GUIDE TO PORT ENTRY

PORT INFORMATION

Produced by
Colin Pielow

SHIPPING GUIDES LTD.

GUIDE TO
PORT ENTRY

1985–86

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COLIN PIELOW

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A.I.C.S.

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FOREWORD

Shipmasters, Shipowners or Managers, Port Authorities, Administrators and Agents, are earnestly requested to assist our work in up-dating the Guide by providing written comment, information, amendments or corrections, plus additional details of any ports or terminals, to the following address:

SHIPPING GUIDES LIMITED,
SHIPPING GUIDES HOUSE,
75 BELL STREET,
REIGATE,
SURREY,
ENGLAND

All communications will be acknowledged and will be most useful, since it is only by this means that the *Guide* will remain of great value to the user and will be up to date and thoroughly professional in content.

For assistance and guidance in the submission of information, a reprint of the items presently covered by the *Guide* is placed hereunder. Additional items will also be most welcome.

N.B. PLANS, DIAGRAMS, DRAWINGS AND SKETCHES: As you will note, this 1985/86 edition of "Guide to Port Entry" contains over two thousand two hundred port plans and mooring diagrams that have been reproduced from plans and drawings very kindly sent to us by numerous Port Authorities, Agents and shipboard personnel. We hope that the special plan section will prove interesting and useful.

Presently however, the special plan section is to an extent incomplete, since there are many ports and mooring facilities for which we have not yet received the necessary plans for reproduction purposes. We are anxious to secure plans, diagrams, drawings or sketches of ports and facilities not presently shown in our special plan section, and therefore request that Port Authorities and/or Agents at the places concerned be kind enough to pass us this data together with the necessary permission for reproduction. We would also be very grateful if ship's officers calling at ports not already covered in our special plan section, could find it possible to provide us with diagrams or sketches of the facilities which would be suitable for reproduction in our later editions and/or which might be re-drawn as required by our own art department prior to reproduction.

PORT INFORMATION KINDLY REQUESTED

PORT LIMITS: The seaward boundaries of the port within which a vessel is considered to be an "arrived ship" and (subject to Charter-Party Terms) laytime will commence.

DOCUMENTS: The matter of documentation is one of the most important items to be included in the *Guide,* and we would like to be sure that ALL requirements are included in order that Masters will be in a position to prepare all necessary documentation before arrival and thus ensure speedy clearance. (E.g. Number of Crew Lists, Passenger Lists, Customs Documents, Health Documents, Manifests, Bills of Lading, Ship's Papers, Ship's Certificates, etc., etc.)

PILOTAGE: Manner in which vessel approaching the port applies for a Pilot. That is, telegraphic address, telephone number or telex number of Pilot Station, amount of advance notice of ETA required, and VHF channel or frequency to be used when contacting Pilot Boat or Pilot Station. If possible, a description of Pilot Boat; particular light or sound signals to be made by vessels requiring a Pilot; the *exact* area where the Pilot Boat is located or where the Pilot has to be taken on board and also any alternative area in the event of bad weather and when Pilot Boat not on usual station; details of any specific requirements on the part of Pilots with respect to boarding and safety measures; location of anchorage for vessel awaiting a Pilot.

ANCHORAGES: Boundaries, areas and depths of safe anchorages.

RESTRICTIONS: Details of any restrictions imposed upon entry, for example at night time, or in accordance with state of tide and draft restriction.

MAX. SIZE: Maximum permissible length, breadth, and draft for any vessel entering the port or for oil-carriers proceeding to installations outside the main port area, also state of tide governing these dimensions.

HEALTH: Pratique procedure and action necessary to obtain Pratique. Also action necessary in the event of any suspected disease or fever on board. Also when Pratique is automatic, for example vessels entering after calling at another port in the same country.

RADIO: Name and call sign of radio station through which it is best for a vessel to route ETA cables to Agent, Receivers, etc. Availability of telex communication with vessels equipped with telex.

VHF: Fullest possible data concerning VHF Radio communication facilities in operation at the port including advices required from vessels approaching the port, arriving at the port, when manoeuvring within the port area, and when sailing. Details of standard communication procedures and numbers of Channels used in calling, further communication and safety, as may be applicable with respect to Pilotage, Tugs, Port Authority, Quarantine or other craft or shore-stations.

RADAR: Details of existing Port Radar Service, also if the Master may contact the Radar Service by means of ship's radio or by VHF, and the frequency or Channel number to be used. Details of Vessel Traffic Management Service (V.T.S.).

TUGS: Number and capacity of tugs available. Minimum number of tugs required for berthing and unberthing. Position where tugs normally join the vessel. Also whether usual for ship's lines or tug's lines to be used, and if optional, the usual charge for use of tug's lines.

BERTHING: Details of available berths, including length of quay, depth alongside, maximum permissible ship-draft at Low Water (indicating whether Salt or Fresh Water), whether load/discharge is by shore equipment or by ship's own gear, and other relevant data, together with advice of cargoes handled at respective berths.

CRANES: Fullest possible information concerning type, safe working loads and numbers of shore-cranes available at respective berths for cargo handling. Details of heavy-lift cranes ashore or afloat, with lifting capacities. It is also helpful to know at which ports, or berths within a port, that cranes are *not* available and a vessel is required to use her own gear.

BULK CARGO FACILITIES: Details of berths and cargoes handled, length of quay, depth alongside, maximum permissible draft (indicating Salt or Fresh) at Low Water, berth equipment, maximum height of discharging-gear above High Water Level, and maximum Loading/Discharge rates. Cargoes intended to be covered by this heading are, Grain, Ores, Coal, Fertilisers, Sulphurs, Copra, etc.

SPECIALISED CARGO-HANDLING FACILITIES: Details of berths, specially equipped for handling containers or Roll-on/Roll-off traffic; berths handling liquid chemicals or LPG carriers. Please note that it is also useful to know if the port does *not* have any of these facilities.

BRIDGES: Details of any particular arrival times required in order to pass through particular bridges, and maximum clearances, that is height of bridge to waterline.

STEVEDORES: Any particular ETA advices required in order to arrange gangs. Details of main commodities and average load or discharge rates. Normal working hours for general and bulk cargoes, also hours that overtime is possible.

MEDICAL: Whether necessary for Agents to receive advance notice of required medical attention and the amount of notice required; also if hospital and dental facilities are available; also any other relevant medical information such as particular inoculations required, vaccination/fever certificates, etc., and if inoculations and vaccinations can be carried out.

TANKERS: Diameter of load/discharge lines in order that Masters may know whether or not it is necessary to fit reducing pieces before arrival; slop (residue) discharge facilities, capacities, and maximum receiving rate; S.G., A.P.I. and temperatures of local types of oil (loading ports only). Number of tanker berths, depth alongside and maximum permitted drafts at these berths, average load/discharge rates. Prevailing wind on berth. If special moorings required. Are shore gangways available? Are facilities available to combat oil spills, if so what equipment available? Availability of shore steam. Ship to ship transfer facilities.

DENSITY: (SALINITY): Average salinity of water in the port.

FRESH WATER: Availability, method of delivery, rate of delivery and approximate cost per ton.

FUEL: Grades (viscosities) available, amount of advance notice required, and method of delivery. If bunkers supplied by vessel/barge, minimum/maximum quantity to be ordered.

FIRE PRECAUTIONS: Any specific precautions particularly respecting tankers (that is, other than usual non-smoking precautions, etc.).

CONSULS: Names of countries having Consuls at the port.

REPAIRS: Whether all types of deck and engine repairs are possible, and if not then what types of repairs are able to be carried out.

DRY DOCKS: Dimensions of largest dry dock and also the number of smaller docks.

SURVEYORS:

(1) Availability of Cargo Inspectors, such as Saybolt, Caleb Brett, Superintendents, etc.
(2) Availability of Surveyors, such as Lloyd's Register, American Bureau, Bureau Veritas, etc., also Salvage Association or U.S. Salvage.

GANGWAY/DECK WATCHMEN: Whether service of watchmen necessary or to be recommended and if so, the cost of watchmen.

HATCHES: Whether opening/closing is normally carried out by crew or stevedores.

CUSTOMS ALLOWANCES: (Tobacco/Wine, Spirits). Quantity permitted for each crew member to be held out of Bond.

CARGO GEAR: Whether load/discharge effected by shore gear or by ship's gear, and details of any special cargo equipment, e.g. heavy lift cranes, etc.

REPATRIATION: If facilities exist for effecting crew changes and arranging any necessary repatriation.

AIRPORT: Distance from airport and whether airport is served by regular airlines; otherwise number of flights per day or week and destinations.

TIME: Local time in relation to GMT and dates/details of any alterations made to clocks during the year (summertime).

HOLIDAYS: Dates and details of official and local holidays and advice whether or not cargo work can be arranged on those days.

POLICE/AMBULANCE/FIRE: Telephone numbers of these three services, that is, the nearest departments.

EMERGENCY CO-ORDINATION CENTRE: Nearest Emergency Co-ordination Centre and details of telephone and telex numbers (e.g. U.S. Coast Guard, U.K. Coast Guard, S.A.R. etc.). This information is necessary because local Port Agents may not be suited to emergency matters and may not be contactable.

TELEPHONES: Whether arrangements exist for placing telephones on board and if so the approximate cost for this connection.

SERVICES: Details of any special services available, e.g. tank-cleaning equipment, facilities for discharge of tank-washings, compass adjusting, radio and radar repairs, supply of charts, nautical publications, sounding paper, course recorder paper, availability of Notice to Mariners, availability of safety equipment, possibility of extension of certificates.

BANKS: Names, addresses and telex numbers of any banks in the area.

STORING:
(1) Can vessel be stored by barge or truck?
(2) Regulations concerning barge storing, such as, can vessel store from barges during loading or discharging? If not, what are the regulations concerning storing?
(3) Can trucks proceed alongside at the berth? If not, what is the approximate distance the truck is to remain from the ship?
(4) Can fork lift trucks be used on the jetty to handle stores?
(5) Customs Regulations in force regarding storing.
(6) Can local Riggers be employed to assist with storing?

SHIP SUPPLY SERVICE: Name, address, telephone no., telex no., etc., of ship supply service operators who are able to supply craft or helicopters for transfer of stores, crew and sick personnel. Also range, capacity and rendezvous points of supply craft and helicopters.

SHORE LEAVE: Whether crew members are allowed ashore or not.

IDENTIFICATION CARDS: Whether shore passes issued or whether seaman's book is sufficient.

REGULATIONS: Any particular or unusual regulations for the port.

DELAYS: What delays in berthing, loading, discharging or bunkering can normally be expected.

DEVELOPMENTS: Details of expected draft increases, new installations, berths, etc., expected in the foreseeable future together with expected dates of completion.

SHIP'S OFFICERS REPORTS: Information is earnestly sought from Shipmasters and other serving officers giving corrections, amendments and additions to existing information, together with their professional advices or comment upon recommended or required procedures for entering or sailing port, including advice of their experience of the port either generally or specifically. Useful items of experience and suggestions of other Shipmasters are of great value, and will be printed under a special heading.

GENERAL: Any other information that you feel may be of value to the Shipmaster that is not already covered by the previous questions.

AUTHORITY: Name, address, and other details of local Port Authority.

AGENT: At the foot of many of the ports in this *Guide* we have an additional heading entitled "Agent". The purpose of including this item has been to provide Shipowners, Managers, and Operators with prompt access to the name, address, telephone, telex numbers, and cable addresses, etc., of an experienced Agent at the port concerned.

Of course, it will be understood that the Agents named in the *Guide* are not necessarily the only Agent at that port; however, demands on available space preclude the inclusion of other reputable Agency companies and we trust that other such companies will understand and appreciate the position. We have been obliged therefore to include details of one Agency company only, but by doing so we hope to have provided a further service to the user of the *Guide*.

ROBERT PEDLOW, *Editor,*
Shipping Guides Ltd.

PUBLISHER'S NOTE

"GUIDE TO PORT ENTRY" – 1985/86 EDITION

The extent of this edition of "Guide to Port Entry" is approximately five times that of our first edition, which was issued in 1971. Such an increase in the number of printed pages reflects the increasing degree of careful study and preparation required in the production of this work and we hope will also point to its increasing usefulness to seafarers and others in the shipping industry.

This edition has been prepared with the utilisation of a lighter weight paper than that used for earlier editions in order to compensate for the increase in page extent, which has now become about 3,000 pages including both volumes. This new 1985/86 edition includes details of a number of additional ports, including some three hundred additional port plans and diagrams which have been unobtainable previously and also considerable additional port information data.

Our very sincere thanks are again due to those very many Shipmasters who are in contact with us and who kindly provide us with up-to-date information and advice concerning the ports at which their vessels call and we also express great thanks to all Port Authorities, Agents, Terminal Operators and other professional bodies including the British Admiralty for providing much of the information from which these volumes have been compiled.

"The Ships' Atlas"

The first edition of this new publication proved to be very successful following its issue during 1984. Due to demand, a second impression was produced in March this year and we are currently working upon the next edition which we anticipate should become available during 1986. Purchasers of "The Ships' Atlas" have been most kind in their expressions of appreciation and we thank them for their comments.

It is as well to mention here that copies of "The Ships' Atlas" are obtainable upon application to this office.

"Guide to Tanker Ports"

Over one thousand oil carriers now have this loose-leaf publication on board including many of those vessels owned or operated by the majority of the major oil companies. As such, this publication is believed to be a great asset to its users, many of whom are active in assisting us to keep it comprehensive and up-to-date. Details of the "Guide to Tanker Ports" may be obtained upon application to Shipping Guides Ltd.

Reigate 1985

COLIN PIELOW

Albania

DURRES: 41.19 N. 19.28 E.

DOCUMENTS: Completed on arrival.
PILOTAGE: Compulsory. Arriving vessels should anchor and await Pilot in position Lat. 41° 15′ 08″ N., Long. 19° 26′ E. Pilot available in daylight hours only.
RESTRICTIONS: Vessels arriving from ports in Yugoslavia, Italy and Greece must give Notice of Arrival 48 hours in advance. Vessels arriving from ports in other countries must give notice of arrival 5 days in advance. Notice of Arrival is sent by radio to "Adetare Durres" with following information: Vessel's name and flag; name of last port; draft on arrival; cargo description and distribution; particulars of vessel's tonnage and length.

Entrance is through buoyed channel, depth 27 ft.
MAX. SIZE: Controlled by berth depth. Max. draft 28 ft. 6 in.
Also see "Shipmaster's Report".
HEALTH: Free pratique given when Pilot boards provided vessel's Health Declaration is satisfactory.
RADIO: Vessels should maintain regular contact with Durres Radio up until time of entry into Albanian territorial waters, which extend 10 miles off shore.
TUGS: Port Authority supplies tugs for mooring and unmooring on Pilot's recommendations.
BERTHING: General cargo wharf No. 5, depth 26 ft. All other berths, depth 21 ft.
MEDICAL: Doctor and hospital facilities available.
TANKERS: One oil berth, at the East Mole, depth 23 ft. Tank cleaning facilities available.
FRESH WATER: Available ex-wharf at all berths.
FUEL: Limited quantity available for emergency only.
OPENING/CLOSING HATCHES: Carried out by stevedores.
IDENTIFICATION CARDS: Shore passes issued by local police.
REPAIRS: State shipyard can effect limited hull and engine repairs.
AIRPORT: Rinas Airport, distance 35 km.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year (January 1st and 2nd); Proclamation of the Republic (January 11th); Labour Day (May 1st); October Revolution (November 7th); Independence Day (November 28th); Liberation Day (November 29th). No work performed on Sundays and holidays.
SHORE LEAVE: Crew may use seamen's club in port area.

SHIPMASTER'S REPORT: 1979
Navigation: Incoming vessels are to anchor in position Lat. 41° 15′ N., Long. 19° 27′ E. (2.5 miles from breakwater) and await orders. The Danger Area shown on B.A. Chart No. 2701 is reportedly non-existent.
Communications: The local radio station call sign ZAD is to be contacted on anchoring. The radio transmitter is sealed on berthing. The Agents have a telex machine which works intermittently. Telephone calls to Northern Europe possible but subject to delay.
Pilot: Equipped with VHF Channel 16, boards at anchorage.
Tugs: Two medium size tugs available for docking. One salvage tug stationed in port.
Draft: Pilots advised 27 ft. 6 in. max. draft alongside and in approaches.
Cargo Facilities: Loaded 14,000 tonnes of cement in 50 kg. bags from rail and road trucks. 3 shift system. Used both shore cranes and ships derricks. As cargo comes from cement factory in interior by rail, presentation is very intermittent, and vessel rarely informed of working prospects more than a few hours in advance. Sundays are normally holidays. Loading rate averaged 1,000 tons approx. per working day but ranged from 200 to 1,700 tons depending on labour and cargo availability.
Formalities: ETA's required 5 and 2 days in advance, also include length, tonnage, flag, state of health, etc.

Documents required: 6 crew lists, 2 lists of foreign currency, 2 personal effects lists, 1 health declaration, 3 stores lists. Bond is sealed but Customs will open on request.
Repair Facilities: Small shipyard for minor repairs available.
Surveys: Agents advise that Government Surveyor available for radio surveys, etc. No Classification Society Surveyor available.
Cash: Lek is currency – 1 Lek = approx. 14 US cents (7 Leks = $1). Foreign currency may be exchanged (approx. 5 days notice).
Provisions: Government ship chandler. Fresh vegetables good, fish available at moderate prices, meat not recommended.
Laundry: Available. Reasonable price, average standard.
Crew: Repatriation is reportedly possible, however it takes 3 days to get an exit visa.

Shore leave is permitted to seaman's club only until 2300 hrs. A special pass has to be obtained to visit the town (1500 to 1900 hrs. only). Tours to Tirana can be arranged by car, if one day's notice is given. Casual dress (jeans) also long hair prohibited outside dock gates.

Gangway guards in attendance throughout stay.

Considerable difficulty experienced in arranging tour for Chinese ratings.
Port Facilities: Berthing facilities for 10 ocean-going vessels. Sufficient 5 ton shore cranes available. Railway tracks to most quays. Main imports coal/coke. Exports, low grade chrome ore. Priority for Albanian vessels. One floating crane. Lack of mechanisation reduces work rate. No fork lifts or proper palletisation observed.
Agency: Adtare (Government Agency) in port area. The Agents visit vessel twice daily and speak adequate English and are reasonably helpful.
Fresh Water: Available from barge at $1.50 per ton approx.
Fuel Oil: Prices January 1st, 1979: Heavy oil $98 per ton and diesel $141 per ton delivered by road tankers (limited amounts).
Local Regulations: Permission to immobilise engines must be obtained. Garbage is collected (compulsorily) daily in plastic sacks. Permission required prior to de-ballasting.
Watchmen: Not required as gangway guards provided.

AUTHORITY: Drejtorija e Portit Durres.

SARANDE: 39.52 N. 20.02 E.

DOCUMENTS, RESTRICTIONS: Refer to "Durres".
PILOTAGE: Compulsory. On arrival vessels should anchor and wait for Pilot in position Lat. 39° 51′ 50″ N., and Long. 20° 10′ 10″ E. Pilot available only during daylight hours.
HEALTH: Free pratique given when Pilot boards provided vessel's Health Declaration is satisfactory.
RADIO: Durres Radio.
BERTHING: Larger vessels work cargo at anchor only. Ship's gear used.
FRESH WATER: Not available.
FUEL: Not available.
GENERAL: See "Durres" for General Information.
AUTHORITY: See "Durres".

SHENGJIN: 41.49 N. 19.35 E.

DOCUMENTS, RESTRICTIONS: Refer to "Durres".
PILOTAGE: Compulsory. On arrival vessels should anchor and await Pilot in position Lat. 41° 48′ N., Long. 19° 35′ E. Pilot available only during daylight hours.
MAX. SIZE: Draft 18 ft.
HEALTH: Free pratique given when Pilot boards provided vessel's Health Declaration is satisfactory.
RADIO: Durres Radio.
TUGS: One small tug available.
BERTHING: Two piers in harbour, one of which is used for larger vessels.
FRESH WATER: Limited supply by barge.
FUEL: Not available.
GENERAL: See "Durres" for general information.
AUTHORITY: See "Durres".

NOTES

Please also advise Shipping Guides Ltd.

Algeria

ALGIERS (El Djazair): 36.50 N. 03.00 E. (See Plan Book)

DOCUMENTS:

1 Cargo Manifest required for all cargo including that in transit for non-Algerian ports.
8 Crew Lists.
2 Crew and Passenger Personal Effects Lists.
1 Stores List, including Bonded Stores.
1 Currency Manifest.
2 Lists of arms, ammunitions or Military Stores (or "Nil" Declaration).
1 Private Bond and Beer List.
1 Declaration of Health.
1 Vaccination List.

Immigration officials may require to inspect all discharge books or passports. Customs regulations are strictly interpreted. Care should be taken to ensure that all ships' papers are perfectly in order. Vessels arriving with incomplete or inaccurate documentation have been subjected to severe delays and penalties.

PILOTAGE: Compulsory. Available day or night. Pilot boards vessel about 0.5 mile from end of Wattier jetty. Pilot boat is black with insignia of 2 white anchors.

ANCHORAGE: Algiers Bay is crescent-shaped with Cape Caxine on the West and Cape Matifon on the East. Depth 25 m. – 30 m. Bottom is good holding ground, and vessels are sheltered from West and Northwest.

RESTRICTIONS: None if Port Authority is advised by Radio Algiers or by Agent.

MAX. SIZE: Vessels of 25,000 tons proceed normally. Length not restricted; maximum draft 38 ft.

HEALTH: Health Officer boards vessel on arrival.

RADIO: Algiers Radio, operates continuously.

VHF: Harbour Master on Channels 16 and 12.

TUGS: Three available of 600 to 800 h.p. and also one of 1,000 h.p. for towing in harbour; two larger available for open sea, 1,500-1,300 h.p.

BERTHING: 54 berths available, total length of 9,519 m. plus 2 berths of 250 m. each for tankers. All general cargo berths have cranes with lift of 3-6 tons.

STEVEDORES: Available.

MEDICAL: All assistance available.

TANKERS: Quay de Lorient: 2 berths, with depth alongside 11.50 m. Deballasting facilities available.

"LPG vessels" – See "Shipmaster's Report".

DENSITY: Salt water.

FRESH WATER: Delivered by pipe-line to quay, or by water barges.

FUEL: Deliveries by pipe-line on most quays or by barge. Large vessels are supplied by barge in the roads.

FIRE PRECAUTIONS: A special notice with instructions is delivered to tankers. Fire station established within port area.

GANGWAY/DECK WATCHMEN: Service by three experienced companies arranged by Agent.

OPENING/CLOSING HATCHES: Normally opened by crew, or by port workers.

IDENTIFICATION CARDS: Not required.

CONSULS: All principal countries are represented in Algeria.

REPAIRS: All repairs available.

DRY DOCKS: Two: one of 136 m. long, 18.50 m. width, and 8 m. depth. The second of 74.30 m. long, 15.50 m. width and 5 m. depth.

REPATRIATION: Frequent departures for Europe by ship or plane.

AIRPORT: Dar-el-Beida at a distance of 20 km. from Algiers; several flights daily.

TIME: GMT (Winter). GMT plus 1 hour (May-October).

HOLIDAYS: 1st January; 5th July; 1st November; Labour Day; Proclamation Day; plus religious holidays – Aid Seghir; Aid Kebir; New Year's Day (Egira); Achoura, and Mouloud. Friday is now considered as the weekly rest day in Algeria.

POLICE/AMBULANCE/FIRE: Police 63.01.61; Fire Brigade Service 63.71.22.

SHORE LEAVE: Allowed.

DEVELOPMENTS: The port is to be extended to the East to provide 700 m. of container berths with a depth of 19 m. Work is to commence in 1985.

SHIPMASTER'S REPORT: January 1981.

Approaches: BA. Chart Nos. 855 and 2555.

Prominent land features clearly visible both visually and by radar. At night-time, anchored or underway, vessels are very difficult to identify due to background of shore lights.

No. 2 buoy marking Western extremity of prohibited anchorage area (Lat. 36° 49.3′ N., Long. 03° 07.2′ E.) unlit at time of visit.

Anchorage: Anchorage prohibited East of line drawn from No. 2 buoy to East of beacon on coastline at 03° 10′ E. Reasonable anchorage obtained two miles N.E. of Qk.Fl. light at end of Northern breakwater in approximately 40 fathoms. No separate tanker or small vessel anchorages although small vessels generally appeared to anchor either between main breakwaters immediately East of Jettee de L'Est or close offshore with little regard to Eastern harbour entrance. Anchorage completely exposed to prevailing winds from N.E. and swells that accompany wind.

Wind: Prevailing wind is from North to N.E. and is strongest during Winter months. Swell builds up quickly and causes harbour to be virtually untenable with many ships breaking loose from berths. Authorities close port and all ships leave berths generally when weather conditions have started to abate. Forecasts difficult to obtain.

VHF: Call "Algiers Harbourmaster" Channel 16, working on Channel 12. Range limited to about six miles. On arrival, vessel's information required and details of cargo to be loaded or discharged. French speaking is an advantage in which case call "Capitainerie du Port". Very little warning of berthing instructions given. Agents can, apparently, be contacted through Harbour Master.

Berthing: Berthing and unberthing only during the hours of daylight unless in extreme emergency.

Pilot: Upon receipt of berthing instructions, vessel proceeds to a position approximately half mile East of Southern breakwater entrance. Pilot boards by pilot ladder, side appropriate to weather conditions but generally on port side, from pilot launch. Pilot ladder about 1 m. above water.

Pilot also boards by launch when unberthing.

Tugs: Two used for berthing and three for unberthing (bad weather). Two good ship's ropes to each tug. For berthing, forward tug taken on port bow and aft tug on starboard quarter, similar arrangement for unberthing. These positions to enable vessel to swing short round to port immediately after entering breakwater.

Berth: Berth 37: Port side alongside "Brise lames Est" jetty in Area 9. Depth alongside 10.0 m. forward and 10.5 m. aft. Little or no tidal effect. Straight jetty with protruding dolphins of concrete construction and fendered by tyres mounted on timber and suspended from quayside by chains.

Berth affected by swell from North/N.E. and vessels can surge up and down the quayside alarmingly. It is essential to have out as many moorings as possible and in particular good stern lines and forward back-springs. On this visit, five moorings parted and eventually necessary to have mooring winches manned continuously to counteract vessel's surging. This vessel (31,296 cu.m.) was largest gas vessel to have entered Algiers.

Port gangway initially used but later replaced by "Board of Trade" gangway. It is advisable not to rig gangway before berthing due to quayside obstructions.

Density: Density alongside 1026.

Cargo: Butane discharge. Receiver's Sonatrach cannot accept cargo below +5°C, therefore heater required. Booster pump not required after initial problems resolved. Shore tank capacity is small and adjacent to gas-bottling/distribution plant. At first, Receivers were asking for maximum rate of discharge and then stopping cargo every two/three hours. After contacting Commercial Manager of Sonatrach, arrangement was made whereby shore plant emptied tanks before resumption of discharge and then discharge maintained at slow rate for several hours. Cargo discharged = 4,000 tonnes in five days.

Contacts: Mr. Larbi-Cherif – Sonatrach Manager LPG Operations, Marketing Division – Gas Exports, 46 Boulevard Mohamed V, Algiers. *Tel:* 61-12-24.

This person is responsible for all gas import/export contracts, works closely with Trammogas.

Mr. Brahim Ouerdane – Sonatrach Commercial Manager, Commercial Division, 46 Boulevard Mohamed V, Algiers. *Tel:* 61-12-24.

Commercial Manager who works closely with Mr. Larbi-Cherif.

Mr. Dadoux (Dardoo) – Manager for gas movements inside Algeria.

Authorities: Algerian requirements are now well established and particularly applicable to this port. All items contained within the Bond are carefully checked and counted and any single discrepancy can result in large fine. All money (all currencies) collected in, declared on Currency Declaration and locked in safe. Customs did not rummage on this visit because all paper-work exactly to their requirements.

Port Health require Smallpox vaccinations to be valid.

No cargo documentation was in the vessel's possession for berthing. Customs satisfied with Master's Declaration that cargo papers were in transit between U.K. and Algeria.

Agent: Compagnie Nationale Algerienne de Navigation (C.N.A.N.). Cable Address: CNAN, Algiers. Tel: 62–64–00 and 62–88–00. Representative: Mr. A. Cpaoui. Home No. 64–34–24.

Chandler: Provided excellent quality fresh provisions at short notice and at reasonable price. Method of payment is by Cash Requisition through Agent.

Fresh Water: Good quality and available on quayside. Shore meter inoperative.

Bunkers: Available by barge.

General: Repatriation can be easily arranged through Agents. Airport about 10 km. away with five daily flights to Paris and one to London. Disembarking personnel hand in Discharge Book plus two photographs to Agent a few hours before disembarking to clear Immigration formalities.

Reasonable communication links with the U.K. and people most helpful.

Rate of exchange (Jan. 1981) £1.00 = 9.3082 Dinars.

Shore leave unrestricted – personnel to carry Identity Cards.

AUTHORITY: Capitainerie du Port.

ANNABA: 36.58 N. 07.47 E.

DOCUMENTS: Refer to "Algiers".

PILOTAGE: Compulsory when entering, leaving or shifting in harbour, vessels arriving during night and wishing to enter the basin must anchor at 2 nautical miles to East of Southern Lighthouse at main entrance (red occulting light) on steady sand bottom of 65 ft. to 100 ft. depth.

ANCHORAGE: Quite good anchorage well protected against West or North winds at about 3 nautical miles to North of harbour with depths of 40 ft. to 60 ft. on rocky and sandy steady bottom.

MAX. SIZE: Length 656 ft. draft 33 ft., breadth no restriction. Tankers Max. draft 39 ft.

RADIO: Cable Agents giving ETA or to Harbour Master by cable or radio telephone via Annaba Radio Station which is permanently watching on 2182 kHz.
VHF: Harbour Master's Office can be contacted on Channels 16 and 14.
TUGS: Two tugs available each of 700 h.p. both fitted with radio telephone and two fire appliances.
BERTHING: Harbour is open to merchant navigation every day from 0500 hrs. to 2200 hrs. In case of necessity vessel will be handled at any time.

21 general cargo berths with depths 6.2 m. to 10.0 m.

BRIDGES: No bridges or power cables crossing port area.
CRANES: 18 electric or diesel shore cranes with lifting capacities from 3 to 6 tons; 1 electric shore sheers of 110 tons and 1 diesel-electric sheers hulk of 80 tons.
STEVEDORES: Available. Working hours (whole days), normal hours: 0700/1020–1400/1720. Shifts: 0630/1230-1300/1900-2000/0200. Working night and holidays, overtime 50%.
TANKERS: Two tanker berths in outer port, entrance 43 ft. The first is at Lyon's Jetty consists of two dolphins 180 ft. apart, depth 33 ft. Second at South Jetty consists of two dolphins 180 ft. apart, depth 43 ft. Pipe-lines of 8 in. and 10 in. supply the oil installations.
FRESH WATER: Plentiful supply of water alongside wharves at a rate of 8 to 14 t.p.h. By barge at the tanker berths.
FUEL: Bunkering available. No coal.
GANGWAY/DECK WATCHMEN: Performed by ship's crew.
OPENING/CLOSING HATCHES: Performed by stevedores.
IDENTIFICATION CARDS: Required.
SHORE LEAVE: Allowed.
REPAIRS: One graving dock fitted with two rolling cradles on slipways, lifting capacity 100 and 200 tons. Divers and frogmen available.
GENERAL: Prevailing winds generally of N.W. and West. Storms from these directions are blocked by mountains which lie behind harbour. Harbour is only exposed to storms from East and N.E. which are very rare. There is practically no swell or surf into harbour. Tidal variation about 1 ft. and water level ranges about 31 in. dependent on season. Low waters from February to June and high waters from June to February.

SHIPMASTER'S REPORT: September 1982.
Position: 36° 54′ N., 07° 46′ E.
Name: Formally named Bone, in most of the charts is mentioned as Bone.
Radio: Annaba Radio keeps watch also on VHF Channel 16 and working Channels 24, 25, 26, 27.
Gangway/Deck Watchmen: Shore watchman is compulsory by Port Authorities.
Opening/Closing Hatches: Performed by crew.
Identification Cards: Shore passes are issued by Immigration Office and shore leave is allowed on presentation of the issued pass and Passport or Seaman's Book.
Restrictions at Port: As soon as vessel anchors in Annaba Roads, Coast Guard comes on board and collects all documents and seals all Bonded Stores. Attention is to be paid on the correct counting of Bonded Stores, such as cigarettes, spirits, etc. Beer is not sealed and crew allowed 200 cigarettes plus one bottle of spirits each.

(a) It is strictly forbidden for ships to use their whistles or sirens in the harbour, exceptions when vessel being under way for preventing collisions. Strictly forbidden to call Pilot by means of whistle between 2000 hrs. and 0600 hrs.
(b) All ships must keep on board sufficient crew in order to carry out all ship's handling, especially shiftings of vessel. Normally Master is informed by Port Authority and signs notice, but many times happened to inform vessel at any time to shift immediately.
(c) It is strictly forbidden to carry out deballasting operations in the harbour waters, except after a systematic control has been made by the Master, the Dock Master or a Surveyor appointed by them, to prove that ballast water is clean.
(d) Any repairs being made to the hull of the vessel, scraping, painting, painting of Load Line marks must be authorised by the Captaincy.
(e) Trials of the engines can only be done with an authorisation from Port Captain.

Maximum Draft Allowed: 31 ft. for the berth of minerals – "Iron and Coke".

AUTHORITY: Directeur du Port.

ARZEW (including Arzew El Djedid): 35.50 N. 00.08 W. (See Plan Book)

LOCATION: The Port of Arzew extends between Lat. 35° 50′ N. and 35° 52′ N. and Long. 0° 08′ W. and 0° 17′ W., at the N.W. end of the Gulf of Arzew.

The Port of Arzew El Djedid is located in position Lat. 35° 48′ 06″ N., Long. 00° 12′ 30″ W.

DOCUMENTS:
3 copies – Manifest   2 copies – Vaccination List
4 copies – Crew List   2 copies – Arms & Ammunition List

All Log Books, Certificates and Registers will be inspected.
Sailing: The sailing declaration must be made 2 hours at least prior to sailing time.
APPROACHES: *Landfall:* By day recognition of Arzew is made easy by the high ground of Cape Ferrat. On entering the Gulf the lighthouse of the Island of Arzew is seen and in clear weather it is possible to distinguish to the East, the town of Mostaganem. The Arzew mountain (225 m.) dominates the Bay of Arzew and the port.

The storage tanks for hydrocarbons are visible from a long way offshore. At night, vessels see firstly the oil flares of the different units in the industrial zone. These flares are visible in good weather for a distance of 25 miles.

LNG Flare "4Z"	Lat. 35° 50′ 31″ N.	Long. 0° 18′ 42″ W.
Refinery Flare	Lat. 35° 49′ 40″ N.	Long. 0° 19′ 15″ W.
L.P.G. Flare	Lat. 35° 49′ 58″ N.	Long. 0° 18′ 12″ W.
LNG Flare "1Z"	Lat. 35° 49′ 07″ N.	Long. 0° 16′ 20″ W.
	Lat. 35° 49′ 04″ N.	Long. 0° 16′ 26″ W.
LNG Flare "2Z"	Lat. 35° 48′ 32″ N.	Long. 0° 15′ 23″ W.
	Lat. 35° 48′ 47″ N.	Long. 0° 15′ 21″ W.

Port Lights: Lighthouse on Arzew Island: Lat. 35° 52′ 34″ N., Long. 0° 17′ 20″ W.
Buoys: Junction Buoy (vertical red and white stripes), white light, position: Lat. 35° 50′ 29″ N., Long. 0° 16′ 03″ W.

Madrague Buoy, East cardinal mark ("A" System), white light, position: Lat. 35° 51′ 40″ N., Long. 0° 16′ 20″ W.

Sea Water Intake Buoy (CEAZ complex): North cardinal mark ("A" System), white light, position: Lat. 35° 50′ 06″ N., Long. 0° 16′ 55″ W.

Working Buoy on Offshore Jetty: Black (starboard characteristics) with fixed green light, position: Lat. 35° 50′ 51″ N., Long. 0° 17′ 16″ W.
Lights of the Port of Arzew: Breakwater: Green light, position: Lat. 35° 51′ 06″ N., Long. 0° 17′ 04″ W.

Head of Offshore Jetty: White light, position: Lat. 35° 50′ 27″ N., Long. 0° 17′ 22″ W.

Secondary Jetty: Red light, flash every 3 secs., position: Lat. 35° 50′ 59″ N., Long. 0° 17′ 45″ W.

South Jetty: Red light, position: Lat. 35° 51′ 17″ N., Long. 0° 17′ 55″ W.

Mole IV: Fixed green light (S.W.), position: Lat. 35° 51′ 28″ N., Long. 0° 17′ 44″ W.

Mole III: Fixed red light (S.E.), position: Lat. 35° 51′ 32″ N., Long. 0° 17′ 57″ W.
Lights of the Port of Arzew El Djedid:
West Jetty: Green light, position: Lat. 35° 49′ 26″ N., Long. 0° 15′ 22″ W.

East Jetty: Red light, position: Lat. 35° 49′ 05″ N., Long. 0° 14′ 32″ W.
PILOTAGE: Pilotage is compulsory. The limit of the pilotage zone out to sea is the parallel of the lighthouse on Arzew Island.

Pilots may ensure that anchoring is carried out in the roads for large vessels. The Pilot embarks in the waiting zone. The pilot ladder must be rigged on the lee side at a height of 1 m. above the water. For large vessels in ballast, the pilot ladder must give access to an accomodation ladder rigged at a height of 5 m. (approx.) above the water.

Communications from tankers will be via the international radio station at St. Lys, which is in telex communication with the Arzew Terminal. Contact with the Arzew Terminal can be made on VHF Channel 16. Vessel will then be informed by the control room of the frequency to use, either Channel 12 or 14 for mooring purposes.
ANCHORAGE: Vessels requiring to anchor on arrival normally use services of the Pilot. Anchorage fees are charged whether the Pilot is used or not. Sea bottom of rocks, sand and mud.

The operations in the roads and the safeguard of accesses have brought about the reserved zones, forbidden areas, waiting and anchoring zones.

The position of these zones is shown on the chart.

a) The forbidden zone corresponds to the S.W. sector included between the parallel of Arzew Island (Lat. 35° 52′ 28″ N.) and a straight line running at 45° from the land and passing through the following geographical point: Lat. 35° 50′ 27″ N., Long. 0° 15′ 55″ W.

b) The waiting zone corresponds to the N.E. sector included between the North of the breakwater of the New Port and a straight line running at 45° to the West from the land, passing through the above geographical point.

Vessels which have to anchor on arrival can request the services of a Pilot.

The bottom is firm, constituted by sand, pebbles, and muddy shale.
Use of Anchors for Manoeuvring: This is forbidden in the port except under conditions of force majeure. It is strictly prohibited in the passages and fairways, and in the vicinity of the pipelines.
RESTRICTIONS: Vessels may enter or sail by day or night, weather conditions permitting. Tankers berthing on the sea-line berths may be restricted by bad weather, heavy wind or swell.

Vessels sailing have priority over vessels entering.
Port Closure: In case of accident or unfavourable weather conditions the port may be closed for entry, for leaving or in both directions at the same time. Notice of closure is broadcast on VHF Channel 16.

In general, the port of Arzew may be closed for entry if:
1. The swell is greater than 2 m.
2. Winds are force 6 (Beaufort) or greater.

The port of Arzew El Djedid may be closed for entry if:
1. The swell is greater than 2 m.
2. Winds are force 5 (Beaufort) or greater.

State of Vessel: Prior to entry into port, Masters must sign a declaration in which they state that the navigability of their vessel is perfect and that they are in possession of all certificates and documents required.

Vessels which are required to operate at the sea-line must arrange their loading derricks prior to the manoeuvre. The strength of these loading derricks must be equal to or greater than 5 tonnes, their safety certificate is required on arrival.
MAX. SIZE: See "Berths".
HEALTH: Free pratique is not granted by radio. For tankers berthing at the sea line, pratique may be granted by a visiting sanitary officer or by the Pilot when he boards, providing the health declaration is satisfactory. For vessels berthing inside the harbour, the Health Officer will board on arrival.

Vessels calling at Arzew must give their ETA 48 and 24 hours prior to arrival, naming the ports called within the last 10 days.

Crew must be vaccinated against cholera and smallpox. Vaccination books must be valid and a check is made before free pratique is granted.

RADIO: Oran Radio and Algiers Radio both listen on international frequencies. Tankers normally use St. Lys Radio.

Notice of Arrival: Vessels destined for Arzew must send to the Port Captaincy a message at least 48 hours in advance through a coastal station stating, date and time in GMT of their arrival in the port roads.

The notice of arrival is to be confirmed 12 hours prior to arrival of the vessel in the port roads.

VHF: *Port Radio Service:*

Call-up Frequency:

156.8 MHz., Channel 16, listening-out frequency.

Working Frequencies:

156.7 MHz., Channel 14, Arzew Port Captaincy.
156.5 MHz., Channel 12, Arzew El Djedid Captaincy.
156.65 MHz., Channel 13, Pilotage Station.
156.6 MHz. Channel 10, Tug Station.
156.55 MHz., Channel 11, Sea-Line.
156.7 MHz., Channel 14, Tug Station.

Vessels arriving at Arzew, and waiting in the roads, must listen out continuously on Channel 16.

Vessels with their Pilot aboard must listen out on Channels 14 (Arzew), 12 (Arzew El Djedid), 11 (sea-line):

a) From the time the Pilot comes on board until arrival at the quay.
b) From the departure from the quay until the Pilot disembarks.
c) During the whole time the vessel is at the sea-line.

TUGS: Tug service is compulsory for vessels of more than 1,500 g.r.t. 8 tugs are operational with power ranging from 2,000 h.p. to 3,500 h.p.

It is compulsory for tankers of up to or larger than 50,000 metric tonnes (d.w.t.) to use at least 3 tugs on entry.

The tow lines, supplied by the ship, must be in perfect condition and appropriate for the manoeuvre.

The route programme is drawn up by the Pilot, in agreement with the ship's Master.

BERTHS:

Arzew:

Mole III: 258 m. long and 100 m. wide, with 5 berths for various cargoes with depths of water varying from 5 m. to 8 m.

Specialist port.

Berth (Name/No.)	*Depth (m.)*	*Max. d.w.t.*	*Products Handled*	*Loading Arms (Diameter)*
Methane Terminal:				
North Berth	9.80	40,000 cu.m.	methane methanol	12 in. 8 in.
South Berth	9.80	40,000 cu.m.	methane	12 in.
Jetee Secondaire:				
"S1" (Inner West)	10.0	30,000 15,000 cu.m.	ammonia refined products LPG residue and deballasting facilities	3×10 in. 3×8 in. 3×12 in.
"S2" (Outer East)	11.0	60,000 25,000 cu.m.	refined products LPG bitumen deballasting facilities	3×12 in. 3×12 in. 3×12 in.
Jetty Large:				
P1 (Middle Berth)	13.50	50,000	crude, gas oil, fuel oil, condensate	12 in.
P2 (Seaward/Outer Berth)	15.50	100,000	crude, gas oil, fuel oil,	12 in.
P0 (Inner Berth)	10.0	30,000	LPG, fuel oil, gas oil	8 in.
Sea-line	26.0	100,000	crude, condensate	28 in. hoses

Arzew El Djedid:

Berth	*Depth (m.)*	*Max. Size*	*Products Handled*
M1	13.5	125,000 to 200,000 cu.m.	LNG
M2, M3 (2 berths)	13.5	125,000 to 200,000 cu.m.	LNG
M4, M5 (2 berths)	13.5	125,000 cu.m.	LNG
M6	13.5	125,000 to 200,000 cu.m.	LNG
B1	23.5	25,000 to 100,000 cu.m.	crude, condensate
B2	23.5	50,000 to 150,000 tons	crude, condensate
B3	26.5	100,000 to 250,000 tons	crude, condensate
D1	13.0	35,000 to 70,000 cu.m.	LPG (See "Shipmaster's Report" dated March 1984

Berths M2/M3 and M4/M5 are operational, a hydraulic gangway with a crane (3 tonnes) is available on the service platform of these berths.

The berths are equipped with a battery of 5 loading arms for LNG of 16 in. × 66 in. of which one is for vapour return. Pumping rate is 2,500 cu.m.p.h. A bunker arm of 8 in. × 66 in. is provided.

Nitrogen: Supply of nitrogen on M2/M3 is by tanker lorry.

BERTHING:

Coming Alongside and Mooring: Except in exceptional cases, vessels must be berthed bow facing out to sea. Each vessel is moored with its own lines.

The number lines per vessel must in no event be less than 14, i.e. 7 forward and 7 aft: 3 head lines (stern lines), 2 breast lines, 2 springs.

Mooring lines of rope should be used preferably unless abnormal conditions prevail.

Lines of steel wire, if used, must not be secured on tanker working decks, except if they are on constant tension winches, and pass through roller leads.

It is recommended that mixed moorings be avoided. In particular, springs must be lines of the same material.

The moorings must be suitably tightened, be inspected constantly, and adjusted every time it is necessary.

Fire Wires: Towlines of steel wire, the so-called "fire wires" must be positioned on the seaward side on the forecastle and the poop, with the eye of the wires being maintained 1.50 m. above water level by a watchman. On each fire wire a length of wire of 10.0 m. must be arranged on deck between the bollards and the lead.

Gangways, Gangway Ladders, Pilot Ladders: The gangway or gangway ladder must be easily accessible under all circumstances and provided with a safety net, being well lit at night.

At the port of Arzew El Djedid, at Berths M2/M3 and M4/M5, vessels are connected to shore by automatic gangways.

The positioning of the pilot ladder or the gangway ladder on the opposite side to the quay is forbidden.

Vessel's Stay at Berth: Any stay at a berth outside that of commercial operations must be authorised by the Port Captain.

All vessels must only stay in port for the minimum time required.

In the event of commercial operations not commencing immediately, or are stopped for any reason, the Port Captaincy may decide to call for the vessel to go out to the roads.

Departure formalities may be required to be carried out in the roads. Masters must report any machinery damage which reduces their capability. Repair works of any kind are forbidden except where specially permitted by the Port Captain.

Sealine: Use of ship's anchors will not be permitted when manoeuvring into berth. Two tugs are available to assist in berthing. On arrival vessels should have ready 8 mooring lines, 4 forward and 4 aft and a tow rope at each end as it will be necessary to position the vessel with her own gear before securing to the heavy wires. Good rope messengers should be ready at each end of the vessel to pick up these wires.

There are 3 mooring buoys at the bow and 3 at the stern. All buoys are fitted with 5 in. wire ropes. Ships of moderate tonnage may be moored using 2 bow buoys and 2 quarter buoys only. Hoses will be lifted from both sides of the vessel using ship's gear and crew.

The port and starboard derricks must be ready for use before berthing. The safe working-load must be at least 5 tons. The Loading Master can refuse to berth a tanker whose lifting tackle is not correctly rigged or in good working condition.

Three 12 in. hoses are connected for loading, 2 on one side and 1 on the other. Loading rates up to 5,500 t.p.h.

Also see "Shipmaster's Report" dated March 1983.

TANKERS: See "Berths" and "Berthing".

BALLAST: Pilots are empowered to refuse to berth a vessel if in their opinion the vessel has insufficient ballast, or her trim is such that it would prevent safe loading.

STEVEDORES: Vessels must cable their ETA at least 24 hours before arrival and confirm before 1700 hrs. on day prior to arrival or before 1000 hrs. if vessel will arrive in the afternoon of the same day. Gangs are ordered before 0700 hrs. for mornings and at 1030 hrs. for afternoons. Shifts are from 0730 – 1050 hrs. and 1530 to 1650 hrs. Extra shifts from 0730 – 1330 hrs. and from 1330 to 1930 hrs.

DENSITY: 1030.

MEDICAL: All treatment of ship's crew is arranged by private doctors through ship's Agent. No hospital facilities at Arzew. Seriously injured crew are taken to Oran, 45 km. away, for hospitalisation. Vessels arriving with sick crew on board should notify Agents well in advance to make arrangements for hospitalisation on arrival. No patient is to be disembarked without notification to the Health Officer for his agreement.

FRESH WATER: Provided by fresh water hydrants on M2/M3 (El Djedid), Moles III and IV. Elsewhere fresh water can be supplied by a tug.

FUEL: Two barges of 2,000 tons each are available. They deliver at a rate of 350 cu.m.p.h. These barges are intended for bunkering vessels with fuel oil (1000 sec. redwood, 0.924), bunker "C" (3000 sec. redwood, 0.960), gas oil and diesel oil (40 sec. redwood, 0.810 to 0.840) and lubricants, both in the roads and at the quays.

WATCHMEN: Shore watchmen are compulsory for vessels loading fertiliser or discharging LPG or refined crude in the harbour area. For tankers loading at the sea line berth, watchmen are at Master's discretion.

CUSTOMS ALLOWANCES: 200 cigarettes and an opened bottle of spirits per man.

IDENTITY CARDS: On arrival, the immigration control inspect all passports or seamen's books. Shore passes are given at the harbour gate in exchange for passports, seaman's book, or in the case of French seamen, their identity cards.

AIRPORT: International Airport at Es-Senia (Oran), distance 50 km.

CONSULS:

France (Consul-General), Tel: 33.10.13.
Italy (Vice-Consul), Tel: 35.51.96.
U.S.A. (Consul), Tel: 35.26.65.
Spain (Consul-General), Tel: 33.21.65.
U.S.S.R. (Consul).

The Netherlands are also represented.

TIME: GMT plus 1 hour all year.

TELEPHONES: Available only at methane berths. At the sea line berths tankers may communicate using VHF Channel 16 to Arzew Terminal.

SERVICES: *Launch Service:* Available for ship's crew for transportation to the roads.

GENERAL: *Measures to be taken in the event of deterioration in weather conditions:* In the event of a warning of high winds and bad weather, the Master must be prepared to stop loading and to make arrangements for suitable *ballasting.*

In the event of high wind or the threat of it, particularly from the North to the East, the following measures should be considered:

Reinforcement of moorings.
Ballasting.
Taking a Pilot on board.
Requesting aid of tugs.
Stop loading – disconnection of arms.
Sailing of the vessel.

Light and Flag Signals: From their arrival in the Roads until they leave, all tankers not degassed or vessels carrying hazardous goods must exhibit the following signals:

By day: A red flag.

By night: A fixed red light visible all around the horizon, apart from regulation navigation lights.

Wind: In Winter winds predominantly from the West.

In Summer the main winds are those from the East to North sectors.

Seasonal variations define two periods: the one of a windy Winter (October to April) and the other, the Summer, more calm (May to September). The average frequency of winds in excess of 10 m./sec. from the N.E. quadrant varies from 3.5% during the Winter to 2% during Summer, whilst that of winds from the S.W. quadrant varies from 5.1% to 1.3% between the same periods.

Tide: The variation in water level arise from the superimposition of a half-daily lunar tide of low amplitude (15 cm. – 30 cm.), fluctuations in general level during the year and long period oscillations (tidal waves).

Swell: Swell from North to East direction is preponderant, whilst that from other directions is negligible.

79% of the time the amplitude is less than 1 m.

3% of the time the amplitude is greater than 3 m.

The bad weather period is from December to April, with the maximum risk in December.

Currents: General Currents: Centre of current from East to West, –0.25%.

Surface Currents: With N.E. wind between 30 km./h. and 35 km./h. currents in the same direction (0.8 km./h.) as far as the Madrague area where they turn to the South and even S.E. (0.3 km./h.). With S.W. wind at 25 km./h., the currents have the same direction as the wind and can reach speeds of the order of 1.2 km./h.

Bottom Currents: There is a bottom current coming from Mostaganem (0.35 km./h.) which follows the coast.

Accident on Board or in Port – Principal Steps to be Taken:

In the event of accident, all fire-fighting means installed permanently on the moles, quays and in the port area are immediately placed at the disposal of Masters.

If there is fire on board the vessel, the Master must, as soon as the source of the fire has been established, take every measure to extinguish it.

If the Master considers that he cannot achieve this, he draws the attention of the port services by making a series of long blasts on his vessel's whistle, and requests that all possible available means be put at his disposal. At the same time he must:

(1) Stop commercial operations.
(2) Disconnect loading arms and hoses.
(3) Close all openings leading to the tanks, pump room, bunkers, etc.
(4) Place his vessel immediately in a position to sail so as to get away from the berth should the Port Authorities so request.

Other vessels, as soon as they hear the siren of the vessel in trouble, must:

(1) Stop commercial operations.
(2) Disconnect loading arms and hoses.
(3) Close all openings leading to the tanks, pump room, bunkers, etc.
(4) Place the vessel immediately in a position to sail.
(5) Prepare all means for fire-fighting.

Fire-fighting means:

These comprise:

First strike means (foam, powder) installed at the loading points Fire-fighting network.

A pump vessel equipped for fighting hydrocarbon fires.

Tugs fitted for fighting fires of all kinds.

SHIPMASTER'S REPORT: March 1983.

Vessel – 140,000 d.w.t. tanker.

Documents: 2 Immigration officials boarded and their launch circled the vessel first. They required 2 Shore Declarations each in quadruplicate, 2 Arms and Ammunition Lists , 2 Narcotics Lists, 2 Crew Lists, 1 Crew Declaration and 1 Stores List.

Agent required 2 Crew Lists, 1 Crew Declaration and 1 Stores List. Customs do not always board at Sea Berth but when they do are very strict.

Cargo documents usually arrive on board before vessel leaves berth, otherwise vessel drifts off berth until documents delivered.

Pilotage: There are 5 Pilots for the harbour. When a vessel is at the Sea Berth then 1 Pilot lives on board all the time. They change watches between 1400 hrs. and 1500 hrs. each day.

Anchorages: Anchored in position with Ilot d'Arzew bearing 291°(T)×4.0 nautical miles. Bottom mud, good holding ground. Had a Force 8 WxS Wind and did not drag, with 10 shackles out. According to British vessel there, ships frequently do drag.

Restrictions: Berthing daytime only, unberth anytime.

Tugs: 3 tugs; 1 forward, 1 aft with ship's lines and 1 pushing which does not make fast.

Berthing: Went to Sea Berth and moored heading N'ly. Mooring buoys are referred to by Pilots as No. 1 (starboard bow) round to port bow and from port quarter to buoy on starboard quarter which is No. 6. Require two ropes at each end as ship's first lines to buoys. Wires with nylon tails not allowed as the buoy quick release hooks do not work and they say they cannot get the eyes off the buoys due to the weight. 2 mooring boats.

Method of mooring in good weather with no wind was:

1 ship's rope to No. 3 buoy, then 1 ship's rope to No. 1 buoy, then 1 ship's rope to No. 4 buoy, then 1 ship's rope to No. 6 buoy. Vessels are then positioned transversely and shore wires are taken onboard from No. 2 and 5 buoys to position the vessel longitudinally. Then shore wires are taken from No. 3 and 4 buoys, then No. 1 and 6 buoys; when these are fast, ship's ropes are let go. Final moorings are 2 wires from No. 1, 3, 4 and 6 buoys and 1 wire from No. 2 and 5 buoys.

According to echo sounder depth of water was about 21.5 m. forward and about 18.5 m. aft.

5 riggers board with Carpenter's stoppers and assist in mooring, unmooring and with hoses. They also live onboard and require accommodation and feeding. Riggers change shifts about 1000 hrs. daily.

Loading: If loading condensate then 1 hose from each side with average loading rate of about 2,600 tonnes/hour. There is another hose on starboard side which is apparently used for crude oil.

Ballast: Ballast is pumped to sea.

Time: GMT plus 1 hour all year.

SHIPMASTER'S REPORT: March 1984.

Arzew el Jadid – Bethioua: LPG Berth No. D1.

Berthing: Two tugs make fast close to East Entrance to the port – at the time of berthing the wind was from the N.N.E. at 20 knots gusting to 25 knots and the tugs were secured with great difficulty with the vessel positioned virtually in the entrance.

Whilst berthing a third tug pushes amidships to hold the ship on the berth.

Two tugs are used for unberthing.

Tugs are secured using two lines (ship's lines).

Manoeuvring area inside the breakwater is tight and I would not recommend berthing or unberthing operations in wind speeds exceeding 15 knots.

The max. length of vessel permitted on Berth D1 is 220 m. and the max. permitted draft is 12 m., – understand the first ship to use the jetty touched the bottom during berthing (35,000 tonnes shipment) no record of draft available.

Moorings: Three head/stern lines, two breast lines and two back springs.

Gangway: No shore gangway.

Chiksans: 3×12 in. liquid loading arms, 1×12 in. vapour return line, 1×8 in. bunker loading arm. Quick release clamps are fitted on chiksan arms. Disposition from West to East is; Bunker loading arm; Liquid loading arm; Liquid loading arm; Vapour return arm; Liquid loading arm.

There is a facility for purging loading arms with nitrogen prior to disconnecting which was unproven during our call due to low nitrogen pressure.

Cargo Pumps: 1×500 cu.m. circulating pump. 3×1,650 cu.m. loading pumps.

Vapour Return: Capacity unknown.

AUTHORITY: Entreprise Portuaire D'Arzew, 45 Rue Aissat Idir, B.P. 46, Arzew, Algeria. *Tel:* 377527, 377491, 377970. *Telex:* 12819, 12990, 12982.

BEJAIA (Bougie): 36.45 N. 05.05 E. (See Plan Book)

DOCUMENTS: Refer to Algiers.

PILOTAGE: Compulsory within pilotage zone between Cap Carbon to the West and Ras Attia to the East. Contact pilot station by VHF Channel 16 or Telex 83940. Tel. 92.35.03 (night). International code signals used to call Pilot who boards at the limit of pilotage zone. Pilot ladder should always be placed on port side.

ANCHORAGE: Suitable anchorage in all weathers will be indicated by the Pilot.

RESTRICTIONS: No night movements for tankers with LPG or refined petroleum cargoes.

MAX. SIZE: Tankers: Length 260 m. Draft up to 13 m. Waiting zone for vessels in ballast; depth 10 m.

Commercial Port: Draft between 7 m. to 9 m.

HEALTH: Free pratique given by Brigade Maritime on arrival, unless suspected disease on board when Port Doctor will visit the ship. Pratique is automatic after calling at another Algerian Port.

RADIO: Alger Radio.

TUGS: Available under direction of Pilot by VHF contact. Ship's lines always used. 2 tugs required for berthing and unberthing.

BERTHING: 23 berths with depths 5.5 m. to 10.0 m.

TANKERS: *Sonatrach Oil Terminal:* 3 loading piers for crude oil.

Pier No. 1 for vessels up to 11.50 m. draft. 4×10 in. hoses.
Pier No. 2 for vessels up to 12.50 m. draft. 4×12 in. hoses.
Pier No. 3 for vessels up to 13.00 m. draft. 4×12 in. hoses.

Maximum pressure allowed 3 kgs.

Loading rates up to 4,000 t.p.h.

BALLAST: All dirty ballast to be discharged ashore; 2 hoses available at each berth, can receive ballast up to 2,000 t.p.h.

Vessels berthed at Piers No. 2 and 3 cannot discharge ballast simultaneously.

Clean ballast may be discharged to sea, only if vessel is in gas-free condition.

Thick slop residues may only be accepted subject to terminal operator's approval, but only in quantities of less than 100 tons.

FRESH WATER: Available at berths No. 2 and 3 only, subject to 24 hours' notice. Loading rate about 15 t.p.h.

FUEL: Available at all Sonatrach berths, subject prior arrangements. No barges.

REPAIRS: Very limited facilities. No dry docks. No possibility for radio/radar repairs.

No repairs may be carried out on board a tanker without first obtaining the Harbour Master's permission.

FIRE PRECAUTIONS: Anchors must be hove-up while vessel is moored in berth. A fire wire must be provided fore and aft for tug's use if necessary.

Tanker's fire-fighting equipment must be ready for use on fore and main deck.

3 tugs are equipped with fire-fighting apparatus.

DENSITY: 1025.

WATCHMEN: Not compulsory but recommended. The Port Commandant may impose a guard on vessels carrying certain cargoes.

CUSTOMS ALLOWANCES: 3 packets cigarettes and 1 bottle of wine or alcohol per man per day.

CONSULS: France.
REPATRIATIONS: Can be arranged via Algiers.
AIRPORT: Dar-el-Beida International Airport at Algiers, 240 km. from Bejaia.
POLICE/FIRE/AMBULANCE: Police, tel. 92.04.22. Ambulance/Fire, tel. 92.00.02 or 14.
TELEPHONES: None on board, but telephone exists at each tanker berth.
SHORE LEAVE: Allowed, provided seamen carry identity cards or shore passes.
DEVELOPMENTS: Port to be expanded to accept vessels of 30,000 d.w.t.
AUTHORITY: Office National des Ports, Mole Casbah, B.P.94, Bejaia. *Tel:* 92.18.04/05, 92.35.03. *Telex:* 83055, 83940.

GHAZAOUET (Nemours): 35.06 N. 01.52 W.

(See Plan Book)

PILOTAGE: Pilotage is compulsory and is provided day and night, unless the port is closed. Whilst awaiting the Pilot the vessel must keep watch on Chanel 14 or 16 VHF.
Pilotage Area: To the East: meridian passing through the Touent Coastguard Station. To the West: the meridian passing through the village of El Amadra.
ANCHORAGE: Limit of the anchorage area: To the East meridian 01° 51′ 00″ Long. West as far as its intersection with parallel 35° 07′ 22″ Lat. North.

To the North: Parallel 35° 07′ 22″ between its intersections with meridians 01° 51′ 00″ and 01° 52′ 42″.

To the West: Meridian 01° 52′ 42″ of Long. West to half a mile to the West of the head of the North Jetty as far as its intersection with parallel 35° 08′ 22″

The port of Ghazaouet offers roads with good holding ground, but by virtue of its position, vessels are exposed to all weather.
APPROACHES: From seaward and during daytime the best landfalls for the roads is Tadjera mountain (861 m.) or the square mountain of Trara 18 km. to the East of Ghazaouet and the summit of the mountain chain of Djebel Fillaoucene visible at over a distance of more than 20 miles offshore in clear weather.

The outer channel is 225 m. wide and 12 m. – 20 m. deep and the inner channel 166 m. wide and 11 m. – 12 m. deep. There are 5 lights; 1 at the Two Brothers' Rock (Les Deux Freres), one at the end of the West jetty, one at the head of the old West jetty, one at the West end of the North jetty and one on the pier of the North jetty.
MAX. SIZE: Max. length 170 m.
TUGS: One tug, 1,800 h.p. Available through CNAN (Algerian National Navigation Co.).
SPECIAL CARGO HANDLING FACILITIES: Inflammable goods are handled at Quay No. 1, cereals are handled at Quay No. 8 (4 suction pumps available, 2×50 t.p.h. and 2×100 t.p.h.), also 3 mechanical shovels, loading of acid at Quay No. 9 and ore is handled at Quay No. 10.
CRANES: There are 3 electric cranes on rails fitted with scoops. 2×10 tonnes and 1×12 tonnes. There are also 6 mobile cranes fitted with hooks, 2×2 tonnes, 2×10 tonnes, 1×28 tonnes and 1×40 tonnes. Nineteen fork-lift trucks, 12×3 tonnes, 5×8 tonnes, 1×10 tonnes and 1×28 tonnes.
STEVEDORES: Carried out by SONAMA (national company for handling). Work carried out in two shifts and from time to time a night gang is available. Working hours from 0700–1900. Port Director can extend working hours beyond 1900 hrs. for vessels to complete operations and sail. 160 stevedores available.
FRESH WATER: Available from 17 hydrants along the quays.
FUEL: This is not provided on a regular basis, however, small quantities are sometimes supplied by road tankers.
POLICE/AMBULANCE/FIRE: Police tel. 22.12.76, Fire Brigade tel. 22.10.14.
WEATHER: The strongest and most frequent winds are from the N.W. and with the entrance channel aligned East-West passage is dangerous since the currents generally follow the direction of the winds.
SERVICES: No deballasting facilities available. Stores available through CNAN.

BANKS: B.E.A., Bd. Du 1er Novembre, Ghazaouet. Tel: 22.11.68, 22.13.50.
C.P.A., Rue de la Republique, Ghazaouet. Tel: 22.10.51.
B.N.A., Rue de la Republique, Ghazaouet. Tel: 22.12.80, 22.12.68.
GENERAL: *Lights:*
Ghazaouet Lighthouse: Lat. 35° 05′ 09″ N., Long. 01° 52′ 03″ W.
Passage Lights: Light on the Two Brothers (02), light on end of the West jetty, light on the West jetty head, light at the West end of the North jetty and a light on the mole of the North jetty.
Max. Tide: 40 cms.
Dominant Winds: Northeasterly and Northwesterly.
Visibility: Excellent.
DEVELOPMENTS: The following works are planned: the moles are to be re-surfaced and the fendering to be improved, a ro/ro ramp is to be built at Quay No. 9. Dredging work to take place.

SHIPMASTER'S REPORT: 1982.
Name: Ghazaouet (ex Nemours), Lat. 35° 06′ 00″ N., Long. 01° 52′ 21″ W.
Port Limits: As anchorage, a suitable one is within 1 mile of the port. The limits are observed around that area.
Documents: Same as for Algiers. Also every vessel must have copies of Manifest and Bills of Lading, minimum 3 copies of each.
Pilotage: Pilotage is compulsory for all vessels except those who comply with Article 178 of Maritime Code. Agents arrange for Pilot, who can be contacted on VHF Channels 16 and 14. On calling Channel 16 call "Ghazaouet Port Control". Pilot boards in fair weather at anchorage or 2 to 3 cables from the entrance. Pilot boat has a black hull. Pilot station is located at Quay "D".
Anchorages: No anchorage boundaries described. However anchorage in fair weather can be obtained in 15 to 20 fathoms of water which is about 3 to 5 cables North of Northern breakwater. Bottom is sand. Anchorage is not protected, it is mostly open and dangerous to winds from Northern semi-circle.
Restrictions: Vessels can berth or sail any time of day or night.
Max. Size: It was not stated clearly. This vessel's LOA is 147.5 m., and max. breadth of 21.5 m. Berthing and unberthing was quite safe. Max. permissible draft as stated by Port Control is 10 m., but alongside this ship depth in places was 32 ft. Max. length stated which is possible for berthing is 170 m.
Health: Pratique is granted after berthing. Two crew vaccination lists are to be submitted along with Maritime Declaration of Health (Algerian Form).
Radio: At present there is no coast radio station.
VHF: At Port Control VHF watch is kept during daytime and berthing/unberthing. Calling Channel 16, working Channel 14.
Radar: No radar facilities available.
Tugs: There is 1 tug at present. The details could not be obtained about its horse power. Ship's lines are used. Tug joins the vessel outside the breakwater during fair weather.
Berthing: There are 5 moles in Ghazaouet details as follows:
Mole Alger (A) – Quay No. 1. Depth alongside 7.5 m. to 8 m.
Mole De Batna (B) – Quay Nos. 2 and 3. Depth alongside 7 m. to 8 m.
Mole Constantine (C) – Quay Nos. 4, 5, 6 and 7. Depth alongside 8 m. to 9 m.
Mole Djanet (D) – Quay No. 8. Depth alongside 8 m. to 9 m.
Mole Tlemcen (E) – Quay Nos. 9 and 10. Depth alongside 9 m. to 10 m.
Specialities:
Quay No. 1 – Dangerous Cargo.
Quay No. 8 – Cereals.
Quay No. 9 – Loading Acids.
Quay No. 10 – Minerals.
Cranes: As per available data. There are two cranes of SWL 10 tonnes, one of 12 tonnes and one of 14 tonnes. Also there are 4 mobile cranes available, capacities are 2×2.5 tonnes, 1×5 tonnes and 1×24 tonnes.
Bulk Cargo Facilities: The vessel carried corn in bulk. The cargo was discharged either into rail wagons or into trucks. Rate of discharge variable. If sufficient trucks or wagons available rate can reach up to 600 tonnes per shift (approx).
Bridges: No bridges at Ghazaouet.
Stevedores: Stevedores are arranged either by Agents or Receivers. No separate notice necessary by vessel.
Medical: Doctors and hospital available at Ghazaouet. Agents to be informed in writing prior to anybody seeing the doctor.

BERTHING:

Quay	Berth No.	Basin	Depth (m.)	Length (m.)	Usage	Priority Usage	Equipment
No. 1	1	Skikda	7.5 – 8	100	Various	Various	
	2	Skikda	7.5 – 8	100	Various	Various	
	3	Skikda	7.5 – 8	100	Various	Various	
No. 2	1	Skikda	7.5 – 8	80	Food Products,	Food Products,	
	2	Skikda	7.5 – 8	80	Various	Various	
No. 3	1	Skikda	7.5 – 8	123	Various	Various	
No. 4	1	Skikda	7.5 – 8	94	Bags, Pallets (Minerals)	Bags, Pallets (Minerals)	
No. 5	1	Wahran	8 – 9	101	Bags, Pallets (Minerals)	Bags, Pallets (Minerals)	
No. 6	1	Wahran	8 – 9	125	Bags, Pallets (Minerals)	Bags, Pallets (Minerals)	
No. 7	1	Wahran	8 – 9	103	Bags, Pallets (Minerals)	Bags, Pallets (Minerals)	
No. 8	1	Wahran	8 – 9	100	Cereals & Minerals	Cereals	2 electric cranes of 10 T.
	2	Wahran	8 – 9	100	Cereals & Minerals	Cereals	
	3	Wahran	8 – 9	100	Cereals & Minerals	Cereals	
No. 9	1	Macherek	10	120	Acid, Wood	Acid	Acid loading installation
No. 10	1	Macherek	10	100	Minerals, Cereal Discharge	Minerals	1 electric crane of 12 T.
	2	Macherek	10	100	Minerals, Cereal Discharge	Minerals	
	3	Macherek	10	100	Minerals, Cereal Discharge	Minerals	

Density: Density was observed to be 1028.
Fuel: None available. Gas oil may be supplied in barrels if sufficient notice given.
Fresh Water: Available alongside each pier. Rate of delivery about 7 to 10 tonnes per hour.
Consuls: None.
Surveyors: None.
Gangway/Deck Watchmen: Agents arrange for same. As long as vessel is in port she must have shore watchman. Usual recommendation given in port is to lift gangway at night, if vessel not working cargo, at about 2300 hrs.
Customs Allowances: 200 cigarettes per man per week, 1 bottle of alcohol per man per week.
Time: GMT plus 1 hour.
Telephone: Telephones are not available on board.
Agents: Compagnie Nationale Algerienne de Navigation (CNAN).
Telephone Numbers: The following important telephone numbers were obtained:

Fire Brigade 22.10.14, Police 22.12.76, Pilots 22.13.45, Port Director 22.12.20.

AUTHORITY: Port de Ghazaouet, Rue de la Marine, B.P.17, Ghazaouet, Algeria. *Tel:* 22.12.20, 22.12.55 and 22.12.35. *Telex:* 18086. *Contact:* K. Mehabi, Port Commandant.

JIJEL: 36.50 N 05.47 E.

SHIPMASTER'S REPORT: October 1984.

DOCUMENTS: Same as "Algiers".
PILOTAGE: Pilot boards vessel off the breakwaters. Pilot working daytime only. Call Pilot on VHF Channel 16.
ANCHORAGE: Off the breakwaters at a distance of 0.5 miles – 1 mile, depths from 12 fathoms to 20 fathoms. Anchorage not sheltered.
TUGS: One tug available.
BERTHS: There are two berths. The South Quay 200 m. long and the North Quay 400 m. long. Max. draft 10 m.
CRANES: At the North Quay two cranes under construction. All other equipment available.
STEVEDORES: Work in two shifts from 0730 hrs. to 1330 hrs. and 1400 hrs. to 2000 hrs. Fridays and holidays not worked.
CARGO GEAR: Stevedores use ship's cargo gear.
FRESH WATER: Available from quay but not good for drinking water.
REPATRIATION: Can be arranged via Agent.
TIME: GMT in Winter. GMT plus 1 hour May to October.
CUSTOMS ALLOWANCES: 200 cigarettes and an opened bottle of spirits. Customs are very strict.
IDENTIFICATION CARDS: On arrival Immigration Control inspect all passports and seamen's books. Shore passes are given at the harbour gate in exchange for passports, seamen's books.
SHORE WATCHMEN: At Master's discretion.
AUTHORITY: Capitainerie du Port.
AGENT: CNALNAV (State Agent), Jijel. Office at South Quay.

MOSTAGANEM (Mestaghanem): 35.56 N. 00.04 E. (See Plan Book)

DOCUMENTS:
- 7 Crew Lists.
- 1 Passenger List.
- 1 Health Declaration.
- 2 Store Lists, including Bonded Stores.
- 2 Crew Personal Effects Lists.
- 2 Lists of Arms and Ammunitions.
- 1 List of Currencies.

Certificates: All certificates are required in the case of an inspection from the Maritime Authorities or in the case of arrest.
Coastguards & Customs: Visit by the Coastguards in the Roads.

Visit by the Customs Officials at the quay. Manifests must be accurate.

PILOTAGE: Compulsory. There are 3 Algerian Pilots; 24 hour service. Pilot boat is black with a white stripe. Vessels arriving after sunset, if no cargo work at night, will be kept in the Roads until 0600 hrs. next morning. Vessels sail at any time during the night.
ANCHORAGE: Vessels anchor about 0.5 miles from the Sea Jetty, recognisable by a lighthouse with a white light at its top (3 flashes, 1 pause, 3 flashes, 1 pause).
MAX. SIZE: Max. LOA 180 m. Max. depth of water 27 ft.
HEALTH: Free pratique is granted easily upon berthing and producing Health Declaration and Vaccination List. If any Vaccination Certificates have expired, free pratique will be granted and Health Authorities will arrange, on request, the vaccinations.
RADIO: Alger Radio, receiving on 2182 kHz. and working on 1792 kHz., on 24 hours basis. Also Oran Radio, listening on 2182 kHz., and working on 1735 kHz., on 24 hours service. Advisable to use the latter.
VHF: At the Harbour Master's Office, working on Channel 16, officially 24 hour service, English, French and Arabic spoken.
TUGS: Two tugs available, request to be made to Pilot. 24 hour service.
BERTHING: Eight berths available. Total length of quays, 1,100 m.

Berth No.	Length (m.)	Depth (ft.)
0	115	23
1	140	24
2	140	24
3	132	24
4	135	25
5	135	25
6	140	26
7	140	27
X, Y	Service Quays	

CRANES: 2×6 tons and 3×15 tons. 5 cranes will be aquired in 1984/85.
STEVEDORES: Supplied by Port Authority. 3 shifts of 6 hours each from 0700 hrs. – 0100 hrs. Ship's gear to be used if cranes not available.
MEDICAL: All facilities available.
DENSITY: 1025.
FRESH WATER: Available at certain quays, otherwise by tug.
FUEL: No facilities. Vessels must proceed to Oran or Arzew for bunkering.
GANGWAY/DECK WATCHMEN: Not compulsory, but strongly recommended by Port Authorities and Agent.
OPENING/CLOSING HATCHES: Can be performed by ship's crew or by stevedores.
CUSTOMS ALLOWANCES: 1 bottle of spirits and 1 carton of cigarettes are allowed for every Crew member. Anything in excess of this amount will be sealed.
IDENTIFICATION CARDS: On leaving the vessel, Crew members to carry their passports, which will be kept at the harbour gate, whilst ashore.
CONSULS: None.
REPATRIATION: It is possible and easily arranged by Agent (CNAN).
REPAIRS: Only minor repairs can be carried out by workshop. Repairs on board with Port Captain's permission.
AIRPORT: At Oran, La Seine Airport, 80 km. distance, with 3 daily domestic flights to Algiers.
HOLIDAYS: See "Algiers".
TIME: GMT plus 1 hour in Summer.
PORT REGULATIONS; No repairs to main engine, no lifeboat practices, no work on hull and anchors without prior permission from Port Captain. Offenders will be heavily fined.
SHORE LEAVE: No restrictions, except for some nationals.
DEVELOPMENTS: A ro/ro berth and a general cargo berth will be available in 1986. Depth of water 30 ft.
AUTHORITY: Entreprise Portuaire de Mostaganem, P.O.Box 131, Mostaganem. *Tel:* 26.81.85, 26.04.07. *Telex:* 14036, 14086.
Contact: M. Tahar, Director General.

ORAN (Wahran): 35.43 N. 00.39 W.

DOCUMENTS: Refer to Algiers.
PILOTAGE: Compulsory. Arranged by Agents' basis vessels ETA. International Code signals used. Pilot boards at port entrance.
ANCHORAGE: In depths over 40 ft. available in the roads.
MAX. SIZE: Length 800 ft. Draft 38 ft.
HEALTH: Free pratique given by Brigade Maritime on arrival, unless suspected disease on board when port doctor will visit the ship. Pratique is automatic after calling at another Algerian Port.
RADIO: Alger Radio.
TUGS: Available to assist berthing and unberthing.
BERTHING: Mole 1: tankers, depth alongside 39 ft. Mole 2: tankers, depth alongside 33 ft. Cargo vessels: Twenty berths at quays with depths from 20 ft. to 33 ft. alongside.
MEDICAL: Doctors and hospital facilities available.
FRESH WATER: Available by barge.
FUEL: All grades available by pipe-line at the oil berths.
REPAIRS: Only minor repairs can be effected.
WATCHMEN: Not compulsory but recommended. The Port Commandant may impose a guard on vessels carrying certain cargoes.
CUSTOMS ALLOWANCES: Three packets cigarettes and one bottle of wine or alcohol per man per day.
AIRPORT: La Senia, 7 km. away. Daily flights to Algiers for international connections.
AUTHORITY: Entreprise Portuaire d'Oran, Direction Generale, 6 Avenue Mimouni Lahcene, B.P. 106, Oran, Algeria. *Tel:* 39.56.01, 39.57.10, 39.53.52. *Telex:* 22422. *Contact:* The General Manager.

SKIKDA: 36.53 N. 6.54 E. (See Plan Book)

DOCUMENTS: The Harbour Master or his representative board on vessel's arrival alongside. The following are required:

Certificate of Registry.
Safety Construction Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Safety Radio/Telephony Certificate.
Fire Extinguisher Certificate.
International Oil Pollution Prevention Certificate.
1 Copy Crew List for Port Office (Harbour Control).

All ships' Masters must have ready the relevant declarations for the cargo, currency, state of health of the crew – and these should be ready before arrival in the Roads. Customs will open the shipboard bond every 8 days on request of the ship's Master.

PILOTAGE: Compulsory.

RESTRICTIONS: Mooring and unmooring permitted at night. Also see "General".

If vessel required to swing inside harbour, turning basin is 360 m. diameter provided draft not more than 11 m.

MAX. SIZE: New Port: Berth No. 3 – Depth 16.0 m. Max. draft 14.8 m. Max. LOA 260 m.

Tankers up to 50,000 d.w.t. acceptable at No. 3 berth.

VHF: Station-Radio Skikda. Channel 16 (Calling and Safety), Channel 12 (Working – Port Captaincy), Channel 14 (Working – Port Manoeuvres).

The above Channels are to be used from arrival till departure when within the port limits.

Information on berthing times may be obtained between 1100 hrs. and 1200 hrs.

TUGS: 4 tugs, 1,500 h.p. – 2,300 h.p. Tug assistance available for berthing and unberthing.

DENSITY: 1023.

TANKERS: New Port:

NP. 1 & 2: Max. LOA 230 m. Depth 14 m. Max. draft 12.8 m.

NP. 3: Max. LOA 260 m. Depth 16.0 m. Max. draft 14.8 m. Also see "Shipmaster's Report" dated May 1984.

NP. 5: Max. LOA 140 m. Depth 11.5 m. Max. draft 10.5 m. Butane and propane handled.

A.1: Max. LOA 140 m. Depth 11.5 m. Max. draft 10.5 m. Ethylene handled.

M.1 and M. 2: Max. LOA 220 m. Depth 11 m. and 12 m. respectively. Max. draft 11 m.

FRESH WATER: Available in very limited quantities by pipe-line at the berths.

FUEL: Available.

AIRPORT: Constantine (Ain El Bey Airport) 100 km. from Skikda. Annaba (Les Salines Airport) 130 km. from Skikda.

MEDICAL: Medical services and hospital available.

CONSULS: None.

REPAIRS: All arrangements made by Agent (C.N.A.N. – Skikda Agency).

SAFETY: Harbour Office issue Port Regulations on arrival.

GENERAL:

Wind Limits in Port: Old Port 7/8 on Beaufort Scale, New Port 4/5 on Beaufort Scale.

Repair Work/Maintenance: Whilst the vessel is alongside, all work (painting, scraping, welding, chipping) is forbidden before obtaining permission from the Harbour Master's Office.

Engine repairs are also forbidden and Master must declare all defects engine/deck.

Dirty Ballast: Only clean ballast or ballast having less than 10 p.p.m. of oil may be discharged at the anchorage or in new or old port.

Legislation: All Masters of vessels are under obligation to conform to all legislation in force, to operating regulations, to the Police and Security Regulations for the ports and to the instructions of any Authority charged with the supervision of their enforcement.

Movements: Current Combined Port: Departures 24 hours, entry Winter 0500 – 1900 hrs., entry Summer 0500 – 2100 hrs.

New Port: Departure 0600 – 2400 hrs., entry Winter 0600 – 1600 hrs., entry Summer 0600 – 1900 hrs.

The modernisation of the Port lighting currently being undertaken will permit a greater range of movement.

SHORE LEAVE: Crew wishing to go ashore must obtain a pass from the Frontier Police.

SHIPMASTER'S REPORT: 1979.

Pilotage: Pilotage is compulsory. When entering the port Pilot is arranged with the Harbour Control. When leaving, the ship contacts Harbour Control on VHF radio once all documentation has been completed and the vessel is ready to leave. There are 5 Pilots attached to the port.

Anchorage: The anchorage is sheltered from the South through West to N.N.W. by hills, but is open from the North through to the East.

During our stay at the anchorage the wind varied from S.W. to North, and at times a large swell built up, obviously from a disturbance away from the coast. I found secure holding ground in 30 m. to 40 m. of water 1 mile North of the main breakwater of Skikda harbour for the 3 times we had to anchor, with 4.5 shackles of cable out on the starboard anchor. Our vessel rode out several severe squalls when other ships in the vicinity were dragging their anchors.

Radio: There is a local radio station working VHF only, call sign "Skikda Radio", calling frequency Channel 16 and working frequency Channel 26. Local telephone calls to Skikda are handled very quickly, but overseas telephone calls can be subject to long delays, this is because they first have to go on the land line to Alger (Algiers) and this line can be congested, the same delay is also experienced when telephoning overseas from ashore.

There is a local Port Control radio, Call sign "Skikda Port Control", calling frequency Channel 16 VHF, and working frequencies Channels 12 or 14 VHF. When approaching the port ships should call the "Port Control" and give the following:

(a) Ships Name.
(b) Nationality.
(c) Gross tonnage.
(d) Draft.
(e) Length overall.
(f) Tonnage and type of cargo for discharge at Skikda.
(g) Last port.

After which stand-by on Channel 16 for instructions. When at the anchorage it is a good idea to contact the Port Control each day to see if they have any instructions. Control seem to give the ships as much prior notice of movement as they can, and the Pilot will call on Channel 16 when he is on his way to the vessel.

Tugs: Tugs are compulsory for vessels over 1,500 g.r.t., the number used depending on the size of the vessel. There are 5 tugs attached to the port, all of at least 3,000 h.p. in order to handle the large tankers and gas tankers that use the port in what is called the "New Port", which is a new port complex built 1 mile to the East of Skikda to handle the export of natural gas. The tugs are really too big for use with vessels of the size of our vessel (3,200 d.w.t., 1,597 g.r.t.).

Stevedoring/Port Facilities: The stevedores are part of a nationalised concern. General cargo discharge or loading is carried out by a combination of shore cranes and ships gear. Dangerous cargo is discharged directly on to trucks. The main grain discharge berth is by the silo, this berth is out of action for grain at present as the machinery is under repair, the latest estimate for recommencing discharge there is July. Once the machinery is in full working order they expect to be able to produce figures of up to 3,000 tonnes per day.

We lay at the other grain berth on the outer harbour wall where discharge was commenced with a mobile sucker into a hopper, however, on the second day of work the machine became inoperative. They did try to work with a mobile crane, but the condition of the quay was such that the crane was unable to find a secure platform for work so we had to wait for another berth to become vacant and discharge by shore crane with a grab into hopper then into lorries. Once on the final berth the discharge progressed quickly taking 3 working days. Working hours: 0600 – 1220 hrs., 1300 – 1900 hrs. and 2000 – 0300 hrs.

The port is well equipped with mobile machinery, i.e., forklifts large and small, mobile cranes of different types, however, maintainance appears to be a problem. There is a floating crane of unknown lifting capacity, there was no safe working load marked on any of the cranes.

There is a firefighting launch in the harbour equipped with several nozzles, the tugs are also fitted for firefighting.

Stores: A limited amount of fresh provisions can be obtained, including fresh meat, however, it is expensive. We found that items such as cooking oil, butter and flour simply could not be obtained. The ship chandler is part of the Agency so once again is part of a nationalised concern. Fresh water is laid on to most quays, but whilst we were at Skikda it was only available for 3 hours each morning each day, and at one stage the water supply system stopped functioning for 4 days. The Harbour Master seems to do his best to find ships a berth inside when they reach the desperate stage for fresh water and stores.

Authorities: Skikda is unique in the ports of Algeria in the fact that when at anchor ships come under the jurisdiction of the local Algerian Coastguard. This means that Coastguard officers board when the ships have anchored, examine the crew declaration, stores list, bonded stores list, currency declaration, crew cabins, and then seal the Bond. If laying at anchor for a long time they will come out and give an issue from the Bond if the Agents contact them.

Once inside the port the local Customs Authorities take over. They visit on arrival alongside and also require, crew declaration, stores list, bonded stores list, currency declaration; dangerous drugs list and crew lists. They will give an issue from the bond, but only sufficient for use whilst the ship is in port.

The Port Health and Immigration Officers also board on arrival alongside. Port Health requires the usual Maritime Declaration of Health and a list of vaccination (smallpox) dates, and Immigration require a crew list. If going out of the dock gate crew need passport, Seamens I.D. card or discharge book for presentation at the gate where they are issued with a shore pass and book is left in Police care until crew member returns to the dock area.

It is a Police regulation that a shore watchman is employed day and night. The Agency arrange this, deal with the paperwork and present the bill for signature.

Agency: There is only one agency in the port. The agency is Compagnie Nationale Algerienne de Navigation (CNAN), a copy of their instructions to Masters is presented below. One man being appointed to look after each vessel.

Notice:

Compagnie Nationale Algerienne de Navigation:
Agency of Skikda.

Notice:

Dear Captain,

In order to fix all necessary arrangements for your call and give the best possible turn-around, you are kindly requested to follow the instructions hereunder stated:

1. ETA to be addressed to: Trafiic Department. Cable: CNALNAV SKIKDA. Telex: 92.815. Telephone: 95-57-51; 95-57-52; 95-50-29.

1st ETA: 72 hrs., 2nd ETA: 48 hrs. and confirm via Skikda Radio definite ETA 24 hrs. before arrival (and to Harbour Control).

2. Specify nature and quantity of cargo on board for Skikda together with dangerous goods if any, and name and address of receivers of dangerous cargo.

3. State details of heavy cargo and clarify whether to be unloaded with ship's gear or shore cranes.

4. Bunkers: Should be ordered from the Agent 24 hrs. before arrival and must be received from suppliers at latest 24 hrs. before sailing. This is very important in order to avoid delay.

5. Shipchandler: Requirements should be ordered from the Agent or direct from the suppliers immediately on arrival and delivered latest 12 hrs. before sailing. The bills should be signed by Master before ship's departure.

6. Medical Assistance: Medical visits are fixed twice a day: 0900 hrs. and 1500 hrs. Emergencies excepted.

Master should declare Crew members for doctor, morning for afternoon visit. Afternoon for next morning.

All medicine should be ordered only by Master by letter addressed to the Agent.

7. Disembarking/Embarking: All Customs and Immigration formalities should be arranged 24 hrs. before sailing.

Master should declare Crew members for repatriation latest 24 hrs. before sailing, otherwise no disembarking will be arranged.

8. Custom's Fine: All penalties for whatever should be the reason must be paid by Master to Customs 24 hrs. before ship's departure.

Working hours of Customs office as follows:

Morning	0800 – 1100 hrs.
Afternoon	1430 – 1700 hrs.
Thursday	0800 – 1100 hrs.
Friday	No work

on Friday and holidays office is closed.

9. (a) Discharging and/or loading operations must be carefully checked by Master and all remarks should be mentioned on stevedoring time sheets out-turn reports.

(b) Watchmen in holds are recommended in order to avoid pilferage. Expenses involved for watching will be Owners or Charterers account.

10. The Agent will deliver to Master on arrival, "forms of call's report". These documents should be carefully filled in and returned before sailing.

SHIPMASTER'S REPORT: May 1984.

New Port, Berth No. 3.

Pilotage: 8 Pilots, 4 of whom are Algerian. Foreign Pilots have difficulty when communicating with tugs as tug skippers speak French or Arabic.

Documents:

5 Crew Lists (indicate Nationality and Seamen's Book Number).
1 Health Declaration.
4 Stores Lists.
3 Personnel Effects Declarations.
3 Arms and Ammunition Lists.
3 Narcotics Lists.
3 Foreign Currency Lists (including Crew's personal currency).

Restrictions: Vessels are able to berth between 0600 hrs. and 2100 hrs. and unberth up until midnight.

Vessels to have propeller immersed and be trimmed less than 3.0 m. by the stern.

Entrance channel: 1 Green buoy at the entrance, with plenty water on both sides. Channel dredged to 18 m. There is a sandbank on the port side of the inner entrance with less than 8 m. depth. Care is needed when leaving berth without Pilot (which seems normal practice here in Winter time.).

Tugs: 4 tugs from 2,500 h.p. – 3,500 h.p. (2 tugs forward and 2 tugs aft). Ship's ropes used.

Berthing: Vessel berthed at No. 3 "Jetee du Large", port side to. Depth of water 16.0 m. 4×16 in. loading arms, but only one available, rate 2,200 cu.m.p.h. 1×12 in. arm for bunkers.

The use of wire ropes for mooring is very difficult, some Pilots require rope moorings.

VHF: Channels 16 and 14.

Time: UTC plus 1 hour. From June 15th until end of December. UTC plus 2 hours.

AUTHORITY: Office National des Ports – Port Office of Skikda, B.P. 65, Skikda. *Tel:* 95.68.66 (direct line), 95.57.29/41 and 45 (switchboard). *Telex:* OPSKI 87840 DZ. *Contact:* Port Director.

Port Captaincy: Traverse Sud (South Road) Combined Port. *Tel:* 95.51.42. *Telex:* 87907 CASKI.

NOTES

Please also advise Shipping Guides Ltd.

Angola

CABINDA: 05.32 S. 12.11 E. (See Plan Book)

DOCUMENTS:
- 7 Manifests for each port of origin of cargo for Cabinda, plus 1 copy of each Bill of Lading.
- 8 Passenger Lists (Disembarking/in transit) even if nil.
- 7 Crew Lists.
- 8 Lists of ports previously visited.
- 2 Lists of Crew vaccinations.
- 3 Lists of Ships Stores.
- 3 Personal Effects Lists.

Other forms intended for Customs, Health, etc., can be filled in on arrival.

PILOTAGE: Government Pilots' service is obligatory. Radiograms giving ETA to be sent to Agents via Luanda Radio (or by telegram from previous port), and anchorage to be used which is the closest to Cabinda, provided locations permit. The vessel is visited by port authorities, and, if necessary, the vessel may shift to another anchorage.

When the cargo is for the account of Cabinda Gulf Oil, the vessel must be moved closer to Malongo where the oil companies have their own berth for discharge of various cargo into barges.

Tankers: The Mooring Master, from Cabgoc, moves arriving tankers 1 to 2 miles to the West, and assists in mooring to buoy. Assistance from a tug is unnecessary. Vessels may moor and unmoor during hours of daylight and darkness. Attention must be paid to oil wells and pipe-lines in that area. All platforms have lights which emit the letter "U" in Morse Code. Approach must be made from the West.

It is requested that vessels have on their port side and at the stern a properly equipped and illuminated accommodation and/or pilot ladder.

On the forecastle there must be 4 mooring cables. 1 steel cable of 0.75 in. diameter with an eye and an appropriate shackle must be rigged on the derrick.

ANCHORAGE: For vessels bound for Malongo, the anchorage is restricted where Cabinda Gulf Oil is operating. See "Single Buoy Moorings".

MAX. SIZE: Cargo vessels, in the anchorage, with 32 ft. draft, may work at will. Vessels with greater draft can be accommodated further seaward but there is always the risk of swell hampering operations.

Also see "Single Buoy Moorings".

CLEARANCE: After arrival, official authorities will board the vessel for rapid clearance so that preparations may be made to berth.

In the event of arrival during the night, clearance will not be made before 0800 hrs.

RADIO: A HF radio telephone is installed in the Malongo Terminal, call sign "Malongo", listening out throughout 24 hours, on the international frequency 2182 MHz.

For communications up to approximately 50 miles, a VHF system is installed at Malongo, which uses the same call sign (Malongo Terminal) and is also manned throughout 24 hours.

Initial contact on VHF, must be made on 156.8 MHz (Channel 16) and then by mutual agreement traffic can be passed on one of the following frequencies: 156.6 MHz (Channel 12); 165.45 MHz (Channel 9); 156.7 MHz (Channel 14).

Masters of vessels are requested to advise "Cabgoc Cabinda" 72 and 24 hours in advance of the ETA, giving the name of the vessel, date and time of expected arrival, name of Master, and any other special information.

SINGLE BUOY MOORINGS (OIL):

Berth M:

This terminal is called Berth "M" and is located about 8 miles W.S.W. of the Cabinda Gulf Oil Co. Terminal at Malongo.

Position: Lat. 05° 26′ 11″ S., Long. 12° 04′ 44″ E.

Water Depth: 75 ft.

Identification: White light, 5 miles range, flashing 2 secs. and eclipsed for 18 secs.

Berthing: Day and night operations.

Anchorage Area Position: Lat. 05° 27′ 21″ S., Long. 12° 02′ 26″ E. Water depth 130 ft.

Pilot Boarding Area: As above.

Arrival Message: Masters are requested to advise Cabgoc-Luanda (Angola) 7 days, 48 hours and 24 hours in advance of ETA. Export tankers with Telex facilities should contact Telex No. 3160 Malongo AN or 3948 Malongo AN.

Radio: A Racon beacon is installed on Juliet Platform transmitting code signal "G". Juliet platform's co-ordinates are Lat. 05° 24′ 50″ S., Long. 11° 59′ 29″ E. and the Anchorage and Pilot Boarding Area is approximately 4.5 miles S.E. from Juliet Platform.

Communications: HF radio telephone is installed in the Malongo Terminal, call sign "Malongo Terminal", listening out throughout 24 hours on the international frequency 2182 MHz. A VHF system is installed at Malongo Terminal, and is also manned throughout 24 hours. Initial contact must be made on Channel 16.

Berth T:

This terminal is called Berth "T" and is located about 25 miles W.N.W. from Cabinda Gulf Oil Co. Terminal. At this berth, a storage tanker named "Afran Ocean" is permanently moored and export tankers will berth alongside this vessel with the assistance of two tugs.

Position: Lat. 05° 14′ 13″ S., Long. 01° 50′ 31″ E.

Water Depth: Approx. 225 ft.

Identification: White light, 5 miles range, flashing 2 secs. and eclipsed for 18 secs.

Berthing: Berthing operations are carried out from 0600 hrs. to 1600 hrs. Unberthing operations during day and night time assisted by two tugs.

Anchorage Area: The Cabgoc Mooring Master on board the storage tanker "Afran Ocean" will instruct the Master of export tanker, but usual anchorage area is 2 miles North of the storage tanker.

Pilot Boarding Area: As above.

Arrival Messages: As per Berth "M".

Radio: A Racon beacon is installed on Lima Platform transmitting code signal "L". Lima Platform co-ordinates are: Lat. 05° 14′ 30″ S., Long. 11° 49′ 44″ E.

Communications: As per berth "M".

BERTHING (OIL): The berthing equipment is passed on board the vessel at the terminal when the Berthing Master comes on board the tanker. Berthing is available during 24 hours.

Handling of Hoses: 2×12 in. hoses at Berth "M" (1×16 in. at Berth "T") are connected to the manifold of the vessel on the port side. The handling of hoses is effected by the ship's crew, under the direction of a deck officer, in accordance with instructions of the Berthing Master.

The derrick on the port side must be prepared with a wire of 0.75 in. diameter (minimum), with a minimum of 5 tons safe working load.

The weight of hose is 5 tons.

Ballast: There are no facilities for receiving dirty ballast. Vessels must arrive with clean ballast sufficient for safe manoeuvring. Deballasting operations will be constantly checked by a representative of "Cabgoc", and the slightest evidence of pollution will cause permission for deballasting to be withdrawn.

Cargo: The crude oil at Cabinda has densities varying from 26.3 API. to 34.6 API. Blend loaded has average of 32 API at Berth "M" (API 34.0 at Berth "T") . Some of this oil contains appreciable percentages of hydrogen sulphide, namely 8 p.p.m., which can cause a toxic atmosphere during loading.

Loading: This is done by gravity, at times assisted by pumps at a rate of 30,000 bbls.p.h. at Berth "M" (30,000 bbls.p.h. by pumps at Berth "T"). About 30 minutes prior to completion, the representative of Cabgoc must be advised so that the "Shutdown" between the vessel and the terminal may be co-ordinated.

When the vessel has completed loading, the valves on land must be closed. Only then may the vessel's manifold valves be closed.

In an emergency the vessel may suspend loading operations.

After completion of loading, the vessel will carry out a comparison between its own load measurements and those of the terminal. The verified quantity will be transmitted by radio and lists prepared and distributed – Bill of Lading and Manifest.

Cargo documentation will be delivered to the Master of the vessel by the ship's Agents and as quickly as possible, normally by mail.

Tankers must be cleared very quickly so that there is no delay in departure. It is imperative that the Master declares prior to loading the tonnage required. Accurate meters ashore ensure that the ordered tonnage is supplied.

SINGLE BUOY MOORING (LPG): LPG Berth.

Pilotage: All manoeuvring of ships within the "Berge Sisar" mooring area is to be done only in accordance with the advice of the Cabgoc Berthing Master, subject to the understanding that in all cases and circumstances the Master of the vessel being manoeuvred shall remain solely responsible on behalf of his vessel's Owner for the safety and proper manoeuvring of the vessel.

Anchorages: The anchorage should be approached from Westerly directions. The anchorage area co-ordinates are Lat. 05° 27′ 21″ S., Long. 12° 02′ 26″ E. A Racon is installed on Juliet gathering station transmitting code signal "G". The Anchorage/Pilot Boarding Area is approximately 4.5 miles from Juliet Platform. Juliet G.S. co-ordinates are Lat. 05° 24′ 50.21″ S., Long. 11° 59′ 28.81″ E.

In all cases tankers instructed to anchor, should obtain clearance for their intended anchorage position from Malongo LPG Terminal. Tankers will not anchor in the "Berge Sisar" mooring area.

Upon arrival at Anchorage/Pilot Boarding Area, the vessel's Master shall tender Notice in writing that the vessel is in all respects ready to load. Such readiness shall include adequate cool down of and no contamination in cargo tanks.

Upon receipt of Notice of Readiness, the vessel's agency representative, any Government Officials, together with appropriate Cabgoc and "Berge Sisar" personnel will board the vessel for prompt clearance so that preparation can begin for mooring.

The vessel shall not leave the Anchorage/Pilot Boarding Area until clearance in all respects has been received from the Cabgoc Berthing Master.

Vessels are requested to have a pilot ladder safely and securely rigged in accordance with the requirements of SOLAS as instructed by the Cabgoc Berthing Master. At night, adequate lighting must be rigged overside for the safe approach and boarding of Officials and Cabgoc Representatives.

The (a) Conditions of Entry Into and Use of the Port and (b)Agreement for Hiring of Tugs shall be presented to the Master for signature and shall apply.

Restrictions: In the event of arrival during night, clearance will not usually be effected until 0800 hours. Berthing operations shall commence promptly after clearance is granted while unberthing may be performed at any time.

Max. Size: The SPM buoy is designed to provide a safe mooring for the 55,000 d.w.t. storage ship.Export vessels of 55,000 d.w.t., while moored to the storage ship, may safely load LPG while maintaining alignment of least resistance to wind, current, and waves. The maximum loading allowed on the buoy by a full storage ship and export vessel is 140,000 tons. The maximum allowable working pressure of the centre pipe shaft and valves is 400 p.s.i.g.

Radio: Masters are requested to advise Cabgoc – Luanda (Angola) 7 days , 48 hours and 24 hours in advance of ETA, giving vessel's name, date and hour of expected arrival, Master's name, expected deballasting time, amount of cargo required, information on condition in cargo tanks, and any special requirements.

Export ships with telex facilities should contact Telex No: 3160 Malongo An or 3948 Malongo An.

VHF: A high frequency (H.F.) radiotelephone system is installed at the Malongo Terminal and uses the call sign, "Malongo Terminal". 24 hour watch is maintained on the International Calling and Distress frequency of 2182 kHz. After making the initial contact on 2182 kHz, agreement must be reached between the vessel and Malongo to move to any of the following frequencies: 2738, 2638, 2056, 2049 kHz. This facility is for medium range communications and should reach, under normal conditions, 600 miles by day and about double this distance at night.

For short range communications of approximately 50 – 80 miles, a VHF system is in operation at Malongo. It covers Channels 1 through 78. Cabgoc monitors 24 hours a day Channels 16 (156.8 MHz) and 12 (156.6 MHz). The radio call sign is "Malongo Terminal".

Ship to ship communications will be on a separate frequency to be determined at a later date. Two hand-held R/T units will be distributed to both ships' chief officers by the Cabgoc Berthing Master. Receipts for these units must be signed by the chief officers.

Tugs: 2 tugs assist with berthing.

Berthing: LPG is loaded from the storage tanker "Berge Sisar". This vessel has a capacity of 75,000 cu.m. and is moored to a single point mooring buoy located at a position with a minimum depth of water of 100 ft. MLWS.

The geographical location of the buoy is Lat. 5° 25′ 30″ S., Long. 12° 02′ 15″ E.

The "Berge Sisar" receives the LPG at ambient temperature through a bow loading line from the SPM. The LPG is refrigerated and stored aboard the "Berge Sisar". The "Berge Sisar" is equipped with fenders slung from davits on her starboard side; tankers will therefore berth portside alongside the "Berge Sisar" and receive refrigerated cargo from her.

The export tanker will be moored alongside the "Berge Sisar" according to a mooring plan to be agreed between the Master of the "Berge Sisar", the Cabgoc Berthing Master and the Master of the export tanker. Fendering between the two vessels consists of 4 large fenders each 10 ft. in diameter by 20 ft. length at water line level, and 5 secondary fenders positioned close to the freeboard deck. A mooring boat will be provided by Cabgoc in order to run lines between the two ships. Vessels should provide synthetic mooring lines, or failing that, mooring wires with synthetic tails. This is necessary in order to provide sufficient elasticity in the mooring arrangement to take account of differential rolling periods of the two ships. Vessels should have 4 mooring lines forward, 4 aft, 2 backsprings forward and 2 backsprings aft.

The mooring system will be subject to variations.

Storage Ship: The LPG Storage Ship is the Norwegian registered "Berge Sisar". The vessel has the following characteristics.

Length	737 ft.
Breadth	112 ft.
Draft	39 ft.
Freeboard	41 ft.
Dead Weight Tons	55,173 (Summer)
Cargo Capacity	75,684 cu.m./500,000 bbls.
No. Cargo Tanks	4

The ship is equipped with 6×100 ton refrigeration units to chill incoming liquids to −50°C and refrigerate storage tanks to remove heat. The ship is capable of storing propane, butane, and propane-butane mix. The ship has an emergency shutdown capability in the event of equipment failure. The system will shutdown pumps and provide for necessary valve closures to protect the ship.

Determination of "Berge Sisar" onboard quantities will be by the ullage method. The quantities measured will be temperature corrected to give actual amount of each cargo tank. The storage tank will be sampled and analysed by chromatograph at least once per week.

The ship is equipped with a stern thruster mounted aft to maintain relative positive to the SPM buoy.

Hose Connection: A Cabgoc Berthing Master will advise on hose connection and will remain on board throughout the vessel's stay on the berth to co-ordinate the loading operation; therefore, adequate accommodation must be provided.

The "Berge Sisar" will present 2×8 in. lines to the manifold of the exporting vessel. Normally, one of these hoses will be for loading of LPG and the second hose string will serve as a standby vapour return line, should this be required. Normally, vapours will not be allowed to be returned to the "Berge Sisar". The vapour return line should be regarded as a safety precaution only. In the event that any vapours are returned no accounting credit will be given. It will be the responsibility of the export tanker to co-operate with the Cabgoc personnel in making the connection of the two hose strings to the manifold.

The "Berge Sisar" is equipped on her starboard side with 2 hydraulic telescopic hose-handling cranes and 1 conventional derrick. The derrick is not considered suitable for hose-handling except under very favourable weather conditions, and under all circumstances only for lifting of the vapour return hose. The telescopic cranes can either lift two 8 in. liquid hoses, or 1 liquid and 1 vapour return hose.

With the concurrence of the Cabgoc Berthing Master 2 liquid hoses may be used, in which event they will be connected to the manifold/metering unit by means of one Y-reducer, from 14 in. 150 ASA to 2×8 in. 150 ASA. Each hose is expected to have a flow of approximately 600 tonnes/p.h. If 2 liquid hoses are used the export vessel shall be responsible for the safe handling of any vapours generated during loading.

The hoses will be brought to a landing position on the export vessel approximately 20 ft. forward or aft of the manifold section. The hoses will be connected to the export tanker manifold by means of 90°, 60° or 45° bends, and the 20 ft. of hoses resting on deck will be expected to absorb any normal movements between the 2 ships.

The hoses are equipped with flap-valves as close as possible to the manifold on the export vessel. Normal flanges are 8 in. 150 ASA, but 8 in. 300 ASA flanges can also be matched. Reference should also be made to the OCIMF publication "Standardization of Manifolds for Refrigerated Liquefied Gas Carried for Cargoes from 0°C to −104°C.

The export vessel will always have to use the manifold on its port side (port side to "Berge Sisar's" starboard side).

Loading: Notice of Readiness will not be accepted at time of arrival, unless the vessel is, in all respects, ready to load. The Master of the export vessel is required to have the blank flanges removed from his vessel's port side loading manifold before mooring in order to expedite the connection of hoses. Two 8 in. connections will be used.

While the vessel is being cleared, the Cabgoc representatives will give the Master of the export vessels written specifications concerning the anticipated loading conditions, i.e. gravity, temperatures, loading rates, etc.

There are no facilities available to discharge excess cargo should the vessel overload. It is, therefore, imperative that the export vessel's Master declare the tonnage he requires prior to loading.

Cargo loading is by "Berge Sisar's" deep well pumps at a rate of approximately 14,000 bbls. (1,175 metric tons) per hour.

Spot lights should be rigged on both wings of the bridge and on the forecastle of the export tanker to supplement the "Berge Sisar's" lighting during transfer operations.

About 30 minutes before the cargo loading is expected to be completed, the Cabgoc Berthing Master should be advised in order to co-ordinate the shutdown between the export ship and the "Berge Sisar".

When the vessel has completed loading the cargo, loading line valves on the "Berge Sisar" will be closed; *only then may the export vessel's manifold valves be closed.* (In an emergency, however, the export vessel may shut down against loading with immediate notification to "Berge Sisar").

After completion of loading operations, both vessels will be ullaged. A Bill of Lading, Cargo Manifest, Ullage Report, Certificate of Quality, Certificate of Quantity, Certificate of Origin, and Time Log will be presented to the export ship Master for his acceptance and signature. The official quantity and quality of the LPG delivered onboard the export vessel shall be determined by Cabgoc on the basis of meters and equipment on the "Berge Sisar".

The number and size of LPG samples taken will be determined by Cabgoc. "Cabinda LPG" will have varying gravities ranging from 0.505 to 0.595 specific gravity.

Fresh Water: Not available.

Fuel: Not available.

Repairs: Not readily available.

STEVEDORING: It is recommended that notice be given 48 hours in advance as to distribution and nature of cargo.

MEDICAL: Arrangements can be made for a doctor to visit the vessel on arrival. There are hospital facilities. Serious cases are sent to Luanda. Crew must have certificates of inoculation against smallpox and yellow fever.

DENSITY: 1025. Influence of the current of the River Zaire varies according to the time of the year.

FRESH WATER: Supply cannot be guaranteed.

FUEL: None available.

WATCHMEN: Not necessary. The authorities place a port policeman on board.

OPENING/CLOSING HATCHES: By the crew or stevedores.

CERTIFICATES: Ship's register, certificates of deratting (valid) and certificate of life saving equipment.

CUSTOMS ALLOWANCES: Customs normally place no restrictions on the consumption of alcoholic drinks on board, but under no circumstances may alcohol be taken ashore.

IDENTIFICATION CARDS: Supplied by the Agents and stamped by the Immigration police before any person comes ashore.

CONSULS: None.

REPAIRS: Very limited facilities.

REPATRIATION: This can be arranged only when absolutely necessary, but solely via Luanda.

AIRPORT: Small airport about 4 miles from the town served by the internal airline with only 1 flight per day to and from Luanda.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January, 4th February, 27th March, 1st May, 2nd November, 11th November, 10th December, 25th December.

No work is possible on any of these days.

POLICE/AMBULANCE/FIRE: Police Tel. 22456; Ambulance Tel. 22405; Fire Tel. Port Captain 22160/22159.

SERVICES: None available.

SHORE LEAVE: Shore leave for Crew members limited. Crew members who are not on board when the vessel leaves are detained and repatriated at the cost of the vessel. The vessel may also be fined.

DELAYS: Tankers are not normally delayed, but dry cargo vessels may be delayed if two or more vessels arrive simultaneously, due to a lack of sufficient barges. Also, delay in loading and unloading may be caused by rough seas.

SHIPMASTER'S REPORT: June, 1983.

Malongo LPG Terminal: The m.v. "Berge Sisar" has a storage capacity of 75,000 cu.m., receiving product from "Foxtrot" gathering station at 450 tonnes/day. This LPG mix is received on board at sea temperature and after passing through R22 intercoolers especially fitted on the "Berge Sisar", is dropped into one of the vessel's 4 cargo tanks. The vessel's normal refrigeration machinery is then used to handle the LPG mix. It is hoped to increase production to around 700 tonnes/day when at full capacity. The "Berge Sisar" has been chartered to Gulf for initially 5 years with, it is understood, yearly options after that up to another 5 years. The vessel is fitted with a helicopter landing pad over the poop, has a stern thruster which can be lifted and stowed when at sea and presently accommodates up to 20 plus additional Gulf personnel, who live on board. Export vessels must always berth on the storage vessel's starboard side, "Samson" fenders are either floating at the water line (4 of them) or smaller ones are slung from davits and hang mid-way down the ship's side and also protect the starboard quarter.

Approach: BA Charts are of little use in making a safe approach and great care must be exercised when approaching the area from the West. The Racon on "Juliet" Platform Lat. 05° 24′ 50″ S., Long. 11° 59′ 29″ E.

transmits code signal "G" and the area is surrounded by numerous small platforms and flares. At night the flares are of such intensity as to make the sighting of smaller less well lit platforms very difficult.

Pilotage: Pilots are not required for anchoring. They are known at this installation as Mooring Masters and all seemed to be either Portuguese or Italian, most speaking good English. They can be contacted on Channel 9 by calling "Mooring Service". Once the vessel has been cleared by the Angolan authorities and the Tank Analysis has been accepted, the Mooring Masters (normally 2) will board at the Anchorage and take the vessel North for the approach to the "Berge Sisar". During both the berthing operations undertaken by this vessel the Mooring Master did not take over the operation until the Master had proceeded just North of the "Berge Sisar" and was about to turn the vessel to approach the "Berge Sisar". One of the Mooring Masters will remain on board throughout the loading operation and he will be in communication with the Mooring Master on the "Berge Sisar". Their priority duties are to maintain the vessel's head into the swell by the use of either the "Berge Sisar's" stern thruster or the use of a small tug pulling on the "Berge Sisar's" port quarter.

Anchorages: The designated anchorage area is Lat. 05° 27′ 21″ S., Long. 12° 02′ 26″ E. and is some 2 to 2.5 miles to the South of the "Berge Sisar".

The anchorage has a depth of 130 ft. and during the months of May and June the vessel rode to 6 to 7 shackles with no problems. The predominant current during the above months was Northerly with an almost continuous SW'ly swell, sometimes moderating to very little and increasing suddenly to moderate to heavy. As the vessel tends to lie to the current the rolling encountered at anchor can be quite heavy. The current appeared to vary from 0.5 to 3 knots.

Chemical Analysis and Safety Checks are carried out at the anchorage. The Analysis is very comprehensive and lengthy. All carried out by Gulf Chemists who live on board "Berge Sisar", safety check carried out by Officers of both vessels. NOR will not be accepted until Analysis clears vessel for loading. Please note that there must be no contamination and vessel must be cooled down ready to load. Contamination will include presence of Ammonia, Inerts or Oxygen.

Also see "Agent".

VHF: Communications between the 2 vessels is maintained by the use of 2 VHF radios, 1 has a private Channel which is open to only the 2 vessels and the "Foxtrot" gas collecting station which supplies the Product to the "Berge Sisar". The other radio has communications to the Duty Mooring Master who is on either or both of the 2 vessels.

Tugs: 2 tugs are based at Malongo and assist with all Tanker and LPG operations in the area. Once they have been designated for an operation other ship movements are delayed. The tugs, the "Eldergarth" and "Rowengarth" are manned by British personnel. Numerous other "crew boats" are working in the area and are based at Malongo, being owned by "Zapata".

The 2 tugs are made fast on the starboard side, 1 just forward of the accommodation and the other at the break of the fo'c'sle. 2 wires are passed aboard by each tug and must both be made fast on the same bitt (they lead to a single towing rope on the tug's bow). Once the berthing operation is completed the tugs will anchor close S.W. of the "Berge Sisar". At one time one of the tugs had to replace the small tug on the "Berge Sisar's" port quarter as it had been unable to stop the vessels coming beam on to the swell and cargo operations had to cease whilst the larger tug was used to bring the two vessels back to head on to the swell.

Berthing: Once the 2 vessels have been paralleled at a distance of around 50 yards, 2 headlines are sent away by the use of a launch from forward. The 2 tugs and ship's engines are then used to bring the Export ship within heaving line distance (In the future the "Berge Sisar" intends to use air driven line throwing equipment). Once heaving line contact has been made the "Berge Sisar" will send 2 of her breast lines across, 1 forward and 1 aft. These will then be used to pull the export vessel alongside and hold her there whilst other moorings are passed across. The mooring lines used by the "Berge Sisar" have been supplied by Gulf Oil Company and are of the sheathed nylon type and extremely strong and durable (also very expensive). The final mooring consisted of 8 lines forward from the export ship and 6 from the "Berge Sisar", whilst aft there were 6 from the export ship and 4 from the "Berge Sisar". No restriction was placed on the mooring line size as was indicated by the "Transhipment Conditions" received before arrival, wherein it was stated that 16×10 in. lines were required by the export vessel.

The 2 tugs are released after mooring is completed and are on "standby" until the transhipment is completed.

At the beginning of the operation direct communication was via the "Berge Sisar's" gangway which was landed on the rails immediately forward of the 2 vessels' aft superstructure at maindeck level, movement between the 2 vessels was allowed for by allowing the gangway to slide over the lower vessel's rails. Halfway through the operation as the export ship's freeboard decreased and the "Berge Sisar's" increased the export ship's gangway was substituted for the "Berge Sisar's".

Loading: The LPG mix being produced at Malongo (Cabinda) will vary in SG as stated in the Loading Regulations from 0.505 to 0.595, 60/60. At the loadings undertaken in June 1983 it varied from 0.537 to 0.536. The make up was basically 65/35, Propane/Butane supplied at −34°C.

Normal procedure will be to take two 8 in. liquid line anaconda type hoses, and one 8 in. vapour line hose. The hose lengths on the visit in June, 1983, were for 1 hose length of 100 ft. The "Berge Sisar" has a number of "angled" connections which are fitted immediately after the 12 to 8 in. reducer and allow the hose to be led off at angles between 30°, 45°, or 90° from the manifold, this is to allow the hose string to be led off along the deck at the best angle to avoid sharp edges. Connecting and unconnecting of hoses is done by close co-operation between export vessel and personnel on board "Berge Sisar", Gulf personnel are in no way involved in this operation. Before commencing cargo the hose is purged of air by purging with Nitrogen from the "Berge Sisar", this is monitored at the drain connection of the export vessel's manifold until the Oxygen content is acceptable, below 6%. A shut-off valve is fitted at the export vessel end of the hose string and is used to clear the hose back to the "Berge Sisar" after loading is completed, Nitrogen is again used for this purpose. It is understood that the future intention is to fit a drain hose to allow liquid to be drained back to the "Berge Sisar", using her own compressors to supply the pressure to clear the hose of liquid.

The "Berge Sisar" is normally continuously receiving product from the "Foxtrot" gathering station. This liquid is supplied at sea temperature and once on board the "Berge Sisar" passes through R22 intercoolers fitted on top of the Cargo Control Room/LPG housing, the cooled product is then dropped into 1 of the 4 cargo tanks. The vessel's normal reliquification machinery then takes over the cooling process. The "Berge Sisar" is fitted with 3 R22 Howden screw compressors and 3 LPG Howden screw compressors. Production from "Foxtrot" was 450 t.p.d. in June, 1983, but the expected rate is 700 t.p.d.

During the loading operation no water was detected in the condensers on board our vessel. The product is slightly warmer than that normally found at shore based Terminals, loading at an average rate of 500 t.p.h. (the maximum through the one hose allowed at the loading in June, 1983) the tank pressures finally peaked at 200 mbs; considering the vessel had 250 tonnes of cargo already in each tank at a pressure of less than 10 mbs. the incoming cargo could be regarded as on the warm side.

The "Berge Sisar" is fitted with 2 hydraulic cranes in way of the manifold purely for hose handling, these cranes are of the type more usually seen fitted on the trench digging JCBs.

After loading completed vessel will normally wait for documents at anchor for up to 5 hours, however it is expected that as further loadings take place this time will be shortened. Gulf personnel handling the vessel obviously have limited experience with this type of operation, however they were all most helpful and co-operative.

There is obviously no draft problems due to depth of water. The major problem is obtaining an accurate draft due to the continuous swell. The ranging of the tank measuring gauges on both vessels also leads to differences which are understandable and "Protest Noted".

Medical: Doctor is available ashore at the Gulf Base at Malongo, the major obstacle is obtaining a crew boat to take personnel ashore and bring back to ship.

Fresh Water: Not available.

Fuel: Not available.

Customs Allowances: The Bond will be sealed and if the vessel's anchorage is prolonged the Agent and Customs will board for cigarette issue. Boarding of the vessel must be carried out using the pilot ladder combined with the gangway, preferably on the port side as the vessel will lie to the Northerly current with the S.W. swell on starboard bow.

General: "Berge Sisar" has helicopter pad fitted over the poop and a hydraulic crane on the port quarter lifts all personnel on and off any launch delivering stores or personnel. The helicopters are not allowed on the pad whilst another vessel is alongside the "Berge Sisar".

The operation between the 2 ships is in line with I.C.S. Guide. Overall control of the operation whilst alongside is in the hands of the Gulf "Gas Supervisor".

Master of "Berge Sisar" has no radio operator on board. Communications are all carried out by Master through INMARSAT fitted in Master's Cabin.

During the fitting out of the "Berge Sisar" for this operation a $2,000,000 Flow Meter was constructed on the starboard aft part of the main deck, this apparently at the insistence of the Angolan Authorities. It has not so far been seen to be working. It is understood that once it is fully operational Bills of Lading will be based on the out-turn from this Meter, at present the "Berge Sisar's" out-turn is the Bill of Lading figure.

Agent: Hull Blyth Cabinda are apparently the only Agents at Cabinda, they also have offices in Luanda and London, U.K. Once within VHF range they can be contacted during the day on Channel 16 by calling "Hull Blyth". They will board vessel at anchorage using the pilot launch from Cabinda itself, also boarding at the same time will be Customs, Immigration, Health and Port Captain's office. Clearance inward must be obtained before the cargo operation can commence.

The Agent will clear the vessel outward whilst alongside the "Berge Sisar".

AUTHORITY: Inspector of Operations for Northern Ports, Cabinda.

Cabinda Gulf Oil Company, C.P. 40, Cabinda, Republica Popular de Angola. *Tel:* Cabinda 22459, 22221. Malonga 22256/7/8/9. *Cables:* Cabgoc, Cabinda. *Telex:* 3160 Malonga, An. *Contact:* T. G. King, Director General. Captain M. Palumbo, Supervisor/Mooring Master.

Luanda Office: C.P. 2950, Luanda, Republica Popular de Angola. *Tel:* 91141, 91191, 91241, 91291, 91341, 91391. *Cables:* Cabgoc, Luanda. *Telex:* 3167 Luanda, An.

Capitania do Porto de Cabinda. *Tel:* 22160.

LOBITO: 12.20 S. 13.34 E.

DOCUMENTS: Required on arrival:

Health Certificate.
2 Vaccination Certificates (smallpox, cholera and yellow fever).
8 Crew Lists.
11 Passenger Lists (each for Landing and Transit).
4 Lists showing Ports of Call.
2 Lists of Articles held by Crew: cameras, binoculars, radio, spirits, cigarettes, etc.
3 Ship's Stores Lists.
6 Dangerous Cargo Lists.
8 Unfreighted Cargo Manifests.
1 Freighted Manifest.
3 Non-negotiable copies Bills of Lading.
3 Cargo Plans (preferably before ship's arrival).
Other necessary official forms prepared by Agent.

PILOTAGE: When Pilot required outside Harbour Entrance, vessel must request via Agent at least 12 hours before arrival. Otherwise Pilot boards inside Lobito Bay. Pilot boat: grey hull, white housing. Max. speed entering Bay – 8 knots.
ANCHORAGE: Lobito Bay excellent holding ground, depths over 33 ft. and easily accessible day and night the year round.

RESTRICTIONS: No restrictions, vessels may enter harbour day and night. Vessels not normally visited by Port Authorities between approximately 1900 hrs. and 0700 hrs.
MAX. SIZE: Length 900 ft., draft 34 ft., max. depth 35 ft. – 37 ft. (normal tidal range: 3 ft. 3 in., maximum: 6 ft.).

WEATHER: March/May rain season. Heavy wind and rain can effect cargo work.
HEALTH: Pratique never given by radio, but granted after Port Authorities (including Doctor) board vessel between 0700–1900 hrs. Pratique granted if no contagious illnesses aboard, otherwise quarantine restrictions imposed. Ships calling from other Angolan Ports – except coasters – subject same procedure.

RADIO: Because Lobito Radio (call sign CQZ) operating MW range 200/400 miles only, all ETA messages, etc., must be routed via Luanda Radio (call sign CQW). Agent uses same routeing.
TUGS: Tug (usually one only) joins vessel for berthing and sailing. Ships' lines used.
BERTHING: Unless Masters indicate preference, Port decides which side alongside. No vessels usually allowed berth after sunset. Sailing after dark allowed at Port Authorities' discretion, up to 2400 hrs. No vessel permitted berth without Pilot. Before berthing, vessel must effectively cover water outlets, prepare accommodation ladder and have anchors "at the ready". (Authority fine any vessel ejecting water or waste on to quays.) Ships carrying explosives not permitted berth before Port Captain inspects cargo.

Passenger and Fruit vessels are given priority regarding berthing.
STEVEDORES: Important that vessel gives accurate ETA at least 24 hours in advance to enable Agent order necessary gangs. (Gangs ordered 0700 and 1500 hrs.) No work usually allowed Sundays.
MEDICAL: Radio before arrival if medical assistance necessary on entry. Good hospital facilities available, but specialised treatment and surgery is not. Yellow Fever, Cholera and Smallpox Vaccinations Certificates inspected on arrival.

TANKERS: No oil to be pumped overboard into Territorial waters. Heavy fines imposed for oil pollution, however slight. Three 8 in. diameter pipe-lines discharging into local storage tanks. No slop tanks available. Two Tanker Berths, Nos. 5 and 8, maximum drafts 30 ft. and 35 ft. respectively.
DENSITY: 1024.
FRESH WATER: Normal requirements readily available and delivered by 3 in hose. Loading rate very slow as pressure usually low.

FUEL: Fuel Oil (Ordinary) available, viscosity up to 1500 sec. Redwood. 24 hours' notice bunker requirements essential. Gas oil available. No Diesel.
GANGWAY/DECK WATCHMEN: Compulsory, both day and night.
OPENING/CLOSING HATCHES: When closed or opened by Stevedores, cost per time per hatch. (Crew allowed to carry out this operation.)
SHIPS' CERTIFICATES: Registered Tonnage Certificate, Derat Certificate to be shown.
CUSTOMS ALLOWANCES: No restrictions. Customs Guard supervises opening and resealing of bond.
CARGO GEAR: Normal routine gear: wire and rope slings, nets, chain-slings, baskets, grabs, and shore-cranes (capacity 3–10 tons) available. Heavy lifts of over 10 tons must be discharged using ship's derricks. Two cranes 10 tons available, but not always accessible. 100 ton floating crane sometimes available.
IDENTIFICATION CARDS: On arrival, all crews' and passengers' passports must be handed to Immigration Police, who retain these and issue shore-passes. Passes must be carried at all times when on shore. If lost, a fine is imposed.
CONSULS: At Lobito, Norwegian and Belgian Consulates and French Consular Agency. At Benguela – 30 km. from Lobito – Italian Vice-Consulate.
REPAIRS: Small, slipway accommodating vessels up to 800 tons available. Limited engine and hull repairs: electric, oxy-acetylene welding, riveting, cleaning, repairs to auxiliary diesel and electric equipment and boilers. Floating dock for vessels up to 2,000 tons displacement.
REPATRIATION: Air communication via Luanda.
AIRPORT: About 4 km. from Port. Airstrip unable to take heavy aircraft.
TIME: GMT plus one hour.
HOLIDAYS: 1st January; March/April Easter; May/June (Corpus Christi); 15th August (Ascension Day); 2nd September (City Day); 5th October; 1st November (All Saints Day); 8th December; 24th December; 25th December.
SHORE LEAVE: Nationals from countries having friendly diplomatic relations with Angola usually granted shore leave, See "I.D. Cards". Shore leave during certain hours only.
DELAYS: Congestion not unusual and berthing delays may vary from one to three days. Ships calling for bunkers have no priority but are sometimes berthed at sunset and fuel during night-shift. Discharging of bulk cargoes can be effected by shortage of suitable wagons.

GENERAL: Ships should not: Dispose of any wastes into harbour or on to quays. Change mooring lines or lower lifeboats or immobilise main engine or use ship's sirens or radio station without prior permission from Authorities. Vessels must: use watchmen 24 hours per day on adequately illuminated gangway.
NOTICES: Supplied to Master by Agent.

For your information, the following Regulations are in force at Lobito. Failure to comply with these instructions will result in fines being imposed on the vessel under your command.

Over and above the Regulations listed hereunder, all international Regulations governing a ship's stay in port are also applicable.

1. It is essential that an Angolan Flag be flown during the time the vessel is in Port.
2. Maximum speed for vessels entering or leaving the harbour is set at 8 knots.
3. All sound signals are prohibited excepting regulation signals whilst manoeuvring or in cases of distress.
4. No boat may be lowered until permission for so doing has been received from the competent Authorities (Customs and Port Captain). Any boat thus lowered is allowed to make contact with land at one point only, i.e., the landing steps situated at the junction of the 2 quay walls.
5. No member of the crew may go ashore without a pass signed by the Master and visaed by the Immigration Police. If a member of the crew is found to be ashore without a pass, the ship will be fined £1,315.00 in every instance. All shore passes must be returned to the Immigration Police before vessel's departure.
6. Vessels are not allowed to make any communications by wireless during their stay in Port.
7. Water from ship's condenser outlets or other exhausts may not be ejected onto the quay. A Fine of £1,000 will be applied if this instruction is not complied with.
8. All lavatories on the side adjacent to the quay wall must remain locked and not used during the time the vessel remains alongside.
9. No vessel is permitted to take salt water ballast whilst alongside the wharf.
10. No vessel is permitted to test engines whilst alongside the wharf.
11. No games whatsoever are allowed in the Port area; if members of the crew disrespect this regulation, heavy fines are applied to the vessel.
12. No garbage, oily or petroleum substances, should be thrown in the Bay either at anchorage or alongside otherwise a fine will be imposed on the vessel by the Port Captain, Fine which ranges from £250.00 to £1,250.00
13. The engines may not be put out of use without the authorisation of the Port Captain.
14. No repairs whatsoever may be done on board without the Port Captain's authorisation.
15. The following procedure is to be adopted whenever cargo or vessel suffer damage by Stevedores or Port staff:
    (a) Master or Chief Officer should request the Port Officer in charge of commercial operations to examine the damage.
    (b) The Chief Tally Clerk of our Company should also be present when examination is carried out.
    (c) Written notice must be delivered to the Port Officer and a copy sent to the Agent at the same time.

Kindly take note of the foregoing Regulations and return 1 copy to us duly signed.
Thank you, Agence Maritime Internationale S.A.

SHIPMASTER'S REPORT: June, 1979
VHF: Port Authority not equipped with VHF. Agent (AGENANG) is equipped
Currency: The currency is Kwinzas (Kz)
Shore Leave: Immigration allow shore leave between 1800 hrs and 2200 hrs. The Master however, is allowed to visit agents or carry out official duties outside these hours.

SHIPMASTER'S REPORT: June 1979
Documents: Papers required for clearance:
If these are prepared before arrival Agent will pass to Persons concerned. i.e. Port Health, Customs & Immigration.
1 International Declaration of Health.
(Lobito have no forms, best to use some other Port form that can be altered).
1 List of Crews Vaccinations and date they expire.
10 Crew Lists.
10 Passenger Lists or "Nil" passengers.
4 Arms & Ammunition Lists or "Nil" if none.
2 Livestock Lists.
6 Ports of Call Lists.
Stores Lists. (Provisions, Deck & Engine) 2 lists.
Crew Custom Effects List (Own form or free form) 2 sets.
Narcotic Lists 2 sets or "Nil" Lists.
Small Package Lists to be landed or "Nil" statement 2 copies.
Manifests & Bills of Lading – 3 sets.
Observations:
The Main Lighthouse Light on the end of the Spit, and the 4 Channel Buoys are still lit. But on reduced candle power. Vessel is still required to enter the Bay and anchor without Pilot. Pilot only used when berthing. Caution is required at night as the buoys are difficult to pick up. Both by day and night it is better to only proceed about 1.5 miles into the Bay, as many trawlers are always anchored at the head of the Bay. The Berths consist of a right angled quay, with space for 4/5 ocean-going ships. (Depending on length.) The loading berth for ore cannot be used for general cargo, and as the loader is at present inoperative it is not used for loading ore.

Shore leave is allowed but only from 1800 hrs. to 2200 hrs. daily.
No cargo worked on Sundays.
Pilot will unberth vessels up to 2400 hrs.
The only VHF is located in the Agents office, it is manned during office hours. Calling Channel 16 thence Channel 11.
Two Tugs are now used for berthing.
Lobito Radio Station is not manned, all traffic sent through Luanda.
Continuous soundings give at least 26 m. from the entrance to the anchorage.
Discharging is very slow, averaging 4 tons per gang man hour.
Vessels swing at anchor twice daily to weak tide, rise about 1 m.

Pilot comes out to anchorage in launch using accommodation ladder for boarding, tug is used for swinging vessels if necessary, as Bay is narrow.

No provisions are available.

AUTHORITY: Port Manager, Port of Lobito.

LUANDA: 08.48 S. 13.14 E.

PORT LIMITS: A vessel to be considered an "arrived ship" should be anchored in the bay past a line drawn between the Ilha Light and across the bay to Fort S. Pedro.

DOCUMENTS:

8 Crew Lists.
8 Passenger Landing and Transit Lists.
2 Crew Lists, showing dates of Vaccinaion and Inoculation.
6 Lists of Ports of Call (with arrival and departure dates).
4 Stores Lists.
4 Personal Effects Lists.
6 Lists of Slop Chest Contents.
3 Photo-copies of Bills of Lading.
6 Cargo manifests.
6 Arms and Ammunitions Lists.
6 Lists of Birds and Animals.
6 Lists of Drugs.
6 Mail Lists.

Copies (if possible) of following Certificates will be taken ashore by Port Authorities:

Loadline Certificate.
Safety Construction Certificate.
Radio-Telegraphy Certificate.
Tonnage Certificate.

All Passports will checked and stamped.

PILOTAGE: 72 hours notice of arrival, addressed Agents via Luanda Radio, plus message of arrival at least 6 hours prior arrival received during working hours (0700 – 1700 hrs.). VHF available. Pilot launch comes out from port. Anchorage for Pilot in Luanda Bay. No draft restriction at anchorage. Pilot not required for anchoring in bay. Pilotage compulsory. No special berthing Pilot. Pilot launch white – flying Pilot Flag (H).

Pilot Boarding Station: Lat. 8° 45.36′ S., Long. 13° 16.78′ E.

ANCHORAGES: Luanda Bay offers safe, sheltered anchorage at all times of the year. Good holding ground – sand/mud. No draft restrictions.

RESTRICTIONS: Berthing in daylight only. Unberthing until midnight.

MAX. SIZE: Length 1,000 ft. (alongside); breadth, no restriction; draft, 34 ft. (alongside). Tankers, up to 55 ft. draft at the refinery buoys.

WEATHER: March/May rain season. Heavy wind and rain can affect cargo work.

HEALTH: Pratique may be granted by radio through Radio Luanda, addressed Port Health or via Agents. Accommodation ladder must be rigged for doctor on arrival. Pratique must be granted at each Angolan port. Pratique is *not* automatic. If infectious disease on board inform Port Health/Agents by cable.

RADIO: Addressed "Luandaradio" for ETA, draft and requirements. Call sign CQW on 500 kHz, listening on "odd" hours only throughout 24 hours. Listening between 0600 – 1800 hrs. Call sign CQW3 on 13,023 kHz on "even" hours only. Listening between 1800 – 0600 hrs. Call sign CQW on 8,565 kHz on "even" hours only.

TUGS: Two available (1,500 h.p. and 480 h.p.) and compulsory for berthing and unberthing. Tugs join vessel off berths. Ship lines used (if tug lines requested – extra charges).

BERTHING: Ships taken in strict rotation of arrival for berthing, except that passenger vessels have priority. There are 7 berths for import and export cargoes, all berths are available for oil bunkering.

The quays are divided into 5 zones with depths alongside of 32 ft. maximum.

Zone I.	1,380 ft. of which 900 ft. of quay length suitable for ocean-going vessels.
Zone II.	480 ft. quay length.
Zone III.	900 ft. quay length.
Zone IV.	540 ft. quay length.
Zone V.	574 ft. quay length.

Shoreside cranes of 3 tons and 5 tons, furthermore 2 cranes of 10 tons lifting capacity and also 1 mobile crane of 20 ton capacity for lifting heavy pieces only.

A self-propelled floating crane, capable of lifting 100 tons, was recently commissioned – maximum and minimum reach of 46 ft. 6 in. and 9 ft. respectively, lifting to about 78 ft. approximately.

BULK HANDLING FACILITIES: Ores in bulk are usually loaded at Zone III; no mechanical loading installation.

The ore is shovelled from railway trucks into buckets; daily loading average 4,000 tons per 24 hours.

Grain vessels will also be moored at Zone III alongside the grain shed. Discharging by means of tubes which are lowered into the holds and suck the grain out by an electrically propelled spiral fitted in the tube.

The rate of discharging is about 100 t.p.h. and the grain is loaded into railway wagons, each of 30 ton capacity, via the adjacent warehouse.

STEVEDORES: Gangs arranged by Agent/Shipmaster. Normal port working hours 0700 – 1200 hrs., 1400 – 1730 hrs. (overtime 1730 – 2330 hrs.), Saturday 0700 – 1230 hrs. Sunday/holidays – no work.

MEDICAL: For serious cases, as much advanced notice as possible should be given with all details available. Minor cases can be treated on arrival within half an hour without previous notice. Apart from Government Hospital, there are a number of private nursing homes with good facilities. Smallpox inoculations are essential. Yellow Fever inoculations recommended.

TANKERS: Two tanker terminals No. 2 Quay and off-shore terminal. Drafts – No. 2 Quay (Products Berth) 34 ft. Off-shore terminal (Refinery Berth) two sets mooring buoys, one for tankers with max. length 230 m. and max. draft 55 ft. and the other for tankers not exceeding 100 m. with draft 40 ft.

Shore Lines: Products Berth: 1×8 in. fuel oil pipe-line and 1×10 in. line for white products. 6 in. hoses for fuel oil and 10 in. hoses for White products.

Refinery Berth: 12 in. crude oil submarine lines and 8 in. for fuel; 8 in. LPG line and 6 in. hose; 8 in. G.O./Kero line and 8 in. hose; 12 in. G.O. line and 2×8 in. hoses.

Lub Oil: 1×10 in. sphere launching trap connected to ship's manifold, 100 ft. of 8 in. flexible hose between tap and floating pontoon, 0.5 miles of underwater 8 in. line from pontoon to shore tanks.

DENSITY: About 1024.

FRESH WATER: Fresh water available through quay pipe-lines, each hose delivering about 30 t.p.h.

FUEL: Limited number of grades can be obtained subject to nomination well in advance. No barges available.

FIRE PRECAUTIONS: For tankers loading/discharging alongside No. 2 Quay – no vehicles allowed within vicinity and other vessels cannot berth within 40 m. of tanker's stern or bow.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Can be carried out by crew or stevedores at vessel's option.

SHIP CERTIFICATES: Tonnage and Derat Certificates.

CUSTOMS ALLOWANCES: No restrictions, but sales ashore a serious offence.

CARGO GEAR: No additional requirements provided valid test certificates aboard.

IDENTIFICATION CARDS: Provided by Agents for crew proceeding ashore.

CONSULS:

Austria
Belgium
Brazil
Denmark
France
Great Britain
Italy
Netherlands
Norway
South Africa
Spain
Sweden
Switzerland
U.S.A.
West Germany

REPAIRS: Minor repairs and hull repairs above the water-line can be carried out.

DRY DOCKS: None.

REPATRIATION: Repatriation will not present any difficulties.

AIRPORT: Distance from port 4.5 miles.

TIME: GMT plus 1 hour all year.

HOLIDAYS: Saints Day (1st January), Saints Day (15th August), Saints Day (1st November), Saints Day (8th December), Christmas Day (25th December). No cargo work on these holidays.

POLICE/AMBULANCE/FIRE: Police 7408; Ambulance 25275; Fire 22222.

TELEPHONES: Can be placed on board.

SERVICES: Tank cleaning possible but advance notice required. Radio, radar repairs possible, but spares rarely available.

SHORE LEAVE: Crew members allowed shore leave subject Immigration approval provided inoculation certificates are valid.

REGULATIONS: Mailboats have berthing priority over all other vessels, foreign *passenger* vessels next in precedence.

DELAYS: Congestion rarely exceeds 36 hours.

GENERAL: Ample water in bay for anchoring, and most vessels enter port without Pilot. Pilotage is compulsory for berthing/unberthing on quays, this service being available from 0700 hrs. to midnight. If Master elects to wait for Pilot outside port and another vessel proceeds direct to anchorage, the latter will be first on turn for berth.

DEVELOPMENTS: Plans for reclamation and new berths round to the Forte da S. Pedro da Barra.

AUTHORITY: Servicos de Portos, Caminhos de Ferro, e Transportes.

MOCAMEDES (incl. Porto Saco): 15.11 S. 12.07 E. **(See Plan Book)**

DOCUMENTS:

Health Certificate.
2 Vaccination Lists (smallpox and yellow fever).
8 Crew Lists.
11 Passenger Lists (for each landing and transit).
4 Lists showing ports of call.
2 Lists of Articles held by crew/passengers, i.e. cameras, binoculars, radios, tobacco, etc.
3 Ships' Stores Lists.
6 Dangerous Cargo Lists, i.e. all types of explosives.

All foregoing to be signed by Master. Other essential official forms prepared by Agent.

PILOTAGE: Pilot boards in Bay – safe, natural bay with no reefs and easily accessible both day and night. Vessel *must* wait for Pilot and instructions before berthing.

ANCHORAGE: No currents in harbour area, but slight prevailing winds constant. Good holding ground with depths over 34 ft. Approaches up to 45 ft. depth. Tidal range about 5 ft.

RESTRICTIONS: Berthing not permitted during hours of darkness. Unberthing permitted up till midnight. Authorities visit between 0700 hrs. and 1900 hrs. (approx.) only.

MAX. SIZE: *Mocamedes* – Governed by berth depth 33 ft. alongside.

Porto Saco – Vessels up to 14 m. draft. Largest bulk carriers handled.

HEALTH: Pratique granted on arrival after "Health Guard" visit: boarding 0700-1900 hrs. Normal quarantine restrictions imposed if contagious diseases aboard. Ships calling from other Angolan ports (except coasters) are subject same procedure.
RADIO: Messages *must* be routed via Luanda Radio (call sign CQW). No ship/shore radio link.
TUGS: Two available of 2,200 h.p., fitted with VHF Channels 16 and 29. Join vessel for berthing. Ship's lines used. Vessel under 5,000 tons use 1 tug only.
BERTHING: Unless Masters indicate preference, port decides berthing-side. No vessels berthed after sunset (except passenger ships), but sailing during nightshift permitted so long as prior warning given before 1700 hrs. No vessel allowed berth without Pilot. Before berthing, important that vessel covers all water outlets, prepares accommodation ladder and has forward anchors ready. Ships carrying explosives not permitted berth before Port Captain surveys cargo.
CARGO FACILITIES: *Mocamedes* – The accommodation consists of 1 concrete quay, length 1,350 ft. providing 3 berths. For the handling of general cargo, there are 4 cranes of 5 tons and 2 cranes of 3 tons, modern cargo handling devices. Also lightening possible. One 10-ton floating crane available, subject ample notice from Lobito. Dangerous cargo is discharged alongside or into lighters, at the Port Captain's discretion.

Porto Saco (Saco Bay) – Ore is loaded at the pier in Porto Saco; length is 1,066 ft., width 59 ft. Depth alongside 54 ft. 6 in. at low tide, normal sea water, clear height from water level at ISHW up to unloader 73 ft. 10 in. One mechanical loader of conveyor belt type; capacity often exceeds 3,500 metric t.p.h. Reach 65 ft. 6 in. approx. from fenders. Connections for supply of bunkers and water.
STEVEDORES: Radio accurate ETA 24 hours in advance to enable Agent order required gangs. (Gangs ordered 0700 hrs. and 1500 hrs.) No Sunday work permitted for cargo vessels.
MEDICAL: If medical assistance required on arrival radio to Agent. Adequate hospital facilities available, but no specialised treatment or surgery. Yellow fever/smallpox certificates inspected on arrival.
TANKERS: No oil or waste products to be pumped overboard. Heavy fines imposed for breach of this regulation. Tankers discharge at Porto Saco – about 10 km. North of general cargo berths, situated Northern end of Mocamedes Bay. Maximum draft 54 ft., length of quay 1,066 ft. No dirty ballast facilities.

Shore Lines: All 1 mile flight to installation.
Benzine: 8 in. line and 8 in. or 6 in. hoses.
Kerosine/Gas Oil: 8 in. line and 8 in. or 6 in. hoses.
Fuel Oil: 10 in. line and 8 in. hoses.

DENSITY: 1024.
FUEL: Available from dockside pipe-line. At Porto Saco, rate 200 t.p.h. Bunkers may be taken during loading operations without delay.
FRESH WATER: Available ex-wharf, rate 15 t.p.h.
FIRE PRECAUTIONS: No special precautions except ships carrying explosives. Fire Brigade standby charge.
GANGWAY/DECK WATCHMEN: Compulsory, day and night.
OPENING/CLOSING HATCHES: When performed by stevedores, costs per hatch per time, but crew allowed to perform this task.
SHIPS' CERTIFICATES: Registered Tonnage Certificate, Derat. Certificate, examined by authorities on arrival.
CUSTOMS ALLOWANCES: No restrictions. Customs' guard supervises opening and resealing of ships' bonded lockers.
IDENTIFICATION CARDS: All crew/passenger passports handed Immigration Police who issue shore passes. Passes must be carried when on shore.
CONSULS: None.
REPAIRS: Only very minor voyage repairs.
DRY DOCKS: None.
REPATRIATION: Air communication via Lobito and Luanda.
AIRPORT: Small airstrip unable to take heavy aircraft.
TIME: GMT plus 1 hour.
HOLIDAYS: See "Lobito".
SERVICES: None available.
SHORE LEAVE: All nationalities from countries having friendly diplomatic relations with permitted shore leave. See "I.D. Cards".
DELAYS: Berthing delays are unusual.
GENERAL: Ships must not dispose of wastes into harbour or on to quays, change mooring lines, lower lifeboats, immobilise main engine, use ship's siren, or ship's radio station without prior permission from authorities. Vessels must use watchmen for 24 hours per day on well-illuminated gangways and hoist Angola flag from 0800 to sunset.
DEVELOPMENTS: Porto Saco (Iron-ore/Tanker berth) anticipated augment present ore-loading equipment to enable load ore-carriers up to 10,000 t.p.h. Dredging to projected depth of 65 ft.

QUINFUQUENA: 06.20 S. 12.14 E. (See Plan Book)

LOCATION: The Quinfuquena Terminal is located 15 miles South of the Zaire River entrance and consists of 2 loading points. Both loading points are single mooring points.
DOCUMENTS:

5 Lists of passengers disembarking or in transit, even if nil.
5 Crew Lists.
5 Lists giving previous Ports of Call.
5 Lists of Crew Vaccinations.
5 Stores Lists.
5 Personal Effects Lists.
5 No Animal Lists, even if nil.
5 Arms and ammunition Lists, even if nil.
Clearance from last port.

PILOTAGE: Pilotage is compulsory. The pilot boarding area is 2 nautical miles North of the loading points (see "Anchorage").

The Pilot will indicate to the arriving vessel the loading point at which it will be loaded. At this times the Pilot will also confirm the anchoring position.

Masters of the vessels are reminded of their obligation to comply with statutory rules and are requested to comply with the following:

The Officer responsible for the embarkation or disembarkation of the Pilot must be a Watchkeeping Officer.
The pilot ladder must be properly secured.
The pilot ladder and immediate areas must be adequately illuminated.
Means must be provided to enable the Pilot to pass safely and conveniently from the head of the ladder into the ship and on to the deck.
The ladder must be in good condition.
The length of the ladder should not exceed 30 ft.
Whenever the distance from sea level to the point of access is more than 30 ft., a combination accommodation ladder/pilot ladder should be used.
Spreaders are to be positioned at intervals of not more than 10 ft.
Two manropes in good condition should be ready but not lowered unless so instructed by the Pilot.
A lifebuoy with safety line must be available at the embarking/disembarking area. The safety line must have a self-lighting light.
The pilot ladder must be rigged on the lee side, clear from all discharges and water outlets.
The ladder must be rigged in such a manner that each step rests firmly on the ship's side.
Nylon pilot ladders must no be used.
The use of pilot hoists is not recommended.

If, in the opinion of the Mooring Master the pilot ladder is not safe, the Mooring Master may refuse to board the vessel and thus cause delay to the ship. Such delay would be for ship's account.

The Master or responsible qualified Deck Officer must be on the bridge at all times when the vessel is manoeuvring.

Vessels are requested to provide food and accommodation for the Loading Master. This accommodation should be equivalent to the minimum standard required for a Senior Officer.

Ship's crew required for mooring operations and connecting/disconnecting of the hose.
APPROACHES: It is essential to be in possession of BA. Chart 3206.

Good radar targets, visible on 24 mile range are:
Moanda Oil Terminal in position Lat. 05° 37.5′ S., Long. 12° 10′ E.
A boring platform in position Lat. 06° 13.5′ S., Long. 12° 10′ E.
The Quinfuquena Oil Terminal, when a ship is alongside, otherwise poor echo. During the night a flare in position Lat. 05° 58′ S., Long. 12° 25′ E. is seen at a distance of about 30 nautical miles.
The Soyo Aero Beacon is of assistance when passing the 100 fathom line.
Other Aero Beacons out of order as well as the lights of Pta. da Moita Seca and Cabeca da Cobra.

ANCHORAGE: Vessels waiting for mooring are requested to anchor along an imaginary line which is 2 nautical miles North of and parallel to a line connecting the SPM and the RMD. This will place all anchoring vessels a minimum of 2 nautical miles from loading points and a minimum of 2 nautical miles South of the Block Two Offshore Essungo Installations.

At times the Pilot may alter the anchorage location for one reason or another. The Pilot requests will always overrule anything written herein.

The sea bottom in the area is sand and mud or fine sand and mud. Strict attention must be paid to all of the offshore installations in the area. In addition to the loading points these installations include the Essungo and Cuntala Platforms, the 18 in. oil sealine from Essungo to shore, the 20 in. oil sealine from shore to the RMD., the 30 in. oil sealine from the RMD to the SPM and the 8 in. oil sealine from Cuntala to shore.

These facilities are all marked on the British Admiralty Charts and all vessels bound for Quinfuquena Terminal must have on board the British Admiralty Chart No. 3206.

Anchoring is prohibited within a distance of 1.5 nautical miles from any of the offshore installations. All traffic is prohibited within a distance of 3 nautical miles of the loading points.
RESTRICTIONS: Mooring carried out daytime only. Unmooring may be carried out at night.
MAX. SIZE: See "Berthing".
HEALTH: Upon arrival, 3 Government Officials and Agent board the vessel. The party comes by boat from the Kwanda Base near Soyo, which is situated about 20 nautical miles from the Terminal. The Agent is a local clerk, and speaks English. He boards the vessel on arrival and few hours before departure.
RADIO: *Arrival of Vessels:* Companies intending to lift crude oil from QQ Terminal will have notified by telex 7 days prior to the anticipated arrival date the following information:

Name of tanker.
Flag.
Gross Tonnage.
Nett Tonnage.
Dead Weight Tons.
Length – Overall.
Length – Bow to Manifold.
Nominated cargo quantity.
Shipper.
Agent.
Consignee.
Destination.
ETA QQ Terminal.
Deballasting Time Required.

Vessels bound for Soyo, Quinfuquena Terminal must give their ETA 72 hours/48 hours/24 hours before arrival to Fina Soyo. This can be done via Luanda Radio or via the station tugboat.

The message should contain ETA vessel; Master's name; Vessel's name; Draft on arrival; Last port of call.

24 hours before arrival radio contact can be made with Fina Soyo on SSB 8291.1, 1 kHz at 0930 hrs. GMT.

A 24 hour radiowatch is maintained on VHF Channel 11 in the Mooring Master's Office call sign "Quinfuquena Pilot". Ships are usually able to make contact by VHF at a distance of 20 to 30 miles.

Hours: 6218.6 at 0800 hrs.; 8294.2 at 0900 hrs.; 8291.1 at 0930 hrs.

VHF Channel 11 – 24 hours.

VHF: See "Pilotage" and "Radio".

TUGS: One tug, 1,450 h.p. available, also see "Current".

BERTHING: The new oil terminal, built for The FST Association, has been in operation since December 1979 and is situated 7.5 nautical miles offshore.

The first loading point is of the RMD-type (Ready Made Dolphin). This is a rigid structure standing on the seabed.

The second loading point is a Single Point Mooring Buoy (SPM).

The RMD is located in about 72 ft. of water in the following position:

Lat. 6° 19′ 45″ S., Long. 12° 14′ 42″ E.

On the RMD 2 limits have to be observed:

Max. draft 47 ft.

Max. cargo intake 104,500 tonnes

The RMD is equipped with a white navigation light and fog horn.

Identification navigation light: Flash "U" 30 secs. 8.5 nautical miles.

Identification fog horn: "U" 30 secs. 1 nautical mile.

A 20 in. cement coated sea line connects the RMD with the shore in a position:

Lat. 6° 14′ 54″ S., Long. 12° 20′ 57″ E.

The SPM is located in about 120 ft. of water in the following position:

Lat. 6° 20′ 18″ S., Long. 12° 09′ 48″ E.

Under normal departing conditions the SPM is designed to accommodate 250,000 d.w.t. tankers.

A 30 in. sea line connects the SPM with the RMD.

The SPM is equipped with a navigation light and fog horn.

Identification navigation light: Flash "A" 15 secs. 5 nautical miles.

Identification fog horn: 2 secs. on, 15 secs. off. 0.5 nautical miles.

MOORING: In principle mooring operations are not carried out at night but unmooring operations are performed day or night. At times, if sea, current and weather conditions permit, night mooring can be considered. The Mooring Master will in all cases decide when mooring and unmooring operations shall be done.

All mooring and unmooring operations are done by the ship's crew as indicated by the Mooring Master.

On arrival, vessels must have the port derrick rigged and ready to be used. The SWL of the derrick should be 10 tons.

A line-boat and a crewboat assist the vessels while mooring and unmooring.

The Mooring Master will accept the Notice of Readiness, providing that the vessel is ready in all respects to receive cargo.

The line-boat will bring the terminal mooring gear alongside, which has to be picked up with the ship's derrick. It consists of: 2×14 m.×56 mm. wire snotters; 2×100 ton SWL Crosby shackles; hoseslings; 2 pelican hook chain stoppers; pressure gauges.

Two messenger lines of minimum 400 ft. length must be ready on the forecastle. The wire snotters must be installed on the bitts as indicated by the Loading Master.

The line-boat brings 2×10 in. pick up lines alongside the bow when the vessel is within a reasonable distance of the loading point. The messenger lines will be connected to the pick-up lines and taken on board until the chaffing chains pass through the fairleads. The chaffing chains are connected to the wire snotters by means of the 100 ton shackles.

The fairlead should be a single Panama lead mounted on the centre line of the vessel suitable for receiving 2×3 in. chaffing chains. The approximate minimum inside dimensions of the inside of the fairlead have to be 40 cm. high and 60 cm. wide. Two sets of mooring bits should be situated at the forward end of the forecastle head.

The bitts are not to be closer to the centre Panama lead than about 3 m. and are to be capable of handling 56 mm. diameter wires.

Once the vessel is moored to the loading point the floating hose is brought alongside and connected to the manifold by the ship's crew. The floating hose is equipped with a camlock connection. The floating hose at the RMD is a 12 in. hose and at the SPM a 16 in. hose.

A pressure recorder will be installed on the ship's manifold. During the whole period that the vessel is moored to the loading point the line-boat will be made fast to the stern of the tanker. The vessel shall supply a good towline for this purpose and keep a second one on stand-by ready to be used. If available, buoyant lines are also preferred in this position.

LOADING: The loading rate is approx. 1,300 cu.m.p.h. Soyo crude oil approx. API 33.7. The temperature varies with the seasons. At the end of May, the loading temperature was 78° F.

Tank Farm has a capacity of 800,000 barrels.

During the whole loading operation, a crew member is stationed on the forecastle and one by the manifold. Forecastle must be in permanent contact with Duty Officer and Loading Master by radio if available.

Also see "Mooring".

MEDICAL: Assistance only available in an emergency.

FRESH WATER: Not available.

FUEL: Not available.

SERVICES: Following are not available: Stores and provisions, cash, laundry service, dirty ballast facilities, national flags and ship supply service.

Charts are not available. Vessels must have B.A. Chart Nos. 638 and 3206 onboard when calling at the terminal.

REPATRIATION: Repatriation is available if absolutely necessary but can only be arranged via Luanda with great difficulty.

The Oil Company and the Authorities are against any crew changes.

MAIL: Mail sent from Europe, usually takes 3 weeks.

SHORE LEAVE: Not allowed.

WEATHER:

Winds: The general direction of the trade winds is E.S.E. to S.S.E. The direction is affected by onshore/offshore breezes.

The onshore breeze appears from the S.W. between 1000 hrs. and 1100 hrs. and falls at sunset. It is then replaced by a light breeze from the S.S.E. to E.S.E. which blows until 0800 hrs. or 0900 hrs.

From December till May thunder squalls from the N.E. occur. During the month of May the trade winds often blow night and day.

From June to September (dry season) the winds are low. S.W. in the daytime and S. to S.W. with calm periods at night. At mid-September a stable S.W. breeze settles until the beginning of December. It then becomes more variable with calms at times.

Hygrometry: The relative humidity is above 80% for 11 months of the year but in June falls to 50%.

Visibility: Fog appears more often during the dry season than during the rainy season. During the rainy season visibility is reduced by heavy showers.

Tides and Current: In general the current flow at Quinfuquena is in a Northerly direction and has an average velocity of 0.8 knots. The current direction and velocity are governed by two significant sources; the Benguela Current flowing North and the outflow of the Zaire River. At most times the Benguela Current is the most influential so the most common current direction is North. However, at times, especially during the rainy season (November to May) the effluent from the Zaire River may be so voluminous that it can over-rule the Benguela current and reverse the direction of the current at Quinfuquena. At the RMD we have witnessed a 180° change of direction in 10 minutes.

When this happens during the daylight hours it is possible to receive advance notice if the man on watch spots the muddy front from the Zaire River moving South. This notice allows the line handling tug crew and tanker crew to be in the best position to keep the tanker from contacting the protection ring of the RMD or the SPM. When it happens at night, however, the allowable reaction time is greatly reduced and any error or delay may allow contact of the tanker with the loading point. It is for such instances that the watches must be maintained and ready.

Although, as stated previously, this phenomenon is more likely to happen in the rainy season, it can, and has happened in the dry season.

Tidal currents in this area are minimal. They have an average velocity of 0.5 knots and a maximum of 2 knots. The tidal range is about 1.5 m.

Swell: As far as swell is concerned 93% of the waves come from South (S.E. to S.W.). The average height of the swell is 1.5 m. during the rainy season and increases to 3 m. or 4 m. during the dry season.

NOTICE: Notice to Masters

Subject: Forecastle Head Watchman.

Quinfuquena Terminal has certain peculiarities and your attention is drawn to the following.

1. The tower is a "Rigid Mooring Device" and is standing on the sea-bed as opposed to a "Single Mooring Buoy" which is anchored to the sea-bed and therefore has some lateral movement.

2. Normally your vessel will ride to the "Benguela" current (S'ly), however the Congo River outfall will occasionally produce an adverse current, which will change heading of your vessel to a Northerly direction in a very short period of time.

Therefore a watchman must be placed on the forecastle head at all times, and at the slightest indication that the vessel is "Riding-up" to the tower, he must not hesitate to call the Mooring Master on board who will take the necessary action.

A line-boat, which has the capacity to tow your vessel astern, clear of the tower, will be tied up to your vessel's stern at all times.

Please ensure that a tow rope of a good quality is passed to the line-boat.

SHIPMASTER'S REPORT: April, 1981.

Location: Lat. 6° 19′ 45″ S., Long. 12° 14′ 42° E.

Depth: Berth 21 m.

Current: 0.6 knots.

Bottom: Mud and sand.

Max. Size: Max. draft 14.35 m. Max. Cargo 104,000 tonnes.

Pilotage: Pilot boards 2 miles N.N.E. of Quinfuquena Tower. Vessels can enter at any stage of the tide, day or night.

Tugs: One tug, used for docking and undocking and towing when no current.

Radio: Luanda Radio D3E.

Pratique: Available day and night.

Customs/Immigration: Generally work during daylight only.

Fresh Water: Available in emergency only from coastal ship "OSA-Kestrel".

Bunkers: Diesel oil available from "OSA-Kestrel" in an emergency only.

Doctor: Only available in an emergency.

Charts: B.A. Chart Nos. 604 and 3206.

Documents: Last Port Clearance, 3 Crew Lists, 3 Vaccination Lists, 2 Stores Lists, 2 Crew Customs Declarations, 2 Animal Declarations, 2 Firearms and Ammunition Declarations.

Cargo: Hose connected to port side. Product loaded, crude oil.

Coastal tanker "Fina Norvege" may have priority at loading berth.

Agent: 3 Agents located in Soyo. Compulsory to appoint ship agency.

Anchorage: 2 miles N.N.W. of Quinfuquena Tower. Bottom mud/sand, depth 12 to 18 fathoms.

Characteristics of Loading Point: The Loading Point of Quinfuquena is a tower structure called a "RMD" (Rigid Mooring Device) standing on the sea-bed with a base of 21 sq.m. At water level is an anti-collision ring or fender. The tower is marked by navigation light as follows: White showing Morse letter "U". Also fog-horn Morse letter "U".

Note: This light is unreliable in performance and visibility during operation is less than 1 mile.

A flexible 20 in. hose connects the tower to a 20 in. shore-line.

Moorings: Moorings are from the tower, 2 lines 12 in. (braided) and 2×3 in. chaffing chains leaching to 2×200 m. 8 in. pick-up ropes. The chaffing chains are connected on the ship to 2×12 in. braided "Snotters" made up on the bitts.

The ship must supply 2 messengers, a tug brings the 2 mooring pick-up lines to the ship and makes them fast, always on the port side of the ship even though the moorings are port and starboard. Ship's crew will make moorings fast. The ship shall also provide a mooring line to be used as a tow rope. At all times a tug will be made fast to the stern of the ship.

During loading a member of the ship's crew shall be posted forward to watch the mooring lines and to warn the Loading Master in case of the ship "reaching up to the tower".

Ship's crew will make moorings fast and connect the flexible hose.

From the tower to the ship is 1×16 in. floating hose reducing to 12 in. aboard the ship. Ship's derrick should be made ready, always on the port side. Derrick should have SWL 7 tons. Ship's crew will also rig cargo hoses under the supervision of the Mooring Master.

Loading: Inspection of tanks after de-ballasting made by the Loading Master. Samples taken onboard the ship and 3 samples to remain onboard. Loading rate is about 300 cu.m./hr. All cargo paper work is done onboard the ship and a cargo surveyor arrives from Europe 1 day prior to completion of loading. Loading will be interrupted 2 or 3 times to allow a coastal tanker to load. This tanker has priority at the Loading Berth. Ship will return to anchor during this period.

Weather: Rainly Season: October through March.

Visibility: Good all year round.

Sea: Density 1025 but sometimes 1020 when River Congo outfall arrives.

Tide: Usually not noticable until FULL moon period. Then is semi-daily. 1.20 m. at Springs.

Wind: S.S.W./S.S.E. usually less than force 4.

Swell: S.S.W. usually less than 2.50 m. although during dry season can rise to 6.00 m.

Current: Usually N.N.W. 0.60 knots but changes at periods of FULL moon – unpredictable.

Also liable to change rapidly (in 10 minutes, 180° change) due to the arrival of the River Congo outfall.

Telecommunications: VHF Channel 11 permanent watch while vessel at Quinfuquena Terminal. Call sign "Fina Marine" and "Oil Soyo".

Radio messages addressed to Fina Soyo via Luanda Radio D3E.

As this is not very reliable, it is advised to send all traffic to "Master Tug Oil Retainer" via Portishead Radio GKA. The call-sign of the tug is 2YRZ and is in contact with GKA via radiotelephone. This method is much more reliable and ensures all traffic reaches Petrangol and the Mooring/Loading Master. The tug is always standing by at the Quinfuquena Terminal.

Navigational Warnings: Sub-sea pipe-lines run in the Quinfuquena area and drilling platforms are not marked on the chart.

The most important cautionary notes concerning Quinfuquena area are as follows:

1. Quinfuquena Loading Tower (Lat. 6° 19′ 45″ S., Long. 12° 14′ 42″ E.). From this position a sub-sea pipe-line runs 052° to the beach crossing at Lat. 6° 14′ 50″ S., Long. 12° 21′ 00″ E.

From the same loading tower a second sub-sea pipe-line runs 273° to approximate position: Lat. 6° 20′ 00″ S., Long. 12° 07′ 30″ E. where a new SBM Buoy is expected to be operative in the near future.

2. A production platform exists in approximate position: Lat. 6° 14.2′ S., Long. 12° 10.0′ E. From this position a sub-sea pipe-line runs at 095° to the beach crossing at approximately Lat. 6° 14.5′ S., Long. 12° 21.0′ E.

Recommendations: Vessels calling at Quinfuquena for loading cargo MUST have provisions and fresh water onboard to allow for 45 days stay at the Terminal.

There is no possibility of fresh provisions or crew changes or mail and fresh water is provided via Petrangol only in absolute emergencies.

OPERATOR: Fina Petroleos de Angola, C.Postal No. 1320, Luanda, Angola. *Tel:* (Admin) 35802, 35815; (Refinery) 70101, 73737, 73738, 70195, 70540. *Telex:* 3033, 3246. *Cables:* Fina, Luanda. *Contact:* Captain B. Diricq, Marine Superintendent.

Capitania do Soyo, Capitania do Porto do Soyo, Soyo, Republica Popular Angola.

NOTES

Please also advise Shipping Guides Ltd.

Antigua

St. JOHN'S: 17.07 N. 61.52 W. (See Plan Book)

PORT LIMITS: All the waters enclosed by an imaginary straight line running due West from Weatherill's Point forming the Northern boundary by an imaginary straight line running due North from Shipstern Point forming the Western boundary and by the coast line running from Weatherill's Point to Shipstern Point forming the Eastern and Southern boundaries.

DOCUMENTS:
4 Crew Lists.
2 Stores Lists.
4 Passenger Lists.
1 Customs Declaration.
1 Declaration of Health.
4 Copies of Manifest.
Port Clearance from previous port.
3 Copies of B/L.
1 Copy Crew Personnel and Curio List.
Fumigation and Derat Exemption Certificate to be shown.

PILOTAGE: Compulsory. Messages should be received by Agents 48 hours in advance. Pilot boat may be identified by pilot flag.

Pilot boards at entrance of channel if vessel is proceeding to Deep Water Harbour. If vessel proceeding to Oil Berth, Pilot boards 2 miles North of Sandy Island.

ANCHORAGE: Area between Fairway Buoy, South Warrington Buoy and No. 1 Channel Buoy. Approximately 7 cables N.N.W. of Pillar Rock Light. Depths 40 ft. – 45 ft. Anchorage for vessels up to 54 ft., 2 miles N.E. of Sandy Island.

RESTRICTIONS: (a) No vessel is permitted to berth alongside before permission to do so is given by the Port Authority or unless such vessel is under the command of a Pilot.

(b) Tidal variation is negligible.

(c) Channel is 8,000 ft. long and 300 ft. wide.

(d) Draft restriction is 32 ft. at berth.

MAX. SIZE: Vessels of any size, but with a maximum draft of 45 ft. can anchor at the Outer Harbour. At berth max. draft is 32 ft.; length of dock 1,200 ft.; and turning circle 1,200 ft. diameter.

HEALTH: Pratique given at berth. Suspected infectious diseases must be notified to Port Health Inspectors in advance of vessel's arrival.

RADIO: Cable and Wireless (W.I.) Ltd. via Barbados Radio 8PO.

VHF: Port Authority maintains watch on Channel 16 during normal working hours. Watch is also maintained by Pilot and tugs on Channel 16 one hour before ETA of any vessel. Tugs and Oil Terminal Pilot use Channel 6 during berthing operations.

RADAR: Nil.

TUGS: Two harbour tugs, each with 1,500 h.p. engines. Tugs join vessel in Approach Channel. Tugs lines normally used. No charge.

BERTHING: Three berths on pier of length 1,200 ft.; maximum permissible shipdraft 32 ft. in salt water; loading or discharging can be done either by shore equipment or by ship's own gear.

CRANES: Authority owns 1×150 ton H & G mobile crane and 1×10 ton Coles mobile crane.

2×75 ton cranes are available on dockside which are provided by a private contractor.

Lift Trucks: Authority owns 1 large truck with adjustable spreaders capable of lifting fully loaded 40 ft. and 20 ft. containers.

BULK CARGO FACILITIES: None.

SPECIALISED CARGO-HANDLING FACILITIES: None.

BRIDGES: None.

STEVEDORES: 48 hours notice is required to arrange gangs. Average load or discharge rate is 10 t.p.h.

Working hours: 0700 – 1600 Monday to Friday and 0700 – 1100 on Saturdays. Overtime possible weekdays and Sundays.

MEDICAL: Agents should have at least 24 hours notice should medical attention be required. Hospital facilities are available and can be arranged by either Ship's Agent or Port Authority.

TANKERS: *Sea Island:* A concrete platform 180 ft. long with 4 mooring dolphins, overall length 750 ft. The jetty platform is protected by 5 foam filled Yokohama type fenders. Depth alongside 35 ft. at MLW. Max. draft 32 ft. (deeper draft subject to Marine Terminal approval). Max. load displacement 22,000 tons. Berthing by tankers on South side only. Port side alongside with the assistance of 2 tugs. Mooring arrangements: 2 head/stern lines, 2 breast lines, 2 springs.

Distance to shore is 4,500 ft.

Pipe-lines: 1×16 in. crude line with 1×12 in. hose; 1×8 in. gasoline line and 1×8 in. distillate line each with 1×6 in.; 1×4 in. LPG line. 1×3 in. fresh water line. One grade at the time with max. throughput of 1,500 bbls.p.h. and max. back pressure of 120 p.s.i.

Sea Buoy: A CBM of 5 mooring buoys (3 head buoys and 2 stern buoys) in 50 ft. of water. Max. draft 43 ft. Distance to shore 7,800 ft. 1×16 in. crude line with 1×12 in. hose (both submarine). No slop residue discharge facilities available.

Hose connections: Port side amidships on Sea Island and Sea Buoy.

All Bunker grades are available. The blender is on the jetty with meters. Lubricants are available. The bunker line is 10 in. with a 6 in. bunker hose.

There are no slops or dirty ballast facilities. Ships to load are to arrive with clean ballast.

There are always two jetty attendants who are to be provided with meals.

It is possible to arrange a boat service between ship and shore but the ship's motor lifeboat can be used as well for this purpose and can sail in Antiguan waters without restrictions, provided the ship is cleared by the Authorities.

DENSITY: 1025.

FRESH WATER: Available at Deep Water Harbour, 24 hours' notice required. Also at Oil Refinery Pier and by barge, but only in conjunction with bunker fuel deliveries.

FUEL: All grades of marine fuel available at the Marine Pier. Also available at the Sea Buoy and by barges at Deep Water Harbour.

FIRE PRECAUTIONS: (a) No open fires nor smoking are allowed near the open hatches or in the hold in which flammable or dangerous goods are stored, or at the place of discharge of shipment.

(b) No person may set off or ignite any flare, rocket, explosive device, firework or make any bonfire or barbecue in any port area other than for emergency life saving or ship safety purposes, unless permission has been granted by management.

CONSULS: American, Norwegian, Dutch, French, Danish, Swedish and Venezuelan.

REPAIRS: All types of deck, but only minor engine repairs are possible.

DRYDOCK: None.

SURVEYORS: Lloyds and ABS.

GANGWAY/DECK WATCHMEN: Services of watchman absolutely necessary.

HATCHES: Opening and closing normally carried out by ship's crew.

CUSTOMS ALLOWANCES: 1 carton of cigarettes, 1 bottle liquor.

CARGO GEAR: Loading and discharging effected both by shore and ship's gear, but mainly by shore gear.

REPATRIATION: Facilities exist for effecting crew changes and arranging for necessary repatriation.

AIRPORT: Airport is 4 miles from the Deep Water Harbour, and is served by such international airlines as Eastern, Air Canada, B.W.I.A., B.A., L.I.A.T., Prinair, Air Guadeloupe, etc.

TIME: Local time is GMT minus 4 hours. No adjustments made to clocks during the year.

HOLIDAYS: 1st January; Good Friday; Easter Monday; Labour Day (1st Monday in May); Whit Monday; 1st Monday and Tuesday in August (Carnival); State Day (1st November); Christmas Day; Boxing Day; Queen's Official Birthday which is either the 1st or 2nd Saturday in June.

POLICE/AMBULANCE/FIRE: Police Tel: 20125-6-7-8; Ambulance Tel: 20251-2-3; Fire Tel: 20044.

TELEPHONES: Arrangements exist for placing telephones on board.

SERVICES: No special services exist e.g. tank-cleaning equipment, discharge of tank washings, compass adjusting, etc. However, arrangements can be made to carry out these services.

SHORE LEAVE: Crew members are permitted to go ashore; there are abolutely no restrictions.

IDENTIFICATION CARDS: Not necessary to show identification cards. However, may be called upon to present seaman's book should the occasion warrant it.

REGULATIONS: Users of the Port should be acquainted with Port Authority Act and Port Regulations. Copies of these can be purchased at the Government printers.

DELAYS: Delays due to unavailability of berth are very infrequent. However, during the months of December to April, 24 hours delay can be expected.

AUTHORITY: Antigua Port Authority, P.O.Box 1052, St. John's, Antigua. *Tel:* 20053, 21273, 23439. *Telex:* 2179 Anport Ak.
Contact: Port Manager.

NOTES

Please also advise Shipping Guides Ltd.

Argentina

Information for ports of Argentina, including drawings of port areas as reproduced in our plan section, have been compiled not only with the assistance of Port Authorities but also with the very kind co-operation of Centro de Navegacion Transatlantica of Buenos Aires to whom we are very much indebted.

Shipowners and Masters wishing to be in possession of more detailed information concerning River Plate ports, Argentina South Atlantic ports and the Strait of Magellan, are advised to obtain a copy of the "C.N.T. Year Book" which is published by Centro de Navegacion Transatlantica, 25 de Mayo 489, Buenos Aires.

N.B. For practical purposes, we have sub-divided information for Argentina into three sections as follows:

I. *GENERAL.* II. *RIVER PLATE PORTS.*
III. *SOUTH ATLANTIC PORTS.*

I *GENERAL*

DOCUMENTS: *Required prior to arrival:*

(a) At least 24 hours prior to the anticipated arrival of the vessel, a request for berthing must be presented to the General Port Administration in triplicate. There is a special form for this request, indicating the specifications of the vessel and the freight to be handled, for the assignment of the berth.

Upon receipt of the allocation of the berth, the following authorities must be notified:

a. The Chief of the Office of Maritime Health, to whom a request must be made 24 hours in advance for a health pratique. This must be made in duplicate, on a special form, to which a copy to the radio request for a health pratique must be attached. This is necessary to obtain authorisation to dock in the assigned berth, without a prior boarding by the health officer;
b. The Naval Prefecture, to which the request for a health pratique must be presented indicating the date and time of arrival from the open seas at the Intersection (in Buenos Aires) and from the intersection at the assigned berth;
c. The Chief of the Office of Overseas and Coastwise Shipping of the Naval Prefecture, to whom a request for pilotage must be made in duplicate, indicating the date and time of arrival, and designation of berth for the vessel.

On arrival:

Type of Document	Number and distribution of documents				
Basic Forms	Prefecture	Customs	Immigration	Health	Total
Additional documents:					
1. General declaration	1	–	2	1	4
2. Cargo manifest	–	1	–	–	1
3. Crew list	2	–	2	–	4
4. Passenger list	2	–	2	–	4
5. Ship's store list	–	2	–	–	2
6. Crew's effects declaration	–	2	–	–	2
7. Maritime declaration of health	–	–	–	1	1
8. Mail list (a)	–	–	–	–	1
9. Entrance declaration	–	–	–	–	4
10. Standardised manifest cover	–	2	–	–	2
11. Section request	–	2	–	–	2

(a) Delivered directly to Postal Service.

Prior to departure:

Type of Document	Number and distribution of documents				
Basic forms	Prefecture	Customs	Immigration	Health	Total
Additional documents:					
1. General declaration	2	–	2	–	4
2. Cargo manifest	–	2	–	–	2
3. Crew list	2	–	2	–	4
4. Passenger list	2	–	2	–	4
5. Sailing notice	–	–	3	–	3
6. Sailing declaration	–	–	–	–	–

Request for health pratique:

At least 24 hours prior to sailing, a request for the health pratique must be presented to the Naval Prefecture (four sets).

Other provisions:

A representative of the Naval Prefecture and a Migrations Inspector board the vessel prior to sailing.

(b) Masters should also have at hand for inspection as required all the various certificates such as Certificate of Registry, Postal packet permit, if pertinent, Freeboard, Measurement, Safety Equipment, Radio Installation, Bulk Cargo, shifting board installations or equivalent, and Deratisation Certificate, or exemption.

None of these documents requires an Argentine Consular visa.

(c) Port Agents should also receive copies for their use and to facilitate any further contacts with the authorities in case of need. In particular they require a large number of copies of Manifest, and from this they will prepare Spanish manifest, which must be presented to Customs within 48 hours of vessel's entry. A number of extra copies of crew list are also needed, and one extra store list.

(d) Every person figuring on the crew list of a vessel entering an Argentine port must possess documents proving his identity, such as a discharge book, passport or other documents in use in the country of origin, authorised by the competent Authorities.

(e) Vaccination Certificate. Members of crew must be provided with an international vaccination certificate, not more than 3 years old, which should be presented on arrival, together with the individual Identity Card. Failing this, the crew will be vaccinated by the boarding doctors.

(f) Identity Cards. On arrival at an Argentine port, Masters of foreign vessels must deliver Identity Cards complete with photographs and finger-prints of each member of the crew, together with two copies of Crew List. One set is retained by the Migrations Department, and the other document remains in possession of the individual so that once identified, the crew member may return to the country without the necessity of obtaining new documents. The Master is handed in exchange one copy of the Crew List, sealed and signed by the Immigration Officer to enable him to prove at other Argentine ports of call, that he has complied with the corresponding Regulation.

No member of the crew, except the Master, is allowed to land until the Immigration Auhorities have checked the crew with the Identity Cards.

Masters may if necessary have the Identity Cards completed with photographs in the Argentine at the first port of arrival. In such cases it is advisable that Agents are advised in advance so that preparations may be made against vessel's arrival. The Authorities will not allow any members of the crew to be disembarked until they have presented their Identity Cards or have had their photographs taken. Agents must present these Identity Cards to the authorities for stamping within 48 hours of arrival of the vessel. Immigration control is made at whatever hour the vessel arrives, forming part of the normal reception procedure.

(g) The stores lists should be completed with great care as a specially trained searchers' brigade has been visiting most ships as soon as free pratique is granted.

Particular care must be taken to declare all sizes and measures in the metric system. A plea of a regrettable mistake is not accepted and fines, if legally applicable, can be severe.

FREE PRATIQUE: Vessels take pratique in port, and may enter and berth if they fulfil the following conditions:

(a) Clean port of sailing and ports of call.

(b) No persons with infectious or contagious diseases or with fever on board.

(c) No cases during the voyage of disease of international concern, or of infectious diseases of an epidemic nature.

To be able to obtain this privilege of taking pratique in port, it is essential that Masters of all vessels arriving from abroad wireless their Agents, not more than twelve hours before arrival, that vessels under their command are in the sanitary conditions as required by Art. 45 of the regulations to enter port and go alongside.

On receipt of this message, Agents will present to the Health Authorities the request for a berth, accompanied by the telegram sent by the Master, not less than six hours (nor more than twelve) in advance, detailing sailing port and ports of call, and indicating the approximate hour of arrival. If the wireless message is in code, Agents will give the necessary translation, and be held responsible for any error in such translated version.

The message may be sent either in English or Spanish, and we give specimen texts in both languages, which should be closely followed:

"Addressed to Agency in Buenos Aires (or other port) solicitamos pedir libre platica telegrafica buque . . . (1), procedente de . . . (2), con escalas en . . . (3), con . . . (4) . . . tripulantes, (5) . . . pasajeros Buenos Aires . . . (6), pasajeros transito punto. declaro no tener abordo persones afectadas por ninguna enfermedad pestilencial punto estado sanatario bueno

"captain . . . (7)."

or in English:

"please request free pratique ms (or ss) . . . (1), proceeding from . . . (2), with calls at . . . (3), with . . . (4) . . . crews, (5) . . . passengers for Buenos Aires . . . (6). passengers in transit stop hereby declare that nobody on board affected by any pestilential disease stop sanitary condition good.

"master . . . (7)."

In each case the gaps must be filled in as follows:

1. Port of vessel and flag.
2. Port of commencement of voyage.
3. Full details of all ports of call.
4. Number of crew.
5. Number of passengers for Buenos Aires (or whatever port first entered).
6. Number of passengers in transit.
7. Full name of Master, and also of doctor if there is one on board.

As there have been cases of insufficient information being received from vessels, and "added in" by Agents in the translation, the authorities have established this standard form which Masters must follow in their messages, and which will accompany the request to the Health Authorities.

This facility now refers to all Argentine ports, the message requesting Free Pratique to be sent to the vessel's Agent at first port of call, after which Free Pratique is automatic in all subsequent Argentine ports. If, however, a non Argentine port is called at en route, Free Pratique must again be requested at what will then become the "first Argentine port".

Agents will confirm to the vessel, by radio, the date and hour of granting of free pratique, and with this information in hand, vessel can enter port and go alongside. The Port Authorities will board as soon as the gangway is placed for their routine inspection, and until they have boarded, no one else should be allowed on board.

Vessels which do not meet the sanitary requirements, or come from unclean ports, must fly the yellow flag on entering for the necessary inspection alongside.

River Ports. Vessels proceeding to river ports get pratique at destination.

Vessels lightening. Tankers and other ships lightening in River Plate waters, provided they comply with Art. 45, may later continue their voyage and go straight into berth at port of destination to take free pratique there.

Sick crew members. If there is a sick person aboard, the international sign "W" must be flown on entering, and for Free Pratique, the customary yellow flag.

Masters must report to the boarding sanitary authorities those members of the crew having venereal complaints.

Asian and African Ports. In accordance with WHO requests, all vessels proceeding from these ports will be subject to an inspection of all galleys and store rooms.

Infected ports. Apart from the smallpox vaccination certificate, which is obligatory in all cases, the recent Cholera epidemics have caused the Health Authorities to tighten control. All persons on board vessels coming from ports in the countries named below must be in possession of the Anti-Cholera inoculation certificate, and from other zones as indicated as International Yellow Fever vaccination certificate.

Cholera. The international certificate is valid from the sixth day of inoculation, and for six months. The countries at present under control are:

Africa: Algeria, Alto Volta, Benin, Cameroon, Chad, Ghana, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Somalia, Togo.

Asia: Burma, India, Indonesia, Malaysia (West), Muscat, Nepal, Pakistan, Philippines, Vietnam.

Epidemics are not officially admitted in the Arab Republic of Egypt and Sudan, but the certificate is advisable as a precautionary measure.

Other zones may be affected at short notice.

Yellow Fever. The vaccination certificate is valid for ten years, as from the tenth day of inoculation. It is required for all persons coming from:

Africa: Angola, Ghana, Kinshasa, Nigeria, Sierra Leone, Sudan.

South America: Brazil (territories of Roraima and Boa Vista), Colombia (Bolivar, Simiti, Boyaco and Paz de Ariporo).

Inflammables. It should be borne in mind that vessels carrying over 25 tons and under 100 tons of inflammables, explosives, etc., must be inspected in the roads before entering whether they have asked for Free Pratique by radio or not, although this is still advisable as the one inspection is independent from the other.

CLASSIFICATION OF ARGENTINE PORTS: In accordance with Article 31 of the Pan American Sanitary Code, the National Health Department has classified the Argentine ports as follows:

Clean Ports Class A—Buenos Aires, Rosario, Santa Fe, La Plata and Bahia Blanca.

Clean Ports Class B—San Nicolas, San Lorenzo, San Martin, Villa Constitucion and Concepcion del Uruguay.

Clean ports under the vigilance of the Health Department—Mar del Plata, Necochea and Diamante.

A clean port, in general, requires the absence of non-imported cases of cholera, yellow fever, pest, exanthematic typhus or any other contagious disease of a serious epidemic nature, that may be carried through international trade. The clean ports of Class A have competent staff and suitable sanitary equipment, also bacteriological laboratories, registers of disease and deaths, lazarettos, etc.

The clean ports of Class B are those that have not got all the equipment required for Class A.

FLAG: The flag of the Republic is three horizontal and equal bands of which the centre one is white, and the upper and lower, sky blue.

The official colours, flown by Naval vessels and all official entities are distinguished by a rising golden sun in the centre of the white.

All foreign merchant vessels must fly the Argentine flag from the highest mast while in territorial waters and ports, and fly their own national colours from the ensign staff.

PILOTAGE: A. *Ordering:* For Recalada Station, minimum 48 hours in advance, for all other services Agents of the vessels to be piloted must apply, in writing, to the Pilotage section of the Prefectura at their domicile before 1700 hrs. on the day before the service is to be effected, or on Sundays/holidays, before 1100 hrs. Pilots are obliged to render service in strict turn, in accordance with the register in the zone.

Applications for Pilots presented outside the hours established will be accepted but they will be classed under the headings of "Extraordinary" or "Urgent" applications. Pilots should always be ordered by the Agency; only in exceptional cases may a Pilot be requested direct by a Master, when by reasons of force majeure, or change of destination arrival is unforeseen. Vessels which are unaware of their Agents name may also request a Pilot direct. In such cases the request should be made direct, by radio, to the Prefectura with full explanations of the circumstances.

B. *River Plate Zone:* There are three Pilot stations in this Zone, namely; Port of Buenos Aires, Intersection and Recalada.

(i) Inwards from sea. Inward vessels for up river ports Buenos Aires or La Plata have to take a Pilot at Recalada, and must give 48 hours advance notice of arrival, both to Agents in Buenos Aires and direct to Recalada, call sign LSR 500 kHz. (600 m.) Type A1, A2.

The operator is on duty from 8 to 10, 12 to 14, 16 to 18 and 20 to 2200 hrs. Communications can also be made on 462 kHz. (649 m.).

The second Pilot station is at Intersection km. 37 measured out of Buenos Aires.

The Recalada Pilot takes all vessels to Intersection only, where another Pilot comes aboard, as follows:

if bound for Buenos Aires, a port Pilot.

if bound for La Plata, a river Pilot to La Plata Roads where a La Plata Port Pilot takes over.

if bound for upriver, a river Pilot.

(ii) Outwards to Montevideo. Vessels sailing from Argentine Plate ports to Montevideo must take an Argentine Pilot up to Montevideo Roads, not drop him at Recalada.

(iii) Inwards from Montevideo. Vessels arriving from Montevideo come in charge of a Uruguayan Pilot to Intersection, where the second Pilot takes over as above: Uruguayan Pilots, when in Argentine waters are subject to all Argentine laws and regulations.

(iv) Outwards to sea. Outward bound vessels (except for Montevideo) are obliged to disembark their Pilots at Recalada, except when prevented by weather, in which case the Pilot must land at first available port and his travelling expenses back to Buenos Aires are for vessel's account.

C. *River Parana Zone:* Comprises the River Parana from the port of Parana (km. 600 from Buenos Aires) down to its mouth, and that part of the River Plate limited to the East by its left bank to Punta Negra (Uruguay), thence to Intersection, to the South by the North bank of the access channel to Buenos Aires Port, to the West the right bank of the River Plate from the entrance to Buenos Aires port to kilometre 0 of the River Uruguay.

On the River Parana, on distances exceeding 200 km. two special Pilots must be ordered, and therefore there will be four Pilots on board (two special and the two on turn), and the vessel has to pay for each of them, i.e. four times the tariff.

For distances of less than 200 km., the same ruling applies when continuous navigation is requested, which necessitates the employment of two Pilots on turn. However, when only one Pilot is asked for, only one special Pilot is nominated, if specially asked for, and consequently the tariff is double.

(i) Northbound. Pilots for navigation through this zone go on board, north-bound, at Intersection, whatever the destination. If for Uruguayan ports in the River Uruguay, the Uruguayan port Pilot comes on board off Parana Bravo.

(ii) From River Uruguay. Vessels from River Uruguayan Ports, either Argentine or Uruguayan, change their River Uruguay Pilot for River Parana Pilot at the mouth of the Parana Bravo. However, if proceeding from a Uruguayan port, it is preferable to send the Parana Pilot to the Uruguayan port, and drop the Uruguayan Pilot off Nueva Palmyra. In certain cases the Argentine Parana Pilot can also come aboard at Nueva Palmyra.

(iii) Inside Parana River. There are two stations for despatching Pilots in the River Parana Zone; one at Buenos Aires and the other at Rosario. From the port of Buenos Aires Pilots will be cleared to take vessels to the Northern limits of the Zone, as also for vessels anchored at ports or places South of San Pedro, for any destination.

From the Rosario station, Pilots will be despatched to vessels anchored within the port of San Pedro, and all places to the North of the port, whatever their destination.

At some of the smaller ports in this zone the Prefecture will, to avoid delay to the vessel, authorise the River Pilot to berth the vessel. This request must be made when ordering the Pilot, but Agents at the river port must also apply for a Pilot, and see that he is employed if available.

Draft is ruled by the depth of water at Martin Garcia Bar, which is at present 24 ft. 6 in. at zero. This varies, and from time to time the Prefecture has authorized clearance of vessels up to 27 ft. Occasionally it happens, in spring, that there is less water in the river above Martin Garcia, but the Weekly Bulletin issued by the authorities covers this and all determining depths on the river routes.

(iv) To Montevideo. Vessels proceeding down river to Montevideo, take a Pilot at Intersection to Montevideo Roads, where a port Pilot boards.

(v) To La Plata. Vessels from up river ports for La Plata drop their river Pilot at Intersection, take another river Pilot to La Plata Roads (optional) and then a port Pilot there.

D. *River Uruguay Zone:* Comprises the River Uruguay from Concepcion de Uruguay, km. 188 to its mouth, and that part of the River Plate mentioned under the Parana River Zone. All Pilots for this Zone will be despatched through the Buenos Aires station.

E. *Bahia Blanca Zone:* Comprises the Bay from a line joining the buoys at Punta Tejada and Punta Lobos, up to the ports. There is no pilot vessel on station. The ordering of Pilots for the Bahia Blanca Zone is effected by the Overseas and Coasting office at that port. As the official tug for taking sea Pilots to meet incoming vessels is sometimes out of commission, Masters are requested to advise their Agents of the ETA 48 hours in advance. The cost of a special tug is heavy, and on occasions a saving can be made sharing expenses if the tug can take out Pilots for other incoming vessels, and also embark those from vessels outward bound from Bahia Blanca.

F. *Southern Ports:* South of Bahia Blanca and as far as Rio Grande pilotage is obligatory in port, when a vessel requires a Pilot, application should be made to the Pilots' Office of the Naval Prefecture through vessel's Agents in Buenos Aires with at least five days advance notice. They go on board either at Buenos Aires, off Mar del Plata, or at other ports as required, and are authorized to operate in all of the Southern ports: San Antonio del Oeste, Madryn, Commodoro Rivadavia and the adjacent oil berths, Deseado, San Julian, Santa Cruz, Rio Gallegos, San Sebastian, Rio Grande and Ushuaia.

Their duties are to act as Port Pilots for entering, mooring, unmooring and leaving any of these ports.

Vessels from South Atlantic Argentine ports, for Montevideo should pick up an Argentine Pilot from Recalada to Montevideo Roads, but if such vessels pass further than five miles away from Recalada Lightship and pass direct to Montevideo Roads, there is no such obligation.

G. *Embarking/Disembarking:* Accommodation ladder. The gangway should be lowered to about 3 m. above the surface of the water, and adjusted in such a way that the Pilot only needs to climb the rope for this distance, in order to step on to the gangway. This rope ladder must have all the steps resting firmly against the side of the ship, in accordance with the requirements of the Safety of Life at Sea Convention. Similarly, the gangway must rest against or be secured to the side of the vessel, and Pilots may refuse to board if these conditions are not complied with.

RADIO: All times are given in GMT unless otherwise specified.

Storm Warning, Met. situation, Weather forecasts and Notices to Mariners. Are transmitted in clear (A1) in Spanish and then English, daily, from the following stations:

General Pacheco Buenos Aires	LSV	3220.5 kHz	0.5 kW	0130 hrs.	Storm warning Met. resume
	LSV 2	5907.5	0.5 kW		Forecast
	LSV 4	12100	1 kW		
	LSV 5	17520	1 kW		

and again at 1600

while LPD 5 transmits the same information on 512 kHz (5 kW) at 0148 and 1630 hrs.

The weather forecast covers the zone from Rio de Janeiro to Drake Strait and is valid until 1200 of the next day. The word "nil" is used if there is no information to report, as for example in storm warnings.

Vessels at sea can request a forecast and state of the weather at any time from Meteoro Baires, through Pacheco – LPD on 4177, 4187, 8354, 8374, 11531, 12561, 16708, 16748, 22220 and 22270 kHz.

Radio Trelew	LPZ 20	527 kHz	3 kW	at 1730
Radio Comodoro Rivadavia	LPX 2	474 kHz		at 0400 and 1800 as above.

Vessels at sea in this area can request a forecast from Meteoro Comodoro Rivadavia through LPX 2.

Notices to Mariners and Urgent River Notices. Are transmitted in Spanish and repeated in English by Radio Pacheco and Radio Comodoro Rivadavia.

Radio	LPD 5	512 kHz	5 kW	A2 at 0030 hrs. Plate Area
Pacheco	LPD 6	4268 kHz	0.25 kW	A1 at 1230
Comodoro	LPX 2	474 kHz	3 kW	A2 at 1330 2000
Rivadavia	LPX 27	4428.6 kHz	0.5 kW	A3 at 0400 0800 1200 2100

This station only reports on Lat. 42° S. to 52′ S.

In both cases messages are repeated twice at intervals of 1 minute at the times indicated. Notices are repeated daily during 6 days from publication, preceded by the signal TTT, followed by the number of the notice, the letter R and then the text in this sequence:

Zone, sea, river, province, locality, etc.

Lat. and Long. if necessary.

News in question.

Sign off with SHN to indicate the authority (Servicio Hidrografia Naval).

If there is no notice to transmit, the stations will transmit "no hay avisos para navegantes", "no notices for mariners".

Notices to Mariners, and Other Items, in Spanish Only: Notices to Mariners and other special information are given in Spanish only as follows:

Rosario – LSQ 38, 477 kHz, A1, at 1305 hrs.:
Depth of water in the Parana River from Los Pajaros to Los Ratones and also the minimum depth between Santa Fe and Rosario.

Concepcion del Uruguay – LSQ 57, 477 kHz, A1, 0.5 kW at 1300 hrs.:
Information on the Uruguay River from San Javier to Gualeguaychu.

Buenos Aires South Dock (Darsena Sur) – LSQ 9, 477 kHz, A1, 1.5 kW at 0400, 0500, 0600, 0700, 0800, 0900, 1000, 1100, 1200, 1300, 1400, 1500, and 1545 hrs. except on Sundays and holidays.
Depth of water on the gauge at Riachuelo.

Buenos Aires Central de Comunicaciones (Prefectura Naval Argentina) – LSQ 4, 524 kHz, A2, from 05 to 10 minutes each hour:
Depth of water indicated by the semaphores at Puerto La Plata and Riachuelo, and of the El Codillo Zone of the Punta Indio Channel referred to zero on the Oyarbide Tide Gauge which is between pairs of buoys 24 and 25 in the Main Channel, and the new tide gauges referred to under "Buenos Aires", Tidal Signals.

Buenos Aires, Meteo (All A1) – LSV 3220.4; LSV 2, LSV 6, 5907.5; LSV 4, 12100; LSV 5, 17520 kHz at 1705 hrs.
Depth on the River Plate, River Parana, River Paraguay and River Uruguay zones. Buenos Aires, Radio Nacional LRA 870 kHz, A3, at 0100, 1100, 1500, 1800 and 2100 hrs.
Depths of water and met. forecast for River Plate Zone, this station also transmits tidal forecasts at 0100, 1000, 1315, 1600, 1900 and 2200 hrs.

Intersection River Plate – LOI, 524 kHz, A2:
Continuous information on local depths of water, on request.

Recalada – LSR, 524 kHz, A1:
Same as Intersection.

Buenos Aires, Central de Comunicaciones (Navy) – LOL 457.2, 2162.5, 4856, 8030, 13101, 17180, 22840 kHz, A1, at 0230, 0300, 1300, 1330, 1930 and 2030 hrs.
Urgent Notices to Mariners, and Notices to Mariners covering the Argentine Coast and river systems.

Santiago River (La Plata) – LOM, 524 kHz, A2,
from 05 to 10 minutes each hour:
Depth of water on the semaphore at La Plata.
From 10 to 15 minutes each hour:
State of tides in El Codillo Zone of Punta Indio Channel, referred to zero on the Oyarbide Tidal Gauge (between pairs of buoys 24 and 25).

All Atlantic ports also transmit local Notices to Mariners and weather forecasts in Spanish, the call signs and frequencies are indicated under each individual port, but between the powerful stations at Pacheco (Buenos Aires) and Comodoro Rivadavia, the whole coast is covered by the regular information given in both Spanish and English.

Facsimile Reports: Buenos Aires also transmits facsimile reports, of which the following correspond to surface forecasts, valid for 24 hours, and weather on Mercator projection.

		0800/0815 and 2000/2015 hrs.
From station	LRO 69	5185 kHz
and	LRB	10720 kHz

both of F4, white and black with a variation in frequency of plus 400 minus 400 – 5 kW and referred to observations made 8 hours earlier.

From the Antarctic, the Argentine Met. Station at the South Orkney Islands transmits an analysis of the Atlantic area at 0300 and 1700 hrs. from LOK on 4250 kHz and 13051.5 kHz.

Traffic Control and Safety at Sea: The Prefectura Naval Argentina, in charge of shipping activities including safety at sea, maintains a control centre at Buenos Aires, and another at Mar del Plata (where several hundred fishing vessels operate).

Objectives are to prevent collisions at sea or groundings and to keep a safe, expedite and orderly flow of traffic, as well as to alert safety and salvage systems when vessels need assistance.

A – The Controlled Area, from Buenos Aires, covers from parallel 57° W passing through pair of Buoys No. 21 in the main entrance Channel to a line from San Isidro (Buenos Aires) to the mouth of the Parana Guazu River.

The Centre is on permanent duty in the following VHF-FM channels

16 frequency	156.8	MHz for calls, assistance, urgency and safety.
12	156.6	notices to mariners.
14	156.7	annex to Channel 12.
6 and 8	156.3/4	bridge to bridge use.

Information all vessels in the area, both foreign and national, must inform the Centre of the following:

1. On entering the systems.
2. On leaving the systems.
3. On crossing km 57 in the main channel.
4. On arriving at Intersection.
5. On crossing km 11 of the access channel to/from Buenos Aires.
6. When anchoring, mooring or unmooring.

In each case, except 2 and 6, they will give the estimated hour of arrival at the next point en route.

Vessels will also report, on Channel 16, the following:

(a) Accident or fire on board.
(b) Sighting another vessel in apparent difficulties.
(c) Sighting any dangerous obstacle to navigation.
(d) Any serious reduction in visibility.

They will also advise, on Channel 12, as soon as possible, if any mark, light or navigational aid is damaged, missing, functioning badly or evidently out of position. Vessels must keep constant watch on Channel 16 from entering the zone to leaving it, and immediately after using any of the other channels will continue to listen on Channel 16. If, for any reason, this is not possible, they will report this to Control Office by Channel 12.

The Centre transmits as routine information urgent Notices to Mariners, ruling weather conditions every 4 hours from 0000 hrs. and depth of water at El Codillo, La Plata Port, Riachuela and Martin Garcia Bar 5 minutes after every hour.

Also tide and met. forecasts at 0900 and 1500 hrs. Storm warnings, visibility reports and obstructions in channels will be transmitted immediately on being reported, and then included in the next routine transmission.

Information can be requested from the Centre at any time.

The Administration procedure is that figuring in the International Union of Telecommunications and/or the Manual for the Use of Mobile services.

Time used in this service is local Argentine time, i.e. GMT minus 3 hours.

Language: Personnel on duty in the Control centre will use only Spanish.

If necessary recourse can be had to the Code groups in the International Signal Code in use, and the spelling and lettering tables therein, or to Code Q.

B. – Mar del Plata Centre controls the area from 35° 30′ S. to 41° S. In this zone the system is voluntary for foreign flag vessels. The Centre operates on the following frequencies:

				Coastal Frequency				*Ship Frequency*	
One:	Type	A3	H	2182	kHz	LSO	20	2182	a
				2100		LSO	69	2100	d
				4409.4		LSO	70	4410.8	f
				8754.4		LSO	71	8220.4	g
				13189.5		LSO	72	12410.5	i
	A1	A2		500		LSO	20	500	
	A1			437		LSO	20	437	
				4325		LSO	21	4325	
				12728		LSO	57	12728	

Two: The Mar del Plata Centre maintains a continuous listening watch on:

A1	A2	500	kHz	LSO	20
A1		4325		LSO	21
A3	H	2182		LSO	20
		4110.8		LSO	70
		8220.4		LSO	71

and also listens from 00 to 05 minutes each hour on A1 12728 kHz and from 45 to 50 minutes every hour on A3 H on 2100 and 12410.5 kHz.

Vessels can use any of the frequencies listed under "one" after calling any of the frequencies in "two". In radiotelephony, except for frequencies 2100 kHz and 2182 kHz traffic will be routed in semi-duplex as per frequency pairs as indicated in "one" f, g and i.

In this are Notices to Mariners and Safety information will be transmitted as follows:

A3	H	2100	8754.4	0005 and 0505	Argentine time (GMT −3)
		4409.4	7854.4	0805	Argentine time (GMT −3)
		4409.4	13189.5	1205 and 1605	Argentine time
A1		437	4325	0100 and 0600	Argentine time
		4325	12728	1300 and 1900	Argentine time

Storm warnings or other urgent information will be transmitted in A3H and A1 on 500 kHz and 2182 kHz.

Information: Vessels on entering or leaving the zone will indicate:

1. Position, course, speed, whence proceeding, whither bound.
2. Sailing from or entering ports in the area.
3. Report geographical position every 12 hours counted from time of first advice, giving course and speed.
4. Any change in course or speed which alters the normal route and time at which it occurred.
5. Anchoring in or leaving the area.

Happenings: All vessels will immediately advise the centre of:

(a) Accident or damage to own or another vessel.
(b) Sighting any object dangerous to navigation.
(c) Any serious reduction in visibility, or unfavourable meteorological conditions.
(d) Having observed if any lighthouse, beacon, buoy, etc., is not working properly or is out of its correct position.

Language and Time: As in River Plate Centre.

Time Signals: Time signals are transmitted from LOL Buenos Aires as follows: frequency 475.5, 2162.5, 4856, 8030, 13101, 17180, 22840 kHz, A1. at 0100, 1300 and 2100 hrs. GMT, using the modified modern American system, with dots every second from 54.30 to 54.50, a dash of eight seconds ending with four half-second dashes, every minute to the hour, ending with a dash.

LOL also transmits on 5, 10 and 15 MHz simultaneously in A1, A2, A3. Carrier waves are modulated in 1000 and 440 c/s. alternately.

Signal consist of dots every second, omitting the 59th second, and with one second interval before the next period commences. Transmissions is from 0800 to 0900, 1100 to 1200, 1400 to 1500, 1700 to 1800, 2000 to 2100, and 2300 to 2400 hrs. Argentine time (GMT minus 3 hours daily), except Sundays and national holidays.

At the end of each period of transmission the call sign is given in morse, and before each period the words Observatorio Naval Argentino are followed by the hour and minute corresponding to the commencement of the next signal.

Modulation on 440 c/s. corresponds to the note LA of the fifth octave in the musical scale.

D/F BEACONS: A number of radio beacons specially for shipping have been installed down the coast, in addition to the airbeacons which can also be used, though with less accuracy.

There are 8 beacons, and 18 aerial beacons in use as follows:

Practicos Recalada – Lat. 35° 10′ 06″ S., Long. 56° 15′ 00″ W. range 150 miles (on the lightship) frequency 320 kHz, A2.

Signal PR once 9.7 seconds, followed by silence 2.3 seconds, a long dash 17 seconds, silence 1 second, dash 17 seconds., silence 1 sec. PR repeat the cycle, PR again and final silence 14.3 seconds, making a period of 120 seconds (2 minutes).

In good weather there are two transmissions every 2 minutes, from 02 to 08 and 32 to 38 minutes each hour.

In fog, one 2-minute transmission every 4 minutes from 02 minutes.

Punta Mogotes – Lat. 38° 05′ 32″ S., Long. 57° 32′ 28″ W. range 120 miles. (On the lighthouse) frequency 295 kHz, A2.

Signal PM once 9.8 secs., followed by silence 2.2 sec., dash 17 secs., silence 1 second, dash 17 secs., silence 1 second PM and repeat cycle. PM again, final silence 14.2 seconds, total period 2 minutes of the hour.

In good weather 2 transmissions as from 06 and 36 minutes of the hour.

In fog, continuous commencing on the hour.

Bahia Blanca – (On the Recalda Lighthouse) Lat. 38° 59′ 33″ S., Long. 61° 15′ 38″ W. range 350 miles frequency 310 kHz, A2, 0.2 kW.

Signal BB 9.8 seconds, silence 2.2 secs., dash 17 seconds, silence 1 second, dash 17 seconds, silence 1 sec. BB and repeat cycle, then BB and final silence 14.2 seconds, total period 2 minutes.

In good weather 2 transmissions 4 minutes apart from 04 and 34 minutes after the hour.

In fog, 1 transmission every 4 minutes from 04 each hour.

Bahia Blanca – (On the Light Buoy El Rincon) Lat. 39° 23′ 12″ S., Long. 62° 00′ 48″ W. range 200 miles, frequency 310 kHz, A1 and A2, 0.15 kW.

Signal RN once, 7 seconds, silence 2 seconds, 2 long dashes 41 seconds, silence 2 seconds RN repeat cycle, but 1 second first silence after signal then as before repeat RN and final silence 250 seconds, total 6 minutes.

In good weather, 2 transmissions from 02 and another 2 from 32 minutes of each hour.

In fog continuously from 02 each hour.

Bahia Blanca – (On the Segunda Barranca Lighthouse) Lat. 40° 47′ S., Long. 62° 16′ W. approx. range 200 miles, 310 kHz, A2.

Signal SB 9.8 seconds, silence 2.3 seconds, dash 17 seconds, silence 1 second, dash 17 seconds, silence 1 second SB and repeat cycle, repeat SB final silence 14.8 seconds, total period 2 minutes. In good weather, 2 transmissions every half hour, at 00/02 06/08 30/32 and 36/38 minutes on the hour, in fog, every 4 minutes 00/02, 06/08, etc.

Punta Delgada-Los – Lat. 42° 46′ 00″ S. Long. 63° 38′ 00″ W. range 200 miles, frequency 315 kHz, modulation 1000 c/s. modulated A2 signal PD 9.7 seconds, silence 2.3 seconds, long dash 00 seconds, silence 1 second, long dash 17 seconds, silence 1 second PD repeat cycle, PD final silence 14.3 seconds total period 2 minutes, good weather 4 transmissions every hour at 04, 10, 34 and 40 minutes after the hour. In fog, 2 minutes transmission and 4 minutes silence from 04 of the hour.

San Gregorio – Lat. 45° 01′ 30″ S., Long. 65° 37′ 51″ W. range 200 miles, frequency 295 kHz, A2, 2kW.

Signal IL 9 seconds, silence 3 seconds, long dash 17 seconds, silence 1 second, long dash 17 seconds, silence 1 second, IL repeat cycle. IL final silence 15 seconds, 2 minutes period in good weather 4 times every hour, 2 minutes each from 00, 06, 30 and 36 after the hour.

In fog, one 2-minute transmission and 4 silence, from 00 in the hour, but fog transmission temporarily suspended.

Cabo Blanco-Loa – Lat. 47° 12′ 12″ S., Long. 65° 44′ 33″ W. range 200 miles (on the lighthouse) frequency 295 kHz, A1, A2, 0.15 kW signal CB 12 seconds, 2 long dashes 37 seconds, CB repeat cycle CB final silence 250 seconds, total period 6 minutes. Good weather, twice from 08 and twice from 38 minutes after the hour; fog, continuously from 02.

Temporarily out of service.

Medical Advice: Medical consultations can be made, without charge, from vessels at sea with urgent illness or accidents on board. Messages should be brief, but clear and concise, describing the symptoms of the illness with all possible details, including age and sex of patient and informing what first aid equipment is available on board.

For priority, messages should be preceded by the urgent signal XXX and be signed by the Master of the vessel.

The Medical section of the International Signals Code, 1931, Volume 2, can be used, as also clear language if it is necessary to amplify the message.

Messages should be radioed to "Consulta Radiomedica" followed by the name of the coastal station used.

All consultations are gratuitous, they must be composed in Spanish, and indicate in this order:

Sex; Age; clinical antecedents; symptoms leading to the consultation; probable cause of the illness or conditions in which accident occurred; any other data which could assist diagnosis and facilitate treatment, such as pulse rate, temperature (in Centigrade) character and appearance of the wound, etc., and informing what first-aid equipment is on board.

The following stations at Buenos Aires give continuous service for this purpose:

LPD	4	44.5	kHz	A1	A2
LPD	68	4268	kHz	A1	
LPD	86	8646	kHz	A1	
LPD	32	13002	kHz	A1	
LPD	46	17045.6	kHz	A1	
LPD	91	22419	kHz	A1	
LPD	44	4434.5	kHz	A3	
LPD	8	8811.5	kHz	A3	
LPD	9	13180	kHz	A3	

TUGS: Use of tugs compulsory. Exceptions may be made to vessels with bow thrusters.

Working hours at ports of the interior: The working hours for towage services during the week will be from 0700 to 1700. Saturdays 0700 to 1100.

Ordering of Towage Services: For a service to be performed during working hours this must be ordered 3 hours beforehand, and up to 1600 on working days and 1200 on Saturdays. In Bahia Blanca and other ports this will be up to 1100.

Commencement of the service: There will be half an hours grace without surcharge.

Overtime Rates: Working days from 1900 to 0700, 40 per cent. extra. Saturdays 0000 to 0700, 40 per cent. extra. At Buenos Aires and Bahia Blanca 1300 to 2400, 40 per cent. extra. At other ports 1100 to 2400, 40 per cent. extra. Sundays and Holidays 0000 to 2400, 80 per cent.

Surcharges for delays: These will be applied per hour or fraction of about 15 minutes.

Cancellations without charges: In Buenos Aires it will be possible to cancel a service three hours beforehand, and at Bahia Blanca two hours beforehand during working days. At other ports one hours' notice is required.

Cancellations with penalty: There will be a charge of a minimum of one hour for services ordered during working days and cancelled. On Saturdays, Sundays and Holidays, the minimum charge will be two hours.

LOAD LINE: Vessels are permitted to load to their Summer marks all year round at all River Plate Ports as well as Atlantic ports as far South as Cape Tres Puntas; inclusive (47° 06′ S. 65° 05′ W.) and provided they are Northbound or Eastbound. All ports in the River Parana, River Uruguay and the River Plate proper are fresh water.

With regard to Loaded Draft, the mean draft and not the maximum must be taken into account, and this should not exceed the Load Line marks.

On the mean draft an allowance will be made equal to the weight of the fuel vessel will consume until it reaches the Sea from up-river ports. No allowance is given to vessels leaving Buenos Aires or La Plata.

LIGHTENING ANCHORAGE: Vessels wishing to lighten cargo and perform topping-off operations may do so in the following positions:

Position No. 1	34° 42.0′ S. 57° 57.2′ W.
No. 2	34° 44.1′ S. 56° 48.0′ W.
No. 3	34° 46.0′ S. 56° 48.0′ W.
No. 4	34° 43.9′ S. 57° 57.2′ W.

For ships performing such operations in the River Parana, after passing Martin Garcia, the respective zone is between km. 172 and km. 173 in the River Parana Guazu, outside the channel. It is forbidden for ships not lightening or topping off to anchor at these points.

The Following Beacons, all on A2, may be of assistance

		Lat.	Long.	Freq.	Time
Bs. Aires, Aeroparque	OP	34° 31′ 18″ S.	58° 29′ 00″ W.	260	kHz continuous
Bs. Aires, el Palomar	PAL	34° 37′	58° 36′	400	from sunset, on req.
Bs. Aires, Moron	MOR	34° 40′	58° 38′	355	continuous
Bs. Aires, Ezeiza	EZA	34° 49′	58° 32′	365	continuous
La Plata	PTA	34° 53′	57° 56′	250 or 275	continuous
Punta Indio	PDI	35° 18′	57° 16′	325	09/2300
Dolores	DOL	36° 20′	57° 42′	235	on request, range 120 miles
Bahia Blanca	BCA	38° 43′	62° 12′	330	daylight only, not Sundays/holidays, range 250 miles
Comandante Espora	EPO	38° 45′	62° 10′	370	daylight
San Antonio Oeste	SAO	40° 44′	64° 58′	220	daylight
Trelew	TRE	43° 14′	65° 19′	205	daylight, range 300 m.
Comodoro Rivadavia	CVR	45° 47′	67° 30′	230	daylight, range 230 m.
Puerto Deseado	ADO	47° 44′	65° 55′	210	continuous
San Julian	SJU	49° 18′ 30″	67° 46′ 30″	375	occasional, range 150 miles
Santa Cruz	SCZ	50° 01′	68° 34′	245	occasional, range 250 miles
Rio Gallegos	GAL	51° 37′	69° 17′	330	09/2300 350 miles
Rio Grande	RGN	53° 47′	57° 40′	365	on request
Ushuaia	USU	54° 49′	68° 19′	235	on request 200 miles

SPEED: *Maximum speed in Ports, Channel and rivers* – Vessels operating in the proximity of an open port, close to quays or loading places where other vessels or barges are operating, will reduce speed to a maximum six knots.

In particular this refers to

Rosario	between Saladillo and Punta Barrancos (La Florida)
San Nicolas	between km. 347 and 351
Ramallo	between km. 322 and 326
Zarate	between km. 104 and 111
Campana	between km. 96 and 98

FUMIGATION: *(a) Exemption.* Vessels of foreign registry will be fumigated when proof is not shewn that fumigation has been effected by competent authority, and in a port duly authorized by the International Office of Public Hygiene, or that they have been exempted from such operation by the Health Ministry at authorized ports, within the last 6 months. Vessels arriving with an expired Fumigation or Exemption Certificate, will be fumigated except where a request of one month's grace is made to allow vessel to return to home Country or a request is made for an inspection. Should the vessel be in either case in a sanitary condition and have *no trace of rats,* an Exemption Certificate will be granted.

(b) Certificates are of no value if vessel is not in good sanitary condition. The Authorities will not recognize the validity of any Certificate or issue any Exemption Certificate to those vessels which in the opinion of the National Health Ministry, after inspecting the vessel, are not in a good sanitary condition. Both cyanide and sulphur (Clayton process) Fumigation Certificates are accepted by the Health Ministry.

(c) Permit to commence loading of vessels ordered to fumigate. No vessels which have had an annotation on their Free Pratique Certificate to the effect that they must be fumigated or inspected, are permitted to commence loading before these requisites are complied with. To this effect the necessary advice will be passed by the Customs or Port Authorities to the Health Ministry for intervention.

(d) Ports where vessels can fumigate. The sulphur fumigation is exclusively effected by the Health Ministry at the ports of Buenos Aires, La Plata and Rosario. The cyanide process is effected by private companies at practically every port of the Republic, provided sufficient notice is given, as at some ports it is necessary to bring the equipment from other ports.

Masters are recommended to ensure that their vessels are in good sanitary condition and free from traces of rats on arrival. Even although vessels may be given a Free Pratique Certificate, this does not always free vessel from fumigation if on arrival at port of loading, the Authorities discover traces of rats on board. The granting of Free Pratique has, in fact, no relationship to the granting of fumigation exemption, and permission to load.

(e) Weevil. The National Grain Board is very strict on inspecting for weevil on board vessels destined to load grain.

TIDES: Following data indicates the tidal range at Spring and Neaps in feet and tenths of a foot indicating the Argentine chart number on which the respective datum is given, and the height to be added to or deducted from that datum at the various ports, which are given in North/South rotation.

	Springs	*Neaps*	*Chart number*
Martin Garcia	2	0.4	70
Buenos Aires	3.2	0.8	176
Mar del Plata	3.8	1.2	18
Quequen/Necochea	5.2	2	18
Puerto Belgrano (Bahia Blanca)	12.6	6.4	74
S. Antonio Oeste	30.4	11.8	6
Puerto Madryn	18.8	6	92
Comodoro Rivadavia	19.6	7.4	30 (plus 0.6 feet)
Puerto Deseado	17.2	6.2	21
San Julian	28	9.2	H 350
Santa Cruz	39.8	9.4	2
Rio Gallegos	39.4	9.6	H 451/2
Cabo Virgenes	37.8	7.4	203 (minus 2.5)
San Sebastian	33.8	9.4	84 (minus 0.7)
Rio Grande	22.6	7.6	67 (minus 2.1)
Ushuaia	5.2	2.2	45
and for comparative purposes.			
Montevideo	0.8	0.4	242 (plus 0.8)
Punta Arenas	5.6	1	British chart 545

DRY DOCKS AND FLOATING DOCKS: There are two dry docks at Buenos Aires and two at Bahia Blanca, and six floating docks at Buenos Aires, with smaller ones available at Rosario and Corrientes.

The four dry docks are under the control of the Ministry of Marine as are some of the floating docks, but all are available for merchant vessels, and private repair companies are permitted to carry out work in these Government docks.

(a) Applications for entering either Dry or Floating Docks are the same:

Name and class of vessel; flag, characteristics; NRT as per Register; nature of repairs; estimated stay in dock, date when ready to enter dock; vessels' Register number and plans of the hull for docking.

Tank vessels must also supply a "Gas Free" certificate.

(b) Buenos Aires.—The two dry docks are at right angles in the North Basin, on the Northeast side and have the following dimensions:

No. 1 493 ft. (150 m.), breadth at top of entrance 66 ft. (19.75 m.) gradient 1: 300.

No. 2 590 ft. (180 m.), breadth at top of entrance 92 ft. (22.10 m.).

Vessels with large beam can only enter if their draft does not exceed 20 ft.

(c) Bahia Blanca.—The two dry docks are in the Naval Dockyard base.

No. 1 is 705 ft. (215 m.) in length, width on sill 72 ft. 6 in. (22.12 m.).

No. 2 is 672 ft. 6 in. in length (closed) (205 m.).

(d) Floating Docks.—There are seven in Buenos Aires, as follows:

	Lifting Capacity	*Length*		*Internal Breadth*	
No. 1	3,500 tons	413′	126.10 m.	56.0′	17.10 m.
No. 2	1,500 tons	300′	91.50 m.	41.0′	12.50 m.
No. 3	750 tons	216′	65.79 m.	44.0′	13.32 m.
No. 4	750 tons	216′	65.79 m.	44.0′	13.32 m.
No. A	12,000 tons	565′	172.50 m.	86.0′	26.20 m.
No. B	2,800 tons	397′	110.00 m.	60.7′	18.05 m.
No. C	1,000 tons	246′	75.00 m.	51.4′	15.68 m.

All supply cranes, fire fighting equipment, compressed air, water pumps, electric supply – 380 V. and 110 V. AC or 220 V. DC. Telephone, sanitary discharge for ship's bilges and sanitary services on the dock.

FUEL: Bunker stocks of diesel oil are available in bond at Buenos Aires, Bahia Blanca and Montevideo, thus these ports are the most convenient for taking Diesel bunkers. It is available at other ports, but has to be transported by lorry from Buenos Aires. Lorries are unable to go alongside at some of the elevator berths, and there are no oil barges at Rosario, San Nicolas, or Necochea.

At Buenos Aires there are barges of 150 to 550 tons with tanks to carry all classes of oil. If smaller quantities are required transportation can be effected by lorries from the tanks, the cost being cheaper than barging.

Oil can be transported by lorry to any berth in the port of Buenos Aires.

STEVEDORES: Working hours are officially 0700/1300; 1300/1900; 1900/0100 and 0100/0700. From 1900/0100 and 0100/0700 there is a 100% surcharge on Mondays to Fridays, or 200% on Saturdays, Sundays or holidays. On Saturdays the second shift (1300/1900) and on Sundays/holidays the two day shifts (0700/1300 and 1300/1900) are paid with 100% surcharge.

In Parana River ports, shifts start and finish one hour earlier, except at Santa Fe.

It is forbidden for a man to work more than one shift daily, unless no other labour is available at the halls, and the Port Captain agrees.

Use of mechanical appliances is encouraged, and when the Port has not sufficient available, the Stevedoring companies hire this to the vessel to speed up operations.

Stevedoring damage: It is essential that Master and/or Agent leaves on immediate record any damage done to vessel or cargo by the stevedores, in order to assist in recovering the cost of repairs.

Holidays and Non-Working days: National Holidays: January 1st (New Year's Day), Good Friday, May 1st (National Workers' Day), May 25th (National Independence Day), June 20th (Argentine Flag Day), July 9th (Independence Day), August 17th (Death of Gral. San Martin), December 25th (Christmas Day).

Non-Working Days: Maundy Thursday, December 8th (Catholic Holiday).

Drinking Water. A good supply of drinking water should be available on board, and in hot weather this must be iced.

GRAIN LOADING: On a North/South basis. See Table A overleaf.

WATCHMAN: The use of watchmen is obligatory in all ports, and they are the auxiliary delegates of the Maritime Authority. One man per gangway must be placed. Masters may also place a crew member on watch, but in ports where there is an official service the official watchmen must be used. His duties are to control access to the vessel, control the shipment or discharge of prohibited articles, to revise all packages brought on board or landed, see that the moorings are in order, that the gangway is duly illuminated and that rat guards are in place.

WHARF CLEANING: It is the Master's duty to see that the wharf is properly cleaned up before his vessel vacates a wharf. Port Authorities can do this, and charge the Agents of the vessel last berthed with the cost.

HATCHES: Opening and closing normally carried out by the stevedores in each port. All hatches must be kept closed when vessels are not operating, and when leaving port, must be well battened down and covered with two tarpaulins.

RAT GUARDS: All moorings must be provided with regulation pattern rat guards, 80 cm. diameter.

As part of the rat control gangways must be painted white and fully illuminated at night. Fines are imposed for non-compliance.

FENDERS: At all ports, vessel must be boomed off the quay at least 1 m. 50 cm. Any type of fender meeting this requirement will do, but at San Nicolas, special fenders are supplied.

NIGHT LIGHTS: All vessels when made fast must illuminate that side towards the water with at least one screened light. When vessels are double berthed, the one lying second off must comply with this rule. Similarly, vessels moored with either stern or bows to shore must show a light over the anchor chain to seaward. Vessels laid up or being dismantled are exempt from this, but owners are responsible for any resulting damages.

DESTINATION CHANGE: When at sea if there is any change in destination, within the Argentine, Masters must report this by radio to the Marine Prefecture, indicating the reasons for such change.

DESPATCHES: Once despatch is granted, this is valid for 12 hours only, after which period new despatches must be requested, and reasons given for not sailing. In ports where local conditions impose a longer limit, the maximum allowable is 30 hours.

SEAMEN'S INSTITUTES, HOME AND CHURCHES: There is one hostel for seamen, and five institutes operating in Buenos Aires and one in Rosario, as follows:

Stella Maris (Apostleship of the Sea)

Independencia 20 (corner Ing. Huergo). Telephone: 33–0832

Open every day. Vessels visited daily. Hotel – Rooms, Meals, Bar. Information – Port Office, Books, Money Exchange, Souvenirs. Amusements – Dancing, table tennis, billiards, television, excursions. Salon Dance – Wednesdays, Saturdays and Sundays.

Religion – Mass every Sunday at 1930 hrs., and in the morning on board ship by request. Confession at all times. Night prayer for all seamen.

Football games arranged. Books freely exchanged.

TABLE A

		Berths	Spouts	Workable simultaneously	Rate per hour each	Total
Santa Fe						
72,500 tons	Unit 1	2	8	3	300/400	1200
	unit 2 N.W.	1	6	2	200	400
	unit 2 S.W.	1	2	2	200	400
Diamante						
20,000 tons		1	4	2	500	1000
San Lorenzo/San Martin						
320,000 tons	unit 8	1	2	1	150/180	150
	unit 10	1	3	1	150/180	150
Rosario						
326,100 tons	unit 1	1		2	170	340
(80,000 in construction)	unit 2	1		2	200	400
	unit 3 × 4	1		2	250	500
	unit 4 × 8	1		2	under repair	
	unit 5 × 10	2		2	200	400
	unit 6 × 13	2		6	200	1200
Villa Constitucion		2		1 each	300	600
225,500 tons		2		1 each	300	600
San Nicolas						
53,000 tons		1	5	2	500	1000
(16,000 in construction)						
Ramallo						
12,080 tons		1		2	250	500
San Pedro						
7,560 tons		1	7	1	400	400
Concepcion del Uruguay						
3,200 tons		1		1	not ready	
(20,000 in construction)						
Buenos Aires						
219,400 tons	Basin D	5	29	5	500	2500
(20,000 in construction)	Dock 3	1	6	1	500	500
	South Dock	1	4	1	400	400
	South Dock	1	3	1	400	400
Mar del Plata						
25,000 tons		2	5	2	400	800
Quequen						
404,500 tons	unit 1 3/4	1	4	2	450	900
	5/6	1	4	2	450	900
	unit 2	1		1	400	400
	extension berth	1		1	230	230
Bahia Blanca						
617,480 tons						
	old elevator ext. 1/2	2	12	2/4	250	500
	3/4	2	8	2/4	400	800
	central elevat. 5/6	2	10	2/4	480	960
	7/8	2	10	2/4	480	960
	new elevator 9	1	12	2	1000	2000

The Missions to Seamen
Cochabamba 223. Telephone 33–0326

Open daily from 1900 hrs., with dances on Tuesdays, Thursdays and Saturdays from 2100 hrs. Shop, post office, billiards (three tables), snooker, table tennis, television, bar (beer, no spirits), etc.

There is a service of Holy Communion at 1900 hrs. every Sunday. Football games and excursions arranged. Vessels are visited.

Sjomandskirke
Ing. Huergo 1263. Telephone: 33–3861

Open daily from 0800 hrs. Library, billiards, table tennis, sightseeing visits arranged, as also football matches. Vessels visited every day.

Church services every first Sunday at 1030 hrs.

Axel Johnson Minne till Svenska Sjoman
Juan de Garay 80. Telephone: 33–7304

Open daily from 1800 hrs. Library, sightseeing arranged.

Details of religious services on board of Swedish Church in Azopardo 1428 (round the corner from the Johnson Foundation).

Dansky Kirke
Carlos Calvo 257. Telephone: 33–9154

Danish seamen are welcome at the Norwegian Centre, while at the Church the office is open every Tuesday from 2000 hrs. to 2200 hrs. for assistance, and the Young People meet on Tuesdays and Fridays from 2000 hrs. to 2200 hrs., all being welcome.

Church services are at 1000 hrs. every Sunday, and on third Sunday in every month at 1600 hrs.

Finnska Sjomens-Kyrken. Suommerimien Kirkko
San Juan 234. Telephone: 33–6797. Open daily 1800 hrs. to 2200 hrs.

Rosario: The Missions to Seamen at Sarmiento 209.

II *RIVER PLATE PORTS*

Acevedo
Acindar
Atucha
Borghi
Buenos Aires
Buitrago
Campana
Concepcion del Uruguay
Diamante
Ibicuy
Ing. Rocca
La Plata
Ramallo
Rocca
Rosario
San Lorenzo
San Martin
San Nicolas
San Pedro
Santa Fe
Villa Constitucion
Zarate

THE RIVER PLATE

The River Plate, or Rio de la Plata, is formed by the rivers Parana and Uruguay, and is one of the greatest river systems in the world, the Basin covering nearly four million square kms. It is some 150 miles long, and the mud and sand in the waters give a thick brownish colour. Tides are small, but the water level is subject to frequent and sudden fluctuations on account of the weather.

The official depth at zero of the long entrance channel from Recalada to the Port of Buenos Aires is presently (this varies slightly from time to time):

	Width of Channel m.	Depth ft.	Depth in.	Alternative Width m.	Alternative Depth ft.	Alternative Depth in.
Punta Indio	110	28	6	200	22	
and of the access channel from the Roads (km. 37 to km. 9.8)	50	29		80	27	
North Channel (km. 9.8 to Anteport)	50	25		80	18	6
South Channel (km. 8.2 to Boca)	30	23		50	21	6

From Recalada Lightship West the Bay is all fresh water.

Vessels drawing 31 ft. or even 32 ft. (fresh water marks) frequently navigate safely. The tidal rise and fall is from three to five feet, but the state of the river is influenced to a far greater extent by the force and direction of the wind. There is no guarantee that a vessel drawing 31 ft. may not be caught by low water caused by a North wind, which carries the water seawards. Just as a North wind will reduce the depth of water, so a Southerly or Southeasterly wind raises it considerably, often several feet.

Winds from S.W. to E.N.E. through N. make the level drop, North being the strongest in this sense.

E.N.E. to S.S.W. winds make the water rise, S.S.E. having the greatest influence.

Between S.W. and S.S.W. or N.E. and E.N.E. the influence of the winds is much less.

Vessels often touch bottom, or even bump slightly, but as the bed of the river is soft mud and silt, one never learns of these ships reporting damage. The Plate Pilots, of course, warn Masters of this not infrequent occurrence. The docks and basins in the port also have soft mud bottoms, except for the entrance between North Basin and Dock 4, and it is quite customary to see vessels lying safely aground when loading or discharging.

RECALADA LIGHTSHIP: Vessels enter the Plate system passing the Recalada Lightship, 16.8 miles South of Montevideo at Lat. 35° 10′ 06″ S. and Long. 56° 15′ W. At this point it is obligatory to take an Estuary Pilot, if proceeding West, and a minimum 48 hours notice must be given both to Agents in Buenos Aires and to Recalada Lightship.

The Recalada Lightship and pilot station is a small vessel, whose hull is painted in vertical black and white stripes, 2 m. wide, and with an orange/red housing.

Apart from the usual pilot lights (white above red) there is a lantern on the foremast, with a white flash every 8 seconds (1 second light, 7 seconds eclipse) placed at 19 m. above river level, range 12 miles.

The lightship also has a fog signal, period 30 seconds sounding for 3 seconds and silent for 27.

Radio call sign is LSR on 500 kHz type A1, transmitting in clear every hour from 05 to 08 and 35 to 38 minutes. Operator on watch 08/10, 12/14, 16/18 and 20/22, also listens on 462 kHz using 437 kHz as working frequency. For ship to ship 468 kHz or 156.3/156.4 MHz. 2182 kHz and 2065 kHz are used in A 3 H/J as well as 4125/4239.5 in A 1 or 3860.5 in A3, for P 3 156.8 or 156.7 MHz.

Punta Indio Channel

The term "Adjacent Zone" comprises the zones of the main channel of the River Plate which extends 500 m. to either side of the buoy at km. 57 and Buoys No. 30 at Punta Indio Channel, likewise 300 m. on each side, outwards, of the pairs of buoys marking the Punta Indio Channel between Buoys No. 30 and 1.

Vessels navigating in these zones have equal privileges to those navigating the Punta Indio Channel, which comprises the zone of the general channel of the River Plate between Buoy No. 30 and the Recalada Lightship following the route buoyed for ocean going vessels by the Ministry of Public Works.

Vessels drawing over 24 ft. entering or leaving the River Plate are obliged to traverse the Punta Indio Channel from Buoys 1 to 30, and the Adjacent Zones existing between Buoys 30 and km. 57.

Westbound traffic, after passing Buoy 30 will leave Buoy 31 on the port side, and continue along the North adjacent zone to km. 57.

Eastbound, when water level permits, after passing km. 57 will keep to the South adjacent zone as far as Buoy 32, then to the North leaving Buoy 31 to starboard and then heading for pair of Buoys 30. Should the water level not allow this at km. 57, vessels will follow the North adjacent zone to km. 66, then take the South zone to Buoy 32 and then as above, leaving Buoy 31 to starboard.

Vessels drawing 21 ft. and up to 24 ft. inclusive must follow the route of the general channel and the corresponding Adjacent Zones and may make use of the Punta Indio Channel or not, depending on the depths of the river.

Vessels drawing 19 ft. but under 21 ft. must use the general channel of the River Plate and the corresponding Adjacent Zones, but can only use the Punta Indio Channel between Buoys 19 and 23 when depth of the river makes this advisable.

Vessels drawing less than 19 ft., wishing to follow the route of the main channel, may do so through the corresponding Adjacent Zones but are forbidden to navigate along the Punta Indio Channel unless there are no other ships in that channel, which by reason of their draft, must navigate there. They must use the adjacent North zone when Westbound, or South zone if Eastbound.

Between pairs of Buoys 20 and 30 no crossing is permitted in the channel, neither is overtaking allowed. The Eastbound vessel should adjust speed to avoid such crossing with an entering (Westbound) vessel.

INTERSECTION: This pilot station, near km. 37 and 166 km. West from Recalada is on the South side of the principal channel, at Lat. 34° 41′ 04″ S. and Long. 57° 57′ 05″ W.

Call sign is now LSP on 500 kHz or other frequencies as for Recalada. Operator on duty from 8 to 10, 12 to 14, 16 to 18 and 20 to 2200 hours.

At this point the estuary Pilot concludes his stint, inwards, or takes over outwards, and port Pilots for Buenos Aires take over or finish. Similarly up river Pilots for vessels bound for Uruguay or Parana rivers take over or deliver vessels here.

If, owing to the bad weather or force majeure, the launch cannot transfer Pilots, by day the blue flag with the letter "P" normally flown at the fore will be struck, or by night the red and white Pilot lights will be extinguished, and a red light exhibited at the stern.

At Intersection vessels anchor while waiting for draft to proceed to the Parana or Uruguay rivers, as well as those awaiting berth in Buenos Aires.

The holding ground here is not good, being soft mud. All ships drawing more than 15 ft. must, before leaving Martin Garcia or Interseccion outward bound, ascertain the state of the channel from LSP (Radio Interseccion) who will give the departure time, draft, and speed of vessels navigating in the channel. Only after receiving this dual information can Masters and Pilots decide to proceed, and then must communicate time, draft and speed to Radio Interseccion. Vessels drawing less than 15 ft. can navigate freely between Martin Garcia and Interseccion. but must give way to vessels of deeper draft.

INTERSECTION TO MARTIN GARCIA: No vessel may cross the bar drawing more than 7.92 m. (26 ft.) (often less) and with a minimum speed of 10 knots. For those with less than 10 knots but not below 8 knots, vessels of 5,600 tons or over cannot exceed a draft of 6.70 m. (22 ft.) or those of lesser tonnage, 6.85 metres (22 ft. 6 in.).

If speed is below 8 knots but above 5 knots, the maximum draft admissible is 6.1 m. (20 ft.) but such vessels must request a clear channel. Ships of less than 5 knots, and tug convoys will request special permission from the Naval Prefecture.

From Intersection (km. 38) to Martin Garcia (km. 106) vessels will anchor near km. 37 until there is sufficient water, with 1 ft. under the keel and a rising tide or river. If it is calculated that the vessel will have 3 ft. clear through the whole passage, she may leave, but on a falling or stationary river, she must adjust speed to avoid the difficulties between km. 37 and km. 79.

From Martin Garcia to Intersection, vessels drawing 22 ft. 6 in. or more will leave when conditions assure 1 ft. 6 in. of water under the keel. It is essential to radio LSP as above to check on tides, etc. Such vessels coming down river must also communicate to LSP the passing of km. 101 and 38, while those going up river must advise passing km. 38, 72 and 101.

In the sector Intersection/Martin Garcia vessels may anchor in any suitable place until depth of water permits them to go upstream on a rising river.

No vessel drawing over 4.6 m. (15 ft.) may cross or overtake another between km. 47/52; 57/72; 83.5/95 and 100/106; Should a crossing appear necessary in any of the prohibited zones between km. 38 and 79, the ship which commenced to navigate with 6.8 m. (22 ft. 6 in.) and with 0.45 m. (1 ft. 5 in.) under keel will hold back or manoeuvre to avoid crossing, except when the vessels which sailed from Intersection did so on a falling tide. If the crossing were to occur between 83.5 and km. 96 or 100 to 106 the vessel proceeding upriver will manoeuvre or regulate speed. Nevertheless, if crossing appears inevitable, any vessel affected by such a manoeuvre has the right to lodge a protest on arriving in port or at Intersection.

Vessels drawing 6.7 m. (22 ft.) or more are recommended to cross between km. 72/74, 80/82 and 96/98. Those drawing less than 6.7 m. (22 ft.) may cross between km. 52/56 and 98/100 provided that they keep 0.9 m. (3 ft.) beneath their keel.

In any case of grounding which may obstruct navigation, totally or partially, owners must take immediate action to remove the obstruction, including immediate lightening of the ship without waiting for any summary report.

Distance Table

Montevideo and Buenos Aires to Parana and intermediate ports

Nautical miles

	Montevideo	Recalada Practicos	La Plata	Practicos Interseccion	Buenos Aires	Martin Garcia	Ibicuy	Campana	Zarate	San Pedro	Obligado	Ramallo	San Nicolas	Villa Constitucion	Rosario	San Lorenzo	Grondona	Gaboto	Diamante	Alvear	Santa Fe	Bajada Grande	Parana
Montevideo	—	16	118	108	128	145	205	243	238	239	249	261	276	285	310	326	343	348	374	385	400	406	410
Recalada Practicos	16	—	102	92	112	129	189	227	222	223	223	245	260	269	294	310	327	332	358	369	384	390	394
La Plata	118	102	—	10	30	47	107	145	140	141	151	163	178	187	212	228	245	250	276	287	302	308	312
Interseccion Practicos	108	92	10	—	20	37	97	135	130	131	141	153	168	177	202	218	235	240	266	277	292	298	302
Buenos Aires	128	112	30	20	—	57	117	155	150	151	161	173	188	197	222	238	255	260	286	297	312	318	322
Martin Garcia	145	129	47	37	57	—	60	98	93	94	104	116	131	140	165	181	198	203	229	240	255	261	265
Ibicuy	205	189	107	97	117	60	—	41	36	37	47	59	74	83	108	124	141	146	172	183	198	204	208
Campana	243	227	145	135	155	98	41	—	5	72	82	94	109	118	143	159	176	181	207	218	233	239	243
Zarate	238	222	140	130	150	93	36	5	—	67	77	89	104	113	138	154	171	176	202	213	228	234	238
San Pedro	239	223	141	131	151	94	37	72	67	—	10	22	37	46	71	87	104	109	135	146	161	167	171
Obligado	249	233	151	141	161	104	47	82	77	10	—	12	27	36	61	77	94	99	125	136	151	157	161
Ramallo	261	245	163	153	173	116	59	94	89	22	12	—	15	24	49	65	82	87	113	124	139	145	149
San Nicolas	276	260	178	168	188	131	74	109	104	37	27	15	—	9	34	50	67	72	98	109	124	130	134
Villa Constitucion	285	269	187	177	197	140	83	118	113	46	36	24	9	—	25	41	58	63	89	100	115	121	125
Rosario	310	294	212	202	222	165	108	143	138	71	61	49	34	25	—	16	33	38	64	75	90	96	100
San Lorenzo	326	310	228	218	238	181	124	159	154	87	77	65	50	41	16	—	17	22	48	59	74	80	84
Grondona	343	327	245	235	255	198	141	176	171	104	94	82	67	58	33	17	—	5	33	44	59	65	69
Gaboto	348	332	250	240	260	203	146	181	176	109	99	87	72	63	38	22	5	—	37	48	63	69	73
Diamante	374	358	276	266	286	229	172	207	202	135	125	113	98	89	64	48	33	37	—	11	26	39	36
Alvear	385	369	287	277	297	240	183	218	213	146	136	124	109	100	75	59	44	48	11	—	15	21	25
Santa Fe	400	384	302	292	312	255	198	233	228	161	151	139	124	115	90	74	59	63	26	15	—	6	10
Bajada Grande	406	390	308	298	318	261	204	239	234	167	157	145	130	121	96	80	65	69	32	21	6	—	4
Parana	410	394	312	302	322	265	208	243	238	171	161	149	134	125	100	84	69	73	36	25	10	4	—

MARTIN GARCIA BAR: The Island itself, in Lat. 34° 11′ S. and Long. 58° 17′ W. is an almost circular mass of granite, about 26 m. high and some three miles in circumference. Shores are muddy but also rocky.

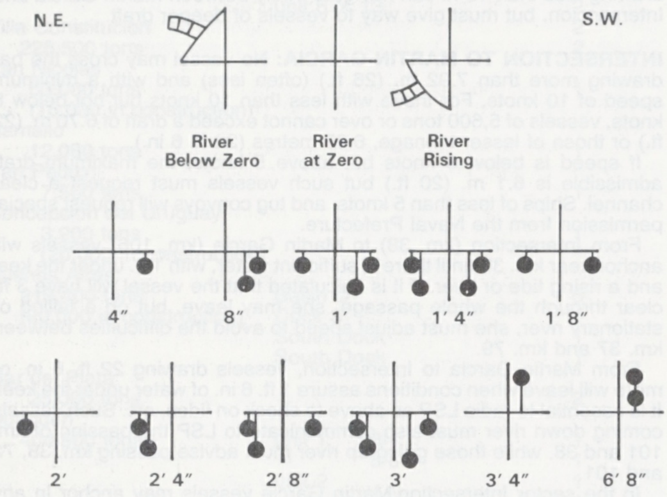
It commands the entrance to the Rivers Parana and Uruguay, and all vessels using these rivers must pass within half a mile of the shore on the South side, or within less than a mile by the Northern channel. There is an Argentine Naval detachment there.

Important: It is always said that Martin Garcia Bar rules the rivers; this is not strictly correct as, usually in the second half of the year, there may be less water in the stretches above Rosario, and at times even below San Nicolas to San Pedro, where new shallows keep forming which have constantly to be watched. Caution should be used, therefore, from July to January in this connection.

Lighthouse. At an elevation of 38 m. a light is shown from a circular stone tower standing 13 m. high in the centre of the island.

Tidal Signals. These are made from a signal mast placed alongside the lighthouse.

Day Signals



The figures given below the corresponding signals indicate the level of the river in feet and inches either above or below zero mark.

To obtain the effective depth in Martin Garcia Channels, 26 cm. (10 in.) should be deducted from the draft of water indicated on the semaphore

Night Signals

	(White flash)	Cycle: 30 seconds
	(Red flash)	Long flash: 2.5 sec. each.
	(Green flash)	Short flash: 6/10 sec. each.
White flashes		Rising tide: One long. Falling tide: Two short.
Red flashes		Above zero: For each m.: One long. For each 10 cm.: One short.
Green flashes		Below zero: For each m.: One long. For each 10 cm.: One short.
Green and red flashes		Zero: One green and one red, both short.

Depth of water here varies from hour to hour, with no pattern, and is not dependant on the depth of water in the Parana. The only relation between the River Parana and Martin Garcia and San Pedro Bars, seems to be that with a full and strong river, the water which is blown into the Plate Estuary by Southerly winds against the strong head of the river, makes deeper water than a similar Southerly wind opposed to a smaller stream from the river. Likewise, the water blown out to sea by Northerly winds causes lower depths when the river is running strongly than when it is low. The effect is almost that of a new or full moon on the lunar tides.

It must always be remembered, therefore, that the dominant factors from Martin Garcia seawards are the direction and force of the wind. A Southerly wind will bank up the water, while a Northerly wind will blow it out. There may be, say, 30 ft. in the Parana, with a strong North wind, and less than 20 ft. on Martin Garcia. With the wind in the S.E., the depth at Martin Garcia can rise in a few hours up to 30 ft.

A prudent course is never to attempt to cross Martin Garcia drawing more than 25 ft. even with the river at its highest.

Martin Garcia lies at km. 99.4 from Buenos Aires, via Intersection, i.e. at km. 62.4 from Intersection.

Vessels continue North to km. 140, at which point the Uruguay and Parana Rivers meet to form the River Plate. This is opposite Nueva Palmira in Uruguay, and at this point the River Uruguay buoy numbers start from km. 0, while the Parana numbering continues from 140 on through the Parana Bravo, which is the Northerly arm of the extensive Parana Delta.

WEATHER: *The yearly average direction of winds* of Force 7 or more, as observed at Recalada Lightship shows:

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
0.8	1.3	2.7	3.4	5.2	3.7	1.9	1.3

expressed in per cent of winds observed, the least frequent being the North. Division is relatively even over the year, with perhaps August showing a higher incidence of storms.

The average velocity of winds from the various directions, over the year, is 6.8 knots on the coast or 12.5 knots at Recalada Lightship, the highest figures being from S.E., S. and S.W. at 8.3, 9.3 and 9.2 knots respectively.

Percentagewise the direction of the winds through the year is remarkably even:

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	calm
12.7	15.8	14.4	14.2	11.3	9.7	6.8	9.2	5.8

Visibility in the Plate area is normally good; rain storms may temporarily affect it, but these are usually of short duration. Fog (visibility less than 1,000 m.) or mist (visibility 1/2,000 m.) occurs from April to October, with June showing the highest percentage of fogs (13%). North winds seem to favour the forming of fog, as these figures show.

Calm %fog	11	SE	12
N	24	S	6
NE	17	SW	0
E	5	W	3
		NW	13

Fog on the river forms by a cooling from below of warm air which drifts from E. or N.E., and is formed only when the temperature of the air is greater than that of the water. If the current augments its velocity, the fog lifts and visibility improves at sea level. Shore fogs usually affect only the coast and are of short duration.

Rain falls, on average, 92 days a year, with a total of 1,089 mm. yearly in Buenos Aires, spread evenly through the year with a high in January of 113 mm.

Humidity is high, on average 77% with 82% Winter, and 71% Summer months.

Electric storms are not frequent, and usually limited in extent.

Average yearly temperature is 16.6° C, in Summer 22.2°, Autumn 17.2°, Winter 11.2° and Spring 16°. Extremes correspond to January 43.3° (all-time high) and minus 5.6° in July.

ACTION OF THE WIND ON TIDES: In this large body of enclosed and shallow water winds up and down its axis raise or lower the water level very appreciably.

Cross winds in general have much less effect, and the inner and centre sections of the Plate show greater variations than the outer part. We show below a table as estimated by the Hydrographic Office, based on many years observations showing the variations, in cm., due to speed and direction of the winds. The values quoted must be applied to the astronomic tidal figures to arrive at a net level over datum.

Four new tide-gauges have been installed – two in Punta Indio Canal, at km. 99 and km. 180, and two up-river. Eventually four more will operate at Palermo, Banco Ortiz, Martin Garcia and Atalaya. Connected to the Hydrographic Office, the date will be incorporated into the regular tidal bulletins.

Table showing variations in river level according to force and direction of wind in the River Plate
expressed in centimetres.

	Kilometres/hour								
	10	20	30	40	50	60	70	80	sign
N.	18	30	39	48	60	72	84	96	minus
N.N.E.	9	21	30	36	45	57	69	81	minus
N.E.	3	6	9	24	39	57	69	81	minus
E.N.E.	3	6	9	12	18	33	42	51	plus
E.	6	12	24	36	48	60	72	84	plus
E.S.E.	9	24	39	57	69	81	93	105	plus
S.E.	21	39	57	72	87	102	114	126	plus
S.S.E.	30	45	66	81	96	114	132	150	plus
S.	18	36	57	66	78	99	108	120	plus
S.S.W.	12	24	39	48	57	69	78	87	plus
S.W.	9	12	18	24	33	52	51	60	minus
W.S.W.	6	12	18	30	39	51	60	69	minus
W.	9	15	27	36	45	54	63	72	minus
W.N.W.	12	21	30	36	45	54	66	78	minus
N.W.	12	21	33	39	48	60	69	78	minus
N.N.W.	15	24	36	45	54	63	75	87	minus

(Source: Naval Hydrographic Service)

The tidal forecasts transmitted regularly over LRA (870 kHz), in telephony, in Spanish are, therefore, a combination of astronomical tide figures and meteorological influences on this basis.

Wind direction also affects the hours of the tide. In general, time of high water is not affected, but low water can be delayed or advanced by the wind force.

MITRE CANAL: The new channel, 5 miles off shore and 28 miles long was opened in 1976. It is between km. 12 of the access channel to Buenos Aires and km. 56 of the Parana de las Palmas branch of the River Parana, opposite San Fernando.

It was dredged to depth of 32 ft. with a width of 130 m. but silting up and lack of dredging have reduced the depth to 29 ft..

At present, ships going up river are allowed to use the channel but to proceed only as far as Zarate, with a draft of not more than 27 ft. (a maximum draft of 28 ft. is permissible but 2 ft. safety margin must be kept below the keel) and, because of the sharp bends in the river, the length must not exceed 220 m.

All the ships navigating down river can use the channel en route to ports in the Plate or to the sea, and the draft is limited to 27 ft. and the length to 220 m., as above.

The Mitre Channel shortens the distance between Buenos Aires and the grain loading ports up river by 36 miles compared to the Martin Garcia route. Both routes are almost the same distance from Intersection. Campana is brought 95 miles closer to Buenos Aires, and Intersection about 90 miles.

The big advantage of the Mitre Channel is that ships can navigate with a draft of 27 ft. compared to an average 24 ft. via Martin Garcia, and without the risk of having to wait for more water at the bar, especially if drawing over 24 ft. This applies to ships loading grain at up-river ports and to those proceeding to and from Campana.

Vessels proceeding up river to ports beyond Zarate must still use the old Martin Garcia route. It is expected that such vessels drawing up to 27 ft., will soon be allowed to use the Mitre Channel, but some of the bends in the river above Zarate will probably have to be straightened out first.

Ships coming down river from km. 456, just above San Lorenzo, or further South, if intending to proceed via the Mitre Channel must not draw more than 27 ft. As a point of interest, the depth of the river from Rosario to San Pedro is, on average, more than enough for ships to load to the 27 ft. maximum fixed, at present, from km. 177 to Zarate. The Hydrographic office records the river level, and can estimate ahead prospects of the depth of the water, and Owners should consult Agents before committing a vessel.

The regulations state that vessels over 120 m. in length or 18 ft. in draft may navigate only in day-time. The maximum speed is 12 knots, unless expressly agreed with the Coastal Radio station.

In the stretch between Zarate and km. 177 (the junction with Parana Guazu) navigation down river is without restrictions but up river it is limited to pushed convoys not more than 225 m. long or 28 m. wide or 9 ft. draft, to ferry boats or to vessels not over 35 m. long or drawing not more than 11 ft. At night time, navigation is permitted to ships with a length or draft not more than 12 m. or 18 ft., respectively, to pushed convoys as above, and towed convoys not over 180 m. long or 28 m. wide

Vessels over 35 m. long which cannot communicate with another by VHF or with the Coastal stations must not cross or overtake in the bends and stretches given below, and in any case, no vessel over 60 m. in length may do so; between km. 175/177; 156/158; 148/149; 138/142; 134/137; 130/132; 124/128; 118/120; 105/108; 99/101; 89/91; 46/52.4. Any vessel navigating up stream in the Parana de las Palmas and meeting another coming down in the stretch 175/177 (i.e. the fork of the Parana de las Palmas – Parana Guazu), must regulate its speed until the other has cleared the sector. Similarly, if coming down river towards the Parana de las Palmas a vessel sighting another between km. 230/235 of the Parana Guazu must regulate her speed until the other has left the stretch. Also, any vessel in the River Parana or Parana Guazu about to enter the Parana de las Palmas and sighting another coming up that branch of the river, is obliged to regulate her speed until the other has cleared km. 177.

Ships over 35 m. long or 11 ft. draft must not anchor outside of the waiting zones which are between km. 62/75; 108/111; 120/123; 149.5/153, and those under 35 m. in length or 11 ft. draft must not anchor in the dredged channel between km 46.5 and 56 or in the bends and stretches between km. 177 and 46, indicated above, or off Campana between km. 95/99.

It is prohibited to extract sand or to practice nautical sports and water-skiing along the route.

Ship navigating between the Mitre Channel and the port of Buenos Aires may turn either at km. 12 (the junction of the Mitre Channel and the Access Channel) or at Intersection depending on the weather, cargo and manoeuvrability of the ship, and with the prior consent of the Traffic Control of Buenos Aires. At km. 12 at least one tug must be used for ships between 120 and 200 m. in length, and two tugs, if over 200 m.

Ships over 120 m. long when turning at Campana to come down river, must use one tug. Permission from the Zarate Coastal station is required for berthing and unberthing.

When passing under the Zarate-Brazo Largo bridges, ships must have an anchor at the ready and an emergency electric generator on stand-by.

Ferries crossing the rivers must coordinate their movements with other vessels navigating, through the Zarate coastal station.

In the stretches where crossing is not allowed in the Parana de las Palmas, vessels longer than 60 m., going down river, must blow 3 blasts on the whistle – one long, one short, one long – to indicate that their length is more than 60 m.

All ships must reduce speed, consistent with their steerage-way, in the following stretches: off the ports of Zarate and Campana; when passing under Zarate-Brazo Largo bridges; between km. 69/70 (local quay).

Pilotage regulations are that of Buenos Aires port. Pilots take vessels between Intersection and km. 12 of the Access Channel. However, revised regulations make an exception for Parana Pilots who are now authorised to operate on this stretch when vessels are proceeding to and from the Mitre Channel/Parana de las Palmas. This avoids the inconvenience and expense of having to send out the port Pilot by tug to km. 12 or to bring him back, and the alternative of having to embark and disembark him at Campana.

When ships are coming to Buenos Aires from up-river ports, the port Pilot is sent out on the tug needed to turn the vessel at km. 12, and vice versa.

PARANA RIVER: Maximum drafts permitted up to km. 585 (Santa Fe) are governed by the Martin Garcia Bar, and must also, logically, take into account river conditions.

The River Parana rises in Brazil, and is formed by a junction of a number of rivers, the principal tributary being the Paraguay River.

It is a great river at all times, conveying an immense volume of water to the Atlantic. The Northern bank is comparatively high and rocky, the Southern bank low.

The stretch above Rosario is entirely riverlike in behaviour with an annual flood, rising and falling yearly. From Rosario to Martin Garcia Bar, where the river joins the Uruguay River to form the River Plate, there is also an annual flood, but this part is also influenced by the Plate tides. This section can be divided into two, from San Pedro to Villa Constitucion where the tidal fluctuations are always felt, and from Villa Constitucion to Rosario where the tide makes its influence felt only in periods of low water in the river.

Maximum depth in the river is normally reached in March and the low in September, but it is irregular in behaviour. There is a possibility that the series of dams being built in Brazil for hydroelectric purposes may eventually regularize the river by permitting some control over the seasonal increases.

When the river commences to fall, care must be taken in calculating loaded draft a few days ahead, as the official figures may be reduced one or more feet without warning.

HIGH AND LOW WATER: Maximum and minimum figures registered between Rosario and San Pedro in the last ten years.

		Jan.	*Feb.*	*March*	*April*	*May*	*June*
High	Max.	32′	32′ 8″	33′ 7″	36′ 3″	37′ 9″	30′ 5″
	Min.	27′ 2″	29′ 2″	29′ 2″	28′ 7″	29′ 5″	25′ 3″
		July	*Aug.*	*Sep.*	*Oct.*	*Nov.*	*Dec.*
High.	Max.	32′ 7″	28′ 2″	29′ 9″	31′ 5″	30′ 7″	31′ 4″
	Min.	25′ 5″	23′ 6″	22′ 8″	25′ 8″	26′ 6″	26′ 3″
		Jan.	*Feb.*	*March*	*April*	*May*	*June*
Low	Max.	31′ 3″	31′ 4″	31′ 7″	33′ 7″	36′ 6″	29′ 9″
	Min.	24′ 2″	25′	27′ 2″	27′ 6″	26′ 3″	24′ 9″
		July	*Aug.*	*Sep.*	*Oct.*	*Nov.*	*Dec.*
Low	Max.	29′ 9″	27′ 2″	25′ 6″	25′ 8″	30′	29′ 6″
	Min.	23′ 9″	21′ 8″	21′ 7″	23′ 3″	24′ 3″	24′ 3″

MAXIMUM DRAFT UP RIVER: When vessels by reason of their loaded draft have to complete loading at Buenos Aires or La Plata, they should never load deeper than 2 ft. less than the offical draft on the River Parana.

In the sector San Lorenzo/River Plate, when the height of the river is 4 ft. or more, one ft. must be calculated below keel depth; when the river is under 4 ft., two ft. clearance must be calculated.

In the sector Parana (Santa Fe)/San Lorenzo, when the height of the river on the hydrometer at Santa Fe is 5 ft. 7 in. or more over zero, 2 ft. must be calculated under the keel with vessels of under 50 fiscal units, or 2 ft. 6 in. over that size. When the depth on the hydrometer is less than 5 ft. 7 in. (1.70 m.) then 2 ft. 6 in. and 3 ft. 6 in. respectively must be allowed.

These safety margins for the Parana/San Lorenzo/Santa Fe zone refer to river navigation; in access channels and ports a margin of 1 ft. is sufficient.

The references to river height refer respectively to Rosario and Santa Fe.

A falling or rising river will also be taken into account.

BRIDGES: A road and rail bridge has been built from Zarate (km. 107 on Parana de las Palmas) across the various islands and arms of the Parana to Brazo Largo (km. 180 on the Parana Guazu). The span on this arm of the river is over 200 m. and clearance at high water 45 m.

A bridge from Resistencia (Capital of the Chaco Province) connects with Corrientes (Capital of Corrientes Province). This does not affect ocean shipping, beyond that going to Asuncion, and the clearance of the main span is 40 m. above high river level.

Two bridges have also been built over the River Uruguay, one at Paysandu, which will not affect ocean shipping, and another at Puerto Unzue to Fray Bentos, in Uruguay. This latter has a 220 m. span with 36 m. clearance above river level.

SHIPMASTER'S REPORT: 1979.

General: This river and its approaches serve the major ports of Montevideo, Buenos Aires and Rosario and numerous smaller ports.

The hinterland and Pampas of this area is of major importance as a grain exporting market and frozen meat exporter.

For the most part the river is shallow giving a maximum draft depending on suitable tide of 33 ft.

Although Argentina is self sufficient in oil, from her wells in the South, with prices around 70p per gallon (20.7.79) cheap by world standards, she imports about 300,000 tonnes of LPG per annum mainly from the Gulf and Venezuela.

The majority of the LPG is shipped during the Southern Winter with approximately eight 30,000 tonne shipments annually.

Shipments from Venezuela are in smaller vessels of the 15 – 30,000 cu.m. size.

All LPG is for the Account of Gas Del Estado, the state Gas Corporation, who tender for contracts from the major Gas traders generally bi-monthly.

The storage capacity at Doc Sud Buenos Aires is about 20,000 tonnes.

Currency is the Pesos which is very much orientated towards the US dollar. The dollar is used for most commercial transactions.

Approaches to The River Plate:

Chui D/F (ALRS 5046) on Brasilian border is good.

A good longitude is obtained by 200 m. line. On chart BA. 3064 the bank in the region of Lat. 35° 08′ S., Long. 53° 34′ W. is pronounced.

Cape St. Maria comes in at 35 miles on radar.

Punta Jose Ignacio is distinct on radar at 22 miles, Light observed at 19 miles.

Isla Lobos observed at 26 miles on radar.

A strong N.E. current set is apparent from the 200 m. line to Isla Lobos, particularly so about 40 miles East of Lobos. Pta Del Este Light is difficult to pick out from the shore lights. This area is an important holiday resort area. A new light has been established: Fl. R. ev. sec. position Lat. 34° 51.8′ S., Long. 54° 44.0′ W. Vis. 25 miles.

Anchorages: On 2 occasions the vessel has anchored well East of Zone Alpha before proceeding to lighten. Once each in position Lat. 35° 10′ S., Long. 55° 32′ W. in 15 m. and Lat. 34° 57.5′ S., Long. 55° 37.5′ W. in 13 m.

It is wise to pay out plenty of cable as the wind can increase quickly.

There are 3 lightening or Topping Off anchorages – Alpha the most commonly used one being 10.5 miles South of Montevideo Pta Brava, Delta 39 miles to East and Bravo 36 miles to S.W. are little used.

Areas as marked on Argentina Charts H. 113 and H. 116 are not rigidly binding and it is as well to take advantage of the deeper water 3 miles to East of Zone Alpha.

There are 3 D/F stations in the area.

Carrasco (CAR) as Admiralty light and Radio signals (ALRS) 5036 good – Montevideo Airport. Continuous Aero 24 hours.

South Airport (CRO) 305.7 m. – Lat. 34° 50.5′ S., Long. 56° 01.5′ W. Aero Cont. 24 hours

Pta Gorda (BC) 340 m. – Lat. 34° 54′ S., Long. 56° 05′ W. Aero Cont. 24 hours.

Banco Ingles North Buoy moved position about 1.2 miles East to Lat. 35° 05.4′ S., Long. 55° 52′ W. light very weak.

The foul areas marked on Argentina Chart H. 113 and BA. 1749 (C) do not exist according to the Masters of local lightening ships and Pilots.

A – Lat. 35° 03.0′ S., Long. 55° 59.0′ W.
B – Lat. 35° 03.0′ S., Long. 56° 04.0′ W.
C – Lat. 35° 08.8′ S., Long. 56° 12.7′ W. BA 1749
D – Lat. 35° 09.0′ S., Long. 56° 15.9′ W.
E – Lat. 35° 11.0′ S., Long. 56° 14.0′ W.

The D/F on Isla Flores (ALRS 5038) is not operating and the light is very weak.

The 2 buoys to S.W. of Zone Alpha to Recalada are in position but no lights observed on passing them (20.7.79)

Communications: VHF: Montevideo Movement Control (ALRS 6-H1010) speaks little English. We tried to contact them on arrival but got no response. The Agents advise vessel to cable anchoring positions to its call sign 'CWC 104'.

Recalada pilot station works on Channel 12, English reasonable.

Interseccion pilot station works on Channel 12, English reasonable.

Lightening vessel "Permian Gas" – Channel 68.

Lightening vessel "Lavoisier" – Channel 8.

Bulk Topping off vessel on station Zone Alpha 'Arylanza' of Argentina flag with cranes works Channel 6.

Generally all Spanish communications – ALRS G 2655, 2670, 2680.

Montevideo R/T: Punta Carretas (CWF) 6020 transmits 2182 or 2768. Spanish and good English. Telephone only Montevideo area. Good.

Argentina: 'Pacheco' LPD, LPL, LPQ 5905 (no English).

Weather: Generally the weather in this region has been well documented. Reading publications one gets the impression at times that it can be severe all the time in mid winter. But this is not the case, although one should be on the guard all the time, we had very good weather during a stay of 16 days in July, generally light winds, clear skies, and little rain. Although quite quickly the opposite can happen.

Visibility can be excellent, up to 20 miles.

Forecasts for the area are predominately in Spanish.

The Fascimile that is published for Buenos Aires LRB, LRO 5910 was not received on any frequency.

Tides: Again very well documented. Generally out at Zone Alpha the tide is not strong and has little effect. Getting into Recalada and farther West to Interseccion the tide has a big effect and can alter very quickly with the wind.

The tides strength is very marked in the shipping channels from Recalada Westwards to Buenos Aires.

Density:		
	At Zone Alpha	: 1019
	At Recalada	: 1012
	At Km. 45	: 1005

Lightening: As previously mentioned there are three Zones for transhipping cargo and topping off. The most commonly used area is Zone Alpha the limits of which are not obligatory.

Before lightening can commence the ship has to be cleared by Customs/Immigration who come from Montevideo after travelling up from Buenos Aires. They either board by tug or by the first lightening tanker.

9 persons board with 4 persons leaving when formalities are complete leaving 5 persons onboard – 6 when Pilot boards at Recalada. They consist of Agency Representative, Immigration, Customs, Prefectura of Police, Gas Del Estado rep. etc. Those that stay being Agent, Police (1), Customs (1), Surveyor (1), Gas Del Estado (1). As long as vessels paper work and passes have been well prepared the formalities are quickly dealt with. Generally vessels proceed to Zone Alpha when the Officials/Lightening Tanker is due otherwise needless standby is required because of the close proximity of other lightening operations and draft.

We anchored with Pta Brava 320°×10.4 miles, depth at HW 12.5 m. Plenty of cable on port anchor is required, say up to 8 shackles to guard against any sudden gusts of wind. On occasions up to 10 shackles have been out.

Ships passing through this area are required by Argentina Law to proceed at slow speed, but rarely do with some narrow scrapes. Zone Alpha is joint Uruguay/Argentina territory.

Pratique: Cable to be sent (in Spanish) to Agent 12 hours before initial arrival. Granted when officials board.

Notice of Readiness: Send cable when vessel has anchored, N.O.R. received when Agent boards at Zone Alpha.

Mail: Agent will bring out mail at Zone Alpha and also give to Interseccion Pilot who boards after lightening at Km. 45 if requested in advance.

Money: If requested well in advance Agent will bring money out at Zone Alpha. This helps when berthing at Doc Sud as people can get ashore quickly without waiting for money.

Time: The Time Zone used at Alpha is Argentina time GMT − 3 hours. Uruguay time is on GMT − 2 hours.

Lightening Tankers: At present there are 2 vessels in this operation, however a 3rd vessel may soon be allocated. In the past numerous LPG ships of different owners have been used.

"LAVOISIER": A small semi-pressurized tanker of Argentina registry owned by Navigas.

Vessel has 3 Yokohama fenders floating and 2 small fenders hanging aft. Very good co-operation maintained – vessel was very efficient. The chief officer speaks little English but Master and one Second Mate spoke very good English. All very helpful.

Lines: 3+1 each end in moderate weather. No STBL lines.

Hose: 6 in. Braided wire (wear gloves) – 18 m. total length – 150 ASA couplings.

Tanks: 6 tanks max. temperature: −6°C 4 bar.

Capacity: Approximately 2,800 tonnes.

Rate: 300 t.p.h. Butane, 90 t.p.h. Propane which has to pass through heater for pressurization.

B.P.: Max. 8 bar.

Gangway: Use STBL gangway aft.

Radio: Use STBL UHF sets.

Vessel will take motors, etc., ashore if she is returning to Doc Sud for repair by Cromwell Engineering.

"PERMIAN GAS": Owned by Maritime Overseas. Liberian Flag – call sign A8UR. Chartered by Gas Del Estado.

Has 2 Yokohama fenders and tyres forward and aft. Not very satisfactory as operations have to be broken off in any type of wind.

Lines: 3+1 plus two from STBL F & A.

Hoses: 6 in. 300 ASA with 300/150 spool piece. Compoflex type with rope lagging. Total length approximately 18 m.

Tanks: 6 semi pressurized – 6 bars 2 grades handled – not together.

Capacity: 5,200 tonnes max.

Rate: 350 t.p.h.

Gangway: From STBL, a short BOT type.

Radio: Motorola UHF sets from 'Permian Gas'.

Navigas are purchasing another LPG vessel about the same size as 'Permian Gas' and should be on station in October 1979. Generally the transferred cargo is taken to the smaller outports up the River Plate and down the coast, the vessel can be away for up to four days.

With a mixed cargo of Butane/Propane of 30,000 tonnes two to three weeks is the normal length of stay in the River Plate.

Pilot: Pilot does not board at Zone Alpha.

Pilot boards at Recalada pilot station at the end of the buoyed channel Canal Indio. Pilot vessel is an old coastal troop transport and has been on station for 10 years. It is painted with red upperworks and black and yellow stripped hull.

Pilots board from small white launches which lie alongside the pilot vessels lee side.

Only 1 ship handled at one time, the launch returns to the pilot vessel. Long delays can occur if ships have got bunched up inwards and outwards.

Will use hoist, but have gangway and fixed pilot ladder arrangement ready. Make good lee otherwise Pilot will not board. Inwards pass to North of pilot vessel. Outwards to the South. Pilots generally speak good English.

Pilot vessel new position: Lat. 35° 10.8′ S., Long. 56° 06′ W.

Racon shows up well at 20 miles. No D/F. No boarding with wind speed above 30 m./sec. No anchoring within 1 mile of pilot vessel. Make arrangements for Pilot through Agent via Recalada or Pacheco Radio Station at least 48 hours in advance.

One Pilot to Interseccion Pilot Station, about 7 hours depending on tide. If stopping at Km. 45 for lightening, Pilot stays on board and changes at Interseccion.

In the vicinity of Recalada numerous vessels are anchored so its a case of having to proceed with caution.

Canal Indio: From Recalada to Interseccion, 95 miles.

This channel is marked by light buoys leads to the deeper water off Banco Chico near La Plata and is 50 miles in length to Canal Intermedio with a bend at Codillo.

Generally the depth is 28 ft. CD but patches of 27 ft. have been found between Recalada Pilot Station and No. 1 buoys.

We attempted to manoeuvre with a draft of 28 ft. 9 in. but constantly grounded near the wreck buoys East of No. 1 buoys.

The channel from Recalada to No. 1 buoys passes South of the wreck buoys, these wreck buoys should not be confused for channel buoys as has happened in the past.

Generally the max. draft is 31 ft. with a tide of 1.20 m.

Pilots always seem to think of drafts in terms of feet and tide heights given out in metres.

Vessels of up to 33 ft. have safely transitted.

Once inside the channel at No. 1 buoys the channel is very marked and steeply shelving.

The wreck at No. 17 buoys is to be lifted by a Japanese crane barge early in 1980. There is no passing at this point.

No dredging has been undertaken for five years in Canal Indio but it is hoped to resume in 1980 after Canal Nord and Sur have been dealt with.

On the day we left (20.7.79) three Spanish built suction dredgers arrived ("Buenos Aires", "Terra Del Fuego" and "La Plata") with three more to follow. It is reported that a total of 20 dredgers have been contracted for, partly Government owned as are the Spanish built dredgers and partly German contract work.

It is hoped dredging will start in Canal Nord and Sur late 1979 moving to Canal Indio in 1980 and Canal Mitre 1981.

The buoys are often missing or the lights out.

24 hours transit of all vessels is undertaken. Vessels of less than 22 ft. navigate outside the channel when deep draft ships approach in channel.

Vessels of less than 18 ft. navigate outside channel at all times.

No overtaking from Codillo Bend to Recalada.

Tides can be strong.

Km. 99-Racon not working (as BA.1749)

Tides given on VHF every hour plus 5 minutes in cms.

As long as no hinderances with ships ahead or draft a speed between manoeuvring full and full sea speed is requested.

La Plata Km. 45 Lightening: Further lightening is undertaken off La Plata in the deep water position: Lat. 34° 44.5′ S., Long. 57° 49.5′ W.

Pilots report that the foul area just South does not exist.

Interseccion: Pilots changed here after lightening at Km. 45.

Canal Accesio Buenos Aires: This channel is 15 miles in length and leads from Interseccion pilot vessel to the junction of Mitre Canal, Canal Nord and Canal Sur.

It has a depth of 31 ft. CD min. and is probably the deepest of all the channels in the area.

It presents no problems after final lightening.

The Beacon at Km. 14 on the North side of the channel has been destroyed.

At Km. 14 a forward tug can be engaged at extra charge. This is well worth the additional expense to get the vessel around the bend into Canal Sur and over the shallows.

Canal Sur: This relatively short length of channel leading to the Doc Sud area is 4 miles in length. It presents the worst problems with regard to draft in all the channels but the bottom is of soft mud and no grounding damage has been reported.

Ships invariably always bottom and the channel is kept open by the dredging action of vessels.

The worst area is the Eastern end between Km. 8.2 and Km. 7 with a poor area continuing to Km. 5.

The after tug is taken at Km. 8.2.

The least depth is 22 ft. CD which means vessels up to 24 ft. 6 in. can normally transit and up to 26 ft. with very high tides.

We had 60 cm. tide with a draft of 24 ft. and had to use full power with the vessel listing 5° to starboard when we got to the edge of the channel – Southern edge. The tugs were invaluable at this point.

Pilots report Southern edge of channel worst area. (One large LPG ship recently aground for 2 days at draft of 25 ft. 6 in. – 60 cm. tide and falling. Vessel aground between Km. 8.2 to 7.6.)

As soon as Canal Accesio is left at Km. 10.1 steep shelving occurs which is very marked on Echo Sounder and vessel is bottoming.

No night movements of LPG carriers.

At Km. 1 another shallow area of 21 ft. 6 in. CD is reported but we experienced no difficulty in this region.

Tugs: As previously stated forward tug can be taken at Km. 14 and after at Km. 8.2. When outward bound forward tug leaves at Km. 11 (extra charge) and after tug at Km. 5.

Tugs power varies from 2,000 h.p. to 3,500 h.p.

2 good lines are given to each tug through centre leads fore and aft, they will need them with large LPG carriers when turning in the narrow confines of Doc Sud.

Ante Puerto Sud: Vessel is swung in this area so as to enter Doc Sud stern first.

Clearance is very tight.

Pilot requires both anchors ready and engines prepared for maximum astern power.

Tide depth gauge on North inner entrance.

In Darsena 2 there are 2 floating dry docks capable of handling ships up to 15,000 d.w.t.

In Darsena 1 a Navy Synchrolift of 10,000 d.w.t. capacity has recently been constructed (vertical hoist type, not ramp type).

The new dock outside at Km. 1 in position: Lat. 34° 38′ S., Long. 58° 20′ W., has been completed but not dredged. This is to be undertaken 1980/81 and is intended for large LPG carriers for Gas Del Estado. The breakwater is completed and extends to Lat. 34° 37.9′ S. – 550 m. in N.E. direction.

Doc Sud: Least depth 33 ft. CD. In section 2 on the East side is the oil complex with Gas Del Estado berth North end section 2, South side of bend, East wall second berth. On West side are grain and frozen meat berths. Ships always berth head out. Starboard side to East wall, port side to West wall.

Narrow entrance which large vessels frequently hit, particularly the knuckle on East side which should be guarded against with fenders. From Interseccion to completion of tie up about 4.5 hours. In all of Doc Sud no engine movements are permitted. This is a new regulation.

If using midship gangway this has to be turned forward before arrival so as to land on small pipe jetty. If gangway is aft vessel has to use fixed section or hire boat on the offshore side.

Mooring: 2 headlines, 2 breastlines and 2 springs each end, the leads are not very good. Springs onto dolphins. Dolphins have poor fenders so advise use ships fenders.

Manifold: 12 in. – 150 ASA liquid, 8 in. – 150 ASA Vapour return, VRL has to be left open.

Tanks: Max. tank pressure on arrival to be 50 mbs.

Pumping: 500 to 700 t.p.h.

Berthing: Daylight hours only.

Labour: Shore labour for connection.

Surveyor: Surveyor from independent firm joins at Zone Alpha and makes survey together with Chief Officer before and after each transhipment and at Doc Sud. Generally paper work after each transfer takes about 1 hour. Ensure that signed statement of complete cargo discharged obtained.

Samples: An attempt is made to take samples at Zone Alpha.

Fresh Water: By Barge.

Stores: Arrange by Barge, very difficult otherwise.

Repairs: Cromwell Engineering: – 'Cromeng' generally good. By boat. As previously stated vessel can land motors etc. by lightening tanker if returning to Doc Sud for Cromwell to pick up.

Taxis: Difficult to obtain. Best obtained via Gas Del Estado office. Doc Sud is outside Buenos Aires municipal boundary so off meter. Meter starts at Boca bridge. Generally about £6 into town in daytime and £10 back at night. No difficulty in getting taxi back at night, try and agree fare. Do not go ashore alone.

Do not take much money with you. Have shore pass. About 20 minutes to town if no delays.

Customs/Immigration: Board at Zone Alpha and again at Doc Sud and on Departure.

Formalities:

2 Store lists per department (Deck and Engine combined) (Argentine Official Papers).

1 copy taken off at Zone Alpha, 1 copy for customs at Doc Sud.

2 Copies International Maritime Declaration Health (Standard Form)

1 copy Zone Alpha, 1 copy Doc Sud.

2 Crew Personnel Declarations – (Argentina Forms)

Both Zone Alpha.

30 Crew lists (Ships form)

One is stamped by Immigration at Zone Alpha for Doc Sud. No officials onboard at Doc Sud.

Crew Passes – Fichas – Argentine Official Forms.

One for each crew member must contain photo. We used ships Polaroid camera. (Two heads to a shot.)

Stamped at Zone Alpha and *must* be handed back before departure Doc Sud for stamping and then given to Master.

2 Vaccination Lists (Ships form)

Each time the vessel shifts/heaves up anchor the Agent onboard has to make out a departure declaration for Master to sign and give to Police onboard.

As long as vessel has Argentina papers and photocopier onboard no difficulties should exist.

Bond: Not sealed, quite in order and usual as long as ships staff only consume liquor.

Publications: These notes are in addition to information contained in: BA Charts 1749, 1751, 3561, 3064. Argentine Charts H 113, 116, 118, – 1979

Publications: NP 5 supp-2/78, NP 275 2 & 6 79/78, "Guide to Port Entry" 1977-78 edition. C.N.T. Year Book 78/79.

SHIPMASTER'S REPORT: July/October 1983.

Navigation on the River Plate and River Parana: INWARD: The Uruguay Traffic Control System and Radar Monitoring now extend from the border with Brazil to the Recalada Pilot. Vessels are required to report course, speed, and ETA on passing each designated control point.

Recalada Pontoon was not heard on M/F radio and all messages were passed through General Pacheco. Recalada was slow to answer on VHF, and probably the watchkeeper has to call a Pilot to speak English (The ability to speak Spanish is a very marked asset trading to Argentina).

It is preferable to keep North of "Zone Alpha" and then to head for the small passenger ship that is the Recalada pilot vessel, Racon only about 8 miles.

The dredged channel is quite narrow with strict limitations about overtaking in certain areas. Averagely ballasted ships can pass outside the line of buoys. Subject to the Pilots advice it may be possible to use heavy oil for the 90 miles (7 hours) to La Plata Anchorage.

The Intersection Pontoon has been withdrawn and the operation is now based ashore in La Plata.

The 2 River Pilots are ordered for a suitable tide time to approach the Martin Garcia Channel. Each Pilot requires a cabin with bathroom en-suite, the Masters sea cabin may be refused. One Pilot had a very few words of English, the other none. Their use of English numbers was uncertain, so the Officer of the Watch must be very vigilant. The Pilots listen to 2 VHF Channels and their own radio, which makes the bridge very noisy.

The vessel proceeds always at Best Full Speed but it was difficult to get any programme from the Pilots because of the language problem.

The vessel anchored at 10 minutes notice at Km. 80 for oncoming ships in narrow channel. Then had to heave up as quickly as possible to get over the bar before tide fell.

Speed was reduced turning into the Rio Parana Guazu at Km. 121. The vessel had to stop and drift for sometime waiting for oncoming ships to clear the bridge at Km. 180. This bridge can only be passed in daylight and had a clearance of 45 m. in the prevailing floods which were estimated to be 4 m. over normal tide. If unable to pass before sunset, it is necessary to anchor and wait till the next day.

The vessel anchored for the night at Km. 243 to avoid a dangerous bend in the dark at about Km. 273. However, had to anchor again at 5 minutes' notice for fog at Km. 270. This later cleared and vessel proceeded to anchorage off San Nicolas.

Two anchors were employed, but the order to let go was given much earlier than the indicated place which caused some surprise (due to language difficulties).

The inspection party of Agent, Customs, Coastguard, Port Health, Grain Surveyor and Photographer boarded shortly after the River Pilots left. The forms had been put onboard on leaving La Plata Anchorage and were only completed in time by exceptional effort. The entry formalities were complete in about 1 hour, while the Grain Surveyor took about 1.5 hours.

A Harbour Pilot put the ship alongside, and took her off on sailing. An anchor was dropped for use on sailing.

The river is quite narrow and sparsely marked. The Pilots navigated by the tops of the trees sticking out of the flood water. Some salient points were marked by a single lighted beacon. Buoys marked critical sections. However, these could be capsized by the accumulated weight of vegetation floating down the river. Progress was erratic and diesel was used throughout the River Pilots guidance.

OUTWARD: The normal route down river is the El Mitre Canal with a draft of 27 ft., however, this had silted up to 21 ft. The vessel loaded to 23 ft. (fresh water) to pass via the Martin Garcia. There is a similar bridge and restrictions on this route.

The vessel anchored at Km. 210 to wait for daylight for the bridge. Then used the River Parana Bravo to pass into the main river. This was very narrow and twisting in places, the Pilot was observed to be using reverse helm on the canal effect from the banks.

The vessel next anchored at Km. 117 to await a suitable height of tide before passing over the Martin Garcia Bars. However, the hourly VHF broadcasts showed that the tide did rise as predicted, and the vessel had to wait for the next tide.

The Regulations are that a minimum clearance of 1 ft. is required with a rising tide. The dredged channel is 100 ft. wide with minimum depths of 20 ft. – 21 ft.

The vessel sailed on the next tide and past the tide gauge at Martin Garcia when it was 1.3 m.

The Pilot watched the forward echo sounder reading and reduced speed whenever it came down to 1.0 m. However near Km. 70 the vessel first took a sheer to port, which hurriedly corrected by starboard helm. Then she took a list to port and the engine was increased to full speed to push through the shallow. Near Km. 69 the vessel again felt the ground and seawead, again the engine was put to full speed to push through.

At Km. 49 the vessel took a list but continued her progress. The crew working on deck at these times reported hearing rubbing noises.

The vessel anchored at La Plata Anchorage and the River Pilots left. The Recalada Pilot boarded almost 4 hours later as the tide was rising and the vessel sailed for Sea Channel.

At 22 ft. 6 in. salt water the vessel was not as unrestricted as when coming in. It was necessary to slow down in order to allow a deep laden vessel to clear the channel before we entered it. I understand that the normal maximum at the top of the tide is 31 ft.

Again subject to the Pilots advice it may be possible to use heavy oil for this passage.

The Pilot spoke good English and readily gave advice on the river and approaches.

We were bound for Bahia Blanca to complete loading. The Pilot advised that the banks had extended Eastward from the land, and Westward from the sea shoals, so that local knowledge was necessary for the most direct route. Tankers from the South lighten at Zone Brava and then come up to No. 1 Buoys on a North-Easterly heading (at 31 ft.) to avoid the encroaching shoals.

It was apparent that the buoys had been moved to new positions to allow for the movement of the shoals.

BAHIA BLANCA ANCHORAGE: The vessel had been warned that there was a delay of 30 days at Bahia Blanca. The Buenos Aires newspaper listed 37 ships at that port. On arrival it was found that there were 15 ships in the Buoy No. 17 Anchorage, 11 ships in the Buoy No. 11 Anchorage and 10 ships between Buoy Nos. 1 and 4. The local Port Control Radio Station speaks no English, however a Spanish speaking Officer keeping anchor watch kindly translated for us and advised that we could anchor off Buoy No. 4. The arrival telegram was sent from that position.

Contacting other company ships already anchored, it appeared that the actual time to wait was nearly 60 days. The ability to speak Spanish is an untold blessing on the Argentine coast. The Sea Pilots appear to be fluent in English, but the River Pilots and Radio Watch Keepers have no English nor French. The ability to consult ships in the nearer anchorages was most helpful.

The chart shows 3 radio beacons off the port, which are supposed to be in continuous synchronised operation. However we could only find one operating from 4 to 10 minutes past the hour and the half hour in clear weather. El Rincon and Recalada Bahia Blanca seemed to alternate day about.

A water boat of 350 tons capacity will come as far as Buoy No. 11 at a flat charge of US$3,500.

BAHIA BLANCA: 28th July, 1983.

The vessel part loaded at San Nicolas where she was advised of 30 days waiting at Bahia Blanca, the completion port.

The vessel was assisted by a Spanish speaking Officer keeping anchor watch to contact the Port Radio Station and permission was given to anchor near Buoy No. 4 due to the congestion. Arrival was reported by cable to the Agents from that position. The initial berthing prospect was quoted as being 8th September, then as time past this was amended to 22nd September and 4th October. The ship did actually berth on the 5th October.

Informatively Lloyds List was found to have shown 57 days delay with 38 ships waiting soon after the ship's arrival. It would seem that the formula should be 2.0 – 2.5 days per ship waiting.

The delays were extended by 'go-slow' strikes, and at least two instances of contaminated cargo ex-silo.

Communications to and from Agents normally only by telegram. The Port Radio Station call sign "L4Z" – "Lima Quatro Zulu", another Control Station is "L2N" – "Lima Dos Novembre", VHF Channel 12 is watched with Channel 14 for working.

The pilot boats are modern fast launches using the call sign "Sierra Papa" 21, 30 etc. If there is a Pilot on board for your ship he may call up in English. The boats work to order and do not stay on station.

For a ship of 25,000 g.r.t. the shift from the Pilot Anchorage (Buoy No. 11) to the Commercial Ships Anchorage (Buoy No. 17) was quoted as US$1,700 in July 1983. However, unless bunkers are needed there is only limited benefit from moving into this anchorage.

The Monacci Agency uses a ferry operator who has large very old white cabin cruisers, the costs were quoted in August 1983 as US$500 per ship visited. In September the cost was quoted as US$700 per ship visited. They operate from Port Rosales which dries out at LW. The Agency appeared to use the boats once a week only.

A water boat also operates from Port Rosales, with a nominal capacity of 350 tons. The cost per trip in July 1983 was quoted at US$3,500 plus the amount of water supplied. In September this was quoted at US$5,200 plus. It normally pumps in with 2 hoses in 3.5 hours. However in this vessel the available ullage was not even and the water boat stopped pumping and disconnected as soon as the first tank was full. Thus it delivered only 250 tons for the same fee! Thus it would seem necessary to ensure that there is at least 175 tons of ullage available for each of the 2 hoses. As the berth dries out where the boat secures, it may be that they will not delay by pumping only 1 hose so that they can get back alongside in the one tide.

The Monacci Agency uses one Shipchandler only, who has to deliver via the same launch described above. There is another Chandler who uses a different boat but the details are not known. All provisions sent to ships have to be cleared by the Customs with quite substantial service fees, quoted as US$100 – $150 per delivery. The Customs also restrict the amount of rice that can be supplied. Of the fresh vegetables and fruit delivered the quality was not good, and condemnations had to be made when they were unpacked. The provisions came only with delivery notes, and the bills for August, September and October were prepared on board after the completion of loading! Those ships who have been to Bahia Blanca before take as much provisions as they can in the river ports, where quality and value are better, and delivery easier.

The Monacci Agency have VHF Channel 9 in their Port Rosales Office for use with their own fleet, and the Bahia Blanca Boarding Agency carries a walkie-talkie, with 60 VHF Channels, but normally on Channel 22A (the U.S. Coastguard Channel). They do not make this information known to the ships under their Agency.

In general they seem very reluctant to talk to ships, probably only a few of their staff speak English. Messages sent only to Monacci were never acknowledged and often not acted upon. Messages sent to Sudocean in Buenos Aires always acknowledged and acted upon. The use of telex numbers is preferred at least for routine messages.

Medical: Three men went to the doctor from the Inner Anchorage and stayed ashore for 6 days until the next weekly ferry trip. The hotel bills being apparently cheaper than the hire of the launch. When the vessel finally berthed after almost 70 days at anchor 12 men were medically treated and prescribed for on board plus additional tests, etc., for 4 ashore. The total fees came to about US$1,000.

Grain Berths: There are 3 berths in use at Engeniro White No. 9 with a sailing draft of 38 ft. 6 in. (port side to, stern in), take bunkers by road tanker. Currently about 800 t.p.h. for 16 hours including overtime from one belt. The plant has been damaged (possibly by a dust explosion), and one belt is out of use at this time. Berth Nos. 5 and 6 are rated at 36 ft. 6 in. sailing draft, port or starboard side to, according to tide when off the berth, bunkers by barge. (Berth Nos. 7 and 8 are shallower, but was in use). This berth loaded 21,750 tonnes in 48 hours into the vessel. However, the subsequent vessel required 5 days for the similar amount due to shortage of cargo in the silos. No. 9 silo seems to be fed by road vehicles, while 5/6, 7/8 are fed by rail.

At both berths the vessels take the ground and dry out up to 10 ft. – 12 ft. at LW. The bottom is said to be soft mud, and every ship loading to the authorised drafts goes aground. The vessel has to wait for the rising tide in order to finish and be certain of the drafts.

On sailing the drafts are read by the Prefectura Naval (Coastguard) and both the Harbour and River Pilots. Thus it is necessary to be very precise when finishing. No surveyor examined the vessel after the initial hold cleanliness inspection by the National Grain Board.

On sailing (head out), with 2 tugs, the ship would not swing to port into the line of the flood tide and the ship came very close to the opposite bank before the port anchor was dropped. The beacons which are charted as being in deeper water are in fact well up on the mud bank and the channels appear much narrower. Two tugs were used inward and outward with twin ships ropes from offshore fairlead forward and centre aft. Swinging in the pilot hoist when berthing was a race against time. There are some floating fenders alongside Berth Nos. 5 and 6 but the upper works of the elevator system are very close to the edge. Bridge wings apparently often touch.

The passage outward depends on the conditions of the day. A ship at 37 ft. 2 in. sailed directly out to sea because of fresh onshore winds. Another of 38 ft. 4 in. took 4 days to reach the sea. She had to anchor at Buoy No. 18 from one daylight tide to the next, then the port was closed for naval movements, then anchor again at Buoy No. 11, before finally clearing the port. The tide predictions can be increased or decreased by as much as 5 ft. due to the weather prevailing.

Anchorages: One ship in the Commercial Ships Anchorage found that she had 4 lengths of her own chain fouled around the anchor when she hove up. She had to hire a barge to lay the chain on so that it could be cleared. The quotation was said to be US$5,000 but the bill presented was for US$18,000. The vessel was arrested when the bill was challenged. It would seem a wise policy to change anchors from time to time. Also when anchored off Buoy No. 18 to wait for the next HW over the bar, another ship's anchor and chain was picked up. It was necessary to put a wire onto the other cable and lower the ship's anchor out from under to clear it. The delay was about 45 minutes but the ship was still able to make the tide.

There is a dredged channel between Buoy Nos. 7 and 8 but in fact the shallow area extends from Buoy No. 9 to Buoy Nos. 3 and 4 and speed needs to be restricted to reduce the squat.

At this time British subjects were not allowed ashore.

Outline of Official Argentine Forms:

Personal effects of the crew.

In vertical columns the following items:

Radio sets
Typewriters
Sextant
Gramaphones
Gramaphone discs
Binoculars
Photographic cameras
Spirits
Tobacco
Plug Tobacco
Cigarettes
Packets of cigarette papers
Boxes of matches
Number of caged birds
Soap

Sundry other effects such as musical instruments new or used, new clothes, etc.

All electronic items, such as radios, cassettes, calculators, televisions, declared by type, makers name, model name, serial number on separate sheets which then attached to the original declaration. The original columns for such equipment must be marked "nil" so that no duplicate declaration is made. The ship's electronic items, as above, plus VHF, radars, walkie-talkie sets, the main radio equipment, etc. must all be declared on separate sheets in the above detail.

The authorities require two copies of every declaration, one of which is kept at the Port of Entry and the other travels on the ship with the clearance for landing at each subsequent port. i.e. "travelling manifest".

The ship should have its own copy for reference, as neither of the above may be on board while in port.

The Health Declaration is in the standard form and can be filled in quickly, but the Customs forms and the identity cards take a lot of time and it is better to have a rough copy ready for copying out on arrival. The official forms are not available outside Argentina, and are too big for photocopying. Photographs are required for the identity card, but if advised a photographer will board with polaroid 'mini Portrait' outfit and charge accordingly.

Crew lists should be in the IMO format with full details of date and place of birth, plus the type of identity document (passport or seaman's book).

6 copies arrival, and 6 copies each departure! Company crew lists said to be acceptable provided ALL the information required has been inserted.

The identity cards can be photocopied and this would allow them to be prepared at sea before arrival.

The inspection party was 6 strong with Coastguard, Agent, Customs, Grain Surveyor, etc. Formalities including holds took about 1.5 hours with all documents prepared since sailing from La Plata. This was a rush to be avoided. (The vessel was cleared at the loading port up-river.)

British subjects not allowed ashore, all British passports and S.N.I.C.'s taken ashore and not returned until the vessel was cleared outward and Pilots on board.

Store List Deck Engine Refrigerating

Aluminium Paint
Paint driers
Paints assorted in pastes
Paints assorted in liquid
Enamels assorted
Varnishes assorted
Red lead
White lead
Paint Powder
Coils Manilla rope (new)
Steel cable (new)
Hemp rope (new)
Tarpaulins (new)
Tarpaulins (used)
Burlap (new)
Separation clothes
Oil engine
Oil cylinder
Oil solidified
Packing assorted
Methylated spirit
Binoculars
Nanometers
Typewriters (new or used)
Micrometers
Monographs
Ammunition, firearms, explosives, etc.
such as:
Deck flares
Rockets
Rockets sticks
Rockets signals
Friction tubes
Blue lights
Lifebuoy lights
Company's signals
Cartridges
Carbines
Guns
Revolvers
Rifles
Rocket Projectors
Gunpowder
Other portable firearms and explosives
(Red Hand flares)
Orange Smoke floats
Deck and Engine Stores considered to be in
excess of normal requirements
(Fuel Oil)
(Diesel Oil)

Signed Chief Officer/Chief Engineer/Master.

Cabin Stores:
Bitters
Brandy
Champagne
Gin
Fruit Juices
Liquors Assorted
Rum
Cider
Table Wines
Strong Wines (Sherry, Port)
Sparkling Wines
Vermouth
Whisky
Other beverages (Vodka,
Chinese Wine, Beer)
Tobacco (cut)(Chinese)
Tobacco plug
Cigars
Cigarettes
Alcohol (spirits of wine)
Jams (assorted Marmalade,)
Jellies
Caviar
Pickles
Pickles for crew
(Cooking wine)
Tobacco (50 mg./can)
Playing Cards (new)
Typewriters (new and used)
Calculating machines
(new and used)
Cameras
Wireless sets Portable
Micrometers
Monographs
Binoculars
Perfumes
Thermometers clinic
Alkaloids such as:
Morphine
Cocaine
(Phenobarbital)
(Butobartbitine)
Preserved fruits (in syrup)
Electric vacuum cleaners
Electric irons
Electric toasters
Electric kettles
Electric Rice cooker
Articles said to be in excess of
normal requirements:
Fruition declared as follows:
White sugar
Cooking oil
Tea
Coffee
Evaporated Milk
Rice
Flour
Cheese
Butter
Fresh eggs
Frozen Meats

Everything must be in units of the metric scale. Items in full time use normally not necessary to declare but extra items in quantities more than for normal use must be declared.

All electronic items were declared on a separate sheet giving type, makers name. Model type, serial number. No item can be declared twice.

Instructions for the compiling of Argentine official port arrival forms:

1. Immigration Department – Crew identity card: This form is required by all crew members without exception in order to enter and depart from Argentine Ports. As well it is the only document valid for authorities. Therefore, special care must be taken by the bearer in order not to damage or loose said document as, eventually inconvenience will arise. Furthermore, details in order to complete this form are printed in both Spanish and English. Particulars required of person, family names, status, when/how engaged. Fingerprints. One original card is required for each crew member.

Important: Each form must carry the photograph of the bearer. In this respect, Masters are kindly to inform Agent with anticipation if photographer will be required on arrival.

2. Customs Department – Deck & Engine Stores, Cabin Stores, personal effects of crew: Each form is required in original and one copy, the latter will travel with the ship from port to port. The ship will require one for her own records.

Store List (Green form): Instructions and details for filling this form are printed on it in Spanish and English.

Important: Even though items Fuel Oil and Diesel Oil are not listed on the form it must be declared in the blank spaces.

Cabin Store List (Yellow form): Instructions and details for filling this form are on it in Spanish and English.

Important: Even though the item coffee is not included in this form it must be declared in the blank spaces.

Personal Effects of Crew (Pink form): Instructions and details for filling this form are printed on it in Spanish and English.

N.B. Very important. Recently as per terms of local Customs Regulation Number 325/80, every vessel calling Argentine ports is compelled to declare every electronic item to Customs with their respective make, model, and serial number.

Consequently, and in order to avoid confusion, we suggest to declare on both the Pink and Yellow forms all items except electronic equipment (such as TV sets, VHF's, Radars, etc. which must be declared on an additional page (any kind) stating clearly their type, make, model and serial number particulars. The Yellow and Pink forms should be endorsed 'plus sheets declaring electronic items.' These additional sheets will also have to be signed by the owners of the equipment.

We believe that the above proceedure will prevent and avoid a possible "double declaration" which is also very important. Therefore everything declared on the additional page is not, must not, be declared on the above Pink/Yellow forms.

3. Coast Guard (Prefectura Naval)

Crew List. 12 copies for first port.

The preferred form is in the IMO format with headings in Spanish. The crew list must be completed according to the following points:

1. Name of ship
2. Port of Arrival/Departure
3. Date of Arrival/Departure
4. Nationality of ship
5. Arrival port (last port)
6. Kind and number of identity document. (seaman's book or passport)
7. Given name, family name (not initials)
8. Number as per crew list
9. Rank
10. Nationality
11. Date and place of berth
12. Date, signature and stamp of Master

This form is used for clearance on arrival and again on departure.

4. Sanitary Authorities:

Maritime Health Declaration. One original form, printed in Spanish and English, international format. One Vaccination list to be attached to the above, showing cholera and yellow fever if from Africa.

ATUCHA: 33.58 S. 59.16 W.

"C" category port. Km. 132 – River Parana de las Palmas Province of Buenos Aires.

Situated on the left bank of the Parana de Las Palmas at km. 132, 15 miles upstream from Zarate, and 80 miles by river from Buenos Aires, via Mitre Channel.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

BERTH: A small berth 33 m. long with two dolphins in 40 ft. built especially for the discharge of heavy material for the new Atomic Energy Plant. There is a 300 ton heavy lift crane on the concrete platform. The plant is now in full operation.

PORT AUTHORITIES: There are no port authorities here, and the port comes under the jurisdiction of Zarate.

BUENOS AIRES: 34.36 S. 58.22 W. (See Plan Book)

"A" category port

Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

APPROACHES: Access is by the "Punta Indio" channel which requires constant dredging and commences just West of the Recalada Lightship, which is situated 30 km. due South of Montevideo. The channel with 28 ft. 6 in. on a width of 100 m. or 23 ft. over 200 m. winds up to the Outer Roads, which are some 37 km. from the Port. Direct entrance is by a channel, dredged to 29 ft 6 in. with a 50 m. width, and 28ft. 6 in. on an 80 m. width, to within 10 km., where the channel divides into North Channel, serving the New Port and Madero Port berths, and South Channel, for the rest of the port. North Channel at present has a depth of 25 ft. with a width of 50 m. or 19 ft. with 80 m. width. South Channel has 23 ft. 6 in. with a width of 35 m., or 21 ft. 6 in. over 50 m. All depths given here and elsewhere refer to the zero of the Riachuelo tidal indicator and semaphore in Buenos Aires port, which practically corresponds to the level of the ordinary lowest water, and is marked 0.72 m. under the average medium level of tides. Tides average 3 ft., but the principal factor is that of wind, which can raise or lower the water by 5 ft. or more.

The Mitre Channel enters the access channel at Km. 12, and under existing regulations the Mitre Pilot ceases his job there, and a Buenos Aires Port Pilot will either take the vessel into Buenos Aires or out to Intersection, or vice versa. This involves use of tugs for the changeover, unless the vessel goes only to Campana or comes from there, when the Buenos Aires Pilot can travel by land.

When large passenger liners or LASH vessels are entering or leaving, it is possible to have the access channel closed to all other traffic for a period of four hours on account of the narrowness of the dredged channel.

ROADS: The Outer Roads are between Buoys 25 and 37, according to draft. The Inner Roads are between Buoys 12 and 15. Intersection Pontoon, or Pilot station, is at Buoy 37, North side.

PORT: The port, which is artificial, comprises:

Puero Madero	North Basin, Docks 4, 3, 2, 1 and South Basin.
New Port	Basin A, B, C, D, E and F.
South Dock	First and Second sections.
Liquid Gas Basin	On the South side of the South Channel before reaching S. Dock
Inflammable Basin	On the South side of the South Channel between Liquid Gas Basin and South Dock.
East Basin	On the North side of the South Channel.
Riachuelo	The Districts known as Boca and Barracas.

BERTHING:

Puerto Madero (Central Zone): This is the oldest part of the Port. Ocean going vessels mainly operate in North Basin, and Docks 4 and 3.

North Basin. Built in the form of an irregular pentagon, with the entrance, 100 m. wide in one angle. The two piers at the entrance are 200 and 225 m. long, respectively. The West side is 390 m. long and the South 377 m., North 335 m., and with a depth presently 22 ft.

As the basin was built for a depth of 21 ft., and later dredged, when vessels load deeper than 20 ft. they should be careful to keep well off the quay wall to prevent grounding. Up to three vessels can discharge at anchor.

There are two dry docks in the basin, and a repair shop.

Usually only one berth, section 6, is used for loading/discharging operations and can be used for containers. Sections 1 and 2 are used by vessels repairing or laid up, while sections 3 and 5 are for Navy use. The warehouse of section 7 is used by the Custom House.

Dock 4. Connected to North Basin by a lock 197 m. long, and 25 m. wide. The dock itself is 630 m. long and 160 m. wide, with 20 ft. of water.

On the West side there are four warehouses, each 4 storeys high and twelve 3-ton cranes. Berths, or sections, numbered 1 to 4.

On the East side there are four two-storey warehouses and twenty-three 2.5 ton cranes. There are also several sheds behind and parallel with the warehouses which give on to the dock, sections numbered 5 to 8.

Between berths 6 and 7 on the East side there is a large open space where vessels or lighters can discharge direct to trucks or to railcars. Trucks may also go alongside at the other berths, at all of which there are railway lines, but space is limited.

The dock heads are used for discharging sand and gravel from barges.

Dock 3. South of Dock 4, connected by a cutting 70 m. long by 20 m. wide, with a swing-bridge. This dock is 690 m. long and 160 m. wide, depth also 20 ft.

On the West side, berths 1 to 5, there are four four-storey warehouses, and there are thirteen 3-ton cranes. There was a fifth warehouse at No. 3, burnt down and not rebuilt; this now forms part of the open space for general discharge and storage of imperishables.

On the East side, which is fitted with six 3-ton cranes, there are two elevators for grain. Unit three, with capacity for 6,000 tons in bulk and 1,200 tons in bags, fitted with 3 tubes and 3 chutes, can load 500 tons an hour bulk, or 160 bagged, by one spout only at a time. It is used for the smaller vessels in the trade with Brazil only. The other elevator in this Dock, No. 5, is used for storage.

Between the elevators, on the East side, there are open spaces where vessels may berth and discharge lumber or drummed cargo, but this section is limited to medium and small vessels only.

Dock 2. This is connected with Dock 3 by a cutting 60 m. long, and 20 m. wide, with a swing-bridge. The Dock is 570 m. long by 160 m. wide and 20 ft. deep at zero.

On the West side there are four berths, each with a warehouse, Nos. 1 and 4 being 3-storey, and 2 and 3, 4-storeys high. There are fifteen 3-ton cranes.

Section 1 is no longer used for the storage of dangerous or noxious cargoes, although Section 2 is in use for parcel storage.

The grain elevators on the East side of the dock are in a state of disuse. Their demolition is envisaged in order to provide an open storage area.

Dock 1. Connects with Dock 2 by a cutting 80 m. long, 20 m. wide, with 19 ft. This dock is chiefly used by Government-owned river craft. On the West side there are 5 warehouses, and 18 cranes. There are also ample open spaces. On the East side there is an elevator, capacity 27,000 tons in bulk, and three sheds between Docks 1 and 2, at about 300 m. from the quay.

At the southern end of this dock a hazardous and inflammable cargo store has been established, known as Shed 0 (zero).

South Basin. This basin is connected with Dock 1 by a lock 184 m. long by 20 m. wide, with a swing-bridge.

None of the lock gates in Docks 1 to 4 are used as water gates, water level is tidal, and the gates are simply means of communication. There are only gates proper into Dock 4 and Dock 1 from the North and South basins respectively. These have not been used for many years, although they were originally functional and formed one lock of all the docks.

The basin is 1,029 m. long and an average width of 110 m. It is used by river craft, cross river passenger ferry boats, coasters, etc. A new ferry boat terminal has been built here, on the land side of the basin, with waiting rooms, Customs section, etc.

New Port: The New Port, lies to the North of Puerto Madero, and entrance is via the Northern Channel. A breakwater extending from the North anteport protects the basin of the New Port from rough seas, and extends as far as Basin D, from which point another breakwater protects Basin E. Between the two, a channel is kept dredged for the movement of coasters to and from upriver. Basin F is used entirely for small coasters and river craft.

The five basins of this part (excluding F, coastal) offer good accommodation for the larger vessels entering Buenos Aires, and in all the berths there is sufficient water to float any vessel which can navigate the entrance channels.

Basins are numbered from South/North.

Basin A. Used by passenger vessels as well as general cargo. A landing station for passengers has recently been opened here and all vessels carrying over 50 passengers must land them here, shifting later to another berth if necessary.

The basin is 365 m. long by 140 m. wide, with 870 m. of wharfage. Northern side can accommodate two medium/large ships. Western side is frequently reserved for the Argentine Navy. On the S.W., passenger section, there is room for one vessel. On the S.E. another berth is available if the vessel operating at the Maritime Station is medium size only.

Pier head No. 1 is 100 m. long, but is mostly used as waiting berth for river going vessels. There are two railway lines on each side of the basin, and also at the back of the deposits. There are five warehouses and a total of 14 three-ton cranes.

Basin B. Used for general cargo vessels, is 525 m. long on the North side, 464 m. on the South and 151 m. wide at the Western end, with 1,165 m. of wharfage with room for seven medium/large ships.

There are ten warehouses, and a total of 29 cranes, all three tons.

Pier head No. 2 is 202 m. long. There are three 3-ton cranes, and as a rule large passenger vessels occupy this berth after shifting from the passenger station.

Section 6 and 7 of this basin are reserved for the State Fleet vessels, or if used by others must be vacated if required by the national vessels.

Basin C. This is 495 m. long on the North, 585 m. on the South and 175 m. wide at its Western end, with 1,284 m. wharfage for seven medium/large vessels.

On the South side there are three warehouses, built 20 m. back from the quay to facilitate operations. There are thirteen 3 ton cranes.

On the North and West sides there are no sheds, and this is used for operating directly to or from trucks or rail cars.

There are seven 3-ton cranes on the North and three on the West side.

On Pier head No. 3 which is 236 m. long there are two 3 ton cranes and a 20 ton crane.

Railway tracks are fitted with a third rail for narrow gauge traffic.

The South side of this basin is reserved for ELMA (State Fleet) vessels.

The North side 1/2/3 is used for grain in times of congestion.

Basin D: This is 495 m. long on the North, 585 m. on the South and 194 m. wide at its Western end, with 1,300 m. of wharfage.

Along the Southern side is the Grain Elevator, which occupies all the water front and extends also along Pier Head No. 4 — 295 m. Capacity is at present 150,000 tons, with another 20,000 being added. It can deliver 13,500 t.p.d. to a total of five vessels. On the North and Western sides, vessels may work to or from trucks for direct delivery cargo. There are nine 3 ton cranes on the North and three on the West, and also three cranes capacity 30 tons each.

On the North side a Container yard has been operating with 25,000 sq.m. of pavement and 1 shed, 100 m. long, 10 m. high and 30 m. wide. There are also two side loaders for 20/22 tons and one for 35 tons. Eventually the flooring will be extended to twice the area. 20 ft or 40 ft. Containers can be handled by 4×35 ton gantry cranes and one Liebherr "T 100".

For vessels with a reduced number of Containers, Basin E, North side, can also be employed, using the same concentration area at the Ericson yard.

Basin E: The basin is 495 m. long on the North side, 585 m. on the South and 194 m. at the West end. Coal is discharged on the North side and there is also a warehouse there for other cargoes, although basically this basin is used for coal.

On Pier Head No. 5, which is 523 m. long, the Power plant discharges its coal or oil. There is one oil intake and two travelling grabs, capacity 4 tons each, and also a 30 ton crane.

On the South side of this Basin vessels operate loading or unloading fruit and generals.

On the West, or shore side of the basin there are 20 tanks (more building) for caustic soda, present capacity 7,400 cu. m. These are all steel tanks, and there are 11 lines to the pier. There are truck loading installations in the plant, and a weighbridge, but no fire-fighting installations. Wine tanks are also being built.

Basin F: This faces North, and is used for river craft only, pusher barges and tugs, while on the land or West side there are discharging facilities for sand hoppers.

Pier Head No.6, between Basins E and F is 310 m. long, with room for one vessel only, and with two intakes for fuel oil and a 7.5 ton travelling grab for discharging Coal, capacity 150 t.p.h.

South Dock

First section. The first section has continuous quays on both sides, and a width of 90 m., widening to a turning basin before reaching the connecting channel to the second section.

Before the turning basin are 8 steel tanks for chemical or vegetable oil products, total capacity 5,260 cu.m., with two 6 in. stainless steel lines and two 4 in. steel lines, maximum discharge rate is 175 t.p.h.

Nearer the basin itself are 28 tanks, capacity 14,494 cu.m. plus 8 more tanks in the installation for use both with caustic soda and other chemicals or alcohol. Only one tank (No. 3) of 320 cu.m. is of stainless steel, the others are all steel.

The West quay is 911 m. long, and the East side 1,109 m., both in use for liquids and general.

The old Freezing plant is inactive and on the East side of the turning basin there is an elevator capacity 6,500 tons, 4 tubes and 3 chutes, plus another storage shed for 19,100 tons grain. Only 1 tube at a time may be used at 400 t.p.h.

At warehouse 10 there are 3 steel tanks capacity 10,600 cu.m. with a 10 in. line used for caustic soda, and by the grain board elevator 11 tanks capacity 23,640 cu.m. for vegetable oils.

On Pier A there are 41 tanks, capacity 18,580 cu. m. with two load lines for use with inflammables, handling usually caustic soda, fatty acids, tallow dodecilbencene and vegetable oils.

At Piers E and G there are 19 tanks total capacity 21,058 cu.m. for alcohol and chemical products, with 4 lines to the pier.

At F and G there are also 15 tanks, capacity 8,199 cu.m. for caustic soda, alcohol and chemical products.

Pier G has a further 6 tanks, total 3,259 cu.m. for any kind of chemical products, with 5 lines to the pier.

Second section:— The connecting channel is 90 m. wide, with earth banks. Jetties for discharging petroleum are placed along the East side, while on the West there is a continuous quay 1,000 m. long, on which there are 4×3 ton cranes and 8×1.5 ton cranes for discharging sand.

There are 7 berths, 5 of which are for general use, 1 for the Power plant for discharge of coal, with a 5 ton grab, and 1 elevator berth, Unit 10, capacity 23,500 tons. The loading bridge has five turrets, each with 2 tubes and 1 chute. Only one can load at a time, rate 400 t.p.h.

There are also 6 tanks, total 4,698 cu.m. for use with Tung oil with one line to the pier.

There are 8 petroleum jetties on the East side for the discharge of tankers and loading oil barges ex-shore tanks. The jetties are marked A to H. On reaching a draft of 23 ft. 6 in. vessels must shift to New Port.

The gangways to the mooring dolphins for tankers are in a very precarious state, which may lead to the closing of this sector.

It will be seen that there has been a considerable increase in number and capacity of tanks, all for private companies. In South Dock there are 134 tanks, capacity 87,147 cu.m.

Liquid Gas Basin. The Liquid Gas basin lies on the South side of the channel, immediately East from the Inflammables Basin, and consists of a central mooring platform 356 m. long, with four pairs of dolphins and two mooring blocks at each end, all joined by a foot gangway. The basin is protected from the S.E. by a breakwater 850 m. long, in the form of an inverted "L". The Gas lines are insulated to carry Liquid gas at minus 45°C.

Only two tankers are allowed to use the basin at a time.

As with the Inflammables Basin, all transit to land is by launch.

Inflammable Basin. This is situated outside the South Channel in front of km. 0.500 and about 300 m. distant from the axis of the Channel and at a right angle. The dimensions are as follows: length: 483 m. on the East side, 323 m. on the West side, 185 m. on the S.W. side and 72 m. on the South side. The dock walls at the entrance are 44 m. long on each side. The entrance is 50 m. wide. All the dock walls of this basin are of cement, as well as the intakes and landing dolphins. It has 6 intakes, 6 dolphins and 12 jetties for mooring vessels. The present tank storage in South Dock lies to the S.E. of this basin at a distance of about 1,000 m. The land lying between the South Dock and the Inflammables Basin is used for erecting tanks.

Ocean going tankers discharge at the piers on the West side. There are no facilities for reaching the city by land and therefore all the transport of officials, crew, stores, etc., must be done by launch.

The oil for the Y.P.F. tanks on the East side of the Basin and the M.O.P. workshops is sent from South Dock by piping under the South Channel.

East Basin. At the entrance to the South Anteport, a breakwater and two new basins have been constructed.

Basin No. 1 is used exclusively by the Port Works Department for laying up and repairing dredgers and other maintenance craft. It also contains a dry dock and a shipyard. Depth of water is 24 ft. in the basin but only 16 ft. at the entrance.

Basin No. 2, in form an irregular quadrilateral, is separated from No. 1 by a mole, and is 146 m. wide at the entrance, 170 at the base and with walls 372 m. long to the S.E. and 294 m. long to the West, allowing a number of vessels to berth. Alongside this mole is the SEGBA Power Plant. Depth in the basin varies from 24 ft. to 14 ft. at the entrance.

From No. 2 there is a mole parallel to the South Access channel, 260 m. long, with a central salient 120 m. long, and two side salients 15 m. long each, and at 55 m. from the central mole. This is used by tankers discharging fuel for the Power Plant. There is one crane, 16 tons, and a narrow gauge railway line.

The breakwater has been built on the South side of the access channel as a protection for the basins, and commences 100 m. South of the light buoy on km. 1 of this canal.

South Anteport. The construction of the Inflammables Basin, and of the East Basins, before arriving at the entrance to South Dock, Riachuelo or South Basin has created an Anteport. The North part has a mole 384 m. long from East Basin No. 1 to South Basin. This is used by the Port Works Department for workshops, deposits and offices.

The Prefecture has an office here, on top of which is a mast 2 m. high, used as a signal station. A white-edged red flag by day or a flashing red light by night indicates that a vessel is entering by the Southern Channel from km. 8 to the Anteport. This signal will remain until the vessel reaches the Anteport, and signifies that the Channel is closed to all except tugs, sand hoppers and river passenger craft, provided draft does not exceed 14 ft.

Riachuelo. This is a narrow, winding stream which flows to the Plate by way of the South channel. It has a depth in its axis of 21 ft. and from 17 ft. to 19 ft. at the berths, while the banks being sloping can cause trouble with moorings on a falling tide. Ocean-going vessels rarely use this now, except for occasional discharge of timber, and it is used mainly by lighters and coastal craft, as well as by laid up vessels and what are now virtually wrecks.

This is the old time Boca and Barracas area.

TUGS: From vessels drawing up to 22 ft., service is rendered by a bow tug from km. 5, and a stern tug from km. 1, or vice versa, and to or from kms. 8 and 4 respectively when draft exceeds 22 ft.

Stand-by time will be charged if a vessel is delayed in entering or leaving by bad weather, fog, low water, no berth, etc., plus usual Sunday/holiday surcharge.

Tug hours now coincide with ordinary port working hours and time is counted from the hour they leave their moorings and until they return.

When a vessel is leaving port, and tugs are ordered to accompany her beyond normal limits, an overcharge will be made on an hourly basis.

Once a vessel is moored, all further service in the same section will be charged by hour. If the vessel shifts section, this movement is charged plus the sections traversed.

A special compensation charge is made when tugs are ordered but not used.

For the services of tugs supplying electricity or steam, charges are made per day and per hour, varying with the size of the tug.

If vessels do not use their engines while under tow, a surcharge of 50% is made.

Tow ropes must be supplied by the vessel, but can also be hired. The towage company is not responsible for breakages, fouling of propeller, expenses of diver or any other consequence.

Also see "General" before first port.

DENSITY: Fresh water.

FRESH WATER: There are hydrants at all berths, with very few exceptions, at which vessels can take water at a charge per cu.m.

There are no hydrants in the Inflammable Basin, and only at Berth No. 1 on either side of Basin E in the New Port.

Delivery rate varies from 5 to 10 t.p.h., depending on the number of vessels taking water, time of day, etc. An extra charge is made in overtime.

FUEL: Available, by barge.

CARGO: *Classification of import cargo.* Argentina being a tariff protected country, all cargo landed is subject to Customs control.

To facilitate control, there are Custom House warehouses on the city side of the dock zone, on the quays, in the South Dock, and others away from the quays. The Dock Zone is enclosed.

The transport of all goods from vessels is currently effected by State owned vehicles. There are no longer any private warehouses.

All fine cargo, cargo in cases, and most baled cargo must be discharged to Custom House Warehouses, direct from the ship, by means of dock cranes.

Other cargo in cases, barrels, etc., which might be damaged if stowed in the open air, also cargo which from its nature might damage other cargo stowed with it must go to the Custom House warehouses away from the quays, and is conveyed there by port railway wagons that take the cargo from alongside the ship. This same class of cargo can also be sent to private fiscal warehouses and is similarly conveyed there from the ship's side by railway wagons.

Cargo that can be stowed in the open air without risk of damage, such as cases of glass, motor cars, sanitary ware, etc., is also conveyed from the ship's side by railway wagons to open spaces (plazoletas) within the dock zone, reserved for the stowage of such cargo.

Certain classes of cargo, such as bales of gunnies, jute, rice, agricultural implements, and all articles the nature of which can be seen at a glance, can be discharged direct to consignees' carts, motor lorries, etc., from the ship's tackle. Also certain classes of rough cargo, such as coal, lumber, iron, cement, etc., must be discharged direct in this way.

The Custom House, in order to expedite despatch, has enlarged the list of goods that can be discharged in this manner, and also authorises the carrying out of these operations outside ordinary working hours, which has hitherto been prohibited.

Storage of goods in Custom House Deposits is limited to six months, counting from the date of the vessel's entrance to port.

All classes of cargo can be discharged into lighters (by permit from the Custom House).

Discharge to lighters can take place in all sections of the port.

Use of special deposit called "Transit" for reception of general cargo. In order to facilitate the discharge of vessels with general cargo for delivery to Fiscal Warehouse, the Custom House authorities have authorised the direct discharge from vessels to a special warehouse which receives all the cargo as it comes out of the hold, labour being supplied by Agents.

This facility is only available at certain sections of the port and whenever a vessel discharges at a berth where there is a "Transit" deposit, this must be used unless the vessel carried homogeneous cargo or of such a nature that it does not require the use of the "Transit" deposit.

The cargo discharged in these special warehouses must be delivered by the Agents at ship's expense, into the Customs warehouses.

Cargo in transit to or from Paraguay is now stored in sections of Warehouse No. 5 of Dock 4. The goods may remain in the warehouse, once onwards transportation has been arranged, for three days, where the ocean carrier is operating, or in a special shed in Section 1 of Dock 2, where the river vessels load for that country.

Cargo in transit for other countries can be deposited in any approved space. In all cases, special permit must be obtained in order not to lose the status of "transit cargo".

Time limit for the permanency of "In transit" cargo in lighters. Maximum time limit is set at ninety days, but it is possible to renew this, while on the expiry of such authorisation, the cargo must be discharged to fiscal warehouses, and be subject to all the rules and conditions governing this operation.

The Custom House is authorised to grant an extension of time when the interested party requests this before expiration date, and providing the causes are, in the opinion of the Custom House Authorities, justified.

Cargo in transit that is discharged by mistake to fiscal deposit, has to be removed from there within 48 hours; otherwise it must be added to the cargo manifest as a surplus discharge.

A tariff in the style of railway tariffs is in force with a variety of charges, all depending on the class and nature of the cargo that is being transshipped. Therefore, Shipowners, their Agents and Forwarding Agents should, in every case, communicate with their Agents in Buenos Aires to ascertain the exact cost of these charges. Subsequently to the new tariff being enforced, various increases were declared, so that the extra freight on cargo trans-shipped is now an important item to be considered when accepting through bookings.

Delivery of cargo. The receiver of the merchandise or holder of the Bill of Lading must deliver this document to the Custom House to clear the goods. The merchandise, whether for deposit of direct despatch is delivered to the Consignees without the intervention of the Master of the vessel or the Agents. The Bill of Lading remains with the Custom House, under whose control the cargo is delivered. The Custom House verifies the legitimacy of ownership, and whether all the import dues or services have been paid on the merchandise before leaving warehouse.

Collection of freights on imported goods. In the Argentine, the Custom House releases the cargo, and not the Agent, therefore the only means of ensuring collection of freight when payable at destination, is for the Agent to place a judicial embargo on the entire cargo. This action necessitates the Consignee first obtaining the Agent's conformity to the documents before the Custom House will accept them and deliver the goods.

Without an embargo the Agent, once he has presented the Cargo Manifest, cannot intervene between the Custom House and Consignee. Not even the retention by Shipper of all the signed original Bills of Lading is a safeguard, because the Custom House, which is only concerned with the delivery of the cargo to the lawful Owner and is in no way concerned with the freight payment, will deliver the cargo against production by consignee of a bank guarantee that the Bills of Lading will be forthcoming in due course.

From the foregoing it may be gathered that freight should always be prepaid when possible.

The Custom House usually does not release the cargo, if the Bills of Lading are claused "Payable at destination", until the importer produces an account for freight, duly receipted by the Agent, but this is not a sufficient cover, as the Customs are not under any legal obligation to effect this control, and therefore cannot be held responsible for the freight of goods delivered without it being paid.

Cargo discharged to or loaded from vehicles. The Custom House Administrator has authorised the access of vehicles of all classes to the quays of this port for the reception or delivery of cargo of any class, size or weight.

It is necessary for the importers, exporters or Custom House brokers to obtain a permit for this, and the applicant is held responsible for any damage to port installations caused by said vehicles. Sufficient space must be left between truck and sheds to allow passage of Port Authority vehicles and fire engines.

The authorities will not be responsible for any accidents to the vehicles, their crew or their cargo. The vehicles must be so handled as not to interfere with the railway traffic.

Discharge of Inflammables. This is now permitted in the Port of Buenos Aires under strict security control.

Discharge of Sulphur. It is compulsory to have a motor launch fire extinguisher alongside vessels during the discharge of sulphur. An extra man is also required at each hold for carrying water to the stevedores.

Delivery of fresh fruit. The Custom House allows the consignees of fresh fruit to take away their cargo immediately on vessel's arrival, upon presentation of a special permit endorsed by a bank and Agents, and whereby the receivers guarantee presentation of the Bill of Lading in due course.

Placing of Lighters between Vessel and Wharf. When lighters are placed between the vessel and the wharf for the convenience of discharging a vessel's hold, full Port Service Dues are charged.

Lighters may be placed between the vessel and the wharf when the vessel's work to shore is not interfered with thereby. In such cases the vessel will continue to pay full dues. Lighters are, in fact, not considered as occupying any berth unless they are allotted a special berth by the Custom House to load or discharge. It is only when lighters are so commissioned by the Custom House, that a vessel going alongside these lighters would be charged in the category of a vessel lying second off.

Discharge of Heavy Lifts. There are three floating cranes, one for lifts of up to 60 tons, another of 100 tons and a new one of 250 tons. The first two may have lost part of their capacity. The 250 ton crane can navigate carrying its cargo, so making special movement of the vessel unnecessary, but the two smaller cranes must operate between ship and shore in swivelling movement.

There is also a floating crane capacity 30 tons belonging to the Navy, and two others, each 75 tons capacity, belonging to the State Fleet.

Hire counts from getting the crane alongside, and in condition to work, until work is completed, plus an extra hour to compensate crews from getting the crane back to its mooring place. Slings must be supplied by the lessee, and no responsibility is accepted for damage or breakage, the charge being on a tonnage/hour basis.

The 250 ton crane is not self propelled, and has a length of 45 m., 23 m. beam and a draft of 5 m., displacing 1,400 tons. If required it can be used in salvage operations, towage being for account of lessee.

Normally these cranes, except for the 250 ton crane, navigate under their own power, but the Craneman has the right to employ a tug or tugs for lessee's account when he considers it necessary and two tugs are also generally employed.

Wharf Cranes. The hire of shore cranes is charged by the Port Administration to the Agents of the vessel requesting their use. Special permission must be obtained for overtime work, and also to have shore cranes handle ship's machinery, ballast, or any other non-commercial commodity.

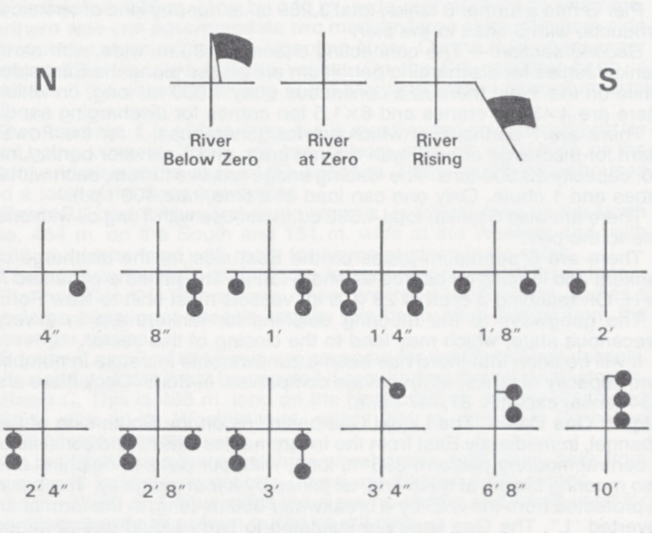
Movable Cranes. Charged per hour from arrival until work finishes. These are used for shifting cargo from one wagon to another, or for shifting cargo for convenience of consignees.

Advertisements. Advices of arrival of vessels with cargo, inspections of general cargo and notices of general average are published in the local press.

Notarial Protest and extensions. When vessels arrive with cargo it is customary to note protest before a Public Notary, for which there are fixed fees per page to be filled in, plus further fees should an extension be necessary later.

TIDAL SIGNALS: The following tidal signals, shown from a semaphore on the North side of the entrance to South Basin Lat. 34° 38′ S., Long. 58° 21′ W. (approx.), indicate the height of the water above or below zero.

SIGNALS BY DAY



The signals are made with balls and black flags by day and with flashes by night as shown in the diagram below, seen from the Anteport looking out towards the river.

To indicate that no signals are being made at the semaphore, a flag is hoisted to the masthead, and another at the yard-arm.

SIGNALS BY NIGHT

(White flash) Cycle:	30 seconds.
(Red flash) Long flash:	2.5 secs. each.
(Green flash) Short flash:	6/10 secs. each.

White flashes	Rising tide: One long. Falling tide: Two short.
	Above zero:
Red flashes	For each metre: One long. for each 10 centimetres: One short.
	Below zero:
Green flashes	For each metre: One long. For each 10 centimetres: One short.
	Zero:
Green and red flashes	One green and one red, both short.

A weekly bulletin is issued by the public works ministry and widely distributed among Pilots and Agents reports depths referred to the zero of the Riachuelo Indicator in channels, passages, basins and berths and it is possible to know the real depths at that moment in each part of the port area.

GENERAL: *Port Zone.* No one is permitted to enter the port zone on Sundays or holidays, or any working day after 1800 hrs., unless supplied with a pass. Visitors to ships must have cards issued by the Agents and approved by the authorities.

There are several access gates open during day time, but after working hours and on Saturdays/Sundays and holidays only those at Cangallo Street (by Dock 4) and Maipu (New Port) are open on a 24-hour basis.

Allotment of Berths. Vessels to discharge are allotted berths by the Port Authorities in strict turn, as from arrival in the roads, and according to the nature of the cargo to discharge or load and its quantity. A certain time is granted for completing operations, though an extension can usually be obtained, the Port Authority reserving the right to order a vessel out if operations are not completed on time.

Berths are allotted in South Dock when the greater part of a vessel's cargo is for the factories in that zone.

Berths at the Elevators. These are allotted in accordance with the certificate given by the National Grain Board, and in strict order of arrival in the roads.

Time limit for occupying berths and commencing operations. Vessels which do not commence operations within four hours of the first ordinary period, are liable to have the berth given to others. Similarly those which suspend operations without due cause may lose the berth.

ELMA berths in New Port. Any vessels may solicit one of the reserved berths, if vacant, but must shift as soon as a State vessel requires the berth.

Discharge of Inflammables. Consignees must take delivery from alongside. Should Customs clearance for such cargo not be ready, it must be discharged into lighters and the authorities will indicate where it must be placed.

Entrance. Vessels can enter or leave at any time of day or night, with advance notice to the authorities.

Movements. Vessels are not allowed to shift if their draft is not at least 10 in. less than the depth of water on the semaphore, with a rising river. No vessel can interrupt the operations of another to shift within the port, but if ready to sail, the other vessel must facilitate its departure whatever the hour may be.

All vessels moored alongside one another, at the quay, must reciprocally facilitate their operations, and open out when the vessel on the inside finishes her operations, and must leave or change berth. They must also make room for lighters with cargo for the vessel next to the quay, outside working hours.

When a vessel has to shift along the quay up to one ship's length to discharges or load from another hatch, neither towage nor pilotage is necessary when the shift is between the forward hatches, or the after hatches. Prior permission must be obtained.

Shifting from North to South or vice versa. There is no set rule, but usually vessels going from say, South Dock to New Port, will let tugs go and sail out to Intersection Roads to turn round and take up tugs again in the North Channel. It is also possible to have tugs follow out to km. 9, where the North and South Channels meet, turn there and come into the new berth with the same tugs, if length of vessel permits.

It is for the Master and Pilot to decide where the vessel will turn, depending on weather, draft, current, etc.

Opening of Dock bridges. The established time table, twice an hour is not observed, and Agents arrange for this when a vessel is ready to move through. Vessels should not attempt to pass the lock gates if clearance is less than ten cm. and the river is not rising. It must be remembered that the sole of the locks in each case is of concrete.

It is frequent in Madero docks to see vessels resting on the soft muddy bottom.

Prefecture Control. On both entering and leaving the Prefecture officers may check with the crew list that all members of the crew are on board, particularly on sailing.

Draft on sailing must be checked by the Pilot and Master, and duly recorded in the Pilot's book. Load lines are strictly checked; in case of hogging, drafts fore and aft are taken while in sagging marks will prevail.

Shiftings and manoeuvres in port are carried out under the responsibility of the Master, but Pilots are also responsible, at least to the Prefecture, since they are under direct authority and at the same time considered assessors to the Prefecture.

Trim is also controlled, no list is allowed, and maximum tolerance for difference of draft fore and aft is 6 ft. to 7 ft. according to vessel's length overall. Vessels should not be down by the head.

Hatchways. All hatches must be kept closed when a vessel is not working. If hatches are found open when a vessel is idle, the vessel is fined.

Garbage. A garbage barge goes round the port every morning to take away the garbage, which must be left in drums slung over the stern ready for lowering into the barge. It is also possible to arrange for a barge to take off refuse from holds, old dunnage, bedding, etc. Collection is often a rushed affair, and good watch must be kept for the barge. Fines are imposed if garbage is not removed.

Working Hours. Ordinary working hours are now fixed as from 0700 to 1300 and 1300 to 1900 hrs. Tugs are now also on this same time table.

Overtime can be worked from 1900 to 0100 hrs. and from 0100 to 0700 hrs., but Stevedores are not allowed to take two consecutive shifts.

Custom House guards and other official workers follow the same schedule from Monday to Friday, but earn overtime on Saturdays, Sundays and holidays.

TELEPHONE: There is no special installation for vessels in port. Many Agents have one or more lines of their own, which can be placed on board, if there are connections available in that sector. The telephone company makes a connecting charge each time, at a high cost to the vessel, plus the usual charges for the service.

CONSULS:

Algeria	Montevideo 1889	Tel. 41-0271
Australia	Sta. Fe 846	32-6841
Austria	French 3671	72-7095
Belgium	Defensa 113, 8th floor	33-0066
Bolivia	25 de Mayo 611 2nd floor	31-7365
Brazil	Paraquay 580 2nd Floor	31-7743
Bulgaria	Manuel Obarrio 2967	83-7458
Canada	Suipacha 1111 25th floor	32-9081
Chile	San Martin 439 9th floor	49-8271
China, Peoples Rep.	Sucre 3001	73-1950
Colombia	Sta. Fe 782 8th Floor	31-4381
Costa Rica	Libertador 1146	42-6181
Cuba	Virrey del Pino 1810	73-4349
Czechoslovakia	F. Alcorta 3240	80-3917
Denmark	L.N. Alem 1064 9th floor	32-6901
Dominican Rep.	Maipu 844 5th floor	392-2381
Ecuador	Quintana 585 10 Piso	42-6408
El Salvador	Talcahuano 1038	42-6192
Finland	Sta. Fe 846	32-0600
France	Sta. Fe 846	32-2425
Germany, West	Maipu 938	32-9424
Great Britain	Luis Agote 2412	80-7070
Greece	R. S. Pena 547	34-2838
Guatemala	Lavalle 1759	46-4662
Haiti	Viamonte 1167	45-8796
Holland	Maipu 66 1st floor	34-8778
Honduras	Rodriguez Pena 336 2nd floor	40-0484
Hungary	Cnel. Diaz 1874	83-0767
Iceland	J. A. Roca 610 7th floor	34-3454
India	Paraguay 580 3rd floor	31-3020
Indonesia	Mariscal Castilla 2901	80-6622
Iran	Ocampo 2901	83-9314
Ireland	Sta. Fe 782 7th floor	32-4360
Israel	Arroyo 916	392-4481
Italy	M. T. Alvear 1149	42-9841
Jamaica	Corrientes 127 4th floor	31-4872
Japan	Azcuenaga 1035	83-1031
Korea-South	F. Alcorta 3221	83-4633
Lebanon	Lib. Gral. Sn Martin 2354	821-0466
Liberia	Florida 142	49-5543
Mexico	Cordoba 1367	42-0723
Nicaragua	Venezuela 146 2nd floor	37-8375
Norway	Esmeralda 909 3rd floor	32-1904
Pakistan	Alvear 1402	44-0355
Panama	Talcahuano 1038 5th floor	42-9651
Paraguay	Maipu 464 3rd floor	392-6536
Peru	Corrientes 330 3rd floor	31-3374
Philippines	Castex 3123	80-5068
Poland	Av. M. Aguado 2870	821-9681
Portugal	Cordoba 315 3rd floor	32-3524
Rumania	Arroyo 962	392-2630
Sierra Leone	Cordoba 1233	40-9573
South Africa	M. T. Alvear 590	31-8991
Spain	Guido 1760	41-0078
Sweden	Tacuari 147	38-3001
Switzerland	Sta. Fe 846	31-6941
Syria	Callao 956	42-2113
Thailand	Av. Belgrano 265 9th floor	33-3690
Turkey	R. S. Pena 852 8th floor	46-8779
United Arab Republic	Guido 1530	42-8542
U.S.S.R.	R. Pena 1741	42-1552
U.S.A.	Sarmiento 669 3rd floor	46-3211
Uruguay	Corrientes 545 6th floor	49-4129
Venezuela	Esmeralda 909 4th floor	32-2786
Vietnam	Cordoba 1184	46-6533
Yugoslavia	R. Pena 1012	411309
Zaire	Cerrito 1070	44-0902

REPAIRS/DRY DOCKS: Syncrolift with capacity 40,000 d.w.t.

DEVELOPMENTS: Port access to be dredged to 32 ft. for a width of 460 ft. At a later stage dredging of the port to 35 ft. will be undertaken.

SHIPMASTERS' REPORT: September 1980.

Documents: In addition to the papers mentioned in the "Guide" the following papers were requested.

2 Vaccination lists. (Especially with smallpox information).
3 Arms lists.
2 Crew lists with the numbers of the passports.
1 List of loading ports of the last voyage with dates of arrival and departure.

The I.D. cards were checked before departure and stamped again.

AUTHORITY: Administrador del Puerto Buenos Aires.

CAMPANA: 35.15 S. 58.58 W. (See Plan Book)

(Province of Buenos Aires) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

On the left bank of the Parana de las Palmas arm of the Delta from seaward, 155 miles by river from Buenos Aires, Martin Garcia, or 60 miles via Mitre Channel.

The port is mainly used for receiving and despatching petroleum and its products. There are also facilities for handling timber and general cargo, as well as steel tubes for the petroleum industry, both for internal requirements and for export, which are made here.

PILOTAGE: Compulsory.

RESTRICTIONS: Draft is controlled by depth of water at Martin Garcia Bar. Daily draft forecasts made by local authorities. See "Mitre Channel" (in River Plate section).

MAX. SIZE: Up to 27 ft. draft, dependent on local river conditions.

HEALTH: Free Pratique can be obtained in the usual way, by notifying Buenos Aires Agents. Tankers lightening part of their cargo in Buenos Aires Roads, can take pratique here, provided that the convoy formed by the tanker and barges follows up to Campana, and no one on board has any contact with shore until after the medical visit. If the vessel is "unclean" however, pratique is taken before lightening.

RADIO: Use Buenos Aires stations for overseas, but for traffic control this comes under Zarate VHF (Channel 14) LSO 23.

TUGS: See "General" before first port.
BERTHS: From North to South the berths are:

Dalmine: At km. 98.5 on the Parana de las Palmas, (from Buenos Aires), and 2 km. above Campana port. A newly installed marginal wharf, 185 m. long, in 35 ft., with flashing yellow lights at either end. Discharging of iron ore is by grab to a travelling hopper, working the full length of the wharf, leading to an endless belt at the Western end, and thence to stockpiles ashore; Air draft below the discharging arm is 23 m. (depending on river level) and maximum operating distance off is 22 m. from the line of the rubber fenders on the wharf.

Theoretical discharge rate is 800 t.p.h., but in practice only 4/500 t.p.h. is obtained.

This plant now produces its own steel, for use in making seamless tubing for the petroleum industry; installed capacity is 800,000 tons per annum, shipped over the National Mole at Campana itself.

National Mole. 20 ft. alongside, used for shipment of the steel tubes and movement in general. The mole is 116 m. long, with three electric cranes, 4 ton capacity and two mobile cranes.

Esso Mole H. Concrete pierhead, 16 m. long, over which crude oil is discharged through an 8 in. line. there is deep water at this mole which is mainly used for import cargo. There is also a belt conveyor equipment for loading petroleum coke in bulk.

Esso Mole G. A mile South of Mole H, fitted with an 8 in. line for discharge of crude from smaller tankers, in 18 ft. Length 14 m.

Esso Mole E. 130 m. long, with 24 ft. There are two intakes on this mole, of 6 in. the former being used for shipments of clean products and the latter both for crude and for shipment of clean products.

Esso Mole F. In 26 ft., 16 m. long, with a 10 in. line which can be used crude and for lubricants.

200 m. downstream there is a wharf, 70 m. long, in 14 ft. used for discharge of timber and sand.

There are no facilities for handling of grain or other produce.
MEDICAL: Doctors and hospital available.
DENSITY: Fresh water.
FRESH WATER: Available at Esso Moles and National Mole.
FUEL: Available at Esso berths. No barges.
CONSULS: Italy.
REPAIRS: Can be effected.
DEVELOPMENTS: Studies are now being made for improving the port installations as the Mitre Channel is now operating, as this is the first upriver port, and the zone is highly industrialised, with much movement for export to Buenos Aires by road and rail.
AUTHORITY: Administracion de los Puertos Parana.

CONCEPCION DEL URUGUAY: 32.29 S. 58.12 W. (See Plan Book)

Km. 183 – River Uruguay (Province of Entre Rios) "B" category port.
N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

On the left bank of the River Uruguay from seaward, 182 miles from Buenos Aires.
APPROACHES: Access to the port is by a channel 1,000 m. long, 45 m. wide, which is now 19 ft. at zero.

The roads of the port extend from the buoy marking the entrance to the channel, and about 2 km. up river, where vessels may anchor if awaiting berth.

Access is governed by the water on the Montana and Altos y Bajos passes, where there is normally no more than 17 ft. and this draft should be taken as a determining factor.
PILOTAGE: Pilots for Uruguay River board off Buenos Aires entry channel.
ANCHORAGE: In Uruguay River, about 900 m. North of entry channel buoy.
RESTRICTIONS: Day and night navigation allowed. Channel dredged to 20 ft. LW. Depth on bars, 17 ft. LW.
MAX. SIZE: Maximum permitted draft in Uruguay River is 18 ft. Fresh water, subject to local conditions.
HEALTH: 8 hours before arrival, radio Agent advising last port of call, number passengers and crew on board and health condition of vessel requesting free pratique. If this procedure is followed there should be no delay in obtaining pratique when officials board on arrival, provided vessel's health conditions are satisfactory.

Masters may either advise their Agents in Buenos Aires, or direct to Agents in Concepcion del Uruguay, using station LSQ 57, on 477 kHz A1, and may proceed direct from sea to this port.
RADIO: The port station LSQ 57 transmits daily information at 1300 hrs. GMT on the state of the River Uruguay from San Javier to Gualeguaychu. It operates on 477 kHz, A1 power 0.5 kW.
TUGS: Compulsory both for entering or sailing and for movements in port.
BERTHS: There is a quay frontage of 1,500 m. of which 1,100 m. are for ocean-going vessels, with presently 19 ft. alongside at zero. The other 400 m. is for river traffic.

There are 5 cranes on the quay, 1 of 5 tons, the others of 3 and 1 tons, and there are 2 portable 5 ton cranes.

New elevator capacity 20,000 tons, working with one tube 300 t.p.h.

There are several wharves at the South end of the mole for discharge of tankers.

Due to silting alongside quay, vessel should be prepared to be fendered about 1.5 m. off the quay.
MEDICAL: All medical facilities available.
TANKERS: Two berths for tankers up to 18 ft. draft.

YPF Berth: Eight hose connections, 12 in. and 6 in. diameter.

Esso Berth: Hose connections, 8 in. for naphtha, 6 in. for other products.
DENSITY: Fresh water.
FRESH WATER: Available, there are several hydrants of 1.5 in. diameter on the mole.
FUEL: Available from the State Oil Company at the pier, or by drums from other suppliers.
REPAIRS: National and privately owned workshops for all types of minor repairs.
DRY DOCKS: One, owned by Ministerio de Obras Publicas, length 70 m.
REPATRIATION: Can be arranged subject to Immigration formalities.
AIRPORT: Situated 3 km. away, with daily services to Buenos Aires.
CONSULS: There are Italian, French, Spanish and Uruguayan representatives.
POLICE/AMBULANCE/FIRE: Police tel. 2222; Fire Service tel. 2860; Ambulance tel. 1792; Hospital tel. 2464.
TELEPHONES: Arrangements can be made for placing telephone on board.
SHORE LEAVE: Permitted subject to Immigration control.
AUTHORITY: Capitania del Puerto Concepcion del Uruguay.

DIAMANTE: 32.05 S. 60.33 W. (See Plan Book)

Km. 533 – River Parana (Province of Entre Rios) "B" category port.
N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

On the right bank of the River Parana from seaward, above Rosario and 286 miles by river from Buenos Aires.
APPROACHES: There is ample depth of water in the port and approaches, which is governed by the water on the various bars on the river, the shallowest above Rosario being Isla de los Pajaros, at km. 468 to km. 473.
PILOTAGE: There is no resident port Pilot, and Pilot has to be ordered from Rosario. Minimum 10 hours notice required. The river Pilot ends his duties in the outer roads. Vessel must sail to make Los Pajaros Pass in daylight.
HEALTH: Vessels arriving directly from abroad must take Free Pratique at San Nicolas or Rosario, with the usual pre-advice to Agents there, which is essential for preparation of Notice of Readiness.
RADIO: Nearest station is Rosario LSQ 38, on 477 kHz. A1 LSQ broadcasts daily, at 1305 hrs., the depth of water in the Parana River from Los Ratones to Los Pajaros, and also the minimum depth between Santa Fe and Rosario.
TUGS: None available locally, but one tug is required on sailing from the new elevator berth and has to be ordered from Santa Fe.
BERTHS: Grain is loaded from the new elevator at the North end of the port, section 4, where there is 30 ft. Only one vessel may load at a time. Loading rate is up to 600 tons per tube per hour, work being possible with two tubes simultaneously.

It is possible to load a second vessel, lying second off, if the beam of the vessel alongside permits.

Storage capacity in port is about 50,000 tons, of which 20,000 tons are in elevator at section 4.

There are tanks for vegetable oil with a capacity of 4,000 tons. Pumping rate is about 120 t.p.h. to vessels' tanks.
STEVEDORES: Working hours: 0600–1200, 1200–1800. Overtime if required 1800–2400 and 0000–0600 hrs.
FRESH WATER: Available at the new elevator berth.
FUEL: Not available.
REPAIRS: Only minor repairs possible.
DENSITY: Fresh water.
MEDICAL: Hospital available.
CONSULS: None. Outward bound consulate despatches should be requested from Rosario or Buenos Aires.

IBICUY: 33.39 S. 59.15 W.

Km. 218 – River Parana (Province of Entre Rios) "B" category port.
N.B. Refer to beginning of Argentina and River Plate Ports.

Situated 3.5 miles up the River Ibicuy, on the right bank of the River Parana Pavon from seaward, 177 miles from Buenos Aires by river.

With the closing of the rail ferry from Zarate this port has now been closed down, and is unlikely to reopen.

LA PLATA: 34.54 S. 57.55 W. (See Plan Book)

(Province of Buenos Aires) "B" category port.

N.B. Refer to beginning of Argentina and River Plate ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

This port is situated on the left bank of the estuary of the River Plate from seaward, 30 miles South of Buenos Aires. It is the capital of the Province of Buenos Aires and is rapidly becoming industrialised.

APPROACHES: Access to the port is by a channel, which leaves the main entrance channel to Buenos Aires at km. 57. It can be dredged to 28 ft. maximum. La Plata Roads extend for 3.5 miles from the moles.

PILOTAGE: Coming from the sea, or Montevideo, the Recalada or Uruguayan Pilot will take the vessel to La Plata Roads 27 ft. where a La Plata port Pilot comes aboard.

From up river to La Plata, the river Pilot is dropped at Intersection, where a new Pilot takes the vessel to La Plata Roads for the port Pilot to come aboard.

ANCHORAGE: Four miles S.E. of Recalada.

RESTRICTIONS: Vessels navigating in the entrance channel have preference over those in the River Santiago, and those which by reason of size must turn at Four Mouths have priority over others in their vicinity.

There must be no crossing or overtaking of vessels over 60 m. long or 9 m. beam, or 20 ft. draft and for this reason vessels ready to sail from Gran Dock will not let go while any vessel is entering by the entrance channel.

Vessels over 190 m. in length can only manoeuvre in daytime, with a minimum visibility of 1,500 m. and with a wind not exceeding 10 knots.

On entering or sailing on a rising tide minimum depth cannot exceed vessels draft, and on a falling tide there must be 50 cm. (1 ft. 8 in.) under the keel.

Regulations for the Santiago River Channel prohibit movement between sunset and sunrise for vessels over 140 m. long, or drawing over 24 ft. Vessels over 11 m. beam cannot cross or overtake, and vessels in this channel must not interfere with those moving in Four Mouths (Cuatro Bocas).

MAX. SIZE: Regulations limit length, beam and draft to 215 m., 30 m. and 9.15 m. (30 ft.) respectively.

HEALTH: Free Pratique — radio messages should be sent direct to Agents in La Plata if vessel is entering direct.

RADIO: Station LOM 524 kHz, A2. State oilfields have a VHF service, range 50 km. for communication with their vessels on 156.5 MHz during the first 15 minutes of each hour.

TUGS: Two tugs must be used, each of a minimum 820 h.p. Normally join vessel in entrance channel. Also see "General" before first port.

BERTHS: The port comprises Rio Santiago, Gran Dock and the Propulsora berth, 5 km. up the river Santiago, also known as Port Ingeniero Rocca.

Rio Santiago: The grain elevators on the West side of the entrance channel are no longer in use, and their installations would require considerable repair. This berth is 450 m. long, due West of the Four Mouths turning basin. Four tanks for reception of liquid chemicals have been installed here, capacity 2,300 tons.

There are no fixed cranes at the berths, but a number of mobile units are in use. No lighters are available, unless brought from Buenos Aires.

Of the two Packing plants, one, Armour, is completely closed down and would need considerable repair to re-open. The other, Swift, is operating at less than capacity, for local demand, and any export meat is trucked to Buenos Aires for shipment.

Gran Dock: Seventeen berths, depth 26 ft. alongside. Also see "Tankers".

Berth No. 11 at the N.W. end of the dock is used for handling Ammonium Nitrate, in 1,000 ton lots. There are no sheds or cranes here, though portable cranes are available. Smoking is prohibited within 25 m. of either end of the ship on shore, and no naked lights are allowed on board.

Maize and sugar is loaded over this berth (slitting bags) and it is also used for discharge of steel in rolls for Propulsora when the one berth at Ing. Rocca is occupied.

Berth No. 10 is used for petroleum coke, about 10,000 tons monthly, which is stockpiled alongside. Vessels should have their own grabs for use on their own gear and normal yield is 4,000 tons in a 12 hour double shift day.

The old grain elevators on the Western head of Gran Dock are no longer in use and the proposal to repair them has been shelved. The wharf here is 380 m., and there are 4 tanks for reception of imported chemicals.

The two old packing plants on the Eastern side of Gran Dock were sold early in 1978, but nothing is yet known of their eventual use. The ex-Armour plant is completely closed down and the ex-Swift plant working for local demand only.

Propulsora: A cold rolling steel mill has been built inland and a 5-km. channel dredged to 30 ft. from "Cuatro Bocas". There is one berth here, 154 m. long, though vessels of up to 205 m. LOA have operated here. The material used in the mill is imported in coils, and exports of cold rolled sheets and wire are also handled. There are two cranes, 30 ton and 32 ton capacity and combined rate of discharge is 500 t.p.h. Work is continuous.

Some 600 m. from the wharf itself, there is a turning basin 300 m. diameter. Vessels go in bow first, as there is less water to the South end of the wharf, and turn in this basin before returning down channel to La Plata proper. Only one vessel can operate at a time here. Vessels are secured to bollards on shore at the bow, and a mooring buoy astern.

TANKERS: *Gran Dock:* There are 11 petroleum intakes in Gran Dock, including one 24 in. line and several of 16 in., 14 in. and 12 in. At No. 5 there is an 8 in. connection from the Petrochemical plant some 6 km. away for loading of benzene and other petrochemicals.

The turning basin at the South end of the Dock is 180 m. in diameter, and for those vessels unable to use this there is turning space in 27 ft. at Cuatro Bocas, the junction of the Santiago River, access channel and Gran Dock. Vessels using this must turn here and reverse to their berth in the Dock, usually for Nos. 11, 10, 4 and 5 only.

Special regulations for Gran Dock permit vessels to moor with bows either inwards or outwards, indiscriminately. Those moored bows inwards (facing South) will be assigned, preferably to intakes 4, 5, 10 and 11, and must sail immediately after finishing operations, taking preference over others about to sail.

Vessels between 175 and 215 m. length, or drawing 22 ft. or more can navigate ahead or astern, and will turn in Four Mouths on entering or sailing as the case may be. When such vessels are moving stern first, the Prefecture will make sure that there are no craft of more than 5 m. beam moored on either side of the Armour Freezer, shifting these if necessary.

Vessels of less than 175 m. length or with a draft of less than 22 ft. must turn in the Turning Basin on entering or sailing.

Turbine steamers of over 140 m. in length will only use the Turning Basin in daylight.

For safety reasons there must be one tug and one fire-fighting craft on service and ready to sail.

No mooring second off is permitted except for tugs and vessels receiving dirty ballast or liquid from cleansing of tanks, or when supplying steam.

Degassing tanks is prohibited in port.

Heated repairs can only be carried out under deck and on special authorization from authorities.

MOORING: Vessels of up to 150 m. length will employ 4 men for mooring, and those over 150 m., 6 men. Mooring hours in ordinary time are from 0600/1800 hrs. on week days, 0600/1200 hrs. on Saturdays. There is a 50% extra from 1800/2400 hrs. on week days or from 1200/1800 hrs. Saturdays, and 100% at all other times.

SEMAPHORE: For night signalling of the depth of water in the access channel, the system is similar to that at Martin Garcia and Riachuelo, Buenos Aires. By day signals are hoisted on a tower at km. 4,460 on the access channel arm if tide is rising. If the river is stationary or falling, no flag is hoisted.

MEDICAL: Doctors and hospital facilities available.

FRESH WATER: Delivery by barge, capacity 300 tons and pumping with barge's own pump, 100 t.p.h. There are also connections at the berth.

FUEL: Available alongside and by barge.

REPAIRS: All repairs can be effected except those requiring a dry dock.

CONSULS: Following countries are represented in La Plata: Belgium, Brazil, Great Britain, Italy, Norway and Spain. All other consuls at Buenos Aires.

SHORE LEAVE: Allowed, provided crew members in possession of Identification Cards.

AUTHORITY: Capitan de Puerto de La Plata.

RAMALLO: 33.32 S. 59.59 W. (See Plan Book)

Km. 326 – River Parana (Province of Buenos Aires) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

APPROACHES: The port is on the left bank of the Parana from seaward, where the river is divided into two by the Isla de las Hermanas. Traffic up river normally keeps to the starboard channel at this point, or the port when downstream and the entrance into Ramallo, although buoyed, is not lighted. No depths are given for the access but as a guide, when the main channel of the Parana is at say 24 ft., then vessels can safely load to 18 ft. in Ramallo. However, with the building of a new elevator, 20,000 tons capacity to replace that damaged some years back, movement has recommenced and the River Bulletin publishes 21 ft. for the elevator mole, and 24 ft. 6 in. for the hardboard mole. Nevertheless, it is advisable to check on access depths.

PILOTAGE: According to the Maritime Digest, port Pilot must bring the vessel in from the main channel, and take her out there again, a distance of 5 miles. The Roads are technically in the main Parana, but it is usual to anchor 150 m. off the wharves. 6 hours notice required for Pilot as he has to come from Rosario.

RADIO: Agents at San Nicolas must be contacted either through Buenos Aires Radio, or via Rosario, LSQ 38, on 477 kHz A 1.

TUGS: See "General" before first port.

BERTHS: Apart from two damaged moles, out of use, there are, from South/North:

Grain Board Mole. There is an elevator, capacity 12,000 tons and two loading belts, load rate 250/300 t.p.h. each. The berth, for one vessel not over 145 m. length, consists of a small jetty and several dolphins and two mooring buoys.

National Mole. Concrete wharf 100 m. long, with three sheds on it, used by sand hoppers, and by river craft.

Fiplasto Mole. Used for discharge of fuel to the hardboard factory, from tankers. There are two dolphins with 24 ft. 6 in. water. As the current runs fast here, vessels may roll with any wind, and it is recommended to put out more ropes than usual, both fore and aft.

FUEL: Not available.

FRESH WATER: Not available, except by drums from a tank on the National Mole.

MEDICAL: Attention available, but no hospital.

CONSULS: None, consular clearances can be effected at San Nicolas.

REPAIRS: No repair facilities.

ROSARIO: 32.57 S. 60.33 W. (See Plan Book)

Km. 420 – River Parana (Province of Santa Fe) "B" category port. *N.B. Refer to beginning of Argentina and River Plate Ports.*

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

APPROACHES: Outer Roads, between buoys 410 and 413.

PILOTAGE: The port Pilot will come on board off km. 411, by launch. Vessel should whistle for him if not here to meet the ship (2 long, 1 short).

ANCHORAGES: Between kilometres 410 and 413. Both anchors should be used.

RESTRICTIONS: *Fog.* In thick fog, special permit must be obtained to enter or leave. There is an average of 6 days fog per month in the period April/August but only 1 day per month in the rest of the year. Electric storms are frequent.

Maximum speed in Zone. From Saladillo stream North, there is a limit of 6 knots, up to Punta Barrancas.

There are no restrictions as to length and breadth of vessels, but draft and size of vessels are subject to river depth, which is very variable and no standard information can be given. Vessels up to 27 ft. draft are permitted to navigate the River Parana up to Rosario and San Lorenzo, provided vessels speed exceeds 10 knots and that there is at least 1 ft. keel clearance. Above Rosario controlling depth 22 ft. Vessels loading in Parana Ports must keep close contact with Agents for daily forecasts of admissible draft crossing Martin Garcia Bar to avoid risk of overloading and consequent delays.

HEALTH: Free Pratique, use Radio LSQ 38, on 477 kHz, or via Buenos Aires Radio.

TUGS: Two tugs are available, controlled by Port Authority. See "General" before first port.

RADIO: All messages through Pacheco Radio, call sign LPD, operating on 425 kHz. Pilots equipped with VHF radio Channel 16.

BERTHING: A new concrete wharf, 616 m. long, is ready just North of Unit 6 (previously Unit 13), and immediately behind this a larger basin is being built, to 30 ft., which will add 4,250 m. of new quay frontage to the port. It is intended to centralise here the movement in fuels, coal, gravel, sand, etc., and to use it for discharge of grain barges which now form a large part of the pusher trains in use on the river, and which have materially changed the type of river transport. Dredging of the basin itself is ready, but the necessary retaining walls or wharves have not been commenced, so that much of the dredging effort is being lost through crumbling of the sides: Work continues on a 80,000 ton elevator (Unit 7) South of the 616 m. wharf, to load either to the river side or into the new basin berths, to the West, but work has also been delayed.

At the present time, the situation from North to South of the various piers is as follows:

Montserrat Wharf. Used by river craft only.

Unit I. Of the 4 jetties, only Nos. 1 and 2 are in use, and can deliver 170 tons of grain per hour each, accommodating one vessel in 21 ft.

Refineria Argentina Mole. In use for discharge of fuel oil only.

Unit II. Only 1 berth in 24 ft. 9 in. with 2 spouts, 200 t.p.h. each or 125 tons by-products.

Unit III. Known previously as Unit IV, can work with 2 tubes, 250 tons each, berth for 1 vessel only. The space between Units II and III is now out of use.

Unit IV. This is still under repair, a belt joining the 3 sheds previously known as Units 5, 6 and 7 is being installed. Eventually there may be 2 loading tubes and berth for 1 vessel.

Old Unit No. 8 has been dismantled and taken to Victoria.

Deposits 3 to 30. These still exist, but the area 3 to 17, originally allotted to Bolivia for use as a Free Zone, has now been replaced by the transfer of sheds 23 to 30 to the Bolivian zone.

In 1978 only sheds 23/4 and 25 had been readied for Bolivia, using a frontage of 342 m., with 3 portal cranes. The final transfers will be for a total of 54,667 sq.m., against the present 17,300 sq.m. and a frontage to the river of 998 m. There is no indication as to when this longstanding agreement will be fulfilled, and in the meantime, the area of sheds 3 to 17 is being used for transhipping cargo to Paraguay.

Sheds 29/30 have been rented, and the wharf being used in breaking up the navy aircraft carrier.

Unit V. Is the Old Unit X, renumbered. Two vessels can berth here and there are 2 spouts workable per vessel at 200 t.p.h. each spout.

What was Unit XI is now rented for the storage of oilseeds, and Unit XII has been dismantled. Vessels can berth here to load expellers by belts.

New Pier. At this point the new pier, 616 m. long, has been finished, though with no cranes installed as yet, lines being in place for the expected portal cranes. Neither are there any sheds and for the moment the wharf is used for loading expellers, ex truck, over portable conveyors and vegetable oil ex-tank. There is a 30 m. gap between the South end of the wharf and Unit VI, with a slight change in line of the river front. The former petrol storage tanks, behind the elevator, are now used for vegetable oils, load rate 120 t.p.h., one line. Tank capacity total 3,200 tons.

Unit VI. The South Elevator, previously numbered XIII, now has 29 ft. at zero, and can handle 2 vessels, if both under 150 m., or one if over that length. Load rate is 1,200 t.p.h per berth, over 3 tubes to each vessel, or 5 tubes if to 1 vessel only (2,000 t.p.h.). Storage capacity is 125,000 tons. A further 360,000 tons storage capacity in the underground deposits in the cliffs on the far side of the future river basin will eventually be connected to Unit VI. At present their cargo is shifted to truck or rail.

Immediately South of the existing elevator a new 80,000 ton elevator is under construction, and which will form part of the Unit VI complex, which will then have 6 berths to the river front, and possibly others to the river basin.

Entrance to the future river basin will be South of the extended Unit VI, and to the North of the Meat packing plant and cattle ramp, while South of this a shipbuilding yard is under study. The pier at the packing plant is 175 m. long.

The port zone proper ends at Saladillo stream, on the South side of which the Swift Meat Packing plant has a pier, 175 m. long, for the loading of its products. There is also a line here for loading vegetable oils in bulk, capacity 100 t.p.h.

The projected basin will have its entrance between the Inflammables zone and the Cattle berth, and South of the Cattle berth a shipbuilding yard is projected.

Cranes. There are a large number of electric cranes, and the port is built in such a way that with few exceptions all cargo discharged must be handled by shore cranes. If the river is high, and shore cranes cannot operate to the vessel, the ship may discharge to shore, for the shore crane to place on railway cars, etc.

Bills of Lading covering lifts of 2.5 tons or more should be claused in such a manner that any extra expense in landing them is for account of the cargo.

Floating cranes. There are two, 90 tons and 50 tons.

Allotment of berths. May depend on the availability of grain to the particular shipper, but normally berths are allotted in order of arrival.

Fenders. Vessels must use fenders for keeping them off, and can use their own or hire from the port.

Ashes, etc. Arrangements can be made with Agents for daily removal.

STEVEDORES: Gangs supplied according to vessels requirements by private companies under Government supervision.

Normal capacity per gang, per shift:
20 to 25 t.p.h. frozen meat.
120 to 140 tons per shift general cargo.

MEDICAL: Private and state-owned hospitals. All facilities available.

TANKERS: Discharge at Moles 3 and 4.

FRESH WATER: Only available at the berths on the Southern part of the port, except at the new wharf.

FUEL: All grades available, by barge.

REPAIRS: All repairs excluding dry docking, can be effected.

AIRPORT: 16 km. from port. Daily flights to Buenos Aires.

CUSTOMS ALLOWANCES: 60 cigarettes per day, and 2 bottles spirits each man.

CONSULS: The following countries are presented at Rosario:

Belgium
Brazil
Chile
Denmark
Dominican Republic
Ecuador
Finland
France
Germany
Great Britain
Greece
Italy
Lebanon
Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
Spain
Sweden
Switzerland
Syria
Uruguay
Yugoslavia

POLICE/AMBULANCE/FIRE: Police 29071; Ambulance 45600; Fire 20147.

TELEPHONES: Can be placed aboard.

SHORE LEAVE: No restrictions.

AUTHORITY: Rosario Port Administration.

SAN LORENZO: 32.45 S. 60.38 W. (See Plan Book)

Km. 442 – River Parana (Province of Santa Fe) "B" category port.
N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

On the left bank of the River Parana from seaward, 16 miles above Rosario and 238 miles by river from Buenos Aires or 202 miles via the Mitre Channel.

The port includes the separate sections of Puerto Borghi, Puerto San Lorenzo and Puerto San Martin.

PILOTAGE: Available, six hours notice required.

APPROACHES: Access is controlled by the passes Destileria and Borghi above Rosario.

ANCHORAGE: Vessels may anchor in the roads between buoys 447 and 449.

MAX. SIZE: Up to 27 ft. draft depending on river depths.

HEALTH: Vessels coming in from abroad, should take pratique in Rosario Roads, advising Agents there in good time.

RADIO: Use Radio Rosario LSQ 38, on 477 kHz A1. This broadcasts, in Spanish at 1305 hrs. daily, depth of water in the river between Santa Fe and Rosario.

TUGS: See "General" before first port.

BERTHS: *Puerto Borghi.* Is a privately owned berth used for loading zinc ores, cinders and sulphuric acid. It consists of 3 dolphins each 6×9 m., spaced 21 m. apart, giving 60 m. alongside which vessels can lie. Both anchors must be laid out and moorings taken to shore. There is a conveyor belt, rate 60/80 t.p.h. fixed by a crane to work at an angle of from 20°/25°, so that if vessels are loading both fore and aft they must shift to position their holds. The belt is reversible, and can be used for discharging vessels fixed with bucket dredge gear in each hold. There is ample water alongside.

This port comes under Rosario for Customs, but under San Lorenzo for Maritime Prefecture control, and stevedores are taken from San Lorenzo.

San Lorenzo proper is a third category Custom House and thereby independent of Rosario. There is an important petrochemical complex here which is being extended, which may lead to an improvement in port facilities.

The roads are between buoys 443 and 445 in the main navigation route and within this area vessels may anchor to await entrance to port, without paying dues.

This was originally a grain port but this now takes second place to industrial developments.

At km. 443 there is a short concrete mole 50 m. long, with 21 ft. alongside used for liquids, (Duperial Berth), chemical and petrochemical products.

There is a grain elevator at Unit VIII (ex. 14), with a total storage capacity of 80,000 tons, and 39 ft. alongside. The elevator has one tube, with a load rate of 150/180 t.p.h. Bulk sugar also stored in sheds and loaded over belts at up to 300 t.p.h.

There is also a pipe-line at this berth for loading vegetable oils in bulk, rate from 120 t.p.h.

A line for loading fuel oil has also been installed here.

State Oilfields YPF have a large cracking plant here, with 3 concrete piers of 80, 60 and 80 m. long respectively, in deep water and situated just North of Unit VIII. Piers 1 and 3 operate in the discharge of crude from overseas or coastal tankers and in the loading of products with four 6 in. and 10 in. lines. No. 2, with the same size lines is used for coastal tankers only. Rate 700/800 t.p.h.

Esso have two dolphins here for discharge, with 6 in, and 10 in. lines respectively, but in 23 ft. only.

San Martin port starts after the Esso berth, and at the commencement is the old car ferry, now used for launches only, draft 6 ft.

Next to this is the *Gas Del Estado Mole,* receiving Propane at 200 cu.m. per hour, or Butane at 150 cu.m. per hour. These rates drop appreciably with back pressure in the tanks. Ammonia also handled.

At 400 km. is the *Dempa Mole,* with two lines for loading vegetable oils at 150/230 t.p.h. Expellers are also loaded over belts at 250/300 t.p.h.

El Transito mole is used for loading linseed or soya oil over a 10 in. line, and there is also a line for discharge of fuel oil. Expellers are loaded at 150/180 t.p.h., one spout.

El Litoral mole takes the place of the old Bellavista wharf, and operates in grain by belts, rate 300/350 t.p.h.

At km. 451 is the *Pasa* petrochemicals installation, with dolphins at either side of the head. Small vessels (under 80 m.) can berth along the arm working to trucks which operate round the base, while for larger vessels, berthed to the dolphins, trucks turn and reverse up the longer arm. At this site only one gang can work, though there are a number of pipe-lines, capacity up to 1,000 t.p.h., for the various products, including ammonia. Hydrocarbons for the plant are received by pipe-line from the refinery at San Lorenzo.

Max. LOA 200 m. – 210 m. Max. sailing draft 23 ft.

STEVEDORES: Working hours – 0600/1200, 1200/1800, in ordinary time, and in overtime, if required, from 1800/2400, 0000/0600.

FUEL: Available.

FRESH WATER: Small quantities available; Masters are recommended to take elsewhere if possible.

MEDICAL: Attention available.

REPAIRS: Small repairs attended to. It is also possible to bring specialists from Rosario if bigger jobs have to be handled.

CONSULS: Consular clearances must be made at Rosario.

AUTHORITY: Administracion de los Puertos Parana Medio.

SAN NICOLAS: 33.20 S. 60.13 W. (See Plan Book)

Km. 343 – River Parana (Province of Santa Fe) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

On the left bank of the Parana River, from seaward, below Rosario, and 188 miles by river from Buenos Aires.

PILOTAGE: Compulsory. 6 hours notice required to bring Pilot from Rosario.

APPROACHES: Between San Nicolas and Rosario are the "Paso Paraguayo" and "Abajo Yaguaron" passes, and below San Nicolas, apart from Martin Garcia, the "Tonelero" and las "Hermanas" passes.

The old-time characteristic of a grain port has been submerged in the industrial complex which has grown up around the steel mill, but grain is still shipped here.

The entrance channel to the port from the river is kept dredged to 24 ft. 6 in. at zero.

MAX. SIZE: Draft up to 24 ft. depending on river conditions.

RADIO: Use LSQ 38, Rosario, on 477 kHz A1.

BERTHS: From North to South the sections of this port are:

Old Port. Out of use.

New Port. Consists of a 287 m. long berth, with ample water alongside, with two dolphins upstream. Here a 250 m. extension is being built to make a total frontage of 537 m. There are no sheds on the dockside, but one railway line exists, and there are 7 portal cranes, one of which is out of use. Two cranes can handle 20 tons each at 15 m. radius or 12 tons at 25 m., three of 1.5 tons and the remaining crane 3 tons.

New Port Administration and Naval Prefecture offices have been installed on the cliff above the berth, they were previously in the old port 4 km. away. Agency offices are in the old town.

Grain Berth: 90 m. downstream is the recently finished Grain Berth, which came into operation in 1977. It has 6 telescopic tubes, on a 143 m. length and with 25 m. between tubes. There are four breasting dolphins and a vessel's bows can be moored to the end of the New Port wharf.

With one belt as installed loading rate is 600/800 t.p.h. A second belt is to be installed and then rate will increase to 800/1,000 t.p.h. on each. The existing belt is connected to the new elevator, 14,000 tons capacity, and the former Alcohol factory has been converted to an elevator capacity 45,000 tons and connected with a long overhead conveyor to the new elevator. It will also connect directly to the second belt.

Superusina Mole. This is the last of the sectors of San Nicolas proper, and consists of a concrete mole 200 m. long, with ample water alongside. There is a fixed heavy lift crane here, with a reach of 25 m. and capable of lifting 140 tons out of the square of the hatch of a vessel, or 180 tons from on deck. This part of the mole is reinforced.

There are also a 16 ton and an 8 ton crane for grab discharge of coal to an endless belt system working a coal stacker, handling 1,500 tons daily.

Puerto Buitagro lies South of the Ramallo brook, and comes under the district of Ramallo, although administered by the San Nicolas port authorities. It handles all the movement of the State Steel Mill, Somisa, the capacity of which is presently being increased to produce 2,500,000 tons of steel per year.

Again, from North to South, the moles are:

Ing. Buitagro general mole. 300 m. long, for movement of general cargo. It is 16 m. wide and has 1×30 ton crane and 2×15 ton cranes.

Somisa Wharf (Ex-Gotaas Larsen berth). This berth consists of 4 dolphins, 35 m. apart, with bollards on the 1st and 4th used by the lightening vessels for discharge of coal or iron ores, while ocean carriers discharge direct at the Buitagro Wharf.

Ing. Buitagro Bulk Wharf. 680 m. long, immediately South of the Gotaas Larsen berth. Dredging is carried out continuously and there is 26 ft. at zero alongside. Four vessels of up to 22,000 tons can operate, plus 2 more in second tier. Storage capacity in the yards adjacent to the wharf is 1,370,000 tons iron ore and 300,000 tons of coal. Discharge is by grab, 1×45 tons and 2×12 tons each giving a discharge rate of 4–500 t.p.h. provided hatches are sufficiently wide to permit easy working.

Capacity of the belts is being increased, to meet the requirements of the larger capacity, now raised to 2,500,000 tons installed capacity, and which will be increased to 4 million tons in 1980. These include a new 1,400 t.p.h. discharge unit for ore and/or coal, a new system of conveyor belts 860 m. long, a stock piler capacity 5,000 t.p.h. and belts for moving coal 1,200 m. from stock pile at 3,000 t.p.h. with a transfer tunnel 600 m. long fitted with 13 vibratory screen feeders.

At Puerto Buitagro all discharge or loading is carried out by factory personnel, no outside stevedores engaged.

The bulk wharf has been extended South with a berth for self-discharging ore carriers, or colliers, and also for ore carriers using shore installations. At the moment this berth is used by the Gotaas Larsen lightening vessels only.

TUGS: None needed at the New Port or Buitagro berths, as vessels enter bow upstream, and the current is strong enough to turn them on leaving. Only in the event of high winds should tugs be ordered from Villa Constitucion. Also see "General" before first port.

DENSITY: Fresh water.

FRESH WATER: Available at berths.

FUEL: Available, but must be delivered from Buenos Aires or San Lorenzo by truck.

REPAIRS: Possible.

MEDICAL: Doctor, hospital facilities available.

CONSULS: Italian, Portuguese and Spanish.

SAN PEDRO: 33.42 S. 59.39 W. (See Plan Book)

Km. 277 – River Parana (Province of Buenos Aires) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

On the left bank of the Parana River from seaward, below Rosario and 151 miles from Buenos Aires, by river.

APPROACHES: There are no bars below this port, except Martin Garcia, and vessels can therefore load to the limits of either Martin Garcia or Mitre Channel at its maximum of 30 ft.

The roads are 1,500 m. down-stream from the entrance channel. Also see "Berthing".

PILOTAGE: Pilot sent from Rosario.

ANCHORAGE: Vessels can anchor if necessary about 500 m. from wharf.

HEALTH: Free Pratique can be taken, but it is advisable to radio Agents at Buenos Aires for them to arrange, since there is no radio here and the Doctor must come from San Nicolas.

RADIO: None; use Rosario LSQ 38, 477 kHz A1, or Buenos Aires.

TUGS: See "General" before first port.

BERTHING: Access channel from the roads is kept at over 32 ft. and vessels must order their Pilot 6 hours in advance, since he comes down from Rosario by road. Draft in all the overseas basin is well beyond 30 ft., soundings taken in April 1977 showing 45 ft. in the centre and a minimum of 28 ft. at plumb of the wharf (taken on a river height of 2.48 m.) the loading gallery, at 35 m. high, has 7 tubes, and an overall length of 110 m. Tube radius is 16 m., and extension to the telescopic arms is available. Vessels moor bows to the N.E., swinging in the basin East of the wharf, with a maximum turning length of 225 m., and turn on their engines, use of tugs not being necessary, since wind problems are minimal with the high cliff close in.

Vessels moor port side to with three lines from the bow, two astern and two springs from midships aft. Maximum beam is 32 m.

Elevator capacity is 7,000 tons in one, plus 24,000 tons in a second elevator which came into use in early 1978, and another 90,000 tons in underground chambers connected by belts to the main elevator. At the moment only one belt is working, capacity 500/600 t.p.h. A second belt is to be installed with a similar capacity shortly. Hand trimmers are available if needed and there are also centrifugal trimmers for use on the tube. Any bagging needed must be done on board.

By-products are also loaded over a second berth at the head of the wharf, 88 m. wide at this point, taking vessels of up to 150 m., shifting as needed. Loading is over portable conveyor belts, of which there are three in use, loading 80 t.p.h. each. The by-products are loaded ex-truck onto the conveyors, and can be stored in a shed on the main mole.

There are no cranes or railway lines, in the port, the station being some 4 km. away, and the grain enters by truck from the large hinterland nearby.

The coastal basin, N.W. from the main basin, can only take river barges, maximum depth being 11 ft., and some by-products enter there.

Authorisation has been granted for a second grain berth to be installed on the South side of the overseas basin, which is 100 m. wide. This will be a privately owned berth, with elevators for 150,000 tons, and an estimated yearly tonnage of 500,000 tons.

DENSITY: Fresh water.

FRESH WATER: Available at the berths.

FUEL: Not available.

MEDICAL: All medical assistance can be obtained. Hospital.

REPAIRS: Minor repairs can be effected.

CONSULS: None; consular clearances effected at San Nicolas.

SANTA FE: 31.40 S. 60.37 W. (See Plan Book)

Km. 585 – River Parana (Province of Santa Fe) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

Situated on the Santa Fe river, a tributary of the Parana, 90 miles by river from Rosario and 312 miles from Buenos Aires or 226 miles via Mitre Channel.

APPROACHES: Entrance to the port is through an access channel, 6,085 m. long, and with 24 ft. at zero.

On this section of the river, from Rosario to Santa Fe, vessels must keep 2 ft. under the keel if measuring less than 50 fiscal units, or 2 ft. 6 in. if over. This applies when the hydrometer at Santa Fe indicates over 1.70 m. of water over zero. If the hydrometer measures less than 1.70 m. (5 ft. 7 in.) then vessels must have 2 ft. 6 in. and 3 ft. 6 in. respectively under the keel.

PILOTAGE: Port Pilot comes aboard in the Parana, at the mouth of the entrance channel. 6 hours advance notice is required for the Pilot to be in position.

ANCHORAGE: Although partially dredged in 1975, restrictions have not been lifted and vessels can only enter or sail between 0900 and 1700 hrs., and if unable to enter within this period must wait in Diamante Roads (km. 533) and follow radio instructions from the Prefecture. If the Diamante Roads have already been passed, a vessel may lie below Punta Alvear, or eventually at km. 568 (Animas de Paracao) but must immediately notify the Santa Fe Prefecture.

Vessels sailing must leave with sufficient margin to be able to pass "Los Pajaros" (km. 468/473) in daylight, and avoid anchoring in the sectors indicated above as reserved for Northbound vessels.

Exceptionally vessels under 160 m. LOA may anchor in Diamante Roads, if they leave in daylight and arrive in the roads before sunset, and provided there is no other ship anchored there. These instructions apply under normal hydrological conditions, and with unusual changes in water depth may be changed by the Prefecture.

SIGNALS: There is a signal station on the top of the tower of the new elevator (unit 1) in visual and radio contact with the control station tower at the river end of the access channel, where the signals are hoisted. It is also possible to observe movement in the roads from here.

The signals in the entrance channel are:

By day (shown at both ends of the access channel)

White globe, 60 cm. diameter	Channel free for overseas vessels.
Red biconic mark	Exit only for overseas vessels.
Green cone	Free movement of coastal vessels.
Yellow cone	Movement of coastal vessels allowed, but with precaution.

By night (interior signal staff only)

White flashes	Entrance free for overseas vessels.
Red flashes	Exit free for overseas vessels.
Green flashes	Free movement for coastal vessels.
Green and red flashes	Coastal movement only with restrictions.

Absence of signal – signifies port and channel closed.

All vessels will await the corresponding signals, which can be asked for by whistling, repeating 1 long, 3 short, for overseas vessels, or 2 short, 1 long, for coasters.

Should the absence of signals be due to a failure of the system, instructions will be sent by the Authorities.

NAVIGATION: *In the Channel:* Maximum speed in the entrance channel is 5 knots, however, the Pilot can advise on other speeds.

Movement by night is possible, but usually Pilots will not take a vessel out after 1500 hrs., since navigating the passes down river might oblige a vessel to lie in the roads, and turning there would require the use of 2 tugs, it being easier to wait until through transit down stream is possible.

During fog. Usual international precautions must be observed, but if the fog is very thick, entrance or departure of vessels is prohibited without special permission. There are no official statistics as to frequency of fog, but in the period May/August there may be 5 to 6 foggy days a month, and in the rest of the year one or two a month.

HEALTH: As there is no radio station here, Master should radio Agents with the usual request for Free Pratique.

RADIO: Regulations in this port state that Agents or Consignees must give written notice to the Port Authorities 24 hours before ETA, with details of vessel, cargo carried etc., or if in ballast, indicating for account of whom the vessel will load.

ETA should be confirmed if there is any change, since the port Pilot and tugboat must be sent out to the main river to meet the vessel. This will also allow the preparation and presentation of the Notice of Readiness without delay.

Radio LSQ 38, on 477 kHz A1, at Rosario, transmits river depth at 1305 hrs. GMT.

TUGS: One tug is required by all vessels over 20 Fiscal units and up to 165 m. LOA, with a second tug standing by at km. 592 unless the Pilot calls for its services (high winds, etc.).

Vessels over 165 m. will have a second tug standing by in the roads. Outbound vessels over 20 fiscal units will take two tugs, and let go the stern tug at km. 592, the bow tug continuing until the roads are reached. However, if sailing from Basins 1 or 2 or the Terminal berth and with no other vessels in the way, one tug only may be taken, provided the wind is below 22 knots.

Also see "General" before first port.

BERTHS: The port is composed of four parts:

Dock No. 1, with stone wharves, 564 m. frontage on the East and 672 m. on the Western side, 120 m. wide and well equipped with cranes, and sheds; 24 ft. at zero.

Between Dock 1 and Dock 2, on the pierhead are tanks for vegetable oil, capacity 5,000 tons and pumping capacity 2/300 t.p.h.

Dock No. 2 lies parallel to Dock 1, and has a piling frontage 900 m. long on the East, 720 m. on the West and 120 m. wide. 22 ft. at zero.

Both docks are served by broad and narrow gauge railway lines.

Derivation Channel. 2,178 m. long, lies to the West of Dock 2. It has open banks, with no stone or wooden frontage. There are a number of dolphins and mooring facilities. It is reserved for Inflammables and there are also two deposits for Quebracho logs and for bones. Although there are railway lines, there are no cranes or facilities for handling cargo. Vessels awaiting orders or effecting repairs can lie up in the Eastern side of the Channel, North of the Esso plant. Shell and YPF plants on the Western side, where vessels may take on bunkers.

Coastal Wharf. Concrete wharf, 810 m. long, lying between the West side of Dock 1 and the Elevator at Unit 1. It has 4 dolphins and can berth and work 2 vessels simultaneously in 24 ft.

Allotment of berths. Allotted by the port by order of arrival. If berthing in the Derivation Channel, spars must be placed to fend the vessel off the bank, and an anchor may also be cast, but this must be done under the direction of the port Pilot.

Loading Grain. There are 2 units, comprising 3 elevators in use. Unit 1 on the South end of the West quay of Dock 1, next to the coastal section, can berth 2 vessels in 24 ft. The elevator has a capacity of 50,000 tons, and the loading gallery has 8 spouts with 3 belts, so that both vessels can operate simultaneously, although no more than 3 spouts can be in use together, with a load rate of 300 tons each, rising to 400 tons in favourable conditions, or when only 1 vessel is loading.

Unit 2 is now composed of the ex-Bunge Elevator on the Northwest of Dock 2, capacity 12,000 tons, and with 6 tubes, loading simultaneously by 2 at a rate of 200 t.p.h. each, and also of the De Ridder Elevator, on the S.W. side of the dock, capacity 6,000 tons, and with 2 tubes, capacity 200 t.p.h. each.

STEVEDORES: Working hours: 0700 – 1300 hrs. and 1300 – 1900 hrs.

FUEL: Available at the pipe-lines in the Derivation Channel. If small quantities only are required, these can be delivered by truck.

FRESH WATER: From hydrants in Docks 1 and 2, or by tug in the Derivation Channel.

REPAIRS: Can be arranged. There are several tugs and lighters equipped to render assistance to vessels.

MEDICAL: Doctors and hospital facilities available.

TANKERS: Berths owned by Esso, Shell, and YPF in Derivation Channel.

CONSULS: At Santa Fe following countries are represented: Italy, Paraguay, Spain. Other consuls at Rosario and Buenos Aires.

AIRPORT: 17 km. from Santa Fe, regular flights to Buenos Aires and other Argentine cities.

CUSTOMS ALLOWANCES: For consumption on board each man allowed 40 to 60 cigarettes a day and 1 litre of spirits a week.

POLICE/FIRE/AMBULANCE: Police: Tel. 21141; Ambulance: 36220 and 24687; Fire: 21212.

TELEPHONES: On board connection is only made for naval vessels.

SHORE LEAVE: Allowed, provided Crew members in possession of identification cards.

AUTHORITY: Administracion de los Puertos Parana Medio.

VILLA CONSTITUCION: 33.15 S. 60.17 W. (See Plan Book)

Km. 365 – River Parana (Province of Santa Fe) "B" category port.

N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

On the left bank of the River Parana from seaward, 33 miles below Rosario and 197 miles by river from Buenos Aires.

PILOTAGE: Port Pilot available, and obligatory.

MAX. SIZE: Up to 25 ft. draft depending on river depths.

TUGS: Vessels over 2,000 NRT must use 2 tugs. Also see "General" before first port.

RADIO: Rosario LSQ 38, on 477 kHz, A1.

BERTHS: *In Villa Constitucion* the old overseas moles are closed. The coastal wharf is also being dismantled, but a concrete mole next to it is being used for this trade. There is a proposal to recondition the old railway wharf in view of increasing movement.

At the Elevator berth 2 vessels can operate, in 27 ft., North and South. At each berth there are several loading tubes, but only one can operate at a time, giving 3/400 t.p.h. on each berth.

Capacity of the elevator is 50,000 tons, plus 170,000 tons in underground deposits. There is also a belt for bag loading.

Puerto Acevedo. Two km. South of Villa Constitucion is Acindar Mole, otherwise known as Puerto Acevedo, where a large steel mill is installed. The port is under the jurisdiction of Villa Constitucion and pending a definite resolution as to Villa Constitucion Roads, vessels awaiting berth anchor off the Acindar mole.

The mole is 110 m. long by 34 m. wide, in 29 ft. and is used for the discharge and storage of steel billets. It is fitted with two 45-ton electric cranes on rails. Vessels of any length can moor, but must shift to present distant hatches. Two new cranes are to be installed shortly, and the former cranes retired from service. Discharge rate reaches 400 t.p.h. per crane with steel billets.

Port Pilot from Villa Constitucion attends here, but tugs are not necessary. No facilities are available, except for water, to obtain which a vessel will have to supply a long hose to be coupled up to the factory itself.

FRESH WATER: Obtainable.

FUEL: Not available.

MEDICAL: Doctor and hospital facilities available.

REPAIRS: Can be effected, if necessary bringing men and equipment from Rosario, or San Nicolas.

CONSULS: Consular despatches must be taken at Rosario.

ZARATE: 34.09 S. 59.05 W. (See Plan Book)

"B" Category port. Province of Buenos Aires.

Situated on the West bank of Parana River, 150 or 65 miles by river from Buenos Aires, and 5 miles upstream from Campana.

N.B. Refer to beginning of Argentina and River Plate Ports.

Also see "River Plate" – Shipmaster's Report dated July/October 1983.

TUGS: See "General" before first port.

MAX. SIZE: Up to 26 ft. depending on river depths.

BERTHING: The river here is wide and deep, but the old moles are no longer in use, having been silted up, with a maximum of 10 ft. at the National Mole. With the opening in 1978 of the rail road bridge over both branches of the Parana (de las Palmas and Guazu) to the Entre Rios Province the rail ferry has been closed down, and there is no sign of any new port works being undertaken here.

The Naval Prefecture at Zarate remains in charge of transit under the bridges and Pilots must maintain VHF contact with Zarate while in this zone (Channel 14). (LSO 23) Vessels not carrying VHF must use medium wave.

Shipmaster's Report: July 1983.

The river at Zarate is wide and deep but the 8 old wharves are no longer used by oceangoing vessels and have silted up to depths of 10 ft. or less.

DEVELOPMENTS: One of the first developments has already been authorized by the Port Authority. This will be a Petroleum storage plant for Paraguay, at km. 112.6 on the Parana de las Palmas river, just upstream from Zarate. It will be for the exclusive use of Crude imports for Paraguay, where ocean tankers will discharge to tanks, and river tankers continue transport to Medin, near Asuncion. Work is expected to commence shortly, but it is not known yet if the berth will be known as "Zarate" or by some other name although it will come under the Zarate port authority.

FRESH WATER: Available at Smithfield Wharf.

FUEL: Not available.

MEDICAL: Doctor and hospital facilities available.

CONSULS: Italy is represented locally. All other consuls at Buenos Aires.

REPAIRS: Small repairs can be effected.

III. *SOUTH ATLANTIC PORTS*

Bahia Blanca
Caleta Cordova
Caleta Olivares
Caleta Olivia
Comodoro Rivadavia
Galvan
Ing. White
Mar del Plata
Necochea
Puerto Belgrano
Puerto Deseado
Puerto Madryn
Puerto Rosales
Punta Ancla
Punta Ciguena
Punta Colorado
Punta Medanos
Punta Quilla
Quequen
Rio Gallegos
Rio Grande
San Antonio del Este
San Julian
San Sebastian
Ushuaia

BAHIA BLANCA: 38.47 S. 62.16 W. (See Plan Book)

(Incl. Galvan, Ingeniero White, Puerto Belgrano, Puerto Rosales, Punta Ancla and Punta Ciguena.)

(Province of Buenos Aires) "B" category port.

Also see "River Plate" – Shipmaster's report dated July/October 1983.

N.B. Refer to Argentina, Section I.

PORT LIMITS: Berthing priority is fixed when vessel arrives at No. 11 buoy in the channel entrance.

Final berthing marks the commencement of time authorised for loading and/or discharging.

DOCUMENTS: Required by foreign vessels.

Registration Certificate.
International Tonnage Certificate.
International Freeboard Certificate.
International Safety Certificates.
General Declaration, Crew List and List of Passengers (signed by the Master).
Sailing Clearance Certificate from port of origin or from last port of call, whichever the case may be.

APPROACHES/PILOTAGE: *Entrance Channel.* Commences at Rincon Light Buoy, which is a whistling buoy, fitted with radar reflectors and is stationed some 17 miles S.S.W. from the Recalada Lighthouse. It is a large buoy, painted with black and white vertical stripes, it can shift or be extinguished, being rather exposed. In case of doubt vessels are recommended to sound and stay outside the 10 fathom line until daylight or fog has cleared. Pilots must be requested 24 hours in advance. See "VHF".

From this buoy vessels must proceed past buoys 1 to 10, and the Bay Pilot comes aboard near buoy 11 (39° 05′ S. and 61° 48′ W.). There is no pilot ship on station, and vessels arriving at this point after sunset must stand off until daybreak, unless a Pilot has been ordered and is approaching, when vessels can anchor and wait near buoy 11. To avoid delay and waiting time, Masters should keep Agents well advised by radio to station LPW 2, which listens from 0700 to 2400 hrs. on 500 kHz. from 19 to 25 minutes past each hour, every hour. As the coast is shallow here, with South or East winds it is advisable to stand well off at night as there is also a tidal current favoured by these winds.

Locations where the Pilot can be taken on board are: buoy 11, buoy 22 and exceptionally buoy 1 (at Master's request).

Pilot vessels intended for this service are: Launch "Skipper" – length 18.40 m., beam 5.6 m., depth 2.60 m., 85 h.p. engine, capacity 10 persons, steel hull; Launch "Carumbe" – length 18.6 m., beam 3.6 m., depth 1.20 m., 105 h.p. engine, capacity 10 persons, wooden hull; Launch "Alo" – length 10.46 m., beam 2.71 m., depth 1.74 m., 105 h.p. engine, capacity 10 persons, wooden hull.

The Bay Pilot takes the vessel to the Bahia Blanca roads, which commence for Ing. White and Puerto Nacional between Naposta Brook and the South Elevator. For Galvan he takes the vessel as far as the South Elevator. At either of these points the port Pilot comes aboard for actual berthing operations.

Vessels bound for Punta Ciguena, Punta Ancla, Rosales or Puerto Belgrano, take on their port Pilot (ordered in advance through the Agents by radio), at buoy 17.

In the access channel the following regulations must be observed:

(a) in the areas included between the pairs of buoys 07–08, 12–16, and 26–29, it is prohibited to approach or cross in front of any vessel which because of its draft has to remain in the centre of the channel, such vessels always having priority.

(b) in the event of two vessels meeting whose drafts do not permit them to depart from the centre of the channel, the vessel leaving port has priority, the vessel entering having to effect such necessary manoeuvres so as to not interrupt its navigation.

The access channel is 150 m. wide and is marked with light buoys, which permits navigation by night. Between buoys 12–16 the depth is 30 ft. and in the access channel to port Ingeniero White, between pairs of buoys 24 and 29, the depth is 33 ft. with a width of 170 m. The maximum draft for vessels navigating the channel is 35 ft., and dredging operations are in hand to bring the depth to 39–40 ft.

Buoys 01, 02, 03, 04, 05, 06, 09, 18, 19, 20 and 21 are mid-channel, and all illuminated. There is a degaussing buoy between Nos. 18 and 19, conical, painted blue and white checks.

Special warning. At very low neaps, and with strong North winds there may be up to 5 ft. less water than is shown on charts.

Tidal range is 12.6 ft. at springs to 6.4 ft. at neaps, but as much as 19 ft. has been observed with S.W. winds, whose action is similar to the Plate winds.

Inner Roads. From Ing. White to Galvan there is room for two vessels drawing 32 ft. to anchor, as well as a number of vessels drawing 24 ft. The access channel to Galvan has been dredged to 32 ft. for the new Inflammable berths, and a turning basin 400 m. in diameter at 33 ft. dredged due South of Galvan pier. The Inflammable berths are at 40 ft.

ANCHORAGE: *Anchorage for merchant vessels:* Buoy 11, 7. The anchorage area has been rendered suitable for merchant vessels. This area is limited by six lit (white) buoys which mark a zone approx. 6 miles by 1.6 miles. Depth of water in the area is 10.5 m.

Punta Ancla Oil Loading point: Constituted by a revolving buoy of the "Swedish" type, situated 1.25 miles to the East of the mid-channel buoy No. 9. It is recommended that vessels do not navigate in this area nor anchor to the North of the axis of the channel.

Punta Ciguena Oil Loading Point: One mile to the South of Punta Ciguena is the oil loading point; its alignment for anchorage is 036.7° formed by the front and rear buoys.

Ingeniero White Roads: The port roads are considered to be from the mouth of the Naposta stream to the front of the Ingeniero White South Elevators Quays, and roads "B" as far as the quays of Puerto Galvan. At high tide, the banks cannot be seen.

Distance Table
Montevideo and Buenos Aires to Ushuaia and intermediate ports
Nautical miles

	Montevideo	Recalada Practicos	La Plata	Interseccion Practicos	Buenos Aires	Mar del Plata	Necochea y Quequen	Arroyo Pareja	Ing White	San Antonio	Madryn	Comodoro Rivadavia	Deseado	San Julian	Santa Cruz	Gallegos	Virgenes (Lighthouse)	Magellan Straits	Ushuaia
Montevideo	—	16	118	108	128	206	279	452	466	626	671	850	891	1015	1076	1151	1167	1182	1376
Recalada Practicos	16	—	102	92	112	190	263	436	450	610	655	834	875	999	1060	1135	1151	1166	1360
La Plata	118	102	—	10	30	292	365	538	552	712	757	937	978	1101	1162	1237	1253	1268	1462
Interseccion Practicos	108	92	10	—	20	282	355	528	542	702	747	927	968	1091	1152	1227	1243	1258	1452
Buenos Aires	128	112	30	20	—	302	375	548	562	722	767	947	988	1111	1172	1247	1263	1278	1472
Mar del Plata	206	190	292	302	302	—	73	246	260	434	479	658	700	823	884	959	975	990	1184
Necochea y Quequen	279	263	365	355	375	73	—	173	187	361	405	584	642	762	823	898	918	933	1135
Arroyo Pareja	452	436	538	528	548	246	173	—	14	280	316	500	568	682	743	818	838	853	1080
Ingeniero White	466	450	552	542	562	260	187	14	—	294	330	514	582	696	757	832	852	867	1094
San Antonio	626	610	712	702	722	434	361	280	294	—	227	411	473	603	664	739	759	774	1009
Madryn	671	655	757	747	767	479	405	316	330	227	—	274	345	473	534	609	629	644	875
Comodoro Rivadavia	850	834	937	927	947	658	584	500	514	411	274	—	156	293	354	429	449	454	703
Deseado	891	875	978	968	988	700	642	568	582	473	345	156	—	153	214	289	309	324	564
San Julian	1015	999	1101	1091	1111	823	762	682	696	603	473	293	153	—	96	171	200	215	487
Santa Cruz	1076	1060	1162	1152	1172	884	823	743	757	664	534	354	214	96	—	114	146	161	450
Gallegos	1151	1135	1237	1227	1247	959	898	818	832	729	609	429	289	171	114	—	67	82	390
Virgenes (Lighthouse)	1167	1151	1253	1243	1263	975	918	838	852	759	629	449	309	200	146	67	—	15	333
Magellan Straits	1182	1166	1268	1258	1278	990	933	853	867	774	644	454	324	215	161	82	15	—	315
Ushuaia	1376	1360	1462	1452	1472	1184	1135	1808	1094	1009	875	703	564	487	450	390	333	315	—

RESTRICTIONS: Port is experiencing silting therefore depths should be checked prior to arrival/fixture. Long delays may be expected.

Puerto Galvan: Night entries are not authorised, sailings being subject to favourable weather conditions.

Shipmasters' Report: 1979.

The Port Authority will not allow vessels with a list to sail.

MAX. SIZE: Entry into the port is allowed for vessels up to 230 m. LOA with a keel clearance of 1 ft.; in the access channels the safety margin is 2.5 ft. In accordance with the current dredging conditions, this allows operation with 34 ft. 9 in. draft.

In Puerto Galvan, Max. lengths of 195 m. are allowed. In Puerto Ingeniero White, at the Elevators Nos. 7 and 8 berth, operations are limited to length of 200 m. and beam of 30 m.

HEALTH: It is necessary to present:
Crew List.
Derat Certificate.
Inspection Certificate of Maritime Health.

The Ship's Agent carries out all orders for obtaining free pratique. The health inspection takes place normally at the mooring berth, and is effected by the doctor who comes on board. Notice must be given 24 hours in advance of ETA, with indication of the port from which the vessel has recently left together with any intermediate ports of call. Likewise, an indication must be given of any illness on board, particularly anything of an abnormal nature.

The Master of the vessel must indicate the number of crew members, passengers if any, and the non-existence of the six "plague" diseases: Cholera, Yellow Fever, Smallpox, Exanthematous Typhus, Recurrent Fever and Bubonic Plague. Also there is a requirement for declaration that there is no transmittable illness on board.

RADIO: LPW 2 on 500 kHz. A2, working frequency 431.5 or, LPW 45 on 4415.8. A3.

For weather forecasts in English, use either Radio Pacheco at Buenos Aires LPD 5 on 512 kHz. A2, or Radio Comodoro Rivadavia LPX 2 on 474 kHz. A2.

VHF: Pilots now use VHF, and Channel 12 is set as a "listening channel' during transit of the entrance and the Naval Base at Belgrano acts as receiver/repeater.

Channel 8 is kept for manoeuvring in port, after contacting tugs and walkie-talkies are used by Pilots and tugs in this band.

Any "bridge to bridge" communications will use Channel 6, returning later to Channel 12.

Channel 9 is reserved for oil tankers for Punta Ancla or Punta Ciguena.

Channel 4 is reserved for Navy use in the Navy Base, but may be used in emergency.

RADAR: No service available.

TUGS: No tugs are required at Punta Ancla or Punta Ciguena. For Rosales and Puerto Belgrano tugs are requested from the Naval Base at Puerto Belgrano, and make contact between buoys 24 and 25.

For the other ports (White, etc.) tugs come alongside in the anteport, where the port Pilot boards.

Argentine vessels are berthed by the Bay Pilot at any of the berths, but foreign flag vessels take a Port Pilot, who comes on board at the Inner roads on one of the tugs, regulations for which are as follows:

Vessels over 3,000 tons gross require 2 tugs, those from 500 to 3,000 tons, 1 tug, and under 500 tons none.

For the Iron mole, vessels up to 10,000 tons do not need a tug, from 10,000 to 15,000 gross, 1 tug and over 15,000 tons 2 tugs.

For Puerto Galvan, vessels over 3,000 tons gross take 2 tugs on entering, and one on leaving provided they berth bows outwards, otherwise they need 2 tugs. Between 1,000 and 3,000 tons, vessels take 1 tug when entering and leaving if they berth bow inwards. If mooring bow outwards they must take 2 tugs on berthing, but require none on leaving.

These rules are for normal weather conditions. Masters can ask for more tugs, or alternatively not pass cables to the tugs if this could be dangerous to the vessel or tugs, but in this case, tugs must accompany the vessel during the manoeuvre to act in emergency.

Also see "General" before first port.

BERTHS: N.B. Agents must give 10 days advance notice of arrival of reefer vessels to the Authorities, and check this with 48 hours confirmation of arrival. Tankers are exempt from this rule but must confirm arrival time at buoy No. 11, 48 hours in advance. Precedence for berthing granted in accordance with arrival at buoy 11 at the entrance channel. All requests for free pratique by radio are made in the usual manner to Agents, with 12 hours advance notice.

The ports in the Bahia Blanca area are, from East to West:

Punta Ciguena	adjacent to each other between buoys 21 and 22 of the access channel.
Puerto Rosales	
Puerto Belgrano	
Ingeniero White	approx. 14 miles West of Puerto Belgrano.
Puerto Galvan	approx. 2 miles West of Ing. White.

Punta Ciguena and Punta Ancla

There is a rotary buoy with connection on the starboard side of tankers. The oil tanks belonging to the State Oil Company have a capacity of 240,000 cu.m. and are connected by pipe-line to the State Refinery at La Plata.

At Punta Ciguena there is a mooring for tankers with four mooring buoys and port side connection. It is currently out of service, and it is intended to replace it by another rotary buoy. As at Punta Ancla, this mooring belongs to the State Oil Co.

Puerto Rosales

An old grain port which is used by small craft, shortly to be fitted out as a private fishing port. The pilot launches are based here.

Puerto Belgrano (Saluting Base)

The entrance channel, 2 miles West of Punta Ciguena buoys, is 1.7 miles long, 150 m. wide and dredged to 30 ft. at zero.

Being a Naval base, care must be taken to observe regulations. In daytime signals are hoisted at the head of Mole C, and at night lights are shown at a height of 34.5 m. from the signal station, being visible for ten miles. A strong green light prohibits entry, and a white light above green prohibits sailing from the port. Two green lights, vertical, both entry and leaving prohibited.

Gunnery Exercises. Captains are warned that in order to avoid any danger, the greatest care should be taken when navigating or anchoring in the security zone, between the coast and an imaginary broken line which passes through the following:

(A) Lat. 39° 00′ 01″ S. Long. 61° 37′ 01″ W.
(B) Lat. 39° 05′ 02″ S. Long. 61° 40′ 01″ W.
(C) Lat. 39° 02′ 05″ S. Long. 61° 47′ 09″ W.
(D) Lat. 38° 58′ 02″ S. Long. 61° 51′ 00″ W.

Danger Zone. Situation Lat. 38° 53′ S., Long. 62° 06′ W. (approx.).

During gun practice at the Naval Base of Puerto Belgrano, navigation is prohibited in the circular area of 180° from the central point of the Signal Station which extends from 152° to 332°. The boundary of this area passes 9 miles off the Signal Station.

While gun firing is being carried out, the Signal Station will hoist during the day 2 "B" flags of the International Code on the same yard-arm. This signal will be hoisted half an hour before practice commences and will be furled when firing ceases.

At night the signals will be substituted by 3 vertical lights, the top one, red, and the following two, white. In addition a searchlight will sweep the zone every 15 minutes, casting a beam of 3 minutes duration.

The Prefecture of Ingeniero White will notify all ships in good time of the expected hour and date on which firing practice will commence.

Should exercises not commence on the date and hour fixed for same, the fire signal will be hoisted half an hour before the appointed time, and on the other yard-arm, the flag "N" (negative of the International Code).

These signals will be shown for half an hour from the time they are hoisted.

During exercises, the firing intervals will be signalled in the following form: during day, by hoisting "N" flag, and at night by 2 vertical lights; the top one white, and the bottom one, green.

Ingeniero White (See Plan)

Berths 1, 2, 3 and 4: Reserved for auxiliary vessels.

Berths 5 and 6: Assigned for loading cereals, length 300 m., dredged to 30 ft. above datum. Berth has 5 tubes and 2 belts of 480 t.p.h. capacity.

Berths 7 and 8: Same as berths 5 and 6.

Berth 9: Assigned for loading cereals. Possibly general cargo using ship's derricks. Length 227 m., dredged to 40 ft. above datum. Berth has 6 tubes with a capacity of 500 t.p.h.

Iron Quay: Its commercial use is restricted. Intended for repair, and waiting at berths 11 and 12, with a length of 400 m., been dredged to 29 ft.

Berths 13 and 14: Reserved for official dredging craft.

Berth 10: Out of service.

Berths 15 and 16: On high level quay (Alto Nivel), out of service.

General Cargo Quay, berths 17, 18 and 19: With a total length of 450 m., dredged to 25 ft. Has 4 cranes of 3,000 kgs. capacity.

Berth 20: Length 211 m., and dredged to 25 ft. (5 m. from the quay). Berth has 3 cranes of 3,000 kgs. capacity. On these quays there is a useful working width of 25 m. on which it is possible to work with wagons and lorries.

Berth 21: Length 60 m., for waiting and repairs to small craft.

Access to the port to be dredged to 35 ft.

Shipmasters Report: February 1982.

Ingeneiro White Elevators:

Documents: 6 Crew Lists.

Approaches & Pilotage: The line of buoys from the Rincon Light Buoy No. 1 cannot be relied upon and a vessel should remain to the South by some miles as the weather is frequently altering the relative positions while shoaling at No. 5 is considerable.

The Outer Bar between the No. 7 and 8 pairs is shoaling from the West but if the tide is low or falling after half tide, it is worth trying to call Bahia Blanca Pilots on Channel 16 VHF for advice on the relative depths prevailing. This bar is not dredged with any regularity and soundings are taken less frequently than with the Canal Principal, hence a vessel entering to anchor with a deep draft from loading "up coast" is cautioned regarding the "alleged" 10 m. prevailing.

The anchorage is not good, being of uncertain bottom nature and dragging is frequent. There is more space near to Buoy 11, the position of which has been altered, but the strongest winds are from the South and South West hence any dragging leaves little margin if in this section.

Pilotage is available from Buoy 6 at DOUBLE fees for both boat and Pilot.

The pilot launch is a large black high speed launch with white wheelhouse and "Prefectura" in white on the starboard side "Praticos" on port side. The Pilots usually give a call when leaving their base at Puerto Rosales thus affording about 1 hour's warning. The Pilot messages are also sent from the Puerto Rosales Control Centre of the Prefectura or Coast Guard who will supply the Pilot with tidal information obtained from the radio connected gauge to the East of the Outer Bar and showing a green light. This is essential as, despite the large modern dredger operating almost exclusively in the Canal Principal, there are depths well under the 10 m. claimed, especially near Buoy 13 Red and between 13 and 14 on the East side of the channel where the movement of the bank is not yet controlled.

It is planned to dredge a new channel directly towards Rincon Buoy but parallel to the coast to the East of the inner buoyed anchorage, but this is only now being subjected to surveys for assessing the dredging.

The buoyed channel from Belgrano inwards to the elevators is subject to problems as the buoys shift their positions and dredging has to be frequent to be effective throughout yet the loading berths are reported to require little work to keep their 30 ft. depth.

Stevedores: An 18 hour day can be worked.

Puerto Galvan (See Plan):

Berth 1: Assigned for general cargo, with a length of 150 m., and dredged to 25 ft. No cranes.

Berth 2: Length of 120 m., and dredged to 25 ft. Berth has an obsolete elevator. Can possibly be used for waiting and repairs.

Berth 3: Assigned to general cargo, with a length of 140 m. and dredged to 25 ft. No cranes.

Berth 4: Assigned for waiting and repairs, with a length of 75 m., and dredged to 25 ft. No cranes.

Berth 5: Assigned to general cargo, with a length of 150 m., and dredged to 29 ft. Berth has 2 modern cranes with a capacity of 35 tons at 16 m. radius, and 20 tons at a 27 m. radius.

Berth 6: Assigned to general cargo, with a length of 115 m., and dredged to 27 ft. No cranes.

Berths 7, 8, 9 and 10: Assigned to auxiliary craft and possibly general cargo for small craft with lengths of 60 to 65 m., dredged to between 15 ft. and 20 ft.

Inflammable Quay: 2 berthing fronts of 370.80 m. each, dredged to 40 ft. Each berth has a platform of 30.80 m. length and 20.80 m. width. Berth 1 is intended for oil and its derivates, and berth 2 for gas handling.

CRANES: The Puerto Belgrano Naval Base has a floating crane of 50 ton capacity, which can be hired. Also see "Berthing".

SPECIAL CARGO HANDLING FACILITIES: The cranes located at berth 5 of Puerto Galvan are suitable for handling small containers and have grabs of 8 cu.m. capacity for operation with bulk cargo (minerals, by-products, etc.).

The port has mobile cranes of up to 45 tons capacity. The stevedoring companies have vehicles with automatic elevators and various equipment basically suited for loading boxes of fruit, loading and discharge of boxes of frozen fish, etc. There are no special facilities for ro/ro traffic. The elevator quays have special installations for bulk loading of cereals.

BRIDGES: There are no bridges in the access channel or in the port.

STEVEDORES: Permanent stevedores available, no prior advice being required for their availability. The vessel requiring labour must present their order 45 minutes prior to the contracting time to the Port Captaincy at the Contracting Centre.

Contracting times are 0630, 0930, 1230, 1530 and 1830 hrs. (on this shift contracting is also made for night working).

The usual working period is from 0700 to 1900 hrs. from Monday to Friday, and from 0700 to 1300 hrs. on Saturday. Nevertheless, it is possible to operate 24 hours a day, including Sundays and Holidays, but premium rates for this will apply.

DRY DOCKS: Capacity of the dry docks are:

No. 1 215 m. OA, width on the sill 22.12 m. or at 34 ft. above the sill, 26.25 m.

No. 2 235.45 m. OA, afloat, or 205 m. closed there is also a floating dock for smaller vessels 65.8 m. OA, beam 13.46 m., capacity up to 750 tons.

The dry docks are located at the Puerto Belgrano Naval Base, and vessels of the Argentinian Navy have priority of usage.

SURVEYORS: American Bureau, Norske Veritas, Bureau Veritas, Lloyds (insurance only).

HATCHES: Work on deck is prepared by the stevedores during working hours. Preparation of the gangway to be effected by the ship's crew. Stevedores only will close and open hatches with mechanical means. Covered ways will be closed and opened by the stevedores.

LOAD-LINE: Vessels North- or East-bound may load to Summer Marks all year round.

WEATHER: Average velocity of winds is 11 knots, direction North and N.E. 30%, and West and N.W. 32%.

Rainfall averages 558 mm., with July/August the driest months.

Maximum temperature in Summer about 31° C, with an absolute maximum of 42.5° C, and a minimum of about 15° C. In Winter, maximum of about 15° C, average minimum 3.5° C, and absolute minimum minus 8.8° C.

MEDICAL: All kinds of medical treatment are available, there being various state and private hospitals. For very specialised treatment, in extreme cases, evacuation to the city of Buenos Aires is possible.

DENSITY: The salinity in the external area of the Port of Bahia Blanca is 33.6 – 34% in Autumn and Winter. In the inner area the minimum salinity is 16.53% and the maximum 38.57%.

FRESH WATER: Available at any berth at Ing. White, Galvan and Puerto Belgrano, at 10 t.p.h.

FUEL: All grades available ex-wharf or by barge.

GANGWAY/DECK WATCHMEN: Vessels Agent must ask Port Authority for watchman.

FIRE PRECAUTIONS: Tankers, during loading or discharge operations, whether in port, in the roads, at loading points or to other vessels, will comply with the following requirements:

All conduits for loading or discharge of hydrocarbon oils which are land-based for connection to a tanker vessel, must have insulated installations, or, in the absence of same, non-conductive hoses must be used in such a way as to constitute an insulating circuit between the main pipe-line and the connecting flange with the ship.

Pipe-lines carrying hydrocarbon oils, converging on the quay, must be earthed in an effective manner, in the immediate section adjacent to the existing insulating flange on the quay or in the section of hose which is not electrically conductive.

In the event of pipe-lines being used with cathodic protection connected to the vessel with non-conductive loading hoses, insulating flanges must be fitted at their ends. If the pipe-line does not have cathodic protection, it must be earthed conventionally.

At the commencement of and during operations, tankers must fly the "B" flag during hours of sunlight and during the rest of the day a red light in adequate safety conditions.

It is necessary to check that the connecting hoses for loading and discharge operations are in good condition, do not show any cracks or any signs of deterioration.

It is necessary to check that the connecting flanges, when they are bolt-connected, are fixed with all the bolts which they require, and when they are of another type, they must fulfil also the maximum requirements of mechanical efficiency for prevention of oil leaks.

Beneath each of the connecting flanges must be installed drip trays to prevent product reaching the water or the quay; in the same context, all loading deck scuppers must be blocked.

Loading hoses must be installed in such a way that there are no sharp bends nor sudden changes of direction. In the event that the hoses have to rest on sharp edges, adequate protection must be used, to prevent any possibility of wear.

In the event of excessive movement in the berthing area, either during bad weather or due to the manoeuvring of an adjacent vessel, pumping of the product must be stopped. Likewise, if there is any untoward occurrence, such as fire or explosion on the quay or in the quay safety area, on adjacent vessels, or in the event of electric storms of great intensity, or if leakage of the product is observed, pumping must be stopped.

In the event of operations at loading points with long pipe-lines connected to the land, approved communication systems must be used between vessel and the shore to permit the need to stop operations immediately in the event of damage to the pipe-line or any other untoward occurrence.

Whenever it may be necessary to keep open any observation cover of a tank the flame prevention fabric must be positioned.

Constant vigilance must be maintained at the access to the vessel and on deck to prevent the entry of unauthorised persons.

With the exception of very high frequency equipment, which are safe for use, the vessel's radio/electrical equipment must not be used, the wireless room being sealed.

Loading and discharge of tanks must be effected solely by the corresponding pipe-line, the usage of the integral outlets of the tanks being prohibited.

Double berthing of vessels is not permitted, unless they are carrying out operations of lightening, repairs or in the event of emergency.

A foam extinguisher must be placed next to the connecting flange of a hose, and the fire pump must be maintained operational, except where the latter incorporates a remote control system which is approved.

The hose at the loading point and on the main deck must have a proper sealing joint in its unions.

The sealed doors on the main deck must remain closed.

Tankers effecting operations between one another, in the roads or at suitable anchorages, must have main engines ready to manoeuvre at all times; likewise, the necessary personnel for operations of anchors, chains and mooring equipment.

Masters or Owners are obliged to order cessation of any operation, and to request, if necessary, the collaboration of the Maritime Authorities, whenever at the operations quay or in its safety area, in the vessel operating under their control, the requisite safety stipulations are not being met.

During degassing operations, those involved with cleaning, repairs and maintenance, tankers must comply as follows: during degassing operations, no passengers or other unauthorised persons must be on board the vessel.

Whilst gasses are being liberated during the degassing process, the use of galleys must be reduced to a minimum, and open flame burners must be sealed, except boilers and heaters. Under the same circumstances, openings to quarters on deck must be kept closed, so as to obviate any contamination, and smoking must not be permitted anywhere in the vessel.

Boilers must not be lit up, and the combustion pattern must not be altered.

On decks no rags, or absorbent material impregnated with fuel may be deposited. Such material must be placed in adequate receptacles, with covers, for transporting away from the vessel.

When opening covers, and parts of them have to be struck, only anti-spark tools must be used.

Tankers effecting minor repairs, which do not involve cutting or welding of metals but cause sparks or other risky operations of a similar nature, must carry out such work only at the quays in the oil area appropriately equipped, or outside the oil area. When work of a greater magnitude is carried out, this cannot be effected at the special quays, except where reasons of emergency dictate, and in any case only after prior permission has been obtained from the Prefecture.

All degassing operations or opening of tanks not certified as being gas-free are prohibited in the ports, docks, breakwaters, piers or quays intended for operation with combustible or inflammable products or hydrocarbon derivates.

The tasks of washing or cleaning of tanks in port, docks, breakwaters, piers or quays intended for operation with combustible or inflammable products or hydrocarbon derivates may only be effected when a Certificate for Safety of Work has been issued.

Cleaning or degassing of tanks is prohibited in vessels carrying out movement operations of combustible or inflammable products which are hydrocarbon derivates in ports, docks, breakwaters, piers or quays.

CUSTOMS ALLOWANCES: 60 cigarettes and 1 litre of liquid per day. No cigarettes or alcohol may be taken ashore.

REPATRIATION: Possible.

REPAIRS: All classes of repairs possible including dry-docking.

CONSULS: Belgium, Chile, Denmark, France, Greece, West Germany, Italy, Netherlands, Norway, Peru, Portugal, Spain, Sweden.

AIRPORT: Regular air service with Argentine cities.

TIME: GMT minus 3 hours.

HOLIDAYS: (a) National holidays – January 1st, Good Friday, May 1st, May 25th, June 20th, July 9th, August 17th and December 25th.

(b) Not worked – Holy Thursday – December 8th. Nevertheless, the port can work; The stevedores receive an extra of 75% on their pay.

POLICE/AMBULANCE/FIRE: Argentine Naval Prefecture is responsible for port safety, Tel: 71720/71727/71833. Ingeniero White Volunteer Fire Brigade, Tel: 70115. Ambulance of the Port and Maritime Chamber can be requested from the hospital at Ingeniero White, Tel: 70267.

TELEPHONES: There are no facilities for installation of telephones on vessels at the quay. The offices of Maritime Agents, stevedoring contractors and official bodies have telephones and telex. There are public telephones in cabins at Puerto Ingeniero White and Puerto Galvan.

SERVICES: These can be obtained via private firms.

SHORE LEAVE: No restrictions.

IDENTITY CARDS: Seaman book is sufficient.

REGULATIONS:

a. Owners and Maritime Agents must communicate to the Port Captaincy and Port Administration the intention to position the vessel for loading and/or discharge five days in advance (exception to this is made for tankers and grain ships).

b. ETA at buoy 11 must be confirmed 48 hours in advance (including tankers and grain vessels), indicating overall length, estimated draft on arrival and departure, and type of operation to be effected, with specification of tons, packages or volumes to be loaded or discharged.

c. At anchorage at buoy 11 or on passing it, in the event of direct entry, ETA must be confirmed. This time gives the priority for entry, provided the previous communications have been made.

d. Minimum quantities authorised for loading and discharge are:

Cereals	10,000 tons per day
Fruit	21,000 boxes per day
Loading frozen fish	600 tons per day
Discharge of frozen fish	200 tons per day

Other cargoes: The Port Administration determines this in each individual case.

e. These and other regulations with regard to the operations of loading and discharge, obligation to free quays, etc., are recorded in a Circular issued jointly by the Port Captaincy and the Port Administration.

DELAYS: Normally, there are no delays in berthing of vessels, although occasionally during the peak period for cereal exports grain ships may be delayed. It can be considered that vessels load as quickly as they can receive if the cargo is in port.

DEVELOPMENTS: With the dredging work already carried out in the entry channel, and that which is to be effected in the access to the elevators it is expected that vessels of up to 40 ft. draft can operate. A study carried out under the auspices of the P.N.U.D. is on the point of being implemented, under which a notable improvement will be made in the loading conditions of cereals by means of the construction of a new elevator, remodelling those already in existence, construction of three quays in place of those already there, construction of waiting berths, etc.

SHIPMASTER'S REPORT: July 1980

Documents: See 'Guide to Port Entry'.

Pilotage: Pilot boards at buoy No. 11 and requires 48 hours' notice. Pilotage compulsory. Vessels are not able to dock or undock at berths 19 or 20 without the aid of a Pilot.

Restrictions: Vessels are able to enter and leave during hours of darkness.

Max. Size: LOA 200 m. Max. draft: 36 ft. The mean tidal range is 12 ft. Keel clearance of 1 ft. required.

Tugs: Vessel is required to use tugs. 3×1,250 h.p. and 1×1,200 h.p. available.

Radio: Bahia Blanca Radio (LPW). Telephone Nos. of the radio station are 29347,22418 and 22413.

VHF: Pilot and Port Authority on Channel 16.

Berthing: Vessel berthed at general cargo berth No. 19 which is 21 miles from the entrance. Max. size of vessel that can safely berth is 200 m. LOA and 32 ft. draft. The least depth of water in the channel from sea to berth is 36 ft. and the mean tidal range at the berth is 12 ft. Nature of bottom of the berth is mud/silt.

Consuls: Greece, Germany, Spain, Italy, Sweden, Chile, Norway and Denmark.

Services: The following services are available: Fresh water, fresh provisions, minor repairs, dry dock, machine shop, airport, surveyors, laundry services, bunker fuel oil, gas oil, lubricating oil, doctor and hospital, groceries and meats. There are no slop facilities.

General: Vessel arrived at pilot station at buoy No. 11 at 0800 hrs. as arranged, but had to wait until 0900 hrs. for Pilot to come alongside. Whilst waiting it was very difficult to keep vessel in position between sandbanks with floodtide running.

Approach to port not the best as only one buoy lit and the first two buoys missing completely of the first five approach buoys.

Vessel docked about one hour before high water, starboard side-to at berth No. 19. Draft of vessel, forward 13 ft. 11 ins., Aft 20 ft. 07 ins.

As expected vessel was aground at low water. Vessel was sounded round and it was estimated that water at berth on low water 17 ft. forward and 20 ft. aft (difficult to be accurate as all soundings showed very soft silt).

As loading progressed vessel was aground as much as two hours before low water.

Intakes for this vessel are all on the port-side, but even so the intakes are only just above mud level, which naturally meant that the fire main could not be used at low water (being choked with mud), and the toilets were being flushed with solid mud.

I asked the docking Pilot when he next expected the berth to be dredged (in the past dredging had taken place during the month of January) he stated that "the dredger they have is old and new dredgers are expected", however, the Government is concentrating on developing Puerto Madryn.

Many local trawlers have already moved their home base to the South. Berth No. 20 has I believe slightly more water. River berth now unusable as the mooring bollards are missing.

AUTHORITY: Capitan de Puerto Bahia Blanca.

COMODORO RIVADAVIA: 45.51 S. 67.27 W.

(Province of Chubut) "B" category port.

N.B. Refer to Argentina, Section 1.

On the San Jorge Gulf, 947 miles South of Buenos Aires.

ANCHORAGE: Anchorage within the five or six fathom line offers little difficulty for regular work to lighters, but the reserved zone off the YPF Pier must be respected.

RESTRICTIONS: Port should be entered at high water in daylight only. Tidal range from 19 ft. 6 in. to 7 ft. 4 in.

MAX. SIZE: Dry Cargo, Length 150 m., draft 15 ft. Tankers up to 30 ft. draft.

RADIO: For radio regarding free pratique, or reporting ETA call LPX 2, on 474 kHz. This station transmits weather forecasts in English at 0400 hrs. and 1800 hrs. GMT.

TUGS: See "General" before first port.

CARGO: It is advisable to stow inwards cargo aft for this port, as lighters lying at hatches one or two receive little protection from sea and swell, and in any case, owing to the limited number of lighters, vessels usually work with two or three gangs at most.

To avoid loss of time, it is the custom in this port to leave the sling loads "as is" in the lighters and therefore a larger quantity than usual of slings have to be hired from the Agents.

It is advisable to establish in Bills of Lading that lighterage is at the risk of the cargo.

BERTHS: The main part of the port consists of:

National Wharf: At the end of the breakwater built over the Punta Borja reef, and still unfinished. It is L shaped, presently 1,160 m. long with 23 ft. at the extreme. Vessels can only go alongside in the last inner sections, with 15 ft. at zero. The breakwater gives some protection from the S.W. and S.E. winds, but vessels with large superstructure should not go alongside, and it is recommended to leave the pier after work is finished each day in case North or West winds blow strongly.

No export cargo is shipped now, as what wool there is moves from the farms North by road, and port conditions are precarious, except for the oil berths. The Titan crane is restricted to 30 tons, and there are 2×5 ton steam cranes on the wharf. The railway now operates only up to km. 27, in the oil fields, having been dismantled further inland for lack of movement.

YPF Mole: Also known as km. 3, is built over the Coronel Reef a short distance North of the town. It has a length of 956 m. and 21 ft. at low water. It is used exclusively for discharging cargo consigned to YPF and for loading their oil and other products, so that special permission from YPF is required to operate here. There are 2×15 ton cranes and 1×4 ton crane on the mole.

The privileged zone extends 150 m. either side of an imaginary line projected from the mole, and 2,500 m. seawards, reserved for tankers loading YPF products, and other vessels cannot moor in this area. There are 5 mooring buoys, two each side of the mole near to its head, the fifth is 200 m. from the beacon at the sea end of the mole bearing 020°.

Kilometre 5: Three miles North of the town there is a wooden wharf, 75 m. long, with only 3 ft. at low water. Vessels using this wharf for discharge over lighters, anchor 1.25 miles off the coast.

The wharf shows a fixed red light at its head and is used for cargo consigned to the Railways. There is one 8-ton electric crane and 2×5 ton steam cranes on the wharf. With East or S.E. winds the wharf cannot work.

TANKERS: The oil berths within the Comodoro Rivadavia port area are, from North to South:

Caleta Olivares, at 45° 46′ S. and 67° 22′ W.

A loading berth for crude, which can only operate by day. A minimum of 12 hours advance notice of arrival must be given to Agents in Comodoro Rivadavia. There is a launch which assists in mooring to the 4 buoys, which are cylindrical painted black and clearly numbered. There is another cylindrical buoy, also black, but unnumbered marking the end of the line.

It is necessary to obtain, in advance, from the pumping station the regulations, instructions and signal code in use, signals which are made from a semaphore mast, 13 m, above sea level (land height 7.4 m.) both by day and night. There is a small wharf for landing of passengers, crew, etc., and a floating crane, capacity 30 tons. All supplies, water, etc., must be made through Comodoro Rivadavia.

Caleta Cordova, at 45° 43′ S. and 67° 21′ W. approximately, and some 10 miles North of Comodoro Rivadavia, to which it is connected by phone. This is also a loading berth for crude. Four light beacons on shore indicate the entrance. Astra, showing its light at 40 m. elevation, Loma Blanca at 55 m. (white light). With these two lights in line the concrete block, in 34 ft. which sustains the end of the loading line, is 1,325 m. from Astra. Vessels should enter bearing these two lights or marks on 268° and anchor where the cross bearings of this line intersect with the line from the Novales Beacon, a white light at 79 m. height, and Cordova, also a white light at 53 m.

This point is 300 m. from the block or pillar, in 36 ft. Vessels then swing on their anchor to moor by the stern to the 4 mooring buoys. Anchorage is good, in spite of an uncomfortable sea with winds in the 1st, 2nd or 3rd quadrants. S.E. storms are dangerous, however, and it is necessary then to go out to sea at the first sign thereof.

There are two small wharves for small boats, in the S.W. of the bay, one for high and another for low-water, the latter being covered at half tide.

There is also a floating crane for heavy lifts, but as in Olivares, all supplies, etc., must be taken via Comodoro Rivadavia.

Caleta Olivia, the third oil-loading berth, is South of Comodoro Rivadavia at 46° 26′ S. and 67° 31′ W.

There are two petroleum intakes here, North and South, a mile apart, each well buoyed.

A small wharf, 70 m. long, is used for discharge of lighters or landing boats at high tide only. Stores are available here, and the small town is connected by phone with Comodoro.

An SBM has recently been installed here, lying 2,700 m. off shore in 22 m. It is fitted for deballasting (14 in. discharge line) and with a 30 in. loading line, able to handle vessels of up to 150,000 d.w.t.

WEATHER: Average wind velocity 17 knots, with 79% from S.W., W. or N.W.

The port is open to N.E. and E. winds.

Rainfall is scarce, 189 mm. yearly, evenly distributed.

Temperature: Summer maximum is 25.5° and minimum 13.4° C, while in Winter maximum averages about 11° and minimum 3°.

FRESH WATER: Obtainable at National Wharf and YPF Wharf. Ships supply own hoses.

FUEL: Fuel oil and diesel available at the YPF Pier in Comodoro Rivadavia.

WATCHMEN: Recommended. Normally arranged by Agent.

HATCHES: According to port regulations, stevedores open and close hatches at commencement and end of cargo operations.

MEDICAL: Hospital available.

CUSTOMS ALLOWANCES: Only sufficient for normal daily consumption on board. *Custom House.* Fully authorised for import/export cargo, including reception of explosives for commercial use.

REPAIRS: Urgent repairs can be carried out by the oil companies, and there is a permanent service of divers, equipped to operate to 150 ft.

CONSULS: British, Chilean, Dutch, Greek, Italian, Belgian and Spanish.

AIRPORT: Situated 11 km. from port. Daily services to Argentine cities.

POLICE/FIRE/AMBULANCE: Regional Hospital 2451; Clinica Central 2282; Police 2778; Fire Brigade 2505.

TELEPHONES: No connection aboard vessels.

DEVELOPMENTS: Dredging to increase depth to 26 ft. alongside wharves.

AUTHORITY: Capitania de Puerto de la Patagonia.

MAR DEL PLATA: 38.00 S. 57.32 W. (See Plan Book)

(Province of Buenos Aires) "B" category port.

N.B. Refer to Argentina, Section 1.

On the Atlantic Coast, 302 miles from Buenos Aires.

APPROACHES: The port is some 3 miles South of the main town, sheltered by 2 breakwaters (Northern arm 1,099 m. long, Southern arm 2,750 m., entrance, facing North 300 m. wide). Both breakwaters carry roads and access is open to all traffific, so that car headlights and street lighting can cause confusion at night on taking the Southern bearing.

DEPTHS: The dredged channel is officially 100 m. wide, but dredging is now only occasional, and the official depth is 26 ft. 9 in. and tidal ranges 3 ft. 8 in. Spring to 1 ft. 2 in. Neaps, with constantly forming sandbanks off the South breakwater.

There is often a heavy swell in this port, causing vessels to range in all berths, fenders being essential. It is safer to lie outside in 36 ft. to 42 ft. if awaiting berth than in the anteport within the breakwaters.

PILOTAGE: Pilotage compulsory. Pilots requested through Agent, or in emergency, direct to Prefecture Maritime Station frequency 500 kHz. ETA by radio to Agent required 24 hours to 48 hours in advance.

Pilot boat about 8 m. long, grey-white in colour. Pilot boards approximately 1 mile from port entrance.

ANCHORAGE: The best anchorage bears 191° on the Southern breakwater light beacon and 313° on the Cape Corrientes buoy, or even farther out. Holding ground is good and strong winds may safely be ridden out here, even with a big swell.

MAX. SIZE: Draft dependent on state of tide. Keel clearance of 2 ft. 6 in. required. Normal maximum draft 27 ft. to 30 ft., or up to 33 ft. maximum in best possible conditions.

RADIO: For radio regarding free pratique or reporting ETA call LPM 2 on 512 kHz. A2. English weather forecasts from Radio Pacheco, Buenos Aires, LPD 5, on 512 at 0148 and 1630 hrs. GMT.

TUGS: Use of tugs is obligatory; vessels over 1,000 N.R.T. must use 2 tugs.

Also see "General" before first port.

BERTHING: Big swell causes vessels to range, therefore Masters recommended have ready fenders for use at berth. Vessels can enter or sail any time day or night.

There are three basins in the commercial port, of which the smaller fishing vessels or inshore craft use the most Southerly, and the trawlers the Coastal basin. Here an extension of the marine railway and dry docking facilities is now ready.

The third basin, or overseas, has an Elevator on its Northern side, capacity 20,000 tons, with 8 tubes and 2 belts, load rate 400 t.p.h. per belt. The berth is 300 m. long, with officially 30 ft. alongside, numbered 12 and 13, berth 11 is at the shore end of the basin, with berths 9, 10 and 8 along the South side, 300 m. long. Berth No. 7 is at the head of the basin, and immediately opposite this a jetty has been built out from the Southern breakwater, for discharge of liquid gas or petroleum products to the tank farm on shore. This also serves to shelter the Coastal and Fishing basins from the constant swell.

Grain shipments are now very infrequent, and the port is quickly becoming a fishing centre. Reefers can only load, however, up to 1,500 tons of deep frozen fish, due to the lack of storage facilities. There is one very small storage shed in the port, and the several factories each have their own storage units. Most of the fish is still landed fresh, for filleting and freezing on shore, and goes to Buenos Aires for the local market. Some of the newer trawlers, however, have their own filleting and freezing facilities and shipments are usually timed to meet their arrival in port and make a direct transhipment. From 300 trawlers and fishing boats in operation here ten years ago, the fleet has grown to nearer 500 trawlers.

On the inside of the Northern breakwater arm, there is a berth for passenger/tourist vessels, admitting vessels up to 220 m. LOA but with no facilities beyond those for landing tourists with vessel's gangway to a paved road. Depth alongside is 30 ft. Vessels at this berth must moor bow to the South, laying out their starboard anchor.

Floating crane. There is a 40 ton floating crane (Navy), present capacity 20 tons, and also 4 mobile 2 ton cranes.

MEDICAL: Assistance obtainable alongside. Captain should telegraph Agent in good time expected date and hour of arrival. Hospitals and sanatoriums.

TANKERS: Only fuel oil discharged at berth No. 7.

DENSITY: Sea water.

FRESH WATER: Available at all berths, delivery from 7 to 10 t.p.h.; at the Northern tourist berth through 3 hydrants, total 60 t.p.h. Being slightly salty it is not recommendable for boiler use.

FUEL: Fuel oil and diesel available at Berth No. 7.

WATCHMEN: Compulsory. Arranged by Agent.

STEVEDORES: Gangs engaged by Port Authority according to vessels requirements.

Normal capacity per gang, per shift:

150 to 175 tons fish (direct transhipment).

70 to 100 tons general cargo.

OPENING/CLOSING HATCHES: Can be performed by crew, but in any case subject to charter party terms.

CARGO: *Loading marks.* Vessels can load to their Summer marks all year round if sailing Northbound.

Import cargo. This is a fully authorised Custom house. Berth 9 in the central basin is the most appropriate berth for handling import cargo, there being little space on shore at the other berths. Berth 7, the pierhead here, has 30 ft. and is also reasonably suitable for discharging, but in the Northern basin there is little or no room for depositing cargo alongside.

Import of Potatoes. Is permitted here, this being near the main potato growing region but permission must be obtained for the discharge of certified seed potatoes.

WEATHER: *Wind.* There is no really predominating wind, 42% being from W., N.E. and N.W., average velocity being 11 knots.

Rain. Rainfull averages 941 mm. evenly distributed.

Temperature. Summer maximum about 25° and 13° minimum, while in Winter the maximum averages 14° and minimum 3.5°. Absolute maximum and minimum are 41.6° and minus 6.7° C.

REPATRIATION: Can be arranged.

IDENTIFICATION CARDS: Compulsory. Arranged on board immediately after arrival.

CONSULS: French, Italian, Portuguese, Spanish, Uruguayan.

REPAIRS: All types of repair possible, except dry-dock repairs. Divers available.

AIRPORT: Six miles distant. Two regular lines: Austral and Aerolineas Argentinas, 2 services/day between Mar del Plata and Buenos Aires.

HOLIDAYS: None. Work every day during year.

TELEPHONES: No telephones are available on board or on the berth.

DELAYS: In accordance grain elevator capacity. Normally none.

DEVELOPMENTS: Dredging to obtain depth of 30 ft. in channel and port.

AUTHORITY: Captain of the port: Port Administrator.

PUERTO DESEADO: 47.46 S. 65.54 W. (See Plan Book)

(Province of Santa Cruz) "B" category port.

N.B. Refer to Argentina, Section 1.

988 miles South of Buenos Aires. The port is situated on the right bank of the river, and at its mouth. There is a meat packing plant.

APPROACHES: The approaches and entrance to the harbour are determined by two pairs of beacons as range or leading lights. Care must be taken not to confuse the installed portal cranes, each 18 m. high, with the beacons, which are painted the same colour.

There is 27 ft. on the bar, at low water: tidal range is 17 ft. 6 in. to 6 ft. 2 in.

PILOTAGE/ANCHORAGE: The Pilot will be on board, under standard instructions, but if for any reason he has to be picked up here, he will only come out about one mile, for lack of suitable craft. In such cases vessels should anchor in the roads at 47° 47′ 5″ S. and 65° 47′ 8″ W.

RADIO: For radio regarding free pratique, or reporting ETA call LPO 5 on 461 kHz. A1. For weather reports in English, listen to Comodoro Rivadavia LPX 2, on 474 kHz., at 0400 and 1800 hrs. GMT.

TUGS: See "General" before first port.

BERTHING: Vessels moor starboard side. Best time for entering is on an ebb tide and sailing on a rising tide, and for berthing within the hour of high tide. With a narrow entrance channel flow of tides often exceeds 5 knots. There is a mud and gravel bank almost opposite and slightly West of the wharf, some 200 yards out from it, with only 16 ft. at zero. When sailing, a back current runs inside the bank, and assists in opening the bows from the wharf. Vessels then usually steam across the bank, drop anchor on the outer edge and swing on the still rising tide until facing the entrance.

The fiscal wharf has been extended to 129 m. overall, in 27 ft and is being extended to 275 m. There are two portal cranes on it, each 12 tons capacity. West of this, there is a space of 90 m. which is being filled in to extend the wharf, and then a 62 m. concrete wharf also in 27 ft., but bearing 312° while the fiscal wharf is on 284°. Both sections of the wharf have wooden fenders and there is ample storage space. Rail connections have not yet been extended to the more Westerly section, where coastal vessels discharge direct to trucks.

FUEL: Available by truck from Comodoro Rivadavia.

FRESH WATER: Available at the wharf, but in limited supply in Summer.

MEDICAL: Attention available.

REPAIRS: Minor repairs only.

CONSULS: British, Chilean and Spanish.

WEATHER: Conditions are generally good, and winds seldom exceed 40 knots. If anchored awaiting Pilot or berth, care should be taken to watch for strong winds against the current. When a strong W. wind blows there can be heavy dust storms, which impede proper visibility; in such cases it is advisable to keep position by radar and stand off or anchor until the visibility improves.

Yearly average for winds is 14 knots, 63% of the time from W., S.W. or N.W.

Rainfall is low, 202 mm. yearly with an average 74 days a year evenly distributed. Maximum temperature in Summer months is 35.6° C., while in Winter maximum ranges to 15.6° and minimum to minus 8.6°.

PUERTO MADRYN: 42.46 S. 65.02 W. (See Plan Book)

(Province of Chubut) "B" category port.

N.B. Refer to Argentina, Section 1.

On the Atlantic coast, 767 miles South of Buenos Aires. One of the most sheltered and deepest harbours in Argentina.

PILOTAGE: This is obligatory both on entering and sailing. There is no resident Pilot, and one of the Southern zone group of Pilots is sent from Buenos Aires by air as required, staying on for sailing if stay in port is to be short, 72 hrs. notice required. The Pilot will board at anchorage, unless he has brought the ship in from elsewhere. As there are no tugs it is advisable to berth in the early morning, before the wind rises.

ANCHORAGE: Half mile from pier terminal good anchorage in 60 ft. depth in protected bay. Anchorage used for transhipment cargo to smaller vessels.

RADIO: For free pratique, or reporting ETA call LPZ 20, at Trelew, on 527 kHz. A1, and for weather forecasts to LPX 2, at Comodoro Rivadavia in English, at 0400 and 1800 GMT, on 474 kHz.

TUGS: See "General" before first port.

BERTHING: The new pier for the aluminium plant is 1,477 m. in length, the first viaduct being 1,133 m. long, 12 m. wide, of which 3 m. are for the conveyor belt; there are 2 general cargo berths, on the South side, one for vessels drawing 20 ft–24 ft., lying in 20 ft.–29 ft. and which consists of a series of 7 mooring dolphins, close to the pier. Any vessel operating here would have to discharge ashore with her own gear.

The main general cargo berth, with 31 ft. at zero at the shore end and 37 ft. at the East end is 130 m. long and can take vessels up to 160 m. in length, drawing 30 ft. There are 2 mooring dolphins, one at each end of the berth, which is ample and wide – a total width of 55 m. at this point, vessels discharge with their own gear, to trucks, the long viaduct having room for 2 trucks to pass easily. There are two 12 ton electric cranes at this point, and two 25 ton cranes are also to be installed.

To seaward, on the North side of the pier, is the bulk berth, with 37 ft. at the shore end and 50 ft. at the East end, 217 m. long and 35 m. wide. There are 2 mooring dolphins, one off each end. Discharge is by grab, on a travelling tower which moves the full length of the berth, and delivers on an endless belt to the stockpiles on shore. Installed capacity is 1,000 t.p.h., but actual yields are much lower. On windy days there is a problem with the dusty Bauxite blowing, and it is advisable to keep the ship's quarters tightly shut.

The old jetty, 458 m. long, with 16 ft. at the head and 12 ft. at 125 m. in, at low water, lies 2,500 m. to the South and is still in use for smaller vessels operating with their own gear. There are no lighters in the port.

MEDICAL: Attention available.

FUEL: By truck from Comodoro Rivadavia or Bahia Blanca.

FRESH WATER: Presently available at the end of the old pier, 5 t.p.h. and on the new jetty at 10/15 t.p.h., vessel supplies hose.

WEATHER: *Winds* mainly West, with a yearly average of 8.3 knots but reaching 15 knots in Summer months.

Rainfall scarce, average 173 mm. evenly distributed throughout the year.

Temperature. Summer maximum is 27° C and minimum 13°, and in the rest of the year maximum 21° minimum 8°.

Tidal range is 18 ft. 8 ins. and 6 ft.

HATCHES: According to Port Regulations, stevedores open and close hatches at commencement and end of cargo operations.

CUSTOMS ALLOWANCES: Sufficient for daily requirements only.

CREW IDENTIFICATION CARDS: Required.

CONSULS: Italian Consular Agent at Madryn. British and Spanish consuls at Trelew.

REPAIRS: Minor emergency repairs only, also divers available.

REPATRIATION: No facilities for effecting crew changes. Repatriation facilities only.

AIRPORT: Trelew distant 64 km. Scheduled flights to Buenos Aires and other cities.

POLICE/AMBULANCE/FIRE: Police and fire tel. 249. Hospital 240.

TELEPHONES: No arrangements for placing telephones on board.

SHORE LEAVE: Crew members allowed ashore but must be provided with identification cards.

DELAYS: Possible delays due congestion owing berth shortage and tide.

DEVELOPMENTS: There are plans in hand for installing a shipyard, to build vessels of up to 150,000 tons, and also for setting up a new Steel mill, but it will be some time before either develops.

SHIPMASTER'S REPORT July 1980:

Pilotage: Compulsory. Pilot requires 24 hours notice. At present the pilot boat is small with only about 1 ft. freeboard therefore vessels do not berth or unberth in any sort of wind, sea or swell.

Restrictions: Vessels can berth and unberth at any state of the tide, day or night.

Tugs: None available. Vessel able to dock and undock without aid of tugs.

Health: Authorities require 72 hrs. notice.

Radio: Bahia Blanca (LWP) and General Pacheco (LPD).

Documents: See "General" before first port.

Services: Fresh water available. Limited amount of fresh provisions available. Minor repairs possible. Airport, Doctor and hospital available. Groceries, meats and laundry services also available. Dry docking facilities, surveyors, fuel and slop facilities not available.

Consuls: No Consular representative. Nearest at Buenos Aires.

Anchorage: In position Lat. 42° 44′ S., Long. 65° 00′ W.

Berthing: Vessel berthed at a general cargo berth in position Lat. 42° 44′ S., Long. 65° 01′ W. Berth being about one mile from the pilot station. Any medium sized vessel able to dock at the southern berth (general cargo berth). Vessel able to dock and undock at any stage of the tide day or night.

Density: 1025.

Cargo Handling Facilities: There is a Bulk Aluminium berth opposite the general cargo berth. Two small cranes of approximately 2.5 tonnes capacity available. No floating cranes or Ro-Ro facilities. No facilities for handling containers or palletised cargoes.

PUNTA COLORADA: 41.41 S. 65.00 W.

(See Plan Book)

PILOTAGE: Pilotage is obligatory, and 72 hours advance notice must be given in Buenos Aires for the Pilot to travel down.

MAX. SIZE: No. 1 Berth: 60,000 d.w.t. (approx.) LOA 220 m. Draft 11.58 m.

No. 2 Berth: 25,000 dwt (approx.) LOA 175 m. Draft 10.05 m.

BERTHING: The mechanical loading arm for iron ore movement from Sierra Grande iron ore mines has finally been placed at Punta Colorada, a small peninsula, mid-way between Point Pozos and Point Porfido, the neck of land often being under water at high tide. After grinding and concentrating at the mines, which are some 25 km. due West from the coast, the slurry is pumped to the pelletizing plant at Punta Colorada, stockpiled there and taken by conveyor some 1,600 m. to a retractable loading arm. This has a loading rate of 2,000 t.p.h., and turns on an arc permitting it to load over a length of 112 m., without shifting position of the vessel. There is 42 ft. at Berth No. 1 at LWST, vessels lying due North/South as shown on the plan and 35 ft. in Berth No. 2 lying East/West.

The port is privately owned and run by the Mining Company.

OPERATOR: Hierros Patagonicos S.A.

PUNTA MEDANOS: About 280 km. South of Buenos Aires.

New deep-water port under construction. On completion, expected to accept vessels up to 50 ft. draft.

PUNTA QUILLA (Santa Cruz): 50.07 S. 68.25 W.

(See Plan Book)

(Province of Santa Cruz) "C" category port.

N.B. Refer to Argentina, Section 1.

On the estuary formed by the Rivers Santa Cruz and Chico, 1,172 miles South of Buenos Aires.

APPROACHES: The entrance to the port is by a channel 10 miles long. The Santa Cruz Lighthouse and 9 other beacons determine 4 pairs of leading lights for the approaches and entrance to the harbour, which can be entered only at HW, as both in the bar, either North or South passage, there are shoals on the leading lines, and also just before taking the anchorage in front of the town.

PILOTAGE: Southern Zone Pilot must be on board.

ANCHORAGE: The port is well sheltered and vessels can lie in up to 30 ft. – 36 ft. 0.5 miles off the town in good holding ground.

RADIO: For radio regarding free pratique or reporting ETA call LPT 2 on 441 kHz. A2. For weather forecasts in English tune to Comodoro Rivadavia LPX 2, on 474 kHz, at 0400 and 1800 hrs. GMT.

TUGS: See "General" before first port.

LOADING: A new wharf at Punta Quilla, 160 m. long, depth 42 ft., but with no services or facilities, and a distance of 18 km. from the town, from which all labour, authorities, etc., must be brought. At the same time, there are no more lighters in service, and unless the old freezer recently sold at auction, reopens movement appears negligible although it is expected that petroleum products will be moved over this wharf to relieve the strain on the pipe-lines.

STEVEDORES: Working hours: 0700 – 1300 hrs. and 1300 – 1900 hrs.

FUEL: Available in small quantities, in drums, from the local YPF agency.

FRESH WATER: Available in drums, ex-lighter, to be pumped out by the vessel.

WEATHER: A dry zone, with an average of 186 mm. rain, spread over 72 days throughout the year. Wind averages 11 knots.

Tidal range is 39 ft. 8 in. to 9 ft. 4 in.

MEDICAL: Attention available.

CONSULS: None.

REPAIRS: Minor repairs only.

QUEQUEN/NECOCHEA: 38.35 S. 58.42 W.

(See Plan Book)

(Province of Buenos Aires) "B" category port.

N.B. Refer to Argentina, Section 1.

On the Atlantic Coast, 375 miles South of Buenos Aires, Necochea, is on the right bank, and Quequen, on the left bank of the Quequen River. The ports, whose administration is centered in Quequen, are the outlet for a very rich agricultural zone.

APPROACHES: The port is at the mouth of the river, protected by two breakwaters, the Western arm being 1,192 m. long, lying from N.W. to S.E., and the Easterly arm 572 m. long and lying North/South. The passage between the arms is 210 m. wide, and the entrance channel proper 100 m. wide. The channel is at present dredged at 32 ft. but improving constantly.

PILOTAGE: Pilots must be applied for as usual through Agents at least 24 hours ahead, using Radio Pacheco LPD 5 on 512 kHz, A2, since there is no radio station at Quequen. This can be done by phone from Buenos Aires or other ports if vessels are not coming from abroad.

No Pilots will come out in bad weather. The small pilot boat is painted grey, with a yellow deckhead, and the Pilot comes aboard about 1.5 miles off the South end of the breakwater.

ANCHORAGES: Not advisable to anchor in bad weather due extremely dangerous winds from West through South to East. Anchorage in open sea 800 m. – 1,500 m. from cliffs.

RESTRICTIONS: Day and night entry possible. Vessels with length in excess of 175 m. require channel navigation permit obtainable from Maritime Prefecture.

MAX. SIZE: *Admissible Draft.* A dredger has been working at the Necochea Bar (breakwater entrance) deepening the channel edge, and from July 1984 the following official depths apply at the port of Necochea in a channel width of 90 m. at Summer Salt Water zero level:

Up to 175 m. LOA = 31 ft. 02 in. Up to 180 m. LOA = 30 ft. 02 in.
Up to 185 m. LOA = 29 ft. 02 in. UP to 190 m. LOA = 28 ft. 02 in.
Up to 195 m. LOA = 27 ft. 02 in. Up to 200 m. LOA = 26 ft. 02 in.
Up to 205 m. LOA = 25 ft. 02 in. Up to 210 m. LOA = 24 ft. 02 in.
Up to 215 m. LOA = 23 ft. 02 in. Up to 220 m. LOA = 22 ft. 02 in.

From these water depths a clearance of 4 ft. to 5 ft. must be deducted to obtain vessels' summer salt water even keel drafts.

However, vessels lying close up to the dolphins often find less depth, as the dredgers could not work too close in. The pool inside the breakwater is at 30 ft. but as there are no buoys for mooring, it is safer for vessels to await their turn outside.

Also see "Shipmaster's Report" – February 1982.

HEALTH: Free Pratique is now given only when alongside, or in the pool. Master should advise agent in advance of health situation aboard. If proceeding from another Argentine port, health inspection not required. Derat Certificate to be shown.

RADIO: For radio regarding free pratique, or reporting ETA call Radio Pacheco LPD 5, on 512 kHz. There is no station here and advice to Agents can be given by phone or telegraph from Buenos Aires or other ports, also Costera del Mar de Plata (LPM).

TUGS: Two tugs must be used both on entering and leaving and these come alongside at the entrance, and are also needed for movements in the port. Both are old, however, and within sufficient power for anything other than work inside the port. Ship's lines used.

Two vessels cannot be in the entrance channel at the same time. Should the weather make it imprudent for the safety of the ship and/or tugs to make fast ropes in any position, the tugs will continue at the side of the vessel to be engaged when necessity arises. In every case tugs must be paid for, used or not, and any damage done by the non use or late engagement of the tugs will be attributable to the vessel.

Also see "General" before first port.

BERTHING: Allotment of berths is effected by order of arrival, and vessels awaiting turn to load must do so in the outer roads until the pool inside the breakwater is fully dredged. Shippers consider the Outer roads as open sea, and will not accept Notice of Readiness until a vessel enters port.

There are only eight berths in the port, one of which is not yet in service. No work lying two abreast is possible, since the tubes will not do more than just reach, and with the restricted number of loading points only one vessel could work at a time.

Total storage capacity of grain in the port and anteport can be estimated at 600,000 tons.

Loading marks. Vessels are authorized to load to their Summer marks all year round, provided they are Northbound.

Movement inside the Port. At this port it is customary for the vessel lying second off to pay for the tugs attending her own movements. Vessels lying second off must shift to allow the inside vessel out, and then occupy the vacant berth, effect two movements, as there are only two tugs available. Of these two movements only one is charged to the vessel second off, but if either of the movements is in overtime, the extra is also charged.

Fenders. Good fenders are often needed in this port, although surge has diminished with the extension of the breakwater. It is recommended that these should be at least 3 ft. thick.

QUEQUEN SIDE

Unit 1 National Elevator "Ministro de Tomaso" (Dolphins 3/4/5/6 l.h.)

This elevator, built by the Government, has a capacity of 80,000 tons, a loading bridge with eight tubes but only four conveyor belts. Two vessels can load simultaneously.The berths consist each of two piers 10 m. wide and 70 m. apart, with two railway sidings (broad gauge) running parallel to them. There are twelve mooring bollards distributed between these landing places. A loading bridge has been constructed for the new berth from the Elevator Terminal, while it receives directly from an automatic truck discharging plant at 600 t.p.h., and being at a slight angle it is feared will interfere with a vessel of more than 140 m. long loading at Dolphins 5 and 6.

Unit III (Dolphins 1 & 2 r.h.)

Beyond Unit III, in the direction of the breakwater, there are four sheds with a capacity of 29,750 tons and two piers reinforced concrete, 10 m. wide and 70 m. distant from each other. A pipe line runs alongside the pier for the purpose of eventually discharging tankers. Beyond these two piers, and at right angles to them, a breakwater of 120 m. length has been built as a further protection to ships at this berth.

NECOCHEA SIDE

Unit IV (Coasting vessels: Dolphins 1, 2 & 3 l.h. and 4 & 5 r.h.).

Situated on the western bank of the river and consists of the following berths: (Coasting vessels) A concrete pier 300 m. long with 12 mooring bollards. There are three brick-built sheds known as "Galpones A, B & C" of 5,000 tons each. Two vessels can moor at the same time, and load bagged cargo depth between 18 ft. and 20 ft.

Dolphins 1, 2 & 3 l.h. and 4 & 5 r.h. consists of three piers 18 m. wide and 70 m. apart and two piers 18 m. wide and 70 m. apart respectively. There are two direct discharge lines for Fuel oil for the Power plant.

The right-hand dolphin quays Nos. 1, 2 & 3 are used for fuel discharge, the pipelines are 12 in. diameter.

There are two sheds, Nos. 4 and 5 of 9,750 tons, one at each pier. Vessels can load bags or bulk by cutting bags on board. There are seven mooring bollards distributed between two berths. These, however, are not used now for export movement.

The old railway bridge is now used for road traffic, and the railway crosses higher up the river. The previous road bridge has been cut in the middle, and the area between the two bridges is being converted into a fishing port, which in turn will ease the congestion in port, especially on the Necochea side where trawlers and fishing vessels presently operate.

Importation of cargo. The Custom house here is authorised as a deposit zone, thus permitting the import of cargo.

WEATHER: *Winds*, average velocity is 7 knots, with 46% from N., N.E. and E., and only 29% from S.W., W. and N.W.

Rainfall. Averages 909 mm., evenly distributed.

Temperature: Summer maximum averages 26° C and minimum 14° with an absolute maximum of 39.9°, while in Winter the maximum is around 13° and the minimum 4°, with an absolute recorded minimum of minus 4°.

Tidal range is 5 ft. 2 in. spring to 2 ft. neaps.

TANKERS: Fuel oil discharged.

DENSITY: Salt water.

FRESH WATER: Obtainable from hydrants on the wharves, vessel must supply hoses.

MEDICAL: Attention available.

FUEL: Advance notice essential as deliveries must be lightened from Buenos Aires, Mar del Plata, or Bahia Blanca.

WATCHMEN: Compulsory.

HATCHES: Opened/closed by stevedores additional charge made.

REPAIRS: Minor repairs only.

REPATRIATION: Through Buenos Aires.

AIRPORT: 5 miles distant. Daily flights to Buenos Aires.

TIME: GMT minus 3 hours.

CONSULS: Danish, Italian and Spanish. Consular clearances for France and Uruguay must be effected in Mar del Plata, and must be done the day the vessel sails. Brazilian clearances have to be taken at La Plata Consular offices.

HOLIDAYS: Vessels worked every day of year.

POLICE/AMBULANCE/FIRE: Police, Necochea 2148 and Quequen 6008; Ambulance, Necochea 2350 and Quequen 6052; Fire, Necochea 4900.

TELEPHONES: No arrangements for placing aboard.

SERVICES: Any special services required, technicians sent from Buenos Aires.

SHORE LEAVE: Not permitted.

DELAYS: Daily cargo work 18 hours/day. One waiting berth available. Delays up to four days can occur in January and February.

DEVELOPMENTS: New quay in operation under the name of Ultramar II operating with 2 tubes of 400 t.p.h. capacity each, for loading cereals. Max. permitted overall length 170 m. Actual depth at foot of quay 40 ft.

Can be used for loading or discharging general cargo.

The dredging has been finished, although not to the target of 40 ft., and the present max. length admissible is 160 m., with an official figure of 26 ft. draft at zero. However, vessels lying close up to the dolphins often find less depth, as the dredgers could not work too close in. The pool inside the breakwater is at 30 ft. but as there are no buoys for mooring, it is safer for vessels to await their turn outside, from 800–1,500 m. from shore, in 50 ft. – 60 ft., but with heavy winds from West through South to East they must put out to sea.

SHIPMASTER'S REPORT: February 1982.

Approaches: The channel is being maintained by a new dredger at 28 ft. 02 in. this allows a sailing draft of 30 ft. 02 in. *providing* the swell on the bar is less than 1.3 m. as decoded by the Pilots from observations.

The pool inside the breakwaters and the swell mole are used for swinging before berthing if the weather is good, and after loading if wind prevents this, hence NO anchoring is permitted in this area.

The tugs meet the vessel just outside the breakwaters and two lines each are the normal requirement (ship's lines), but these have to be sent away quickly when directed or else the vessel cannot swing in favourable weather. A deep sea tug has joined the tug fleet.

Berthing: All vessels wait at anchor in the roads where the holding ground is of mixed type. The strong Southerly winds must be watched and rise of the barometer.

A vessel of some 42,000 tonnes deadweight was accommodated head out at the main elevator berth, while two vessels waiting to sail were accommodated at the Ultramar II berth, each 183 m. overall, and without hindering the berthing and loading operations of a 31,700 ton bulk carrier. It should be noted that the inner vessel took the ground at 29 ft. draft when the tide was low; dredging is planned here when the newly restored berths on the Necochea side are completed and dredged to 10 m. as a lay-by and general cargo wharf. However, the nature of the piling is preventing much increase in depth at this old wharf. The limited number of shoots will prevent much use of this berth when it is again in use.

All linseed oil and similar cargoes are being handled at the berth to the East of the Overseas Wharf on the Quequen side but the lack of water makes taking the ground normal for tankers at low water while the swell effect is marked.

Density: This varies with the season and the flow of water down the River Quequen. A flash flood destroyed the footbridge above the elevator and this is now mainly cleared away but no extension has been planned as yet for the adjacent elevator berth. Thus the density can range from salt to near fresh in season.

Fresh Water: Very slow rate of delivery and very salty (500 parts).

Shore Leave: Permitted as soon as Argentine Identity Cards have been processed.

Developments: The Ultramar I berth has 8 tubes and can pour four at 350 tonnes/h. each. Work now proceeds according to who pays the overtime, but an 18 hour day is available on most weekdays, from 0700 hrs. to 0100 hrs.

AUTHORITY: Capitania de Puertos de Quequen y Mar del Plata.

Contact: Francisco Cesar Gallo, Chief of Operations Division.

RIO GALLEGOS (including Punta Loyola): 51.33 S. 68.59 W.

(Province of Santa Cruz) "B" category port.

N.B. Refer to Argentina, Section 1.

About eight miles up the river, 1,247 sea miles South of Buenos Aires.

PILOTAGE: Access to the channel is well buoyed, and the authorised Southern zone Pilot must be on board. There are 2 channels for entering port, the Southern channel though of less depth is preferred as it is more sheltered and the current is weaker.

ANCHORAGE: Good anchorage when awaiting tide is off Punta Loyola in 30 ft. or on the Northern coast in front of Punta El Gancho or between Punta Bustamante and Isla Deseado, this latter in the case of N.W. storms only.

In the port itself, the town anchorage is the best and is deepest in front of the packing house plant. Vessels discharge to or load from lighters, and ocean going vessels are permitted to use their own launch for connection with shore while in port.

RESTRICTIONS: Entrance to the anchorage is buoyed. The Northern Channel has a shingle bank bar 13 ft. at low water. The Southern Channel is more sheltered and the current not so strong. Rio Gallegos is a tidal port, the height of tide being as much as 40 ft. at times.

The port is characterised by the intensity of the currents, up to six knots, and should be entered on a rising tide there being only 22 ft. in the pool of the port at low water.

RADIO: For radio regarding free pratique, or reporting ETA call LPG 2 on 486 kHz. A2. For weather reports in English tune to Comodoro Rivadavia LPX 2 on 474 kHz. at 0400 and 1800 hrs. GMT.

TUGS: See "General" before first port.

BERTHS: Apart from the freezer wharf, there is the coal wharf, T shaped, fitted with an endless belt capacity 300 t.p.h., for the loading of the coal vessels taking the coal to Plate ports. There is only 20 ft. at this wharf.

There are nine lighters with varying capacity from 120 to 400 tons, which are usually unloaded or loaded when aground at low water.

FRESH WATER: Available by barge in very limited quantities. Vessel's pumps used.

FUEL: Available in drums or ex-truck from Comodoro Rivadavia.

MEDICAL: Doctor available.

REPAIRS: Workshop facilities for small repairs.

AIRPORT: Daily air service to Buenos Aires.

WEATHER: *Winds.* Characterised by constant winds from W. and S.W. averaging 16 knots during the day. In Spring and Summer 25 knots rising to 75 knots at times. Easterly winds are rare, usually with rain.

Rain. There are usually about 100 days with rain, in total 222 mm. distributed from April to October.

Temperature. Average maximum temperature in Summer is 18° C, maximum recorded being 29°, Summer minimum is 5.8° while in Winter the average maximum is 6.5° and minimum minus 11°.

Tidal range is 39 ft. 4 in. spring and 9 ft. 6 in. neaps, tides of over 40 ft. have been registered.

CONSULS: British, Chilean, Spanish and Italian.

DEVELOPMENTS: Punta Loyola: Coal loading berth under construction, completion expected 1984. Length 160 m. Depth 12.9 m. Berth will able to receive vessels up to 224 m. LOA and draft 13.29 m.

AUTHORITY: General Ports Administration.

SAN ANTONIO OESTE: 40.49 S. 64.55 W.

PILOTAGE: Pilot boarding position: 40° 54′ S., 64° 59′ W.

ANCHORAGE: There is a natural deep water pool here which will allow vessels of up to 33 ft. to lie in complete shelter.

BERTHS: A new pier is being built on the North side of Villarino Point on the opposite side of the bay from the old fishing port, now abandoned.

Plans have been changed slightly from the original, and there will be a viaduct, 290 m. long and 12 m. wide, at an angle of 170° to shore, widening to 18 m. at the end with a 45 m. by 16 m. floating pontoon, for fishing vessels. The viaduct serves a jetty 200 m. in length and 30 m. wide. Max. draft in the initial stages will be 26 ft.

Fresh water, telephone, telex, fuel and other services to be available.

SAN JULIAN: 49.18 S. 67.43 W.

(Province of Santa Cruz) "C" category port.

N.B. Refer to Argentina, Section 1.

In the creek of the same name, 1,111 sea miles South of Buenos Aires.

APPROACHES: Access is well buoyed, but vessels must wait for high tide to enter.

PILOTAGE: Southern Zone Pilot must be on board.

ANCHORAGE: Best anchorage situated in front of the town, in 22 ft. at LWS. When heaving anchor care must be taken as the 3 knot current drives vessels towards the shore. Puerto Scholl is the best of several anchorages.

RADIO: For radio regarding free pratique, or reporting ETA call LPY on 428.5 kHz, A2. For weather forecasts in English, tune LPX 2, Comodoro Rivadavia on 474 kHz, at 0400 and 1800 hrs. GMT.

TUGS: See "General" before first port.

BERTH: A quay has recently been put into use, 62 m. long by 20 m. wide, and in 24 ft. with two mooring dolphins, so ending the previous use of lighters.

FUEL/FRESH WATER: Not available. In emergencies, water could be supplied by lighter in drums.

MEDICAL: Doctor, and hospital available.

CONSULS: None.

Ascension Island

GEORGETOWN: 07.55 S. 14.20 W. (See Plan Book)

DOCUMENTS: Crew and Passenger Lists, Health Documents, Manifests and Bills of Lading if discharging cargo.
PILOTAGE: No pilots are available and not required as it is an open anchorage. 48 hours notice of ETA is required. Call Ascension Island Radio on 2182 kHz. or VHF Channel 16.
RESTRICTIONS: Advisable for ships or yachts arriving at night to wait until daylight unless contact is made with "Wideawake" on Channel 16 and specific instructions are given for berthing. Occasionally a floating pipe-line connects tankers at anchor in Clarence Bay with the Pierhead.
ANCHORAGE: Anchorage positions are available and will be given as bearing and distance in feet from Bates Rock Beacon, available by Harbourmaster by telex or "Wideawake" Channel 16. Depths at anchorage from 11 to 31 fathoms. Abandoned cables are in the area and if picked up should be released without cutting, if possible. Regular mailship always takes precedence for anchorage and cargo facilities.
HEALTH: Pratique should be requested when giving ETA.
RADIO: VHF Channel 16 "Wideawake" or Ascension Radio 2182 kHz. Shipping Agents Ascension Island Services Telex 219. Harbour Authority, the Administrator Telex 214.
RADAR: None.
TUGS: No tugs available.
BERTHING: No alongside berthing. "See Anchorages."
Cargo Facilities: Cargo has to be discharged by ships' cranes onto lighters. Lighters pull alongside Pierhead where cargo is off loaded. Pierhead cranes can handle weights up to 17 tons.
MEDICAL: Facilities available. 48 hours notice required if possible. Georgetown has a 12 bed hospital. Dental facilities usually available. Vaccination and inoculation certificates not normally required.
TANKERS: Anchorages available. Tankers for English Bay should anchor of Clarence Bay until boarded, it is not normally possible to put tankers into English Bay after 2100 hrs.
FRESH WATER: Not normally available.
FUEL: Not normally available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Preferable that this done by crew to avoid delays in starting discharge.
CONSULS: No Consulates. British Administrator attends to all requirements.
REPAIRS: Only minor repairs can be effected.
REPATRIATION: No facilities for crew changes. Repatriation can usually be arranged but only in the case where a person has been hospitalised or in extreme compassionate cases. No civil airlines call at Ascension but RAF (to UK) or USAF (to Antigua twice weekly and to Johannesburg bi-monthly) can usually assist. Master of vessel required to give guarantee in writing that all hospital fees and air fares will be honoured by his shipping line Agent.
TIME: Always GMT.
HOLIDAYS: Cargo vessels can be discharged during public holidays – no night work.
SERVICES: *Offshore Services:* Ascension Island Services. Contact Dr. Ray Harrison, Senior Manager.
GENERAL: There are no facilities for visitors on the island. With certain exceptions no-one is allowed to land at Ascension without an entry permit.
SHORE LEAVE: Limited facilities ashore make shore leave impracticable for most crews but Immigration Officer ready to consider special limited arrangements at the request of the Master. Yachts are normally granted 48 hour stay with daytime shore leave to revictual.
AUTHORITY: Office of the Administrator, Ascension Island, South Atlantic. *Tel:* Georgetown 311/327. *Telex:* 214 Govt. Av. *Contact:* The Administrator.

NOTES

Please also advise Shipping Guides Ltd.

Australia

GENERAL:

PILOT LADDERS: The Merchant Services Guild of Australia has advised that as from 1st December, 1975, Pilots will not board any ships on which the height from sea level to point of access exceeds 9 m., unless prior written assurance is given by the owner or Agent that arrangements have been, or will be, made to satisfactorily alter the ship's construction or equipment at the earliest opportunity. The only acceptable means for boarding ships with freeboard in excess of 9 m. is by a pilot ladder secured at an opening in the ship's side, or by an approved combined system of pilot ladder and accommodation ladder. The notice has been issued by the M.S.G.A. as, although the "9 m. rule" has been part of Australian and SOLAS regulations for some years, their members have found that a high number of vessels are not fully complying.

HOLD LADDER POLICY: For easy reference, summarised below is the Waterside Workers Federation official policy for hold ladders in Australia. Details of acceptable designs for special type vessels, i.e. car carriers, shallow 'tween deck refrigerated ships, etc. are available from Agent's Office upon request.

1. General Cargo Vessels – The standard acceptable ladder construction would be an upper vertical section limited to 3 m. (subject to this being technically possible) with the balance of the access hold ladders being of stairway design angled to the tank top.

2. Bulk Cargo Vessels – The standard acceptable ladder construction would be an upper vertical section limited to 3 m. (subject to this being technically possible) with a bottom vertical section limited to 6 m., (in order to reduce damage by grabs, bulldozers, etc.) and with the balance of the access ladders between the upper vertical section and lower vertical section being angled and of stairway design with the angle being not greater than 65° in both the above classes of vessels.

HEALTH: The Procedure for Clearance of ships at *ALL* ports in Australia is as follows:

An overseas vessel approaching a port should by radio supply the Agent not more than 24 hours and not less than 12 hours answers to the following questions:

A. Name, type and nationality of vessel.
B. Itinerary for last 21 days. If over 21 days from the last port, name of port and date of departure.
C. Name of first Australian port and ETA.
D. Number of crew.
E. Number of passengers.
F. Have you had any deaths on the voyage? If so please give details.
G. Have you had any cases of illness during the last 21 days with a fever of 38°C or above, and
  a) accompanied by rash, jaundice or glandular swelling or;
  b) accompanied by diarrhoea lasting longer than 24 hours.
H. Have you had persons suffering from venereal disease during the voyage?
I. What live fish, birds, reptiles or other animals are you carrying? Ships' pets should be mentioned.
J. Have you carried livestock on previous voyages in the last 6 months? If yes, please advise type of livestock, date of voyage and ports entered. Have all stock carrying compartments been thoroughly cleaned and disinfected?
K. Do you request radio pratique or radio approval to both?

3. Radio pratique may be given to all vessels except stock vessels, provided satisfactory answers are given to the quarantine questionnaire. Stock vessels will require a satisfactory report from Agricultural Quarantine. When radio pratique is not granted vessels will usually be granted radio permission to berth. Vessels which do not send answers to the questionnaire must be prepared to stop at the Quarantine Line.

4. When radio pratique has been issued a Quarantine Officer will board to deliver the Certificate of Pratique. When Radio Permission to Berth is granted a Quarantine Officer will board immediately on arrival to grant pratique.

5. Vessels must fly the "Q" flag until after pratique has been granted by radio or otherwise. The Agent must deliver the answers to the questionnaire to Quarantine as directed by the Regional Director of the Commonwealth Department of Health.

Authority: Department of Health, P.O.Box 100, Woden, A.C.T. 2606. Tel: 891555. Telex: AA 62149. Cables: Health, Canberra.

SHIP REPORTING SYSTEM: (See Plan Book).

The Australian Ship Reporting System (AUSREP) was initiated in 1973 on a voluntary basis. It has now been fully proved operational and became mandatory on April 1st, 1982. Participation in AUSREP will be compulsory for Australian ships throughout the AUSREP area, but foreign vessels will be required to participate only from their first arrival at an Australian port. Foreign vessels may, of course, participate voluntarily in the scheme throughout this sojourn in the AUSREP area.

AUSREP information packs for use on board ships will be available to foreign ships on arrival at their first Australian port from ship's Agents and Mercantile Marine Offices or from the Australian Coastal Surveillance Centre, Canberra (Tel: 062-884 999).

SHIP SUPPLY SERVICE: The National Safety Council of Australia has some capability in this regard as follows:

NORTH QUEENSLAND COAST: Approximate area from Cape York (Lat. 10° 42′ S., Long. 142° 35′ E.) to abeam Rockhampton (Lat. 23° 25′ S., Long. 150° 50′ E.), up to 100 nautical miles offshore. Helicopter is based at Townsville (Lat. 19° 15′ S., Long. 146° 46′ E.) and approximate transit time can be calaculated by 100 knot cruise speed.

Contact: National Safety Council of Australia, Queensland Division, Townsville S.A.R., 16 Belinda Street, Aitkenvale, Queensland, 4814. Tel: (077) 79 6511, (077) 75 3647. Facsimile: (077) 79 6356.

VICTORIA COAST: Approximate area from Merimbula in New South Wales (Lat. 36° 54′ S., Long. 149° 54′ E.) round S.E. point of Australia and along Southern coast of Victoria to Portland (Lat. 38° 19′ S., Long. 141° 28′ E.). Helicopter cruise speed 100 knots, aircraft based at Morwell in Victoria (Lat. 38° 13′ S., Long. 146° 28′ E.), operating up to 100 nautical miles offshore.

Contact: National Safety Council of Australia (Head Office), P.O. Box 700, Traralgon, Victoria 3844. Facsimile: (03) 267 7770. Telex: 35369.

The helicopter types would be Bell 212 twin turbine medium lift machines which are equipped for Search & Rescue & Emergency work, including winch, infra-red scanner, VLF/OMEGA navigation system, Radar, ADF 320 for location of marine beacons, medical equipment, oxygen, etc. They carry crewmen with a ship to aircraft winch capability including stretcher recoveries.

The NSCA operates an Emergency service only (i.e. not commercial work) and is available 24 hours a day throughout the year. Request for this service should be passed directly to the Australian Coastal Surveillance Centre. Aircraft carry Marine VHF and will normally make initial contact on Channel 16 using ships name as call sign.

There is some possibility that the area covered by the NSCA will be increased later in 1984.

GRAIN SURVEYS: *Survey Requirements for Vessels Loading Grain Cargoes:* Vessel's cargo compartments must be thoroughly swept clean, particularly of old grain, even if same is of Australian origin. All traces of grain must be carefully swept from floors of lower holds, tween decks, spar ceilings, bulkheads, box coamings, mast housings, base of electric crane housings and also from all beams, frames and gussets and stiffeners in all compartments. Vessels, upon arrival, often find when opening hatches that some old grain has fallen onto the ceilings originating from hatch beams,etc., which are not sufficiently swept. Such grain falls onto the ceilings due to the movements of the vessel at sea and should be removed prior to inspection.

SHIPMASTER'S REPORT: July 1983.

Radio/Health: I sent a request for free pratique to the Commonwealth Director of Health, Sydney, that being my first port, but the radio operator instructed our Radio Officer to address the message to Quarantine Sydney.

There was no advice as to the vessel having been granted free pratique when the Port Health Authorities boarded the vessel in Sydney. I was told that the radio pratique must be requested 18 – 24 hours prior to arrival from the Agents (see "Health" above).

The questionnaire to be answered was Form 106 No. 3.13.

ABBOT POINT, Queensland: 19.52 S. 148.05 E.

PORT LIMITS: Southwards of Lat. 19° 48′ S., between Long. 147° 59′ E. and Long. 148° 08′ E. East to coast.

DOCUMENTS: See "Townsville".

PILOTAGE: Compulsory. Prior notice confirming ETA 24 hours before arrival to be given through local Agent. Boarding ground is Lat. 19° 48.5′ S. Long. 148° 05′ E. or as directed by Pilot vessel.

Maintain listening watch on VHF Channel 16/67. Standard IMO pilot ladder rigged as per IMO recommendations. Usually starboard side 1 m. above water.

ANCHORAGE: Lat. 19° 49′ S., Long. 148° 06.5′ E. in 25 m.

RESTRICTIONS: Ballast condition, propellor fully immersed with forward draft not less than 2% of LOA.

No restrictions on time, however berthing at discretion of Harbour Master with regards to weather conditions.

Engines must not be immobilised whilst alongside without prior permission of Harbour Master.

Unberthing in accordance with state of tide and draft. Under keel clearance required is 10% of deepest draft plus 0.61 m.

MAX. SIZE: Optimum max. size vessel is 297 m. LOA and 47.5 m. beam, however, consideration given to larger vessels provided that mooring arrangements on board vessel are satisfactory.

HEALTH: Standard Australian Regulations and procedures apply, radio pratique is available.

VHF: Abbot Point Security maintains listening watch on VHF Channel 16. Pilot vessel and tugs, call on VHF Channel 16 and work on VHF Channel 6.

TUGS: 2 twin screw Zed Pellor tugs of 56 tonnes bollard pull are available. Two line launches are also available for berthing. Tugs lines always used.

BERTHING: One berth only which is a bulk coal loading facility, serviced by conveyor and ship loader. Length of berth fendering 268 m. Plus 4 mooring dolphins. Depth of water in approaches is 17.2 m. below datum. Depth of water at berth is 19.3 m. below datum.

Shiploader has a rated capacity of 4,600 tonnes/p.h.

DENSITY: 1026.5.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Ship's crew as watchman, ship's gangway used.

AIRPORT: Townsville Airport, 210 km. by road.

TIME: Local time is GMT plus 10 hours.

EMERGENCY CO-ORDINATION: Through Abbot Point Security using VHF Channel 16, internal telephone 212 or external (077 862244).

TELEPHONE: Provided on berthing.

GENERAL: Provisions available on request.

Nearest town is Bowen, 32 km. by road, Bowen has full facilities.

AUTHORITY: Department of Harbours and Marine, P.O.Box 225, Bowen, Queensland 4805. *Tel:* (077) 861268, 861933. *Telex:* 47435. *Contact:* Captain P. J. Zealley, Harbour Master Bowen/Abbot Point, Tel. (077) 861775.

AGENT: Sub-Agent of Patrick Agencies, Brisbane.

ADELAIDE, S.A.: 34.51 S. 138.30 E. (See Plan Book)

PORT LIMITS: Northern Limit: a line drawn due East from Lat. 34° 40.42′ S., Long. 138° 22.25′ E. to shore.

Southern Limit: a line drawn due East from Lat. 34° 51.30′ S., 138° 24.80′ E. to shore.

Western Limit: a line drawn between Lat. 34° 40.42′ S., Long. 138° 22.55′ E. to Lat. 34° 51.30′ S., Long. 138° 24.80′ E.

DOCUMENTS: See "Melbourne".

If first port of call, Customs and Quarantine Officers board at pilot station. If intermediate port and vessel has pratique, boarding is done at the wharf. The loadline and freeboard of all tankers arriving with full cargo are inspected by the Department of Navigation.

PILOTAGE: Advance notice 24 hours, telegraphic requests through ship's Agent. VHF Channel 16. Call sign "Adel. OH" Pilot launch orange hull, yellow deck house, "Pilot" on each side in black letters. Give pilot launch good lee and safe pilot ladder. Pilot boards 1.5 miles seaward of Entrance Beacon.

ANCHORAGE: 0.5 mile West of Entrance Beacon.

RESTRICTIONS: Controlling depth in channel to container berth 39 ft. 4 in. (12.0 m.) and to Inner Harbour 30 ft. (9.1 m.) ISLW. All vessels to maintain 1 ft. (0.3 m.) keel clearance in berth at all times.

Vessels up to 28 ft. (8.5 m.) require 3 ft. (0.91 m.) keel clearance; vessels up to 28–30 ft. (8.5–9.1 m.) require 3 ft. 8 in. (1.10 m.) keel clearance; vessels over 30 ft. (9.1 m.) draft require 4 ft. 4 in. (1.30 m.) keel clearance.

Night berthing/unberthing subject to Harbour Master's approval.

MAX. SIZE: Inner Harbour – length 640 ft. (195 m.) OA; draft 31 ft. (9.4 m.) Neaps, subject to tide; 34 ft. 06 in. (10.5 m.) Springs. Outer Harbour (Container Berth) – length 945 ft. (288 m.) OA; draft 37 ft. (11.3 m.) Neaps, subject to tide; 39 ft. (11.9 m.) Springs.

HEALTH: Including Document A in short form. Also see "Melbourne".

RADIO: Adelaide Radio VIA.

RADAR: Decca Type RR 1219 installed in signal tower.

TUGS: 4 available. Use tugs wires.

BERTHING: Tug power as required by Pilot. Depth at berths: Inner Harbour: 27 ft. (8.2 m.) – 36 ft. (11 m.). Outer Harbour: 33 ft. (10.1 m.) – 40 ft. (12 m.).

Berth	*Length (m)*	*Depth at L.W. (m)*	*Type*	*Cargo*	*Cranes*
9	133	8.2	Ro/Ro ship ramp	Containers	
13 & 14	303	9.1	Conventional	Steel & scrap	4/6.5t travelling
25	230	9.1	Ro/Ro shore ramp	Containers, Ro/Ro	25t fixed
27	204	10.7	Bulk loading	Cereals	2 loaders, 800t/hr
29	245	9.8	Ro/Ro quarter ramp	Steel	—
H	254	11.0	Bulk loading	Cement clinker	Loader
Osborne					
1	183	9.8	Bulk	Sugar, dry & liquid bulk	6/9t travelling cranes
2	177	9.4			
O.H. 2	183	10.1	Passenger terminal	Passengers	—
O.H. 4	214	10.7	Ro/Ro quarter ramp	Containers	—
O.H. 6	298	12.0	Container berth	Containers	45t container crane 60t on hook
O.H. 1	184	11.0	General	Sheep	

STEVEDORES: No advance ETA required.

MEDICAL: Contact Quarantine Department in ample time.

TANKERS: Vessel carrying inflammable cargoes or not gas-free restricted navigation during darkness. "Leak free" advice to Harbour Master to be given through Agent. 500 tons slop discharge facilities. 6 Berths. Unauthorised persons not allowed on board.

Berths:

"J"	Shell Co.	Depth alongside 8.2 m.
"L"	Mobil Oil Co.	Depth alongside 8.5 m.
"M"	B.P. Ltd.	Depth alongside 8.5 m.
"N"	Caltex Co.	Depth alongside 8.5 m.
O.H.4	Amoco.	Depth alongside 10.7 m.
OSB. 1	Terminal Properties.	Depth alongside 9.8 m.

DENSITY: Slightly denser than sea water; not affected by tide.

FRESH WATER: Inner Harbour: Through Hydrants at 12–15 t.p.h. Outer Harbour: 100 t.p.h.

FUEL: Fuel oil, thin fuel oil, diesel, gas oil. 48 hours notice required. A bunkering barge capable of transporting 1,000 metric tons of bunkering oils operates in the port. The use of this bunkering barge will enable vessels to bunker without leaving their loading berths or using road tankers.

GANGWAY/DECK WATCHMEN: Optional except for white spirit tankers. Cost varies according to time of shift.

OPENING/CLOSING HATCHES: Carried out by crew.

CERTIFICATES:

Last Port Customs clearance.
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment.
Light Dues Receipt.
Ship's Articles (British Vessel).

CUSTOMS ALLOWANCES: Each Crew member 200 cigarettes or 40 cigars or 8 oz. tobacco. Limited amounts of spirits per man.

CARGO GEAR: Accordance Australian Regulations. See "Melbourne".

IDENTIFICATION CARDS: See "Melbourne".

CONSULS: The following countries are represented:

Austria
Belgium
Denmark
Finland
France
Germany
Greece
Guatemala
Italy
Japan
Lebanon
Liberia
Netherlands
Norway
Peru
Philippines
Portugal
Sweden
USA

REPAIRS: All repairs possible.

DRY DOCKS: None.

REPATRIATION: Available.

AIRPORT: Adelaide Airport 8 miles, regular airlines.

TIME: GMT plus 9 hours 30 minutes. Daylight Saving Time from last Sunday in October to first Sunday in March – GMT plus 10 hrs. 30 mins.

HOLIDAYS: Xmas Day, Waterside Workers' Picnic Day (late January), Good Friday, Anzac Day (25th April), Adelaide Cup Day (3rd Monday in May), Eight Hours Day (2nd Mon. October). Restricted holidays, Boxing Day, New Year's Day.

TELEPHONES: Port Adelaide Police 49-6111, Ambulance (Wharf) 461616, Fire Brigade 471515.

Note: $30 connection fee plus cost of calls.

SERVICES: Garbage disposal, cleaning out and fitting out and compass adjusting.

DEVELOPMENTS: 2nd Portainer Crane (36 tonne capacity) to be sited at Outer Harbour Berth No. 6 and to be operational early 1986.

AUTHORITY: Dept. of Marine and Harbors, P.O. Box 19, Port Adelaide, S.A. 5015, Australia. *Tel:* (08) 470611. *Telex:* AA 82525. *Cables:* DEPMAH. *Contact:* Harbour Master.

AGENT: Patrick Agencies, POB 107, 3 Todd Street, Port Adelaide, S.A. 5015. Tel. 47–4655. Telex AA. 82624. Cables: "Rikpat Adelaide".

ALBANY, W.A.: 35.02 S. 117.53 E. (See Plan Book)

PORT LIMITS: All the waters of King George Sound and Princess Royal Harbour Westward of a line drawn from Herald Point to Bald Head.

DOCUMENTS: See "Melbourne".

PILOTAGE: Compulsory service provided by State Marine and Harbours Department. Pilot boards vessel with King Light – bearing 292°, distance 3 miles.

ANCHORAGE: King Point Light, bearing 292°, distance 3 miles, or as directed by Agent's radio message. There is a Prohibited Anchorage of 0.5 miles radius from a position on the line of main leads midway between Buoy Nos. 1 and 2.

RESTRICTIONS: The Entrance Channel from King George Sound to Princess Royal Harbour has a width of 550 m. land to land. The Navigation Channel therein being 145 m. wide, with a depth of 12.8 m. – 12.2 m. LWOST. Depth of Swinging Basin in the harbour is 12.20 m. and vessels with a draft of 11.20 m. can work No. 3 Berth and 9.6 m. No's. 1 and 2 Berths. Although some margin is allowed at the Harbour Master's discretion, dependent upon weather and tidal conditions, (HHW 0.9 m.). Vessels can be berthed day or night.

MAX. SIZE: LOA 200 m., beam 29 m., draft 11.2 m. at Berth No. 3 and 9.6 m. at Berth Nos. 1 and 2, deadweight 38,000 tonnes.

HEALTH: Master should supply answers to a prescribed questionnaire 24 hours before arrival. Details of the questionnaire can be obtained from vessel's Agent and answers should be radioed to Agent, who will arrange pratique.

RADIO: Perth or Esperance Radio.

VHF: Call sign is "Albany Port" and is normally open 0830 – 1630 hrs. Monday to Friday except holidays. Otherwise by special arrangement Channels 6, 12 and 16.

TUGS: Motor tug available, bollard pull 27.4 tons. Normally ships lines are used.

BERTHING:

King George Sound: Safe anchorages are available.

Princess Royal Harbour: The following berths are available:

Land Backed Wharf: A continuous wharf face of 608 m. allocated into 3 berths. Berth No. 1: 209 m., depth 10.4 m. Berth No. 2: 172 m., depth 10.4 m. Berth No. 3: 227 m., depth 12.2 m. There is no swell at any of these berths.

Max. permissible ship draft at LW is 11.2 m. at Berth No. 3 and 9.6 m. at Berth Nos. 1 and 2.

Load/discharge is by ship's gear other than loading of grain on Berth No. 3 which is by shore equipment.

The wharf berths are served by road and rail transport. The rail transport is connected with the West Australian Government Railways State system.

Berth Uses: No. 1 Wharf has a transit shed with a floor space of 4,300 sq.m. and is used mainly for general cargoes. Whilst the berth has not been constructed to receive ro/ro vessels, it has been possible to work them at this berth.

No. 2 Wharf is used for loading of livestock and the discharge of rock phosphate, sulphur and for general cargoes. This wharf has also been designed as a secure wharf for petroleum products discharge.

No. 3 Wharf is a general purpose berth and has been designed for receiving ro/ro vessels and container traffic, although it is used mainly for the loading of bulk grain.

CRANES: No cranes are available and ships use their own gear.

BULK CARGO FACILITIES: All berths are capable of receiving bulk cargo via ships gear and grabs into hoppers and road trucks.

No. 3 Wharf has a grain loading facility consisting of conveyors, 3 loading booms and spouts of which any 2 can operate together. The design loading rate (wheat) is 1,600 t.p.h. The facility is also designed to load 50,000 d.w.t vessels.

STEVEDORES: No ETA required. Private companies. ETA by 1330 hrs. in order to commence on any shift of the following day. (Labour can be confirmed the next day).

Normal Working Day: Day Shift (Ordinary Time) 0730 to 1430 hrs. Evening Shift (Time and a Half) 1430 to 2130 hrs. Night Shift (Double Time) 2300 to 0600 hrs. Saturday (Double Time) 0730 to 1430 hrs., Sunday (Double Time and a Half) 0730 to 1430 hrs. and 1430 to 2130 hrs.

MEDICAL: No advance notice except in case of serious illness to be included in arrival cable, ample hospital facilities available.

TANKERS: Discharging facilities are provided only at No. 2 Wharf where the hose is 200 mm., connecting to a 300 mm. main. Loading facilities are provided on all 3 berths from 100 mm. hoses.

Max. drafts at these berths are Berth Nos. 1 and 2, 9.6 m. and Berth No. 3, 12.2 m.

DENSITY: Average salinity of water in the port is 1026 – 1027.

FRESH WATER: Available at all berths at a rate of approximately 60 – 80 t.p.h. Unlimited quantities available. Supply by 62 mm. hoses metered individually or if more hose required from 200 mm. main meter.

FUEL: Light marine diesel oil is available at all berths from pipe-line or road tanker. Pipe-line approximately 100 t.p.h.

FIRE PRECAUTIONS: During receival of fuel Berth No. 2 is isolated and all Australian Association of Port and Marine Authorities' guidelines complied with.

CONSULS: Norway – Vice-Consul – Tel: 41 1755.

REPAIRS: A slipway of 340 tonne capacity is available. Small repairs only are dealt with by Board of Trade Engineers. Shore based facilities for minor engine repairs. Local shipwrights are available.

SURVEYORS: Cargo Inspectors: S.G.S., C.A.S.C.O. and Associated Marine Surveyors, W.A., Lloyd's Register, American Bureau, Bureau Veritas available at 4 hours notice.

GANGWAY/DECK WATCHMEN: From February, 1984, gangway watchmen required on all Australian crewed vessels and foreign fuel tankers.

HATCHES: Normally carried out by ships crew.

CUSTOMS ALLOWANCES: Each crew member 200 cigarettes or 40 cigars or 250 gm. tobacco; spirits 1 litre per person.

REPATRIATION: Crew changes and repatriation can be carried out with little difficulty.

AIRPORT: Airport located 11 km. from port with domestic flights to Perth.

TIME: GMT plus 8 hours.

HOLIDAYS: As for Fremantle except W.W.F. Picnic Day being late January.

POLICE/AMBULANCE/FIRE: Police Tel: 41 1411; Ambulance Tel: 41 1666; Fire Tel: 41 2122.

EMERGENCY CO-ORDINATION CENTRE: State Emergency Service contacted through Police Tel: 41 1411.

TELEPHONES: Telephones are available at all berths. Arrangements made through Agents. The approximate charges (February, 1984) $A45, plus calls.

SERVICES: Some radio and radar repair facilities available. Minor electrical and mechanical repairs.

BANKS: Commonwealth Trading, 261 York Street. Tel: 41 2022.
Australia & New Zealand, 23 Albany Highway. Tel: 41 1300.
National Commercial, 250 York Street. Tel: 41 2655.
Rural & Industries, 232 York Street. Tel: 41 1288.
Westpac Banking Corp., 281 York Street. Tel: 41 1722.

STORING: Vessels can be stored by launch in King George Sound or alongside the berth by road. Stores can be loaded during cargo operations. Forklifts can use all wharves. For stores Customs Form 43 to be submitted giving details of stores. For any storing in excess of 3 hours W.W.F. labour must be engaged.

SHORE LEAVE: No restriction.

IDENTIFICATION CARDS: Not required.

DELAYS: Not normally experienced unless waiting for another vessel on grain loading or deep draft Berth No. 3.

SHIP SUPPLY SERVICES: Fremantle Tug Operators, c/o Hall's Shipping & General Agencies, Port Road, Albany, W.A. 6330.
Austin Launch Service, 13 Alicia Street, Albany, W.A. 6330.

Servicing of ships in this area is done by launch, as helicopters are not readily available to take off sick personnel. Austin's Launch Service operate launches and a 50 ft. tug which are used for servicing ships in the area.

The transfer of personnel, sick seamen and transport of stores is carried out by launch or tug. Communication is done by VHF.

AUTHORITY: Albany Port Authority, 85 Brunswick Road, Albany, W.A. Postal Address: P.O.Box 175, Albany, W.A. 6330. *Tel:* (Office) 41 2844, (Transit Shed) 41 2759. *Contact:* B. J. E. Hudson, Managing Secretary.

AGENT: Patrick Agencies, P.O.Box 42, Port Road, Albany, W.A. 6330. Cables: "Rikpat". Tel: 41 3538. Telex: 91914.

ARDROSSAN, S.A.: 34.26 S. 137.55 E.

DOCUMENTS: See "Melbourne".

PILOTAGE: Compulsory (except for B.H.P. vessels). 24 hours notice required. Pilot boards one mile East of berth.

APPROACHES: *Navigation Beacon:* The light beacon, flashing white every second, marks the Northern side of the seaward limit of the dredged exit channel.

Lead Lights: Lead light towers line up on a grid bearing 249°. Towers are located approximately 10 m. from the clifftop edge and approximately 610 m. from clifftop edge.

MAX. SIZE: Max. size 46,000 d.w.t. for berthing and loading.

HEALTH: Officials board at berth. 24 hours notice required.

VHF: Manned weekdays 0730 hrs. – 1200 hrs. and 1245 hrs. – 1615 hrs.

TUGS: Available from Port Adelaide.

BERTHING:

B.H.P. Jetty:

Length 931 m. "T" head – 6 Dolphins and 2 mooring platforms. Total berth length 409 m. Continuous fendering is installed from Dolphin No. 2 to Dolphin No. 5 for 160 m. length. Depth of water – 9.2 m. MLWS.

Loading is via a Belt Conveyor System. Two fixed loading booms are available for use. One boom is set higher with a longer reach. Only 1 boom may be used at a time. The fixed boom necessitates vessel warping along "T" head during loading.

Loading rates: Dolomite 2,400 t.p.h. Wheat 400 t.p.h.
Barley 400 t.p.h.

Northern Boom:

Height of chute above MLWS – 12.38 m. Loading chute extends across vessel from wharf face – 12.3 m.

Southern Boom:

Height of chute above MLWS – 16.18 m. Loading chute extends across vessel from wharf face – 16.1 m.

TIDE: Average rise and fall 1.8 – 2.4 m. max. 3.1 m. at Spring tides.

FRESH WATER: Small quantities can be made available by special arrangement. (Flow rate is approximately 3 tonnes/hour).

FUEL: Not available.

STEVEDORING: Arranged with private companies.

Operations: Working hours are flexible to suit vessel's requirements.

Working Hours –	Night Shift	0001 – 0800 hrs.
	Day Shift	0800 – 1600 hrs.
	Afternoon Shift	1600 – 2359 hrs.

AUTHORITY: The Broken Hill Pty. Co. Ltd. P.O.Box 21, Whyalla, South Australia 5600.

AGENT: Sub-agent of Patrick Agencies, Adelaide.

BALLAST HEAD, Kangaroo Is.: 35.45 S. 137.48 E.

(See Plan Book)

In Eastern Cove, Kangaroo Island. Private bulk loading installation from which charter vessels load gypsum for shipment to factories in Eastern Australian states. No facilities for discharging cargo and no Customs, health or other government departments' facilities available.

DOCUMENTS: For vessels chartered to carry gypsum to Eastern Australian ports, Bills of Lading prepared on completion of loading.

PILOTAGE: No Pilots resident at Ballast Head but pilotage can be arranged through Harbour Master, Port Adelaide if required.

ANCHORAGE: Sea approach is unobstructed, with deep water anchorage and turning basin of Eastern Cove, 4.5 km. wide and extending 0.8 km. South of berth. Minimum depth about 10.5 m. Sand bars exist immediately South of berth but well inside line of dolphins.

RESTRICTIONS: Vessels may proceed to anchorage at any time, but can berth only during daylight hours. Loaded vessels can leave berth or anchorage at any time without concern for tide conditions.

Port can experience dodge tides. Port classified as unsafe by Department of Marine and Harbours. Vessel must be ready to depart berth at any time.

MAX. SIZE: Vessels of 16,000 d.w.t. are regularly loaded. However, before confirmation of vessels suitability can be given, dimensions of vessel must be advised to ensure conformance with berth and loading requirements. Ships must exercise extreme care in berthing to avoid damage to dolphins or head frame. Max. approach velocity 0.15 m./sec.

HEALTH: Pratique must be obtained at Port Adelaide.

RADIO: Ship-shore VHF radio. Call sign "Ballast Harbour". Frequencies, 150.80 MHz for distress and calling; 156.60 MHz for working.

Arrival Advice: At least 8 hours notice of ETA is required to S.A. Gypsum Adelaide Office, Tel: (08) 2687855 or after hours, Adelaide (08) 390 1357 or Kingscote (0848) 22457.

TUGS: No tugs are available, but can be arranged from Port Adelaide, if required. However, a launch is available for running ships' lines, and must be used.

BERTH: The berth consist of a line of 10 dolphins running North/South, 293 m. overall length forming a T-head jetty with loading conveyor gantry. Depth of water alongside 26 ft. (7.9 m.) LWOST. Berthing signals by radio instruction or mast head.

Loading Facility: Loading equipment consists of conveyor system to fixed loading gantry supporting luffing boom conveyor. Discharge from boom conveyor feeds into an adjustable Banana Spout that can be rotated through 360°. Boom conveyor operates only in horizontal position and loading chute does not telescope. Fixed loading gantry situated at centre of line of berthing dolphins. Distance from face of fenders to centre line of loading spout is 12.0 m. Distance from low water level to outlet end of loading chute in loading position – 8.2 m. Maximum handling rate of rock gypsum on conveyor system, 850 t.p.h.

MEDICAL: Doctor available at Kingscote, 40 km. distant. Hospital also at Kingscote.

FRESH WATER: Not available.

FUEL: No facilities available.

GANGWAY/DECK WATCHMEN: None required.

OPENING/CLOSING HATCHES: Carried out by crew.

CONSULS/REPAIRS/DRYDOCKS/REPATRIATION: No facilities available.

AIRPORT: Kingscote Airport approximately 30 km. distant. Regular ai service to Adelaide – at least one flight daily.

TIME: 9 hours 30 minutes in advance of GMT from March to October inclusive. 1 hour Summer saving time operates from November t February inclusive.

HOLIDAYS: Loading carried out on any day but at least 24 hours Notice of ETA required for loading on public holidays.

POLICE/AMBULANCE/FIRE: Police station, Kingscote 2.2018. Ambulance, Kingscote 2.2037 or 2.2028; Fire, Kingscote 2.2200.

TELEPHONES: No arrangements exist for placing telephones on board.

SERVICES: None available.

DELAYS: Berth accommodates only one vessel at a time, but once berthed the loading continues without break until completion except fo the time taken to shift ship from hatch to hatch and to check draft.

AUTHORITY: Gypsum Products Group, CSR Building Materials P.O.Box 58, Rosewater East, South Australia 5013, Australia. *Tel:* (08 268 7855. *Telex:* AA 82112.

Contact: State Manager, Gypsum Products Group. *Tel:* (08) 268 7855. Mine Manager, New Lake Gypsum Quarry, Kangaroo Island. *Te* (0848) 33-077.

BARROW ISLAND, W.A.: 20.49 S. 115.33 E.
(See Plan Book)

LOCATION: The Barrow Island Tanker Terminal, owned and operated by West Australian Petroleum Pty. Limited, is a crude oil loading installation located on the East side of Barrow Island, Western Australia. The tanker moorings are located approximately 32,400 ft. (9,875 m.) offshore at Lat. 20° 48′ 52″ S., Long. 115° 33′ 04″ E. Refer to current hydrographic chart AUS-742 for further information.

DOCUMENTS: Refer to "Melbourne" – Also see "Health".

MINIMUM REQUIREMENTS:

Minimum Requirements for Tankers Loading:

1. A Mooring Master is assigned to tankers calling at Barrow Island to assist in mooring and unmooring, in connecting and disconnecting the submarine loading hose, and to advise on matters concerning the safety of the tanker and terminal facilities. The Master of the ship shall be in full command at all times. In the event of negligence on the part of the Mooring Master causing damage to or loss of the vessel, the Owners and Charterers of the vessel indemnify the Mooring Master and West Australian Petroleum Pty. Limited against all claims by the vessel's Owners, Charterers and third parties arising therefrom.
2. West Australian Petroleum Pty. Limited may, at its discretion without prior written approval, refuse to moor or load any tanker that does not conform to the minimum requirements listed below. The Company also reserves the right to reject any tanker, that in the judgement of the Mooring Master, is deficient in any manner whatsoever. The onus is exclusively on the Master, Owner and Charterer of each Tanker entering the Terminal to ensure that the vessel is sea-worthy and that all equipment is and remains in good working order. Failure by WAPET to reject any vessel not meeting these requirements will not relieve the vessel's Owner or Charterer of liability.
   Vessels which could possibly contravene pollution regulations (both Commonwealth and State) will not be accepted.
3. Tankers exceeding the following dimensions cannot be accommodated at the sea berth:
   a. Deadweight tonnage (loaded) – 71,000 tonnes.
   b. Overall length – 820 ft. (250 m.).
   c. Moulded depth – 58 ft. (17.67 m.)
   d. An under-keel clearance of not less than 5 ft. (1.56 m.) must be maintained.
4. Tankers must have the following:
   a. At least one tension winch on the port side and one tension winch on the starboard side at the after end of the maindeck and a minimum of four tension winches on the poop deck;
   b. At least one set of mooring bitts on the port and starboard sides at the after end of the main deck;
   c. A minimum of four sets of mooring bitts on the poop deck to which preventer wires can be hove tight and made fast; and
   d. A set of bitts at the after end of the fo'c'sle head on the port side to which the swamp mooring can be made fast.
5. Both bow anchors are required to have a minimum of 10 shackles of chain. All anchors and chains are to comply with the requirements of a Classification Society recognised by the Australian Department of Transport.
6. Tankers should have sufficient mooring ropes and/or wires so that single or doubled up they have a total breaking strain of 80 tonnes to each of the 6 mooring buoys. 6 such lines or combinations not less than 120 fathoms each in length are required.
7. The tanker's derrick or crane must be capable of lifting the 5 tonne cargo hose on the starboard side.
8. Tankers shall have an access platform to facilitate safe connection of the cargo hose of configuration and dimensions to meet the requirements of Australian Standard No. 1657.
9. Tankers are required to furnish the necessary personnel to perform all work involved in the connecting and disconnecting of the cargo hose.
10. Tankers manifolds must be capable of being bolted to the 12 in. U.S.A.S. flanges used by the cargo hose.
11. Under fine weather conditions, tankers are required to arrive ballasted to at least one quarter of their summer deadweight tonnage with propeller submerged. During adverse weather conditions tankers shall, if so notified by the Mooring Master, take on additional ballast prior to berthing.
12. Tankers are required to victual and provide sleeping accommodation for the Mooring Master and Operators and to victual only the 3 man launch crew.
13. At all times the tanker shall be in a state of readiness to leave the moorings.
14. The dumping of rubbish overboard at the Port is prohibited.

READINESS: Notice of Readiness is accepted:

(a) *When the berth is available:*
When the vessel is all fast in the berth, i.e. all lines secured to the buoys and preventers made fast.

(b) *Where the berth is not available:*
6 hours after the vessel drops anchor at a nearby anchorage. Laytime ceases for the period of time taken for the vessel to move from the anchorage and is resumed when the vessel is all fast at the berth.

(c) *Where a vessel with inadequate lights arrives at night:*
6 hours after daybreak following arrival or when the vessel is all fast at the berth – whichever occurs first.

PILOTAGE: A terminal Mooring Master will meet and board tankers bound for the Island Tanker Terminal in an approximate position with tanks (conspicuous) bearing 300° and 2 nautical miles off the moorings. Tankers waiting to berth etc. are requested to anchor in this position.

ANCHORAGE: See "Pilotage".

RESTRICTIONS: Vessels equipped with adequate searchlights may be berthed during the hours of darkness. 2×12 in. (30 cm.) reflector diameter searchlights, one fitted to each port and starboard wing of the bridge in such a manner as to provide a wide scanning range, are considered adequate. Tankers not fitted with searchlights may berth in daylight hours only.

MAX. SIZE: The minimum depth of water in the vicinity of the berth is 43.3 ft. (13.2 m.) and an under keel clearance of 5 ft. (1.56 m.) is required at all times. Also see "Minimum Requirements" – No 3.

HEALTH: Tankers arriving from foreign ports must make prior arrangements for quarantine and customs clearance through their agents. Port Walcott, Western Australia, is the nearest port where customs and quarantine clearances can be obtained.

RADIO: All tankers proceeding to the Port of Barrow Island shall notify WAPET at Barrow Island, telex 99125 or WAPET Perth Office, telephone 325 0181 (contact available 24 hours/day) or cable address WAPET, Perth, during normal business hours, their estimated time of arrival, not less than 96 hours before arrival, amending or confirming this ETA at intervals of 48 and 24 hours prior to arrival. A final ETA is to be confirmed 12 hours before arrival at the Port. Failure to comply with the above procedure may result in a Mooring Master not being available on the tanker's arrival. Quantity and condition of ballast on board should be advised in original ETA message.

During normal daylight working hours, the Company's Mooring Master, Barrow Island, can be contacted by means of the International Maritime VHF. Frequencies in use are:

Channel 16 156.8 MHz – safety and calling
Channel 14 156.6 MHz – terminal operations,
ship/shore
Call sign 'Barrow Island'
Channels 8 & 12 are also fitted

At times other than normal working hours, contact may be made by pre-arranged scheduling. In all events tankers are required to tune their VHF sets to Channel 16 when within 100 nautical miles of Barrow Island.

TIDES: Slack water at the terminal moorings occurs approximately 1 hour after HW and LW. The direction of the flow is approximately 245° flood tide and 065° ebb tide, and attains a rate of approximately 1 knot at springs.

Times and heights of high and low waters occurring at the Terminal Moorings are to be published in the Australian National Tide Tables effective 1978 (supplement). The above tidal information can only be taken as a guide as times, direction, rate and heights cannot be implicitly relied upon.

BERTHING: West Australian Petroleum will furnish a suitable launch and crew to secure and cast off the tanker's lines to the mooring buoys.

Tankers must have at least 2 sets of mooring bitts on the port and starboard sides at the after end of the main deck or, alternatively a mooring winch and 1 set of bitts, and on the poop deck, in addition to mooring winches, 4 sets of mooring bitts to which mooring lines and/or wires can be hove tight and made fast.

To facilitate berthing, 2 mooring lines on the after end of the main deck, and 2 mooring lines on the poop deck should be securely joined together giving an effective length of approximately 240 fathoms (440 m.).

Each self-tensioning winch should have approximately 70 fathoms (128 m.) of wire or rope flaked out on the deck ready for running by the mooring launch to the mooring buoys. After mooring, tension winches will not be left in tension, but with the brake securely screwed up.

Permanent 5 in. circumference wires are fitted to all mooring buoys. These wires are provided to supplement the tanker's own lines relative to the prevailing weather conditions at the time. These wires are fitted with 160 ft. (48.7 m.) of 3.75 in. (9.6 cm.) wire and 4.5 in.×100 ft. (110 cm.×30 m.) terylene messengers. A good ship's rope messenger is required to bring the messenger to the tanker's winch drum.

West Australian Petroleum reserves the right to refuse to load any tanker that is deficient in any manner whatsoever or presents a pollution hazard.

DEBALLASTING: There are facilities for receiving ballast from vessels loading at Barrow Island.

Under fine weather conditions, tankers are required to arrive ballasted to at least one quarter of their summer deadweight tonnage with propeller submerged. During adverse weather conditions, tankers shall, if so notified by the Mooring Master, take on additional ballast prior to berthing.

Owing to the time factor involved in pumping dirty ballast ashore, it is recommended that tankers arrive with clean ballast and preferably deballast concurrently with loading.

However, if required, ballast on arriving tankers may be pumped to shore using ship's pumps through the submarine line then through a deballasting line to the ballast receiving pond. The following deballasting procedure is used at the Terminal:

After the hose has been connected, at least one-third of the summer deadweight tonnage must be loaded before deballasting. Part of this oil is to be used to displace ballast from the submarine line. The line displacement of the submarine loading line is approximately 12,250 barrels (1,680 tonnes).

It is necessary to load at least one-third of the summer deadweight tonnage before deballasting operations begin in order to keep the ship in as heavy a condition as possible and thereby minimise the effects of sudden changes in sea and weather conditions.

When the preceding operation is complete, deballasting operations start. When the oil-water interface is detected onshore, the stream is diverted from the crude oil storage tanks to the ballast receiving pond. Pumping of the ballast continues until all ballast is discharged from the ship. Pressure at the ship's rail during deballasting should not exceed 100 p.s.i. At this pressure the discharge rate is approximately 1,120 tonnes/p.h.

When all ballast is discharged Barrow Island crude oil previously loaded is pumped into the line in order to displace all ballast from the submarine pipe-line. When approximately 11,000 bbls. (1,500 tonnes) of crude has been pumped the Mooring Master and the shore Terminal are to be advised.

When the water-oil interface is detected ashore, the stream is then diverted to the shore tanks and the ship's pumps are requested to be stopped. During the displacement operations, pumping rates should be kept as high as possible to keep line contents in a turbulent condition in order to sweep the lines as clean of water as possible.

LOADING: The tanker should, if possible, arrive with the derrick or crane rigged on the starboard side and in all respects ready to lift the deck hose, hanging off chain, etc., from the mooring launch.

The onshore Terminal facilities consist of five 200,000 bbl. capacity floating roof storage tanks, two gas engine drive centrifugal loading pumps with necessary auxiliary equipment. The loading pumps are rated to deliver a maximum of 15,400 bbls. (2,000 tonnes) per hour of crude oil to tankers with a nominal pressure of 10–25 p.s.i.g. at the ship's rail.

Barrow Island crude oil has an approximate API gravity range of 35.5 to 37.1 and an approximate temperature range of 74°F to 98°F (23°C – 37°C).

The sea line delivering the oil is 20 in. O.D. × 0.375 in. (51 cm. × 9 mm.) steel pipe with a 2 in. (5 cm.) thick concrete external coating. The line is terminated with 200 ft. (61 m.) of flexible submarine loading hose consisting of 150 ft. (45 m.) of 16 in. (40 cm.) and 50 ft. (15 m.) of 12 in. (20 cm.) hose. The sea end of the pipe-line is marked with a white spar buoy, and the pick-up end of the flexible hose is marked with a white cone buoy.

The submarine line is left full of crude oil between tanker arrivals. (After picking up and connecting the hose, the system will be pressurised to about 25 p.s.i.). After the hose has been hoisted and secured at the ship's rail, the blank flange on the end of the hose assembly is removed and the hose connected to the tanker's manifold by the deck hose and the adaptor spool assembly previously delivered to the tanker by the mooring launch.

During loading operations, a responsible deck officer must be present to approve the hose connections and supervise the tanker's crew members in this work.

One deck hose, 19 ft.×12 in. (5.18 m.×30 cm.) and reducers of 14 in. to 12 in. and 12 in. to 10 in. are available (36 cm. to 30 cm. and 30 cm. to 25 cm.). All flanges are U.S.A. Standard, formerly known as American Standards Association. An adaptor from 10 in. diameter U.S.A.S. (flange pitch circle diameter 14.25 in.) to 10 in. diameter British Standard (flange pitch circle diameter 15 in.) is available.

The tank tops should be kept closed at all times. Ullage plugs should be closed but not pinned at all times except when sampling, gauging, thieving or inspecting for which they may be opened for the necessary time but should be immediately closed again.

Steam to deck machinery is not to be turned off without first notifying the Mooring Master.

The Mooring Master is to be advised when 200 tonnes is required to complete loading so that the pump motors can be eased down slowly, and again at 50 tonnes when the pumps will be stopped and loading completed by gravity. On completion of loading, the manifold valve is to be closed slowly to minimise the surge of oil in the pipe-line and the consequent quick build up of back pressure.

Portable radios are supplied for communication between tankers and the Terminal. To minimise the possibility of a dangerous position arising due to an undetected radio failure, tankers are required to keep an hourly test call schedule with the Terminal at which time they should advise the Terminal of the back pressure at the ship's rail.

CAUTION – When all hose connections have been made the Cameron valve and the ship's manifold are opened and gravity loading takes place until such time as the ship's checks are completed and clearance is given to start the loading pumps. Whilst loading, the flow of oil from the shore pumping station via the submarine pipe-line is not to be shut off by closing ship's valves or the pipe-line valve without prior approval of the Mooring Master. At least one tank is to be fully open to the inflow of oil from the submarine pipe-line at all times, and in order to reduce back pressure as many tanks as possible should be open during loading. In all events the back pressure at the ship's rail is not to exceed 100 p.s.i.

GENERAL: Ships must load promptly and leave the mooring Terminal promptly or risk demurrage charges which may accrue to other vessels waiting and ready to load.

Medical facilities, telephone, Consuls or Foreign Government Representatives, bunker oil, fresh water, cargo or tank inspection services, and facilities for ship's laundry, stores or repairs are not available at Barrow Island Tanker Terminal.

Ship's crews cannot be accommodated ashore on the Island.

The dumping of any rubbish overboard is prohibited.

AGENCY: No ship's Agent's services are furnished by West Australian Petroleum.

AUTHORITY: West Australian Petroleum Pty. Limited, 233 Adelaide Terrace, Perth. Postal Address: Box C 1580 P.O., Perth, W.A. 6001. *Tel:* 325 0181. *Telex:* Wapet AA 92008. *Cables:* Wapet.

Barrow Island Tanker Terminal: *Tel:* 091-946007 (hours 0700 – 1630) *Telex:* 99125

BOTANY BAY, N.S.W.: 34.00 S. 151.14 E.

(See Plan Book)

DOCUMENTS:

2 Crew Lists (Form M. & S. II).
Stores List (Form 42 A).
Personal Effects List (Form 5).
2 copies Health Report (Form A Q360).
3 copies Ports of Call List (Form C & E 886).

PILOTAGE: Compulsory. Ordered by Agent basis Master's ETA. Pilot boards outside Botany Bay Heads in position Lat. 34° 01.1′ S., Long. 151° 17.5′ E. Vessels waiting for Pilot not to proceed West of Long. 151° 15′ E. Pilot vessels fitted with VHF for communication with other ships. Watch maintained on Channel 13 while at sea and messages conducted on Channel 6.

RESTRICTIONS: Tankers not berthed after sunset. Mooring normally effected 2 hours before HW at Kurnell No. 3.

MAX. SIZE:

Kurnell	No. 1	Length	183 m.	Draft	10.02 m.
„	2	„	198.2 m.	„	11.1 m.
„	3	„	228.5 m.	„	11.5 m.
Bulk Liquids Berth		„	185 m.	„	14.0 m.

SBM Terminal, up to 12.8 m. draft.

RADIO: Sydney Radio. VHF to Harbour Control, Sydney. Also see "Sydney – VHF".

TUGS: Two tugs permanently stationed at Botany Bay. Extra tugs sent from Sydney on request.

BERTHING:

Kurnell Nos. 1 & 2: Operators: Australian Oil Refining Pty. Ltd. Finger pier with 2 berths; No. 1 – Eastside. No. 2 – Westside. Crude 1×26 in. 1×18 in. lines – 8 in. hoses. Fuel 1×24 in. 1×12 in. lines – 8 in. hoses. White 6 in. – 16 in, Bunkers and FW ex-wharf. Slop facilities up to 8,200 tons.

Kurnell No. 3 Berth: Operators: Australian Oil Refining Pty. Ltd. Vessel moors using both anchors forward and ropes to 5 buoys and 2 swamp moorings, semi-circle (astern). Hoses connected midships – 2×12 in. to submarine line (crude). Bunkers, fuel and diesel. Fresh water 70 t.p.h. ex-pipe-line.

SBM: A single point mooring for up to 80,000 d.w.t. tankers, at 12.8 m. draft, located just inside bay entrance. Crude: 1×16 in., 1×12 in. hoses, up to 1,500 t.p.h. White Products – No bunkers available. Fresh water ex-tug at 100 tons per lift.

Bulk Liquids Berth: Bulk liquid chemical and petrochemical cargoes piped to adjacent tank farms. Max. length of vessel – 185 m. Depth alongside 19 m. Max. draft 14 m.

Brotherson Dock: Six berth container terminal complex commissioned December 1979. Dredged to 15.3 m., swinging basin at entrance dredged to 13.1 m. Northern terminal leased to the Australian National Line – 42 hectares, wharfage 1,000 m. comprising 3 berths each with ro/ro ramp and 35 tonne gantry cranes. Southern terminal leased by Container Terminals Australia Limited – 38 hectares, wharfage 936 m., comprising 3 berths.

BALLAST: *Tank Cleaning and Dirty Ballast Facilities:* A.O.R. Berth Nos. 1 and 2: Maximum quantity acceptable, 8,255 tons. Rate 1,000 t.p.h.

Only clean, oil free ballast water may be discharged overboard, after written permission received from Port Authority which is difficult to obtain.

Severe penalties will be imposed by the Authorities for any infringement of Harbour Regulations, and when doubt exists with regard to whether the ballast is clean and oil free, then the shore reception facilities may be used.

DENSITY: 1025.

FRESH WATER: Available at all berths with the exception of the SBM.

FUEL: Marine fuel and diesel oil available at Kurnell Berth Nos. 1, 2 and 3.

FIRE PRECAUTIONS: Normal restrictions.

GANGWAY/DECK WATCHMEN: None available.

IDENTIFICATION CARDS: See "Melbourne".

REPAIRS: Most repairs. Ships not allowed to be immobilised.

DRY DOCKS: Nil.

AIRPORT: 6 km. – regular airlines.

TIME: GMT plus 10 hours. (Plus 1 hour for daylight saving when applicable).

HOLIDAYS: Cargo worked all days.

POLICE/AMBULANCE/FIRE: Tel: 000.

TELEPHONES: At Wharf and Kurnell Berth No. 3. AOR Ltd.

SERVICES: Compass adjusting only.

DELAYS: Normal only.

DEVELOPMENTS: Major port development for container and bulk trades, with channels of up to 19.2 m. in depth and entrance of Bay 2 km. wide completed on the Northern foreshore.

A wharf for bulk liquid chemicals and petrochemicals was commissioned in 1979, and extensive storage facilities have been constructed on port land adjacent to the wharf.

Two container terminals of 42 (Northern) and 38 (Southern) hectares have been developed along the sides of the Brotherson Dock. These two new terminals more than double the container handling capacity of Sydney Ports (Port Jackson and Botany Bay).

Each of the terminals has 3 berths involving almost 2 km. of wharfage. The water depth at these berths is 15.2 m.

AUTHORITY: Maritime Services Board of New South Wales, G.P.O. Box 32, Sydney, NSW 2001, Australia. *Tel:* (02) 240 2111. *Telex:* MSB SY AA 24944. *Cables:* "Marboard". *Contact:* Berthing Master.

AGENT: Patrick Agencies, Sydney Branch, Suite No. 2, 12th Floor, ADC House, 189-193 Kent Street, Sydney, N.S.W. 2000. Tel: 233-6722. Telex: 74093. Cables: Rikpat, Sydney.

BOWEN, Queensland: 20.01 S. 148.15 E.

(See Plan Book)

PORT LIMITS: The Port of Bowen limits is an area comprised within a line commencing at Cape Edgecumbe and proceeding thence to Cape Gloucester.

DOCUMENTS: See "Melbourne".

PILOTAGE: Pilot will board at the Fairway Buoy. To avoid possible delay, vessels should telegraph or radio their expected time of arrival at the Fairway Buoy.

The pilot vessel is equipped with VHF radio having international Channels 6, 8, 12, 13, 14, 16 and 67. Pilot requires ladder, rigged 5 ft. above the water, man-ropes rigged and heaving line ready.

ANCHORAGE: On Bramston leads to seaward of the six fathom line.

RESTRICTIONS: Approach channel: 7.00 m. LWST to 8.53 m. HWST (latest soundings 1980) see "Note".

Tide variation: Mean spring rise 2.43 m. to 3.04 m. Mean neap rise 1.21 m. to 2.43 m.

Note: The last commercial ship to enter the Port of Bowen was in July 1982. Considerable shoaling appears to be taking place in the approach channel to the swing basin, therefore maximum depth in approach channel of 7.00 m. LWST as shown by 1980 soundings is no longer correct.

MAX. SIZE: Length about 540 ft. overall. Berth depth from 22 ft. 9 in. to 30 ft. LWOST.

HEALTH: See "Melbourne".

Officials board off Bramston leads, South of the six fathom line. 24 hours notice required. Radio pratique available.

RADIO: Vessels arriving from the North use Townsville Radio. Vessels from the South use Sydney and Brisbane radio stations.

TUGS: Tug available for berthing and departure. Motor launch used to run lines to berth.

BERTHING:

Berth	*Length*	*Depth*	*Remarks*
No. 1.	203 m.	—	Not used
No. 2.	203 m.	—	Not used
No. 3.	167 m.	9.0 m.	

Berthing during daylight hours, starboard side to No. 3 Berth, bulk coal loading facilities. No berthing is undertaken if wind speed exceeds 25 knots. Sailing at any hour. No. 1 and 2 Berths are not used by large vessels and are in poor state of repair.

SPECIALISED CARGO-HANDLING FACILITIES: Berth No. 3 is specially equipped for the handling of the export of bulk cargoes (coal, ore, grain, mineral, sands, etc.) by a ship loader equipped with telescopic chute and jet slinger fed by a belt conveyor from stockpile areas. Loading rate 610 t.p.h.

STEVEDORES: There are no permanent waterside workers in Bowen.

MEDICAL: Hospital facilities available. No advance notice required. Tel. No. 29.

DENSITY: Average density at berths 1025 to 1027.

FRESH WATER: Limited supply available.

FUEL: Oil bunkers not available but small quantities can be obtained from Townsville by road or rail tankers.

GANGWAY/DECK WATCHMEN: Watchmen available, but not compulsory.

OPENING/CLOSING HATCHES: Can be performed by crew or stevedores.

REPAIRS: No facilities.

AIRPORT: Internal flights from Proserpine and international flights from Townsville.

HOLIDAYS: Christmas Day (December 25); Good Friday; Labour Day (1st Monday in May); Anzac Day (April 25th). No work performed on these days.

POLICE/AMBULANCE/FIRE: Police, tel. 861333; Ambulance, tel. 861211; Fire Brigade, tel. 861444.

TELEPHONES: Ship-board telephones can be rented.

DEVELOPMENTS: A five-year development plan includes improvement of coal export facilities, see "Abbot Point", and building a single buoy mooring terminal for bulk liquid carriers.

Plans call for the port to be dredged to 70 ft. for VLCC's in the future.

AUTHORITY: Bowen Harbour Board, 6 Herbert Street, P.O.Box 78, Bowen, Queensland 4805, Australia. *Tel:* (077) 861966. *Contact:* Miss J. Buckingham, Office Supervisor.

Department of Harbours and Marine, P.O.Box 225, Bowen, Queensland 4805. *Contact:* Captain P. J. Zealley, Harbour Master.

AGENT: Sub-agent of Patrick Agencies, Brisbane.

BRISBANE, Queensland (including Fisherman Islands, Hamilton, Pinkenba): 27.27 S. 153.04 E.

(See Plan Book)

PORT LIMITS: A vessel is considered an "arrived vessel" when it is at the Pilot boarding grounds off Caloundra.

DOCUMENTS: See "Melbourne".

PILOTAGE: Notify Agent approximately 1 week in advance. Confirm ETA to Duty Harbour Master 24 hours before arrival at pilotage ground, plus max. draft. Master of vessel to radio ETA Pilot boarding ground 8 hours before arrival. Messages should be addressed: Shipserv Caloundra Signal Station.

Contact Caloundra Signal Station by VHF Channel 16 when within range. Pilot boards S.E. of Cartwright Point in position, Lat. 26° 43′ S., Long. 153° 10.6′ E. Pilot vessel white hull with words "Pilots" in black letters. Orange superstructure. Place ladder about 6 ft. from water.

Pilot ground is 44 miles from entrance to river. River then navigable to ocean going vessels for 14 miles from the mouth.

Same Pilot remains to berth vessel. Pilotage time about 5 hours.

APPROACHES: Good navigation conditions in Moreton Bay except in exceptionally heavy weather in N.W. channel. Minimum depth in N.W. channel 13 m., and N.E. channel 7.5 m., in Bar Cutting 11.6 m., in Swinging Basin at Luggage Point 11.7 m., to Hamilton 9.1 m., and to Bulimba Point 8.8 m. (all LWOST). Dredged channels in Moreton Bay minimum 300 m. width. River Cuttings 120 m. width, Bar Cutting 180 m. width.

In Moreton Bay and Brisbane River the mean spring rise is 2.13 m. above LWST and mean neap rise is 1.74 m. above LWST. The lowest neap tide 1.22 m. above LWST and maximum spring tide 2.7 m. above LWST. The visibility generally good except in cyclonic weather when heavy rain.

RESTRICTIONS: Berthing times dependent on vessel's draft in relation to state of tide.

MAX. SIZE: Waterline length in river 250 m. at 9.7 m. draft (special provision made for larger vessels, especially when light draft condition preparing entering Graving Dock). Draft at HWOST for tankers 12.2 m.; for cargo vessels 9.7 m. No limit on height at present – see "Bridges".

HEALTH: See "Melbourne". Doctor boards at river entrance or at berth. Available 24 hours per day.

RADIO: Most traffic channelled through VIB, coastal radio station Brisbane. VHF Channel 16, 156.6 MHz and 156.8 MHz.

RADAR: Continual watch kept at Caloundra Head, and Lytton Hill Signal Station.

TUGS: Six tugs available, 4×33 tonnes and 2×42 tonnes bollard pull. Tugs are privately owned. Tugs join vessel approaching the berth, or as may be required elsewhere in the river. Line boats available.

BERTHING:

Berth		*Length* (m.)	*Depth LWOST* (m.)
Bulimba Reach			
Capricorn Wharves Mercantile Wharves	No longer in service for commercial cargo purposes		
Newstead Wharf	No. 1	140	9.4
	No. 2	190	9.4
	No. 3	130	8.5
ANL Ro-Ro Wharf	—	220	9.1
Hamilton Reach			
Brett's Wharf (3 berths)		470	9.1
Hamilton Wharves	No. 1	140	9.1
	No. 2	240	10.4
	No. 3	170	10.4
	No. 4	210	9.5
Cairncross Dock		340	9.1
Maritime Wharves	No. 1	170	9.1
	No. 2	257	9.8
	No. 3	271	9.8
Quarries Reach			
Abattoir Wharf*		—	—
Borthwick's Wharf		190	8.0 (tallow tankers only)
Pinkenba Wheat Wharf	No. 1	210	10.0
	No. 2	190	10.0
Shirley's Wharf		210	9.8
Consolidated Fertilisers Wharf		220	8.5
Queensland Cement & Lime		220	9.8 (import bulk clinker)
Fisherman Islands:			
Containers	No. 1	280	12.0
	No. 2	270	12.0
Coal Wharf		240	13.0
Wheat Wharf (under construction)		240	13.0

*Wharf removed – new wharf under construction for bulk sugar.

BULK LOADING FACILITIES: *Hamilton Wharf Berth No. 4:* Gross handling rate for loader is 700 t.p.h. Movable conveyor system services 110 m. of wharf.

Pinkenba No. 1: 2 belt conveyors serving 7 loading spouts of which 4 can be used simultaneously. Nominal handling rate is 1,600 t.p.h.

Pinkenba No. 2: Single shiploader. Loading rate for grain 1,000 t.p.h. Loading rate for rutile sand 7,000/8,000 tonnes per day.

Coal Wharf: Single shiploader, loading rate for coal 1,000 t.p.h. Also discharge bulk cement to silos at 150 t.p.h.

TANKERS: Port and Harbour Regulations stipulate that tankers use large coir/nylon springs for attaching vessel's fore and aft springs to the mooring bollards on the wharves except where tension winches are fitted. The springs are supplied by wharf owners.

Moorings should consist of at least 4 parts out each end in addition to 2 back springs both fore and aft. If these lines are not tended and taut at all times the vessel cannot be considered to be securely moored. In addition to the above 2 lines have to be made fast: 1 fore-line from the main deck and 1 aft-line from the main deck.

A rat guard is to be properly fixed to each mooring line and where it is not possible to place a guard on the forward or after spring lines, a piece of tarred rag or hessian should be attached.

A Radar Station at Lytton at the mouth of the Brisbane River conducts a 24 hours, all weather watching brief over all ships entering or leaving the port of Brisbane.

The load-line and freeboard of tankers arriving with full cargo may be inspected by the Department of Navigation.

All official or crew wishing to go or leave the Ampol Terminal at Fisherman Island or Amoco Terminal at Luggage Point must do so by launch. Masters should contact the local Agents to arrange.

Ampol Refinery, Fisherman Island: Dolphin berth. Berth length 330 m., depth 12.8 m. Grades handled:

Crude Oil discharge, 4×8 in., 3,353 m., 150 p.s.i./3,500 cu.m.p.h. max.

Fuel Oil, Diesel Oil, Gas Oil, loading 4×8 in., 3,353 m., 290 cu.m.p.h. max.

No dirty ballast facility.

Port side alongside.

Amoco Refinery, Luggage Point: Dolphin berth. Berth length 280 m., depth 12.2 m. LWOST. Grades handled:

Crude Oil discharge 2×12 in., 1,402 m., 150 p.s.i./3,500 cu.m.p.h. max.

Fuel Oil, Diesel Oil, loading 2×12 in., 1,402 m., 300 cu.m.p.h. max.

No dirty ballast facility.

Port side alongside.

Ampol Products Wharf, Lytton: T-head and Dolphins. Berth length 280 m., depth 9.8 m. LWOST. Grades loaded:

Fuel Oil, 1×8 in., 1,676 m., 200 cu.m.p.h. max.

Gas Oil, 3×8 in., 762 m., 1,500 cu.m.p.h. max.

Ballast, 2×8 in., 1,676 m., 1,000 cu.m.p.h. max.

Kerosene, 2×8 in., 1,676 m., 1,000 cu.m.p.h. max.

Diesel Oil, 1×8 in., 1,676 m., 350 cu.m.p.h. max.

Dirty Ballast: 2×8 in., 762 m., max. 6,000 tons, max. rate 1,000 cu.m.p.h.

Starboard side alongside.

Amoco Products, Bulwer Island: T-head and Dolphins. Berth length 240 m., depth 9.8 m. LWOST. Grades loaded:

All products: Loading 1×8 in., 2,764 m., 550 cu.m.p.h. max. Discharge 1×8 in., 183 m., 150 p.s.i., 1,000 cu.m.p.h. max.

LPG: Loading 1×6 in., 671 m., 45 cu.m.p.h. max.

Dirty Ballast: 1×8 in., 90 m., max. 4,460 tons, max. rate 1,000 cu.m.p.h. max. No ballast with chemicals acceptable.

Either side alongside.

Shell Pinkenba: T-head and Dolphins. Berth length 220 m., depth 11.0 m. LWOST. Grades discharged:

Fuel Oil, Diesel Oil, Bitumen, 1×8 in., 427 m., 150 p.s.i., 1,000 cu.m.p.h. max.

Gas Oil, Ballast, Kerosene, Chemicals, 1×8 in., 427 m., 150 p.s.i., 850 cu.m.p.h. max.

Lub Oils, 1×8 in., 732 m., 150 p.s.i., 320 cu.m.p.h. max.

No dirty ballast facilities.

Starboard side alongside.

Mobil Colmslie: T-head and Dolphins. Berth length 190 m., depth 6.5 m. LWOST. Grades discharged:

Ballast, Kerosene, Gas Oil, Chemicals, 1×8 in., 577 m., 150 p.s.i., 750 cu.m.p.h. max.

Fuel Oil, Diesel Oil, 1×8 in., 577 m., 150 p.s.i., 800 cu.m.p.h. max.

Lub Oils, 1×8 in., 577 m., 150 p.s.i., 300 cu.m.p.h. max.

LPG, 1×2 in., 91 m., 15 cu.m.p.h. max.

No dirty ballast.

Either side alongside.

Maritime Wharves Pty. Ltd., Hamilton: T-head and Dolphins. Grades discharged:

Ballast, Kerosene, Gas Oil, Fuel Oil, Diesel Oil, 1×8 in., 1,676 m., 150 p.s.i., 750 cu.m.p.h. max.

No dirty ballast facilities.

Starboard side alongside.

All berth depths must be confirmed prior to arrival.

Gas freeing facilities not available, but chemist available to issue Gas-free Certificate. There are slop discharge facilities at both refineries.

BRIDGES: Bridge under construction (clearance 55 m.) completion expected in 1986.

STEVEDORES: Ample labour available for all cargo working except rush periods.

Normal capacity per gang per shift: 60 tons break bulk; 75 tons palletised cargo.

CRANES:

Location	*No.*	*Capacity* (Tonnes)
ANL Wharf	2	25
Hamilton No. 2	1	45 (Portainer)
Hamilton No. 4	4	6
Maritime Wharves	1	34
	4	6
Fisherman's Island No. 1 & 2	2	60 (Portainer)

DENSITY: 1.025 g./cu.m. (possibly less during cyclone conditions).

FRESH WATER: From mains 600 kPa. 180 t.p.h. at all berths.

FUEL: Oil bunkering available at all oil wharves. Also by road tanker at cargo berths. Distillate diesel fuel or fuel oil. Largest bunkering barge is 1,400 tons for fuel oil.

GANGWAY/DECK WATCHMEN: Normally by crew, but can be hired.

OPENING/CLOSING HATCHES: Performed by stevedores/crew.

CUSTOMS ALLOWANCES: See "Melbourne".

CARGO GEAR: Heavy lift facilities up to 45 tons available certain wharves.

IDENTIFICATION CARDS: See "Melbourne".

CONSULS:

Austrian Consulate	127 Creek St.	229-3222
Belgian Consul	18 Eustace St., Aspley	359-1106
Bolivian Consulate-General	210 Queen St.	221-1606
British Consulate-General	193 North Quay	221-4933
Cyprus Consulate	P.O.Box 156, Kenmore	371-5105
Danish Consulate	127 Creek St.	221-8777
Federal Republic of Germany	289 Queen St.	31-2151
Finnish Consulate	324 Queen St.	221-9111
French Consular Agent	379 Queen St.	221-6122
Greek Consulate	127 Creek St.	229-3222
Italian Consulate	158 Moray, New Farm	358-4344
Japanese Consulate	68 Queen St.	31-1438
Mexican Consulate	35 Sherwood St., Toowong	371-1066
Nepal Consulate	66 High St., Toowong	371-4228
Netherlands Consulate	260 Queen St.	31-1779
New Zealand Consulate	288 Edward St.	221-3722
Norwegian Consulate	344 Queen St.	221-3316
Panamanian Consulate	P.O.Box 276, Kenmore	374-1723
Papua New Guinea Consulate	127 Creek St.	221-7915
Philippine Consulate	Perry House, Elizabeth St.	229-6363
Portuguese Consulate	379 Queen St.	221-4833
Spanish Consulate	26, Toubridge, Mt. Gravatt	343-5578
Swedish Consulate	30 Herschel St.	221-9977
Swiss Consulate Agency	15 Corowa, Wavell Hts.	266-9782
U.S.A. Consulate	343 Wickham Terrace	

REPAIRS: All major repairs undertaken, including main propulsion diesel engines, steam turbines, boilers, reduction gearing servicing, propellers, tailshafts, stern bearings, all engine-room repairs, deck gear, radar, radio and sonar equipment, fitting-out berths.

DRY DOCKS: Cairncross: Largest vessel handled, m/v *Clutha Capricorn*, 83,500 d.w.t. All major facilities available.

The Dock has a bottom width of 33.5 m., a total depth of 15.5 m., and a length of 268 m. Depth over sill 9.1 m. LW. The Dock is fully equipped for repair services, including facilities for water blasting, sand blasting, compressed air, Radiographic (X-Ray) facilities, hull cleaning and painting, mechanical and structural repairs, etc. Heavy lift cranes available, 1×50 ton alongside dock and 2×30 ton on fitting out wharf.

TIME: GMT plus 10 hours.

HOLIDAYS: New Year's Day; W.W.F. Picnic Day; Australia Day; Good Friday; Easter Monday; Anzac Day; Queen's Birthday; Christmas Day; Boxing Day.

Close Holidays – Christmas Day, Good Friday, Anzac Day, Labour Day, W.W.F. Picnic Day (No labour available these days). Some public holiday dates vary from year to year. Consult Agent for current information.

POLICE/AMBULANCE/FIRE: Tel: 000 and ask for service required.

TELEPHONES: At most wharves. Can be connected on board.

DEVELOPMENTS: Work has started on the construction of new bulk grain facilities for the port.

The new installation, which is due to be operational by late 1985, will be located between the present bulk oil wharf and the container terminal at Fisherman Islands.

It will initially be able to handle vessels of up to 60,000 d.w.t. Upon further dredging however, it will be able to accommodate vessels up to 80,000 d.w.t.

The loading equipment and terminal storage will be funded by the Queensland Grain Handling Authority. The Port of Brisbane Authority's contribution will cover the cost of dredging services, site reclamation and fill and wharf construction. The Authority has let a contract to Steel Mains Pty. Ltd. for the manufacture and supply of the wharf's steel piling. When completed, the installation will be able to load ships at the rate of up to 2,200 tonnes per hour.

Also see "Berthing" and "Bridges".

AUTHORITY: Port of Brisbane Authority. A.M.P. Place, 10 Eagle Street, G.P.O. Box 1818, Brisbane, Australia 4001. *Tel:* 228-9711. *Telex:* AA42780. *Cables:* Portbris. *Contact:* F. M. Wilson, General Manager.

AGENT: Patrick Agencies, 443, Queen Street, Box 1460, G.P.O., Brisbane, Queensland 4001. Cables "Rikpat". Tel: 31-1871. Telex: AA40260. After hours Tel: 379-3665.

BROOME, W.A.: 17.59 S. 122.14 E. (See Plan Book)

PORT LIMITS: All water enclosed in an East and West line drawn through Station Hill; a North and South line drawn through Fall Point; and an East and West line drawn 3 miles to South of Entrance Point, a North-South line drawn 3 miles West of Entrance Point and including the whole extent of Dampier Creek.

CERTIFICATES/DOCUMENTS/HEALTH: See "Melbourne".

PILOTAGE: No resident Pilot. Inform Marine and Harbour Department, Fremantle ETA 2 weeks in advance. Pilot boards approximately 292° (T) distant 4.5 miles from Gantheaume Point.

RESTRICTIONS: Channel between Channel Rock and Middle Bank dredged to 17 ft. LWOST. Vessels of more than 15 ft. draft restricted to height of tide for arrival/departure. HWOST 27.5 ft. HWONT 17.2 ft.

MAX. SIZE: Draft 30 ft.

VHF: Limited facilities channels 6 and 16.

TUGS: None.

BERTHING: 2 berths. Outer berth max. length 612 ft., 32 ft. LWOST. Inner berth length 479 ft., depth 28 ft. LWOST.

STEVEDORES: 2 gangs working 0800 hrs. – 2000 hrs.

CARGO GEAR: See "Melbourne".
FRESH WATER: Up to 100 tons available. Rate up to 20 t.p.h. at 85 cents per 1,000 litres.
FUEL: Diesel oil available, provided prior notice given to BP Agents.
REPAIRS: Minor repairs possible through Port Engineering Services.
TIME: GMT plus 8 hours.
GENERAL: Tides: Both ebb and flood in direction of line of jetty. Tide has apparent ebb period of 8 hours, flood 4 hours. Slack water 2.5 hours prior HW and LW. Information given by radio.
DEVELOPMENTS: The Government of Western Australia has approved in principal a plan to provide grain handling and storage equipment at the port of Broome. An A$18.4 million project has been put forward to ship sorghum from the port and the Western Australia Harbour and Light Department has designed the equipment necessary for storage and ship loading. Tenders call for the construction of a 20,000 tonne mechanised storage shed and 2 shiploaders. The cost of the equipment would be approximately A$2.7 million. The State Minister for Transport said that negotiations were currently underway to determine port charges to be applied.
AUTHORITY: Marine and Harbours Department, P.O. Box 402, Fremantle, Western Australia 6160. *Tel:* 3351211. *Contact:* Captain W. Spencer, Nautical Adviser.

Marine and Harbours Department, P.O.Box 42, Broome, Western Australia 6725. *Contact:* Mr. M. Gower, Wharfinger (Port Manager).

AGENT: Sub-agent of Patrick Agencies, Fremantle.

BUNBURY, W.A.: 33.19 S. 115.38 E. (See Plan Book)

DOCUMENTS:
Number of Crew Lists, 2 official (Forms M & S 11 and 2 flimsy copies).
Passenger Lists, 5.
Customs Documents:
Last Port Clearance.
Form 42A Ship's Stores consumed in Australia.
Form 5 Manifest of Crew's Possessions.
Loading Ports List.
Ship's Master's Bond.
Approved Identification Documents of all crew.
Commonwealth Light Dues Receipt.
State Tonnage Dues Receipt.
Health Documents, Smallpox Certificates and other forms handed to Master by Quarantine Doctor.
Manifests, 3.
Bills of Lading, 2.

PILOTAGE: Compulsory with exception of British ships whose Master holds an exemption certificate for the port. Radio Harbour Master, Bunbury 24 hours and 4 hours notice. VHF Channel 16 – pilot boat and tug. Base set not manned continuously but pilot boat may be contacted 1 hour before arrival. Pilot boat painted white with black rubbing strip, black gunwhale, centre house with orange top. Word "Pilot" painted on sides. Pilot boards 1.5 – 2 miles from breakwater. Boarding area is with North Shore leads in line bearing 157° – 337° and 1 mile from Breakwater Light seawards – no alternative area. Anchorage – main lighthouse bearing 195° distance 1.5 – 2 miles.
ANCHORAGE: Depth 7 to 9 fathoms. Anchoring not advised in stormy weather; safer to steam offshore.
RESTRICTIONS: 24 hour port but entry not generally carried out at night.
MAX. SIZE: *Outer Harbour:* Max. length 585 ft. Deepest permissible loaded draft 8.7 m. Subject to a small increase at Harbour Master's discretion.
Inner Harbour: Max. draft 11.6 m.
HEALTH: Quarantine inspection required if Bunbury is first Australian port. Quarantine inspection for Health Clearance – hours of inspection 0600 – 2200. Also see "Melbourne".
RADIO: Perth Radio.
VHF: Watch maintained on Channel 16 prior to arrival of vessels.
TUGS: 2 tugs available. "Capel" (42 tonne bollard pull) and "Geographe" (22 tonne bollard pull). Join vessel off berth. Ship's lines used if necessary. The tugs are normally manned from 0700 to 1600 hrs. weekdays. At other times overtime is charged.
BERTHING: Heavy shore mooring springs used.
BULK CARGO FACILITIES: *Outer Harbour:* One ore-loading berth 184 m. in length. Conveyor system loading at 900 t.p.h.

General purpose berth 184 m. in length. Equipped with grain handling facilities (rated at 250 tonnes per hour).

Weighbridge: 50 tonne capacity, 15 m. × 3 m. platform.

New Inner Harbour: No. 1 Woodchip berth consists of 6 breasting dolphins fitted with flexible fender units, 2 mooring dolphins and a central shiploader platform and access jetty. The dolphins and platform are connected by steel walkways. Length of berth 381 m. Depth 12.2 m. Wood Chip bulk loader rated at 1,000 t.p.h. The facilities can accommodate vessels up to 11.6 m. draft. During loading the vessel is warped back and forth alongside the shiploader. Berth also used for tanker discharge.

No. 2 General purpose berth, length 240 m.

Alcoa's Alumina Berth. Bulk loader rated at 2,000 t.p.h.

The approach channel depth to both berths is 12.20 m.

Weighbridge: 60 tonne capacity, 18 m. × 3 m. platform.

STEVEDORES: Weekdays – ETA to be advised by 0600 hrs. for labour requirements on that day. Week-ends – ETA required by 0600 hrs. Friday.
MEDICAL: Medical attention available. Hospital facilities available. Smallpox vaccinations and valid certificates required.
TANKERS: One tanker discharge berth – (See "Bulk handling facilities" – Woodchip berth).
DENSITY: 1023 to 1027 – no relation to tide.
FRESH WATER: Readily available – 55 cents per kilolitre.
FUEL: Furnace oil by road ex-Fremantle. Marine and light diesel by road.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Preferably by crew.
CUSTOMS ALLOWANCES: Each crew member 200 cigarettes initially and thereafter as required in reasonable quantities. Wine and/or Spirits, open bottles of spirit on arrival not to exceed 1 quart and thereafter as required in reasonable quantities.
CARGO GEAR: Must comply with Australian Loading and Unloading Safety Regulations. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: Vice-Consul for Norway.
REPAIRS: Facilities available.
DRY DOCKS: Nil.
REPATRIATION: Facilities available.
AIRPORT: Light aircraft landing strip only.
TIME: GMT plus 8 hours.
HOLIDAYS: Days on which work cannot be performed: Good Friday, Christmas Day, Labour Day, Waterside Workers' Picnic Day, Anzac Day.
POLICE/AMBULANCE/FIRE: Emergency Number Bunbury 000.
TELEPHONES: Available on application.
DELAYS: Generally no delays.
SHIP SUPPLY SERVICE: *Contact:* Wills Shipping, P.O. Box 52, Bunbury W.A. 6230. Tel: (097) 214866 Telex: AA93045.
AUTHORITY: Bunbury Port Authority, P.O.Box 4, Bunbury 6230, Western Australia. *Tel:* 21-2800. *Contact:* Mr. B. P. Cunningham, Managing Secretary.
AGENT: Patrick Agencies, 33 Victoria Street, Bunbury, W.A. 6230. Tel: 219911. Telex: 94934 A/B Rikpat. Cables: Rikpat.

BUNDABERG, Queensland: 24.45 S. 152.24 E. (See Plan Book)

PORT LIMITS: The port limits are defined as the waters contained within a radius of 4 miles of South Head (Burnett Heads) Lighthouse, together with all navigable rivers communicating therewith, and the banks and the foreshores thereof.
CERTIFICATES/DOCUMENTS/HEALTH: See "Melbourne".
PILOTAGE: Compulsory. Radio not less than 24 hours ETA; VHF Channel 16.

Pilot boards 2.5 miles East of South Head Lighthouse.

DEPTHS: (Datum) Channel 7.6 m.; Swinging Basin 7.6 m., Sugar Berth 10.0 m.; Oil Berth 8.0 m. Keel clearance normally 0.9 m.
RESTRICTIONS: Length 182.87 m. maximum. Vessels not to pass out through sea reach on ebb. Channel width 76 m. Also see "Delays".
RADAR/VHF: No radar service. Bundaberg Harbour Board office, craft, tug and pilot launch can be contacted on VHF Channel 16 during office hours.
TUGS: One tug, 22 tonnes bollard pull, owned by Howard Smith Industries, and one work boat of 4 tons bollard pull, owned by the Harbour Board, which is also used for pushing, are available, both fitted with VHF. Ship's lines or tug's lines are used, and no charge for tug's lines.
BERTHING: No. 1 Bulk Sugar Berth 190 m. long. No. 2 Oil, Molasses, Aqua Ammonia, 80 m. long.
SPECIALISED CARGO HANDLING FACILITIES: *Bulk Sugar Berth:* Loading by movable gantry at 1,400 t.p.h.
Bulk Molasses: Loading rate 240 t.p.h. No facilities for containers or roll-on/roll-off traffic.
Oil Berth: Facilities for discharge all petroleum products and aqua ammonia and loading molasses.
MEDICAL: Hospital facilities available.
TANKERS: 10 in. lines. No slop discharge facilities. Oil tankers, discharge only. Molasses tankers, load only. Depth alongside tanker berth 8.0 m. Datum.
DENSITY: Average density about 1025.
FRESH WATER: Available, delivered by hose, variable loading rate and quality (bore water) 12 t.p.h. Cost 50 cents per 1,000 gallons.
FUEL: All grades available, 24 hours notice required.
GANGWAY/DECK WATCHMEN: Not necessary, but available.
OPENING/CLOSING HATCHES: By crew.
CARGO GEAR: No additional local regulations. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: None.
REPAIRS: Almost all types of deck and engine repairs possible.
DRYDOCKS: No drydock. Slipway for small vessels only. Mobile and floating cranes may be hired.
SURVEYORS:
(1) Cargo surveyors available (Lloyd's Agent).
(2) Classification surveyors available from Brisbane.
REPATRIATION: Facilities exist.
AIRPORT: Airport 2 miles from city serviced by regular internal airlines.
TIME: GMT plus 10 hours.
HOLIDAYS: Normal Queensland holidays observed but cargo worked regardless of holidays.
POLICE/AMBULANCE/FIRE: Dial 000 from the port.
EMERGENCY CO-ORDINATION CENTRE: Bundaberg Harbour Master (Captain D. R. Cole). Tel: (Office) 724633, (Home) 792386. Telex: 49751.

TELEPHONES: Telephone connection placed at tanker berth and sugar berths.
BANKS: Major Australian Banks have branches in Bundaberg.
STORING: See "Prelims" Page viii.

(1) Yes.
(2) Yes at sugar berth. No at oil berth.
(3) Yes.
(4) Yes.
(5) Same as other Australian ports.
(6) No. None available.

DELAYS: Vessels can berth at any state of the tide provided there is 0.9 m. under keel clearance. Vessels sail on flood tide only.
AUTHORITY: Bundaberg Harbour Board, P.O.Box 75, Bundaberg, Queensland 4670. *Tel:* (071) 712247, 712248. Port Office *Tel:* 794233. *Cables:* Bundaberg Harbourboard. *Contact:* Mr. D. Antrobus, Harbour Board Secretary. Captain D.R. Cole, Harbour Master.
AGENT: Sub-agent of Patrick Agencies, Brisbane.

BURNIE, Tasmania: 41.03 S. 145.55 E. (See Plan Book)

PORT LIMITS: Southward of a line drawn from the Eastern Island Breakwater Light to the Round Hill Lighthouse on the Eastern side of Emu Bay.
APPROACHES: Port situated on Western shore of Emu Bay and easy of access. Bay is 2 miles wide and 1 mile deep facing in a Northerly direction. The bottom is sand and clay interspersed with patches of reef and rock, particularly in the Southeastern sector of Bay. Vessels may anchor on main leads in vicinity of Pilot Boarding Ground, but it is not advisable remain at anchor during strong on-shore winds. Port protected by 2 breakwaters: the inner, founded at inner end of Blackmans Reef, lies in a 110° direction and is 380 m. long. The other, an island structure 488 m. long and protecting the port from Easterly weather, lies in a 130°/310° direction, with its N.W. end bearing 045°, 700 ft. from the S.E. end of the Inner Breakwater.
DOCUMENTS: Also see "Melbourne". (Marine Board only): Inward Manifests to be lodged on arrival. Agents supply Manifests and non-negotiable copy Bills of Lading to Customs for checking prior to vessels arrival.
PILOTAGE: Prior advice through local Agents, ETA by radio telegraphy through Melbourne Radio (VIM) or Hobart Radio (VIH) to Marine Board Burnie. Immediate advice VHF Channels 16 and 12.

Pilot launch – 14 m. white launch with buff cabin, name "Miowera". International Signals apply. Boarding area on main harbour leads 210° (T) with Round Hill Point Lighthouse bearing 155° (T). Ladder 1.5 m. from water, manropes, no boat rope.

ANCHORAGES: See "Approaches".
RESTRICTIONS: Vessels up to 9.4 m. draft, no restriction. Maximum length 250 m. 24 hour service, weather permitting.
MAX. SIZE: (See "Restrictions"). Tankers at Island Breakwater to 10.9 m. draft at all states of tide.
HEALTH: Pratique automatic when from other Australian ports. Otherwise notify local Agent.
RADIO: Melbourne Radio (VIM).
RADAR/VHF: No radar service. Port equipped with VHF, R/T operating International Maritime Bands. Pilot vessel, tug, and other floating plant similarly equipped.
TUGS: Tug(s) join East of Island Breakwater. Usually lashed alongside with tug's lines (no extra charge). When on towing duty, usually ship's line.
BERTHING: Vessels equipped with vegetable fibre ropes or bare spring wires required to use shore springs:
Quayage, Sheds and Depths:

Ocean Wharf: On South side of Inner Breakwater. 305 m. long, 28 m. wide. Dredged depth 10 m. for 180 m. length, shoaling to 7.6 m. at inshore end. Stern loading facilities at inshore end.

McGaw Pier: 240 m. long and 44 m. wide (added to Emu Pier, the original concrete breakwater). On North side is 213 m. of effective berthage with dredged depths ranging from 9.1 m. for 150 m. length, shoaling to 6.4 m. at inshore end. A new stern loading ramp now operating at inshore North McGaw. Apron width is 7.6 m. On South side 183 m. of effective berthage with dredged depths of 9 m. to 190 m. from end. 1×12 tonne luffing crane and 1×28 tonne luffing crane.

Bulk Berth: 275 m. long with 215 m. of effective berthage. This berth incorporates a bulk loader with a capacity of up to 1,270 t.p.h. The berth is also suitable for general cargo operations.

Ferry Terminal: 83 m. long and 35 m. wide. Vessels of up to 200 m. may berth. 1×35 – 50 tonne luffing crane.

The stern loading ramp has a width of 8.5 m. permitting 2 lines of traffic. The axle loading of the wharf is 50 tons. The berth is dredged to 9 m.

Jones Pier South: Berth is 170 m. long, effective length 260 m. Apron width to shed 30 m. Dredged to 9.4 m. overall.

Mobile cranes available if required.

BULK CARGO FACILITIES:
Conveyor Loader: At bulk berth for export of zinc, lead and copper concentrates to 1,270 t.p.h.
Inward Bulk: Berth and crane at South McGaw Pier.
Sulphuric Acid: Loading and discharging facility at Island Tanker Berth and bulk berth, with rate of 1,000 t.p.h.
STEVEDORES: Labour to be ordered (1) by 1500 hrs. for following day (weekdays), (2) by 1300 hrs. Friday for Saturday and Sunday, (3) by 1900 hrs. Sunday for Monday.
MEDICAL: Notify Agent prior arrival of extra requirements other than pratique. General Hospital 1 km. from port. Current smallpox and cholera revaccinations arranged by prior notice.
TANKERS: Tanker Berth is 85 m. long and 30 m. wide, sited on South side of Island Breakwater. 11.3 m. of water in this berth, which will accommodate vessels of up to 200 m. in length. Diameter of lines are 250 mm. No residue discharge facilities. 1 berth, maximum draft 10.9 m.
DENSITY: 1025 to 1028.
FRESH WATER: All wharves – hose from wharf hydrants. Rate adequate – cost 12c per ton.
FUEL: Diesel and heavy fuel available from road tankers.
FIRE PRECAUTIONS: Normal. 24 hour ferry service to be maintained to tanker berth.
GANGWAY/DECK WATCHMEN: Watchmen commonly used. Penalty rates apply on weekends and holidays.
OPENING/CLOSING HATCHES: Stevedores will close hatches.
SHIP CERTIFICATES:

Safety Construction.
Safety Equipment.
Safety Radio Telegraphy.
Load Line.

CUSTOMS ALLOWANCES: 200 cigs. or 500 grams tobacco. Beer is carried outside the bond. One bottle spirits per man every 10 days .
CARGO GEAR: Australian Navigation (Loading & Unloading) Regulations apply.
CONSULS: None.
REPAIRS: Limited repairs carried out. The Emu Bay Railway Company have a foundry and machine shop.
REPATRIATION: On crew member signing off Agent requires passport or identification card. Agent handles repatriation details and notifies Immigration Department, Hobart, re movements of crew member.
AIRPORT: Daily services: 17 km. distant.
TIME: Local time is Australian Eastern Standard time, i.e. GMT plus 10 hours. Tasmanian Summer Time applies. Dates of operation published in Australian Notices to Mariners.
HOLIDAYS: Cargo work performed on all holidays except Christmas Day, Good Friday, WWF Picnic, Anzac Day, Labour Day.
POLICE/AMBULANCE/FIRE: Police Tel: 30-1201; Ambulance Tel: 31-2111; Fire Tel: 31-1155.
TELEPHONES: Telephones are available at all wharves, through Marine Board.
AUTHORITY: The Marine Board of Burnie, P.O.Box 216, Burnie, Tasmania 7320, Australia. *Tel:* 004-313444. *Telex:* AA59003. *Cables:* Burmar. *Contact:* Captain M. C. Strachan, Harbour Master.
AGENT: Sub-agent of Patrick Agencies, Melbourne.

BUSSELTON, W.A.: 33.38 S. 115.20 E. (PORT CLOSED)

This port is closed to commercial shipping and it is unlikely that the jetty will be re-opened.
Jetty partly demolished by cyclone in 1978.
AUTHORITY: Busselton Shire Council, P.O.Box 84, Southern Drive, Busselton, Western Australia 6280. *Tel:* Busselton 521011. *Contact:* The Shire Clerk.

CAIRNS, Queensland: 16.56 S. 145.47 E. (See Plan Book)

CERTIFICATES/DOCUMENTS/CARGO GEAR: See "Melbourne".
PORT LIMITS: Commencing at the HW mark on the Northernmost tip of Taylor Point and bounded thence by a line bearing approximately 83° 52′ T. (83° 30′ A.M.G.) for a distance of about 15.66 nautical miles (29,000 m.) to a point on the LW mark on the Northernmost tip of the coral reef surrounding Green Island, thence by that aforesaid LW mark generally in an Easterly and South-Easterly clockwise direction around the aforesaid coral reef to its Easternmost tip, thence by a line bearing 180° T. (179° 38′ A.M.G.) for a distance of about 9.34 nautical miles (17,300 m.) to a point on the HW mark on the Northern shore of Fitzroy Island, thence by that HW mark generally in a South-Westerly, South-Easterly and North-Easterly direction anti-clockwise around the aforesaid Fitzroy Island to a point on the Southern shore of that Island where the HW mark intersects with the Southerly projection of the aforesaid line from the Easternmost tip of the coral reef surrounding Green Island to the Northern shore of Fitzroy Island, thence by a line bearing 180° T. (179° 38′ A.M.G.) for a distance of about 4.10 nautical miles (7,600 m.) where it intersects with a line bearing 90° T. (89° 38′ A.M.G.) and distant about 5.78 nautical miles (10,700 m.) from a point on the HW mark on the Northern bank of Bubbabadoo Creek at its confluence with the Pacific Ocean, thence by the aforesaid line bearing 270° T. (269° 38′ A.M.G.) for about 5.78 nautical miles (10,700 m.) to the aforesaid point on the HW mark on the Northern bank of Bubbabadoo Creek at its confluence with the Pacific Ocean, thence by that HW mark generally Northerly and Westerly back to the point of commencement including all navigable rivers, creeks and waters communicating with the area described above.
PILOTAGE: Arrangements are made by ship's Agent with the Harbour Master. Location of boarding is outside the Fairway Beacon, 10 km. from port.

APPROACHES: Through Grafton Passage, which is 34 km. long and 8 km. wide, and free of any encumbrances, and is lighted by a group flashing light on Fitzroy Island which is visible in clear weather for a range of 47 km.

Channel: 10 km. long, 76.2 m. wide, 8.2 m. LWOST – defined by beacons 183 m. apart spaced at intervals of approximately 915 m. and 1220 m.

After passing through the channel, the inlet widens to 458 m. opposite the main wharves. The inlet runs for 8 km. with various depths.

MAX. SIZE: *Largest Vessel:* "P. J. Adams" – gross tonnage 22,692 and nett tonnage of 14,083, deadweight capacity 33,682. Overall length 203 m.

Largest Cargoes: Raw Sugar: "Eiru Maru" 30,961.5 tonnes, 9.3 m. draft.

Bulk Molasses: "Team Augini" 18,793.5 tonnes, 7.925 m. draft.

Petroleum Products: "W. M. Leonard" 25,533 tonnes, 8.687 m. draft.

PRATIQUE: Available 24 hours per day, 7 days a week. Also see "Melbourne".

VHF: VHF radio-telephone service is situated at the Piermaster's Office, No. 2 Wharf, and operates a service from 0800 hrs. to 1700 hrs. with "out of hours" transmission being every hour, on the hour.

The Launch "Floreat" has HF and VHF.

TUGS: 1 tug is based in the port and is operated by Moreton Tug and Lighter Company. The tug "Babinda" has a bollard pull of 14 tons. Other tugs are available from Mourilyan Harbour on request.

Launches for running lines etc. are also available, together with punts and catamarans. The launch "Floreat" is used for channel soundings and is also available for other purposes.

BERTHING:

	Depth alongside:
Nos. 1 to 5	8.6 m. LWOST – 3.048 m. from wharf face
No. 6	8.8 m. LWOST – 3.048 m. from wharf face
No. 8	9.1 m. LWOST – 3.048 m. from wharf face
No. 10	9.5 m. LWOST – 3.048 m. from wharf face
No. 12	10.7 m. LWOST – 3.048 m. from wharf face

BULK HANDLING FACILITIES:

Bulk Sugar Terminal Loading: No. 12 Wharf.

(a) 1 travelling gantry loader, consisting of a luffing boom supported from a shore based structure (mobile).

(b) Maximum distance from wharf edge to loading unit 14.2 m.

(c) Maximum length of traverse of loading unit 143.2 m.

(d) Maximum length permissible for ship using bulk berth – wharf length 183 m. plus dolphin in line with wharf and 39.6 m. distant each end. No limit anticipated.

(e) Maximum beam permissible for ship using bulk berth 24.4 m.

(f) Maximum clearance of loading unit at highest high water (for non retracting loader), not applicable, boom of loader at horizontal working position 13.5 m. above high water level but boom is capable of being lifted to a vertical position.

(g) Gross handling rate for loader – 864 t.p.h.

Bulk Molasses Terminal:

Total capacity of 19,000 tons with pipe-line connection to wharf. Loading rate 305 t.p.h.

Bulk Tallow Tanks:

Rear of No. 6 Wharf. 2 tanks; one with a capacity of 304.8 tons and one with a capacity of 813 tons. Loading rate of 56 to 61 t.p.h.

Grain Handling Facilities:

No. 3 Wharf shed with a loading capacity of up to 152 t.p.h. with a rail to shed transfer system.

Container Handling Facilities – Ro/Ro:

There are facilities at No. 6 Wharf for handling containerised and unitised cargoes, including a 25 ton stiff-legged derrick crane and a Roll-on/Roll-off stern ramp. There is adequate assembly area adjacent to the wharf.

STEVEDORES: Port quota 47 men.

TANKERS: Tankers berth at Berth No. 8 or 10. Max. LOA 183 m. Berth No. 10 is served by various oil pipe-lines and L.P. gas pipe-lines to company depots.

FRESH WATER: Fresh water is available on all wharves. Rate of supply is 70 t.p.h.

FUEL: Oil bunkering facilities are available at No. 10 Wharf which is connected by pipe-line to adjacent oil tank farm installations.

DRY DOCK: A dry dock, 61 m. long and 12.2 m. wide accommodates vessels up to 58 m. in length. De-watering rate is 303–379 litres per minute. Draft of vessels which can be accommodated is equivalent to the height of tide at the particular time.

Slipways: Tropical Reef Enterprises has slipway facilities at Senrab Point to handle vessels up to 3,000 tons. North Queensland Engineers and Agents Pty. Ltd. slipway in Smith Creek is able to handle vessels to 61 m. in length.

AIRPORT: International Airport.

TELEPHONES: There are plug-in points available to shipping from Nos. 1 to 6 Wharves, and No. 8 Wharf.

DEVELOPMENTS: A site for a future deep water port, with a minimum depth of 32.8 m. of water, in the area adjacent to King's Point and Little Turtle Bay on the mainland opposite Fitzroy Island is under investigation. The port limits are to be extended to include this area.

AUTHORITY: Cairns Port Authority, P.O.Box 594, Cairns, Queensland 4870. *Tel:* (070) 51-3555. *Telex:* 48256. *Contact:* Mr. R. C. Manning, Secretary.

AGENT: Patrick Agencies, 18 Abbott Street, P.O.Box 621, Cairns, North Queensland 4870. Tel: 51-5211/5445. Telex: 48412. Cables: "Rikpat".

CARNARVON (Including Useless Loop & Cape Cuvier):

(A) CARNARVON: 24.53 S. 113.40 E.

BERTHING: Jetty closed.

SHIP SUPPLY SERVICE: Carnarvon-Sharks Bay Shipping Services, P.O.Box 571, Carnarvon, W.A. 6701. Tel: (099) 41 1178. After hours: (099) 41 1898.

One launch readily available at this port which is capable of performing emergency or general duties to vessels at sea if required. Details of the launch "King Bay" are as follows:

L.O.A.	13.70 m.
Beam	3.65 m.
Draft	1.22 m.
Twin screw speed	13.50 knots
Cap/Range	2,200 Lt. Distillate
2 – 3 Bunks	
Cooking/Refrigeration facilities.	

The vessel has an adequate open/working deck area aft of the wheelhouse to carry light provisions/stores – approximate area 15.2 sq.m.

The cabin with access via the wheelhouse provides adequate shelter, resting and cooking facilities for 3 – 4 persons.

Being an ex-Pilot launch she is particularly stable and seaworthy.

The service is readily available 24 hours a day and in particular is very useful for vessels using the Northern approaches to or from Useless Loop at Sharks Bay which is some 90 mile distant and at which there are no faciltities for storing. Contact is as above per O.T.C. Radio Station Carnarvon or alternatively to Perth, details of which are as follows:

Office hours	09 322 6543
After hours	09 364 5738

In addition to the above Carnarvon-Sharks Bay Shipping Services also have operating at Carnavon 2 small tugs which are available 24 hours a day for servicing vessels at Useless Loop, Shark Bay or for any other emergency services which they may be required.

(B) CAPE CUVIER: 24.13 S. 113.23 E. **(See Plan Book)**

LOCATION: Cape Cuvier is situated on the N.W. coast of Australia approximately 75 km. N.N.W. of Carnarvon.

PORT LIMITS: This port is now incorporated in the Port of Carnarvon the limits of which have been extended as follows:—

"A line due West for 4 nautical miles from a point on the mainland in Lat. 24° 10′ S. and Long. 113° 26′ 4.5″ E., and thence in a S.S.W. direction to Cape Ronsard at the North End of Bernier Island" and then as for Carnarvon to the starting point.

DOCUMENTS: The following documents are currently required and must be completed prior to arrival and sailing.

Form 42A:	Ship's Stores Consumed in Australia.
Form M&S–11 (2 copies):	Crew List.
Form W080:	Boarding Report.
Form W283:	Loading Ports List.
Form 5:	List of all Articles Owned or in Possession of Master, officers and crew.
Form QA4:	Quarantine Notice.
Form QA5 (if required):	Ship Master's Bond.
Form F Q360:	Primary Health Report.
Ship's Stationery:	Crew List.

APPROACHES: Red Bluff about 12 miles North of Cape Cuvier can be picked up by radar at a distance of about 20 miles. Cape Cuvier is easily identified by large white salt hill.

The berth is floodlit at night when a vessel is being loaded.

PILOTAGE: Facilities provided by vessels for Pilot boarding at Cape Cuvier must comply strictly with Solas regulations in all aspects.

Pilot will board approximately 1 mile North of jetty-head.

Any delays to vessels berthing due to non-compliance with Solas regulations (IMO current resolutions) will be for owners account.

Pilotage is compulsory for all vessels entering, leaving and manoeuvring within the Port of Carnarvon (including Cape Cuvier) except those of a tonnage of 150 tons or less and those whose Masters hold a valid Pilotage Exemption Certificate.

(The Pilot will remain on board the vessel for the duration of loading. Vessels are required to provide accommodation and meals for the Pilot.)

ANCHORAGE: Recommended anchorage is in position with the jetty bearing approximately 200° (T) at a distance of 1.5 miles. Depth at anchorage is about 15 fathoms. 3 cables off the shore, the depth is about 9 fathoms. Holding ground is good.

RESTRICTIONS: No berthing at night.

MAX. SIZE: Vessels of 65,000 d.w.t. call on a regular basis. Depth alongside is 52 ft. (15.85 m.).

RADIO: Carnarvon Radio.

Weather Broadcasts: Vessels are advised to listen to daily weather broadcasts by:

1. Perth Radio (VIP) at 0100 hrs. GMT and 1200 hrs. GMT, on 484 kHz, 8597 kHz, 12294 kHz or at 0200 GMT and 1000 GMT on 16947 kHz or 22315 kHz.

2. Broome Radio (VIO) at 0118 and 1230 hrs. GMT on 440, 4323.6 and 6407.5 kHz (local forecast).

3. Carnarvon Radio (VIC) at 0148 and 1130 hrs. GMT on 476, 4323 and 6407.5 kHz (local forecast).

Vessels Arrival Requirements: Cape Cuvier is a first port of entry and all vessels bound for the berth are required to radio to Dampier Salt (Operations) Pty. Limited, Telex No. 99283, through the normal recognised coastal radio stations, i.e. Broome Radio VIO, Carnarvon Radio VIC or Perth Radio VIP the following information additional to Port Health messages (see "Health"):

1. 10 days before intended arrival at the port, the estimated time of arrival and whether or not the port is the first port of call in Australia.

2. 7 days before intended arrival at the port, confirmation or any variation of the advice previously given.

3. 4 days before intended arrival at the port, confirmation or any variation of the advice previously given.

4. 48 hours before intended arrival at the port – estimate time of arrival at the Pilot boarding ground and also advise the vessel's estimated draft fore and aft.

5. 24 hours before intended arrival confirmation or any variation of the advice previously given.

6. 12 hours before intended arrival, final confirmation of time of arrival.

In addition to the requirements above, all vessels are required to radio to the Harbour Master, Carnarvon through Carnarvon Radio VIC the messages referred to in 3, 4, 5 and 6 above.

Note: Because of the isolated location of Cape Cuvier and the need to organise transport for the various berth services it is imperative that ample notice is given on arrival times. This is particularly so for weekend arrivals. Failure to adhere to these requirements may jeopardise vessels berthing to the detriment of owner's account, and could result in substantial costs and delays.

VHF: Call sign: Cape Cuvier. Available frequencies: Channels 6, 8, 12, 16, 67. Loading Operation Frequency: 155.97 MHz. Emergency Working Frequency: Channel 67.

A continuous watch must be maintained by the vessel on VHF Channel 16. All vessels approaching the Port or at anchor must maintain a continuous watch on this frequency. *Disregard of this requirement is a contravention of Berth By-Laws and may adversely affect expeditious berthing.*

HEALTH: In the case of each vessel arriving from overseas the following information must be sent to the Port Health Authorities between 12 and 24 hours before arrival, addressing the message to Quarantine Carnarvon prefixing the message SHIPSERVE (a copy of which message is required to be sent also to Dampier Salt (Operations) Pty. Limited (Telex No. 99283)):

1. The expected hour and date of arrival of the vessel.
2. Confirmation that the Master has individually inspected all persons on board within 24 hours before arrival.
3. Particulars of any cases of serious illness on board.
4. Confirmation that all persons on board are satisfactorily vaccinated against smallpox and cholera and in possession of valid Vaccination Certificate.
5. Request for permission to enter Port.

On receipt of quarantine message, Dampier Salt (Operations) Pty., Limited, will advise anchorage position if vessel is not berthing on arrival.

Vessels must also ensure International Quarantine signals are displayed at all times until cleared by the Quarantine Officer.

Quarantine inspections are normally carried out at the berth where the Quarantine Doctor/Officer may grant Free Pratique.

Rat guards are to be maintained on all mooring lines while vessels are berthed at Cape Cuvier.

Whilst berthed at Cape Cuvier all food and organic waste must be kept in efficiently sealed containers and frequently doused with a soluble disinfectant. No garbage may be thrown overboard.

TUGS: A contractor operates the tugs and line launches which are available at all hours.

The following craft are available to assist in berthing and unberthing.

"Cooralya" – Line launch. Length 9.6 m., breadth 3.8 m., draft 1.2 m. Engine Cat. 3208T. 260 h.p. at 2,800 r.p.m. Single screw.

"Quobba" – Tug. Length 19.5 m., breadth 6.1 m., draft 3.3 m. Main engines 2×V12 Detroit Diesel V71. Series 1,800 r.p.m. 470 b.h.p. each. Bollard pull 11.4 tonnes. Twin screw kort nozzles.

"Boolathana" – Tug. Bollard pull 25.0 tonnes. Length 24 m., breadth 8 m., draft 3.4 m. Main engines 2×V12 Caterpillar 398 1,400 r.p.m. 850 b.h.p. each. Twin screw kort nozzles.

BERTHING:

Salt Loading Berth: Situated at Lat. 24° 13′ S., Long. 113° 24′ E. The berth is used only for salt loading.

A central timber decked wharfhead carrying a fixed position, stiff arm, slewing and luffing conveyor boom shiploader with deflector.

Six mooring buoys anchored to the seabed.

Vessels moor to buoys and warp themselves into position for loading each hold. The shiploader generally has the capacity to load 2 adjacent holds for each warped position of the vessel.

The principal berth dimensions are as follows:

Natural seabed level: R.L. – 17.8 m.

Minimum distance between vessel and jettyhead structure: 14.5 m.

Berth length 670 m. between fore and aft mooring buoys Nos. 2 and 5.

Berth width 180 m., between breasting mooring buoys Nos. 3 and 4, and minimum vessel stand-off from jettyhead (14.5 m.).

R.L 0.0 m. is Indian Spring Low Water at Cape Cuvier. The maximum tidal range at Cape Cuvier is 1.7 m.

The principal shiploader dimensions are as follows:

Jettyhead area:	18 m.×18 m.
Jettyhead deck level:	R.L. 13.2 m.
Shiploader boom underside:	R.L. 16.2 m.
Shiploader boom outreach:	Approx. 30 m.
Shiploader boom luff:	incline 45° decline 15°
Shiploader boom loading arc:	incline 18° decline 15°
Shiploader boom slew:	± 90°
Shiploader boom conveyor width:	1,600 mm.
Shiploader boom conveyor speed:	3.1 m./sec.
Shiploader boom conveyor capacity:	3,500 t.p.h.

Also see "Loading".

MOORING:

Ships Mooring Lines:

1. Vessels shall provide the following lines:

6×250 m.×80 mm. diameter polylines on forecastle deck.

6×250 m.×80 mm. diameter polylines on afterdeck.

All lines to have a reinforced soft eye, 1 m. long in the outer end.

2. All vessels shall provide satisfactory ships lines on both fore and after decks such to pick up the 36 mm. diameter steel wires, 2 from each mooring buoys Nos. 2 and 5.

3. All working and spare lines supplied by the vessel are to be in first class working condition.

Mooring Equipment – Supplied by Dampier Salt:

1. Dampier Salt shall supply 2×310 m.×36 mm. diameter steel wires from each of mooring buoys Nos. 2 and 5. These lines are to be run back to the vessel and secured on drum winches to act as the fore and aft longitudinal mooring lines.

2. Dampier Salt (Operations) Pty. Limited shall supply all ropes necessary for stopping off polylines.

Berth Operating Conditions: Unless the Pilot otherwise directs, berthing operations will generally be restricted to the following conditions:

Winds: Zero winds from Northern quadrants and below 25 knots within the Southern sector between East and West.

Swells: Up to a mean amplitude of 2 m. as recorded on the berth wave rider.

Ballast: The vessel to maintain ballasted state with the propellor 75% immersed and a stern trim.

Berth Occupancy: Unless the Pilot otherwise directs, berth occupancy will generally be restricted to the following conditions:

Winds: Below 35 knots from the Southern quadrants. Below 10 knots from the Northern quadrants.

Swell: Up to a mean amplitude of 2.5 m. as recorded on the berth wave rider.

Mooring Procedure:

1. Preparation before Berthing – Two central drums, both fore and aft, are to be left bare ready to receive the 36 mm. diameter wires when these wires are landed on board from mooring buoys Nos. 2 and 5.

Suitable polylines are to be readied to be run out from the vessel to pick up the steel wires. The length of these polylines is to be a minimum 250 m. All other drum winches fore and aft are to be equipped with polylines 250 m. long and 80 mm. diameter. A minimum of 4 working polylines 250 m.×80 mm. must be available on each of the fore deck and after deck. If insufficient winch drums are available for these lines then they are to be coiled down on the deck. Two spare 250 m.×80 mm. polylines must be held coiled in readiness on each fore deck and after deck.

2. On berthing – Immediately prior to berthing, a number of shore based personnel will board the vessel to assist in handling lines during berthing. As instructed by the Pilot, polylines will be run out as both breasting lines and to pick up the steel wires from the fore and aft mooring buoys. Polylines unable to be held on drum winches will be taken up on warping winches, stoppered off and placed on bitts.

The Pilot will give instructions as to how much tension is to be applied to each line.

3. On Warping – During the shiploading operation, it will be necessary to shift the vessel such that the shiploader can load the vessel in accordance with the loading schedule. Normally, the shiploader will load only two hatches from the one positioning of the vessel.

The shore-based personnel will board the vessel to assist in line handling for the warping operation The tugs will also assist as required.

Under the direction of the Pilot, lines shall be played out or taken in such to warp the vessel to the next loading position.

4. On Unberthing – All lines shall be dropped or taken in as instructed by the Pilot. The shore personnel will assist in line handling.

LOADING:

Condition to Load Salt:

1. Ensure that vessel's holds are thoroughly washed and all traces of the previous cargo are removed.

2. Ensure that vessel's holds are thoroughly lime washed with slaked lime (calcium hydroxide – $Ca(OH)_2$) and that no other substances are mixed with it.

Note: Limewashing is a pre-requisite of vessel's loading. If vessel's holds are not considered by an independent Marine Surveyor to be in a condition of cleanliness normally acceptable to Dampier Salt (Operations) Pty. Limited the vessel may not be loaded until such time as the Surveyor is satisfied that the holds meet the standards set by Dampier Salt (Operations) Pty. Limited.

In the event that holds are not acceptable, the Master may be required to sign a "Letter of Indemnity" accepting the cargo on behalf of the Operating Line, acknowledging that holds are in the condition described in the report by the independent Marine Surveyor.

Provided the vessel's holds are acceptable to the Surveyor as being "clean" the Surveyor will issue a Hold "Cleanliness Certificate".

The above stipulations are necessary to avoid any contamination or other effects on the quality of the product loaded and are required by both Shippers and Receivers. Limewashing also assists in protecting the vessel's holds against adverse action caused by the salt.

3. Ensure that mooring lines are laid out in readiness for berthing in accordance with "Mooring Procedure".

Loading Procedure: The vessel is to ensure that the first 2 holds to be loaded have the hatch covers removed on berthing. On berthing the vessel will be positioned by the Pilot such that the loading can commence immediately upon acceptance of the notice of readiness and verification that vessel's holds are clean to standards set by Dampier Salt (Operations) Pty. Limited.

An independent Marine Surveyor appointed by Dampier Salt will agree all draft readings and ballast soundings with the chief officer prior to commencement of loading.

The Marine Superintendent from Dampier Salt (Operations) Pty. Limited will board the vessel immediately following mooring to check that the vessel is ready to load, and then commence the loading operation. This Officer will agree with the Chief Officer a loading sequence, loading schedule, warping procedures, draft problems (if any) and any other matters relating to the loading of the vessel. Warping procedures shall be confirmed with the Pilot.

The Marine Superintendent will draw up a loading schedule nominating the approximate hold loading duration, times of warping and the estimated time of completion of loading, and sailing time.

An Operations Foreman will normally remain on board the vessel for the duration of loading in order to liaise with the Chief Officer on matters concerning the loading procedures.

A belt weightometer is used by Dampier Salt (Operations) Pty. Limited to indicate loading rates and tonnages loaded in each hold. This instrument has an accuracy of ± 1.5%. It is the practice of Dampier Salt (Operations) Pty. Limited for the Surveyor and Chief Officer to agree a preliminary draft survey when the second last hold is approximately 80% loaded. This survey then allows the correct loading of the remainder of the cargo so as to ensure correct trim and prevent inadvertent overloading. The final loaded cargo tonnage is determined by draft survey, calculated by and agreed between the Surveyor and Chief Officer.

No labour is available at Cape Cuvier to board the vessel for any shipboard duties other than handling of mooring lines. Trimming is by conveyor discharge at the end of the loading spout only.

Salt – General Specifications: Stowage factor of Salt. Normal stowage density 32 cu.ft. per long ton or 0.89 cu.m. per metric tonne. Angle of repose 33°.

STEVEDORES: Dampier Salt Pty. Ltd.

MEDICAL: Master to advise by telex via coastal radio if any crew members require medical or dental services. Prior advice will generally ensure adequate arrangements can be made to accommodate such requests. Insufficient notice, or advice only on berthing may jeopardise the chances of obtaining normal medical/dental treatment. Emergency medical treatment is normally available through Carnarvon Regional Hospital.

DENSITY: 1025.

FRESH WATER: Not available. Due to possible loading delays caused by adverse weather it is recommended that vessels arrive with all fresh-water tanks full.

FUEL: Not available.

WATCHMEN: No shore watchmen available.

HATCHES: To be opened/closed by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes in opened carton, or 0.25 lb. cigars, or 0.5 lb. tobacco, and one opened bottle spirits per crew member.

An Australian Customs Boarding Officer is resident in Carnarvon. Regulations of Australian Department of Customs and Excise apply to the Port.

CARGO GEAR: Not required. Salt loading is by conveyor belt.

REPAIRS: There are no ship repair facilities. However, vessels may carry out repairs of a limited nature but only with the prior approval of Dampier Salt (Operations) Pty. Limited and the Harbour Master.

DRY DOCK: None.

REPATRIATION: Road connection to Carnarvon, which is 65 miles distance from Cape Cuvier, thence air connection with Perth where international flights available.

AIRPORT: Private airfield only, about 10 miles from port of Cape Cuvier. Carnarvon has a daily air service to Perth. Connecting flights for other Australian cities and also for overseas destinations are available from Perth.

TIME: GMT plus 8 hours.

GENERAL: Port is gazetted under Western Australian legislation and controlled under Ports and Harbours Regulations.

Charts and Publications:

Australian Pilot Volume V
Australian Chart AUS 329 (N.W. Cape to Pt. Cloates)
Australian Chart AUS 330 (Pt. Cloates to Quobba Pt.)
Australian Chart AUS 331 (Quobba Pt. to Geraldton)
British Chart BA 1055 (Bedout Island to Cape Cuvier)

Winds: The local wind pattern usually shows a marked diurnal variation in both wind speed and direction, typical of the local sea breeze cycle. Wind intensity under the diurnal system regularly attains an intensity of more than 20 knots and blows from the Southern quadrants of the compass.

The mooring area is protected to some extent from Southerly winds by the cliffs at the Cape which are approximately 120 m. high.

Swell: A predominant high energy, long period swell system emanates from the deep sea to the S.W. This system is both diffracted and refracted locally by the topography of Cape Cuvier Point and travels Eastward across the bay. Analysis shows that open sea swell patterns to amplitude of 3.5 m. are generally dispersed by diffraction and refraction at the Cape to an amplitude in the berth of generally less than 2 m. The period of these waves is generally in excess of 8 seconds and can be up to 30 seconds. Wave lengths are in the order of 250 m.

Superimposed on the long period swell system are the effects of the diurnal wind system which generate local wind waves of a shorter period of about 5 seconds. In this instance wave lengths are in the order of 20 m. Depending on wind direction, this short period swell is also diffracted and refracted by the Cape.

When local or storm winds blow consistently from the Northern quadrants for a duration of the order of 12 hours, the inshore berth location is subjected to the same type of wind wave climate as the offshore open sea location.

Current: The mean velocity profile in the berth of currents is some 5.3 cm. per second (0.1 knots) setting exclusively to the N.W. The maximum current speed recorded is 31 cm. per second (0.6 knots), this being a storm generated current.

Tides: For operational purposes, the tidal predictions for Carnarvon are usually considered accurate for Cape Cuvier.

A maximum tidal range of 1.7 m. can be expected at Cape Cuvier.

Cyclones: The local cyclone season extends from mid November to end of April with an average of one cyclone per year which will influence the area near Cape Cuvier. Cyclones in the area generally travel in a Southerly direction parallel to the coast prior to crossing the coast and moving inland. Whilst offshore the cyclone can generate dangerously high waves in the port which is unprotected from the North. Wave heights resultant from cyclonic conditions may reach 10.5 m. in the berth area. Wind velocities in excess of 60 m./sec. (120 knots) may also be experienced.

Weather Effects on Berth Occupancy: Berthing may be delayed due to strong winds or heavy swell and vessels may on occasion be required to return to anchor before completion of loading if the berth is affected by inclement weather conditions.

In these cases, the decision to vacate the berth will be made by the Pilot or the Harbour Master.

Ordering Stores: Telex advice of any and all stores and provisions requirements should be given to Agent at least 4 days prior to arrival. Stores orders received later than this may not be able to be filled.

Access to Vessel:

At Anchorage: Whilst at anchorage, access will be by authorised personnel only from the line launch or one of the tugs.

In Berth: Whilst in berth, access will normally be from a rope ladder and catwalk on the shiploader boom. On these occasions the shiploader supervisor will direct the timing and positioning of the shiploader boom such to minimise inconvenience to the shiploader operation.

Vessels Engines: Vessel's engines are not to be demobilized whilst the vessel is in berth. Adverse weather conditions affecting the area may require the vessel to be moved. Vessels in the berth will be on notice to shift at all times.

OPERATOR: Dampier Salt (Operations) Pty. Ltd., Lake Macleod Division, P.O.Box 501, Carnarvon, W.A. 6701. *Tel:* (099) 41 1200. *Telex:* AA 99283. *Contact:* N. G. Swan, Manager.

AUTHORITY: Department of Marine & Harbours, 6 Short Street, Fremantle, Western Australia. *Tel:* 335-0888. *Contact:* Captain Spencer.

Department of Marine and Harbours, P.O.Box 775, Carnarvon 6701. *Tel:* 099-411902. *Contact:* Captain C. Shuttleworth, Harbour Master.

AGENT: See "Fremantle".

(C) USELESS LOOP (Shark Bay): 26.05 S. 113.24 E.

DOCUMENTS: See "Melbourne".

PILOTAGE: Compulsory. Notice for Pilots is by 'Shipserv' message to Harbour Master, Carnarvon, 7 days, 48 hours and 24 hours prior to arrival.

APPROACHES: Vessels from the North proceed direct to Denham Channel, vessels from the South can navigate through Naturaliste Channel with caution using Chart AUS 331. All vessels must anchor at pilot boarding ground situated 1 mile North of Denham Channel Lat. 25° 52′ S., Long. 113° 15′ E. and wait for further instructions on VHF Channel 16. Vessels must provide a good lee for pilot boat with ladder always on starboard side unless otherwise ordered. It is important that final ETA is correct and must be amended if necessary to Harbour Master via Carnarvon or Perth Radio. It is important that vessels arrive in full or good ballast condition otherwise they may be unable to berth.

Pilots remain on board during transit to Useless Loop, when berthed alongside jetty and until disembarkation in above position.

RESTRICTIONS: Continuous strong "Southerlies" may result in abnormal tides which could result in large vessels having to leave berth prior to completion of loading on rare occasions.

TUGS: None.

BERTHING: One berth. Owned and operated by Shark Bay Salt Pty Ltd. Conveyor belt system from Salt Stock Pile to ship gross rate 700 t.p.h. for salt, 400 t.p.h. for gypsum. Dolphin type jetty length 620 ft. runs approximately North and South directions and 2.1.cables from Topper Island. Min. depth at berth 33 ft. LWOST. Rise of tide approximately 3 ft. Winds predominantly S.E./S.W.

FUEL: Not available.

FRESH WATER: None available.

REPAIRS: Not available.

AUTHORITY: Department of Marine & Harbours, 6 Short Street, Fremantle, Western Australia. *Tel:* 335-0888. *Contact:* Captain Spencer.

Department of Marine and Harbours, P.O.Box 775, Carnarvon 6701. *Tel:* 099-411902, *Contact:* Captain C. Shuttleworth, Harbour Master.

AGENT: See "Fremantle".

COFFS HARBOUR, N.S.W.: 30.18 S. 153.09 E.

PILOTAGE: Not compulsory. Pilots available on request.

APPROACHES: Depth at entrance 9.4 m. No bar.

ANCHORAGE: Vessels awaiting berth may anchor, in reasonable weather, on the line of the leads with the outer end of the jetty bearing approximately N.N.W.

VHF: Pilot and Port Authority on VHF.

BERTHING: Southern berth 189 m. long. Depth of 7 m. at outer end shoaling to 5.3 m. at inner end. Suitable for ships 91 m. to 121 m. long, any breadth, and 6 m. mean loaded draft.

Northern berth 168 m. long (approx.) depth 5.8 m. – 6.4 m. Occasional heavy swell in harbour and vessels use anchors at berth. Unmarked anchorage off the jetty has a sand bottom. Boat harbour on Northern side and launching ramp on Southern side. Berths connected to the N.S.W. railway system.

CRANES: Two diesel electric travelling cranes, capacity 5 tonnes.

STEVEDORES: *Working Hours:* 0800 to 1900 hrs.; weekdays, except Thursday, 0800 to 1700 hrs. Saturdays, 0800 to 1700 hrs. Sunday by arrangement.

FRESH WATER: Available at berths, 13.6 cu.m.p.h.
FUEL: Oil available in drums, or 45.5 cu.m. rail tankers available at berth if ordered 24 to 48 hours in advance.
REPAIRS: Light repairs effected.
AIRPORT: Nearest at Newcastle.
HOLIDAYS: See "Sydney".
AUTHORITY: Maritime Services Board of N.S.W., P.O.Box 23, Coffs Harbour N.S.W. Tel: (066) 523311.

Captain R. Pook, Pilot Station, South West Rocks, 2431 N.S.W.

AGENT: See "Sydney".

DAMPIER: W.A.: 20.38 S. 116.45 E. (See Plan Book)

LOCATION: Port Dampier is located on the N.W. coast of Australia in the Dampier Archipelago. Legendre Island in position Lat. 20° 21′ S., Long. 116° 51′ E. forms the N.E. extremity of the Archipelago and Rosemary Island in position Lat. 20° 28′ S., Long. 116° 37′ E. forms the N.W. extremity of the Archipelago.

The port facilities are constructed: adjacent to Parker Point in Lat. 20° 39′ S., Long. 116° 43′ E. East Intercourse Island in Lat. 20° 39.03′ S., Long. 116° 40.4′ E. Mistaken Island in Lat. 20° 39.2′ S., Long. 116° 39.6′ E.

PORT LIMITS: A vessel is considered to be an arrived vessel from the time of crossing the quarantine line, which runs due East from Courtenay Head Lighthouse.

APPROACHES: From the 100 fathom line in Lat. 19° 20′ S., Long. 116° 20′ E., a channel 15 miles wide, leading 157° was surveyed by the Royal Australian Navy in 1963 and found to be clear of dangers. This approach is recommended for ships arriving from the North and N.E. Ships arriving from the West pass North of Tyrell Rocks situated to the N.W. of the Monte Bello Islands and then should pass not less than five miles to the North of Rosemary Island on the Latitude of Legendre Island Light. When in a position 6 miles West of Legendre Island Light, course should be altered to the S.W. to pass into the Archipelago.

Marine Notice: No. 1/84. Dated 1st June, 1984.

Mariners and small boat owners are advised that the following navigation buoys have been deployed to delineate the Woodside Channel in Mermaid Sound.

Spar Buoy No. 8W in position Lat. 20° 32′ 50″ S., Long. 116° 43′ 21″ E. This buoy is painted red and has a red (5 secs.) occulting light. The buoy has the characters '8W' painted on the spar and is fitted with a radar reflector and day mark.

Spar Buoy No. 4W in position Lat. 20° 28′ 40″ S., Long. 116° 43′ 53″ E. This buoy is painted red and has a red (5 secs.) occulting light. The buoy has the characters '4W' painted on the spar and is fitted with a radar reflector and day mark.

Woodside Channel Buoy in position Lat. 20° 26′ 12″ S., Long. 116° 43′ 42″ E. This buoy is painted red and has a red group flash 3 every 5 secs. light. The buoy has the word 'Woodside' painted on the spar and is fitted with a radar reflector and daymark.

Further construction work will continue in the area adjacent to the Spar Buoy 8W and all persons are cautioned to keep well clear of construction equipment in this area until further notice.

ARRIVAL ADVICE: Dampier is a first port of entry and all ships bound for this port are to radio through the normal recognised coast stations, addressing their messages "Pilharb Perth" and prefixing the message "Shipserv".

(a) In the case of vessels arriving from overseas.
- (i) 10 days before intended arrival at the port ETA and whether the port is the first port of call in Australia.
- (ii) 7 days before intended arrival at the Port, confirmation of any variation of the advice given pursuant to paragraph (i) above including in the message the forward and after arrival draft.

(b) In the case of all vessels, cable "Shipserv Pilharb Perth".
- (i) 72 hours before intended arrival at the Port advising ETA at the Pilot boarding ground East of Malus Island, including in the message if not previously given the forward and after arrival draft and deepest departure draft.
- (ii) 48 hours before intended arrival, confirmation or any variation of ETA.
- (iii) 24 hours before intended arrival, confirmation or any variation of ETA.

(c) In addition to this information, Masters of OBO vessels are to furnish the information required under "General" – "Gas-freeing".

Arrival Information: Every vessel intending to *load* a cargo of iron ore at Dampier shall on departure from the last port of call cable the following information, addressing the message SHIPSERV HAMIRON DAMPIER.

(a) ETA, quantity of cargo required, deepest departure draft, and distance between keel and hatch coaming.
Example: Name of Ship, ETA PM20/4, 108000 k/t, 16.46 m., 24.15 m.

(b) 7 days before intended arrival at the Port confirmation or any variation to the above and indicate loading order by hatches of the products to be lifted.
Example: Name of Ship, ETA 1000/4, 108000 k/t, 16.46 m., 24.15 m., 1/10000 Fines, 7/10000 Fines, 9/10000 Fines, 2/10000 Lump, 4/10000 Lump, 6/10000 Lump, 3/8000 Fines, 5/10000 Fines, 2/8000 Lump, 6/6000 Lump, 7/5000 Fines, 3/8000 Fines, Trim 3000 Fines. Total 108000 k/t.

Arrival Advices: Every vessel intending to *discharge cargo* at Dampier shall on departure from the loading Port or 7 days before arrival, whichever occurs first, cable the following information addressing the message SHIPSERV HAMIRON DAMPIER: ETA, quantity and nature of cargo to be discharged, stowage and the deepest arrival draft.

Example: Name of Ship, ETA AM/4, 4700LT. General 1/1200, 2/200, 3/1500.

Note: Berthing and sailing times must be fixed with Pilbara Harbour Services prior to 1500 hrs. each weekday and 0700 hrs. on Saturday for service between the hours of 2359 Saturday to 0830 Monday. It is therefore imperative that ample notice is given on arrival times particularly for weekend arrivals.

HEALTH: Radio Pratique is now in force for the Port of Dampier. Please send Radio Pratique message to Agency Telex Number not more than 24 hours before arrival.

Please answer the following questions, indicating NIL where necessary, and answer them in order. If answers are not correct, or not in the correct order, it could cause unnecessary delay to your vessel berthing:

(A) Name, type and nationality of vessel.
(B) Itinerary for last 21 days. If over 21 days give name of port and date of departure.
(C) Name of first Australian port and ETA.
(D) Number of crew.
(E) Number of passengers
(F) Have you had any deaths on the voyage? If so please give details.
(G) Have you had any cases of illness during the last 21 days with a fever of 30° Celcius or above
and
(a) Accompanied by Rash, Jaundice or Glandular Swelling
or
(b) Accompanied by Diarrhoea lasting longer than 24 hours.
(H) Have you had persons suffering from Venereal Disease during the voyage?
(I) What live fish, birds, reptiles or other animals are you carrying (ship's pets should be mentioned)?
(J) Have you carried livestock on previous voyages in the last 6 months? If 'Yes', please advise type of livestock, date of voyage and ports visited. Have all stock carrying compartments been thoroughly cleaned and disinfected?
(K) Request Radio Pratique.

On receipt of quarantine messages Harbour Master will advise anchorage position if vessel not berthing on arrival.

Inspections may be carried out at the jetty or at anchorage at the discretion of the Quarantine Officer.

Rat guards are to be maintained on all mooring lines while vessels are berthed in Dampier Harbour.

PILOTAGE: The Pilot boarding area commences from a position bearing 090° distance 1.5 miles from Courtenay Head Light, thence 195° distance 2 miles, thence 090° distance 1.7 miles, thence 015° distance 2 miles, thence 270° distance 1.7 miles to point of commencement.

Pilotage is compulsory for all vessels entering, leaving and manoeuvring within the Port except those of a tonnage of 150 tons or less and those whose Masters hold a valid pilotage exemption. Pilotage services operate from the pilot cutter "Pilbara Mercury".

Pilot boarding and disembarking arrangements must comply with the SOLAS regulations and be properly rigged and attended.

RADIO: Perth Radio – VIP. Broome Radio – VIO.

VHF:

Call Sign	Dampier Port Control
Frequency	Channels 16, 67, 11, 13, 14, 72, 74 and 68.
Channels	11, 13 and 68 are port working frequencies.
Channel 72	Can be used vessel to vessel.

Channel 67 is an emergency working frequency.

A continuous watch is maintained on VHF Channel 16. All vessels approaching the Port or at anchor must maintain a continuous watch on this frequency.

Continuous watch is also maintained on VHF Channel 11, the working channel for general port traffic information.

TUGS: Pilbara Harbour Services Pty. Limited own and operate the tugs, workboats and lines launches which are available to shipping at all hours.

The following craft are available to assist in berthing and unberthing and for hire:

"Pilbara Mars"	1,700 h.p.	Bollard Pull	27 tons
"Pilbara Comet"	2,400 h.p.	Bollard Pull	33 tons
"Pilbara Neptune"	1,900 h.p.	Bollard Pull	28 tons
*"Pilbara Jupiter"	2,600 h.p.	Bollard Pull	47 tons

Three (3) Lines Launches
One (1) Workboat – 400 h.p.

MOORING: Mooring lines are taken ashore by lineboat. Vessels using heavy wire ropes are required to have the ends terminated with a 9 m. (30 ft.) rope spring finished with a standard eye for placing over the bollards and slip hooks.

All mooring ropes and wires to have a 6 m. (20 ft.) tail of light rope spliced into the eye to facilitate the transfer from the boat to the dolphin.

Vessels shall be ready in all respects to commence loading on completion of mooring, hatches cleaned and opened.

Spring Lines should be laid out along the main deck for a distance of some 50 m. – 60 m. from the actual lead point. Rope tails of compatible size, where necessary, should be some 20 m. in length.

This will enable the rope tail, or, if the spring is rope, then the eye of that spring to be lowered from the main deck to the required dolphin.

LOADING IRON ORE: Vessels loading iron ore are recommended to exhibit either on top of the hatch lids or on the deck or coaming adjacent to the hatch, numerals identifying the hatch. These are to be of such a colour and size as to be clearly visible to the shiploader operator stationed at the end of the shiploader boom.

Reference to loading is to be made by hatch, not hold and all weights are to be expressed in metric tonnes.

Confirmation in writing of the cargo booking is delivered on board prior to berthing by the Pilot.

This document contains four copies of the loading sequence. The first copy is retained on board, the remainder completed and passed to the shiploader operator immediately on berthing. Attention is drawn to the run off quantity required to be loaded to clear the conveyors at the completion of loading.

Red, green and white list lights, clearly visible to the shiploader operator are recommended fittings on all vessels loading iron ore. A fixed white light shall indicate the vessel is upright.

Masters are cautioned the loading of iron ore is carried out by draft. Frequent "on the run" draft checks between hatch changes should be carried out. Whilst shiploading sequences are equipped with weight scales, these figures are to be used only as a guide and reference to them will not relieve the Master of the responsibility of adequately maintaining draft checks and supervising the loading accordingly.

Final confirmation of tonnages on board will be the result of a draft survey carried out by the Master and the Company's surveyor.

Ballast shall be adjusted to ensure at high water a minimum clearance of 1.0 m. is maintained between the vessel's structures and the shiploader. Ballast to be discharged at a rate which prevents disruption to loading, final trimming and completion.

Subject to tide, ships shall be ready to vacate the iron ore berths on completion of loading and have all gear tested and available for use on departure.

Ships departing during the hours of darkness will require to have fitted on the fore mast a small steering light visible from the bridge.

STOWAGE FACTORS: The following stowage factors are provided for guidance:

Lump Ore	2.35 tonnes/cu.m.	Fine Ore	2.50 tonnes/cu.m.
Pellets	2.90 tonnes/cu.m.		

PARKER POINT ORE JETTY: The ore jetty consists of a tubular steel pile structure carrying a deck and rail traverse of a slewing boom shiploader.

8 multi-spring pile dolphins fitted with "Air Bloc" pneumatic fenders are situated clear of the ore jetty structure and vessels berth port side alongside and moor to these dolphins.

Iron ore is the only product handled and following are principal dimensions:

Length of jetty:	268.9 m.
Depth of water alongside:	17.20 m. (LAT)
Travel of shiploader:	180 m.
Radius of ore delivery from fender facing:	23.8 m.
Ht. under side boom above ISLW:	22.14 m. (LAT)
Total length of fendering, No. 1 to No. 8 dolphins:	354.8 m.
Rated capacity of shiploader:	6,000 long t.p.h.

The ore jetty is connected to the East Intercourse Island departure channel by a 170 m. wide departure channel dredged to 15.35 m. (LAT)

Parker Point ore loading facility accommodates vessels up to 140,000 d.w.t.

The maximum departure draft from this berth is dependent upon tidal conditions and adequate under keel clearance.

EAST INTERCOURSE ISLAND ORE JETTY: The ore jetty consists of a tubular steel pile structure carrying a deck and rail traverse of a slewing boom shiploader.

Nine multi-spring dolphins fitted with air bloc pneumatic fenders are situated clear of the ore jetty structure and vessels berth starboard side alongside, mooring to these dolphins.

Iron ore is the only product handled over this facility and the following are principal dimensions:

Length of jetty:	341.4 m.
Depth of water alongside:	21.50 m. (LAT)
Travel of shiploader:	237.8 m.
Radius of ore delivery from fender facing:	25 m.
Ht. under side boom at ISLW:	24.05 m. (LAT)
Total length of fendering, No. 1 to No. 9 dolphins:	429.8 m.
Rated capacity of shiploader:	7,500 long t.p.h.

The ore jetty is connected to the open sea by a 167.7 m. wide departure channel dredged to 15.35 m. (LAT).

East Intercourse Island ore loading facility accommodates vessels up to 230,000 d.w.t. The maximum departure draft from this berth is dependent upon tidal conditions and adequate under keel clearance.

SERVICE WHARF: All general cargo is received over this facility and vessels are acceptable up to a max. draft of 7.19 m. (LAT).

The wharf consists of steel sheet pile cells constructed in water of surrounding depths of 6.51 m. (LAT).

A berthing basin 243.8 m. long and 38.10 m. wide has been dredged to a depth of 7.73 m. (LAT) on the Western side.

The wharf is 69.5 m. in length and faced with piles on which are secured rubber fenders. Mooring buoys are positioned off the N.E. and S.W. extremity of the wharf and head and stern lines are secured to these buoys.

Generally ships berth portside to this facility and normal discharge is carried out by 3 gangs using ship's own gear.

Vessels are required to berth ready in all respects to work cargo with hatches open and cargo gear rigged.

On completion, vessels may be required to vacate the berth and cover hatches, stow gear, etc., at anchor.

Tankers delivering oil products are accommodated at this wharf.

MISTAKEN ISLAND SALT BERTH: The salt berth owned and operated by Dampier Salt Limited consists of a tubular steel pile approach structure carrying conveyor belt to a fixed position, cantilever shiploader.

7 multi-spring pile mooring dolphins are situated clear of the shiploader platform, ships generally berth starboard side alongside.

Due to the fixed nature of the loader, ships have to be warped along the line of dolphins, to bring each hatch in sequence under the loading boom.

This wharf was built by Dampier Salt Limited, for the handling of salt from their salt pans, situated 6.4 km. from the wharf. The following are the principal dimensions:

Total length of fendering No. 1 to No. 7 dolphins:	358.2 m.
Minimum depth of water on approach path	9.60 m. (LAT)
Depth of water alongside:	12.00 m. (LAT)
Outreach of loader boom from line of fendering:	18.29 m.
Ht. under side boom at ISLW:	20.01 m. (LAT)
Rated capacity of shiploader:	Max. 3,200 tonnes per hour. Average 2,000 – 2,500 tonnes per hour.

Underkeel Clearance: Underkeel clearance of 1.0 m. required whilst alongside. On departure vessels up to 35,000 d.w.t. to maintain 1.0 m. keel clearance and vessels over 35,000 d.w.t. to maintain 1.5 m. keel clearance.

Condition to Load Salt:

1. Ensure that vessel's holds are thoroughly washed – to remove all traces of the previous cargo.
2. Ensure that vessel's holds are thoroughly lime washed with slaked lime (Calcium Hydroxide – $Ca(OH)_2$) and that no other substances are mixed with it.
3. Vessels should ensure that mooring lines are laid out in readiness for berthing. See Plan.

Note: Limewashing: This requirement is a pre-requisite of vessels loading. If vessel's holds are not deemed, by an independent Marine Surveyor, to be in a condition of cleanliness normally acceptable to Dampier Salt (Operations) Pty. Limited, the vessel may not be loaded until such time as the Surveyor is satisfied that the holds meet the standards set by Dampier Salt (Operations) Pty. Limited. This may mean that unacceptable vessels will be laid at anchor until the holds are deemed to be acceptable for loading salt. The Master may be required to sign a "Letter of Indemnity" accepting the cargo on behalf of the Operating Line – with holds in a condition described in a report by the independent Surveyor, if the holds are not acceptable. In these cases, no cleanliness certificate will be issued by the Surveyor.

Provided the vessel's holds are acceptable to the Surveyor as being "clean" the Surveyor will issue a Hold "Cleanliness Certificate".

The above stipulation is for the contamination effects on quality control and is a requirement of both Shippers and Receivers of the Salt. Limewashing also protects the vessel against adverse action on the vessel's holds caused by the salt.

Loading Procedure: The vessel is to ensure that the first two holds to be loaded have the hatch covers removed on berthing. On berthing the vessel will be positioned by the Pilot such that the loading can commence immediately upon acceptance of the Notice of Readiness and verification that vessel's holds are sufficiently clean to standards determined by Dampier Salt (Operations) Pty. Limited as acceptable to load.

An independent Ships' Surveyor, retained by Dampier Salt (Operations) Pty. Limited will take all draft readings during the berthing operation in order that the commencement of loading will not be delayed. Ship's arrival condition and ballast readings prior to commencement of loading will be agreed between the Chief Officer and Surveyor.

An Operations Supervisor from Dampier Salt (Operations) Pty. Limited will board the vessel immediately following mooring to check that the vessel is in readiness to load, and then commence the loading operation. This Officer will then agree with the Chief Officer loading sequence, loading schedule, warping procedures, draft problems (if any) and any other matters pertaining to the loading of the vessel.

He will draw up a loading schedule confirming with the Chief Officer the approximate hold loading duration, times of warping and the estimated time of completion of loading, and sailing time.

An Operations Foreman will remain on board the vessel for the duration of loading in order to liaise with the Chief Officer concerning the procedures and times to move the vessel so as to load each hold in warp sequence and maintain critical draft, where applicable.

A belt weightometer is used by Dampier Salt (Operations) Pty. Limited, to indicate loading rates and tonnages loaded in each hold. This instrument has a proven accuracy of ±1.5%. It is the practise of Dampier Salt (Operations) Pty. Limited, for the surveyor and Chief Officer to agree a preliminary draft survey when the second last hold is approximately 80% loaded. This survey then allows the correct loading of the remainder of the cargo so as to ensure correct trim and prevent inadvertent overloading. The final loaded cargo tonnage is determined by draft survey, calculated by and agreed between the Surveyor and Chief Officer.

No labour is available at Dampier to board the vessel for any shipboard duties. Trimming is by conveyor discharge at the end of the loading spout only. Any subsequent trimming required must be undertaken by the ship's crew.

Stowage Factor: Stowage density 32 cu.ft. per long ton or 0.89 cu.m. per metric tonne. Angle of repose 33°. It has been found that the cargo does not shift during the vessel's voyage to discharge port.

Typical Specification – Australian Salt NaCl (Sodium Chloride):

Appearance: Generally clear, white and free from organic matter.

Additives: Nil additives in final washed product.

Component:

(percentage by weight)	*Average*
Moisture content:	2.25
Calcium content:	0.03
Magnesium content:	0.02
Potassium content:	0.01
Sulphate content:	0.11
Chloride content:	58.97
Water insolubles content:	0.02
Heavy metals:	less than 15 ppm.
NaCl content:	97.50

Chemical analysis expressed in combined form:

NaCl	97.50%
$CaSO_4$	0.12%
$MgSO_4$	0.05%
$MgCl_2$	0.04%
KCl	0.02%
Moisture	2.25%
Insolubles	0.02%

Location of Berth in Relation to Dampier Township:

The berth although geographically in close proximity to the township of Dampier is in fact a journey of some 40 km. by road. The only land access to the berth being through Company property. During shiploading and/or replenishing of the salt stockpile on Mistaken Island, there is a continuous 24 hour per day movement of large heavy haulage trucks along a narrow causeway which makes the movement of private vehicles, taxis or individuals extremely hazardous. Therefore access to the township through Dampier Salt property is strictly controlled and limited.

Vessel Arrival Requirements:

Dampier Salt (Operations) Pty. Ltd. operates its own shipping agency department. All vessels calling at the salt berth are attended by a nominated Dampier Salt (Operations) Pty. Ltd. Shipping Officer who acts in the capacity of both owners and charterers agents.

Services Required:

1. Master to advise by telex via coastal radio if any crew members are required to attend doctors or dentists. Prior advice will generally ensure adequate arrangements can be made to accommodate the requests. Insufficient notice, or advice on berthing may jeopardise the chances of obtaining normal medical/dental treatment. Emergency medical treatment is available at all times.
2. Telex advice of any and all stores requirements should be given to Dampier Salt (Operations) Pty. Ltd., at least 4 days prior to arrival. Stores orders received later than this may not be able to be filled, although the majority of items normally requested are carried locally by the ships' providores.

Prior telex advice will ensure the maximum supplied – whilst advice to the Agent on arrival may not be sufficient time to fulfil the full requirements of the vessel.

MEDICAL: Doctors are permanently resident at Dampier and Karratha and a modern General Hospital is situated in Karratha.

TANKERS: See "Service Wharf".

STEVEDORES: Subject to application. Apply: Hammersley Iron Pty. Ltd.

CARGO GEAR: See "Melbourne".

FIRE PRECAUTIONS: 1 firefighting tug.

FUEL/WATER/REPAIRS: Fuel for ships' bunkers is not available.

A limited supply of fresh water is available in an emergency.

Stores and provisions can be arranged. For large orders Masters are recommended to cable their Agent giving 7 days notice of their requirements.

Minor ship repair work can be arranged through ship's Agents. However, Masters requiring major work are recommended to cable their Agents advising their requirements in advance. (Note: Port of Dampier By-Law No. 23).

GANGWAY/DECK WATCHMEN: Crew.

OPENING/CLOSING HATCHES: By crew.

SHIP CERTIFICATES: See "Melbourne".

REPATRIATION: Limited facilities available.

AIRPORT: Twice-daily service to Perth, and twice-weekly service to Darwin. Karratha Airport is 15 km. from the port.

TIME: GMT plus 8 hours.

TELEPHONES: Ship-to-shore telephones are available at all berths for ship-to-shore communications. Ships and jetty telephones are barred access to STD and trunk line facilities.

WEATHER: The Archipelago is situated in the cyclone belt with an average statistical incidence of three tropical cyclones per year in an area extending from Port Hedland to North West Cape.

The cyclone season lasts from December to April.

Prevailing winds are Easterly in Winter and Westerly in Summer but surrounding hills give considerable protection. Forces in excess of 20 knots are seldom experienced.

The port facilities are situated in sheltered waters and experience only slight seas and occasional low Northerly swell in the Summer months.

Vessels are advised to listen to daily weather broadcasts by:

(1) Perth Radio at 0100 GMT and 1200 GMT on 484 kHz, 8,597 kHz, 12,994 kHz or at 0200 GMT and 1000 GMT on 16,947 kHz or 22,315 kHz.

(2) Broome Radio at 0010 GMT and at each succeeding 4 hourly interval on 6 MHz.

The salt berth is situated in sheltered waters and experiences only slight seas and occasional low Northerly swell in the Summer months.

TIDES: Tidal streams are weak within the Archipelago, the flood flowing to the South with a maximum strength of less than one (1) knot at Spring tides in the berthing area.

Spring tidal range is 5.3 m.
Neap tidal range is 3.2 m.
Mean sea level is 2.7 m.
(Lowest Astronomical Tide).

Dampier is a standard port in the Australian National Tide Tables, published by the Hydrographer Royal Australian Navy.

SERVICES: A Walport film exchange is available – contact ship's Agent.

A sealed road connects Dampier with Perth extending North to Port Hedland. This highway provides all weather access from the State capital.

A bus service operates between Dampier and Perth and Dampier and Port Hedland.

Postal and telegraphic facilities are available at Dampier Post Office. Business Hours: 0900–1230 hrs., 1330–1700 hrs. weekdays.

Customs: A sub-collector of Customs and staff are resident in Dampier and regulations of the Department of Business and Consumer Affairs–Bureau of Customs will apply.

Police: A police sergeant and police officers are stationed at Dampier.

Township: Dampier is a modern township built overlooking Hampton Harbour at the S.W. extremity of the Archipelago. It has a population of approximately 4,000 and an enclosed air-conditioned shopping centre and hotel-motel cater for everyday requirements.

SEAFARERS' CENTRE: A seafarers' centre operated by the Mission to Seamen Flying Angel Club is located on the Esplanade, Dampier, overlooking the Hampton Harbour. The centre is equipped with a shop, recreational facilities, bar, and serves meals. Telephone: 83 1424 (area code 091).

GENERAL: *Gas-freeing of Vessels:* The port requirements regarding gas-freeing of OBO or other vessels presenting at the port are as follows:

1. Where vessels have been issued with a Gas-Free Certificate prior to their call at Dampier, such vessels can berth on arrival or whenever the berth is free.
2. Where vessels arrive at the Port of Dampier without a Gas-Free Certificate on board, such vessels must be issued with a Gas-Free Certificate before berthing.
3. No Gas-Free Certificates signed by the Ships' Masters will be accepted.
4. Gas-Free Certificates will be acceptable only from an industrial chemist or any other competent person approved by the Port Authority, Pilbara Harbour Services Pty. Limited.

The Master of an OBO vessel shall cable the Harbour Master Port of Dampier addressing its message "Shipserv Pilharb Perth" 72 hours before intended arrival at the port, advising:

(a) Nature of the preceding three cargoes the vessel has carried.

(b) Date and place last oil cargo was discharged.

(c) Statement on the condition of the slop tanks and whether these are pressed up or fully inerted and sealed.

(d) The date and place of issue of the Gas-Free Certificate carried on board.

Charts and Publications:

1. Australian Pilot Volume V
2. Australian Chart No. 741 Decca
3. Australian Chart No. 58 Decca

Hamersley Iron Pty. Limited: The jetties, wharves and facilities over which iron ore, general cargo and oil products are handled are owned and operated by:

Hamersley Iron Pty. Limited, Tel: 83 1000 (Area Code 091). Telex: AA99151. Cables: "Hamiron Dampier".

Vessels Arriving to Discharge General Cargo:

(a) Owners are required prior to accepting cargo for Dampier, to submit a copy of the vessel's General Arrangement Plan for the purpose of ascertaining the vessel's acceptability in sufficient time to permit recommendations to be made on the positioning and stowage of the cargo.

(b) Prior to departure from the loading port, Masters shall forward by first class air mail a copy of the vessel's cargo plan showing the nature, description and weight of the cargo to be discharged at Dampier.

The documents referred to in (a) and (b) above shall be forwarded to Hamersley Iron Pty. Limited, P.O.Box 21, Dampier, marked *Urgent Ship's Papers.*

REGULATIONS: Following are some of the important regulations in respect of handling of dangerous goods (effective 1st November, 1984).

46. (1) The Master of a vessel having on board flammable liquid or onto which flammable liquid is being loaded shall ensure that, in handling the flammable liquid, the requirements of the International Safety Guide for Oil Tankers and Terminal (1984 Edition) published by the International Chamber of Shipping are complied with in addition to the other requirements of these regulations.

(2) The Master of a vessel having on board liquefied flammable gas or onto which liquefied flammable gas is being loaded shall ensure that, in handling the liquefied flammable gas, the requirements of the International Chamber of Shipping Tanker Safety Guide (Liquefied Gas) (1979 Edition) published by the International Chamber of Shipping are complied with in addition to the other requirements of these regulations.

47. (1) In this regulation the Rules for the Safe Transport, Handling and Storage of Dangerous Substances and Oils in Port Areas (1984 Edition) made by the Association of Australian Port and Marine Authorities are referred to as the rules.

(3) The Harbour Master may exempt the Master of a vessel from the requirements of sub-regulation (2) if he is satisfied that:

(a) flammable liquid has not been carried in the tanks or spaces into which the ore is to be loaded during the last 3 voyages on which cargo has been carried in those tanks or spaces; and

(b) since flammable liquid was last carried in the tanks or spaces they have been properly cleaned and ventilated and a certificate as described and to the effect described in sub-regulation (2) (a) has been obtained from an approved person, and any such exemption may be given subject to the taking of such other precautions as are specified by the Harbour Master.

(4) An exemption under sub-regulation (3) shall have effect according to its tenor.

(5) Application to the Harbour Master for an exemption under sub-regulation (3) may be made in writing setting out a description of the cargo carried on each of the last 3 voyages and the dates on which they were loaded and the application shall be accompanied by a copy of the certificate referred to in sub-regulation (3) (b) that the Harbour Master is satisfied is authentic.

64. The Master of a dangerous goods vessel berthed at a wharf shall ensure that the outboard side accommodation ladder or lifeboat is turned out as an alternative means of escape.

67. (b) at all times while the vessel is berthed at a wharf, in addition to the requirements of paragraph (a):

(i) the vessel's International Ship-Shore Fire Connection is connected to the fire hydrant of the vessel that is nearest to a gangway; and

(ii) a hose is connected between the vessel's International Ship-Shore Fire Connection and a shore hydrant.

78. (4) Where a vessel is to be loaded with, or unloaded of, flammable liquid, the Master of the vessel shall ensure that, before loading or unloading is commenced, a box or satchel on which the words "Emergency Documents", in black letters, are clearly displayed, is placed on the wharf in a prominent and readily accessible position at least 30 m. from the vessel and that the box or satchel contains:

(a) details of the plan referred to in sub-regulation (1) (a), including particulars of relevant times, sequences, and rates;

(b) a list of the characteristics of:
 (i) the cargo, if any, on board the vessel; and
 (ii) the flammable liquid to be handled;
and details of the position where it is or, as the case may be, is to be stowed;

(c) a Crew List, including reference to persons joining or leaving the vessel while it is in the port; and

(d) a plan of the general arrangement of the vessel.

82. (1) The Master of a vessel engaged in cargo operations involving dangerous goods shall ensure that:

(a) 2 suitable independent telephone or VHF systems for communicating between the vessel and the shore are available; and

(b) throughout the cargo operations, all reasonable endeavours are used to maintain communication between the vessel and a responsible person on the shore by means of each of the 2 systems referred to in paragraph (a).

(2) For the purposes of sub-regulation (1) (a), a VHF system is not suitable unless each unit is portable and is carried by a person nominated for the purpose of maintaining communication in accordance with sub-regulation (1) (b).

83. The Master of a vessel shall ensure that:

(a) if any leakage or spillage occurs during the loading onto, or unloading from, the vessel of flammable liquid, the loading or unloading shall be forthwith stopped, all valves shall be closed, and the Harbour Master shall be forthwith notified; and

(b) if any leakage or spillage of oil or oily ballast water onto the deck occurs, scupper plugs are not removed and steps are taken forthwith to prevent oil or oily ballast water from going overboard.

AUTHORITY: Pilbara Harbour Services Pty. Ltd., East Intercourse Island, P.O.Box 178, Dampier, Western Australia, 6713. *Tel:* (091) 83 1306. *Telex:* AA99610. *Cables:* Pilharb Perth. *Contact:* Captain G. F. Hammonds, Harbour Master. T. E. Dyer, Superintendent – Port Operations.

AGENT: Pilbara Harbour Services Pty. Ltd.

DARWIN, N.T.: 12.28 S. 130.50 E. (See Plan Book)

PORT LIMITS: A line drawn between Charles Point and Lee Point defines the seaward limits of the port.

DOCUMENTS: Vessels arriving at Darwin as their first Australian port will require the following documentation:

2 Crew Lists, Form M & S 11.
2 Passenger Lists, Forms M308, 309, 310.
2 Port of Call Lists.
1 Crew Personal Effects List, Form 5.
2 Barber's and Ship's Stock, Form 5AA.
1 Stores List, Form 42A.
1 Animal Pets Aboard, Form QA4.
Ship's Log.
Last Port Clearance.
Safety Certificates: Construction
 Equipment
 Safety Equipment
 Loadline
 Radio
 International Oil Pollution Prevention
  Equipment (Tankers Only).

Where possible, cargo manifests and stowage plans should be forwarded by airmail, ahead of the vessel to the local Agents.

Enquiries regarding Customs Allowances should be directed to either the vessel's agent or to the Customs Officer at time of boarding.

PILOTAGE: Darwin buoyage is IALA "System A". Pilotage is compulsory for all craft exceeding 25 m. LOA unless a current Pilotage Exemption is held by the Master.

Pilot Boats: Pilot boats are dark blue with the word "Pilot" in white on either side. Decks and upperworks are yellow and white with red visibility patches. Both boats are fully seagoing and equipped with radio, radar, fire and salvage pumps, as well as equipment for treating oil pollution.

Boarding: The usual pilot boarding point is 1 nautical mile N.W. of Channel Rock Buoy (No. 6). Pilot boarding arrangements must be according to the International Maritime Organisation Regulations.

Vessels awaiting pilotage may anchor between 1 and 2 nautical miles N.W. of Channel Rock Buoy, in 25 m. of water, sand bottom and good holding ground.

Special arrangements can be made for deep draft vessels, whereby the Pilot will board to seaward of Charles Point Patches Buoy (No. 5) situated at Lat. 12° 20.4′ S., Long. 130° 40.5′ E. Vessels awaiting pilotage from Charles Point Patches Buoy may anchor 2 nautical miles North of the buoy, where there is not less than 20 m. of water and good holding ground.

In the case of bad weather, the pilot boat will lead ahead to sheltered waters, using VHF-FM radio for communication.

Also see "Radio".

ANCHORAGE: Masters familiar with the Port may be invited to proceed to the Quarantine Anchorage area, 0.3 to 0.5 of a nautical mile West of Quarantine Buoy (No. 10), situated at Lat. 12° 28.6′ S., Long. 130° 49.9′ E. The Quarantine Anchorage area offers good sand holding ground in not less than 15 m. of water.

Also see "Health".

MAX. SIZE: Ships up to 246 m. LOA and 12.83 m. draft have been accepted at No. 1 berth by special arrangement, depending on tide conditions.

As a general guide the datum depths alongside are:

No. 1	:	12.0 to 12.6 m.
No. 2W	:	11.0 to 11.6 m.
No. 2E	:	11.0 to 12.0 m.
No. 3W	:	9.0 to 10.0 m.
No. 3E	:	9.0 to 12.6 m.

(Note: The least depth at No. 3 occurs in the middle between the berths, which both increase to deeper water at the East and West ends of the wharf.)

No. 4W	:	4.5 to 7.0 m.
No. 4E	:	4.5 to 6.0 m.

(Note: Berths 4, West and East are restricted to small and special vessels and are not accessible to vessels greater than 40 m. LOA.)

HEALTH: *Quarantine Reporting:* A vessel approaching the Port and requiring pratique, should send a message to the Quarantine Office not more than 24 hours and not less than 12 hours before arrival, containing the following information: name of vessel, ETA, number of passengers, number of crew, number of passengers disembarking, and last port of departure and date. The message should also state whether or not there is any disease on board, whether or not livestock have been carried within the last 6 months, and whether or not there are any animals or birds on board at present.

On arrival the health report should be given to the Quarantine Officer, 2 copies being furnished on the prescribed form (Q360 Form A), one of which will be signed by the Quarantine Officer and returned to the Master. A passenger list and crew list together with a list of passengers disembarking including their permanent address within the country is also required. (Commonwealth Health Department – Quarantine Regulations – Part III: 18, 19, 20 and 21.)

The telegraphic address of the Quarantine Department is "Quarantine Darwin Telex AA85658".

Health Clearance: The Commonwealth Department of Health Quarantine Officer will clear vessels at all times, subject to the provision of suitable lighting during the hours of darkness. A gangway should be made available for the use of the Quarantine Officer. The appropriate day or night signal should be displayed until clearance is obtained. (By night – red over white lights.) Subject to receipt of a satisfactory message, wharfside clearance or radio pratique may be available on request.

Quarantine Anchorage: The Quarantine anchorage is 0.3 to 0.5 of a nautical mile West of Quarantine Buoy (No. 10). Vessels requiring to use the anchorage may be subject to pilotage.

RADIO: Ships at sea should work Perth (VIP) or Sydney (VIS), these being the major West and East area stations. Darwin Radio (VID) should be worked as early as possible and full use made of Satcom and Telex.

ETA: Notice of ETA and request for a Pilot must be made to the Harbour Master not less than 24 hours before anticipated arrival at Channel Rock Buoy (No. 6), situated at Lat. 12° 25.1′ S., Long. 130° 46.9′ E.

Communications: Telex messages should be addressed to Telex AA85605, answer-back code "Harbour". Telegraphic address is "Shipserv Norport".

Confirmation of ETA is required at least 2 hours before arrival at Channel Rock Buoy. Such confirmation, or any amendment to ETA, should be made on VHF-FM Channel 16 (156.8 MHz) or the Port Working Frequency of VHF-FM Channel 10 (156.5 MHz). Both Channels are continuously monitored.

VHF-FM Channel 16 is for calling and distress only; Channel 10 should be used for routine working. The Port Base Station incorporates a high performance transmitter.

The standard Colregs signals may be used by vessels requiring a Pilot.

VHF: Communication within the port is by VHF-FM radio using the following frequencies:

Channel 16 – 156.800 MHz Distress and calling
67 – 156.375 MHz Distress
10 – 156.500 MHz General Port working and routine business
12 – 156.600 MHz Tug working
6 – 156.300 MHz Intership

Call sign is "Darwin Harbour" H24.

Ships arriving off the port should make contact on Channel 16 and shift to Channel 10 for routine working. This can be done as part of "Notice of Arrival" which is required 2 hours before ETA Channel Rock Buoy.

RADAR: A low power radar installation covers the commercial port area but is not part of the traffic management system. Both the pilot boats are radar equipped.

TUGS: Coastal Tug and Barge Pty. Ltd. operate the tug "Goyder" of 700 kw and 10 tonne bollard pull. This vessel has limited seagoing capability.

Line Boats: Frances Bay Marine offer 2 small metal work boats for line handling and limited picket boat service.

Launches: Launches up to 50 passenger capacity are available for services to vessels at anchor.

Those and other vessels, including landing barges up to 20 tonne d.w.t., can be contacted through the Port Office.

BERTHING:

Berths	*Main Cargoes*	*Depth Alongside (m.)*	*Length (m.)*	*Height above datum (m.)*	*Max. Deck Loading (Tonnes/sq.m.)*	*Width of Apron (m.)*	*Special Facilities*
No. 1	Petroleum Livestock Mineral Ores	12.0 – 12.6	142	10.4	3.0	12.0	Travelling Belt Unloader, ro-ro
No. 2 West	Containers Dry Bulk Piped Cement	11.0 – 11.6	150	9.5	2.5	35.0	Container Crane, ro-ro Container Crane
No. 2 East	Containers Dry Bulk	11.0 – 12.0	150	9.5	5.0	35.0	—
No. 3 West	General	9.0 – 10.0	146	10.6	1.8	12.2	—
No. 3 East	Dry Bulk General	9.0 – 12.6	146	10.6	2.2	34.0	—
No. 4 West	Fishing	4.5 – 7.0	140	9.5	1.8	11.9	—
No. 4 East	Fishing	4.5 – 6.0	140	9.5	1.8	9.0	—
No. 5	Fishing	6.0	50	9.5 – 10.6	1.0	10.0	—
Frances Bay	Fishing	4.0	100	8.5	1.0	21.0	—

No. 1 Berth (Iron Ore Wharf): No. 1 Berth is a dolphin type berth with a face length of 142 m. Two mooring dolphins are positioned 69 m. East and West of the berth, which can routinely accommodate vessels up to 240 m. LOA and 12 m. draft.

The berth is used mainly for the import of bulk petroleum products and acids, as well as the export of livestock and bulk ores. In addition, No. 1 Berth can be utilised as a ro-ro berth for vessels with large starboard quarter ramps, such as first and second generation PAD and SCAN carriers. Bunker fuel up to 120 cSt is available by 15 cm. pipe-line.

The wharf is equipped with a travelling belt loader, designed for ores and similar dry bulk cargoes. The loader has a transit distance of 140 m. along the wharf and an outreach of 14 m. beyond the fenders. The high water air-draft of the loading boom is 11 m. The loader is connected by travelling belt to the shore stockpile area, a distance of approximately 450 m. Bulk cargoes can be loaded at a maximum gross rate of 1,000 tonnes/p.h.

A variety of product lines are installed to handle petroleum and acid cargoes:

Black oil	30 cm.
White Oils	25 cm.
Distillates	20 cm.
Marine Diesel	15 cm.
LPG	10 cm.
Sulphuric Acid	10 cm.

Discharge rates up to 300 tonnes/p.h. (1,000 kPa) can be accepted.

No. 1 Berth is also equipped with a cattle race, 200 m. in length, for the live export of cattle and buffalo. The ship loading ramp is workable at any stage of the tide. Livestock are delivered into the cattle race directly from road trains.

No. 2 Berth West (New Fort Hill Wharf): No. 2 Berth West, 150 m. in length, was opened in 1981 to form the first stage of the Port of Darwin's present development programme.

Maximum deck loading is 2.5 tonnes/sq.m. and height of deck is 9.5 m. above datum. Minimum depth alongside varies between 11.0 and 11.6 m. Bunker fuel up to 120 cSt is available by 20 cm. pipe-lines. The berth is fitted with pipe-lines for the discharge of bulk cement.

Ro/Ro Facility: In 1982 the "Linkspan" ro/ro facility was installed at the Western end of No. 2 Berth, establishing the berth as the centre for ro/ro operations.

The ro/ro facility consists of an extendable version of the "Linkspan" ship-to-shore semi-buoyant bridge 77 m. in length, connecting with a 35 m.×42 m. pontoon and is workable at all tidal levels.

The pontoon can be extended, retracted and ballasted, thus enabling ro-ro vessels of any size or type – side-loading, end-loading, quarter-loading (port or starboard) – to use the Port of Darwin.

For example, when extended:

The pontoon forms a corner berth for use by ships with their own ramps. Non-ramp ships can be loaded or discharged over extendable finger flaps.

Ships with port or starboard quarter ramps or stern ramps, lying port side to the wharf, can be handled with equal ease. Vehicles discharged over a starboard quarter ramp make a 125° turn on the pontoon to reach the end of the "Linkspan",

Large international ro-ro vessels, such as first and second generation PAD and SCAN carriers, can lie at the No. 1 Berth, working cargo over their starboard quarter ramps.

When the pontoon is retracted, its outer end forms an extension of No. 2 Berth West. The facility can then be used for vessels like car carriers, with side doors or starboard shoulder ramps.

No. 2 Berth East: No. 2 Berth East is a 150 m. extension to No. 2 Berth, giving a total wharf length of 300 m.

Maximum deck loading is 5 tonnes/sq.m., enabling containers to be stacked 4 high and catering for forklift axle loads of 80 tonnes. Deck height above datum is 9.5 m., with minimum depth alongside varying between 11.0 m. and 12.0 m.

Both No. 2 Berths, West and East, are served by an I.H.I./Sumitomo rail-mounted, single lift gantry container crane. The crane has a container handling capacity of 30 TEU per hour and a heavy lift capacity of 70 tonnes. A 10 cu.m. grab is available for the handling of bulk cargoes.

No. 3 Berths, West and East (Outer Stokes Hill Wharf): No. 3 Berths, West and East, comprise the outer side of a concrete decked, steel piled wharf with a 300 m. trestle approach. Total length of the two berths is 292 m., with a least depth of 9 m. Height above datum is 10.6 m. Permissible wheel loading for standard type vehicles is 6 tonnes, while maximum deck loadings are 1.8 tonnes/sq.m. with some local restrictions.

Both berths are used mainly for general break bulk cargo, as well as by rig tenders, timber carriers, passenger ships, survey vessels and visiting naval craft. Number 3 Berth East, is also used for dry bulk imports, such as sulphur and clinker, which are landed by ship's grab. Bunker fuel up to 40 cSt is available by 12 cm. pipe-lines.

No. 4 Berths, West and East (Inner Stokes Hill Wharf): These berths, on the inner side of Stokes Hill Wharf, are reserved for smaller vessels such as prawn trawlers, tugs and the like. Maximum length of vessel is restricted to 40 m.

Total length of the berths is 280 m., with a least depth alongside of 4.5 m. Height above datum is 9.5 m., with maximum deck loading of 1.8 tonnes/sq.m. Bunker fuel up to 40 cSt is available by 12 cm. pipe-lines.

Frances Bay Small Ships Facility: The facility has a concrete deck on steel piles with an overall length of 90 m. The least depth is 4 m., deck height is 9.5 m. above datum and deck loading is 1.0 ton/sq.m.

Facilities include shore power at 415V., 3 phase, 100A per point, bunkers to 10 cSt and fresh water. The wharf is designed as an assistance to the fishing industry and is situated adjacent to Darwin Ship Mainentance Services repair works, with its 400 ton synchrolift dock. Full cold and dry storage facilities are under construction.

Storage Facilities: Two cargo sheds suitable for the under-cover and secure storage of break bulk cargoes are located at No. 3 Berths West and East (Stokes Hill Wharf). Total floor area is approximately 3,200 sq.m.

The port's two main cargo sheds are situated in the Container Depot, adjacent to Kitchener Drive. The sheds have a total floor space of approximately 4,000 sq.m. Used predominantly for container storage, the sheds are equipped with 60 power points for refrigerated containers.

The Container Depot has an additional 18,000 sq.m. of open storage space, able to accommodate 600 TEU when double stacked.

The first stage of the Darwin Container Terminal, immediately adjacent to No. 2 Berth West, was completed in May, 1983. Fitted with 64 power points for refrigerated containers, the Terminal is currently able to accommodate approximately 200 TEU.

The Terminal's capacity is being gradually increased as land-backing of No. 2 Berth West progresses. With the completion of the berth's land-backing, expected in 1986, the Terminal will be capable of accommodating 1,000 TEU when double stacked.

CARGO HANDLING EQUIPMENT: An extensive range of cargo handling equipment is maintained by the Port Authority and the Stevedores.

Fork lifts vary in lifting capacity from 2.5 tonnes to 27 tonnes.

Mobile cranes of up to 16 tonnes lifting capacity are owned by the Port Authority. Larger mobile cranes – up to 300 tonnes – can be hired locally.

A variety of tractors and trailers (6.1 m. and 12.2 m.) are available as internal transfer vehicles and for ro/ro container operations.

BRIDGES: There are no bridges or other restrictions to prevent access to the Port by vessels of not more than 12 m. draft. Ships of greater draft may need await tide at Charles Point Patches.

STEVEDORES: Working hours from 0800 – 2200 hrs. (2 shifts) Sundays to Fridays, extension to 2400 hrs. if vessel sails. Saturdays to 1200 hrs. with extension to 1500 hrs. if vessel is sailing. Night shifts by arrangement. Weekend and Monday labour (including mooring gangs) must be ordered by 1300 hrs. Friday. Average rate on breakbulk general is 9 tonnes/p.h per gang.

OPENING/CLOSING HATCHES: Ship's hatches are usually handled by W.W.F. labour while the vessel is alongside.

GANGWAY/DECK WATCHMEN: Gangway and Gate Watchmen can be supplied by the Stevedores at union award rates. Hold Watchmen are not necessary. Shed or Gate Watchmen may be required during the handling of hazardous cargoes.

Gangways: Various shore gangways are available for hire from the Stevedores.

MEDICAL: Full hospital facilities available without prior notice.

FRESH WATER: Good quality potable water is available in unlimited quantities at all berths. Delivery rate is approximately 30 tonnes/p.h. per connection.

FUEL: All grades of fuels and lubricants are available. Darwin is the only Port between Fremantle and Townsville which can supply H.F.O. to 180 cSt. Longest possible notice is desirable.

TANKERS: See "Berthing"

Precautions: Governed by Australian Ports Association standards. Copies of Port tanker rules are supplied on arrival and will be amplified by Pilots if necessary.

CONSULS: The following Consuls are located in Darwin:

Honorary Consul for Finland
Mr. J. C. Hickman G.P.O.Box 540, Darwin.
Honorary Consul for Greece
Temporarily unfilled.
Consulate of Indonesia
Mr. Soedhoro G.P.O.Box 1953, Darwin.
Honorary Consul for Italy
Mrs. Anna Sacilotto G.P.O.Box 2364, Darwin.
Honorary Consul-General for Japan
Mr. R. Morris 3 Banksia Street, Nightcliff.
Honorary Consul for Philippines
Temporarily unfilled.
Honorary Consul for Portugal
Mr. J. L. da Costa Alves 2 Cooper Street, Nightcliff.
Honorary Consul for Switzerland
Mr. P. H. Fuchs 46 Wells Street, Darwin.

REPAIRS: Routine maintenance and boilermaking assistance to light engineering standards. There is no foundry in the Port.

DRY DOCKS: A "Syncrolift" facility with S.W.L. 400 tons operates at Frances Bay (length 40 m., breadth 9 m., depth 4.0 m.).

SURVEYORS: Representatives of most Cargo Surveyors and Classification Societies can be brought from interstate or overseas at short notice. Lloyd's Agent at the port represents most of the Classification Societies and both Commonwealth and N.T. Surveyors are appointed at the Port.

CUSTOMS ALLOWANCES: Australian Commonwealth Regulations apply.

Customs Officers board all vessels upon arrival, with the exception of Intermediate Port vessels. For such vessels, Officers board Mondays to Fridays between 0800 hrs. and 1600 hrs.

Prior notice of arrival is required, including details of passengers and crew leaving the vessel at Darwin.

Requests for the services of Customs Officers should be made through the vessel's Agents.

REPATRIATION: Scheduled aircraft connect with all Australian states several times daily. Direct overseas connections include New Zealand, Singapore, Bali and Brunei. All facilities exist for changes of crew and repatriation of seamen. Full hospital facilities are available without prior notice.

TIME: Local time is UT minus 9 hours 30 minutes without variation. Summer time is not used. ETA and similar information should preferably be in local time: if GMT/UT is used, it should be clearly stated.

HOLIDAYS: Cargo is not worked on Christmas Day, Good Friday, Anzac Day or Picnic Day (first Monday in August).

Gangs for mooring and unmooring vessels can be made available at all times.

POLICE/AMBULANCE/FIRE: All emergency services are available through the Harbour Office. Automatic fire alarms are installed throughout the Port and alarms can be raised or emergencies reported on Channel 16 at any time.

Police	81.5555
Fire	81.2222
Ambulance	27.9000

EMERGENCY CO-ORDINATION CENTRE: Any maritime emergency will initially be handled through the Harbour Office. The responsibility may eventually be transferred to another authority depending on the magnitude or complexity of the emergency.

TELEPHONES: This service is available aboard ships at all berths by prior arrangement through the Agents. Standard rates apply.

SHORE LEAVE: When Immigration and Customs requirements have been satisfied, there are no restrictions on crew members' shore leave. Identity cards or shore passes are not necessary.

A Telephone Interpreter service is available by telephoning 81 4411 at any time. Most major European and Asian languages are included.

DELAYS: Berthing delays are very infrequent. Occasional labour shortages develop when several general cargo vessels are working.

SERVICES: A Compass Adjuster resides at the Port.

BANKS: No foreign bank branches exist in the Northern Territory but local banks represent most overseas finance houses.

STORING: Vessels can be stored by truck or by launch at anchor. Vehicles and boats may not approach tankers while working cargo. Forklifts and shore cranes can be used to assist stores loading. Local labour is available to assist storing. The usual Customs Regulations apply regarding drawback of duty or tax.

DEVELOPMENTS: *Container Crane:* No. 2 Berths, West and East (New Fort Hill Wharf) are equipped with an I.H.I./Sumitomo rail-mounted, single lift gantry container crane.

The crane has a handling capacity of thirty 6.1 m. (or fifteen 12.2 m.) containers per hour and a heavy lift capacity of 70 tonnes at 50% outreach. It is equipped with a 10 cu.m. grab for bulk cargoes.

Selected Data – Container Crane:

Containers per hour	30 TEU
Bulk capacity	10 cu.m. grab
Capacity at 100% outreach	35 tonnes
Capacity at 50% outreach	70 tonnes
Outreach from fenders	32 m.
Total outreach	35 m.
Height to bottom of boom	30 m.
Total height	50 m.
Total height (boom raised)	70 m.
Total weight	850 tonnes
Speed of travel on rails	27 m./min.

Construction of 150 m. extension to new Fort Hill Wharf is well advanced. Completion of the extension is expected in mid 1984. The Port will then have 2 berths serviceable by the rail mounted container crane.

Land-backing of the first section of new Fort Hill Wharf is proceeding on a gradual basis. It is expected that the wharf will be fully land-backed in 1986.

GENERAL:
Charts and Documents: Refer to:
AUS 27, 28, 309
Admiralty Pilot Vol V
Admiralty List of Lights (Vol K)
Admiralty Tide Tables (Pacific)
Admiralty National Tide Tables (AHP11)
Marine Information Manual Australia

A copy of the Port Handbook and (in season) the Port Cyclone Procedures will be issued to Masters of arriving vessels.

Restrictions and Regulations: Vessels must not immobilise main engines without permission from the Harbour Master.

Tankers: Tankers will not be allowed to immobilise at any time of year while working cargo. Petroleum tankers and other carriers of hazardous liquid bulk cargoes will be issued on arrival with a copy of port "Procedures for Tankers", which sets out in full the procedures to be carried out in case of fire, oil spill or other accident. Tankers are not moved before sunrise or after sunset except in emergency conditions.

Anchorage: Anchorage is prohibited in area between Emery Point, Mandorah and Bullocky Point, where high voltage power lines cross the harbour bottom. Anchorage is not advised in the foul area South of Channel Rock Buoy, which is obstructed with wartime wreckage.

Cyclone Procedures: Darwin is within the Southern Zone of tropical revolving storms. The season extends from November to April and the Port and environs may be more or less affected at any time during that period. All vessels entering the port during the "Cyclone Season" are supplied with copies of the Port procedures which set out in detail the various stages of alert and warning, together with actions to be taken in the case of an approaching cyclone. Ships may be placed on short notice for sea and required to maintain themselves in seagoing condition at all times.

Allocation of Berths: The allocation of berths is determined by the Harbour Master.

Signals: The Port of Darwin adheres to the International Code of Signals and the International Rules for Prevention of Collision.

Two special emergency sound signals are used in the Port. In the case of fire, the morse letter F (· · – ·) should be continuously sounded on the ship's whistle or siren. In the case of oil spill or other pollution of the harbour waters, the morse letter P (· – – ·) should be continuously sounded.

Tides: Darwin is a standard port (No. 6323) and full predictions are given in the Australian National Tide Tables. Maximum range is 7.92 m., with a mean range of 3.72 m. Tidal streams at Springs may exceed 3 knots in channels and reach 3 knots at berths.

Visibility: Visibility in the district is usually good but may be affected by dust during the "Dry Season" and humidity during the "Wet Season". Fog is virtually unknown. During the "Wet Season" severe thundersqualls with heavy rain frequently occur. These are usually brief but gusts may reach 60 knots and the wind generally shifts through 360°. Vessels at anchor should veer a good scope of cable and have a second anchor ready for immediate use.

Electricity: Shore power connections are installed at all berths.

Garbage Disposal: The dumping of garbage into port waters is strictly prohibited.

The Port Authority provides a free garbage collection and disposal service, for which purpose a modern oil-fired incinerator is operated in the Port Area.

Delivery and collection of bins can be arranged by contacting the Wharf Office on Number 2 Berth (Tel: 81 6701) or through the Shipping Agent.

Port Security: The Port Authority operates its own security service, staffed by Port Authority personnel. Patrols throughout the Port area take place around-the-clock.

The Container Depot (adjacent to Kitchener Drive) and the Container Terminal (adjacent to No. 2 Berth, West) are enclosed by high security fences which are locked when the areas are not being worked.

The storage sheds in the Container Depot are kept locked when not being worked as are the Transit sheds on Berth Nos. 3 and 4, when being used to store cargo.

Requests for additional security for special cargoes should initially be addressed to the Port Authority.

AUTHORITY: The Director, Darwin Port Authority, P.O.Box 390, Darwin N.T. 5794. *Tel:* (089) 81 6701 (all hours). *Telex:* AA85605 Harbour. *Contacts:* Mr. M. N. Bartlett, Director Marine and Port. Capt. J. A. Mayor, Manager Operations. Mr. B. K. Newell, Manager Administration. Mr. C. J. P. Mountford, Manager Marketing. Capt. R. J. Wilson, Harbour Master. Mr. B. E. McFadyen, Operations Engineer. Capt. M. S. Fleming, Assistant Harbour Master.

AGENT: Sub-agent of Patrick Agencies, Sydney, NSW.

DERBY: W.A.: 17.17 S. 123.35 E. (See Plan Book)

CERTIFICATES/DOCUMENTS: See "Melbourne".

PORT LIMITS: All waters to South and Eastward of a line through Valentine Island in a 053° – 233° direction to the mainland on each side.

PILOTAGE: Not compulsory but recommended. Private Pilots arranged by Agents at Fremantle or Derby. Pilot boards Cockatoo Island in Yampi Sound. Two weeks advance notice required of Pilot requirement.

ANCHORAGES: N.N.W. of North Mary Ann Island with Derby front lead bearing 141° distance 6.4. miles.

RESTRICTIONS: Numerous islands and reefs, strong tides. Navigate during day.

MAX. SIZE: 575 ft. length. Max. draft berthing/sailing 8.0 m.

HEALTH: First port of entry. Vessel examined for pratique alongside. Also see "Melbourne".

VHF: Limited VHF, Channels 6 and 16.
BERTHING: Tide range one of biggest in the world. Berth alongside dries 2 ft. 6 in. at Springs. Several patches dry, 1 – 2 ft. Ground in berth level and it is "Practice of Port" vessels stay aground if stay over tide. Important to note above for circulating water for ships auxiliaries, as vessel makes own arrangements on board.
TANKERS: Oil – discharge connection 236 ft. from Southern end of jetty.
FRESH WATER: Up to 224 tons at 15 t.p.h. Could be restricted by drought.
TIME: GMT plus 8 hours.
CARGO GEAR: Due to extreme range of tide vessels with short derricks will have difficulty at LW. Also see "Melbourne".
AUTHORITY: Department of Marine and Harbours, 6 Short Street, P.O.Box 402, Fremantle, W.A. 6160. *Tel:* (09) 3350888.
AGENT: Sub-agent of Patrick Agencies, Fremantle.

DEVONPORT, Tasmania: 41.11 S. 146.22 E.

(See Plan Book)

PORT LIMITS: Within all waters that extend 3 miles seawards bounded on the Eastward by an imaginary line drawn 000° – 3 miles from the coastline and intersecting the most Easterly point of Wright Island and to the Westward by an imaginary line drawn 000° – 3 miles from the Western side of the entrance to the River Don.
DOCUMENTS: See "Melbourne".
APPROACHES: Port situated 1 mile inside Mersey River, the entrance to which is sheltered by the Mersey Bluff on the West and by a breakwater on the East bank. There is good anchorage in vicinity of boarding ground, but it is inadvisable to remain at anchor during periods of strong on-shore winds. The Inner Harbour provides good all-weather shelter. There is a swinging basin which can accommodate vessels of length 200 m. or more, especially where tugs are used.
PILOTAGE: Compulsory. 24 hour service for all vessels where Masters are not in possession of a valid Exemption Certificate. Pilots will board when required at a position within 400 m. of a point Mersey Bluff Lighthouse bearing 242° by 1.93 km.

Masters of vessels requiring the services of a Pilot are advised to radio the Harbour Master, Devonport, their ETA and vessel's arrival draft 12 hours prior to arrival.
ANCHORAGE: The quarantine anchorage is defined as to the North of a line running East and West through the Mersey Bluff Lighthouse. Vessels must lie clear of the fairway into the River.
RESTRICTIONS: Approach channel 26 ft. (7.6 m.) LWOST. Tidal range is 2.44 m. average, 2.56 m. Spring. Enquiries should be made for vessels exceeding 30 ft. (9.6 m.) draft and 600 ft. (180 m.) length.
MAX. SIZE: LOA 200 m., max. draft 9.6 m. Also see "Restrictions".

TIDES:	
Lowest Recorded Tide	Minus (–)0.48 m.
Mean High Water Spring Tides	2.89 m.
Mean High Water Neap Tides	2.62 m.
Mean Low Water Neap Tides	0.59 m.
Mean Low Water Spring Tides	0.33 m.

HEALTH: Pratique is mandatory for all vessels arriving from overseas ports. Agents normally make necessary arrangements.
VHF: 24 hour listening watch – Channel 16, switching to Channels 12 and 67 as required. Call sign is "Devonport Harbour Control".
TUGS: Conventional 1,130 b.h.p. (bollard pull 23 tonnes) plus smaller tug 250 b.h.p. immediately available. Additional tugs, as required, available at reasonable notice.
BERTHING:
Berths on West Side:
No. 1 Berth: Length 167 m., depth alongside 8.5 m.
No. 2 Berth: Length 189 m., depth alongside 8.5 m.
No. 3 Berth: Length 168 m., depth alongside 7.9 m.
Cargo Shed: On wharf 2,676 sq.m.
No. 4 Berth: Length 198 m., depth alongside 8.5 m.
Cold Store: For meat, vegetables and dairy produce 7,200 cu.m. Additional cold storage facilities of 38,000 cu.m., capacity available within 3 km. of the port.
LPG/Stock Berth: Max. length vessel 90 m., max. draft 6.3 m., depth alongside 6.4 m.
Berths on East Side:
No. 1 Berth: Length 115 m., depth alongside 7.2 m.
Ferry Berth: Passenger Terminal. Roll-on/Roll-off 9.14 m. wide stern loading ramp. Wharf decking 4.57 m. above LWOST. Travelling gantry crane – 32 tonne capacity. Assembly area of 2.1 hectares of heavy duty open space. Cargo shed – 855 sq.m.
No. 2 Berth: Length 182 m., depth alongside 9.1 m. Roll-on/Roll-off facility. Travelling slewing crane of 25 tonnes capacity. 3.2 hectares of heavy duty open space and 60 power points for refrigerated units.

All wharves are floodlit for night work and are under T.V. surveillance. Ample fresh water at a rate of 32 – 40 tonnes per hour available at a nominal charge. Three phase power, telephones and victualling available to all berths. Bunkering by road tankers only. Garbage disposal by arrangement. Other cranage available – floating crane 35 tonne capacity, 2 mobile cranes of 6.5 tonne and 4 tonne capacity, 2 large forklifts – capacities 20,321 kilos and 23,133 kilos and numerous small forklifts.
TANKERS: 2 berths with 250 mm. discharge lines for black and white products.
BULK HANDLING FACILITIES:
Wheat: One berth with discharge connections to 12,000 tonne silo.
Tallow: One berth with loading connections to 1,500 tonne silo.
Ores: One berth with facilities for loading and discharging using crane, hoppers and conveyors.
Livestock: One berth suitable for ships up to 90 m. in length with adjacent holding facilities.
STEVEDORES: Agents for ships arrange stevedores.
MEDICAL: An out-patients department of the local general hospital is available 2 km. from the port. Lie-in facilities are available at the hospital proper 8 km. from port.
REPAIRS: The Port Authority can carry out limited repairs. Fuller repairs can easily be arranged to be carried out by the numerous engineering firms in the vicinity of the port. Underwater diving service is available with facilities for photography, welding, survey and repairs.
SURVEYORS: *Cargo Inspectors:* For Devonport, the appropriate Cargo Inspector would be R. M. Davies and Associates, Wynyard. Tel: (004) 42 2435.

Surveyors: There are no surveyors in the Devonport area but, Lloyd's Agents are readily available in Launceston, just over 1 hours' drive way.
GANGWAY/DECK WATCHMEN: Arranged by Agent.
CARGO GEAR: Australian Navigation (Loading and Unloading) regulations apply.
FRESH WATER: Available all wharves. 40 t.p.h.
FUEL: Road tanker delivery only.
TELEPHONES: Available each berth.
HOLIDAYS: Work all days except Christmas Day, Good Friday, Anzac Day, Labour Day, Picnic Day W.W.F.
POLICE/AMBULANCE/FIRE: Fire 24-1886 (Other than alarm, 24-1887); Police 24-5999; Ambulance 24-5077.
EMERGENCY CO-ORDINATION CENTRE(S):
1. *At Sea in Australian Waters:* Under the AUSREP system which became effective from 1st April, 1982, all Australian and foreign vessels from arrival at first port until departure from the past port, must report at least once every 24 hours, a position report and destination, to the Australian Coastal Surveillance Centre, Canberra (A.C.S.C.), who are responsible for the Australian SAR area, the largest in the world covering one nineth of the earth's surface. In the event of a report not being made, SAR operations will begin within 24 hours of a missed report. Although not mandatory until first port of arrival, foreign vessels would find it in their best interests to inform Canberra of their arrival in Australian waters and their departures therefrom.
2. *Alongside:* In addition to the emergency numbers listed (Police/Ambulance/Fire), there is a State Emergency Service responsible for major emergencies. In Devonport the Harbour Master is the local co-ordinator, but the service can be contacted direct on Burnie 31-3160 or 31-4144. The service is manned 24 hours a day.

TIME: GMT plus 10 hours. Summer time is effective from the first weekend in October until the last weekend in March. Reporting of ETA's should be made in Eastern Standard Time or as appropriate, which should be made clear in the message.
AIRPORT: Devonport (Pardoe) Airport is situated approximately 8 km. from the port with approximately 6 flights per day each way to/from Melbourne (the services are reduced on Sundays). There are also intra-island services. Facilities at the airport are being increased and an increase in the intake of flights should follow.
SERVICES: Shipwrights and carpenters available at 24 hours notice. Underwater diving services available.
SHORE LEAVE: Once Customs and Immigration requirements have been met, there are no restrictions upon crews except those imposed by the Master and that they must have rejoined their ship by sailing time. For non-English speaking crews, there is a telephone interpreter service in the following languages: Greek, Croatian, Serbian, Italian, Spanish, Polish and Vietnamese.
STORING: Vessels are normally stored by truck and not barge. On all berths, except No. 2 West, trucks are able to proceed alongside a vessel. At No. 2 West trucks can approach within about 30 metres. The same applies to fork lift trucks. The ship's Agents are normally responsible for arranging labour for storing.
BANKS: There are no American or European banks in the area, although all the Australian banks are usually affiliated to one or other of the major banking houses. There has been a Commission Report (the Campbell Report), submitted to Federal Parliament recommending that foreign banks be allowed to trade in Australia, but as yet, the report has not been acted upon.

The normal method of credit card usage is by Bankcard, issued by the Australian banks. These can be obtained outside Australia through the overseas branches of Australian banks, particularly those situated in London. Visa, American Express and Diners Club cards are also accepted by certain banks and establishments. Access usage is no longer permitted.
DEVELOPMENTS: Channel widening and deepening continue and, with this in view, a new dredger was constructed in 1983.
AUTHORITY: Port of Devonport Authority, 50 Formby Road, Devonport, 7310 Tasmania. Postal Address: P.O.Box 478, Devonport, 7310 Tasmania. *Tel:* (004) 24-1951. *Telex:* Pordev AA59222. *Contact:* Mr. D. J. Cowan, General Manager. Captain W. J. Stuart, Harbour Master.
AGENT: Sub-agent of Patrick Agencies, Melbourne.

EDEN (Twofold Bay), N.S.W.: 37.04 S. 149.55 E.

DOCUMENTS: See "Sydney".
PILOTAGE: Compulsory, boarding ground is close off the entrance to the Bay (position Lat. 37° 04.5′ S., Long. 149° 56.5′ E.).
APPROACHES: Entrance depth into Twofold Bay is 36 m. at LWOST. Bottom sand. Tidal data: Higher HW 1.3 m., Lower HW 1.1 m.
MAX. SIZE: Woodchip berth can accommodate vessels up to 50,000 g.r.t. Also see "Tankers".
VHF: Channels 16, 13 and 6 available.
TUGS: 1 tug of approximately 1,000 h.p. 2×12 m. work boats.

BERTHING: Also see "Tankers".
Private Jetty (Eden Canning Co.): This jetty is situated at Cattle Bay. Length 145 m., depth at outer end 6.0 m.
Eden Jetty: This jetty is situated on the East side of Snug Cove and currently under re-construction. Length to be 205 m., The South-Eastern part of this jetty has a depth of water of 7.3 m. at the outer end, which extends for 110 m. inshore with fendering for 104 m. of its length.

The North-Western berth has a minimum depth of 4.9 m.
Eden Breakwater Jetty: Situated on Eastern side of Snug Cove, 1 berth. Length 104 m. Depths: Inner End 2 m.; Midpoint 5 m.; Seaward end 7.5 m.
Mooring Jetty: Fishing vessel use only.
Woodchip Loading Berth: "T" Head jetty with centre loading point located at Mungaroo Point. Berth consists of a pier, extending from the shore with a 6 buoy mooring system off the end of the pier. Berth can accommodate vessels up to 50,000 g.r.t. Loading rate approximately 600 tonnes/p.h., 1 fixed loading arm. Length of jetty 275 m., depth alongside 12.5 m.
STEVEDORES: Same working hours as Sydney.
TANKERS: There are a group of mooring buoys East of breakwater. Tankers discharge by a submarine oil pipe-line extending to shore. Max. length of vessel 183 m., max. draft 9.75 m.
FRESH WATER: Available at Eden Jetty.
FUEL: Limited supplies of distillate, and diesel fuel.
REPAIRS: Slipways, and repair facilities for fishing craft only available. Minor repairs can be effected.
DRYDOCKS: None.
AIRPORT: Merimbula, 17.7 km., with service to Sydney.
HOLIDAYS: See "Sydney".
GENERAL: *Access:* By road only to berths.
Navigation Information: Australian Pilot Vol. II, Sailing Directions N.S.W. Coast (10th Edition). Charts: AUS 806, AUS 101.
AUTHORITY: Maritime Services Board of N.S.W., P.O.Box 32, Sydney, N.S.W., 2001. *Tel:* 240 2111. *Telex:* Msb Syaa 24944. *Cables:* Marboard.
Local Official: The Pilot, Pilot Station, Eden. Tel: (0649) 61719.
AGENT: See "Sydney".

ESPERANCE, W.A.: 33.52 S. 121.53 E. (See Plan Book)

DOCUMENTS: The following documents should be available for inspection:

Ship's Papers, including the following certificates:
- (a) Register.
- (b) Load Line.
- (c) Safety Equipment.
- (d) Safety Radio.
- (e) Safety Construction.
- (f) Australian Light Dues Receipt.
- (g) Articles of Agreement and Account of the Crew (or equivalent).
- (h) Western Australian "Port Bill" – Tonnage Dues Receipt.

Valid Derat or Exemption Certificate.
Crew's Identity Documents.
International Vaccination Certificates of all persons aboard.

PILOTAGE: Pilotage is compulsory except where Exemption Certificates are held. Radio "Harbour Master – Esperance" 48 and 24 hours before arrival. VHF Channel 16 – pilot boat and base set. Base set not manned continuously but pilot boat may be contacted 1 hour before arrival. Pilot boat painted white with black rubbing band and white centre house. Word "Pilot" painted on both sides of house. Pilot boards 1.5 miles N.E. of Gull Island. Pilot ladder and ancillary equipment must comply with international regulations. Lee to be provided against swell.

It is more usual for vessels to approach from the Westward. In this case use may be made of either West or Causeway Channels. Approaching from the Eastward is not recommended during the hours of darkness or in weather which is in any way restricting visibility.
ANCHORAGE: Vessels proceeding to anchorage should anchor in an E.N.E. direction from the Eastern extreme of the breakwater. Good holding is found in depths ranging from 14.5 m. – 27.5 m. However, plenty of cable should be veered and at least 6 shackles is recommended. In the most boisterous conditions vessels have held well with from 6 to 8 shackles out. However, the vessel should always be watched. A pilot ladder and not accommodation ladder is recommended for vessels at anchor due to the swell conditions which normally prevail at the anchorage.
PRATIQUE: Vessels requiring "Free Pratique" are cleared between 0600 and 2000 hrs. daily.

Vessels may be cleared outside these hours upon request and at the discretion of the local Medical Officer.

Vessels are cleared alongside and rarely at anchor.

Please also note that a Health Message is required at the first port of entry from overseas. This is to be despatched within the period 12 and 24 hours prior arrival at the first port of entry, and to advise the following information:

Name of vessel, and ETA.
Last port of call.
Date of departure.
Number of crew on board.
Number of passengers on board (if any).
Confirmation that all on board have valid smallpox vaccinations and details of any sickness.

RADIO: Esperance: Radio call sign VIE (operative from 0700 to 2000 hrs.). Perth: Radio call sign VIP (continuous).

Port VHF limited to Channels 6 and 16. Call sign "Esperance Harbour", range 70 miles.
TUGS: One tug with 9.5 ton bollard pull will be used.
BERTHING: The Inner Harbour consists of one land-backed berth of 244 m. (No. 1). A second berth of 213 m. in length adjoining the first is to the S.E. (No. 2). The depth in the approach Channel, manoeuvring area and alongside is 11 m. Maximum draft permitted is 10.0 m., pending maintenance dredging. On occasions it may be possible to exceed this draft but reference must be made to the Harbour Master before so doing, who may at his discretion permit an increase dependent on tide and prevailing weather conditions.

At all berths shore coir and/or nylon springs are used to supplement ships moorings.

24 hour port but entry not generally carried out at night.
TANKERS: Tankers berth at No. 2 Berth, Inner Harbour. Tankers berth during daylight hours only but may be permitted to sail at night at the discretion of the Harbour Master.

Tanker discharge line 14 in. reduced to 8 in. at discharge manifold. Average discharge rate 465 tonnes per hour.
STEVEDORES: 40 men. Working hours: 0800 – 1700 hrs., 1800 – 2400 hrs., 0000 – 0700 hrs. No work from 1700 hrs. Saturday to 0800 hrs. Sunday. ETA to Agent by 1600 hrs. previous day for labour requirements Tuesday to Friday. For weekend requirements ETA to Agent by 1600 hrs. on Thursday. For Monday labour ETA to Agent by 1600 hrs. Friday. Notice for labour pick-up has to be posted by 1700 hrs.
OPENING/CLOSING HATCHES: Preferably handled by crew or as per charter party.
MEDICAL: Advance notice not required. Normal facilities and hospitalisation available.
DENSITY: 1026-1028.
FRESH WATER: Available at all berths; one hose 40 t.p.h., two hoses 70 t.p.h. charge, 90 cents per kilolitre.
FUEL: Available by road tanker only. Advise Agent of grade and quantity at least one week before arrival.
GANGWAY/DECK WATCHMEN: Shore watchman is supplied at entrance to Tanker Berth in the case of tankers only. Shore watchmen are available if requested by vessel. It is more normal for ship to provide gangway watchmen from crew. Irrespective a gangway watchman must be on duty at all times at any berth.
CARGO GEAR: Inner Harbour berths, two link belt bulk loaders used. One loader for grain and gypsum at No. 1 berth. One loader for zinc/copper concentrates at No. 1 and No. 2. Rates achieved on various commodities – gypsum 850 t.p.h., grain 500 t.p.h., zinc concentrates, copper concentrates 200 t.p.h., phosphate and sulphur 100 t.p.h. per ship's grab.

Mobile Cranes: P. & H. Omega 20, 18 tonnes capacity and Cranvel 8 tonnes capacity.

Permanent sheep yards are erected at No. 1 berth with holding capacity of 11,500 head. Races and loading ramps available for both sheep and cattle.
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: Nearest at Fremantle.
REPAIRS: Welding, rewinds, under-water inspections. Large structural repairs not possible.
DRY DOCKS: None.
BANKS: Commonwealth Banking Corporation transacts business with all American and European banks. Postal address – P.O.Box 486, Esperance, 6450.
EMERGENCY CO-ORDINATION CENTRE: Contact Port Authority.
STORING: See "Prelims" page viii.
1. (1) By truck.
2. (2) Storing can be completed during loading or discharging.
3. (3) Trucks can unload at ship's side.
4. (4) Fork lifts can be operated.
5. (5) Normal Customs procedures apply.
6. (6) Storing usually completed by ship's crew although other labour may be used.

SURVEYORS:
1. (1) Harbour Master acts as Cargo Inspector.
2. (2) Harbour Master represents Lloyd's Register on request.

REPATRIATION: Facilities exist for repatriation of crews.
AIRPORT: Feeder airline services connect with Perth and international flights. 13 flights per week in either direction. Airport is 25 km. from harbour area.
TIME: GMT plus 8 hrs.
POLICE/AMBULANCE/FIRE: Police 711900; Ambulance 711711; Fire 712328.
TELEPHONES: Available all berths.
SHORE LEAVE: Crew allowed ashore provided Immigration Act complied with in relation to Identification Cards.
DELAYS: Not normally encountered.
SHIP SUPPLY SERVICES: There are no ship supply services operational in the Esperance area.

In the case of emergencies arrangements have been made to fly in a helicopter on charter or on less urgent cases make use of the locally based tug.
AUTHORITY: Esperance Port Authority, P.O.Box 35, Esperance, W.A. 6450. *Tel:* (090) 71 2111. *Telex:* Esport AA91057. *Contact:* F. J. Gratwick, General Manager. Captain N. S. W. Dyson, Harbour Master. C. A. Stewart, Managing Secretary.
AGENT: Sub-agent of Patrick Agencies, Fremantle.

FREMANTLE, W.A.: 32.03 S. 115.44 E. (See Plan Book)

(A) FREMANTLE (B) KWINANA

(A) FREMANTLE

DOCUMENTS: See "Melbourne". Also Inward and Outward Manifests accordance Regulation Nos. 142 and 143 and schedule. These documents supplied by ship's Agents.

APPROACHES: Channel leading from Gage Roads into Cockburn Sound presently 45 ft. (13.7 m.) deep, planned to be deepened to 55 ft. (17 m.) to take ships of 120,000 tonnes.

PILOTAGE: Pilotage is compulsory in the Port of Fremantle except for ships not exceeding 150 g.r.t., and for coastal and inter-state ships, the Masters of which hold operative Pilot Exemption Certificates. There are 2 pilot boarding grounds: the outer boarding ground which is situated 3.5 nautical miles N.E. of Bathurst Point, Rottnest Is., and the compulsory pilot boarding ground in Gage Roads to the Westward of Hall Bank Buoy, which is approximately 2 miles from the entrance to the Inner Harbour.

Note: Pilotage is compulsory from the Outer Boarding Ground for ships drawing 11.6 m. or more.

It is necessary for all vessels to give 24 hours notice by radio telegraphy of the expected time of arrival at Fairway Buoy, followed by a second notice, confirming or amending the previous notice, 2 hours ahead of the expected arrival time in that locality.

Ships requiring a Pilot at the non-compulsory ground must include this requirement in their 24 hours notice of arrival.

Two pilot vessels available, one has royal blue hull, white superstructure and the other, a fast pilot launch, is painted international orange. Pilots may be contacted by VHF Channel 12.

Usually pilot ladder is required on the port side for vessels inward and starboard side for vessels outward, even when the wind is in the East, unless Easterly wind is very strong as there is nearly always a West to N.W. swell. If in doubt call Port Signal Station on VHF Channel 12.

Pilot does not board vessel at anchor.

Pilot ladder to be 4 ft. – 5 ft. above sea level with manropes slightly shorter. Boat-rope not required. The ladder should be clean and conform with Regulation 17 of SOLAS. The vessel should be making 3 – 4 knots.

SOLAS Regulations are strictly adhered to i.e. Single length of ladder, non-slip surface (Aluminium Not acceptable), 12 in. spacing between steps, no more than 2 replacement steps, all ropes on ladder and manropes to be manila and not covered (nylon and polypropelene not acceptable), Regulation 17(a) part (VII) and (VIII) very important, a responsible officer to standby and not a sailor.

Check with Signal Station and find out if Pilots preference is ladder or mechanical hoist (if available).

ANCHORAGES: Gage Roads 44 ft. (13.4 m.) Owen Anchorage 42 ft. (12.8 m.) Cockburn Sound 50 ft. (15 m.).

RESTRICTIONS: *Inner Harbour:* Basin and entrance channel dredged to minimum of 36 ft. (11 m.) below datum.

Outer Harbour: Main approach channels dredged to minimum of 45 ft. (13.7 m.) below datum – secondary channels leading to alumina refinery jetty and steelworks jetties dredged to min. of 38 ft. (11.6 m.) below datum.

MAX. SIZE: Limited by draft. Minimum under-keel clearance of 0.9 m. required.

Outer Harbour, up to 41 ft. 6 in. (12.6 m.) draft.

Inner Harbour, up to 34 ft. 6 in. (10.5 m.) draft but with suitable tide and by special permission of Harbour Master up to 35 ft. (10.6 m.) draft.

Tankers: The maximum ship draft acceptable at the Oil Refinery Jetty at Kwinana is 41 ft. 6 in., this being the maximum draft permitted in the approach channels.

HEALTH: No restrictions except quarantine. Doctor not normally available between 2200 and 0600 hrs. See "Melbourne".

Port Quarantine Regulations:

(a) The accommodation, galley and other areas must be free from cockroaches and rodents.

(b) Garbage cans, either belonging to the ship or to Fremantle Port Authority, when used must be at all times covered with satisfactory tops.

(c) Rat guards must be fitted to all lines and regularly checked including weekends where the Department of Health have increased their inspections.

It is also to be noted regardless of the existence of current Derat or Derat Exemption Certificates, all vessels are inspected for rodents.

RADIO: VIP Perth.

TUGS: *Inner Harbour:* 4 available up to 2,600 h.p. (1,940 kW), join vessel in Gage Roads – extra charge if tug's line is used.

Outer Harbour: 3 tugs, including 2 special tugs equipped as fire tenders are also stationed. Tugs join ships approx. 2.5 miles from berths – extra charge if tug's line is used.

VHF: Port Authority signal station manned 24 hours. Keeps watch principally on Channel 16, 14, 12, 8 and 6. Channels 14 and 6 are exclusively assigned to tug use. Channel 12 for ship/shore contact.

BERTHING: *Inner Harbour:* Victoria Quay – continuous quayage 5,359 ft. (1,633.3 m.); 8 berths.

North Quay – continuous quayage 5,877 ft.; 10 berths. Container berth (No. 11 & 12) 1,427 ft. (429 m.); 2 berths.

All berths in the Inner Harbour, including Victoria Quay, North Quay and the container berth are dredged to a minimum of 36 ft. (11 m.) below datum.

Outer Harbour: Alumina Refinery Jetty, length of berth 800 ft. (244 m.), depth 38 ft. (11.6 m.). Steelworks Jetty No. 1, length of berth 183 m., depth 36 ft. (11.0 m.). Steelworks Jetty No. 2, length of berth 259 m., depth 40 ft. (12.2 m.). Oil Refinery Jetty, see "Tankers" below. Bulk Cargo Jetty, length of berth 1,603 ft. (489 m.), depth 44 ft. (13.4 m.).

A bulk grain jetty of 955 ft. (291 m.) depth 55 ft. (16.8 m.) has been constructed at Kwinana to serve Co-operative Bulk Handling Ltd's grain terminal.

The jetty is equipped with conveyors and ship loaders capable of handling bulk grain at the rate of 5,000 t.p.h. It will eventually be able to handle vessels up to 100,000 d.w.t.

CRANES: 2 'twin lift' portainer cranes, 2 single lift container cranes, 35 tonne capacity luffing crane, quay cranes of 20 tonne, 7.5 tonne and 3 tonne capacity, mobile cranes of up to 6 tonnes capacity, also 80 tonne floating crane is available.

STEVEDORES: Shipboard stevedoring by private contractor, shore side by FPA and others – usually arranged by ship's Agent. ETA should include particulars of cargo, showing heavy lifts, dangerous or hazardous cargoes, hatch stowage, gangs required, etc.

MEDICAL: Notice not necessary but advisable if treatment required. Full hospital facilities available. Cholera and smallpox vaccinations essential if ship comes from affected areas. International certificates must be current.

TANKERS: *Kwinana Oil Refinery Jetty:* 2 berths for tankers up to 752 ft. (229 m.) – depths 12.8 m. and 13.4 m. 1 berth for tankers up to 860 ft. (262 m.) – depth 13.6 m. Oil separation tanks ashore serve each berth.

DENSITY: Salt 1025, generally at all tides.

FRESH WATER: Available 24 hours a day, delivered by up to 8 hoses each of 50 tonnes/p.h. $1.50 per kilolitre.

Note: Seasonally a water shortage in the Fremantle area may limit the amount of water which can be supplied to ships.

FUEL: Marine fuel (2 grades); Marine diesel. Notice 14 days then 48 hrs.

FIRE PRECAUTIONS: Watchman to be on duty. Ship heading out. Fenced off on land. Buoys 50 ft. (15 m.) out from ship marking prohibited area.

GANGWAY/DECK WATCHMAN: Watchman required – member of crew, or shore-based watchman available.

OPENING/CLOSING HATCHES: By arrangement between ship's Agent and Stevedore.

CERTIFICATES: Health; Derat; Load Line; Ship's Register; Articles. Also see "Melbourne".

CUSTOMS ALLOWANCES: According to local Customs Dept.

CARGO GEAR: Strict surveillance of cargo handling gear by Commonwealth Government Dept. of Transport Australia. Also see "Melbourne".

IDENTIFICATION CARDS: See "Melbourne".

CONSULS:

Austria
Belgium
Denmark
Finland
France
Germany
Guatemala
Italy
Japan
Netherlands
Norway
Philippines
Portugal
Sweden
U.S.A.

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: No dry docks – slipway up to 3,000 tons.

REPATRIATION: Facilities exist for repatriation of crews.

AIRPORT: 17 miles (23 km.) to Perth International Airport.

TIME: GMT plus 8 hours.

HOLIDAYS: *Extraordinary Holidays – Port Closed:* Labour Day (1st Monday in March); Good Friday; Anzac Day (25th April); Union Picnic Day (celebrated on the first Tuesday in November); Christmas Day (25th December).

Ordinary Holidays: New Year's Day (1st January); Australia Day (celebrated on a Monday late in January); Easter Monday; State Foundation Day (1st Monday in June); Boxing Day (26th December).

On ordinary holidays waterside labour available to work ships in following categories:

(a) Scheduled passenger ships.
(b) Marine casualties.
(c) Ships that can complete cargo handling operations prior to the next engagement of labour.

POLICE/AMBULANCE/FIRE: Victoria Quay Police Station Tel: 335.2783 or 335.5016; Ambulance 335.1601; Fire Brigade 335.6262.

TELEPHONES: Telephones can be supplied to any vessel – installation time plus proportion of annual rental plus cost of calls.

SERVICES: All special services available.

REGULATIONS: Normal port regulations. Special Regulations for Tankers berthing at Oil Refinery Jetties.

DEVELOPMENTS: State Government approval has been granted in principle for the development of 3 deep-water berths at Point Peron adjacent to the causeway linking Garden Island with the mainland.

No. 12 Berth, North Quay is fitted with a ro/ro ramp and 2 Portainer cranes. Another Portainer crane is to be provided for North Quay.

SHIP SUPPLY SERVICES: Elder Prince Marine Services Pty. Ltd., P.O.Box 892, Fremantle, W.A. 6160. Tel: (09) 3358444. Telex: AA92821 Towboat.

Services: Passenger launches for crew ferries, agents, providores to vessels at anchor in Gage Roads and Cockburn Sound. Stores lighters and fresh water up to 150 tonnes per trip. Draft survey, paint punts, lines running.

Other Operators – Seaborne:

Australian Offshore Services, 111 St. George's Terrace, Perth, W.A. 6000.

Brambles Manford, 191 St. George's Terrace, Perth, W.A.

Lombardo Marine Group Pty. Ltd., Offshore Division, 106 Marine Terrace, Fremantle, W.A. 6160.

Tidewater Port Jackson Marine Pty. Ltd., 94a Murray Road, Bicton, W.A. 6157.

Atlas Offshore, c/o TNT Australia Resource Development or Union-Bulkships Pty. Ltd., 17 Henry Street, Fremantle, W.A. 6160.

Western Marine Service Co., 17 Mews Road, Fremantle, W.A. 6160.

Other Operators – Airborne:

Merifield Helicopters Pty. Ltd., 28 Broadway, Nedlands, W.A. 6009.

Mayne Bristow Helicopters Pty. Ltd., Jandakot Airport, Jandakot.

Jayrow Helicopters W.A. Pty. Ltd, 320 Great Eastern Highway, Redcliffe, W.A. 6104.

Vowell Air Services (Helicopters) Pty. Ltd., Hope Road, Jandakot Airport, 6164.

Lloyd Helicopters Pty. Ltd., 64 Canning Highway, Victoria Park, W.A. 6100.

Westcoast Helicopters Pty. Ltd, P.O.Box 108, Belmont, W.A. 6104.

AUTHORITY: Fremantle Port Authority, 1 Cliff Street, Fremantle, Western Australia 6160, P.O.Box 95, Fremantle, 6160. *Tel:* (09) 335 3981, 335 3801. *Telex:* AA 92951 "Frepa" and AA 95919 Frehm (shipping advices only). *Cables:* "Fremport", Fremantle, W.A. *Contact:* Captain M. Coleman, Harbour Master. Captain B. L. Noble, General Manager.

AGENT: Patrick Agencies, P.O.Box 656, 10, Phillimore Street, Fremantle, W. Australia 6160. Tel. 335–6311. Telex: AA 92434. Cables: "Rikpat Perth WA".

(B) KWINANA

The following information was produced by Alcoa of Australia Ltd. Also see Section (A).

LOADING: Alumina Loading Procedure – Kwinana

The following information is for your guidance and should assist in achieving a successful loading with minimum delay. We would appreciate your assistance and thank you in anticipation of your co-operation.

Berthing: Berthing and loading will be facilitated if the vessel arrives with sufficient ballast for navigation requirements and retains as much ballast as possible for as long as possible without delaying the loading.

Mooring Arrangements and Shifting Ship:

1. It is the vessel's responsibility to provide adequate mooring lines and to tend them properly whilst at the berth. A vessel with under strength or insufficient moorings will be considered unseaworthy. The quality of equipment and supervision shall be such that the ship is able to remain in the berth, in all normal weather conditions, without undue surging backwards and forwards or drifting off the wharf face.

   If, due to drift, it becomes apparent that the loading chute is endangered, loading will cease immediately. Time lost in such an event could be treated as a vessel delay.
2. Normal moorings at Kwinana, would consist of three headlines, three stern lines, a breastline at each end, a forward and an after spring. The breastlines are preferably doubled up by placing a bight directly over a shore bollard.
3. As the shiploader is of the fixed type, vessels are loaded by warping them backwards and forwards along the jetty so as to position the various hatches underneath the loading chute. If the ship is to be moved ahead, normally the sternlines and forward spring are slackened, whilst heaving on the headlines and the after spring. To move astern, the process is reversed.
4. To minimise the possibility of springs fouling the underside of the dock fenders it is strongly recommended that:
   - A messenger line attached to a 'D' shackle is used on the slackening spring to keep the spring alongside the ship and above the fender line.
   - The spring should not be slackened excessively.
5. You will be advised 30 minutes before completion of each hold and we request your co-operation in providing your crew for vessel movements as promptly as possible.
6. The arrangement of mooring cells and bollards is such that even when shifting between adjacent hatches the breastlines typically change their angle by up to 60° relative to the fore and aft line of the ship, thus losing most of their effectiveness. It is usually necessary therefore to relocate the breastlines at each shift by carrying the ends along the wharf from cell to cell. In the case of long shift ship (e.g. from No. 2 to No. 7 hatch) it may also be necessary to move head or sternlines and springs, since they may become unsafe or ineffective through being too short or too long.

Line Priorities: Most ships are not fitted with sufficient self-tensioning or self-stowing mooring winches to be able to work all mooring ropes direct from the winch drums. Where only 2 or 3 such winches are fitted, it is important that they be used to the best advantage. We recommend that the following priorities be observed:

1. Forward
   (a) Two headlines, for warping ship ahead. (May be turned up on windlass warping drums).
   (b) For'd spring – for warping astern.
   (c) Breastline – for holding alongside.
   (d) Third headline, extra breastlines etc.
2. Aft
   (a) Two sternlines, for warping astern.
   (b) After spring – for warping ahead.
   (c) After breastline – for holding alongside.
   (d) Third sternline, extra breastline etc.
3. Where a breastline cannot be secured directly to a winch or warping drum, a second breastline should be provided.

Cleanliness/Draft Survey: Prior to loading, the vessel's holds and hatch covers will be inspected by an Independent Surveyor engaged by Alcoa or the Consignor.

This Surveyor will also conduct a Draft Survey in conjunction with the Chief Officer.

Shipping Foreman: Alcoa's Shipping Foreman supervises the loading of the vessel and will liaise with the Chief Officer. Hatch stowages and order of loading should be advised to the Foreman prior to commencement of loading.

Weighing: All cargo is weighed continuously by a weightometer which permits a record of hatch tonnages. However the weightometer is a guide only and must not be relied upon as cargo is determined by draft survey.

Documentation: Upon completion of loading an Alcoa Transportation Officer will attend on board to complete all documentation.

Pollution: We are obliged by Fremantle Port Authority regulations to report any pollution caused by vessels at our berth.

G. G. Trimble
Transportation Department Fremantle

Attach.

GGT: sdf. Nov. 83
Please provide your signature as evidence of receipt of this document.

MASTER

DATE

ALCOA BERTH – GENERAL:

Jetty Approach: The Company's jetty is located on the East side of Cockburn Sound, approached in daylight hours by the Northern Channels and loading vessels berth on the North side of the jetty, facing due West. At night, the approach is from Cockburn Sound and the Southern Channels. Departure fully loaded is by the Southern Channels to Cockburn Sound, thence Parmelia and Success Channels and Gage Roads to sea.

Fully loaded vessels for discharge at our dock approach through the Parmelia and Success Channels into Cockburn Sound thence by Southern Channels to berth on the South side of the jetty, facing due West. Departure in ballasted condition is by Northern Channels to sea during daylight hours and Southern Channels at night.

Woodman, Jervoise and Medina Channels are unlit and are used for daylight navigation only.

	Max. Draft
Fremantle Approach – Gage Roads	13.10 m.
Cockburn Approach – Parmelia and Success Channels	12.65 m.
Alcoa Kwinana – Jetty Approach	
Northern – Woodman, Jervoise and Medina Channels	8.53 m.
*Southern – Sterling & Calista Channels	10.98 m.
Anchorage – Gage Roads on sand	
Cockburn Sound on clay	16.45 m.

*Overall length limit of 228.6 m.

Refer Chart AUS.117 for detail.

Facilities, Supervision and Manning: The berth consists of 8 cells, each 18.9 m. in diameter spanning 335.3 m. No. 1 Cell is 152.4 m. from the shore. No. 8 Cell is 487.7 m. from shore.

There is a maximum of 12.2 m. depth of water alongside the jetty and vessels are restricted to a maximum of 10.98 m.

The jetty runs due West from the Plant site. Loading vessels will berth port side to heading West and discharging vessels berth starboard side to.

The loading berth is fitted with line haul winches, guides, bollards and cleats to assist in line-handling operations. There is also a heavy line astern to the beach, to which the ship's line can be attached to assist between hold moves. This heavy line should be let go upon completion of loading to enable Alcoa staff to recover it before Pilot arrives.

All line handling on the jetty is carried out by Alcoa staff and ship's crew are prohibited from handling lines on the jetty.

A hydraulic gangway is provided on the Eastern side of the Alumina loader on Cell No. 4, for loading vessel access and this is operated by Alcoa staff during loading operations. However, discharging vessels on the South side must provide own access. A safety net is required under the gangway which must be provided and fitted by the vessel. (Refer Navigation 'Miscellaneous Equipment' Regulations).

Dock Access Restrictions: The overall control of movements on Company docks are strictly under the direction and control of the Alcoa Foreman who liaises with Security Staff on personnel and vehicle access.

Directions given by Alcoa dock and security staff *must* be complied with immediately.

Access to the docks by personnel and vehicles will be restricted where the access of emergency vehicles or safety is jeopardised.

Access to the dock will be allowed at the discretion of Alcoa supervisory staff whose decision is final.

(a) When the safety of personnel and vehicles is not endangered.
(b) A vehicle is on lawful business providing services to Alcoa or to the vessel, i.e. provisions, laundry, oils, servicemen and emergency services, etc.
(c) Company vehicles servicing equipment or transferring personnel.
(d) Vehicles delivering baggage, large parcels, carrying persons requiring medical attention or Pilots and Masters to and from the vessel.
(e) No hindrance to emergency vehicles will occur.
(f) When a vehicle does not exceed 15 tonnes all up weight.
(g) At the Master's request.

Vehicles are not to remain on the dock unattended for any reason, and must complete their business and be removed from the dock promptly. Alcoa reserves the right to remove vehicles from the dock without consulting the owner or driver, should the need arise and will accept no responsibility for accidental damage to the vehicle should this occur. Persons proceeding in an unsafe manner on the dock will be fully responsible for any claims made due to their actions.

No bunkering facilities are available on the jetty, however a barge from Fremantle is available for the transfer of fuel oils subject to weather conditions.

Water is normally available at 50 tonnes per hour from connections on the dock.

Provisions, laundry and engineering services have access to the vessel from the dock.

The movement of flammable material over Alcoa property is strictly controlled and permission must be sought from the Transportation Officer before any transfer to or from vessels at the berth.

Holds must not be cleaned whilst vessels are secured to Alcoa berths.

Vessels whose holds have not been passed as suitable for loading alumina, must make arrangements to have these holds brought up to the required standard. As cleaning cannot take place to Alcoa berths, then the vessel must move to a suitable berth within the port, for this purpose.

General Information: The jetty is 17 km. from Fremantle by road with no public transport services readily available.

Alcoa Security Personnel will provide first aid for minor injuries and an ambulance is available at the plant for urgent transferring of patients to hospital, however, normal medical needs will be arranged by the Agent.

Local telephone calls are provided free, however, intrastate, interstate and overseas telephone calls must be authorised by the Agent who will be invoiced after the vessel's departure.

Access to and from the jetty will be usually under the control of a Security Guard. However, remote control operation of the gates will be used at times and it will be necessary to follow the instructions on the notice boards at the gates to gain entry or exit. Besides voice communications with the main Security Office there is remote control television surveillance of the whole dock area.

ALCOA BERTH – LOADING:

Description of Product: A fine white powder Al_2O_3 density 0.99 cu.m. (35 cu.ft.) per tonne.

Stowage factor: 1.02 cu.m. (36 cu.ft.) per tonne in a bulk carrier; 1.133 cu.m. (40 cu.ft.) per tonne in a general cargo vessel.

Angle of repose 32° – 36°, no shifting boards required.

Absorbs moisture, not to be loaded in heavy rain. Is chemically inert and will not contaminate or damage other cargo except through dust effect alone. No inherent vice.

Ship Loader – Dimensions, Loading Rate and Limitations: The non-traversable, lifting and slewing loader is located on the fourth cell (318.2 m.) from the shore.

The loader is an open spout feed type with a dust control box fitted on the chute and is fed by conveyor systems from storage bins ashore.

Note: Vessel is required to move under its own power, to enable loader spout positioning over hold. Fullest co-operation of vessel's crew and officers is required to minimise non-loading time.

The loader is capable of a maximum of 1,500 t.p.h. whilst loading and allowing for vessel movements, achieves an average overall loading rate of 750 t.p.h. from start to finish of loading, depending on vessel's configuration and hold capacities.

All cargo is weighed continuously by a Weightometer, accurate to within 0.5% and situated at the foot of the jetty.

Individual hold tonnages are calculated from the Weightometer readings.

The draft tonnage is used for all documentation.

The loader spout is capable of being raised and lowered and the supporting boom swings horizontally through approximately 20° West to 15° East of North at maximum extension of boom.

HW to underside of loader boom in operating position is 17 m.

Fender face to vertical centre line of spout extended is 17.45 m.

Fender face to vertical centre line of spout retracted is 7.85 m.

Loader chute fully lowered is 7.32 m. below HW mark.

Loader chute fully raised is 8.61 m. above HW mark.

HW is 3.66 m. below top of cell.

Variation between HW and LW rarely exceeds 1.22 m.

Loader boom must be fully retracted to raise and lower for vessel berthing and departure.

Alumina Vessel Limitations:

Length Overall	200.00 m.
Breadth	29.87 m.
Draft	10.98 m.

Height of hatch coaming (or any equipment in way of loader access) not to exceed 15.85 m. above waterline.

Ship's beam, the distance from shell to inside of fore and aft coaming at centre hatches, not to exceed 7.92 m.

Vessels with division in holds or centre line bulkheads unacceptable for loading at this facility.

Projections outside main hull line must not exceed 0.5 m.

All drains, hatch wells, bridges, etc., to be dry and sealed, vents to be closed before loading.

Cargo to be protected against sweat, however not necessary to cover steel bulkheads.

Recommended that winches and engine room skylights be covered to avoid dust nuisance.

Vessels not fitted with easily closed hatch covers, should have hatch tents or tarpaulins prepared to quickly cover open holds during adverse weather.

Working Times: 7 days per week, 24 hours per day, however, we request that berthing and sailing movements avoid shift change times of 0630 – 0730 hrs., 1430 – 1530 hrs. and 2230 – 2330 hrs. daily.

Berthing and Sailing: Any time, subject to weather, quarantine, Pilot and tug availability. 2 tugs usually used for berthing and 1 only for departure if draft exceeds 10.21 m. or LOA exceeds 183 m.

Vessels requested to maintain sufficient ballast for navigation requirements without affecting or delaying the loading programme.

Proposed stowage plan required by Alcoa, prior to berthing if possible or immediately vessel is secure to our dock. Advice of distance from centre of first loading hold to front of bridge is required prior to berthing, to enable pilot marker to be placed on dock to assist positioning of vessel.

Survey: Holds will be inspected for cleanliness by a qualified surveyor appointed by Alcoa or the Consignee prior to loading commencing. Holds must be free of all rust scale, residues of previous cargo, dry and swept as required for wheat cargo. Alcoa has no responsibility for vessel cleanliness.

A qualified surveyor will also carry out a full draft survey in conjunction with the Chief Officer.

Documentation: On completion of loading, the Company's Transportation Officer will attend on board to complete all documentation.

The vessel's Agent compiles the Notice of Readiness, Time Sheet/Statement of Fact, Manifest and any supplementary documents required by Charterers and Owners.

The Company's Transportation Officer compiles the Bills of Lading, Weight Certificates and provides details of times, hold quantities etc., for completion of required documents.

SHIPMASTER'S REPORT: June 1984.

Bulk Alumina Loading:

Properties: A fine white powder A1203 density 0.99 (35 cu.ft. per ton). Obtained from bauxite. Stowage factor 1.02 cu.m. (36 cu.ft.) per ton in a bulk carrier (Actual 36.137 cu.ft. per tonne). Angle of repose 32° – 36°. No special requirements re-shifting. Absorbs moisture, not to be loaded in heavy rain. Is chemically inert and will not contaminate or damage other cargo except through dust effect alone. No inherent vices.

Hazards: Has no effect on the human body. However, if inhaled in large quantities can cause respiratory diseases. Stevedores should wear dust masks. All machines in close proximity should be covered. I.E. Electrical equipment with fans where dust can get access. Fog horns.

Hold Cleaning and Preparation Prior to Shipment: Requirement: To get cleaned to grain standard. Washed down with salt/fresh water. Chipped/scaled touched and rusty areas painted as necessary and all oil/stains removed. Bilge boxes to be cleaned and sealed.

Loading Cargo: Bauxite at Kwinana is loaded into the vessel by means of a fixed loader. This loader is of the open feed type with a dust control box fitted on the load chute. The loader spout can be raised and lowered and the supporting boom swings horizontally through 20° West to 15° East of North at the maximum extension of the boom. This loader is capable of a maximum of 1,500 tonnes/p.h. however, due to the shifting to allow for loading into different hatches a figure of about 750 tonnes/p.h. overall from start to finish. This figure is dependent on the number of shifts and the size of the hatches. Actual weight of the cargo in each hatch is determined by a weightometer which is situated at the foot of the jetty however, total quantity of cargo loaded is determined by a draft survey. This can cause problems as with strong winds from a S.W. to N.W. direction, a sea/swell of 1.5 m. – 2.0 m. can be experienced and this kind of survey has to be cancelled. The cargo is loaded as evenly as is possible all over the hatch. On arrival at the berth it is necessary to have all the ballast in due to jetty being exposed to winds from the South to North through West and it is difficult to keep the vessel alongside. Prior to loading, the constant is determined by surveyor appointed by Alcoa and Owner's Surveyor remarks as above to draft survey also apply. The cargo is loaded at 60°C and can be loaded in light rain but hatches have to be covered in heavy rain. Loading at this berth is on a continuous basis 7 days per week with change of shifts at 0630 – 0730 hrs., 1430 – 1530 hrs. and 2230 – 2330 hrs. The only problem is in shifting the vessel as crew have to be on continuous standby. 30 minutes notice is given before shifting. This is an efficient plant and the staff are helpful and very friendly. Access to the vessel is by way of a hydraulic gangway on the East side of the fixed loader. The vessel has to provide a gangway net.

1. *General Remarks:*

(a) Summary of Weather (Wind, Current and Tide).

Mediterranean type climate average maximum 23.1°C, average minimum 13.1°C. Annual rainfall about 900 mm.

Normal wind pattern Easterly breezes in the morning followed by S.W. winds in the afternoon. In the Winter months many frontal systems pass associated with the pattern of lows moving from West to East in an uninterrupted direction in the ocean to the South. Winds from a Westerly direction can be experienced in July up to 90 knots and in January strong Easterly gusts up to 50 knots. Swells in Gage Roads of up to 3.0 m. – 3.5 m. mainly with Northwesterly winds.

(b) Alcoa Jetty runs due West from the plant site. Overall length limit for vessels is 228.6 m. There is a maximum of 12.2 m. depth of water alongside the jetty and vessels are restricted to a maximum loadable draft of 10.98 m. Density 1025.

(c) Reference Charts and Publications:

AUS 117. General chart of area.
AUS 112. Approaches to Fremantle.
AUS 114. Gage Roads and Cockburn Sound.
BA 17. Sailing Directions. Australia Pilot Vol.V 1972.

(d) Port Handbook: Fremantle Port Authority. General Information for Ship's Masters. A complete set of Regulations is available for $A1.00.

2. *Navigation:*

(a) Advance notice to parties concerned before entry:

Normal notices to parties concerned per Charterer's/Company Instructions. 24 hours notice to Harbour Master of ETA with vessel's particulars and a second notice 2 hours prior expiry of original ETA, and if correction 2 hours before arrival of Pilot.

(b) Radio Pratique: Can be obtained by sending to Agent 24 hours before arrival.

(c) Pilotage: Compulsory pilotage from Gage Roads. There are 2 pilot boarding grounds.

(i) If draft over 11.6 m. (38 ft.) compulsory from Fairway Buoy.

(ii) From Pilot boarding position in Gage Roads. This is clearly marked on charts by dotted lines.

(d) Anchorage: Good anchorage can be obtained in Gage Roads at the Pilot boarding ground in 16 m. – 17 m., bottom of sand. (Hall Bank Buoy 270° 0.7 miles). Should the weather be very rough a more secure anchorage can be obtained about 0.75 miles S.W. of North Mole Breakwaters entrance to Inner Harbour Fremantle. (Beagle Rocks Buoy 262° – 0.7 miles) in 16.0 m. – 17.0 m., bottom of sand.

(e) Directions. The approaches to Fremantle are straightforward. Rottnest Island can be picked up on the radar about 30 miles away and the lights on the Island are good. The Racon on the Fairway Buoy is clearly visible on the radar about 20 miles away. Should the vessel be deep drafted (over 11.6 m.) the Pilot is picked up about 0.25 miles N.W. of the Fairway Buoy otherwise proceed to Gage Roads where the Pilot boarding position is clearly shown on chart AUS 112. From the Fairway Buoy about 2.7 miles S.E. there is a deep channel which is marked by 2 red and 2 green buoys. Vessels can pass to the Eastward of the most Southerly red buoy if draft is less than 11.6 m.

Pilotage is compulsory from Gage Roads to the Alcoa Plant Wharf. This is situated on the Eastern side of Cockburn Sound. Vessel enters Cockburn Sound by Success Bank. Parmelia Bank Channel which is dredged to 13.7 m., navigable width 152 m. Once in the Sound during daytime in ballast, vessel uses the Woodman, Jervaise and Medina Channels which are unlit and have a depth of about 9.0 m. At night time vessels use the Sterling Channel, depth 11.7 m., navigable width 122 m. and the Callista Channel, depth 11.6 m., navigable width 152 m. These 2 channels are used when sailing from the berth.

(f) Mooring Method: See "Plan Book" for basic arrangements of ship's mooring lines and line priorities and also arrangements for loading 25,000 d.w.t. Bulk Carriers at hatches No. 3, No. 1, and No. 6.

Vessel berths portside alongside using the starboard anchor with about 5 shackles out and 2 tugs, 1 on the starboard shoulder and the other made fast just forward of the bridge. Normal moorings at this berth should consist of 3 headlines, 3 sternlines, a breastline at each end and forward and after spring. The breastlines are preferably doubled by placing a bight on the bollard. As the ship's loader is a fixed type, vessels are loaded by warping back and forwards along the jetty, positioning the various hatches under the loading chute as required. On sailing, vessels with a draft of over 10.21 m. and a LOA of over 183 m. require 1 tug.

(g) Restrictions: Vessels cannot berth until Pratique has been granted. Pilotage available 24 hours per day. Vessel can berth and unberth at any time of the day or night subject to the following regulations:

Tug Services: These are available 24 hours per day however manning requirements sometimes restrict availability between 2300 hrs. and 0600 hrs. Tug requirements over weekends and holidays must be confirmed by 1400 hrs. on the last normal working day before the period required.

Alcoa Plant: All line handling done by staff of the plant 7 days per week 24 hours per day. However, plant requests berthing and sailing movements avoid shift changes at 0630 – 0730 hrs., 1430 – 1530 hrs. and 2230 – 2330 hrs. daily. Crew under no circumstances can handle ship's lines on jetty.

(h) Communications. Perth Radio (VIP) available 24 hours per scheduled frequencies.

Harbour Master. Telex: 92951 (FREPA AA 92951) Cable address: Harbour Master Fremantle.

Radio VHF Perth Radio/Fremantle Port Authority.

Channel 6	Ship/Ship	Fremantle Pilots
Channel 8	Ship/Shore	Fremantle Pilots
Channel 12	Ship/Shore	Fremantle Pilots
Channel 14	Ship/Shore	Fremantle Pilots
Channel 16	Ship/Ship	Fremantle Pilots

Regular weather reports/Gale warnings are issued by Perth Meteorological Office on Channel 16/67.

3. *Tugs:*

Name	Category	Length (m.)	b.h.p.	Bollard Pull Tonnes
Wongara	Ocean Going	41	2,400	45
Weela	Harbour	34	1,580	25
Wato	Harbour	38	2,640	34
Hamilton	Harbour	26	1,600	28
Wyola	Harbour	29	2,500	41
Parmelia	Harbour	46	1,500	21
Challenger	Harbour	34	3,200	44

Three of these tugs are available in Cockburn Sound and are fitted with modern fire-fighting equipment.

4. *Wharves/Buoys:*

(a) Length, Depth: Alcoa Jetty runs due East and West. The berth consists of 8 concrete cells each 18.9 m. in diameter spanning 335.3 m. interconnected by a roadway. No. 1 cell is 152.4 m. from the shore and No. 8 cell is 487.7 m. from the shore. There is a maximum depth of 12.2 m. alongside the jetty and vessels are restricted to loading to 10.98 m. Actual length of the berth which can be used by vessels is 244 m. The cells are well fendered. The Southern side of the jetty is used by Product tankers which discharge caustic soda and the Northern side is used for loading Alumina.

(b) Facilities for Bulk Carriers: Bulk Alumina is loaded from the 4th cell by a fixed loader, the Alumina coming by conveyor systems from storage bins ashore. The loader is an open spout feed type with a dust control box fitted on the load chute. The spout is capable of being raised and lowered and the supporting boom swings horizontally through approximately 20° West to 15° East of North. This loading boom/spout must be fully retracted to raise and lower for vessel berthing and departure. A hydraulic gangway is provided on the Eastern side of the Alumina loader for access to the vessel and is operated by Alcoa staff during loading operations. A safety net is required underneath this to comply with Department of Transport Regulations. Miscellaneous Equipment must be provided and fitted by the ship's crew.

HW to underside of loader boom in operating position is 17 m. Fender face to vertical line of spout extended is 17.45 m. Fender face to vertical centre line of spout retracted is 7.85 m. Loader chute fully lowered is 7.32 m. below HW mark. HW is 3.66 m. below top of cell. Variations between HW and LW rarely exceed 1.22 m.

Limitations for Vessels Loading Alumina:

Length overall	200.00 m.
Beadth	29.87 m.
Draft	10.98 m.

Height of hatchcoaming (or any equipment in way of loader access) not to exceed 15.85 m. above waterline. Ship's beam, distance from outer bulwark/shell plating to inside fore and aft coaming at centre hatches not to exceed 7.92 m.

Vessels with sub-divided hatches or centre line bulkhead unacceptable at this facility. Projections outside main hull must not exceed 0.5 m.

Vessels not fitted with easily closed hatches covers should have hatch tent or tarpaulins ready to cover hatch during adverse weather.

(c) Facilities for Tankers (Product Carriers) Caustic Soda.

5. *Repairs/Dockyards:*

General repairs can be carried out to hull and machinery for all classes of machinery. Surveyors representing all classification societies available and Australian Department of Transport. Qualified cargo surveyors for all requirements.

6. *Supplies/Services:* Provisions of all kinds available. Can be taken on board from the jetty. Laundry can be collected and returned from the jetty. Fresh potable water available from the jetty. Bunkers and lubricants available by barge from Fremantle. Starboard side alongside subject to weather conditions. Bunkers and lubricants are not allowed over the jetty. Garbage disposal not available at this berth.

Medical and Dental: At Fremantle arranged by Agent, however in an emergency first aid can be given by plant and an ambulance is available.

Repatriation and Crew joining: Perth has an international airport and connections to all parts of the world can be easily arranged.

Consuls: Many countries represented in Perth.

Quarantine Officials available for derat, etc.

This jetty is 17 km. from Fremantle and as such there is no regular public transport facilities. Taxi to Fremantle is about $A12.00. Transportation can be arranged by the Missions to Seamen (small bus) for a minimal payment made to the Agents.

7. *Cargo Operations:* All loading done by Alcoa staff. This is a private facility and waterside workers, painters and dockers are not allowed to work here. Alumina is loaded by the fixed loader which has a capacity of 1,500 tonnes/p.h., however, due to vessel having to shift each hatch, this, being dependent on the number of shifts can be reduced to 750 tonnes/p.h. overall.

All cargo is weighed continuously by a weightometer accurate to within 0.5% which is situated at the foot of the jetty. Quantities loaded in hatches are given this way. Actual amount of cargo loaded is done by draft survey. However, due to weather conditions at times it is not practical to do it this way. 1.0 m. – 1.5 m. sea and swell with strong winds. Surveyor is appointed by Alcoa as well as Owner's surveyor. Working times are 24 hours per day, 7 days per week. Shift changes at 0630 – 0730 hrs., 1430 – 1530 hrs. and 2230 – 2330 hrs. All holds are surveyed prior to loading. Cleanliness is required up to grain standard. Cargo is loaded at 60°C and can be worked in light rain. The stowage factor is about 36 cu.ft. per tonne.

8. *Rescue and Distress:* This is handled by the Department of Transport in conjunction with the Coastguard Co-ordination Centre in Canberra, A.C.T. Ocean going salvage tug available. All ships must comply with AUSREP.

9. *Port Authority:* Immigration require that all Seafarers except nationalities as specified by Commonwealth Immigration Department require seaman's Identity Cards with one passport sized photograph attached. Agent will arrange photographer, if necessary. Shore leave allowed to all crew members with no restrictions apart from ID Cards before departure. Customs/Immigration is done by same department. Papers required on arrival:

Form M.S.11 (List of Crew) 2 copies.
Form 42A (Store List) 1 copy.
Form 5 Articles owned or in possession of Master, Officers and Crew 1 copy.
Form C-E 866 (Ports of Call) 1 copy.
Form QA3 (Declaration of Animals carried as Cargo) 1 copy.
Form QA5 (Shipmaster's Bond to cover ship's pets) 1 copy.
Form AQ360 (Health Report) 2 copies.

On completion of loading Alcoa Transportation Officer will issue Bill of Lading, also provide weight certificates, hold quantities and provide times per Statement of Facts.

Ship's Agent – all other documentation, i.e. Notice of Readiness, Time Sheet/Statement of Facts, Manifest and any supplementary documents required.

10. *Master's Advice:* Vessel should be fully ballasted prior to berthing, required by surveyor for constant and at this berth the prevailing wind is from the Soutwest and it is difficult to keep the vessel alongside while in a light draft condition.

Navigation approaches to Fremantle are straightforward.

GEELONG, Victoria: 38.09 S. 144.22 E. (See Plan Book)

PORT LIMITS: A line in a 150.5° direction from a beacon 1.5 chains West of the Little River entrance intersecting with a line in a 009° direction from the N.W. extremity of Sproat St., Portarlington. N.B. – This seaward limit passes 2 cables Eastward of No. 1 beacon Pt. Richards channel.

DOCUMENTS:

3 Crew Lists Form M & S 11.
Store List Form 42A.
1 Articles owned or in possession of Master, officers or crew, Form 5.
3 ports of call Form C & E 886.
1 Form QA 3 ship's cargo.
1 Form QA 4 ship's pets.
2 Form QA 5 Shipmaster's bond.
2 Form AQ 360 Health reports.

PILOTAGE: See "Melbourne". Radio ETA to "Seapilots Melbourne" 24 hours prior arrival advising deepest draft. Pilot station equipped with radio-telephone continuous watch on 2182 kHz., and VHF Channel 16. Pilots carry portable sets.

ANCHORAGES:

1. Quarantine. As directed.
2. Explosives.
   (a) *Outer:* 088° from Pt. Wilson Beacon 3.52 miles. Circle 0.25 miles (463 m.) radius. Depth 32 ft. (9.7m.).
   (b) *Inner:* 077° from Pt. Wilson Beacon 1.77 miles. Circle 0.15 miles (278 m.) radius. Depth 21 ft. (6.4 m.).
3. Vessels over 30 ft. (9.1 m.) draft: outside No. 2 Beacon Pt. Richards and South of the line of prolongation of the Pt. Richards Channel. Least depth 12.5 m.
4. Vessels over 27 ft. 6 in. (8.4 m.) draft: East of and within 1 mile of No. 17 Beacon Pt. Richards Channel. Least depth 9.1 m.
5. Inner Harbour: As directed:
   Note: Vessels desiring launch communication with the shore will normally anchor South of the Hopetoun Channel.

Masters of vessels are cautioned *(a)* that the bottom of the Inner Harbour is soft mud and is not good holding ground and *(b)* that vessels should not be immobilised unless with the express permission of the Harbour Master. Vessels at anchor should retain the maximum quantity of ballast on board.

RESTRICTIONS: Vessel must have at least 2 ft. (0.6 m.) of water under the keel with a maximum of 6 in. (0.15 m.) for tide.

Night navigation is not normally permissible for any vessel over 10.4 m. draft or inward 215 m. in length.

MAX. SIZE: Tankers: 853 ft. (260 m.) length with 34 ft. 6 in. (10.5 m.) draft. Other vessels: Enquiries should be made with regard to vessels over 658 ft. (200 m.) length.

HEALTH: An overseas vessel approaching the port requiring pratique shall send a message to the Quarantine Officer not more than 24 hours and not less than 12 hours before arrival containing the following information: name of vessel, ETA, number of passengers, number of crew, number of passengers disembarking, port of departure and date, disease on board.

By supplying by radio to Agent the answers to 12 questions on the form Q.2 (below), the vessel may be permitted to berth prior to the granting of pratique.

Question		*Answer*
A.	Name, type and nationality of vessel	
B.	Itinerary for last 15 days. If over 15 days from last port, please give name of port and date of departure.	
C.	Name of first Australian port and ETA.	
D.	Number of crew.	
E.	Number of passengers.	
F.	Have you had cases of illness accompanied by a temperature of 38°C or above for more than two days, or accompanied by rash, jaundice or glandular swelling during voyage?	
G.	Have you had any deaths on the voyage? If so, please give details.	
H.	Have you had cases of illness including diarrhoea sufficiently severe to interfere with normal work or activity during the voyage?	
I.	Have you had persons suffering from venereal disease during the voyage?	
J.	What live fish, birds, reptiles or other animals are you carrying? Ships' pets should be mentioned.	
K.	Have you carried livestock on previous voyages in the last six months? If yes, please advise type of livestock, date of voyage and ports visited. Have all stock-carrying compartments been thoroughly cleaned and disinfected?	
L.	Do you request approval to berth?	

On arrival the health report shall be given to the Quarantine Officer, 2 copies being furnished on the prescribed form, 1 of which will be signed by the Quarantine Officer and returned to the Master.

RADIO: Coastal radio station for local messages "Radio Melbourne" VIM. The Port of Geelong Authority maintains a Signal Station at Point Henry at which a 24-hour watch is kept. (Lat. 38° 7′ 51″ S., Long. 144° 25′ 28″ E.). The building is a cream brick tower 11.3 m. in height to the roof, situated at the Northern end of the high land of Point Henry, and is surmounted by a white signal mast. Movement of traffic within the port is controlled through the Signal Station. Communication is affected as follows:

1. Telephone. Geelong 48 – 2700.
2. Radio Telephone VHF F/M (International Channel).
   (i) Channel 16. 156.8 MHz. Calling (continuous watch).
   (ii) Channel 12. 156.6 MHz. Working.
   (iii) Channel 8. 156.4 MHz. Pilots and Tugs (continuous watch).
   (iv) Channel 6. 156.3 MHz. Tugs.
   (v) Channel 67. 156.375 MHz. Safety.

These frequencies are the same as those operated by the pilot launches, Point Lonsdale Signal Station, Melbourne Harbour Control and all Port Phillip tugboats on commercial towage.

TUGS: Vessels normally towed from Hopetoun Channel to berth, extended towage if required. 3 large tugs available. Use of tug's line optional. Tugs equipped with VHF Channels 6, 8, 12 and 16.

BERTHING:

	No.	*Length (m.)*	*Depth (m.)*	*Use and facilities*
Cunningham Pier	4	328	9.7	Gen. cargo – cargo shed 137m. × 15 m. Rail access.
Bulk Grain Pier	2	201	11.0	Bulk grain export. Gantry extends 154 m. of berth.
Corio Quay South 1	1	183	9.7	Stern loading ramp for roll-on/roll-off. Rail access.
Corio Quay North 1	1	183	9.7	Steel and dry bulk cargo.
2	1	183	9.7	Rail access Four 6 t. Portal cranes. Gen. cargo shed 91 m. × 30.5 m.
Corio Quay North 3	1	161	9.7	Gen. cargo shed 97.5 m. × 27 m.
Lascelles Wharf 1	1	173	11.0	Dry bulk cargo.
2	1	173	11.0	Siwertell bulk unloader. Rate 600 t.p.h. Cargo shed 30 m. × 27 m.
3	1	275	11.0	Single lift Portainer crane – Container Berth.
Refinery Pier 1 & 2	2	213	11.0	Petroleum products.
3 & 4	2	275	11.0	Crude oil, chemicals and LPG export.
Pt. Wilson Explosives Pier	2	168	9.1	Dangerous cargo. Commonwealth Government controlled.
Pt. Henry	1	152	9.1	Bulk alumina and allied products. Unloading gantry.

STEVEDORES: Labour ordering: Day labour must be ordered by 1400 hrs. the preceding day. Twilight shift labour by 1400 hrs. preceding day, and midnight shift. Saturday labour must be ordered by 0900 hrs. Friday, Sunday labour by 1100 hrs. Friday (day and twilight shift), Sunday midnight before 0900 hrs., Friday. Monday labour is ordered at 1600 hrs. Sunday. Special requirements exist for labour requirements on public holidays.

TANKERS: Refinery Pier. 4 berths, depth alongside 36 ft. (11 m.) Pumping platform 16 ft. (4.9 m.) above low water, wharf 12 ft. (3.7 m.) above low water. One-ton crane at each berth and accommodation ladder.

No. 1 and 2 Berths: Pier 2,909 ft (887 m.) long, direction 315° berth 700 ft. (213 m.) approx., suitable for ships up to 180 m. LOA. Ships moor to 2 spring dolphins 61 m. apart; pumping platform set back 1.7 m. from line of these dolphins.

No. 3 and 4 Berths: a branch from the main pier, direction 330°, berth 275 m. approx., suitable for ships up to 260 m. LOA. Ships lie alongside a concrete sprung berthing beam 73 m. in length. No. 4 Berth equipped with capstans and 90 tonnes S.W.L. mooring hooks for berthing large vessels. Distance between backspring bollards 35 m. Hoses 8 in. – reduction from 10 in. available. Shore accommodation ladder provided at all berths.

Ballast: Tank cleaning and dirty ballast facilities: Line 12 in. Maximum quantity restricted by ullage in shore tank. Rate 900 t.p.h. Berths 1, 2, 3 and 4. All ballast must be discharged via the shore reception facilities even though oil free. Severe penalties will be imposed by the Authorities for any infringement of harbour regulations.

Geelong Port Authorities take a serious view of any form of oil pollution within the harbour, and Courts impose heavy penalties on offenders. Essential Master advises ship personnel before berthing of necessity for extreme care to ensure no oil spillage occurs.

MEDICAL: Comprehensive medical facilities available, including 459-bed Geelong Hospital. If vessel to be in port less than 24 hours it is advisable to radio Agent informing him of medical requirements prior to vessel's arrival.

DENSITY: Normally 1025, may decrease to 1023 after much rain, or increase to 1027 in Summer after prolonged dry spell.

FRESH WATER: Available at all berths from shore hose at 40–50 t.p.h. Charge 40c per kilolitre plus service charge.

FUEL: Marine fuel to 650 sec. and diesel fuel available Corio Quay North and Lascelles Wharf; all grades to 3,500 sec. available at Refinery Pier berth.

FIRE PRECAUTIONS: Stringent restrictions against burning or welding on vessels carrying dangerous cargoes. Standard fire precautions.

GANGWAY/WATCHMEN: Shore gangway man compulsory. Penalty rates after hours.

OPENING/CLOSING HATCHES: Crew or stevedores, to Master's requirements. It is normal to request bulk carriers to arrive at berth with all hatches open.

CERTIFICATES:

Derat Certificate (Health Requirement).
Ship's Articles (British) (Customs requirement).
Ship's Register (Customs requirement).
Load Line Certificate (Customs requirement).
Safety Equipment Certificate (Customs requirement).
Safety Radio Certificate (Customs requirement).
Last Port Clearance (Customs requirement).

CUSTOMS ALLOWANCES: 200 cigarettes or 250 gm. tobacco or 40 cigars. Spirits: Any bottle opened not to exceed 1 litre.

CARGO GEAR: Australian Navigation Act requirements. See "Melbourne".

IDENTIFICATION CARDS: See "Melbourne".

CONSULS: Consulates in Melbourne available if required:

Austria
Canada
Chile
Denmark
Ecuador
Egypt
Finland
France
Germany
Greece
Honduras
Iceland
Italy
Japan
Latvia
Lebanon
Malaysia
Monoco
Nauru
Netherlands
New Zealand
Norway
Peru
Philippines
Portugal
Senegal
Seychelles
Sweden
Switzerland
Thailand
Turkey
Uruguay
USA
Venezuela
Yugoslavia

REPAIRS: All services available. Most Melbourne repair and service firms will also undertake work in Geelong.
DRY DOCKS: *Rippleside Slipway:* 1,000 tons on 47.85 m. B.P. and repair workshop.
REPATRIATION: Possible without difficulty.
AIRPORT: Nearest major commercial airport is Tullamarine, 50 miles distant, from which there are frequent interstate and international flights. Airport accessible by road in about 1 hour 15 minutes (direct bus).
TIME: GMT plus 10 hours. Summertime, GMT plus 11 hours.
HOLIDAYS: Closed holidays: Christmas Day; Waterside Workers' Picnic Day; Labour Day; Good Friday; Anzac Day (Tanker operations excepted). Other holidays: Australia Day; Easter Monday; Queen's Birthday; Geelong Cup Day.
TELEPHONE: Always placed aboard on arrival; ship charged for trunk line calls, etc.
SERVICES: Cleaning, painting, fitting out, etc., fumigation. Good fresh stores available.
POLICE/AMBULANCE/FIRE: Police 26 2800; Ambulance 22 2555; Fire 21 2755.
SHORE LEAVE: No restrictions. Seamen aboard vessels berthed at Refinery Pier sign book on leaving pier and again on re-entering; this is in lieu of any form of dock pass.
DEVELOPMENTS: *Geelong Grain Terminal:* The grain terminal at Geelong is to be upgraded to take ships of up to 70,000 d.w.t. as against the present 40,000 d.w.t. limit.

Work has started on the program, which will cost about $A.50 million, and is due to be completed by 1988.

Included is a near tripling of the terminal's ship loading capacity from 1,600 tonnes/hr. to 4,500 tonnes/hr. and rail link improvements.

A second grain pier is to be provided.

Dredging: Channel to be deepened from 9.0 m. to 11.0 m.
AUTHORITY: Port of Geelong Authority, 65 Brougham Street, (P.O.Box 344), Geelong, Victoria 3220. *Tel:* (052) 22 1644. *Telex:* AA38648. *Contact:* Operations Manager.
AGENT: Patrick Agencies, 2 Moorabool Street, P.O.Box 37, Geelong, Victoria 3220. Tel: 22 1155. Telex: AA 32658. Cables: "Rikpat".

GERALDTON, W.A.: 28.46 S. 114.36 E. (See Plan Book)

PORT LIMITS: Inner Harbour includes all that area of water in Champion Bay bounded by a line drawn from Gregory Street, Geraldton, along the foreshore to a point due South of the Western extremity of the breakwater; thence along the breakwater to the Western extremity of the Eastern breakwater; thence S.E. to the foot of the said Gregory Street, and also including the Entrance Channel thereto.

Outer Harbour includes all that area of water in Champion Bay and Geelvink Channel bounded by an imaginary line drawn from Point Moore lighthouse true West as far as Longitude 114° 30' E. thence true North to the shore of the mainland about 2.75 nautical miles (North and West from Woolawar Gully), but excluding the waters of Geraldton Inner Harbour and the Entrance Channel thereto.
ETA: "Shipserve Harbour Master Geraldton" requires 48 and 24 hours notice prior arrival. The 24 hours message should be timed to be delivered before 1630 hrs. local time on the day before arrival so that arrangements can be finalised, when possible, in working hours. Please also indicate fore and aft draft in the 48 hours notice.

Masters are advised for medical and or other emergencies; the Harbour Master should be contacted through Principal or Local Agents.

Vessels arriving in ballast are requested to retain all clean ballast until after berthing. Discharging ballast before arriving may preclude berthing if strong wind conditions prevail.
DOCUMENTS: Quarantine Notice and Declaration QA3 Form A, Quarantine Notice QA 4 Form E2, Shipmaster's Bond QA 5, Departure Notice, 2 Crew Lists. Also see "Melbourne".
PILOTAGE: Compulsory. Pilot boards in position Point Moore Lighthouse 2.2 miles, bearing 135°. If conditions abnormal pilot launch may not be able to reach this position then Port Control will advise boarding point. Usually off No. 1 Buoy (formerly Inner Knoll Buoy).

Pilot ladder and accessories, including access to vessel, must comply in all respects with current IMO/SOLAS requirements. Failure to comply *will* incur delays.

At NO time will mechanical pilot hoists be utilized due to swell conditions.
ANCHORAGE: Vessels of up to 150 m., Moore Pt. Lt. Ho. 195° distance 2.2 miles in 11 m. Vessels in excess of 150 m. are advised to anchor close to and to seaward of Pilot Boarding Ground, unless weather conditions are excellent. The former position is referred to as the "Inner Anchorage" and the latter, the "Outer Anchorage".
MAX. SIZE: Length 213 m.; Beam 30.4 m. Permissible drafts: 8.7 m. at LW – 9.1 m. at 0.8 m. of tide, 9.3 m. at 1.1 m. tide provided swell at Waverider Buoy does not exceed 3 m. Vessels wishing to load to maximums dependent on tide prevailing should contact Harbour Master before so doing.
RESTRICTIONS: Swells up to 5.0 m. in outer approaches. Loaded ships advised not to enter when swell excessive.

Bluff Point Leads or Outer Channel: Depth of water 10 m., minimum LWIS width of channel 180 m.

Curved Section of Channel: Depth of water 9.7 m. to 9.4 m. LWIS.

Inner Harbour Channel and Manoeuvring Area: 9.1 m. LWIS. Depth alongside berths: No. 2-5 9.4 m. LWIS.
HEALTH: First port of entry, radio Port Authority not less than 12 hours prior to arrival advising state of health. Also see "Melbourne".
TUGS: One 16.5 tonne bollard pull and one 6 tonne bollard pull. Compulsory.
RADIO: VHF available for communications with Pilot. Channels 6, 9, 12 and 16. Continuous watch not maintained.
BERTHING: The wharf is divided into 4 berths numbered 1, 2, 3 and 4 from East end, 3, 167 m. in length and the fourth 181 m.

No. 1. Berth has a transit shed with a 1,000 ton capacity, and an old shed which has been used for bulk storage of wheat and salt. The berth is used as a general purpose berth.

No. 2. Used as the tanker berth, and also for the discharge of bulk phosphate, sulphur and allied cargoes. Also for loading bulk cargo other than wheat. General cargo can also be handled and facilities are available for the holding and loading of sheep. Has an unobstructed apron of 27.5 m. for almost the full length of berth.

No. 3. Berth mainly for loading of bulk grain. There are 2 loading gantries on the wharf each capable of loading wheat at the rate of 400 t.p.h.

No. 4. It is possible to use No. 4 for general purposes, but a loading gantry and conveyor system at the berth is used for loading mineral sands. Max. rate 1,000 t.p.h. Air draft for loader not to exceed 11 m.

No. 5 berth is situated to the West of the main wharf and runs in a N.N.E. direction. The berth is 213 m. in length with mooring dolphins either end. Currently the berth is used for general purposes.
CARGO GEAR: See "Melbourne".
STEVEDORES: 35 men. Working hours 0800 – 1700 hrs. Monday – Friday. Extended shifts Monday – Thursday. Evening shifts all days except Saturday.
CRANES: No container or floating cranes available. Only mobile cranes up to 20 tonne lift. Order through Agents.
FRESH WATER: At each berth 25 t.p.h.
FUEL: Light diesel oil 80 t.p.h.
FIRE PRECAUTIONS: Fire fighting unit available.
REPAIRS: Engine and engineering repairs can be carried out. Arrange through Agents.
GANGWAY/DECK WATCHMEN: Normally done by ships' crew.
OPENING/CLOSING HATCHES: Done by ships' crew.
CUSTOMS ALLOWANCES: Each crew member 200 cigarettes or 40 cigars or 8 oz. tobacco and limited amounts spirits per man.
REPATRIATION: Crew changes can be carried out with little difficulty.
AIRPORT: Local airport 11 km. East of town. International – Perth, 430 km. South.
HOLIDAYS: Christmas Day, Boxing Day, Easter, Labour Day, Anzac Day, Queen's Birthday, Foundation Day.
POLICE/AMBULANCE/FIRE: Police 21 1144; Ambulance 21 3255; Fire 21 2222.
TIME: GMT plus 8 hours.
TELEPHONES: Available at each berth (ordered through Agent).
SERVICES: Compass adjustment, radio and radar repairs available. Contact Agents.
BANKS: Commonwealth, Westpac, Rural & Industries, A.N.Z. Banking Group, National Australia Bank.
STORING: See "Prelims", page viii.

1. Stored by truck.
2. Not applicable.
3. Trucks allowed alongside.
4. Fork lifts allowed.
5. Storing of ships must abide by Customs Regulations.
6. Waterside workers would be employed to assist with storing if required.

SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not required.
DELAYS: All subject to weather conditions.
AUTHORITY: Geraldton Port Authority, P.O.Box 1064, Geraldton, Western Australia 6530. *Tel:* (099) 212699. *Telex:* 91285. *Contact:* Harbour Master, Department of Marine & Harbours, P.O.Box 296, Geraldton, Western Australia 6530. *Tel:* 213340 or 215255.
AGENT: Patrick Agencies, 10 Francis Street, P.O.Box 67, Geraldton, W.A. 6530. Tel: 21-6744, 21-6976. Telex: 91696 A/B Rikpat. Cables: Rikpat.

GLADSTONE, Queensland: 23.51 S. 151.15 E.

(See Plan Book)

PORT LIMITS: Inside a line commencing at a point 1.5 miles North of East Point, Facing Island; thence to the outer extremity of Jenny Lind Bank, and thence by a line to Tiber Point.

DOCUMENTS: See "Melbourne".

PILOTAGE: ETA's may be sent through Brisbane or Rockhampton Radio Stations, not less than 24 hours before arrival, followed by amended advices where necessary as takes pilot launch 2 hours to reach Pilot Boarding Ground from town. Pilotage compulsory all merchant ships. Pilot boards at the Fairway Buoy which is approx. 28 km. West of Bustard Head. VHF Channel 16 may be used to contact pilot station, call sign "Gladstone Harbour Control"; 24 hour watch maintained. Pilot boat also has VHF. Pilot boat orange launch and displays usual signals.

Boarding of Pilots may be possible by helicopter if vessel meets certain requirements. The decision will be made after radio communication with the vessel.

ANCHORAGE: Good anchorage inside Gatcombe Head about 7 cables South of Bushy Islet in 8 to 10 fathoms, sand and mud, North of Facing Island Leads.

RESTRICTIONS: The port is served by an entrance channel, some 10 km. long, with a bottom width of 183 m., dredged to 15.3 m. at LWOST.

The max. allowable draft of a vessel passing through the channel is determined by the following formula:

Allowable draft in metres = 15.3 m. + tide height −1.5 m./2.0 m.*

*−1.5 m. (for vessels less than 85,000 d.w.t.) and −2.0 m. (for vessels of 85,000 d.w.t. or greater).

The max. daily tide height is 4.9 m.

The min. daily tide height is 2.7 m.

Tankers carrying petroleum products may enter during hours of darkness only at Harbour Master's discretion.

MAX. SIZE: The Port can accommodate vessels of up to 16 m. draft on any day of the year. The maximum draft for entrance channels is dependent on tidal conditions. Length and breadth dependent upon wharf to which vessel is to proceed. Principal wharves are:

Auckland Wharf	No. 1	Depth 11.30 m. at LW	
„ „	No. 2	„ 11.30 m.	„
„ „	No. 3	„ 11.30 m.	„
Barney Point		„ 15.00 m.	„
South Trees	East	„ 13.72 m.	„
„ „	West	„ 12.80 m.	„
Clinton Coal Facility		„ 17.20 m.	„ also see
Smelter Wharf		„ 15.00 m.	„ "Developments"
Clinker Wharf		„ 10.40 m.	„

HEALTH: A system of radio pratique has been adopted for vessels calling at Gladstone as first port Australia provided they are regular callers from disease free areas.

All vessels requiring pratique must radio answers to a series of questions regarding crew health etc. to ship's Agents 24 hours prior to arrival.

See "General-Health" before first port.

RADIO: Radio messages passed to Agents via any coastal radio station. All shipping cables to Agents, etc., should be prefixed "Shipserv" to enable delivery destination outside ordinary postal hours if necessary.

VHF: Shipping movements are controlled by VHF Radio, the base station being operated by the Harbour Master and his Staff.

TUGS: 4 tugs in service with bollard pulls of 46, 42, 42 and 34 tonnes. Tugs normally join vessel in vicinity of South Trees Point. Tug's lines always used when vessels are piloted. There is no extra charge for use of tug's lines.

BERTHING: Large vessels requiring load coal either Auckland Point Wharf or Barney Point Wharf normally swing and berth starboard side to, head to sea, on flood tide. Smaller vessels using these berths either port or starboard side to, depending upon tide. Vessels requiring discharge bauxite South Trees Island Wharf berth at periods of slack water (high or low) only. Vessels loading alumina this wharf berth either on flood tide or slack water – *never* on ebb tide.

Auckland Point Wharves: With total length of 578 m., there are 3 berths at Auckland Point, owned and operated by the Gladstone Harbour Board.

No. 1 Berth: Coal is exported through this berth over 2 bulk shiploaders each with a capacity of 800 tonnes/p.h. These loaders travel a distance of 142 m. along the wharf and are joined by 2 conveyors to the coal stockpile area. Capacity of the stockpile is 300,000 tonnes. Depth of berth is 11.3 m. LWOST

No. 2 Berth: This berth handles the export of grain (wheat, grain sorghum, oil seeds) from the rich grain growing areas of the Dawson/Callide Valleys and the Central Highlands. Grain is stored in the adjoining complex of silos and storage sheds.

Total Port capacity for storage of grain is 45,000 tonnes. Taken from the storage areas by conveyors, the grain is loaded onboard vessels by a mobile gantry shiploader at the rate of 400 tonnes/p.h. The storage and shiploader capacity is presently being increased – see "Developments". The berth depth is 11.3 m. LWOST.

No. 3 Berth: Petroleum products imported through this berth are stored in the tank farms constructed by the major oil companies on reclaimed land adjacent to the berth. This vital fuel is then distributed throughout Central Queensland. General cargo and special heavy lift vessels also use this berth. The berth depth is 11.3 m. LWOST.

Barney Point Wharf: This wharf with a total length of 205 m. is owned and operated by Thiess Dampier Mitsui Coal Pty. Ltd. Coal from the T.D.M. Mine at Moura and Thiess Brothers Mine at Blackwater is exported through this facility. Coal from the Moura Mine is carried 180 km. to the port over the direct Gladstone to Moura railway line. The stockpile area has a capacity of 400,000 tonnes. Shiploading is done by a single 2,000 tonnes/p.h. mobile shiploader. The berth depth is 15.0 m. LWOST.

South Trees Wharf: Owned and operated by Queensland Alumina Limited, this facility handles all cargoes for the giant alumina refinery. Bauxite is imported from Weipa (in North Queensland) and alumina is exported to all parts of the world. The other components necessary for the alumina process – caustic soda and fuel oil are also imported over the wharf.

Depth at the berth is 12.8 m. LWOST.

Boyne Wharf: Constructed to serve the needs of the Gladstone aluminium smelter, the wharf is 250 m. long and will cater for vessels up to 60,000 tonne capacity.

A causeway 710 m. long provides access to the wharf and to a sealed area (400 m. × 50 m.) for storage of aluminium billets. On the wharf will be errected a 400 tonnes/p.h. mobile unloader to handle petroleum coke used in the smelting process.

Depth at the berth is 15.0 m. LWOST.

Fisherman's Landing Wharf: Most Northerly of the wharf centres, the wharf at Fisherman's Landing will export clinker from the Queensland Cement & Lime Clinker Plant. The limestone is mined in the Mount Larcom area, crushed and pumped down to the plant in slurry form. After processing, the clinker is exported to Brisbane to be used in the manufacture of cement.

The clinker will be loaded by a 2,000 tonnes/p.h. pivoting bulk shiploader. The shiploader will load vessels of 25,000 tonne capacity.

Depth at the berth is 10.4 m. LWOST.

Clinton Coal Facility: One berth owned and operated by Gladstone Harbour Board. Shiploader and unloading operations at rate of 4,000 tonnes/p.h. Berth caters for vessels from 25,000 d.w.t. to 140,000 d.w.t. and of 16 m. draft. Depth of berth is 17.20 m. LWOST. Stockpile capacity of 2 million tonnes. Cargo: Coal.

BULK HANDLING FACILITIES: *See Table opposite.*

STEVEDORES: Special ETA advices necessary if week-end labour required and must be ordered by 1400 hrs. on previous Friday. Monday labour for vessels arriving after Friday must be ordered by 1500 hrs. on Friday. The only commodities requiring shore labour are bulk grain and general cargo.

MEDICAL: Dependent duration stay in port, prior notice for medical attention not required (other than notice of infectious diseases). Hospital facilities available. Current vaccination certificate for each member of crew required.

TANKERS: Diameters of discharge lines 12 in., (0.305 m.) and 8 in. (0.203 m.) for white oils and 6 in. (0.152 m.) black oils, no slop discharge facilities. Main tanker berth at Auckland Point Wharf (Berth No. 3) min. depth alongside 10.50 m. LWOST. Black oil also discharged South Trees Island Wharf for use in alumina plant only.

DENSITY: Average density 1024–1028.

FRESH WATER: Available all wharves. Fresh water hydrants placed at intervals along wharves.

FUEL: Fuel oil is available by bunker lines at Auckland Point No. 1 and No. 3 Berths and South Trees Island Berths. (Fuel oil at South Trees Island is available to Queensland Alumina's vessels only). Lubricating oils and diesel are available by road tanker. Coal (high carbon content) also available.

FIRE PRECAUTIONS: Where petroleum and goods of dangerous inflammable character are being unloaded, watchman shall be employed to collect matches from all persons in vicinity and to patrol wharf within the limits in which petroleum cargo is being handled. Every vessel carrying inflammable liquids when in any Queensland port shall display red flag, not less than 1 m. (3 ft.) square with white circular centre 15 cms. (6 in.) in diameter.

OPENING/CLOSING HATCHES: Either by ship's crew or shore labour.

GANGWAY/DECK WATCHMEN: Services of watchmen is not recommended except in the case of petroleum tankers previously mentioned.

SHIP CERTIFICATES: List of certificates usual for Australian ports. See "Melbourne".

CARGO GEAR: To be in accordance with Commonwealth Navigation (Loading and Unloading Safety Measures) Regulations. See "Melbourne".

CUSTOMS ALLOWANCES: 0.5 lb. of tobacco or 200 cigarettes, to be opened. 1 only 26 ounce bottle, to be opened.

DEVELOPMENTS: To cater for the expanding grain trade, construction of additional grain storage has brought storage capacity in the port to over 80,000 tonnes. Upgrading of shiploaders with the addition of a 1,200 tonnes/p.h. shiploader will give a total shiploading capacity of 1,600 tonnes/p.h. The facility will be expanded to handle vessels up to 80,000 d.w.t., and will involve reconstruction of a section of the wharf and section of the gallery. Work is presently underway for completion in late 1984.

Tide/Draft Table: The Harbour Master at Gladstone has issued a tide/draft table following the completion of the dredging programme. A copy of the full table is available from Agent's office, but we quote below examples of drafts extracted from the full table:

Tabulated tide height (m.)	*Vessels up to 85,000 d.w.t.* (m.)	*Vessels over 85,000 d.w.t.* (m.)
2.2	15.6	15.1
2.5	15.9	15.4
2.8	16.2	15.7
3.1	16.5	16.0
3.4	16.8	16.3
3.7	17.1	16.6
4.0	17.2	16.7
4.3	17.3	16.8
4.6	17.4	16.9
4.9	17.6	17.1

The restriction at Clinton Wharf of vessels maximum 120,000 d.w.t. is also lifted and in future the vessel size at this berth will be limited by such parameters as beam 42 m. and loader travel – distance between forward hatch and aft hatch 181 m. – vessels which exceed these limitations will be considered on an individual basis.

IDENTIFICATION CARDS: See "Melbourne".
CONSULS: None.
REPAIRS: Minor engine and deck repairs are undertaken.
DRY DOCKS: None available. Slipway capable of lifting vessels up to 125 tons displacement with max. beam 23 m. and max. draft forward of 6 ft.
REPATRIATION: Facilities for effecting crew changes and necessary repatriations can be arranged. Prior notice required.
AIRPORT: Airport approximately 3 km. from port and is regularly served by 2 internal airlines. Daily flights to Brisbane with connections with overseas airlines.
TIME: GMT plus 10 hours.
HOLIDAYS: Only 5 official holidays in year when it is *not* possible to arrange cargo work: Christmas Day; Anzac Day (25th April); Labour Day (1st Monday in May); Good Friday.
TELEPHONES: Public phones available on wharf.

POLICE/AMBULANCE/FIRE: Telephone number of these services in cases of emergency only is "000" and ask to be connected to the required service. Emergency call to Hospital is 72.1033.
SERVICES: No tank cleaning facilities. No slop facilities.
SHORE LEAVE: Crew members allowed ashore provided vaccination certificates in order.
DELAYS: No unusual delays other than berth availability or unusual tidal conditions.
GENERAL: No cranes on wharves. Mobile cranes available for hire. No lighterage facilities. Electricity available to ships. Passengers not normally embarked or disembarked this port, as no facilities for them.
AUTHORITY: Gladstone Harbour Board, P.O.Box 259, Yarroon Street, Gladstone, Queensland 4680. *Tel:* (079) 76 1333. *Telex:* Gl Port AA 49480. *Contact:* Mr. B. J. Jordan, Secretary.
AGENT: Patrick Agencies, P.O.Box 296, 136 Gondoon Street, Gladstone, Queensland 4680. Tel. 72 2088. Cables: "Rikpat" Gladstone. Telex: AA 49431.

BULK HANDLING FACILITIES (Gladstone)

Location	Auckland Point No. 1	Auckland Point No. 2	Barney Point	South Trees East	South Trees West	Clinton Facility
Number of Units	2	1	1	1	2	1
Type of Unit	Mobile Gantry Loader	Mobile Gantry Loader	Mobile Gantry Loader	Mobile Gantry Loader	Mobile Gantry Grab Unloader	Mobile Gantry Loader
Length of Travel (metres)	142 (Combined)	121	149	168	198	181
Max. Outreach from Wharf (metres)	15.2	28.3	16.2	25.6	26.7	27.72
Throw of Trimmer (metres)	15.2	N/A	11.0	N/A	N/A	15.24
Max. Beam of Vessel (metres)	32	30.5	35.4	35.4	35.4	42
Capacity (t.p.h.)	1,600	400	2,000	1,200	2,000	4,000
Commodity Handled	Coal	Grains	Coal	Alumina	Bauxite	Coal
Storage (Tons)	300,000	48,000	400,000	238,000	1,000,000	2,000,000 (6×300,000 tonne Stockpiles and 1×200,000 tonne Stockpile)

GOVE, N.T.: 12.12 S. 136.40 E. **(See Plan Book)**

DOCUMENTS:
2 Crew Lists Form M. & S. 11 (3 at outports).
5 Passenger Lists, Forms M. 308 and 309.
1 Ports of Call List.
3 Barber's stocks and stock in ship's shops and canteens (Form 5) continuation of the back Form 5 AA.
1 List of Customable Articles, Form 5 (crew).
3 Return of Goods of Barber's stock, etc., Form 5 AA.
3 Stores List Form 42 A.
1 Clearance from Last Port.
Ship's Log.
1 Derat Certificate.
1 Light Dues if paid previously.

PILOTAGE: Compulsory for vessels proceeding to Nabalco facilities. The Pilot will board at the anchorage position.
ANCHORAGE: Melville Bay affords good holding ground, the bottom being either sand or mud and the depths ranging up to 48 ft. (14.64 m.) West of Dundas Point. Vessels awaiting a berth should anchor approximately 1.5 miles (2.41 km.) Westward of West Woody Island close by the Fairway Buoy. The Quarantine Officer and Customs Officer normally clear vessels alongside the berth, but may on occasions board at the anchorage.

A vessel is considered to be an "arrived ship" for purposes of laytime when she enters the Quarantine Anchorage.

We quote below Australian Notice to Mariners No. 510/1978.

Gove Harbour – Quarantine Anchorage Altered:

(a) A pecked line is to be inserted joining the following positions:
From Lat. 12° 11.12′ S., Long. 136° 37.5′ E. on the Harbour Limit to
Lat. 12° 09.58′ S., Long. 136° 37.5′ E. thence to
Lat. 12° 09.58′ S., Long. 136° 39.6′ E. and thence to
Lat. 12° 11.12′ S., Long. 136° 39.6′ E. on the Harbour Limit
On Plan, from Long. 136° 39.6′ E. in the N. border to
Lat. 12° 11.12′ S., Long. 136° 39.6′ E. on the Harbour Limit.

(b) The Legend *Quarantine Anchorage* is to be inserted within the area of 1(a).

RESTRICTIONS: Approach Channel to bulk cargo and tanker jetties has minimum depth 13.8 m.

Approach Channel to general cargo jetty has minimum depth 30 ft.
PRATIQUE: The port of Gove has been declared a port of first entry for health clearance of vessels arriving from overseas.

The Commonwealth Quarantine Regulations provide for health clearance of a vessel between sunrise and sunset. However, the Quarantine Officer has direction to clear ships up to 2200 hrs. local time. Arrangements can be made for vessels to depart up to 2030 hrs. local time, as health clearance is not necessary for outgoing ships. Vessels will usually be cleared alongside the berth.

If pratique is required, vessel must provide:
(a) Primary Health Report.
(b) A Vaccination Register proving that all persons have been currently vaccinated against smallpox.
(c) Usual valid Cholera Certificate if the vessel is less than 5 days from a cholera-infected area.

Radio pratique may be granted.

RADIO: *Notice of Arrival:* Prior to arrival, vessels are requested to radio the following information:
(i) For all vessels:
(a) ETA Gove – 72 hours out
– 48 hours out
– 24 hours out
(b) Anticipated draft forward and aft.
(ii) For bulk carriers, anticipated hatch loading plan, loading sequence and quantity required in each pour.
(c) For petroleum tankers, approximate quantities to be discharged and grade of product desired for first discharge, and order of unloading various grades if more than one grade is carried.

Radio messages should be addressed to "Gobaux", Darwin. The call sign of the radio station at Darwin is VID. Radio messages will be passed by teleprinter to Gove.

Cable messages for Nabalco should be addressed to "Shipserv", Gove.

Vessels should note that berthing cannot be effected between 2200 hrs. local time and sunrise unless quarantine clearance has been received.

VHF: The Nabalco Harbour Master's Office maintains a listening watch on Channel 16 during office hours. VHF frequencies used are 16, 12 and 6. Call sign "Gove Harbour".

TUGS: There are 3 work boats available for hire in the port, max. h.p. 2000. Tug's lines are used in most instances, but no extra charge is made.

BERTHING: *Bulk Cargo Wharf:* The bulk cargo wharf runs in a N.W./S.E. direction and bears 189° true 2,440 m. (8,000 ft.) from West Woody Island triangulation point. The wharf has a 'T' head which is connected to the shore by an access bridge 946 m. (3,120 ft.) long and 3.05 m. (10 ft.) wide.

The Northern branch of the wharf head constitutes the bauxite/alumina berth and the Southern branch the bulk liquids berth.

The bauxite/alumina berth is mounted with a travelling, luffing shiploader with telescopic trimming spout having an outreach of 31 m. (101 ft. 6 in.) from the fender line. The distance of travel along the berth is 164.2 m. (540 ft.). The clearance beneath the spout at maximum elevation for loading is 16.7 m. (55 ft.) above chart datum (LWOST) at berth side.

The shiploader has a designed capacity of 2,000 tonnes/p.h. for bauxite and for alumina.

The shiploader is connected by a belt conveyor system to the bauxite stockpiles and to the alumina silos, 3,202 m. (10,500 ft.) and 2,592 m. (8,500 ft.) distant respectively from the wharf head.

The bulk liquids berth consists basically of mooring dolphins and fenders associated with a pipe bridge support. Three pipe-lines are provided namely:
(1) 46 cm. (18 in.) diameter for bunker fuel oil.
(2) 30 cm. (12 in.) diameter for caustic soda.
(3) 25.4 cm. (10 in.) diameter for diesoleum, petroleum and aviation kerosene.

During the tanker discharging operations, connection between ship and shore is provided by 20.3 cm. (8 in.) diameter flexible hoses with BS Table "F" 8-hole fittings at each end. BAS reducers from 30.5 cm. (12 in.) to 20.3 cm. (8 in.) are available.

If other types of fittings are required to effect discharge, arrangements should be made by the tanker vessel to provide such items.

The length of each pipe-line is approximately 1,982 m. (6,500 ft.) covering the distance from bulk liquids berth to shore tank farm.

A depth of water of 13.9 m. (45 ft. 08 in.) below chart datum (at low water ordinary Spring tide) is available at both the alumina/bauxite and bulk liquid berths.

This will allow simultaneous occupancy by a tanker and bulk carrier, each of up to approximately 60,000 d.w.t., under ordinary conditions. A minimum clearance under the keel of 10% of the draft is required for berthing and unberthing.

General Cargo Wharf: This wharf extends in a S.E. direction from the Eastern side of the land strip leading to Dundas Point. The wharf bears 315° (T) × 1,342 m. (4,400 ft.) from Half Tide Rock and is a substantial structure 94 m. (310 ft.) long by 27.89 m. (91 ft. 6 in.) wide connected to the shore by an access jetty 287.2 m. (950 ft.) long and 5.49 m. (18 ft.) wide.

The wharf has been designed for vessels of max. length of 182.8 m. (600 ft.) and of up to 20,000 d.w.t. to berth at each side under normal conditions. Vessels of up to 30,000 tons can be accommodated under suitable tidal conditions.

The depth of water alongside is 11.59 m. (38 ft.) below chart datum (LWOST) on both sides of the wharf head.

Jetty: A wooden jetty with a depth alongside of 4.27 m. (14 ft.) below chart datum (LWOST) is located at the head of Melville Bay. Use of this jetty is generally reserved for vessels of the landing barge type.

STEVEDORES: No local stevedoring companies.

TANKERS: See "Berthing".

FRESH WATER: Available at all berths.

FUEL: Not available, however distillate can be supplied ex-road tanker in cases of emergency at the general cargo wharf.

MEDICAL: Medical services and a large modern hospital with comprehensive theatre, medical and surgical facilities, at Nhulunbuy, 9 miles from the port.

AIRPORT: Gove is served by commercial flights to and from Darwin on 7 days a week and by commercial flights several times a week from Brisbane and Sydney via Cairns and Mount Isa. Services to other parts of Australia and the rest of the world are frequent from Darwin.

TIME: The time used is GMT plus 9.5 hours, and all reference to time should be given in Local Time.

REPAIRS: Limited facilities, minor repairs only.

DENSITY: 1025.

SURVEYORS: Lloyd's Surveyors available from Darwin.

HATCHES: Opening and closing carried out by ship's crew.

REPATRIATION: Facilities exist for effecting crew changes and repatriation.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 litre of spirits per crew member.

IDENTIFICATION CARDS: Not required.

SHORE LEAVE: After clearing inwards crew members may proceed ashore without special permission.

REGULATIONS: It is forbidden to take firearms and alcoholic beverages ashore.

AUTHORITY: Nabalco Pty. Limited, P.O.Box 21, Nhulunbuy, N.T.5797. *Tel:* (089) 87 5211. *Telex:* 85045 (Port Telex). *Cables:* Gobaux. *Contact:* Captain W. J. Gibson, Port Superintendent or Captain E. C. H. Cooke, Assistant Port Superintendent.

Gove Port Office *Tel:* (089) 875347.

AGENT: Agency undertaken by Nabalco Pty Limited.

GROOTE EYLANDT (Milner Bay), N.T.: 13.52 S. 136.25 E. **(See Plan Book)**

LOCATION: Milner Bay is situated on the Northwestern corner of Groote Eylandt which is itself situated in the Southwestern area of the Gulf of Carpentaria.

It is a "Port of First Entry" to Australia. Customs, Quarantine Doctor, Police, are in residence on the Eylandt.

PORT LIMITS: The waters in Milner Bay bounded by a line commencing at the HW mark on the N.W. coast of Groote Eylandt in position Lat. 13° 50′ 05″ S., Long. 136° 24′ 29″ E. and proceeding in a 260° 44′ 10″ direction to a point in Lat. 13° 50′ 28″ S., Long. 136° 22′ 03″ E. at the high-water mark on the East coast of Connexion Islet; thence by a line following the contour of the coast of Connexion Islet at the HW mark to "Boulder" in position Lat. 13° 50′ 46″ S., Long. 136° 20′ 14″ E.; thence by a line bearing 151° 30′ to a position Lat. 13° 53′ 34″ S., Long. 136° 21′ 47″ E.; thence by a line bearing 80° 44′ 10″ to a point being Lat. 13° 52′ 54″ S., Long. 136° 25′ 58″ E. thence by a line following the contour of the coast at high-water mark to the point of commencement.

DOCUMENTS:

3 Crew Lists.
5 Passenger Lists.
1 Port of Call List.
3 Stores Lists.
1 Crew's Personal Effects List.
Derat. Certificate.
Clearance from Last Port.

PILOTAGE: There is a Port Superintendent and a Port Officer at Milner Bay who will assist Masters in berthing and departing from the jetty. Approaching Groote Eylandt from the Northwards, vessels should steer to a position 10 miles North of the Northeast Islet, which is rocky on the Northern coast and rises to grassy hills. From the above position, steer to pass about 3 miles North of Chasm Islet until the recommended track on chart AUS. 14 is reached. This track 221° passes about 1 mile East of Brady Rock (light Gp. Fl. (3) ev. 12 secs.) and continues on this course until Bickerton Island Light (Fl. 5 secs.) bears 250° when the course should be altered to steer for Hand Islet on the recommended track (250°) until reaching the position to alter course to 195° to pass down the middle of Warwick Channel. It is recommended to remain on this course until reaching the patch South of Connexion Island.

If vessels enter via the Connexion Passage, care must be taken to avoid the 3 fathom patch off N.W. Bluff and keep clear of the 27 ft. patch about 3.5 miles N.E. of Connexion Islet.

ANCHORAGE: Good holding ground is found 1 mile West of the jetty where there is a good sand bottom free of obstructions with about 40 ft. of water. Due to currents up to 3 knots in the area, it is advisable to use at least 6 shackles. Quarantine is granted at this anchorage.

MAX. SIZE: The max. LOA is 700 ft. and max. breadth 96 ft. The max. draft is 35 ft.

PRATIQUE: Vessels are granted Pratique at the Anchorage 1 mile West of the wharf or at the Jetty.

RADIO: The Port is able to communicate with vessels which are fitted with VHF radio through normal international Maritime Channels and the call sign is "Groote Eylandt". However, the shore station is only open during office hours unless prior telegraphic arrangement is made. Office hours are 0800 to 1645 hrs. Monday to Friday and 0800 to 1230 hrs. Saturday.

It is requested that vessels arriving at any hour of the day should monitor VHF Channel 16 as sometimes attempts are made to contact vessels outside of office hours. Channels available are 16, 67 and 06 (private).

ETA's are required at least 72, 48 and 24 hours prior to arrival. Telegraphic address is: Manager, GEMCO, C/-Hematite, Darwin. Telex AA70858. Or Manager, GEMCO, Alyangula, N.T. 5798. Radio telephone: Darwin 81-6589, or Cairns 3547.

VHF: Port – Channels 16, 06 and 67.

Tugs – Channels 16 and 12.

TUGS: 2 tugs available. 1×16 tonne bollard pull and 1×6 tonne bollard pull.

Normally join the vessel 0.75 miles from berth.

Tug's line is used for berthing whilst ship's lines are used for sailing.

BERTHING: The ore-loading jetty is situated in approximately Lat. 13° 51.5′ S., Long. 136° 25′ E., with a depth of water alongside of 35 ft. (10.67 m.) MLWOST with a tide range of 6 ft. Two small tugs are available to assist in berthing vessels. The jetty consists of a central landing 324 ft. long and 36 ft. wide, with two breasting dolphins on the North and South ends of the central landing. A roadway extends from the shore to the central landing, virtually parallel to and on the North side of the loading conveyor belt. As there is no tidal information for this area, the tidal direction should be checked with the shore prior to berthing, as the tidal stream is sometimes different half a mile from the jetty.

The line of dolphins is offset 8° from the jetty stem which runs out 1,350 ft. from the shore in a 249° 45′ direction so that care must be exercised in placing the vessel for loading. All breasting dolphins are fendered with vertical timbering. When berthing, vessels should keep well clear of the loading head in the centre of the jetty, as it is possible that a vessel on a too fine approach could cause damage to the loading boom with the flare of the bow.

Vessel must have rat guards in position at all times (except while shifting ship), otherwise they will be liable to a fine. As Groote Eylandt is a reserve this requirement is rigidly enforced.

Loading rate is 900 – 1,100 t.p.h. and the vessel is required to shift ship to load each hatch as the loading boom is fixed. Shore labour is available to shift lines, etc., as required. Shore labour will not trim manganese ore, which is dump loaded from the conveyor.

This is a seasonal tropical loading zone from 1st April to 30th November.

FRESH WATER: Available. Rate 9 tonnes/hour.

STORES: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle spirits, 3 bottles of beer per man.

MEDICAL: There is a Medical Centre and medical staff available if necessary. Valid vaccination certificates are required, covering the requirements of the Australian Government Department of Health.

FIRE PRECAUTION: A permanent fire-fighting facility is installed on the ore-loading jetty. It is an automatic system which starts as soon as a fire hydrant is turned on, and delivers a 140 p.s.i. through a 2.5 in. hydrant with a 5 TPI V thread connection.

All shore hoses are 2.5 in. and are equipped with fog nozzles. Foam equipment is also available on the jetty with an output of approximately 1,000 gallons per minute. Fire-fighting lines on the jetty deliver salt water only. International shore connection available.

TIME: Time kept is Northern Territory "Standard Time", GMT plus 9.5 hours.

WEATHER/WIND/TIDE: Tides cause some eddying in both the Connexion and Warwick Channels, but these cause no concern provided normal care is exercised.

Prevailing winds from May to October are S.E. and blow strongly at times during the day but ease off considerably after sunset.

There are occasional heavy fogs in the area in June and July in the early morning and these sometimes persist until 1000 or 1100 hrs.

From November to May the wet season prevails with winds blowing mainly from the N.W. with heavy rains and occasionally, more than moderate seas.

IDENTIFICATION CARDS: Seamen calling at this port have to be in possession of Seamen's Identification cards, Form M315, issued by the Commonwealth of Australia, however, certain nationalities are exempt.

Facilities at Groote Eylandt are severely restricted and the Port Authorities recommend seamen should be provided with the required card before arriving at Groote Eylandt. For information, we would advise that Greek nationals are not exempt from this requirement, but nationals of Great Britain, Norway, Japan, Hong Kong, India and the People's Republic of China are.

REPATRIATION: Can be effected to most countries from Groote Eylandt via Darwin which is serviced by Qantas and British Airways. Due to the remoteness of Groote Eylandt, repatriation of crew members should only be considered in a 'Force Majeure' circumstance. All necessary bookings and reservations are made through the local airline office and Seamens' Discount Fares, where applicable, are utilised.
AIRPORT: Airlines of Northern Australia operate a 3 times a week jet service to and from Darwin. Bush Pilots Airways operate a twice weekly DC3 service to and from Cairns.
ACCOMMODATION: Visitors accommodation in the GEMCO township of Alyangula, is severely limited and shipowners who are arranging for a change of personnel at Groote Eylandt are requested to ensure that the arrival of crew members at Groote coincides as closely as possible with the arrival of the vessel.
NOTARY PUBLIC: A Notary Public is available.
HOLIDAYS: Cargo worked on most holidays by arrangement.
SHORE LEAVE: The area is an Aboriginal reserve and *shore leave is allowed in the town area only* provided the vessel has a permit which is supplied by the Agent on berthing.
AUTHORITY/AGENT: The Groote Eylandt Mining Company Pty. Ltd. act as ships' Agents in all cases.

Groote Eylandt Mining Company Pty. Ltd., Alyangula, N.T. 5798. *Tel:* Nhulunbuy (089) 87 1011. *Telex:* AA 85166. *Cables:* Hematite Alyangula. *Contact:* J. Ellyett, Port Superintendent.

Mail for steamers to be addressed to: "Vessel", Groote Eylandt Mining Co. Pty. Ltd., Groote Eylandt, N.T. 5798.

HAY POINT (including Dalrymple Bay), Queensland: 21.16 S. 149.18 E. **(See Plan Book)**

PORT LIMITS: The seaward Port Limits extend from the North shoreline at the entrance to Bakers Creek by a line in an East North Easterly direction to Lat. 21° 10′ S., Long. 149° 20′ E. thence East to Lat. 21° 10′ S., Long. 149° 30′ E., thence South to Lat. 21° 18′ S., Long. 149° 30′ E. thence West to the shore South of Hay Point.

A vessel is considered to have arrived when it anchors within Port Limits or if proceeding directly alongside at the time when the Pilot boards.
DOCUMENTS: The documents required by the Customs Department are:

2 Crew Lists.
1 Declaration of Dutiable Goods (Australian Customs Form 5)
1 Ports of Call List showing previous 6 ports
1 List of Dutiable Stores and Drugs held on board (Australian Customs Form 42A)
Last Port Clearance.

The Customs Officer will also wish to sight the following documents:

Ship's Register
Safety Radio Certificate
Safety Construction Certificate
Safety Equipment Certificate
Loadline Certificate.

The documents required by the Department of Health are:

2 Declarations of Health (Australian Government Department of Health Form Q.360)
1 Crew List
1 Vaccination List
1 Ports of Call List.

The Quarantine Officer will also wish to sight a current Derat Exemption Certificate.
PILOTAGE: Pilotage, which is compulsory is provided by the Queensland Department of Harbours and Marine, whose Pilots are stationed at the port. Vessels should notify the Harbour Master, through their Agents of their ETA 24 hours before arrival and they will be advised of the Pilot boarding area. The boarding areas are generally 2.3 miles S.E. or N.E. of Hay Point Wharf, depending on whether the vessel is berthing port side or starboard side alongside.

Vessels must make a good lee for the pilot boat and have a pilot ladder rigged in accordance with the provisions of the Navigation (S.O.L.A.S.) Regulations.

Boarding of Pilots may be possible by helicopter if vessel meets certain requirements. The decision will be made after radio communication with the vessel.
ANCHORAGE: No. 1 Anchorage generally used by vessels which will be berthing port side to, is situated 2.3 miles S.E. of Hay Point Wharf. No. 2 Anchorage for vessels berthing starboard side to, is situated 2.3 miles N.E. of Hay Point Wharf. Ships will be advised of their anchorage position before arrival but the attention of Masters is drawn to the restricted area between Nos. 1 and 2 Anchorages where anchoring is prohibited.
RESTRICTIONS: A vessel arriving at the port must have its propeller totally immersed and be trimmed not more than 2.5 m. by the stern.

Maximum departure draft is dictated by the height of tide and is calculated on the basis of maintaining an underkeel clearance in the departure channel equal to 10% of draft + 0.6 m. Channel depth is 13.4 m. and vessels on maximum draft will sail 1 hour before HW.

While alongside vessels must maintain a minimum underkeel clearance of 1.5 m.
MAX. SIZE: The designed maximum size vessel for the berths is 200,000 d.w.t.
HEALTH: Radio Pratique may be requested through a vessels' Agents, between 12 and 24 hours prior to arrival. This is generally granted if there are no unusual circumstances. See "General" before first port.

On receipt of quarantine message the Agent will obtain from the Harbour Master an anchorage position and advise vessel not berthing on arrival.

Inspections may be carried out at the jetty or at anchorage at the discretion of the Quarantine Office.

Pratique is available in the berth on a 24 hour basis, 7 days per week.

Rat guards are to be maintained on all mooring lines whilst the vessel is alongside.

Whilst in the vicinity of the port, vessels are required to store garbage aboard in containers approved by the Quarantine Inspector.
RADIO: Radio messages can be sent through Sydney Radio (VIS) but within 24 hours of arrival Townsville Radio (VIT) provides a faster service.
Advice of Arrival: Dalrymple Bay: The port of Hay Point is a first port of entry and all vessels bound for this port to load at the Dalrymple Bay Coal Terminal facilities are to radio through the normal recognised coastal radio stations or by telex the following arrival notifications, addressing their messages to:

Cables: Shipserv Dalbay Mackay.
Telex: AA 46374.

The following ETA notices are required:

(i) 7 days before the intended arrival at the port, or on departure from the last discharge or loading port, whichever is the sooner, advising:
ETA at the port.
Whether the port is the first port of call in Australia.
Arrival condition (ballast or part loaded).
Cargo requirement.
Full or part cargo.

(ii) (a) 48 hours before intended arrival at the port advising:
ETA at the Anchorage Area/Pilot Boarding Ground within port limits.
Confirmation of tonnage intended to load.
Forward and after arrival draft.
Planned forward and after sailing draft.
Stowage plan.
Hatch loading sequence plan.
Distance between keel and hatch coaming.
(b) Masters of vessels calling to load part cargo only shall advise the following additional information:
If arriving part loaded:
  Berthing displacement.
  Previous loading port.
  Stowage of loaded cargo.
If completing loading as subsequent port(s):
  Next loading port.
(c) Masters of O.B.O. vessels are to furnish the following additional information:
Nature of the preceeding 3 cargoes the vessel has carried.
Date and place last petroleum product was discharged.
Statement on the condition of the slop tanks and whether these are pressed up or fully inerted and sealed.
The date and place of issue of the Gas Free Certificate carried on board.
Confirmation or variation of previously advised ETA at the port.

(iii) 24 hours before intended arrival at the port advising:
Confirmation or variation of previously advised ETA at the Anchorage/Pilot Boarding Ground.

(iv) Immediately upon arrival at the Anchorage/Pilot Boarding Ground, as designated, within port limits, advising:
Arrival/anchorage time.
Chart position.
Declaration that vessel is in all respects ready to load, with clean hatches, and hatch covers opened on berthing.
First pour.
Actual arrival draft forward and aft.

VHF: Call sign "Hay Point Harbour". A continuous watch is maintained on Channel 16. Working Channels are 14 and 12. Vessels arriving at the anchorage should confirm ETA 2 hours before arrival and then notify anchoring time. A continuous watch should be maintained on Channel 16 while at anchor.
TUGS: 2 tugs each of 75 tonnes bollard pull are available to service vessels using the Central Queensland Coal Associates wharves and 2 Z-peller tugs each of 55 tonnes bollard pull are available for the Dalrymple Bay Terminal. It is anticipated that a third similar tug will become available for the Dalrymple Bay Terminal during 1984. Tugs normally join vessel at pilot boarding area. Tugs lines are used.

BERTHS: The Port of Hay Point currently consists of 3 coal loading berths as follows:
Central Queensland Coal Associated Berth No. 1:

Berth Alignment	350° True
Dredged Depth	16.76 m. Below Datum
Dredged Width	60.96 m.
Dredged Length	342.90 m.
Nominal Loading Rate	4,000 t.p.h.
Shiploader Travel Distance	188.98 m.
Air Draft (From Chart Datum)	24.0 m.
Max. Height of Fenders Above Chart Datum	9.2 m.

Central Queensland Coal Associates Berth No. 2:

Berth Alignment	330° True
Dredged Depth	17.07 m. Below Datum
Dredged Width	60.96 m.
Dredged Length	365.76 m.
Nominal Loading Rate	6,000 t.p.h.
Max. Shiploader Travel Distance	191.41 m.
Normal Shiploader Travel Distance (Between Limit Switches)	181.36 m.
Air Draft (From Chart Datum)	24.0 m.
Max. Height of Fenders Above Chart Datum	10.0 m.

Dalrymple Bay Coal Terminal Berth No. 1:

Approach Trestle:	
Approach Trestle Length	3,850 m.
Trestle Conveyor Capacity	6,600 t.p.h.
Wharf:	
Design Vessel – Maximum	200,000 d.w.t.
Design Vessel – Minimum	20,000 d.w.t.
RL Top of Front (seaward) Rail	+17.6 l.w.d.
Number of Berthing Dolphins	7
Number of Mooring Dolphins	4
Distance between extreme Berthing Dolphins	254 m.
Distance between extreme Mooring Dolphins	490 m.
Berthing Dolphin Fender Type	Bridgestone – C2250H – R1 Cell Type
Berth Depth	−20.0 m. l.w.d.
Channel Depth	−13.4 m. l.w.d.
Maximum Predicted Spring Tide	6.7 m.
MHWS	5.49 m.
MHWN	4.23 m.
Available Draft in Channel at MHWS with Underkeel Clearance* of 2.27 m.	16.6 m.
Available Draft in Channel at MHWN with Underkeel Clearance* of 2.15 m.	15.5 m.
Wharf Conveyor Belt Width	2,000 mm.
Wharf Conveyor Belt Speed	4.94 m./sec.

*Underkeel Clearance = 10% of draft +0.61 m.

Moorings: Due to the open sea nature of the berths vessels with wire rope moorings should have a synthetic tail at least 10 m. long fitted to assist in mooring and to reduce breakages.

LOADING: Dalrymple Bay: Vessels shall be ready in all respects to commence loading on completion of mooring with holds clean and hatches open and present detailed loading plan, agreed to by the Terminal, which clearly shows hatch quantities with loading sequence and quantity of coal to be reserved for trimming, by hatches, including anticipated sailing draft.

Ballast shall be adjusted to ensure at HW a minimum clearance of 1 m. is maintained between the vessel's structure and the shiploader. Ballast to be discharged at a rate which prevents disruption to loading, final trimming and completion.

Loading Procedures: A portable radio and telephone will be placed on board for communications during shiploading operations.

The loader operator is in direct radio and telephone contact with the Control Room and the Production Foreman at all times.

The responsible ship's officer may direct the shiploader operator at any time.

The manner in which the coal is stowed is the sole responsibility of the Master or his nominee and his instructions and directions will be complied with within the limits of the Terminal facilities. Any changes in loading sequences must be immediately relayed to the Production Foreman.

The coal is reclaimed from the Terminal stockpiles by bucketwheel reclaimer or received direct from the rail receival pit and, after passing through a 1,000 tonne capacity surge bin and the automatic sampling station, is conveyed at a nominal rate of 6,600 t.p.h. to the shiploader, a distance of 3,880 m.

In the case of problems during loading, the Production Foreman may be contacted via the shiploader operator or the Control Room, the telephone numbers of which are listed on the Terminal Loading Plan, a copy of which is retained by the Master.

On directing the shiploader operator to stop loading during normal operations, there will be between 150 to 200 tonnes still to be received, coal that has to be cleared from the wharf belt to permit the loader to move from South to North.

At the completion of loading the operation is first stopped at the reclaimers and the whole system emptied of coal. The surge bin and all reclaim, jetty, wharf and shiploader belts have at the moment of stopping a variable amount of coal, depending on the position of the reclaimers, shiploader and the feed rate in use. The amount of coal may be up to 3,355 tonnes.

All coal contained on the outloading conveying system must be run off into the vessel on completion of loading. The Production Foreman will be able to give an estimate of the quantity to be expected. An allowance for these tonnages must be made during the final stages of loading.

It is essential for the efficient operation of the loading system that a minimum quantity of 250 tonnes be requested for the final pour. Smaller quantities cannot be handled effectively.

Red, green and white list lights, clearly visible to the shiploader operator, are recommended fittings on all vessels loading coal. A fixed white light shall indicate the vessel is upright.

The Shiploader Operator has been instructed to observe the trim lights and to keep the vessel upright during loading and to stop loading in the event of a hatch becoming too full.

The sole responsibility for the correct and safe loading of the vessel, as is customary, rests with the Master and it is stongly recommended that a responsible officer is on deck at all times directing and supervising the loading by mechanical shiploader to a spout trimmed condition. No mechanical or manual trimming will be undertaken by the Terminal Company. The vessel is to provide sufficient lights on board for night loading and shall open and close hatch covers.

Vessels nominated to load consignments for more than one parcel shall complete each parcel before starting the next.

Masters are cautioned that loading of coal is carried out by draft. Frequent "on the run" draft checks between hatch changes should be carried out. Whilst shiploading sequences are equipped with weight scales, these figures are to be used only as a guide. Reference to these will not relieve the Master of the responsibility of adequately maintaining draft checks and supervising the loading accordingly. No guarantee of accuracy can be given of these belt weight scales.

On directing the Shiploader Operator to stop loading in an emergency there will be about 150 tonnes to receive as the belts do not stop instantaneously. The loader may then be moved from North to South only, or loading resumed in the same hatch.

Subject to tide, ships shall be ready to vacate the loading berth on completion of loading and have all gear tested and available for use on departure.

Draft Survey: Weight determination of coal loaded onto vessels is carried out by Draft Survey, utilising the ship's scales to the nearest tonne, conducted by a Surveyor acceptable to the Terminal Company.

Immediately the vessel is berthed, the Surveyor will carry out an initial Draft Survey to determine all weights on board. The Surveyor will review the proposed loading plan and be available to advise the Master on the loading sequence and quantities most appropriate to the Terminal facilities and equipment and early despatch of the vessel.

During the final stages of loading, the Surveyor will attend the vessel and be available to advise the Master as required on the final trimming and cargo distribution.

Immediately on completion of loading the Surveyor will carry out the final survey and issue a Certificate of Weight in respect of the entire cargo loaded.

The Master or his nominee is required to assist the Surveyor in determining the quantity loaded and its hatchwise stowage.

Properly certified accurate and legible ships scales shall be made available to the Surveyor.

Gas-Freeing of Vessels: The Master of every O.B.O. vessel shall include the following information with the 48 hour arrival notice (ETA), addressed to:

By Radio: "Shipserv Dalbay Mackay".

By Telex: AA 46374.

(a) Nature of preceding 3 cargoes the vessel has carried.

(b) Date and place last petroleum product was discharged.

(c) Statement on the condition of the slop tanks.

(d) Date and place of issue of the Gas-Free Certificate carried on board.

See "Radio – Advice of Arrival".

No Gas-Free Certificate signed by the Ship's Master will be accepted.

The Master of an O.B.O. vessel shall not allow his ship to berth at the Terminal facilities unless the vessel is certified to be gas-free and a Certificate of Test has been issued by an authority acceptable to Dalrymple Bay Coal Terminal Pty. Ltd., certifying that the tanks, holds and/or spaces are free from explosive, flammable and injurious gases, fumes and vapours and slop tanks are pressed up or fully inerted and sealed, and such certificate is still valid.

Slop tanks pressed up or fully inerted and sealed shall not be opened whilst the vessel is alongside the berth.

All costs in connection with the inspection, testing and issue of a Certificate of Test in relation to a tank or hold or space for the purposes of these requirements shall be borne by the Owner of the ship.

A Notice of Readiness will not be accepted from an O.B.O. vessel unless it is certified gas-free in accordance with the above requirements.

Shiploader:

Maximum Loading Rate	6,600 t.p.h.
Average Loading Rate	6,000 t.p.h.
Shiploader Conveyor Belt Width	2,500 mm.
Shiploader Conveyor Belt Speed	3.2 m./sec.
Maximum Operating Wind Speed	72 k.p.h.
Maximum Reach of Chute from Front Rail	41.5 m.
Fender Face from Front Rail	7.5 m.
Maximum Reach of Chute from Fender Face	33.0 m.
Shuttle Travel	21.7 m.
Shiploader Longitudinal Travel	214 m.
Highest Boom Working Position	+12°
Lowest Boom Working Position	−10°
Distance from 0.0 l.w.d. to Underside of Boom in +12° Position at Fender Face (Air Draft)**	30.3 m.
Cyclone Security	Tie down to strongpoint

**Dimension shown provides for a clearance of 0.6 m. but location of Control Cabin and hatch covers should be checked for each berthing.

MEDICAL: Hospital and dental facilities available in Mackay 37 km. by road. Agent should if possible be notified at least 24 hours before arrival of medical attention required, or on Friday if arriving over weekend.

FRESH WATER: Not available.

FUEL: Not available.

DENSITY: Average 1024.

CONSULS: See "Brisbane".

REPAIRS: Minor repairs only. Vessels not permitted to immobilise at berths.

DRYDOCKS: See "Brisbane".

SURVEYORS: Cargo and draft surveyors in attendance at berths. On hire and gas-free surveys can be carried out. Arrange through Agents. Department of Transport Surveyor – see "Gladstone".

GANGWAY/DECK WATCHMEN: None available.

OPENING/CLOSING HATCHES: To be opened and closed by ships crew.

CUSTOMS ALLOWANCES: 200 cigarettes, 26 oz. bottle spirits every 10 days.

REPATRIATION: Readily available through Mackay Airport which has daily connections to Brisbane and worldwide.

AIRPORT: At Mackay 37 km. by road. Serviced by T.A.A. and Ansett. Regular daily flights to Brisbane and Sydney.

TIME: GMT plus 10 hours. No Summertime applicable. (1984).

HOLIDAYS: Public holidays as for Brisbane. Loading operations are unaffected except for Christmas Day.

POLICE/FIRE/AMBULANCE: Police Tel: 561 333. Ambulance Tel: 561 222. Fire – contact relevant terminal operating company.

EMERGENCY CO-ORDINATION CENTRE: Australian Coastal Surveillance Centre, Canberra. Search and Rescue Tel: (062) 475 244.
TELEPHONES: Available on each berth.
SERVICES: Compass adjusting and radio, radar or gyro repairs can be arranged if prior notice is given.
BANKS: Major Australian banks are represented in Mackay. Contact through ships' Agent.
STORING: Vessels can take small quantities of stores by truck. Large orders usually by barge subject to weather at C.Q.C.A. berths. D.B.C.T. berth has stores crane. No shore labour available.
SHORE LEAVE: Permitted. Nearest city Mackay 37 km. away.
IDENTIFICATION CARDS: Citizens of certain non-Commonwealth countries require identification cards.
GENERAL: *Charts and Publications:* Australian Pilot Volume III. Australian Chart No. Aust. 249. Sailing directions and other information for the Ports and Harbours of Queensland. Ports of Queensland and their services.

Weather Conditions: The Port of Hay Point is situated in the cyclone belt. An incidence of about 2 cyclones per year can be expected on the Queensland coast, usually during the cyclone season between November and April.

Prevailing winds are South-Easterly and velocities in excess of 25 knots are infrequent.

The port facilities are sheltered from major swell by the Great Barrier Reef. However, prolonged South-Easterly winds of more than 20 knots can occasionally make conditions unsafe alongside and Masters are advised to order Pilot and tugs in sufficient time should these conditions occur.

Tides: Tidal streams are generally weak, reaching a maximum strength of 2 knots at Spring tides. The flood tide sets 150° and the ebb sets 330° parallel to the berth with the direction of the stream changing about 1.5 hours before the predicted tide times.

Maximum Predicted Spring Tide	6.70 m.
Minimum Predicted Spring Tide	−0.10 m.
Mean Spring Tidal Range	4.75 m.
Mean Neap Tidal Range	2.24 m.
Mean Sea Level above Chart Datum	3.11 m.

The Port of Hay Point is a standard port in the Australian National Tide Tables published by the Hydrographer, Royal Australian Navy and in the Official Tide Tables for Queensland published by the Department of Harbours & Marine.

The minimum underkeel clearance of 10% of the vessel's loaded draft plus 0.61 m. allows a maximum drafted vessel to sail 1 hour before HW. The least depth in the channel is −13.41 m. l.w.d.

The Harbour Master has advised maximum permissible drafts relative to predicted height of tides, for general guidance, which may be amended from time to time at the Harbour Master's discretion to suit prevailing conditions.

AUTHORITY: Harbours Corporation of Queensland, P.O.Box 2195, Brisbane. *Contact:* Manager, Port Affairs. *Tel:* (07) 227 8823. *Telex:* Harbrs AA 40760.

Harbour Master, Hay Point – Captain A. J. F. Diack. *Tel:* (079) 563 109. *Telex:* Haypt AA 46483.

AGENT: Sub-Agent of Patrick Agencies, Brisbane.

HOBART, Tasmania (including Risdon):
42.53 S. 147.20 E. **(See Plan Book)**

PORT LIMITS: 'Harbour' means so much of the waters of the River Derwent and its Estuary as lie to the Northward of a line drawn from the Derwent Light (on the Iron Pot Islet) to Kelly Point, on North Bruny; together with so much of the D'Entrecasteaux Channel as lies to the Northward of a line drawn from the Southern end of Partridge Island to Southport Island; and together with all bays and estuaries opening either into the said River Derwent or the said D'Entrecasteaux Channel.
DOCUMENTS: As for all Australian Ports.
PILOTAGE: Pilotage is compulsory for all vessels exceeding 35 m. in length. For vessels bound for Hobart (including Risdon) the pilot boarding ground is on a line drawn from White Rock Lighthouse (Chart AUS 171 – Lat. 42° 58.7′ S., Long. 147° 23.9′ E., Fl. W. 3 secs., 13 m., 8 nautical miles); to Crayfish Point on the Western bank of the River Derwent. Notice of ETA and request for a Pilot must be advised at least 24 hours in advance and confirmation or amendment of this ETA must be made not less than 2 hours prior to the vessel's arrival at the pilot station. Channel 16 VHF is continuously monitored and ETA may be confirmed or adjusted on this frequency using the call sign "Hobart Harbour". Vessels can generally establish contact on Channel 16 at ranges in excess of 50 nautical miles from Hobart and are requested to do so. Telex facilities are available using HARHOB AA58319.

The pilot boat is 13.1 m. LOA, white upper works, blue hull with the word 'Pilots' on each side.

ANCHORAGE: Vessels awaiting Pilot may anchor 1 mile S.E. of Crayfish Point or 1 mile S.W. of White Rock Light, depending on weather conditions. Depth of water is 20 m. with good holding ground. Vessels wishing to proceed to the Quarantine Anchorage will require a Pilot.
RESTRICTIONS: Navigation within the Port of Hobart is on a 24 hour basis with the following exceptions:

(i) Vessels of 25 m. or more in length will not be permitted to pass under the Tasman Bridge from Monday to Friday inclusive between the hours of 0700 and 0915 and 1600 to 1830.
(ii) At Risdon vessels exceeding 175 m. in length and of a draft more than 10 m. may be restricted from departing berth during the hours of darkness if such vessel has to swing to proceed to sea.

The following overhead clearance restrictions exist within the Port of Hobart:

(i) The centre line of the Main Navigation Span of the Tasman Bridge is 45 m. above MHWS.
(ii) The overhead clearance of the power cable just South of the Electrolytic Zinc Company Wharf at Risdon is 45.7 m. above MHWS.

MAX. SIZE: The maximum depth of water at the entrance to the River Derwent is 15.2 m. Ships of up to 12.6 m. draft can be accommodated at Macquarie No. 4 Berth. There is no restriction as to length and beam. Max. draft available at Risdon is 10.7 m.
HEALTH: Australian Commonwealth Rules apply. The Commonwealth Department of Health Quarantine Doctor/Officer will clear first entry vessels at all times, boarding at Quarantine Anchorage or by arrangement.
RADIO: Hobart Radio – call sign VIH. Hours of duty EST (add 1 hour for Summer Time) Monday to Saturday inclusive 0730 – 1730 hrs., Sunday 0800 – 1600 hrs.
RADAR: There is no Port Control Radar but the pilot boats are radar equipped. Minimal fog may occur during April to July but shipping is seldom delayed because of it.
VHF: The Marine Board of Hobart maintain a listening watch on Channel 16 and Channel 67 on a 24 hour basis from the Port Control Building Hobart. When contact has been established all traffic must be passed through Channel 12. Tugs are worked on Channels 6 or 8. Vessels can usually establish contact on Channel 16 at ranges in excess of 50 nautical miles and are requested to do so. (See also "Pilotage").
TUGS: Five tugs as available for assisting vessels. Their bollard pulls vary from 10 to 25 tonnes. Vessels bound for Risdon will pick the tug up just North of the Tasman Bridge. A nominal additional charge is made for the use of tugs' lines.

BERTHING:
Hobart:
Macquarie No.4: Common user container/general cargo berth. Quay length 244 m., water depth 12.6 m. 3 ha. of sealed cargo area, adequate reefer holding points, rail siding connecting into main rail system, wharf apron, axle loading 70 tonnes.
Macquarie No. 2/3: Common user deep sea berth suitable for quarter ramp vessels. Quay length 328.3 m., depth 10 m. to 14.6 m.
Macquarie No. 1: General cargo berth, quay length 168.9 m., water depth 6.2 m. to 9.8 m.
Elizabeth St. Pier: Suitable for specialised car carriers with stern quarter ramps. Used for discharge and storage of vehicles. Quay length 153 m., water depth 7 m. to 11.3 m.
Princes No. 1: Common user Ro-Ro berth for vessels equipped with their own ramps. Quay length 138 m., water depth 7.2 m. Used by William Holyman & Sons, ramp is fixed with an axle load SWL of 40 tonnes.
Princes No. 2: General cargo and bulk wheat discharge berth. Quay length 167.7 m., water depth 8.0 m.
Macquarie No. 5/6: Terminal leased to Union Steamship Co., comprises 2 ro-ro berths with adjustable ramps each having an axle loading SWL of 59 tonnes. Quay lengths 135 m. and 189 m., water depth 10.1 m. to 13.6 m. A marshalling area provides 4.4 ha. of fenced hardstanding.
Selfs Point Oil Wharf: Dolphin type berth with a wharf face length of 95 m., length over dolphins of 252 m., and a water depth of 11.0 m. Facilities are available for discharge of all black and white products including LPG. In addition vessels may obtain supplies of marine fuel oil and marine diesel oil for bunkers.
Risdon:
Owned by the Electrolytic Zinc Company of Australasia, situated 2 miles above the Tasman Bridge on the Western side of the river. Quay length 400 m., water depth 10.4 m. to 10.7 m. Imports of raw and semi-processed materials such as zinc concentrates, phosphate rock, muriate of potash etc., are discharged by a conveyor system. Exports of manufactured zinc, cadmium, sulphate of ammonia are loaded via 2 modern gantry type cranes of 25 tonnes SWL, operating from mid-1984.

Facilities are available for sulphuric acid to be loaded into tankers at a 151 m. acid wharf with a minimum depth of 7.9 m.

CRANES: One Coles "Colossus" 254 tonne fully mobile crane – capacity to handle 30 tonnes at 33 m. outreach and 170 tonnes at 9.1 m. outreach through 360° of slew and a working rate of 15 to 20 lifts per hour. 2×31 tonne cranes; 2×15 tonne cranes; forklifts ranging from 170 kg. to 23,000 kg., 6 tow-motors; and 1×12 m. tri-axle trailer container handling crane.
BRIDGES: See "Restrictions".
STEVEDORES: Sundays to Fridays: Working hours in 3 shifts: 0800 – 1500 hrs., 1500 – 2200 hrs., 0001 – 0700 hrs. Saturdays: to 1200 hrs. with extension to 1500 hrs. if vessel is sailing. Weekend and Monday labour must be ordered by 1300 hrs. Friday.
MEDICAL: Full hospital facilities available without prior notice.
DENSITY: Varies from 1016 at Risdon to 1025 at Hobart.
FRESH WATER: Fresh water is available at all wharves. Delivery is effected via hydrants at convenient points along the wharves. Hose connections are 64 mm. diameter standard thread and delivery rates from 40 tonnes to 60 tonnes per hour per connection.
FUEL: All grades of fuels and lubricants available. Vessels may be supplied at Selfs Pt. Wharf (see "Berthing") or by road tankers.
TANKERS: See "Berthing".

CONSULS: Consulates exist for the following countries:

Denmark
Finland
France
Germany (Fed. Republic)
Greece
Italy
Japan
Netherlands
Norway
Sweden
Switzerland
United Kingdom

REPAIRS: Facilities available for minor engine and hull repairs. Several repair firms are situated in Hobart.
DRY DOCKS: No dry docks, however a modern slipway owned and operated by the Marine Board is available for vessels up to 1,200 tonnes displacement.

SURVEYORS: A Commonwealth Surveyor is available and Lloyd's Agents also represent other Classification Societies.

GANGWAY/DECK WATCHMEN: Can be supplied at Union award rates. Watchmen will be required during discharge/loading of dangerous cargoes.

OPENING/CLOSING HATCHES: Normally handled by stevedores while alongside or by ship's crew before arrival.

CUSTOMS ALLOWANCES: Australian Commonwealth Regulations apply.

CARGO GEAR: Discharge/loading is usually by ship's gear except at Risdon. However a number of cranes are available for hire from the Marine Board (see "Berthing" and "Cranes").

REPATRIATION: All facilities exist for crew changes and repatriation of seaman. Scheduled aircraft connect with all states several times daily where services operate world-wide and there is also one overseas flight per week via New Zealand.

TIME: Local Time (Eastern Standard Time) 10 hours ahead of GMT. Summer Time is in force from October to March when clocks are advanced to GMT plus 11 hours.

HOLIDAYS: No work will be performed on Waterside Workers' Picnic Day (January); Labour Day (March); Good Friday; Anzac Day (25th April); and Christmas Day (25th December). Work is restricted to certain types of vessels and conditions on New Year's Day (1st January); and Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Automatic fire alarms are installed throughout the port and emergencies can be reported to Port Control on Channel 16, 24 hours a day. Otherwise fire, police and ambulance calls may be reported by dialling 000.

TELEPHONES: Available at all wharves and may be placed on board vessels. Standard rates apply and coin operated telephones are available for use by ship's crews.

SHORE LEAVE: No restriction on crew shore leave or need for shore passes as long as Immigration and Customs requirements have been satisfied.

SERVICES: A number of Compass Adjusters are available.

AUTHORITY: Marine Board of Hobart, P.O.Box 202 B, 1 Franklin Wharf, Hobart, Tasmania, 7001. *Tel:* (02) 346722. *Telex:* Marhob AA 58319. *Contact:* Captain J. M. E. Lucas, Harbour Master.

AGENT: Sub-agent of Patrick Agencies, Melbourne.

LAUNCESTON, Tasmania (including Inspection Head, Beauty Point, Bell Bay): 41.27 S. 147.07 E.

(See Plan Book)

PORT LIMITS: A vessel is considered to have arrived when at the Pilot boarding ground.

DOCUMENTS: Agents prepare Bills of Lading and Shipping Documents. Only documents required Crew List and Passenger List. Light Dues receipt is necessary if payment is made before arrival.

PILOTAGE: Compulsory for vessels over 50 gross tons. Pilot boards off Low Head lighthouse, slightly to East of leads in line.

Contact Pilot by radio giving ETA 24 hours before arrival. Telegraphic address "Harbormstr". Telex: "PBBAY AA58640" (manned 24 hours). Pilots equipped with VHF Channels 16 and 12. "G" Flag to be flown on arrival.

Instructions for boarding given by Pilot over radio-telephone.

ANCHORAGE:

Position *(a)* Low Head Lat. 41° 03′ 32″ S., Long. 146° 47′ 18″ E.
(b) 1.15 miles 280° from *(a)*
(c) 0.9 miles 308° from *(b)*
(d) 0.85 miles 038° from *(c)*
(e) 0.9 miles 128° from *(d)*
thence 0.85 miles 218° to *(b)*

RESTRICTIONS: *Entry:* Vessels up to 168 m. overall length can enter the river at any time depending on draft of vessel. Vessels over 168 m. overall length enter on flood tide only. Earliest entry is 30 minutes after LW at George Town. Vessels then enter according to draft through to HW at George Town.

Departure: Vessels up to 168 m. overall length can depart at any time depending on draft of vessel. Vessels over 168 m. overall length single up for departure within the following limits:

Vessels berthed at Woodchip Berths – from 1 hour before, up to HW or LW depending on draft of vessel.

Vessels berthed at all other down river berths – from 1 hour before to 1 hour after HW or LW depending on draft of vessel.

Note: Vessels wishing to swing at the Western berths, should, under normal conditions of wind and tide be taking the Pilot on not less than two hours before HW at George Town.

At the Eastern or Bell Bay berths it is possible to swing providing vessel enters not less than 30 minutes before HW at George Town.

Night navigation undertaken (tankers now operate at night). Over 168 m. length at Pilot's discretion.

MAX. SIZE: Max. permissible draft 9.0 m. at zero water. 11.10 m. at HW. Length restricted to approx. 250 m., and beam 45 m. Vessels over 168 m. length cannot work Channel during ebb tide. Under keel clearance to be 1.3 m.

HEALTH: Organised by ship's Agent. Notify Agent prior to arrival. Pratique automatic if vessel visits other ports in Australia prior calling Launceston.

Radio Pratique: The Master of any vessel arriving from overseas should, not more than 24 hours and not less than 12 hours before arrival, transmit to the Quarantine Officer, if necessary through the Agent, a statement giving the following details:

A. Name, type and nationality of vessel.
B. Itinerary for last 21 days. If over 21 days from last port, name of port and date of departure.
C. Name of first Australian port and ETA.
D. Number of crew.
E. Number of passengers.
F. Any deaths on board during the voyage? Give details.
G. Any cases of illness during the last 21 days with a fever of 38°C or above, and:
(a) accompanied by rash, jaundice or glandular swelling, or
(b) accompanied by diarrhoea lasting longer than 24 hours.
H. Persons suffering from venereal disease during the voyage?
I. Live fish, birds, reptiles or other animals being carried (including ship's pets).
J. Livestock carried on previous voyages in the last six months? Please advise type of livestock, date of voyage and ports visited. Have all stock-carrying compartments been thoroughly cleaned and disinfected?
K. Do you request radio pratique?

RADIO: Melbourne VIM or Hobart VIH.

VHF: Port Radio Control keeps 24 hour watch on Channel 16. (Distress watch maintained on 2182 kHz DSB and 27-880 MHz DSB). Vessels to report updated ETA 3 hours prior to arrival on Channel 16. Pilot boat, tugs and launches fitted with Channels 16, 12, 8 and 6. Pilot launch fitted with radar.

TUGS: Two tugs, 21 and 32 ton bollard pull at the deep water berths. Both fitted with radar. Both fitted with fire monitors and one with foam.

BERTHING:

Bell Bay: On the Eastern shore within 11 km. of the entrance.

No. 1, Comalco Berth (Private): A concrete decked and pile wharf 152 m.×19 m., with 2 mooring dolphins 330 m. apart. Cranes – 2×12.5 tons grabbing cranes, each with rated capacity of 300 t.p.h. travel full length. Max. radius 20.57 m. Max. outreach from wharf fenders 15.24 m. Centre of crane to outer edge of wharf fenders 5.33 m. Max. height of lift above deck at max. radius 19.81 m. Concrete cargo bin (uncovered) runs almost entire length of wharf. Alumina now being unloaded by self unloading vessels. Alumina discharge to hoppers then by endless belt to factory. Other bulk cargoes discharge to hoppers then road hauled to the works. Oil fuel via 250 mm. pipe. Base of tanks 30.48 m. above wharf level. Deck loading 2.7 tons/sq.m., (5 cwt/sq.ft.). Axle loading 20 tons. Fresh water available. Telephone plug ship to shore. Bunkering – Road tanker. Depth alongside 11.1 m. at LAT. Height of deck above datum 5.40 m.

No. 2, A.N.L., Ro/Ro, and Container Berth: A specially designed terminal for the Bass Strait and Sydney vehicular deck ships and equipped with stern loading facilities capable of carrying wheeled or mobile cargo in excess of 120 tons gross weight. Length of wharf 86.28 m. Crane – 25 ton for handling of containers and unit loads travels 28 m. along wharf. Max. radius 32 m. Max. outreach from wharf fenders 24.39 m. Centre of crane to outer edge of wharf fenders 7.62 m. Max. height of lift above deck at max. radius 18.29 m. Ramp: max. vehicle width 8.140 m., with capacity exceeding 100 tonnes. Mooring dolphin 223 m. East of ramp end. Marshalling area 4.72 ha. Power Outlets – 110 for freezer containers outlets 415 V. 30 Amp. Deck loading – 2.7 tons/sq.m. (5 cwt/sq.ft.). Axle loading 14.3 tons. Wharf power 1×240 V., 10 Amp. Fresh water available. Telephone plug ship to shore. Bunkering – Road tanker. Depth alongside 8.4 m. currently being dredged to 9.5 m. at L.A.T. Height of deck above datum 5.03 m.

No. 3, Bell Bay Wharf: A concrete decked, steel piled wharf – 152 m.×20 m. providing for handling of general and bulk cargoes. Mooring dolphins 236 m. apart. Crane – 12.5 ton kangaroo pouch type grabbing crane on rails full length of wharf. Max. radius 26.90 m. Max. outreach from wharf fenders 16.7 m. Centre of crane to outer edge of wharf fenders 10.13 m. Max. height of lift above deck at max. radius 21.34 m. Grabbing rate of 450 t.p.h. Transit shed space 929 sq.m. Deck loading 4.4 tons/sq.m. (8 cwt/sq.ft.), 140 ton loads on suitable transporters. Axle loading 20 tons. Wharf power 2×415 V., 30 Amp.; 2×240 V., 10 Amp. Fresh water available. Telephone plug ship to shore. Bunkering – Road tanker. Depth alongside 11.2 m. at LAT. Height of deck above datum 5.18 m.

No. 4, Tanker Berth: A 'T' head, concrete decked, timber berth 25.5 m.×12 m. with separate fender dolphins 61 m. apart and mooring dolphins 262 m. apart. Pipe-lines – (a) two 250 mm., one for black and one for clean oil (B.P. and Mobil); (b) pipe for discharge of LPG load 440 kpa (64 lb./sq.in.) (Mobil). Bottom of tanks in tank farms 33 m. above manifolds on wharf. Axle loading 14.3 tons. Fresh water available. Wharf power not available. Telephone plug ship to shore. Bunkering – fuel oil 100 mm. and 150 mm. connection, 50 – 60 t.p.h. Diesel oil by road tanker 75 mm. connection at 18 tons per 1.25 hours. Depth alongside 11.2 m. at LAT. Height of deck above datum 5.33 m.

No. 5, Common User Berth (General, Container and Ro/Ro): A concrete decked, steel piled wharf 174 m. long. A heavy duty berth designed for container, Ro/Ro, conventional and bulk cargoes. Mooring dolphin 101 m. West of wharf end. Crane 50 ton – travelling length of wharf equipped with spreaders and other equipment for the handling of 6.1 m. and 12.2 m. ISO containers and grabbing by special arrangement. Max. radius 32 m. (40 ton), 22.86 m. (50 ton). Max. outreach from wharf fenders 24.38 m. (40 ton), 15.24 m. (50 ton). Centre of crane to outer edge of wharf fenders 7.62 m. Max. height of lift above deck at max. radius 24.38 m. Ro/Ro Ramp – 8.23 m. wide, stern loading ramp with capacity in excess of 180 tons. Rail siding at ship side. Marshalling area 2.615 ha. Power outlets: 72 power outlets using double adaptors gives a total of 144 refrigerated containers. Outlets 415 V. 30 amps. Deck loading 3.23 tons/sq.m. (672 lb./sq.ft.). Axle loading (a) deck and pavement – 50 tons; (b) ramp 52.4 tons. Fresh water available. Wharf power 3×415 V., 30 Amp; 3×240 V., 10 Amp. Telephone plug ship to shore. Bunkering – Road tanker. Depth alongside 12.1 m. at LAT. Depth in front of ramp 9.1 m. at LAT. Height of deck above datum 5.03 m.

Bell Bay Industrial Area: (a) Cold storage capacity of 22,940 cu.m. (b) Stock yards – area 590 sq.m.

Long Reach: On the Eastern shore within 16 km. of the entrance.
Thermal Station Berth: A 'T' head concrete decked, steel piled wharf 26.2 m.×13.4 m. with concrete approach from land 3.66 m. wide. Separate fender dolphins are 61 m. apart and mooring dolphins are 262 m. apart. Pipes for discharge 3×250 mm. lines feeding into 2×300 mm. lines to 3×15,000 ton tanks – head 0.00 m. when tank is empty to 18.29 m. when tank is full. Deck loading 488 kg/sq.m. (100 lb/sq.ft.). Axle loading of wharf approach 14.3 tons. Fresh water available. No wharf power or telephone plug. Bunkering – Road tanker to 20 tons all up weight. Depth alongside 12.3 m. at LAT. Height of deck above datum 5.66 m.
No. 1, Woodchip Berth – Northern: Forest Resources berthing face 229 m. long consisting of 5 fender dolphins and 4 mooring dolphins; 2 at 450 m. apart; 2 shore dolphins at 208 m. apart. Steel walkway between dolphins is 1.22 m. wide and approach road is 3.81 m. wide. Woodchip loader (fixed) situated on central dolphin with loading rate of 700 t.p.h. Fresh water available. No wharf power. Telephone ship to shore. No bunkering. Depth alongside 11.5 m. at LAT. Height of deck above datum 5.64 m.
No. 2, Woodchip Berth – Southern: Associated Pulp and Paper Mills Ltd., berthing face 229 m. long consisting of 5 fender dolphins and 4 mooring dolphins; 2 at 450 m. apart; 2 shore dolphins at 211 m. apart. Steel walkway between dolphins is 1.07 m. wide. Approach from land by 18.3 m. long bridge. Woodchip loader (fixed) situated on central dolphin with loading rate of 700 t.p.h. Axle loadings on deck and approach roadway 14.3 tons. Forklift 50 tons. Fresh water available. Telephone plug ship to shore. No bunkering. Depth alongside 11.2 m. at LAT. Height of deck (loading dolphin) above datum 6.86 m.

Inspection Head: On the Western shore within 11 km. of the entrance.
Inspection Head Wharf: No. 1 Northern End – 186 m. long, concrete decked, steel piled.

No. 2 Southern End – 149 m. long, concrete decked and piled.

Overseas berth with 1854.4 sq.m. of shed space and 624.7 cu.m. of cool storage. Mooring dolphins 2 at 435 m. apart. Wheat loader 2×"Neuro" unloaders with loading rate of 250 t.p.h. Crane – 5 ton stiff leg derrick on S.W. corner of No. 2 . Max. radius 13.72 m. Max. outreach from wharf fenders 8.59 m. (West), 12.19 m. (South). Centre of crane to outer edge of wharf fenders 5.13 m. (West), 1.52 m. (South). 198 m. swinging room for vessels is available off the wharf. Deck loading 2.7 tons/sq.m. (5 cwt/sq.ft.). Axle loading 20 tons. Fresh water available. Wharf power 8×240 V., 10 Amp; 8×415 V., 30 Amp. Telephone plug ship to shore. Bunkering – Road tanker. Depth alongside 10.0 m. at LAT. Height of deck above datum 5.33 m.

Beauty Point: *Australian Maritime College:* A private 'T' head concrete jetty, 60 m.×9 m. with 2 mooring dolphins 90 m. apart. A side pontoon plus lifeboat deck exist on Northern side of jetty approach. Deck loading 1.5 tons/sq.m. (2.8 cwt/sq.ft.). Axle loading 14.3 tons. Depth alongside 10.0 m. average. Height of deck above datum 4.5 m.
Small Boats' Marina: Constructed as a pontoon and catwalk type with amenities block adjacent to car park area. Total berths 44. Fresh water available.

Hillwood: On the Eastern shore 32 km. from the entrance. A Timber jetty 18 m.×24 m. Depth alongside 4.2 m. at LWOST.

Launceston: *King's Wharf:* A concrete decked and piled wharf providing a total berthing length of 295.3 m. with 2,406 sq.m. of shed space. Wharf is equipped with 50 ton bollards every 18.3 m. Deck loading 2.7 tons/sq.m. (5 cwt/sq.ft.). Axle loading 13 tons. Wharfside power 5×415 V., 30 Amp. Fresh water available. Depth alongside subject to variation. Height of deck above datum 5.64 m. Next section of wharf is demolished. Remaining section is P.L.A. Plant Berth.
Cattle Jetty: A 'T' shaped timber deck, 27.3 m. long connected to holding and receiving yards by adjustable gangway. Depth alongside subject to variation. Height of deck above datum 5.64 m.
Wheat Berth: A concrete decked and timber piled wharf 12.80 m. long with facilities for bulk unloading. Deck loading 2.7 tons/sq.m. (5 cwt/sq.ft.). Axle loading 13 tons. Fresh water available. Wharf power available. Telephone plug ship to shore. Depth alongside subject to variation. Height of deck above datum 5.61 m.

North of this is a walkway 62 m. long with mooring hooks. South is a walkway connected to a catwalk 31 m. long ending in a mooring dolphin.

CRANES: See "Berthing".
BULK CARGO FACILITIES: See "Berthing".
SPECIALISED CARGO-HANDLING FACILITIES: See "Berthing".
BRIDGES: No bridges for large overseas shipping. Some inter-state vessels proceeding to Launceston will pass under Batman Bridge – 27 m. mast height allows 0.9 m. clearance at HW.
STEVEDORES: Agent for ship arranges stevedores.
MEDICAL: Agents should be notified to prepare for medical attention or hospitalisation. Hospitals at Launceston, Beaconsfield, and George Town.
TANKERS: See "Berthing". No. 4 Bell Bay Tanker Berth, Long Reach Thermal Station Berth and No. 1 Bell Bay Comalco Berth.
DENSITY: 1012 to 1028, depending on rainfall.
FRESH WATER: Fresh water available at all berths. Delivery 30 t.p.h. by hose.
FUEL: See "Berthing".
FIRE PRECAUTIONS: Tankers governed by the Association of Australian Port and Marine Authorities "Rules for the Handling of Dangerous Goods and Oils in Ports".
CONSULS: None.
REPAIRS: All deck and engine repairs are possible.
DRY DOCK: *R. A. Ferrall Shiplift:* Adjacent to the Northern end of Kings Wharf. A shiplift docking complex 105.3 m.×25 m., capable of lifting ships to 65 m. in length, 18 m. beam, 5.5 m. draft and a displacement of 2,160 tonnes. A transfer system is provided for up to three 700 tonne displacement vessels leaving the platform free for larger vessels. A 17.5 ton derrick crane covers the aft section of the docking platform. Max. radius 25.87 m. (15 tons), 19.81 m. (17.5 tons). Max. height of lift above deck at max. radius 9.75 m. A concrete fitting out berth is also provided adjacent to the complex. Deck loading 4.3 tons/sq.m. (7.87 cwt/sq.ft.). Axle loading 26.7 tons (with max. weight vessel) – 45 tons (if vessel weight less than 1,500 tons). Height of deck above datum 5.64 m.
William Hart Dockyard: A steel and concrete graving dock with a clear width at the entrance of 12.8 m., capable of accommodating ships of up to 62.5 m. in length and 3.66 m. draft.

Fitting Out Berth – Town Pier (forms part of William Hart Dockyard). A concrete decked berth 135 m. long. Deck loading 2.7 tons/sq.m. (5 cwt/sq.ft.). Axle loading 14.3 tons. Wharf power 1×240 V., 10 Amp. Fresh water available. Depth alongside 3.0 m. to 4.0 m. at LWOST. Height of deck above datum 4.98 m.

SURVEYORS: Lloyds, ABS and N.V. are represented.
GANGWAY/DECK WATCHMEN. Most vessels supply their own. May be supplied if required. Tidal port makes this requirement necessary.
HATCHES: Opening/Closing usually by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams of tobacco per man; 1 opened litre of spirits per man; stores sealed on arrival.
CARGO GEAR: See "Berthing". Certificates of loading gear and derrick tests to be produced. Also see "Melbourne".
REPATRIATION: Arranged through ship's Agents.
AIRPORT: Approx. 64 km. from Bell Bay to airport, regular services.
TIME: EST; clocks advanced by 1 hour October-March.
HOLIDAYS: Good Friday, Anzac Day, Christmas Day and New Year's Day close holidays, work on other holidays may be arranged through Agents.
POLICE/AMBULANCE/FIRE: Port Radio Control must be advised in the event of fire. Inspection Head 831141; 831204; 831109 (fire calls only), Bell Bay 821566; 821680; 821717 (fire calls only).
TELEPHONES: Ship-to-shore phones available.
EMERGENCY CO-ORDINATION CENTRE: Port of Launceston Authority, Radio Control at Bell Bay, Tel: 821222 or 329711, Telex: PBBAY AA58640 (24 hour operation).
STORING: Vessels stored by truck; customs require stores be "entered for export".
SHORE LEAVE: When Immigration and Customs requirements have been satisfied there is no restriction on crew shore leave so long as they rejoin the vessel on departure. There is no need for identity cards or shore passes except in so far that non-English speaking persons may wish to identify themselves.
SHIP SUPPLY SERVICES: No service available.

In cases of emergency upon request, the pilot boat has been used for removing sick crew members, taking small quantities of stores and repair people to vessels outside the port. Water has been supplied in small quantities from the tugs to vessels anchored off the port.

There is no all weather anchorage outside the port and in many instances it would be more appropriate to bring a vessel to anchor within the port at Bell Bay for any required services.

In the case of serious emergency and a vessel was unable to enter the port, depending upon circumstances, Coastal Surveillance, Canberra would if needs be, organise a helicopter to be sent from Melbourne.

DEVELOPMENTS: Continuous reclamation with fill, downstream from No. 5 Berth Bell Bay with possible extension of berth size and marshalling area within 2 years.
AUTHORITY: Port of Launceston Authority, P.O.Box 257C, Launceston. 7250. *Tel:* (003) 329711. *Telex:* Plaun AA 58730. *Cables:* Portlaun. *Contact:* General Manager.

Harbour Master: Captain R. E. N. Barber (Bell Bay). *Tel:* George Town (003) 821222. *Telex:* Pbbay AA58640.

AGENT: Sub-Agent of Patrick Agencies, Melbourne.

LUCINDA, Queensland: 18.32 S. 146.20 E.

(See Plan Book)

LOCATION: Lucinda is a first port of call and is situated in position Lat. 18° 32′ S., Long. 146° 20′ E. This port is approximately 680 miles North of Brisbane.
PORT LIMITS: See "Plan".
PILOTAGE: Location of pilotage boarding ground for the bulk sugar loading berth is Lat. 18° 30′ S., Long. 146° 24′ E.

The pilot vessel is equipped with VHF Channels 16, 12 and 6. No regular watch is kept.

For the inshore berth the pilot boarding ground is in position Lat. 18° 15′ S., Long. 146° 03.5′ E.

HEALTH: Pratique available 24 hours a day, 7 days a week. This is carried out alongside.
TUGS: Required for all movements.
BERTHING: *Sugar Wharf:* The sugar wharf has an approach jetty from the shore 5.76 km. in length. The berth is 224 m. long.

The wharf is used for the export of bulk sugar which is loaded via a travelling gantry.

The depth of water at LWOST is 13.6 m.

The mean Spring rise is from 0.5 m. to 2.9 m. whilst the mean water neap rise is from 1.2 m. to 2.1 m.

The sugar berth was constructed to accommodate vessels of 40/45,000 d.w.t. with loading rate of up to 1,420 tonnes/p.h. at the offshore deepwater wharf. Tugs are required for all movements. Berth starboard side to. The maximum all up weight of vehicles allowed on wharf is 5 tonnes gross. There is a height clearance of 2.1 m. on apron.

There are 3 sheds and are confined to bulk sugar storage only. Total capacity 231,000 tonnes. (400,000 tonnes shipped out in 1980).

Inshore Berth: Length 133.35 m. Depth 9.0 m. Imports bulk aqua-ammonia and exports bulk molasses.

FRESH WATER: Not available.
FUEL: Not available.
GENERAL: *Stores:* Available from Townsville but should be ordered prior to arrival.
AUTHORITY: Department of Harbours and Marine, P.O.Box 1921, Townsville, Queensland 4810. *Tel:* 71-5135. *Telex:* 47124. *Cables:* Harbour Master - Townsville. *Contact:* Harbour Master.
AGENT: See "Townsville".

MACKAY, Queensland: 21.06 S. 149.14 E. (See Plan Book)

CERTIFICATES/DOCUMENTS/CUSTOMS ALLOWANCES: See "Melbourne".
PORT LIMITS: As for anchorage.
PILOTAGE: Compulsory, service obtained by radio to Agents at least 24 hours before ETA. Pilots will board in position Lat. 21° 06.94′ S., Long. 149° 15.22′ E. To allow time for manoeuvring, vessels should be under weigh at the Pilot boarding time. Masters are advised not to manoeuvre West of a line between Slade Island and Flat Top Island.
ANCHORAGES: *Prohibited Anchorages:*
(a) Lat. 21° 07.63′ S., Long. 149° 13.20′ E.
(b) Lat. 21° 07.63′ S., Long. 149° 15.70′ E.
(c) Lat. 21° 06.78′ S., Long. 149° 16.55′ E.
(d) Lat. 21° 05.82′ S., Long. 149° 13.45′ E.
RESTRICTIONS: None. Day or night access.
MAX. SIZE: Up to 620 ft. (189 m.). Largest vessels load at bulk sugar berth, max. length governed by length of traverse of loading appliance winch 445 ft. 8 in. (136 m.) between hatches.

Vessels up to 650 ft. berthed at Breast Wharf subject to Harbour Master's approval, state and height of tide, daylight, and draft, etc.
HEALTH: See "Melbourne". Inspection at anchorage or at berth.
RADIO: See "Brisbane". A VHF Port Radio Station has been established at Mackay Harbour. Frequency: Channels 67, 16, 13, 11 and 6, call sign "Mackay Harbour". Hours: Continuous.
TUGS: Two tugs available, 12 tons bollard pull each.
BERTHING:

Berth No.	*Length* (m.)	*Depth* (m.)
1.	123.00	10.6
2.	198.12	10.3
3.	198.12	10.6
4.	182.88	10.4

Slack water entry. Swinging basin 28 ft. (8.3 m.) LWOST. Mean high neap tide rise 13 ft. 4 in. (4.1 m.). Mean high spring tide rise 18 ft. 1 in. (5.5 m.). Depth at berths 33 ft. – 35 ft. (10.1 m. – 10.4 m.).
SPECIALISED CARGO HANDLING FACILITIES:
Sugar Loading Gantry
(a) Loader Height: Clear height of loader in horizontal position from top of the pier, 26 ft. (7.9 m.). Height of pier above LW, 34 ft. (10.4 m.). Can be used in lifting slope "V" position up to 14° above horizontal. Max. vessel's hatch height above sea surface with which vessel may start loading even at HW, 35 ft. (10.7 m.).
(b) Outreach: Max. outreach of loader from side of pier, 40 ft. (12.2 m.). Breadth of permanent fender from side of pier, 2 ft. 6 in. (0.8 m.). The chute can be traversed along the boom for a max. distance of 20 ft. (6.1 m.).
(c) Movable Range. Length of movable range along pier, 445 ft. 8 in. (135.8 m.).
(d) Capacity: Average loading rate 1,400 tonnes/p.h.
(e) Total storage capacity 727,000 tonnes.
Container/Unit Load Facilities

Berth: length 600 ft. (183 m.); depth 34 ft. (10.4 m.); width 100 ft. (30.5 m.). Wharf deck: 126 ft.×60 ft. plus 2 ft. 6 in. breadth of permanent fender (38 m.×18 m. plus 0.8 m.); height above low water 28 ft. (8.5 m.) Crane: 25 tons (25.4 tonnes) capacity at 110 ft. (33.5 m.) radius.
Grain: 4 grain silos, capacity 10,800 tons.
STEVEDORES: As much notice as possible.
TANKERS: Berth at Breast Wharf. Load rate for bulk molasses 300 t.p.h. through 18 in. (46 cm.) dockline. 8 in. (20.3 cm.) (Caltex) dockline for white petroleum. 10 in. (25.4 cm) dockline (Mobil) for black petroleum products. 8 in. (20.3 cm.) dockline (CSR) for export of industrial alcohol. 4 in. (10.2 cm.) dockline (gas supply) for import LPG. 6 in. (15 cm.) dockline for export of tallow.
DENSITY: Sea water.
FRESH WATER: Available all berths, rate of load 45 tons (45.7 tonnes) per hour.
FUEL: Available at Breast Wharf and North Pier Berth.
FIRE PRECAUTIONS: Normal requirements.
WATCHMEN: Not obligatory.
OPENING/CLOSING HATCHES: Normally by crew, but can be done by stevedores if required.
CARGO GEAR: See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
REPAIRS: Small repairs can be carried out. Oxy-welding and electric welding plants, compressors and air tools available. Salvage divers available.
REPATRIATION: Facilities available.
AIRPORT: Daily service to Brisbane and thence to world-wide destinations.
TIME: GMT plus 10 hours.
HOLIDAYS: Bank holidays as for Brisbane, plus Waterside Workers' Picnic Day.
POLICE/AMBULANCE/FIRE: Police Tel: 51-2000, Fire Tel: 572244, Ambulance Tel: 572222.
TELEPHONES: Ships' extension telephones may be connected at all berths.
SHIP SUPPLY SERVICES: Broken Bay Light Salvage and Diving Services, P.O.Box 233, Mackay, 4740. 39 Main Street, Dundula, Q. 4740. Tel: (079) 521592.
Services: Underwater video inspections and recording of ships hulls, propellers, rudders, state of marine fouling and zinc blocks including damage inspection and report.

Transport of lubricating oils and essential items.

Transport of personnel.
Rendezvous Points: Offshore Mackay and Hay Point. (Other rendezvous points can be arranged through ships Agents.)
Communications: Vessel carries both SSB and VHF.

Initial contact possibly through Mackay Harbour Board.
Vessel: 12 m. steel salvage and general purpose vessel.

Roylen Cruises Pty. Ltd., Tel: (079) 57 2595; 57 2596. Telex: 48515. P.O.Box 169 Mackay, River St., Mackay, North Queensland 4740.

The barge "Tambai II" is available for charter, for the transportation of stores, oil, bulk distilate and water.
DEVELOPMENTS: Construction of a Northern Wharf to commence in 1984. Length 150 m. and width 20 m. The Berth will be dredged and the swinging basin extended.

Berth will be used for export of grain and import of fertiliser and iron ore.
AUTHORITY: Mackay Harbour Board, P.O.Box 96, Mackay, Queensland 4740, Australia. *Tel:* 551155. *Telex:* Mkport 46373. *Contact:* E. N. Lever, Secretary.
AGENT: Sub-agent of Patrick Agencies, Brisbane.

MARYBOROUGH (Urangan), Queensland: 25.18 S. 152.54 E. (See Plan Book)

PORT LIMITS: The area between the mainland and Great Sandy Island from a line joining Hook Point and the Eastern extremity of Inskip Point to the parallel of 25° 7′ S. latitude, including all rivers, creeks and navigable waters in the above named area.
APPROACHES: Via Hervey Bay and the Pearl Channel.

The width of the channel to Urangan is 500 ft. (152.4 m.).

The depths of water at LWOST in this port and approaches are:

	Metres
Urangan Channel	5.10
Mary River	1.22
Sandy Straits	0.60

The swinging basin at Urangan has a width of 1,800 ft. (548.64 m.) and a depth of 27 ft. (8.23 m.).
DOCUMENTS: See "Melbourne".
PILOTAGE: Vessels requiring the services of a Pilot should advise the Harbour Master, Bundaberg at least 24 hours before their expected time of arrival at the Fairway Buoy and also advise vessels draft.

Pilot Boarding Ground is located off the Fairway Buoy, Hervey Bay and the distance therefrom to Urangan Jetty is 13 miles.
RESTRICTIONS: Large vessels may only enter and leave during daylight hours.
MAX. SIZE: Max. draft of vessels that may enter the port are:
Urangan: HWOST 24 ft. (7.3 m.) and at LWOST 14 ft. (4.27 m.) allowing 3 ft. (1 m.) under keel.
HEALTH: Pratique available 24 hours a day, 7 days a week.
TIDES: The mean Spring rise is 10 ft. (3.048 m.), while the mean Neap rise is 8 ft. (2.438 m.) at Urangan.
TUGS: Towage is not available at this port. Arrangements for tugs would need to be made in advance to allow steaming time from Bundaberg, the next nearest port.
BERTHING: There is only 1 berth at Urangan.

The jetty at Urangan is 26 miles by road from Maryborough.

The length of the berth and depth of water at LWOST at Urangan is 390 ft. (118.87 m.) in length; depth of water 8.0 m. Max. length of vessel which can be accommodated is 560 ft. (170.69 m.).

Wharf Use: The wharf at Urangan is used as an oil tanker berth and is used by Caltex Oil (Australia) Pty. Limited.
REPAIRS: Limited small repairs can be carried out.
FRESH WATER: Water is available at the rate of $0.75 per 1,000 gallons ($0.17 cents per 1,000 litres) (minimum charge $0.75).
CONSULS: None.
MEDICAL: The Hospital, situated at 185 Walker Street, Maryborough may be contacted on telephone number 212222.
POLICE/AMBULANCE/FIRE:
Fire Services: For emergency calls, dial "000" and ask the operator for the Fire Brigade. General enquiries should be directed to telephone number 212535. The Brigade Station is situated at 98 Lennox Street, Maryborough.
Police Services: For emergency calls, dial "000" and ask the operator for the Police. General enquiries should be directed to telephone number 212211. The Police Station is situated in Lennox Street, Maryborough.

Vessels at Urangan should ring Hervey Bay Police on 281122.
Ambulance Services: For emergency services, dial "000" and ask the operator for the Ambulance. General enquiries should be directed to telephone number 212244. The Brigade is situated at 155 Neptune Street, Maryborough and at 118 Torquay Road, Hervey Bay (Tel: 281211).
AUTHORITY: Dept. of Harbours & Marine, Box 2195 GPO, Brisbane 4001. *Tel:* 2277111. *Telex:* Harbrs 40760. *Cables:* Harbours.
Local Authority: Captain D. Cole, Harbour Master, P.O.Box 476, Bundaberg, Queensland 4670 or P.O.Box 155, Maryborough, Queensland 4650. *Tel:* 214001. *Telex:* 46534. *Cables:* Harbours.
AGENT: See "Brisbane".

MELBOURNE, Victoria (including Maribyrnong River, Holden Oil Dock, Port Melbourne, Williamstown and Yarraville):

37.50 S. 144.58 E. **(See Plan Book)**

PORT LIMITS: Vessels at anchor off Gellibrand Light are considered "arrived" for the purposes of priority of berthing.

DOCUMENTS:

	No. of copies required
Form M & S 11 (List of crew)	3
Form 42A (Store List)	1
Form 5 (Articles owned or in possession of Master, Officers or crew)	1
Form B921 – Green – Loading Ports List	3
Form QA3 (Declaration of animals carried as cargo), only if on board	1
Form QA4 (Declaration of ship's pets)	1
Form QA5 (Shipmaster's Bond to cover ship's pets)	1
Form A Q360 (Health Report)	2

Of the above, Forms 42A and 5 need only be compiled at first port of call in Australia. Passenger — individual Passenger Cards are utilised therefore no list of passengers required. Agents require 7 copies of Manifest of cargo on board and at least 1 set copies Bills of Lading. These normally received by airfreight or airmail direct from Agents at loading port outside Australia therefore not necessary for Masters to be in possession of either Manifest of cargo on board or appropriate copies of Bills of Lading.

PILOTAGE: The Port Phillip and Westernport Sea Pilot Service operates from shore based Pilot Stations at Queenscliff and West Head respectively, and Pilots embark and disembark from fast orange or yellow coloured launches.

The Pilot Boarding Ground for Port Phillip lies 3 – 5 miles Southwest of Point Lonsdale, and for Westernport 3 miles South of West Head.

The Pilot Stations are equipped with radio telephone and VHF, and is manned at all times by a Pilot-in-Charge. A continuous watch is maintained on 2182 kHz and Channels 16, 12 and 13 VHF at Queenscliff and Channels 14 and 16 at Westernport.

The Master of a vessel requiring a Pilot is requested to advise the Pilot Service of his ETA at Port Phillip Heads or Westernport 24 hours before arrival, together with the vessel's deepest draft. Changes in the ETA of more than 1 hour should be amended immediately, and the final ETA confirmed 4 hours before arrival.

VHF Procedure:

Two hours prior to arrival at the boarding ground, VHF contact should be made on Channel 16 by calling "Port Phillip Sea Pilots". Please give position, course and speed; and ETA at Pilot Boarding Ground.

Following the initial contact a listening watch should then be kept on VHF Channel 12 for vessels bound for Port Phillip or Channel 14 for vessels bound for Westernport.

The pilot launch will make contact when abeam of Point Lonsdale or West Head outward bound to give final boarding directions.

Tides at Port Phillip Heads: (See cautionary notice on Charts AUS. 143 & 158.)

In the entrance the tidal stream runs at its strongest at times of High and Low Water, and the ebb stream may at times exceed 9 knots. You will be required to be in a position WESTWARD of the tidal stream in the fairway when embarking a Pilot.

Low powered vessels and vessels of over 10.5 m. draft should indicate such condition in their first telegram/telex, as the time of their passage through the Port Phillip entrance may be governed by the tidal stream.

Requirements for embarkation of Pilots:

1. Make a *good lee* for the pilot launch with the wind and sea well abaft the beam on the weather side, and a speed of about 7 knots.
2. The pilot ladder (see plan) constructed and rigged in accordance with I.M.O. requirements (see Chapter V of SOLAS 1960 for pilot ladders, and Aust. D.O.T. Notice No. 12/1976). The ladder should be clean, properly fitted with spreaders, well clear of all discharges and outlets, and all outboard fittings which might foul the pilot launch. The bottom of the ladder should be 1.5 m. or 5 ft. above the water. The distance from the waterline to the point of access must not exceed 9 m.
3. Two clean *manila* manropes of not less than 24 mm. dia. and not more than 32 mm. dia. are to be securely made fast to the ship, and *must not* be made fast to the ladder at any point. The manropes must not be longer than the ladder.
4. Where the ladder is rigged over a bulwark, *two* stanchions are to be securely fitted in the top of the bulwark, one on each side of the ladder, and steps are to be provided from the top of the ladder to the deck.
5. A heaving line is to be provided for mail and the Pilot's bag.
6. By night a bright light is to be provided, shaded to show *downwards and forward* to clearly illuminate the ladder and the ship's side.
7. Tripping lines and boat ropes are *not* to be used.
8. An officer should be in attendance at the ladder, with life-saving appliances ready for immediate use.

Masters are urged to have all gear kept in first class condition, to have it inspected regularly, and to ensure always that the ladder and manropes are securely made fast. Serious accidents have occurred through inattention to these matters.

Should the gear and the manner in which it is rigged not be satisfactory, pilotage services may be withheld.

Vessels ETA: We have received an advice from the Marine Board of Victoria regarding the ETA of vessels at Port Phillip Heads or Westernport.

For the guidance of Masters we quote below the relevant information. "Instances have occurred recently where changes to ship's ETA have, for various reasons, not been passed on to the Port Phillip Sea Pilots.

For your information the Master of a vessel requiring a Pilot is required to advise the Pilot Service of his ETA at Port Phillip Heads or Westernport 24 hours before arrival, together with the vessel's deepest draft. Changes in the ETA of more than 1 hour should be amended immediately, and the final ETA confirmed 4 hours before arrival.

It would appear that most of the problems occur outside office hours and it is the Board's recommendation that Agents advise ships to their agency to send all amendments to the original ETA direct to the Port Phillip Sea Pilots using the following address: Sea Pilots, Melbourne, Telex: AA36920.

ANCHORAGE: *Quarantine Anchorage:* If, from Quarantine Regulations, Southerly gales, or other causes, it is necessary to anchor off Quarantine Station, a vessel drawing more than 20 ft. should anchor to Northward, with jetty bearing 195°, in depths of from 48 ft. to 54 ft., from 3 to 6 cables off-shore; and at night in white sector of jetty light, visible from 126° through South to 195°, preferably with that light bearing 180°, and Point Lonsdale light bearing 280°.

Symonds Channel Anchorage: Good anchorage clear of all fairways, in red sector of Low light, and well to windward of Southern shore in Northerlies, is to be had in the middle of Symonds Channel close to its Southern end. A good berth is in a depth of about 40 ft. with Queenscliff High Light bearing 286°, and No. 3 (Tuckey) West Channel in transit with Coles Channel Light.

Queenscliff Anchorage: In anchoring off Queenscliff, care should be taken to keep clear of West Channel fairway by bringing up as near as possible to N.W. side of channel. A good berth in a depth of 38 ft. and in red sector of Low light, may be obtained with High Lighthouse bearing 284° distant half a mile, and fixed green light at Queenscliff South pier head bearing 336°.

Vessels awaiting berths in the Port of Melbourne are normally directed to anchor at Pilot's discretion South of Gellibrand light and clear of the Melbourne ship channel.

Tank Cleaning: The Port Officer for Port Phillip, the responsible authority for the waters of Port Phillip Bay, has issued a circular which requires all Masters to notify the Harbour Master if they intend to anchor in the waters of Port Phillip for the purpose of cleaning tanks, gas freeing, cooling down or repairs.

For purposes indicated notify Port Officer, Ports and Harbour Division, 168 Exhibition Street, Melbourne, 3000, Victoria, Australia. Tel: 669-8666, Telex: AA37056.

RESTRICTIONS: Mean Tidal Range is 0.50 m. and mean of all High Waters for 1981 was 0.85 m. Tide is used for the navigation of vessels having drafts in excess of those given in Column 4 of "Max. Size". For the navigation of channels, a minimum under keel clearance of 0.6 m. is required for vessels drawing up to and including 10.9 m. and a clearance of 0.9 m. for vessels having a draft between 10.9 m. and 12.2 m. Vessels over 183 m. in length. Pilots require 10% of maximum draft under keel clearance to navigate River Channel at all times, subject to draft restriction in Column 5 "Max. Size".

Tankers which are not gas-free or with cargoes which have a flashpoint of less than 150°F will not be navigated to or from river berths at night.

PRATIQUE: All overseas vessels at first port of entry to Australia or at any subsequent ports, subject to quarantine until pratique granted or until vessel released from quarantine. If examinations and inspections satisfactory vessel granted pratique for all Australian ports. A list of names and addresses of passengers also required at first port of entry. 24 hours quarantine clearance of overseas vessels available. Treatment of Crew members for illnesses other than quarantinable diseases arranged by private practitioners through ship's Agent.

Radio Pratique: Concession of radio pratique is available to all vessels except those which carry stock animals. Following requirements to be met in the case of a vessel requiring radio pratique or permission to berth.

(a) (1) The Master of the vessel or his Agent must make a request (using Form Q2) to the Department of Health within the period of 24 hours prior to the arrival of vessel giving answers to all questions on the form.

(2) If the answers given are satisfactory radio pratique will be given for Melbourne from a specified time and date enabling the vessel to proceed to the berth without displaying the quarantine signal.

(3) A Quarantine Officer will board the vessel at the berth, if the answers given on the Declaration of the Health (Q360) are found to be satisfactory pratique may then be granted for all Australian ports.

(b) Notwithstanding that pratique for all ports may have been granted, Master will still be responsible for reporting any case of infectious disease which may subsequently occur whilst vessel is in Australian waters.

Should a case of infectious disease (not being a quarantineable disease) occur on board whilst vessel is at sea in Australian waters, Master will be required to advise by radio Commonwealth Regional Director of Health for State in which next port situated, who will arrange for a Quarantine Officer to see case on arrival, Master will not be required to fill in a Supplementary Health Form and vessel will be permitted to proceed direct to berth without flying "Q" flag.

Should a case of suspected quarantineable disease occur on board whilst at sea in Australian waters, Master is required to radio details to the Commonwealth Regional Director of Health for State in which next port situated and await instructions. Commonwealth Regional Director of Health will decide according to circumstances whether to inspect vessels outside Quarantine Line or permit it to proceed to berth and will advise Master.

(c) Should it come to notice in any particular case that radio pratique has been granted as a result of a wireless message sent in accordance with sub-paragraph (a) whereas in fact wireless message contains false information, matter will be investigated thoroughly and reported to the Director-General of Health who will decide whether radio pratique will be denied in future to vessel on which Master and the ship's surgeon hold responsibility.

Also see "Shipmaster's Report".

RADIO: Melbourne Radio VIM.

A Shipping Control Centre referred to as "Harbour Control" is established on the southern side of Victoria Dock entrance. It is a two storied structure supported on a rectangular tower with an overall height of 39.6 m.

Movement of traffic within the Port of Melbourne is controlled by the Harbour Master through Control Officers operating from this Centre who direct all shipping movements in and out of the port, and co-ordinate all ancillary services connected with shipping movements on a 24 hour basis.

The radio call sign is "Harbour Control", and the following frequencies and Channels are available.

(continued next column)

Continuous watch kept on:

156.3 MHz	Channel 6	Intership operations.
156.4 MHz	Channel 8	Intership operations.
156.6 MHz	Channel 12	Port operations.
156.650 MHz	Channel 13	Port operations.
156.8 MHz	Channel 16	Calling and safety.
156.375 MHz	Channel 67	Safety of persons and vessels.

When approaching the Port of Melbourne radio communication is made with "Harbour Control" initially on Channel 12 and then on a channel as directed for berthing instructions and information regarding the movement of other vessels. The Master of a vessel proceeding inwards shall not pass Fawkner Beacon until permission has been granted by Harbour Control.

TUGS: Tugs attend for inward-bound vessels at or in vicinity of Gellibrand Light for vessels proceeding either up river or to Port Melbourne berths. On departure and should vessels require attendance down river, service terminated in vicinity of river entrance. Tugs present for service at any point required by Owner or Agent. Ships lines, or tug lines at a charge. Crews of tugs will not accept wire tow line. Wire tow line with rope end of 5 or 6 fathoms acceptable, rope section being available for tugs towing hook.

MAX. SIZE: In the Port of Melbourne, draft and length limitations for navigation of vessels are determined by the Port Phillip Sea Pilots, and these divisions are outside the jurisdiction of the Port Authority, the Port of Melbourne Authority.

Particulars concerning maximum lengths and draft of vessels navigating by day and night to and from berths in the port.

1	2	3	4	5	6	7
	Day		*Night*			
Berth	*Max. Length (m.)*	*Max. Draft LW (m.)*	*Max. Length (m.)*	*Max. Draft (m.)*	*Max. Draft LW (m.)*	*Remarks*
SWANSON DOCK:	289	11.9	228	11.0		1W–1E–2E either way. 2W–3W–3E Head in only. Vessels between 228 m. and 289 m. by day and above 213 m. by night will not be swung if berths to seaward of 31.5 South Wharf are not clear. Specially identified vessels will be piloted at the discretion of Pilot Service.
	183	12.5	183		11.6	Vessels of 183 m. or under will be swung to ALL berths, day or night.
APPLETON DOCK:	253	9.4	213	9.4		
	183	9.7	183		9.7	
VICTORIA DOCK:	203	8.8	203		8.8	2/VD or 21/VD clear if departing at night. Depart any time up to 152 m.
	183	10.4				
16/VD	203	9.9	203		11.0	
8/VD	150	7.9	150		7.9	6/VD and 9/VD – Clear if over 137 m.
22VD, 23VD, 24VD	213	8.5	213	8.5		
	183	8.8	183		8.8	
SOUTH WHARF:						
15 – 19/SW	183	7.9	183		7.9	By night – (i) All berths on South Side to seaward of allocated berth including 21/SW to be clear–OR–(ii) All berths on North Side up to that berth opposite allocated berth and berth downstream to be clear. If above conditions cannot be met, up to 152 m. can depart at anytime. Identified vessels up to 198 m. and 7.9 m. draft+tide will be berthed by day only head in to 17–19/SW and can depart under conditions (i) and (ii) above.
			168		7.9	
21SW and 26SW	213	8.5	213	8.5		
32SW	183	8.8	183		8.8	
24SW – 25SW	213	7.7	213	7.7		
	183	7.9	183		7.9	
1/MARIBYRNONG:	178	9.2	144		7.9	Vessels over 91.5 m. head in only.
1/YARRAVILLE:	178	6.5	144		6.5	Tankers which are not gas free will not be navigated to or from River Berths at night.
5/YARRAVILLE:	178	8.8	144		7.9	
6/YARRAVILLE:	190	9.4	213	9.4		
	183	9.8	183		9.8	
HOLDEN OIL DOCK:	183	9.4	137		7.9	Maximum beam – 26.5 m.
GELLIBRAND PIER:	289	11.2	207		10.7	
B/WATER PIER:	213	11.2	178		9.7	
	228	7.6	178		7.6	
WEBB DOCK: – 1	137	6.4	137		6.4	
2	140	6.4	140		6.4	
3	222	9.1	222	9.1		
	183	9.4	183		9.4	
4	222	10.2	222	10.2		
	183	10.6	183		10.6	
STATION PIER:						
Outer Berths –	305	10.4	305		10.4	
Inner Berths –	305	9.7	305		9.7	
PRINCES PIER:						
Eastern Berths –	259	10.4	259		10.4	
Western Berths –	259	9.7	259		9.7	

Conversion of relative lengths and draft to feet;

Length	*Draft*
305 m. = 1,000 ft.	11.6 m. = 38 ft. 0 in.
289 m. = 950 ft.	11.3 m. = 37 ft. 1 in.
259 m. = 850 ft.	11.0 m. = 36 ft. 1 in.
253 m. = 830 ft.	10.6 m. = 34 ft. 9 in.
250 m. = 820 ft.	10.4 m. = 34 ft. 1 in.
228 m. = 750 ft.	10.2 m. = 33 ft. 6 in.
222 m. = 730 ft.	9.8 m. = 32 ft. 2 in.
213 m. = 700 ft.	9.7 m. = 31 ft. 10 in.
207 m. = 680 ft.	9.4 m. = 30 ft. 10 in.
198 m. = 650 ft.	9.1 m. = 29 ft. 10 in.
183 m. = 600 ft.	8.8 m. = 28 ft. 10 in.
178 m. = 585 ft.	8.5 m. = 27 ft. 11 in.
168 m. = 550 ft.	7.9 m. = 25 ft. 11 in.
152 m. = 500 ft.	7.7 m. = 25 ft. 3 in.
150 m. = 495 ft.	7.6 m. = 24 ft. 11 in.
144 m. = 472 ft.	7.3 m. = 23 ft. 11 in.
140 m. = 460 ft.	6.4 m. = 21 ft. 0 in.
137 m. = 450 ft.	0.6 m. = 2 ft. 0 in.
91.5 m. = 300 ft.	
26.5 m. = 87 ft.	

All vessels over 183 m. navigating the River and Webb Dock must have 10% of Draft under keel clearance (Pilots' Requirement). The Authority requires 0.6 m. under keel clearance at all times. Tidal readings may be applied to drafts shown in Columns 3 and 6.

All movements must be considered subject to weather conditions.

(Max. Size continued next page)

SHIPMASTER'S REPORT: December 1982.

Inner Harbour Coal Berth

Restrictions: The following information is required prior to arrival berthing:

1. Stem of each type of coal.
2. Stowage, tonnage and type of coal each hold.
3. Commencing holds – basis two loading heads.
4. Trimming holds.
5. Expected departure draft.
6. LOA, gross and nett tonnages.

The vessel must conform with the following criteria:

Vessels must not present for loading with hatch coaming more than 17.4 m. above ISLW.

Minimum size of hatch openings (without prior arrangement with harbour authority) when using trimming head 4.9 m. × 4.9 m.

Whilst under keel clearance during loading operations is usually left to the discretion of individual Masters, the Harbour Master recommends 0.3 m.

Vessels of 243.84 m. and over are required to berth and sail in daylight hours only.

Due to the short travel range of the loading gantries it is recommended that with the larger size vessels, i.e. LOA 228.6 m. and upwards, to avoid moving along the berth during the final phases of loading that loading be programmed to complete in the centre hatches.

Max. Size: Max. LOA 267 m., max. beam 40 m. Max. loaded craft 11.40 m. plus available high tide less 0.3 m. under keel clearance on sailing (i.e. 11.10 m. plus tide).

Berthing: The berth is constructed with a concrete decking on steel piles and has a length of 215 m. Bollards are placed at 18.29 m. intervals with provision for mooring lines beyond the actual berth. Maximum pull load of each bollard is 85.63 k/t. Depth of water at the berth is 11.40 m. ISLW with a bottom of natural sand and clay. This depth extends for a distance outward from berth of 12.19 m. and for a distance alongside of 267 m.

Depth after 12.19 m. distance outward from berth is 13 m. ISLW increasing to 15.25 m. ISLW in the main channel.

Vessels usually berth port side alongside.

Bulk Cargo Facilities: There are two loading gantries at ship's side which have a travelling range along the berth of 150 m.

Each fitted with a telescopic loading chute with a trimming head attached which has the effect of throwing the coal in any given direction.

Each boom has an outreach from the wharf fender of 19.8 m. Maximum angle of raise is 80°, working range of boom is horizontal to 11° below the horizontal.

For the purpose of estimating expected loading time it is recommended that with both loading heads in use a figure of 1,400 t.p.h. be used.

SHIPMASTER'S REPORT: January 1983:

Documents: The following forms, are to be completed and presented to the Customs Boarding Officer upon your arrival at the first Australian port.

Form	*No. of Copies Required*	*Note*
Form M&S 11 (Crew List)	2	—
Ship's Crew List	3	—
Form 5 (Crew's Possessions)	1	Refer Form G29 (Instructions to Master)
Form C & E886 (Ports of Call)	3	Show all ports from first overseas loading port.
Form QA3 (Animal Cargo)	1	Refers to cargo only. One for each relevant port. Nil return not required.
Form QA4 (Ship's Pets)	1	Nil return required.
Form QA5 (Shipmaster's Bond)	1 (in duplicate)	Required only if ship has pets
Form 42A	1	Part 1 only
Forms Required if Passengers On Board		
Form M308 (List of Passengers Disembarking in Australia)	5	To be divided into ports of disembarkation
Form M309 (List of Passengers not Disembarking in Australia)	5	—

Pilotage: Embarkation of Pilots: Masters of vessels are requested to carry out the following procedure when embarking a Pilot:

1.1 Make a good lee for the pilot launch and proceed at a speed of about five knots.

1.2 The pilot ladder, clean and fitted with spreaders at intervals, is to be rigged well clear of all discharges and outlets, and of all outboard fittings which might foul the pilot launch. The bottom of the ladder is to be maintained at a position approximately 1.5 m. above the water. The distance from waterline to point of access must not exceed 9 m.

1.3 Two clean 24 mm. in diameter manilla manropes are to be rigged with knots in the end only. The manropes are to be securely made fast to the ship. On no account must they be made fast to the ladder at any point.

1.4 Where the ladder is rigged over a bulwark, *two* stanchions not less than one metre in length are to be securely fitted in the top of the bulwark, one on each side of the ladder. Steps are to be provided from the top of the bulwark to the deck.

1.5 A heaving line is to be provided for mail and the Pilot's bag.

1.6 By night a bright light shaded to show downwards and clearly illuminate the ladder and ship's side is to be in position before the pilot launch approaches.

1.7 Tripping lines and boatropes are not to be used.

Note: Masters are urged to have all the abovementioned gear kept in first class condition and to have it inspected frequently and to ensure always that the ladder and manropes are securely made fast. Serious accidents have occurred through inattention to these matters. Should the abovementioned gear and the manner in which it is rigged be not satisfactory, pilotage services may be withheld.

VHF: It is necessary to maintain a VHF watch on Channel 13, whilst anchored off the port.

Berthing: Outer Harbour:

The under mentioned rules are provided for the guidance of Masters of vessels berthed in the outer harbour, Port Kembla.

(a) Main engines should not be taken adrift or major repairs commenced unless arranged by prior consultation with the Harbour Master.

(b) Power for main engines should be available at *four hours' notice* during normal weather conditions.

(c) Upon the International Code Signal XT being hoisted at the Signal Station, or by night the exhibition of two all round red lights therefrom, power for main engines should be available at *one hour's notice.*

(d) Sufficient crew should be maintained on board to enable removal of vessels from jetties to be effected if such removal is considered necessary for the safety of the vessel and/or other vessels.

Inner Harbour: New coal berth is located between Berth 12 and Berth 14. See "Plans".

Port Kembla Coal Loader – Stage 1

1 – Navigation restrictions

Vessels – LOA	290 m.
– Beam	45 m.
Approach channel depth	15.25 m. below ISLW
Berthing basin depth (sand bottom)	16.25 m. below ISLW
Underkeel clearance while moving	10% draft
Tide variation – mean high of high tides	1.4 m.

Sailing restrictions:

Weather conditions – Pilot's discretion

Inward movements – No restrictions

Outward movements – Up to 12.8 m. draft – No restrictions

– Above 12.8 m. draft – Daylight only (New navigational aids are being installed and tested. If these are satisfactory the daylight restriction will be lifted)

Vessels normally berth port side to berth.

Tug requirements:		
	over 244 m.	– 4 tugs
	183 m. – 244 m.	– 3 tugs
	under 183 m.	– 2 tugs

2 – Berth

Length of berth face	287.12 m.
Length between extreme mooring bollards	400 m.
Length between centres of end fenders	250 m.

Fendering – 8 Seibu Type W 2000H×1500L buffer fenders at 35.64 m. centres.

Bollards – 10×100 tonne quick release hooks

– 6×120 tonne quick release hooks

– 2×100 tonne storm bollards

3 – Shiploaders – 2 travelling shuttling bridge type (only one in operation at a time).

Nominal loading rate	5,000 t.p.h.
Outreach (+ reach of chute when tilted)	32 m. (+8 m.)
Throw – pivoting spoon type (dependent on flow characteristics and moisture content)	5 m. maximum
Air Draft	22.40 m. above ISLW
Shiploader travel: park to park	235 m.
common range	185 m.

4 – Operating Authority

Maritime Services Board of N.S.W.

Box 32 G.P.O.	Circular Quay West
Sydney 2001	Sydney 2000
Telex: Sydney Head Office	Msbsy AA24944
Pt Kembla Cl. Ldr.	Msbptk AA29270

Repairs: There is an efficient diving service – Commercial Diving Service Pty. Ltd., (Shipping repair and maintenance division underwater), 3 South Avondale Road, Dapto P.O.Box 126, Dapto 2530, N.S.W., Australia. Neil Johnson Tel: (042) 61 4179. Keith Johnson Tel: (042) 61 4980.

Telephones: Placed on board on arrival at New Coal Berth.

Telephone Numbers:	The Maritime Services Board of N.S.W.
Office	74.0203/74.0204
Pilot Station	74.0761
Signal Station	74.4571
Stannard Bros. (for moorings)	74.1045

General:

Pollution: The Board views very seriously any kind of pollution. The regulations provide for heavy penalties on conviction. Attention is invited to the following:

1. *Oil of any description* – Discharge or escape from a ship – *Penalty up to $50,000.*
   Failure to inform of discharge or escape: *Penalty up to $10,000*
   Cost of dispersing or dealing with oil: *May be recovered from Master or Owner.*
2. *Other Pollutants* – (Including dangerous goods)
   Discharge or escape into port : *Penalty up to $400.*
3. *Dangerous Goods*
   Failure to keep pipe-line or hose gastight and free from leakage: *Penalty up to $200.*
   Failure to keep dangerous goods which have escaped in as small an area as possible: *Penalty up to $200.*
   Failure to report escape of dangerous goods from a pipe-line or hose within 24 hours: *Penalty up to $200.*

AUTHORITY: Maritime Services Board of N.S.W., Cnr. Military and Darcy Roads, Port Kembla. *Postal Address:* P.O.Box 89., Port Kembla, N.S.W. 2505. *Tel:* 74 0201. *Contact:* H. Lewis, Port Manager.

AGENT: Patrick Agencies, Foreshore Road, P.O.Box 83, Port Kembla, N.S.W. 2505. Cables "Rikpat". Tel. 74–0335. Telex AA 29025.

PORT LATTA, Tasmania: 40.51 S. 145.23 E.
(See Plan Book)

DOCUMENTS:
Cargo Plan.
4 Crew Lists, Commonwealth No. MS11.
1 Customs Store List, Commonwealth No. 42A.
1 Personnel Effects, Commonwealth No. 5.
1 Quarantine/Animals, Commonwealth No. QA4 and QA5.
Last port clearance.
3 Lists of ports of call.
Also see "Certificates".

PILOTAGE: Compulsory pilotage from anchorage to berth. Pilot remains on board throughout loading. Pilot station equipped VHF radio Channels 16, 12 and 6. Pilots and line boats stationed at small boat harbour, Port Latta. Pilot boards at anchorage (2 miles N.E. of seaward end of jetty). Vessels communicate with Port Latta Marine Department on normal ship-shore frequencies, through Australian coastal stations, addressing message to "Pickands Wynward" prefixed "Shipserv". ETA required 10 days, 2 days, 1 day prior. Accommodation ladder to be rigged and ready on port side.

ANCHORAGE: 1 mile radius from point with Rocky Cape Light. Bearing 130° (T) × 5 miles (16 fathoms).

RESTRICTIONS: Vessels berth on arrival day or night, weather permitting. Minimum depth of water in berth and approaches 15.25 m. (50 ft.) at I.S.L.W. A static 1.5 m. (5 ft.) under keel clearance required at all times, or 10% of draft whichever is the greater.

MAX. SIZE: LOA 245 m. (804 ft.), beam 38.5 m. (126 ft.), draft 16.0 m. (52.5 ft.). Vessels in excess by prior consultation.

HEALTH: Commonwealth appointed Quarantine Officers will board vessel at anchorage or berth when Port Latta is first port of call. Minimum 24 hours advance notice of pratique to "Quarantine (Hobart)" and Agent. Quarantine Officer requires 1 copy Crew List.

RADIO: Radio messages addressed to "Shipserv. Pickands, Wynward" and Agent.

TUGS: One tug is available "Spring Cove", 1,825 h.p. 27 tons bollard pull. Tug is on thirty (30) minutes standby notice when in berth.

Two (2) line boats are available. On call 24 hours when a vessel is in berth. Licensed to carry five (5) passengers. Used to transport all persons and goods ship to shore.

Tug will join vessel at anchorage. Tug stationed at Port of Stanley and will stay with vessel throughout loading. The use of tug or ship line is at discretion of Pilot. No extra charge made for use of tug lines.

BERTHING: Propeller submerged with vessel at or near even keel. Vessels usually berth port side alongside using starboard anchor. Accommodation ladder to be rigged and ready on port side.

Mooring lines required.

(a) *Under 100,000 tonnes deadweight.* Seven (7) 220 m. (722 ft.) lines forward includes backspring. Similar aft.

(b) *100,000 tonnes deadweight plus.* As for (a) and in addition one (1) 220 m. wire forward and one (1) 220 m. wire aft. All mooring lines must comply with Classification Society requirements. Ore berth where vessel secures 3.9 m. (12.8 ft.) clear of loading facility to three (3) mooring buoys forward and three (3) aft. Backsprings to protection dolphins. *Polyprolene instead of nylon required.*

Main engines required to be on thirty (30) minutes standby notice.

Mooring winches to be fully operational and maximum power available at all times.

LOADING/DISCHARGING: A 1,830 m. (6,000 ft.) long steel structure from the shore carries the ore conveyor and oil pipe-lines.
Shiploader: Two (2) radial arm type (one loading at any given time).
Rate: 3,000 long tons per hour maximum (2,750 nominal).
Working Hours: 24 hours/day, every day weather permitting.
Outreach: (a) Central: 24.82 m. (81.4 ft.). (b) Max. slew: 17.82 m. (58.5 ft.).
Throw: Max. 3.9 m. (12.7 ft.). Working Trajectory 1.8 m. (5.9 ft.).
Height: (Air Draft) above H.W. 16.46 m. (54 ft.).
Travel: 79.25 m. (260 ft.) for one loader. Total coverage both loaders 164.6 m. (540 ft.) including 6.1 m. (20 ft.) dead area between loaders. Stowage factor iron ore pellets 0.4767 cu.m./tonne. Angle repose 27°.

MEDICAL: Minimum of 24 hours notice required by Agent to arrange doctor. Hospitals situated at Smithton, 19 miles; Wynyard, 25 miles.

TANKERS: Berth on arrival, weather permitting. Hose 10 in. diameter, discharge line only, no facilities for receiving ballast or slops. Maximum permitted draft 45 ft.

Oil/Ore vessels require gas free certificate prior to landing.

A floating pipe-line connecting facility to vessel is handled by line boats.

DENSITY: 1025.
FRESH WATER: Limited quantity from tug – 70 tons.
FUEL: Not available.
FIRE REGULATIONS: Standard Mines Department fire regulations.
OPENING/CLOSING HATCHES: Ship's responsibility.
CERTIFICATES: Required: Derat., Safety Equipment, Load Line, Registered Tonnage, Safety Construction, Safety Radio.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes or 8 ozs. tobacco per man. Wine/Spirit, 1 quart per man, bottle/bottles must be unsealed.
CARGO GEAR: None required.
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: No consulates.
REPAIRS: Carried out by local contractors through Agent.
REPATRIATION: Agents can arrange repatriation and crew changes.
AIRPORT: Nearest airport 25 miles at Wynyard with daily domestic flights to mainland for international flight connections.
TIME: Local time is Eastern Australian Standard (EST), GMT plus 10 hours. Tasmanian Summer Time exists between October and March, GMT plus 11 hours.
HOLIDAYS: Cargo loading continuous throughout public holidays.
POLICE/AMBULANCE/FIRE: Police, Stanley 581104; Ambulance, Smithton 521221; Fire, Stanley 581202.
TELEPHONES: Arrange through Pilots.
SHORE LEAVE: Arrange through Pilots. Sufficient crew remain on board to handle vessel for clearing berth – to include ten (10) competent deck crew, five (5) forward and five (5) aft.
GENERAL: *Chart:* Port Dalrymple to Circular Head, AUS 798.
Tide Predictions: See "Port of Stanley" – Australian National Tide Tables. Mean Spring range of tide 2.5 m. (8.42 ft.).
Officials: Marine Supervisor, Quarantine Officer, Customs Clearance Officer and Agent will board on arrival, weather permitting.
AUTHORITY: Savage River Mines, Marine Department – Port Latta, P.O.Box 353, Wynyard, Tasmania 7325., Australia. *Tel:* Wynyard (004) 423451. *Telex:* Pickand AA 59019. *Cables:* Pickand Wynyard. *Contact:* D. C. Schmidt, General Manager.

AGENT: Sub-agent of Patrick Agencies, Melbourne.

PORT LINCOLN, S.A.: 34.42 S. 135.50 E.
(See Plan Book)

PORT LIMITS:
Northern Limit: From Pt. Boston Light in a direction 059°×3 miles.
Southern Limit: From Cape Donington Light in a direction 059°×3 miles.
Eastern Limit: A line joining outermost ends of North and South limits.
DOCUMENTS: See "Melbourne".
PILOTAGE: Compulsory. Pilot boards 1.0 miles S.E. of Boston Point.
APPROACHES: Depth in approach Channel 30 ft. (Proper Bay) – 14.3 m. (Main Pier).
TUGS: 1 tug available.
VHF: Radio telephone in operation. Channels 6, 12, 16 and 67.
Office hours 0845 – 1700.
BERTHING: Kirton Point Jetty oil tanker berth at "T" head, berthing space 900 ft. (275 m.), depth 32 ft. (9.75 m.). Shipping Pier depth 27 ft. (8.2 m.) and 28 ft. (8.5 m.).

Two bulk grain loading berths 350 m. long, depth 14.93 m., with 2 travelling loaders with combined capacity of 4,000 tonnes an hour and an outreach of up to 35.5 m. on each side of jetty. Vessels up to 60,000 d.w.t. can be accommodated.

A berth, 247 m. long, depth 12 m. to accommodate general cargo including bagged grain, phosphate rock and sulphur vessels.

B.H.P. Jetty (Proper Bay) jetty and berth with mooring dolphins. Distance between outer dolphins 882 ft. (270 m.). Depth 34 ft. (10.4 m.) MLWS. Channel depth 9.1 m. Loading rate 1,900/2,000 t.p.h. Max. beam permissible 80 ft. (24 m.).

FUEL: Diesel and limited fuel oil by road tanker only.
FRESH WATER: Available at jetty and shipping pier. Not available at B.H.P. (Proper Bay) Berth,
AIRPORT: There is a scheduled 1 hour air service to Adelaide with up to 4 flights a day.
EMERGENCY CO-ORDINATION CENTRE: Australian Coastal Surveillance Centre-Canberra. Tel: (062) 475344. Telex: AA 62349.
STORING: See "Prelims" page viii.
(1) Yes.
(2) Operations at Harbour Master's discretion.
(3) Yes, right alongside.
(4) Yes.
(5) Normal Australian Regulations.
(6) Yes.
AUTHORITY: Department of Marine and Harbours, P.O.Box 354, Port Lincoln, South Australia, 5606. *Tel:* (086) 82 3633. *Telex:* AA 82525. *Contact:* Captain R. J. Cobban, Harbour Master.
For Proper Bay: Broken Hill Proprietary Co. Ltd.

AGENT: Patrick Agencies, 32 Edinburgh St, P.O.Box 399, Port Lincoln, South Australia 5606. Cables: Rikpat. Tel: 82 1011/1167. Telex: AA 80474.

PORT PIRIE, S.A.: 33.10 S. 138.08 E. (See Plan Book)

CERTIFICATES/DOCUMENTS/HEALTH: See "Melbourne".
PILOTAGE: Compulsory. The Pilot Boarding Station is South-West to West and within 3 miles of Eastern Shoal North Beacon.

The regulation pilot ladder should be secured so that the lowest step is 1.22 m. clear of the water. Manropes must be provided but a boat rope is *not* required.

Pilotage distance is 17 miles and time occupied is approximately 2 hours.

ANCHORAGE: Vessels awaiting a Pilot should anchor near the Pilot Boarding Station which is good holding ground.

Exempt vessels may anchor within Germein Bay. However, anchorage near Cockle Spit is not recommended for vessels of light draft under adverse weather conditions.

RESTRICTIONS/MAX. SIZE:
Daylight: Max. length 183.0 m. OA } i.e. Port Limits
Max. beam 27.5 m. OA }
At Night: Max. length 178.0 m. OA

Vessels are *NOT* piloted inwards or swung at night.

The entrance, river channel and harbour area are dredged to 6.4 m. LWOST. The keel clearance of any vessel proceeding in the harbour or channel should be 0.61 m. For vessels with a beam in excess of 21.33 m. the minimum keel clearance should be 0.76 m. and vessels over 22.25 m. the minimum keel clearance should be 0.91 m.

Max. draft at HWOST is 8.1 m., keel clearance of 0.9 m. required.

Vessels have sailed from the port under suitable tidal conditions with drafts in excess of 8.23 m.

Port Pirie Channel Information: The table shows the *maximum* depths to which vessels may load when the sailing or berthing time is 2 hours before HW (i.e. allowing 0.3 m. (1 ft.) rise of tide) and to provide the following keel clearances:

N.B. Berthing time means the pilot boarding time at Eastern Shoal North.

Note 1: It is recommended that the maximum draft shown on the table should be *decreased* by 0.15 m. (6 in.) when "fixing" vessels in advance, to allow for possibility of the tide being less than that predicted due to weather conditions.

Note 2: The LW heights should be considered when fixing deep vessels to ensure that the vessel always remains afloat in the berth.

		Minimum Keel Clearance
Column 1	Up to 21.33 m. (70 ft.) beam	0.6 m. (2 ft. 0 in.)
2	From 21.33 m. to 22.25 m. (70 ft. to 73 ft.) beam	0.76 m. (2 ft. 6 in.)
3	Over 22.25 m. (73 ft.) beam	0.91 m. (3 ft. 0 in.)
4	10% of draft	0.6 m. (2 ft. 0 in.)

Predicted height of tide	Depth in Channel	1	2	3	4
	m. ft. in.	m. ft. in.	m. ft. in.	m. ft. in.	m. ft. in.
		0.6 (2 0)	0.76 (2 6)	0.91 (3 0)	10%
0.0	6.4 (21 0)	5.5	5.3	5.2	5.5
0.1	6.5	5.6	5.4	5.3	5.6
0.2	6.6	5.7	5.5	5.4	5.7
0.3	6.7	5.8	5.6	5.5	5.8
0.4	6.8	5.9	5.7	5.6	5.9
0.5	6.9	6.0	5.8	5.7	6.0
0.6	7.0 (23 0)	6.1 (20 0)	5.9 (19 6)	5.8 (19 0)	6.1 (20 0)
0.7	7.1	6.2	6.0	5.9	6.2
0.8	7.2	6.3	6.1	6.0	6.3
0.9	7.3	6.4	6.2	6.1	6.4
1.0	7.4	6.5	6.3	6.2	—
1.1	7.5 (24 7)	6.6 (21 8)	6.4 (21 0)	6.3 (20 8)	6.5 (21 5)
1.2	7.6	6.7	6.5	6.4	6.6
1.3	7.7	6.8	6.6	6.5	6.7
1.4	7.8	6.9	6.7	6.6	6.8
1.5	7.9	7.0	6.8	6.7	6.9
1.6	8.0 (26 3)	7.1 (23 3.5)	6.9 (22 8)	6.8 (22 4)	7.0 (22 11)
1.7	8.1	7.2	7.0	6.9	7.1
1.8	8.2	7.3	7.1	7.0	7.2
1.9	8.3	7.4	7.2	7.1	7.3
2.0	8.4	7.5	7.3	7.2	—
2.1	8.5 (27 11)	7.6 (24 11)	7.4 (24 4)	7.3 (24 0)	7.4 (24 5)
2.2	8.6	7.7	7.5	7.4	7.5
2.3	8.7	7.8	7.6	7.5	7.6
2.4	8.8	7.9	7.7	7.6	7.7
2.5	8.9	8.0	7.8	7.7	7.8
2.6	9.0 (29 6)	8.1 (26 7)	7.9 (25 11)	7.8 (25 7)	7.9 (25 10)
2.7	9.1	8.2	8.0	7.9	8.0
2.8	9.2	8.3	8.1	8.0	8.1
2.9	9.3	8.4	8.2	8.1	8.2
3.0	9.4	8.5	8.3	8.2	8.3
3.1	9.5 (31 2)	8.6 (28 3)	8.4 (27 7)	8.3 (27 3)	8.4 (27 5)
3.2	9.6	8.7	8.5	8.4	8.5
3.3	9.7	8.8	8.6	8.5	8.6
3.4	9.8	8.9	8.7	8.6	8.7
3.5	9.9 (32 6)	9.0 (29 6)	8.8 (28 11)	8.7 (28 6.5)	8.8 (28 11)

RADIO/VHF: Port Pirie is serviced by VHF R/T Channels 16, 12 and 6. "Pirie Harbour" maintains a watch from 0845 hrs. – 2359 hrs. and when a vessel is under pilotage on Channel 67 and Channel 16. Vessels entering the port should advise "Pirie Harbour", as soon as contact can be established, of their ETA and draft, also the position anchored, if applicable. Exempt vessels should advise when ready to depart.

There is no visual signal station.

There is no radio telegraph station at Port Pirie. All such messages are handled through "VIA" Adelaide and are forwarded to or from Port Pirie by land-line.

TUGS: Two tugs, bollard pull 11 tonnes and 30 tonnes.

BERTHING: Vessels are normally berthed in the order of first arrival at the Pilot Boarding Station and are usually swung prior to berthing.

Main engines must not be immobilised and static engine tests must not be made without prior approval of the Harbour Master.

Berths: Vessels berthed at No. 1 should not exceed 152.40 m. (500 ft.) OA length.

At Berth Nos. 2, 3, 5, 6, 7, 8, 9 and 10 the OA length limit of 183.0 m. applies, provided adequate berthing space is available.

	Dredged to:						
Berth	*Depth*		*Width*		*Length*		*Normal usage*
No.	*m.*	*ft.*	*m.*	*ft.*	*m.*	*ft.*	
1	7.32	24	24.38	80	152.40	500	General
2	8.23	27	30.48	100	182.89	600	Silo-Bulk Grain
3	7.32	24	30.48	100	198.13	650	Tankers
4	5.79	19	—	—	106.68	350	Tugs & Launches
5	8.23	27	30.48	100	198.13	650	Concentrates – Overseas
6	8.23	27	30.48	100	182.89	600	Concentrates – Overseas
7	8.23	27	30.48	100	144.79	475	Concentrates – Interstate
8	8.23	27	30.48	100	179.84	590	Lead & Zinc Pigs
9	8.23	27	30.48	100	179.84	590	Lead & Zinc Pigs*
10	8.23	27	30.48	100	158.51	520	Coke, Coal and Limesand*
11	3.6	12	24.38	80	47.71	150	Acid

*Fuel oil can be discharged at these berths, for B.H.A.S.

CRANES: Eight 7.5 ton electric cranes are available as under:

No. 7 Berth – 2 for concentrate loading (Interstate only).

Nos. 8 and 9 and 10 berths – 6 plus the 2 from No. 7 if not required at that berth.

Two 7.5 ton cranes situated at No. 7 Berth are the property of E.Z. Company and the balance of the 7.5 ton cranes are the property of B.H. Associated Smelters and can only be procured when they are not required by the Company or when it is stipulated in contract, agreement or Charter, that cranes to be supplied.

BULK HANDLING FACILITIES: The boom of the shiploader is 70 ft. (21.3 m.) in length and when lowered to the horizontal position for pouring should plumb the midship line of most ships loading from this machine. The "jet-trimming slinger" at the lower end of the loading chute is capable of throwing a stream of ore some 60 ft. (18.3 m.) through 360° and can be directed to any position within the vessel's hold.

Bulk wheat and barley can be delivered ex-silo on a conveyor belt which is capable of delivery at the rate of 800 t.p.h. Five outlets are available but the maximum is 800 t.p.h.

FRESH WATER: Fresh water available all berths at rate of approx. 15 t.p.h.

FUEL: There are no bunkering facilities at any berth. Limited quantities of diesel oil may be obtained by road tanker.

TIME: Local time is Central Standard Time, GMT plus 9.5 hrs.

TIDES: MHW Springs 2.65 m., Neaps 1.65 m. Generally tidal heights of 2.74 m. or over occur at Springs about 50% of the days of the year. However, tides are affected by weather and may be up to 0.61 m. above or below predictions.

REPAIRS: Subject special arrangements.

TELEPHONES: Police 32 1200; Fire Department 32 3000; Harbour Master 32 1455.

AUTHORITY: Department of Marine and Harbours, Ellen Street, Port Pirie, South Australia. *Tel:* (086) 321455. *Telex:* AA82525. *Contact:* Harbour Master.

AGENT: Patrick Agencies, POB 38, 15 David Street, Port Pirie. S.A. 5540. Tel: 32 3222. Cables: "Rikpat".

PORT STANVAC, S.A.: 35.06 S. 138.28 E.

(See Plan Book)

The Marine Terminal is situated on the Eastern shore of the Gulf of St. Vincent, 18 miles South of Port Adelaide in Lat. 35° 06′ S., Long. 138° 28′ E., bearing 219°, 4.0 miles from Marino Light. Mariners are referred to current hydrographic chart AUS 780.

The Terminal berths are open and unprotected. Consequently at all times a vessel must be in a suitable condition, with sufficient deadweight and personnel on board to vacate the berth immediately on short notice.

The Terminal comprises a buoyed sea-berth served by a 34 in. submarine pipe-line, for the discharge of crude oil tankers of up to 175,000 tonnes displacement and a product berth for vessels up to 32,000 tonnes displacement. The product berth is attached to the seaward end of a pier which extends in a direction of 300°(T) from the shore.

The Terminal operates 24 hours per day, seven days per week. Vessels are berthed in daylight, subject to tides and/or suitable weather conditions and may depart at any time. Cargo handling operations are continuous whilst a vessel is in the berth.

DOCUMENTS: Inward clearance is effected on board the vessel by the Customs Boarding Officer after the vessel has berthed. This official is also the Superintendent of the Mercantile Marine Office.

The following documents are required:

Clearance from last port.

Crew List in duplicate on Form M & S 11, and in addition 3 copies on plain paper.

Store List on Form 42A (1 copy).

Dutiable articles owned by Master and Crew on Form 5 (1 copy).

Form C & E 886, Loading Port List (1 copy for each Australian port of discharge).

Cargo Manifest (B/L).

Livestock Notice (Form QA4) if any livestock on board, plus Shipmaster's Bond (Form QA5) in duplicate.

Necessary forms will be supplied by the ship's Agent on a vessel's first visit to the terminal.

Clearance outward is granted on board before sailing. No documents are required by the Master when clearing outwards – the ship's Agent handles all clearance documents at the Customs House.

PILOTAGE: Prior to berthing at Port Stanvac vessels will be boarded by a Company Mooring Master in the anchorage area. The Mooring Master will advise the Master on the pilotage of the vessel to the berth and in respect of mooring and unmooring of the vessel. At the offshore moorings he will also advise on the hoisting and lowering of the submarine hoses and on loading/unloading. He will remain on board while the vessel is moored at the off-shore berth. The Mooring Master will carry out his duties subject to the authority of the Master of the vessel.

Vessels are requested to have a pilot ladder and manropes, rigged on the leeward side for the safe embarkation and disembarkation of the Mooring Master. At night the ladder area should be efficiently illuminated. Pilot ladder and manropes should remain rigged during vessel's stay in port, whilst in the offshore berth.

If the vessel's freeboard is more than 9 m. then the accommodation ladder should be rigged in conjunction with the pilot ladder.

ANCHORAGE: Vessels awaiting to berth at Port Stanvac are advised to anchor in the following positions unless instructed otherwise:

Crude Oil Vessels: Using starboard anchor, with Marino Rocks Lighthouse bearing 065°(T) distance 3.5 miles in 11 fathoms of water.

Product Vessels: With Marino Rocks Lighthouse bearing 065°(T) distance 3.0 miles in 11 fathoms of water.

Holding ground in these anchorages is good with a hard sand bottom.

RESTRICTIONS: Approaches from the West through Investigator Strait; from the East, through Backstairs Passage.

Minimum depth in channel to jetty berth is 40 ft. (12.2 m.). Minimum depth in channel to Sea Line Berth is 60 ft. (18.3 m.).

Height of tide, 9.0 ft. (2.7 m.) HHW, and 4.6 ft. (1.4 m.) LHW.

MAX. SIZE: *Crude Oil Discharge Berth:* Max. size limitations for vessels using the off-shore berth are:

(a) LOA 300 m.
(b) Beam, no limitation.
(c) Draft 15.55 m.
(d) Displacement 175,000 tonnes.

Note: Vessels LESS THAN 65,000 d.w.tonnes need to be referred to Adelaide Refinery for suitability to berth.

Products Berth: Max. size limitations for vessels using the product berth are:

(a) LOA 183 m.
(b) Beam, no limitation.
(c) Draft 9.75 m.
(d) Displacement 32,000 tonnes.

Note: Ships at the product berth must have a parallel flat side at the lightship waterline of a minimum of 61 m. and maintain a minimum freeboard whilst loading of 1.7 m.

HEALTH: Vessels will be boarded by the Department of Health Officer either at the anchorage or in the berth.

If radio pratique (see "Radio") has not been obtained prior to arrival international quarantine signals must be exhibited until the vessel is cleared by the Department of Health Officer.

RADIO: *Arrival Message:* Masters are requested to radio their Agents 7 days before their estimated arrival at the port, giving the following information:

ETA
Number and nationality of crew aboard.
Crew's state of health.
Advise if the hull is free of leaks.
Whether bunkers are required and, if so, the quantity.
The number of crew members, if any, who require the services of a Doctor or a Dentist.
Advise if inert gas system is in good working order and conforms to SOLAS.
Advise if ship has C.O.W. on board and if crude oil washing is required at Port Stanvac and conforms to SOLAS.

Further ETAs should be sent 72 hours, 48 hours and 24 hours prior to arrival. The 24 hours message must also confirm that the hull is free of leaks. If there is any change to the 24 hours ETA then advice should be promptly transmitted.

Radio Pratique: Radio pratique can be obtained by vessels prior to arrival. To obtain radio pratique Masters should cable the following information to their Agents with a request for pratique 24 hours before expected arrival time:

A. Name, type and nationality of vessel.
B. Itinerary for last 15 days. If over 15 days from last port, please give name of port and date of departure.
C. Name of first Australian port and ETA.
D. Number of crew.
E. Number of Passengers.
F. Have you had cases of illness accompanied by a temperature of 38°C or above for more than 2 days, or accompanied by rash, jaundice or glandular swelling during voyage.
G. Have you had any deaths on the voyage, if so, give details.
H. Have you had cases of illness including diarrhoea sufficiently severe to interfere with normal work or activity during the voyage.
I. Have you had persons suffering from venereal disease during the voyage.
K. What live fish, birds, reptiles or other animals are you carrying? Ship's pets should be mentioned.
L. Have you carried livestock on previous voyages in the last six months? If yes, please advise type of livestock, date of voyage and port visited. Have all stock-carrying compartments been thoroughly cleaned and disinfected?
M. Do you request approval to berth?

VHF: Port Stanvac Refinery is equipped with VHF radio operating on the following frequencies: Channel 16 (156.8 MHz) calling and standby only; Channel 14 (156.7 MHz); Channel 9 (156.45 MHz).

Masters of vessels proceeding to Port Stanvac are required to establish VHF radio contact with Port Stanvac (call sign "Port Stanvac") as soon as possible prior to arrival to confirm the vessel's ETA. Masters will be advised on which Channel they should maintain a listening watch while in the Port Stanvac area and to receive instructions related to berthing, cargo operations and other matters.

TUGS: Depending upon conditions and ship size, 1, 2 or 3 tugs may be used to assist in berthing crude oil vessels. These tugs are stationed at Port Adelaide and take about 3 hours to reach Port Stanvac. The tugs' hawsers are always used for berthing.

Tugs are not normally used for berthing at the Product Berth.

BERTHING: Crude Oil Discharge Berth:

Vessels are moored heading approx. 270° using ship's port and starboard bow anchors and 6 mooring buoys in a crescent around the stern. Three Swamp moorings.

Vessels should be equipped with at least 6 mooring lines of at least 220 m. of good quality, to secure in the berth. If a vessel is only equipped with mooring wires these should be fitted with fibre tails of at least 15 m. in length. The mooring buoys are fitted with 40 mm. diameter preventer wires of sufficient length to reach a vessel moored in the berth. These preventer wires will be taken from the buoys to the ship by launch and must be secured on board under the supervision of the mooring Master's Assistant.

After the vessel is securely moored, the ship's crew under the direction of a officer, and supervised by the Mooring Master, will by means of the ship's derrick or crane lift separately 2×12 in. submarine hoses for direct connection to the ship's manifold. The weight of each 12 in. hose is approximately 4.5 tonnes with the ship in loaded trim and about 5 tonnes when in the light condition.

When bunkers are required the 10 in. submarine hose will be lifted and connected at the same time as the discharge hoses. The weight of this hose is approximately 3.5 tonnes.

Vessels should have in place, on the manifold, reducers or spools to suit 12 in. A.S.A. flanges, and a reducer or spool to suit the 10 in. A.S.A. bunker hose.

Vessel's derrick should be rigged with a SINGLE WIRE RUNNER, with a shackle on its working end. All gear to have a safe working load of 5 tonnes.

Two good messenger ropes of at least 25 mm. diameter and 50 m. in length for heaving-in preventer wires should be available.

It is recommended that the patent "Carpenter's Stopper" provided by shore be used in handling the heavy 40 mm. preventer wires.

Maximum discharge pressure allowed is 1,000 Kpa (150 p.s.i.) at the ship's manifold.

Product Berth: The Product berth has a fixed all round green light mounted on top of the hose boom.

All vessels are berthed portside alongside heading in a direction 240°(T).

Mooring line requirements are that vessels may be required to use 8 mooring lines, in good condition. The headline can be a wire rope but, if so, must have a 15 m. synthetic tail. The stern line must be a floating synthetic line so as not to foul the propeller on berthing.

The bow and stern mooring buoys are each fitted with 1×40 mm. diameter preventer wire. These wires will be taken to the ship by launch and secured on board under the supervision of the Mooring Master.

The berth is equipped with a Woodfield Flow Boom which handles all loading hoses, except the 2 solvent hoses. There are 2×14 in. lines which are for transferring white oils and taking off clean ballast. There are 2 × 16 in. lines for transferring black oils and taking off dirty ballast. Each of these 4 lines uses a 10 in. hose. In addition there are 2×6 in. solvent lines utilising 6 in. hoses and 1×12 in. line using an 8 in. hose for loading lube oils.

Typical loading rates are:

Black oils	1,600 tonnes/p.h. both lines.
White oils	1,400 tonnes/p.h. both lines.
Solvents	100 tonnes/p.h. each line.
Lub oils	500 tonnes/p.h. one line.

Multiple grades can be loaded simultaneously if segregation and safety are assured.

Ballast at 700 tonnes/p.h. is discharged through a 16 in. line to shore tanks with a receiving capacity of some 11,000 cu.m. On completion of deballasting clean salt water is to be discharged for approximately 15 minutes.

Notice of Readiness: Notice of Readiness will be accepted when vessel is securely berthed or, if berth is occupied, from the time the vessel is 'brought up' at anchor off the port in, or adjacent to, the recommended anchorage.

Draining of Hoses: Crude oil discharge hoses are cleared by creating a vacuum on the submarine crude oil line. All product hoses are drained by gravity and ship's personnel are requested to co-operate with the Terminal Operators to ensure complete draining of hoses. Drip trays must be placed in position to catch any oil which may remain in the hoses and oil absorbent material must be in readiness to absorb and clean up any small leaks.

Emergency Signal: Should normal ship to shore communication fail, the emergency signal to stop the flow of oil will be one or more blasts of the ship's whistle each blast of NOT LESS THAN 10 SECONDS DURATION. In the case of a fire this should be supplemented by a continuous sounding of the ship's general alarm system. Steam or air should never be shut off the whistle whilst the ship is in port.

Signals: Vessels discharging or loading shall, by day, display the international code inflammable flag and by night, a red light, where it can be clearly seen and visible all around the horizon.

MEDICAL: Medical and Dental treatment is available if required. The Agent should be informed of the treatment required.

FRESH WATER: Fresh water at approximately 25 cu.m.p.h. is available at the product berth.

There is no fresh water connection at the crude berth. Crude oil vessels requiring water must arrange, via their Agents, for water to be brought by tug from Port Adelaide. Tug hire is expensive and is for the account of the ship. Transfer of water from a tug to a ship must be carried out at the anchorage.

FUEL: Fuel oil is available at the Crude Oil Berth, fuel oil and diesel oil are available at the Product Berth.

CONSULS: Most nations, with the exception of the Arabian countries and the Panama Republic, have Consulates in Adelaide.

REPAIRS: Port Stanvac is an open roadstead and while vessels are moored at either berth, the main engines must be maintained in readiness to enable the vessel to leave the berth under full power at all times. No engine repairs which may interfere with this requirement will be permitted.

No welding, hotwork or scaling is permitted on vessels whilst at either berth. All repairs must be carried out in the anchorage. There are 2 repair firms in Adelaide capable of handling emergency voyage repairs. Details of any emergency repairs should be included in the ETA message.

CUSTOMS ALLOWANCES: All dutiable goods declared on Form 5 (see "Documents"), should be ready for possible collection and sealing by Customs. Non Australian crew members are allowed to retain: 200 cigarettes (opened carton) or 0.5 lb. tobacco or 40 cigars or 300 Biddies and 1 opened bottle (quart) of liquor.

BALLAST: No dirty ballast may be discharged into the sea at Port Stanvac.

Ballast disposal facilities are available at the Product Berth, maximum capacity is 11,000 cu.m.

There are no shore ballast facilities for the off-shore berth.

TIME: South Australian standard time is GMT plus 9.5 hours. South Australian Summer time is GMT plus 10.5 hours and this is observed from November through March.

POLLUTION: Extreme care must be taken to avoid pollution of water by oil. A $50,000 fine, plus the cost of any clean-up can be imposed on, among others, a Master of any vessel which causes pollution of the sea by oil

The contents of engine-room and pumproom bilges must not be discharged into the sea. All pumproom and sea suction and overboard discharge valves must be securely lashed before loading or discharging operations commence.

If vessels need to unlash sea suction valves, the Mooring Master must first be informed. The ship's pumps must be started and a vacuum obtained before opening any sea valve.

The area around the ship's manifold and overside in the vicinity of the submarine hoses, when in the off-shore berth, shall be efficiently illuminated at night during loading and discharge operations.

All deck scuppers must be plugged and sealed before commencement of loading or unloading.

A stand-by warning must be given to the Terminal Operator not less than fifteen (15) minutes before any cargo transfer is completed. When topping off, the loading rate will be reduced by the Terminal Operator as required.

SHORE LEAVE: Port Stanvac is an open, unsheltered roadstead and it is emphasised that vessels must be in readiness to vacate the berth immediately on receiving instruction to so do.

There will be a launch available for transporting crew members ashore for shore leave. The launch is restricted to carry a maximum of 10 persons. The launch will only be available on completion of mooring and hose connecting service and will be limited to a maximum number of trips at set times.

At Anchorage: 0800, 1200, 1800 and 2300 hrs. from Launch Dock.
At Berth: Daytime by arrangement with Mooring Master.
Night – 1800, 1930, 2100, 2230, 2400, 0130, 0300, 0430, 0600 and 0730 hrs. from Launch Dock.

Crew members failing to be present for the last return trip of the launch from shore to ship will be required to make their own arrangements for transport to the ship.

Vessel's crew members and visitors are not allowed to walk through the Refinery. Access from the wharf to the Main Gate, and vice versa, must be by car or taxi only. Taxis may be ordered through the Main Gate personnel. Taxis are free as far as the Main Gate.

GENERAL: *Gangway:* A shore gangway is provided at the Product Berth.

Ship's accommodation ladder should be rigged on the leeward side in the off-shore berth.

Garbage: The dumping of garbage into the sea at Port Stanvac is STRICTLY PROHIBITED by law. PENALTY $2,000 FINE.

Laundry: Laundry facilities are available in Port Adelaide. Master should advise requirements to his Agent prior to arrival.

Stores and Provisions: A limited amount of stores such as bread, milk, fresh vegetables and fruit, not exceeding a gross weight of 5 cwt., will be permitted to be delivered by the company launch. In such instances, it will be the responsibility of the vessel ordering such stores to make available a sufficient number of ship's crew to be taken to the launch harbour by the company launch in order to handle the stores into the launch for eventual transportation to the vessel. On no account is the launch crew to handle ship's stores. Arrangements for the handling of stores should be made through the Mooring Master on board the vessel, or the ship's Agent.

Stores ordered in excess of the above quantities must be arranged via the ship's Agent, and must be transported to the vessel direct from Port Adelaide by barge. The cost of this facility is expensive.

Masters are advised that whenever possible they should arrange to receive stores at other ports where facilities for storing may be more convenient.

The company will not accept responsibility for any stores handled at the Terminal.

Tides, Current and Depths of Water: The predicted tide times at Port Stanvac are approximately 10 minutes earlier than the tidal predictions for Outer Harbour, Port Adelaide. However, the times and heights may be affected quite markedly by the prevailing weather conditions. The tidal current flows in a N.S. direction and on occasions may reach 1 knot.

The lowest recorded depth of water at the Product Berth is 40 ft. MLWS and at the Crude Oil Berth is 61 ft. MLWS.

Weather: From September to May, the prevailing winds are from the South, S.E. to East. During the remainder of the year, winds are generally from North, West to S.W. At times winds may reach gale force.

AUTHORITY: Petroleum Refineries (Australia) Pty. Ltd.

AGENT: See "Adelaide".

PORT WALCOTT, W.A.: 20.37 S. 117.11 E. (including Cossack and Point Samson (defunct), Cape Lambert (operational) and Dixon Island (possible future)

(See Plan Book)

PORT LIMITS: All that portion of water bounded by a line starting from the North end of Dolphin Island running to the North end of Delambre Island then in a 081° direction to a position in Lat. 20° 21.5′ S., Long. 117° 31.5′ E. and then due South to meet the high water mark of the shore line generally in a Westerly and Northerly direction to Sloping Point; thence generally Westerly to the Northernmost Northwestern extremity of Burrup Peninsular; thence Northeasterly crossing the Western entrance of Boat Passage to the high water mark at the Westernmost Southwestern extremity of Dolphin Island and thence generally Easterly and generally Northeasterly along the shore line of that Island to the starting point.

DOCUMENTS: See "Melbourne".

PILOTAGE: Pilots resident at Wickham. 24 hours service. Pilotage is compulsory anywhere in the port, except that, with permission, ships may enter port and proceed via the Eastern route to anchorage. Ships should not enter via Bass Pass except with Pilot.

Pilots will, generally, board and leave ships by means of a small helicopter. Ships which cannot accept a helicopter must advise the Harbour Master at least 48 hours prior to arrival. All crew members should keep well clear of the hatch on which the helicopter will land. Helicopter is fitted with marine VHF radio. Call sign "Alpha Julliett Uniform".

Pilotage will be provided, on request, from No. 1 Buoy. However this will only be just prior to a ship berthing. Ships may anchor, inside port limits, to the East of No.1 Buoy.

Pilot Ladders, Hoists, etc: On arrival, Pilots will accept a pilot hoist, a pilot ladder not exceeding 9 m. in length, an accommodation ladder if the weather is suitable or a combination of pilot ladder and accommodation ladder.

Owing to swell conditions, a clean pilot ladder is required for departure. This should be rigged so that it is 1 m. above sea level and provided with 2 clean manropes.

This ladder is required to comply with Australian Standard Specification No. 1267 of 1975 which is based on the requirements of the SOLAS Convention and the Navigation Act.

A pilot hoist or accommodation ladder is *not* considered suitable for disembarking.

Whilst in the berth, the appropriate accommodation ladder is used for access to the ship.

APPROACHES: Approaches are marked by 5 light buoys. The first is in position Lat. 20° 23.45′ S., Long. 117° 25.34′ E. and is fitted with a 3 cm. Racon – morse code "K". From a position about 1 mile East of this buoy, ships should proceed on a course 183° for 7 miles, then 252° for 10 miles to the anchorage area. Ships should not attempt to enter via Bass Pass.

Exit Channel: Marked by some 28 buoys and beacons. Pilotage is compulsory for all ships in this area.

ANCHORAGE:

Recommended Anchorages:

Bearing of Jarman Island Lighthouse.

No. 1	191°×6 miles	No. 7	208°×8 miles
No. 2	201°×6 „	No. 8	215°×8 „
No. 3	196°×7 „	No. 9	222°×8 „
No. 4	205°×7 „	No. 10	204°×9 „
No. 5	213°×7 „	No. 11	210°×9 „
No. 6	200°×8 „	No. 12	217°×9 „

For smaller ships:
'F' 175°×6.7 miles and 'A1' 184°×5.2 miles.

RESTRICTIONS: *Max. draft for different tidal heights in order to obtain 10% U.K.C.*

Based on the availability of 16.0 m. at low water.

Tide (m.)	*Draft* (m.)	*Tide* (m.)	*Draft* (m.)	*Tide* (m.)	*Draft* (m.)	*Tide* (m.)	*Draft* (m.)
2.9	17.18	3.7	17.90	4.5	18.63	5.3	19.36
3.0	17.27	3.8	18.00	4.6	18.72	5.4	19.45
3.1	17.36	3.9	18.09	4.7	18.81	5.5	19.54
3.2	17.45	4.0	18.18	4.8	18.90	5.6	19.63
3.3	17.54	4.1	18.27	4.9	19.00	5.7	19.72
3.4	17.63	4.2	18.36	5.0	19.09	5.8	19.81
3.5	17.72	4.3	18.45	5.1	19.18	5.9	19.90
3.6	17.81	4.4	18.54	5.2	19.27	6.0	20.00

Controlling Depths for ships to the Service Jetty is 8.2 m. and Ore Jetty
12 m. For sailing from the Ore Jetty – 16.0 m.

For vessels bound for Lambert Service Jetty – 8.8 m. (29 ft.).

Berthing of ore carriers is usually carried out at about 1 hour – 2 hours before HW.

Part loaded ore ships are restricted to berthing at HW. The turning area has a least depth of 12 m. and a U.K.C. of 1.5 m. is required. Drafts of up to 15 m. can be accommodated, but ships are strongly advised to contact the Harbour Master for advice prior to arrival.

Ships over 150,000 d.w.t. to berth at HW only. Ships of 190,000 d.w.t. and above to berth in daylight only.

Sailing from the Ore Jetty is at 1 hour before HW. No variation can normally be permitted. The 18 mile exit route is 'graded' from 16 m. to 17.4 m. to accommodate tidal variations.

Drafts for sailing are calculated by adding the height of tide to the controlling depth and then deducting one eleventh of that total to give an U.K.C. of 10% of draft.

Owing to tidal peculiarities, berthing at the Lambert Service Jetty is either at about 2.5 hours before HW or 3.5 hours after HW.

TIDES: Spring range is 5.8 m. (19 ft.).

MAX. SIZE:	*Berth No. 1*	*Berth No. 2*
DWT	225,000	290,000
LOA	355 m.	355 m.
Beam	50 m.	55 m.

Largest ship to date (July 1984), the 'Weser Ore' 274,326 d.w.t. LOA 335 m. and beam 52 m.

RADIO: Send ETA advices to "Shipserve-Harbourmaster-Portwalcott" 7 days and 24 hours prior to arrival.

VHF: VHF communications are available on a limited basis – a watch being kept on both Channels 16 and 14. Hours are approx. 0830 – 1200 and 1300 – 1630 Monday to Friday. The station is also manned if it is thought that urgent communication is necessary.

HEALTH: Pratique may be given by radio. Pratique is automatic if having called at another Australian port.

TUGS: Two tugs, "Roebourne" and "Wickham", are available for use at Cliffs Jetties only. Each is 3,200 h.p. with a bollard pull in excess of 50 tons. They are twin screw with Kort nozzles. One line launch is available. Tugs supply towing equipment.

BERTHING:

Cape Lambert Service Jetty is owned by Cliffs Robe River Iron Associates (C.R.R.I.A.). The neck is 1,500 ft. long and the berthing head is 510 ft. long. Off each end of the head is a mooring dolphin some 90 ft. away. This permits a vessel of about 625 ft. long to berth. There is a min. depth of 10 m. at LW. The height of the jetty, above LW, is 35 ft. Cargo is handled by ship's gear. The jetty is designed for road transport only. It was built to normal Australian standards and 110 ton locomotives have been landed. This is not a common-user berth and permission must be obtained from the Port Authority before any cargo, other than C.R.R.I.A. cargo, is handled.

Lambert Ore Jetty is owned and operated by C.R.R.I.A. It extends 8,760 ft. to sea in a 046.75° direction. It is double sided and capable of handling ships up to 290,000 d.w.t. Max. beam at No. 1 is 50 m. and No. 2 is 55 m. The depth of water in No. 1 (South) Berth is 18.5 m. and in No. 2 (North) Berth is 19.5 m. Ships should arrange their trim so that there is always a clearance of 1 m. when in the berth. There is a single shiploader designed to operate at 6,000 t.p.h. Ships berth 'head out' and are secured to dolphins, parallel to the jetty. These dolphins are 25 ft. (7.6 m.) above LW. The height of the jetty is 61 ft. above LW and the boom of the shiploader is about 100 ft. above LW. Max. distance between hatches is: No. 1 Berth, 234 m. and No. 2 Berth, 236 m.

CRANES: 2×5 ton mobile cranes.

STEVEDORES: Labour for stevedoring purposes is controlled by the Association of Employers of Waterside Labour. Requests for labour should be made through an Agent or Stevedore. Hours of work are usually 0800 – 2130 and 2130 – 0630. This labour operates at Lambert Jetty.

TANKERS: Usually berthed 'head-in' at the Lambert Service Jetty as the deeper water (35 ft.) is at the seaward end. Discharge is through an 8 in. pipe-line which is situated about the centre of the berth. Tankers at the Lambert Ore Jetty are moored with 2 anchors and stern moorings to the berth.

A basin has been dredged to accommodate tankers. Discharge is through either a 24 in. or 12 in. pipe-line via a pair of "Wheaton Arms".

CARGO GEAR: See "Melbourne".

FRESH WATER: Fresh water available at both wharves – ships supply own hoses with 2.5 in. quick release fittings.

FUEL: Not available.

TIME: GMT plus 8 hours.

STORES: Dry, chiller, freezer and Bond stores are available. It is suggested that ample notice be given.

AIRPORT: At least 1 jet flight per day to Perth from Karratha, flight time 2 hours.

CERTIFICATES: Ore/Oil carriers require inspection by surveyor if previous cargo oil. Gas-free Certificates over 24 hours old are not accepted.

CHARTS: AUS 55, 740, 741, 326 and 327, plain or Decca are available at Harbour Master's Office, also AUS 56 and Aust. Nat. Tide Table. Notices to Mariners, U.K. & Aust. are available for inspection.

REPATRIATION: Carried out regularly.

TELEPHONES: Not available at the berths.

HOLIDAYS: Iron ore is loaded 24 hours per day, except for one 24 hour period over Christmas (usually 2300/24th to 2300/25th December).

SHORE LEAVE: Crew members are allowed ashore by pre-arranged bus or taxi – nearest town is 10 miles away.

SHIP SUPPLY SERVICE: Port Walcott has limited ship-to-shore transport with the only non-fishing commercial craft being CRRIA owned tugs (2) and workboat, and the State Government's pilot launch. All these craft are available for emergency use.

Charter craft are available from either Lombardo Marine Group at Port Dampier or Elder Prince Marine at Port Hedland.

The local ship's Agents are conversant with the availability of charter craft and ship Masters and Owners would be well advised to operate through their Agent.

A helicopter Pilot Service is due to commence at Port Walcott in July, 1984. This service may be available for emergency use. Contact should be made through the Harbour Master's Office.

Harbour Master Port Walcott, Department of Marine and Harbours, P.O.Box 61, Wickham, W.A. Tel: (091) 871428.

Elder Prince Marine Services Pty. Ltd., Port Hedland. Tel: (091) 731651.

Lombardo Marine Group Pty. Ltd., Karratha. Tel: (091) 853344.

GENERAL: Port Walcott is connected by sealed roads to the towns of Wickham, Roebourne, Karratha, Dampier and Port Hedland, each of which has a hospital and other facilities. The sealed road also extends to Perth, some 1,100 miles away.

Charts: AUS 740, AUS 741, AUS 742, AUS 326, AUS 327, AUS 58, AUS 56 and AUS 55 are stocked, either plain or in Decca (LD8) configuration. These charts are available at the Habour Master's office. British and Australian Notices to Mariners may be inspected at this office.

Tides: Spring range is 5.70 m. (18 ft. 9 in.).

Stores: Providores operate here. Freezer, chiller, dry and Bond stores are available but advance notice is preferred.

Seamen's Club: A Mission to Seamen is situated in Wickham about 16 km. from ore berths. This club is attached to the Wickham Club Inc. and visiting seafarers are welcome as guests. A small bus (15 seater) will be made available on request. This bus is driven by volunteers and is operated at mutually convenient times.

Access: Access from the ship to the shore is by means of ship's accommodation ladder to a dolphin at the ore jetty and by means of a brow at the Service jetty.

Moorings: 1. Any wire ropes should terminate in a fibre rope tail of at least 20 m. length, including eye.

2. Spring lines should be laid out on deck, prior to coming alongside, for a distance of approx. 80 m. from the ship's lead. In the case of wires, the rope tail would be included in this 80 m. This arrangement should permit easy lowering vertically to the appropriate dolphin.

AUTHORITY: Department of Marine and Harbours, P.O.Box 61, Wickham, W.A. 6720. *Tel:* (091) 871428. *Contact:* Captain R. H. Hudson, J.P., Harbour Master. Office located at Point Samson.

AGENT: Sub-agent of Patrick Agencies, Fremantle.

PORTLAND, Victoria: 38.20 S. 141.36 E.

(See Plan Book)

PORT LIMITS: As much of the waters of Portland Bay as lie Westward of a line bearing due North from Point Danger to the opposite shore of Portland Bay.

DOCUMENTS: Refer to "Melbourne".

PILOTAGE: Compulsory except for exempt Masters. Pilot boards about 0.75 mile N.E. of main breakwater. Pilot is available 24 hours. 24 hours notice required.

Approach from the West: A safe course into Portland Bay can be maintained by rounding Lawrence Rocks at a distance of 1.5 miles and altering until a course of 330° can be steered, which will clear the Southern side of the Bay between Point Danger and Portland by 1.5 miles. Steer this course until Whaler Point Lighthouse bears 270° about 2.5 miles distant where course can be altered for the harbour entrance.

Approach from the East: Is a straight course after rounding Lady Julia Percy Island, 18 miles from the breakwater.

ANCHORAGE: Portland Bay is clear of all hazards and safe anchorage may be found 0.25 to 0.5 miles North and N.E. of the Main Breakwater and for smaller vessels between the Lee Breakwater and Whaler Reef. Holding ground is good, and excellent shelter is obtained from Westerly weather. Anchoring is not recommended in strong Easterly or South-easterly weather, as there may be a confused sea and swell.

RESTRICTIONS: The Harbour is bounded by 2 breakwaters, enclosing 101 hectares. The entrance is 244 m. wide.

Swinging Basin: Between the two breakwaters, bounded by No. 6 Berth and the Lee Breakwater.

Depth of water in the harbour is based on a datum of 0.082 m. above LWOST, which ensures a depth of not less than 11 m. under all tidal conditions. Mean rise and fall is approximately 0.75 m. but the prevailing wind has a certain influence on the tide.

MAX. SIZE: The largest vessel to use the port to date was with a departure draft of 11.89 m.

Also see "Tankers".

HEALTH: Portland is a first port of entry. When requiring pratique, inform the Port Health Officer of the ETA, number of crew and passengers and the state of health of the complement. Use the prefix "Shipserv" for all cabled messages. All requirements as for Melbourne.

RADIO: Maritime VHF operating on Channels 12 and 16 is installed in the Harbour Master's Office and on the tugs.

Listening on Channel 16 between 0800 and 1700 hrs. and when shipping is expected.

Radio Advice of Arrival: Address ETA telegrams to the Harbour Master, using the prefix "Shipserv".

TUGS: 1×1,600 h.p. and 1×1,700 h.p. available.

BERTHING: The Main Breakwater extends 1,280 m. in a North-South direction from Battery Point with its Northern extremity in 14 m. of water. There are 2 berths at the inshore end known as No. 1 and No. 2, K. S. Anderson Wharf.

Depth alongside No. 2 Berth, is 11 m. SW, whilst the Max. draft is 10.5 m. (this draft may be increased if written application made to Harbour Master).

No. 1 K.S. Anderson Berth: Dredged to 12.2 m. for a length of 212 m., with a max. draft of 11.6 m. with similar variance conditions as apply to No. 2 Berth. K.S. Anderson Wharf is 396 m. in length and is primarily utilized as a bulk grain loading wharf. Two mobile shiploaders operate over the length of the wharf. Shiploaders are 27 m. high and are capable of delivering 750 t.p.h. of grain.

In addition to bulk grain, K.S. Anderson Wharf is suitable for use as a point for bunkering as well as loading and discharging general and ro/ro cargo.

No. 5 Berth: A multi-purpose, heavy duty wharf is located on the East side of No. 2 Quay. No. 5 Berth has an alongside depth of 11 m., and is 122 m. in length. Facilities adjacent to No. 5 Berth include a bulk tallow installation, a 7,230 cu.m. capacity cool/cold store and a 2.6 hectare container park.

No. 6 Berth: At right angles to K.S. Anderson Wharf, length 228.6 m., depth 11.0 m. It is designed and built for handling bulk cargoes, but is also utilised for loading livestock, woodchips and general cargo. As the case with No. 5 Berth., a tallow line runs to No. 6 Berth.

Special Purpose Bulk Berth: Constructed to service the shipping requirements of an aluminium smelter which is under construction at South Portland. Berth is located on the Main Breakwater 198 m. North of K.S. Anderson Wharf. Depth alongside – 12.2 m. Max. draft 11.7 m.
Cold Stores: 7,230 cu.m. capacity situated on No. 2 Quay.
Container Storage Park: A container park of 2.6 hectares is situated on No. 2 Quay. Capacity is 80 refrigerated and 500 conventional containers.

TANKERS: S.L. Patterson Berth and Lee Breakwater protrudes in an Easterly direction from point 3.7 cables South of Whaler Point Lighthouse for a distance of 1,180 m., with its extremity in 12.2 m. of water.

The S. L. Patterson Berth is situated on this breakwater about 457 m. from the seaward end.

The wharf is 76 m. in length and designed for vessels up to 38,000 d.w.t. Depth alongside is 10.4 m. LW. Maximum draft permitted is 9.9 m.

Berthing and unberthing of tankers is on a 24 hour basis, at the discretion of the Harbour Master. During darkness, a Pilot is compulsory.

The Shell Company of Australia Limited, and Ampol Petroleum (Victoria) Pty Limited have pipe-lines to the berth. Average discharge rate is approximately 300 t.p.h. This wharf can also be utilised as a loading berth ex-road transport and as a fitting out repair berth

STEVEDORES: There are 68 registered members and in excess of 100 casual waterside workers available.

Hours of work are from 0800 – 1700 hrs., from 1700 – 2300 hrs. and midnight – 0700 hrs.

Extended shifts are allowed to be worked to 1900 hrs. each day (except Thursday and Sunday) when no twilight labour is available.

Pallets can be manufactured locally by prior arrangement.

Vessels can be serviced expeditiously under skilled supervision including fitting out for grain, battening out for freezer or general cargo and securing cargoes to departmental requirements. Ample supplies of dunnage are available.

MEDICAL: Medical, dental and optical services are available.
FRESH WATER: Obtainable in unlimited quantity at all berths at a loading rate of up to 100 t.p.h.
FUEL: Not available.
REPAIRS: There are a number of repair and light engineering firms capable of minor repairs.
GANGWAY/DECK WATCHMEN: Shore gangway watchman are compulsory.
AIRPORT: An air service is maintained between Portland and Melbourne. 3 flights daily connecting with all interstate and international services.
TELEPHONES: At all berths. Tanker Berth No. (055) 231852. K.S.A. No. 1 – (055) 231122, K.S.A. No. 2 – (055) 231633, No. 6 Berth – (055) 231286, No. 5 Berth – (055) 231111, S.P.Berth – (055) 234804.
POLICE/AMBULANCE/FIRE: Fire Brigade 232998; Police 231999; Ambulance 231666; Hospital 231033, after hours, general patients 231400.
GENERAL: *Provisions:* Plentiful and available at short notice. Bonded stores are at present only available from Melbourne at approximately 24 hours notice.
AUTHORITY: Port of Portland Authority. P.O.Box 292, Portland, Victoria 3305, Australia. *Tel:* (055) 231922. *Telex:* AA 55853. *Contact:* Captain R. A. Waters, Harbour Master.
AGENT: Patrick Agencies, 77 Bentinck Street, P.O.Box 133, Portland, Victoria 3000. Tel: (055) 23-4011 (office), (055) 23-1521 (after hours). Telex: Rikpat AA 55865. Cables: Rikpat.

RAPID BAY, S.A.: 35.32 S. 138.12 E.

LOCATION: On Eastern shore of St. Vincent's Gulf about 55 sea miles South of Port Adelaide.
PORT LIMITS: 1 mile radius of jetty head.
DOCUMENTS: As for Port Adelaide if overseas entry.
PILOTAGE: Not required or available. Call "Rapid Bay" on VHF Channel 16 for clearance to berth. No launch for lines. Ample supply of heaving lines to be available on approaching berth – grappling hooks used from ashore.
ANCHORAGES: In fair weather, anchor 1 mile due North of jetty head.
In bad weather, best to anchor in Nepean Bay (Kangaroo Island).
RESTRICTIONS: Night berthing at Masters discretion but not preferred.
MAX. SIZE: LOA 165 m. Jetty 188 m. long, in 113° – 293° direction.
HEALTH: Customs informed of ETA which is first port of call from overseas or if on overseas documents.
RADIO: ETA cables should be by telegram to Hematite, Second Valley, S.A. Tel: 085 59.4056.
VHF: Channel 16 for calling.
Channel 12 for relaying berthing and loading instructions etc.
Station not manned at all times.
RADAR: Not available.
TUGS: None available.
BERTHING: Generally starboard side to as tide nearly always sets S.W.
Prevailing wind S.W. – S.E.
Max. draft 28 ft. MLWS.
Fixed head loading boom.
Vessel warps along wharf.
Loading rate approx. 1,500 t.p.h.
CRANES: None.
BULK CARGO FACILITIES: "T" shaped jetty 1,600 ft. long.
"T" shaped jetty 737 ft. long.
Depth 28 ft. MLWS.
Height of chute above water MLWS 38 ft.
Fixed chute extends 35 ft. beyond jetty fender line.
Maximum loading rate 1,500 t.p.h.
Cargo – limestone.
SPECIALISED CARGO HANDLING FACILITIES: None.
STEVEDORES: None available.
MEDICAL: Require notice on arrival or by telegram. No hospital available. Nearest at Victor Harbour. Nearest doctor at Yankalilla (16 miles from Rapid Bay).
TANKERS: No facilities.
DENSITY: 1030.
FRESH WATER: Not available.
FUEL: Not available.
FIRE PRECAUTIONS: Normal precautions.
CONSULS: None.
REPAIRS: No facilities.
DRY DOCKS: None.
SURVEYORS: Lloyds Surveyors and Agents available from Adelaide.
GANGWAY/DECK WATCHMEN: None available.
HATCHES: Controlled by crew.
CUSTOMS ALLOWANCES: If first port of call, Customs will attend from Adelaide.
CARGO GEAR: Loading by fixed boom on jetty head.
REPATRIATION: No facilities.
AIRPORT: Nearest airport at Adelaide approx. 60 miles from Rapid Bay.
TIME: (G.M.T. plus 9.30 hours) Daylight saving November to March inclusive.
HOLIDAYS: All public holidays, however, loading crew can be arranged.
POLICE/AMBULANCE/FIRE: Police Tel: (085) 58.2014 (Yankalilla). Ambulance Tel: (085) 52.2111 (Yankalilla and Victor Harbour). Adelaide Brighton Cement Ltd. owned ambulance on site. Fire Tel: (085) 58.2000 (Yankalilla).
TELEPHONES: On shore only.
SERVICES: None.
SHORE LEAVE: At Master's discretion.
IDENTIFICATION CARDS: Not required.
REGULATIONS: Normal.
DELAYS: None.
DEVELOPMENTS: None.
AUTHORITY: Department of Marine and Harbours, P.O.Box 19, Port Adelaide, South Australia 5015. *Tel:* (08) 470611. *Telex:* AA 82525. *Contact:* Captain B. J. Hodges, Harbour Master.
AGENT: Sub-Agent of Patrick Agencies, Adelaide.

ROCKHAMPTON, (Port Alma) Queensland: 23.24 S. 150.33 E. (See Plan Book)

CERTIFICATES/DOCUMENTS: All documentation carried out by ship's Agents either in Rockhampton or at main Agent's office. Also see "Melbourne".
PILOTAGE: Agent notifies Pilot of ETA, and boarding time then determined by Pilot, taking into consideration circumstances prevailing.

Pilot boards from 50 ft. white launch. Pilots can be contacted by VHF Channels 8, 12 and 16, or radio-telephone 2182 and 2760 kHz.

RESTRICTIONS: Channel depth 24 ft. LWOST. Berth depth 32 ft. LWOST. Keel clearance of 2 ft. required. Max. draft dependent on height of tide.
ANCHORAGES: Anchorage for Port Alma is Timandra Buoy, approximately 13 miles from Port. Vessels *Cleared* to enter may anchor at Sea Hill.
HEALTH: Port Alma is a first port of Entry for overseas vessels and full quarantine and customs facilities are available when required. A doctor is in attendance for Quarantine purposes, and there is a quarantine anchorage at Sea Hill Point on the approach channel.

The Port is also a designated timber port, and facilities are available for the issue of Derat Certificates. Fumigation services for both ships and cargo are provided by private firms based at Rockhampton, and under the control of the Commonwealth Department of Health.

RADIO: VIR Rockhampton.
VHF: Harbour Board call sign: "Port Alma Wharves" Channel 16, 67, 6 and 12. Listening watch on Channel 16 when vessel due at Fairway Buoy.
TUGS: Tug assistance obtainable if required from Port of Gladstone.
BERTHING: Berth at Pilot's discretion after receiving advice from Agent as to ETA. Berths allocated by Port Manager.

3 berths available at Port Alma.

No. 1 Berth, of 168 m., and No. 2 Berth of 122 m., are concrete Breast Wharves providing a total of 290 m. continuous Breast Wharf with a depth of 9.7 m. at LWOST on a mud bottom.

No. 3 Berth consists of a dolphin type bulk loading berth with a length of 271 m., also with a depth of 9.7 m. minimum at LWOST.

Cargo Handling: The Rockhampton Harbour Board provides modern cargo handling facilities for Port users. These include Petrol Driven Fork-lift Truck for normal cargo operation. Other facilities for container operations include a 25 ton fixed crane and 2 nearby container receiving areas.

A bulk conveyor with a capacity of 1,000 t.p.h. is situated at No. 3 Berth. Though primarily intended for loading of salt cargoes, this conveyor is also available for other approved cargo. The Board provides a general cargo shed 49 m.×12 m. in area, and, in addition there are privately owned cold stores in which space is available for other shippers by arrangement.

CRANES: A 25 ton crane (fixed leg) is available on No. 2 berth to handle containers and other cargo.
STEVEDORES: Agent advises Stevedoring Company of ETA. Requisitions to be lodged for labour before 1300 hrs. on previous day. No requisition can be lodged from 1300 hrs. Friday to 1300 hrs. Monday.
MEDICAL: All medical requirements carried out by Agent. Hospital available 40 miles from Port Alma.

TANKERS: 10-inch disch. lines. No slop facilities. 1 berth 32 ft. LWOST. *Hazardous Cargo:* The Port is authorised to handle exposives and other hazardous cargo. Fire protection service.
FRESH WATER: Fresh water available by road transport only, necessitating road haul of 40 miles, average cost $40.00/1,000 gallons.
FUEL: Fuel oil and other bunkers can be arranged by road tankers from fuel terminals situated in Port Alma.
FIRE PRECAUTIONS: Usual precautions as laid down by the Marine Board of Queensland.
GANGWAY/DECK WATCHMEN: Crew.
OPENING/CLOSING HATCHES: Crew.
CUSTOMS ALLOWANCES: Under supervision by Custom's Department, 200 cigarettes or 1 lb. of tobacco each 10 days. Wine/Spirits, no definite information available.
CARGO GEAR: As per the Navigation Act. See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: See "Brisbane".
REPAIRS: Minor repairs only.
REPATRIATION: Facilities available.
AIRPORT: Regular services 43 miles from Port Area.
TIME: GMT plus 10 hours.
HOLIDAYS: Christmas Day, Good Friday, April 25th and Waterside Workers' Picnic Day.
POLICE/FIRE/AMBULANCE: Tel. No. 000. 40 miles distance.
TELEPHONES: No provisions for placing telephone on board ship. Public telephone on Wharf.
AUTHORITY: Rockhampton Harbour Board, P.O.Box 9, Rockhampton, Queensland 4700. *Tel:* (079) 276444, ext. 281. *Contact:* J. P. Stanley, Port Manager. *Tel:* (079) 346931 (Port Office), (079) 331728 (after hours). C. R. Monro, Assistant to Port Manager, (after hours: (079) 346103).
AGENT: Sub-Agents of Patrick Agencies, Gladstone.

SPRING BAY, Tasmania: 42.33 S. 147.56 E. (See Plan Book)

DOCUMENTS: As for all Australian ports.
PILOTAGE: Compulsory. Pilot boards from a tug (black hull, red funnel with black top), on a line joining Pt. Home Lookout and Stapleton Pt. (see Chart AUS 170). ETA is usually sent to vessel's Agent 72 hours prior to vessel's arrival and confirmed 24 hours and 6 hours before arrival at the Pilot station. ETA should also be sent to Harbour Master, Hobart, VHF Channel 16, call sign "Hobart Harbour". The tug from which the Pilot boards leaves Spring Bay Wharf 30 minutes before a vessel is due at the pilot station, and also keeps a listening watch on VHF Channel 16.
ANCHORAGE: A good anchorage can be found in depths of 22 m. approximately 1.25 miles South of Windlass Bay.
RESTRICTIONS: The wharf is used exclusively by vessels loading wood chips from Tasmanian Pulp and Forest Holdings. The main wharf, on which the wood chip loader is situated, is 800 ft. long with additional dolphins (3) and a mooring block for head, stern and breast lines. Ships are normally berthed starboard side to. The ship loader is a fixed structure and vessels loading are required to move up and down the wharf using their own lines. At present vessels are only berthed during daylight hours, but may leave during the hours of darkness at the discretion of the Pilot. Should a vessel require to immobilise her engines, application must be made to the Harbour Master; if permission is granted a tug will be required to stand by alongside.
MAX. SIZE: The minimum depth alongside the wharf is 35 ft., and the mooring dolphins and ship loading facilities were designed to accommodate specialised ships with an overall length of 685 ft. No difficulty envisaged in working ships having an overall length up to 800 ft.
HEALTH: The local medical practitioner boards vessels after berthing and acts for the Commonwealth Department of Health. Immigration/Customs Officers travel by road from Hobart and board after pratique has been granted. Quarantine Authorities must be informed of suspected disease or fever at least 18 hours before arrival. Also see "Melbourne".
RADIO: Hobart Radio, call sign VIH. Hours of duty EST (add 1 hour for Summer Time). Monday-Saturday inclusive 0730 – 1730 hrs. Sunday, 0800 – 1600 hrs.
TUGS: 1 tug is stationed at Spring Bay. When a ship is due a second tug is despatched from Hobart and remains in the port area throughout the vessel's stay. One of the tugs is used to embark and disembark the Pilot as well as assisting in berthing and unberthing. Should tugs be required to stand-by during loading operations an additional charge will be made in respect of crews' wages etc. It is customary to use the tug's lines, for which an additional charge is made.
MEDICAL: A local doctor is available and well equipped health clinics are situated at Triabunna (3 miles) and Orford (7 miles).
DENSITY: 1025.
FRESH WATER: Limited supplies are available from wood chip factory.
FUEL: None laid on to the wharf. In an emergency limited supplies could be provided by road tankers from Hobart.
FIRE PRECAUTIONS: No special fire precautions other than non-smoking or lighting of fires or use of naked lights.
GANGWAY/DECK WATCHMAN: None available.
OPENING/CLOSING HATCHES: Hatches opened by the ship's crew.
CERTIFICATES: Register, Load Line Certificate, Derat Certificate, Light Dues, Articles of Agreement, Clearance from previous Port.
CUSTOMS ALLOWANCES: See "Melbourne".
IDENTIFICATION CARDS: See "Melbourne".
CONSULS: None, nearest at Hobart.
REPAIRS: No facilities available for major repairs, but the wood chip factory may be able to assist in minor repairs. Local Hobart firms available.
REPATRIATION: Facilities available through Hobart.
AIRPORT: Hobart Airport is situated 49 miles from Spring Bay Wharf. Frequent services operate to the mainland and New Zealand from where services operate world wide.
TIME: Local time (Eastern Standard Time) 10 hours ahead of GMT. Summer Time in force October to March when clocks advanced 1 hour.
HOLIDAYS: See "Hobart". Ships may be loaded on days which are regarded as holidays in Hobart.
POLICE/AMBULANCE/FIRE: Police, 573116; Ambulance, 573129; Fire, 573187.
TELEPHONES: A telephone is connected to all vessels on arrival.
AUTHORITY: Marine Board of Hobart, G.P.O.Box 202B, Hobart 7001. *Tel:* 346722. *Telex:* 58319 *Contact:* Captain J. M. E. Lucas, Harbour Master.
AGENT: See "Hobart".

STRAHAN, Tasmania: 42.10 S. 145.20 E. (See Plan Book)

PORT LIMITS: "Port of Strahan" means all waters of Macquarie Harbour and all bays and estuaries opening into that harbour, but not beyond an imaginary line bearing 000° (True) for a distance of 1.20 km. from Watts Hill and thence bearing 090° (True) to the shore line.
DOCUMENTS: As for all Australian Ports.
PILOTAGE: Pilotage is compulsory for all vessels exceeding 35 m. in length. All Pilots are stationed at Hobart and special arrangements must be made in advance if a Pilot is to be provided. Usual minimum notice is 24 hours by contacting Marine Board of Hobart by telephone 002.34 6722 or telex Marhob 58319. The Wharf Officer at Strahan may be contacted on telephone No. 004.71 7291.

The Pilot Boarding Ground is outside the bar (Chart B.A. 3531 – Lat. 42° 12.0′ S., Long. 145° 13.0 E.). The pilot launch is fitted with VHF radio (Channels 16, 12, 8 and 6) and the Pilot will advise the ship by radio of the time he intends to board.
ANCHORAGE: There are no safe anchorage positions outside the Port of Strahan. The fairway is unprotected from the weather and during North-Westerly gales the outside bar breaks heavily making entry impossible.
RESTRICTIONS:
(i) Navigation within the port for vessels requiring a Pilot is only during daylight hours.
(ii) The entrance to Macquarie Harbour is 70 m. wide and very strong tidal streams can be experienced – up to 6 knots.
(iii) The tides are unpredictable. In Westerly gales the flood tide can run for 20 hours and when the wind backs to the South the ebb can run out for 20 hours.
(iv) A bar having a least depth of 5.5 m. exists outside the entrance, however the lead depth in the inner channel is 4.27 m.

MAX. SIZE: Largest vessel recently – "Pacific Bold", LOA 66.45 m., draft 4 m.
HEALTH: Australian Commonwealth Rules apply. The local medical practitioner boards vessels after berthing and acts for the Commonwealth Department of Health.
RADIO: See "Hobart".
TUGS: None available and not required.
BERTHING: Two wharves – depths varying from 3.7 m. to 5.5 m. alongside. The port is now mainly used by fishing vessels.
MEDICAL: The nearest hospital and doctor at Queenstown (30 miles).
FRESH WATER: Limited fresh water available from town water supply.
FUEL: Bunkers may be obtained by road tanker.
GANGWAY/DECK WATCHMEN: None available.
OPENING CLOSING HATCHES: Hatches are opened by ship's crew.
AIRPORT: A small airport is located 3 miles from Strahan.
AUTHORITY: Marine Board of Hobart.
AGENT: See "Hobart".

SYDNEY, N.S.W.: 33.55 S. 151.12 E. (See Plan Book)

DOCUMENTS: See "Melbourne".
PILOTAGE: Compulsory. Pilot Boarding Ground is in position Lat. 33° 50.1′ S., Long. 151° 19.8′ E. Pilot vessels fitted with VHF for communication with other ships. Watch maintained on Channel 13 while at sea and messages conducted on Channel 6.
MOVEMENT DIRECTIONS: See under "VHF".

1. Vessels shall not enter port until authorised to do so by Port Operations Officer.
2. Vessels entering port shall report to Port Operations Officer:
   (a) when passing Sea Buoy, Bradley's Head, Fort Denison and, where applicable, Longnose Point, and
   (b) as soon as secured at berth or anchorage.
3. Vessels proceeding to sea shall report to Port Operations Officer:
   (a) 1 hour before departure.
   (b) when passing Longnose Point (where applicable), Fort Denison, Bradley's Head and the Sea Buoy and
   (c) when clear of port area.

4. Vessels moving from berth or anchorage in port to another shall report to Port Operations Officer:
   - *(a)* 1 hour before moving.
   - *(b)* when passing Longnose Point, Fort Denison or Bradley's Head, and
   - *(c)* when secured at new berth or anchorage.

Note that:
- *(a)* a vessel must not be moved from any berth or anchorage in port without prior approval of Harbour Master (given by Port Operations Officer), and
- *(b)* every Port Operations Officer has been appointed to exercise powers of Harbour Master in giving enforceable directions relating to vessels in Port.

APPROACH DEPTHS: 24.38 m. in entrance to Harbour, 12.8 m. in East Channel, 13.71 m. in West Channel.

HARBOUR BRIDGE CLEARANCE: 52.35 m. less 2.43 m. for painting gantry.

HEALTH: See "Melbourne".

TIDES: HHW 1.57 m. LHW 1.27 m. Fort Denison.

RADIO: Sydney – VIS.

VHF:

1. PORT OPERATIONS AND INFORMATION SERVICE

Service co-ordinates flow of shipping traffic within Port of Sydney to ensure expeditious movement of vessels in safety, and provides information to Pilots and Exempt Masters as aid to safe navigation in Port.

Maritime VHF radio service operated by Board for Ports of Sydney (Port Jackson and Botany Bay), Newcastle and Port Kembla is integrated into Port Operations and Information Service.

Service manned continuously on watch-keeping basis, each watch being under control of qualified Master Mariner, known as Port Operations Officer, who is responsible to Harbour Master.

Rules to be observed by shipping contained in Port Operations and Information Service Manual, and all shipping using port will be required to observe these rules.

Instructions concerning maritime VHF radio service have been revised to fit in with Port Operations and Information Service. The revised instructions also contained in Port Operations and Information Service Manual.

Copies of manual may be obtained, on request from the Harbour Master's Office.

2. SHORE STATIONS: (Call sign "Sydney Maritime").

Interconnected system of stations handling messages for Signal Stations at Newcastle, Sydney and Port Kembla operated from central control using call sign "Sydney Maritime", will exercise control of service and provide facilities indicated below for area from 50 miles North of Newcastle to 50 miles South of Port Kembla and a distance of 50 miles to seaward.

Ships requested maintain watch on Channel 16 when in this area. If Channel 16 in use for distress, urgency or safety communications, Shore Station will maintain continuous watch on Channel 12 and ships may establish contact with Shore Station on this Channel.

On the hour "Sydney Maritime" will give identification call followed by any general messages or navigational warnings.

On request Shore Station will provide following services:
- *(a)* Navigational information.
- *(b)* Local weather reports from Signal Stations.
- *(c)* Booking of ship's telephones, shore power supply, temporary lighting and other port services provided by Maritime Services Board of N.S.W.
- *(d)* In addition, Shore Station on request from Pilots or Exempt Masters, allocates a Channel for use between ships and attendant tugs during berthing operations.

Radiotelephone Discipline: To ensure that the full advantage of efficient communications is achieved, strict radio discipline and attention to procedure, particularly on the safety and calling Channel 16 is imperative. Messages must be as brief as possible.

3. ADVICE OF ETA – SYDNEY AND NEWCASTLE HARBOURS

Vessels proceeding to Sydney and Newcastle required advise either Shore Station, "Sydney Maritime" (per medium of maritime VHF radio) or "Marboard" (per medium of the coastal radio service) of ETA at entrance to port concerned at least 4 hours prior to such time.

"Sydney Maritime" maintains continuous watch on Channel 16 for ships reporting ETA.

4. CHANNELS IN USE

Channel No.	*Title*	*Use*
16	Safety and Calling	Initial contact or emergency use. The calling entry to either Port Information, Port Operation or Intership Channels.
12	Port Operation (Port Information)	Primarily for ships passing and receiving navigational information to and from Shore Station ("Sydney Maritime").
6	Interships	1. For intership communications. 2. Working Channel for Pilot Vessels. 3. Allotted by "Harbour Control" for temporary use between ships and attendant tugs at *Port Kembla* on request of Pilot or Exempt Master.
8	Berthing Operations	1. Allocated by "Harbour Control" upon request by Pilot or Exempt Master for use in *Sydney Harbour* between ships and tugs during berthing operations.
13	Berthing Operations	1. Allocated by "Harbour Control" upon request by Pilot or Exempt Master for use in *Newcastle Harbour* between ships and tug, during berthing operations. 2. Used by Port Operations Officer when passing information to vessels.
14	Berthing Operations	1. Allocated by "Harbour Control" upon request by Pilot or Exempt Master for use in *Botany Bay* between ships and tugs during berthing operations. 2. Allocated by "Harbour Control" for Naval berthing operations and other special purposes.

5. DISTRESS AND EMERGENCY

In the case of fire, explosion, loss of life, sinking, collision, or any such emergency, vessels should immediately call on Channel 16 (Safety and Calling) using International R/T distress signal "Mayday" or urgency signal "Pan" followed by name of vessel and signal letters, giving its position and type of emergency and if assistance required.

Other vessels on hearing a distress message must cease any transmissions immediately.

The signal "Mayday" should be used only when ship sending it is threatened by grave and imminent danger and requires immediate assistance.

The signal "Pan" (pronounced "Panne") should be used by a station having a very urgent message to transmit concerning its safety, or that of another ship, or of some person on board or in sight.

TUGS: Powerful modern tugs, operated by private companies, available. The Maritime Services Board of New South Wales advised the following as a general guide for the ordering of tugs to attend vessels in Sydney. The following, which is only for guidance, is subject to variation due to darkness, weather, ships' equipment, bow thrusters, etc.

Vessels between 125 m. – 185 m. LOA	usually 2 tugs
Vessels between 185 m. – 230 m. LOA	usually 3 tugs
Vessels between 230 m. – 260 m. LOA	usually 4 tugs

Vessels over 260 m. – by consultation with Harbour Master.

The above is for guidance only and actual tug requirements are at the discretion of the Sydney Harbour Master and in some cases, the above guidelines may be exceeded.

BERTHING: See "VHF".

Woolloomooloo: 5 berths, depths 9.3 m. to 11.9 m.
Darling Harbour: 10 berths, depths 6.3 m. to 11.0 m.
Pyrmont: 13 berths, depths 8.6 m. to 10.5 m.
Glebe Is.: 4 berths, depths 9.7 m. to 11.8 m.
Sydney Cove: 2 berths, depths 7.1 m. to 10.4 m.
Balmain: 1 berth, depth 11.6 m.
White Bay: 4 berths, depths 10.0 m. to 11.0 m.
Snails Bay: 4 berths, depths 9.2 m. to 11.8 m.
Oil Terminals: See "Tankers".

HEAVY LIFTS: *Wharf Cranes:* Woolloomooloo: Berth No. 11: 2 portal cranes 26.4 tonnes max.

Darling Harbour: Berth Nos. 9 and 10: 1 portal crane, 26.4 tonnes max.

Container Berths: White Bay: Berth Nos. 5 and 6: 2 twin lift 45.72 tonne container cranes, and terminal equipment. One crane capable of working Berth No. 4. Ro/Ro vessels to be handled early 1985.

Glebe Island: Berth Nos. 1 and 2: 2 single lift 35.56 tonne container cranes and terminal equipment.

A 152.4 tonne floating crane available, and a 254 tonne crane on Fitting Out Wharf at Garden Island Dock.

BULK LOADING FACILITIES: Glebe Island, Berth No. 7 (bulk wheat). Max. permissible length and beam of ship using bulk berth: length 224.06 m., beam 32.61 m.

Berth No. 8 (bulk soda ash). Max. length 99.36 m., max. beam 13.71 m. This is a private berth leased by Imperial Chemical Industries of Australia, and the plant is suitable only for unloading of bulk soda ash.

Balmain: Berth No. 1 (bulk coal). Max. LOA 230 m. Max. beam 32.3 m. Depth 11.6 m. and channel to 12.2 m. Loader 1,250 tonnes/p.h.

Balls Head: Transhipment facility for coal to Ube in Japan. Loading rate 2,000 t.p.h. Length 150 m. Depth 8.2 m.

Also see "Shipmaster's Report".

STEVEDORES: Private companies. Stevedoring regulations are the responsibility of an operations supervisor, nominated by the ship's Agent when applying for a berth.

TANKERS:

	Max. permissible length of vessel	*Depth alongside*
Gore Bay No. 1 (Shell)	259 m.	13.5 m.
Gore Bay No. 2 (Shell)	171 m.	9.7 m.
Gore Bay No. 3 (Shell)	171 m.	9.4 m.
Berrys Bay No. 1 (B.P.)	160 m.	8.4 m.
Berrys Bay No. 2 (B.P.)	183 m.	9.5 m.
Ballast Point (Caltex)	213 m.	9.2 m.
Pulpit Point (Mobil)	168 m.	8.2 m.
Chowder Bay (Navy)	171 m.	9.2 m.

Warning Notices: The Maritime Services Board of New South Wales requires signs to be exhibited on all tank vessels, including barges, berthed at tanker berths in all New South Wales Ports.

The signs shall be worded as follows:

WARNING KEEP CLEAR
This vessel is handling Flammable Goods.
Do not approach within 30 m.
Authorised vessels exempted.

The signs are to be coloured white with red lettering, and all lettering to be a minimum 220 mm. in height. Owners of tank vessels calling at N.S.W. ports should take note.

FRESH WATER: Available at all berths at a rate of approximately 30 t.p.h.

FUEL: All grades available.

IDENTIFICATION CARDS: See "Melbourne".

CONSULS: The following countries maintain consuls in Sydney:

Argentina
Austria
Belgium
Bolivia
Brazil
Bulgaria
Canada
Chile
China
Colombia
Costa Rica
Cuba
Czechoslovakia
Denmark
Dominican Republic
Ecuador
Egypt
Ethiopia
Fiji
Finland
France
Germany F.R.
Great Britain
Greece
Honduras
Hungary
Iceland
Indonesia
India
Iraq
Israel
Italy
Japan
Jordan
Kampuchea
Korea
Lebanon
Malaysia
Malta
Mexico
Monaco
Morocco
Nepal
Netherlands
New Zealand
Norway
Pakistan
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Romania
Singapore
Sierra Leone
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Thailand
Turkey
Uruguay
U.S.A.
U.S.S.R.
Yugoslavia

REPAIRS: Every facility available.

DRY DOCKS: Captain Cook Dock, Garden Island – length 347.16 m., No. 1 Sutherland, Cockatoo Island – length 210.33 m., No. 2 Fitzroy, Cockatoo Island – length 145.67 m. Several smaller dry docks and a number of slipways available.

SURVEYORS: Classification Societies:

American Burea of Shipping. Tel: (02) 231 6422/(02) 231 6868; Telex: AA27122.
Bureau Veritas. Tel: 27 5264; Telex: AA26352.
Germanischer Lloyd. Tel: (02) 639 6335.
Korean Register of Shipping. Tel: (02) 27 43 86; Telex: AA26712.
Lloyd's Register of Shipping. Tel: (02) 221 1277; Telex: AA26164.
Nippon Kaiji Kyokai. Tel:(02) 233 7751; Telex: AA71391.
Det Norske Veritas. Tel: (02) 92 1050/(02) 92 1080; Tlx: AA26447.
USSR Register of Shipping. Tel: (02) 274386; Telex: AA26712.

GANGWAY/DECK WATCHMEN: Compulsory.

CERTIFICATES:

Last Port Customs Clearance.
Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Ship's Articles (British Vessels).
Safety Construction.

BANKS:

Australia & New Zealand Banking Group Ltd.
Australian Bank Ltd.
Bank of New Zealand.
Banque Nationale de Paris
Barclays Group of Banks.
Commercial Banking Company of Sydney Ltd.
Commonwealth Banking Group.
The First National Bank of Boston.
The First National Bank of Chicago.
Lloyds Bank International Ltd.
The National Bank of Asia.
National Bank of Greece.
National Commercial Banking Corporation of Australia Ltd.
National Westminster Bank Ltd.
State Bank of New South Wales.
Swiss Bank Corporation.
Westpac Banking Corporation.

SPECIAL REGULATIONS: *Smoke Restrictions:* Ringelmann 2 limited to 10 minutes overall, 5 minutes continuous, in 60 minutes, Ringelmann 3 limited to 3 minutes in 30 minutes, in special circumstances only and as far as practicable from shore, Ringelmann 4 prohibited absolutely. Tubes must not be blown in port.

Breaches of Port Laws by a ship (in particular, oil spillages) dealt with by requiring Master to authorise ship's Agent to accept any summons and the Agent to undertake to appear, so as not to delay sailing. If Master refuses, he may be arrested, charged and released on bail. However, it is in Master's interests to give authority, because this allows time for consideration of whether any action is to be taken.

DUES: Commonwealth Light Dues payable on the nett register tonnage of vessel, valid for a period of 3 months, in Australian waters. Harbour and Light Dues payable on vessels gross tonnage valid for 6 months for the State of N.S.W. only.

GENERAL: *Shifting Vessels:* Due to the location of the coal berth at No. 1 Balmain and its proximity to the grain loading berth at No. 7 Glebe Island, vessels loading grain at No. 7 Glebe are required to haul astern when coal loading ships are moving in or out of No. 1 Balmain.

Linesmen will no longer carry mooring ropes between the dolphins and the Maritime Services Board requires that a Pilot and tug be available. This involves additional expense being placed on the owners or operators of grain vessels loading at Sydney.

SHIPMASTER'S REPORT: December 1982.

Bulk Loading Facilities: The coal Berth at Sydney is No. 1 Balmain at the head of White Bay above Sydney Bridge. The berth was upgraded a year ago but is not ideal for Panamax vessels, mainly due to location and draft problems.

The coal comes to the dock by train and is transferred onto the loading belt. There are 2 loading heads and together can load at 20,000 tons a day. Air draft not known but is in excess of 15 m., which allows this vessel to berth with hold ballast out. Vessels berth head in, starboard side to so loaders can reach all hatches.

The amount a vessel can load is governed by the tide. Once a vessel is declared for a tide and loading is resumed she is committed to sail on that tide.

Tugs: 4 tugs required for sailing, these are certainly necessary as vessel has to come stern first down the dock before being able to swing off Peacock Point.

Draft Restrictions: The shallowest channel patch is off Miller's Point, approximately 45 minutes after unberthing.

Depth of Water at Load Berth: – 11.6 m.

Vessels must keep 0.3 m. below the keel at all times. This means that vessels can load at the berth to 11.3 m. plus prevailing low tide.

Depth of water in Channel – 12.2 m.

Vessels must have 10% of draft below the keel on sailing. For vessels loading in excess of 11.3 m. draft the prevailing tide will have to be taken into consideration for both loading at the berth and sailing. Vessels completing on a tide must ensure that once past LW they sail on that tide.

For your *guidance only* I have set out below a list showing berth and channel drafts against the prevailing tide. Please ensure that the Berthing Master gives his approval of the draft prior to your advice to other Parties.

			Max. Departure Draft	
Tide (m.)	*Max. Berth Draft* (m.)	*Channel Depth* (m.)	*Depart. Draft* (m.)	*10% under Keel* (m.)
1.0	12.3	13.2	12.00	1.20
1.1	12.4	13.3	12.09	1.21
1.2	12.5	13.4	12.18	1.22
1.3	12.6	13.5	12.27	1.23
1.4	12.7	13.6	12.36	1.24
1.5	12.8	13.7	12.45	1.25
1.6	12.9	13.8	12.54	1.26
1.7	13.0	13.9	12.64	1.26
1.8	13.1	14.0	12.73	1.27
1.9	13.2	14.1	12.82	1.28
2.0	13.3	14.2	12.91	1.29

AUTHORITY: The Maritime Services Board of New South Wales, P.O.Box 32, Sydney, N.S.W. 2001, Australia. *Tel:* (02) 2402111. *Telex:* MSB SY AA 24944. *Cables:* Marboard. *Contact:* Berthing Master.

AGENT: *Head Office:* Patrick Agencies, P.O.Box 3918, 60 Margaret Street, Sydney, N.S.W. 2000. Tel: 233-6722. Telex: AA. 20618 Cables: Rikpat.

Ships Agency Branch Office: Patrick Agencies, Sydney Branch, Suite No. 2, 12th Floor, ADC House, 189-193 Kent Street, Sydney, N.S.W. 2000. Tel: 233-6722 (as Head Office). Telex: 74093 A/B Rikpat. Cables: Rikpat, Sydney.

THEVENARD, S.A.: 32.09 S. 133.39 E.

(See Plan Book)

PORT LIMITS: As marked on Chart AUS. 1200 (Approaches to Thevenard).

DOCUMENTS: All documents necessary for first entry vessels are as for other Australian ports (i.e. Customs, Health, etc.).

PILOTAGE: Compulsory. Pilots board approximately 1 mile seaward of Entrance Beacon (2 miles seaward of No. 1 Light Beacon). Pilot vessel "Gannet" approx. 12 m. LOA orange hull and yellow superstructure. "Pilot" in black on topsides. Vessels awaiting Pilot for extended periods should anchor approx. 235° – 4 miles from Entrance Beacon. Vessels approaching pilot station should take care not to approach the Entrance Beacon before Pilot has boarded owing to restricted sea room.

ANCHORAGES: Outer Anchorage as above. Inner Anchorage for vessels awaiting berth available in Murat Bay. This is a safe anchorage for several vessels at one time, with good holding ground. Pilotage is necessary to Inner Anchorage.

RESTRICTIONS: Daylight berthing only. Sailing at any time. Sailing times depending on tide. Tides may be greatly effected by prevailing weather conditions – adverse weather can cause a large depression below the predicted height. Channel depth 8.2 m. (27 ft.) LW. There is a minimum depth of 5.5 m. (18 ft.) in the swinging area off the berths.

MAX. SIZE: LOA 168 m., beam 24.4 m.

Arrival drafts: As vessels are permitted to discharge clean ballast whilst alongside drafts should be as follows: Fore: 2 m. (minimum). Aft: 6 m. (maximum).

HEALTH: Radio pratique available within 24 hours of arrival providing sufficient information is supplied. Quarantine/Health Officer will still board vessel in order to grant formal pratique. Vessels arriving direct from other Australian Ports have automatic pratique, but Health Officer will still attend the vessel on arrival.

RADIO: ETA messages for Agents, Harbour Master, etc. may be routed through any Australian coastal radio station, the closest being Adelaide Radio (VIA), not less than 24 hours prior to arrival.

VHF: Channels available: 16, 12, 8, 6.

Channel 16 used for general call up, and Channel 8 usually used for Port operations. Call Sign: Thevenard Port Control. Hours of operation: Monday to Friday 0845 hrs. to 1700 hrs. except Public holidays, or by arrangement.

TUGS: One tug of 11.4 tonnes bollard pull (650 h.p.), "Wandana".

BERTHING: Berth dimensions: Length 198 m. (650 ft.). Width 30 m. (100 ft.). Draft subject to keel clearance of 0.76 m. (2 ft. 6 in.) for vessels up to 8.2 m. (27 ft.) draft, and 0.91 m. (3 ft.) for vessels over 8.2 m. (27 ft.) draft. One wharf, 2 berths, depth alongside 9.8 m. (32 ft.). Head in or head out berthing dependent on prevailing weather conditions at time of berthing.

CRANES: Nil.
BULK CARGO FACILITIES: Movable gantry and conveyor bulk loading plant. Single loading spout for each berth, however loading of only one vessel at a time is possible. The plant will be manned on a two shift basis for 24 hours, with overtime as necessary for vessels loading gypsum or salt, and from 0800 hrs. to 2300 hrs. (two shifts) Sunday to Friday if overtime required, and 0800 hrs. to 1200 hrs. Saturday for the loading of grain.
Bulk Handling Plant Rates: Wheat 300/350* tonnes per hour. Oats 200 tonnes per hour. Barley 480 tonnes per hour. Gypsum 900 tones per hour. Salt 800 tonnes per hour.

*Dependent on which silo grain is taken from.

SPECIALISED CARGO HANDLING FACILITIES: None.
BRIDGES: None.
STEVEDORES: Ordering of labour organised through Agents and Grain Handling Authority. Loading rates as above.
MEDICAL: Two private medical practices available (4 Doctors). Also two dental practices. District hospital located at Ceduna (distance 4 km.). Ambulance service also available, with connecting air ambulance service for transport to Adelaide, if necessary. Vaccination certificates as for all Australian ports.
TANKERS: No tanker facilities.
DENSITY: Average density 1027/1028.
FRESH WATER: Available at 20 tonnes per hour.
FUEL: Most grades available in small quantities providing sufficient notice is given prior to arrival (approx. 10 days notice for fuel oil, less for diesel oil and lubricating oil).
FIRE PRECAUTIONS: Usual precautions necessary, leaving in mind danger of grain dust. Local Fire Brigade available. International shore connection should be connected.
CONSULS: None.
REPAIRS: Minor repairs possible.
DRYDOCKS: None.
SURVEYORS: (1) Cargo Surveyors available – will be arranged by Agents as required.

(2) Lloyd's Surveyor should be organised through principal Agents. Lloyd's Agent is at Port Adelaide.

Other Classification Society Surveyors also available in Australia with sufficient notice to Agents. None resident at Thevenard.

GANGWAY WATCHMEN: All vessels, regardless of nationality, must employ shore based Watchman, on shift basis, during any periods the vessel is not, or is unlikely to be, loading. Approx. cost $11.00 per hour plus overtime penalties.
HATCHES: Opening and closing by ship's crew.
CUSTOMS ALLOWANCES: Normal Australian allowances.
CARGO GEAR: Bulk loading only.
REPATRIATION: Can be achieved. Arrangements should be made through ship's Agent.
AIRPORT: 7 km. to airport. Airlines of South Australia, 2 flights per week (Monday and Thursday), 6/8 seater light aircraft Tuesday, Wednesday and Friday connecting to Adelaide. Charter flights can be arranged.
TIME: Local time GMT plus 9.5 hours. Summer time (GMT plus 10.5 hours) late October to early March.
HOLIDAYS: New Year's Day; Australia Day (January); Good Friday; Easter Monday; Anzac Day (April); Adelaide Cup Day (May); Queen's Birthday (June); Labour Day (October); Christmas Day and Proclamation Day (December 26th)

The bulk loading plant operates on all public holidays except Good Friday and Christmas Day.

POLICE/AMBULANCE/FIRE: Police Tel: 782001. Ambulance Tel: 782404. Fire Tel: 782000.
EMERGENCY CO-ORDINATION CENTRE: "Coastwatch" (Australian Coastal Surveillance Organisation) free telephone call from all Australian ports by STD or reverse charge (062) 476666.
TELEPHONES: Telephones placed aboard ship on arrival. Cost approx. $40.00 plus $1.50 per day rental.
SERVICES: Tank and hold cleaning facilities available.
BANKS:

Australia and New Zealand Banking Group Ltd., Poynton Street, Ceduna S.A. 5690. Tel: 782202.

State Bank of South Australia, Poynton Street, Ceduna S.A. 5690. Tel: 782060.

Savings Bank of South Australia, Poynton Street, Ceduna S.A. 5690. Tel: 782648.

STORING: See "Prelims" page viii.

1. By truck.
2. —
3. Wharf access available for trucks.
4. Wharf access available for fork lifts.
5. Normal Customs Bond Regulations apply.
6. Labour available for storing.

SHORE LEAVE: No restriction.
IDENTIFICATION CARDS: Normal Australian ID cards necessary, but not required to be carried ashore.
REGULATIONS: No unusual regulations.
DELAYS: May be experienced due to awaiting tide or awaiting loading of other vessels during periods of heavy shipping.
AUTHORITY: Department of Marine & Harbours, Thevenard, S.A. 5690. *Tel:* (086) 782077. *Contact:* Captain C. D. Marshall, Harbour Master.

Department of Marine & Harbours, P.O.Box 19, Port Adelaide, S.A. 5015.

AGENT: Sub-Agents of Patrick Agencies, Adelaide.

THURSDAY ISLAND, Queensland: 10.35 S. 142.13 E.
(See Plan Book)

DOCUMENTS/HEALTH: See "Melbourne".
PILOTAGE: Pilotage compulsory. ETA 24 hrs. before arrival stating max. draft and direction from which vessel arriving to: Harbour Master, Thursday Island. Further amended ETA if necessary prior to arrival. Pilot boards 1 mile South of Goods Island or Scott Rock Buoy as required. Harbour Master will advise boarding ground after receipt of max. draft and direction from which vessel arriving. Pilot vessel white hull, orange top, flying pilot flag. Vessel awaiting Pilot to anchor West of Black Rock in Normanby Sound or off Scott Rock.
ANCHORAGE: West of Black Rock in 5.5 fathoms. Nurses' Home over shoulder of Black Rock 098° (T) with two white beacons S.E. side Goods Island in line 005° (T).
RESTRICTIONS: Daylight movements only. Draft restricted to 23 ft. (7.01 m.) LWOST.
RADIO: Thursday Island "VII" via telex to Harbour Master's office, for ETA's etc.
VHF: Call sign "Thursday Island Harbour". Listening watch during working hours. Channels 67, 16, 12 and 6.

Torres Straits Pilots on VHF Channels 16 & 12. Pilot vessel on VHF Channels 16 and 6. Call sign "Reef Pilots". Watch maintained when vessels are expected.

TUGS: No tugs.
BERTHING:

Wharf	*Length (m.)*	*Depth (m.)*
Main	30.0	4.00
Engineers	27.5	4.20
Caltex	22.9	5.00
Horn	12.5	4.00

STEVEDORES: 0800 hrs. pick up for day work. 1000 hrs. notice for night work. 1600 hrs. Friday notice for week-end work. Mainly general cargo handled. Approximately 8 t.p.h.
MEDICAL: Notice of required medical attention with ETA message to Harbour Master. Hospital, four doctors available. Vaccinations etc., as per Commonwealth of Australia requirements.
DENSITY: Salt at all states of tide.
FRESH WATER: Available in limited quantities most of the year.
FUEL: Bulk distillate available at Caltex Jetty, approx. 20 t.p.h.
GANGWAY/DECK WATCHMEN: Crew member on gangway sufficient.
OPENING/CLOSING HATCHES: By Stevedores.
CERTIFICATES: Normal Commonwealth of Australia requirements. See "Melbourne".
CONSULS: Nil.
REPAIRS: Deck and engine repairs, excluding large castings.
REPATRIATION: Available.
AIRPORT: Airport on Horn Island, 2 miles by launch, 4 miles by bus. Seven flights per week. Air Queensland regular airline. Private charter plane available.
TIME: Australian Eastern Standard Time.
HOLIDAYS: Normal Queensland Public Holidays. No cargo can be worked on Christmas Day, Good Friday, Anzac Day.
POLICE/AMBULANCE: Police 69 1520. Ambulance 69 1501.
TELEPHONES: STD facilities available with several public boxes available on the island.
SERVICES: Garbage disposal. Apply to Harbour Master.
DELAYS: As wharf space limited and berthing is on a "first come, first served" basis, delays vary with amount of shipping.
AUTHORITY: Harbour Master, Department Harbours & Marine, P.O.Box 109, Thursday Island, Queensland 4875, Australia.

AGENT: Sub-agent of Patrick Agencies, Brisbane.

TORRES STRAIT:

MAXIMUM DRAFT & UNDERKEEL CLEARANCE: The Queensland Coast & Torres Strait Pilot Service will pilot vessels through Torres Strait on a maximum draft of 40 ft. (12.2 m.). This draft limitation extends from Booby Island to the Eastern extremity of the Prince of Wales Channel. On completion of currrent (1978) survey and tidal analyses it is possible that a deeper maximum draft will be attainable and up to date information may be obtained from "Torres", Sydney.
GANNET PASSAGE (BOOBY ISLAND) & PRINCE OF WALES CHANNEL: These are the two tidally restricted and, therefore, controlling areas for traversing Torres Strait, the Great Northeast Channel and the Inner Route. Gannet Passage has a least depth of 9.8 m. (32 ft.) and is marked by 2 light buoys which may be shifted from time to time. Daily tidal rises enable vessels to cross Gannet Passage allowing a minimum U.K.C. of 1 m. at all times of the year, weather conditions permitting and at the Pilot's discretion. There is an automatic telemetric tidal gauge situated on Booby Island (see No. 4055 – Admiralty List of Radio Signals & Radio Navigation Aids; Vol. 2, 1977) which promulgates exact tidal heights in Gannet Passage. A recent detailed hydrographic survey by H.M.A.S. "Flinders" (1977/78) established a least depth of 11.6 m. (38 ft.) on the usual pilotage track in P.O.W. Channel. Min U.K.C. acceptable in P.O.W. Channel is 1 m. for vessels with a draft of less than 11.89 m.; 10% of draft for vessels with a draft exceeding 11.89 m. It is planned to establish, in the near future, further automatic telemetric tide gauges in this channel. Masters of deep draft vessels are advised that reductions in speed may be necessary in both Gannet Passage and P.O.W. Channel.
PALM PASSAGE: The Queensland and Torres Strait Pilot Service has started a pilotage service through the Palm Passage in the vicinity of Townsville and Lucinda.

Navigational aids were installed in the area at Pith and Rib Reefs in 1975 laying the foundations for future development. Construction of large berths at Lucinda and Abbot Point and increased traffic through Townsville spurred the Torres Service to examine the possibilities of using Palm Passage. With the successful conclusion of studies, the service can now offer pilotage assistance to vessels transiting the channel.

There are virtually no restrictions on vessels using the new passage. Transit is possible at any time, and sufficient depth of water is available that vessels will only be restricted by the draft available at the load port.

BOARDING STATIONS: Pilots for Eastbound vessels will board 3.5 miles West of Booby Island Lighthouse or 2.5 miles West of Goods Island Lighthouse, as required. Pilots for North and Westbound vessels will board at any East Australian port; off North Point, Gladstone for vessels coming from New Zealand; off Euston Reef or Fitzroy Island for vessels using Grafton Passage; off Port Moresby. Pilot launches keep a listening watch on VHF Channel 16 when on station. Masters are requested to ensure that pilot ladders and boarding arrangements comply with international and Australian standards of safety.

COMMUNICATIONS: *(a)* Vessels should confirm ETA, at Booby or Goods Islands, 24 hours and 6 hours prior to arrival. These radio messages should be addressed to "Torind", Thursday Island and relayed via Thursday Island Radio Station (VII).

(b) ETA messages should be given in local time (GMT plus 10 hours) and be prefixed with the non-chargeable code word "Shipserv" which will ensure prompt delivery 24 hours a day, every day.

(c) When 10 miles West of Booby Island, vessels should open VHF Channel 16 and establish contact with the Thursday Island Base Pilot Station (call sign – "Reef Pilots") which maintains a listening watch on Channel 16 and operates on Channel 12. Masters should bear in mind that no Pilots are stationed on Booby Island and that it takes a pilot cutter approximately 2 hours to reach the Booby Island boarding station from Thursday Island.

(d) All vessels (piloted or unpiloted) are requested to keep International Radio watch hours when between Carpentaria Light Float and Bramble Cay (Great Northeast Channel Route) or between Carpentaria Light Float and Gubbins Reef on the Inner Route – see Australian Notice to Mariners No. 415/1975. A continuous VHF watch on Channel 16 should also be maintained from Carpentaria Light Float to Wyborn Reef (Inner Route) or to Bet Reef (G.N.E. Channel Route). When within the Inner or Great Northeast Channel Routes it is extremely important, for traffic safety reasons, to open the VHF on Channel 16 whenever another vessel is sighted and not to close the set until both vessels have passed, and are well clear of, one another.

(e) Masters of deep draft vessels will be advised, by radio in advance, the time limits on day of arrival when tidal conditions will permit transit of Gannet Passage & P.O.W. Channel.

TO ORDER A PILOT:

South & East Bound: Masters are requested to advise "Torres" Sydney, 5 days in advance, which boarding ground (Booby or Goods Islands) is required, the ETA thereat, deepest draft and where bound. Thereafter, Masters are requested to confirm, or amend, ETA to "Torind", Thursday Island as advised in *(a)*, *(b)* and *(c)* of the "Communications" section of this entry.

North & West Bound: If in an Australian port instruct Agents to arrange with "Torres" Sydney, giving as much notice as possible. If from an overseas port and requiring a Pilot, radio "Torres" Sydney, at least 5 days in advance, giving ETA at embarkation point, deepest draft and where bound. Confirmation, or adjustment, of ETA to "Torres" is also requested 48 and 12 hours prior to arrival.

Papua New Guinea: Vessels Westbound through Torres Strait (via Great Northeast Channel) may obtain a Pilot at Basilisk Beacon (Port Moresby Harbour Entrance) and at all main ports elsewhere in Papua New Guinea including Kieta/Anewa Bay on Bougainville Island.

Gulf of Carpentaria: Pilots are available at the ports of Weipa, Groote Eylandt and Gove.

Northern Territory: Pilots are available at Darwin.

Any Other Place/Position: By arrangement with "Torres", Sydney.

Masters are requested to note that all shipping radio messages to Australian addresses should be prefixed with the non-chargeable code word "Shipserv" to ensure prompt delivery 24 hours a day, every day. All messages to "Torres" will be acknowledged.

REFERENCES: Australian Pilot, Vol. 3, 1973; pp 81 & 234-237.

Australian Notices to Mariners Nos. 138/1970, 415/1975, 37/1978.

AUTHORITY: The Queensland Coast & Torres Strait Pilot Service, 122 Sussex Street, Sydney, N.S.W. 2000, or, G.P.O. Box 1573, Sydney, N.S.W. 2001. *Tel:* (02) 29-2125. *Cables:* "Shipserv Torres". *Telex:* AA20269. *Contact:* Norman R. Rogers, or Stephen Radford (Joint Secretaries) or Perry Sutton (Deputy).

TOWNSVILLE, Queensland: 19.15 S. 146.50 E.

(See Plan Book)

PORT LIMITS: The Townsville Harbour Board jurisdiction commences at the HW mark on the most Northern extremity of Cape Cleveland, thence by a line to a point Lat. 19° 05′ 30″ S., Long. 146° 52′ E., thence by a line due Westward to 146° 45′ E., thence by a line due South to HW mark at a point on the mainland, thence by HW mark to the point of commencement and including all navigable rivers communicating with that area and the banks and shores and foreshores thereof.

APPROACHES: The approach to Cleveland Bay anchorage from the Southward is clear of dangers, with the exception of Salamander Reef, the Four-foot Rock, and the Twenty-foot Rock, all these lying within a radius of 3 miles of Cape Cleveland Lighthouse.

To clear these dangers, passing North of them bring Mount Marlow in transit with the extremity of Hawkings Point, bearing 265° (258° Mag.) before approaching within 5 miles of Cape Cleveland, which will then bear 252° (245° Mag.); and, if passing between them, the leading lights on Cape Cleveland should be brought in line bearing 291° (284° Mag.) before they are approached within 5 miles. Proceeding into Cleveland Bay a depth of not less than 8.2 m. will be obtained by keeping North of the line Mount Marlow in line with Hawkings Point.

Approaching Cleveland Bay from the Northward, passing East of Magnetic Island a vessel should keep at least half a mile off Magnetic Island shore to obtain not less than 11 m. of water at LWOST. The shore is steep to except for Orchard Rocks off the N.E. extremity of the island.

ENTRANCE CHANNELS: 10 pairs of lighted beacons (numbered East and West from seaward) and the East and West Breakwater Beacons mark the entrance channels into Townsville Harbour. The Fairway Beacons are 210 m. apart transversely. No. 2 and 3 Beacons are 164 m. apart and all other pairs of beacons are 180 m. apart.

Sea Channel: This Channel 1.75 miles in length (for use by vessels with draft exceeding 8 m.) lies between No. 1, 2, 3 and 4 Beacons which are spaced at 1,070 m. intervals. Only No. 1 and 4 Beacons are fitted with day marks.

The centre line of this channel is marked by the V-shaped white Sea Leads in line bearing 201.5° (194.5° Mag.), at night the Front Lead (No. 5 East Beacon) exhibits a white light flashing every second.

The Back Sea Lead, 915 m. from the Front Lead, exhibits a white light flashing every 1.5 seconds.

Platypus Channel: The channels alter in direction at No. 4 Beacons and the centreline of the Platypus Channel proceeds in a 212° (T) direction 3.5 miles to the harbour entrance and is marked by 2 V-shaped Gayglo orange triangular leads with black centre, in line bearing 212° (205° Mag.), at night these leads each exhibit a red neon candle light. No. 5 Beacons are 520 m. from No. 4 Beacons, thence there are 5 pairs of beacons and the East and West Breakwater Beacons at 1,000 m. intervals.

Ross River Channel: This daylight only channel which commences 1 mile 128°(T) from harbour breakwater entrance is 1.35 miles in length, 30 m. wide and carries 2.5 m. L.W.S.

Four beacons carrying red square topmarks numbered 1 to 4 from seaward are situated 15 m. from the Eastern edge of this channel, spaced at 750 m. intervals. The Outer (No. 1) Beacon exhibits a light flashing red every 3 seconds. All beacon topmarks at an elevation of 3.7 m.

The centre line of this channel is marked by 2 V-shaped white leads with black centres 700 m. apart in line bearing 219°(T). The leads are not lit.

Shortly after passing No. 4 Beacon the 60 m. wide swinging basin is entered, on the Western side of which is situated a fishing company wharf. Depth in the swinging basin and alongside wharf is 2.5 m. L.W.S.

South of the swinging basin overhead power lines cross the river, the clearance under which is 13 m.

Presently only shallow draft vessels can proceed up river beyond the swinging basin. Dredging is in progress.

DOCUMENTS: *Customs:*

3 Crew Lists, Form M and S–11.
3 Passenger Lists, if applicable.
3 Lists of Ports of Call.
1 Form 42A Ships Stores.
1 Form 5 Articles Owned by or in the possession of Master, Officers and Crew.
1 Form QA4 Quarantine Notice.
2 Forms QA5 Quarantine Shipmaster's Bond.
2 Inward Manifests.
1 Bill of Lading.
1 Outward Manifest.
1 Form 40 Application for Clearance and Guarantee to Pay Duty.

Health:

Form Q360 Health Report which is taken aboard by inspecting Officer.

Harbour Authority:

2 copies of Inward and Outward Manifest.

PILOTAGE: The Pilot is ordered through the ship's Agent or direct to Harbour Master at least 24 hours before arrival or last port of departure stating ETA and draft. Telegraphic Address "Harbour Master". VHF Channel 16. Call sign "Townsville Harbour". Pilot launch is 42 ft. wooden launch equipped with VHF Channels 6, 12 and 16. Light or sound signal by vessel requiring Pilot is International Call G. For other than deep draft vessels Pilots board within 1.5 – 2.0 miles East of Hawkins Point. Ladder placed on starboard side. Location of anchorage for vessels awaiting a Pilot is off Magnetic Island between Bremer and Hawkins Point.

ANCHORAGES: Boundaries: Orchard Rocks/Cape Cleveland. Cleveland Bay Depths 8.2 m. to 12.2 m.

RESTRICTIONS: 0.6 m. of water under keel at all times.

Harbour Depths:

Sea Channel and Platypus Channel (width 92 m.)	10.4 m.
Swing Basin (396 m. diameter)	10.4 m.
No. 1 (tanker) berth (4.6 m. off)	11.2 m.
No. 2 (20t crane) berth (4.6 m. off)	11.2 m.
No. 3 (Container crane) berth (4.6 m. off)	11.0 m.
No. 4 (Gen. & Ro-Ro) berth (4.6 m. off)	9.6 m.
No. 6 (No. 1 Pier E) Gen. cargo berth (4.6 m. off)	7.8 m.
No. 7 (No. 1 Pier W) Minerals shiploader berth (4.6 m. off)	11.0 m.
No. 8 (No. 2 Pier E) Freezer berth (4.6 m. off)	9.1 m.
No. 9 (No. 2 Pier W) Sugar shiploader berth (4.6 m. off)	9.6 m.
No. 10 (Container Ro-Ro berth)	7.3 m.
Between berth 4 and 6 (77 m.)	7.4 m.
Between berth 7 and 8 (84 m.)	8.1 m.
Between berths 9 and 10 (142 m.)	8.0 m.

MAX. SIZE:

Berth No.	*Length*	*Max. Length of Vessel*
1	274 m.	238 m.
2	256 m.	238 m.
3	256 m.	238 m.
4	247 m.	238 m.
6	122 m.	60 m.
7	183 m.	195 m.
8	213 m.	220 m.
9	230 m.	228 m.
10	160 m.	152 m.

Generally, the limit in size of vessels entering the harbour will be 238 m. in length and 34 m. beam. Large vessels will only be taken into No. 4 Berth on condition that no vessels are berthed at No. 3 Berth closer inshore than mark No. 18 on arrival and mark No. 16 on departure and that a vessel berthed at No. 6 Berth is shoreward of No. 4 mark on both arrival and departure of a vessel at No. 4 Berth.

When tankers of over 213 m. in length are being berthed at No. 1 Berth, no vessel at No. 2 Berth is to be seaward of mark No. 33.

Decking of all wharves is between 4.81 m. and 5.79 m. above datum.

Largest Single Cargo: Inward 56,506 tonnes of bulk oil. Outward, 43,772 tonnes of raw sugar.

Deepest draft vessel, 12.04 m. Longest vessel, 261.15 m. Largest vessel (Tanker) 85,180 d.w.t.

HEALTH: Townsville is a first port of entry and notification of quarantine inspection requirements should be made not more than 24 hours nor less than 12 hours in advance. Inspections may be carried out at the wharf or at the quarantine anchorage, at the discretion of the Quarantine Officer. Rat guards are to be maintained on all mooring lines while vessels are berthed in the Townsville Harbour.

RADIO: Townsville Radio. The Port Radio Station "Townsville Harbour" keeps continuous watch on VHF Channel 16. Working Channels 6 & 12.

VHF: Continuous watch maintained on Channel 16. Call sign "Townsville Harbour". Channels 6 and 12 also available.

TUGS: Normally join at harbour entrance. Tug lines or (optional) ship's lines. Tugs equipped with VHF radio and operate on Channel 16, the same as Townsville Harbour. Two tugs available bollard pull 26 tons each.

BERTHING:

No. 1 Berth (isolated) is used exclusively by tankers for bulk oil discharge and by all types of vessels for bunkering.

No. 2 Berth (Eastern breakwater) has two electrically operated level luffing travelling jib cranes, one with an outreach of 11.25 m. and a lifting capacity of 20.3 tonnes and the other with an outreach of 21.25 m. with a lifting capacity of 12.2 tonnes.

No. 3 Berth (Eastern Breakwater) is equipped with a container crane which is leased to Townsville Transport & Services Pty. Ltd. and is operated and controlled by Northern Shipping & Stevedoring Pty. Ltd. Both of these companies are part of the M.I.M. Holdings Group. The crane has lifting capacity of 55 tons and its equipment includes an extendable spreader to suit all sizes of containers, a grab of 7.6 cu.m. capacity and a heavy lift hook. Maximum height of lift above wharf deck is 27 m. whilst the outreach beyond the wharf face is 31.85 m. and outreach over rail and road services is 23.77 m. Distance between bogies is 32.61 m. The crane traverses the full length of berth No. 3.

A recently constructed landing pad at the berth allows simultaneous use of the container crane and stern angle ramp for ro/ro traffic.

No. 4 Berth (Eastern Breakwater) has a landing pad, supported by steel piling, to service stern angle ramp ro/ro vessels in the U.K./Continent trade.

No. 6 Berth (No. 1 Pier E.) is a general purpose berth with oil bunker and bulk molasses loading pipe-line facilities.

No. 7 Berth (No. 1 Pier W.) supports a bulk shiploader through which passes mineral concentrates, phosphate rock and ores up to 102 mm. aggregate at the rate of 1,000 t.p.h. The berth is also equipped with bulk molasses loading pipe-line facilities.

No. 8 Berth (No. 2 Pier W.) services the export frozen beef trade with cargoes drawn from freezer stores erected on the pier. It also serves as a general purpose berth.

No. 9 Berth (No. 2 Pier E.) is the raw sugar loading berth. A bulk shiploader delivers sugar to carriers at the rate of 1,500 t.p.h.

No. 10 Berth (A.N.L. Ro-Ro Berth) is equipped with a stern ramp for ro-ro traffic and 25 tonnes, 32 m. radius, travelling jib crane for container and unit load handling.

Wharf Sheds: No sheds are available for general cargo storage at the harbour. Both free and bonded warehousing is available within 4 km. of the wharves.

Storage Facilities: Oils – All major Oil Companies operate ocean terminals close to the Harbour.

Raw Sugar – 2 storage sheds of 285,000 tonnes total capacity.
Molasses – 3 bulk storage tanks of 35,000 tonnes total capacity.
Concentrates – 115,000 tonnes covered storage area.
Frozen Meat – 2 cold stores on No. 2 Pier, total capacity 2,500 tonnes.
Open space storage for Rock Phosphate, Sulphur, Crude Lead and Refined Copper.

Container Terminals: No. 3 Berth, with an area of 1.2 hectares, has storage accommodation for 184 dry containers.

No. 10 Berth, with an area of 2.6 hectares, can accommodate 400 containers, 18 of which may be connected to refrigeration power outlets.

Northern Shipping and Stevedoring Terminal with an area of 1.6 hectares has a holding capacity of 160 refrigerated containers and 400 dry containers.

STEVEDORES: Times for ordering labour: Normal 1400 hrs. previous working day. Bulk Cargoes 0930 hrs. for night labour. Saturday or holidays 0930 hrs. previous working day. Notice required for difficult or long tows or a cargo requiring particular or special handling.

MEDICAL: Advance notice not particularly required unless urgent assistance required. Hospital facilities available. Health book inspected by boarding doctor.

TANKERS: Diameter of load/discharge lines: white fuel 10 in., black fuel 12 in. No residue discharge facility available. One tanker at berth at any time. Max. permitted draft at berth 31 ft.

DENSITY: Average density 1025 at all times.

FRESH WATER: Fresh water is available at all berths. Hoses have 2.5 in. London V thread fittings.

FUEL: Bunker fuel oil and distillate is available through pipe-lines at Berth Nos. 1, 6 and 7. Road tankers are used to bunker small ships at other berths.

FIRE PRECAUTIONS: Tankers required to have safety fire wires lead off foc'sle head and run as far aft as possible. Vessels at all times capable of manoeuvring with main engines.

GANGWAY/DECK WATCHMEN: Services available at ship's option.

OPENING/CLOSING HATCHES: Optional for either crew or stevedores.

SHIP'S CERTIFICATES:

Passenger Ship Safety.
International Load Line.
Ship Safety Construction.
Ship Safety Equipment.
Ship Safety Radiotelegraphy.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 250 grams tobacco on arrival and then can be purchased by the packet from bar on board. Wine and/or spirits: 1 opened bottle (26 oz.) spirits or wine on arrival and then spirits by the glass and wine by the bottle, from the bar on board.

CARGO GEAR: Australian Navigation Dept. requirements.

CONSUL: Netherlands representative, Tel. 71.6188.

REPAIRS: All deck and engine repairs can be carried out.

DRY DOCKS: Slipway with a capacity of 1,525 tonnes d.w.t. Slip can accommodate a 67 m. length vessel. Air, power, and water are available at the slip.

REPATRIATION: Full facilities exist for effecting crew changes and arranging repatriation.

AIRPORT: Distance from the International airport is 6.5 km.(4 miles).

TIME: East Australian Standard Time, GMT plus 10 hours.

HOLIDAYS: Cargo can be worked on all holidays except Christmas Day, Good Friday and the Waterside Workers' Picnic Day.

EMERGENCY TELEPHONE NUMBERS: Police, Ambulance or Fire "000", and ask to be connected to service required. Non-emergency numbers. Police 72 3000, Ambulance 79.3722, Fire Station 71.2111, Hospital 81 9211.

TELEPHONE: Ship to shore telephones are available at all berths. Oil tankers berthed in the port are required to have on board a flash proof telephone of a type approved by Telecom Australia.

Ships telephone lines are barred access to STD and trunk facilities.

SERVICES: Services available for compass adjusting, radio and radar service. A floating boom and an oil skimming device is available to deal with oil spills. Chemical dispersants are used for minor spills.

A garbage collection vehicle will call at each ship which has ordered the service before 0800 hrs. each day or at other times as directed by the Quarantine Officer. All garbage must be kept in drums with tight fitting lids on board the vessel until the arrival of the collection vehicle.

Ships crew is required to deliver garbage to the collection vehicle.

SHORE LEAVE: Crew members allowed shore leave.

DEVELOPMENTS:

In Progress:

1. Reconstruction of No. 4 Berth.
2. Reclamation of 105 ha. being Stage II of Eastern Breakwater development.

Planned:

1. Demolition of Magazine Hill.
2. Construction of one, and possibly two additional raw sugar storage sheds.
3. Detailed planning for development of port facilities East of Ross River. A large area of land has been acquired for this purpose.

AUTHORITY: Townsville Harbour Board, P.O.B. 1031, Townsville, Queensland, Australia, 4810. *Tel:* (077) 72 1011. *Telex:* Naport AA47334. *Cables:* Nausport. *Contact:* Mr. Ivan Malpas, Secretary/Chief Executive Officer.

AGENT: Sub-agent of Patrick Agencies, Brisbane.

WALLAROO, S.A.: 33.56 S. 137.37 E. (See Plan Book)

DOCUMENTS: See "Melbourne".

PILOTAGE: Compulsory. Pilot boards from 0.5 to 1 mile West of the No. 1 Fairway Beacon. Pilot vessel colours – orange hull, yellow superstructure. Pilot available 24 hours. 24 hours notice required.

RESTRICTIONS: No berthing at night. Approach Channel 27 ft. 09 in. (8.5 m) at low water.

VHF: Listening Channel 16. Working Channel 6

TUGS: One Tug available.

BERTHING: 6 berths. Depths various from 24 ft. (7.3 m.) to 31 ft. (9.4 m.). Bulk loading berth length 950 ft., dredged width 118 ft.

CRANES: 1 × 5 ton mobile crane.

STEVEDORES: Arrangements with private companies.

FRESH WATER: Available all berths. Delivery rate 15 t.p.h. Boosted rate 60 t.p.h.

FUEL: Available by road tanker.

REPAIRS: Engineering firms available from Port Adelaide.

DEVELOPMENTS: Minor dredging planned in order to widen entrance channel and deepen and enlarge part of No. 1 Berth for the benefit of larger vessels.

AUTHORITY: Department of Marine & Harbours, Adelaide.

AGENT: Patrick Agencies, P.O.Box 111, 2 Owen Terrace, Wallaroo 5556, South Australia. Tel: 23-2412 or 23-2340.

WEIPA, (including Albatross Bay), Queensland: 12.42 S. 141.41 E. (See Plan Book)

PORT LIMITS: Seaward boundary commencing at a point at HW mark on the Western Extremity of Duyfken Point, thence by a line in a 173° (T) direction to the HW mark at Boyd Point.

DOCUMENTS/HEALTH: See "Melbourne".

PILOTAGE: Vessels requiring Pilot may apply to Harbour Master, Weipa 48 hours before arrival, confirming ETA 24 hours before. Vessels to give Harbour Master their draft. Generally speaking minimum berthing draft should be, forward 2% of vessel's length and aft, the propeller completely immersed.

Pilot boat is 15 m. (length), named "Daintree" and painted white and orange. It may be contacted on VHF Channel 16. Pilot boards 1 mile S.W. of Fairway Beacon.

ANCHORAGE: Anywhere in Albatross Bay except between 2 lines situated 1 mile North and South respectively of the line of leads and extended to the port limits.

RESTRICTIONS: Weipa Approach Channel is 7.8 miles long with a minimum depth of water 11 m. (36 ft. 1 in.) LWOST. Usually vessels up to 30,000 d.w.t. enter channel at any stage of the tide. Vessels of over 30,000 d.w.t. enter at any stage of the flood up to 2.5 hours before HW.

Usually vessels up to 30,000 d.w.t. can berth at any state of the tide. Vessels of over 30,000 d.w.t. due to their departure draft and existing tug power must berth starboard side alongside and can do so at any stage of the flood tide. Vessels normally depart 1 hour 15 minutes before HW. Some vessels up to 30,000 d.w.t. can depart on LW.

MAX. SIZE: Maximum LOA 254 m. (835 ft.) Beam 35.3 m. (116 ft.) Draft depends on height of tide and 90 cm. (3 ft.) keel clearance is required.

HEALTH: See "Melbourne".

RADIO: Forcomal, Sydney Radio and within 48 hours Thursday Island Radio.

VHF: Call "Weipa Harbour" on Channel 16 on arrival 1 mile S.W. of Fairway Beacon. Tugs operate on Channels 6, 8 and 12. Vessels to advise "Weipa Harbour" passing Fairway Beacon inward and outward and on arrival at and prior to departure from the wharf.

RADAR: No Port Radar.

TUGS: Vessels entering North of Cora Bank tugs join at No. 25 Beacon. Vessels entering South of Cora Bank tugs join at No. 19 Beacon. Tugs are usually used in the lashed up position using tug's lines.

3 tugs are available of 23, 24 and 43 Tonnes bollard pull, of which only 2 are in use at any one time.

BERTHING: Loading and discharge at Humbug Point generally by ship's gear but mobile cranes may be hired if required.

Evans Landing Wharf is generally only used for petrol and distillate discharge.

CRANES: 2×70 tonne P.&H. 1×31 tonne P.&H. 1×26 tonne P.&H. 2×12 tonne Austin and Weston. 1×12 tonne B.H.B. 1×8 tonne Cranville.

BULK HANDLING FACILITIES: 2 Bauxite Berths, Lorim Pt. West old berth and Lorim Pt. East which is an extension of the previous old berth. Depth alongside Lorim East 12.5 m. (41 ft.) Lorim West 12.5 m. (41 ft.).

Loading rates are Lorim West 3,500 t.p.h. Lorim East 6,000 t.p.h. If there are vessels at both berths loading simultaneously the rates are West 3,500 t.p.h., East 4,500 t.p.h.

SPECIALISED CARGO HANDLING FACILITIES: None.

BRIDGES: None.

STEVEDORES: No special advice required. None available for working on ships.

MEDICAL: Inoculations per Australian Regulations. No notice required for medical attention. Urgent cases flown out and treated at Cairns or Thursday Island. Hospital facilities available for minor cases.

TANKERS: 8 in. discharge lines. Tankers berth at Evans Landing and Lorim Point.

DENSITY: Dry Season 1024. Wet Season 1012. These figures can vary considerably.

FRESH WATER: Available at all berths. 5 t.p.h.

FUEL: Not available.

FIRE PRECAUTIONS: No specific precautions.

STORES: Very limited stores are available. In emergency large orders could be supplied only if several days notice given by radio, as they have to be flown from Cairns.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Work carried out by crew.

SHIP CERTIFICATES: Ship's Register, Load Line, Safety Radio and Safety Equipment Certificates. See also "Melbourne".

CONSULS: None.

REPAIRS: Not available.

DRY DOCKS: None.

SURVEYORS: Lloyd's surveyor available at Cairns.

CUSTOMS ALLOWANCES: See "Melbourne".

CARGO GEAR: See "Berthing".

HOLIDAYS: Vessels are loaded and berthed or sailed at any time.

POLICE/AMBULANCE/FIRE: Police 733119, Ambulance 733444, Fire 733444. As no telephone supplied contact "Weipa Harbour" on Channel 16 for these services.

SERVICES: Not available.

SHORE LEAVE: See "Melbourne".

IDENTIFICATION CARDS: See "Melbourne".

REGULATIONS: Vessels may not immobilise without written permission from the Harbour Master.

DELAYS: The only delays to be normally expected are as under restrictions, i.e. awaiting tides.

REPATRIATION: Can be arranged.

AIRPORT: 7 miles from airport. Served by Air Queensland.

TIME: GMT plus 10 hours.

BANKS: Commonwealth Trading Bank, Rocky Point, Weipa, Queensland, 4874. Tel: 733238.

DEVELOPMENTS: The Alumina Plant at Weipa has been deferred indefinitely.

AUTHORITY: Department of Harbours and Marine, P.O.Box 489, Weipa, Queensland 4874. *Tel:* 070-733339. *Telex:* 48871. *Cables:* Harbour Master Weipa. *Contact:* Captain M. Lutze, Harbour Master.

AGENT: Sub-agent of Patrick Agencies (through Patrick's Melbourne).

WESTERNPORT, Victoria: 38.21 S. 145.14 E. (See Plan Book)

DECLARATION: *Declaration Prior to Arrival:* The Master of a ship which carries liquid bulk dangerous substances or oil in bulk, other than oil fuel used for the propulsion or operation of the ship, shall ensure that the Marine Authority is advised, in writing, with answers to the following questions at least 48 hours prior to arrival in the port:

1. Is the hull leak free?
2. Is an inert gas system fitted?
3. Is the inert gas system, if fitted, fully operational?
4. Is a crude oil washing system fitted?
5. Is the crude oil washing system, if fitted, fully operational?
6. Are there any defects to the ship, machinery and equipment, which may affect safe pilotage, berthing, cargo or ballast operations?
7. Have stress calculations for the envisaged programme of cargo handling, ballasting and bunkering been made?
8. Is the hull stress calculated within recommended safety limits?

Additional information required for liquefied gas carriers:

9. Are all cargo tanks and lines free of air?
10. Is the re-liquefaction or boil-off control equipment in good working order?

PORT LIMITS: The Port Authorities consider a vessel to be arrived when she crosses an imaginary line between West Head and Point Grant.

DOCUMENTS: Application for berth, tugs, mooring launches, telephones, and notification to load or unload, to be delivered by ship's Agent to Harbour Master not less than 24 hours before arrival.

Customs Documents required:

Form M & S 11	Crew List and attachments, 3 copies.
Form M 42 A	Stores List, 1 copy.
Form 5	Articles owned by or in possession of crew, 1 copy.
Form C & E 886	Ports of call since commencement of voyage, 3 copies.
Form QA 3	Quarantine Form. (Animals carried as cargo), 1 copy.
Form QA 4	Quarantine Form. (Animals carried as pets), 1 copy.
Form QA 5	Ship Master's Bond re animals carried, 1 copy.
Form Q 360	Health report of all persons on board, 2 copies.
	Inwards Manifest, 1 copy.
	Outwards Manifest, copy.
Form 40	Application for clearance.

PILOTAGE: Pilotage compulsory for merchant vessels except those specially exempted. Pilots for Westernport are available at any time provided notification of ETA is given 24 hours in advance and confirmed 6 hours prior to arrival. Pilot for Westernport will board from a launch, painted orange and showing the signals and lights prescribed for such vessels, by day approximately 3 miles Southward from West Head. By night in the white sector of McHaffie's Point Light, with Cape Schank Light bearing 295° (White), at the entrance to Westernport. Pilot launch is equipped with VHF Channel 16 (156.8 MHz). A speed of 7 knots must be maintained.

In adverse weather, vessels to 9.5 m. draft may board Pilot adjacent to yellow buoy 2 miles – 084° from Flinders Jetty Light. At night buoy shows Fl. Y. 4 secs.

Harbour Master's Office requires notification of vessels ETA at Fairway Buoy 24 hours prior to arrival. Confirmation of ETA is required 6 hours prior to arrival. To minimise delays in co-ordinating Port services vessels expecting to arrive between the hours 0900 to 1700 hrs. should ensure Harbour Master receives confirmation by 0830 hrs. that morning.

Vessels expecting to arrive between the hours 1700 to 0900 hrs. should confirm ETA by 1530 hrs. that afternoon.

Vessels expecting to arrive during a weekend period should indicate ETA by 1530 hrs. on Friday, then follow above procedure.

Telex Number of this Office is PHWP AA 34051.

Also see "Melbourne".

ANCHORAGES: Anchorage within port between Southern edge Tortoise Head Bank, and Northern shore of Phillip Island. Anchorage 4 miles in length, East to West, and 1.25 miles wide, depths 16 m. – 27 m. at Western end, decreasing 11 m. – 20 m. at Eastern end.

An anchorage area having a least depth of water of 8.5 m., has been established adjacent to Long Island Jetty.

RESTRICTIONS: No vessel shall enter port with less underkeel clearance than 10% of draft.

MAX. SIZE: Governed by underwater clearance. Vessels drawing up to 14.5 m. may enter depending on state of tide, but underkeel clearance shall not be less than 10% of draft.

Oil jetties can accommodate vessels of up to 100,000 tons, depending upon water available.

See "Tankers".

RADIO: *Advice to ships Masters on Westernport Harbour Control*

GENERAL INFORMATION

1. *Radio Watch*	A continuous radio watch will be kept by Harbour Control on VHF Channel 16. Main working channel is 14.
2. *Pilot Boarding Ground*	Position 3 mile × 180° from West Head will be identified as position "A".
3. *Fairway Buoy*	Position of Fairway Buoy (ISO. 2 sec.) will be identified as position "B".

INWARD BOUND VESSELS

1. Vessels shall report to Harbour Control at least 1 hour before arrival at position "A" or "B", giving ETA position "A" or "B", deepest draft and information re-hull leaks and health of crew, etc.
2. Vessels must request permission to enter port. It is an expressed condition of entry that any malfunction or impairment of machinery, steering and propellor indicators which could cause restrictions in the manoeuvring ability of the vessel, is reported to Harbour Control and to the Pilot when engaged.
3. Vessels shall advise Harbour Control when passing Fairway Buoy (position "B"). Sea lashings to be removed from anchor cables and anchors made ready for immediate use.
4. Vessels shall advise Harbour Control when rounding Sandy Point and request VHF Channel for berthing operations and tugs.
5. Vessels shall report to Harbour Control (Channel 16) when all fast, finished with engines and tugs dismissed.

OUTWARD BOUND VESSELS

1. Vessels shall contact Harbour Control 1 hour before fixed time of departure advising if they will/will not be ready to sail in 1 hour's time.
2. Vessels will be advised at sailing time by duty Harbour Master re permission to sail, port movements, etc.
3. When vessels clear their berth and tugs dismissed and proceeding they shall report this to Harbour Control (Channel 16).
4. Vessels to advise Harbour Control when (a) Rounding Sandy Point. (b) Clear of Port.

VESSELS PROCEEDING TO ANCHORAGE

1. Vessels inward and outward to an anchorage are to use the same procedure as in above for inward and outward vessels respectively. Vessels will be advised if required to anchor and what anchorage to use. Whilst at anchor vessels shall keep a continuous listening watch on Channel 16.
2. Vessels shall advise Harbour Control when they have anchored and also when vessels are underway again from an anchorage.

ENGINE TRIALS AND LIFEBOAT DRILLS, ETC.

1. Vessels wanting to carry out engine trials shall first obtain permission from the duty Harbour Master.
2. When lifeboat drills are to be held and boats swung out and put into the water the duty Harbour Master shall be given prior notice.
3. All vessels in the port shall notify Harbour Control (Channel 16) of any distress signals sighted or any untoward occurrence.

PRATIQUE: Advise state of crew's health 24 hours prior to arrival. If all healthy, pratique granted subsequent to berthing; if crew's health suspect, doctor boards prior to berthing. Pratique automatic when more than 14 days have elapsed since calling at a foreign port, and the vessel has subsequently been granted pratique first at another port within the Commonwealth of Australia. Pratique may be granted 24 hours a day.

TUGS: Two tugs are available both of 3,800 kW. and 50 tonnes bollard pull. Tugs join vessel at Sandy Point. Ship's lines normally used by tugs. Tugs are fitted with VHF and radar and fire-fighting equipment. Additional tugs available from Melbourne given 24 hours notice.

BERTHING: Berthing subject to Harbour Master's direction. 3 oil berths, 2 steel works berths (one is Ro/Ro) and 2 tug berths are available.

Steel Industry Wharf (2 Berths) (16.5 n.m. from Entrance): Berths are owned and utilised by J. Lysaght (Australia). Approach channel has a depth of 9.1 m. Depth alongside both berths is 12.1 m. Swing basin diameter 457 m. Steel works is 2.5 Km. from berth.

Steel Industry Wharf No. 1: Ro/Ro Berth – Vessels with stern door up to 10,000 tons.

Ramp details: Length 28 m. (curved), width 8.5 m. Ramp made up of 7 sections which are hydraulically operated to allow accommodation of various types of stern loading/discharging vessels.

Ramp section is approximately 3 m. proud of stern berthing fenders.

Steel Industry Wharf No. 2: Conventional General Cargo Wharf. 152 m. long, 24 to 15.6 m. wide. Reinforced concrete wharf with wooden fendering. A mooring dolphin is provided 30 m. N.E. No. 2 Berth is adjacent and extends in a N.E. direction from No. 1 Berth.

Max. size of vessel to 200 m. length – 40,000 d.w.t.
Tidal range at berth: Between 2 m. and 3 m.
Nature of Bottom: Mud, clay and some rock.
Vessel can dock/undock at any stage.
Vessel can dock/undock during hours of darkness.
Vessels moor using ship's lines to Harbour Master's requirements.
Pilots used, unless Master holds special exemption. Water available.
Bunkers by Road Tanker only, subject to Harbour Master's approval.
Engines may be immobilised whilst ship is alongside, subject to Harbour Master's approval.
Stores and supplies can be delivered from dock or by launch.

STEVEDORES: Westernport is a class "B" port for stevedoring facilities. Port Waratah stevedores available. Require ETA's of vessels from Agent. Ordering time for labour: Tuesday-Friday, by 1430 hrs. previous day. Saturday-Sunday, by 1430 hrs. previous Friday. Monday, by 1430 hrs. previous Sunday. All close holidays observed.

CARGO GEAR: No shore cranes. All vessels must comply with Commonwealth of Australia Regulations prescribed under the Navigation Act.

MEDICAL: Four qualified medical practitioners available and 20-bed Nursing Hospital. Agent should receive prior notice of particulars of vaccinations required.

CERTIFICATES:

Clearance from last port.
Ship's Register.
Articles of Agreement.
Official Log Book.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derat Certificate.
Light Dues Certificate (receipt).
Pratique Certificate from last port (if to be used in this port).

TANKERS:

Crib Point Jetty: *(2 Berths, 13 n.m. from Entrance):* Berths are State owned and utilised by B.P. (Australia). The approach channel has 14.3 m. below chart datum, swing basin has a diameter of 610 m., and depth of 14.3 m.

No. 1 Crib Point: Capable of accommodating 100,000 ton tankers with a depth alongside of 15.8 m. Shore gangway used at this berth.

No. 2 Crib Point: Capable of accommodating 40,000 ton tankers with a depth alongside of 12.8 m.

Crib Point Terminal General:
Grades Handled – Crude, Black Oils, White Oils, Bunkers.
Tank Height – Crude Tank base 17 m. above sea level.
Full 37 m. above sea level.
Distance of tank farm to Jetty Head – 2 km.
Hose and Pipe-line diameters:
Crude: 4×12 in. diameter hoses. 2×24 in. diameter pipe-lines.
Pumping rate up to 5,000 t.p.h. Max. back pressure 150 p.s.i.
Black Oil: 4×12 in. diameter hoses. 1×16 in. diameter pipe-line.
Pumping rate up to 1,500 t.p.h. Max. back pressure 150 p.s.i.
White Oil: 2×10 in. diameter hoses. 1×16 in. diameter and 2×12 in. diameter pipe-lines.
Pumping rate 700 – 1,000 t.p.h. Max. back pressure 150 p.s.i.
Bunkers: 1×8 in. diameter hose. 1×12 in. pipe-line.
Pumping rate 200–500 t.p.h. Max. back pressure 150 p.s.i.
Reducers: Refinery has reducers from 12 in. to 6 in.
Hoses connected by B.P. Airdraft to manifold 16 m. above MHW.
Ballast capacity 30,000 tons.

Long Island Jetty *(1 Berth 15.5 n.m. from Entrance):* Berth is State owned and utilised by Esso (Australia). The approach channel has a depth of 14.3 m., swing basin has a diameter of 548 m. and a depth of 14.3 m. There is a depth of 15.8 m. alongside the berth. Berth used for export of Gippsland Crude and LPG. Can accommodate vessels up to 100,000 tons. Shore gangway used.

Long Island Terminal General:
Tank Height above sea level – Crude Base 13.7 m. Tank Full 28 m.
LPG Base 7.6 m. Tank Full 36.6 m.
Distance of tank farm to Jetty – Crude 3 km.
LPG 1 km.

Hose and Pipe-line diameters:
No Hoses. "Chiksan" arms used. Airdraft to manifold 16 m. above MHW.
Crude: 2×16 in. diameter arms. 2×30 in. diameter pipe-lines.
Max. pumping rate 7,250 t.p.h. Max. back pressure 125 p.s.i.
LPG: 1 × 12 in. diameter liquid arm. 1 × 12 in. diameter vapour arm. 1 × 20 in. liquid pipe-line.
Max. pumping rate 1,750 t.p.h. Max. back pressure 85 p.s.i. (Refrigerated).
Reducers: Terminal has 8 in., 10 in. and 12 in. ASA Reducers.
Arms connected by Esso.
Ballast, normal capacity 15,000 tons, up to 22,000 tons with 48 hours notice.

Pollution: Cases of discharging dirty ballast or oil spillage will be investigated and vessels are liable to fines and/or detention. Vessels shall not discharge into the waters of the port any part of the contents of their cargo, slop or ballast tanks (this includes clean ballast) or tank washings or bilges which are liable to pollute these waters. Masters shall ensure that pipe-lines and equipment are clean before using them for discharging anything into the waters of the port. Scuppers shall be plugged effectively and no leakage or spillage from any vessel shall be allowed to leak or be swept overboard.

Masters of vessels must seek permission from Harbour Master before pumping anything into the waters of the bay.

The State of Victoria has stringent laws in force concerning the pollution of the sea by oil.

Smoke emissions controlled under the Clean Air Act which will operate under the jurisdiction of the Environment Protection Authority.

Ballast (Tankers): All ballast contained in tanks connected in any way to the vessel's cargo carrying system, is to be discharged to shore tankage.

Fire Precautions: Tankers shall not immobilise main engines whilst alongside jetties. Vessels must observe Port Rule 113 (Dangerous Goods and Oil in Ports) 1974. No oil cargo handling or physical preparation for same permitted unless firewatch tug is on duty.

Tank Washing/Gas Freeing: Permitted alongside subject to approval from Harbour Master. All tank washings to be discharged ashore.

Garbage: Garbage and rubbish will be collected daily from vessels within the Port, all collections shall be a charge on the vessel.

Bunkers: Fuel oil and diesel oils available at Crib Point Jetty only via direct line from refinery. Delivery rate approximately 350 t.p.h. 48 hours notice is required for lubricating oil. Small quantities of marine fuel are available from road tankers at other berths.

Fresh Water: Available, approximate rate 100 t.p.h. Approximate price $1.00 per 4.5 cu.m. Delivered from hydrants at Jetty Heads at all Berths.

Density: Average density between 1025 and 1030 oz. per cu.ft.

Mooring: Vessels secure to oil jetties using ship's lines and shore preventer wires, at all times. See "Plan Book".

GANGWAY/DECK WATCHMAN: A shore watchman may be hired. Cost borne by the vessel.

CUSTOMS ALLOWANCES: *(a)* Tobacco: each crew member permitted either 200 cigarettes or 250 gm. of pipe tobacco, or 250 gm. of Fine Cut Tobacco out of Bond. *(b)* Wine and/or Spirit: each crew member is allowed 1 litre of wines or spirits (opened).

IDENTIFICATION CARDS: Required for all nationalities except the United Kingdom, Canada, South Africa, Japan, Israel, Norway, Denmark, Fiji, Hong Kong, Malaysia, and South Korea. Also see "Melbourne".

CONSULS: None.

REPAIRS: Facilities for medium size deck and engine repairs. All repairs subject to Harbour Master's approval.

SURVEYORS: Cargo Inspectors: Caleb Brett, Cargo Superintendents available from Melbourne. All major classification societies, surveyors and insurers represented as for Melbourne.
REPATRIATION: Facilities available.
AIRPORT: Nearest major commercial airport is Tullamarine, 55 miles distance, from which there are frequent interstate and international flights. Airport accessible by road in about 2 hours by taxi-car.
TIME: Summer, GMT plus 11 hours Winter, March-October GMT plus 10 hours.
HOLIDAYS: Oil terminals work on all holidays. Steel Works observe close holidays.
POLICE/AMBULANCE/FIRE: Police Hastings 790222; Ambulance Frankston 7832222; Fire. Hastings 791345, and Crib Point 839221.
TELEPHONES: Port Authority insists that Public Telephone is placed on board. Cost of this service $100.00, plus cost all trunk calls.
SERVICES: Licensed compass adjuster available. Underwriters' Representatives available. Radio and radar repairs available.
BANKS: American and European bank offices are represented from Melbourne.
EMERGENCY CO-ORDINATION CENTRE: Port Emergency Plan is activated by Duty Harbour Master with Co-ordination Centre initially established in Harbour Master's Office, Stony Point.
STORING: Vessels may be stored by barge or truck. At tanker terminals storing is not allowed during loading or discharging operations. Trucks and forklifts are restricted to a point 60 m. from jetty head. Bonded stores are handled under Customs supervision. Local labour is available to assist with storing.
SHORE LEAVE: Crew members permitted shore leave, and launches can be supplied to vessels at anchor, provided vessels have pratique, and have been cleared by Customs.
DELAYS: No delays anticipated. Port operates 24 hours per day.
GENERAL: Vessels secure to oil jetties using ship's lines and shore preventer wires at all times.
AUTHORITY: Ports and Harbours Division, Ministry of Transport, 168 Exhibition Street, Melbourne, 3,000. *Tel:* 03-6698666. *Telex:* 34051.

Local Authority: Captain D. J. Baird, Harbour Master, Harbour Master's Office, Stony Point Road, Crib Point, Victoria 3919.

AGENT: See "Melbourne".

WHYALLA, S.A.: 33.02 S. 137.36 E. (See Plan Book)

LOCATION: Situated on Western shore of Spencer Gulf opposite to and 27 miles by sea from Port Pirie. Open to all Southerly winds, which seldom interfere seriously with operations.
BUOYAGE: "IALA" Buoyage system "A" has been adopted.

The system is that the port hand beacons are red in colour, lights red, topmarks can shape and even numbered. The starboard beacons are green in colour and lighting, topmarks cone shape and odd numbers.

FACILITIES: Jetty for iron ore loading, and dredged harbour with one main wharf for steel and general cargo, and for bulk cargoes of coal, coke, limestone, pig iron, salt, etc. Harbour berths are safe berths.
DOCUMENTS: See "Melbourne".
PILOTAGE: Compulsory except for those vessels whose Masters hold Exemption Certificates. Pilots board 0.5 to 1.5 miles East (105°) of Whyalla No. 1 Ore Loading Jetty. Vessels requiring Pilot should request service in sufficient time enable Pilot be ordered before 1600 hrs. Monday to Friday and should show prescribed signal within at least 10 miles of Whyalla. If delayed berthing, Master informed by radio and recommended anchor at Pilot boarding station (see above).
ANCHORAGES: Quarantine line extends in direction 241° from Black Point to Coast Southwestward of port. Quarantine anchorage shown on Australian Chart AUS.135, lies Southeastward of quarantine line and Eastward of jetty. Anchor preferably North of harbour leads. Vessels should not anchor on harbour or jetty leads, but should anchor, draft permitting, approximately 1 mile North of Outer Fairway Beacon. Holding ground good with hard clay and sand bottom.
RESTRICTIONS: Vessels will not be moved within port by Pilot unless at least 10% of max. draft in water beneath keel. Min. clearance 2 ft. Also see "Berthing".
PRATIQUE: Whyalla is a port of first entry. 48 hours' notice of request for pratique required. Pratique granted at anchorage or in berth. Also see "Melbourne".

Also see "Australia-General" before first port – Answers required to questions in Quarantine form by radio, 48 hrs. prior to arrival (Monday – Friday).

RADIO: Cable "Hematite Whyalla" also local Agent *(a)* on departure from previous port advising ETA and total cargo for discharge Whyalla (if any); *(b)* 48 hours prior arrival giving ETA; *(c)* 24 hours prior arrival giving ETA; *(d)* advise any alteration in ETA exceeding 2 hours; *(e)* advise estimated draft on arrival fore and aft. These cables necessary in order ensure loading and labour. Cables to be signed with Master's name. Cables sent outside working hours should be prefixed "Shipserv". In event vessel arriving direct from overseas port requiring pratique, following additional advice to be cabled: No. of crew, nationality, and whether health vaccination certificates required.
VHF: Port equipped with VHF. Service maintained 24 hours a day. Call sign "Whyalla Harbour".
TUGS: All tugs fitted VHF radio. 4 tugs available between 2.5 and 45 tons bollard pull. Wire towropes not to be used unless risk of damage to tug undertaken by ship. Charge for use of tug's lines. Orders for tugs to be made at least 2 hours before required and not later than 1530 hrs. Monday to Friday. Ferry services undertaken to ships at anchorage outside harbour when requested.
BERTHING: Iron ore loading jetty no longer in service, lies near Eastern side of town is 2,273 ft. long with T head formed by 6 dolphins. At night, the dolphin shows fixed white light,

No. 2 Jetty max. length of vessel 820 ft. Depth of water alongside 38 ft. LW. Approach Channel depth 35 ft. LWOST. Swinging basin, depth 35 ft. LWOST.

Stowage factor iron ore, 13 ft. – 15 ft. per ton. No stevedoring incurred and generally cargo loaded lower holds and no trimming necessary.

Whyalla Harbour: About 1.25 miles to North or Iron Ore Jetty. Entrance Channel 394 ft. wide and approx. 10,000 ft. length. Water depth in Channel and basin 9.5 m. LWOST. Depth of water at Harbour Wharf 10.7 m. LWOST. 4 berths, full wharf 2,300 ft.

DENSITY: Specific gravity of water approximately 1028 to 1035 therefore vessels must load light.
STEVEDORES: Shift work 21 hours per day on continuous 7 day roster. At least 24 hours notice for labour requirements.
MEDICAL: Resident doctors and hospital available.
FRESH WATER: Available at No. 2 Jetty and all wharves.
FUEL: Bunkering not normally undertaken. Fuel oil, coal and diesel oil available at Whyalla Harbour Wharf in emergencies only.
REPAIRS: Essential repairs only. Consult ship's Agents before maintenance or repairs undertaken.
SURVEYORS: The following Surveyors available anytime if advance notice given: (1 hour flight from Adelaide).

Lloyd's Register: 149 Brebner Drive, Westlakes, Adelaide, South Australia 5021. Tel: Adelaide 353 5166. After hours: Adelaide 267 2554 and 294 7478. Telex: 89973 (LRADL).

Bureau Veritas: 20 Divett Street, Port Adelaide, South Australia 5015. Tel: 47 5924. Telex: AA88593.

STORES: Marine and bonded stores can be procured by arrangement with Adelaide. 5 days notice required.

Lloyd's agents are Adelaide Steamship Co. Ltd.

STORING: (See "Prelims" page viii).

Storing at the Blast Furnace Wharf:

1. Vessels can be stored by trucks.
2. Vessels can store during loading or discharging if the vessel can provide cranes and labour for this purpose. Barges not used at this wharf. Storing must not cause any delay to stevedoring operations.

Stevedoring operations cease between the hours of 0700 to 0800; 1500 to 1600; 2300 to 2400.

3. Trucks can proceed alongside at all berths.
4. Forklifts are available for hire and can be used at all berths.
5. Application to load stores should be made to Customs by submitting a requisition showing details of items required, prior to loading.

At least 24 hours notice is required by Customs during business hours, Monday to Friday.

Form 957 (Entry for Exportation) is then completed showing all details and value of the goods, and signed by the Ship Owner or his Agent, and lodged with Customs within 7 days.

6. Shore labour is not available for storing.

Storing at the Ore Loading Jetty:

Modest amounts can be loaded by launch on the port side using ship's cranes. Launch charge $113.00 per hour.

Small orders can be manhandled to ship's starboard side at the jetty.

Vessels always berth head out, starboard side to the ore jetty.

GANGWAY/DECK WATCHMAN: Available at ship's option.
REPATRIATION: Air, road and rail facilities available.
AMBULANCE: In event of accident contact Agent or BHP 419 or BHP 2205. After hours BHP 699. St. John's Ambulance Services (Tel: 45-7777) available 24 hours daily.

Aerial Ambulance available for transfer of patients to a metropolitan hospital.

BANKS: A.N.Z. Banking Group, Forsyth Street, Whyalla. 5600.
Tel: 45 7122
Commonwealth Banking Corporation, Forsyth Street, Whyalla. 5600.
Tel: 45 8666.
National Bank of Australia, Forsyth Street, Whyalla. 5600.
Tel: 45 8033.

EMERGENCY CO-ORDINATION: Whyalla Police Tel: 45 7088.
State Emergency Service Tel: 45 0272.

Local Emergencies within B.H.P. Area, including Ships Alongside: e.g. Accidents, fire, flooding, deaths, electrical faults causing hazards, oil spills and other pollution.

Dial 'OO' on B.H.P. Interworks black telephones.

SHORE LEAVE: Crew members permitted shore leave, and launches, at ship's option, provide regular schedule to anchorage – weather permitting.
DEVELOPMENTS: See "Port Bonython".
AUTHORITY: *Port Authority:* The Broken Hill Proprietary Company Limited, P.O.Box 21, Whyalla, South Australia 5600 *Tel:* 45 7000 *Telex:* AA 80270 and AA 80259. *Cables:* "Hematite" Whyalla.

Harbour Master: Department of Marine & Harbours, P.O.Box 102, Whyalla, South Australia, 5600 *Tel:* Business: 45 5666. After hours: 45 7682 or 45 3352.

Department of Marine & Harbours available as Cargo Inspectors and Independent Surveyors.

AGENT: Sub-agent of Patrick Agencies, Adelaide.

WYNDHAM, W.A.: 15.27 S. 128.06 E. (See Plan Book)

PORT LIMITS: All waters in the Cambridge Gulf South of a line extending from Cape Dussejour to the summit of Hill 437 on Lacrosse Island, thence to Cape Donett.

CERTIFICATES/DOCUMENTS/HEALTH: See "Melbourne".

PILOTAGE: Compulsory for all vessels entering port except those whose Masters have pilotage exemptions. Pilot boards South of Lacrosse Island in a position with Lacrosse Lt. Ho. bearing 350° distant 5.5 miles. Vessels arriving early should anchor in or near this position. Preferably vessels should arrive at Pilot boarding ground at dawn, as Gulf negotiated during daylight only.

Pilot also boards at Nicol Point (Lat. 14° 58.2′ S., Long. 128° 10.3′ E.) and Nicol Point bearing 214°, distance 5.2 miles.

Pilot no longer stationed permanently at Wyndham, but there is usually one there from April to November/December. Early advice (2 weeks) is essential. 48 hours prior arrival give ETA to Harbour and Light Department, Wyndham.

All ships awaiting a Pilot should maintain listening watch on VHF Channel 16 at least 2 hours prior to Pilot boarding time, have engines on stand-by at least 1 hour before boarding time, and be ready to proceed in accordance with the Pilot's instructions given by VHF.

The approaches Channel has a minimum depth of 6.4 m. LWOST.

ETA: Shipserve "Harbour Master Wyndham" required 48 and 24 hours notice prior arrival. The 24 hours message should be timed to be delivered before 1630 hrs. local time on the day before arrival so that arrangements can be finalised, when possible, in working hours.

Indicate max. draft in the 48 hours notice.

APPROACHES: Generally speaking, it is preferable to arrive at the pilot station at daybreak. Approach Medusa Bank Buoy and pass Westward (buoy bearing 090° distance 1 mile). Steer 180° until Lacrosse Island Lighthouse bears 040°, distance 2 miles. Alter course to 145° to a position with Shakespeare Hill and Cone Hill in transit (086°), Cone Hill distance 4 miles. The course should then be altered to 225°. Course clears Guthrie and East Banks and puts Black Cliff right ahead.

It will be noted that a conspicuous hill (un-named) is sighted immediately behind Black Cliff Point and these together form an excellent lead down this part of the Gulf to a position off Islet Point. From this point onwards pilotage is fairly complicated. There is a submerged wreck off the jetty, which must be considered when berthing and unberthing. Large vessels may only navigate the Hare Channel at half tide or better, as there is a 6.4 m. patch in the fairway.

RESTRICTIONS: The max. length of vessel permitted to navigate the Gulf is 189 m. overall. Longer vessels fitted with bow thrusters have used the port by special permission.

The Gulf is not navigable during hours of darkness at present.

MAX. SIZE: Length 190 m. draft 8.8 m.

HEALTH: Wyndham is a first port of entry. Masters are required to radio Port Health Authority, Wyndham, not less than 12 hours prior to arrival at pilotage station and giving state of health of the vessel. Examination for pratique is usually conducted after arrival alongside and nobody is permitted ashore until doctor's examination is completed.

TUGS: None.

BERTHING: There is a jetty of 283 m. in length. The Southern 210 m. having a least depth of 9.14 m., there is slightly less water at the Northern end.

Ordinary moorings are used. A launch is on station to run lines. There is no tug available.

FRESH WATER: Available at both berths. Supply is 10 t.p.h. approx.

FUEL: Not available.

STEVEDORES: Working hours: 0730 – 1130 hrs., 1230 – 1630 hrs., 1630 – 1830 hrs. When no extension of work, labour finishes at 1630 hrs.

Labour is organised by the A.E.W.L. WWF conditions prevail, 2 gangs are available. Prior advice as to labour requirements, hatches to be worked, etc., is of great assistance to stevedores.

CARGO HANDLING: By ship's gear only direct to motor transport. 1×12 ton Coles slewing crane available, provided sufficient notice is given. Fork-lift trucks and pallets are used for handling general cargo where suitable.

A container park and facilities for handling and storage of reefer and dry containers ashore has been installed.

Bulk Loader on South Berth, grain loading rate 120 t.p.h.

REPAIRS: No facilities.

TIME: GMT plus 8 hours.

AUTHORITY: Marine and Harbours Department, P.O.Box 119, Wyndham, Western Australia 6741. *Tel:* 611006, 611203. *Telex:* 99853. *Contact:* Harbour Master.

AGENT: Sub-agent of Patrick Agencies, Fremantle.

YAMBA, N.S.W.: 29.26 S. 153.21 E.

PORT LIMITS: One nautical mile Eastwards of the ends of the North and South Breakwaters defines the seaward limits of the port.

DOCUMENTS:

2 Crew Lists M&S 11.
2 Port of Call Lists.
2 Passenger Lists Forms M308, 309, 310 (2 each).
1 Crew Personal Effects List Form 5.
1 Store List Form 42A.
1 Animal Pets aboard Form QA4.
Ship's Log.
Last Port Clearance.
Safety Certificates: Construction, Equipment, Safety Equipment, Loadline, Radio.

Where possible, cargo manifests and storage plans should be forwarded by airmail ahead of the vessel to the local Agent.

PILOTAGE: The Clarence buoyage is IALA "System A". Pilotage is compulsory for all craft exceeding 30.48 m. LOA, unless a current Pilotage Exemption is held by the Master.

Notice of ETA and request for a Pilot must be made to the Harbour Master not less than 24 hours before ETA at breakwater. Cable address is "Pilot Yamba", Telex, receiving only, address is Metyam 66660. Confirmation of ETA is required 2 hours before arrival breakwater. Channel 16 VHF is continuously watched 1 hour before last given ETA and ETA may be confirmed or adjusted on this frequency. Pilot boat is 15 m. LOA and is a black hulled tug with black funnel and white superstructure, called "Francis Freeburn". The usual international signals may be employed by vessels requiring a Pilot. The Pilot boarding point may vary according to weather and sea conditions, if possible it will be 1 nautical mile seaward of the breakwater, otherwise Pilot will either issue instructions or lead vessel into the river and board just inside breakwater entrance. Pilot boarding arrangements must be according to IMO rules. Vessels awaiting Pilot or suitable tide may anchor between 1 and 2 miles East of the breakwater entrance – sand bottom and good holding ground.

ANCHORAGE: Masters familiar with the port and pilotage vessels may proceed to an anchorage downstream of the Harwood Bridge for berthing at Harwood Sugar Mill in 5.0 m. of water or to a position midway between Freeburn Island and Illuka Wall in 6.0 m. of water for vessels berthing at Goodwood Island wharf. Also see "Pilotage".

RESTRICTIONS: Vessels can enter the port day or night. The only restrictions would be on bar conditions and the height of tide in relation to vessel's draft.

MAX. SIZE: Generally,there is no restriction on length, max. beam would be approximately 70 m. to get through a 91 m. passage in a rock reef inside the breakwater entrance. The main restriction is draft of vessel which is 3.7 m. plus height of tide, such tides being almost identical to Sydney in both height and time.

HEALTH: Australian Commonwealth Rules apply.

RADIO: Sydney Radio (VIS) or Brisbane Radio (VIB) are the long range area stations.

VHF: The base station with call sign "Yamba Harbour Control" is situated behind the Wooli Head Lighthouse. A continuous watch is not maintained, only on prior notice that a vessel is due. Initial calls are made on Channel 16, another Channel will be used after contact has been made. The pilot vessel, which also acts as tug, if required, has Channels 16, 12, 6, and 8.

RADAR: There is no Port Control Radar.

TUGS: There are no commercial tugs, the pilot vessel may act as a tug if required either by the Master of the vessel or on advice from the Pilot. The "Francis Freeburn" is 460 b.h.p. and five tonnes bollard pull.

BERTHING: Main general cargo berth is Goodwood Island Wharf. This is a concrete decked, concrete piled wharf with timber and rubber fender piles. Permissible wheel loading 4.2 tonnes, wharf 70 m. deck floor 2,600 kg./sq.m. Vessels of greater than 70 m. length can secure at the berth as bollards are available 24 m. and 30 m. up and downstream respectively from the wharf. The least depth alongside the wharf is 7.0 m. There are no sheds on the wharf, however a large stacking area is available, the wharf being designed mainly for timber export/imports. Ship's cargo gear is usually employed, but mobile cranes up to 50 tonnes are available at reasonable notice for extended hire.

For vessels loading bulk sugar or molasses a "T" jetty is situated at the Harwood Sugar Mill just downstream of the Harwood Bridge, 30 m. long with dolphins for mooring lines about 30 m. up and downstream from the ends of the "T" jetty which has the overhead conveyor belts for loading bulk sugar and molasses. The least depth alongside this berth is 5.0 m. The overhead belt loader is a fixed head and takes 24 hours with shifts in vessel's position to load 2,500 tonnes, bulk molasses is very slow, taking 24 hours to load just over 1,500 tonnes.

There are no roll-on/roll-off traffic berths or berths for handling liquid chemicals or LPG carriers. The berth at Goodwood Island is suitable for loading or discharging explosives.

STEVEDORES: Working hours are from 0800 – 1900 hrs. 5 days per week, weekends by arrangement, also second and third shifts by arrangement.

MEDICAL: Full hospital facilities at Level 2 available without prior notice, Level 3 on transfer to Grafton or Lismore with specialist services.

FRESH WATER: Good quality potable water available in unlimited quantities at 30 tonnes/p.h. per connection, ship's hoses used at the present time.

FUEL: Nearly all grades of fuels and lubricants are available by road transport with arrangements being made through Agent.

CONSULS: Nearest at Sydney or Brisbane.

REPAIRS: Routine maintenance and boilermaking assistance to light engineering standards. The nearest foundry is in Ballina, 1 hour's drive from the port, operated by the same firm that does the maintenance and boilermaking.

DRYDOCK: A slipway of 1,200 tonnes displacement is available.

SURVEYORS: Lloyd's Agents who also represent other Classification Societies and Surveyors can be brought from Sydney or Brisbane at short notice.

GANGWAY/DECK WATCHMEN: Gangway and deck watchmen are not normally used in this port but can be obtained at Union award rates, with prior notice to the Agent.

HATCHES: Opening/closing normally handled by stevedores whilst alongside or by ship's crew before arrival.

CUSTOMS ALLOWANCES: Australian Commonwealth Regulations apply.

CARGO GEAR: Discharge or loading of cargo at Goodwood Island Wharf is by ship's gear, however mobile cranes up to 50 tonnes capacity are available for extended hire at short notice.

REPATRIATION: Scheduled aircraft to Sydney are available twice daily at Grafton Airport, 1 hour's drive away. Rail connections to and from Sydney are also available at Grafton. All facilities exist for changes of crew and repatriation of seamen with prior notice to Australian Customs at Yamba.

AIRPORT: See "Repatriation".
TIME: Local time is GMT plus 10 hours. Summer Time is used from October 24th to March 7th (GMT plus 11 hours)
HOLIDAYS: Christmas Day, New Year's Day and Good Friday.
POLICE/AMBULANCE/FIRE: All emergency services are available through the local wharf office.

Police: Iluka 46 6019: Maclean 45 2444.
If unanswered Tel: 42 0222.
Fire: Maclean 54 2420
Ambulance: Maclean 45 2020.

TELEPHONES: This service is available aboard ships at Goodwood Island Wharf by prior arrangement through the Agent, local calls only, account rendered through the Port Authority.
SHORE LEAVE: When Immigration and Customs requirements have been satisfied, there is no restriction on crew shore leave, so long as they rejoin the vessel before departure.
IDENTIFICATION CARDS: There is no need for identity cards or shore passes except in so far as non-English speaking persons may wish to be able to identify themselves.
DELAYS: Berthing delays are very infrequent, only possible delay would be due to adverse bar conditions.
SERVICES: A compass adjuster resides at the port.
EMERGENCY CO-ORDINATION CENTRE: All emergencies are co-ordinated through Canberra.
STORING: Vessels can be stored by trucks, all "under Bond" goods are subject to Australian Bureau of Customs control. Trucks can proceed alongside vessel at berth during storing. Fork lift trucks can be used on wharf to handle stores. Local riggers can be employed to assist storing.
AUTHORITY: Maritime Services Board of New South Wales, G.P.O.Box 32, Sydney, N.S.W., 2001. *Tel:* 240 2111. *Telex:* MSB SYAA 24944. *Cables:* Marboard.

Local Office: Captain G. W. Gray, Pilot Station, Yamba. *Tel:* 462002. *Telex:* 66660 (Mętyam Aa) (Receiving only).

AGENT: See "Sydney".

YAMPI SOUND, W.A. (Cockatoo Island and Koolan Island): 16.08 S. 123.38 E.

PORT LIMITS: The port limits, which are not marked on the charts of the area extend from a position in Lat. 16° 13′ 13″ S., Long. 123° 32′ 32″ E. in a Northerly direction for 10 miles to about midway between Bathurst and Irvine Islands, thence Eastward for 15 miles, thence Southwards to the mainland passing nearly 0.75 miles Eastwards of Koolan Island. The Southern limits of the port includes all the intermediate coastline between the Eastern and Western limits as defined above.
DOCUMENTS: The following documents should be prepared prior to arrival if Yampi is the first port of entry to Australia:
Health:
2 copies – Form Q360
Customs:
2 copies – Form M&S 11 (List of Crew)
1 copy – Form 42A (Store List)
1 copy – Form 5 (Articles owned or in possession of Master, Officers or crew)
3 copies – Form C&E (Ports of Call)
1 copy – Form QA4 (Declaration of Ship's Pets)
1 copy – Form QA5 (Shipmaster's Bond) – completed only if pets on board
3 copies – Crew List – unofficial
3 copies – Ship's Bonded Stores – unofficial

The following Certificates are required to be produced if Yampi Sound is the first port of entry to Australia:
Loadline Certificate
Safety Radio Certificate
Safety Equipment Certificate
Safety Construction Certificate
Commonwealth Light Dues Certificate (receipt)
Custom's Clearance from last port

PILOTAGE: Yampi Sound is not a compulsory pilotage area. However, the Company's Port Officer holds a foreign going Master's Certificate, is well versed in local conditions and will act as Pilot for Masters requiring his service. Cockatoo Island Pilot Boarding Place Lat. 16° 07′ S., Long. 123° 35.4′ E. Koolan Island Pilot Boarding Place 270°×2 miles from Nares Pt. Light. The Port Officer will board at the Quarantine Anchorage.

An approved pilot ladder as per SOLAS Regulations is required.

As a Westerly wind is quite common, Masters are advised that their vessel should be adequately ballasted prior to berthing operations.
ANCHORAGE: Yampi Sound is a well sheltered deep water port with good all weather anchorages.

The Quarantine Anchorage is located on the Eastern side of Yampi Sound, with Nares Point bearing 090° True, distance 2 miles.
MAX. SIZE: *Koolan Island:* LOA, 280 m. Breadth, 43.0 m. Draft (ordinary) 15.54 m. (51 ft.) however loading permitted to deeper drafts on rising tide.
Cockatoo Island: LOA, 225.55 m. (740 ft.). Breadth, 36.57 m. (120 ft.). Draft (ordinary) 12.49 m. (42 ft.). However vessels can exceed the berth depth (42 ft.) by completing loading on a rising tide.
HEALTH: Yampi Sound is a first port of entry to Australia, and valid Vaccination Certificates are required. Radio pratique is available through Health Department at Port Hedland. Doctor is not now required by Quarantine Regulations – only upon request by vessel. The doctor is normally available during daylight hours only, excepting emergencies.

Customs normally board upon vessel berthing.

RADIO: The port is able to communicate with vessels which are fitted with VHF radio through the normal international maritime channels. The call sign is "Koolan Island". A continuous listening watch is maintained on Channel 16 when vessels are due

The telegraphic address for Yampi Sound is "Ironsteel", Derby, W.A., Telex: 99884 Dmckni and Masters of vessels destined for Yampi Sound are required to advise their ETA by radio on departure from the previous port, and at 72 hours, 48 hours, and 24 hours prior to arrival, depending on the vessel's departure from that port.

TUGS: The following vessels are available for shipping movements within Yampi Sound.

Kalibah – 850 hp. Tug – 15 tonne bollard pull.
Farm Cove – 2,000 hp. Tug – 30 tonne bollard pull.
Wirana – Line launch.

Also available for general cargo work is

Wandi II – Landing Barge of 60 tonne capacity.
Dampier Barge – Dumb barge 200 tonne capacity.

TIDES: Tidal streams within Yampi Sound generally set Easterly with the flood, and Westerly with the ebb tide. At Koolan Island Wharf, the tidal stream sets Eastward except for a period from 0.5 hours before to 2.5 hours after HW when the tidal stream sets Westward.

At Cockatoo Island Jetty the tidal stream sets Eastward except for a period from 1 hour before to 3 hours after HW when the tidal stream sets Westward.

At Spring tides these streams are most pronounced, however may become confused at Neap tides.

Further advice on tides and tidal movement can be obtained from the Company's Port Officer.

LOADING ZONES: A Summer Loading zone exists at Yampi Sound with the exception of a Seasonal Tropical Allowance from 1st May to 30th November.

BERTHING:
Koolan Island: The loading berth at Koolan Island consists of a substantial, well fendered wharf 170.7 m. long with the centre located approximately Lat. 16° 08.3′ S., Long. 123° 44.3′ E. Additional mooring dolphins are located each end of the wharf to accommodate vessels of up to 140,000 d.w.t. with a maximum beam of 44 m.

The depth of water alongside the wharf is 15.8 m. at LWOST with a tidal range of up to 10.67 m.

The shiploader consists of a travelling, retractable, luffing, conveyor boom capable of loading iron ore at a rate of 3,000 t.p.h., and can move a distance of 118.9 m. along the wharf. Larger vessels may be required to shift along the berth to complete loading operations, the vessel's Master being fully responsible for shifting operations at all times.

Loading is normally continuous with the exception of closed holidays such as Christmas Day, Anzac Day, Good Friday, etc.

General cargo handling facilities at this wharf include a 33 tonne travelling and luffing crane on the Eastern end. Shore labour is available only for use as mooring gangs, and loading and handling of cargo on the wharf only. There are no ship foremen.
Cockatoo Island: The loading jetty at Cockatoo Island consists of 6 dolphins aligned in a 117° T – 297° T direction over a distance of 210.3 m. with its centre, located approximately Lat. 16° 06.3′ S., Long. 123° 36.8′ E. Berthing dolphins are located 111.9 m. and 82.9 m. from the centre of each West and East end dolphin respectively. The dolphins are well constructed with a facing of rubber tyres from the wharf decking to LW level.

The depth of water alongside is 12.8 m. at LWOST with a tidal range of up to 10.67 m.

The shiploader consists of a fixed, retractable, luffing conveyor boom located between the 2 centre dolphins and is capable of loading iron ore at a rate of 1,800 t.p.h.

Due to the fixed nature of the shiploader, ship's Masters are required to bring each hatch in sequence under the boom, by warping the vessel along the jetty. During these operations Company employees are in attendance for handling the shore end of mooring lines only. The vessel's Master is fully responsible for the warping operations at all times.

Loading is normally carried out from 0600 to 2000 hrs. local time. These hours may be extended to complete loading operations. Loading is not carried out on closed holidays such as Christmas Day, Anzac Day, Good Friday, etc.

General cargo is not handled at this jetty.

MEDICAL: There is a resident doctor on Koolan Island and a small medical centre on both islands. However, the nearest hospital facilities are at Derby, 140 km. from Yampi Sound, and all patients are transferred by aircraft.

SERVICES: Stores, laundry service, fresh water, repair facilities, divers and trading bank facilities are not readily available.

Fresh water can be supplied in an emergency while moderate amounts of stores are obtainable if sufficient notice has been given beforehand. Limited cash can be obtained.

Bunkers are not available, while distillate is available in moderate quantities only after prior arrangement.

The facilities in the townsites of Cockatoo and Koolan Islands are very limited and include a Post Office, Supermarket, Shop, Savings Bank, Open Air Cinema, and a Private Club. There is a swimming pool at Koolan Island townsite.

AIRPORT: There is an airstrip located on both Cockatoo and Koolan Islands and flights by the Company's Charter Aircraft connect with the Australian airline system at Derby, 140 km. from Yampi Sound.

FIRE PRECAUTIONS: There are no fire services available, except the Works Fire Brigade and the safety of the vessel, due to the isolated nature of the berths, remains the responsibility of the Master at all times.

International shore connections are readily accessible at both Cockatoo Island Jetty and Koolan Island Wharf.

POLICE/AMBULANCE/FIRE: In an emergency the Port Officer should immediately be informed.

Emergency telephone numbers:	Koolan	Cockatoo
Medical	333	60
Fire Brigade	222	23
Port Officer – Home	387	0-378
Office	202	0-202
Assistant Port Officer – Home	385	—
Office	285	—
Policeman	327	0-327

TIME: GMT plus 8 hours.

PORT REGULATIONS: Whilst in the Port of Yampi Sound, Masters are respectfully requested to observe the appropriate Quarantine Regulations, particularly in regard to the following matters:

Garbage, waste oils and tank cleaning compounds should not be discharged into the sea whilst in Yampi Sound.

Rat guards should be used at all times.

SHORE LEAVE: Identity cards are not necessary for shore leave. The townsite on Koolan Island is 10 km. from the wharf and on Cockatoo Island 3.5 km. from the jetty. Transport to the townsite is limited, however transport may be arranged through the Port Officer or the Assistant Port Officer. Seamen and visitors are not permitted to walk near the quarry areas, and are cautioned to keep clear of all machinery.

Permission must be obtained before seamen and visitors proceed ashore.

GENERAL INFORMATION: The sole export from Yampi Sound is iron ore which is quarried on Cockatoo and Koolan Islands by B.H.P. Minerals Ltd., a subsidiary of the Broken Hill Proprietary Co. Ltd.

The first shipment of iron from Cockatoo Island was made in 1951, while the first shipment from Koolan Island was made in 1965.

During the year ended December 1983, 3.17 million tonnes of iron ore were shipped from Yampi Sound by 44 vessels. The largest shipments loaded to date have been 140,000 tonnes from Koolan Island by Australian vessel "Iron Spencer", and 65,141 tonnes by the Norwegian vessel "Voywi" from Cockatoo Island.

From November to March Yampi Sound is near the Southern extremities of the N.W. monsoonal influence and cyclones can be expected during this period. The effects of cyclones are more prevalent in this area early in this period, however cyclonic conditions have been experienced at Yampi Sound during February/March.

During the season November to March (known locally as the "Wet"), the prevailing winds are Westerly, strong at times, particularly during the afternoon. Rain and thunder squalls are also frequent during the "wet", and Master's are warned to be watchful for storms, as the accompanying winds can be gale force.

The season April to October (known locally as the "Dry") brings a period of very little rain and frequent periods of strong South-Easterly winds during the mornings, giving way to light Westerly sea breezes in the afternoons. No cyclones are likely during this period.

	Koolan Island	*Cockatoo Island*
Depth of Water		
Berth	15.85 m. (52 ft.)	12.80 m. (42 ft.)
Turning Basin	20.10 m. (66 ft.)	16.45 m. (54 ft.)
Channel	20.10 m. (66 ft.)	16.45 m. (54 ft.)
Tide, Rise and Swell		
Spring Rise	10.70 m. (35 ft.)	10.66 m. (35 ft.)
Neap Rise	2.10 m. (7 ft.)	2.13 m. (7 ft.)
Mean Rise	4.63 m. (15 ft.)	4.57 m. (15 ft.)
Swell	Usually Nil	Very little
Keel Clearance	0.91 m. (3 ft.)	0.91 m. (3 ft.)
Draft of Ballast Condition	6.40 m. (21 ft.)	6.40 m. (21 ft.)
Loader Facilities		
Outreach	15.85 m. (52 ft.)	14.63 m. (48 ft.)
Throwing Dist.	4.57 m. (15 ft.)	4.26 m. (14 ft.)
Clear Height From HWOST	45 ft.	48 ft.
Berthing Side	Dependent on tide Portside – ebb Stbd. side – flood	Usually Port-side alongside
Stowage factor	13	13
Angle of Repose	about 25°	approx 25°
Nature of bottom	Mud	Mud
Radio Pratique	Available	Available
Time, berthing and unberthing	Usually daylight berthing only at both islands. Unberthing upon completion – dependent upon tidal condition at both islands.	

AUTHORITY: B.H.P. Minerals Ltd, Koolan Island, W.A. 6733.
Tel: Derby 911575. *Telex:* 99883. *Cables:* Ironsteel Derby.
Contact: Port Officer.

AGENT: B.H.P. Minerals Ltd., Koolan Island.

Ship's mail and any correspondence should be addressed: c/o B.H.P. Minerals Ltd., Koolan Island, Western Australia, 6733

NOTES

Please also advise Shipping Guides Ltd.

Azores

HORTA, Faial: 38.32 N. 28.38 W. (See Plan Book)

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
For Customs
Arrival Declaration.
Manifest of Cargo for discharge or in transit.
Provisions List.
Request to commence load/discharge.
For Port Health
Derat Certificate or exemption.
Health Clearance from Last Port.
For Port Captain
Seaworthiness Certificate.
Certificate of Registry.
Tonnage Certificate.

PILOTAGE: Can be called by two long and one short blasts on the whistle, or by International Code flag "G". Radio contact with pilot station can be made by VHF Channel 16; Phone 2182; via radio station CUG, or in cases of urgency, through the Horta Naval Radio Station CTH.

Pilot launch painted black with "Pilotos" painted on each bulwark. If requested by Master, Pilot will board at entrance of Faial-Pico Channel or Faial-St. George Channel. Otherwise Pilot will board at port entrance. Vessels waiting for Pilot must remain 1.5 miles from the breakwater with Ponta de Doca Lighthouse in line with Avia Larga Lighthouse on Pico Island.

ANCHORAGE: The best holding ground is with the breakwater light in line with the tower of San Francisco church bearing 272°, and with Ilheu Negro in line with Casa Joao Catita bearing 203°. Another line of good soundings is in the open Channel dos Ingleses.

MAX. SIZE: For berthing, max. draft 22 ft. Depth in the artificial port is 36 ft. at high water. Depth at buoy moorings: 33 ft. Vessels of any draft can anchor outside the port.

HEALTH: If vessel has not touched any contaminated port, Pilot will haul up signal "TO" and Health Inspector will give free pratique. Master is obliged to send the Maritime Declaration of Health given by the Pilot to shore within one hour together with a Crew List and Cargo Manifest. If vessel has suspected case of fever on board or is coming from a port in a contaminated zone, pratique will only be given after Health Inspector has boarded.

RADIO: Commercial station CUG and Naval station CTH.

TUGS: None available.

STEVEDORES: Gangs are provided by local stevedores syndicate when requested by Master or Agent.

MEDICAL: Doctors and hospital facilities always available.

FRESH WATER: Can be provided by one water barge, capacity 57 tons, cost 38.50 Escudos per ton. Also available from 3 hydrants on quay, rate 50 t.p.h.

FUEL: Gas oil and gasoline available by pipe-line on quay.

GANGWAY/DECK WATCHMEN: Police Guard or Coast Guard (Policia Maritima).

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: Up to 150 grammes tobacco and small allowance wine or spirits for each man.

IDENTIFICATION CARDS: Not required.

CONSULS:
France
Greece
Germany
Italy
Netherlands
Norway

REPAIRS: Machinery and small electronic repairs can be effected.

REPATRIATION: Can be arranged.

TIME: GMT minus 1 hour all year round.

HOLIDAYS: 1st January; 25th April; 1st May; 10th June; 24th June; 15th August; Corpus Christi; 5th October; 1st November; 8th December; 25th December.

POLICE/AMBULANCE/FIRE: Police 22022; Ambulance 115; Fire 22333 and 115.

TELEPHONES: Can be connected on board vessels berthed alongside.

SHORE LEAVE: Allowed.

AIRPORT: Several flights during the day from Faial Airport, 10 km. from the port, to Lajes airport and International Airport at Santa Maria. There is a daily boat service to Pico and several weekly to other islands.

AUTHORITY: Capitania do Porto da Horta, 9900 Horta, Azores. *Tel:* 22813.

PONTA DELGADA: 37.44 N. 25.40 W. (See Plan Book)

DOCUMENTS:
1 Store List.
4 Crew Lists.
4 Landing Passenger Lists.
4 In Transit Passenger Lists.
2 Manifests of Cargo Being Landed.
1 In Transit Cargo Manifest.
Ship's Register.
Load-line Certificate.
Safety Equipment Certificates (London Convention).
Derat Certificate.

PILOTAGE: Good deep approach. Harbour Pilot boards 0.5 mile S.E. of breakwater. Radio Harbour Master direct or through Agent ETA 48 hours notice. ETA message to include draft, reason for calling, type of bunker required, fresh water required, oil products needed, nature of repairs and what cargo, if any, aboard.

Pilot station with visual signal tower and radiotelephony, at entrance of port installations. Telephone number 2.35.50. Pilot's motorboat – Pilotos in capital white letters printed both sides hull, as well as flag "P" hoisted during day or 1 red and 1 white light at night.

When necessary, Pilot motorboat will complete identification by flashing word "Pilotos".

Besides usual signals of ICS, Pilots' station, when necessary, will hoist on main signal tower the following:

By Day – Flag "X" of ICS – Wait outside Harbour (for Portuguese or foreign ships regularly visiting Ponta Delgada); Flags "OG" of the ICS – Wait outside Harbour (for all other ships);

By Night – Two green lights (one above the other) – Wait outside the Harbour (for Portuguese and foreign ships).

ANCHORAGE: Outside artificial harbour, in roadstead and off breakwater, anchorage suitable for all ships whose drafts are too deep for admission into artificial port – over 40 ft. depth. Good holding ground.

RESTRICTIONS: Vessel considered adversely trimmed when more than 10 ft. "by the stern" or 2 ft. "by the head".

MAX. SIZE: Up to 38 ft. draft.

HEALTH: The Pilot requests Master to hoist quarantine flag when vessel comes from an infected port, or when sick people carried on board. Port doctor then boards for inspection and nobody allowed to board or leave vessel before completion of inspection.

Animals: Importation and transit of all birds and small animals allowed but valid health certificate and valid rabic vaccination certificate required. All staff and Crew members of vessels arriving from a port officially declared infected by smallpox, not allowed go ashore, unless in possession of vaccination certificate.

RADIO: San Miguel Radio, call sign CUG. Transmitting on 1663.5 kHz. Receiving on 2182 kHz. Radio telephone frequencies 4415.8, 8792.8, and 13175.5.

RADAR/VHF: Harbour radar covers range of 20 sea miles; controls inside harbour waters. VHF location – main signal tower. Call sign – "Pilotos". Operating 24 hours on Channel 16. Range 20 to 25 miles.

Calls must be made on Channel 16 and then shift to Channels 20 or 22 as indicated by Port Operations Station. Channel 13 used for communications between tug, Pilot station, Pilot aboard, during manoeuvres of mooring and unmooring. It should be understood that the Port Operations Station is not to be used for ship's business with Agents or Shippers of cargo.

TUGS: Two tugs, 1,100 h.p. and 3,400 h.p. operated by Junta Autonoma available for assistance during berthing and unberthing.

BERTHING:
No. 1 – Quay for small craft.
No. 2 – West Quay, 1,069 ft. long, min. depth alongside, LW, 20 ft.
No. 3 – Central Quay, 678 ft. long, min. depth alongside LW, 27 ft.
No. 4 – East Quay, 2,023 ft. long, min. depth alongside, LW, 40 ft.
Mooring buoys in depths ranging from 20 ft. to 30 ft.

MEDICAL: Large well-equipped hospital. Santa Casa da Misericordia de Ponta Delgada, telephone number 2.23.22 and Clinica de Bom Jesus, telephone number 2.53.52.

TANKERS: Vessels carrying explosives, inflammable liquid or any other dangerous cargoes, before entering port, must hoist International Code Signal "B" at foremast during day and a red light at night. Upon boarding vessel the harbour Pilot enquires from the Master whether there are explosives and any other dangerous cargoes on board. Masters requested to supply accurate information as to quantity and nature in order to enable Port Authorities to select a suitable berth or anchorage for vessel.

Constant Readiness: Vessels carrying dangerous cargoes, while moored, must maintain engines and propulsion machinery in readiness to leave the port under full power, if necessary.

STEVEDORES: Available. Early advice to Agent recommended.

FRESH WATER: Available at all quays ex hydrants.

FUEL: Bunkers are readily available but, for their own convenience Masters should telegraph Agents quantity and type of bunkers required. In order to avoid possible delays to their own and other vessels, Masters are requested to replenish bunkers at the time suggested by their Agents.

GANGWAY/DECK WATCHMEN: Customs Guards are on duty upon the quay and at the entrance of the wharf. Customs guards are also placed on board and those assigned for this duty should be provided with meals (at regular meal times) and sleeping quarters on board.

CUSTOMS ALLOWANCES: Storerooms will be sealed but a reasonable quantity of stores, estimated as indispensable for consumption, may be removed before sealing. This amount should be ready for removal from the storeroom prior to arrival at berth.

CARGO GEAR: Mobile Cranes: 1×12 ton; 2×6 ton; 1×5 ton; 1×3 ton; 1×6 ton (auto-crane); 1×5 ton (Rapier motor crane); as well as 7 lift trucks from 2.5 tons – 4 tons. Tender for passenger vessels.

IDENTIFICATION CARDS: No Crew members allowed ashore without landing cards, which are supplied by Agents.

CONSULS:

Belgium	Tel. 2 20 29	Italy	Tel. 2 42 46
Brazil	,, 2 26 38	Mexico	,, 2 27 04
Chile	,, 2 32 26	Netherlands	,, 2 31 94
Denmark	,, 2 28 50	Norway	,, 2 27 83
Dominican Rep.	,, 2 53 90	Panama	,, 2 20 45
Finland	,, 2 35 59	Spain	,, 2 25 02
France	,, 2 41 29	Sweden	,, 2 26 38
Germany	,, 2 39 35	Turkey	,, 2 26 67
Greece	,, 2 41 29	U.S.A.	,, 2 22 16

REPAIRS: Engine or other repairs can be undertaken. Repairs to electric installations, motors and refrigerating systems can also be undertaken as well as repairs to wireless stations (including VHF, radio-telephone equipment, radar, Echo-sounders, direction-finders, gyro-compasses, steering-gear, Sal logs and cinema projectors).

Workshops duly equipped to undertake hull and engine repairs. Divers and equipment also available for some underwater work. Small tugs, motor-launches and lighters. Small slipway for vessels up to 200 ft. long. No dry-docking available. A seagoing salvage tug, owned by Junta Autonoma is stationed in the port.

REPATRIATION: Can be arranged.

AIRPORT: 3 km. from Ponta Delgada. Daily flights to Lisbon by TAP-Air Portugal and to Airport of Santa Maria and to Lajes Airfield (Terceira Island) and Faial by Sata Airlines.

Daily connections with flights of TWA and TAP-Air Portugal, to and from Europe and United States or Canada.

TIME: GMT minus 1 hour. No changes.

HOLIDAYS: 1st January – New Year's Day, 25th April (Liberty Day), June 10th (Portugal Day), Corpus Christi, August 15th, October 5th, November 1st, December 1st, Monday before Ascension Day. Government offices close on afternoon of Maundy Thursday and on afternoon of Christmas Eve. Most firms close on Shrove Tuesday and Good Friday.

POLICE/FIRE/AMBULANCE: Police telephone 22022; Fire telephone 22333; Ambulance telephone 22022.

TELEPHONES: Any ship moored alongside can be connected to the city's telephone network, upon request through the ship's Agent.

GENERAL: Visual storm signals are shown on Main Signal Tower.

SERVICES: Fresh and dry provisions available all the year round.

SHORE LEAVE: Allowed.

REGULATIONS: Ballast: Vessels must arrive with sufficient ballast to permit safe handling.

Ratguards: It is advisable to use ratguards while moored alongside.

Scupper Covers: Boards or other suitable devices must be used to cover outlets from lavatory discharges, etc., to prevent fouling of pier or craft alongside.

Garbage: It is absolutely forbidden to dispose of cinders, garbage, or any other refuse inside the harbour or within the territorial waters limit. Non-compliance is subject to heavy fines.

AUTHORITY: Junta Autonoma Dos Portos Do Distrito. de Ponta Delgada.

NOTES

Please also advise Shipping Guides Ltd.

Bahamas

FREEPORT: 26.31 N. 78.46 W. (See Plan Book)

DOCUMENTS:

(a) Inwards:

	Description	*Customs*	*Immigra-tion*	*Agents*	*Total*
1.	Crew Lists	2	1	1	4
2.	In transit Passenger List	2	2	2	6
3.	Disembarking Passenger List	2	2	2	6
4.	Stores List	2	—	—	2
5.	Gift Shop Inventory	2	—	—	2
6.	Crew's Declaration	2	—	—	2
7.	Ship's Report Inwards (supplied by Agents)	2	1	—	3
8.	Maritime Declaration of Health (supplied by Agents)	1	—	—	1
9.	Cargo Manifest for Freeport	4	—	2	6

10. Landing cards supplied by Agents to be completed by each disembarking passenger.
11. Baggage Declaration forms supplied by Agents to be completed by each disembarking passenger.
12. Clearance from last port will be collected by Customs.
13. Derat Certificate should be available for inspection.

If vessel's previous port of call was in Bahamas items (7), (8) and (13) need not be complied with.

When vessel requires Consular Despatch to country such as Venezuela, 2 extra copies items (1), (4) and (6) should be supplied.

(b) Outwards:

	Description	*Customs*	*Immigra-tion*	*Agents*	*Total*
1.	Ship's Report Outwards (supplied by Agents)	2		—	2
2.	List of embarking passengers (if any)	2	2	2	6
3.	Outward Manifest Freeport Cargo	2	—	2	4

If vessel clearing for another Bahamian port item (1) does not have to be complied with, but copy of next port's manifest required.

PILOTAGE: Compulsory for passenger vessels exceeding 199 gross tons and freighters exceeding 399 gross tons. Pilotage is compulsory for tankers berthing at Borco Dock, but vessels calling for bunkers only may anchor and bunker by barge without using Pilot services. However, pilotage recommended. Pilot station located in position in which Freeport Light bears 050° True, distance 2 miles. Approaching Freeport, particularly from North West, keep at least 3 miles from shore, and, when off port, remain at pilot station until boarded by Pilot. Pilotage area extends from pilot station to offshore refuelling moorings, anchorage to West of harbour entrance and harbour. Pilots available any time of day or night. Harbour signal station maintains a 24 hour watch for visual and radio signals. Borco on VHF Channel 16 only.

Vessels can communicate by RT on 2182 kc/s., and once they have established contact will normally be asked to switch to one of the following frequencies: 2638 or 2738 kc/s. Vessels can also communicate by VHF Channels 16 and 14. Freeport call sign on all frequencies is ZFP 81 or Freeport Harbour Control. Give ETA 48 hours in advance, with subsequent corrections as necessary.

The Restricted Area has been extended to 1 nautical mile radius from the Eastern end of No. 2 Jetty (Inner Jetty). Vessels are prohibited from anchoring in this area. No other vessels (with the exception of BORCO or Harbour Company vessels) should enter the Restricted Area owing to the fire hazard created by the handling of inflammable liquids emitting explosive vapours.

Additionally, a 2 nautical mile area centered on the Eastern end of No. 2 Jetty (Inner Jetty) has been established. Any vessel closing the port from seaward in order to take on stores, land crew members, take on bunkers, fresh water, etc., other than a vessel going alongside the jetties or entering the harbour, should remain outside this 2 mile limit.

Unauthorised entry into these areas does not carry a penalty, however, the prudent mariner is advised that in any investigative proceedings into accidents within these areas, due account will be taken of any failure by a vessel to observe the 2 nautical mile and 1 nautical mile limits as indicated.

ANCHORAGES: There is a good offshore anchorage approximately 2,500 ft. to the N.W. from the entrance channel for a distance of 1.5 miles (submarine cable in existence) which is sheltered from Northerly winds. The bottom of the sea is lime and coral rock covered by sand and loose lime.

Anchorage area is exposed during periods when strong Southerly winds prevail. During these periods, vessels may drag their anchors. Mariners are therefore advised to use anchorage areas with caution.

A vessel can anchor in depths of 14.6 m. to 18.3 m. (48 ft. to 60 ft.) to the West of the harbour entrance with No. 1 Jetty (Outer Jetty) in transit. Anchorage is not recommended for vessels greater than 60,000 d.w.t. and vessel should be prepared to vacate the anchorage at short notice, particularly if the wind sets in from between S.E. and West. Pilotage is not compulsory but recommended and is available upon request.

APPROACHES: The following landmarks are prominent when approaching the port: Borco Refinery 3 chimneys. 369 ft. above MLW. White with red bands showing 3 sets of 4 red lights at night. Visible approx. 20 miles. Flames occasionally visible from BORCO stacks. Bahamas Cement Company storage silos just to West of harbour entrance. Visible approx. 15 miles.

Currents in the area are not predictable and are largely wind induced. Harbour is approached through straight channel 1,800 ft. in length, 300 ft. width and with controlling depth of 30 ft. below MLW. Turning basin, 2,000 ft. by 1,800 ft. Vessels may enter and leave harbour on 24 hour basis, weather permitting.

Vessels using Freeport Harbour are advised that an Aero Beacon situated in the Dock 1 area transmits continuously on 209 kHz. the group "ZEP" at a rate of 7 words per minute. The output is rated at 100 Watts. Reception by surface craft has been registered at 60 – 70 nautical miles distance.

MAX. SIZE: *Tanker Berths.*

Berth		*d.w.t.*	*Depth Alongside (MLW)*	*Max. Draft*
No. 3	up to	38,000	50 ft.	40 ft.*
4	„ „	80,000	54 ft.	47 ft.*
5	„ „	90,000	80 ft.	50 ft.*†
6	„ „	312,000	87 ft.	82 ft.
7	„ „	65,000	53 ft.	40 ft.*
8	„ „	100,000	56 ft.	Heading East 42 ft. Heading West 50 ft.*†
9	„ „	130,000	68 ft.	‡
10	„ „	500,000	92 ft.	91 ft.

*Drafts on Berth Nos. 3, 4, 5, 7, 8 and 9 are limited by depths over submarine pipe-lines in berth approaches.

† 47 ft. if headed S.E.

‡ 46 ft. arriving/47 ft. departing.

HEALTH: Pratique granted by Customs Boarding Officer after Maritime Declaration of Health Form Completed by Master and Derat Certificate examined. Important that vessel should not commence refuelling nor work cargo until cleared. A vessel arriving from another Bahamian port, e.g. Nassau, does not require pratique. If any suspected disease or fever on board, pratique may be withheld, pending examination by Government Medical Officer.

RADIO: Recommended that radio messages giving ETA, etc., be transmitted via Miami Radio.

Tankers proceeding to Borco Installation should transmit the following information within 6 hours of clearing at last port:

(a) name of tanker;
(b) name of port at which the tanker last called;
(c) date and hour of estimated time of arrival at Freeport.

It is imperative that the Master of each tanker shall establish communications with the refinery at least 72 hours prior to the estimated time of arrival, and that the refinery be notified of any change in ETA. Four hours before arrival at Freeport the Master should establish contact by VHF radio and advise on vessels precise ETA. Any berthing instructions will be passed to the Master at this time.

Radio Telephone: A continuous watch is maintained by the Control Tower of Freeport (Bahamas) Harbour on 2182 kHz and on VHF Channels 16 (156.80 MHz) and 14 (156.80 MHz).

Working frequencies are:

Medium Frequencies:

2638 kHz – Ship-to-Shore
2738 kHz – Ship-to-Shore
2782 kHz – Freeport Harbour (Private frequency).

VHF: Channel 14 (156.70 MHz).

In addition, Freeport Harbour can communicate on:

2031.5 kHz – Miami Marine.
2118 kHz – Miami Marine.
2198 kHz – Nassau Marine.
2670 kHz – Coast Guard

As far in advance of the time of arrival as possible, but not less than 1 hour, vessels should establish radio communication with "Freeport Harbour Control" to amend or confirm the ETA.

TUGS: Borco Towing (Bortow) provide 2 tugs for assisting in berthing and unberthing. These are of 4,300 h.p. In addition there are 2 chartered tugs of 4,000 h.p.

BERTHING: 9 wharves, depth alongside 30 ft.

STEVEDORES: Freeport Harbour Company, Ltd., are the sole stevedoring company. Some limitation on labour availability and difficult to obtain more than 2 gangs at any one time. Normal discharging rate 10 d.w.t. per hook per hour. Port Authority operate forklift trucks ranging from 2 to 30 tons capacity. First ETA at least 48 hours prior arrival, to ensure labour booked in time.

CRANES: Forklift trucks ranging from 5,000 lbs. to 18,000 lbs. capacity, as well as a mobile crane with a lifting capacity of 12 tons, are owned by Freeport Harbour Company. Mobile cranes up to 35 tons capacity may be hired from local companies.

MEDICAL: No port Medical Officers. Persons requiring attention must proceed approximately 7 miles to Freeport's hospital and dental clinic, or to Antoni Clinic or Lucayan Medical Group Clinic which approximately same distance from port area. Holistic Health World also approximately 7 miles from Freeport Harbour. Advance notice to Agent desirable but not essential.

SPECIALISED CARGO HANDLING FACILITIES: *Cement:* Bahamas Cement Company own and operate the whole of Basin No. 3 (1,365 ft. by 350 ft. by 636 ft. – depth 30 ft. at MLW), with bulk handling facilities.

Roll-on/Roll-off: Basin No. 1: 2 ramps for 2 vessels (passenger/car ferry type) at S.E. end. Depth 28 ft. MLW. Both ramps approx. 4 ft. above MHW.

Basin No. 2: 2 ramps for 5 landing ship type vessels at S.E. end. Depth 15 ft. MLW. 1 ramp 4 ft. above MLW (4 vls.), the other 0 ft. (1 vl.).

LPG: There is a small LPG Berth in Basin No. 2 which accommodates coastal tankers.

TANKER BERTHING FACILITIES: There are 4 off-shore loading platforms (sea islands) situated between 2,500 ft. and 3,600 ft. from the shore line at Pinder's Point. There are 2 berths on each platform making a total of 8 berths which can accommodate tankers ranging in size from 16,000 to 500,000 d.w.t.

Inside the harbour at Dock 1 are facilities for handling smaller vessels, mainly barge loading and import/export of refined products on a small scale. This is the only Mogas import berth for the island.

Borco Dock 1: The No. 1 Dock area is the centre of Bortow's Operations. Bortow is responsible for the maintenance and provision of all marine transport associated with the off-shore operation. Bortow provides tug-boats, mooring boats, personnel carriers, pilotage service and bunker barge facilities, the barges being used to bunker and water vessels in the harbour and in the anchorage.

The working length of the dock is 600 ft., it will accommodate vessels up to approximately 18,000 d.w.t. with a maximum draft of 27 ft.

Bortow provide a bunkering service. This service is given to vessels visiting the Port of Freeport, (cruise ships, cargo ships), and to vessels anchoring outside the port solely to purchase, bunker fuel. The barge service is also used occasionally at Borco's marine facilities when it is more convenient to bunker a vessel by barge. Bunker fuel supplied to the above mentioned vessels ranges from diesel oil to heavy fuel oil, blends being made in between to suit individual customer requirements.

Products imported or exported via the No. 1 Dock loading facilities are:

Imports:
1. Premium Gasoline.
2. Regular Gasoline.
3. Heavy Fuel Oils for Bunkering.
4. Heavy Fuel Oil, to be supplied as bunker fuel to visiting tankships.

Exports:
1. Diesel oil to small craft for inter-island distribution.
2. All grades of fuel oil into barges or tankships when scheduled for delivery to the Out-Islands or the East Coast of U.S.A.
3. Kerosene.
4. LPG.

Note: Tankships, except for gasoline imports and local sales of kerosene and LPG, normally only use the No. 1 Dock facilities during occasions of extreme bad weather.

Loading Platforms: The 3 loading platforms which accommodate Berths Nos. 3 & 4, 5 & 6, 7 & 8 are of fully enclosed, box like type of construction the interior of which contain equipment for the operation of each respective platform.

The platform serving Berth Nos. 9 & 10 is of a slightly different design in-so-much that it is of an open type construction with no between decks storage space.

All of the platforms are situated in an elevated position approximately 40 ft. above sea-level and are supported by piling structures sunk into the sea-bed.

The platforms serving Berth Nos. 3 & 4, 7 & 8 and 5 & 6, 9 & 10 are interconnected by cat-walks which extend in a N.W./S.E. direction, in line with prevalent weather conditions. The overall lengths of these structures are approximately 2,040 ft. and 3,000 ft. respectively.

Each loading platform is entirely self-sufficient in that they each have their own power supply, fresh water, office and store-rooms, fire fighting and anti-pollution equipment, slop systems, storm water systems and a host of contributory operating equipment. Communication systems amount to P.B.X. Telephones, Magneto Telephones (inter-Jetty communication) and 2 VHF Radio systems.

Two fresh water lines extend from the shore, one to Berth Nos. 9 & 10 and the other to Berth Nos. 3 & 4. Fresh water is then supplied to Berth Nos. 5 & 6 via Berth Nos. 9 & 10, and Berth Nos. 7 & 8 via Berth Nos. 3 & 4. This water supply can also be used to water tankships alongside the platforms.

To enable tankships to be safely secured alongside the loading facilities, each platform and associated cat-walk unit has mooring dolphins with quick-release mooring hooks and integral capstans.

Berth Nos. 3 & 4: Situated approximately 2,500 ft. from the Pinder's Point shore-line with a platform size of 94 ft.×100 ft.× 12 ft. in depth.

Submarine sea lines available are:

1×30 in. Diameter	Crude Oil Line.
2×24 in. "	Fuel Oil Lines.
1×20 in. "	Diesel Oil Line.
1×20 in. "	Kero/Jet Line.
1×20 in. "	Naphtha Line.
2×20 in. "	Dirty Ballast Lines.
1×18 in. "	Bunker Fuel Line.

These pipe-lines terminate at 12 in. Chiksan marine loading arms – counter balanced and hydraulically powered.

Berth Nos. 5 & 6: Situated approximately 3,600 ft. from the Pinder's Point shore-line with a platform size of 100 ft.×144 ft.×12 ft. in depth.

Submarine sea lines available are:

Berth No. 5.	2×30 in. Diameter	Crude Oil Lines.
	1×24 in. "	Fuel Oil Line.
	1×20 in. "	Diesel Oil Line.
	1×20 in. "	Kero/Jet Line.
	1×20 in. "	Dirty Ballast Line.
	1×18 in. "	Bunker Fuel Line.
Berth No. 6.		
	2×30 in. "	Crude Oil Lines.
	1×24 in. "	Fuel Oil Line.
	1×20 in. "	Dirty Ballast Line.
	1×18 in. "	Bunker Fuel Line.

These pipe-lines terminate at 16 in. Chiksan marine loading arms of the same design as on Berth Nos. 3 & 4.

Also incorporated on Berth No. 6 is a Berthing Approach System which is used by the Pilots as an aid in safely moving vessels on or off the berth.

Berth Nos. 7 & 8: This platform was completed and handed over in 1973. Situated approximately 2,500 ft. from the Pinder's Point shore-line with a platform size of 110 ft.×90 ft.×12 ft. in depth.

Submarine sea lines available are:

2×24 in. Diameter	Fuel Oil Lines.
1×20 in. "	Diesel Oil Line.
1×20 in. "	Kero/Jet Line.
1×20 in. "	Naphtha Line.
1×20 in. "	Dirty Ballast Line.
1×18 in. "	Bunker Fuel Line.

There is no crude oil facility available at this berth. Crude oils will be handled by Berth Nos. 5, 6, 9 & 10 under normal conditions and by Berth Nos. 3 & 4 if required.

The above listed pipe-lines terminate at 12 in. Chiksan marine loading arms, again similar in construction to the berths mentioned previously. 6 arms service each berth of which 2 are bunker lines and the remaining 4 for product loading.

Berth Nos. 9 & 10: This platform, the most recent addition to the marine loading facilities at Borco was completed and handed over in 1974.

Situated approximately 3,600 ft. from the Pinder's Point shore-line with a platform size of 190 ft.×125 ft. (No below deck space) this facility is of a rather different design to the other loading platforms namely:

The platform is of a completely open design with major operating equipment sited on the top surface. Ancillary equipment such as slop and storm water systems are situated below the platform. Because of its design, equipment is more readily available and build up of hydrocarbon vapours is eliminated.

Other features incorporated within the platform design are:
1. Weather recording station.
2. Meter (bunker) proving systems – electronically controlled.
3. Berthing approach system for Berth No. 10 which is used by the Pilots as an aid in safety moving vessels on or off the berth.

Submarine sea lines available are:

1×20 in. Diameter	Bunker Fuel Line.
1×24 in. "	Fuel Oil Line.
1×20 in. "	Ballast Water Line.
1×42 in. "	Crude Oil Line.
1×30 in. "	Crude Oil Line.

As can be readily seen this platform is a crude oil/fuel oil loading/discharging facility only, white oil products are not available. The above stated lines terminate at 10 Chiksan marine loading arms, again similar in construction to those on other platforms. The service per berth as below:

Berth No. 9.	1×12 in. Diameter	Bunker Fuel.
	1×12 in. "	Ballast.
	1×12 in. "	Fuel Oil.
	2×12 in. "	Crude Oil.
Berth No. 10.	1×16 in. Diameter	Bunker Fuel.
	1×16 in. "	Ballast.
	1×16 in. "	Fuel Oil.
	2×16 in. "	Crude Oil.

BALLAST: Facilities are provided for discharge of dirty ballast at the tanker jetties. Each jetty is connected by a 20 in. ballast pipe-line. These lines have been tested to 350 lb. pressure and are designed for 150 lb. working pressure.

DENSITY: Salt water. Rise and fall of tide between 3 ft. and 3 ft. 6 in.

FRESH WATER: Fresh water available by pipe-line in the harbour. Average pumping rate 18 t.p.h. per connection with maximum 2 connections in the harbour. Fresh water also supplied by barge to the tanker berths at the rate of about 30 t.p.h. and to vessels at anchorage.

FUEL: All grades available. 24 hours notice desirable. Bunkering facilities are provided at each tanker jetty. 1×16 in. pipe-line provides "C" fuel and intermediate fuel, and 1×16 in. pipe-line provides marine diesel and gas oils. Fuel also available to vessels at anchor by barge.

GANGWAY/DECK WATCHMEN: Not necessary as security guards patrol port area 24 hours a day.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

SHIP CERTIFICATES: Derat Certificate required.

CUSTOMS ALLOWANCES: 50 cigars or 200 cigarettes or 1 lb. tobacco and 1 quart of spirits per man.

CARGO GEAR: Currently no cranes based permanently in harbour area. However, mobile cranes can usually be made available, although essential shipowners consult Agents before accepting heavy lifts requiring shore facilities for discharge

IDENTIFICATION CARDS: Not required.

CONSULS: No foreign Consuls in Freeport.

REPAIRS: Only minor repairs.

SURVEYORS: 1. Caleb Brett (Bahamas) Ltd., 1st Floor Administration Building, Freeport Harbour, P.O.Box F-2428, Freeport, Bahamas. Tel: (809) 352-7608. Telex: (297) 30029. Cables: Brettcalcabhm.

2. E. W. Saybolt & Co., S.A., 24C Kipling Building, P.O.Box 2049, Freeport, Bahamas. Tel: (809) 352-7616. Telex: (297) 30042. Cables: Saycosa. Additional offices South Riding Point, Grand Bahama, Harbour Area, Freeport.

3. Epic Petroleum Inspection Co. Ltd., P.O.Box F-2525, 25 Churchill Building, Freeport, Bahamas. Tel: (809) 352-2525, 352-4139, 373-4840. Telex: 30051.

REPATRIATION: Facilities for crew changes and repatriation by air.

AIRPORT: Approximately 5.5 miles from harbour, served by following airlines: Air Florida, Eastern Airlines, Air Canada and Pan American Airways.

TIME: GMT minus 5 hours. Summertime, from April to October, GMT minus 4 hours.

HOLIDAYS: No cargo work in the port on following days: New Year's Day; Good Friday; Easter Sunday; Christmas Day; Labour Day (1st Friday in June); Whit Monday; Independence Day (July 10th); Boxing Day (December 26th); Emancipation Day (1st Monday in August); Discovery Day (October 12th). Work ceases 1700 hrs. on day preceding above holidays and commences 0800 hrs. on day after.

POLICE/AMBULANCE/FIRE: Police Tel: 352-8333. Police Station approximately 2 miles from harbour, and operates several radio-controlled vehicles. Ambulance Tel: 352-6735. Ambulance based at Rand Memorial Hospital which approximately 7 miles from harbour. Fire Tel: 352-8888. Fire Station approximately 7 miles from harbour and at present consists of 2 fire-trucks with auxiliary vehicles.

TELEPHONES: Can be placed on board at certain berths. There is a connecting charge.

SHIP SUPPLY SERVICE: Lucaya Shipping and Trading Co. Ltd., P.O.Box F-3240, Freeport, Grand Bahama, Bahamas. Tel: (809) 352-3581. Cables: Caytrade. Telex: 30 711.

Services may be performed by launch or tug boat 2.5 to 3 miles off the port; at a berth in the harbour or at anchorage.

AUTHORITY: Freeport Harbour Company, Ltd., P.O.Box F-2465, Freeport, Grand Bahama. *Tel:* (809) 352-9651/4 or (809) 352-9088. *Telex:* (297) 30079. *Cables:* Freharco. *Contact:* Captain John Hinchliffe, Port Director.

AGENT: Marine Agents & Brokers Ltd., 1st Floor, Building 12, Main Harbour, P.O.Box F-2637/38 Freeport, Bahamas. Tel: (809) 352-9744/45. Telex: (297) 30013. Cables: Marbrok. VHF: Channels 9 & 16.

Branch Office: Burmah Terminal, Freeport, Bahamas. Tel: (809) 348-3044. Monitors VHF Channel 16.

NASSAU: 25.05 N. 77.20 W. (See Plan Book)

DOCUMENTS:

(a) Inwards:

Description	*Customs*	*Immigration*	*Agents*	*Total*
1. Ship's Report Inwards (supplied by Agents)	2	—	—	2
2. Maritime Declaration of Health (supplied by Agents)	1	—	—	1
3. In transit passenger manifest	2	1	2	5
4. Disembarking passenger manifest	2	1	2	5
5. Crew Lists	2	—	1	3
6. Crew Curio List	1	—	—	1
7. Stores List	2	—	1	3
8. Gift Shop Inventory	1	—	—	1
9. Cargo Manifest	3	—	3	6

10. Derat. Certificate – should be available for inspection.
11. Clearance from last port to be given to Customs.
12. Immigration landing cards must be completed by all passengers. (These are supplied by Agents.)
13. Customs Declaration forms must be completed by all disembarking passengers. (These are supplied by Agents.)
14. Cargo Tally books – two per hatch where Nassau cargo is to be discharged.

If vessel's previous port of call was in Bahamas items 1, 2 and 10 need not be complied with. Item 9 – two cargo manifests supplied to Agents should show freight charges in detail.

Note: All non-Bahamian passengers finally disembarking at Nassau must be in possession of return ticket or have proper Bahamas Immigration Entry Permit.

(b) Outwards:

Description	*Customs*	*Immigration*	*Agents*	*Total*
1. Ship's Report Outwards (supplied by Agents)	2	—	—	2
2. List of embarking passengers	2	1	2	5
3. Manifest covering cargo loaded	3	—	3	6

Note: If vessel clearing for another Bahamian port, item 1 does not have to be complied with, but copy of next port's manifest required.

PILOTAGE: Presently no signal station and Masters requested telegraph ETA at least 48 hours in advance with subsequent amendments as necessary to Agents, who will inform Pilots. Pilot normally boards in approximate position one mile North of Western end of Hog Island (Paradise Island). When port closed due to bad weather a red flag will be displayed at Western end of Hog Island by day and red light in same location at night. Vessels may anchor in vicinity of pilot station where depth of water allows. There are three Pilots and boats are clearly marked "Pilot" and display international pilotage signals. Pilots are accustomed boarding by pilot ladder.

ANCHORAGES: Anchorage just off Nassau Harbour extends over area North and East of Western point of Hog Island to approximately half a mile off shore, where it becomes too deep.

RESTRICTIONS: No restrictions apart from adverse weather conditions or excessive draft which may make it advisable to enter on certain state of tide.

MAX. SIZE: No restriction on length or breadth but safe draft is considered 35 ft. Largest vessel to enter harbour to date is QE II. Safe draft cargo pier 25 ft.

HEALTH: Provided vessel healthy Customs grant free pratique on receipt international declaration of health form completed and signed. If any suspected disease or fever on board Master should advise Agent by cable, who will inform appropriate authorities and advise Master clearance procedure. Once vessel obtained free pratique in one Bahamas Port and proceeds another there are no further procedures at next port.

RADIO: Communications can be directed through Nassau Harbour Control, which came into existence in 1974, in an effort to control shipping and movements in and out of the harbour of Nassau.

VHF frequencies used are Channels 6, 9, 14, 16, 12, 68, 73, 74, 79, 20, 65 and 66.

Single Side Band frequencies used are 282.5 – 3,300.0 – 4,139.5 – 8,100.0 – 8, 281.2 – 12,421.0 – 16,565.0 kHz. Also transmits 2522 kHz, receive 2126 kHz upper sideband.

AM Radio Ship-to-Shore frequencies are 2182 Emergency – 2638 and 2738 kHz.

TUGS: Tugs normally join vessel at entrance to turning basin. Usual for vessels to provide tow line.

BERTHING: No specific requirements but due to congestion essential that Agent is kept well informed of ETA.

CRANES: There are 2 lift cranes for Container Handling at the Union and John Alfred Wharves. Both wharves are geared exclusively for container traffic, but a limited amount of break bulk cargo is handled at the Union Wharf.

At the Union Wharf is an "American" Truck Crane of 120 ton capacity geared to handle 20 ft. and 40 ft. containers with a 100 ft. boom used in lo/lo method.

The John Alfred Wharf is served by a Manitowac Track/Crawler crane of 130 ton capacity with a 150 ft. boom. Here 20 ft. and 40 ft. containers are landed by lo/lo method.

The Union Wharf encompasses a total berth length of 546 ft., while at the John Alfred Wharf berth length is limited to 500 ft.

BULK CARGO FACILITIES: There are no facilities for this type of cargo.

BRIDGES: No bridges affecting entrance to main berths.

STEVEDORES: Master should include in ETA number gangs required and tons per hatch for discharge, as shipping documents do not always arrive in advance. Discharge rate approximately 10 t.p.h. 135 ton mobile crane available.

MEDICAL: Full medical services available. In serious cases requiring immediate attention Agent should be advised so that doctor may board on arrival.

TANKERS: Limited facilities provided for tankers at Clifton Pier on S.W. side of Island. Vessels moor to dolphins offshore and discharge through submarine pipe-line. Vessels proceeding Clifton Pier (unless otherwise advised) should pick up Pilot off Nassau and clear Customs. Only oil imports are for domestic purposes and there is no oil refinery. Max. draft Clifton Pier 36 ft.

DENSITY: 1025.

FRESH WATER: Available Prince George Wharf on old section but not yet provided on new deep water pier. Rate 10 – 15 t.p.h. from hose connections on dock. Public Water Department supplies hose end connections. Price approximately $9.55 per 1,000 gals. depending on amount required. No water barges available.

FUEL: No fuelling facilities available with exception of small quantities diesel which may be delivered by Tanker Truck (4,000 gals.) by prior arrangement.

Small tankers can deliver fuel (80,000 – 100,000 gals.).

FIRE PRECAUTIONS: No special requirements. Vessels carrying explosives should notify Agent in advance so that Authorities may be advised.

GANGWAY/DECK WATCHMEN: Vessel to supply own watchman if required.

OPENING/CLOSING HATCHES: Roller hatches usually opened and closed by vessel's crew but older wooden hatches and tarpaulins handled by stevedores.

SHIP CERTIFICATES: Only certificate normally required for inspection is Derat Certificate.

CUSTOMS ALLOWANCES: Quantity should be reasonably based on individual requirement and length of stay in port. Actual amount is at discretion of Customs Officer clearing vessel.

IDENTIFICATION CARDS: Not required.

CONSULS:

			Telephones	
Country	*Status*	*Location*	*Office*	*Home*
Austria	Honorary Consul	Nassau	74258	74258
Belgium	Honorary Consul	Nassau	32371	74233
Canada	Honorary Commercial Agent	Nassau	55591	31305
Cyprus	Honorary Consul	Nassau	24292	36189
Denmark	Honorary Consul	Nassau	42265	42265
France	Honorary Consular Agent	Nassau	32371	74233
	Honorary Consular Agent	Freeport	352-7831/2	373-4611
Germany	Honorary Consul	Nassau	32156-8	51230
Greece	Honorary Vice-Consul	Nassau	24097	52025
Guyana	Honorary Consul	Nassau	35491	34880
Iceland	Honorary Consul General	Nassau	28956	57709
Israel	Honorary Consul	Nassau	28956	34095
Italy	Honorary Consular Agent	Nassau	24416	42013
Japan	Honorary Consul	Nassau	35654	Unlisted
Mexico	Honorary Consul	Nassau	52863	
Monaco	Honorary Consul	Nassau	51166	74050
Netherlands	Honorary Consul	Nassau	28210 22275	22334
Norway	Honorary Consul	Nassau	24614	41112
Peru	Honorary Consul	Nassau	57511	52177
Sweden	Honorary Consul	Nassau	77944 77785	77944
Switzerland	Honorary Consul	Nassau	28349	

REPAIRS: Only limited repairs and requirements should be passed to Agent in advance of vessels arrival.

REPATRIATION: Crew changes can be arranged but accommodation expensive and not always available at short notice.

AIRPORT: Extremely good air services. At certain periods airlines become fully booked and suggested that reservations be made in advance.

TIME: Local time (Eastern Standard Time) 5 hours behind GMT. Daylight Saving Time 4 hours behind GMT applicable 27th April to 26th October.

HOLIDAYS: New Year's Day (1st January); Good Friday; Easter Monday; Whit Monday; Independence Day; Labour Day; Emancipation Day; Discovery Day (12th October); Christmas Day (25th December); Boxing Day (26th December); Cargo can be worked on all holidays except Labour Day and Christmas Day.

POLICE/AMBULANCE/FIRE: Police 24444; Ambulance 22221; Fire 919.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: *(a)* Bonded Stores only available to passenger vessels regularly calling Nassau. *(b)* Passenger Vessels: Is of assistance to Agent to know how many passengers disembarking and how many in transit.

SERVICES: Most specialised services unavailable, e.g. radar, radio, gyro, tank cleaning, compass adjusting. If Agent given sufficient notice arrangements can be made for technicians to be flown from Miami.

SHORE LEAVE: No limitations.

AUTHORITY: Port Director, Port Department, Nassau.

SOUTH RIDING POINT: 26.37 N. 78.14 W.

(See Plan Book)

LOCATION: The terminal is situated at South Riding Point on the South coast of Grand Bahama Island, about 35 miles East of Freeport.

At a distance of 4,000 ft. offshore, the Sea Island Mooring Dolphin extremities are positioned thus:

No. 1 Mooring Dolphin: Lat. 26° 36′ 43.7″ N., Long. 78° 13′ 49.5″ W.
No. 6 Mooring Dolphin: Lat. 26° 36′ 46.7″ N., Long. 78° 13′ 33.6″ W.

BAHAMIAN FLAG: Bahamian national flag shall be flown during daylight hours by all vessels within Bahamian territorial waters.

DOCUMENTS: Incoming:

Prepared by Ship:

3 Copies of Declaration Form Y14.
3 Crew Lists.
2 Stores Lists.
2 Crew Declaration forms.
4 Copies of Bills of Lading.

In addition the ship will have to supply a clearance from last port of call, Derat Certificate, vaccination lists and the usual ships papers viz: Register, Safety, Radio, Safety Equipment, Loadline Certificate. Oil Record Book must be up to date and available for inspection.

All vessels must have a valid certificate of insurance or other financial security in respect of civil liability for anti-pollution damage.

Prepared by Agent:

1 Copy of Maritime Declaration of Health.
2 Copies of Inwards Report.

Customs and Immigration: After pratique has been granted, an immigration and customs inspection is carried out. The Master will be required to furnish particulars including:

(a) Name and nationality of vessel.
(b) Last port or ports of call.
(c) Nature of cargo.
(d) Number of crew.
(e) Number of passengers.
(f) Port of destination and name of Agent.
(g) Number of days since departure from last loading/unloading port.

Copies of the crew list and stores remaining on board will be required before clearance is granted.

Masters of vessels must take every precaution to ensure that no drugs, wine or alcoholic liquors are supplied, sold or conveyed to any person at the terminal.

Outgoing:

Prepared by Agent:

4 Copies of Outward Cargo Manifest.
2 Copies of Outwards Report.
Port Clearance Certificate.

In order to comply with Immigration regulations, crews should be checked before sailing and any missing seaman reported to the Agent. In the case of seamen left ashore for any reason, Masters are requested to furnish a letter accepting responsibility for all expenses incurred, advances if any, and instructions for repatriation.

Documentation and Clearance:

Documentation on completion of cargo operations is normally attended to prior to the vessel vacating the berth. In cases where excessive documentation is anticipated a vessel may be asked to leave the berth to complete this standing off. In such cases launches would be made available to transport documents and personnel in order to expedite the vessel's departure.

Early Departure Procedure (EDP) is available on request.

PILOTAGE: Berthing and operational instructions will be given by Burmah Control on vessel's arrival at South Riding Point.

A vessel will be deemed to have arrived when in a position, 3 miles South of the sea island and in this position the Berthing Master will board from a tug.

Before a vessel is allowed to proceed the Master will be required to sign the following forms:

(a) Conditions of use of sea berths and inner harbour at South Riding Point (See "Appendix I").
(b) Tug Requisition (See "Appendix II"). The Master will also be provided with copies of the Fire and Safety Regulations (See "Appendix IIIA and IIIB") and a Ship/Shore Safety Check List Form (See "Appendix IVA and IVB").

APPROACHES: Vessels approaching South Riding Point from the Eastern entrance of Northwest Providence Channel are recommended to make departure from Great Stirrup Cay Lighthouse Gp. Fl. (4) 15 sec. 14m. and head directly for South Riding Point Terminal.

Preliminary extensive soundings by U.S. Hydrographic Department indicate no underwater obstructions up to 100 fathom line within Northwest Providence Channel.

Landmarks: Conspicuous towers are sited adjacent to South Riding Point Terminal in the following positions:

1. Position: Lat. 26° 36′ 40″ N., Long. 78° 20′ 51″ W. Steel framework tower painted red and white, 175 ft. above sea level. Light: Air Occ. R. 4 sec. 1 F.W. 2 F.R. vert.
2. Position: Lat. 26° 36′ 51″ N., Long. 78° 19′ 25″ W. Steel framework tower painted red and white, 407 ft. above sea level. Light: Air Qk. Fl. R. 2 F.R. vert.
3. Position: Lat. 26° 37′ 06″ N., Long. 78° 18′ 47″ W. Steel framework tower painted red and white, 211 ft. above sea level. Light: Air Occ. R. 8 sec. 1 F.R. vert.
4. Position: Lat. 26° 37′ 44″ N., Long. 78° 14′ 20″ W. Steel framework tower painted red and white, 241 ft. above sea level. Light: Air 2 F.R. vert.
5. Position: Lat. 26° 42′ 44″ N., Long. 78° 09′ 27″ W. Steel framework tower painted red and white, 270 ft. above sea level. Light: Air Occ. R. 3 sec. 1 F.R. vert.

The F.6M. light exhibited from a white painted wooden mast close East of High Rock Settlement in position: Lat. 26° 37.3′ N., Long. 78° 16.1′ W. is kerosene lit and is therefore unreliable.

A conspicuous parabolic dish antenna is situated in position: Lat. 26° 37′ 30″ N., Long. 78° 17′ 58″ W. The antenna has a face diameter of 85 ft. and maximum height above sea level is 134 ft.

The large buff-painted oil storage tanks are visible behind the sea island. The terminal frontage is backed with pine trees and scrub.

Lights: A light, Fl.R. 3 seconds, is exhibited from a height of 140 ft. above sea level on top of the sea island control building on the central platform, whilst Nos. 1 and 6 mooring dolphins are marked by quick flashing red lights.

Two leading line (range) towers mark the 300 ft. wide approach channel centre line. Lights with clear lenses, each 2.5 seconds flash, 0.5 seconds eclipse, are exhibited from the top of the towers at elevations of 39.4 ft. and 53 ft. The towers are located at Lat. 26° 37′ 21.7″ N., Long. 78° 13′ 10.2″ W., and Lat. 26° 37′ 22.8″ N., Long. 78° 13′ 11.5″ W. respectively. Daymarks are attached as follows:

Leading mark: A 9 ft. triangle at the base of the tower.
Rear mark: A 9 ft. × 6 ft. diamond immediately below the light.
Both marks are painted with 'dayglo' orange.

Two leading line beacons are located, one on each of the two inner harbour breakwaters. These are to guide deep laden vessels into the inshore sea island berth (No.2) when approaching from the west.

Leading mark – a 9 ft. triangle. Rear mark – a 9 ft. × 6 ft. diamond.

Both marks are painted with dayglo orange. Above each mark is situated a white fixed light visibility approximately 4 miles.

Buoys: Red and Black Buoys mark the outer channel entrance to the inner harbour whose light characteristics of red and green respectively are each 2.0 seconds flash, 2.0 seconds eclipse.

Four international orange buoys with quick flashing white lights mark the contour of 50 ft. sea bed between the sea island and the shore.

ANCHORAGES: Three white buoys mark the seaward boundary of a designated anchorage area in the following positions:

West Anchorage Buoy: Quick Flash (Green) Lat. 26° 35′ 51″ N.,
Long. 78° 17′ 27″ W.
Mid Anchorage Buoy: Quick Flash (White) Lat. 26° 35′ 57″ N.,
Long. 78° 16′ 19″ W.
East Anchorage Buoy: Quick Flash (Red) Lat. 26° 36′ 00″ N.,
Long. 78° 15′ 33″ W.

These anchorage buoys are laid in 15 fathoms and vessels wishing to anchor should drop their anchors in the transit line of the buoys which will provide ample swinging room for typical shuttle vessels of up to 100,000 tons d.w.t., in ballast conditions. No attempt should be made to anchor Eastward of the East Anchorage Buoy.

Whilst holding ground is considered good and is of sand, limestone and soft coral, vessels should maintain their engines at short notice readiness, especially during periods of strong onshore winds.

In all cases, vessels wishing to anchor should contact the duty Berthing Master, who will advise on anchorage procedures and whose services are available for pilotage on request and at operational convenience.

Anchorage or the lowering of anchors is prohibited at the sea island berths.

Vessels wishing to stand off until berth readiness are recommended to use Westerly aerial tower (Lat. 26° 36′ 40″ N., Long. 78° 20′ 51″ W.) as Westerly boundary of standing off ground in order to avoid congestion with Freeport traffic.

HEALTH: On completion of mooring, Customs officials acting on behalf of Health and Immigration authorities will board the vessel to grant pratique.

RADIO: Vessels loading for South Riding Point should communicate ETA date to the terminal immediately after clearing loading port. They should also indicate cargo figures, draft and cargo disposition if multigrade, together with preferred discharge sequence. Intention to crude oil wash should be advised at this stage and supported with details of vessel and crew's experience.

Variations of this original ETA date should be communicated throughout the voyage.

Vessels proceeding to South Riding Point Terminal to load should communicate their ETA immediately upon clearing departure port, indicating draft, condition of ballast, amount of slops, previous cargo and intended lifting.

All vessels should upgrade ETA's 72, 48 & 24 hours prior to arrival.

VHF: Station "Burmah Shore Control" located at the terminal is equipped with VHF radio maintaining continuous watch on Channel 16. After making successful contact, vessels will be required to change to a working frequency, where information will be exchanged regarding berthing, manifold connections, quantity of ballast and deballasting time required.

The terminal is also equipped with approved intrinsically safe VHF walkie-talkie radio sets and vessels will have this additional communication with the terminal after boarding by the Berthing Master.

TUGS: 4 × 4,200 h.p. diesel tugs are stationed at the terminal. Each tug has a bollard pull of 50 tons.

All tugs are equipped for fire fighting and can deliver water at the rate of 2,000 gallons per minute through direct or fan spray nozzles. The tugs have foam making and oil dispersant equipment.

The tugs are owned and operated by Nassau Towing Company. Conditions of hire are given in Appendix II.

Small Craft: The terminal has one diesel engined personnel/general purpose carrier for up to 25 persons and three line handling boats. Two of the latter are equipped for anti-pollution duties. Launches are available for hire when operationally convenient.

Small Craft Landing: A landing is situated on the West side of the platform of the oil berths and there are additional landing stages at mooring dolphins Nos. 1 and 6.

BERTHING/UNBERTHING: *Responsibilities:* In all circumstances, the Master of any vessel shall remain solely responsible on behalf of his owners, for the safety and navigation of his vessel.

Tugs: Tank lids and openings should be securely closed before tugs are made fast. Tug utilisation in berthing operations will be as required by the Berthing Master who will meet the vessel in position as directed off the sea island. Masters of calling vessels are reminded of their obligation to comply with statutory pilot ladder rules and associated safe access regulations.

Mooring System: The Berthing Master will advise the Ship's Master of minimum mooring requirements. Usual moorings consist of 2 springs, 3 breast and 4 head/stern lines at each end.

The berths have double and triple quick release hooks of 150 and 100 tons capacity. Mooring and berthing dolphins have electrically operated capstans with 2 ton line pull at 100 ft. per minute in association with mooring assemblies.

Ship Connection: The positioning of the vessel's deck manifold in relation to the loading arms on the berth must be carried out to a close tolerance to the requirements of terminal personnel and as directed by the Berthing Master.

Loading arm connection will be made to ship's manifold by the sea island crew.

Independent oil measurement representatives will attend to ullaging and sampling and/or inspection of cargo tanks in vessels discharging or loading.

Unberthing: Tug attendance and numbers will be dependent on weather conditions and on the advice of the Berthing Master.

BERTHING FACILITIES: The sea island has two berths interconnected for tanker to tanker transfer and to the shore tanks and inshore berths by 2×36 in. diameter submarine lines.

The island is 1,470 ft. long with a central platform 48 ft. above datum and 3 mooring dolphins 25 ft. above datum on each side.

The berths are equipped with a Sonar Doppler system for docking assistance with clock meter display indicators and associated lights showing distance off berth and speeds of approach. Current meters are sited on the sea island together with meteorological instruments and public address system.

There are 4 fixed and 4 oscillating foam/oil dispersant monitor units on the platform.

The berths have a sacrificial anode cathodic protection system and ships that have an impressed voltage cathodic protection system should it turn off in the vicinity of the sea island.

Berth No. 1: Tankers of 50,000 to 440,000 d.w.t. can dock at this outer berth which is equipped with a self levelling and articulated gangway and 4×16 in. diameter Chicksan loading arms with quick release couplings in sizes 16 in., 14 in. and 12 in. diameter.

Water depth at the berth is 100 ft.

Berth No. 2: Tankers of 35,000 to 100,000 d.w.t. with a max. LOA of 900 ft. can dock at this inner berth which is equipped with a self levelling and articulated gangway and 4×12 in. diameter loading arms with quick release couplings in sizes 12 in., 10 in. and 8 in. diameter.

Water depth at the berth is 85 ft.

Inshore Berths: Two berths are available within the inner harbour, each of which is equipped with a ship/shore gangway and 4×12 in. loading arms with quick release couplings in sizes 12 in., 10 in. and 8 in. diameter.

Though further development is proposed, use of the inner harbour is currently restricted to vessels not exceeding 675 ft. LOA and 36 ft. loaded draft.

Product Transhipment: May be undertaken with product storage planned for the future.

Small Boat Harbour: This harbour is at the S.W. corner of the inner harbour and has a water depth of 25 ft. The harbour is used by the Company's tugs and small craft.

LOADING/UNLOADING:

Procedure: Once the vessel is secure, the Berthing Master, who also acts as Loading Master, will advise the Master and Chief Officer of their cargo programme and discuss the vessel's ability to comply. Any adjustments will be mutually agreed at this stage and be reflected on the Loading/Discharging instructions which the Master will sign. (See "Appendix VII").

Ballast Water: Ballast water can be received in the terminal oil and water separation tanks through one of the submarine or onshore lines at rates of up to 5,000 t.p.h. On no account may ballast water be otherwise discharged in territorial waters, unless vessel has segregated ballast system.

Dirty ballast and slops from ships' cargo tanks which, on the previous voyage, carried product including fuel oils or any crude requiring heat, cannot be accepted ashore. In such cases, vessels must arrive with clean ballast for shore reception.

During ballast operations at the berths, strict observance of rules and regulations governing the opening of sea valves is necessary and in correct sequence with ballast pump commencement to eliminate the risk of oil spills. Vessels may be required to ballast concurrent with discharge and throughout all cargo operations, maintain draft and trim conditions consistent with prevailing weather conditions, on the advice of Berthing Master.

Control: A responsible Ship's Officer is required to be on duty continuously.

The Terminal Operators in the control buildings offshore and onshore continuously monitor the cargo transfer rates and status of the onshore tanks or shuttle tankers receiving cargoes direct from VLCC's. The Ship's Officer will be advised immediately of changes necessary in the pumping programme.

The Terminal Operator in the offshore control room will activate all cargo movements from the tanker's manifold to or from shore tanks/receiving shuttle tankers.

Mooring Lines: It is the responsibilty of the Ship's Master to ensure that all mooring lines are kept tight. Berthing Master will constantly check a vessel's moorings and may at any time direct lines to be adjusted as circumstances warrant.

Tension Winches: When a vessel is fitted with tension winches, the latter must be set to manual operation and the brakes securely applied.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: The Rand Memorial Hospital in Freeport is open on a 24-hour emergency service and two medical clinics, Lucayan and Antoni are open during regular office hours.

TIME: Bahamian Standard Time is 5 hours behind GMT. Daylight Saving Time is observed from the end of April through the end of October when clocks are advanced one hour.

SURVEYORS: Saybolt, Caleb Brett, Charles Martin, Redwood and Epic represented on Grand Bahama.

Lloyd's have agency in Freeport. Classification and Salvage Association Surveyors available from Florida.

REPAIRS: Facilities for minor repairs to electrical, radio and mechanical equipment are available in Freeport but should these be required Masters should give as much advance notice by radio as possible.

TELEPHONES: The sea berths have a telephone connection to the shore and to the Freeport exchange. Calls are restricted to emergency use only. All other calls should be made from agency offices ashore.

STORES: Stores are not available at the terminal but may be obtained through the auspices of ships' agencies and chandlers. All deliveries to vessels are restricted to daylight hours and operational convenience. Transportation and handling must be arranged and attended by the vessel's Agent and it is imperative that advance terminal approval is obtained since responsibility cannot be accepted for custody should operational considerations cause delivery delays.

STORING: See "Prelims" page viii.

(i) Storing at Terminal discretion. Terminal launches normally employed. Small barges may be used by prior arrangement.

(ii) Storing permitted during cargo transfer using stern lifting devices only.

(iii) At the Inner Harbour berths, trucks would be permitted by way of the stern only.

(iv) Fork lift not available.

(v) Usual Customs regulations.

(vi) Labour usually supplied by chandler.

LAUNDRY: Limited services are available in Freeport but in view of the distance from the terminal (35 miles) and the relatively short time at berths, Masters are advised not to depend on such services.

WEATHER: From November to May, average temperatures in the 70's Fahrenheit prevail, with low humidity and little rain. From June to October, average temperatures rise into the 80's with relatively high humidity and rainfall of between 5 in. and 9 in. per month.

SEA CONDITIONS: Prevailing winds are from the S.E. During the Winter season numerous cold fronts transit the area producing a normally predictable wind veer to S.W. then Northerly with the passage of the front. A strong frontal system may cause seas and swell of up to 10 ft. but these quickly subside following frontal passage.

Current in the vicinity of the Sea Island seldom exceeds 1 knot and runs predominantly East and West. Tidal ranges above datum are Low Water 0 – 0.5 m. and High Water 0.8 – 1.5 m.

GENERAL: *Charts:* The best available charts of the area at present are U.S. Defense Mapping Agency Hydrographic Centre N.O. 26326 and British Admiralty No. 390.

Currency: Currency is the Bahamian dollar which is on a par with the U.S. dollar. U.S. dollars are generally acceptable anywhere without changing to local currency.

Garbage: Garbage or refuse disposal overside at berths or in terminal approaches is strictly forbidden.

BANKS: Chase Manhattan, Mall and Pioneer Way, P.O.Box F-2432, Freeport, Grand Bahama.

Citibank N.A., on the Mall, P.O.Box F-2681, Freeport, Grand Bahama.

Barclays International, Mall & Pioneers Way, P.O.Box F-2404, Freeport, Grand Bahama.

Royal Bank of Canada, Bank of Nova Scotia, Canadian Imperial Bank of Commerce, Bank of Montreal.

EMERGENCY CO-ORDINATION CENTRE: Bahamas Air Sea Rescue Association, Freeport. Telephone Nos.: Base Station 809 373-2264, Mobile Radio Telephone 809 352-9889, Daytime 0800 – 1700 hrs. 809 352-8826.

SAFETY: *TERMINAL SAFETY REGULATIONS:* With the object of protecting all concerned against the possibility of fire hazards, oil and smoke pollution, vessels calling at South Riding Point Terminal must comply with the following safety regulations or other regulations which may be issued by the proper authorities from time to time.

Dangerous Area: The whole of the sea island and the onshore terminal are declared Dangerous Areas and the use of naked lights and smoking therein is strictly prohibited except in those places expressly designated by the Master of a vessel and the Terminal Manager.

A copy of the "Fire and Safety Regulations" (See "Appendix IIIA and IIIB") is given to the Master of every vessel by the Berthing Master on boarding and it is the responsibility of the Master to see that these regulations are strictly observed.

Inspection: The Berthing Master will conduct a safety inspection prior to the commencement of loading/unloading and at regular intervals thereafter to ensure that all safety regulations are being enforced.

A comprehensive list of safety requirements are detailed on a Ship/Shore Safety Check List (See "Appendix IVB") and must be signed by the Master of the vessel or his delegate and the Berthing Master.

Galley Fires: Only approved steam or electric galleys in selected locations in the after part of the vessel, as agreed to by the Master and the Berthing Master, are permitted.

Firewires: Firewires of steel must be made fast and hang over the outboard bow and quarter whilst alongside to enable tugs to connect readily in an emergency situation. Firewires must be tended on board throughout cargo operations in order to maintain towing eyes at water level.

Boiler Tubes: Boiler tubes must not be blown whilst vessel is alongside and emitting smoke is strictly prohibited while vessels are in the vicinity of the terminal. Every precaution must be taken to prevent sparks and soot particles escaping from the funnel.

Deck Scuppers: Deck Scuppers must be securely plugged and cemented before loading/discharging operations commence. Approved mechanical means of closing scuppers may be acceptable.

Spillage Trays: See "Oil Pollution – Minor Leakages Onboard".

Main Engine(s): Immobilization is prohibited whilst alongside a terminal berth. Minor engine repairs may be effected after receipt of written permission from the Berthing Master and providing the repair will not affect the prompt sailing of the vessel in an emergency or upon cargo completion.

Maintenance Work: No chipping, scaling, hot work or work of any kind that would cause a spark is allowed while alongside a berth.

Ventilation: When loading or discharging cargo or ballast, all open ullage pipes and sighting ports shall have installed approved flame arresters.

Cargo tank lids shall be closed and secured throughout all loading or discharging operations.

Lights: Lights, electric fittings and hand torches must be of types approved by a recognised classification society or government authority for use in a vapour laden atmosphere.

Radio Equipment: Radio, radar or other electronic equipment must not be energized while a vessel is at berth except approved explosion proof equipment.

This does not mean that essential servicing of ship's radio equipment cannot be performed alongside berths. Suitable arrangements for ensuring safety during this work should be made between the Ship's Master and the Berthing Master and will require a work permit.

Stores: Inflammable or explosive ship's stores shall be kept in a safe place securely fastened.

Bilge and Dirty Ballast Water: Disposal of bilge and dirty ballast water over the side is strictly prohibited by the authorities and any pollution of the sea through these mediums will result in heavy claims and fines. The terminal will, in case of an oily discharge, take such steps as may be deemed necessary to fight the pollution before it spreads.

If the discharge is due to faulty equipment or material on the vessel or to negligence on the part of ship's personnel, the terminal shall be indemnified for any expenses incurred in connection with the preventative action taken. (See Oil Pollution – "Oil Spills").

International Code Flag 'B': International Code Flag 'B' shall be flown during the day and a red light exhibited by night by all vessels during cargo or ballast operations.

Transfer Cargo Operations: Transfer cargo operations shall not be started, or if started, shall be discontinued by the Berthing Master or Terminal Control if any of the following conditions prevail:

(a) During severe electrical storms.
(b) If fire breaks out at berth or on vessel.
(c) Should any condition develop which represents a hazard to the vessel or terminal facilities.

Fire-Fighting Equipment: Fire-fighting equipment of vessels alongside must be kept ready for use at all times.

Gas-Freeing: Gas-Freeing of vessels alongside sea island berths will not be permitted.

Earthing and Bonding: All metal on the shore side of an insulating flange should be electrically continuous to the sea island or inshore berths earthing systems and all metal to the seaward side should be electrically continuous to the vessel.

Insulating flanges are fitted on each loading arm.

Small Boats or Craft: Small boats or craft will not be permitted to moor alongside a vessel during cargo or ballast operations, unless special permission has been granted by the Berthing Master.

Permitted Entry: Only persons holding authorized passes will be permitted entry to the terminal or sea island. The terminal reserves the right to refuse admission.

Safety Responsibilities: Nothing in these regulations will relieve Masters of their responsibilities in observing the normal safety, fire prevention and security regulations. The Berthing Master is authorized to advise and request Masters to take additional measures to ensure a higher degree of safety if they find that circumstances warrant such action.

FIRE FIGHTING:

Responsibilities: The Fire and Safety Officer is responsible for all fire fighting operations at the sea island and the onshore terminal.

Fire Alarm: Do not hesitate to raise the alarm in the event of fire however small it may be.

The ship's fire alarm at the terminal will be one or more blasts of the ship's whistle or siren, each blast of not more than 10 secs. duration supplemented by a continuous ringing of the ship's bell and continuous sounding of the general alarm system.

The fire alarm at berths or elsewhere within the terminal or harbour area will be a continuous blast on the sirens sited on the onshore and offshore control buildings.

Action Ship – Fire On Your Ship:

1. Raise alarm.
2. Fight fire and prevent it spreading.
3. Inform terminal of details.
4. Cease all cargo operations and then close all valves.
5. Standby to disconnect loading arms.
6. Bring engines to standby.

Action Ship – Fire On Other Ship: You will be advised of necessary instructions to:

1. Cease all cargo operations and then close all valves.
2. Standby to disconnect loading arms.
3. Bring engines and crew to standby ready to unberth.

Action Shore: The operator in the control room will immediately contact the Fire and Safety Officer by phone or VHF radio. The Fire and Safety Officer will then direct operations.

1. Raise alarm.
2. Cease all cargo operations and then close all valves.
3. Fight fire and prevent fire spreading.
4. Standby to disconnect loading arms.
5. Inform all ships of details.
6. Terminal emergency procedure is immediately effective.

Emergency Situation: During an emergency situation on board a vessel alongside, the Berthing Master will be in charge of organising the preliminary fire-fighting/anti-pollution procedures assisted by the operators in the Control Room and at the berths until the Fire and Safety Officer at the terminal takes over the direction of all fire fighting operations.

The Berthing Master is to make use of all available means at his disposal, such as tugs, launches, terminal equipment and other facilities to assist the vessel and protect lives and terminal facilities.

OIL POLLUTION/ACCIDENTS:

Oil Spills: Oil spills from whatever source must be reported immediately to the Berthing Master or Terminal Control. Cargo movements will be ordered suspended upon such a report or upon observation of pollution by terminal personnel and they shall not resume until the source of leakage is determined and controlled and the pollution dispersed or contained. The terminal maintains adequate anti-pollution equipment to attend to minor spills and this will be mobilised promptly. Clean-up costs in regard to pollution known to be the responsibility of a vessel using the facility will be billed to that vessel. The terminal shall also be indemnified against any fines and claims for damages resulting from such pollution (See "Appendix V"). Vessels discharging oil into Bahamian waters are liable to fines not exceeding $120,000.

Minor Leakage Onboard: Spillage trays or other receptacles should be placed under the flange connection at the vessel's manifold. Oil absorbing material in suitable quantity should be available for immediate use in the event of oil leakage on deck.

Damage to Facilities: If a Master has reason to believe that damage has been caused to berth, other vessels, craft or terminal property by his vessel, he should immediately notify the Berthing Master in writing. (A Typical Accident Form See "Appendix VI").

APPENDICES:

Appendix I:

Burmah Oil Transhipment Services Limited
South Riding Point Oil Terminal, Grand Bahama
Contractual Berthing Conditions

This Agreement is made between BURMAH OIL TRANSHIPMENT SERVICES LIMITED, its servants and Agents, NASSAU TOWING LIMITED, its servants and Agents and their Sub-Contractors (hereinafter called "the Terminal") and the Owners and Charterers of the vessel.. (hereinafter called "the vessel").

In consideration of the Terminal permitting the vessel to berth at and to use the terminal and its facilities or providing to the vessel tug line handling services, ferry services or other ancillary services connected with the use of the terminal by the vessel, the undersigned Master of the ....for and on behalf of the Vessel agrees to the following conditions.

1. The Terminal shall not be liable for any loss or damage suffered by the vessel howsoever arising including negligence on the part of the Terminal in connection with or by reason of the use or intended use of the Terminal vessel.

2. The Vessel will indemnify the Terminal in respect of all liability to third parties including costs and any other expenses and interest arising out of claim in connection with or by reason of the use or intended use of the Terminal by the vessel howsoever arising including negligence on the part of the Terminal. The vessel will indemnify the Terminal in respect of any penalties and fines incurred by it in connection with or by reason of the use or intended use of the Terminal by the vessel. The vessel will indemnify each party referred to in this Agreement collectively as "the Terminal" in respect of any liability to any other party referred to as "the Terminal" by reason of the use or intended use of the Terminal by the vessel howsoever arising including negligence on the part of the Terminal.

3. The vessel will indemnify the Terminal in respect of any damage or loss including financial loss suffered by the Terminal in connection with or by reason of the use or intended use of the Terminal by the vessel, howsoever caused including negligence by the Terminal.

4. It is agreed that if the vessel sinks or grounds or otherwise becomes, in the opinion of the Terminal, an obstruction or danger in any part of the port or its approaches the Terminal may in its sole discretion take any steps it deems necessary to remove the obstruction or danger and any expenses of such removal shall be payable by the vessel's Owner or Charterer.

5. The obligations of the vessel hereunder shall be joint and several.

6. The obligations of the vessel hereunder shall be without right of limitation of liability.

7. If any one or more of the provisions or part of this Agreement should at any time for any reason be declared invalid or void or otherwise inoperative by a court of competent jurisdiction, such declaration or decision shall not affect the validity of this Agreement as a whole.

8. This Agreement cannot be varied other than in writing signed by all parties.

9. This Agreement shall be governed by and construed in accordance with English Law and all disputes arising hereunder shall be and hereby are referred to the High Court of Justice in England.

Time & date:....................
Signed on behalf of the
Owners and Charterers of the ....
Master

Signed on behalf of
Burmah Oil Transhipment Services Limited,
its servants and agents, and Sub-Contractors,
Nassau Towing Limited, its servants, Agents
and Sub-contractors ....

Appendix II:

BURMAH OIL TRANSHIPMENT SERVICES LIMITED
NASSAU TOWING LIMITED
Requisition

VESSEL PARTICULARS:

Ship:..
Nationality:..
DWT Tonnage:..
Drafts Forward:.......... Mid:.......................... Aft:..........................
Berth No.:.................................... Berthing Master:..........................
Date:...................... Time on:..................... Time off:....................
Berthing/unberthing:..
Tugs:..

Time Connected	Time Released
Time Connected	Time Released
Time Connected	Time Released
Time Connected	Time Released

We hereby request and authorise BURMAH OIL TRANSHIPMENT SERVICES LIMITED and/or NASSAU TOWING LIMITED to provide tug or tugs, line handling boat or boats, crew boat or boats and line handling, ferry and other services and a Berthing Master or Masters in order to assist in the navigation, berthing and unberthing of the vessel, and all matters related thereto, and the performance of the vessel's business at or near South Riding Point and at the facilities of Burmah Oil Transhipment Services Limited. We hereby agree that all such assistance and services rendered by you are requested and accepted by us on your usual terms and conditions printed overleaf and which we have read, understand, approve and accept:

Date
Time
Signed
Master
for and on behalf of and with
the authority of the Owners
and Charterers of the
....

Appendix IIIA:

Safety and Fire Regulations

To be posted in prominent positions on board ship

The following Fire Regulations and Smoking Restrictions should be brought to the notice of all personnel on board and must be strictly enforced.

SMOKING IS PROHIBITED while alongside berths EXCEPT in the following rooms in the after part of the vessel specified by Master.

Masters and Officers must ensure that these SMOKING RESTRICTIONS are strictly adhered to.

Only approved electric and steam galleys, in selected locations in afterpart of the vessel, agreed to by the Master and the Shore Authorities, are permitted.

CIGARETTE ENDS AND HOT MATERIALS MUST NOT BE THROWN INTO THE WATER AT ANY TIME.

No chipping or scaling is allowed whilst alongside. Overside hull painting is not allowed on jetty side of vessel.

All ship's scuppers on main deck must be plugged and cemented oil tight.

Approved mechanical means of closing scuppers may be accepted.

All vessels moored at these berths must have the eye of a steel hawser paid out to the water's edge and securely made fast on board on the offshore bow and quarter, to be of sufficient strength to enable tugs to take the vessel to a place of safety. Main engines must be available for use at all times whilst alongside the jetty.

Fire hoses on forward and after decks to be rigged and ready for instant use.

It is the responsibility of the Master to ensure that the mooring lines of his vessel are tight at all times.

Alarm in case of fire

1. The ship's fire alarm at the terminal will be one or more blasts of the ship's whistle or siren, each blast of not less than 10 seconds duration supplemented by a continuous ringing of the ship's bell and continuous sounding of the general alarm system.

2. The fire alarm at berths or elsewhere within the terminal or harbour area will be a continuous blast on the sirens sited on the onshore and offshore control buildings.

Overflow or escape of oil into the water

In the event of an overflow and/or escape of oil into the water, loading will be suspended immediately on the vessel concerned. Loading will not be resumed until the area has been cleared of oil and conditions declared safe.

Terminal safety and fire inspections

It is the duty of the Berthing Master to make periodical inspections on board vessels at berth in respect of any breach of the Terminal Safety and Fire Regulations.

Inspectors must be allowed free access on board all vessels at all times for this purpose.

IN ALL CASES OF EMERGENCY CONTACT BURMAH CONTROL.

Appendix IIIB:

Instructions in case of fire

Ship's fire alarm at terminal

One or more blasts of the ship's whistle or siren each blast of not less than 10 seconds duration or a continuous ringing of ship's bell supplemented by a continuous sounding of the general alarm system.

Terminal fire alarm

Continuous long blast on all fire sirens.

Action Ship

Fire on your ship

Raise alarm
Fight fire and prevent fire spreading
Inform terminal of details
Cease all cargo operations and then close all valves
Stand by to disconnect hoses or arms
Bring engines to standby

Fire on other ship at terminal

Cease all cargo operations and then close all valves
Stand by to disconnect hoses or arms
Bring engines to standby and crew to stand by ready to unberth

Action Shore

Fire on terminal

Raise alarm
Cease all cargo operations and then close all valves
Fight fire and prevent fire spreading
If required stand by to disconnect hoses or arms
Inform all ships of details
Terminal Emergency Procedure is immediately effective
In case of fire, terminal will direct movement of vessels.
Do not hesitate to raise the alarm.

Appendix IVA:

Burmah Oil Transshipment Services Ltd.
P.O.Box F-2530 Freeport, Grand, Bahama.
The Master, m.s./m.v..
Dear Sir,

South Riding Point Transhipment Terminal Safety Requirements

Responsibility for the safe conduct of operations on board your ship while alongside our terminal rest with you as Master. Nevertheless, since our personnel, property and other shipping may suffer serious damage in the event of accident aboard your ship, we wish, before operations start, to seek your full co-operation and understanding on the safety requirements set out in the Ship/Shore Safety Check List.

These safety requirements have been drawn up by a number of international terminal operators in conjunction with a representative section of the international tanker industry. They are based upon the provisions of the codes of safe practice currently accepted by the oil and tanker industries. We therefore expect you and all under your command to adhere strictly to them throughout your stay alongside this terminal. We, for our part, will ensure that our personnel do likewise and co-operate fully with you in the mutual interest of safe and efficient operation.

In order to assure ourselves of your compliance with these safety requirements, we shall, from time to time, instruct a member of our staff to visit your ship and, after reporting to you or your deputy, join one of our officers in a routine inspection of cargo decks and accommodation spaces.

If we observe infringements on board your ship of any of these safety requirements we shall bring this immediately to the attention of yourself or your deputy for corrective action. If such action is not taken in a reasonable time we shall adopt such measures as appear to us most appropriate to deal with the situation and shall notify you accordingly.

If you observe any infringement of these requirements by terminal staff, whether on the jetty or on board your ship, please bring this immediately to the notice of our representative who is nominated as your contact during your stay in port. Should you consider any immediate threat to the safety of your ship arises from any action on our part, or equipment under our control, you are fully entitled to demand an immediate cessation of operations.

WE RESERVE THE RIGHT IN THE EVENT OF CONTINUED OR FLAGRANT DISREGARD OF THESE SAFETY REQUIREMENTS BY ANY SHIP, TO STOP ALL OPERATIONS AND ORDER THAT SHIP OFF THE BERTH FOR APPROPRIATE ACTION TO BE TAKEN BY THE CHARTERERS AND OWNERS CONCERNED.

Terminal Manager

Appendix IVB:

Ship/Shore Safety Check List

Vessel: Berth:

The safety of operations requires that all questions be answered affirmatively after checking by both Ship and Terminal representatives. If an affirmative answer is not possible, the reason should be given and agreement reached upon appropriate precautions between the Ship and the Terminal.

	Terminal Representative	Ship Representative
1. Is the Ship securely moored?	....	....
2. Are emergency towing wires correctly positioned?	....	....
3. Is there safe access between Ship and Shore?	....	....
4. Is the Ship ready to move under its own power?	....	....
5. Is there an effective deck watch in attendance on board and adequate supervision on the Terminal?	....	....
6. Is the agreed ship/shore communications system operative?	....	....
7. Have the procedures for cargo/ballast handling been agreed?	....	....
8. Has the emergency shut-down procedure been agreed?	....	....
9. Is fire fighting equipment on board and ashore ready for immediate use?	....	....
10. Are cargo hoses/arms in good condition and properly rigged?	....	....
11. Are unused cargo and bunker connections blanked?	....	....
12. Are scuppers effectively plugged?	....	....
13. Are sea and overboard discharge valves, when not in use, closed and latched?	....	....
14. Are all cargo and bunker tank lids closed?	....	....
15. Is the agreed tank venting system being used?	....	....
16. Are flame screens within the tank venting system in position and in good condition? (Give date of last inspection)	....	....
17. Are hand torches of an approved type?	....	....
18. Are portable R/T sets of approved design?	....	....
19. Are the ship's main radio transmitting aerials earthed?	....	....
20. Are electric cables to portable electrical equipment disconnected from power?	....	....
21. Are all external doors and ports in the amidships accommodations closed.	....	....
22. Are all doors and ports in the aft accommodation that are required to be in fact closed?	....	....
23. Are unsafe air conditioning intakes closed?	....	....
24. Are window-type air conditioning units disconnected?	....	....
25. Are SMOKING requirements being observed?	....	....
26. Are GALLEY requirements being observed?	....	....
27. Are NAKED LIGHT requirements being observed?	....	....
28. Is the quality of the Inert Gas satisfactory? (Give O2 Content)	....	....
29. Is ballast water in permanent segregated ballast tanks clean and suitable for overboard discharge?	....	....
30. Are C.O.W. requirements being observed?	....	....

We have checked with each other the items listed on this check list in the course of a joint inspection and have satisfied ourselves that the entries we have made are correct to the best of our knowledge.

For Ship Name........................Rank: ....Signature................
For Terminal Name:.......................Position:..........Signature................
Time.......................Date..

Repetitive Time & date
Checks B.M. initials

Remarks:

Orig: Ship
c.c. Berthing Master
c.c. Sea Island

Appendix V:

South Riding Point Transhipment Terminal

The Master,
s.s./m.v. "..............................."

Dear Sir,

At .... hours on .... an oil spill occurred on board your vessel and a quantity of oil escaped into the sea, necessitating cleaning up operations by our personnel and equipment.

In accordance with Terminal Regulations, we hereby hold you responsible for any expenses incurred as a result of the oil spill and subsequent clean-up operation, in addition to fines which may be imposed by the Authorities.

You are requested to furnish the Terminal management with an extract of your "Oil Transfer Log" and a written reason for this incident.

Yours faithfully,

For: Burmah Oil Transshipment Services Ltd.

Signed: ....Master
Date: ....
cc: Ship's Agents.

Appendix VI:

South Riding Point Transhipment Terminal

..........................19..........

The Master,
s.s./m.v. "..............................."

Dear Sir,

At .... hours on .... the vessel under your command was involved in an incident, as a result of which, the following damage was caused:

The foregoing report is based on preliminary examination and must be considered an interim statement of damage pending survey examination of the areas concerned.

In consideration therefore of "Conditions of Use of Sea Berths and Inner Harbour" and "Condition of Hire of Tugs", we hereby hold you responsible for this damage.

Please acknowledge receipt of this letter by signing the attached copies.

Yours faithfully,

For: Burmah Oil Transshipment Services Ltd.

Signed: ....
Date: ....
cc: Ship's Agents.

Appendix VII:

Burmah Oil Transshipment Services Ltd.
South Riding Point Transhipment Terminal

To: Master,
s.s./m.v. "..............................."
Date:

This serves to introduce Captain .... who is duty Berthing/Loading Master.

As Loading Master, he will be responsible and available at all times throughout your stay for all liaison aspects of your cargo operations and safety alongside.

Please bring all cargo, safety or documentation queries to his personal attention.

Your co-operation in this regard will serve to assist in our rendering to your vessel, an efficient dispatch from South Riding Point.

Terminal Manager

Appendix VIII:

Burmah Oil Transshipment Services Ltd. South Riding Point Terminal Crude Oil Washing Check List

Vessel: .... Date: ....

On Arrival	Yes	No
1. Has terminal been notified?		
2. Is oxygen analysing equipment tested and working satisfactorily?		
3. Are tanks pressurised with good quality Inert Gas (max. 5% O_2)?		
4. Is tank washing pipe-line system isolated from water heater and engine room?		
5. Are all hydrant valves on tank washing line securely shut?		
6. Are all valves to fixed tank washing machines shut?		
7. Have tank cleaning lines been pressurised and leakages made good?		

Signed:...................... Master/Chief Officer. Time and Date..............

Alongside		
1. Is quality of Inert Gas in tank(s) satisfactory (max. 5%O_2)?		
2. Is Inert Gas pressure satisfactory?		

Signed:...................... Master/Chief Officer. Time and Date..............

Before Washing		
1. Are valves open to machines on selected tanks?		
2. Are responsible persons positioned around the deck to watch for leaks?		
3. Are tank ullage gauge floats lifted on tanks to be washed?		
4. Is Inert Gas System operating?		
5. Are all tanks closed to outside atmosphere?		
6. Have tanks positive Inert Gas pressure?		

Signed:...................... Master/Chief Officer. Time and Date..............

During Washing		
1. Are all lines oil tight?		
2. Are tank washing machines functioning correctly?		
3. Is quality of Inert Gas in tanks satisfactory (max. 5% O_2)?		
4. Is positive pressure available on Inert Gas System?		

Signed:...................... Master/Chief Officer. Time and Date..............

After Washing		
1. Are all valves between discharge line and tank washing line shut down?		
2. Has the tank washing main pressure been equalised and line drained?		
3. Are all tank washing machine valves shut?		

Signed:...................... Master/Chief Officer. Time and Date..............

NOTICE:
Burmah Oil Transshipment Services Ltd.
P.O.Box F-2530 Freeport, Grand Bahama
South Riding Point Terminal.
To: Master
s.s./m.v. ....

Dear Sir,

During your stay at South Riding Point Terminal, your co-operation is requested with regard to shipboard visitations by Terminal staff.

With the exception of official visits necessary to the satisfactory performance of cargo and safety operations, none of our terminal staff should board your vessel.

We are particularly concerned in cases where food and drink have been unofficially provided by visiting ships and we would respectfully request that you bring to the attention of your crew, the need to disregard any requests of this nature.

We trust that your compliance and understanding will avoid any embarrassment for your vessel whilst alongside and that as a result our operating attentions will be rendered more efficient.

Thank you.

Terminal Manager

AUTHORITY: *Operator:* Burmah Oil Transshipment Services Ltd., P.O.Box F-2530, Freeport, Grand Bahama. *Tel:* South Riding Point Terminal 348-3471. *Contact:* Captain J. B. Moncrieff, Marine Operations Manager/Harbour Master.

AGENT: See "Freeport".

NOTES

Please also advise Shipping Guides Ltd.

Bahrain

GENERAL

ANCHORING: It is compulsory for all ships entering Bahrain waters for reasons other than berthing at Mina Sulman, ASRY, Bapco, Alba, or other private jetties to obtain a prior written permission from the Port Director before anchoring in Bahrain waters. All ship's Agents are required to submit to the Harbour Master at the end of each month, a list of all vessels managed by their Agency which entered Bahrain waters.

PORT OPERATIONS SERVICE: The following has been received from the Customs & Ports Directorate, State of Bahrain. (Harbour Notice 4/84).

The above service is to be established based initially in the radio room of Mina Sulman. All information concerning the movement of vessels within the area under the jurisdiction of the 'Bahrain Ports Authority' will be conducted through the Bahrain Ports Operations and Information Service, hereinafter referred to by its call sign 'Bahrain Port Control'. This service will be manned continuously throughout 24 hours, with a duty Pilot available for advice on request. Close liaison will be maintained between Owners/Agents, Marine Terminals of Bapco, Alba, ASRY and AIS Co. and other private wharves within the Mina Sulman area.

Communications: (a) All vessels having gross tonnage of more than 50 g.r.t. and any vessel engaged in towing shall carry fixed or portable VHF radio equipment capable of operating on port operation channel in addition to Channel 16.

(b) A Port Operations VHF radio channel will be introduced, Channel 74 (156.725 MHz). All vessels must monitor this Channel when transiting the port limits or approach channels, or at anchor and communicate with 'Bahrain Port Control' as required.

Reporting Procedures: The Master of the inward bound vessels shall on coming within VHF radio range of 'Bahrain Port Control' give the vessel's ETA at Sitra Beacon, and shall at the same time advise of his vessel's draft and any other information requested, and of any circumstances which may affect the seaworthiness or handling capacity of the vessel. To facilitate keeping track of a vessel's whereabouts, vessels should inform 'Bahrain Port Control' when passing the following seamarks as appropriate:

Deep Draft Channel	*N.E. Approach Channel via Sitra Inwards Buoy*
Bahrain Light Vessel	Sitra Inwards Buoy
No. 3 Beacon	Vidal Buoy
Bahrain Approach Buoy	No. 27 Buoy
No. 14 Buoy	Sitra Beacon
No. 27 Buoy	Middle Ground Buoy
Sitra Beacon	when berthed or at anchor
Middle Ground Buoy	
when berthed or anchored	

The Master of an outward bound vessel shall inform 'Bahrain Port Control' within 15 minutes prior to commencing navigation in the area, and again immediately prior to such navigation commencing. During the outward passage he shall report to 'Bahrain Port Control' when passing the above seamarks as appropriate.

The Master of a vessel berthed, moored or anchored within the area of jurisdiction and who wishes to move his vessel to another berth, mooring or anchorage within that area shall request permission from 'Bahrain Port Control' prior to moving and report when finally secured, anchored or moored.

Special Directions: (a) The deep draft channel is primarily for vessels confined by their draft to use it. No vessel inward bound shall proceed beyond No. 3 Beacon without seeking prior approval from 'Bahrain Port Control'. No vessel outward bound shall proceed beyond Bahrain Approach Buoy without seeking prior approval.

(b) The Master of any vessel proposing to anchor should inform 'Bahrain Port Control' of the position it is intended to anchor the vessel. This notice shall be given in sufficient time to enable 'Bahrain Port Control' to give a special direction to the Master to place the vessel in an alternative anchorage if required.

(c) Any vessel engaging in towing, except tugs engaged in berthing/unberthing operations shall inform 'Bahrain Port Control' of the length of tow, speed of tow and anticipated passage. Such vessels must seek approval before commencing such operation within the area of jurisdiction.

Interpretation: In these directions: 'Port Limits' means the area of water enclosed by straight lines drawn from the following positions:

A.	Latitude: 26° 13′ N.	Longitude: 50° 32′ E.
B.	Latitude: 26° 22′ N.	Longitude: 50° 32′ E.
C.	Latitude: 26° 22′ N.	Longitude: 50° 47′ E.
D.	Latitude: 26° 06.7′ N.	Longitude: 50° 47′ E.
E.	Latitude: 26° 06.7′ N.	Longitude: 50° 38′ E.

'Area of jurisdiction' includes the marine terminals of Mina Sulman, Bapco, Alba, ASRY and AIS Co. and all other private wharves within the Mina Sulman area, also the deep draft and N.E. approach channels.

Commencement: These directions shall come into operation on 15th July, 1984. A full V.T.M.S. "Vessel Traffic Management System" will be introduced based in the control tower at Mina Sulman in September of this year (1984). Notice of the commencement of this service will be promulgated by Marine Notice.

MINA SULMAN: 26.12 N. 50.37 E. (See Plan Book)

DOCUMENTS:
International Declaration of Health.
5 Crew Lists.
Ship's Report (given by Customs on arrival).
Cargo Gear Register (Blue Book).

Agents to submit cargo manifest 3 days before vessel's arrival.

Exports to Bahrain: Shipping documents for exports to Bahrain should include a Certificate of Origin bearing the stamp of a Bahrain embassy or consulate, where such representation does exist. Alternatively the stamp of any other Arab embassy or consulate will be acceptable.

Compliance with the above regulation will help process the clearance of goods without delay.

PILOTAGE: Mina Sulman Pilots board either at Sitra Anchorage (see "Sitra") or by special arrangement at Outer Middle Ground Buoy. Pilotage compulsory except for naval vessels and small locally-owned craft whose Masters are familiar with the port and control.

Port equipped with 5 tugs, 3×800 h.p., and 2×1,600 h.p., 3 pilot cutters and a number of mooring launches and work boats.

Pilot cutters mostly blue with white-painted wheel-house and cabin accommodation.

ANCHORAGE: Normal anchorage in vicinity of No. 27 Buoy. Approximate position Lat. 26° 10′ N., Long. 50° 47′ E. Sitra Anchorage now restricted anchorage and may only be used by special permission of Port Authorities.

MAX. SIZE: Vessels up to 300 m. may enter port subject to tide. Depth of channel 9.75 m. New berths dredged to 10.9 m. Finger pier, depth 30 ft. (9.1 m.).

HEALTH: Port Health Authorities board vessel on arrival at berth alongside Deep Water Jetty and grant pratique.

RADIO: Vessels intending call Mina Sulman should advise Agents via Bahrain Radio, call sign A9M, their ETA, draft, hatch distribution and any other requirements, giving as much notice as possible. Agent to give Coastguard 72 hours notice of ETA.

VHF: Vessels equipped with VHF should, when within range, contact Mina Sulman Harbour Office on Channels 6 or 16 which have frequencies of 156.30 and 156.80 respectively. VTM System in operation. Also see "General" before first port.

TUGS: 5 tugs available. Will usually join vessel between Channel Buoy Nos. 7 and 8 or 9 and 12 during final approach to Deep Water Jetty. Tugs fitted with VHF. Bollard pull up to 28 tons.

BERTHING: Finger pier 800 m. long, berthing on both sides with 10 berths each of 150 m. in length for vessels up to 9 m. draft and 3 general cargo berths each 200 m. in length with depth of 10.9 m.

Three container berths (Berth Nos. 14, 15 and 16) each 200 m. in length and 10.9 m. depth equipped with 4 container handling gantry cranes up to 35 tons capacity with 38 m. outreach.

Berths for coastal vessels, length of quay 285 m. with depth of 7 m.

Small ro/ro ramp for vessels up to 5.5 m. draft. Width of ramp 15.5 m.

Each general cargo berth is provided with modern fork lift trucks, trailers and units to facilitate the movement of cargo.

Pallets are available to assist cargo handling. Shore mobile cranes of various capacities ranging up to 200 tons available from private companies. Cargo handling equipment of various types also available.

Storage Facilities: Storage facilities consist of 14 sheds (one of which is located in the container terminal area) having an area under roof of 1,000,000 sq.ft. in addition hard surfaced yards and the container terminal stacking/parking area provide extensive storage capacity.

Hyundai Jetty: Lat. 26° 11′ N., Long. 50° 39′ E. Length of jetty 175 m., depth alongside 9 m. Berthing permitted between 0600 and 1800 hrs.

GRAIN HANDLING: Two portable pneumatic suction/blowing units are used. Capacity 75 t.p.h. each. Wheat is discharged into 20 ton trailers, which takes about 8 to 12 minutes for each trailer.

STEVEDORES: Stevedoring gangs shall be ordered and paid for by ship's Agents.

Working Hours: The port will operate on a 2 shift basis 6 days per week. Additional work on Fridays and Public Holidays are subject to extra charges.

Saturday to Thursday – 0700 hrs. to 2300 hrs.

Working hours are subject to change at the discretion of the Port Authority. Requirements for Port Labour must be submitted by ship's Agents to the Port Authority by 1400 hrs. for work during the first shift on the following day and by 1000 hrs. on the same day for work on the second shift.

Special overtime to finish and sail a ship may be granted after 2300 hrs.

CRANES: Smit International Middle East, Bahrain, operates a floating crane 400 tons lifting capacity, which is tug-assisted for mobilisation voyages between the various Gulf ports where normal discharge of heavy lifts is being carried out.

Smit International Middle East, Mina Sulman Industrial Area Road nr. 4308, Gate nr. 423, P.O.Box 5510, Bahrain. Tel: 727201. Telex: 8659 Sime Bn.

Also see "Berthing".

MEDICAL: As per present local regulations all crew for medical treatment have first to be reported to the Public Health Department from where patient, if required, will be referred to Government hospital or specialists.

FRESH WATER: Well water available and can be delivered on berths at Deep Water Jetty at rate of approximately 20 t.p.h. per hose. Fresh water also available by barge with capacity of 300 tons.

FUEL: Bunkers available alongside in Mina Sulman and also provided by barge of 8,700 barrels capacity, which is owned by the Bahrain Petroleum Company. All usual grades of commercial oil available. 48 hours' notice required.

Gulf Agency Co. also able to supply fuel oil, marine diesel, gas oil and also intermediate grades at a premium.

GANGWAY/DECK WATCHMEN: Not customary to employ deck watchman.

IDENTIFICATION CARDS: These cards necessary for any crew member wishing to proceed ashore. Identification card is surrendered to Immigration Authorities at main entrance to port in return of a pass. On return to port, the pass is surrendered and seaman's identity card returned to him.

REPAIRS: Good facilities for both hull and engine repairs which can be effected by the two principal slipway companies. Facilities exist to receive single vessels of 1,000 d.w.t., and a tower crane capable of a 15 tons lift at 40 ft. Also see "Dry Dock".

SURVEYORS: Available on request through Agent.

DRY DOCK: *Asry Dry Dock:* The dry dock measures 375 m.×75 m., the bottom structure being strong enough for double dockings.

This is the first repair dock in the world specially designed for shallow draft VLCCs. With the sill beam at 9 m., it can accept vessels of 34 ft. draft.

Four dockside arms, two per side, give access to almost the entire surface of a VLCC hull for cutting, welding, shotblasting and cleaning/painting purposes, without the need for scaffolding.

Manoeuvring Basin: The manoeuvring basin dredged to 10 m. allows ships of up to 32 ft. draft to dock at any time. If necessary, ships may lie directly on the basin's sandy, levelled bottom.

Jetties: The 2 finger jetties are 170 m. long × 21 m. wide and can accommodate at least 4 large vessels for in-water repairs.

Mechanical Shop: The mechanical shop is equipped with 36 major machine tools, plus additional supporting services.

Plate Shop: The plate shop is equipped with 45 machine tools and portable equipment, plus additional supporting services.

Pipe Shop: The pipe shop is equipped with 26 machine tools and portable equipment, plus additional supporting services.

Electrical Shop: The repair capability in the electrical shop is summarised as follows:

Motor rewinding
Transformer and operating coil rewinds
Generators (main and auxiliary), large motors; strip, inspect, clean, replace bearings and rebuild
Rewiring (limited facility)
Switchboards: clean and repair
Motor controllers: find fault and repair
Air conditioning equipment: servicing and repair
Engine and bridge control panels (limited repair facility).

Navigational equipment (radar, DF, UHF, gyro compass, auto pilot, echo sounder) repairs are carried out by manufacturers' agents, who are fully represented in Bahrain.

Cranes: Four rail cranes of 15 tons lifting capacity and 75 m. outreach are located on the 2 finger jetties and adjacent to the dry dock. In addition, 1 rail crane of 100 tons lifting capacity and 61 m. outreach is located adjacent to the dry dock.

These five rail cranes cover about 90% of Asry's outdoor production area. For the remaining production areas, 4 mobile cranes each of 20 tons capacity and 2 hydraulic lifting platforms of 80 tons each are available.

Inside the workshops, overhead cranes of 6, 15, 25 and 160 tons lifting capacity are available.

Floating Crane: A floating crane of 200 tons lifting capacity, specially designed to reach any point on the deck or superstructure of a VLCC in ballast condition, is available. This lifting equipment is installed on a pontoon which has an overall length of 35.5 m. and a beam of 23 m. The crane is of the luffing type, which permits the height of the hook to be maintained while the outreach can be adjusted in travel.

Tugboats: The yard has a fleet of 6 tugboats, each of 32 tons bollard pull, which have been specially designed to manoeuvre large ships both in the yard and at sea.

Each tugboat has an overall length of 33 m. and a moulded beam of 8.5 m., with a draft fore and aft of 2.55 m. and 3.05 m. respectively.

The main engine is rated at 2,400 b.h.p. at 500 revs. per minute in accordance with DIN 6270A, and provides each tug with a normal free navigation speed of 12.5 knots.

Tank Cleaning Station: Asry's tank cleaning station is the 35,000 d.w.t. tanker "White Beach", which has been fully converted for the purpose. It is able to receive, by a continuous segregation system, slops, dirty ballast and tankwashing water at a rate of up to 1,500 t.p.h.

The cleaning station is fully equipped to supply steam, electrical power, distilled water and compressed air. Temporary storage of bunkers is also available.

Asry repaired vessels totalling 22 million d.w.t. in 1979.

120 vessels repaired in 1979, of which 72 were VLCCs.

Largest vessel so far to enter dry dock was 411,000 d.w.t.

Largest vessel to be repaired was 508,000 d.w.t.

Total workforce is 1,400 persons. Management is in the hands of Lisnave of Portugal.

REPATRIATION: It is possible for whole crews or just individual crew members to join or leave vessels at Bahrain. As much notice as possible should be given to Agents to enable arrangements to be made for their reception, hotel accommodation and transportation.

AIRPORT: Bahrain International Airport regularly served by main international airlines, with frequent services to Europe, U.S.A., Far East, and Australia. Also frequent inter-Gulf flights.

TIME: GMT plus 3 hours.

HOLIDAYS: Public holidays in accordance with Muslim calendar as follows: 3 days during Ied Al Fittr; 3 days during Ied Al Adha; 3 days during Muharram; 12th R'Awal Prophet's Birthday; Accession of H.H. The Ruler, 16th December; 25th December; 1st January. Apart from 6 days, two during each of the religious anniversaries, all holidays will be worked in the port as on Fridays, the Sabbath day.

TELEPHONES: Can be provided at each berth on Deep Water Jetty. In case of emergency, dial 79 for ambulance; 77 for Duty Police Officer; 75 for Fire Brigade.

SERVICES: Bahrain well provided for services including repairs, stores and supplies, fumigation surveys, adjustments, radar and gyro compass repairs, professional diving, and underwater brushing.

SHORE LEAVE: Permitted.

AUTHORITY: Ministry of Finance, Customs and Ports Directorate, P.O.Box 453, Bahrain. *Tel:* 243555. *Telex:* 8642 Mina Bn. 8643 Harbour Bn. *Cables:* Stateport. *Contact:* Captain J. A. Duck, Harbour Master. Eid Abdullah Yusuf, Port Director.

AGENT: Gulf Agency Co. (Bahrain) W.L.L., Awal Building, 1st Floor, Government Road, P.O.B. 412, Manama, Bahrain. Cables: "Confidence". Tel: 254228, 243381. Telex: 8211 (A/B "GAC BN").

SITRA: 26.09 N. 50.40 E. (See Plan Book)

PORT LIMITS: A vessel is normally considered to be an "arrived vessel" when the vessel passes due South of Sitra Beacon, unless she has been instructed to anchor in the deep water S.E. of No. 27 Buoy. Also see "Loading/Discharging".

The Port of Sitra is an open roadstead situated on the N.E. side of Bahrain. Some protection is afforded to the anchorage during the prevailing N..W. wind by Muharraq Island and outlying reefs which lie to the North of the anchorage.

During Southerly winds some protection is also afforded by outlying reefs and sandbanks which lie to the Eastward of Bahrain Island. Prolonged winds from an Easterly or S.E'ly direction make the anchorage uncomfortable for small vessels.

SPECIAL FEATURES:

1. There are 6 oil loading berths for ocean-going vessels at the Port of Sitra, and in addition one berth where small vessels of up to 240 ft. in length and 16 ft. draft may be berthed. The Alba Island Terminal has a jetty with 2 berths; nominally the outside berth being for bulk carriers unloading coke and alumina ore and the inside berth being for vessels loading metal products.

2. Company Mooring Masters advise and assist Masters in berthing, unberthing, mooring and navigating their vessels in the port.

3. All incoming vessels scheduled to load or discharge at either BAPCO or ALBA facilities should establish radio contact with BAPCO via "Cable & Wireless" at Manama, Bahrain, at least 48 hours prior to arrival giving a firm ETA, arrival draft and the requirements if any for bunker fuels. (See "Radio").

4. The laws of Bahrain are in force at Sitra and crew members are advised, for their own protection, to abide by them.

5. All vessels must display international quarantine signals when approaching Sitra and keep them displayed until pratique is granted. The national flag of Bahrain is to be flown at the foremast head during the vessel's stay in the port.

6. Safety is a prime concern and Masters must comply with all Safety Regulations pertaining to the port.

DOCUMENTS: Crew List 3 copies. Passenger List 3 copies. Customs Declaration 2 copies. Health Declaration 2 copies. Log Book for Inspection by Customs Officers.

Cargo and bunker documents are delivered to the vessel as soon as possible after the vessel has been cleared on quantity and quality. Delays are sometimes incurred. As a result, the Company reserves the right to unberth a vessel and deliver documents by launch so as to minimize berthing delays to subsequent vessels.

Early Departure Procedure (E.D.P.) is available on Master's request.

The Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution: All tankers carrying or loading/discharging at Sitra Wharves any persistent hydrocarbon mineral oil, such as crude oil, fuel oil, heavy diesel oil and lubricating oil, whether or not carried as cargo, shall be in possession of a TOVALOP (Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution) Certificate.

PILOTAGE: Pilotage is not provided between Bahrain Light Vessel and Sitra Anchorage.

Harbour Pilotage: Under no circumstances shall any vessel, irrespective of size, be allowed to berth alongside Company wharves unless a Company Mooring Master is on board and correct documentation signed. A Company Mooring Master shall also be on board a vessel for the unberthing operation, however, under special circumstances, certain vessels may be allowed to unberth without a Company Mooring Master on board, providing the Mooring Master has given permission immediately prior to unberthing. The services of the Company Mooring Masters are provided without charge. Mooring Masters are embarked at a position 0.5 miles South of Sitra Beacon.

The Mooring Master will decide on the number of tugs to be used in berthing and unberthing operations. Normally, 2 tugs are used in each instance.

Boarding: The Company Mooring Master may board the vessel from either a pilot cutter, tug or a tow-boat displaying the normal pilot vessel signals.

If no berth is available, vessels should anchor in the prescribed anchorage until such time as a berth is available. Every endeavour will be made to give the Master berthing instructions prior to the boarding of the Mooring Master, and to this end, Masters are requested to maintain a continuous watch on the VHF. In cases where it is impossible to give prior berthing instructions, the Master and Chief Engineer are requested to co-operate with the Company by getting the vessel's engines ready for use with the least possible delay.

APPROACHES: Without accepting any responsibility, the following suggestions are made by Bapco marine staff, for the benefit of Masters not familiar with approaches to Sitra.

The courses inbound will depend upon draft of the vessel. Masters of vessels wishing to utilise the "Deep Water Departure Channel" should follow reciprocal of courses described for "Deep Water Departure Channel".

Masters of vessels with drafts of less than 30 ft. are requested to *Keep Clear* of this channel, and use "Sitra Inward" Buoy as follows.

(a) Under 30 ft. Draft

(i) From a position (Lat. 26° 27.8′ N., Long. 51° 00′ E.) 2.5 miles S.E. of No. 3 Beacon (Lat. 26° 28.5′ N., Long. 50° 57.4′ E.) a course should be set to position 0.75 miles North of "Sitra Inward" Buoy (Lat. 26° 21.2′ N., Long. 50° 49.7′ E.) leaving the "Caisson Wreck" Buoy (Lat. 26° 24.2′ N., Long. 50° 52.7′ E.) at least 0.5 mile to starboard.

(ii) From position 0.75 mile North of "Sitra Inward" Buoy a course should then be set towards No. 16 Buoy (Lat. 26° 12.9′ N., Long. 50° 46.3′ E.).

(iii) When the vessel has reached a position with No. 16 Buoy, 1.5 miles ahead, course can be adjusted to due South, passing Westwards of "Vidal" Buoy (Lat. 26° 14.1′ N., Long 50° 47.2′ E.) until "Sitra Beacon" bears due West. The course can then be altered to pass South of No. 18 Buoy (Lat. 26° 10.3′ N., Long. 50° 43.9′ E.), and thence to Sitra Anchorage, thus keeping clear of the deep water channel.

(iv) All vessels, with the exception of coastal tankers, coastal freighters and tugs, should proceed to an *anchorage 1 mile South of No. 27 Buoy* until instructed by either Sitra Port Control, Asry Port Control or Mina Sulman Port Control. If permission is granted to proceed to Sitra Anchorage for special purposes, such as discharging into barges, loading bunkers by barge, etc., the vessel should proceed to anchor *North of an imaginary line joining Sitra Middle Ground Buoy and the Sitra Beacon.* The Sitra Middle Ground Buoy is the buoy 4 cables to the N.E. of BAPCO's Island Jetty. The above line delineates the Southern Limit of the anchorage, the Departure Channel is then kept clear for deep-drafted vessels entering and leaving the ports.

(v) The colours of beacon structures and buoys are often obliterated by Guano.

(b) Deep Water Departure Channel

(i) The following "Alteration of Course" positions are based upon a radius of turn of 5 cables. This may necessitate an increase in engine revolutions, together with full helm, on some vessels.

(ii) The Company Mooring Master unberthing the vessel will normally leave vessel after having crossed the Sitra Middle Ground Bar; and with the vessel proceeding to pass 2 cables South of "Sitra Beacon" (Fl. 3.3 sec.) and close North of No. 18 Buoy (Qk. R.).

(iii) When No. 18 Buoy comes abeam, course should then be altered to 090° (T) which will bring Sitra Beacon dead astern, bearing 270° (T).

(iv) As No. 27 Buoy (V. Q. (6) + L. Fl. 10 sec.) comes abeam to port, course should be altered to 022° (T), until Buoy Nos. 21, 23 and 25 are sighted in line, bearing 344° (T), whence course should be altered to 344° (T).

(v) On course 344° (T) Buoy No. 25 (Fl. G. 5 sec.) and Buoy No. 23 (Q. G.) will be passed close on the port side and Buoy No. 16 (Fl. Y. 6 sec.) a "Special Port Hand Mark" on the starboard side.

(vi) As No. 21 Buoy (V. Q. (3) 5 sec.) comes abeam to port, course should be altered to 015° (T), which should bring Buoy No. 12 dead ahead and Buoy No. 21 dead astern. The bearings of these buoys should be watched closely to gauge and correct for cross set which is sometimes quite strong on this course and the next. On this course No. 14 Buoy (Fl. Y. 10 sec.) will be left to starboard.

(vii) On No. 19 Buoy (Fl. G. 3 sec.) coming abeam, course should be altered to 002° (T) bringing Buoy No. 15 (Occ. G. 5 sec.) dead ahead. Buoy No. 12 (Fl. Y. 2 sec.) will then be left close to starboard and No. 17 Buoy (Q. G.) will be left to port.

(viii) In order to pass over a cable Eastwards of Buoy No. 15, course should be altered to 016° (T) as Buoy No. 10 (Fl. (3) Y 10 sec.) comes abeam to starboard and then altered to 356° (T) as Buoy No. 15 comes abeam to port. This course would pass 3.5 cables West of Bahrain Approach Buoy position. It may be advisable to reduce engine revolutions shortly after steadying on course 356° (T), in order to be able to increase if required to provide better steerage on rounding the beacon.

(ix) When the Bahrain Approach Buoy bears 051° (T) course should then be altered to 051° (T). As this heading is approached, it should be found that Buoys No. 8 (Fl. R. 2 sec.) and No. 6 (Fl. (3) R. 6 sec.) are in line to starboard, as Bahrain Approach Buoy comes abeam at 2.5 cables, and then should commence to open. Buoys No. 13 (Fl. G. 5 sec.) and No. 11 (Q. G.) are parallel to the course on the port side of the vessel, give clearance of the 43 ft. patches and give the extent of the bar which should be traversed at Slow Speed.

(x) On No. 11 Buoy coming abeam to port, course should be altered to 054° (T) passing between No. 9 Buoy (Fl. G. 10 sec.) and Buoy No. 4 (Q. R.), followed by Buoy No. 7 (Fl. G. 5 sec.) to port.

(xi) When Buoy No. 2 (Fl. (2) R. 10 sec.) bears East, course should be altered to 071° (T) to pass close South of Buoy No. 5 (Fl. G. 3 secs.).

(xii) Buoy No. 5 should be close abeam to port, when the course is altered to 057° (T) and speed reduced to cross the spit which extends in a Southerly direction from No. 3 Beacon (Fl. 6 sec.) in a minimum depth of 43 ft. 6 in. at Chart Datum.

(xiii) When Buoy No. 1 (Q. G.) bears 040° (T), course should be altered to 040° (T) bringing the Bahrain Light Vessel (Gp. Fl. (3) 20 sec.) on the starboard bow. 1.5 miles after Buoy No. 1 has been left to port, the minimum depth of water is greater than 50 ft., and it is safe to go full ahead.

(xiv) Masters can expect to have to make adjustments from time to time, to the recommended courses, due to set. Effects of tide and current should be watched for at all times.

Sitra Channel Marks:

Bahrain Light Vessel	26° 33′ 00″ N. 51° 03′ 30″ E.	A light vessel painted Red with the word 'Bahrain' in white on both sides of the vessel.	Gp. Fl. (3) every 20 secs. Range 15 miles. Racon.
No. 1 Buoy	26° 28′ 39″ N. 50° 58′ 30″ E.	Starboard hand buoy, Green conical.	Quick Green.
No. 2 Buoy	26° 25′ 58″ N. 50° 52′ 56″ E.	Port hand buoy, Red can.	Gp. Fl. (2) Red every 10 secs.
No. 3 Beacon	26° 28′ 30″ N. 50° 57′ 21″ E.	Black framework tower 47 ft. high with Radar Reflector.	Fl every 6 secs. Geographical Range: 12 miles.
No. 4 Buoy	26° 23′ 41″ N. 50° 49′ 14″ E.	Port hand buoy, Red can.	Quick Red.
No. 5 Buoy	26° 27′ 06″ N. 50° 56′ 11″ E.	Starboard hand buoy, Green conical.	Fl. Green 3 secs.
No. 6 Buoy	26° 22′ 26″ N. 50° 47′ 21″ E.	Port hand buoy, Red can.	Fl. Red every 6 secs.
No. 7 Buoy	26° 24′ 56″ N. 50° 50′ 57″ E.	Starboard hand buoy, Green conical.	Fl. Green 5 secs.
No. 8 Buoy	26° 22′ 12″ N. 50° 47′ 00″ E.	Port hand buoy, Red can.	Fl. Red every 2 secs.
No. 9 Buoy	26° 23′ 47″ N. 50° 48′ 53″ E.	Starboard hand buoy, Green conical.	Fl. Green 10 secs.
No. 10 Buoy	26° 17′ 50″ N. 50° 46′ 32″ E.	Port hand buoy, special Yellow can.	Fl. (3) Yellow every 10 secs.
No. 11 Buoy	26° 22′ 43″ N. 50° 47′ 30″ E.	Starboard hand buoy, Green conical.	Quick Green.
No. 12 Buoy	26° 16′ 44″ N. 50° 46′ 28″ E.	Port hand buoy, special Yellow can.	Fl. Yellow every 2 secs.
No. 13 Buoy	26° 22′ 13″ N. 50° 46′ 48″ E.	Starboard hand buoy, Green conical.	Fl. Green 5 secs.
No. 14 Buoy	26° 14′ 42″ N. 50° 46′ 00″ E.	Port hand buoy, special Yellow can.	Fl. Yellow every 10 secs.
No. 15 Buoy	26° 18′ 16″ N. 50° 46′ 22″ E.	Starboard hand buoy, Green conical.	Occulting Green every 5 secs.
No. 16 Buoy	26° 12′ 52″ N. 50° 46′ 17″ E.	Port hand buoy, special Yellow can.	Fl. Yellow every 6 secs.
No. 17 Buoy	26° 16′ 59″ N. 50° 46′ 05″ E.	Starboard hand buoy, Green conical.	Quick Green.
No. 18 Buoy	26° 10′ 15″ N. 50° 43′ 53″ E.	Port hand buoy, Red can.	Quick Red.
No. 19 Buoy	26° 15′ 54″ N. 50° 46′ 00″ E.	Starboard hand buoy, Green conical.	Fl. Green 3 secs.
No. 21 Buoy	26° 13′ 52″ N. 50° 45′ 41″ E.	East Cardinal Black Yellow Black Pillar.	Every Quick (3) 5 secs.
No. 23 Buoy	26° 12′ 37″ N. 50° 46′ 05″ E.	Starboard hand buoy, Green conical.	Quick Green.
No. 25 Buoy	26° 11′ 47″ N. 50° 46′ 21″ E.	Starboard hand buoy, Green conical.	Fl. Green 5 secs.
No. 27 Buoy	26° 10′ 28″ N. 50° 45′ 32″ E.	South Cardinal Yellow Black Pillar.	Very Quick (6) + L Fl. 10 secs.
Caisson Wreck Buoy	26° 24′ 14″ N. 50° 52′ 40″ E.	South Cardinal Yellow Black Pillar.	Quick (6) + L Fl. 15 secs.
Sitra Inward Buoy	26° 21′ 03″ N. 50° 49′ 41″ E.	West Cardinal Yellow Black Yellow Pillar	Quick (9) 15 secs.
Vidal Buoy	26° 14′ 04″ N. 50° 47′ 10″ E.	Port hand buoy, Red can.	Fl. (2) Red every 10 secs.
Bahrain Approach Buoy	26° 21′ 38″ N. 50° 46′ 40″ E.	West Cardinal Yellow Black Yellow Pillar.	Very Quick (9) 10 secs.
Sitra Beacon	26° 10′ 20″ N. 50° 42′ 51″ E.	Black framework tower 50 ft. high, with Radar Reflector & Racon.	Fl. every 3.3 secs. Range: 11 miles.
Sitra Beacon Guard Buoy	26° 10′ 16″ N. 50° 42′ 51″ E.	Starboard hand buoy, Green conical.	Fl. Green 3 secs.
South Shoals Beacon	26° 09′ 25″ N. 50° 41′ 47″ E.	Pile structure, 20 ft. high.	Gp. Fl. (2) Red 4 secs.
North Range Beacon	26° 10′ 02″ N. 50° 39′ 55″ E.	Pile structure, 20 ft. high.	Fl. Red Green 2½ secs.
South Range Beacon	26° 09′ 18″ N. 50° 41′ 01″ E.	Pile structure, 20 ft. high.	Fl. Red every 4 secs.
Sitra Middle Ground Buoy	26° 10′ 01″ N. 50° 40′ 33″ E.	South Cardinal Yellow Black Pillar.	Very quick (6) + L. Fl. 10 secs.
Seistan Wreck Buoy	26° 09′ 22″ N. 50° 43′ 12″ E.	North Cardinal Black Yellow Pillar.	Very Quick Fl.
Alba Beacon	26° 09′ 14″ N. 50° 40′ 23″ E.	Pile structure, 20 ft. high.	Scintilating Fl. Green.

ANCHORAGE: The whole of the navigable waters to the West of Sitra Beacon are restricted for anchorage unless specific permission has been granted. The area South of an imaginary line joining Sitra Beacon and Sitra Middle Ground Buoy is the fairway to Mina Sulman, and the approaches to BAPCO and ALBA wharves and as such *anchorage is prohibited.*

The area to the North of an imaginary line joining Sitra Beacon and Sitra Middle Ground Buoy is an anchorage, bounded on the North by Asry Drydock where coastal tankers, coastal freighter, tugs, vessels' working barges and bunker barges may anchor after specific permission has been granted. This area is also the approaches to the Asry Drydock and vessels should not immobilise their engines without having received written permission from a Port Authority.

Masters of all vessels are requested to maintain a continuous watch on the VHF Channel 16.

Caution: Due to the presence of pipes and power lines, anchoring or the use of anchors is prohibited in the vicinity of or between No. 1 (Island) Wharf and No. 2 Wharf except upon the advice of a Company Mooring Master.

MAX. SIZE: *Bapco Terminal:* See "Oil Wharves".

Special Conditions for Vessels Over 80,000 d.w.t.:

Vessels from 80,000 to 110,000 d.w.t. will only be moored on Berths 5 & 6 providing the following conditions are met:

1. Maximum berthing displacement 71,500 tons.
2. Maximum overall length 900 ft.
3. Maximum distance from Manifold to Bow or Stern 475 ft.
4. To have segregated permanent ballast system of at least 15% of d.w.t. This ballast to be retained until loading commences, then discharged balancing loading rate, 12,000 – 16,500 tons.
5. To have the propeller covered and a trim of 12 ft. to 15 ft.
6. Mooring to consist of 7 lines at each end, 3 Bow/Stern lines to Outer Mooring Dolphins, 2 Quarter lines to Inner Mooring Dolphins, 2 Backsprings to Breasting Dolphins.

Alba Marine Facilities: Up to 35,000 tons d.w.t.

LPG Vessels: Max. size of vessel is limited to 48,000 d.w.t. (75,000 cu.m.)

RESTRICTIONS: Berthing carried out night and day.

Explosives: Merchant vessels carrying explosives not permitted to enter the Sitra Anchorage unless permission has been granted and anchorage allocated. The Masters of such vessels are advised to anchor in a position 2 miles due East of South Shoals Beacon, as shown on the British Admiralty charts and depicted on the chartlets included in the Sailing Directions. Merchant vessels carrying explosives are NOT allowed alongside the oil wharves.

Tidal Information:

The Standard Port for the area is Mina Sulman.

No.	Place	High Water Mean Springs	High Water Mean Neaps	Low Water Mean Springs	Low Water Mean Neaps
		Standard Port		Standard Port	
4252	Mina Sulman	2.4 m. (7.9 ft.)	1.9 m. (6.2 ft.)	0.6 m. (2.0 ft.)	1.0 m. (3.3 ft.)
		−0030 hours		−0030 hours	
4251	Sitra	2.2 m. (7.2 ft.)	1.7 m. (5.6 ft.)	0.3 m. (1.0 ft.)	0.8 m. (2.6 ft.)
		−0037 hours		−0037 hours	
4250a	Bahrain Approach Buoy	2.1 m. (6.9 ft.)	1.7 m. (5.6 ft.)	0.4 m. (1.3 ft.)	0.8 m. (2.6 ft.)

The Deep Water Channel between Sitra Anchorage and Bahrain Light Vessel has minimum depth in the shoaler areas, of 43 ft. 6 in. at Chart Datum. This permits unrestricted use of channel for vessels drawing up to 40 ft.

For vessels with drafts in excess of 40 ft., the following conditions will apply:

a. *Between 40 ft. and 42 ft. draft.*
   Neap Tides: Vessels can navigate the channel at all stages of the tide.
   Spring Tides: Tidal sailings will apply, utilising the rise of tide, so as to pass through the shoaler areas between Bahrain Approach Beacon and No. 3 Beacon over the high water period at reduced speed.

b. *Between 42 ft. and 44 ft. draft.*
   It is mandatory to utilise the tidal ranges in order to safely clear the shoaler areas, mentioned above. These areas should be traversed at a reduced speed.

Masters of departing vessels requiring to utilise the rise of tide, to cross the bar N.E. of Bahrain Approach Buoy, and that South of No. 3 Beacon should be underway, passing Sitra Beacon not later than *3.5 hours before* the next predicted *High Water* at *Mina Sulman,* or at a time not later than that which would allow vessels to make the passage between Bahrain Approach Buoy and No. 3 Beacon at a reduced speed of 8 knots, having the full benefit of the tide, and passing Bahrain Approach Buoy *1.5 hours* before predicted *High Water* at *Mina Sulman.*

RADIO: The Company does not operate a coast radio station, long-distant radio communication being routed through Cable and Wireless Coast Station "Bahrain Radio" "A9M" of Manama, Bahrain, upon which a regular watch should be maintained. The cable address is "Bapcoship Bahrain". When within 50 miles of Bahrain, communication should be established with "Bapco Terminal", by VHF.

All communications to the Company should be quoted in GMT, and the appropriate letters, GMT, inserted after the time.

Bahrain Radio (A9M)

Type	*Time*	*Frequencies in kHz* *Calling*	*Working*	*Listening*
W/T, M/F	Continuous	500	487, 442, 516	500, 480, 454, 468
W/T, H/F	Continuous	4302	4284	4181.2 - 4182.4
	0300 - 1700	8448	8454	8362.4 - 8364.8
	0400 - 1700	12709	12698	12543.6 - 12547.2
	0400 - 1700	17175.2	17169	16724.8 - 16729.6
	0700 - 0800	17169	17169	16724.8 - 16729.6
	1245 - 1315	17169	17169	16724.8 - 16729.6
R/T, M/F	Continuous	2182	2607, 2656, 3745	2182 and as requested
R/T, H/F	Continuous	4125		4125
			4394.6	4100.2
	Continuous	6215.5		6215.5
	By W/T arrangement		8718.9	8195
			8734.6	8210.5
			13125.6	12354.8
			17285.6	16512.7
R/T, VHF	Continuous	Ch. 16	Ch. 26, 27, 82, 84	Ch. 16, 26, 27, 82, 84
Telex	On demand		4350	4170
	Continuous		8716	8355
	Continuous		13086.5	12506.5
	Continuous		17202	16665

Masters of vessels having business with Bapco, may contact Bapco by Telex through A9M, on Telex: 8218 BN (Answerback being BAPSHP) but messages to the vessel from BAPSHP will all be relayed through to Bahrain Radio for onward transmission.

Sitra Port Control

Call sign "Bapco Terminal".

R/T, VHF	Continuous	Ch. 16	Ch. 6, 8, 9, 12, 14
R/T, H/F	On demand	2182	2182, 2621, 2806

Masters of all vessels are requested to maintain a continuous watch on VHF Channel 16.

All vessels are requested to keep "Bapcoship Bahrain" fully advised regarding estimated times of arrival. It is requested that vessels provide "Bapcoship Bahrain" (Telex No. 8218 BN) with an ETA and arrival and departure drafts, last 3 ports of call and dates, total number of crew and nationality, not later than 72 hours steaming time from the port of Sitra. Agent to give Coast Guard 72 hours notice of ETA.

A separate radio message should be sent to the Government Port Health Officer, Bahrain, advising last bill of health and present health conditions on board.

The Radio and Radar equipment of any vessel must *not* be operated whilst alongside Company wharves.

VHF: See "Radio" and "General" before first port. VTM System in operation.

HEALTH: Bahrain Port Health Regulations based on International Sanitary Regulations adopted by World Health Organisation, May 1951.

In accordance with International practice, quarantine signals must be prominently displayed by all vessels approaching the port of Sitra.

Pratique is granted by the Pilot, however Master is to supply Health Declaration when vessel is being cleared.

No person, excepting Agents' Representatives and Mooring Masters, are permitted to leave or board a vessel until Pratique has been granted.

Rat guards should be properly placed on all mooring ropes as soon after berthing as practicable.

The port of Sitra is not classed as a "Plague Port" but all crew members must have in their possession valid certificates of vaccinations and inoculations against cholera in accordance with current Health Regulations.

The Bahrain Government Port Health Officer has an office on Sitra Causeway Pierhead and is available by arrangement through vessel's Agent. The Port Health Officer, in addition to official duties, will provide consultation and treatment for other than quarantine purposes.

Deratisation and Deratisation Exemption Certificates are obtainable in Bahrain. Requests should be made through the vessel's Agent.

TUGS: The assistance of Company tugs is normally available on a 24 hour basis.

When assisting in berthing and unberthing operations, the tugs are under the direct orders of the Mooring Master.

The Company normally has 2 tugs on station. Each tug is fitted with fire pumps and monitors and can provide limited assistance fighting fires.

The Mooring Master will decide upon the number of tugs to be used in berthing and unberthing operations. Normally, 2 tugs are used in each instance.

If the assistance of a tug is required for purposes other than berthing or unberthing, the request should be directed to the Port Captain, Sitra, via the vessel's Agents.

Towboats: Normally there are 3 tow-boats of 365 h.p. on station. Primarily intended for other harbour duties, these tow-boats are available for assisting in the berthing/unberthing of the smaller class of vessel.

BERTHING: Under normal circumstances, berthing and unberthing operations are conducted on a 24 hour basis at the discretion of the Mooring Master; wind, weather, tide and other circumstances permitting.

Full power must be available on the main engines and the vessel must be sufficiently ballasted during berthing operations. Mooring Masters will decline to berth vessels if they are not properly equipped with satisfactory mooring lines, or if deck appliances are inoperable, or if steering gear, telegraphs and whistles are not in an efficient condition. Anchors and cables should be cleared ready for letting go. The Master should notify the Mooring Master of any defects or peculiarities pertaining to his vessel.

Minimum Manoeuvring Drafts for Tankers: Due to the exposed location of the wharves, vessels are required to be sufficiently ballasted with clean ballast water before coming alongside.

Minimum tanker drafts normally acceptable are:

Deadweight-tonnage	*Feet* F.	*Feet* A.	*Metres* F.	*Metres* A.
16,000 to 20,000	12	20	3.60	6.00
20,000 to 30,000	13	21	4.00	6.40
30,000 to 40,000	14	22	4.20	6.70
40,000 to 50,000	15	24	4.60	7.30
50,000 to 60,000	16	25	4.80	7.60
60,000 to 70,000	16	26	4.80	7.90
70,000 to 80,000	17	26	5.20	7.90
80,000 to 110,000	17	27	5.20	8.20

Ballast draft should be sufficient to completely immerse the propeller. Mooring Masters may decline to berth vessels if they are not sufficiently ballasted.

Handling Mooring Lines: The Company provides a shore gang for handling mooring lines on the wharves. This service is directed by the Company personnel on the wharf.

Vessels berthing at the wharves must be equipped with *at least* 5 lines forward and 5 lines aft, in addition to backsprings fore and aft. These lines must be sufficient length to enable moorings to be "doubled up" in bad weather. Method of mooring at discretion of the duty Mooring Master.

OIL WHARVES: Two wharves, which lie 146° – 326°, have been constructed to handle the main petroleum products produced by the Company, with a wharf lying 023° – 203° for coastal tankers in special services.

Whilst the main petroleum products, together with bunkers (fuel oil, marine diesel and gas oil) are available at all berths, the following specialities are handled on particular berths:

Asphalt, Berths 2, 4, 7; Refrigerated L.P.G. (Vapour Return/Loading Arm), Berth 1; Refrigerated L.P.G. (Vapour Return/Loading Arm), Berth 2; Caustic/T.E.L. imports, Berth 4; Drummed Asphalt, Berth 4; Blended Bunker Fuel Oil, Berths 2, 4.

No. 1 Island Wharf: No. 1 (Island) Wharf consists of 1 main central platform supported on steel piles with 4 inter-connected mooring dolphins, 2 positioned to the North-West and 2 to the South-East; giving the wharf an overall length of 923 ft. This wharf, which is supplied by submarine pipe-lines, provides 2 berths protected by 4 breasting dolphins each side.

Depths at this wharf are as follows:

Berth No. 5	46 ft. at Chart Datum Max. draft, 44 ft.	(14.03 m.)
Berth No. 6	43 ft. 6 in. at Chart Datum Max. draft of 44 ft. permitted only under suitable tidal conditions	(13.26 m.)

Length limitations for these berths are 900 ft. with a maximum distance from manifold to ends of 475 ft. Owing to the breasting dolphin arrangement, the shortest tanker must exceed 540 ft. and no freighters are handled on these berths.

The maximum size of vessel berthed is 71,500 tons displacement, which approximates to 110,000 d.w.t. in ballast.

Also see "Max. Size".

No. 2 Wharf: No. 2 wharf is a pile driven 'T' head structure with 3 interconnected dolphins, 2 positioned to the N.W. and 1 to the S.E., giving the wharf an overall length of 1,666.5 ft., and providing four berths, 2 on the outside and 2 on the inside. Both outside berths (Nos. 1 and 2) and the N.W. inner berth, No. 3 are protected by berthing beams. This wharf is connected to the mainland by a causeway 3 miles in length.

Depths at this wharf are as follows:

Berth No. 1	42 ft. at Chart Datum Max. Draft 40 ft.	(12.801 m.)
Berth No. 2	42 ft. 6 in. at Chart Datum Max. Draft 40 ft. 6 in.	(12.954 m.)
Berth No. 3	39 ft. at Chart Datum Max. Draft 34 ft. but 36 ft. may be permitted under suitable tidal conditions.	(11.887 m.)
Berth No. 4	39 ft. at Chart Datum Max. Draft 34 ft.	(11.887 m.)

The length limitations are as follows:

Berths 1 & 2	Normally 820 ft., but may be exceeded depending upon the configuration of the vessel and the vessel utilising the other berth.	(250 m.)
Berth No. 3	560 ft.	(170 m.)
Berth No. 4	550 ft.	(167 m.)

The maximum berthing displacement on berths 1 and 2 is 58,000 tons, which approximates to 80,000 d.w.t. The maximum berthing displacement on Berth 3 is 33,000 tons, which approximates to 25,000 d.w.t. of cargo import.

Coastal Tanker Wharf: This wharf which lies 023° – 203°, is limited to vessels of under 240 ft. in length and less than 16 ft. (4.90 m.) draft. The wharf is a pile driven structure connected by a catwalk to the causeway. At its N.N.E. end there is a warping dolphin and it is protected on its Eastern side only, with a berthing beam.

This wharf handles bunkers (diesel gas oil, marine diesel and fuel oil), bulk asphalt and LPG only.

REFRIGERATED L.P.G. LOADING:

General: Butane and propane are stored at Sitra storage tanks at 0.5 PSIG, and +23°F. and −43°F. respectively. Maximum storage capacity is 188,000 bbls. per product.

Product is pumped to the loading arms via a 16 in. insulated loading line by 2 pumps, each with a capacity of 5,000 b.p.h. There is a 10 in. vapour return line. The vapour return line can be routed to a tank or to flare as required.

The loading line and the vapour return line are in the configuration as per plan (see Plan Book – Sitra Wharf No. 2). Loading and vapour return operations are accomplished via chiksan type arms, the arms having 12 in., 150 A.S.A. rating, and 8 in., 150 A.S.A. rating flanges respectively.

Atmospheric venting is not permitted alongside the wharves. Vessels which are "hot" will be required to load a quantity of coolant, unberth and purge and cool down at the designated anchorage.

Refrigerated L.P.G. loading is only carried out at No. 1 and 2 berths.

Communications: Vessels intending to load L.P.G. at Sitra will be contacted approximately 72 hours prior to arrival, and will be required to furnish the following information:

1. ETA at No. 27 Buoy.
2. Arrival draft, departure draft and berthing displacement.
3. State of readiness to berth/load, and composition of vapours in ship's tanks.
4. Disposition of cargo to load and maximum rate and order of loading.
5. Cargo presently on board the vessel.
6. Length overall and position of manifold and liquid/vapour return lines.

This information should be updated every 24 hours or sooner should any major alterations to the original be made.

VHF radio contact should be established with Sitra Port Control as soon as possible to obtain the latest berthing schedule.

Procedure for Arrival: Upon establishing VHF communications, vessels should pass to the Port Control their intended passage from Bahrain Light Vessel to No. 27 Buoy. As far as possible vessels will be kept informed of any adverse traffic conditions or navigational hazards existing within the area.

Should the berth be unavailable for any reason, vessels will be directed to the Sitra Holding Anchorage, which is 1 mile South of No. 27 Buoy, or as near to that position as is practicable. Vessels carrying out cooling down procedures will also use this designated anchorage.

LPG vessels will not under normal circumstances use the Sitra Inner Anchorage but if the occasion arises then permission must be first obtained from the Port Captain, Sitra.

Berthing and unberthing operations are at all times governed by prevailing weather conditions and the larger freeboard of LPG vessels will be taken into account when considering berthing prospects.

Mooring arrangements will be generally similar to those outlined (see "Berthing"), but particular attention will be paid to extra moorings should any warnings of imminent weather change be received.

BALLAST: The discharge of dirty ballast within the territorial waters to Bahrain is strictly prohibited. As a further measure to avoid pollution by oil of the Marine environment, Masters of tankers are requested not to pump any oil overboard within the Gulf area.

Vessels should arrive with all ballast clean.

In special circumstances limited quantities up to 200 tons slops may be accepted at a certain charge per barrel. The use of these facilities is entirely at vessels risks.

In the event of a vessel spilling oil in Sitra harbour the Company will, at its discretion, clean up the oil and recover costs by charging the vessel.

ALBA WHARF FACILITIES: The "Alba" Wharf is a pile driven, inverted "L" shaped structure 562 ft. long with a reinforced concrete decking. A mooring dolphin is situated 165 ft. to the North West and a warping/mooring dolphin 197 ft. to the South East. These dolphins give the wharf an overall length of 924 ft.

Depths at this wharf are as follows:

Seaward berth: 34 ft. at Chart Datum (10.35 m.), 36 ft. at MLW (11 m.);
Inner berth: 30 ft. at Chart Datum (9.1 m.), 31 ft. at MLW (9.4 m.).

Alba provide 2 shore springs which must be taken aboard upon completion of ships mooring at the inside berth.

The seaward berth is provided with berthing heads to accept vessels of up to 35,000 d.w.t. while the landward berth is designed to accept vessels of up to 12,000 d.w.t.

Loading and Unloading Facilities: Bulk carriers will be unloaded on the outside or seaward berth by two 10 ton capacity grab equipped cranes.

Metal exports will be loaded at the inner or landward berth using ship's gear or, possibly, at the seaward berth when the jetty cranes may be used.

Due to the exposed location, vessels alongside the inner berth may experience considerable surging in rough weather and a careful watch should be kept on mooring ropes.

Services: Vessels using Alba Marine facilities are assisted by Bahrain Petroleum Company Limited Mooring Masters and tugs. Transportation between the Alba jetty and mainland must be provided by Agents.

Operators: Company cable address is "Metalba Bahrain".

AISCO JETTY: *Jetty:* Length 300 m. Depth alongside 13.7 m.

Approaches: Turning basin and main channel dredged to 13.7 m. Max. width of turning basin 700 m.

Max. Size: LOA 300 m. Beam 45 m. 100,000 d.w.t. Vessels loading part cargo only of approx. 60,000 tons.

Cargo Handling: 2 Shore Grab Cranes, each with capacity 1,500 t.p.h. Max. outreach from jetty edge 26.0 m.

MEDICAL: Advance notice to Agents preferable. Good hospital and medical facilities.

Emergency hospital cases will be treated as such, and will be handled by the vessel's Agent or by Company facilities, whichever is first available. Under normal conditions, the vessel's Agent should handle all personnel from vessels other than "Company" vessels.

Heat exhaustion. Experience over many years has shown incidence of heat stroke and heat exhaustion cases among the crews of vessels visiting Bahrain during the hot season, with some fatalities. The Company medical authorities have prepared notes on this subject which may be of assistance to Masters, but skilled medical assistance should be called for immediately a case of heat exhaustion or heat stroke is observed.

To enable heat exhaustion cases to be treated expeditiously a Heat Exhaustion Unit is located in the Port of Sitra shipping offices at the Wharf gate.

RESIDUES: Limited slop tank facilities for oily residues at all berths.

LOADING/DISCHARGING: *Readiness:* The following will apply in regard to Notice of Readiness.

Notice of readiness to load is a warranty on the part of the Master that the vessel is in all respects ready to load and that the tanks, pipes, pumps and accessories of the vessel are fit to receive the cargo to be loaded.

The Master or his representative is required to hand to the Company, a written Notice of Readiness to load. Receipt of such Notice of Readiness by the Company does not necessarily imply acceptance.

The Company will make every effort to accept Notice of Readiness when tendered on arrival, provided vessel is in all respects ready to load. The Company will endeavour to load vessels upon arrival and/or as promptly as a berth is available.

Arrival, where used above, means when the vessel passes "Sitra Beacon" when proceeding either straight to the berth or to anchor in Sitra Anchorage. In the case of vessels coming from Mina Sulman it is the time when passing North range beacon. In cases where vessels are required to anchor in the area South of No. 27 Buoy, then the time of anchoring will be used providing that the presence of the vessel is made known to Sitra Port Control by VHF or BAPCOSHP via Bahrain Radio on radio telephone, Awali 2662 at the time of anchoring.

Responsibility: Loading will not start until the vessel's loading officer reports the vessel is ready to receive cargo and the Company's Loading Master is satisfied with the preparations for loading. Any inspection made by the Company's Loading Master in this regard is performed without the Company assuming any liability.

All operations on board the vessel in connection with loading and discharging are the responsibility of the vessel.

A Company Loading Master will be available throughout the loading to offer advice to the Master on loading procedures and loading hazards.

Warning is given of the danger of closing a valve against an incoming oil stream. This procedure will create excessive pressures which may result in damage to the loading hoses, vessel's pipe-lines or Terminal facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

Hose Handling: Without assuming any liability on behalf of the Company, Company employees will assist in connecting and disconnecting hoses to vessels. A ship's officer must be present, and the ship's deck officer on duty must approve the hose connection on board.

The Company has modern air-operated hose-handling equipment on all berths at the No. 1 (Island) Wharf and the No. 2 Wharf, except No. 4 Berth. However, the vessel's hose rigging derricks should always be in a constant state of readiness to give additional assistance as necessary. Company employees will not operate ship's derricks or winches.

Cargo Inspection Service: The service of the Bahrain Government Petroleum Inspectors are available for the inspection and certification of the condition of a vessel's tanks, pipes, pumps and appurtenances. the Agent will, upon request, arrange for the services of this Inspector.

The Company will not issue any certificate purporting to state that vessel's tanks, pipes, pumps and appurtenances are clean or acceptable for receiving cargo. In the event a Company representative either alone or accompanied by the Bahrain Government Petroleum Inspector, inspects the vessel, the Company will make no representation nor assume any responsibility in connection with the condition of vessel's tanks, pipes, pumps and appurtenances, nor will the Company assume any liability for contamination of cargo aboard ship caused by the condition of the ship's tanks, pipes, pumps or appurtenances.

Loading Rates: This table prescribes the approximate maximum loading rates of products available at the Wharves:

Product		*Barrels per hour*	
Motor gasoline	up to	7,000	on 2 S/Ls
Naphtha (JP4) Jet fuel	„	10,000	on 3 S/Ls
Kerosene	„	5,000	on 2 S/Ls
White diesel	„	12,000	on 2 S/Ls
Black diesel	„	2,500	
Fuel	„	25,000	on 3 S/Ls
L.P.G	„	10,000	on 1 S/L

Loading rates of kerosenes and jet fuels are restricted due to static electricity hazards. These rates will be made available by the Company Loading Master.

A maximum pressure of 150 lb. is allowed on the loading hoses.

Discharging Rates: The discharge rates will be governed by the vessel's pumps, which must be limited to 150 lb. pressure.

DENSITY: Average 1030.

FRESH WATER: Limited quantities of well-water available at Sitra Oil Wharves. It is saline and is mainly used for washing purposes. The use of this water in boilers and evaporators unless pretreated, will cause scale formation.

There is a nominal delivery charge.

Only in cases of extreme emergency will vessels be berthed for water alone, at an additional docking charge.

There is no water available on the Alba Wharves except by barge.

Water is available from lighters in the Sitra Anchorage. Requirements should be requested through the vessels' Agents.

FUEL: *Facilities:* Bunkers can be supplied at all oil berths and can be loaded simultaneously with bulk cargo.

Bunker quantities are measured by "Brodie" positive displacement meters.

Chief Engineers, on request to the Company's Loading Master, can avail themselves of the opportunity of checking the opening and closing counter readings on the meters supplying bunkers to the vessel.

Product	*Bunkering Rates are approximately* *Bbls./hr.*	*Tons/hr.*
Fuel oil	up to 2,500	up to 360
Marine diesel	up to 1,500	up to 200

Bunker Barge Service: The Company operates a bunker barge service principally to supply bunker fuels to vessels at Mina Sulman. This service is also available to vessels in the Sitra Anchorage and Alba wharves, but may be temporarily suspended due to adverse weather conditions.

The service is maintained by the barges "Bapco 1", "Safala" and "Askar".

"Bapco 1": The barge with a loaded d.w.t. of 1,200 L.T. has a cargo capacity of approximately 8,900 barrels. Its approximate maximum capacities are as follows:

Marine diesel	1,800 bbls. (240 tons)	or	5,200 bbls. (720 tons)
	+		+
Fuel oil	6,350 bbls. (950 tons)		2,800 bbls. (425 tons)

The discharge rates for the "Bapco 1" are:

Marine diesel	50 – 750 bbls./hr.	(10 – 100 t.p.h.)
Fuel oil	100 – 1,500 bbls./hr.	(30 – 200 t.p.h.)

"Askar"/"Safala": Each barge has a capacity for 1,300 bbls. (170 tons) of diesel gas oil which it can discharge at rates between 50 – 760 bbls./hr. (5 – 100 t.p.h.).

Application for the use of the bunker barge service should be made to the Company via the vessel's local Agent and it is desirable for the vessel to give as much advance notice as possible.

Lubricating Oils and Greases: A full range of Caltex lubricants and greases are available at Bahrain.

In order that lubricating oils may be promptly delivered, Masters of vessels are requested to radio "Bapco Bahrain" their requirements at least 48 hours prior to their arrival at the port of Sitra.

Empty lubricant containers are not accepted at Bahrain.

Drummed Products: Limited quantities of gasoline, kerosene and diesel gas oil in drums are available at short notice.

To facilitate prompt delivery Masters are requested to radio "Bapco Bahrain" at least 48 hours prior to their arrival for orders exceeding ten drums.

All supplies are in non-returnable steel drums.

GANGWAY/DECK WATCHMEN: An officer must be on deck during all loading or discharging operations. A deck watch must be maintained for moorings and hose connections.

TOBACCO ALLOWANCE: No restriction.

WINE AND/OR SPIRIT ALLOWANCE: Ship's requirements. Bond sealed but can be re-opened upon application. Liquor trafficking between vessels alongside Wharves or between vessels and shore strictly prohibited.

IDENTIFICATION CARDS: Discharge Book or Passport to be deposited with Immigration when going ashore.

CONSULS: Embassies are established in Manama, Bahrain.

SURVEYORS: The American Bureau of Shipping, B.V., N.K.K. and Lloyds Register of Shipping have Surveyors stationed in Manama, Bahrain.

REPAIRS: Local marine repair companies can undertake limited repairs of general nature.

Also see "Mina Sulman".

REPATRIATION: Facilities for crew change (except Eastern Block) and repatriation by sea or air.

AIRPORT: An international airport served by regular airlines located about 15 miles from Sitra.

TIME: GMT plus 3 hours. No changes during year.

HOLIDAYS: Numerous holidays do not affect operation of Port, which operates 24 hours a day, 7 days a week. Local Sabbath is Friday.

TELEPHONES: No facilities for placing telephones on ships.

NAVIGATION: Port Captain will be available for advice concerning navigation of channel.

Navigation Warnings: Attention is drawn to the service provided by the Middle East Navigational Aids Service (MENAS) in promulgating navigation warnings covering the whole of the Gulf area.

Mariners are requested to report any hazard/obstructions encountered, observed failure of or alterations to navigational aids, etc., to:

Middle East Navigational Aids Service,
Post Box 66, Bahrain,

or if the information is urgent, radio/cable to

Megulite, Bahrain.

Printed Navigation Notices:

(a) The notices, promulgate all navigational information of a permanent or semi-permanent nature.

(b) Each notice, which is serially numbered, in sequence each year, remains in force until specifically cancelled by a later notice, when the information in the notice is:

(i) Known to have been promulgated in British Admiralty Notice to Mariners.
(ii) No longer valid.
(iii) Considered sufficiently promulgated.

(c) These printed notices are distributed to various Agents, Port and Harbour Authorities, where they can be viewed.

Radio Navigation Warnings:

(a) The warnings relate to navigational information which may immediately effect the safe navigation of ships at sea.

(b) These warnings are serially numbered, with the prefix "NAV" and authenticated by the signature "Megulite".

(c) The warnings are broadcast by Bahrain Radio (A9M) on 487 kHz on receipt and at 0518, 0918, 1318 and 1718 GMT. For further details consult the latest edition of "Admiralty List of Radio Signals" Volume V.

(d) Each radio warning is rebroadcast for a period of from 24 hours to one month, depending upon the nature of the information it contains. At the end of which period it is either self-cancelling or superseded by a new warning.

WEATHER: *Winds:* The direction and strength of winds in this area vary and change at very short notice. However, the prevailing wind is from the N.W.

Occasionally it is necessary to suspend berthing during adverse weather conditions.

For a more complete description of winds in the Gulf, refer to the "Sailing Directions".

Weather and Temperature: The local weather during the period May through September is hot and very humid with temperatures ranging up to 110°F in the shade.

Weather during the remaining months is pleasant with temperatures ranging between 50°F to 80°F.

SHORE LEAVE: *Permitted Under Following Conditions:*

When persons going ashore are in possession of valid Vaccination Certificates, and inoculation against cholera certificates, if these required by Port Health Authority.

Persons going ashore must be in possession of valid passport, or Seamen's Discharge Book, which must be handed to the Immigration Officer, and recovered before returning on board.

No smoking is allowed on the wharf, or on board any launch between the wharves, or by any person within 900 ft. of the wharves.

Crew members are warned that it is an offence to bring ashore fire-arms or drugs, and any traffic in intoxicating liquor is strictly prohibited.

GENERAL:

Anchors: The offshore anchor should be cleared and lowered to the waterline, ready for letting go, before approaching the berths. Anchor buoys are not to be used whilst moored alongside in Sitra.

Rat Guards: Every vessel berthed at Company wharves must fit adequate rat guards to all mooring ropes and wires.

Gangway: Every vessel berthed at the wharves shall provide an efficient gangway, which shall be adequately lighted during the hours of darkness and be of sufficient length to provide safe access when the vessel is deballasted.

Emergency Exit Ladder: All vessels berthed alongside shall have a pilot ladder over on the outboard side, maintained at sea level, for emergency exit.

Fire Wires: All vessels berthed alongside, in the Port of Sitra, must have the eye of a wire hanging over the outside bow and quarter, to enable tugs to connect up readily, in a fire emergency. The wire shall be suitable for the intended purpose and shall have sufficient scope on deck for free running.

Engines: The main engines and all gear must be in an operable condition and in a state of immediate readiness whilst the vessel is alongside the oil wharves.

Port Police and Company Security: The Bahrain State Police maintains launch patrol in the vicinity of the wharves, and ex-officio have access to wharf installations in the course of their duty.

The Company maintains security guards and officers on its wharves to enforce the regulations of the Bahrain Government and to safeguard its own interests.

The Company security officers are fully recognised by the Bahrain Government and have the full powers of a police officer.

Masters are required to co-operate with any request made to them by a security officer.

Swimming: Not permitted in the vicinity of the wharves.

Provisions: Available, contact Agent.

Laundry: Available, contact Agent.

Publications and Charts: The following British Admiralty or U.S. Hydrographic publications are recommended for use in Bahrain waters:

British Admiralty Charts
No. 3790 – Ras Laffan to Ras Tannura.
No. 3792 – Approaches to Mina Sulman and Al Manama.
No. 3796 – Mina Sulman and Approaches.
No. 3798 – Bahrain Outer Approaches to Mina Sulman.
The current edition of "The Pilot".

U.S. Hydrographic Office Charts
No. 62411 – Ras Tannura to Ras Laffan.
No. 62412 – Approaches to Jazirat Al Muharraq.
No. 62413 – Sitra Anchorage.
The current edition of "Sailing Directions for the Gulf".

Launch Services: The Company does not provide launches for general use. Transportation of ship's personnel between vessel, the mainland of Bahrain and the wharves is provided by the vessel's Agents.

Tank Cleaning and/or Gas Freeing: Tank cleaning and/or gas freeing are not permitted alongside the wharves.

Fishing: Fishing is not permitted from the wharves or from vessels alongside as nylon lines constitute a safety hazard to personnel travelling on the launches and foul launch propellers.

SAFETY: The Company is primarily concerned with Safety, and Masters of vessels are requested to provide the maximum co-operation. Detailed regulations concerning safety are contained in the Sixth Schedule of the Bahrain Port Ordinance 1965 and certain of these regulations are summarised below for convenience:

Smoking: Smoking is strictly prohibited within 900 ft. of the wharves, and on board tankers alongside except in those enclosed spaces aboard ship specifically designated by the Master as "Smoking Areas". Failure to comply with this regulation can involve cessation of loading operations and/or unberthing pending complete investigation, and receipt of written assurance from the Master that effective controls have been established.

The Company reserves the right in unusual circumstances to prohibit smoking at any time in any place on or adjacent to the Company's wharves during loading operations.

Fire Wires: Whilst alongside, vessels must have the eye of a wire hanging over the offside bow and quarter to enable tugs to connect up readily in an emergency.

Funnel Sparks: Whilst alongside, vessels must not blow boiler tubes, and every precaution must be taken to prevent sparks escaping from the funnel. Vessels unable to control the emission of sparks will be unberthed.

Vessels' Engines Alongside Wharves: The main engines and all gear must be in an operable condition and in a state of immediate readiness while vessels are alongside the wharves.

Trim of Vessels Alongside Wharves: During loading or discharging operations the loading officer must ensure that at no time does the vessel assume a trim which will, in case of emergency, preclude the unberthing of the vessel under her own power.

Scupper Plugs: All scuppers must be plugged and cemented prior to mooring alongside wharves.

Ullage Screens: During loading or discharge of highly volatile cargoes, all ullage pipes and sighting ports, when necessary to be left open, are to be protected by a fine mesh copper screen or gauze plug.

Fire Hoses: Whilst a vessel is within the Port of Sitra, her fire hoses shall be connected and kept ready for instant use.

Craft Alongside Vessels at Wharves: Once a vessel is berthed, no craft are allowed alongside. This applies to any local craft, agents' launches, etc.

Suspension of Loading: In the event that Safety Regulations are violated Mooring Masters and Loading Masters are authorised to shut down loading operations.

Vessels Carrying Bulk Sulphur: Owing to the hazardous nature of this cargo, vessels having bulk sulphur on board are not allowed alongside the oil wharves and will be bunkered by barge as available.

PORT REGULATIONS: Port Captain should be contacted for any queries not covered by lists of regulations provided on arrival.

SHIPMASTER'S REPORT: December 1979.

Anchorage: East of No. 27 Buoy, good holding ground with thick mud. Inner Anchorage thick mud and VLCC's not dragging with 6 shackles out, in force 7 winds.

Fuel: HVF and Diesel available from barge which holds about 900 L/t (BAPCOSHIP). Barge will not come alongside after 1800 hrs. or in rough weather but will stay alongside pumping after 1800 hrs. if already there. Will only bunker in inner anchorage.

AUTHORITY: The Bahrain Petroleum Company B.S.C. (closed), Awali, Bahrain. *Telex:* 8218 Bapshp Bn. *Cables:* Bapco Bahrain. *Contact:* The Port Captain.

AGENT: See "Mina Sulman".

NOTES

Please also advise Shipping Guides Ltd.

Bangladesh, People's Republic of

CHALNA (Khulna): 22.35 N. 89.32 E.

PORT LIMITS: *To the North:* A line drawn due East-West from a point in position Lat. 22° 38′ 00″ N., Long. 89° 20′ 00″ E. to a point in position Lat. 22° 38′ 00″ N., Long. 89° 40′ 00″ E. *To the South:* A line drawn due East-West from a point in position Lat. 21° 27′ 00″ N., Long. 89° 20′ 00″ E. to a point in position Lat. 21° 27′ 00″ N., Long. 89° 40′ 00″ E. *To the East:* A line joining the point in position Lat. 22° 38′ 00″ N., Long. 89° 40′ 00″ E. to a point in position Lat. 21° 27′ 00″ N., Long. 89° 40′ 00″ E. *To the West:* A line joining the point in position Lat. 22° 38′ 00″ N., Long. 89° 20′ 00″ E. with the point in position Lat. 21° 27′ 00″ N., Long. 89° 20′ 00″ E.
DOCUMENTS: See "Chittagong".
ARRIVAL ADVICE: Inward ships must present themselves at Pussur fairway buoy at least 4 hours before HW to enter on a particular day.

The Master should send the following information to port via Khulna Radio call sign S3E and to duty pilot vessel call sign S2YS and pilot station call sign S3K 24 hours prior to arrival at Khulna Fairway Buoy. Fairway Buoy position: Lat. 21° 24.56′ N., Long. 89° 28.82′ E.

1. ETA Pussur Fairway Buoy.
2. Fresh water draft.
3. Speed available.
4. Vessel's length.
5. Vessel's gross tonnage.
6. Fresh water requirements.

PILOTAGE: Compulsory. Master should in addition to usual ETA to Agents keep in touch with pilot vessels stationed at Hiron Point about 45 miles from the base calling S3K, depending on which vessel is stationed at the time. Pilot vessels are equipped with radio and maintain regular watches on 500 m. from 0600 to 0800, 1000 to 1200, 1400 to 1600 and 1800 to 2000 hrs. local time. If a message is not being picked up, by Khulna Radio call sign S3E, it should be relayed through Chittagong Radio or the pilot vessel.

Ships over 17 ft. draft are usually piloted on the flood to cross the bar and the pilot vessel, which has been in contact with the incoming ship leaves from Hiron Point, in time to coincide with the arrival of the vessels at the pilotage ground, situated about 7 miles Northwest of the Fairway "Lighted" Buoy where ships can anchor in 9 fathoms of water. The channel from Fairway up to the Anchorage has been marked with lighted buoys and pilotage is carried out in daylight.

In rough weather and especially during the monsoon, ships are led into calm waters by the pilot vessel, which maintains close radio contact, and Pilots board inside the river.
ANCHORAGE: Chalna port consists of a sheltered deep-water anchorage at Mongla on Pussur River.

Depth of water 19 ft. to 45 ft. at LLWD. Distance from sea 65 miles.
RESTRICTIONS: Entrance to the Pussur River is about 6 miles wide at the mouth and has a bar over about 5 miles where the depth is 3 fathoms.
MAX. SIZE: Ships drawing up to 23 ft. can cross the bar in all seasons. In S.W. monsoons vessels up to 25 ft. 6 in. can be accommodated on spring tide. Also see "General".
HEALTH: On arrival at the mouth of the Pussur River, vessels are required to wireless "Quarantine" Khulna, giving health report, to avoid difficulties with Port Health Authorities.
RADIO: At present coast station at Khalishpur (Khulna Radio) of Telegraph and Telephone dept. maintain 24 hours W/T watch on 500 kHz call sign (S3E). In addition to the T & T system, the port has harbour control station (call sign S3K) at Mongla and pilot station (call sign S3K) at Hiron Point to maintain 24 hours W/T watch on 500 kHz. The station at Hiron Point guides incoming and outgoing vessels from fairway to pilot grounds and vice versa and remains in touch with Khulna Radio, Mongla S3H and ships anchored at Hiron Point for movement of Pilots, mooring of vessels etc. the *Sarothi II* is equipped with W/T and VHF system and is kept on standby for emergency work.
VHF: The pilot station and harbour control are equipped with VHF Channels 16, 11 and 12.
TUGS: Two powerful tugs available to assist in emergency. Not required for berthing.
BERTHING: 15 swinging moorings and unlimited anchor berths. 5 new jetties also available.
CRANES: 2×40 ton, 2×20 ton and 1×10 ton cranes available at the new jetties.
STEVEDORES: Plenty of labourers available.
TANKERS: Oil is not handled at the port at the present time.
DENSITY: The density of water at the Outer Bar varies from 1005 to 1025 and at Mongla from 1002 to 1020.
FRESH WATER: Available by barges.
FUEL: Coal and fuel oil can be arranged in limited quantities if sufficient advance notice given. The government have occasionally suspended sale of bunkers to foreign vessels.
FIRE PRECAUTIONS: One buoy tender fitted with powerful fire fighting appliances and one modern fire fighting tug can be made available to meet emergency at very short notice.
CONSULS: None.
REPAIRS: Minor repairs can be arranged through Khulna shipyard. Repair facilities are being constructed along with the permanent facilities.
DRY DOCKS: A dry dock for sea-going vessels is under construction at Chittagong.
SURVEYORS: Lloyds/NKK. Surveyors are available at Khulna.
TIME: Six hours difference exists between GMT and local time.
HOLIDAYS: Eid-ul Azha, Moharram, Eid-I-Miladun Nabi, Independence Day, Jamat-ul-Bida, Eid-ul-Fitr, depending on the sighting of moons calculated in the basis of moon months.
POLICE/AMBULANCE/FIRE: Police telephone number 7 and for other purposes port telephone No. 62633 is available.
TELEPHONES: No arrangement is available at the anchorage for placing telephones on board the vessels.
SHORE LEAVE: Crew members of foreign vessels are allowed to disembark ashore as per Master's request.
GANGWAY/DECK WATCHMAN: On receipt of orders from the Master the Stevedores will arrange to supply watchmen by day and night.
HATCHES: Opening and closing of hatches is normally carried out by the stevedores.
CARGO GEAR: Goods loaded and unloaded by the ship's gear.
REPATRIATION: Local shipping Agents are responsible for arranging repatriation of the crew.
AIRPORT: Jessore, which is 70 miles from the port.
IDENTIFICATION CARDS: Seaman's book is sufficient for identification.
REGULATIONS: Crew members are not allowed to undertake chipping/painting of vessels whilst in the port. This is to be done by licenced contractors.
DELAYS: No unusual delay in the port.

GENERAL: Port of Chalna Authority
INSTRUCTIONS FOR MASTERS OF VESSELS:

1. As these are fresh water drafts, the incoming ships should give necessary allowance. The outgoing ships may have to leave anchorage a day earlier to take advantage of next A.M. drafts at Outerbar.
2. Inward ships must present themselves at Fairway Buoy at least 3 hours before high water to enter on a particular day.
3. Masters should send the following information to Port Khulna, via Khulna Radio (call sign S3E) and pilot station S3K, 24 hours prior to arrival at Chalna Fairway Buoy: (a) ETA Pussur Fairway Buoy; (b) fresh water drafts on arrival; (c) anticipated fresh water drafts at the time of sailing; (d) speed available; (e) length; (f) gross tonnage; (g) fresh water requirements.

   In addition to Khulna Radio (call sign S3E) Harbour Control Station (call sign S3H) and pilot station (call sign S3K), maintain 24 hours W/T watch on 500 kHz. The ships are strictly to follow the instructions given by the Pilot while crossing the Outer Bar and anchor 2 miles S.E. of Hiron Point and wait for the Pilot. The time of crossing the Outer Bar is given by the pilot vessel or pilot station under instructions from the Pilot. QTG service available. VHF on Channel 16 and 11 available at pilot station Hiron Point, Harbour Control Mongla and Port Control Khulna.
4. *Important:* Ships due to enter must keep W/T watch while crossing Outer Bar and International Radio watch while waiting for Pilot at Hiron Point and in the vicinity of Fairway Buoy. Whilst navigating in Port Limits, W/T watch would be maintained as advised by Pilot.
5. All vessels entering port shall display their signal letters and the mooring/anchor berth in addition to pilot flags. They are also to display their signal letters while waiting for Pilot at Hiron Point and/or in the vicinity of Fairway Buoy.
6. The Port can reduce these declared drafts without notice.
7. Ship Owners and their Agents are advised to consult the Harbour Master's Office regarding incoming and outgoing deep draft vessels well in advance.
8. *Outward Ships* of deep drafts will leave the anchorage with the first of flood at Mongla.
9. Vessels entering or leaving Port must have full power on main engine and deck machinery and both anchors must be available for use at all times.
10. Masters are advised to manoeuvre with great care and make good lee while receiving and disembarking Pilots. A neat and clean pilot ladder as specified in Merchant Shipping (Pilot Ladders) Rules 1967. Manropes and boat ropes should be ready on lee side. A responsible Officer must be present on the deck near the pilot ladder while Pilot boards/disembarks and a lifebuoy must be kept handy near the pilot embarkation/disembarkation point for emergency use and also bulwark ladder for climbing down on deck.
11. In spring tides, ships of less than 10 knots shall not be permitted to transit the river. However, if permission is given under special circumstances, a suitable tug will have to be hired from the Port to escort the vessel within the Port limits. Requests for the tug must be made at least 24 hours in advance.
12. In adverse weather if boarding is not possible at Hiron Point, the pilot vessel will lead incoming ships up to Sibsa (Akrampoint), where the Pilot will board in sheltered water.
13. Pilot vessels are liable to be withdrawn without notice.
14. Vessels of 600 ft. length or more are required to have a tug standing-by during in and outward river passage and if the length is more than 650 ft. a tug may be required to keep standby throughout her stay in the Port at the discretion of Port Authority.
15. The length of vessels entering the Port is restricted to 750 ft. and may be increased depending on the season and circumstance of the case and normally only 2 vessels of more than 600 ft. can be accommodated at a time.
16. Masters of the visiting vessels are advised to ensure that while their ships are in the anchorage, no Officer or crew travels to and from ships in native boat, sampan or any other boat, not authorised by the Port Authorities to ply in the anchorage for carrying passengers.
17. Masters of the visiting vessels are also advised to post 3 watchmen on duty, one on the forecastle, one aft and one on gangway all the time the ships are at the anchorage. The watchmen shall be provided with lifebuoys for use in emergency.
18. While the vessels are in Port, the Masters are to ensure that no ship's crew is employed for chipping, painting and working overside.
19. In port limits, wireless communication with any station except those operated by Port or Khulna Radio (S3E) is strictly prohibited.

20. In case of *emergency* whilst at anchor/mooring in harbour limits, the Assistant Harbour Master should be immediately contacted: (a) by use of lamp signal to signal tower; (b) by W/T on 500 kHz, call sign S3H; (c) VHF Channel 16, 11.
21. Masters of vessels are advised that more than 8 barges or 4 flats (one flat being equivalent to 2 barges) should not be allowed to lie alongside. Under adverse conditions, this permissible number may further be reduced.
22. Whilst in anchorage limits, adequate anchor watch should be maintained and power on main engines and deck machinery should be available on immediate notice, specially during spring tides and inclement weather.
23. Fire hoses should be rigged and water kept running when working cargo of jute, jute goods and any other inflammable cargo.

Deputy Conservator, Port of Chalna Authority, Khulna.

DEVELOPMENTS: Permanent port facilities with 7 jetties, transit shed and warehouses including 2 feeder container jetties are under construction on the East bank of the Pussur River adjacent to the present anchorage. These will be ready by the end of 1985. A scheme is under preparation to deepen the channel to allow vessels with deeper drafts to enter the port.

5 jetties and 2 transit sheds have been completed.

AUTHORITY: Port of Chalna Authority, P.O. Customs House, Khulna, Bangladesh. *Tel:* 61331, 61310. *Cables:* Port Khulna. *Contact:* Harbour Master.

CHITTAGONG: 22.19 N. 91.48 E.

DOCUMENTS: *Before vessel's arrival:*

2 copies Freight Manifest.
2 sets Bill of Lading.
3 copies Stowage Plan.
15 copies Passenger List.
4 copies Cargo Manifest.
3 copies Hatch Lists.
1 copy Exception Lists.
2 copies Passenger Money Manifest.
2 copies Special Cargo List.
2 copies Hazardous Cargo List.
2 copies Heavy Lift Cargo List.

With vessel:

1 set Arrival Papers as per booklet available from Agent.
2 copies Cargo Manifest.
Last Port Clearance.
Passenger Lists, disembarking and transit — 6 copies each.
Crew List 8 copies plus 2 for Immigration Police.
List of Favour Parcels 2 copies.
Currency declaration of ship's money, officers and crew, together with the personal property list.
Ships Stores Lists on local Customs forms – 3 copies.
Cargo Clearance Certificates.
Derat Exemption Certificate.
International Load Line Certificate.
Radio Safety Equipment Certificate.
Safety Equipment Certificate.
Record of Safety Equipment Certificate.
Load Line Certificate.
Ship's Article.
Ship's Register.
Light Dues Receipt.
Radio Telegraphy Certificate.
Safety Construction Certificate.
Voyage Licence.
Exemption Certificate of Crew Members.
I.P.B. Permission of Foreign Nationals.
Gear Register Book with Annealing Certificate
Authority Letter of Supernumerary.
Store List.

PILOTAGE: Pilotage is compulsory. Pilots board and leave vessels 1.5 miles W.S.W. of No. 1 Sea Buoy.

Inward ships must present themselves at Fairway Buoy at least 3 hours before high water to enter on a particular tide, both day and night.

Night navigation possible for outward and inward movements of vessels upto 164.60 m. and 137.15 m. LOA respectively.

APPROACHES: Since South Patches lightvessel is missing, it is advisable to make for Elephant Point/Cox's Bazaar, and then shape course to pass West of South Patches. Due allowance must be made for the state and rate of tide. In this area, the tide runs in a North–South direction.

Once it is ascertained that the vessel is West of South Patches, course can be shaped to pass 8–9 miles off Kutubdia Lighthouse. The buoys indicating the channel to Chittagong Outer Anchorage are mostly out of place or missing and cannot be relied upon. The buoys are unlit and without radar reflectors and navigating in their vicinity during hours of darkness can be hazardous.

Vessels must reach pilot grounds at mouth of River Karnaphuli 3 hours before high water of a particular tide. Both tides used for handling vessels.

ANCHORAGE: The Anchorage is considered safe and the holding ground is good. The bed of the river is soft mud and is harmless in case of grounding.

Holding ground off Kutubdia fairly good but strong tides render it necessary to pay-out extra length of cable.

Spring tides at outer anchorage are very strong (6 to 8 knots) and at times of freshets the rate may be more. It is advisable to keep engines ready at all times during Spring tides, and maintain continuous and efficient anchor watches.

Ship Masters approaching Chittagong Roads are advised not to attempt to cross bow of vessels at anchor/underway to avoid drifting on them resulting in probable collision in view of the prevailing strong current at Outer Anchorage. However, if it is inevitable to cross, Ship Masters may do so with caution by giving a wide berth to the vessel at anchor/underway considering the minimum velocity of the current being 6 knots and other marine factors.

RESTRICTIONS: Night sailings both inward and outward are permitted, however with restriction on the vessels of up to 164.6 m. length for outward and 173.2 m. for inward. Night sailing not permitted for vessels with the bridge on the bow, vessels with the bridge aft are allowed but only up to 152.4 m. in length.

Draft: Normally between 7.32 m. and 9.14 m., depending on state of Karnaphuli draft restrictions. Published monthly.

Power Lines: The minimum clearance of Power Transmission Lines crossing over the River Karnaphuli from CPA Dock Office Tower – 21 (approx. Lat. 22° 18.04′ N. Long. 91° 48.47′ E.) on the opposite bank of the River Karnaphuli is 52 m. from jetty level and the transmission lines are charged at 132 kV. Mariners are advised to navigate with caution.

MAX. SIZE: Anticipated safe drafts are predicted three months in advance. The depth of water over the Outer, Inner and Gupta Bars is maintained at 4.42 m. at low water throughout the year. The bars are situated at distances of half, one and 4.75 miles from the entrance. In order to calculate the draft for entering and leaving port, the depth of 4.42 m. over the bars is added to the height of water in the tide tables for day tides. Also see "Tankers".

HEALTH: All vessels must send the standard quarantine messages by radio. Vessels which have touched ports between Port Sudan and Durban, on the East Coast of Africa including these two ports, or any other yellow fever port or other port on the continent of Africa, or ports which are declared from time to time as quarantine areas, are suspected vessels on account of yellow fever or jigger, or other infectious disease as the case may be and may not have communication with the shore till declared by the Port Health Officer, who attends only between sunrise and sunset, except in special circumstances. The incubation period for yellow fever is 9 days, but vessels arriving later than 9 days are still not free from quarantine because there is no incubation period for jigger.

RADIO: Chittagong Radio Control. MF/RT distress frequency 2182 kHz. SSB equipment with 200 mile range also available.

Arrival Advice: ETA advice should reach Agents 72 hours and confirmation cable at least 24 hours before arrival at the Pilot Station. While advising ETA Masters should bear in mind that W/T messages generally take minimum 12 hours to reach Agents.

The radio message should contain the following information:

1. Name of vessel.
2. ETA Pilot Station.
3. g.r.t.
4. n.r.t.
5. d.w.t.
6. Length.
7. Date and Hour sailed last Port of Call.
8. Quantity and description of cargo to discharge.
9. Next Port of Call.
10. Classification of Vessel and Nature of cargo carried.
11. Name of Master.
12. Max. arrival fresh water draft.

VHF: *Port VHF Service:* The Harbour Master can be contacted by R/T during office hours on any working day on frequency 156.8 MHz. (International Channel 16). Calls may be connected to the public telephone system via Channel 27.

Private VHF Service:

(i) Location: Port Office.
Call Sign: "Port Radio Control".
Position: Lat. 22° 19′ 30″ N., Long. 91° 50′ 00″ E.
Watchkeeping: From 0830 – 1700 hrs. continuous.
Frequency: 156.80 MHz.

(ii) Location: Port Signal Station.
Call Sign: ARH 24.
Position: Lat. 22° 14′ 03″ N., Long. 91° 50′ 34″ E.
Watchkeeping: (i) Duration of daylight Flood tide: beginning every hour.
(ii) Duration of night Flood tide only when ship-movements are being performed: every half hour.
Frequency: 156.80 MHz (Channel 16) (short range about 7 miles from Pilot Station to Anchorage).

(iii) Location: Pilot Vessel: Capt. Fuhrmann P.V. Rahnuma
Call Sign: AQEG.
Watchkeeping: (i) Duration of daylight Flood tide: every half an hour.
(ii) As above.
Frequency: 156.80 MHz (Channel 16).

(iv) Location: Patrol Tugs Kandari 7 and Kandari 8.
(S. T. Khalid – under repair).
Call Sign: AQEF.
Watchkeeping: (i) Duration of daylight Flood tide: every half an hour.
(ii) As above.
Frequency: 156.80 MHz (Channel 16).

(v) Location: Sea-Tug "Suljuq".
Call Sign: AQEP.
Watchkeeping: Duration of daylight Flood tide and in emergencies.
Frequency: 2182 kHz.

Remarks: Vessel should shift to some other Channel after contact has been made on Channel 16 (International Frequency 156.80 MHz).

A cable to be sent to Port Health Officer before arrival requesting free pratique, stating issuance date of Derat (Exemption) Certificate.

RADAR: No service available.

TUGS: Available, under direction of Pilot.

BERTHING: 17 jetties including 2 Pontoon jetties ranging in jetty face length from 133 m. to 193 m. 13 are provided with shore cranes, 10 with transit sheds and 8 with railway tracks. Additional 4 jetties for cargo in bulk like foodgrain, cement clinkers, etc.

Also 7 moorings for oil tankers of various lengths, 4 moorings for dry cargo, 2 moorings for lighterage.

Depths: Depth at Jetty Berths ranges from 7.01 m. to 9.14 m. Depth at Moorings 6.24 m. to 9.19 m. and above.

Cement Clinker Jetty: Up to 167.7 m. LOA – draft 7.62 m.; up to 161.6 m. LOA – draft 7.01 m.; up to 167.7 m. LOA – draft 6.71 m.

CRANES: Variety of cargo handling equipment, maximum lifting capacity 125 tons.

TANKERS: Crude oil tankers up to a draft of 10.36 m. can be handled at the Outer Anchorage.

Clean tankers enter the river and berth at petroleum jetties inside the port, restricted to length of 170.73 m. overall, and subject to published river draft.

Tankers up to 60,000 d.w.t. discharge into lighters at Kutubdia anchorage where depth is 7 fathoms.

MEDICAL: Doctors and Hospital facilities available.

DENSITY: From 1000 to 1004.

FRESH WATER: Available from quays. Also available at outer anchorage. Require 3–4 days notice. Capacity of water barge about 500 tons. Supply daylight hours only.

FUEL: All grades available at oil berths. Otherwise supplied by barge. The Government have occasionally suspended sale of bunkers to foreign vessels.

DRY DOCK: Construction of a Dry dock is in progress.

REPAIRS: Facilities for repairs available. Ships' engines may not be dismantled or immobilised whilst at berths or moorings without the prior sanction of the Port Authority.

HATCHES: Opened by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes or 0.5 lb. of tobacco and 1 bottle of wine/spirit per week per man or 2 pints of beer per day.

REPATRIATION: Possible.

STEVEDORES: Available through Agent. Working hours: Monday to Thursday and Saturday day shift, 0730 – 1200 and 1330 – 1700 hrs. Night shift, including Friday 2000 – 2400 and 0000 – 0400 hrs. Friday, day shift, 0700 – 1200 and 1400 – 1700 hrs.

HOLIDAYS: Eid-e-Milad, Shaheed Day, Independence Day, Bengali New Year, May Day, Buddhu Purnima, Shabe Barat, Jamatul Wida, Eid-ul-Fitr, Durga Puja, Revolution Day, Eid-ul-Azha, Muharram, Victory Day, Christmas.

POLICE/AMBULANCE/FIRE: Call "Port Control" Channel 12 and 16 call sign, "S2YA" or Tel: 505021/505041.

CARGO GEAR CERTIFICATES: International Cargo Gear Test Certificates not more than 12 months old must be presented to the Dock Labour Inspector before a vessel is allowed to use derricks/winches. Annealing and testing of gear at Chittagong is an expensive process. In certain cases dispensation can be obtained at the discretion of the Dock Labour Inspector.

AIRPORT: Patenga Airport about 5 miles from city.

SHORE LEAVE: Allowed, prior permission from Immigration arranged by Agent.

GENERAL: *Berthing Priority:* All concerned are reminded that vessels loading/carrying cargo/mixed-up cargo or loading/carrying cargo in less than three holds, or unequally stowed in more than three holds, or with in-operative ships derrick, will be classed as Grade-II ships and shall be given berth conveniently, and if required, shall be shifted to another berth/mooring or outer anchorge convenient to the Port Authority.

Frequent breakdown in the machinery and engine of a ship, will also entail her being classed as Grade-II ship and the consideration for priorities will rest on the Administration.

This will be strictly followed with effect from January 1st, 1984, and no further consideration will be entertained from that date.

Hydrological and Hydrographical Data: The width of the navigation channel (5.49 contour) varies from place to place. Effective width is between 243.90 m. to 304.88 m. A minimum channel width of 250 m. is maintained.

Tidal Works:	At Patenga	3.35 m.
	At Khal (Channel) No. 10	2.74 m.
	At Sadarghat	2.29 m.

Max. velocity of current opposite Khal (Channel) No. 10:

Spring Tides (S.W. Monsoon):	4.5 to 5.5 knots
Neap Tides (S.W. Monsoon):	2.5 to 3.5 knots
Spring Tides (Winter Months):	upto 3 knots
Neap Tides (Winter Months):	upto 2 knots
Freshet Ebbs (Winter Months):	upto 8 knots

Meteorological Data:

Temperature: 32.10°C Max., 13.40°C Min.

Rainfall: 24.25 Max., 0.10 Min.

Normal Pressure:

1018.80	Max.	0000 GMT.
1000.90	Min.	at 0600 hrs.
1016.20	Max.	0300 GMT.
1002.30	Min.	0900 hrs.
1013.00	Max.	1200 GMT.
1000.00	Min.	1800 hrs.

The following cautionary notice has been issued by the Chittagong Harbour Master:

"Shipmasters trading to Chittagong are informed that a hot sultry day/afternoon, followed by "Still" air conditions in the early evening, usually result in thunderstorms. The peculiarity of these thunderstorms is that they approach from the North and West in the form of a line squall, and are accompanied by intense lightning activity, thunder, rain and cyclonic rotation winds which may reach a velocity upwards of 50 knots.

When percursory signs of such a "North-Wester" storm exist shipmaster's must exercise great caution, have a responsible Officer on watch and attend carefully to moorings. Vessels at fixed moorings and pontoon jetties must exercise extreme caution when a North Wester storm is blowing."

Mooring: Vessels moored alongside and pontoon jetty and vessels moored alongside each other must ensure that adequate numbers of rat guards are used to prevent movement of rats between ship/shore and ship/ship.

TIME: GMT plus 6 hours.

DEVELOPMENTS: Two multi-purpose berths of length 450 m. with back-up facilities will be constructed to cater for the increased flow of containers. More cargo handling equipment will be procured in phases.

For maintenance or dredging of the navigational channel CPA is going to acquire a hopper dredger. Outer and inner bars to be dredged to 9.1 m. and 7.1 m. respectively.

SHIPMASTER'S REPORT: September, 1979

Pilotage: Pilot boards 2 miles W.S.W. of No. 1 Sea Buoy.

Radio: Chittagong Radio Co.

Radar: No Radar service.

Restriction: Normally up to 7.5 m. depending on state of Karnaphuli draft restrictions, published every 4 months.

General: At the anchorage vessels should strictly guard against river thieves who board the vessel to steal hawsers, drums and dunnage.

AUTHORITY: Chittagong Port Authority, Bandar Bhaban, P.O.Box 2013, Chittagong, Bangladesh. *Telex:* 66264 Port BJ. *Cables:* Potasraya.

NOTES

Please also advise Shipping Guides Ltd.

Barbados

BRIDGETOWN: 13.06 N. 59.38 W. (See Plan Book)

DOCUMENTS:

8 copies Crew Lists.
5 copies Passenger Lists.
1 copy Health Certificate.
4 copies Ship Particulars.
1 copy Vaccination Report on Crew.
1 copy Vaccination Report on Passengers.
Derat Certificate.
2 copies Manifest.
1 copy Bill of Lading.
1 copy Clearance from Last Port.
2 copies Ship Stores List.
2 copies Crew's Declaration List.
1 copy Animal Declaration List.

Vessel should be entered within 24 hours and articles deposited in Shipping Office if staying longer than 48 hours.

Immigration:

1. List of passengers: a) in-transit; b) landing.
2. All disembarking passengers must fill out an E/D Card.
3. List of Crew, and if necessary, list of crew who will be landing.

PILOTAGE: Pilotage is compulsory for all vessels entering Bridgetown Harbour, except in cases of warships where pilotage is optional. Agents of vessels intending to visit the port are required give ETA as early as possible and to submit details on Form A in accordance with the Barbados Harbour's Regulations, 1961, and in advance of the vessel's arrival. Notification of arrival and request for services on Saturday should be known to the Harbour Master by 1100 hrs. local time on the previous Thursday if there is to be no delay. Notification of arrival and requests for services on Sundays should be made known to the Harbour Master by 1400 hrs. on the previous Friday if there is to be no delay.

Pilot Station: Located 0.8 km. West of Fairway Buoy (Admiralty Chart No. 502). There is no alternative station in bad weather. Usual Jacob's ladder in good condition should be rigged on port side of vessel when approaching the harbour.

Signal for pilot boat – International Code Letter "G" by day. Blue light by night. Call and watch on VHF Channel 12 – 156.60 MHz and HF – SSB 2182 kHz. Pilotage vessels, (power driven launches) are approximately 10 m. in length and painted grey.

ANCHORAGES: Quarantine Anchorage as indicated Admiralty Chart 502. Explosive anchorage as indicated on chart. Carlisle Bay Anchorage see Chart 502.

RESTRICTIONS: Bridgetown Deep Water Harbour offers 24 hours service to ships with draft up to 9.6 m. A harbour for small craft (careenage) caters to ships up to draft 4.11 m. high water.

Tankers: May enter and leave any stage of tide, day or night, except Needham's Point where daylight berthing only.

MAX. SIZE: Max. length permitted in Deep Water Harbour 244 m. Vessels of greater length allowed to berth if fitted with bow thruster (up to 293 m.). Draft 9.6 m. Oil Carriers Pier outside Deep Water Harbour max. draft 11.6 m.

Also see "Tankers".

HEALTH: Pratique may be obtained by radio or from Pilot or Health Officer on arrival. In case of suspected disease Port Doctor should be notified by radio through Agents.

Procedure for Granting of Pratique:

1. The radio request should be sent not more than 18 hours and not less than 4 hours before the expected time of arrival.
2. The message should be addressed to the Shipping Agent, who will inform the Medical Officer of Health (Port) of the contents of the Message.
3. The Medical Officer of Health will inform the Shipping Agent whether or not pratique is granted, and the Shipping Agent will inform the Master, by radio, of the decision.
4. The Medical Officer of Health will inform the Officer on duty at the Signal Station whether or not radio pratique has been granted, and the Officer on duty at the Signal Station will inform the Berthing Master and the Public Health Inspector of the decision of the Medical Officer of Health.
5. The Berthing Master on boarding a ship which has been granted radio pratique will authorise lowering of "Q" flag, if still flying.
6. The Berthing Master on boarding a ship which has not requested radio pratique will inquire as to the presence of any illness in the ship; if there is no illness, he will grant pratique in his capacity of Visiting Officer, *and will ensure that the "Q" flag is lowered.*
7. If radio pratique has been refused or if the Berthing Master is informed that there is illness in the ship, the "Q" flag *must* be kept flying and the Public Health Inspector will board the ship, and if satisfied will grant pratique; if he is not satisfied he will refer the matter to the Medical Officer of Health (Port).
8. Disembarking passengers (not passengers in transit) and any Crew members being signed off will be kept segregated on the ship until their Vaccination Certificates have been inspected by the Public Health Inspector.
9. No person except the Berthing Master, the Public Health Inspector, the Medical Officer of Health or the Immigration Officer will be permitted to board a ship before pratique has been granted. The granting of pratique is indicated by the lowering of the "Q" flag.

   Notes: From the foregoing it will be seen:

   (i) that healthy ships will be granted pratique either by radio or by the Berthing Master;
   (ii) that ships with any illness on board will be granted pratique by the Public Health Inspector or the Medical Officer of Health;
   (iii) that the Public Health Inspector will board a ship for the following reasons only:
      a. when radio pratique has not been granted and the Berthing Master cannot grant pratique;
      b. to inspect Vaccination Certificates of disembarking (not in-transit) passengers and signed off crew members.
   (iv) that to avoid misunderstanding and delay the "Q" flag must be lowered as soon as pratique is granted.
10. A ship with disembarking passengers may be granted pratique and permitted to work e.g. load or unload cargo, *provided* that disembarking passengers are kept segregated *on the ship* until Vaccination Certificates have been inspected and immigration formalities completed.

RADIO: Cable and Wireless, Barbados Radio: Call sign 8 PO. 24 hours watch is maintained on 500 kHz. ETA to include name and nationality of Master, number and nationality of crew. Name of last and following ports of call and quantity and grades of cargo to be discharged, if any.

VHF: Barbados Radio VHF Channels 16 and 26. Barbados Port Department VHF Channels 12 and 16.

TUGS: Two tugs available namely "Barbados" and "Culpepper" 1,700 and 1,500 h.p. respectively. 2 tugs for vessels of 20,000 n.r.t. or over, and 1 tug for vessels of 10,000 n.r.t. or over or 167.64 m. in length. The tug will meet the ship at the entrance to the harbour. For vessels under 550 ft. in length having bow thrusters the tug will be optional.

BERTHING: Harbour is situated on the North-Western side of Carlisle Bay, approximately 0.75 miles (1.21 km.) N.W. of the Molehead of the careenage. The harbour is dredged to 9.75 m. LWOST and was constructed by joining Pelican Island to the Mainland by reclamation, providing 702 m. of quay space and 829 m. of protective breakwater, and offering berths for eight ocean-going vessels. All berths are equipped to supply fresh water, bunker fuel and telephone service.

Berth	*Length* (m.)	*Width* (m.)	*Depth* (m.)	*Remarks*
No. 1	152	23	9.7	
Nos. 2 and 3	366	15	9.7	
No. 4	184*	24	9.7	Container berth. *215 m. with dolphins.
Breakwater	522 outer arm	9.3	9.7	Passenger vessels.
	307 inner arm	—	9.7	Bulk sugar and molasses.
Shallow Draft	156	15.2	6.7	Inter-island vessels, max. draft 6.8 m.
Bulk Handling Facility	dolphins	—	11.5	Max. LOA 183 m.
Black Rock	—	—	—	Max. LOA 122 m., max. draft 7.5 m.
Spring Garden	—	—	—	Max. LOA 103 m., max. draft 4.9 m.

Cold Storage Facilities: Cold Storage facilities of the Port of Bridgetown are supplied by BICO Ltd., who are sub-contracted by the Barbados Port Authority to handle all locally consigned and Transshipment reefer cargoes .

The facility abounds the Harbour perimeter and has four receiving doors.

4×20 ft. reefer Containers may be stripped simultaneously or 2×20 ft. and 2×40 ft. Containers. The receiving rate is in excess of 350 tonnes per day.

Storage capacity is 2,100 tonnes frozen (−18°C), 300 tonnes chilled cargo (+2°C).

Cargo movements are effected by seven Clark 1.5 tonne capacity Forklift Trucks.

Power supply is guaranteed by 'Ring' circuit feed supplemented by standby generator.

There are four Tower Units (MacAlpine Prestcold) for the holding of Conair Containers and electrical points (400 V 3 phase + neutral) for the holding of integral Containers.

Holding facilities are owned and maintained by the Port of Bridgetown.

CONTAINER HANDLING FACILITIES: The extensions to the Harbour were completed in 1978 and included the provision of a Container Berth, a Container Shed and an open land area for the development of a Container Stacking Park and other ancillary requirements for the making of a Container Terminal.

Phase I of the development of this area was completed in 1980 and included the paving and lighting of the area adjacent to the Container Quay for the provision of a Container Park, a Container Control Office and an area for the stuffing and unstuffing of Containers.

Phase II of the development of the Terminal was completed in 1981.

In January, 1981, a new Container handling unit, the Ferranti 830 L Straddle Carrier, was introduced to the Terminal which was followed by another unit in 1982. These units are capable of handling fully laden 40 ft. Containers.

These units supplement 2 Lancer Boss 2500 CH sideloaders for the handling of fully laden 20 ft. Containers and one Lancer Boss Front end loader with adjustable spreader for handling empty Containers.

In addition, there are ample Tractor Trailer units to cope with the present movement of Containers.

During 1982, the 'old Container Park' was reopened to provide further space for the stacking of trans-shipment Containers and also the North Gate was opened to facilitate the free movement of Containers to and from the Port.

The Terminal is geared to handle 75,000 Container movements annually.

The Container Terminal consists of the following:

a. Container Berth
b. Container Shed (C.F.S)
c. Container Park

The Container Berth is 188 m. long, with one breasting dolphin providing an additional 36 m. of berthing space.

This berth can accommodate a vessel up to 205 m. in length and a maximum draft of 9.60 m.

The Container Shed (C.F.S.) has a floor area of 5,314 sq.m. and is used for the storing of Cargo to be stuffed into Containers or for Cargo unstuffed from Containers.

The Container Park can accommodate a total of 1,384 Containers in lane stacked positions.

The full Container Park can stack 320 Containers, the empty Container Park can stack 744 Containers and the Trans-shipment Park can stack 320 Containers.

The Container Control Office directs the movement of the Five Container Handling Units in the delivery, receiving and spotting of containers by means of UHF communication equipment.

A new Engineering Workshop completed in early 1984 ensures that equipment at the Terminal is readily available and that 'downtime' is kept to a minimum.

BULK HANDLING FACILITIES: *Grain:* The bulk unloading facility of Barbados Mills Limited is primarily used for wheat, corn and soyabean meal. It consists of a 6 storey workhouse, 14-"Lippe" type metal silos each with a capacity of 1,000 tonnes and a 669 sq.m. flat storage warehouse of re-inforced concrete capable of receiving and storing 2,400 tonnes.

The dock consists of a 557 sq.m. apron on steel piling with 4 breasting dolphins of similar construction in line with the end of the dock and parallel to the shoreline. There is a lightweight steel catwalk between the dolphins and the dock apron.

Grain enters the Terminal by means of a 762 mm. wide covered conveyor belt running 68.5 m. to the workhouse where it is cleaned of tramp metal, sticks, dust, etc. and weighted before being directed to one of the silos or the flat storage.

The conveyor belt has a capacity of 200 tonnes per hour and is equipped with one tonne hopper mounted dockside over the belt to accommodate self-discharging vessels. In addition the facility has a drag conveying system for conventional bulk vessels and an electrically driven portable suction system that can be used separately or in conjunction with the drag system

Diesel powered skid steer tractors with buckets are used for clean-up of the holds.

Sugar and by-products: All sugar from Barbados' six sugar factories is transported to the Bulk Sugar Terminal at the Bridgetown Port in special trucks with bins, which are the property of Sugar Transport Limited.

The Bulk Sugar Installation at the Bridgetown Port has a capacity of 81,284 tonnes and is 171 m. long with a width at floor level of 43 m.

The Bulk Sugar Installation has been in operation since 1961, and is serviced by a fleet of 27 sugar trucks with bins.

Barbados Molasses Terminals were resited at the Bridgetown Port from Needham Point in 1963, commencing operations in 1964. There is a capacity of 11,356 cu.m., and this is stored for local consumption and export. There is a storage charge from July 1st to the start of the following crop.

In 1981, a new tank was constructed to facilitate T/S Molasses. This tank has a capacity of 20,000 tonnes, and is presently leased to the United Molasses Company of England which is a subsidiary of the Tate & Lyle Group of Companies for handling T/S Molasses within the Caribbean region.

Barbados Fancy Molasses is owned and operated by Jason Jones Ltd., DaCosta & Musson Ltd., Plantations Trading Company Ltd., and Evelyn Roach, Ltd.

There is a capacity of 14,006 cu.m. of which 99.5% is for export and the balance for local consumption.

Description of the Bulk Sugar Installations: The storage shed has a capacity of 81,284 tonnes of sugar and is 171 m. long with a width at floor level of 43 m. The side retaining walls are 4.6 m. high and the roof slopes from the top of these walls a to height of 31 m. at the apex.

Sugar is delivered from the factories in 7 tonne containers fitted to road lorries and is received at the reception area at the East end of the store. After weighing, the container is discharged through a side top-hung door on the container into a reception hopper. This hopper feeds a 1.65 m. conveyor belt which runs the full length of the store underground through a reinforced concrete tunnel. At the Western end of the store the conveyor, used for both reception and reclamation of sugar, rises above ground level through an enclosed steel gantry which slopes upwards to the top of a distribution and weigher tower. Here the sugar falls on a second conveyor belt which slopes back up to the top of the store and extends some 122 m. through the store at a high level. This conveyor is fitted with a mobile take-off and high speed thrower capable of throwing the sugar some 15.25 m. in any direction.

In the floor of the store and over the tunnel carrying the reception/reclamation conveyor belt, 57 louvred hoppers with 0.46 sq.m. openings are spaced along the entire length of the store. During shipment, sugar is run at a controlled rate on to the underground belt which carries it to the top of the weigh tower where it is diverted into the feed hopper of an automatic 10 tonne Servo-Balans scale. After weighing, the sugar falls on to a third which carries the sugar 165 m. through an underground tunnel to a transfer house near the breakwater. At this point the conveyor system turns through an angle of 45° and the sugar is transferred to a fourth conveyor which rises out of the ground from the transfer house and continues 152.5 m. in a covered steel gantry to the first of the three towers which house the power and control units for the ship outloaders. These towers, which are 38 m. apart, each carry 18.25 m. cylindrical boom, with 1.65 m. conveyor belt, which can be raised and lowered like a crane jib and can be slewed through an arc of 80°. A high speed thrower is suspended in the hold of the ship from a telescopic chute at the end of each boom.

During shipment a loading rate of 500 tonnes per hour can be maintained through one outloader or this loading rate can be distributed between two or three outloaders if necessary.

The conveyor system enables sugar to be recirculated within the store if desired. When a ship is loading at the same time as sugar is being received, however, the freshly delivered sugar must go direct to the ship mixed with additional sugar from store.

The store is open along the eaves of the roof and forced ventilation is possible by running extractor fans installed on both sides of roof near apex.

STEVEDORES: Gangs must be ordered before 1500 hrs. on day preceding date of arrival and 1000 hrs. on Saturday for Sunday or following Monday. Average rate of cargo discharged:

Bag Stuff, 22 tonnes (weight) per hour.
General Cargo, 12 tonnes (weight) per hour.
Ships specially equipped for handling palletised cargo, 30 tonnes/p.h.
Average rate of loading of cargo: General cargo 12 tonnes; Bag Stuff 18 tonnes.

MEDICAL: Agents should receive advance notice of required medical attention as soon as possible. Modern 800 bed hospital. Private clinics and usual medical facilities available.

TANKERS: Vessels arriving during darkness for Needham's Point Terminal should anchor in Carlisle Bay. Services of a Pilot are not compulsory but a Pilot must be taken to berth and unberth.

Oistin: Submarine discharge. Max. LOA 172 m. Max draft 10 m.

Needham's Point: Mobil Oil Barbados Ltd. Multi-buoy mooring Max. LOA, 198 m. Max. draft, 11.6 m. Depth at MLW, 12.19 m. Nature of bottom, sand on coral. Daylight berthing only. Vessels may berth and unberth any stage of tide. No fuel or dirty ballast facilities. Fresh water available by tug. Product handled, crude oil. Sealine taken aboard on starboard side. One 12 in. (30 cm.) pipe-line, length 498.35 m. connected to 1×10 in. hose. Pumping rate 300 t.p.h. max. pressure, 50 p.s.i.

Esso Standard Oil S.A. Ltd.: 2 berths. Esso Jetty outside breakwater. "T"-Head finger jetty. Max. LOA, 244 m. Max. draft, 11.6 m. Depth at MLW 55 ft. Vessel berths port-side alongside.

Deep-water Harbour Oil Pier: Max. LOA 244 m. Max. draft 9.14 m. Depth at MLW, 9.75 m. Vessels berth either side alongside.

Fuel and fresh water available. No facilites for receiving dirty ballast.

Berth	Grade Handled	Pipe-line (in.)	Length (ft.)	Load/ Discharge Rate (t.p.h.)	Hoses (in.)
Esso Jetty	Bunker C	1×16	2000	400	1×8
	Marine Diesel	1×12	2000	270	1×8
	Light Marine Diesel/gasoil	1×8	2000	150	1×8

Max. Pressure 100 p.s.i.

DENSITY: 1025.

FRESH WATER: Easily available. Delivery 50 t.p.h. Delivery by hose-pipe through hydrants installed in each berth.

FUEL: Modern bunkering facilities are supplied by Esso Standard Oil on a 24 hour basis, however, a minimum of 24 hours advance notice is required. This may be done through an Esso branch in the previous port of call. Bunkering is done alongside at the bunker pits, which are supplied with Bunker "C" fuel, marine gas oil and marine diesel oil. A blend of Bunker "C" and diesel intermediate fuel can also be supplied, as well as marine lubricants. Small yachts and schooners can also be bunkered, and at the Esso Bay Street Jetty, fishing boats and pleasure craft can be supplied with diesel fuel. Loading and discharge facilities consist mainly of an 8 in. pipe-line for gas oil, a 12 in. pipe-line for marine diesel and a 16 in. pipe-line for fuel oil. These pipe-lines run underground for approximately 1 km. from the Bridgetown Port to a bulk terminal at Holborn, Fontabelle. Pumps located at the terminal are used for deliveries to the Port.

The speed of delivery to the Bridgetown Port varies widely depending on the size of the vessel being bunkered. Pumps are rated to deliver from a minimum of 25 tonnes/p.h. to a maximum of 300 tonnes per hour.

There are 16 refuelling points along the berth of the Bridgetown Port. These permit any vessel with a maximum draft of 9.6 m. to be refuelled at any point within the port.

GANGWAY/DECK WATCHMEN: Watchmen's services necessary.

OPENING/CLOSING HATCHES: By stevedores.

SHIP CERTIFICATES: Load Line Certificate, Certificate of Registry, Safety Certificates.

CUSTOMS ALLOWANCES: Two packages or 100 cigarettes per person. Wines and spirit allowance at discretion of Customs Officer.

IDENTIFICATION CARDS: Desirable for entrance to port from shore leave.

CONSULS: Consulates, Embassies and High Commissions:

Austria
Belgium
Brazil
Canada
China
Colombia
Cyprus
Denmark
Dominican Republic
Ecuador
Finland
France
Germany
Iceland
Israel
Italy
Japan
Netherlands
Norway
Sweden
United Kingdom
United States
Venezuela

REPAIRS: Minor repairs can be carried out by Central Foundry Ltd.

DRY DOCK: One small dry dock length 73.15 m., breadth 14.02 m., depth 3.96 m. Lifting capacity 930 tonnes displacement.

SURVEYORS: Lloyd's Register, Bureau Veritas, A.B.S., N.K.K., G.L. and Det Norske Veritas.

REPATRIATION: Facilities for crew changes available.

AIRPORT: Served by regular lines. Distance from harbour about 13 miles (20.92 km.). Island is served by flights from Europe and from North America.

TIME: GMT Minus 4 hours. DST (Daylight Saving Time) 1 hour advanced is now being used from 16th April to 22nd October every year.

HOLIDAYS: New Year's Day, Good Friday, Easter Monday, May Day (1st Monday in May), Whit Monday, Kadooment Day – Crop Over Festival (1st Monday in July), Caricom Day (1st Monday in August), United Nations Day (1st Monday in October), Independence Day (November 30th), Christmas Day (December 25th), Boxing Day (December 26th).

TELEPHONES: All berths equipped with telephones.

BANKS: The following international banks service Barbados: Some are located within very close proximity to the Bridgetown Port.

Barbados National Bank
Bank of Nova Scotia*
Barclays Bank International Ltd.*
Canadian Imperial Bank of Commerce
Chase Manhattan Bank
Citibank N.A.
Royal Bank of Canada

The main offices are located in Bridgetown. Service hours are:
0800 – 1300 hrs. Monday through Thursday.
0800 – 1300 hrs. and 1500 – 1730 hrs. on Friday.
**Extended hours Monday through Thursday 0800 – 1500 hrs.*

SHIP SUPPLY SERVICE: The Barbados Port Authority operates 2 tugs and 1 heavy duty launch which is used when requested by Agents for transporting to super-carriers, stores and crews which are sometimes changed at this port. Service available on 24 hours basis and advance notice required.

The Ship Chandlers are as follows:

J. N. Goddard and Sons Limited,
Broad Street,
Bridgetown.
and
Hanschell Larsen & Company Limited,
Kensington,
Fontabelle,
St. Michael, Barbados.

The cost of tug hire is BAR$600.00 per hour and that of the launch is BAR$150.00 per hour.

Ships can lie safely on 100 fathoms depth at a distance of 2 miles West of the Signal Station.

SHIPMASTER'S REPORT: 1979.

Pilotage: Compulsory. Pilot boards 0.5 miles West of breakwater. Ladder usually required on the port side.

Restrictions: Vessels able to enter and leave at any stage of the tide. Pilots usually commence berthing and unberthing operations at daybreak.

Max. Size: Max. draft 32 ft.

Tugs: Available. Use of tugs depends on which berth the vessel uses and which side to.

Radio: Barbados Radio.

VHF: Pilot on Channels 16 and 12.

Berthing: Vessel berthed at Berth No. 2 which is close to the entrance. Bulk handling facilities available. There is ample equipment for handling palletised cargoes, and ample storage space for breakbulk and palletised cargoes, there is also storage space for containers and sufficient equipment for handling 20 ft. and 40 ft. containers. Accommodation ladder required.

Services Available: Fresh water, fresh provisions, repair facilities, machine shop, airport, Lloyds surveyor, laundry services, telex, bunker fuel oil, diesel oil, lubricating oil, doctor, hospital, groceries and meats.

AUTHORITY: Barbados Port Authority, University Row, St. Michaels, Barbados, W.I. *Tel:* 426-1030. *Telex:* 2367 Portman WB. *Cables:* Portman. *Contact:* Mr. P. B. Parker, General Manager. Captain H. L. Van Sluytman, Harbour Master.

AGENT: Hanschell & Harrisons Shipping Ltd. P.O.Box 304, Bridgetown, Barbados. Tel: 69918 or 60720. Telex: 2267 Shipagnt. Cables: Shipagent Barbados.

NOTES

Please also advise Shipping Guides Ltd.

Belgium

ANTWERP: 51.14 N. 04.23 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
2 Lists Passengers in Transit.
2 Lists Passengers Disembarking.
2 Personal Effects Lists.
3 Crew Lists indicating full date and place of birth, nationality and No. of Identity Document (Seaman's Book or Passport).
2 Store Lists indicating alcoholic beverages in bottles and size of bottles.
International Health Declaration.
Manifests and usual ship documents.

PILOTAGE: Access to River Scheldt is:

(a) Via Wielingen and Scheur Channels (West) (Wandelaar Station) where Belgian sea pilot cutter is stationed near A.1. Buoy. Cutter has black hull with a white number on bow, yellow funnel with black top, red flag with white letter "P".

(b) Via Oostgat Channel (North) (Steenbank Station) where Dutch sea pilot cutter is lying near the Middelsteen Bank Buoy.

The pilot cutters of both cruising stations can be called by the signals of the international code. They can also be contacted on VHF Channel 6.

ETA: Pilot cutter Wielingen or pilot cutter Oostgat should be given at least 4 hours notice before arrival at the pilot cutter, respectively via Ostend Radio (OST) to "Pilotage Ostend" or via Scheveningen Radio (PCH) to "Pilotage Flushing".

In case pilot service is suspended because of weather conditions, Flushing Pilot Station can be contacted on VHF Channel 14. At Flushing, the Sea Pilot disembarks and the River Pilot boards the vessel and pilots her to the riverside berths or to the locks. For vessels bound for a berth in the docks, the dock Pilot takes over in the lock until the vessel is moored in berth.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg".

ANCHORAGE: There is sufficient anchorage for deeply loaded vessels at all times around the A.1 buoy, and for smaller vessels around the MSB buoy. There are unlimited possibilities for anchoring at Flushing Roads. Anchorage on the river is limited.

RESTRICTIONS: No restrictions on night entry. Tankers larger than 2,000 g.r.t. destined for berths on the river upwards of Baudouin-Van Cauwelaert-Locks are not allowed to transit during hours of darkness.

LOCKS: *Right Bank:* Royers Lock, length 590 ft., width 72 ft. 2 in., depth at high tide 36 ft. 4 in.

Van Cauwelaert Lock, length 885 ft., width 115 ft., depth at high tide 49 ft. 2 in.

Boudewijn Lock, length 1,180 ft., width 147 ft., depth at high tide 50 ft. 10 in.

Zandvliet Lock, length 1,639 ft., width 187 ft., depth at high tide 60 ft. 8 in.

Kattendijk Lock, length 360 ft., width 81 ft. 4 in., depth 20 ft. 7 in.

Left Bank: Kallo Lock, length 480 ft., width 165 ft., depth 52 ft. 6 in.

Also see "Developments".

MAX. SIZE: At HW, under normal weather conditions and depending on tidal conditions vessels up to 885 ft. (270 m.) may enter on a maximum draft of 48 ft. (at spring tide corresponding to 43 ft. at dead tide) (this on condition that a speed of 12 knots can be reached). For vessels of more than 270 m. LOA, subtract 6 in. draft for length from 270 m. to 280 m. and 3 in. per 10 m. length over 280 m. Larger vessels can be admitted under certain conditions. It is however advisable to check in each case what maximum draft will be allowed for a specific vessel.

Vessels with a draft up to 34 ft. can enter on all stages of the tide.

HEALTH: No special requirements to obtain free pratique. Vaccination Certificates must be valid. Recent Derat Certificate required. In case of contagious illness aboard, advise Agent.

RADIO: Cable Agents ETA Flushing, max. fresh water draft, and requirements via Ostend Radio-OST or OSU (radio telephone). Radio Antwerp-OSA operates only on medium frequency.

RADAR/VHF: A radar chain established from Hansweert to Doel, but only used to help Pilot determine position. Masters can keep close contact for information, day and night, on the following Channels: Pilot cutter Channel 6 – Flushing Radio Channel 14 – Zandvliet Radio Channels 12 and 14, when in appropriate sector – Harbour Office Channel 18 – A radar chain, using, depending the zone, the VHF Channels 19, 21 or 4 for communication, is established between Hansweert and Doel, but only used to assist the Pilot to determine position.

Vessels not equipped with VHF can rent a portable portaphone. The Scheldt Information Service gives information by VHF within an area extending from the sea to the mouth of the river Rupel, situated upstream of Antwerp. On every full hour plus 5 minutes until that hour plus 10 minutes, vessels should switch to Channel 16 to listen to the traffic list and navigation reports, issued by Antwerp Radio.

On every full hour plus 55 minutes, Flushing Radio (Channel 14) and Zandvliet Radio on every hour plus 35 minutes (Channels 12 and 14) transmit information regarding visibility, water level, hindrances, anchorages, etc.

As soon as one of the stations reports a decrease of visibility under 3,000 m., visibility reports are transmitted by Antwerp Radio on every hour plus 48 minutes.

TUGS: Tugs for berthing at a riverside berth or entering the lock are ordered at river Pilot's request according to weather conditions and tide. Generally at Lieftkenshoek for Van Cauwelaert and Baudouin Locks and between Saftingen and North Ballast Fort for Zandvliet Lock. For supertankers, tugs may join at Bath. Ship's lines are usually used for towage. If ship asks for tug lines there will be an extra charge per line.

The number of tugs required in the dock area shall be mentioned on the "hailing bill". Eventually, "according to dock Pilot's advice" can be mentioned.

Tugboats on the Scheldt belong to private companies. There are 49 tugboats. They can assist the vessels up to the entrance in the lock. Inside the dock area the service is supplied by the Port Authority (municipal tugs).

33 tugs available, up to 2,200 h.p.

BERTHING: Deeply loaded vessels normally moor at their berth in the docks 2 hours after high water.

BULK HANDLING FACILITIES: *Container Terminals:* Private terminals with gantries from 40 tons to 70 tons lifting capacity.

Leopolddock : 1 terminal with 2 gantries (45 tons)
Churchilldock : 3 terminals with in total 4 gantries.
Delwaidedock : 4 terminals with in total 8 gantries (plus 1 on order).

3 container cranes at railroad container terminal; 9 quay-cranes (32 tons and 35 tons) suitable for container handling; 4 mobile container cranes.

Grain:

1. Sobelgra Terminal at sixth harbour dock has 5 elevators with capacity of 400 t.p.h. each for unloading and 2 loading towers of 400 t.p.h. each for loading seagoing vessels. Elevators are combined with conveyor belts for direct transhipment or storage in silo (106,000 tons). Water depth 48 ft. in dock for seagoing vessels, 24 ft. in dock for barges. Quay length 1,200 ft.
2. Grain handling plant of S.A. des Magasins a Grains (SAMGA) at Lefebvre Dock. Quay length 500 m., draft 32 ft. fresh water, silo 120,000 tons, 5 elevators on quay plus use of floating elevators. Discharge rate 1,100 t.p.h. Loading rate 1,400 t.p.h. into barges.
3. Smaller installation of De Trouw (silo 10,000 tons) and De Molens van Antwerpen (silo 4,000 tons).
4. Sarandi Terminal for seeds at Canaldock B1: storage capacity 30,000 tons.

Potash: Plant situated at Quay Nos. 152/160 in the Albert Dock, can accommodate vessels up to 35 ft., fresh water draft. Loading rate up to 6,000 tons per day. Storage capacity 322,000 cu.m.

Ore/Coal/Phosphate: Stocatra: Bulk handling plant situated at Quay Nos. 232/254 of Hansa Dock. quay length 1,200 m., depth alongside about 43 ft., clearance of grabs above water level 15 m. Up to 48,000 tons of ore can be transhipped in 24 hours, out of 1 vessel.

Equipment: 5 travelling bridges 15 tons.
8 travelling bridges 25 tons.

Stocatra: Terminal at Delwaidedock (Quays No. 750-762), quay length 1,000 m. Depth 55 ft. (+600 m. for barges); 2×50 tons travelling bridges and conveyor belt system. Discharge rate 2,500 t.p.h.

SGM: Terminal at Canaldock: 4 bridges of 25 tons for non-ferrous ores. Quay length 500 ft., depth 50 ft., max. discharge rate 3,000 t.p.h. average discharge rate 2,400 t.p.h.

Coal Terminal Vloeberghs: 3 cranes 10 tons. Quay length 300 m., Several smaller installations for coal.

Sulphur: Transhipment installations of Duval Sales (Antwerp Tank Cleaning) near Boudewijn Lock with covered storage over 100,000 sq. ft.

Soda: The Solvay concern has built specialised warehouses on the South Quay of the 5th Harbour Dock, comprising 14 silos with a capacity of 6,700 tons of soda products. This installation is equipped with 10 cranes, 3 transporter bridges and 4 km. of conveyor-belt.

Fertilizers: Besides quays of chemical plants such as Bayer and BASF there are specialized terminals for fertilizers mainly at 3rd Harbour Dock (Manuport) and Canaldock B1 (Manufert) and Ferchimex (the latter used for fertilizer, sulphur, phosphates etc.).

Total covered warehousing space for chemical fertilizers is 38,405 sq. m.

Other specialized installations include:

Refrigerated storage:	449,000 cu.m.
Tank storage capacity:	9.9 million cu.m.

CRANES:	Container cranes	(35/53 t)	14
	Quay cranes	(2.5/100 t)	446
	Floating cranes	(5/800 t)	17
	Mobile cranes	(5/90 t)	45
	Loading bridges	(15/25 t)	16
	Grain elevators:	on quay	16
		floating	5

TANKERS: Five important refineries and oil storage installations, located at Antwerp have a total tank storage capacity of 6,947,000 cu.m. The total quantity of crude oil refined amounted to 35,790,000 tons in 1982. In the vicinity of the Van Cauwelaert Locks, S.I.B.P. and Esso have important plants. R.B.P. is established in the 4th Port Basin, whereas Belgian Refining Company and Nafta (B) have their installations along the Canal Dock B-2. In the Southern sector of the port, on the River Scheldt and of an earlier construction, the Oil Terminal Antwerp South is situated with restricted length of 650 ft.

Also see Table overleaf

Chemicals, Minerals and Edible Oils:

Installation	*No. of Berths*	*Quay No.*	*Max. draft FW* ft.	in.	*Storage Capacity* cu.m.
Havenbehandelingen S.A.	2	273/275	36	0	290,000
Noordnatie S.A.	2	239/241	35	0	175,000
Panocean-Eurotank NV	7	387/399	36	6	459,000

LPG Terminal: Antwerp Gas Terminal at Left Bank for LPG tankers.

The first phase of the construction of AGT is now completed. It includes construction of 4 spheres of 3,300 cu.m. each and 3 jetties. These are the Main Jetty, the Secondary Jetty and the Barge Jetty. Each jetty is "T" shaped and is equipped with Wiese loading arms provided with an emergency shut-off/disconnecting device. The minimum water depth at the Main Jetty is 11.85 m. enabling tankers handling up to 75,000 cu.m. to berth.

Antwerp Cleaning and Storage CY NV: This terminal situated between the Boudewijn Lock and the Bayer plant, is able to receive ballast water from tankers and other seagoing vessels, and is fitted with separators with a capacity of 600 t.p.h.

Installation	No. of Berths	Quay No.	Max. Draft FW ft.	in.	Bunkers ex-Installation	Rate tonnes per hour load/disch.	Shore facilities for dirty ballast	Spares Stores
S.I.B.P.	7	Pier 2	34	0	Yes	Loading: 1500	Yes	Light by truck
		Pier 3/4	32	4		Discharging: 6000		Heavy by barge
		Jetties 429/435	40	0				
Esso	5	Pier 1/4	18	6	Yes	Loading: 5000	Yes	By barge
						Discharging: 6000		
R.B.P.	3	279-285	39	0	Yes	Loading: 1500	Max.	By barge
		281/283	40	0		Discharging: 4000		
Gamatex	1	623	38	0	No	Loading: 1500	No	By barge
						Discharging: 2000		
Nafta B	2	641 North	50	0	No	Loading: 2000	No	By barge
		641 South	32	0		Discharging: 3000		
Belgian Refining Company	2	661-665	46	0	Yes	Loading: 650	Yes	Light by truck
						Discharging: 6000		Heavy by barge
South Pier	2	River Quay	29	0 LLW	Yes	Loading: 2200	Max.	By barge
River Scheldt		(tidal)	32	0 HW		Discharging: 1400	500 tons	

STEVEDORES: To enable Agents to order gangs, important to obtain ETA Flushing before arrival. Latest time to order gangs, normal day shift 0800 – 1545 hrs. before 0630 hrs. same day. First shift 0600 – 1345 hrs., before 1400 hrs. previous day; second shift 1400 – 2145 hrs. before 1230 hrs. same day; night shift 2200 – 0545 hrs. before 1500 hrs. same day. First shift Monday, 0600 – 1345 hrs. before 1400 hrs. previous Friday. Failure to give exact ETA may result in losing 12 hours to 24 hours and the cost of gang's idle time. No work performed on Saturday and Sunday unless overtime paid.

MEDICAL: Ample medical attendance in the port. Hospital facilities available.

DENSITY: Fresh water in the docks, slightly brackish in the river.

FRESH WATER: All berths supplied by shore connections. Fresh water also available by barge.

FUEL: All grades available. Minimum 24 hours advance notice preferred. All grades can also be supplied by barge. Tankers may not refuel by barge concurrent with working cargo or ballast.

FIRE PRECAUTIONS: No floating objects allowed alongside during loading/discharge/ballasting.

GANGWAY/DECK WATCHMEN: Not compulsory but recommended in general and specially for ships berthed at river quays because of rise and fall of tide.

OPENING/CLOSING HATCHES: Normally opened/closed by crew. Stevedores usually helping lift beams. Tramp vessels according to charter party.

SHIP CERTIFICATES:
Registered Tonnage Certificate.
Derat Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes or 20 cigars or 250 gm. tobacco per man. Spirits 0.25 litres per head.

IDENTIFICATION CARDS: Not required.

CONSULS: The following countries are represented:

Argentina
Austria
Bangladesh
Bolivia
Brazil
Chile
Colombia
Costa Rica
Cuba
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany F.R.
Ghana
Great Britain
Greece
Greek Maritime Office
Guatemala
Haiti
Honduras
Iceland
India
Indonesia
Ireland
Israel
Italy
Ivory Coast
Japan
Korea, Republic of
Lebanon
Luxembourg
Madagascar
Malta
Mexico
Monaco
Morocco
Nepal
Netherlands
Nicaragua
Norway
Pakistan
Panama
Peru
Philippines
Poland
Portugal
Senegal
Sierra Leone
South Africa
Spain
Sweden
Switzerland
Turkey
U.S.S.R.
U.S.A.
Uruguay
Venezuela
Zaire

REPAIRS/DRY DOCKS: The Mercantile-Beliard N.V. owns within its premises 8 private drydocks for vessels up to about 150,000 t.d.w., and 19 private repair berths.

Besides carrying out general repairs, conversion and dry-docking of ships, the yard can carry out licensed repairs and are spare parts suppliers for the following diesel engines:

Burmeister & Wain; Doxford; Fiat; Gøtaverken; Mann; Pillstick and Sulzer. They also are an approved repair centre for Lips and Kamewa propellers.

Dimensions of Private Dry Docks:

No.	Length (m.)	Width (m.)	Depth (m.)
1	146.30	18.50	5.85
2	166.40	21.15	6.50
3	192.60	26.00	7.25
4	206.60	27.00	7.75
7	225.00	29.78	8.25
5	255.00	39.40	8.70
8	270.00	37.29	8.25
6	312.35	50.00	9.20

Facilities:

Gritblasting machines for ship's sides and ship's bottom.
Tank cleaning (2 barges available).
Tank storage barges.
Testing plant for anchor chains and cargo gear (up to 300 tonne test capacity).
Dynamic balancing plant for motors, turbines, up to 11 tonne.
Lifting capacity in drydocks and workshops.
Floating crane and heavy mobile cranes.
Specialised fuel valve repair shop.

Apart from above yard, various smaller repair firms are available to carry out deck and engine repairs. They have qualified labour, specialised workshops but no drydock facilities. For example Messrs. Longueville Bros., Messrs. Locomar Inc. and Messrs. S.K.B.

SURVEYORS: American Bureau of Shipping. Tel: 232.28.66; Bureau Veritas. Tel; 233.79.30/31; Det Norske Veritas. Tel: 232.69.16; Germanischer Lloyd. Tel: 233.74.16; Lloyd's Register of Shipping. Tel: 232.09.40; Registro Italiano. Tel: 233.78.60.

REPATRIATION: All arrangements for crew changes and repatriation can be made.

AIRPORT: Zaventem Airport (distance 50 km.) served by regular airlines. Antwerp Airport Deurne (distance 15 km.) only regular service with Amsterdam and London (3 flights per day). Plans to extend.

TIME: Summertime: April to September (April to October) GMT plus 2 hours. Remainder of year, GMT plus 1 hour.

HOLIDAYS: New Year's Day; Easter Monday; 1st May; Labour Day; Ascension Day; Whit Monday; 21st July; Assumption (15th August); 1st November; 11th November; Christmas Day. Plus the replacement days when New Year's Day; 1st May; 21st July; Assumption; 1st November, 11th November or Christmas Day fall on a Saturday or a Sunday. Cargo work can be arranged when labour available and at surcharge 100%.

POLICE/AMBULANCE/FIRE: Harbour Police Tel: 32.18.40; Alarm and Accidents Tel: 906; Ambulance Tel: 900; Fire Tel: 900.

TELEPHONES: At shipyards and oil terminals telephone is placed on board or in the vicinity without extra cost for local calls. Long-distance calls at special request.

SHIP SUPPLY SERVICE:

Ship-to-Shore Supply Operators:

Alpina Transports & Affretements n.v., Ankerrui 2, B-2000 Antwerp. Tel: 03/231.66.90. Telex: 33759.

Clayton of Belgium n.v., Rijksweg 30, 2680 Bornem. Tel: 03/889.11.31. Telex: 31715.

Continental Lines n.v., Klipperstraat 15, 2030 Antwerp. Tel: 03/541.68.40. Telex: 72368.

Eastcott Freight Services (div. of Westcott Shipping n.v.), Brouwersvliet 21, 2000 Antwerp, Tel: 03/231.29.20. Telex: 32982.

I.B.S. Technical Marine Supply (Antwerp) n.v., Ijzerlaan 12/14, 2008 Antwerp. Tel: 03/231.11.28 – 03/231.11.56. Telex: 35153.

Kopcke Belgium n.v., Sint Michielskaai 21, 2000 Antwerp. Tel: 03/238.58.46. Telex: 31916.

Mercantile-Berliard n.v., Hansadok 403, 2030 Antwerp. Tel: 03/541.04.20. Telex: 31219.

Offshore Europe n.v., Begijnenvest 113, 2000 Antwerp. Tel: 03/231.87.70. Telex: 34129.

Titan Supply Company n.v., Sint Pietersvliet 3, bus 2, 2000 Antwerp. Tel: 03/234.00.66. Telex: 32655.

Unie van Redding-en Sleepdienst n.v., Jordaenskaai 15, 2000 Antwerp. Tel: 03/232.38.80. Telex: 31864.

p.v.b.a. World Wide Offshore, Westdijk 72, 2100 Deurne. Tel: 03/886.99.11. Telex: 34472.

DEVELOPMENTS: The navigable channel and estuary are dredged continuously. The aim of the present plans is to increase the draft allowed as follows: Incoming vessels up to 48 ft. in one tide; 50 ft. in two tides: Outgoing vessels in one tide 43 ft.

At the right bank the construction of the Delwaidedock (quay length 4,700 m.) is completed, the first terminal has been in operation since 1981.

New Lock (Berendrecht Lock) South of Zandvliet Lock under construction.

When completed in 1986, this lock will be able to accommodate fully laden vessels of up to 125,000 d.w.t. and partly laden vessels of up to 250,000 d.w.t. With a length of 500 m. between outer gates, a width of 68 m. between walls and 17.75 m. water depth.

Other terminals for containers/general cargo and for ores are under construction. South of this dock a special Ro-Ro terminal was built for loads up to 2,000 tons.

At the left bank the lock (Kallo Lock) is finished. The construction of docks is continuing.

Other works/investments recently finished, under-way or planned for the near future include: new bridges over the locks; a high bridge over the docks at Quay Nos. 100 – 101; new dredging equipment; new quay cranes (12 tons at 42.5 m. reach) of which 12 are already delivered, 6 ordered. The port recently acquired a 800 ton capacity self propelled floating jack.

Private companies are setting up new container gantries, bridge cranes, etc.

Plans to build a Ro-Ro terminal in the Scheldt.

AUTHORITY: Port of Antwerp General Management, Town Hall, B-2000 Antwerp. *Tel:* 03-231.16.90. *Telex:* 31.807.
Branch Office: Kolveniersstraat 19, 2000 Antwerp. *Tel:* 03-231.17.72.
Contact: Dr. C. Verschueren, Principal Adviser.

AGENT: Muller-Thomsen Antwerpen N.V., 9 Ankerrui, 2000 Antwerp. Tel: (03) 2338920. Telegrams: Mineral. Telex: 71303.

BRUSSELS: 50.51 N. 04.22 E. (See Plan Book)

DOCUMENTS: Same as Antwerp and to be handed to Agent at Antwerp Roads, where clearance obtained.

PILOTAGE: Notice of ETA Antwerp Roads should be given 24 hours beforehand to Antwerp Agent, who will apply for upper Scheldt Pilot. This Pilot takes over at Antwerp Roads and brings ship up Rivers Scheldt and Rupel to Wintam Lock. Canal Pilot boards Wintam Lock. Boatmen service on canal optional, but advisable for ships over 164 ft. length and according weather conditions. Boatmen for possible mooring Wintam Lock Entrance always available. All locks equipped with VHF. Call and answer on Channel 13.

ANCHORAGES: Use of anchors strictly regulated on canal and only permitted certain areas in emergency.

RESTRICTIONS: Ships proceed upstream from Antwerp to Wintam day and night accordance state of tide, direction of current, length and draft.

MAX. SIZE: Overall length: 344 ft. 06 in.; Extreme breadth: 48 ft. 02 in.; Max. draft: 19 ft.

HEALTH: See "Antwerp".

RADIO: See "Antwerp".

VHF: All locks and tug boats equipped with VHF.

TUGS: Normally tug joins vessel Wintam Lock. Ship's lines always used. Although not compulsory, towage advisable in accordance length and draft or weather conditions.

BERTHING: No specific requirements for berthing in canal. Owing to dense traffic, ships should moor strongly.

The Brussels' Harbour extends over a length of 12.5 km. between Brussels (Sainctelettesquare) and Grimbergen (Pont-Brule).

The Inner Port offers: 14 km. of quays and mooring berths 220,000 sq.m. of wharf areas. 390,000 sq.m. of storage areas. 169,000 sq.m. of warehouses.

Materials Quay: Length: 710 m. Number of berths: 15. Depth: 3.5 m. 2 cranes of 2 tons lifting power, owned by the Canal Company.

Barges Quay: Length: 710 m. Number of berths: 15. Depth: 3.5 m. Equipment: 1 crane of 2 tons lifting power owned by the Canal Company. 1 private installation for cargo handling.

Shipowners Quay: Length: 920 m. Number of berths: 15. Depth: 6.5 m. Equipment: 3 cranes of 2 to 4 tons lifting power owned by the Canal Company. 6 private installations for cargo handling.

Steamers Quay: Length: 920 m. Number of berths: 15. Depth: 6.5 m. Equipment: 7 private installations for cargo handling.

Factories Quay: Length: 2,000 m. Depth: 6.50 m. (along the quay wall: 3.20 m.)

Leon Monnoyer Quay: Length: 1,800 m. Number of berths: 20. Depth: 6.5 m. Equipment: 11 private cranes from 3 to 10 tons lifting power. 9 private installations for cargo handling.

Heembeek Quay: Length: 360 m. Number of berths: 4. Draft: 6.5 m. Equipment: 9 private installations for cargo handling.

Industrial Harbour Section: Length: 6,000 m. Number of berths: 60. Draft. 6.5 m. Equipment: 59 private installations for cargo handling, (electric cranes from 1 to 10 tons lifting power, grain elevators, belt conveyors, suction devices.)

Maritime Canal: Length: 20 km. Draft: 6.5 m. Equipment: 26 private installations for cargo handling.

SPECIALISED CARGO HANDLING FACILITIES: Private cargo handling facilities exist in the whole of the Industrial Maritime Canal for grain, coal, fertilisers, liquid chemicals and L.P.G.

BRIDGES: Ships can reach outer harbour with clearance of 100 ft. and pass under fixed bridges to inner harbour with clearance of 20 ft. Road bridges open on demand. Railway bridges open according timetables, which subject to change.

STEVEDORES: Arrangements made by Agents.

MEDICAL: No notice required for medical attendance. Hospital facilities available. In case of accident or emergency call phone number 900. No particular inoculations or certificates required.

TANKERS: Oil usually imported by tank barges. No slop facilities. Max. draft permitted for wine tankers, gas tankers and acid carriers: 19 ft.

DENSITY: Canal is fresh.

FRESH WATER: Fresh potable water delivered from shore in Wintam Lock at average rate of 10 t.p.h. during passage through lock, and in outer harbour at maximum rate of 20 t.p.h. according diameter of hose.

FUEL: All grades available. At least half a day notice should be given.

FIRE PRECAUTIONS: The usual precautions to be taken by tankers and ships handling inflammable or dangerous goods.

GANGWAY/DECK WATCHMEN: Services of shore watchmen optional.

OPENING/CLOSING HATCHES: Carried out by ship's crew.

IDENTIFICATION CARDS: Not needed.

CONSULS:

Algeria	02	537.81.33	537.82.41
Denmark	„	217.11.31	
Finland	„	512.98.93	
France	„	217.31.79	217.24.63
Germany (Fed. Rep.)	„	770.58.30	
Greece	„	217.76.14	
Iceland	„	512.59.65	
Italy	„	537.19.34	537.90.56
Liberia	„	344.49.40	
Luxemburg	„	733.99.77	
The Netherlands	„	511.39.60	
Norway	„	736.20.45	
Panama	„	512.66.30	
Portugal	„	538.47.90	
Spain	„	511.73.90	
Switzerland	„	512.78.43	
Tunisia	„	734.91.78	
United Kingdom	„	219.11.65	

REPAIRS: No shipyards in Brussels, but in Boom and Temse, not far from Brussels, and Antwerp. Minor deck and engine repairs by small shipyard on canal.

REPATRIATION: Arrangements for repatriation can be made with Maritime Authorities on Antwerp Roads or at Brussels with the Harbour Authorities. Consuls in Brussels arrange for crew changes or repatriations (Consulates closed Saturdays, Sundays and Holidays).

AIRPORT: Brussels Airport served by regular airlines. Air terminal situated in town centre, directly connected with Airport by special railway.

HOLIDAYS: Official Holidays: January 1st (New Year), Easter Monday, May 1st (Labour Day), Ascension Day, Whit Monday, July 21st (National Holiday), August 15th (Assumption Day), November 11th (Armistice Day), December 25th (Christmas). Most offices closed on Saturdays.

POLICE/AMBULANCE/FIRE: General call, Ambulance/Fire: 900; Police: 906; Fire: 02/511.55.55. – 512.22.22. Police 02/513.28.40.

TELEPHONES: Only placed for warships at one particular berth.

GENERAL: Bus 47 near left bank and street-car 58 near right bank of outer harbour, lead to town centre (10 minutes). General Information Office situated on de Broukeresquare (town centre). Ship stores can be obtained, but no bonded stores.

SHORE LEAVE: Crew members allowed ashore without restriction.

REGULATIONS: At night only main gate of outer harbour on right bank is open.

DEVELOPMENTS: Complete schedule for modernising canal, including building two larger locks, widening and deepening canal to be worked out over several years. Works of first new lock near present Kapellelock already completed.

AUTHORITY: "S.A. du Canal et des Installations Maritimes de Bruxelles" (Port of Brussels Authority), Place des Armateurs, 6, 1020 Bruxelles. *Tel:* 02/425.10.00. *Telex:* 64.361. *Cables:* Bruportus. *Contact:* General Manager.

Harbour Master: Rue de L'Avant-Post 2, Boite 1, 1020 Brussels. *Telex:* 64361.

AGENT: See "Antwerp".

GHENT: 51.02 N. 03.44 E. (See Plan Book)

PORT LIMITS: As a rule, the Notice of Readiness must be given in writing and will generally not be accepted by the receivers before the ship has berthed. Exceptionally, when the berth is occupied, the notice can be tendered as soon as the vessel has dropped anchor at Flushing or Terneuzen Roads, or has moored at a waiting berth. Strictly speaking, ports limits are at the border between the city of Ghent and the town of Zelzate, i.e. at about 3 km. from the Dutch border.

DOCUMENTS:

Documents needed for Customs:

1 Cargo Manifest No. 125.
1 Store List.
1 Crew List, with the list of personal effects of the crew, such as cameras, guns, cigars, cigarettes, tobacco, alcohol.

Documents needed for the Water Bailiff:

1 Crew List.
1 Passenger List.
Tonnage Certificate.
Oil Register.
Certificate for Civil Liability when the ship carries more than 2,000 tons of oil in bulk.

PILOTAGE: For seaward approach, position of pilot-cutters and ETA-messages: see "Flushing". Pilotage is compulsory for all ships, except those in ballast having a draft of less than 22 decimetres (7.2 ft.). All vessels proceeding to Ghent have to pass the locks at Terneuzen. The Canal-Pilot normally boards a ship bound for Ghent when she passes Flushing. Ships coming from the North always have a Dutch Sea-Pilot on board who brings the ship to the Terneuzen Locks where a Dutch Canal-Pilot takes over.

Pilotage Regulations: Reporting of the ETA at one of the pilot stations at sea in the estuary of Scheldt must take place in the following manner:

1. The ETA must be reported not less than 6 hours before that time.
2. For the pilot station "Wandelaar", via Ostend-Radio (OST) or via other appropriate communication channels. The message is to be addressed to "Pilotage Ostend".

The text of the message is to consist of:

(a) The words "ETA Pilot Wandelaar".
(b) The ETA as a group of 4 digits in GMT.
(c) The draft of the ship, stating the units used.
(d) The Port of Destination.

3. For the pilot station "Steenbank" via Scheveningen-Radio (PCH) or via other appropriate communication channels. The message is to be addressed to "Pilotage Flushing".

The text of the message is to consist of:
- (a) The words "ETA Pilot Steenbank".
- (b) The ETA as a group of 4 digits in GMT.
- (c) The draft of the ship, stating the units used.
- (d) The Port of Destination.

ANCHORAGE: The roads of Terneuzen offer a safe and spacious anchorage outside the fairway, at the so-called Pit of Terneuzen. Depth is at least 49 ft.

RESTRICTIONS: Navigation day and night. There are no restrictions for entering the locks at LW for vessels with a draft not exceeding 32 ft.

MAX. SIZE: In normal practice, length 256 m., breadth 34 m., draft 12.25 m. Fresh water. Also see "Shipmaster's Report".

RADIO: All cables to Agents, receivers, etc. to be sent via Ostend Radio (call sign OST), eventually via Scheveningen Radio (PCH) for vessels coming from the North. Also see "Pilotage".

VHF: Contact pilot-cutters via Channel 6, Flushing Radio via Channel 14 and Terneuzen Harbour via Channel 11. All communications with the Harbourmaster's Office in Ghent should go via Channel 5.

RADAR: See "Antwerp".

TUGS: Tugs needed for entering the locks usually meet the vessels near Buoy 23. The Master decides whether to use own lines or not.

BERTHING: The Alderman Siffer Dock, Port Arthur Quay, Petroleum Dock (Texaco), Rodenhuize Dock and the Sidmar Quay can all accommodate ships with a deadweight up to 80,000 tons. The older docks (Noord-, Midden- and Zuiddok, and the Fore Harbour) have depths ranging from 7 m. to 8.75 m.

CRANES: All the docks mentioned above are equipped with handy, powerful cranes, the majority of which are owned by the Port Authority.

At the Sifferdok there are 4 multi-purpose cranes of 40 tons and 2 tobogans owned by N.V. Stukwerkers Havenbedrijf. The Sifferdok, Middendok and Zuiddok each have two bulk-handling gantry cranes of 10 tons. Two floating cranes of 25 tons are also available.

At the Port Arthur Quay there are 10 cranes of 5 tons, 8 cranes of 15 tons and 2 tobogans owned by Manuport.

BULK CARGO FACILITIES:

Sifferdok: The installations of Euro-Silo at the end of the dock offer facilities for all kinds of grain and derivatives. Quay length: 475 m. Storage capacity: 130,000 tons heavy grain. A warehouse for flat storage of 40,000 tons of heavy grain. Equipment: 2 pneumatic discharge towers of 500 t.p.h. each; 2 screw unloaders of 700 t.p.h. each; 2 mobile cranes for grab discharge of barges; 2 train unloading stations of 500 t.p.h. each. 2 mobile and 1 fixed loading tower of 600 t.p.h. each; 2 loading stations for trains of 600 t.p.h. each. The Compagnie Belge de Manutention (CBM) situated on the left bank of the Sifferdok specializes in the handling of bulk cargoes such as pyrites, ores, phosphates, coal, cokes etc. Equipment: 2×15 ton and 3×10 ton cranes for grab discharge and 2 mobile cranes of 40 tons. Also mechanical shovels for the discharge of bulk goods into rail-wagons. Storage capacity: 2,500,000 tons.

The same commodities are also handled by CBM in the Zuid- and Middendok; grab discharge with 10 ton cranes.

Rodenhuizedok: The new grain silo "Ghent Grain Terminal" can accommodate vessels up to 80,000 tons. For unloading there are 2 mobile pneumatics and 1 fixed tower with a total capacity of 1,800 t.p.h. For loading there is 1 mobile post and 1 fixed post with a total capacity of 1,600 t.p.h. Vertical storage capacity of the silo is 60,000 tons. Quay length: 670 m.

Sidmar: Steel plant situated on the right bank of the ship-canal to Ghent, with 1,050 m. quay length of which it is the exclusive user. Maximum depth at terminal: 13.50 m. Equipment: for the loading of steel sheet and coils, 1×25 ton and 1×35 ton crane. For grab discharge: 2 portal cranes of 25 tons each and 1×15 ton crane.

SPECIALISED CARGO HANDLING FACILITIES: Specialised berths where equipment for handling fertilisers is available are No. 27 (Grootdok) and No. 83 (Sifferdok); cranes for grab discharge, funnels and conveyor belts.

Liquid chemicals are currently handled at the U. Kuhlmann factory in Rieme on the left bank of the ship-canal, most commonly liquid sulphur and propylene. No berths for LPG-carriers exist in Ghent.

Containers can be handled on the right bank of the Sifferdok (see "Cranes").

Three roll-on/roll-off berths exist on the right bank of the Sifferdok, each with a fixed concrete ramp. One double berth is situated at Quay No. 101/102 and has a ramp on each side of 20 m. width. The other ramp is situated at Quay No. 98 and is only 15 m. wide. Max. draft 12.25 m.

TANKERS: There are 3 tanker berths for seagoing vessels, 2 owned by Texaco in the Petroleum Dock and 1 owned by Ghent Tanking Co. in the Rodenhuizedock. Each berth can accommodate ships of 70,000 tons with a draft of 12.25 m. maximum.

Texaco have load/discharge lines of 10 in., but all kinds of fittings are available. They also have 2 tanks for the reception of dirty ballast (120,000 bbls.) and 2 tanks for the reception of oil residue (10,000 bbls.).

The diameter of load/discharge lines at the jetty operated by Ghent Tanking Co. is 8 in. No tanks for ballast or slop discharge available. Vessels to discharge with own pumps.

BRIDGES: There are 3 bridges across the Ghent/Terneuzen Canal, namely at Sluiskil, Sas-van-Ghent and Zelzate. They open day and night, on signals by Pilots.

High tension cables cross the canal at the Rodenhuize and Langerbrugge power-stations. Maximum air draft permitted: 48.90 m.

MEDICAL: Agents to be advised by radio or cable if urgent medical assistance required. Ample hospital facilities available.

STEVEDORES: Will be advised by Agents of ETA. Gangs must be ordered by noon in order to commence at 0600 hrs. next working day (morning shift); by 1700 hrs. to commence at 0750 hrs. next morning (normal working day); by 0700 hrs. to commence at 1400 hrs. same day (afternoon shift); by 1300 hrs. to commence at 1325 hrs. (half working day).

DENSITY: Water in the docks and the Ghent-Terneuzen Canal is practically fresh.

FRESH WATER: (For seagoing vessels). Supply by barge. Within normal working hours at 185 F per cu.m.; outside normal working hours at 245 F per cu.m., with a supplement ranging from 2,095 F to 4,190 F. Minimum of 10 cu.m. always charged. Rate of delivery: ±40 t.p.h.

FUEL: All grades are delivered either by barge or truck. At least 24 hours notice required.

CONSULS:

Austria	Tel. 25.75.41	Korea	Tel. 22.68.03
Central African Republic	„ 28.10.81	Mauritania	„ 88.86.48/ 25.41.07
Chile	„ 74.15.40	Netherlands	„ 25.18.16
Denmark	„ 25.65.62	Norway	„ 51.25.21/ 55.75.34
El Salvador	„ 25.44.29		
Finland	„ 23.50.11	Pakistan	„ 85.42.13
France	„ 25.97.30/ 25.97.43	Peru	„ 28.20.83
		Senegal	„ 25.75.51
Germany (F.R.)	„ 25.91.68	Spain	„ 25.75.91
Great Britain	„ 25.68.75	Sweden	„ 26.19.26
Greece	„ 25.58.91	Tunisia	„ 26.41.42
India	„ 26.34.33	Zaire	„ 25.98.34
Italy	„ 22.35.26		

REPAIRS: Practically all kinds of deck and engine repairs are possible. Radio and electronic apparatus can also be repaired.

DRY DOCKS: There are 2 dry docks for ships with following dimensions.
- (1) length: 120 m. breadth: 13 m. draft: 5 m.
- (2) length: 70 m. breadth: 11 m. draft: 3.90 m.

SURVEYORS: All major Classification Societies have offices in Antwerp.

GANGWAY/DECK WATCHMEN: Not compulsory, but recommended. Cost per watchman: 4.087 B.F. (morning shift), 5.053 B.F. (afternoon shift).

HATCHES: Opening and closing is normally done by crew, if not otherwise specified by Charter-Party.

CUSTOMS ALLOWANCES: 200 cigarettes or 50 cigars or 250 gm. tobacco or 100 cigarillos. Wine is practically free. Spirits, one opened bottle per crew member.

CARGO GEAR: Either shore or ship's gear may be used. Public property: 85 cranes with lifting capacity from 2.5 to 15 tons. Two floating cranes of 25 tons. Two multipurpose cranes of 40 tons. Two container gantry cranes of 55 tons. Private property: 39 cranes and 27 bridge-cranes of 15 tons.

REPATRIATION: All arrangements for crew changes and repatriation can be made.

AIRPORT: National airport of Zaventem near Brussels is 70 km. Ostend Airport (Middelkerke) is 50 km.

TIME: Summertime, GMT plus 2 hours, from beginning of April to end of September. Otherwise, GMT plus 1 hour.

HOLIDAYS: New Year; Easter Monday; Labour Day (1st May); Ascension; Whit Monday; National Day (21st July); Assumption (15th August); All Saints (1st November); Armistice (11th November); Christmas Day. Work on these days possible at special overtime rates.

POLICE/AMBULANCE/FIRE: Dial 900 for any emergency. Dial 906 for Police assistance. Harbour Master's Office: 51.04.57 or by VHF, Channels 5 and 11.

TELEPHONES: Only placed on board visiting warships.

SERVICES: All kinds of special services are available, e.g. tank-cleaning, reception of waste oil, discharge of tank-washings or slops, compass adjusting, etc.

SHORE LEAVE: No restriction of any kind. Seaman's book is sufficient.

BANKS: *Banks near to the Port:*

Bank Brussel Lambert — open from 0900 hrs. until 1230 hrs.
Muidepoort 8 — 1400 hrs. until 1600 hrs.
9000, Ghent — Friday until 1700 hrs.
Tel: 51.02.39

Kredietbank — open from 0900 hrs. until 1230 hrs.
Doorzelestraat 7 — 1400 hrs. until 1630 hrs.
9000, Ghent
Tel: 25.61.41

Generale Bankmaatschappij — open from 0900 hrs. until 1230 hrs.
Stapelplein 31 — 1400 hrs. until 1600 hrs.
9000, Ghent — Friday until 1700 hrs.
Tel: 23.13.86

A.S.L.K. — open from 0900 hrs. until 1230 hrs.
Voormuide 39 — 1330 hrs. until 1600 hrs.
9000, Ghent — Friday until 1830 hrs.
Tel: 25.62.06 — Saturday 0900 hrs. until 1200 hrs.

SHIPMASTER'S REPORT: July, 1983.

Sifferdok: The berth we were allocated in 'Schepen Sifferdok' (the top corner as shown on the Chart Nos. 95, 94, 93) has insufficient water alongside to take a ship with a recommended draft of 12.25 m. We arrived at this berth on the night of 11th July, with a draft of 12.25 m. and could not approach nearer than 5 m. forward and 10 m. aft and the ship lay at an angle until sufficient cargo had been discharged by long reaching shore cranes to enable the vessel to come alongside properly.

The Port Booklet states that the maximum water in the dock is 13.5 m. and the maximum permitted draft of vessel is 12.25 m. It is not possible to berth at that draft. Soundings taken by hand lead indicated depths of 36 ft. – 39 ft. at 5 m. off the quay and future callers at this port should be aware of this problem should they be allocated this berth in Sifferdok. Pilots maintained that the situation had been like this for many years.

Terneuzen: Terneuzen locks to come into the canal system to Ghent, authorities are extremely strict on the draft being 12.25 m. or less. i.e. They are critical about the draft here and Masters should be warned when loading max. cargo for Ghent not to go over 12.25 m.

AUTHORITY: Havenbedrijf Der Stad Gent, Vliegtuiglaan 1, B-9000, Gent. *Tel:* (091) 51 04 57. *Telex:* 11460. *Contact:* Captain A. De Wilde, Port Commander.
AGENT: See "Antwerp".

LIEGE: 50.38 N. 05.35 E.

APPROACHES: Depth on Albert Canal from Antwerp to Kanne, 3.2 m., and from Kanne to Liege, 3 m. Depths on River Meuse range from 2.2 m. at Namur to 3 m. in Liege. Merksem Bridge on Albert Canal, 6.7 m. air draft and Arches Bridge on River Meuse has 6.4 m. air draft.
MAX. SIZE: *Largest Vessel:* LOA 97.2 m. Max. beam 11.7 m. Max. draft 1.8 m. – 2.8 m.
BERTHING: 16.3 km. of public quays; 8 km. of private quays; port facilities at Monsin are now operational. One sheltered dock, 110 m. long, 26 m. breadth equipped with 4 warehouses, 10,000 sq.m. total storage area, good road and rail connections. 170 berth marina.
Ro/Ro Facilities: Ramp at the Port de Seraing for loads up to 1,200 tonnes.
BULK HANDLING FACILITIES: All quays have facilities to load and discharge bulk cargoes. Silos for storage of sand and gravel also available.
TANKERS: Facilities at Wandre. Storage capacity of 240,000 cu.m.
Liquefied Gas Terminals: Facilities for storage (6,650 cu.m.) and distribution of butane and propane.
CRANES: 117 gantry and mobile cranes.
FRESH WATER: Available.
AIRPORT: At Bierset, distance 20 km.
DEVELOPMENTS: Albert Canal is being improved.
AUTHORITY: Port Autonome de Liege, Quai de Maestricht 14, B-4000 Liege, Belgium. *Tel:* (041) 235907/9. *Contact:* R. Planchar, General Manager.

NIEUWPOORT: 51.09 N. 02.43 E. (See Plan Book)

DOCUMENTS: Immigration requires:
Ship's Papers
2 Crew Lists
2 Passenger Lists
Passport or Seaman's Books
PILOTAGE: Compulsory. Pilot station at inner end of West Pier.
ANCHORAGES: Good anchorage available in roads.
MAX. SIZE: Largest vessel 82 m. LOA, 5 m. draft.
VHF: Pilots operate on Channel 9.
TUGS: No tugs available.
BERTHING: Harbour entrance formed by two parallel piers running N.W. – S.E. giving access to inner harbour through straight channel. Wharf of 1,200 m. length. Depth in channel and harbour 3 m. at MLWS. Tidal range 4 m. – 5 m.
Yachting harbours with a capacity of 2,000 yachts.
CRANES: 3 ton and 5 ton cranes available.
MEDICAL: Hospital facilities at Veurne (10 km.).
FRESH WATER: Available.
FUEL: Light and heavy gas oil available. No coal.
REPAIRS: Small repairs only.
AIRPORT: Middlekerke, 10 km., distant.
AUTHORITY: Maritime Commissioner (Harbour Master), Langestraat 89, 8450 Nieuwpoort, Belgium. *Tel:* 058-233045. *Contact:* The Harbour Master.

OSTEND: 51.14 N. 02.55 E. (See Plan Book)

DOCUMENTS:
2 Crew Lists or Passenger Lists.
4 Cargo Manifests.
2 Copies Bills of Lading.
3 Freight Lists prepared by Agents.
2 Customs Provision Lists prepared by Agents.
General Declaration prepared by Agents.
Customs Declaration outward bound prepared by Agents.
PILOTAGE: *(a)* from Pilot boat between "S.W. Akkaert" and "A.1" lightbuoys. Black hull, white number forward on both sides of hull, yellow funnel black top. Displays by day at top of mast, red square flag with letter "P" in white; by night lights prescribed by International Regulations. Contact pilot boat: Channel 6 VHF. Morse or flag signal: G.8. In low visibility: sound signal G.8 to be made at least 3 seconds after usual fog signal. Pilot boat answers with sound signal "H" at least 3 seconds after sounding prescribed fog-signal.
Anchorage awaiting Pilot: Between S.W. Akkaert, N.E. Akkaert and A.1 Lightbuoys. Depths at least 18 m. MLLWS. Advice from pilot boat VHF Channel 6. If Pilot boat not on station, shipping informed by Ostend Radio in radiotelephonic frequency 2761 kHz (108 m.) announced on 2182 kHz (137 m.) on following hours: 0103 – 0803 – 1303 – 1603 and 2103 GMT.
(b) From Pilot Station Ostend. ETA to "Pilot Station Ostend" via "Radio Ostend" at least 2 hours before arrival. Harbour Pilot boat will meet as far as Lat. 51° 15′ 30″ N., Long. 2° 30′ E. Pilot boat shows by day: red square flag white "P"; by night: international prescribed lights. Anchorage: Lat. 51° 15′ 30″ N., Long. 2° 30′ E. Depths: at least 7 m. MLLWS. Pilot Station Ostend operates VHF Channel 9 (only for Pilotage matters).
RESTRICTIONS: Any restrictions imposed are shown on mast of signal station at end of Eastern harbour entrance pierhead.
MAX. SIZE: Entrance of lock to Commercial Docks restricted to max. length 124 m., max. beam 57 ft. 6 in. and draft max. 24 ft. Entrance to lock of Fishing Port restricted to ships with max. length 90 m., max. beam 50 ft. and max. draft 23 ft. Harbour channel restricted to 30 ft. draft.
HEALTH: Pratique obtained from Belgian Pilot. Any advice on health matters also obtainable from Pilot services.
RADIO: Ostend Radio – OST.
TUGS: Government tug 1250 h.p. available, meets outside harbour. Tug lines optional; (if demanded from Government tug) charge according to tariff (59/701100).
BERTHING: According draft. Any specific instructions given by Harbour Pilots or Agents.
BULK HANDLING FACILITIES: Ro/ro berths in timber dock and on deep water quay with facilities for loading and unloading containers.
STEVEDORES: ETA advices week-days before 0600 hrs. For Saturday or Sunday work advise before 1500 hrs. Fridays. All stevedoring arrangements made by Agents.
MEDICAL: Advance notice to Agents for medical attention 6 hr. before arrival. Hospital services available. Medical information can be obtained on R/T via Ostend Radio.
TANKERS: Only small coastal tankers. Only discharge in Fishing Port. Max. length 285 ft., max. beam 50 ft., max. draft 23 ft., or Ostend-Bruges canal, max. length 312 ft., beam 57 ft., max. draft 21 ft. (16th May – 16th October); max. 18 ft. (16th October – 16th May).
FRESH WATER: Available quayside in docks. Rate delivery approx. 15 t.p.h.
FUEL: All grades.
GANGWAY/DECK WATCHMEN: Not necessary. If required, cost approx. ±5,500 frs. per shift of 8 hrs.
OPENING/CLOSING HATCHES: Normally carried out by crew. Can be done by stevedores but will then be charged.
CERTIFICATES: Load Line, Tonnage, Radar and Radio Certificates.
TOBACCO ALLOWANCE: 200 cigarettes or 100 cigarillos or 50 cigars or 250 gm. tobacco. Fresh supply weekly.
WINE AND SPIRIT ALLOWANCE: 1 litre per man in opened bottles.
CARGO GEAR: No additional requirements.
CONSULS:
Austria
Chile
Denmark
Finland
France
Germany
Great Britain
Guatemala
Monaco
Norway
Portugal
Sweden
Uruguay
REPAIRS: All types deck and engine repairs.
DRY DOCKS: In Fishing Port 2 slipways available, one 1,000 tons deadweight, the other 500 tons; one of approx. 3,000 tons is planned. One floating dry dock of 5,700 tons in Government berths.
REPATRIATION: Through Immigration Officers and Maritime Police, Tel: 500925 and 500926.
AIRPORT: 3 miles from port, served by regular airlines.
TIME: Local time GMT plus 1 hour all year round.
HOLIDAYS: New Year (1st Jan.); Easter Monday (changeable); Labour Day (1st May); Ascension Day (changeable, in May); Whit Monday (changeable); Independence Day (21st July); Our Mary Ascension Day (15th Aug.); All Saints' Day (1st Nov.); Armistice Day (11th Nov.); Christmas Day (25th Dec.). Cargo work can be arranged on those days at sufficient notice.
POLICE/AMBULANCE/FIRE: Police Tel: 701111 and 701057; Ambulance Tel: 900; Fire Tel: 701010 and 701086.
TELEPHONES: No arrangements for placing on board.
SERVICES: Compass adjusting, radio and radar repairs.
DEVELOPMENTS: New deep water quay with max. depth 8.0 m. LLW, to be increased to 10 m. in the near future. Fresh water alongside.
AUTHORITY: Stad Oostende, Havendirectie, Slijkensesteenweg 1, 8400 Ostend. *Tel:* 059-321669, 059-321687. *Telex:* 81281 (Osthav B). *Contact:* Ghys Raphael, Harbour Master – Director.

ZEEBRUGGE: 51.20 N. 03.12 E. (See Plan Book)
BRUGES: 51.13 N. 03.13 E.

PORT LIMITS: A line drawn between the seaward end of the East and West jetties.

DOCUMENTS:
1 List of Dangerous Goods.
2 Crew Lists or Passenger Lists.
4 Cargo Manifests.
2 copies Bills of Lading.
3 Freight Lists (prepared by Agents).
2 Customs Provision Lists (prepared by Agents).
1 General Declaration (prepared by Agents).
1 Customs Declaration, outward bound (prepared by Agents).
Certificate of Registry.
Tonnage Certificate.
Bill of Health.
Derat Certificate.
Oil Record Book.
Certificate of Insurance in respect of Civil Liability for Oil Pollution Damage.
Safety Certificates.

PILOTAGE: Compulsory. Notice of ETA and request for a Pilot must be made at least 6 hours in advance to "Pilotage Oostende", through Oostende Radio, Channel 16. Message to contain ETA Pilot, draft and destination. Direct calls to pilot vessel should be made on Channel 6.

The Pilot boards the vessel near the A1 Buoy (14 miles N.W. of the port, co-ordinates Lat. 51° 22.5′ N., Long. 02° 53.5′ E.) or for small vessels near the Zand-1 Buoy (Pas van het Zand).

From Zand-1 Buoy (entrance "Pas van het Zand"). Applications to pilot station "Wandelaar", via Ostend Radio, VHF Channel 16.

Pilotage Service Addresses: Ostend: Sir Winston Churchillkaai 2, B-8400 Oostende. Tel: 059-70.77.01/02/03.

Zeebrugge: Loodswezenstraat 30, B-8380 Zeebrugge-Brugge 5. Tel: 050-54.50.72.

ANCHORAGE: Safe anchorage in Zeebrugge Roads for vessels drawing up to 9.70 m. Vessels drawing more than 9.70 m. will be anchored if needed around "A1" Buoy.

RESTRICTIONS: Vessels with a draft of over 35 ft. are dependent on tide for entry.

Access Channel: "Pas van het Zand", beaconed; 4,600 m. long, 500 m. wide; depth Z (−11 m.) LLWS over a width of 300 m.; direction N.W./S.E.

TIDES: *Tidal Currents:* Rising tide: direction S.W./N.E., average velocity: 2 knots. Outgoing tide: direction N.E./S.W., average velocity: 2 knots.

Tidal Differences: Mean tide: +4.35 m. at HW; +0.70 m. at LW; +4 m. from 50 minutes before HW to 1.20 hours after HW; +3 m. from 1.40 hours before HW to 2.50 hours after HW.

Spring tide: +4.70 m. at HW; +0.40 m. at LW.

Neap tide: +3.82 m. at HW; +1.05 m. at LW.

MAX. SIZE: Vessels up to 350 m. and 61 m. beam can be accepted. Max. draft is 13 m. (keel clearance 1.80 m.).

For Bruges: Max. beam 19 m., max. draft 8 m.

HEALTH: Pratique is normally given at pilot station provided health situation satisfactory. Any advice on health matters also obtainable from pilot service.

RADIO: Ostend Radio (VHF Channel 16) used for all messages.

VHF: Pilotage: A1 Buoy on Channel 6, port entrance on Channel 9 (continuous watch). Port Control: Channel 13 (continuous watch). Tugs: Channel 13 (continuous watch).

BERTHING FACILITIES: Outer Harbour:

Harbour Mole:

Quay No.	*Length* (m.)	*Depth at LLWS* (m.)
1, 2, 3	450	10.5
3, 5, 6 (part)	375	9.0
6 (part), 7, 8, 9	746	7.2

Cranes: 6×8 ton, 5×8 – 16 tons and 2×3 ton.

Car Ferry Terminal: Quay Nos. 10, 11, 12 – 2 public ro/ro berths. Quay No. 13 – 1 private berth.

Ramps: 2×53 m. width of the bridge, including 2 separate protected footpaths for passengers: 7.10 m. max. load capacity: 400 kg./sq.m. (heavy articulated loads to a maximum of 60 tons with an axle load of 20 tons over 4 wheels).

Berths: 2, on both sides of a line of 6 dolphins with a diameter of 10 m., linked with a gangway length: 145 m. water depth: 7 m. at LLWS.

Ships: Max. length allowed, no limitation. Max. beam allowed: 21.20 m. with the ship's axis in line with the ramp axis (ships of 33 m. beam, however, can berth obliquely, or out of axis).

Western Peninsula: Area: 18 ha. Total quay length: 1,615 m., of which 1,525 m. with a water depth of 13 m. (LLWS), quay height 8 m. above LLWS.

West Quay: Quay No. 13: 90 m. of connecting quays. Quay No. 14, 15: 725 m. for Ocean Container Terminal Zeebrugge.

North Quay: Quay No. 16: 205 m. for OCZ and waiting quay.

East Quay: Quay No. 17, 18, 18a: 595 m.; terminals for the discharge of crude oil and refined products.

Ocean Container Terminal Zeebrugge (OCZ): Area: 15 ha.
Quays: Total length 1,020 m.
Gantry cranes: 2×45 ton, 1×30 ton.
Storage area: 10,000 TEU's.
Straddle carriers: 10×35 ton.
Forklifts: 15×2 ton – 30 ton; 1 trailer tractor; 2 tractors; slots for reefer container.

The Train Ferry Terminal (T.F.T.): Area: 4 ha. Quay No. 19: Berth for train ferry ships. Length: 195 m. Width: 25 m. Water depth: 6.70 m. LLWS. 1 ramp, length: 50 m. Width: 9.6 m. Max. size: 163 m. LOA, 18.5 m. width. Draft 4.0 m.

The Short-Sea Container Terminal (S.C.T.): Area: 9.5 ha. Quay Nos. 21, 22, length 270 m. Terminal for loading/discharging container vessels. Water depth: 7 m. LLWS. Quay height: 7.30 m. above LLWS.

2 berths for container vessels. 2 gantry cranes (Peiner) of 30 ton SWL. 2 Peiner straddle carriers (30 tons). Fork lift trucks and tractors. Capacity 2,200 TEU's.

The Swedish Quay: Area: 12.4 ha. Quays: B, C + reserve quay. Length 825 m. Water depth: 8 m. LLWS. Quay height: 8 m. LLWS. Includes SeaRo terminal.

SeaRo Terminal: Area: 12.4 ha. Equipped to berth ro/ro vessels alongside quay with stern to MacGregor pontoon (50 m. × 33 m.). 1 mobile crane (40 tons). Fork lifts (5 tons – 30 tons). Trailers (up to 60 tons).

Other Installations: Bunkering station: 5 tanks, total capacity: 20,450 cu.m. (bunkering from lighter, however, is possible on all quays).

Gas freeing station (near Bunkering station), capacity : 4,000 cu.m. in gaseous nitrogen.

Maritime station: Equipped for the embarkation and disembarkation of cruise-ship passengers (hall, banking services, refreshment rooms, etc.); restaurant (capacity: two rooms with approx. 100 persons each).

Tank storage for molasses, 10 tanks with a total capacity of 87,350 tons.

Berths for tugs, 4 berths for tugs on stand-by at quays Nos. 9 and 10.

Inner Port at Zeebrugge:

The Sealock: Length: 210 m. Width: 19.70 m. Sill depth: 5.50 m. LLWS. The usable water depth in the lock varies between 5.50 and 9 m.

The Baudouin Canal: Length between the sealock to the bridge at Dudzele: 5.5 km. Width at water surface: 70 m. Width at bottom: 22 m. Depth: 8 m. = Z (−4.50 m.) + canal level Z (+3.50 m.). Quays, with a length of 450 m., in front of the coke and glass works.

The Turning Area: Length: 500 m. Width: 175 m. Depth: 8 m.

The Prince Philip Dock: Length: 560 m. Width: 200 m. Depth: 8.40 m.

North Sea Ferries: Size of vessel governed by sea lock (205 m. × 19 m. (beam) × 8 m. (max. size bow ramp). Bridge, Length: 24 m. Width: 7.8 m. Max. load: 60 ton, 20 ton per axle. Tugmasters, forklifts, 30 ton mobile crane.

The Former Ferrydock: Length: 500 m. Width: 130 m. Depth: 8 m.

Inner Port at Bruges:

The Baudouin Canal: Length between the bridge at Dudzele to the entrance of the West dock: 4,950 km. Width at water surface: 125 m. Width at bottom: 77 m. Depth: 8 m.

The East Dock: Length: 370 m. Width: 90 m. Depth: 8 m.

The West Dock: Length: 550 m. Width: 90 m. Depth: 8 m.

The Industrial Dock: Length: 1,080 m. Width: 125 m. Depth: 8 m.

The Junction Lock: Length: 115 m. Width: 12 m. Sill depth: 4 m.

Quays: Cranes: 2×5 ton, 2×8 ton.

Berth No.	*Dock*	*Length*
1 – 2 – 3 (Quenastkaai)	East dock	389 m.
4 – 5 (Kaap Hoornkaai)	East dock	228 m.
6 (Albertakaai)	East dock	148 m.
7 – 8 – 9 (Graaf Visartkaai)	West dock	315 m.
10 – 11 –12 – 13 – 14 (Julius Sabbekaai)	West dock	520 m.

BULK HANDLING FACILITIES: *Cereals:*

Borlim nv: Head Office: Lanceloot Blondeellaan, B–8380 Zeebrugge-Brugge 5. Tel: 050-54.48.61.

Storage capacity: 9 silos, total capacity: 35,000 tons. Discharge capacity: 150 t.p.h. Loading capacity: 300 t.p.h.

Shore and quay length: total shore length: 160 m., actual quay length: 99 m.

Dumingra, Pathoekeweg 32, B–8000 Brugge 1. Tel: 050-31.51.61.
Storage capacity: 2 silos, 11,300 tons.

H.E.L.B., Krakeleweg 34, B–8000 Brugge 1. Tel: 050-31.50.24.
Storage capacity: 95 cells, 10,000 tons.

Voeders Huys, Krakeleweg 28, B–8000 Brugge 1. Tel: 050-31.80.38.
Storage capacity: 84 cells, 8,000 tons.

WACO, Pathoekeweg 68a, B–8000 Brugge 1. Tel: 050-31.80.08 – 016-24.26.43.
Storage capacity: 34 cells, 15,000 tons.

Furnace coke: Exported from Zeebrugge Mole.

TUGS: VLCC's: Tugs join the vessel at the "Scheur-Zand" Buoy.

Other vessels: Tugs join the vessel near "Zand" Buoy.

Tugs available on 1 hours notice; extra tugs available on 4 hours notice.

From Zand-1 Buoy tugs are permanently available: 4 tugs, from 1,500 to 4,000 h.p. (19 to 43 tons bollard pull); 2 tugs in inner port (400 and 1,000 h.p.). Extra tugs available on request. Applications to U.R.S. via Ostend Radio, VHF Channel 13.

Towage service address: Unie van Reddings-en Sleepdiensten (U.R.S.) c/o Ruys & Co., Leopold II Mole 2, B-8380 Zeebrugge-Brugge 5. Tel: 050-54.42.60. Telex: 81.332.

Salvage: Via Ostend Radio, VHF Channel 13, operated by U.R.S.

FUEL: All grades of fuel and lubricants available. Can be supplied ex-wharf or by barge provided advance notice given. There are 5 tanks (total capacity 20,450 cu.m.).

Bunker Station: Belgische Bunkeroliemaatschappij, Administrative Office: Wetstraat 33, B–1040 Brussels.

Head Office: Zeebrugge Shipping and Bunkering Co., Minister Beernaertstraat 9, B-8380 Zeebrugge-Brugge 5. Tel: 050-54.42.60. Telex: 81.138.

The bunkering station situated at the end of the mole delivers all grades of marine fuel. Supplies can be effected directly ex-wharf (quays 1 and 2) or by barges and tank lorries throughout the port. The depot is offering 24 hour service.

Operators are Messrs. Belgische, Bunkeroliemaatschappij.

DENSITY: 1025.
FRESH WATER: Available from the berths, rate 30 t.p.h.
STEVEDORES: 24 hours notice required to arrange gangs.
MEDICAL: Hospital at Bruges, Blankenberge and Knokke. Facilities available without prior notice.
TANKERS: Length of quay: 595 m. with depth 13.1 m. at LLWS. Discharging facilities for Texaco and Zeetank.
Texaco: Unloading rig. Three hydraulically operated 16 in. arms. Each arm is equipped with hydraulically operated quick couplings for connection to ship's manifolds having 12 in., 14 in. and 16 in. flanges. Discharging rate: 75,000 b.p.m. (12,000 cu.m./h.) with a ship's rail pressure of 150 psig (10.5 kg/cu.m. ATO). Manifold 240 m. from N-end of quay.

Pipe-line: 36 in. × 1.5 km. 8 storage tanks in inner port, capacity 320,000 cu.m.
Zeetank: Discharging rate: gasoil 500 t.p.h., fuel 800 t.p.h. Manifold 136 m. from South end of quay.
Additional Storage: Refined products:

Company	*No. of Tanks*	*Total Capacity (cu.m.)*
Zeetank	11	146,000
Petrover	4	12,500
Detavernier	3	5,500
L. Francois	2	4,000
Groep Rosseel	2	4,000
Lambert & Dauw	3	3,500
Traen Gebr	9	10,000
Glue		
Merckx	–	4,200
Molasses		
Tameco	–	29,700

Cleaning Station: Euroservices nv, Minister Beernaertstraat 9, B-8380 Zeebrugge-Brugge 5. Tel: 050-54.42.61. Telex: 81.138.

The nitrogen plant operated by Euroservices nv offers gasfreeing and cleaning facilities for liquid gas carriers. The station is equipped with a ground flare and provides the necessary equipment to change grade with the shortest delay. 24 hour service is guaranteed (quay No. 1).
GANGWAY/DECK WATCHMAN: Available. Only required when handling explosives.
OPENING/CLOSING HATCHES: Normally by crew.
CERTIFICATES: Registry, tonnage and usual certificates.
CUSTOMS ALLOWANCES: Each crew member 200 cigarettes or 200 gm. tobacco. Officers: 1 open bottle of spirits.
CONSULS: Norway, Sweden, Netherlands.
REPAIRS: *Ships' maintenance and repairs:* Slipway on the transverse quay of the Prince Philip Dock in the inner port at Zeebrugge.

Management: MBZ. Operated by: nv Valcke Freres, Tijdokstraat 26, B-8380 Zeebrugge-Brugge 5. Tel: 050-54.41.79. Telex: 81.426.

Actual maintenance of ships is done by the company commissioned by the shipowner.

Slope: Length: 248 m., width of the cradle: 17.50 m., capacity: ships up to 1,000 tons.

Transfer area: Length: 85 m., width: 25 m.

Equipment: Tower crane: Lifting height: 30 m., max. reach: 30 m., lifting capacity: 1.8 tons with jibs at 29 m., 6 tons with jibs at 11 m.

Several ships can use the slope and the transfer area simultaneously.

Area of the adjacent grounds: 3.8 ha., which can be used by various ship repairers.
SURVEYORS: Available from Antwerp.
AIRPORTS: *Ostend Airport:* Situated at 30 km. from Bruges and Zeebrugge. Especially suited for regular daily flights to the U.K. (Gatwick and Southend). Also charters and private business flights.
Brussels Airport: 120 km. from Bruges and 135 km. from Zeebrugge (to be reached via E5-motorway and Circular road R1 around Brussels) or by rail (1.5 hour ride).

More than 50 airline operators have landing rights at Brussels Airport. An average of 200 take-offs and landings take place every day, of which 80% to and from European airports and 20% to and from outside Europe. These flights are either direct or indirect via the closest transit airports of Amsterdam, Paris, London, Frankfurt.
CARGO GEAR: Discharge of general and containers is usually by shore gear. Heavy lifts by mobile crane or ship's gear.
REPATRIATION: Brussels National Airport. All facilities exist for changes of crews and repatriation of seamen.
TIME: GMT plus 1 hour. Summertime GMT plus 2 hours.
HOLIDAYS: None.
POLICE/AMBULANCE/FIRE: All emergency services are available through the Port Control, VHF Channel 13. Ambulance and Fire: Tel: 900. Police: Tel: 901.
TELEPHONES: This service is available aboard ships at all berths by prior arrangement through the Agents.
SHORE LEAVE: When Immigration and Customs requirement have been satisfied there is no restriction.
IDENTIFICATION CARDS: Seaman's book is sufficient.
REGULATIONS: Port regulations and regulations concerning the handling of dangerous goods and explosives must be observed.
DELAYS: None.
SHIP SUPPLY SERVICE: *Off-Shore Facilities:* Facilities for supply of fresh water or stores and for transport of personnel by sea-going tugs available from Zeebugge.

Contact: Ruys & Co. Zeebrugge. Tel: 050-54.42.60. Telex: 81930.
DEVELOPMENTS: A sea-lock (500 m.×57 m.×18.5 m.), accessible for vessels of 150,000 d.w.t. as well as additional docks, became operational in November 1983, Eastwards of Zeebrugge and will provide access to a new dock, 1,000 m. long, 250 m. wide with 14 m. depth, and a new junction dock.

3 new terminals are under construction along this dock: a multi-purpose terminal (18 hectares), quay length 600 m., a terminal for neo-bulk commodities (11 hectares), quay length 520 m., and a fruit-and-perishables terminal (8 hectares), 400 m. quay length.

A Western and Eastern dam are under construction and when completed will have a total length of 8,900 m. Also a new LNG terminal, length 200 m., depth 11.5 m., will be finished in 1986.
AUTHORITY: Maatschappij van de Brugse Zeevaartinrichtingen NV (MBZ), Louis Coiseaukaai 2, B-8000 Brugge, Belgium. *Tel:* 050-44.42.11. *Telex:* 81201 Porbrg B. *Cables:* Ports Brugge. *Contact:* B. M. Michiels, General Manager. R. van Havere, Harbour Master.
Harbour Master's Office: Carferry Building 301, Doverlaan 7, B-8380 Zeebrugge-Brugge 5. *Tel:* 050-54.42.63, 050-54.41.70 (Port Control), 050-54.69.29 (Port Administration) *Telex:* 81.205 Porzrg B.
Sealock Operations: Kapitein Fryattstraat 1, B-8380 Zeebrugge-Brugge 5. *Tel:* 050-54.40.12.
AGENT: See "Antwerp".

NOTES

Please also advise Shipping Guides Ltd.

Belize

BELIZE: 17.29 N. 88.11 W. (See Plan Book)

PORT LIMITS: Usually upon arrival at English Caye Pilot Station for vessels arriving from North and East and at anchorage in Belize Harbour for vessels arriving from South inside the reef.

DOCUMENTS:

Crew Lists – 5 copies for local use plus 10 Spanish copies for Consular Clearance.

Passenger Lists – 5 copies for local use plus 10 Spanish copies for Consular Clearance.

Stores List – 3 copies for local use plus 10 Spanish copies for Consular Clearance.

Manifests – 8 copies.

Customs Documents – Clearance for last port and crew declaration.

Health Documents – International Declaration of Health plus one copy crew vaccination list.

Ship's Papers and Certificates should be available on request.

PILOTAGE: A Pilot is always on station at English Caye. Contact can be made with the pilot station on VHF Channel 16. Vessels consigned to Eurocaribe can make contact on Channel 16 VHF.

ANCHORAGES: Depths in harbour anchorage area vary due to a natural slope; for example, a vessel drawing 14 ft. can anchor within 0.25 mile; 16 ft. 0.5 mile; 20 ft. 1 mile and so on Southward. Masters should refer to Pilot for this information.

MAX. SIZE: Size and length, within reason is not a problem. Tankers bringing oil to the Esso storage depot secure to buoys fore and aft. Max. draft 19 ft. 6 in.

PRATIQUE: Granted by Customs after boarding in harbour or at berth.

RADIO: Most ships' Agents man their own radio stations and usually stand-by on Channel 16 VHF with alternative at Channels 6, 11, 12, 13 and 14. Eurocaribe on VHF Channel 16 working 6, 11, 12, 13 and 14.

TUGS: Tugs are not normally necessary but small tugs are available.

BERTHING: Main berth – length 220 ft., depth 17 ft. (approx.). Ro-Ro berth is 70 ft. wide, vessel lies alongside dolphins.

STEVEDORES: Gangs usually require 2 hours notice during normal working hours. Work rates average between 3 and 10 tons per gang hour.

MEDICAL: Hospital facilities are available. Smallpox vaccinations required.

TANKERS: Undersea pipe-line 8 in. in diameter.

Hand-pump discharging rate 250 to 300 g.p.m., also gravity flow. Normal discharge rate 2,000 barrels per hour.

DENSITY: Density varies with outflow from rivers during wet season (July-December).

FRESH WATER: Very scarce and expensive if vessel cannot berth at dock.

FUEL: Light diesel oil 45/48 available subject to Government Approval. Can be supplied at buoys with 8 in. dia. pipe (reductions to 4 in. available or by barge). Also available by truck if vessel able to dock.

FIRE PRECAUTIONS: None.

CONSULS: Belgium
Denmark
El Salvador
Holland
Honduras
Lebanon
Nicaragua
Norway
Sweden
West Germany
Embassies: France
Mexico
Panama
United States
High Commission: British

REPAIRS: Only small minor repairs possible.

SURVEYORS: Lloyds and A.B.S.

GANGWAY/DECK WATCHMEN: Not required.

HATCHES: Stevedores open and close hatches except McGregor type.

CUSTOMS ALLOWANCES: 200 cigarettes plus 1 bottle spirits (0.20).

CARGO GEAR: Ship's gear; heavy lift cranes are available up to 30 tons for vessels which can reach the dock.

REPATRIATION: Possible, regular air services to and from Miami, New Orleans, and neighbouring Republics.

AIRPORT: Belize International Airport 10 miles from Belize City.

TIME: Normally GMT minus 6 hours.

HOLIDAYS: Public Holidays: New Year's Day*; Baron Bliss Day (9th March); Good Friday; Holy Saturday; Easter Monday*; Columbus Day (12th October); Labour Day* (1st May); Commonwealth Day (24th May); St. George's Caye Day* (10th September); Independence Day* (21st September); Carib Settlement Day (20th November); Christmas Day* (25th December); Boxing Day* (26th December).

*No work whatsoever, all other days subject to overtime rates.

POLICE/AMBULANCE/FIRE: All emergencies dial 90.

EMERGENCY CO-ORDINATION CENTRE: None. Eurocaribe Ltd. have successfully handled salvage operations.

SHORE LEAVE: Possible.

IDENTIFICATION CARDS: Seaman's book sufficient.

REGULATIONS: None.

DELAYS: Discharge and loading operations occasionally delayed by weather (rain) and sometimes by shortage of equipment (trailers, etc.).

BANKS: Barclays Bank International Ltd., P.O.Box 363, Albert Street, Belize City. Tel: 7211/2. Telex: 217.

Atlantic Bank Ltd., 6 Albert Street, Belize City. Telex: 216.

Royal Bank of Canada, 60 Market Square, Belize City. Tel: 3232. Telex: 229.

Bank of Nova Scotia, P.O.Box 708, Belize City. Tel: 2601. Telex: 218.

STORING: See "Prelims", page viii.

1. Yes.
2. Vessels may store by barge during loading and discharging.
3. Yes.
4. Yes.
5. Prior arrangements must be made.
6. Possible to use riggers, however, it is best to use crew.

GENERAL: Starboard anchor usually used to make lee for operations on portside if vessel is at anchor. It is necessary for vessels to provide toilet facilities for stevedores. Feeding of Supervisors and Customs Officials is normal.

SHIP SUPPLY SERVICE: There are numerous small crafts each individually owned, which ply between the wharves and ships anchor in the harbour. These crafts provide ship to shore transport of personnel, and/or essential stores and/or sick crew members.

AUTHORITY: Belize Port Authority, P.O.Box 633, Belize City, Belize, Central America. *Tel:* 2439, 2449. Contact: Mr. A. Mahler, Port Commissioner and Chief Executive.

AGENT: Eurocaribe S.S. Ltd. P.O.Box 281, 14 Fort St., Belize City, Belize, C.A. Tel. 2100, 45286. Cables "Eurocaribe Belize". Radio call sign: Eurocaribe, Belize. Telex: 224 BZ A/B Eurocarib.

NOTES

Please also advise Shipping Guides Ltd.

Benin, People's Republic of

COTONOU: 06.20 N. 02.32 E. (See Plan Book)

PORT LIMITS: The area contained within an arc of a circle of 1 mile radius centred on the red light at the West Jetty.

DOCUMENTS: (Also see "Shipmaster's Report".) Once berthed the ship must be able to produce to the Port Authorities:

6 copies Crew List.
4 copies List of Ports of Call.
6 copies Passenger List, and passengers in transit.
3 Customs Declarations (personal effects list).
2 Maritime Declarations of Health.
3 Lists Provisions and Stores, including foodstuffs.
10 copies Manifest.
1 Bill of Lading.
1 Declaration of Arms and Ammunition.
3 Lists of Dangerous Cargo (unloading or in transit).

Also international documents of ownership and safety.

PILOTAGE/APPROACHES: Vessels must advise ETA to Port Authority "Dirport Cotonou" 24 hours prior arrival weekdays, and before midday Saturday for Sundays and before midday on day preceding holidays. Cable address pilot station "Commandant du Port, Cotonou". Telex: 5004 "Dirport Ctnou". On approach to port vessels may also call pilot station on 2182 kHz or VHF Channel 16. Permanent radio watch kept by port Coast-Guard Station. Pilot services permanent and operate night and day, Sundays and holidays, except for nights of 24th and 31st December from 1800 – 0600 hrs. Ships drawing more than 30 ft. must enter on high tide. On arrival in approaches, ships coming from West or South must steer a Northerly course in direction of lighthouse, and take Pilot about half a mile from fairway. If arriving from East, vessels should take Westerly course in direction of fairway and take Pilot about half a mile from fairway. Pilot boat is small cutter with black hull and white superstructure, by day carries flag "H" and by night carries statutory lights for pilot boats. Piloting obligatory for ships over 100 net tons.

Fairway Buoy: Position Lat. 06° 20.4′ N., Long. 02° 26.8′ E. Light-flash "A" (· –) 10 secs.

ANCHORAGES: In cases of bad weather or of waiting for Pilot, ship must anchor approx. 1 mile to South of lighthouse. Sound anchorage with sand bottom and depth 14 m. Forbidden to anchor within radius of 700 m. from red light of West Jetty.

Prohibited Anchorage: All the area to the West of the meridian of the West breakwater red light.

RESTRICTIONS: No restrictions on hours of entry or departure.

MAX. SIZE: See "Berthing" and "Tankers".

HEALTH: Free Pratique generally given by Agent.

RADIO: Advisable give Agent 72 hours notice of ETA. Thereafter re-confirm 36 hours prior arrival.

RADAR/VHF: No port radar service. VHF Channel 16. R/T 2182 kHz.

TUGS: Tug assistance performed by Port Authority of Cotonou and compulsory for every vessel over 500 g.r.t., mooring, unmooring, at berth or shifting. Extra charge for using tug's lines. Vessels with length over 100 m. require 2 tugs.

BERTHING: Berthing quay 620 m. long, 10.0 m. depth, which will accept alongside a minimum of 4 ships working together. Harbour dredged up to 11 m. under zero of chart and will permit almost all sizes of ships to work safely. Railway line runs 4 m. side of quay, under ship tackles, and used only for heavy lifts. Berthing priority only given cargo ships and tankers which have specially reserved berths. Other ships berth dependent on berths available and in order of arrival. As well as 2 tanker berths there is loading berth for bulk palm-oil, one waiting berth at harbour entrance, and 4 quays with warehouses for import/export traffic.

New Quay: Length 660 m. Depth alongside 11.0 m. Two conventional berths (360 m.), one container berth (200 m.) and one Ro/Ro berth.

Facilities include a container storage area of 65,000 sq.m., 2 warehouses of 6,000 sq.m. each, 1 transit warehouse of 4,000 sq.m. and an open storage area of 60,000 sq.m.

STEVEDORES: Ship must advise Agent in advance of number stevedore teams required, and specify number of hours work required. This must be done 24 hours in advance on weekdays, and before midday Saturday for Sundays, and before midday on day preceding holidays. Loading and unloading rate: Working days – 600 tons for bagged cargo. 400 tons for other cargo. Sundays and holidays, half above rates. Days counted as 24 hours starting from first break following berthing. For ships having to handle smaller quantities, assessment of time calculated in multiples of 300 tons for bagged cargo and 200 tons for other cargo, per 12 hours. Loading and unloading operations can be carried out on Sundays and public holidays if Ship's Master wishes, with exception of Labour Day (May 1st), 26th October, 30th November, 31st December and Independence Day.

MEDICAL: Well-equipped modern hospital in Cotonou – smallpox vaccinations required.

TANKERS: 2 tanker quays for ships of 215 m. length and 31 ft. draft. (Depth at seaward berth 11.0 m.). Unloading carried out by 100 mm. pipe-line. Loading of petroleum products carried out by pumping (80 cu.m.p.h.) or by gravity (50 cu.m.p.h.). Products are aviation spirit 100/130, "Super" petrol, low-grade petrol, Kero Avtur, and gas oil.

FRESH WATER: Supplies available at all berths on quay by pipe-line of 100 mm. with reduction of 70 mm. (discharging 25 t.p.h.).

FUEL: Fuel oil of 1,500 seconds viscosity available at Berth No. 1 and at the Fishing Quay. Rate 50 to 80 cu.m.p.h.

FIRE PRECAUTIONS: Port has following safety equipment: 2 tugs equipped with fire hose of 50 cu.m.p.h. 2 motor pumps of 30 cu.m.p.h., 1 draining pump of 150 cu.m.p.h. In addition special security watches are kept on dangerous merchandise in classes 1a, 1b, 1c, 1d and 111c. Normal watch up to 5 tons, double watch from 5 tons to 16 tons. Motor pump standing by from 16 – 50 tons. Tug standing by for quantities above 40 tons for inflammable liquids (flashpoint less than 55°C) and above 50 tons for other dangerous cargo.

WATCHMEN: (See "Fire Precautions".) Recommended that a watchman be on board. Can be arranged by Agents.

OPENING/CLOSING HATCHES: Carried out by stevedores

CUSTOMS ALLOWANCES: 200 cigarettes and 3 opened bottles of spirits for each Crew member.

REPAIRS: Workshops for small repairs. No tank-cleaning facilities.

DRY DOCKS: Only hauling gear of 250 tons for careening small ships and trawlers.

CONSULS:

West German Embassy 31-2967
Chinese Popular Embassy 31-4424
U.S.A. Embassy 31-2650
French Embassy 31-2224
French Consulate 31-2638
Ghanaian Embassy 31-2746
Nigerian Embassy 31-3142
U.S.S.R. Embassy 31-2834
Niger Consulate 31-3334
Belgian Consulate 31-2486
Netherlands Consulate 31-3037
Consulate of Sweden and Norway 31-2433
Zaire Embassy 31–4983.

AIRPORT: 5 km. from port, served regularly by DC8 for European destinations (5 departures a week for Paris).

TIME: GMT plus 1 hour.

HOLIDAYS: January 1st; January 16th; Easter Sunday 1st April; Labour Day (May 1st) – no cargo work; 26th October; 30th November; 31st December – no cargo work; Assumption; November 1st (All Saints' Day); 25th December (Christmas); Tabaski and Ramadan at the beginning of Lunar Year (Moslem holidays).

POLICE/AMBULANCE/FIRE: Harbour Police 31-3942; First Aid 17; Hospital 31-2713 and 31-2717; Fire Brigade 18.

TELEPHONES: A telephone can be placed on board at request of Ship's Master.

SHORE LEAVE: Crew must carry shore pass.

SHIPMASTER'S REPORT: 1978.

Documents: Before a vessel can be registered certain items are needed by Agents, who can send pilot boat to collect from anchorage.

	Registration	*Port Health*	*Police*	*Agent*	*Customs*
Crew Lists	4	1	2	2	1
Passenger List	4	1	1	2	1
Ports of Call	4	1	1	1	1
Store List	2	–	–	–	1
Crew Declaration	2	–	–	–	1
Animal List	2	–	–	–	1
Arms & Ammunition	2	–	2	1	1
Vaccinations List	2	1	–	–	–
Cargo Plans	3	–	–	–	–
Hatch List	2	–	–	–	–
Cargo Manifests	15	(or as many as available for photo copy)			
Dangerous Cargo	3	–	–	–	–
Health Declaration	2	1	–	–	–

Registration: There does not appear to be a firm set of priorities but some cargo can be worked at most berths while others are restricted to a single berth. Two tankers can discharge or load at the South end of the East Mole which may also be used for containers.

Radio: Cotonou Radio was erratic and, on 2182, very poor via land line to the Agency Office. VHF is available on 16, 14 and 12 with Port Control and some Agents have their own set or use that of a vessel alongside.

Consuls: There is no British representation in Benin. All requirements can be obtained by driving to Lagos to the High Commissioner.

Developments: A 40 tonne fork lift for containers etc. has been added to the cargo gear available but there are no cranes.

Shore Leave: A Shore Pass (Visa de Passage) is required but single items are given to Senior Officers only, all others must share between 2 or 3 persons. It takes 24 hours to obtain a valid pass via Agent from Police.

AUTHORITY: Port Autonome de Cotonou, B.P. 927, Cotonou, Benin. *Tel:* 312890, 315280, 314387. *Telex:* 5004 Dirport. *Cables:* Dirport. *Contact:* A. Babadjide, Port Director.

Bermuda

HAMILTON, (incl. Freeport): 32.15 N. 64.50 W.

(See Plan Book)

NAVIGATIONAL WARNINGS: (Circulated by the Department of Marine & Ports Services)

Government Notice No. 196 (27.4.79)

The attention of all mariners is drawn to the dangers and hazards of close approach to the reefs which surround Bermuda, especially to the North and West of the Islands. They extend in places to a distance of 12 miles from the visible land and are virtually unmarked by navigational aids at their extremities.

Ships on passage with no intention of calling at Bermuda are advised to give the Islands a berth of at least 30 miles, observing that little distance is lost on the passage by so doing and nothing is gained by a closer approach. On the contrary, stranding or shipwreck has occurred all too often through the years with pollution of the surrounding reefs and beaches and destruction of the ecological life as well as possible ruin of the economy of the Islands.

Ships making for Bermuda are advised to do so from the East and South as the only entrance to the sheltered waters is at the S.E. of the Islands off St. George's. Here Pilots are available and can be embarked in daylight hours. Entry at night is dangerous and prohibited and close approach in dark hours should not be attempted without local knowledge.

Government Notice No. 197 (27.4.79)

Ships approaching Bermuda should contact the Bermuda Harbour Radio which is manned day and night on Channel 16 (VHF) or 2182 kHz or 500m kHz W/T giving vessel's name, call sign and position. Only after clearance has been given and instructions issued should ships – in daylight only – approach within 3 miles off St. David's Head on a heading between 240° and 300°. On no account should any other approach be made without local knowledge and large scale charts.

Pilots are available in this area for those who require them and are compulsory for all commercial vessels making entry to these Islands.

Notice to Boatmen. Admiralty Notices to Mariners:

1114. North Atlantic – Bermuda Islands – Caution (15.6.79).

(1) The accompanying caution is to be inserted below the title on Chart 334.

5. Mariners are advised to navigate with extreme care in the approaches to Bermuda Islands, owing to the existence of extensive reefs which encircle the Islands and which are a constant hazard to navigation. North Rock Lt. (32° 28.5′ N., 64° 46′ W. approx.) and then outer seabuoys may not be reliable through lack of maintenance due to inaccessibility, except in very calm weather.

(2) The legend, see caution No. 5 is to be inserted in the following positions:

(a) 32° 18.5′ N., 65° 02.5′ W. (b) 32° 29.2′ N., 64° 48.0′ W.
(c) 32° 26.5′ N., 64° 31.5′ W.

DOCUMENTS:

Ship's Register.
Derat Certificate.
Clearance from previous Port.
5 Crew Lists.
5 Passenger Lists.
2 Provision Lists.
2 Crew Personal Effects Lists, i.e. cameras, binoculars, cigarettes, etc.
5 copies Cargo Manifest if discharging.

Cruise Ships: Customs require:

(Note: Forms may be secured in advance for prospective vessels.)

*2 Crew Lists
1 Crew Declaration
*2 Lists of all disembarking passengers
*2 Lists of all transit passengers
*2 Lists of all non-United States Citizens in transit (on ships from and returning to the United States)
1 Stores List
1 Declaration of Health
Clearance from vessel's last port of call
1 Bermuda Vessel Report (Customs No. 49).

(**Note:* Plus 1 of each of these forms for Agents)

N.B.

1. A facility for examining disembarking passengers and luggage must be provided. No passenger or luggage is to be allowed to board the tender without Custom's approval.

2. All passengers on vessels from, and returning to, the United States who are not U.S. Citizens must be seen by the Customs Official.

3. All disembarking passengers and luggage must be seen by the Customs Official.

4. Persons purchasing a ticket in Bermuda must complete an Immigration Embarkation Card which should be lodged with the Purser on embarkation. Similarly persons arriving by air and leaving by sea must lodge their duplicate immigration cards with the Purser on embarkation. It is required that the Purser pass all such cards to the Duty Customs Official prior to the vessel's departure.

PILOTAGE: Pilot ordered by Agent on receipt of vessel's ETA (72, 48 and 24 hrs.). Pilot boards vessel approximately 2 miles East of Island with St. David's Lighthouse bearing 240° True. Boats black hull varnished superstructure.

If vessel's ETA alters, Bermuda Harbour Radio which in direct contact with Pilot station can be contacted by VHF Channels 10, 12, 16, 26. Pilotage is confined to daylight hours only with exception of vessels calling for medical aid – some of which handled off-shore.

ANCHORAGES: Grassy Bay and Great Sound. These anchorages are used mainly by passenger liners as they are close to Hamilton Harbour and are protected from heavy weather. Also used by large vessels carrying out extensive repairs.

RESTRICTIONS: Restricted by draft of 26 ft. Daylight piloting only.

MAX. SIZE: Largest ship to enter to date, length 690 ft., draft 26 ft.

HEALTH: Pratique granted on 24-hour basis and can be obtained by wireless by sending message via VRT to "Health Bermuda" requesting free pratique be granted. If any suspected disease or fever on board advise "Health" as well as Agent.

RADIO: Commercial radio station operated by Cable & Wireless Ltd., call letters VRT Bermuda. Bermuda Harbour Radio, controls channel traffic, call sign ZBM Bermuda.

VHF: Operated by Bermuda Harbour Radio. Contact on Channels 10, 12, 16, and 26.
Bermuda (VRT) on Channels 16, 26 and 28.
VTM system in operation.

TUGS: 3 tugs available, 2×1,200 i.h.p. and 1×1,800 i.h.p. Tugs normally join vessel in harbour if requested. Tugs not compulsory and ordered depending on the size of the vessel and weather conditions. Tug's lines used during normal tug operations.

BERTHING: Docks and tugs are agreed upon between Agent and Pilot prior ship's arrival.

Hamilton

Berth	*Length of Berth*	*Max. Draft*	*Remarks*
No. 1	510 ft.	26 ft.	Port layout allows ships in excess of 510 ft. in length to be accommodated.
Nos. 5 and 6	620 ft.	26 ft.	Primarily a passenger berth.
No. 7	650 ft.	26 ft.	A small ro/ro ramp is provided at Berth No. 7 West.
No. 8	450 ft.	23 ft.	Berth Nos. 7 and 8 provide facilities for container operations, with approx. 5.5 acres of open area.
No. 8 East	250 ft.	16 ft.	

Drafts are governed by depth of water in channel approaches to the Harbour, i.e. 26 ft. MLW.

Freeport (Bermuda Government)

Commercial	800 ft.	32 ft.	Bulk cement and Shell Company of Bermuda bunkering facilities. Max. length of vessel 600 ft.
Esso Oil Terminal	—	32 ft.	Two dolphins, centre platform and walkways. Vessels up to 700 ft. in length can be accommodated. Berth owned and operated by Esso Bermuda. Also see "Tankers".
Murray's Anchorage	—	36 ft.	
The Great Sound	—	34 ft.	
Five Fathom Hole	—	Unlimited	

STEVEDORES: Ordered by Agent after receipt of ETA. Average discharge general cargo 10 t.p.h.

Gangs and Priorities: Basically Bermuda operates with a maximum of 3 gangs although this can reduce when breakbulk or refrigerated cargo are being handled, or for the tying-up and letting-go of cruise ships. Gang Allocation Rules (BSA No. 97 15-3-79) are:

1. The first vessel to arrive to have all available gangs.
2. The second vessel to arrive to have 1 gang on arrival.
3. The third vessel to arrive will get labour from 1 or 2 when it becomes available.
4. When it is necessary for full utilisation of labour, all vessels must work maximum overtime in order to retain gangs.

Hours of Work (Longshoremen):

Straight time	Monday/Friday	0800 – 1200 hrs.
		1300 – 1700 hrs.
Overtime	Monday/Friday	1800 – 2200 hrs.
Double time	Monday/Friday	2200 – 0800 hrs.
	Saturday	0800 hrs. to Monday 0800 hrs.
	Public Holidays	

Meal hours (double time) 0700– 0800; 1200 – 1300; 1700 – 1800 hrs. When working a unit or units between 2400 hrs. to 0800 hrs., when required by the Union, 1 half hour from 0400 hrs. to 0430 hrs. may be taken for a meal time.

Note: Normally the Port stops Sunday/Friday inc. at 2200 hrs.

Work stops at 1600 hrs. on Saturday until 0800 hrs. on Sunday unless the vessel is being worked through to a finish for sailing that night or the next day.

Good Friday and Christmas days are 'No work' days on the Bermuda waterfront.

CRANES: 1×250 ton "Coles" Colussus, 1×225 tons, 1×100 ton (P&H), 1×60 ton U.S. Navy floating crane (by special arrangement).

MEDICAL: No advance notice required for medical attention if other than critical cases. First-class hospital facilities available. Vaccination Certificates required for all seamen.

TANKERS: Shell bunkering Berth, Freeport, Ireland Island. Discharge lines 8 in. and 10 in. No slop discharge facilities.

Requirements for Vessels Using the Esso Oil Terminal:

1. Tankers and Large Vessels for Bunkers:

(a) It is an Oil Terminal requirement that a Pilot remains on board at all times while alongside the Terminal.

(b) It is a Terminal requirement that all vessels on completion of either discharging or bunkering/ballasting leave the berth and proceed either to sea, or wait daylight.

(c) One tug is mandatory for berthing and unberthing and a second tug depending upon weather and other conditions decided by the Master and Pilot, and the Agent informed accordingly.

(d) Tug requirements for unberthing outside normal working hours must be discussed well in advance between Master and Pilot (and Agent informed) as it may take up to 6 hours before the second tug is available at the Terminal. Weather conditions, especially at weekends during the winter months, must be assessed and any likelihood of strong Northerly winds, precaution should be taken of ordering a tug(s) or if necessary have a tug standing-by in readiness.

(e) Max. draft alongside not to exceed 32 ft. (9.75 m.) and/or length 700 ft., 38,000 d.w.t. unless under exceptional circumstances and permission authorised by Esso Management.

2. Liquid Gas Carriers and Smaller Vessels for Bunkers:

(a) It is mandatory to have a tug for berthing liquid gas carriers but depending upon conditions prevailing at the time, the Master and Pilot will decide whether or not a tug is advisable for unberthing.

3. General:

The over-riding factor must be for the safety of the ship at all times and the Pilot with his local knowledge and skill will advise the Master (who probably is unfamiliar with Bermuda waters) as to the advisability of the necessary assistance required.

Pilot detention will be paid at an hourly rate from the time the vessel is secured alongside as this is not in his normal line of duty. He is retained at the request of the Terminal as a precautionary measure should the ship have to be moved at short notice.

Also see "Berthing".

DENSITY: 1025.

FRESH WATER: Available alongside at Berths Nos. 6-7, by truck (capacity 4 tons), or by barge. Order prior arrival to avoid delay.

FUEL: Grades available from Shell or Esso: Bunker "C" fuel oil, viscosity 100 SSF at 122° F. Diesel oil. Viscosity 3616 at 100° F.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Usually carried out by stevedores.

TOBACCO/WINE ALLOWANCE: Customs allows about 1 carton cigarettes and limited amount of spirits per man.

IDENTIFICATION CARDS: None required.

CONSULS:

Belgium	France	Norway
Bolivia	Germany (Federal Republic)	Portugal
Chile	Greece	Sweden
Denmark	Italy	United States
Finland	Netherlands	

REPAIRS: All types minor deck and engine repairs can be carried out. Also major temporary repairs. Electronic repairs possible.

DRY DOCKS: Only yacht slipways available.

REPATRIATION: First-class facilities available for repatriation and crew changes.

AIRPORT: Distance from airport 10 miles. Connections to all parts of world. Average 15/20 flights per day.

TIME: Local time GMT minus 4 hours (October-April). GMT minus 3 hours (0200 hrs., last Sunday in April – 0200 hrs. last Sunday in October).

HOLIDAYS: New Year's Day; Good Friday; Bermuda Day (May 24th); Queen's Birthday (celebrated annually in June) June 11th; Cup Match (Thursday and Friday before first Monday in August); Labour Day (1st Monday in September); Remembrance Day (November 11th); Public Holiday (November 12th); Christmas Day, Boxing Day (December 26th).

POLICE/AMBULANCE/FIRE: Police 2-2222; Ambulance 2-2000; Fire 00; Air Sea Rescue 7-1010.

TELEPHONES: Can be placed on board vessel when alongside.

GENERAL: Port of Freeport, Ireland Island, situated in the Port of Hamilton at the old British Dockyard is used mainly by the Royal Navy and Shell Bunkering.

SHIPMASTER'S REPORT:

Approaches: Approach was made at night from Southward. Gibbs Hill Light sighted at 29 miles. First radar echo was made at 34 miles. St. David's Lt. Ho. Occ. 5 sec. can be easily confused with St. David's House Lt., Gp. Fl. 2 and they are hard to pick out against background lights. Mills Breaker and Kitchen Shoal Buoy are both good lights and are conspicuous on the radar. Lobster pots marked by unlit buoys can be troublesome.

Pilotage: There are 10 Pilots who operate on a rotation basis. Least depth is in the Dundonald Channel and Two Rocks Passage approaching Hamilton. Passenger Vessels over 26 ft. anchor in Grassy Bay just North of the Dundonald Channel. Official max. draft is 26 ft. although I was told by the Harbour Master that they will take ships up to 26 ft. 06 in.

Berthing: Vessel berths starboard side to, swinging on anchor with tug assistance. During a long stay vessels often have to shift up and down the wharf to make room for other ships making short calls. At one time the bow was overhanging the end of the quay by 100 ft. but even in this position ship can be well secured.

Cargo Operations: Labour force consists of around 40 men which can just make up two freezer gangs. When a container ship arrives she takes priority and one gang is lost. At weekends a few additional men are available from other jobs within the stevedoring firm and a third general gang can be made up. Stevedore stressed that cargo be restricted to two hatches when possible especially in ships with beams and hatches. Locker stow should be avoided when possible. Average on freezer was approximately 9 t.p.h.

Hours of work are: 0800 – 1200, 1300 – 1700 and 1800 – 2100 hrs. This applies every day except Saturday when work finishes at 1700 hrs. General cargo gangs can be worked until 2200 hrs. but all freezer gangs finish at 2100 hrs. to allow time for Receivers to clear the wharf of cargo by 2200 hrs.

Fresh Water: Not readily available in large quantities due to a water shortage. Price when available is 6 dollars a ton. We managed without buying any in spite of a prolonged stay.

Currency: Stated in Pilots Book to be pounds. It is in fact Bermuda Dollars which are equivalent to American dollars and readily interchangeable.

Stores: Very expensive and would suggest only plan on buying essentials from supermarket in small quantities.

Discharge Averages:

No. 1 Palletised Milk Powder	20.0 t.p.h.
No. 2 Cartons of Apples (Locker)	6.2 "
No. 3 UTD Centre Meat & Butter	10.8 "
No. 3 MTD Centre Meat	8.8 "
No. 4 UTD Centre Meat & Butter	8.0 "
No. 4 UTD (P) Meat	11.0 "
No. 4 UTD (S) Cartons Cheese	7.6 "
No. 5 UTD Carton Meat (Full Deck)	8.5 "

AUTHORITY: Harbour Master, Marine and Port Services Department.

AGENT: Meyer Agencies Ltd., P.O.Box HM 510, Hamilton 5, Bermuda. Tel: 55214, 54176.

Shipping, Insurance, Travel Agents. Marine repairs, tug and barge operators, stevedoring operators.

ST. GEORGE'S: 32.22 N. 64.41 W. **(See Plan Book)**

DOCUMENTS: Also see "Hamilton".

Ship's Register.
Derat Certificate.
Clearance previous Port.
5 Crew Lists.
5 Passenger Lists.
2 Provision Lists.
2 Crew Personal Effects Lists, i.e. cameras, binoculars, cigarettes, etc.
5 copies Cargo Manifest if discharging.

PILOTAGE: Pilot ordered by Agent on receipt of vessel's ETA. Pilot boards vessel approximately 2 miles East of Island with St. David's Lighthouse bearing 240° True. Boats black hull, varnished superstructure. If vessel's ETA alters, Bermuda Harbour Radio which in direct contact with Pilot station can be contacted by VHF Channels 10, 12, 16, 26. Pilotage day only. Except medical cases which are handled offshore.

ANCHORAGES: *(a)* Five Fathom Hole, located at Eastern end of Island and is point where Pilots embark/disembark. Used by vessels not required to enter or those awaiting daylight. *(b)* Murray's Anchorage, used instead of Five Fathom Hole during times of heavy weather (daylight hours only). Also, by vessels unable enter St. George's Harbour and wishing to take on water, carry out repairs, etc. A stand-by anchorage for vessels waiting berth at Esso Oil bunkering pier and for vessels leaving this pier and awaiting daylight. *(c)* St. George's Harbour, when weather conditions such that Five Fathom Hole and Murray's Anchorage unsuitable to land ill/injured persons vessel proceeds directly to St. George's Harbour and anchors.

RESTRICTIONS: Entry to St. George's Harbour restricted by draft of 30 ft. Murray's Anchorage restricted by draft of 38 ft.

MAX. SIZE: Largest ship to enter to date – length 628 ft. However, size controlled by max. draft of 30 ft., displacement and weather conditions.

HEALTH: Pratique granted on 24 hour basis and can be obtained by wireless by sending message via VRT to "Health Bermuda" requesting free pratique be granted. If any suspected disease or fever on board advise Health as well as Agent.

RADIO: Commercial radio station operated by Cable & Wireless Limited, call letters VRT Bermuda, also on VHF 16, 26 and 28. Bermuda Harbour Radio controls Channel traffic, call sign ZBM Bermuda.

VHF: Operated by Bermuda Harbour Radio. Contact on Channels 10, 12, 16, and 26.

VTM system in operation.

TUGS: Tugs normally join vessel in harbour if requested. Tugs not compulsory and ordered depending on the size of the vessel and weather conditions. Tug's lines used during normal tug operations. Also see "Hamilton".

BERTHING: Dock and tugs agreed upon between Agent and Pilot prior ship's arrival.

St. George's as a Port of Discharge: Stevedores advised the 51st meeting (1974) of The Bermuda Shipping Association that as St. George's is no longer being used for cargo all gear and equipment have been removed from the port. In the event of discharge taking place at St. George's there will be an 'item of cost' for transport of gear and equipment from Hamilton to St. George's. Similarly an 'item of cost' is applicable to discharge at Freeport (Dockyard).

Berth	*Length*	*Max. draft*	*Remarks*
Penno's Wharf	750 ft.	28 ft.	Cargo-handling berth. Possibly to be extended Eastwards 330 ft. into the Hunter's Wharf area.
Hunter's Wharf	335 ft.	28 ft.	Wooden jetties. Two dolphins to Eastwards of berth allow accommodation of vessels up to 600 ft. in length with draft limitations ". . . to the Eastward (400 ft. at 28 ft. then gradual shelving Eastwards to 24 ft. at the 600 ft. point)".
Ordnance Island	160 ft.	26 ft.	No cargo-handling facilities. Capable of berthing 620 ft. cruise ships.

STEVEDORES: Ordered by Agent after receipt of ETA. Average discharge general cargo 10 t.p.h.

Also see "Hamilton".

MEDICAL: No advance notice required for medical attention if other than critical cases. First-class hospital facilities available. Vaccination certificates required for all seamen.

TANKERS: Esso Oil Pier: Discharge lines 8 in. and 10 in. No slop discharge facilities.

DENSITY: 1025.

FRESH WATER: Delivered by barge. Order prior arrival to avoid delay.

FUEL: Grades available: Bunker "C" fuel oil, viscosity 122 SSF at 122°F. Diesel oil, viscosity 3616 at 100° F.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Usually carried out by the stevedores.

TOBACCO/WINE ALLOWANCE: Customs allow about one carton cigarettes and limited amount spirits per man.

IDENTIFICATION CARDS: None required.

CONSULS: See "Hamilton".

REPAIRS: All types minor deck and engine repairs can be carried out. Also major temporary repairs.

DRY DOCKS: Only yacht slipways available.

REPATRIATION: First-class facilities available for repatriation and crew changes.

AIRPORT: Distance from airport 2 miles. Connections to all parts of world. Average of 15/20 flights per day.

TIME: See "Hamilton".

HOLIDAYS: See "Hamilton".

POLICE/AMBULANCE/FIRE: Police 7–1122; Ambulance 2–2000; Fire "00"; Air Sea Rescue 7-1010.

TELEPHONES: Can be placed on board vessels when alongside.

GENERAL: Esso Oil Berth, within Port of St. George, is purely a bunkering and petroleum discharge pier situated on the Southern side of Murray's Anchorage.

AUTHORITY: Harbour Master.

AGENT: Meyer Agencies Ltd., P.O.Box GE 48, St. George's 1, Bermuda. Tel. 7–1255 (6 lines). Telex 3361 Meyer BA.

Shipping, Insurance, Travel Agents. Marine repairs, tug and barge operators, stevedoring operators.

NOTES

Please also advise Shipping Guides Ltd.

Bolivia

GENERAL: Bolivia is completely land locked with no ocean ports.

The country has special port facilities or 'in transit zones' in Brazil at Belem and Santos; in Argentina at Rosario; and to the Pacific at Matarani, (and shortly Ilo) in Peru also Arica and Antofagusta in Chile.

In 1975 Chile offered a corridor 5 to 7 miles wide at the Pacific to Bolivia, and negotiations are at present being conducted on this subject. Whether this zone will include the port Arica is not yet known.

(1) A newly installed in-transit zone at Rosario (Argentina) is expected to divert present Bolivian imports and exports from Buenos Aires. The new area covers sheds 23/30, an area of over 5 hectares, and 945 m. of wharf. The present free zone, in the centre of the port zone, will eventually become the Northern sector of the port, with good railway connections to Bolivia. All Government Cargo is handled by the Bolivian Customs Office from Ocean Port, but all private cargo is looked after by forwarding agents on behalf of importers, whose job it is to arrange for despatch, pay port handling charges, rail freight, etc.

(2) There are also special port facilities at Matarani and Ilo in Peru, and a new road is being built which will bring La Paz to within one days road travel from the sea.

(3) The country borders to the East with the Paraguay River on a brief stretch near Corumba, on the Caceres Lagoon by Puerto Suarez, and where a new port – Sucre is to be opened shortly in connection with the movement of Iron Ore and Manganese down river. The river will normally permit vessels up to 11 ft. or 12 ft. draft, occasionally falling to 5 ft. or 6 ft. in the dry season (October/November).

DOCUMENTS: In each port there are Bolivian Customs Authorities under the control of the Bolivian Consul. At none of the 'in-transit ports' are any special Consular despatches or documents needed by vessels, other than those required by the particular country. It is only necessary to present separate manifests for cargo in transit to Bolivia.

However commercial invoices, and goods documentation does require consular intervention.

Shippers must vise Bills of Lading and Consular Invoices and also attach suppliers invoices, certificates of origin and insurance policy. Most imports are handled under letters of credit. Documents must be made out in Spanish. At Ocean Port, forwarding Agents replace the Bill of Lading with a railway bill or trucking bill. There is no exchange control or shortage of foreign exchange in Bolivia.

Claims are finally set up (shortages, condition, etc.) in Bolivia, and hook tallies, local port receipt to Bolivian Customs, railway or truck receipts, etc., all form part of the settlement.

CONTAINERS: It is possible to despatch sealed containers right through to Customs in Bolivia for opening there.

WEIGHTS AND MEASURES: All weights and measures are to be expressed in the metric system, except for lumber, in board feet.

FLAG: Three equal horizontal stripes of red, yellow and green.

NOTES

Please also advise Shipping Guides Ltd.

Brazil

GENERAL

VESSEL REPORTING SYSTEM:

A mandatory reporting system is operated by the Naval Command for the Control of Maritime Traffic (COMCONTRAM). The coordinates of the area covered by the system are:

(a) The border between Brazil and French Guiana
(b) Lat. 05° 00′ N., Long. 48° 00′ W.
(c) Lat. 05° 00′ N., Long. 40° 00′ W.
(d) Lat. 07° 40′ N., Long. 35° 00′ W.
(e) Lat. 06° 22′ S., Long. 16° 00′ W.
(f) Lat. 06° 22′ S., Long. 10° 00′ W.
(g) Lat. 34° 00′ S., Long. 10° 00′ W.
(h) The border between Brazil and Uruguay

In addition vessels are requested to report on a voluntary basis within the larger area of the Atlantic Ocean South of Lat. 23° 30′ N.

Requirement for Messages

Departure Message (type 1) which contains the vessel's sailing plan should be sent:

(a) As soon as a vessel is underway from a port within the reporting area.
(b) Prior to entering the reporting area.

Alteration of Route Message (type 2) should be sent when the original destination given in the departure message is changed.

Position Message (type 3) should be sent:

(a) When a vessel is 10 nautical miles off its pre-established route.
(b) When the navigational situation of the vessel has changed e.g. stopped, damaged.
(c) When a vessel sights a danger to navigation.

Arrival Message (type 4) should be sent:

(a) When the last point on the pre-established route close to the port of arrival is reached.
(b) When leaving the reporting area.

Form of Messages

Items of a message should be separated by a stroke (/).
Omitted items should be indicated by a dash between two strokes (/-/).
The end of a message should be indicated by two strokes (//).
Vessel type (message item D) is coded as follows:

CGO — General Cargo, Container or ro-ro.
BLK — Bulk Carrier.
PAS — Passenger.
TKR — Tankers in general (oil, chemical, gas, etc.).
TUG — Tug.

Date-time information (message items G, I, N, P, R, S) comprises six digits and the letter Z in the following order:

2 digits indicating day of month (01-31).
2 digits indicating hours (00-23).
2 digits indicating minutes (00-59).
"Z" indicating Zulu (GMT).

Geographical positions (message items L_0, L_1 . . . L_{15}, M) comprise:

4 digits indicating degrees and minutes of Latitude "N" or "S" as appropriate.

5 digits indicating degrees and minutes of Longitude "E" or "W" as appropriate.

Departure Message (type 1) should contain the following:

(A) Vessel's call sign.
(B) Vessel's nationality (abbreviated to 2 letters).
(C) Vessel's name.
(D) Type of vessel identified by 3 letter code as given above.
(E) "1" indicating a type 1 message.
(F) Port of origin/departure.
(G) Date and time of departure from a port in the area or of entering reporting area. Comprises 6 digits and the letter Z as given above.
(H) Port of destination.
(I) ETA at destination or reporting area boundary. Comprises 6 digits and the letter Z as given above.
(J) Speed. Comprises 3 digits indicating speed in knots to one decimal place of a knot.
(T) Whether there is a doctor on board. S indicates yes. N indicates No.
(L_0) Starting point of route, either close to port of departure or at reporting area boundary.
(L_1 . . . L_{15}) Latitude and Longitude of points on route where course changes are planned (maximum 15).
(S) Date and time of transmitting message (6 digits and the letter Z as given above) followed by the first 3 letters of the name of the month in English and the last 2 digits of the year.

Alteration of Route Message (type 2) should contain the following:

(A) Vessel's call sign.
(B) Vessel's nationality (abbreviated to 2 letters).
(C) Vessel's name.
(D) Type of vessel identified by 3 letter code as given above.
(E) "2" indicating a type 2 message.
(G) Date and time at the point where vessel changes direction to follow the new route. Comprises 6 digits and the letter Z as given above.
(H) Port of destination.
(I) ETA at destination or reporting area boundary. Comprises 6 digits and the letter Z as given above.
(J) Speed. Comprises 3 digits indicating speed in knots to one decimal place of a knot.
(L_0) Point where vessel changes direction to follow the new route.
(L_1 . . . L_{15}) Latitude and Longitude of points on route where course changes are planned (maximum 15).
(S) Date and time of transmitting message (6 digits and the letter Z as given above) followed by the first 3 letters of the name of the month in English and the last 2 digits of the year.

Position Message (type 3) should contain the following:

(A) Vessel's call sign.
(B) Vessel's nationality (abbreviated to 2 letters).
(C) Vessel's name.
(D) Type of vessel identified by 3 letter code as given above.
(E) "3" indicating a type 3 message.
(M) Position.
(N) Date and time of the position in (M). Comprises 6 digits and the letter Z given above.
(O) Number of the leg of the route along which the vessel is navigating when the position message is sent. Comprises 2 digits.
(P) New ETA at destination or reporting area boundary. Comprises 6 digits and the letter Z as given above.
(Q) New speed. Comprises 3 digits indicating speed in knots to one decimal place of a knot.
(U) If necessary, additional information on the incident which has necessitated the sending of a position message. The code of the general section of the International Code of Signals should be used.
(S) Date and time of transmitting message (6 digits and the letter Z as given above) followed by the first 3 letters of the name of the month in English and the last 2 digits of the year.

Arrival Message (type 4) should contain the following:

(A) Vessel's call sign.
(B) Vessel's nationality (abbreviated to 2 letters).
(C) Vessel's name.
(D) Type of vessel identified by 3 letter code as given above.
(E) "4" indicating a type 4 message.
(H) Port of arrival within the reporting area or port of destination outside the area.
(R) Date and time of arrival at the last point on the pre-established route close to the port of arrival and on leaving the reporting area. Comprises 6 digits and the letter Z as given above.
(S) Date and time of transmitting message (6 digits and the letter Z as given above) followed by the first 3 letters of the name of the month in English and the last 2 digits of the year.

Transmission of Messages

Reports, addressed to COMCONTRAM, are free of charge and should be sent to one of the following Brazilian coast radio stations:
Belem (PPL), Olinda (PPO), Rio (PPR), Juncao (PPJ).

DOCUMENTS:

Required prior to arrival:

Notice of arrival:

At least 24 hours prior to the anticipated arrival of the vessel, the following must be notified: the Captain of the Port, the Federal Maritime and Air Police, and Maritime Health. Likewise, the Cooperative of Health Inspector of Bahia (VHF radiotelegraph station, Channels 12 and 18) must be notified either directly or through the agency. (The Bahia Cooperative is a private institution, controlled by the Office of the Captain of the Port.)

Information on cargo for the port:

The agency should receive by airmail, at least 24 hours in advance of the anticipated arrival of the vessel, the following documents for distribution as indicated.

Documents	*Port Authority*	*Customs*	*Agency*	*Total*
Cargo manifest	1	1	2	4
Manifest of dangerous cargo	1	1	2	4
Freighted bills of lading	–	1	2	3
Stowage plan	1	–	1	2

All manifests not in the Portuguese language must be translated into Portuguese and put on a special form, (copia de traducao de manifesto de carga) copy of translated cargo manifest.

Request for port services:

At least 24 hours prior to arrival, the Brazilian Port Authority, Empresa de Portos do Brasil, S.A. (PORTOBRAS), must receive their berthing request, to obtain port services.

Additional requirements:

All communications with the above mentioned Authority must be made through a shipping broker. The Port Agent handles all cargo operations. The shipping broker may also be the Port Agent.

On arrival:

Type of Document	*Number and distribution of documents*					
Basic forms	*Port Captain(a)*	*Customs*	*Maritime Police*	*National Health*	*Agency*	*Total*
1. General Declaration(b)	1	1	1	–	1	4
2. Cargo Manifest(c)	–	1	–	–	1	2
3. Crew List	1	3	3	1	2(d)	10
4. Passenger List	1	3	3	2	2(d)	11
5. Ship's Store List	–	3(a)	1(f)	–	1	5
6. Crew Effects Declaration	–	3	–	–	–	3
7. Maritime Declaration of Health	–	–	–	1(g)	–	1
8. Mail List	–	–	–	–	1(h)	1
9. Health Pratique Book from preceding Brazilian Port	–	–	–	1	–	1
10. Entrance Declaration	1	–	–	–	–	1
11. Certificate of Customs Inspection	–	1	–	–	–	1
12. No-cargo Manifest	–	1	–	–	1	2
13. No Passenger Declaration	1	1	2	1	2(d)	8
14. List of Passengers in transit	1	–	1	1	–	3
15. Bills of Lading	–	1	–	–	1	2
16. Declaration of On-deck Cargo	1	–	–	–	–	1
17. In-ballast Declaration	1	–	–	–	–	1

(a) These documents are delivered to the Office of the Captain of the Port, where their contents are recorded. They are then sealed and returned for the vessel's departure operation.

(b) In addition to the special Entrance Declaration for the Office of the Captain of the Port, and the certification of Customs inspection.

(c) The manifest should include the number and contents of the containers, as well as an indication of unfreighted containers.

(d) One copy for the exit gate of the harbour.

(e) In the event that the next port of call should be Brazilian, an additional copy must be submitted, which is stamped by Customs.

(f) If the drugs are not included on the ship's store list, a list of medicinal drugs (narcotics) must be presented to the Maritime Police.

(g) Only for the first Brazilian port of call. There is a special form in the Portuguese language, but the LAFTA/OAS form will be accepted.

(h) For delivery to the Postal Authority.

Other requirements:

The landing card requirement provision is still current, but it is not always requested. The agency delivers blank forms. The cards are filled out on board, and a photograph of the passenger or crew member must be affixed. The cards must be presented to the Maritime Police within 48 hours after the arrival of the vessel, but in the meantime all interested persons may land. The cards must be returned to the Police before the vessel's departure.

Prior to Departure:

At least 24 hours prior to sailing, to avoid possible delays, the following documents must be processed:

Customs:

The original of the payment voucher covering the lighthouse and beacon fees, to obtain the clearance permit;

Captain of the Port:

A copy of the above mentioned voucher; Crew List, should there have been any crew changes; List of Passengers Embarked; upon presentation of these, the sailing permit is granted.

Maritime Police:

Passenger List or no-passenger declaration; Crew List, should there have been any crew changes.

Postal Service:

A certificate of mail delivery or a no-mail certificate must be obtained.

In the event that the next port of call is Brazilian, the local authorities check the sailing permit issued by the four agencies mentioned above; if the next port of call is foreign, the sailing permit issued by the Captain of the Port suffices.

Other Provisions:

The agency must, within seven days following the departure of the vessel, deliver a copy of the cargo manifest of freight embarked in the port, and a copy of each bill of lading issued to Customs, PORTOBRAS, and SUNAMAN.

FLAG: The Brazilian flag is a green ground with a yellow lozenge enclosing a blue sphere, with 21 white stars of which 5 form the Southern Cross and the motto 'Ordern & Progresso'.

This must be flown from the foremast when in Brazilian Ports, from 0800 hrs. to sunset daily.

The customs flag – blue with a white star – to be flown 24 hours a day after clearance is granted.

FREE PRATIQUE: Vessels must report ETA via Agent 24 hours in advance, confirming 12 hours prior to arrival. The message must report that sanitary conditions are satisfactory or otherwise and an indication of the number of passengers intending to disembark and/or in transit.

On arrival the Port Health Authority will board, and further to the documents previously mentioned will require to sight vaccination certificates.

The reception committee will only board by accommodation ladder, or gangway if the vessel is alongside, and must be met at the head of the ladder by a Ship's Officer.

PILOTAGE: This is compulsory for all vessels over 200 g.r.t. There are specific boarding points shown on the charts for each port and vessels must wait there, flying flag G, either at anchor or under way. A safe rope ladder must be provided and must be properly illuminated. Pilots should be ordered at least 2 hours prior to arrival by ship's Agent, or in the event of outlying ports 24 or 48 hours ahead (See each port).

STEVEDORES: Longshoremen are provided by the dock companies and paid for from the Port Charges. Stevedoring can be carried out either by ship's Agents or by contract. In all cases the number of men per gang and their salaries are fixed by Sunamen (Merchant Shipping Superintendency in the Ministry of Transport).

The vessel is legally the employer of the labour, and as a result the vessel is responsible for any damage to the cargo, ship or any third party, by the stevedores.

GENERAL BERTHING INFORMATION:

A berthing priority in Brazilian Ports is given as follows:–

(1) Warships, Brazilian or Foreign.

(2) Regular Passenger Liners for whom immediate berthing facilities are available, if requested at least 24 hours in advance.

(3) Cargo vessels, for whom there are special installations, are given preferential berthing rights.

(4) Vessels with perishable cargoes are given priority berthing.

(5) Vessels that can load and discharge simultaneously can obtain preference over others.

As soon as cargo operations finish, all vessels must leave their berth, or be removed by the Port Authority.

FUEL: A monopoly on supply is held by PETROBRAS, and owners requirements must be made well in advance to the Petrobras offices in New York, London or Rio de Janeiro. Supplies are not plentiful, and in certain ports only certain grades are available.

POLLUTION: Very strict penalties are enforced, and fines are the same, however little pollution is caused. No dumping of any oil is permitted within 50 miles of the coast.

Garbage: It is forbidden to dump any garbage in any harbour or river. In some ports garbage collection can be arranged.

CREW: Crew members wishing to join a vessel, must carry a letter of instruction for the ship's Agent. They must be signed on within 48 hours of arrival.

For Crew members joining from abroad it is advisable to be in possession of a two year multiple entry visa, as only U.S. consulates in Rio de Janeiro, Recife and Brasilia are authorised to issue visas.

Seamen's Missions:

Scandinavian Seaman's Mission
Flying Angel Club
German Seaman's Home

The above Missions are in Santos, and can arrange football matches, tours, etc. There are no Missions in other ports.

GENERAL: Operators and Masters of Liberian flag vessels should consult Agents well in advance respecting requirements for endorsement of seamen's books or passports.

ANGRA DOS REIS: 23.01 S. 44.19 W. (See Plan Book)

(A) GENERAL CARGO SECTION.
(B) TANKER SECTION.

(A) GENERAL CARGO SECTION

DOCUMENTS: See "General" before first port.

PILOTAGE: When requested by the Agents, a pilot launch meets incoming ships off the automatic lighthouses of Itacuatiba and the Lage Branca, depending on whether the ships approach from the East or West, respectively. Pilotage compulsory, 2 hours notice required. State ETA and position Pilot will be embarked.

ANCHORAGES: In the Bay of Ilha Grande; approximately midway between the ports of Rio de Janeiro and Santos; offering excellent anchorages, amongst which may be mentioned: Enseada das Estrelas, Enseada do Abraao, Enseada das Palmas, Enseada Sitio Forte and Enseada de Aracatiba.

The inspection area of the port health, federal receipt and maritime police authorities is covered by a radius of 300 m. around the point of co-ordinates 23° 00′ 42″ S., 44° 18′ 41″ W.

Anchorage for vessels of more than 31 ft. draft and 10,000 g.r.t. 23° 01′ 54″ S., 44° 19′ 18″ W.

Anchorages for vessels of less than 31 ft. or 10,000 g.r.t. 23° 00′ 48″ S., 44° 18′ 30″ W.

Anchoring prohibited in the approach channel and manoeuvring basin.

RESTRICTIONS: The Bay of Ilha Grande possesses two entrances, from the East and the West, permitting immediate access to the Port of Angra dos Reis from the direction of Rio de Janeiro or the Port of Santos, without any change of course. Both access Channels are adequately marked, enabling ships of up to 14 m. draft to navigate in complete safety as far as the port basin about 1 mile from the wharf, where they may lie at anchor and take on cargo from tenders tied up alongside There is another basin with a mud bottom even nearer the wharf, permitting anchorage and docking manoeuvres for ships of up to 10 m. draft.

HEALTH: Port doctor visits all ships on arrival and requires Maritime Declaration of Health, Deratisation Certificate, 2 Crew Lists. Vessels from another Brazilian port automatically receive free pratique and should not fly Quarantine Flag. If suspected disease or fever on board it is advisable to cable Agent before arrival.

TUGS: Available: 4 tugs of up to 600 h.p.

BERTHING: A wharf 1,300 ft. in length, with 1,050 ft. available for tying-up. The wharf is being extended 600 ft. and will be dredged the entire length of the quay so as to receive ships of up to 10 m. draft.

CARGO FACILITIES: Two grain suckers each with capacity of 60 t.p.h. Two electric cranes of 6–6.2 tons capacity, one crane of 3.2 tons capacity and three electric cranes of 1.5 tons capacity. Mobile cranes, 1 for 8 tons, 1 for 9 tons, 1 for 45 tons and 1 for 61 tons. Verolme have an 80 ton floating crane available for hire.

Also available for hire are 2 mechanical conveyors, each with 80 t.p.h. capacity.

MEDICAL: All facilities available. If doctor needed on arrival or making emergency call to land sick persons, cable ETA 12 hours before arrival.

FRESH WATER: Available. Vessels can be provided with up to 50 tons. Connection is 4 in. Pressure greater at night.

FUEL: No facilities for supplying large vessels. Small vessels can be supplied with diesel oil.

REPAIRS: Various mechanical workshops for the execution of shipboard repairs, equipped with lathes, presses, planes, electric and acetylene welding, drills, power-saws and grindstones, etc. The large shipyards of Verolme are situated in the Bay of Jacuecanga, near the port of Angra.

CUSTOMS ALLOWANCES: For each crew member, 2 cartons of cigarettes and 1 bottle wine or spirits.

WATCHMEN: Gangway watchmen strongly recommended for any vessels working cargo with shore labour on board. Watchmen from shore not necessary for coal, iron ore and oil cargoes.

CONSULS: There are no Consuls in this port. They are situated in Rio de Janeiro.

TIME: The local time is GMT minus 3 hours.

HOLIDAYS: 1st January; 1st May; 29th June; 7th September; 8th December; 25th December; 31st December, also local holidays January 6th, April 3rd and December 8th.

TELEPHONES: Not available.

AUTHORITY: Porto de Angra dos Reis, Pca. Lopez Trovao, Angra dos Reis, Rio de Janeiro, Brazil. *Contact:* Fernando Mauricio de Lima Cavalcanti, Manager.

(B) TERMINAL MARITIMO DA BAIA DA ILHA GRANDE – TEBIG.

POSITION: 23° 03′ 38″ S., 44° 13′ 10″ W.

IMPORTANT FEATURES:

1. Anchorage – (see Brazilian Nautical Charts No. 1600, 1602 and 1609).

Anchorage for tankers: The anchorage for tankers waiting for berth is a circle with one mile radius, its centre near Ponta Acaia. Bearing 075° – 2.8 miles from Lage Branca light – (Lat. 23° 09′ 00″ S., Long. 44° 23′ 48″ W., shown on Brazilian Nautical Charts Nos. 1600, 1602 and 1609.

2. Anchorage for lighterage: The same as for waiting for berth.

3. Vessels are prohibited from anchoring in the areas near the Terminal piers, since these areas lie on the access channel for ships making for the Port of Angra dos Reis or leaving it through the Eastern bar.

4. There is no assigned anchorage for Port Authorities clearance (for the time being).

According to the Captain of the Port of Angra dos Reis, free pratique will be granted upon docking at the Terminal pier.

5. Display of quarantine signals on approach to Angra dos Reis must be continuously maintained until free pratique is granted. These signals are: sunrise to sunset: Quarantine Flag. Sunset to sunrise: Signal lights red over white.

6. In addition to quarantine signals the Brazilian Flag must be flown from vessel's foremast throughout the vessel's stay in port.

7. The access channel from anchorage to the manoeuvring area (near the pier) is about 8.75 miles long, 350 m. wide and 25 m. deep in a S.W. – N.E.'ly direction, beaconed with 18 resilient beacons (eight exhibit Fl. W. 5 sec. 3M. and ten exhibit Fl. R. 5 sec. 3M).

8. The manoeuvring area near the pier is 0.6 miles Northward and nearly 1.3 miles East-Westward and more than 30 m. (90 ft.) depth.

9. Signals for emergency: Series of 7 short blasts followed by 1 long blast of the ship's whistle or siren.

10. The Terminal operates around the clock.

11. There are two "open L" shaped piers for accommodating oil tankers, projecting from Ponta do Leme into the sea, about 1,318 m. long in an East-Westerly direction.

12. Pilotage is compulsory when making for the pier and commences near Ponta Acaia.

DOCUMENTS: The Captain of the Port of Angra dos Reis authorises ship's clearance upon berthing alongside the Terminal piers.

The following documents are required for immediate inspection by the boarding officials:

Any and every document issued or related to ship's clearance at the Last Port of Call.

5 copies Crew List.
2 copies Stores List.
2 copies Personnel Effects.
3 copies Passenger List.
3 copies Cargo Manifest.
3 copies Bill of Lading.

APPROACHES: A vessel making for TEBIG approaching by the channel Westward of Ilha Grande should steer for Lage do Coronel light column (a truncated pyramidal concrete column painted in red and black horizontal bands 4 m. in height situated in the middle of the rock (Gp.Fl.(2)R. 10 sec. 10M.) (Lat. 23° 06′ S., Long. 44° 24′ W.), bearing more than 000° which will lead Westward of Lage do Pendao de Fora. When Lage Branca light-column bears 090°, course should be altered so as to make for the swept channel, beaconed with 18 resilient beacons (Fl.W. 5 sec. 3M. and Fl.R.5 sec. 3M.) in a S.W. – N.E.'ly direction about 9 miles long, 350 m. wide and 25 m. deep, which leads to the manoeuvring area near the "L" shaped piers.

The "Terminal Maritimo da Baia da Ilha Grande – TEBIG" facilities are situated on the mainland, in front of the central part of Baia da Ilha Grande.

Its "L" shaped piers extend about 1,318 m. from Ponta do Leme in an East-Westerly direction and have berthing space for tankers up to 500,000 d.w.t.

PILOTAGE: Pilotage is compulsory when making for the piers.

Pilots moor, unmoor and supervise the movement of all vessels in the vicinity of the piers. Compulsory pilotage starts near Ponta Acaia in position Lat. 23° 09′ 00″ S., Long. 44° 23′ 48″ W.

Pilot will board the ship at this point from a launch or tugboat. Vessels must be equipped with satisfactory mooring equipment, lines, gear, etc., and ballasted to the satisfaction of the Pilot.

It is the responsibility of the Master to notify the Pilot of any special conditions, difficulties or peculiarities such as engine or boiler deficiencies, defective navigational equipment, mooring lines, tackle, gear, or lack of necessary equipment which might impose hazards in connection with the handling, mooring, unmooring, discharging and loading of vessel.

At the piers, vessels must be moored to the entire satisfaction of both the Pilot and Terminal Operators.

If the Master or the Officer of the Watch is in any doubts as to the Pilot's actions or intentions, or if he does not agree with Pilot's actions considering the safe navigation or manoeuvre of his ship it is the responsibility of the Master to take the necessary steps according to his best judgement and to notify the Captain of the Port, in writing, through the General Manager of the Terminal.

ANCHORAGE: *Anchorage for tankers waiting for berth:* Anchorage for tankers waiting for berth is within a circle with 1 mile radius, its centre near Ponta Acaia, with Laje Branca lighthouse bearing 075° (true), and 2.8 miles away (Lat. 23° 09′ 00″ S., Long. 44° 23′ 48″ W.), shown on Brazilian Nautical Charts 1600, 1602 and 1608.

Anchorage for lighterage: Anchorage for lighterage is the same as for tankers waiting for berth (see above).

Prohibited anchorage: Vessels are prohibited from anchoring in the vicinity of the Terminal piers since the place lies on the access channel for ships making for Angra dos Reis or leaving it by the Eastern bar.

Anchorage for clearance: There is no assigned anchorage for Port Authorities clearance (for the time being).

According to the Captain of the Port of Angra dos Reis, free pratique will be granted upon berthing at the Terminal pier.

RESTRICTIONS: *Access Channel:* The swept access channel from anchorage to the manoeuvring area (near the pier) is about 9 miles long, 350 m. wide and 25 m. depth, running in a Southwest-Northeasterly direction and beaconed with 18 light beacons (Fl.W. 5 sec. 3M. and Fl.R. 5 sec. 3M).

Manoeuvring Area: The manoeuvring area near the pier is approximately 0.6 miles Northward and 1.3 miles East-Westward and more than 30 m. depth.

Tidal Amplitude and Streams: Local and diurnal tidal rise is approximately 1.20 m. (4 ft.) above MLWS at neaps and 1.70 m. (5.5 ft.) in HWS.

Tidal streams are West going during the in-going, tide, running nearly parallel to the pier, and East going during the out-going tide.

If the wind is fresh from N.E., South or S.W., the tidal stream follows the direction of the wind.

Tidal stream normally attains a rate from 1.0 to 2.2 knots.

There are no remarkable tidal streams in this whole area.

MAX. SIZE: See "Berthing".

HEALTH: Vessels entering are inspected by the Health and Customs Offices between 0730 hrs. and 1900 hrs.; but by previous application, a special visit may be granted outside this period on payment of an extra tax.

RADIO: Radio Messages prior to arrival: ETA must be radioed by all Petrobras chartered vessels bound for TEBIG, 72 and 48 hours prior to arrival, to Petrobras as well as to Agent through PPR Radio Station (Official Rio Coastal Radio Station).

Confirmation as well as any changes in the time of arrival must be radioed 24 hours prior to arrival.

When within VHF range, ships must contact TEBIG for instructions.
ETA radio messages must specify "local" or "GMT" time.
SSB listening around the clock.

VHF: TEBIG Central Radio Station is in the Control Room. Transceivers are monitored by Terminal Operators tuned to Channel 16 (Delta), 24 hours a day.

TUGS: *General:* TEBIG operates 4×3,720 h.p. tugs.

Mooring and unmooring assistance is provided by these tugs which are fitted with fire pumps, water cannons and foam monitors to assist in fighting fires.

At least one tug is on duty at all times in order to provide assistance should necessity of emergency or additional services arise.

Tug/Ship Communications: The tugs are equipped with VHF radiotelephones so that continuous communications between ship and tugs may be maintained during docking and undocking manoeuvres.

A 24-hour-a-day listening watch is maintained in order to comply with ship's or operational personal requests even if the vessel is already berthed.

Should a radio failure occur when docking/undocking and manoeuvres are in progress, the following whistle signals must be used:

Calling: 4 long blasts followed by 1 or 2 short blasts. Short blasts are intended to number the tugs needed, that is, one blast one tug, two blasts two tugs, and so on.

Before towing line is made fast: 2 short blasts – stand by for pushing on the bow or picking up ship bow line. 3 short blasts – stand by for pushing on the stern or picking up ship stern line.

After towing line is made fast: 1 long blast – pull to starboard. 2 short blasts – pull to port side. 3 short blasts – stop pulling.

Manoeuvring alongside ship: 1 short blast – pull. 2 short blasts – push.

Other ship's whistle signals for the tender craft:

Calling: 2 long blasts followed by 1 short blast – calling pilot launch. 1 long blast followed by 2 short blasts – calling motor launch.

Tugs will acknowledge orders received by sounding a short blast; since tugboats are equipped with radio-telephone, orders may be given by radio.

Unless otherwise ascertained, the Pilot gives orders to the fore tug sounding a mouth whistle and to the aft tug sounding the ship's whistle.

Launches:

Launches for Crew Members: The Terminal does not operate launches for crew transportation. Ships must contact Agent in order to have launches rented for such a purpose if needed.

Pilot's Launch: Pilots use either one of the manoeuvring tugs or pilot's station launch since TEBIG operates no launches for pilotage service.

Small craft for assistance in manoeuvres: Assistance in handling mooring lines is rendered to TEBIG by contract with specialised firm including operation of two small diesel powered launches.

BERTHING: TEBIG operates around the clock. Vessels may moor and unmoor at any hour except in severe adverse weather conditions.

Pier Facilities: There are two "L" shaped piers for accommodating oil tankers up to 500,000 d.w.t., projecting from Ponta do Leme into the sea, about 1,318 m. (3,954 ft.) long in an East-Westerly direction.

	Outer Berth	Inner Berth
Name:	P-1	P-2
Location:	South Side	North Side
Length:	570 m. (1,869 ft.)	570 m. (1,869 ft.)
Depth:	36 m. (118 ft.)	36 m. (118 ft.)
Loading Arms:	4×20 in. for oil and ballast 1×12 in. for diesel oil and fuel oil	4×16 in. for oil and ballast 1×12 in. for diesel oil 1×12 in. for fuel oil

Ship's manifold maximum heights above loading arms platform level:

Outer berth (P-1)	23.60 m. (77.5 ft.)
Inner berth (P-2)	20.60 m. (67.5 ft.)

Height of loading arm platform above MLWS: The height of the loading arm platform level referred to the MLWS is 7.20 m. (21.6 ft.).

Max. allowed d.w.t. for operating ships:

Outer berth (P-1)	Up to 500,000 d.w.t.
Inner berth (P-2)	Up to 350,000 d.w.t.

LOADING/UNLOADING: *Equipment:* The pier is equipped with the following lines for loading/unloading and/or bunkers (both berths):

3×42 in. oil lines about 9,500 m. long; 10.5 kg./sq.cm. (150 lb./sq.in.) maximum working pressure; 12,000 cu.m./h. maximum flow rate (each).

1×26 in. line for ballast, about 1,800 m. long; 10.5 kg./sq.cm. (150 lb./sq.in.) maximum working pressure and 7,500 cu.m./h. maximum flow rate.

2×20 in. lines for fuel oil, about 2,000 m. long; 10.5 kg./sq.cm. (150 lb./sq.in.) maximum pressure and 3,200 cu.m./h. maximum flow rate (each). Maximum working temperature for both lines: 75°C (167°F).

1×12 in. line for diesel oil, about 1,500 m. long; 10.5 kg./sq.cm. (150 lb./sq.in.) maximum working pressure and 1,100 cu.m./h. maximum flow rate.

1×8 in. line for drinking water, 3.2 kg./sq.cm. (45 lb./sq.in.) working pressure and 133 cu.m./h. maximum flow rate.

Auxiliary Facilities: Both berths are equipped with recording devices to measure continuously the ship's speed and her distance to the pier, referred to the pier longitudinal axis.

Both berths are also equipped with hydraulic powered accommodation ladders for easy access aboard ship.

Cargo/Ballast Operation:

General: The terminal is equipped with 2 slop tanks with a combined capacity of 45,000 cu.m. or 282,000 bbls. (22,500 cu.m. or 141,525 bbls. each).

Discharge into the sea of any amount of oil or oil based products, either alone or in combination with ballast water, is strictly forbidden and heavily fined.

TEBIG is particularly interested in having vessels complete the deballasting operation promptly after berthing in order to minimise time at berth.

Simultaneous loading/deballasting or unloading/ballasting is allowed on properly equipped vessels.

Hose Handling: Hoses are in use for fresh water supply only. For loading/unloading operations the Terminal is equipped with 11 quick release flange connection loading arms of 150 lb./sq. in. capacity.

Nominal Flow Rates: The terminal lines allow oil discharging at a rate of 25,000 cu.m./h. and loading up to 6,600 cu.m./h.

Cleaning Tanks:

Discharging of oily water resulting from conventional tank cleaning is not allowed as a rule. Provided previously scheduled and accepted by Terminal, crude washing may be authorised.

MEDICAL: In emergencies or cases of serious injury, TEBIG may assist with first aid. Medical treatment in case of serious illness must be requested by Masters to Agents.

Dental treatment is available in Angra dos Reis.

If the patient(s) cannot speak Portuguese or Spanish, an interpreter will be desirable for better understanding.

FRESH WATER: *Drinking Water:* TEBIG is equipped for supplying drinking water through universal quick release 2.5 in. universal manifold from a 8 in. line with a 133 cu.m./h. flowing rate. There are also threaded ended hoses with 2.5 in. thread and 7.5 pitch series, male and female.

Boiler Water: TEBIG auxiliary area is equipped with 2×1,550 cu.m./h. tanks (each) for own use as well as for supplying ships with boiler water through a 8 in. line.

FUEL: TEBIG is equipped with blending machines for mixing fuel oil and diesel oil in order to supply berthed tankers with any type of bunkers e.g. bunker C, marine gas oil, marine diesel oil and marine fuel with any grade of viscosity, and charging international prices.

Orders for bunkers must be placed 48 hours in advance and addressed to:

Divisao de Abastecimento de Navios, Departamento Comercial, Av. Republica do Chile, 65 – ZC – 06, Rio de Janeiro 20.000 – RJ – Brasil. Cable Address: Petrobrasecope. Telex: 031422 or 031423.

Departamento Comercial may also be contacted through Owner's Agent.

Lubricants: Orders for lubricants must be placed 15 days in advance and addressed to:

Petrobras Distribuidora, Praca 22 de Abril, 36 – 4°. andar, ZC, 06 Rio de Janeiro 20.000, RJ, Brasil. Telex: 031422, 031423 and 031424. Tel: 242-9381 and 242-4901.

Petrobras Distribuidora may also be contacted through owner's Agent.

CONSULS: There are no Consular representatives available in Angra dos Reis. The nearest city where such representatives can be found is Rio de Janeiro, where most of the maritime nations maintain Consulates. Agents may be able to contact Consulates if duly notified in good time.

REPAIRS/DRYDOCKS: *Ship Repairs:* There is a shipbuilding yard, Verolme Estaleiros do Brasil, in Baia de Jacuacanga (km. 83 Estrada Rio-Santos) which may be used by vessels to effect limited repairs only, since it main activity is shipbuilding.

There is no specialised personnel or well equipped workshops intended for ship repairs.

In case of emergency repair or those which cannot possibly be postponed and which Verolme yards cannot effect, the following workshops may be contacted for limited repairs.

Industria e Comercio Angrense Ltda. Rua do Comercio 495 – Loja 6.

Oficina Mecanica Tres Irmaos, Rua Arcebispo Santos 209 – Fundos.

Electronic Repairs: There are no workshops or specialised personnel for repairs in electronics available in Angra dos Reis.

Agents may be able to take the necessary steps in order to comply with orders placed for repairs in electronics if contacted in good time.

Compass and Radio Adjustments: Orders for compass and radio direction finder adjustments must be placed through Agents well in advance, considering that such services are not available in Angra dos Reis.

SURVEYORS: There are no classification societies representatives in Angra dos Reis. However they may be called from Rio de Janeiro and/or Santos upon Agent's request. ABS, LR and BV maintain offices and representatives in Rio de Janeiro.

Petroleum Inspection: No Petroleum Inspection Services are available in Angra dos Reis. They may be contacted in Rio de Janeiro or Santos at the following addresses:

Chas. Martin & Co., Rua da Lapa 200 – Conjunto 906, 20.000, Rio de Janeiro – RJ – ZC – 00. Tel: 242-4219, 245-5636.

E. W. Saybolt & Co., Rua Bras Cubas, 3, 11100 – Santos – SP. Tel: 4-6638

Sociedade Brasileira de Superintendencia S/A (Redwood), Av. Presidente Vargas, 466, 13° andar. Tel: (021) 233-3522. Rio de Janeiro, RJ, 20.000.

WEATHER:

Winds: Easterly winds predominate but due to the Ilha Grande high mountains they may blow from several directions. S.S.W. winds due to cold fronts may cause heavy seas and swells in exposed areas. S.S.W. winds often blow in the afternoon period. N.N.E. winds are not infrequent. Wind speed ranges from 3 knots to 30 knots in the Terminal area.

In the Autumn and Winter, cold fresh winds are common on the coast from Rio de Janeiro to Santos. In daytime the breeze tends to increase the East component, and at nightime the West component predominates.

In protected areas (harbours, bays and channels in this area) S.S.W. winds starts about noon, when fresh to moderate winds cause the temperature to decrease; wind force decreases at night and an interval of calm follows, before the arrival of the sea breeze from N.N.E., about 2000 hrs. (local time) until 1000 hrs. (local time).

Rain: The average annual rainfall is about 2,000 mm. in the area.

Visibility: The visibility in this area is generally fair to good.

During Autumn and Winter fog is moderately frequent in the early morning. In Summer time, dry haze is comparatively frequent, causing the visibility to be reduced.

Temperature: Local average temperature ranges from 18°C (64.4°F), in June and July, to 35°C (95°F), in December and January.

Pressure: The pressure over the area is about 1,015 mb. in good weather.

Humidity: Humidities are comparatively high, ranging from 76% to 81%.

SHORE LEAVE: Ship's personnel are not permitted ashore for any purpose whatsoever until free pratique has been granted. Luggage and packages are subject to Customs Officers and/or Terminal Watcher inspection. As a rule shore leave is permitted with the above stated restrictions. Vessels are not permitted to sail unless all crew members are onboard. In case of seamen left ashore for any reason whatsoever all expenses are for ship's account.

Passengers: Passengers will be permitted ashore if in possession of the required visas and documents.

GENERAL: *Charts:* No charts or Pilot Publications are available either at the Terminal or Angra dos Reis. If necessary, Agents must be contacted for placing orders in Rio de Janeiro.

The "Diretoria de Hidrografia e Navegacao" (Brazilian Navy Hydrographic Service) issues the following navigational publications:

Chart Numbers: 1600, 1601, 1602, 1603, 1604, 1605, 1606 and 1609 (soundings in metres) covering the area.

A Brazil Pilot of the Brazilian Coast (Roteiro).

List of Lights (Lista de Farois).

Flags: Display of quarantine signals on approach to Angra dos Reis and TEBIG facilities must be maintained until free pratique is granted. These signals are: sunrise to sunset: quarantine flag (QUEBEC). Sunset to sunrise: signal lights – red over white.

In addition to quarantine signals, the Brazilian Flag must be flown from vessel's foremast throughout the vessel's stay in port.

Vessels entering or leaving Brazilian ports must display their ensign when within 3 miles of the entrance to a port or anchorage and, by day, also display their call letters in flags of the International Code of Signals.

Cranes: Neither TEBIG and Angra dos Reis Port operate floating cranes. Verome Yards may rent a floating crane with 80 tons capacity. TEBIG does not operate barges or lighters.

Provisions and Stores: Orders for provisions and/or stores may be placed through Agents. Since some items are only obtainable in Rio de Janeiro, orders must be placed as soon as possible.

Laundry: No laundry facilities are available at TEBIG. There are however laundry facilities in Angra dos Reis which may be used through Agent, which must be contacted as soon as possible for such purposes.

Mail Services: No Post Office Agency is available at TEBIG. Mail must be sent care of Agent and posted in Angra dos Reis.

Cash Advances: TEBIG is not authorised to effect cash advances. Master must contact either Owner's Agent or FRONAPE for such purpose (FRONAPE must be contacted in the case of ships chartered by PETROBRAS).

Customs Watches: Brazilian Customs Officials may be assigned on board according to Customs Regulations in order to enforce the said regulations. Meals must be supplied to these Officials at regular meal times.

Contraband: Brazilian law is very strict in every aspect concerning smuggling. Masters are requested to instruct their crews about restrictions concerning trafficking goods of any kind including cigarettes, cigars, tobacco, alcoholic beverages, souvenirs, firearms, playing cards, narcotics. Trafficking in these articles or any others, between ships or between ships and Terminal employees or representatives, or anybody else is strictly prohibited and failure to comply with the law may result in several penalties.

Items as above stated must be kept sealed under lock and key.

Visitors: No visitors are allowed aboard ships berthed alongside unless duly authorised by Master and Terminal Superintendent and local Maritime Police. Unauthorised visitors will have to be reported to the Maritime Police.

National Holidays: All ships in port must be fully dressed on the following National Holidays: September 7th and November 15th.

Machinery in Readiness: When berthed alongside PETROBRAS' Terminal vessels must keep engines and propulsion machinery in readiness to leave the berth under full power on short notice.

No repairs are allowed which would interfere with this requirement.

Violation of this rule will entail towage from the berth at the vessel's expense and PETROBRAS will not accept any kind of responsibility for the resulting delay to the vessel.

Refuse and Garbage: All deck scuppers must be kept plugged and, as far as possible, discharging of waste water from lavatories on terminal side must be prevented.

TEBIG has no way to deal with ship's garbage or refuse. If absolutely necessary, Agent must be contacted for such a purpose.

Fishing and Painting: Use of pier for painting ship's hull is not allowed. It is also forbidden to fish on the terminal side of the ship.

General: Shore access to TEBIG is by car or by bus along BR-101 Highway km. 81 Jacuacanga.

TEBIG is 150 km. (about 93 statute miles) from Rio de Janeiro.

There is a regular bus service between these cities. There is international telephone service available (Long Distance Direct Dialling) DDD (0243 for Angra dos Reis). The piers are equipped with two hydraulic powered accommodation ladders which allow personnel to board the vessel safely.

At the ladder's end, a lifebuoy is fastened to a 27 m. (29 yd.) long safety line.

Telephone Numbers: Important telephone numbers of the Terminal:

Executive Assistant of the Terminal	02*
Operations Manager	03*
Operations Supervisor (around the clock)	15, 80 and 83
Operating Room (main) (around the clock)	15 and 80
Operating Room (auxiliary) (around the clock)	44
Pier (around the clock)	46
Traffic and Facilities Section	41*
Program and Control Section	04*
Safety Section	60**
Marine Section	50**
Medical Section	21**

*to be called in working hours only

**when needed out of working hours call 15, 80 or 83

SHIPMASTER'S REPORT: November 1981.

Port Name: Although called "Terminal Maritimo de Baia de Ilha Grande" orders for this terminal are given for "Angra dos Reis". Terminal called TEBIG.

Anchorage: Outside the port about 3 miles West of Laje Branca. Except in special cases officials will not board vessel in this anchorage as a result of difficulties experienced in the past with sudden changes of weather. In the approaches to the port, to South and North of the buoyed channel, anchorage is possible with a max. draft of 21 m. and port officials will board vessels here, shore leave being possible by shore launch for crew.

Pilotage: Pilots board off the seabuoy at the entrance to the buoyed channel to take vessel to terminal or inside anchorages. Outward bound the Pilot remains until the last pair of channel buoys. Pilots work ships for terminal only.

Channel Lights: These are neither very bright nor very reliable.

Pratique: There is no radio pratique and quarantine officials board with Customs and Immigration but ships should cable to Agents two days prior to arrival "Codicoes Sanitarias Abordo Satisfactorias".

Formalities: 2 each Crew Lists, showing vaccination dates; 2 each Store Lists and Personal Effects; 8 Crew Lists. Ship's Certificates taken ashore by Agent to effect Clearance.

Agents: Direct VHF communication from office to ships in anchorage or at terminal. Until recently weekend cables were erratic but telex is now installed.

Shore Leave: By minibus from berth to Angra dos Reis (30 minutes) – taxis not allowed inside terminal gate (30 minutes walk from berth). No passes required.

Crew Changes: Easily possible (via Rio de Janeiro, 3 hours by car) – sometimes difficulties with Customs for crew joining and leaving bringing/taking radio/cassette players, Customs escort sometimes being required or ambiguous fines imposed.

Fresh Water/Bunkers: Available at terminal. Lighter fuel oils are sometimes a mixture of heavier fuel and diesel oils.

Tugs: Three terminal tugs of 4,000 h.p. each always available, fourth tug for larger ships (also 4,000 h.p.) berthing is sent from Rio de Janeiro. Two ship's lines are used to bow and stern tug (and care should be taken sending these as tugs inclined to steam off with them) and tug's lines from shoulder tugs.

Berth: Single long finger pier, South side taking ships up to 500,000 d.w.t and North side up to 300,000 d.w.t. Ships on North side feel current flow tending to push them off the berth and short "semi-breast" stern lines are preferable to ones with long drifts. Main deck springs are sometimes impractical to the shore as centre dolphin section of the pier is about 260 ft. in length and in many ship's springs would be too short. Otherwise plenty of mooring hooks and general pattern is 2 springs, three breast and four head/stern lines.

Terminal: Communication by VHF; crude oil washing permission should be sought prior to arrival; usual check lists; terminal schedules of berthing and discharge are very variable.

AUTHORITY: Terminal Maritimo da Ilha Grande BR-101 km. 81 – Jacuacanga, Angra dos Reis – RJ *Tel:* 65-0358 PABX, Direct long distance dialling number DDD 0243 (for Angra dos Reis) followed by the telephone number (65-0358). *Contact:* The Superintendent.

Head Office: Petroleo Brasileiro S/A – Petrobras, Avenida Republica do Chile, 65-ZC-06-Centro – Rio de Janeiro – 20.000 Brazil.

Divisao de Operacoes: Same address, as above, 12th Floor, (Operations Division).

ANTONINA (Barao de Tefe): 25.26 S. 48.41 W.

(See Plan Book)

Also see "General" before first port and "Paranagua".

PORT LIMITS: The limits of the port of Barao de Tefe extend from the Teixeira Point to the port quay.

DOCUMENTS: See "Paranagua".

Inspection carried out at Paranagua.

PILOTAGE: Compulsory in the port of Barao de Tefe and in the access channel. Also see "Paranagua".

ANCHORAGE: Only anchorage is in the vicinity of Teixeira Point (See DHN chart No. 1823). See "Paranagua" for quarantine and explosives anchorages.

Anchoring in front of the quay is prohibited.

RESTRICTIONS: *Access Channel:* This is marked on chart No. 1823 of the DHN (National Hydrographical Directorate), the channel is 120 m. wide, running in a S.E.–N.W. direction, starting at the Island of Teixeira and proceeding as far as the manoeuvring basin.

Critical Points: Itaucu de Baixo Rocks, Shallows of Fundao Grande and Joao Fernandes; average depth 5 m. Anchoring in the channel is forbidden, and to navigate it, it is necessary to have good visibility and daylight.

Tide: The average speed reaches 3 knots on the ebb tides, average height during Spring tides – 2.2 m., Neap tides – 1.7 m.

Berthing: Manoeuvring may only be effected in daylight and good visibility. Berthing always takes place on a rising tide.

TUGS: To be requested from Paranagua.

BERTHING: The area for manoeuvring is 280 m. wide in front of the quay, with a length of 700 m. Variable depth between 6.5 m. and 7.5 m.

Length of berth, Matarazzo Quay, length 200 m. (additional quay, length 150 m. planned, being 45 m. from Matarazzo Quay); depth alongside, 6.0 m. – 6.5 m.; Bollards 50 m. apart.

Facilities: 5 warehouses, 12,200 sq. m. without cold storage; 1 vertical silo at Matarazzo of 8,500 tons capacity (not in operation); open air areas, 7,500 sq. m.

Cranes: 1 of 6.5 tons on rails, 4 on tyred wheels of 9 and 3.5 tons, stacker trucks – 4 of 5 tons capacity, 4 of 2.5 tons and 5 of 2 tons. No rolling bridge, loaders or suction units available.

Railway lines extending 3,100 m. but no locomotives available; 6 wagons which are of the open type (28 ton capacity); 22 trucks on tyred wheels (3.5–7.0 tons capacity).

No ro/ro or container facilities. No barges, pontoons or lighters available.

STEVEDORES: See "Paranagua".

MEDICAL: Hospital available. Tel: 432-1244.

FRESH WATER: One hydrant at end of port quay, rate 30 cu.m.p.h. and 3 hydrants at Matarazzo Quay (100 m. apart), rate 30 cu.m.p.h.

No water boat available.

FUEL: Available to vessels alongside by road tanker.

REPAIRS: See "Paranagua".

AIRPORT: At Curitiba (Afonso Pena Airport) 65 km. away, or Paranagua for light aircraft 50 km. away.

HOLIDAYS: Local: 6th November (City Anniversary), 15th August (City's Patron Saint Day).

CUSTOMS: Tel: 432-1221.

POLICE/AMBULANCE/FIRE: Police, tel: 355 or 432-1234; Fire Brigade from Paranagua is used.

TELEPHONES: Not available.

SERVICES: Foodstuffs available. Rubbish collection is the responsibility of the Agent.

GENERAL: Following received from a ship's Agent in 1980.

The port of Antonina is situated in the inner recesses of Paranagua Bay, about 15 miles from this port. Vessels demanding that port receive free pratique at Paranagua and proceed on voyage one hour before HW. As the channel has no light-buoys, navigation is only possible during day time. There are only two berths available at Antonina, and should both of them be occupied, vessels await in Paranagua, because there is no safe anchorage there.

Vessels have to turn around before docking, and for this reason only small vessels should go there.

Official maximum drafts: Spring tide – HW: 21 ft.
Neap tide – HW: 18 ft.
LW: 15 ft.

Stevedoring – Labour:

a) Number of gangs available: Not restricted.
Stevedores affiliated to their Union.

b) Working hours:

Normal hours:	0700–1100	1300–1700
Night hours:	1900–2300	0000–0400
Overtime:	1100–1300	1700–1900
	2300–2400	0400–0700

c) Number of men in regular gang:
Unitised cargo: 9 men.
Break-bulk cargo 11 men
Reefer cargo: 20 men

d) Labour available all year round.

e) Rigging and cleaning gangs available.
f) Capable supervision is available. In addition to normal stevedore supervisors, agency employees give ample assistance to ships' operations.
g) Average tons worked per hour per gang, loading: Bagged cargo: average of 40 t.p.h. General cargo: average of 10/20 t.p.h.
h) Average tons worked per hour per gang, discharging:
Bagged cargo: average 20 t.p.h.
General cargo: average of 10/15 t.p.h.

Equipment/Gear:

Shore gear, hooks, slings, etc., available.

Heavy lift slings available to handle maximum 120 tons.

Shore cranes:
1 electric crane – capacity 25 tons – Outreach 25 m.
4 electric cranes – capacity 6.3 tons – Outreach 25 m.
4 electric cranes – capacity 3 tons – Outreach 15 m.
6 electric cranes – capacity 3.2 tons – Outreach 25 m.
4 electric cranes – capacity 2 tons – Outreach 25 m.
1 automotive crane on tyres – capacity 30 tons – Outreach 20 m.
1 floating crane available, capacity 110 tons.

Cargo is discharged onto railroad trucks and trailers. Export cargo is brought alongside by trucks, railway cars or trailers.

Sideloaders also available.

No container spreaders available.

No lighters available.

Warehouse/Transit Cargo Sheds:

a) Within the port area there are 31 warehouses of concrete construction, with tile roofs, with a total of 87,310 sq.m. of storage.
b) A small refrigerated storage shed is available, used mostly for meat, fish, shrimps and fruit; its capacity is for 2,900 cu.m., and there are 9 chambers.
Temperature: Range of 14°/15°F. One chamber can be brought down to −13°F.
c) Free time period allowed on cargo discharged from vessels is 6 days.
d) Storage always paid by importer/exporter.

AUTHORITY: Administracao dos Portos de Paranagua e Antonina, Av. Conde Francisco Matarazzo, Antonina, Brazil. *Tel:* 432-1027.

Port Captain, Rua Marques de Herval 216. *Tel:* 432-1384.

ARACAJU: 10.55 S. 37.03 W. (See Plan Book)

LOCATION: On the right hand bank of the Rio Sergipe, 3.24 nautical miles from the entrance. D.H.N. Charts 1000 to 1003 cover this area.

PILOTAGE: Compulsory.

APPROACHES: The access channel is 100 m. long and 2.9 m. deep. Tidal variation 2.3 m.

BERTHING: Manoeuvring basin is 600 m. long with a depth of 12 m.

The quay consists of 96 m. (concrete) and 80 m. (wood) berthing space, with depths of 6 m. and 7 m. available. Warehouse of 1,200 sq.m. and 50,000 sq.m. open storage available.

CRANES: One 9 ton mobile crane available.

BULK HANDLING FACILITIES: There are 3 silos, with a capacity of 5,800 tons and one mechanical wheat loader, capacity 20 ton. A 40 ton weighbridge is also available.

FRESH WATER: Available, delivery rate 25 t.p.h.

CONSULS: Portugal (vice-consul).

REPAIRS: Can be undertaken.

AIRPORT: Nearest at Santa Maria, 13 km. distant.

TIME: GMT minus 3 hours.

HOLIDAYS: National: January 1st, April 21st, May 1st, September 7th, November 15th and December 25th.

Regional: December 8th.

Movable: Monday and Tuesday of Carnival, Ash Wednesday, Good Friday and Corpus Christi.

Commemorative: August 28th, October 28th, October 30th and November 2nd.

AUTHORITY: Administracao do Porto de Aracaju, Av. Joao Rodrigues, s/no., 49000, Aracaju, SE. *Tel:* (0792) 22-3314. *Contact:* Engineer Militino Rodrigues Ferreira, Administrator. *Tel:* (0792) 22-3217.

ARATU: 12.47 S. 38.30 W. (See Plan Book)

LOCATION: The port facilities of Aratu are located on the Eastern side of All Saints Bay in the Enseada do Caboto, between Marinho and Pereira Points, to the North of the Bar of Cotegipe and the Naval Base of Aratu, facing the Mare Island.

Its areas of administration and jurisdiction correspond to the Bay of All Saints, limited to the South by parallel 12° 50′.

DOCUMENTS: See "General" before first port and "Salvador".

PILOTAGE: Compulsory. Requests for Pilots are to be made to the Bay of Todos os Santos Pilots' Association at Serra da Raiz Building, 5th Floor. Room 510 – Rua da Grecia 8, Tel: 242–2221 or by Channel 16 VHF-FM of the coastal radiotelephone network.

Requests must be made 2 hours in advance, specifying the time of the vessel's entry.

APPROACHES: *Access Channel:* The access channel starts at Lat. 12° 58′ S. and Long. 38° 31′ 55″ W. with a minimum depth of 18 m. (see Chart 1108 of the NHD). The channel is marked by 8 light buoys, 4 to starboard with red lights and 4 to port with white lights and by the lighthouse at Areia Point. To the North of the port of Aratu is the lighthouse of Cabrito Point which provides a good landmark day and night for vessels bound for the port of Aratu. The length of the channel is about 2 miles as far as the manoeuvring area, with a minimum width of 180 m.

The improvement of the nautical signalling arrangement in the access channel to the port is planned, based on a study carried out by a Dutch firm and under an agreement which will be signed with the SSN. The following points are fairly clear and serve for direction finding purposes:

(a) Furnaces of the Salvador Cement Company, at Sacopa Point, during the day;
(b) USIBA terminal which has a red light at its top, serving as a reference point both day and night.
(c) Construction at the top of the hill at Toque-Toque Point, during the day.
(d) Church of Nossa Senhora das Neves on the Southern part of the Island of Mare during the day;
(e) The lighthouses of Areia Point and Cabeto Point, both day and night.

Existing Dangers: The shoal to the West of Sacopa Point and the banks of the Island of Mare are being permanently dredged.

Manoeuvring Area: The area intended for berthing and unberthing of vessels is defined to the East and West by the 10 m. line, with variable width from 400 m. to 1,000 m., limited to the South by the 12° 46′ 09″ S. parallel. Minimum depth 12.0 m. Depth at Bar 20.0 m. Max. height of tide 2.80 m.

ANCHORAGE: The anchorage of Monte Serrat, must be used for visiting vessels and for manoeuvring. Anchorage is prohibited in the manoeuvring area and in the access channel (See chart).

The visiting areas of the Port Health Authorities, Federal Receipt and Maritime Police are those defined by a radius of one mile around the points of co-ordinates Lat. 12° 58′ 07″ S. and Long. 38° 32′ 18″ W. and Lat. 12° 55′ 56″ S. and Long. 38° 31′ 37″ W., as shown in chart 1.102 of the National Directorate of Hydrography.

Vessels may only come alongside the berth after having been visited by the authorities. The anchorage for free pratique coincides with the waiting area for Pilots and the permitted anchorage area (i.e. the anchorage area of Monte Serrat).

MAX. SIZE: Access to Bulk Terminal: Length 220 m. Draft 11.6 m. Beam – No restriction. Also see "Berthing".

HEALTH: See "Anchorage".

TUGS: Salvador tugs used.

BERTHING: To carry out operations of vessels going to the Port of Aratu and movement of their cargo and storage, the Port has specific Terminals, with an infrastructure capable of giving highly efficient operations as follows:

Cargo:
1. Solid Bulk Terminal – T.G.S.
2. Liquid Bulk Terminal – T.G.L.
3. Gas Products Terminal– T.P.G.

Solid Bulk Cargo Terminal – T.G.S.:

Finished in 1976, commenced operation in 1977 and has a basic formation of:

A berthing pier; berthing dolphins (2) – South side; access bridge; a storage area; silos and warehouses (private); various equipments.

This terminal will also be equipped with a berth for solid bulk which is now in the project stage. Construction commencement is planned for 1985 and beginning of operations is expected for 1988. This dock will be equipped with a pier of approximately 175.05 m. in length; draft of 12.00 m. for vessels of up to 40,000 g.r.t. over which electric portico cranes and special private facilities will be installed.

The mooring dolphins will also be built with access by means of passageways from the pier. For storage and handling of bulk solids, which will be performed at this site, a complete infrastructure will be prepared on the re-fill, including highway/railway access.

Handling of aggressive and/or corrosive solid bulk products currently operated at TGS, such as sulphur and fertilizer as well as alumina, will be transferred to this pier. In addition to these products, all bulk currently handled at the Port of Salvador which, due to physical/chemical difficulties could not yet be handled at Aratu, will also be transferred to this dock.

Mooring Pier:

Constructed in reinforced concrete on pipes and with the following characteristics:

Level +4.50 m.; width 37.50 m.;, length on the North side 153.20 m., on the South side 202.60 m.; distance between dolphins 286.60 m. (on the South berth).

North Berth: Depth 10.00 m.; largest permissible vessel 100,000 g.r.t.; distance between mooring points 24 m.; max. load on mooring point 50 tons (9); cylindrical fenders, external diameter 0.80 m.×1.50 m. (12).

South Berth: Depth 11.00 m.; largest permissible vessel 100,000 g.r.t.; distance between mooring points 24 m.; max. load on mooring point 50 tons (9); cylindrical fenders, external diameter 1.20 m. × 1.50 m. (24).

Note: In a later phase, after extension, the depths will be increased as will be permitted loads.

Mooring Dolphins:

There are 2 berthing dolphins in reinforced concrete on pipes situated on the South side of the pier with the following characteristics:

Distance from axis to axis, 286.60 m.; mooring capacity 100 tons; dimensions 10 m. × 10 m.

Access Bridge:

Constructed in protected reinforced concrete with the following characteristics:

Level +4.5 m.; width 9 m., length 200 m.; load projected – Class 36.

This acts as support for the conveyor belts, pipes, electrical supply, passage of vehicles and service equipment, ambulances and fire fighting equipment.

Storage Open Area:

For storage of various solid bulk cargoes in the open air, destined for import and export, with the following characteristics:

Covered by asphalt concrete; total width 114 m.; total length 600 m.; total area 68,400 sq.m.; usable area 35,840 sq.m.; Permitted load 30 tons/sq.m.; max. static load 475,000 tons.

Note: By virtue of the diversification of solid bulk cargo moved and stored in the open air, the loads stated are subject to the action of wind and rain and special care is recommended with regard to positioning; protection and cleanliness at the storage area.

Silos and Warehouses (Private):

1. Alcan – Aluminio do Brasil Nordeste S.A.

Installations for receipt and storage of calcinated aluminium, connected to the T.G.S. transport system, and constituted basically by:

1 vertical metal Silo on a structure of reinforced concrete with top feed and discharge at the bottom through 9 outlets, capacity 10,000 cu.m.

1 conveyor belt "B10" width 48 in. and 141 m. long.

Note: Extension of these installations is planned by construction of more vertical silos.

2. Nitrofertil – Fertilizantes Nitrogenados do Nordeste S.A. Installations for receipt of urea by road vehicles and rail trucks, storage under cover and shipment connected to the transport systems of T.G.S. and constituted basically: By a discharge station for road vehicles and railway trucks under cover and containing 4 silos and two 401–V–48 in. and 402–V–48 in. transporters, both with a capacity of 300 t.p.h.

One warehouse constructed from reinforced concrete, with 50 m. width and 200 m. long and 40,000 tons capacity, equipped with 10 dehumidifiers, 1 transporter (403–V–48 in. – 300 t.p.h.) with receipt from a moving handling unit with two outlets for stacking area, 1 Kratzer of 750 tons per hour for recovery and loading to the transporter 404–V–54 in. – 730 tons, for shipment.

One external transport complex for shipment, of 730 t.p.h., including 4 transfer points and 3 conveyor belts 405–V–54 in., 406–Va–48 in., 406–Vb–48 in.

1 weighbridge for flow purposes installed in the transporter 404–V; 1 administrative office; 1 sub-station.

3. Caraiba Metais S.A.

Installations for the receipt of copper concentrate, phosphate rock and coke, covered storage and delivery for metallurgy, through a direct duct silo and road and rail system, in the future railway silo with feed in the shed by loader and constituted basically by:

1 covered shed with 15,000 sq.m. area and storage area of 79,600 tons (concentrated copper 42,000 tons, phosphate rock 35,000 tons and coke 2,100 tons).

T.G.S. Equipment:

The installations and equipment of T.G.S. are constituted by a semi-automatic system for movement of solid bulk cargoes by three lines of operation, that is to say:

Import Line: 1. Situated on the pier there are the following installations:

1 vessel discharger unit which is mobile with a nominal capacity of 970 t.p.h. lifting capacity on the hook of 25 tons, its own weight 900 tons, maximum load in the self-carrying silo of 600 tons, which uses grabs of the 'clam shell' or 'trimmer' large capacity type, with cycles of less than 60 seconds under normal conditions and two vibratory feeders for the Bla transporter with 700 t.p.h. each. Currently there are 7 grabs ranging between 4 cu.m. and 13.5 cu.m.

2. Connecting the pier and the storage area:

1 reversible conveyor belt Blb–48 in. – 1,200 t.p.h. – 1.6 m/sec. – 442 m.

3. Situated in the storage area:

1 belt transporter B2–48 in. – 1,200 t.p.h. – 1.6 m/sec. – 247 m.

1 mobile stacker, for piling bulk solid up to a height of 10.0 m., with a capacity of 1,200 t.p.h.

The recuperation of stored merchandise for delivery to the user is performed by means of mechanical shovels with direct feeding to trucks.

Railway wagon feeding is planned for the near future.

Quantity control of bulk products is performed by means of vessel draft and/or highway scale, 60 tons capacity, installed at the Port entrance.

Average unloading capacity (production) under normal conditions is 500 t.p.h.

Factors which reduce average production:

Specific weight granulometrical and aggregation of bulk products.

Improper stowage.

Necessary clean-up of terminal between operations with different bulk products.

Improper vessels (non-bulk carrying vessels).

Export Line:

1. Situated in the storage area:

1 mobile loader fed by shovel with a capacity of 12 cu.m. with 2 vibratory feeders of 700 t.p.h. each; 1 belt transporter B3–48 in. – 1,200 t.p.h. – 1.6 m/sec. – 238 m.; 1 transfer tower B2/Blb.

2. Connecting the storage area and the pier: 1 reversible belt transporter Blb (See "Import").

3. Situated on the pier: 1 transfer tower Blb/B7; 1 belt loader B7–54 in. – 1,200 t.p.h. – 1.6 m/sec. – 19 m.; 1 transfer tower B7/BB; 1 belt transporter B8–48 in. – 1,200 t.p.h. – 1.6 m/sec. – 331 m.; 1 belt transporter B9–48 in. – 1,200 t.p.h. – 1.6 m/sec. – 81.0 m.

One ship loader which is mobile, with a nominal capacity of 1,200 t.p.h. and equipped with a telescopic arm which includes a lifting movement and a 54 in. belt.

The recovery of cargo stored for feeding the hopper is performed by means of mechanical shovel, storage being performed either directly from dump trucks onto storage area, arranging the material by mechanical shovel for area reduction, or by means of wagon/truck unloading line which is described below.

Wagon/truck unloading line: Located in the storage area, consisting of:

1 underground wagon/truck unloading station, with 220 cu.m. silo and 2 vibratory feeders, capacity 700 t.p.h.

1 B6-48 in. conveyor belt – 1,200 t.p.h. – 1.6 m./sec. 54.0 m.

1 B2 conveyoy belt (See "Imports").

1 Stacker (See "Imports").

General comments on the T.G.S.:

Maximum specific load permitted 3.88 tons per. cu.m.

Maximum granulometry – 400 mm. diameter.

Total length of the 8 conveyors – 1,848.0 m.

Currently, the conveyor system is regulated to the primary phase, that is:

Belt velocity – 1.6 m./sec.

Maximum belt volume capacity – 1,000 cu.m. per ton.

Maximum load capacity – 1,200 t.p.h.

In addition to the equipment already mentioned, the T.G.S. has at its disposal 3 sub-stations, 1 system control house with synoptic panel and 1 control building in the storage area.

In order to perform operations, pre-established teams are assigned in advance, depending on the nature of the operation to be performed, which act within Codeba facilities.

It should be noted that in operations for private facilities (Alcan, Nitrofertil, Urea and Caraiba Metais) both the equipment and the staff from the corresponding companies should work in a synchronised manner with the Codeba equipment and staff. For this purpose, the Terminal has an interlock system for basic functions and its own telephone communications system, which reaches specific areas, using VHF radio for remaining areas.

Liquid Bulk Cargo Terminal – T.G.L.:

Completed in 1978, commenced operation in 1979, and is composed basically of: A berthing pier; 10 berthing dolphins; access bridge; platform; storage area (tanks); installations and equipment.

Berthing Pier: In this terminal, the berthing is defined by the dolphins which are located at the side of the operations platform.

North Berth: Depth 10.6 m.; largest cargo vessel permitted, 35,000 g.r.t./220 m. length; distance between fenders (2) 66 m.; maximum load – mooring heads – 50 tons (6); cylindrical fenders (2) – external diameter 1.20 m. × 1.50 m.

South Berth: Depth 11 m.; biggest cargo vessel permitted 25,000 g.r.t.; distance between fenders (2) 66 m.; maximum load – mooring heads – 50 tons (6); cylindrical fenders (2) – external diameter 1.20 m. × 1.50 m.

Note: Near the berth there is a slope which limits the operations here to the following:

(a) Maximum vessel length – 120 m. (394 ft.)

(b) Ships over 105 m. length must be equipped with bow thruster.

(c) Ships of more than 80 m. (262 ft.) length must be assisted by a minimum of 3 tug boats and operations must be performed under favourable sea and weather conditions.

(d) Time of manoeuvring is at the Pilot's discretion.

Mooring Dolphins:

There are 10 mooring dolphins made of concrete on pipes with the following characteristics

Dimensions – 10 m. × 10 m.; maximum level – +4.60 m.; mooring capacity – 50 tons.

By virtue of the characteristics of the T.G.L. the dolphins are fitted with quick-release hooks to enable them, in case of necessity, to carry out prompt deberthing of the vessel.

Access Bridge:

Constructed of reinforced concrete on pipes with the following characteristics.

Level – variable +10 m.; width – 9 m.; length – 324.60 m.

Purpose – Access to the dolphins and platforms, passage for service vehicles, ambulance and fire fighting equipment.

Support – There are two series of concrete supports on the bridge, level +4.65 and +6.55 m. for support and passage of pipe-lines.

Platforms:

Platforms made of concrete on pipes.

Junction – On 3 levels with approximately 1,600 sq.m.

Pumping – On only one level with access by metal ladder with approx. 200 sq.m.

Operation – On two levels: upper level with 566 sq.m. and lower level with 2,068 sq.m.

For reasons of safety, vessels must not transmit forces to the operations platform of the T.G.L.

Storage Area (Tanks):

Due to contracts with pre-established duration, signed with companies specializing in movement and storage of liquid chemical products, tanks and miscellaneous facilities were built in addition to equipment and installations on the pier and TGL feedback, capable of guaranteeing full operation of transport and storage systems for chemical and petrochemical products from the area of their entrance, with a high degree of efficiency and operational flexibility.

Tank storage area operated by Tequimar – Terminal Quimico De Aratu S.A.

A complex of 40 tanks in carbon steel, carbon steel lined with stainless steel, some for multiple purposes and others for a specific product only which will be handled and stored within rigid guidelines of security, distributed in concrete construction ducts.

Installed capacity – with 40 tanks with 99,600 cu.m., thus:

2 tanks of 300 cu.m.; 12 tanks of 750 cu.m.; 12 tanks of 1,500 cu.m.; 8 tanks of 3,000 cu.m.; 2 tanks of 8,000 cu.m. and 4 tanks of 500 cu.m.

Dichloroethane: Pipeduct for Dichloroethane (EDC) with 35 km. length connecting the terminal to the Camacari Chemical Complex.

It is planned to increase the capacity by installation of more tanks in accordance with demand.

Tank accessories: Blanketing with N2; heat installation with cooling serpentines; inlet and outlet valves motor-operated by remote telecontrol; automatic level measuring with remote indicator; Automatic temperature measuring with remote indicator. central analogical computation system for control of stocks.

System of Loading and Unloading of Vessels:

Sleeves, 2 supports and 2 cranes for the movement of sleeves.
Pier lines with flanged connection valves.
10 pre-pumping tanks of 8 cu.m. on the pier – for sampling;
10 pre-pumping tanks of 8 cu.m. in the storage area – for sampling

A complex of centrifugal ship-loading pumps with a nominal capacity of 250 t.p.h.

Simultaneous transfer operation in all the pier lines.

"Pig" device for internal cleansing and scraping of lines which handle various different products.

A complex of pumps, of the screw type of 60 cu.m/h. used for draining the lines, pumping of samples and other emergency operations. There are also two more pumps with a capacity of 120 cu.m./h. intended for services which require greater outlet, for example transfer of liquids from one storage tank to another.

Loading/unloading System for Truck Tankers:

The operations of loading and unloading trucks are performed on bases located on parallel lines on jetties, at the points near the tanks or group of tanks. These bases (12) compose the "islands" under which are installed the pumps which permit loading or unloading trucks on one side or the other of the bases, by means of loading arms.

All storage tanks are connected to the respective pumps.

Auxiliary Units:

There is in the port area a system of steam distribution, service air, drinking water, and nitrogen for all necessary operations and cleaning of pipe-lines in the terminal.

Drinking Water System:

A raised concrete storage tank with 15 cu.m. and one made of carbonic steel, with 500 cu.m. Feed is made by the distribution mains operated by Codeba with meters.

Steam System:

A tubular frame boiler, fed by diesel oil with a capacity of 2 t.p.h. of steam at a pressure of 6 kg./sq.cm.

The steam is intended for service stations and for cooling the Dutrex tanks and the lines with "steam-tracing".

One of the uses of steam is for the production of hot water for washing hoses. For this there are various water heating points distributed at the various points of consumption.

Compressed Air System:

The compressed air system consists of 2 (two) compressors of the two stage type with a capacity of 160 N cu.m./h. at a pressure of 7 kg./sq.cm.

It is intended for feeding service stations and its main function is the drying of hoses after washing.

Mask Air System:

The air system for breathing consists of various stations distributed within the loading areas for lorries and vessels.

Nitrogen System:

Nitrogen is stored in a pressurized tank of 17.6 kg./sq.cm. with a liquid capacity of 34 cu.m. The system with vaporiser was planned for a demand of 200 N cu.m/h., operating at a pressure of 5 kg./sq.cm.

Nitrogen is intended to turn the inert atmosphere in the tanks which require "blanketting". It is also used for cleaning lines and for moving the "Pigs".

Firefighting System:

The firefighting system is constituted by equipments and installations.

The water mains to combat fire using sea water through a ring of firefighting water which covers the tank area, the anchorage and those where work and administration is carried out. The capacity of the mains is 1,500 cu.m./h. being fed by 3 pumps of 500 cu.m./h. capacity each and a maximum pressure of 12 kg./sq.cm. Apart from the firefighting pumps, there is a "jockey" type pressurised pump of 50 cu.m./h. which maintains the mains continually pressurised at a pressure of 7 kg./sq.cm.

With a complex of extinguishers of CO_2 and chemical powder; a system for storage tank cooling; A system for foam firefighting; a system for fire alarm by means of local manually operated units; a system of communication of emergency by telephonic lines.

Port Services: In view of foreman type contracts signed for predetermined durations with Codeba, Tequimar may perform foreman services on its connections and those of others. However, it is up to Codeba to inspect such services as well as to control access to berths and vessel mooring.

Installations and Equipment of Nordeste Terminais S.A.:
Nordeste Tank Storage Area:

A complex of 30 tanks in carbon steel, some for multi-purposes and others for specific products which will be operated and stored within rigid security guidelines and distributed in docks of containment made of concrete.

Installed Capacity: 16 tanks with 28,200 cu.m. and there are under construction another 14 similar tanks with a planned capacity of 6,600 cu.m.

Capacity under Construction: 8 tanks of 300 cu.m. and 6 tanks of 700 cu.m.

The capacity planned should bring up, after all phases of construction the total storage capacity to 63,000 cu.m.

System of Loading and Unloading of Vessels:

Sleeves, 2 supports and auxiliary arms for movement of sleeves.
5 pre-pumping 1 cu.m. tanks – for sampling on the pier.
5 pre-pumping 1 cu.m. tanks in the storage area, – for sampling.

A complex of chemical centrifugal pumps for loading vessels with a nominal capacity of 204 cu.m./h.

Simultaneous transfer operation in all the pier lines.

"Pig" – device for cleaning the interior of lines which use different products.

System of Loading and Unloading Lorries:

The unloading operations of tanker vehicles are carried out in localized bases on the bridges which are nearest the tank or group of tanks in question. The bases are constituted by "islands", equipped with 80 cu.m./h. and 204 cu.m./h. pumps which enable simultaneous discharge.

The loading operations of tanker trucks is centralised in a platform for loading tanker road vehicle's point in which it will be possible to load 6 tanker lorries at a time by independent lines at each storage point.

Drinking Water System:

A raised tank made of concrete of 5 cu.m. and another one in carbon steel of 500 cu.m. Feed is made by the distribution network operated by Codeba with meters.

Steam System:

A flame-tubular boiler with a capacity of 1,000 kg./hr.

The boiler is fed by BPF, the steam is destined for heating tanks with serpentines and service stations.

Compressed Air System:

Constituted by an Atlas Copco air compressor, continuously operated and which is used for feeding the service stations, cleaning and drying sleeves and tubes.

Breathing Air System:

Consists of various stations distributed in the loading areas for lorries and vessels.

The stations are formed by batteries of fixed cylinders with hoses and individual masks.

Nitrogen System:

Nitrogen is stored in a pressurised tank 17.6 kg./sq.cm. with a liquid capacity of 27,800 litres. The nitrogen converts the inert atmosphere in the tanks which require "blanketting".

Firefighting System:

Water; foam; chemical powder,

System of Industrial Safety:

Cooling of tanks; system of alarms; systems of communication of incidents.

General Information and Recommendations:

Both the piers of T.G.L. and T.G.S. were planned so as to enable future dredging to adapt to 20 m. for berthing of large bulk carriers up to 100,000 g.r.t.

Safety in operation of vessels:

It is important that safety rules be observed during operations with ships at the terminal.

a. Special attention must be given during berthing to ensure that the vessel is properly moored avoiding any collision with dolphins and platforms or the breaking of hoses.

b. One bow cable and one stern cable must always be available in the event of any vessel needing to be removed in the event of fire on board or on shore.

c. Any repairs which require cutting, welding or other services involving the usage of heat on board or on the pier must be avoided wherever possible.

Where such services are absolutely vital on board, a responsible person at the Terminal must be warned in advance so that the necessary precautions may be taken ashore.

d. It is fairly common for bunkering to take place from barges on the offside of vessels moored at the Terminal. This practice requires certain security measures and must be avoided at all costs during the loading and discharge of the vessels.

e. It is recommended that no movement of vessels takes place at T.G.S. whilst a tanker is mooring or unmooring at T.G.L.

f. Both at T.G.L. and T.G.S., mooring and unmooring of vessels must only be effected with the aid of tugs in accordance with the instructions of the Port Captain.

g. It is recommended that all vessels berth with the bow turned towards the Access Channel provided that this does not cause difficulties in ensuring a proper berthing and thus permitting a rapid departure in the case of emergencies.

h. Deballasting operations are only possible by using the adequate installation as owned by the Terminal and which is in perfect condition for usage, together with the collection of residue and at all costs contamination and pollution of the area must be avoided.

Before commencing discharge or loading operations and after having drawn up a movement plan for the liquid product, it is obligatory to carry out a general safety inspection and of the conditions of installation including the system of communication between vessel and land and as proof of this a "Declaration of Inspection" must be drawn up on the appropriate form signed by a representative of the vessel and by the responsible person for the operation within the Terminal. One copy of this declaration must be sent to Codeba.

Gas Products Terminal – T.P.G.:

The works began in July 1980 and operations began in 1983. The terminal consists of a pier for handling of liquefied gases, including only one mooring berth. The terminal is basically composed of:

Operations platform
Landing and mooring dolphins (6)
Access bridge
Access jetty
Storage area/facilities and equipment

Operations Platform:

Platform is reinforced concrete supported by tubes of reinforced concrete supported by tubes of reinforced concrete of 100 cm. diameter connected to the coast on the one hand by a land connection and by a bridge. It is protected by impact from the vessels by mooring dolphins – one at each end.

The platform will support the structures for the loading arms, tubes, pumps, auxiliary crane, the foam storage tank, the emergency gangway and operation and control buildings.

Main characteristics: area – 33 m. × 20 m. = 660 sq.m.; level – +4.50 m.; depth of the project – 10.9 m.; permitted vessel size – 20,000 g.r.t. length 180 m.

Mooring Dolphins:

The two mooring dolphins consist of a block of reinforced concrete of 18 m. × 10 m. × 1.80 m. supported by 6 concrete tubes 120 cm. diameter.

Each one of the 4 dolphins consists of a block of concrete 10 m.×10 m.×1.5 m. supported by 4 tubes of 120 cm. diameter.

All the dolphins are equipped with 10 mooring hooks of 50 tons each of the quick release type.

Each of the mooring dolphins will be equipped with 3 fenders made of rubber and in a cylindrical shape with a diameter of 60 cm. × 150 cm.

The mooring dolphins will be accessible by 4 concrete gangways and 4 metal ladders on the sea side.

Access Bridge:

The access bridge consists of a superstructure made of reinforced concrete supported by reinforced tubes of 100 cm. diameter.

Access Dock:

The access dock is built of hard stone which is resistant to sea water. The land connection and the access bridge will carry the necessary ducts and piping and the access path arranged for 2 lines of traffic, thus admitting free access for vehicles. The control of access to the pier to persons and vehicles will be the responsibility of Codeba.

Tank Park and Facilities of Terminal de Gases Ltda. – TEGAL

Tanking Park:

1 cryogen tank destined to storing ethene at 106° Centigrade and 15,000 cu.m. capacity.

Refrigerated sphere tank for butadiene at – 45° Centigrade and 3,200 cu.m. capacity.

1 sphere tank for MVC at ambient temperature. Capacity for 3,200 cu.m.

System of pumps. Flow: 250 cu.m./hr.

4 "islands" for trucks loading/unloading.

Flanged nets to connect land pipeducts.

Crane to move nets.

Tank Accessories:

Automatic level measuring.

Automatic temperature measuring.

Thermal insulation of lines.

Tegal complementary facilities:

Nitrogen System

N_2 is stored in pressurized tanks at 17.6 kg/sq.cm., with net capacity of 34 cu.m. Compressed air, potable water and steam are supplied by Tequimar through interconnecting lines.

Fire Defense System:

Water supply is made by Tequimar.

Other Facilities:

Control Room. Room for JPG pier operators.

Fertilizantes Nitrogenados do Nordeste, SA – Nitrofertil

This company has at TPG, complete facilities for the operation with Ammonia, which includes a sphere/reservoir with 30,000 cu.m. capacity.

Conventional Quay:

This is in the final phase of executive planning, being expected that the works will commence at the end of 1981 and operations should start during 1984.

It will have a conventional quay section of approximately 175 m. in length with a depth of water of 12 m. for vessels up to 40,000 g.r.t., on which will be installed electric jib cranes and special private installations. There will also be 2 mooring dolphins with access by gangways from the quay. For storage and movement of solid bulk cargo which will be carried out here, there will be prepared a rear land area infrastructure including a road and rail access. For this quay, movement of solid bulk cargoes will be transferred and/or those of a corrosive nature, which are currently operated by T.G.S., for example sulphur and fertilizers, together with aluminium which will bring about a drop in the operations of T.G.S. Apart from this there will be a transfer of all bulk cargoes currently handled in the Port of Salvador which, due to physical and chemical difficulties cannot be operated in T.G.S. at the Port of Aratu.

PORT EQUIPMENT: The port has 3 loading shovels of 3 cu.m., 1 mobile crane up to 20 tons, 1 front stacker of 3.2 tons, 1 agricultural tractor, 1 bob cat tractor, 2 fast action fire fighting trucks, 1 pump and tank truck for fire fighting.

REPAIRS: There is a workshop under construction.

DRY DOCK: There is a naval dry dock in Aratu capable of handling vessels up to 45,000 d.w.t. It has dimensions 230 m. by 30 m. wide. Depth 11.5 m. However, the access channel will only allow vessels of up to 10 m. draft, though this is expected to be increased shortly.

FUEL: This is done by lighter and only at the solid bulk cargo terminal (T.G.S.).

FRESH WATER: Small quantities available.

AIRPORT: 2nd of July Airport at Salvador, 43 km. from the port.

CONSULS: See "Salvador".

TIME: GMT minus 3 hours.

HOLIDAYS: *National:* 1st January, 21st April, 1st May, 7th September, 15th November, 25th December.

Municipal: Fixed: 2nd February, 14th August. Movable: Good Friday.

Traditional: Movable: Carnival – Tuesday (Mardi Gras) and Ash Wednesday – Corpus Christi.

Fixed: St. John (June 24th), July 2nd, November 2nd.

GENERAL: *Useful Addresses:*

1. Terminal of Madre de Deus – Temadre. Baia de Todos os Santos. Products handled: oil and derivatives. Tel: 801-1821.
2. Dow Chemical Terminal – Baia de Todos os Santos. Products handled: chemical products. Tel: 801-1011 and 801-2211.
3. Terminal of Usina Siderurgica da Bahia – Usiba. Baia de Todos os Santos. Products handled: bulk ore. Tel: 594-8311.
4. Terminal of Fabica de Cimento Aratu. Baia de Todos os Santos. Products handled: cement and limestone. Tel: 594-9488.
5. Terminal of Equipetrol. Baia de Todos os Santos. Products handled: preinspection of rig structures. Tel: 594-8811.
6. Sao Roque Terminal (Petrobras). Estuary of the Paraguassu River. Products handled: rig parts and structures for oil drilling. Tel: 242-7997 and 242-7797.
7. Terminal of IMBASA – Industria de Mamona da Bahia, S.A. Baia de Todos os Santos. Products handled: vegetable oil (castor oil). Tel: 594-9133 and 594-9386.

AUTHORITY: Porto de Aratu, Baia de Todos os Santos, Enseada do Caboto, Municipio de Candeias, Estado da Bahia – Cep 43700 Brazil. *Tel:* (071) 801 – 1212/3/4/5. 801 – 1217 (operations). 801 – 1216 (management). *Telex:* 071-1637.

AREIA BRANCA (Salineiro Terminal):
04.50 S. 37.03 W. **(See Plan Book)**

LOCATION: In open sea 14 km. out from the continent, near to the town of Areia Branca.

CLEARANCE: The Health Authorities of the Port and the Federal Police do not have representatives in the town of Areia Branca. Therefore, in the event of there being a necessity, the ship's Agent must communicate, sufficiently in advance, with the Port Authorities of Natal, when representatives will be sent to Areia Branca, to carry out vessel inspections.

Addresses and telephones of Port Authorities:

Port Captaincy Agency – Rua Joao Felix, 12 – Areia Branca. Telephone: 332-2211.

Maritime Work Post – At the top of the CP-RN Agency Building at Areia Branca. An Advocate is employed with duties and representation at Areia Branca, in the Maritime Work Delegation – Telephone 332-2022.

Federal Customs in Areia Branca: Telephones: 332-2425 and 332-2426.

PILOTAGE: Pilotage is obligatory, from the pilotage anchorage to any point in the Port area for vessels of more than 2,000 g.r.t. Pilots must be requested by radio, through the Agencia Maritima Ltd, Rua Cel. Aureliano, 37, P.O.Box 138, Tel: 222-1449 – or, at Rua Cel. Fausto No. 481, Tel: 332-2001 and 332-2011 at Areia Branca. Contacts must be maintained with the Marine Agency with regard to the taking on of Pilots and this must be done a minimum of 10 hours in advance of the arrival of the Pilot at the point of embarkation by virtue of the distance between the town and the point of embarkation and the dependency upon the tide.

ANCHORAGES:

(a) For vessels of any g.r.t., awaiting berthing orders or awaiting repairs – between parallels 04° 49′ 18″ S. – 04° 49′ 48″ S. and meridians 37° 02′ 54″ W. – 37° 03′ 48″ W.

(b) For vessels in quarantine
As above.

(c) For pleasure craft – between parallels 04° 54′ 00″ S. – 04° 54′ 18″ S. and meridians 37° 07′ 24″ W. – 37° 08′ 12″ W. (Inner Area).

(d) In the event that the Island Port is not working, due to damage to its equipment, the anchorages mentioned above will be used where the vessels will receive salt directly from barges.
(1) Inner Area – Limits mentioned in (c) can be used with safety by vessels drawing up to 12 ft. of water.
(2) Outside Area – between parallels 04° 51′ 12″ S. – 04° 52′ 00″ S. and meridians 37° 04′ 00″ W. – 37° 05′ 12″ W. can be used with safety by vessels drawing up to 22 ft. of water.

(e) Restrictions: Anchoring is not permitted in the access channel nor in the manoeuvring area.

Also see "Berthing".

RESTRICTIONS: No night navigation.

Vessels not directly concerned with port operations, must travel at a minimum distance of 1,000 yards off the Island Port berthing dolphins.

APPROACHES: Access to the Terminal: The access to the terminal for vessels of medium tonnage is made by a channel 13 m. depth (length 15 km., width 1.2 km.) at minimum level. This channel goes to the mooring point from João da Cunha Reef.

Manoeuvring Basin: Length 2 km., depth of water 11 m., at minimum water level.

Lighting and Buoys: The lighting and buoys are as follows: One light buoy at the beginning of the access channel; along this channel and in the manoeuvring basin are distributed a further 10 unlit buoys.

Tidal Variation: From 0.10 m. to 3.90 m.

TUGS: 2×1,680 h.p., 20 tons bollard pull.

Normally there is no need for tugs for berthing or for unberthing except in the case of damage to machinery or when the action of the wind is sufficiently strong to throw the vessel against the dolphins (winds from the sector S.E. – S.W.), in which case the following regulations must be observed: vessels up to 10,000 g.r.t. must use 1 tug, in the event of the wind intensity being less than 25 knots, and 2 tugs if the wind intensity is greater than that level. Vessels over 10,000 g.r.t. must use 2 tugs, but it is not advisable to try to berth or unberth with winds greater than 25 knots.

BERTHING: *Manoeuvring Area:* This is a strip 400 m. long in front of the dolphins, between the meridians 37° 02′ 24″ W. – 37° 02′ 54″ W. Depth: from 12 m. to 23 m. It is expressly prohibited to anchor anywhere in this area which is reserved for berthing and unberthing operations.

Island Port Resources:

Berthing Quay

(1) For vessels:

Constituted by 3 dolphins, each with a mooring head and a hook. Distance between the end dolphins, 78.6 m. The system of berthing is completed by 3 buoys. Depth: 12 m.

Vessels berth port side to on 3 dolphins, using starboard anchor and moored to 3 buoys.

(2) For Barges:

Situated on the S.W. side of the artificial island there is a 195 m. long quay, for berthing barges. Depth: 6 m.

River Mossoro:

For vessels with less than 3.5 m. draft, dependent on the tide, entering or leaving the town of Areia Branca, there is a deviation due to the previously used channel being silted up, which makes it obligatory to have help from the local Pilots.

BULK CARGO FACILITIES: Cranes/Stackers/Rolling Bridges/Loaders/Suction Units:

The salt is transported from the storage area on the Island Port to the vessel's hold by means of a conveyor working at a speed of 1,500 t.p.h. At the end of the conveyor there is a rotary loader, supported on one side on a pivot on a metal transfer tower platform and on the other by a curved track structure. The loader permits only rotary movement (sector of 17°–22°) with also axial displacement and rise (with a range of 39 m.) which makes it possible to load two different vessel holds when necessary.

Transport Along the Quay:

The salt is unloaded from barges moored on the quay on the S.W. face of the island by 2 jib cranes, rolling bridge type, moving on a railway line and equipped with clam shell grabs, with nominal capacity each, of 350 t.p.h., connected with weighbridges, hoppers and mats for formation of piles. It is possible to discharge the salt directly in the piles (storage area) or into the equipment which forms them, or even directly into the loading mat which makes it possible in this case to effect direct transfer of the salt into the vessels.

The salt in the storage area is also moved by 2 loading shovels with a nominal capacity of 680 t.p.h. and 3 tractors.

Pontoons/Barges/Launches/Lighters:

The Rio Grande do Norte Docks Company (CODERN) has 5 self-propelled 452 h.p. barges with a capacity for transporting 520 tons of salt each, as well as 5 dumb barges with a capacity for transporting salt from Areia Branca and Macau to the Island Port.

The SOPORMAR (Maritime & Port Services Company) has 6 barges in operation between Macau, Areia Branca and the Island Port.

SPECIALISED CARGO HANDLING FACILITIES: No facilities for container or ro/ro traffic.

STEVEDORES: On working days, Sundays and holidays, the working timetable is as follows:

Day Period

0700 to 1100 – Normal Day
1100 to 1200 – Meal Break
1200 to 1600 – Normal Day
1600 to 1800 – Possible Overtime
1800 to 1900 – Meal Break

Night Period

1900 to 2300 – Normal Night
2300 to 0000 – Meal Break
0000 to 0400 – Possible Overtime
0600 to 0700 – Meal Break

Stevedores are carried out to the Island Port aboard launches which are hired by the ship's Agent. The journey from Areia Branca to the Island Port is made normally in a maximum of 2 hours. The time launches leave depends on the tide, by virtue of the limitations of the bar of the River Mossoro.

MEDICAL: In the Island Port, there is an infirmary for first aid treatment, where there is always a nurse on duty. There is no doctor on duty. Nearest hospital is at Mossmoro, 50 km. away.

FRESH WATER: In the Island Port there is an artesian well which permits a supply of water to berthed vessels via a pipe-line in the metallic structure at the berth. Capacity: 50,000 litres/hour. From the end of the pipe, supply is effected by means of 2.5 in. hoses.

FUEL: Supply of diesel oil to vessels is possible through the self-propelled barges of the Rio Grande do Norte Docks Company (CODERN). Supply will be made preferably with the vessel anchored. Each barge has a capacity to supply up to 20,000 litres of diesel oil. Orders must be made 48 hours minimum in advance in order that the Rio Grande do Norte Docks Company (CODERN) can take the necessary steps for topping up the tanks at the Island Port.

REPAIRS: Active shipyard authorised by SUNAMAM to construct vessels up to 1,000 tons gross carrying weight. They also carry out naval repairs and have workshops and underwater repair facilities.

The Salineiro Terminal has a workshop capable of carrying out small repairs.

EMERGENCY SERVICES: The Salineiro Terminal has 2 tugs used in port operations and which can be used in a situation of emergency in life saving and salvage operations. There is no organised service.

GANGWAY/DECK WATCHMEN: The Rio Grande do Norte Docks Company (CODERN) has a group of watchmen, 25 strong, which works between the Island Port and the office in Areia Branca, there always being a minimum of 6 at the Island Port.

AIRPORT: Nearest at Natal and Fortaleza, 300 km. distant, served by commercial flights.

TIME: GMT minus 3 hours.

HOLIDAYS: National: 19th January, 21st April, 1st May, 7th September, 12th October, 15th November and 25th December.

Movable Holidays: Monday and Tuesday of Carnival, Ash Wednesday, Good Friday and Corpus Christi.

Commemorative Days: 28th August (Banks), 28th October (Public Officials), 30th October (Business), 2nd November (All Saints), 28th January (Port Workers).

Municipal Holidays: 6th January (Foundation of the City), 21st November (City of Natal Celebration), 15th August (City of Areia Branca Celebration).

Local Holidays: 15th August – Our Lady of the Mariners; 8th December – Immaculate Conception.

POLICE: Tel: 332-2057.

TELEPHONES: No facilities exist for placing telephones on board vessels.

GENERAL: *Charts:* DHN Nos. 703 and 720 cover the port area.

AUTHORITY: Companhia Docas do Rio Grande do Norte, Rua Princesa Isabel, 342, 59000, Natal, RN. *Tel:* (084) 222 3774 PABX. *Telex:* (084) 2114.

Local Office at Salineiro Terminal: Cais Tertuliano Fernandes 81, 59620, Areia Branca, RN. *Tel:* (084) 332 2121 PABX. *Contact:* Heinz Zech, Director.

BARRA DO RIACHO: 19.51 S. 40.03 W.

(See Plan Book)

PILOTAGE: Compulsory. Agent reports direct to Pilot Association at Vitoria, through VHF Channel 16. Pilots maintain 24 hour watch.

APPROACHES: Access Channel: Depth 11.5 m., width 150 m.

RESTRICTIONS: Vessels up to 110 m. length can enter and sail day or night. Vessels from 110 m. to 190 m. can enter during daylight hours. Max. breadth 35 m.

The Manoeuvring Basin has diameter of 250 m.

TUGS: Two tugs are required for berthing and unberthing. Tugs have no lines on board. The tugs are requested from Vitoria.

BERTHING: Barra do Riacho Quay: Length 230 m., depth 10.7 m. Warehouse for export of cellulose 12,000 sq.m.

CRANES: Not available.

FRESH WATER: Available.

REPAIRS: No facilities.

MEDICAL: Hospitals at Vitoria and Aracruz.

AIRPORT: At Vitoria.

AUTHORITY: Companhia Docas do Espirito Santo, Empresa do Sistema Portobras, Av. Getulio Vargas No. 556, Vitoria, Espirito Santo, CEP 29000. *Tel:* (027) 222-1311. *Telex:* (027) 2118. *Contact:* Gerardus Maria Franciscus Zaeyen, Director-Presidente.

BELEM: 01.28 S. 49.29 W.

(See Plan Book)

PORT LIMITS: Subject to Charter Party Terms, vessel normally considered an "arrived ship" when at Val-de-Caes Anchorage, Icoaraci Anchorage, or alongside the quay.

DOCUMENTS: See "General" before first port.

PILOTAGE: Pilot usually ordered through vessel's Belem Agent, ETA at least 72 hours in advance and confirming not less than 24 hours prior to arrival. Vessels can apply direct to pilot station (on condition that local radio station is operating). Telegraphic address "Praticagem – Salinopolis", and call sign of Salinopolis (or Salinas) Radio Station is PPL. Pilot boards at a point 7 miles North of Salinas Lighthouse; a red motor-launch is used. Launch carries a red flag with a black P; it also has a black P painted on each side and on cabin roof. If pilot boat not in position on arrival of vessel, position 7 miles North of the light is a safe anchorage. Masters who do not know area should approach Salinas with caution.

APPROACHES: The port is located on the right-hand side of the Bay of Guajara, running North/South, limited to the left by the island of Oncas 19 km. long and other similar islands which are in front of the River Para, with 3 wide entry channels being provided i.e.

1. Between the bar and the island of Fortim used by deep sea vessels and large coasters.
2. Between the islands of Arapiranga and Cotijuba which is used by small coasters and the typical local river craft known as "gaiolas".
3. The Carnapijo Channel behind the island of Oncas which provides communication at high tide with the Bay of Marajo which measures from between 3,200 m. and 4,000 m. long in front of the island of Oncas with a shallow which divides it in the middle into two channels, one to the West with 12 m. to 20 m. depth at the foot of the above island and the other to the East next to the city and where the current port is located with 9 m. to 10 m. depth minimum water level when dredged. Comprehensive considerations make it that this latter channel to the East deserves special studies which allow the following details to be presented:

Length	6,000 m.
Width	90 m. to 180 m.
Depth	6 m.
Average annual siltation	600,000 cu.m.

The Turning Basin: The port has a wide turning basin 1,000 m. long, 500 m. wide with a depth of water between 5 m. – 6 m., an annual siltation of 400,000 cu.m., fully equipped with buoys and lights under the control of the Technical Council of the Directorate of Hydrography and Navigation of the Brazilian Navy.

ANCHORAGE: Vessels with a draft greater than 26 ft. anchor off Icoaraci, 7 miles from the port where they work cargo.

Vessels that are impounded anchor off Val-de-Caes.

Vessels undergoing repairs anchor off the Naval base dock at Val-de-Caes.

Vessels with a draft of less than 26 ft. anchor at Val-de-Caes. Co-ordinates: Lat. 01° 24′ 01″ S., Long. 48° 30′ W.; Lat. 01° 21′ 03″ S., Long. 48° 29′ 03″ W. and Lat. 01° 08′ 09″ S., Long. 48° 28′ 03″ W.

Between Icoaraci and Val-de-Caes, there is a shallow spot at Tapana, which ships should approach with caution, although bottom is soft mud and sand.

HEALTH: Maritime Police, Customs and Port Health board vessel on arrival at whichever anchorage is used, or alongside. Pratique granted on the presentation of documents. If port *not* first Brazilian port of call. Port Health Authorities not required, although Police and Customs will still board. After first Brazilian port, Port Health only required in cases of illness or death. The use of quarantine "Q" flag not necessary. Also see "General" before first port.

RADIO: No VHF facilities in the area. Suggested that ship contacts Belem Agent through Barbados Radio, and this is also usual way that vessels are contacted by Belem. An alternative to Barbados Radio is the United States radio station at Chatham, Virginia.

TUGS: One tug, "Rio Acara", 700 h.p.

BERTHING: The quays are of cement and sand construction on a base of stones, which is, in turn, on a bed of hard clay. The quay height is a max. of +4.50 m. to accommodate the max. tidal rise of up to +3.20 m.

Soundings taken in 1979, for vessels alongside in relation to the hydrographic zero of the port are as follows:

Length of quay (m.)	*Draft* (m.)	*Location*
75	2.5	S. face and N. face of Marechal Hermes Dock
300	5.0 to 6.2	Quay wall – Mosqueiro & Soure Shed and Warehouses 1 and 2.
342	6.3 to 7.0	Quay wall – Warehouse 3, Maua Square and Warehouse 4.
385	6.7 to 7.5	Quay wall – Warehouses 5, 6 and 7.
100	8	Quay wall – Warehouse 8
261	7.5 to 8.5	Quay wall – Warehouses 11 and 12.
110	8.0 to 9.2	Quay wall – Ocrim Silo to the end of the Wall.

Quay Equipment: 26 electric cranes (2.8 – 12.5 tons), 10 mobile cranes on pneumatic tyres (5 – 25 tons), 2 steam cranes, ranging from 2.5 to 25 tons capacity. 1 self propelled floating crane of 200 tons capacity and 1 steam operated floating crane with capacity of 20 tons at 37 ft. There are facilities for handling containers.

74 Stackers (capacity 2,500 kg. – 25,000 kg.), 4 loaders (12,000 lbs. – 4 tons), 55 lorries, 8 trucks, 6 conveyor belts, 14 weighbridges (1.5 tons – 60 tons) and 8,000 pallets.

CARGO FACILITIES: 3 regular silos for grain, with a capacity of some 10,800 cu.m. 2 irregular silos with a capacity of 1,537 cu.m. Average hourly discharge rate 200 tons.

For grain suction there are 2 fixed towers, capacity 100 t.p.h. and 40 t.p.h. and 1 mobile tower with capacity 60 t.p.h.

The suction unit for 100 t.p.h. has the following characteristics: 1 mobile pneumatic suction tower for 100 t.p.h., 65 m. belt transporter of the elevated type with 200 t.p.h. capacity, including 2 end stations for drive of 40 h.p. each; 1 bucket-type elevator with 200 t.p.h. capacity, a height of 64 m., including an end drive station of 75 h.p.; 1 weighing tower with 200 t.p.h. capacity.

TANKERS: At oil terminal of Miramar (Val-de-Caes), vessels of 18,000 d.w.t. may berth or unberth at any state of the tide, subject to draft. Max. depth alongside berth at LW 26 ft., the same as that of approach channel. Mooring at this berth is to buoys inside the line of the "T" jetty. 77 tanks for liquid fuel leased to 7 companies.

STEVEDORES: Stevedoring gangs for day shifts 0630 and 1230 hrs. and 1630 hrs. for night shift. Loading and discharging rates exceptionally good, particularly if vessel working at anchorages into lighters. Any delays to vessels alongside can usually be put down to the lack of official clearances in case of loading export cargo.

MEDICAL: Notice of required medical assistance should always be given in advance. There are a number of first-aid posts for minor complaints. Vaccination Certificates for smallpox are essential, and, although not required officially, yellow fever vaccinations recommended.

DENSITY: Strong outflow of Amazon and its tributaries is such that water at Salinas is only semi-salt. In the river itself, the water becomes slightly brackish, and half way to Belem, is absolutely fresh.

FRESH WATER: Fresh water only obtainable alongside main quay, and not at oil berth. Delivery rate 25 t.p.h. (2.5 in. line) Boiler water may be taken direct from the river at a point named Capim, near the entrance to Marajo Bay.

FUEL: See "General" before first port. Available, but due to Brazilian Custom's Laws, as much advance notice as possible should be given in order to obtain correct documentation. A minimum of 1 weeks' notice recommended.

GANGWAY/DECK WATCHMEN: The employment of gangway watchmen recommended.

HATCHES: Hatches normally opened and closed by stevedores, but if it is raining they are inclined to shelter before closing.

CUSTOMS ALLOWANCES: Custom's Authorities do not normally search ship's crews, and reasonable quantity can remain in the possession of crew members. However, no attempt should be made to take more than a reasonable amount ashore.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS:

Belgium
Bolivia
Colombia
Costa Rica
Denmark
Dominican Republic
France
Great Britain
Holland
Italy
Japan
Mexico
Norway
Peru
Portugal
Spain
Sweden
United States
Uruguay
Venezuela

REPAIRS: Deck and engine repairs of all types can be carried out by the Brazilian Naval Dockyard, or by repair shops of the Companhia Docas do Para.

DRY DOCKS: At Naval Base, there is a dry dock measuring 730 ft. by 74 ft. with a depth over the sill of 25 ft. There are also several small floating docks, but they are not adequate for sea-going vessels.

REPATRIATION: There are 3 international flights each week from Belem. Miami 1 flight per week, Wednesday. New York 2 flights per week, Monday, Friday. In addition, daily flights to Rio de Janeiro. Airport of Val-de-Caes is about 4 miles from the city centre.

TIME: Local time GMT minus 3 hours. Summertime (1st December – 28th February) GMT minus 2 hours.

HOLIDAYS: New Year's Day (1st January); Carnival (variable); Labour Day (1st May); Corpus Christi (25th May); Independence Day (7th September); All Souls' Day (2nd November); Proclamation of the Republic (15th November); Christmas Day (25th December). Work could be carried out on these days, but costs would be prohibitive.

POLICE/AMBULANCE/FIRE: Maritime Police Tel: 234996; Ambulance Tel: 222523; Fire Brigade Tel: 23-3119.

TELEPHONES: Telephones can be put on board vessels alongside main quay.

GENERAL: Tidal action in the Guajara Bay is extensive, with the "Pororoca" phenomenon which comprises the meeting of tidal water with masses of fresh water coming from the Brazilian Equatorial rivers. The tidal wave takes 3 hours 40 minutes to come from the Salinas Lighthouse to the South end of the port of Belem, the port establishment being 11 hours 35 minutes. Systematic measurements at times of spring tides show that the average height of water reaches 3.22 m. at high tide and in the quadratures 2.42 m. Maximum high and low water levels recorded are +4.21 m. and −0.37 m. respectively.

During the ebb, the waters coming up the Bay of Guajara are predominantly picked up by the Western channel current, with great speed, thus explaining the great depths at that point, and also in the Western channel the average ebb and flow speeds are 1.30 and 1.74 m. per second, respectively, and in the East channel they are respectively 1.19 and 2.10 m. per second. At the extreme Southern point of the berthing quays the average flow speed record was 2.77 m. per second.

AUTHORITY: Companhia Docas do Para, Avenida Presidente Vargas, 41-20 Andar, CEP 66.000, Belem, Para, Brazil. *Tel:* 223-0056, 223-2066. *Contact:* Raul da Silva Moreira, Director-President.

CABEDELO: 06.58 S. 34.50 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

PILOTAGE: Contact Pilot's Headquarters by radio via vessel's Agent located at Joao-Pessoa (24 km. from Cabedelo). As no radio station available at Joao-Pessoa or Cabedelo such messages are usually relayed by Olinda Radio PPA – Fortaleza Radio PPC – Amaralina Radio PPA – or Rio Radio PPR. All messages are delivered by National Telegraph – Telegrafo Nacional. Pilots maintain day and night watch from Cabedelo Beach. Pilots' launches painted red with capital "P". Pilot Boarding Station: Lat. 6° 55.5′ S., Long. 34° 48.4′ W.

Pilots may be requested through VHF (Channels 12 and 16 – 156.6 MHz and 156.8 MHz). Pilots board ships within 5 hours after request.

ANCHORAGE: Vessels of more than 5,000 g.r.t. – within a radius of 1 mile around the point: Lat. 06° 58′ 20″ S., Long. 34° 51′ W.; depth – 6 m.

Vessels of less than 5,000 g.r.t. – within a radius of 0.5 miles around the point: Lat. 06° 58′ 48″ S., Long. 34° 50′ 18″ W.; depth – 6 m.

Vessels impounded or requiring considerable repairs use same anchorage as vessels over 5,000 g.r.t.

RESTRICTIONS: For Masters calling at Cabedelo for first time it is preferable not to enter during darkness.

MAX. SIZE: Max. length 200 m., draft spring tide 23 ft., neap tide 21 ft.

HEALTH: Also see "General" before first port. If Master suspects contagious disease aboard he must report to Agent who will contact Brazilian Health Authorities at Joao-Pessoa.

VHF: See "Pilotage".

TUGS: None available.

BERTHING: Safe drafts at bar entering or sailing: spring tide 23 ft., neap tide 21 ft. Berthing takes place in accordance with vessel's draft. Master must always give Agent vessel's draft arriving off Cabedelo. Length of quay, 600 m. depth alongside 5 m. – 10 m.

Berth Length (m.)	*Depth* (m.)	*Remarks*
125	9	Tankers, veg. oil, minerals, containers, general cargo
135	9	General cargo, minerals, containers, wheat
135	9	General cargo, minerals, containers, refrig.
135	9	Bulk cargo and containers
72	9	General cargo and bulk

STEVEDORES: Advise Agent ETA at Cabedelo 48 hours prior to arrival to make arrangements with dock and stevedores for discharging or loading.

CRANES: 3 Portal cranes, 2×3 tons, 1×6 tons and 5 cranes of 1.5 tons capacity.

MEDICAL: For urgent cases recommended that vessel call at Recife instead of Cabedelo as Recife has better facilities. If vessel must enter patient will be removed to Joao-Pessoa Hospital as no hospital available at Cabedelo.

TANKERS: Cabedelo not a loading port for petroleum products. Messrs. Esso-Brasileira de Petroleo, have tanks for reception of gasoline and other petroleum products which are carried by Brazilian fleet of tankers "Fronape" – Frota Nacional de Petroleiros. At Cabedelo only Berth No. 1 is suitable for discharging petroleum products or to bunker vessels since pipe-line is only connected to Berth No. 1. Tankers enter and sail during dark hours from Cabedelo. Length of berth 125 m. Depth alongside 9 m.

DENSITY: Varies from 1020 to 1025 at HW.

FRESH WATER: Supplied by pipe-line alongside quays at rate of 50 cu.m.p.h.

FUEL: Available. Suppliers Messrs. Esso-Brasileira de Petroleo. Pipe-line at Berth No. 1 where vessels can bunker alongside. Pipe-line fuel oil, 8 in.; pipe-line diesel, 8 in.

GANGWAY/DECK WATCHMAN: Watchmen available. Also the hours of work agree except that Captains have option to choose suitable times when their services are required.

OPENING/CLOSING HATCHES: By stevedores. Crew assist when stevedores not familiar with modern hatches.

CUSTOMS ALLOWANCES: 1 carton cigarettes per crew member at Customs discretion and 1 bottle of whisky or any other kind of spirit, subject to Customs discretion.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS:

Vice-Consulate of France	Tel: 226.2621

Other consulates at Recife 110 km. from Joao-Pessoa about 2 hours by road.

REPAIRS: Minor repairs only.

DRY DOCKS: None.

REPATRIATION: Repatriation can be arranged via Recife or direct from Joao-Pessoa to Rio de Janeiro. No direct air service from Joao-Pessoa available for foreign destinations.

AIRPORT: 9 km. from Joao-Pessoa. Small airport utilised by National Lines whose planes make regular calls.

TIME: GMT minus 3 hours throughout the year.

HOLIDAYS: For holidays see "Recife". Work is possible during holidays and Sundays provided the Dock Administration and Stevedores are advised in anticipation say, 24 hours before commencement. Usually on Good Friday, Christmas Day and Independence Day work at the Cabedelo dock is not obtainable. Same applies to the third Day of Carnival.

POLICE/AMBULANCE/FIRE: Police (located at Joao-Pessoa) 190. Cabedelo has a small Police Station but no telephone available. Ambulance (located at Joao-Pessoa) 191 and 192 (24 km. from Cabedelo). Fire Brigade (located at Joao-Pessoa) 193.

TELEPHONES: No facilities for placing telephones on board.

DEVELOPMENTS: The port is being dredged to allow vessels with 33 ft. draft to enter.

AUTHORITY: Administracao do Porto de Cabedelo, Av. Presidente Joao Pessoa, Cabedelo, Paraiba, Brazil. *Contact:* Afonso Augusto de Toledo Navarro, Administrator.

CARMOPOLIS: 11.03 S. 37.01 W. (See Plan Book)

LOCATION: Terminal Maritimo de Carmopolis, (Tecarmo), operated by Petroleo Brasileiro SA, PETROBRAS, is located on the N.E coast of Brazil at the Atalaia Velha Beach, Lat. 11° 00′ 30″ S., Long. 37° 04′ 00″ W. about 9 km. South of Aracaju City, capital of the State of Sergipe.

The mooring site is an open roadstead seaberth. It is located about 3.8 miles from the beach and at the end of a submarine pipe-line marked by 1 lighted buoy, 4 miles Southwards from the bar entrance to the port of Aracaju. The geographical position of the berth is: Lat. 11° 02′ 53″ S., Long. 37° 00′ 47″ W.

DOCUMENTS: See "General" before first port.

ESSENTIAL REQUIREMENTS: *Most essential requirements to be met by vessels loading:*

1. The ocean terminal consists of a conventional berth, i.e., tankers are moored with the ship's two anchors ahead and the terminal's six mooring buoys round the stern (See plans).
2. The terminal is intended to load ships with crude produced in the nearby shore and sea oil fields.
3. Loading is effected by a 26 in. diameter submarine pipe-line with a length of 7,500 m. from the mainland. It divides into two strings of hoses (North and South) through a "Y" reducing piece.
4. Ship's manifold should be preferably equipped with one 10 in. flange (ANSI). As a rule the North string is generally used unless any special event arises.
5. Amidships, derrick or crane with a minimum capacity of 5 tons must be provided to hoist and connect the nominated string of hoses, always on starboard side.
6. Ship's windlass (chain cables, brakes, windlasses, etc.) must be in perfect operational condition so that anchor and chains can be dropped, heaved in, adjusted, etc.
7. A forward winch must also be prepared for heaving in the pick-up wire of the hose.
8. Maximum permitted draft for the terminal is 15 m. so that a 3 m. bottom clearance is assured to face extreme operating sea conditions.
9. The mooring was designed to accommodate vessels up to 65,000 d.w.t. however, in special favourable circumstances a 115,000 d.w.t., tanker has been moored. Ship's LOA (300 m.) and longitudinal position of ship's manifold are also limiting factors.
10. By daylight a Mooring Master will board the vessel about 1 mile S.E. of the terminal sea buoys. He will advise on all manoeuvres relative to berthing, connecting and disconnecting hoses, etc. When arriving at night or for awaiting berth, Masters are requested to use the recommended anchorage. However, if weather conditions permit, ships may unmoor at night.
11. One terminal loading supervisor and 8 working men will stay aboard.
12. Vessels are requested to have a pilot ladder long enough to reach the terminal's launch, rigged alongside the accommodation ladder, in order that the shore personnel may transfer to it after 2 m. or 3 m.
13. Being an open roadstead, vessels must keep engines on standby during their stay in the mooring. Steam must be kept on deck in case adjustments to anchor cables or mooring lines are found necessary.
14. No ballast discharging facilities exist at the terminal. Vessels must arrive with necessary clean ballast. Brazilian laws are very strict with regard to the pollution of coastal waters and fines are heavy.
15. Any emergency should also be immediately transmitted by radio telephone on Channel 16. When operating the vessel's and the Terminal's radiotelephones will remain to Channel 12, set apart for such use.
16. Under no circumstances should vessels drop their anchors in the area between the sea buoys and the shore and the nearby submarine pipe-lines (North and South) from the oil production platforms.

REMARKS:

Non-compliance of just one of the above stated conditions (items 5, 6, 8 and 14) could result in rejection of the ship as being unsuitable for this terminal.

ARRIVAL:

Mooring Turn: Arrival time is considered to be the time the vessel reaches the anchorage or the time the Mooring Master boards the vessel, whichever occurs first. However, Notice of Readiness will not be considered as the time of arrival unless the vessel is in all respects ready to load. Tankers are loaded in turn except when the Terminal Superintendent grants priority to a particular vessel out of turn, in special circumstances only.

PILOTAGE: No Pilots exist in Carmopolis. All manoeuvres will be undertaken by the vessel's Master, with the help of a Carmopolis Mooring Master, who will board the vessel in the anchorage area and advise the Master on all operations such as mooring, connecting hoses, unmooring, loading, etc. It is important to emphasise that the services of the Mooring Master are afforded without charge and upon the express undertaking and condition that PETROBRAS shall not be liable for any damage or injury resulting from any advice, assistance or actions given or made by such Mooring Master. In the event it becomes necessary to disregard the Mooring Master's advice, in order to ensure safety of the vessel, the Master must forward a full written report of the circumstances for delivery to the Captain of the Port through the Terminal. It is the responsibility of the Master to notify the Mooring Master of any special conditions or peculiarities such as defective navigation equipment, tackle, gear or lack of necessary equipment which might impose hazards related to handling, mooring and loading the vessel.

Vessel must be moored to entire satisfaction of the Mooring Master. The Mooring Master may require the vessel to unmoor at anytime he deems necessary for the safety of the vessel or mooring or both or for an infringement of terminal or port regulations.

Unsatisfactory conditions will be reported to the Terminal Superintendent who is empowered to reject the ship unless the reported deficiencies have been remedied.

APPROACHES: As it is an open roadstead the access to the terminal can be easily and safely approached either from the N.N.E. or from the S.S.W.

The shore line runs of 035°/215°. Between the Sergipe and Vata-Barris Rivers the coast is almost a straight dune-covered sand beach which offers a very few notable natural landmarks.

Tankers must be aware of the existence of 4 oil fields with fixed production platforms which constitute in themselves good marks. Marking the bar of the port of Aracaju, located about 5 miles N.W. of the terminal berth, is a light exhibited from a conical white framework tower enclosing a central cylinder, 41 m. high, with a range of 14 miles (international No. G0230). The entrance of the berth itself is marked by 1 signalling lighted buoy about 0.5 miles S.E. It is painted yellow exhibiting a red flash. Its geographical co-ordinates are: Lat. 11° 03′ 00″ S., Long. 37° 00′ 30″ W. There is a radio-beacon at the local airport with signal letters AR (· — · — ·) transmitting continuously on 355 kHz. Its geographical co-ordinates are: Lat. 10° 59′ 27″ S., Long. 37° 04′ 22″ W. Near to the terminal offices are 4 steel towers and a chimney of a natural gas plant.

RESTRICTIONS: Mooring at the buoys will be effected in daytime only. Nevertheless loading and connecting hoses may sometimes be effected in night-time under certain conditions.

MAX. SIZE: The berth is designed to accommodate tankers up to 65,000 d.w.t., however, under favourable circumstances and vessel Master's discretion a 115,000 d.w.t. tanker has been moored. The ship's final draft is usually 15 m. (49 ft.). This draft will usually afford a safe bottom clearance 3 m. (10 ft.) even under the most severe sea conditions in which the loading operation is feasible. Depth is 18 m. (MLWS).

ANCHORAGE: The advisable anchorage site either for awaiting berth or daylight is determined by the following geographical co-ordinates: Lat. 11° 04.1′ S., Long. 36° 59.0′ W. Depth is 25 m. (82 ft.) MLWS.

Occasionally Mooring Master will board arriving tankers whilst still underway nearby the anchorage area. This anchorage provides vessels with ready access to the berth. Holding ground in this area is very good, as the bottom is varied in character (mud and fine sand). It is recommended that vessels should stay at anchor for periods of not longer than 24 hours with the anchor in the same place, otherwise it will be difficult to heave up anchor.

IMPORTANT:

Under no circumstances should vessels drop their anchors in the area between the berth and the shore due to submarine pipe-lines.

ETA: Vessels bound for Aracaju or TECARMO should advise their ETA 48 hours prior to arrival to radio station "PPS" (Official Coastal Radio Station) as well as to their Agent in Aracaju-SE (Cruz Irmaos & Cia.) whose cable address is Cruzirmaos, via the following coastal radio stations: Amaralina Radio (PPA) in Salvador – BA; Olinda Radio (PPO) in Recife – PE; or Rio Radio (PPR) in Rio de Janeiro-RJ.

When vessel is within 50 miles of the terminal contact may also be made by VHF radiotelephone on Channel Delta/16 (156.8 MHz). The terminal keeps a 24 hour listening watch on this Channel.

VHF: The radio and communication centre is located in the Oil Control Building. There is a VHF set operating 24 hours a day on Channel 16. Portable sets are taken aboard for the sake of safety and controlling the loading. No signal lamp (Aldis lamp) exists.

TUGS: There are no tugs available to assist berthing and unberthing.

BERTHING: The berth is of a conventional type, i.e., vessels are moored with two anchors ahead and synthetic mooring lines to the 6 sea buoys round the ship.

Ships are loaded by means of a 26 in. diameter submarine pipe-line dividing into two strings of hoses (by an "Y" piece) either of which will always be picked up on the starboard side. The end of the submarine line is 3.8 miles off-shore in 18 m. of water. The North hose is 10 in. designed to support 225 p.s.i. The South string of hoses is only used when the North (main) string is out of use, it is also 10 in. and designed to support 225 p.s.i. The 10 in. hoses are connected to the ship's manifold, through a quick release connecting device, the flanges being of normal 10 in. ANSI pattern.

MOORING: Vessels moor using both anchors forward with 2 lines to each buoy.

Turnround: To promote the economical operation of the vessel, Masters are requested to co-operate with installation representative in minimizing their in-port time. Any delays which are considered unnecessary or extensive should be reported to the loading Operating Supervisor so that corrective measures can be taken in due time.

HOSES: There is a submarine pipe-line from shore installations direct to the terminal, which are divided into 2 flexible hoses long enough to reach the ship's manifold. Usually, only 1 hose is connected, of 10 in. diameter. The nominal loading rate is about 3,000 cu.m.p.h. (18,870 bbls.p.h.). Shore labour used to connect hoses. Hoses are lifted on the starboard side.

The Mooring Master will guide the terminal's workmen in lifting, connecting and lowering the hose. As soon as the vessel is securely moored, one of the strings of hoses (usually the North one) must be lifted to the rail by ship's gear (crane or boom). Sundry hose securing and connecting equipment (strops, gaskets, quick-release device, etc.) will be supplied by the terminal and put aboard the ship soon after arrival. Hose will always be lifted and connected on the starboard side.

LOADING: At the beginning and during the loading operation tankers are requested to observe the following:

(a) Pumping will not start without the ship's and Mooring Master's permission.

(b) The max. allowed pressure established by the ship will be maintained.

(c) During operations a constant lookout by responsible men is required on the moorings and in the manifold area to keep watch on the connections.

Also see "Hoses".

MEDICAL: Medical treatment and/or hospitalisation, if required are provided at Aracaju private hospitals. Dentists are also available in Aracaju. Agent will make such arrangements.

For emergency cases (injury etc.), Petrobras first aid may be requested by the Master.

BALLAST: Vessels should arrive at Carmopolis with minimum clean ballast to enable manoeuvring under prevailing weather conditions. Masters are encouraged to take advantage of the favourable weather which prevails most of the time to minimize ballast. Early radio contact with the terminal must be established in order to obtain the latest weather information so that he can decide on appropriate ballast. The terminal is particularly interested in having vessels complete the deballasting operation promptly after berthing in order to minimize time at berth. Simultaneous loading and deballasting is encouraged on properly equipped vessels. Vessels requiring excessive time to complete the deballasting operation will be given Letters of Deficiency.

To avoid any possible pollution of the local waters, all tankers calling at the terminal to load must do necessary tank cleaning prior to arrival. Before arriving at the loading berth Masters must assure themselves that all tanks, pipe-lines, and pumps are free of oil. All tank cleaning should be preferably done 50 miles off the Brazilian coast. The terminal does not have facilities to receive any significant amount of oily ballast. If, after mooring a vessel is found to have oily ballast water aboard, it will be sent to sea to accomplish the necessary tank cleaning. A new Notice of Readiness to load must then be given.

WEATHER: *Weather conditions:* Local weather and sea conditions may be considered as fair for tanker operations.

Rain: The annual precipitation averages 1,103 mm. April, May and June are the rainy season.

Visibility: Usually the visibility condition in this area is fair, except during squalls.

Temperature: Actual temperatures ranging one year from a Low of 18.2°C in June to a high of 30.8°C in February.

Pressure: The annual average atmospheric pressure is 1013.2 mb.

Relative humidity: During most of the year the relative humidity of air is about 82%.

Remarks: Weather forecasts as well as Notice to Mariners are transmitted by PWZ and PPR coastal radio stations. For details refer to Brazilian Navy H.O. publication (Radio Aids) DH.8.

Winds and Waves: Winds blowing from shore to sea are practically non-existent. Those blowing from 040° to 160° counter-clockwise are not worth mentioning. From October to March Eastern winds will prevail (070° to 110°), and between May and August SE winds will prevail, i.e. (120° to 160°). In April and September, winds will blow either from the East or the S.E. 78% of wind force will be about 2 and 4 on the Beaufort Scale. i.e. slight to moderate breeze. Seldom fresh gales (force 8) have been observed. 19.7% of periods of calm and the rest 2.3% is of light air occurences (force 1 to 3).

Essentially all waves near the Aracaju area are caused by the prevailing local winds. However, the changeable periods in which they occur, when the waves will give the false impression to the swell. 60% of the recorded waves were between 0.5 m. to 0.9 m. high. During one full year period of observations the studies have demonstrated that only 1.4% of the operational time, the terminal will be closed for tanker loading, periods in which the waves are equal or higher than 2 m.

Currents: Currents recorded in the terminal area are made up of diversified and simultaneous causes acting in different grades of strength and combination. The causes were identified as being winds, tides, salinity and also temperatures, none of them was outstanding enough to be regarded as the final prevailing cause. The currents chiefly run parallel to the coast, but they do not vary greatly in set and drift. This lack of constancy affords evidence that it cannot be attributed to the Brazil current. Maximum recorded speed of current was one knot. It has been reported that upon N.E. winds and at ebb tides the current sets to S.S.W. with speeds higher than usual.

Tides: The mean HW interval is 4 hours 46 minutes. Tidal velocity rarely exceeds 2 knots and the tidal range varies from 1.99 m. at Spring to 1.05 m. At Neaps.

CARGO: The cargoes are called Sergipano Crude Oil of an average API 33, temp. 90° F., Plataforma Crude Oil of an average API 40.3, temp. 90° F. or Carmopolis Crude Oil of an average API 23.4, temp. 90° F. No heating required.

SURVEYORS: *Petroleum Inspection:* Petroleum inspectors are not available in Aracaju, but may be requested.

Chas. Martin & Co., Rua da Lapa 200, conj. 906, 20.000 – Rio de Janeiro. Tel: 242-4219, 245-5636 and 225-3507.

E. W. Saybolt & Co., Rua XV de Novembro 70, P.O.Box 826, Santos. Tel: 341984. Telex: (013) 1004.

FUEL: No bunkers available at Aracaju Terminal.

FRESH WATER: No water available.

TIME: GMT minus 3 hours.

AIRPORT: There is an airport at Aracaju.

CUSTOMS ALLOWANCES: Brazilian Laws are strict with regard to smuggling, and Masters are requested to instruct their crew not to retain cigarettes in carton lots, cigars, tobacco, alcoholic drinks, drugs, souvenirs, etc.

By no means will any commercial transactions be tolerated be it either among terminal employees, crew members or anyone else.

GENERAL:

Charts and Publications: (a) Brazilian Charts: 1003 and 1000 and 60 (Brazilian Navy Hydrographic Office).

(b) Foreign Charts: No. 24210 and 24211 of the US NOO and No. 1396, 3286 and 3977 of the H.D. (U.K.).

(c) Brazilian HO publications: Sailing Directions DH 1-9, List of Lights DH 2, Radio Aids DH 8.

No supply of charts, sailing directions or other publications are available in Aracaju, however if ordered in advance by Agent they may be obtained.

Bonded Stores: Cigarettes, beverages or other goods are not available in Aracaju.

Cash Advances: No cash advances are effected by the terminal. As a rule, the ship's agent will be able to handle this service when previously requested by radio.

Classification Societies: In Aracaju, there are no A.B.S. or L.R. surveyors, however, they may come from Rio de Janeiro upon Agent's request.

Consulates: No consular representatives exist in Aracaju.

Lubricating Oil: Supplies of lubricating oil are expensive and available only in emergencies and in very small quantities. Purchase and delivery are difficult.

Mail: There is regular Post Service in Aracaju. Letters should be sent care of the ship's Agent. In turn, the letters will be delivered to the ship upon arrival.

Provision and Stores: Limited. Provisions and stores are ordered through the ship's Agent or through shipchandlers in Aracaju.

Radio and Radar Repairs: Small radar and radio repairs may be effected in Aracaju provided that prior notice has been given to ship's Agents.

Agency: Ships Agent: Cruz Irmaos & Cia., Av. Barao do Rio Branco, 324, Ground Floor, P.O.Box 1, 49.000 – Aracaju-S.E., Brazil. *Tel:* (079) 222 6722. *Cable Address:* Cruzirmaos.

AUTHORITY: Petroleo Brasileiro S.A. – PETROBRAS, Avenida Republica do Chile, 65 – Centro – Rio de Janeiro – 20.035 – Brazil.

Divisao de Operacoes: Same address, as above, 12th Floor (Operations Division).

Terminal: Terminal Maritimo de Carmopolis – TECARMO. Caixa Postal 327, Aracaju, Sergipe, Brazil CEP 49000. *Tel:* 079-2231901. *Telex:* (0792) 127.

FORNO: 22.54 S. 43.10 W. (See Plan Book)

PORT LIMITS: The port is situated in Arraial do Cabo, on the North coast of the State of Rio de Janeiro, and its limits are comprised by: on the sea side, waters of the Anjos; the creek, and by the intersection of the mountain range with the foot of Fortaleza Hill. Its entrance is located in the alignment of the last point of Santa Cruz Street (Rua Santa Cruz), and on the opposite side, terminates at the shelter breakwater quay commencement point.

APPROACHES: The access channel is 700 m. wide, with a bar (minimum depth 12 m.) between Cabo Frio and Ilha dos Porcos.

PILOTAGE: Optional.

ANCHORAGE: The anchorage area is situated beyond Anjos Creek.

BERTHING: Manoeuvring Basin: Depths of 12 m. – 13 m. available.

Quay: length 220 m., depths from 6 m. up to 10 m. by the Dukes of Alba.

Also see "Tankers".

CRANES: 2 jib cranes with a capacity of 5 – 6.3 tons. Other equipment includes 1×7 ton stacker truck and 1 tanker truck with 10,000 litres capacity.

TANKERS: *Caustic Soda:* One tank with a capacity for storage of 14,500 tons, used previously for molasses with a pipe system which extends up to the Dukes of Alba and which permits loading of vessels at the rate of 300 t.p.h.; there is a receiving bridge for the product when transported by lorries, and pumping houses.

Liquid Bulk Cargo: Pipes located at the Dukes of Alba, used for receiving fuel oil for the Companhia Nacional de Alcalis, Esso Brasileira de Petroleo and Petrobras Distribuidora. The same berthing area is frequently used also for vessels carrying chemical products such as caustic soda intended for Dow Quimica S/A., whose bulk cargo is moved by pipe-line connected to the storage tank.

FRESH WATER: The port has available a tank with a capacity for 40,000 litres.

AUTHORITY: Porto do Forno, Rua Santa Cruz, 28910 – Arraial do Cabo – RJ. *Tel:* (0246) 43-0063 and 43-0070. *Contact:* Gustavo Gurgulino de Souza, Director.

FORTALEZA: (including Mucuripe), Ceara: 03.41 S. 38.33 W. (See Plan Book)

PORT LIMITS: From the end of the mole on a true bearing of 235° to the meridian of 38° 29.8′ W., thence to the coast.

DOCUMENTS: See "General" before first port.

PILOTAGE: By Associacao de Praticagem do Porto de Fortaleza. Address: Rua Dragao do Mar, 372. Tel: 212088. The Pilots board ships about 0.5 miles N.W. from the breakwater, call by International Code Signals.

Pilot may be ordered through the vessel's Agent or Fortaleza Radio (PPC). One hour before arrival specifying time of arrival and from which point the Pilot is required.

ANCHORAGE: Vessels awaiting Pilot may anchor W.N.W. of the breakwater head, distance 0.5 miles. Water depth 32 ft.

RESTRICTIONS: Access channel Length 1,000 m., width 100 m., depth 10 m.

MAX. SIZE: Up to 27 ft. draft depending on the tide.

HEALTH: The inspection area for Port Health and the other authorities is within 1,430 m. of position Lat. 03° 42′ 24″ S., Long. 38° 29′ 18″ W.

All ships must be visited by Port Health Inspector. If vessel has passengers in transit for another Brazilian port, another visit will be required at port where passengers disembark. If ship's health condition satisfactory, Inspector will give free pratique immediately. Radio pratique available if Master able to declare satisfactory health condition before arrival. Free pratique is valid for subsequent ports in Brazil.

If there is a crew member to be hospitalised, the Health Inspector will issue pass to hospital on request of Master or Agent who will be made responsible for all expenses incurred.

Inoculations for International Certificates can only be given by an employee of the Port Health Authority.

Ships are inspected by Custom House and Health personnel at the anchorage.

VHF: Port Radio on Channels 9, 10, 13 and 16.

TUGS: One tug 1,680 h.p. available.

BERTHING: 1,054 m. of berthing length, depth 3.6 m. – 10.0 m. Berths for five vessels. One grain elevator, capacity 150 t.p.h. Four lighters available capacity up to 70 tons each.

Berth No. 1. 106 m. long, 18 ft. deep.
Berth No. 2. 150 m. long, 20 ft. deep.
Berth No. 3. 170 m. long, 22 ft. deep.
Berth No. 4. 530 m. long, 33 ft. deep.
Berth No. 5. 160 m. long, 33 ft. deep.

Vessels are advised to take a Pilot and use a tug if available due to the peculiar port variations.

Vegetable oils can be loaded in drums, 18/20 t.p.h. or ex-barge at 100/125 t.p.h.

CRANES: A 100 ton floating crane is on order. 7 diesel cranes 9 ton – 50 ton capacity. 5 electric cranes 3.5 tons – 12.5 tons capacity. No. 3 Berth has a travelling suction tower with 2 tubes, operating at 120 t.p.h.

TANKERS: *Petrobras:* Berthing platform length 90 m., width 28 m., depth 11.0 m. (1st phase), 12.0 m. (2nd phase). Capacity 34,000 g.r.t. (1st phase), 50,000 g.r.t. (2nd phase). Length of access bridge 853 m., width 3.7 m.

Loading Lines (planned): 1×18 in. (crude); 1×16 in. (fuel oil); 1×12 in. (asphalt); 1×10 in. (diesel oil and Naphtha); 1×12 in. (petrol/alcohol); 1×12 in. (aviation kerosene); 1×12 in. (kerosene/diesel oil); 1×8 in. (LPG); 1×6 in. (LPG vapour); 1×6 in. (drinking water); 1×10 in. (ballast); 3×12 in. (not designated) and 1×4 in. (steam).

Lines available (1st phase): 1×6 in. (drinking water); 1×8 in. (fire water line); 1×12 in. (diesel/kerosene); 1×12 in. (petrol/alcohol) and 1×16 in. (fuel oil/asphalt).

FRESH WATER: 20 hydrants on the quay spaced 50 m. to 80 m. apart. Connections 2 in. Rate 20/30 t.p.h.

FUEL: Boiler fuel available from seven connections (6 in. and 8 in.), rate 45 t.p.h., spaced along the quay. Diesel oil is available by road tanker. Also see "General" before first port.

REPAIRS: Two workshops available for machinery repairs. No electronic repairs possible.

TELEPHONES: Available on board through the Ceara Dock Co.

CONSULS: None at Fortaleza.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

REPATRIATION: Can be arranged.

AIRPORT: Only internal services from local airport.

POLICE/AMBULANCE/FIRE: Maritime Police Tel: 24.14.94; Ambulance 21.34.34 and 21.22.22; Fire 23.13.81.

SHORE LEAVE: Allowed under control of Maritime Police.

SHIPMASTER'S REPORT: January 1981.

Tugs: One available of 1,600 h.p., used for all berthing/unberthing operations.

Berthing: Berth No. 5 has been dredged to take ships with a draft of 10 m. Deep laden grain ships lighten at this berth by using shore cranes to discharge into lorries before shifting under the sucker towers.

A dredger is based at Fortaleza and works continuously.

Cranes: There are now 2 travelling suction towers for handling grain, each with 2 tubes, at Berth No. 3 where max. draft is 8 m.

AUTHORITY: Companhia Docas do Ceara, Praca Amigos da Marinha Esplanada do Mucuripe, C.P. 1099, 60.000 Forteleza-CE. *Tel:* 224.20.33. *Contact:* Livio Silva de France, Director/President.

ILHEUS (Malhado): 14.47 S. 39.02 W. (See Plan Book)

PORT LIMITS: The Port is limited by the line which goes from the estuary of the river Almada to the Ilheus Grande, and then as far as the Southern end of the Pororocas Parcel.

From there towards the Pernambuco Morro, and then going along the Pontal Coast towards the Airfield, and from this point to the Southern extremity of the Island of Frades, and then turning towards Pedra Point, and going from there following the left bank of the River Cachoeira, then continuing along the coast to the estuary of the River Almada.

DOCUMENTS: See "General" before first port.

PILOTAGE: Pilotage is controlled by the Captaincy of the Port.It is compulsory for foreign vessels of any large tonnage; for oil tankers; for propane carriers; for vessels of any size carrying explosives and for chartered, oceangoing tug boats, whether Brazilian or foreign, that are not captained by a Brazilian officer or that do not include in their crew a Brazilian officer of the category of Nautical Officer or Master of Short-haul Cabotage. The Pilotage zone goes from the Ilheus Grande anchorage ground, marked on Chart No. 1201 of the DHN, to final berthing place.

Request for Pilot: The request for a Pilot must be made with at least 4 hours advance notice. Pilot service in Ilheus is provided by the Pilots Association of Ilheus, with offices in the Banco Economico Building – Room 406 – Tel: (073) 231-2206.

ANCHORAGE: Marked on charts (DHN Chart No. 1201).

Normal Anchorage: At the beginning of the access channel, with a depth of 12 m. Anchoring in the 100 m. stretch along the Wharf and in the Access Channel is forbidden.

Quarantine Anchorage: An area of 500 yards radius with its central point located at Lat. 14° 45′ 30″ S., Long. 39° 01′ 00″ W.

RESTRICTIONS: *Access Channel:* Length 1,000 m., width 200 m., depth 10 m.

Manoeuvring Basin: Length 560 m., width 200 m., depth 10 m.

Navigation Dangers: The passage between the Itaipins reefs and the Ilhote de Itapitanga should be avoided. When sailing South of the Parcel dos Pororocas, the Ilheus Lighthouse should no be sighted at less than 270° until the Ilhote de Ipitanga/Ilheus Grande line has been crossed.

HEALTH: Port doctor visits all ships on arrival and requires Maritime Declaration of Health, Derat Certificate, 2 Crew Lists. Vessels from another Brazilian port automatically receive free pratique and should not fly Quarantine Flag. If suspected disease or fever on board it is advisable to cable Agent before arrival. Vessels can receive pratique at any time.

TUGS: Three private companies own tugs.

BERTHING: There is a total of 432.5 m. of quay available (3 berths), depth alongside 10 m. The wharf extends 110 m. West from the breakwater. There are 5 Portal cranes (3×3.2 tons, 2×6.3 tons). 2 mobile cranes, capacity 15 tons and 24 tons. 23 fork-lift trucks, 2 tons to 7 tons capacity. Loading rates for bagged cargo of cocoa and coffee approximately 30/45 t.p.h. per gang. Discharge of bulk wheat by grab. Tankers moor partially off the quay to a stern buoy.
STEVEDORES: Arranged by Agent.
MEDICAL: All facilities available. If doctor needed on arrival or making emergency call to land sick persons, cable ETA 12 hours before arrival.
TANKERS: Almirante Jeronimo Goncalves Terminal owned by Frota National de Petroleiros. Buoy mooring. (Pipe-line 2,600 m. length – 12 in. diameter).

There is a wooden pier used solely for the movement of liquified gas, length 49.5 m., depth 7.0 m.
FRESH WATER: Available. Rate 50 t.p.h.
FUEL: Supplied by Petrobras road tankers.
WATCHMEN: Compulsory.
HATCHES: By stevedores.
CUSTOMS ALLOWANCES: Only sufficient tobacco for daily use. No alcohol to be taken ashore.
IDENTIFICATION CARDS: Necessary to go ashore.
CONSULS: Only in city of Salvador.
REPAIRS: Workshop belonging to Port Administration. Minor repairs only.
REPATRIATION: Can be arranged via Rio de Janeiro.
AIRPORT: Situated at Pontal, 3 km. from the port.
HOLIDAYS: *National:* 1st January, 21st April, 1st May, 7th September, 12th October, 15th November, 25th December.

Municipal: Fixed: 23rd April, 28th June, 2nd July, 15th August.
Movable: Good Friday and Corpus Christi.
Traditional: Movable: Carnival – Tuesday (Mardi Gras) and Ash Wednesday.
Fixed: 2nd November, 24th June.
POLICE/FIRE/AMBULANCE: Police tel. 2530; Ambulance 2417.
TELEPHONES: No connection to vessels can be made.
TIME: GMT minus 3 hours.
SERVICES: Diving service available.
SHORE LEAVE: Allowed with identity card.

SHIPMASTER'S REPORT: December 1982
Pilotage: Pilot is ordered by vessel's Agent and can be confirmed by VHF on Channel 16. Locality of pilot station marked on chart. Pilot boat is wooden motor boat with white superstructure.
Tugs: Two tugs available (one of 125 h.p. and the other 130 h.p.) assist when going alongside.
Berthing: The pilot boat also assists in bringing the lines ashore. There is a total of 432.5 m. of quay available. Tankers and also general cargo vessels sometimes moor partially off the quay to a stern buoy.

AUTHORITY: Port of Ilheus (Pormal), Avenida Almirante Aurelio Linhares No. 432, Ilheus, Bahia, Brazil. *Tel:* (code 073) 231-3318, 231-3212. 231-1962 (Management). *Telex:* 073-2118.

AGENT: See "Salvador".

IMBITUBA: 28.14 S. 48.39 W. (See Plan Book)

DOCUMENTS: See "General" before first port.
PILOTAGE: Compulsory. The Pilots have a launch with VHF equipment which is normally moored within the port. The point for awaiting the Pilot is in the anchorage, in the outer part of the port, (Chart 1.908 of the Directorate of Hydrography and Navigation). The launch is painted red and marked with the letter 'P' in black.
ANCHORAGE: The anchorage, near the port, is on the alignment Silo-Ponta da Ribanceira, with a depth between 8 m. and 12 m., and a sandy bottom. It is sheltered from South, North and West winds, but not so from Easterly winds.
RESTRICTIONS: The port is situated in an open inlet, with a width of approximately 3,000 m., but presenting in its external area the shallow water characteristic of the Rocks of Imbituba, with the lowest depth of 8.7 m., and the Rocks of Aracaju, with the lowest depth of 6.9 m. The sea above the rocks is normally shallow, and it is dangerous to navigate over the rocks, even for vessels of small draft.
MAX. SIZE: There is no major restriction with regard to the length of vessels. The manoeuvring basin, inside the port, is 315 m. long and more than 10 m. deep. Vessels of a length of 175 m. operate normally in the port.
HEALTH: See "Itajai".
RADIO: Messages from vessels at sea for Agents or from the latter to vessels must be sent via the Empresa Brasileira de Correio e Telegrafos, which has a Coastal Station at Florianopolis (PPF).
TUGS: One tug, "Mar de Espanha", length 28 m., beam 8 m., draft 3.7 m., displacement 276 tons and power 1,680 h.p. It has VHF equipment, and its use is advisable when berthing and unberthing.
BERTHING: ETA to be advised not less than 24 hours prior to arrival. Priority of berthing is based, in principle, on the time of arrival of the vessel. The port has, at the moment, 4 berths.

Berth No. 1 for shipment of coal, 175 m. long with 10 m. depth of water.

Berth No. 2, 133 m. and 10 m., for general cargo, and which is an extension of Berth No. 1.

Berth No. 3, 245 m. and 11 m., for bulk cargo and generals.

Berth No. 4 with approximately 50 m. and 7 m., exclusively for ro-ro vessels which berth bow on or stern on.

There is also provision for construction of Berth No. 5 with approximately 250 m. and 10 m., for bulk and general cargoes, and as an extension of Berth No. 3.

CARGO HANDLING FACILITIES: Berth No. 1: A system of storage (silo), belt with a loading capacity of 350 t.p.h. of coal and a shoot system (8,000 tons) and three cranes with grabs, with a capacity of loading of 650 t.p.h. of coal, totalling a nominal capacity of 1,000 t.p.h.

Berth No. 2: Uses derricks or cranes of the ship, with the possibility of assistance from port cranes.

Berth No. 3: Conveyor belts and loaders/unloaders, with a discharge capacity of phosphate rock of 500 t.p.h. (special equipment for this type of solid bulk cargo), in the future there will be a similar system for loading coal, with capacity of 3,000 t.p.h.

Ships derricks or cranes used for moving general cargo, with the possibility of assistance from port cranes.

Berth No. 4: Special Ro-Ro system, for a single vessel, berthing bow or stern on.

Tanks: There are 2 metal tanks with 2,607 cu.m. and 1,590 cu.m. capacity, intended for storage of bulk liquid caustic soda.
STEVEDORES: Stevedoring service is carried out by port employees, with the addition per shift of personnel of the Imbituba Union of Stevedores, Imbituba and Laguna loading and discharge tallymen, Imbituba trimmers and workers in the Port Services of Imbituba. Working is 24 hours a day every day in the port, with the following shift arrangement:

By Day: Common day work from 0730 hrs. to 1100 hrs., lunch from 1100 hrs. to 1230 hrs., common day work 1230 hrs. to 1630 hrs.; first extension from 1630 hrs. to 1830 hrs., 2nd extension from 1830 hrs. to 1900 hrs.

By Night: Common night work from 1900 hrs. to 2300 hrs., meal break from 2300 hrs. to 2400 hrs., common night work from 0000 hrs. to 0400 hrs., 1st extension from 0400 hrs. to 0600 hrs., 2nd extension from 0600 hrs. to 0700 hrs.

It is necessary to make a prior agreement between the Master of the vessel and the Agent to ensure the necessary number of shifts, and the availability of other resources for loading or discharge.
CRANES: Port: 2×8 ton and 2×8.2 ton.

Coal: 6×10 ton, 1×5.7 ton, 3×1.2 ton and 2×3.4 ton.
MEDICAL: The Agent must be advised in advance as to the need for medical assistance. The town of Imbituba has a hospital (Caridade Sao Camilo) with 100 beds.
DENSITY: The density of water is constant, there being no river discharge to affect it, since the port is open to the sea.
FRESH WATER: Berth Nos. 1 and 2: 3 in. pipes, 10 take-off points, with a feed rate of 6 t.p.h. per point.

Berth No. 3: 1.5 in. pipe (provisional), 1 take-off point, delivery rate of 5 t.p.h.

Berth No. 4: 1.5 in. pipe (provisional), 1 take-off point, delivery rate of 5 t.p.h.
FUEL: There is no supply of fuel to vessels.
WATCHMEN: Not compulsory, but advisable.
OPENING/CLOSING HATCHES: This is done by port personnel or by the stevedores.
REFUSE COLLECTION: Drums on Berth Nos. 1 and 2. There is no refuse collection on Berth Nos. 3 and 4.
CONSULS: At Rio Grande or Florianopolis.
DEVELOPMENTS: Berth No. 5 is under construction as is a stockage system (500,000 tons), conveyor belts and loaders/unloaders for handling coal, which, when ready, should have a capacity of 3,000 t.p.h. The whole of the manoeuvring basin has been dredged, providing a depth of 10.0 m. along berths Nos. 1 and 2, 11.0 m. along berth No. 3 and 7.0 m. along berth No. 4.

The breakwater was reinforced and increased by 250 m. and is now about 1,000 m. in length.
AUTHORITY: Companhia Docas de Imbituba, Av. Graca Aranha, 226-8° Andar, Castelo, Rio de Janeiro, CEP 20030, Brazil. *Tel:* (021) 2404445. *Telex:* 2123568 EACB BR. *Cables:* Imbitubadocas.

At Imbituba: Av. Getulio Vargas S/N, Imbituba, Sta. Catarina, Brazil, CEP 88780. *Tel:* (0482) 550080. *Telex:* 482421 DOIM BR. *Contact:* The General Manager.

ITAJAI: 26.54 S. 48.39 W. (See Plan Book)

DOCUMENTS: See "General" before first port.
PILOTAGE: Compulsory. To await or to receive Pilot, anchor from 0.5 to 2 miles East of South Breakwater.

Pilot Service does not have radio or VHF; any telegram can be addressed to Pilots Service in Itajai (Servico de Praticagem-Itajai), but customary to send all advices to Pilot Service via Agents.

Pilot Service has three launches painted red with a "P" on side and on funnel. Launches always anchored inside port. In case of bad weather, vessel must wait for instructions in Porto Belo Bay, South of this port, and in case of bad weather on sailing, if impossible to disembark Pilot in entrance of bar, must be done in Porto Belo Bay.
ANCHORAGE: Waiting anchorage situated in Enseada de Cabecudas, up to 2 miles distant from South Light, depth of 8 m.
RESTRICTIONS: Vessels can enter or sail at any tide with a max. draft of 18 ft. Vessels with a max. draft of 22 ft. may enter or sail at HW. Tanker movements in daylight only. Max. speed allowed in the access channel is 5 knots.
Depths: Depth at Bar – 8.0 m. Access Channel – width 140 m., depth 7.0 m. Manoeuvring Basin – width 200 m., depth 7.0 m.
MAX. SIZE: Max. length 160 m. for dry cargo vessels. For tankers, max. length 155 m.
RADIO: For telegrams (radio) direct from vessel to Agent, or vice-versa, Departamento de Correios e Telegrafos radio station in Santos or Florianopolis, with prefixes: Santos PPS, Florianopolis PPF.

HEALTH: When coming from abroad, vessel will be visited by Health Authorities, who issue free pratique after inspection. When coming from another Brazilian port, free pratique issued in previous port is sufficient. This document must stay on board, to be presented in subsequent ports. In case of sickness on board, after receiving free pratique, must contact Agent who notifies Health Service.

TUGS: One tug "Anapolis", 1,680 h.p.

BERTHING: Previous communication required, time of priority based on time of arriving at bar. Length at quay, 703 m., depth alongside 7 m.

Storage:

Warehouse AZ-1	4,000 sq.m.	Capacity 12,480 tons
Warehouse AZ-2	3,960 sq.m.	Capacity 10,454 tons
Warehouse AZ-2A	2,440 sq.m.	Capacity 6,440 tons
Warehouse AZ-3	4,800 sq.m.	Capacity 17,580 tons

Refrigerated Warehouse: Capacity 2,100 tons (4,000 cu.m.).

Open Storage: 29,911 sq.m. (paved area).

Oil Storage: 23 Tanks. 14,060 cu.m. (petrol); 6,988 cu.m. (diesel oil); 941 cu.m. (Paraffin); 6,686 cu.m. (fuel oil). 28 Gas Tanks – 3,112 cu.m.

Chemical Products: Sodium Sulphate – 6,000 tons, Caustic Soda (Dow Chemicals) – 12,000 tons.

Equipment: Stacker Trucks: 2×1 ton, 20×1.8 ton, 5×3.5 ton, 3×5 ton and 3×7 ton.

Trucks: 1×30 ton, 4×3 ton, 10×3.5 ton, 2 tractors of 52 h.p., 1 tractor of 70 h.p.

CRANES: 1×20 ton mobile crane for containers and mobile crane 9 tons. 3 electric cranes, 2×1.5 ton Portal cranes, 1×3 ton, 1×5 ton.

STEVEDORES: When vessel arrives in morning, advisable that Master advises in advance number of gangs he will need so that Agency can make arrangements.

When discharging dry bulk cargo (grain or salt) trucks with special equipment used.

Average for loading: *(a)* Timber 120 tons/gang day. *(b)* General Cargo 100 tons/gang day. *(c)* Bags and Tobacco 90 tons/gang day.

For discharging: *(a)* General Cargo 100 tons/gang day. *(b)* Bulk 120 tons/gang day.

Hours as follows: 0700 to 1100 hrs.; 1230 to 1630 hrs.; 1900 to 2300 hrs.; 2400 to 0430 hrs.

MEDICAL: In urgent cases, advise Agent requirements in advance. Hospital available (573 beds). Normally no special vaccination required, nor presentation of certificates.

TANKERS: 5 oil terminals where vessels 155 m. length and 22 ft. draft discharge.

Shell Terminal:

Fuel oil 10 in. for discharging 8 in. for loading.
Diesel 6 in. for discharging 4 in. for loading.
Gasoline 6 in. for discharging.
Kerosene 6 in. for discharging.

Esso Terminal:

Fuel oil 8 in. for discharging 4 in. for loading.
Diesel oil 6 in. for discharging 4 in. for loading.
Gasoline 6 in. for discharging.
Kerosene 4 in. for discharging.

Atlantic Terminal:

Diesel 6 in. for discharging.
Gasoline 6 in. for discharging.
Kerosene 6 in. for discharging.

Ipiranga Terminal:

Diesel 6 in. for discharging.
Gasoline 6 in. for discharging.
Kerosene 6 in. for discharging.

Heliogas Terminal:

Gas 6 in. for discharging liquid 4 in. for discharging vapour.

DENSITY: During low tide whole port is influenced by fresh water of River Itajai – Acu, situation changing completely at high tides.

FRESH WATER: Available, supplied direct by hydrants (14×3 in.) along quay. Average supply 10 cu.m.p.h.

FUEL: See "General" before first port.

WATCHMEN ON GANGWAY: Not compulsory, but recommended.

OPENING/CLOSING HATCHES: By stevedores.

CUSTOMS ALLOWANCES: Customs can liberate one or two cartons of cigarettes and one or two bottles of spirits, dependant on time vessel remains in port.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS: Argentina, Sweden and Chile.

REPAIRS: Almost all repairs on engines or deck possible.

REPATRIATION: Repatriation, normally made by Agents via Rio de Janeiro and/or Sao Paulo.

AIRPORT: Situated about 10 km. from port. Daily regular flights to Sao Paulo, Porto Alegre, and Rio de Janeiro by Varig.

TIME: 2nd Mar. – 30th Nov. GMT minus 3 hours. 1st Dec. – 1st Mar. GMT minus 2 hours.

HOLIDAYS: New Year's Day (January 1st); Good Friday; Tiradentes (April 21st); Labour Day (May 1st); Corpus Christi; Proclamation of the Republic (November 15th); Independence Day (September 7th); Christmas Day (December 25th).

Regional Holidays: June 6th and December 8th.

POLICE/AMBULANCE/FIRE: Police 312; Ambulance 500; Fire Brigade 339.

TELEPHONES: There are facilities for placing telephones on board.

DEVELOPMENTS: Two grain silos in port area under construction.

AUTHORITY: Empresa de Portos do Brasil S.A., Administracao do Porto de Itajai – API. Av. Cel. Eugenio Muller, 622, P.O.Box 244, 88.300 Itajai – SC. *Tel:* (0473) 44-0722 (23 lines). *Contact:* Engineer Deobaldo Wilson Storrer, Administrator.

Port Captain: Av. Cel. Eugenio Muller, 106. *Tel:* 44-2435.

LAGUNA: 28.30 S. 48.46 W.

LOCATION: The port is situated in the State of Santa Catarina on the left bank of the connecting channel of the Lake of Santo Antonio with the Atlantic Ocean.

PILOTAGE: Compulsory. Tel: 44-0075.

ANCHORAGE: Recommended anchorage is at the entrance off the bar.

APPROACHES: The area is covered by D.H.N. Chart No. 1901. The access channel is 1,300 m. long, 80 m. wide and 6.2 m. depth. Tidal range 0.84 m.

BERTHING: The manoeuvring basin measures 300 m.× 200 m., with a depth of 4.1 m. The quay is 300 m. long, depth alongside 5 m.

There are 2 warehouses (1,600 sq.m.) and an open warehouse (392 cu.m.) available, and a cold store capable of freezing 24 tons/day at −35°C., capacity 800 tons at −30°C.

EQUIPMENT: 2 locomotives, 300 h.p. each, with 5,000 m. of railway track. 4×20 tons open trucks and 1×2.5 tons stacker truck.

FRESH WATER: 715,000 litres capacity reservoirs.

FUEL: Diesel oil available. 3 storage tanks.

REPAIRS: Not available within port area.

HOLIDAYS: In addition to National holidays, local holidays are 2nd February, 13th June and 18th June.

AIRPORT: Nearest commercial airport is at Florianopolis, 130 km. away. Municipal airport 15 km. from the city.

AUTHORITY: Administracao do Porto de Laguna, Avenida Getulio Vargas 728, P.O.Box 39, 88790, Laguna, SC. *Contact:* Amilton Machado Alcantara, Port Administrator.

Port Captain, Avenida Brito Peixoto 72, Laguna. *Tel:* 440196.

MACEIO: 09.40 S. 35.44 W. (See Plan Book)

PORT LIMITS: Limited to the North by the shore, to the South by the mole, to the West by the Atlantic Ocean and to the East by the access mole (Lat. 09° 41′ S., Long. 35° 44′ W.). The Marine terminal of Salgema (Lat. 09° 41′ S., Long. 35° 46′ W.). is located between the beaches of Trapiche and Ouricuri where can be seen the distinctive cylindrical tanks for storage of the products of Salgema Industrias Quimicas S/A. There is a mole emerging from Trapiche beach extending seawards 145°, for about 1,000 m., and at the end of which is a quay. From the mole and extending Southwards is a submarine pipe-line for disposal of residues from the terminal.

The Sugar Institute (IAA) accepts Notice of Readiness only after having been signed by Surveyor to the effect that holds are in all respects ready to receive cargo.

DOCUMENTS: See "General" before first port.

Port Health, Customs and Maritime Police board vessels alongside. However vessels from Eastern bloc countries are boarded at the anchorage.

PILOTAGE: Not compulsory. However, for tankers, propane carriers, nuclear vessels, those carrying explosives and foreign vessels in general, pilotage is compulsory.

A request for a Pilot can be made via the ship's Agent, 12 hours in advance, specifying the time of entry of the vessel, and from which point pilotage is required, via radio station Amaralina (PPA) or Olinda (PPO). The Pilot boards and leaves vessels 0.25 miles to the West of the Peixe-Pau Buoy and 1 mile from the mole light.

Pilots' Association: Rua Sa e Albuquerque No.467-Room 17, Jaragua-Maceio-AL. Tel: 223-2203 and VHF radio on Channels 9, 13 and 16. Listening Channel is 16. Vessels may anchor off Peixe-Pau Buoy in bad weather.

ANCHORAGES: Vessels anchor outside the area marked as "Anchoring forbidden" on the Chart 901 of the DHN.

Quarantine Anchorage: To the seaward of the Peixe-Pau Buoy.

Vessels are not permitted to anchor in the port basin.

RESTRICTIONS: Max. permitted speed between the Peixe-Pau Buoy and the port is 6 knots.

No restrictions on length. On approaching the port attention must be paid to the shallows existing to the N.W. of the Peixe-Pau. The average depth is from 10 m. to 15 m. Vessels may enter day and night. Pilot refuses to berth tankers after nightfall.

MAX. SIZE: Vessels have loaded up to 33 ft. draft.

HEALTH: No Health Authorities board vessel. In event of suspected disease or fever on board, advise Agent by cable so that Port Authority may take appropriate action.

RADIO: Radio Olinda (Recife), call sign PPO. Radio Amaralinha, call sign PPA.

TUGS: One tug available, bollard pull 20 tons.

BERTHING: 6 Berths (4 for general cargo and 2 for sugar) available day and night, weather permitting.

Sugar Terminal: Facilities for loading bulk molasses. Projected loading capacity 1,000 t.p.h. of bulk sugar, 300 t.p.h. molasses.

Sugar Wharf: 250 m. length. General cargo wharf 500 m. length. Depth alongside 33 ft.

One quay for loading the products of Salgema Industrias Quimicas S/A (Maritime Terminal of Salgema). This quay is located at the end of a mole some 1,000 m. long starting at Trapiche beach and extending seawards 140° (Lat. 09° 41′ S., Long. 35° 46′ W.).

The average depth of water in the port is 10 m., and at the Salgema Terminal 8.8 m.

In order to be admitted with safety into the port and terminal, vessel's length must not exceed 250 m. and 157 m., respectively.

The sugar quay has 10 bollards and the general cargo quay 16. At the Salgema Terminal Quay, only 1 vessel is berthed at a time.

Cargo Handling Facilities: There are 6 warehouses, 5 being 80 m.× 80 m. for general cargo and 1 of 200 m.×50 m. for Demerara sugar (200,000 tons).

There is a tank with a capacity of 4,000 cu.m. for alcohol and another for molasses with the same capacity. There is a refrigerated store with a capacity of 200 tonnes.

There is an open storage area covering the whole extension of the general cargo quay measuring 20,400 sq.m.

There are 5 stacker trucks, 4 with a capacity of 2 tons and 1 of 7 tons.

There are 2 mechanical sugar loaders with total capacity for shipment of 4,000 bags per hour, and 1 bulk sugar mechanical loader of 1,000 t.p.h. capacity.

There is 1 mechanical grain suction unit with capacity for unloading 100 t.p.h.. There is 1 bulk grain distributor with scales for loading lorries.

STEVEDORES: ETA required 24 hours before arrival to arrange gangs. When work required Saturdays and Sundays, ETA must be sent on Friday. Loading/discharge – General: 8 t.p.h. per gang. Sugar 20 t.p.h. per gang. Grain 60 t.p.h.

CRANES: 4×3.2 ton and 2×6.3 ton capacity electric cranes.

MEDICAL: No advance notice needed except if vessel due to arrive on Saturday/Sunday in order to arrange doctor and/or hospital. Hospital facilities available.

TANKERS: 1 tanker berth. Max. draft 33 ft. 1 pipe-line 8 in. for gasoline and one 6 in. for diesel/kerosene.

Tanks: Petrobras, 9 tanks with total capacity of 38,929 cu.m.

Atlantic, 9 tanks with total capacity of 14,482 cu.m.

I.A.A., 1 tank for molasses with capacity of 7,000 tonnes.

FRESH WATER: Fresh water available. Pipe-line from water tower by gravity. Rate about 5 t.p.h. 11 points at the general cargo wharf and 5 at the sugar wharf.

FUEL: Diesel fuel oil and fuel oil 'A' (PPF) is supplied by Esso, Texaco, Shell, Atlantic and Petrobras, by gravity from tanker trucks. The availabilities are minimal, as the storage capacity is small, at times there being no products available. Orders must be placed 24 hours in advance. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCES: One carton cigarettes to be declared. One bottle alcohol, open, to be declared.

IDENTITY CARDS: Foreign Crew members not permitted to go ashore without presentation of Identity Card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The Identity Card must be delivered on disembarkation to the Federal Police who will return it to the Crew member on re-embarkation.

CONSULS:

Norway	2276	Portugal	2449
Italy	3302	France	2126
Spain	2640		

REPAIRS: Small repairs only can be effected.

REPATRIATION: Carried out by Recife Consulates.

AIRPORT: Airport at Palmares, distance 30 km. Served by Varig, Vasp and Transbrazil.

TIME: GMT minus 3 hours.

HOLIDAYS: Work prohibited on Labour Day only. Other days on which work is considered overtime and charged as such are: 1st January, Good Friday, 7th September, 15th November and 25th December.

Local Holidays: 16th September and 27th August.

POLICE/AMBULANCE/FIRE: Police 221-5348; Ambulance 241-2288 and 241-1488; Fire Brigade 223-2447 and 193.

TELEPHONES: Telephone on quayside. If telephone required onboard 48 hours notice required.

GENERAL: Prevailing winds: Summer months – N.E. Rainy season – S.E. with strong South winds during July/August/September and strong undertow during August/September.

DEVELOPMENTS: The Salgema marine terminal is being built across the bay. It will consist of a jetty 1,300 m. long. The loading platform will allow 18,000 d.w.t. vessels to load in 11 m. depth.

Loading Caustic Soda	12 in. line	330/350 cu.m./hr.
Ethylene Chloride	10 in. line	330 cu.m./hr.
Ethylene Cryogenic	8 in. line	330 cu.m./hr.

AUTHORITY: Administracao do Porto de Maceio, Rua Sa de Albuquerque, Jaragua, 57000 Maceio, Alagoa, Brazil. *Contact:* Lafayete Pacheco Neto, Administrator.

MANAUS: 03.08 S. 60.00 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

PILOTAGE: Pilots join vessel at Belem and make the round voyage back to Belem. Vessels entering via North Channel take a Pilot at Santana. No Pilots from Barra Norte to Santana.

ANCHORAGES: Suitable places can be indicated by the Pilot.

Anchorage for vessels over 3,000 g.r.t. Lat. 03° 09′ 00″ S., Long. 60° 01′ 48″ W.

Anchorage for vessels of less than 3,000 g.r.t. Lat. 03° 09′ 00″ S., Long. 60° 02′ 12″ W.

Vessels impounded or requiring considerable repairs Lat. 03° 08′ 30″ S., Long. 60° 02′ 30″ W.

Vessels in quarantine Lat. 03° 08′ 48″ S. Long. 59° 55′ 48″ W.

RESTRICTIONS: Passage across Barra Norte to be made at HW only. Berthing and unberthing preferably takes place at Manaus in daylight.

MAX. SIZE: Entry to the Amazon via the North Channel; max. draft 30 ft. Via Belem; draft 29 ft. with a length up to 175 m. and draft 24 ft. with a length up to 210 m.

HEALTH: See "General" before first port. All ships must be visited by Port Health Inspector. If vessel has passengers in transit for another Brazilian port, another visit will be required at port where passengers disembark. If ship's health condition satisfactory, Inspector will give free pratique immediately. Radio pratique available if Master able declare satisfactory health condition before arrival. Free pratique is valid for subsequent ports in Brazil.

If there is a crew member to be hospitalised, the Health Inspector will issue pass to hospital on request of Master or Agent who will be made responsible for all expenses incurred.

Inoculations for International Certificates can only be given by an employee of the Port Health Authority.

RADIO: Salinopolis Radio or Rio Radio. There is also Barbados Radio Station at Belem.

TUGS: 1×210 h.p. and 1×1,680 h.p.

BERTHING: Arranged by Agent who asks permission from local Port Authorities to provide a berth. All berths suitable for vessels able to navigate the river.

Two floating stages in "T" jetty form.

Easterly stage 272 m. long. Floating roadway 252 m.

There are 3 cranes on this stage.

Westerly stage 275 m. long. Floating roadway. No cranes.

Water depth 35 m. – 45 m. at both stages.

Warping buoys must be used when leaving stages as there are no tugs.

A third stage is planned.

A stone jetty 500 m. long will shortly be available for year round operations, when it has been fitted with Portal cranes.

Moageria Berth: Used for the discharge of bulk grain, one tube, rate 30 t.p.h.

CRANES: Ten fixed electric cranes with capacity 1.5 – 7.0 tons. Three mobile cranes, capacity 4, 6 and 15 tons. 2×25 ton Hyster lift trucks for containers.

STEVEDORES: Available.

MEDICAL: Doctors and hospital facilities available.

TANKERS: *Copam Refinery Berth:* A floating pontoon with buoy moorings ahead and astern. Vessel berths starboard side to, using port anchor.

Facilities for crude discharge. Products only loaded. No dirty ballast facilities.

No. 1 Terminal: Vessel lies to 4 buoys, and picks up a floating line, normally attached to the bank. Available for products only.

DENSITY: Fresh water.

FRESH WATER: Not suitable for drinking purposes.

FUEL: Bunker C and Diesel. Available ex-barge or at the terminals.

Petrobras Distribuidora S.A., Av. 7 de setembro, 1251 s/511. Tel: 232-5482.

Shell do Brasil S.A., Rua Ferreira Pena 222. Tel: 232-5881.

Texaco do Brasil S.A., Av. Presidente Castelo Branco 720. Tel: (092) 234-2980.

Esso Brasileira de Petroleo S.A., Rue Recife, Adrianopolis. Tel: (092) 232-1886.

Also see "General" before first port.

IDENTIFICATION CARDS: Required.

GANGWAY/DECK WATCHMEN: Compulsory.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per man. Only normal daily consumption wine/spirits allowed.

CONSULS: Following countries are represented at Manaus:

Belgium
Bolivia
Colombia
Denmark
Ecuador
France
Germany
Great Britain
Italy
Japan
Panama
Peru
Portugal
U.S.A.

REPAIRS: Very limited facilities available.

REPATRIATION: Can be arranged.

AIRPORT: Regular daily international flights from Manaus Airport.

TIME: GMT minus 5 hours.

HOLIDAYS: *National Holidays:* 1st January, 21st April, 1st May, 7th September, 12th October, 15th November, 25th December.

Municipal Holidays: Good Friday, Corpus Christi, All Soul's Day, 8th December (Devotion to Our Lady the Patroness Saint of Manaus).

POLICE/FIRE/AMBULANCE: Civil Police Tel: 22113; Maritime Police 22315; Fire 21155; Ambulance 21112.

TELEPHONES: Arrangements can be made for telephone connections on board.

SHORE LEAVE: Allowed.

SHIP SUPPLY SERVICE: Contact: Helijet Aero Taxi Ltd., Km. 4, Estr. T. Tapajos. Tel: (092) 236-2150 and (092) 236-7611 for helicopter air-lift service.

AUTHORITY: Administracao do Porto de Manaus, Rua Tagueirinha No. 25, CEP 69.000 Manaus, Amazonas, Brazil. *Telex:* (0922) 109 APMN BR. *Contact:* Fernando Lima Barbosa Vianna, Administrator.

NATAL: 05.47 S. 35.12 W. (See Plan Book)

LOCATION: Port situated on East bank of Potengi River, 2 miles from sea.

PORT LIMITS: The port area is considered to be the estuary of the River Potengi between the parallels 05° 45′ 36″ S. and 05° 46′ 42″ S.

DOCUMENTS: See "General" before first.

Clearance: The visiting area for the Health Inspector of the Ports, Federal Customs & Maritime Police is close to the point of receipt of the Pilot (05° 45′ 06″ S. – 35° 11′ 18″ W.). In special cases, these authorities may permit visits to be made with vessels already berthed. Also see "Health".

APPROACHES: *Access Channel:* This is shown on Nautical Chart 802 (DHN). Width 90 m. to 400 m. Minimum depth: 7 m. in relation to the Reduction Level of the Nautical Charts. Critical Points: The area between the entrance to the bar and the Manimbu Light.

Tides: Average speed on ebb: 3.5 knots at high tide and 1.3 knots at periods of low tides. Average speed of the rising tide: 1.5 knots coming up river.

PILOTAGE: Pilotage is obligatory from the point of receipt of the Pilot (05° 45′ 06″ S. – 35° 11′ 18″ W.) up to any point in the port area.

Request for the Pilot must be made to the Pilots' Association of the Rio Grande do Norte (Rua Silva Jardim, No. 1 – Ribeira Tel: 222-1613), with a minimum of three hours in advance of requirement. The Pilots' Association has VHF, working on Channels 6, 8, 10, 11, 12, 13 and Channel 16 (for calling up), throughout 24 hours. Normally the Pilot will be on board within 2 hours, when the request has been made on working days, during the period between 0800 hrs. and 1800 hrs. Normally Pilots go out to vessels in a red launch with the letter "P" painted in black. When very strong winds are blowing, it is recommended that Masters manoeuvre vessels in order to allow the Pilot's cutter to come alongside on the lee side.

ANCHORAGES:

(a) For vessels of more than 3,000 g.r.t. – between the access channel and the right bank of the River Potengi, with effect from the parallel of 05° 45′ 30″ S. to parallel 05° 46′ 00″ S.

(b) For vessels of up to 3,000 g.r.t. – between the access channel and the left bank of the River Potengi, with effect from parallel 05° 46′ 30″ S. to parallel 05° 46′ 48″ S. On anchoring, this must be done leaving a free area of a minimum of 80 m. in the access channel to the Almirante Ary Parreiras Base.

(c) For quarantine vessels – the area between parallels 05° 45′ 24″ S. – 05° 45′ 36″ S. and meridians 35° 11′ 06″ W. and 35° 11′ 24″ W.

(d) For pleasure craft – between the access channel and the right bank of the River Potengi, going from parallel 05° 45′ 48″ S. to the parallel of 05° 46′ 00″ S., near to the yacht club.

RESTRICTIONS:

(a) The maximum speed permitted for navigation in the River Potengi for vessels of over 20 g.r.t. is 8 knots.

(b) The access channel to the port in the area included between the bar and the Manimbu Light does not permit simultaneous traffic of vessels going in opposite directions.

Manoeuvring Area: Between the parallels of 05° 46′ 30″ S. – 05° 46′ 06″ S., in an area of 300 m. starting from the port quay and from the line which joins the North end of the quay to the North dolphin of the Terminal for PETROBRAS fuel. Depth: from 6 m. to 11 m. It is expressively prohibited to anchor any vessel in this area, which is reserved for the manoeuvres of berthing and unberthing.

MAX. SIZE: Length 520 ft., draft up to 23 ft. 6 in. at spring tides.

HEALTH: Official visit made on vessel's arrival if between 0700 hrs. and 1900 hrs. Visits can be arranged at other times.

The inspection area of the Port Health, Federal Receipt and Maritime Police authorities is 04° 45′ 06″ S. and 35° 11′ 15″ W.

TUGS: Not available.

BERTHING:

(1) *Port Quay:* 400 m. long with 13 berthing bollards. Presents a depth of 8 m. in front of warehouse A-2 and 7 m. in front of the rest of the quay, in relation to the reduction level of the Nautical Charts.

(2) *The PETROBRAS Fuel Terminal:* Situated 200 m. downstream from the port quay, has a distance between dolphins of 100 m. and a depth of 8 m. in front of them (starting from a distance of 20 m. in the direction of the port quay, the depth decreases to 7 m.).

There are no special rules; however, the process will be most rapid and safe if berthing is made port side to on an ebb tide and unberthing being effected on a rising tide.

STORAGE FACILITIES:

(1) *Within the Port:*

Warehouses: 3 for general cargo. Usable total area: 3,945 sq.m. Total capacity: 18,200 cu.m.

Cold Store: 1 with a usable area of 925 sq.m. and a capacity of 140 tons. It is rented for operation to the Companhia de Produtos do Mar (PRODUMAR).

Open Storage Areas: 2 with a usable area of approx. 10,000 sq.m.

Covered Storage Areas: 2 with an area of 800 sq.m.

(2) *In the Vicinity of the Port:*

Warehouses: 3 belonging to the Firma Comercio e Industria de Fibras, situated in the Avenida Hildebrando de Gois, 117 to 137. Usable total area: 2,400 sq.m. Total capacity 12,000 cu.m.

Silos: 2 belonging to Natal Industrial S.A. and operated by the firm Moinho Natal. Total capacity: 4,800 tons.

PORT EQUIPMENT:

Cranes: 2 electric, jib type with a capacity for 2 tons.
2 on wheeled tyres, with a capacity for 8 to 9 tons (but these are out of operation).

Stackers: 16 Yale type, 8 of them in operation and 8 out of action.

Rolling bridges: None.

Loaders: None.

Suction Units: 2 mobile on tyred wheels, with a real capacity of 10 t.p.h. From the suction units, the wheat is carried out along a subterranean gallery and from this, by a cargo transfer unit, and a transport platform to the silos of Moinho Natal.

The Port Administration has 5 trucks, 3 tractors and 2 lorries.

LOADING: When loading sugar bags, only canvas-bottomed slings to be used. Shippers will not permit loading with ordinary rope slings. Suitable slings can be hired from shore. Six slings required for each working gang.

TANKERS: Oil berth suitable for vessels up to 520 ft. length.

CUSTOMS ALLOWANCES: One opened bottle spirits and 200 cigarettes per crew member per week.

STEVEDORES: On working days, Sundays and Public Holidays the following is the work timetable:

Day period	*Night Period*
0700 to 1100 – Common Day	1900 to 2300 – Common Night
1100 to 1300 – Meal Break	2300 to 2400 – Meal Break
1300 to 1700 – Common Day	0000 to 0400 – Common Night
1700 to 1900 – Possible Overtime	0400 to 0600 – Possible Overtime
	0600 to 0700 – Meal Break

FRESH WATER:

(1) *On the Port Quay*

The supply of water is made by the Companhia de Aguas e Esgotos do Estado do Rio Grande do Norte (CAERN).

There are 12 hydrants spaced 22 m. apart with a discharge capacity of 6 t.p.h.

(2) *At the PETROBRAS Oil Terminal:*

The system of water supply is via one hydrant.

FUEL: There are no oil barges. Supply of diesel oil for vessels moored at the Port Quay is made by means of tanker lorries. Vessels can also be bunkered at the Fuel Terminal of PETROBRAS, which has a 4 in. pipe and capacity for supply of 30 to 40 t.p.h.

Orders can be made via the local ship's Agency, with a minimum of 48 hours' notice in advance.

MEDICAL: Hospitals and doctors available.

CONSULS: France, Italy, Lebanon, Portugal and Spain.

REPAIRS: There is a Naval Base at Natal, which apart from providing service to naval vessels, also deals with merchant vessels requiring repairs. The Base has seven departments, Mechanical, Naval Carpentry, Electricity, Electronics, Sails, and Painting, and a Docking System comprising two floating docks and one office ship. The Goias Dock has a capacity for vessels up to 1,000 tons and 4.80 m. draft. There is a ballasting service.

The City of Natal Dock has a capacity for vessels up to 2,800 tons and 5.80 m. draft.

Apart from other facilities, the Base has maintenance, refrigeration and kitchen services, which can be placed at the disposal of vessels during repairs to their own installations.

POLICE/AMBULANCE/FIRE: Police: Tel. 222-3656, Fire: Tel. 231-3581 or 193.

TELEPHONES: No facilities exist.

HOLIDAYS: *Local Holidays:* 6th January – Holy Kings; 21st November – Our Lady of Presentation (Padroeira).

AIRPORT: There is the Airport of "Augusto Severo" (20 km. distance from the port) situated in the Municipality of Eduardo Gomes. There are direct flights to Fortaleza, Recife and the rest of the country.

EMERGENCY CO-CORDINATION:

(a) 2 corvettes and 1 tug of the Grupamento Naval do Nordeste – These will be put into action by the command of the Third Naval District in cases of emergency on the request of the ship's Agent or his legal representative.

(b) Tugs of the concerns which operate in support to the PETROBRAS platforms, actioned by the Captaincy in accordance with the RTM, and on request of the interested party.

GENERAL: *Garbage:* There is no collection of rubbish by the Port Administration. It is the responsibility of every vessel to deposit their rubbish in a container on the quay which is collected daily by a lorry of the Department of Urban Cleansing of the Prefecture of Natal.

AUTHORITY: Companhia Docas do Rio Grande do Norte (CODERN), Av. Hildebrando de Gois, Ribeira, Natal, Rio Grande do Norte, Brazil CEP – 59.000. *Contact:* Ivan Reis de Lima, Administrator.

NITEROI: 22.53 S. 43.07 W.

LOCATION: The port of Niteroi is situated in the inlet of Sao Lourenco, on the East coast of the Bay of Guanabara. The area is covered by D.H.N. Chart Nos. 1501, 1511 and 1512.

APPROACHES: The access channel is 1,400 m. long, 70 m. wide and 6 m. deep.

PILOTAGE: Compulsory.

ANCHORAGE: See D.H.N. Chart Nos. 1510, 1511 and 1512.

MAX. SIZE: 20,000 g.r.t.

BERTHING: The manoeuvring basin is 430 m. long, 250 m. wide and 6 m. deep. The quay is 450 m. long, 7 m. depth with 20,000 sq.m. of open storage. There are 2 warehouses with a capacity of 3,300 sq.m.

CRANES: 1×1.5 tons electric jib crane, 1×46 tons mobile crane and 1×36 tons mobile crane.

BULK HANDLING FACILITIES: At the S.W. extremity of the port, in the external quay area, there is a wheat silo which is the property of Moinho Atlantico and comprises of 13 cylindrical cells with a static capacity for storage of 15,000 tons. Its construction is of reinforced concrete. This silo is connected by a Radler type elevated transporter to a pneumatic suction unit of the "Buller", type with a nominal capacity of 120 t.p.h.

PORT EQUIPMENT: Stacker trucks: 6 with a capacity of 2 to 7 tons; winch: 1 of 60 tons; tractor on wheels: 1; rolling bridges: 4 of 1,500 kg.

FRESH WATER: Available ex-quay, 14 hydrants with 2.5 in. dia., rate 20 cu.m./h. Also there are 2 barges, each with 100,000 litres capacity.

FUEL: Available from Petrobras.

REPAIRS: Can be undertaken.

HOLIDAYS: National Holidays: 1st January; 21st April; 1st May; 7th September; 12th October; 15th November and 25th December.

Regional Holidays: 24th June and 22nd November.

Movable Holidays: Monday and Tuesday of Carnival, Ash Wednesday, Good Friday and Corpus Christi.

Commemorative Holidays: 28th January (port workers); 28th August, 28th October; 30th October; 2nd November (All Saints).

TIME: GMT minus 3 hours.

AIRPORT: Santos Dumont and the International Airport of Rio de Janeiro.

GENERAL: Niteroi Port Authority serves traditionally the specific areas of the municipality of Niteroi, apart from acting as a support base for the oil rigs which operate in the Campos Basin. It is able to receive roll-on/roll-off type vessels and this port acts as an important alternative for vessels of this sort which are intended for the Rio de Janeiro region.

AUTHORITY: Porto de Niteroi, Av. Feliciano Sodre, 215, 24.030 – Niteroi – RJ. *Tel:* (021) 722-4535 and 718-3182. *Contact:* Engineer Antonio Manne, Manager.

PARANAGUA: 25.30 S. 48.30 W. (See Plan Book)

(★) Indicates information received from a ship's Agent in 1981.

PORT LIMITS: The port is limited by co-ordinates Lat. 25° 29′ 45″ S. and 25° 30′ 12″ S. Long. 48° 32′ 06″ W. and 48° 30′ 00″ W. which also include commercial and inflammable berths.

DOCUMENTS: Also see "General" before first port.

The visiting areas for the Port Health, Federal Receipt and Maritime Police are those mentioned as areas 1, 2, and 3. See "Anchorages". Normally visits are made at the quay, after berthing.

Documents for clearance inwards of foreign vessels:

a) Certificate of registration.
b) Classification document for the vessel in the port of registration.
c) International Load Line certificate.
d) Safety certificate for passenger vessels or Safety construction certificate for cargo vessels.
e) Safety equipment certificate for cargo vessels.
f) Safety certificate for radio-telegraphy or radio-telephony on cargo vessels.
g) Exemption certificate, in respect of the foregoing certificates, where applicable.
h) Safety certificate for nuclear vessels.
i) Certificate or other financial guarantee in respect of the International Convention governing Civil Responsibility in Damage caused by Oil Pollution, 1969.
Federal Receipt and Port Health Clearance.
Bill of Lading for postal purposes, where the vessel carries mail.
Copy of the payment docket in respect of the tariff for using lighthouses.
Crew list.
Written declaration from Master or Owner stating name and address of legal representative in the port.
Cargo manifest.

National Vessels:

(1) Up to date equipment roll, accompanied by extra-roll licences and those for extra tonnage.
(2) List of Crew members in duplicate.
(3) Inscription and Registration Pass Book (CIR) or pass books of personal inscription (CIP), for verification as deemed necessary;
(4) List of passengers;
(5) Load Capacity Sheet, for checking the categories of Crew members taken on board and checking the functions effected corresponding to the upper category;
(6) Cargo manifest;
(7) Terms of Inspection in dry dock and afloat or Certificate of Regularisation of the vessel;
(8) Provision of Register of the Maritime Tribunal, with statement of the name of the Master and his category or Document of Registration (CP-1);
(9) Ship's Log.
(10) Certificate of authorisation of the vessel's line or of extraordinary voyage, issued by the Superintendency of the National Mercantile Marine (SUNAMAM), except for "tramp" vessels.
(11) Certificate of Safety of Passenger vessels, for deep sea vessels and long distance coasting;
(12) Certificate of Safety of Construction of cargo vessels, for deep sea vessels and long distance coasting;
(13) Certificate of Safety Equipment on cargo vessels for deep sea vessels and coasters;
(14) Certificate of Safety of radio telegraphy and radio-telephony on cargo vessels, deep sea and coasting vessels;
(15) Certificate of Exemption, corresponding to the certificates mentioned above;
(16) Freeboard Certificate.
(17) Certificate or other financial guarantee corresponding to the International Convention covering Civil Responsibility for Damages caused by Oil Pollution, 1969;
(18) Passes issued by the Delegation of Federal Receipt (Customs), Port Health, Federal Police and Postal Authorities when the vessel carries mail bags (only for vessels destined for foreign countries);
(19) List of relatives of the Master and the Crew;
(20) Authentic Xerox copy of the last payment form of pension contributions to the INPS or FUNRURAL, paid by the Charterer or Owner;
(21) Certificate of Tonnage or tonnage calculation notes.

(★) *Documents required on arrival and amount of each:*

	Doctor	*Police*	*Customs*	*Agency*	*Total*
Provision List	–	–	3	1	4
Crew List	1	2	3	3	9
Voyage Memorandum	–	1	1	1	3
Personal Effects of Crew	–	–	3	–	3
Baggage declaration (when disembarking Crew members)	–	–	2	–	2
Health Declaration	1	–	–	–	1
Free Pratique	1	–	–	–	1
Vaccination List	1	–	–	–	1
Clearance from last Brazilian port of call	–	1	1	–	2
Cargo Manifest from each port where cargo loaded for Paranagua	–	–	1	–	1
Bill of Lading from each port where cargo loaded for Paranagua	–	–	1	–	1
Negative Cargo Manifest from each port of call where no cargo loaded for Paranagua	–	–	1	–	1

PILOTAGE: Pilotage is compulsory for foreign vessels and tankers, propane carriers and those carrying explosive cargo under the Brazilian flag, of any GRT, from the point at which the pilot boards, shown on DHN Chart No. 1821, approaching the port by the South East or Galheta channels as far as the berth.

Pilotage is optional for vessels of Brazilian flag of less than 500 GRT and for national or foreign support craft whilst they are operating in the port of Paranagua with Brazilian crews or which have in their crew a Brazilian mariner of the category of Nautical Official or Master of Coasting.

Pilotage can be requested via the Ship's Agent, 4 hours in advance, stating time of entry or departure of vessel. Vessels approaching Paranagua should contact Paranagua Radio, Channel 16 VHF, two hours prior to arrival in the Pilot waiting area.

The Pilots' Association maintains permanent watch on Channel 16 VHF, passing traffic on VHF Channels 10 and 13. (Tel. 422-0530, 422-1560 and 422-1570). The greatest restriction for Pilots is the condition of the sea, which in Galheta Channel, with the sea above force 4 – makes the passage of the pilot cutter difficult.

ANCHORAGE: Vessels must anchor in the areas circumscribed by the coordinate points mentioned below:

(a) Area "1" intended for vessels of less than 180 m. in length and a draft of less than 9.45 m. = 31 ft. Priority of anchorage is accorded in this area to vessels within these limits which have to be bunkered by TEFRAN-SEPAR, with fuel and lubricant oils for their own consumption.

Point	*Latitude South*	*Longitude West*
A	25° 29′ 32″	48° 31′ 28″
B	25° 29′ 51″	48° 31′ 28″
C	25° 30′ 01″	48° 33′ 31″
D	25° 29′ 40″	48° 33′ 31″

(b) Area "2" to the South of the Galheta Channel: intended for vessels in one of the following situations, or of the types and sizes mentioned below, with the order of priority being observed for anchorage.:

1. Vessels of any size in quarantine;
2. Vessels of any size operating with explosives;
3. LASH type vessels;
4 Vessels which require to bunker with fuel oil and/or lubricants, for their own use; and
5. Vessels over more than 180 m. overall length.

Point	*Latitude South*	*Longitude West*
A	25° 29′ 45″	48° 26′ 14″
B	25° 30′ 10″	48° 26′ 14″
C	25° 29′ 46″	48° 27′ 10″
D	25° 30′ 07″	48° 27′ 10″

Area "2" to the North of the Galheta channel: intended for vessels in one of the following situations, or of types and sizes mentioned below, observing the order of priority for anchoring in which they are located:

1. LASH type vessels.
2. Vessels requiring to bunker with fuel oil and/or lubricants for their own consumption; and
3. Vessels of more than 180 m. overall length.

Point	*Latitude South*	*Longitude West*
A	25° 29′ 08″	48° 26′ 17″
B	25° 29′ 30″	48° 26′ 17″
C	25° 29′ 34″	48° 29′ 43″
D	25° 29′ 10″	48° 29′ 43″

OBSERVATION: 1. Vessels which anchor in these areas must be positioned as closely as possible to the port of Paranagua, i.e. as close as possible to the Western limit of the area; and

2. Whilst a vessel with specific priority is in these areas, and another arrives with greater priority, it will go to another area, allowing the arriving vessel to take up position.

(c) Area "3" intended for vessels to be subjected to Health inspection by the Port health Inspectorate or authorised body. The Ship's Agents, consigners of vessels involved in such cases, must, after obtaining from the pilot the estimated time of anchorage in this area, inform the corresponding authorities, sufficiently in advance, so that appropriate action may be taken.

Point	*Latitude South*	*Longitude West*
A	25° 29′ 46″	48° 27′ 10″
B	25° 30′ 07″	48° 27′ 10″
C	25° 29′ 48″	48° 28′ 00″
D	25° 30′ 03″	48° 28′ 00″

(d) Area "4" intended for vessels with an overall length less than 140 m., and a draft less than 6.1 m. (20 ft.).

Point	Latitude South	Longitude West
A	25° 29′ 16″	48° 30′ 19″
B	25° 29′ 30″	48° 30′ 19″
C	25° 29′ 16″	48° 31′ 28″
D	25° 29′ 32″	48° 31′ 28″

(e) Area "5" intended for vessels of overall length less than 180 m. and draft less than 9.14 m. (30 ft.).

Point	Latitude South	Longitude West
A	25° 30′ 04″	48° 24′ 44″
B	25° 30′ 25″	48° 24′ 44″
C	25° 29′ 45″	48° 26′ 14″
D	25° 30′ 10″	48° 26′ 14″

(f) Area "6" anchorage for the port of Antonina.

Point	Latitude South	Longitude West
A	25° 28′ 34″	48° 37′ 41″
B	25° 28′ 51″	48° 37′ 41″
C	25° 28′ 30″	48° 38′ 37″
D	25° 28′ 47″	48° 38′ 37″

(g) Area "7" intended, exclusively, for the anchorage and berthing of barges used in transport of "off-shore" platform structures.

Point	Latitude South	Longitude West
A	25° 32′ 28″	48° 22′ 09″
B	25° 32′ 42″	48° 22′ 14″
C	25° 32′ 28″	48° 22′ 35″
D	25° 32′ 43″	48° 22′ 16″
E	25° 32′ 54″	48° 22′ 10″

(h) The anchorage for sport and recreation vessels must be effected, preferentially, in area 1 or in the River Itibere, and Cotinga Point, in accordance with the buoy restrictions. More ample details are available from the Captaincy of Ports Regulations.

RESTRICTIONS: The access channels – Galheta and South East are marked on charts 1821 and 1822 of the National Brazilian Hydrographical Dept; the Galheta Channel, normally used, is dredged to a depth of 12.00 m. (39.37 ft.) with a width of 200 m., and a length of 12 miles. The official depth of the channel is 11.28 m. (37 ft.) at high Spring tides and 10.06 m. (33 ft.) at low tides. The critical points of the channel are between the pairs of buoys 3–4 and 7–8, where there are currents running across the channel, and with a heavy sea, waves break making the departure of pilot cutters difficult. In the S.E. Channel, the depth varies from 7.62 (25 ft.) to 6.4 m. (21 ft.)

Tides: There is a difference of approximately two hours between the tide in the port and at the bar. At the Galheta Bar, the current may reach a speed of 6 knots during Spring tides. Also see "Berthing".

MAX. SIZE: See "Berthing".

HEALTH: Authorities visit vessels at the anchorage. Port Health Service Tel: 422-0594.

(★) *Note:* Compulsory Sanitary Inspection, prior to docking, is carried out at special anchorage, for vessels proceeding direct from the following countries: U.S.A., Mexico, all Central America, Trinidad, Colombia, Venezuela, Guyana, Suriname, French Guyana, all African countries, all Asiatic Countries, Australia, Polynesia.

Special areas are provided for vessels according to their lengths and drafts. Also for Sanitary Inspection special areas are provided in the vicinities of Ilha das Cobras (Cobras Island).

RADIO: Paranagua Radio, call sign PPG. VHF Channels 24, 25, 26 and 27 for vessels navigating close to the port.

TUGS: 4 private tugs owned by Wilson Sons S.A.: 1 × 2,170 h.p. (bollard pull 33.4 tons), 1 × 1,200 h.p. (bollard pull 18.5 tons), 2 × 1,680 h.p. (bollard pull 18.4 tons).

BERTHING: Manoeuvring Area: **(A)** The areas for vessel manoeuvres have a width of 700 m. along the whole length of the quay with varying depths:

1) Section "A"
   10.06 m. = 33 ft., at low tide.
   11.28 m. = 37 ft. at high tide

2) Section "B"
In section "B", between the mooring heads, from Numbers 01 to 18:
   11.28 m. = 37 ft., at full Spring tide
   10.67 m. = 35 ft., at full Neap tide
   9.45 m. = 31 ft., at low tide

3) Sections "B" and "C"
In Section "B", from mooring head number 18 as far as Section "C", and all along that section
   9.45 m. = 31 ft., at high tide
   8.23 m. = 27 ft., at low tide

4) Inflammables Quay
   a) Pier No. 2 – Internal berth
   Max. drafts:
   8.84 m. = 29 ft., at Spring high tides
   7.92 m. = 26 ft., at Neap high tides
   6.71 m. = 22 ft., at low tide
   Max. vessel overall length = 176 m.
   b) Pier No. 2 – External berth
   Max. drafts:
   11.28 m. = 37 ft., at Spring high tides
   10.67 m. = 35 ft., at Neap high tides
   9.45 m. = 31 ft., at low tide
   c) Pier No. 1 – Propane berth
   Max. drafts:
   5.79 m. = 19 ft., at Spring high tides
   5.18 m. = 17 ft., at Neap high tides
   4.57 m. = 15 ft. at low tides
   Max. overall length of vessels = 145 m.

At Section "B" berths use of pontoons is obligatory for vessels of drafts greater than 27 ft. At the section "C" berths, it is convenient to use pontoons for vessels with drafts greater than 25 ft.

(B) *Restrictions:*

(i) Max. passage 50 m. = 164 ft.

(ii) Max. speed over the bottom = 9 knots

(iii) Vessels cannot move with trim or list when at the max. draft.

(iv) The max. depths at Spring and Neap tides shown above can only be used from 3 days before to 3 days after two days of full or new moon and two days of fourth crescent or waning moon, respectively. Nevertheless, the Tide Table must be consulted for the day in question in order to ensure a sheet of water over the keel of the ship greater than or equal to 8% of the depth at Spring tides or equal to 15% at Neap tides.

(v) Vessels with drafts between 35 ft. and 37 ft., inclusive, at Neap and Spring high tides, can only be moved with tugs, without using their propellers, along Section "B" of the channel (area facing Warehouses 01 and 02).

(vi) At the internal berth of Pier No. 2, night manoeuvres can only be effected with adequate illumination so that the whole berth and the area next to the deck and bridge are clearly visible, and at the discretion of the Master of the vessel.

(vii) At the internal berth of Pier No. 2, vessels can only manoeuvre during ebb tides and when the current is equal to or less than four tenths of a knot, i.e. the manoeuvres will be effected from commencement of ebb to a maximum of 2 hours afterwards; when the draft of the vessel is equal to or less than 22 ft., manoeuvres can be effected during 2 hours prior to ebb maximum until the completion of ebb.

(viii) In berthing manoeurvres at the internal berth of Pier No. 2, the minimum distance at which the end of the vessel (bow or stern) must be to the bridge is 10 m.

Traffic in port:

(a) No crossing or overtaking is permitted by vessels in the access channel if visibility is less than 2 miles.

(b) Crossing or overtaking is not permitted when one of the vessels has a draft exceeding 7.92 m. (26 ft.), between pairs of buoys 1-2 and 13-14. The vessel which has the current running at its stern, in this event, has preference in the manoeuvre, the other vessel being required to wait for it to pass.

Stay in Port:

After completion of operations, vessels must unberth within 1 hour, except where request has been made previously to the Port Administration and approval has been given.

BERTHING FACILITIES:

(a) Quays:

(1) Commercial Quay: Total length 2,106 m. with the following depths:
   420 m. with a depth of 10 m.;
   1,170 m. with a depth of 8 m.;
   516 m. with a depth of 12.0 m.;
   Mooring bollards every 25 m.

(2) Inflammables Quay – Secondary Pier (for Propane Carriers) berthable only on the outside, for vessels with max. length of 145 m. and draft up to 19 ft.
   Principal Pier (Pier No. 2) – berthable on both sides, external and intenal. Length of 184 m. and 174 m., bollards spaced 46 m., apart.

(b) Warehouses/Cold Stores/Silos/Open storage areas:

(1) Warehouses: 21 warehouses for general cargo, with total area of 56,400 sq. m. and total volume of 282,000 cu. m.

(2) Cold Stores: One cold store for 7,000 tons, operated by a private company on rental.

(3) Silos: Two vertical silos with total capacty of 110,000 tons.
   Four horizontal silos with capacity of 68,000 tons.
   Privately-operated silos:
      One vertical of 10,000 tons.
      Nine horizontal silos, total of 285,000 tons.

(4) Open areas: General cargo – 27,000 sq. m.
   Heavy lifts 14,000 sq. m.
   Containers 22,000 sq. m.
   Fertilizers 3,000 sq. m.
   Next to the port area are many warehouses, providing a rear-area with a capacity of 1,000,000 tons.

Also see "Bulk Handling Facilities".

CARGO HANDLING EQUIPMENT:

Cranes: 18 jib cranes on rails, capacities 1.5, 3.2, 6.0, and 12 tons. Two wheeled (Lorain) cranes, capacity 136 tons and 30 tons.
Port Authority heavy lift floating crane: 110 tons capacity.
Stacker Trucks: 8×7 tons, 8×5 tons, 15×3.5 tons, 18×2.5 tons and 1×2 tons.
Rolling Bridges: 3×1.5 t.p.h. (2 at Warehouse No. 8 and one at the cold store).
Grabs: 31×2 cu.m. – 3.8 cu.m.
Tractors: 42×45 h.p. – 105 h.p.
Ro/Ro: 1 Ro/Ro ramp but dredging is required.
Side Loaders: 2×36 tons (for containers).
Suction Units: 2 fixed in the vertical silo (Warehouse No. 1). Rate 75 t.p.h. each.

There are no barges, lighters, workboats or pontoons.

BULK HANDLING FACILITIES:

Cargill (Berth 12): One loading tower of 500 t.p.h., movable over a distance of 150 m., capacity 20,000 tons (horizontal silo). Also capacity for 3,000 tons of bulk oil with capacity of 150 t.p.h.

Sanbra (Berth 6): At warehouses 6, 6a and 6b. 2 fixed loading towers, each 100 t.p.h., capacity 12,000 tons. Also two slightly movable elevators, with a total loading capacity of about 100 tons.

At the same berth there is a loading tower, movable over 180 m., with a loading capacity of 500 t.p.h. which is connected to a silo of 60,000 tons.

Gransol (Berth 4): At warehouses 4 and 5. One loading tower, 400 t.p.h., movable over a distance of 150 m. and one fixed, loading rate 100 t.p.h. Storage capacity 10,000 tons. 2×12.5 ton portal cranes for containers at Shed 5.

Socopar (Berth 2): One loading tower, 300 t.p.h., movable over 110 m. Storage capacity 64,000 tons.

Port Silo (Berth 1): (Operated by the Port Administration) one loading tower, 300 t.p.h., movable over 150 m. Storage capacity 10,000 tons.

Cargill and Sanbra can handle vessels loading to 42 ft. by using pontoons. Other installations, even with the use of pontoons, can only handle vessels loading to 30 ft.

The new grain terminal at warehouse No. 13 with capacity of 164,000 tons and 2 loading towers, movable over 200 m., loading capacity 1,500 t.p.h. each. There are two additional vertical silos each with capacity of 110,000 tons.

Cold Store: Capacity 7,000 tons.

(★) *Liquid Bulk:* Liquid bulk cargoes consist mostly of soya bean, castor, peanut and cotton seed oil. Messrs. Cargill have their own storage tanks and a loading installation capable of delivering 200 t.p.h. All other shippers effect their shipments through portable pumps connected to tank-trucks. Loading capabilities of portable pumps: 30/50/80 and 100 t.p.h. Shippers provide the pumps and hoses and particulars are:

Hoses: Lengths 32 ft., 50 ft. and 100 ft. Diameters 2 in. and 4 in.

STEVEDORES: *Working Hours:* Daywork: 0700–1100 and 1300–1700, overtime 1100–1300 and 1700–1900.

Nightwork: 1900–2300, 0000–0400. Overtime possible 2300–2400 and 0400–0600.

Same working hours are valid for Sundays and holidays with 20%–100% surcharge.

MEDICAL: All facilities available. Crew members should hold valid International smallpox inoculation certificates.

TANKERS: 2 berths, length 185 m. (outside) and 174 m. (inside). Depth alongside 9.0 m.–11.0 m. Bollards 46 m. apart. ((★) Max. drafts 31 ft. and 26 ft. respectively).

Propane Quay: Length 142 m., depth 5.79 m. Bollards 46 m. apart.

Dirty Ballast: Petrobras Terminal has tanks (capacity 4,500 cu.m.) for dirty ballast and contaminated oil. At Commercial Quay collected free of charge by road tankers.

DENSITY: Salt water at entrance of the bar. Brackish water inside the Bay, which varies with the tides: At HW: between 1013 and 1024.

At LW: between 1012 and 1013.

FRESH WATER: 47 hydrants at 45 m. intervals available along the quays, rate 27 t.p.h. There is a water barge with capacity of 400 tons., pumping rate of 80 t.p.h.

FUEL: Bunker C, fuel oil, diesel oil, Navy Special and all types of marine fuel available. Rate of supply for vessels at the Inflammables Quay: Diesel oil: 50 t.p.h. and fuel oil and mixtures: 200 t.p.h.

Bunkering of vessels in the roads or berthed at the Commercial Quay is by private barge – Empresa Transportadora "Estrela" Ltda., 1 self-propelled barge for diesel oil, capacity 185 tons, rate of supply 70 t.p.h., 1 dumb barge for fuel oil and mixtures, capacity 590 tons, delivery rate 140 t.p.h. Requests for bunkers must be made 72 hours minimum in advance through the Agencies.

FIRE PRECAUTIONS: *Fire fighting facilities:* 4 conventional fire-fighting tenders. 1 chemical spraying vehicle.

REPAIRS: Small structural and machinery repairs possible in the port. 3 firms available.

DRY DOCKS: None.

SURVEYORS: Principal classification societies are represented in the town:

Lloyd's Register of Shipping;
American Bureau of Shipping;
Bureau Veritas;
Nippon Kaiji Kiokai;
Registro Italiano Navale;
Germanischer Lloyd;
Det Norske Veritas;
Brazil Salvage S.A.

Marine Surveyors: P & B – Consultoria Navel e Industrial Ltda.
Inspect Consultoria e Peritagens Ltda.

GANGWAY/DECK WATCHMEN: At least 1 watchman is compulsory on board every vessel alongside 24 hours per day.

OPENING/CLOSING HATCHES: By stevedores.

AIRPORT: Curitiba, 80 km. from the port for national connections. Paranagua, for medium distance carriers. Air taxi service also available.

TIME: Local time 3 hours behind G.M.T.

HOLIDAYS: National: 1st January; 21st April; 1st May; 7th September; 2nd November; 15th November and 25th December. Local: 29th July and Corpus Christi (movable).

POLICE/AMBULANCE/FIRE: Civil Police 422-0101 and 422-0172. First aid 422-0111. Fire 193. Maritime Police 422-0382.

CONSULS: *In Paranagua:*

Denmark – Avenida Gabriel de Lara, 1471 Tel: 422-0605
Italy – Avenida Manoel Ribas, 317 Tel: 422-0045 and 422-0046
Norway – Avenida Gabriel de Lara, 1471 Tel: 422-0605
Paraguay – Rua Roque Vernalha, 428
Portugal – Avenida Arthur de Abreu, 29–5° andar – Sala 5
Uruguay – Rua Doutor Leocadio, 112 – Sala 102

In Curitiba:

Germany – Avenida Joao Gualberto, 1237 Tel: 52-4244
Argentina – Rua Marechal Floriano Peixoto, 228–8° andar – Conj. 803 Tel: 23-5141
Austria – Rua Marechal Floriano Peixoto, 228–17° andar – Cjto. 1707 Tel: 24-6795
Belgium – Rua 15 de Novembro, 297 – Sala 303 Tel: 23-3346 and 23-3490
Bolivia – Rua Presidente Faria, 334–4° andar – apt° 401 Tel: 22-4885
El Salvador – Travessa Oliveira Bello, 67–1° andar Tel: 22-0820
Spain – Rua Visconde de Cerro Frio, 229 – Novo Mundo Tel: 46-1714
France – Rua Lourenco Pinto, 68 Tel: 22-4906 and 22-8866
Honduras – Praca Rui Barbosa, 537 Tel: 24-9911
Italy – Rua Barao do Cerro Azul, 198 2° andar – Tel: 22-3877
Japan – Rua Marechal Deodoro, 51 6° andar – Conj. 601 Tel: 24-3861
Mexico – Rua Comendador Araujo, 795 Tel: 22-0367
Paraguay – Praca Osorio, Edificio ASA – 1° andar Sala 1002 Tel: 23-9010 – Ramal 45
Peru – Rua do Rosario, 63 Tel: 24-2827
Poland – Rua Agostinho Leao Junior, 234 Tel: 22-2472
Portugal – Rua Marechal Deodoro, 126 – 8° andar – Tel: 22-4022
Syria – Rua Ebano Pereira, 28 – 2° andar Tel: 23-3875 and 24-6691
Switzerland – Rua Marechal Floriano Peixoto, 228 – 8° andar Sala 807 Tel: 23-7553

Consulate General for the U.S.A. – Main office in Sao Paulo, Rua Padre Joao Manoel, 20 Tel: 37-5574.

REPATRIATION: Possible.

TELEPHONES: Request for installation should be made to the Traffic Section of the Port Administration.

SERVICES: Cleaning services available. Electronic repairs possible. Rubbish collected daily from drums on quay. Deratting service available. Divers available.

SHORE LEAVE: No restrictions.

IDENTIFICATION CARDS: I.D. Card, Seamans Book or passport sufficient.

DELAYS: Normally no delays.

GENERAL:

(★) *Preferential Docking:* Port Administration regulations for Preferential Docking are as follows:

1. Preferential docking is granted to vessels operating with cereals and meats in bulk at the following berths equipped with special mechanical installations:

Berth 1 – Vertical Silo, belonging to Port Administration
Berth 2 – Vertical Silo, belonging to Soceppar
Berth 4/5 – Horizontal Silo, belonging to Gransol
Berth 6 – Horizontal Silo, belonging to Sanbra
Berth 12 – Horizontal Silo, belonging to Cargill
Berth 13 – Horizontal Silo, belonging to Port Administration

2. Preferential docking is granted to vessels discharging solid bulk cargoes (fertilisers, salt, minerals) using shore cranes and grabs at berth 11. Upon arrival of such vessels, should this berth be occupied, they may dock at any other berth, shifting to berth 11 when it becomes available and only if Port Administration feel this necessary.

3. Preferential docking is granted to vessels operating exclusively with containers at berth 14.

4. Preferential docking is granted to vessels operating exclusively with liquid gas and liquid bulk cargoes at the special inflammable berths.

5. For vessels operating general cargo, docking will be granted at any berth according to time of arrival and in compliance with above mentioned preferential dockings.

6. When a general cargo vessel docks at any preferential berth, this will be done on a conditional basis, having to vacate this berth upon arrival of any other vessel with preferential docking for that particular berth, provided there is another berth available. All expenses due to shifting will have to be paid by the interested party.

7. Any vessels operating bulk and general cargo and docked at preferential berth will have to vacate this berth upon completion of loading/discharging the cargo, giving right to a preferential docking, if and whenever another vessel with the same rights should be awaiting this berth but only according to clause 6.

  a) Vessels docked at a preferential berth for a specific cargo may load/discharge simultaneously any other cargo provided this does not interfere or prejudice the loading of that specific cargo.
  b) All vessels have a right to a maximum of three loading berths being allowed to shift from one berth to another without losing their priority and will do so according to clause 6.

8. All vessels are entitled to up to three dockings.

  a) Only under special circumstances duly justified and only with the Port Administration consent may a vessel dock more than the times established in item 8.

9. A vessel may only dock when its cargo is ready for shipment and port dues (export/import) are duly paid for up to the following percentages:

  a) General and bulk cargo:
    1. Up to 50% of declared general cargo.
    2. Up to 50% of cargo declared at each loading berth.
    3. For the specific case of coffee the following percentages will be observed, duly verified by I.B.C. (Brazilian Coffee Institute):

Up to 5,000 bags coffee declared 100%
Up to 10,000 bags coffee declared 50%
Up to 20,000 bags coffee declared 35%
Up to 30,000 bags coffee declared 30%
Up to 50,000 bags coffee declared 25%
Up to 100,000 bags coffee declared 20%
Over 100,000 bags coffee declared 15%

For vessels arriving and initiating operations on a Monday morning or the day following a holiday, docking will be granted on a conditional basis, providing she has a minimum of 2,000 bags of coffee ready for immediate operation and if by 1100 hours she did not fulfil above mentioned percentages she will have to undock having to cope with all expenses and placed at the end of the line of vessels awaiting a berth.

  b) Above mentioned percentages may be altered by the Port Administration at any moment and at their discretion.
  c) So as to be able to comply with mentioned rules, all agencies must declare, without forfeit, to the Port Administration when requesting normal docking or with priority, vessel's complete bookings.
  d) Any vessels not maintaining normal loading/discharging rates will be forced to undock taking last place in line of vessels awaiting berth.

10. After load/discharge operations are completed, any auxiliary operations will have to be carried out at anchor unless duly authorised by Port Administration.

11. In order to provide proper service for vessel's discharge, all agencies are obliged to hand over to Port Administration vessel's cargo manifest and a non-negotiable copy of all bills of lading, as well as furnishing time of arrival and any alteration of same.

12. Any vessels undocking voluntarily due to lack of cargo will maintain first place in line of vessels awaiting berth.

AUTHORITY: Capitania dos Portos do Estado do Parana, Rua Benjamin Constant, 535 Paranagua-PR. CEP. 83.220 Brazil. *Tel:* 422–3033. *Contact:* Captain Ronald Cardoso Guimaraes, Port Captain.

Administracao dos Portos de Paranagua e Antonina, Av. Governador Manoel Ribas, S/No. Paranagua, Brazil. *Tel:* 422-3311, 422-0282.

PELOTAS: 31.47 S. 52.20 W. (See Plan Book)

LOCATION: The port is located on the Northern edge of the Sao Goncalo channel.

PILOTAGE: Available through Associacao dos Praticos da Lagoa dos Patos – Rua General Bacelar, 444 Rio Grande – RS. Tel: 21349.

APPROACHES: The access channel is 80 m. wide with a depth of 5.1 m.

TUGS: Delegates Services Administration tugs are used.

BERTHING: Manoeuvring basin: 120 m. wide, depth 5.1 m.

Quay: 500 m. long, depth 6.5 m.

CRANES: 3 mobile cranes, with capacities of 5 – 8 tons. Twelve stacker trucks with 1.8 tons capacity each.

BULK HANDLING FACILITIES: One Samrig type silo with a capacity of 6,880 tons.

STORAGE: 3 warehouses with an area of 7,160 sq.m., 440 sq.m. of covered storage and 14,012 sq.m. of open storage available.

FRESH WATER: 7 hydrants spaced 65 m. apart with a discharge rate of 18 t.p.h.

FUEL: Available.

AIRPORT: 10 km. distant.

TIME: GMT minus 3 hours.

HOLIDAYS: National: 1st January, 21st April, 1st May, 7th September, 15th November and 25th December.

Regional: 2nd February.

Movable: Monday and Tuesday of Carnival, Ash Wednesday, Good Friday and Corpus Christi.

Commemorative Days: 28th August (Banks), 28th October (Public Officials), 30th October (Commercial) and 2nd November (All Saints).

CONSULS: Italy (Consular Agency) and Portugal (Vice-consul).

AUTHORITY: Porto do Pelotas, Rua Conde de Porto Alegre, 1. 96.100 – Pelotas – RS. *Tel:* (0532) 2.1125 and 2-1134. *Contact:* Engineer Decio Mariante, Director.

PONTA DA MADEIRA: 02.34 S. 44.23 W.

Iron ore terminal under construction, completion expected mid-1986.

LOCATION: 1.5 km. North of Itaqui.

APPROACHES: Minimum depth in approach channel 23 m. There are 24 light buoys with radar reflectors marking the channel.

ANCHORAGE: *Waiting Areas:* Inner Area, with sea bottom of fine, compacted sand, able to accommodate 10 ships, with spacing between them of 0.6 to 0.8 miles. When Inner Area completely occupied, Outer Area available, located N.W., N. and N.E. of No. 1 and 2 Buoys.

TUGS: 4 × 3,200 h.p.

BERTHING: *Turning Basin:* 0.8 miles wide and 2 miles long, located near the Terminal, with depth ranging from 26 m. close to Ponta da Madeira, to 38 m. close to No. 21 Buoy.

Berthing Area: Sheltered area protected by 2 rockfill breakwaters. To assure safe shiphandling, berthing and unberthing operations will be avoided with ships of more than 100,000 d.w.t. when current velocities exceed 3 knots, or 4 knots in case of ships of less than 100,000 d.w.t.

Design parameters: Following ship characteristics used in design of terminal:

D.w.t.	275,588 t.
Full load displacement	219,522 t.
LOA	339.54 m.
Depth	28.30 m.
Breadth	55.00 m.
Max. draft	21.50 m.
Under keel clearance (port)	1.00 m.
Under keel clearance (channel)	2.20 m.

BULK HANDLING FACILITIES: 2×8,500 t.p.h. dual rotary cardumpers, 2×8,500 t.p.h. stackers and 2×8,000 t.p.h. bucketwheel reclaimers. 3 high-precision scales. Fully equipped sampling station, 1×16,000 t.p.h, single shuttle-boom, slewing, shiploader, designed to load vessels from 20,000 to 280,000 d.w.t. without shiphandling.

DENSITY: 1019 (HW), 1017.5 (LW) and 1018 at half tide.

FRESH WATER: Available. Rate 20 t.p.h. to 40 t.p.h.

FUEL: Not available.

OPERATOR: Cia. Vale do Rio Doce.

PORTO ALEGRE: 30.05 S. 51.15 W. (See Plan Book)

This information does not apply to Tramandai Oil Terminal which is listed separately.

DOCUMENTS: See "General" before first port.

PILOTAGE: Porto Alegre is situated 164 miles up the Lagoa dos Patos, a large fresh water lake, and vessels must take on a Pilot after receiving pratique at Rio Grande, which lies at sea entrance of lake. Pilot and authorities board after arrival at Rio Grande Inner Anchorage. Pilots arranged by Agent upon receipt of vessel's radioed ETA via Rio Grande Radio (PPJ). Since 40-mile channel between Rio Grande and Lagoa dos Patos is unlit, vessels should proceed from Rio Grande only by daylight, allowing 3 hours to negotiate channel. Vessels over 12 knots may leave Rio Grande for Porto Alegre not later than 1700 hrs. in Summer, or 1500 hrs. in Winter. Vessels under 12 knots not later than 1600 hrs. in Summer or 1400 hrs. in Winter. Entry must be made to Rio Grande at least 3 hours before these times to allow for clearance.

RESTRICTIONS: Vessels approaching Porto Alegre from the Lagoa should do so only by daylight since 30 miles access channel leading from the Lagoa to Porto Alegre poorly lit. If necessary, vessels should anchor off Itapoan Lighthouse at head of the Lagoa, to await daylight before proceeding. On arrival at Porto Alegre, free pratique must again be obtained, and crew lists, store lists, etc., again presented to authorities, who usually visit vessel in berth alongside.

MAX. SIZE: Not recommended that vessel of more than 215 m. LOA attempt to reach Porto Alegre. Max. safe draft is 17 ft. at any time.

ANCHORAGES: Inner harbour. Not normally used unless port congested. If vessels are too late for transit they must anchor at either end of the lagoon overnight.

HEALTH: Vessels receive clearance on passing Rio Grande. No yellow flag required. Also see "General" before first port.

RADIO: All messages should be routed via Rio Grande Radio (PPJ).

VHF: On arrival at Porto Alegre, vessel can use the VHF station Porto Alegre Radio (PPP). Tel: (0512) 210322 or (0512) 141. Also VHF Channels 16, 23, 24, 25, 26, 27 and 28.

Also, at short distances, when arriving at the port or manoeuvring within the port area, vessels are able to use the radio station (as yet without call sign) of the Porto Alegre Port Administration, Tel: (0512) 245733. Also transmitting on VHF with 1 Watt, on Channels 16, 9, 10, 11, 71, 12, 13 and 14.

TUGS: 1×1,680 h.p. and 4 small low-powered tugs 220, 250, 280 and 320 h.p.

BRIDGES: Vessels proceeding up-river from Porto Alegre to oil berth must pass under bridge with lifting-span. Span is lifted when approaching vessel sounds prolonged blast on siren.

BERTHING: The berths are on the East bank of the river, and the jetties stretch over a distance of 8 km.

Maua Quays: Berths "A", "A1" to "A7" and "B", "B1" to "B7". Length, 1,482 m. Depth 17 ft.

Navegante Docks: 2,433 m. long.

Cesa Grain Berth: 2 belts loading rate 100 t.p.h. each. 3 grain elevators, rate 100 t.p.h. each.

Between Maua and Navegante there are several small jetties but none capable of handling ocean-going vessels.

CRANES: *Maua Quays:* 7×3 ton portals (narrow gauge), 2×6.25 ton cranes (wide gauge), 1×12.5 ton (wide gauge), 4×3 ton portals (narrow gauge).

There are no cranes available at Navegante Docks.

STEVEDORES: *Working Hours:* 0730 – 1130, 1300 – 1700. Overtime 1700 – 1900, 1900 – 2300 and 0000 – 0400 hrs.

MEDICAL: Full facilities available. Crew members should hold valid international smallpox inoculation certificates.

TANKERS: Proceed to oil and LPG berths on Gravatai River for discharge. These berths accessible only to small tankers of up to 1,600 d.w.t. Also see "Tramandai".

DENSITY: Fresh water at all times, unaffected by tides.

FRESH WATER: Available from hydrants at all berths. Delivery rate up to 25 t.p.h.

FUEL: Available, delivered by road tanker. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Vessels at anchor and alongside must have a watchman.

OPENING/CLOSING HATCHES: Usually done by stevedores.

CUSTOMS ALLOWANCES: Each crew member allowed to keep out of bond 1 carton of cigarettes and 1 bottle of wine or spirits.

IDENTIFICATION CARDS: Necessary.

CONSULS:

British
German
French
Spanish
Belgium
Danish
Italian
Norwegian
Swedish

REPAIRS: All light deck and engine-room repairs possible. No dry-docking facilities available except for small vessels of up to 300 ft. LOA.

TELEPHONES: Connections available from warehouses A, A2, A4, A6, B, B2, O, O2 and D4.

DEVELOPMENTS: 2 new dredgers are being used to deepen the channels leading to Porto Alegre, permitting a working draft Rio Grande/Porto Alegre of 20 ft.

A new grain elevator with a capacity of 60,000 tons is expected to be ready shortly.

AUTHORITY: Administracao do Porto de Porto Alegre, Av. Maua S/No., Porto Alegre, Rio Grande do Sul, Brazil CEP 90000. *Tel:* (0512) 24-5733. *Telex:* (051) 2540 *Contact:* Roberto Schramm Barreto, Port Administrator.

PORTO TROMBETAS: 01.28 S. 56.23 W.

(See Plan Book)

LOCATION: The Porto Trombetas Bauxite Terminal is situated on the right bank of the Trombetas River, State of Para. The Trombetas River is a left hand affluent of the Amazon River.

Geographical location:

Lat. 01° 27′ 31″ S., Long. 56° 22′ 48″ W.

The shortest route through the fairway from the North Bar of the Amazon River (North Entrance) to Porto Trombetas is approximately 575 nautical miles.

The distance between the Port of Belem, capital of the State of Para, and Porto Trombetas is approximately 880 km. by air and 611 nautical miles down river.

The distance between the Terminal and Oriximina, the nearest town to Porto Trombetas, is 42 nautical miles.

DOCUMENTS:

At Anchorage on Fazendinha Roads: At anchorage on Fazendinha Roads (see "Anchorage") Port Authorities will board vessel for clearance and the following documents should be delivered to the Agent, assisting Port Authorities and Master:

1 copy Health Maritime Declaration.
2 copies Vaccination List.
5 copies Crew List.
3 copies Store List.
3 copies Crew Personal Effects.
3 copies Bonded Stores List.
Last Port Clearance.

Documents to be Presented:

Derat or Exemption Certificate.

General Declaration Form, which the Agent will present to the Master (to be filled in during clearance).

After Customs and Sanitary Guards Inspections (which takes about 1.5 hours) the Agency will deliver to the Master the Fazendinha Clearance to be presented to Port Trombetas Authorities.

A new set of the above mentioned documents less Health Maritime Declaration and Vaccination List must be ready to present at Porto Trombetas during the clearance there.

At Porto Trombetas:

(a) Documents required:

6 copies Crew List.
2 copies Store List.
2 copies Crew Personal Effects List.
6 copies Passenger List.
1 copy Ballast Declaration.

At hand to show:

Ships Data,
Fuel, Diesel, Water Quantities on Arrival,
Derat or Exemption Certificate,
Gas Free Certificate (if ore or oil vessel),

(b) Cargo papers: Master will receive copies of each of the documents listed below:

Notice of Readiness.
Bill of Lading (non-negotiable copy).
Cargo Receipt.
Stowage Plan.
Statement of Facts.
Draft Survey Result.
Manifest of Cargo.

Master shall approve and sign the Notice of Readiness, Bill of Lading, Draft Survey Result, Statement of Facts and Cargo Receipt, as required by the Shippers and Agents.

(c) Clearance: Ship's Agents will furnish clearance papers for sailing as well as the cargo manifest.

(d) From Trombetas the envelope of cargo documents destined to Ansanav Santana will be delivered to such Agents together with a Sailing Information Form (Given to the vessel's Master by Santana Agent on the up river call at Fazendinha).

PILOTAGE: Pilot service is available between Porto de Santana and Porto Trombetas. They will board and disembark in the vicinity of Porto de Santana. The Pilots will stay on board at Porto Trombetas.

ANCHORAGE: *Anchorage at Fazendinha for Visit of Authorities and Embarkation/Disembarkation of Pilots:* In order to avoid any delay due to entrance to Porto de Santana, the Port Captaincy of the State of Para and Federal Territory of Amapa has officially determined the Fazendinha area for visit of Authorities and embarkation/disembarkation of Pilots.

Such area is located around Lat. 00° 04′ 06″ S., Long. 51° 06′ 45″ W.

Whenever passing by the port of Macapa, vessels bound for Porto Trombetas are supposed to contact Messrs. "AMSANAV SANTANA", through VHF Channel 16.

Messrs. AMSANAV SANTANA will arrange the visit of Authorities and embarkation of Pilots.

NAVIGATION: *Nautical Charts:*

(a) The Nautical Charts issued by the Hydrographic Navigation Offices (Brazilian Navy) and listed below are used to navigate from the Amazon River North Bar to Porto Trombetas:

200	Maraca to Machadinho Island.
210	Vicinities (approach) of the North Bar to the Amazon River.
220	From the North Bar to Porto de Santana.
201	North Bar of the Amazon River.
202	Bailique Island to Ponta do Capinal.
203	Ponta do Capinal to Pedreira Islands.
204	Pedreira Islands to Santana Island.
205	Macapa to Santana Island.
4101A	Macapa to Mangabal Island (Santana Island included).
4101B	Mangabal Island to Comandai Island.
4102A	Gurupa to Almeirim.
4102B	Almeirim to Prainha.
4103A	Prainha to Costa do Ituqui.
4103B	Costa do Ituqui to Meio Island (Santarem included).
4104A	Meio Island to Santa Rita Island (Obidos included).
4401A	Obidos to Paru Lake (entrance Trombetas River included).
4401B	Paru Lake to Caipuru Lake (Oriximina included).
4402A	Caipuru Lake to Bacabal.
4402B	Bacabal to Erepecu Lake (Narrow Channel of Bacabal and Porto Trombetas).

All charts and publications can be altered by Notice to Mariners (Brazilian Navy information service).

(b) All nautical charts are available through the vessel's sub-Agents if required in advance.

Navigation Inwards:

(a) Undoubtedly the greatest difficulty for navigators coming from the sea is to cross the Amazon River North Bar sand banks.

Bulk carriers navigating to Porto Trombetas will be in ballast, for this reason there should be no need for them to await the high tide, in so far as at low tide, it is possible for them to cross the bar with 9.75 m. (32 ft.) draft.

(b) With adequate nautical charts, good radar and calibrated direction finder, an experienced navigator should be able to enter the North Bar of the Amazon River to Macapa without major difficulties.

Navigation Outwards:

(a) Navigation from Macapa to Ponta do Ceu offers no problem and it will not be necessary even to reduce speed.

(b) The critical section for navigation is from Ponta do Ceu to the open sea as, in addition to the 32 ft. draft, ships have to take advantage of the tide to cross banks of the North bar, where they are affected by the adverse action of a strong current.

Under such conditions ships have to be equipped with such facilities which will permit accurate positioning.

If it is necessary to wait for a suitable stage of the tide, the river provides good bottom to anchor at several places along the navigable routes.

Navigation Aids:

(a) Radio Beacon:

A radio beacon is installed at Ponta do Ceu.

The main details are:

Frequency:	290 kHz.
Signal Letters:	EH
Working Hours:	Continuous
Geographical Position:	Lat. 00° 45′ 40″ N. Long. 50° 06′ 58″ W.
Range:	300 miles.
Signal:	Ao and A^2 (1,020 H2)
Character of Signal:	(EH . . .), Twice in Ao during 10 seconds and A^2 (1,020 H2) during 5 seconds.

(b) Racon:

Racon (letter M – Morse Code) is located at Bailique Lights position (Lat. 00° 59′ 24″ N., Long. 49° 56′ 53″ W.) with a range of about 25 miles.

Mineracao Rio do Norte S.A. MRN is not responsible for the location and operation of the navigation aids.

Tidal Information: The Hydrographic Navigation Office of the Brazilian Navy based on data furnished by the National Astronomical Observatory publishes an Annual Tide Table for the majority of Brazilian ports, including the North Bar of the Amazon River – the Brigue Island, Lat. 00° 55′ N., Long. 50° 05′ W. and Porto de Santana.

(See DG 16 – 14 Tabuas de Mare (Tide Tables DG 16 – 14).

Outer Bar Tide: With reference to data published in the tide tables, Ilha do Brigue – Lat. 00° 55′ N., Long. 50° 05′ W., Charts 210, 202 and 201, the tidal time is local time (GMT minus 3 hours) and the tidal amplitude figures are shown in metres.

In position "E", Lat. 01° 34′ N., Long. 49° 09′ W., tidal time at and about this position is 4 hours earlier than shown in the tide tables for Ilha do Brigue. Tidal amplitude is 48% of the figures shown in the tide tables. In position Lat. 01° 09′ N., Long. 49° 36′ W., tidal time at and about this position is about 2 hours earlier than indicated in the tide tables for Ilha do Brigue. Tidal amplitude is 63% of the figures shown on the tide tables.

On Banco do Meio, tidal time at and about this position is 1 hour earlier than shown in the tide tables for Ilha do Brigue. Tidal amplitude is equal to the figures shown in the tide tables. Tidal currents in the area indicated as "Canal Grande do Curua", are reported to coincide with the direction of the axis of channel in that area.

Outer Bar Tide Current: On the Nautical Chart No. 210 information about tide current is furnished (see upper left side of the chart).

RESTRICTIONS:

Draft Restrictions:

Amazon River North Bar:

37 ft. fresh water at high tide.
32 ft. fresh water at low tide.

Trombetas River:

36 ft. fresh water from August to December (ebb tide season).
37 ft. fresh water from January to July.

Remarks: These figures are subject to further confirmation with Shippers and vessel's Agent.

RADIO: *Arrival Advice:* For Agency purposes vessel proceeding to Porto Trombetas shall send ETA North Bar of the Amazon River to Messrs. "AMSANAV BELEM". For your guidance, one notice is required 72 hours prior to such arrival which means vessel's passage along Entrance Buoy located at Lat. 01° 14′ 30″ N., Long. 49° 37′ 16″ W. This procedure will allow sub-Agents at Belem to convey Pilots to Fazendinha Anchorage Area accordingly. After passing along the mentioned entrance buoy, vessel shall proceed via North Channel of the Amazon River up to Fazendinha Anchorage Area located at Lat. 00° 04′ 06″ S., Long. 51° 06′ 45″ W. During such sailing to Fazendinha Anchorage Area vessel will receive from Messrs. "AMSANAV BELEM" all information regarding eventual changes in position of buoys, operations of lights and other aids.

When passing along Macapa (about 8 miles before Fazendinha Anchorage Area) Master is expected to be in contact with Messrs. "AMSANAV SANTANA" through VHF Channel 16. At that time all instructions for vessel's anchorage at Fazendinha in order to receive visitation of Authorities will be forwarded by Messrs. "AMSANAV SANTANA".

When leaving Fazendinha Anchorage Area, Master will be requested to inform local sub-Agents of ETA at mouth of the Trombetas River to be re-transmitted to "DOCENAVE" Porto Trombetas.

Before entering the Trombetas River, Master must obtain "Confirmation for Entrance" from Shipper's Dock Master through VHF Channel 16.

TUGS: One tug of approximately 30 ton bollard pull and one line handling boat are available for berthing and unberthing.

BERTHING:

Bauxite Loading Terminal: The bauxite loading terminal is equipped to load ore carriers up to approximately the Panamax Size.

The maximum loading rate is 6,000 tonnes p.h. but the average loading rate is estimated at 4,200 tonnes p.h. The pier is 100 m. long and the maximum permissible air draft (the distance from the waterline to the top of the hatch coaming) is 13.50 m. at the high water period. The mooring system consists of four concrete dolphins upon metal piling and four mooring buoys.

Accommodation for Vessels:

(a) One vessel can be berthed at the loading dock. Two waiting vessels can be secured to mooring buoys about 1.8 miles downstream from the berth. A secondary waiting area is located West of the mouth of the Trombetas River in the vicinity of Lat. 01° 54′ S. and Long. 55° 40′ W. There is good holding ground in this area and some protection from canaranas and other floating debris.

(b) The movement of all vessels within the Trombetas River system is under the control of MRN. Up-bound vessels are not permitted to enter the Trombetas River without prior clearance from MRN. Such approval can be obtained by contacting MRN or DOCENAVE on VHF. In case such permission has not been received, the vessel shall anchor at the secondary waiting area in the Amazon River until it is granted. This is necessary because there are two areas within the Trombetas River where vessels are not permitted to pass. Vessels will normally be loaded at Porto Trombetas in order of arrival, provided that they are within their lay-day period as previously agreed with MRN.

Berthing and Unberthing: For berthing and unberthing the width of the channel in front of the terminal is currently 300 m.

Manoeuvring of vessels should be performed at Master's and Pilot's discretion.

Fendering: No fenders are needed for docking. The terminal is equipped with permanent fenders.

Anchor: The use of vessel's anchor during manoeuvring is permitted at Master's and Pilot's discretion.

Loading Hours: 24 hours a day, Sundays and holidays included.

Hold Condition: No cleaning crews are available.

Holds should be cleaned prior to arrival and they will be inspected before acceptance of vessel.

Loading Operation: The bauxite is transferred from the stockpile to the ship's holds through a conveyor belt system and automatic shiploader.

The shiploader boom moves horizontally around its hinge with an angle of 53° 24′ 44″ to each side.

The loading operation usually starts soon after the vessel is alongside and cleared by the Authorities.

The air draft (that is, the distance from the waterline to the top of the hatch coaming) is 13.5 m. (minimum) in July and 19.0 m. (maximum) in December.

The stowage factor for dried bauxite is 25 cu.ft. per ton up to 28 cu.ft. per ton depending on moisture content of the bauxite.

Careful check of vessel's draft and trim should be made by the ship's officers at all times during loading operations. Cargo is belt trimmed only.

The cargo weight should be determined by the "ship's displacement" method (light versus loaded draft survey).

Tonnage on the conveyor belt system between stockpile and ship is approximately 275 tons. This tonnage must be discharged into the holds to complete the loading.

MRN reserves the right to require any vessel to undock after loading and completing the necessary formalities in order to permit another vessel to berth or for any other reason.

GENERAL CARGO WHARF: MRN handles general cargo at a general cargo wharf 350 m. downstream from the shiploader.

MEDICAL: Medical service may be arranged at the MRN Hospital, in emergency. Health conditions in the region are good. No epidemics or tropical diseases are recorded in the region.

BALLAST: Vessels are not allowed to discharge salt ballast into the Trombetas River. Salt ballast can be discharged into the Amazon River up till Almeirim Island.

POLLUTION: No facilities are available at the terminal to receive slops, salt water or contaminated ballast.

Discharge of any material other than clean ballast will be subject to heavy penalties as prescribed by the Brazilian law. It is not permitted to discharge salt water ballast into the Trombetas River.

TANKERS: Tankers discharge bulk fuels at a floating pier situated about 400 m. upstream from the Terminal.

FRESH WATER: Available subject to prior consultation with MRN.

FUEL: Not available.

CONSULS: None.

AIRPORT: The nearest international airport is Manaus (capital of the State of Amazon). There is a domestic airline service between Manaus and Santarem, Belem and Santarem, and Santarem-Porto Trombetas.

REPAIRS: Small repairs can be undertaken by MRN workshop in extreme emergency only.

SURVEYORS: There is no Classification Society surveyor at Porto Trombetas. Whenever needed a surveyor can be appointed, who will come from any other Brazilian port by plane.

P & I Club: Not available at Porto Trombetas. Administrative assistance and legal advice on matters concerning ship's civil liability to third parties can be obtained from a representative in another Brazilian port who will come by plane.

TIME: Local time is GMT minus 4 hours.

IDENTIFICATION CARDS: Crew and Passengers: There are no restrictions by the local authorities, but crew members and passengers should carry their identification papers when on shore. Visits to the industrial area require prior approval of MRN.

GENERAL:

Weather:

(a) Rain: during the rainy season precipitation is usually heavy but of short duration.

(b) Wind: from July to December, East and E.S.E. winds predominate and they are usually moderate with occasional strong gusts.
From January to June calmness predominates followed by N.E. winds backing to S.W. with persistent showers. The predominant wind speed is 10 knots.

(c) Haze is rare in the Amazon River, but it is more frequent in the Trombetas River, particularly early in the morning.

Tide and Current: In the Porto Trombetas region, the current may reach 2 knots during high water season (January to July).

Temperature: An average of 30°C.

Mail: Ship's and crews' mail should be addressed to: Mineracao Rio do Norte S.A., MRN legal domicile:

Avenida Almirante Tamandare, 1.114
Belem – Para – Brasil
CEP 66.000.

Telephone: Telephone communication between Porto Trombetas and the rest of Brazil and also international calls are available.

Telephone number: (091) 544-1462
(091) 544-1335

Telegraph: There is no public station in Porto Trombetas. Telegrams from Porto Trombetas must be sent through the vessel's Agent.

Services:

Ship chandlers and laundry not available.
Derat and Fumigation not available.
Electricity not available for supplying vessels.

Porto Trombetas Port Captaincy: The Brazilian Navy has installed an Agency at Porto Trombetas with the purpose of controlling all vessels destined to the port.

MRN recommends that the Brazilian Pollution Regulations be carefully observed.

The Port Captaincy is located in the vicinity of the shiploader and for any communications, this Port Authority can be reached at the following Telex and Telephone numbers:

Telex: (091) 1470
Telephone: (091) 544-1462
(091) 544-1335

Agency:

All ships will be attended by Vale do Rio Doce Navegacao S.A. – DOCENAVE through its regional office in Porto Trombetas, and DOCENAVE's sub-Agents in Belem and Porto de Santana (Agencias Mundiais Ltda.):

DOCENAVE's head office:
Rua Voluntarios da Patria, 143
Rio de Janeiro, State of Rio de Janerio
22.270, Brasil
Telephone: (021) 286-8002
Telex: (021) 22142, 22249, 22730
Cable Address: "DOCENAVE RIO DE JANEIRO"

DOCENAVE's regional office:
Trombetas, State of Para
68.270 Brasil
Telephone: (091) 544-1335
Telex: (091) 1470
Cable Address: "DOCENAVE PORTO TROMBETAS"
Manager: Mr. Marcos Sant'Anna
*Home Phone: (091) 544-1335

DOCENAVE's sub-Agents:
Agencias Mundiais Ltda.
Av. Presidente Vargas, 121, 2° andar
P.O. Box 190
Belem, State of Para
66.000 Brasil
Telephone: (091) 224-4822
Telex: (091) 1184 and (091) 1799
Cable Address: "AMSANAV BELEM"
General Manager: Mr. R. J. Burnett
*Home Phone: (091) 235-0359
Assistant Manager: Mr. E. A. St'Roas
*Home Phone: (091) 222-4078
Agencias Mundiais Ltda.
Av. Senador Filinto Muller, 1445
Porto de Santana, Federal Territory of Amapa
68.900 Brasil
Telephone: (632) 6669, 6663, 6639, 6629
Telex: (091) 1708
Cable Address: "AMSANAV SANTANA"
Manager: Mr. Assis de Souza
*Home Phone: (621) 5669

SHIPMASTER'S REPORT: November 1980.

Vessel visited Porto Trombetas on November 23rd until 25th, 1980 for loading a full cargo of bauxite ore. This port is situated on the righthand side of the Trombetas River, State of Para, a lefthand affluent of the Amazon River, approximately 575 nautical miles from the open sea.

All vessels destined for Porto Trombetas are cleared inwards at Santana, Federal Territory of Amapa, as being the first Brazilian port of call.

On arrival at Porto Trombetas, State of Para, the vessel was visited again by Customs and Federal Police in order to clear the vessel for this "Port of Call". Again several documents were needed. On departure from Porto Trombetas a "Harbour Master's Clearance" is received which has to be handed over to the Santana Authorities, usually via the River Amazon Pilots leaving the vessel in Santana, in exchange for a clearance from that port, delivered by pilot launch.

OPERATORS: Mineracao Rio do Norte S.A. – MRN

Legal Domicile:

Avenida Almirante Tamandare, 1.114
Belem – Para
CEP 66.000
Telex: (091) 1154
Telephone: (091) 222-6800

Works:

Mineracao Rio do Norte S.A. – MRN
Porto Trombetas
Municipio de Oriximina
PARA
CEP 68.270
Telex: (091) 1470
Telephone: (091) 544-1462
(091) 544-1335
Cables: "RIONORTE".
Contact: Captain Jorge A. Chaves (Dock Master).

Main Office:

Praia do Flamengo, 200 – 6° andar
Rio de Janeiro
CEP 22.210
Telex: (021) 23352
Telephone: (021) 205-9112
Cable: "RINORTE".

RECIFE (Pernambuco): 08.04 S. 34.52 W.
(See Plan Book)

PORT LIMITS: West of Longitude 34° 50′ W. and between Latitudes 08° 00′ S. and 08° 07′ S.

DOCUMENTS: Most of the documents required by the local authorities are presented by the vessel's Agents after arrival.

Master must have on hand, on arrival the following documents:
7 Crew lists.
1 International Health Declaration completed and signed.
Clearance from last port of call.
Manifests of the cargo to be discharged.
Copies of bills of lading of the cargo to be discharged.

PILOTAGE: Compulsory. Pilots board the vessel at Southern end of Banco Ingles, at approximate position Lat. 08° 05′ S., Long. 34° 50′ W. Vessels must give accurate ETA to their Agents, not to the Pilot Association, however when within VHF range, vessel should communicate with the Pilot Association, if no instructions have been received from the Agents or the Pilot does not board upon arrival.

ANCHORAGES: Most favourable position for ships to await pilot boat is 1.5 miles in direction 303° from "Picao", also just outside the 6 fathom line. In fine weather ships can sail to a position 8 cables from "Picao" in same direction just South of buoy. Anchorage in fine weather between above-mentioned places; in bad weather more than 1.5 miles in direction 303° from "Picao" and North and South of line, in water of 7 and 8 fathoms depth.

RESTRICTIONS: Vessels only enter port at night in cases of necessity. 3 ft. under keel clearance required when heavy swell running.

The port is situated between 2 channels, 1 to the North, the other to the South, which are the main fairways of the port. The Southern Channel is 850 ft. wide by 32 ft. 6 in. deep and the Northern Channel is 32 ft. deep but with variable width.

Tankers: May enter and leave during daylight only (0500 – 1800 hrs.). Also see "Tankers".

MAX. SIZE: Vessels 220 m. in length can enter, max. draft 31 ft. Also see "Tankers".

HEALTH: Free pratique is granted by radio at any time, day or night. Masters must radio to "Saporto Recife", informing sanitary conditions of the vessel, reporting any case of sickness and requesting free pratique.

RADIO: A very powerful radio station "PPO"-Olinda Radio now available, operating on radiotelephony and radiotelegraphy, with VHF and HF in all maritime frequencies.

RADAR: No facilities available.

TUGS: Pilot brings vessels to inner harbour where tugs available to help to go alongside; not practice for tugs to meet vessels on Outer Roads. 3 tugs available, largest 1,680 h.p. Vessels up to 5,000 g.r.t. require 1 tug. Vessels over 5,000 g.r.t. require 2 tugs.

BERTHING: Vessels arriving at Recife Roads with 26 ft. can enter port on low tide and can go alongside from Sugar Terminal to Warehouse No. 9, over 26 ft. it is better to wait for high tides to enter, 31 ft. being the max. draft for entering Recife.

Depth alongside wharves:
Warehouse No.1 – 1A: 31 ft.; No. 7 – 9: 25 – 26 ft.
Warehouse No. 2 – 6: 30 ft.; No. 10 – 11: 25 ft.
Warehouse No. 12 – 15: 24 ft.;

At anchorage (pool) in port, max. draft is 31 ft. Depth between 32 ft. and 26 ft., the max. rise of tide being 5 ft. Distance from the quay side, 200 m. Manoeuvring space is 1,640 ft. or 500 m. with a depth of 28 – 30 ft. max.; 590 ft. or 180 m. with a depth of 26 ft.

SPECIAL CARGO FACILITIES: *Cereals:* Silos with unloaders. Silos capacity: 25,000 tons (CAGEP), 23,500 tons (Moinho Recife).

Capacity of unloaders: 400 t.p.h. (Warehouse No. 1), 100 t.p.h. (Warehouse No. 9), 150 t.p.h. (Warehouse Nos. 9 – 10).

Sugar: Sugar Terminal: warehouse capacity 200,000 tons, capacity of loader 1,000 t.p.h.

Molasses: Tanks: capacity to store 14,000 tons, capacity of loader 120 cu.m.p.h.

Cranes:

1 Crane with capacity of 20 tons (Warehouse Nos. 5 – 6).
1 Crane with capacity of 8 tons
6 Cranes with capacity of 5 tons
28 Cranes with capacity of 1.5 tons
5 Automobile cranes with elevated cab capacity of 8 tons, with 2 clamshell and 2 graiffers.

Fork Lifts:

1 special fork-lift for containers with capacity of 40 tons.
79 fork-lifts with capacity of 2.5, 3, 4 and 7 tons.

Floating Crane:

1 floating crane, capacity 100 tons.

STEVEDORES: Advise Agents of ETA at least 48 hours prior to arrival to make necessary berthing arrangements and hire dock labourers and stevedores in time.

MEDICAL: In *urgent cases* communicate with Agents immediately by means of Radio at least 48 hours prior to vessel's arrival if possible. It is necessary for vessel to enter port to enable sick person to land because on outer roads there is too much swell. Not necessary to Dock. Port Doctor must be advised by Agents and will board to see sick person and grant permission to land in Recife temporarily. Hospitals available also First Aid Stations equipped with ambulances. Port Authority also equipped with ambulance. Crews should always have yellow fever and small-pox inoculation certificates.

TANKERS: Oil companies who keep petroleum products here are: Petrobras, Esso, Texaco, Shell and Atlantic. To discharge petroleum products tankers utilise Warehouse Nos. 1, 1-A and 2, but only berth of Warehouse No. 1-A is considered by the Port Authorities as inflammable berth. Max. safe draft for a tanker to enter Recife is 30 ft. and entry must take place on high tide.

DENSITY: Low water density in Summer time 1028. High water density in Summer time 1027.

FRESH WATER: Supplied by Port Administration by means of pipelines in the docks. Vessels can be supplied alongside any quay; water fit for human consumption.

The local Port Administration has 1 water barge, capacity 240 tons, for supply to vessels inside the breakwater.

There are 92 hydrants, diameter 2.5 in., rate 15 – 20 t.p.h.

FUEL: *Fuel Oil:* This can be loaded between Warehouse Nos. 1 to 7 by existing network along the quay. At Warehouse No. 1 there is 1×10 in. take-off point and 2×12 in.; Warehouse No. 2 has 1×10 in. take-off and 2×12 in.; No. 3 there are 2×6 in. and 1×8 in.; at Warehouse No. 5 1×8 in.; at Warehouse No. 6 1×8 in. – all with a capacity of 60 to 100 t.p.h. and from Warehouse No. 8 to No. 15 tanker trucks with a capacity of 40 t.p.h. Also see "General" before first port.

Diesel Oil: At Warehouse No. 1 there is 1×6 in. take-off and 1×8 in.; at Warehouse No. 2 there is 1×6 in. take-off and 1×8 in.; at No. 3, 2×6 in. with a capacity of 40 – 50 t.p.h.; at other warehouses this supply is effected by tanker trucks.

GANGWAY/DECK WATCHMEN: Compulsory.

OPENING/CLOSING HATCHES: Normally by stevedores but crew helps when stevedores not familiar with hatches of modern vessels.

CUSTOMS ALLOWANCES: One carton cigarettes and one bottle of spirits allowed each man at Customs discretion.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS: The following countries are represented in Recife/Pernambuco:

Argentina
Belgium
Costa Rica
Czechoslovakia
Denmark
El Salvador
Ecuador
Finland
France
Germany
Great Britain
Guatemala
Honduras
Italy
Japan
Lebanon
Mexico
Netherlands
Norway
Portugal
Sweden
Switzerland
Spain
United States

REPAIRS: Available but limited to small mechanical equipment.

SURVEYORS: 1. Supervise and Superinspect are companies available to do cargo surveys.

2. Lloyd's Register, A.B., B.V., Salvage Association and U.S. Salvage are available at the port.

REPATRIATION: Facilities by air available.

AIRPORT: Situated 9 miles from docks. 228 flights per week.

TIME: GMT minus 3 hours.

HOLIDAYS: *National Holidays:* Fraternidade Universal (January 1st); Tiradentes (April 21st); Labour Day (May 1st); Brazil's Independence Day (September 7th); Commemoration of the Republic (November 15th); Christmas Day (December 25th).

State Holidays: Nossa Senhora da Conceicao (December 8th); Nossa Senhora do Carmo (July 16th); Carnival 3rd Day; Good Friday, Memorial Day (November 2nd).

POLICE/AMBULANCE/FIRE: Harbour Police Tel: 2241686. Port Administration Fire Brigade Tel: 224007. State Fire Brigade Tel: 193. Ambulance (First Aid) Tel: 192. State Police Tel: 190.

BANKS: City Bank – Av. Marques de Olinda, 126. Tel: 224.7922. Telex: (081) 1093.

Bank of London – Rua Estreita do Rosario, s/no. Tel: 224.3729. Telex: (081) 1173.

STORING: See "Prelims" page viii.

1. Vessel can be stored only by trucks.
2. Vessel cannot store from barges. Storing must be done directly onto/from wagons and warehouses.
3. Trucks can proceed alongside at the berth.
4. Fork-lift trucks can be used on the jetty to handle stores.
5. As a rule, when cargoes go to the warehouses they must pay in advance a fee corresponding to one month's rent, which costs 1% of the value of the cargo. If the cargo remains another month then 2% of its value must be paid as a fee. If the owner of the cargo doesn't clear it through Customs in 3 months it will be confiscated. Certain kinds of cargoes, such as, fertilizers, wheat, corn, oil derivated goods and rollers have an anticipated dispatch and there will be 6 days free-of-charge for them to take them out of the port.
6. Local Riggers can be employed to assist with storing.

TELEPHONES: Can be connected on board if requested.

DEVELOPMENTS: Plans are underway to dredge the access channel to 11.5 m. It is also intended to construct new berths for general cargo and molasses tankers, and to modernise the existing berths.

AUTHORITY: Administracao do Porto do Recife – Portobras, P.O.Box 720, Praca Artur Oscar – s/no, Recife, PE, Brazil 50.000. *Tel:* 231.4044, 231.4144. *Telex:* 1018. *Contact:* Gilberto Barreto da Costa Pereira, Administrator.

REGENCIA: 19.41 S. 39.41 W.

This terminal is located on the East coast of Brazil in the State of Espirito Santo, approximately 80 km. to the North of Vitoria. It consists of an oil storage area, a pipe-line both on land and underwater with a diameter of 16 in., 4 km. long and a set of buoys for mooring vessels. Its purpose is storage and passing to production of oil products from the fields of the State of Espirito Santo, principally the field of Lagoa Parda which is next to the terminal.

The set of buoys is designed to handle vessels up to 50,000 g.r.t., permitting a maximum draft of 13 m.

PILOTAGE: The area has Pilots to attend to the manoeuvring of vessels at the buoys.

TIME: GMT minus 3 hours.

RIO DE JANEIRO: 22.54 S. 43.12 W. (See Plan Book)

(A) GENERAL CARGO SECTION. (B) TANKER SECTION.

(A) GENERAL CARGO SECTION

LOCATION: The port of Rio de Janeiro is located geographically in the inlet on the coast (Western) of the Bay of Guanabara, in the city of Rio de Janeiro, capital of the state of Rio de Janeiro.

DOCUMENTS: See "General" before first port.

CLEARANCE: All clearance is taken care of at the quarantine anchorage (pratique, Custom's immigration). Accommodation ladder must be rigged for this purpose.

Shipmaster's Report: Clearance also carried out alongside.

After clearance by the customs a dark blue flag with a white five-pointed star in the middle must be shown day and night during vessels stay in port. Deratisation service is available. Inspection of the vessel will be made by inspectors to whom the valid deratisation or derat-exemption certificate must be shown.

PILOTAGE: The pilotage service is compulsory for national vessels of more than 42 ft. length and for foreign craft of more than 37 ft. length, in the following situation: From the Waiting Zone, in the anchorage (about 2 nautical miles to the North of Rasa Island), for any anchorage within the Bay of Guanabara.

Pilots board vessels at the following geographical point:

Latitude: 22° 02′ South
Longitude: 43° 08′ West

Requests for pilotage service may be made via the ship's Agent by telephone 24 hours ahead of the ship's arrival, or to Av. Rio Branco No. 4 – Room 1501, there being available a total of 33 Pilots.

Pilots may also be requested by cable, via Station PPR – Radio Rio, operating on frequencies 17,194; 13,105; and 8364 kHz. or via Channel 16 VHF for general call-up. For pilotage and other purposes, using Channels 14 and 12.

HEALTH: Vessels from another Brazilian port automatically receive free pratique and should not fly quarantine flag. If suspected disease or fever on board it is advisable to cable Agent before arrival. Also see "General" before first port.

ANCHORAGE: In the Rio de Janeiro port area, the following areas are designated for anchorage of vessels coming into port.

Anchorage for vessels up to 22 ft. (6.7 m.) draft Anchorage No. 3. Within 300 m. radius of position Lat. 22° 51′ 1″ S., Long. 43° 10′ 8″ W.

Anchorage for vessels with 22 ft. (6.7 m.) draft or more within 800 m. radius of position Lat. 22° 51′ 5″ S., Long. 43° 08′ 6″ W.

Vessels impounded or requiring extensive repairs: position determined by the Port Captaincy for each specific case.

Vessels in quarantine: position Lat. 22° 50′ 7″ S., Long. 43° 08′ 6″ W.

Vessels carrying explosives and inflammable material: position Lat. 22° 51′ S., Long. 43° 11′ W.

RESTRICTIONS: Port is accessible to all vessels at all times and states of the tide. Attention must be paid to messages sent by Rio Radio about forbidden areas due to Marine exercises with live ammunition along the coast near entrance to the port.

Access Channel: Access to the port for large vessels is via a channel well dredged to a depth of 17 m., passing close to Copacabana Beach, and to the West of the island of Cotunduba. This channel goes as far as the port basin area, reaching also the oil terminals located inside the Bay of Guanabara. The safety depth located directly to the South of Leme Bridge is 20 m.

The Access channels to Gamboa, Sao Cristovao, Caju and the Mineral and Coal Area are dredged, respectively, to depths of 10 m., 8.5 m., 6.0 m. and 12 m.

The total length of the main access channel is 18,500 m. There being a distance of 11,100 m. between the outer part of the Bay to the anchorages, and the other 7,400 m. in a Northerly direction, from the anchorages to the Almirante Tamandre Oil Terminal. Depths vary from 20 m. to 35 m.

Access channel to the quays:

	Length (m.)	Width (m.)
1. Maua Pier Quay	—	—
2. Gamboa Quay	3,000	250
3. Sao Cristovao Quay	4,000	150
4. Caju Quay	5,000	80
5. PMC Quay (Oil Mineral & Coal)	3,000	150

Manoeuvring Basin: Such basins are located in the actual access channels to the quays. Normally, vessels manoeuvre off the quay and in front of their intended berth. The areas available at the various quays are as follows:

	Length (m.)	Width (m.)
1. Maua Pier Quay	400	200
2. Gamboa Quay	3,000	250
3. Sao Cristovao Quay	1,000	150
4. Caju Quay	1,000	80
5. PMC Quay	760	200

MAX. SIZE: No limits for entering port. Draft limited by berth depth.

RADIO/VHF: Rio Radio, call sign PPR. Working frequencies 17,194; 13,105; and 8,364 kHz. VHF marine radiotelephone is available. Channel 16 for general call, Channels 14 and 12 for Pilot and harbour purposes.

TUGS: There is adequate tow-boat service at Rio de Janeiro varying from 220 h.p. to 1,200 h.p., tariff being divided into sections – 200 h.p. to 600 h.p. and 601 h.p. to 1,200 h.p. The number of tugs to be employed in a service depends on the tonnage of the vessel and/or nature of the berth and respective approaches, as determined by the naval authorities. Ship's lines usually employed.

Requirements: The assistance of tugs for mooring and departure operations is governed by the following rules:

(a) Manoeuvring at the Gamboa and Sao Cristovao Quays:
- vessels up to 2,000 g.r.t. no tug.
- 2,001 to 5,000 g.r.t. 1 small tug.
- 5001 to 15,000 g.r.t. 1 large and 1 small tug.
- 15,001 to 30,000 g.r.t. 2 large and 1 small tug.
- over 30,000 g.r.t. 2 large and 2 small tugs.

(b) Manoeuvring at the Caju Quay (warehouses 31 to 33):
- vessels up to 2,000 g.r.t. without tug.
- 2,001 to 5,000 g.r.t. 1 small tug.
- 5,001 to 15,000 g.r.t. 1 large tug and 1 small tug.
- over 15,000 g.r.t. 1 large tug and 2 small tugs.

(c) Manoeuvring at the Mineral and Coal Quay:
- vessels up to 2,000 g.r.t. without tug.
- 2,001 to 5,000 g.r.t. 2 small tugs.
- 5,001 to 15,000 g.r.t. 2 large and 1 small tug.
- over 30,000 g.r.t. 3 large and 1 small tug.

(d) Manoeuvring at the Petroleum Terminals, Maua Pier and Docks:
- vessels up to 4,000 g.r.t. 1 small tug.
- 4,001 to 15,000 g.r.t. 1 large and 1 small tug.
- 15,001 to 30,000 g.r.t. (loaded) 2 large and 1 small tug.
- 15,001 to 30,000 g.r.t. (in ballast) 2 large tugs.
- over 30,000 g.r.t. (ballast) 3 large tugs.
- over 30,000 g.r.t. (loaded) 3 large and 1 small tug.

The following must also be observed:

1. All vessels (tankers) manoeuvring at quays which are not terminals will be assisted by tugs as shown in section *(d)*.
2. The requirements in sections *(a)*, *(b)*, *(c)* and *(d)* will apply when the manoeuvre is effected under normal conditions.
3. In abnormal conditions, and according to the Pilot's judgement, other necessary measures will be adopted to ensure safety of the manoeuvre.
4. When a vessel is manoeuvring with the aid of a tug, the Pilot may call for a further tug with power compatible with the requirements of the manoeuvre.
5. A tug will be considered as large where its power is in excess of 600 h.p.

BERTHING: Berth usually accessible day and night. Ratguards obligatory.

For vessels loading iron ore, it is important that hatch coamings are not higher than 31 ft. above the water-line in order to pass under the loading belt.

Berth	*Length (m.)*	*Depth (m.)*	*Use*
1	150	9.1	General cargo, containers, steel
2	150	9.1	General, steel, chemical products, containers
3	150	8.3	General, steel, chemical products, containers
4	150	8.2	General, steel, containers
Maua 1	165	7.3	General cargo, containers
Maua 2	160	9.8	General cargo, steel, coal, minerals, containers, vehicles
Maua 3	160	9.2	General cargo, coal, chemical products, containers and new vehicles
Maua 4	160	8.3	General cargo, containers, steel, new vehicles
5	280	8.8	General cargo, steel, wheat, containers
7	150	9.1	General cargo, steel products, chemicals, containers
8	150	10.3	General cargo, steel, coal, containers
Frigorifico	150	8.5	General cargo, steel, containers
10	150	8.8	General cargo, steel, containers
11	150	9.1	General cargo, steel, containers
12	150	8.3	General cargo, steel, containers
Patio 8/9	150	9.2	General cargo, steel, fertilizer, coal, minerals, containers
13	150	7.4	General cargo, steel, containers
14	150	7.9	General cargo, steel, containers
15	140	9.0	General cargo, steel, lubricating oil, containers
16	140	8.8	General cargo, containers
17	140	8.2	General cargo, containers
18	140	7.2	General cargo, containers
22	240	7.1	General cargo, wheat, coal, minerals, salt, containers, ro-ro
Terminal de Sal	120	8.5	Coal, salt, containers
Parque de Carvao	790	8.0	General cargo, steel, fertilizer, chemical products, containers, ro-ro, new vehicles, coal, minerals, lube oil
30	100	7.0	General cargo, steel, containers, ro-ro
31	200	5.6	General cargo, containers
Parque de Inflamaveis	550	6.4	General cargo, steel, petroleum, vegetable oil, chemical products, containers
Parque de Minerio e Carvao I	480	12.0	General cargo, coal, minerals, containers
Parque de Minerio e Carvao II	280	13.0	Coal and minerals

Report: Companhia Docas do Rio de Janeiro advised the following in December 1982.

Quay	*Length (m.)*	*Depth (m.)*
Pier Maua	808	11.0
Cais da Gamboa	3,325	7.2–10.3
Cais de Sao Cristovao	1,325	6.0–8.5
Cais do Caju	300	5.2–6.4
Cais do PMC	483	11.7
Extension of PMC	282	12.0

CARGO FACILITIES:

Passenger Station: with an area of 2,035.5 sq.m.

Storage Areas: Covered (14) with an area of 14,215.95 sq.m.
Open – (20) with an area of 1,149,298.40 sq.m.

Warehouses: Internal – 22 with a total area of 93,600 sq.m.
External – 9 with a total area of 66,724 sq.m.
Refrigerated: area of 27,864 sq.m., volumetric capacity of 66,240 cu.m. or 15,200 tonnes.
Passenger Station – 1 with an area of 2,033 sq.m.
English Mill Area – 1 with an area of 2,033 sq.m.
Containers: 1 warehouse with an area of 7,000 sq.m.

Silos:

Rio de Janeiro Mill:
1 with 24 cells with 6,000 tons capacity
1 with 40 cells with 12,000 tons capacity
1 with 17 cells with 20,000 tons capacity.

Da Luz Mill:
1 with 42 cells with an individual capacity of 320 tons and a total of 15,000 tons.

Guanabara Mill:
10 with 1,500 tons capacity each.
2 with 380 tons capacity each.

Observation: There are 5 suction units for wheat discharge, with a nominal capacity of between 70 t.p.h. and 160 t.p.h.

Terminals:

Coal:
Movement capacity: 11,000 tons per day
Storage capacity: 130,000 tons in two heaps of 65,000 tons each.
Normal removal rate: 550 t.p.h.
Length of transport conveyors: 2,598 m.
Pile storage area: 50,000 sq.m.

Minerals:
Movement capacity: 60,000 tons per day.
Storage capacity: 250,000 tons
Normal removal rate: 6,000 t.p.h.
Length of transport conveyors: 2,129 m.

Salt:
1 warehouse with an area of 2,157 sq.m.

Containers:

Container handling occurs as far as Caju Quay, and the areas adjacent to internal warehouse Nos. 30, 31, 32. Warehouse No. 32 (internal) is used for containerised cargo and has a total area of 7,000 sq.m. on its two floors.

Container discharge can be effected on all quays intended for deep sea and coastal vesels, i.e. from the Maua Pier as far as internal warehouse No. 18.

When a container is discharged on to the quay, this occurs onto trucks which go to the Terminal Area which can accommodate up to 1,030 units. The equipment used for container discharge and handling comprises 3 Karricons with a 35 ton capacity.

Also, the Caju Quay has facilities for loading and discharge operations of "LASH" type vessels. At the end of this quay, there was recently constructed a terminal for Ro/Ro vessels for intermodal purposes. Also, on the Caju Quay, there is an area for storage of heavy lifts, covering 29,272 sq.m.

EQUIPMENT:

Cranes: Jib – 104 with capacities from 2 tons to 40 tons.
On tyred wheels: 7, with capacities from 20 tons to 150 tons.
Railborne: 1 of 12 tons.

Stacker trucks: 165 with capacities from 2 tons to 14 tons.

Winches and floating cranes: Winch "Piaui" with 250 tons capacity;
Winch "Presidente Castelo Branco" with capacity of 200 tons.

Tractors: On tyred wheels: 11 with capacity of 50 tons to 500 tons traction
Track Mobile (Road/Rail): 6 with capacity of 700 tons to 1,500 tons traction.

Lorries: 40

Trucks: 19, from 20 tons to 40 tons.

Mechanical Shovels: 11, from 2.5 cu. yards to 4 cu. yards.

Rolling bridges: 196, from 1.5 tons to 2 tons.

Launches: 4 with power from 35 h.p. to 150 h.p.

Locomotives: 17, with capacity from 550 tons to 1,500 tons traction

Underground crushers: (for minerals): 1 for 2,000 t.p.h. (discharging 2 wagons at once); 1 for 4,000 t.p.h. (discharging up to 6 wagons at once).

STEVEDORES: Cable Agent ETA 36 hours before arrival in order to arrange gangs required. When arriving during week-ends or on Monday, Agent needs ETA on Friday afternoon. Loading/discharge rates:
General cargo cases 7 to 8 tons per gang/hour.
Bags 15 tons per gang/hour.
Grain in bulk 1,000 tons per eight hours.
Coal in bulk 7,000 tons per day.
Loading iron ore 25,000 tons per day.

MEDICAL: All facilities available. If doctor needed on arrival or making emergency call to land sick persons, cable ETA 12 hours before arrival.

TANKERS: See "Section – B".

DENSITY: Salt water at entrance to bay. Further inland water often brackish, and density varies with tide.

FRESH WATER: Available alongside from 87 points, loading rate 50 t.p.h. Also available by barge, capacity 450 tons, loading rate 100–200 t.p.h.

FUEL: See "General" before first port.

WATCHMEN: Gangway watchmen strongly recommended for any vessels working cargo with shore labour on board. Watchmen from shore not necessary for coal, iron ore, and oil cargoes.

CUSTOMS ALLOWANCES: Each crew member allowed 2 cartons of cigarettes and one bottle wine or spirits.

IDENTITY CARDS: Foreign crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS: Most countries have consuls in Rio.

REPAIRS: All types deck and engine repairs can be effected. Five dry docks. Largest dry dock, length 259 m., breadth 34 m., max. draft 14 m.

AIRPORT: Santos Dumont, in the centre of the city, and Rio de Janeiro International, located on Governor's Island (Ilha do Governador).

POLICE/FIRE/AMBULANCE: Police 190; Maritime Police 263–3747; Ambulance 222–2121; Fire 232–1234.

HOLIDAYS: Requests for operational services for these days must be made in advance (minimum of 24 hours).

Fixed:

National: 1st January
21st April
1st May
7th September
12th October
25th December

Regional: 20th January

Movable:

Monday and Tuesday of Carnival
Ash Wednesday
Good Friday
Corpus Christi

Commemorative Days:

28th January (Port Day)
2nd November (All Saints')

Federal and State Government Departments, as well as banks, do not work on Saturday.

TIME: GMT minus 3 hours.

TELEPHONES: Available at warehouses 1–8 on request to the Brazilian Telephone Company.

SHORE LEAVE: Shore leave is permitted.

GENERAL: Vessels to fly signal letters when manoeuvring in port and special Brazilian Customs flag after reception.

DEVELOPMENTS: Caju Quay is being widened and dredged to 12 m. to provide 2 roll-on/roll-off berths, 1 sulphur and salt berth, and 1 heavy lift general cargo berth.

SHIPMASTER'S REPORT: 1980.

Clearance: Clearance of vessels undertaken at quarantine anchorage and alongside.

Identification Cards: Identification Cards required for foreign crews but no picture necessary. Cards must be shown when leaving and entering the dock.

Visitors: No unauthorised persons are allowed on board. If unauthorised persons found on board, heavy fines are imposed.

Entering and Leaving: When entering and leaving at night, the full name of the vessel has to be flashed on the Aldis Lamp to the naval signal station. No VHF communications available.

Ratguards: Should be in place when alongside.

Flags: At all ports in Brazil the Authorities are very strict about flying of flags (no tangles). The "G" flag and "H" flag should be flown when Pilot required or on board.

AUTHORITY: Companhia Docas do Rio de Janeiro, Rua Acre No. 21, 4° Andar, CEP – 20.081 Centro Rio de Janeiro, R.J. Brazil. *Tel:* (021) 233–4522. *Telex:* (021) 22.163–CDGB. *Contact:* Pedro Batouli, President.

Porto do Rio de Janeiro (Riopor), Av. Rodrigues Alves No. 20, 4° Andar, Rio de Janeiro, CEP – 20.081 R.J. Brazil. *Tel:* (021) 2912122. *Contact:* Arnaldo Soares da Silva, Manager.

(B) TANKER SECTION. All information refers to the "Petrobras Terminal" – TORGUA *unless otherwise stated.*

LOCATION:

TORGUA is an oil terminal consisting of four (4) different mooring sites all of them located inside Guanabara Bay.

These four (4) mooring sites are linked to Ilha d'Agua and then to the mainland (Duque de Caxias Refinery-Reduc) by submarine pipe-lines.

South Dock-Island (main)	
Lat. 22° 49.2′ S.	East Berth (PP1) or
Long. 43° 09.2′ W.	West Berth (PP2)
North Dock-Island (secondary)	
Lat. 22° 48.3′ S.	East Berth (PS1) or
Long. 43° 08.9′ W.	West Berth (PS2)
Butadiene Dock-Island	
Lat. 22° 48.2′ S.	East Berth (PAB)
Long. 43° 09′ W.	
Ilha Redonda Pier	
Lat. 22° 48.1′ S.	West Berth (IR)
Long. 43° 09′ W.	

IMPORTANT FEATURES:

1. Four mooring sites, in the vicinities of Ilha do Govenador (the largest of Guanabara Bay), are available for loading and discharging of crude oil, derivatives and LPG.
2. Pilotage is compulsory for any shifting inside the bay.
3. Safety Rules are strictly enforced.
4. Display of quarantine signal – "Quebec" flag – must be maintained until free pratique is granted.
5. Neither in port nor in Brazilian coastal waters may dirty ballast be pumped overboard.
6. Emergency signal consists of a series of short blasts followed by a long one on the ship's whistle or siren.
7. Tankers up to 135,000 d.w.t. operate at the terminal. Draft is 15.8 m. (52 ft.) or below at LW.

Remarks: Non-compliance of item 7 above stated will result in rejection of the ship as being unsuitable for this terminal.

DOCUMENTS:

Immigration and Maritime Police: The following documents have to be submitted to the boarding Maritime Police Officials:

1 Copy Crew List.
1 Copy General List.
3 Copies Passengers List.
3 Copies Passengers-In-Transit List.

Health: The following documents have to be submitted to the boarding Health Officials:

1 Copy Vaccination List.
1 Copy Certificate of Deratisation Exemption.
1 Copy Maritime Health Declaration.
1 Copy List of Drugs and Narcotics.
1 Copy Passengers-in-Transit List.
1 Copy Passenger List.

Customs: The following documents have to be submitted to the boarding Custom Officials:

3 Copies Crew List.
3 Copies Spare Parts List.
3 Copies Stores List.
3 Copies Provisions List.
3 Copies Drugs and Narcotics List.
(if not included in the Stores List).
1 Copy Cargo Manifest.
1 Copy Bills of Lading.
2 Copies Passengers List.
2 Copies Passengers-In-Transit List.
3 Copies Crew Personal Effects List.
3 Passengers Personal Effects List.

Note: Supplies, stores, cigarettes, cigars, tobacco, alcoholic beverages, arms, ammunitions, souvenirs, playing cards, drugs and narcotics, medicines (not in use) etc., must be kept under lock and key; the doors of the storage rooms will be sealed by the Customs Officials and the seal must be kept unbroken throughout the vessel's stay in port.

Any goods or personal effects omitted from the lists may be confiscated.

Extracts of Sea Protest drawn out from the Log Book must be submitted to the boarding Customs Officials in case of accident which has caused damage or loss of cargo or part of it.

Ship's Agent: The ship's Agent will need the following documents:

3 Copies Passengers List.
3 Copies Passengers-In-Transit List.
3 Copies Crew List.

The Agent will take care of necessary steps in order to grant the Disembarkation Cards.

Leaving Clearance: Masters must appoint their ship's Agent at Rio de Janeiro and have their International Safety Certificates in force. It is also necessary for vessels Leaving Clearance:

Leaving Permit from Customs.
Leaving Permit from the Captain of the Port.
Leaving Permit from the Maritime Police.
Leaving Permit from Brazil Mail (Passe de E.C.T.).

General: The Customs flag (blue with a white star) must be flown from the vessel's mast or yard throughout the vessel's stay in port.

Special licence from the Captain of the Port must be granted for passengers bound for foreign countries and so their names must be given and their passports must be delivered to Agents at least 48 hours before they apply for the vessel's leaving permit.

The number of disembarking passengers must be radioed to Agents at least 24 hours before the vessel's expected time of arrival.

APPROACHES: The safe access to the Terminal is made through a main (deep but narrow) channel swept to 17 m. (56 ft.) that begins between the Island of Cotunduba and the Point of Leme. It extends as far as the East neighbourhood of the South Dock-Island East Berth. As long as the ship does not exceed 11.3 m. (37 ft.) the access can also be undertaken through the North – South axis passing by Ilha Rasa and the bar's entrance (secondary entry, larger but shallower).

A long bridge (Rio-Niteroi), has been built, linking Ponta do Caju (West) to Ilha do Mocangue Grande (East) it crosses the swept channel. Three navigable spaces: – the central one 300 m. (980 ft.) wide; 50 m. (165 ft.) high at MLWS, the side ones with 200 m. (650 ft.) in width – will maintain the safe access for ships.

A shoal (reef) in 11.5 m. (38 ft.) deep lies about 0.3 m. E.N.E. of Lage Is. just after the bar's narrow entrance (between Sao Joao and Santa Cruz Points).

A wreck marked by a green buoy (CS) lies sunk nearly 1.3 miles Eastward of Cotunduba Is.

When approaching the coast of Guanabara Bay entrance, vessels should keep a particularly sharp lookout for fishing boats and small craft.

ANCHORAGE: Vessels should anchor N.E. of Ilha Fiscal for port authorities clearance (Lat. 22° 51′ S., Long. 43° 11′ W.). After pratique has been granted they should change anchorage site while awaiting for a berth alongside.

Vessels should anchor clear of the 17 m. (56 ft.) swept channel. They must take care to avoid dropping their anchors on the route of submarine cable near to a line joining the islands of Villegagnon and Boa Viagem.

For further information refer to Brazilian Charts No. 1501, 1511 and 1512 (DHN-Navy Hydrographic Office).

Prohibited Anchorage: Under no circumstances should ships drop anchor Westwards and between South and North platforms due to the existence of submarine pipe-lines connecting Ilha D'agua to the platforms and to Ilha Redonda.

Ships are also prohibited from anchoring in the fairway of the ferry boats plying between Rio and Niteroi.

Also see "Pilotage".

READINESS: Arrival is usually considered the time the vessel reaches the anchorage area or the time the Pilot boards the vessel, whichever occurs first. Notice of Readiness will be accepted at the time the tanker is in all respects ready to operate.

PILOTAGE: Pilotage is compulsory after the ship's free pratique has been granted.

Request for pilotage service may be made either right to the Harbour Pilot's Working Co-operative (pilot station VHF Radiotelephone – Channels 16 and 12. Listening period from 0600 to 1800 hrs. local time) or, through ship's Agent, 24 hours beforehand.

For tankers larger than 100,000 d.w.t. Pilots usually board the vessel outside the main channel's entrance.

This will occur if weather conditions permit and in daylight only. Ships could also use, in most circumstances, a secondary entry channel with North-South axis passing through Ilha Rasa (larger but shallower) as long as their draft does not exceed 11.3 m. (37 ft.). In certain cases and at the discretion of the Pilot, according to the prevailing conditions, ships will use this channel with a draft up to 12.5 m. (41 ft.).

Ships may anchor 1.8 miles off the North of Ilha Rasa for awaiting the Pilot, who will board the ship and proceed by day or night according to ship's draft, visibility conditions, etc.

A pilot ladder must be safely rigged for immediate use and be long enough to reach the Pilot's launch. At night adequate lighting must be rigged so as to enable the Pilot to approach and board the vessel. In addition, a boat rope should be led along the side, from well forward.

A lifebuoy with 27 m. (15 fathoms) of rope must be conveniently placed in the vicinity of gangway for use in emergency. Vessels should always make a lee.

Tankers of 40,000 d.w.t. or over are requested to have a pilot ladder (preferably with a centre gripping line) rigged alongside the accommodation ladder in order that the Pilot may transfer to it after about 2 to 3 m. (6 to 10 ft.).

RESTRICTIONS: Ships usually moor and unmoor at any hour except when an unexpected event arises, such as breakdowns, gales, heavy squalls, etc.

See "Pilotage".

TIDES: *Tide and Tidal Currents:* The mean tide level at Rio de Janeiro is 0.69 m. (2.2 ft.), Spring range 1.38 m. (4.5 ft.). The usual rate of the tide is about 0.7 knots; Springs run at 1.5 knots. The ebb runs much longer than the flood, especially after heavy rains.

MAX. SIZE: Tankers up to 135,000 d.w.t. will operate in the terminal. Draft is 15.8 m. (52 ft.) at low water.

Berthing capacity is limited by structural resistance of installation, actual depth of the swept channel and weather conditions.

South Dock Island (Main)

East Berth (PP1) – Tankers drawing up to 15.8 m. (52 ft.) draft can moor and unmoor at any time.

Structural resistance of pier was designed to handle tankers up to 105,000 d.w.t. but under special conditions this limit can be extended to 135,000 d.w.t.

West Berth (PP2) – By day tankers drawing up to 13.1 m. (43 ft.) draft can moor according to the range of tide.

11.9 m. (39 ft.) draft to a range of 0.0 m. (0.0 ft.)
12.2 m. (40 ft.) draft to a range of 0.3 m. (0.98 ft.)
12.5 m. (41 ft.) draft to a range of 0.6 m. (1.98 ft.)
12.8 m. (42 ft.) draft to a range of 0.9 m. (2.94 ft.)
13.1 m. (43 ft.) draft to a range of 1.2 m. (3.94 ft.)

By night only ships up to 32,000 d.w.t. will moor.

Leaving at night only enough ballast and with own power, up to 38,000 d.w.t.

Shifting ship from East to West Berth only by daylight, draft 12.8 m. (42 ft.), fair weather and wind speed up to 2 Beaufort;

North Dock-Island (Secondary)

East Berth (PS1) – Tankers up to 35,000 d.w.t. can moor either by day or night.

At low tide, the maximum draft permitted is 10.4 m. (34 ft.).

West Berth (PS2) – At night tankers up to 10,500 d.w.t. can manoeuvre. Whenever another tanker is already berthed to the Butadiene Dock-Island, night mooring to the North Dock-Island is not advisable. West-berthing will be undertaken with ebb tide, i.e. the set of the current is South, preferably.

At low water max. permitted draft is 8.2 m. (27 ft.).

Butadiene Dock-Island (PAB)

Manoeuvres will be undertaken at daylight only. Max. permissible draft at low water is 8.5 m. (28 ft.).

Ilha Redonda Pier (IR)

LPG tankers can moor by day only, limitations concerning draft is 9.14 m. (30 ft.) at most. Max. ship's LOA is 200 m. (656 ft.).

Advisable draft for safe manoeuvring: Although the amount of ballast carried on vessels is at the Master's discretion, the table below is recommended as a guide:

Vessels of 30/40,000 tons, draft for'd 16 ft. aft 20 ft.
Vessels of 40/50,000 tons, draft for'd 18 ft. aft 24 ft.
Vessels of 40/70,000 tons, draft for'd 20 ft. aft 28 ft.
Vessels of 70/100,000 tons, draft for'd 24 ft. aft 32 ft.

Vessels over 100,000 tons, should have approximately one-third of the vessel's deadweight in ballast.

HEALTH: *Free Pratique:* Vessels must anchor N.E. from Ilha Fiscal for Port Authorities clearance. After free pratique is granted vessels must change anchorage for waiting.

Vessels must remain at anchorage clear of the 17 m. (56 ft.) swept channel, and take good care not to drop anchor in the vicinity of the submarine cables along a line joining Villeganon and Boa Viagem Islands.

RADIO: Vessels under charter to Petrobras bound for Rio de Janeiro should advise their ETA 48 hours prior to arrival to PPR as well as to their Agents when it will be the case, through PPR (Rio Radio – Government Coast Station). Confirmation or change of ETA should be cabled 24 hours before arrival. When within range, tankers may also call Torgua or Fronape VHF radio-telephone stations for instructions. All ETA's should indicate whether it is local time or GMT.

VHF: The terminal radio and communication centre is located in the Oil Handling Control Room situated at Ilha D'agua. There is a R/T set operating 24 hours a day, on Channel 16 (Delta) and manned by terminal operators.

It is strictly prohibited to use vessel's wireless transmitters in the port of Rio de Janeiro.

Non-compliance with this regulation may result in a fine being imposed on vessel by the authorities.

Transmitters: Radar and radio transmitting aerials must be switched off and grounded when ships are at berth. VHF communications with terminal and stand-by tug are permitted.

TUGS: Tugboat assistance is rendered by one Petrobras 1,430 h.p. tug boat. Private tugboats are also available. While rendering such assistance tugs act under the orders of the Harbour Pilot. All manoeuvring orders will normally be given by VHF telephone on Channel 13 (Alpha). However they usually keep watch on Channel 16 (Delta).

The tugs are usually stationed either at the terminal dolphin or "L" pier on Ilha D'agua. The Pilot in consultation with the Master, will decide the number of tugs required for each berthing or unberthing operation. Safety of the Terminal installations demands, at least, two tugboats, even for bow thruster equipped ships.

BERTHING:
Petrobras: Torgua is an oil terminal consisting of four distinguished mooring sites located on different places inside the Guanabara Bay.

All these mooring sites are linked to Ilha D'agua and then to the mainland (Duque de Caxias Refinery – REDUC) by submarine pipelines. Three of them are dock-islands, i.e. island-type offshore platforms lying near to the Eastern edge (about half mile away) of Ilha D'agua (where storage tanks, operation controlling room and part of the administrative staff are placed). Two of these dock-islands are squared platforms (South and North) with two berths each (East and West). The South one is designed for larger tankers consisting of two mooring and two breasting dolphins on each side of the platform. It is normally used for the discharge of crude oil.

The North Dock-Island (smaller) has only two mooring dolphins on each side. Two berths (East and West) are also available. It is generally used for handling derivatives.

The third Dock-Island (the smallest and round shaped one) is actually the dolphin of the North Dock-Island square platform. It is known as the "Butadiene Pier" and only one vessel at a time can be berthed there (East) either for discharge of LPG or butadiene. Besides these three mooring sites there is a fourth located on Ilha Redonda (approx. 2 miles E.N.E. of Ilha D'agua). This installation comprises one single berth (West), head of a small pier. It handles LPG only. Four spherical storage tanks (7,000 tons) and 3 cylindrical (refrigerated) storage tanks (20,000 tons) can easily be seen from incoming vessels.

Other Terminals: *Manguinhos Terminal* – Operators: Refineria de Petroleo de Manguinhos. At Manguinhos terminal a draft of 36 ft. is permissible. Conventional buoy berth in which two ship's anchors and four buoys are used, one on starboard forward of the bow and three buoys aft. Two ship's lines run to each buoy. The terminal is situated in the inner harbour of Rio de Janeiro and close to the quays. Three 8 in. hoses from an underwater pipe-line are connected to the ship's manifold. Maximum back pressure is 100 p.p.s.i., at the ship's rail. Discharge rate is about 1,000 t.p.h. Care is to be taken that the vessel shall not exceed a draft of 40 ft. during discharge. Bunkering is permitted when discharging cargo.

Riberia Terminal – depth alongside 30 ft.
Shell Terminal – „ „ 31 ft.
Texaco Terminal – „ „ 29 ft.

CARGO INFORMATION:

Grades	Pipe-lines No.	Pipe-lines Dia. in.	Pipe-lines Volume cu.m.	cu.m. per hour	Hoses/Arms No.	Hoses/Arms Dia. in.	P.S.I.
South Dock-Island (main)							
For Loading							
Diesel oil	1	12	90	1,200	1	8	250
Gasoline	1	12	90	900	1	8	250
Fuel oil (HPP, LPP)	1	12	90	800	2	8 & 12	450
Water	1	6	22	50	1	2.5	150
For Discharge							
LPP crude oil	1	32	8,300	3,800	3	8/12/12	250
	1	26	5,994	2,300	3	8/12/12	250
HPP crude oil	1	26	5,994	2,300	3	8/12/12	250
Ballast/slop	1	12	90		1	8	250
North Dock-Island (secondary)							
For Loading							
Gasoline	1	10	445	1,200	2	8	250
	1	12	98	900	2	8	250
Diesel oil (Kerosene)	2	12	98	1,200	2	8	250
Water	1	4	12	50	1	2.5	—
Fuel oil (HPP, LPP)	1	14	135	800	2 (PS-1) 2 (PS-2)	12 8/12	450
For Discharge							
Ballast	1	12	98	800	2 (PS-1) 2 (PS-2)	12 8/12	250
Butadiene Dock-Island							
For Loading/Discharge							
LPG/Butadiene	1	8	623	300	2	4	250
Ilha Redonda Pier (West Head Berth) IR							
For Loading							
LPG liquid	1	12	5.6	800	1 2	10(L)	430
LPG vapour	1	8	3.2	—	1 6	6(V)	250
For Discharge							
LPG liquid	1	12	5.6	800	1 3	10(L)	600
LPG vapour	1	8	3.2	—	1 2	6(V)	—

LOADING: Before any loading commences, the Officer on watch may be invited to be present at the sample taking from the shore pipe-line that will be used for the oil handling. Likewise, after the first 150 cu.m. have been loaded (about 20 minutes) a new sample will be taken. From such a sample the ship will receive 2 sealed and tagged bottles containing the cargo.

At the beginning of diesel and kerosene loadings the vessel should concentrate the product in a single tank. As soon as the innage reaches 0.70 m. high, then other tank valves may be switched. From that part of the cargo a sample is obtained and tested in the laboratory, if the results stand between acceptable stated specification limits, loading will go on without any drawbacks. During the loading of this first tank, the ship is requested to flush her pipes with the same grade being handled.

Discharge of high pour point (HPP) oils will be regarded separately (as far as minimum pumping temperatures are concerned) in conformity with oil and ship characteristics.

A time sheet form will be given to the ship's Master upon arrival. The form is regarded as a receipt for information on operational procedures, oil to be loaded, etc.

Hose Connection: Pier crews are on duty continuously to handle oil hoses/arms and mooring lines. Mooring lines on board vessel will not be handled by Petrobras personnel.

MEDICAL: Medical treatment and/or hospitalisation, if required, is provided in local clinics. Dentists are also available. For emergency cases (serious illness or injury) Torgua first aid may be requested by the Master, Internal Tel. No. 39.

A nominal amount is charged for any supplies or medicines furnished by the terminal.

FRESH WATER: Facilities may be arranged to supply water in North and South platforms only. Water supplying barges are also available.

FUEL: The Terminal is equipped with blending valves and can deliver any type of fuel – as Bunker C fuel oil, marine gas oil, marine diesel oil and intermediates of any grade – concurrently with tankers working cargo, at international prices.

The supply rates are about 300 mt/hr. for Bunker C, 180 mt/hr. for MGO and 450 mt/hr. for intermediates.

Orders for bunkers should be placed, a minimum of 48 hrs. in advance, to: Marine Fuel Division, Commercial Department. Telegraphic Address: Petrobrasecope. Telex number: 031422 or 031423. Rio de Janeiro – Brazil.

Lubricating Oil: Marine lubricant orders should be placed a minimum of 15 days in advance and subject to confirmation, to: Petrobras S.A., Lubricants Management, Praca 22 de Abril, No. 36-40 Andar. Tel: 242-9381, 242-4901. Cables: Petroedipe. Telex: 031422, 031423 and 031424 Rio de Janeiro, Brazil.

BALLAST: All ballast should be pumped out to the terminal slop tanks. Under no circumstances should it be pumped into the sea even if the ballast is said to be clean. As soon as the ship is moored, the Terminal Representative must be told of the quantity of ballast on board and the estimated time to pump it out. Right after discharging a sludge ballast of high pour point (HPP) oil, tankers are asked to flush the line with water from the main suction inlets. The Terminal Representative must be notified 30 minutes before the ship will be out of ballast.

There are two sludge tanks with a total capacity of about 18,000 cu.m. (130,000 bbls.). The terminal is particularly interested in having vessels complete the deballasting operation promptly after berthing in order to minimise time at berth. Simultaneous loading and deballasting is encouraged on properly equipped vessels.

REPAIRS: Repairs of all kinds can be effected in Rio de Janeiro. There are floating cranes with a capacity of 100 tons. Divers service may be obtained.

DRY DOCKS: Dry Docks to hold ships up to 33,000 d.w.t. are available.

GANGWAY/DECK WATCHMEN: Port watchmen are compulsory on all vessels coming from overseas throughout the vessel's stay in port.

SURVEYORS: Lloyd's Register of Shipping, American Bureau of Shipping and Bureau Veritas have representatives in Rio de Janeiro. Advance notice should be given in order to arrange for an appointment through Fronape or ship's Agent.

Cargo Inspectors: Chas. Martin & Co., Rua da Lapa, 200 – conj. 906, 20.000 – Rio de Janeiro – GB – ZC-00, Tel: 242-4219, 245-5636 and 225-3597.

E. W. Saybolt & Co., Rua Bras Cubas, 3 11.100 – Santos – SP. Tel: 4-6638.

SGS do Brasil S.A., Av. Pres. Vargas 446, 13° Andar, 20.071 – Rio de Janeiro – RJ. Tel: 223-1252. Telex: (021) 23.588.

TIME: The 30°W. (GMT minus 2 hours) is adopted for the oceanic islands including Fernando de Noronha. The 45°W. (GMT minus 3 hours) is adopted for all coastal states (for Estado do Para only the Eastward part of a line starting from the mouth of the Rio Jari through Rio Amazonas until the mouth of Rio Xiangu and through this river until the borderline of Estado de Mato Grosso).

SERVICES: Compass adjustment or radio direction finder calibration can be effected by competent hydrographers and extra-masters. Contact Agents or Pilot's station.

SHORE LEAVE: Ship's Crew is not permitted ashore for any purpose whatsoever until pratique has been granted. Luggage and packages are subject to Custom's Official and/or Terminal Watcher's inspection. As a rule shore leave is permitted with the above stated restrictions. Vessels are not permitted to sail unless all crew members are aboard. In case of Seaman left ashore for any reason whatsoever all expenses are for ship's account.

GENERAL:

Turnround: To promote the economical operation of their vessel, Masters are requested to co-operate with Terminal Representatives in minimising their in-port time. Vessels requiring excessive time to complete operations will be given Letters of Defficiency (Protest).

Gangway: All vessels using the port of Rio de Janeiro must provide a safe gangway. The use of rung ladders (sea ladders) is contrary to Port Regulations and Port Authorities will not board except by means of a safe gangway or accommodation ladder. A lifebuoy with 27 m. (15 fathoms) of rope must be conveniently placed in the vicinity gangway for use in emergency. It will be the responsibility of ship to provide and maintain this equipment.

At night, the gangway must be adequately lighted. In addition, a boat rope should be led along the side, from well forward. In the near future a special safe gangway will be provided in the South and North Dock-Islands.

Repairs: Repair and maintenance services for radar, radio, gyro compass, echo-sounder, etc., are available. The repair man should be contacted through ship's Agent.

Stores: Provisions and stores are available. Requisitions should be conducted through the Agents. Ship chandlers are normally permitted to visit ships when specifically instructed by Agent. Bonded stores not available.

Launches: Launch service for the transportation of personnel ashore must be arranged through ship's Agents.

Laundry: Laundry service is available throughout each working day. Such service should be requested in the vessel's ETA message to Agents.

Photographing: The taking of photographs within the boundary of the terminal premises is prohibited.

Ratguards: Ratguards must be fitted to all mooring lines.

Sea Pollution: Brazilian law is very strict in regard to the pollution of harbour and coastal waters. Vessels should not discharge dirty ballast, ashes, refuse, etc., into the water. Heavy fines are imposed for violations. All overboard discharge valves from cargo tanks and bilges are to be conducted with the greatest care and vigilance in order that errors or delays in handling cargo valves may not result in overflows. All deck scuppers should be plugged to avoid harbour contamination should an oil spill occur.

Similarly, any hull leakages will be subject to equal restrictions. To offenders, fines will be charged (besides resulting delay) according to ship's tonnage, i.e. 2% of the largest country's minimum wage per each ship's (gross) ton.

Emergency Towing Wires: Two towing wire ropes (fore and aft) should be hung overboard to the water's edge in such way that tugs can easily make fast if an emergency situation arises.

Shore Leave: Shore leave is normally permitted. Baggage and packages are subject to examination upon entering and leaving the Terminal property and vessels, either by Petrobras watchers or by Custom's Officers.

Cleaning: Several contractors in the area provide labour for tank cleaning and mopping. Masters having need of this service should submit their requirements to ship's Agent who will contact and request a contractor to go on board to discuss details and estimate cost of work to be effected.

It must be pointed out that the Master of the vessel is solely responsible for the fitness of the ship's tanks for loading his next cargo, and will therefore be held liable for any contaminations of the cargo after loading, due to inadequate tank cleaning. Therefore it is up to him to decide the degree of tank cleaning necessary. He may, of course, seek advice from petroleum inspectors in this respect, whenever there is any doubt.

Compass Adjustment & RDF Calibration: Compass adjustment or radio direction finder calibration can be effected by competent hydrographers and extra-masters. Contacts with Agents or through the Pilot Station.

Charts: Brazilian No. 1501, 1511 and 1512. U.S. No. 24161 and 24162; British Admiralty No. 541.

Custom's Watches: Sometimes while vessel is in port, Brazilian Custom's Officials are assigned on board to ensure compliance with Customs Regulations. Meals must be supplied to these Officials during regular meal hours.

Important Telephone Numbers (PABX):

Terminal's Executive Assistant	10*
Operation Manager	60*
Operation Supervisor	68
Marine Section	50*
Safety Section	40*
Medical Section	39

*To be used in working hours only.

DEVELOPMENTS: A new berth is being built on Pombeya Island and dredged to 12 m. This is intended to relieve Ilha de Braes Port.

AUTHORITY: Petroleo Brasileiro S.A. – Petrobras, Avenida Republica do Chile, 65 – 12 Andar, Rio de Janeiro, CEP 20.035, Brazil. *Contact:* Divisao de Operacoes (Operations Division), same address as above, 12th floor.

RIO GRANDE: 32.03 S. 52.05 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

Shipmaster's Report: 1980.

Also required: 2 Arms and Ammunition Lists, 1 Narcotics List, 1 List of Loading Ports of the Last Voyage with dates of arrival and departure.

PILOTAGE: Compulsory for all vessels entering the Bar or requiring any shifting in the port area. Also compulsory for foreign fishing boats. The Pilot's boarding area outside the Bar is the circular area with one mile radius which centre is the Buoy No. 1 of the Approach Channel.

Requests for a Pilot to be made by Agent, normally 4 hours in advance. Vessels can contact Pilots by VHF Channel 16.

The Pilot's boat is easily identified as it is painted red and is well distinguished from the various boats used in the port.

Priority to enter the Bar: Priority to enter the Bar is established by the anchoring time or arrival time at the outer anchorage or the Pilot's boarding area and vessels should, when anchoring, inform the Port Captaincy, by the 500 kHz. frequency of the coastal station EMBRATEL "PPJ", the name of the vessel, port of registry, port of origin and date-hour of arrival.

When berth is not available and all the inner anchorage areas are occupied, vessels arriving at the Port of Rio Grande should stay outside the Bar.

ANCHORAGE: The official anchorage for vessels arriving at Rio Grande or that have to wait outside the Bar is the circular area within one mile radius, of centre Lat. 32° 12′ S., Long. 52° 02′ W.

In order to increase the safety to navigation on the inner part of the channel, the Port of Rio Grande is divided into six areas as follows:

PERMITTED ANCHORAGE AREAS:

Area Alfa: Available for anchoring of up to maximum four vessels of 200 m. LOA, outside the channel. Vessels over 200 m. LOA have to wait outside the Bar to await berth. In special conditions the Harbour Master may grant permission for those vessels to anchor at that area, to load or discharge, using one floating elevator and one barge.

The area *ALFA* is limited by the following points:

A1 – Lat.: 32° 10′ 00″ S.
– Long.: 52° 05′ 27″ W.
A2 – Lat.: 32° 10′ 00″ S.
– Long.: 52° 05′ 03″ W.
A3 – Lat.: 32° 08′ 00″ S.
– Long.: 52° 05′ 48″ W.
A4 – Lat.: 32° 08′ 00″ S.
– Long.: 52° 06′ 06″ W.
A5 – Lat.: 32° 08′ 24″ S.
– Long.: 52° 06′ 06″ W.

Area Charlie: Available for the anchoring of a maximum of two vessels of up to 180 m. LOA, to load or discharge, using one non-self-propelled floating elevator, or two floating elevators of which one has to be necessarily self-propelled.

The area *CHARLIE* is limited by the following points:

C1 – Lat.: 32° 05′ 10″ S.
– Long.: 52° 05′ 30″ W.
C2 – Lat.: 32° 05′ 00″ S.
– Long.: 52° 05′ 48″ W.
C3 – Lat.: 32° 05′ 18″ S.
– Long.: 52° 05′ 33″ W.
C4 – Lat.: 32° 05′ 18″ S.
– Long.: 52° 05′ 50″ W.
C5 – Lat.: 32° 06′ 00″ S.
– Long.: 52° 06′ 06″ W.
C6 – Lat.: 32° 06′ 00″ S.
– Long.: 52° 05′ 45″ W.

Area Echo: Available for the anchoring of a maximum of 5 (five) liner vessels of up to 170 m. LOA.

The area *ECHO* is limited by the following points:

E1 – Lat.: 32° 04′ 37″ S.
– Long.: 52° 05′ 25″ W.
E2 – Lat.: 32° 04′ 51″ S.
– Long.: 52° 05′ 03″ W.
E3 – Lat.: 32° 04′ 15″ S.
– Long.: 52° 04′ 07″ W.
E4 – Lat.: 32° 04′ 00″ S.
– Long.: 52° 04′ 37″ W.

Area Golf: Available for the anchoring of vessels proceeding or coming from the Ports of Porto Alegre and Pelotas, inland vessels and vessels loading or discharging, using one non-self-propelled floating elevator, or two floating elevators of which one has to be necessarily self-propelled.

The area *GOLF* is limited by the following points:

G1 – Lat.: 32° 03′ 27″ S.
– Long.: 52° 02′ 30″ W.
G2 – Lat.: 32° 03′ 36″ S.
– Long.: 52° 03′ 13″ W.
G3 – Lat.: 32° 02′ 21″ S.
– Long.: 52° 02′ 24″ W.
G4 – Lat.: 32° 01′ 51″ S.
– Long.: 52° 02′ 24″ W.
G5 – Lat.: 32° 00′ 48″ S.
– Long.: 52° 02′ 40″ W.
G6 – Lat.: 32° 00′ 48″ S.
– Long.: 52° 03′ 06″ W.
G7 – Lat.: 32° 02′ 32″ S.
– Long.: 52° 02′ 52″ W.
G8 – Lat.: 32° 02′ 45″ S.
– Long.: 52° 02′ 57″ W.

PROHIBITED ANCHORAGE AREAS:

There are three areas where vessels cannot anchor, two located in front of the Terminals of the Super Port and used for manoeuvring of the vessels berthing or unberthing on those Terminals, and the third located on the fork of the main channel of approach to the New Port and channel of approach to Pelotas and Porto Alegre.

Area Bravo: Limited by the following points:

B1 – Lat.: 32° 08′ 00″ S.
– Long.: 52° 06′ 06″ W.
B2 – Lat.: 32° 08′ 00″ S.
– Long.: 52° 05′ 45″ W.
B3 – Lat.: 32° 06′ 00″ S.
– Long.: 52° 06′ 06″ W.
B4 – Lat.: 32° 06′ 00″ S.
– Long.: 52° 05′ 45″ W.

Area Delta: Limited by the following points:

D1 – Lat.: 32° 05′ 00″ S.
– Long.: 52° 05′ 46″ W.
D2 – Lat.: 32° 05′ 10″ S.
– Long.: 52° 05′ 30″ W.
D3 – Lat.: 32° 04′ 51″ S.
– Long.: 52° 05′ 03″ W.
D4 – Lat.: 32° 04′ 37″ S.
– Long.: 52° 05′ 25″ W.

Area Foxtrot: Limited by the following points:

F1 – Lat.: 32° 04′ 00″ S.
– Long.: 52° 04′ 30″ W.
F2 – Lat.: 32° 04′ 15″ S.
– Long.: 52° 04′ 00″ W.
F3 – Lat.: 32° 03′ 34″ S.
– Long.: 52° 03′ 27″ W.
F4 – Lat.: 32° 03′ 32″ S.
– Long.: 52° 03′ 35″ W.
F5 – Lat.: 32° 03′ 32″ S.
– Long.: 52° 04′ 30″ W.

RESTRICTIONS: According to the Brazilian legislation it is prohibited to spill oil or throw overboard any refuse on to the Port waters. The vessels that wish to de-ballast of throw overboard residues resulting from the washing or sweeping of holds should do so outside the Bar, in the circular area of 10 miles radius, with centre at the point 32° 00′ S. and 49° 00′ W., maintaining a course of 090° and speed of 10 knots. The Port Captaincy will grant permission to vessels that need to leave the Port and cross the Bar to do these operations.

MAX. SIZE: The deepest allowable draft in the approach channel to the Port is 40 ft. up to Portobras Wheat and Soyabean Terminal (TTS); from there inwards there is a variable and progressive reduction to the depth along the remaining part of the channel, ending with a depth of 29 ft. alongside the New Port.

Bar Entrance: Max. draft 40 ft. (36 ft. 06 in. in 1984 due to heavy silting).

HEALTH:

(a) Vessels arriving from a foreign port of call must receive a visit from Port Health Authority. Each passenger (whether to land or in-transit) and crew members must be in possession of a valid international vaccination certificate against smallpox. Also see "General" before the first port.

(b) Maritime Health Declaration has to be made out and handed to the doctor at the time of visit. When all papers have been examined and found in order, the doctor will authorise lowering of the yellow flag and hand over free pratique.

(c) Vaccination against smallpox can be made on board and respective international certificate issued.

(d) In case of death, suspected disease, serious accident, etc., on board, before vessel arrives in port, Master should radio Agent giving full particulars so that necessary steps may be taken with Health/Police Authorities.

RADIO: The Port of Rio Grande has a coastal station of the EMBRATEL network, "Juncao Radio", operating on the international call sign "PPJ", on a wavelength of 600 m. (500 kHz). There is telephone communication between radio station and shipping offices, so that, normally, messages are relayed without any appreciable delay. According to government regulations, EMBRATEL is to monitor/control all maritime traffic through its coastal stations, therefore only the tugs and launches used in the Port traffic are allowed to have VHF sets for manoeuvring, therefore all VHF traffic between Agent/ships is channelled through "PPJ" as Agents are not allowed to have their own VHF sets.

TUGS: The Port of Rio Grande has 10 (ten) tugs used in the normal port operations and in refloating vessels. In order to discipline the requisition and employment, the tugs are grouped in accordance with their power: Small, Medium and Large.

The tugs are normally requested by the Agents and placed at the disposal of the Pilot, who should use the tugs in accordance with the size and draft of the vessel, as follows:

1. For berthing/unberthing manoeuvres (vessels in d.w.t.):

up to 2,500	optional
from 2,501 to 5,000	– 1 small tugboat
from 5,001 to 10,000	– 1 small and 1 medium
from 10,001 to 20,000	– 1 medium and 1 large
more than 20,000	– 2 large tugboats

2. To turn vessels or to come in/go out stern first (vessels in d.w.t.):

up to 2,500	– 2 small tugboats
from 2,501 to 5,000	– 3 tugboats (1 medium and 2 small)
from 5,001 to 10,000	– 3 tugboats (1 large and 2 small)

BERTHING: *Old Port:* Used by fishing boats and tugs.

New Port: Has 1,890 m. of continuous quay with 29 ft. draft. Has three rows of sheds for general cargo, plus a series of terminals along its length, mechanically equipped to facilitate loading and unloading operations.

Container Terminal: Max. draft 40 ft.

BULK HANDLING FACILITIES: *Cesa Silo:* Terminal used for storage, loading and unloading of grain in bulk. Storage capacity of 60,000 tons. Equipped with two loading/unloading towers of the pneumatic suction type with a discharging rate of 100 t.p.h. each. Max. draft 29 ft.

Companhia Riograndense de Adubos: This terminal handles raw material used in the manufacturing of fertiliser. The discharging operation is processed through grids with rate of 2,500 to 3,000 tons per day. The discharged cargo is transported by tip-up trucks to the plant, that has a storage capacity of 30,000 tons. Max. draft 33 ft.

Samrig Terminal: Located on the fourth line of port warehouses. It is used for storage and loading of soyabean meal. It has a storage capacity of 35,000 tons and the loading is performed through a conveyor belt with a rate of 300 t.p.h. Max. draft 29 ft.

DNPVN Terminal: It has a receiving grid used both for trucks and railroad wagons. Storage capacity of 60,000 tons. It is mainly used for storage and loading of soyabeans, however, it can also be used for storage and loading of soyabean meal. Loading is done through a conveyor belt. Max. draft 29 ft.

Acos Finos Piratini: Terminal used for storage, loading and discharging of iron ore via conveyor belts. The discharging of vessels is performed at a rate of 600 – 800 t.p.h. and the loading of barges at a rate of 250 t.p.h. Storage capacity of 20,000 tons.

Fertilizantes do Sul S/A-Fertisul: Receives raw material (liquid and solid) used for manufacture of fertilisers. To receive solid fertiliser the conveyor belt of Acos Finos Piratini's installation is used, and, for liquid, there is a pipe-line running from Fertisul's tanks to the New Port's Southernmost part. This pipe-line is used for phosphoric and sulphuric acid, while ammonia is received through a pipe-line running from the Bunker Pier to Fertisul's special ammonia tank, located in the Super Port area.

Discharging rate (approx.) as follows:

Ammonia	400 t.p.h.
Phosphoric acid	1,000 t.p.h.
Sulphuric acid	600 t.p.h.
Solids	400 t.p.h.

Vegoil Terminal: Used for the receiving of, storage and loading of crude soyabean oil. Four tanks with storage capacity of 16,000 tons total. The oil is normally received from trucks or barges. Barges have a discharging rate of about 150/250 t.p.h. The loading is performed via a pipe-line running from the tanks to the New Port (Bomba Geral area) with a loading rate of 300 t.p.h. Max. draft 29 ft.

Bianchini Terminal: One warehouse with storage capacity of 40,000 tons. Loading rate of 500 t.p.h. Uses conveyor belt system. Max. draft 29 ft.

AGEF Grain Terminal: Storage of soyabean and soyabean meal. Belongs to the Federal Railroad Administration and is linked to the DNPVN Terminal loading installations. Storage capacity of 24,000 tons (2 sheds). Max. draft 29 ft.

Meat Reefer Warehouse: Has a total storage capacity of 8,200 tons.

Barge Terminal: Basically it is an installation linked to Bianchini, SAMRIG, DNPVN and AGEF Terminals, used for discharging of soyabean meal/soyabeans from barges. It uses cranes with grabs to discharge the barges. The cargo is transported by a conveyor belt to the Terminals.

The New Port has along its extension several cranes varying from 3 tons to 12 tons, used for operations with general cargo and containers.

Super Port: Port complex located at the 4th "Secao da Barra" on the West margin of the approach channel, with various terminals equipped with loading/discharging equipment conveniently suitable for the handling of bulk cargoes.

Luchsinger Madorin Fertiliser Terminal: Located South of the bunker pier, has a T-shaped pier, 118 m. in length and max. draft of 36 ft. It has facilities for discharging sulphuric acid, phosphoric acid, liquid anhydrous ammonia and two conveyor belts for discharging of raw material used in the manufacturing of fertiliser. The storage capacity of solid fertiliser is of 100,000 tons. On the inside part of the pier there are loading facilities for barges with a loading rate of 300 t.p.h.

Discharging rates are as folows:

Liquid ammonia	544 t.p.h.
Sulphuric acid	500 t.p.h.
Phosphoric acid	1,200 t.p.h.
Solid fertiliser	500 t.p.h.

Portobras Wheat & Soyabean Terminal: It is located South of Luchsinger Terminal with a solid pier 611 m. in length and draft of 47 ft., allowing for the berthing of vessels up to 412 m. LOA. Loading rate of 3,000 t.p.h. and storage capacity of 130,000 tons. Can receive cargo simultaneously from trucks and railroad wagons, at a rate of 250 – 500 t.p.h. It is the biggest Grain Terminal in Latin America.

Cotrijui Grain Terminal: Located South of the new Portobras' Wheat & Soyabean Terminal, it has a "T"-shaped pier of 265 m. length and max. draft of 40 ft. It can receive vessels up to 60,000 d.w.t. It has 8 sheds with 25,000 tons soyabeans, 27,000 tons of wheat and 18,000 tons of soyabean meal capacity each and two tanks for storage of soyabean oil with capacity of 5,000 tons each. Loading rate as follows:

Soyabean	2,000 t.p.h.
Wheat	1,000 t.p.h.
Soyabean meal	600 t.p.h.
Soyabean oil	500 t.p.h.

Transhipment Dolphins: Located South of the Cotrijui Grain Terminal is used for transhipment of vessels over 180 m. LOA. Max. draft 40 ft.

Meat Terminal: Located South of the Transhipment Dolphins, has a solid quay of 300 m. in length and draft of 37 ft. It has a reefer warehouse with 4 cold chambers with a total storage capacity of 10,000 tons. The pier has 2 gantry cranes for the loading/unloading of containers.

TANKERS: *Bunker Pier:* Located approximately one mile North from the place called "Ponta da Mangueira"; it is a pier 228 m. in length and draft alongside of 33 ft. Primarily used for the receiving of crude oil and for the loading of bunker barges. There also are located the connections of the Fertisul Ammonia Terminal, Manah and CRA Phosphoric Acid Terminals.

STEVEDORES: *Working Hours:* Straight time, 0730/1130 – 1300/1700 (weekdays). During weekdays, labour for morning shift which commences at 0730 hrs., may be ordered up to 0715 hrs.; at 1245 hrs. extra gangs may, if necessary, be engaged for afternoon shift commencing at 1300 hrs. For night work, longshoremen (i.e. dock labourers distinct from stevedores) must be ordered before 1600 hrs.; stevedores, tally-clerks, etc., for night work may be engaged up to 1845 hrs. for shift that starts at 1900 hrs.

Sunday/holiday work must be ordered previous day, up to 1600 hrs.

MEDICAL: Two hospitals available which have adequate facilities to deal with a majority of cases.

FRESH WATER: Along the New Port quay there are 30 connections for fresh water that is delivered at a rate of about 25 t.p.h., or less, depending on the number of vessels being supplied. The terminals on the Super Port area lack those facilities apart from the Bunker Pier which has 6 connections with a rate of 20 t.p.h. For ships anchored at the Inner Roads fresh water can be supplied by a barge owned by the Port Administration, with a capacity of 400 tons. The barge requires the assistance of a tug to tow it.

FUEL: Can be supplied by truck (diesel), at the Bunker Pier (diesel and fuel) and ex-barges (diesel and fuel). Most commonly bunkers are supplied ex-barge. Suppliers are Petrobras, Shell, Elf, Exxon and Texaco. Stem has to be made previously abroad and price charged is the one in force on the day of delivery.

GANGWAY/DECK WATCHMEN: Compulsory for all sea-going vessels to have a port gangway watchman, normally requested by the ship's Agents, to the Watchman Syndicate. Apart from the gangway watchman, it is advisable to employ a crew member as deck watchman to look after the ship's safety.

OPENING/CLOSING HATCHES: Opening and closing of conventional hatches normally done by stevedores, without any extra cost, advisable, however, for steel hatches to be handled by crew.

CUSTOMS ALLOWANCES: Each crew member allowed one carton of cigarettes (or the equivalent in pipe tobacco) and one bottle of spirits, per week. Ships that remain in port over a week may request customs, through their Agent, to open bond for another weekly issue.

IDENTITY CARDS: Foreign crew members are not allowed to go ashore without presentation of identity card, on which there is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on disembarkation to the Federal Police, who will return it to the crew member on re-embarkation.

CONSULS/VICE-CONSULS:

Britain	Tel.	2.3303	Norway	Tel.	2.1611
Denmark	"	2.3011	Portugal	,,	2.3978
Italy	"	2.2362	Spain	,,	2.2621
Netherlands	,,	2.3303	Uruguay	,,	2.2953

REPAIRS: Two small repair shops equipped to carry out minor repairs. No dry docks. Radio, radar and gyro technicians available, but expensive.

REPATRIATION: Seamen being repatriated have to proceed to Porto Alegre, by bus, where arrangements can be made for embarkation by air.

TIME: GMT minus 3 hours.

HOLIDAYS: *National:* 1st January*, 21st April, 1st May*, 7th September, 15th November, 25th December*.
Municipal: 2nd February.
*No labour available.

POLICE/AMBULANCE/FIRE: Police 2.1695; Hospitals 2.3802; Ambulance 2.3801; Fire 2.1778.

TELEPHONES: There are no facilities for placing telephones on board.

GENERAL: *Light and Power:* The supply to the New Port is done by the State Company of Electric Energy (CEEE) with 13. 8 kV, 60 c/s. voltage that is lowered by 6 sub-stations along the quay, from 600 to 1,000 kVA to 380 to 220 V. Along the quay, every 25 m. there is a power plug to connect the power to the port cranes with 300 A. Those plugs can also connect the power to the vessels along the quay.

Flags to be flown.

(*a*) Brazilian flag at the top of the foremast.

(*b*) Yellow flag (to be hoisted until the doctor's clearance is given). Vessels arriving from a Brazilian port, with no disembarking passengers, must *not* hoist yellow flag unless there is sickness on board requiring presence of the Health Authorities.

(*c*) Pilot flag.

(*d*) Customs flag (to be hoisted after the vessel is cleared by Customs and flown during the vessel's stay in port).

SHIPMASTER'S REPORT: 1980.

Flags: The Brazilian flag when flown as a courtesy ensign should at no time be allowed to get tangled.

Identification Cards: Necessary but no photograph required.

Repatriation: Transport to Porto Alegre is possible by air taxi.

Garbage: Authorities are very strict with regard to throwing garbage overboard.

SHIPMASTER'S REPORT: February, 1982.

Pilotage: There are anchorages for three vessels between a position some 3 cables South of No. 12 Light Buoy to the vicinity of No. 14 Light Buoy. Here vessels can be in ample depth but, owing to the narrow channel, a Pilot must be retained aboard for, despite the current being outward the effect of the wind is critical. Despite the channel depth, there is a restriction to 38 ft. max. draft due to the inability of the dredging to guarantee more over the bar.

Documentation: At least 10 Crew Lists are required but otherwise few formalities.

Radio: This is one of the most efficient along the coast and both H/F and VHF are handled with commendable speed while W/T is equally available.

Tugs: Depending upon weather and current conditions, at least one tug is required to turn a vessel at the anchorage to sail outwards.

Fresh Water: The barge that delivered up to 400 tonnes is now condemned hence the only facility is a maximum of 45 tonnes from a tug, an expensive facility.

Fuel: There are at least two bunkering barges, one a minor coaster, but the speed of delivery is low e.g. 100 t.p.h. The depth of water at the tanker berth is 33 ft., hence loaded vessels ex-Argentine ports must remain in the stream.

Remarks: The Agencies and Pilots appear to be well geared to the prospect of a steady use of the port for bunkering, water and stores, while the radio station helps in expediting all communications. Suggestions have been made for three dolphin type berths in place of the anchorages, use being made of the Eastern side of the channel.

SHIPMASTER'S REPORT: November 1982.

My vessel is 39,026 tonnes SDWT and was ordered to load a full cargo of Soya Bean Oil for discharge in Iran:

Contained in my voyage orders was the instruction to inform Agents and suppliers of ETA at daily intervals 20/15/10/5/3/2/1 (My departure port was Bandar Abbas and routing was via Cape Agulhas).

Documentation as per "Guide to Port Entry". A "Nil" statement of drugs (excepting medical), firearms and ammunition in three copies is required.

Courtesy flag from foremast at all times.

My vessel loaded part cargo in Porto Novo (General Pumping Berth). The draft alongside was quoted to me as 29 ft. by my Agent but he stipulated actual draft was about 27 ft. with soft mud. The soft mud I do not dispute but my own sounding with the hand leadline indicated 26 ft. 4 in. and I did not load beyond 26 ft.

Loading rate never exceeded 250–300 tonnes per hour. After loading to 26 ft. draft I shifted ship to a pontoon berth (un-named) in position Lat. 32° 07.22′ S., Long. 52° 06.15′ W. (Farol da Barra Lt.H. 084.8°×1.34 miles). At this berth I again checked depth of water by hand leadline and got around 14 m. which presented no difficulties; my Summer draft being 11 m.

Loading at this pontoon berth was carried out by barge which varied in size from 3,000 tonnes to 1,500 tonnes; apparently they load in Porto Alegre and average turnaround time is about 5 days thus I anticipate a further week here before completing cargo as barges are not plentiful. Loading rate approx. 200–300 tonnes max.

Passes complete with photographs are required by all ship's staff.

At this pontoon berth launches are available to take crew members ashore but they are expensive and I would advise Masters to abstain from being too generous.

SHIPMASTER'S REPORT: October 1983.
Anchorages: The anchor was dropped in the Outer Roads off Rio Grande do Sul. The holding ground proved to be poor and the ship dragged anchor in a force 4 wind with less than a 2 knot tide, though anchored in 12 m. with 4 shackles in the water, i.e.: 9 times the depth. The nature of the bottom was mud with some shell, though marked gravel on the chart. While entering port the Pilot advised that ships frequently drag there, even with 8 shackles out.
Berthing: From the anchorage to the No. 1 (sea) buoy was 2 miles thence 3 miles more to the berth. There was about 17.6 m. depth at Cotrijui, reducing to 14 m. in the dredged approach channel.

The ship berthed at dolphins, in the first instance, port side to, just below the silo at Cotrijui. The village of Macaceo is just to the West of the dolphins. One floating elevator was then employed to start loading from a series of barges, pending the ship's turn at the faster, silo berth.

The gross rate of loading from the floating elevator (there are several on the river; this one was owned by Corymar) was 77 t.p.h. At 0415 hrs. 13th October, having completed loading 5,000 tonnes from 3 barges, the ship awaited the availability of the silo berth. At 1720 hrs. 18th October we left the dolphins to allow the next ship to berth there before dark and, after anchoring just upstream from the silo while the previous ship completed paperwork, berthed at Cotrijui silo, port side to, at 2124 hrs. 18th October.

The berth and equipment are very worn and in a poor state of repair. It is hard to keep the ship alongside in the strong tides due to the configuration of the river bottom. A dilapidated shore gangway is used; there is nowhere to land a ship's gangway. There ought to be another bollard and fender amidships to square the ship on to the wharf, and place an after fore spring properly. However, the shore personnel were very helpful and co-operative. As the hatches finished they were actually trimmed, without having to be requested, by men equipped with shovels. The loading spouts, working 2 holds at a time, are heavy and less manoeuvrable than most silos. Therefore the cargo cannot be thrown sideways into the wings and ends of the hatches with any force, leading to a poorer stow. The loading rate was 372 t.p.h. Ships longer than 250 m. have to have a tug pushing onto the wharf while loading, rather like some of the Mississippi berths. Cargo was completed at 0845 hrs. 21st October, after which there was a relatively large amount of documentation to be done. The ship sailed at 1249 hrs.

There is a more modern complex called Portobras Wheat and Soyabean Terminal. Unfortunately, after only about 6 months in operation, there was a fire there and the Terminal no longer works.
Fresh Water: Fresh water can be obtained from some berths but not Cotrijui silo or at the dolphins. It comes by dumb barge, capacity 250 tonnes.

AUTHORITY: Capitania dos Portos do Estado do Rio Grande do Sul, Rua Almirante Cerqueira e Souza 197, Cep 96200, Rio Grande RS, Brazil. *Contact:* Captain Reynaldo Guedes Pereira.

SALVADOR (Bahia): 13.01 S. 38.35 W.

(See Plan Book)

LOCATION: Lat: 13° 00′ 37″ S., Long: 38° 35′ W.
PORT LIMITS: The Port is limited by the line East/West which passes through the Santo Antonio Lighthouse, bridging the frontier coast of the Island of Itaparica, and from there turning to enter the bay through the same line East/West which connects the Continent and that towards the coast Northwards as far as parallel 12° 50′ and then from there going Eastwards towards the Continent.
DOCUMENTS: (See "General" before first port.)

Agent also fills out the "Entrada & Saida Capitania do porto" to be signed by Master. The particulars for this document are:

Name of Master – name of ship – flag – code signal letters – tonnage: gross and net – horsepower – engines: twin or single – type of ship, etc. – port of registry – tons of cargo to discharge – owners – Agents in port – last port of call – previous ports of call – next port of call – number of crew – number of disembarking passengers – number of transit passengers – speed of vessel – also specifications of nature and quantity of cargo in transit.
Documents to be Supplied to the Ship Before Departure:
1 "Clearing pass" from the Port Captain
1 „ „ „ „ Federal Police
1 „ „ „ „ Post Office
1 „ „ „ „ Custom House
1 Custom House negative cargo declaration for each following Brazilian port of call.
The Port Doctor will require the following information: Class, name and flag of ship – net register tonnage – name of Master and ship's Doctor – number of officers and crew – name of Agent – all ports called at during voyage – number of days from first to previous ports of call – number of passengers disembarking and in transit – tons of cargo to be discharged – whether any sick persons or deaths occurring on board.
The Customs will require the following information: Name of vessel – nationality – gross and net tonnage – H.P. of engines – name of Master – number of officers and crew – owner's name – name of Agent – all ports called at during voyage – ports of destination – days of voyage from first to previous ports of call – tons of cargo to be discharged – particulars of passengers.
The Federal Police require the following information: Vessel's name – nationality – gross and net tonnage – name of Master – number of officers and crew – name of Agent – port of departure and all ports of call – number of days from first and last ports of call – number of passengers disembarking and in transit – specification of embarking and disembarking ports of each transit passenger.

Ships calling at Salvador are normally boarded by the authorities at any time, day or night, when required. If there is no special urgency, however, the visit is effected the following morning at 0630 hrs.

The Inspection Area of the Port Health Authorities, Federal Receipt and Maritime Police is defined by a radius of 1 mile around the point of co-ordinates Lat. 12° 58′ 07″ S., Long. 38° 32′ 18″ W., the area around the point of co-ordinates Lat. 12° 55′ 56″ S., Long. 38° 31′ 37″ W., indicated in chart 1102 of the NHD.

Vessels may only come alongside after clearance by the Federal Receipt, Port Health Authorities and Federal Police. The free anchorage coincides with the pilotage waiting area and permitted anchorage (anchorage of Monte Serrat).

PILOTAGE: Compulsory for all vessels entering Salvador and berthing/unberthing at general docks or proceeding to other marine terminals. The following areas are considered as pilotage zones for vessels bound for the port: Monte Serrat Anchorage, the S.W. Anchorage to the Panela Bank and waiting and disembarking point for Pilots, shown on NHD chart 1102.

Also considered as pilotage area is all the internal area of the Bay of Todos os Santos (All Saints) to the North of the parallel passing through Monte Serrat. The area of the port of Salvador, inside the breakwater, is considered to be a compulsory pilotage area for vessels over 4,500 d.w.t.

Also considered to be an area of compulsory pilotage is all the zone North of parallel 12° 55′ 05″ S., which passes through Monte Serrat, for vessels over 3,000 d.w.t., bound for the terminal ports and their access channels inside the Bay of Todos os Santos. Request for Pilot can be made through the ship's Agent, 2 hours in advance, specifying the time of entry of the vessel and from which point pilotage will be required.

The Salvador Pilots' Association has VHF-FM radio, at their office and on board the pilot launch, operating on Channels 16 and 11, listening out on Channel 16.

The address of the Pilots' Association is: Rua da Grecia No. 8, Tel: 242-2221, Edificio Serra da Raiz, 5th Floor, Room 510.

Vessels should use the signal "Hotel" to call up the Pilot at the pilot station (Chart 1102) and may use an audible signal for this purpose.

The Amaralina (ERA) Radio Station maintains coastal communication, and can also be used to call the Pilot by vessels bound for Salvador. Amaralina Radio Station communicates with the Pilots by telephone.

APPROACHES: *Access Channel:* There are 2 accesses to the port. The North Channel, the main one with the greatest depth, starts at a point Lat. 12° 58′ S., Long. 38° 32′ 04″ W.; it reaches the manoeuvring area passing to the North of the North Breakwater, and is 400 m. long.

The South Channel, starts from the Southern Buoy of Panela Bank as far as the entrance between the North and South Breakwaters, where it reaches the port manoeuvring area. Vessels are not permitted to cross the bars formed by the breakwaters, vessels leaving port having priority.
Action of Tides: Tidal amplitude in the port of Salvador is 2.5 m. on average, during the tides at the full moon. The flood tide in the port of Salvador runs for 5 hours to the N.N.E. and the ebb for 7 hours to the S.S.W., with a speed of 1.5 knots. During Spring tides, these tides can reach 2 to 3 knots.

During ebb tides, it is suggested that the approach to the quay be made by the South Entrance, between the two breakwaters, so that there will be no need for a yaw action in the manoeuvring bay formed by the breakwaters. The ebb tide may cause the vessel to swing to the South, in the entrance between the breakwaters.
Manoeuvring Area: The area intended for the manoeuvring of vessels for mooring or unmooring has a length of 100 m. along the whole extension of the quay, with a draft of 27 ft. at any state of tide. In this area, and also in the access channel the anchorage of any vessel is expressly prohibited, except with the prior permission of the Port Captaincy.

ANCHORAGES: There are 3 anchorages for waiting and inspection, see Chart 1102 of the NHD.
South: To the South of Panela Bank, in position Lat. 12° 58′ 00″ S., Long. 38° 32′ 33″ W. for waiting for the Pilot.
North: In the vicinity of position Lat. 12° 56′ 01″ S., Long. 38° 31′ 06″ W. In the vicinity of position Lat. 12° 57′ 01″ S., Long. 38° 41′ 01″ W.

There is a special anchorage for LASH vessels and for the operation of loading and unloading barges. It is located on the alignment of the North Light of the North Breakwater and the Monte Serrat Lighthouse, at a distance of 0.8 miles from this lighthouse, as shown on Chart 1102 of the NHD, in note (1).

Inside the breakwater and to the South of Fort Sao Marcelo there is an exclusive anchorage for the mooring of LASH vessel barges.

PROHIBITED ANCHORAGE: Locations prohibited for anchorage and movement of foreign and national pleasure craft. Mooring and anchorage locations:

a) Bahia Yacht Club (Chart 1102)
Lat. 12° 59′ 49″ S., Long. 38° 32′ 00″ W.
b) Aratu Yacht Club (Chart 1103)
Lat. 12° 48′ 36″ S., Long. 38° 28′ 49″ W.
c) Area of the Bay of Itapagipe (Chart 1110).
d) Section included between the prohibited anchorage area and the LASH barge anchorage (Chart 1102), unless duly authorised by the CPBA.

Areas where anchorage and navigation are prohibited.

a) All the area in front of Inema beach (Chart 1104).
b) Almirante Alves Camara Terminal (Chart 1105).
c) Manoeuvring bay for the quay at the port of Salvador (Chart 1102), port of Aratu (Chart 1103), Terminal of USIBA (Chart 1103), Dow Chemicals (Chart 1103), (only navigation prohibited.)
d) D. Joao Oilfield – location designation in Caution B of Chart 1110.

RESTRICTIONS: There is sufficient depth of water in the Outer Anchorage to accommodate the largest vessels afloat with safety, and the anchorage can, in addition, take a considerable number of vessels at any one time. The average depth of water in the channel leading to the dock warehouses is 33 ft. (10 m.) except opposite Shed No. 2 where 28 ft. (8.50 m.) is the max. depth. The dock quays are sheltered by two breakwaters, one running parallel with the shore for just over 0.5 miles. Because of the shallow draft opposite No. 2 Shed, all vessels entering or leaving the port with more than 28 ft. normally enter the Northern Channel.

MAX. SIZE: *Limit of Size of Vessels Navigating in the Channels:*

Access to Temadre: Length 250 m., draft 12.8 m., beam 40 m.; Access to Dow Chemicals: Length 170 m., beam 25 m., draft 10.3 m.; Access to USIBA: Length 170 m., beam 25 m., draft 10 m.; Access to the port of Salvador: Length 180 m., beam 30 m., draft 10 m.

Also see "Berthing" and "Tankers" and Port of Aratu.

ARRIVAL INFORMATION: Required before vessel's arrival:

(a) Vessel – ETA; deepest draft.
(b) Cargo – Quantity of cargo to be discharged and specification of hatch list.
(c) Passengers – Number of passengers disembarking.
(d) Bunkers – Quantity required.
(e) Water – Quantity required.
(f) Labour – Quantity required.
(g) Any other information – Number of mailbags to be landed, etc.

Specimen of telegram to be sent from previous port:

1. Vessel's name.
2. ETA Salvador.
3. Draft.
4. Number of passengers disembarking.
5. Number of mail bags to be landed.
6. Quantity of bunkers required.
7. Quantity of water required.
8. Number of gangs required.
9. Any other information.

FLAGS: On entering the port the vessel should fly the following flags:

1. Brazilian flag on fore mast top.
2. Quarantine flag when Salvador is first Brazilian port of call, or when there is a passenger for Salvador from a foreign port.
3. Customs flag (white star on blue background) after the vessel has been visited.
4. Flag "B" if dangerous cargo on board.
5. Pilot flag.

PRIORITY: Passenger vessels and wheat vessels have priority over cargo ships and the so-called "navios mixtos", i.e. cargo ships with a limited passenger accommodation. Passengers vessels are those that carry 60 or more passengers; except when loading 1,000 tons or over in which case they loose their priority.

HEALTH: The Doctor only boards the vessel when Salvador is first Brazilian port of call or when there are passengers from abroad to disembark, in which case Master should advise Agent who will then take the necessary steps required by Port Health. A yellow flag should be flown if Port Health Doctor is required on board.

RADIO: Master should always endeavour to contact Agent through Radio Amaralina Coastal Station, call sign ERA, and Agent will contact Master the same way. Since this station has a limited range, the Agent at Salvador may be contacted via Rio Radio when North-bound, or Olinda Radio/Fortaleza Radio when South-bound.

TUGS: Always used for berthing and unberthing. At other marine terminals tugs are supplied from Salvador. For container and cargo vessels berthing at 10 m. quay, a tug is usually supplied to help vessel moor and unmoor. When coming alongside tug joins vessel inside port. 8 tugs available 120-1,688 h.p.

Rules for using tugs:

I) At Temadre and Usiba.
All berthing and unberthing of vessels with tonnage between 2,000 g.r.t. and 10,000 g.r.t. must be with the aid of 2 tugs. Vessels with gross tonnage between 10,000 and 50,000 g.r.t. must be assisted by 2 tugs of power above 1,000 h.p. Vessels over 50,000 g.r.t. must be assisted by 3 tugs of power greater than 1,000 h.p.

II) In the port of Salvador and other marine terminals.
All manoeuvres of berthing and unberthing of vessels with gross tonnage between 2,000 and 10,000 g.r.t. must be assisted by 2 port tugs. All manoeuvres of vessels of gross tonnage above 10,000 g.r.t. must be aided by 3 port tugs. Vessels of tonnage less than 2,000 g.r.t., according to the Pilot's judgment, may use a port tug, in special situations.
In special situations, with winds from the East, according to the judgement of the Pilot, the use of tugs can be dispensed with for unberthing.

BERTHING: No restrictions, but if draft over 28 ft. berthing and unberthing take place from 1 hour before HW until 1 hour after HW. Anchor used for berthing. Container and cargo vessels at 10 m. quay may unberth at any time, but Pilots usually refuse to berth during hours of darkness because of the bad lighting on this length of quays.

The Port of Salvador is protected by 1 breakwater (Northern Breakwater) and 1 mole (South Mole). There are two channels for vessels entering and leaving. On the wharf there are 9 warehouses and between some of the sheds sheltered storage spaces.

Heavy lifts are left on the wharf until taken delivery, or discharged directly to trucks.

There are 4 quays in the port:

	Length (m.)	*Depth (m.)*		*Max. draft. (ft.)*
Coastal Vessel Quay	683	7 – 8	warehouse 5 & 6	23.5
Long Distance Quay	782	7 – 9	warehouse 7 & marine station	32.0
Connecting Quay	238	8 – 9		
10 Metre Quay	370	9 – 10		

All warehouses (excl. No. 9) are fitted with overhead internal cranes.

Explosives would be discharged into lighters at the proper anchorage for discharge of such cargo and taken to special deposits. Forewarning must be given for this cargo in order that arrangements may be made in advance.

One grain discharger × 150 t.p.h., and 2 wheeled suction plants × 60 t.p.h. each.

Grain silos – 20,500 tons (Salvador Mill), and 13,357 tons (Bahia Mill).

Industrial cold store of 2,300 cu.m. belonging to FRIUSA.

All other goods are loaded/discharged at the wharf.

Bulk Cargo Vessels: See "Aratu".

Containers: 1×30 ton crane for containers. 2 transtainers will be available in 1985. Roll-on/Roll-off facilities available. 22,000 sq.m. storage for containers and 10,000 sq.m. for containers ex-Roll-on/Roll-off.

Also see "Report" dated November 1982.

CRANES:

Jib Cranes:	4×3 tons 2×0.5 tons 17×3.2 tons 3×6.3 tons 3×12.5 tons
Mobile Cranes:	1×13.5 tons 1×30 tons 1×75 tons
Floating Cranes:	1×100 tons

STEVEDORES: The Agents at Salvador act as stevedores.

The work at Salvador, especially loading, is considered amongst the best in Brazil, as a rule, sufficient gangs are available.

Masks, gloves are supplied by the stevedores. All other material such as slings, nets, etc., shall be supplied by the vessel.

The ordinary working hours are 0700 – 1100, 1300 – 1700 hrs., Mondays to Saturdays inclusive.

For overtime work notice must be given the previous day. As it would be difficult to obtain permission before each overtime period, a general permission covering ship's stay in port shall be obtained prior to arrival.

1100 – 1300 hrs. Special permission must be obtained from the Dock Company which is only given to passenger vessels, or for cargo vessels to finish the cargo, or under special circumstances.

1700 – 1900 hrs. Continuation period. Advice must be given to workmen at 1645 hrs.

1900 – 2300, 0000 – 0400 hrs. Considered as night work. Advice must be given to the Dock Company at 1645 hrs. and to the stevedores at 1700 hrs.

2300 – 2400 hrs. same as 1100 – 1300 period.

0400 – 0600 hrs. Continuation period. Advice must be given to workmen at 0345 hrs.

0600 – 0700 hrs. Second night continuation period. Can be worked under special circumstances to finish the cargo. Vessels discharging/loading bulk cargoes, or loading/discharging reefer cargo, are allowed to work round the clock.

To work on holidays, advice must be given to the Dock Co. before 1700 hrs. the previous working day. For Sunday work advice must be given before 1100 hrs. on Saturday. The same applies for stevedores/tally/coopers.

CARGO INFORMATION: Inward Cargo: When cargo is discharged from the vessel it is checked, weighed and weight noted by the shore tally-clerk (for account of the ship), by the Dock Company tally-clerk and by the Custom House. If there is a difference in weight, the ship is held responsible and has to pay double duty on same. Once the goods have been checked and weighed ship's responsibility ceases.

Goods are delivered to the consignees on presentation of the bill of lading to the Dock Warehouse.

Transhipment Cargo: Foreign cargo for transhipment at Salvador must be so declared on the manifest, and after it has been discharged the Agents have to obtain special Customs permission to tranship it to the port destination and also sign a guarantee that the goods are going to that port and that duty will be paid there. They will be held responsible for that duty until a declaration issued by the Custom House at the port of destination is received by them and handed over to the local Customs.

Transhipment charges vary considerably with the type of cargo and are very high compared with foreign freights.

Outward Cargo: Generally, cargo to be loaded is deposited in the dock shed prior to vessel's arrival.

Refrigerated Cargo: All reefer cargo is discharged directly to trucks, and vice versa.

Dangerous Cargo: Vessels with explosives and inflammables on board are not permitted to come alongside. All vessels carrying this kind of cargo must fly the "B" signal and remain at the proper anchorage. Advance notice must always be given of any vessel carrying explosives and inflammables. Under special circumstances it may be arranged for vessels to come alongside if they only have a minimum quantity of dangerous cargo on board, and the hatch in which it is stowed is not to be opened at Salvador.

When vessels are boarded by the Harbour Officials, the Master must hand to the Customs Officer and the Federal Police the Dangerous Cargo List.

Corpses as Cargo: Notice should be given to the Port Authorities of such cargo carried, if possible, before vessel's arrival.

Vegetable Oil in Bulk: Vegetable oil in bulk is loaded directly from lighters where the oil is deposited prior to vessel's arrival. Vessels are usually required to supply steam for pumping when they can.

Loading and Discharging Rate: The average rate for loading bagged and baled cargo is 16 – 20 tons per gang per hour. (Tobacco has been loaded at 28 tons and cocoa at 30 tons per gang hour). Discharging rate of general bagged cargo is about 10 tons per gang hour.

Heavy Lifts: For heavy lifts of more than 3 tons, a request shall be made to the Dock Co. to use the 80 ton capacity floating crane. Heavy lifts may also be discharged directly to the quay with the vessel's own gear when, due to a light draft (under 24 ft.), they can come directly alongside without the use of a pontoon. It is recommended that the Agent be consulted before booking any heavy lifts for Salvador as the heavy lift crane is sometimes out of working order.

Inflammables, Fuel and Diesel Oil, Etc., as Cargo: Bulk crude oil, diesel, fuel, inflammables, lubricants, etc., are discharged at the Madre de Deus Terminal, which belongs to the Government owned Petrobras.

Damaged Cargo: When cargo is discharged, damaged or pilfered, it is immediately checked and weighed by the Dock Co. and the Customs and separately stored.

The Insurance Co. makes a survey in the presence of the Dock Co. upon request of consignees.

Bulk wheat is discharged to two mills at Salvador, namely the "Moinho Salvador" and "Moinho da Bahia". Average discharging rates (23 hours work per day) are respectively 1,500 and 800 tons.

Handling of Mail: Timely notice should be given to the Agents in case there is mail to be landed, stating the number of bags.

As regards outgoing mail the Agents will be advised by the Post Office if there is any and issue the Post Office Pass. The bags shall be placed at the quayside, loading being for the account of the ship.

MEDICAL: When vessels arrive over week-ends or during holidays advisable that Master cable Agent giving advance notice of medical attention required if case is serious. For routine medical attention no previous advice required as ample medical and hospital facilities available.

TANKERS: All tankers loading/discharging inflammables, lubricants, etc., must do so at the Madre de Deus Terminal, which is privately owned by Petrobras, the Brazilian Government-run oil company.

The Madre de Deus Terminal is a T-fashioned quay situated within All Saint's Bay, 18 miles from Salvador. All vessels calling at Madre de Deus must be cleared at Salvador where Agent and authorities board the vessel before proceeding to Madre de Deus. This terminal is equipped only to handle tankers. Water, bunkers and deballasting facilities are available.

Max. drafts are 41 ft. for vessels loading and 37 ft. for discharging, and length 240 m.

Five berths are available, pipe-line is 12 in.

PP1. Max. size 65,000 d.w.t. Depth 13 m.
PP2. Max. size 53,000 d.w.t. Depth 13 m.
PP3. Max. size 16,000 d.w.t. Depth 13 m.

These 3 berths can load or discharge both Crudes, White oils and Products. They are all fitted with deballasting facilities.

PS1. Max. size 4,000 d.w.t. Depth 7.5 m.
PS2. Max. size 2,000 d.w.t. Depth 5 m.

Also see "Shipmaster's Report".

DENSITY: Salt water.

FRESH WATER: Advance information recommended. Rate 20 cu.m./h. If several vessels are in need of supply, pressure may not be enough to supply all at once. No water barges available in the port, and all vessels are replenished alongside.

FUEL: Diesel oil can be supplied alongside at Salvador, directly from trucks to vessel, but fuel oil can only be supplied by Petrobras at the Madre de Deus Terminal, 18 miles up the bay.

Lubricants are supplied in drums. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: All foreign vessels must employ a gangway watchman by law. Hold watchmen are optional, depending on request by Masters/Agents.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCES: Customs officials will place cigarettes and "souvenirs" belonging to crew members under lock and seal. Excepting the Master, each crew member may keep in his possession only 1 carton of cigarettes and 1 bottle of spirits with seal broken. The Customs will periodically renew the seals for vessels staying in the port for a lengthy period thus enabling new issues to crew.

LIGHTERS: Soc. Alvarengagem de Ilheus are operating 4 lighters in the port with a combined capacity for about 670 tons.

CONSULS:

Austria
Belgium
Denmark
France
Germany
Great Britain
Italy
Netherlands
Nicaragua
Norway
Portugal
Spain
Sweden
Switzerland
U.S.A.
Uruguay

REPAIRS: The Navy operates a dry dock at Aratu with the following capacity: 35,000 tons; length 230 m.; width 30 m.; depth 8.5 m. Various small vessels can be attended at the same time. There are a number of workshops in Bahia fitted for repairing vessels, but it is recommended that large repairs be effected at the Aratu dry dock. When time allows, repairs may be made whilst the vessel is alongside the wharf. There is no time-limit but, as a rule, a vessel is not supposed to remain idle at the wharf if the berth is needed for another vessel which has to load/discharge.

SURVEYORS: *Lloyd's Agent:* Expresso Mercantile Agencia Maritima Ltd., 340 Avenida Estados Unidos, Salvador. Tel: 242-7011.

Bureau Veritas: 3 Rua Visconde Rosario, Salvador. Tel: 243-8222.

American Bureau of Shipping: H. Taxman, 18 Avenida Estados Unidos. Tel. 242-0447.

REPATRIATION: Most crew changes are made via Rio de Janeiro but some are made via Recife and on direct flights Salvador/Lisbon.

AIRPORT: Airport is 31 km. from centre of town (40 km. from the port). No direct flights to foreign countries but various daily connections available with Rio, S. Paulo, etc.

TIME: GMT minus 3 hours.

HOLIDAYS: *National:* 1st January; 21st April; 1st May; 7th September; 19th October; 15th November; 25th December.

Municipal: Movable: Good Friday; Corpus Christi. Fixed: 24th June (Saint John); 8th December (Our Lady of Conception).

Traditional: Movable: Carnival – Tuesday (Mardi Gras) and Ash Wednesday. Fixed: 2nd November (All Souls); 2nd July (Independence of Bahia).

POLICE/AMBULANCE/FIRE: Fire Tel: 193; Police Tel: 190.

TELEPHONES: Facilities available for placing telephones on board.

REGULATIONS: Rat-guards must be used at all times, as the Port Health make periodic inspections on the quay.

STORES: Ship chandler can supply meat, vegetables, tropical fruits, canned goods, etc., but no bonded stores for foreign goods available.

DEVELOPMENTS: A new gas terminal is being constructed near the Tequimar Liquid Terminal.

SHIPMASTER'S REPORT: September 1981.

General: Salvador, capital of Bahia State is a large city combining the old with the modern. It is an important tourist resort for both Brazilian and overseas visitors.

The tanker terminal, owned and operated by 'Petrobras' at Madre De Deus Island, is some 14 miles N.N.W. of Salvador in Dos Santos Bay,.

The most unsettled weather occurs in March to May with heavy rain.

Approach: Salvador is easily picked up on radar at maximum range with its high rise buildings situated on an elevated point called Pt. De Sto Antonio.

Vivid flashing white lights from TV towers situated about 2 miles E.N.E. of Pta. De Sto Antonio can be seen long distances at night. BA. 540 and 546 refer to Salvador. For Madre De Deus the Brazilian chart 1105 is useful.

Although the entrance to Salvador Bay (Torros os Santos) has good depths strong currents are found on rising and falling tide setting N.N.E. and S.S.W. respectively.

Pilots: Pilots are embarked in the shelter of the Bay, 1 mile West of the Southern Breakwater. They use a small dark red launch. Pilots disembark in same position.

Pilotage time to Madre De Deus is about 1.25 hours.

VHF: Pilots: Call "Salvador Pilots" Channel 16, working 11, 13, 14. Range limited to about 6 miles South of Pt. Antonio.

Tugs: Channel 13.

Public Correspondence: 'Salvador Radio' Channel 16, working 24, 25, 26, 27 local and international (IDD) calls.

Arrival: Vessels proceeding to Madre De Deus Tanker Terminal will be required to anchor about 1.5 miles South of Pta. De Monte Serrat after embarking Pilot, for customs inspection, even if coming from another Brazilian port, generally takes about 1 hour.

If waiting for berth at Madre De Deus vessels anchor off Salvador.

Anchorage: South of Monte Serrat off Salvador in least depth of 13 m., plenty of sea room.

Madre De Deus Terminal: The large tanker terminal, operated by Petrobras, was completed 15 years ago to serve the refinery at Mateipe 4 miles to N.E. Maximum draft is 42 ft. (12.8 m.) and maximum size up to 85,000 d.w.t.

Least depth on approach to berth was found near Beacon No. 7. 2.5 miles S.E. of "P1" Berth of 11 m. Chart Datum. The terminal is set amongst wooded islands, the principal being Isla Do Frade which has an inviting sandy beach. By sea to Salvador takes about 1.5 hours by launch. The road which branches inland to join the main Rio De Janeiro Highway is about 50 miles in length and journey time of 1.25 hours. Tidal streams off the berth are very strong with a 3 m. range at times. Rates of 4 knots are common. Vessels calling regularly at Madre De Deus will find the Brazilian charts useful, plus Brazilian Tide Tables which list the Terminal and adjacent areas.

Berthing: Vessels are swung about 3 cables S.W. of the berths and use offshore anchor when berthing (about 3 shackles in water). At "P1" Berth Starboard anchor is used which is to assist in both berthing and unberthing. Also at "P1" Berth forward moorings go to a dolphin ahead of the Berth. At "P2" and "P3" Berths there is an off-lying dolphin astern of the berths (to West). Two powerful mooring launches are used, one each end. We used on "P1" Berth 4 head/stern lines, 2 breast and 2 springs each end. The forward breast lines to have any use should be brought down the deck to a lead about third of ship's length from forward.

There are 2 large flat sprung fenders proud of Jetty face.

Tugs: 2×1,200 h.p. permanently stationed at Terminal, 2×1,000 h.p. tugs come from Salvador as required.

For large vessels 3 tugs are used, generally pushing or tied up alongside with ship's lines.

Berths: Total of 5 berths on 2 jetties for sizes up to 85,000 d.w.t. and 42 ft. draft with following characteristics.

Berth No.	*Draft ft.*	*Size d.w.t.*	*Side to*	*Berthing*	*Product*
P1	42	85,000	Port	6 hrs. either side HW	Crude, Products, Refrig LPG
P2	42	33,000	Either depends on tide	Any time	Crude, Products
P3	36	33,000	Starboard	On flood tide	Crude, Products
S1/S2	24	15,000	Below 120 m. length any side to over 120 m. "S1" starboard side to and "S2" port side to.	Any time	Products, Heated LPG

Density: Density at "P1" Berth 1025 at all states of tide.

Discharge: Refrigerated LPG only at "P1" Berth.

2 chicksans – 10 in. vapour, 12 in. liquid, 150 ASA, both of Brazilian manufacture, similar to Santos. These are not now used due to leaks and discharge is by flexible hose to manifold on jetty. Shore will supply hose although we used our own for part of distance as they were already rigged with lower discharge pipe from Santos. Plenty of reducers available. As the vessel is off the quay face for about 5 m. due to fenders, approx. 20 m. of hose are used.

No vapour return line at present.

Discharge to tanks situated about 1.5 miles inland, varies from 200 t.p.h to 400 t.p.h. with back pressure around 6 Bar. Communication with shore is poor with operator on quay speaking no English.

3 refrigerated holding tanks of 1×10,000, 2×5,000 tonnes nominal capacity plus 4×3,000 pressure spheres. The product is either heated into spheres and then transhipped into small coastwise tankers on berths "S1"/"S2" or pumped another 2 miles to a road tanker terminal near the refinery. Surveyor, SGS, has little knowledge of LPG calculations. 5 chicksans to West of LPG arms are for products plus numerous flange connections with rubber pipes on jetty.

Facilities: Fresh Water: On each berth, couplings American type. About 15 t.p.h. dependent on how many vessels taking water.

Fuel: On each berth both H.O. and D.O. available.

Access: A roadway to each berth with weight restriction of 16 tonnes and permission to discharge stores etc., within 20 m. of ship's side.

Repatriation: Salvador Airport 1 hour from terminal. Local flight to Rio International Airport.

Taxi: Costs £26 for round trip to Salvador.

Repairs: Basic repairs possible from Salvador.

Doctor: From Salvador will come very promptly, organised through Agent.

Chandler: Principal chandler – Barbosa Costa, reasonable for basics.

Communications: Telex – International. Phone – Good Internal and International Direct Dialing (IDD). About £2 per minute to UK. There is a public call box in Jetty Operators Office which you can use to reverse charges overseas – very good and easy.

Consul: Salvador has an Honorary British Vice-Consul which comes under Rio de Janeiro and was very helpful.

Salvador: 241-3222.
Brasilia: 0612-25298, 252710, 252625.

Safety Equipment Certificate extended by 5 months through Brasilia and Salvador.

Lloyds: Non exclusive surveyor in Salvador – ABS, nearest exclusive is Rio de Janeiro.

Lifeboat: Can be lowered into water. A sandy beach on wooded island opposite terminal is popular with ships but watch tide – current rise and fall.

REPORT: Received November 1982.

Butane/Propane at Petrobras Terminal (Temadre): Capacity 20,000 tonnes at minus 45°C. Discharge rate up to 500 tonnes per hour but dependant on vessel pumping rate. For daylight berthing vessels up to 50,000 d.w.t., max. draft 40 ft., vessels up to 118,000 d.w.t. max. draft 38 ft. Max. LOA 240 m.

Butane/propane vessels with over 20,000 tons to discharge may transfer excess across the Terminal to smaller gas tankers, sometimes unrefrigerated.

Larger vessels than limits shown have gone in. We had vessel (55,173 d.w.t./39 ft. 6 in. draft) earlier this month, which berthed by special dispensation of Port Captain, under considerable pressure from Petrobras. Vessel had less than 50,000 tons on board but limitation is on registered d.w.t., not cargo. Port Captain's Office now studying possible increase d.w.t. limit for 40 ft. draft vessels but not confirmed yet, so if you are working vessel over present limits please advise soonest and details.

Remember vessels proceeding to Santos to complete discharge must arrive there with 28 ft. draft or less. Usually there is no difficulty here with transferring propane to butane tanks on board to correct trim.

REPORT: May 1983.

Refrigerated LPG Discharge: Pipe-line length 3,000 m., liquid line diameter 18 in., vapour line diameter 8 in. Discharge using 3 liquid hose lines with 8 in. diameter and 1×8 in. diameter vapour hose line.

AUTHORITY: Companhia Das Docas Do Estado Da Bahia (CODEBA), Estacao Maritima De Passageiros, Avenida Da Franca, S/N, CEP 40000, Salvador, Bahia, Brazil. *Tel:* (071) 243-5066, 243-5165, 243-5965, 243-5765. *Telex:* 071-1110.

Porto De Salvador – Porsal, Avenida Da Franca S/N, CEP 40000, Salvador, Bahia, Brazil. *Tel:* (071) 243-5066, 243-5165, 243-5965, 243-5765. Port Control: 242-1341. Port Administration: 242-4570. Traffic: 242-5998. Port Guard: 242-3497. Telex: 071-1110.

AGENT: Cory Irmaos (Comercio E Representacoes) Ltda, Avenida Estados Unidos 4, Rooms 1109/1113, Caixa Postal 38, Salvador, Bahia. Tel: 241-3222, 241-3120, 241-3873. Telex: (071) 1050.

SANTANA: 00.03 S. 51.11 W. (See Plan Book)

DOCUMENTS: Also see "General" before first port.

6 Crews Lists.
3 Crew Personal Effects Lists.
7 Transit Passengers List or Negative Passengers List.
3 (each) Stores Lists (engine, deck and bonded).
5 Cargo Manifest or Ballast Declaration.
7 Disembarking Passengers List (if any).
3 Maritime Health Certificate.
3 Vaccination List.
Derat Certificate.
Maritime Police Pass (when proceeding from Brazilian Ports).
Clearance Certificate.

PILOTAGE: No Pilots available either for the North Channel entrance and/or for docking and casting off operations.

ANCHORAGE: In front of the port, protected anchorage between mainland and Santana Island, where vessels can safely anchor at any location. Bottom is mud.

RIVER NAVIGATION: Outer bar transit restricted to 32 ft. at LW and 37 ft. at HW. When loaded and outward bound, the Master should study carefully the tides and direction of currents.

RESTRICTIONS: Vessels can depart at any stage of tide. Night transit in North Channel is at Master's discretion.

Channel transit restricted to 32 ft. in low water. Due to shifting of mud banks it is recommended that a set of up-to-date Brazilian nautical charts, covering from outer bar to Santana Port, should be used.

The Hydrographic Office of The Brazilian Navy, based on date furnished by the Brazilian National Astronomical Observatory, publishes an annual tide table for the majority of Brazilian ports, including Barra Norte do Rio Amazonas-Ilha do Brigue – Lat. 00° 55′ N. Long. 50° 05′ W. and Porto de Santana.

Nautical charts and tide tables are available through the vessel's Belem (Para) Agent.

Shipmaster's Report: The above is correct but we would advise you to add: "The charts and books are delivered by pilot launch off Salinopolis (the pilot station for the port of Belem), if ordered well in advance via Belem's Agent. The meeting point, anchorage, can easily be reached on B.A. Chart No. 520 and is described in South America Pilot Volume 1 (eleventh edition 1975), page 53, line R 41 – 45".

In certain periods, but mainly from April to August, there are large logs, trees, etc., drifting down river.

MAX. SIZE: On East side of floating ore pier, general cargo pier has a depth alongside of 29 ft. Along floating ore pier depth ranges from 35 ft. to 90 ft. (at LW). 35 ft. on East end of pier. Tidal range about 9 to 11 ft. Tidal current at middle of river ranges from 2 to 3 knots, while close inshore along ore dock it runs approximately 1 – 1.5 knots. Amazon river water at Santana is fresh in spite of tides.

Port of Santana: Alongside the floating ore pier, the tidal current continues to run for 60 minutes beyond the time computed from the table. In mid-stream, the delay in the change of current is 90 minutes, depending on the river flow.

HEALTH: Health authorities visit vessel arriving from abroad. Authorities require regular ship's gangway to be lowered. Jacob's ladders not accepted. Also see "General" before first port.

RADIO: Vessels scheduled to load ore at Santana must radio Belem (Para) Agents (preferably via Chatham, Amagansett or Belem Radio) at least 48 hours prior to ETA North Channel. Other means of communication not satisfactory and result in delay.

TUGS: No tugs available.

BERTHING: *Private Floating Pier:* Length 247 m. Depth of water 10.6 m. A retractable loading arm loads Manganese at an effective average loading rate of 1,000 long tons per hour for each hatch loaded.

Also see "Shipmaster's Report".

Macapa Pierhead: Length 18 m. Depth of water 8.8 m. Fitted with a 65 ton crane, and used for general cargo handling.

Recommended that amidship hatches be used for Santana cargo. Vessels berth according to direction of tidal current. Berthing operations assisted by a motor craft to place lines on shore, East of pier. On West side, lines moored to the bitts on floating fender. Linesmen available to assist berthing and shifting. Ore carriers have preference when docking.

When berthing, use of the anchor must be avoided except in an emergency.

STEVEDORES: Stevedores are available at Macapa about 25 km. by road from the port. Rates and other pertinent details must be arranged through the ship's Agents. Conveyor belt for ore loading fixed, consequently vessels must be shifted by own winches to load various hatches. Effective average loading rate 1,000 t.p.h. Special caution must be taken not to pump all ship's ballast before loading starts, since the height of boom is 40 ft. above water level. Cargo belt trimmed only.

MEDICAL: Medical attention may be arranged at Macapa through ship's Agent.

TANKERS: Discharge at the Dolphins Pier, about 150 m. West of floating pier. Depth 8.0 m. Pipe-lines lead to tanks ashore (distance from pier 1,000 m.). Storage tanks have capacities for 35,000 barrels of diesel oil, 9,500 barrels of gasoline and 60,000 barrels of fuel oil. There are no shore facilities available at the terminal for receiving slops, dirty or contaminated ballast. Masters are cautioned that discharging of anything other than uncontaminated ballast will be subject to penalties as prescribed by Brazilian law.

(See Pollution Regulations in "General" before first port).

DENSITY: The Amazon river water at Santana Port is fresh water at any stage of tide. Checking density during load operations is recommended.

FRESH WATER: No drinking water available.

FUEL: There is no suitable installation for fuel supply. See "General" before first port.

GANGWAY/DECK WATCHMEN: Gangway watchman compulsory.

OPENING/CLOSING HATCHES: Ore carriers: service carried out by crew. General cargo vessels: service executed by stevedores.

CUSTOMS ALLOWANCES: Limited quantity for use during ship's stay.

CARGO GEAR: No additional requirements as to gear. A heavy-lift stiff leg derrick mounted on the pier. Boom: 60 ft., Mast: 37 ft. 6 in., Capacity: 65 tonnes. Mobile crane (maximum lift 40 tonnes) available for discharge of general cargo from small vessels.

IDENTITY CARDS: Foreign Crew members not permitted to go ashore without presentation of identity card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The identity card must be delivered on dis-embarkation to the Federal Police who will return it to the crew member on re-embarkation.

CONSULS: None. Documents which are to be visaed by a Consul must be sent to Belem.

REPAIRS: Only in cases of extreme emergency and then only minor repairs.

REPATRIATION: Effected by ship's Agent. No Immigration Authorities at Macapa.

AIRPORT: Macapa airport 25 km. from Santana near city of Macapa. Scheduled domestic flights from Belem to Macapa, a trip of 25 mins.

TIME: GMT minus 3 hours.

HOLIDAYS: New Year's Day (January 1st); Tiradentes (April 21st); Martyr of Independence; Labour Day (May 1st); Independence Day (September 7th); All Saints' Day (November 2nd); Proclamation of the Republic (15th November); Christmas Day (December 25th).

TELEPHONES: No facilities for placing telephones on board.

GENERAL:

Aids to Navigation – Radio Beacon – A radio beacon is installed at Ponta do Ceu, marking the entrance from the open sea to the river proper. It is operated by the Brazilian Hydrographic Office and the main details are:

Frequency	– 290 kHz
Signal letter	– EH
Working hours	– Continuous
Geographical position	– Lat. 00° 45′ 40″ N. Long. 50° 06′ 58″ W.
Range	– 300 miles.
Signal	– A0 and A2 (1020 H2)
Character of signal	– (EH.....) Twice in A0 during 10 secs. and A2 (1020 H2) during 5 secs.

Vessels have reported that certain times the beam may stray as much as 15°/20°. This straying is most noticeable during early evening and at dawn, less so during the night, and least during the daytime hours.

Industria e Comercio de Minerios S.A. – ICOMI is not responsible for the location and operation of the various aids to navigation (lights, radio beacon, buoys, etc.).

COMMUNICATION: *Notices* – Vessels scheduled to load ore at Porto de Santana, must send radio to Belem (Para) Agents (preferably via Chatham, Amagansett or Belem Radio) at least 48 hours prior to their ETA North channel. Agents forward this information via telephone to their representative in Macapa who notify the shippers.

Telephone: Telephone communications between Porto de Santana and all Brazilian cities and also international calls, via Embratel (Brazilian Telecommunication Company) are possible every day, Sundays and holidays included.

Telegraph: There is a public telegraph service in Macapa, operated by the Brazilian Post Office and Telegraph Department.

Cable: International Cables are speeded by phoning them to the Agents in Belem (Para) who file them in the local cable offices there.

Mail: Ship's or crew's mail should be addressed in care of the ship Agents in Belem (Para). Mail should not be addressed to Macapa or to Santana.

POLLUTION REGULATIONS: Brazilian Legislation contains several sanctions and penalties applicable to those who cause pollution of any kind. The prohibition against the execution of acts which cause pollution and the respective penalties, both administrative and pecuniary, are principally contained in The Federal Law No. 5318, dated 26/9/67, and in the National Policy for Sanitation, in the Decree No. 221, dated 20/2/67 – Fishing Code, in the Federal Decree 5798, dated 11/6/40, on Rulings for Maritime Traffic, and in the State Law (State of Rio de Janeiro) No. 6753, dated 10/12/71.

The sanctions and penalties can be applied cumulatively against infractors, and among those, special attention is called to the penalties foreseen in Federal Law No. 5357, 17/11/67, of which the first article reads:

> "Article 1 – Vessels or maritime or river terminals of any kind, foreign or national, which discharge debris or oil in waters which are within a strip of 6 (six) nautical miles from the Brazilian coast, or in rivers, lakes or other stretches of water, will be subject to the following penalties:
>
> (a) vessels, to the fine of 2% (two per cent) of the greatest minimum salary in force in the national territory, per gross register ton or fraction thereof:
>
> (b) maritime or river terminals, to a fine of 200 (two hundred) times the greatest minimum salary in force in the national territory.
>
> Sole paragraph – in the case of repetition the fine will be applicable in double".

In addition to the administrative and pecuniary penalties, under the new Brazilian Criminal Code, (Decree-Law No. 1004 of October 21, 1969, which was put in effect as of January 1, 1974, according to Law 5857/72, acts causing pollution constitute a violation punishable with imprisonment as follows:

> "Article 303 – Pollute lakes and rivers or, in inhabited places, the shores and the atmosphere, thus breaching provisions of federal laws or regulations:
>
> Penalty – Imprisonment up to 3 (three) years and payment of a 5 to 25 day fine.
>
> Sole paragraph – If the crime is not wilful the penalty shall be imprisonment from 2 months to 1 (one) year".

SHIPMASTER'S REPORT: July 1982.

The following concerns our recent visit to Santana to load bulk manganese ore, destined for Canada. The following should be read together with "The Pilot Book" and "Guide to Port Entry".

Communications: We were provided, by Charterers, with Agent's address, including cable address, in Santana. However cables sent here could not be delivered. All communications then sent to Agent in Belem. They responded with berthing instructions. Agent assured me that mail to Europe takes 5 to 6 days only. Incoming mail must be addressed to the Belem Agent and not direct to Santana. Agent has a VHF set but it is currently out of order. Contacted Macapa Radio on VHF Channel 16 when passing but they did not pass the message on to Santana.

D/F: When some 200 miles from the beacon at Pta. do Ceu, a clear sharp signal was obtained. However, when crossing the Barra Norte, the signal was poor with a spread of 10 to 12 degrees. Generally showing the correct bearing though and it is the only aid to navigation.

Pilots: There are no Pilots available for the passage from sea to Santana. A competent Pilot boarded at the anchorage and aided the berthing operation. This same Pilot should have aided the sailing but he arrived late and vessel was already leaving the pier. I understand that vessels proceeding further up the River Amazon embark Pilot at Santana. A mooring boat and line handlers are provided.

Charts: I found Admiralty charts adequate for the in-bound, light ship, passage. Purchased seven Brazilian charts from the Agent and these were invaluable for the outbound passage. Large important sections have been surveyed 1980. Similar detail to Admiralty charts but much better scale.

Navigational Marks: Found all buoys and beacons as charted inbound. They are well laid out and are about adequate. Outbound found Barra Norte No. 2 Buoy missing. This fact was reported to Belem Agent. Inbound and outbound passages were mostly in daylight so I cannot vouch for the lights.

Landfall: No. 2 Buoy was sighted at 14 miles on radar and visually at 10 miles. All buoys showed well on radar. Pta. do Guara Lighthouse well defined on radar at 24 miles. The coast line Northward of Rio Araguari was clearly visible on radar at 24 miles.

Tide Tables: Used Admiralty tables inbound. Predictions are based on Georgetown, Guyana. Crossing Barra Norte, inbound, could not make tidal streams conform with predictions. After berthing purchased Brazilian Tide Tables from Agent. The predictions for Santana were found to be similar in both sets of tables. However for Barra Norte found High Water some 4.5 hours and 2.2 m. difference between the tables. Sailed on basis of Brazilian predictions and found that tidal streams conformed much better. Inbound, light ship, the height of tide is not so important. Santana direction of tidal stream, which dictates berthing, is correct. Outbound use Brazilian tables and charts. The chart has a good tidal rose.

Santana Anchorage: As another vessel was already alongside I passed the berth and anchored about 1 mile above the berth in a deep pool at the confluence of three creeks. Stayed here for some 36 hours and noted that the flow of tide continues for some 60 to 90 minutes after the Admiralty predicted high and low waters.

Customs: Conscientious and efficient. A search of store rooms, cabins, lockers and cargo spaces was carried out. This took 1.5 hours and Agent assured me that this is normal. Two Customs Officers lived onboard throughout our stay. They come complete with spare seal should you wish to visit bonded stores.

Immigration: All matters taken care of by the Agent.

Port Health: Most thorough and meticulous. All medical books checked. The Brazilian Government is sponsoring a massive drive against Yellow Fever. Next morning Port Health Doctor returned to the vessel and vaccinated all who did not have proper documentation. International 10 year certificates issued.

Extended derat exemption for 6 months on proper form.

Watchman: A shore watchman was provided. Very useful for keeping the canoe people off the vessel. Also useful as a runner to the Agent.

Pier: The pier is 247 m. long, lies along 100°/280° and has a freeboard of about 4 ft. It floats on pontoons and is connected to the shore by 2 arms. It has a wood faced rubbing strip. Adequate rams horn bollards are provided. There are 2 mooring buoys at the Western end of the pier. See "Plan Book" for moorings and soundings.

Cargo: Vessel alongside for 48 hours and loaded 25,408.6 tonnes. Cargo pours out at a rate of some 800 tonnes per hour. Some time is lost shifting vessel up and down the quay to locate hatches under the chute. Our seven shifts accounted for 4.5 hours. When the tide is "kind" these shifts are easy enough, other times not so easy. Before the final pour into the last hatch operations were halted for 3 hours while samples were analysed. The belt weight was found to be accurate when compared to draft. There is no trimming. It lies where it falls.

Chute: The loading chute floats on a separate pontoon. The air draft is 40 ft. and of course is not affected by tide. The chute can be adjusted to pour across the ship thus taking care of vessels with varying beams.

Language: Few shore people had any knowledge of English. No personnel aboard could speak their particular brand of Portuguese. Final documentation all completed in perfect English.

Provisions: Fresh provisions were puchased and prices were reasonable. Used American dollars from Master's safe.

Fresh Water: Fresh water is not available. The loading rig has a system of pouring water to keep the belt wet, but this is just river water.

AUTHORITY: Companhia Docas do Para, Porto de Macapa, Av. Felinto Muller, Santana, PA, Brazil. *Contact:* Agostinho Raiol da Cunha, Manager.

SANTAREM: 02.25 S. 54.43 W. (See Plan Book)

LOCATION: Also see "General" before first port.
Santarem is located on the right bank of the Tapajos River which joins the Amazon River.

BERTHING: 520 m. of quay of which 380 m. is a pier, 2 warehouses with an area of 3,000 cu.m., open air area of 10,000 sq.m.; mechanical workshop, 60 ton weighbridge, administrative building, water tower and residence for the Port Administrator.

2 deep sea vessels or larger coasters can come alongside, with a minimum of 10 m. depth of water, and at the same time, 2 vessels of lesser draft can be berthed in the inner area where the depth is 6 m.

To handle river vessels, there is a marginal quay, with a minimum depth of 3 m.

There are at present 2×6.3 ton cranes, with plans to install a further 4.

1 mobile crane, capacity 9.1 tons

The principal export is meat which is delivered by road. A cold store is to be built.

FUEL: Fuel oil available at Petroleo Sabba private wharf. Also see "General" before first port.

AUTHORITY: Companhia Docas do Para, Avenida Presidente Vargas 41 – 20 Andar, Belem, Para, Brazil. *Tel:* 223-0056, 223-2066.

SANTOS: 23.56 S. 46.19 W. (See Plan Book)

PORT LIMITS: The port of Santos is situated in the centre of the State of Sao Paulo, and the port installations spread over an estuary bounded by the islands of Sao Vicente and Santo Amaro.

The port limits are:

(a) Parallel alignment of 24° 02.7′ S., in the limits Morro do Munduba (Munduba Hill) and Ponta do Itaipu (Itaipu Point).
(b) Mar pequeno.
(c) Channel of the port of Santos.
(d) Piacaguera Channel.

DOCUMENTS: The following documents, etc., are required to be presented to the Authorities upon ship's arrival.

To Port Health Authorities:

1 Crew List
1 Free Pratique Certificate from the first Brazilian port of call, if any.
1 Maritime Declaration of Health (only at the first Brazilian port).
Derat Certificate.
1 List covering empty containers to be discharged at the port.

To Federal Revenue Bureau (Custom House):

Envelopes addressed to the Federal Revenue Bureau containing a cargo manifest and copies of Bills of Lading covering cargo loaded at foreign ports, or a negative manifest if no cargo loaded for Santos. Envelopes for the Federal Revenue Bureau – from Federal Revenue Bureau's Delegates of every Brazilian intermediate port of call following the same procedure. Tankers are permitted to bring bulk petroleum products on 1 manifest "for Brazil", although cargo may eventually be discharged at one or more Brazilian ports. In the latter case, the original manifest is visaed by the Federal Revenue Bureau at each discharging port, is kept on board and delivered to the Federal Revenue Bureau at the last discharging port.

3 Crew Lists.
3 Store Lists (Deck, Engines, Cabin, etc.)
3 Lists covering Crew's belongings.
1 Copy of each of the above Lists duly visaed by the Federal Revenue Bureau of the previous Brazilian port of call, if any.
Federal Revenue Bureau's Pass from the last Brazilian port of call, if any.
1 List covering empty containers to be discharged at the port.
Statement of Cargo Discrepancies, also 1 list giving the name of all preceding ports of call with dates of arrival and sailing, respectively.

To Maritime Police (DOPS):

3 Crew Lists plus 1 visaed by the Maritime Police Authorities of the last Brazilian port of call, if any.
2 Stowaway List and Declaration (if stowaways found on board).
1 Captain's General Information Report covering the number of passengers on board for Santos, or in transit from each foreign port of call, also the number of Crew members.
Maritime Police Pass from the last Brazilian port of call, if any.

To Port Captaincy:

Port Captaincy's Pass from the last Brazilian port of call, if any.

The Captain must also fill out an Arrival Declaration giving all data concerning his vessel as well as the number of crew, passengers on board, ports of call, cargo loaded for this port, Agents, etc.

To Post Office: Mail lists or mail passes from every port of call.

Passengers to Land or in Transit:

Whenever there are passengers on board, the following additional documents are required:

Passengers Disembarking:

2 Passenger Lists together with individual baggage declarations, in duplicate, for the Federal Revenue Bureau.
2 Passenger Lists for the Health Authorities.
3 Passenger Lists and Individual International Embarking/Disembarking Cards, duly filled out, for the Maritime Police.

Passengers in Transit:

2 Passengers-in-Transit Lists for the Port Health Authorities.
1 List for the Maritime Police visaed by the Maritime Police Authorities of the last Brazilian port, if any.

PILOTAGE: Pilotage is compulsory for Brazilian flag vessels of more than 500 d.w.t. and all foreign vessels, as well as tankers.

Pilots embark and disembark in the South part of the buoyed entrance channel abreast parallel 24° 00′ 33″ S., in the proximity of Ilha das Palmas (Palmas Island). Shifting of berth alongside the quay, anchorage in the inner anchorages and other tasks requiring the shifting of vessels, should only be carried out with a Pilot on board.

When arriving, vessels may anchor in the Outer Anchorage without a Pilot, but should not cross the buoyed channel.

Pilot's services may be requisitioned with 2 hours notice, by telephoning the pilotage station, telephone 36.8037 and 36.8038, or directly by the vessels through the Estacao Costeira do Servico Movel Maritimo, Santos – Radio PPS – (Maritime Mobile Service Coastal Station) or through VHF, calling the pilotage station on Channel 16, which maintains a permanent watch (it can also be reached through Channels 11, 12, 13 and 14.

The Co-operative of Pilotage Services are located at Avenida Almirante Saldanha da Gama, No. 74. The Co-operative have their own boats, which are equipped with radio.

If the weather conditions prohibit the Pilot from boarding, the vessel must remain at anchor until the weather improves.

If on departure the Pilot is unable to disembark he should be landed at the next port of call.

Fly "H" flag when Pilot onboard in order to avoid fine from Captain of the Port.

APPROACHES: *Approach Channel:* The Approach Channel is marked on Chart 1701 of the DHN (Hydrographic Office) which contains all necessary information concerning beacons, depths and leading line lights.

As the projected depths for the sections of the channel shown in the note appearing in Chart 1701 have not yet been reached in all sections, it is important to observe the existent information given by the "Notice to Mariners".

The mean depth of Sections B and C is 11.5 m.; in Section D, Piacaguera Channel, 12 m.

Vessels drawing 36 ft. or over should be manoeuvred during HW.

In the Piacaguera Channel (Section D), the mean depth is 39.3 ft. (12 m.); due to its small width and dimensions of the turning basin, the following characteristics limits should be observed for all vessels until these figures are revised in function of the observations to be made after the last dredging in December 1980:

Maximum breadth	30.5 m.
Length overall	215.0 m.
Maximum draft	35 ft. 6 in. (salt water) 36 ft. (fresh water)

Note: Vessels negotiating the Piacaguera Channel should employ 2 tugs, at least 1 with tow line held fast. Should the vessel be drawing over 36 ft. passage only permitted in daytime and vessel should be assisted by 4 tugs in Saboo/Alemoa area and 3 tugs in Alemoa/Cosipa area.

Tides and Currents: The rise and fall has a mean value of about 1.5 m.; its intensity is at Spring tides, up to 1 knot during HW and about 1.4 knots during LW.

Exact figures with respect to the range of tide rise and fall and intensity may be obtained in publications of the DHN (Hydrographic Office). Tide tables and in the table of tidal currents for the port of Santos.

ANCHORAGE: The port of Santos has 6 anchorages. In case of *force majeur*, anchoring outside the areas indicated on Chart No. 1701 of the DHN is prohibited without the express permission of the Captain of the Port. There are submarine cables in the vicinity of Anchorage Nos. 3 & 4.

(a) *Anchorage No. 1 (Inner):* Provisional with capacity for 3 vessels with the maximum length of 180 m. and maximum draft of 8.23 m. (27 ft.).
(b) *Anchorage No. 2 (Inner):* For small and pleasure craft 50 m. off the beach.
(c) *Anchorage No. 3:* Exclusive for warships.
(d) *Anchorage No. 4:* For vessels with a maximum length of 100 m. and maximum draft of 5.79 m. (19 ft.).
(e) *Anchorage No. 5:* For vessels with a maximum length of 180 m. and maximum draft of 9.75 m. (32 ft.).
(f) *Anchorage No. 6:* For vessels with a length over 180 m. and maximum draft of 9.75 m. (32 ft.).

Vessels with port operations to be performed, can only remain at anchor in the inner anchorage areas 1 and 2, for a period of 24 hours. Beyond what is specified above, the Ships' Masters or their representatives should obtain the required permission from the Port Captaincy.

When vessels anchor in the Inner Area Nos. 1 and 2, normally only 2 cable lengths should be used. Notwithstanding, it is common in the port of Santos for strong winds to blow from N.W., causing accidents, therefore, for the sake of security in those areas, it is compulsory for vessels to maintain their engines ready in order to face any eventuality, preserving on board the necessary crew for manoeuvring.

The traffic and anchorage of vessels in the vicinity of the military fortifications of Itaipu and Guaruja (Itaipu and Andradas Fortresses) is not permitted; all craft should keep a minimum distance of 100 m. from the neighbourhood of Morro do Itaipu (Itaipu Hill) and Morro do Munduba (Munduba Hill).

RESTRICTIONS: The access channel and port area have been dredged to 13 m. and dredging will continue to a depth of 13.5 m. However, depth alongside the deepest general cargo quay does not exceed 36 ft. at HW, and can be as low as 32 ft. at LW.

The maximum permitted speed in the channel is 8 knots, except in cases of justified emergency.

In the Piacaguera Channel navigation is only permitted by one vessel at a time and at night max. LOA is 215 m.

MAX. SIZE: Regulations in force stipulate that vessels drawing 36 ft. or over should be manoeuvred during HW (Diurnal), depending also on the berthing place. During the night with HW the max. draft is 34 ft. in Sections "B" and "C".

At the Piacaguera Channel, in view of its narrow width and the dimensions of the turning basin, the following characteristic limits should be observed:

(a) For berthing at the outer side of Cosipa's Pier:

Length	228 m. (total)
Width	33 m.
Draft	36 ft.

(b) For berthing at the inner side of Cosipa's Pier:

Length	228 m.
Width	33 m.
Draft	31 ft.

(c) For berthing at Ultrafertil's Pier:

Length	200 m.
Width	33 m.
Draft	31 ft.

Alemoa: Max. draft 33 ft. 06 in. at No. 2 and 31 ft. 06 in. at No. 1.

Also see "Developments".

RADIO: Santos Coastal Station, VHF Channel 16. Working 24, 25, 26 and 27. S.S.B. facilities will be available at a later date.

VHF: *Ship Reporting System:* Compulsory system in effect for vessels over 20 g.r.t. Call sign: PWS 88. Channels: 16, 11, 12, 13, 14, 68, 69, 71 and 74.

Procedure:

1. Vessels should report:
   - (a) On anchoring
   - (b) On leaving an anchorage
   - (c) Abreast of Ilha das Palmas (inward-bound)
   - (d) Immediately before leaving berth (outward-bound)
2. Reports should include:
   - (i) Vessel's name
   - (ii) Call sign
   - (iii) Flag
   - (iv) Port of departure (inward-bound)
     Destination (outward-bound)
   - (v) Type of vessel
   - (vi) Anchorage or berth (inward-bound)
     Estimated date of arrival at destination (outward-bound)
   - (vii) Estimated date of departure (inward-bound)
     Cruising speed (outward-bound)

Vessels shifting anchorage or berth report vessel's name, call sign, and previous and present position.

3. Reports are to be Portuguese (request assistance in transmission from Pilot, pilot station or Santos (PPS) Channel 16, as necessary).

4. Vessels unable to contact the Control Post inform the Captaincy of the Ports of the State of Sao Paulo stating vessel's name, date, time (GMT) and reason for not reporting.

HEALTH: Port Health Authorities consisting of 1 doctor and 1 assistant will check all vaccination certificates and issue a free pratique pass, which shall remain on board for presentation at subsequent Brazilian ports of call. Masters can obtain free pratique by radio, which does not mean that the doctor will not come on board, but only that other authorities can board the ship before his arrival.

Free Pratique by Radio: Master should radio to Agent (in Portuguese) as follows: "Para Sa Portos condicoes sanitarias a bordo satisfatorias" (Master's name) which means: "Sanitary conditions on board satisfactory". *N.B.* "Sa Portos" is the cable address of Port Health Authorities.

TUGS: 14 tugs available, equipped with radios (VHF Channels 10, 13 and 16). 1,010 h.p. – 2,360 h.p. 2 small tugs available, 505 h.p. – 545 h.p.

The use of 2 tugs or more is compulsory in the Piacaguera Channel – see "Approaches".

Vessels should dock, preferably against the tide.

The assistance of at least 2 tugs will be obligatory in the following places:

Saboo Quay – Points 1, 2 and 3.

Warehouses 13, 26 and 9, where the pneumatic wheat unloaders are located;

Piacaguera Channel: Cosipa, Alamoa, Ultrafertil and Dow Quimica Terminals and Barnabe Island.

Alemoa Terminal – For vessels of 7,000 to 15,000 d.w.t. a third tug boat should be used as pusher.

Outside the above mentioned areas, when employing tugs, the following minimum requisites should be observed:

Vessels up to 4,000 d.w.t. .... optional
Vessels from 4,001 to 6,000 d.w.t. .... 1 tug up to 1,000 h.p.
Vessels from 6,001 to 10,000 d.w.t. .... 1 tug of more than 1,000 h.p.
Vessels from 10,001 to 30,000 d.w.t. .... 2 tugs (one with more than 1,000 h.p.)
Vessels over 30,001 d.w.t. .... 2 tugs (one with more than 1,000 h.p. and 1 with more than 1,500 h.p.)

Note: Should no tug of the indicated power be available, tugs of immediately superior power should be requisitioned but the cost of attendance should be equal to that of the tug which would have been required by the above scale.

Vessels with bow-thrusters may employ 1 tug instead of 2 in certain operating areas.

Piacaguera Channel:

Ship's Gross Tonnage	*Number of Tug Boats* *Minimum*	*Maximum*
Up to 4,000	Optional	
From 4,001 to 10,000	2 large	2 large
From 10,001 to 15,000	2 large	3 large
From 15,001 to 30,000	3 large	3 large
From 30,001 upwards	3 large	4 large

Until such time as a fresh dredging is carried out at the turning basin at Alemoa, in the passage or ships drawing over 34 ft., destined to or proceeding from Cosipa, 1 tug should be standing by in order to push, if necessary, vessels operating at Pier Nos. 1 and 2.

BERTHING: Berthing quays have 435 bollards with an average distance of 25 m. between them.

Port Administration: Linear quays 9,562 m. Dolphin berths and jetties: 1,918 m.

Private Berths: 717 m.

	Length (m.)	*Depth* (m.)
Continuous Quay:		
Single Use:		
General Cargo – ocean-going vessels	4,193	7 – 13
General Cargo – Coastal vessels	246	7
Bulk Solids	962	8 – 11
Bulk Liquids	671	10
Double Use:		
Bulk Solids and Liquids	200	10
Bulk Solids and General Cargo	2,267	7 – 13
General Cargo and Passengers	373	11
Diversified Use:		
Maritime Department	363	5 – 8
Lighters and small craft	159	
Terminals:		
Port Administration:		
Bulk Solids – Conceicaozinha	567	13.5
Bulk Liquids –Alemoa	841	7 – 12
Containers	510	13.5
Private:		
Bulk Solids – Cosipa	300	12
Bulk Solids – Ultrafertil	164	10
Bulk Liquids – Dow Quimica	253	10

Wharves. Total length 6,013 m. Inner Harbour (Saboo New Quay) 800 m. (depth 11 m.). Barnabe Island pier 300 m. (depth 10 m.).

Special Cargo Handling Facilities – Refrigerated Cargo: Refrigerated cargo after discharge is deposited in the cold storage (between Warehouses 23 and 25). The Receiver is usually responsible for cartage and storage arrangements as well as for the required temperature to be maintained in cold chambers.

Bulk Cargo – Grain Elevators: There are 3 elevators in Santos from which wheat can be discharged direct into freight cars, owned by: Cia. Docas (with external silos) between Sheds 25 and 26; Moinho Paulista between Sheds 12A and 13; Moinho Santista between Sheds 8 and 9.

Cosipa Terminal, depth 12 m.; Ultrafertil Terminal, depth 10 m.

Fertiliser, sulphur, etc, in bulk can be discharged at any point along the quay where 6 ton cranes equipped with automatic motor-driven grabs or shovels are in operation. Alternatively, cranes with ordinary hand-filled buckets are used. The usual place for handling this type of cargo is by the Saboo bend.

Silos:

Cargo	*No.*	*Capacity (tons)*
Cereals	1	30,000
Soya/Maize	2	80,000
Salt	3	90,000
Fertilizer	6	180,000
Pellitised Veg. Products	7	128,573

Special/Valuable Cargo: Special or valuable cargo, objects of art, precious metals, etc., are discharged without special formalities and may be kept in Shed 12A, where there is a special safe.

CONTAINER HANDLING FACILITIES:

Container Terminal: On left bank of Santos Estuary, opened September 1981, with the following characteristics; 510 m. long wharf, draft 13 m., equipped with two portainers with the following main characteristics:

Hoist capacity below spreader: 35 ft
Rate (40 ft. containers): 20 containers per hour.
Size of containers to be handled (ISO): 20 ft., 30 ft. and 40 ft.
Handling capacity 142,000 per year.
2 transtainers on tyres for 30.5 tons. 1 transtainer on rails for 35 tons.

BULK HANDLING FACILITIES: The Ultrafertil Terminal is situated East of the Cosipa Terminal and both make use of the same manoeuvring basin with depth of 10 m., connected with the Port of Santos by a dredged channel 8 km. long, 10 m. in depth and 60 m. in width.

Cosipa Terminal: Consists of a pier 150 m. in length and 22 m. in width, built on concrete tubing, with a depth of 10 m., allowing for the berthing of vessels of up to 22,000 d.w.t. Future plans foresee the lengthening of the pier to 250 m. and a depth of 13 m., enabling it to receive vessels of 45,000 d.w.t.

Equipment for the discharge of coal and ore is installed at the pier, capable of handling 600 t.p.h., as well as equipment for the loading of steel plates produced at the plant.

Ultrafertil Terminal: An open dock in the form of an "L" built on concrete tubing, 240 m. in length and 15 m. in width. At its main point, vessels of 23,000 d.w.t. and drawing 10 m. may berth. The secondary point permits the berthing of vessels of up to 3,000 d.w.t. (liquid gas carriers).

The terminal is especially equipped for the discharge of bulk solids at a rate of 500 t.p.h. and is likewise equipped with pumps and adequate pipes for the discharge of liquified gas.

Macuco Novo Quay: Export terminal for cereals. Length 280 m. Max. draft for vessels is 13 m. Storage capacity 60,000 tons. Loading rate 3,000 t.p.h.

Conveyor Belts:

(a) 2 conveyor belts for salt, in front Warehouse No. 23, receiving product from the ship by means of grabs and transporting it to the mill of SALMAC S/A with capacity for 500 t.p.h.

(b) 8 conveyor belts for fertilisers at Conceicaozinha Island with variable capacity from 500 to 2,000 t.p.h., depending on the product.

Wheat Unloaders:

Pneumatic type: Capacities: 5×150 t.p.h.
2×120 t.p.h.
4× 60 t.p.h.

Location: 3 in front Warehouse No. 9, of which 1×150 t.p.h. and 2×60 t.p.h.; 4 in front Warehouse No. 13, of which 2×150 t.p.h. and 2×60 t.p.h.; 4 in front Warehouse No. 26, of which 2×150 t.p.h. and 2×60 t.p.h.

All adequate for the discharge of wheat using conveyor belts into silos belonging to the port, or privately owned silos existent in the port area.

Roll-on/Roll-off: One ramp available.

CRANES: *Heavy Lifts:* Cia Docas operates 2 floating cranes – 1×100 ton, and 1×150 ton. The 150 ton crane reaches 22 m. in height and can handle lifts within a radius of 10 m.

Quay Cranes: 151×1.5 – 30 tons.

Mobile Cranes: 41×3 – 140 tons.

STEVEDORES: All longshoremen are in employ of Cia. Docas, which holds charter for general operations at Santos Docks. Their services can be requisitioned up to 1500 hrs. for vessels at berth/expected to berth next day. Stevedores ordered but not used shall be paid full day or night. Therefore, if the men should be kept standing by (inactive) at 0700 hrs., their period runs up to 1700 hrs., and at 1900 hrs., their period runs up to 0400 hrs.

Working Hours: 0700 – 1300, 1300 – 1900 and 1900 – 0100.

Overtime: Sundays, holidays and meal hours.

Port Workers: In Brazilian ports there are 2 categories of workers engaged in handling cargoes in loading and/or unloading ships, namely:

Longshoreman: In the employ of Dock Company, to work ashore operating the cargo from the ship's tackles to the warehouse or to waggons, lorries, etc. as well as in the reverse operation.

Stevedores: They are called "autonomous" because they have no ties of fixed employment and they are engaged by Shipowners or their Agents to work on board the ships in loading and/or unloading operations. They are professional and qualified workers grouped in their respective syndicates or trade union.

MEDICAL: Hospitals and Nursing Homes available.

TANKERS: Discharge terminals at Saboo Quay, Alemoa and Ilha Barnabe.

Alemoa Terminal: Allows simultaneous mooring of 2 tankers with capacity of up to 60,000 d.w.t. (80,000 tons displacement). Length of wharf 630 m. Depth of 12 m. at LW. Sixteen "Chiksan" arms available. Unloading rate 500 – 2,000 t.p.h. Distance between manifolds 180 – 260 in. Connections 6 in. and 8 in.

Report: May 1983 – Refrigerated LPG discharge is carried out through hydraulic arms, 1×16 in. diameter for liquid and 1×10 in. diameter for vapour. Pipeline length 1,000 m.

Also see "Shipmaster's Report" – dated September 1981.

Ilha do Barnabe: Length of dock 301 m., depth 10 m. The dock is used for loading, unloading and storage of liquid fuel.

Saboo Quay: Connections – 6 in., 8 in. and 12 in.

FRESH WATER: Adequate supply of fresh water is always available from hydrants (rate 40 t.p.h. – connections 7 threads per inch in 2 in. and 1.5 in.) along the quay (day and night) or from water-barges (440 tons). Water barges (3) cannot supply more than 2 ships per day, their capacity being only 250 tons, which can be pumped into the ship's tanks at the rate of 80 t.p.h. Cia. Docas should be advised 24 hours in advance, priority being given to passenger vessels.

FUEL: MFO, MDF, and gas oil can be supplied at Vallongo by Shed No. 1 or at the Saboo New Quay Extension, or by barge, if up to 300 tons. Applications for supplies should be made a few days in advance to avoid delay in delivery.

REPAIRS/DRY DOCKS:

Shipyards: Santos Dock Company, Wilson Sons S/A, and various others for small size craft.

Repair Shops: Santos Dock Company, Wilson Sons S/A and various others for maintenance services and marine repairs such as: mechanical, boiler, electrical, electronic and refrigeration.

Drydocks: Wilson Sons S/A. With capacity for vessels of 65 m. in length, 12 m. breadth and maximum drafts of 4.20 m. aft and 3.90 m. forward.

Slipways: Santos Dock Company, with two cradles and capacity up to 300 tons with a maximum of 45 m. in length and 11 m. breadth; there also exist innumerous slipways for small size craft.

Many other repair shops and slipways of lesser capacity are available.

All the main engine manufacturers (B & W, MAN, Sulzer, MaK, amongst others) have service representatives in Santos and many major repairs, including re-engining of ships, have been effected in this port.

Metalock do Brasil, S.A.: General voyage repairs, including all usual mechanical services, machining, foundry, engine repairs and electrical services.

Also specialised Metalock repairs, crank shaft *in situ* machining and chocking of engines and machinery.

SURVEYORS: Practically all the Classification Societies are represented in Santos. Hold and derrick inspections as well as cargo surveys, are executed expertly, among others, by Perimar Ltd. a surveying firm which also performs testing, sampling and technical research. Its address is: Rua Amador Bueno, No. 38, conj. 91, 9th Floor, P.O.B. 624, 11.100 Santos. Tel: 35.2677. Telex 013-1213. Cables: Perima Santos.

P & I Clubs: Most associations, British, Scandinavian, Polish, Japanese and Greek are represented by Pandibra Ltda. at the following address: Rua XV de Novembro 65, 8th Floor, P.O.B. 550, 11.100 Santos. Telephone Exchange No: 34.7228. Telex: 013-1248. Cables: Pandibra Santos. Also Proinde Ltd., Rua Visconde Do Rio Branco 2, 11.100 Santos. Tel: 33.1230.

WATCHMEN: It is compulsory to have 1 shore watchman at the gangway.

Cases of piracy (Master held at knife point) are becoming common, especially at Alemoa Terminal.

OPENING/CLOSING HATCHES: May be performed by ship's crew or by stevedores.

CONSULS: The following countries are represented in Santos:

Argentina
Belgium
Bolivia
Chile
Denmark
El Salvador
Finland
France
Greece
Italy
Netherlands
Norway
Panama
Paraguay
Portugal
Sweden
U.K.
Uruguay
West Germany

AIRPORT: Situated at Sao Paulo, about 60 km. from Santos. Full international services.

TIME: GMT minus 3 hours.

HOLIDAYS: No work is accepted on the following days: Christmas Day; New Year's Day; Independence Day; Proclamation of the Republic Day; Easter; Good Friday; May 1st.

On Christmas Day, no work available except on passengers' luggage. Working overtime on holidays is possible provided application is made not later than 1500 hrs. on the preceding day. On Sundays work stops at 1900 hrs. for freighters, and is allowed to continue for passenger vessels when only handling luggage.

Local Holidays: January 26th. (City Anniversary) and September 8th (City's Patron Saint).

POLICE/AMBULANCE/FIRE: Emergency Tel: 2170. Police (Warehouses 1-7), Tel: 31.5544. Police (Warehouses 8-28), Tel: 32.5497. Police (Warehouses 29-43), Tel: 36.9979.

IDENTITY CARDS: I.D. cards not required.

TELEPHONES: Every vessel berthing between Sheds 1 to 39 will have a telephone on board, available only for local calls.

GENERAL: Flags to be shown by incoming/outgoing vessels: *(a)* National flag. *(b)* Brazilian flag. *(c)* Yellow flag – (Q) (whenever doctor's clearance is required and up to obtainment). *(d)* Customs flag (blue with a white star – to be flown 24 hours a day, after clearance is granted.)

The following circular letter was handed to a Master by his Agent (May 1980).

Re.: PORT REGULATIONS

We kindly request your attention to the following regulations in force at this port, to which you should strictly adhere, otherwise, it will result to heavy fines being imposed by the local Port Captaincy:

1. a) *Gala Flag:* The gala flag is obligatory on the following dates, considered as official national holidays:
   September 7th (Independence Day)
   November 15th (Proclamation of the Republic)

   b) *Half Gala Flag:* The half gala flag must be used on the following dates:
   January 1st (New Year's Day)
   April 21st (Tiradentes' Day)
   May 1st (Labour Day)
   December 25th (Christmas Day)

   c) *Mourning Flag:* On November 2nd (All Saints Day), the vessel should dress the flag in mourning.

   The regulations mentioned above should be followed whenever the dates are coincident.
2. *Brazilian Flag:* The Brazilian flag is to be hoisted by the vessels in port, daily at sunrise and accordingly lowered at sunset. It must be hoisted in the correct position and must be double-faced, i.e., not printed and not painted on one side only. The two sides of the flag must be absolutely identical.
3. *Pilot Flag:* The moment that a Pilot boards the vessel, his indicative flag must be hoisted immediately and should only be lowered at the time he leaves the vessel. The local Port Captaincy is imposing heavy fines on infringers.
4. *Pilot Rope:* Whenever the use of this equipment becomes necessary, same should be immediately removed as soon as the Pilot leaves the vessel, otherwise, the Port Captaincy will impose heavy fines.
5. *Gangway:* All vessels should arrange a net to be placed under the gangway in order to prevent accidents. Violators may be fined according to the Brazilian law, in the event a worker or a crew member falls from the gangway, for not having placed the said net as required.
6. *Bulbous Bow:* In accordance with the port regulations, during night time, from 1800 hrs. to 0600 hrs., a light should be placed at the bulbous bow, otherwise, the Port Captaincy will heavily fine the vessel.
7. *Refuse/Garbage:*

   a) Vessels when berthed alongside the quay or at anchor in the areas foreseen in the "Norms for Traffic and Permanency at Ports" *must not leave* hanging from the sides of the vessel containers or any other type of recipient for collecting refuse or garbage.

   b) Refuse/garbage originating from aboard the vessel during the ship's stay in port must be placed in containers or in drums or in any other type of collecting recipient, which must be kept with a lid or cover, on deck, until the time they are withdrawn from the ship.

   c) The vessel not being in operation (loading or discharge), the deck must be clean and all dunnage wood should be properly stowed or lashed.

   d) Refuse/garbage of any nature, specially in the case of solids which float, resulting from loading or unloading operations, must be discharged before the ship sails.

e) In order that the regulation in item (d) may be controlled, Masters of vessels should enter or record in their logbooks, item 26, the following:

(i) Dumping of oil or refuse/garbage into the sea, date, hour, position, distance from the coast or island/s where same occured, kind of polluting substance dumped, approximate quantity dumped and reason why the material was not transferred to shore; and

(ii) Register the transfer to terminals, barges alongside or lorries, with details of tugs, destination and approximate quantity which was transferred.

f) Refuse/garbage which are not polluting, as well as the results of the cleaning of reservoirs used for by-products of petroleum and holds where chemical products were used, *must not be dumped into the sea.*

The above-mentioned regulations should be observed and seriously noted, since the Port Captaincy keeps day and night watch on the sea and shore, photographs are taken as evidence, and heavy fines are imposed, reasons why we are asking for your kind co-operation.

Observation: In addition to regulations cited above, the Brazilian flag, as well as the flags signifying the "Call Sign" of the vessel – *properly and correctly hoisted* – must be flown on the arrival/entrance of the ship.

PORT CIRCULAR: (See "Shipmaster's Report" dated July 1983.)

1 – *Watch the Ship and the Cargo*

It is the duty of every ship's Master to look after the cargo and take the precautionary steps to ensure the full safety of the ship. The controlling of access to the vessel, as well as the activities performed on board should be exercised also by members of the crew under risk of infraction of article 141 of the RTM (Maritime Traffic Regulations), sections vii and ix.

2 – *Illuminate the Ship and its Sides*

Bad visibility makes difficult the controlling actions thus giving favourable chance to illicit activities. Keep your ship illuminated, particularly the side on the sea side all along the ship's length.

3 – *Establish Communications for External Support*

The Port Authorities maintain a permanent service for fighting criminality. Install, whenever possible, a telephone line within easy reach to the ship's watchman or ship's officer on duty. Ask for assistance over telephones 33-3238 and 33-3239 of the Federal Police Guard on duty.

Remember that the Santos Radio Station is permanently listening on Channel 16 (VHF) and it can also pass on your request for assistance.

4 – *Control the Access Leading to the Accommodation*

The cabins and other habitable compartments should be kept locked whenever their occupants are absent. Endeavour to also maintain locked the passage ways to the inner areas thus guaranteeing the entry and exit control of persons by the gangway watchman.

5 – *Maintain the Portholes Closed*

Open portholes may give easy access to undesirables.

Close the portholes with the clamps properly secured whenever leaving the cabin or any other habitable compartment.

6 – *Do not Leave Valuable Objects Exposed*

Valuable objects exposed invite robbery or "opportunity". Keep your valuable objects, money and jewellery, in a locked and safe place.

7 – *Maintain the Ladders Raised*

At the Inner Anchorage or at the Bar, make difficult the access to strangers by maintaining the accommodation and jacob's ladders raised.

In port leave only the accommodation ladder lowered.

8 – *In case of Assault Set in Motion the Alarms*

In cases of threat of assault, do not hesitate in setting in motion the ship's alarm signals. This measure, in addition to warning the ship's crew members will discourage the infractor in the felonious practice.

9 – *Maintain the Contracted Watchman Under Control of the Ship's Officer on Duty*

Demand a good service from the watchman. Make him identify every person entering or leaving the ship. Facilitate his task by recommending the ship's crew to cooperate in the controlling.

Do not permit the watchman to abandon the gangway, unless he is substituted by another watchman or crew member.

10 – *Advise the Ship's Agent Regarding any Occurrence Relative to Pilferage, Robbery or Assault*

Besides the measures taken for immediate support, the occurrences relative to robbery or assault both in respect to the cargo as well as to valuables and objects belonging to the ship or members of the crew should be reported to the ship's agents for divulgement to the competent authorities. The authorities will use such information in order to guide themselves in regard to the adoption of other steps which may contribute to guarantee the safety of the ship and crew.

SERVICES: Pollution control and tank cleaning services available.

REGULATIONS: Should vessel use any type of small craft for embarking or disembarking, the landing on shore should take place within a Customs area.

Vessels at anchor may not lower their accommodation ladder and vessels alongside may not lower the offshore gangway.

Whilst in port, at anchor or berthed alongside the quay, vessels should collect garbage in adequate containers fitted with covers whilst those lying in open spaces should be kept with their covers on.

Drainage of holds or tanks containing chemical products, oils or polluting substances which may affect the flora and fauna, is prohibited.

Painting and treatment of ship's sides and decks is authorised, the lowering of planks and craft for this purpose being permitted independently of licence from the Port Captaincy.

DEVELOPMENTS: Dredging operations being carried out in order that vessels up to 45,000 tons with a draft of 12.3 m. can come into the port and go alongside Conceicaozinha. As a second phase, this dredging will be extended to the estuary to attain a depth of about 14 m. From this locality up to the Cosipa Channel, the dredging should reach a depth of 12 m.

For the prolongation of the Macuco Quay, a depth of about 13 m. is contemplated. A section of another 375 m. with a depth of 11 m. and another of 230 m. with a depth of 13 m. will be made in an extension of 605 m.

SHIPMASTER'S REPORT: July 1980.

Officers and crew should be very alert with regard to stealing. It is not uncommon for armed robbery to take place at the anchorage. Cargo has at times been stolen from containers. Also crews effects have been stolen and on occasions the Master's safe has been robbed.

Prior to departure, an inspection is made by the officer from the Harbour Master's Office. He will check the lashings of the deck cargo, the cleanliness of the deck and will ensure that the decks are clean with no garbage in bags, containers or cartons as it is feared that once the vessel is at sea the garbage will be dumped. There is a good garbage collection service in the port.

SHIPMASTER'S REPORT: September 1981

General: The Port Limits are a line from Ponta Itaipu in the West to Ponta Munduba in the East.

In terms of trade the largest port in South America and the principal port of Brazil handling most of the Coffee exports. Situated on the confluence of several small rivers which have been canalised. The total length, including the extension of Canal de Piacaguera to the industrial complex at its Northern end, is 10 miles.

General cargo wharves are continuous on the S.W. side for 5.5 miles. New container and dry bulk berths on N.E. side with recently completed rail link from Barnabe Island.

Petroleum berths at Barnabe Island 5.5 miles from the port entrance on N.E. side and at Alemoa on South bank 7 miles from entrance.

Brazilian Charts of Santos seem to be very difficult to obtain, after trying in Santos itself and Rio. B.A. 19 refers.

Arrival: Vessels up to 32 ft. can leave/arrive 24 hours a day any time. Over 32 ft. depends on tide. Generally arrive and berth 2 hours before HW.

Standard Quarantine message to be cabled through Agent 24 hours beforehand.

Anchorage: Outer: The general area is to East and West of Channel. The various designated areas on B.A. 19 seem to have little relevance and vessel's position depends on draft. The closer in, the more the ground swell is apparent. Large vessels seem to favour 1.5 miles South of Ponta Grossa, with plenty of cable.

Inner: Various river anchorages are used, all fairly to very full and require engines to keep clear of other vessels when swinging to tide. One anchor. Tugs used to swing vessel on heaving up.

Approach: The coast being hilly with cliffs provides good positions. Bottom is gently shelving to 50 ft. at Outer Buoy, 4.5 miles from port entrance.

Large ground swells are often encountered.

Pilot: Pilot joins and leaves from dull red cutter between Buoy Nos. 7 and 8, about 1.75 miles from Pt. Fortaleza the port entrance. He will not come outside as indicated on B.A. 19. Reasonable English spoken. About 1.5 hours from No. 7 Buoy (Pilot) to Alemoa Berths. Drafts quoted in feet and inches.

For night-time sailing/arrival Pilot must be ordered before 1730 hrs. to move up to 0700 hrs. next morning.

Channel: From No. 1 Buoy to No. 7 Buoy dredged to 48 ft. No. 1 to No. 6 Buoy sufficient water outside channel for all vessels liable to use port.

No. 6 Buoy inwards max. draft 36 ft. 6 in. to Industrial Complex at North end of Canal de Piacaguera. Not all berths of this depth.

Buoyage South of No. 7 to No. 1 very liable to shift position and have lights extinguished. Not to be relied on at all.

In Southerly winds the ground swell is very large and in deep draft vessels can make steering very difficult.

We entered at 34 ft., 2 hours before HW and to negotiate the channel to No. 8 Buoy was a bit difficult.

VHF: Pilot: Call "Santos Pilot", Channel 16. Works 10 and 11.

Bunkers: Call "Estrela", Channel 12.

Repairs: Work Channel 6.

Public Correspondence: "Santos Radio", call Channel 16, works Channels 25, 26 and 27. Local and international calls. Good and efficient. English good.

Tugs: 15 ship-handling tugs in port, with power from 505 h.p. – 2,236 h.p. Large vessels generally have 4. Two ships lines used. Most vessels proceeding above Itapema Point, at new container berth take tugs 1 ahead and astern 2 alongside. Down river tugs depart at Itapema Point.

Berth – Alemoa: Alemoa Berths about 7.5 miles from sea on South bank comprise 2 concrete pile jetties at end of pier. The berths are owned by the Port Authority and leased to 'Petrobras' the state oil company for product and LPG transfers.

Length of vessel depends on Turning Basin just off berths. Max. length is 300 m.

Max. draft is 34 ft. Although at LW there is only about 32 ft. alongside berth face. Very soft mud.

Large vessels berth portside to. Small coastwise vessels berth either way. Both berths capable of same product range.

Density 1011 to 1015.

Moorings – Alemoa: 3,3,2 each end. There is a small mooring launch which takes one line at a time.

Fenders: 3 large timber faced flat fenders on rubber shock absorbers.

Gangway: Difficult to land accommodation ladder. We used B.O.T. type which was very steep at completion, to after dolphin.

Lines – Alemoa: Each berth has 2 refrigerated chiksans, at the Western end, one vapour 10 in. and one liquid 12 in. (Western most), both 150 ASA couplings. Unfortunately both sets have severe leaks on all joints.

After trying liquid arms at both Berth Nos. 1 and 2 we ended up by using our low discharge pipe with both our flexible hoses plus 2 shore hoses giving approximately 24 m. length from ship side rail. The connection on shore main line (16 in.) to chiksan was uncoupled and flexible hoses with reducer coupled up to main line.

The Terminal say they are now going to construct a 'Tee' piece in line below chiksan to by-pass same and take flexible hoses.

At the Eastern end of both berths are liquid and vapour Butadiene chiksans (8 in. and 6 in. respectively). These will be converted for 'VCM' use next year (1982).

There are 2 sets of pressure/semi-refrigerated LPG chiksans (liquid 12 in. and 10 in., vapour 10 in. and 8 in.) situated between Butadiene and refrigerated chiksans.

Plus 4 'AVGAS' chiksans on each berth.

Max. air draft of LPG chiksans is 20 m. HW.

Discharge: Varies greatly from 100 t.p.h. to 600 t.p.h. depending on shore tank pressures. VRL always coupled to ship.

Terminal say fastest discharge has been 1,200 cm. per hour on butane. We were only second refrigerated ship with import cargo to berth at jetty.

Shore tank pressure problems seem to occur frequently and the VRL is often required for return to ship.

Two points to watch are incompatible product being returned and liquid in vapour line arm which occurs when liquid/vapour cross-over valve on quay does not seat properly. This is a small auto valve about 5 m. inboard of chiksan arms and should be checked before shore require VRL used.

Reasonable co-operation, if the Manager or Assistant Manager can be contacted they are very helpful.

On completion the terminal will blow hot vapour back.

General: Fresh Water: From meter on jetty – both piers. Port Authority connect/disconnect and arrange in advance. About 10 tonnes per hour at £1.50 per tonne (9/81).

Bunkers: By barge both heavy and diesel. Barges maximum capacity about 500 tonnes, pump at 150 t.p.h. Prices very competitive (9/81).

Repairs: Several repair firms in area covering most types of work. We used 'Metalock' for motors and pipework. Collected and returned by launch. Very quick and competitive service.

Lub. Oils: All obtainable but only by drums from barges at Alemoa. On dry cargo/non inflammable berths large quantities can be pumped from tank truck.

All international oil companies have to use 'Petrobras'.

Transport: Agent advises from Alemoa use mini-bus at night due to 'muggings' etc. We used a bus to town and everyone used their own taxi back.

Mini-bus 8 seater, £5.50 per trip.

Agent: All tankers have to use Petrobras Agent – 'L. Figeiredo' S.A. (cable 'Doralice'). Seemed very efficient and was extremely attentive and helpful.

Communications: Telex: International.

Phone: S.T.D. (and works) very clear to U.K.

Cables: Rio de Janeiro Radio, "PPR" – efficient.

Brazilian Flag: Very particular. Must be lowered at sunset and hoisted again at sunrise and be in good condition.

Pollution/Garbage: Very strict. Garbage drums to be inboard with lids on them. Nothing to go overboard. Collection service available.

Holidays: Difficult to get services on weekends and public holidays, so arrange well in advance.

Formalities: Shore Passes: Some form of identification is required when going ashore. For this purpose an Official Brazilian Shore Pass is obtainable which should have crew members photograph and particulars on it.

Personnel stopped by police and showing this pass seem to be in better position than those having no pass or foreign I.D. Card.

Forms: Have large quantity of following ready: Crew Lists, Personal Declaration, Store List, Ship Information, Bond List, Vaccination, Personnel for Repatriation and Effects. Sight Ships Certificates.

Generally no difficulties as long as everything ready. Bond will be visited.

Repatriation: Through Sao Paulo Airport – a 2 hour drive from Santos.

Customs have to check baggage on ship or baggage has to be landed before departure with full list of electronic equipment (Radios, etc. and cameras).

Agent requires details of flight and passport numbers three days prior to departure.

ALEMOA LPG STORAGE PLANT – SANTOS, BRAZIL

General: The plant was opened in 1979.

Basic design is by Technigaz of France and construction by a Brazilian company. Most of the equipment is of U.S. design made in Brazil under licence. This causes problems over maintenance and spares.

The plant is a shipping terminal drawing LPG from refineries in the South of the country and from around Sao Paulo and re-shipping it to localities up and down the coast.

Every so often there is a requirement for import feedstock, about 10,000 tonnes every 2 months to boost local supplies.

LPG can be pumped under pressure to Sao Paulo.

Tanks: 4×10,000 tonnes nominal capacity refrigerated LPG tanks with polystyrene insulation built by Chicago Bridge and Iron Co. in 1978.

2 for Butane and 2 for Propane.

2 pressure spheres of 2,500 tonnes nominal capacity.

4 semi-refrigerated spheres of 3,000 tonnes nominal capacity. These will be converted for use to V.C.M. in 1982 a fact which considerably worries the maintenance staff.

Plant: Each refrigerated tank has own Boil Off unit – total 4.

2 Flash Gas Units can be connected to any tank to back up Boil Off units.

3 units convert pressure LPG from spheres to fully refrigerated LPG each with an output of 80 t.p.h. of condensate.

The refrigerant used on all units is Propylene which is quite successful. Freon R22 used to be used but considerable losses were being experienced plus it was more expensive.

All units work on the cascade principle. The sea water cooling being derived from a pump house on the pier. 2 electric pumps backed up by 2 diesel driven pumps all designed by Worthington.

All compressors are of the piston type designed by Ingersoll Rand U.S.A. and constructed in Brazil under licence.

Heaters, etc.: For transfer of refrigerated LPG to pressure spheres, 3 sea water heaters are employed.

Two desicant drying towers are employed from spheres to refrigerated storage.

For refrigerated LPG transfer 8 Worthington deepwell pumps of 300 cu.m.p.h. are available.

All anti-freeze used in the plant is alcohol derived from sugar cane which Brazil has pioneered for use in car engines.

SHIPMASTER'S REPORT: July 1983.

Documents: As per "Guide to Port Entry".

Pilotage: Compulsory, Pilot usually boards at No. 3 Buoy, but boarded this vessel at No. 9. One hour's notice required, given through Agent.

Anchorages: As given on Chart, depths 10 m. – 13 m. To avoid pirates, anchor about 1 mile S.E. of Sea Buoy.

Restrictions: Berthing possible 24 hours a day, at any stage of tide.

Max. Size: Deepest draft with which vessels can safely enter port is 36 ft.

Health: Notice required by Quarantine is arranged by Agent.

Radio: Santos Pilots, telephone numbers 104 and 312988.

VHF: Pilots on Channels 16 and 11, Port Control on Channel 16.

Tugs: Available.

Berthing: Vessels berthed at Warehouse No. 37, Berth No. 2, 6 miles from entrance to port. Berthing possible 24 hours a day, at any stage of tide.

Depth of water in channel to berth 36 ft.

Nature of bottom at berth – mud.

Cranes: Ample on quay, varying from 3 tons to 16 tons SWL. Vessel used Salens equipment to handle palletised cargo.

3 floating cranes available – 1×90 tons, 1×120 tons, 1×250 tons.

Specialised Cargo Handling Facilities: 3 berths available for ro/ro vessels.

Facilities for handling and storage of 20 ft./40 ft. containers.

Stevedores: Ample union controlled labour. No private stevedores.

Fresh Water: Available.

Consuls: U.K. and others.

Repairs: Can be undertaken.

Dry Docks: None.

Surveyors: Lloyd's and salvage surveyors are available.

Gangway/Deck Watchmen: Pilfering was a very serious problem – suggest vessels take all precautions to prevent this.

Airport: At Sao Paulo.

General: Fresh provisions and ships' laundry service available.

AUTHORITY: Companhia Docas do Estado de Sao Paulo – CODESP – (Portobras), Conselheiro Rodrigues Alves Avenue, Santos. *Tel:* 35-1611.

Capitania dos Portos do Estado de Sao Paulo, Avenida Conselheiro Nebias No. 448, Santos, CEP 11.100. *Contact:* Captain Sergio Ribeiro de Vasconcellos, Captain of the Port.

SAO FRANCISCO DO SUL: 26.10 S. 48.34 W.

(See Plan Book)

(A) General Cargo Port.
(B) Oil Terminal (Tefran).

(A) GENERAL CARGO PORT.

DOCUMENTS: See "General" before first port.

PILOTAGE: Not compulsory. Pilots join vessel at the Island Ilha da Paz about 5 km. East of bar, Pilot comes from inside with boat. Cables informing ETA to Agent.

ANCHORAGES: Channel low tide 30 ft. high tide 35 ft. Port: low tide 20 ft. high tide 30 ft.

RESTRICTIONS: Bar draft: max. 30 ft. Bottom: bar, channel and port: sand and mud. Speed of current: channel low water 4 knots high water 5 knots.

Note: Reports received in August 1976 indicate that the bar has now been dredged to a depth of 8.50 m.

HEALTH: Vessel must present free pratique issued at first call-port. Port's doctor will visit vessel.

RADIO: Call Agent. Sao Francisco do Sul, via Florianopolis Radio.

TUGS: Two tugboats for shifting ships and barges.

BERTHING:

Quay	*Length* (m.)	*Depth* (m.)
1	225	10
2	150	8
3	150	6
4	150	4/6

CRANES: 2 cranes × 7 tons.

Neither the Terminal Maritimo de Sao Francisco do Sul-Tefran – Nor Sao Francisco do Sul Port services operate either floating cranes, barges or lighters.

STEVEDORES: Sufficient working force available, working hours 0700 – 1100 hrs., 1300 – 1700 hrs. normal period; 1700 – 1900 hrs. days-overtime; 1900 – 2300 hrs., 2400 – 0400 hrs. night-working; 0400 – 0600 hrs. night-overtime.

MEDICAL: Medical attendance available, 2 hospitals, all medical care available.

FRESH WATER: 13 hydrants on Quays 1 and 2, American type thread 2 in., capable of supplying 14 to 30 t.p.h. Also a private water barge of 100 tons capacity.

FUEL: Oil for boilers, diesel engines, and gasoline are distributed by a private firm, Distribuidora Maritime Porto de Sao Francisco Ltda. by tanker trucks, coming from Itajai, where orders must be placed 12 hours in advance.

WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: By stevedores.

CUSTOMS ALLOWANCES: 1 package of 200 cigarettes, and 1 bottle of spirits each man.

CONSULS: Chile.

REPAIRS: Deck and engine repairs possible, workshop in town.

REPATRIATION: No facilities for changing crews.

AIRPORT: None, nearest in Joinville, with regular traffic, about 40 miles distant.

TIME: GMT minus 3 hours.

HOLIDAYS: 1st January; 15th April; 21st April; 1st May; 7th September; 15th September; 15th November; 25th December; Holy Friday; Corpus Christi; 8th September; 8th December.

TELEPHONES: Available at dock entrance.

DEVELOPMENTS: The bar is expected to be dredged to a depth of 9 m.

A new grain terminal is expected to be completed in the near future.

AUTHORITY: Administracao do Porto de Sao Francisco do Sul, Avenida Engenheiro Leite Rebeiro 782, CEP-89230 San Francisco do Sul, Santa Catarina, Brazil. *Contact:* Clemintino Nascimento Moura, Superintendent.

(B) SAO FRANCISCO DO SUL OIL TERMINAL (TEFRAN)

LOCATION: Terminal Maritimo de Sao Francisco do Sul – TEFRAN, operated by Petroleo Brasileiro S/A – PETROBRAS, consists of an SBM whose body is 11 m. in diameter, weighing 143 tons and exhibits a light beacon Iso. Fl. R. 2 sec. 7 m. 5 M. It is situated about 4 miles Eastward of Sao Francisco do Sul Island, its co-ordinates are: Lat. 26° 13′ 46″ S., Long. 48° 25′ 03″ W. Onshore base is located 18 km. from the town of Sao Francisco do Sul, which is 48 km. from Joinville City, both in Santa Catarina State. The main scope of TEFRAN is to receive, store and transfer oil to Refinaria Presidente Getulio Vargas – REPAR, a refinery in Araucaria, a town in the state of Parana.

DOCUMENTS: See "General" before first port.

Any and every document issued or otherwise related to ship's clearance at the last port of call is required for immediate inspection by the boarding officials.

Immigration and Maritime Police:

1 copy Crew List.
1 copy General List.
3 copies Passenger List.
3 copies Passengers in Transit List.

Health:

1 copy Vaccination List.
1 copy Certificate of Derat Exemption.
1 copy Maritime Health Declaration.
1 copy List of Drugs and Narcotics.
1 copy Passengers in Transit List.
1 copy Passengers List.

Customs:

3 copies Crew List.
3 copies Spare Parts List.
3 copies Stores List.
3 copies Provisions List.
3 copies Drugs and Narcotics List (if not included in the Stores List).
1 copy Cargo Manifest.
1 copy Bills of Lading.
2 copies Passengers List.
2 copies Passengers in Transit List.
3 copies Crew Personal Effects List.
3 copies Passengers Personal Effects List.

NOTE: Supplies, stores, cigarettes, cigars, tobacco, alcoholic beverages, arms, ammunition, souvenirs, playing cards, drugs and narcotics, medicines (not in use) etc., must be kept under lock and key; the doors of the storage rooms will be sealed by the Customs Officials and the seal must be kept unbroken throughout the vessel's stay in port.

Any goods or personal effects omitted from the list may be confiscated.

Extracts of Sea Protest drawn out from the Log Book must be submitted to the boarding Customs Officials in case of accident which has caused damage or loss of the cargo or part of it.

Leaving Clearance:

Masters must appoint their ship's Agent at Sao Francisco do Sul and have their International Safety Certificates in force. It is also necessary for vessels Leaving Clearance:

Leaving Permit from Customs.
Leaving Permit from the Captain of the Port.
Leaving Permit from the Maritime Police.
Leaving Permit from Brazil Mail (Passe da E.C.T.).

Anchorage for Clearance: The anchorage for Port Authorities clearance is the same as for vessels waiting for mooring. Port Authorities clearance is effected during office hours only.

Display of quarantine signals must be continuously maintained until free pratique is granted. These signals are: sunrise to sunset – quarantine flag "Quebec". Sunset to sunrise – signal light red over white light.

In addition to quarantine signals, the Brazilian Flag must be flown from foreign vessel's foremast throughout the vessel's stay in port.

Vessels arriving at anchorage sites after 1630 hrs. in Winter time and after 1800 hrs. in Summer time, can only moor the next day after daybreak.

PILOTAGE: Pilotage is not compulsory in the area of the SBM, either when making for it, mooring at it or clearing the SBM. TEFRAN provides a duly trained Mooring Master for assistance to Masters of vessels operating at SBM. His services are presently rendered without charge.

Mooring Master will advise vessel where to anchor.

For approaching manoeuvres, and after mooring to the SBM, the Master of the vessel will be assisted by the Mooring Master who boarded the vessel in the proper site and will help the Master of the vessel as far as the operational activities in the area are concerned, such as: mooring, hose connections, discharge, hose disconnection and unmooring, as well as control of small crafts which render assistance to the vessel.

It is the responsibility of the Master of the vessel to notify the Mooring Master of any special conditions, difficulties or peculiarities of the vessel such as defective navigational equipment, mooring lines, tackle, gear, helm, engine or boiler deficiencies or lack of necessary equipment which might impose hazards in connection with handling, mooring, unmooring and actually operating the vessel.

The Mooring Master must be immediately advised about any acts or facts which may jeopardise the safety of the vessel or the system, as well as operational events which may possibly alter the existing conditions.

The vessel must be moored to the entire satisfaction of both the Master and the Mooring Master.

The Mooring Master will remain on board the vessel throughout the vessel's stay at the SBM and will notify the Terminal Superintendent about any operational failures; and the vessel may be ordered off the SBM and refused to be accepted in future, unless corrective action by the ship is immediately taken.

The Mooring Master will notify the Master of the vessel, in writing, about disregard of the operational requirements established upon arrival of the ship.

APPROACHES: Refer to Brazilian Hydrographic Office Nautical Chart Nos. 1800, 1804 and 1830.

Vessels approaching the SBM from the North, will first sight Ilha da Paz Lighthouse (Fl. W. 20 sec. 84 m. 23 M.), Morro Joao Dias, Morro Pao de Acucar and Morro de Ubatuba which are hills inland. A conspicuous cross stands on Morro Pao de Acucar. Vessels approaching in night-time, when at less than 15 miles from shore, after loosing sight of Ponta Caioba Light (Fl. W. 5 secs. 15 M.) will sight Ilha da Paz Light which is the most prominent landmark for vessels bound for Sao Francisco do Sul Port and the TEFRAN SBM.

Vessels approaching the SBM from the East, will sight the same above mentioned landmarks when near Sao Francisco do Sul. In the night-time Ilha da Paz Light will be first seen since its range is 23 miles. Ilha da Paz Light is the only landmark at night-time, except for the glare of the town of Sao Francisco do Sul lights which can be seen from a distance of 30 miles.

Vessels approaching the SBM from the South, in the daytime, when less than 10 miles away from shore, may use Remedios and Tamboretes Islets as an indication of the nearness of the SBM; when nearer, will sight Morro Pao de Acucar, Morro Montao de Trigo, Morro Ubatuba and Morro Joao Dias, which are hills and can steer to Ilha da Paz Light. At night-time, after loosing sight of Ponta do Vigia Light (Fl. W. 6 sec. 50 m. 15 M.) near Itapocoroia, vessels will sight no long range lights until sighting Ilha da Paz Light. These vessels, in order to navigate safely, must keep away from Remedios and Tamboretes Islets which can be accomplished by keeping Eastward of the 20 m. line, 6 miles seaward. Eastward of this line there are no dangers.

It is safe to sail using the radar, since the coast affords quite well defined lines and good radio wave reflections. Radar systems, with 48 miles range or more, cover the area efficiently and make it possible to guide launches not provided with radar, when there is fog.

ANCHORAGE: For vessels waiting either for Port Authorities Clearance or mooring or under repair, the advisable anchorage site is 1.3 miles North of the SBM, in the following position: Lat. 26° 12′ 30″ S., Long. 48° 25′ 00″ W. The seabed is fine sand and mud. The depth is 22 m. Mooring Master will board arriving tankers in this position.

In no case must vessels drop anchor near the SBM (within a circle 1 mile in radius, centered on the SBM) within the area between the SBM and the coast or in the access channel to Sao Francisco do Sul River, due to existance of submarine pipe-lines and anchor chains on the seabed.

RESTRICTIONS: The buoy is designed for tankers up to 200,000 d.w.t. but due to the depths in the area, the maximum draft allowable is 18 m. (59 ft.). Sometimes, due to bad weather, tankers have to wait for favourable weather conditions, so that mooring may safely be started. Mooring should be undertaken at daylight only.

MAX. SIZE: 200,000 d.w.t. Draft 18.0 m.

HEALTH: Vessels bound for TEFRAN are inspected at the SBM by Health, Customs and Maritime Police Officials. Ship's Agent must apply beforehand for these visits.

RADIO: Vessels bound for Sao Francisco do Sul Terminal, should advise their ETA 72 hours prior to arrival directly to vessel's Agent through a Coastal Station. This arrival message will be passed by the Agent to the Terminal.

Tankers must have their VHF radios tuned to Channel 16 (VHF) or 4125 kHz (SSB), around the clock when nearing the anchorage position, and send updated ETA messages until Mooring Master boards. Weather forecast and/or Sinoptic charts, if available aboard, must be shown to the Mooring Master when he boards.

VHF: Vessels bound for TEFRAN must have their VHF radios tuned 24 hours per day on Channel 16 (Delta) with maximum gain when nearing the area of the SBM. TEFRAN Control Room will contact the arriving vessels and inform their Master about pertinent matters and emergencies. After contacting the Terminal on Channel 16, this contact must be maintained through Channel 14. During mooring and unmooring operations and ship's stay at the SBM, the launches will keep in touch with the Mooring Master through VHF transceivers.

TUGS: No tugs are available at the Terminal for assistance in mooring vessels.

Launches: Launches under direction of the Mooring Master will assist Terminal and the vessel when mooring, unmooring, connecting and disconnecting hoses. They will also assist in personnel transportation, that is to say, crew members, agents, Port Authorities, suppliers, and authorised persons.

BERTHING: The Terminal Maritimo de Sao Francisco do Sul (TEFRAN) consists of facilities for receiving, storage and transfer of oil.

Discharge System: The discharge system consists of an SBM connected to 2 parallel 20 in. diameter × 271 m. long (888.5 ft.) floating hoses.

At the ship's tail end of the hoses there are 2 special 16 in. hoses – "Tanker Tail Hoses" or "Ship Tail Hoses" – to be connected to the ship's manifold, provided with a butterfly valve and a blank flange (each flange is 16 in. in diameter Standard PSI-ANSI B.16.5).

Two 16 in. × 53 m. (173 ft.) in length nylon hawsers are fastened to the SBM turntable for mooring of the vessels.

On the upper part of the SBM there are 3 turning arms for securing the mooring hawsers and the hoses, as well as to balance the system.

From the bottom of the buoy start 2 submarine hoses 20 in. in diameter, connected to the underwater manifolds of the submarine pipe-lines.

Two × 11 km. long × 34 in. diameter submarine steel pipe-lines laid on the sea bottom following the general West-Easterly direction, connect the submarine manifold to the Terminal storage tanks.

Under normal conditions discharge system allows a 10,000 cu.m./h., 10 kg./cu.cm. (150 p.s.i.) pumping rate measured at the ship's gauge.

At the site where the pipe-lines reach the mainland there is a beacon showing an intermittent blue light indicating the general direction of the lines.

The above described discharge system is shown on the Brazilian Nautical Chart No. 1804 issued by the Diretoria de Hidrografia e Navegacao da Marinha do Brasil (Brazilian Navy Hydrographic Office-DHN).

Note: It is forbidden to navigate and to drop anchor within the area limited by two parallel lines 1 mile away from each side of the submarine pipe-lines, between the SBM and the mainland as well as within a circle 1 mile in radius centered on the SBM.

Storage System: The storage system consists of 7 tanks which are able to receive crude oil directly discharged from the tankers moored at the SBM.

The 5 tanks have the following main features:

Type: Cylindrical vertical (floating roof).
Diameter: 86.56 m.
Height: 14.63 m.
Nominal Volume: 86,114 cu.m.
Operational Volume: 77,000 cu.m.
Receiving Line: 36 in. diameter.

Two tanks have the following main features:

Type: Cylindrical vertical (floating roof).
Diameter: 45.72 m.
Height: 14.63 m.
Nominal Volume: 23,850 cu.m.
Operational Volume: 21,500 cu.m.
Receiving Line: 36 in. diameter.

The tanks are equipped with remote control valves and readings, monitored from the Operations Control Room.

Neither the tanks nor the lines are heated.

Ballast System: No conventional tank cleaning procedures are allowed. The SBM is not provided with ballast line.

Arrival: Arrival time is considered to be the time vessel reaches the anchorage site or the time the Mooring Master boards the vessel, whichever occurs first. However, Notice of Readiness will not be considered as the time of arrival unless the vessel is in all respects ready to discharge.

To avoid delays the following items must be observed by the tanker: keep the Terminal advised about any change in ETA; arrive with the port side derrick and an ordinary pilot ladder on lee side rigged, as well as the 2 manifold flanges to be used ready for connection of the hoses, i.e. without blind flanges, reducers fitted if necessary, etc.; 2 good eye-spliced (9 in. circumference at least) nylon ropes on forecastle head; anchor well at home and secured with stoppers and brakes. If the ship's manifold flanges are not standard 150 p.s.i., ANSI-B.16.5-16 in. in diameter, the vessel must advise Terminal through the Agent before arriving.

Mooring: Mooring Master will advise on the way of securing the ship. Tankers are moored by 2 bow nylon hawsers of 16 in. circumference and 53 m. in length. Vessel's messenger lines are shackled, one at a time, to the pick-up wires of the hawsers by the launch crew and hove in by the vessel's windlass until the lengths of the chafing chains are brought over the roller chocks/fairleads and shackled to the wire strops secured to the bollards.

Hoses Connection: The Mooring Master will direct the Terminal's working men in lifting, connecting and lowering the hoses. After the vessel is securely moored, the 16 in. floating hoses must be individually lifted to the rail by the ship's gear. Sundry hose securing and connecting equipment (strops, gaskets, nuts, bolts, wrenches, etc.) will be supplied by the Terminal and put aboard the tanker just after arriving. Hoses will be lifted by the ship's derrick on the PORT SIDE. Minimum lift of 8 tons capacity is required. Winds reaching about 8 Beaufort Scale and waves, 3.0 m. high, may determine the operation to be interrupted and the hoses disconnected, according to the Mooring Master's judgement.

Discharging: Pumping must not be started without permission of the Mooring Master. The maximum allowable pressure is 10 kg./sq.cm. (150 p.s.i.). While the vessel is moored, the vertical angle formed by the hawsers and the sea surface should not exceed 30° degrees, for safety of the SBM. If necessary the Terminal will require the ship to pump sea water through the hose lines in order to displace the remaining oil.

Ballasting: When necessary, due either to excessive pitching or by being trimmed too much by the stern, pumping of ballast must be concentrated in the fore tanks, even though interruption of discharging becomes mandatory.

As a rule, the vessel must be ballasted at the same time the discharge is being carried out. Vessels which fail to do so, will be notified in writing and will be held responsible for the extra time spent at the SBM after the disconnection of the hoses.

No dirty ballast or any oily residues must be pumped overboard, otherwise the vessel may incur a heavy fine from the Brazilian Authorities.

Terminal Personnel On Board: The vessel is required to give proper treatment to the Terminal personnel assigned to work on board, including lodging and meals. As a rule, 7 people (1 Mooring Master and 6 workmen) are assigned to duty onboard the vessel.

Machinery in Readiness: When moored at the SBM, vessels must keep engines and propulsion machinery in readiness to unmoor and proceed under full power at short notice or to prevent riding upon the SBM. An Officer must also be on duty on the bridge. Should the ship not comply with above stated requirements, she may be considered unsuitable for mooring at the SBM.

MEDICAL: Medical treatment and/or hospitalisation, if required, are provided at Sao Francisco do Sul or Joinville private hospitals. Serious illness will usually be treated in Joinville. Dental care is also available in Sao Francisco do Sul. For emergency cases (injury, etc.) TEFRAN first aid may be requested by the Master. As usual, Agent will make such arrangements.

FRESH WATER: Neither TEFRAN nor Sao Francisco do Sul are able to supply either drinking or boiler water to vessels either moored or at anchor.

FUEL: Neither TEFRAN nor Sao Francisco do Sul port can supply bunkers for vessels.

Lubricants: TEFRAN has no way of supplying lubricants to vessels, either moored or at anchor. Nevertheless in urgent cases, Agents must be contacted in order to place orders for lubricants, 15 days in advance. Even then, lubricants can only be supplied in very limited quantities, due to the natural difficulties of transportation to moored ships.

REPAIRS: Limited repairs may be effected by private workshops. Agents must be contacted 72 hours in advance in order to make the necessary arrangements to assist vessels needing repairs.

WATCHMEN: Port watchmen have to be compulsorily assigned to duty onboard all vessels coming from overseas throughout the vessel's stay in port.

CUSTOMS: Brazilian laws are strict with regard to smuggling and Masters are requested to instruct their crew not to retain cigarettes in carton lots, cigars, tobacco, alcoholic drinks, drugs, souvenirs, etc. These should be collected prior to arrival, listed with the items in the Customs Locker to be sealed by the Customs Officials and placed in the custody of the Master throughout the vessel's stay. No commercial transactions will be tolerated, be it among Terminal employees, crew members or anyone else.

TIME: Local time is GMT minus 3 hours.

CONSULS: Most maritime nations maintain consular representatives in Sao Francisco do Sul and Joinville.

GENERAL:

Charts/Publications: The Diretoria de Hidrografia e Navegacao da Marinha do Brasil (Brazilian Navy Hydrographic Office) has issued the following nautical charts of this area: DHN 1800, 1830, 1804, as well as Roteiro DH 1.8 (Brazil Pilot), Lista de Farois DH 2.11 (List of Lights) and Lista de Auxilio Radio DH 8.8 (Radio Aids List).

No charts or navigational publications are available at TEFRAN or Sao Francisco do Sul. When necessary, Masters must contact ship's Agent, in advance, for placing orders for such items in Rio de Janeiro.

Provisions and Stores: Orders for provisions and stores may be placed through the Agents or directly to shipchandlers. Most of the items are obtainable in Joinville but some may be found in Sao Francisco do Sul.

Tidal Amplitudes: The tides in the area of the SBM present the same characteristics as those of the port of Sao Francisco do Sul. (Please refer to the Tide Tables issued by Diretoria de Hydrografia e Navegacao da Marinha do Brasil – Brazilian Navy Hydrographic Office – DG – 16 – 15).

High and low tides occur nearly 40 minutes before they occur in the port of Sao Francisco do Sul and the tidal amplitude at the SBM area is a little below the ones of the said port.

Weather Conditions: As a rule, the conditions in the area of the SBM may be considered fair, as far as operating conditions for the vessels are concerned, except in the occurrence of gales from the South, which sometimes blow for more than 48 hours in winter time.

Winds: The strong winds recorded in the area originate from the South, caused by cold fronts or instability lines. One of the strongest recorded winds blew on March 11th, 1978, from N.W. reaching an intensity of 70 km. per hour, during one hour. It was observed that at the same time the isobathic wind at the sea, blew from the South with an intensity of 40 km. per hour.

Rain: The average annual rainfall is about 980 mm.

Visibility: The visibility in the area is generally fair all year round, except in Winter time when sometimes fog may occur.

Temperature: The local average temperature ranges from 8°C (46°F) in June, July and August, to 32°C (90°F) in January and February.

Humidity: The relative humidity of the air is nearly 80% in the region.

Currents: Currents in the area are not related to the local winds since the set, as well as swells result, as a rule, from deep sea winds which are not always in correspondence with local winds.

According to the variation of the intensity of the high sea winds, it is possible to forecast the variations of the intensity of the currents in the area of the SBM.

In the vicinity of the SBM, when there is no wind or there are only winds of low intensity, the currents of the area are strongly influenced by the tidal set of the bar of the port of Sao Francisco do Sul.

Waves: Southerly winds are originated, as a rule by cold fronts. The waves caused by them are very seldom higher than 3.5 m. (11.4 ft.).

The waves are, usually, 2.5 m. in height and have an 11 second period when Southerly winds blow during the Winter time, from June to October.

The maximum wave height allowable for operating vessels moored at the SBM is 3 m. (9.8 ft.), depending on the conditions of the mooring lines and the tensions over them.

SHIPMASTER'S REPORT: 1977

Description and Approach: (Refer B.A. Charts No. 550 and 3968) This terminal consists of one SBM situated about 4 miles from the shore off Ilha de Sao Francisco in position Lat. 26° 13′ 53″ S., Long. 48° 25′ 03″ W. A light beacon, Iso. Fl. R. 2 sec., is exhibited from the buoy.

The land in the vicinity of Ilha de Sao Francisco do Sul is mainly low lying with sandy beaches, however, several small steep-sided hills, 405 ft. to 496 ft. high, are to be found near the coast at Cabo Joao Dias and from Punta da Enseada to Punta da Prainha. These are conspicuous and identifiable on radar some 35 miles off, as is Ilha da Paz in the Arquipelago das Gracas off the Northern end of Ilha de Sao Francisco.

When making the approach the course was maintained to keep outside the 20 fathom line until to the East of the SBM when the course was then altered to 273°. Accurate radar fixes had been obtained by this time and shortly after crossing the 20 fathom line the SBM was observed on radar at a range of 13 miles and was positively identified soon after when its beacon was sighted at a distance of 12.75 miles. At the time the visibility was good and the sea calm.

About the same time the beacon on Ilha da Paz (Fl. 20 sec. 23 miles) was sighted and identified at a range of about 16 miles.

Anchorage: An hour and a half before arrival contact was made on VHF radio with the Terminal Operators who instructed the vessel to anchor in position Lat. 26° 13′ S. Long. 48° 22′ W., a distance of 3 miles from the SBM they also advised that the Pilot would board the vessel at 0500 hrs. the following morning but due to language problems it was difficult to exchange much information.

Throughout the time at anchor (18th/2030 hrs. to 19th/0600 hrs.) soundings were taken every half hour and the least depth observed was 23.92 m.

Later I was handed a printed sheet by the pilot advising that the anchor positions for vessels waiting to berth at the Tefran Terminal are as follows:—

For Drafts up to 16 m.	Lat. 26° 12′ 00″ S. Long. 48° 27′ 00″ W.
Drafts 16 m. up to 18.5 m.	Lat. 26° 12′ 30″ S. Long. 48° 25′ 00″ W.

Taking into consideration the depth of water inshore and also to the North of the buoy I feel that the anchor position received by VHF is far safer and allows advantage to be taken of deeper water also this position gives more room to manoeuvre when berthing.

Charts: The SBM does not lie within the area covered by the B.A. small scale chart No. 550 but this is useful for purposes of identification, however, I believe a small scale Brazilian chart is available which covers the whole area.

Pilotage: Two Berthing Masters are employed at the terminal but only work alternate ships. The Berthing Master remains on board throughout the discharge.

For boarding they prefer to use an ordinary pilot ladder but when departing like an accommodation ladder to be rigged.

Mooring Arrangements: The buoy is of usual size and shape to other SBM's and the mooring operation follows the usual pattern. Ships' lines are run out as messengers and two buoy ropes, 18 in. circumference and 50 m. in length, are hove on board and secured, 1 on each bow, by pulling numerous bights of the ships' mooring ropes through the eyes of the buoy ropes and turning each bight up on the bitts. This is a rather cumbersome method however it presented no difficulties.

Berthing is only permitted during the hours of daylight but unberthing may be carried out at any time.

The hoses may be connected on either side of the vessel as required by the Pilot on boarding.

Shore Personnel: Apart from the Berthing Master, a terminal operator and 10 men board for mooring and connecting the hoses. They all remain on board throughout the discharge. The mooring/pipe-line gang bring their own mattresses with them but rely on the ship to provide food.

Pilot boat/Work boat: An ex-fishing boat, 18 m. in length, with a black hull and black tripod mast is stationed at Enseada and used as a pilot and general work boat. Additionally for mooring a small open boat is used for running and connecting ships' lines to the buoy ropes.

In the near future 2 new and faster launches of about 18 m. in length will replace the ex-fishing boat, however, I was unable to ascertain whether or not she will still be used for pipe-line/mooring work.

Depths: As previously stated the minimum depth observed at the anchorage (26° 13′ S. 48° 22′ W.) was 23.92 m. with a sandy bottom, but evidence of some mud was found when weighing anchor.

On arrival at the SBM near to the time of low water the depth was observed as 23.17 m. The Pilot advised me he thought the depth at the mooring was 22 to 23 m. also that the nature of the bottom in the vicinity of the buoy was fine sand.

To seaward of the SBM the bottom appears to be fairly uniform, however, a sounding of 11 fathoms is shown on the chart 097.5° × 1.7 miles from the buoy.

Current: Referring to the South America Pilot Volume No. 1, the predominant current runs in a Southwesterly direction for most of the year with a rate of up to 2 knots, except for the months of May, June and July when the direction is Northeasterly. However, the currents and tides are influenced by the prevailing wind conditions.

Weather: I was advised by the Pilot that the area in general enjoys good weather and that most of the time the wave heights do not exceed 1 m. He also remarked that fog is rare but some mist is experienced during the months of July and August.

Maximum Draft at the SBM: When questioned about the maximum draft accepted at the SBM the Pilot replied that it was 18.5 or 19 m.

Terminal Equipment:

Floating hoses	2×275 m. × 16 in. diam.
Hose flanges	16 in. diam.
Hose – Buoy/Pipe-line	20 in. diam.
Pipe-line – Buoy/Shore	1×11 km.×32 in. diam.
Distance – Ship/Shore tanks	11 km. (6 nautical miles).
Max. Back/Pressure permitted	10 kg.
Capacity of Shore tanks	478,260 cu. m.

Actual Discharge Rates Attained (Long tons):

Rate on bulk	7,200 t.p.h.
Rate overall	6,361 t.p.h.

Customs/Port Health: The normal Brazilian Customs and Health Regulations apply. About 72 hours before arrival, if coming from a foreign port, pratique should be requested through the Agents.

Contact with Installation: During discharge contact is maintained with the installation by means of VHF radio. Calling Channel 16, working Channels 14, 13, 11, 9, and 6. The Pilot and terminal operator on board the ship both carry radios, complete with battery charging equipment. Apart from the launch, this is the only organised contact with the installation.

Facilities: Hospital and dental facilities are available also provisions may be obtained. Laundry and small engineering repairs can be carried out. Bunkers and fresh water are not available at the SBM.

Connection with Rio de Janeiro: Regular twice daily flights connect Rio de Janeiro with the town of Joinville (near Sao Francisco do Sul) via Sao Paulo or Curitia. Travelling times (approx.) are as follows:–

Rio de Janeiro/Joinville (By air)	2.5 hrs.
Joinville/Enseada (By car)	40 mins.
Enseada/SBM. (By boat)	40 mins.

Film Service: No facilities exist for exchanging Walport films at this port.

Shore Leave for Ships' Personnel: No shore leave was taken by ships' personnel at Sao Francisco do Sul, however, I was advised by the Pilot that the village of Enseada, where the pilot/workboat is stationed, has 2 restaurants and other limited facilities. Further, the town of Joinville with more amenities, including hotels, may be reached in 40 minutes by car.

AUTHORITY: Petroleo Brasileiro S.A.-PETROBRAS, Avenida Republica do Chile, 65-12° Andar, 20035 – Rio de Janeiro – RJ.
Contact: Jose Luiz de Oliveira Rodrigues, Chief of Operations Division.

SAO LUIZ (Including Itaqui), Maranhao: 02.30 S. 44.07 W. (See Plan Book)

LOCATION: *Itaqui:* The Port of Itaqui is located in the bay of Sao Marcos, in the Municipality of Sao Luis, Capital of the State of Maranhao, almost at the edge of the N.E. region of Brazil, and 9 km. to the S.W. of the city, with which it is connected via a breakwater extending over the River Bacanga.

The location, fairly sheltered, encompasses Itaqui Point and extends to the North as far as Madeira Point, where a Terminal is to be constructed for handling iron ore on behalf of Serra Dos Carajas, and to the South, reaches close to the Island of Tauamirim: it is formed by a re-entrance into the coast where the contours (depths) of 0 m., 5 m., 10 m., and 15 m., are almost parallel and are between 30 and 40 m. apart. In front of Itaqui, at a distance of 400 m. from the quay, is the Island of Guarapira with maximum dimensions of 100 m. × 300 m. and stretching in a N.S. direction.

The Area of Administration of the "Maranhao Docks Company" includes the Bay of Sao Marcos and the Islands located within it, being limited by a line which joins Tatinga Point on the mainland, to Sao Marcos Point on the Island of Sao Luis.

(a) The Port of Itaqui is confined between the parallels of 02° 34′ S., and 02° 36′ S. and meridians 44° 21′ W. and 44° 24′ W.

(b) The "Administrative Area" is confined by the following co-ordinates:

Meridians of 44° 24′ W. and 44° 19′ W.
Parallels of 02° 37′ S. and 02° 29′ S.

(c) The Area of Jurisdiction encompasses the whole of the coast of the State of Maranhao, from the border with the State of Piaui as far as the frontier with the State of Para.

DOCUMENTS: See "General" before first port.

PILOTAGE: Approaching coast, the Master must inform Agent via Coast Station Sao Luis – PPB (VHF Channels 16, 24, 25, 26 and 27) or Radio Marinha de Sao Luis – PWM (HF). Pilot launch painted red and provided with conventional lights. Launch awaits at Ponta da Madeira or other places requested in limit by Brazilian Chart DHN–412.

Vessel to notify Pilot service of ETA 6 hours before arrival.

ANCHORAGE:

Sao Luiz: The following areas are reserved for the anchorage of vessels awaiting to enter port.

(a) Location No. 1 for vessels of more than 2,000 g.r.t., up to 21 ft. draft and 135 m. overall (this is the nearest anchorage to the town).

Location No. 2 for vessels up to 18 ft. draft (and that which follows No. 2).

Location No. 3 for vessels up to 18 ft. draft (is the nearest to the bar).

These anchorages are situated between the parallels of 02° 30′ 5″ S. and 02° 31′ 5″ S.

(b) Vessels impounded or requiring extensive repairs:
Vessels up to 10 ft. – Lat. 02° 31′ 9″ S., Long. 44° 18′ 7″ W.
Larger vessels: Lat. 02° 30′ 0″ S., Long. 44° 20′ 0″ W.

(c) Anchorage for vessels of less than 2,000 g.r.t. To the South of the partly submerged hull of the *Maria Celeste* between the State Warehouse and the Customs Warehouse.

(d) Vessels in quarantine: Lat. 02° 29′ 5″ S., Long. 44° 20′ 5″ W. Vessels may not anchor in the approach channel or the turning basin.

Itaqui: The following anchorage zones for vessels arriving at Itaqui:
(a) Vessels over 5,000 g.r.t.: Lat. 02° 35′ 5″ S., Long. 44° 22′ 4″ W.
(b) Vessels impounded or requiring extensive repairs: Lat. 02° 35′ 1″ S., Long. 44° 22′ 3″ W.
(c) Vessels in quarantine: Lat. 02° 35′ 4″ S., Long. 44° 23′ 3″ W.
(d) Inspection anchorage: Lat. 02° 35′ 2″ S., Long. 44° 22′ 4″ W.

RESTRICTIONS:
Sao Luiz: May only be entered during daylight hours and near HW.
Itaqui: Cargo vessels may moor any time during the day or night depending on the state of the tide. Vessels bound for the oil terminal may only berth on the rising tide during the day. Berthing should commence 1 hour before HW.

MAX. SIZE: For port of Itaqui, max. draft at LW is 34 ft. At HW, depth of 45 ft. to 48 ft. available depending on height of tide.

HEALTH: (See "General" before first port.) Health Authorities visit compulsory, due to disinfection by Yellow Fever Service.

Tankers bound for the oil terminal will be inspected at the terminal after mooring is completed.

Vessels awaiting berths will be inspected at the inspection anchorages.

RADIO: Radio Marinha, code PWM, may be used for any message to the Agent.

TUGS: *Sao Luiz:* One tug 50 h.p. available.
Itaqui: None.

BERTHING: *Sao Luiz:* See "Anchorage".
Itaqui:
Administration Quay – Length 164 m., depth 12 m.
Warehouse Quay – Length 164 m., depth 12 m.
North Quay – Length 164 m., depth 12 m.
South Quay – Length 164 m., depth 12 m.

The 80 m. quay will be provided with a ramp for car ferries.

CRANES: *Sao Luiz:* 8 portal cranes (2×6 tons, 6×3 tons) 1×50 tons, 2×3 tons, 1×6 ton on order.
Itaqui:
6×3.2 ton (gantry), 2×6.3 ton (gantry)
3×2.5 ton (mobile), 1×4.0 ton (mobile).
1×9.1 ton (mobile), 2×4 ton (tracked mobile).

BARGES: *Sao Luiz:* 11 barges of 60 tons, 5 barges of 80 tons and 1 barge of 150 tons capacity. There are also 5 oil barges with a total capacity of 1,090 tons.

BULK HANDLING FACILITIES: 2 mobile grain elevators at Warehouse Quay serving Maranhao Wheat Mill, rate 150 t.p.h. The Maranhao Wheat Mill has silos with 12 cells, capacity 6,000 tons. Additional silos with 2,000 tons capacity available. The rated capacity of the elevators will be doubled in the near future.

TANKERS: Discharge at port of Itaqui.
Tank Capacities:

STEVEDORES: On receipt of vessel's ETA Agent provides the necessary gangs. Master to mention in his ETA cable the distribution in cargo hold enabling Agent to arrange for number of gangs required. When loading or discharging bagged cargo an average of 4,000 bags per 8 hours work per gang handled.

MEDICAL: Advance notice by radio preferred, since medical assistance in S. Luiz is limited to 1 general clinic and 3 hospitals.

FRESH WATER: *Sao Luiz:* Fresh water available by barge, rate 60 tons per day. There is also an outlet at warehouse No. 4 on the quay.
Itaqui: Available ex-wharf, rate 18 t.p.h.

FUEL: *Sao Luiz:* Fuel oil available to vessels alongside, delivery by road tanker.
Itaqui: Diesel oil available to vessels alongside the Warehouse Quay and South Quay.

GANGWAY/DECK WATCHMEN: Normally done by the crew.

OPENING/CLOSING HATCHES: Done by stevedores.

CUSTOMS ALLOWANCES: No limit or restrictions.

IDENTITY CARDS: Foreign Crew members not permitted to go ashore without presentation of Identity Card, on which is a photograph of holder and personal details. These cards are provided by the Agent upon arrival. The Identity Card must be given on disembarkation to the Federal Police who will return it to the Crew member on re-embarkation.

CONSULS:

France	Tel. 1117	Spain	Tel. 2664
Portugal	„ 1689	Norway	„ 1888
Denmark	„ 1507	Bolivia, no telephone	

Italian Consul at Itaqui. Tel: 2-04-08.

REPAIRS: Shop for small repairs available.

REPATRIATION: Possible. Last Port Clearance and Crew List required by Maritime Police.

AIRPORT: 13 km. from centre of town (18 km. from Itaqui), with daily flights to North and South of country.

TIME: GMT minus 3 hours.

HOLIDAYS: January 1st; April 21st; May 1st; September 7th; November 15th; December 25th (National holidays). July 28th; September 8th, December 8th, June 29th (local holidays); Maundy Thursday; Good Friday (Church holidays). On all holidays, except Good Friday, work permitted.

POLICE/AMBULANCE/FIRE: Police Tel: 1150; First Aid Ambulance 1943; Fire Brigade 1753.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: The Port of Itaqui is rail-connected with the whole of Brazil, with the exceptions of the States of Para (Belem) and Amazonas (Manaus).

DEVELOPMENTS: Wharf at Itaqui to be extended to 1,068 m. Depth will vary from 30 ft. to 40 ft.

The existing petroleum berth will be replaced by the final extension of the wharf, although plans indicate the intended construction of a new Petroleum Berth on Guapira Island.

New unloader for bauxite, coke and iron ore under construction, rate 1,500 tonnes per hour.

A 16,000 t.p.h. linear shiploader has been ordered for Itaqui.

Also see "Ponta da Madeira".

AUTHORITY: Companhia Docas do Maranhao, Rua da Paz 561, Sao Luis, Maranhao, Brazil. *Contact:* Washington de Oliveira Viegas, President.

	Esso		*Sabba*		*Texaco*		*Petrobras*		*Gas Butano*	
Products	*No. of Tanks*	*Volume (cu.m.)*	*No. of Tanks*	*Volume (cu.m.)*	*No. of Tanks*	*Volume (cu.m.)*	*No. of Tanks*	*Volume (cu.m.)*	*No. of Tanks*	*Volume (cu.m.)*
Gasoline	2	4,003	2	4,800	1	4,000	1	9,135		
Kerosene	1	1,580	1	8,000	1	400	1	1,544		
Diesel Oil	1	3,200	2	5,500	1	3,200	1	9,135		
Jet Kerosene					2	1,600				
Liquefied Gas									6	704
B.P.F.							1	4,032		

SAO SEBASTIAO: 23.48 S. 45.24 W. (See Plan Book)

LOCATION: Terminal Maritimo Almirante Barroso (TEBAR) is located on the West edge of the Sao Sebastiao Channel. Safe access is made through the South Entrance. The approximate geographical position of berths is Lat. 23° 48′ 3″ S., Long. 45° 23′ 3″ W.

The port limits extend from Ponta do Araca-Ilha das Cabras to Pontal da Cruz-Pontal do Paquea.

DOCUMENTS: The visiting area of the Port Health Authorities, Federal Revenue and others, is designated by the alignment: Ponta do Araca-Ilha das Cabras (South) and South limit of the zone of submarine cables (North).

Inward clearance is effected on board immediately after docking by Government Port Officials and Agent's Representative. It is necessary that the following documents be ready on arrival.

Any document regarding outward clearance of the ship at last port of call.

5 copies Crew List.
2 copies Store List.
2 copies Personal Effects List.
3 copies Passenger List.
3 copies Cargo Manifest, (or more if available).
3 copies Bill of Lading, (or more if available).
2 copies Maritime Declaration of Health.
Notice of Readiness (Addressed to Petrobras)
List of vessel's particulars: call sign, n.r.t., g.r.t., d.w.t., speed, engine b.h.p., draft, total crew, officers, time of arrival, loading ports and dates of sailing, quantity of cargo for Sao Sebastiao, quantity of cargo in transit for other ports, etc.

PILOTAGE: Pilotage is compulsory between the intersection of the Sao Sebastiao Channel with the alignment of the coordinates Lat. 23° 43′ 18″ S., Long. 45° 20′ 12″ W. and Lat. 23° 43′ S., Long 45° 21′ 18″ W. (North Bar — Chart DHN No. 1616) and the intersection of the Sao Sebastiao Channel with the alignment of the coordinates Lat. 23° 53′ 36″ S., Long. 45° 28′ 50″ W. and Lat. 23° 52′ 42″ S. Long. 45° 29′ W. (South Bar – Chart DHN No. 1615), except for Brazilian vessels less than 10,000 d.w.t. and which do not call at the port itself (passing only).

Pilotage is compulsory in the port of Sao Sebastiao for:
(a) Foreign vessels, tanker vessels, gas vessels and all vessels of any g.r.t. transporting explosives.
(b) All types of vessels over 500 g.r.t. bound for the Tebar Terminal. Pilotage is optional for Brazilian vessels bound for Port of Sao Sebastiao except the above mentioned.

The request for Pilots for entering should be made through the ship's Agents 24 hours in advance via Santos Radio Station (PPS) or Sao Sebastiao Radio (PTS) when the vessel's ETA is given. The ETA should be confirmed 3 hours in advance through Channels 13 or 16 (VHF) to the Pilot's Association of the Port of Sao Sebastiao.

The positions for boarding and disembarking of the Pilot – are defined by the areas of the circles of 0.5 miles radius whose centres are the following coordinates (Chart DHN No. 1614):
(a) NORTH BAR: Lat. 23° 42′ S., Long. 45° 21′ W.
(b) SOUTH BAR: Lat. 23° 53′ 30″ S., Long. 45° 29′ 30″ W.

The Pilot's Association functions at Rua Manoel Ladislau de Mattos, 27, Suite 24. Tel: 52-1332 – Sao Sebastiao. The Pilot's Association also has a branch office in Santos at Rua General Camara 5, Suite 606. Tel: 38-1944, 36-8036, 36-8037 and 36-8038.

APPROACHES: *Approaching Channel:* The channel of the port of Sao Sebastiao is 12.3 miles long. The South Bar Channel, dredged to 25 m. is 300 m. wide at its narrowest part, allowing entrance and sailing of vessels drawing up to 23 m. The North Bar Channel sounded to 18 m. is 550 m. wide at its narrowest part, allowing entrance and sailing of vessels drawing up to 10 m.

Special attention should be paid by vessels drawing over 18 m. when navigating in the Sao Sebastiao Channel; Chart DHN Nos. 1614, 1615 and 1616 show several cautions with depths of 20 m. and less in the proximities of the limits of the channel. "Caution A" on chart DHN No. 1616 should be strictly observed: Existence of submarine cable. It is forbidden to anchor within the marked area.

Tidal Stream: The height of the tide in the port of Sao Sebastiao varies from (−) 0.2 m. at LW and 1.5 m. HW, having an average level of 0.66 m. The tide runs either Northerly into the channel or Southerly with characteristics of permanent flowing as if it was a river following the orientation as given by the channel. The current attains considerable speeds which might prejudice the manoeuvring of vessels in the channel, specially at times of entrance of a cold front when winds also attain a significant force.

Whistling: Vessels approaching the port, prior to coming to Araca Point, must give a long blast on the whistle as a warning.

ANCHORAGE: Anchorages for ships are identified on Charts DHN 1614 and 1616.

Position No. 1: For ships awaiting berths (delay less than 6 hours):
Lat. 26° 49′ 15″ S., Long. 45° 23′ 39″ W.

Position No. 2: For ships up to 150,000 d.w.t., length 300 m., draft 18 m.:
Lat. 23° 48′ 18″ S., Long. 45° 22′ 54″ W.
Lat. 23° 48′ 00″ S., Long. 45° 22′ 39″ W.
Lat. 23° 47′ 24″ S., Long. 45° 22′ 30″ W.

Position No. 3: For larger ships and/or lightering of tankers:
Lat. 23° 46′ 24″ S., Long. 45° 22′ 12″ W.
Lat. 23° 45′ 42″ S., Long. 45° 22′ 54″ W.
Lat. 23° 44′ 54″ S., Long. 45° 21′ 42″ W.
Lat. 23° 44′ 15″ S., Long. 45° 21′ 24″ W.

Position No. 4: For ships in special conditions (quarantine, load/unload of explosives, etc.):
Lat. 23° 49′ 51″ S., Long. 45° 24′ 21″ W.

In the area comprised by the alignments – North Pier end with Itaguacu Point and South Pier end with Pontinha Lighthouse, anchoring will be permitted only in exceptional conditions and with authorisation from Delegacy of Port Captaincy.

RESTRICTIONS: The terminal normally operates around the clock. Ships are moored and unmoored at any hour except when an unexpected event arises, such as breakdowns, gales, heavy squalls, and so on.

Safe draft for passing along the dredged channel is 23 m. (75.5 ft.), no matter what existing conditions are, such as day or night, current set and drift, wind, tide or swell. However, at the discretion of Pilot, according to the prevailing above conditions vessels can use the channel with drafts up 24 m. (78.7 ft.) These figures are not final as they may change in time without previous notice.

Remarks: The limitations mentioned above could result in rejection of the ship as being unsuitable for this terminal.

Speed: Max. speed in port limits is 8 knots.

MAX. SIZE:

Position 1 (External Berth, South Pier): 26 m. (85 ft.) depth, for tankers up to 300,000 d.w.t., with max. draft of 23 m. (75 ft. 05 in.).

Position 2 (Internal Berth, South Pier): 19 m. (62.32 ft.) depth, for tankers up to 155,000 d.w.t., with max. draft of 16.9 m. (55 ft. 06 in.).

Position 3 (External Berth, North Pier): 19 m. (62.32 ft.) depth, for tankers up to 150,000 d.w.t., max. draft of 16.9 m. (55 ft. 06 in.).

Position 4 (Internal Berth, North Pier): 13.7 m. (45 ft.) depth for tankers up to 65,000 d.w.t., max. draft 12.2 m. (40 ft.).

HEALTH: Port doctor visits all ships on arrival and requires Maritime Declaration of Health, Derat Certificate, 2 Crew Lists. Vessels from another Brazilian port automatically receive free pratique and should not fly Quarantine Flag. If suspected disease or fever on board it is advisable to cable Agent before arrival.

RADIO: Vessels under time-charter to PETROBRAŚ bound for Sao Sebastiao should advise their ETA 48 hours prior to arrival to PPA 25 (Company's own radio station) as well as to their Agents when it will be the case, through PPR (Rio Radio Government Coast Station). Confirmation or change of ETA should be cabled 24 hours before arrival. When within range, tankers may also call TEBAR or FRONAPE VHF radio-telephone stations for instructions. All ETA's should indicate whether it is local time or GMT.

English is generally understood by Pilots and terminal representatives. Weather forecast as well as Notice to Mariners are transmitted by PWZ and PPR radio stations. Radio equipment should not be used at the piers. Communication ship-to-shore will be by telephone.

TUGS: Mooring and unmooring is provided by 6 tugboats: 2 of 2,360 b.h.p., 2 of 3,170 b.h.p., 1×1,430 b.h.p. and 1 of 3,720 b.h.p. tugboats (twin motors-equipped with controlled-pitch propellers). While rendering such assistance, the tugboats act under orders of Harbour Pilot. These tugs are fitted with fire pumps and monitors (including mechanical foam to assist in fighting fires. The following ship's whistle signals code is used for tugs communications:

Calling:

4 long blasts followed by 1 or 2 short blasts.	The number of short blasts will call 1 or 2 tugs respectively.

Before Towing Line is Made Fast:

2 short blasts	Prepare to push on the bow or to pick up line from ship's bow.
3 short blasts	Prepare to push on the stern or to pick up line from ship's stern.

After Towing Line is Made Fast:

1 long blast	Pull to starboard
2 short blasts	Pull to port
3 short blasts	Stop pulling

Manoeuvring Alongside Ship's Hull:

1 short blast	To pull
2 short blasts	To push

Other ship's whistle signals are used for auxiliaries boats.

Calling:

2 long blasts followed by 1 short blast	To call small craft or Pilot (launch)
1 long blast followed by 1 short blast	To call motor-boat (launch)

All orders received by tug will be acknowledged with a distinct short blast.

As tugboats are provided with VHF, manoeuvring orders may be given by radio.

Usually orders to fore tug are given by a mouth whistle and to aft tug by ship's whistle.

. Tugs are fitted with flashing signal lamps.

Circular: Instructions for employment of tugs during pilotage operations at the "Almirante Barroso" Maritime Terminal (TEBAR):

1. To operate at "TEBAR" vessels over 15,000 d.w.t., should have tug of at least 15 tons bollard pull.
2. The employment of tugs with adequate power is compulsory as from the Manoeuvring Area, both when berthing and anchoring at the Waiting Area. In case the vessel is without propulsion, a minimum of 3 tugs should be employed, 2 forward and 1 aft, with tow line fast.
3. During the unberthing operations of vessels of any given tonnage, the employment of at least 2 tug boats of adequate power is compulsory.
4. During berthing operations under normal conditions, the number of tugs to be employed should be, at least, the number of tugs indicated in table and as many as may be necessary to meet the following minimum requisites of bollard pull.
5. When for the sake of safety the Pilot may consider necessary a number of tugs beyond the number mentioned, he may act accordingly, justifying same, shortly therafter, in writing to the Delegate of the Captaincy in Sao Sebastiao.
6. When the condition of the sea, intensity of the wind or the visibility stop operations, the Pilot's Association should officially inform the Delegacy in Sao Sebastiao, accordingly.
7. The Agents of the companies engaged in the services of tugs at "TEBAR" should submit to the Delegacy and the Pilot's Association in Sao Sebastiao copies of the static pull referring to each tug.

Deadweight Tons (× 1000)	*Static Traction in tons*	*Minimum number of Tugs*			
		Outer berths		*Inner berths*	
		P1	P3	P2	P4
up to 15	19	2	2	2	2
15 to 30	30	2	2	2	2
30 to 65	40	2	2	3	4
65 to 100	50	2	3	4	—
100 to 135	60	3	4	4	—
135 to 200	70	4	4	4*	—
200 to 250	90	4*	—	—	—
250 to 300	100	4*	—	—	—
300 on	130	4*	—	—	—

*Should extra tugs be available employment is recommended.

GENERAL CARGO WHARF: *Commercial Quay:* Length 150 m., depth 8.2 m. 6 bollards for berthing, spaced 30 m. apart. Fresh water available, 3 hydrants, capacity 10 cu.m.p.h. each. Fuel available by road tanker in small quantities.

Warehouses/Open Storage Areas: The covered storage area, available in the port area is 2,000 sq.m. and has a capacity of 12,000 cu.m. The open storage area for containers in the port area is 20,000 sq.m. and for heavy lifts 24,000 sq.m.

The storage area outside the port area, covered and open, is 10,000 sq.m. and belongs to the Companhia Nacional de Armazens Gerais Alfandegados (National Bonded General Warehousing Company).

There are no cold stores or silos on the port quay.

Cranes: 1×25 tons (private), 1×50 tons, 1×22 tons, 1×16 tons, 1×12 tons and 4×4.5 tons.

Stackers: 21×2 tons – 13.5 tons.

TANKERS: The pier is located on the Western edge of the channel between the shore and Sao Sebastiao Island. Safe access for large tankers is possible through the South Entrance but smaller tanker of draft 35 ft. or less may enter through the North Entrance.

The head of the jetty which is "T" shaped is 1,690 m. (5,544 ft.) from the shore, in position Lat. 23° 48.2′ S., Long. 45° 23.3′ W.

The South Pier is 510 m. (1,673 ft.) length and the North Pier 380 m. (1,246 ft.).

Also see "Max. Size".

Loading Arms:

Position 1	4×16 in. (cargo) 2×12 in. (diesel oil/fuel oil)
Position 2	3×16 in. (cargo) 2×12 in. (diesel oil/fuel oil)
Position 3	2×12 in. (cargo) 2× 8 in. (diesel oil/fuel oil)
Position 4	Same as Position 3

Reducers are available. All shore hoses are chiksan type arms.

Max. Height: Max. height of hoses above platform. Position 1: 21.5 m. (70 ft.); Position 2: 17.8 m. (58 ft.); Position 3 and 4: 16 m. (52 ft.).

Pipe-lines: 2×34 in. diameter pipe-lines, 2,300 m. (7,500 ft.) link the South Pier to the shore tanks. 2×24 in. diameter pipe-lines, 2,000 m. (6,500 ft.) link the North Pier with the shore tanks.

LOADING: *Maximum Permissible Pressure:* Both piers 10 kg./sq.cm. (150 p.s.i.).

Pumping Rates: South Pier: 100,000 bbls./p.h. if using two 34 in. lines and 3 or 4 hoses; up to 50,000 bbls./p.h. if using one 34 in. line and 3 or 4 hoses.

North Pier: Up to 48,000 bbls./p.h. if using two 24 in. lines and 2 hoses; up to 28,000 bbls./p.h. if using one 24 in. line and 2 hoses.

BALLAST: Brazilian laws are very strict in regard to the pollution of harbour and coastal waters. Vessels should not discharge dirty ballast, ashes, refuses, etc., into the water. Heavy fines are imposed for violations. All overboard discharge valves from cargo tanks and bilges are to be secured before any loading or discharging commences. All deck scuppers should be plugged to avoid harbour contamination should an oil spill occur. To offenders, fines will be charged (besides resulting delays) according to the ship's tonnage. Facilities for receiving dirty ballast are available. However, amount is dependent on space in shore tanks at the time. Capacity of tanks 12,000 cu.m. (75,000 bbls).

The Terminal is particularly interested in having vessels complete the deballasting operation promptly in order to minimize time at berth. Simultaneous discharging/loading and deballasting/ballasting is encouraged on properly equipped vessels.

MEDICAL: Medical treatment and/or hospitalisation, if required, is provided in the private local hospital. Dentists are available in the area. For emergency cases (serious illness or injury) TEBAR first medical aid may be requested by the Master. Internal telephone number is 20. If patient does not speak Spanish or Portuguese, an interpreter should accompany him.

FRESH WATER: Fresh water can be supplied if necessary; however, supplies are limited to essential requirements (up to 400 tons). Rates: Minimum 91 t.p.h. Maximum 148 t.p.h.

FUEL: The Terminal is equipped with blending valves and is able to deliver bunker "C", fuel oil, marine gas oil, marine diesel oil and intermediates of any grade – concurrently with working cargo at international prices.

The supply rates are about 300 t.p.h. for bunker "C", 180 t.p.h. for M.G.O. and 450 t.p.h. for intermediates.

Orders for bunkers should be placed, with a minimum of 48 hours notice to:

Divisao de Abastercimento a Navios – Departamento Comercial, Av. Republica do Chile 65, 19.° andar, Rio de Janeiro – Brazil. Telegraphic Address: Petrobrasecope. Telex: 031422 and 031423.

Lubricating Oils: Orders for marine lubricants should be placed at least 15 days in advance and subject to confirmation to: Petrobras Distributidora, Praca 22 de Abril, 36, 4.° andar, Rio de Janeiro – Brazil. Telegraphic address: Petroedipe Telex: 031422, 031423 and 031424. Tel: 242-9381 and 242-4901.

Simultaneous Bunkering and Discharging Operations: Considering that the loading/discharging hoses cannot be crossed with bunkering hoses, the simultaneous bunkering and discharging operations will depend on the position of the ship's bunkering manifold. If the ship has 2 bunkering manifolds – 1 on each side of cargo manifold – the bunkering and the discharging may be effected at the same time. However, if a tanker has only 1 bunkering manifold at each board (located to the aft part in relation to cargo manifolds), this simultaneous operation will only be possible if the ship, is berthed port side at position 3 or starboard side at positions 1, 2 and 4. Alternatively, upon completion of loading/discharging the ship will have to be shifted a few metres forward to receive bunkers.

SURVEYORS: *Petroleum Inspectors:* None available in Sao Sebastiao. If required, arrangements should be made well in advance. A representative of Chas. Martin and Co. is based in Rio de Janeiro and E. W. Saybolt & Co. in Santos.

GANGWAY/DECK WATCHMEN: Compulsory.

REPAIRS: Some repairs of minor nature can be effected in Sao Sebastiao. When alongside pier, vessels must maintain engines and propulsion machinery in readiness to leave the berth under full power on short notice. No repairs are permitted which would interfere with this requirement. The ship repairing firms usually have branch offices in Sao Sebastiao which are able to undertake many kinds of small repairs. If necessary they can avail themselves of personnel of Santos or Rio de Janeiro branches.

CUSTOMS ALLOWANCES: For each Crew member, 2 packets of cigarettes and 1 bottle of wine or spirits. While the vessel is in port, Brazilian Custom's Officials are assigned on board to ensure compliance with Customs Regulations. Meals must be supplied to these Officials during regular meal hours. Brazilian laws are strict in regard to smuggling and Masters are requested to instruct their crews not to take cigarettes or other articles ashore. Cigarettes in carton lots, cigars, tobacco, alcoholic drinks, souvenirs, etc., should be collected prior to arrival in port, listed with the items in the slop chest and placed in the custody of the Master for deposit in the slop chest or closet which will then be sealed for the duration of the vessel's stay in port. By no means will any commercial transactions be tolerated, be it either among terminal employees, crew members or anyone else. Cigarettes or other stores in bond are not obtainable in Sao Sebastiao.

POLICE/AMBULANCE/FIRE: Police Tel: 521-400, Fire (Petrobras) Tel: 522-711 or VHF Channel 16 to Tebar.

CONSULS: No consular representatives are reported to exist in the area.

REPATRIATION: Possible, but involves lengthy car ride to Sao Paulo or Rio de Janeiro.

AIRPORT: At Ubatuba and Sao Jose dos Campos.

TIME: Local time is GMT minus 3 hours.

HOLIDAYS: 20th January (Sao Sebastiao Day).

SHORE LEAVE: The access pier is 1,600 m. long. The crew can use it to get ashore, but special passes are required for this purpose. There is, however, a launch service provided by Agent.

TELEPHONES: No service at the Commercial Quay. At Tanker Terminal there are telephones in the control room.

GENERAL:

Brazilian Flag and Others: In accordance with international practice, quarantine signals must be displayed by vessels when approaching Brazilian ports. These signals shall be displayed continuously until free pratique is granted and are: sunrise to sunset – quarantine flag "Quebec"; sunset to sunrise-signal lights red over white.

Tankers will display the red flag "Bravo" during the day and a red light during the night throughout their stay in port indicating inflammable or explosive cargo.

In addition to quarantine signals which are to be shown until free pratique is granted, the Brazilian Flag must be flown from foreign vessel's foremast throughout the vessel's stay in port.

Vessels must provide themselves with this flag before arrival but if circumstances render this impossible, the flag may be supplied by ship's Agent.

The Brazilian Flag must be of proper size, according to the d.w.t. of the vessel.

National Holidays: By order of the local Port Authorities it is requested that all ships in port must be fully dressed on the following National Holidays: 7th September and 15th November.

Watches: An efficient watch must be maintained on board the ship, deck and engine room and a sufficient number of crew members should always remain on board to cope with emergency or port operation situations.

Ratguards: Ratguards must be placed on all mooring lines.

Visit of Authorities: In case the ship enters and berths directly, the official visit of Authorities together with the Agents will take place as soon as she is tied up and the gangway is lowered. However, if the ship is not berthed immediately upon arrival (e.g. in view of the pier being occupied, or any other reason), the visiting party will proceed to the ship by motor-boat as soon as she drops anchor. If the ship arrives after 2100 hrs. it is possible that Authorities will decide to visit the ship next morning at 0800 hrs.; however, the ship is authorised to operate normally and crew members are allowed to go ashore.

Seamen Left Ashore: Ships are not permitted to sail until all crew members are on board. Should, however, a crew member definitely not be found, his passport (or seaman card) and his international vaccination certificates must be given to the Agents, together with a letter requesting him to be repatriated.

Weather and Tide Conditions: The weather at Sao Sebastiao is generally very favourable; however, strong winds and currents are frequent mostly during winter. 128 km.p.h. wind was registered last year. Swell is not observed in the channel. The winds are unpredictable for more than a few hours in advance; usually it blows from N.N.W. or S.S.W. As regards rain, the annual precipitation averages 2,000 mm. The visibility is mostly fair, although in Autumn and Winter it may become rather poor in the early morning. The temperature ranges from 15°C (59°F) in July to 39°C (104°F) in January. The relative humidity of the air is usually high, often exceeding 85%. The normal range of tides is around 1.2 m. (4 ft.). Although higher ranges of 2 m. (6.5 ft.) have been noticed during Spring. The currents are irregular but usually follow the direction of the wind; according to the intensity and the duration of the wind, the drift may range from 1 to 4 knots.

Safety Precautions in Case Imminent Bad Weather:

(a) Wind speed in excess of 30 knots and/or currents more than 3 knots.
 Permanent inspection of mooring system.
 Pilot, tugboats and longshoremen in readiness.
 1 tug to be alongside ship berthed in PP-1 and another alongside ship berthed PP-3.
 Engine room-ready.
 Steam fed to winches.
 Reduce surface exposed to wind.
 Discontinue unloading and disconnect loading arms.

(b) Wind speed in excess of 50 knots and current of more than 4 knots.
 Do not loosen winch brakes to try to run cables.
 Man manoeuvring station.
 Call Pilot, tugboats and longshoreman. Discontinue loading/unloading operation.
 Increase torque on brakes.
 Pass extra mooring lines.
 Disconnect loading arms.
 Remove gangways.

Derat Certificate: In case the Derat Certificate has expired and needs to be renewed, a radio message should be sent to the Agent a few days before arrival, so that they are able to make the necessary arrangements with the Sao Sebastiao Port Health Inspector.

Renewal of Vaccination Certificates: For the same reason mentioned above, the Master should send, beforehand, a radio message stating how many vaccinations of each kind will be required. The vaccinator has to come from Santos.

Passengers: Passengers will be permitted to disembark if in possession of the required visa and documents for identification.

Visitors: Only the personnel duly authorised by Port Authorities may come on board the ships; this excludes all visitors. Relatives of crew members may obtain from Port Authorities a licence to go on board.

Constant Readiness: During the time the ship is berthed alongside, her engine and propulsion machinery should be in readiness to leave the berth on short notice. No repairs are permitted which would interfere with this requirement.

Smoking: Smoking in open areas of the ship and on the pier, is strictly forbidden. The crew are not to throw lighted cigar or cigarette ends overboard.

Photography: The taking of photographs within the terminal is prohibited.
Emergency Towing Wires: 2 towing wire ropes should be always hanging to the water's surface so that the tugs can easily make fast should an emergency arise.
Gangways: All ships calling at Sao Sebastiao must provide a safe gangway. Authorities may refuse to board the ship if a safe gangway or accommodation ladder is not provided. At night, the pilot ladder must be adequately lit. The terminal is not equipped with platform ladder. The ship's ladder must be used.
Lifebuoy: A lifebuoy with 15 fathoms (27 m.) of rope should be kept nearby the gangway for use in case of emergency.
Ship's Fire-fighting Equipment: At least 2 fire hoses should be connected to hydrants on main deck: 1 forward and the other abaft the cargo valves manifolds. A third hose with an NPU nozzle and 2 mechanical foam containers should be kept nearby the pump-room. The ship's main fire-extinguishing system should be kept under constant pressure.
Minimum Draft for Safe Manoeuvring: Although the amount of ballast carried on vessels is at the Master's discretion, the table below is recommended as a guide:

Vessels of 30 – 40,000 t.d.w. draft for'd 16 ft. aft 20 ft.
Vessels of 40 – 50,000 t.d.w. draft for'd 18 ft. aft 24 ft.
Vessels of 50 – 70,000 t.d.w. draft for'd 20 ft. aft 28 ft.
Vessels of 70 – 100,000 t.d.w. draft for'd 24 ft. aft 32 ft.

Vessels over 100,000 tons should be ballasted to approximately one third of the vessel's deadweight.
Bond Wire: Before the connection of shore hoses, the bonding wire will be connected, by a terminal employee, to ensure a good grounding electric contact.
Boiler Tubes and Sparks: Whilst alongside the pier, no boiler soot blowers may be used. The use of derricks is also forbidden (excepting the poop derrick, when lifting stores, provisions, etc.). Likewise, the use of objects and/or tools which may cause sparks is also forbidden.
Fire Signal: Should fire break out in any part of the ship, the fire alarm should be given: a continuous sounding of 7 short blasts on the whistle, followed by a long one.
Transportation of Stores, etc., from Shore to Ship: The terminal does not permit the carriage of items through the jetty. Consequently, the ship has to use the services of a motorboat, or a tugboat or of a floating craft (which is towed to the ship's side). The motorboat or the tugboat may only approach the ship by the sea side. No derricks may be used, although the terminal has no objection to the use of the poop derrick or crane (sea side). Depending on the nature and the weight of items involved, they may be taken on board using the gangway (sea side).
Provisions and Stores: Provisions and stores are supplied by shipchandlers contracted directly by Owners or Masters or through the Agents. Usually they have to be brought from Santos, which requires a radio advance request, in view of the distance involved. It is hoped that in the near future provisions and stores in large quantities may be easily obtainable in Sao Sebastiao. Some items may be obtained in Caraguatatuba.
Radio Equipment: When the tanker is berthed, its main transmitting aerials should be earthed.
Laundry Facilities: Available at Sao Sebastiao.
Communications: Telex and telephone available at the Agencies and at the terminal.
Rubbish: Garbage bins are available at the Commercial Quay for berthed tankers and anchored vessels, garbage bins are available through boat acquired by Agent. Dry garbage facilities available for anchored and berthed vessels using boat acquired through Agent.

REGULATIONS:

Craft not directly engaged in the port's traffic should navigate at a minimum distance of 150 m. from the Maritime Terminal and from vessels alongside and at anchor.

Skin diving and underwater hunting are prohibited in the area assigned as being the port of Sao Sebastiao.

The line between Pontinha Lighthouse and the Cais Comercial (Commercial Quay) should be kept permanently clear due to the traffic of ferry boats.

The passage through the Sao Sebastiao Channel of foreign flag vessels other than those destined for the port itself is prohibited.

The maximum speed allowed between the limits of the port of Sao Sebastiao for vessels over 1,000 d.w.t. is 8 knots.

Craft and vessels berthed on the external side of the Cais Comercial (Commercial Quay) and Maritime Terminal, on both sides, should maintain vigilance and be manned.

All vessels which, for any given reason, may have to stay in the channel and port of Sao Sebastiao for more than 1 week, should communicate in writing to the Delegacy of the Port Captaincy the reason surrounding the fact and informing at the same time the expected time of stay.

SHIPMASTER'S REPORT:
Pilotage: Vessels normally sail and arrive by the Southern Entrance.
Anchorages: The holding ground for VLCCs is not very good, but appears good for smaller vessels. (We had 3 cases of ships dragging during our two and a half weeks stay, all VLCCs.) The current runs Northerly or Southerly depending on the wind.
Tugs: 5 tugs normally used for berthing and unberthing irrespective of vessel's size.
Medical: Dental and routine medical matters available. Specialists are available some miles away. For inoculations the doctor comes from Santos.
Fresh Water: Rates are dependent on number of vessels watering and can be as low as 10 t.p.h.
Customs Allowance: 2 cartons cigarettes per man. Customs no longer stay on board the vessel.
Repatriation: Is possible, but involves lengthy car ride to Santos or Rio de Janeiro. The best and nearest airport is outside Sao Paulo, where international flights are available. This is quicker than going to Rio.
Telephone: Available in jetty control rooms.
Shore Leave: When berthed the Agent can arrange a minibus service from the T-head of the jetty.
Port Regulations: Vessels throwing or discharging anything into Brazilian waters are subject to a fine equalling 2% of the minimum Brazilian basic wage multiplied by the vessel's gross tonnage. Garbage disposal is difficult to arrange and they will only accept dry garbage.
General: Communications are poor, no telex and messages have to be telephoned to Santos. Best method is to use ship's equipment when at anchor.

AUTHORITY: Petroleo Brasileiro S.A. – PETROBRAS.

Head Office: Av. Republica do Chile, 65, 23°, Andar, ZC-06, Caixa Postal 809, 20000 Rio De Janeiro – RJ, Brazil. *Tel:* 221-5577. *Telex:* 31.422.

Transportation Department: Av. Republica do Chile, 65, 12°, Andar, 20035 Rio De Janeiro – RJ. *Tel:* 221-5577 – Ramal 2401

Terminal Almirante Barroso: Rua Guarda-Mor Lobo Viana, 1111. Sao Sebastiao, Sao Paulo, Brazil. *Tel:* 50111, 50112, 50119, 50120. *Contact:* Stael Prata Silva, Superintendent.

Secretaria dos Transportes do Estado de Sao Paulo, Avenida Dr. Altino Arantes No. 410, Sao Sebastiao. *Tel:* 52-1524, 52-1338.

Capitania dos Portos, Avenida Dr. Altino Arantes No. 544, Sao Sebastiao. *Tel:* 52-1555, 52-1550.

SEPETIBA BAY, (Guaiba Island and Ilha Madeira): 23.00 S. 44.02 W. **(See Plan Book)**

See "General" before first port.
LOCATION: About 50 miles West of Rio de Janeiro, is the site of a bulk iron ore terminal located off the S.E. end of Ilha Guaiba about 7 miles due North of the bay entrance.
PILOTAGE: Compulsory for all ships entering the bay and berthing and unberthing at the ore facility. Pilots board in the vicinity of Lat. 23° 08′ 39″ S., Long. 44° 04′ 36″ W. A pilot ladder, boat rope, and gangway must be properly rigged with the landing platform of the gangway lowered to within 5 m. (16.5 ft.) of the water. Adequate lighting should be provided at night.
ARRIVAL INFORMATION: Vessels bound for Baia de Sepetiba should send an ETA to their Rio Agents, via Rio Radio, six days, 48 hours, and 24 hours prior to arrival. Any significant change in this ETA should be corrected as soon as possible but not less than 8 hours prior to arrival. Also see "VHF".
ANCHORAGE: In the vicinity of the Pilot boarding area. Ships should not proceed beyond this point unless a Pilot is aboard and instructions have been received from Sepetiba Marine Operations to proceed.
MAX. SIZE: *Ore:* Max. draft 21.98 m. (July 1983).
HEALTH: Radio pratique should be requested 72 hours prior to arrival by transmitting a quarantine message to the Port Health Authorities through the the ship's Agent. This message should contain the following information: name and nationality of vessel; last port of call; number of crew and passengers; general conditions of health on board. Also see "General" before first port.
VHF: Vessels are requested to contact Sepetiba Marine Operations directly when within VHF radio-telephone range. Channel 16 is the calling channel and 11, 12 and 13 are the working channels. Anchoring or berthing instructions should be requested 4 hours prior to arrival or when within VHF radio-telephone range.
TUGS: Tug assistance is compulsory for all manoeuvring in the vicinity of the pier and 3 powerful twin screw tugs are available for this purpose. All ships should be equipped with a wire cable tow line with a nylon pendant. Radio-telephone communication is maintained between the tugs and the Pilots on Channel 6.
BERTHING: Ore: Facilities consist of a deep-water pier located about 400 m. (1,312 ft.) South of the island. The South Berth has a depth of 24 m. (78.75 ft.) alongside and the North Berth has a depth of 19 m. (62 ft.). A mooring dolphin at the West end of the pier provides an overall mooring length of 470 m. (1,541 ft.) alongside the South Berth. Bollards are spaced along both pier faces and quick release hooks and capstans are fitted for breast, bow and stern lines.

Also see "Shipmaster's Report" – dated May 1980.

Coal: Terminal completed and fully operational.
Location: 23.01 S., 44.02 W.
Operator: Cia Docks do Rio.
Berth: Length 575 m. Depth 17 m. Max. draft 15 m.
Equipment: 2 grab unloaders × 1,500 tonnes per hour and 2 grab unloaders × 800 tonnes per hour.

Also see "Reports" – dated December 1980 and August 1984.

BULK HANDLING FACILITIES: Ore: One travelling shiploader serves both berths and has a boom clearance of 22 m. (72 ft.) at shipside. Ore is stacked in a storage area and is delivered to the shiploader by conveyor belt which is loaded by either of 2 stackers having an average capacity of about 7,000 tonnes per hour each.
Coal: See "Berthing" and "Reports".

SHIPMASTER'S REPORT: Ore Berth: May 1980.
Agents:

(a) Mineracoes Brasileiras Reunidas, (the operators and loaders). Av. Graca Aranha, 26, 17th Floor, Rio de Janeiro. Tel: 222-5171. Cables: "Brasilore".

(b) Buarque & Cia, (ship's Agent appointed by the Solmer contract), Rua de Rosario, 113, P.O. Box 1542, Rio de Janeiro. Telex: 2121300 BUCL. Cable: "Joarce". Tel: 221-2210, 221-9961.

Arrival Telegrams: According to the charter party, telegraph "Brasilore" and "Joarce" when leaving the previous port of call, and repeat 72 hours and 24 hours prior to arrival. During the last 24 hours, a change of one hour or more in ETA must be reported.

Radio clearance is requested through the intermediary of BUARQUE to whom it is necessary to quote in the 72 hours telegram the following: last port of call, number of crew members, passengers, state of health, date of deratting certificate, name of Master.

BUARQUE replies to the first ETA telegram indicating the possibilities of direct entry or waiting. As MBR remains silent, it is advisable to ask BUARQUE to confirm the tonnage to be loaded and the quantity, more or less, of each type of ore involved. Olinda/PPO (Recife) and Rio/PPR stations are normally used. Good easy connections and no delay. Olinda is particularly well placed for communications with vessels approaching from the North.

If the crew members have no Brazilian pass (even if made out in another port) ask for a photographer.

General Information:

The port of Sepetiba, opened to ore traffic in 1974, belongs to Mineracoes Brasileiras Reunidas (MBR). It is the maritime outlet for a group of mines located some 1,200 km. inland.

Situation: The terminal is located at the S.E. end of the island of Guaiba, in the East part of the bay of Ilha Grande (Large Island), some 50 miles to the West of Rio de Janeiro.

The island is connected to the mainland by a railway bridge which brings the ore for shipment.

The terminal administrative office is on Sai beach, 5 miles to the N.E. (and 120 km. from Rio by road).

Local Time: GMT minus 3 hours.

Pollution: Deballasting at sea only. The Authorities make pressing recommendations to avoid pollution, warning that fines are heavy and not alterable.

Monetary Exchange: Only at the Agency can cruzeiros be obtained, but dollars are much sought after on land, even by small traders. Advantageous exchange rate.

Navigation:

Charts: Brazilian – 1601, 1602, 1603, 1608, 1610.
British – 3970, 1683, 3970
American – HO 24155, 24164, 24160.

Landfall: No difficulties, using the mountains which are around the entrance: Ilha Grande to the West (1,037 m.) and Ilha de Marambaia to the East (620 m.).

Access: The approach channel, is in two straight parts, and is 7.6 miles long. Buoys are not very visible either by day or by night, but perfectly detectable on radar.

The width of the channel varies from 280 m. up to Buoy No. 7; 580 m. at Buoy No. 9 (bend); 330 m. up to Buoy No. 13; and then widens out into a manoeuvring basin 1.8 miles long and 0.5 miles wide.

Draft: The channel has been dredged to 22.5 m., and the manoeuvring basin to 24.5 m. Vessels drawing 21.5 m. have used it on sailing. The Pilots recommend drafts forward of 30 ft. and aft of 36 ft. for the entry for a vessel of the tonnage 122,000 d.w.t.

Currents: Along the coast, coming from the East, weak and counterclockwise. Inside, tidal currents may reach 1.5 knots.

Tides: Twice a day but not equal every day. Tidal rise about 1 m.

Times of entry and sailing: Night and day.

Maximum vessel dimensions: Within the limit of the practicable draft of 21.5 m. No length restriction.

Pilotage: Compulsory. The Pilot boards between 1 and 2 miles from the channel entrance. On sailing, he leaves the vessel between Buoy No. 8 and No. 6.

The pilot vessel has a white hull, a red roof and shows an alternating red light by night. Max. speed 9 knots.

Call up on VHF Channel 16, work on Channel 13.

For embarkation, lower the accommodation ladder to 5 m. above the water, and the pilot ladder to 1 m. above the water. On leaving the vessel, he only uses the pilot's ladder (if the vessel is fully loaded).

Anchoring: When awaiting the Pilot, vessels can anchor in 24 m. of water, 2 miles to the South or S.S.W. of the channel entrance (unmarked wreck, at a depth of 19 m. 1.5 miles to the S.E. of the entrance).

Whilst waiting to berth, the Pilot anchors the vessel, either to the North of the second part of the channel between Guaiba Island and Mangaratiba Lagoon, in 15 to 18 m. of water. (Four vessels of 150,000 tons would be able to lie there with ease). Or, to the East of Guaiba Island, outside the manoeuvring basin, in 25 to 30 m. of water.

Holding is good in all these anchorages, but vessel exposed to the swell.

Tugs: Three tugs of 4,000 h.p. available (MBR 1, 2 and 3).

The tugs are taken at the entrance near Buoy No. 11. They are released on sailing, before Buoy No. 13.

On entry and sailing, 1 tug forward and 1 astern, each taking 2 lines from the vessel. The third comes alongside amidships and passes 2 lines to the vessel. Communication with the Pilot is by walkie-talkie.

Berths: The pier is 400 m. long and orientated 238°/058°. It is connected to the Island by a bridge approximately 300 m. long carrying the conveyor belt. Vessels can come alongside on the inside (N.N.W.) but for large ships only the outside (S.S.E.) is used.

Berthing: Inside – starboard to quay
Outside – starboard to quay after manoeuvring, or portside to the quay (according to the current).

Fenders: Inside – two thicknesses of large tyres. Outside – metal panels fitted on thick rubber supports and shock absorbers. When heaving off, it is recommended not to slide against these fenders so as to avoid damaging them.

Mooring lines: A strong swell is experienced at the quay, therefore good moorings are necessary. 4 lines at the bow, 2 to 4 amidships and 2 astern. Two launches assist in passing lines. There are windlasses on the quay. The wire lines are positioned afterwards.

Height of Quay: 5 to 7 m. above the water, dependent upon the state of the tide.

Gangway: This is only used after the vessel is fairly well loaded.

Handling:

Equipment: A single conveyor belt, movable through 360°, 22 m. above water level. Personnel, installation and equipment belong to MBR.

Advance Arrangements: Come alongside the quay with holds clean and open. Opening of hatches can be carried out during the approach manoeuvre. Inspection of tanks and slops takes place as soon as the vessel is alongside, and a gas-free certificate is issued.

Working hours: 24 hours.

Holidays: None.

Capacity: The gear can supply 7,000 t.p.h. In reality, the net capacity, with stops deducted was 3,100 t.p.h., and more than 40 hours had to be worked, stops and weighing included, to ship 120,000 tons.

Weighing: As the weighbridge was not operating the only check therefore was reading the draft marks, fairly approximate as there was a swell, carried out by the Master and the draft surveyor (the latter issues the gas-free certificate). It appears that it is necessary to watch calculations closely, particularly as far as the incidence of sag on the deadweight (application on the MBR leaflets of the "Means of means" rule which is less favourable than the "two-thirds rule" generally applied elsewhere).

Formalities:

On arrival: The Agent comes on board with Customs, Health and Immigration. Whilst the photographer is working, and the inspector checks the holds, the following documents are handed over to the different authorities represented:

1 Manifest of Ballast.
9 Crew Lists.
2 Passenger Lists.
5 Stores Lists.
4 Individual Declarations.
1 Health Declaration.
4 Notices of Readiness.

Photographs for passes are brought back within 2 hours and the next morning where a night arrival is concerned. (May 1980 – done on the spot using a Polaroid).

Customs: Seals placed on alcohol and tobacco. No individual limitations.

On sailing the Agent delivers on board:

2 Gas-free Certificates
2 Visaed Notices of Readiness, ship's copy
2 Notices of Readiness, Agency copy
1 Sailing Pass
1 Embarkation Pass
2 Vessel Sailing Passes
1 Draft Survey Results
1 Weight Certificate per type of Ore Loaded
2 Cargo Manifests
2 Cargo Loading Statements
2 Cargo Distribution Plans.

Facilities:

Shore access: The nearest town is Mangaratiba (7,000 inhabitants). To reach it, show your pass at the gatekeeper's office on leaving the port, take a bus (a few minutes) to the landing stage at the foot of the bridge between the island and the mainland.

Take the launch (45 minutes) to Mangaratiba.

From there, another bus goes to Rio (the bus company is EVAL) which takes about 3 hours, leaving every 2 hours. The first bus is at 0800 hrs. Price 18 cruzeiros. Last departure from Rio at 1800 hrs. (Bus station at the corner of the port, at the end of Avenida Francisco Bicalho).

The Agent arranges the times of departure of the launches with vessels' officers.

Medical care: At Mangaratiba for urgent attention and minor treatment. More serious cases must be handled in Rio.

Repairs: Small repairs possible using local personnel. For repairs of some importance, it is necessary to call in Verolme at Angra dos Reis or a shipyard in Rio.

Stores: Some direct purchases possible in Mangaratiba. Limited choice. An order can be sent by telegram to the Agent who will make the necessary purchases in Rio, which will involve the cost of transport, and therefore high prices, particularly for small quantities.

Bunkers: None available.

Fresh Water: Available on the quay, but not drinkable. Output 60 t.p.h.

Telephones: Connection possible on request to the land network.

Lifeboat practice: After prior agreement of Port Captain.

REPORT: December 1980. Coal Berth.

Location: Madeira Island – District of Itaguai – Rio de Janeiro.

Geographical Coordinates:

Latitude: 22° 56′ 11″ South, Longitude: 43° 50′ 20″ West.

Access:

Railroad – Wide gauge linking the Port to Japeri.

Highway – Connecting BR-101 highway to the Northern and Southern highways.

Ocean – Deep channel with 15 m. in the initial phase with 18 m. later.

Infrastructure:

Electric Power – High tension line of 138 kva.

Water – Guandu system, with great capacity.

Available systems of communication: telephone, telex and radio.

Hand-labour – Specialised and semi-specialised, available in the area.

Supplies – Easily available in the area.

Stages of the Project:

1st Stage: The terminal has a capacity to transport 5.8 million tons of coal/year, added to the manoeuvring of 130,000 tons/year of alumina from Valesul. Termination expected in the 2nd half of 1981.

2nd Stage: To be developed soon after the termination of 1st stage. Will be constituted of installations for the exportation of 18 million tons/year of iron ore (2 berths); 4 million tons/year of steel products (3 berths) and a quay for the transport of natural gas, sulphur, fertilisers and containers.

Construction being executed:

Access channel – With 22 km. extension and 200 m. width. Manoeuvring basin of 11 m. depth where vessels will manoeuvre without cargo.

Berthing quay: With 540 m. length and 39.25 m. width, allowing the berthing of 2 vessels (one of 90,000 t.d.w. and another of 50,000 t.d.w., or 2 of 65,000 t.d.w.) at South face, and 2 of 45,000 t.d.w. at North face. It will have 2 conveyor belts for coal and one for alumina, being 3 m. wide reserved for the installation of equipment in the 2nd stage.

Access bridge: The access to the quay is by an "L" shaped bridge, 750 m. in length and 22.5 m. width.

Sea-wall: It covers the Southern part of Madeira Island with an extension of 4,000 m. It will also be utilized for the passage of coal conveyor belt lines, access roads, and in the 2nd stage, for the access of steel products and ore conveyor belt lines to the quay.

Stocking area: Parallelogram-shaped, it will have 2,500,000 sq.m. and a stocking capacity of 500,000 tons.

Rear stocking area:

Reserved for cargo (coal, ore, solid and liquid bulks, etc.)	5,050,000 sq.m.
Reserved for the administration, maintenance and services	1,200,000 sq.m.
Reserved for small industries associated with the port activities	800,000 sq.m.
	7,050,000 sq.m.

Operational equipment:

Quay equipments: Coal – 2 dischargers of 1,500 t.p.h. each
2 dischargers of 800 t.p.h. each
Alumina – 1 sucker of 300 t.p.h.

Transport equipment:

Coal – 2 conveyor belts of 4,500 t.p.h. each
Alumina – 1 conveyor belt of 300 t.p.h.

Piling equipment:

Coal – 2 fork-lifts of 4,500 t.p.h. each
2 recyclers of 3,000 t.p.h. each

Centralized Control: Equipment is controlled by an automated Main Control Centre which will supervise the operations.

Water supplying and fire fighting system: A 200 mm. duct, expected capacity of 200 litres/second. A reservoir of 1,500 cu.m. will supply the whole port including the fire line.

Sewage: A compact modular station has been initially planned, and subsequently an underwater pipe-line.

Buildings and auxiliary installations:

Buildings for the Administration and Operations.
Buildings for the Maintenance and Services.
For the Communications Room.

Expansion: So as to increase the capacity of the coal terminal to 2.8 million tons/year, making a total of 8.6 million tons/year, 2 more dischargers will be required, one (1) with a capacity of 1,500 t.p.h. and another with 800 t.p.h.

SHIP'S OFFICER'S REPORT: August 1984. Coal Berth.

Anchorage: There are 3 main anchorages used by vessels awaiting berthing at Ilha de Madeira Terminal, Sepetiba Bay.

The first is the main waiting anchorage which serves the Pta. do Leme Oil Terminal, Ilha Guaiba Ore Terminal and Sepetiba Bay. This is situated in the vicinity of Lat. 23° 08.8′ S., Long. 44° 04.5′ W. as marked on Chart No. 1683. Pilots will board here.

The second anchorage is that which the Pilots prefer you to use as the waiting anchorage and is situated in the vicinity of Lat. 23° 03.7′ S., Long. 44° 03.0′ W. This area is also the preferred boarding station for the Pilot as vessels proceeding to Sepetiba Bay do not have the draft to require them to use the approach channel to Ilha Guaiba Ore Terminal.

The third anchorage area is the main waiting area for vessels bound for Ilha de Madeira Terminal and lies to the South of Ilha Jurubaiba, North of the main channel, as marked on Brazilian Chart No. 1623, from the vicinity of No. 4 buoy to the vicinity of the corner to the North of No. 5 buoy Northwards to the Latitude of 22° 58.0′ S. (Approx.).

Pilotage: Pilotage is provided by the Rio de Janeiro Pilotage Authority who should be given the usual long-range ETA's etc., "Sepetiba Pilot" should be called on VHF Channel 16/13 from about 4 hours before arrival off Pta. de Castelhanos (Lat. 23° 10.2′ S., Long. 44° 05.5′ W.) for instructions. Pilots will not move vessels in Sepetiba Bay after dark and, if there is a ship on the berth at Ilha de Madeira ready to sail they prefer to make one operation of it by sailing the outward bound vessel before taking in the arriving vessel. Should they require an arriving vessel to anchor they prefer it to use the second anchorage mentioned above so that they may leave the outward vessel and transfer to the inward ship around that area. Pilotage is compulsory for all ships using the deep water channel in Sepetiba Bay.

Tugs: There are three powerful twin-screw tugs which serve the ports in and around Sepetiba Bay. They are "MBR I", "MBR II" and "MBR III". They are apparently based at Itacurca. At Ilha de Madeira Terminal they tie up one on the bow, one on the stern and the third assisting as required amidships, using ship's ropes.

Berthing: Ilha de Madeira Terminal is situated on Ilha de Madeira (Lat. 22° 56.15′ S., Long. 43° 50.2′ W.) and consists of a single long jetty lying approx. 086°/266° T. with a connected dolphin each end. The Eastern dolphin is also connected to the shore by a bridge in the direction 357° T. (approx.) which carries the coal and Bauxite belts, service lines and the approach roadway.

The main part of the jetty is 610 m. (approx.) long and can berth two ships on the outside which is protected by large pneumatic rubber fenders. These berths are served by 4 discharging gantries and two belts for the discharge of coal. At present only two of the gantries are operational but work proceeds on the other two and they should be ready in the near future. Ships berth port side at this jetty. There is a berth on the inboard side of the jetty at the Eastern end which handles Bauxite. The rest of the inboard side has bollards at the usual intervals but has no machinery serving it at present.

The jetty was opened for use in February 1983 and development continues. Further development of the port is projected.

The present limiting draft for arrival is considered to be 37 ft. with a limiting draft alongside of 41 ft. Further dredging etc. is projected to improve the approaches.

Stevedores: Stevedoring appears to be under the control of: Servicos Maritimos e Portuarios Ltda., Matriz: Rua de Quitanda 191-5e andar Rio de Janeiro – RJ. Tel: 253 8899 Geral. Telex. 21214915 SMP BR.

Repairs: All repair firms etc. are located in Rio de Janeiro, hence all major work must be done there. Minor work may be carried out in Sepetiba Bay. Divers, etc. would come from Rio if required.

Supplies: All fuel must be obtained at Rio de Janeiro. Fresh water is supposed to be available on the berth but the berth is most unwilling to supply and only then in very limited quantities. The available hydrant is well forward and the shore will provide only sufficient hose to reach the deck. This hose is in extremely poor condition.

Provisions are supplied by road from Rio and appear to be of good variety and quality. Bonded stores are available also.

Services: All services are supplied through or at Rio de Janeiro.

Communications: There is a good road to Rio de Janeiro and there is a rail link. The nearest airfield for international flights is at Rio de Janeiro.

AUTHORITY: Porto de Sepetiba, Cais do Porto, Itaquai, RJ Brazil.
Contact: Francisco X. Bastos do Amaral, Manager.

TRAMANDAI (Rio Grande Do Sul): 29.59 S. 50.08 W.

(See Plan Book)

LOCATION: *Almirante Soares Dutra Terminal:* Terminal Maritimo Almirante Soares Dutra – TEDUT, is located 6 km. from Tramandai, which is 120 km. from Porto Alegre, Capital of the state of Rio Grande do Sul. The Buoys (SBMs) are positioned 1.9 and 3.7 miles from the shore and their geographical co-ordinates are:

SBM No. 1 (West), Lat. 30° 00′ 40″ S., Long. 50° 05′ 42″ W.
SBM No. 2 (East), Lat. 30° 01′ 52″ S., Long. 50° 04′ 35″ W.

DOCUMENTS: Also see "General" before first port.

Cargo Manifest, Bill of Lading, Cargo's Quality Certificate, Time Sheet and Ullage Report from the Loading Port, Narcotics List, Crew List, Stores List, Crew's Baggage Declaration, Passenger's List.

PILOTAGE: Sea Pilot not required. On daylight arrivals the PETROBRAS launch will meet the ship 2 miles Northeastward from SBM No. 2, carrying the Mooring Master, Port Authorities, Terminal's workers, equipment for mooring and connection of hoses. All manoeuvres will be undertaken by the vessel's Master with the help of a TEDUT Mooring Master who will board the vessel in the anchorage area and advise the vessel's Master on all operations such as mooring, connecting hoses, unloading, unmooring, etc.

It is important to emphasise that the services of the Mooring Master are afforded without charge and upon the express undertaking and condition that PETROBRAS shall not be liable for any damage or injury resulting from any advice, assistance or actions given or made by such Mooring Master. In the event it becomes necessary to disregard the Mooring Master's advice, in order to ensure safety of the vessel, the Master must forward a full written report of the circumstances for delivery to the Captain of the Port through the Terminal. It is the responsibility of the Master to notify the Mooring Master of any special conditions or peculiarities such as defective navigation equipment, tackle, gear or lack of necessary equipment, which might impose hazards related to handling, mooring and unloading the vessel. Vessel must be moored to the entire satisfaction of the Mooring Master. Unsatisfactory conditions will be reported to Superintendent of the Terminal, who is empowered to reject the ship for future calls unless the reported difficulties have been remedied.

ANCHORAGE: The advisable anchorage sites are: For tankers with a draft of 15 m. (50 ft.) or less, the anchorage is in position Lat. 29° 59′ 00″ S., Long. 50° 04′ 30″ W., or with SBM No. 1 (West) bearing 213° at a distance of 1.5 miles to 2 miles, where depth is 20 m. (65 ft.)

For tankers with a draft of more than 15 m. (50 ft.), the anchorage is in position Lat. 30° 00′ 00″ S., Long. 50° 03′ 00″ W., or with SBM No. 2 (East) bearing 217° at a distance of 2 miles to 2.5 miles, where depth is 24 m. (79 ft.)

The seabed in the anchorage area is fine sand and mud. Mooring Masters will board arriving tankers in those areas.

APPROACHES: See Brazilian Chart No. 2010.

There are 3 conspicuous water towers named *Tourist, Agrimer* and *Tramandai.* There is also a meteorological watch steel tower nearby the pier in position Lat. 29° 58′ 32″ S., Long. 50° 07′ 21″ W. There is also, located side by side a lighthouse tower and a radio beacon steel tower, both at position Lat. 30° 00′ 27″ S., Long. 50° 08′ 05″ W. Characteristics of lighthouse: Flash (3) group – white 12 sec. – 25 m. 15 M. Characteristics of radio beacon: Code FB – FOX/BRAVO – continuous, frequency 300 kHz, range 300 miles.

SBMs' Light Characteristics:

SBM No. 1:	Flash Red, 2 sec.	SBM No. 2:	Flash Red, 4 sec.
	Eclipse 2 sec.		Eclipse 4 sec.
	Period 4 sec.		Period 8 sec.

RESTRICTIONS: Due to the peculiar conditions of the terminal, mooring undertaken only at daytime. Sometimes the leaving of launches seawards depends on the height of tide and the strength of the waves. Tankers may have to wait for favourable weather conditions so that mooring may safely be started.

MAX. SIZE: SBM No. 1 (West), designed for 105,000 d.w.t. tankers, max. draft 16 m. (52 ft.). SBM No. 2 (East), designed for 200,000 d.w.t. tankers, max. draft 19 m. (62 ft.). The distance between the vessel's bow and manifold must not be more than 100 m. for mooring to SBM No. 1 (West) or 150 m. for mooring to SBM No. 2 (East).

RADIO: Vessels bound for Tramandai should advise their ETA 48 hours prior to arrival direct to Fronape/Rio (through government coastal radio station) as well as to their Agents (through PPR – Porto Alegre Radio – government station). In turn these stations will send messages to the terminal. Confirmation or change of ETA should be cabled 24 hours before arrival. Vessels may also contact TEDUT's radio-telephony station either in AM or SSB on the following channels and frequencies:

VHF: Frequencies:

Channel 11 – 156.55 MHz.
Channel 12 – 156.60 MHz.
Channel 13 – 156.65 MHz.
Channel 14 – 156.70 MHz.
Channel 16 – 156.80 MHz.

SSB Frequencies:

Channel 3 – receives 4,125 kHz. transmits 4.125 kHz.
Channel 4 – receives 4,084.6 kHz. transmits 4,379.1 kHz.
Channel 5 – receives 8,216.7 kHz. transmits 8,740.7 kHz.

Permanent listening: VHF on Channel 14 and SSB on 4125 kHz.

When within range, vessels equipped with radio-telephone should call first on Channel 16/DELTA-156.8 MHz and then change to another agreed Channel, preferably 14/CHARLIE-156.7 MHz for mooring instruction. All ETA's should indicate whether it is local time or GMT. Weather forecasts as well as Notices to Mariners are transmitted by PWZ and PPR radio stations.

PRATIQUE: Display of quarantine signal – "Q" flag – on approach Tramandai must be maintained until free pratique is granted. The National Brazilian flag should remain hoisted throughout vessel's stay in the terminal. Port Doctor visits all ships on arrival and requires Maritime Declaration of Health, Derat Certificate, 2 Crew Lists. Vessels from another Brazilian port automatically receive free pratique and should not fly Quarantine Flag. If suspected disease or fever on board, it is advisable to cable Agent before arrival. Also see "General" before first port.

LAUNCHES: Mooring, unmooring and connection operations are assisted by the terminal's launches. While rendering such assistance the boats act under orders of the Mooring Master. Usually 2 service boats are at his disposition. Besides operational assistance they undertake transportation of Mooring Masters, personnel, Agents, ship chandlers and Port Authorities.

ARRIVAL: Arrival time is considered to be the time the vessel reaches the anchorage vicinity or the time the Mooring Master boards the vessel, whichever occurs first. However, Notice of Readiness will not be considered as the time of arrival unless the vessel is in all respects ready to discharge. In the event berthing is delayed by weather conditions, tankers will be unloaded in turn. If, however, the weather is so bad that the port is closed and vessels awaiting discharge have to go out to sea, TEDUT may discharge another vessel on reopening if it arrives before the return of other waiting vessels. More rarely, the Terminal Superintendent may grant priority to a particular vessel out of turn, in special circumstances only.

MOORING: The Mooring Master will advise on the method of securing the ship. Tankers are usually moored by two bow nylon hawsers of 15 in. circumference and 50 m. length. Vessel's nylon messenger lines are shackled – one at a time – to the pick-up wires of the chafing chains by the launch crew and hove in (through the vessel's windlass warping bollard) until the lengths of the chafing chains are brought over the vessel's roller chocks/fairleads. Ship's engines may help the lead-in ropes (vessel's messenger) in coming up to the SBM.

The following items must be observed: Anchors must be well at home and secured with stoppers and brakes. Windlass warping bollards must also be ready to lift chain stoppers, wire strops, shackles, senhouse slips, crowbar, hammer, spikes and other gear to be placed on board for mooring purpose (equipment supplied by TEDUT). Two good eye-spliced (9 in. at least) nylon hand-inlines must be be ready, at each side, on the fo'castle head, to be given to the launch, who in turn will shackle them to the hawser's pick-up wires (marked by little spar buoys).

HOSE CONNECTION: The Mooring Master will direct the Terminal's working men in lifting, connecting and lowering the hoses. After the vessel is securely moored, the 16 in. floating hoses must be individually lifted to the rail by the ship's gear. Sundry hose securing and connecting equipment (strops, gaskets, nuts, bolts, wrenches, etc.) will be supplied by the Terminal and put aboard the ship just after arrival. Hoses will be lifted by ship's derrick, always on the port side. Minimum lift of 5 tonnes capacity required. When wind force reaches about 8 Beaufort Scale and waves are 3.5 m. high, emergency disconnecting operation will take place, even at night time.

UNLOADING: Pumping must not be started without permission of the Mooring Master. The max. allowable pressure is 7.5 kg./sq.cm. (110 p.s.i.). While the vessel is moored, the vertical angle formed by the nylon hawsers and the sea level should not exceed 30°, for safety of the SBM's turntable. When necessary, due either to excessive pitching or by being trimmed too much by the stern, pumping of ballast must be concentrated in the fore-tanks, even if interruption of unloading becomes mandatory. So the Mooring Master may require cargo to be discharged, in certain stages, either from aft or for'd compartments.

As a rule, when unloading is over, the ship should have ballast on board at least 40% of her total d.w.t. tonnage. Besides the Mooring Master himself, some terminal workmen stay aboard ship. Therefore, room and meals for 1 officer and 6 crewmen should be supplied. Upon completion of discharge the Mooring Master will sometimes require the ship to pump sea water through the submarine pipe-lines to displace the remaining oil.

BALLAST: No slop facilities are available for dirty ballast. Brazilian laws are very strict with regard to the pollution of coastal waters. Vessels are not allowed to discharge dirty ballast into the water. Heavy fines are imposed for violations.

Tramandai is the largest Rio Grande do Sul seaside resort and any pollution of the sea in this area will cause damage to the beaches. Hence, no dirty ballast or any oily residues must be pumped overboard within a range of over 50 miles, if no safer alternative exists.

MEDICAL: Medical treatment and/or hospitalisation, if required, are provided at Tramandai or Osorio private hospitals. Serious illness will usually be treated in Porto Alegre. Dentists are also available in Tramandai. For emergency cases (injury, etc.) TEDUT first medical aid may be requested by the Master. As usual, Agent will make such arrangements.

FUEL: Not available.

FRESH WATER: Not available.

CONSTANT READINESS: Since moorings are in open roadstead, vessel's engines and gear must be ready with full power for immediate use through the period the vessel is moored and the ship must be able to clear the mooring immediately on the advice of the Mooring Master or Superintendent of the Terminal.

Whenever necessary, vessels may use their own power to prevent riding upon the SBM.

CUSTOMS REQUIREMENTS: Brazilian laws are strict with regard to smuggling and Masters are requested to instruct their crews not to retain cigarettes in carton lots, cigars, tobacco, alcoholic drinks, drugs, souvenirs, etc. These should be collected prior to arrival, listed with the items in the slop chest and placed in the custody of the Master for deposit in the chest or closet which will then be sealed for the duration of the vessel's stay at the mooring.

By no means will any commercial transactions be tolerated, be it either among terminal employees, crew members or anyone else.

CONSULATES: No consular representatives are reported to exist in the area; however, there are consulates of most maritime nations in Porto Alegre.

TIME: Local time is GMT minus 3 hours.

GENERAL: Lighters not available. Launch connection with shore is entirely dependent on weather conditions and must be considered unreliable.

SHORE LEAVE: Depends upon agreement between ship's Master and Agency.

AUTHORITY: Petroleo Brasileiro, S.A. – PETROBRAS, Terminal Maritimo Almirante Soares Dutra (TEDUT), Caixa Postal 19, 95590 Tramandai-RS. *Contact:* Nelson Nunes Toledo, Superintendent.

TUBARAO (Including Praia Mole): 20.17 S. 40.15 W. (See Plan Book)

PILOTAGE: Pilotage is compulsory between the anchorage and the berth. Request for the Pilot must be made in advance by the ship's Agent. The vessel should indicate the time of arrival of the vessel at the entrance and from which point pilotage is required. Pilot may be contacted on the following VHF Channels: 16 for constant listening and 10, 12 and 14 for conversations.

Compulsory pilotage area is from the anchorage area where the Pilot embarks, the access channel, the manoeuvring basin and the existing piers in the port. After a Pilot receives advice of vessels arrival it takes 50 minutes for the Pilot to embark, this is done by a launch of the Vitoria Pilot Service. No difficulties are encountered when embarking except when the sea is very rough and there are strong winds.

Pilotage Area: The inner maritime area is limited by the circumference of 2.5 miles radius, centered on the Tubarao South Light in the sector included between 340° and the island Boi, as far as the berth.

APPROACHES: The access channel is 280 m. wide and dredged to 22.5 m. and runs in a 345°-165° direction. The beginning of the channel is marked by a red light buoy in position Lat. 20° 19′ 36″ S., Long. 40° 14′ 22.5″ W. and a white light buoy in position Lat. 20° 19′ 41.5″ S., Long. 40° 14′ 34.5″ W. (See NHD chart 1401).

Tides: Tidal variation is small, on average, there being 2 high tides and 2 low tides each day. The coastal current generally runs to the South with an average speed of 1 km./hour. The current is less constant in May and June. The maximum size waves, are 1.5 m. with wind coming from N.E. and 2.5 m. with S.W. wind.

Manoeuvring Area: The manoeuvring area for berthing and unberthing has a width of 150 m. along the whole length of the quay, the manoeuvring basin has a diameter of 600 m. and depth of 22.5 m. Anchoring is prohibited in the access channel and the manoeuvring area except with prior permission of the Port Captain.

Access Channel: Vessels destined for the Coal Terminal, located on the Northern edge of the access channel to the port of Tubarao, use this channel as far as slightly ahead of Buoy No. 5 (LF. ev. 3 secs.) turning to the N.E. to enter the terminal manoeuvring basin of 500 m. diameter currently dredged to – 12 m. plus the tide level at the time.

ANCHORAGE: The anchorage area for vessels awaiting berths is Lat. 20° 19.3′ S., Long. 40° 15.1′ W. Vessels in quarantine must anchor in an optional area indicated on chart 1401.

MAX. SIZE: See "Berthing" and "Tankers".

HEALTH: Free pratique may be obtained by radio, the message being sent to the ship's Agent by radio via "Saportos/Vitoria" at least 72 hours prior to the vessels arrival. Declaration of Health must be prepared and typed in order that it may be delivered to the doctor when he comes on board.

RADIO: Vitoria Radio Station PPV operates on the following frequencies: 2 MHz band on transmission frequencies 2086 and 2096.5 MHz and on emergency frequency of 2182 MHz.

4 MHz band – transmission frequencies 4403.9, 4382.2 and 4366.7 MHz., and on emergency frequency 4125, 4143.6 and 4072 MHz.

8 MHz band – on transmission frequencies 8802.6 and 8774.7 MHz, and reception on 8257 MHz.

TUGS: Two tugs of at least 1,500 h.p. are used when proceeding from the entrance to the manoeuvring area off the berth. When berthing 4 tugs and 1 launch assist.

Name	*H.P.*	*Bollard Pull*
Helio Ferrzaz	3,000	31.7
Tubarao	1,900	29
Itabira	1,530	16
Carajas	2,540	39.4
Trombetas	2,540	37.6
B. Horizonte	1,680	20
Guaiba	1,680	21.5
Titan	2,170	36.6
Arcturus	2,160	25
Servemar 10	1,070	7.5
Jamie	600	6
Affonso	1,640	16.4

BERTHING: Should a vessel be departing at the same time as another vessel is entering, the vessel which is leaving has priority and the vessel which is waiting to enter is to wait outside the entrance channel. Vessels are not permitted to pass each other in the channel or the manoeuvring basin. Should the weather conditions be poor, visibility restricted or too dark for the vessel to berth or unberth the decision to manoeuvre will be taken by the Pilot who may decide to change the operations to a more convenient time.

Vale Do Rio Doce Co.

Pier 1: Length 390 m. useable berthing length 350 m., depth on North Side 16.2 m., and on South Side 15.6 m. Berthing is possible on both sides.

Ship Loader No. 1: Max. height of hatch coaming above sea level 12.50 m. Max. outreach of loading boom 24 m. Nominal capacity of loader 6,000 t.p.h. Vessels max. LOA 330 m. Max. sailing draft 15.20 m. plus height of tide.

Ship Loader No. 2 (Seaward side of pier): Max. height of hatch coaming above sea level 17 m. Max. outreach of loading boom 33.50 m. Nominal capacity of loader 8,000 t.p.h. Max. length 330 m. Max. sailing draft 15.20 m. plus height of tide.

Pier 2: Max. LOA permissible 350 m., depth alongside 24 m. There are 4 dolphins each with 2 hooks and 4 dolphins each with 3 hooks.

Storage Area: Old area 2 million tons, new area 4 million tons, factory area 1.7 million tons.

This is a new pier now completed parallel and inshore of the existing pier for vessels of 250,000 d.w.t. intended max. draft 20 m. Vessels berth at seaward side only to avoid ranging. 2 shiploaders, swivelling (20 m. airdraft). Load rate 12/16,000 t.p.h. No dirty ballast facilities. Heavy fines for pollution.

Should Pilot wish to berth a bulk carrier on Pier No.1, South side, (Vale Do Rio Doce Co.) and there is a vessel at the Petrobras Terminal, the vessel at Petrobras Terminal will be removed prior to berthing of the bulk carrier.

Praia Mole: The port is situated on the North side of the Bay of Espirito Santo in the approximate position Lat. 20° 17′ S., Long. 40° 14′ E., close to the port of Tubarao. It is 12 km. from the centre of the town of Vitoria, capital of the State of Espirito Santo, connected by an ashphalted road.

It is an artificial port in the open sea, functioning mainly to receive metallurigal and power generation coal and the shipment of metal products for export.

The port of Praia Mole consists of a terminal with coal receiving equipment and a terminal with equipment for export of metal products.

Coal Terminal: Built for the movement of 8 million tons/year in its first stage to be concluded in the first six months of 1984, and 12 millions of tons/year in its second stage, with final completion in 1985.

The pier is 730 m. long (operating on one side only) and the civil engineering work is finished. It should be able to receive vessels of 15,000 d.w.t. to 170,000 d.w.t. in the first part (330 m.) and for this dredging will be carried out down to 18 m. (currently there are depths of 13.5 m.) and in the second part should receive vessels up to 250,000 d.w.t. after dredging this berth to 21 m.

On the pier will be fitted 3 discharge units with a capacity of 1,800 t.p.h. each, one already having been fitted and operating. The discharged coal is transported via three lines of conveyor belts (1 line already functioning) for storage in the Coal Storage Area of the port or taken directly to CST or CVRD. The Coal Storage Area will have a capacity of 11 million tons, with 520,000 tons for the first stage (currently one part is concluded, with approx. capacity of 260,00 tons). In the Coal Storage Area, for stocking and recovery of coal are planned 3 stackers and 2 recovery units, with capacities per machine of 2,200 t.p.h. and 4,400 t.p.h. respectively. (Currently, 1 stacker is undergoing operational tests, 1 recovery unit is being installed.) The coal recovered from the area will be sent to the cellulos/cement industries for pelletisation by CVRD, to CST or for Usiminas/Acominas by means of a system of loading wagons on the railway system, with a capacity of 2,000 t.p.h. in the phase of current installation.

Metal Product Terminal: Built for moving 3 million tons/year in its first stage and 4.5 million tons/year in its second stage. It comprises a 638 m. long quay for taking vessels from 15,000 d.w.t. to 70,000 d.w.t. and for this dredging will be required down to 14.5 m. (currently only 13 m.). The quay civil engineering works, planned for completion at the beginning of 1984, is today with its foundations totally concluded, and super-structure with 260 m. completed.

On the quay will be installed 5 loaders for metallurgical products for vessels with 35 tons capacity each, currently with 2 loaders in the initial phase of installation, with completion planned for the beginning of 1984. In the rear part of the quay will be formed an area for storage and handling products, with an area of 30,000 sq.m. in its first stage, and 100,000 sq.m. in its second stage (currently 60,000 sq.m. has been finished). This storage and handling area will have 10 rolling bridges with a capacity of 35 tons each and will be served by 5 railway lines along the quay. The railway lines are interconnecting CVRD to the quay.

TANKERS: *Petrobras Terminal:* The berth consists of 2 mooring dolphins which enable vessels of 160 m. LOA and draft of 7.9 m. to berth.

STEVEDORES: Services of stevedores not normally required. Crew open hatches.

MEDICAL: Four hospitals available.

FUEL: Diesel oil in quantities up to 100 tons can be supplied by Petrobras in road tankers at the berths, also vessels with Max. draft of 8 m. and Max. LOA 160 m. can berth at the Petrobras Oil Terminal inside the breakwater to take bunkers and diesel. Vessels at Praia Mole bunkered by barge.

Terminal Rates:

Diesel oil	– 100 t.p.h.
Fuel oil	– 150 t.p.h.
Mixture	– 80 t.p.h.
Crude oil	– 700 t.p.h.

FRESH WATER: Available at all quays of the terminal, maximum quantity per vessel 150 tons. Requests for water must be made by Ships Officers immediately on berthing. If quantity greater than 150 tons is required 48 hours notice must be given in order to establish whether or not the additional quantity is available.

POLICE/AMBULANCE/FIRE: Police Tel: 227-0057. Fire Tel: 228-5193.

REPAIRS: There is a naval repair shop in the area able to carry out normal repairs.

TELEPHONES: Not available for placing on board.

AIRPORT: 8 km. from the port with connections to other cities within the country.

HOLIDAYS: Confraternizacao dos Povos, January 1st; Passion Friday movable; Nossa Senhore da Penha, movable; Tiradentes, April 21st; Labour Day, May 1st; Independence of Brazil, September 7th; Our Lady of Vitoria, September 8th; All Saints, November 2nd; Proclamation of the Republic, November 15th; Christmas, December 25th.

BANKS: The following banks have correspondents in other countries:

Banco Frances e Brasileiro S/A: Credit Lionaise (France), Praca Presidente Vargas, 35 – Vitoria – ES. Telex: 2249.

Banco Sudameris Brasil S/A: Sudameris Paris; Comerciale Italiani; Banque de Paris et Pais Bas; Dresden Bank, Rua Treze de Maio, 48 – Vitoria – ES. Telex: 2265.

Banco Lar Brasileiro S/A: Chase Manhattan, Av. Governador Bley, 137-145. Telex: 2.2174.

Banco de Credito Nacional: Barclay's Bank – England; Av. Princesa Isabel, 53 – Vitoria – ES.

Bradesco-Banco Brasileiro de Descontos S/A (Correspondente): Av. Jeronimo Monteiro, 400 – Vitoria – ES. Telex: 132.

GENERAL:

Smoking: Smoking on tankers and OBO vessels may only take place in compartments specified and as indicated by the Master of the vessel.

Readiness: Vessels must be able to unmoor immediately in cases of emergency. Unmooring is done with the aid of tugs.

Repairs: No repairs undertaken to the vessels engines or any other repairs which may impeed emergency unmooring. Should any repairs at all be necessary these can only be done with the authority of the Terminal.

Deballasting: Discharge of dirty ballast is strictly prohibited. Failure to comply with this rule will result in fines.

Fire Fighting: The ship's fire fighting equipment must be kept in readiness at all times.

Rubbish: There is no collection service.

Deratting Service: Not available.

Stores: Specialising firms in the district, orders must be placed 24 hours in advance.

Degassing and Unloading:

a) All ore/oil and oil/bulk/ore vessels must have their holds and tanks gas free.

b) Ore/oil vessels carrying inert gas must have their holds inerted to receive ore cargo and be free of explosive gas and/or rendered inert.

c) The terminal Inspector must receive, prior to loading, a certificate stating that the vessel on berthing is free of explosive gases and has been rendered/or is inert.

d) The operation of gas freeing is not permitted when the vessel is berthed or in areas deemed to be dangerous by the Terminal authority.

AUTHORITY: Companhia Vale Do Rio Doce, Superintendencia do Porto-Tubarao, C.P. 1078, Vitoria, Espirito Santo, CEP 29000, Brazil. *Tel:* (027) 228 005. *Telex:* 0272 – 161. *Contact:* Roberto W. Kenski, Port Superintendent.

UBU: 20.47 S. 40.35 W. (See Plan Book)

LOCATION: The port of Ponta do Ubu is located on the coast of the State of Espirito Santo, approximately 40 nautical miles South of Vitoria. Geographic position of the Ponta do Ubu Beacon:

Latitude: 20° 46′ 48″ S.
Longitude: 40° 34′ 40″ W.

DOCUMENTS: All ships are subject to routine arrival visits by the following port officials:

Health Officers
Customs Officers
Maritime Police Officers
Immigration Authorities

Also see "Shipmaster's Report".

PILOTAGE: Pilotage compulsory for all ships sailing through the channel, berthing and unberthing in Ubu. Pilots will board in the area of anchorage. Pilots attending the Ponta do Ubu area are members of the "Associacao dos Praticos do Porto e Barra do Espirito Santo".

All ships must provide an accommodation ladder and rope ladder, freeboard permitting. The landing platform of the accommodation ladder should be approximately 5.0 m. above the water. Boarding facilities should be adequately lighted.

Ships should request anchoring and/or berthing instructions from Ponta do Ubu Marine Operations 4 hours prior to arrival at the pilot boarding area, or when within VHF range.

Ships must not proceed beyond specified boarding area or anchorage unless so instructed by Ponta do Ubu Marine Operations.

APPROACHES: The Ponta do Ubu area is under the jurisdiction of Diretoria de Hidrografia e Navegacao (DHN), an agency of Brazil's Ministry of the Navy. Ponta do Ubu appears on DHN Charts Nos. 70, 1400 and 1402, and on Admiralty Chart No. 3972, U.S. Hydrographic Office Chart No. 24170 and Brazilian Coast Pilot (Roteiro)

Lights in the Vicinity:

Ilha Escalvada (Island)	Gp. Fl. (2)	6.0 sec.
	27 metres	9 miles
	Lat. 20° 42′ S.	Long. 40° 24′ W.
Ilha do Frances (Island)	Fl.	3.0 sec.
	48 metres	12 miles
	Lat. 20° 56′ S.	Long. 40° 45′ W.
Ilha Branca (Island)	Fl.	10.0 sec.
	5 metres	9 miles
	Lat. 21° 00′ S.	Long. 40° 48′ W.
Ponta do Ubu	Lat. 20° 46′ 48″ S.	Long. 40° 34′ 40″ W.

Channel: See DHN Chart No. 1402 as amended by Aviso aos Navegantes (Notice to Shipmasters) No. 141/77, 117/78 and 171/78. Maintained channel depth is 18.0 m. (59 ft.) referred to chart datum.

ANCHORAGE: Anchorage instructions must be requested from Ponta do Ubu Marine Operations. Anchorage area position is Lat. 20° 46′ 24″ S., Long. 40° 32′ 33″ W. Masters are advised to give due consideration to Brazilian antipollution regulations while in coastal waters.

Brazilian Government officials may board ships in anchorage for clearance formalities. Suitable and adequately secured accommodation ladder for this purpose must be provided soon after anchoring. Life ring with line with a minimum length of 50 m. should be on hand and adequate lighting provided.

MAX. SIZE: Ships arriving in ballast are requested to comply with the following recommended arrival drafts, keeping in mind indicated shiploading rates and shiploader clearance height limitations.

Recommended Arrival Draft

Deadweight *Tons*	*Metres*	*Feet*
30,000 to 40,000	6.1 – 6.7	20 – 22
40,000 to 60,000	6.7 – 7.3	22 – 24
60,000 to 75,000	7.3 – 7.9	24 – 26
75,000 to 100,000	7.9 – 9.1	26 – 30
100,000 to 150,000	9.1 – 11.0	30 – 36

Ships unable to meet these suggested drafts due to insufficient ballast capacity, anticipated deballasting problems, etc., should so advise in 48-hour ETA message, along with estimated deballasting time.

Max. Arrival Draft: 10.0 m. plus height of tide (0.6 m. – 1.6 m.) at moment of berthing.

Max. Departure Draft: 15.5 m. plus height of tide at moment of departure.

RADIO: Rio de Janeiro Coast Radio Station, call sign "PPR" (Telex 491) operates on a 24 hr. basis on the following frequencies: 435 kHz, 8,634 kHz, 13,105 kHz.

The Master of an arriving vessel is required to cable his notice of ETA 15 days (or when departing prior port, if sailing distance is less than 15 days) then 5 days, 48 hours, and 24 hours prior to estimated time of arrival at Ponta do Ubu.

Five day message shall contain ETA, cargo tonnage required by hatch number and whether vessel is O.B.O. or ore/oil carrier.

48 hours message shall provide the following information: ETA, arrival draft, ballast tonnage on board and deballasting time.

24 hours message. Cable your ETA, indicate if vessel is fitted with an inerted system and if compartments will be under control of said system during loading. Also include type, manufacturer's name and the society that approved the classification of the inert system.

When within VHF range, Master is to contact the Marine Manager's office for additional information on docking schedule, anchorage arrangements and cargo information.

VHF: Ponta do Ubu Marine Operations is equipped with VHF radio monitored 24 hours a day.

Frequencies:

Calling Channel: 16 (156.800 MHz)
Working Channels: 156.375 MHz, 156.650 MHz, 156.700 MHz.

HEALTH: Radio Pratique should be requested 72 hours prior to arrival, by forwarding quarantine message to Port Health Authorities through the ship's Agent. The information required is as follows:

Name and nationality of vessel; name of the last port of call; port of destination and name of Agent; nature of cargo, if any; date and place of last derating or exemption certificate; number of crew and passengers; health conditions of all on board; vaccination status of crew and passengers; ETA and any other information that may be required by the quarantine officers.

Radio pratique does not constitute quarantine clearance, and the ship will require inspection upon arrival. Radio pratique if granted, will enable ship to enter, berth, and commence loading prior to official quarantine clearance.

The following documents shall be submitted to the Port Health Authority boarding on arrival:

Maritime Declaration of Health, duly filled in as required by Sanitary Regulation No. 2 of the World Health Organization. Copy of up-to-date crew list. Vaccination Certificates of all Crew members as well as their seamen's books or passports.

Quarantine inspection will be carried out at the pier, or at anchorage if required, weather permitting.

Quarantine flag must be flown until free pratique is granted.

Masters are advised to have all vaccination certificates, derat certificate and clearance from last port ready for inspection.

TUGS: Tug service is compulsory for all vessels. Tugs will operate in accordance with Brazilian regulations covering this matter.

Available tugs: 3×1,680 h.p., 20 ton bollard pull, tugs permanently based at the terminal. 1 tug on call.

All ships should be equipped with wire cable tow line with nylon pendant.

All communication between tugs and Pilots is via VHF.

Tugs will operate on same Channel as the Marine Operations office.

BERTHING: Vessels are subject to the berthing/unberthing regulations exercised by Port Authority for night-time manoeuvres.

The port of Ponta do Ubu is owned and operated by Samarco Mineracao S.A., and is used solely for the purpose of handling and shipping iron ore.

The port consists of a breakwater protected pier, close to the shore with a dredged berth area and access channel.

Product stockpiling and transportation prior to loading: A bucket wheel stacker-reclaimer and a stacker operate in a 1,200 ft. long stockpile area. The stockpile has a total capacity of 550,000 metric tons of pellets and 385,000 metric tons of pellet feed.

During normal operations, pellets are stockpiled by the stacker-reclaimer, and pellet feed stockpiled by the stacker. Both pellet feed and pellets are reclaimed using the bucket wheel stacker-reclaimer. The reclaimed material is then conveyed to the shiploader for loading aboard bulk carriers, at rates of up to 8,000 metric t.p.h.

When reclaiming pellets, the output from the pellet plant is bypassed through the stacker-reclaimer and combined with the reclaimed pellets for shiploading. When reclaiming pellet feed, the output from the pellet plant is conveyed to the stacker, while the pellet feed output is conveyed to the stacker-reclaimer, bypassing the machine and combined with reclaimed pellet feed for shiploading.

A simple station is provided to monitor the quality of pellet feed or pellets being loaded into a given ship statistically. Samples are automatically cut from the shiploading conveyor system at preset intervals, without interrupting the loading operation. Each sample is then reduced in size, and subjected to a complete range of quality control tests.

Material reclaimed for shiploading by the stacker-reclaimer is conveyed to a rail-mounted travelling shiploader. The shiploader is designed to load vessels on either side of the pier. A loadout weigh scale located near the shiploader monitors the final product delivered for shipment.

Port facilities: Port facilities at Ponta do Ubu are located in the open sea near the apex of a shallow indentation in the coastline where currents have provided 20 m. deep water within 2 km. of the shore.

The existing depth of water in the dredged channel is minus 18 m. The main berth area was dredged initially to minus 19 m.

Berthing: The breakwater protected pier consists of a 313 m. long by 22 m. wide concrete deck, extending in a 022° 30′ direction. It projects from the Eastern portion of the breakwater to a distance of 685 m. from the shore.

The pier has berths on both East and West sides.

Shiploading: The mobile rail mounted pier shiploader has a 41.6 m. fixed length boom, with a 280° turning angle and a 19.5 m. air draft. Its nominal loading capacity is 9,000 metric t.p.h.

LOADING: Vessels will be generally loaded in turn, in their order of arrival, provided that:

(i) They are in all respects ready to receive cargo;
(ii) All the cargo is available at the terminal;
(iii) It is in accordance with the instructions of the charterer or his Agent.

Vessel shall present a detailed loading plan immediately on arrival, including hatch quantities, with loading sequence and quantity of ore to be reserved for fore and aft trimming by hatches.

Ships will leave berth immediately on completion of loading, unless specific permission to do otherwise has been granted by Marine Operations.

Loading hours, subject to change, are as follows: 24 hours operation, Sundays and holidays included.

All ships *must secure bilge systems* while at Ponta do Ubu.

Combination ore/oil and ore/bulk/oil carriers must ensure that ballast tanks and piping systems are free of oil contamination, prior to arrival. Gas-free condition of combination carriers must be confirmed prior to loading. Certification and inspection shall be arranged through the vessel's Agent. Vessels with inerted tanks shall be checked and monitored continuously during loading.

MEDICAL: The medical facilities nearest to Ponta do Ubu are located at Guarapari, 15 minutes away by car.

Vitoria has modern hospital facilities.

FRESH WATER: Not available.

FUEL: Not available.

TIME: Local time is GMT minus 3 hours.

AIRPORT: Guarapari (20 km.) for light aircraft (air taxi).

Vitoria (70 km.) Airport Eurico Sales, connection to other Brazilian towns.

POLICE/AMBULANCE/FIRE: Police (Guarapari) Tel. 261-0151.

SERVICES: There are supermarkets at Guarapari.

HOLIDAYS: *Local holidays:* Confraternizacao dos Povos – 1st January; Passion Friday – movable; Tiradentes – 21st April; Labour Day – 1st May; Sao Pedro – 29th June; Independence of Brazil – 7th September; All Saints – 2nd November; Proclamation of the Republic – 15th November; Day of the City and Day of Our Lady of the Conception – 8th December.

REPAIRS: No facilities.

TELEPHONES: No facilities for placing telephones onboard.

GENERAL: The Brazilian National flag shall be flown while in the Ponta do Ubu area.

Line-handling port personnel will be available for handling ship's lines during berthing and unberthing. All shipboard work necessary for berthing, loading and unberthing, including, but not limited to, handling and tending moorings, opening and closing hatches and normal deck cleanup, shall be performed by the ship's crew.

Ships must have main engines ready and maintain watch while alongside the pier, unless specific permission to do otherwise has been granted by Marine Operations.

The nearest town is Guarapari, 15 minutes to the North by car. Vitoria, capital of the State of Espirito Santo, is about 80 minutes by car to the North. Daily flights, operated by major Brazilian airlines, connect the state capital with the rest of the country.

Ships causing oil pollution, dumping of waste, refuse, etc., in coastal waters will be liable for all resulting fines and cleanup costs. All ships must secure bilge systems while in the Ponta do Ubu area, and combination ore/oil and ore/bulk/oil carriers must exercise all precautions necessary to insure that ballast tanks and/or piping systems are free of oil contamination prior to arrival. *Accidental and deliberate oil or oily mixture discharges in the area must be reported to Ponta do Ubu Marine Operations IMMEDIATELY.*

There are no shore facilities available at the terminal for receiving slops, and dirty or contaminated ballast. Masters are cautioned that discharging of anything other than uncontaminated ballast will be subject to penalties as prescribed by Brazilian law.

Solid garbage and refuse disposal ashore can be arranged through Marine Operations.

Weather conditions and temperatures are moderate with year-round average highs of 27°C (80°F) and year-round average lows of 19°C (66°F).

Winds recorded are less than 30 knots more than 95% of the time and prevailing winds are East to N.E. Local winds may have a significant effect on the tide.

There are no significant currents noticed in the turning basin.

For general information about currents in the Ponta do Ubu area, use South Atlantic Pilot Charts and Brazilian Coast Pilot (Roteiro).

Sea conditions are generally moderate.

Meteorological bulletins are available 24 hours a day through Rio de Janeiro coast radio station, Radio Arpoador, call sign PPR. 17,194 kHz.

SHIPMASTER'S REPORT: 1978.

Documents: Please refer to other Brazilian ports, vessel came from Rio de Janeiro so only the Agent and the Customs boarded and asked for 3 Crew Lists, 1 Custom Store List and 1 Personal Effect List. We were told that to go ashore every Crew member needed a pass with picture attached but crew went to the near town of Guarapari after showing passport or an identity card at the gate.

Pilotage: The Pilot boards about 2 to 3 miles outside the channel. He comes on board by Pilot boat based at Point Ubu and even though we were in very light condition wanted to use the pilot ladder. Pilots come from Tubarao and Vitoria.

Restrictions: Until now the maximum draft allowed on arrival at all times has been 11 m. while the maximum sailing draft is 16.5 m. at high water in fair weather. The Pilots Association have asked for buoys No. 13–11–9–7 to be removed from their actual position and only buoy No. 9 to be placed in front of the 9.8 m. patch. They say that numerous soundings over the patch always show 11 m. so 9.8 m. does not exist. The Pilot told me that these changes might take place around March/April 1978, but nothing certain.

Tugs: Three tugs are based at Point Ubu namely the "Scorpius", "Polaris" and "Aquidauana". The first 2 are good and operate respectively on the bow and stern of the ship with 2 ship's nylon ropes. If vessel over 200 m. in length the Port Captain orders a fourth tug that must come from Tubarao (about 3 hours) and it is very helpful and powerful.

VHF: Marine Operations answered us about 2 hours from berth (30 miles).

Bulk Cargo Facilities: We were the sixth ship to load in this port, the loading rate is around 4,000/5,000 t.p.h. at present.

Medical: Ship's Agent can arrange to send people to the doctor at any time or to the hospital in the near town of Guarapari.

Density: Checked over 3 days and always found to be 1026.

Loading: The Bill of Lading figures are taken from the weightometer which is believed to be extremely correct, but it showed a difference of 1,000 long tons over 37,000 long tons loaded on the ship. A surveyor carried out a draft survey on arrival and it was said that it was a check on the weightometer, being normal check that was carried out for these early loadings but the real figures are taken from the weightometer. 2,000 long tons before completion of loading we stopped for trimming and the scale showed about 1,000 long tons more loaded than the ship's figures. Because of this, the Terminal considered the ship's figures (survey) and to these figures they added according to the scale the quantity we requested to complete loading.

OPERATORS: Samarco Mineracao S.A.

Ponta do Ubu: Postal address: Caixa Postal 205, 29.200 Guarapari, .S. Brazil. Tel. 261–1344, 261–0448. Area code* 027. Telex 272204 (SASA BR). Contact: Ruben E. B. Brena, Manager.

Central Office: Avenida Carandai, 1115, 18th floor, 30.000 Belo Horizonte, MG, Brazil. Tel. 222-4022; Area code*; 031. P.O.Box: C.P. 1317. Cable address: Samarco. Telex 031-1474.

Rio de Janeiro office: Avenida Nilo Pecanha, 50, 5th floor, Suite 510, 20.000 Rio de Janeiro, Brazil. Tel. 222-9756, 224-8306, 224-3935. Area code*: 021.

*Code for Brazil: 0055.

AUTHORITY: Capimar – Vitoria, Praca do Trabalho 66, Centro-Vitoria. *Tel:* (027) 222-4622. *Telex:* 0272102. *Cables:* Capimar Vit. *Contact:* Captain Figueria.

VITORIA: 20.19 S. 40.17 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory. Vessel approaching port should communicate with Agent through local radio station, giving date and hour of arrival at pilot station so that they can arrange for a Pilot to be at the roads on arrival. Communicate direct to Pilot Association through VHF Channel 16. Pilots maintain 24 hour watch.

ANCHORAGE: The official limits of the port are:

Arc of a circle of 1 mile radius, seaward, with centre at Santa Luzia Lighthouse. There is a 8.9 m. patch which will be removed in the near future.

Notice of Readiness is accepted as at time the Master radios advising vessel has anchored, SHINC, lay time starting 3 hours afterwards (subject to C/P).

No draft limitations at anchorages.

APPROACHES: Length of access channel 3.5 miles, width 120 m., depth 10.6 m. Maximum speed allowed 5 knots.

RESTRICTIONS: All sailings are to take place on a rising tide. Vessels of up to 205 m. can enter day or night.

Vessels from 205 m. to 240 m. can enter during daylight hours, weather permitting. Vessels of this length must be assisted by 3 tugs, 2 of which must be of at least 1,000 h.p. and the other of at least 400 h.p.

For turning in the manoeuvring basin, 2 tugs are required, 1 to be of at least 1,000 h.p. and the other of at least 400 h.p.

MAX. SIZE: 35 ft. draft at HW and 32 ft. at LW. Also see "Tankers" and "Developments".

HEALTH: Free pratique obtained by radio to Agents, addressed for "Saportos Vitoria" followed by ship's name, last port, ETA, and the letters ZT (meaning "my replies to the 6 questions on the port health declaration are negative"), and ZS (meaning "the sanitary condition of my ship is satisfactory"). Pratique is granted when this message is delivered by Agent to the port doctor. Also see "General" before first port.

The Agent may send a reply containing the group ZY, meaning "you have free pratique". In any case the time of pratique is registered as time that the ship's cable was received by the Health Authorities. This pratique does not allow the crew to go ashore until after customs clearance.

Crew vaccinations are done free.

The Port Doctor usually arrives onboard some time after the visit of Authorities and it is important to have the Health Declaration ready for handing to him by a responsible person (to avoid a fine).

RADIO: Local radio station, Vitoria Radio, call sign PPT. This radio station normally used by Agents when cabling vessels.

Operating Frequencies:

2 MHz band on transmission frequencies 2086 and 2096.5 MHz and on the emergency frequency of 2182 MHz.

4 MHz band – transmission frequency 4403.9, 4382.2 and 4366.7 MHz on the emergency frequency 4412.5 and 4143.6 MHz.

8 MHz band on the transmission frequencies of 8802.6 and 8774.7 MHz and reception 8278.7 MHz and 8250.8 MHz.

VHF: Request Pilot on Channel 16 and 12 one hour before arrival. Upon notice it then takes Pilot 40 minutes to reach vessel.

TUGS: Tugs join vessels at anchorage. Ship's lines used. Tugs have no lines on board. The lines given to tug-boats should be without wire as the swell usually prevailing causes severe sudden stresses on the tow lines.

2 tugs of 1,680 h.p., (20 tons) and 4 tugs of 1,600 h.p. (22 tons).

Vessels up to 2,000 g.r.t. require 1 tug, up to 10,000 g.r.t. require 2 tugs and over 10,000 g.r.t. require 3 tugs for berthing.

Vessels up to 2,000 g.r.t. require 1 tug and vessels over 2,000 g.r.t. require 2 tugs for unberthing.

BERTHING: Also see "Developments".

Commercial Quay: No restrictions for vessels berthing at Nos. 4 and 5 Warehouse, entrance and sailing at any stage of tide. Max. drafts are:

No. 5 Warehouse – 28 ft. 02 in., max. length 597 ft. 2 in.
No. 4 Warehouse – 27 ft. 06 in., max. length 597 ft. 2 in.
No. 3 Warehouse – 27 ft. 10 in., max. length 508 ft. 9 in.
No. 2 Warehouse – 13 ft. 01 in., max. length 393 ft. 8 in.
– 16 ft. 04 in., max. length 328 ft. 1 in.

Vessels at Nos. 2 and 3 restricted to sail on flood tide only.

Usiminas Quay – Coal Discharge: Max. draft 35 ft., max. length 853 ft. Limited to entry only at beginning of ebb tide; sailing at any stage of tide. Discharge by 3 mechanical grabs, daily unloading rate, 15,000 long tons.

Iron Ore Berths:

Atalaia Quay: Max. draft 31 ft. 2 in., max. length 787 ft. 5 in. Vessels berth and sail on flood tide. Entering and sailing during night or day; max. length 657 ft. 10 in. during the day only, 787 ft. 5 in.

Paul Quay: Max. draft 29 ft. 10 in., length 524 ft. 11 in. There is one loading area with a capacity of 600/900 t.p.h. depending on type of ore. Max. reach beyond quay edge, 49 ft. Max. height extremity of hook at 18 in. elevation, 52 ft. at HW, 59 ft. at LW. Width of pontoon, 14 ft.

CRANES: Eleven electric gantry cranes 1.5 – 12.5 tons capacity, 3 mobile cranes 10 – 30 tons capacity and 1 heavy lift crane 200 ton capacity.

BRIDGES: Bridge under construction in position Lat. 20° 19′ S., Long. 40° 17′ W.

TANKERS: *Esso and Shell Terminal:* Berthing and unberthing can take place during day or night period, provided vessels draft does not exceed 22 ft. Max. length permitted 531 ft. 5 in. with max. draft of 27 ft. Vessels must enter on ebb tide and sail at high tide.

STEVEDORES: On ETA cable general cargo ships should include number of gangs required.

MEDICAL: No advance notice of required medical attention. Hospital facilities available.

DENSITY: Average density at Vitoria 1025. Somewhat lower during rainy season.

FRESH WATER: Fresh water available at Commercial Quay, Vitoria Iron Ore Berths, Usiminas Quay and Esso Terminal. Rate of delivery 30 t.p.h.

A barge with capacity of 50 tons may be adapted to carry water.

FUEL: *Esso Berth:* Bunkers can be taken here, supplied under gravity only.

Max. draft 27 ft., and length restricted to 162 m. Due to various factors, the taking of bunkers in Vitoria is not recommended, however, fuel is available by road tanker at the Commercial Quay. Rate 10,000 litres/hour.

Esso and Petrobras can supply Bunker "C", fuel oil and diesel oil, the last two being available by truck.

WATCHMEN: Compulsory at commercial quay in Vitoria. Not available at Vitoria Ore Terminals.

OPENING/CLOSING HATCHES: Normally done by stevedores except in cases of modern vessels using MacGregor hatch covers, when crew asked to close hatches.

CUSTOMS ALLOWANCES: Each Crew member allowed 200 cigarettes out of the bond. One bottle, wine or spirits opened, for each Crew member.

REPAIRS: Deck and engine repairs available.

REPATRIATION: There are 3 flights daily from Rio de Janeiro to Vitoria.

AIRPORT: Airport located 8 km. from centre of town and is served by 3 airlines with daily flights to Rio de Janeiro, Salvador, Recife.

TIME: Local time GMT minus 3 hours.

HOLIDAYS: January 1st; April 21st; May 1st; September 7th and 8th; November 2nd and 15th; December 25th; Good Friday; Nossa Senhora da Penha and Corpus Christi. Only holiday when no stevedore work is possible Good Friday; exception made to iron-ore loading.

IDENTIFICATION CARDS: Required with photographs to enable officers and Crew members to go ashore. Agents supply forms.

CONSULS: The following countries have consular representatives in Vitoria:

Argentina
Belgium
Finland
France
Great Britain
Netherlands
Italy
Lebanon
Portugal
Uruguay
West Germany

POLICE/AMBULANCE/FIRE: Police Tel: 190. Maritime Police Tel: 2230173. Radio Patrol Tel: 2270992. Ambulance Tel: 2224646. Emergency Hospital Tel: 2230203. Fire Brigade Tel: 193.

TELEPHONES: No facilities for placing telephones on board.

DEVELOPMENTS:

Capuaba Quay:

The Capuaba Quay is in its final stages of completion, with silos and refrigeration installations.

Cold Store: With capacity of 5,000 tons in its first phase, and 15,000 tons in its final capacity, intended for refrigerated storage of general (meat and juices).

Silo: With capacity of 30,000 tons in the initial stage and 90,000 tons in its final phase, it will be equipped with cleaning, drying, classification, weighing and bagging equipment.

It has an 84 m. tower, made of blocks of cells 35 m. high and 8.5 m. diameter. It can take cereals, (maize, soya, sorghum) at the rate of 600 t.p.h., and delivery at the rate of 1,200 t.p.h., and can, in the case of imported wheat, receive at the rate of 300 t.p.h. With 765 m. of quay, Capuaba will also deal with the exportation of industrial products, such as cellulose, metal products and general cargo. The installations include warehouses, for metals of 7,500 sq.m. and general cargo 4,000 sq.m., there is also open area storage of 82,000 sq.m. for containers.

Capuaba Quay: (Already installed).

Length of quay: 655 m.
Depth: Max. 11.5 m. Min 7.8 m.
General cargo warehouse: area of 4,000 sq.m.
Storage open area: area of 82,000 sq.m.
Road and rail access.
  Length of roadway: 3,120 m.
  Width of platform: 16 m.
  Length of bridge over River Aribiri: 126 m.
  Length of railway: 660 m.
Port Silo capacity: 30,000 tons in the first phase and 90,000 tons in the final phase.
Purpose: Export of cereals (soya, maize and sorghum) and importation of wheat.
Operational speed: 1st phase: 1,200 t.p.h.
  2nd phase: 1,800 t.p.h.
Cells: 8.5 m. diameter and 35 m. high.
Elevation tower: 84 m. high.
Belt transporter: 800 m.
Fresh Water: Available. Rate of delivery 50 t.p.h.
Cranes: Two electric gantry cranes 6.3 tons capacity, 2 electric gantry cranes 12.5 tons capacity, 1 electric gantry crane 32 – 40 tons capacity.

AUTHORITY: Companhia Docas do Espirito Santo, Empresa do Sistema Portobras, Av. Getulio Vargas No. 556, Vitoria, Espirito Santo, CEP 29000. *Tel:* (027) 222-1311. *Telex:* (027) 2118. *Contact:* Gerardus Maria Franciscus Zaeyen, Director-Presidente.

NOTES

Please also advise Shipping Guides Ltd.

Brunei State

BANDAR SERI BEGAWAN: 04.53 N. 114.56 E.

Brunei State is an independent country governed by H.M. the Sultan with a Council of Ministers and Legislative Assembly. The capital town of Bandar Seri Begawan (formerly known as Brunei Town) is situated 16 miles upriver from Muara Harbour which is at the mouth of the Brunei River. Use of the town wharf at Bandar Seri Begawan is restricted to small wooden coastal vessels operating within the Brunei Bay area not exceeding 80 ft. in length overall and 50 tons gross registered tons. The port of Bandar Seri Begawan comprises a reinforced concrete wharf 730 ft. long with a wharf apron 76 ft. wide and a passenger pier 124 ft. long with a wharf apron 63 ft. wide. Three transit godowns are provided.

BANKS: The Hong Kong and Shanghai Banking Corporation, Bandar Seri Begawan, Brunei. Tel: 22305/22306.

The Chartered Bank, Bandar Seri Begawan, Brunei. Tel: 22386/22458.

The Bank of America, Bandar Seri Begawan, Brunei. Tel: 224911.

The Citibank, Bandar Seri Begawan, Brunei. Tel: 23983/23984.

EMERGENCY CO-ORDINATION CENTRE: The Duty Officer, Search and Rescue Co-ordination Centre, Royal Brunei Armed Forces, Emergency Tel: 32777 or 31111 extension 462.

SURVEYORS: Cargo surveyors and non-exclusive classification society surveyors are available.

SHIP SUPPLY SERVICE:

1. Brunei Shell Petroleum Co. Ltd., Seria, State of Brunei Darussalam.
2. O.I.L. Industrial Services Ltd., P.O.Box 2320, Bandar Seri Begawan, State of Brunei Darussalam.
3. Jackson Marine Mashoor Pte. Ltd., P.O.Box 980, Kuala Belait, State of Brunei Darussalam.
4. Marine Services Ltd., P.O.Box 489, Kuala Belait, State of Brunei Darussalam.

AUTHORITY: Jurisdiction for land based operations in the Ports of Brunei: Controller of Ports, Ports Department, Muara Port, Muara, Brunei. *Tel:* 72240/72220 *Cables:* Ports, Brunei.

Jurisdiction for water based operations in the Ports of Brunei: Director of Marine, Marine Department, H.M. Customs Building, Bandar Seri Begawan, Brunei. *Tel:* 22293/22294 *Cables:* Marine, Brunei. *Contact:* I. G. Faraker, Director of Marine.

LUMUT: 04.43 N. 114.26 E. (See Plan Book)

DOCUMENTS: The Master will be required to provide 12 copies of the Crew List, Last Port Clearance and International Declaration of Health.

PILOTAGE: The Berthing/Loading Master will board incoming vessels approximately 2 miles North of the berth.

Masters are requested to provide a good lee for the launch to facilitate the boarding of the Berthing Master. The regulation pilot ladder should be rigged.

ANCHORAGE: Anchorage Area for vessels calling at Lumut (Anchorage "C") is located approximately 2 miles North of the loading platform, in the area contained within the following limits:

Latitudes: 4° 45′ N. and 4° 43.5′ N.
Longitudes: 114° 25′ E. and 114° 27′ E.

APPROACHES:

Approaches to the berth: Mariners are warned that drilling rigs may be encountered when approaching the Brunei coast. Latest Notice to Mariners should be consulted.

Western Approach: During January 1972, extensive berthing and mooring trials were performed at Lumut. The approach into the berth from the Eastward was found to be difficult during these trials by reason of shallow water N.E. of the berth. The Western approach was therefore preferred in that this is clear of obstructions, provided that due account is taken of the run of the depth contours.

Rolling: It is known that when long period swells of over 1.5 m. height and more than 7 seconds period prevail, significant rolling will occur when the direction of the swell is within 50° – 130° of the ship's fore and aft line. Such swell conditions can be experienced at Lumut and are likely to follow a cyclonic disturbance in the South China Sea. Thus, serious rolling may occur when approaching the berth from the Westward on courses between 130°, through East to 050°. A danger exists that ships may touch the bottom as a result of this movement.

RESTRICTIONS: Lumut is not an all weather berth. Sea and swell conditions could cause delays by preventing buoy work, or by causing unacceptable ship movements either during berthing or in berth.

Draft Calculations: There are three factors which are liable to limit the ship's draft:

(i) The approaches to the berth where rolling is likely to reduce the clearance under the keel.
(ii) The pitching movement of the ship in the berth, also likely to reduce the keel clearance.
(iii) The vertical limits within which the loading boom tie rod can be safely connected to the ship's pedestal.

Rolling in the approaches to the berth: The swept depth in the Western approach to the berth is 10.95 m. (36 ft.) below A.C.D.

An underkeel clearance of at least 0.60 m. (2 ft.) is to be maintained at all times after allowance has been made for roll.

The following calculation applies:

Depth of water below A.C.D.	10.95 m.
Allowance for roll	−2.00 m.
	8.95 m.
U.K.C. after allowing for roll	−0.60 m.
Maximum draft on arrival	8.35 m.

Pitching in the Berth: The swept depth in the Southern part of the berth is 10.95 m. (36 ft.) below A.C.D.

An underkeel clearance of at least 0.60 m. is to be maintained at all times after allowance has been made for pitching.

Depth of water in berth below A.C.D.	10.95 m.
Allowance for pitching	−1.00 m.
	9.95 m.
U.K.C. after allowing for pitching	−0.60 m.
Maximum draft	9.35 m.

Vertical Limits under the Loading Boom: Levels on the Loading Boom are referred to Seria Datum which 28.23 m. below A.C.D. Clearance should be calculated on the following lines:

Distance from underside of keel to top of ship's tie rod pedestal	31.51 m.
Draft, say	−8.35 m.
Distance from waterline to top of ship's tie rod pedestal	23.16 m.
Height of tide, say	+1.00 m.
Distance of top of ship's tie rod pedestal above A.C.D.	24.16 m.
Correction, A.C.D. to Seria Datum	+28.23 m.
Height of ship's tie rod pedestal above Seria Datum	52.39 m.
Allowance for pitching in swell waves	±1.00 m.
	51.39 m.
Range of heights of ship's tie rod pedestal above Seria Datum to	53.39 m.

This range must lie within the safe vertical operating limits of the loading boom, which is 50.40 m. to 53.70 m. above Seria Datum.

When connecting the loading arms it is necessary to first haul down the boom rapidly in order to bring the base of the tie rod hood within the retarding section, i.e. to less than 55.90 m. above Seria Datum. A clearance of about 2.00 m. should then be maintained between the base of the tie rod hood and the top of the ship's pedestal before commencing the final stage of the haul down. In the example shown in this section the base of the hood would be brought down rapidly to a point about 55.5 m. above Seria Datum.

NOTE: The water depths given in these sections are derived from the sweep survey of the berth and its approaches published in a survey sheet dated 22.8.72. They should be checked against subsequent surveys.

HEALTH: A detailed shipping report has to be completed for the Brunei Government Marine Department. Agent will provide the forms for completion.

If the vessel comes from an infected port or its state of health is suspect, the Medical Officer may board in order to inspect crew and relevant International Medical Certificates.

RADIO: *Arrival Advice:* Confirm ETA at least 48 hours in advance, also declaring Bill of Health and estimated cooldown time required. W/T traffic should be passed through Singapore Radio, and addressed to Crosfield Kualabelait.

When within range, vessels are requested to make direct W/T contact with Brunei Shell Petroleum Company (call sign BSP ONE) at the following local times (GMT plus 8 hours) 0945 hrs., 1345 hrs. and 1745 hrs. B.S.P. will transmit on 8558 kHz call sign BSP ONE and listen out on 8354 kHz to 8374 kHz.

When contact is made on this frequency a standard information cable will be transmitted to the ship.

VHF: A VHF station at Seria (call sign BSP ONE) maintains a continuous watch on Channel 16 with Channel 19 as a working channel.

A VHF Station (Port Control) at Lumut (call sign Lumut Control) maintains a watch from 12 hours before vessel's ETA, on Channels 9 and 73 as working channels.

TUGS: Not available.

BERTHING: This is an open sea berth situated approximately 4.5 km. offshore from the coastline in the vicinity of Seria.

Two mooring boats assist running moorings. Normal berthing approach is made from Westward or Eastward depending on weather conditions. As vessel enters berth confines, an anchor may be used underfoot to assist turning the ship.

Head wires and stern wires are run as required. Head buoys are each fitted with two quick release hooks to take the nylon tails of ship's mooring wires. Stern wires are made fast to quick release couplings fitted to the seaward end of the stern mooring nylons on the dolphins. After moorings have been passed, vessel is warped into position with the ship's stern loading platform directly under the loading arms on the gantry.

A loading platform, with loading gantry is situated approximately 2.6 miles offshore. A trestle supporting the loading lines runs from the platform to the shore in a direction 150°T. A branch trestle 380 ft. long runs 240°T from the main trestle, about 350 ft. inshore of the platform, to the Marine Flare. Ship moors stern to the loading platform, using three or four of the five head buoys, and four stern dolphins. Heading in berth is 000°.

The loading platform is connected to the shore by a trestle which carries the gas pipe-line. No facilities other than LNG and gaseous nitrogen are provided at the platform.

Design Concept: This is not an all-weather berth.

It has been designed so that the berth may be safely used up to the following limiting conditions:

Swell moderate (significant height 1.86 m.)
Wind speed 30 knots
Current velocity 0.5 knots
or
Swell slight (significant height 0.60 m.)
Wind speed 45 knots
Current velocity 1.0 knots.

The higher swells are normally experienced from directions between N.E and N.W. and the limiting current conditions occur with the current setting across the line of the berth.

Loading Platform: The loading platform carries the crane. It is protected on its North, East and West faces by a heavy defence structure designed to prevent damage to the loading platform in the event of a mismanoeuvre or mooring failure onboard the ship. No moorings are run to the loading platform.

Ship's Moorings: Nylon tails: 5×200 ft.×120 mm. diameter nylon rope tails of plaited construction with a leathered eye at both ends are provided for use on the forward wires at the Lumut berth. These are only for use at Lumut and should be fitted before arrival and disconnected after sailing. Five Mandel type connectors are provided for attaching the nylon tails to the 48 mm. mooring wires forward.

Navigational Aids: The berth is designed for day or night mooring and unmooring. Navigational lights are provided on the mooring buoys and on the trestle head.

Information from Shore Control: Arrangements have been made for Lumut Control and the Berthing Master to pass information on conditions at the berth to the ship. This will include:

the period and height of wave as measured in the berth locality;
the direction and rate of current;
wind force and direction;
tidal height;
latest weather reports, together with any information which Port Services Department may be able to provide from their experience as to changes in conditions likely to be experienced whilst the ship is at Lumut.

Additionally monthly tables showing predicted hourly tidal heights are prepared by B.S.P. and issued to ships.

MOORING: *First Line Ashore:* In accordance with standard practice, the 72 mm. diameter nylon rope from the nylon rope handling winch will generally be used as the first line to the head buoy and the first line to a stern dolphin.

Additional Moorings: The basic mooring system, without the doubling up of head or breast lines, is, in fact, designed to hold the ship in the berth provided that all equipment is in a defect-free condition and provided that the wind, current and swell do not exceed the design limitations for the berth.

Emergency shut down and disconnection systems are provided to protect the loading system in the event of a mooring failure of if the manifold reaches the edge of the loading crane envelope due to the elongation of the stern ropes under load. Under the present state of knowledge, it must be recognised that mechanical or material failures can occasionally occur in mooring systems while, pending the results of further current observations, there may be a possibility of a current running across the berth at times at a rate exceeding 1 knot.

The primary consideration is to ensure that the ship does not contact the defence around the stern loading platform as a result of a failure in the head mooring system. For this reason, the head rope is to be doubled by using the forward 48 mm. wire from either the port or starboard mooring winch on the forward mooring deck. Two 48 mm. main moorings with nylon tails will thus be run to the head buoy.

Additionally, if there is any doubt as to the good condition of winch brakes or of a main mooring and if such defect cannot be corrected prior to berthing, it will then be for the decision of the Master in consultation with the Port Services Department, BSP, whether to:

(a) Delay the ship to effect repairs.
(b) Delay the ship until weather, current or swell conditions improve.
(c) Berth the ship with the added security of additional moorings.

In reaching this decision, account must be taken of weather forecasts, observed current, winds and waves and the local estimation as to likely changes in these conditions during the loading period.

Any defects in mooring equipment must be reported promptly to Port Services Department, BSP.

In that some uncertainty still exists as to whether currents in excess of 1 knot may be experienced at times running across the berth, the observed set and drift of the current should be checked with Port Services Department, BSP, prior to berthing. Unless there is clear evidence that the rate of the prevailing current can be expected to remain below 0.5 knots, additional breast lines should be put out to hold against the currrent.

Particular attention should be paid to the warning contained in Admiralty Sailing Directions No. 31 regarding the increase in rate of currents associated with tropical revolving storms.

The additional breast lines forward are obtained by using either the port or starboard wire from the after drums of the two forward mooring winches.

Winch Brakes: Once the ship is moored, winch brakes *must be fully applied* thus ensuring that the designated holding power is obtained from the winch throughout the time that the ship is in the berth.

Attention to Mooring Whilst in Berth: Moorings should not normally require attention during the time that the ship is in the berth other than the routine checking of winch brakes.

It is important, however, to ensure that individual moorings do not become slack for any reason and should this occur the mooring should be tightened up to provide the initial tensioning required.

The Berthing Master will indicate any change in tensioning in after moorings which could lead to a significant displacement of the ship's loading platform relative to the crane.

If it appears that the ship is in danger of moving out of the loading envelope very careful account must be taken of the prevailing wind, current and swell before taking any corrective action. Loading must be discontinued and the loading boom disconnected.

Attempts should not be made to adjust moorings against a high load which may approach the heaving power of the winch.

Preparation for Leaving Berth: This is not an all-weather berth and conditions will arise where it is necessary to vacate the moorings due to deteriorating wind, swell or current conditions. A careful check must be kept on conditions throughout the time that the ship is in the berth in conjunction with the Berthing Master and preparations made to leave the berth if the design limits for the moorings are being approached. It should also be realised that the mooring boat is limited to sea conditions of about 6 ft. height in operating and if this condition is exceeded, the boat may not be able to reach the head buoys and release the hooks.

Unberthing: Standard Manoeuvre: Having singled up fore and aft, the ship can then be released from the moorings and steam out between the head buoys on a suitable course.

Moorings at Discharge Berths: The ship will be moored conventionally at discharge berths using the main 6 in. mooring wires without nylon tails, the 4.5 in. back spring outfit and the ship's equipment of synthetic ropes as appropriate

LOADING: *Hoses:* Vessel loads through a special loading platform on the stern. The gantry supporting the loading arms is connected to the ship's loading platform by means of a tie rod. Loading/vapour/nitrogen arms and the tie rod are secured by quick release couplings.

Shore Line System: 2×18 in. LNG loading lines from shore to loading platform. LNG can be loaded through both lines, or circulated back to shore on one line. Shore lines lead to 2×16 in. liquid loading lines in loading arms. A further line leads vapour back from ship's manifold to Marine Flare, while a fourth line, the hybrid, may be used either for liquid/vapour return as required. A nitrogen supply line (shore to ship) is also included in the loading arm system.

Ship to shore communication during loading is by direct telephone.

During loading operations, an Emergency Shut Down System (ESDS) operates to stop cargo and disconnect loading arms safely in the event of an emergency.

Berthing/Loading Master stays on board during loading operations.

DENSITY: 1020–1025.

FRESH WATER: Not available.

FUEL: Not available. Bunkers can be obtained at Lutong (Miri).

REPAIRS: Small emergency repairs may be carried out in Brunei Shell Petroleum Company's workshops. Request for repairs should be made in advance by radio.

TIME: Local time is GMT plus 8 hours.

SHORE LEAVE: Not permitted.

GENERAL: *Special Regulations:* The Brunei national flag should be flown during hours of daylight.

The ship's main radio transmitters must not be used whilst the vessel is moored at Lumut.

Immobilisation of Engines: Vessels are not permitted to immobilise main engines whilst at the berth.

Stores and Laundry Facilities: Not available.

Tank Cleaning and Dirty Ballast Facilities: Not available.

AGENCY: Agent for all Shell Owned and Chartered vessels calling at Lumut is Harrisons & Crosfield, Jalan Sungei, P.O.Box 16, Kuala Belait, Brunei. *Cable Address:* Crosfield Kualabelait.

MUARA PORT: 05.01 N. 115.04 E. (See Plan Book)

PORT LIMITS: The sea area within Lat. 4° 58′ N. and 5° 05′ N. and Long. 115° 03′ E. and 115° 10′ E.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
2 Dangerous Goods Lists.
2 Manifests (plus 1 additional copy for Port Department).
1 Health Document.

PILOTAGE: Application for Pilot 24 hours in advance by telegraph through ship's Agents. Pilot boat awaits at Beacon No. 1, Lat. 5° 03′ 39.9″ N., Long. 115° 06′ 06.3″ E. Pilot boat painted white with green awning. If on arrival No. 1 Beacon pilot boat not visible then ships should call "Muara Harbour Radio" on VHF Channel 16. Pilotage compulsory and available daylight hours only. Vessel should anchor in vicinity of No. 1 Beacon when awaiting Pilot.

ANCHORAGES: Safe anchorages available vicinity No. 1 Beacon, S.E. of Tanjong Sapo Light (Lat. 4° 59.7′ N., Long. 115° 07.6′ E.) and in Muara Harbour 4 cables S.S.W. of the wharf.

RESTRICTIONS/MAX. SIZE: Entrance to Muara Harbour restricted to daylight hours only at present. Minimum depth in dredged channel 32 ft. ACD. Max. length of vessel 600 ft.

RADIO: See "Tanjong Salirong".

VHF: Ports Department VHF Channels 11, 12, 13, 14 and 16 in operation Mondays to Thursdays and Saturdays from 0745 to 1630 hrs. local time. Call sign "Muara Port".

RADAR: No port radar service available.

TUGS: A Government owned tug is available to assist with berthing and unberthing ships. The tug has a 20 ton bollard pull, firefighting equipment and oil pollution dispersal equipment.

BERTHING: Marginal wharf 1,400 ft. long with depth 32 ft. ACD alongside. Inner Berth 285 ft. long with depth 17 ft. ACD alongside. Mobile shore cranes available up to 30 tons capacity.

STEVEDORES: Provided by ship's Agents. Major commodities are general cargo and cement, oil well cement, tubulars, machinery and vehicles.
MEDICAL: Hospital available 16 miles from port. Port Health Clinic outside port main gate.
DENSITY: Salt water.
FRESH WATER: Readily available at wharf, cost Brunei $4 per 1,000 gallons.
FUEL: High speed diesel available in small quantities.
CONSULS: There are several Consulates, Embassies and High Commissions in Bandar Seri Begawan.
REPAIRS: Minor deck and engine room repairs possible.
DRY DOCKS: None.
SURVEYORS: Lloyds and American Bureau are represented.
GANGWAY/DECK WATCHMEN: Not compulsory but available through Agents on request.
HATCHES: Opening and closing by crew or stevedores at ship's option.
CARGO GEAR: Loading/discharging normally effected by ship's gear but 30 tonne capacity mobile crane available from Ports Department on request. Slings, nets, tarpaulins, 30 ton capacity low loader and container platform trailer available from Ports Department.
REPATRIATION: There is no Shipping Office but ship's articles are countersigned by the Director of Marine on request.
AIRPORT: International airport 12 miles from port. Regular services to Singapore, Hong Kong, Manila, Kuala Lumpur, Bangkok, Sydney and direct flights once weekly to United Kingdom.
TIME: Local time is GMT plus 8 hours. No alterations in clocks throughout year.
POLICE/AMBULANCE/FIRE: Police 72333 and 22366. Ambulance 22366. Fire 72255.
TELEPHONES: Available onboard with prior arrangement with Telecoms Dept.
SERVICES: Diver available, cold store facilities available.
SHORE LEAVE/IDENTIFICATION CARDS: After clearance inwards Crew members are allowed ashore if in possession of discharge book, identity card or passport.
BANKS:

Bank of America NT & SA, Suri Building Jalan Tutong, P.O.Box 2280, Bandar Seri Begawan. Telex: BU 2235.

The Chartered Bank, 145 Jalan Chevalier, P.O.Box 186, Bandar Seri Begawan. Cable: Chartbank.

CitiBank N.A., 147 Jalan Chevalier, P.O.Box 2209, Bandar Seri Begawan. Telex: BU 2224.

EMERGENCY CO-ORDINATION CENTRE: S.A.R. Control Berakas, Telephone BSB-32777.
STORING: (See "Prelims" page viii).

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. Import goods on arrival to be deposited in Customs Warehouse or depending on quantity and weight may be stored outside warehouse. Dangerous goods are not to be stored in warehouse except with Customs approval.

Export cargo to have Customs Declaration approved before storing onboard ship.

6. Yes, but requires supervision.

HOLIDAYS: Hari Raya Puasa, Hari Raya Haji, Chinese New Year (all dates moveable) Christmas Day. Work can usually be arranged on all holidays with exception of Chinese New Year when direct delivery to vehicles only available.
AUTHORITY: *Land Side:* Controller of Ports, Ports Department, Muara, Brunei. *Tel:* 72240, 72220. *Cables:* Ports Brunei.

Marine Side: Director of Marine, Marine Department, Bandar Seri Begawan, Brunei. *Tel:* 22294.

SERIA: 04.43 N. 114.19 E. (See Plan Book)

LOCATION: Seria is an open sea berth port. At present 2 SBM's are in operation located approximately 5.4 miles off the coast in the following positions:

SBM 1: Lat. 4° 42′ 51″ N. Long. 114° 18′ 53″ E.
SBM 2: Lat. 4° 42′ 50″ N. Long. 114° 19′ 44″ E.

WARNING: Due to numerous drilling structures in this area Masters are requested to give them a wide berth.
FLAGS: The Brunei National Flag should be flown during hours of daylight.
DOCUMENTS: *Papers Required On Arrival:*

6 copies of the Crew List. If the vessel is stemmed for Japan, 6 extra copies are required from non Japanese flag vessels.
International Maritime Declaration of Health.
2 Vaccination Lists on the first visit and subsequently a single updated List.
Last Port Clearance.

The boarding clerk will supply and prepare the following documents for the Master's appraisal and signature:

Marine Shipping Report. The form will be completed by the boarding clerk who will need to see the ship's papers.
Quarantine Entry Declaration Form.
Inward Manifest.

Departure: Bills of Lading will be completed by the Berthing Master before the vessel sails. This is done while disconnecting the cargo hoses, normally no delays are experienced.

PILOTAGE: The Berthing Master and Mooring Assistant board incoming vessels 2 miles North of the SBM.

Masters are requested to provide a good lee for the launch to facilitate the boarding and lifting of radio sets and mooring equipment.

The pilot ladder must be in good condition, fitted with spreaders, be properly rigged and secured, adequately lit at night and well clear of the ship's propellers. When the accommodation ladder is used it must be rigged well clear of the water with a pilot ladder below to gain access to the main ladder.

Crew members must be in attendance at the ladder head where a lifebuoy and clean heaving line should be sited.

The Pilot should be met at the ladder and escorted to the bridge. The Berthing Master and Mooring Assistant remain on board throughout and will require accommodation during the vessels stay.

APPROACHES: *Approaches to the berth and anchorages:* (See Plan).

There are many oil field production structures off the coasts of Sarawak, Brunei and Sabah coupled with a large amount of exploration and drilling activity. These field structures both surface and subsurface pose a hazard to navigation and Masters are advised that they should give all these activities and fields a good wide berth.

ANCHORAGE: A tanker anchorage (B) ("See Plan") is located approximately 3 miles North of the SBM berths in the area contained within the following limits:

Lat. 4° 45′ N. and 4° 47′ N.
Long. 114° 17′ E. and 114° 19′ E.

Tankers should not anchor in any other locations due to the presence of many submarine pipe-lines throughout the oil field and adjoining areas.

RESTRICTIONS: No port restrictions.
MAX. SIZE: SBM 1: 313,000 d.w.t. max. draft: 62 ft.
length between bow and manifold max. 680 ft.
SBM 2: 200,000 d.w.t. max draft: 57 ft.
length between bow and manifold max. 540 ft.
HEALTH: *Customs and Health Requirements:*

A detailed shipping report has to be completed for the Government Marine Department. Agent will provide the forms for completion.

If the vessel comes from an infected port or its state of health is suspect, the Medical Officer may board in order to inspect the crew and relevant International Medical Certificates. Customs Officers do not normally board incoming vessels but may do so with the Agent.

RADIO: *Information Required Prior to Arrival:*

Radio Advice: Confirm ETA at least 48 hours in advance also declaring state of Health, Master's name, number of crew, destination, and quantity of cargo required.

This data is used to obtain the vessel's "Seria Port Clearance," in advance.

W/T Traffic should be passed through Singapore Radio, and addressed to Crosfield, Kuala Belait or Borneo Kuala Belait (Agents) as appropriate.

The Agent will pass ETA's to the BSP Marine Department and to Seria Oil Terminal.

Vessels making their first call at Seria port will receive a comprehensive message from the Agent describing the location of the anchorage and information on pilotage, radio stations and papers required on arrival.

When within range, vessels are requested to make direct W/T contact with Brunei Shell Petroleum Company (Call sign "VSL-1" or Brunei Shell Radio) at the following local times (GMT + 8 hrs.) 0945 hrs. to 1020 hrs.; 1345 hrs. to 1420 hrs.; and 1725 hrs. to 1820 hrs.

BSP will transmit on 8558 kHz, call sign Brunei Shell Radio, and listen out on 8354 to 8374 kHz. When contact is made on this frequency a standard information cable describing necessary derrick and mooring arrangements will be transmitted to the ship by BRUNSHELL.

The ship's radio station must not be used whilst the tanker is moored to the SBM.

Agent:

The Agent's launch is equipped with a VHF radio and a single side band radio transmitting on 4400 kHz. and 5923.5 kHz.

Agent boards arriving vessels from morning to about 2100 hrs.

VHF: A continuous watch on Channel 16 is maintained both by Brunei Shell Radio and by Seria Terminal. Vessels should contact either of these stations as soon as practicable, passing her latest ETA at Seria Pilot Station. While berthing, Channel 13 is normally used to communicate between bridge, mooring boat and forecastle.

Brunei Shell Radio uses Channel 19 as working Channel and can link the ship with the Agents through the Government telephone system.

TUGS: Available in emergency only.
BERTHING: Berthing and unberthing is carried out night and day.

Mooring can usually be safely carried out in sea/swell heights of between 6 ft. and 8 ft., operations are normally suspended if heights are in excess of 8 ft. The operation however is governed by the mooring boat performance in the sea conditions prevailing at the time.

Wind speeds in excess of 20 knots make it difficult to prevent the "bow falling off" when on final approach. Berthing operations are as a rule suspended when wind speeds exceed 25 knots. Again this is governed by the mooring boat performance and the ships handling characteristics.

Tanker Moorings: Tanker moorings from the buoys comprise of two 12 in. circumference two-in-one braided nylon endless grommet type mooring ropes complete with Dunlop type floating sleeves. They have a soft eye to each end, both ropes being 150 ft. long and have a breaking load of 396 tons when new. Fairlead chafing chains with triangle connecting plates are attached to the tanker end of the moorings. Each chain is 25 ft. × 3 in. diameter stud link chain constructed of special quality U2 grade steel. Incorporated within the chain is a further connecting triangle plate for larger tankers.

A 10 in. circumference × 40 ft. polypropylene pick up rope is shackled to the end connecting triangle plate, the free eye of the rope being buoyed off for easy recovery by the mooring launch ("See Plan").

The buoy end of the 12 in. circumference nylon mooring ropes are pinned into a twin triangle plate which in turn is secured to lugs on the revolving turntable by short lengths of chain and connecting shackles.

Mooring Equipment: Two portable UHF radios for ship/shore communications during loading are passed to the tanker when the Berthing Master boards approximately 2 miles North of the buoy. If required, for vessels without suitable patent mooring brackets, mooring equipment consisting of two 15 in. circumference two-in-one braided single type nylon snotters 80 ft. long, with forelock shackles for connecting to the triangle plates are lifted on board the tanker with the ship's derrick from the lee side. In good conditions the equipment is normally taken directly onto the forecastle from the mooring boat, a ship's mooring rope being lowered to the boat and the snotters shackled to the end of it.

The mooring equipment is set out on the forecastle head during the tanker's approach to the SBM.

The snotters must be so placed to be clear of any structure and other forecastle gear and equipment that may cut or damage these nylons ("See Plan").

LOADING: The starboard derrick should be rigged to lift a minimum of 7 tons and the crew ready forward with a ship's mooring rope to take the mooring equipment.

Two 16 in. hoses will be connected by the ship's crew after the vessel has completed mooring.

Load-on-Top: Unless the vessel has other instructions then the "Load-on-Top" system applies.

Slops *cannot* be accepted ashore.

Position of Hose Connections: Starboard side amidships, in this area tankers lying at SBMs tend to swing away from the hoses, during changes of tide.

Hose derrick should be rigged to lift at least 7 tons and the vessel to have the appropriate reducers fitted to take standard 16 in. manifold hoses 150 ASA. Hose connection and disconnection is carried out by the ship's crew.

Pipe-lines and Floating Hose Strings

Pipe-lines: 2 submarine sea lines are laid from the terminal to the buoys. A 32 in. line, 33,000 ft. long to No. 1 buoy and a 24 in. line 32,200 ft. long to the Eastern plem of SBM No. 2.

A 24 in. crossover line 5,500 ft. long joins the "T" piece connection situated 4,100 ft. from SBM No. 1 plem to the Western plem valve on No. 2 SBM. All lines are concrete coated and cathodically protected with aluminium anodes.

The main sea lines terminate at "T" piece manifold plems. 75 ft. and 66 ft. from the vertical axis of the buoy on SBM No. 1 and No. 2 respectively.

Two underwater hose strings in "Lazy 'S'" configuration connect the manifolds to the underbuoy flanges. No buoyancy tanks are fitted on these strings.

Connected to the buoy turntables are 2 floating hose strings of 885 ft. in length for SBM-1 and 785 ft. for SBM-2.

Floating hose strings are electrically continuous except the tail end hoses, which isolate the cathodic protection of the SBM from the tanker.

Spare hoses are held in stock to increase the length of the strings to accommodate VLCC tankers should these be programmed for Seria Terminal.

Either floating hose string can be isolated to allow loading through 1 hose, by closing the butterfly valves sited on the buoy turntable.

CARGO PARTICULARS: Crude Oil and BNGL Liquid only

Approximate API and SG's at Loading Temperatures.

Seria light export blend	API 36 at 60°F	SG 0.8348 at 83°F.
Champion export	API 24 at 60°F	SG 0.9100 at 83°F.
BNGL	API 52 at 60°F	SG 0.7711 at 83°F.
BLSB	API 34 at 60°F	SG 0.8566 at 83°F.

These figures are subject to change.

Approximate Loading Rates:

SBM I Champion export 5,000 cu.m./hr. and SLEB 5,000 cu.m./hr.
BLSB 5,000 cu.m./hr.

SBM II Champion export 3,500 cu.m./hr. BLSB 3,000 cu.m./hr.
SLEB 3,500 cu.m./hr. BLSB 3,500 cu.m./hr.

Ships are required to load cargo as rapidly as possible in accordance with the terms in their Charter Parties. They are expected to load as fast as Seria Terminal can supply or they can safely receive. The question of how fast a ship may load is the responsibility of the Master having regard to his Owner's instructions and Charter Party and experience of his crew.

Loading is controlled by portable UHF radio sets taken on board with the Berthing Master. Incorporated in these sets is an emergency shut down button which when activated stops all the shore pumps. During loading, four hourly figure comparison checks in long tons are required to ensure no subsea leaks develop undetected.

DIRTY BALLAST: There are no tank cleaning or dirty ballast facilities. All ships must arrive with clean ballast, pumps and lines. Pollution in any form cannot be accepted.

MEDICAL: In cases where medical attention is required then the Agent will arrange for the patient to be taken by launch and car to the hospital. This journey involves a 40 minutes launch ride to an open sea landing stage which can only be used in fair weather. Otherwise the patient must be taken to Kuala Belait (1 hour 10 minutes by launch) where there is a possibility of delays due to tidal and weather restrictions. Unless absolutely necessary this option is not recommended.

In cases of emergency involving, serious injury or illness the Berthing Master or Brunei Shell Radio can initiate Brunei Shell Petroleum Company "Medivac Procedure". Representation of the patients, remains with the Agent, who should be informed immediately to contact customs and immigration authorities.

REPAIRS: Small emergency repairs to Shell owned and chartered vessels only may be undertaken at the Brunei Shell Petroleum Company workshops. There is a small yard at Kuala Belait which also undertakes repairs.

DENSITY: Varies 1020 – 1025 depending on season and rainfall.

FRESH WATER: Not available.

FUEL: Bunkers are not available at Seria. They can however be obtained at Miri (Lutong).

Fuel oil bunkers (100 sec Redwood) max. draft 44 ft.
Diesel fuel bunkers ....max. draft 41 ft.

Three days prior notice is required.

AIRPORT: At Bandar Seri Begawan.

REPATRIATION/JOINING: Crew members leaving or joining vessels at Seria require a valid travel document for travelling through Brunei State from the airport to Kuala Belait or vice-versa. However, the Seaman's Book may be used in lieu of a Passport by all Nationalities that have ratified the ILO's (International Labour Organisation) Convention.

Crew to be repatriated from Seria have their travel documents endorsed in Kuala Belait before travelling to Bandar Seri Begawan International Airport. The Immigration Office in Kuala Belait is open during normal office hours on Monday to Thursday and Saturday. Crew arriving ashore on Friday and Sunday stay overnight in Kuala Belait. There are two morning flights daily and additional evening flights from Thursday to Sunday to Singapore for destinations worldwide.

Two flights a week are scheduled for Bangkok and Hongkong.

TIME: Brunei keeps local time of GMT + 8 hours.

SHORE LEAVE: No shore leave is allowed.

WEATHER: The area is affected by squalls associated with cumulonimbus and thunderstorms. These squalls, though not isolated can be very severe and peak gusts of 75 knots are not uncommon. This peak gust is brief and settles to between 25-40 knots. All squalls are accompanied by torrential rain.

SAFETY: *Safety Regulations:* As per International Oil Tanker and Terminal Safety Guide (ISGOTT).

Smoking is only permitted in two places jointly approved by the Master and Berthing Master.

One man must be stationed on the forecastle to watch the buoy throughout the time the vessel is moored to ensure the vessel does not approach the SBM.

Engines must be kept available at all times.

Brunei Shell Petroleum Company Limited reserves the right in the event of flagrant and continued disregard of safety requirements by any ship to stop all operations and order the vessel off the berth for appropriate action to be taken by Charterers and/Owners concerned.

GENERAL: *Refuse:* No garbage, rubbish or refuse may be thrown overboard while the vessel is in Brunei Waters.

Stores and Laundry Facilities: None.

AUTHORITY: Brunei Shell Petroleum Co. Ltd., Seria, State of Brunei. *Tel:* Pan-O 37-3999. *Telex:* Bu 3313. *Cables:* "Brunshell" Seria. *Contact:* Captain P. Gill, Marine Department.

TANJONG SALIRONG: 04.53 N. 115.06 E.

The log-loading anchorage at Tanjong Salirong is situated 12 miles above the Outer Bar at the mouth of the Brunei River. Vessels of up to 21 ft. draft may cross the bar at HW.

DOCUMENTS: *(a)* To be produced on arrival:

Marine Department
Boarding Report.
1 Crew List.
1 Passenger List.

Customs Department
2 Inward Manifests.
1 Crew List.
1 Passenger List.
1 Port Clearance.
1 Stores List.
1 Arms List.

Agents
2 Inward Manifests.
1 Crew List.
1 Passenger List.
2 Hatch Lists.
1 Arms List.

(b) To be supplied before ship's departure:

Customs Department
1 Outward Manifest.
1 Passenger List.
1 Crew List.
1 Export Declaration.

Immigration Department
1 Passenger List.
2 Crew Lists.

Vessels
2 Outward Manifests.
Port Clearance.

PILOTAGE: *Bandar Seri Begawan:* Pilotage is not compulsory. If a Pilot is required by a vessel proceeding to Bandar Seri Begawan a written request must be made at least 24 hours before ship is scheduled to arrive. This must include position where Pilot is required to embark (i.e. at Outer Bar or Sapo Point).

Muara Harbour: Pilotage is compulsory. Application for a Pilot for entering Muara Harbour must be made by written request at least 24 hours before arrival. Pilots board vessels in Brunei Bay at the Northern end of the entrance channel through Pelompong Spit.

Tanjong Salirong: Pilotage is not compulsory. If a Pilot is required for vessels loading logs at Tanjong Salirong then application must be made 24 hours in advance of arrival stating position where it is required for Pilot to embark (i.e. at Outer Bar or Sapo Point). A Customs Officer and Agent's clerk will proceed to Tanjong Salirong from Muara Harbour or Bandar Seri Begawan and will remain on board whilst vessel is loading, accommodation and food provided by ship. Stevedores and tally clerks provide their own food.

ANCHORAGE: Vessels entering Muara Harbour without berthing space will be anchored 5 cables S.S.W. of wharf. If so desired ships may discharge perishable cargo at anchorage into lighters. Consignees must make arrangements with Agent to obtain permission from Customs, who will provide a Customs Officer to attend to discharge.

HEALTH: *(a)* Immigration: Immigration Officer will board vessel and clear her inward after pratique granted by Port Health Authority. Immigration will require 2 copies of passenger lists and 2 copies of crew list. Vessels inward are cleared up to 2000 hrs. only.

(b) Quarantine: For vessels coming from outside State of Brunei, Port Health Authority will board on arrival at wharf or anchorage. Port Health Authority requires complete copy of Entry Declaration of Health and copies of passenger and crew lists.

RADIO:

State of Brunei
Notice to Mariners No. 9 of 1984
Brunei, North West Coast
Establishment of Port and Harbour Radio Station

Date: With immediate effect.

Details: Mariners are advised that a Port and Harbour Radio Station, call sign "VSL3" and in plain language "Muara Harbour Radio" has been established in the Marine Department Signal Station located at the main entrance channel to Muara Harbour in position:

Lat. 05° 02' 21" North Long. 115° 05' 20" East

and has been put into operation for the convenience and safety of port and harbour users with immedaite effect. Details of the radio equipment installed, hours of operation and operating procedures are as follows:

2. A listening watch is kept on VHF Hague Plan Channel 16, (156.8 MHz) radio telephone daily from 0745 hrs. until 1630 hrs., Brunei Time (GMT plus 8 hours). Working Channels are listed below:

International VHF
Hague Plan

Channel Number	*Channel Allocation*
Channel 16	Calling and Safety
Channel 11	Ship to Shore Working
Channel 12	Ship to Shore Working
Channel 13	Ship to Shore Working
Channel 14	Ship to Shore Working
Channel 8	Pilot and Tug Operations

3. A listening watch is kept on medium frequency radio telephone on 2182 kHz daily from 0745 hours until 1630 hours, Brunei Time.

Single Side Band radio telephone working frequencies are as follows:

Serial No.	*Frequency in kHz*	*Frequency Allocation*
1	2222	Shore to Ship Working
2	2767	Shore to Ship Working
3	4170	Shore to Ship Working
4	6445	Shore to Ship Working
5	8065	Shore to Ship Working
6	12016	Shore to Ship Working
	16112	Shore to Ship Working

4. Additionally, the following equipment is available to assist ships in distress and with Search and Rescue operations:

4.1 Auto Alarm equipment guarding the wireless telegraphy distress frequency of 500 MHz which is triggered by the first 4 dashes of the International Distress Signal consisting of 12×4 second dashes with a 1 second interval between each dash.

4.2 Auto Alarm equipment guarding the radio telephone distress frequency of 2182 kHz which is triggered by the 2 tone alarm signal transmitted over a period of a least 30 seconds but not exceeding 1 minute.

4.3 A listening watch is kept on the radio telephone aircraft distress frequency of 121.5 MHz daily from 0745 hrs. to 1630 hrs., Brunei Time.

4.4 Radio Direction Finding equipment is available to automatically determine the bearing of a distress signal on wireless telegraphy 500 MHz, radio telephone 2182 kHz, VHF radio telephone Channel 16 (156.8 MHz) or VHF radio telephone 121.5 MHz.

Charts Affected: B.A. No. 2134 and 2109.
Authority: Director of Marine.
Reference: MB 35/200/83 (68).
Date: 11th February, 1984.

STEVEDORES: Stevedoring is in the hands of contractors who supply gangs as required. Working hours are 0730 hrs. to 1215 hrs., 1315 hrs. to 1600 hrs., 1900 to 2300 hrs. (overtime). Overtime is usually worked from 1900 to 2300 hrs., permission to work overtime is required from the Customs Department. No tally clerks available. All tallies to be made by ship's own tally clerks.

MEDICAL: Government General Hospital is situated in Bandar Seri Begawan 16 miles from Muara Harbour. General Hospital is well equipped with facilities to carry out normal surgery. Inoculations and vaccinations given free of charge.

FRESH WATER: Can be supplied from the wharf at Muara Harbour and Bandar Seri Begawan. No fresh water is supplied at Tanjong Salirong. No water-boat in State.

FIRE PRECAUTIONS: Fire-floats are stationed at Fire Brigade sub-station near Customs sub-station in Bandar Seri Begawan. A Government tug with fire fighting capabilities is stationed at Muara Harbour.

CONSULS: There are several Embassies, Consulates and High Commissions in Bandar Seri Begawan.

HOLIDAYS: The Brunei Government working days are Monday to Thursday and Saturday. Friday and Sunday being holidays. Application must be made to Customs for working on Friday and Sunday and other public holidays. Brunei being a Muslim State, insists on strict observation of all Muslim rites such as The Sultan's Birthday, Har Raya Puasa, Hari Raya Haji, etc. Chinese New Year is also observed.

POLICE/AMBULANCE/FIRE: Emergency telephones numbers are:

From	*Fire*	*Ambulance*	*Police*
Bandar Seri Begawan	22555	22366	22333
Muara	72255	22366	72333

AUTHORITY: The Director of Marine, Marine Department, H.M. Customs Building, Bandar Seri Begawan, Brunei.

NOTES

Please also advise Shipping Guides Ltd.

Bulgaria

BOURGAS: 42.30 N. 27.29 E.

Well protected port at inner end of Bourgas Bay, with good roads, anchorage.

DOCUMENTS:

Master's Declaration.
Cargo Plan.
Custom's Manifest.
Charter Party.
Derat Certificate.
Health Condition Certificate for Crew Members.
Manifest and Consignment of Cargo.
Provision List.
Crew Lists.
Passenger List.
Crew Passports.

PILOTAGE: Pilotage in Inner Roads compulsory for vessels above 100 g.r.t. Application for Inner Roads Pilot must be made to Agents "Inflot" at least 2 hours prior to arrival (if incorrect ETA given – pilotage fee is doubled).

Outer Roads pilotage not compulsory. Vessels requiring Outer Roads pilotage must advise Agents "Inflot" at least 12 hours before time required and give position of required pick-up point.

Applications for Pilot should include Nationality and call letters; gross tonnage; date (2 figures); time (4 figures) when Pilot required; draft in metres (4 figures).

APPROACHES: Through fairway, depth of channel 29 ft. 6 in. LW.

ANCHORAGE: Outer Roads. Vessels anchored must keep close watch on Roads Signal Station for orders given by flag or signal lamp. Vessel ordered by Authorities to proceed to position Lat. 43° 39′ N., Long. 27° 56′ E., for clearance and Pilot.

RESTRICTIONS: Arrival and sailing from Western Port and Fish Port day and night.

RADIO/VHF: Bourgas 500 kHz. Port control VHF Channels 16 and 10. Pilots VHF Channel 14.

TUGS: Available and compulsory for vessels over 1,000 g.r.t. Tugs join vessels in the Roads. Tugs lines used.

BERTHING: Compulsory piloting for vessels over 50 g.r.t. Container handling facilities available. 2 berths available for bulk carriers, 11 berths for general cargo ships. No specialised berth for passenger vessels, conventional berth can be provided with 5 days notice.

CRANES: Berths are equipped with electrical portal cranes with capacity from 3 to 32 tons. 100 ton capacity floating crane available.

STEVEDORES: Available. Liner ships and chartered vessels on liner terms are obliged to use stevedore and tallyman service.

MEDICAL: All facilities available.

TANKERS: Oil port Drujba. Height of quay 2 m.

Berthing: At the S.W. corner of the Bay there are 2 "T" shaped berths, max. depth 40 ft. There are mooring dolphins for vessels length 250 m.

There is an additional tanker berth for vessels loading only, to the South of the "T" shaped berths, depth 30 ft.

Discharging: 2 × 8 in. hoses are connected to the pipe-line on the catwalk. Discharge rate 1,800 to 2,000 t.p.h. depending on the back pressure. The height limit of the hoses is about 54 ft. above sea level. The berth is protected from the prevailing N.E. wind.

Report received 1977 states that the max. draft is 39 ft. – no length limitation. Max. draft at the Product Berth (gas oil) is 23 ft.

DENSITY: 1012 – 1014.

FRESH WATER: Available through hose hydrants or ex-barge. 24 hours notice required.

FUEL: From VTO "Transimpex" Tel: 45751. 72 hours notice required, diesel and gas oil available, also Shell and Castrol lubricants.

FIRE PRECAUTIONS: Constant day and night duty, and direct telephone connection with port fire service.

GANGWAY/DECK WATCHMEN: Vessels in Roads not permitted to have gangways down. Vessels alongside quay with lowered gangway must have manropes, safety net, life-buoys with rope of at least 30 m. length attached, an Officer on duty at the gangway and must be lit at night.

OPENING/CLOSING HATCHES: According to charter party.

CERTIFICATES:

Construction
Safety Radio
Classification
Hull and Machinery
Load-line
Cargo gear

CUSTOMS ALLOWANCES: Tobacco – 2 packets per crew member per day. Wines/spirits – for Master, as required, for crew – 1 opened bottle. No limits on board, no seals, crew are allowed to take 1 or 2 packets of cigarettes ashore.

IDENTIFICATION CARDS: Required. Crew members are given shore passes.

CONSULS: Turkey.

REPAIRS: Small repairs only.

DRYDOCKS: Floating dock with capacity 3,000 d.w.t. available.

REPATRIATION: Can be fulfilled if necessary. Replacement of crew by Bulgarian nationals is possible.

AIRPORT: Internal and international flights.

SERVICES: Tank cleaning and removal of sludge.

TELEPHONES: Captain of the Port Tel: 42293; Pilots Tel: 47128; Customs House Tel: 42301; Bulgarian Shipping Register Tel: 47132; Shipping Agency "Inflot" Tel: 45506.

SHORE LEAVE: Allowed.

REGULATIONS: Given to Master on arrival.

DELAYS: Possible while waiting for Pilot owing to bad weather or waiting turn for berth.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year (1st January); May Day (1st/2nd May); Day of Slavonic written language (24th May); Day of Freedom (9th/10th September); October Revolution (7th November). Time from 1300 hrs. on day before Sundays and Holidays until 0800 hrs. day after is non-working time, but loading and discharging carried out at overtime rates.

SHIPMASTER'S REPORT: (Vessel 107,023 d.w.t.).

Danger Area: Minefield area 43, see Nemedri.

Documents:

Bill of Health.
6 Crew Lists.
3 Stores Lists.
3 Personal effects Lists.
Ship's documents (Register, Certificates, etc.).
No money list required.

Upon arrival Master receives Port Regulations (re: watchmen, ratguards, stoppage of propeller, waste disposal, pollution, etc.).

Radio: Bourgas Radio, port control VHF Channels 16 and 10; Pilots VHF Channel 14.

Density: Average 1012.

Identification Cards: Crew members are given shore passes and are allowed ashore until midnight. Persons with long hair are refused passes.

Customs Allowances: No limits on board, no seals, crew are allowed to take 1 or 2 packets of cigarettes ashore.

Repatriation: No difficulties.

Airport: Daily flights to Sofia with connecting international flights.

Tugs: Seven available.

Anchorage: Vessel ordered by Authorities to proceed to position Lat. 43° 39′ N., Long. 27° 56′ E. for clearance and Pilot. After clearance vessel proceeded to Lat. 42° 40′ N., Long. 27° 49′ E. for lightening.

Lightening: Vessel required to be lightened to 39 ft. Tankers come alongside; they carry good rubber fenders and one 10 in. discharge hose. Discharge rate varies from 1,500 – 1,800 t.p.h. according to tanker's requirements.

Berthing: At the SW corner of the bay. There are two "T" shaped berths, max. depth 40 ft. Each berth consists of 3 platforms connected by a catwalk. Length of berth used was 125 m.There are mooring dolphins but the length of vessel is 259 m. so all lines were breast ropes and springs.

Discharging: Two 8 in. hoses are connected to the pipe-line on the catwalk. Discharge rate, 1,800 to 2,000 t.p.h. depending on the back pressure. The height limit of the hoses is about 54 ft. above sea-level. Vessels are required to ballast if necessary before reaching this level. The Berth is protected from the prevailing N.E. wind.

Dardanelles Entrance: (Canakkale, Turkey) Pilot station is at Seddulbahir. Call sign "Canakkale Pilot" VHF Channel 16. During Southerly gales Pilot boards close to Kanakkale Town.

Bosporus: North entrance, pilot station at Kavagi, Pilot boards off Dikilikaya Light. Call Pilot on VHF Channel 16.

SHIPMASTER'S REPORT: January 1984.

Arrival: Prior to arrival in Bougas Roads vessel may contact Port Control on Channel 16, shifting to Channel 11.

Anchorage: Port Control advise vessel that the anchorage limits are: Lat. 42° 28′ 18″ N. and Lat. 42° 27′ 30″ N. and Long. 27° 30′ 54″ E. and Long. 27° 29′ 48″ E.

Anchoring is not allowed North of this area.

The Agent, Doctor, Customs and Harbour Master come on board and clear the vessel at the anchorage.

Documents:

1 copy Health Declaration.
6 copies Crew List.
4 copies Personal Effects List.
4 copies Stores List
4 copies Money Declaration List of Crew.

Ship's documents (Register, Loadline, Safety Construction, Safety Equipment, Safety Radio, these documents are kept by the Harbour Master and returned before sailing).

VHF: Bourgas Port Control Channels 16 and 11; Pilot Channel 14, Bourgas Radio Channels 16 and 28.

Identification Cards: Shore passes are given to all crew members and any expired passport holders are not allowed to go ashore. Crew can stay ashore until 0400 hrs.

Customs Allowance: No limits and no seal made on board. Crew can take ashore 2 packets of cigarettes. If the vessel receives any Bulgarian money (Leva) from the Agent, the Money List must be handed to the Customs Office.

The doctor places under seal all meats from all countries, except chickens. Meats are not to be used during stay in port.

AUTHORITY: State Shipping Corporation, 17 Pauagurishte Street, Varna, Bulgaria.

Bourgas Port Complex, 8000 Bourgas, Bulgaria. *Tel:* 42293 (Port Director), 43140 (Harbour Master). *Contact:* C. Minkov, Port Director.

AGENT: State Shipping Agency "Inflot". Cables: "Bolinflot", Telex: 083 509, Tel: 45506, 42879.

PORTS IN THE AREA OF PORT BOURGAS

Port Nessebar: Situated on 18 miles North-eastern of Bourgas in the Bourgas Bay. Available 2 berths for passenger and other small ships with draft up to 19 ft.

VARNA: 43.12 N. 27.57 E.

Well protected port at inner end of Varna Bay.

DOCUMENTS:
Master's Declaration.
Cargo Plan.
Customs Manifest.
Charter Party.
Derat Certificate.
Health Condition Certificate for Crew Members.
Manifest and Consignment of Cargo.
Provision List.
Crew List.
Passenger List.
Crew Passports.

PILOTAGE: Pilotage in Inner Roads compulsory, but not compulsory for Outer Roads. Vessels requiring pilotage at Outer Roads must radio Agents "Inflot" 24 and 12 hours prior to arrival giving position of required pick-up point, also: name of vessel; nationality and call letters; g.r.t.; length; draft in metres (4 figures); date (2 figures); time (4 figures).

Pilot comes from Inner Port of Varna. In bad weather impossible for pilot boat to reach Outer Roads and vessel will be so informed by Agents "Inflot" and instructed to proceed to anchorage in Varna Bay.

Pilot boat is a patrol boat with yellow funnel and letter "P" on a blue strip and carries international recognition signals by day and night.

APPROACHES: Through fairway, depth of channel 39 ft.

ANCHORAGES: Outer Roads in area East of meridian 27° 56′ E., beyond fairways. Vessels anchored must keep close watch on Roads Signal Station for orders given by flag or signal lamp.

RADIO: Radio Varna LZW-500 kHz. LZW-4 – transmits 8607 kHz, receives 8447 kHz. LZW-5 – Transmits 13,078 kHz, receives 12,612 kHz. Port Control VHF Channels 16 and 10; Pilots VHF Channel 14.

TUGS: Available and compulsory for vessels over 1,000 g.r.t. Ship's lines used.

BERTHING: Compulsory piloting for vessels over 50 g.r.t. Depths at quays up to 31 ft. 10 berths available for general cargo vessels, 1 berth for containers and 3 berths for passenger ships.

CRANES: Berths are equipped with electrical portal cranes with capacity from 3 to 32 tons, also 100 ton floating cranes are available.
Container Terminal: Loading and discharging of 10 ft., 20 ft., and 40 ft. containers. The necessary specialized loading and discharging equipment is available.

BRIDGES: When proceeding to and from Varna Lake, vessels pass under the new Asparuhov Bridge (45 m. above the water level).

STEVEDORES: Available. Liner ships and chartered vessels on liner terms are obliged to use stevedore and tallyman service.

MEDICAL: All facilities available.

TANKERS: 2 berths, draft 30 ft. and 28 ft.

DENSITY: 1013.

FRESH WATER: Available through shore hydrants or ex-barge. 24 hours notice required.

FUEL: From VTO "Transimpex", tel. 22927, No. 3 N. Vaptzarov str. 72 hours notice required. Bunker "C", diesel and gas oil available. Lubricants: Shell and Castrol – 48 hours notice required.

FIRE PRECAUTIONS: Constant day and night duty and direct telephone connection with port fire service.

GANGWAY/DECK WATCHMEN: Vessels in roads not permitted to have gangway down. Vessels alongside quay with lowered gangway must have manropes, safety-net, life-buoys with rope of at least 30 m. length attached, an officer duty at the gangway and must be lit at night.

OPENING/CLOSING HATCHES: In accordance with charter party.

CERTIFICATES:
Construction.
Safety Radio.
Classification.
Hull and Machinery.
Load-line.
Cargo Gear.

CUSTOMS ALLOWANCES: Tobacco: 2 packets per crew member per day. Wines/spirits: For Master, as required, for crew – 1 opened bottle. No limits on board, no seals, crew are allowed to take 1 or 2 packets of cigarettes ashore.

IDENTIFICATION CARDS: Required. Crew members are given shore passes.

CONSULS: U.S.S.R., D.D.R. Poland, Czechoslovakia, Cuba.

REPAIRS: All kinds of repairs possible in ship-repair yard.

DRY DOCKS: Suitable for vessels up to 30,000 d.w.t.
Floating Docks: 2 floating docks with lifting capacity of 4,500 tons and 12,500 tons respectively.

REPATRIATION: Can be fulfilled if necessary. Replacement of crew by Bulgarian nationals is not possible.

AIRPORT: Internal and International Flights.

SERVICES: Tank cleaning and removal of sludge. Compass adjusting.

TELEPHONES: Captain of the Port 23479; Pilots 27023; Custom House 25532; Lloyd's representative 27167; Soviet Register 22651; Bulgarian Shipping Register 26122; State Shipping Agency "Inflot" 22669.

SHORE LEAVE: Allowed.

REGULATIONS: Given to Master on arrival.

DELAYS: Possible while waiting for Pilot owing to bad weather or waiting turn for berth.

TIME: GMT plus 2 hours (1st October – 1st April). GMT plus 3 hours (1st April – 1st October).

HOLIDAYS: New Year (1st January), May Day (1st/2nd May), Day of Slavonic written language (24th May), Day of Freedom (9th/10th September), October Revolution (7th November). Time from 1300 hrs. on day before Sundays and holidays until 0800 hrs. day after is non-working time, but loading and discharging carried out at overtime rates.

AUTHORITY: State Shipping Corporation, 17 Panagyurishte Street, Varna, Bulgaria. *Tel:* 26318, 26018, 28592. *Telex:* 077524. *Cables:* OVT. *Contact:* N. Yovchev, Director-General.

AGENT: State Shipping Agency "Inflot". Cables: "Bolinflot". Telex: 021516. Tel: 22669, 22636, 25924.

PORTS IN THE AREA OF PORT VARNA:

Port Varna-West: Situated 14 nautical miles from Port Varna. 7 berths available for bulk carriers, 3 berths for containers and 5 berths for general cargo vessels. Ships of max. 33 ft. draft proceed in one direction only, through 2 deep channels and Varna Lake between them, with limitation in speed up to 6 knots. A container platform for loading and discharging of 20 ft. containers and specialized loading/discharging equipment available.

Ferry-boat Complex: Situated 13 nautical miles from Port Varna, next before Port Varna-West. Two specialised berths for ferries with max. draft 26 ft. available.

Port Balchik: Situated 18 nautical miles North of Port Varna, for ships with max. draft 24 ft. 1 berth for bulk carriers available. Entering and leaving the port with a Pilot commencing from the Outer Roads of Port Varna.

Drujba (Port Topolly): Specialised port for wood materials. Situated on the Northern part of Varna lake, 8 nautical miles from Port Varna. 3 berths for ships with max. draft 26 ft., 21 ft. and 15 ft. available.

Port of the Termo-Electrical Station Varna: Specialized port for coal, situated on the West part of Varna Lake, 8.5 nautical miles from Port Varna. 2 berths for ships with max. draft 32 ft. available.

NOTES

Please also advise Shipping Guides Ltd.

Burma

RANGOON: 16.47 N. 96.15 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Crew and Passenger List.
Dangerous Cargo List, if any.
Customs Declaration for Crew and Ship.

PILOTAGE: Compulsory. The services of Assistant Harbour Masters are required to bring ships alongside.

Vessels bound for the port of Rangoon should make for the *Dagon* lightvessel (China Bakir) Lat. 15° 59.9′ N., Long. 96° 14.5′ E. and then proceed towards *Lanthaya* lightvessel. Vessels of 26 ft. draft and over should anchor off *Dagon* lightvessel due to insufficiency of depths at the pilot station at low water, and await instructions from the pilot vessel for embarking Pilot.

Vessels below 26 ft. draft may proceed direct to the pilot vessel for embarkation of Pilot.

The pilot vessel or its relief is normally cruising or anchored at Lat. 16° 11.0′ N., Long. 96° 19.6′ E. approximately 10 miles North of *Dagon* light vessel and approximately 2 miles East of Lanthaya Light Float and 42 miles from the Port of Rangoon.

ANCHORAGES: Specific areas of the port are reserved for special anchorages as follows:

(a) *Petroleum Anchorage* at Liffey Reach just below Syriam, accommodating two vessels.
(b) *Explosives Anchorage* below Admiralty Jetty near Chokey Point.
(c) *Small Craft Anchorage* at King's Bank accommodating 20 inland vessels and schooners, etc.

ETA: 48 hours advance notice of ETA required, confirmation to be made 24 hours later or one working day ahead of the ship's ETA to enable necessary arrangements to be made regarding Pilots. Information required in the advance notice are:

(a) ETA, *(b)* Fresh Water Draft, *(c)* Speed, *(d)* Gross tonnage, *(e)* LOA and LBP.

RESTRICTIONS: Generally on a flood tide between the time of LW water to HW at the pilot station, depending on ship's actual draft and speed in order to obtain sufficient depths at the Outer Bar.

Navigation day and night during river passage, but entry into Inner Harbour is normally restricted to daylight hours.

The Master Attendant regularly issues Draft Forecasts to all steamer Agents advising them of the drafts to be obtained within the next 2 months.

MAX. SIZE: The port is accessible to vessel of 540 ft. LOA, and draft up to 28 ft. at Spring tides. The draft of the vessel entering the river is controlled by the depth available at the Outer Bar, carrying 11 ft. depth at datum. Entry into the harbour is controlled by the Inner Bar off Monkey Point, carrying from 11 ft. to 12 ft. depth at datum. These depths are subject to seasonal variations and are least during the dry season from November to May.

HEALTH:

(a) Maritime Declaration of Health signed by the Master and also by a Ship's Surgeon if one is available.
(b) Valid Derating or Derating Exemption Certificate.
(c) Valid Vaccination Certificates against cholera and smallpox of crew and passengers (if a certified list of date of expiry of these Certificates is available, the issue of pratique will be expedited).
(d) Pratique is issued by the Medical Officer on duty, after examination of the crew and passengers of the ship. The pratique is automatic if the vessel arrives after touching other ports in the country. NO RADIO PRATIQUE IS ISSUED.
(e) Quarantine Clearance on sailing is essential.

RADIO: International single operator watch period for zone "C". Assigned frequencies are 425, 454, 468, 512, 500 kHz and 2.8, 4.26 MHz, call sign XYCZ.

In cases of inability to contact the pilot vessel by wireless the Master should send cable to the Harbour Master "Portrust" via Rangoon Radio Station, call sign XYR.

Within harbour limits contact can be made with Port Tower by light visual signalling. VHF contact can also be made with Port Tower, call sign XYU, Channel 16 (calling frequency). The working frequencies are Channels 14, 12 and 6 (Hague Convention).

BERTHING: There are 11 wharf berths and 2 pontoon berths for seagoing vessels:

Rice Loading Berths:

(a) *Sule Pagoda Wharf,* Berths Nos. 1 & 2 accommodating two vessels of 450 ft. each. LWOST varies from 24 ft. to 28 ft. approx.
(b) *Ahlone Wharf,* length 440 ft. accommodating a vessel of 440 ft. LWOST varies from 26 ft. to 28 ft. approx.
(c) *Hteedan No. 1,* length 456 ft. accommodating a vessel of 460 ft. LWOST varies from 26 ft. to 30 ft. approx.

General Cargo Berths:

Sule Pagoda Wharf Berths Nos. 3, 4, 5, 6 and 7 accommodating five vessels ranging from 450 ft. to 520 ft. LWOST varies from 24 ft. to 30 ft. approx. Berth Nos. 3 and 4 are generally reserved for coastal vessels.

Timber Export Berths:

Brooking Street Wharf: Berths Nos. 1 and 2, accommodating two vessels of 450 ft. each. LWOST varies from 26 ft. to 29 ft. approx.

Passenger Berth:

The Port Health Station. A Pontoon Jetty equipped with a large floating pontoon 500 ft. length and accommodating vessels of 520 ft. to 595 ft. LWOST varies from 25 ft. to 28 ft.

Moorings:

The port is equipped with 13 swinging moorings and 2 sets of fixed moorings in the Inner Harbour; 3 swinging mooring buoys at Hastings, and 2 fixed moorings for Oil Tankers. In addition, a number of mooring buoys are provided for small sized seagoing vessels.

Mooring and Berthing Procedure:

While in port, ships tie alongside wharves or moorings. The procedure is as follows:

(a) *Single Buoy Mooring* – Vessels moored with ships' own cable which is led through hawse pipe and shackled on to buoy cable. The shackle is provided by the Board.

(b) *Fixed Mooring* – Same procedure as above but the vessel is moored to 4 buoys.

(c) *Berthing* – Normal ship's ropes and wires are used for berthing at wharves. In addition wharves' mooring chains are also provided for securing to ship's bollards.

TUGS: Generally not used for mooring and berthing purposes, but available in emergency.

FUEL: Fuel, diesel and gas oil (HSD) from Myanma Oil Corporation. Fuel oil provided by barges of 150 tons to 180 tons capacity alongside vessel during daylight hours. Coal supplied by Government Trade Corporation No. 17.

FRESH WATER: Available either directly alongside the wharves or in midstream, delivered by water boats.

CARGO HANDLING EQUIPMENT: The heaviest lifting capacity of the port is a 40-ton crane at the Brooking Street Wharf.

Heavy packages may be landed or shipped by a vessel's own tackle at the wharves subject to prior notice being given to the Traffic Manager.

STEVEDORES: In two shifts of 0800 hrs. to 1600 hrs., and 2000 hrs. to 0400 hrs. Overtime work is arranged on special request from Agents. Stevedoring undertaken by Port Authority. To enable ship's Agents to order labour gangs in time, it is important to obtain in advance the accurate ETA of vessels. Latest time to order gangs is 1100 hrs. for booking for that night and the next day. For Sundays and Holidays bookings must be made before 1100 hrs. of the preceding working day.

GANGWAY/DECK WATCHMEN: Available on application to the Traffic Manager.

The working hours of a watchman are the same as the wharf working hours.

OPENING/CLOSING HATCHES: Undertaken by port labour.

REPAIRS: Deep-sea repairs are undertaken by Board's engineers. The "Setsan Dry Dock", a tidal dock owned by the Board, can take vessels up to 1,000 tons and 250 ft. in length.

The Sinmalaik Dry Dock can take vessels up to 2,000 tons and 300 ft. in length.

FIRE PRECAUTIONS: A special land-based Port Fire Brigade is maintained by the Port Authority supplemented by a fire-fighting vessel and tugs for emergencies in the river.

CONSULS: The following countries are represented by consulates or embassies at Rangoon:

Afghanistan
Algeria
Australia
Austria
Bangladesh
Belgium
Bulgaria
Ceylon
China
Cuba
Czechoslovakia
Denmark
Egypt
Finland
France
Fed. Rep. of Germany
German Dem. Rep.
Great Britain
Hungary
India
Indonesia
Israel
Japan
Kampuchea
Republic of Korea
Laos
Malaysia
Mongolia
Nepal
Netherlands
Nigeria
Norway
Pakistan
Philippines
Poland
Singapore
Thailand
U.S.A.
U.S.S.R.
Vietnam
Yugoslavia

POLICE/AMBULANCE/FIRE: Port Police 74520; Ambulance 008; Port Fire Brigade 78653.

TELEPHONES: Ship to shore telephones are available on request.

HOLIDAYS: Independence Day; Karen New Year; Union Day; Peasant's Day; Full moon of Tabaung; Resistance Day; Thingyan; Burmese New Year; Labour Day; Full moon of Kason; Full moon of Wazo; Martyr's Day; Thadingyut; Dewali; Tazaungdaing; National Day; Christmas.

Ships may work on Sundays and holidays on application to the Chief Traffic Manager and on payment of Sunday or holiday fees.

DEVELOPMENTS: Berths to be converted for container handling. Expected to be operational 1987.

SHIPMASTER'S REPORT: July 1978.

Approaches: Approach was from the Malacca Strait, in generally overcast and rainy weather. The last reliable fix obtained prior to picking up the Dagon Light Ship at 1330 hrs. on 6/7/78 was at 0530 hrs. on 5/7/78. From 1330 hrs. on 5th, 2° were allowed for Easterly set, apart from a 2-hour period on the 6th, when only the Compass Error was allowed. This would seem to indicate that an Easterly set was experienced, but it is possible that what actually occurred was that the vessel was set to the Eastward by the tide, from about 0900 hrs. on the 6th until the Dagon Light Ship was picked up. We sighted the Dagon at about the time and on about the bearing we expected.

The tidal information provided on B.A. Chart 823, although depending on observations obtained during the dry season, was most helpful.

On clearing the Rangoon River, shortly after HW Elephant Point, there was a slight South-Westerly tidal set, as one would expect. The departure Pilot provided the following information, which we were not able to check:

B.A. Chart 823: "Thuriya" Light Buoy is in position Lat. 15° 19′ N., Long. 95° 01′ E., and not as charted.

The two dangerous wrecks about 38 and 40 miles South of Thante Light are no longer dangerous.

B.A. Chart 833: The dangerous wreck between Upper Western and Upper Middle Buoys is no longer dangerous. We passed between the buoys without any difficulty, drawing 19 ft. 03 in., fresh water. The following is from our own observations: Upper Spit Buoy is now in approximate position 290°(T) – 7 cables from its charted position. All buoys, from and including Upper Spit Buoy to the berth, with the sole exception of "C.M.B." Buoy, were unlit.

Naturally, vessels do not transit this portion of the river during the hours of darkness. With the exception of Upper Spit Buoy all buoys, light floats and the light ship appeared to be in their charted positions. When crossing the bars and during the river passage very close attention must be paid to the steering. With a top-class helmsman who is really concentrating, little difficulty would be experienced. In order to carry the tide up to Rangoon, it is important that a vessel should arrive at the pilot station not later than HW Elephant Point; we were in fact 10 minutes late, and would not have continued except that we were fortunate enough to have the most senior Pilot on board.

It was noticed on departure that an inbound vessel giving an ETA at the pilot station 30 minutes after HW Elephant Point, was directed to anchor.

Anchorages: Vessels may anchor in the vicinity of the pilot station shown on B.A. Chart 823 or in the petroleum or explosives anchorages shown on B.A. Chart 833.

Berthing: Vessel was originally placed at a buoy berth, the anchor cable down the hawsepipe and shackled on to the buoy.

As we have a short length of cable inboard of each anchor with a joining shackle, this operation presented little difficulty but took considerable time.

When we were placed at the buoy, it was dark by the time the operation was completed, but if we had gone straight alongside this could have been done under twilight conditions. Neither the Pilot nor I could understand why the vessel was not berthed on arrival, since our berth was then vacant. The explanation I received was that the shore lighting was poor and that, as a safety precaution, ships are only berthed in full daylight.

At 0625 hrs. the next morning, we commenced unshackling from the buoy and the vessel was secured alongside No. 1 Berth, Sule Pagoda Wharf at 0805 hrs. We berthed starboard side to, stemming the ebb tide and river outflow. The buoy anchor remained hung off until after berthing. When berthing, the offshore anchor is placed in a convenient position to assist in getting the vessel off again. When alongside and the cable slack, we had 4.5 shackles out on the port anchor. Moorings were as follows: Forward – 3 headlines, 1 ship's wire and a shore mooring chain, all leading ahead. No spring. The shore chain is brought on board and turned up on the ship's bitts. Aft – 1 breastrope, 2 sternlines and ship's wire leading aft. No spring.

Departure: The vessel leaves the berth on the last of the ebb and drops down the harbour stern first to a position North of the transit beacons on the South bank, where she anchors until there is sufficient water to cross the Inner Bar and proceed downstream.

Pilotage: Is compulsory. River Pilots take the vessel from the pilot station to the port or buoy and Docking Pilots do the berthing and unberthing, including dropping down to the temporary anchorage. The Docking Pilot remains on board while at anchor. River Pilots, when boarding and leaving, require pilot ladder, manropes and a boatrope. Ship comes under the stern, never ahead, of the cutter, with ladder rigged on the lee side. Docking Pilots board and leave by the gangway.

Tugs: There are tugs in the port, but I understand that they are never used for berthing.

Communications: Rangoon Radio, call sign XYR, keeps regular watch schedules on 6 HF frequencies. However from departure Lae on 24th June to 2nd July, nothing was heard of this station.

Two-way contact was established on 3rd July, but after the station had instructed the Radio Officer to change frequency, it ceased working.

It was not until 0500 hrs. GMT on 4th July that traffic could be cleared. Later that day it became possible to work XYR on MF. All calls were then answered promptly and an efficient service provided.

An advice of bad propogation conditions from Portishead Radio was in effect during the period covered by the above remarks. This may have had some bearing on the difficulties experienced. The vessel arrived at the pilot station at 0830 hrs. GMT, 6th July, 1978.

VHF: The Pilot cutter and the Harbour Master's Office are fitted with VHF Channel 16. This is efficiently operated.

Telephone: I spent many hours in the Agent's office, attempting to contact London. We were unsuccessful. The hours, local time, during which one may attempt to call London, are: via Hong Kong – 0900 to 1430 hrs.; via India – 1630 to 1800 hrs. These hours are nominated by the Port and Telecommunication Corporation.

Telex: There is a telex machine in the Agent's office, and the Operator's normal hours of duty are 0930 to 1630 hrs. It was possible to send an outward message only in these hours and so, on occasions, it was necessary to request that the Operator remain on duty until 2000 hrs. The reasons for the difficulty in sending outward messages is: Unless a special request is made otherwise, all outward messages are sent to a central transmitting point. Inward messages were received promptly.

Mail: Both to and from Europe and Australiasia, appeared to be reliable.

Agents: T.A.C. are a government corporation and handle every vessel that uses the port. All concerned are most charming, and very polite. All persons I came into contact with from T.A.C. spoke excellent English.

Documents: Required on arrival: 20 Crew Lists, 6 Crew Personal Effects Lists, 6 Ship's Declarations of Foreign Currency, 6 Crew Declarations of Foreign Currency, 1 International Health Declaration, 1 List of dates of Smallpox and Cholera Vaccinations.

Notes:

1. All on board must be possession of valid Vaccination Certificates against smallpox and cholera.
2. The Customs do an efficient rummage on arrival, and again on sailing. Their main concerns seem to be cigarettes, foreign currency and pornography.
3. It is most important that all paper money of any foreign country held either by the ship or by individuals is accurately declared and then placed in one or other of the ship's safes. The safes are then sealed and can only be opened with the approval of the resident Customs Officer. Time and trouble on arrival can be saved by collecting all foreign currency in advance. Some small amounts of foreign currency were found by rummagers, but a lenient attitude was taken and these sums were allowed to be placed under seal. The Penalties for attempting to evade the regulations with regard to foreign currency are severe.
4. All on board are required to be photographed, so that local shore passes may be issued. The passes are valid for 12 months from date of issue and cover subsequent calls at Rangoon or any other Burmese port. No shore leave is permitted until shore passes in quadruplicate have been processed. This happens quite swiftly and takes about 12 hours.
5. With the exception of the Health Declaration, there do not appear to be any pre-printed Burmese Forms, and the ship will have to make up her own.

Departure: At least 6 up-to-date Crew Lists are required. All shore passes must be collected prior to departure, they are stamped by Immigration and returned to the holders.

All 3 government departments involved with the vessel (Customs, Immigration and Quarantine) issue a clearance on departure. In addition, the Master is given a letter from the Burma Ports Corporation for the River Pilot, stating that all sailing documents have been produced and giving permission for the vessel to proceed to sea.

Register and supporting Certificates: (Load Line, Safety Equipment, etc.) are taken ashore by Agents on arrival, against a receipt, and returned immediately prior to departure.

Officials: Supervisors and Tally Clerks wear uniform with badges of rank. They must be provided with an office on board, and it is customary to provide these gentlemen with meals. Two Customs Officers live on board at all times and accompany vessel to anchorage or buoy berth. These Officers must be fed in the dining saloon and provided with accommodation. On arrival the Customs seal the bond and, if requested to do so, will also seal the dry stores, which is a wise precaution.

Beer is not put under seal. The Customs Officer will make an issue of bonded items daily if requested. The only thing to which restrictions are applied is cigarettes, where the daily issue is limited to 40 per man. Customs also exercise a tight control over all local currency drawn from the Agents and all must be accounted for prior to departure, even cash spent on Provisions.

Cargo Work: Two shifts of 8 hours are normally worked, that is, 0800 – 1600 hrs. and 2000 – 0400 hrs. Cargo can be worked at any time. Overtime hours being 1600 – 2000 hrs. and 0400 – 0800 hrs. Ship's gear was used for discharge. Two gangs were employed at each hatch, and rates of discharge were: No. 2 – 10.35 t.p.h. No. 3 – 14.46 t.p.h. The rate of discharge at No. 2 was remarkably good when one takes into consideration that No. 2 after crane, due to a winch breakdown, was not available after the first 1.5 days. Two gangs were employed throughout at this hatch. After the crane failure the after gang were employed in shifting cargo to where the forward crane could plumb it.

Weather permitting, discharge continued 24 hours a day. A total of 37 hours, 40 minutes working time was lost due to rain. When one takes into consideration the many delays and the fact that the Watersiders were discharging a random stow, the rate of discharge was most creditable. Crane drivers and Watersiders were very satisfactory; Supervisors were helpful. Pilferage was nil, damage to cargo was slight and there was no damage to the ship.

Pratique: Granted on arrival. There are no facilities for Radio Pratique.

Provisions: Obtained through the Shipchandler. But very expensive. We purchased salad and bread at the local market at reasonable prices and of reasonable quality. This was done by the Purser/Catering Officer, going there with the Agent and paying cash. This is common practice and was condoned by our Customs Officer.

As we had no contact with the Official Shipchandler, we do not know what his prices were or what his product range is. Any future vessel calling at Rangoon should arrive with as much in the storerooms as possible.

Fresh Water: Obtainable either from water boats or the wharf. Give 2 days notice. It is expensive, 10 Kyats (about 79 pence) a ton. As a precaution, we treated what we took with chloride of lime.

Repairs: We employed some electricians from the machine shop of the Central Electric Service to assist in our investigations of the winch fault at No. 2 hatch. An Electrical Engineer and 3 Electricians were provided and appeared competent. Unfortunately, they did not trace the fault.

Currency: The unit of currency is the Kyat, worth approximately 12.69 to the Pound Sterling.

Weather: Hot and humid, with much rain, it being the season of the S.W. monsoon. Winds in the port were generally light. At the time of our stay, the river was just beginning to rise as a result of the monsoonal rains in the high country, but had not reached full flood. There was, however, a continuous outflow past the port at all states of the tide.

Health: Up to date Cholera Vaccination Certificates are required by the local Authorities and anti-malaria precautions should be taken. Mosquitoes and many other insects are numerous, especially in the wet weather.

General: Five watchmen were provided. When at anchor or at buoy berth, the ship must feed them. When alongside, they eat ashore. The security at the gate is very strict indeed and all local people leaving the port area are searched. No ship's gear or personal effects went missing. There is no garbage collection at Rangoon, so the ship must make her own arrangements for storing waste. Burmese people are unfailingly polite and courteous and naturally expect the same treatment in return. The vessel can work cargo on any day.

Repatriation: Possible but not recommended.

Holidays: (1978). January 4th (Independence Day); January 9th (Karen New Year); February 12th (Union Day); March 2nd (Farmer's Day); March 23rd (Full Moon Day); March 27th Resistance Day (Armed Forces Day); April 13th – 16th Water Festival (Burmese New year); May 1st (May Day); June 20th (Full Moon); July 19th (Martyrs Day); August 18th (Full Moon); October 15th – 17th (Lighting Festival (Buddhist); November 13th – 15th Lighting Festival (Buddhist); November 24th (National Day); December 25th Christmas (There are a large number of Christians in Burma).

NOTES

Please also advise Shipping Guides Ltd.

SHIPMASTER'S REPORT: August 1982.
Navigation: Dagon Light Vessel was showing Gp. Fl. (3) 20 sec. on the vessel's arrival, but was unlit on departure 10 days later. The Racon was not operating. The light vessel was in its charted position.

The pilot vessel "Thamada", call sign XYCZ, anchors around position Lat. 16° 13′ N., Long. 96° 18′ E. In August 1982 the pilot vessel's VHF was not operating, but they could be contacted by WT on 500 kHz and also by Aldis lamp. When picking up a Pilot the pilot vessel will be under way; boat rope, manropes and heaving line are required; the Pilot comes off by motor launch from the pilot vessel. If the anchorage is crowded extreme caution is advised while manoeuvring, due to very strong tides, estimated at 6 knots to 7 knots at Springs. Many collisions have taken place during embarkation of Pilots.

Lanthaya Light Float was observed to be 1.8′ N.N.E. of its charted position. It is small and inconspicuous. Northwards of Lanthaya, buoys and light floats are moved as conditions in the channel require, and their charted positions should not be relied upon.

There are no navigational aids available which are useful in approaching the pilot station; however, acceptable results were obtained by taking RDF bearings of the Burma Broadcasting Service broadcast station operating on 955 kHz with antennaes in position Lat. 16° 52′ N., Long. 96° 10′ E. (position from World Radio & TV Handbook 1982).

There is a Port Radio station at Rangoon Port, operating on VHF Channel 16, call sign "Port Tower".
Tugs: No tugs are available for berthing, however Pilots are very experienced and all were found to be excellent shiphandlers.
Formalities: Immigration require 4 photographs of each crew member and will issue shore passes; Agents can arrange a photographer to attend on board on arrival.

Customs Regulations are extremely strict, particularly with regard to foreign currency. All foreign currency must be declared and will be put under seal during the vessel's port stay. It has been reported that violations of currency regulations have resulted in severe prison sentences recently. Firearms and narcotics will also be placed under Customs seal. Shore-going crew must undergo Customs inspection at the Main Gate.

Derat is available.
Cargo: The vessel loaded a full cargo of 2,982 Hoppustons of Burmese round logs of mixed varieties; logs were very heavy, averaging out at 1.23 tonnes/cu.m. Cargo was brought alongside by trucks and loaded ex-wharf by ship's gear. Stevedores were inexperienced; stowage was poor and loading rate slow. Cargo was also found to be rat infested. Shippers originaly requested 600 (repeat six hundred) original B/L's, and when this request was dismissed they eventually agreed to 60, issued through Agents, covering 41 parcels of cargo.

Shippers also presented a proforma copy of "Burma Ports Corporation B/L Form" which they requested be issued instead of Owners' forms, stating that this was a standard Burmese B/L form. After studying the clauses contained in this B/L form it was rejected as being poorly written, badly printed, containing many misprints and having no provision for the inclusion of the "Clause Paramount". Masters are therefore advised to exercise caution in accepting a B/L for signature in this form, in order to safeguard Owners' interests.
General: There is a Philippine Embassy in Rangoon, where Filippino crew may renew or be issued with passports conveniently. Call Mrs. Rosario for appointment. Fresh water is available alongside or by barge. Bunkers are not available. Minor repairs can be undertaken, but are very expensive. Good medical facilities are available. Fresh provisions may be obtained at the local markets at very reasonable prices. The British Embassy is next door to the main post office. The Strand Hotel, near the British Embassy, provides good meals and adequate facilities at reasonable prices.

AUTHORITY: Burma Ports Corporation, P.O.Box No. 1, Rangoon, Burma. *Tel:* 83122. *Telex:* BM 21208, BM 21219. *Cables:* Portrust Rangoon. *Contact:* The Managing Director.

Cameroon, United Republic of

DOUALA: 04.03 N. 09.42 E. **(See Plan Book)**
TIKO: 04.00 N. 09.24 E.
LIMBE (Formerly Victoria): **04.01 N. 09.13 E.**
KRIBI: 02.56 N. 09.54 E.

DOCUMENTS:
5 Crew Lists.
5 Lists of Port of Call.
5 Passengers' Lists.
2 Crew Customs Declarations.
2 Declaration of Provisions on Board.
1 Arms and Ammunition.
2 Stores Lists
2 Manifests or Bills of Lading

PILOTAGE: (With the exception of Kribi and Limbe (formerly Victoria) where ships work cargo at anchorage); Compulsory at Douala and Tiko. Ship's arrival must be notified at least 24 hours in advance, together with draft (F.W.) forward and aft. This must be confirmed.

At Cape Limboh (Limbe) where ships can proceed alongside, pilotage is compulsory.

For Douala waiting anchorage at base buoy (Lat. 3° 54′ 12.3″ N., Long. 9° 32′ 19.8″ E.). Pilot called by VHF (16 – 14).

For entry of Tiko waiting is at Limbe Anchorage.

ANCHORAGE: Base buoy for entry at Douala (see "Pilotage") 12 m. depth approx. For Limbe Anchorage on Roads in Bay Ambas about 9 m. depth. Anchorage for Tiko on the Bimbia. Kribi Anchorage by red conical buoy (Lat. 02° 56′ 36″ N., Long. 09° 53′ E.) depth 6.30 m. to 7 m.

RESTRICTIONS: Draft only, for ports of Douala and Tiko. Official level of Wouri Channel is 5.80 m.

MAX. SIZE: At Kribi and Limbe Anchorage, no restrictions.

Douala max. length 200 m., max. draft 8.0 m.

HEALTH: Free pratique granted after compulsory checking of vaccination certificates against yellow fever and smallpox. Health Officials hand the Master a special Health form to fill in.

RADIO: (See "Pilotage"). Douala Radio limited to broadcasting for private individuals. VHF Channels 16 and 14 and R/T 2,182 kHz.

For vessels arriving at Douala, Masters should send a message to their Agent at least 48 hours prior to arrival, giving the following information:

(1) ETA at Base Buoy (given in local time).
(2) Cargo tonnage for discharge, and hatch distribution.
(3) Number of gangs required.
(4) Vessel's draft.
(5) Any other requirements, e.g. money, medical attendance, etc.

For vessels arriving on a Sunday or on a Public Holiday, Agents must be informed by 1100 hrs., the day before arrival. If overtime or night work is required by vessel, the Agent must be informed by 1700 hrs. the day before arrival. It is also possible to telex information from the last port of call as Douala Radio Station can sometimes be difficult to contact.

VHF: Channels 16 and 14.

RADAR: No radar.

TUGS: Two tugs 900 h.p. and 1,100 h.p. are available on request to Cameroon National Ports Authority, Operations Department. Towage is compulsory for ships of 600 d.w.t. and more, and subject to Pilot's advice.

A single tug is available at Cape Limboh obtainable from the National Ports Authority.

BERTHING: For Douala there are 14 berths equal to 2,330 m. approx. length on left bank. Two of these berths have priority berthing for mail, alumina carriers and occasionally tankers. Two others downstream from the port have priority berthing for container carriers. One of these berths has ro/ro accommodation with 2 dolphins 70 m. apart.

There is a berth consisting of 2 dolphins and 4 buoys used for oil discharging. Tankers moor with 3 head and stern lines to the other outer mooring buoys – 2 breast lines to the inner mooring buoys and spring lines on the dolphins.

At Douala, 9 berths have a depth of 9.50 m. approx. at LW. The tanker berths have a depth of 9.0 m. at LW (tidal range 2.20 m.).

At the right bank (Bonaberi): There are two berths equal to 350 m. in length. One is mainly used by banana carriers (700 tonnes per day) and butane tankers, length 150 m. The other is equipped with a Goliath crane used by mineral carriers. All these berths have a depth of 13 m. at LW.

Limbe: At Cape Limboh (Limbe) one berth available admitting ships of 130 m. in length. Length of quay 150 m. and depth alongside at LW is 10 m. 3 quay cranes available. One mooring buoy (SBM) for ships loading Fuel Oil, max. draft 18 m. and max. tonnage is 90,000 tons. (Also see "Shipmaster's Report").

Kribi: One quay of 250 m. for export of timber, cocoa, coffee, flour, salt and palm products. One crane available.

CRANES: Loading and discharging is carried out by ship's gear. However, there are two cranes, one of 100 tons and the other 25 tons.

BULK CARGO FACILITIES: There is a rolling gantry at the right bank to transport cement to the cement side. Max. height of loading/discharging gear above HW is 2 m. Max. loading/discharging rates – 1,000 tons per day, length 200 m., depth 8.5 m.

No. 2 berth at left bank is equipped with a rolling gantry to transport aluminium. Max. height of discharging gear above HW level is 2 m., length 280 m., depth 9.5 m.

SPECIALISED CARGO HANDLING FACILITIES: *Containers:* With the end of the extension works of Douala Port, a modern container and ro/ro terminal has been created. This terminal has a quay frontage of 500 m. dredged to –11.50 m. Facilities include 3 berths, the first 2 of which, with a total length of 400 m., are designed for full container ships and the last for ro/ro ships. Additional facilities comprise 2 dolphins and 2 ro/ro ramps. The adjacent yard has a surface area of 23 hectares and a width varying between 400 m. and 500 m.

At the back of this yard, there exists a stuffing and stripping container warehouse of 7,500 sq.m.

The annual capacity of the terminal is 1,500,000 tons. Plans are underway to extend it to 2,000,000 tons with the purchase of 2 gantry cranes.

Timber: The equipment includes:
- timber yard of 20 hectares served by road and rail,
- a water surface of 20 hectares with 3 m. draft in the area next to the quay and 9.50 m. in the rest of the dock. This dock is capable of receiving 4 ships,
- 150 m. quay frontage designed for the handling of floating timber.

The annual capacity of the timber port is 2,000,000 tons.

STEVEDORES: The number of stevedore gangs is requested from Charterer's Agents, taking into account size of cargo.

MEDICAL: An appropriate Medical Service can be provided on request in case of an emergency, such as an epidemic on board.

TANKERS: At Douala harbour, a berth of 153 m. can accommodate oil tankers of about 12,000 tons when the tanker berth has a breakdown. No slops discharge. The depth at LW is 8.00 m. The tanker berth in the river can accommodate tankers of less than 180 m.

At the tanker berth are found 3 connections of 8 in. for white products, discharge rate of about 250 t.p.h. to 300 t.p.h. Bunkers can be supplied but are not always available.

Sailing from the tanker berth: subject to draft, always on flood tide between 2 hours before HW and LW; sailing/mooring, day and night. 1 or 2 tugs (optional) assist in mooring and sailing proceedings. A permanent tug assists during discharging.

Also see "Berthing" and "Shipmaster's Report" – dated 1982.

DENSITY: 1012.

FRESH WATER: Available at berth; supplied by hoses at 50 t.p.h. Available at Cape Limboh (Limbe, formerly Victoria).

FUEL: Supplies arranged by Charterer's Agent who have their particular suppliers. Available at Cape Limboh (Limbe).

FIRE PRECAUTIONS: In addition to the usual measures, the quay station for oil tankers is isolated during discharging, and there is also a permanent watch by tugs.

REPAIRS: There is a ship repair unit having a 200 m. long quay for afloat repairs.

DRY DOCKS: Two floating docks of 1,000 and 500 tons handling capacities are available.

SURVEYORS: Lloyd's Register; Bureau Veritas; Germanischer Lloyd's; A.B.S. and Det Norske Veritas.

GANGWAY/DECK WATCHMEN: Ship's crew or arranged by Charterer's Agents or Master's option.

OPENING/CLOSING HATCHES: By ship's crew.

CERTIFICATES: Safety, Radio, Sea-worthiness, Freeboard, Derricks, etc.

CUSTOMS ALLOWANCES: 1,000 cigarettes per person, not more than 2 bottles of spirits per person in cabin.

CARGO GEAR: Loading and discharging affected by ship's gear.

CONSULS: At Douala.

	Telephone No.	P.O. Box No.
Australia	42.11.19	1 323
Belgium	42.47.50	263
Denmark	42.64.64	215
Spain	42.23.95	1 102
United States	42.34.34	4 006
Finland	42.43.88	4 003
France	42.62.50	869
Great Britain	42.21.77	1 016
Greece	42.44.52	4 009
Italy	42.36.01	1 033
Lebanon	42.62.65	5 747
Morocco	42.14.44	739
Nigera	42.48.81	1 553
Norway	42.53.88	320
Sweden		
Netherlands	42.50.35	5 028
Chad	42.34.50	47
UNO	42.41.11	1 132
Germany	42.35.00	509
Canada	42.37.19	559
Germany (F.R.)	—	—

REPATRIATION: Repatriation as well as crew changes can be arranged after consultation with the responsible Consuls.

AIRPORT: International airport is situated about 12 km. from Douala Port. Regular airline flights to Europe twice daily during whole year.

TIME: Local time GMT plus 1. No change during year.

HOLIDAYS: *Official Holidays:* New Year's Day, 1st January; Youth Day, 11th February; Labour Day, 1st May; National Day, 20th May; Christmas Day, 25th December. Any other Day declared by Presidential Decree. *Variable Holidays:* Easter Day; Festival of the Sheep; End of Ramadan; Assumption Day; Ascension Day.

Even though there are public holidays, cargo work may be carried out by arrangements.

POLICE/AMBULANCE/FIRE: Central Police Station, Tel: 42.55.25. Ambulance (Hospital Laquintinie), Tel: 42.68.88; (Polyclinique), Tel: 42.18.40. Fire Brigade (in town), Tel: 18. Cameroon National Ports Authority, Tel: 42.52.33 or 42.15.22, ext. 466.

EMERGENCY CO-ORDINATION CENTRE: None at present apart from the Cameroon National Ports Authority, B.P. 4020 – Douala. Tel: 42-52-33 and 42-15-22. Telex: 5270 KN.

TELEPHONES: No telephone connections on board.

SERVICES: Deratisation and fumigation.

SHORE-LEAVE: Permitted.

IDENTIFICATION CARD: Seaman's Book and shore pass are sufficient.

REGULATIONS: Normal Port Regulations in force.

DELAYS: No unusual delays.

BANKS: Boston Bank Cameroon, SA., B.P. 1784 – Douala. Tel: 42.36.12. Telex: 5858KN.

Chase Bank Cameroon, B.P. 1132 – Douala. Tel: 42.98.05, 42.52.91. Telex: 5580KN.

Societe General de Banque au Cameroun (S.G.B.C.), Rue Joss, B.P. 4042 – Douala. Tel: 42.10.10, 42.12.91. Telex: 5212KN, 5579KN.

Societe Camerounaise de Banque (S.G.B.), Rue Joss B.P. 4013 – Douala. Tel: 42.56.60, 42.50.46. Telex: 5208KN, 5665KN.

Banque Internationale Pour le Commerce et l'Industrie du Cameroun (B.I.C.I.C.), B.P. 4070 – Douala. Tel: 42.27.34. Telex: 5225KN.

Banque Internationale Pour l'Afrique Occidental (B.I.A.O.) Cameroun, Avenue de Gaulle, B.P. 4001 – Douala. Tel: 42.20.11. Telex: 5218KN.

Societe Generale de Banque au Cameroun (S.G.B.C.), P.O. Box 404 – Limbe. Telex: 5610KN.

Societe Camerounaise de Banque (S.C.B.), P.O. Box 42 – Limbe (formerly Victoria). Tel: 33.32.38. Telex: 5281KN.

Banque International Pour l'Afrique Occidentale (B.I.A.O.) Cameroun, B.P. 244 – Limbe. Tel: 33.42.38. Telex: 5661KN.

Banque International Pour le Commerce et l'Industrie du Cameroun (B.I.C.I.C.), B.P. 138 – Kribi. Tel: 46.12.24.

Societe Camerounaise de Banque (S.C.B), B.P. 124 – Kribi. Tel: 46.11.56. Telex: 5539KN.

STORING: See "Prelims" page viii.

1. Yes.
2. No regulations.
3. Yes.
4. No jetty.
5. No custom regulations in force.
6. Subject to arrangement.

SHIP SUPPLY SERVICE: For details contact: Syndicat des Compagnies de Navigation et Consignataires de Navires au Cameroun, B.P. 73, Douala.

DEVELOPMENTS: A project has been launched for improving the loading conditions of Berth Nos. 1 and 2 and also a second long term storage area. A new fruit terminal is to be built, length 200 m. It will be able to accept vessels with draft 9.5 m.

SHIPMASTER'S REPORT: March 1982.

Sonara Refinery SBM at Cape Limboh Oil Terminal.

The new refinery is situated at Cape Limboh (Limboh Point). The exact position of the SBM is Lat. 03° 59′ 16″ N., Long. 09° 07′ 36″ E. (BA Chart 1455).

Type of Hose (Loading Hose): 16 in. ASA Serial 150 type barbell.

Manifold Derrick: Should be of minimum SWL 10 tons. Connection is made on port side.

VHF: Sonara Refinery keeps watch on Channel 14, make contact 2 hours before arrival.

Pilot: Pilot boards 1 mile South of SBM.

Pipe-line: Submarine line is always kept filled with crude oil therefore if loading fuel oil the vessel should be in position to receive about 1,500 cu.m. of line contents inside the ship's slop tanks and on completion of loading fuel oil the line contents must be pumped back into submarine line.

Depth: Depth of water at berth is 21 m.

SHIPMASTER'S REPORT: April 1984.

Banana Pier: At Bonaberi on West side of river above Douala Port. Always berth port side to stemming tide. One tug assisting. Buoys in river unreliable as regards position and lights. Max. draft in river at LW up to Base Buoy from entrance 6.5 m. having regard to swell at entrance.

Channel from Base Buoy to Douala Port minimum depth (dredged) 5.5 m. Pilot usually boards at HW at Base Buoy depending on outgoing traffic. Vessel sails on flood tide only and swings off the berth. Ship's watchman required, not compulsory to use shore watchman. Agents submit written request to feed 6 men twice a day during loading. Loading intermittent, from both rail trucks and lorries. Bananas good quality and cartons in good condition. At least 1 hour to be allowed for removal of loading equipment by ship's derricks. Side doors not used. Essential that shore supplied rain tents are well secured.

Provisions, etc., not recommended as prices high even for local fruit and vegetables. Slow loading rate at No. 4 Hatch (Aftermost) due to quay not being parallel. Douala Radio Station keeps irregular hours.

AUTHORITY: Cameroon National Ports Authority, 5 Boulevard Leclerc, B.P. 4020 – Douala, United Republic of Cameroon. *Tel:* 42.52.33, 42.15.22. *Telex:* 5270KN. *Contact:* Valentin Njoya, Director General.

AGENT: *Douala:* Socopao Cameroun, B.P. 215 Douala. Tel: 42.64.64. Telex: Freight 5252/5214/5319 KN. Telex: (Airport) Freight 5557 KN. *Kribi:* Socopao Cameroun, B.P. 38 Kribi. Tel: 46.10.58.

KOLE: 04.13 N. 08.33 E. (See Plan Book)

LOCATION: The loading point is located at Lat. 04° 13′ 20″ N., Long. 08° 33′ 30″ E. (approx. 285° – 26 miles from Cape Debuncha).

DOCUMENTS:

3 Copies Crew List
3 Copies List of Ports of Call
3 Copies Arms and Ammunitions List
3 Copies Animals List
3 Copies Store List
3 Copies List of the Passengers Landing or in Transit
Ships Manifest

PILOTAGE: Compulsory. Piloting shall be carried out by the Pilots of the Port of Douala. Call signals for a Pilot are those provided for by the International Code. The Pilot may be contacted on VHF Channel 16 (156.8 MHz).

The Pilot will board 2 miles S.W. of the SBM in position Lat. 04° 12′ N., Long. 08° 32′ E.

ANCHORAGE: Vessels may anchor in 38 m., 2 miles S.W of the loading point (position Lat. 04° 12′ N., Long. 08° 32′ E).

Anchoring less than 1 mile from the loading point or pipelines is prohibited.

Prohibited Area/Navigation Aids: Navigators shall keep outside the prohibited area (demarcated by the parallels 04° 19′ N., and 04° 13′ N. and the meridians 08° 22′ 36″ E., and 08° 36′ E.) sheltering the working oil equipment. They must not pass the limit of 1 mile from the loading point SBM without a Pilot.

Utility vessels and small craft of Elf Serepca are the only ones allowed to enter in the prohibited area.

This prohibited area is demarcated by sea buoys and spars of international cardinal system.

		On the North of area
Spar No. 1	Cardinal	Lat. 4° 19′ N.
	West	Long. 8° 22′ 36″ E.
	Light	2 white flashes, range 5 nautical miles.
	Daymark	2 black cones points opposed.
Spar No. 2	Cardinal	Lat. 4° 19′ N.
	North	Long. 8° 29′ E.
	Light	3 white flashes, range 5 nautical miles.
	Daymark	2 black superimposed cones points upwards.
Spar No. 3	Cardinal	Lat. 4° 19′ N.
	East	Long. 8° 36′ E.
	Light	Red flashes, range 5 nautical miles.
	Daymark	2 black cones bases opposed.
		On the South of area.
Buoy No. 1	Cardinal	Lat. 4° 13′ N.
	West	Long. 8° 22′ 36″ E.
	Light	2 white occulting, range 5 nautical miles
	Daymark	2 black cones points opposed
Buoy No. 2	Cardinal	Lat. 4° 13′ N.
	South	Long. 8° 29′ E.
	Light	2 red occulting, range 5 nautical miles.
	Daymark	2 black cones superimposed points downwards.
Buoy No. 3	Cardinal	Lat. 4° 13′ N.
	East	Long. 8° 36′ E.
	Light	Red quick flashing, range 5 nautical miles.
	Daymark	2 black cones bases opposed.

Besides every oil platform and the floating storage "Serepca 1" inside of the prohibited area are showing white light flashing the letter "U" every 15 secs.

The floating storage "Obernai" swinging around the position Lat. 4° 15′ N., Long. 8° 33′ E., carry the lights of vessel at anchor according to the international regulations.

The loading point Lat. 4° 13′ 20″ N., Long. 8° 33′ 30″ E. buoy of yellow colour showing a white light flashing the letter "U" every 15 secs., range 6 nautical miles and a radar reflector.

The floating hose line which extends over a radius of 263 m. round the floating buoy is lit by small white intermittent lights.

Fog Signals Inside of the Prohibited Area:

Fog horns range 2 nautical miles sending out a sound signal "U" every 30 secs. are operating when the horizontal visibility is below 1 mile at the following positions:

Oil production platform "Ekoundou"	Lat. 4° 16′ 28″ N. Long. 8° 25′ 10″ E.
Oil production platform "Kole"	Lat. 4° 16′ 56″ N. Long. 8° 34′ 03″ E.
Floating storage "Serepca 1"	Lat. 4° 15′ 42″ N. Long. 8° 33′ 28″ E.
Loading buoy	Lat. 4° 13′ 20″ N. Long. 8° 33′ 30″ E.
The floating storage "Obernai"	Lat. 4° 15′ N. Long. 8° 33′ E.

Further platforms have been established in the following positions:

Lat. 4° 08.15′ N., Long. 8° 27.42′ E.
Lat. 4° 11.99′ N., Long. 8° 26.69′ E.
Lat. 4° 11.99′ N., Long. 8° 26.20′ E.
Lat. 4° 11.42′ N., Long. 8° 28.17′ E.
Lat. 4° 12.02′ N., Long. 8° 25.43′ E.
Lat. 4° 10.74′ N., Long. 8° 24.42′ E.

The above sound the signals of a vessel at anchor according to the international regulations for preventing collisions at sea.

Notice to Mariners No. 001/CP: Dated 10th September, 1984.

Origin: Captaincy of the Port of Douala (RC).

Subject: Extention of the Forbidden Navigation Area.

Text: Mariners are informed of extension works being carried out in the zone of the Oil Drilling Site at KOLE which is forbidden to navigation.

The co-ordinates of the new field limits are as follows:

(a) Lat. 4° 13′ 00.3″N., Long. 8° 22′ 36.6″ E.
(b) Lat. 4° 12′ 59.7″N., Long. 8° 36′ 00.5″ E.
(c) Lat. 4° 18′ 36.0″N., Long. 8° 41′ 36.0″ E.
(d) Lat. 4° 26′ 32.0″N., Long. 8° 34′ 35.0″ E.
(e) Lat. 4° 26′ 32.0″N., Long. 8° 25′ 23.0″ E.
(f) Lat. 4° 18′ 59.3″N., Long. 8° 22′ 36.5″ E.

A cardinal system of buoys will define this area.

Signed: Port Captain.

Prohibited Area:

(AA) Lat. 4° 09′ 10″ N., Long. 8° 29′ 43″ E.
(BB) Lat. 4° 06′ 28″ N., Long. 8° 29′ 43″ E.
(CC) Lat. 4° 06′ 28″ N., Long. 8° 25′ 24″ E.
(DD) Lat. 4° 09′ 58″ N., Long. 8° 25′ 24″ E.

In the above area there is oil equipment of TEPCAM. Also see "Victoria Terminal".

MAX. SIZE: Maximum permissible draft is 22 m. (72 ft.). However, Elf Serepca may reduce this draft should meteorological conditions be unfavourable.

Minimum underkeel clearance 4.5 m. (15 ft.).

HEALTH: Health inspection carried out by doctor or the Pilot. Master to have ready for inspection the following:

Maritime Declaration of Health
Derat Certificate
Vaccination Certificate of the Crew

In case of infectious disease on board, contact the Doctor in Chief or the Douala Border Health Police B.P. 1115 – Tel: 42.36.33, through the Harbour Master.

RADIO: The vessels should send their ETA to: Elf Serepca, B.P. 2214. Tel: 42.13.66 Douala. Telex: 5299 Kn Elferap.

Via Coastal Station – Douala Radio.

Call signal: "TJC 5", "TJC 6" or "TJC 8".

The Coastal Station works on 500 kHz and 8718 kHz.

Transmitter Power: 1 kw.

Listening Hours: Permanent watch from 0500 – 2000 hrs. GMT on 500 kHz, 15 minutes transmission at 0600 – 0700 – 0800 – 0900 – 1100 – 1300 – 1500 – 1600 – 1700 – 1800 – 1900 hrs. GMT on the 8 MHz band.

Kole Terminal – 2 Floating Storage Vessels:

"Serepca 1" – Call sign: "TJAR". Power 750 w.

"Obernai" – Call sign "FNCJ". Watch on 500 kHz 0700 – 1100 hrs. GMT, 1500 – 1700 hrs. GMT and 1900 – 2100 hrs. GMT.

Watch maintained permanently on VHF Channels 11 and 74 and Channel 12 during daylight hours.

The above mentioned watch is ensured 3 days before the expected arrival of the vessel going to load at the Kole Terminal.

Arrival Advice: Advise "Elf Serepca" 72 hours and 24 hours before arrival, also advise any changes.

TUGS: A motor boat is provided to assist with mooring.

BERTHING: The loading point of Elf Serepca at Kole is of an SBM with single point mooring at the bow.

The vessel is moored by the bow on a buoy consisting essentially of a square, 9.10 m. in length/breadth and 4.50 m. high.

This buoy is moored by chains with 6 drilled piles. Mooring extends over a radius of 290 m. round the buoy.

A 36 in. sea-line connects the storage barge with the loading point; the buoy is connected to the sea-line by 2 lines of flexible hoses of 20 in. diameter. A floating hose line 24 in. with 2 lines of 16 in. at the end connects the buoy to the tanker.

The loading point is provided for the mooring and loading of tankers of approximately 50,000 d.w.t. to 250,000 d.w.t. The quantity loaded a Kole will be limited to approximately 120,000 tons

Depth of water at the buoy is 30 m.

Mooring: Mooring ropes shall be supplied by Elf Serepca. The vessel shall be ready to embark 2 mooring ropes, one on the starboard side, and the other on the port side. Each rope consists of 46 m. of nylon of 14 in. circumference and a 5 m. chain, diameter 64 mm. Each rope is equipped with a polypropylene inhaul of 10 in. circumference and 100 m. long for one and 70 m. for the other.

Messengers are passed to the vessel by a motor-boat. The vessel shall prepare 2 ropes at the bow for taking the messengers onboard.

Mooring and connecting can be carried out by day as well as by night, weather and sea permitting. However, the Pilot reserves the right to delay night mooring.

Sailing is carried out immediately after completion of loading, day and night.

The derrick shall be rigged before arrival on the port side with a minimum safe working load of 10 tons.

The ships manifold shall be prepared on the port side for connection with the 2×16 in. flexible hoses.

BALLAST/POLLUTION:

Ballast on Arrival: Ship must arrive with sufficient ballast and correct trim to be able to manoeuvre in complete safety:

The ballast must not be less than 30% of the deadweight. Deballasting will not be allowed without the agreement of the Pilot.

The storage installation is not equipped to receive dirty ballast. The vessel shall, therefore, arrive with clean ballast.

Any vessel approaching with dirty ballast may be forced to leave the loading point and delays arising therefrom shall be to the vessels account. Acceptance of Notice of Readiness would be rectified accordingly.

It is forbidden to throw into the sea any cinders, burning materials, objects and waste of any kind.

The ship's Master shall be responsible for any spills or pollution and any other difficulties which may involve discharge of oil. The terminal is equipped with an anti-pollution first aid device.

Scuppers shall be plugged during the whole loading time.

LOADING: *Notice:* Notice of Readiness shall be sent to Elf Serepca.

Connection of Flexible Hoses: Loading of the vessel shall be carried out through 1 line of 220 m. of 24 in. flexible floating hoses, terminating in 2×43 m. length of 16 in. flexible hose.

Connection with the ship's manifold shall be by 16 in. 150 ASA flanges. Elf Serepca can supply 10 in. and 12 in. reducers.

The tanker's derrick shall be rigged before mooring on the port side. The safe working load of the derrick hook shall be 10 tons minimum.

During connection and disconnection of the flexible hoses, assistance of the crew is essential, in particular for the working of winches and derricks. During the whole stay of the vessel at the loading point, the Pilot shall ensure that a safety watch is maintained onboard. The Elf Serepca representative carries out the duties of head of loading and remains in contact with the terminal.

The Elf Serepca service craft shall remain at the disposal of the Pilot and shall remain alongside the tanker or very nearby. A ladder must be kept permanently ready alongside the vessel so as to permit access by the team in charge of the flexible hoses.

Loading: Loading may be carried out with a maximum flow of 6,500 t.p.h. The maximum capacity of each part loading is approximately 120,000 tons.

Inspection of tanks after deballasting and ullages after loading shall be taken in the presence of the head of loading representing Elf Serepca.

The terminal shall place on board the vessel sealed samples of the cargo.

Twenty minutes before the end of loading, the vessel shall warn the terminal by VHF so that pumping may be stopped accordingly.

During Loading: All the hull valves shall be closed except those required for water circulation.

The scuppers of the main deck shall be plugged.

Two fire hoses shall be connected and placed, one at the bow, the other at the stern of the vessel. The fire pump shall be maintained under pressure.

In case of electrical storms, loading may be stopped if necessary.

In case of fire on board a vessel moored at the loading point the Master shall give the alarm by means of short whistle blasts at short intervals. He shall be responsible for the implementation of technical means of fire fighting, maintenance of stability and safety on his vessel. He shall take the required steps to leave should he be required to do so.

MEDICAL: Hospitals, clinics and doctors in Douala. Transportation carried out by Elf at vessels expense.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: There are well-equipped repair workshops at Douala.

TIME: GMT plus 1 hour.

CONSULS: At Douala:

French Consulate
Federal German Consulate
Netherlands Consulate
Danish Consulate
Norwegian Consulate
Swedish Consulate
Monaco Consulate
American Consulate
Lebanese Consulate

AIRPORT: 4 km. from Douala. 1 or 2 flights daily to Europe. Several flights weekly to U.S.A.

GENERAL: *Charts:* French Chart No. 5380 and British Chart No. 1860.

Safety: During the vessel's stay at the loading point the Master shall:

Maintain on board sufficient crew for handling of the vessel and moorings and fire fighting.

Maintain the engines ready for manoeuvring.

Ensure that the moorings function properly without any undue stress.

Ensure that the floating hoses do not wear out or rub thus causing deterioration.

Ensure that the vessel does not make contact with the buoy either by change in current or change in the direction of the wind or for any other reason.

Fire Fighting: It is forbidden to:

Smoke, utilise naked lights or tools liable to give rise to sparks outside the areas normally authorized on a tanker.

Leave the anchors outside the hawse pipe.

Make any repairs or carry out maintenance on deck.

Turn the propellers.

Utilize in the areas classified as dangerous any equipment or tools of a type not recognised for this use by a competent organization.

Elf Serepca reserves the right to take any steps it may deem necessary in case of danger and in particular stop loading.

Stores: Two ship chandlers at Douala can supply the vessel with any foodstuffs they need. But the distance between the Kole Terminal and Douala makes the process very difficult.

Elf Serepca can, in no way, be in charge of the orders and the transportation of foodstuffs.

Territorial Waters: The sovereignty of the United Republic of Cameroon extends to 50 nautical miles from the lowest sea watermark along the coast.

Currency: Legal currency is CFA Francs. 1 CFA Franc = 0.02 FF.

Meteorology: The rainy season (monsoon) extends from May to September. The dry season extends over a period of 2 to 3 months that is to say from December to February.

Air Temperature: The air temperature varies on an average from 22° C to 30° C.

Sea Temperature: On the surface, the sea temperature varies from 29° C at the beginning of the year to 25° C in July, August and September.

Visibility: Owing to the Harmattan, a hot wind blowing from the Sahara, visibility can be reduced to 1 or 2 miles from December to February. During the rainy season, and especially in June, July and September, visibility can be reduced to 0.5 miles due to rain.

Tides: The tides are of a semi-daily type and the Kole cycle is 15 minutes in advance compared with Bonny Town. Maximum amplitude is 2.30 m., mean amplitude is: Spring tides 1.80 m. Neap tides 0.90 m.

Wind: Generally South – less than 15 knots.

Strong winds last for a short period and blow from the East or the S.S.E. in connection with tornadoes.

Current: In the Kole area currents may be of a very changeable speed and direction. However, the ruling currents are the tidal currents.

Slack tide is S.S.E. and flood tide N.N.W. On the surface its speed can reach 3 knots.

Swell: The direction of the swell is S.S.W. (210°). The average height is 2.5 m., period 8 seconds. The waves generated by the local winds are scarcely higher than 2 m.

SHIPMASTER'S REPORT: 1979.

Pilotage: Compulsory. Contact via Kole Terminal on VHF. Pilot boards 2 miles South of SBM. Pilot remains on board throughout loading and carries out departure manoeuvring.

Anchorage: Good anchorage 2 miles South of SBM, good holding ground in heavy grey mud. Sheltered anchorages not available.

Radio: ETA's sent to "Elf Serepca Kole" via Douala Radio. 7 days, 3 days, 2 days and 1 days notice to be given. Kole Terminal keeps watch on VHF Channel 16 calling and Channel 12 working, 24 hours per day.

Radio Practique: Not available.

Tugs: Not available.

Berth: One conventional SBM with 2×16 in. connections, usually on the port side but occasionally starboard side will be utilised. Mooring at the SBM is in the normal manner with the exception that the shore supplies all messengers and equipment. Pilot's assistant and 3 shore labourers assist ship's crew on the fo'casle. Hose connections carried out by shore labour and ship's crew together. Derrick capacity to be minimum of 10 tons SWL. Maximum draft 16.0 m. (in good weather).

Cargo Operations: Cargo is loaded from a storage tanker at a maximum rate of 4,500 t.p.h. Maximum lifting is restricted by the deadweight of the storage tanker and is about 120,000 long tons. A Loading Master remains on board throughout cargo operations. He will inspect tanks and sign Dry Tank Certificate prior to loading. 20 minutes notice required for completion of loading to enable loading rate to be reduced.

Kole mixture crude oil API 33.91, loading temperature 100° F.

Cargo papers delivered very promptly on completion of loading during the disconnection of the hoses (calculation is by computer on storage tanker and quantities radioed to Loading Master).

Deballasting: Vessel to arrive with all clean ballast, no facilities for receiving ballast ashore.

Time: GMT plus 1 hour.

Repairs: Minor repairs may be carried out at well equipped workshops in Douala (expensive).

Provisions: Available from Douala but extremely expensive. Delivery problems and transportation make this service impractical.

Fresh Water: Not available.

Bunkers and Lube Oils: Not available.

Medical Services: Available at Douala. Elf Serepca will arrange transportation by helicopter, in emergencies, at vessel's expense.

Crew Change and Shore Leave: Possible.

Consulates at Douala: France, Germany, Netherlands, Greece, Denmark, Norway, Sweden, U.S.A., Lebanon, Monaco.

Weather: Wind is generally from the South and less than 15 knots. The rainy season extends from May to September and during this time, especially in June, July and September, visibility can be reduced by half a mile because of heavy rain. From December to February mist may be experienced due to hot offshore winds.

Tides: Spring tides 1.80 m. Neap tides 0.90 m.

Current: Variable, mainly tidal. Maximum rate can reach 3 knots.

Authorities: 1 Customs Officer boards and remains onboard throughout the vessel's stay. He carries out all arrival formalities and requires the following forms, in triplicate:

Crew List
List of Ports of Call
Arms and Ammunitions List
Animals List
Stores List
Crews Effects List
Vaccination List (vaccination certificates for Smallpox, Cholera and Yellow Fever).
International Declaration of Health.

Agents do not attend vessel, agency work is handled by Loading Master. Accommodation must be supplied for 3 men, namely the Pilot, Loading Master and Customs Officer.

SHIPMASTER'S REPORT: 1980.
Kole Terminal can be reached on VHF by Channels 16 and 12. In this way, primary information concerning anchorages can be obtained. If possible, vessels should be anchored 4 nautical miles to the South of the Terminal, and listen out on VHF Channel 12.

With the Pilot, a Loading Master, a Customs Officer and 4 men arrive on board. The 4 men assist in making fast the vessel and positioning hoses, and then go back on the tug.

The Pilot, Loading Master and Customs Officer remain on board during the time in port, and accommodation and meals must be provided.

The Customs Officer completes the clearance inwards and outwards.

The following documents are required:

1 Crew List
1 Passenger List
1 List of Ports of Call
1 Arms and Ammunition List
1 Birds and Animals lists
1 Stowaway List
1 Crew Effects Declaration List
1 Bonded Stores List

On average, only 8 to 9 vessels arrive for loading every month, all of them not being greater than 120,000 tons.

As in all other ports, vessels are moored using their own tackle.

Co-operation with the terminal personnel is first-class.

SHIPMASTER'S REPORT: March, 1981.
Maximum permissible draft is 22 m. (72 ft.). However Elf Serepca may reduce this draft should meteorological and tidal conditions be unfavourable. At the moment there are no reductions.

Minimum under keel clearance is 15 ft. Depth of water at buoy 30 m. The SBM is provided for the mooring and loading of tankers of 50,000 tons to 250,000 tons. Considering the useful capacity of storage the quantity loaded at Kole will thus be limited to about 120,000 tons. At this moment no cargo in excess of 120,000 metric tons is forthcoming.

Loading may be carried out with maximum flow 6,500 t.p.h. The maximum capacity of each part loading is about 120,000 tons.

AUTHORITY: Elf Serepca, B.P. 2214 and B.P. 2215, Douala, United Republic of Cameroon. *Tel:* 421366. *Telex:* 5299 Kn Elferap. *Contact:* Chef Terminal Marin.

AGENT: See "Douala".

VICTORIA OIL TERMINAL: 04.07 N. 08.29 E.

(See Plan Book)

LOCATION: The Victoria Field, of which Tepcam is the operator, is situated in the Gulf of Guinea about 50 nautical miles West of the town of Limbe (Victoria) in Cameroon, in depths of 50 m. to 58 m.

The Victoria Field comprises the following units:

2 well platforms: VA (Lat. 4° 08′ 11″ N., Long. 8° 27′ 24″ E.) and VB (Lat. 4° 09′ 22″ N., Long. 8° 25′ 55″ E.)
1 production platform; VT (Lat. 4° 08′ 09″ N., Long. 8° 27′ 25″ E.)
1 accommodation barge, anchored near VT
1 loading terminal consisting of: 1 floating storage unit (F.S.U.), the "Moudi" (Lat. 4° 08′ 11″ N. Long., 8° 28′ 49″ E.). 1 Single Point Mooring berth (S.P.M.) (Lat. 4° 07′ 00″ N., Long. 8° 29′ 11″ E.)

DOCUMENTS:

Maritime Declaration of Health.
Derat or Exemption Certificate.
Vaccination Certificates for crew and passengers.

After ship's arrival at Victoria Marine Terminal, the Tepcam Representative boards and the Master signs the following documents:

Notice of Readiness.
Acknowledgement of receipt by the Master of Terminal Regulations.
Safety check list before loading.

Following commercial documents are filled out by Terminal and presented to the Master:

Bill of Loading.
Certificate of Quality and Quantity.
Certificate of Origin.
Cargo Manifest.
Time Sheet and Loading Report.
Ullage Report.
Receipt for Samples.
Receipt for Documents.

The Tepcam Representatives on board the ship shall assist with the inspection of tanks after deballasting and ullage measurements after loading.

PILOTAGE: Pilotage is mandatory and carried out by the Pilots of the National Port Bureau of Cameroon.

On board the ship, the Pilot acts as a nautical adviser to the Master for handling the ship at the entry and exit of the pilot zone or for movements within this zone.

His advice shall commit neither his responsibility nor that of Tepcam.

Any ship mooring to the loading buoy is required to take the Terminal Pilot on board in the pilot zone extending from anchorage zone to the S.P.M.

The Pilot call signals are those in the International Code. The Pilot may be contacted by VHF Channel 16.

Pilot Boat:

The assistance boat insures the pilotage functions (transport of Pilot and Tepcam employees, transport of equipment required for mooring and hose connections).

It is at the ship's disposal under Pilot's instruction during the whole stay of the ship at the loading buoy for:

Tug Assistance (pull: 22 T).
Approach/Mooring Assistance/Launching of an inflatable dinghy, clearance of hoses.

Exceptionally:

Fire-fighting (2 guns, total delivery 600 cu.m./hr.)
Anti pollution Assistance (Dispersant and Anti-pollution Spray-ramp, 30 cu.m./hr.)

During operations, the assistance boat monitors permanently the operating VHF frequency and Channel 16.

NAVIGATION AIDS:

Fixed Platforms/Quarters Barge: The 3 fixed platforms, VA, VB and VT are all equipped with the following:

4 white lights at the 4 corners, range 8 miles, flashing the letter U (· · —) operated by sun switch,
2 fixed white boat landing lights, range 3.5 miles.
2 foghorns, range 1.5 miles, emitting the letter "U", operated manually (visibility less than 1.5 miles).
1 identification panel fixed to the South side displaying "Victoria VA", "Victoria VB", "Victoria VT", respectively in black letters 1 m. high on a yellow background.

Platform VT is also equipped with a fixed red light on the crane, and fixed yellow and blue lights on the helideck.

VA/VT catwalks and flare are equipped with 3 and 4 fixed equidistant white lights respectively.

The accommodation barge carries the lights of a ship at anchor: 2×360° white lights, 1 in the bow and 1 in the stern. It is equipped with a foghorn, range 1.5 miles, emitting the letter "U".

Floating Storage Unit (Moudi): The Moudi, a converted 220,000 ton tanker, carries the lights of a ship at anchor, 2×360° white lights, 1 in the bow and 1 in the stern. It is equipped with a foghorn, range 1.5 miles emitting the letter "U". It carries the inscription "Moudi" painted in white letters 1.5 m. high on the black hull at port and starboard in the bow and at the stern.

SPM (buoy/hoses): The buoy, painted orange, is equipped with the following:

1 fixed white light, range 5 miles, flashing the letter "U" every 15 secs,
a hand-operated foghorn, range 2 miles, emitting the letter "U" every 30 secs,
a radar reflector.

The floating hoses are equipped with 3 white winker lights (60 flashes per minute).

The ship shall provide adequate and safe means to take the Pilot on board on the most sheltered side.

Pilot Ladders:

1. In all ships where the distance from sea level to the point of access to, or from, the ship exceeds 5 m. (O.N.P.C. requirements), the ship must be provided to embark and disembark Pilots by means of the accommodation ladder in conjunction with a pilot ladder. The ship should carry an accommodation ladder on each side, unless such ladder is capable of being transferred.

2. The ladder should be sited leading aft. When in use, the lower end of the ladder should rest firmly against the ship's side within the parallel body length of the ship and within the mid-ship half section and clear of all discharges. Equally safe arrangements which might be more suitable for special types of ships should be acceptable.

3. The length of the accommodation ladder should be sufficient to ensure that its degree of slope does not exceed 55 degrees.

4. The lower platform of the accommodation ladder should be in a horizontal position when in use.

5. Intermediate platforms, if fitted, should be self-levelling. Treads and steps of the accommodation ladder should be so designed that an adequate and safe foothold is given at the operative angles.

6. The ladder and platforms should be equipped on both sides with stanchions and rigid handrails, but if handropes are used they should be tight and properly secured. The vertical space between the handrail or handrope and the stringers of the ladder should be securely fenced.

7. The pilot ladder should be rigged immediately adjacent to the lower platform of the accommodation ladder and the upper end should extend at least 2 metres above the lower platform.

8. Lighting should be provided at night such that the full length of the ladder is adequately lit.

9. If a trap door is fitted in lower platform to allow access from and to the pilot ladder, the aperture should be not less than 750×750 mm. In this case the after part of the lower platform should also be fenced as in paragraph 6, and the pilot ladder should extend above the lower platform to the height of the handrail.

10. The accommodation ladder(s), together with any suspension arrangements or attachments, fitted and intended for use in accordance with this Recommendation should be the satisfaction of the Administration.

ANCHORAGES: The anchorage zone is a circle 1 mile in radius centred about 2 miles E.N.E. from the SPM, at the point with coordinates: Lat. 4° 07′ 33″ N., Long. 8° 31′ 04″ E.

Approach to the anchorage should be made from the East. With the S.P.M. as the centre, vessels should steer a course of between 210° and 330°. (See "Plan Book".)

RESTRICTIONS: The danger zone in which routine navigation and fishing activities are prohibited is defined by the four points AA, BB, CC and DD, of which the coordinates are given below. The field installations are situated about half a mile inside the limits.

AA: Lat. 4° 09′ 10″ N., Long. 8° 29′ 43″ E.
BB: Lat. 4° 06′ 28″ N., Long. 8° 29′ 43″ E.
CC: Lat. 4° 06′ 28″ N., Long. 8° 25′ 24″ E.
DD: Lat. 4° 09′ 58″ N., Long. 8° 25′ 24″ E.

Ship moorings and connections take place from 0600 hrs. to 1800 hrs. weather and sea permitting. They may be performed by night, on Tepcam preliminary agreement conditions. Departures from berth take place day and night.

MAX. SIZE: The loading station is designed for the mooring and loading of ships from 50,000 to 280,000 d.w.t.

The water depth at the buoy is 57 m. to hydrographic zero.

HEALTH: Sanitary boarding is carried out by the Doctor in Chief of the Border Health Police. Pilots are entitled to carry out this inspection. In case of infectious disease on board, contact the Doctor in Chief of the Border Health Police through the Harbour Master before ship's arrival at the terminal. For the application of Health Regulations, the ship shall use the signals in the International Code of Signals.

RADIO: Ships shall announce their arrival by telegram sent 72 hours before their planned arrival. This telegram, addressed to Tepcam shall be sent via Douala Radio and shall announce its ETA in GMT, as well as all information concerning the planned loading:

Arrival ballast.
Deballasting time.
Max. loading rate.
Cargo quantity.
Derrick lifting capacity.
Dimensions of manifold flanges.
Forward anchoring system characteristics.
Sanitary conditions.

The ship shall repeat contact 48 hours and 24 hours before its arrival and correct its ETA if necessary.

Communications between ship and base through Douala Radio should be in decameter or hectometer wave.

Douala Radio monitors 2182 kHz and VHF Channel 16.

During radio contacts preceding the arrival of the ship at the site, the ship shall receive instructions from the Terminal Superintendent for direct mooring or, on the contrary, standby anchorage in the zone defined.

VHF: When 60 miles from the Terminal, the ship shall make contact by Channel 16 and then switch to the operating frequencies below.

The ship shall then receive the instructions required for its mooring to the loading buoy.

Port regulations are communicated as soon as possible to the Master, who shall acknowledge receipt by letter.

Monitoring as well as safety frequency are provided on Channel 16. Also see "Pilotage".

Communications between the ship and the Terminal are provided on:
VHF Marine Total, Channel 69 (156.475 MHz)
VHF (land) between base and Douala headquarters:
Tx: 75.550 MHz Rx 80.550 MHz
Tx: 75.650 MHz Rx 80.650 MHz
Tx: 75.700 MHz Rx 80.700 MHz
VHF Total field communication:
Tx: 159.725 MHz Rx 155.125 MHz

TUGS: See "Pilotage – Pilot Boat".

BERTHING: The Victoria Loading Buoy is of the CALM type (Catenary Anchor Leg Mooring) with a single mooring point.

It consists essentially of a cylindrical body 12 m. in diameter and 4.7 m. high, equipped at the bottom with a skirt projecting 1.7 m., and with a turn-table. The buoy is anchored by means of 6 chains extending in a radius of 380 m. around it.

A 255 m. long line of 24 in. floating hoses terminates in 2×37 m. long extensions of 16 in. hoses equipped with 16 in. Camlock type quick couplings at the ends for buoy/ship connection.

A mooring line and its accessories are used to moor the ship to the turn-table.

The mooring personnel carrying out the polypropylene connection from the buoy to the "Messenger Line" of the ship are provided by the Terminal.

Loading Master: Assistant to the Terminal Superintendent, he co-ordinates with him all the following operations:

Mooring
Connection
Loading.

He is responsible for ensuring compliance with Port Regulations at the Terminal. His instructions shall not be questioned or disputed and he will not check the Pilot's action, who is the Harbour Master's representative at the Terminal.

He may refuse or prohibit, after Pilot's advice, the entry of the ship in cases such as but not limited to:

unfavourable weather conditions,
ship insufficiently equipped or possessing defective equipment,
insufficient or dirty ballast.

He is in charge of obtaining the agreement to start loading. He makes sure of the correct application of safety instructions by the shipboard personnel and of the loading plan.

Once the ship is moored, he may ask the Pilot's advice for an early removal from berth of the ship or may suspend loading of the ship for reasons such as but not limited to:

safety
bad weather
non-compliance with instructions
insufficient drainage of cargo tanks
dumping of polluted water into the sea
incidents affecting the loading buoy or the pumping installation.

During loading operations he insures the radio co-ordination between the ship and the Terminal.

Terminal Crew Chief: He acts under the direction of the Loading Master. Mainly in charge of inspection of specifically marine equipment, he shall assist and inform the Pilot and the Loading Master during approach, mooring, connection/disconnection and loading phases.

Mooring and Connection: The engines shall be in condition to deliver their maximum capacity if required. The ship's port derrick shall be rigged to project 1 m. over the ship's side and to lift a minimum load of 10 tons.

The Pilot shall instruct the Master of the ship of the standard manoeuvres for berthing and mooring.

Mooring and connection operations shall be performed by the ship's crew.

Once it is moored, the ship shall keep its engines ready to manoeuvre. No work reducing the ship's manoeuvring potential shall be undertaken without the approval of the Terminal Superintendent or his assistant.

The ship's Master shall ensure that the mooring lines guarantee a secure mooring at all times. He shall make sure that the mooring units operate to satisfactory conditions, in order to minimise wear and to prevent their breakage.

LOADING: When the ship is absolutely ready to perform loading operations, the ship's Master shall present the "Notice of Readiness". The "Notice of Readiness" shall not be accepted if the Terminal is closed.

Once the mooring and hose connections have been completed, the checklist shall be checked and signed jointly before the start of loading by the Tepcam Representative and the ship's Master.

The Terminal Superintendent shall issue the order to start pumping, after the ship has confirmed that she is ready to load and shall notify the ship of the progress of loading operations.

Radio connections shall be checked frequently. All information concerning flow rate, gas pressure, change in cargo tank, cumulative quantities, etc., shall be communicated between the ship and the control room.

20 minutes before the end of loading, the ship shall advise the Loading Master in order to stop pumping in due time.

In the case of a storm or leakage, loading shall be suspended.

Measurement of the ullages, temperatures and draft after loading, for control purposes, shall be performed in the presence of the Tepcam representative.

Throughout the loading period, the ship shall carry the following:

- by day, a red flag on the masthead ("B" flag of International Code),
- by night, a red light visible 360°.

This requirement shall also be valid for ships which are loaded, moored, or manoeuvring in the danger zone, and also for ships that are not declared "gas free".

The Terminal shall provide the ship with representative samples of the cargo.

Lookout: During the whole stay of the vessel at the SPM, the Pilot ensures watch of safety on board.

Permanent bow lookout: The Tepcam representative and the Pilot will demand permanent bow watch by a member of the ship's crew and shall be advised of the tanker's position in relation to the buoy.

Permanent lookout at manifold: As soon as connections are made, the Tepcam representative shall demand permanent manifold watch by a member of the ship's crew and shall be advised of the configuration of the tanker rail hoses and if any leaks in the manifold.

BALLAST: The Terminal is not provided with facilities for treating ballast water. Ships shall therefore arrive with clean ballast. The minimum arrival ballast shall be equal to about 30% of the ship's d.w.t., ensuring a draft consistent with safe manoeuvring, a reasonable trim and a propeller submerged, to the satisfaction of the Pilot.

Inspection of the ballast to be unloaded shall be made on arrival, and any ship arriving with dirty ballast may be required to leave the buoy, and to bear responsibility for any delay resulting from this. The acceptance of the "Notice of Readiness" shall be corrected to show this.

Deballasting operations shall only begin with the agreement of the Pilot. As a rule, loading operations shall not begin until deballasting is completed, if the ship is not fitted out for simultaneous deballasting and loading operations. An inspection of tanks shall be carried out after deballasting in the presence of the Tepcam representative.

POLLUTION: It is prohibited to dump any objects or waste of any type into the sea.

It is also prohibited to dump into the sea any liquid liable to ignite or to pollute the water.

The ship's scuppers must be closed/plugged during the loading operations.

A system designed to collect any drips and leaks shall be placed under the hose/manifold connection.

In the case of water pollution caused by the ship, for any reason whatsoever, Tepcam declines any responsibility, and the ship shall be held responsible for the direct consequences of this pollution. In particular, the assistance costs incurred by Tepcam shall be passed on to the ship.

Tepcam also declines any responsibility concerning any infringement by the ship of international regulations or Port Regulations that could be ascertained by the Pilot or any Tepcam employee. Written reservations will be expressed and report will be drawn-up.

Objects falling into the sea: Any object falling into the sea shall be stated in a declaration to the Terminal Superintendent, who shall prescribe the measures to be taken for its recovery. Similarly, the recovery or removal of various objects or equipment stationed or deposited in the danger zone shall be carried out automatically, whenever the owner or operator of the said objects or equipment cannot or does not wish to perform this removal himself.

Recovery and removal shall be carried out at the cost, risk and perils of the parties concerned. For any object, (or person) that has fallen into the sea, a written report shall be addressed to the Harbour Master.

MEDICAL: Emergency cases are evacuated to Douala by Tepcam at ship's expense. Douala has a hospital, clinics and several specialist doctors.

FRESH WATER: Not available.

FUEL: Not available.

CONSULS: Consulates in Douala:

Denmark
France
Greece
Lebanon
Monaco
Netherlands
Norway
Sweden
United States of America
West Germany

REPAIRS Not available at Victoria Terminal. However, well equipped repair facilities are available at Douala.

REPATRIATION: Not permitted.

AIRPORT: The nearest airport is 4 km. from Douala. 1 or 2 flights daily for Europe, several flights weekly for the U.S.A. (with changes in Europe).

TIME: GMT plus 1 hour.

STORING: Not possible at Victoria. 2 maritime victualling companies are established in Douala.

GENERAL: *Useful Publications:* Ships planning to call at the Victoria Marine Terminal shall refer to the following regulations and documents:

- Safety of Life at Sea,
- IALA "A" system for Navigation Aids,
- International Regulations for Preventing Collisions at Sea,
- Marine Charts Nos. 5633, 5602, 6076 and 5380, of the Service Hydrographique de la Marine (French Marine Hydrographic Service),
- Marine Chart No. 1860 from Hydrographic Office of the Navy,
- ISGOTT (International Safety Guide for Oil Tankers and Terminals (OCIMF/ICS Publication)).

Meteorology: The year is characterised by 2 seasons: Rainy season from June to September, variable season from October to May with low rain frequency.

The outdoor temperature varies on average from 22°C/72°F (July and August) to 30°C/86°F (February to April).

Water temperature at the surface varies from 25°C/77°F (June to September) to 29°C/84°F (February).

The prevailing winds are 4 knots to 10 knots from the S.W. sector throughout the year. The strongest winds, up to 45 knots, are rare and occur from February to May, in October, and in December. They may accompany tornadoes generally travelling from East to West.

Visibility is rarely very good and only rarely exceeds 11 nautical miles. It may be reduced to a half mile by rainfall, especially from June to September.

Tides, Currents, Waves: Tides at the Victoria site are of the semi-diurnal type 35 minutes in advance of those at Bonny (Admiralty Tide Table, Volume 2) or about 1.5 hours in advance of those of Limbe (Victoria) (Service Hydrographique de la Marine).

Surface currents, mainly influenced by the Guinea Currents, generally flow towards the S.W. and rarely exceed a speed of 1 knot.

The predominant direction of waves is S.S.W., with a trough from 0.6 m. to 1.2 m. from October to February, and a trough from 1.3 m. to 1.9 m. from February to September. Mean period 8 seconds to 10 seconds.

SAFETY: *Nautical Safety Rules:* Apart from export tankers using the loading buoy, entry into the "danger zone" is prohibited to all ships except ships of the Administration or those necessary for the development or production of the Victoria Field.

These vessels shall be equipped with fire-fighting facilities and shall not be left without surveillance.

Moreover, it is prohibited in the "danger zone" to establish anchorages, permanent or otherwise, and ships or floating equipment are prohibited from dropping their anchors.

Safety Rules Related to Weather Conditions: Throughout the presence of the ship at the loading buoy, the ship's Master shall ensure that the standard safety regulations are observed, and especially the following:

Keep in service a sufficient portion of the crew in order to guarantee trouble-free manoeuvring of the ship and operating the preliminary fire-fighting facilities.

Keep the engines ready to manoeuvre within a period specified by the Loading Master.

Have a steel wire safety towline, in mousing arrangement, placed starboard bow and stern, in such a manner that the eye can be secured easily by an assistance vessel if the latter is present on the site.

Fire-Fighting Rules: Any person who discovers a fire at the Terminal shall immediately sound the alarm.

If the fire breaks out on the ship, the latter shall transmit the distress signals specified in the international regulations.

Fire-Fighting: The ship's Master shall be responsible for the use of the technical fire-fighting facilities, and the maintenance of the ship's stability and safety.

Throughout the presence of the ship at the loading buoy, the following is prohibited:

Smoking, the use of naked flames or tools liable to generate sparks outside areas normally authorised on a tanker.

Repairs, handling operations or work liable to generate sparks.

The use, in zones classified as dangerous, of equipment or tools which are not of a type approved for this service by a competent agency.

Turning of the propellers, except for steam-ships.

Leaving open hatches and doors leading on to the main deck.

Firing shots.

As a rule, the ships shall comply with the safety requirements specified in the International Safety Guide for Oil Tankers and Terminals. In particular, it shall:

Position and connect 2 fire-hose nozzles in the bow and stern of the ship, ready for use.

Keep the fire-fighting system under pressure.

Position hand extinguishers of a suitable type near the manifold.

Tepcam reserves the right to take any measures that it deems effective in case of danger and, in particular the postponement or interruption of loading operations.

Emergency Measures: In the case of incidents/accidents which occur during loading, the Loading Master shall be notified immediately in order to take the measures imposed by the incident, promptly and in association with the Terminal Superintendent.

In all cases, the Master shall be capable of coping with these situations rapidly and effectively.

AUTHORITY: *Operator:* Total Exploration Production Cameroon (Tepcam), Avenue Ahmadou Ahidjo, BP 1225, Douala, Cameroon. *Tel:* 42-32-91. *Telex:* 5698 Kn, 5385 Kn. *Contact:* Mr. Chatain or Mr. Delos, Operations Department.

Pilot Ladders:

1. In all ships where the distance from sea level to the point of access to, or from, the ship exceeds 5 m. (O.N.P.C. requirements), the ship must be provided to embark and disembark Pilots by means of the accommodation ladder in conjunction with a pilot ladder. The ship should carry an accommodation ladder on each side, unless such ladder is capable of being transferred.

2. The ladder should be sited leading aft. When in use, the lower end of the ladder should rest firmly against the ship's side within the parallel body length of the ship and within the mid-ship half section and clear of all discharges. Equally safe arrangements which might be more suitable for special types of ships should be acceptable.

3. The length of the accommodation ladder should be sufficient to ensure that its degree of slope does not exceed 55 degrees.

4. The lower platform of the accommodation ladder should be in a horizontal position when in use.

5. Intermediate platforms, if fitted, should be self-levelling. Treads and steps of the accommodation ladder should be so designed that an adequate and safe foothold is given at the operative angles.

6. The ladder and platforms should be equipped on both sides with stanchions and rigid handrails, but if handropes are used they should be tight and properly secured. The vertical space between the handrail or handrope and the stringers of the ladder should be securely fenced.

7. The pilot ladder should be rigged immediately adjacent to the lower platform of the accommodation ladder and the upper end should extend at least 2 metres above the lower platform.

8. Lighting should be provided at night such that the full length of the ladder is adequately lit.

9. If a trap door is fitted in lower platform to allow access from and to the pilot ladder, the aperture should be not less than 750×750 mm. In this case the after part of the lower platform should also be fenced as in paragraph 6, and the pilot ladder should extend above the lower platform to the height of the handrail.

10. The accommodation ladder(s), together with any suspension arrangements or attachments, fitted and intended for use in accordance with this Recommendation should be the satisfaction of the Administration.

ANCHORAGES: The anchorage zone is a circle 1 mile in radius centred about 2 miles E.N.E. from the SPM, at the point with coordinates: Lat. 4° 07′ 33″ N., Long. 8° 31′ 04″ E.

Approach to the anchorage should be made from the East. With the S.P.M. as the centre, vessels should steer a course of between 210° and 330°. (See "Plan Book".)

RESTRICTIONS: The danger zone in which routine navigation and fishing activities are prohibited is defined by the four points AA, BB, CC and DD, of which the coordinates are given below. The field installations are situated about half a mile inside the limits.

AA: Lat. 4° 09′ 10″ N., Long. 8° 29′ 43″ E.
BB: Lat. 4° 06′ 28″ N., Long. 8° 29′ 43″ E.
CC: Lat. 4° 06′ 28″ N., Long. 8° 25′ 24″ E.
DD: Lat. 4° 09′ 58″ N., Long. 8° 25′ 24″ E.

Ship moorings and connections take place from 0600 hrs. to 1800 hrs. weather and sea permitting. They may be performed by night, on Tepcam preliminary agreement conditions. Departures from berth take place day and night.

MAX. SIZE: The loading station is designed for the mooring and loading of ships from 50,000 to 280,000 d.w.t.

The water depth at the buoy is 57 m. to hydrographic zero.

HEALTH: Sanitary boarding is carried out by the Doctor in Chief of the Border Health Police. Pilots are entitled to carry out this inspection. In case of infectious disease on board, contact the Doctor in Chief of the Border Health Police through the Harbour Master before ship's arrival at the terminal. For the application of Health Regulations, the ship shall use the signals in the International Code of Signals.

RADIO: Ships shall announce their arrival by telegram sent 72 hours before their planned arrival. This telegram, addressed to Tepcam shall be sent via Douala Radio and shall announce its ETA in GMT, as well as all information concerning the planned loading:

Arrival ballast.
Deballasting time.
Max. loading rate.
Cargo quantity.
Derrick lifting capacity.
Dimensions of manifold flanges.
Forward anchoring system characteristics.
Sanitary conditions.

The ship shall repeat contact 48 hours and 24 hours before its arrival and correct its ETA if necessary.

Communications between ship and base through Douala Radio should be in decameter or hectometer wave.

Douala Radio monitors 2182 kHz and VHF Channel 16.

During radio contacts preceding the arrival of the ship at the site, the ship shall receive instructions from the Terminal Superintendent for direct mooring or, on the contrary, standby anchorage in the zone defined.

VHF: When 60 miles from the Terminal, the ship shall make contact by Channel 16 and then switch to the operating frequencies below.

The ship shall then receive the instructions required for its mooring to the loading buoy.

Port regulations are communicated as soon as possible to the Master, who shall acknowledge receipt by letter.

Monitoring as well as safety frequency are provided on Channel 16.

Also see "Pilotage".

Communications between the ship and the Terminal are provided on:

VHF Marine Total, Channel 69 (156.475 MHz)

VHF (land) between base and Douala headquarters:

Tx: 75.550 MHz	Rx 80.550 MHz
Tx: 75.650 MHz	Rx 80.650 MHz
Tx: 75.700 MHz	Rx 80.700 MHz

VHF Total field communication:

Tx: 159.725 MHz	Rx 155.125 MHz

TUGS: See "Pilotage – Pilot Boat".

BERTHING: The Victoria Loading Buoy is of the CALM type (Catenary Anchor Leg Mooring) with a single mooring point.

It consists essentially of a cylindrical body 12 m. in diameter and 4.7 m. high, equipped at the bottom with a skirt projecting 1.7 m., and with a turn-table. The buoy is anchored by means of 6 chains extending in a radius of 380 m. around it.

A 255 m. long line of 24 in. floating hoses terminates in 2×37 m. long extensions of 16 in. hoses equipped with 16 in. Camlock type quick couplings at the ends for buoy/ship connection.

A mooring line and its accessories are used to moor the ship to the turn-table.

The mooring personnel carrying out the polypropylene connection from the buoy to the "Messenger Line" of the ship are provided by the Terminal.

Loading Master: Assistant to the Terminal Superintendent, he co-ordinates with him all the following operations:

Mooring
Connection
Loading.

He is responsible for ensuring compliance with Port Regulations at the Terminal. His instructions shall not be questioned or disputed and he will not check the Pilot's action, who is the Harbour Master's representative at the Terminal.

He may refuse or prohibit, after Pilot's advice, the entry of the ship in cases such as but not limited to:

unfavourable weather conditions,
ship insufficiently equipped or possessing defective equipment,
insufficient or dirty ballast.

He is in charge of obtaining the agreement to start loading. He makes sure of the correct application of safety instructions by the shipboard personnel and of the loading plan.

Once the ship is moored, he may ask the Pilot's advice for an early removal from berth of the ship or may suspend loading of the ship for reasons such as but not limited to:

safety
bad weather
non-compliance with instructions
insufficient drainage of cargo tanks
dumping of polluted water into the sea
incidents affecting the loading buoy or the pumping installation.

During loading operations he insures the radio co-ordination between the ship and the Terminal.

Terminal Crew Chief: He acts under the direction of the Loading Master. Mainly in charge of inspection of specifically marine equipment, he shall assist and inform the Pilot and the Loading Master during approach, mooring, connection/disconnection and loading phases.

Mooring and Connection: The engines shall be in condition to deliver their maximum capacity if required. The ship's port derrick shall be rigged to project 1 m. over the ship's side and to lift a minimum load of 10 tons.

The Pilot shall instruct the Master of the ship of the standard manoeuvres for berthing and mooring.

Mooring and connection operations shall be performed by the ship's crew.

Once it is moored, the ship shall keep its engines ready to manoeuvre. No work reducing the ship's manoeuvring potential shall be undertaken without the approval of the Terminal Superintendent or his assistant.

The ship's Master shall ensure that the mooring lines guarantee a secure mooring at all times. He shall make sure that the mooring units operate to satisfactory conditions, in order to minimise wear and to prevent their breakage.

LOADING: When the ship is absolutely ready to perform loading operations, the ship's Master shall present the "Notice of Readiness". The "Notice of Readiness" shall not be accepted if the Terminal is closed.

Once the mooring and hose connections have been completed, the checklist shall be checked and signed jointly before the start of loading by the Tepcam Representative and the ship's Master.

The Terminal Superintendent shall issue the order to start pumping, after the ship has confirmed that she is ready to load and shall notify the ship of the progress of loading operations.

Radio connections shall be checked frequently. All information concerning flow rate, gas pressure, change in cargo tank, cumulative quantities, etc., shall be communicated between the ship and the control room.

20 minutes before the end of loading, the ship shall advise the Loading Master in order to stop pumping in due time.

In the case of a storm or leakage, loading shall be suspended.

Measurement of the ullages, temperatures and draft after loading, for control purposes, shall be performed in the presence of the Tepcam representative.

Throughout the loading period, the ship shall carry the following:

- by day, a red flag on the masthead ("B" flag of International Code),
- by night, a red light visible 360°.

This requirement shall also be valid for ships which are loaded, moored, or manoeuvring in the danger zone, and also for ships that are not declared "gas free".

The Terminal shall provide the ship with representative samples of the cargo.

Lookout: During the whole stay of the vessel at the SPM, the Pilot ensures watch of safety on board.

Permanent bow lookout: The Tepcam representative and the Pilot will demand permanent bow watch by a member of the ship's crew and shall be advised of the tanker's position in relation to the buoy.

Permanent lookout at manifold: As soon as connections are made, the Tepcam representative shall demand permanent manifold watch by a member of the ship's crew and shall be advised of the configuration of the tanker rail hoses and if any leaks in the manifold.

BALLAST: The Terminal is not provided with facilities for treating ballast water. Ships shall therefore arrive with clean ballast. The minimum arrival ballast shall be equal to about 30% of the ship's d.w.t., ensuring a draft consistent with safe manoeuvring, a reasonable trim and a propeller submerged, to the satisfaction of the Pilot.

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POLLUTION: It is prohibited to dump any objects or waste of any type into the sea.

It is also prohibited to dump into the sea any liquid liable to ignite or to pollute the water.

The ship's scuppers must be closed/plugged during the loading operations.

A system designed to collect any drips and leaks shall be placed under the hose/manifold connection.

In the case of water pollution caused by the ship, for any reason whatsoever, Tepcam declines any responsibility, and the ship shall be held responsible for the direct consequences of this pollution. In particular, the assistance costs incurred by Tepcam shall be passed on to the ship.

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AIRPORT: The nearest airport is 4 km. from Douala. 1 or 2 flights daily for Europe, several flights weekly for the U.S.A. (with changes in Europe).

TIME: GMT plus 1 hour.

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These vessels shall be equipped with fire-fighting facilities and shall not be left without surveillance.

Moreover, it is prohibited in the "danger zone" to establish anchorages, permanent or otherwise, and ships or floating equipment are prohibited from dropping their anchors.

Safety Rules Related to Weather Conditions: Throughout the presence of the ship at the loading buoy, the ship's Master shall ensure that the standard safety regulations are observed, and especially the following:

Keep in service a sufficient portion of the crew in order to guarantee trouble-free manoeuvring of the ship and operating the preliminary fire-fighting facilities.

Keep the engines ready to manoeuvre within a period specified by the Loading Master.

Have a steel wire safety towline, in mousing arrangement, placed starboard bow and stern, in such a manner that the eye can be secured easily by an assistance vessel if the latter is present on the site.

Fire-Fighting Rules: Any person who discovers a fire at the Terminal shall immediately sound the alarm.

If the fire breaks out on the ship, the latter shall transmit the distress signals specified in the international regulations.

Fire-Fighting: The ship's Master shall be responsible for the use of the technical fire-fighting facilities, and the maintenance of the ship's stability and safety.

Throughout the presence of the ship at the loading buoy, the following is prohibited:

Smoking, the use of naked flames or tools liable to generate sparks outside areas normally authorised on a tanker.

Repairs, handling operations or work liable to generate sparks.

The use, in zones classified as dangerous, of equipment or tools which are not of a type approved for this service by a competent agency.

Turning of the propellers, except for steam-ships.

Leaving open hatches and doors leading on to the main deck.

Firing shots.

As a rule, the ships shall comply with the safety requirements specified in the International Safety Guide for Oil Tankers and Terminals. In particular, it shall:

Position and connect 2 fire-hose nozzles in the bow and stern of the ship, ready for use.

Keep the fire-fighting system under pressure.

Position hand extinguishers of a suitable type near the manifold.

Tepcam reserves the right to take any measures that it deems effective in case of danger and, in particular the postponement or interruption of loading operations.

Emergency Measures: In the case of incidents/accidents which occur during loading, the Loading Master shall be notified immediately in order to take the measures imposed by the incident, promptly and in association with the Terminal Superintendent.

In all cases, the Master shall be capable of coping with these situations rapidly and effectively.

AUTHORITY: *Operator:* Total Exploration Production Cameroon (Tepcam), Avenue Ahmadou Ahidjo, BP 1225, Douala, Cameroon. *Tel:* 42-32-91. *Telex:* 5698 Kn, 5385 Kn. *Contact:* Mr. Chatain or Mr. Delos, Operations Department.

GENERAL (See Plan Book)

PILOTAGE REGULATIONS: Vessels arriving from any point *East* of the Strait of Belle Isle, Cabot Strait or the Strait of Canso is required to give notice of ETA 24 hours in advance, second notice of ETA 12 hours in advance and Final notice confirming or correcting the ETA 4 hours in advance. With the first notice the following information should be supplied:

(a) in the case of the first arrival of the ship in the compulsory pilotage area in any calendar year,
  (1) the name, nationality, call sign and Agent of the ship,
  (2) the length, breadth, moulded depth, deepest draft, speed and the largest net registered tonnage of the ship, and
  (3) the immediate and the ultimate destinations of the ship within the compulsory pilotage area, and

(b) in the case of any subsequent arrival, movage or departure of the ship in the compulsory pilotage area in any calendar year,
  (1) the name, call sign, deepest draft, the speed of the ship and any changes in the information provided under paragraph *(a)*, and
  (2) the immediate and ultimate destinations of the ship within the compulsory pilotage area

The Laurentian Pilotage Authority advises that, where there is failure to give the required notices, without reasonable cause, the Authority is *not* required to provide the vessel with the services of a Pilot.

NOTICE: *Non-Canadian Ships Compliance Certificate:* In September, 1983, the Shipping Federation of Canada advised the following:

We have been informed by the Canadian Coast Guard that many tankers are being diverted unexpectedly in mid-Atlantic to Canadian ports. Some of these vessels have never been involved in Canadian trade before and as a result do not have a Non-Canadian Ships' Compliance Certificate and are therefore in breach of Canadian regulations. The regulations governing the issuance of the certificate apply to all non-Canadian oil tankers of 500 g.r.t. or more trading in waters South of the 60° parallel of North Latitude. The regulations hinge on the 1930 and 1966 Solas Conventions, the navigating appliances regulations, the oil pollution prevention regulations, the charts and publications, regulations, etc. The certificate is valid for two years and essentially indicates that the ship complies with other Canadian regulations.

The Coast Guard has recently permitted several of these vessels to enter Canadian waters and has diverted the offenders to the nearest suitable port where ship inspectors ensure that the vessels meet Canadian standards prior to issuing a certificate. We have been informed by the Canadian Coast Guard that tankers which contravene the regulations will not be permitted to enter the Gulf of St. Lawrence. This diversion to an inspection port creates a loss of time for the shipowner and efforts must be made to correct the situation.

In waters other than Canadian, an inspector of the government of the state in which the ship is registered and representatives of recognised classification societies are empowered to issue the non-Canadian ships' compliance certificate on behalf of the Canadian Coast Guard.

NOTICE TO MARINERS:

NOTICE No. 10: Transmission of Estimated Time of Arrival: In the interest of marine safety Masters should give an early indication of the vessel's ETA to the appropriate Port Authority and in this respect comply with any published instructions relating to this requirement. At ports where instructions have not been published, the ETA should be radioed in sufficient time for Port Authorities to make arrangements for the arrival of the vessel, taking into account actual conditions such as tide, size and draft of the vessel and notice as necessary to alert Pilots and towing services.

Notice to Mariners Nos. 25 and 26 also provides information on reporting procedures for specific areas.

Authority: Department of Transport (CGSN).

NOTICE No. 23: Canada – Ice Information, Routing and Requests for Icebreaker Assistance

1 **HUDSON STRAIT AND CANADIAN ARCTIC**

Arctic Canada Traffic System (Nordreg Canada). Mariners should be aware of the existence of the Arctic Canada Traffic System (Nordreg Canada) and the advantages of reporting to this system which is a voluntary Vessel Traffic Service (VTS) covering the waters of Ungava Bay, Hudson Bay and James Bay South of the parallel of 60° North Latitude and the waters to which the Arctic Waters Pollution Prevention Act applies.

During the Arctic navigation season, a Nordreg office based at Frobisher Bay is staffed with an Ice Operations Officer who provides information on ice conditions and vessel routing in ice. Icebreaker assistance, when requested may be arranged through the Ice Operations Officer. For more detailed information on this VTS system, the definition of waters it covers and the requirements to make certain reports and obtain clearance, Mariners should refer to the current Annual Edition of Notices to Mariners.

(a) *For general information on ice conditions:*
Address: NORDREG CANADA,
Canadian Coast Guard,
Department of Transport,
P.O.Box 718,
Frobisher Bay, N.W.T.
X0A 0H0.
Telephone: 819-979-5724
Telex: 063-15529
Radiogram: Ice Frobisher.

2 **EAST COAST AND GULF OF ST. LAWRENCE**

During the Winter navigation season a similar service is provided to ships intending to transit or to operate in East Coast and Gulf of St. Lawrence waters. Access to this service can be obtained by contacting the Eastern Canada Traffic System (ECAREG CANADA). ECAREG communications procedures are specified in the current Annual Edition of Notices to Mariners.

(a) *For general information on ice conditions:*
Address: ECAREG CANADA,
Canadian Coast Guard Traffic Centre,
Maritimes Region, Canadian Coast Guard,
Department of Transport,
P.O.Box 1013,
Dartmouth, N.S.
B2Y 3Z7.
Telephone: (902) 426-5664 or (902) 426-5665
Telex: 019-22625 or 019-22510
Radiogram: Ice Halifax.

(b) For general information on ice conditions and icebreaker assistance in Newfoundland waters, East of Cape Chidley and Long. 58° 00' W., including Labrador Coast and Hamilton Inlet:
Address: ECAREG CANADA
Canadian Coast Guard,
Newfoundland Region,
Department of Transport,
P.O.Box 1300,
St. John's, Newfoundland.
A1C 5N5.
Telephone: (709) 772-2078
Telex: 016-4530
Radiogram: Ice St. John's.

3 **ST. LAWRENCE RIVER**

In the St. Lawrence River West of Long. 66° 00' W. to Montreal, ship movement is under the general control of the Vessel Traffic Services (VTS) system and ice information and advisory services are handled through this system as follows:

For general information on ice conditions:
Address: Canadian Coast Guard Regional Information Centre,
Wing 2, Ground Floor,
Port of Montreal Building,
Cite du Havre,
Montreal, Quebec,
H3C 3R5.
Telephone: (514) 866-1584
Telex: 055-60641.

4 **CANADIAN GREAT LAKES**

Vessels entering Canadian waters of the Great Lakes may obtain ice information, routing advice and request icebreaker assistance by contacting the following address:
Ice Operations Officer,
Canadian Coast Guard,
Department of Transport,
16th Foor, Toronto Star Building,
1 Yonge Street,
Toronto, Ontario, M5E 1E5.
Telephone: (416) 369-3918
Telex: 06-23317
Radiogram: Ice Toronto.

5 **GENERAL REMARKS**

A limited number of icebreakers are available for the support of shipping and these are heavily committed. It is emphasised, therefore, that it may not be possible to provide icebreaker support at short notice. In order to make the most efficient use of all available resources, it is important that the Canadian Coast Guard Traffic Centres be kept informed of the position and projected movements of vessels in Canadian waters.

Authority: Department of Transport (CGVO).

NOTICE No. 25: Vessel Traffic Services (VTS).
See Annual Canadian Notice No. 25 (not reproduced) and "Plan Book" for areas.

AMHERSTBURG, Ontario: 42.06 N. 83.08 W. (See Plan Book)

PORT LIMITS: Southerly Port Limits commence at Buoys 43D and 44D and extend on the Canadian side of the International Boundary Line, Northerly to the Southerly limits of Windsor Harbour.

DOCUMENTS: Amherstburg is not a port of entry, but a Customs Officer is available upon notice 24 hours a day. Foreign Ships, on arrival, are required to present Canadian Customs Form A-6 inward and A-6 outwards.

PILOTAGE: Pilotage is compulsory as required by Seaway Regulations.

ANCHORAGES: Windsor Harbour is the only recognized anchorage in Detroit River.

RESTRICTIONS: Seaway draft is maintained in main channel and shallow draft channel of 21 ft. Water levels are affected by fluctuation of Lake Erie. A Low Water Warning is broadcast from Belle Isle on 2670 kHz and 156.6 MHz on the odd hour plus 55 minutes when the water level in the West end of Lake Erie falls 1 in. or more below the lower level of the Lake Survey Centre's predicted range of levels shown in bulletins issued the 5th and 20th of each month during navigation season. Water levels are broadcast on FM radio from Group Detroit.

MAX. SIZE: About 432 ft. long and 21 ft. draft is maximum for Allied Chemical Dock.
HEALTH: Pratique is not necessary as vessel has passed all health requirements before entering Canada.
RADIO: Messages may be sent and received via VBE Sarnia Radio.
VHF: None available for port movement, except as established between vessels in Harbour.
TUGS: Available, but not usually used.
BERTHING: There is no public wharf.

Canadian Coast Guard (C.C.G. Docks available on request for distress or emergency only. Contact by radio or telephone) has two docks: South – 250 ft. in length with approach depth 17 ft.; North – 291 ft., with approach depth 17 ft. North of this dock is McQueen's, 17 ft. draft. The old Town Coal Dock is converted into a public park.

Allied Chemical is a private dock which consists of 3 cement filled caissons protected with steel sheet piling. Import fuel oil and export liquid calcium. Vessels of 412 ft. length call here regularly, draft approach alongside 21 ft.

CRANES: Shore cranes are available for hire from private contractors, also floating barges with cranes, 100 ton capacity and 200 ft. boom if required.
BULK CARGO FACILITIES: Conditions of various wharves does not warrant any usage for bulk cargoes.
BRIDGES: No bridges within Amherstburg Harbour area.
STEVEDORES: Stevedoring is arranged through Agents in Windsor.
MEDICAL: Should medical attention be required it can be arranged through radio station VBE Sarnia by message to Canadian Coast Guard Base Amherstburg. Hospitals are available in Windsor with Ambulance service. Injured seaman can be taken off if necessary by Canadian Coast Guard in vicinity of Amherstburg, when notified via VBE Radio Sarnia.
TANKERS: Use private wharf of Allied Chemical Limited.
DENSITY: Fresh water only.
FRESH WATER: Fresh water could be supplied in an emergency by tank truck or contacting Public Utilities Commission.
FUEL: Not available on docks, except by truck.
FIRE PRECAUTIONS: Usual ship board fire precautions on board.
CONSULS: None.
REPAIRS: Small ship repairs can be carried out by local firms from Windsor.
DRY DOCK: None.
SURVEYORS: None stationed in port, but arrangements can be made to have an inspector when required.
GANGWAY/DECK WATCHMEN: No regulations requiring watchman.
CUSTOMS ALLOWANCES: Same as all Canadian Customs Regulations.
CARGO GEAR: Ship's gear, unless pallets are used.
REPATRIATION: Arrangements for crew change can be made.
TIME: Local time is GMT plus 5 hours and Summer time plus 4 hours.
HOLIDAYS: All Canadian Holidays, working time requires negotiating with local unions.
POLICE/AMBULANCE/FIRE: Police – 736-3622, Ambulance – 736-5411, Fire – 736-6500.
TELEPHONES: No telephone jacks available on any dock.
SERVICES: Laundry can be done, but takes considerable time. Food stuffs are available, including fresh produce.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Seaman's I.D. card is sufficient.
REGULATIONS: No unusual regulations.
DELAYS: Private owner's dock is only dock being used for cargo.
AUTHORITY: 1. Canadian Coast Guard, 370 Dalhousie Street, Amherstburg, Ontario. *Tel:* 519-736-5449. *Telex:* 064-77655. *Contact:* Steven D. Lear, Sub-District Manager.
2. Harbour Master – Mr. Len Duby, Amherstburg, Ontario.
3. Wharfinger – Mr. N. Faucher, 200 St. Arnard Street, Amherstburg. *Tel:* 736-5451.

AMHERST HARBOUR, Quebec: 47.14 N. 61.50 W.

LOCATION: Situated at the N.E. end of Amherst Is., which is part of the Magdalen Islands group.
DOCUMENTS: Amherst is not a port of entry, clearance obtained at previous Canadian port of call.
PILOTAGE: Not compulsory.
ANCHORAGES: Available inside the harbour, depths 4.88 m. to 5.5 m.
RESTRICTIONS: Navigation season from April 1st to December 15th. Channel depth 16 ft. at LWST.
RADIO: Grindstone (VCN).
TUGS: None.
BERTHING: Transport Canada Wharf: Length 183 m., depth alongside 5.18 m. at LW.
STEVEDORES: Available.
FRESH WATER: Available.
FUEL: Diesel available.
REPAIRS/DRYDOCK: Not available.
AIRPORT: Flights to Charlottetown and Quebec Province.
AUTHORITY: Transport Canada, Garde Cotiere Canadienne, Region des Laurentides, 4 Place Quebec, Suite 103, Quebec, P.Q., G1R 4X3. *Contact:* Felix A. Boudreau, Harbour Master, Amherst.

BADDECK, N.S.: 46.06 N. 60.44 W. (See Plan Book)

DOCUMENTS:
4 Crew Lists.
Customs Documents.
Harbour Dues Receipt.
Stores List.
Derat Certificate.
Safety Regulations.
Clearance from Last Port.
PILOTAGE: Compulsory. Pilot station at Table Head, see Canadian chart 4367.
ANCHORAGE: Good anchorage in lake. Depths 50 ft. to 500 ft.
RESTRICTIONS: Can be restricted by heavy fog, tide, ice.
Great Bras d'Or: (Entrance to lakes restricted at Seal Island Bridge to vessels less than 119 ft. high).

Entrance into the Bras d'Or Lakes via the Great Bras d'Or is from the Northward, through a ten mile long fiord which varies in width from 0.5 to 1 mile wide and flanked by high rolling hills.

MAX. SIZE: Largest vessel to dock 497 ft. long, 66.7 ft. wide. Draft 28 ft.
HEALTH: Pratique obtained at Sydney, N.S.
RADIO: Sydney Radio
TUGS: None.
BERTHING: The dock is 330 ft. in length, with an approach way of 80 ft. length, making an "L" shape. Depth alongside at LW is 15 ft. at the inner end and 25 ft. at the outer end.
MEDICAL: No advance notice required. Hospital available.
DENSITY: In sea 35/1000. In lake 25/1000.
FRESH WATER: Supplied at 20 t.p.h.
FUEL: Diesel oil available by truck.
CERTIFICATES: Registry, Derat and Safety Certificates.
CUSTOMS ALLOWANCES: Tobacco, 100 cigarettes per week or 0.5 lb. tobacco. Wine/spirit: None.
CONSULS: None.
REPAIRS: Minor repairs only.
SURVEYORS: Lloyds, ABS and BV available from Halifax.
HATCHES: Normally opened and closed by crew.
AIRPORT: 55 miles. Served by regular airlines.
TIME: GMT minus 4 hours. Advance 1 hour in Summer.
HOLIDAYS: Sundays and Statutory holidays; New Year's Day; Good Friday; Easter Monday; Victoria Day; Canada Day; Labour Day; Thanksgiving Day; Remembrance Day; Christmas Day.
POLICE/AMBULANCE/FIRE: 295 2350, 292 2032, 295 2110.
TELEPHONES: None available for placing on board.
AUTHORITY: Transport Canada, Baddeck, Nova Scotia. *Tel:* 295-2113. *Contact:* Mr. Cantwell, Harbour Master/Wharfinger.

BAIE COMEAU, Quebec: 49.15 N. 68.09 W.

PORT LIMITS: Starting from a point on the Southern limit of Baie Comeau at Pointe St. Gilles Lat. 49° 12′ 10″ N., Long. 68° 08′ 41″ W. Thence, North-Eastward to Pointe St. Pancrace, Lat. 49° 15′ 14″ N., Long. 68° 04′ 43″ W.

All waters inside of these points are understood to be part of Baie Comeau Harbour.

DOCUMENTS: Baie Comeau is a Port of Entry. Customs and Immigration facilities are located in the Town of Baie Comeau. All vessels arriving from Foreign Ports will be boarded by Customs and Immigration Officers.

The following forms are to be completed prior to arrival at the first Canadian Port:

3 copies Immigration Crew List, IMM-200
3 copies Crew Declaration, Y-14
3 copies Ship's Stores, E-1
3 copies Passenger List, IMM-264
2 copies Quarantine Service, *Q-S-1
*To be supplied by Quarantine Officer on arrival.

ETA: Advise Agent 72, 24 and 4 hours before arrival. Include fuel and stores requirements.
PILOTAGE: Not compulsory. The services of a qualified Docking Master are available through the facilities of Cargill Grain Company. Docking instructions will be given by radio after receiving vessel's ETA.

Normally the Docking Master boards from tug approximately 0.5 mile S.W. of Pointe St. Pancrace.

RESTRICTIONS: Port open for shipping all year round. Deep water approaches without restrictions for any vessel able to berth alongside.
ICE ADVISORY SERVICE: Ships inbound for Baie Comeau from seaward between December 15th and April 15th should advise the Ice Information Officer, Sydney, N.S., 36 hours prior to entering Cabot Strait stating their position, destination, whether loaded or in ballast. This procedure will facilitate the passing of ice information to the ship as necessary.

On request, ice information is also available from Marine Radio Stations at Halifax, Camperdown, Seven Islands, Twillingate and Grindstone. The Canadian Broadcasting Corporation Maritime network also broadcasts ice information daily during the Winter navigation season. Supplementary ice information may also be obtained from Canadian Marine Service icebreakers.

During the ice season, radio broadcasts of ice information are made twice daily from Marine Radio Stations as follows:

		Call Frequencies
Cape Race, Nfld.	VCE	420 kHz CW 2582 kHz RT
Fox River, Que.	VCG	434 kHz CW 2582 kHz RT
Mont-Joli, Que.	VCF	446 kHz CW 2582 kHz RT
North Sydney, N.S.	VCO	489 kHz CW 2582 kHz RT
Halifax	CFH	115.3 kHz CW 6949.5 kHz 8662 12984 17218.4

MAX. SIZE: Up to 40 ft. draft at Cargill at LW. Size limited only by berth depth.

RADIO: Mont-Joli Radio VCF 2582 kHz (VHF, CRM Co. Ltd., Wharf Office, base to ships on marine frequencies) (Channel 7A – 156.350 MHz and Channel 16 – 156.800 MHz, call XJS94).

HEALTH: Incoming vessels making Baie Comeau port of entry must obtain pratique by wireless. Radio pratique may be obtained between 0900 hrs. and 1700 hrs. the day preceding arrival. Address message "Quarantine Quebec": For the purpose of radio pratique, vessels are required to give the following information:

1. Name and nationality of vessel.
2. Ports called at during voyage.
3. Nature of cargo.
4. Number of crew.
5. Number of passengers.
6. Port of destination and name of Agent.
7. Number of persons without valid certificates.
8. Condition of health of all on board with details of any sickness or death which has occurred during the voyage.

Ships arriving in English Bay in Quarantine will be inspected by Health Officer at anchorage or on arrival alongside. Should Officer board vessel at anchorage, proper accommodation ladder must be provided.

TUGS: Available. Not compulsory except for Cargill Grain Terminal.

BERTHING:

Dock No. 1: Transport Canada: berth 456 ft. long, max. depth 27 ft.; berth 360 ft. long, max. depth 25 ft. North Shore Paper Company: 1,000 ft. wharf, max. depth 27 ft. Dock Pier: 2 berths, 422 ft. long, 20 ft. depth.

Dock No. 2: Canadian Reynolds Metals Co., Ltd. Wharves consist of breakwater and approach jetty called Berth No. 1, 450 ft. long. Berth Nos. 2 and 3 in slip, 587 ft. and 551 ft. long respectively. The docking area is dredged to 30 ft. at low water at Berth No. 1 and 31 ft. at Berth Nos. 2 and 3 and flares out to marker buoy (Fl. red Ev. 12 secs.) at Northern extremity and 1,000 ft. to its Southern extremity, where depth of water increases rapidly off shore from approximately 400 ft. East of breakwater. A port hand can buoy marks dredging out from S.E. corner of No. 1 Berth.

Dock No. 3: Cargill Grain Terminal, North Pier, 2 loading berths, length 585 ft., North side dredged to 40 ft., South side dredged to 38 ft. South Pier, 1 unloading berth, length 720 ft., North side only dredged to 29 ft.

Quebec-Hydro Dock: Depth alongside 27 ft. (25 ft. depth at berth used by Quebec North Shore Paper Co.).

CRANES: 100 ton stiff leg derrick at Canadian Reynolds Metal Co. Ltd., 5 ton level luffing crane at No. 2 Dock.

Mobile cranes available through local contractor.

CARGO HANDLING FACILITIES:

Canadian Reynolds Metal: 2 Pneumatic unloaders for Alumina and Coke, rate 140 t.p.h. each. at No. 3 Berth.

Cargill Grain Terminal: North Pier: 2 vessels can be loaded simultaneously at a combined average rate of 1,200 t.p.h. (long tons). South Pier: Discharging rate 1,100 t.p.h. (short tons).

STEVEDORES: Each terminal employs own stevedores.

MEDICAL: All facilities available. Local Hospital in Baie Comeau and Hotel-Dieu, Hauterive, 5 miles.

DENSITY: 1000 – 1025.

FRESH WATER: Delivered by pipe-line to the berths (April – October).

FUEL: Available by pipe-line to Cargill Grain Terminal. Diesel oil and gasoline delivered by truck (Imperial, Gulf, Texaco and Shell).

REPAIRS: Minor repairs may be effected through local contractors.

IDENTIFICATION CARDS: Gate passes are issued at the gate to all Crew members when going ashore for the purpose of identity on their return.

AIRPORT: Daily service to Quebec and Montreal.

CUSTOMS ALLOWANCES: 200 cigarettes for each man. Officers may be allowed 1 bottle wine/spirits, Master up to 5 bottles.

TIME: GMT minus 5 hours. Daylight Saving Time: GMT minus 4 hours, applied from last Saturday of April until last Saturday of October each year.

SHORE LEAVE: Crew members allowed ashore. No restrictions.

HOLIDAYS: New Year's Day; Epiphany; Good Friday; Ascension Day; St. John the Baptist Day; Labour Day; All Saints' Day; Christmas Day. No work performed on these holidays.

AUTHORITY: Transport Canada, Baie Comeau, Province Quebec. *Tel:* 418-296-4296. *Contact:* Leopold Amiot, Harbour Master/Wharfinger.

BAY ROBERTS, Newfoundland: 47.36 N. 53.26 W.

(See Plan Book)

DOCUMENTS: Documents as per Standard Canadian Requirements.

PILOTAGE: Non-compulsory. Can be arranged by Coast Guard Traffic Management Centre, St. John's.

ANCHORAGES: Good anchorage in outer area of Bay Roberts Harbour in depths of 5 to 6 fathoms.

RADIO: Ship to Shore through St. John's (VON).

BERTHING: Deep water approach, channel depth approximately 60 ft. Navigable year round.

Wharves: (1) Transport Canada Wharf (Canadian Coast Guard) – Finger pier 181 ft. long (55 m.) and 40 ft. (12 m.) across the outer face. Depths alongside 20 ft. – 21 ft. LWOST. Concrete deck. Load limits 300 p.s.f., 15 tons concentrated load.

(2) Fish Plant Wharves – Two finger piers; East Wharf 160 ft. long and 26 ft. across the outer face (49 m.×8 m.), and West Wharf 197 ft. long and 26 ft. across the outer face (60 m.×8 m.). Depths alongside East Wharf 11 ft. to 13 ft. (3.4 m. to 4 m.) and West Wharf 13 ft. (4 m.) LWOST. Load limits unknown.

(3) Spencers Wholesale Wharf – Marginal wharf 263 ft. along the outer face (80 m.) with depths alongside 11 ft. to 14 ft. (3.4 m. to 4.3 m.) LWOST. Load limits unknown.

(4) Avalon Coal Salt and Oil Wharf – Marginal wharf 149 ft. long at the outer face (45 m.) with depths alongside 15 ft. to 19 ft. (4.6 m. to 5.8 m.) LWOST. Load limits unknown.

There are several smaller wharves and piers present.

CRANES: Small mobile cranes only.

STEVEDORES: Local labour; should be arranged by Agent.

MEDICAL: Local clinic. Full hospital facilities at Carbonear, 15 km. distant.

TANKERS: See "Berthing".

FRESH WATER: Available at Fish Plant Wharf.

FUEL: Available at Fish Plant Wharf.

REPAIRS: Limited welding can be arranged locally, nearest major repair shops at St. John's, 90 km. distant.

SURVEYORS: Lloyd's Register, P.O.Box 5044, St. John's, Newfoundland A1C 5V3. Tel: (709) 726-0543, (709) 368-2538 (residence).

GANGWAY/DECK WATCHMEN: Usually ship's crew. Ship's gangway used.

REPATRIATION: Can be arranged by Agent via St. John's airport.

AIRPORT: At St. John's, 90 km. distant.

POLICE/AMBULANCE/FIRE: R.C.M.P. Detachment at Harbour Grace, local fire station, ambulance service available.

EMERGENCY CO-ORDINATION CENTRE: Coast Guard, Search & Rescue, St. John's, Newfoundland. Tel: (709) 772-5151.

GENERAL: Bay Roberts is covered by Chart No. 4572.

SHORE LEAVE: No restrictions.

BANKING: Services available.

AUTHORITY: Transport Canada, Ports & Harbours, P.O.Box 1300, St. John's, Newfoundland, A1C 6H8. *Tel:* 772-5154. *Telex:* 016-4530. *Contact:* D. A. Lester, Regional Manager.

BECANCOUR, Quebec: 46.24 N. 72.23 W.

(See Plan Book)

PORT LIMITS: Normally vessel has "arrived" when first line on the bollard (subject to Charter-party terms).

DOCUMENTS: Crew Lists, Customs, Health, Manifests, Bills of Lading, Ship's Papers, Certificates, etc.

Customs, Health, Agents, Port Manager will board ship on arrival.

PILOTAGE: First Pilot boards at Les Escoumins Pilot Station. Exchanging Pilots off Quebec Pilot Station, on to berth in Becancour.

ANCHORAGES: Off berth or off main channel or, 5 miles (8 km.) West of harbour.

RESTRICTIONS: None.

Winter Navigation: From December 10th to April following, every year or as soon as the floating aids to navigation have been lifted a second Pilot is compulsory from Les Escoumins to Montreal.

Daylight navigation only between Quebec and Montreal.

The Canadian Seaway closes at about the same date.

Normal navigation resumes as soon as the aids are floated, normally between 15th March and 15th April.

MAX. SIZE: No restriction as to length, although 800 ft. (244 m.) is considered a respectable length. Chart datum depth 35 ft. (10.7 m.), average water level change 3 ft. (1 m.).

HEALTH: Pratique may be requested through any Canadian Coast Guard Radio Station or VHF traffic control stations.

TUGS: Not compulsory. Stationed in Trois-Rivieres/Quebec (5 miles West). Master's request.

BERTHING: 5 berths, length ranging from 500 ft. (155 m.) to 800 ft. (244 m.), depth 35 ft. (10.7 m.). Average water level 3 ft. (1 m.) above chart datum height. No reversing tide effects. Warehousing facilities, as required paved, lighted, open spaces 15 acres (6 hectares).

CRANES: Up to 200 tons capacity, rental or ship's gear.

STEVEDORES: Private firm (exclusive to Becancour). Normal working hours 0800 – 1700 hrs. Overtime for night work, weekends and holidays can be arranged.

BULK HANDLING FACILITIES: Bulk is normally carried by self unloading vessels discharging at a rate of 2,000 t.p.h.

2 cranes on rails will be in operation mid-1985 (suction type). 500 tons rate per crane.

Total stockpiling area: 150 acres.

SPECIALISED CARGO HANDLING FACILITIES: Ro/Ro ramp 70 ft. (21 m.) wide.

MEDICAL: Nicolet, Trois-Rivieres, emergency ambulance standing-by.
DENSITY: Fresh water.
FUEL: Only by truck. Trois-Rivieres depot (35 tons truck). Rate: 20 to 30 t.p.h.
TANKERS: Special tankers are loading chemical products from trucks, occasionally.
FRESH WATER: From dock pipe-lines and hoses. Agent places order to Port Authority ($2.27 per 1,000 gallons plus labour).
CONSULS: At Montreal and Quebec.
REPAIRS: Piping and welding repairs, other limited ships repairs.
DRY DOCKS: Quebec, Sorel, Montreal.
SURVEYORS: ABS, Lloyd's, N.V. and private firms.
GANGWAY/DECK WATCHMEN: Recommended.
HATCHES: Opening and closing carried out by crew members.
CARGO GEAR: Ship's gear or shore gear. Heavy lift crane 200 tons (mobile).
REPATRIATION: Can be arranged without restrictions through Montreal International Airport by ship's Agent and Canadian Authorities.
AIRPORT: Inter-provincial airport in Trois-Rivieres. International airports in Montreal and Quebec (1.5 hours). Regular arrival to and from many parts of the world.
TIME: From last Saturday of March (every year) advance 1 hour to E.D.S.T.

From last Saturday of October (every year) minus 1 hour from E.S.T.
HOLIDAYS: Same as Quebec Province.
POLICE/FIRE/AMBULANCE: Gentilly, (area code: 819) 298-2211. Becancour (area code: 819) 298-2223
TELEPHONES: Offices on the docks (agency offices).
SERVICES: Commercial firms tank cleaning equipment facilities. Electronic aids to navigation repairs.
SHORE LEAVE: Allowed with permission of Master.
IDENTIFICATION CARD: Seamans book is sufficient.
REGULATIONS: Copy of the operational regulations will be handed to Master on ship's arrival by Port Authority.
DELAYS: Delays not experienced to date.
GENERAL: The port facilities are administered and operated by "La Societe du Parc Industriel du Centre du Quebec" a provincial Government Corporation under the Minister of Industry, Commerce and Tourism Quebec.
DEVELOPMENTS: The marine facilities of Becancour are part of an industrial park located within the Municipality of Becancour, Quebec.

The port facilities are already expanding to meet the requirements of a major industrial development.

SHIPMASTER'S REPORT: June 1982.
Restrictions: Port open all year round. Mooring/unmooring possible anytime day or night.
Tides: Tidal difference 2 ft. – 3 ft. Current always running downstream.
Radar: Not available.
Tugs: Tugs are not compulsory. No tugs are stationed at Becancour, but can be obtained from Trois Rivieres, about 5 miles away.

Vessel was berthed at No. B-1 berth, and did not use any tugs, neither on arrival not on departure.

The Pilots told me that tugs were advisable in some cases for berthing at B-2 and B-3 berths, depending of size of vessel, and prevailing weather conditions.
Berthing: Three berths, B-1, B-2 and B-3. Lengths of wharves 800 ft. (240 m.), 490 ft. (147 m.) and 600 ft. (180 m.) respectively. Depth alongside 35 ft.

Warehousing facilities include a 14,000 sq.ft. (1,300 sq.m.) transit shed on the wharves and a 40,000 sq.ft. bonded warehouse plus a 15 acre fenced-in outdoor storage area a short distance from wharves.
Cranes: None available. Ship's gear used.
Bulk Handling Facilities: None. Vessel berthed at "B-1". Average loading rate for bundled timber was 43 tonnes per gang hour. Stockpile area of 75,000 sq.ft.
Specialised Cargo Handling Facilities: Ro-Ro ramp at "B-2". Width of ramp 70 ft. (21 m.).
Stevedores: Private firms, to be booked by the vessel's Agents. Normal working hours: 0800 – 1200 and 1300 – 1700 hrs. Overtime can be arranged for night work and for work on Saturdays, Sundays and other holidays.
Density: Fresh water.
Fuel: Only by truck. (Vessel received 340 tonnes intermediate fuel oil and 30 tonnes diesel oil from Shell, Canada, Trois Rivieres depot. Each truck about 35 tonnes. Loading rate 20 – 30 minutes per truck.
Repairs: No facilities.
Surveyors: Available in Montreal and Quebec.
Gangway/Deck Watchmen: By crew.
Hatches: Open/close by crew.
Customs Allowances: Same as for Trois Rivieres. (Becancour Port is attended to by Trois Rivieres Custom's officers.).
Repatriation: Can be arranged without restrictions from Montreal Airport (about 2.5 hours drive by car). The Agents are usually engaging a specially licensed company, who takes care of the transportation to the airport, and checking that crew members are actually leaving Canada.
Shore Leave: No restrictions.
Identificaton Cards: Passport or seaman's book recommended to be carried whenever leaving the vessel. There is no gate-control of persons entering of leaving the port area.
Developments: Tankfarm under construction for edible oils, chemicals and petroleum products.

Future development of harbour will include additional stockpiling area for bulk material, containers and more warehousing capacity. The planned installations will cover a 200 acre area.

AUTHORITY: "La Societe du Parc Industriel du Centre du Quebec", 1000, 7eme Rue, Parc Industriel Portuaire, Becancour (Quebec), Canada G0X 1B0. *Tel:* (819) 294-6656. *Telex:* 05-837279 (spicq bccr). *Contact:* Captain Jean-Guy Chouinard, Port Manager.

BELLEDUNE, N.B.: 47.55 N. 65.51 E.

A deep water harbour administered from Ottawa, Ontario and serving Belledune Fertilizers and other projects in the Bathurst area. This harbour is open to shipping all the year round.
DOCUMENTS: See "Saint John".
PILOTAGE: Pilotage is not compulsory, however, should a Pilot be required, the services of a local Berthing Master Mariner are available on request.

Regardless of pilotage, estimated times of arrival should be given to Belledune Fertilizers Ltd. 72, 48 and 24 hrs. before.
ANCHORAGE: Vessels wishing to anchor will find no difficulty in obtaining an anchorage in more than 10 fathoms, approximately 1 mile to the Northward of the Belledune Breakwater.
TUGS: None available. May be obtained from Halifax.
BERTHING: One berth, length 550 ft., depth at LW, 34 ft.
TIDES: Tides normally rise 6 ft. at springs and 3 ft. at neaps. Tidal current seldom exceeds 1 knot.
STEVEDORES: Bulk cargoes handled by Belledune Fertilizer Ltd., and general cargo by Longshoremen.
CRANES: Heavy-lift equipment available from private companies. Cranes up to 25 tons available.
MEDICAL: Hospital at Bathurst.
FRESH WATER: Available. Delivered by tank trucks upon arrangement with Belledune Fertilizer Ltd.
FUEL: None locally. Can be obtained and delivered by tank trucks.
CONSULS: None.
REPAIRS: Minor repair facilities at Belledune Fertilizer Ltd. machine shop.
STORES: All types of provisions as well as deck and engine stores can be obtained at Bathurst for delivery to Belledune.
AUTHORITY: Canada Ports Corporation, 320 Queen Street, Place de Ville, Ottawa, Ontario K1A ON6. *Tel:* 996-4230 (Area Code 613). *Telex:* 053-4127. *Contact:* Director, Port Operations.

Local Representative: Belledune Fertilizer Ltd. Local Operations Director: R. Boudreau.

BOTWOOD, Newfoundland: 49.09 N. 55.20 W.

(See Plan Book)

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 Crews Declaration (Can. Form Y14).
3 Stores Lists (Can. Form E.1).
Health Declaration (Can. Form QS. 2001).
3 Cargo Manifests.
3 Bills of Lading.

PILOTAGE: Compulsory. Pilot boards in position Lat. 49° 19′ 44″ N., Long. 55° 12′ 49″ W. day or night. Send ETA 12 hours and 4 hours in advance. Pilot station and boat equipped with VHF. Coastal pilotage service from St. John's to Botwood available on request.
ANCHORAGE: In Botwood Harbour, off the oil dock in depths of 10 – 20 fathoms.
RESTRICTIONS: Navigation season from mid-April to mid-January approximately. Ice-breaker assistance may be necessary in Winter months. Deep water approaches.
MAX. SIZE: Up to 32 ft. draft.
RADIO: Comfort Cove, St. John's, St. Lawrence or Corner Brook.
HEALTH: Health Officer boards on arrival.
TUGS: None available.
BERTHING: *Pier No. 1:* Owned by Price (Nfld.) Pulp & Paper Ltd., used exclusively for handling newsprint outward and caustic soda inward. Is 500 ft. long; min. depth alongside 32 ft., is adjacent to newsprint storage shed, capacity 20,000 tons (standard newsprint).

Pier No. 2: Berth unfit for use.

Pier No. 3: 600 ft., owned by American Smelting & Refining Co., used for shipping concentrates, and discharging Bunker "C" fuel and sulphur inward. Min. depth alongside 32 ft. Concentrates loaded by 1 fixed conveyor.

Ministry of Transport Finger Pier: Length 150 ft., min. depth alongside 35 ft. Face is 23 ft. – 25 ft. Is connected by pipe-line to bulk fuel storage tanks, owned by Golden Eagle Refining Co. Ltd., and is used primarily for discharging of clean fuels.

Ministry of Transport General Cargo Wharf and Shed: Wharf 269 ft. long, 103 ft. in breadth, cargo shed 200×70 ft., 20 ft. clear height below steel girders. Apron of wharf is 33 ft. wide with access driveway extending around each end of shed to main roadway. Rear cargo doors from shed open at truck level to facilitate mechanical handling. Front and end doors are wharf level.
MEDICAL: Doctors, hospital facilities available.
FRESH WATER: Available at all berths.
FUEL: Only light diesel available.
REPAIRS: Minor repair and diving services only.
SURVEYORS: Lloyd's and Norske Veritas at St. John's.
CUSTOMS ALLOWANCES: 200 cigarettes for each man. Officers may be allowed 1 bottle wine/spirits, Master up to 5 bottles.
TIME: GMT minus 5 hours. Daylight Saving Time: GMT minus 4 hours, applied from last Saturday of April until last Saturday of October each year.
SHORE LEAVE: Allowed. No restrictions.
HOLIDAYS: Good Friday; Labour Day; Christmas Day and Boxing Day. No work performed on these holidays.

AIRPORT: Gander International Airport, 60 miles away.
BANKS: Bank of Montreal, 52 Water Street, Botwood, Newfoundland A0H 1E0. Tel: 709-257 2957
EMERGENCY CO-ORDINATING CENTRE: Canadian Coast Guard, St. John's. Telex: 016-4530. Tel: 709-737 2083/4.
AUTHORITY: Ministry of Transport.
Harbour Master H. Baldwin, Wireless Road, Botwood. *Tel:* 709-257 3288.

BRIDGEWATER, N.S.: 44.23 N. 64.31 W.

(See Plan Book)

DOCUMENTS: See "Halifax".
PILOTAGE: Not compulsory. Report ETA by radio-telephone or radio-telegraph to Superintendent of Pilots, Halifax, N.S. at least 12 hours before arrival at boarding station. ETA to be confirmed 3 hours before arrival. Pilot boards off Moshers Island Light.
ANCHORAGE: At Dayspring, 2 miles below Bridgewater.
RESTRICTIONS: Port is situated on La Have River, 10 miles from the sea. Channel path at LW, 20 ft.
MAX. SIZE: Length 325 ft. Draft 20 ft.
RADIO: Halifax Radio.
HEALTH: Pratique granted by Customs Officer who boards on arrival at the berth. Also see "Montreal".
BERTHING: Transport Canada Wharf, berthing length, 1,073 ft. Depth alongside 21 ft.
FRESH WATER: Available ex wharf only on West side of river.
FUEL: Diesel and gasoline from storage tanks in port.
MEDICAL: Hospital services available.
REPAIRS: Limited facilities for engine repairs.
STEVEDORES: Available.
HOLIDAYS: Dominion Legal holidays.
AIRPORT: Nearest approximately 90 miles away.
POLICE/AMBULANCE/FIRE: Police Tel: 543-2464. Dawson Memorial Hospital Tel: 543-4603.
BANKS: Bank of Montreal, Tel: 543-2415.
Royal Bank of Canada, Tel: 543-7161.
Bank of Nova Scotia, Tel: 543-8155.
Canadian Imperial Bank of Commerce, Tel: 543-2451.
AUTHORITY: Transport Canada, Bridgewater, Nova Scotia. *Tel:* 543-8815. *Contact:* Glayden L. Conrad, Harbour Master.

CHANDLER, Quebec: 48.22 N. 64.40 W.

LOCATION: Town on the Quebec shore entrance to Chaleur Bay, 10 miles N.E. of Point au Maquereau, 16 miles W. of Cape d'Espoir.
PILOTAGE: Controlled by Halifax Pilot Board Association.
RESTRICTIONS: *Navigation Season:* All year round, ice breakers sometimes accompany vessels.
HEALTH: Pratique is secured by radio through Quebec City.
RADIO: Grindstone (VCN) and Fox River.
TUGS: None available or required.
BERTHING: *Transport Canada Wharf:* East Side reserved for fishing vessels.
West Side: Length 600 ft. Depth at LW 32 ft.
STEVEDORES: Skilled labour available.
FRESH WATER: Available.
FUEL: Diesel oil available. Bunker 'C' can be brought in by rail.
REPAIRS: Machine shop available for minor repairs.
SURVEYORS: Lloyd's at Quebec City. ABS at Montreal.
SERVICES: Post office, bank, telephone, notary, telegraph, hospital.
AUTHORITY: Transport Canada. *Contact:* Victor Bujold, Harbour Master and Wharfinger, Tel: 689-6713.

CHARLOTTETOWN, P.E.I.: 46.14 N. 63.07 W.

(See Plan Book)

PORT LIMITS: A ship is considered to be "arrived" when it reaches Pilot Boarding Station at Lat. 46° 00′ N., Long. 63° 08′ W.
DOCUMENTS:
Port clearance from previous port.
3 Form QS.2001 Quarantine, if from other than U.S. port or St. Pierre et Miquelon.
3 Form HA.282 Garbage Disposal Warning.
2 Form IMM.200 Crew List, only Canadian documentation acceptable.
3 Form E1 List of Ship's Stores. May use own documentation.
3 Form 71 Crew's Declarations. May use own documentation.
2 Form A6 Report Inwards.
PILOTAGE: Pilotage is compulsory. One Pilot active with privately owned 40 ft. wooden boat, white hull, blue vertical strip midships. The pilot boarding station is in position Lat. 46° 00′ N., Long. 63° 08′ W. No alternate area in event of bad weather. To avoid a delay in obtaining a Pilot, he may be contacted on VHF Channel 16. Master should report ETA at least 12 hours before the ETA at the pilot boarding station. The ETA must be confirmed or corrected not more than 6 hours later. The Master of a vessel that is to depart or make a move within the compulsory pilotage area must report to "Pilots Charlottetown" 6 hours prior to estimated time of departure.
ANCHORAGES: Anchorage inside harbour at Three Tides – Lat. 46° 13′ N. Long. 63° 08′ W. Average depth of water 30 ft.
MAX. SIZE: Draft 32 ft.
HEALTH: Pratique procedure carried out by Customs Officers. (Form QS1).
RADIO: VCA Charlottetown, Canadian Coast Guard.
VHF: Canadian Coast Guard (VCA) Channels 16 and 26.
RADAR: Service not available.
TUGS: Not available.
BERTHING: (1) Railway Wharf: West side, berthing length 730 ft. with depth ranging from 32 ft. at outer end to 10 ft. at inner end at low water; East side, berthing length 500 ft. with depth of water ranging from 32 ft. at outer end to 10 ft. at inner end at low water. Outer end has a berthing length of 230 ft. with a depth of water of 32 ft. at low water. Wharf used for loading and discharging general cargo; equipped with railroad tracks, one – heated shed – 385 ft. long×50 ft. wide, one heated freight shed 385 ft.×60 ft. Electric light, water, oil and gasoline available. Mobile cranes available.

(2) Ministry of Transport wharf, 300 ft. wide, with a depth of 33 ft. alongside. Office and stores building, buoy test shop, etc. West side berth, 450 ft. long, with depth of 26 ft. for Coast Guard use only.

(3) Texaco Canada Ltd. wharf, 365 ft. long, with four large oil storage tanks. Mooring dolphins have been erected adjacent to the wharf and there is reported to be at least 28 ft. alongside at low water.

(4) Department of Public Works, berthing length 500 ft. with depth of 20 ft. at outer end, 19 ft. along outer part of West side, and 19.25 ft. on East side; equipped with electric light and water mains; used for Government marine purposes only.

(5) Irving Oil Co. Ltd. wharf, on edge of channel, about 600 ft. from Old Bridge Site. Use by Irving tankers only.

A railway line runs along inner end of wharves. All depths given are at low water.
CRANES: No shore cranes available, vessels are required to use own gear.
BULK CARGO FACILITIES: (1) Railway Wharf: West side, berthing length 500 ft. with depth ranging from 32 ft. at outer end to 10 ft. at inner end at low water; East side, berthing length 730 ft. with depth of water ranging from 32 ft. at outer end to 10 ft. at inner end at low water. Outer end has a berthing length of 230 ft. with a depth of water of 32 ft. at low water. Wharf used for loading and discharging general cargo; equipped with railroad tracks, one – heated shed 385 ft. long×50 ft. wide, one heated freight shed 385 ft.×60 ft. Electric light, water, oil and gasoline available. Mobile cranes available.
SPECIALISED CARGO FACILITIES: Berths not equipped for handling containers or roll-on/roll-off traffic.
BRIDGES: None.
STEVEDORES: Advise ETA before 1600 hrs. in order to commence 0800 hrs. next day.
MEDICAL: No advance notice required, ample hospital facilities available.
TANKERS: Railway Wharf: Outer end has a berthing length of 230 ft. with depth of water 32 ft., discharge lines 8 in., 10 in. and 12 in., no slop facilities.

Texaco Canada: Wharf 365 ft. long with four large oil storage tanks. Mooring dolphins have been erected adjacent to wharf. Draft 28 ft., discharge lines 8 in. no slop facilities.

Irving Oil Wharf: On edge of channel about 600 ft. from bridge. Discharge lines 8 in. and 10 in. Draft 32 ft., no slop facilities.
DENSITY: 1025 oz. per cu.ft.
FRESH WATER: Available at Railway Wharf. Order through Agent. Rate 12 t.p.h.
FUEL: Delivered by tank truck. Most grades of fuel and diesel as well as marine lubricants can be obtained through supplier.
GANGWAY/DECK WATCHMEN: Usually ship's crew.
OPENING/CLOSING HATCHES: Stevedores work hatches which are not mechanically operated.
CUSTOMS ALLOWANCES: 200 cigarettes or 2.0 lb. tobacco or 15 cigars per man per week. Wine and/or Spirit: 40 oz. of wine or spirits or 288 oz. of beer.
REPAIRS: Minor repairs only.
DRY DOCKS: Not available.
CARGO GEAR: Vessel required to use own gear for loading and unloading.
REPATRIATION: Crew changes and repatriation can be carried out with little difficulty.
AIRPORT: 4 miles distant with daily flights by Eastern Provincial Airways and Air Canada.
TIME: GMT minus 4 hours, May to October; GMT minus 5 hours, November to April.
HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Victoria Day; Canada Day; Labour Day; Thanksgiving Day; Remembrance Day; Christmas Day; Boxing Day. Work can be arranged on these days.
POLICE/AMBULANCE/FIRE: Police, 894–5513; Ambulance, 892-5311. Fire, 894–3113.
TELEPHONES: No hookup available.
BANKS:
(1) Royal Bank of Canada, Confederation Plaza, Charlottetown, PEI.
(2) Bank of Montreal, Confederation Plaza, Charlottetown, PEI.
(3) Bank of Nova Scotia, Confederation Plaza, Charlottetown, PEI.
(4) Toronto Dominion, 192 Queen Street, Charlottetown, PEI.
(5) Canadian Imperial Bank of Commerce, Queen Street, Charlottetown, PEI.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not required unless disembarking. Crew members should then possess Seaman's Book and/or Passports.
DELAYS: If berth available, no delays in loading or unloading.
AUTHORITY: Transport Canada, Box 1202, Charlottetown, P.E.I. C1A 7M8. *Tel:* (902) 566-7974. *Telex:* 014-44130. *Contact:* Paul McGonnell, Port Manager.

CHATHAM and NEWCASTLE, N.B.: 47.00 N. 65.33 W. 47.02 N. 65.28 W.

DOCUMENTS:

Previous port clearance.
3 Immigration Crew Lists.
3 Ship Stores Lists.
3 Crew Declaration.
Derat Certificate.
Health of Animals.
Load Line Certificate.
Safety Equipment.
Safety Radio.
Safety Construction.
Ship's Register.
Health Declaration (QSI).
3 General Declaration Inwards (A6).
Cargo Manifests.

PILOTAGE: Contact Agent for Pilot at least 12 hrs. in advance. Pilot boat, wooden hull, length 44 ft., grey, Pilot flag about 20 ft. above sea-level. Apr. 16 to Dec. 9 Pilot taken aboard 2 miles North of Escuminac Breakwater. In event of very bad weather good anchorage Egmont Bay, PEI. Dec. 10th–April 15th Pilot boards at Eddy Point NS when inbound from East. In other cases Pilot boards at point of departure in Canada.

MAX. SIZE: Max. draft 7.46 m. Also see "Developments".

HEALTH: Pratique procedure carried out by Customs Officer (complete form QS 1).

RADIO: Use Grindstone (VCN) or Charlottetown Radio (VCA), or Escuminac Pilot (VHF Channel 16).

TUGS: Not required.

BERTHING: Approx. 3 hrs. from pilot station to Berth.

BRIDGES: Bridge at Chatham 35 m. clearance high tide. Hydro wires at Middle Island 41 m. at 60 degrees Fahrenheit at lowest point, channel wide at this point, able to get 55 m. clearance. Morrisey Bridge, max. span opening is 30 m. Overhead cables at Morrisey Bridge.

STEVEDORES: Notice at least 12 hrs. before arrival.

MEDICAL: Hotel Dieu Hospital, Chatham and Miramichi Hospital, Newcastle.

TANKERS: Hose connections 15 cm.; no slop discharge facilities.

FRESH WATER: Available only at Government wharves at Chatham and Newcastle.

FUEL: All types by tanker truck.

GANGWAY/DECK WATCHMEN: Not necessary.

CUSTOMS ALLOWANCES: 200 cigarettes/man/5 days. Spirits: 40oz./man/5 days.

CREW IDENTIFICATION CARDS: Not needed.

CONSUL: Danish Consul in Newcastle.

REPAIRS: Light repairs by Miramichi Foundry and Arvin Speciality Machines.

SURVEYORS: Lloyd's Surveyor at Dalhousie. N.B., others at Halifax.

REPATRIATION: Facilities good.

AIRPORT: Chatham. Daily flight to Montreal.

TIME: Atlantic Standard, 4 hours difference GMT. Change from Standard to Daylight Saving last Sunday in April through last Sunday in October. (1 hour forward).

HOLIDAYS: No work Labour Day, Armistice Day, New Brunswick Day. Other holidays may be worked on overtime.

POLICE/AMBULANCE/FIRE:

	Newcastle	*Chatham*
Police:	622–2111	773–4436
Ambulance:	Through Police	773–3492/733–4321
Fire:	622–2500	773–5856

SHORE LEAVE: No restrictions.

DELAYS: Not normally.

EMERGENCY CO-ORDINATION CENTRE: Coastguard (Maritimes) Emergency Centre. Tel: Zenith 49000.

STORING:

(1) Vessels may be stored by truck.
(2) Trucks may proceed alongside at the berth.
(3) Fork-lift trucks may be used.
(4) Local riggers may be employed to assist with storing.

GENERAL: Charts required (Canadian) 4023 – Northumberland Straits, 4910 – Miramichi River, Sailing Directions – Gulf and St. Lawrence. Tides; Spring 1.75 m. Neaps; 1.22 m. Night navigation possible.

DEVELOPMENTS: 7.62 m. draft available in 1984 at wharf extension (length 71 m.) and 10,300 sq.m. shed under construction in Newcastle.

Wharf (length 179 m.) and 3,900 sq.m. shed under construction in Chatham, project to be completed March 1985.

AUTHORITY: Port Manager, Department of Transport, Box 32, Newcastle, New Brunswick E1V 3M2. *Tel:* (506) 622-0918. *Telex:* 014-25540.

CHEMAINUS: 48.55 N. 123.42 W.
CROFTON: 48.51 N. 123.38 W.

DOCUMENTS, PILOTAGE, HEALTH, CONSULS etc.: Refer to "Vancouver, B.C.".

ANCHORAGE: Available in Houston Passage.

RESTRICTIONS: Channel depth 48 ft. MLLW. Restricted by berth size only.

TUGS: Available. Tugs for Crofton are ordered from Chemainus.

STEVEDORES: 22 gangs available. Refer to "Vancouver, B.C.", for holidays, etc.

MEDICAL: Doctors and hospitals facilities available at Chemainus, 5 miles from Crofton.

BERTHING:

Chemainus:

Wharf	*Berthing Length* (ft.)	*Depth at LW* (ft.)	*Remarks*
MacMillan Bloedel	450	39 (North End) 19 (South End)	Crane available
MacMillan Bloedel	560	53 (North End) 30 (South End)	
Crofton:			
Stuart Channel No. 1	650 (Max. LOA)	35	Check draft with Pilot
No. 2	700 (Max. LOA)	40	
No. 3	700 (Max. LOA)	40	Check draft with Pilot. Vessels berth port side too. Ship's gear used for cargo handling.

No loading gear installed at Crofton berths.

DENSITY: Salt water.

FRESH WATER: Available at wharves.

FUEL: Diesel oil available from Imperial Oil Wharf at Chemainus.

CUSTOMS ALLOWANCES: See "Vancouver, B.C.".

REPAIRS: Repairs arranged from Victoria or Vancouver Shipyards. Minor repairs available locally.

AUTHORITY: Transport Canada, 10007 Daniel Street, Chemainus. *Tel:* 246-3569. *Contact:* R. B. Guilbride, Harbour Master.

Transport Canada, Chilco Street, Crofton. *Tel:* 246-9185. *Contact:* E. G. Long, Harbour Master.

CHICOUTIMI, Quebec: 48.25 N. 71.02 W.
(See Plan Book)

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
3 Crews Declaration (Can. Form Y14).
3 Stores Lists (Can. Form E.1).
Health Declaration (Can. Form QS. 2001).
3 Cargo Manifests.
3 Bills of Lading.

PILOTAGE: Pilotage is compulsory. Pilots board vessels that are Westerly-bound at Anse-aux-Basques and Easterly-bound at Quebec City. The Master of every ship inward bound in the Gulf of St. Lawrence and destined for ports West of Anse-aux-Basques must report his ETA to Pilots Montreal via Marine Traffic Control on VHF radio Channel 14 (156.7 mHz) or by other means of communication to Seven Islands Radio Station VCK giving his ETA to Escoumains Pilotage Station and the net registered tonnage of his vessel.

A minimum notice of 12 hours must be given to ensure the availability of Pilots at Anse-aux-Basques for vessels proceeding from the Gulf to Chicoutimi.

This notice must be confirmed 3 hours prior to arrival at the pilot station by radio-telegraph or radio-telephone as mentioned above.

The pilot station for vessels upbound to Chicoutimi is located at Anse-aux-Basques, charted 2 miles S.W. of Les Escoumains Wharf on the North shore of the St. Lawrence River. Two pilot boats are constantly on service.

ANCHORAGE: At St. Fulgence, 6 miles before Chicoutimi.

RESTRICTIONS: Navigation season from mid-April to end November approximately. Channel depths 6 m. LW up to oil terminal and 4.88 m. LW above oil terminal.

MAX. SIZE: Up to 7.62 m. draft.

RADIO: Riviere du Loup Radio Station.

HEALTH: Pratique may be obtained by radio to Quarantine Quebec. Health Officer boards on arrival.

TUGS: None available.

BERTHING: Main Wharf, 792 m. berthing length, 9 m. depth alongside.

CRANES: Two cranes for bulk cargoes 5 tons capacity.

TANKERS: *Albert Maltais Oil Berthing Pier:* Located in main channel to the port off Pointe-a-l'islet. Length of berth 40 m. Depth alongside 9 m. (30 ft.) at LW. Max. size: 130 m. (430 ft.) and not over 10,000 tons. Pipeline: length 460 m. (1,500 ft.) diameter 2×25 cm. (10 in.). Vessels moor to buoys fore and aft.

DENSITY: Fresh water.

MEDICAL: Doctors, hospital facilities available.

FRESH WATER: Available at all berths.

FUEL: Available at oil berth.

REPAIRS: Minor machine shop repairs only.

CUSTOMS ALLOWANCES: 200 cigarettes for each man. Officers may be allowed 1 bottle wine/spirits, Master up to 5 bottles.

TIME: GMT minus 5 hours. Daylight Saving Time: GMT minus 4 hours, applied from last Saturday of April until last Saturday of October each year.

SHORE LEAVE: Allowed. No restrictions.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Victoria Day; St. John the Baptist Day; Dominion Day; Labour Day; Thanksgiving Day; Remembrance Day; Christmas Day. No work performed on these holidays.

AUTHORITY: Port of Chicoutimi, C.P. 760, Avenue Lafontaine, Chicoutimi, Quebec G7H 5E1. *Tel:* (418)-543-0263. *Telex:* 051-36218. *Contact:* Guy Deseagne, Port Manager.

CHURCHILL, Man.: 58.47 N. 94.12 W. (See Plan Book)

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists (if applicable).
3 Ships Stores Lists.
2 Quarantine Certificates.
1 Certificate for Harbour Master to be prepared after approval.
1 Certificate that Gyro Compass in order certified plus copy of manifest giving weight or measurement for each Bill of Lading. Certification by Local Collector of Customs.

Arctic Pollution Prevention Certificates: Ships have arrived in Churchill without such certificates and have thus contravened the Arctic Shipping Pollution Prevention Regulations. This certificate states that a vessel is in class, complies with SOLAS conventions, and has all of the equipment required by the regulations such as two radars, etc.

A certificate may be obtained from a surveyor employed by a major classification society named in the regulations. Ships unexpectedly diverted to Churchill should contact the Port Warden immediately on arrival at Churchill.

Ship Masters are cautioned to ensure that they comply with the Arctic Shipping Pollution Prevention Regulations.

PILOTAGE: Pilotage is not compulsory, but the pilotage fee is compulsory. Pilots board ships outside the harbour within a radius of 5 miles from Eskimo Point. The fee is $415 per ship inward and $415 per ship outward. Moving vessel within harbour is $290.

Vessels must advise their ETA at the port, and should also advise their time of arrival at Fairway Buoy.

Requests for Pilots should be submitted through the local marine radio. Pilots embark from vessels at the Fairway Buoy. The tug "Twolan" is used as pilot boat.

ANCHORAGES: Inside the harbour, there is anchorage room for one small vessel in 30 ft. of water about 0.75 miles N.W. of wharf. There is insufficient swinging room at this anchorage for large vessels. Large vessels anchor outside the harbour. The outside anchorage is exposed and vessels in a light condition may find it difficult to maintain their anchorage, particularly with a strong N.E. wind.

RESTRICTIONS: Vessels are usually brought in just before high tide, although vessels may enter any time.

MAX. SIZE: Max. length 600 ft. width 100 ft. and depth alongside wharf at zero tide is 31 ft. at three berths, 33 ft. at one berth, 22 ft. at Wolfe Berth and 20 ft. at the coastal Berth.

HEALTH: All vessels must fly yellow flag until cleared by authorities after docking.

RADIO: Department of Transport, Marine Aeradio Station call sign VAP, Channels to be used: 16 for calls and replies, 12 for harbour control, as well as Channel 26.

RADAR: Requirements as laid down by Arctic Pollution Prevention Regulations.

TUGS: Tugs usually join vessels inside the harbour. Two tugs available. Ship's lines used.

BERTHING: Max. allowable salt water draft at sulphur berth 32 ft., thereafter topping-up with the tide for a few more inches.

Loading capacity for bulk grain is 60,000 bushels/hour.

CRANES: 1×100 tons capacity and 1×35 tons capacity.

STEVEDORES: Gangs are available during whole of shipping season, no advance notice required.

MEDICAL: Fully staffed and equipped hospital available, approximately 1 mile from harbour.

TANKERS: Discharge pipes 4 in. diameter. One berth available with max. depth of 33 ft. at zero tide.

FRESH WATER: Fresh water available at all berths. Water pumped through 2.5 in. pipe connected directly to ship, discharged at rate of approximately 60 t.p.h.

FUEL: Bunker fuel requires 30 days advance notice. Arctic fuel available all times.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Carried out by ship's crew.

CUSTOMS ALLOWANCES: See "Montreal".

CONSULS: None.

REPAIRS: Most repair work. Fully equipped machine shop available.

DRY DOCKS: None.

SURVEYORS: By arrangement with Ship Safety at Thunder Bay.

CARGO GEAR: Ship's gear.

AIRPORT: Airport situated 5 miles from the harbour and served by Pacific Western Airlines and Calm Air International Ltd., with 2 flights going North and 3 flights South every week (Monday, Wednesday and Friday).

TIME: GMT minus 6 hours. Daylight Saving Time (1 hour forward starts first Sunday in May and ends last Sunday in October).

HOLIDAYS: New Year's Day (January 1st); Good Friday; Easter Monday; Victoria Day (May 24th); Dominion Day (July 1st); Civic Holiday (First Monday in August); Labour Day (First Monday in September); Thanksgiving Day (Second Monday in October); Remembrance Day (November 11th); Christmas Day (December 25th); Boxing Day (December 26th).

Arrangements normally made to have crews available for those days.

POLICE/AMBULANCE/FIRE: Police Tel: 675-2422; Ambulance Tel: 675–8881, Fire Tel: 675–2424.

TELEPHONES: No facilities.

SHORE LEAVE: Allowed, no restrictions.

BANKS: Royal Bank of Canada.

STORING: Vessels may be stored by truck, which may proceed alongside. No forklift trucks available. Riggers may be employed. Customs regulations in force.

DELAYS: Little delay.

AUTHORITY: Ports Canada, P.O.Box 217, Churchill, Manitoba, R0B 0E0. *Tel:* (204) 675 – 8823. *Telex:* 0766 – 6513. *Contact:* General Manager.

CLARENVILLE, Newfoundland: 48.08 N. 53.56 W.

DOCUMENTS:
Crew List, Form 200 in duplicate.
List of Ship's Stores, Form E1 in duplicate.
Crew Declarations, Form Y.14 in duplicate.
Manifests in triplicate.
Bills of Lading in duplicate.

PILOTAGE: Contact Pilot through St. John's Radio (VON). Pilot usually boards off St. John's.

ANCHORAGE: Good anchorages in Random Sound.

MAX. SIZE: Largest ship 644 ft. long, breadth 84 ft., draft 26 ft.

HEALTH: See "Montreal".

RADIO: St. John's Radio (VON).

TUGS: None available.

BERTHING: Newfoundland Hardwoods Wharf: Length 375 ft., depth at LW 28 ft.

STEVEDORES: Available. 48 hours notice required.

MEDICAL: Necessary for Agents to receive advance notice of medical attention required. Hospitals available at Come By Chance (30 minutes distance by road) and St. John's. Vaccination/Fever Certificates necessary for pratique.

FRESH WATER: Limited supplies available.

FUEL: Light fuels only (no bunkers).

OPENING/CLOSING HATCHES: By crew.

CERTIFICATES: Load Line, Safety Equipment, Derat Certificates.

CUSTOMS ALLOWANCES: Tobacco 200 cigarettes allowed per crew member per week. Wine and/or Spirit, 1 bottle of spirit allowed per crew member on the first voyage in each year. Each subsequent voyage in one year, 1 bottle allowed only to officers.

IDENTIFICATION CARDS: Not required.

CONSULS: At St. John's.

REPAIRS: Minor repairs possible.

REPATRIATION: Only available by air.

AIRPORT: Gander International Airport located about 2 hours distance by road/served by regular airlines.

TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.

HOLIDAYS: See "Montreal".

POLICE/AMBULANCE/FIRE: Police 466-3211; Fire 466-7777; Ambulance 466-2010.

TELEPHONES: No facilities for placing on board.

SERVICES: Only limited services available.

SHORE LEAVE: Allowed.

AUTHORITY: Transport Canada.

AGENT: Newfoundland Hardwoods Ltd.

COME BY CHANCE, Newfoundland: 47.48 N. 54.01 W. (See Plan Book)

LOCATION: The Come By Chance oil terminal operated by Provincial Refining Co. is located in Placentia Bay, Lat. 47° 48′ 18″ N. Long. 54° 00′ 35″ W.

DOCUMENTS:
3 copies Crew Declaration (Form Y14).
3 copies Ship Stores List (Form E1).
3 copies Immigration Crew List (Form IMM 200) only Canadian form accepted.
2 copies of Bill of Lading or Manifest.

In addition, clearance from last port, Derat Certificate, extra copy of Crew List, Vaccination List, Ship's Register, Radio Equipment Certificate, Safety Equipment Certificate, Load Line Certificate and Non-Canadian Ship Compliance Certificate. Oil record log book should be up to date and readily available for inspection by Government steamship inspectors.

COAST GUARD TRAFFIC CENTRE: A vessel traffic management centre has been established at Argentia. Operation on a 24 hour basis; this centre will provide radar surveillance off Placentia Bay. Masters are required to establish communication with this station when in VHF range on Channel 16 (working on Channels 6, 12 and 14) in accordance with Notice to Mariners, in order to provide vessel's identification and obtain information regarding pilotage, buoyage, weather conditions, etc.

PILOTAGE: *Ship's Officer's Report:* Pilotage is compulsory. Pilots board off Argentia (position Lat. 47° 21.9′ N., Long. 54° 04.6′ W.) by prior arrangement with St. John's Pilotage. An ETA message (preferably in GMT) should be sent at least 12 hours before arrival to "Coast Guard Traffic Centre St. John's". The message should state the following:

Name of ship. Call letters. Draft. Gross tonnage. Length. Breadth. Moulded depth. Destination.

Confirmation or amendment of the ETA should be sent 6 hours prior to arrival.

The pilot boat is approximately 50 ft. long with a black hull and white housing. It has "Pilot" painted on the housing and flies the Pilot flag – white over red horizontal stripe.

VHF channels are allotted to various areas in Canadian waters but in the absence of this information contact can be established in the first instance on Channel 16. The most frequently used Channels are numbers 6, 11, 12 and 14. In general Channel 6 is used by tugs and Channel 11 by Pilots in pilotage waters.

It is anticipated that there will be no pilotage in Placentia Bay during the hours of darkness for a period of at least two years for vessels of over 50,000 d.w.t.

The pilotage routes used are as follows:

Latine Pt. (Argentia)	097°×4.6′	Co. 019°
to		
Margery Cove (N. of Red Is.)	291°×2.7′	Co. 021°
to		
Buffett Is. (E. of Long Is.)	275°×2.7′	Co. 350°
to		
Green Is. (Off Long Is.)	260°×2.8′	Co. 351°
to		
Cheese Is. – N. End (N. of Long Is.)	261°×1.6′	Co. 000°
to		
Grassy Pt.	090°×1.2′	Co. 022°

ANCHORAGE: Will be assigned by the Pilot in conjunction with the Department of Transport.

Ship's Officer's Report: The following areas have been designated as anchorages:

Area A	Lat. 47° 43′ 45″ N.,	Long. 54° 01′ 40″ W.
Area B	Lat. 47° 45′ 45″ N.,	Long. 54° 09′ 15″ W.
Area C	Lat. 47° 43′ 22″ N.,	Long. 54° 10′ 45″ W.

RESTRICTIONS: Will be dispatched by the Department of Transport to ship's Agent.

MAX. SIZE: Tankers of 327,000 d.w.t., can be accommodated.

Also see "Berthing".

HEALTH: Vessels arriving from a foreign port may obtain pratique by radio from "Quarantine St. John's" at least 12 hours before arrival. Information required by Quarantine Officer shall include:

Name and nationality of the vessel.
Last port of call.
Nature of cargo.
Number of crew and passengers.
Port of destination.
Name of Agent.
Conditions of health of all on board with details of any sickness or death incurred during the voyage.
Animals if any.

RADIO: The best radio stations to use en route to Come By Chance are:

St. John's Marine Radio – call sign VON.
Halifax Marine Radio – call sign VCS.
St. Lawrence Marine Radio – call sign VCP.

TUGS: Tugs available from Halifax on request.

BERTHING: The jetty extends 3,000 ft. from the shore. Berth No. 1 (outside) can accommodate 327,000 d.w.t. tankers. Depth of water alongside 100 ft. Berth No. 2 (inside) can accommodate tankers up to 67,000 d.w.t. Depth of water alongside 52 ft. This berth used mainly for refined products.

Ship's Officer's Report:

The quay is designed for the use of tankers. There are no provisions for general cargo ships. Tankers of up to 500,000 d.w.t. with a max. draft of 90 ft. can be accommodated on the West side, and on the East side ships of up to 60,000 d.w.t. with a max. draft of 48 ft.

The length of the quay is 1,520 ft. and the height was measured at HW and LW and found to be 19 ft. 6 in. and 25 ft. respectively. HW was taken to be half an hour later than the predictions at Argentia.

The bollards each consist of a group of three hooks with quick-release mechanism. Each hook is designed to take a strain of 100 tons and is mounted in such a way as to be able to swivel independently in any direction towards the ship. An electric capstan is situated behind each bollard.

There are adequate fenders of the compression type.

A depth of 22 fathoms was recorded by echo sounder when alongside, the transmission unit being situated 52 ft. from the quayside.

MEDICAL: Masters are asked to notify their Agents at least 72 hours prior to arrival, advising the number of men to see the doctor and their complaint. The doctors work out of hospital which is about 10 miles from the berth.

TANKERS: No. 1 Berth: 4×16 in. arms which run into 42 in. lines. Bunkers 1×10 in. arm.

No. 2 Berth: 4×10 in. arms, bunkers 1×8 in. arm.

Dirty ballast facilities on either berth. All ballast must be pumped ashore.

FRESH WATER: Available. If for any reason there is no water available, vessels will be advised by their Agent. Rate approximately 20 t.p.h.

FUEL: Ship's bunkers are available. Bunker requirements, including quantities and specifications, should be made known in the 72 hour message.

Bunkers are delivered concurrent with cargo operations. Bunkers should be stemmed by owners or charterers before arrival.

FIRE PRECAUTIONS: Usual precautions for a refinery.

CONSULS: The following countries have consular offices in St. John's:

Brazil
Denmark
Dominican Republic
Germany (West)
Netherlands
Norway
Portugal
Spain

REPAIRS: The Agent should receive early advice of requirements, as most repairs are only available at St. John's. Radio, radar, gyro, navigator and Loran, etc., the technicians for such equipment work out of St. John's. The following brand names have representatives in St. John's: Decca, Marconi, Kelvin Hughes, Furono, Atlas and Sperry.

SURVEYORS: Stationed in St. John's, Lloyds, N.V. and B.V.

GANGWAY/DECK WATCHMEN: Usually ship's crew.

CUSTOMS ALLOWANCES: Each man 200 cigarettes and one 40-oz. bottle of wine or spirits per week.

Ship's Officer's Report: There are no Customs and Immigration offices in the port at present. Officials will therefore come from St. John's and board the ship on arrival alongside.

REPATRIATION: No formal facilities, but with little difficulty crew changes and repatriation can be carried out. Prior notice to Agent is required.

AIRPORT: Nearest airports presently at St. John's, 94 miles away, and the Gander International Airport, 128 miles away.

Ship's Officer's Report: There is a good road to St. John's which is 86 miles from the port. A passenger bus service is available and also a railway for goods only.

The nearest airport is at St. John's although there is a helicopter landing area within the refinery grounds.

TIME: GMT minus 3.5 hours. Last Sunday in April clocks advanced 1 hour. First Sunday in October clocks retarded 1 hour.

SUPPLIES & LAUNDRY: Stores and provisions have to be obtained in St. John's. In order to avoid delays, Agents should be notified prior to arrival, of the vessels requirements. Stores and supplies will be delivered by barge, tug, or small boat. Laundry facilities are not available in Come By Chance, but if required will have to be sent to St. John's. Therefore, early notification is required.

TELEPHONES: Not available at present.

POLICE/AMBULANCE/FIRE: The Police are located in Clarenville – Tel. 466–7830. Ambulance is available on site – tel. 463–2458. Fire Department located in Clarenville – tel. 466–7777. Also Fire Department located on site – tel. 463–2458.

SHORE LEAVE: In order to comply with immigration regulations, crews should be carefully checked before sailing, and any missing seamen reported to Agent.

In case of seamen left ashore for any reason, Masters are requested to furnish a letter accepting responsibility for all expenses incurred, advances (if any) and also instructions for repatriation.

GENERAL: Masters are strongly advised to contact their Agent 72, 48, 36, 24, 12 and 6 hours with ETAs. On the 72 hour message Masters should advise all port requirements.

Gangway: Ship's gangway.

WEATHER: *Ship's Officer's Report:* The prevailing winds are from the S.W. in Summer and N.W. in Winter. Fog is experienced regularly in April, May, June and July, the latter two months being the worst. The fog is usually associated with a Southerly wind.

There is no shelter afforded on the North, East and South sides of the quay and only a nominal amount on the West side.

Local Pilots report that the range of tide is between 5.5 and 8.5 ft. which can increase if the wind has been blowing from the South for any length of time.

AUTHORITY: Transport Canada, P.O. Box 1300, St. John's, Newfoundland A1C 6H8. *Tel:* (709) 772-5154. *Telex:* 016-4530. *Contact:* D. A. Lester, Regional Manager, Ports and Harbours.

In Port – VHF Channel 12, Call sign PLACENTIA TRAFFIC.

CONTRECOEUR, Quebec: 45.53 N. 73.12 W.

(See Plan Book)

LOCATION: The Contrecoeur Transfer Dock is located on the South shore of the St. Lawrence River, approximately 25 miles East and downstream from Montreal. (Canadian Chart 1339, Admiralty 422).

DOCUMENTS, HEALTH, RADIO, etc.: Refer to "Montreal" and "Quebec".

PILOTAGE: Compulsory. River Pilot docks and undocks vessels. Boarding at all hours.

ANCHORAGE: Available at Lanoraie 15 miles East of dock and Sorel 20 miles East of dock. Also at Contrecoeur, off the berth.

RESTRICTIONS: Hatch openings must not be less than 25 ft.×35 ft. Vessels will be required to vacate the berth immediately after completion of loading and/or discharging. Masters and/or Agents to advise ETA 36 hours, 24 hours and 12 hours. If any change after 12 hours notice, Terminal to be advised immediately, otherwise charges for waiting time will be assessed.

MAX. SIZE: 850 ft. length; 105 ft. beam; 35 ft. draft chart datum; fresh water, (subject river levels and recommended keel clearance, average river levels vary from +7 ft. above chart datum (April, May) to +3 ft. (Aug., Sept.) with extremes recorded of +10 ft. and +1.5 ft.).

TUGS: Tugs not normally required for vessels docking including vessels in 50,000 to 65,000 d.w.t. range. One tug sometimes used for vessels undocking.

RADIO: *Arrival Notice:* Cable address: CONORE, Montreal. Master or Agent to advise the Terminal of vessel's ETA 48 hours, 24 hours, 12 hours and 6 hours prior to vessel's arrival.

Also see "Restrictions".

BERTHING: Ships will be berthed in regular turn of vessels, providing they present with hatches open, ready for discharging and/or loading, based on the following reporting procedures;

i) Downbound vessel reported out Cote Ste Catherine Lock before upbound vessel passes Trois Rivieres Pilot Station will have precedence and vice versa.
ii) Downbound vessel reported clear of Montreal Wharf before upbound vessel passes Ile des Barques reporting station will have precedence and vice versa.
iii) In cases of two upbound vessels, the first passing Trois Rivieres Pilot Station will be first in turn.

Berthing Facilities: The dock is 1,500 ft. in length and is divided into two berths. Berth No. 1 is 750 ft. in length with dredged depth alongside of 35 ft. fresh water chart datum. It is fitted with two Wellman travelling towers equipped with 7.5 cu.yard grabs with outreach of 57 ft. from fenderline. The tower travel is 476 ft. centre to centre. Concrete pad measuring approx. 600 ft. × 140 ft. is located adjacent to Berth No. 1 and can accommodate approx. 75,000 tons of material stowing less than 20 cu.ft./ton.

Berth No. 2 is 485 ft. in length with dredged depth alongside of 22 ft. chart datum. It is fitted with a stationary boom shuttle for loading bulk materials into vessels. This shuttle is reversible for loading to trucks or rail cars. Bulk commodities can be handled:

a) Direct from vessel to vessel.
b) Direct from vessel to truck or rail cars.
c) Indirect from vessel to pad for stockpiling by truck or reloading to vessel.

Unlimited storage capacity is available for stockpiling bulk materials. Material is reclaimed from dead storage area and returned by trucks to pad for reloading aboard vessels or into rail cars.

The working capacity of discharging or loading free digging bulk materials with a stowage factor of less than 20 cu.ft./ton is as follows:

Transferring direct from vessel to vessel	1600 L/T per hour
Discharging from vessel to dock	1800 L/T per hour
Loading from dock to vessel	1800 L/T per hour
Transferring from vessel to rail cars	900 L/T per hour
Transferring from vessel to trucks	1200 L/T per hour

The railway siding on the dock property can accommodate 70 railway cars. Dock storage and dead storage areas are available by arrangement. Materials can be held in bond subject to Canadian Government Regulations.

STEVEDORES: Available at following times: Regular working periods are from 0800 to 1600 hrs. and from 1600 to 0000 hrs., Friday. Under special arrangement, work performed from 0000 to 0800 hrs., also on Saturdays, Sundays and legal holidays. Sunday overtime rate begins 0800 Sunday and ends 0800 on Monday.

MEDICAL: Doctor and hospital available.

FRESH WATER: Available. Except in Winter months.

FUEL: Available.

TIME: GMT minus 4 hours.

HOLIDAYS: Legal holidays are as follows: Good Friday, St. Jean Baptiste Day, Dominion Day, Labour Day, Thanksgiving Day, Ascension Day, Victoria Day, Remembrance Day.

AGENCY: Contrecoeur Terminal does not handle ship agency. Shipowners or Charterers appoint their own Agents for attending ships' requirements.

AUTHORITY: Compagnie Miniere IOC, Iron Ore Company of Canada, 1920 Marie-Victorin, Contrecoeur, Canada J0L 1C0. *Tel:* 514-866-8805. *Telex:* 05-267556. *Cables:* Conore. *Contact:* M. R. Morin, Manager.

CORNER BROOK, Newfoundland: 48.57 N. 57.57 W.

DOCUMENTS:

3 Crew Lists – Form IMM.200.
3 Crew Declaration – Y.14.
3 Bonded Store List – E.1.
2 Maritime Declaration of Health – Form QS 2001. (Not required from USA port).
2 Manifests of Cargo (In Transit) and Manifest of cargo for discharge.

Required by Agent:

Vessel Expiry Dates for Canadian Customs.
Load Line Certificate
Radio Equipment Certificate
Safety Equipment Certificate
Derat Certificate
Safety Construction Certificate
Non-Canadian Compliance Certificate (Tankers only)

PILOTAGE: Pilot launch is called *Glenkim* fitted with radio telephone, receives on 2182, 2558, 2134 and 2582 kHz. Radar and VHF onboard. Pilot Station, Frenchman's Head. Pilotage compulsory, operated by Atlantic Pilotage Authority with head office in Halifax. During the ice season, Pilots will board from tug *Indian Lake* approximately 1 mile from Bowater's berths. The tug is also fitted with VHF. Also see "Radio".

APPROACHES: Corner Brook Harbour is approximately 20 miles inland from South Head. South Head commands the Southern entrance to the Bay of Islands. There are no off-lying shoals near the approaches.

ANCHORAGES: Good anchorages in Outer Bay. Most convenient is in Humber Arm off Petitpas Cove in 15 to 20 fathoms. Masters requested to contact local Pilots regarding anchorage as a submarine cable enters waters of Humber Arm at Wild Cove and continues out of the bay to Frenchman's Head.

HEALTH: Pratique is granted when all crew have been vaccinated and no suspected sickness on board. Pratique is automatic when from a quarantine port or non-quarantine port, provided Port Health Authorities have been established. Also see "Montreal".

MAX. SIZE: Max. size tankers handled – LOA 620 ft., max. draft 32 ft. at Bowater No. 4 Berth.

RADIO: For short range: Stephenville Marine Radio operated by DOT. WT 500, 416, and 40 kHz. RT call letters VOJ. Receives 2182, 2558, 2134, 2582 kHz. For long range: Via Halifax Marine Radio.

Advice of Arrival: (Vessels docking at premises of Bowaters Newfoundland Ltd.) ETA messages should be sent (to cable address – "Bowship") in GMT, 72, 48, 24 and 12 hours notice recommended. All messages sent to Agents will be given local Pilots and Customs. Cash requirements and other items requiring immediate attention on arrival should be given in the 48 hours ETA.

It is also recommended that notices advise number of gangs vessel can work, also if there is cargo for discharge, quantity and holds stowed. *Other Port Users:* Same as Bowaters except when destined for Western (1983) Ltd., send to cable address "Westerm".

VHF: Humber Arm Harbour Master on VHF Channels 16, 14, 12, 11 and 19A.

TUGS: Not available.

BRIDGES: None.

BERTHING: *Bowater's Wharves* located near centre of city waterfront. Consist of 4 berths, and are continuous. Run parallel with shore line. Total length 1,650 ft. Max. draft 28 ft. in No. 1 Berth, elsewhere 32 ft. at low tide. Fresh water and electric power available.

Vessels loading normally dock starboard side to No. 1 Berth and port side to No. 2 Berth. Oil and caustic soda tankers discharge port side to No. 4 Berth. General cargo, such as sulphur, is normally discharged port side to No. 4 Berth.

Canadian National Railway Wharf: Steel and concrete structure. Length of wharf 600 ft. Depth alongside 32 ft. Storage shed is 240 ft. long by 35 ft. wide. Railway tracks on both sides of shed and accessible to ship's side.

North Star Cement Wharf: Annexed to small Government Wharf. Combined length is 400 ft. Depth of water 24 ft. at Western end and 17 ft. on inner end. Partly laden tankers of T-2 class discharge at this wharf.

Imperial Oil Ltd.: Discharging pier depth of 30 ft. minimum at low tide. Full laden tankers of the T-2 class can discharge.

Irving Oil Company Ltd.: Discharging pier with depth of water at Eastern end of 30 ft. and at Western end 26 ft. Tankers discharge with the forward draft restricted to 26 ft.

Gulf Oil Ltd.: Discharging pier has a depth at Eastern end of 28 ft. and at Western end 22 ft. T-2 tankers may discharge with restricted drafts accordingly.

Ultramar Canada Inc.: Discharge oil at North Star Cement Wharf.

Department of Transport Wharves: Length of wharf is 1,200 ft. Steel and concrete structure. Depth of water alongside is 32 ft. to 34 ft. Shed measures 500 ft. by 120 ft. by 20 ft. high, for a capacity of 1,200,000 cu.ft. Fresh water is available. General cargo is handled.

CRANES: Mobile crane available at Bowater – capacity 11 tons from ship's hold, 18 tons from deck.

Other port users: From local rental Agent. Maximum 65 tons.

STEVEDORES: (Vessels at Bowater premises)

Working Hours:

0800 to 1200	– 2 gangs
1200 to 1230	– Lunch break
1230 to 1630	– 2 gangs
1630 to 2030	– 2 gangs
2030 to 2100	– Meal break
2100 to 0100	– 2 gangs

Overtime: Can be worked Mondays to Fridays (day gangs) 1630 to 2100 hrs. if requested.

MEDICAL: Hospital available. If ships' Crew members require emergency medical attention *on board immediately on arrival,* this should be stated in message to Agents, together with ETA. Otherwise, doctor appointments can be arranged during regular office hours.

TANKERS: It is recommended by local Pilots that oil tankers for North Star Cement Wharf arrive and sail in daylight, otherwise there are no special requirements except usual advance notice should be given to Agents in order to arrange linesmen. See "Berthing".

DENSITY: Average 1015.
High water, Easterly wind 1025.
High water, Westerly wind 1008.
Low water 1005.

FRESH WATER: Fresh water available at Bowaters berths – 85c per ton plus $30.00 service charge. Fresh water also available at other docks.

FUEL: (Vessels at Bowater premises). Gas oil and marine diesel available by truck delivery from local oil companies.

Other port users: Available at DOT docks by tanker trucks.

OPENING/CLOSING HATCHES: (Vessels at Bowater premises). Opening and closing hatches is normally done by ship's crew. Rigging ship's gear is normally done by stevedores.

CUSTOMS ALLOWANCES: On arrival per crew member: 3 lb. tobacco or 300 cigarettes or 75 cigars. Two dozen beers or 60 oz. spirits.

Additional issue will be made *after 7 days* in port. 2 lb. tobacco or 200 cigarettes or 50 cigars. 1.5 dozen beers or 40 oz. spirits.

IDENTITY CARDS: Every Crew member should be in possession of some form of identity card.

REPAIRS: Minor ship repairs carried out. No dry docks available. Radar and VHF repairs possible.

REPATRIATION: All necessary crew changes and repatriation facilities available.

AIRPORTS: International Airport, 222 miles from Corner Brook, at Gander. Stephenville Airport, Air Canada and EPA, 50 miles from Corner Brook. Deer Lake Airport, EPA service available, 30 miles from Corner Brook.

TIME: NST-GMT less 3.5 hours. Newfoundland Daylight Saving Time – GMT less 2.5 hours, last Sunday in April to last Sunday in October.

HOLIDAYS: Following applies to ships docking at premises of Bowater Newfoundland Limited, Newsprint Manufacturers and Shippers.

January 1st – New Year's Day
July – Dominion Day (normally first Monday in July)
September – Labour Day (first Monday in September)
December 25th – Christmas Day. No work is performed after 1600 hrs. on Christmas Eve (December 24th), nor on New Year's Eve (December 31st).
Sunday – As per Union agreement. Work can be performed at time and a half rates as follows: *July and August* – a maximum of 2 consecutive Sundays. Remainder of the year a maximum of 3 consecutive Sundays.

Other port users: Similar to Bowaters.

POLICE/AMBULANCE/FIRE: *Police:* Alongside Bowater, Ext. 274, Mill Guards. Local Police. Area Code: (709) 634-5372 or 634-2810.
Ambulance: Alongside Bowater, Ext. 274, Ambulance. City Area Code: (709) 634-5611.
Fire: Alongside Bowater, Ext. 274, Mill Brigade. City Area Code: (709) 634-4333.
Hospital: 634-4393 or 634-5101.

TELEPHONES: (Vessels at Bowaters premises). None available on board ships, but phones are on the wharf in nearby offices.

Other port users: Can be available at installation and service costs. *Police:* 634-5372 or 634-8236. *Ambulance:* 634-5611. *Fire:* 634-4333. *Hospital:* 634-4393 or 634-5101.

CONSULS: Nearest consuls are in St. John's approximately 450 miles.

Brazil
Denmark
Dominican Republic
France
Iceland
Netherlands
Norway
Portugal
Spain
Sweden
West Germany

GENERAL: Ice coverage can be expected between January 1st and April 15th. Shipmasters should contact "Ecareg Ice Halifax", Nova Scotia, Tel: (Area code 902) 526-5664 or 426-5665. Telex No. 019-22625 for routing and Icebreaker assistance. 36 hours ETA in Cabot Strait is required.

SERVICES: Compass adjuster can be engaged.

SHORE LEAVE: Discretion of Master. No port regulations.

AUTHORITY: Bowater Newfoundland Ltd., Mill Road, Corner Brook, Newfoundland A2H 6J4, Canada. *Tel:* (709) 634-2810. *Telex:* 016-44278 (Bowship Cnbk). *Cables:* Bowship.

Contacts: Mr. Ellison Butt, Harbour Master and Terminal Manager, Western (1983) Limited. *Telex:* 061-44193 (Westerm Cnbk). Cables: Westerm.

Mr. V. Collomb, Customs and Immigration.

Mr. W. G. Hull, Shipping Superintendent, Bowater Newfoundland Limited. *Tel:* (709) 634-2810 or 637-3291. *Telex:* 016-44278 (Bowship Cnbk). *Cables:* Bowship.

COWICHAN BAY, B.C.: 48.45 N. 123.36 W. (See Plan Book)

LOCATION: Lat. 48° 44′ 50″ N., Long. 123° 36′ W. Cowichan Bay is entered from Satellite Channel Southward of Separation Point and extends 4.8 km. Westwards, terminating in a large mud flat that is the estuary of the Cowichan and Koksilah Rivers.

PILOTAGE: Compulsory, Pacific Pilotage Authority rates.

APPROACHES: The bay is deep and without danger. The deep sea berths at the S.W. corner of the bay on the edge of the mud flat have deep, open water approaches.

ANCHORAGE: Cowichan Bay Anchorage – 8 permanent anchorages in depths of approx. 40 m. – 50 m. on a line starting 700 m. S.S.W. of Skinner Point and ranging with 3 designated anchorage along the Northern side of Cowichan Bay to Separation Point and then on the Southern side of Satellite Channel with 5 designated anchorages from Separation Point to 1,000 m. North of Hatch Point. Anchorage can also be afforded to small vessels at Genoa Bay, in depths of 4.6 m. – 11 m. which has a rock marked by a beacon in the middle of its entrance, and two other rock hazards nearby.

MAX. SIZE: *Largest Vessel:* LOA 200.51 m., beam 30.89 m.

TUGS: Tug services at Cowichan Bay are provided by Falt Towing Ltd., 1805 Pritchard Road, Cowichan Bay, B.C. V0R 1N0. Tel: 748-8175. Falt Towing has one 500 h.p. and two 300 h.p. tugs operating from Cowichan Bay and can supply additional tugs as required with a minimum of 48 hours notice.

BERTHING: *Deep Sea Vessels:* The CNR Wharf is owned by Canadian National Railways and is operated by Westcan Terminals Ltd., P.O. Box 1442, 189 Dallas Road, Victoria, B.C. V8W 2X2. Tel: 386-1321. Telex: 049-7312. The deep sea wharf consists of two berths used mainly for loading forest products.

Berth No. 1 (South end) has a length of 155 m. and a depth alongside of 9.3 m.

Berth No. 2 (North end) has a length of 198 m. and a depth alongside of 8.3 m.

At a distance of 3 m. from the wharf face the minimum depth alongside for No. 1 is 9.9 m. and No. 2 is 9.7 m.

Log bundles can be made available to adjust the vessel's position alongside for draft considerations.

The South end of Berth No. 1 has a rail barge slip which connects to the rail car handling and loading facility at the terminal and the rail lines on Vancouver Island.

Note: Berth depths alongside CNR Wharf taken from depth survey by Canadian Hydrographic Service April and May 1980.

Small Vessels: There is a Government Wharf situated on the South shore for small vessels only, with depths of 5.2 m. – 6.1 m. alongside. A pile and timber breakwater protects several floats attached to the Eastern and Western sides of the wharf approach structure. The area inside the breakwater and East of the wharf has been dredged to a depth of 3.0 m. A number of privately owned wharves and floats are located Westward of the Government Wharf, along the Southern shore of the bay.

STEVEDORES: Westcan Terminals/Stevedores Ltd. offers 24 hour 7 day cargo handling services. Shifts: first 0100–0430, 0500–0800; second 0800–1200, 1300–1700; third 1700–2100, 2130–0100. Work ceases 1200 hrs. on Christmas Eve and New Year's Day.

FRESH WATER: Available at berth by local water tanker truck and at berth or at anchor by water barge from Vancouver.

FUEL: Diesel fuel, gasoline and other petroleum products are available in moderate quantities by tanker truck at berth. Heavy fuel and large amounts of bunkers available by bunker barge from Vancouver.

MEDICAL: Full medical facilities available at the Cowichan District Hospital in the town of Duncan, 10 km. away. Dental facilities also available in Duncan.

REPAIRS: See "Victoria", B.C. for information on the graving dock and ship repair facilities in Esquimalt, a suburb of Victoria 60 km. S.S.W. of Cowichan Bay.

SERVICES: The following general services are available in the Cowichan Bay/Duncan area or from Victoria, B.C.

Decca: Racal Decca Canada Inc., 353 Harbour Road, Victoria, B.C. V9A 3S2. Tel: 388-6257.

Fumigation: PCO Pied Piper, 3374 Burns Avenue, Victoria, B.C. V8Z 3P2. Tel: 388-9721.

International Garbage: C.W. Disposals Ltd., P.O.Box 279, Duncan, B.C. V9L 3X3. Tel: 746-4589.

Laundry: Chemainus Laundromat & Dry Cleaners, 9870 Croft Street, Chemainus, B.C. V0R 1K0. Tel: 246-9912.

Marconi: Canadian Marconi Co., 1 Burnside Road W., Victoria, B.C. V9A 1B2. Tel: 386-9414.

Surveyors: Argus Marine Ltd., 2924 Wilkinson Road, RR 2, Mill Bay, B.C. V0R 2P0. Tel: 743-3463. Hull and cargo.

Lloyd's Register of Shipping, non-exclusive surveyor for hull, machinery and cargo attached to Marine Design Associates below.

Marine Design Associates, 493B Garbally Road, Victoria, B.C. V8T 2J9. Tel: 384-4191. Telex: 049-7397. Hull, machinery and cargo.

Welding: Duncan Iron Works Ltd., P.O.Box 855, RR 3, Allenby Road, Duncan, B.C. V9L 3Y2. Tel: 746-5147.

AUTHORITY: Transport Canada, P.O. Box 10060, Pacific Centre, 700 Georgia Street, Vancouver, B.C. V7Y 1E1. *Tel:* 666-6222. *Telex:* 04-53235.

Contact: Captain G. M. MacKay, Harbour Master – Victoria, Esquimalt and Cowichan Bay, Tel: 388-3578. Mr. W. H. Briscoe, Government Wharfinger, Tel: 746-5215.

DALHOUSIE, N.B.: 48.04 N. 66.22 W. (See Plan Book)

DOCUMENTS:

Ship's Register.
Load Line.
Safety Radio and Safety Equipment Certificates.
Stores List and Crew Declaration (E–17, Y–14), if from foreign port.
Pratique, if from a Foreign Port.
Immigration Clearance from last Canadian Port.
If from a Foreign Port, 2 copies of crew list.

For Shipping Master: Ship's Articles if British or Canadian Registry.

PILOTAGE: Telegram sent to Restigouche Pilots, Dalhousie, N.B., or to vessel's Agent. 6 hours minimum notice required except during Winter operations (January – April). Pilot vessel is a 40 ft. steel hull, black, grey superstructure, displays proper flag by day and proper lights by night. Pilots meet and board all inbound vessels in position Lat. 48° 03′ N., Long. 66° 15′ W. Pilots prefer pilot ladder for boarding.

ANCHORAGES: Safe anchorage 1.5 miles offshore due East of harbour entrance. Pilots will board vessels for anchorage in from 6 to 12 fathoms.

RESTRICTIONS: Tide restricted if vessel exceeds 28 ft. on arrival.

MAX. SIZE: Max. length 750 ft., beam 100 ft., draft 36 ft. at the Government Wharf including oil and bulk carriers. Vessels approaching these dimensions must berth at high water, port side to. Max. draft entering harbour and berthed starboard side to is 28 ft. because of restricted turning basin.

HEALTH: See "Montreal".

RADIO: ETA through Grindstone.

TUGS: Not necessary.

BERTHING: To berth starboard side to at any berth vessel is requested to arrive 3 hours before high water.

STEVEDORES: Contact Agents.

MEDICAL: Hospital and doctors available.

TANKERS: One 12 in. line with three 8 in. connections is laid to the Government Wharf. Depth alongside 34 ft. LWOST.

DENSITY: Average density 1008.

FRESH WATER: Available at all berths from hose lines on the dock. 50 t.p.h.

FUEL: Available by truck if necessary. Advance notice required.

GANGWAY/DECK WATCHMEN: Available if requested.

OPENING/CLOSING HATCHES: As in Charter Party.

IDENTIFICATION CARDS: Not needed.

CONSULS: None.

REPATRIATION: Facilities exist providing sufficient notice given.

AIRPORT: 1 flight daily from Montreal to Dalhousie and Chatham and return to Montreal.

TIME: Daylight Saving during Summer months. Atlantic Standard otherwise.

HOLIDAYS: Official Holidays: New Year's Day; Christmas Day; Dominion Day; Labour Day.

POLICE: Telephone 684–5551.

TELEPHONES: Made available upon prior arrangement.

SHORE LEAVE: Allowed.

AUTHORITY: Edrick Allain, Harbour Master, Canadian Coast Guard, Dalhousie, New Brunswick, P.O.Box 3, E0K 1B0. *Tel:* 684-3483.

Wharfinger: Wendell J. Firlotte.

DIGBY, N.S.: 44.38 N. 65.45 W. (See Plan Book)

DOCUMENTS: See "Montreal".
PILOTAGE: Usually contacted through St. John radio station by VHF. 12 hours notice required. Pilot usually meets ships at entrance to Digby. As long as adequate notice is given no waiting is experienced.
ANCHORAGE: Good Anchorage N.E. from town 15 to 25 fathoms.
MAX. SIZE: Length 400 ft. and 28 ft. depth at low water.
HEALTH: See "Montreal".
RADIO/VHF: St. John Radio call sign VAR.
TUGS: Not normally necessary, light towing available in case of necessity.
BERTHING: Transport Canada wharf with berthing length 400 ft. and 28 ft. alongside at low tide, also main Transport Canada Spur Pier 330 ft. long and 50 ft. wide, 20 ft. depth alongside at normal low tide (21 ft. to 28 ft. rise and fall in tide).

Presently under construction is a 100 m. long × 12 m. wide extension to the existing spur pier with a 100 m. long × 12 m. wide pier to this. Berthing within this extension will be 4.6 m. at low normal tide and 6.7 m. at low normal tide on the exterior face. Construction is expected to be completed by December, 1984. (See "Plan Book").
FRESH WATER: Supplied by pipe-line on wharf.
FUEL: Diesel oil available only.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Usually carried out by crew.
CUSTOMS ALLOWANCES: 200 cigarettes per man, per week; 40 oz. alcohol per man per week for crew.
IDENTIFICATION CARDS: Required or passport.
CONSULS: None.
REPAIRS: No major repair facilities available.
REPATRIATION: Can be arranged.
AIRPORT: Small local line based at St. John N.B. supplies service between St. John and Digby. Halifax International Airport 180 miles away.
TIME: GMT minus 4 hours.
HOLIDAYS: New Year's Day (Jan. 1st); Good Friday; Easter Monday; Victoria Day and Queen Elizabeth Day (May 19th) Canada Day (July 1st); Labour Day (Sept. 1st); Thanksgiving Day (Oct. 13th); Remembrance Day (Nov. 11th); Christmas Day (Dec. 25th).
POLICE/FIRE/AMBULANCE: Police 245–2579; Fire 245–2121; Ambulance 245–2205.
TELEPHONES: Available at cost of installation.
SHORE LEAVE: Allowed.
AUTHORITY: Transport Canada, Office of Harbours and Ports – Maritimes Region, P.O.Box 1013, Dartmouth, N.S. B2Y 4K2. *Contact:* The Regional Manager, Tel: (902) 426-2588.

Contact: (Digby). Clifford Mullen, Harbour Master and Wharfinger, Tel: (902) 245-2831.

FRASER PORT, B.C.: 49.12 N. 122.55 W. (See Plan Book)

DOCUMENTS, ANCHORAGE, and further information: Refer to "Vancouver, B.C.".
PILOTAGE: Compulsory from Fraser River Sands Heads. Contact Pilots through Vancouver Pilots. 12 hours notice required. Pilot boards 1 mile off Sandheads. Contact pilot launch on VHF Channel 74.
MAX. SIZE: Draft limited to 33 ft. on 12 ft. tide.
HEALTH: Pratique and quarantine at Victoria B.C.
TUGS: Available, normally join vessel on arrival.
BERTHING: (North and South side of river).
Fraser-Surrey Docks Ltd.: 5 general berths, total length 3,300 ft., 1 sawdust/woodpulp bulk cargo berth. Depth at low water 33 ft. Water, power and telephone connections at all berths. Cargoes handled include forest products, steel, heavy lifts bulk and general cargo, as well as roll-on/roll-off cargoes and containers. Terminal well equipped with fork lifts, front-end loaders, cranes to 250 tons and 2×40 ton Paceco Portainers. Operators are Fraser Surrey Docks Ltd.
Fraser Wharves Ltd.: 1 berth, length 500 ft., width 45 ft. Berth for loading and unloading cars.
Annacias Auto Terminals.: 2 berths. No. 1 length 700 ft., width 200 ft. No. 2 length 565 ft., width 60 ft. Situated at East end of Annacis Island for discharging of cars.
Domtar Chemicals Ltd.: 1 berth, length 610 ft., depth 27 ft. Berth connected to plant by 30 in. conveyor belt system for transfer of crude rock gypsum to the plant. Berth is upstream of the Patullo Bridge.
Crown Zellerbach Building Materials Ltd.: 2 berths, total length 1,300 ft., depth at LW 30 ft. Berth is upstream of the Patullo Bridge.
MEDICAL: All services available.
DENSITY: Varies with location and season.
FRESH WATER: Available.
FUEL: All grades available.
CONSULS: At Vancouver.
REPAIRS: Engine repairs only.
AIRPORT: Nearest is Vancouver International.
TIME: Pacific Standard Time, GMT minus 8.
POLICE/AMBULANCE/FIRE: Police 521-7711; Ambulance 872-5151; Fire 526-4411.
SHORE LEAVE: Allowed.
DEVELOPMENTS: Future developments call for 35 ft. draft and expanded berthing facilities.
AUTHORITY: Fraser River Harbour Commission, Suite 505, 713 Columbia Street, New Westminster, B.C., Canada V3M 1B2. *Tel:* (604) 524-6655. *Contact:* R. C. Pearce, Port Manager.

FROBISHER BAY, N.W.T.: 63.44 N. 68.32 W.

LOCATION: An expanding settlement at the head of Frobisher Bay, Baffin Island. Navigation season, mid-July to mid-October depending on ice conditions. Port of entry.
DOCUMENTS: See "Montreal".
PILOTAGE: No service as such but a senior port officer may assist vessels to moorings.
APPROACHES: Anchorage in depths of 38.4 m. to 40.2 m. Approximately 925 m. East of Monument Island settlement. Minimum depths in approaches, 9.8 m.
TIDES: Rise of Tide, 12.2 m., with strong tidal runs between islands. Low powered vessels generally navigate Pike Resor Channel at slack water, high or low tide if current unfavourable. This channel is mostly navigated during daylight hours.
HEALTH: Free pratique, if health certificate is in order. In the event of suspected disease or fever on board, report to Frobisher Bay Telecommunications Branch call sign VFF R/T or W/T.
RADIO: Frobisher Bay R/S VFF.
TUGS: 2 landing craft (LCM's) each powered with two 130 h.p. diesel engines assist vessels in mooring, acting as tugs and running ship's stern lines to Innuit Head.
BERTHING: Tankers of 160 m. length, 17.68 m. breadth and draft of 9.1 m., discharge approximately 243.8 m. off Innuit Head. Method of mooring is to stream both anchors in anchorage area and stern lines to mooring bollards situated on Innuit Head for this purpose. General cargo ships up to 12,000 tons also moor in this position. Vessels should be prepared for a quick departure in event of storm warnings, especially hazardous from N. and S. winds. Maximum length, breadth and draft determined by Master and Owners or Charterers. Delays can be expected due to tidal conditions. All general cargo, machinery, vehicles, etc., transferred from ship to shore and vice-versa via landing craft as no pier exists; beach gradient is gradual. Frequently barges cannot be discharged and re-floated until next rising tide. Delays expected for cargo vessels anchoring off Monument Island and discharging or loading by lighters during high winds and rough seas.
STEVEDORES: Special arrangements are necessary for these services.
MEDICAL: Hospital facilities available.
DENSITY: From August 1st to September 15th mean approx. 1.02477 increasing slightly as season advances.
FRESH WATER: Small quantity in emergency. Approximately 50 gallons per minute.

Note: Due to tidal conditions considerable delay could result in delivering fresh water.
FUEL: Only supplied in emergency, Arctic diesel Grade 1, viscosity quoted as minus 60. Arrangements to be made through Imperial Oil Ltd.
OPENING/CLOSING HATCHES: According to agreements.
IDENTIFICATION CARDS: Required if arriving from a foreign country.
REPAIRS: Limited repairs, i.e. welding, R/T and radio.
REPATRIATION: Crew changes can be effected by air passage to or from Montreal.
AIRPORT: Distance approximately 0.8 km. from landing beach, 5 flights weekly to and from Montreal, weather permitting, via Nordair Ltd. of Montreal.
TIME: GMT minus 4 hours.
POLICE/AMBULANCE/FIRE: RCMP 5202; Ambulance 979–5231; Fire 6666.
AUTHORITY: Transport Canada, Ottawa.

Officials: Transport Canada Area Supt., Tel. 641 and Harbour Master, Tel. 278, during season. Telegrams, c/o Canadian National Telegraph via VFF or VAW.

GASPE, Quebec: 48.50 N. 64.29 W. (See Plan Book)

DOCUMENTS:
Immigration Documents:
Passenger Landing Cards (Tourist) 1 each passenger.
1 Crew List from Immigration.
2 Passenger Lists.
Customs Documents:
3 Inward Reports.
3 Outward Reports.
3 Ship Stores Lists (Form E.1).
3 Crew Declarations (Form Y.14).
National Health and Welfare:
2 QS.1 Maritime Declarations of Health.
Manifests required for cargo unloaded only.
PILOTAGE: Not compulsory but recommended. No licensed Pilots available, but men recommendable for guidance to harbour and wharf. To obtain Pilot, arrange by radio phone through marine radio station VCG at Fox River, Gaspe PQ, on receipt of message either to Agent or Port Authority, Pilot and other arrangements can be made.
MAX. SIZE: Vessels of 650 ft. and over have both docked and anchored. Tide has no effect as it is very sheltered. Government Wharf depth 35 ft. LW.
HEALTH: On arrival in Canadian waters Master applies for Radio Pratique by radio to Quarantine Officer at Quebec City. Master flies yellow flag on arrival and until Medical Officer decides it can be lowered or otherwise according to regulations. See also "Montreal".
RADIO: VCG Marine Station Fox River, Gaspe PQ.
TUGS: Not necessary, no tugs available unless called for in emergency. Line boats available for docking, by arrangement.
BRIDGES: New bridge under construction – no opening span.

BERTHING: *Transport Canada (Sandy Beach) Wharf:* Berthing length 600 ft., depth alongside at LW 33 ft. to 35 ft. outer face and about 26 ft. inner side; railroad tracks on wharf, oil tanks, electric light and water.
STEVEDORES: Good stevedoring available at all times and hours.
MEDICAL: Hospital and ambulance service.
TANKERS: Oil lines on Transport Canada Wharf owned and used by Gulf Oil Canada, Irving Oil, Shell Canada Limited and Imperial Oil. These lines are privately owned.
FRESH WATER: Available, arranged through ship's Agent.
FUEL: Light and medium diesel available at all times. If bunker fuel required, on request it will be brought in by tanker car.
GANGWAY/DECK WATCHMEN: Recommended watchmen necessary, may be obtained.
OPENING/CLOSING HATCHES: Done by ship's crew.
CUSTOMS ALLOWANCES: On arrival officers and crew permitted 1 bottle and 200 cigarettes and 1 lb. of tobacco for period of 1 week, further allowances of tobacco given after 1 week, as well as spirits to Master only.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Only minor repairs.
REPATRIATION: May be arranged by Agent subject to Immigration control.
AIRPORT: Situated about 7 miles from the dock. Twice daily service to Quebec and Montreal. Connections to all parts from Montreal. Charter passengers and freight flights also available.
TIME: GMT minus 5 hours all year.
HOLIDAYS: Saturday, New Year (January 1st); Good Friday; Victoria Day (May 19th); Confederation Day (July 1st); Labour Day (September 1st); Thanksgiving Day (about October 13th); Remembrance Day (November 11th); Christmas Day (December 25th). There are a few other R.C. Church days on which some men are not obtainable. On most of these holidays stevedores and men are available.
POLICE/AMBULANCE/FIRE: Police area 418 call 368–3337. Local RCMP area 418 call 368–2543. Ambulance Area 418 call 368–2835.
TELEPHONES: Possible arrangements may be made with local telephone company for installations to vessel.
SERVICES: Radar repairman available if matter not too serious.
SHORE LEAVE: Crew allowed ashore.
AUTHORITY: Transport Canada, 179 Mgr. Leblanc, C.P. 890, Gaspe, Province Quebec, Canada 90C 1R0. *Tel:* (418) 368-3648. *Telex:* 01443220. *Contact:* Robert Lagace, Harbour Master.

GOOSE BAY, Labrador: 53.22 N. 60.22 W.

DOCUMENTS, HEALTH: See "Montreal".
PILOTAGE: Compulsory. 2 Pilots available; 12 hours notice of arrival required with confirmation 8 hours and 4 hours before arrival. Contact Pilot on radio-telephone 2182 kHz (working 2716 kHz), calling "Victor Gulf Whiskey". Pilot station at Rigolet (92 miles from Terrington Basin).
ANCHORAGE: Good anchorage, with excellent holding ground in 36 ft. (11 m.), mud, can be obtained in the central part of Terrington Basin. Ships carrying dangerous cargoes must use the designated Explosives Anchorage situated 2 miles N.E. of Groves Point.
RESTRICTIONS: Navigation season early June to end November depending on pack ice movements. Approach – Sandy Point Channel at entrance to Goose Bay and 15 miles from the dock has a width of 300 ft. Harbour Master advises draft of 31 ft. HWF. Groves Point Channel at entrance to Terrington Basin and 1.5 miles from Main Dock has depth of 32 ft. HWF and width of 300 ft.
Caution: When a tanker is seen to be leaving her berth in Terrington Basin or is in or approaching Terrington Narrows, she shall be granted the right of way, and other vessels must not be navigated into the narrows until the tanker is well clear of the channel.
Ice: The entry into Goose Bay Harbour is entirely dependent upon ice conditions at the seaward end of Hamilton Inlet. Ice begins to form in Terrington Basin between the latter part of October and mid November, with complete coverage occurring any time between early November and the beginning of December. During winter the ice attains a thickness of about 42 in. (1.1 m.). Break-up generally occurs between the third week of April and the first week of June.
MAX. SIZE: Max. draft at Government Wharf 19 ft. 06 in.
Also see "Berthing".
VHF: Pilot vessel on Channels 51 and 16.
TUGS: There are no tugs. 3 landing craft available to assist.
BERTHING: The main Government Wharf is situated 1.5 miles W.S.W. of Terrington Narrows; it has a berthing length of 810 ft. (247 m.) and was dredged to 30 ft. (9.1 m.) in 1971, but some silting has occurred and up-to-date depths should be obtained from the Harbour Master. There are 5 large storage sheds on the structure. The office of the Harbour Master is in a building on the main road leading from the wharf.
Another Government Wharf is situated 0.4 miles N.W. of the main Government Wharf; it has a depth of 21 ft. (6.4 m.) at the outer end. A freight shed is situated on this wharf.
STEVEDORES: A local stevedoring company can provide labour for handling cargo. There are no fixed cranes on the wharves, but mobile cranes can be hired locally.
TANKERS: There is a small oil wharf used for discharging petroleum products at the E.S.E. end of the main Government Wharf. It has a depth of 18 ft. (5.5 m.) at its outer end.
DENSITY: 1000, fresh water.
FUEL: Light diesel oil available by pipe-line at the main Government Wharf.
FRESH WATER: Available alongside berths.
REPAIRS: Only minor repairs may be effected in emergency.
AIRPORT: 1.5 miles distant.
HOLIDAYS: New Year's Day; Good Friday; July 1st; Labour Day; November 11th; Christmas Day; Boxing Day.
GENERAL:
Communications: Telephone. Canadian Coastguard Radio Station (see "Radio Aids to Marine Navigation").
Transportation: Airfield with frequent scheduled service by Eastern Provincial Airways to other Newfoundland centres and the mainland. Scheduled cargo and cargo/passenger services during the navigation season by Chimo Shipping Limited and CN Marine.
Mail: Post Office.
Accommodation: Several motels.
Medical: Hospital.
Banks: Royal Bank and Bank of Nova Scotia.
Police: RCMP detatchment.
Supplies: Hudson's Bay Company store and several smaller stores.
Customs: Port of Entry; the Customs Office is situated at Goose Airfield.
AUTHORITY: Harbours and Ports Directorate, P.O.Box 1300, St. John's, Newfoundland A1C 6H8, Canada. *Telex:* 016 4530. *Contact:* D. A. Lester.
Transport Canada, Goose Bay. *Contact:* Captain W. T. Haynes, Harbour Master. *Tel:* 709-896 2569.

GRAND BANK, Newfoundland: 47.06 N. 55.45 N.

(See Plan Book)

PORT LIMITS: A line drawn from Grand Bank Head to L'Anse au Loup Pt. defines the port limits.
PILOTAGE: Pilotage is not compulsory, but recommended for those without local knowledge. A licensed Pilot can be arranged by giving 24 hours notice of requirement to Pilots, St. John's. the Pilot will board off St. John's in position Lat. 47° 33′ 42″ N., Long. 52° 37′ 54″ W. or off Grand Bank Harbour provided the vessel's local Agent arranges for a boat to embark the Pilot. The Atlantic Pilotage Authority pilot boat No. 2 is used at St. John's; this boat guards VHF Channels 16 and 11 (156.8 and 156.55 MHz.). Alternatively, Shipmaster's may arrange to use local persons in the town for pilotage purposes.
ANCHORAGES: Vessels may anchor in depths of 10 fathoms (18.3 m.) off Grand Bank, but the holding ground has been reported as poor.
VHF: A radiotelephone watch is maintained on Channel 16 (156.8 MHz) in the office of the Harbour Master at Grand Bank from 0800 to 1700 hrs. local time Monday, Tuesday, Thursday, Friday and Saturday. The call sign is "Grand Bank Harbour Master". Channels 11 and 12 are available as working frequencies.
BERTHING: The Western Breakwater (deck elevation 4.4 m.), about 600 ft. (183 m.) in length, affords protection to the harbour entrance between the Western Pier and the Eastern Breakwater. In 1977, there was a least depth of 15 ft. (4.6 m.) alongside the Western Pier. The CN Marine coastal vessels berth at this pier which is 240 ft. (73 m.) long. The deck of the wharf has an elevation of about 3.5 m. A shed, 60 ft. by 41 ft. (18 m. by 12 m.), is located adjacent to the pier. Least depth alongside 3.7 m.
A fish wharf 245 ft. (75 m.) in length, situated on the East side of the harbour, had a least depth of 16 ft. (4.9 m.) alongside in 1977. A fish-packing plant is situated on the wharf.
Marginal wharf length 1,140 ft., depth alongside 14 ft. – 18 ft. LWOST.
A government wharf is situated at the South end of the harbour. The harbour is open all year round.
CRANES: Small mobile cranes only.
MEDICAL: Cottage hospital within the town.
EMERGENCY CO-ORDINATION CENTRE: Coast Guard, Search and Rescue, St. John's Tel: (709) 772-5151.
GANGWAY/DECK WATCHMEN: Usually ship's crew, ship's gangway used.
FRESH WATER: Available.
FUEL: Limited supplies of fuel and diesel oil available.
BANKING: Services available.
SHORE LEAVE: No restrictions.
GENERAL: Chart: 4611.
AUTHORITY: Transport Canada, P.O.Box 1300, St. John's, Newfoundland, A1C 6H8. *Tel:* 772-5154. *Telex:* 016-4530. *Contact:* D. A. Lester, Regional Manager.
Local Wharfinger: William Taylor.

HALIFAX, N.S.: 44.39 N. 63.34 W. (See Plan Book)

DOCUMENTS:
Port Doctor: Form QS1; Crew Vaccination Certificates; Derat Certificate.
Customs: Customs Clearance or Certificate From Last Port; Cargo List (if no cargo, words "In Ballast" entered); Bonded Stores List (Form E.1); Crew Declaration for each crew member (Form Y14). Ship's Register; Safety Radio, Load Line and Safety Equipment Certificates.
Immigration: Crew List (Form 200) in duplicate in English; all crew Passports (returned prior to sailing).
PILOTAGE: Compulsory. Essential send arrival notice by radio to avoid delay in waiting Pilot. 12 hour notice of ETA required and confirmed or corrected 3 hours before arrival. All times must be GMT. Radio messages should be addressed Marine Aid Centre, Chebucto Head. All pilotage messages subject to full tolls.

When possible, Pilots will board in vicinity of Inner Automatic Light and Whistle Buoy situated about 2 miles N.E. of Chebucto Head. In heavy weather not always possible for pilot vessel to take up station at above position, but will proceed as far seaward as feasible to embark or disembark Pilot.

In normal weather pilot vessel shall, in daytime, fly Pilot flag, and at night will show lights required by international regulations. In abnormal weather – fog, mist, snow, heavy rainstorms – when on station on pilotage duty, in addition to regular signals, will blow 4 long blasts at regular intervals. Vessel requiring Pilot should blow 4 short blasts on whistle at intervals until pilot boat sighted. Pilot boats equipped with radar and stand-by on radio telephone operating on frequency of 156.8 MHz or Channel 16 under international VHF designations.

ETA: For provisional clearance to enter the Halifax Marine Traffic Regulating Zone, vessels should supply the following information to "Halifax Traffic":

1. Position.
2. ETA Zone Limit (Zone boundary is approximately 16 miles radius from Chebucto Head).
3. Destination and last port.
4. Draft.
5. Description and weight of pollutants or any dirty cargo carried.
6. Deficiencies in ship's navigational equipment, engine's steering gear or anchors.
7. Any leakage of pollutants or any damage which may result in pollution.
8. Pilots must be advised ETA 12 hours and 3 hours prior arrival at the Pilots Boarding Station, using GMT, to "Pilots Halifax".

For final clearance to enter the Halifax Marine Traffic Regulation Zone:

1. Report to "Halifax Traffic" on VHF Channel 14 or 2182 kHz, when approaching the zone boundary.
2. Report to "Halifax Traffic" when approaching zone boundaries approximately 8 and 4 miles radius from Chebucto Head.

Vessels leaving Halifax are to report to "Halifax Traffic" when approaching zone boundaries.

ANCHORAGE: Vessels anchor in harbour in areas designated by Ports Canada.

RESTRICTIONS: Controlling depth in channels of approach 60 ft. in main harbour as far as the Narrows. Ice free all year. Ample turning room for the longest vessel.

MAX. SIZE: Length and breadth unlimited. Can berth ships up to 60 ft. draft. Channel depth 60 ft. Tide range 6 ft. to 9 ft. 110,000 ton tankers with drafts 50 ft. enter harbour regularly.

HEALTH: Quarantine – every vessel coming from port outside Canada shall be inspected by Quarantine Officer at a place specified by him. (Quarantine Station in Anchorage No. 1). Where sufficient information can be given by radio, Radio Pratique may be given between 0900 hrs. and 1700 hrs. local time (address "Quarantine Halifax") and message should include (i) name and nationality of vessel, (ii) ports of call during voyage, (iii) nature of cargo, (iv) number of crew and passengers, (v) statement of health, (vi) name of Agent, (vii) ETA pilot station in GMT. A coastwise vessel, free from disease and arriving from a disease-free coastwise port, may be exempted quarantine inspection.

TUGS: Join vessel inside harbour at Quarantine Anchorage. Tugs towing use vessel's lines. Tugs made fast alongside vessel for docking or undocking use their own lines at no extra charge.

RADIO: Halifax Marine Radio Station, Ketch Harbour. Radio-telephone and other services. Masters may contact Halifax Marine Radio on 500 or 2,182 kHz, VHF on 156.8, working Channel 26 (161.9 and 157.3 MHz).

RADAR: Marine Traffic Regulating Center at Chebucto Head. Working frequencies Sector One 156.7 MHz (Channel 14); Sector Two 156.6 MHz (Channel 12). Call sign "Halifax Traffic".

BRIDGES: There are two: Angus L. MacDonald Bridge (Halifax-Dartmouth) min. vertical clearance at HW 158 ft.; A. Murray MacKay Bridge (narrows) min. vertical clearance at HW 157.7 ft.

BERTHING:

Ports Canada – Port Facilities

			Shedded			
Berth Number (Usual Name)	*Wharf Length* (m.)	*Depth at LW* (m.)	*Approx. Size* (m.)	*Approx. Area* (sq.m.)	*Approx. Open Space* (sq.m.)	*Remarks*
Ocean Terminals:						
20	224	12.1	181 × 29	5,250	—	Pipe-lines for tallow and vegetable oils to storage tanks. Bagged flour.
21	178	12.1	161 × 29	4,670	—	Bagged flour.
21 Upper Floor	—	—	161 × 29	4,670	—	Leased – Navigational School.
22	209	12.5	153 × 29	4,440	—	Bagged flour.
22 Upper Floor	—	—	153 × 29	4,440	—	Storage.
23	213	9.7	161 × 31	4,990	—	*Heated Shed Break-bulk general cargo
24	137	8.8	—	—	3,728	Open Terminal – Containers, Steel, Heavy Lifts, etc.
25	168	11.2	—	—	5,462	Open Pier (Restricted by Grain Galleries) – Bulk Cement.
26	213	10.6	201 × 30	6,030	—	Fixed Marine Leg for discharging Grain – Break-bulk general cargo.
East End Pier A	97	8.8	—	—	—	Part of Shed 27 leased to Can-Ocean.
27	207	13.4	202 × 31	6,250	—	
28	174	12.1	—	—	4,660	Open Pier (Restricted by Grain Galleries).
29 (Fish Pier)	122	9.1	—	—	—	Fishing Processing Plant.
30	244	10.5	—	—	1,858	Open Area (part.) Containers, Steel, Heavy Lifts, etc., Cruise Passengers.
31	—	10.5	—	—	5,574	Open Terminal. Containers, Steel, Heavy Lifts, etc., Cruise Passengers.
32 (East End A 1)	88	10.0	—	—	—	
33	190	12.1	188 × 31	5,830	—	*Heated Shed. Break-bulk general cargo.
34	190	8.2	126 × 31	3,906	1,953	*Heated Shed. Break-bulk general cargo, Containers Ro/Ro, etc.
35	103	4.5	—	—	3,411	Open Area – 15 m. Ro/Ro ramps (2). End loading for vessel on Berth 36 and Berth 34. Containers, Ro/Ro, etc. Ro/Ro cargo – consolidation area.
36-40	190	10.6	—	—	18,580.60	Open area. Containers.
37	190	12.8	79 × 29	2,290	2,290	Containers, Steel, Heavy Lifts, etc.,
38 (East End B)	91	11.5	80 × 31	2,480	—	Shed. Break-bulk general cargo.
39	190	10.9	158 × 29	4,580	—	Break-bulk general cargo. Container berths, 3 × 40.8 tonne
41	259	14.0	—	—	—	**Gantry cranes, berth 41 has 24.4 m. wide stern Ro/Ro ramp.
42	259	11.5	—	—	—	Terminal fenced area 22.7 hectares. Consolidation shed 2,787.07 sq.m.
Richmond Terminals:						
9	213	8.1	—	—	—	Volvo Auto Assembly Plant. Oil pipe-lines to Storage Tanks.
9A	240	8.1	154 × 37	5,698	—	Leased to Husky/Bow Valley – Supply Base.
9B	213	8.1	168 × 37	6,216	—	Leased for Offshore Oil Supply Base Shell Oil – March 1982 (9B & 9C).
9C	140	8.7	—	—	6,131	**Oil pipe-line to storage tanks. Open Area.
9D	—	—	—	—	—	No Berth. Additional area created for storage area – Supply Base.

*Heat available as required. **Terminal Operation.

Berthing (continued)

Private Facilities:

Berth	*Length* (m.)	*Depth LW* (m.)	*Remarks*
Dartmouth:			
Imperial Oil No. 3	67	11.6	Bunkering.
No. 4	122	10.7	Bunkering. Refinery and Storage Tanks.
No. 5	67	14.9	Bunkering.
	30	12.8	Crane: Height 45 m., 11 t. lift, unloading 180 t. per hour. Pipe-line for liquid salt to shore tank.
Mobil Oil Dock	36	8.2	Offshore supply base – approx. 4.86 hectares.
Irving Oil Dock A	94	11.16	Bunkering. Storage tanks.
Irving Oil Dock B (L shaped)	85	—	Bunkering. Storage tanks.
Industrial Estates Wharf	152	7.6	Lay-up Berth.
Eastern Passage:			
Texaco Wharf	168	10.1	Bunkering and oil storage. Refinery.
Autoport – outside	201	13.7	Approx. 36.4 hectares for vehicle storage. **Floating Dock– Ro/Ro side loading and end loading. Pre-servicing available for import vehicles.
Autoport – inside	107	7.6	
Bedford Basin:			
Bedford Institute			Dock at Bedford Institute of Oceanography – Department of Fisheries and Oceans.
Gulf Oil Wharf	110	9.7	Storage Tanks.
National Gypsum Ltd.	197	10.1	Loading capacity of 4,500 t. gypsum rock per hour. Diesel fuel is available.
Fairview Cove Container Terminal	335.28	13.41	Operator: Ceres Corp. Consolidation shed area: 21.17 hectares (space for expansion as required). Facilities 2×40 tonne dockside gantry cranes; ro/ro ramp end loading.

**Terminal Operation.

TANKERS: 110,000 ton tankers, 50 ft. draft, use port regularly. Terminals – 9 berths operated by 5 oil companies.

Imperial Oil, South Dartmouth, 3 piers, vessels up to 282 m.; max. draft 15.2 m., bunkering vessel also provides barge service.

Irving Oil Co. Ltd.: South Dartmouth, 3 berths, ocean vessels any length, max. draft 11.6 m.; located at Woodside.

Texaco Canada Ltd.: Eastern Passage, 2 berths (1 berth any length vessel) draft up to 10.1 m., barge service provided in harbour.

Gulf Oil Canada Ltd.: Bedford Basin; 109.8 m. wharf (no restriction vessel length) depth 9.7 m.; located Burnside, Halifax – Dartmouth Marine Terminal.

Also see "Berthing".

BULK HANDLING FACILITIES: *Grain Handling Facilities: Ports Canada Elevator* – Storage capacity 144,256 tonnes wheat equivalent. *Max. Capacity:* Berth 28: 1,000 tonnes per hour. (Wheat equivalent) (loading). Berth 26: 800 tonnes per hour. (Wheat equivalent) (unloading)

MEDICAL: Sick Mariners' Service may be obtained for venereal disease only at the Federal Building, Suite 620, Bedford Row, Monday through Friday, Tel: 426-3998. Doctor always available either by telephone or telephone answering service. Information for emergency treatment outside these hours may be obtained from ship's Agent. Emergency hospitalisation can be obtained only at Camp Hill Hospital.

STEVEDORES: Available from several private companies.

DENSITY: Salt water all tides.

FRESH WATER: Dock side only. No water barges. 50 t.p.h. per hose.

FUEL: See "Tankers".

GANGWAY/DECK WATCHMEN: Can be provided.

OPENING/CLOSING HATCHES: Patent mechanical hatches by ship's crew. Wood and canvas hatch covers by stevedores.

CUSTOMS ALLOWANCES: Tobacco: 1 lb. per man per week; 200 cigarettes per man per week. Wine/spirit allowance: 40 oz. bottle per man per week.

CARGO GEAR: All ships liable to inspection by Government Inspectors. Gear Certificates to be produced, if required. Heavy-lift equipment: 59 pieces ranging in single lift capacity to 300 short tons. Normally available on a few hours notice, including floating cranes.

CONSULS: The following countries are represented in Halifax:

Austria
Belgium
Britain
Brazil
Denmark
Finland
Japan
Germany
Iceland
Italy
Netherlands
Norway
Peru
Portugal
Spain
Sweden
United States of America

DRY DOCKS: Floating dock 182.9 m. by 30.5 m. by 9.45 m. deep; Lifting capacity 22,680 tons. Graving dock – 172.9 m. long, 24.4 m. wide at keel blocks; clearance at top is 31.2 m.; max. draft over the keel blocks is 7.9 m., capacity 13,610 tons. Two marine railway slips at Dartmouth capable of hauling vessels from 36 to 2,720 tons displacement. Complete machine shop and other repair facilities as well as Salvage equipment available.

New floating dock. Lifting capacity 36,000 tons. Dimensions 237 m. × 38 m. × 9 m. draft.

REPAIRS: All types of repairs possible.

SURVEYORS: Surveyors and Cargo Inspectors available.

AIRPORT: Halifax International. Regular services to Canada, USA and Europe.

TIME: Standard Time GMT minus 4 hours. Daylight Saving Time from last week-end in April to last week-end in October, clocks advanced 1 hour.

HOLIDAYS: New Year's Day (January 1st); Good Friday; Queen's Birthday (May 20th); Dominion Day (July 1st); Labour Day (September 2nd); Thanksgiving Day (October 14th); Remembrance Day (November 11th); Christmas Day (December 25th). Cargo work can be arranged on all holidays except Labour Day, Christmas Day and New Year's Day.

POLICE/AMBULANCE/FIRE: Police Tel: 4105. Harbour Police (Ports Canada) Tel: 426-3629. Ambulance Tel: 429-5151. Fire Tel: 4103.

EMERGENCY CO-ORDINATION CENTRE: Coast Guard Halifax Tel: 426-6030. Halifax Traffic Centre Telex: 22502.

TELEPHONES: Service available at all berths.

GENERAL: Extensive rail and road services plus extensive transit sheds, cold storage with 1,719,000 cu.ft. storage space.

STORING: See "Prelims", page viii.

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. None for local stores.
6. Yes.

SERVICES: All services available including compass adjusting, tank cleaning, etc.

SHORE LEAVE: Crew allowed ashore.

DEVELOPMENTS: Fairview Cove Container Terminal: Berth extension approved – 329.18 m.

AUTHORITY: Port of Halifax, P.O.Box 336, Halifax, Nova Scotia, Canada B3J 2P6. *Tel:* (902) 426-3643. *Telex:* 019-21643. *Contact:* Captain N. C. Stark, Harbour Master (*Tel:* (902) 426-3648). R. V. Beck, General Manager (*Tel:* (902) 426-3643).

HAMILTON, Ontario: 43.14 N. 79.41 W. (See Plan Book)

For important General Information refer to St. Lawrence Seaway.

DOCUMENTS:

Inward manifest 3 days prior to arrival of vessel.
1 Steamship company release covering inward shipment.
1 Loading list, 24 hours prior to vessel loading.
1 Customs report outwards (A.7).
3 Vessel's outward manifest within 3 days after departure of vessel.

PILOTAGE: See "St. Lawrence Seaway".

MAX. SIZE: LOA 730 ft. Max. draft 26 ft.

HEALTH: First port of entry. See "Montreal".

RADIO: VBG Toronto.

Vessels Inbound: Call Burlington Bridge on radio telephone (VHF or AM) for clearance. Call Harbour Master's office for information about docking orders (VHF or AM).

Vessels Outbound: Call Burlington Bridge for clearance. Call Harbour Master's office to advise next port of call.

General: Harbour Master's office keeps radio watch on AM and FM working channels. Tug or linesmen may be ordered through the Harbour Master's office.

TUGS: Join inside harbour entrance – ship's lines used.

BERTHING: Arrangements made with Harbour Master.

Berthing Capacities: The Port of Hamilton provides berthing facilities for all vessels capable of navigating the St. Lawrence Seaway which can handle maximum size vessels of 730 ft. length × 75 ft. beam with a draft of 26 ft. 6 in.

The Hamilton Harbour Commissioners provide 19,000 ft. of berthing and in addition 10,050 ft. of berthing is available for private docks i.e. – International Harvester, The Steel Company of Canada, Dominion Foundries & Steel.

Covered Storage Space: Total 638,000 sq.ft. from which the Hamilton Harbour Commissioners utilize 430,000 sq.ft. and leases to private operators:

108,000 sq.ft. to Canada Steamship Lines Limited Pier No. 24
100,000 sq.ft. to Seaway Terminals Pier No. 14

Outside Storage Space: Total – 2,980,200 sq.ft. Operated by The Hamilton Harbour Commissioners:

Centennial Terminal	400,000 sq.ft.
Wellington Street Terminal	200,000 sq.ft.
Pier 23	140,000 sq.ft.

Leased to Private Operators:

Pier 11	250,000 sq.ft.
Pier 12	600,000 sq.ft.
Pier 13	240,000 sq.ft.
Pier 14	1,000,200 sq.ft.
Pier 15	150,000 sq.ft.

BRIDGES: Lift bridge at harbour entrance can be raised any time.

STEVEDORES: Must be ordered prior to 1545 hrs. on previous day.

MEDICAL: Hospital services available and doctors can be arranged.

FRESH WATER: Available.

FUEL: All types available.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: See "Montreal".

IDENTIFICATION CARDS: Not required.

CONSULS: Consuls located in Toronto.

REPAIRS: Available.
AIRPORT: Hamilton CVC Airport (10 miles South), and Lester B. Pearson International Airport (30 miles East).
TIME: GMT minus 5 hours.
HOLIDAYS: Normal Canadian statutory holidays apply and labour can be arranged at extra cost. See "Montreal" for details.
POLICE/AMBULANCE/FIRE: Harbour Police 529-3423 or 911.
TELEPHONES: Can be arranged on board.
SHORE LEAVE: Crew allowed ashore.
AUTHORITY: The Hamilton Harbour Commissioners, 605 James St. N., Hamilton, Ontario L8L 1K1. *Tel:* 416 – 525-4330. *Telex:* 061-8638. *Contact:* E. M. Perkins, Port Director. I. M. Noble, Harbour Master.

HANTSPORT, N.S.: 45.04 N. 64.10 W.

DOCUMENTS: See "Montreal".
PILOTAGE: Non-compulsory, but advisable. Rates by agreement.
MAX. SIZE: Tidal port and no shipping arrives or departs at low water. Draft of largest vessel that entered port was 24 ft. A draft of 25 ft. can be taken in and out.
HEALTH: Customs Officer acts as Quarantine Officer.
RADIO: Ship-to-shore communications; through St. John N.B. or Yarmouth N.S.
BERTHING: Berthing length 400 ft., no water at low tide, ships lie aground on mud alongside. There are railroad tracks on wharf, main and electric lights laid on.
FRESH WATER: From pipe-line on Government wharf.
FUEL: Oil by truck from various companies.
REPAIRS: Hull repairs can be made at low water with vessel high and dry.
SERVICES: Supplies: ship's stores can be secured in port.
AUTHORITY: E. L. Dillman, Harbour Master, P.O.Box 351, Hantsport, Nova Scotia. *Tel:* 684 – 3644, 684 – 3231. *Telex:* 019 – 32133.

HARBOUR GRACE, Newfoundland: 47.43 N. 53.08 W.

DOCUMENTS:
Crew Lists.
Names of passengers.
Clearance from Last Port of call.
Deratting Certificate.
Inoculation List of all crew members and passengers.
Manifest of Cargo.
Copy Bills of Lading.
List of Bonded Goods.
PILOTAGE: Not compulsory, if required cable Agent.
ANCHORAGES: Pilot will instruct Master.
MAX. SIZE: Max. length 650 ft., max. draft 24 ft. low tide.
HEALTH: See "Montreal".
RADIO: Route cables and telephone calls through St. John's Newfoundland Radio.
VHF: Stand by on Channel 6.
TUGS: Not available.
BERTHING: Nothing specific, Pilot will have instructions; Agent should be given 24 hours arrival notice.
CRANE: Available on request.
STEVEDORES: Available. 24 hours notice required.
MEDICAL: Port doctors available; hospital facilities; advance notice would be helpful in providing ambulance services if needed.
TANKERS: Marine storage terminals for oil are served by Canadian tankers.
FRESH WATER: Available, pipe-line delivery at piers, rate of delivery as required.
FUEL: Diesel, gas oil, marine bunkering facilities in piers, available at any time, no notice required.
GANGWAY/DECK WATCHMEN: Not necessary, available if required.
OPENING/CLOSING HATCHES: By crew.
IDENTIFICATION CARDS: Not required.
CONSULS: Norway; Denmark; Spain; Portugal; France.
REPAIRS: Deck and engine repairs available.
AIRPORT: 1 hour 15 minutes drive, service by regular airlines making connection to all points in the world.
TIME: GMT minus 3.5 hours. Clocks advance 1 hour last Saturday of April each year and are put back 1 hour last Saturday October each year.
HOLIDAYS: New Year's Day; Good Friday; July 1st; November 11th; December 25th. Cargoes could be worked on these days with exception of Good Friday and Christmas Day.
POLICE/AMBULANCE/FIRE: One telephone number for all services 709-596-5014.
TELEPHONES: Available at pier.
CUSTOMS ALLOWANCES: Tobacco – each man 200 cigarettes per week. Wine and Spirit – each man 40 oz. wine or spirits per week.
SERVICES: Compass adjusting, radar repairs, RT repairs, gyro compass repairs, all types electronic equipment repaired. Divers available for surveys and underwater repairs.
REGULATIONS: Fishing vessels must advise of week-end arrival on Friday so that permit to take supplies can be obtained from Federal Dept. of Fisheries.
SHORE LEAVE: All crew members allowed ashore.
AGENT: Ocean Harvesters Ltd., P.O.Box 310, Harbour Grace, Newfoundland, Canada, AOA 2MO. *Tel:* 709-596-5111, 709-596-5112, 709-726-4840. *Telex:* 016-3111 A/B Moorfish. *Cables:* Moorfish, Hr. Grace. *Contact:* R.D. Moores or R. Babb.

HAVRE ST. PIERRE, Quebec: 50.14 N. 63.35 W.

DOCUMENTS: Not a port of entry, clearance can be obtained at a previous port of call or by radio from Quebec.
PILOTAGE: Not compulsory.
ANCHORAGES: Safe anchorage in 42 ft. – 90 ft. to be found in Eskimo Harbour.
MAX. SIZE: Largest vessel; 10,000 tons, draft 28 ft. 6 in.
RADIO: Seven Islands – VCK.
TUGS: None.
BERTHING: Quebec Iron & Titanium Corp: Ore Loading Dock has 640 ft. of berthing space, depth alongside 30 ft. at LW.

Transport Canada Wharf: 400 ft. long, depths 26 ft. to 37 ft. alongside at LW.

Tidal variation from 4.75 ft. – 7.75 ft.

CRANES: 1 rail mounted crane available at the ore loading dock.
BULK CARGO FACILITIES: Conveyor and loading boom (40 ft. extension) at ore loading dock. Capacity 3,500 t.p.h.
MEDICAL: Hospital facilities available.
FRESH WATER: Available ex-town mains supply.
FUEL: Lubricants only.
REPAIRS: Welding repairs can be undertaken.
AIRPORT: Local airstrip with services.
AUTHORITY: Transport Canada, Garde Cotiere Canadienne, Region des Laurentides, 4 Place Quebec, Suite 103, Quebec, P.Q., G1R 4X3. *Contact:* Rene Jomphe, Harbour Master, Havre St. Pierre. *Tel:* 418-538-3030.

KINGSTON, Ontario: 44.12 N. 76.30 W.

For important General Information refer to St. Lawrence Seaway.
DOCUMENTS: See "Montreal".
PILOTAGE: Contact Pilotage Officer, in Cornwall, telephone 613-932-8740, USA Pilot Station, Cape Vincent 315-654-2900.
ANCHORAGE: Good anchorage off Penitentiary.
RESTRICTIONS: Channel Depths – Controlling depth at low lake levels 22 ft. until wharves in harbour approached. In upper harbour, controlling depth 17.5 ft. Depths vary from month to month.
Navigating Season April 15th – December 15th.
HEALTH: First port of entry. Quarantine at Quebec City for incoming ships from foreign ports.
TUGS: Available. Necessary for handling ships in rough weather at Elevator and other docks.
BERTHING: Docks extend West from North of bridge (La Salle Causeway) to Little Catariqui Bay – some 4 miles. Transport Canada 455 ft., depth alongside 17 ft. Portsmouth Olympic Harbour – Environment Canada, under construction. Also smaller docks for coastal vessels and private docks, including Canada Steamship Lines Elevator dock 700 ft. long on East side 25 ft. alongside, and 600 ft. on West side depth 22 ft. La Salle Causeway 1,000 ft., 19 ft. alongside, used for berthing in Winter. James Richardson Wharf: Berthing length 800 ft., depth alongside 19 ft.
BULK HANDLING FACILITIES: *Canada Steamship Lines Elevator Dock:* Large Upper Lake vessels are unloaded on East side by two travelling marine towers; canal-size vessels are loaded on the West side, 6 loading spouts. The elevator capacity is 2,500,000 bushels, marine towers 35,000 bushels per hour. Canadian National Railways tracks run to the elevator and cars can be loaded with grain. This dock is also open to general cargo.
MEDICAL: Hospitals, Kingston General and Hotel Dieu.
STEVEDORES: From Toronto.
FUEL: Bunker coal – normal stock 2,000 tons from lighters at wharf. Bunker "C" and diesel oil also available.
FIRE PRECAUTIONS: No unusual precautions.
CUSTOMS ALLOWANCES: See "Montreal".
REPAIRS: Most repairs possible.
DRY DOCK: Will take ships of length 210 ft., beam 44 ft. Depth on sill 13 ft.
TIME: Eastern Standard Time GMT minus 5 hours. Daylight Saving Time from last week-end in April to last week-end in October, clocks advanced 1 hour.
HOLIDAYS: See "Montreal". Port Officials always available.
TELEPHONES: Ship-to-shore phone communications through Kingston (VBH).
AUTHORITY: Transport Canada, P.O.Box 592, Kingston, Ontario K7L 4X1. *Tel:* (613) 546-3335. *Contact:* E. Phipps-Walker, Harbour Master.

KITIMAT, B.C.: 53.59 N. 128.46 W. **(See Plan Book)**

PORT LIMITS: All waters of Kitimat Arm and Kildala Arm bounded by the high water mark, North of a line drawn from Hilton Point (Lat. 53° 48′ 54″ N., Long. 128° 52′ 16″ W.) through Louis Point (Lat. 53° 49′ 08″ N., Long. 128° 45′ 38″ W.) on Coste Island to Steel Point (Lat. 53° 49′ 35″ N., Long. 128° 42′ 20″ W.) on the mainland. Canadian Chart 3743.
DOCUMENTS and General Information: Refer to "Vancouver".
PILOTAGE: Compulsory. Pilot boards at Cape Beale, West Coast, Vancouver Island, or Triple Island, off Prince Rupert. Pilotage Authority require 48 hours notice to allow Pilot to meet vessel at Triple Island or Cape Beale.
ANCHORAGE: No vessel shall anchor in the fairway or dredged Channel approaching the wharf or otherwise in a position to interfere with or obstruct the docking or undocking of any other vessel. Pilot will instruct Master. Usual anchorage South of Eurocan Terminal, East side of Kitimat Arm.

RESTRICTIONS: Approach to the port from the South is via Laredo Sound, Laredo Channel, Campania Sound, Whale or Squally Channels and thence via Douglas Channel. From the North via Brown Passage, Arthur Passage, Grenville Channel, Douglas Channel. The route from the South is approximately 120 miles, from the open sea and from the North approximately 130 miles. Entrance channel to Terminal Wharf No. 1 (red and black buoys with flashing light) is 732 m. long, dredged to a depth of 10.67 m. at low water, width varies from 244 m. at entrance to 183 m. In addition, a turning basin has been dredged to 10.67 m. at low water on the side of the channel opposite wharf, providing a turning basin 198 m. in width. The channel has mooring dolphins on West side, 264 m. South of wharf No. 1 to accommodate vessels up to 16,000 d.w.t. while awaiting berth.

Vessels may enter or depart any time of day or night.

MAX. SIZE: LOA, 207 m. beam 27.4 m., draft 11 m. Mean tide range 4.2 m. Depth alongside at zero tide 10.67 m.

HEALTH: Vessels proceeding direct to Kitimat from foreign ports must apply for permission to proceed by radio to William Head Quarantine Station.

RADIO: Prince Rupert Radio "VAJ" 500, 2182, 1630.

ETA: Notice of ETA must be given to Alcan Eurocan at Kitimat at least 24 and 12 hours before arrival. Alcan Eurocan may then assign a berth to the vessel but shall not be liable for any delay in providing berth or for failure to provide a berth. Vessels carrying bulk cargoes for discharge are instructed to request Alcan via radio or wireless telegraph through shore stations as to which hatches are to be opened on arrival alongside unloading berth to permit immediate entry of unloading devices.

TUGS: Tug services available. 3 tugs, 750 h.p. – 950 h.p.

BERTHING: Alcan Terminal Wharf No. 1 (concrete caisson construction) is 229 m. long and has two pneumatic unloading towers discharging to a belt conveyor and a Kangaroo Crane for either bulk and general cargo duties. The wharf is connected by rail direct to Aluminum Co. of Canada smelter yard and to the Terrace – Kitimat spurline of CNR.

Rivtow Straits Ltd. operates a weekly Ro/Ro barge service for containers and palletised cargo to and from Vancouver from a barge loading ramp located south of Alcan's mooring dolphins. The channel has mooring dolphins on the West side, 264 m. South of Wharf No. 1, to accommodate vessels up to 16,000 tons, while awaiting berth.

Eurocan Terminal is located to the East of Ocelot Terminal and is 137 m. long with mooring dolphins at South end. To the North of the terminal is located a hydraulic barge loading ramp.

No container or LPG carrier facilities available.

Ocelot Industries Ltd., terminal is located south and east of Alcan's facilities and is of concrete piles and consists of a loading platform with two pads on either side with mooring dolphins to the North and South. The distance between breasting pads is approximately 78 m. and the overall length between dolphins is approximately 300 m. The berth area is approximately 430 m. long and 90 m. wide and is dredged to 13 m. at LLW. At the entrance there is a Q.F. flashing red buoy in line with the berth and another at the North end. F. W. range lights bearing 001° are located to the North and have a range of 4 miles. Principal export cargo is methanol.

STEVEDORES: ETA sent by cable 24 and 12 hours before arrival.

MEDICAL: Kitimat General Hospital – complete medical service provided.

DENSITY: Varies with state of tide, water depth and season of the year.

FRESH WATER: Available at Alcan's Terminal Wharf No. 1.

FUEL: Only diesel oil available.

GANGWAY/DECK WATCHMAN: Not necessary.

OPENING/CLOSING HATCHES: Normally done by crew on bulk discharge. On general cargo, stevedores open and close hatches.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 0.5 lb. tobacco. Liquor: 40 oz. per man, additional issue after 7 days.

CONSULS: Available at Vancouver, B.C.

REPAIRS: Minor repairs only; nearest shipyard facilities Esquimalt or Vancouver.

SURVEYORS: Cargo Inspectors: S.G.S. Supervision Service Inc. located at Kitimat A.B.S., B.V. and Lloyd's Surveyor available from Vancouver.

REPATRIATION: Facilities convenient for crew changes.

AIRPORT: Three flights daily from Terrace to Vancouver International Airport. Limousine service from Kitimat to Terrace, distance 40 miles.

TIME: GMT minus 8 hours. Daylight saving time from last Saturday in April to last Saturday in October.

HOLIDAYS: New Year's Day, Good Friday, Victoria Day, Dominion Day, Labour Day, Thanksgiving Day, Christmas Day, and Boxing Day.

POLICE/AMBULANCE/FIRE: Police 632-7111; Ambulance/Fire 632-639-9111.

EMERGENCY CO-ORDINATION CENTRE: Local fire chief, R.C.M.P. Kitimat. Tel: 632-7111 or Canadian Coast Guard, Prince Rupert. Tel: 624-9146.

STORING: Vessels can be stored by truck, which may proceed alongside the berth. Fork-lift trucks may be used to handle stores. Customs Regulations in force for bonded stores only. Riggers available to assist with storing.

TELEPHONE: Telephone available at dock offices.

SHORE LEAVE: Permitted.

AUTHORITY: Transport Canada, (Box 1800, Kitimat, B.C., V8C 2H2), 1470 Albatross Avenue, Kitimat, British Columbia, Canada. *Tel:* (604) 623-6233. *Contact:* Captain K. J. Loader, Harbour Master.

LES ESCOUMINS, Quebec: 48.20 N. 69.20 W.

LOCATION: Situated on the North shore of the St. Lawrence River, 25 miles East of the Saguenay River.

APPROACHES: Depth in channel is 17 ft. LW. Tidal variation is from 10.75 ft. – 17 ft.

MAX. SIZE: Largest vessel, draft 15.5 ft.

BERTHING: Transport Canada Wharf is 530 ft. long, with 15 ft. depth alongside at LW. There is a ferry berth, used from April 15th to December 15th, for the Les Escoumins – Trois Pistoles Ferry.

BULK CARGO FACILITIES: Pulpwood is loaded at Transport Canada Wharf by means of a conveyor (100,000 cords per season).

FRESH WATER: Available ex-town mains supply.

REPAIRS: Electronic repairs possible.

AUTHORITY: Transport Canada, Garde Cotiere Canadienne, Region des Laurentides, 4 Place Quebec, Suite 103, Quebec, P.Q., G1R 4X3. *Contact:* C. E. Boucher, Wharfinger, P.O.Box 278, Les Escoumins. *Tel:* 233-2739.

MATANE, Quebec: 48.51 N. 67.35 W.

SHIPMASTER'S REPORT: November, 1983.

PILOTAGE: Optional; advisable on first visit. Pilot can be requested by telephoning (418) 562-3201 or 4083, or by contacting the Harbour Master's Office during office hours.

Pilot boards vessel 1 mile off the entrance.

ANCHORAGE: In the river, 1 mile from the West breakwater, in depths of 9 m. – 18 m. Bottom mud.

MAX. SIZE: Up to 30,000 d.w.t., length 175 m. (575 ft.) and max. draft 8.5 m. (28 ft.).

HEALTH: Pratique is granted on arrival.

RADIO: Mont-Joli: VCF.

VHF: Harbour Authority has no VHF.

BERTHING: Matane is on St. Lawrence River South Shore, 36 miles above Cap Chat. The new harbour is 2 miles West of the town and open to traffic throughout the Winter.

Two breakwaters protect and form Matane harbour, which provides a commercial quay of 183 m. (600 ft.) with 8.2 m. (27 ft.) depth alongside.

An underwater oil pipe-line extends 600 m. seaward N.E. and parallel with the N.E. breakwater. The seaward end in 6 m. of water, is marked by a buoy.

Entry direct from the river. The 150 m. (500 ft.) wide entrance between the breakwater heads faces N.E. In the Autumn, strong N.E. winds send in a heavy sea.

Max. tidal rise is 4.4 m. (14 ft. 6 in.). The mean tidal rise: MHWS 3.4 m. (11 ft.), MHWN 2.7 m. (9 ft.) and MLWN 1.2 m. (4 ft.).

STEVEDORES: Good supply of labour available.

MEDICAL: Full range of medical services available.

DENSITY: 1013.

FRESH WATER: Laid on to berth. Has to be reconnected in Winter season, which makes it expensive.

FUEL: Light fuel and diesel oil available.

CUSTOMS: Matane is a port of entry.

AIRPORT: Daily flight to Montreal.

GENERAL: Port used mainly for Canadian timber exports.

AUTHORITY: Ministry of Transport. *Tel:* (418) 562-0042. *Contact:* Harbour Master.

MONTREAL, Quebec: 45.30 N. 73.33 W.

(See Plan Book)

DOCUMENTS:

- 2 Crew Lists.
- 2 Passenger Lists.
- 3 sets Customs Documents.
- 3 sets Health Documents.
- 6 sets Manifests.
- 6 sets Bills of Lading.
- 3 sets Ship's Papers.

PILOTAGE: Compulsory. Pilots board inbound vessels at Anse-aux-Basques (near Les Escoumains) to bring ships as far as port of Quebec where Pilots are exchanged for the trip to Trois-Rivieres. Pilots are again exchanged at Trois-Rivieres before ships may proceed to Montreal.

For further information refer to "Quebec".

ICE ADVISORY SERVICE: Ships inbound from seaward between 15th December and 15th April should advise the Ice Information Officer, Sydney, N.S., 36 hours prior to entering Cabot Strait stating their position, destination, whether loaded or in ballast. This procedure will facilitate the passing of ice information to the ship as necessary.

On request, ice information is also available from Marine Radio Stations at Halifax, Camperdown, Seven Islands, Twillingate and Grindstone. The Canadian Broadcasting Corporation maritime network also broadcasts ice information daily during the Winter navigation season. Supplementary ice information may also be obtained from Canadian Marine Service ice breakers.

During the ice season, radio broadcasts of ice information are made twice daily from Marine Radio Stations as follows:

		Call frequencies
Cape Race, Nfld.	VCE	420 kHz CW 2582 kHz RT
Fox River, Que.	VCG	434 kHz CW 2582 kHz RT
Mont-Joli, Que.	VCF	446 kHz CW 2582 kHz RT
North Sydney, N.S.	VCO	489 kHz CW 2582 kHz RT
Halifax, N.S.	CFH	115.3 kHz CW 6949.5 kHz 8662 kHz 12984 kHz 17218.4 kHz

ANCHORAGE: Available at Longue Pointe abreast of the Island of Montreal close to upper harbour. Also at Lanoraie, approx. 3 miles above Sorel harbour limits, and at Pointe-aux-Trembles anchorage below berth 110. Also opposite Canadian Vickers. Boatmen services are available to vessels at anchor.

Anchorages will be allocated by the Harbour Master (Montreal), through the Marine Traffic Control Centre, Montreal.

MAX. SIZE: Entry only restricted by draft. Main channel depth is 10.67 m. Channel 243.8 m. wide at narrowest point.

HEALTH: Except in case of coastwise vessels free of disease and arriving in Canada from ports or areas that are not infected, every vessel coming from a port outside Canada is inspected by the Quarantine Officer, and shall not make customs entry until it has received pratique. "Coastwise Vessel" means a vessel operating exclusively between Canada and the island of St. Pierre and Miquelon or between Canada and the United States, including Alaska. A "coastwise vessel" loses coastwise status and is subject to quarantine inspection on its next arrival at a Canadian port when at any time it touches a foreign port other than those mentioned above.

Where sufficient quarantine information can be given by wireless, radio pratique may be obtained between the hours of 0900 and 1700 the day preceding arrival:

(a) From "Quarantine Halifax" by vessels bound for Halifax, Nova Scotia.

(b) From "Quarantine Saint John" by vessels bound for Saint John, New Brunswick.

(c) From "Quarantine Quebec" by vessels approaching Canadian ports via the Saint Lawrence River.

For the purposes of radio pratique vessels are required to give the following information:

(a) Name and nationality of vessel.
(b) Ports called at during voyage.
(c) Date and place of last fumigation or derating exemption certificate.
(d) Nature of cargo.
(e) Number of crew.
(f) Number of passengers.
(g) Port of destination and name of Agent.
(h) Number of persons without valid vaccination certificates.
(i) Condition of health of all on board with details of any sickness or death which has occurred during the voyage.

To facilitate the quarantine clearance of vessels entering the St. Lawrence Seaway, the Montreal quarantine facilities have been augmented by opening a new office in Montreal East near the entrance to the Seaway. Vessels proceeding directly into the Seaway may now receive quarantine inspection and clearance while at anchor awaiting entrance to the Seaway.

RADIO: All communications via Montreal radio, call sign VFN. Marine traffic control handle VHF traffic as follows: Between Tracy and Cap St. Michel, VHF Channel 10 (156.5 mHz.). From Cap St. Michel to Montreal, VHF Channel 13 (156.65 mHz.). Ship to ship communication, VHF Channel 6, (156.3 mHz.). Port radar service available.

TUGS: 8 tugs, 1,000 h.p. – 1,600 h.p.

BERTHING:

Berth number (usual name)	*Wharf length (m.)*	*Depth alongside (m.)*	*Remarks*
Bickerdike Basin			
M-6	217.6	4.5	
M-5	628.19	7.62	
M-4		7.62	
M-3		7.62	
M-2		7.62	
M-1	91.4	7.62	
Bickerdike Pier			
East Side B-1	568.7	8.83	
B-2		8.83	
B-3		8.83	
North End			
B-12-N	152.4	8.83	
West Side			
B-4	586.13	8.83	
B-5		8.83	
B-6		8.83	
B-7	357.2	8.83	
B-8		8.83	
Windmill Point Wharf			
5 W	141.7	9.14	Total berthing length
6 W	152.4	9.14	311.8 m.
7 W	163.9	9.14	Grain loading
9 W to 10 W	373.6	9.14	Grain unloading
11 NE	90.5	4.26	
11 NW	41.1	4.26	
12	300.8	4.26–8.83	Ro/Ro
Alexandra Pier			
South Side			
Lower 3	177.7	10.2	Berth 3 and 5: Total berthing length of 358.1 m. Grain loading
Upper 3			Passenger terminal "Iberville" upper shed 3
Lower 5	181.3	10.2	Parking only
Upper 5			Passenger terminal "Iberville" upper shed 5
End of Pier			
14 E	107.3	10.2	
North Side			
Lower 4	162.4	10.2	
Upper 4			
Lower 6	215.2	10.2	
Upper 6			
King Edward Pier			
South Side			
Lower 7	386.5	10.6	
Upper 7			
Lower 9			
Upper 9			
End of Pier			
16 E	107.9	10.2	
North Side			
Lower 8	389.5	10.6	
Upper 8			
Lower 10			
Upper 10			
Harbour Front			
Lower 11	178.9	8.8	Berthing length 144.78 m.
Upper 11			
12	213.4	10.6	Vieux Port
Jacques Cartier Pier			
14	131.06	10.6	Grain loading
18	210.9	8.83	
19	212.1	8.83	
End of Pier 22N	75.2	8.83	
West Side			
20	105.7	7.62	
Market Basin			
21	140.2	7.62	
22	166.7	7.62	Coastal
23	206.6	7.62	Coastal
Sect. 24 – 42 inc.			
24	117.04	8.99	
25	295.6	8.99	
27	252.6	8.99	
28	245.9	9.1	
29	252.0	9.1	
30	147.3	9.1	Snow dumping for City of Montreal
31	153.0	9.1	
32	153.6	9.1	
33	151.4	9.1	
34	143.2	9.1	
35	168.8	9.1	
36	161.1	9.1	
37	163.6	9.1	
39	183.4	9.1	
40	185.6	9.1–10.6	
41	199.9	10.6	
42	187.7	10.6	
Laurier Pier			
43 SW	133.1	9.1	Capable of handling containers.
43 SE	132.8	9.1	
43 N	174.3	9.9	
43 S	150.5	9.9	
Tarte Pier			
44 S	225.5	9.9	Salt Berth
44 E	95.7	9.1	
44 N	263.3	9.1	Grain loading
45	168.8	9.1	Floating Crane Berth

Berth number (usual name)	Wharf length (m.)	Depth alongside (m.)	Remarks
Sutherland Pier			
46	143.8	9.9	Shed
46 SE	162.1	9.9	Bulk sugar facility
46 E	69.1	9.9	
47	100.5	9.9	Coastal trade Max. berthing length 92.97 m.
Sect. 48 – 56 Inc.			
48	196.2	9.9	
49	183.1	9.9	Capable of handling containers
Hochelaga Terminal			
50	189.8	9.9–10.6	
51	239.5	10.6	
52	338.3	10.6	
Elevator No. 4			
54	394.7	10.6	Grain loading
55		10.6	
56	244.7	8.2	Grain unloading
Vickers East	461.7	9.1	Dry Dock
Vickers West	264.8	9.1	
Sect. 57 – 58 Inc.			
57	197.8	9.1	One Bridge Crane – Dry Bulk
58	167.6	9.7	
Racine Terminal			
59	152.4	10.6	3 gantry cranes, 35 tons each, capable of container handling
60	152.4	10.6	
61	190.8	10.6	
62	245.3	10.6	
Cadillac Terminal			
63	235.3	9.1	
64	254.2	9.1	
66	208.4	9.1	Ro/Ro
67	216.4	9.1	
68	215.7	9.1	
Container Terminal			
70	181.0	10.6	Two travelling container cranes (28 tons and 45 tons capacity)
Sect. 71 – 72 Inc.			
71	198.1	10.6	Two travelling cranes, 30 tons each – Dry Bulk
72	198.1	10.6	
Boucherville Terminal			
73	192.9	10.6	Ro/Ro – One travelling container crane, 45 tons
74	192.9	10.6	
Nepco Terminal			
76	155.4	10.6	Oil discharging facilities.
Ultramar Canada			
77	249.0	10.6	Oil discharging facilities.
Task Terminal			
78 79 80	542.0	10.6	Total berthing length capable of handling containers 420.0 m.
Canadian Salt			
93	228.6	8.23	Bulk salt facility.

GRAIN FACILITIES:

Elevator No.	Capacity in bushels	Loading galleries at berths	Loading capacity bushels per hour	Remarks
3 (Section 43)	5,000,000	43N	16,000	
4	5,500,000	54–55	54,000	
5	5,100,000	7W	32,000	2 marine legs 484.6 m. loading galleries. Unload at 9W–10W with 2 marine legs and a capacity of 72,000 bushels per hour

CRANES: Floating crane 275 ton capacity and many mobile cranes with capacity up to 200 tons.
STEVEDORES: Working hours 0800 to 1200, 1300 to 1700.
MEDICAL: All medical facilities available.

TANKERS:

Berth No. (usual name)	Wharf length (m.)	Depth alongside (m.)	Remarks
Petro-Canada 94	238.05	10.67	
Pittston Petroleum Inc.			
95 96 97	404.77	9.1–10.6	
Texaco			
98 99 100	439.52	9.1–10.6	
Imperial Oil			
101 E	192.6	10.6	Total berthing length 384.96 m.
102 E	192.5	10.6	
102 W	97.5	9.1	
Shell Canada			
103 S	189.5	10.6	
103 N	189.5	9.1	
Sunoco Inc. 104	32.6	9.1	Can accommodate ships of 147.8 m. length
Gulf Canada			
105	116.1	9.1	Total berthing length 232.57 m.
106 E	116.4	9.1	
106W	69.11	9.1	
Petro Canada			
109	138.6	10.6	Total berthing length 277.36 m.
110E	138.6	10.6	
110W	163.6	4.57	
Marien Street Wharf			
110	31.08	3.65	

FRESH WATER: Available by pipe-line at most berths.
FUEL: Oil – all grades can be delivered at oil companies' terminals; also by bunker barges to vessels lying anywhere in the harbour.
Coal – delivered direct to vessels at coal berths.

Dock and Location: Section No. 71 and 72.
Operator: Canadian Import-Weaver Fuels, 5250 de Maisonneuve W, Tel: 484-1112.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Fuel oil.
Size of Pipe-lines: 14 in. and 10 in.
Storage Capacity: 550,000 barrels.
Distance from Dock to Storage Tanks: 1,135 ft.
Length of Dock: 1300 ft.
Depth at Dock: 35 ft.

Dock and Location: Berth 94, East Montreal.
Operator: Petro-Canada, 11701 Sherbrooke Street East, Montreal, Tel: 252 5713.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Crude oil, gasoline, stove oil, marine fuel oil, marine diesel fuel, No. 2 fuel oil, No. 6 fuel oil.
Size of Pipe-lines: 16 in.; 12 in. and 10 in.; 10 in.; 12 in.; 12 in.; 12 in.; 12 in.
Storage Capacity (Barrels): 1,000,000; 430,000; 80,000; Production capacity: 15,000; 400,000; 300,000.
Distance from Dock to Storage Tanks: 3.5 miles; 1,500 ft.; 1,500 ft.; 3.5 miles.
Length of Dock: 781 ft.
Depth at Dock: 35 ft.

Dock and Location: Sections 98-100.
Operator: Texaco Canada Ltd., 10200 Notre-Dame St. E., Tel. 645-8811.
Type of Dock: Loading, unloading, bunkering.
Type of Cargo Handled: Gasoline, distillate fuel oils, crude oil, marine diesel fuel oils and bunker "C".
Size of Pipe-lines: 2–8 in.; 10 in.; 8 in.; and 2–6 in.; 16 in.; 8 in.; 6 in. and 4 in.
Storage Capacity (Barrels): 2,300,000; 1,200,000 and 500,000.
Distance from Dock to Storage Tanks: 1.5 miles.
Length of Dock: 1.442 ft.
Depth at Dock: 30-35 ft.

Dock and Location: Berth 101.
Operator: Imperial Oil Ltd., 10515 Notre-Dame E.
Type of Dock: Loading and unloading, bunkering.
Type of Cargo Handled: Crude oil, gasoline, stove oil, furnace oil, diesel fuel, bunker "C".
Size of Pipe-lines: 16 in.; 12 in.; and 8 in.; 10 in.; 12 in.; 12 in.; 16 in. and 12 in.
Storage Capacity (Barrels): 3,000,000. Total storage capacity rotated by products depending on seasonal demands.
Distance from Dock to Storage Tanks: 2,800 ft.
Length of Dock: Inside 712 ft. Outside 1263 ft.
Depth at Dock: 28 ft. and 35 ft.

Dock and Location: Berth 103 S. & 103 N. Montreal East.
Operator: Shell Canada Ltd., 10501 Sherbrooke St. East, Pointe-aux-Trembles, Que. Tel. Marine Bunkers and Lubricants: 866-7571.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Gasoline, stove oil, furnace oil, chemicals jet fuel, aviation fuel, marine diesel, bunker "C", thin fuels 200 secs./3,500 secs.
Size of Pipe-line: 3–10 in.; 20 in.; 12 in.
Storage Capacity (Barrels): 4,000,000.
Distance from Dock to Storage Tanks: 1.75 miles.
Length of Dock: 622 ft.
Depth of Dock: 35 ft. S., 30 ft. N.

Dock and Location: Berth 104.
Operator: Sun Oil Co. Ltd., 11055 rue Victoria.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Gasoline, No. 1 fuel oil, No. 2 fuel oil.
Storage Capacity (Barrels): 130,000; 80,000; 240,000; 530,000 (total).
Distance from Dock to Storage Tanks: 2,300 ft.
Length of Dock: 107 ft.
Depth at Dock: 30 ft.

Dock and Location: Berths 105 and 106.
Operator: Gulf Oil Canada Limited, 3501 Broadway. Tel. Marine Bunkers: 645–8767; Marine Lubes: 274-4453.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Crude oil; gasoline; light fuels; marine gasoil; marine diesel; medium fuels 200 secs/3,000 secs; bunker "C".
Size of Pipe-lines: 12 in. and 8 in.; 10 in.; 3–8 in.
Storage Capacity (Barrels): 6,300,000 total storage capacity rotated by products depending upon production requirements.
Distance from Dock to Storage Tanks: 1 mile.
Length of Dock: 990 ft.
Depth at Dock: 30 ft.

Dock and Location: Sections No. 109 and 110.
Operator: Petro-Canada, 11701 Sherbrooke Street East, Montreal. Tel: 252-5830.
Type of Dock: Loading and unloading.
Type of Cargo Handled: Gasoline; crude oil; No. 6 fuel oil; middle distilates.
Storage Capacity (Barrels): 650,000; 900,000; 300,000; 540,000.
Distance from Dock to Storage Tanks: 0.75 mile.
Length of Dock: 910 ft.
Depth at Dock: 35 ft.

FIRE PRECAUTIONS: Looped wire over stern and bow not more than 4 ft. above water for towing in case of fire.
GANGWAY/DECK WATCHMEN: Required.
OPENING/CLOSING HATCHES: Always done by stevedores.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes; 50 cigars; tobacco, 2 lb. per person over 16. Wine/Spirits, total of 40 oz. per person over age of 21.

Subsequent issues may be authorized to crew members of foreign vessels, but the max. quantity any crew member may hold at any one time must not exceed 300 cigarettes, 75 cigars, 3 lb. tobacco, and 60 oz. liquor.
IDENTIFICATION CARDS: Not required
CONSULS: (Consul General unless otherwise stated)

	Tel: No.		*Tel: No.*
Argentina	866-3819	Korea	879-1910
Austria	845-8661	Lebanon	276-2638
Belgium	866-8678	Liberia	871-9121
Benin Rep.(Consul)	849-3695	Luxembourg	487-3387
Brazil	866-3313	Madagascar (Consul)	844-4427
Great Britain	866-5363	Mexico	288-2502
Chile	932-3225	Monaco	844-0516
Colombia	849-4852	Netherlands	866-4875/6
Costa Rica	866-8159	Nicaragua	486-5085
Cuba	843-8897	Nigeria (Consul)	845-6126
Czechoslovakia	849-4495	Norway	861-5542
Denmark	849-5391	Pakistan	845-2297/8
Dominican Republic	738-1068	Panama	
E. Caribean Com.		Peru	932-3692
(Trade Officer)	866-7761	Poland	937-9481/2
Ecuador	849-0200	Portugal	487-4322
El Salvador (Consul)	876-8543	Romania (Trade Com.)	842-1779
Egypt	937-7781/2	Rwanda (Consul)	527-2859
Finland (Trade Com.)	866-2202	San Marino	871-3838
France	878-4381	Senegal	849-4191
Germany, Fed. Rep.	849-1134	South Africa (Consul)	861-5667
Greece	845-2105	Spain	935-5235/6
Guatemala	861-5919	Sweden	866-4019
Haiti	871-8993	Switzerland	932-7181/2
Honduras	935-9708	Syria (Consul)	363-2557
Hungary (Trade Com.)		Thailand	866-8205
	849-9261/2	Uruguay	481-1828
Iceland	875-2071	U.S.A.	281-1886
Israel	866-4048	U.S.S.R.	843-5901
Italy	849-8351	Venezuela	842-3417/8
Japan	866-3429		

REPAIRS: All kinds of hull and engine repairs possible.
DRY DOCKS: Steel floating dock: Length 585 ft., lifting capacity 25,000 tons. Steel floating dock section: Length 400 ft., lifting capacity 17,500 tons. Steel floating dock section: Length 200 ft., Lifting capacity 6,700 tons.

The 200 ft. sections may be joined to either of the other docks, making the max. length for docking 785 ft.

All docks breadth at entrance 107 ft. Draft over keel blocks 27.5 ft.
SURVEYORS: American Bureau of Shipping, Bureau Veritas and Lloyd's Register of Shipping.
REPATRIATION: All facilities available.
AIRPORT: International Airports at Dorval and Mirabel.
TIME: GMT minus 5 hours. Daylight saving time applied from last Saturday of April to last Saturday of October.
HOLIDAYS: New Year's day; Epiphany; Good Friday; Ascension Day; St. Jean Baptiste Day (June 24th); Labour Day; All Saints Day; Christmas Day.
POLICE/AMBULANCE/FIRE: Emergency telephones at berths, directly connecting berth with Police and Ambulance.
SHORE LEAVE: Permitted.
BANKS:

- Bank of Canada.
- Bank of Montreal.
- Bank of Nova Scotia.
- Banque Nationale du Canada.
- BNP Canada Inc.
- Banque Provinciale du Canada.
- Canadian Imperial Bank of Commerce.
- Mercantile Bank of Canada.
- Montreal City & District Savings Bank.
- Royal Bank of Canada.
- Toronto-Dominion Bank.

AUTHORITY: National Harbour Board, Port of Montreal, Port of Montreal Building, Cite du Havre, Montreal, Quebec H3C 3R5. *Tel:* (514) 283-7011. *Telex:* 05 – 267699. *Contact:* Captain D. Hassib, Director of Operations; Public Relations Officer; General Manager.

NANAIMO, B.C.: 49.10 N. 123.57 W. **(See Plan Book)**

DOCUMENTS:

3 copies Crew List Form IMM.200.
1 copy Passenger List.
3 copies Ship Stores E.1.
3 copies Crew Declarations Y.14.
1 Quarantine Certificate.
Manifest from previous Ports.

PILOTAGE: Compulsory. Pilots board off Williams Head, Victoria. Pacific Pilotage Authority – Tel: 666 6771.
ANCHORAGES: Off Harbour entrance and in Departure Bay.
RESTRICTIONS: No restrictions on Nanaimo Assembly Wharf or Duke Point. Harmac Wharf restricted from 2045 to 0700 hrs.
MAX. SIZE: Ships of any size can be taken into harbour with safety. Controlling depths are: Harbour entrance, 17.37 m. at HW and 13.41 m. at LW. Mean channel depth, 9.45 m. at LW. Mean rise of tide 3.96 m.

Largest vessel: Assembly Wharves 24,527 tonnes. Harmac Wharves 20,412 tonnes.

Deepest draft out: Harbour 10.36 m.; Harmac 10.69 m. Navigation season all year.
HEALTH: Pratique granted at Victoria, B.C.
RADIO: Vancouver Radio and Nanaimo Radio VHF Channel 87.
VHF: Nanaimo Radio on Channel 16.
TUGS: Join vessel at Gallows Point, Protection Island. Ship's lines to be used. Available all hours in and out and as required by Pilot.
BERTHING: *Assembly Wharf:*

Berth "A" – 182.88 m. long, depth alongside 10.36 m.
Berth "B" – 182.88 m. long, depth alongside 10.36 m.
Berth "C" – 182.88 m. long, depth alongside 11.59 m.

Duke Point:

Berth "D" – 182.88 m. long, depth alongside 14.00 m.
Coastwise – 60.96 m. long, depth alongside 4.88 m.

Private Wharves:

Two deep-sea wharves at Harmac Pulp Mill, each being 118.9 m. long with depth alongside of 11.28 m. at LW.
C.P.R. Wharf 106.68 m. long, depth alongside 7.62 m.
Imperial Oil Wharf 48.76 m. long, depth alongside 9.14 m.
British American Oil 33.53 m. long, depth alongside 4.88 m.
Standard Oil Wharf 12.19 m. long, depth alongside 2.44 m.

Bulk Cargo Facilities:

Imports: Machinery, forest products, salt cake.
Exports: Lumber, pulp and other related forest products.

STEVEDORES: Ordered by Agent, 16 hours minimum notice.
MEDICAL: No advance notice except in case of serious illness to be included in arrival cable. Ample hospital facilities available.
TANKERS: Tanker berths at private companies' wharves where own regulations on lines apply. See "Berthing".
DENSITY: September to May inclusive 1.0203 average. June to August inclusive 1.0171 average.
FRESH WATER: Available at all wharves.
FUEL: Bunkering is limited to delivery by tanker truck and barge.
FIRE PRECAUTIONS: No other specific precautions except during extreme heat when smoking may be prohibited on wharf adjacent to lumber.
GANGWAY/DECK WATCHMEN: Services not necessary but security guards are available.
OPENING/CLOSING HATCHES: Either crew or stevedores whichever to ships advantage.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per week or 0.5 lb. tobacco and 15 cigars. Wine and/or Spirit: Officers allowed 40 oz. liquor per week. Crew allowed beer only, any amount. *Note:* Beer is not bonded.
IDENTIFICATION CARDS: Not necessary.
CONSULS: None.
REPAIRS: Temporary repairs only.
DRYDOCKS: See "Vancouver".

SURVEYORS: See "Vancouver".
REPATRIATION: Facilities exist in Vancouver.
AIRPORT: Cassidy Airport, 10 miles South of Port, charter flights only. Seaplane service from Harbour to Vancouver or charter.
TIME: Pacific Standard Time, 8 hours behind GMT. Daylight Saving Time in effect from late April to late October.
HOLIDAYS:

(1) Sundays and Good Friday, Easter Monday, Victoria Day (24th May), Dominion Day (July 1st), Thanksgiving and Remembrance Day crews are available at overtime rates by arrangements.
(2) No cargo work on Christmas Day, Boxing Day and New Year's Day.
(3) Labour Day in case of emergencies only.
(4) Crews cease work at 1200 hrs. on December 24th until 0800 hrs. December 27th; also from 1200 hrs. December 31st until 0800 hrs. January 2nd.

POLICE/AMBULANCE/FIRE: Police 753-2345; Ambulance 758-8181; Fire 753-7311.
EMERGENCY CO-ORDINATION CENTRE: Nanaimo Emergency Co-ordination Centre: Tel: 758-6430.

Coast Guard (Rescue): Tel: (Vancouver) 732-4274 and (Gabriola Island) 247-8533.

TELEPHONES: Available for each vessel.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Not necessary.
REGULATIONS: None unusual.
DELAYS: Generally none.
DEVELOPMENTS: *Duke Point:* The Duke Point industrial project is being developed by the provincially owned British Columbia Development Corporation.

When complete, the 140 hectare (350 acre) site will include a 28 hectare (70 acre) shipping terminal facility with 2 deep sea berths owned and operated by the Nanaimo Harbour Commission.

The terminal will accommodate 210 m. (700 ft.) vessels of up to 13.5 m. (45 ft.) draft LW. Coastal and sea-going barges are handled at separate ro-ro facilities. The terminal will also include 10,800 sq.m. (120,000 sq. ft.) of warehouse space. One berth has been completed and is operating as Berth "D", serving the forest industry.

Doman Industries has completed an ultra-modern sawmill, and the company also has plans for a thermo-mechanical newsprint mill and specialty sawmill on adjoining sites.

Another site next to the shipping terminal has been reserved for a second thermo-mechanical pulpmill. An 8 hectare (20 acre) petroleum products tank farm and a 34 hectare (85 acre) industrial park are also planned.

AUTHORITY: Nanaimo Harbour Commission, P.O. Box 131, Nanaimo, British Columbia, Canada V9R 5K4. *Tel:* (604) 753-4146. *Telex:* 044-6114. *Contact:* Mr. Lloyd Bingham, Port Manager.

NANISIVIK, N.W.T.: 73.04 N. 84.32 W. (See Plan Book)

DOCUMENTS: Standard Canadian documents, See "Montreal".
PILOTAGE: No pilotage.
ANCHORAGE: Anchorage can be obtained 15 miles within the entrance of Strathcona Sound, 8 cables off the South shore of the Sound in a berthing depth of 69 m. (228 ft.), clay. Good anchorage is reported to be available in English Bay in a depth of 15 m. (48 ft.).
RESTRICTIONS: Vessel must comply with Canadian Arctic Pollution Regulations which govern earliest and latest dates permitted within Arctic zones depending on vessel's ice classification, nature and quantity of cargo and fuel.
MAX. SIZE: Draft must not exceed approx. 40 ft. alongside dock. Mooring facilities feasible for vessels up to 50,000 tons gross but may prove awkward for those over 20,000 tons gross especially under S.E. wind conditions.
HEALTH: See "Frobisher Bay". Customs Officer (R.C.M.P.) acts as Quarantine Officer.
RADIO: Vessels bound North should pass messages through Frobisher Bay VFF until into Lancaster Sound where communications regarding ETA, etc. are relayed via Resolute Bay VFR.

Direct contact may be made with Nanisivik Mines Limited, Call Sign XOY 817, on 6596.5 at 1300 GMT and 2000 GMT during the shipping season (1st July to 15th October). Vessels may transmit and receive on 6596.5.

VHF: Channel 16 monitored once arriving vessels have entered Strathcona Sound en route to port of Nanisivik. Channel 6 monitored as standby.
BERTHING: No special requirements. The dock consists of three parallel 70 ft. wide cells which are 55ft. apart. The centre cell supports the shiploader. The right and left hand cells each have two bollards (see plan) each with an additional bollard 150 ft. in from the dock face. To the East and West of the dock there are dolphins supporting single bollards. To connect to these the ship's bow and stern lines are towed ashore and attached to a 0.5 in. diameter × 600 ft. heaving line. Once ashore the lines are shackled to a 3.25 in. diameter × 380 ft. mooring line which is secured to the bollard. The lines are then taken up and made fast.
CRANES: The only shore cranes available are mobile units when they are not in service by the mine.
BULK CARGO FACILITIES: One fixed shiploading gantry capable of loading 100 tonnes per hour. The facilities are automatically shut down when winds exceed 50 m.p.h.
STEVEDORES: As per contract with Nanisivik Mines Limited.
MEDICAL: The community has a large modern nursing station with a full time nurse and occasionally a doctor. No advance notice required. Transportation provided by mine vehicles. For serious medical cases vessels should radio in advance so air transportation can be arranged to Frobisher Bay's hospital.
DENSITY: Density varied with ice conditions and tides. Note — When reading densities it has been found that different readings have been found at different depths due to ice melting.
FRESH WATER: Available by tank truck through Nanisivik Mines Limited.
FUEL: Not available.
REPAIRS: Minor repairs only i.e. welding, etc., by mine personnel.
SURVEYORS: Not available. Nearest availability is Montreal, Quebec.
GANGWAY/DECK WATCHMEN: Not obligatory but recommended due to sudden changes in wind and tide. Nanisivik Mines Ltd. provide gangway.
OPENING/CLOSING HATCHES: Carried out by crew.
CUSTOMS ALLOWANCES: Standard Canadian allowance except no beer or alcohol permitted ashore. This restriction strongly upheld by R.C.M.P.
REPATRIATION: Crew changes may be effected TWICE weekly to or from Montreal, Quebec via Boeing 737 jet service.

Mine requires 1 week's advance notice through Administration Superintendent's Office for lodging arrangements.

AIRPORT: Approx. 8 miles from dock, transportation provided courtesy of mine.
TIME: GMT minus 4 hours during Summer months (shipping season).
BANKS: None available.
EMERGENCY CO-ORDINATION CENTRE: Canadian Coast Guard, Ottawa, Ontario. Tel: (613) 996-9788, Telex: 053-3128.
STORING: See "Prelims" page viii. Items 1, 2, 5, 6 not applicable. Items 3 and 4: Trucks and forklift trucks can proceed alongside at the berth.
SHORE LEAVE: Permitted.
TELEPHONES: Not available on or near dock. Phone calls can be made from the mill offices or in the community.
AUTHORITY: Nanisivik Mines Limited, Nanisivik, N.W.T. *Contact:* Mr. Eric Rowan (Ship's Agent). *Tel:* (819) 436-7385.

Mr. Frank Pierce, Harbour Master, Arctic Bay, N.W.T. *Tel:* (819) 439-9917, (819) 439-9918.

NEW RICHMOND (Black Cape), Quebec: 48.08 N. 65.50 W. (See Plan Book)

LOCATION: On the North Shore of (Cascapedia Bay) Baie des Chaleurs in the municipality of New Richmond.
ANCHORAGE: Outside Black Cape Wharf. Masters are instructed not to anchor in the area of the effluent line to the West of the wharf (See Plan).
RADIO: Ship to shore through Grindstone (VCN) or Fox River (VCG). Calling Frequency 2182 kHz.
Arrival Advice: 72, 48, 24 hours prior to arrival.
VHF: Bathurst Paper Ltd.

Frequencies: 156.500 kHz (Simplex)
Channel No.: 10 (Marine traffic control)
Station location: New Richmond, Quebec, Canada
Co-ordinates: Lat. 48° 09′ 24″ N., Long. 65° 50′ 06″ W.
Call Sign: X 00749
Operating range is about 20 miles.

TIME: Atlantic Standard Time. Daylight Saving time is not observed.
GENERAL:
Charts: B.A. Chart No. 1715.
Navigation Aid: Type DCB rotating beacon. White with a flash interval 0.2 seconds duration once every 5 seconds.
Tides: Atlantic Coast Tide and Current Tables.
Prevailing Winds: Southwest.
Port of Reference: Pointe St. Pierre.

SHIPMASTER'S REPORT: May 1979.
Approaches: Straightforward. We used Canadian Chart 4486 – Baie des Chaleurs. The light on the end of the pier is a rotating beacon type, which shows both Green and White on one rotation. The pier is a good Radar target, but is not conspicuous from seaward in daylight.
Anchorage: Vessels may anchor off the pier as convenient (See "Anchorage" above). We did not anchor, but we would imagine the holding ground to be good, as we found stiff clay in the vicinity of the pier.
Berthing: There are no tugs or Pilots at New Richmond. In good weather conditions, such as we experienced, berthing and unberthing present no difficulties. Caution should be exercised, since the tide and prevailing winds set across the pier.

An offshore anchor let go about 2 cables off the pier head, was found to be most useful arriving and leaving. We let the cable run to one shackle on deck. This is a little too much, for it was found necessary to slack away to 4 shackles in order to get the ship alongside. In good weather, the anchor just on the bottom should be sufficient. Line handlers should be arranged with Consolidated prior to arrival. There is no lineboat.

We berthed head in, starboard side to, on the West side of the New Wharf.

The 32 ft. depth is only available for a length of 400 ft., so vessels of greater length will find their stern overhanging. For plan of soundings taken at LW, "see Plan Book".

Departure: The vessel was backed easily down the pier, heaving in the cable at the same time and carrying down a bresting line to use as a check if necessary. One shackle of cable should be left out to assist with turning the vessel off the pierhead. This turn should be as short round as possible and care should be taken to keep as near as possible on the line of the axis of the pier while making it. We strayed a little to the Eastwards, but maintained a minimum depth of water of 11.5 m. while making the turn.

The pier is unlighted and it is not advisable to berth during the hours of darkness. Sailing in the dark presents no problem, as the ship's decklights proved adequate.

Density: 1016.

Agency: Matters were attended to by the Consolidated Warehouse Manager.

Documents: New Richmond was our second Canadian port and the only documents required were 2 copies of Crew List and clearance from previous port.

Officials: The only official person encountered was the local Customs Officer, who was pleasant and obliging.

Cargo Work: Normal hours of work are 0800 hrs. to 2200 hrs., with breaks from 1200 hrs. to 1300 hrs., 1500 hrs. to 1520 hrs. and from 1700 hrs. to 1720 hrs.

Vessel loaded 448 tonnes of Linerboard rolls, using 2 gangs and ship's gear. Rate of loading, nett time per gang-hour, was 27 tons. The stow was not of very good quality and a lot of chocking and securing was required on completion of loading.

The cargo is brought down to the pier by road transport and waits some time there before being loaded. On a wet day, many rolls will get wet, as Consolidated do not have sufficient covers for all trailers.

General: The pier is some miles from the town of New Richmond.

AUTHORITY: Consolidated – Bathurst Inc., New Richmond, Quebec GC 2B0. *Tel:* (418)-392-2133. *Telex:* 014-43111. *Contact:* J. Pierre Savard.

NORTH SYDNEY, N.S.: 46.16 N. 60.13 W. (See Plan Book)

DOCUMENTS:
3 Copies Crew List 1MM.200.
3 Copies Ships Stores E1.
3 Copies Crew Declarations Y14.
Required ship information.

PILOTAGE: Compulsory. Pilotage distance is approximately 12 miles and administered under the Atlantic Pilotage Authority. The area for Cape Breton Pilot embarkation is the Sydney Outer Buoy: Lat. 46° 22′ N., Long. 60° 08′ W. To avoid delay in obtaining a Pilot, Masters must report by message addressed to Pilots, through Sydney Radio VCO or any coast radio station 24, 12 and 6 hours before vessel's ETA.

ANCHORAGE: The land-locked harbour affords safe anchorage for a large number of any size vessels with depths ranging from 40 ft. – 60 ft.

RESTRICTIONS: Open year round. During Winter months January/March drift ice can be expected. However, vessels can be assisted by Canadian Coastguard (Ice Operations).

The controlling depth is 38 ft. at lowest normal tides with average rise and fall from 3 ft. – 5 ft.

MAX. SIZE: See "Berthing".

HEALTH: See "Sydney".

RADIO: Eddy Point Vessel Traffic Management Centre, Lat. 45° 31′ N., Long. 61° 15′ W. Call Canso Marine Radio (VAX) VHF, MF. and R/T.

TUGS: Tugs are not necessary to dock powered vessels.

BERTHING:

CN Marine Terminals: Private pier used for ferries carrying passengers and freight daily to Newfoundland. There is 1 transit shed and 2 ro/ro berths to handle passenger car, truck and rail car loadings. The depth of water varies from 20 ft. to 29 ft.

Transport Canada Wharf: The North Pier is 350 ft. long with a LW depth of 23 ft. – 25 ft. on both sides. It is an open storage dock used in the handling of fresh and frozen fish.

Transport Canada Wharf: The Transport Canada Wharf South Pier and Transit Shed have been partially demolished to make way for the CN Marine new ferry "Carbiou" and will no longer be owned by Transport Canada. Plans are to have a new berth are contemplated in the near future.

Private Freight and Fish Plant Wharves: Range up to 250 ft. in length and have a 12 ft. – 16 ft. depth at LW.

FRESH WATER: Available at all wharves.

FUEL: Fuel oil and diesel oil available. See "Sydney".

DRY DOCK: The North Sydney Marine Railway operates 5 repair cradles, the largest being 125 ft. long and 35 ft. wide at bilge. This can accommodate vessels with a draft of 12 ft. forward and 14 ft. 6 in. aft and a displacement of 550 tons. A connecting machine shop is capable of making major repairs in hulls, engines and other parts.

REPAIRS: Sydney Engineering & Dry Dock Co. Ltd., P.O.Box 100, Sydney, N.S. B1P 2G9. Tel: 902-564 4488.

Atlantic Spring & Machine Co. Ltd., 40 King's Road, Sydney, N.S. B1S 1A1. Tel: 902-564 5559.

North Sydney Marine Railway Co. Ltd., P.O.Box 400, Commercial Street, North Sydney, N.S. B2A 3M4. Tel: 902-794 4791.

SURVEYORS: SGS Supervision Services Ltd., Dominion St., P.O.Box 39, Whitney Pier, Sydney, N.S. B1N 3B1. Tel: 902-562 2344. Telex: 019-35219.

Ship Safety and Inspection: Suite 218, Cabot House, 500 King's Road, Sydney, N.S. B1S 1B1. Tel: 902-539 8530.

AIRPORT: Sydney. Regular service to Halifax and Montreal International Airports.

TIME: Atlantic Standard Time (GMT minus 4 hours).

SERVICES: Radio, Radar and Decca repairs possible. Ship chandlers available.

EMERGENCY CO-ORDINATION CENTRE: Canadian Coastguard: Oil spills and other emergencies from Sydney Harbour area (no charge) ask operator for Zenith 49000.

AUTHORITY: Transport Canada, P.O.Box 248, North Sydney, Nova Scotia B2A 3M3, Canada. *Tel:* 902-794 4631. *Contact:* John Shaw, Harbour Master and Wharfinger.

OCEAN FALLS, B.C.: 52.21 N. 127.41 W.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 copies Inward Report (Customs A6).

PILOTAGE: Compulsory. Pilots may be taken at Vancouver or Victoria. ETA to be given to Pilots 6 hours before arrival through radio station VAK.

ANCHORAGE: In harbour, ample room for any size vessels.

RESTRICTIONS: Channel depth 25 fathoms.

MAX. SIZE: For berthing alongside, length 600 ft., draft 30 ft.

HEALTH: Ships from overseas are given pratique at William Head.

RADIO: Vancouver Radio, VAK.

TUGS: Not usually considered necessary. Can be made available by prior arrangement.

BERTHING: Ocean Falls Corporation owns 4 wharves depth alongside 31 ft. at LW.

FRESH WATER: Available from wharves, free of charge.

CUSTOMS ALLOWANCES: 200 cigarettes or 2 lb. tobacco may be held out of bond per person, and 40 ounces of alcohol.

SHORE LEAVE: Crew members allowed ashore.

HOLIDAYS: Easter Monday; July 1st; Labour Day; Thanksgiving Day; Remembrance Day; Christmas and Boxing Day; New Year's Day.

POLICE/FIRE/AMBULANCE: Police Tel: 957-2388. Fire Tel: 289-3828.

GENERAL: Ocean Falls Corporation Paper Mill ceased operations in 1980 and it is very unlikely to resume in the near future. Ocean Falls Corporation is maintaining a caretaking operation (12 employees) until such a time that there is a decision made on the future of Ocean Falls.

AUTHORITY: Ocean Falls Corporation, P.O.Box 730, Ocean Falls, British Columbia V0T 1P0, Canada. *Tel:* 604-289 3355. *Contact:* F. A. MacDonald, Manager.

OSHAWA, Ontario: 43.52 N. 78.50 W. (See Plan Book)

PORT LIMITS: The limits of the Oshawa Harbour is defined as follows: All the waters of Lake Ontario within the following limits: Commencing at the high water mark of Lake Ontario where it intercepts the Easterly limit of Lot 1 of the broken front concession of the Township of East Whitby.

Thence along the high water mark in a Westerly direction to a point where it intercepts the Westerly limit of Lot 17 of the broken front concession of the Township of East Whitby.

Thence in a Southerly direction 3,000 ft. into Lake Ontario on the extension of the said Westerly limit of Lot 17;

Thence on a straight line in an Easterly direction to a point on a Southerly extension of the said Easterly limit of Lot 1, 3,000 ft. from the high water mark.

Thence in a Northerly direction to the point of commencement.

And all water-front property, wharves, piers, docks, buildings, shores and beaches in or along the said waters.

DOCUMENTS: The matter of documentation is done through Hub Transportation Services Limited (Terminal Operator) in conjunction with the Customs Office located at the City of Oshawa.

ANCHORAGES: Off the entrance of Lake Ontario.

RESTRICTIONS: Draft 25.6 ft. at East Wharf and 22 ft. on West Wall.

MAX. SIZE: Applies to maximum size of vessels entering seaway.

HEALTH: Normal formalities are conducted at first port in Canada in the St. Lawrence Seaway or East Coast, and therefore the vessel is usually considered cleared prior to entering the Seaway system.

RADIO: Toronto VOR or by telephone: (416) 576-0400.

VHF: Not available.

RADAR: None.

TUGS: Tugs available at the harbour entrance.

BERTHING: East Wharf – 730 ft., draft 25.6 ft. West Wharf – 900 ft., draft 22 ft. Discharging: Ship's gear or shore equipment.

East Wharf – General Cargo, Petroleum, Sugar, Steel, Automobiles.
West Wharf – Gypsum, Salt, Petroleum Products, Coal, Steel.

CRANES: Mobile cranes having a capacity of up to 300 tons are available at all times. Two of these cranes are stationed at the Port of Oshawa and same have respective capacities of 150 and 100 tons.

BULK CARGO FACILITIES: Dry bulk cargoes with the exception of sugar, i.e. coal, salt and gypsum, are carried by self-underloaders and discharged by ship's gear. Sugar is discharged by mobile cranes using clam grabs at a rate of 225 – 250 t.p.h. Present discharging gear by high water level, specific details will be made available on request.

BRIDGES: None.

STEVEDORES: The port stevedore (Hub Transportation Services Limited) employs members of the I.L.A., Local 1997, and 4 gangs are available from this local.

The main commodities handled are unitised general cargo, containerised general cargo, import and export steel, and raw sugar.

The productivity rate is above average, with general cargo usually reaching a level of 20 tons plus, per gang. Depending on units, weights, runs somewhere in the region of 60 – 125 tons per gang hour. Bulk commodities are usually discharged at a rate of 250 t.p.h.

MEDICAL: A full range of medical services is available at the local Medical Clinic and Oshawa General Hospital.

FRESH WATER: Fresh water available at East Wharf only.

FUEL: Available on request.

FIRE PRECAUTIONS: Usual regulations.

CONSULS: All major consuls in Toronto, 29 miles away.

REPAIRS: Available on request.

DRY DOCKS: Contact Hub Transportation Services Ltd.

SURVEYORS: Classification Societies are represented by Lloyd's, ABS and N.V. in Toronto.

GANGWAY/DECK WATCHMEN: Not required at the Port of Oshawa.

HATCHES: The opening and closing of hatches is normally carried out by ship's crew.

CUSTOMS ALLOWANCES: In accordance with Canadian standards.

CARGO GEAR: Wherever possible by shore crew.

REPATRIATION: Possible.

AIRPORT: Toronto International Airport. All major airlines, 45 miles West.

TIME: EST.

HOLIDAYS: Usual holidays with the exception that Ontario celebrate Civic Holiday which is the first weekend in August. Cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Police Tel: 579-1234. Fire Department Tel: 725-6574. Ambulance Tel: 576-8711.

TELEPHONES: Arrangements can be made through Bell Canada for telephones to be placed on board. A cost of approximately $24.75 installation charge per line.

SERVICES: All services available on request to Terminal Operator.

SHORE LEAVE: Possible.

IDENTIFICATION CARDS: Seaman's book is sufficient.

AUTHORITY: Oshawa Harbour Commission, 1050 Farewell Avenue, Oshawa, Ontario L1H 6N6. *Tel:* (416)-576-0400. *Telex:* 06-981229. *Contact:* Peter H. Cash, Harbour Master or Donna Taylor.

PASPEBIAC, Quebec: 48.02 N. 65.15 W.

DOCUMENTS: See "Quebec".

ANCHORAGES: Vessels anchor in 36 ft. in Paspebiac Bay.

RESTRICTIONS: Navigation season May to December.

MAX. SIZE: See "Berthing".

HEALTH: Customs Officers deal with pratique and quarantine formalities.

RADIO: Grindstone (VCN).

BERTHING: L-shaped wharf owned by Ministry of Transport provides 1,141 ft. of quayage, with depths from 10 ft. – 22 ft. alongside. There is a small wharf for fishing vessels.

FRESH WATER: Available.

FUEL: Fuel oil available.

REPAIRS/DRY DOCKS: There is a shipbuilding yard in the port for small to medium size vessels.

AUTHORITY: Transport Canada, Garde Cotiere Canadienne, 4 Place Quebec, Suite 103, Quebec, P.Q., G1R 4X3. *Contact:* Norman Whitton, Wharfinger, Paspebiac. *Tel:* 418-752-3418.

PICTOU, N.S.: 45.41 N. 62.43 W.

DOCUMENTS:

Customs Report Inwards, Form A6 in duplicate.
Clearance from last port.
Stores List, Form E1 in duplicate.
Crew Declarations, Form Y14 in duplicate.
Crew List, Immigration Form 200 in duplicate.
Quarantine Q25 in duplicate.
Fumigating and Derat Certificate.
Load Line Certificate.
Inspection Certificate.
Safety Equipment Certificate.
Radiotelegraphy Certificate.
Certificate of Register.

If Pictou is first port of call in Canada photostat copies of the ship's ocean bills of lading in duplicate to cover all goods for discharge in Canada.

PILOTAGE: Normally arranged through Halifax as there is no radio station in Pictou. Various pilot boats in use.

ANCHORAGE: Safe anchorage all over harbour in 40 ft.

RESTRICTIONS: No entry restrictions except draft over bar at entrance to harbour, which is 22 ft. low water.

MAX. SIZE: Government pier 720 ft. long with 27 ft. water on both sides.

HEALTH: Masters must complete Quarantine Form QS.25. Vessel may be quarantined by port doctor, if any disease on board.

RADIO/VHF: Halifax, call sign, VCS, Channels 26, 59, 79. Alternate Charlottetown call sign VCA, Channel 59.

TUGS: Not necessary for berthing.

BERTHING: No specific requirements; berths usually available at all times.

STEVEDORES: Usually 24 hours' notice required for stevedores.

MEDICAL: Hospital facilities available. Serious cases may be transferred to larger hospital at New Glasgow 8 miles distant, or to Halifax 100 miles distant.

FRESH WATER: Supplied by town through 4 in. line. Water pressure 110 p.s.i.

FUEL: Diesel fuel available in quantity. 24 hours' notice required for bunker fuel as it is only brought in on order.

GANGWAY/DECK WATCHMEN: Not usually required unless requested by ship.

OPENING/CLOSING HATCHES: Usually by crew.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per man. Issue may be made if ship is in port for long periods. Wine/Spirits: One bottle per man.

IDENTIFICATION CARDS: Not required. Customs and Immigration Officer should be notified if any crew member wants to travel any distance from port area.

CONSULS: None.

REPAIRS: Facilities to carry out all types of ship's repairs, including deck, engine, electrical and hull repairs.

DRYDOCKS: Largest dry dock, 2,000 ton capacity, 250 ft. long, 42 ft. beam.

REPATRIATION: Crewmen repatriated through Halifax.

AIRPORT: Closest airport is Halifax International Airport approximately 80 miles distant.

TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Queen's Birthday (May 19th); Dominion Day (July 1st); Labour Day (1st Monday in September); Thanksgiving Day (2nd Monday in October); Remembrance Day (November 11th); Christmas Day; Boxing Day. Cargo normally not worked on holidays. Would have to be arranged with stevedoring company.

POLICE/AMBULANCE/FIRE: Police 485-4363; Fire 485-4141; Ambulance 485-4381.

TELEPHONES: Facilities available for placing telephones on ships.

GENERAL: For larger and bulk cargoes stevedores should be notified well in advance. Rates vary according to the type of cargo.

AUTHORITY: Department of Transport, P.O.Box 1270, Charlottetown P.E.1., C1A 7M8. *Tel:* (902) 566-7973. *Telex:* 014-44130. *Contact:* Area Manager; Evan Crowe, Harbour Master and Wharfinger, *Tel:* (902) 485-6854.

PORT ALBERNI, B.C.: 49.14 N. 124.50 W.

(See Plan Book)

PORT LIMITS: A line drawn 320° through Pill Pt. extending across Trevor Channel and Junction Passage (See Canadian Chart No. 3672).

DOCUMENTS, HEALTH, CONSULS, ETC.: See "Vancouver".

PILOTAGE: Compulsory, contact through Vancouver Radio. Pilot boards at Cape Beale.

ANCHORAGE: Deep water anchorage available in harbour, depths up to 66 ft.

RESTRICTIONS: Depths in approaches 84 ft. MLLW.

MAX. SIZE: "Panamax" size vessels.

RADAR: There is no Port Control Radar.

VHF: Channel 74 (VTS Tofino); Channel 6, tugs and inter-harbour traffic.

TUGS: Available and required for berthing.

BERTHING: Pulp and paper wharf with two berths supplied directly from MacMillan Bloedel's pulp and paper mill. Berthing length has been increased to 700 ft. with 39 ft. depth on the West side using pile dolphins; on the East side berthing length remains at 500 ft. with 33 ft. depth. Storage sheds in the centre, with specialised equipment for loading pulp and rolls of paper. A smaller berth in the river is used for loading 7,200 ton cargoes on specially covered newsprint barges.

Port Alberni Terminals Berth 3: 600 ft. long with a depth alongside of 40 ft.

Port Alberni Terminals Berths 1 and 2: berthing is 1,050 ft. with 37 ft. to 50 ft. depth. Storage sheds and forklifts.

CRANES: 2 mobile cranes – one 50 ton and one 30 ton.

STEVEDORES: 15 Gangs available. Refer "Vancouver" for holidays, etc.

BRIDGES: There are no bridges.

MEDICAL: Doctors and hospital facilities available.

DENSITY: 1012, approximately.

FRESH WATER: Available at wharves.

FUEL: Supplies by barge from Vancouver or by truck to dockside.

TIME: Local time is GMT minus 8 hours (P.S.T.) or GMT minus 7 hours (P.D.S.T.) in Summer.

TELEPHONES: Service available at all berths.

CUSTOMS ALLOWANCES: See "Vancouver".

REPAIRS: Machine shop capable of major repairs. Also radar, radio, etc.

BANKS: Contact: Port Alberni Shipping Co. Ltd. Telex: Pasco Ttal 044-64553. Tel: (604) 723-7373.

EMERGENCY CO-ORDINATION CENTRE: V.T.S. Centre ("Tofino Traffic") Channel 74 (VHF) or Tel: (604) 726-7777.

STORING: Vessels may be stored by truck, for regulations check with Terminal Manager. Trucks may proceed alongside. For distances check with Terminal Manager.

SURVEYORS: Surveyors and Cargo Inspectors available from Nanaimo & Vancouver B.C.
POLICE/AMBULANCE/FIRE: R.C.M.P., Tel: 723-2424; Fire Hall, Tel: 723-1234; (Ambulance) V.T.M. (Tofino), Tel: 724-2442.
SERVICES: Garbage disposal and septic tank extraction by arrangement.

Ship chandlers available.

GENERAL: *Tides:* 12 ft. range at Springs, 8 ft. range at Neaps.

Loading: Carried out by ship's cranes or by mobile cranes if ship's equipment malfunctions.

DELAYS: No delays in berthing should be anticipated – one company scheduling – ice free port.
AUTHORITY: Port Alberni Harbour Commission, 2750 Harbour Road, P.O.Box 99, Port Alberni, B.C. V9Y 7M6. *Tel:* (604) 723-5312 or 723-5333. Port Alberni Terminals: 723-7922. *Contact:* Captain D. E. Brooks, Port Manager. Captain D. C. Drewe, Harbour Master. Mr. K. Fertuck, Terminal Manager.

PORT ALFRED (including Bagotville), Quebec: 48.20 N. 70.52 W. (See Plan Book)

LOCATION: Ha! Ha! Bay, Saguenay River, about 60 miles from junction of the Saguenay with the St. Lawrence.

Port Alfred, Ville de La Baie, is located within the limits of the National Harbours Board of Haut-Saguenay.

DOCUMENTS:
- 2 Crew Lists.
- 2 Passenger Lists.
- 3 Crew's Declaration (Can. Form Y.14).
- 3 Stores Lists (Can. Form E.1).
- Quarantine (Can. Form QS.2001).
- 3 Cargo Manifests.
- 3 Bills of Lading.
- 2 Stowage Plans.
- Harbour Master Dues receipt.

PILOTAGE: Pilotage is compulsory. A minimum notice of 24 hours must be given to ensure availability of Pilot. This notice to be confirmed 12 hours and 4 hours prior to arrival at pilot station. Reports stating ETA and Nett Reg. Tonnage of Vessel to be addressed to "Pilots Montreal" and passed by the Marine Traffic Control communication system on VHF Channel 14 (156.7 MHz), or by any coast radio station.

The Pilot station for vessels upbound to Baie des Ha! Ha! is located at Anse-aux-Basques, charted 2 miles S.W. of Les Escoumins Wharf on the North shore of the St. Lawrence river and for downbound vessel at Quebec City.

ANCHORAGE: Vessels awaiting berthing facilities anchor off Anse a Philippe (48.21 N., 70.73 W.).
RESTRICTIONS: None. Vessels may enter or depart at any time of day or night.
MAX. SIZE: Vessels of up to 39 ft. draft may berth at Duncan Wharf and 33 ft. and 36 ft. at Powell Wharf. Max. breadth 110 ft. LOA 800 ft. (243.8 m.).
HEALTH: Pratique obtained by cable to Quarantine Quebec, and serves for duration of vessel's stay in Canada. See also "Montreal".
RADIO: Halifax Radio Station used by vessels while in Atlantic and Sept-Iles Radio Station while in Gulf of St. Lawrence.
VHF: VHF radio telephone Channel 9 (Escoumins Channel).
TUGS: 2 Voith-Schneider tug-boats available 2,400 h.p. and 3,000 h.p. Join vessel 1 mile off wharves at Port Alfred. Ship's lines used. Tugs are compulsory for all vessels over 3,000 g.r.t. docking or undocking at Duncan Wharf and for tankers above 5,000 g.r.t., docking at Powell Wharf. Also, tugs will be compulsory when judged necessary by the management.
STEVEDORES: ETA sent by cable 72, 24 and 12 hours prior to arrival is sufficient to arrange gangs.

Working hours: The regular working hours at Port Alfred are:

General commodities on Powell Wharf:

(a) 2nd January, 1982 to 31st December, 1982.

From Monday to Friday: 0800 to 1600 hours
1600 to 2400 hours

(b) For hours worked outside of above hours and on Saturdays, Sundays and holidays, premium will apply.

At commencement of a working period (0800 or 1600 hrs.) a minimum of four (4) hours applies to any gang ordered as per procedure.

All operations cease from 0001 hrs. Sunday to 0800 hrs. Monday except in extreme circumstances such as to complete a vessel within a maximum of two (2) hours.

Rules: The following rules and regulations are now in effect for general commodities on Powell Wharf:

(a) All requests for labour must be done by telex or cable.

(b) In order to insure that gang(s) will be available, it is imperative that the telex message be in Alcan office by 1400 hours the day before the gang(s) is (are) required. Failing this, it will be beyond Alcan control to obtain gangs. Also note that this goes for every day of the week, including Sunday for Monday work. The following is an example of the type of information required on telex.

- ETA of vessel.
- Number of gangs required and number of carpenters.
- Tonnage of commodities to be loaded or unloaded per hatch.
- Instruction if machines (forklifts, etc.) can be used at the beginning of the operations.
- if overtime approved when applicable.

Nevertheless Alcanport reserves the rights as to the number of gangs to be placed on any vessel.

Bulk commodities on Duncan Wharf: From 0001 hours each Monday to 2400 hours each Saturday, the unloading towers will work three 8-hour shifts daily. Trimming gangs will be available at the regular working hours.

BERTHING:
N.H.B. Facilities

Berth	Wharf length (ft.)	Depth at Low Water (ft.)	Remarks
Bagotville Main Wharf (outer face)	167	28	

Private Facilities

Berth	Length (ft.)	Depth at Low Water (ft.)	Utilisation and General Remarks
Port Alfred (Alcan Smelters and Chemical Ltd, Transport Division).			
(1) Powell Wharf South Side	1,138	33/36	Floor capacity 20,000 tons.
North Side	481	39	Two 5 ton electric level-luffing gantry cranes (bucket or hook) operate on a 35 ft. apron.
Across outer end	215	36	
(2) Duncan Wharf South Side	1,265	39	For unloading bauxite and other bulk cargoes. Two electric gantry towers. 600 t.p.h. each, and one for general and bulk, 10 ton capacity. Also two electric towers 1,000 t.p.h. each.
(3) Consolidated Bathurst North Side	600	25	

MEDICAL: General hospital at Chicoutimi located 13 miles away, in addition to local hospital.
TANKERS: 1×12 in. (Fuel Oil) and 1×12 in. (Caustic Soda) discharge hoses. ASA fittings. No slop discharge facilities. One berth available for tankers at 39 ft. draft. (No. 4 Powell Wharf).

Notice to Tankers: It is important for all vessels discharging fuel oil or caustic soda that the following specific limits be strictly adhered to:
Fuel Oil: Maximum temperatures 150°F, minimum 120°F, with maximum pressure of 115 p.s.i. to a minimum of 75 p.s.i.
Caustic Soda: Maximum temperatures 110°F, minimum 90°F, with maximum pressure of 110 p.s.i. to a minimum of 60 p.s.i.

The above specifications are for security purposes of pipe-lines, and official readings are those on charts on the dock.

DENSITY: Varies, 1002 – 1015.
FRESH WATER: Available at most berths.
FUEL: A Shell Diesel oil station is located at 88 m. (288 ft.) from the Eastern end of No. 4 Powell Wharf, 2 oil pipes of 8 in. diameter
FIRE PRECAUTIONS: Alcanport have a trained fire-fighting crew and fire hydrants installed at all strategic points. No-smoking on all wharves and in ship's holds.
GANGWAY/DECK WATCHMEN: To be attended by ship's personnel.
OPENING/CLOSING HATCHES: Done by crew on bulk discharging. On general cargo, stevedores open and close hatches.
CUSTOMS ALLOWANCES: One carton (200) cigarettes allowed for each crew member. Wine and/or Spirits, one bottle for Officers and crew and 5-6 bottles to Master.
IDENTIFICATION CARDS: Not required.
CONSULS: France: Mr. A. Cano, 1500 Roussel, Chicoutimi, secteur Nord (Quebec), G7G 1T4. Tel: 543-8942.

Norway: Mr. A. Bouchard, 241 de la Fabrique, Bagotville, Ville de La Baie, G7B 2S7. Tel: 544-2714.

REPAIRS: Only minor deck and engine repairs.
SURVEYORS: Lloyd's at Quebec City. ABS and BV at Montreal.
REPATRIATION: Facilities convenient for crew charges.
AIRPORT: At Bagotville, 6 miles from dock, Daily service to Montreal, Quebec City, Sept-Iles and Baie Comeau.
TIME: Eastern daylight saving time will prevail from 26th April, 1981 to 25th October, 1981 (+4). The remaining part of the year is Eastern Standard time (+5).
HOLIDAYS: 1st & 2nd January, Easter Monday, St. Jean Baptiste Day (24th June), Confederation Day, 3rd Monday in July, 2nd Monday of August, Labour Day & 25th December.
POLICE/AMBULANCE/FIRE: Police 544-6804; Fire 544-6804; Ambulance 544-3335.
TELEPHONES: At the main office and public pay phone outside.
SHORE LEAVE: Crew members allowed ashore.
REPORTING: *Notice to Masters of vessels approaching Canadian waters during Winter months:*

Masters of vessels proceeding from sea inbound to Port Alfred (Ville de la Baie) Quebec must report, at least 24 hours before entering the Gulf of St. Lawrence, to the Canadian Coast Guard, through Halifax Radio Station, N.S. or through any other Canadian Coast Station giving all pertinent information, i.e. name of ship, d.w.t., b.h.p., date built, ice class or non-strengthened, approximate draft and time entering Cabot Strait, destination. Then the Coast Guard should acknowledge and give the vessel the recommended route. When a vessel is beset in ice, the Master must radio for ice-breaker assistance, and in the case where conditions improve and vessel makes progress, it must be reported soonest to the ice-breaker in the vicinity or the Coast Guard so that the breaker coming to the assistance is well informed of the new position.

GENERAL: *Conditions for use of Alcan dock facilities:*

1. Notice of ETA, description and tonnage of the commodity to be loaded or discharged and the number of passengers to be landed or embarked, must be given to Alcanport at least 48 hours and 24 hours before arrival. Alcanport may then assign a berth to the vessel but shall not be liable for any delay in providing a berth or for failure to provide a berth.

2. Vessels shall not berth at Alcanport's wharves before obtaining permission. Berthing instructions will be given on VHF Radio, Channel 9 (Channel Escoumins).

3. The normal berthing will be on a "First come, first served" basis but the port management reserves the right to change priority.

4. With a view of expediting the work of the port, Alcanport reserves the right, free of expense to itself, to order (a written three-hour notice) a vessel to vacate its berth or to shift from one berth to another at any time. If the vessel does not vacate its berth or does not shift in accordance with Alcanport's instructions, an additional dockage charge of $500.00 per hour or fraction thereof shall be payable in advance in cash to Alcanport, time to count three hours after notice to shift or vacate has been delivered in writing to the person in charge of the vessel. This clause shall not impair the right of Alcanport to compel removal of the vessel by any lawful means.

5. Any object landed from a vessel on Alcanport's property is to be accompanied by a written permit signed by the Master or Officer-in-charge of the vessel; the said permit is to be handed to Alcanport's gateman.

6. Persons wishing to visit vessels berthed alongside Alcanport's wharves are required to have written permission, signed by the Master of the vessel.

7. No person shall smoke or expose a naked light on any pier or wharf or in any shed or warehouse owned or operated by Alcanport, or in any railway car while on Alcanport's property, or in the hold of a vessel while berthed alongside Alcanport's wharves.

8. Tugs are available on call for service in accordance with the charges and the Standard Towing Conditions.

9. If an anchor is used during the berthing of a vessel at Port-Alfred, the Master of such vessel is hereby requested to heave in the anchor on completion of berthing operations.

The cost of any delay caused by any vessel due to not heaving in the anchor will be charged to the owner of such vessel.

Gangways:

10. Vessels berthed on Duncan Wharf or Powell Wharf are to provide safe and efficient gangways fitted with handrails and safety nets, (no ladders allowed). The bottom end of the gangway must rest on the wharf and be tied to the eyebolts of the rails on the wharf. Gangways are to be supervised by ship's personnel.

Note: The safety net must be so installed that it will catch anyone that might fall off when embarking or disembarking the vessel. Also a life buoy with a lifeline must be placed at the bottom end of the gangway and ready for use at all times. In addition, at the Duncan Wharf, such a gangway must be positioned longitudinally in line with the vessel so as to permit free movement to the discharging towers from one berth to another as necessary. In cases where the gangway cannot reach and rest on the wharf, a small union gangway with handrails must be so placed so as to permit safe and free passage from the wharf to the ship's gangway. In order to avoid delays, we urge that these gangways be as ready as possible to be set out quickly on docking of the vessels.

In addition there must be a free passage on ship's decks, free of hazards, so as to permit officials and stevedores to safely carry out their respective duties. Any failure to comply with the above rule may cause the shore personnel to refuse to board, and the cost for any delay incurred while the ship's crew rectify the situation will be charged against the vessel.

Further, during the coldest months, all accesses including hatch covers must be kept free of ice.

For vessels berthed on Powell Wharf only:

There is now an aluminium gangway available for rental at a minimal fee of $100.00 per 24 hours., or part thereof. It is to be noted that this gangway, as for vessels using their own, is to be under the responsibility and supervision of the ship's personnel at all times while in use by the vessel.

WARNING:

11. This is to advise vessels that Alcanport's wharves are equipped with underwater cathodic protection which prevents corrosion of the wharf structure.

Any debris on the river bed, and especially metallic objects such as wire rope, cans, etc., will adversely affect this expensive system. We request your co-operation to ensure that no refuse of any nature be thrown overboard from vessels. This will avoid damage to the cathodic protection and also claims which we would be compelled to make in the event of damage being caused by refuse from vessels.

It is unlawful to discharge or dispose of any ship's refuse at Port Alfred. (There is no incinerator in this region).

Any ship approaching or manoeuvring near the wharves at Alcanport must ensure that divers working on the cathodic protection system are not under water. When divers are at work, the International Divers' Flag is displayed at the east end of the wharf or wharves involved.

Sailing Directions: Canadian Hydrographic Service in Ottawa (Ontario). St. Lawrence Pilotage (below Quebec City). Canadian Charts Nos. 1202 and 1203.

Tide: Rise and fall 2.1 m. (7 ft.) to 6.7 m. (22 ft.).

Transfer of Funds: All transfers of funds to Alcan Smelters and Chemicals Ltd., Transport Division, or to vessels as cash advance or otherwise through Alcanport, must be sent to: The Royal Bank of Canada, Bagotville Branch, 375 rue Bagot, Ville de La Baie, (Québec) G7B 2N6. *Tel:* (418) 544-6836.

AUTHORITY: Alcan Smelter and Chemicals Ltd., P.O. Box 10, Ville de la Baie (Sector Port Alfred) P.Q. Canada, G7B 3R1. *Tel:* (418) 544-3311 and 544-3314. *Telex:* 051-36176. *Cables:* ALCANPORT.

Contact: F. Bebard, Port Captain. C. J. Tremblay, Agent. J. A. Cummings, Port Manager. A. Lavoie, Bulk Commodities. M. Bouchard, General Commodities.

PORT ALICE, B.C.: 50.22 N. 127.28 W.

(See Plan Book)

PILOTAGE: Compulsory. Pilots can be secured off Cape Beale, Barkley Sound, South end of Vancouver Island. Master should advise "Pilots Victoria" via Radio Station VAK giving their ETA Cape Beale.

ANCHORAGE: Good anchorage within 0.5 miles of dock in 30 fathoms.

HEALTH: The nearest station is at Victoria, B.C. Ships coming from foreign other than U.S.A. ports and having duplicate pratique from same to British Columbia ports other than Victoria must obtain radio pratique through Victoria, B.C.

TUGS: Small tug (335 h.p.) and line boat available to assist berthing and departure if required.

VHF: Ship to shore communications on Channel 6.

BERTHING: Controlling depth from entrance of Quatsino Sound to Port Alice dock 24 fathoms. A draft of 25 ft. can be handled alongside dock and a vessel 525 ft. in length can be berthed with safety.

Oil tankers with draft up to 35 ft. and 580 ft. in length can berth against berthing scow positioned between dock and oil tanker. (Width of scow 35 ft.).

Bulk Carriers with draft of 35 ft., 565 ft. in length are berthed approximately 16 ft. out from dock by means of log fenders. Gantry of monck cranes extending over apron of dock. Largest ship handled of this type, 29,500 d.w.t., draft 35 ft. 4 ins. (Cargo loaded – Units of woodpulp).

STEVEDORES: Working day of 12 hours.

MEDICAL: 12 bed hospital, physician in attendance.

FRESH WATER: Available.

FUEL: Limited quantity of diesel oil. Fuel oil only available in an emergency from gravity hose on dock, vessel must supply hoses.

CONSULS: None.

REPAIRS: Minor repairs can be made in the company workshop.

CUSTOMS: Customs board at Port Alice.

CARGO GEAR: No shore cranes, ships use own gear.

AIRPORT: 35 miles from Port Alice, daily service.

HOLIDAYS: All Dominion legal holidays.

GENERAL: Port Alice is a private port open to navigation all year round. Limited quantity of supplies available.

AUTHORITY: Western Forest Limited Partnership, P.O.Box 2000, Port Alice, B.C. V0N 2N0. Canada. *Tel:* 284-3331. *Telex:* 610-975 7035. *Cables:* West Pulp Pa. *Contact:* P. Bazille.

PORT CARTIER, Quebec: 50.02 N. 66.47 W.

(See Plan Book)

LOCATION: Port Cartier is located on the North shore of the St. Lawrence River, approximately 25 miles, in a Westerly direction from Sept-Iles (Seven Islands) at Lat. 50° 02′ N., Long. 66° 47′ W.

DOCUMENTS:

Immigration:

Crew List Form IMM.200 in triplicate or IMO No. 6.

Customs:

Report Inwards (A.6) in triplicate.
Crew Declaration (Y.14) in triplicate.
Ship's Stores List (E.1) in triplicate.
Ship's Register.

The above forms will be supplied by mail on request.

The Master shall also have ready for inspection by Customs:

Certificates of Registry, Safety Construction, Safety Equipment, Derat, Safety Radio, Load Line, Clearance from Last Port. Any spares, materials for repair, or materials for furtherance must be declared on Form A6A on arrival.

Also see "Health".

On Canadian or International Crew Lists, black pen or typewriter must be used. Blue is not acceptable because of copy reproduction difficulties.

Designation and dates of expiry of all major trading certificates are required for outward clearance.

Arrangements have been made so that loading can commence before Customs Entry has been completed, and Customs Outward papers will be completed so as not to interfere with immediate departure after completion of loading.

Also see "Shore Leave".

PILOTAGE: Pilotage is compulsory at Port Cartier for docking, sailing and, at Port Authority's discretion, for changing berths.

An exception is made in the case of Coasters or vessels less than 350 ft. LOA unless requested by the Master, or, if considered necessary by the Port Authority.

Pilot will board vessels from attending tug or harbour tender approximately 1 mile off the harbour entrance.

It is the responsibility of all vessels to ensure that the pilot ladder is in good condition and in a safe position for the boarding of the Pilot.

Frequencies for VHF communication with Pilot and Harbour Office. Calling 156.8 mHz. Receiving/transmitting 156.6 MHz. Internal harbour (tugs and Pilots) 156.35 MHz.

Vessels over 40,000 d.w.t. shall also provide accommodation ladder with rope ladder alongside. The landing platform of the accommodation ladder should be approximately 20 ft. above the water.

APPROACHES: The depth of water in the harbour is 50 ft. at MLW. A depth of 54.5 ft. at MLW is maintained in the channel for a width of 200 ft. on each side of the centre line of approach into the harbour. For a distance of 300 ft. on both sides of this channel a depth of 40 ft. at MLW is maintained.

AIDS TO NAVIGATION:

Fairway Buoy: A black and white vertically striped light and bell buoy "Mo (A)" (white light showing the morse code letter A) equipped with a radar reflector, marked "Port Cartier" is in position: Lat. 50° 00′ 12″ N., Long. 66° 47′ 45.7″ W. Removed during Winter season (mid November to mid April).

Rear Range Light: F.G. 255 ft. backed by 10 ft. square fire orange daymarker. Lat. 50° 02′ 25″ N., Long. 66° 46′ 45″ W.

Front Range Light: F.G. 151 ft. backed by 10 ft. square fire orange daymarker. Lat. 50° 02′ 10″ N., Long 66° 46′ 52″ W.

Radio Beacon: Lat. 50° 02′ 09″ N., Long. 66° 46′ 51″ W. Frequency 286 kHz. Power 50 watts. Range 30 miles. Signal "C" followed by Long Dash. Period continuous – 24 hours per day.

Fog Horn: Signal – Continuous short pulses during poor visibility and fog off Port Cartier on request from vessel. Lat. 50° 01′ 52″ N., Long. 66° 47′. W.

Caroussel Island Light: White Gp. Fl.2 ev. 18 secs. 190 ft. 20 miles radio beacon. Fog signal ev. 30 secs. Lat. 50° 05′ 20″ N., Long. 60° 22′ 44″ W.

Local Chart: Canadian Chart No. 1240 Port Cartier and Approaches.

N.B.: All aids to navigation subject to change. ALL VESSELS NOT UNDER PILOTAGE MUST GET PERMISSION FROM THE PORT AUTHORITY BEFORE ENTERING THE HARBOUR, AND MUST ALSO OBTAIN PERMISSION BEFORE LEAVING ANY DOCK WITHIN THE HARBOUR LIMITS.

ANCHORAGE: Anchorage areas have been established as follows:

Designation	*Position*
A.	Lat. 50° 00′ 57.0″ N., Long. 66° 46′ 36.2″ W.
B.	Lat. 50° 01′ 07.1″ N., Long. 66° 45′ 44.5″ W.
C.	Lat. 50° 01′ 16.4″ N., Long. 66° 44′ 53.2″ W.
D.	Lat. 50° 00′ 32.8″ N., Long. 66° 45′ 44.5″ W.
E.	Lat. 50° 00′ 22.7″ N., Long. 66° 46′ 35.0″ W.
F.	Lat. 49° 59′ 56.5″ N., Long. 66° 48′ 43.0″ W.
G.	Lat. 49° 59′ 44.0″ N., Long. 66° 49′ 32.8″ W.

Chart (last correction): 1240 (2/15/80). Publication – Gulf and River St. Lawrence Sailing Directions, 1977, p.332.

MAX. SIZE: Vessels of 100,000 d.w.t. and over must have a draft not exceeding fwd. 33 ft. and aft 38 ft. on arrival. Also see "Berthing" and "General".

HEALTH: All vessels should 24 hours before arrival and during normal office hours, 0900 – 1700 hrs. (holidays and Sundays excepted) radio – "Quarantine Montreal, Quebec" for radio pratique. Ships trading between Canada and the United States continuously and touching no other foreign port, since last granted Canadian pratique, comply with the above, only on first trip to Canada.

The information to be provided to the Quarantine Officer is:

(a) the name and nationality of the vessel;

(b) the ports called at during the voyage of the vessel;

(c) the nature of the cargo on board the vessel;

(d) the number of persons comprising the crew of the vessel;

(e) the number of passengers on board the vessel;

(f) the port of destination of the vessel and the name of the vessel's owner or, if the owner is not in Canada, the name of the vessel's Agent in Canada;

(g) the condition of all persons on board the vessel and details of any death or illness occurring during the voyage;

(h) whether the body of any person is being carried on the vessel;

(i) the estimated time of arrival of the vessel at the port of destination;

(j) the number of persons on board the vessel who are not in possession of valid evidence of immunization to smallpox: and

(k) the date and place of issuance of any Derat Certificate or Derat Exemption Certificate applicable to the vessel.

Vessels inspected by Port Health Officer soon as possible, in berth or not.

Persons not in possession of valid Smallpox Certificate are re-vaccinated if vessel arriving from suspect area.

Masters shall have ready for inspection:

Maritime Declaration of Health Form Q.S.2001 in duplicate.

Derat Certificate.

All Smallpox Vaccination Certificates of crew and passengers if vessel is arriving from an infected port – otherwise not necessary.

RADIO: Cable Address "Cartier" Port Cartier.

Vessels entering the Gulf from the Atlantic should keep watch on Halifax Radio for all traffic. Information as to time of reports and frequencies will be found in International Radio Aids to Navigation Manual.

Traffic List	420 kHz	Even hours plus 50 GMT
	2582/161.9	Even hours plus 40 GMT

Weather, Ice Reports and Notice to Shipping.

Channel 21	Receiving Frequency	161.65 MHz	(59)
Channel 59	Receiving Frequency	2582 kHz	(59)
Channel 26 and CW	Receiving Frequency	161.9 MHz	(26)

When vessels are 36 hours from Port Cartier, they should keep W/T watch on VCK Seven Islands Radio for traffic from this Port.

VCK – Seven Islands: Tel: 418-968 3118.

	Channel	*Transmitting*	*Receiving*
W/T Frequency		500 kHz	500 kHz
R/T (HF)	Channel 51	2182 kHz	2182 kHz
	Channel 57	2514 kHz	2118 kHz
R/T (VHF)	Channel 16	156.8 MHz	156.8 MHz
	Channel 12	156.6 MHz	156.6 MHz
	Channel 24	161.8 MHz	157.2 MHz
	Channel 26	161.9 MHz	157.3 MHz
	Channel 21	161.55 MHz	157.05 MHz
Port Cartier Station			
R/T (VHF)	Channel 12	156.6 MHz	156.6 MHz
	Channel 7A (Internal tugs and Pilot)	156.35 MHz	156.35 MHz
Traffic Escoumins			
RT (VHF)	Channel 14	156.70 MHz	156.70 MHz

The Port Office telephone number is 418-768 2485, and Telex number is 051-8-6422. It is also fitted with VHF on the frequencies mentioned above. The office is open to receive messages on a 24 hour basis. Radio and radio telephone traffic by a ship at anchor in the area off Port Cartier is permissible.

THE ST. LAWRENCE WATERWAY TRAFFIC REGULATIONS: The zone extends from Long. 66° 00′ W. to Montreal. In general, the regulations state that a ship must report to the Marine Traffic Regulator by contacting Channel Escoumins on 156.7 MHz, Channel 14 before entering Zone 1 (i.e. crossing Long. 66° 00′ W.). The port of Port Cartier is in Zone 1. Ships have to maintain a continuous radio watch on Channel 14, except when alongside. Authorisation to communicate on another Channel has to be requested from Channel Escoumins, unless the vessel is equipped with 2 radios. Clearance must be obtained from Channel Escoumins to move within the anchorage.

ARRIVAL ADVICE: Also see "General". ETAs – All vessels must advise ETA 72 hours, 48 hours and 24 hours before arrival. If any change in ETA of more than 1 hour occurs after transmission of the 24 hour ETA, the vessel must send a corrected ETA immediately. These ETAs shall be submitted in local time at Port Cartier.

In the 72 hours ETA vessels will advise: Tonnage of cargo required; grain fittings, if any; quantity orders for supplies; bunkers, water and cash advance requirements; and bonded stores.

In the 24 hours ETA vessels will advise the estimated time for pumping ballast after arrival alongside. However, if because of weather or any other cause the estimated pumping time should change, the Port Authority will be notified immediately.

All ships shall request docking instructions 2 hours before arrival.

TUGS: Compulsory, with the exception of coasters or vessels less than 380 ft. LOA unless requested by the Master, or, if considered necessary by the Port Authority. Meet vessel outside harbour under instructions from Pilot. Tug lines used at all times. Two tugs of 3,800 h.p. available.

BERTHING: Harbour and Terminal:

1. The North Dock is 2,600 ft. in length, the West 2,000 ft. being Berth Nos. 1 and 4 for ore loading and the East 600 ft. being Berth No. 4a for bentonite and limestone discharge. Facilities for oil receiving are located at Berth Nos. 1, 2, 3 and 4.

Coastal vessels may also use Berth Nos. 1, 2 and 3 when permitted to do so by the Port Authority.

2. The depth of water in the harbour is 50 ft. at MLT. A depth of 54.5 ft. at MLT is maintained in the channel for a width of 200 ft. on each side of the centre line of approach into the harbour. For a distance of 300 ft. on both sides of this channel a depth of 40 ft. at MLT is maintained.

3. Vessels of 100,000 d.w.t. and over must have a draft not exceeding forward, 33 ft. and aft, 38 ft. on arrival.

4. The harbour bottom is smooth rock and anchors are of little value, although Pilots may advise Masters as to the use of anchors under special circumstances.

5. The faces of all berths are fitted with rubber and tyre fenders.

6. Mooring bollards are positioned 75 ft. apart at Berth Nos. 1, 2 and 3. There are also hooks at every pier at Berth No. 4. All bollards except those at Berth Nos. 2 and 5 are 4 ft. in extreme diameter and all mooring ropes and wires should have eyes at least 8 ft. in diameter.

7. The East Breakwater Cells are cathodically protected. The cabling and anodes extend approximately 60 ft. from the cells, affording all round protection. The use of anchors, or equipment likely to damage this protection, is not permitted within these areas.

Bentonite and Limestone: The bentonite and limestone discharging facility has a rated capacity of 1,500 t.p.h., with the discharge hopper being in a fixed location on Berth No. 4.

MEDICAL: Hospital facilities are available at Port Cartier. All costs for medical and dental treatment required by seamen will be charged to the vessels in which the seamen are serving as crew members. All crew members requiring medical attention should be available upon the vessel's arrival alongside.

TANKERS: No facilities for slop discharge.

FUEL: Available at Berth Nos. 1, 2, 3 and 4 for Bunker "C", marine diesel and/or any specialised blend and connections are positioned for ready supply to all vessels. All bunker requirements are directly supplied by Gulf Oil Canada Limited, and proper credits should be established. Bunker "C" can be supplied at approximately 1,500 b.p.h. Marine diesel oil can be supplied at approximately 900 b.p.h., Bunker "C" line is 10 in. with 8 in. reducer flange connection. Marine diesel oil line is 8 in. with 4 in. reducer flange connection. There is no coal available at this port.

Vessels nominated for Port Cartier and required to anchor awaiting a berth, which in the meantime require bunkers, will be permitted to enter the harbour, if a berth is available with bunkering facilities, for the purpose of bunkering, and shall then return to anchor. The fee for this service shall be $3,600 (including second tug if used) plus applicable line handling charges.

DENSITY: Has been known to vary slightly between 1025 and 1021, but is considered salt.

FRESH WATER: Available to all vessels at Berth Nos. 1, 2, 3, 4 and 5 with connections conveniently located. Rate of approximately 20 t.p.h. The fresh water line is 6 in. with 2.5 in. standard Quebec hose, male connection of 7 threads to the inch. Necessary connections and hoses are to be furnished and handled by vessel.

If required, fresh water can be supplied to vessels at anchor. Max. amount per trip 40 tons.

GANGWAY/DECK WATCHMEN: Not necessary. Security guards obtainable on request.

OPENING/CLOSING HATCHES: Normally done by crew.

CUSTOMS ALLOWANCES: Canadian Customs Regulations allow each crew member to have in his possession for his personal consumption 200 cigarettes, 50 cigars, 2 lb. pipe tobacco and 40 oz. of spirits. All quantities must be declared on Crew Declaration Form Y-14 along with all personal effects such as radios, cameras, tape recorders, binoculars, souvenirs, etc., plus serial numbers of these items.

N.B.: Masters of vessels are advised that tobacco items and spirits in excess of these amounts in possession of crew members should be collected and placed in bonded stores prior to the vessel's arrival in order to speed up the clearance of the vessel.

Canadian seamen returning from voyages to American or other foreign ports are permitted $100 value of duty free merchandise every quarter for periods outside Canada of over 48 hours and $300 once a year for periods outside Canada of 7 days.

IDENTIFICATION CARDS: Not necessary.

REPAIRS: Minor repairs can be effected. They must be supervised by the vessel's personnel, and will be the responsibility of the vessel.

REPATRIATION: Crew changes and repatriation can be carried out.

AIRPORT: Nearest airport is Seven Islands about 40 miles by road. Services to Quebec City and Montreal, 4 flights daily.

TIME: Port Cartier is located in the Eastern Standard Time Zone (GMT minus 5 hours). Daylight Saving Time (GMT minus 4 hours) is observed from last Saturday in April to last Saturday in October.

HOLIDAYS: See "General".

POLICE/AMBULANCE/FIRE: Police Tel: 766 2233. Ambulance/Fire Tel: 768 2300.

TELEPHONES: No direct connections to vessels. Available on berths.

POLLUTION: The discharge of oil and garbage into the waters of Canada is prohibited by strictly enforced regulations which provide heavy penalties on summary conviction. Every precaution must be taken to prevent escape of oil from a vessel, but should such an escape occur, the regulations require that vessel immediately report it to the nearest Canadian Coastguard Officer or to the Chairman, Board of Steamship Inspection, Ministry of Transport, Ottawa.

SERVICES: Electronic repair services to navigational equipment. Should be requested in advance.

SHORE LEAVE: All ships arriving from a foreign port will be boarded by Customs and Immigration Officers. Ship's personnel are not allowed ashore until permission is granted by these Officers, nor shall crew members joining a vessel board without Customs permission.

DELAYS: Occasionally Easterly weather conditions may delay vessels berthing.

GENERAL: Vessels which have completed discharging of grain and are to load iron ore should have ratguards fitted to all mooring lines at all times.

Ore Concentrate and Pellet Vessels:

I. Advising Arrival: (See also "Arrival Advice") 1. Each vessel operator or its principal shall notify Quebec Cartier Mining at least 2 weeks prior to the expected arrival of each vessel at Port Cartier and Quebec Cartier Mining Company shall forthwith advise such vessel operator or principal whether it can accept the vessel at such time. An allowance of 3 days preceding and 3 days subsequent to the date so fixed will be made for the actual arrival of each vessel. If the vessel's actual arrival is not within such 3 day period preceding or subsequent to the date fixed for its arrival, Quebec Cartier Mining Company may fix another arrival date for such vessel that will not interfere with other scheduled loading. Quebec Cartier Mining Company shall be kept fully advised of all vessel nominations, substitutions, cancellations, delays, sailing dates at Port Cartier of all vessels designated to accept delivery of ore at this Port.

2. The submission of a Notice of Readiness by the vessel will constitute acceptance of all terms and conditions of this Advice to Vessels by the vessel, its Managers, Agents, Master, Operator and or Charterer.

II. Loading Conditions: Ships will be loaded in regular turn of vessel's arrival off Port Cartier provided they present with hatches open and do not have ballast pumping time which will exceed minimum loading time. The 1 shiploader has a rated capacity of 9,000 tonnes/p.h. for concentrate and 7,200 tonnes/p.h. for pellets. A vessel which has berthed at the loading dock and is found to have a deballasting rate time which in the opinion of the Port Authority will not permit loading at maximum rate, may be ordered off the dock and moved to the standby berth or to anchorage until it is in a condition to accept its cargo at maximum loading speed.

The vessel will then be returned to the ore loading berth in turn, following re-submission of Notice of Readiness. All moves to be at vessel's expense. Quebec Cartier Mining Co., Port Authority will be final arbitrator in case of dispute.

III. Loading Minimum and Vessel Specifications: Each vessel designated to accept delivery of ore at Port Cartier, must conform in construction to the following specifications and conditions:

1. Not less than 4 ore hatches of at least 18 ft. square, except Great Lake Bulk Carriers where the minimum width of hatches shall be 9 ft., to accept ore cargo direct from loading tower at Port Cartier.

2. All vessels nominated must be suitable for the loading and the transportation of concentrates or pellets and capable of taking the entire cargo to be loaded in the lower holds without "peak-up" above the tween deck levels. The vessel shall load and stow cargo in accordance with the Canada Shipping Act and Regulations.

3. Hatch opening sufficiently clear of obstruction on deck to permit free and direct contact with loading tower.

4. Vessels may be loaded to a draft of 54 ft. if tides permit them to sail while maintaining a safe under keel clearance (at least 3 ft.) on a rising tide.

If a vessel requests to wait for a following higher tide in order to lift more cargo, and the Port Authority agrees, then this additional time is not to count and, if required by the current operational condition of the Port shifting is necessary, all additional shifting fees will be for the account of the vessel.

5. *Maximum Allowable Dimensions:* Maximum allowable dimensions of vessels at the ore berth.

LOA 995 ft.
Beam 174 ft. Moulded depth 92 ft. (to top of hatch cover).
Air draft under loader:
MHW 42 ft. water line to top of hatch covers.
MLW 52 ft. water line to top of hatch covers.
Draft of Vessel Loaded:
Draft at MLW 48 ft. loaded.
Draft at MHW 54 ft. loaded.

IV. Special Regulations: 1. Any vessel which discharges a cargo of grain and is to load a cargo of iron ore will be considered in turn for loading only after the vessel has completed discharging grain and is in all respects clean and ready to receive iron ore.

2. Loading plan should be available as soon as possible after arrival and must be presented to the ore loading foreman, in metric tons, on arrival at the berth.

3. All shipboard work necessary for docking and loading, including but not limited to line handling and tending, opening and closing hatches, and normal deck cleanup, shall be done by the vessel's crew.

4. Any Owner or Charterer with more than 1 vessel waiting turn to load may interchange his vessels, provided they are of comparable capacity (deadweight). Any interchange of turn must be arranged with and have the approval of Quebec Cartier Mining Company.

5. All weights shown on the Bill of Lading and/or Manifest will be the same as recorded on the weighing facilities of Quebec Cartier Mining Company.

6. The Port will be in operation 24 hours a day, 7 days a week; however, ore vessels will not be loaded on New Year's Day (January 1st), and on Christmas Day (December 25th), nor will they be loaded from 0800 hrs. Sunday to 1600 hrs. Sunday, nor during the same period on the following holidays: Good Friday; St. Jean Baptiste Day – June 24th; Dominion Day – July 1st; second Monday of July; first Monday of August; Labour Day – first Monday of September; Thanksgiving – second Monday of October; Boxing Day – December 26th.

7. Arrangements have been made so that loading operations will commence as soon as possible after the vessel's arrival at the loading berth.

8. Vessels usually dock port side to at Ore Berth.

V. General Instructions in Preparing Vessels' Holds to Accept Iron Ore Concentrate: Quebec Cartier's iron ore is a type of iron ore concentrate which weighs on the average 192 lb. per cu.ft., and stows at approximately 12/13 cu.ft. per gross ton.

The iron ore contains an average moisture content from 2.5% to 3.5%, and could sometimes in the Summer Season be shipped at as high as 5%. The character of this ore is self draining. It will retain moisture up to about 2.5%, but all moisture over and above this will drain on compaction of the material, and also, if the ore is left for long periods in stock-pile or in the hold of a vessel, this drainage of moisture will sometimes leave a considerable quantity of water in the hold of the vessel, and could cause some inconvenience when discharging the cargo. For this reason all bilge strums or wells should be sounded regularly and pumped out at regular intervals, so as to keep the bottom of the hold as dry as possible.

Quebec Cartier's iron ore is abrasive, and could cause damage to bilge pumps. Masters of vessels are advised to cover all bilge strums or wells with burlap in a similar manner as when receiving a grain cargo in bulk; so as to permit a free flow of the water and retain the iron ore in the hold of the vessel.

All holds for the acceptance of this cargo should be clean prior to the arrival of the vessel.

VI. Pellet Stowage Factor: Iron ore pellets will stow at about 17 – 18 cu.ft. per gross ton.

All holds for the acceptance of this cargo should be clean prior to the arrival of the vessel.

Grain Vessels: Berthing and use of the Elevator Dock Facilities: *Regulations, Terms and Conditions:*

(The term 'Tariff' refers to the Tariff issued periodically by the Elevator Company; the term 'Company' in this section refers to the Elevator Company).

1. Application for Berth: For all vessels desiring a berth at the Elevator there shall be filed an Application for a Loading Berth at the Elevator Office, between 0900 – 1700 hrs. Mondays through Fridays and from 0900 – 1200 hrs. on Saturdays, except on holidays. Application shall be made in writing on forms supplied by the Company. Whether or not such Application Form is signed, the Owner and Charterer of each vessel shall be deemed to agree in consideration of the Company permitting the vessel to berth at the Elevator for the purpose of loading or discharging bulk grain, to abide by all rates, rules and regulations stipulated in the Company's current Tariff, and to acknowledge having taken communication of same and, without restricting the generality of the foregoing, to undertake and agree that the berthing of the vessel at the Elevator will be free of risk and expense to the Company. Owners and Charterers also agree to indemnify the

Company against and hold it harmless from any and all damages whatsoever and howsoever caused which may be occasioned to its facilities or any of them by the vessel and in like manner to indemnify the Company against and hold it harmless from any and all claims of any nature whatsoever arising from damages which may be sustained by the vessel while berthed or during berthing or unberthing. Owners and Charterers shall in like manner be deemed to agree to make prompt payment of invoices as presented and *in the case of export grain to deliver to Les Silos Port Cartier signed written evidence of the receipt on board of the grain according to the Les Silos Port Cartier Description and Tally (i.e. "Mate's Receipts").* All charges shall constitute a lien against the vessel until paid. The Application for Berth shall be dated and timed and shall constitute a contract between the Company and the Owners and Charterers of the vessel, such that the latter shall be bound by the terms thereof and, without restriction, to comply with all the charges, rules and regulations stipulated in the Company's current Tariff.

2. *Allocation of Loading Berth:* Except as otherwise provided in these regulations, vessels shall be assigned a loading berth in the chronological order in which they file with the Elevator Office the signed Application for Berth, accompanied at the time of filing by the following documents:

(a) Certificate issued by the Canadian Government Department of Agriculture and/or by the United States Department of Agriculture, Grain Division, as the case may be, that all cargo compartments are fit to load in compliance with the regulations of the respective departments.

(b) Certificate of Readiness in all compartments issued by the Port Warden.

(c) Evidence to the effect that the vessel has been entered at the Canadian Customs House.

(d) Evidence to the effect that the vessel has been tendered to and accepted by the Charterer.

Vessels are required to present alongside the Loading Berth with hatches open and gangway and gangway net ready.

3. *Allocation of Unloading Berth to Lake Vessels:* Subject to the exceptions contained herein, but at all times in accordance with the provisions of the Canada Grain Act and Canadian Grain Commission Regulations, Lake vessels shall be assigned to an unloading berth in the order in which they arrive in port and file application and required documents for berth with the Company with evidence of vessel's readiness to discharge.

(a) A hold of a vessel having been partially unloaded at another port shall not be accepted for unloading unless by prior express arrangement with the Company.

(b) A hold of a vessel having a separation between more than one grade or kind of grain shall not be accepted for unloading.

4. *Berthing Prior to Receipt by the Company of Appropriate Certification:*

(a) At the sole discretion of the Company, a vessel may be allowed to berth alongside the Elevator prior to having received all the above certificates. If subsequently, the vessel fails to deliver such certification, it must, immediately on order of the Company vacate the berth. Nothing contained in this rule shall be deemed a waiver of any of the provisions of Item 5 hereinafter.

(b) Any vessel, which has been allowed to berth at the Elevator having previously filed all the certificates enumerated in above item 2, and which subsequently is found by an Official Inspector unsuitable to receive grain for any reason, must, if required by the Company, immediately vacate the Elevator Berth. Nothing contained in this rule shall be deemed a waiver of any of the provisions of Item 5 hereinafter.

5. *Refusal or Failure to Vacate Berth:* Any vessel which fails or refuses to vacate the berth when required by the Company for any reason whatsoever including being under arrest, except as provided hereinafter, in Item 9, shall be liable, in addition to any other charges due hereunder, to pay to the Company a charge of $1,200.00 per hour, or any part thereof after vacating notice has been given in writing to the Owner, Manager, Agent, Master, Mate, Operator or Charterer of the vessel. This charge shall be paid promptly and it is accepted that it accurately represents a minimum estimate of damages to the Company because of refusal or failure of the vessel to vacate. This payment shall not constitute a waiver on the part of the Company to claim greater actual damages that may be sustained as a result of the vessel's failure to vacate.

The Company shall have the right, authority and privilege to compel the removal of the vessel, by any lawful means, at the vessel's own risk and expense and shall not be liable for any damages, delay or other expenses, including legal costs, arising from the act of removal of the vessel, by whomsoever incurred.

6. *Berth Operations:* The Company, in its sole discretion, may:

(a) Alter the turn of vessels whether in berth or not, when confronted by an urgent need to receive or ship a particular grade or kind of grain or when in its judgment

(i) This is necessary or desirable in order to facilitate elevator operation, or

(ii) Conditions within the Elevator or approaches thereto render this necessary or desirable.

(b) Require a vessel to load in overtime hours at vessel's own expense during all hours when labour can be available, continuously until loading is completed, or for any part of such hours as the Company may determine necessary. This rule may be applied whenever more vessels are in port than can be berthed at the Elevator, or in order to expedite the movement of vessels and/or grain, or to ensure the fullest possible use of the Elevator, or to eliminate any threat of actual or possible congestion of any other vessels. Any vessel unwilling to work overtime as directed in accordance with this rule shall vacate the berth without delay and the vacating vessel shall only be permitted to berth again at the Elevator after giving written agreement to load continuously until completed whether in regular or in overtime hours. Should any vessel refuse to vacate, it will be liable for damages described in above Item 5.

(c) If a strike or other labour disturbance involving a vessel at berth or waiting for berth (whether by vessel's crew or otherwise) or any other circumstance affecting a vessel and not attributable to the Company will, in the Company's judgment, tie up or impede operations at the dock, the Company may order such vessel out of berth or refuse to accept it at the berth. Should any vessel refuse to vacate, it will be liable for damages described in above Item 5.

7. *Vessel in Berth:* Any vessel in berth shall at all times maintain appropriate Officers and crew aboard to permit shifting of the vessel or reception or discharge of cargo at any time of day or night including Saturdays, Sundays and Holidays.

All vessels discharging or loading grain shall at all times have adequate rat guards on all mooring lines.

8. *Work Interruptions:* When work is interrupted on account of rainy or other weather conditions, a vessel at its own expense may be required, at the discretion of the Company, to retain on standby, according to local labour rules, stevedore and other labour necessary to the loading, up to a maximum of 4 hours in any stevedoring work period. Any vessel or its Agent failing to have such labour available, if so required, shall be, in addition to any other charges due hereunder, assessed a charge of $1,200.00 per hour for any period where work is subsequently ordered resumed by proper authority (after the weather interruption) but cannot be carried out for lack of labour.

If such interruption occurs during an overtime period or on Saturdays, Sundays or Holidays, the usual charges for overtime periods will still be fully assessable and due in addition to the above charge. This rule shall be applicable unless otherwise agreed by the Company in writing.

9. *Completion of Loading: Upon completion of loading, a vessel shall not occupy the loading berth at the Elevator longer than is necessary to close the hatches, but in any event for not longer than 1 hour.* Vessels requiring extra time to set booms and derricks before making ready for sea or for any other reason may, at the time of docking, request written permission from the Company to do this work at the Elevator Berth, but it shall be at the sole discretion of the Company whether such permission is granted or not. Any vessel not granted such permission must vacate the berth immediately as required by the Company. Most vessels requiring extra dock time will be ordered to a lay-by berth, if available, or to anchorage, at vessel's expense.

Failure to comply with this requirement will automatically cause the vessel or its Agents to be assessed an extra charge of $1,200.00 per hour or part thereof from the time that permission was refused. This charge shall not impair the right of the Company to compel removal of the vessel from the berth nor shall it constitute a waiver on the part of the Company to claim any greater damages that may be sustained as a result of vessel's failure to vacate. The Company shall have the right, authority and privilege to compel the removal of the vessel by any lawful means at the vessel's own risk and expense and the Company shall not be liable for any damages, delay or other expenses including legal costs, arising from the act of removal of the vessel, by whomsoever incurred.

Port Expenditure: In addition to the port charges, the following charges will be applicable:

1. Grain Inspection Fee.
2. Charges as stipulated in the Company's Current Tariff.
3. The Port Warden and D.O.A. and/or U.S./D.O.A. fees when applicable, charged at cost in accordance with the regulations.

Unloading and Loading Facilities: The grain unloading berth is adequate for the largest lakers known and is equipped with 2 marine towers able to unload grain at a peak rate of over 2,240 tonnes (80,000 bushels) per hour.

The loading berth can handle ocean vessels having up to the following maximum dimensions:

Length Overall	900 ft. (see Note below).
Beam	137 ft. for self-trimming bulk carriers. 137 ft. for OBO-centre holds only. 125 ft. for tankers, provided off-shore tank openings are a minimum of 15 ft. inside ship's side.
Draft	47 ft. at MLW, subject to slight increase depending on state of tide. Port Authorities require vessels to have 3 ft. under their bottoms at all times.
Air Draft	53 ft. at MLW, to top of hatch covers. 45 ft. at MHW, to top of hatch covers.

Note: Vessels having in excess of 730 ft. LOA up to 900 ft. LOA, may be accepted at the Elevator, but only by prior arrangement with the Company, which reserves the right, at its sole discretion, to refuse to load any vessel over 730 ft. because of its length or other physical characteristics which makes it impracticable to load.

The Port Cartier harbour as well as the grain loading berth have a depth of water of 15.2 m. (50 ft.).

REGULATIONS: Also see "General".

1. Ships will leave the loading or discharging berth immediately on completion of loading or discharging. If any delays occur on documentation, crew members missing etc., ship will leave the dock and all matters will be handled from anchorage or another berth.

2. Vessels ordered to anchor, should do so in the recommended area, see "Anchorage". Failure to do so may result in delays to vessels from being boarded by Port and Government Authorities. *Vessels at anchorage must remain 0.25 miles clear of the Harbour Approach Channel.*

3. Vessels arriving in ballast should ensure they are in good trim for safe handling into the harbour, bearing in mind the loading rate, so as not to cause any delay in loading due to deballasting. However should a vessel not be sufficiently ballasted at the time of proceeding into the harbour, the Pilot may request further ballasting, depending on the prevailing weather conditions. If in doubt the Master should contact the Port Office by Radio Telephone.

4. Vessels should have main engines and deck machinery operable at all times when alongside the berth. Permission contrary to the above must be obtained from the Port Authority.

5. All O.B.O. vessels not in possession of a valid Gas Free Certificate by an independent chemist will advise accordingly in the 72 hour ETA, and arrangements will be made to have a chemist available on arrival at vessel's expense. Masters must present a valid Gas Free Certificate before Notice of Readiness may be tendered.

6. Normally, vessels will be permitted entry to the harbour, to their assigned berth in order of their arrival. However, the Port Authority may alter the order to assure in its sole opinion, efficient operation of the harbour. The Port Authorities shall be the final arbitrator in case of dispute.

7. The Port Authority may require a vessel to vacate an assigned berth, proceed to anchor or standby berth and return to the assigned berth to complete loading or discharging as soon as conditions permit.

8. Any vessel which fails or refuses to vacate the berth when required by the Company, shall be assessed, in addition to any other charges due hereunder, an automatic charge of $2000.00 per hour or any part thereof after vacating notice has been given in writing to the Owner, Manager, Agent, Master, Mate, Operator or Charterer of the vessel. This charge shall be paid promptly and it is accepted that it accurately represents a minimum estimate of damages to the Company because of refusal or failure of the vessel to vacate. This payment shall not constitute a waiver on the part of the Company to claim greater actual damages that may be sustained as a result of the vessel's failure to vacate.

The Company, through the Port Authority, shall have the right, authority and privilege to compel the removal of the vessel, by any lawful means, at the vessel's own risk and expense and shall not be liable for any damages, delay or other expenses, including legal costs, arising from the act of removal of the vessel, by whomsoever incurred.

9. A stand-by charge of $1500.00 per hour will be assessed against any vessel causing delay of ore loading alongside berth when such delay is caused by the vessel not complying with Port regulations and requirements.

AUTHORITY: Quebec Cartier Mining Company, Port Office, P.O.Box 188, Port Cartier, P.Q. G5B 2H3, Canada. *Tel:* 418-768 2400/768 2439/768 2485. *Telex:* 051-8-6422. *Contact:* L. S. McGee, Port Manager. A. Spence, Marine Supervisor.

PORT COLBORNE, Ontario: 42.52 N. 79.15 W.

Refer to "St. Lawrence Seaway" for important general information.

DOCUMENTS: All documentation carried out by Authorities in Montreal. Only when vessels have called at United States port after departing Montreal will any changes in documentation be necessary, which will consist of a United States Customs Clearance Certificate, to be available on board.

Immigration papers.
1 copy QS2 (Health Certificate).
3 Stores Lists.
Crew Personal Effects List.
Customs Clearance.

All of the above will have been stamped in Montreal.

PILOTAGE: Compulsory for ocean vessels over 250 tons gross. Pilots are available at Port Weller (upbound) and Sarnia (downbound). Supervisor of Pilots located in St. Catharines.

ANCHORAGE: In Lake Erie, beyond the 3-mile fairway buoy at entrance to Port Colborne Harbour.

No anchorage available outside those allocated by the St. Lawrence Seaway Authority, except those vessels waiting to unload at N.H.B. facilities only can moor temporarily on the inner breakwater West of the N.H.B. elevator with permission from the N.H.B. elevator manager.

RESTRICTIONS: Navigation season approximately from April 1st to December 31st. Channel depth 27 ft. dependent on Lake level.

Limiting depth in the channel from Port Colborne piers to Bridge 21 and 20 is 9.14 m. (30 ft.). From Bridge 21 and 20 North to Rameys Bend the limiting depth in the channel is 8.23 m. (27 ft.). The Welland Canal will accommodate vessels not exceeding 222.5 m. (730 ft.) in overall length and 23.16 m. (76 ft.) in extreme breadth. Permissible draft is 7.92 m. (26 ft.).

MAX. SIZE: 730 ft. length, 75 ft. 6 in. beam, 26 ft. draft.

HEALTH: Pratique granted at Quebec City for incoming vessels from foreign ports.

TUGS: None available.

BERTHING:

Canada Starch Dock (Old Channel) Wharf No. 11:

Type	Grain Discharge into Hopper
Equipment	Ships' Equipment
Length	120 m. (390 ft.) between three dolphins
Depth	8.23 m. (27 ft.)

Rameys Bend, Wharf No. 12:

Type	Stone and Sand
Equipment	Tunnel and Belt Conveyor, Loading
Length	1,797 ft. (547.7 m.)
Depth	27 ft. (8.23 m.).
Operator	Port Colborne Quarries Ltd.

Robin Hood Dock, Wharf No. 13:

Type	Elevator – Grain and Grain Products
Length	1,000 ft. (304.8 m.)
Depth	25 ft. (7.62 m.)
Operator	Robin Hood Flour Mills Ltd.

R.E. Law Dock, Wharf No. 14:

Type	Vessel repairs
Equipment	Mobile as required for repairs
Length	700 ft. (213.4 m.)
Depth	25 ft. (7.62 m.)
Storage Capacity	13,500 tonnes stone.
Operator	Herb. Fraser & Assoc. Ltd.

Wharf No. 15:

Type	Sand
Equipment	Self-unloaders
Length	850 ft. (259.1 m.)
Depth	14 ft. (4.27 m.).
Operators	Beam Building & Supply Co. Ltd., and Underwater Gas Developers Ltd.

Wharf No. 16:

Type	Unloads and loads bulk cargoes, marine diesel oil and coal bunkers available.
Equipment	1 Belt Conveyor 7 in. – 8 in. Pipe-line
Length	1,480 ft. (451.1 m.)
Depth	27 ft. (8.2 m.)
Storage Capacity	27,000 tonnes above.
Operator	Rochester & Pittsburg Coal Co. (Canada) Ltd.

Fuelling Wharves:

Wharf No. 17:

Type	Unloads and loads bulk cargoes using ship's or mobile gear
Equipment	Mobile repair equipment
Length	1,120 ft. (341.4 m.)
Depth	27 ft. (8.2 m.)
Storage Capacity	225,000 tonnes.
Operator	Upper Lakes Shipping, Toronto

Imperial Oil – Shell Canada, Wharf No. 18:

Type	Marine Diesel Fuel, Bunker "C" and Coal
Length	1,650 ft. (502.9 m.)
Depth	27 ft. (8.2 m.)
Storage Capacity	170,000 Barrels.

Maple Leaf Mills Ltd., Wharf No. 19:

Type	Grain Elevator
Length	1,650 ft. (502.9 m.)
Depth	27 ft. (8.2 m.)
Storage Capacity	63,000 tonnes

National Harbours Board, Wharf No. 20:

Type	Grain Elevator
Length	Holding Side 900 ft. (274.3 m.)
Depth:	Holding Side 19 ft. (5.79 m.)
Storage Capacity:	84,000 tonnes.

MEDICAL: Local hospital at Port Colborne. All assistance available.

DENSITY: Fresh water.

FRESH WATER: Available at West Side Wharf.

FUEL: Bunker and diesel fuel available.

REPAIRS: Lay-up berth at West Side Wharf, 9.5 ft. – 13.5 ft. alongside. Local repair shops for boiler, engine and above deck repairs.

DRYDOCK: At Port Weller.

SURVEYORS: ABS at Toronto.

AUTHORITY: St. Lawrence Seaway Authority, Western Region, P.O.Box 370, 508 Glendale Avenue, St. Catharines, Ontario L2R 6V8. *Tel:* (416) 684-6571. *Contact:* M. S. Campbell, Regional Vice-President.

PORT DALHOUSIE, Ontario: 43.12 N. 79.16 W.

(See Plan Book)

LOCATION: On the South shore of Lake Ontario 43 km. Southeast of Hamilton and 5 km. West of Port Weller, the Northern entrance of the Welland Canal. Port Dalhousie is now amalgamated with the City of St. Catharines.

APPROACHES: Access to the port is through 2 parallel entrance piers projecting out into Lake Ontario, which lead into a wide basin utilized by recreational vessels.

RESTRICTIONS: Navigation season: Usually April 1st to December 30th. Channel depth: Limiting depth in the channel between the entrance piers is approximately 21 ft. to 23 ft. below Chart Datum (Elev. 242.8 ft.) and gradually reduces in depth towards the basin.

RADIO: Ship-to-Shore communications: Through Toronto (VBG).

TUGS: No towing facilities.

BERTHING: The entrance to the harbour is between 2 parallel concrete piers 61.0 (200 ft.) apart. The East pier 701.1 m. (2,300 ft.) in length, extends out 457.3 m. (1,500 ft.) from the shore, 76.2 m. (250 ft.) beyond the outer end of the West Pier. Southward of the inner end of the entrance piers, the harbour widens out into a basin utilized by recreational vessels.

MEDICAL: General Hospital and Hotel Dieu at St. Catharines.

CUSTOMS: Officers available at St. Catharines at any hour by previous arrangement.

FUEL: Gasoline available.

SERVICES: Supplies available.

SURVEYORS: Lloyd's at St. Catharine, ABS at Toronto.

AUTHORITY: City of St. Catharines (Parks & Recreation Dept.), P.O.Box 845, 320 Geneva Street, St. Catharines, Ontario, L2R 6Z4. *Tel:* (416) 937 – 7210. *Contact:* Robert G. Christie, Harbour Master, or G. J. Shanahan.

PORT HAWKESBURY AND STRAIT OF CANSO, N.S. (See Plan Book)

PORT LIMITS: Port Hawkesbury and Mulgrave harbour limits are from a line joining Melford Point and Bear Head, and the Canso Causeway.

DOCUMENTS:

3 copies Crew Declaration, Form Y14 (IMO Form 5 acceptable).
3 copies Store List, Form E1.
3 copies Immigration Crew List, Form IMM 200.
3 copies Inward Report, Form A6.
2 copies Shipping Report, Form S1.
3 copies Outward Report, Form A6.
Completed Maritime Declaration of Health, Form QS 2001.
Valid Derating Certificate.
International Vaccination Certificates for crew members.
Complete copy of Manifest for Goods to be Discharged in Canada.
Clearance from Last Port.

Tankers must be in possession of Canadian Compliance Certificate, valid for 2 years, or have arrangements made to receive one.

ICE: Ice Advisory and Shipping Support Service is provided from mid-December to the end of the ice season. Information regarding ice conditions is broadcast regularly and special reports will be obtained on request from "Ice Halifax" through Halifax Radio (VCS).

Local reports are included in a routine information broadcast on VHF by "Eddy Point Traffic" at half hourly intervals.

Masters are cautioned that it may be necessary to remove certain buoys in Chedabucto Bay and the Strait of Canso during the ice season, and it is recommended that Masters request information on their deposition from "Eddy Point Traffic" prior to entering the Canso Marine Traffic Regulating Zone.

PILOTAGE: Pilotage is compulsory. Pilotage boarding stations:

Strait of Canso, Northern Approach:	45° 42′ 42″ N. 61° 29′ 12″ W.
Strait of Canso, Southern Approach:	
(a) For vessels of 730 ft. and under:	45° 29′ 30″ N. 61° 11′ 06″ W.
(b) For vessels over 730 ft.:	45° 24′ 00″ N. 61° 01′ 00″ W.

Vessels must report by radio-telephone or radio-telegraph their ETA's to the Eddy Point Marine Aids Centre, 12 hours before the vessel's ETA. Time used must be GMT. ETA's must be confirmed or corrected not more than 8 hours later nor less than 4 hours prior to the new ETA.

Canso pilot boat guards Channel 14 whilst in the area of Chedabucto Bay approach and Channel 12 whilst in the area of St. George's Bay approach.

ANCHORAGES: In the interests of safe navigation, anchorage berths for vessels of 65 ft. registered length have been established.

Anchorages "A" to "F" are situated in Chedabucto Bay in water depths from 14 to 26 fathoms.

Anchorages "G" to "O" are situated in Inhabitants Bay in water depths from 5 to 8 fathoms.

HEALTH: Pratique will be granted on arrival at berth by boarding officers, but it is the Master's responsibility to report by radio all details of any sickness or death occurring during the voyage to "Quarantine Halifax".

RESTRICTIONS: Overhead power cable – clearance 178 ft.

MAX. SIZE: Tankers of 50,000 d.w.t. can be accommodated at the Gulf Canada Ltd., Ocean Terminal. See also "Berthing".

RADIO: Halifax (VCS) continuous year round. 500, A2; 2,182, A3; 156.8; F3 also 4, 6, 8, 12, 16, 22 MHz bands.

Sydney (VCO) continuous year round. 500, A2; 2,182 A3, 156.8, F3.

Canso (VAX) continuous year round. 2,182, A3; 156.8, F3.

Grindstone, Magdalien Island (VCN) continuous year round. 500, A2; 2,182, A3; 156.8 F3.

Canso Locks (VAZ3) continuous during navigation season. 2,182, A3; 156.8, F3.

TUGS: No tugs in the area.

BERTHING: *Gulf Canada Ltd., Ocean Terminal, Point Tupper:* Masters are required to establish communications with the terminal when within a distance of 35 miles of the terminal on VHF Channel 16, using call-sign "Gulf Control".

Situated at Wright Point and is a "T"-shaped structure providing one berth for tankers. Berth can accommodate vessels up to 50,000 d.w.t. with a least depth of 75 ft.

Berth is equipped with 6 hydraulically operated loading arms each fitted with a speed seal hydraulically operated manifold coupling.

Loading arm	*Coupling*	*Purpose*	*Rate*
1	8 in.	Vessel bunker	2,500 b.p.h.
2	12 in.	Cargo bunker	12,000 b.p.h.
3	12 in.	As No. 2	
4	10 in.	Premium gasoline	10,000 b.p.h.
		Regular gasoline	10,000 b.p.h.
5	10 in.	Stove oil	10,000 b.p.h.
		D-40	10,000 b.p.h.
		D-20X	10,000 b.p.h.
		D-25	10,000 b.p.h.
6	8 in.	Vessel bunker	2,500 b.p.h.

Product tanks are situated 3,920 ft. for bunker to 6,400 ft. for gasolines from the berth.

Vessels will be expected to berth with manifold blinds removed, sea valves sealed and locked, pumps and pipe-lines set ready to commence discharge of cargo or ballast immediately on connection of loading arms and on verification of the discharging/loading procedure between the Master or his delegate and the terminal's representative.

On termination of the cargo transfer, the vessel will be required to vacate the berth, if loading, on the completion of gauging, sampling and documentation; if discharging upon ballasting to a draft consistent with the weather conditions prevailing.

Suitably equipped vessels will be able to maintain VHF radio communication with the terminal control room during the cargo operation.

Fresh water and fuel are available for calling tankers.

Nova Scotia Forest Industries Wharf. Situated at Madden Point and serves the pulp and paper manufacturing facility, the wharf is 425 ft. long, with dolphins extending a farther 100 ft. from each end of the wharf, depth alongside 26 ft. at LW. Fresh water available, bunkers not available.

Georgia Pacific Corporation Terminal. Situated at Point Tupper, this gypsum loading facility consists of a series of dolphins capable of mooring a ship over 700 ft. in length and has a min. depth of 32 ft. LW. Conveyor system from plant to centre of dolphins. No fuel oil or fresh water available.

Port Hawkesbury Department of Transport Wharf. Berthing length 50 ft., depth of water alongside 18 ft. No fresh water, no bunkers.

Mulgrave Department of Transport Wharf. Berthing length 940 ft., depth of water 18 ft. to 25 ft. Used for wood pulp and general cargo loading/discharging rail tracks, fresh water available, fuel oil delivered by truck, no cranes or permanent hoist.

MEDICAL: Masters are required to give early advice to their Agent regarding medical and dental attention requirements, hospitalisation cases will be referred, Antigonish, 40 miles distant.

DENSITY: 1025. Influenced by Spring thaw run-off.

FRESH WATER: Available in limited quantities.

FUEL: Available at Gulf Canada Ocean Terminal for calling tankers only. Vessels requested to give 72 hours notice of requirement, quantity and specification.

CONSULS: See "Halifax".

REPAIRS: Breton Industrial and Marine perform hull and machinery repairs to vessels afloat. Radio and radar service is available locally, the vessel's Agent should receive early advice of repair requirements.

GANGWAY/DECK WATCHMEN: Usually ship's crew.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 50 cigars or 2 lb. tobacco per person per week. Wines/spirits: Total of 40 ounces per person over 21 years old.

Subsequent issues may be authorised to crew members of foreign vessels, but the max. quantity any crew member may hold at any time must not exceed 300 cigarettes, or 75 cigars, or 3 pounds of tobacco and 60 ounces wines/spirits.

Crew personal effects such as radios, tape recorders, binoculars, etc., should be declared on manifest.

REPATRIATION: Crew changes and repatriation permitted.

AIRPORT: Regular services by Air Canada from Halifax International Airport 150 miles distance, and from Sydney Airport 90 miles distant. Charter flights by small aircraft can be arranged from Port Hawkesbury Airport to Halifax and Sydney.

SUPPLIES: Provisions and bonded stores can be supplied locally but Masters are advised that to avoid delays, their Agent should be notified prior to arrival on their requirements, particularly for deck and engine stores as these may have to be obtained from Halifax.

Laundry facilities are available and in order to expedite the service, Masters should request their Agent to have a representative to attend on arrival.

Supplies of stores will have to be conveyed to tankers at Gulf's Ocean Terminal by stores boat or barge.

TIME: GMT minus 4 hours. Last Sunday in April, clocks advanced 1 hour, last Sunday in October, clocks retarded 1 hour.

POLICE/AMBULANCE/FIRE: Police 625-2220; Ambulance 625-2929 or 625-1911; Fire 625-2838.

SHORE LEAVE: Permitted.

CANSO CAUSEWAY CANAL: Max. vessel dimensions, length 715 ft., width 75 ft., draft 28 ft., vessels with draft greater than 28 ft. and not more than 30 ft. may proceed through with special permission of the Canal Superintendent. Depth of water on the North and South approach mooring berth is 32 ft. During the months December to April Masters should consult with Ice Operations, Halifax, whether lock in operation.

AUTHORITY: The Harbour Master, Port Hawkesbury, Nova Scotia, Canada.

PORT HOPE, Ontario: 43.56 N. 78.17 W.

TUGS: None.

BERTHING: Two breakwaters form artificial harbour. Depth at entrance 7 ft. – 12 ft. Town docks have 650 ft. total berthing length with 9 ft. – 11 ft. alongside. Queen's Wharf is 1,200 ft. long with 8 ft. alongside.

FRESH WATER: Available at Queen's Wharf.

FUEL: Gasoline available.

AUTHORITY: Port Hope Harbour Commission, 56 Queen Street (P.O.Box 117), Port Hope, Ontario, L1A 3V9. *Tel:* (416) 885 – 4544. *Contact:* E. M. Creighton, Chairman.

PORT WELLER, Ontario: 43.14 N. 79.13 W.

LOCATION: On the South shore of Lake Ontario, West End. Port Weller is the Northern entrance of the Welland Canal and is 5 km. East of Port Dalhousie.
PILOTAGE: Master of ships requiring pilotage service in the Port Weller-Sarnia area should send a notice of their arrival by radio-telephone so as to avoid any delay in waiting for a Pilot. When Westbound, Master should order a Pilot 4 hours in advance of the ETA at Port Weller through Toronto Radio. When Eastbound, Masters should order a Pilot 4 hours in advance of their ETA at Port Huron light vessel or Rogers City. Both an accommodation ladder and a pilot ladder are required to assist Pilots boarding ships at Port Weller.

District Supervisor of Pilots: P. Hansell. P.O.Box 2008, Station B, St. Catharines, Ontario L2M 6P5. Tel: (416) 934-2921.
RESTRICTIONS: Channel depth: Limiting depth at entrance and through the Welland Ship Canal is 8.23 m. (27 ft.). Permissible draft is 7.92 m. (26 ft.). The locks will accommodate vessels not exceeding 222.5 m. (730 ft.) overall length and 23.16 m. (76 ft.) extreme breadth.

Navigation season: April 1st to December 30th.
HEALTH: Quarantine service at Quebec, P.Q., for incoming ships from foreign ports.
RADIO: Ship-to-shore communications: Through Toronto Coast Guard Station (VBG).
TUGS: Available from Port Weller Dry Docks Ltd.
BERTHING: See "St. Catharines".
MEDICAL: Hospitals at St. Catharines.
FUEL: Marine diesel fuel is available to vessels secured at the extreme North end of Wharf No. 2 through St. Catharines Fuels. Tel: 416 685-6511.
REPAIRS/DRYDOCKS: Port Weller Dry Docks, Ltd., 222.5 m. (730 ft.) building dock, gate width 24.38 m. (80 ft.); 228.6 m. (750 ft.) graving dock gate width 24.38 m. (80 ft.); depth over sill 9.15 m. (30 ft.). Also 365.8 m. (1,200 ft.) fitting out berth. Complete machine shop in connection; major conversion jobs and all kinds of hull and machinery repairs. Shipyard gantry crane, 45 tons capacity; shearlegs crane, 125 tons capacity; two self-propelled cranes, 15 tons and a 55 ton level luffing gantry crane extending 609.6 m. (2,000 ft.) from the shipbuilding berth to the fitting out berth. Forged finished shafting available from Canada Foundries & Forgings Ltd.
SURVEYORS: ABS at Toronto.
GENERAL: Transportation: All vessels entering the Welland Canal from Lake Ontario, or vessels from Lake Erie to Lake Ontario, via the canal, use this port but no steamship line makes it a regular port of call for discharging or loading freight. Highway connects with St. Catharines, 5.5 km.

Holidays: Officials of canal available at all times during navigation season.
AUTHORITY: St. Lawrence Seaway Authority, Western Region, P.O.Box 370, 508 Glendale Avenue, St. Catharines, Ontario L2R 6V8. *Tel:* 416-684-6571. *Contact:* M. S. Campbell, Regional Vice-President.

POWELL RIVER, B.C.: 49.52 N. 124.33 W.
(See Plan Book)

DOCUMENTS:
Customs Clearance from last port.
Manifest for goods to be off-loaded and "In Transit" cargo tonnage.
Duplicate Pratique for vessels arriving from ports other than U.S. ports.
Canadian Immigration Crew List, (Imm. 200) required in triplicate.
Passenger List in triplicate.
Seamen's passports and I.D. cards should be available when arriving from sea.
Ship's Certificates.
PILOTAGE: Payment compulsory. Incoming ships take Pilot at Race Rocks, near Victoria. Pilotage District of British Columbia.
ANCHORAGE: No suitable anchorage is available in Powell River area. Vessels usually anchor in English Bay (Vancouver) or various anchorages Vancouver Island.
RESTRICTIONS: No linesmen available between 2359 hrs. and 0700 hrs. Except tankers who berth anytime.
MAX. SIZE: Up to 600 ft. LOA. 32 ft. draft. Tankers up to 615 ft. have berthed for discharging purposes (No. 2).
HEALTH: Duplicate pratique for first port of call. See also "Montreal".
RADAR/VHF: No radar. Pilots are in contact with tugs and mill office using VHF Channel 10.
TUGS: Two tugs available, to 500 h.p.
BERTHING: Berth No. 1 requires a tug when berthing only (Berth No. 1 reserved for company barges). Berth No. 2 Pilot's discretion. Accommodation: Channel depth 30 ft. – 35 ft. LW. Two private piers; pier A with Berth No. 1, 500 ft. long, depth alongside 30 ft. LW, Berth No. 2, 482 ft. long, depth alongside 35 ft. LW; Berth No. 4, 400 ft. long, Berth No. 5, 130 ft. long, and Berth No. 6, 375 ft. long, depths alongside 30 ft. LW.

Three 10-ton elevators, one 6-ton travelling crane. Dock storage for 10,000 tons. The elevators are used for loading barges only.
STEVEDORES: None. Local longshoremen only. Supercargoes are sent from Vancouver to assist in loading vessels. Longshoremen are members of Papermakers' Union.
MEDICAL: Powell River General Hospital and port doctor available. Complete medical services provided.
TANKERS: Bunker oil supplied by company barges.
FRESH WATER: Unlimited supply, $25.00 connection charge.
FUEL: Fuel oil, diesel, and gasoline available.
GANGWAY/DECK WATCHMEN: On request.
OPENING/CLOSING HATCHES: By crew prior to arrival and departure.
CUSTOMS ALLOWANCES: 300 cigarettes, or 50 cigars, or 1 lb. tobacco on arrival. Issues every 7 days. 60 oz. or 2 cases beer on arrival. Issues every 7 days.
IDENTIFICATION CARDS: Keep available for inspection.
CONSULS: Available at Vancouver, B.C.
AIRPORT: 2 flights per day to Vancouver International Airport. 4 miles from docks. Charter flights available to Vancouver Island on request.
TIME: Pacific Standard Time.
HOLIDAYS: Union Contract. Usual holidays are New Year's Day, Easter Monday, Labour Day and Christmas Day, every second Sunday.
TELEPHONES: Ship's telephone available.
SERVICES: Most services arranged in Vancouver.
SHORE LEAVE: Permitted.
AUTHORITY: MacMillan Bloedel Ltd., Dock Office, Powell River, B.C. *Tel:* (604) 483-3722. *Telex:* Via Vancouver, B.C. VHF Channel 10 – 24 hours.
AGENT: Powell River Shipping Services Ltd., Box 74, Powell River B.C. V8 4Z5. Tel: (604) 483-4232. Telex: 044-767.

PRESCOTT, Ontario: 44.44 N. 75.31 W.
(See Plan Book)

For important General Information refer to "St. Lawrence Seaway".
DOCUMENTS: See "Montreal".
PILOTAGE: Arranged through Agents – Montreal.
ANCHORAGE: Seaway Anchorage.
MAX. SIZE: Up to 8.23 m. draft.
HEALTH: See "Montreal".
RADIO: Seaway Stations.
BERTHING: *Ports Canada Facilities.*

Berth	*Length* (m.)	*Depth alongside* (m.)
Grain Unloading Berth	395.0	8.23
Grain Loading Berth	283.4	8.23
Shed Berth	441.9	8.23
Salt Dock Berth at Shed	441.9	8.23
Salt Dock Berth Up-stream Pier	189.0	8.23

Grain Facilities: Prescott Elevator, capacity 154,000 tonnes, 11 spouts available. Loading capacity 2,180 tonnes/hour, depending on type of vessel and conditions.
STEVEDORES: Stevedores arranged by Montreal Agents.
MEDICAL: Nearest hospital located at Brockville (20 km.). Ambulance service available at Prescott.
DENSITY: No tide – seaway density.
FRESH WATER: Available.
FUEL: Arranged with Montreal Agents.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Ship's crew.
CUSTOMS ALLOWANCES: Tobacco: No limit. Wine and/or Spirits: No limit.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Small repairs available.
AIRPORT: 208 km. to Montreal – served by regular airlines.
TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.
HOLIDAYS: See "Montreal". Work can be arranged on holidays.
POLICE/AMBULANCE: Prescott – Police 925-4252; Ambulance 925-2925.
TELEPHONES: Arrangements can be made to place telephones on board.
SHORE LEAVE: Allowed.
BANKS: Royal Bank of Canada, Toronto Dominion, Bank of Montreal.
SHIP SUPPLY SERVICE:

Canadian Coast Guard, Prescott Base, Transport Canada, Prescott, Ontario, K0E 1T0. Tel: (613) 925-2865. Two helicopters, several launches, medical services, 2 "medicboats".

Orraids Limited, River Road East, Prescott, Ontario, K0E 1T0. Tel: (613) 925-4329. Marine equipment and supply.

Port of Prescott, Ports Canada, Prescott, Ontario K0E 1T0. Tel: (613)925-4228. Anchorage for ships, small barge available for ship to shore crew member emergency, ambulance service 3 km. distance from port.

Prescott Machine and Welding Inc., River Road East, Prescott, Ontario K0E 1T0. Tel: (613) 925-4277. Ship repairs.

Simjac Marine Limited, North Channel Road, Prescott, Ontario K0E 1T0. Tel: (613) 925-2457. Tug service, marine contractors.
AUTHORITY: Ports Canada, P.O.Box 520, River Road East, Prescott, Ontario K0E 1T0. *Tel:* (613) 925-4228. *Telex:* 06636515. *Contact:* R. E. Bailey, Operations Manager.

PRINCE RUPERT, B.C.: 54.19 N. 130.19 W.

(See Plan Book)

PORT LIMITS: Prince Rupert Harbour Limits are shown on Canadian Chart No. 3985 and described in British Columbia Coast Sailing Directions (Vol. II), published by the Canadian Hydrographic Service. Charter-party terms govern when laytime will commence and, as such there is generally no specific geographical point at which a vessel is considered to be an "arrived ship".

DOCUMENTS: If first Canadian port:
Crew List (Imm. 200) 3 copies.
List of Ship's Stores (E.1) 3 copies.
Personal Possession List (Crew Declaration Y.14) 3 copies.
Maritime Declaration of Health (QS 2001) 3 copies.
Calculation of stability for vessels loading bulk grain (82/0579).

Certificates:
Safety Construction.
Safety Equipment.
Derat.
Safety Radio.
Loadline.
Certificate of inspection for chain or wire lashings if timber deck cargo to be loaded.

PILOTAGE: Compulsory. Telegraphic address: "Pilots Vancouver", 48 hours' notice required with confirmation of ETA pilot station at 24 hours and 12 hours. VHF Channels 17, 77 and 16. Pilot boat, "Pacific Pilot Four", 20 m. vessel with red hull and white house. Boarding station 1 mile radius from Triple Islands (Lat. 54° 18′ N., Long. 130° 53′ W.). Heavy weather – follow pilot boat into sheltered waters when advised by Pilot.

ANCHORAGES: Inside harbour limits – allocated by Harbour Master, Port of Prince Rupert.
A: McIntosh Rock Beacon bearing 243°(T) × 6.1 cables, 23 fathoms, mud bottom.
B: McIntosh Rock Beacon bearing 237.5°(T) × 12.1 cables, 19 fathoms, mud bottom.
C: Vigilante Island Peak bearing 048°(T) × 12.4 cables, 22 fathoms, mud bottom.
D: Vigilante Island Peak bearing 040.5°(T) × 6.3 cables, 23 fathoms, mud bottom.
E: Vigilante Island Peak bearing 254°(T) × 5.4 cables, 25 fathoms, rock/sand bottom.
Anchorages "A" – "E" have radii of 549 m. (1,800 ft.).
V: Vigilante Island Peak bearing 333.5°(T) × 3.1 cables, 24 fathoms.
Anchorage "V" has a radius of 396 m. (1,300 ft.) and is solely for log loading vessels not exceeding 170 m. LOA.
X: Greentop IT Light bearing 218° (T) × 15 cables, 31 fathoms, silt and clay bottom.
Y: Greentop IT Light bearing 316°(T) × 19.6 cables, 34 fathoms, silt and clay bottom.
Anchorages "X" and "Y" have radii of 5.1 cables.
Additional anchorages area available outside harbour limits in the vicinity of Prescott Island.

RESTRICTIONS: Nil on Prince Rupert Harbour. Porpoise Harbour, slack water and daylight. Swept to 23 ft, at LW.

MAX. SIZE: The coal berth at Ridley Terminals will accommodate vessels up to 250,000 d.w.t., 325m. LOA, 50 m. beam and 22 m. draft. Vessels of 247 m LOA have berthed at Fairview Terminal where there is 13.7 m. at low tide.

HEALTH: Pratique is automatic unless vessel suspects the presence of infectious or communicable diseases on board. Under these circumstances vessel should notify Agent well in advance of arrival at pilot station.

RADIO: Prince Rupert Coast Guard Radio VAJ 500, 2182, 4125 and VHF 16.

VHF: Prince Rupert Vessel Traffic Services operate on VHF Channels 11 and 71. Vessels should establish communications with "Prince Rupert Traffic" on VHF Channel 11 when 50 nautical miles West of the Queen Charlotte Islands. Vessels proceeding to Prince Rupert via Vancouver or Tofino Traffic Zones will be advised when to change frequencies to VHF Channel 11.

Vessels wishing to communicate with the Port Authority may contact Prince Rupert Traffic for information.

TUGS: Join vessel off berth. Not all tugs have lines. No extra charge if tug's line used.

BERTHING: DEEP SEA BERTHS:

Fairview Terminal: (Forest Products, Mineral Concentrates, Grain By-products, Oilseeds and General).

Owner	Port of Prince Rupert
Length	427 m.
Depth	13.70 m.
Open Area	15 hectares
Covered Storage	4,583 sq.m.
Rail Siding	2,750 m.
Ro/Ro	130 ton ramp

Ocean Dock: (Passenger Vessels and Log Carriers).

Owner	Port of Prince Rupert
Length	151 m.
Depth	9.20 m.
Open Area	5,754 sq.m.

Grain Elevator: (Inner Harbour).

Owner	Prince Rupert Grain Ltd.
Length	305 m.
Depth	15 m.
Capacity	2,250,00 bushels.
Shippers	5×15,000 bushels per hour each

B.C. Timber: (Pulp).

Length	360 m.
Depth	10.6 m.

Ridley Terminals Inc.: (Coal).

Max. V/L Dimensions	
D.w.t.	250,000 tons
LOA	325 m.
Beam	50 m.
Draft	20 m.
Onsite Storage	1.2 million tonnes.
Annual Throughput	13 million tonnes.

Shiploaders:
2 × 4,500 t.p.h. capacity each.
Quadrant type with elevating boom.
Air draft on berthing – unlimited.
Max. allowable working height 34 m. above LLW
Large tide range 7.7 m.
Record tide range 8.4 m.
Outreach 43.0 m.
Max. permissible combined hatch length 240 m.
Stacker Reclaimer: 2 × 6,000 t.p.h.
Tugs: 2 purpose built × 3,750 h.p. 50 tonne bollard pull each.
Operated by Minette Bay Ship Docking Services.
Tides:
MHWS 6.5 m.
MHWN 5.2 m.
MLWN 2.5 m.
MLWS 1.2 m.
Current: Ebb maximum 2.0 knots. Flood Maximum 1.2 knots.
Berthing/Unberthing: At Master's discretion.
Max. berthing speed: 15 cm./sec.
6 in./sec.
Max. design impact: 15 cm./sec. 250,000 d.w.t. 80% laden.
Tokyo Keiki approach velocity indicator will be installed in 1984.
Fresh Water/Fuel: Not available.
Under Construction:
Grain elevator (Ridley Island) operational January 1985.
Owner: Prince Rupert Grain Ltd.
Designed to accommodate vessels of 10,000 – 65,000 d.w.t.
Shiploaders: 3 (tower mounted)
Loadng Rate: 4,000 t.p.h. (150,000 bushels per hour).
Berth Depth: 14.5 m. at LW.

STEVEDORES: Gangs arranged through Agent.

Main Commodities for Export and Loading Rates:
Grain (Inner Harbour Elevator) – up to 13,500 tonnes per day.
Packaged Lumber – 40,000 to 75,000 fbm per gang hour*.
Logs – up to 20,000 scrib per gang hour*.
Pulp – 45 to 180 tonnes per gang hour*.
Mineral Concentrate – up to 300 tonnes per hour.
*Dependent on ship's gear.

MEDICAL: Hospital facilities available.

DENSITY: Variable, 1013 to 1025.

FRESH WATER: Available at all berths except coal terminal. No facilities for supplying vessels at anchor.

FUEL: Diesel oil available by tank truck. No Bunker "C" available at present.

GANGWAY/DECK WATCHMEN: Shore gangways available. Port Operating By-Law states that gangways shall be attended at all times by a watchman or other responsible person and clearly illuminated at night.

OPENING/CLOSING HATCHES: This work is carried out by stevedores except for specially constructed hatches such as McGregor.

CERTIFICATES:
Safety Equipment.
Cargo Ship Certificate.
Safety Radio.
Derat.
Load-line.
Cargo Gear Book and Certificates.
All subject to inspection on arrival.

CUSTOMS ALLOWANCES: Tobacco, 50 cigars and 200 cigarettes and 2 lb. of tobacco. Wine and Spirit, 1 bottle per officer, (40 oz.) and Beer 288 oz. or 24 pts.

CARGO GEAR: Cargo Gear Book to be ready for inspection.

IDENTIFICATION CARDS: Not required.

REPAIRS: Minor repairs deck and engine room.

SURVEYORS: SGS Supervision Services Inc. P.O.Box 1082, Prince Rupert, B.C. V8J 4H6. Tel. (604) 624-9745.

Rupert Marine Surveyors Ltd., P.O.Box 292, Prince Rupert, B.C. V8J 3P6. Tel: (604) 624-5330.

Classification Societies are based in Vancouver and will attend a vessel in Prince Rupert upon request.

DRY DOCKS: Two small slipways for 150 ft. vessels.

REPATRIATION: Crew changes and repatriation can be carried out with little difficulty. Connections for international flights are made at Vancouver.

AIRPORT: Two flights daily to Vancouver, B.C. Travelling time to airport about one hour.

TIME: Zone plus 8 Pacific Standard Time. Last week in April to last week in October is Summer Time, clocks advanced 1 hour.

HOLIDAYS: New Year's Day (no work); Good Friday; Easter Monday; Queen's Birthday; Dominion Day; Labour Day (no work); Thanksgiving Day; Remembrance Day; Christmas Day and Boxing Day (no work).

POLICE/AMBULANCE/FIRE: Tel: 911.

EMERGENCY CO-ORDINATION: Within Port Limits call "Prince Rupert Traffic" on VHF Channel 71 or Tel: 624-4157.

TELEPHONE: Placed on board if required.

STORING: Stores are available without restrictions with handling equipment available.

SERVICES: Compasses adjusted. No tank cleaning equipment or facilities for discharge of tank washings. Radios and electronic navigational aids may be serviced by local technicians.

SHORE LEAVE: No restrictions.

SHIP SUPPLY SERVICE:

Tug Services: Minette Bay Marine Services Ltd., 941-8th Avenue East, Prince Rupert, B.C. V8J 2N2.

RivTow Straits Ltd., P.O.Box 65, Prince Rupert, B.C. V8J 3P4.

Launch Services: Prince Rupert Water Taxi, P.O.Box 685, Prince Rupert, B.C. V8J 3S1.

Minette Bay Marine Services Ltd., (see "Tug Services").

Helicopter Services: Rotortech Helicopters Ltd., P.O.Box 610, Prince Rupert, B.C. V8J 3R5.

Vancouver Island Helicopters Ltd., P.O.Box 115, Prince Rupert, B.C. V8J 3P4.

REGULATIONS: Vessels anchored in the harbour must have engines on stand-by and second anchor ready for letting go if wind speed attains 25 knots.

AUTHORITY: Port of Prince Rupert, 110 Third Avenue West, Prince Rupert, B.C. V8J 1K8 *Tel:* (604) 627-7545. *Telex:* 047-89192. *Contact:* K. R. Krauter, General Manager. Captain M. Gray, Manager-Operations.

QUEBEC, P.Q.: 46.49 N. 71.12 W. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists (cargo vessels).
8 Passenger Lists (passenger vessels).
3 Ship's Stores Lists.
3 Crew Declarations.
1 Maritime Declaration of Health.
1 Complete Manifest of cargo to be discharged in all Canadian Ports.
5 Manifest for local cargo.

No bills of lading required to Local Authorities.

PILOTAGE: On arrival at Anse-aux-Basques, a ship takes on board a Pilot of the Laurentian Pilotage Authority to bring the ship to Quebec. Pilotage and payment of dues are compulsory. Pilots board inbound vessels at Anse-aux-Basques. The Master of every ship inward bound in the Gulf of the St. Lawrence and destined for ports West of Anse-aux-Basques must report ETA to Pilots Montreal, via Marine Traffic Control on VHF radio Channel 14 or by other means of communication to Seven Islands Radio Station, giving any information Control may require.

A minimum notice of 24 hours and 12 hours must be given. This notice must be confirmed 4 hours prior to arrival at the Pilot station.

Note: Pilot boats (2) and pilot station keep watches on 156.55 MHz. and have VHF facilities, which are only used for local instructions from one to the other.

Pilot boats (2) in operation: Pilot No. 9 Canada and Pilot No. 10 Canada. Hull painted blue, white superstructure. Pilot-jack welded on stack – all-steel vessels. Equipment: Radar – echo sounder – radio VHF/all frequencies. A.M. – all frequencies – electric whistle – loud hailer – searchlight.

Pilot station can either be raised by radiotelephone frequency 156.8 MHz., by morse lamp – semaphore – by just blowing the code letter "G" consecutively or displaying code flag "G". Exact location of pilot station Anse-aux-Basques, on North shore of St. Lawrence river. Lat. 48° 19.2′ N., Long. 69° 24.9′ W. Pilotage ground limits are rectangular distance of 2 miles from the station. In bad weather, pilot boats removed from station to more secure position and pilotage service held up until better conditions. Same procedure applies during severe ice conditions. Any changes regarding pilot boat service obtained through Marine Traffic Control.

Vessels using pilot boarding stations within St. Lawrence River – Seaway – Quebec Harbour – Lakehead, requested provide accommodation ladder. Landing platform of accommodation ladder should be 10 ft. above water.

Vessels arriving Anse-aux-Basques without having previously stated ETA pilot station 24 hours and 12 hours in advance, or during such time as pilotage service held up for any reason, vessels normally proceed to anchorage off Ile-aux-Basques on Southern side of river, where good anchorage ground can be found. Further instructions will be given to Vessel by Marine Traffic Control or pilot station on VHF or 156.55 MHz.

ANCHORAGE: See "Pilotage".

Due to submarine cables and other submarine installations, anchoring in the harbour is prohibited without permission of the Harbour Master. Permission for anchoring is to be obtained through Marine Traffic Control Centre. The official anchorage area extends Southwestward from the fixed blue light on Queen's Wharf Lat. 46° 48′ 34″ N., Long. 71° 12′ 12″ W.

RESTRICTIONS: Depth of water in 11 mile dredged channel is 40 ft. to which depth add height of tide which, at times, may give extra 15 ft.

MAX. SIZE: No limit in length and breadth. Draft limited to 46 ft. Winter and 50 ft. in Summer.

HEALTH: Radio pratique obtained through Seven Islands by wireless. In case of reported suspected disease instructions will be given by wireless. When pratique granted, vessel automatically cleared for *all Canadian Ports*.

RADIO: Seven Islands: Call sign VCK. Quebec: Call sign VCC, VHF Channel 16.

RADAR/VHF: Port radar service in operation. VHF Marine Traffic Control System in effect for area extending from meridian of Longitude passing through Sept-Iles to upper limits of Montreal Harbour.

In order to take advantage of the Traffic Control System and avoid unnecessary delays, all vessels approaching Sept-Iles from seaward should be fitted with VHF set. Control of VHF Channels shall be immediately available on bridge, convenient to conning position and such installation shall conform to requirements laid down in Radio Regulations for equipment used in VHF International Maritime Mobile Radiotelephone Service and be capable of operation on Channels: 16, 14, 13, 12, 11, 10, 9 and 6.

For vessels not provided with VHF equipment, portable VHF sets will be taken on board by Pilot. Rental charge for this service. Vessels approaching meridian of Longitude passing through Sept-Iles from Eastwards should call Channel Quebec on 156.7 (Channel 14) for further instructions.

TUGS: Tugs join vessels in stream and use ship's lines.

5 tugs available, each equipped with radio-telephone. Two tugs of 4,200 h.p.; two tugs of 1,250 h.p. and one tug of 7,200 h.p.

BERTHING:

Berth No.	*Length (m.)*	*Depth at LW (m.)*	*Operator/ Owner*	*Remarks*
Vieux-Port				
4	240.0	3.8/8.1	Ports Canada	Light repairs – wintering
5	180.0	5.1/9.3	Ports Canada	Light repairs – wintering
14	178.0	6.2	Ports Canada	Port services
17	210.0	5.5	Ports Canada	Coast Guard
18	240.8	11.0	Ports Canada	Grain unloading
19	192.0	9.0	Ports Canada	Waiting – Inner Basin
20	342.0	7.5	Ports Canada	Light repairs – wintering
21	206.0	11.3	Ports Canada	Visiting ships
22	325.0	10.7	Ports Canada	Passenger vessels
23	—	—	Ports Canada	Under construction
24	167.6	9.0	Ports Canada	Not in use
25	222.5	10.7	Ports Canada	General cargo
26	240.8	11.0	Ports Canada	General cargo
27	293.2	11.5	Ports Canada	Ro/Ro
28	277.4	12.0	Ports Canada	Grain loading
29	304.8	11.5	Ports Canada	General cargo
30	224.0	10.5	Ports Canada	General cargo
31	224.0	9.0	Ports Canada	General cargo
46	210.0	6.7	Papeterie Reed	Forest products
47	205.0	6.7	Papeterie Reed	Forest products
Beauport				
50	210.3	11.9	Ports Canada	Liquid bulk
51	210.3	12.5	Ports Canada	Solid bulk
52	211.0	12.5	Ports Canada	Solid and liquid bulk
53	213.0	15.2	Ports Canada	Solid and liquid bulk
54	213.0	16.0	Ports Canada	Solid bulk
Anse au Foulon				
100	—	7.5	Ports Canada	Under construction
101	198.1	11.3	Ports Canada	General cargo
102	134.1	11.3	Ports Canada	General cargo
103	210.9	11.3	Ports Canada	General cargo
104	210.9	11.3	Ports Canada	General cargo
105	195.4	11.3	Ports Canada	General cargo
106	195.4	11.3	Ports Canada	General cargo
107	173.1	11.3	Ports Canada	Liquid and solid bulk
108	180.1	11.3	Ports Canada	Liquid and solid bulk
109	22.0	10.6	Petroles Irving Inc.	Petroleum products
South Shore				
70	152.2	8.2	Davie Shipbuilding	Lay-byberth
71	121.9	7.6	Davie Shipbuilding	Lay-by berth
72	106.6	7.0	Davie Shipbuilding	Out-fitting wharf
73	164.4	5.4	Davie Shipbuilding	Out-fitting wharf
74	141.4	4.8	Davie Shipbuilding	Out-fitting wharf
75	168.8	6.0	Davie Shipbuilding	Out-fitting wharf
76	182.8	7.6	Davie Shipbuilding	Out-fitting wharf
77	169.7	5.7	Davie Shipbuilding	Lay-by berth
78	168.2	5.0	Davie Shipbuilding	Lay-by berth
79	121.9	4.0	Davie Shipbuilding	Lay-by berth
80	91.4	—	Davie Shipbuilding	Small boats building and repairs
81	220.0	10.0	Ports Canada	Solid bulk
86	295.0	10.6	Ultramar Canada	Loading chemical products
87	335.0	16.7	Ultramar Canada	Unloading crude oil – up to 100,000 d.w.t.

BULK HANDLING FACILITIES:

Grain Elevators (see Table overleaf):

Storage capacity – 8,000,000 bushels (240,000 short tons). Served by CN and CP railways.

A marine terminal facility on Piers 50, 51 and 52 which include – 4 bridge towers with a loading capacity of 3,000 t.p.h., locomotive cranes to unload gondola cars, a track-mobile to shunt cars and other ground rolling stock to manipulate bulk material on paved pads, and two-way underground conveyor system to handle dry bulk cargoes at a present loading rate of 800 t.p.h. 2,000 ft. of dock frontage with a depth of at least 41 ft. at LT and leased from Ports Canada over 1 million sq.ft. of land and operating 13,500 ft. of trackage on property connected to CNR. Storage capacity of 7 million imperial gallons for any liquid products serviced by 10 in. marine pipe-lines and a 4 in. loading rack.

Storage facilities: Shed 27, 42,000 sq.ft.
Shed 28, 50,000 sq.ft.
Open area 27, 227,000 sq.ft.

CRANES: 75 mobile cranes up to 440 tonnes capacity.

STEVEDORES: Dead-line for orders: 1100 – 1600 – 2200 hrs. for periods starting 0800 – 1300 – 1900 hrs.; 1 hour required before deadline to order gangs.

Bulk Handling Facilities:

Loading Berths (Grain)

Elevator	*Number of berths*	*Berth name*	*Length of berth*	*Depth of water*	*Number of belts*	*Max. hourly capacity each belt (metric tons)*	*Number of travelling loaders*	*Total max. hrly. capy. bushels*
Bunge	1	28	840 ft.	41 ft.	4	300	4	100,000

Unloading Berths

Elevator	*Number of berths*	*Berth name*	*Length of berth*	*Depth of water*	*Number of legs*	*Max. hourly capacity of each leg (short tons)*	*Total max. capacity (short tons)*
Bunge	1	18	800 ft.	35 ft.	2	900	1,800

MEDICAL: No advance notice required for medical attention. Hospital facilities available.

TANKERS: Slop discharge facilities available. Eight tanker berths. Depths from 37 ft. to 50 ft. See "Berthing".

DENSITY: Fresh water.

FRESH WATER: Available to all berths, provided directly from the Board's hydrants and hoses to vessels. Rate: St. Charles River piers, 20 t.p.h. Anse-aux-Foulons 50 t.p.h. with 1 line, and 2 lines 100 t.p.h.

FUEL: Available any berth by truck and by barge.

FIRE PRECAUTIONS: Only usual precautions; towing wire hanging overboard.

GANGWAY/DECK WATCHMEN: Watchmen at gangway not necessary, but could be obtained.

OPENING/CLOSING HATCHES: McGregor hatches must be opened by crew. All other cases recommended to be done by crew also, but stevedores would also under conditions specified in stevedoring contract.

SHIP'S CERTIFICATES: Load Line, Safety Equipment, Construction, Radio, Passengers, Cargo Gear, Derating.

CUSTOMS ALLOWANCES: Tobacco, 8 oz. tobacco for 8 days, cigarettes: 1 carton per 8 days. Wine and/or Spirits, 40 oz. only. Officers and Masters will have additional supply for entertainment daily on request to Customs.

CONSULS:

Denmark: 880 chemin Ste-Foy, Quebec, Quebec G1S 2L2	Tel: 681-0708
France: 110 Ave des Laurentides, Quebec, Quebec G1S 3C3	Tel: 688-0430
Netherlands: 71 rue St-Pierre, Quebec, Quebec G1K 7A8	Tel: 692-0660
Italy: 3161 rue de la Concorde, #18, Ste-Foy, (Quebec) G1W 2T9.	Tel: 651-2898
Mexico: 950 chemin St-Louis, Quebec, Quebec G1S 1C7	Tel: 681-4482
Norway: 2 Nouvelle-France, Anse au Foulon, Quebec, Quebec G1K 7A2	Tel: 525-8171
Sweden: 425 boul. Charest E., 5th Floor, Quebec, Quebec G1K 3H9	Tel: 529-9968
Switzerland: 2985, 1 iere Avenue, Quebec, Quebec G1L 3P2	Tel: 623-9864
United States of America: 1 Ste-Genevieve, P.O.Box 939, Quebec, Quebec G1R 4T9	Tel: 692-2095

All other consuls located in Montreal and send representatives to Quebec on request.

REPAIRS: Repairs of all types can be obtained.

DRY DOCKS: Department of Public Works located within Davie Shipbuilding Ltd. "Champlain" dry dock 1,150 ft. by 120 ft. at gate entrance. Can dock largest ships afloat. "Lorne" dry dock 624 ft. with floor width 73.5 ft. Also 3 outdoor berths and 1 covered berth.

SURVEYORS:

Classification Societies:

Lloyd's Register of Shipping, P.O.Box 248, Levis, Quebec G6V 6N8. Tel: 837-5763.

American Bureau of Shipping, 360 St. James, Montreal, Quebec H2Y 1P5. Tel: (514) 844-3029.

Bureau Veritas, 360 rue St-Jacques, Suite 1206, Montreal, Quebec H2Y 1P5. Tel: (514) 288-6515. Telex: 05-24691.

Det Norske Veritas, Gall Communications Inc., 2226 rue St-Antoine Ouest, Montreal, Quebec H3J 1A7. Tel: (514) 937-5336.

Cargo Surveyors:

Polynavigation Inc., P.O.Box 7413, Charlesbourg, Quebec G1J 5E6. Tel: 664-0151. Telex: 051-3008.

Services de Surveillance SGS Inc., P.O.Box 1606, Quebec, Quebec G1K 7J8. Tel: 661-6624. Telex: 051-3321.

REPATRIATION: All facilities for effecting crew changes and repatriation.

AIRPORT: 5 miles from city limits, served by regular airlines.

POLICE/AMBULANCE/FIRE: Police (Harbour) Tel: 694-3645, City Tel: 694 -6123, RCMP Tel: 694-3733. Ambulance Tel: 529-9221, 529-6811. Fire Tel: 694-6441.

TELEPHONES: No existing facilities for placing telephone on board.

TELEPHONE NUMBERS:

Port Warden, Captain Serge Theoret	Tel: 692-3853
Quarantine: Medical and Sick Mariners Service	Tel: 694-3013
Manpower and Immigration	Tel: 694-3513
Transport Canada – Marine Services:	
Regional Director: Jean Paul Godin	Tel: 694-4158
District Manager: Jacques Lorquet	Tel: 694-3420
Aids to Navigation: Lucien Cardinal	Tel: 694-3574
Harbours and Property	Tel: 694-3680
Marine Traffic Regulations: L. Misson	Tel: 694-3884
Steamship Inspector Service	Tel: 694-3237
Shipping Master: E. Lebars	Tel: 694-3234
Laurentian Pilotage Authority: C. Bouchard	Tel: 694-3358

TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end April to last week-end October, clocks advanced 1 hour.

HOLIDAYS: Longshoremen Official Holidays: Good Friday; Saint Jean Baptiste (June 24th); Confederation (July 1st); Labour Day (first Monday of September); Thanksgiving Day (beginning of October); Armistice Day (November 11th); Christmas Day. Cargo can be loaded or unloaded during each holiday except Labour Day.

BANKS:

Bank of Montreal, 800 Place d'Youville, Quebec, Quebec G1R 3P4. Tel: 692-1850. Telex: 051-2241.

Bank of Nova Scotia, P.O.Box 444, Quebec, Quebec G1K 7R9. Tel: 522-1571. Telex: 051-3713.

Banque Nationale de Paris (Canada), 500 Grande-Allee E. – P.O.Box 579, Quebec, Quebec G1R 4R8. Tel: 647-3858. Telex: 051-3947.

Canadian Imperial Bank of Commerce, 650 boul. St-Cyrille E., Quebec, Quebec G1R 4V7. Tel: 529-2101. Telex: 051-2344.

Continental Bank of Canada, 2795 boul. Laurier – P.O.Box 10550 Ste-Foy, Quebec, Quebec G1V 4M4. Tel: 656-6941. Telex: 051-31522.

Federal Development Bank, 871 chemin St-Louis, Quebec, Quebec G1S 1C1. Tel: 694-3972. Telex: 051-3356.

Mercantile Bank of Canada, 580 Grande-Allee E., Quebec, Quebec G1R 2K2. Tel: 647-2921. Telex: 051-2210.

National Bank of Canada, 150 boul. St-Cyrille E. – 18th Floor, Quebec, Quebec G1R 2B2. Tel: 647-6000. Telex: 051-3946.

Royal Bank, 700 Place d'Youville, Quebec, Quebec G1R 4Y4. Tel: 692-3607. Telex: 051-2294.

Toronto-Dominion Bank, 1150 Claire-Fontaine, Quebec, Quebec G1R 5G4. Tel: 522-5684. Telex: 051-3573.

SERVICE: Any services needed.

SHORE LEAVE: No restrictions.

DEVELOPMENTS: Extensive land reclamation work being carried out in the development of Beauport Flats will provide prime waterfront property for container and bulk-loading facilities. Work will commence shortly on the construction of a new berth (No. 55) at Beauport Flats, 1,200 ft. long with a depth of more than 50 ft. alongside. Beauport Flats are connected to the Metro-Quebec expressways.

AUTHORITY: Port of Quebec, 10 rue de Quercy, P.O.Box 2268, Quebec, Quebec G1K 7P7, Canada. *Tel:* (418) 694-3640. *Telex:* 051-2297. *Contact:* Henri Allard, General Manager.

RIMOUSKI, Quebec: 48.25 N. 68.34 W.

DOCUMENTS: See "Quebec". Rimouski is a port of entry with Customs and Immigration Officers stationed at the port. It is also a quarantine sub-station.

PILOTAGE: Not compulsory. Pilots board at entrance to harbour.

APPROACHES: Rimouski is approached through a dredged channel depth 18 ft. Tidal variation is from 10 ft. – 14.5 ft.

ANCHORAGES: Vessels anchor in the roads or near the East end of Barnaby Island.

HEALTH: See "Documents".

RADIO: Mont – Joli (VCF).

BERTHING: There are 2 wharves, operated by Transport Canada.

1. L-shaped wharf, 2,330 ft. long, 243 ft. wide at head of L-shape. Depth alongside 24 ft.

2. Length 2,850 ft., depth 21 ft. alongside, which lies to the West of the L-shaped wharf.

CRANES: Mobile cranes from 7 – 100 tons available.

FRESH WATER: Available ex-wharf.

FUEL: Bunker "C" and diesel available.

REPAIRS: Minor repairs only.

BANKS: Bank Canadian National, 186 Ave. de la Cathedrale, Rimouski, G5L 5H9.

AUTHORITY: Transport Canada, Garde Cotiere Canadienne, Region des Laurentides, 4 Place Quebec, Suite 103, Quebec, P.Q., G1R 4X3. *Contact:* Jacques St. Laurent, Harbour Master, Rimouski. *Tel:* 418-723-6563.

ST. ANDREWS (Bayside), New Brunswick: 45.10 N. 67.08 W. (See Plan Book)

DOCUMENTS:
Clearance from Last Port.
3 Copies of Crew List.
Crew's Effects List.
Stores List.
2 Copies of Customs Entrance A-6 and Manifests.
Current Safety Radio Certificate.
Safety Construction Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Derat Certificate.

PILOTAGE: Not compulsory but recommended. Pilot boards off East Quoddy Head, Campobello Island. Notice required 24 hours. The Pilot is a retired fisherman and he only gives advice on tide and weather.

ANCHORAGES: Areas are available a few hundred metres off of the wharf face, 3 miles from the Wharf just East of St. Andrews and in the vicinity of Campobello Island. All of the locations have over 70 ft. of water and good bottom. Those in the vicinity of Campobello can be reached by radio direction from the Pilot if shelter is needed and the Pilot cannot board.".

RESTRICTIONS: None have been imposed but daylight berthing and departures are recommended.

RADIO: Yarmouth, Nova Scotia.

VHF: Bay of Fundy Traffic Control Channel 14 (Tel: 506-648-4696); Pilot Channel 11 (Tel: 506-752-2283). Port Stevedores and line crews Channel 10 (Tel: 506-529-3732. Telex: 014 47321).

HEALTH: Send advice to Saint John, New Brunswick at least 24 hours before arrival.

BERTHING: *Sand Point Wharf:* The wharf is located in position Lat. 45° 09′ 35″ N., Long. 67° 08′ 30″ W. The wharf is in the form of an "L" shape.

The outer face has a length of 300 ft. and draft at LWOST of 28 ft. The inner face has a length of 260 ft. and draft of 25 ft. Mean tidal range at berth is 26 ft. The ebb tide and river flow set onto the wharf, the flood tides sets off the pier.

The distance from the pilot station to the pier is 21 miles, with a minimum draft of 45 ft. There are navigation lights in the channel and the pier is lit at both ends.

SPECIAL CARGO HANDLING FACILITIES: Conveyors are available to load bagged cargoes (i.e. potatoes). This equipment requires ship's crew to be very diligent in tending lines.

CRANES: Shore cranes are available in the 25 to 35 ton range but the wharf space limits the number of usable cranes to two.

STEVEDORES: Normal working hours are 12 to 16 hours per day (varying by commodity), 7 days per week. Cargoes handled regularly are bulk and cartooned frozen fish, lumber, potatoes, unitised pulp, frozen orange juice concentrate in drums. Transhipping is also done at the pier both across the pier and directly from ship to ship.

MEDICAL: Doctor and hospital available.

DENSITY: 1017 (varies with tide).

FRESH WATER: Available.

FUEL: MDO ad IFO are available. Delivery is by truck.

SURVEYORS: Located in Saint John.

GANGWAY/DECK WATCHMEN: Ship's crew. Ship's gangway used. Fixed accommodation ladders are only usuable at or near high tide.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: Tobacco each man 200 cigarettes per week. Alcohol each man 40 oz. of wine or spirits per week.

AIRPORT: Nearest commercial airport at Saint John, New Brunswick, (45 miles), but a small public airstrip is located in St. Stephen, New Brunswick (16 miles).

TIME: GMT minus 4 hours. Last Sunday in April clocks advance 1 hour and last Sunday in October clocks retard 1 hour.

HOLIDAYS: New Year's Day; Easter Sunday; Thanksgiving Day; Christmas Day.

SHORE LEAVE: No restrictions.

GENERAL:
Services: Fresh provisions, ship's laundry service.
Chart: Use U.S. Chart (Calais to West Quoddy Head) No: 13328 for the pilot station to the pier and Canadian Chart No. 4011 for the entrance to Bay of Fundy and traffic control areas.

AUTHORITY: The Harbour Master, Champlain Industrial Park, Bayside, St. Andrews, New Brunswick E0G 2X0. *Tel:* (506) 529-8939 (office), (506) 529-3429 (Residence). *Contact:* Milton Cross, Harbour Master.

ST. CATHARINES, Ontario: 43.10 N. 79.16 W.

Refer to "St. Lawrence Seaway" for important general information.

DOCUMENTS: See "Montreal".

PILOTAGE: Commences in lower St. Lawrence River and is continuous from district throughout Great Lakes. See "Quebec".

ANCHORAGES: Good anchorage areas at both ends of the Welland Canal.

MAX. SIZE: Max. size of vessel permitted in Welland Canal is LOA 730 ft. (222.51 m.), beam 75 ft. (23.15 m.), draft 26 ft. (7.92 m.).

HEALTH: Pratique granted at Quebec City for incoming vessels from foreign ports.

RADIO: Toronto Radio (VBG), Buffalo Radio (WBL).

TUGS: Tugs may be obtained from Port Weller Dry Docks Ltd.

BRIDGES: Vessels are instructed by Traffic control on the transit of the Canal. Generally no delay for bridges.

BERTHING:

Port Weller Harbour East, Wharf No. 1:

Type	– Various and Sundry Partial Cargoes
Equipment	– Self Unloaders or Rented Cranes
Length	– 638 ft. (194.5 m.)
Depth	– 27 ft. (8.23 m.)
Operator	– St. Lawrence Warehousing Ltd., Hamilton, Ontario

Port Weller Harbour West Wharf No. 2:

Type	– Coal, Sand, Zircon Ore, Bulk Sugar
Equipment	– Self Unloaders only
Length	– 1,288 ft. (392.6 m.)
Depth	– 27 ft. (8.23 m.)
Storage Capacity	– 76,500 tons.
Operator	– Seaway Terminals, Hamilton, Ontario Fourum Transport Ltd.

St. Catharines Wharf, Wharf No. 3 (Homer Dock):

Type	– General Cargo, Oil
Equipment	– Ships' Gear and Rental Equipment as Required.
Length	– 330 ft. (100.6 m.)
Depth	– 25 ft. (7.62 m.)
Operator	– St. Catharines Fuels (C.F.M.G.Inc.) Shell (Canada) Ltd., Port Colborne.

Wharf (No. 3) used for bunkering purposes only. Abreast of the wharf is a turning basin with a depth of 7.62 m. (25 ft.) for ships of 106.68 m. (350 ft.) in length.

MEDICAL: Medical and hospital facilities are available.

TANKERS: There are limited berths suitable for small domestic tankers.

DENSITY: Fresh water.

FRESH WATER: None available except in emergency by tank wagon.

FUEL: Bunker and diesel fuel oil available at the North end of Wharf No. 2 from St. Catharines Fuel Oils Ltd.

GANGWAY/DECK WATCHMEN: At discretion of the Master.

CUSTOMS ALLOWANCES: See "Montreal".

IDENTIFICATION CARDS: Not needed.

CONSULS: No consuls.

REPAIRS: Deck and engine repairs are possible at Port Weller.

DRY DOCKS: Situated at Port Weller able to accommodate vessels, LOA 730 ft.

SURVEYORS: A.B.S. at Toronto. Senior Steamship Inspector, Mr. J. Aspin.

AIRPORT: International Airport at Toronto, 75 miles away.

TIME: GMT minus 5 hours. Daylight Saving Time when clocks advanced 1 hour usually 28th April and retarded 27th October.

POLICE/AMBULANCE/FIRE: St. Catharines – Fire 684-4311; Police 416-688-4111. Welland – Fire 734-4511; Police 416-735-7811. Port Colborne – Fire 834-4511.

SHORE LEAVE: Only when usual formalities are observed, e.g. Customs, Immigration, etc.

AUTHORITY: St. Lawrence Seaway Authority, Western Region, P.O. Box 370, 508, Glendale Avenue, St. Catharines, Ontario L2R 6V8. *Tel:* 416-684-6571. *Contact:* M. S. Campbell, Regional Vice-President.

SAINT JOHN, N.B.: 45.16 N. 66.03 W. (See Plan Book)

PORT LIMITS: A vessel is considered to be an "arrived vessel" when it comes alongside the pier.

Seaward limits of the Port are as follows:
From Cape Spencer Lighthouse (Lat. 45° 11′ 42″ N., Long. 65° 54′ 37″ W.) due South to position Lat. 45° 08′ 03″ N. thence due West to intersect with the HW mark on the mainland near the Easterly entrance to Little Musquash Cove (Lat. 66° 17′ 12″ W.).

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 Sets Customs Documents.
3 Sets Health Documents.
6 Sets Cargo Manifests.
6 Sets Bills on Lading.
3 Sets Ship's Papers.

PILOTAGE: Compulsory. Pilot boarding station in vicinity of position: Lat. 45° 10′ 30″ N., Long. 66° 03′ 30″ W. Masters are reminded that it is essential to send ETA by radio directly to ship's Agent 24 hours prior to arrival, to avoid delay in waiting for Pilot. This ETA (in GMT or LMT and so stated) must be attended no later than 4 hours before arrival. Any material change in ETA must be corrected as soon as possible. A Pilot can also be ordered directly through VTM Fundy Traffic or any coastguard radio station at least 4 hours prior to arrival at pilot station (Tel: 648-4864).

Pilots can be contacted through Fundy Traffic on VHF Channel 12.

Vessels must report to the Coastguard Vessel Traffic Management System prior to entering the Bay of Fundy. VHF Channels 14 and 12 are monitored. Vessels must follow instructions from VTM regarding traffic control.

ANCHORAGE: See chart.
Also see "Plan Book".

RESTRICTIONS: Saint John is a tidal harbour experiencing 2 high and 2 low tides every 24 hours; most vessels being handled between 2-3 hours before to 2-3 hours after HW depending on berth.

During the Spring each year, due to thaw conditions, a strong downflow (freshet) is experienced in the main harbour from the Saint John River. Vessels entering or departing from Courtenay Bay may be restricted to 28 ft. maximum draft and daylight movements only depending on conditions at the time. Freshet conditions normally occur between March and June and their duration depends on seasonal conditions.

MAX. SIZE: Controlling depth in main channel is 30 ft. at LW. Vessels length and breadth unlimited. Also see "Tankers".
HEALTH: See "Montreal".
RADIO: VCS Halifax or VAU Yarmouth.
TUGS: Available and considered necessary for docking and undocking large ships. 2 tugs usually needed, both in and out.
BERTHING: 27 berths. Dredging done each year to maintain depth. Due to rise and fall of tide, boatmen usually necessary for running lines and docking. All berths are tidal. Tidal range varies from 22 ft. – 28 ft. (HW) and from 0 ft. – 7 ft. (LW).

Ports Canada Facilities:

Berth	*Wharf Length (m.)*	*Depth Low Tide (m.)*	*Remarks*
Navy Is. 1a-1b	377	10.4	2 sheds – forest products – Ro/Ro facility
2a – 2b	312	9.8	Grain
2c	91	7.6	
3a – 3b	312	9.8	Grain
Rodney A & B	295	12.2	Container Terminal – 3 cranes. 1 stuffing shed (No. 8 – 36,750 sq.ft.)
Rodney C & D	606	12.2	
11	134	9.1	
12a – 12b	265	9.1	
13a – 13b	244	9.1	Heated shed
14a – 14b	244	9.1	
Long Wharf A	189	9.1	
Long Wharf B & C	280	10.7	Heated shed
Pugsley North	—	—	Open Terminal
Pugsley A	390	10.4	511 sq.m. heated
Pugsley B	—	—	
Pugsley C	232	10.4	Heated shed
Lower Cove	245	11.0	Open terminal – Ro/Ro facility, (starboard quarter ramp vessels)
Broad St. A – B	274	6.7	Bunker oil – fitting out berth
Barrack Point	290	12.2	Bulk facility – potash

Also see Tables below.
SPECIAL CARGO FACILITIES: *Forterm:* Forterm is the corporate trade name for Forest Products Terminal Corporation Ltd.

The terminal is located at Navy Island. Strategically situated for both rail and highway transport access the spacious 80 ft. wide pierside aprons and make shipside cargo loading easy. Berthing space of 1,235 ft. (376 m.) provides for 2 simultaneous loading operations at any given time. Loading records of up to 400 tonnes per hour, per hatch are recorded.

Maple Leaf Mills Ltd.: Maple Leaf Mills Ltd. (Grain Division), a subsidiary of Canadian Pacific Enterprises Ltd., operates elevator "H" with a capacity of 1.5 million bushels under an agency agreement with the National Harbours Board.

This facility has the capacity to receive 80 carloads of grain per 8 hour day through automatic car dumpers. It also has a potential to deliver 60,000 bushels of grain per hour to Berth Nos. 2 and 3.

Brunterm: Container terminal located at Rodney Terminal with 3×45 ton ship-to-shore cranes, 15 toplifters plus a wide array of additional terminal handling equipment. The 3×45 long ton capacity cranes each have an outreach of 115 ft. and a back reach of 60 ft.

Two of the cranes are designed with articulating rail trucks on each of their 4 legs, enabling them to operate on both berths at the 50 acre, L-shaped facility. Brunterm has a 2,000 ft. marginal berth and 1,200 ft. slip berth. Water depth (minimum) is 40 ft.

Ro/Ro ramp length 200 ft. to be completed by end 1984.

Brunterm provides a full range of terminal services, including a 33,788 sq.ft. on-site stuffing and de-stuffing shed and facilities for both electrical and cryogenic refrigerated containers.
CRANES: Mobile cranes available.

J. D. Irving, Limited, (Equipment Division), have available for rental mobile cranes with hydraulic boom from 8 tons to 75 tons, with conventional boom for 17.5 tons to 140 tons and crawler cranes with conventional boom from 25 tons to 300 tons.

The above (and other equipment) available on prior request only.

MEDICAL: Hospital available, also Seaman's Clinic.
STEVEDORES: Stevedores required in morning must be ordered by 1600 hrs. preceding day, and stevedores required in afternoon must be ordered by 1100 hrs. same day.
TANKERS: Controlling depth in channel to tanker wharves at Courtenay Bay is 18 ft. LW. Max. draft of 37 ft. only available at Spring tides. Also see "Restrictions".

Canaport: Situated 6 miles from Saint John, 4,100 ft. offshore from Mispec Point. Tankers moor and sail at any time, day or night, at any stage of tide to a Mono-buoy, depth 120 ft. at LW. Underwater pipe-line, diameter 20 in. – 36 in. connected to terminal with 10 tanks each with capacity of 9 million gallons. There are 2 pumps with total capacity 2,000,000 g.p.h.
FRESH WATER: Available from pipe-lines throughout the docks.
FUEL: Fuel oil and diesel oil – ample stocks of fuel oil and diesel oil are always available. Diesel and bunker fuel can be delivered by pipe-line in Courtenay Bay (vessels restricted to navigation at HW). Irving Oil operates a bunkering barge service and also delivers to ships by pipe-line or by truck or tankwagon. Gulf, Crystal Oil Ltd. and Texaco Canada Ltd. also supply vessels by truck.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 50 cigars or 2 lb. tobacco per person over 16 years old.

Wines/Spirits: total of 40 ounces per person over 21 years old.

Subsequent issues may be authorised to Crew members of foreign vessels, but the max. quantity any Crew member may hold at any time must not exceed 300 cigarettes, 75 cigars, 3 lb. tobacco, and 60 ounces wines/spirits.
IDENTIFICATION CARDS: Not required.
CONSULS:

Belgian Consulate – Honorary Consul, Joz De Bedie, 6126 Regina Terrace, Halifax, N.S. Tel: (902) 425-6546.

Danish Consulate – Eric L. Teed, Q.C., Seawood Lane, West. Tel: 672-6856.

Dominican Republic – Honorary Vice-Consul, John A. Driscoll, 50 Broad Street. Tel: 693-1403.

Finland – Thomas L. McGloan Jr., Q.C., Harbour Building. Tel: 693-7268.

France – Honorary Consular Agent of France, Charles F. Whelly, Q.C., 122 Carleton Street. Tel: 693-1193.

Ireland – Honorary Consul, Harold E. Kane, 20 King Street. Tel: 657-3000.

Italy – Honorary Consular Agent, Guy Gaetano De Giacinto, 634 Queen Street, Fredericton, N.B. Tel: 454-2271.

Netherlands – Honorary Consul, F. G. Elkin, 167 Prince William Street. Tel: 693-1403.

Norway – Honorary Consul, Donald F. MacGowan, 40 Wellington Row. Tel: 652-3800.

Sweden – Consul, G. A. McGillivray, Hilyard Place, Building A. Tel: 642-1046.
REPAIRS: Complete repair facilities and equipment available also salvage equipment.
DRY DOCKS: Two. One 1,780 ft.×125 ft.×53 ft. deep with 42 ft. of water over sills at high tide. Smaller one 440 ft.×60 ft.×34 ft. deep, 22 ft. water over sills at high tide.
SURVEYORS:

Bureau Veritas, P.O.Box 1047, Rothesay, N.B. Tel: 847-2363.
Det Norske Veritas, P.O.Box 1047, Rothesay, N.B. Tel: 847-2363.
Lloyds Register of Shipping – A. L. McIntosh, 133 Prince William Street. Tel: 652-6180.
N.K.K., P.O.Box 1047, Rothesay, N.B. Tel: 847-2363.
R.N.I.A., P.O.Box 1047, Rothesay, N.B. Tel: 847-2363.
United States Salvage Association, P.O.Box 1047, Rothesay, N.B. Tel: 847-2363.

REPATRIATION: Can be arranged.
AIRPORT: Regular services by Air Canada from airport 12 miles from harbour. Also Eastern Provincial Airways and private charter flights.
TIME: GMT minus 4 hours. In Summer, time is GMT minus 3 hours.
HOLIDAYS: Sundays, New Year's Day, Good Friday, Victoria Day, Dominion Day, New Brunswick Day (1st Monday in August), Labour Day, Thanksgiving Day, Remembrance Day, Christmas Day and Boxing Day, of which Labour Day and Christmas Day are NO WORK DAYS for longshoremen.

Private Facilities:

Berth	*Length (m.)*	*Depth at LW (m.)*	*Utility and General Remarks*
Atlantic Sugar	134	9.1	Refinery – bulk sugar unloading – 2 cranes
Irving Pulp	139	6.7	Loading bleached sulphite pulp
D.O.T. Agency	407	7.9	East side of harbour
Irving Oil	506	12.2	4 berths Courtenay Bay – oil tankers.
C.P. Ferry	253	6.7	Terminal – ro/ro ferry for vehicles/passengers
MacMillan Rothesay Ltd.	168	—	Ro-Ro loading towed barges in Courtenay Bay
Cana Port	—	36.6	Mooring buoy – oil discharging

Grain Handling Facilities:

Elevator	*Capacity in bushels*	*Loading galleries at berths*	*Loading capacity bushels per hour*	*Remarks*
Maple Leaf Mills (West-side)	1,500,000	2–3	60,000	Combined length of conveyor galleries to berths 3,000 ft.

POLICE/AMBULANCE/FIRE: Available as follows:
(a) Through "Fundy Traffic" VTS (VHF Channel 12).
(b) On regular phones – Dial 911.
(c) By using Port Emergency Telephones which are strategically located around the facilities.

TELEPHONES: Telephones can be placed on board vessels at most facilities. Must be ordered ahead through Agent.

SERVICES: All services available including compass adjustment.

BANKS:
Bank of Canada, 75 Prince William St. Tel: 693-1491.
Bank of Montreal, 15 Market Square. (5 branches). Tel: 657-8740.
Bank of Nova Scotia, One Brunswick Square, (King Street). (10 branches). Tel: 658-3365.
Canadian Imperial Bank of Commerce, 44 King Street. (5 branches). Tel: 652-4530.
Continental Bank of Canada, Courtenay Centre, Crown Street. Tel: 652-7390.
Federal Business Development Bank, 75 Prince William Street. Tel: 648-4751.
National Bank of Canada, 71 King Street. Tel: 693-2634.
Royal Bank of Canada, 22 King Street. (5 branches). Tel: 657-1691.
Toronto-Dominion Bank, 40 King and Germain Street. (2 branches). Tel: 657-6550.

SHORE LEAVE: Crew allowed ashore.

SHIP SUPPLY SERVICE: D.M.K. Marine Services Ltd., 58 Collins Street, Saint John, N.B. E2M 3P9, supply launch service to vessels in the vicinity when requested.

Atlantic Towing Limited, 300 Union Place, Saint John, N.B. E2L 1B6. Tel: (506) 652-3540 24 hours. (506) 652-8090. Telex: 014-47518.
A fleet of 22 tugs ranging 8,500 i.h.p., providing:
Ocean, coastal and harbour towing.
Petroleum barging and deck load transport.
Salvage and pollution control.
Dredging, floating cranes and heavy marine winches.

DEVELOPMENTS: During 1981-82 several major developments and expansions were carried out at Saint John. Construction of Potash Terminal completed 1983 and Potash Company of America to commence operations immediately. Shed can hold 75,000 tons.

Future development expected to build additional shed to hold 200,000 tonnes on a more than $50 million Potash Terminal project which encompasses an entirely new land area at the apex of the city peninsula. In addition, the expansion of Rodney Container Terminal is now complete – and Port Officials see the ultimate addition of a fourth crane to keep the Rodney facility going at "full tilt."

AUTHORITY: Ports Canada, Port of Saint John, P.O.Box 6429, Station "A", Saint John, N.B., E2L 4R8. *Tel:* (506) 648-4869. *Telex:* 014-47281. *Contact:* Gordon C. Mouland, General Manager. C. E. Pringle, Harbour Master and Director of Operations. Captain A. G. E. Soppitt, Assistant Harbour Master.

Harbour Master is available 24 hours per day through Fundy Traffic.

ST. JOHN'S, Newfoundland: 47.34 N. 52.41 W.

(See Plan Book)

DOCUMENTS:
Quarantine:
Completed Declaration of Health (QSI).
Valid Derating Certificate.
International Vaccination Certificates.
Customs:
Crew Declarations (Y.14).
3 Ship's Stores (E.1).
Inward Report (A.6).
Complete copy of each Manifest for goods to be discharged in Canada.
Clearance from Last Port.
Immigration:
2 Immigration Crew Lists (200).
2 Tally Sheets (201).
3 Passenger Manifests for passengers not disembarking.
Immigration Control Cards for each person.

PILOTAGE: Compulsory. To avoid a delay in obtaining a Pilot, the Owner, Master, or Agent of a ship bound for St. John's must report via any coast station by R/T or W/T the vessel's ETA 12 hours in advance of ETA. ETA's must be confirmed or corrected not less than 3 hours prior to ETA. Time must be GMT. In message of ETA, the following information must be included.
(1) Name/call sign of vessel
(2) Nationality
(3) Length, draft, and gross registered tonnage.

Pilot Boarding Station: Lat. 47° 33′ 42″ N., Long. 52° 37′ 54″ W. (2 miles (3.22 km.) off entrance)

St. John's Traffic Centre stand by on: VHF Channel 16 (156.8 MHz); VHF Channel 11 (156.55 MHz); Telephone: 772-2083.

Berthing:
(a) Pilot – compulsory. Shifting or ETD requires a 1 hour advance notification to Coast Guard Traffic Centre.
(b) Berths arranged by Harbour Master in advance.
(c) Two small tugs available.
(d) Linesmen – arranged through Pilots.
(e) Boatmen – arranged through ship's local Agents.

ANCHORAGE: No anchorages near harbour. Safe anchorage in harbour.

MAX. SIZE: No restrictions except draft 35 ft. max.

HEALTH: Pratique, cable name and nationality of ship, ports of call during voyage, nature of cargo, number of crew and passengers, port of destination and Agent, condition of health of all on board with details of any sickness, and whether all vaccinated. Also see "Montreal".

RADIO: St. John's Coast Guard Radio, call sign VON duplex R/T on 2118 kHz, 2206 kHz, and 4110.8 kHz.

TUGS: As required by Pilots. Normally ship's lines used. 2 small tugs available.

BERTHING:
Ports Canada:

Berth No.	*Wharf length (m.)*	*Depth at low water (m.)*	*Remarks*
1	175	3.0–6.1	
2	165	9.1	
3	183	9.1	
4	119	9.1	Dangerous cargo berth. Note that explosives in small amounts to be approved by Ports Canada prior to arrival.
5	160	8.8–9.1	
6	150	6.1–7.0	
7	120	7.0–7.9	(Repairs) E. F. Barnes machine shop – Shed No. 3
8	150	7.9–9.1	
9	150	7.3–7.9	
10	150	9.1	
11	150	9.1	
17	180	7.9–12.2	Ultramar, also shedded berth – Shed No. 3
18	76	12–15	Dolphins
19	115	5.8–7.6	
20	162	5.5–8.2	
21	58	8.5–7.3	
SBB	122	2.7–1.2	Small fishing vessels only

Private facilities:

Berth	*No.*	*Length (m.)*	*Depth, low water (m.)*	*Utility & General Remarks*
Harvey Terminals	12	114	7.3–8.5	Offshore services
Harvey Terminals	14	153	5.8–9.1	
Harvey Terminals	15	107	8.2–9.5	Bulk cargo, container services
Harvey Terminals	16	145	7.6–10.1	General cargo
Mobil Oil	22	153	6.7–9.1	
Imperial Oil	23	145	7.6–10.1	
Irving Oil	24	69	9.5–10.4	
Fisheries College	25	137	4.9–7.3	
D.N.D.	26	61	6.7–7.3	
Husky Bow Valley	27	153	5.5–7.0	
Gulf Oil	28	69	5.2–7.0	
Gulf Oil	29	114	5.2–7.6	
C.O.T.C.	30	99	5.2–5.5	
M.O.T.	31	183	7.0–7.6	
C.N.R.	34	92	10.7	Dry dock
C.N.R.	35	122	7.6–8.5	Dry dock
C.N.R.	36	107	5.8–7.6	Dry dock
C.N.R.	37	114	6.7	Dry dock

CRANES: Newterm Limited, mobile heavy lift crane 2×220 tonnes, 1×150 tonnes.

A. Harvey & Co., mobile heavy lift cranes 2×65 tonnes; 2×35 tonnes; 1×50 Tonnes.

STEVEDORES: Advise before 1600 hrs. ETA in order to commence 1800 hrs. same day or 0800 hrs. next day.

MEDICAL: No advance notice except in case of serious illness to be included in arrival cable, ample hospital facilities available.

TANKERS: Discharge lines 6 in., 8 in., 10 in., 12 in. No slop facilities.
Holyrood Refinery: 47.23 N. 53.08 W.

A bunkering port of Ultramar Canada Ltd., situated in the South Arm of Holyrood Bay at the head of Conception Bay, S.E. coast of Newfoundland. Finished, refined petroleum products are exported from Holyrood, and crude petroleum is imported.

Channel depth: 35 ft. right up to wharf. Tidal range is 4 ft. – 5 ft. at springs, and 3.5 ft. at neaps. Good anchorage anywhere in Holyrood Arm.

One 275 ft. long berth, depth alongside 34 ft. 6 in. high water, 32 ft. low water, with moorings for Bow and stern lines on shore. Situated at Ultramar Refinery. 3 in. water mains for fresh water.

DENSITY: 1025.

FRESH WATER: Fresh water available all berths. Order through Agent. Rate approx. 25 t.p.h.

FUEL: Oil delivered by pipe-line at 8 berths, and by tank trucks at all other berths. Major grades of bunker fuel and diesel as well as marine lubricants can be obtained through suppliers.

GANGWAY/DECK WATCHMEN: Usually ship's crew. Ship's gangway used.

OPENING/CLOSING HATCHES: Stevedores or ship's crew whichever to ship's advantage.

CERTIFICATES:
Construction Certificate.
Safety Equipment Certificate.
Radio Safety Certificate.
Load Line Certificate.
Cargo Gear Book.

CUSTOMS ALLOWANCES: Tobacco: Each man 200 cigarettes per week. Wine and Spirit: Each man 40 oz. wine or spirits, per week.

CREW IDENTIFICATION CARDS: Not required.

CONSULS:

France	726-3837	Dominican Rep.	579-5081
Portugal	726–6958	Netherlands	726–2961
U.S.A.	726–4524	Norway	579–5006
Brazil	726–7702	Spain	726–1804
Denmark	726–8000	West Germany	722–1525
Sweden	726–8000	Iceland	722–4270

REPAIRS: Most deck and engine repairs can be carried out.
SURVEYORS: Lloyd's Register, P.O.Box 5054, St. John's, NF, A1C 5V3. Tel: (709) 726–0543, (709) 368–2538 (Residence).
DRY DOCKS: St. John's Dry Dock (owned by C.N.R.). Length at coping head, 173.9 m.; at floor head, 173.2 m.; maximum length of keel blocks 167.1 m.; width at coping, 23.3 m.; depth of water over sill, 8.2 m.

Machine shop is equipped for major repairs to hulls machinery.

A modern synchrolift development project has been completed and now operational at the Newfoundland Dockyard. The synchrolift is a massive elevator designed to lift ships up to 3,640 tonnes out of the water for repairs.
REPATRIATION: Crew changes and repatriation can be carried out with little difficulty.
AIRPORT: Distance 4 miles served by Air Canada 4 flights daily.
TIME: GMT less 3.5 hours. Last Sunday in April clocks advanced 1 hour. Last Sunday October clocks retarded 1 hour.
POLICE/AMBULANCE/FIRE: Police 722-5111; Ambulance 726-3037; Fire 722-1234. Emergency No. 911. Ports Canada Police 772-4669.
EMERGENCY CO-ORDINATION CENTRE: Coast Guard, Search and Rescue (St. John's, Newfoundland). Tel: (709) 772–5151.
SERVICES: Compass adjusting, radar repairs, RT repairs, gyro compass repairs, all types electronic equipment repaired. Divers available for surveys and underwater repairs.
SHORE LEAVE: No Restrictions.
REGULATIONS: Fishing ships must advise of weekend arrival on Friday so that permit to take supplies can be obtained from Federal Dept. of Fisheries.
HOLIDAYS: New Year's Day; St. Patrick's Day; Good Friday; St. George's Day; Commonwealth Day; Discovery Day; Memorial Day; Orangemen's Day; Labour Day; Armistice Day; Christmas Day; Boxing Day.

Except for Easter and Christmas, the above holidays are normally taken on the nearest Monday to the festival date.
SHIP SUPPLY SERVICE: *Offshore Services:*

1. Seabase Limited, P.O.Box 5099, Suite 809, Atlantic Place, St. John's, Newfoundland A1C 5V3.
2. Harvey Offshore Services, P.O.Box 5128, St. John's, Newfoundland A1C 5V6.
3. Petro Canada Exploration Ltd., P.O.Box 5190, St. John's, Newfoundland A1C 5V5.
4. Crosbie Offshore Services Ltd., P.O.Box 12092, Crosbie Building, Crosbie Road, St. John's, Newfoundland A1B 3T5.
5. Mobil Oil Canada Ltd., Box 62, Atlantic Place, St. John's, Newfoundland A1C 6C9.
6. Husky Bow Valley, Box 79, Suite 810, Atlantic Place, St. John's, Newfoundland A1C 6C9.

Helicopter Services: Helicopter services are available from St. John's Airport just minutes from the St. John's waterfront. These are operated by private interests as follows:

1. Sealand Helicopters Ltd., P.O.Box 5188, St. John's, Newfoundland A1C 5V5.
2. Universal Helicopters, P.O.Box 9025, Station "B", St. John's, Newfoundland A1A 2X3.

AUTHORITY: General Manager, Ports Canada, P.O.Box 6178, St. John's, NF, A1C 5X8. *Tel:* (709) 772-4664, 772-4665, 772-4666. *Contact:* D. J. Fox, General Manager.

Captain H. Peden, Harbour Master. *Tel:* (709) 772-4667, 772-4668.

Lieut. J. S. Peckford, Director of Ports Canada Police Tel: (709) 772-4669.

SARNIA, Ontario: 42.59 N. 82.25 W.

Refer to "St. Lawrence Seaway" for important general information.
DOCUMENTS: All documentation carried out by Authorities in Montreal. Only when vessels have called at United States port after departing Montreal will any changes in documentation be necessary, which will consist of a United States Customs Clearance Certificate, to be available on board.

Immigration Papers.
1 copy QS2 (Health Certificate).
3 Stores Lists.
Crew Personal Effects List.
Customs Clearance.

All of the above will have been stamped in Montreal.
PILOTAGE: Notice of ETA should be given to Pilots at least 12 hours before arrival at Sarnia to avoid delays. Accommodation ladder and pilot ladder should be rigged in readiness.
RESTRICTIONS: Navigation season – ice forms about December 15th and breaks up about the middle of March. Vessels size restricted by Seaway locks.
MAX. SIZE: Length 730 ft., beam 75 ft. 6 in., draft 25 ft. 6 in.
RADIO: Sarnia Radio, call sign VBE, communicate on either AM or FM radio telephone.
HEALTH: Pratique granted at Montreal.
TUGS: Available. Tel: Sarnia 336-5588.
BERTHING: Over 2 miles of water front including main wharves listed below:

C.N.R. Dock, length 1,100 ft., depth alongside 23 ft.; Empire Hanna Coal Dock, length 900 ft., depth alongside 19 ft.; Elevator Dock, length 900 ft., depth alongside 27 ft.; Dept. of Transport Dock, length 1,045 ft., depth alongside 27 ft.; Reid Aggregate Dock, length 500 ft., depth alongside 26 ft.; Imperial Oil Docks – Upper Dock, length 592 ft., depth alongside 23 ft.; Fueling Dock, length 928 ft., depth alongside 26 ft.; Special Products Dock, length 284 ft., depth alongside 26 ft.; Lower Dock, length 720 ft., depth alongside 23 ft.; Polysar Corp. Dock, length 600 ft., depth alongside 26 ft.; Dow Chemical Dock, length 680 ft., depth alongside 26 ft.; Sun Oil Dock North Dock, length 600 ft., depth alongside 26 ft.; South Dock, length 500 ft., depth alongside 26 ft.; Shell Oil Dock North Dock, length 1,000 ft., depth alongside 26 ft.; Middle Dock, length 500 ft., depth alongside 26 ft.; South Dock, length 500 ft., depth alongside 26 ft.
DENSITY: Fresh water.
MEDICAL: Hospital facilities at Sarnia. All assistance available.
FRESH WATER: Available at all berths.
FUEL: All grades available from Imperial Oil and Shell Co. berths.
REPAIRS: Hull, boiler and engine repairs can be effected. No dry docks.
AUTHORITY: Transport Canada, P.O.Box 325, Sarnia, Ontario, Canada N7T 7J2. *Tel:* (519) 337-5121. *Contact:* T. Pratt, Harbour Master.

SAULT STE. MARIE, Ontario: 46.28 N. 84.22 W.

(See Plan Book)

Refer to "St. Lawrence Seaway" for important general information.
Note: The water depths quoted are at extreme low water, normally more water available.
DOCUMENTS: See "Montreal".
PILOTAGE: River or local Pilots available on 12 hours notice. U.S. Corps of Engineers, Sault area operate and control St. Mary's River Falls Canal and regulate traffic through all locks in both cities.
HEALTH: Board of Health Officers can make a call to the ship.
RADIO: Good ship-to-shore telecommunication available through Department of Transport Radio Station, Canadian Pacific Telecommunications and Canadian National Telecommunications. United States Coast Guard maintain fully equipped Coast Guard Base and have radio communication for all frequencies in entire St. Mary's River and Harbour area; they are available immediately for information pertaining to shipping in area and movement of ships in River.
TUGS: Harbour tugs available when required, but prefer advance notice order avoid delays. In Sault Ste. Marie, Ontario tugs available.
BERTHING: Transport Canada Dock, "L" shaped pier length 500 ft. on East side 18 ft. deep. On South side, the river side, it is 356 ft. long, 20 ft. deep. This dock is used for discharging general cargo. No crane facilities for loading and unloading, unless ship's gear is used, mobile cranes have to be brought in. No tug required to berth or unberth a ship at this dock under normal weather conditions.

Algoma Central Railway Terminals Dock. A slip approximately 700 ft. long on East side 18 ft. 6 in. deep with inner 200 ft. having less than 16 ft. depth; South side this dock 350 ft. long with depth 16 ft. Used for aggregates, ores and materials. Tug required to berth or unberth at this slip.

Algoma Steel Corporation Dock. Situated above Canadian Canal with following berths available:

(a) Coal and ore dock with a combined length of 2800 ft.
(b) Commercial dock on West side of slip 400 ft. long.
(c) Limestone dock, "L"-shaped dock on West side 355 ft. long and on South side 450 ft. For loading finished steel.

All 3 Algoma Steel Corporation docks 21 ft. 6 in. deep. Only material consigned to or being shipped from Algoma Steel Corporation have access to these docks.

Seaway Pier: Northeast pier at Canadian Canal which could be used for berthing ships and also used occasionally to load or unload cargo into trucks. This pier approx. 500 ft. long and mobile lifting equipment could be utilised here if necessary. Depth of water 18 ft. Pier mostly used as tie-up for making minor repairs afloat, for medical purposes, or waiting for berth at Algoma Steel Corporation Dock. Berthing and unberthing carried out any time, Sundays and holidays with exception of extreme bad weather, high winds, or fog.
STEVEDORES: Available for loading and unloading at any berths in Sault Ste. Marie area.
TANKERS: Gulf Oil Canada Ltd. Dock: Berthing length 400 ft. Depth 18.5 ft. The West side is the Government Dock, depth 22 ft. 12 tanks (capacity 12,000,000 gallons). For fuel oil and gasoline.
FRESH WATER: Available either by hose or by pumper truck at any dock.
FUEL: Diesel bunkers available at any berths via tank trucks. No bunker "C" facilities available at Sault St. Marie, but can be obtained at Lime Island about 50 miles down river. This station is open during entire navigation season.
REPAIRS: Normal ship repairs are carried out on very short notice if required.
AUTHORITY: Transport Canada, P.O.Box 603, Sault Ste. Marie, Ontario. *Tel:* (705) 254-4181. *Contact:* H. Coyle, Wharfinger.
AGENT: The Algoma Steel Corporation, Marine Division.

SEPT ILES (Seven Islands), Quebec: 50.11 N. 66.23 W.

(See Plan Book)

LOCATION: The City of Sept-Iles is located on the N.E. side of the Baie des Sept-Iles, a sheltered circular basin screened to seaward by 7 small islands, on the North shore of the St. Lawrence River in Lat. 50° 11′ N. and Long. 66° 23′ W.

DOCUMENTS: The following inward papers are to be completed prior to arrival and presented to custom officer on boarding:

Health	QS-2001 Quarantine Form	in duplicate
Immigration	IMM-200 Crew List	in triplicate
Customs	A-6 Report Inward	in triplicate
Customs	Y-14 Crew Declaration	in triplicate
Customs	E-1 Ship's Stores	in triplicate
Clearance from last port		

The above forms will be supplied by mail on request.

Note: On Canadian or International Crew Lists, black pen or typewriter must be used. Blue is not acceptable.

Designation and dates of expiry of all major trading certificates is required for outward clearance.

Arrangements have been made so that loading can commence before customs entry has been completed, and customs outward papers will be completed so as not to interfere with immediate departure after completion of loading.

Tankers: Charterers or Operators nominating tankers for discharge at Canadian ports should ensure that the vessel is provided with a "Non-Canadian Ship's Compliance Certificate" prior to sailing for Canada. All major Classification Societies are authorised to issue such a certificate.

DOCKING MASTER: The use of a Docking Master is compulsory for vessels docking, shifting and leaving I.O.C. docks. When docking on arrival, Docking Master will board inside harbour limits in area of 50° 10′ N. and 66° 24′ W. Ships normally proceed to anchorage without assistance, which can be provided on request.

All vessels shall provide rope ladder for boarding Docking Master on arrival and disembarking Docking Master on departure. Ladder must be well secured by adequate lashings to rail or deck.

Power hoists, in good order and properly attended, are acceptable for boarding. In freezing temperatures however, they should not be used unless electrically powered.

Shipmaster's Report: August 1983: With all bridge and engine room equipment working well, we berthed in thick fog (visibility 50 yards – 100 yards). Pilot and tugs most efficient.

ANCHORAGE: Ships should anchor at least 1 mile off dock to facilitate ships movement in bay and should not proceed closer than 1 mile from dock while waiting for Docking Master to board. Vessels may be requested to shift anchorage if their position interferes with normal docking approaches.

MAX. SIZE: Iron Ore Co. Loading Dock (Old): length 850 ft., beam 130 ft., draft 43 ft. Iron Ore Co. Loading Dock (New): length 1,100 ft., beam 175 ft., draft 57 ft. Imperial Oil Dock: length 775 ft., draft 40 ft.

Vessels arriving in ballast to load at No. 2 Dock are requested to present in accordance with the following recommended arrival drafts to ensure safe handling procedures, keeping in mind indicated ship loading rates and ship loader clearances. These drafts are intended to mean minimum draft aft with normal vessel trim.

Summer Deadweight	*Recommended Arrival Drafts*
Under 30,000	4.0 m. to 4.6 m.
30,000 to 40,000	4.6 m. to 5.2 m.
40,000 to 60,000	4.9 m. to 5.8 m.
60,000 to 75,000	5.5 m. to 6.4 m.
75,000 to 100,000	6.1 m. to 7.3 m.
100,000 to 150,000	8.5 m. to 11.0 m.
150,000 to 200,000	11.0 m. to 13.0 m.
200,000 to 250,000	13.0 m. to 14.0 m.
250,000 and over	14 m. and over

Any vessels unable to meet these suggested drafts due to insufficient ballast capacity, anticipated deballasting problems, etc., should state this in 48 hours ETA, along with estimated deballasting time.

Usually ships berth port side to.

Note: Vessels have berthed with lesser draft than recommended when weather conditions permit.

RADIO: Sept-Iles Radio, Canadian Coast Guard Station, Call sign "VCK", Tel: (418) 968-3118, operates 24 hours a day.

CW	Calling frequency	500	kHz	
	Working frequency	420	kHz	
RT	Calling frequency	2182	kHz	Ch. 51
RT (Working Frequency)	Transmitting	2514	kHz	Ch. 57
	Receiving	2118	kHz	Ch. 57
VHF	Calling Frequency	156.8	MHz	Ch. 16
VHF (Working Frequency)	Transmitting	161.9	MHz	Ch. 26
	Receiving	157.3	MHz	Ch. 26
	Transmitting	161.8	MHz	Ch. 24
	Receiving	157.2	MHz	Ch. 24
	Port Operations	156.6	MHz	Ch. 12

Traffic Lists 420 kHz – Even hours plus 50 minutes GMT
2514/161.9 – Even hours plus 40 minutes GMT

Weather, Ice Reports and Notice to Shipping: A continuous marine broadcast is available on VHF Ch. 21, 161.65 MHz. Recorded information is updated continuously as received 24 hours per day.

Extended VHF communications facilities are also available in MINGAN 50° 16′ 24″ N. 64° 07′ 56″ W.

VHF	Calling frequency	156.8 MHz	Ch. 16
VHF (Working Frequency)	Transmitting	161.9 MHz	Ch. 26
	Receiving	157.3 MHz	Ch. 26
Broadcast Services (continuous)	Transmitting	161.775 MHz	Ch. 83B

Ore Carriers:

Advising Arrival: Cable address "Iroccan" Sept-Iles.

Please advise ETA 96 hours, 72 hours, 48 hours and 24 hours out, including in 96 hours ETA the amount of cargo required in metric tons.

Vessels sailing in ballast from Montreal, Sorel, Three Rivers or Quebec should send ETA on departure from these ports with corrected ETA later if necessary.

Advise with 24 hour ETA probable ballast pumping time required on arrival. If any change in ETA or in ballast situation should occur after 24 hour ETA, it should be advised as soon as possible.

The Marine Services office is equipped with VHF radio on 156.6 MHz Channel 12, and also 156.35 MHz, Channel 7A. Vessels calling at Sept-Iles should be fitted with these VHF Channels for efficient harbour communications.

Docking Instructions: Ships are to request instructions 8 hours before arrival. These instructions will be given as promptly and concisely as conditions permit.

Marine Services is set up to receive radio messages on 24 hour basis. Radio traffic by ships at anchor is permissible in Sept-Iles harbour area.

TRAFFIC REGULATIONS: *Traffic regulations for the Gulf and River St. Lawrence:*

1. Eastern Canada Traffic Zone Regulations (ECAREG)
   The zone extends from outside of Belle Isle and Cabot Straits to 66° 00′ W.
   In general, it states that a ship crossing seaward boundary, either entering or leaving the zone, must report to ECAREG via any Canadian Coast Guard Radio Station. Clearance to move within the zone must be obtained from ECAREG and there are "calling-in-points" where a ship has to report.
   There are also additional reports to be made in case of any defects in machinery, navigational aids, accidents, stranding, pollution, etc.
2. The St. Lawrence Waterway Traffic Regulations.
   The zone extends from 66° 00′ W. to Montreal.
   In general, the regulations state that a ship must report to the marine traffic regulator by contacting Channel Escoumins on 156.7 MHz, Channel 14 before entering Zone 1. (i.e. crossing 66° 00′ W.) The port of Sept-Iles is in Zone 1.
   Ships have to maintain a continuous radio watch on Channel 14, except when alongside. Authorisation to communicate on another Channel has to be requested from Channel Escoumins, unless the vessel is equipped with two radios.
   Clearance must be obtained from Channel Escoumins to move within the harbour.

HEALTH:

1. Vessels calling at Canadian ports no longer require Radio Pratique unless:
   (i) there is a condition of health irregularity aboard or,
   (ii) if vessel has called at an infected port during this same voyage or,
   (iii) if Derat Certificate is no longer valid or will soon expire.
2. Only vessels to which any of the above conditions apply, should cable "Quarantine Quebec" giving name of vessel, last port of call and detail regarding health conditions aboard.

TUGS: Tug service is compulsory at Iron Ore Company docks and Wabash Mines Docks. Two tugs of 5,400 h.p. available.

All communications between tugs and Pilots are by VHF. Tugs operate on 156.9 (Channel 18A).

All ships should be equipped with wire cable towing line with nylon pendant for tug use in undocking. Ships not so equipped will be provided with tug tow lines. Docking Master to determine adequacy of ship's tow lines.

BERTHING:
Ports Canada – Facilities

Berth Number (usual name)	*Wharf length (ft.)*	*Depth at Low Water (ft.)*	*Remarks*
Pointe-aux-Basques	600	27	Small open section at East end of Shed No. 1
Shed No. 1			General cargo shed
Shed No. 2			General cargo shed West and behind Shed No. 1
Mgr. Blanche Wharf	900	23	General cargo berth. Also has docking facilities at the end of the Finger Pier, approx. 180 ft. with a draft of 27 ft. Docking on the end and the West side of pier only. Small open berth at upper end of pier
Town Wharf	546	—	Small coastal vessels Finger Pier also used for small cruising vessels and crafts
Pointe Noire Pier	—	—	Not to be used unless directed by Port officials

Private Facilities

Berth	Length (ft.)	*Depth at Low Water* (ft.)	*Utilisation and general remarks*
Wabush Dock	650	41	General cargo and mooring berth (East end). Total 1,600 ft. berthing
Terminal	950	41	Iron Ore loading berth (West end). Total 1,600 ft. berthing (Loading ore by means of 2 travelling boom conveyors. Total capacity 8,000 long t.p.h.)
Iron Ore Dock Terminal	800	34	Mooring and general cargo receiving berth (West)
Southeast Berth No. 1 Dock	800	38	Ore loading berth 2 travelling boom conveyors max. design capacity. Total berthing length 1,600 ft.
No. 2 Dock	900	60	Total effective mooring length approx. 1,600 ft. Two travelling shuttle boom loaders with 764 ft. of travel. Max. design capacity 7,500 long t.p.h. each
Imperial Oil Dock	300	40	Dolphins increase capacity for berthing. Max. size 60,000 g.r.t.

See also following information on The Ore Company berths. Vessels usually berth port-side alongside.

Number 1 Dock. 2,200 ft. (670 m.) dock divided into 3 berths. The Southeast or loading berth is 800 ft. (224 m.) in length and is fendered with large truck tyres mounted over the dock face. The adjoining 800 ft. (244 m.) mooring or waiting berth is also fendered with large truck tyres. The third and last section, 600 ft. (183 m.) in length, is a Government berth used for general cargo.

Dredged depth at the loading berth is 37 ft. (11.3 m.) at mean low water, 34 ft. (10.4 m.) at mooring berth. Designed depth at the government berth is 27 ft. (8.2 m.). At the loading berth, iron ore is loaded into vessels by means of 2 travelling boom conveyors (travel 183 m.) with a max. design capacity of 4,000 metric t.p.h. each.

The distance from mean low water to loaders in horizontal position is approx. 35 ft. (10.7 m.). Loaders can operate at an angle of up to 12° from the horizontal. Vessels should present for loading with a maximum distance of 40 ft. (12.2 m.) from waterline to hatch coaming. Number 1 dock is fitted with bollards spaced at 50 ft. (15 m.) centres.

Number 2 Dock. Deepwater berth is located some 900 ft. (274 m.) Southeast of original dock and extends approx. 230 ft. (70 m.) further into bay. This single berth is open cell construction with 9 parallel cribs giving total berthing face of approx. 925 ft. (282 m.). A tenth transfer house crib, inset from dock face and a dolphin, both structures fitted with mooring winch and bollards, are located approx. 150 ft. (46 m.) and 350 ft. (107 m.) respectively from N.W. corner of dock face. Two additional dolphins, also fitted with mooring winch and bollards, are situated in a line approx. 150 ft. (46 m.) inside dock face and approx. 100 ft. (30 m.) and 400 ft. (122 m.) from S.E. corner of dock. Dolphins are joined to main dock structure by catwalks. Total effective mooring length is approx. 1,600 ft. (488 m.). Cribs are fendered to waterline with triple sets of extra large truck tyres. Dredged depth is 60 ft. (18.0 m.) MLW. Dock is fitted with 2 travelling shuttle boom loaders with 764 ft. (233 m.) of available shiploader travel, and a maximum design capacity of 7,600 metric tons/hr. each. Number 2 Dock is fitted with bollards spaced at 100 ft. (30 m.) centres. Recommended maximum airdraft for this berth is 17.0 m.

Tidal characteristics		
Tidal characteristics	Neaps	1.68 m.
	Springs	3.05 m.

CRANES: Heavy-lift cranes available. Max. capacity 250 tons.

MEDICAL: Masters are requested to have ready for inspection ship's derat certificate.

All crew members requiring medical attention should be available upon ship's arrival. Sick Mariners dues no longer apply for treatment of seamen. Agent will provide form of application to be given to doctor for crew members requiring medical attention.

TANKERS: Berth at Imperial Oil Dock. (Max. draft 40 ft.) and Transport Canada facilities at Port-aux-Basques.

FRESH WATER: Can be supplied at the approx. rate of 35 t.p.h. Hose is available on the dock but ships' crew are required for connecting and disconnecting.

FUEL: Available on an emergency basis only and subject to inventory situation. All enquiries should be directed to BunkerEsso Montreal.

CUSTOMS ALLOWANCES: Each crew member is allowed to retain in his possession for his personal consumption 200 cigarettes, 40 ounces of spirits, 50 cigars or 2 pounds of pipe tobacco. All quantities must be declared on Crew Declaration form Y-14 along with all personal effects such as radios, cameras, tape recorders, binoculars, etc., plus serial numbers of each such item.

Canadian seamen returning from vogages to American or other foreign ports are permitted $50 value of duty free merchandise every quarter for periods outside Canada of over 48 hours and $150 once a year for periods outside Canada of 7 days.

REPAIRS: Minor repairs can be effected at Sept-Iles. Repairs to be conducted under the supervision of ships' personnel.

TIME: Sept-Iles maintains Eastern Standard Time (GMT minus 5) from last Sunday in October until last Sunday in April. Eastern daylight time (GMT minus 4) is maintained the balance of the year.

SHORE LEAVE: Crew not allowed ashore until permission granted by the authorities.

SAFETY: It is compulsory to have a net under the gangway.

GENERAL: *Customs of the Port:* Ships will be loaded in regular turn of vessels, subject to cargo availability and providing they present with starting hatches open and do not have ballast pumping which will exceed expected loading time. This loading time should be calculated at the rate of 6,600 metric tons/hr. at dock No. 1 and 10,000 metric tons/hr. at dock No. 2.

For establishing turn of vessels, a ship will be considered "arrived" at the time of crossing line between Pointe au Corbeau and Pointe aux Basques.

Loading plans should be presented to the loading foreman on arrival.

Ore-Oil and OBO vessels having discharged petroleum products at last port must advise this in first ETA. If gas-free certificate not already granted by independent chemist, arrangements will be made to have chemist attend. The arrangement for such service implies no liability whatsoever on the part of Iron Ore Co. of Canada Marine Services. Expense for ship's account.

Ships will leave the loading dock immediately upon completion of cargo and secure for sea in the bay. If any delays occur on documentation, crew members missing, etc., ship will leave the dock and all matters will be handled from anchorage.

Present outlook for working hours, subject to change during the season, is as follows: 24-hour operation Sundays included. Usually no loading from 1600 hrs. December 24th till 1600 hrs. December 25th and from 1600 hrs. December 31st till 1600 hrs. January 1st.

Vessels must have main engine ready when alongside loading docks. Permission to perform work that would affect the readiness of the vessel to leave berth in case of emergency must be obtained from Iron Ore Co. Marine Services before proceeding with such work.

Services: Most supplies can be readily obtained at Sept-Iles. Quantity orders should be included in 48 hour ETA. Requests for bonded stores should be included in 96 hour ETA.

Launch service is available on request through Marine Services.

Walport film exchange available.

Ice Navigation in Canadian Waters: During the Winter, ECAREG CANADA (East of 66° 00′ W.) and the St. Lawrence River Vessel Traffic Management (VTM), West of 66° 00′ W. to Montreal, provide a service consisting of the promulgation of up-to-date information on ice conditions, routeing, the provision of icebreaker support where available and considered necessary, and organisation of convoys as required.

Masters requesting this service should address their request to ECAREG CANADA through any convenient Canadian Coast Guard radio station which will handle the message free of charge.

Basically, each system is under the surveillance of Canadian Coast Guard Traffic Centres which Masters may contact for advice and assistance. These centres have access to a complete and current picture of the ice conditions prevailing and the anticipated trend of conditions. The centres are therefore, well equipped to provide advice on the best route to follow. In order to obtain the maximum benefit from the service, it is essential that Masters report to the appropriate Canadian Coast Guard Traffic Centre before their ships enter waters where ice may be encountered.

Radio communications play a very important part in successful ice navigation. The Master relies upon the receipt of accurate ice information and advice upon which he can base his decisions as to his future course and progress.

Ships proceeding independently throughout the Gulf of St. Lawrence when ice is present should report their positions and progress to "Ice Halifax" at 0800 and 2000 A.S.T.

Radiogram: "Ice Halifax". Radio Station: Halifax, Call sign VCS.

Ships inbound from sea to a port in Zone B should report to "Ice Halifax" 36 hours before passing Cape Ray. Ships outbound should report to "Ice Halifax" 12 hours before departure.

DEVELOPMENTS: In 1983, the Government of Canada announced a new project development in the Pointe Noire sector.

The new project consists of building a 260 m. long wharf with an existing depth of 12 m. and more, the construction on an on-site access road including all services such as waterline of 400 mm., power and waste disposal services, embankments and dykes, as well as a 5.2 hectares storage area and a 3,500 sq.m. shed. These new marine infrastructures will also permit to give access to more than 250 hectares of land owned by Ports Canada.

General cargo as well as bulk commodities will be handled in this sector. The project started in September 1983 and will be completed late 1986.

AUTHORITY: Ports Canada – Port of Sept Isle, 421 Arnaud St., Room 202, P.O.Box 280, Sept Isle, Quebec Province G4R 4K5. *Tel:* (418) 968-1231. *Telex:* 051-8-4209. *Contact:* Serge Tremblay, General Manager.

SHEET HARBOUR, N.S.: 44.50 N. 62.30 W.

DOCUMENTS: See "Montreal".
ICE: Open all year with aid of icebreaker during January, February and March. Ice forms about January 15th and breaks up between March 1st and 15th.
PILOTAGE: Compulsory. Pilot boards off Sheet Rock Light.
ANCHORAGE: Anywhere in harbour in depths up to 10 fathoms.
MAX. SIZE: See "Berthing".
RADIO: Ship-to-shore communications: through Halifax (VCS).
TUGS: None.
BERTHING: Wharf, berthing length 500 ft. depth LW 21 ft. No railroad or handling facilities on wharf. (The wharf is in an advanced state of disrepair, removal will probably take place in the near future).
STEVEDORES: Skilled labour available. Gangs consist of 20 men.
MEDICAL: Hospitals available.
FRESH WATER: Available by hose from mill.
FUEL: Available.
REPAIRS: No facilities available.
AIRPORT: Halifax 75 miles.
TIME: GMT minus 3 hours in Summer. GMT minus 4 hours Winter.
AUTHORITY: Transport Canada, Sheet Harbour, Nova Scotia. *Tel:* 885-2311. *Contact:* Guy Hall, Harbour Master.

SHIPPEGAN HARBOUR, N.B.: 47.45 N. 64.42 W.
CARAQUET HARBOUR, N.B: 47.48 N. 64.56 W.
(See Plan Book)

DOCUMENTS: See "Montreal".
PILOTAGE: Approaching vessel hoists flag "G" and uses siren about 1 mile before reaching fairway buoy. Pilot boat motorised 45 ft. vessel, approaches on leeside. Approaching vessels wait for Pilot about 1 mile from Fairway Buoy.
ANCHORAGE: Good anchorage, usually by Fairway Buoy.
RESTRICTIONS: Entry possible night and day, good vision, lighted buoys and beacon lights.
MAX. SIZE: High tide: 23 ft. low tide: 17 ft. (Shippegan, max. tide: 20 ft.).
HEALTH: See "Montreal".
RADIO: VCN Grindstone Radio and VCG Fox River.
TUGS: Not required for these ports.
BERTHING: Caraquet Wharf, 28 ft., Shippegan 25 ft.
MEDICAL: No notice required, hospital available, as required when conditions warrant.
FRESH WATER: Available.
CUSTOMS ALLOWANCE: Tobacco, 200 cigarettes per week per man. Wine/Spirits, Spirits allowed to officers. Beer to crew.
REPAIRS: Minor ship repairs and all electrical repairs.
TIME: Atlantic Standard Time GMT minus 4 hours, Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.
AIRPORT: Moncton, 150 miles, Chatham, 70 miles.
POLICE/AMBULANCE/FIRE: *Caraquet:* Police RCMP 727-2828; Police Town, 727-3167; Fire, 727-2928; Hospital, 727-3435. *Shippegan:* Police, RCMP, 336-2210, Town, 336-2351. Hospital: 344-2261.
AUTHORITY: Department of Transport, P.O.Box 1270, Charlottetown, P.E.I., C1A 7M8. *Tel:* (902) 892-2491. *Telex:* 014-44130. *Contact:* District Manager.

SOREL, Quebec: 46.03 N. 73.09 W. (See Plan Book)

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
3 Crew Declarations (Canadian Form Y14).
3 Store Lists (Canadian Form E.1).
Health Declaration (Canadian Form QS.2001).
3 Cargo Manifests.
3 Bills of Lading.
General Declaration.
PILOTAGE: Compulsory. Under the Montreal Pilotage Authority. Vessels coming in from sea secure Pilots at Escoumins, Quebec and Three Rivers.
ANCHORAGE: Safe and roomy anchorage is provided in the St. Lawrence River off Sorel in a basin 9 miles long by 0.5 miles wide with 30 to 50 ft. water depth. There is no tidal influence at this point.
RESTRICTIONS: Speed limits not to exceed 8 knots in the Harbour of Sorel. Sections 8, 9 and 10 reserved for D.O.T. vessels.
MAX. SIZE: From St. Lawrence Ship Channel there is a clear approach for 10.67 m. draft vessels to Outer Dock No. 15 and from 6.10 m. to 9.14 m. to almost all other docks.
HEALTH: Pratique may be obtained by radio to Quarantine Quebec. Health Officer boards on arrival.

Sorel is also an organised quarantine sub-station. (See "Canadian Quarantine Requirements" for full particulars).
RADIO: St. Lawrence River Marine Traffic Control call sign VFN Sorel and VBK Three Rivers.
RADAR: Radar service may be obtained by VHF from Montreal (80 km.).
TUGS: Tugs are available all year round at Sorel. Their use is advisable for all berths in the Richelieu River, for berths in Lanctot Basin and at Section 5 for ships exceeding 250 ft. in length or having low manoeuvrability. They are also needed for large ships at Sections 15 and 21 when leaving with an Easterly destination.
BERTHING: Following depths are expressed in metres reduced to chart datum and must be used as guidance only. For up-to-date information refer to Canadian Marine Chart No. 1338 (Sorel Harbour).
Transport Canada Wharves:

Dock 5, berth 182.88 m. long, 9.14 m. depth. Dock 6, berth 106.68 m. long, 8.80 m. depth. Dock 7, berth 152.40 m. long, 8.53 m. depth. Dock 8, berth 160.02 m. long, 6.10 m. depth. Dock 9, berth 60.96 m. long, 6.10 m. depth. Dock 10, berth 160.02 m. long, 6.10 m. depth. Dock 16, berth 160.68 m. long, 4.88 m. depth. Dock 17, berth 213.36 m. long, 4.88 m. depth.
Les Elevateurs de Sorel Ltee Wharves: (Private Wharves).

Dock 11, berth 152.40 m. long, 7.32 m. depth. Dock 12, berth 106.68 m. long, 7.32 m. depth. Dock 13, berth 76.20 m. long, 7.32 m. depth. Dock 14, berth 187.45 m. long, 8.30 m. depth. Dock 15, berth 189.58 m. long, 10.67 m. depth.
Omnimar Inc. Wharf: (Private Wharf).

Dock 18, berth 167.74 m. long, 4.27 m. depth.
Marine Industries Ltd. Wharf: (Private Wharf).

Dock 19, berth 182.88 m. long, 6.10 m. depth.
Fer & Titane du Quebec Wharf: (Private Wharf).

Dock 20, berth 335.28 m. long, 9.14 m. depth. Dock 21, berth 335.28 m. long, 9.14 m. depth.
CRANES: Mobile cranes up to 150 tons capacity available from local firms.
BULK CARGO FACILITIES: (Public Wharves). Open storage space for approximately 20,000 tons available (75,000 sq.ft.)

(Private Wharves). Les Elevateurs de Sorel Ltee: Steel and concrete grain elevators 5,500,000 bushels capacity, loading rate 144,000 bushels/hr. Fer & Titane de Quebec: Electric mobile bridge capacity 900 t.p.h.
STEVEDORES: Available for loading and unloading at any berths.
MEDICAL: Doctors and hospitals facilities available.
DENSITY: Fresh water.
FRESH WATER: Available by pipe-line or tank-trucks at all berths.
FUEL: Available from major oil companies by tank-trucks. Can also be obtained by barges from Montreal (50 miles).
CONSULS: Almost all countries, nearest offices at Montreal.
REPAIRS/DRY DOCKS: Marine Industries Ltd. shops are equipped for steel shipbuilding, construction of engines and boilers and repair services of all kinds. The Company has two marine railways, one of which is the largest end-hauling marine railway in the world, capable of launching and dry-docking cargo ships up to 12,000 tons deadweight with transfer or building area admitting of the construction of 8 ships at the same time. Ships of 5,000 d.w.t or smaller can be launched on the second marine railway. The facilities include modern shops, gas and air plants, as required for the building and repairing of all types of hulls and machineries, while subsidiary and associated companies in the same vicinity for rolling mills, heavy and precision machinery, heavy forgings, all kinds of steel brass and metal castings, propellers, etc. Omnimar Ltd., has docking facilities for repairs afloat of equipment, engine and general ship repairs.
SURVEYORS: Lloyd's.
CUSTOMS: Sorel is a port of entry, customs board ships.
CUSTOMS ALLOWANCES: 200 cigarettes for each man, Officers may be allowed one bottle wine/spirit, Master up to five bottles.
REPATRIATION: Can be arranged through Department of Manpower and Immigration.
AIRPORT: Nearest at Montreal (Dorval) 70 miles.
TIME: GMT minus 5 hours. Daylight Saving Time: GMT minus 4 hours, applied from last Saturday of April until last Saturday of October each year.
HOLIDAYS: New Year's Day, Good Friday, Easter Monday, St. John the Baptist Day, Dominion Day, Labour Day, Queen's Birthday, Remembrance Day, Christmas Day, Boxing Day.
POLICE/AMBULANCE/FIRE: Police/Fire 742-5656; Ambulance 742-9441.
SERVICES: Ship's stores can be secured in Port. Tank cleaning equipment available.
SHORE LEAVE: Crew members allowed ashore. No restrictions.
REGULATIONS: Public Harbours Regulations.
AUTHORITY: Transport Canada – Canadian Coast Guard, Sorel Base, 15 Prince Street, Sorel, Quebec J3P 4J4. *Tel:* (514) 743-6881. *Contact:* M. Peloquin, Port Manager.

SQUAMISH, B.C.: 49.41 N. 123.10 W.

PORT LIMITS, DOCUMENTS, PILOTAGE, ANCHORAGE, RESTRICTIONS, HEALTH, See "Vancouver".
MAX. SIZE: LOA 700 ft.
TUGS: See "Vancouver".
BERTHING: One berth, length 450 ft. Depth alongside at LW 38 ft. Forest products mainly handled by ship's own gear. Fork lift trucks of 2,700 kg. – 11,300 kg. available.
CRANES: None available
MEDICAL: No advance notice required but in case of serious illness recommend Vancouver facilities.
TANKERS: No facilities.
DENSITY: 1025.
FRESH WATER: Ample supply available by 1.5 in. hose at 60 gallons per minute. $0.95 Canadian per metric ton.
FUEL, CONSULS, REPAIRS, DRY DOCK, SURVEYORS: See "Vancouver".
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: By Stevedores.
CUSTOMS ALLOWANCES: See "Vancouver".

REPATRIATION: No facilities.
AIRPORT: 50 miles to Vancouver Airport – regular airlines.
TIME: See "Vancouver".
HOLIDAYS See "Vancouver".
POLICE/AMBULANCE/FIRE: Police (966) 898-9611. Ambulance 911. Fire (966) 898-9666.
EMERGENCY CO-ORDINATION CENTRE: See "Vancouver".
TELEPHONES: Telephone can be put on board, $50 cost for connection.
SERVICES: None available.
BANKS: Bank of Montreal, Bank of Nova Scotia, Royal Bank of Canada.
SHORE LEAVE: No restrictions.
AUTHORITY: Transport Canada, P.O.Box 1941, Squamish, B.C. V0N 3G0. *Tel:* 892-3957. *Contact:* C. R. Patrick, Harbour Master.
Operator: Squamish Terminals Ltd, P.O.Box 1520, Squamish, B.C. V0N 3G0. *Tel:* (604) 892-3511. *Telex:* 04-53374. *Contact:* J. R. Wilburn, Traffic Manager.

STEPHENVILLE, Newfoundland: 48.30 N. 58.33 W.

(See Plan Book)

PORT LIMITS: Beginning at Indian Head (Lat. 48° 29′ 58″ N., Long. 58° 31′ 49″ W.); thence running true 210° for 1,700 yards; thence running true 320° for 6,000 yards; thence running true north for a distance of 2,100 yards more or less to the high water mark.
DOCUMENTS:
Completed Declaration of Health
Valid Derat Certificate
3 Crew Lists (Form 200)
3 Crew Declarations (Form Y14)
3 Ship's Stores (Form E–1)
3 Passenger Lists
Manifests
Clearance from Last Port
PILOTAGE: Compulsory. Pilot boards at Fairway Buoy. Pilot ordered by reporting via any coastal radio station by radiotelephone or radiotelegraph to Pilots, Stephenville. 48, 24 and 12 hour ETA required. Time used must be GMT. The Pilot at Stephenville guards Channel 16 (156.8 MHz.) and works Channel 11 (156.66 MHz.).
Harbour Pilot: Capt. Melbourne, Phone: 643-4056.
Stand by Pilots: Capt. W. Collins, Phone: 686-5046, Capt. D. Keeping, Phone: 686-5017.
ANCHORAGE: No sheltered anchorage in the harbour; vessels are exposed to prevailing westerly winds. Limited swinging room and poor holding ground.
RESTRICTIONS: Maximum recommended draft is 28 ft. Daylight sailings only. Channel has least width of 150 ft. with a length of 1.5 miles. Water depth at berth is 28 ft. with a tidal rise of 3 ft. – 4 ft. For any changes in depth restrictions, Mariners should obtain copies of the Canadian Hydrographic Services Sailing Directions for Newfoundland and Chart No. 4681 and contact the Harbour Master.
RADIO: Stephenville Marine Radio, call sign VOJ. Halifax Marine Radio is recommended for all messages.
BERTHING: 1 berth of 960 ft. Also dolphins used primarily for pulpwood discharge can accommodate vessels of over 600 ft. Max. draft at dolphins approximately 28 ft. (8.5 m.). Along docking face 29 ft. (8.8 m.). The largest vessel to enter port has been 640 ft. long and any anticipated larger vessels should be discussed with Port Officials.
STEVEDORES: Ordered by Agent.
MEDICAL: No advance notice required unless serious emergency. Hospital facilities available.
TANKERS: Tanker berth is the main government wharf (960 ft. long). Discharge lines are: 1×6 in., 1×8 in. and 2×10 in. The pipe-lines and nearby tanks are owned by Harmon Corporation and are leased to users.
DENSITY: Salt water.
FRESH WATER: Available from pipes on dock at $1.00 per ton. Water pipe is operated by the Town of Stephenville.
FUEL: Marine diesel available. Delivery by truck.
CONSULS: Nearest Consuls are situated in St. John's, which is approximately 500 miles away.
REPAIRS: Minor repairs are possible locally.
GANGWAY/DECK WATCHMEN: Usually crew.
OPENING/CLOSING HATCHES: Normally carried out by vessel's crew.
IDENTIFICATION CARDS: Not required.
REPATRIATION: Can be arranged.
AIRPORT: 5 miles from dock.
TIME: GMT less 3.5 hours. Clocks advanced 1 hour from last Sunday in April until first Sunday in October.
POLICE/FIRE/AMBULANCE: Police 643-2118, Fire 643-2176, Russell's Ambulance 643-2472, Hospital 643-5131
EMERGENCY CO-ORDINATION CENTRE: Coastguard, St. John's, Newfoundland. Tel: (709) 772-5151.
TELEPHONES: Can be arranged through Newfoundland Telephone Company Limited, Market Division, P.O.Box 98, Corner Brook, Nfld. Phone: 643-3197. Phone jack has already been installed on the dock.
SHORE LEAVE: No restrictions.
GENERAL: Ice is navigable throughout the Winter season. Extra information can be obtained from Ice Operations in St. John's – Newfoundland, Tel: 709-737-2083. Cables: Ice Operations – St. John's – Canadian Coast Guard.
AUTHORITY: Transport Canada, P.O.Box 1300, St. John's, Newfoundland A1C 6H8. *Tel:* (709) 772-5154. *Telex:* 016-4530. *Contact:* D. A. Lester, Regional Manager, Ports and Harbours.
AGENT: At present, the Harmon Development Corporation is acting as Agent for the port. Any special arrangements can be made through the corporation, which is a Provincial Crown Corporation. Address: Harmon Development Corporation, P.O.Box 328, Stephenville, Newfoundland, Canada A0N 1T0; attention Mr. J. Cochrane, Harbour Master, Tel: 709-643 2363 or 709-643 3771. Telex: 016-48135.

SUMMERSIDE, P.E.I.: 46.23 N. 63.47 W.

DOCUMENTS:
2 IMM.200. 1 Quarantine 2001. 1 Customs
3 E.1. 2 Passenger Lists. Document A.6.
PILOTAGE: 24 hours notice of ETA to Agent who notifies Pilot. Pilot boards Fairway Buoy about 6 miles from wharf.
ANCHORAGE: At Fairway Buoy in depths of 30 ft. – 35 ft.
MAX. SIZE: 550 ft. length, 75 ft. beam, 24 ft. draft.
HEALTH: Vessels coming from U.S.A. accepted without pratique. Vessel from other countries radio telephone for permission. See also "Montreal".
RADIO: Halifax N.S., Sydney N.S., Grindstone M.I., Charlottetown P.E.I.
TUGS: Tug available when in port.
BERTHING: Transport Canada Wharf: Length (West side) 600 ft. Depth at LW 19 ft. East side, length 600 ft. Depth at LW 19 ft.
Additional Wharf: Length 300 ft., depth 17 ft.
Holman Wharf: Length 300 ft., depth at LW 8 ft.
Queens Wharf: "L" shaped wharf, head length 155 ft., depth 5 ft.
STEVEDORES: 24 hours notice required.
MEDICAL: Hospital facilities available. Current vaccination/fever certificates required.
FRESH WATER: Available 30 t.p.h.
FUEL: Limited quantities by road tanker.
OPENING/CLOSING HATCHES: Crew/Stevedores.
CUSTOMS ALLOWANCES: Tobacco: 1 carton per man per week. Wine/Spirits: Spirits 40 oz. per man per week. Further allowances made if Master requests.
IDENTIFICATION CARDS: Passports required.
REPAIRS: Only minor repairs.
REPATRIATION: Can be arranged.
AIRPORT: Charlottetown Airport 39 miles away.
TIME: Atlantic Standard Time with daylight saving in Summer.
HOLIDAYS: New Year's Day; Good Friday; Victoria Day (19th May); Dominion Day (1st July); Remembrance Day (11th November); Thanksgiving (13th October); Labour Day (1st September); Christmas Day. Plus all Saturday afternoons and Sundays.
POLICE/AMBULANCE/FIRE: Police 436-9222; Ambulance dial "O" call operator; Fire 436-3333.
TELEPHONES: Telephones can be placed on board.
SHORE LEAVE: Crew allowed ashore.
AUTHORITY: Transport Canada, Linkletter Road, Summerside, Prince Edward Island. *Tel:* 436-3767. *Contact:* Leonce Arsenault, Harbour Master and Wharfinger, P.O.Box 1445, Summerside P.E.I. *Tel:* (Office) (902) 436-2924, (Home) (902) 436-2683.
AGENT: J. Lorne Driscoll, P.O.Box 1461, Summerside, P.E.I., Canada C14 4K4.

SYDNEY, N.S.: 46.09 N. 60.12 W. (See Plan Book)

DOCUMENTS:
Crew's Declaration Y.14 in triplicate.
Ship's Stores E.1 in triplicate.
Crew Tally IMM.201 in duplicate.
Report Inward A.6 in triplicate.
PILOTAGE: Compulsory pilotage distance is approximately 12 miles and administered under the Atlantic Pilotage Authority. The area for Cape Breton Pilot embarkation is Sydney Outer Buoy: Lat. 46° 22′ N., Long. 60° 08′ W. To avoid delay in obtaining a Pilot, Masters must report by message addressed to Pilots, through Sydney Radio VCO or any Coast Radio Station 24, 12 and 6 hours before vessel's ETA.
ANCHORAGES: The land-locked harbour affords safe anchorage for a large number of any size vessels with depths ranging from 40 ft. to 60 ft.
RESTRICTIONS: Berthing allowed day or night. "Harbour Ice", January to March, "Drift Ice" April to May. Navigable with aid of ice breakers requested from Ice Control at Sydney.
MAX. SIZE: Max. draft 37 ft. Governed by least depth in channel of 38 ft. at the lowest normal tides (average rise and fall 3 ft. – 5 ft.).
HEALTH: Sydney is an official quarantine station. Radio pratique obtained between 0900 and 1700 hrs. local time by radio message to "Quarantine Sydney". Information required from vessel is as follows:
Name and nationality of vessel.
Name of three previous ports called at during voyage.
Port of destination and name of Agent.
Nature of cargo.
Date and place of last deratting or exemption certificate.
Number of crew and passengers.
Condition of health of all on board with details of any sickness or death occurring during the voyage.
Vaccination status of crew and passengers.
The ETA and any other information that may be required by the Quarantine Officers.

The ship will require usual inspection on arrival. However, radio pratique will enable vessel to enter port, dock and commence loading or unloading operations prior to official quarantine clearance. Vessels which have not applied for radio pratique and all vessels with suspected infectious disease aboard will remain in quarantine until cleared.

RADIO:

Station	*Call Letters*	*Freq. kHz*
Sydney Radio	VCO	500
Grindstone Island	VCN	500
Canso Radio	VAX	500
Halifax Radio	VBO	530
Cape Race	VCE	500

TUGS: Not necessary for docking powered vessels.

BERTHING: *Syd-Port Industrial Park:*

Main Jetty: The outer face of the main jetty is 850 ft. long with a 36 ft. depth at LW. The inner face is 800 ft. with a 26 ft. LW depth.

Outer Quay: The length of the East face wall is 750 ft. with 20 ft. at LWOST. The North face wall is 600 ft. with a maximum LW depth of 20 ft. graduating to 10 ft. LWOST.

Inner Quay: The inner wall is 1,100 ft. long with 20 ft. LW depth.

Services: The services include fresh water, sewage, electric power, all weather paved roads joining the Trans Canada Highway network and 4,564 feet of rail sidings connecting to major Canadian and U.S. rail systems.

Sydney Steel Corporation Piers:

No. 1 Pier: Berthing length 425 ft. Depth at LW 28 ft. Now used primarily for the loading of coke oven by-products (light oil and coal tar). Equipped with railway connections and 4 in. pipe-line for fresh water.

No. 3 Pier: (Bulk Discharge Berth) Berthing length 700 ft. Depth at LW 41 ft. Equipped to handle bulk cargoes by self-unloading boom type vessels and bulker type vessels. Self-unloading discharge into hopper and main in-haul conveyor system designed to handle iron ore pellets at a rate of 3,000 t.p.h. and coal at a rate of 1,500 t.p.h. Bulkers are unloaded by one 8 ton capacity Mobile Grab-Type Unloading Tower at a rate of approximately 7,000 tons per day. Travel distance 328 ft. Pier is also equipped with a 6 in. pipe-line for water, 12 in. pipe-line for diesel fuel and a 16 in. pipe-line for bunker fuel.

No. 4 Pier: (Steel Loading Berth) Berthing length 715 ft. Depth at LW 41 ft. Equipped with one mobile portal type 45 ton capacity crane to handle the loading of finished and unfinished steel products (including 25 m. steel rails) and the discharging of scrap and other general cargoes. Crane equipped with a 120 ft. hinged boom with a 60 ft. back reach. Travel distance 430 ft. Pier equipped with three railway tracks under centre section of crane and one track on the water side. Fresh water is available along with pipe-line for marine diesel and bunker fuel.

Cape Breton Development Corporation Coal Piers:

Coal Pier No. 4 has a berthing length of 810 ft. with 30 ft. of water alongside at LW. There is a 15,000 short ton storage pocket for coal and coke with an additional 2,000 tons loaded car storage over full bin. A conveyor belt system carries product to the pier head where it is boom loaded into vessels at an average rate of 2,000 short tons per hour. This pier, the main of a series of three is connected with the CN railway system. Equipped with 4 in. line for fresh water.

Sydney Government Wharf:

The berthing length of the West face is 794 ft. with a 28 ft. LW depth. The South face is 300 ft. long sloping off to a 15 ft. LW depth. Facilities include a bonded warehouse (100 ft. × 200 ft.) and 100,000 square footage of bonded open storage with a rail spur line on the waterside with tailgate delivery in the rear. Fresh water and diesel bunkers also available.

STEVEDORES: Available by phoning Rowe Freight & Marine Service Ltd., (Tel: (902) 564-8452 Telex: 019-35275) 24 hours before ETA of vessel. Ships cargo gear is usually employed but mobile cranes up to 125 tonnes are available at short notice for extended hire.

MEDICAL: Two hospitals.

TANKERS:

Irving Oil Pier: Berthing length 24 ft. Depth alongside 23 ft. at LW. 2×8 in. pipe-lines.

Petrofina Wharf: "T" head pier. Berthing length 74 ft. Depth alongside 22 ft. 1×10 in. pipe-line.

DENSITY: Average 1023.

FRESH WATER: Available anytime, supplied through 2.5 in. hose at rate of 25 t.p.h., cost depending on tonnages, from $1.00 to 0.45 cents per ton, plus labour.

FUEL: Marine diesel, bunker fuel and galley fuels are obtainable by pipe-line at Pier Nos. 2, 3 and 4. Rate of bunkering approximately 100 t.p.h.

Suppliers: Northern Petroleum Ltd., 48 Fairview Street, Sydney, N.S. B1P 1P9. Tel: (902) 564-5152.

Gulf Canada, 2020 University Street, Montreal, P.Q. H3A 2L4. Tel: (514) 284-7837.

Petro Fina Canada Inc., Marine Terminal, Sydney River, N.S. Tel: (902) 539-6446.

Irving Oil, Bulk Plant, Kings Rd., Sydney, N.S. Tel: (902) 564-5566.

GANGWAY/DECK WATCHMEN: Crew sufficient.

OPENING/CLOSING HATCHES: Crew.

CUSTOMS ALLOWANCES: 200 cigarettes or 0.5 lb. tobacco or 15 cigars, each officer. 40 oz. of spirit per officer.

IDENTIFICATION CARDS: Seaman's identity cards.

CONSULS:

British and Canadian Shipping Master.
Portugal Vice-Consul 794-3515.
Honorary French Consular Agent, North Sydney 794-4800.
Norwegian Vice-Consul, Sydney 564-9288.

REPAIRS/DRY DOCKS: The Sydney Engineering and Drydocks consist of two wharfs (370 ft. and 425 ft. long) with marine rail slips of 3,000 and 1,200 ton capacity and a 45 ton wharf crane. They have 40,000 sq. ft. of production plants using skilled marine tradesmen. Also see "North Sydney".

SURVEYORS: See "North Sydney".

REPATRIATION: Can be arranged.

AIRPORT: Served by Air Canada, Air St. Pierre and Eastern Provincial Airways.

TIME: Sydney is on Atlantic Standard Time from the last Sunday in October to the last Sunday in April, and on Atlantic Daylight Time from the last Sunday in April to the last Sunday in October. GMT minus 4 hours on Atlantic Standard Time and GMT minus 3 hours on Atlantic Daylight Time.

HOLIDAYS: Christmas Day; New Year; Good Friday; Dominion Day; Thanksgiving Day; Labour Day. No work as a rule from 0800 to 0800 hrs. next day.

POLICE/AMBULANCE/FIRE: Police 564-4415; Ambulance 564-5507; Fire 539-3552.

EMERGENCY CO-ORDINATION CENTRE: Canadian Coast Guard: Oil spills and other emergencies from Sydney Harbour Area (no charge) ask operator for Zenith 49000.

SERVICES: Compass adjusting, tank cleaning.

SHORE LEAVE: Allowed.

AUTHORITY: Transport Canada, P.O.Box 548, Sydney, Nova Scotia BIP 6H2. *Contact:* W. F. Rowe, Harbour Master. Tel: (902) 564-8427.

TADOUSSAC, Quebec: 48.08 N. 69.43 W.

LOCATION: Situated on North shore of Saguenay River, about 5 miles North of junction with St. Lawrence River.

ANCHORAGES: Available in Tadoussac Bay with depths from 7 – 18 fathoms.

RESTRICTIONS: Navigation season, April 1st to November 30th.

MAX. SIZE: Max. draft alongside 20 ft.

RADIO: Mont-Joli (VCF).

TUGS: Available, not normally required.

BERTHING: Transport Canada Wharf, length 235 ft., depth alongside 28 ft. LW., situated in Tadoussac Bay

FRESH WATER: Available.

AUTHORITY: Transport Canada, Region Des Laurentides, 104 Dalhousie, Quebec. P.O.Box 2055, Quebec Terminus, Quebec G1K 7M9. *Tel:* 694-3680 *Telex:* 051-3051. *Contact:* Denis Pelletier, Operations and Properties Manager. Pierre Tremblay, Harbour Master, Tadoussac. *Tel:* 235-4209.

THOROLD, Ontario: 43.05 N. 79.10 W.

LOCATION: Town on Welland Canal, about 8 km. South of Port Weller and 32 km. North of Port Colborne, both ports being the entrances of the Canal linking Lake Ontario with Lake Erie.

RESTRICTIONS: Channel depth: Maximum permissible draft in the Welland Canal and approaches is 7.92 m. (26 ft.). Navigation season: April 1st to December 30th on the average.

HEALTH: Incoming vessels obtain clearance at Quebec City when coming from a foreign port.

RADIO: Ship-to-shore communications: Through Toronto Coast Guard (VBG) or Buffalo (WBL).

BERTHING:

Industrial Dock, Wharf No. 5:

Type: Coal.
Equipment: Self-unloaders.
Length: 152.4 m. (500 ft.)
Depth: 5.50 m. (18 ft.)
Operator: Industrial Docks & Supplies Ltd.

Industrial Dock, Wharf No. 6:

Type: Various Bulk and General Cargo Commodities.
Equipment: 1–2.7 ton Crawler Crane, 1–3.2 ton Crawler Crane.
Length: Dock Wall 121.9 m. (400 ft.), Berth 342.9 m. (1,125 ft.)
Depth: 8.23 m. (27 ft.)
Capacity: 90,000 tonnes.
Operator: Industrial Docks & Supplies Ltd.

Ontario Paper Pulpwood Dock, Wharf No. 7:

Type: Unloads Pulp and Chemicals.
Equipment: Ship's Gear
Length: 186 m. (610 ft.) plus 210 m. (690 ft.) between dolphins at East end.
Depth: 8.23 m. (27 ft.)
Capacity: 90,000 Cords Pulpwood.
Operator: The Ontario Paper Company Ltd.

Ontario Paper Dock, Wharf No. 8:

Type: Loads Newsprint.
Equipment: 2×2.7 ton Orton Crane Hoists.
Length: 132.3 m. (434 ft.)
Depth: 7.3 m. (24 ft.)
Capacity: 3,600 tonnes in Newsprint.
Operator: The Ontario Paper Company Ltd.

Beaverboard Dock, Wharf No. 9:

Type: General, Bulk and Fuel Oil
Equipment: Self-unloaders or Rental Crane
Length: 306.3 m. (1,005 ft.)
Depth: 8.23 m. (27 ft.)
Operators: Walker Bros. Quarries.; St. Catharines Fuels (CFMG INC.), St. Catharines; Industrial Docks & Supplies Ltd.

MEDICAL: Maplehurst Hospital, Thorold; St. Catharines General Hospital, and Hotel-Dieu Hospital, both in St. Catharines.
REPAIRS: Minor repairs possible.
DRYDOCKS: None.
SERVICES: Supplies available.
HOLIDAYS: Customs and Canal Officials always available during the season.
AUTHORITY: St. Lawrence Seaway Authority, Western Region, P.O.Box 370, 508 Glendale Avenue, St. Catharines, Ontario L2R 6V8. *Tel:* 416-684 6571. *Contact:* M. S. Campbell, Regional Vice-President.

THUNDER BAY (Lakehead Harbour): 48.27 N. 89.13 W. (See Plan Book)

For important General Information refer to "St. Lawrence Seaway".
DOCUMENTS: As inland Port all documentation carried out by Authorities in Montreal, prior arriving. Only when vessels have called at United States Port after departing Montreal, and prior arriving at Thunder Bay, will any changes in documentation be necessary; which will consist of a United States Customs Clearance. Certificates to be available on board:

Immigration papers.
One copy QS 2 (Health Certificate).
Three copies of Ships' Stores.
Crew Declaration.
Customs Clearance.

All of the above will have been stamped in Montreal.
PILOTAGE: Pilots are obtained by Agent at Master's request, at which time the location of boarding the ship will be stipulated. Ship's Masters are able to contact Agent by ship-shore duplex through VBA Marine Radio, Thunder Bay.
ANCHORAGE: Anchorage areas defined by Lakehead Harbour Commission but due to large area and number of entrances to Harbour, Masters are permitted considerable latitude in making own decisions. Usual areas are approximately 1 mile outside of Harbour breakwall, free of shipping lanes. However, Masters should be guided by the advice of Lakehead Harbour Commission Radio, VDX 30.
HEALTH: Pratique granted at Montreal.
RADIO: Two radio stations; VBA Thunder Bay, is Department of Transport station offering duplex services; VDX 30, Lakehead Harbour Commission is operated for the sole purpose of monitoring vessel arrivals and departures.

VBA and VDX 30 both operate 24 hours per day during shipping season on following frequencies:

VBA (AM) Channels 51, 52, 57, 58, 59 and 81
(FM) Channels 12, 26, and 28
VDX 30
(FM) Channels 12, 16 and 14

VBA: Thunder Bay Coast Guard Radio
c/o Telecommunications Area Manager
Transport Canada
Thunder Bay Airport
(807) 577-2645

VDX 30: Lakehead Harbour Commission
P.O.Box 2266
Thunder Bay, Ontario
(807) 344-3594

TUGS: Arranged mutually by ship Masters and Agents on arrival in port. Ship lines used. Four tugs available.

Tug Service: Gravel & Lake Services
P.O.Box 2180
Thunder Bay, Ontario
(807) 345-7305
Western Engineering Services Ltd.
274 Kingston Street
Thunder Bay, Ontario
(807) 577-8411

BERTHING: *North Section* is protected by a breakwall. Refer to Canadian Hydrographic Chart No. 2314 for water depths.

The Keefer Terminal is the principal general cargo berth available at Thunder Bay. the ocean vessel shed is 121.9 m. long, has a dock 198.1 m. long with a maximum apron width of 19.8 m. All types of import and export general cargo can be handled at this Terminal. Rental mobile cranes are available for handling lifts up to 12 tons.

The CNR has a bulk dock with a berthing length of 731.5 m. It can accommodate four vessels at one time with 200 loading chutes available. The vertical height from water level to spout is 13.72 m.

South Section is comprised of the Kaministiquia River, Mission River. In general terms, for most vessels two tugs are required for safe river navigation.

There is one open storage Bulk berth, Valley Camp Ltd. on the Mission River. This dock has two overhead gantry cranes with lift capacity of one, 12 – 14 tons and the other 22 tons. The berth is 791 m. long. 3 berths.

Berthing Facilities:

Main Harbour North:

Abitibi-Price – Thunder Bay Mill	
Berthing length 160 m.	Forest Products
Berthing length 22 m.	Coal Wharf
Port Arthur Shipbuilding Co. (PASCOL)	
Dry dock 228 m.	Shipbuilding
Marginal dock 427 m.	and Repairs
United Grain Growers "A"	
Berthing length 320 m.	Grain
Saskatchewan Wheat Pool 4A and 4B	
Berthing length 320 m.	Grain
Richardson Terminals Ltd.	
Berthing length 396 m.	Grain
D.D.S. Salvage Ship Repairs Inc.	
Berthing length 250 m.	Ship Repairs

Main Harbour Centre:

Saskatchewan Wheat Pool 6	
Berthing length 292 m.	Grain
CNR High Dock	
North side berthing length 463 m.	Dry Bulk Cargo
South side berthing length 463 m.	
Northern Wood Preservers	
Berthing length 189 m.	Forest Products
Manitoba Pool Elevator 3	
Berthing length 346 m.	Grain
Canada Malting Co. Ltd.	
Berthing length 305 m.	Grain
Saskatchewan Wheat Pool 7A	
Berthing length 500 m.	Grain
Saskatchewan Wheat Pool 7B	
Berthing length 510 m.	Grain
United Grain Growers "M"	
Berthing length 378 m.	Grain
Manitoba Wheat Pool	
Berthing length 436 m.	Grain
Parrish & Heimbecker	
Berthing length 350 m.	Grain

Main Harbour South:

Transport Canada – Coast Guard	Government Dock
Berthing Length 122 m.	Helicopter Landing Pad
Keefer Terminal	
Berthing length 196 m.	General Cargo Facility
Berthing length 365 m.	Ocean Freight Lake Freight
Berthing length 215 m.	Marginal Wharf, Mobile Cranes, Water, Telephone, & Hydro Storage
Newman Harbour Terminals & Transportation (At Keefer Terminal)	Ro/Ro service for transport trailers

Delta Harbour:

Imperial Oil Ltd.	Berthing for own
Berthing length 2 dolphins	Tankers Fuelling Facilities
Thunder Bay Terminals Ltd.	Dry Bulk Transhipment
Berthing length 223 m.	Facilities
Incan Superior Ltd.	Ro/Ro Service for Rail
Berthing length 366 m.	Cars
Husky Oil Ltd.	Berthing for own
Berthing length 22 m.	Tankers
Shell Canada Ltd.	Berthing for own
Berthing length 28 m.	Tankers
Texaco Canada Inc.	Berthing for own
Berthing length 23 m. and 2 dolphins	Tankers
CP Rail Wharf	
Berthing length 223 m.	Open Dock
St. Lawrence Cement Co.	
Berthing length 90 m.	Dry Bulk Cargo Dock
Saskatchewan Wheat Pool 8	
Berthing length 305 m.	Grain
Mid Canada Marine Works	Ship Repairs
Berthing length 283 m.	Hydro & Telephone
Allied Chemical Co. Ltd.	
Berthing length 174 m.	2 Breasting Dolphins
Superior Grain By-Products	
Berthing length 198 m.	Grain By-Products
Western Grain By-Products	
Berthing length 160 m.	Grain By-Products
N.M. Paterson & Sons	
Berthing length 274 m.	Repair Dock
Western Metals Corp.	
Berthing length 120 m.	Shipbreaking facility
Dow Chemical Ltd.	
Berthing length 60 m.	Marginal Dock
Great Lakes Forest Products Ltd.	
Berthing length 350 m.	Forest Products

Gulf Canada Ltd. Berthing length 46 m.	Berthing for own Tankers
Valley Camp "A" Berthing length 223 m.	Dry bulk transhipment facility
Valley Camp "B" Berthing length 389 m.	Dry bulk transhipment facility
Ontario Hydro Generating Station Berthing length 207 m.	Marginal Dock
Saskatchewan Wheat Pool 15 Berthing length 411 m.	Grain
Cargill Grain Ltd. Berthing length 518 m.	Grain
Abitibi-Price (Mission Mill) Berthing length 646 m.	Marginal Dock

BULK HANDLING FACILITIES:

Grain Elevators: Saskatchewan Pool 8, Cargill, Saskatchewan Co-op 15, Parrish & Heimbecker (Superior), Manitoba Pool 1, United Grain Growers "M", Saskatchewan Pool 7, Canada Malting, Manitoba Pool 3, Saskatchewan Pool 6, Manitoba Pool 2, Richardson, Saskatchewan Pool 4A, Saskatchewan Pool 4B, United Grain Growers "A", Superior Grain By-products.

Capacity for over 85 million bushels.

CRANES: *Crane & Equipment Rentals:* Thunder Bay Harbour Improvements Ltd., P.O.Box 2119, Thunder Bay, Ontario. Tel: (807) 344-7294.

MEDICAL: All facilities available and may be arranged through Agent or by calling 623-7451.

DENSITY: Fresh water port. No tide.

FRESH WATER: Available. Contact: Keefer Terminal, P.O.Box 2266, Thunder Bay, Ontario. Tel: (807) 343-3594.

FUEL: Light diesel available by tank truck. Bunker "C" only in emergencies. Contact: Imperial Oil Limited, 1020 Pacific Avenue, P.O.Box 632, Thunder Bay, Ontario. Tel: (807) 623-1551.

GANGWAY/DECK WATCHMEN: May be arranged through Agent.

OPENING/CLOSING HATCHES: Normally done by crew.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes or 50 cigars every 7 days. Spirit/Wine: Officers: 1 bottle liquor each 7 days. Crew: Beer only, at Master's discretion.

CARGO GEAR: Normal safety certificate only required. No special port regulations.

CONSULS: Following countries are represented at Lakehead:
Denmark, Finland, Greece, Italy, Netherlands and Norway.

REPAIRS: Full repairs available. Includes mobile equipment by both land and water conveyances.

Ship Repair and Building: PASCOL, P.O.Box 2690, Thunder Bay, Ontario. Tel: (807) 683-6261.

D.D.S. Salvage & Ship Repairs Inc., P.O.Box 2717, Thunder Bay, Ontario. Tel: (807) 345-3661.

Western Engineering Services Ltd., 247 Kingston Street, Thunder Bay, Ontario. Tel: (807) 577-8411.

Mid-Canada Welding Inc., 580 New Vickers Street, P.O.Box 130, Thunder Bay, Ontario. Tel: (807) 623-9325.

Western Metals Corporation Ltd., 700 Montreal Street, Thunder Bay, Ontario. Tel: (807) 577-8458.

SURVEYORS: *Surveyors & Weighers (Consulting):* SGS Supervision Services Inc., 203 Briar Bay, P.O.Box 1101, Thunder Bay, Ontario. Tel: (807) 577-5751.

Thunderbell Marine Consultants, 202-244 Camelot Street, P.O.Box 2116, Thunder Bay, Ontario. Tel: (807) 344-7442.

Steamship Inspection: Transport Canada, 325-33 S. Court Street, Thunder Bay, Ontario. Tel: (807) 345-6953.

DRY DOCKS: One available, length 227.69 m. by 29.87 m. Full service machine and welding shops on site.

AIRPORT: Served by regular airlines with connections to any destination.

TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end October, clocks advanced 1 hour.

HOLIDAYS: During shipping season from April to mid-December on which stevedores do not work: May 24th, July 1st, September 1st, and Thanksgiving Day (October). Work can be arranged at overtime rates.

POLICE/AMBULANCE/FIRE: Thunder Bay City Police Tel: 623-6471. Fire and Ambulance contacted most easily through "VBA" Lakehead or Tel: 623-5123 and 623-4542 respectively.

TELEPHONES: Telephones at Keefer Terminal only.

TELEPHONE NUMBERS: Lakehead Harbour Commission 344-3594. *Note:* Lakehead Harbour Commission, Harbour Master 344-3594, Extension 4, or VHF Channel 16.

SERVICES:

Compass Repairs: Sperry Marine Systems, 675 Mountain Road, Thunder Bay, Ontario. Tel: (807) 622-4207.

Mr. Ron Thomson (setting only), 36 McKibbon Street, Thunder Bay, Ontario. Tel: (807) 344-6481.

Garbage Removal: Thunder Bay Marine Services Ltd., P.O.Box 2565, Thunder Bay, Ontario. Tel: (807) 344-9221.

Radio Repairs: Thunder Bay Communications, 1135-A Russell Street, Thunder Bay, Ontario. Tel: (807) 623-1211.

Miskelly's Electronics Limited, 60 Squier Street, Thunder Bay, Ontario. Tel: (807) 345-3641.

Missions to Seamen: Missons to Seamen, Keefer Terminal, P.O.Box 3192, Thunder Bay, Ontario. Tel: (807) 344-8241.

Ship Chandler: Frank's Locker Service, 142 S. Hardisty Street, Thunder Bay, Ontario. Tel: (807) 623-4322.

Waste Removal: A-1 Sewage Services Ltd., R.R. No. 5, Highway 17, Thunder Bay, Ontario. Tel: (807) 939-2712.

Potter Plumbing Services Ltd., R.R. No. 1-2400 Rosslyn Road, Thunder Bay, Ontario. Tel: (807) 577-5221.

GENERAL: All vessels entering, moving in, or departing Lakehead Harbour required to contact VDX 30 prior making such move. Initial contact must be made before entry from area designated as "Welcome Islands" giving particulars of destination within Harbour and routes to be traversed.

SHIPMASTER'S REPORT: June 1980.

Port Limits: Consist of the area surrounded by the chain of islands of which "The Sleeping Giant" is the largest.

Documentation: Generally dealt with at Montreal but Customs, Immigration may board. The bond can be opened after Montreal and sealed again at Thunder Bay.

Pilotage: Arranged in advance by Agent in collaboration with Seaway Authority.

Anchorages: Within port limits are numerous but most favourable within 1 mile of breakwater at the Northern end. Care should be taken to avoid fouling the breakwater entrances.

Max. Size: Loading draft limited by Seaway Authority at 26 ft. 00 in. on arrival at Lock 8, Welland Canal. Size of vessel limited by Seaway Authority.

Pratique: Through Montreal, where vessel anchors prior to seaway passage.

VHF: Communication through Channels 16, 9, 6, 14, "Thunder Bay Port Control" or "Pilot".

Tugs: Two of 800 h.p. each. Use ship's lines for securing.

Bridges: Minimum bridge height 130 ft. above water level.

Medical: Seven hospitals.

Density: Fresh water.

Fuel: None except in emergency.

Consuls: None.

Repairs: Minor repairs can be undertaken.

Gangway/Deck Watchman: Unnecessary.

Hatches: Opening and closing by ship's crew.

Customs: Allowance consistent with Montreal (i.e. 1 bottle of spirits and 300 cigarettes).

Cargo Gear: Discharge by ship's gear or mobile crane (expensive).

Airport: Locally with service to all major airports in Canada.

Repatriation: Possible.

Telephone: Facilities at each terminal, none on board.

Shore Leave: Unrestricted.

Identification Cards: None issued locally, however advise taking own ashore.

General: Loading grain vessel should be clean on arrival and ready for inspection by Port Warden. Grain loading documents should be completed prior to arrival.

AUTHORITY: Port of Thunder Bay, Lakehead Harbour Commission, P.O.Box 2266, Thunder Bay, Ontario P7B 5E8. *Tel:* (807) 344-3594. *Telex:* 073-4347. *Contact:* P. R. Cook, Port Manager, Captain R. T. Legros, Harbour Master.

TORONTO, Ontario: 43.40 N. 79.25 W. (See Plan Book)

For important general information refer to "St. Lawrence Seaway".

DOCUMENTS: Master should prepare for boarding of Customs, Immigration Officers:

Customs: Crew Declaration Lists (in triplicate) and Ship Store Lists (in triplicate).

Immigration: Crew List and Passenger List (in duplicate).

PILOTAGE: As required by Great Lakes Pilotage Authority.

ANCHORAGES: Vessels anchor in Humber Bay or in Inner Harbour. Anchorages allotted by the Harbour Master.

RESTRICTIONS: Vessels may enter port area at any time.

MAX. SIZE: The port has facilities to accommodate any vessel which can navigate the St. Lawrence Seaway Locks.

Max. size of vessels permitted to transit the Seaway:

- *(a)* Ships not exceeding 730 ft. overall and 75 ft. 6 in. extreme breadth may transit.
- *(b)* Masts must not exceed 117 ft. above the water level.
- *(c)* Max. draft 26 ft.

HEALTH: See "Montreal".

RADIO: Controlling radio station in the Toronto area is VBG Toronto. A port communications centre is located in the Harbour Master's Office and operated for emergency, safety and operational requirements. Ships entering Toronto Harbour should contact the Toronto Harbour Master's Office for information by radio telephone. Call sign XJF on frequencies:

156.8 MHz – Safety and Calling
156.6 MHz – Working
156.7 MHz – Alternate Working

TUGS: Not normally required but available. Tugs use ship's lines.

BERTHING: 20 berths available, 2 of which are Ro/Ro berths.

BRIDGES: Two bridges – Ship Channel Bridge and Keating Channel Bridge. Both lift bridges, no height restriction.

CRANES: Stationary dockside crane, capacity 300 short tons at Marine Terminal 35, floating crane 50 ton capacity and mobile crane 40 ton capacity available.

STEVEDORES: General rule is 24 hours notice.

To work ship at 1300 hrs., order gangs by 1030 hrs. the same day.
To work ship at 1800 hrs., order gangs by 1600 hrs. the same day.
To work ship at 0800 hrs., order gangs by 1530 hrs. previous day.

SPECIALISED CARGO HANDLING FACILITIES: The following companies offer berthage and storage for the bulk commodities indicated:

Liquid Chemicals. Allied Chemical Co., Domtar (no waterside storage tanks, trucked directly from vessel). Liquiterminals at Berth No. 425.

Cement. Lake Ontario Cement, Canada Cement Lafarge.

Molasses. Canada West Indies Molasses.

Oil. Texaco, Imperial Oil, Sun Oil, Canadian Fuel Marketers, BP, Gulf, Shell, Roy-L Canadian Fuel, Milnes Fuel Oil, Caloil.

Salt. Canadian Salt Co., Sifto Salt, Iroquois Salt.

Chemicals. Domtar.

Sugar. Redpath Sugars Ltd.

Vegetable Oils. Rothesay Concentrates Co. Ltd., Liquiterminals Ltd., Victory Soya Mills.

Grain. Toronto Elevators Ltd., Victory Soya Mills; Canada Malting Ltd. Total capacity: 4 million bushels.

MEDICAL: Doctor and hospital facilities available.

TANKERS: Diameter of load/discharge lines are the American Standard 8 in. Max. draft at berths is 26 ft.

DENSITY: Fresh water.

FRESH WATER: Available at all berths.

FUEL: In most cases, vessels bunker in Montreal. Fuel available at 12 hours notice, either by road tanker or at oil berths.

Shipmaster's Report: Fuel and lub-oils only delivered by road tankers and vessels are not allowed to bunker while alongside Redpath Sugar Berth. Bunkers not available on Sundays and holidays due to Department of Transportation regulations ruling that no trucks are allowed on highways those days.

GANGWAY/DECK WATCHMEN: Crew member or hired by Agent.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CERTIFICATES:

Certificate of Registry.
Articles of Agreement.
Log Book.
Safety of Life at Sea.
Safety Equipment Certificate.
Safety Construction Certificate issued by the Country to which the ship is registered.

CUSTOMS ALLOWANCES: Tobacco, Crew entitlement on first arrival in Canada – 200 cigarettes, 50 cigars, 2 pounds of tobacco. Wine and/or Spirit, Crew entitlement on first arrival in Canada – 40 oz. of spirits, liquors or wines.

CARGO GEAR: Vessel requires a tackle equipment book and a certificate covering cargo equipment which must be kept up to date and notated every 12 months by a competent person. Port of Toronto has modern equipment including stationary Atlas crane, 300-ton capacity; mobile container crane designed for loading and unloading 20 ft. and 40 ft. containers; 56-ton overhead lift truck equipped with a 40 ft. spreader frame. Two additional container handlers and 50-ton floating crane. Private cranes, ranging in capacity from 20 tons to 150 tons are available by arrangement.

IDENTIFICATION CARDS: Visitor passes available from port police office.

CONSULS:

Belgium
Brazil
Colombia
Costa Rica
Cuba
Denmark
Ecuador
El Salvador
Finland
France
Germany
Greece
Guatemala
Israel
Italy
Japan
Lebanon
Mexico
Netherlands
Nicaragua
Norway
Peru
Portugal
Spain
Sweden
Switzerland
Thailand
Turkey
United States
Yugoslavia

REPAIRS: Most repairs not requiring dry dock can be carried out in Toronto. Nearest dry dock is located at Port Weller, 30 miles distant.

REPATRIATION: All facilities.

AIRPORT: (1) Toronto Island Airport located at Western end of harbour. General aviation only with regular airlines.

(2) Toronto International Airport approximately 15 miles distant. Airport is served by nine regular airlines.

TIME: GMT minus 5 hours. Two alterations made to clocks during year (1) Last Sunday morning in April, Eastern Standard Time to Eastern Daylight Time 1 hour ahead. (2) Last Sunday morning in October, Daylight Time to Eastern Standard Time 1 hour back.

HOLIDAYS: Work can be arranged on any holiday at double time rate with the exception of Labour Day which is the first Monday in September of each year. No work is done on this day.

POLICE/AMBULANCE/FIRE: Emergency numbers as follows: Marine Unit 967-2680; Port Police 863-2137; Emergency No. 911.

TELEPHONES: Arrangements not available for placing on board.

SHORE LEAVE: No restrictions.

AUTHORITY: The Toronto Harbour Commissioners, 60 Harbour Street, Toronto, Ontario, Canada M5J 1B7. *Tel:* (416) 863-2000. *Telex:* 06-219666. *Cables:* Torport or Worldtrade Toronto. *Contact:* John Jursa, Director – Public Affairs.

TROIS RIVIERES, Quebec: 46.22 N. 72.34 W.

(See Plan Book)

DOCUMENTS:

2 sets Crew Lists.
2 sets Passenger Lists.
3 sets Customs Documents.
3 copies Health Documents.
6 sets Manifests.
6 sets Bills of Lading.
3 sets Ship's Papers.

PILOTAGE: Pilots take charge of vessel at Quebec for Trois Rivieres destination. See "Quebec" for further information.

ANCHORAGES: No vessel shall, except in an emergency, anchor within the harbour without prior permission from the Port Manager and then only at such place as is assigned. The anchorage area used for Trois-Rivieres is located approximately 2 miles up river.

RESTRICTIONS: Port open to navigation 12 months of the year. From January – March inclusive, vessels should be reinforced for ice.

MAX. SIZE: Max. draft 10.6 m. (no tide).

HEALTH: Trois-Rivieres is a Port of Entry. Port doctor at the service of vessels. Also see "Montreal".

RADIO: St. Lawrence River Marine Traffic Control call system letters VBK Trois-Rivieres.

TUGS: Not usually considered necessary for berthing ships. However tugs can be made available upon advance notice.

BERTHING: 20 berths are available, including 16 open and 4 shedded. Total berthing length: 3,318 m., including 2 private berths.

Ports Canada Facilities:

Berth Number (usual name)	*Wharf Length (m.)*	*Depth at LW (m.)*	*Remarks*
1	152.4	9.1	Shed
2	121.9	9.1	
3	217.9	9.1	
4	117.3	6.4	
6	91.4	6.4	
7	91.4	6.4	
9	99.0	6.4	
10	251.0	10.6	2 Sheds
11	229.0	10.6	Shed/Ro-Ro ramp
13	182.9	9.1	Shed
14	152.4	10.6	Shed
15	121.9	10.6	
16	175.3	10.6	
17	221	9.1	
19	221	9.1	
20	221	10.6	
Cap-de-la-Madeleine	122.5	9.1	
Ste Angèle	197.8	4.8	

Private Facilities:

Name of Berth	*Length (m.)*	*Depth LW (m.)*	*Remarks*
Canadian International Paper Company's Wharf	226.8	9.1	Receiving pipe-line for bunker oil. 4 × 2.5 tons cranes for pulpwood
Consolidated Bathurst (Wayagamack Division) Wharf	103.6	8.5	Receiving pipe-line for Bunker oil

Grain Facilities:

Elevators	*Capacity in tonnes*	*Loading galleries at berth*	*Loading capacity tonnes per hour*	*Remarks*
No. 1				
No. 2				2 Marine legs at Berth 17
	163,000	16	2,100	
No. 3				Unloading capacity 1,960 tonnes per hour

CRANES: Mobile cranes (private) up to capacity 200 tons available.

STEVEDORES: Stevedores available through local stevedoring firms.

MEDICAL: If medical service is required upon arrival, call through No. 7 (St. Lawrence River Marine Traffic Control System). Hospital facilities available.

TANKERS: Diameter of oil lines 8 in. and 12 in. No slop discharge facilities. 7 tanker berths – 5 for 30 ft. draft and 2 for 35 ft. draft.

FRESH WATER: Hoses connected to harbour hydrants at 14 berths; rate 20 t.p.h.

FUEL: Certain types of fuel oil, in quantity, supplied to ships by Gulf Oil Canada Ltd. Diesel oil is also available.

GANGWAY/DECK WATCHMEN: Not necessary except if dangerous cargo on board.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes each and/or 2 lb. tobacco. Wine and/or Spirits: One bottle each.

IDENTIFICATION CARDS: Seamen's card and/or passport.

CONSULS: At Montreal.
DRYDOCKS: None.
REPAIRS: Minor repairs done by local machine shops.
REPATRIATION: Can be arranged.
TIME: EDST from last Sunday of April to last Sunday of October, then normal EST.
AIRPORT: 5 miles distant. No scheduled flights.
HOLIDAYS: New Year's Day; Easter Monday; Confederation Day; Thanksgiving Day; Christmas Day; Good Friday; Queen's Birthday; Labour Day; Remembrance Day. One Civic Holiday taken June 24th.
POLICE/AMBULANCE/FIRE: Police and Fire 374-3535; Ambulance 373-0505, 376-1212, 376-1286; Poison Treatment 374-6211.
SERVICES: Compass adjusting only.
SHORE LEAVE: Members allowed ashore.
AUTHORITY: Ports Canada, Port of Trois-Rivieres, 1545 du Fleuve, P.O.Box 999, Trois-Rivieres, Quebec G9A 5K2. *Tel:* (819) 378-3939. *Telex:* 05-837226. *Contact:* Paul Alain, Eng., Port Manager.

TWILLINGATE, Newfoundland: 49.40 N. 54.45 W.

(See Plan Book)

PILOTAGE: Pilotage is not compulsory, however, a licensed Pilot is available if desired. A Pilot can be arranged by giving 24 hours notice of requirement to "Pilots, St. John's".

The Pilot will board off St. John's in position Lat. 47° 33′ 42″ N., Long. 52° 37′ 54″ W. or off Twillingate Harbour provided the vessel's Local Agent arranges for a boat to embark the Pilot. The Atlantic Pilotage Authority pilot boat No. 2 is used at St. John's; this boat guards VHF Channels 16 and 11 (156.8 and 156.55 MHz). Alternatively, Shipmasters may arrange to use local persons in the community for pilotage purposes.

ANCHORAGES: The anchorage in Twillingate Harbour is not good as it is open to N.E. winds that send in a heavy sea, and the holding ground is indifferent. The best anchorage is off the West shore N.E. of Twillingate Wharf Light in depths of 6 fathoms (11 m.).

RESTRICTIONS: Navigable from April to February.

BERTHING: The Government Wharf, on the West side of the harbour about 1.4 miles South of Cuckold Point, is 300 ft. (91 m.) long and 35 ft. (11 m.) wide. On the North side of the wharf, the outer 90 ft. (27 m.) decreases gradually from a depth of 34 ft. (10.4 m.) at the head to 21 ft. (6.4 m.), and the next 70 ft. (21 m.) gradually decreases to 13 ft. (4 m.). On the South side, the outer 90 ft. (27 m.) decreases from a depth of 33 ft. (10.1 m.) at the head to 15 ft. (4.6 m.), and the next 90 ft. (27 m.) decreases to a depth of 5 ft. (1.5 m.).

At the boat landing, at the root of the South side of the pier, there is a depth of 2 ft. (0.6 m.). The deck of wharf has an elevation of 10 ft. (3 m.).

A freight shed 90 ft. (27 m.) long and 41 ft. (12 m.) wide stands on the Government Wharf. A bait depot is located adjacent to the Government Wharf.

A rubble mound breakwater 560 ft. (171 m.) long extends West from the North end of Fishery Products Wharf, situated on the East shore near the head of the harbour. Three finger piers, with depths of 5 ft. to 8 ft. (1.5 m. to 2.4 m.) alongside, extend 240 ft. (73 m.) South from this breakwater.

At Jenkins Cove, on the N.E. side of the harbour, there is a Community Wharf 163 ft. (50 m.) long and 21 ft. (6 m.) wide with a least depth of 11 ft. (3.4 m.) at the face. A wharf and fish storage shed extend at a right angle from the Community Wharf; this wharf is 175 ft. (53 m.) long with a depth of 3 ft. (0.9 m.) alongside the face.

Another wharf, at Jenkins Cove, is 200 ft. (61 m.) long and 20 ft. (6.0 m.) wide with a reported depth of 15 ft. (4.6 m.) at HW at outer end.

MEDICAL: Full hospital facilities available. Tel: (709) 884-2131.
SURVEYORS: Not available locally. Lloyds Register, P.O.Box 5054, St. John's, Newfoundland, A1C 5V3. *Tel:* (709) 726-0543, (709) 368-2538 (Residence).
GANGWAY/DECK WATCHMEN: Usually crew.
CARGO GEAR: Mobile crane can be arranged through Agent.
AIRPORT: 100 km. by paved road to International Airport (Gander).
POLICE/AMBULANCE/FIRE:
Police: R.C.M.P. local detachment (709) 884-2811.
Ambulance: Available locally (709) 884-2131.
Fire: (709) 884-2224.
EMERGENCY CO-ORDINATION CENTRE: Coastguard, St. John's. Tel: (709) 772-5151 or ask operator for Zenith 07021.
SHORE LEAVE: No restrictions.
BANKS: Scotia Bank (709) 884-2121.
GENERAL: Chart No. 4548 covers the port.
AUTHORITY: Transport Canada, P.O. Box 1300, St. John's, Newfoundland, A1C 5H8. *Tel:* 772-5154. *Telex:* 061-4530.
Contact: D. A. Lester, Regional Manager.
Local Wharfinger: John Clarke.

VANCOUVER, B.C.: 49.17 N. 123.07 W.

(See Plan Book)

The port is located in an excellent sheltered natural harbour, open to navigation all year round with a minimum depth of 15 m. in the approach channel and at many berths.

PORT LIMITS: The seaward boundary of the inner port within which a vessel is considered to be an "arrived vessel" is a line drawn between Port Atkinson and Port Grey at the entrance to English Bay. The seaward boundary of the outer port is running North-South between the North Arm of the Fraser River and the International Boundary and being 5 miles offshore in the Straits of Georgia.

DOCUMENTS: The following documents are required to be prepared prior to arrival:

3 copies Canadian Customs Form E1-List of ship's stores.
3 copies Canadian Customs Form Y14-List of crew's possessions.
3 copies List of ship's slop chest stores for sale.
3 copies Canadian Immigration Form 200-Crew List.
1 copy Canadian Quarantine Form CS1.

Manifests and other documents are prepared by the Agent.

PILOTAGE: Pilotage is compulsory. Pilots board at the Fairway Buoy off Victoria, Vancouver Island. ETA to be sent to "Pilots Victoria" at least 12 hours before arrival and confirmed 4 hours before arrival. Distance to Vancouver – 135 km.

Victoria Traffic Separation: Vessel Traffic Separations schemes are in effect – Straits of Juan de Fuca and Georgia Strait. Vessel Traffic System – VTS are under the control of the US Coast Guard (Seattle Traffic) and the Canadian Coast Guard (Vancouver Traffic) within the respective territorial limits.

SECOND NARROWS TRAFFIC CONTROL: The following procedures are mandatory and apply to vessels intending to enter or move within the area defined in "Area" below.

In addition, East of the line joining Point Grey (Lat. 49° 15′ 54″ N., Long. 123° 15′ 44″ W.) and Point Atkinson (Lat. 49° 19′ 50″ N., Long. 123° 15′ 48″ W.), the clearance and reporting procedures detailed in *Vancouver Traffic Zone* (G1130) are mandatory for the vessels specified in G1130.

Call: CJU52.
Location: CN Railway Bridge, Second Narrows.
Frequency: Channel 16; 06 12.

Area: Second Narrows Movement Restriction Area (MRA) lies between the following limits:

(a) West limit: Line due North from the light at the N.E. end of Terminal Dock to Neptune Terminals.
(b) East limit: Line due North from Berry Point Light to the North shore.

Procedure: (1) At least 12 hours before entering the MRA, the following vessels should advise Vancouver Harbour Master of their proposed transit time:

(a) Vessels of 20 m. and over in length.
(b) Towing vessels of 8 m. and over in length.
(c) Towing vessels where breadth of tow is 20 m. and over, or length of tow is 30 m. and over.

Any subsequent amendments should be notified.

(2) All deep sea vessels (i.e. vessels requiring a Pilot) intending to pass through the Second Narrows bridges should report their intentions and ETA at CN Railway Bridge to the bridge operator on Channel 12 when entering the harbour limits and before leaving a berth or anchorage in the harbour. ETA should be confirmed on arrival at the limit of the MRA.

(3) Vessels requiring the lift span of the railway bridge raised should contact the bridge operator on Channel 12 – (1) prior to departing berth or anchorage. (2) upon entering port limits if direct from sea. This signal will be acknowledged by the bridge operator on Channel 12.

ANCHORAGE: There are 28 designated anchorages in the port which are available during periods of congestion. 19 in English Bay, 5 in main harbour and 4 above Second Narrows. Main Harbour anchorages reserved mainly for vessels clearing for grain, bunkering or awaiting berths or tides, assignment is limited to a maximum period of 48 hours. Those outside mainly reserved for vessels expecting long waits. Main Harbour anchorages range from 9 to 21 fathoms and English Bay anchorage from 8 to 16 fathoms. Largest vessels using and expected to use Vancouver Harbour can be accommodated at designated anchorages. Holding ground is good and anchorages are protected. Requests for permission to anchor must be made to the Harbour Master.

RESTRICTIONS: Min. depth at LW is 15.00 m. at the First Narrows. Min. clearance at HW is 60.36 m. under First Narrows Bridge (Lions Gate); Min. depth at LW is 13.3 m. at the Second Narrows. Min. clearance at HW is 44.00 m. under Second Narrows Bridge. Vessels are allowed to transit the Second Narrows Movement Restriction Area (MRA) under conditions contained in the Second Narrows MRA Standing Orders (during periods either side of slack water and stemming the tidal current). (All Oil Terminals and Pacific Coast Bulk Terminal lie above the Second Narrows.)

Vessels carrying dangerous goods, tankers, combined carriers, must obtain special clearance from the Harbour Master prior to entry and/or departure.

Canadian Coast Guard maintain and operate the Vessel Traffic System.

All International and National pollution controls are strictly enforced.

MAX. SIZE: Berthing for vessels up to 250,000 d.w.t. and draft up to 75 ft. at Roberts Bank.

HEALTH: *Quarantine Regulations:* Vessels need only apply by radio (Station VAK), where a condition of health irregularity is suspect, or the vessel has called at a country listed under the World Health Organisation as being infected with smallpox, or plague, or has an expired Derat Certificate.

RADIO: VAI/Vancouver Coast Guard Radio.

VHF: VAS/Vancouver Traffic located just North of the First Narrows Bridge. Manned 24 hours per day. Pilots on radio/telephone contact with Vancouver Traffic at all times. Vessels normally communicate on Channel 12 from Iona Jetty/Cape Roger Curtis inwards. Other frequencies available for communication are 16, 6, 14 and 11.

RADAR: Vancouver Traffic continuous radar surveillance from Point Grey/Point Atkinson inward Second Narrows. Anchorage assistance available.

TUGS: Meet vessels East of First Narrows and off berth. Ship's lines are used. Pilots communicate with tugs by VHF Channel 17.

Attendant tugs are required to escort Deep Sea Vessels through the Second Narrows MRA in the vicinity of the Second Narrows Bridges in accordance with the Vancouver Port Corporation (Port of Vancouver) Second Narrows MRA standing orders.

BERTHING: Five vessel Inner Harbour anchorages, 3 anchorages at mouth of Indian Arm and one anchorage in position 49° 17′ 39.5″ N., 122° 58′ W. (all East of Second Narrows Bridge) for vessels awaiting Grain Inspection/Clearance etc., for a maximum period of 48 hours and 19 large vessel anchorages in English Bay for vessels awaiting to berth are available.

Terminal	*No. of Berths*	*Total Length (m.)*	*Min. Depth (m.)*	*Remarks*
Pier B–C				Passenger Terminal Pier B–C to undergo reconstruction, completion expected May 1986.
Centennial/ Ballantyne	11	1,917	9.1+	2 Container Cranes × 40 tonnes, Cargo Sheds 1 Fixed Derrick, 300T, Track Cranes; 3×5T, 1×8T
Vanterm	7	1,404	9.9–15.2 (Berth No. 3, 8.4 m.)	1 Grain Berth 2 Container Berths 1 General Cargo Berth 1 Ro/Ro Berth Container Cranes 3×40 tonnes Cargo Sheds Containers General Cargo and Bulk Tallow
Lynnterm	4	838	14.8	Storage and Shipping – Forest Products, Steel, General Cargo.
Terminal Dock				Demolished – use under review
Fibreco	1	153	13.1	Bulk Loading Woodchips
Seaboard International Terminal	3	580	11.7	Forest Products
Cassiar Terminal	1	182	8.4	Asbestos/General
Neptune Terminal	3	717	15.23	Coal (rate 6,000 t.p.h.), Potash, Phosrock, Rape Seed Oil, Afalfa Pellets
Vancouver Wharves	5	950	11.0	Ore Concentrates, Forest Products, Sulphur, Potash, Methanol
Pacific Coast	2	386	13.7	Coal (rate 1,500 t.p.h.), Sulphur, Phosrock
Westshore Terminals	1	305	20.0	Bulk Coal
United Grain Growers Elevator	2	427	8.27	Grain
Pacific Elevators	3	440	7.66	Grain
Alberta Wheat Pool	2	493	10.05	Grain
Saskatchewan Wheat Pool	2	521	12.2	Grain
Pioneer Grain Terminal	1	229	15.0	Grain
B.C. Sugar Terminal	1	145	8.23	Sugar Gantry Cranes
Goodwin Johnson	2	366	10.7	Lay-by berth, log loading
Hooker Chemical Dock	2	153	6.7	Salt, Caustic Soda
Imperial Oil Ltd.	1	213.4	10.7	Petroleum Products
Shell Canada	1	122	9.8	Petroleum Products
Gulf Oil Ltd.	2	100	8.0	Petroleum Products
Standard Canada Ltd.	1	122	12.2	Petroleum Products
Transmountain Oil Pipeline Ltd.	1	90	7.0	LPG
Canadian Occidental	1	152	10.66	Salt and Chemicals
Dow Chemicals (Lynnterm No. 4)	1	200	11.7	Caustic Soda, Ethylene Di-Chloride, Ethylene Glycol

There are a number of smaller terminals used principally by the coastal ferry and towing services.

BULK HANDLING FACILITIES:

Grain Elevator	*Capacities Millions Bushels*	*Belts*	*Average Rate Loading/tonnes per hour*
U.G.G.	3.6	2	1,000
Pacific Elevator 1, 2	72	6	750
Alberta	100	4	1,650
Saskatchewan	240,000 tonnes	2	2,000
Pioneer Grain	108,000 tonnes	2	1,000

Roberts Bank:

Owner:	Port of Vancouver.
Operator:	Westshore Terminals Ltd. (subsidiary of B.C. Coal Ltd.) Telephone 946-4491.
Construction:	Sand fill; steel pipe and concrete dolphins and wharf head.
Type:	Bulk terminal handling coal and petroleum coke.
Berths:	Two. The facility can store up to 2 million tonnes (or 1.5 months-worth of throughput) without bulldozing.
Depth:	Berth No. 1 – 25 m. Berth No. 2 – 20.5 m. Depth in turning basin 20.5 m. (at zero tide).
Facilities & Equipment:	22.3 hectares outside storage. Dual-quadrant shiploaders each with 5443.2 tonnes per hour capacity. Conveyor system, stackers and reclaimers. Rotary dumper for rail cars. Loop track circles perimeter of site.
General:	Roberts Bank opened in 1970 on a man-made island and a 5 km. causeway created by the National Harbours Board, and linked to trans-continental railroads by a 30 km. rail line especially built by the B.C. Harbours Board.
Developments:	A major expansion programme adding 3 × 20 hectare pads is now underway.

CRANES: Fixed crane capacity 300 tons, floating cranes, 45, 75 and 100 tons and mobile cranes of 150 and 250 tons available.

BRIDGES: See "Restrictions".

STEVEDORES: Gangs normally ordered day before ship's arrival, can be ordered same day for afternoon or evening work.

MEDICAL: All services available.

DENSITY: Density varies in different sections of harbour, according to times of year.

FRESH WATER: Available at most berths or by barge. Hose supplied. Delivery 25 t.p.h.

FUEL: All grades of heavy fuel oil and diesel oil are available, delivery by barge or tank truck. Suppliers are:

Chevron, Shell, Imperial, Gulf, Marine Petrobulk and Maritime Oil.

FIRE PRECAUTIONS: All vessels carrying dangerous materials to have suitable towing wires over offshore bow and offshore quarter.

CONSULS:

Australia – Consulate General
Austria – Consulate
Austria – Trade Commissioner
Belgium – Consulate General
British – Consulate General
Chile – Consul
China, People's Republic of – Consulate General
Colombia – Consulate
Denmark – Consulate General
Ecuador – Consulate
El Salvador – Consulate
Federal Republic of Germany – Consulate General
Fiji – Consulate
Finland – Consulate
France – Consulate General
Greece – Consulate
India – Consulate General
Indonesia – Consulate
Italy – Consulate
Japan – Consulate General
Korea, Republic of – Consulate General
Liberia – Consulate
Mexico – Consulate
New Zealand – Consulate
Norway – Consulate General
Peru – Consulate General
Philippines – Consulate General
Portugal – Consulate
Spain – Consulate
Sweden – Consulate
Switzerland – Consulate
Thailand – Consulate
United States of America – Consulate General
Venezuela – Consulate
Yugoslavia – Consulate General

GANGWAY/DECK WATCHMEN: If required, employment arranged through Agent.

OPENING/CLOSING HATCHES: Normally carried out by stevedores, except in cases of bulk carriers.

REPAIRS: All types of engine and deck repairs.

DRY DOCKS: Available. Max. capacity 75,000 tonnes.

SURVEYORS: (1) American Bureau of Shipping. Tel: (604) 683-7606.
Germanischer Lloyd, Tel: (604) 738-6723.
Lloyds Register of Shipping. Tel: (604) 985-0477.
The Salvage Association. Tel: (604) 688-9548.
Norwegian Veritas. Tel: (604) 985-0314.

(2) A. S. Blakely Marine Surveyors Ltd. Tel: (604) 321-4166.
Columbia Surveyors (Marine) Ltd. Tel: (604) 731-4101.
G. B. Drewery. Tel: (604) 435-2561.
General Testing Laboratories. (Div of SGS Supervision Services Inc). Tel: (604) 254-1647.
Global Marine Services Ltd. Tel: (604) 688-0654.
P. A. Haliburton. Tel: (604) 689-9738.
R. T. Harrison. Tel: (604) 738-1120.
Herring & Co. Surveyors Ltd. Tel: (604) 738-6723.
E. Hill. Tel: (604) 682-3091.
F. I. Hopkins Marine Surveyors. Tel: (604) 688-9233.
Capt. H. F. Mitchell & Associates Ltd. Tel: (604) 758-6331.
Total Boat Marine Surveyors Ltd. Tel: (604) 656-5826.
L. C. Langill. Tel: (604) 485-4782.
Rupert Marine Surveyors Ltd. Tel: (604) 624-5330.
SGS Supervision Services Inc. Tel: (604) 624-9745.

AIRPORT: 30 minutes from Vancouver International Airport.

TIME: Pacific Standard Time GMT minus 8 hours. Clocks will be adjusted to Summer Time (plus 1 hour) when advised.

HOLIDAYS: New Year's Day*; Good Friday**; Easter Monday**; Victoria Day**; Dominion Day**; British Columbia Day**; Labour Day*; Thanksgiving Day**; Remembrance Day**; Christmas Day**; Boxing Day**.

*Non-working holidays.

**Labour available at premium rates.

Work ceases at noon on December 24th and resumes at 0100 hrs. December 26th; ceases at noon on December 31st and resumes at 0100 hrs. January 2nd.

POLICE/AMBULANCE/FIRE: Police 911; Ambulance 879–4511; Fire Vancouver 911; Air-Sea Rescue 732–4272; Harbour Board Police 666–3131.

TELEPHONES: Are placed on board vessels at all berths.

BANKS:

Algemene Bank Nederland NV Bank Canada
Bank of America Canada
Bank of British Columbia
Bank of Canada
Bank of Montreal
Bank of Nova Scotia
Bank of Tokyo, Canada
Banque National de Paris
Barclays Bank of Canada
Canadian Commercial Bank
Canadian Imperial Bank of Commerce
Chase Manhattan Bank of Canada
Chemical Bank of Canada
Continental Bank of Canada
Daiwa Bank
Federal Business Development Bank
Hanil Bank Canada
Hong Kong Bank of Canada
Lloyds Bank International Canada
Mercantile Bank of Canada
Midland Bank of Canada
National Westminster Bank of Canada
Northland Bank
Philippine National Bank
Royal Bank
Seattle First Bank Canada
Societe Generale SA (Canada) Inc
Standard Chartered Bank of Canada
State Bank of India
Swiss Bank Corporation (Canada)
TKM Canada Ltd
Toronto Dominion Bank

GENERAL: Vessels not permitted pump bilges or discharge oil, contaminated ballast or galley refuse into water. Every vessel boarded on arrival by Harbour Patrol Personnel and furnished with applicable excerpts from Harbour by-laws.

SERVICES: Stevedore companies equipped with tank cleaning equipment. Sludge barge available. Services of compass adjuster may be obtained.

SHORE LEAVE: No restrictions, but Immigration will advise of any special circumstances where restrictions might be enforced.

DEVELOPMENTS: Cruise ship terminal to be built to handle 5 vessels at one time. Completion expected in 1985.

AUTHORITY: Vancouver Port Corporation, 1900 Granville Square, 200 Granville Street, Vancouver, B.C. V6C 2P9. *Tel:* (604) 666-3226. *Telex:* 04-53310. *Contact:* Erik Tofsrud, General Manager. M. A. Mulholland, Port Trade Development.

AGENT: Beaufort Navigation (Western) Ltd., 1111 West Hastings Street, Suite 916, Vancouver, British Columbia, V6E 2J3. Tel: (604) 669-2921. Telex: 0451589 Beaufort VCR. Cables: Beaufort Vancouver B.C.

VICTORIA, B.C.: 48.25 N. 123.22 W. (See Plan Book)

PORT LIMITS: Southern tip of Albert Head, to Southern tip of Trial Island (Canadian Charts 3413, 3423 and 3415).

DOCUMENTS: "See Vancouver".

PILOTAGE: Pilots embark at Victoria for all British Columbia ports. Pilot station within 2 mile radius of buoy in position Lat. 48° 22′ 45″ N., Long. 123° 24′ 56″ W. Radio "Pilots Victoria" through radio station VAK giving ETA at least 12 hours and confirmed 4 hours before arrival. Pilot boat on VHF Channel 16 and 17.

APPROACHES: The entrance to Victoria Harbour has a deep, wide, open water approach. The only hazard is Brotchie Ledge 900 m. S.W. of the outer end of the harbour entrance breakwater. The outer end of the breakwater and Brotchie Ledge are fitted with beacons.

ANCHORAGE:

"A"	Lat. 48° 23′ 46″ N.,	Long. 123° 26′ 58″ W.
"B"	Lat. 48° 24′ 09″ N.,	Long. 123° 27′ 36″ W.
"C"	Lat. 48° 24′ 14″ N.,	Long. 123° 26′ 43″ W.
"D"	Lat. 48° 24′ 24″ N.,	Long. 123° 25′ 54″ W.
"E"	Lat. 48° 24′ 44″ N.,	Long. 123° 26′ 37″ W.
"F"	Lat. 48° 24′ 54″ N.,	Long. 123° 26′ 00″ W.

Anchor berths "A", "C" and "D" have a swinging radius of 1,500 ft. and "B", "E" and "F" 1,200 ft.

RESTRICTIONS: Outer Harbour: Depth 35 ft. MLLW. Inner Harbour: Depth 21 ft. MLLW. Largest vessel to use port, length 575 ft. draft 34 ft.

HEALTH: Quarantine Officials board with Pilot. Advise Agent of ETA.

VHF: Pilot station. VAK.

Harbour Master's Office can be contacted on Channel 73. This Channel is also used by ship's Agents, King Bros., Victoria.

TUGS: Tugs and barges of various powers and sizes are available from Seaspan International Ltd., 345 Harbour Road, Victoria. B.C. V9A 3S2. Tel: 385-7711. Two harbour tugs of 500 h.p. each service the Victoria area. Additional or larger tugs are available giving minimum 48 hours notice.

STEVEDORES: 13 gangs available. Refer "Vancouver" for holidays, etc., arranged by Agent.

Working Hours: Westcan Terminals/Stevedores Ltd. offers 24 hour 7 day cargo handling services. Shifts: first 0100-0430, 0500-0800; second 0800-1200, 1300-1700; third 1700-2100, 2130-0100. Work ceases 1200 on Christmas Eve and New Year's Eve.

BERTHING:

Berth	*Length* (ft.)	*Depth* (ft.)	*Remarks*
Ogden Point "A" N. Side	800	35	For handling lumber, pulp, paper, plywood and general cargo. Fresh water available at 20 t.p.h.
Ogden Point "A" S. Side	1,000	35	
Ogden Point "B" N. Side	800	35-40	Dock to be renovated.
Ogden Point "B" S. Side	800	33-35	The South side is used for loading lumber. Fresh water available at 20 t.p.h.

Between Piers A and B (distance 92 m.), at the inner end, is a small fish unloading dock used by the B.C. Packers Cold Storage Plant situated in the terminal area. Ogden Point also has the facilities to handle containers inbound and outbound. The terminal has a 20 acre paved cargo assembly area with on site connections for rail barge, truck barge, tug and barge, and trucks. Vessels must be self loading or unloading, but mobile cranes to 25 tons can be ordered if required.

MEDICAL: Doctors and hospital facilities available.

DENSITY: Salt water.

FRESH WATER: Available at wharves.

In Gulf Islands servicing Plumper Sound Anchorage: Gulf Islands Water Taxi Ganges – P.O.Box 814, Saltspring Island, B.C. V03 1E0. Tel: 537-2516.

FUEL: Marine gas oil available by tank-truck at berth. FO and MDO available by barge from Vancouver.

CONSULS: Norway.

CUSTOMS ALLOWANCES: See "Vancouver".

SURVEYORS: 1. Canadian Coast Guard, Victoria. Tel: 388-3646.

2. Surveyors available through Yarrows Burrard Shipyard, Victoria. Tel: 385-4421. Lloyds Sub-Agent: King Bros. Tel: 384-1174.

Also see "Services".

GANGWAY/DECK WATCHMEN: Crew are required to act as deck watchmen.

OPENING/CLOSING HATCHES: By crew or stevedores.

CARGO GEAR: Ship's gear.

REPATRIATION: Possible, arranged by Agent.

AIRPORT: *Victoria International Airport:* 32 km. North of Victoria. Serviced by Air Canada, Canadian Pacific Airlines, Pacific Western Airlines, Air B.C., San Juan Airlines and many international charters with same plane service to Calgary, Edmonton, Montreal, Seattle, Toronto, Vancouver and Winnipeg.

Victoria Harbour to Vancouver Harbour: Serviced by Air B.C. with daily scheduled float plane service.

HOLIDAYS: 11 statutory holidays, however work can be arranged.

POLICE/AMBULANCE/FIRE: Available at dockside 24 hours a day.

REPAIRS: All repairs facilities available.

DRY DOCK: At Esquimalt: Length 1,173 ft.; breadth 125.6 ft.; depth 49.5 ft.

TELEPHONES: Telephones required on all ships, arranged through Agent.

SERVICES: Compass adjusting possible.

BANKS: Algemene Bank, Nederland N.V., 650 West Georgia Street, Vancouver, B.C. V6B 4N7. Tel: 682-5891.

EMERGENCY CO-ORDINATION CENTRE: Rescue Co-ordination Center, CFB Esquimalt. Tel: 388-1543.

United States Coast Guard, Port Angeles, Washington, U.S.A. Tel: (206)-457-9431.

STORING: Vessels can be stored by truck or barge, during cargo operations. Trucks may proceed alongside. Fork lift trucks may be used. Customs regulations in force (see Agent). Yarrows Ltd., can provide riggers.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Seamans' book sufficient.

SERVICES:

Decca: Racal Decca Canada Inc., 353 Harbour Road, Victoria, B.C. V9A 3S2. Tel: 388-6257.

Fumigation: PCO Pied Piper, 3374 Burns Avenue, Victoria, B.C. V8Z 3P2. Tel: 388-9721.

International Garbage: Cypress Disposal Ltd., 2057 Mills Road, RR 2, Sidney, B.C. V8L 3S1. Tel: 656-0951.

Laundry: Commercial Towel & Linen Supply Co. Ltd., 607 John Street, Victoria, B.C. V8T 1T8. Tel: 383-5112.

Marconi: Canadian Marconi Co., 1 Burnside Road W., Victoria, B.C. V9A 1B2. Tel: 386-9414.

Surveyors: Argus Marine Ltd., 2924 Wilkinson Road, RR 2, Mill Bay, B.C. V0R 2P0. Tel: 743-3463. Hull and cargo.

Lloyd's Register of Shipping, non-exclusive surveyor for hull, machinery and cargo attached to Marine Design Associates below.

Marine Design Associates, 493B Garbally Road, Victoria, B.C. V8T 2J9. Tel: 384-4191. Telex: 049-7397. Hull, machinery and cargo.

Welding: Edwards' Welding Ltd., 727 Caledonia Avenue, Victoria, B.C. V8T 1E4. Tel: 386-3264.

DEVELOPMENTS: Work has commenced on renovation of Pier "B".

AUTHORITY: Port of Victoria, Ministry of Transport, Room 317, 816 Government Street, Victoria, B.C. V8W 1W9. *Tel:* (604) 388-3578. *Telex:* Canadian Coast Guard – Victoria, No. 0497185. *Contact:* Captain G. M. Mackay, Harbour Master.

WELLAND, Ontario: 42.58 N. 79.13 W.

LOCATION: Industrial city on the Welland Canal, 5 nautical miles below Lock 8.
DOCUMENTS: See "Montreal".
RESTRICTIONS: Navigation season: April 1st to December 30th (usually). Channel depth: Controlled at 8.23 m. (27 ft.) in canal channel.
HEALTH: Pratique granted at Quebec City for incoming vessels from foreign ports.
RADIO: Ship-to-Shore communications through Toronto Coast Guard (VBG) or Buffalo (WBL).
BERTHING: New Welland Dock, Wharf 10. Length of dock wall 182.9 m. (600 ft.). Berth 222.5 m. (730 ft.). Depth alongside 8.2 m. (27 ft.). Type of facility: self unloaders and rental cranes.
SURVEYORS: A.B.S. at Toronto.
AUTHORITY: St. Lawrence Seaway Authority, Weston Region, P.O.Box 370, 508 Glendale Avenue, St. Catharines, Ontario L2R 6V8. *Tel:* 416-684-6571. *Contact:* M. S. Campbell, Regional Vice-President.

WEYMOUTH, N.S.: 44.27 N. 66.01 W.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
3 Customs Documents.
3 Health Documents.
3 Manifests.
Ship's Papers.

PILOTAGE: Non-compulsory. Ship's Agent contacts vessel through Marine Radio Station, Yarmouth and notifies Pilot, who will then be on lookout. Ship gives standard whistle signal for Pilot, who boards about 2 hours before high tide. In meantime, ship should ride at anchor about quarter mile N.W. of Fairway Buoy. No special pilot boat. Boat used for Pilot is 35 ft. fishing boat.
ANCHORAGE: Good safe anchorage outside harbour in 33 ft. over mud. Also quarter mile N.W. of Fairway Buoy.
MAX. SIZE: Max. length permissible 375 ft., max. beam 55 ft. Draft, approx. 26 ft. of water at high tide.
RADIO: Yarmouth (VAU) or Saint John (VAR).
TUGS: No tugs required. The fishing-boat will run lines to wharf if required.
BERTHING: North Weymouth, L-shaped wharf 280 ft. in length, and leg 40 ft. width. Depth alongside 9 ft. low water.
STEVEDORES: Available. Experienced loading lumber and pulpwood.
MEDICAL: Hospital: at Digby, 20 miles distant. Ambulance can be arranged.
FRESH WATER: Available; delivery by truck.
GANGWAY/DECK WATCHMEN: No watchmen necessary.
TIME: Eastern Standard Time GMT minus 5 hours. Daylight saving time from last week-end in April to last week-end in October, clocks advanced 1 hour.
POLICE/AMBULANCE/FIRE: Police Zenith 50000; Ambulance 245-2205; Fire 837-5142.
TELEPHONE: No arrangement for placing telephones on board ship. Telephone available near dock.
DEVELOPMENTS: Re-dredging of channel in near future. Dates not finalised.
AUTHORITY: Transport Canada, Weymouth, Nova Scotia. *Contact:* R. L. Long, Customs Inspector, at Digby, *Tel:* 245-4039. F. Manzer, Harbour Master, Ashmore, Digby County, Nova Scotia. *Tel:* 837-4064, 837-4467.

WINDSOR, Ontario: 42.19 N. 83.03 W. (See Plan Book)

For important general information refer to "St. Lawrence Seaway".
DOCUMENTS:
Sanitary Health Certificate – fixed on outside of container for agriculture plant protection. 1 paper affixed to each container.
Meat Locker Certificate.
Quarantine Certificate.
3 Crew Lists.
3 Passenger Lists.
3 Stores Lists.
Manifest – 3 A.6 – 2 A.6 out.
Bill of Lading.

PILOTAGE: Pilots board ships at Sarnia Eastbound and Port Weller Westbound.
ANCHORAGES: Windsor Harbour Anchorage lies approximately 0.5 miles North of Fighting Island marked by 2 white buoys, showing flashing white lights, an area of 800 ft. wide and 0.75 miles long. Depth of 5.5 to 6 fathoms.
MAX. SIZE: Can handle any ship the seaway passes. No tide.
HEALTH: In the case of vessels arriving via the St. Lawrence River radio pratique may be obtained from Quarantine Quebec. See also "Montreal".
RADIO: WFS Detroit Marine Radio. Call on Channels 26 – 28.
RADAR/VHF: No radar service. Harbour Master may be contacted on VHF Channel 16.
TUGS: Available when required.
BERTHING: (Also see "Plan Book").

1. *Canadian Rock Salt Ltd.:* A major rock salt mine producing salt products for highways, water softeners and chemical use. Large tonnages are shipped by water. Lake freighters load at a 420 ft. (128 m.) dock.

2. *United Co-Operatives of Ontario:* A new deep water grain terminal elevator with a storage capacity of 2.7 million bushels. Material handled includes soya beans, corn, wheat, oil seeds, as well as meal from adjacent Maple Leaf Monarch plant. A 1,300 ft. long (396.2 m.) dock enables ships to load and unload with the most modern conveyor equipment. The location provides easy access to all major railways and highways in Canada and the United States.

2a. *Maple Leaf – Monarch Company:* Canada's first multi-oilseed processing plant, located on a 40 acre (161.8 ha.) site adjacent to the United Co-Operatives elevators and dock. The plant has an on-site storage capacity for 11,000 tonnes of soya meal and 2,500 tonnes of soft-seed meal, and operates in close co-operation with the adjacent United Co-Operatives docking facility.

3. *Morton Terminal Limited:* A commercial marine terminal on 180 acres (728.4 ha.) providing large open storage facilities as well as 3 closed sheds with over 60,000 sq.ft. (5574 sq.m.) of space. Three cranes of 10, 25 and 225 ton lifts enable fast movement of goods between ship and the large paved wharves which include a concrete quay-type wharf of 2,400 ft. (731.5 m.) with direct rail transfer in a 200 ft. (60.9 m.) wide slip, water depth presently is full Seaway depth. The Essex Terminal Railway connects with all major railroads.

4. *J. Clark Keith – Hydro Electric Power Corporation:* A coal-fired hydro electric power generating plant operated by Ontario Hydro. Coal stocks are brought in by self-unloading vessels at a 600 ft. (180 m.) wharf, 184 ft. (56 m.) offshore, and transferred inland by a conveyor system handling 1,250 tons (1,134 tonnes) per hour.

5. *Bulk Storage Ltd. (formerly Consolidated Fuels):* Operated by Southwestern Sales Ltd. and is used principally to store building materials including stone and sand. The 660 ft. (201 m.) finger pier juts into the river at an angle of about 30°, and accommodates self-unloaders.

6. *Canadian Salt Co. Ltd.:* Produces fine salt in bulk which is loaded on board vessels at a 185 ft. (56 m.) dock by a conveyor system.

7. *Kennette Contracting Ltd.:* Provides outside storage acreage for bulk materials, primarily stone and sand.

8. *Newman Terminal & Transportation Ltd.:* Large open and closed storage facilities adjacent to the 150 ft. (45.7m.) dock. General cargo which includes canned goods, calcium, lumber, steel and vehicles is loaded and unloaded by fully mechanized freight handling equipment and Ro/Ro.

9. *J. J. Kovinsky Ltd.:* Provides dock serviced property for storage and processing metal for re-cycling purposes. The river frontage is 650 ft. (198 m.).

10. *Windsor Harbour Commission – Liquid Fuel Dock:* Owned by the Windsor Harbour Commission and includes a 1,000 ft. (304 m.) berth with fuel bunkering facilities – operated by: *Sterling Fuels (Ultramar Canada Inc.):* To fuel any vessel transiting the Great Lakes. A full range of fuels is available on a 24 hour basis.

11. *Windsor Harbour Commission – Confederation Dock:* Located on a site of over 12 acres. An 1,100 ft. (335 m.) by 100 ft. (30.5 m.) slip runs along the West side. Goods handled are principally bulk stone and sand from self-unloaders.

11a. *Canada Building Materials:* Cement mixing plant occupies part of the N.W. portion of the property. A large open storage area immediately upriver is presently being developed to accommodate bulk cargo.

12. *Windsor Harbour Commission:* Future docking area – 25 acres are presently in process of development.

13. *Adams Cartage:* Principally a steel handling facility. A large closed storage shed is on the property as well as open storage for 100,000 tons of steel. In addition to the dock face, the property includes an 850 ft. (259 m.) by 100 ft. (30.5 m.) slip at an average water depth of 25 ft. (7.6 m.).

14. *Pyramid Aggregates Ltd.:* Established for the production and processing of quartz products, coloured aggregates, silica, sands, landscaping and exposed aggregate stone. The property includes a 450 ft. (137 m.) by 80 ft. (24 m.) slip adjacent to a steel and concrete warehouse.

15. *Premier Concrete and Lake Ontario Cement Ltd.:* Maintain this dock for the storage of building aggregates as well as bulk cement which is off loaded into silos. The 9 acre site has a 1,000 ft. (340 m.) dock face on the Detroit River.

16. *Canadian Pacific Railways:* Operates a daily Ro-Ro railroad car ferry to Detroit. Two loading aprons with three tracks each, move rail cars from ferries and operate on a daily full year operation. Ro-Lo container barges service, also operates out of the same facilities.

17. *Dieppe Gardens Dock:* Owned by the City of Windsor and docking is administered by the Harbour Commission. Complete with 27 ft. (8 m.) of water at the 800 ft. (244 m.) cement-faced dock, it is used principally for visiting naval ships, cruise ships, etc. Fresh water and sewage disposal are available. Prior application to the Harbour Commission is required.

18. *Canadian National Railways:* Used only for ferrying Ro-Ro railroad cars and Ro-Lo container barges to Detroit.

19. *Hiram Walker & Sons Ltd.:* A major distiller and bottler of alcoholic beverages. From the 833 ft. (254 m.) long wharf, the bucket conveyor equipment handles one and a quarter million bushels of bulk grain between ships and elevators.

20. *Ford Motor Company of Canada:* Dock is a private installation 1,800 ft. (549 m.) long and used mainly for storage of bulk materials including stone, sand and pig iron.

21. *Windsor Yacht Club:* Private pleasure boat facility for members.

22. *Lakeview Park Marina:* Operated by the City of Windsor as a facility for pleasure boaters. Docks and launching ramps and parking areas are provided with easy access to Lake St. Clair and the Detroit River.

23. *Southwestern Sales Ltd.:* A bulk storage dock accommodating large quantities of crushed stone and sand received from self-unloader ships.

STEVEDORES: Advice as to number of gangs should be received no later than 1600 hrs. on day preceding. Arrange through Agent.
MEDICAL: Four hospitals.
TANKERS: Sterling Fuels; hoses 14 in. and 10 in. Max. depth 27 ft. Slop tanks available.
DENSITY: No tide, the water is fresh.
FRESH WATER: Tank truck delivery.
FUEL: Direct liquid fuel bunkering at Sterling Fuel Dock for ships up to and including 1,000 ft. 24 hr. service (VHF Channel 14 or Tel: (519) 253-4694). Dock adjacent to main shipping channel. No coal bunkering available.
FIRE PRECAUTIONS: Fire Dept. requires man at tank installations ashore while pumping, also notify Fire Dept. and Harbour Commission if any spillage.
GANGWAY/DECK WATCHMEN: Not required, but can be supplied.
OPENING/CLOSING HATCHES: Normally done by the stevedoring company.
CUSTOMS ALLOWANCES: See "Montreal".
IDENTIFICATION CARDS: I.D. cards should be carried.
CONSULS: Italian Consul, tel: 256-0092.
REPAIRS: All repairs above water can be carried out.
AIRPORT: Windsor Airport approximately 5 miles. Regular flights 7 days a week by Air Canada.
TIME: GMT minus 5 hours from October to April. DST subject to local vote.
HOLIDAYS: The following are the legally observed holidays; however, vessels will be worked on these days at applicable rates: Christmas, New Year, Good Friday, Victoria Day, Dominion Day. Civic Holiday, Labour Day, Thanksgiving and Veteran's Day.
POLICE/AMBULANCE/FIRE: Police 258-6111; Fire 258-4444; Ambulance 258-2155; Emergency dial 911.
TELEPHONES: Phones can be placed on board by prior arrangement.
GENERAL: Fluctuation of water level; high Westerly wind drops water level. Detroit River Light should be contacted for water gauge on VHF 16 for upbound ships, and Belle Isle Coast Guard Stations on VHF 16 for downbound ships.
SERVICES: Tank truck available for tank-washings, also radio telephone and radar service. Compass adjustor not available.
SHORE LEAVE: No restrictions on shore leave.
AUTHORITY: Windsor Harbour Commission, 500 Riverside Drive West, Windsor, Ontario, Canada N9A 5K6. *Tel:* (519) 258-5741. *Contact:* C. Gress, General Manager. R. D. Beaton, Harbour Master. Tel: (519) 258-5741, 735-5207.

WOODFIBRE, B.C.: 49.20 N. 123.15 E.

(See Plan Book)

LOCATION: Port located in Howe Sound approximately 21 miles from Port Atkinson.
PILOTAGE: See "Vancouver". Arranged through ship's local Agent.
ANCHORAGE: See "Vancouver".
TUGS: Arranged through ship's local Agents. Squamish Tug Tel: 898-3733. Seaspan International Tel: 988-3111. Rivtow Straits Ltd. Tel: 255-1133.
BERTHING: Dock length – 432 ft. Dock width – 24 ft. Depth alongside – 34 ft. at Chart Datum. Principal cargo – unitised baled pulp.
STEVEDORES: I.L.W.U. – Arranged through ship's Agents.
MEDICAL: Squamish Hospital Tel: 892-5211, (plus Mill First Aid). Dental – Squamish Tel: 892-3111. Doctor – Squamish Tel: 892-5151.
FRESH WATER: Limited supply available.
FUEL: Not available.
CONSULS: See "Vancouver".
DRYDOCKS/REPAIRS: North Vancouver, Burrard Yarrows Corp. Tel: 988-2111.
GANGWAY/DECK WATCHMEN: Ship's crew, ship's gangway used.
CUSTOMS: Tel: Vancouver – 665-1545.
AIRPORT: Vancouver.
POLICE/AMBULANCE/FIRE: Police – R.C.M.P., Tel: Squamish – 898-9611. Ambulance, Tel: Squamish – 898-3311. (Plus Mill ambulance). Fire – Mill Fire Department. Emergency number – 911.
SHORE LEAVE: Mill area is a restricted area.
AUTHORITY: Western Pulp Limited Partnership, Box 5000, Squamish, B.C., V0N 3G0, Canada. *Tel:* (604) 897-5311. *Telex:* 04-508828. *Cables:* Westpulp Vcr. *Contact:* Jack Westerberg, Traffic Supervisor.

NOTES

Please also advise Shipping Guides Ltd.

Canary Islands

ARRECIFE: 28.57 N. 13.33 W.

DOCUMENTS:
Maritime Health Declaration.
5 Crew Lists.
4 Transit Passenger Lists.
2 Provisions Lists.
8 Manifests Discharge Cargo.
8 Lists of Passengers Disembarking.

PILOTAGE: Call Pilot VHF Channel 16. Pilot boards about 1,000 m. off port.

ANCHORAGE: Safe anchorage available. Cruising vessels may use own boats for transporting passengers.

RESTRICTIONS: None, except draft (see "Berthing").

HEALTH: Pratique granted in berth or at anchorage if vessel not berthing. Suspected disease on board should be reported to Agent by radio before arrival.

RADIO: Las Palmas Radio.

VHF: For communication with Pilot – Channel 16.

TUGS: No tugs stationed at Arrecife. May be ordered from Las Palmas with advance notice.

BERTHING: Muelle de los Marmoles. 1,000 m. long. Max. draft 9 m. Cargo work with ship's own gear.

STEVEDORES: Shifts 0800 – 1400 hrs., 1400 – 2000 hrs. No work Sundays or Holidays except by special arrangement.

MEDICAL: Facilities available. Advance notice required for inoculations/vaccinations which might not be immediately available.

FRESH WATER: Not available either ex-wharf or ex-barge.

FUEL: By arrangement with Spanish Oil Company CEPSA only.

REPAIRS: Slipways up to 400 tons. Workshops for minor repairs.

REPATRIATION: Via Las Palmas only.

AIRPORT: About 15 km. from port. Served by Interinsular flights and charter flights.

TIME: GMT during winter. GMT plus 1 hour from first Sunday in April to last Sunday in September.

HOLIDAYS: As for Spain, plus local holidays February 7th and August 26th.

SHORE LEAVE: Allowed. Passes not necessary except for Eastern Bloc nationals.

AUTHORITY: Grupo de Puertos de Gran Canaria, P.O.Box 156, Arrecife.

AGENT: Arrangeable through Miller y Cia., S.A., P.O.Box 2200, Las Palmas, Canary Islands. Telex: 95153 and 95353 Midat E. Tel: 260850 and 267750. Cables: Miller Las Palmas.

LAS PALMAS: 28.05 N. 15.27 W. (See Plan Book)

DOCUMENTS:
5 Crew Lists.
4 Transit Passenger Lists.
2 Provisions Lists.
8 Copies of Manifest, with Bills of Lading covering cargo for Las Palmas.
8 Lists of Passengers Disembarking.
Passports of passengers landing (required by Immigration Authorities).
1 Maritime Health Declaration.

PILOTAGE: Compulsory. Masters send radio message to Agents 48 hours and 24 hours prior to arrival giving ETA and requirements. Call Pilot by VHF Channel 16. Pilot boats have black hull, white wheel house, with black "P" and boat number painted both sides of wheel house.

Pilot boards approximately 1 mile from harbour entrance.

ANCHORAGE: Good anchorage in roads, depth in excess of 35 m. Sandy bottom in North Roads, sand and shingle in South Roads. Mean tidal range 2.5 m. Tidal velocity negligible.

RESTRICTIONS: No length or beam restrictions. Max. draft for vessels bunkering or working cargo 12.65 m. Vessels berth and unberth during day and night. Vessels carrying explosive or dangerous cargoes must apply through their Agent with sufficient advance notice (5 days for explosives) for permission to enter port, declaring quantity, IMO class and UN numbers also ports of origin and destination of the cargo. Tankers in ballast must declare whether tanks gas-free or inerted.

MAX. SIZE: Vessels of any length and beam can safely berth and normally discharge and load cargo while bunkering. Max. allowable draft 66 ft.

Largest vessel berthed 550,000 d.w.t.

RADIO: Las Palmas Radio, call sign EAL.

TUGS: The following harbour and/or salvage tugs are available: *Tamaran*, 2,375 i.h.p.; *Arucas*, 2,200 i.h.p.; *Nublo*, 1,062 i.h.p.; *Doramas*, 1,313 i.h.p. *Punta Anaga*, 1,930 i.h.p.; *Orotava*, 2,062 i.h.p.; *Bandama*, Bollard pull 50 tonnes.

BERTHING: Subject to availability. Information should be radioed to Agent 48 hours prior to arrival, if berthing required, and for what purpose. Harbour approach from open sea with no impediments.

Generalisimo Franco Mole: Runs North/South, approximately 2,000 m. long. This quay is normally used by vessels bunkering, passenger vessels and is fitted with bunker and fresh water line connections along its entire length.

Height of quay above LW averages 4.5 m. Average rise and fall of tide 2.5 m.

Vessels lie safely alongside at the following maximum drafts:

Berths 1 – 14 (Northern part)	36 ft. 0 in.
15 – 16	34 ft. 0 in.
17 – 18 – 19	41 ft. 6 in. (Tankers – Dangerous Cargo)

Vessels using Berths 1 to 14 with drafts between 34 ft. and 36 ft. must enter and clear between half and full tide.

La Luz Mole: This quay is used mainly for cargo operations and has a total of 1,200 m. of berthing space.

A grain silo is situated at the North end of the quay. Maximum draft for berthing at the silo (capacity 12,000 tons) is 32 ft. Two connections for discharge of edible oils to the local refinery are also on this quay. Maximum drafts alongside the connections are 39 ft. and 32 ft. respectively; at the latter connection there is a length restriction of 150 m. One cold storage installation situated on this quay.

Fish Mole (Espigon del Castillo) and Ribera Mole: These 2 quays are used mainly by fishing vessels and coastal cargo vessels. Five cold storage installations are situated on the Fish Mole.

Santa Catalina Mole: Length 400 m., depth 4 m. – 8 m. This quay is used as a terminal for passenger/car ferries, with ro-ro ramps.

Queen Sofia Mole: 3,200 m. breakwater with dolphin berth for tankers. Depth of water 22 m. This allows berthing of ULCCs for repairs afloat, painting, underwater cleaning, etc.

Mole EN-1: Length 520 m., depth 12 m. For berthing vessels up to 300 m. LOA. There is a ro/ro ramp and container handling facilities. A fertiliser bagging plant and conveyor system is in operation.

Mole EN-2: Length 410 m., depth 12 m. For berthing vessels up to 200 m. LOA. Facility used by container vessels, general cargo vessels and occasionally passenger vessels (to be extended by 160 m. for ro/ro vessels).

Mole EN-3: Length 440 m., depth 14 m. For berthing of vessels laying-up and under repair.

BULK CARGO FACILITIES: Grain silo with 4 extractors. Rate 50 t.p.h. for each extractor. Draft alongside 32 ft. Cement silo with 2 extractors.

STEVEDORES: Loading and discharging of general cargo can be carried out between 0800 hrs. and 0200 hrs. including Saturdays.

Stevedoring labour works on a 6-hour shift system, 3 shifts per 24 hours. The shifts commence at 0800, 1400 and 2000 hrs.

Labour for the 0800 hrs. shift must be ordered by 0700 hrs., and for the 1400 hrs. and 2000 hrs. shifts on Monday to Fridays by 1300 hrs. Labour for all Saturday shifts must be ordered by 2000 hrs. on Friday.

CRANES: Floating crane with capacity of 70 tons and mobile cranes up to 125 tons capacity. 2×30 ton container cranes at Mole EN-1.

MEDICAL: Master should advise Agent if medical attention required on arrival. Hospital and ambulance services available day and night. Vaccination and inoculation available any time but notice should be given prior to arrival.

TANKERS: No facilities for slop discharge. Crude oil tanker berth. There is a special berth for large tankers with a draft of 22 m. See "Berthing".

FRESH WATER: Available at inner harbour mole delivered by hose at rate of approx. 50 t.p.h. per hose, while bunkering and/or loading/discharging cargo. Also available by barge at anchorage.

FUEL: Masters to include in messages to Agents amount, grade and viscosity of oil required, and name supplier, 48 hours prior arrival.

Bunkers supplied 24 hours. Fuel oil, diesel and gas oil available ex-wharf, rate 1,000 t.p.h.

GANGWAY/DECK WATCHMEN: Recommended. Arranged by Agents.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: No restrictions for tobacco, wine and/or spirits.

IDENTIFICATION CARDS: Not necessary.

CONSULS: The following countries have Consular Representations at Las Palmas:

Argentina
Austria
Belgium
Bolivia
Brazil
Chile
Colombia
Cuba
Denmark
Dominican Republic
El Salvador
Finland
France
Great Britain
Greece
Guatemala
India
Italy
Japan
Korea
Lebanon
Liberia
Mauritania
Monaco
Morocco
Netherlands
Nicaragua
Norway
Peru
Portugal
Philippines
Senegal
Sierra Leone
Syria
South Africa
Sweden
Switzerland
United States of America
Uruguay

SURVEYORS: The following Classification Societies have resident appointed Surveyors at Las Palmas: American Bureau of Shipping, Det Norske Veritas, Lloyd's Register of Shipping, Nippon Kaiji Kyokai, Registro Italiano Navale, Bureau Veritas and Germanischer Lloyd.

REPAIRS: All types of deck and engine repairs carried out afloat.

DRYDOCK: Repair Wharf length 560 m. depth 8 m. – 12 m. Syncrolift platform, lifting power 9,500 tons, for vessels up to 175 m. length, 30 m. beam and 30,000 d.w.t. 5 mooring points of 180 m. and 2 of 220 m.

REPATRIATION: All facilities for crew changes, by sea and air.

AIRPORT: International Airport 26 km. South of Las Palmas.

TIME: GMT in Winter. Summer-time is GMT plus 1 hour.

HOLIDAYS: Local holidays: 24th June; 8th September.

National Holidays: 1st January; 6th January; 19th March; 1st May; 25th July; 1st November; 8th December; 25th December.

Feast Days: Maundy Thursday (half-day); Good Friday; Ascension Day; Corpus Christi.

Cargo handling during holidays and feast days; no stevedoring labour available from 2000 hrs. from day prior to Good Friday, Christmas Day and 1st January, until 0800 hrs. on following day.

POLICE/AMBULANCE/FIRE: Police, 264431. Ambulance, 264473. Fire, 243100.

TELEPHONES: Line connected to vessels alongside wharves from Harbour Board exchange if required.
SERVICES: Underwater hull cleaning, painting, surveys are carried out in clear water in outer harbour. Compass adjusting, etc.
SHORE LEAVE: Permitted. For some nationalities, passes must be issued by Immigration Authorities.
OFF-PORT TRANSFERS: 24 hour service throughout the year by helicopter and launch.
Helicopter: Avicopter S.A. Helicopter Service, Edificio Esta J.O.P., Planta 3a Local, 303, Las Palmas de Gran Canaria. Tel: 270726, 270727, 267986. Telex: 95173 Helic.E. Cable: Helicsa Las Palmas. Range: 80 miles.
DEVELOPMENTS: A new Outer Breakwater is already in use. This runs North/South, parallel to the Generalisimo Franco Mole, and approximately 1,000 m. to the East of it. The new breakwater is 3,200 m. long.

The new harbour area thus created contains at the Northern end the Synchrolift drydock and repair installation which is already operational.

This outer area of the harbour is protected from Southerly weather by a newly constructed jetty heading N.E. from the Southern point of the Generalisimo Franco Mole, and will in due course provide further ro/ro ramps and also deep-water berths for large vessels.
AUTHORITY: Port Commandant, (Comandancia de Marina) and Chief Engineer of the Port (Engeniero Director del Puerto).

AGENT: Miller Y Cia, SA, Muelle Santa Catalina, P.O.Box 2200, Las Palmas, Canary Islands. Telex: 95353 Midat E and 95153 Midat E. Tel: 260850, 267750, 270098. Cables: "Miller Las Palmas".

LA SALINETAS: 27.58 N. 15.22 E.

LOCATION: Private wharf about 15 km. South of Las Palmas, port of fertiliser plant.
DOCUMENTS:
Maritime Health Declaration.
6 Crew Lists.
2 Provisions Lists.
8 Manifests of cargo for discharge.
PILOTAGE: Pilot is taken at Las Palmas. Vessels should advise ETA to their Agents in advance and contact Las Palmas Pilots on VHF Channel 16 on arrival.
MAX. SIZE: LOA 150 m., draft 8.5 m.
HEALTH: Pratique granted on berthing.
RADIO: Las Palmas Radio.
TUGS: Not normally used, but available from Las Palmas if required.
BERTHING: Private loading quay 200 m. long, depth 8.5/15 m., can accommodate ships of 150 m. length and 8.5 m. draft. Loading by conveyor belt, 150/200 t.p.h.
MEDICAL: At Las Palmas, full facilities.
FRESH WATER: Available in an emergency only.
FUEL: Not available. Vessels should be stemmed for bunkers at Las Palmas.
REPATRIATION: Arrangeable via Las Palmas Agents.
AIRPORT: Las Palmas Gando Airport – 5 km.
TIME: GMT during winter. GMT plus 1 hour from first Sunday in April to last Sunday in September.
HOLIDAYS: As for Spain, plus local holiday September 8th.
SHORE LEAVE: Allowed. Passes not necessary except for Eastern bloc nationals.
AUTHORITY: Compania Insular del Nitrogeno, S.A., P.O.Box 417, 35080 Las Palmas, Grand Canary, Canary Islands. *Tel:* 690688, 695860. *Telex:* 95046. *Cables:* Insunitro Las Palmas.

SANTA CRUZ DE TENERIFE: 28.28 N. 16.16 W.

(See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passengers in Transit Lists.
8 Passengers Landing Lists.
7 Cargo Landing Manifests.
2 Stores Lists.
1 International Health Declaration.
1 Free Pratique.
If no passenger or cargo landing, must present negative declarations.
PILOTAGE: Compulsory. Recommended give Agent 48, then 24 hours notice of ETA. Contact Pilot station by VHF Channels 14 or 16. Pilot station located at shore end of Muelle Norte. Pilot boards up to 2 miles off extreme end of Muelle Sur. In daytime pilot cutter identified by blue flag with white "P" superimposed; night-time, red and white light. When pilot cutter unable proceed out of harbour due heavy weather, Pilot awaits in lee of extreme end of Muelle Sur. Pilots called by VHF when entering (Channels 16 and 14); on sailing called by local Agent, or by VHF Channel 16 or 14.
ANCHORAGE: Vessels proceeding to anchorage are conducted by Pilot. Anchorage outside breakwater in depths 10 – 40 fathoms.
MAX. SIZE: Floating pipe-line terminal at Honduras, up to 240,000 d.w.t. Dolphins, up to 45,000 d.w.t.

Dique del Este (new part), 700 m. long with 300 m. LOA limitation, draft up to 60 ft.
HEALTH: Free pratique not granted by radio. "Q" Flag must be flown until vessel cleared inward by Port Health Authorities, which procedure is very quick. If suspected disease or fever on board, Agent or Port Health Authorities must be notified by radio.
RADIO: Tenerife Radio – call sign EAT working frequency 472 kHz. Short-wave EAT 3 working frequency 1930 – 0830 hrs., 8742 kHz. Short-wave EAT 4 working frequency 0830 – 1930 hrs., 13092 kHz. Radio telephone call sign "Tenerife Radio" working frequency 1740 kHz.

There is a 24 hour telephone link with vessels within 100 miles range, which vessels may utilise by calling Tenerife Radio on VHF Channel 16 for connection to Agent's telephone number.
TUGS: Join vessels entering approximately 0.5 miles to 1 mile from extreme end of Muelle Sur. Use of tug's lines optional, but when supplied by the tug, extra charges incurred. Use of tugs not compulsory.

Tugs normally available: *Guimar* 1,600 h.p.; *Tarifa* 2,300 h.p.; *Algeciras* 3,200 h.p.; *Coria* 3,200 h.p.; *El Guanche* 2,200 h.p.; *Gran Canaria* 2,200 h.p.
BERTHING:
Dique del Este: 650 m. length, depth alongside 19.5 m.; 294 m. length, depth alongside 12 m. Quay used by tankers, bulk carriers and container vessels. Water and bunkering facilities available.
New Container Base (South Dock): Length 450 m. Depth alongside 12 m. Gantry cranes up to 35 tons available.
Dique Muelle Sur: 803 m. length, depth alongside 12 m.; 213 m. length, depth alongside 10 m.; 638 m. length, depth alongside 8.00 m. Bunkering and fresh water connections available. Quay used by passenger vessels and vessels bunkering.
Muelle de Ribera: 412 m. length, depth alongside 10 m.; 131 m. length, depth alongside 9.5 m.; 295 m. length, depth alongside 8 m., 314 m. length, depth alongside 7 m. There are 2 ro/ro berths, lengths 100 m. and 169 m., depth alongside 7 m. Bunkers and fresh water available.
Fishing Harbour: Total length 1,850 m. Depth alongside 6 m. Bunkers are supplied by road tanker and water available at certain points along the quay.
Muelle Norte: 103 m. length, depth alongside 8 m. Bunkers and water available.
Container Terminal (N.E. Dock): Length 420 m., depth alongside 10 m.
Honduras Mole: Length 90 m., depth alongside 8 m.
Dolphin Berth: Length 90 m., depth alongside 10 m.
CRANES:
Muella de Ribera: 7×6 ton electric Portal cranes and 8×3 ton Portal cranes.
Muelle Norte: 2×6 ton electric Portal cranes.
Dique del Este: 2×30 ton electric Portal cranes.
Container Terminal (N.E. Dock): 1×30 ton gantry crane. Mobile cranes 180 tons and 125 tons available.
STEVEDORES: Monday to Saturday gangs ordered at 0600, 1200 and 1800 hrs. On Sunday there is only one shift from 0800 – 1400 hrs. and gangs for Sunday work must be ordered at 1300 hrs. on Saturday. Telegraphic information from Masters to be despatched 48 hours prior arrival giving first ETA. Gangs work three 6-hourly shifts, viz. 0800 – 1400 hrs., 1400 – 2000 hrs., 2000 – 0200 hrs. Fourth shift from 0200 – 0800 hrs. by special request. Orders to be made by 1900 hrs. All necessary gear supplied by stevedores.

BULK HANDLING FACILITIES: Grain silo situated at entrance to East Mole, max. discharge rate per extractor, 200 t.p.h. Two extractors available and can work 24 hours a day. It is only used for government department imports. All other shipments are discharged by grabs at the South Mole.

MEDICAL: Masters to advise by radio if medical attention required on board. Yellow fever and smallpox inoculations possible in daytime subject prior notification.

TANKERS: Local refinery (Compania Espanola de Petroleos SA) have ample couplings, hoses and reducers. Slop facilities available. Tankers up to 240,000 d.w.t. discharge at Floating Pipeline Terminal at Honduras Buoy Zone.

Loading terminals situated at Dique del Este; at Puerto Honduras (used mainly for LPG and refined spirit loading) for 45,000 d.w.t.; and 2 berths at extreme end of Muelle Sur.
DENSITY: About 1025.
FRESH WATER: Available at all berths, delivered by hose any time day or night. Water barges available 24 hours to supply vessels at anchorage, 500 tons and 400 tons capacity. Night-time at extra cost.
FUEL: All grades available from CEPSA (cables "Spanoil Madrid" and/or "Tenerife"). Fuel available at all berths, average rate of loading 500-600 t.p.h. Bunkers at anchor can be supplied by bunkering barge *Mayorga,* 1,400 tons capacity, or *Spabunker,* 6,000 tons fuel; 1,500 tons gas oil. Notice required for refuelling 72 hours, to be confirmed at 48 and 24 hours before arrival.
FIRE PRECAUTIONS: All tugs equipped fire-fighting equipment including foam and 4 water/foam monitors. Refinery well equipped with shore fire-fighting equipment, including mobile foam trucks.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
HATCHES: Normally opened by crew, stevedores lifting beams. If whole operation carried out by stevedores, extra charge possible.
CUSTOMS ALLOWANCES: Free port, no restrictions in force.
REPAIRS: NUVASA offer a synchro-lift, lifting capacity 2,000 tons, and vessels up to max. 83 m. LOA can slip at their yards, where there is space for 14 vessels at a time. Dry docking can be effected day and night.

Their workshops can carry out major repairs to ships afloat, including engine and boiler work, and is equipped with modern machinery.
SURVEYORS: Lloyds, ABS, NKK, RIN, BV, GL and NV available from Las Palmas. BV and GL in Santa Cruz.
REPATRIATION: All facilities available for repatriation and crew changes. Daily air flights to Madrid and Europe.

AIRPORT: "Reina Sofia" International Airport situated 65 km. from port, served by Iberia, KLM, Air France, Lufthansa, British Caledonian and others. Daily flights to and from most European capitals.
TIME: GMT in Winter, GMT plus 1 hour in Summer.

HOLIDAYS: Local holiday: May 3rd. National holidays: January 1st, January 6th, March 19th, Maunday Thursday, Good Friday, May 1st, Corpus Christi, July 25th, August 15th, October 12th, December 8th, December 25th.

POLICE/AMBULANCE/FIRE: Police 091; Ambulance 241502; Fire 220080.

TELEPHONES: Facilities exist for connecting telephones on board.

SHORE LEAVE: No restrictions, except for Crew members of East European countries, who must obtain Identification Cards from local Immigration.

IDENTIFICATION CARDS: Not required. For citizens of East European countries local Immigration will deliver Identification Cards, which should be returned to Agent before sailing.

CONSULS:

Austria
Belgium
Bolivia
Brazil
Chile
Colombia
Costa Rica
Denmark
Finland
France
Germany F. R.
Great Britain
Italy
Liberia
Monaco
Netherlands
Norway
Peru
Portugal
Sweden
Uruguay
Venezuela

SERVICES: Underwater hull cleaning, tank cleaning-compounds (Basic Chemicals, etc.), compass adjusting.

Passenger Transport: 8 special craft are available which listen out permanently on Channel 16 VHF.

Transport, Victualling, Lubricants, etc.: There is a fleet of craft operating 24 hours a day for this pupose.

Cleaning of Hulls and Painting Afloat: The company RETRASUB using the Seamp. system operates, and has special craft for hull painting.

Sick Persons: Brought ashore in small craft, and there are ample medical and surgical services available in Tenerife.

Disembarkation of Crew, Technicians etc.: The airports of the island provide wide international coverage for moving crews, etc.

Waiting for Berths: Very reduced tariffs are applied to vessels waiting on stand-by in the anchorage.

DEVELOPMENTS: 2 Ro/Ro berths under construction at Ribera 1 (New South Dock). Length 400 m. Depth 8 m. 2×30 ton cranes.

Ribera 2 Mole (New South Dock). Length 480 m. Depth 12 m. 2×6 ton cranes.

South Dock to be in operation early 1985.

AUTHORITY: Junta Del Puerto De Santa Cruz de Tenerife, Avda, Francisco la Roche. *Tel:* 922-27-78-50. *Contact:* M. Pintor, General Manager.

AGENT: Miller Y Cia S.A., Avenida de Anaga 43-2, P.O.Box 79, Santa Cruz de Tenerife, Canary Islands. Telex 92143 Midoc E. Tel: 282316, 282366, 283766. Cables: "Miller Tenerife".

NOTES

Please also advise Shipping Guides Ltd.

Republic of Cape Verde

PALMEIRA BAY, Sal Island: 16.45 N. 22.59 W.

DOCUMENTS:

5 Crew Lists.
2 Stores Lists.
2 Personal Effects Lists.
1 Health Declaration.
1 Derat Exemption Certificate.
1 Vaccination List.
1 Statement of Ports of Call from Last Loading Port.
3 Bills of Lading.
2 Certificates of Quality (2 from each shore tank at load port).
3 Certificates of Quantity.
2 Cargo Manifests.
1 Ship Particulars Paper (local supply).

PILOTAGE: Accurate ETA advice is essential, as the Mooring Master and Pilot have to leave St. Vincent over 12 hours prior to the vessel's arrival at Sal. Close radio contact must, therefore, be maintained with St. Vincent. If difficulty is experienced in contacting St. Vincent, messages can be passed via Lisbon Radio. Sal Terminal can be contacted on VHF Channels 16 and 13 and by SSB radio.

Shell, St. Vincent, send a Mooring Master from St. Vincent who will berth the vessel and remain onboard until departure.

ANCHORAGES: Position: Lat. 16° 44′ 47″ N., Long. 22° 59′ 37″ W. Sandy bottom. Pilots recommend NOT to anchor during hours of darkness, especially in the months December/March when heavy swell may be encountered.

RESTRICTIONS: Heavy swell occasionally closes port from 1st December to 31st March inclusive.

RADIO/VHF: Arrival displacement to be stated in ETA message. Also see "Pilotage".

Mooring Masters have portable VHF sets for communication to shore during berthing and discharging operations.

TANKERS: A four-buoy (2 forward and 2 aft) sea berth for the supply of refined products to the Airfield on Sal Island, located in Palmeira Bay. Ship drops port anchor in marked location and pays out approx. 7 shackles cable. Three good ropes are required for each buoy. Shore wires are used when swell present. Bottom is stone and rock with some sand patches. Berthing is impracticable in strong South to North West winds which occur usually during winter months.

Engines should be kept ready at all times. The months December/March particularly critical.

DISCHARGING: Shore gang connect hose, however, ship supplies winch driver. Connection is made amidships on starboard side. 1×8 in. flexible hose to an 8 in. submarine pipe-line (length approx 1,000 m.) Max. back pressure 150 lbs./sq.in.

Products Handled: Mogas, Kerosene and Avtur. First product Mogas and last product Avtur.

DENSITY: 1025.

FRESH WATER: None. Nearest at St. Vincent.

FUEL: None. Nearest at St. Vincent.

REPAIRS: None.

GENERAL: A Customs Officer, the Mooring Master and Pilot remain on board during stay in port.

PORTO GRANDE, St. Vincent: 16.53 N. 25.00 W.

(See Plan Book)

PORT LIMITS: Inside of a direct line running from Pta. Joao Ribeiro to Pta. do Morro Blanco.

PORT: Porto Grande at Lat. 16° 52′ 55″ N., Long. 25° 00′ 25″ W. City: Mindelo.

HARBOUR: Porto Grande is a natural semi-circular harbour sheltered and safe, facing island of Santo Antao over a channel approximately 10 miles wide at nearest points. In this channel but nearer St. Vincent is the rock of Ilheu dos Passaros on which is a lighthouse. Entry to harbour is from North to South. Weather conditions throughout year usually good to excellent.

DOCUMENTS: On arrival Masters should hand to Agent:

3 Crew Lists.
3 Passenger Lists.
1 Maritime Health Declaration Certificate.
1 Copy Stores List.

Port Doctor will also wish to sight ship's Derat Certificate.

When discharging cargo a minimum of 5 copies of Bill of Lading and 5 copies of Manifest are required. No special form for Passenger Lists and Crew Lists, and those in general use by the vessel will be accepted.

PILOTAGE: Radio notice of ETA must be sent by Master to Agent at least 48 hours before arrival. Pilot boards mid-way between Bird Island (Ilheu dos Passaros) and the Quay. The Pilot prefers to use pilot ladder. Signal for Pilot is 2 long and 1 short blast on ship's whistle. However, sound signals prohibited between 2000 hrs. and 0800 hrs. local time. Time between Pilot boarding to vessel's anchoring or berthing at piers is 10 to 45 minutes. See "Radio".

Important: The Harbour Master requests Masters not to anchor in harbour before Pilot on board. Pilots available day and night. Pilotage compulsory for all vessels entering harbour for anchoring, or berthing. When sailing, pilotage not compulsory for vessels which anchored in harbour. Pilotage compulsory for all vessels berthing and unberthing at piers.

ANCHORAGE: Anchorage berth in 4 to 20 fathoms.

MAX. SIZE: The harbour of Porto Grande can accommodate vessels up to any size. Also see "Berthing" and "Tankers".

HEALTH: Free pratique can be obtained before arrival on application by radio to Guarda Mor (port doctor) of Sao Vicente de Cabo Verde confirming that crew are in good health. The port doctor, however, usually boards vessel on arrival in company with Police and Customs Guards, in order to provide any medical assistance which may be required. Crew and passengers should be in possession of Smallpox Vaccination Certificates. Production of these certificates will not, however, be called for unless there is a very good reason for doing so.

RADIO: Advice of ETA should be sent by radio to Agents at least 48 hours prior to entering port. Bunker and water requirements, if any, should also be requisitioned in same message. Cash to Master, provisions, cigarettes, spirits, etc., should be also added. ETA message should also advise number of hatches to be worked and number of tons in each hatch.

St. Vincent radio operates on CQA – 500 kHz and 8.738 MHz 24 hours a day – working frequency 435 kHz on 8 MHz. Listening every 2 hours over the hour and again each half hour on the hour. Pilot station may be contacted on VHF Channel 13-16.

BERTHING:

Pier No.	*Max. Depths* (m.)	*Length of Pier* (m.)
1*	11.50	310.00
2	11.50	310.00
3	9.50	160.50
4	9.50	160.50
5	8.50	90.00
6	6.50	122.00
7	4.50	61.50
8	3.50	106.75
9	3.50	40.00
10	4.50	100.00
11	5.50	100.00

(*This pier is open to the sea and usable subject to prevailing winds and swell).

Floating and suspended fenders are available at the piers. Suspended fenders are each of 3 lorry tyres, 3 ft. wide with a diameter of 2 ft. 6 in. suspended at intervals of 70 ft. Floating fenders are of 5 tyres with a wooden core and are 4 ft. 6 in. long and 3 ft. 6 in. in diameter and are placed at intervals between the suspended fenders. Cruising vessels normally berth at Pier No. 2. Max. draft 33 ft.

Height of Pier No. 2 above sea level approximately 2 m. Vessels moor port side to pier. No shore gangways available. Cruising vessels with drafts too deep to berth alongside piers can anchor in harbour about 1,250/1,500 m. distance from Custom House Pier where passengers may land. Ship's launches must be used for the transport of passengers to and from shore. With tug assistance vessels may berth or unberth at any time of day or night at Pier Nos. 2, 3 and 4, but in adverse weather or other adverse conditions berthing at night may be prevented. Berthing and unberthing at night at other piers generally not possible.

CRANES: 1 heavy lift floating crane, max. lifting capacity 60 tons.

STEVEDORES: If quantity for loading or discharging is of 10 tons or under, and in comparatively small parcels, then cargo can be loaded or discharged using the only small lighter available for vessels at anchorage. If larger quantity to be handled vessel must berth alongside quay. In both instances ship's tackle must be used. Discharging rate for bagged cargo, i.e. flour, rice, etc., is about 30 t.p.h. per hatch. In all cases vessel's derricks and winches are used. There are no lighters available, therefore as described above all cargo in excess of 10 tons must be loaded or discharged at the piers. The opening/closing of hatches is the responsibility of the crew on board, but can be done by the stevedores by arrangement with the Master under the supervision and responsibility of the ship's officers.

TANKERS: Max. length 775 ft.; max. draft 36 ft. Underkeel clearance 4 ft. Max. d.w.t. 53,000 tons.

Discharge effected by barge from starboard side of tanker at anchorage, also through submarine pipe-line in harbour at: Lat. 16° 53′ 30″ N., Long. 25° 00′ 50″ W. length of line, 1,000 m.; diameter, 20 in.; Buoy Berth; hoses 12 in.; number of hoses, 7; position of hose connections, midships starboard side; Max. rate per hour, 2,000 tonnes; density of water at berth 1025.

Submarine Pipe-line Buoy Berth: Tankers moored to 1 forward buoy and 3 stern buoys. Tanker also uses port anchor which is dropped before tying up to buoys. Nature of bottom is coarse sand and gravel. Berthing at buoys carried out 24 hours a day and port tugs of up to 1,200 h.p. used always on berthing and on unberthing according to weather conditions.

Cleaning Tanks: 50 miles from shore only.

Gas Freeing: At present no facilities available.

FRESH WATER: Can be supplied at anchorage or at piers or ex-lighter day or night. Water suppliers request at least 48 hours' notice giving quantity required. A minimum charge covering costs of supply of 20 tons is made on supply for under that quantity. To supply over 750 tons during a 12 hour stay in port with 2 lighters, giving between 25 to 50 t.p.h per hose, would be difficult. Connections of hose couplings from water barges are 3 in. male, 11 threads per inch.

FUEL: Oil bunkering carried out ex-lighter at anchorage at rate of up to 300 t.p.h. dependent upon speed at which vessel can receive. Both fuel and diesel oil bunkers can be supplied at the piers. Gas oil can be supplied in drums to vessel at anchorage or in bulk ex-pipe-line on piers. All bunkering at anchorage ex-barge takes place on starboard side of vessel. Supplier: Empresa Nacional de Combustiveis. Telex: 86 Enacol Cv.

GANGWAY/DECK WATCHMEN: Two Maritime Police are always in attendance and are compulsory.

CUSTOMS ALLOWANCES: Tobacco and Wine and/or Spirits, no restrictions within reason.

CONSULS:

Belgian (Vice-Consul)
Danish (Vice-Consul)
Netherlands (Vice-Consul)
Norwegian (Consul)
Swedish (Vice-Consul)
Venezuelan (Belgian Consul acts in a friendly capacity).

REPAIRS: The St. Vincent ship repair yard, situated at Matiota at Porto Grande of St. Vincent, has been completed.

It is constructed on an embankment and protected from the sea by the cliffs and is fitted out with modern installations, well equipped and endowed with specialised personnel, who will be able to execute any repair work on ships up to 6,000 d.w.t.

The elevator system is of slipway type with lateral transference to the repair parks equipped with an elevator platform of 95 m. length and 18 m. width and capacity of 2,800 tons. It has 6 dry repair posts. There is space for 1 more repair post in future.

A pier with a length of 110 m. is situated at the West front and is expected to receive ships of about 6,000 d.w.t. It is used for ship repairs that do not need the dry dock.

The depth along the pier and in the manoeuvring zone is about 6 m.

On shore besides all buildings for the services of storage, the necessary repair shops for the repairs are fitted out with modern equipment.

REPATRIATION: Facilities exist for effecting crew changes by air, but recommend that Lisbon be contacted by Owners for crew making flights into Sal Island in order to join vessel St. Vincent. Agents should also be informed to make necessary arrangements for flight on local plane from Sal Island to St. Vincent. All crew travelling to Cape Verde must have transit visa issued by Consul in country of origin. All crew, except cases for hospitalisation, must be in possession of a passport before police will permit them to disembark for repatriation. Crew possessing valid passports or sailors' books can land in Cape Verde for medical and/or hospital treatment or for repatriation to country of nationality provided it is country with whom Cape Verde has diplomatic relations and provided Agents of vessel take full responsibility on behalf of Owners for all expenses.

AIRPORT: Airport served by Dove planes for inter-island service only. 20 flights a week in and out of St. Vincent, 4 direct from Praia and 6 via Sal Island inwards. 5 via Sal and 5 direct Praia outwards. Main Airport is at Sal Island where 5 flights a week by Boeing 727 call to and from Lisbon. At Sal Island the only hotel is situated at the Airport.

TIME: GMT minus 1 hour all the year round.

HOLIDAYS: New Year's Day (1st January); National hero's day (20th January); St. Vincent's Day (22nd January); Women Day (8th March); Workman Day (1st May); Children's Day (1st June); National Independence Day; (5th July) Nationality's Day; (12th September); Christmas Day (25th December).

Although offices closed on holidays, loading and discharging of vessels not generally affected.

POLICE/DOCTOR/AMBULANCE/FIRE: Contact police on board or local Agent.

SHIPMASTER'S REPORT: July, 1984.

Pilotage: Pilot boards 0.5 miles from end of breakwater.

Anchorage: Vessel anchored with Mohle No. 2 Light bearing 068° distance 0.5 miles.

Restrictions: Vessel may enter day and night at any stage of the tide.

Tugs: 2 tugs available. Docking and undocking possible without the assistance of tugs.

Radio: Sao Vicente de Cabo Verde.

VHF: Pilot on Channel 16. Port Authority on Channel 15. Agent on Channels 16 and 15.

Documents:

3 Copies Crew List.
1 Copy Stores List.
Maritime Health Declaration.

Facilities: The following facilities are available: Fresh water. Fresh provisions in limited quantity. Repair facilities. Dry docking facilities for vessels up to 11 m. draft. Machine shop. Lloyd's Surveyor and Salvage Surveyor. Laundry service. Telex. Bunker fuel oil and diesel oil. Doctor and hospital.

Berthing: Vessel berthed at Berth No. 2 (Molhe No. 2). Length of quay 1,000 ft.

Depths: Depths at N.E. end 37 ft. and at S.W. 43 ft. Least depth of water in channel from sea to berth is 44 ft. Mean tidal range 0.8 m. Bottom mud. Density 1025.

Cargo Handling Facilities: Cold storage capacity 24,000 tons. No ro/ro and bulk handling facilities. No quay cranes on the main quay. Floating quay available. Fork lift trucks available. No handling equipment or storage facilities for containers.

AUTHORITY: Direccao Geral de Marinha e Portos, C.P.7, Mindelo, Republic of Cape Verde. *Tel:* 2433, 2470. *Telex:* 32 Marpor CV.
Contact: Jaoa Baptista Brites, Harbour Master.

AGENT: Agencia Nacional de Viagens (Seccao Internacional) P.O.Box 16, St. Vincent, Republic of Cape Verde. Cable Address: Anavsi Saovicentecaboverde. Telex: 83 Anav Sv – Cv.

NOTES

Please also advise Shipping Guides Ltd.

Cayman Islands

CAYMAN BRAC (See Plan Book)

SHIPMASTER'S REPORT: February 1979.

Cayman Brac – Lightering Area

Chart: British Admiralty 462.

Radio: Very weak VHF only Channels 16, 10, 6. Call – "Cayman Energy" Agent recommends using Curacao (PJC) for ETAs, etc.

Boarding Positions:

No. 1: Lat. 19° 46.5' N., Long. 79° 46.5' W.
No. 2: Lat. 19° 40' N., Long. 79° 53' W.

Documents: 4 Crew Lists, 3 Stores Lists, 3 Personal Effects Lists, 2 Vaccination Lists, Clearance from Last Port, Cargo Manifest and Health Declaration (supplied).

Pilots: Mooring Master boards service vessel, STBL. 2 Pilots, 2 Assistants and 2 Riggers (for fenders). The above 6 men require accommodation on board.

Mooring: According to Operators "Cayman Energy Ltd.", can be carried out anytime day or night.

Cayman Energy Ltd., based in New York, are the operators of the transhipment operation. The local Terminal Manager and Senior Mooring Master resides on Cayman Brac and usually carries out the berthing operation from the service vessel. Ship to ship transfers commenced in 1977, future developments include the construction of a Transhipment Terminal on Little Cayman using SBMs, this project should come into operation late 1979.

The berthing procedure is straightforward and based on the ICS Ship to Ship Transfer Guide. On this occasion, Texaco were using vessels of about 45,000 d.w.t. as service vessels. These ships are in the region of 20 years old and have no modifications for this work. The Officers and crew of these vessels were mainly Italian and well practised in ship-to-ship transfers.

Upon completion of mooring, the Mooring Master departs and the Pilots remain on both vessels in an advisory capacity. 2×10 in. hoses are connected by the respective crews, the shore riggers assisting. Communications between the two vessels is by VHF.

During the transfer operation, the vessels are expected to remain within 4 to 5 miles from the island and the service vessel kept in the lee of the STBL. This entails maintaining a proper bridge watch and frequent use of the engines. The currents invariably set away from the island and can be quite strong at times. The winds during the latter part of January were extremely variable in both direction and force.

The Texaco practice of the STBL taking dirty ballast from the service vessel whilst reducing the risk of pollution, poses stress problems and also requires strict supervision of line draining between each operation. Ideally, water dips and ullages should be taken prior to and after the deballasting.

Unberthing is carried out by the Mooring Master whilst both vessels are drifting. The off-loader is put on the weather side of the STBL. This practice is questionable in winds over 15 knots – the movement of the smaller vessel together with reduced freeboard causes difficulties with the fenders.

The average berth time for each vessel is approximately 30 hours, the number of off-loaders for a ship of this size is five. If a safe and efficient operation is to be maintained throughout the period it is essential that two additional deck officers be available for cargo watch purposes.

SHIPMASTER'S REPORT: January 1980.

Cayman Brac – Little Cayman (See Plan Book)

Communications: "Cayharb Cayman Brac" via Slidell Radio WNU (see "Admiralty Radio Signals Volume 6").

Via VHF Channel 16:

"Cayman Energy" (good reception)
"Cayman Pilots" (via ship where the Pilot is at the time)
"Cayman Harbour" (weak signal)

Pilot Boarding Station:

Lat. 19° 43' N., Long. 79° 53' W. or Lat. 19° 40' N., Long. 79° 53' W.

Note: this position may change with seasonal weather conditions. The position is also used for Port Officials who request accommodation ladder in light condition but accept air pilot hoist or pilot ladder in loaded (tanker) condition.

Documents Required: 4 Crew Lists, 4 Cholera/Smallpox Immunization Lists, 4 Store Lists that include Stores, Narcotics, Bond, 4 Cargo Manifests, 4 Crew Declaration Lists.

Bond: Bonded Stores locker remains unlocked and issues may be made to the crew for onboard use only.

Postal Address: Cayman Harbour Corporation Ltd., Stake Bay, P.O.Box 50, Cayman Brac, Cayman Islands, British West Indies.

Facilities Available: Food, some stores, fresh water limited from tug.

Bunkers: Via lightering tanker ordered via Owners/Charterers.

Medical: Doctor can board ship at any time.

Hospital: Available.

Derat Certificate: No renewal certificate available but a letter of acceptance of renewal for Cayman Brac is issued.

Shore Side Facilities: Cayman Brac: Shops, hotels, post office. Little Cayman: Clubs (tourists). Fishing when in soundings.

Anchorages (under Pilots guidance):

Off Western end of Cayman Brac	up to 57 ft. draft.
Off Little Cayman	up to 69 ft. draft.

Currents: Variable, depending on season and weather. Ships experienced very little set and drift North of Cayman Brac 1.5 mile – 2.5 mile distance, other times over 2 knots. Generally N.W. direction. Stronger South of Islands.

Ship-to-Ship Cargo Pumping Operations: Cayman Energy Corporation Ltd. Tug: "Cayman Energy". Mooring ship to ship – see Plan. Fibre mooring lines instead of wire preferred. Operations under way, under guidance of Pilot/Loading Master. Ships separated by floating fenders supplied by Cayman Energy Corporation. Pumping may continue when ships are manoeuvring dead slow. Fenders remain alongside between lighterings and it is possible to manoeuvre up to 7 knots. Smaller vessel is moored on the lee side of discharging vessel (the larger one).

Pilot plus 4 assistants remain onboard for the duration of all cargo lightering operations but may be relieved if lighterings are prolonged ones.

Shore leave for ships crew is possible via pilot boat or "Cayman Energy".

Cayman Brac Airport: Flights to Grand Cayman and then overseas.

SHIPMASTER'S REPORT: November 1980.

Vessel (230,000 d.w.t.) arrived at Cayman Brac for 2 to 3 months storage and lightening operations. No information or charts were on board prior to arrival.

Cayman Brac is a small island about 12 miles by 1.5 miles and is used solely for lightening operations, a maximum of 4 pairs of ships being handled at one time, but usually only 2.

There are 2 Pilot and Port Official Boarding Areas, North Boarding Area Lat. 19° 43' N., Long. 79° 53' W. and South Boarding Area Lat. 19° 40' N., Long. 79° 53' W., the choice depending on the wind direction. If no chart on board Cayman Brac can be approached to within 1 mile at any draft. There is no proper harbour, the launches have to boarded from the beach using small boats, the launches remaining at moorings some distance offshore which can make transfer difficult in bad weather, especially for heavy stores.

There are no stores available on Cayman Brac, all stores have to be flown in from Grand Cayman or from Tampa, Florida. There is no official shipchandler on Cayman Brac although the Agent will assist vessels requesting small amounts of stores. We were informed by other vessels that usual method of obtaining large stores was to arrange for a supply by container direct from Tampa, Florida to the ship using a small coastal freighter. Other ships had stored at Barbados on the way in and way out. All stores are very expensive.

On arrival at Cayman Brac contact was initially made with "Cayman Brac Pilots" on Channel 16. However the call sign "Cayman Brac Pilots" is not usually used as this is in fact "Cayman Energy" who organise all Pilots, launch services and lightening operations. "Cayman Energy" is run by Captain H. Banks who appears to man the shore VHF station 24 hours a day, in addition to occasionally acting as a Pilot.

There are very few suitable anchorage positions, due to deepwater existing right up to the reef. There is one at the West end of Cayman Brac suitable for a VLCC with maximum draft of 66 ft. This is close to the boarding areas. Another at the West end of Little Cayman is suitable for a VLCC but 2 hours by launch from boarding area. There is another at East end of Little Cayman suitable only for vessels up to 100,000 tons. We used the anchorage at the West end of Cayman Brac and although very close to shore experienced no dragging during time anchored. We were informed by Pilots that no ship had ever dragged from that anchorage. Pilot essential for anchoring.

Agents are "Cayman Harbour" who monitor Channel 16 and are very helpful at all times. A doctor is available but no dentist. (Cable: "Cayharb Caymanbrac").

Lightening Operations: Normal procedure is for ship to be lightened (STBL) to fender starboard side before berthing, 4 fenders being brought out by launch "Cayman Mariner" or "North Harbour" also 2 hoses and reducers if required, on a barge. The fenders are positioned and hoses connected using 2 shore operators assisted by ship's crew. This can take up to 6 hours, during which time a Pilot is on board. Two Pilots and 2 shore operators remain on board during lightening. Then, if conditions are suitable both vessels steam with wind 15° on starboard bow, STBL at 4 knots and lightening ship comes up from astern on starboard side and closes with STBL, the operation being controlled by Pilot on lightening ship.

Berthing can take from 1 to 3 hours depending on circumstances, so a suitable clear run is required ahead of vessels to enable this to take place without altering course. Needless to say berthing vessels have right of way over all other vessels and this local rule is enforced by "Cayman Energy".

Both ships have a Pilot during the entire berthing, lightening and unberthing operations, also Pilot remains on STBL until fenders and hoses removed. This is done unless next lightening operation is expected in near future, as fenders are liable to damage if left in position on STBL.

Due to Cayman Brac lying N.E./S.W. and wind during Winter months generally from N.E. there is not much shelter available but even so lightening operations are only occasionally interrupted due to weather.

Ullages and cargo figures on our vessel and lightening ship were checked by Calib Brett Surveyors, this service having been arranged by charterers, it is not standard procedure, but depends on charterers.

Whilst lightening, navigation is carried out by STBL so bridge must be manned throughout, as well as cargo control room. Vessel steams normally at slow speed to maintain suitable position, with long periods of "stop" when engines are not required. During this time lightening ship's engines are not used. Maximum discharge rate permitted during discharge is 5,000 t.p.h. No difficulties were experienced during berthing or discharge except that due to communication problems with charterers, STBL and lightening ship occasionally had differing orders regarding discharge quantities, however this could usually be sorted out by "Cayman Harbour" in a short time.

There is a twice daily flight from Grand Cayman to Cayman Brac. This flight is always fully booked but even so seats are usually available. Extra flights are also made when required. Flights lasts 50 minutes and costs £10.00 single. There are 2 hotels on Cayman Brac and rooms are usually available.

Documents: On arrival Customs and Immigration board and require 4 copies each:

Crew Personal Effects Lists (Crew Lists also required before sailing).
Stores Lists including Narcotics.
Crew Lists (with full names).
Vaccination Lists.

Currency is Cayman Island Dollars (CI$) but U.S. Dollars are accepted with exchange rate US$ 1.00 = CI$ 0.82.

AUTHORITY: *Operator:* Cayman Energy Limited, P.O.Box 33, Cayman Brac, Cayman Islands, B.W.I. *Telex:* 4350 Celcb Cp.

GEORGETOWN, Grand Cayman: 19.18 N. 81.23 W.

DOCUMENTS:
Bills of Lading.
Crew List.
Cargo Manifest.
Ship's Register.
Safety Certificates.
Clearance from Last Port.

PILOTAGE: Available on request.

ANCHORAGE: With Georgetown Lighthouse bearing 125° – 150° distance 750 m. to 1,200 m.

RADIO: SSB: 4136.3 kHz, 0800 hrs. – 1200 hrs. Monday to Saturday. 8281.2 kHz, 1210 hrs. – 1700 hrs. Monday to Friday.

VHF: Channel 16, 24 hours a day.

TUGS: Launches available. No tugs available.

BERTHING: *South Wharf:* Length 445 m. depth 11 ft. – 24 ft.

West Wharf: Length 240 m. depth 13 ft.

Ro/Ro Ramps: South Wharf: 1 ramp with depth 11 ft. Finger Pier at South Wharf: 1 ramp with depth 21 ft. – 26 ft. West Wharf (South End): 1 ramp with depth 13 ft. – 20 ft.

Cranes: 20 ton, 50 ton and 100 ton cranes available for hire.

Fork Lifts: 5×2.5 tons, 1×5 tons, 1×26 tons, 1×35 tons.

STEVEDORES: Stevedores arranged by Agent, supplied by the Port Authority.

Working Hours:

	0800-1200	Monday to Friday
	1300-1700	
	0800-1200	Saturdays
Overtime	1700-2100	Monday to Friday
	1300-1800	Saturdays

In the event that a vessel may finish discharging and sail, an additional 2 hours may be worked.

No work Sundays and Holidays unless Port Director considers it necessary.

MEDICAL: Hospital available.

FRESH WATER: Supplied by truck.

FUEL: Marine diesel only, delivered by truck.

AIRPORT: Scheduled flights by international carriers.

HOLIDAYS: New Year's Day, Ash Wednesday, Good Friday, Easter Monday, Commonwealth Day or Tree Planting Day (3rd Monday in May), Queen's Birthday, Constitution Day (1st Monday in July), Monday after Remembrance Sunday, Christmas Day, 26th December.

SERVICES: Ship chandlers available.

AUTHORITY: Cayman Islands Port Authority, Harbour Drive, Georgetown, Grand Cayman, Cayman Islands. *Contact:* The Port Director.

NOTES

Please also advise Shipping Guides Ltd.

Chile

GENERAL

The ports of the Republic are under the jurisdiction of the General Directorate of Maritime Territory and Mercantile Marine, and for this purpose, the Director of this Service delegates his functions and responsibilities to the Maritime Authorities located in the different ports of the country, and who in turn are organised into Maritime Governorships, Port Captaincies and Marine Mayors, according to the importance of the port and the extent of its territorial jurisdiction.

ARRIVAL ADVICE: Masters of vessels must inform the Port Captain of their ETA, 24 hours in advance of arrival, via a message which must contain the following information:

Name of vessel and flag.
ETA (date and time).
Number of passengers, or negative.
Quantity of hazardous cargo for the port or in transit, or negative.
State of health of the crew and/or passengers.
Draft.

The telegraphic address of the Maritime Authority is "Maritgob" . . . . . . or "Capuerto" . . . . . ., whichever applies.

All commercial ports have a maritime radio station listening out permanently on 2182 kHz. and Channel 16, VHF.

REPORTING: It is recommended to vessels navigating in the maritime area of national responsibility (200 miles) to communicate their daily position at 0800 hrs. and 2000 hrs.; stating course, speed and destination port, for the purpose of maintaining permanently updated information for achieving efficient and timely action in the co-ordination of search and rescue where persons are in danger or lost at sea.

Also see "Search and Rescue".

DOCUMENTS: All vessels coming from abroad, on arrival at the first Chilean port, are received by the following authorities presided over by the Port Captain.

Human Health.
Customs.
Vegetable Health.
Immigration.

Prior to the Maritime Authority granting free pratique, the vessel must present to the Reception Commission the following ALALC documents:

General Health Declaration	1 (First Port)
Clearance Document from last port	1
Vessel's General Declaration	5
Crew List	5
List of Crew's Personal Effects	3
List of Passengers for the Port	5
List of Passengers in Transit	5
Mail Declaration or Negative	5
List of Provisions	6
Cargo Manifest for the Port	10
Manifest for Cargo in Transit	10
IMO Hazardous Cargo Declaration	6
Declaration of Arms and Ammunition	2

At the first port of call, Immigration will ask for the passports of the crew and/or passengers to make out the cards which they are given and which must be returned when the vessel leaves the last Chilean port.

The Port Captain may require further vessel certificates, but generally asks for the following:

Safety Equipment Certificate.
Certificate of Radiotelegraphic Safety.
Tonnage Certificate.
Certificate of Lighthouses and Buoys (Chilean).
Hydrocarbon Book (Tankers).

Prior to sailing, hatches must be hermetically sealed, and on-deck cargo must be duly lashed, and positioned in accordance with international standards.

When the vessel sails, the Maritime Authority grants a "Sailing Document" stamped by Customs, to which is added a list of the crew and/or passengers, stamped by Immigration.

Transit of persons or crew members to and from the vessel is not permitted once the Sailing Document has been issued. If the vessel does not sail within a reasonable time, for reasons of force majeure, this fact must be communicated to the Port Captain, who will seek the return of the corresponding Document, if he sees fit.

PILOTAGE: The use of a Pilot is obligatory in all Chilean ports, both for berthing and unberthing, including oil terminals. Accordingly, a Pilot is taken on board in each Pilotage Area.

For vessels coming from the North, Pilots come aboard at Valparaiso, Talcahuano, Ancud or at the Pilot Station of Laitec, in Quellon. For vessels coming from the Atlantic, the Pilot comes aboard at the station located in Bahia Posesion.

HEALTH: All vessels arriving from abroad are required to call at one of following ports for free pratique: Arica, Valparaiso or Punta Arenas. Vessels are also allowed to call direct to Tocopilla, Iquique, Antofagasta, Coquimbo, San Antonio, Talcahuano and San Vicente.

Vessels can be exempted from call at one of these ports, and proceed direct to the port of loading and/or discharge providing permission obtained, with 8 days' notice from National Health Service.

Following details in order to apply for exemption on behalf of a vessel are required:

Name and flag of vessel.
Net registered tonnage.
Last port of call.
Cargo carried, or if in ballast.
Port of arrival in Chile and date of arrival.

FLAG: All vessels arriving in Chilean ports must fly their own ensign and also the Chilean Flag, from the highest mast.

On entering port the "Q" flag should be flown until pratique is granted.

The use of whistles or sirens in port must be strictly in accordance with the Rules for The Prevention of Collisions.

RADIO: There are 63 radio stations along the coast.

Notices to Mariners are transmitted from Valparaiso, Punta Tumbes, Puerto Montt, Corona Lighthouse, Punta Arenas and Punta Delgada.

The observation of local weather is transmitted by the following radio stations in radio telephony:

Playa Ancha Radio – CBV.
Talcahuano Radio – CBT-4.
Puerto Montt Radio – CBP-2.
Quellon Radio – CBQ-4.
Calbuco Radio – CBC-6.
Magallanes Radio – CBM-2.

General and special forecasts covering from Arica to San Pedro are transmitted by the Naval Radio Belloto – CCV-6, in telegraphy (Areas I to VI). Furthermore, Naval Station Bellota, CCV-4, transmits daily, on frequencies 4,379 and 22,070 kHz, the following meteorological information in facsimile:

1130 hrs. GMT: Area Chart.
1920 hrs. GMT: Nepho Analysis.
1940 hrs. GMT: Wave Analysis.
2310 hrs. GMT: Area Chart.
2330 hrs. GMT: Forecast Area Chart.
0200 hrs. GMT: Forecast Wave Chart.

The Naval Radio Station of Magallanes transmits the general forecast in telegraphy for Zones VII – VIII and X.

The Chilean Air Force Radio Station Presidente Frei transmits the general forecast for Zone IX.

For weather forecasting the country has been divided from North to South into the following areas or zones.

Zone I : from Arica to Coquimbo;
Zone II : from Coquimbo to Valparaiso;
Zone III : from Valparaiso to Constitucion;
Zone IV : from Constitucion to Isla Mocha;
Zone V : from Isla Mocha to Puerto Montt;
Zone VI : from Puerto Montt to Isla San Pedro;
Zone VII : from Isla San Pedro to Evangelista Lighthouse;
Zone VIII: from Evangelista Lighthouse to Lat. 60° 00′ S.;
Zone IX : from Lat. 60° 00′ S. to Lat. 90° 00′ S.;
Zone X : from Long. 80° 00′ W. to Long. 120° 00′ W.

Chile is normally 4 hours behind GMT, but from the 2nd Saturday in October to the 2nd Saturday in March clocks are advanced 1 hour. However radio transmissions will continue to use GMT minus 4 hours.

ETA advices are best made using GMT.

FUMIGATION: If a vessel's Derat Certificate is overdue an Exemption Certificate may be granted provided that there are no rats on board, and no ports infected by Bubonic Plague have been visited recently. Fumigation can be carried out by the Farming and Cattle Bureau. In such cases the vessel anchors in the inner port or Roads, all crew are landed for a period of 24 hours, and the fumigation carried out before the vessel is berthed.

STEVEDORES: In all Chilean ports there are stevedoring and discharge companies, all of whom have adequate personnel and means for executing the work of loading and discharging vessels.

Daily, Chilean ports work on systems of shifts indicated as follows:

First Shift: from 0730 to 1530 hrs.
Second shift: from 1530 to 2300 hrs.
Third Shift: from 2300 to 0600 hrs.

All vessels in port must have a watchman at its accesses who has the responsibility of ensuring that no person not belonging to the vessel and/or not having due authority comes on board.

Port operations are surveyed periodically by a Safety Patrol whose job it is to ensure that the activity of stevedoring in loading and discharging vessels be carried out in accordance with national and international safety standards. This patrol reports to the Port Captain.

HOLIDAYS: The following dates are public holidays in Chile:

1st January, Thursday and Friday of Holy Week (March/April). 1st May – Labour Day, 21st May – Naval Combat of Iquique (Fleet Day), 15th August – Assumption of the Virgin Mary, 18th September – Independence of Chile. 19th September – Day of the Glories of the Army, 12th October – Discovery of America, 1st November – All Saints' Day, 8th December – Immaculate Conception, 25th December – Christmas.

The holidays do not affect the efficiency of the system of port work.

CREW: Foreign merchant vessels can contract-in Chilean crew members without many problems, the engagement contract having to be authenticated by the Master beforehand.

Curfew: There is no curfew in Chile. Persons may move about freely within the national territory at any hour of the day or night.

FUEL: Fuel can be taken on in any port in the country from tanker trucks. Prices are in accordance with fluctuations in the international market. The ship's Agent must request the required amount in advance.

POLLUTION: It is expressly forbidden to throw overboard any ballast, rubbish or waste, or to spill petroleum or any derivative or residue, contaminated waters from mineral processing plants or any dangerous or noxious substance of any kind either into ports or Chilean jurisdictional waters (200 miles limit) without prior authority from the Port Captain. Standing regulations stipulate that no tanker may dump hydrocarbons or other derivatives within fifty miles of the coast.

In accordance with international rules, vessels navigating in Chilean waters must have an insurance policy against risks of marine contamination. In the event of contamination, without prejudice to the administrative sanctions which may be imposed, the rules of civil responsibility for marine contamination will be applied, as established in international regulations.

MAGELLAN STRAIT: Despite the fact that there is an excellent system of buoys and assistance to navigation, the use of a Pilot (2 Pilots) is obligatory in the Magellan Strait for all vessels and in any condition.

The following lighthouses and installations are equipped with Racon:
Dungenes Lighthouse
Oil Platform SPN No. 2
Oil Platform PO No. 2
Punta Baxa Lighthouse
Segunda Angostura Lighthouse.

The Government of Chile has established a new system of assistance to navigation in Magellan Strait; in order to provide support to navigation and pilotage in the area; by means of interchange of centralised information with vessels, attempting to provide full safety to human life at sea. This system which has radar stations installed in the Punta Dungenes Lighthouse and the Port Captaincy of Punta Delgada, is at the service of any vessel requesting aid, without any cost to the user, and enables navigation to be guided on the Boca Oriental (Eastern Mouth) and the Banco Triton (Triton Bank) or vice versa.

Vessels requiring this service and who are coming from the Atlantic Ocean, must communicate their arrival at the point located at Lat. 52° 35′ S., Long. 68° 10′ W., at least 24 hours in advance, to Maritime Radio Station Punta Arenas (CBM), using the frequencies and times indicated in the Nomenclature of Coastal Stations, List IV, of the International Telecommunication Union.

At 20 nautical miles from the point of arrival, a direct contact must be made with Punta Dungenes Lighthouse (CBF – 67) or Cabo Espiritu Santo (CBF – 68) on Channel 16 VHF.

Stations at Punta Arenas and Punta Delgada also provide the following information:
traffic present in the area
position of oil platforms and naval installations
indication of the anchorage area and for awaiting the Pilot
weather conditions
tidal information
information concerning urgent notices to mariners and others.

SEARCH AND MARITIME RESCUE: (See Plan Book) In January 1983 Chile established a system of "Notification of the Situation of Vessels" in order to render immediate assistance to vessels in danger or distress. The system is called "SISNAV".

The fundamental objective of the "System" is to provide information for the Head of Search and Maritime Salvage at this General Directorate, and to the Mercantile Traffic Situation Controllers, together with the Operational Centres for Search and Rescue along the extent of the coastline; in the ports of Iquique, Valparaiso, Talcahuano, Puerto Montt and Punta Arenas.

The area of national responsibility, for the purpose of search and rescue, is to the North between Lat. 18° 20′ 08″ S. and Long. 120° W.; and to the South as far as the South Pole and the waters of Drake Strait. See "Plan Book".

With regard to the "SISNAV" system, it is necessary to emphasise the following:
(a) The service and its use is free of charge to users.
(b) The format of messages is that recommended by the International Maritime Organisation.
(c) On average, vessels navigating in the area of national responsibility adhere to the SISNAV system; our Service of Search and Maritime Rescue can provide a rapid and efficient aid to any vessel or persons in danger.

Typical messages, provided for the SISNAV system, are as follows, and the maximum priority should be assigned to them:

1. NAVIGATION PLAN (SP):

(a) When the vessel enters national waters:

The vessel's Master must send the entry message through the intermediary of the Maritime Radio Station corresponding to the sector of the Search and Rescue Service or through that which he is able to contact first.

2. SITUATION REPORT (PR):

The message of notification of situation must be originated daily by the vessel's Master at 0800 hrs. and 2000 hrs., or when the situation of the vessel varies considerably from that pre-supposed, and it must be transmitted through the corresponding Maritime Radio Station or through that which the ship is able to contact first.

3. FINAL NOTIFICATION (FR):

(a) On leaving the area of national responsibility:

The Master of the vessel must originate the corresponding message through the intermediary of the Maritime Radio Station of the sector of the Service of Search and Rescue in which he is navigating or through that which he can contact first.

SISNAV communications are made using the Network of Maritime Telecommunications, which is able to receive any kind of message of Assistance, Distress or Urgency and those corresponding to the System.

The Maritime Telecommunication Network is shown in List IV Vol. 1 and 2 of the Coastal Station List of the UIT and for the purposes of the SISNAV system the main radio stations are considered to be Antofagasta (CBA), Playa Ancha (CBV), Talcahuano (CBT), Puerto Montt (CBP) and Magallanes (CBM).

To facilitate the drawing up of typical messages in the System, below are outlined the mechanics of the operation:
SISNAV: Identification of the system.
ALPHA: Type of message, followed by SP–FR–PR, as necessary.
BRAVO: Name of vessel, followed by its international call sign.
CHARLIE: Date/time group (GMT), i.e. a group of 6 digits to indicate the actual date (the first two digits) and the hour and minutes (the last four digits).
DELTA: Situation, port from which sailed or last called at.
ECHO: In a group of four digits to indicate the Latitude in degrees and minutes with the suffix "N" or "S" and a group of 4 digits indicating the Longitude in degrees and minutes with the suffix "E" or W".
FOXTROT: In a group of three digits to indicate the true course of the vessel.
GOLF: In a group of two digits to indicate the speed of the vessel in knots.
HOTEL: To indicate the plane course of the vessel, e.g. RL – rhumbline, CC – great circle, or CO – coastal.
INDIA: ETA at next port.
JULIET: Name of the Coastal Station(s) listening out.
KILO: Time for next report in an indicator group of 6 digits, giving date and time.
LIMA: Any additional information.

To add to the foregoing procedure, below are given the following examples of SISNAV messages:

1. NAVIGATION PLAN
SISNAV
A: SP
B: JUDITH SCHULTE/ZFEK
C: 101000
D: CALLAO
E: 1820S 0714W
F: 173
G: 16
H: CO
I: 122145 VALPARAISO
J: CBA
K: 110800

2. NOTIFICATION OF SITUATION
SISNAV
A: PR
B: JUDITH SCHULTE/ZFEK
C: 110800
E: 2420S 0710W
F: 176
G: 16
J: CBA
K: 112000

3. FINAL NOTIFICATION
SISNAV
A: FR
B: JUDITH SCHULTE/ZFEK
C: 142000
D: VALPARAISO

SEARCH AND MARITIME RESCUE DISTRICTS:

(a) First District for Search and Maritime Rescue

This corresponds to the North Naval District, from the North limiting parallel to Lat. 26° S. The Centre for Coordination of Search and Maritime Rescue is in the Maritime Control at Iquique.

(b) Second District for Search and Maritime Rescue

Corresponds to the First Naval Zone, from parallel 26° S. to parallel 34° 09′ S. The Centre for Search and Maritime Rescue will be located in the Valparaiso Maritime Control.

(c) Third District for Search and Maritime Rescue

This corresponds to the Second Naval Zone, from parallel 34° 09′ S. to parallel 47° S., excluding the territory included in the Fourth District and as indicated in point (d) of this section.

The Centre for Search and Maritime Rescue will be located in the Talcahuano Maritime Control.

(d) Fourth District for Search and Maritime Rescue

This corresponds to the internal waters of the Second Naval Zone, included between Lat. 41° 21′ S. and Long. 74° W. as far as Lat. 43° 16′ S. and Long. 74° W., and from Lat. 43° 16′ S. and Long. 76° W., as far as Lat. 47° S. and Long. 76° W.

The Centre for Search and Maritime Rescue will be located in the Maritime Control of Puerto Montt.

(e) Fifth District for Search and Maritime Rescue

This corresponds to the Third Naval Zone from Lat. 47° S. to Lat. 90° S., and includes all waters under national control and those corresponding to the Sea of Chile.

The Centre for Search and Maritime Rescue will be located in the Maritime Control of Punta Arenas.

ANTOFAGASTA (including La Chimba Cove): 23.39 S. 70.25 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory. Pilot should be awaited in position bearing 300° and 4 – 5 cables from the lighthouse at the head of the breakwater mole. The Pilot will board during 24 hours, weather permitting, and if the vessel is at anchor an extra charge will be made for heaving aweigh while the Pilot is on board.

The accommodation or pilot ladder must be rigged for the Pilot. Pilot can be contacted by VHF Channel 16.

ANCHORAGE: About 1,200 m. from green light on coast mole. Vessels that do not enter port anchor in what is known as "old or outer port" where best anchorage is bearing 103° from anchor painted on hillside, about 5 cables from coast in 37 m. – 22 m. of water.

Small vessels anchor about 4.5 cables from old passenger quay in 22 m. – 18 m. of water. Ships should use two anchors and follow the indications of the Port Pilot.

There is a forbidden anchorage zone established to avoid obstructing manoeuvres when a vessel is entering or leaving the artificial port. This zone is located between the Paita Rock and the extreme North of the protected mole. It is 2.5 cables from North to South and 2 cables wide.

RESTRICTIONS: From May to July the surge is stronger and results in rough seas lasting from 2 to 4 days interrupting the traffic of small craft.

MAX. SIZE: Fishing zone – 24 ft. draft (7.32 m.).
Berth No. 1 – 30 ft. max. draft (9.14 m.)
Berth No. 2 – 30 ft. max. draft (9.14 m.)
Berth No. 3 – 30 ft. max. draft (9.14 m.)
Wharf Zone – 16 ft. draft (4.88 m.)
Berth No. 4 – 30 ft. max. draft (9.14 m.)
Berth No. 5 – 30 ft. max. draft (9.14 m.)
Berth No. 6 – 32 ft. max. draft (9.75 m.)
Berth No. 7 – 33 ft. max. draft (10.06 m.)

La Chimba Cove: Situated about 5 miles North of Antofagasta. The port entrance is 2 cables wide. Max. length 150 m. Draft 27 ft. Vessels use both anchors, and moor to two stern buoys on each quarter. Ship's head 345°T. A further line is sent from the port bow to the shore.

RADIO:

Station *Call Sign*	*Category*	*Frequency*	*Type*	*Receives*	*Transmits*	*Schedule*
Antofagasta	(P)	8 MHz	A1	8354		
CBA 3				8374	8730	H00–30
		4 MHz	A3	4091.6	4396.6	H30–45
		8 MHz	A3	8230	8780	H45–60

Also see "General" before first port.

TUGS: 2 tugs available.

BERTHING: Inner dock measures 4.5 cables long N. to S. and 2.5 cables wide at entrance.

Depths: Berth Nos. 1 – 5, 10 m.; Berth No. 6, 10.5 m.; Berth No. 7, 11 m.

CRANES: Berth Nos. 1, 2 and 3: 6×12 ton electric cranes, 4×5 ton electric cranes.

Berth Nos. 4 and 5: 4×5 ton electric cranes.

1×40 ton steam crane for heavy lifts.

TANKERS: Buoy moorings for tankers, owned by Standard Oil, Shell, Codelco, and Copec.

All terminals operate 24 hours. Tankers can use steel wires. Mooring buoys are fitted with quick release hooks, difficulties may arise with underpowered mooring launches.

Standard Oil Mooring: Max. length 170 m. Max. draft 28 ft. Flexible hoses. One 10 in. line for products. One 12 in. line for fuel oil.

Copec Buoy: Max. length 180 m. Max. draft 30 ft. fwd., 34 ft. aft. 10 in. lines for fuel oil and clean products. Max. pressure 150 p.s.i.

Codelco Buoy: Max. length 200 m. Max. draft 40 ft. Flexible hose of 8 in. for products and lub oils. Vessel berths using both anchors forward and lines to 3 mooring buoys astern. Hoses lifted midships on port side. No slop disposal facilities.

La Chimba Cove: A 6 in. hose is brought on board on the starboard side. Discharge rate 180 cu.m./hr. 250 p.s.i.

STEVEDORES: Available through the Agents working 24 hours a day in 3 shifts, from 0800–1530 hrs., 1530–2300 hrs. and from 2300–0630 hrs.

MEDICAL: A first class hospital is available with 690 beds and all necessary elements and services. Also a sanatorium (rest home).

FRESH WATER: Port has 42 standpipes of 2.5 in. situated at the various moles. Delivery is at the rate of about 10 t.p.h.

Fresh water can also be obtained in small quantities from tugboats for vessels anchored out of port and moored to buoys.

FUEL: Coal: in case of necessity can be obtained in limited quantities. Fuel and diesel oil supplied by Standard Oil, Shell Mex and Copec from petroleum terminals. For quantities less than 70 tons diesel oil can also be supplied from tank cars on the mole. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Shore watchman.

OPENING/CLOSING HATCHES: By riggers.

IDENTIFICATION CARDS: Required.

CONSULS:

Argentina
Belgium
Bolivia
Colombia
Ecuador
El Salvador
France
Germany
Greece
Guatemala
Honduras
Italy
Netherlands
Norway
Panama
Peru
Spain
Sweden
U.K.
U.S.A.
Venezuela
Yugoslavia

REPAIRS: There is one shipyard for repair of small craft, also several workshops, and foundries.

REPATRIATION: Facilities available.

AIRPORT: The Cerro Moreno airport, located 28 km. North of Antofagasta is available for all types of commercial aircraft. There is also another landing field in La Chimba, 11 km. North of the city.

TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before the first port for dates of local changes in time.

HOLIDAYS: See "General" before first port.

BANKS: Several banks, among them:

Banco Central de Chile, 2688 San Martin St., Tel: 221594.
Banco de Credito E Inversiones, 2683 Washington St., Tel: 225054.
Banco del Estado de Chile, 2578 San Martin St., Tel: 221617.
Banco do Brasil S.A., 461 Prat St., Tel: 223767.
Banco Espanol Chile, 2600 San Martin St., Tel: 222537.

EMERGENCY CO-ORDINATION CENTRE: Servicio Radio Costera, Tel: 223978.

STORING: Trucks and railway carriages can proceed alongside.

Fork lift trucks and other storing machines can be used to handle stores.

SHORE LEAVE: Allowed.

REGULATIONS: Inflammable explosives over 100 tons must be discharged in Mejillones. An Antofagasta Pilot goes to Mejillones by land, in order to take ships to be anchored.

GENERAL: Antofagasta is a transit port for Bolivia, Argentina and Paraguay cargo. It is one of the ports operated by Empresa Portuaria de Chile.

AUTHORITY: Empresa Portuaria de Chile, Avenida Grecia W/N°, Casilla 190, Antofagasta. *Tel:* 223115 and 223171. *Telex:* 25232 Empor Cl. *Contact:* Francisco Cabrejos Wenger, Managing Director.

ARICA: 18.28 S. 70.20 W. (See Plan Book)

PORT LIMITS: Ships are considered "arrived vessels" the moment they drop anchor within the safe anchorage zone indicated on the chart, or at the pilot station.

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory. Ships approaching port should fly international signal flag "G" to request Pilot. Pilot boat is small craft painted white, with "P" or "H" flag on the mast. Pilot boards incoming vessels at pilot station, located 3 cables and 165° from red light at end of breakwater. If more than one ship is awaiting Pilot, vessels are requested to hoist, below the flag "G", a numeral, indicating order of arrival, especially if arrived overnight. Vessels waiting to be docked can anchor in Road at pilot station in 10 fathoms of water. Pilot station maintains a VHF watch.

Reception and docking of vessels is done 24 hours a day, but buoy mooring to fuel terminals takes place during daylight hours only.

ANCHORAGE: Safe anchorage for vessels arriving after sunset can be found in a line bearing 194° Faro Isle Alecran distance 7 cables in depths varying from 9 to 10 fathoms.

RESTRICTIONS: There are no restrictions. If the weather permits it, ships can be docked and undocked at any time.

MAX. SIZE: Five berths available within port area. They are numbered from East to West.

Berth	*Vessel Max. Length* (m.)	*Vessel Max. Draft* (ft.)
Berth No. 1	114	13†
Berth No. 2	200	16/20‡
Berth No. 3	200	26/30
Berth No. 4	170	32.5
Berth No. 5	170	34
Berth No. 6	170	34

†Not suitable for larger vessels.
‡Restricted by draft.

If necessary, vessels over 600 ft. in length can be accommodated in Berths 4 to 6, providing the area is available for docking. Oil carriers have mooring buoys outside port area in depths of 48 ft. Installations consist of two groups of buoys, located in the North part of the bay, outside the port but sheltered from the swell prevailing on the coast, by the breakwater. 3 buoys are used to moor tankers loading crude oil from Bolivia. 2 buoys are used to moor tankers discharging clean products for city service.

HEALTH: Health officer boards after vessel has docked. Pratique granted after routine inspection of certificates and papers requested internationally. Yellow flag is lowered to signal the rest of the boarding party to embark to clear the ship.

In case of fever, and/or suspected diseases on board, Masters are to radio to Port Captain details of the above situation. Upon arrival, vessels will be anchored in Quarantine, and inspected according to international procedures. From another Chilean port, pratique is automatic. Also see "General" before first port.

RADIO:

Use "Maritgob Arica" via coastal radio CBA 4. Listening watch kept on 8360 kHz. Transmissions at 0800, 1000, 1200, 1400, 1600 and 1800 hrs. on 8478 kHz. A1. Alternatively if necessary use Valparaiso CBV on 500 kHz.

It is advisable however to request Agents at previous port to notify Arica well in advance of arrival.

Also see "General" before first port.

TUGS: Two tugs × 500 h.p. Tugs normally join vessel at the end of the breakwater. Tug is compulsory for docking and undocking. Tug provides the line at no extra charge.

CRANES:

Berth 1 – None.
Berth 2 – 1×7 tons.
Berth 3 – 2×3 tons.
Berth 4 –
Berth 5 – 2×3 tons.
Berth 6 – 2×5 tons.

SPECIALISED CARGO HANDLING FACILITIES: Two conveyor belts and loaders to operate with bulk ores, grain, coal, etc., at a rate of 100 t.p.h. per conveyor approx.

Containers are handled with conventional gear, but the port has a Container Yard, served by railroad and a bridge crane capable of lifting 65 tons. Service for containers also includes 10-ton fork-lift trucks, mobile cranes from 12 to 13 tons capacity, and specially designed wagons for their proper transportation.

STEVEDORES: Generally, stevedores are nominated the day before ship arrives, according to ETA, by loading/unloading Agencies. Also nomination can be made during the day. Working hours are 0800 – 1530 hrs., 1530 – 2300 hrs. and 2300 – 0630 hrs. Also see "General" before first port.

MEDICAL: Medical assistance can be obtained at any time requiring no advance notice. Hospital in the city.

TANKERS:

Esso Buoys: Position 053°×830 m. from breakwater light. Can handle vessels up to 45,000 d.w.t., 35 ft. draft. Vessels moor to 3 stern buoys. Wires not used for berthing.

Bolivian Export Buoy: Position 039°×1,084 m. from breakwater light. Can handle vessels up to 60,000 d.w.t., 43 ft. draft. 12 in. hose connection. Loading rate 9,000 bbls.p.h. No deballasting facilities.

Berthing is generally in the morning or early evening. Wires not used for berthing. Vessels moor to 3 stern buoys.

San Martin Bay Buoy: Used for discharge of Bunker C for fishing fleet. Max. draft 45 ft. No length restriction. 8 in. hose connection. Vessels moor to 3 stern buoys. A bolt is required to attach mooring lines to the ring type eyes on the buoys. No wires used.

Also see "General" before first port.

DENSITY: 1025.

FRESH WATER: Fresh water is available. Hoses to be provided by vessels. Rate of delivery about 10 t.p.h.

FUEL: Not available.

FIRE PRECAUTIONS: The discharge of explosives is carried out preferably at Berth No. 6, where there is storage for dangerous cargo. Generally, this kind of cargo is discharged directly into railroad wagons or trucks, in order that they can be evacuated from the port area as soon as possible.

GANGWAY/DECK WATCHMEN: Port regulations call for a gangway watchman.

OPENING/CLOSING HATCHES: Loading/unloading Agencies attend to these services, nomination is by number of hatches working. 5 men to a hatch.

CERTIFICATES:

Tonnage Certificate.
Lighthouse Dues (Chilean).
Safety Radio Certificate.

CUSTOMS ALLOWANCES: One carton cigarettes per man, and one bottle wine/spirits per man.

IDENTIFICATION CARDS: Needed to leave and/or enter port area.

CONSULS: The following countries are represented at Arica:

Argentina
Belgium
Bolivia
Denmark
Ecuador
El Salvador
France
Germany
Great Britain
Italy
Netherlands
Norway
Paraguay
Peru
Spain

REPAIRS: Only small repairs can be performed in Arica, like welding, lathe, mechanical and adjusting of motors. Also possible to repair electric motors.

DRYDOCKS: There are 2: intended for fishing boats. Max. capacity 200 tons.

REPATRIATION: Crew changes can be arranged through the local office of Immigration, if repatriated.

AIRPORT: Distance to airport: 7 miles. No international flights are served in Arica, except 2 flights weekly to Bolivia. Domestic flights are available at the rate of 2 per day.

TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before first port for date of time changes.

HOLIDAYS: Cargo can be arranged on all holidays except Labour Day (1st May).

POLICE/AMBULANCE/FIRE: Telephone 32153, 32242 and 32323 respectively.

TELEPHONES: Not available on board.

SHORE LEAVE: Permitted.

DELAYS: No delays under normal conditions. Port congestion causes ships to wait at anchorage 24 hours or more, depending on unusual facts as labour strike, swell, or lack of room to bring vessels alongside (when 5 ships are docked).

SHIPMASTER'S REPORT: April 1980.

Documents:

6 General Declarations.
6 Lists of Passengers for the Port.
6 Passengers Lists (even if nil).
6 Mail Lists (or no mail).
12 Crew Lists.
2 Crew Effects Lists.
6 Bond and Canteen Store Lists.
6 General Stores Lists.
Clearance from the Last Port and Health Declaration.

Pilotage: Compulsory. Pilot boards 0.5 miles N.W. of breakwater.

When within 200 miles of the coast of Chile, vessel to send cable to "Maritgob" at 0800 hrs. and 2000 hrs. daily. Cable to include position, speed, course and destination. The same cable is sent to the Port Captain at the port of destination, who also requires 24 hours' notice of arrival and draft. He then arranges for Authorities to board.

Anchorage: Vessels anchor 0.5 miles N.W. of breakwater. Depth 58 ft. at LW.

Max. Size: LOA 600 ft. Draft 32 ft.

Radio: Antofagasta (CBA4) and Valparaiso (CBV).

VHF: Pilot on Channel 16.

Tugs: One tug of 500 h.p. available. Tug use is not compulsory but advisable.

Berthing: Vessel berthed at Berth No. 4. Max. LOA: Over 600 ft. if adjacent berths vacant. Max. draft: 34 ft. (This allows for heavy swell during Winter time).

Cargo Handling Facilities: Two portable conveyors available for handling bulk cargoes. Rate 200 t.p.h. (approx.) There are no Ro-Ro facilities. There is ample mechanised equipment for handling palletised cargoes. Plenty of open quay space available for storage.

There are mobile cranes available and a bridge crane for loading rail cars, capacity 30 tons, however vessels must discharge with ship's gear.

Medical: Doctor and hospital available.

Fresh Water: Available. Rate 10 t.p.h.

Fuel: Bunker fuel oil and diesel oil not available.

Repairs: Minor repairs possible.

Airport: Airport for internal flights only available.

Services: Fresh provisions, laundry service, groceries and meats available.

DEVELOPMENTS: Project to build a new mole in the Northern part of the port, with berthage for two ships of approximately 540 ft.

AUTHORITY: Empresa Portuaria de Chile, Casilla 923, Arica. *Tel:* 32284. *Telex:* 21012. *Contact:* Luis Molina Cabezas, Secretary.

BARQUITO: 26.21 S. 70.38 W.

DOCUMENTS, HEALTH: See "General" before first port.

PILOTAGE: Pilot available in Chanaral Bay.

ANCHORAGE: Open anchorage with no difficulty. The anchorage position lies on the cross bearing between Point Piedra Blanca bearing 110° and Point Brusen bearing 200°. Depth of water 82 ft. Anchoring prohibited to the South of the marker buoy.

MAX. SIZE: Up to 30,000 d.w.t.

TUGS: Not required for mooring. 2 tugs used for towing lighters only.

BERTHING: Three buoys suitable for mooring large vessels situated in depth of 9 fathoms. Buoys 4 and 5 are used for general cargo vessels.

Position: Buoy 4 Barquito Pier bearing 043°×714 m.
Buoy 5 Barquito Pier bearing 027°×390 m.

Vessels moor stern onto the buoys and discharge into lighters, which in turn discharge at the pier head. Several barges of capacity 1,500 tons.

STEVEDORES: Order 24 hours before arrival. Working hours 0800 – 1200 hrs. and 1400 – 1800 hrs. There are 9 gangs of stevedores. Vessels arriving should ensure that hatches are closed and booms secure in order to avoid labour problems. See "General" before first port.

MEDICAL: Facilities available.

TANKERS: Buoys 1, 2 and 3 are for the Oil Terminal.

The hose marker buoy is in position Barquito Pier bearing 180°×268 m. Vessels use starboard anchor to pivot onto the 2 stern buoys. The hose connection will then be made on the port side. Max. draft 27 ft. Max. length 225 m.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: No fixed limits.

IDENTIFICATION CARDS: Required.

CONSULS: Nearest at Antofagasta.

REPAIRS: No facilities for major repairs. Two slipways for vessels up to 100 tons.

AIRPORT: At Chanaral, 2 miles away.

TIME: GMT minus 4 hours. Also see "General" before first port.

TELEPHONES: Ship-to-shore communication by walkie-talkie radio.

SHORE LEAVE: Allowed.

AUTHORITY: Agent Portuaria – Codelco Chile – Casilla No. 48, Chanaral, Chile. *Tel:* 80031 (Anexo 517). *Cables:* "Codelco Chile". *Contact:* Arturo Barbera D., Port Agent – Barquito.

CALDERA: 27.03 S. 70.53 W.

PORT LIMITS: A line joining Punta Caleta with Punta Fuerte.

DOCUMENTS: See "General" before first port.

PILOTAGE: Arranged by advice of ETA. Vessels may anchor inside the port while waiting for Pilot.

ANCHORAGE: Prohibited within 800 m. of Ore Quay.

Working to lighters is carried out 740 m. East of a line from the Ore Quay. 1 anchor is normally sufficient, but with Northerly winds 2 anchors and a kedge are recommended.

winds 2 anchors and a kedge are recommended.

MAX. SIZE: Vessels up to 41 ft. draft (12.5 m.) and a max. length of 270 m. can moor at the Ore Quay.

HEALTH: Pratique given after official visit, and automatic for vessels from another Chilean port. In case of contagious disease on board, advance notice is required and vessel may need to be cleared first at Valparaiso.

RADIO: Radio Costera Valparaiso – CBV 2; working during even hours only between 0800–1200 hrs. and 1400–2200 hrs.

Radio Costera Caldera – CBD 2, receiving on 2182 kHz only at following times: 0830–0900, 1030–1100, 1430–1500, 1630–1700 hrs.

TUGS: None available.

BERTHING:

Fiscal Mole: Length 225 m. Depth 29 ft. Vesels can berth stern onto the mole using 3 lines, and 6 or 7 shackles on the starboard anchor. Ship's head should be on 360°. It is advisable to shut all ports and doors prior to berthing due to the large clouds of dust from the Iron Ore Berth.

Iron Ore Berth: Max. length 270 m. Max. draft 41 ft. The loading arm is fixed, hence vessels must shift to position each hatch under the tower. All cranes or derricks must be swung out to starboard prior to mooring. Vessels berth port side to, using 6 mooring buoys for head and stern ropes, and 2 dolphins for springs. Loading rate 1,500/2,000 t.p.h. Berthing allowed only by day, but night sailing permitted.

TANKERS: Tankers moor to 2 stern buoys, using both anchors. No length restriction. Water depth 33 ft. Hose connection 12 in. Daylight berthing only.

STEVEDORES: In ETA to Agent indicate number of gangs required for loading/discharging. Also see "General" before first port.

MEDICAL: First-aid only at Caldera. If needed, advance notice necessary to prepare transport to Copiapo, nearest city 75 km. away. Fumigation carried out at ports of Arica, Valparaiso, or Punta Arenas.

DENSITY: 1026.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Arranged by Agent.

OPENING/CLOSING HATCHES: Done by riggers.

CUSTOMS ALLOWANCES: Only amount needed while vessel in port.
CONSULS: None at Caldera.
REPATRIATION: Can be arranged provided that a Police Agent accompanies crew member to Santiago Airport.
AIRPORT: At Copiapo, 75 km. away, a daily flight to Santiago where international connections available.
TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before the first port for dates of local time changes.
HOLIDAYS: See "General" before first port.
TELEPHONES: No connection to vessels.
SHORE LEAVE: Allowed.
AUTHORITY: Captain of the Port.

CALDERILLA: 27.05 S. 70.52 W.

Vessels bound for Calderilla must first call at Caldera for Pilot and official clearance.

Installations of mechanised quay for shipment of iron minerals are owned by the Compania Minera de Atacama.
DOCUMENTS: See "General" before first port.
ANCHORAGE: Vessels less than 180 m. in length can await a berth 4 cables N.N.E. of the East Peninsula, in 42 to 54 ft. of well sheltered water. Larger vessels must anchor in Caldera Bay.
MAX. SIZE: Max. length 230 m., draft 46 ft. (14 m.).
BERTHING: A mechanical loading belt has been built to the N.E. of the Peninsula. There are 2 loading arms each 50 m. long that can load at 1,000 t.p.h. The arms are fixed and vessels must shift to place each hatch under the tower. Vessels moor to 7 buoys, 3 forward and 4 aft. Entry can be made by day only.
MEDICAL: Doctor and hospital 30 miles away. Ambulance available.
FRESH WATER: Not available.
FUEL: Not available.
REPAIRS: Only of a minor nature.
TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before the first port for dates of local time changes.

CHACABUCO (Puerto Aisen): 45.28 S. 72.50 W. (See Plan Book)

DOCUMENTS: The Maritime Authority requires the following list of documents:
Passenger List.
Crew List.
General Declaration.
Cargo Manifest.
PILOTAGE: Compulsory for foreign vessels. Pilots must be taken on board at Valparaiso or Punta Arenas.
APPROACHES: To enter the bay of Chacabuco, this must be done by day for vessels exceeding 60 m. LOA, since weather conditions and coastal configuration do not make access easy, there being gusty winds blowing mainly from the South with some frequency.
ANCHORAGES: S.E. part of the bay with a mud bottom, depth 40 m. and 60 m.
RESTRICTIONS: For large vessels, entry at night is not permitted nor when weather conditions are adverse.
MAX. SIZE: Vessels up to 120 m. LOA can be handled with safety, those between 120 m. and 165 m. must manoeuvre with extreme caution. Max. draft 30 ft.
RADIO: Maritime Authority. Call sign "CBYZ".
VHF: Channels 16 and 14.
TUGS: None.
BERTHING: New quay, depth alongside 7.7 m. – 9.2 m.
CRANES: One crane of 4.5 tons.
BULK CARGO FACILITIES: Private conveyor belt.
STEVEDORES: Must be requested 24 hours in advance, via the Agents.
FRESH WATER: Tank capacity: 1,000,000 litres. Pipe: 75 mm. diameter delivery. Rate: 60 cu.m./hr.
FUEL: There is an oil terminal (Copec & Esso).
DRY DOCKS: None.
AIRPORT: Airport of Aisen 2 km. from the port, with a runway 1,300 m. long × 30 m. wide.

Airport of Coyhaique "Teniente Vidal", runway 1,400 m. long × 30 m. wide.

International Airport of Balmaceda 120 km. from Chacabuco, concrete runway 2,098 m. long × 45 m. wide.
TIME: GMT minus 4 hours. Also see "General" before first port.
TELEPHONES: Telephone service to the whole country and abroad, together with post and telegraph office.
BANKS: Banco del Estado de Chile located in Puerto Aisen.
GENERAL: At Puerto Chacabuco there is a Customs Office, police, a hospital and fire brigade.

To the N.W. of the quay, there is a Ro/Ro terminal for coastal car ferries.
AUTHORITY: Gobernacion Maritima de Aysen, Puerto Aisen, Correo Naval, Chile. *Contact:* Captain Manuel Cofre Munoz, Maritime Governor.

CHANARAL: 26.21 S. 70.38 W.

DOCUMENTS: See "General" before first port.
PILOTAGE: Compulsory for foreign vessels and tankers and for mooring at Mechanised Quay. There is one Pilot at the port. Pilot must be waited for in position bearing 289° and 2,025 m. from reference point indicated on Chilean navigation chart.
ANCHORAGES: Between Point Piedra Blanca and Point Piedra Negra at 325° × 2 cables from head of the Fiscal Quay in 15 m. – 12 m. of water, with good holding ground of sand.
MAX. SIZE: Draft 42 ft., length 800 ft., breadth 100 ft.
RADIO:

Station call sign	*Category*	*Frequency*	*Type*	*Receives*	*Transmits*	*Schedule*
Chanaral	(T)	2 MHz	A 3	2182	2182	H30-45
CBH-2					2000	
		4 MHz	A 3	4091.6	4396.6 4396.6	H45-60

TUGS: There are 4 small tugs.
BERTHING: Fiscal Quay: About 3 cables S.W. from Point Piedra Negra, 70 m. long by 8 m. wide, depth is 5.5 m. Vessels should lie about 5 cables off the head of the pier and moor to the stern buoy in 40 ft. of water.

Mechanised Quay: At Point Piedra Blanca there is a mechanised pier, property of Compania Minera Santa Fe for loading bulk iron ores. 60 m. long by 10 m. wide, with 14.5 m. depth; sand and mud bottom. Ores transported by means of a conveyor belt to a loading tower from which it is loaded direct to ship's hatches. At present loading tower is fixed so that vessels have to be moved to change hatches, but studies are being made as to possibility of converting it into a mobile tower. Loading rate is 1,000 t.p.h. Vessels up to 224 m. length, 36 ft. draft have loaded alongside up to 34,000 long tons. Vessels moor at head of quay, which has 4 buoys (2 forward and aft.). In addition the quay is provided with bitts to secure mooring ropes, fore and aft.
STEVEDORES: 81 stevedores (9 gangs of 9 men each). Ordinary working hours are from 0700 hrs. to 1100 hrs., and continuing from 1300 hrs. to 1700 hrs., but by special agreement and paying for meals, work can be carried on straight, i.e. from 0700 hrs. to 2000 hrs. and continuing from 2000 hrs. till 0700 hrs. of the following day with a 100% surcharge on wages, etc. Also see "General" before first port.
MEDICAL: Modern hospital and doctors available.
FRESH WATER: No means for supplying vessels.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Done by stevedores.
IDENTIFICATION CARDS: Required.
CONSULS: None at Chanaral, the nearest are at Antofagasta.
REPAIRS: 2 shipyards to repair tugs and lighters only.
REPATRIATION: Facilities exist.
AIRPORT: The airport is located 2 km. North of Chanaral.
TIME: Local time is GMT minus 4 hours. Also see "General" before first port.
SHORE LEAVE: Allowed.
DELAYS: There is frequent surf during June and August, sometimes interrupting traffic and cargo operations in the bay for a short time. Surf generally comes from the N.W. or the West. Fogs are frequent between April and August, but sometimes they are quite heavy during other months of year.
AUTHORITY: Empresa Portuaria de Chile.

COQUIMBO: 29.57 S. 71.21 W. (See Plan Book)

DOCUMENTS: See "General" before first port.
PILOTAGE: Compulsory for vessels mooring to quay. Pilot boards day and night in position bearing 101° and 1,215 m. from Point Tortuga Lighthouse, between Lat. 29° 55′ 38.5″ S., Long. 71° 19′ 56″ W. and Lat. 29° 56′ 10″ S., Long. 71° 20′ 34″ W.
ANCHORAGES: Vessels lie in roads until ready to tie up to quay. Bay has good anchorage with a sandy bottom and depths varying from 15 m. – 10 m. A forbidden zone is indicated on charts.

Vessels frequently have to anchor first before mooring to the quay as this only has capacity for 2 vessels at a time.

Waiting zone between Lat. 29° 55′ 38″ S., Long. 71° 19′ 56″ W., and Lat. 29° 56′ 10″ S., Long. 71° 20′ 34″ W.
MAX. SIZE: 378 m. long and 32.8 ft. draft.
RADIO:

Station Call Sign	*Category*	*Frequency*	*Type*	*Receives*	*Transmits*	*Schedule*
Coquimbo	(S)	4 MHz	A 3	4091.6	4396.6	H00-30
CBC-2				6265.5		
		6 MHz	A 1	6280	6505.5	H30-60

TUGS: No tugs available, only motor launches to assist the Pilot and for passing mooring lines.
BERTHING: *Mooring Mole:* 378 m. long, for 2 vessels of 180 m. each with draft of 32.8 ft. Berth No. 1 is on the South side and No. 2 on the North. Can be used at all times except during stormy weather, or when heavy swell is experienced.

Passenger Mole: To the South of mooring mole.

Cranes: 6 rail mounted quay cranes of 5 ton capacity.

Warehouses: 5,000 sq.m. of covered warehousing, of which 2,500 sq.m. for storage of minerals.
STEVEDORES: *Loading/Unloading Rates:* Loading – Barium Sulphate 60 – 80 t.p.h. Unloading – Wheat 80 – 90 t.p.h. Loading – Fish meal 35 t.p.h.

Working hours are 0800 – 1530 hrs., 1530 – 2300 hrs. and 2300 – 0630 hrs.

MEDICAL: Hospital at Coquimbo and La Serena.
FRESH WATER: Can be obtained in limited quantity at quay at rate of 25 t.p.h. Quality is good.
FUEL: Coal can be obtained in limited quantity. Diesel oil and gasoline can be obtained at the quay from truck or railcar.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Done by stevedores.
IDENTIFICATION CARDS: Required.
CONSULS:

Denmark (Vice-Consul)
Great Britain
Liberia
Panama
Peru
Spain

REPAIRS: No shipyards. There is a private workshop for minor repairs.
REPATRIATION: Facilities exist.
AIRPORT: 7 km. to the East of La Serena and 30 km. from the Port of Coquimbo.
TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before the first port for dates of local time changes.
SHORE LEAVE: Allowed.
AUTHORITY: Empresa Portuaria de Chile, Casilla 133-V, Valparaiso, Chile. *Tel:* 55749, 57167. *Telex:* 30313 CL. *Cables:* Emporchi. *Contact:* Vice-Admiral Luis Eberhard Escobar, Director.

Empresa Portuaria de Chile, Administracion del Puerto, Cas 10-D, Melgarejo 676, Coquimbo. *Tel:* 311365, 311852. *Telex:* 20005. *Contact:* Domingo Ormazabal Gonzalez, Port Administrator.

CORONEL: 37.02 S. 73.10 W.

PILOTAGE: Compulsory. The Pilot should be requested at Talcahuano. Pilot boards vessels in front of Punta Pochoco.
BERTHING: *Mechanical Pier:* Length 120 m., draft 24 ft.
There are 5 mooring buoys, and the vessel berths starboard side alongside. Ship's head bearing 180°. Both anchors are used to the final shackle. Loading rate 200 t.p.h. Vessels will be required to shift so that each hatch is under the loading arm.

Max. size 120 m. Draft 24 ft. However, it should be noted that there is only 18 ft. of water near the stern buoy. The berth is exposed to Northwesterly winds and vessels should be ready to sail at short notice.
FRESH WATER: Available at a rate of 20 tons per day.
FUEL: Not available.
MEDICAL: Doctors and hospital available.
CONSULS: At Concepcion.
TIME: Local time GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before the first port for dates of local time changes.

EASTER ISLAND: 27.08 S. 109.22 W.

(See Plan Book)

PILOTAGE: Not available, although assistance can be given by the local natives.
ANCHORAGES: The best anchorage is at Hanga Roa from October to April. Vessels should anchor outside the 16 fathom line. Anchorages in general are poor, and vessels should be prepared to sail at any time with the onset of bad weather.

Another recommended anchorage is in La Peruse Bay.
BERTHING: Vinapu Roads for fuel discharge. Length 150 m. Max. draft 28 ft. 2×6 in. flexible hoses. Manifolds must be no more than 65 m. from the stern.

See "Plan Book".
MEDICAL: Doctors and hospital available.
AIRPORT: Mataveri International Airport is 1 mile from Hanga Roa.
FRESH WATER: Not available.
GENERAL: *Inland Residential Facilities:* The island accommodation for tourists. Capacity is 450 persons.

GUAYACAN: 29.58 S. 71.22 W.

(See Plan Book)

DOCUMENTS: See "General" before first port.
APPROACHES: The entrance to the bay between Point Miedo and Point Herradura is 800 yards wide and its depth varies between 42 m. and 65 m.

Since Herradura de Guayacan Bay is a fishing zone, caution must be observed in navigation. Trawlers and hand propelled craft are used.

Currents from the South and S.W. tend to set the vessel to the N.N.E. when entering the bay. There is a light at the entrance to Herradura de Guayacan Bay on Point Herradura.

Vessels should approach the port at reduced speed on course 140° heading on leading line C. When the vessel reaches leading line C, it turns to the port in order to be placed on leading line B, which indicates course 112° in approach to anchorage. Heading on this leading line and once the vessel is located on leading line of Beacon D1 and D2, the starboard anchor will be dropped, leaving as many as 6 shackles in the water. With the help of the engine and rudder the vessel is turned until located parallel to the pier, then it is docked with the mooring lines previously secured to the buoys and pier.

Leading lines D1 and D2 are used for vessels of 300 m. length and leading lines D1 and D3 are for vessels with 250 m. length.

PILOTAGE: Compulsory. Under no circumstances can the pilot's launch exceed the limits of the port. It is imperative that the ETA of the vessel be as exact as possible.
ANCHORAGES: Vessels that are waiting to moor at the Mechanised Quay of Guayacan will anchor in Coquimbo Bay, where the Pilot will embark to guide the vessel to Herradura de Guayacan Bay once the berth is free.
MAX. SIZE: LOA – 315 m., beam – 50 m. Max. draft – 16.2 m.
RADIO: Operators' cable address is CMP, La Serena, Chile, and all messages having their origin in North America should be routed via All America Cables, and in the rest of the world, via Cable and Wireless Limited. Ship's radio messages should be routed via I.T.T. by radio.

Vessels should advise ETA 7 days, 96 hours, 48 hours and 24 hours out by radio. Also advise Agent. Also see "General" before first port.
BERTHING: The ore pier, of steel construction with a concrete deck, is 700 ft. long and located at the N.E. part of the bay. A total of 10 mooring bitts are available on the main pier, with 2 each on mooring dolphins to the South and North of the pier. Two twin mooring buoys, 1 North and 1 South, a distance of 350 ft. and 410 ft. from each dolphin and slightly inshore of the pier, are also available. A twin buoy to assist in docking and undocking is located 460 ft. to the West of the North end of the pier. Depth of water at the pier is 55 ft. at MLW. Max. draft 16.2 m.
MOORING: Vessels dock port side to the pier. On approaching the pier, the starboard anchor is dropped at a position indicated by cross bearing on markers located on the shore to the N.E. and at the South end of the pier and the shore. Lights are located on the markers for night docking. 9 shackles of cable are laid.

Two motor launches assist in rope handling to the pier and buoys. Sufficient deck crew must be available at all times to shift the vessel if required and to adjust moorings during loading.

Engines must be available at short notice. Permission for any major repair to the engines at the dock must be obtained from Maritime Authorities.
LOADING: In the case of combination ore carrier/tanker type of vessel, the Master must present a gas-free certificate before notice of readiness will be accepted. Such certificate may be obtained from a Coquimbo firm and request for same should be included in the 96 hours ETA message, reporting if there is or there is no tank gas detecting instrument on board.

The loading boom extends 51 ft. from the face of the pier and can be retracted 22 ft. It may be raised or lowered 18° from the horizontal when loading.

The tower is mobile with a run of 390 ft. Clear height (above HWL) is 18.0 m. Vessels may have to be shifted. Aft hatches should be loaded first, when possible, to facilitate efficient loading. When not loading the rig is parked at the centre of the pier with the boom in a vertical position inside the pier face. In the horizontal loading position the boom is 40 ft. from the water at LWL and vessels should be ballasted to ensure hatch coamings and other fixed structure at the hatches have a height less than 40 ft. above water at LWL. Booms and other tackle should be cleared from all hatches.

Rated loading capacity is 3,000 t.p.h.

Emergency stops only are permitted on the conveyor system. Vessels on which cargo reaches coamings should note that 390 tons are on the belts between the stockpiles and the ship and this must be cleared before stopping the system.

Cargo is belt trimmed only. Hire of trimmers, if required, is for vessel's account.

On completion of loading, the vessel shall leave the pier. Delays of port operations including delays of other vessels awaiting berth, caused by a vessel which for any reason is not prepared and able to move from the pier when so ordered, are chargeable to the vessel which causes such delays, at the rate of $4,000 per day or at the demurrage rate of any other vessel that may be delayed – whichever is higher.
BALLAST: Vessels should be ballasted to meet the loading tower information given and to ensure safe handling. Wind condition can make docking of light vessels difficult. Ballast may be discharged at the pier while loading. Upper wing tanks emptied by gravity should have covers fitted over discharges. Vessels are liable to fines by Maritime Authority for any oil or other contaminate discharged in the bay either from tanks or from pumping bilges.
MEDICAL: Medical attention may be arranged through the vessel's Agent. No person will be attended unless he is provided with a letter from the Master authorising such treatment.
FRESH WATER/FUEL: Fresh water and fuel are not available at this port, although water and diesel fuel may be obtained in nearby Coquimbo, or at Salinas, near Valparaiso. Bunker "C" type fuel can be obtained at Salinas also.
REPAIRS: Only in cases of extreme emergency can limited ship repairs be effected at this port.
CONSULS: Consulates of Great Britain, Liberia, Panama, Peru and Spain and Vice-Consul of Denmark are in Coquimbo or the adjacent city of La Serena.
TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before first port for dates of local time changes.
HOLIDAYS: If advance ETA is received, ships will generally be received every day with the following exceptions: 1st January; Good Friday; 1st May; 18th September; 25th December. Also see "General" before first port.
SHORE LEAVE: Shore leave may be granted at the Master's discretion. There are no restrictions by local authorities, but crew should be certain to carry their identification cards (shore pass).
SERVICES: Mail for vessel and crew should be addressed care of ship's Agent at Coquimbo, all mail that is received for holding by the Agent will be delivered to the vessel upon arrival.

Do not have parcel post packages sent, as they must go through Customs in Santiago and are delayed from 2 weeks to a month for their despatch.

Spare or repair parts for the vessel should be sent via air express, addressed to the ship, care of ship's agent at Coquimbo, Chile and marked "Ship's Stores in transit", so as to avoid paying Customs duties. Information regarding the shipment should be sent to the Company via air mail correspondence.

A limited supply of provisions is available, but requests should be sent by radio 48 hours prior to arrival.

AUTHORITY: Compania Minera del Pacifico, S.A.

HUASCO: 28.27 S. 71.14 W. **(See Plan Book)**

DOCUMENTS:
- 1 Clearance.
- 12 Cargo Manifests, or 2 No Cargo Manifests.
- 6 Passenger Lists, or 1 No Passenger Lists.
- 7 Crew Lists.
- 4 Stores Lists.
- 3 Crew Personal Effects.
- 2 Stowage Plans.
- 2 Per Passenger Baggage Declarations.
- 1 Health Certificate.

PILOTAGE: Compulsory for vessels mooring at Santa Barbara, Guacolda and Guacolda II mechanised quays. Vessels awaiting Pilot and/or clearance can anchor in position bearing 090° and 1,200 m. from Guacolda Lighthouse, within a circle of 2 cables radius, in 60 m. depth.

ANCHORAGES: Vessels can anchor at N.N.E. of Cayo Isle distance 3 cables in 24 m. – 26 m. depth; small vessels bearing 090° distance 2 cables from Cayo Isle in 12 m. depth of water, sandy bottom.

Depth is generally moderate and level with a sand and shell bottom, while at the maritime terminals of Santa Barbara and Guacolda is quite deep, around 50 m., which has to be taken into account when anchoring. The bottom at these terminals is mud, offering a good holding ground. Pilot compulsory for anchoring in the Bay.

MAX. SIZE: See "Berthing".

RADIO:

Station call sign	*Category*	*Frequency*	*Type*	*Receives*	*Transmits*	*Schedule*
Huasco CBH-3	(T)	2 MHz	A 3	2182	2182	H30-60

VHF: Vessels must call Pilot Station 2 hours before arrival.

TUGS: No tugs available. At Huasco there are 4 motor launches for use of Pilot.

BERTHING: There are 3 cargo terminals in service: Guacolda I, Guacolda II and Santa Barbara, property of Compania de Acero del Pacifico. The particulars of these installations are:

	Santa Barbara	*Guacolda I*	*Guacolda II*
Max. DWT	—	—	200,000
Max. LOA	290 m.	260 m.	314 m.
Max. Draft	49 ft.	44.3 ft.	23.0 m.
Max. Beam	—	30.0 m.	47.5 m.
Air Draft (HW)	42 ft. 6 in.	42 ft.	22.8 m.
Loading Rate (Average)	2,000-2,500 t.p.h.	2,500 t.p.h.	5,000 t.p.h.
Max. Loading Rate	3,600 t.p.h.	—	6,000 t.p.h.
Loading Arm Reach	30.5 m.	—	42.0 m.

Tidal Range: 3.5 ft. Springs, 2.7 ft. Neaps.

Santa Barbara Terminal: Used exclusively for loading iron ore. No dock to berth only 1 loading tower protected by dolphins (Duque de Alba). Ships berth without tugs to 7 buoys using the starboard anchor. Vessel has to be shifted to receive cargo in all the hatches. Transit through the installations is not allowed, and taxi boat service is provided to go ashore to Huasco wharf.

Guacolda I Terminal: Normally used to load iron ore. Length 183 m. However it is intended in future to use the berth to discharge oil or coal for internal company use. The loader has a 100 m. run. If it is necessary to shift the vessel, this must be done by crew members, as shore gangs are not available.

Guacolda II Terminal: Only Iron Ore pellets loaded – at the present time ship's crew required to shift vessel.

STEVEDORES: There are 50 stevedores for up to 4 gangs. In addition there are 20 longshoremen and 14 lightermen. Working hours are 0700 – 1200 hrs., 1400 – 2100 hrs.

MEDICAL: Hospital at Huasco, also 2 doctors and dentists.

TANKERS: Berth at No. 1 Guacolda. Max. LOA 272 m., max. draft 13.5 m.

FRESH WATER: Not available.

FUEL: None available.

OPENING/CLOSING HATCHES: By stevedores in general cargo ships.

IDENTIFICATION CARDS: Not required.

CONSULS: Norway – Honorary Vice-Consul.

REPAIRS: Only for the repair of minor craft.

AIRPORT: Nearest commercial airport is at Vallenar, 52 km. away.

TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before first port for dates of local time changes.

TELEPHONES: Local and outward service.

GENERAL: Zone for ballast: it is prohibited to deballast in port except clean water from deep tanks. For any other kind of ballast authorisation should be requested first from the maritime authority who will indicate the appropriate place.

SHORE LEAVE: Allowed.

AUTHORITY: Armada de Chile, Direccion General, Territorio Maritimo y M.M., Capitania de Puerto, Huasco, Chile. *Contact:* Port Captain.

IQUIQUE (including Patillos Cove): 20.12 S. 70.09 W. **(See Plan Book)**

PORT LIMITS: The interior area included between a line joining the Serrano Island and Mole lights and another line running 290° (True) to the North buoy of the Esso tanker anchorage.

DOCUMENTS:

For vessels coming from foreign countries:
- Clearance from last foreign port.
- Crew list.
- Passenger list.
- Manifest of hazardous cargo (when applicable).
- Insurance policy against contamination (for tankers).
- International Maritime Health Declaration.
- Derat certificate.
- Tonnage certificate.
- Radio-telegraphy safety certificate.
- Certificate of equipment.
- Lighthouses and buoys certificate.
- Freeboard certificate.
- Construction Certificate.

For vessels coming from another Chilean port:
- Clearance from last port.
- Crew list.
- List of passengers.
- Manifest of hazardous cargo (when applicable).

PILOTAGE: Compulsory. During the day the pilot cutter displays the "H" flag of the international code, and at night the lights prescribed by the International Regulations. Pilot boards 5 cables North of the head of the breakwater. Berthing and unberthing takes place 24 hours a day. Telegraphic address for the Pilots is "Maritgob Iquique 7", it being necessary to give prior notice of requirement 72, 48, 24 and 12 hours ahead of arrival.

Channel for calling the Pilot is VHF Channel 16 and working is on Channel 6. The launch used by the Pilots is white, and approx. 27 ft. overall length, the Pilot coming out beyond the port limits to board the vessel.

ANCHORAGES: Access to the bay is rendered difficult by the continuous traffic of fishing vessels, which limits the manoeuvring area and makes vigilance very necessary. The bay contains a spacious and suitable anchorage with varying depths from 40 m. to 14 m. with sandy bottom, the depth descending gradually from the entrance towards the East. Vessels which are going to stay for a short period of time and which are not going alongside the moles, are safe with a single anchor and necessary chain, according to the point where they moor.

Vessels which moor at the tanker buoys, either Copec or Esso, must remain with bow heading 270° and anchored with 2 anchors. This is convenient so as to remain with the bow pointing out to sea and not to cause the hoses to work. There are 2 submarine cable zones where only vessels of the Chilean Navy may moor. This is defined by a line joining the head of the Naval Quay (ex Alimar North) to the light of the extreme breakwater (291°) and the demarcation 000° determined by a radius of 460 m. from the centre of the quay head.

RESTRICTIONS: Mist occurs with greater frequency from December to March, and is generally slight and low which produces a danger when making a landfall. The general direction of the current is from South to North at a rate of 0.5 to 3 knots. This current is strong at Punta Gruesa, Cavancha and Punta Piedras. Fierce winds frequently occur from May to September but their action is very much less within the area protected by the breakwater.

MAX. SIZE: The berthing areas with their specifications are as follows: Berths 1, 2, and 3 with a total length of 526 m. and an average depth of 9 m. The West side quay comprises Berths 4 and 5 with a length of 335 m. and depth between 9 m. and 12 m.

The East side quay comprises Berths 6 and 7 with a length of 280 m. with a depth of 9 m. to 12 m. at Berth 7, and 12 m. – 15 m. at Berth No. 6.

Max. draft at berths – 30 ft. Max. draft at tanker mooring – 32 ft.

PRATIQUE: On arrival in port vessel will be received by the Health Authority, and if everything is in order, by the Maritime Authority and Customs. It will then be granted "free pratique". In the event of illness or fever on board, contact must be made with the local Agent who will inform the medical authorities.

RADIO: The best way for the vessel to pass ETA messages, both to Agents and to the Maritime Authority, is to "Maritgob Iquique" via Antofagasta Radio: CBA-3 and Antofagasta Naval Radio: CBA.

VHF: In the Iquique Maritime Control there is VHF equipment to facilitate communications between vessel and Pilot, the procedure used being to call up on Channel 16. The Pilot and tug use walkie talkies which have Channel 16 and 6.

TUGS: There is 1 tug with sufficient horse power to moor and unmoor vessels.

BERTHING: Inside the breakwater are Berth Nos. 1, 2 and 3, Berth No. 3 is permanently occupied by deep sea fishing vessels. On the mooring pier on the West side are Berth Nos. 4 and 5, and on the East side, Berth Nos. 6 and 7. When there is a swell, it is not recommended to berth at Berth Nos. 4 and 5 as mooring ropes may be parted. Maximum drafts for mooring are: Berth Nos. 1, 2 and 6: 30 ft.; Berth Nos. 4, 5 and 7: 29 ft. Loading and unloading is by ship's derricks.

Length of Berths

Berth Nos. 1 and 2 – 270 m.
Berth Nos. 4 and 5 – total length 300 m.
Berth Nos. 6 and 7 – total length 270 m.

Patillos Cove: The port is used for the bulk shipment of salt. It is located 33 miles South of Iquique. Pilot boards to the North of Punta Patillos Lighthouse and 6 cables off, weather permitting. Vessels berth to 5 buoys, but must move to present each hatch to the port loader. Max. size: length 250 m., draft 12.0 m.

CRANES: Berths not equipped with cranes for discharging operations. There is one mobile container crane for 80 tons.

MEDICAL: In the event of any serious case or an emergency it is necessary to advise the Agent by telex, otherwise advice should be by Channel 16 VHF. In the district is a modern hospital with sufficient medical resources, and Crew members can be treated.

STEVEDORES: Gangs of stevedores, for ship and shore, must be requested prior to 1600 hrs., which means, in effect, the day prior to that when they are needed. They work continuously, in 3 shifts: 0800 – 1500 hrs., 1530 – 2230 hrs., 2300 – 0600 hrs.

TANKERS: The loading and discharging line is of metal and of 12 in. diameter, reducing at its connecting point to 8 in. There are no deballasting tanks in the port nor any for accepting oil residues. In front of El Colorado Beach, there are 2 groups of buoys with 3 buoys in each, intended for mooring tankers. The North group is for refined products, and the South group for crude oil. Maximum permitted draft is 32 ft.

FRESH WATER: This is brought from the mountain range by pipes for consumption by the town. It can be delivered to vessels moored at the pier in small quantities, and is of good quality.

FUEL: Diesel or boiler oil can be supplied to vessels on request, in any quantity, and for this purpose they must moor at the tanker buoys in front of El Colorado Beach. If quantity required is less than 300 tons, it may be taken at the pier by means of tanker trucks.

CONSULS:

Bolivia
Colombia
Denmark
Italy
Peru
Spain
Sweden
Yugoslavia

REPAIRS: Minor repairs can be effected at the Marco Shipyard.

SURVEYORS: Lloyds.

GANGWAY/DECK WATCHMEN: It is convenient for all vessels to have a gangway watchman, a second guard is required when hazardous cargo is carried.

OPENING/CLOSING HATCHES: Vessels must enter with their holds closed, and these will be opened by a special gang of seamen in the port who, furthermore, attend to all movements of derricks, cranes, and equipment, etc.

DRY DOCKS: There are 2 dry docks for vessels up to 500 tons.

CUSTOMS ALLOWANCES: It is permitted to have all that is required for normal consumption from the ship's store.

REPATRIATION: There are no problems in repatriating crew, either for exchange purposes or for holidays, who have to travel back to their country of origin.

AIRPORT: The airport of Chucumata is 30 minutes away by car, and there are connections by the National Airline and Ladeco (Linea Aerea del Cobre) with foreign airlines at the Airport in Santiago de Chile.

TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 during the Summer season. See "General" before the first port for dates of local time changes.

HOLIDAYS: 1st January (New Year's Day); 1st May (Labour Day); 21st May (Navy Day); 15th August (Assumption); 18th September (Independence); 19th September (Army Day); 12th October (Race Day) (Discovery of America); 1st November (All Saints); 8th December (Immaculate Conception); 25th December (Christmas).

There is also Holy Week which is a movable holiday between end March and middle of April.

POLICE/AMBULANCE/FIRE: Police, Tel. 23456; Ambulance Tel. 22370; Fire Brigade, Tel. 21212.

TELEPHONES: There is no facility for connection on board. Telephones on the quay less than 100 m. from the vessel.

SERVICES: It is possible to obtain gangs for tank and hold cleaning.

SHORE LEAVE: Permitted, no restrictions.

IDENTITY CARDS: Any crew member coming ashore is given an identity card by the International Police, card is returned when the vessel sails.

AUTHORITY: Maritime Governor of Iquique.

LOTA: 37.06 S. 73.10 W.

DOCUMENTS: See "General" before first port.

PILOTAGE: Service is carried out by the Pilot Corps of Talcahuano. This service is compulsory.

ANCHORAGE: Northwest of the Lutrin Light. The Pilot will board here.

MAX. SIZE: Length 160 m. Max. draft 27 ft. (8.2 m.).

BERTHING: Mechanical Pier: The pier is 277 m. long, 14.7 m. wide. This is a fully mechanised quay with a transportation system and a loading tower on its head, and is designed for coal handling at approx. 600 t.p.h. The outermost 140 m. of the pier is used for berthing with a max. draft of 8.2 m. at HW.

To prevent vessels striking against the pier, they secure to 3 mooring buoys available on their outboard side. There are wires which enable the vessel's stern to be secured to the shore.

FRESH WATER: Available.

FUEL: Not available.

CONSULS: At Talcahuano.

TIME: Local time is GMT minus 4 hours during the Winter season and GMT minus 3 hours during the Summer season. See "General" before first port, for dates of local time changes.

MEJILLONES: 23.06 S. 70.28 W.

DOCUMENTS:

Vessels directly from foreign ports:
3 Crew Lists.
3 Passenger Lists.
3 Stores Lists.
5 Import Cargo Manifests.
11 Manifests for cargo destined for Bolivia.

Vessels coming from another Chilean port:
1 Crew List.
1 List of Passengers.
1 Stores List.
5 Import Cargo Manifests.
13 Manifests for cargo destined for Bolivia.

PILOTAGE: Service carried out by the Pilot Corps of Antofagasta (65 km. from this port). Service is compulsory. Agent has to apply for the Pilot, and it is important to give arrival notice in good time.

ANCHORAGES: Open bay very well protected and with deep water.

MAX. SIZE: No restrictions. Vessels work cargo at anchor.

HEALTH: Pratique is automatic for vessels coming from another Chilean port, otherwise it will be granted after Sanitary visit.

RADIO: Antofagasta radio station CBA-3. Listens out between 0800 hrs. and 1200 hrs. and between 1400 hrs. and 1800 hrs.

Transmits 8,370 receives 8,354 Telegraphy H 00–30.
Transmits 4,396 receives 4,091 Speech H 30–45.
Transmits 8,780 receives 8,230 Speech H 45–60.

The station is active listening out every 2 hours, i.e. 0800, 1000, 1200, 1400, 1600 and 1800 hrs.

TUGS: There are none available locally but can be supplied from Antofagasta if needed.

BERTHING: There are no berths. Vessels work cargo at anchor.

Anaex or Proquim Terminal: 3 mooring buoys and a small platform for connection for ammonia discharge. Max. length 180 m. (15,000 d.w.t.). Flexible hose of 6 in., temperature – 32°C.

STEVEDORES: Agent to be informed before 1800 hrs. the day before arrival to order gangs.

MEDICAL: There is a doctor in the port but no hospitals are available and patients are transported to Antofagasta.

DENSITY: Sea water.

FRESH WATER: No fresh water available.

FUEL: Not available.

GANGWAY/DECKWATCHMEN: This service is recommended.

OPENING/CLOSING HATCHES: This work can be carried out by crew and/or stevedores. Derricks operated only by crew.

SHIP'S CERTIFICATES:

Register Certificate.
Tonnage Certificate.
Radio Certificate.
Safety Equipment Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes for each member of the crew besides the ones in the stores. One bottle wine/spirits per person.

REPAIRS: There are no workshops. Vessel repairs done by the crew are allowed.

IDENTIFICATION CARDS: Not necessary, only passport and boarding card.

REPATRIATION: There are facilities for changing the crew.

AIRPORT: 25 km. from Mejillones is the airport Cerro Moreno. To travel to U.S.A. one must go via Santiago. There are daily flights from Antofagasta to Santiago, and from Santiago to U.S.A. with stops in various countries.

TIME: There are two official times:

Summertime: from the second Sunday in October to the second Saturday in March. Local time is GMT minus 3 hours.

Wintertime: from the second Saturday in March to the second Saturday in October. Local time is GMT minus 4 hours.

HOLIDAYS: It is possible to work on holidays with a surcharge of 100%. New Year's Day; Good Thursday; Good Friday; 1st May; 21st May; Ascension Day; 18th September; 19th September; 12th October; 1st November; 8th December; 25th December.

POLICE/AMBULANCE/FIRE: Police Tel: 7 Mejillones; Ambulance 222370 Antofagasta; Fire 41 Mejillones.

TELEPHONES: It is not possible to install lines on board.

SHORE LEAVE: Members of the crew are allowed ashore.

AUTHORITY: Captain of the Port.

PUERTO MONTT: 41.28 S. 72.57 W. (See Plan Book)

PORT LIMITS: Between the meridians of 72° 55′ 50″ W., 72° 59′ 00″ W. The Southern limit is the parallel of 41° 29′ 48″ S. in Reloncaui Bay.

DOCUMENTS: See "General" before first port.

PILOTAGE: Pilotage is compulsory. Foreign vessels entering port from the Pacific Ocean will usually embark Pilots in Valparaiso or in Ancud Pilot Station for navigation through the channels near Puerto Montt. The Harbour Pilot is requested by the Agent on reception of vessel's ETA, at least 24 hours in advance. Otherwise, a request should be made to the Port Captain, cable address "Maritgob Montt". While waiting for the Harbour Pilot, vessels should anchor as indicated below and exhibit code flag "G". Pilot boards from a motor board at the anchorage. Pilot's boat is equipped with VHF.

APPROACHES: The approach to Puerto Montt is made through the Channels, the most important of which is Canal Chacao, which requires careful navigation due to the existence of rocks and shallow areas, as well as tidal currents that reach up to 8 knots. Any type of vessel may pass this channel without problems with a Pilot aboard.

ANCHORAGES: Vessels of any size can anchor in the Outer Roads of the port. The following positions with respect to the touristic pier near the principal square are recommended: (1) bearing 175°, distance 850 m. in 40 m. depth; (2) bearing 175°, distance 1,780 m. in 59 m. depth; (3) bearing 154°, distance 1,200 m. in 50 m. depth. In bad weather, it is recommended to have a second anchor ready to let go.

RESTRICTIONS: Authorisation for entering the port is considered in each particular case, depending on the type of mooring and vessel's draft and length, according to the tide. Tidal amplitude is 6.50 m. (21 ft. 3 in.).

MAX. SIZE: Max. length 172 m., max. draft 26 ft 6 in. LW. In these conditions, manoeuvring is affected by the tide and favourable weather.

HEALTH: All ships are boarded by Authorities on arrival unless coming from another Chilean port. In case of suspected disease on board vessel must advise Authorities by radio before arrival.

RADIO: Radio Maritima Puerto Montt, used for communications, working frequencies Channel 16 VHF, 2182 kHz and 500 kHz, 24 hours a day.

VHF: Marine Control operates VHF equipment between 0700 hrs. and 2400 hrs. on Channel 16.

TUGS: 1 small tug available, "Bores" 180 h.p., owned by Naviera Magallanes (NAVIMAG).

BERTHING: The Commercial Pier, owned by Empresa Portuaria de Chile, has a total length of 320 m. Berths available: No. 1: 200 m. long, depth 8 m.; No. 2: 120 m. long, depth 7.5 m., both at LW.

Ro/Ro Terminal: 200 m. to the West of the commercial pier is the Ro/Ro Terminal with 4 ramps for vessels up to 120 m. LOA, the max. draft 4 m. The commercial pier as well as the Ro/Ro Terminal operate during day and night, in good weather conditions and taking tidal effects into consideration.

CRANES: 4×3 tons and 1×8 tons capacity. Mobile crane of 23 tons at 3.5 m. also available.

Equipment: 1 forklift, 1 tractor, 2 wagons, 4 grain scoops, 2 chutes and 50 pallets.

STEVEDORES: Vessel should advise Agent before arrival the number of gangs required by hatch, and amount of cargo for discharge.

Working hours are 0800 – 1530 hrs., 1530 – 2300 hrs. and 2300 – 0630 hrs.

Also see "General" before first port.

MEDICAL: All facilities available, vaccination, inoculation can be arranged. Prior notice should be given if urgent assistance required on arrival.

TANKERS: *Esso Chile S.A. Terminal:* Tankers moor at buoys in the Eastern part of the bay, in daylight hours only, for vessels up to 15,000 g.r.t.

Copec Chile Terminal: Out of service for the moment.

Vessels moor using both anchors forward and 2 buoys aft. 10 in. submarine pipe-line, 2×8 in. hoses connected. No slop facilities.

FRESH WATER: Available alongside Commercial Pier at 10 t.p.h.

FUEL: Only diesel oil available, supplied by trucks at Commercial Pier or Ro/Ro Terminal.

See "General" before first port.

OPENING/CLOSING HATCHES: It is obligatory to employ shore labour for this purpose.

CUSTOMS ALLOWANCES: Two cartons of cigarettes and 2 bottles of liquor for each man in his cabin, the rest to be declared with his personal effects.

CONSULS: Argentina, Germany, Spain, and Netherlands are represented locally.

REPAIRS: Minor engine repairs can be effected.

REPATRIATION: Can be arranged.

AIRPORT: Situated 17 km. from the port. Daily flights (75 minutes) to Santiago where international connections can be made.

TIME: GMT minus 4 hours. In Summertime: GMT minus 3 hours.

Also see "General" before first port.

HOLIDAYS: Work may be arranged on most holidays. Also see "General" before first port.

POLICE/FIRE/AMBULANCE: Police Tel: 2240. Fire Tel: 2222. Ambulance Tel: 3991.

TELEPHONES: No facilities for placing telephones on board.

TRANSPORTATION: There are de-luxe bus services, with daily departures, between Puerto Montt, Santiago, Valparaiso, and intermediate points.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Outer berths have been dredged to a depth of 8.50 m.

AUTHORITY: Empresa Portuaria de Chile, Administration del Puerto, Puerto Montt, Chile. *Tel:* 2247. *Telex:* 270007 Empor Cl.
Contact: The Administrator.

Armada de Chile, Puerto Montt. *Contact:* Captain Ignacio Campos, Maritime Governor.

PUNTA ARENAS (including Lenadura, Cabo Negro, Clarence Cove, Port Percy, Gregorio):
53.10 S. 70.54 W. **(See Plan Book)**

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory for foreign vessels. Vessel entering from the Pacific will usually embark Pilots in Valparaiso or any other nearest port. Vessels coming from the Atlantic embark Pilots in Bahia Posesion, 30 miles to the West side of the Eastern entry of Magellan Strait. The Southernmost position to embark Pilots is Ancud or Laitec on Chiloe Island, where vessels navigating through the channels from East to West and not calling at Chilean ports can also disembark Pilots.

The landing craft "Crux Australis" and the 2 pilot boats "Ona" and "Yagan" keep a listening watch on 2,182 kHz. and Channel 16 VHF. All carry International Pilot Lights. ETA at Bahia Posesion has to be given at least 24 hours in advance. In bad weather, vessel to anchor and wait at Lat. 52° 17.7′ S., Long. 69° 10.6′ W. For VLCC the position to anchor and wait is Lat. 52° 19.6′ S., Long. 69° 00.4′ W.

Two Pilots are necessary for any navigation, be it in the Magellan Strait and/or channels, but only 1 is required for vessels coming from the Atlantic Ocean and calling at Punta Arenas or any maritime terminal in the Magellan Strait only.

Navigation Assistance by Radar: From Punta Dungenes to Primera Angostura there are several petroleum platforms which often change their location. Some of them are near the navigation track and it is therefore required to consider wide berth. In order to facilitate navigation, there are radars in Dungenes and Delgada, which will help navigation in the area, at no cost, through Channel 16 VHF.

The Pilot for Westbound vessels travels to Bahia Posesion by air from Valparaiso. It is therefore important to request the Pilot through the Valparaiso Agent with as much advance notice as possible, and keep the Agent advised on vessel's ETA.

Pilot's travelling expenses from and to Valparaiso are included in pilotage charges.

ANCHORAGES: Anchor Berths A – G are situated E. and S.E. of Muelle Prat. Anchorage is prohibited within 300 m. of the Fiscal Quay. Vessels should be ready to leave the anchorage on orders from the Port Captain, or in event of bad weather from the East.

RESTRICTIONS: No tidal restrictions, vessels can come alongside day or night.

MAX. SIZE: *Magellan Straits:* Max. draft 70 ft., no limit on d.w.t. tonnage for very large vessels. Vessels with a draft in excess of 70 ft. may be allowed to pass through but only after the authorities have studied the vessel's characteristics. As a safety measure, large vessels navigate the First Narrows in daylight only and with good visibility.

HEALTH: At first Chilean port, doctor will come aboard with Authorities. In other Chilean ports there is no need to ask for pratique or to hoist the "Q" flag as pratique is automatic.

RADIO: There are 2 radio stations: *(a)* CBM Radio Naval of Magallanes permanent watch on 500 kHz. Telegraphy (A1). *(b)* CBM2 Radio Costera Magallanes operating from 0830 to 1830 hrs. on frequencies 4390, 8694 (transmitting) and 4085, 8360 (receiving).

TUGS: Used to go alongside in Punta Arenas tanker terminals – ship's lines used.

BERTHING: A berth should be requested 24 hours before arrival. The pier is 372 m. long with 36 ft. depth at the seaward end, reducing to 28 ft. on both sides toward the land. Vessels berth bow first, and care must be taken to avoid the shallow patches on both sides of the jetty about 120 ft. off. Normally 4 headlines, 4 stern lines and 2 or 4 springs are used.

Berthing is usually at night or early morning as strong winds blow during the day, occasionally rising to Force 12 in the Summer. The port is often closed due to inclement weather.

Weather signals are shown at the North end of the pier.

Weather	*Signal Day*	*Signal Night*	*Meaning*
Variable	Black Ball	1 green light	Put out extra moorings
Bad weather	Flag M	1 red light	Put out extra moorings
Storm	Flag R	2 red lights	Port closed

Tankers: See below. No limits for vessels at anchor.

STEVEDORES: Gangs to be requested 24 hours before arrival. Loading/discharge rate depends on type of cargo but can be estimated at an average of 15 tons/hour/gang. According to the working rules of this port, when a vessel starts its loading/discharging operations without working overtime, it has to continue doing so until work is finished. If it starts working with overtime, it must continue doing overtime every day.

MEDICAL: No advance notice to Agent required. There is a hospital with all facilities.

TANKERS: There are the following terminals for tankers:

Lenadura: Position Lat. 53° 12′ S., Long. 70° 54′ W. Max. length 160 m., draft 30 ft., 18,000 d.w.t. Vessels moor to 3 buoys, 1 astern and 1 on each quarter, using both anchors. Ship's head bearing 090°T. Manifold connection 8 in.

Cabo Negro: Position Lat. 53° 01′ S., Long. 70° 51′ W. Max. length 170 m. Draft 14 m. (46 ft.). Vessels berth port side alongside, using the starboard anchor, and a stern line to a warping buoy 180 m. off the jetty.

Vessels moor to a "T" form jetty head, 280 m. long and 36 m. head. There are also 2 dolphins. The manifold hose is 10 in. Gas is loaded at 1,000 t.p.h. A tug is usually available for berthing.

Clarence Cove: Position Lat. 52° 55′ S., Long. 70° 09′ W. Max. length 200 m. Max. draft limited by the entrance to the cove to 36 ft. (10.97 m.). Vessels berth to 4 buoys, using both anchors. 4 headlines, 3 stern lines, 4 lines to the starboard quarter buoy, and 3 to the port quarter buoy are required. A tug is available. Ship's head 255°T. There are 2 × 8 in. hoses for loading and deballasting facilities will be available shortly.

Forbidden Anchorage Zone: Area within a circle of 0.9 miles radius around the terminal buoys, and leaving entrance clear from 320° to 140°.

Port Percy: Position Lat. 52° 54′ S., Long. 70° 14′ W. Max. length 400 ft., draft 33 ft. vessels use both anchors, vessel's head on 242°T. 10 lines are required to the 4 buoys, 3 headlines, 3 to the starboard quarter, 2 astern and 2 to the port quarter. Wires must not be used. There is a 10 in. line for gas loading, with a 6 in. return line. Load rate 250 t.p.h. A 4 in. line is also available for diesel. Load rate 50 t.p.h

Gregorio: Position Lat. 52° 38′ S., Long. 70° 11′ W. Max. length 650 ft. Max. draft 42 ft. (subject to tidal conditions), 75,000 d.w.t. Manoeuvres should be done with daylight and preferably with high and slack water. Vessels moor with ship's head 232°T, using both anchors to 8 or 9 shackles. 14 mooring lines are required to 4 buoys. There are two 10 in. and 8 in. floating hoses for loading crude oil. Loading rate 1,700 cu.m./hr. Deballasting facilities are installed.

Forbidden anchorage zone is the area limiting Lat. 52° 38′ 30″ S. and Long. 70° 11′ 00″ W., maintaining entrance heading of 331° on head of wharf.

DENSITY: 1025.

FRESH WATER: Only available at Punta Arenas Quay through hoses at a rate of 8 t.p.h. In case of emergency it can be delivered by vessel of the Chilean Army, if advance notice is given.

FUEL: Only diesel oil available in Port Percy with advance notice of at least 7 hours. Also available ex-barge at Punta Arenas, capacity 300 tons (diesel). See "General" before first port.

FIRE PRECAUTIONS: Tankers are forbidden alongside at the quay.

GANGWAY/DECK WATCHMEN: Foreign vessels obliged to employ a watchman, except on Tanker Terminals.

OPENING/CLOSING HATCHES: Carried out by riggers. Crew from the vessel and stevedores not allowed to do this work.

CERTIFICATES: All International Certificates to be shown on arrival.

CUSTOMS ALLOWANCES: Quantity in possession of every member of the crew to be declared at the Customs.

IDENTIFICATION CARDS: Chilean International Police (Extranjeria) provides a provisional card to stay in the country. It has to be held each time a member of the crew goes ashore.

CONSULS:

Argentine
Austria
Belgium
Brazil
Colombia
Denmark
France

Germany
Great Britain
Greece
Italy
Netherlands
Norway

Paraguay
Peru
Spain
Sweden
Switzerland
Yugoslavia

REPAIRS: "Asmar" (Astilleros de la Armada) has a shipyard for small vessels up to 1,500 tons as well as a good workshop to effect floating repairs. Some marine spares can be obtained.

REPATRIATION: Facilities for repatriation, subject permission of International Police (Extranjeria) and Maritime Authority.

AIRPORT: Distance to airport is 18 km. Daily flights from and to Santiago by two national airlines LAN and LADECO. Argentina Airlines fly to Argentine cities twice a week.

TIME: See "General" before first port.

HOLIDAYS: See "General" before first port.

POLICE/AMBULANCE/FIRE: Maritime Police Tel: 22356; Fire 21212, 21264; Ambulance 22658.

TELEPHONES: There is no connection on the quay. From the City of Punta Arenas it is possible to make international calls.

SERVICES: Compass and gyro compass adjusting can be done.

SHORE LEAVE: Crew allowed to go ashore in all ports of the area. Crew must be in possession of provisional Identity Cards issued by police.

SHIPMASTER'S REPORT: 1976.

Documents required by Research Ships:

Clearance from Last Port.
10 Crew Lists.
3 Nil Passenger Lists.
3 Nil Cargo Declarations.
1 Health Declaration.
6 Lists of Personnel disembarking.
2 Stores Lists from each department.
2 Bonded Stores Lists.
2 Crew Manifests.

Pilotage: Vessel entered and sailed via Western end of Magellan Straits. No Pilot is available unless coming from the North. A radio message should be sent to "Commandante Naval Zona Terciera" requesting permission to proceed without a Pilot, giving ETA at Cabo Pilar and Punta Arenas. Messages should also be sent updating ETA and also when passing Cabo Pilar, the latter giving ETA at Paso Tortuoso and speed. This last information should be promulgated to "All ships". The reverse procedure applies when sailing.

Since we had not arrived with a Pilot on board, we waited for the Pilot about 0.25 miles off the jetty for docking. When we sailed, since it was a Saturday morning, I suggested we could manage without a Pilot for undocking. The Port Captain was agreeable to this, but he may have taken a different view had we been in a less convenient berth.

Time: Summertime is kept (GMT minus 3 hours), dates in force not known. (Ended 2nd weekend in March, in 1976).

Stores and Provisions: Available in limited quantity and range, and very expensive. There is no ship chandler. The Agent's runner will take the Catering Officer around the shops and market, purchasing the items required, and arranging collection and delivery to the ship.

Bunkers: Gas oil was obtained from Cabo Negro, a tanker terminal some 9 miles to the North. Vessel berthed alongside the jetty head of the terminal, designed for much bigger ships. There was no real problem with lines, although stern lines were very short nips. The forward lines ran to a dolphin connected to the jetty by a catwalk. The stern overhung the jetty head slightly. Docking and sailing can be done on slack water, but was straightforward, the starboard anchor being used to dredge down on to the jetty head, which lies East/West, with the prevailing wind blowing strongly from W.N.W. A boat is in attendance for running lines. Pilots are very capable and experienced. The berth may not always be available when the ship requires it, which might mean delays.

AUTHORITY: Maritime Governor of Punta Arenas.

QUINTERO: 32.47 S. 71.33 W. (See Plan Book)

PORT LIMITS: The seaward limit of the port is a line running 052° from the lighthouse at Los Molles to Punta Ventanilla.

DOCUMENTS:

1 Outwards Clearance Certificate from the last port of call.
2 Certificates of Dues in respect of lighthouses and buoys.
5 Cargo Manifests for the port.
5 General Manifests for cargo.
5 Manifests for Cargo in transit.
4 Lists of Passengers for the port.
4 Lists of Passengers in transit.
10 Lists of Crew Members.
5 Lists of Personal Effects.
1 Fumigation Certificate.
1 Maritime Health Declaration.

PILOTAGE: Pilotage is compulsory. Pilots and port officials board ships 2,450 m. off the R.P.C. Pier, bearing 290°, not far from the single Mooring Buoy, and 1,500 m. on 055° from the Los Molles Lighthouse.

The accommodation ladder should be rigged on the starboard side. Vessels can enter and moor during the day only, but it is possible to sail at night. Pilot usually boards between 0700 hrs. and 2200 hrs.

ETA should be sent to Agent 72 hours before arrival, with confirmation 24 hours before arrival. The message should state if any special service is required, and additionally Masters are requested to inform "Capuerto, Quintero".

ANCHORAGES: Vessels may anchor within port limits. The bay is well sheltered with ample room for manoeuvring. Vessels should keep clear of the S.W. portion of the bay, due to rocky nature of the bottom, and of the prohibited zone indicated on the charts. Larger vessels may anchor West of Punta Liles lighthouse, where there are depths greater than 20 m. with sand and mud bottom. An anchorage has been established at Lat. 32° 45.77' S., Long. 71° 30.5' W.

The anchorage at Ventanilla is an open roadstead, exposed to S.W. winds and swell, with the possibility of dragging anchors, especially in the Winter months.

RESTRICTIONS: Quintero Bay is entered between Point Ventanilla and Point Liles, entrance 2.5 miles wide, with a bight extending 1.5 miles towards the S.E. Point Liles is surrounded by submerged rocks and reefs for a distance of 2 cables.

Tankers discharging at the buoy terminals may be required to disconnect hoses in the event of bad weather, to avoid damage to the installation. Also see "Pilotage".

MAX. SIZE: *S.B.M.:* up to 120,000 g.r.t. (215,000 displacement tons)

Oil Multi-Buoy Terminal: up to 50,000 g.r.t. (100,000 displacement tons)

Liquid Gas Multi-Buoy Terminal: up to 30,000 g.r.t. (40,000 displacement tons)

Chilectra Andina Quay: North Side: Max. LOA 160 m., max. draft 28 ft. South Side: Max. LOA 200 m., max. draft 32 ft.

Las Ventanas Chemical Terminal: 90,000 displacement tons, max. draft 41 ft.

RADIO: The Naval Radio Station of Valparaiso also handles commercial traffic.

The Coastal Radio Service Station situated in the Port Captain's office, call sign "Capuerto Quintero".

TUGS: No tugs available at Quintero, but they can be requested from Valparaiso, or through Agent.

TANKERS:

S.B.M. Quintero Terminal: The depth at the S.B.M. is 47 m. Max. size for berthing, length 342 m. draft 22 m. (72 ft.). Manifold connection is 16 in. Ship's derricks must be rigged to carry a 12 ton lift. Max. pressure 200 p.s.i. Average discharge rate 8,000 t.p.h. for 25 API crude.

Gas Berth: Max. size 15,000 tons or 40,000 displacement tons. Max. draft 35 ft. Vessels drop both anchors, and moor to 3 stern buoys. Ship's head should lie on 300°. Hose connection 6 in. Discharge rate 240 cu.m./hr.

Vessels may moor or unmoor at any time at these terminals. Mooring warps must be more than 400 ft. in length.

R.P.C.: Max. draft 42 ft. 6 in. Vessels berth to 3 stern buoys, using both anchors, ship's head on 305°. Manifold connection starboard side 10 in. Hose lift 6 tons. Normal pressure 100 p.s.i.

BULK HANDLING FACILITIES:

Chilectra Andina Quay, Las Ventanas: Quay is 530 m. long with max. depth of 19 m. at the head of the quay.

Coal berth situated on the North side of the quay, equipped with mechanical discharging tower which loads up to 300 t.p.h.

The South side of the quay is used for loading copper concentrates, with the addition of 4 dolphins vessels up to 200 m., draft 32 ft., can now berth. Bulk grain can also be discharged here, although the loading tower, being fixed, requires vessels to shift berth to unload each hatch. The berth is exposed to a South-westerly swell.

FRESH WATER: Available by barge from Valparaiso and at Chilectra Andina Quay.

FUEL: Only available at Valparaiso. See "General" before first port.

MEDICAL: There is a small local hospital,and there is an ambulance service to Valparaiso. (20 miles away).

REPAIRS: Only minor repairs may be effected at workshops ashore.

CONSULS: Nearest at Valparaiso.

AIRPORT: Nearest commercial airports at Pudahuel and Cerrillos, near Santiago. Military airfield at Quintero may be used in emergencies, subject to necessary authorisation.

SHORE LEAVE: No restriction on shore leave. Crew must carry an Interpol Identity Card. See "General" before first port.

SERVICES: Food, laundry, etc. can be supplied.

REPATRIATION: Possible.

TIME: GMT minus 4 hours. Also see "General" before first port.

TERMINAL OPERATORS: Refineria de Petroleo Con Con (R.P.C.), Compania Chilean De Electricidad (Chilectra), Andean Mineral Company (Andina), Las Ventanas Chemical Terminal.

AUTHORITY: Quintero Port Captaincy.

SAN ANTONIO: 33.35 S. 71.37 W. (See Plan Book)

DOCUMENTS:

1 Customs Clearance Document.
2 Light Dues Certificates.
9 Cargo Manifests.
2 Crew Lists.
2 Passenger Lists.
2 Lists of Stores.
1 Arms and Ammunition List.
1 List of Personal Effects.
2 Baggage Declarations per passenger.
1 Derat Certificate.
List of Equipment.
Lifesaving Equipment Certificate.
Tonnage Certificate.
Radio Certificate.
Crew Vaccination Certificates.

PILOTAGE: As port is narrow, pilotage is compulsory for entering or clearing the artificial port. Pilots board vessels about 1 mile outside the port, weather permitting. Vessels should wait for Pilot with engines stopped in position bearing 060° and 1 mile from Panul Lighthouse.

ANCHORAGES: Vessels must anchor in position 090° and 1.3 miles from the edge of the South Breakwater in 28 m. of water. The bottom is sand and mud, permitting anchorage of vessels of any length or beam.

Mooring Buoys: Inside the centre of North Pool there are 2 mooring buoys. Buoy No. 1 situated at 085° and 180 m. from head of Port Authorities' Pier and it can be used for vessels up to 200 m. length and 40 ft. draft. Buoy No. 2 situated at 018° and 100 m. from abovesaid pier, can be used for ships up to 145 m. length and 30 ft. draft.

RESTRICTIONS: San Antonio is a narrow and difficult manoeuvring port, entrance to artificial port is subject to weather conditions.

Entry and departure possible 24 hours, weather permitting.

From September to March S.W. wind blows from noon to sunset. It is therefore recommended to arrive at the port during night hours or daybreak, so entering the port immediately. Fog is more frequent in April and May.

MAX. SIZE:

Berth No.	*Max. Length* (m.)	*Depth* (ft.)
No. 1	200	33
No. 2	190	32
No. 3	—	32
No. 4	160	28
No. 5	180	31
No. 6	175	30
No. 7	95	21
Buoy No. 1	Max. displacement	55,000 tons
Buoy No. 2	Max. displacement	10,000 tons

Vessels intending to discharge are authorised 1 ft. more draft at Berth Nos. 1, 2, 6 and 7, with the proviso that they must berth within 2 hours before high tide, up to 2 hours after high tide, and commence discharge immediately.

RADIO:

Station Call Sign: San Antonio CB2. *Category:* (S)

Frequency	*Type*	*Receives*	*Transmits*	*Schedule*
2 MHz	A 3	2182	2182	24 hours
		2738	2738	As required
4 MHz	A 3	4143.6	4143.6	As required

However it is advisable to use Radio Playa Ancha, Valparaiso, that is connected by telex with San Antonio.

Port Control can be contacted by VHF on Channel 16, 24 hours a day.

TUGS: 3 modern tugs, 1,000 h.p., 1,250 h.p. and 2,000 h.p.

BERTHING: San Antonio has 7 piers and 2 mooring buoys.

Pier No. 1: Depth 33 ft., has shore crane for 5 and 10 tons. This pier is used specially for bulk cargoes.

Pier No. 2: Depth 32 ft., has shore cranes for 5 and 10 tons.
Pier No. 3: Depth 32 ft., no shore cranes.
Pier No. 4: Depth 28 ft., no shore cranes.
Pier No. 5: Depth 31 ft., no shore cranes.

Pier Nos. 4 and 5 are used specially for containers and have a mobile crane, capacity 50 tons.

Pier No. 6: Depth 30 ft., has shore cranes for 5 tons.
Pier No. 7: Depth 21 ft., has shore cranes for 5 tons.

All the piers have double strong fenders.

Pier: Berth Nos. 4 and 5 are considered as berths specially for containers, and the requisite priorities for this are being given for the berthing of such vessels.

It is possible to store 1,236 TEU alongside these berths, but where necessary this can be enlarged by occupation of an adjacent area of 7,900 sq.m. and one of 13,000 sq.m. Also, there are other areas usable for storage of containers, which would enable the daily storage capacity to be quadrupled, without prejudice to normal activities. Also, Berth Nos. 2, 4, 5 and 6 can take ro/ro vessels, having ample open areas and facilities for this purpose.

There are three terminals for liquids. Buoy No. 1: General liquids, chemical products. Berth No. 2: General liquids, chemical products. Berth No. 6: Oil.

Cranes: Apart from the 12 jib cranes which the Chilean Port Authority possesses, at Berth No. 1 (South Mole) SAAM has in service a mechanised plant for unloading bulk cargo (up to 1 tonne density per cu.m.). This plant has a speed of discharge of 400 t.p.h.

Also, Agunsa maintains a Demag MC 900 Q crane especially adapted for unloading and loading containers, with specialised personnel belonging to that agency. The crane's capacity is 20 TEU/hour.

CRANES:

1 crane specially for containers, 50 tons capacity.
12 cranes for 5, 7.5 and 10 tons.
80 forklifts of different capacity.
9 mechanical scoops.

Also see "Berthing".

STEVEDORES: There are various stevedoring contractors who between them have some 2,400 workers specialised in the various port and maritime operations (dockers, shipboard workers, watchmen, deckhands, tallymen, crane operators, etc.). Also, these contractors have mobile cranes for use onboard and on land, and two container handling fork lifts (Hyster and Taylor) with 20 ft. and 40 ft. spreaders, also tractors, trucks, etc. Cargo is worked expeditiously, especially copper. Port works continuously, ceasing only from 0530 – 0800 hrs. The rate of cargo handling capacity is as follows:

Loading:

Copper 120 t.p.h. per hatch/gang.
Copper concentrate in bulk 250 – 280 t.p.h.
Wheat and alfalfa in pallets 300 t.p.h.
General cargo 30 – 40 t.p.h. per hatch/gang.
Containers 12 – 15 units per hour.

Discharge:

Bulk cargoes 5,000 – 7,000 tons in 24 hours.
Salt in bulk 100 to 120 t.p.h.
Bags 20 t.p.h. per hatch/gang.
General cargo 30 – 40 t.p.h. per hatch/gang.
Drums 35 – 40 t.p.h. per hatch/gang.

TANKERS: There are 3 chemical cargo terminals:

No. 1: Bulk liquids in Buoy No. 1 (25,360 cu.m. capacity).
No. 2: Chemical terminal in Pier No. 2 (2,250 cu.m. capacity).
No. 3: Esso Terminal in Pier No. 6 (19,780 cu.m. capacity).

MEDICAL: Hospital with 190 beds and necessary surgeons. 3 clinics with 40 beds, minor surgery.

FRESH WATER: All berths equipped with standpipes to supply fresh water direct to vessels at a rate of about 20 t.p.h., but during day rate may be less due to low pressure.

FUEL: Marine diesel oil can be supplied to vessels, provided this is requested with sufficient advance notice.

Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Done by stevedores.

IDENTIFICATION CARDS: Required.

CONSULS: Italy.

REPAIRS: Three workshops for minor repairs. Major repairs in Valparaiso.

REPATRIATION: Facilities exist.

AIRPORT: At Merino Benitez Airport near Santiago only 2 hours away. National and foreign airline services to world-wide destinations.

TIME: Local time GMT minus 4 hours; October to March (Daylight Saving) GMT minus 3 hours.

GENERAL: *Fumigation:* All vessels arriving with a complete cargo of cereals are compelled to be fumigated according to Chilean law. To effect this, vessel is tied up at Mooring Buoy No. 1. Only the hatches are fumigated and all crew members must go ashore (8 duty safety crew remain onboard).

Fumigation takes about 18 – 20 hrs. It is recommended these vessels arrive provided with strong ropes (special nylon) and good fenders as protection against heavy swell.

SHORE LEAVE: Allowed. Also see "General" before first port.

DELAYS: S.W. winds generally blow at dawn calming at sunset, leaving a heavy and strong swell in the bay. It is therefore recommended to arrive at the port at daybreak from September to March, so as to enter the artificial port immediately. South winds also develop a Northerly current. Fogs are frequent from November to March.

DEVELOPMENTS: Dredging commenced in 1979 to achieve a depth of 32 ft. 8 in.

AUTHORITY: Empresa Portuaria de Chile, Casilla 163-A, San Antonio, Chile. *Telex:* 38505 Empor CL.

SAN VICENTE: 36.44 S. 73.08 W. (See Plan Book)

Also see "General" before first port.

PORT LIMITS: East of meridian from Punta Pardo and South of parallel from Punta Hualpen.

PILOTAGE: Compulsory. Pilot boards inside the port limits. Pilot will designate anchorage. Accommodation ladder must be rigged if the vessel is at anchor awaiting berth as the Port Authorities will board. Pilots are arranged by Agent.

RESTRICTIONS: Berthing or unberthing from 0600 hrs. to 2400 hrs. weather permitting. For tankers daylight only.

MAX. SIZE: Draft only restrictions, can berth ships greater than 200 m. LOA and 42 ft. draft.

HEALTH: Port Authorities give Pratique on arrival.

RADIO: Radio Estacion Naval Talcahuano. 500 kHz. A-1 H-24.
Costera Talcahuana 2182 A-3 H-24.
Radio Estacion Naval Valparaiso. A-1 and A-3 all frequencies H-24.

VHF: Channel 16 safety and calling.

TUGS: 2 tugs × 1,200 h.p. Join vessel at the same time as Pilot.

BERTHING: *CAP Pier:* North, length 240 m. draft 33 ft. at any time; South, length 200 m. draft 24 ft. at any time.

General Cargo Berth:

Pier 1: Length 220 m., draft 34 ft. at any time, ships' own gear.

Pier 2: Length 215 m., draft 36 ft. at any time, 2 cranes for bulk cargoes, for general cargo ships' own gear.

Comap Berth "A": Vessel moors with starboard anchor with 7 shackles and 3 lines to 2 buoys astern. Max. LOA 150 m. 1 hose with 8 in. connection on port side midships. Gasoline, kerosene, diesel oil and jet fuel handled. 1 tug and 1 mooring launch available.

ENAP Berth "B": Vessel moors with 2 anchors with 8 shackles on starboard, and 3 lines to 3 buoys astern. Max. LOA 250 m. or up 42 ft. draft. 1 tug and 2 mooring launches required. 3 hoses with 8 in. connections for crude and fuel oil. Handling rate 1,500 cu.m./p.h.

ENAP Berth "C": Vessel moors with both anchors, using 9 shackles starboard side, and 3 lines to 3 buoys astern. Max. LOA 200 m. and 36 ft. draft. 1 tug and 1 mooring launch required. 2 hoses with 8 in. connections, 1 for fuel oil rate 900 cu.m./p.h. can also be used for crude. 1 hose for gasoline, kerosene, turbo, diesel and liquid gas.

STEVEDORES: Through Agents. Stevedores available 24 hours.

MEDICAL: Good hospitals, no special notice required.

DENSITY: Salt water.

FRESH WATER: Available at all piers.

FUEL: Diesel by truck or rail road at piers, or at buoy berths.

CONSULS: Argentina, Belgium, Bolivia, Colombia, Ecuador, France, Great Britain, Italy, Netherlands, Norway, Paraguay, Peru, Spain, Sweden, West Germany.

REPAIRS: Deck and Engine workshops.

DRY DOCKS: ASMAR for large vessels.

SURVEYORS: Lloyds, N.V., B.V., N.K.K., A.B.S., G.L.

WATCHMEN: Gangway watchmen compulsory. Deck or Hatch watchmen optional.

HATCHES: Open and closed by riggers gangs.

CARGO GEAR: Ship's gear. 2 cranes for bulk cargoes, rate 200 t.p.h. Heavy lift crane with 50 tons capacity.

REPATRIATION: There are facilities for crew changes.

AIRPORT: 1 airport for internal flights.

POLICE/AMBULANCE/FIRE: Available in the port.

IDENTIFICATION CARDS: Immigration provide identification cards.

SHIPMASTER'S REPORT: 1977 (Updated 1982).

Documents:

Customs:
- 2 copies List of Ammunition.
- 7 copies Cargo Manifest.
- 4 copies Stores List.
- 4 copies Personal Effects List.
- 4 copies Crew List.
- 4 copies Passenger List (or negative).

Port Captain:
- Clearance from Last Port.
- 2 copies Crew List.
- 2 copies Passenger List (or negative).
- International Certificates.

Police:
- 2 copies Crew List.
- 2 copies Passenger List (or negative).

Health Inspector:
- 1 copy Declaration of Health.
- 1 copy Vaccination List.
- 1 copy Passenger List (or negative).

Agent:
- 1 copy Crew List.
- 2 copies Passenger List (or negative).
- 2 copies Stores List.
- 2 copies Personal Effects List.

Navigation: Bay of San Vicente is entered between rock "Villa de Burdeos" and "Point Gualpen".

There is a traffic route for vessels leaving and entering Bay San Vicente. The separation zone bounded by lines connecting the following geographical positions: 73° 10.7′ W., 73° 10.6′ W. and 73° 09.7′ W., 73° 09.8′ W. Vessels inbound should keep close South of this separation zone and vessels outbound close North of the separation zone.

In the traffic route, Pilot boarding position and the anchorage, the depth is 36 ft. Maximum permissible draft is 38 ft.

The wreck in position Lat. 36° 44.3′ S., Long. 73° 08.6′ W. has been removed.

The present breakwater is under extension to 800 m.

Pilot: Pilotage is compulsory and the boarding position is about Lat. 36° 44.7′ S., Long. 73° 09.8′ W. in Bay San Vicente, or 1 mile S.W. of rock "Villa de Burdeos" Gp. Fl. (2) 10 secs.

Anchorage: The anchorage is about 900 m. East of rock "Villa de Burdeos". The Pilot anchors the vessel.

Radio: Advance notice: Vessels bound for San Vicente must advise Port Captain by radio 24 hours before arrival giving information about ETA, draft, if vessel carries passengers or mail, and state of health on board. Cable address: "Maritgob Talcahuano".

Also ETA to pilot station, VHF Channel 16, 1 hour prior to arrival. Pilot station's name is "Gobernacion Maritima Talcahuano" or Capitania de Puerto de San Vicente.

Tugs: At present there are 2 tugs (1,200 h.p.) in operation. Tugs use ship's lines.

Pilot is in VHF contact with the tug(s) which assists in mooring and unmooring vessels.

Mooring Method: Vessel approaches and enters the berth from South. Mooring and unmooring may take place also during hours of darkness, provided weather conditions are fair and visibility good.

When the vessel is near the berth, port anchor is usually let go and dragged or paid-out while a tug slowly pushes the vessel alongside.

The vessel is moored with 4 headlines and 2 springs forward and 4 sternlines and 2 springs aft.

Wharves: The pier is 435 m. long and is provided with rubber fenders. A new pier 110 m. long is under construction. Depth alongside the pier is 34 ft. to 36 ft.

There are 2 cranes on the pier for grain or other bulk cargoes. Each has a capacity of 240 m.t.p.h. (grain).

Behind the pier is 41,975 sq.m. for log storage. There are railway tracks on the pier and the log deposit area. Logs are brought in by railway wagons.

Stevedores: Stevedores work in 3 shifts of 8 hours each.

Logs are loaded with ship's gear and at present the capacity is max. 60 cu.m. per log-gang per hour. Stevedores working rather slowly but make very good stowage.

Medical: There is an ambulance station just outside the pier gate and good hospital facilities near the port.

Supply Service: Bunkers, provision, fresh water and laundry are available.

Shore Leave: All Crew members are issued with landing permit/identification card, which has to be returned before departure.

Time: Local time is GMT minus 4 hours but from second Saturday in October to second Saturday in March GMT minus 3 hours.

Weather and Time: During Summer the prevailing wind is Southwesterly. In the Winter and specially in the months May to August, the winds are North and Northwesterly.

In general, the weather throughout the year is good, sometimes however, during Wintertime with a Northwesterly wind, weather may become too rough for cargo operations due to the swell and the vessel's heavy movements. In this case the Port Authorities may order the vessel to leave the pier and shift to the anchorage, however that is a rare occurrence.

Tidal difference is 1.50 m.

Advice: All store rooms on deck and in the accommodation should be locked. Crew members should lock their doors, even if they are leaving their cabins for a short period.

Crew members should also take care not to walk alone during late night time near or around the harbour area.

AUTHORITY: Armada de Chile, Direcion Del Litoral y M.M., Gobernacion Maritima, Blanco No. 475, Talcahuano. *Contact:* Captain P. Urbina Sanguesa, Maritime Governor.

Empresa Portuaria de Chile, Casilla 133-V, Valparaiso, Chile. *Telex:* 30313. *Contact:* Vice Admiral Luis Eberhard Escobar, Director.

Empresa Portuaria de Chile, Administracion Puerto, Casilla 355, Talcahuano.

TALCAHUANO (including Concepcion Bay):
36.41 S. 73.06 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory. Pilot boards vessel near Belen Lighthouse, 3 cables distance.

ANCHORAGES: Each berth has its own distinct anchorage point.

Berth	*Anchorage*	*Bearing*	*Depth*
Berth 2	Huascar	101° × 600 m.	21 ft.
Berth 3	”	101° × 900 m.	24 ft.
Berth 4	”	101° × 1200 m.	27 ft.
Berth 5	”	101° × 1500 m.	30 ft.
Berth 6	”	088° × 1000 m.	30 ft.
Berth 7	Mole 500 (Sth. Encl.)	104° × 820 m.	28 ft.
Berth 8	” ”	136° × 400 m.	21 ft.
Berth 9	Explosives Anchorage	36° 06′ S. 73° 04′ 08″ W.	

Vessels in quarantine are moored 182° from Belen Lighthouse and 7 cables distant. Vessels carrying explosives are moored in same direction but 9 cables from Belen Lighthouse.

RESTRICTIONS: Port works 24 hours. Only 6 vessels can moor alongside quay at one time.

MAX. SIZE: Vessels of 28 ft. draft and 195 m. in length can moor on the East side.

RADIO:

Station: Talcahuano. *Call sign:* CBT-4. *Category:* (S).

Frequency	*Type*	*Receives*	*Transmits*	*Schedule*
6 MHz	A 1	6265	6414.5	H00-30
4 MHz	A 3	4085.2	4390.2	H30-60

TUGS: There are two sea-going tugs, 800 h.p. and 350 h.p. Asmar (T) has 3×800 h.p. sea-going tugs.

BERTHING: Berth No. 1: Length 155 m., max. draft 7.32 m. (24 ft.)

Berth No. 2: Length 205 m. of which 180 m. is usable. Max draft 6.71 m. (22 ft.). Berth only used by fishing vessels.

Mole 500/Naval Pier. Max. length 656 ft., draft 26.2 ft., 4 headlines, 4 stern lines and 2 springs required. Ship's gear used for cargo handling.

Passenger Mole: At a distance of 80 m. from the Fiscal Quay and on the Blanco Encalada Mole is the Passenger Pier with concrete steps for passenger traffic.

Chacabuco Quay: Situated in the Inner Harbour for repairs. Vessels up to 21 ft. draft can moor. No railway line or cranes, therefore vessels must work with own derricks to vans. "Asmar" tugs are used for mooring.

Concepcion Bay: Lirquen Private Pier: (Also see "Shipmaster's Report"). Pilot boards off the end of the pier. Max. length 180 m. Vessels use maximum chain on both anchors, ship's head lying on 340°T, and a stern quarter buoy is used. Vessels require 4 headlines, 4 stern lines, and 4 springs.

North Side: Max. length 522.4 ft., max. draft 26 ft. when berthing; Max. draft 32.6 ft., when unberthing.

South Side: Max. length 656 ft., max. draft 31.6 ft. when berthing; max. draft 32.6 ft. when unberthing.

Penco Private Pier: The pier is 1700 m. long ending in a platform on which stands a fixed base rotary crane. Vessel's bows lie on 348°T, both anchors used to final shackle. There are 4 buoys, 1 on each bow, 1 astern, and 1 on the starboard quarter. Vessels also tie up to 3 dolphins on the East side of the pier. 12 × 600 ft. mooring lines are required and also 2 springs. A tug is required. The berth is exposed to strong Northerly winds, and vessels must be prepared to leave at short notice.

Max. draft 33 ft. There are 2 sea-going tugs for docking and undocking.

CRANES: 4 × 5 ton Portal crane on the Fiscal Pier. One floating crane 180 tons. One mobile crane 30 tons.

STEVEDORES: 12 gangs available. Loading: assorted goods 12 t.p.h./gang/hatch. Cereals 25 t.p.h./gang/hatch. Timber 100 t.p.h./gang/hatch. Newsprint 20 t.p.h./gang/hatch.

Discharge: assorted goods 12 t.p.h./gang/hatch. Bagged cargo 25 t.p.h./gang/hatch.

When loading is carried out by means of lighters, this is usually done from privately owned moles belonging to the principal commercial firms of the port from their warehouses situated inside the Morro Channel. Working hours are 0800 – 1430 hrs. and 1439 – 2100 hrs. Also see "General" before first port.

MEDICAL: Public hospital with board and sanatorium for infectious/contagious diseases. In addition, private clinics and a naval hospital.

FRESH WATER: Occasionally available on Berth No. 2.

FUEL: Can be supplied only to vessels moored alongside quay and this in small quantities up to 100 tons, by means of cistern-truck or in drums. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Done by stevedores.

IDENTIFICATION CARDS: Required.

CONSULS: Brazilian and Norwegian consulates. At Concepcion the following:

Argentina
Belgium
Bolivia
Colombia
Denmark
Ecuador
El Salvador
Finland
France
Guatemala
Germany
Honduras
Italy
Mexico
Netherlands
Paraguay
Panama
Peru
Sweden
Switzerland
Spain
U.K.
Uruguay
Venezuela

REPAIRS: "Asmar" or the navy workshop has capable personnel and modern equipment to effect all kinds of repairs, not only to hull, but also to engines, boiler plates, welding, carpentry and electrical works. Chilean Navy has high-sea tugs to effect salvage and assist vessels in danger. 3 private-owned workshops, which can effect small repairs to vessels afloat. Several slipways for construction and repair of small craft.

DRY DOCKS: Naval shipyard and workshops have 2 dry docks, Dock number 1 is 180 m. long by 30 m. wide. Dock number 2 is 250 m. long by 40 m. wide.

Two floating docks: one 200 ft. long by 30 ft. wide for vessels up to 1,000 tons, and the other 333 ft. long by 50 ft. wide for vessels up to 3,500 tons. There is also a workshop for repairs to be effected afloat. There are 6 anchored mooring buoys used by vessels when entering Dry Dock 2.

REPATRIATION: Good facilities exist.

AIRPORT: Carriel-Sur is situated between Talcahuano and Concepcion, 7 km. N.W. of Concepcion. Lan-Chile has connections from this airport with all the towns of the country from Arica to Punta Arenas and abroad.

TIME: GMT minus 4 hours. Also see "General" before first port.

SHORE LEAVE: Allowed.

GENERAL: South wind affects vessels only when moored outside the port zone. Weather signals are indicated on Signal Station of Port Authorities' Building.

Climate: Temperate.
Predominant Wind: S. – W. at 26 knots.
Rainfall: 736 mm. per year.
Temperature: Average maximum 16°C., average minimum 7°C.

SHIPMASTER'S REPORT: 1979.

At Lirquen there is a concrete and metal pier which runs from the shoreline in a North to South direction. Depth of water on the Eastern side is 27 ft. and on the Western side 24 ft.

Two ships of 12,000 g.r.t. can work cargo at the same time. The cargo is delivered to the ship's side by tractor and trailer. Ship's cranes are used throughout loading operations.

The pier and sheds are owned by the Wood Pulp Company as is the Agency. Anchorage is good, about 0.75 miles from the end of the pier. Only woodpulp and bundled lumber are loaded. The woodpulp bales are unitised and bound three high.

The following stowage factors were noted:

Woodpulp in units: 1 L/H 2 cu.m. per tonne.
1 T/D 1.8 cu.m. per tonne.
4 L/H 1.8 cu.m. per tonne.
4 T/D 1.94 cu.m. per tonne.
Woodpulp Loose: No. 2 T/D 1.62 cu.m. per tonne.
Bundled Lumber: No. 2 L/H 1.95 cu.m. per tonne.

Vessels berth stern towards the shore. The Pilot boards 0.5 miles off the pier. There is no tug.

The fresh water at this Port is very poor and not recommended.

AUTHORITY: Empresa Portuaria de Chile, Casilla 355, Talcahuano, Chile. *Contact:* J. Carlos Arredondo Gallardo, Administrator.

TALTAL: 25.24 S. 70.29 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

PILOTAGE: No official pilot station at Taltal. If professional assistance required vessel should give ETA 24 hours in advance via Valparaiso Radio. Pilot boards at the anchorage. International code signals used. Harbour Master's Office can be contacted by radio-telephone on 2182 kHz.

ANCHORAGES: Sheltered deep-water anchorage suitable for any size vessels. Locations of designated areas marked on the chart.

RESTRICTIONS: Port closed in Summer from 2000 hrs. to 0600 hrs.; in Winter from 1900 hrs. to 0700 hrs.

MAX. SIZE: Limited only by depths in anchorage.

HEALTH: Vessel boarded on arrival by Health Inspector.

RADIO: Radio Naval Valparaiso or Radio Naval Arica. Use CB on 2182 kHz. and 2738 kHz. A3 on the half hour from 0800 hrs. to 1800 hrs.

TUGS: One privately owned tug may be called on to assist if necessary.

BERTHING: No berths alongside shore. Vessels work cargo in open anchorage. One buoy berth for tankers. Mooring, unmooring in daylight only. 6 in. hoses for discharging fuel and diesel.

STEVEDORES: At least 24 hours advance notice of ETA required to arrange gangs. Also see "General" before first port.

TANKERS: *Caleta Ossa Mooring Berth:* Vessels berth to 2 stern buoys, using both anchors. Ship's head on approximately 225°T. Depth of water 47 ft. A Pilot is required and comes from Antofagasta.

MEDICAL: Doctors and hospital facilities available. Advance notice desirable.

FRESH WATER: Not available.

FUEL: Not available.

IDENTIFICATION CARDS: Required by all crew members.

CONSULS: There are no local representatives.

REPATRIATION: No facilities for crew change or repatriation.

AIRPORT: There is no airport.

TIME: GMT minus 4 hours. Also see "General" before first port.

HOLIDAYS: See "General" before first port.

TELEPHONES: There is a telephone service.

SHORE LEAVE: Allowed.

AUTHORITY: Capitania de Puerto, Taltal, Chile. *Contact:* Luis Alegre Lepe, Capitan de Puerto.

TOCOPILLA: 22.05 S. 70.11 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

ANCHORAGE: There is an anchoring zone for tankers at 351° and 1,550 m. from the Light House "Punta Algodonales".

There is anchoring zone for general cargo vessels at 031° and 1,650 m. from Light House "Punta Algodonales".

PILOTAGE: Compulsory. Pilot will board at any time.

MOORING: The port has 2 buoys for mooring vessels, for general cargo and nitrate in sacks. The vessel anchors with 6 to 7 chain lengths (port anchor) and then secures to the buoys using at least two ropes (220 m. each one).

The port has two tanker terminals and vessels anchor with both anchors using at least 7 chain lengths. They must be secured to buoys and cleats ashore with an average of 6 ropes (220 m. each one).

The port has a mechanical conveyor crane and vessels anchor with port anchor, using at least 7 chain lengths. They must be secured to 3 buoys with an average of 6 ropes (220 m. each one). Also see "Berthing".

RESTRICTIONS: Ships are boarded by Pilot and Port Authorities at any time.

HEALTH: On arrival vessel boarded by Sanitary surgeon, who will grant full Sanitary Pratique valid for all Chilean ports of call in the present voyage. In cases of suspected disease he will determine if patient or patients should be removed to local hospital, otherwise he will declare the effected vessel sanitary free pratique cleared.

RADIO: See "General" before first port.

TUGS: No tugs are used for mooring or unmooring of ships.

BERTHING: All berthing is done during daylight.

Nitrate Plant: For loading nitrate in bulk and cooper concentrate a Mechanical Conveyor Crane, owned by Sociedad Quimica y Minera de Chile S.A. (SOQUIMICH), is used. Maximum draft permitted is 36 ft., Mechanical arms height above medium sea level is 17.35 m., its arm loads bulk nitrate directly into the ship's hold with a rate of 1,000 t.p.h. Cargo is worked on vessel's port side, therefore all cargo gear should be swung outboard.

Sulphate Mooring Berth: Vessels berth to 3 stern buoys using the starboard anchor. Ship's head on 276°T.

Lighters' Berths: Vessels berth to a stern buoy, using starboard anchor, ship's head on 265°T. There are 3 berths 410 m., 610 m. and 810 m. North of No. 1 mole.

The port has 36 lighters. Working hours 0800 – 1200 hrs., 1400 – 1800 hrs. and 1800 – 2100 hrs.

STEVEDORES: Number of gangs required for loading and/or unloading operations should be radioed 24 hours in advance, indicating last ETA. Also see "General" before first port.

MEDICAL: In case of urgent need of a doctor on arrival the Master should request medical assistance by radio to Agent and/or Port Captain. A modern hospital is available with adequate facilities. There is a first-aid clinic for minor surgery.

TANKERS: Two buoys used for oil discharge. Both for clean and crude products. One of them belongs to Cia de Cobre Chuquicamata – (CODELCO) and operates with 2 lines of 8 in. diameter, the other buoy is property of Sociedad Quimica y Minera de Chile S.A. and has 2 lines of 8 in. diameter for discharge of oil and crude.

BERTHING: *CAP Pier:* North, length 240 m. draft 33 ft. at any time; South, length 200 m. draft 24 ft. at any time.

General Cargo Berth:

Pier 1: Length 220 m., draft 34 ft. at any time, ships' own gear.

Pier 2: Length 215 m., draft 36 ft. at any time, 2 cranes for bulk cargoes, for general cargo ships' own gear.

Comap Berth "A": Vessel moors with starboard anchor with 7 shackles and 3 lines to 2 buoys astern. Max. LOA 150 m. 1 hose with 8 in. connection on port side midships. Gasoline, kerosene, diesel oil and jet fuel handled. 1 tug and 1 mooring launch available.

ENAP Berth "B": Vessel moors with 2 anchors with 8 shackles on starboard, and 3 lines to 3 buoys astern. Max. LOA 250 m. or up 42 ft. draft. 1 tug and 2 mooring launches required. 3 hoses with 8 in. connections for crude and fuel oil. Handling rate 1,500 cu.m./p.h.

ENAP Berth "C": Vessel moors with both anchors, using 9 shackles starboard side, and 3 lines to 3 buoys astern. Max. LOA 200 m. and 36 ft. draft. 1 tug and 1 mooring launch required. 2 hoses with 8 in. connections, 1 for fuel oil rate 900 cu.m./p.h. can also be used for crude. 1 hose for gasoline, kerosene, turbo, diesel and liquid gas.

STEVEDORES: Through Agents. Stevedores available 24 hours.

MEDICAL: Good hospitals, no special notice required.

DENSITY: Salt water.

FRESH WATER: Available at all piers.

FUEL: Diesel by truck or rail road at piers, or at buoy berths.

CONSULS: Argentina, Belgium, Bolivia, Colombia, Ecuador, France, Great Britain, Italy, Netherlands, Norway, Paraguay, Peru, Spain, Sweden, West Germany.

REPAIRS: Deck and Engine workshops.

DRY DOCKS: ASMAR for large vessels.

SURVEYORS: Lloyds, N.V., B.V., N.K.K., A.B.S., G.L.

WATCHMEN: Gangway watchmen compulsory. Deck or Hatch watchmen optional.

HATCHES: Open and closed by riggers gangs.

CARGO GEAR: Ship's gear. 2 cranes for bulk cargoes, rate 200 t.p.h. Heavy lift crane with 50 tons capacity.

REPATRIATION: There are facilities for crew changes.

AIRPORT: 1 airport for internal flights.

POLICE/AMBULANCE/FIRE: Available in the port.

IDENTIFICATION CARDS: Immigration provide identification cards.

SHIPMASTER'S REPORT: 1977 (Updated 1982).

Documents:

- Customs:
  - 2 copies List of Ammunition.
  - 7 copies Cargo Manifest.
  - 4 copies Stores List.
  - 4 copies Personal Effects List.
  - 4 copies Crew List.
  - 4 copies Passenger List (or negative).
- Port Captain:
  - Clearance from Last Port.
  - 2 copies Crew List.
  - 2 copies Passenger List (or negative).
  - International Certificates.
- Police:
  - 2 copies Crew List.
  - 2 copies Passenger List (or negative).
- Health Inspector:
  - 1 copy Declaration of Health.
  - 1 copy Vaccination List.
  - 1 copy Passenger List (or negative).
- Agent:
  - 1 copy Crew List.
  - 2 copies Passenger List (or negative).
  - 2 copies Stores List.
  - 2 copies Personal Effects List.

Navigation: Bay of San Vicente is entered between rock "Villa de Burdeos" and "Point Gualpen".

There is a traffic route for vessels leaving and entering Bay San Vicente. The separation zone bounded by lines connecting the following geographical positions: 73° 10.7′ W., 73° 10.6′ W. and 73° 09.7′ W., 73° 09.8′ W. Vessels inbound should keep close South of this separation zone and vessels outbound close North of the separation zone.

In the traffic route, Pilot boarding position and the anchorage, the depth is 36 ft. Maximum permissible draft is 38 ft.

The wreck in position Lat. 36° 44.3′ S., Long. 73° 08.6′ W. has been removed.

The present breakwater is under extension to 800 m.

Pilot: Pilotage is compulsory and the boarding position is about Lat. 36° 44.7′ S., Long. 73° 09.8′ W. in Bay San Vicente, or 1 mile S.W. of rock "Villa de Burdeos" Gp. Fl. (2) 10 secs.

Anchorage: The anchorage is about 900 m. East of rock "Villa de Burdeos". The Pilot anchors the vessel.

Radio: Advance notice: Vessels bound for San Vicente must advise Port Captain by radio 24 hours before arrival giving information about ETA, draft, if vessel carries passengers or mail, and state of health on board. Cable address: "Maritgob Talcahuano".

Also ETA to pilot station, VHF Channel 16, 1 hour prior to arrival. Pilot station's name is "Gobernacion Maritima Talcahuano" or Capitania de Puerto de San Vicente.

Tugs: At present there are 2 tugs (1,200 h.p.) in operation. Tugs use ship's lines.

Pilot is in VHF contact with the tug(s) which assists in mooring and unmooring vessels.

Mooring Method: Vessel approaches and enters the berth from South. Mooring and unmooring may take place also during hours of darkness, provided weather conditions are fair and visibility good.

When the vessel is near the berth, port anchor is usually let go and dragged or paid-out while a tug slowly pushes the vessel alongside.

The vessel is moored with 4 headlines and 2 springs forward and 4 sternlines and 2 springs aft.

Wharves: The pier is 435 m. long and is provided with rubber fenders. A new pier 110 m. long is under construction. Depth alongside the pier is 34 ft. to 36 ft.

There are 2 cranes on the pier for grain or other bulk cargoes. Each has a capacity of 240 m.t.p.h. (grain).

Behind the pier is 41,975 sq.m. for log storage. There are railway tracks on the pier and the log deposit area. Logs are brought in by railway wagons.

Stevedores: Stevedores work in 3 shifts of 8 hours each.

Logs are loaded with ship's gear and at present the capacity is max. 60 cu.m. per log-gang per hour. Stevedores working rather slowly but make very good stowage.

Medical: There is an ambulance station just outside the pier gate and good hospital facilities near the port.

Supply Service: Bunkers, provision, fresh water and laundry are available.

Shore Leave: All Crew members are issued with landing permit/identification card, which has to be returned before departure.

Time: Local time is GMT minus 4 hours but from second Saturday in October to second Saturday in March GMT minus 3 hours.

Weather and Time: During Summer the prevailing wind is Southwesterly. In the Winter and specially in the months May to August, the winds are North and Northwesterly.

In general, the weather throughout the year is good, sometimes however, during Wintertime with a Northwesterly wind, weather may become too rough for cargo operations due to the swell and the vessel's heavy movements. In this case the Port Authorities may order the vessel to leave the pier and shift to the anchorage, however that is a rare occurrence.

Tidal difference is 1.50 m.

Advice: All store rooms on deck and in the accommodation should be locked. Crew members should lock their doors, even if they are leaving their cabins for a short period.

Crew members should also take care not to walk alone during late night time near or around the harbour area.

AUTHORITY: Armada de Chile, Dirrecion Del Litoral y M.M., Gobernacion Maritima, Blanco No. 475, Talcahuano. *Contact:* Captain P. Urbina Sanguesa, Maritime Governor.

Empresa Portuaria de Chile, Casilla 133-V, Valparaiso, Chile. *Telex:* 30313. *Contact:* Vice Admiral Luis Eberhard Escobar, Director.

Empresa Portuaria de Chile, Administracion Puerto, Casilla 355, Talcahuano.

TALCAHUANO (including Concepcion Bay):
36.41 S. 73.06 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

PILOTAGE: Compulsory. Pilot boards vessel near Belen Lighthouse, 3 cables distance.

ANCHORAGES: Each berth has its own distinct anchorage point.

Berth	*Anchorage*	*Bearing*	*Depth*
Berth 2	Huascar	101° × 600 m.	21 ft.
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Berth 4	"	101° × 1200 m.	27 ft.
Berth 5	"	101° × 1500 m.	30 ft.
Berth 6	"	088° × 1000 m.	30 ft.
Berth 7	Mole 500 (Sth. Encl.)	104° × 820 m.	28 ft.
Berth 8	" "	136° × 400 m.	21 ft.
Berth 9	Explosives Anchorage	36° 06′ S. 73° 04′ 08″ W.	

Vessels in quarantine are moored 182° from Belen Lighthouse and 7 cables distant. Vessels carrying explosives are moored in same direction but 9 cables from Belen Lighthouse.

RESTRICTIONS: Port works 24 hours. Only 6 vessels can moor alongside quay at one time.

MAX. SIZE: Vessels of 28 ft. draft and 195 m. in length can moor on the East side.

RADIO:

Station: Talcahuano. *Call sign:* CBT-4. *Category:* (S).

Frequency	*Type*	*Receives*	*Transmits*	*Schedule*
6 MHz	A 1	6265	6414.5	H00-30
4 MHz	A 3	4085.2	4390.2	H30-60

TUGS: There are two sea-going tugs, 800 h.p. and 350 h.p. Asmar (T) has 3×800 h.p. sea-going tugs.

BERTHING: Berth No. 1: Length 155 m., max. draft 7.32 m. (24 ft.)

Berth No. 2: Length 205 m. of which 180 m. is usable. Max draft 6.71 m. (22 ft.). Berth only used by fishing vessels.

Mole 500/Naval Pier. Max. length 656 ft., draft 26.2 ft., 4 headlines, 4 stern lines and 2 springs required. Ship's gear used for cargo handling.

Passenger Mole: At a distance of 80 m. from the Fiscal Quay and on the Blanco Encalada Mole is the Passenger Pier with concrete steps for passenger traffic.

Chacabuco Quay: Situated in the Inner Harbour for repairs. Vessels up to 21 ft. draft can moor. No railway line or cranes, therefore vessels must work with own derricks to vans. "Asmar" tugs are used for mooring.

Concepcion Bay: Lirquen Private Pier: (Also see "Shipmaster's Report"). Pilot boards off the end of the pier. Max. length 180 m. Vessels use maximum chain on both anchors, ship's head lying on 340°T, and a stern quarter buoy is used. Vessels require 4 headlines, 4 stern lines, and 4 springs.

North Side: Max. length 522.4 ft., max. draft 26 ft. when berthing; Max. draft 32.6 ft., when unberthing.

South Side: Max. length 656 ft., max. draft 31.6 ft. when berthing; max. draft 32.6 ft. when unberthing.

Penco Private Pier: The pier is 1700 m. long ending in a platform on which stands a fixed base rotary crane. Vessel's bows lie on 348°T, both anchors used to final shackle. There are 4 buoys, 1 on each bow, 1 astern, and 1 on the starboard quarter. Vessels also tie up to 3 dolphins on the East side of the pier. 12 × 600 ft. mooring lines are required and also 2 springs. A tug is required. The berth is exposed to strong Northerly winds, and vessels must be prepared to leave at short notice.

Max. draft 33 ft. There are 2 sea-going tugs for docking and undocking.

CRANES: 4 × 5 ton Portal crane on the Fiscal Pier. One floating crane 180 tons. One mobile crane 30 tons.

STEVEDORES: 12 gangs available. Loading: assorted goods 12 t.p.h./gang/hatch. Cereals 25 t.p.h./gang/hatch. Timber 100 t.p.h./gang/hatch. Newsprint 20 t.p.h./gang/hatch.

Discharge: assorted goods 12 t.p.h./gang/hatch. Bagged cargo 25 t.p.h./gang/hatch.

When loading is carried out by means of lighters, this is usually done from privately owned moles belonging to the principal commercial firms of the port from their warehouses situated inside the Morro Channel. Working hours are 0800 – 1430 hrs. and 1439 – 2100 hrs. Also see "General" before first port.

MEDICAL: Public hospital with board and sanatorium for infectious/contagious diseases. In addition, private clinics and a naval hospital.

FRESH WATER: Occasionally available on Berth No. 2.

FUEL: Can be supplied only to vessels moored alongside quay and this in small quantities up to 100 tons, by means of cistern-truck or in drums. Also see "General" before first port.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Done by stevedores.

IDENTIFICATION CARDS: Required.

CONSULS: Brazilian and Norwegian consulates. At Concepcion the following:

Argentina
Belgium
Bolivia
Colombia
Denmark
Ecuador
El Salvador
Finland
France
Guatemala
Germany
Honduras
Italy
Mexico
Netherlands
Paraguay
Panama
Peru
Sweden
Switzerland
Spain
U.K.
Uruguay
Venezuela

REPAIRS: "Asmar" or the navy workshop has capable personnel and modern equipment to effect all kinds of repairs, not only to hull, but also to engines, boiler plates, welding, carpentry and electrical works. Chilean Navy has high-sea tugs to effect salvage and assist vessels in danger. 3 private-owned workshops, which can effect small repairs to vessels afloat. Several slipways for construction and repair of small craft.

DRY DOCKS: Naval shipyard and workshops have 2 dry docks, Dock number 1 is 180 m. long by 30 m. wide. Dock number 2 is 250 m. long by 40 m. wide.

Two floating docks: one 200 ft. long by 30 ft. wide for vessels up to 1,000 tons, and the other 333 ft. long by 50 ft. wide for vessels up to 3,500 tons. There is also a workshop for repairs to be effected afloat. There are 6 anchored mooring buoys used by vessels when entering Dry Dock 2.

REPATRIATION: Good facilities exist.

AIRPORT: Carriel-Sur is situated between Talcahuano and Concepcion, 7 km. N.W. of Concepcion. Lan-Chile has connections from this airport with all the towns of the country from Arica to Punta Arenas and abroad.

TIME: GMT minus 4 hours. Also see "General" before first port.

SHORE LEAVE: Allowed.

GENERAL: South wind affects vessels only when moored outside the port zone. Weather signals are indicated on Signal Station of Port Authorities' Building.

Climate: Temperate.
Predominant Wind: S. – W. at 26 knots.
Rainfall: 736 mm. per year.
Temperature: Average maximum 16°C., average minimum 7°C.

SHIPMASTER'S REPORT: 1979.

At Lirquen there is a concrete and metal pier which runs from the shoreline in a North to South direction. Depth of water on the Eastern side is 27 ft. and on the Western side 24 ft.

Two ships of 12,000 g.r.t. can work cargo at the same time. The cargo is delivered to the ship's side by tractor and trailer. Ship's cranes are used throughout loading operations.

The pier and sheds are owned by the Wood Pulp Company as is the Agency. Anchorage is good, about 0.75 miles from the end of the pier. Only woodpulp and bundled lumber are loaded. The woodpulp bales are unitised and bound three high.

The following stowage factors were noted:

Woodpulp in units: 1 L/H 2 cu.m. per tonne.
1 T/D 1.8 cu.m. per tonne.
4 L/H 1.8 cu.m. per tonne.
4 T/D 1.94 cu.m. per tonne.
Woodpulp Loose: No. 2 T/D 1.62 cu.m. per tonne.
Bundled Lumber: No. 2 L/H 1.95 cu.m. per tonne.

Vessels berth stern towards the shore. The Pilot boards 0.5 miles off the pier. There is no tug.

The fresh water at this Port is very poor and not recommended.

AUTHORITY: Empresa Portuaria de Chile, Casilla 355, Talcahuano, Chile. *Contact:* J. Carlos Arredondo Gallardo, Administrator.

TALTAL: 25.24 S. 70.29 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

PILOTAGE: No official pilot station at Taltal. If professional assistance required vessel should give ETA 24 hours in advance via Valparaiso Radio. Pilot boards at the anchorage. International code signals used. Harbour Master's Office can be contacted by radio-telephone on 2182 kHz.

ANCHORAGES: Sheltered deep-water anchorage suitable for any size vessels. Locations of designated areas marked on the chart.

RESTRICTIONS: Port closed in Summer from 2000 hrs. to 0600 hrs.; in Winter from 1900 hrs. to 0700 hrs.

MAX. SIZE: Limited only by depths in anchorage.

HEALTH: Vessel boarded on arrival by Health Inspector.

RADIO: Radio Naval Valparaiso or Radio Naval Arica. Use CB on 2182 kHz. and 2738 kHz. A3 on the half hour from 0800 hrs. to 1800 hrs.

TUGS: One privately owned tug may be called on to assist if necessary.

BERTHING: No berths alongside shore. Vessels work cargo in open anchorage. One buoy berth for tankers. Mooring, unmooring in daylight only. 6 in. hoses for discharging fuel and diesel.

STEVEDORES: At least 24 hours advance notice of ETA required to arrange gangs. Also see "General" before first port.

TANKERS: *Caleta Ossa Mooring Berth:* Vessels berth to 2 stern buoys, using both anchors. Ship's head on approximately 225°T. Depth of water 47 ft. A Pilot is required and comes from Antofagasta.

MEDICAL: Doctors and hospital facilities available. Advance notice desirable.

FRESH WATER: Not available.

FUEL: Not available.

IDENTIFICATION CARDS: Required by all crew members.

CONSULS: There are no local representatives.

REPATRIATION: No facilities for crew change or repatriation.

AIRPORT: There is no airport.

TIME: GMT minus 4 hours. Also see "General" before first port.

HOLIDAYS: See "General" before first port.

TELEPHONES: There is a telephone service.

SHORE LEAVE: Allowed.

AUTHORITY: Capitania de Puerto, Taltal, Chile. *Contact:* Luis Alegre Lepe, Capitan de Puerto.

TOCOPILLA: 22.05 S. 70.11 W. (See Plan Book)

DOCUMENTS: See "General" before first port.

ANCHORAGE: There is an anchoring zone for tankers at 351° and 1,550 m. from the Light House "Punta Algodonales".

There is anchoring zone for general cargo vessels at 031° and 1,650 m. from Light House "Punta Algodonales".

PILOTAGE: Compulsory. Pilot will board at any time.

MOORING: The port has 2 buoys for mooring vessels, for general cargo and nitrate in sacks. The vessel anchors with 6 to 7 chain lengths (port anchor) and then secures to the buoys using at least two ropes (220 m. each one).

The port has two tanker terminals and vessels anchor with both anchors using at least 7 chain lengths. They must be secured to buoys and cleats ashore with an average of 6 ropes (220 m. each one).

The port has a mechanical conveyor crane and vessels anchor with port anchor, using at least 7 chain lengths. They must be secured to 3 buoys with an average of 6 ropes (220 m. each one).

Also see "Berthing".

RESTRICTIONS: Ships are boarded by Pilot and Port Authorities at any time.

HEALTH: On arrival vessel boarded by Sanitary surgeon, who will grant full Sanitary Pratique valid for all Chilean ports of call in the present voyage. In cases of suspected disease he will determine if patient or patients should be removed to local hospital, otherwise he will declare the effected vessel sanitary free pratique cleared.

RADIO: See "General" before first port.

TUGS: No tugs are used for mooring or unmooring of ships.

BERTHING: All berthing is done during daylight.

Nitrate Plant: For loading nitrate in bulk and cooper concentrate a Mechanical Conveyor Crane, owned by Sociedad Quimica y Minera de Chile S.A. (SOQUIMICH), is used. Maximum draft permitted is 36 ft., Mechanical arms height above medium sea level is 17.35 m., its arm loads bulk nitrate directly into the ship's hold with a rate of 1,000 t.p.h. Cargo is worked on vessel's port side, therefore all cargo gear should be swung outboard.

Sulphate Mooring Berth: Vessels berth to 3 stern buoys using the starboard anchor. Ship's head on 276°T.

Lighters' Berths: Vessels berth to a stern buoy, using starboard anchor, ship's head on 265°T. There are 3 berths 410 m., 610 m. and 810 m. North of No. 1 mole.

The port has 36 lighters. Working hours 0800 – 1200 hrs., 1400 – 1800 hrs. and 1800 – 2100 hrs.

STEVEDORES: Number of gangs required for loading and/or unloading operations should be radioed 24 hours in advance, indicating last ETA. Also see "General" before first port.

MEDICAL: In case of urgent need of a doctor on arrival the Master should request medical assistance by radio to Agent and/or Port Captain. A modern hospital is available with adequate facilities. There is a first-aid clinic for minor surgery.

TANKERS: Two buoys used for oil discharge. Both for clean and crude products. One of them belongs to Cia de Cobre Chuquicamata – (CODELCO) and operates with 2 lines of 8 in. diameter, the other buoy is property of Sociedad Quimica y Minera de Chile S.A. and has 2 lines of 8 in. diameter for discharge of oil and crude.

Codelco Terminal: Maximum draft 36 ft. Maximum length 250 m. manifold distance to bow 130 m., in case greater than 130 m. the maximum draft is limited to 26 ft.

SOQUIMICH Terminal: Maximum draft 45 ft. Maximum length 250 m.

FRESH WATER: None available, except small quantities.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Compulsory to employ services of a gangway watchman.

OPENING/CLOSING HATCHES: Ship's crew not allowed to work in port opening or closing hatches. Riggers' Union should be employed, 1 foreman and 8 riggers.

CERTIFICATES:

Safety equipment (radio, etc.)
Tonnage.
Derat.
Radio.
Chilean Light Dues Certificate.

CUSTOMS ALLOWANCES: No special restrictions.

CARGO GEAR: Gear that complies with standard Port Safety Regulations.

IDENTIFICATION CARDS: Required.

CONSULS: None.

REPAIRS: Facilities only for minor repairs.

REPATRIATION: There are facilities.

AIRPORT: Closed.

TIME: GMT minus 4 hours. Also see "General" before first port.

HOLIDAYS: See "General" before first port.

POLICE/AMBULANCE/FIRE: Police Headquarters 32; Hospital 231; Fire Department 84.

TELEPHONES: No facilities for placing telephone lines aboard.

SHORE LEAVE: Allowed.

REGULATIONS: Not allowed to pump oil or dirty water from bilges or throw rubbish overboard while anchored.

DELAYS: Probable on surf days, mainly in the months of June, July and August.

AUTHORITY: Port Captain.

VALPARAISO: 33.02 S. 71.39 W. (See Plan Book)

DOCUMENTS:

1 Clearance.
1 Light Dues Certificate.
7 Port Cargo Manifests.
4 General Cargo Manifests.
7 Transhipment Cargo Manifests.
3 Passenger Lists for the Port.
3 Passenger Lists for Transit.
18 Crew Lists.
1 Personal Effects List.
Passenger Baggage Declaration (2 per passenger).
1 Fumigation Certificate.

PILOTAGE: Compulsory. Pilot boards vessel 0.5 miles from East Dupret Light.

ETA: Port Authorities require 24 hour, and 4 hour notice prior arrival.

ANCHORAGES: Outside the harbour and close by, vessels find good anchorage in 25 – 15 fathoms of water. It is always prudent to secure a good anchorage owing to possible strong winds during all periods of the year and causing heavy swells.

In Winter, vessels anchor with one anchor with full chain and have another ready for emergencies. During Winter it is not convenient to anchor near the coast due to the risk of dragging; during Summer the nearer to coast, the better.

With the object of keeping the entrance to Valparaiso Bay clear and to assure a proper anchorage when arriving at this port, the Harbour Master has fixed the following anchorages according to arrival, so that vessels may proceed to berth in order of arrival.

Anchorage No.			
1	104° True and	980 m.	from breakwater's red light.
2	099° „	1,400 m.	„ „
3	079° „	820 m.	„ „
4	083° „	1,220 m.	„ „
5	056° „	980 m.	„ „
6	066° „	1,340 m.	„ „
7	070° „	1,730 m.	„ „
8	041° „	1,250 m.	„ „
9	052° „	1,550 m.	„ „
10	059° „	1,900 m.	„ „

If any vessel does not occupy the anchorage assigned, she shall be shifted by a Pilot of the Harbour Master's Office for Account of Owners.

Should the ten anchorages be occupied when vessel arrives, a provisional one shall be expressly given by the Harbour Master's Office to the vessel that requires it.

RADIO/VHF: Maritime Radio Station of Valparaiso in Playa Ancha which attends the public maritime service. Coastal Radio Service (SRC) with its station situated in the Port Captaincy Building, also attends the public maritime service, both national and foreign (CB V-2).

Maritime Radio Station "Valparaiso Playa Ancha Radio/CBV" serves the Official Correspondence (OC) and Public Correspondence (PC) of the National and International Maritime Mobile Service (MMS).

Station Call Sign	*Frequency*	*Type*	*Receives*	*Transmits*	*Schedule (UTC)*
Valparaiso	500 kHz	A1A	500	500	H24
Playa Ancha Radio "CBV"	4 MHz	A1A	b.4/c.1, 5, 6	4349	0400-0430 0600-0630 0800-0830 1000-1030 1200-1400 2200-2400
	8 MHz	A1A	b.8/c.1,5,6	8478	1200-0400
	12 MHz	A1A	b.12/c.1,5,6	12714	1200-1400 1600-2000 2200-0400
	16 MHz	A1A	b.16/c.1,5,6	16956	1400-1600 2000-2200
	22 MHz	A1A	b.22/c.1,5,6	22473	1400-1600 2000-2200
	2 MHz	A3H J3E	2182	2182	H24
	4 MHz	A3H J3E	4125	4419.4	H24
	156.80 MHz	F3	c.16 VHF	c.16 VHF	H24

Station Call Sign	*Frequency*	*Type*	*Receives*	*Transmits*	*Hours of service*
Gobernacion Maritima Valparasio Radio/"CBV5"	2 MHz	J3E	2182	2182	H24
	156.80 MHz	F3	c.16 VHF	c.16 VHF	H24

The pilot station "Gobernacion Maritima Valparaiso Radio/CBV5", located in the same building, has a VHF Radio and communications are carried out directly with ships for the entrance and/or departure from port. Contact pilot boat on VHF Channel 6.

TUGS: There are 4 privately owned tugs, ranging from 800 s.h.p. – 1,440 s.h.p.

BERTHING:

Berth No.	1	2	3	4	5	6	7	8	9	10
Length (m.)	175	175	260	200	165	245	120	240	220	205
Depth (m.)	10	10	10	10	10	10	10	10	10	10
Quay cranes	5	5	4	—	—	7	2	7	4	—
Telephone	1	1	1	1	1	1	—	1	1	—

Berthing by day or night.

STEVEDORES: The stevedoring syndicate has 397 registered members and 108 substitutes. Working hours are 0800 – 1530 hrs., 1530 – 2300 hrs. and 2300 – 0630 hrs.

MEDICAL: Several hospitals and clinics with qualified staff.

TANKERS: *Las Salinas Oil Terminal:* Depth 40 ft. Max. displacement 40,000 – 50,000 tons. Sailing anytime, day or night.

FRESH WATER: Delivered by hoses connected to the existing standpipes. The quality of the water is good and can be delivered at the rate of approximately 20 t.p.h. The couplings are 2.5 in.

FUEL: Oil: Copec, Shell Chile, or Esso Standard Oil deliver petroleum or diesel oil in any quantity needed by pipe-line at Salinas, approximately 5 miles North of the port, mooring vessel in 7 fathoms water to special buoys and embarking a Pilot at Valparaiso Port. Delivery is at a rate of 180–200 t.p.h. There is also a barge with a capacity of 180 tons for delivery in Valparaiso Bay itself. Diesel oil can be delivered from tank cars by pipe at the quay.

GANGWAY/DECK WATCHMEN: Available and are to be used by Law.

OPENING/CLOSING HATCHES: Carried out by the stevedores by Law.

CUSTOMS ALLOWANCES: No unusual restrictions.

IDENTIFICATION CARDS: Required.

CONSULS:

Consulate Generals:
Argentina
Bolivia
Brazil
Colombia
Ecuador
Germany
Greece
Guatemala
Italy
Norway
Panama
Peru
Spain
Sweden
Venezuela

Consulates:
Belgium
Denmark
Dominican Republic
El Salvador
Finland
France
Great Britain
Haiti
Honduras
Monaco
Netherlands
Nicaragua
Paraguay
Switzerland
United States
Uruguay

REPAIRS: Several shipyards, workshops and foundries for repairs to hull, boilers, machinery and engines. The principal is Asmar belonging to the Navy. There are several other smaller shipyards for construction and repair of minor craft.

DRY DOCKS: A floating dock is projected for 1984, actually under construction in Asmar Talcahuano, for vessels up to 10,000 tons.

REPATRIATION: Facilities available.

AIRPORT: International airport at Pudahuel, 90 km. from Valparaiso. Los Cerrillos is the nearest airport. From Pudahuel, Lan-Chile maintain daily services to Arica to the North and to Punta Arenas with stops at all the principal towns.

TIME: Local time October to March, GMT minus 3 hours. March to October, GMT minus 4 hours.

HOLIDAYS: See "General" before first port.

SERVICES: Compasses, radars, meteorological instruments and other nautical equipment can be tested and fixed. Charts and maps can be obtained from the Chilean Navy Navigation and Hydrographic Department.

SHORE LEAVE: Allowed.

WEATHER: A weather report showing the condition at various points off the coast of Chile can be obtained from Playa Ancha Radio twice a day. A general rule for the next day's forecast: the weather condition at Juan Fernandez Islands will be 24 hours later than the conditions at Valparaiso.

Climate: Temperate.
Average Amount of Cloud: 4.8 – 8 hours.
Predominant Winds: S.W. and N.W., speed 23 knots.
Rainfall: 360.2 mm. in one year.
Temperature: Average max. – 19°C.
Average min. – 11°C.

PORT REGULATIONS: It is strictly prohibited to dismantle the main engine or effect repairs to the engines without previous notification and authorisation from the Maritime Authorities. Also, to deballast petroleum, pump bilges, throw waste or refuse overboard in the artificial port.

SHIPMASTER'S REPORT: April 1980 (updated 1984).
Documents:
6 General Declarations
12 Crew Lists
6 Passenger Lists for the Port
6 Passenger Lists (even if nil)
6 Mail Lists (or no Mail)
2 Crew Effects Lists
6 Bond and Canteen Lists
6 General Stores, Food Lists
Clearance from Last Port.

Pilotage: Compulsory. Pilot boards vessel 0.5 miles East of Dupret Light. 24 hours' notice required to Port Captain (Maritgob).
Anchorage: Anywhere outside the "Prohibited Anchorage Area". The holding ground is moderate.
Restrictions: Port closed for all kinds of activities only in bad weather.
Max. size: Max. LOA: 200 m. (depending on berth). Max. draft 10 m. (except berths 9 and 10) after completion of dredging which is in progress. 2 ft. keel clearance required.
Health: Quarantine message should be sent 24 hours prior to arrival.
Radio: Playa Ancha Radio "CBV".
VHF: Port Captain on Channel 16. Pilot on Channel 6, vessel's Agent equipped with Private Channels, contact on Channel 16.
Tugs: 4 tugs available. Compulsory for large vessels.
Cargo Handling Facilities: Portable screw elevators available for grain. Berth No. 9 is equipped for handling bulk cargoes.

Most berths equipped with cranes of 3 and 5 tons capacity. There is sufficient equipment for handling of palletised cargoes and containers, and there is sufficient storage space for the containers.
Density: 1025.
Fresh Water: Available. Rate 15 to 20 t.p.h.
Fuel: Bunker fuel oil and diesel oil available, but expensive.
Airport: At Santiago.
Repairs: Very good services available.
Services Available: Fresh provisions, machine shop, Lloyd's Surveyor, Salvage surveyor, laundry service, lubricating oil, doctor, hospital, meats and groceries.

AUTHORITY: Empresa Portuaria de Chile, Casilla 133-V, Valparaiso.
Telex: 30313.

NOTES

Please also advise Shipping Guides Ltd.

People's Republic of China

GENERAL:

We have been advised by the Head Office of the China Ocean Shipping Agency at Peking that Ship Masters of foreign vessels calling at Chinese Ports should contact the Branch Office at the Port concerned (cable address "Penavico") in order to be provided in due time with necessary information relating to port entry requirements.

DOCUMENTS:

First Port

1 Maritime Declaration of Health.
2 Reports of Entry for foreign ships.
6 Crew Lists.
1 List of Specified Articles (money, gold and silver).
1 Report of Articles Restricted for use in Port.
4 Passenger Lists (if carrying passengers).

Subsequent Ports

1 Report of Entry for Foreign Ships.
5 Crew Lists.
1 Report of Articles Restricted for use in Port.

The list of money, etc., is carried with the ship from the first port.

All forms used to be Chinese. Navigational charts to be put away when boarded by Pilot and examination officer and boarding party.

PILOTAGE: *Regulations with Respect to Sea-port Pilotage issued by The Ministry of Communications (dated 1977):* These Regulations have been made with a view to safeguarding the sovereignty of the People's Republic of China and ensuring the safety of ports and vessels.

Article 1: For all foreign vessels which enter, leave, or navigate or shift berths within any port of the People's Republic of China, pilotage is compulsory. No foreign vessel shall enter, leave, or navigate or shift berths within a port without having on board a Pilot designated by the Harbour Superintendency Administration. In cases of emergency, such as a sudden change of weather, a vessel at anchor may, however, for the purpose of ensuring safety, shift from her original anchor position to any other position in its vicinity without a Pilot, provided the Harbour Superintendency Administration is notified of the same simultaneously.

Article 2: Incoming foreign vessels shall anchor in the designated anchorage or pilot station and await the Pilot. In case an outgoing foreign vessel requests the Pilot to conduct the vessel beyond the limits of the pilotage water, the Pilot has the right to refuse such request.

Article 3: Prior to arrival at the pilot anchorage, incoming foreign vessels shall communicate with the pilot station (boat) or the port signal station by exhibiting appropriate signals prescribed by the Chinese Port Authorities and follow the instructions given by the pilot station (boat) or the port signal station.

Article 4: When the Pilot is boarding or leaving, it is the duty of the Master of the vessel piloted to take safety measures and furnish a pilot ladder complying with the requirements of the International Convention for the Safety of Life at Sea for embarking and disembarking the Pilot safely and quickly, with due regard being paid to the safety of the pilot boat.

Article 5: The Master of the vessel piloted shall give the Pilot a correct description of the vessel's navigability and steering qualities, and shall meet the Pilot's demands in piloting. Failing to do so, the Master shall be responsible for the consequences arising therefrom.

Article 6: While the vessel is under pilotage, the Master thereof shall in no way be relieved of his responsibility for management and operation of the vessel. The Master shall still give care to the safe navigation of the vessel and must co-operate closely with the Pilot. In the interests of safe navigation, the Master may put forward reasonable recommendations and requirements, but shall not interfere in the Pilot's work unreasonably. If the Master has to leave the bridge temporarily, he shall inform the Pilot of the same and designate an officer as his representative during his absence.

Article 7: In order to ensure the vessel's safety, the Pilot has the right to suspend pilotage when necessary until the circumstances are suitable for safe navigation again.

Article 8: For marine accidents occasioned by the fault of a Pilot in the course of piloting, the Pilot shall be duly punished, but shall hold no liability for loss or damage resulting therefrom.

Article 9: When sea conditions or other special circumstances make it impossible for the Pilot to board an incoming vessel at the designated place, the vessel shall first be guided by the pilot boat to a place at which the Pilot can safely embark and then be conducted by the Pilot into the port after his boarding.

In the case of an outgoing vessel, if the Pilot finds it difficult to disembark at the designated place for the same reasons as are stated above, he may disembark midway at a safe place and then guide the vessel out of the port with the pilot boat.

Article 10: The Pilot may be accompanied by apprentice Pilots who go on board for practice. The Master of the vessel piloted shall provide them with conveniences in regard to both work and life.

Article 11: The Master of the vessel piloted shall sign the Pilotage Bill and pay the pilotage or shifting charges according to the prescribed tariff. If the Pilot considers that the vessel should be assisted by a tug or tugs, the charges for the tugs actually employed shall also be for the account of the vessel.

Article 12: These Regulations shall come into force on the date of publication. The "Regulations Relating to Sea-Port Pilotage", promulgated by the Ministry of Communications of the People's Republic of China on 9th December 1959, shall at the same time be abrogated.

VHF: *Provisional Regulations Governing the Use of VHF Radio-telephone by Foreign Vessels. Issued by The Ministry of Communications:* (Dated 1976).

Article 1: During navigating or mooring at anchorage or by buoys in the harbours of the People's Republic of China, foreign vessels may use their VHF radio-telephone for service contacts with the Harbour Superintendency Administration (including pilot station or pilot boat station) and the China Ocean Shipping Agency. But at no time shall VHF radio-telephone communications be permitted between foreign vessels or after berthing alongside wharf.

Article 2: VHF radio-telephone communications are restricted to service contacts only.

Communications by VHF radio-telephone between foreign vessels and the Harbour Superintendency Administration shall be restricted to the following matters:

(1) Entering or leaving port, anchorage or berth; and pilotage.
(2) Safety and rescue of vessels, crew members and passengers.
(3) Navigational safety matters such as weather information, beacons, obstructions, etc.
(4) Other matters that need to be reported to the Harbour Superintendency Administration.

Communications by VHF radio-telephone between foreign vessels and the China Ocean Shipping Agency shall be restricted to the following matters:

(1) The estimated and exact time of ship's arrival at and departure from the port; berthing schedule, etc.
(2) Loading and discharging.
(3) Supply of bunkers, fresh water, provisions, and application launches, etc.
(4) Applications for ship's repairs, marine survey, cargo survey, hold inspection, and for labour for hold sweeping or washing, etc.
(5) Application for urgent medical assistance.
(6) Other urgent matters such as marine casualties, urgent instructions to the ship from the Owners or entrusting parties, or instructions from the Authorities concerned.

Article 3: Foreign vessels intending to establish communications with the Harbour Superintendency Administration shall, on Channel 16 (156.80 MHz), call "Harbour Superintendency Administration XX (name of the port concerned)", and then the Harbour Superintendency Administration Station (including pilot station or pilot boat station) will designate the channel on which the communications are to be made.

Foreign vessels intending to establish communications with the China Ocean Shipping Agency shall call and work on the designated channel. The name of the station called is "Penavico XX (name of the port concerned)".

Article 4: The procedures of call and communications shall be in compliance with the stipulations regarding maritime radio-telephone contained in the International Radio Regulations.

Article 5: VHF radio-telephone communications shall be made either in Chinese, in International Code of Signals or in English. The traffic should be distinct, concise and item by item according to the nature of the services.

Article 6: The working hours for VHF radio-telephone communications in each individual port shall be announced by the Harbour Superintendency Administration of the port concerned. To ensure smooth communications, foreign vessels shall keep constant listening upon their arrival at the pilot anchorage and during their entry into the port.

Article 7: Communications relating to distress or urgent need of medical assistance shall be given priority over all other service communications, in which case other stations operating on the same channel should suspend their operation immediately and keep listening on the designated channel.

Article 8: These Provisional Regulations come into force on the day of publication.

REGULATIONS:

Regulations governing the passage of non military foreign vessels through the Chiungchow Straits.

Article 1. According to "The Declaration of the Government of the People's Republic of China on China's Territorial Seas, the Chiungchow Straits (the Hainan Straits) are Chinese inland waters, where all foreign military vessels are prohibited from passing through. Any non military foreign vessel in need of passing through the Straits must apply for permission in accordance with the present Regulations.

Article 2. For facilitating the control of the Chiungchow Straits, the Chinese Chiungchow Straits Authority of the People's Republic of China (hereinafter referred to as the Chinese Chiungchow Straits Authority) is hereby set up.

The present Regulations are to be carried out under the supervision of the Chiungchow Straits Authority.

Article 3. The water area which comes under the control of the Chiungchow Straits Authority (hereinafter referred to as the Control Area) is bounded temporarily as follows: West of the line connecting the Hainan Head Light Beacon (approx: Lat. 20° 09′ 37″ N., Long. 110° 41′ 00″ E.) and San Kao Lung Light Beacon (approx: Lat. 20° 26′ 00″ N., Long. 110° 30′ 22″ E.) (known as the East Line) and East of the line connecting Cape Kami Light Beacon (approx: Lat. 20° 13′ 30″ N., Long. 109° 55′ 30″ E.) and Cape Lin Kou Light Beacon (approx: Lat. 20° 00′ 22″ N., Long. 109° 42′ 06″ E.) (known as the West Line).

Article 4. Any non military foreign vessel passing through the Chiungchow Straits must comply with the following procedures:

1. Apply for passage permission by cable to the Chiungchow Straits Authority 48 hours before the vessel enters the control area, or before the vessel leaves the port of departure, giving detailed information on ship's name, nationality, gross tonnage, speed, hull colour, funnel marks, port of departure and destination as well as date and time of sailing.

2. After obtaining the passage permission, inform the Chiungchow Straits Authorities 24 hours before entering the control area or within 2 hours after vessel port of departure of the exact time of entering the control area.

All cables relating to the application and permission for the passage through the Straits are to be transmitted through the Haikou Branch of China Ocean Shipping Agency.

Article 5. Notification may be given by the Chiungchow Straits Authority, whenever it deems necessary, to cancel the permission already granted to those non military vessels for passing through the Straits.

Article 6. Passage through the control area by non military foreign vessels should be made in the day time only. They should enter the control area after sunrise and leave before sunset. On the basis of the ship's speed the Chiungchow Straits Authority shall fix the time for the non military foreign vessel concerned to enter or leave the Straits.

Article 7. Non military foreign vessels entering and leaving the Chiungchow Straits should pass through the middle channel, unless special permission has been granted by the Chiungchow Straits Authority.

Article 8. Non military foreign vessels passing through the control area should navigate within the following specified navigation area: North of the line connecting the point on the East line 4 nautical miles away from the Hainan Head Light Beacon to the point on the West line 4 nautical miles away from the Cape Lin Kou Light Beacon; and South of the line connecting the point on the East line 6 nautical miles away from the Hainan Head Light Beacon, the point 4 nautical miles due South of the Cape Paimi Light Beacon (approx: Lat. 20° 15′ 00″ N., Long. 100° 17′ 00″ E.) and the point on the West line 14 nautical miles away from the Cape Lin Kou Light Beacon.

Article 9. Non military foreign vessels passing through the Chiungchow Straits must punctually observe the time as reported and comply with the stipulations on the limit of the navigation area. All vessels entering and passing through the control area should immediately answer and unconditionally comply with the signals from the shore or patrol ships. The vessels in question shall be held responsible for all consequences arising from non observance of the above stipulations.

Article 10. Non military foreign vessels passing through the Chiungchow Straits are not allowed to use radar. If the vessels are under the conditions of restricted visibility caused by dense fog, torrential rains, etc., which necessitates the use of radar, they should make an application to the Chiungchow Straits Authority, giving their reasons as well as the ship's position, speed, etc., and they may set ship's radar in operation when permission is obtained. In the case of emergency which endangers safe navigation of the ships, they may use their radar while making their application simultaneously; after that, they should submit a detailed account (report) to the Chiungchow Straits Authorities giving a full account, together with a statement of facts of the time as to when the radar set in use and when ended for the archives.

Article 11. Non military foreign vessels passing through the Chiungchow Straits are not allowed to take photographs, soundings, or do any other things in violation of the laws and regulations of the People's Republic of China.

Article 12. Any non military foreign vessel violating the present Regulations shall be treated as follows:

1. Before entering the control area, the vessel may be ordered to stop proceeding and to round out by her original route, so as to sail around the Hainan Island; or, to wait until the necessary formalities are completed and the permission for passage granted.

2. In case the vessel has entered the control area, she may be ordered to stop and be escorted to Haikou for inspections; and she shall be treated according to the findings after inspection. After that, the vessel may, as circumstances require, be allowed to pass through the control area, or ordered to return out from the control area, or even be escorted out of the Straits.

Guide to foreign vessels calling at Shanghai

1. Regular channel in Chusan area: Foreign vessels may navigate in the regular channel between Chusan and Raffles Island which is open to navigation, but are not allowed to navigate in other channels between these islands. (By the regular channel is meant the channel from Tongting Island, Steep Island, Elgar Island, Bonham Island, Button Island, Gutzlaff Island to Chang Kiang Kou).

2. Pilotage Area:

(a) Pilotage on vessels entering/leaving port commences from/termination at the position Lat. 31° 05′ N., Long. 122° 10′ E. at Chang Kiang Kou.

(b) The Pilot vessel, when engaged on her pilotage duty, will anchor near 1 mile East of the entrance buoy No. 54 (Lat. 31° 04′ 52″ N., Long. 122° 10′ 00″ E.) at Chang Kiang Kou.

3. Anchorage awaiting for the tide:

(a) Foreign vessels may, when the draft at the time of entry is 25 ft. or less, proceed direct to the pilot station (Lat. 31° 05′ N., Long. 122° 11′ 30″ E.).

(b) In the case of draft at time of entry is more than 25 ft. or it is impossible to arrive at the pilot station at the declared ETA or impossible to proceed direct to the pilot station for reasons of the tide, then the foreign vessels may anchor and wait for the tide near 1 mile N.E. of the Chang Kiang Kou Lightvessel. Such foreign vessels waiting there may telegraph to ask "Penavico" Shanghai for the time of arrival at pilot station and picking up the Pilot.

4. Notice to Mariners: Chang Kiang Kuo South Channel. Also see "Shipmaster's Report", date July 1984 (after No. 7).

(a) The Chang Kiang Kuo Light vessel No. 50 is as described below:
Location Lat. 31° 01′ 48″ N., Long. 122° 25′ 14″ E.
Characteristic Flashing every 6 seconds.

(b) Vessels entering or leaving the port should keep Chang Kiang Kou Lt. Vessel on vessel's port side:
1. Fairway Buoy M.1:
Location Lat. 31° 02′ 51″ N., Long. 122° 19′ 35″ E.
Characteristic Group flashing (3) every 6 seconds.
Shape – can shape, red and white chequered.

(c) No vessel allowed to enter the dangerous areas bounded by lines connecting the following points:
1. Lat. 30° 47′ 15″ N., Long. 123° 03′ 00″ E.
2. Lat. 30° 47′ 15″ N., Long. 123° 05′ 54″ E.
3. Lat. 30° 44′ 45″ N., Long. 123° 03′ 00″ E.
4. Lat. 30° 44′ 45″ N., Long. 123° 05′ 54″ E.

5. Telegraphic Communication:

Foreign vessels at sea may despatch radiograms to "Penavico" Shanghai via Shanghai Coastal radio station, the particulars of which are as follows:

Call sign: XSG Calling frequency: 500 kHz
Working frequency: 458 kHz Working hours: 0000 – 2400

Answering frequency:		Listening frequency:	
8502 kHz	GMT 0000 – 2400	8364 kHz	GMT 0000 – 2400
6414.5 kHz	GMT 2200 – 1000	6273 kHz	GMT 2200 – 1000
12871 kHz	GMT 0000 – 1400	12546 kHz	GMT 1000 – 1400
4349 kHz	GMT 1000 – 2200	4182 kHz	GMT 1000 – 2200

6. Large number of fishing vessels around areas 25-30 miles N.E. of North saddle and 20-25 miles East of East saddle, Barren Island and Lukon Island, please navigate with caution.

7. Anchorage for awaiting tide – Changkiang Kuo:

(a) The water area bounded by lines connecting the following points is the anchorage of Changkiang Kuo for vessels awaiting tide:
Lat. 31° 01′ 00″ N., Long. 122° 24′ 42″ E.
Lat. 31° 01′ 00″ N., Long. 122° 20′ 00″ E.
Lat. 30° 56′ 00″ N., Long. 122° 20′ 00″ E.
Lat. 30° 56′ 00″ N., Long. 122° 24′ 42″ E.

(b) From 25th April 1970, all vessels are strictly prohibited to anchor at any place out of the said anchorage of Changkiang Kuo for waiting tides without obtaining permission (permits) by Shanghai Harbour Authority concerned.

Shipmaster's Report: July, 1984.
Following telex received July 1984.
Quote:
AAA Changkiangkou Lightvessel 31° 03′ 30″ N., 122° 23′ 1″ E.
BBB Changkiangkou Lightbuoys M1 H11-H20 replaced by Buoys 44-49.

Buoy 44	Lat. 31° 03′ 22″ N.,	Long. 122° 19′ 52″ E.	Fl. 3/10 secs.
Buoy 45	Lat. 31° 03′ 14″ N.,	Long. 122° 16′ 58″ E.	Fl. 3/6 secs.
Buoy 46	Lat. 31° 03′ 06″ N.,	Long. 122° 14′ 02″ E.	Fl. 3/10 secs.
Buoy 47	Lat. 31° 03′ 00″ N.,	Long. 122° 11′ 06″ E.	Fl. 3/6 secs.
Buoy 48	Lat. 31° 03′ 34″ N.,	Long. 122° 08′ 14″ E.	Fl. 3/10 secs.
Buoy 49	Lat. 31° 04′ 11″ N.,	Long. 122° 05′ 26″ E.	Fl. 3/6 secs.

Pilot vessel moving in/area Buoy 47/49 serving/as pilot station.
Unquote.

Regulations governing Supervision and Control of Vessels of Foreign Registry sailing in the Yangtze River. (Dated April 1983).

Article 1. The Yangtze River is the inland waterway of the People's Republic of China. These Regulations have been formulated with a view to safeguarding the sovereignty of the People's Republic of China, to ensuring safety of vessels and to maintaining order of traffic in the Yangtze River Waterway and its Ports in accordance with the Regulations governing supervision and control of foreign vessels by the People's Republic of China.

Article 2. These Regulations and all relevant laws and administrative statutes issued by the Government of the People's Republic of China shall be complied with by all propelled and non-propelled vessels and other water-borne means of transport of foreign registry (hereinafter referred to as "vessels") sailing in the Yangtze River Waterway or berthing at its Ports.

Article 3. For the purpose of these Regulations, the "Yangtze River Waterway" shall mean the main waterway extending from the line joining Liuheiwu (Lat. 31° 30′ 52″ N., Long. 121° 18′ 54″ E.) at the lower reaches of the Estuary of the Liu River, and the signal post (Lat. 31° 37′ 34″ N., Long. 121° 22′ 30″ E.) at the lower reaches of the Estuary of the Shiqiao River, Congming Island, and upwards to the upper boundary of Zhangjiagang (a line joining point Lat. 31° 59′ 35″ N., Long. 120° 20′ 00″ E. and point Lat. 31° 57′ 13″ N., Long. 120° 20′ 00″ E.).

For the purpose of these Regulations, the term "Ports" shall mean Nantong and Zhangjiagang, being those open to vessels of foreign registry in the Yangtze River Waterway.

Article 4. These Regulations shall be enforced by the Harbour Superintendency Administration of the People's Republic of China, and all vessels shall be subject to their supervision and control.

Article 5. No vessels can enter the Yangtze River Waterway or its Ports without the Permission of the Harbour Superintendency Administration of the People's Republic of China. Those permitted to enter the Yangtze River Waterway shall be subject to inspection of the Quarantine Office, the Harbour Superintendency Administration, the Frontier Defence Office, the Customs and the Animal and Plant Inspection Office, and complete all relevant formalities. The above-mentioned authorities are entitled to exercise control on board if required.

Article 6. Vessels entering the Yangtze River Waterway shall not engage in shipping business between the ports along the Yangtze River and between the Ports and the port of Shanghai, nor shall they engage in other unauthorised operations.

Article 7. Vessels entering the Yangtze River Waterway and its Ports shall:

(a) a week prior to its expected time of passing through the port of Shanghai, apply to the Harbour Superintendency Administration at her expected port of arrival through the port Agent for completion of entry formalities;

(b) 24 hours in advance of her passing through the port of Shanghai (or on her departure from the last port of call if the voyage takes less than 24 hours), report the vessel's expected time of passage and the vessel's ETA at her expected port of arrival along the Yangtze River, the vessel's size, fore and aft drafts, the maximum height above the actual water line to the Harbour Superintendency Administration of Shanghai and of the expected port of arrival through the port Agents;

(c) give timely advice of any alteration in the ETA reported.

Article 8. Vessels sailing in the Yangtze River Waterway or berthing at its Ports shall apply to the Harbour Superintendency Administration at the port of arrival along the Yangtze River for pilotage and for passing through the port of Shanghai, shall apply to the Shanghai Harbour Superintendency Administration for pilotage.

Article 9. Upon arrival at the port, vessels shall immediately submit the Entry Report and other relevant forms, ship's papers and relevant documents for examination and be subject to inspection. Before leaving the port, vessels shall report the time of departure and the port of destination to the Harbour Superintendency Administration and complete departure formalities through the port Agent and may only leave the port after port clearance has been obtained.

Article 10. Vessels sailing in the Yangtze River Waterway or berthing at its Ports shall by day hoist the national flag of the People's Republic of China at the top of the foremast and the national flag of state of registry at the stern; an "H" flag shall in addition be hoisted when there is a Pilot on board. On entering or leaving Ports or shifting berths, vessels shall moreover display signal-letters and other prescribed signals.

Article 11. Vessels making use of their VHF radio-telephone in the Yangtze River Waterway or its Ports shall comply with the provisional Regulations Governing the use of VHF Radio-telephone by foreign vessels issued by the Ministry of Communications of the People's Republic of China.

Article 12: In the Yangtze River, vessel's radio-telegraph and radio-telephone transmitters can only be used to communicate with the river or coastal radio-stations of the People's Republic of China, and they can only be used in Ports in case of emergency, and reports shall be made to the Harbour Superintendency Administration immediately afterwards.

In the Yangtze River Waterway and its Ports, vessel's signal rockets, flare or gun signals can only be set off in case of emergency, and reports shall be made to the Harbour Superintendency Administration immediately afterwards.

Article 13. Vessels sailing in the Yangtze River Waterway or berthing at its Ports are prohibited from carrying out the following activities:

(a) having military installations and military ships photographed, drawn pictures of, videotaped or surveyed; or

(b) shooting, swimming, fishing, and setting off firecrackers or fireworks; or

(c) other activities threatening the national safety, interests and good order of the People's Republic of China.

Article 14. Vessels sailing in the Yangtze River Waterway shall anchor as near the outer limit of the fairway as is practicable under extraordinary circumstances such as bad weather, flood peaks, etc., which make temporary anchoring necessary, and shall not take the main fairway. Those vessels shall have the position and time of anchoring and the time of departure promptly reported to the nearest Harbour Superintendency Adminstration, and no one shall be allowed ashore without permission of the local public security authorities.

Article 15. Vessels sailing in the Yangtze River Waterway shall not proceed at a speed that would threaten the safety of other vessels and installations ashore.

Article 16. With respect to the regulations on navigation, berthing and prevention of collisions, vessels in the Yangtze River Waterway or berthing at its Ports shall comply with the Regulations governing prevention of collision in inland waterways promulgated by the Ministry of Communications of the People's Republic of China.

Article 17. While using signals, vessels shall comply with the Regulations governing prevention of collision in inland waterways and other relevant signal regulations; signals not being specified therein shall be displayed in accordance with the relevant international regulations.

Article 18. No vessel sailing in the Yangtze River Waterway or berthing at its Ports shall discharge or dispose of oils, oily mixtures or other harmful pollutants or refuse into water.

Article 19. Matters provided for in these Regulations shall be carried out in accordance therewith, while those not being set forth herein shall be dealt with in accordance with the Regulations governing supervision and control for foreign vessels by the People's Republic of China and other relevant laws and statutes.

Article 20. These Regulations shall become effective upon the date of promulgation.

Regulations for Merchant Ships passing through Lao Tie Shan (Liau-ti-shan) Channel.

Merchant vessels passing through the Lao Tie Shan Channel must observe the following regulations:

1. The water area with Lao Tie Shan Lighthouse as centre and a distance of 10 miles as radius, and the water area with North Huang Cheng Dao Light Beacon as centre and a distance of 7 miles as radius are prohibited areas.

The middle channel between these two prohibited areas is a navigable channel.

Note:

(a) Characteristics of Lao Tie Shan Lighthouse (Lat. 38° 43′ 37″ N., Long. 121° 08′ 02″ E.) Fl. (2) 30 sec. 25 miles.

(b) Characteristics of North Huang Cheng Dao Light Beacon (Lat. 38° 23′ 40″ N., Long. 120° 54′ 33″ E.) Fl. 3 sec. 15 miles.

2. Merchant vessels intending to pass through Lao Tie Shan Channel must send a wireless message to "Harbour Master, Dalian" at least 8 hours prior to the passage reporting the following matters:

Ship's name, nationality, call sign, port of departure, port of destination, speed, colours of ship's hull, funnel mark and the accurate expected time to pass the line joining Lao Tie Shan Lighthouse and North Huang Cheng Dao Light Beacon.

Note:

(a) Dalian coastal wireless station:
Signal letters: X S Z; calling frequency 500 kHz;
Working frequency: 462 kHz; 8694 kHz; reserve frequency: 8678 kHz; working day and night.

(b) If weather conditions should cause any change in the expected time of passage, the facts must be immediately reported to "Harbour Master, Dalian".

3. Merchant vessels passing through the Lao Tie Shan Channel must show the lights or signals in accordance with the International regulations for Preventing Collisions at Sea, 1972.

4. Vessels are prohibited to pass through the area with Hai Mao Dao (Lat. 38° 52′ N., Long. 121° 01′ E.) as centre and a distance of 10 miles as radius.

5. Any vessel violating any of the above mentioned regulations will be held responsible for all consequences.

Guide to Foreign Vessels Calling at Dairen: Also see "Dairen" – Shipmaster's Report, dated April 1984.

1. When entering or leaving Dairen Harbour please pass through the channel between Daisansantao and Hwangpotsui. You are not allowed to navigate within area 2.5 miles radius from Daisansantao Lighthouse Lat. 38° 51′ 50″ N., Long. 121° 49′ 20″ E. and 1 mile radius from Lighthouse Hwangpotsui Lat. 38° 54′ 14″ N., Long. 121° 42′ 54″ E.

2. After entering joining line between Daisansantao and Hwangpotsui Lighthouses, radar, radio transmitter and other forbidden articles are prohibited from use, in case of danger or necessity for transmitting emergency message you must report to Harbour Superintendency Administration immediately after you have used.

3. You are requested to wait for quarantine and Pilot within area bounded by lines connecting the following areas: Lat. 38° 57′ 02″ N., Long. 121° 45′ 00″ E., Lat. 38° 55′ 30″ N., Lat. 121° 44′ 28″ E., Lat. 38° 57′ 02″ N., Long. 121° 41′ 11″ E., Lat. 38° 56′ 19″ N., Long. 121° 41′ 11″ E.

4. All merchant vessels are informed that vessels passing through the Liau-ti-shan Channel entering or leaving the port of Dairen, besides it ought to observe the regulations relating to the Liau-ti-shan Channel, must keep the way to navigate through the Southern water area beyond the tangent line joining from the Encounter Rock (Lat. 38° 34′ 21″ N., Long. 121° 38′ 12″ E.) to the outer verge of the Liau-ti-shan prohibited area and the Eastern water beyond Northward meridian line of the Encounter Rock to the continent.

5. Dairen coast radio station.
Call sign: XSZ
Calling frequency: 500 kHz
Working frequency: 462 kHz
Answering frequency: 8694 kHz
Listening frequency: 8364 kHz
Working day and night.

Guide to Foreign Vessels Calling at Whampoa (Kwangchow).

1. Foreign vessels are prohibited to sail in the water areas of the joint lines among Vanshan, Chaieng and Tankan Islands, except the route as designated hereunder:

(a) The vessels calling at Whampoa from ports other than Hong Kong, should proceed from seaward to Lat. 21° 40′ 44″ N., Long. 113° 56′ 00″ E. and set course to 318°T, or to Lat 21° 37′ 30″ N., Long. 113° 37′ 45″ E. and set course to 047°T; proceed to Lat. 21° 47′ 45″ N., Long. 113° 49′ 32″ E. then alter course to 013°T; proceed to Lat. 22° 00′ 00″ N., Long. 113° 52′ 34″ E., then alter course to 334°T; to Lat. 22° 05′ 36″ N., Long. 113° 49′ 36″ E., then straight to Lafsami Pilot Anchorage waiting for Pilot.

Vessels departing should sail along the opposite course and positions above mentioned, after disembarking Pilot at Lafsami Pilot Anchorage.

(b) The vessels calling at Whampoa from Hong Kong should proceed throught West Lamma Channel to Lat. 22° 08′ 44″ N., Long. 113° 55′ 30″E. then alter course to 295°T; to Lat. 22° 12′ 04″ N., Long. 113° 47′ 41″ E. then alter course to 204°T to Lat. 22′ 10′ 36″ N., Long. 113° 47′ 00″ E. then straight to Lafsami Pilot Anchorage waiting for Pilot.

The vessels departing for Hong Kong should sail along the opposite course and positions above mentioned, after Pilot disembarked at Lafsami Pilot Anchorage.

2. The position of Lafsami Pilot Anchorage:
Lat. 22° 07′ 20″ to 22° 08′ 30″ N.
Long. 113° 45′ 48″ to 113° 47′ 54″ E.

3. Kwangchow (formerly Canton) coastal radio station:
Call sign: XSQ
Calling frequency: 500 kHz
Working frequency: 445 kHz
Answering frequency: 8514 kHz
Listening frequency: 8364 kHz
Working day and night.

Guide to foreign vessels calling at Chinwangtao:

(1) When non-military foreign vessels call at Chinwangtao, they may pass through Liau-Ti-Shan channel. For governing regulations, please refer to "Regulation for merchant vessels passing through Liau-Ti-Shan Channel". If a vessel violates the said regulations and enters the prohibited area, the Master of the vessel is to be held responsible for whatever consequence arising therefrom.

(2) All foreign vessels should anchor 3 miles off Chinwangtao Lighthouse waiting for Pilot. In case vessels come from foreign ports, quarantine inspection will be carried out at anchorage. After all formalities completed vessels can enter the harbour with Pilot.

(3) In order to make necessary arrangements beforehand, when vessels calling at this port, the ship should send the following information to Penavico Chinwangtao:

(a) Vessels ETA, the draft fore and aft, stowage plan (if loading export cargo), length overall and derricks' capacities (if first call this port).

(b) Further advice of accurate time of arrival will be required 24 hours before arrival.

(c) If any change in the arrival time owing to certain cause, it should be reported to the Agents immediately.

(4) If weather permits, vessels are requested to lift up all derricks before going alongside, thus enabling vessel to load cargo immediately after berthing.

(5) All telegrams to "Penavico Chinwangtao" from the vessels at sea should be sent via Chinwangtao coastal radio station:

call sign: XSE
working frequency: 286, 8734 kHz
calling frequency: 500, 8364 kHz
working hours: 0600 – 2400

Guide to foreign vessels calling at Taku Bar:
(Hsinkang Tangku and Tientsin)

(1) Foreign vessels entering Pohai Gulf are only allowed to pass through Changshan Channel and/or Liau-ti-Shan Channel. If the latter way is taken, the vessel must send a wireless message to "Harbour Master, Dairen" for directory 8 hours prior to passage. It should be noted that no other channels are permitted for navigation.

(2) Vessels passing Liau-ti-Shan Channel for Dairen must take a detour along the East of "Encounter Rock".

(3) Position of sunken dredger "SE Ho" is at Lat. 38° 31′ 00″ N., Long. 119° 10′ 05″ E. Vessels should keep far away from the above mentioned area during navigation.

(4) Position of the Taku Light Vessel is at Lat. 38° 56′ 51″ N., Long. 117° 55′ 32″ E. Vessels may anchor at N.E. direction of the Light Vessel, according to different condition of vessel's arrival draft, to wait for Pilot.

(5) Vessels are prohibited to enter into the area joining the following four buoys:

Lat.	Long.	
38° 56′ 35″ N.	117° 58′ 33″ E.	flash every 6 secs.
38° 56′ 29″ N.	117° 59′ 11″ E.	flash red (2) every 6 secs.
38° 55′ 45″ N.	117° 58′ 59″ E.	flash red every 6 secs.
38° 55′ 51″ N.	117° 58′ 22″ E.	flash (2) every 6 secs.

(6) Vessels may send radiogram to "Penavico Hsinkang" (via Hsinkang Coastal Radio Station, Call Sign XSV, calling frequency 500 kHz, working frequency 445 kHz, reserve frequency calling 8600 kHz, listening 8364 kHz, working hours 0000 – 2400) giving exact *ETA also fore and aft draft, before entering Pohai Gulf.*

(7) The pilot station is at Tangku. Any foreign vessel, according to harbour regulations, is required to have a Chinese Pilot when entering or leaving the port and among Taku Bar, Hsinkang, Tangku and Tientsin. The Pilot will board the vessel at Taku Bar Anchorage after receipt of exact ETA given by the Master.

Guide to foreign vessels calling at Tsingtao:

(1) Definite route must be taken when sailing in or out : From Lat. 35° 56′ 24″ N., Long. 121° 05′ 00″ E. to Lat. 35° 56′ 24″ N., Long. 120° 46′ 42″ E. course 270° (090°).
From Lat. 35° 43′ 15″ N., Long. 120° 53′ 09″ E. to Lat. 35° 56′ 24″ N., Long. 120° 46′ 42″ E. course 335° (155°).
Thence from Lat. 35° 56′ 24″ N., Long. 120° 46′ 42″ E. course 283° (103°) to Lat. 36° 02′ 00″ N., Long. 120° 15′ 56″ E. then alter course 000° (180°) proceed to Quarantine Anchorage within following 4 points: Lat. 36° 05′ 18″ N., Long. 120° 15′ 34″ E.; Lat. 36° 05′ 18″ N., Long. 120° 16′ 50″ E.; Lat. 36° 04′ 00″ N., Long.120° 16′ 22″ E.; Lat. 36° 04′ 00″ N., Long. 120° 15′ 20″ E.

(2) Pilot station is within the area: with the point Lat. 36° 02′ 00″ N., Long. 120° 18′ 16″ E. as its centre and 3 cables length as its radius (all called Outer Anchorage where vessels inward anchor for initial clearance from Authorities).

(3) Dropping and dragging anchor are strictly prohibited within the following areas:

(a) Within the 4 points: Lat. 36° 04′ 00″ N., Long. 120° 14′ 00″ E.; Lat. 36° 03′ 12″ N., Long. 120° 17′ 00″ E.; Lat. 36° 03′ 27″ N., Long. 120° 14′ 00″ E.; Lat. 36° 02′ 40″ N., Long. 120° 16′ 56″ E.

(b) Within the 4 points: Lat. 36° 02′ 42″ N., Long. 120° 20′ 00″ E.; Lat. 36° 00′ 48″ N., Long. 120° 18′ 00″ E.; Lat. 36° 03′ 36″ N., Long. 120° 23′ 16″ E.; Lat. 35° 59′ 48″ N., Long. 120° 18′ 30″ E.

(4) Must advise ETA Chalientao 24 hours before ships arrival.

(5) When abeam Chalientao on ship's entry, should cable again immediately time abeam Chalientao and accurate time arriving pilot station and awaiting Authorities instructions attentively.

(6) Proceeding on above mentioned route following stipulations should be observed:

(a) Ships national flag and code flags should be flown in daytime.

(b) Dumping rubbish and pumping out oil and oily substance are prohibited.

(c) If by some reasons the vessel needs to anchor, Master should report to Harbour Authorities first for permission.

(7) Within harbour limit the prohibited articles should not be used. In case the use of radar is required for navigation, Master should report to Harbour Authorities beforehand.

(8) Above mentioned Regulations should be strictly complied with. Otherwise the vessel is held responsible for all the consequences arising from the violation of the above.

(9) Tsingtao Coastal Radio Station:

Call sign: XST
Calling frequency: 500 kHz
Working frequency: 435 kHz
Answering frequency: 8546 kHz
Listening frequency: 8364 kHz
Working day and night.

Guide to foreign vessels calling at Lienyunkang:

(1) Foreign vessels must anchor at pilot station to wait for Pilot. Pilot anchorages:

(a) For vessels under 5,000 d.w.t.
Lat. 34° 45′ 20″ N., Long., 119° 31′ 36″ E. (about 3,000 m. East of Tunglientao Lighthouse).

(b) For vessels over 5,000 d.w.t.
Lat. 34° 46′ 54″ N., Long. 119° 34′ 45″ E. (about 4.5 miles off Tunglientao Lighthouse).

(2) Foreign vessels calling this port shall advise the Agents (Penavico Lienyunkang) of her ETA via the Shanghai Coastal Radio Station.

Guide to foreign vessels calling at Tsamkong:

(1) Pilot station: North Anchorage of Nau Chow Island.
Lat. 20° 58′ 21″ N., Long. 110° 36′ 42″ E.

(2) Tsamkong Coastal Radio Station:

Call Sign: XSJ
Calling frequency: 500 kHz
Working frequency: 462 kHz
Answering frequency: 8614 kHz
Listening frequency: 8364 kHz
Working day and night.

Guide to foreign vessels calling at Pasuo:

(1) Coastal Radio Station:

(a) Call Sign: XSH
(b) Working frequency: 452 kHz 0000 – 2400 (local time)
4278 kHz 1800 – 0900 (local time)
8634 kHz 0900 – 1800 (local time)
(c) Listening frequency: 500 kHz 0000 – 2400 (local time)
4182 kHz 1800 – 0900 (local time)
8364 kHz 0900 – 1800 (local time)
(d) Traffic list at 20 minutes pass every odd hour.

(2) Pilot station:
Lat. 19° 07′ 09″ N., Long. 108° 36′ 02″ E.
Bearing upon Telanchau 175° (T) distance 1 mile.

(3) Signal station:
The signal station is on top of Telanchau Hill (Lat. 19° 06′ N., Long. 108° 37′ E.) with light beacon of white light Gp. Fl. (2) 6 sec. 54 m. 12 M. at night.

(4) Radio report before ship's arrival:
Masters are requested to advise "Penavico Pasuo" of the following particulars. 48 hours before ship's arrival or right after departure from last port:

(a) 48 and 16 hours ETA.
(b) Route taken (via Hainan Straits or Yulinkong).
(c) Cargo to be loaded in each hold and/or tweendeck.
(d) The ship's length overall (first call only).
(e) Ship's breadth (first call only).
(f) T.P.I. (laden) (first call only).

Remark: All derricks up and beams off before arrival if and when weather permits.

Guide to foreign vessels calling at Wenchow:

(1) When arriving at or departing from the port of Wenchow, foreign vessels should pass through Whang Dan Sha Channel to enter or leave the Quarantine and Pilot Anchorages.

Before reaching Whang Dan Sha Channel, the vessels should navigate along the water areas 27° 46′ – 27° 54′ N. between Fu Tou You Light Beacon and Dong Yu, Dong Tou, Heng Zhi Shan Light Stations, but keep off the area within 27° 55′ – 28° 05′ N. and 121° 35′ – 121° 55′ E. a suspected minefield.

The vessels should not be allowed to enter into the water areas East of the joint line of Dong Yu and Heng Zhi Shan Light Stations, and also the water areas West of Fu Tou You Light Beacon and Dong Tou Light Station for navigation or anchorage.

(2) Quarantine Anchorage is in the water area with the point Lat. 28° 01′ 10″ N., Long. 121° 05′ 20″ E. as its centre and 0.6 nautical miles in length as its radius.

(3) The above Regulations should be effective as from 0000 hrs. 1st January, 1972, and observed by the foreign vessels accordingly.

(4) Aids to navigation available for fixing ships position.

(a) Fu Tou You Light Beacon:
Lat. 27° 50′ 08.7″ N., Long. 121° 14′ 48.8″ E.
White light Gp. Fl. 6 sec. 99 m. 16 M. (U).
Fog signal flashing on foggy day.

(b) Dong You Light Station:
Lat. 27° 55′ 56.8″ N., Long. 121° 13′ 24″ E.
White light Gp. Fl. (3) 10 sec. 39 m. 9 M. (U).

(c) Dong Tou Light Station:
Lat. 27° 57′ 43.5″ N., Long. 121° 08′ 46.7″ E.
White light Gp. Fl. (2) 6 sec. 21 m. 7 M. (U).

(d) Heng Zhi Shan Light Station:
Lat. 28° 01′ 03″ N., Long. 121° 08′ 34″ E.
White light Gp. Fl. (3) 10 sec. 58 m. 7 M. (U).

(e) Quarantine Light Buoy:
Lat. 28° 01′ 10″ N., Long. 121° 05′ 20″ E.
Orange and yellow can buoy; orange and yellow light Gp. Fl. (2) 6 sec.

(f) Yuan Yi Shan and Lang Dang Light Stations should be suspended to navigate by the foreign vessels as from 0000 hrs. 1st January, 1972.

Other points for attention:

When it is necessary for the foreign vessels to call at Foochow, Amoy, Swatow and Pakhoi, it is requested to contact Messrs. Penavico at relative port direct 48 hours before vessel's arrival at the port in order to know the position of pilot station and quarantine anchorage as well as attentions to be observed for navigation.

Regulations Governing Supervision and Control of Foreign vessels by the People's Republic of China (ENGLISH TRANSLATION)
Dated: 1979

GENERAL PROVISIONS

Article 1

These Regulations have been formulated with a view to safeguarding the sovereignty of the People's Republic of China, to maintaining traffic order in port areas and coastal waters, to ensuring safety of navigation and to preventing pollution of waters.

Article 2

These Regulations as well as all relevant laws, statutes and rules issued by the Government of the People's Republic of China shall be complied with by all foreign vessels (hereinafter referred to as "vessels") navigating in port areas and coastal waters of the People's Republic of China. Vessels shall be subject to inspections by the Harbour Superintendency Administration set up in the port by the Government of the People's Republic of China where the latter deems such inspections necessary.

The term "coastal waters" mentioned in these Regulations means inland waters and territorial sea of the People's Republic of China as well as water areas officially defined as coming under the jurisdiction thereof.

Part 1 ENTRY, DEPARTURE AND NAVIGATION

Article 3

The Master or owner of a vessel shall, a week prior to its expected arrival at the port, submit the required forms to the Harbour Superintendency Administration through the vessel's port Agent for completion of entry formalities, and shall report, 24 hours in advance of her arrival (or on her departure from the last port of call if the voyage takes less than 24 hours), the vessel's ETA, fore and aft drafts on arrival to the Harbour Superintendency Administration through the port Agent. Should there be any change in the ETA, same shall be reported in time.

A report shall be submitted in advance to the Harbour Superintendency Administration in case of special circumstances, such as the vessel being in distress, the engines broken down or her crew or passengers suffering from acute disease, which necessitate the vessel to make an emergency entry into or to return to the port during the voyage.

Article 4

No vessel shall enter or leave the port, or navigate or shift berths therein without a Pilot being appointed by the Harbour Superintendency Administration. Matters regarding pilotage shall be dealt with according to the Regulations with respect to Sea-port Pilotage issued by the Ministry of Communications of the People's Republic of China.

Article 5

Upon arrival at the port, vessels shall immediately submit the Entry Report and other relevant forms for check-up; besides, vessels shall submit ship's papers and relevant documents for examination and be subject to inspections. Prior to leaving, vessels shall submit the Departure Report and other relevant forms for clearance examination and may only leave the port after port clearance has been obtained.

Article 6

Upon arrival at the port, arms and ammunition on board are to be sealed up by the Harbour Superintendency Administration. Radio-telegraph transmitter, radio-telephone transmitter, signal rockets, flare signals and signal guns shall only be used in case of emergency, and a report shall be made to the Harbour Superintendency Administration immediately afterwards.

Article 7

Shooting, swimming, fishing, setting off of firecrackers or fireworks and other actions calculated to endanger the order and security of the port shall be prohibited.

Article 8

The Harbour Superintendency Administration is fully authorised to detain the vessel concerned, or to order the vessel to stop sailing, to change route or to return to the port under any of the following circumstances:

(a) unseaworthiness;
(b) violation of laws or regulations of the People's Republic of China;
(c) involvement in marine accident;
(d) non-payment of expenses to which the vessel is liable or failure to produce security required; or
(e) other cases prohibiting the vessel from sailing.

Article 9

Vessels navigating in Chinese port areas and coastal waters shall not be engaged in activities endangering the national safety, rights and interests of the People's Republic of China and shall comply with regulations governing straits, waterways, routes and areas closed to navigation.

Article 10

Vessels navigating within the port areas shall not proceed at a speed liable to endanger the safety of other vessels and port installations.

Article 11

Boats (rafts) attached to vessels shall not be manoeuvred within port areas except for life-saving purposes.

Article 12

No vessel shall have its boats, derricks and gangways, etc., stretched outboard while navigating or shifting berths within port areas.

Article 13

Vessels requiring to enter any of the Chinese ports open to foreign trade for shelter or temporary stay shall apply to the Harbour Superintendency Administration for permission. Such application shall state: name of the vessel, call-sign, vessel's nationality, name of the shipping company, port of sailing, port of destination , vessel's position, speed, drafts, colour of hull and colour and mark of funnel. Such vessels shall take shelter at places designated.

Vessels requiring to take shelter or to lie at anchor temporarily at places other than any of those Chinese ports open to foreign trade shall, in addition to the above formalities observe the following regulations:

(a) reporting promptly to the nearest Harbour Superintendency Administration the time and position of anchoring and the time of departure;
(b) fulfilling the requirements of local authorities concerned and submitting to their inspections, inquiries and instructions; and
(c) no one to be allowed ashore and no cargo loaded or discharged without permission of local authorities concerned.

Part 2 BERTHING

Article 14

While berthing in port, vessels shall have on board a sufficient number of men to ensure safe manoeuvring, and, in case of emergency such as typhoon warning, etc., all hands shall return immediately aboard to take necessary precautions and urgent measures.

Article 15

Gangways for access of crew members, passengers and other persons shall be properly secured and fitted with railings or manropes. Rope ladders shall be safe and strong. Sufficient illumination shall be available at night.

Article 16

Vessels requiring to turn propellers shall pay close attention to the surroundings at the stern, and shall only do so under the condition that the safety of other vessels and harbour installations has been ensured.

Article 17

While berthing in port, all exhaust valves and discharge openings of the vessel which may give trouble to other vessels, harbour craft, the wharf or the access of persons shall be properly covered.

Article 18

No light of any vessel shall be exhibited in such a manner as to impair the safe navigation of other vessels; strong lights directed at the fairway must be properly screened.

Article 19

All vessels should be in safe and good working condition for cargo operation as required. All cargo handling equipment should be maintained in good working order and certificate of fitness should be made available.

Article 20

Vessels shall apply in advance for and obtain permission from the Harbour Superintendency Administration before carrying out the following operations:

(a) overhauling of any boiler, main-engine, windlass, steering gear or radio-station;
(b) trial trip of engine-test;
(c) lowering boat (raft) for life-saving drill;
(d) welding (except for repairing in shipyard) or working with naked light on deck; or
(e) decorating with colourful lights.

Article 21

Vessels under fumigation shall take strict safety measures and exhibit appropriate signals prescribed by the Harbour Superintendency Administration.

Article 22

In order to ensure the safety of the port and vessels, when ordered to shift berth or to sail ahead of or behind the schedule, vessels shall observe such orders as given by the Harbour Superintendency Administration.

Part 3 SIGNALS AND COMMUNICATIONS

Article 23

Vessels navigating or berthing in Chinese port areas or coastal waters shall by day hoist the national flag of the country of registry. On entering or leaving port or shifting berths, vessels shall in addition display signal-letters and relevant signals prescribed by the Harbour Superintendency Administration.

Article 24

When entering or leaving port or at anchor, vessels shall pay close attention to the call and signals of the port signal-station. When visual signals are used, the Regulations with respect to Coastal Port Signals issued by the Government of the People's Republic of China shall be complied with. Where signals are not specified by Chinese coastal ports, the International Code of Signals shall be applicable.

Article 25

Vessels shall not make sound signals at will within the port except when necessitated by safety of navigation. Vessels requiring to test whistles shall make an advance report to the Harbour Superintendency Administration.

Article 26

Vessels making use of their VHF radio-telephone in port shall comply with the Provisional Regulations governing the Use of VHF Radio-telephone by Foreign Vessels issued by the Ministry of Communications of the People's Republic of China.

Part 4 DANGEROUS CARGOES

Article 27

Vessels carrying or handling dangerous cargoes shall exhibit the prescribed signals, comply with the regulations relating to the carriage of dangerous cargoes and take all necessary safety measures. Cargoes of contradictory nature, in particular, must be separately stowed. It is strictly forbidden to stow explosives with ignitable materials or inflammable cargoes in the same hold.

Article 28

Vessels carrying Grade 1 highly hazardous cargoes shall, 3 days prior to the ETA, apply to the Harbour Superintendency Administration through their port Agent for endorsement, with their descriptive names, properties, packing, quantity, place of stowage stated in detail and a booklet of Description of Dangerous Materials attached, and shall not enter the port, discharge the cargoes or make transit unless permission has been obtained. Such cargoes being: explosives, highly poisonous articles, radio-active substances, compressed gases, liquefied gases, oxidizing agents, substances liable to spontaneous combustion, substances which, in contact with water, emit inflammable gases, inflammable liquids, inflammable solids, acidic corrosives, etc.

Vessels intending to carry the above-mentioned hazardous cargoes for export shall, 3 days prior to the loading thereof, apply for endorsement and shall not load until permission has been obtained.

Article 29

Vessels applying for Certificate of Safety Stowage of Export Dangerous Cargoes shall, 3 days prior to loading, submit a written application to the Harbour Superintendency Administration, stating, inter alia: descriptive names, properties, packing, quantity, place of stowage (accompanied by stowage plan), intermediate ports, port of destination, and shall load at the berths designated by the Harbour Superintendency Administration.

Part 5 FAIRWAY PROTECTION

Article 30

Vessels under way shall comply with the rules of navigation and maintain traffic order. In case of accidents involving the risk of sinking, a report shall immediately be made to the Harbour Superintendency Administration and all effective measures shall be taken to steer clear of the fairway to avoid impeding the traffic and endangering other vessels. If the vessel is sunk, a temporary signal shall promptly be marked by the parties involved at the place of the wreck.

Article 31

Salvage operations on shipwrecks or other objects in port areas or coastal waters shall be carried out in accordance with the Regulations Governing the Salvage of Shipwrecks or Sunken Objects issued by the Government of the People's Republic of China. The Harbour Superintendency Administration may, as it thinks fit, notify the owners thereof to carry out salvage and clear the fairway within a specified time, or to arrange an immediate salvage to refloat or demolish the sunken vessel or object and to clear the fairway, with all responsibilities and expenses incurred borne by the owners concerned.

Article 32

Where any sunken or floating object has been found by any vessel, a report thereon shall be made and the object salvaged handed over to the Harbour Superintendency Administration, whereupon, a reward may be given by the latter as appropriate.

Article 33

Where any vessel wishes to dispose of any refuse such as garbage in port, it shall exhibit signals prescribed by the Harbour Superintendency Administration to request ash boats (cars).

Article 34

Fairway installations and aids to navigation shall be well cared for. Vessels causing damages thereto or to harbour constructions or other facilities shall report immediately to the Harbour Superintendency Administration and shall be held responsible for the restoration made or the expenses incurred.

Part 6 PREVENTION OF POLLUTION

Article 35

No vessel shall discharge oils, oily mixtures or other harmful pollutants or refuse within port areas and coastal waters of the People's Republic of China.

Article 36

If any ballast water, tank washings or bilge water is to be discharged from any vessel, an application shall be made to the Harbour Superintendency Administration for approval. Where a vessel has arrived from a plague-infested port, necessary sanitary treatment should been given by the Quarantine Authorities. Dirty water and hold washings from holds where dangerous cargoes or harmful pollutants have been stowed shall only be discharged at the designated place after their having been tested by and to the satisfaction of the sanitation departments concerned.

Article 37

Oil tankers and vessels with oil as fuel shall carry the Oil Record Book on board and make appropriate entries as required.

Article 38

Where a pollution has occurred within the port area or coastal waters, the vessel at fault shall have all relative particulars entered in the Oil Record Book and the Deck Log, and shall have the matter immediately reported to the Harbour Superintendency Administration. Meanwhile, all effective measures shall be taken to prevent the oil from spreading. Where any chemicals should be applied, an application together with a description of their compositions and properties shall be sent to the Harbour Superintendency Administration for approval.

Article 39

Matters not provided for in this part shall be dealt with in accordance with the regulations relating to the prevention of pollution of marine environment issued by the Government of the People's Republic of China.

Part 7 FIRE FIGHTING AND SALVAGE

Article 40

Smoking or naked flames in the hold or elsewhere liable to cause fire hazard to the vessels is strictly prohibited.

Article 41

Vessels bunkering oil or oil/tankers handling cargo oil shall take strict fire prevention measures for safety.

Article 42

While welding in port, vessels shall clean up the surroundings beforehand, take strict precautionary measures, be provided with fire-fighting apparatus and examine the work site before and after the operation. No welding can be done inside or near oil compartments, unless and until all the oil has been emptied, oil residues cleared out, the compartments sufficiently ventilated, the inflammable gases expelled, and a certificate of fitness obtained.

Article 43

Should any vessel be involved in a fire hazard or marine casualties, an immediate report shall be made to the Harbour Superintendency Administration. Such report must contain ship's position, tonnage, drafts, cargo on board, damages suffered and assistance required.

Article 44

Where necessary, the Harbour Superintendency Administration may order and direct any vessel in port or in coastal waters to rescue the vessel in distress. The vessel so ordered and directed is obliged to do its utmost to render every possible assistance as long as its own safety will not be endangered.

Article 45

As soon as the officers from the Harbour Superintendency Administration or the salvage departments concerned have arrived, the Master of the vessel in distress shall report the accident occurred and measures taken so far, provide all information and facilities required and make suggestions with regard to the salvage as appropriate. All decisions taken by the Harbour Superintendency Administration for maintaining safety and order shall be complied with by all parties concerned.

Part 8 MARINE ACCIDENTS

Article 46

Should any vessel be involved in marine accident, the Master shall give the Harbour Superintendency Administration a summarised report by telegram or radio-telephone soonest possible. In case the accident has occurred outside of port areas, the Master shall, within 48 hours of the vessel's arrival at the first port of call, submit a marine accident report to the Harbour Superintendency Administration. Such report shall be submitted within 24 hours of the accident if the same has happened in port.

Article 47

Should any vessel be involved in marine accident causing death of or injury to persons or damages to properties in port areas or coastal waters of the People's Republic of China, the Master of the vessel at fault shall render every possible assistance to the ship and persons in distress, make timely report to the Harbour Superintendency Administration and be prepared for investigation and settlement. Should the party at fault refrain from rendering any assistance in spite of the imminent danger or flee into hiding, severe punishment will be imposed.

Article 48

Should death happen to any person on board, an immediate report thereof shall be sent to the Harbour Superintendency Administration. Where any damage or death has caused to the port or its persons through the fault of the ship, or vice versa, the spot should be kept untouched and timely reports should be given to the Harbour Superintendency Administration by both parties. In case of dispute, either party may resort to the Harbour Superintendency Administration for investigation and settlement. Matters involving penal proceedings shall be dealt with by judicial organs of the People's Republic of China.

Article 49

Matters not provided for in this part shall be dealt with in accordance with the Regulations Governing Investigation and Settlement of Marine Accidents promulgated by the Ministry of Communications of the People's Republic of China.

Part 9 PENALTIES FOR VIOLATION OF REGULATIONS

Article 50

Vessels violating these Regulations and all relevant laws, statutes and rules issued by the Government of the People's Republic of China shall, according to the seriousness of the case, be warned or fined by the Harbour Superintendency Administration. All offences of vicious or serious nature shall be handed over to the judicial organs.

Article 51

Any offender not yielding to the conclusions made by the Harbour Superintendency Administration may, within 15 days of the receipt thereof, appeal to the Bureau of Harbour Superintendency of the People's Republic of China. The above said conclusions, however, shall remain valid before its being modified.

Part 10 SUPPLEMENTARY PROVISIONS

Article 52

Matters concerning prevention of collisions not provided for in these Regulations and relevant rules and regulations issued by the Government of the People's Republic of China shall be dealt with in accordance with the International Regulations for Preventing Collisions at Sea accepted by the Government of the People's Republic of China.

Article 53

These Regulations shall become effective upon the approval by the State Council of the People's Republic of China. The Regulations Governing Entry and Departure of Foreign Vessels Into and From Ports of the People's Republic of China promulgated by the Ministry of Communications of the People's Republic of China on the 12th March, 1957 shall at the same time repealed.

CHINWANGTAO: 40.00 N. 119.30 E.

Also see "General" before first port.

NOTICE: Chinese Notice June 1984.

Anchorage with bearings and distances from Nanshan Tou light (Lat. 39° 54.6′ N., Long. 119° 36.9′ E. approx.):

(a) Oil tanker anchorage. Sector between bearings 100° and 110° and distances 3.0 miles and 7.0 miles.

(b) East Anchorage. Sector between bearings 110° and 135° and distances 3.0 miles and 7.0 miles.

(c) West Anchorage. Sector between bearings 165° and 190° and distances 3.0 miles and 5.0 miles.

DEVELOPMENTS: *Coal:* At present one berth for coal (Berth No. 8) length 275 m. depth 11 m. for vessel 180 m. LOA and draft 11 m. 5 shiploaders available, rate 4,000 t.p.h.

In 1984 an additional 2 berths will be available. Length 530 m. depth 13.0 m. 3 shiploaders will be available, loading rate 6,000 t.p.h.

In 1985 a further 2 berths will be available. Length 600 m. depth 13.0 m. 4 shiploaders will be available, loading rate 8,000 t.p.h.

Grain: Grain silo to be built.

SHIPMASTER'S REPORT: 1979.

Approaches: Straightforward, mountains to N.W. show on radar at 48 miles, tanker berths to East at 24 miles, also ships at anchor. Notice of passage through Liau-Ti-Shan Straits to be given to Harbour Master Dairen as per "Guide to Port Entry", (see "General" before first port), this also applies when sailing.

Anchorage: Vessel lies mostly to the wind rather than the tide. Winds of up to Force 7 experienced.

Also see "Notice".

Pilots/Berthing: Pilots board from a tug, accompanied by an Assistant Harbour Master who assists with VHF. The approach is on a heading of 308° True, not on the charted leading marks, with a draft of 34 ft. the least depth recorded below keel was 10 ft. A strong tidal set was noted across the entrance. One tug pushing forward, and one standing by, no launch to run lines, port anchor let go approaching berth, veered to one shackle and dredged in. Similar arrangement of tugs when sailing, Harbour Master again boards with Pilot and will not hand over clearance until well clear of the berth.

Tugs: 4 for harbour work, 2 new large, and 2 smaller, plus 1 fairly old tug used by the Agents for visiting ships at the anchorage.

Berth: No. 14 Berth is apparently the grain berth, it is low, well fendered and the accommodation ladder may be turned out prior to berthing. Depth alongside is 40 ft. Berthing seems to be always head in, starboard side to.

There are 2 bulk coal loading berths, one fairly close to the grain berth, and one on the breakwater.

Cargo: All discharging by crane, (5 at this berth), using grabs as long as possible then net and burlap slings, into hoppers which feed railway wagons. Many delays awaiting wagons, average rate at first was 8,200 tonnes per day but this falls off slightly. When hatches are finished the cranes are not utilised at other hatches. 2 shifts, changing at 0700 and 1900 hrs. Very little damage, all repaired when Form 62 presented.

Fresh Water: By barge, very little delay once application made. Garbage boat also by application, again very little delay.

General: All previous restrictions on the use of radar, echo sounders etc., are now lifted, although the Agent advised me not to use them whilst alongside, and permission had to be requested for testing the radar before sailing.

Written application has to be made to the Harbour Master for permission to immobilise the main engine, apparently it is always granted, but for maximum of 48 hours only. Definitely no main engine trials alongside berth.

The cargo was fumigated at the anchorage, gangs for rigging the equipment and for the fumigation, using Methyl Bromide, live on board, and were very efficient and co-operative. All personnel not essential for the vessel's safety were disembarked and accommodated at the Seamens' Club.

Accommodation and food at the Seamans' Club were fairly good. The Club will arrange trips to Peking, about 6 hours by train, they consider the minimum time to be 3 days and 2 nights on average, all in cost of about £40. Also trips to the Great Wall of China 10 miles by road.

Shopping only at the Friendship Store, adjacent to the Club, a wide variety of goods are available. Chinese currency only accepted but notes of almost any nationality can be changed at the Club, £1 Sterling to 3.19 Yuen.

Communication with the U.K. by cable or telex is quite good. Air mail from the U.K. takes about 10 days.

Agents, etc: Most speak fairly good English and are keen to improve. All arrival formalities completed at the anchorage, no musters or searches required either arriving or sailing. Three Frontier Guards live on board at the anchorage, and when berthed they maintain a 24 hour watch at the gangway, all passes to be shown going ashore and returning.

Chandler: Boards on berthing and takes the order. Fresh provisions only available.

SHIPMASTER'S REPORT: March 1981.

CHINWANGTAO (QIN HUANG DAO) (CHIN HUANGTAO).

Lat. 39° 54.6′ N., Long.: 119° 36.7′ E.

Chart: BA No. 3378.

Documents:

5 copies Crew Lists.

1 copy Import Manifest.

1 copy List of Specified Articles belonging to Ship and/or Members of Crew.

1 copy Maritime Declaration of Health.

Anchorage: In case there is ice at anchorage in Winter it is advisable to anchor further off and not pay out too long scope of chain.

Also see "Notice".

Pilotage: Pilotage is compulsory for foreign vessels entering and leaving the port. Pilots board ships at pilotage/quarantine anchorage. Pilotage is undertaken day and night. Pilot boat (tugboat) displays the International Pilot Signal when on pilotage duty. There are about 12 Pilots available. Pilots can speak and understand English sufficiently.

Berthing:

	Name			*Capacity*
Small pier	Berth No. 2		One	5,000 ton ship
Large pier	Berth No. 4		One	7,000 ton ship
Large pier	Berth No. 5		One	10,000 ton ship
Large pier	Berth No. 6		One	10,000 ton ship
Large pier	Berth No. 7		One	10,000 ton ship
New pier	Berth No. 8	Pier B	One	10,000 ton ship
New pier	Berth No. 9		One	10,000 ton ship
New pier	Berth No. 14	Pier A	One	10,000 ton ship
New pier	Berth No. 15		One	10,000 ton ship
Oil pier	East Berth		One	10,000 ton ship
Oil pier	West Berth		One	10,000 ton ship

Channels: In port there are three channels. Original channel, new channel and oil pier channel.

Original channel is about 1.7 miles in length, 100 m. in width and 9 m. to 10.4 m. depth. It is used by ships berthing and leaving the large pier and the small pier.

New channel about 0.9 miles in length, 100 m. in width and 9.4 m. to 10.4 m. in depth. It is a branch of the original channel and is used by ships berthing and leaving the new pier.

Oil pier channel is about 2 miles in length, 100 m. in width and 10.7 m. in depth. It is used by ships berthing and leaving the oil pier.

Radio: Foreign ships calling at this port may according to International Radio Regulations communicate with Qin Huang Dao Coastal Radio Station.

Name	*Chinwangtao Radio*
Call sign	XSE
Medium frequency (kHz)	486
Hours of service	0000 – 2400
High frequency (kHz)	8484
Hours of service	0600 – 2400
Time of traffic list	At H + 10 each given hour.

There is VHF Channel 16 at port control and Channel 11 at 'Penavico' Agents. To call Agents first call port control and then change to Channel 11 after informing the vessel's intention to use VHF.

General: The port is equipped with lifting machinery, tippers, universal lifting machines, belt conveyors. Cargo is unloaded directly into railway wagons. Coal loading is done by conveyor belts. Hatches are opened by ship's crew. Stevedores are not competent in derrick work. Stevedores work in three shifts of eight hours each commencing at 0600 hours. Discharging rate is fully dependent on availability of wagons. There are 11 tugs available. Fresh water and fuel are available by boats. Limited provisions are available.

There is a Seaman's club in the city, well equipped with recreation facilities. A trip to Great Wall of China can be arranged through the club.

CHI WAN: 22.28 N. 113.53 E.

Port under construction.

DEVELOPMENTS: A wharf, length 3,000 m. under construction. The wharf will handle vessels up to 100,000 d.w.t. Oil storage facilities are planned.

SHIPMASTER'S REPORT: April 1984.

New port still under construction situated in Lat. 22° 28.5′ N., Long. 113° 53′ E. Pilot station is located in position Lat. 22° 25′ N., Long. 113° 52.6′ E. It is reached by passing through Hong Kong East Lamma Channel then passing North of Ma Wan Island. There is plenty of water until the pilot station. Anchorage is in very good holding ground. Density of water at any stage of the tide is 1020. Alongside the pier (only one working at the moment), the depth is 8.5 m. but the bottom is soft mud. At HW it varies from 9.5 m. to 10 m. according to the stage of the tides. Fresh water is available at a low rate alongside the pier. Chi Wan Radio working on Channel 16 and 84. Discharging at about 1,000 tons per day with ship's gear and shore cranes. Only one crane is assembled at the moment. 3 cranes of 10 tons capacity will be available in the near future, 1 crane of 40 tons is already working.

Facilities to go to Hong Kong: (2 photographs must be available for the Immigration Visa) Hong Kong dollars are accepted as currency. US dollars must be changed at the local Banks. Entering and leaving the port only during daylight hours. 2 low powered tugs assisting mooring and unmooring the ship.

DAIREN: (Dalian) 38.55 N. 121.40 E. (See Plan Book)

Also see "General" before first port.

REGULATIONS: Abstract of Port Regulations for Dalian Port issued by Dalian Harbour Superintendency Administration.

The Dalian Harbour Superintendency Administration:

1. All vessels (both Chinese and foreign) entering or leaving Dalian port (hereinafter referred to as this port), in addition to strictly abiding by "The Regulations Governing Supervision and Control of Foreign Vessels by The People's Republic of China" shall observe these regulations.

2. The vessels entering or leaving this port must pass through the channel between Da San Shan Dao and Huang Bai Zui and navigate strictly according to "The Navigation Rules for Vessels Passing Through Da San Shan Channel".

Vessels entering or leaving Dalian Xin Gang must navigate through the channel between Sha Tuo Zi and Xian Jiao.

3. The vessels entering or leaving this port after sunrise and before sunset, shall display the ship's national flag, call sign flags and other required flags. The vessels entering the port shall hoist up the above-mentioned flags before Da San Shan Dao lighthouse is abeam, and the vessels leaving the port shall haul down these flags outside the harbour limits.

Remarks:

The harbour limits of this port are the line joining Huang Bai Zui lighthouse (Lat. 38° 54′ 14″ N., Long. 121° 42′ 56″ E.), Da San Shan Dao lighthouse (Lat. 38° 51′ 51″ N., Long. 121° 49′ 29″ E.), the N.E. end of Da San Shan Dao (Lat. 38° 53′ 36″ N., Long. 121° 50′ 03″ E.), the East end of Xiao San Shan Dao (Lat. 38° 54′ 58″ N., Long. 121° 50′ 08″ E.), Jiu Cai Tuo Zi light beacon (Lat. 38° 56′ 48″ N., Long.121° 51′ 42″ E.), Sha Tuo Zi lighthouse (Lat. 38° 58′ 03″ N., Long. 121° 54′ 15″ E.), Xian Jiao light beacon (Lat. 38° 57′ 49″ N., Long. 121° 59′ 11″ E.), and Sha Yu Zui (Lat. 39° 01′ 51″ N., Long. 121° 57′ 42″ E.).

4. The vessels passing through the Lao Tie Shan channel must strictly follow the regulations on passing through Lao Tie Shan channel. (refer to Annex 2).

5. The vessels passing through Lao Tie Shan channel and entering or leaving this port shall, in addition to observing the regulations relating to the Lao Tie Shan channel, keep themselves to the South of the tangent line drawing from Yu Yan (Lat. 38° 34′ 21″ N., Long. 121° 38′ 12″ E.) to the South verge of Lao Tie Shan prohibited area, and to the meridian line drawing North from Yu Yan.

6. When entering or leaving this port, vessels shall pay unremitting attention to the communication with the signal station in the port.

7. When loading or discharging jute, cotton or other inflammable cargoes, vessels must:

(a) Get effective fire-extinguishing equipment ready by the operating hatches;

(b) Put the copper net cover on the top of ship's funnel lest the sparks should come out, and allow no crew members to smoke on deck and near the hatches or to throw cigarette stumps at random.

8. Any vessel alongside an oil jetty must keep her main engine ready all the time and keep sufficient persons on duty, and put a steel wire tow line fore and aft over the off-shore side for emergency.

9. Oily-water separators shall be installed on board and be kept in normal order. After treatment, oil content in the draining water shall be less than 15 p.p.m.

10. The vessels intending to drain engine room bilge water which is not separated or has not been separated up to the above mentioned requirements, must apply for oil collecting boat by displaying "L6" flags in daytime and all-round lights (white, red, green) in a vertical line at night.

11. The vessels intending to pump out ballast water and/or washing water must apply to the Harbour Superintendency Administration for permission at least 12 hours in advance, no such pumping shall be allowed without permission.

12. The vessels replenishing bunkers or loading oil must comply with the following requirements:

(a) 12 hours' notice shall be given to the Harbour Superintendency Administration prior to bunkering. Bunkering operations shall, whenever practicable, be scheduled during daylight hours.

(b) Before bunkering, all scuppers and water drainage pipes on weather deck must be properly plugged.

(c) The oil transfer pipes on board must be carefully connected with the hoses of the bunkering vessels, and oil collectors must be placed under the transfer pipes' connection.

(d) There must be oil-collecting containers placed under the air pipe's outlets (goose-necks).

(e) During bunkering or loading oil, there must be an adequate number of persons on duty, constantly checking the ullage of the tanks, accurately calculating the oil quantity and when a tank is nearly filled with oil, signalling in time to reduce the rate of bunkering or oil loading speed, and opening or closing the proper valves so as to guard against any oil spilling.

(f) In case of an oil spill, effective measures must be immediately taken to prevent the oil from dispersing, and in the meantime a report containing the time and date of the spill and reason thereof as well as the quantity of spilling must be submitted to The Harbour Superintendency Administration without delay.

13. Any tanker carrying 2,000 or more tons of cargo shall have a valid Certificate of Insurance or Other Financial Security in respect of Civil Liability for Oil Pollution Damage. Or a Certificate of Credit for Civil Liability for Oil Pollution Damage or furnish a financial security.

14. The vessels navigating in this harbour may use their VHF telephones for intership navigation communication, Channel 6 is designated for the purpose.

15. The vessels under fumigation in assigned anchorage shall take strict safety measures and exhibit appropriate signals prescribed by the Harbour Superintendency Administration.

16. Tanker vessels calling at this port shall apply for the Certificates of Stockpiling of the Oil Boat and Materials at Deposit Spot from the Harbour Superintendency Administration.

17. The vessels violating the above mentioned regulations shall, according to the case, be subjected to warnings, fines or other punishments.

The Dalian Frontier Defence Inspection Station:

1. When going ashore, crew members and passengers have to observe all laws and regulations of the Chinese Government.

2. When a foreign vessel is entering or leaving the port, crew members and passengers on board shall present their passports or other identity cards to the Frontier Defence Inspection organs for inspection.

3. Foreign crew members and their dependents or passengers in transit intending to go ashore shall apply, through Master, to the Frontier Defence Inspection Station and the local visa-issuing authorities for landing permits and visas respectively. Only by the abovementioned certificates can they go ashore, while Chinese crew members and their dependents with their valid identity cards with photos, which sufficiently certify their nationality – Chinese – can go ashore.

4. Foreign crew members go on board each other's vessels in the same port using their valid passports or other identity cards and their landing permits, while Chinese crew members with their valid identity cards.

5. On embarking or disembarking, crew members and passengers shall present their identification to the inspectors of the Frontier Defence Inspection Station for inspection.

6. The time limit for landing is from sunrise to 2400 hrs. (local) of each day.

7. The area limit for landing is subject to that confined by the local people's government at the place where the port is at which the vessel calls.

8. Crew members having the necessity of lodging ashore, travelling beyond the port area at which the vessel stays, leaving China therefrom, or exiting by a ship he doesn't serve, the Master shall report the case, whichever it may be, to the Frontier Defence Inspection Station and crew member himself shall go through with all necessary formalities in compliance with the regulations concerned. Only after the certificates and visa are granted and submitted to the Frontier Defence Inspection Station for inspection, can he be permitted to leave his ship.

9. Those (crew members and passengers) who break the abovementioned rules shall be criticised or punished with a warning, a fine, a statement or signed repentance, or going ashore prohibited subject to the seriousness of their case. Those who violate the criminal law of China shall be brought to justice by the Public Security Organs according to the Chinese law.

The Dalian Customs:

(1) Carrying, into or out of the country, of the national currency of the People's Republic of China is prohibited.

(2) Shipmasters and seamen in possession of Chinese national currency obtained by exchanging of gold, silver or any kind of foreign currencies should carefully keep the bank's exchange memo for Customs scrutiny.

(3) All articles brought ashore or taken aboard ship by Shipmasters or seamen should be reported to the Customs Officers on duty for permission. Selling of articles brought ashore is strictly forbidden.

(4) Customs seals affixed to any place on the ship should not be tampered with.

(5) All unmanifested cargo or parcels carried on the ship should be declared to the Customs by the Shipmaster while performing formalities for ship's entry.

(6) Ships sailing between Chinese ports must not deviate from their course and proceed abroad without Customs approval. Prior permission must first be obtained if condition necessitates.

The Dalian Quarantine Service:

(1) While in port if a case or a suspected case of any quarantinable disease, or any death not from an accident trauma is found on board, the Master (or the responsible person on duty) shall at once report the case to the Quarantine Service, so as to have a temporary quarantine effected.

(2) While in port the Master of the vessel shall be responsible for carrying out the following:

1. Effective rat guards or other means against rats shall be properly placed on all mooring ropes.
2. When a gangway or gangplank is used, it is to be illuminated with strong electric lights at night.
3. When rats are found dead or rodents are caught on board, a report shall be made to the Quarantine Service for examination.
4. When flies, mosquitoes or other disease-spreading insects are found on board, necessary measures shall be taken by ship's personnel to kill them.

(3) The garbage on board must be kept in a garbage drum or container and covered tightly. Under the direction of Pratique the garbage and ballast water on board controlled by the Quarantine Service shall not be moved away or pumped out in port unless permission is granted by the Quarantine Service. If the Master of the vessel requests to do so, a report must be made to the Quarantine Service.

(4) Derat or Derat Exemption Certificate is valid, within only 6 months from the issued date; if not valid or is going to expire, the vessel should have the application for the inspection forwarded in time to the Quarantine Service.

Note 1. In the absence of surgeon the Master shall regard the following symptoms as grounds for suspecting the existence of infectious diseases:

High fever or fever or fever persisting for several days, or attended with glandular swelling; any acute skin rash or eruption with or without fever; severe diarrhoea and vomiting,; jaundice accompanied with fever.

2. The signal call for a doctor

A "W" flag to be hoisted in the daytime and 3 lamps: White, Red and White to be hoisted perpendicularly at night signify that a sick man having any of the abovementioned symptoms is on board.

Annex 1:
REGULATIONS GOVERNING SUPERVISION AND CONTROL OF FOREIGN VESSELS BY THE PEOPLE'S REPUBLIC OF CHINA: GENERAL PROVISIONS.

See "General" before first port.

Annex 2:
REGULATIONS TO BE OBSERVED BY MERCHANT VESSELS PASSING THROUGH THE LAO TIE SHAN CHANNEL:

See "General" before first port.

Annex 3:
SUPERSEDED BY "TRAFFIC SEPARATION SCHEME" WHICH SEE.

Annex 4:
THE ANCHORAGES IN DALIAN HARBOUR:

Quarantine Anchorage:	
Lat. 38° 57′ 00″ N.	Long. 121° 42′ 00″ E.
Lat. 38° 57′ 00″ N.	Long. 121° 46′ 00″ E.
Lat. 38° 56′ 18″ N.	Long. 121° 41′ 00″ E.
Lat. 38° 55′ 00″ N.	Long. 121° 46′ 00″ E.
Fumigation Anchorage:	
Lat. 38° 59′ 08″ N.	Long. 121° 45′ 00″ E.
Lat. 38° 59′ 08″ N.	Long. 121° 46′ 55″ E.
Lat. 38° 57′ 39″ N.	Long. 121° 45′ 00″ E.
Lat. 38° 57′ 39″ N.	Long. 121° 46′ 55″ E.
Tanker Anchorage:	
Lat. 38° 59′ 08″ N.	Long. 121° 42′ 30″ E.
Lat. 38° 57′ 39″ N.	Long. 121° 42′ 30″ E.
Lat. 38° 57′ 39″ N.	Long. 121° 45′ 00″ E.
Lat. 38° 59′ 08″ N.	Long. 121° 45′ 00″ E.
Hei Zui Anchorage:	
Lat. 38° 56′ 9.7″ N.	Long. 121° 37′ 38″ E.
Lat. 38° 56′ 4.8″ N.	Long. 121° 37′ 31″ E.
Lat. 38° 56′ 7.5″ N.	Long. 121° 37′ 38.2″ E.
Lat. 38° 56′ 12.2″ N.	Long. 121° 37′ 35″ E.
Dalian Xin Gang Inner Anchorage:	
Lat. 38° 58′ 36″ N.	Long. 121° 56′ 30″ E.
Lat. 38° 58′ 36″ N.	Long. 121° 57′ 30″ E.
Lat. 38° 57′ 30″ N.	Long. 121° 56′ 30″ E.
Lat. 38° 57′ 30″ N.	Long. 121° 57′ 30″ E.
Dalian Xin Gang Outer Anchorage:	
Lat. 38° 55′ 00″ N.	Long. 121° 59′ 00″ E.
Lat. 38° 56′ 48″ N.	Long. 121° 59′ 00″ E.
Lat. 38° 56′ 48″ N.	Long. 122° 02′ 00″ E.
Lat. 38° 55′ 00″ N.	Long. 122° 02′ 00″ E.

TRAFFIC SEPARATION SCHEME: *Traffic Separation Scheme of Da San Shan Channel, Port of Dalian:*

1. For the purpose of strengthening the traffic control of this port, so as to ensure the safety of navigation, all Chinese and foreign vessels passing through Da San Shan Channel shall comply with this Traffic Separation Scheme.

2. A Seperation Zone and a Seperation Line are established in Da San Shan Channel.

The Separation Zone, 0.3 nautical miles wide, is centred upon the following geographical positions:

(a) Lat. 38° 51′ 00″ N., Long. 121° 46′ 12″ E.
(b) Lat. 38° 54′ 24″ N., Long. 121° 46′ 12″ E.

The Separation Line connects the following geographical positions:

(c) Lat. 38° 55′ 00″ N., Long. 121° 46′ 12″ E.
(d) Lat. 38° 57′ 00″ N., Long. 121° 46′ 12″ E.

3. To both sides of the Separation Zone and Separation Line are Traffic Lanes for vessels of 20 m. or more in length, outside the Traffic Lanes are Inshore Traffic Zones for vessels of less than 20 m. in length.

The lines connecting the following geographical positions are boundaries between the Separation Lanes and the Inshore Traffic Zones:

A. The East Boundary:
(e) Lat. 38° 51′ 00″ N., Long. 121° 48′ 30″ E.
(f) Lat. 38° 54′ 24″ N., Long. 121° 48′ 00″ E.

B. The West Boundary:
(g) Lat. 38° 54′ 24″ N., Long. 121° 44′ 00″ E.
(h) Lat. 38° 52′ 57″ N., Long. 121° 44′ 00″ E.
(i) Lat. 38° 51′ 00″ N., Long. 121° 43′ 00″ E.

4. A Bifurcation-Junction Buoy "H1" is located at the North end of the Separation Zone (Lat. 38° 54′ 24″ N., Long. 121° 46′ 12″ E., fitted with a fog siren and a radar reflector). The Northern part of the semi-circle made by a 0.6 nautical mile radius from the marking buoy "H1" is a Precautionary Area. Vessels shall keep a proper lookout and take particular care while crossing/meeting with other vessels when navigating within this area.

5. Vessels shall keep their VHF radiotelephone in working order as soon as they enter Da San Shan Channel and report the fact to Dalian Harbour Superintendency Administration and keep in communication throughout the passage.

6. Vessels passing through Da San Shan Channel, shall proceed in the appropriate traffic lane in the general direction of the traffic flow and shall not enter or cross the Separation Zone. In case a vessel trying to avoid immediate danger or being forced to enter or cross the separation zone or separation line, she shall return to the original traffic lane and navigate in it as soon as possible, so as to avoid interference with the safety of navigation of other vessels.

7. Vessels shall normally enter or leave a traffic lane at its terminals; if entering or leaving the lane from its boundary side lines, they shall do so at as small an inclined angle to the general direction of the traffic flow as practicable.

8. Vessels entering harbour and proceeding to Gan Jing Zi or Xiang Lu Jiao Wharves, shall navigate in the appropriate traffic lane in the general direction of the traffic flow and turn into Gan Jing Zi Channel when near to the "H2" Light Buoy (Lat. 38° 57′ 21″ N., Long. 121° 46′ 12″ E.). Vessels departing from the above mentioned wharves shall also turn near to the "H2" Light Buoy and navigate in the appropriate lane along the general direction of the traffic flow.

9. Vessels directly entering the main port or SI ER GOU District or the Quarantine Anchorage West of the Separation Line, shall in day-time hoist a "Substitute 1" flag and a "W" flag vertically and shall at night show vertically three all-round lights of white, red and red in colour.

10. Vessels of less than 20 m. in length, when proceeding to or departing from Dalian Bay, shall navigate along the East Inshore Traffic Zone, while those proceeding to or departing from Hei Zui Zi or Xiang Lu Jiao, shall navigate along the West Inshore Traffic Zone. Those navigating along the traffic lane should act according to the requirements of this Scheme.

11. Vessels passing through Da San Shan Channel, while observing the articles of this Scheme, shall also strictly observe the International Regulations for Preventing Collision at Sea.

12. Anchoring, trawling and underwater planting in the water area within the limit of this Scheme and surrounding water area near its South end, are strictly prohibited.

13. Any vessel violating the requirements contained in this Scheme shall be punished with warning, fine or revocation of certificates according to the severity of the violation by Dalian Harbour Superintendency Administration.

14. *The application of this Scheme is to commence from February 1, 1984.* The Rules to be observed by merchant vessels passing through the Separation Scheme in Da San Shan Channel promulgated by Dalian Harbour Superintendency Administration on October 10, 1978 shall then be repealed simultaneously.

The Bureau of Harbour Superintendency of the
People's Republic of China, October 26, 1983.

DEVELOPMENTS: Container Berth: Length 270 m. under construction. Grain Terminal: To be built for vessels of 80,000 d.w.t. 2×750 t.p.h. shiploaders to be installed.

SHIPMASTER'S REPORT: 1978.
General:

Rule governing the prohibited passage through the inner area of the Encounter Rock:

Vessels passing through the Laotiehshan Channel as well as entering or leaving the port of Dairen besides observing the rules relating to the Laotiehshan Channel, must keep their course within the area from Encounter Rock (Lat. 38° 34.2′ N., Long. 121° 38.12′ E.) to the South outer joining line of Laotiehshan Prohibited Area and the North Encounter Rock to the East of meridian line of continent. Failing which, vessels to be held fully responsible for all consequences.

With exception of Laotiehshan and Changshan Channel of Pohai Gulf, no vessel is allowed to pass through any channel of Miaotao group islands.

Harbour regulations required to be observed by merchant vessels calling at Dairen Port.

When entering or leaving Dairen Harbour vessels must pass through channel between Daisansantao and Kwangpotsue. Vessels are not allowed to navigate within area 2.5 miles radius from Daisansantao Lighthouse, position Lat. 38° 51′ 50″ N., Long. 121° 49′ 29″ E. and 1 mile radius from Kwangpotsue Lighthouse position Lat. 38° 54′ 14″ N., Long. 121° 42′ 54″ E.

After entering joining line between Daisansantao and Kwangpotsue Lighthouses, radar, radio transmitter, radio-telephone, radio direction-finder, echo sounder, range-finder, sextant, firearms, flare signals and rockets of all kind are prohibited to be used.

In case danger occurs or vessel has to send any emergency message, the above-mentioned apparatus may be used, but vessels must report to Harbour Superintendency Administration immediately after using.

Vessels must wait for quarantine and Pilot within area as follows: Lat. 38° 57′ 00″ N., Long. 121° 41′ 00″ E. – Lat. 38° 57′ 00″ N., Long. 121° 46′ 00″ E. – Lat. 38° 56′ 18″ N., Long. 121° 41′ 00″E. – Lat. 38° 55′ 00″ N., Long. 121° 46′ 00″ E. In case this area is occupied, surrounding area may be used.

Documents:

First Port	Subsequent Ports
2 Maritime Declaration of Health.	0
2 Reports of Entry for foreign ships.	2
6 Crew Lists.	5
2 List of Specified Articles.	0
1 Report of Articles restricted for use in port.	1
4 Passenger Lists (if any).	0
1 Ship's Particulars for Identification.	1
2 Cargo Manifests.	1

The List of Specified Articles (money, gold and silver, but not cigarettes and spirits) is taken from port to port. All forms to be Chinese.

General Information: Dairen (Ta-lien) – B.A. Chart No. 3694:

In the fairway the turning basin and along Pier No. 4 East-side, at least 38 ft. of water. Length of the pier about 1,500 ft. Several berths for vessels up to 34 ft.

It was not possible to obtain information on the cranes, and they were not marked with SWL, so the following figures are only estimated:

Pier No. 1 W.-side =4 cranes about 5 tons.
Pier No. 2 E.-side =3 cranes about 3 tons.
Pier No. 2 W.-side =4 cranes about 4 tons.
2 cranes about 10 tons.
Pier No. 3 E.-side =2 cranes about 3 tons.
Pier No. 3 W.-side =4 cranes about 2 tons.
6 cranes about 10 tons.
Pier No. 4 E.-side =6 cranes about 6 tons.
Pier No. 4 W.-side =3 cranes about 6 tons.
One floating crane with 100 tons capacity.

About 8 tugs, 600 – 1,000 h.p. tugs are also used as pilot boat and to bring information and boarding party out to vessels at the anchorage.

One fresh water barge.

Three oil-barges, about 150, 500 and 800 tons.

Medium size shipyard, building vessels up to about 25,000 tons.

SHIPMASTER'S REPORT: September 1979.

Dairen (Ta-Lien) Dry Cargo Harbour:

1. Maximum size and d.w.t.: No restriction.

Draft (Charter Party) 34 ft., but verbally assured to be 35 ft. Probably 35 ft. berthing on rising tide, and discharging to remain, "always afloat" before the next LW.

No port handbook available.

2. (1) ETA's as per Charter Party and Owner's instructions.

(2) Radio Pratique not available.

(3) Pilotage. *(a)* Contact through Dairen Port Radio on Channel 16 VHF who will pass message. The Pilots are not in direct VHF communication with the ships, but do have walkie/talkie communication with the tugs.

(b) Pilots board from a tug at the anchorage.

(c) Pilotage is compulsory from the anchorage, and for shifting in the port.

(d) Pilots are on a three shift system and available at any time. Berthing, shifting, and/or sailing may be carried out at any hour of the day or night. Estimated berthing/shifting times were not updated, and were considerably earlier than initially estimated.

(4) On arrival, anchor without Pilot in the Quarantine Anchorage as shown on BA Chart No. 3694. Straightforward approach, without hazards into spacious anchorage with good holding ground. If quarantine anchorage is busy, anchor as close as may be practical to the North-Eastwards.

(5) Lighthouses operating normally, and no special hazards noted.

(6) Do not approach within 1 mile radius of Huang-Pai Tsui Light in position: Lat. 38° 51.9′ N., Long. 121° 42.8′ E., or within 2.5 miles from Nan-San-Shan Tao Island South Light in position: Lat. 38° 51.9′ N., Long. 121° 49.37′ E., or within the area to the North-Westwards of Encounter Rock in position: Lat. 38° 34.5′ N., Long. 121° 38.5′ E. which remain as designated prohibited areas.

(7) *(a)* Advise Dairen Harbour Radio on VHF Channel 16, your approach time and time and position of anchoring. Such advice is passed to Dairen Harbour Office.

(b) Telephone communication with the Agents office can be arranged through Dairen Harbour Radio. Calling on Channel 16, working on Channel 9.

(c) At anchor, whilst waiting a berth, monitor Dairen Harbour Radio on Channel 16, especially at 1100 and 1600 hrs. when Agents pass berthing instructions and other information on a schedule basis. The ship may contact the Agents by day or night at any time through Dairen Harbour Radio on Channel 16, whether anchored or alongside. The Agents office is open 24 hours a day.

(d) On no account is the main radio transmitter to be used after entering the harbour limits, and until well clear of the port after sailing. This rule is one of the few remaining from previous times, but must be strictly observed.

3. There are two modern tugs of 3,000 h.p., three tugs of 2,000 h.p., and three tugs of 1,600 h.p., in addition to the numerous smaller tugs. The two modern tugs use their own lines which are very heavy and difficult to handle. Other tugs use lighter lines, or ship's lines, without difficulty. Tugs are generally well handled and controlled. Two tugs used at each operation.

4. *Berths:* There are three main piers, each about 600 m. long, (Grain Silo on No. 1 Pier) with wharfage each side, and at the ends. All are well supplied with 5 tons SWL cranes, and have shed storage centrally. Also other berths available. There was no reliable information regarding the depth of water alongside at the other berths, but it would appear that about three ships of around 34 ft. draft could be accommodated simultaneously. There are regular ferry services between Dairen/Japan and Dairen/Shanghai, in addition to numerous other ferries which appear to be Chinese coastal traffic.

5. *Repairs:* Agents advice verbally was that hull, engine, and electrical repairs could be carried out, including winding of electric motors. Underwater cleaning of the hull can also be arranged.

6. *(a)* Provisions are mainly good, and reasonably priced. Worth purchasing most items when found available.

(b) Fresh water was available and good. Said to be available from most wharves, but we were supplied from a waterboat, as we were not allowed to take the supply from the wharf during discharge of grain.

(c) Fuel oils available. Diesel oil shipped was of good quality.

(d) Lubricating oil doubtful, but perhaps available in an emergency as this is a very busy and important shipping port.

(e) De-ratting exemption certificate renewed.

(f) Good and efficient medical facilities.

(g) Agent advised that there were no consular services.

(h) Mail service to Japan said to take up to one week, and to Europe or U.S.A. about 10–14 days. We received mail posted in Japan 6 days previously, but this mail might have arrived earlier as it was only delivered on ship's arrival.

7. Cargo consisted of 30,000 metric tons of American soft red Winter wheat. Discharging was effected by grabs into railway wagons, although we were berthed at the grain silo. Appeared to be no facilities for any other type of discharge.

Four gangs were employed round the clock, on shift system. Highest discharging rate 8,000, and lowest 500 m/tons per day. The reason for the fluctuations was the erratic availability of railway wagons. Grab drivers were not very skilled at clearing the hold bottoms, and time was lost there. No bulldozers were used, and the only mechanical aid was a grain trimmer which was used to transfer the grain from the wings into the centre of the hatches, but this was not very effective, and eventually the bottoms were all cleared using savealls on nets, and shovelling up the grain.

8. Rescue and Distress organisation not located.

9. As at this time, written rules and regulations are not available for either National or local conditions, but the "Old Regulations" have definitely been dropped, and a relaxed, friendly atmosphere now exists.

Documentation for Arrival:

Chinese forms only, are acceptable, except for the Crew Lists which were made on standard IMO forms, and articles restricted for use in port. (Bonded and Stewards store lists).

(1) Report of entry for foreign-going ship. (Original and one copy).
(2) Crew Lists. (Four copies).
(3) Report of articles restricted for use in port. (One copy).
(4) Import Manifest.
(5) List of Specified Articles, Foreign Currency, Gold, Silver, as belonging to the ship and/or members of the crew (1 copy).
(6) Maritime Declaration of Health. (One copy).

Papers submitted for examination:

Ship's Register.
Tonnage Certificate. (Not examined).
Loadline Certificate. (Not examined).
Derat or Derat Exemption Certificate.
Tonnage Tax Certificates. (Not available in our case).

The boarding party consisted of two each Port Health, Frontier Guards, Customs, Agents, and Harbour Office officials. Chinese forms "Report of Entry" and "Maritime Health Declaration" completed during initial boarding, but the List of Specified articles was completed and handed to the Customs official on berthing alongside. Money and shore passes were received on berthing alongside, but mail was delivered to the ship at the anchorage.

Frontier guard stationed at the foot of the gangway. Shore passes, Passports or Seaman's Books examined on every occasion of going ashore or coming aboard. A further checkpoint existed at the dock gate where Passports only were sighted on leaving and returning to the dock area.

Foreign currency could be freely exchanged at the Seaman's Club or the Friendship Store. Mandatory to return all Chinese currency prior to leaving the port.

Documents required before departure:

Report of Clearance. (One copy).
Crew Lists, (4 copies, but only required in the case of crew replacements, stating the reason therefore. If no changes, no crew lists required.)
Export Manifest. (One copy, but 2 if carrying dangerous cargo).
List of Cash returned. (5 copies. Two to the ship. Two to the Agent, and one to the Customs).
All shore passes to be returned without fail. (Counted and Examined).
All Seaman's Books/Passports (scanned and counted).

10. Very much relaxed regulations now in force. There was no thorough search and inspection of the ship and crew on arrival and departure, as previously. Regulations appear to have been revised about June 1979.

The bonded stores were not sealed up, and there was no restriction on usage other than that all items had to remain on board.

The old rules regarding the use of radar and other electronic navigational aids, have been lifted, and there is now no restriction whatsoever on their use. The prohibition on fishing by crew whilst at anchor, has also been lifted, as has the prohibition of chipping overside.

The only restriction imposed was regarding the use of the main Radio Transmitter, which was not to be operated whilst the ship was in the Harbour Area.

Oil and dirty ballast pollution regulations, are of course to be strictly observed at all times.

The grain cargo was thoroughly inspected for damage from sea water or other, and for insect infestation, prior to berthing. The inspection was carried out by 4 Chinese Government Agricultural Officials.

The Agent advised verbally that if the ship arrived at 34.5 ft. draft, it could be accommodated, and even up to 35 ft. draft maximum. However, in such case, it would probably mean that vessel would berth on a half flood tide, so that with a quick initial discharge into waiting rail transport, it would thus be possible to remain "always afloat" at the next LW.

The Agents are both willing and helpful.

Inspection was carried out for renewal of the De-Ratting Exemption Certificate, and the officials (three) advised that the inspection was completed and satisfactory, and that the new Certificate would be delivered to the ship through the Agents.

It is prudent to call the Agents by telephone in good time prior to completion of discharge and update the estimated completion time, so that they may advise the officials, Pilots and tugs as necessary.

SHIPMASTER'S REPORT: March 1980.

Berth: Oil Terminal No. 1 Berth (Lat. 38° 58′ 30″ N., Long. 121° 54′ 10″ E.).

Chart: B.A. 1798.

Draft: Departure draft, 38 ft. 4 in., fore and aft.

Approach: The approach to the Inspection/Pilot Boarding Anchorage is clear of obstructions but large concentrations of fishing vessels were encountered off Shantung Promontory.

Anchorage: S.E. of Hsien Chiao Light (Lat. 38° 57′ 45″ N., Long. 121° 59′ 05″ E.) and bounded by Positions:

Lat. 38° 55′ 42″ N., Long. 121° 59′ 00″ E.
Lat. 38° 56′ 48″ N., Long. 121° 59′ 00″ E.
Lat. 38° 56′ 48″ N., Long. 122° 02′ 00″ E.
Lat. 38° 55′ 42″ N., Long. 122° 02′ 00″ E.

Depth 15/18 fathoms.

Entry Inspection: Carried out at the Anchorage, during daylight hours, by 8 officials representing Customs, Immigration, Harbour Authority and Agency. The entry formalities were very easy and a Bonded Stores List was not required and the Bond was not sealed. The Immigration Officer checked all passports but a Crew muster was not required. After pratique has been granted and other entry formalities completed, 2 Immigration Guards stay on board until the vessel berths, and during this time they make out Crew Shore passes from Passports. After berthing, the Agent's representative lives on board during the vessel's stay and is very obliging and helpful.

Berth: A modern (1977) concrete dolphin structure with tower/elevator gangway and winches on all dolphins, 420 m. long, direction 149°/329°.

No. 1 (outside)	Max. size:	100,000 d.w.t.
	Depth:	17 m.
	Max. draft:	15 m.
	Max. length:	360 m. O.A.
	Loading arms:	4×12 in. Chicksans
	Max. load rate:	10,000 t.p.h.
No. 2 (inside)	Max. size:	50,000 d.w.t.
	Depth:	14 m.
	Max. draft:	12 m.
	Max. length:	230 m.

Fresh water is available on the berths but bunkers are supplied by barge from Dairen old port.

The berths are connected to the shore by a cantilever bridge approximately 0.5 miles long and vehicles are not permitted over the bridge.

There is a dirty ballast reception facility with a maximum rate of 3,000 t.p.h.

Berthing/Unberthing: Carried out at any time with 3 Pilots, 2 large and 1 medium tug for berthing and 2 Pilots and 2 large tugs for unberthing. Berthing at No. 1 Berth is always port side to and is straightforward with plenty of men for handling moorings. Starboard anchor is let go about 100 ft. off the berth. Pilots advise there can be moderate swell with E./S.E. winds.

On departure the vessel is swung to starboard off the berth by 2 tugs and the Pilots disembark shortly after the swing is completed. The Red Flashing Buoy in Lat. 38° 58′ 20″ N., Long. 121° 55′ 00″ E. is left to port when berthing and to starboard on sailing.

Communications: Agents: China Ocean Shipping Agency, Cable: Penavico, Dairen, require following message 7 days, or after sailing from previous port; name, call sign, nationality, ETA, draft fore and aft, cargo quantity to be loaded, crew's nationality and number, departure port and destination after Dairen.

72 hours: ETA, clean and dirty ballast to discharge, cash required.
48, 24 and 8 hours: ETA.
8/12 hours: ETA to Harbour Master Dairen.
8/12 hours: ETA, crew health condition to Port Health Dairen.

Dairen Port Radio can be contacted on VHF Channel 16 and will transfer call to Agents on Channel 9.

Agent: China Ocean Shipping Agency, will provide cash advance but any unused currency must be returned to Agent before departure. Rate of exchange March 1980 – 3.4 Yuan = £1.00. Foreign currency can be exchanged ashore. Agents will provide mini-bus/taxis for crew travel to Dairen Town which is about one hour's drive. After completion of loading there is a delay of 3 to 5 hours before documents are brought on board for signature. Immigration require all shore passes to be returned and Customs wish to sight Tonnage Dues Certificate provided on arrival. There is an armed guard stationed at the shore end of the gangway at all times, and he inspects shore passes and Passports when leaving and returning to the vessel.

Cargo: Taching Crude Oil. A.P.I.: 32 – 33, Pour Point: 28° – 33°C, Sulphur: 0.1%, Load Temp: 40° – 45°C.

Harbour Authority: As vessel's first call, authorities visited after arrival alongside and checked and inspected all safety and fire-fighting equipment, and required details of engine room bilge and sewage disposal whilst in port. Also checked Oil Record Book. They were a little concerned at direct mooring with wires and would perhaps be better to have rope pendants on mooring wires. Normal tanker port restrictions apply regarding pollution avoidance from oil, garbage and sewage, also no fishing is allowed either at anchorage or alongside. When alongside shore labour empty garbage receptacles once per day.

Chandler: Dairen Ocean Supply Corporation have a comprehensive range of catering supplies, and limited deck and engine stores. From the price list obtained the range and price of provisions was extremely competitive. As no stores were purchased quality cannot be commented upon although the Catering Officer did visit the store in Dairen and reported that most of the articles listed in their brochure seemed to be available and of reasonable quality. Our call being in Winter season, fresh vegetables, fruits, salads, etc., were in short supply.

Chandlers Cable Address: Supco, Dairen. Telephone 26820.

SHIPMASTER'S REPORT: September, 1980.

This is a brief report on port information obtained when vessel (42,764 g.r.t. 75,877 d.w.t.) called at Dairen, China in September, 1980 for loading Daqing Crude Oil.

Oil Terminal: Position Lat. 38° 59′ N., Long. 121° 54′ E.

Documents:

To be submitted to the Port Officials:

a) Crew Lists (Chinese Form) 6 copies
* Japanese crew members are required to fill in their names and address in Chinese characters
b) Report of entry for foreign-going ship (Chinese Form) 2 copies
c) Maritime Declaration of Health 1 copy
d) Import Manifest (Free Form) 1 copy
e) List of specified articles, foreign currencies, gold, silver belonging to ship and/or member of crew (Chinese Form) 1 copy
* Specified articles mean watch, camera, recorder and transistor radio, etc.
f) Vaccination List (Free Form) 1 copy
g) Application for discharge of dirty ballast water to shore facility (Chinese Form) 1 copy
h) Application for discharge of segregated ballast water into sea (Free Form) 1 copy
* Store List is not required
* Chinese Forms are obtainable by the Agent

To be shown to the Port Officials:

a) Ship's Register
b) Last Port Clearance
c) Derat Certificate
d) Load Line Certificate
e) Safety Equipment Certificate
f) Safety Construction Certificate
g) Safety Radiotelegraphy Certificate
h) Oil Record Book
i) Certificate of Financial Security in respect of Civil Liability for Oil Pollution Damage
j) Discharge Books, Passports and Yellow Cards

Pilotage: Compulsory for berthing and unberthing at the oil jetty. Pilot boards about 5 miles E.S.E. of the jetty.

No pilot boat, tug used.

Anchorage: Quarantine Anchorage surrounded by the following four points is established:

a) Lat. 38° 56′ 48″ N., Long. 121° 59′ 00″ E.
b) Lat. 38° 56′ 48″ N., Long. 122° 02′ 00″ E.
c) Lat. 38° 55′ 42″ N., Long. 122° 02′ 00″ E.
d) Lat. 38° 55′ 42″ N., Long. 121° 59′ 00″ E.

Nature of bottom is mud, depth of water 27 m. to 35 m.

Restrictions: Entering formalities, so-called "General Examination" made, as a general rule, during day time only by the Port Officials of Quarantine, Immigration, Customs and Harbour Superintendency Administration.

Berthing and sailing operations take place 24 hours a day with the exception that the vessel does not berth on Berth No. 2 during night time.

Berths: There are 2 tanker berths on the oil jetty with a length of about 400 m. and depth of 17 m. at Berth No. 1, 14 m. at Berth No. 2.

Max. Size:

Berth No. 1: 100,000 d.w.t., LOA approx. 260 m., max. draft 15 m.
Berth No. 2: 50,000 d.w.t., LOA about 230 m., max. draft 12 m.

Berth No. 1 is located on the offshore side of the jetty and Berth No. 2 on the inshore side.

Vessels generally berth portside alongside.

Health: Radio pratique is not available. The Master has to show the yellow cards together with a vaccination list and submit a Declaration of Health.

Radio: The Master or owner of a vessel, shall 7 days prior to vessel's arrival, submit the required forms to the Harbour Superintendency Administration through the Agent (Penavico, Dairen) for completion of entry formalities. They require:

a) Vessel's name
b) Nationality
c) ETA
d) Arrival draft
e) Quantity of cargo to be loaded at Dairen
f) Nationality and the number of the ship's personnel
g) Last port
h) Destination

The Master has also to radio to the Agent her ETA and arrival draft, 24 hours in advance of her arrival, through Dairen Radio, who is to advise the Harbour Superintendency Administration.

Furthermore, the Master is also required to advise her Agent 2 or 3 days prior to her arrival, of the quantities of the segregated water ballast and other water ballast retained on board at the time of arrival.

VHF: Dairen VHF station keeps a 24 hour listening watch on Channel 16 and is available to communicate with Agent (Penavico).

Tugs: Available. Normally 3 tugs join the vessel for berthing and 2 for unberthing.

Fresh Water: Available either from the shore or barge.

Fuel: Fuel oil and marine diesel oil are both available from barge.

Ballast: No ballast water is allowed to be discharged into the sea, except segregated ballast water.

Shore reception facilities with a capacity of 30,000 tons can receive 3,000 tons of oily ballast water per hour at a cost of 0.8 Yuan per ton.

According to the Regulations, the Authorities will allow discharge of ballast water into the sea subject to the oil content of the ballast water being less than 10 p.p.m. However, as a matter of fact, any ballast water loaded in cargo tanks is not allowed to be discharged into sea for the reason that the Master cannot give them any evidence of the oil content of the ballast water.

Therefore, there is no necessity for cleaning cargo tanks for ballasting purpose.

Customs Allowances: Ship's bonded stores are not sealed. No limitation to cigarettes or wine/spirit for use on board.

Identification Cards: Shore leave is granted from sunrise to midnight. Shore passes are issued by the Immigration Officer.

Crew members going ashore must carry the shore passes together with their passports or discharge books.

There is a seamen's club with a Chinese restaurant and some souvenir shops. Bus service is also available between the terminal and the seamen's club.

Cargo: The crude oil shipped at this terminal is the Daqing Crude. The properties of Daqing Crude which the vessel loaded in September 1980 at this terminal were as follows:

a) API 32.84
b) Temperature of cargo loaded 41.0°C. (106.0°F)
c) Pour point 24.0° – 25.0°C (77.0°F)

Cargo heating may be required.

Loading:

Berth	Size of arm flange	Number of arm
No. 1	12 in.	5
No. 2	12 in.	3

Max. loading rate is reported to be about 7,000 t.p.h. using 3 arms.

Notice of Readiness will be accepted at the time of completion of the general examination.

Agent: China Ocean Shipping Agency, Dairen Branch (Penavico Dairen).

Provisions: Available at a low price. Ship chandler will be arranged by the Agent.

Currency: (Rate October 1st, 1980.) US$1.00 equal to 1.4377 yuan; 1,000 yen equal to 6.7064 yuan.

Some foreign currency is allowed to be exchanged for Chinese currency at seamen's club.

SHIPMASTER'S REPORT: April, 1984.

I made a port call at Dairen in April 1984 and found after anchoring without Pilot that I had made a wrong passage in the channel, switching off radar, etc. in accordance with previous regulations.

There is now no restrictions or prohibitions on using navigational aids in the harbour.

When entering the Inner Harbour Anchorage without Pilot it is important for the Master, on the first visit, to know that there is a Traffic Separation Scheme and it is sometimes congested with vessels. See "Traffic Separation Scheme".

SHIPMASTER'S REPORT: October, 1984.

Master received following telex from Dairen Agent:

"When entering Dalian Harbour you must pass through Dasanshan Channel and navigate within Right Traffic Lane of Traffic Separation Scheme.

Separation Zone, 0.3 nautical miles wide, is centred upon following geographical positions:

Lat. 38° 51′ 00″ N., Long. 121° 46′ 12″ E.
Lat. 38° 54′ 24″ N., Long. 121° 46′ 12″ E.

Separation Lane is connecting following:

Lat. 38° 55′ 00″ N., Long. 121° 46′ 12″ E.
Lat. 38° 57′ 00″ N., Long. 121° 46′ 12″ E.

and turn into Ganjingzi Channel at Light Buoy H2 (Lat. 38° 57′ 21″ N., Long. 121° 46′ 12″ E.) then enter into Quarantine Anchorage:

Lat. 38° 59′ 08″ N., Long. 121° 42′ 30″ E.,
Lat. 38° 57′ 39″ N., Long. 121° 42′ 30″ E.,
Lat. 38° 57′ 39″ N., Long. 121° 45′ 00″ E.,
Lat. 38° 59′ 08″ N., Long. 121° 45′ 00″ E.

The East Boundary Line between the Separation Lane and the Inshore Traffic Zone is:

Lat. 38° 51′ 00″ N., Long. 121° 48′ 30″ E.,
Lat. 38° 54′ 24″ N., Long. 121° 48′ 00″ E."

HSINGKANG: 39.02 N. 117.41 E.

Also see "General" before first port

SHIPMASTER'S REPORT. (1974.)

B.A. Chart 2653. China Sea Pilot No. 32, Vol. 111.

NAVIGATION: The lighthouse in position Lat. 38° 55′ N., Long. 117° 59.5′ E. was visible at a distance of 10 miles, flashing every 10 secs., and is surrounded by 4 units buoys at a distance of about 180 m. from the tower. The Fairway to berth installations is being dredged, but presently appears to permit a draft of only 25 ft. LW with a draft of 27 ft. It was necessary to await HW before sailing.

PILOTAGE: Pilot and Port Authority Agent board at the anchorage. Pilot boat is large tug which may also be used as an ice-breaker, and has black hull with white superstructure. Pilots are careful and efficient, and speak some English. No VHF or HF radio facilities are available to the Pilot.

MAX. SIZE: See "Navigation". All berths are suitable for vessels of up to 9 m. draft.

TUGS: Six large tugs, and three smaller tugs.

BERTHING: The harbour is under considerable development, and at present has availability for about 15 or more vessels. All berths have rail connections and are approachable by trucks. There are no sheds at the berths and refrigerated stores are only available at Tientsin to where they are transported by train, lighters or trucks. Berths are equipped with rubber fendering, suitable for all requirements.

CARGO GEAR: There are some cranes available and in operation with a lifting capacity of about 10 tons. There are also about 3 floating cranes with capacities of up to about 80 tons. Where no cranes are available, vessels are required to load and discharge with ship's gear.

FRESH WATER: Connections at some points have still to be made, but otherwise fresh water is available at all berths. Due to the very long waiting time for berthing and the lack of some of the connecting points, it is advisable to arrive with full F.W. tanks.

PROVISIONS: It is essential to check all provisions when delivered since they may be of poor quality. Rejected goods are accepted back without problems.

NING/BO (Beilun): 29.52 N. 121.31 E. (See Plan Book)

BERTHING: Principal Wharves:

	Name	*Location*	*Construction*	*Length (m.)*	*Width (m.)*	*Depth (m.)*	*Capacity (t.)*
Work Area No. 1	Chezhan Lu	North bank of the river	Steel concrete pontoon	50.0 46.5	8.5	3.8	3,000
	Pier No. 1	North bank of the river	Steel concrete pontoon	40.0 40.0	9.0	3.8	3,000
	Pier No. 2	North bank of the river	Steel concrete pontoon	49.0	9.0	3.8	1,000
	Pier No. 3	North bank of the river	Steel concrete pontoon	40.0	9.0	3.8	500
	Barge	North bank of the river	Steel concrete pontoon	16.8	6.0	2.0	60
Work Area No. 2	Concrete Pier	East bank of the river	Platform beam type	25.5	8.5	3.0	200
	Framework Pier	East bank of the river	Framework platform	6.0	2.4	0.25	200
	Ferry	East bank of the river	Steel concrete pontoon	18.0	6.0	2.0	60
Work Area No. 3	Landing Stage	Xiabaisha	Steel concrete pontoon	50.0	8.5	3.8	2,000
	Berth Nos. 1 – 9	Xiabaisha	Platform beam type	250.0	33.0	5.0	5,000
	Berth Nos. 10 – 11	Xiabaisha	Platform beam type	80.0	9.8	4.5	3,000
	Berth No. 12	Xiabaisha	Platform beam type	31.0	15.4	4.5	3,000
	Berth Nos. 13 – 16	Xiabaisha	Platform beam type	92.0	15.4	4.5	3,000
Meixu Pier		Meixu	Steel concrete pontoon	20.0	6.1	3.0	50
Zhejiang Oil Refinery	Products Oil Pier	Eastward of Hongqiao	Steel concrete pontoon	46.0 46.0	9.0	3.2	3,000
Work Area No. 4	Harbour Boat West Pier	South side of Zhaobao Shan	Steel concrete pontoon	36.0	9.0	3.4	300
	Harbour Boat East Pier	South side of Zhaobao Shan	Steel concrete pontoon	36.0	9.0	3.4	300
	Coal Pier	Outer side of Zhaobao Shan	Gravity, retaining wall	310.0	—	10.7	20,000
Zhejiang Oil Refinery	Crude Oil Pier	In the vicinity of Qingliang Shan	Jetty with piers	619.4	—	11.0	25,000
Beicang Gang	Ore Transfer Pier	Eastward of Laoshu Shan	Platform beam type	351.0	36.5	18.2	100,000
				499.6	16.0	12.0	50,000
	Harbour Boat Pier	Eastward of Laoshu Shan	Platform beam type	172.0	12.0	5.0	3,000

CRANES: *Work Area No. 3:* 2 gantry cranes. (Berth Nos. 1 – 9). 2 tower cranes (Berth No. 12). 2×3 ton tower cranes. (Berth Nos. 13 – 16).

Work Area No. 4: 10 ton crane and loading machines at coal pier.

Ning/Bo continued on page 308

BULK HANDLING FACILITIES: 2 unloaders × 2,100 t.p.h. each. 2 loaders × 4,200 t.p.h. each.
TANKERS: See "Berthing".
FRESH WATER: Available.

SHIPMASTER'S REPORT: May, 1983.
Beilun
Port Limits: The port is part of Ningbo Port Complex and situated at approx. Lat. 29° 55.7′ N., Long. 121° 52.6′ E. Port consists of a pier accommodating 1 ship of 100,000 d.w.t. and a pier accommodating 2 ships of 25,000 d.w.t. – See B.A. Chart 1429.
Documents:
12 copies Crew List (preferably Chinese forms).
1 copy Customs List (Chinese form mandatory).
2 copies Health Declaration (Chinese forms mandatory).
4 copies List of Narcotics (free form).
2 copies Master's Report (Chinese forms mandatory).
12 copies Passenger List (free form).
4 copies Arms and Munitions List (free form).

Regarding Customs List: Following to be declared: tobacco, spirits, watches, cameras, radios, tape-recorders, T.V. sets, video recorders. Gold, silver jewels, foreign currency. All electronic equipment and cameras to be named with brand, number, etc.
Pilotage: Following received by cable from agents before arrival: "From outer sea steer to position Lat. 30° 10′ 15″ N., Long. 123° 03′ 20″ E. Then, course 218° to reach position Lat. 29° 45′ 00″ N., Long. 122° 40′ 36″ E. at 8.3 miles from Tung Ting Tae L/H bearing 326°. Then course 270° steering directly to pilot station between Lat. 29° 44′ 30″ N., – 29° 46′ 00″ N. – Long. 122° 20′ 30″ E. – 122° 22′ 30″ E. Use of other channels is forbidden. Please contact Pilots through VHF Channel 16 one hour before arrival pilot station."
Call: NINGBO Pilot VHF Channel 16. Pilot boards from pilot vessel which comes from Ningbo. Pilot vessel is same size as a large harbour-tug, white hull and long white superstructure. Funnel placed aft-part of superstructure, and painted in chinese colours – red band with yellow stars. Equipped with radar and VHF. Difficulties experienced in contacting Pilot on arrival and the difficulties are believed to be because of distance from the pilot vessels stationed in Ningbo and the ship waiting on the above pilot station.

3 Pilots boarded the ship, and the ship continued via the narrow but deep strait of Shih-Peng-Chiang.
Anchorages: Above designated pilotage area considered to be a good anchorage for large vessels. Minimum depths of 10 fathoms. Current setting NW and SE with rates up to 4 knots.
Restrictions: No information on restrictions upon entry. The Strait of Shih-Peng-Chiang and inwards to the port was found to be well equipped with lighthouses and other navigational aids (not shown on the chart). Shore based Decca-radars cover the area and give instructions to Pilots during navigation in these waters. The outermost of the radar station is situated in approx. position Lat. 29° 44.4′ N., Long. 122° 18.3′ E. Our vessel arrived at pilot station on LW. Echo-sounder was used and there was not found to be less water than charted.
Max. Size: The port is designed to accommodate 1 ship of 100,000 d.w.t. and 2 ships of 25,000 d.w.t. Minimum depth on the outer-pier said to be not less than 18 m. on LLW.

During ship's stay in Beilun at Outer Pier the LLW depth alongside the pier was found to be 22.30 m. Only measured by echo-sounder.
Health: No special requirements. Ship cleared by Health Authorities after arrival.
Radio: No special instructions. During voyage cables regarding ETA and arrival-conditions were sent to Penavico Beijing and Penavico Ningbo via Shanghai Radio XSG. When within range Ningbo Radio was used (XSN).
VHF: See "Pilotage".
Radar: See "Restrictions".
Tugs: 2 tugs of 3,200 h.p. stationed in port. Very efficient. Meet ships off the pier using tug's lines. They handle vessels "Japanese style" in making fast on ship's sides.
Berthing: The port consists of 2 piers built out into the sea, parallel to the coast. The piers are connected to the coast by a long bridge, estimated 3 km. long. The density of water was measured to be 1019 but varies.

The outermost pier is used for large vessels. It is equipped with a sonar docking system, which shows the distance between the pier and the ship's bow and stern, and the vessel's approach speed in cm. per second. This pier is for bulk cargo discharge only. It is well protected with large rubber fenders. The pier is high and fenders keep ship so far from the pier that most ships unable to use normal accommodation ladder. Necessary to use gangway at right angles to the ship. No gangway supplied from shore.
Cranes: The outermost pier is equipped with 2 large gantry cranes with grabs. They are Japanese built Hitachi-cranes 30 ton SWL. Grabs used are 9.5 cu.m. The cranes discharge from ship to a belt conveyor leading to storage facilities on shore. Estimated length of conveyor belt 3.5 km. During our stay the cranes did not work in wind force exceeding 10.8 m./sec., or in dense fog. Also not working during periods of rain.

The innermost pier is equipped with 2 plants designed for loading bags into ships. The plants are fed with bags from 2 belt conveyors coming from the storage/packing area on shore. The bags slide from the top of the plant to the ship's hold via a "snail". Plants are Japanese built.

None of the piers are designed for anything other than discharging bulk or loading bags. Maximum discharge rate unknown. Our ship, which was unloading potash was guaranteed 1,500 tons per day but more than 5,000 tons per day was experienced. Only one crane was used, and it was only working slowly, because of delays in the packing area. All cargo from the ship was bagged immediately after discharge.
Stevedores: Labour arranged by Agent. Working day and night without any stops, weather permitting.
Medical: Seaman's hospital in Ningbo about 45 km. from the port.
Density: Varying with tide but average 1019. Water discoloured by mud.
Fresh Water: Available from pipes on the pier. Delivery rate 18 t.p.h. Approximate cost 1.5 Yuan/Tons.
Fuel: No fuel on the pier. Not known whether any bunker supply in the area.
Consuls: None.
Hatches: Operated by ship's crew.
Customs Allowances: On arrival each crew had max. 1 bottle of spirits and 200 cigarettes. No objections was made to this. No cabins were searched. Neither were the Chief Steward's lockers with spirits, beer and slop chest checked. Chief Steward was allowed to take out any of the above mentioned goods for use during stay in port.
Cargo Gear: All cargo work carried out with shore gear.
Repatriation: Arrangements can be made. Crew members are transported to Shanghai by ship or train.
Time: GMT plus 8 hours.
Holidays: None.
Shore Leave: Crew members not allowed to go outside the gate situated on the shore end of the bridge connecting pier to shore. Distance from pier to gate about 3 km. There is a seaman's club in Ningbo. On request the club will arrange tours and sightseeing. The cost for a tour to Ningbo and return to the ship is 7.5 Yuan per man.
Identification Cards: Shore passes are issued on arrival. Each time a crew member steps ashore or comes aboard the ship, the shore pass and national passport should be shown to the Emigration Officer.
Watchman: An Emigration Officer is constantly on board checking passports each time people leave or come to the ship.
Telephones: Telephone placed on board for convenience of Agents, Stevedores, etc.
Regulations: Following received by cable from Agent before arrival: "Not permitted to use radio transmitters at anchorage or in port unless emergency. Must keep main engine, steering gear, rudder indicator, telegraph communication equipment, whistle/siren, gyro compass repeaters, radars and echo sounder in good condition, but not permitted to use any of them unless allowed by Pilot. Photographing and survey are not allowed in Chinese territorial waters, stay at anchorage or in port. The above regulations must be observed strictly."
Delays: No delays observed.
General: A ship's chandler from Ningbo is able to deliver all usual kinds of provisions.

Agent will arrange for laundry.

During the stay I was invited to see the packing area. The potash goes from the belt conveyor to 8 spouts, which weigh out the cargo and fill it into bags. Each spout capable of average 45 t.p.h. I was told that more equipment would be installed this year thereby doubling the packing capacity. Behind the packing house, there was a large area where ore of various kinds, which was discharged from large bulk-carriers at the outer pier, could be stored. The ore is reloaded into smaller ships at the inner pier using the same plants as when loading bags. These plants are designed for both bags and bulk. The loading rate of ore is said to be up to 4,000 t.p.h.
Developments: No information available.
Agent: China Ocean Shipping Agency, Ningbo Branch. No agent's port office at Beilun. No telex available from Ningbo. Cables from ship to Owners/Charterers and vice versa are taken by car to/from Ningbo which makes communication slow and expensive.

SHANGHAI: 31.14 N. 121.28 E.

Also see "General" before first port.
PILOTAGE: Pilot available 24 hours. Working VHF Channels 16 and 6. Pilot boards:
(a) vessels using Beicao Hangdao and Beicao Hangcao: between Lt. buoys "Y1" and "Y4";
(b) vessels using Nangcao Hangdao: between Lt. Buoys "47" and "49".

Send ETA at the outer roundabout, when at least 4 nautical miles from it, on Channels 6 or 16. Vessels making for Beicao Hancao should make a safety broadcast 3 nautical miles before entering it and on entry, broadcast their name and the time. Vessels intending to navigate in Yawosha Hangcao should be equipped with VHF Channel 6.
CIRCULARS:

China Ocean Shipping Agency Shanghai Branch
CIRCULAR

June 1, 1977

The VHF radiotelephone of China Ocean Shipping Agency Shanghai Branch is, from this day, open to foreign vessels calling at the port of Shanghai:
Channel: 11. (If Channel 11 is not available on board, the vessel may make contact with the Shanghai Harbour Radiotelephone Station (Channel 16) and then communicate with Penavico on the Channel appointed by that Station).
Call Sign: PENAVICO.
Working Hours: 0000 – 2400 hrs., continuous service day and night. (All ships anchored at Woosung Quarantine Anchorage and in its vicinity or moored at buoys – those berthed alongside wharves excluded – are requested to have their VHF radiotelephone station opened every day at the undermentioned times:

1115 – 1130, 1515 – 1530, 1915 – 1930 hrs.

in order to keep watch and receive any message such as berthing information, which Penavico may transmit to them. The ships which are not called in the above period of time may then close down their station. Ships which intend to communicate with us may call Penavico at any other time).

When using VHF radiotelephone, foreign vessels should observe "Provisional Regulations Governing the Use of VHF Radiotelephone by Foreign Vessels" issued by the Ministry of Communications of the People's Republic of China.

CHINA OCEAN SHIPPING AGENCY
SHANGHAI BRANCH

GUIDE TO FOREIGN VESSELS CALLING AT SHANGHAI
October, 1978

1. Regular Channel in Chusan Area:

Foreign vessels may navigate in the regular channel between the Chusan and Raffles Islands which is open to navigation, but are not allowed to navigate in other channels between these islands. (By the regular channel is meant the channel from Tongting Island, Steep Island, Elgar Island, Bonham Island, Button Island, Gutzlaff Island to Chang Kiang Kou).

2. Dangerous Area:

All vessels are to note and keep away from the dangerous area bounded by lines joining the following four points:

Lat. 30° 47′ 05″ N., Long. 123° 03′ 00″ E.
Lat. 30° 47′ 15″ N., Long. 123° 05′ 54″ E.
Lat. 30° 44′ 45″ N., Long. 123° 03′ 00″ E.
Lat. 30° 44′ 45″ N., Long. 123° 05′ 54″ E.

see Chart No. 1199

3. (a) The Chang Kiang Kou Light Vessel: See "Shipmaster's Report", dated July 1984.

4. (a) With the line joining Chang Kiang Kou light vessel and light buoy M-1 as a demarcation line.
  (i) Entrance Channel: The water area within 1,100 m. and on the Northern side of the line is the Entrance Channel.
  (ii) Departure Channel: The water area within 1,100 m. and on the Southern side of the line is the Departure Channel.

(b) With the line joining light buoys H12, H14, H16 and H18 as a demarcation line, the water area within 1,100 m. and on the Southern side of the line is open to navigation. The water area on the Northern side of the line is prohibited to navigation.

Shipmaster's Note:

Extensive dredging is taking place between the Pilot vessel and Woosung anchorage.

A buoyed channel has been established under the same project and several buoys have been re-positioned and laid above those charted in B.A. Chart 1602. All the buoys have new numbers.

DEVELOPMENTS: Container wharves at Wusong under construction. Two berths. Hitachi container crane (30.5 tonne) under construction.

Two coal wharves (4 berths) being re-built.

Seven new berths for vessels of 10,000 d.w.t. to be built.

SHIPMASTER'S REPORT: July, 1984.

Shanghai Entrance. Buoys as follows:

AAA Changkiangkou Lightvessel Lat. 31° 03′ 30″ N., Long. 122° 23′ 1″ E.

BBB Changkiangkou Lightbuoys M1 H11-H20 replaced by Buoys 44-49.

Buoy 44	31° 03′ 22″ N.,	122° 19′ 52″ E.	Fl. 3/10 secs.
Buoy 45	31° 03′ 14″ N.,	122° 16′ 58″ E.	Fl. 3/6 secs.
Buoy 46	31° 03′ 06″ N.,	122° 14′ 02″ E.	Fl. 3/10 secs.
Buoy 47	31° 03′ 00″ N.,	122° 11′ 06″ E.	Fl. 3/6 secs.
Buoy 48	31° 03′ 34″ N.,	122° 08′ 14″ E.	Fl. 3/10 secs.
Buoy 49	31° 04′ 11″ N.,	122° 05′ 26″ E.	Fl. 3/6 secs.

Pilot vessel moving in/area Buoy 47/49 serving/as pilot station.

SHIPMASTER'S REPORT: 1974.

B.A. Chart 1602. China Sea Pilot No. 32, Vol. 111.

Navigation: Marine flashing light Yangtse North – the position quoted in the Nautical Light Service 11 agrees with Pilot's information. Marine flashing light North Saddle – very weak, signals KK. Marine flashing light Gutzlaff Island – out of service.

The wreck shown on the chart between the entrance of the Wangpoo into the Yangtse Kiang and Buoy No. 51 (new numbering) has been removed.

On the Yangtse Kiang there has been considerable dredging, particularly between Buoy Nos. 54 and 51–3 (new numbering) in order to clear the Bar. According to the Pilot, until the present time, only vessels with less than 25 ft. draft could pass at slack water.

Following the Pilot's disembarkation, vessels proceeding Northbound should make an Easterly course to Lat. 31° 05′ N., Long. 122° 31′ E. and then alter course Northerly, Chi-ku Chiao Lt. (Amherst Rocks) should be passed at a distance of about 6-8 miles.

Buoy No. 51-0 (Entrance) is in position at Lat. 31° 04.9′ N., Long. 122° 10′ E. Same signal. Buoy No. 51 (Fairway) is in position at Lat. 31° 03.8′ N., Long. 122° 14′ E. Same signal. Buoy at Lat. 31° 12.8′ N., Long. 122° 19.1′ E. Non-existent. Buoy at Lat. 31° 07′ N., Long. 122° 22.5′ E. Flashing green every 3 seconds. Buoy Nos. 54 (now 51-2), 57 (now 51-3), 58 (now 53), and 61 (now 54) are in process of positional alterations. Characteristics are not as on chart. Shaweishan Lt. Gp.Fl. (2 and 1) 12 seconds was observed. Numbering of the buoys on the Yangtse is now changed, and the numbers given on the chart no longer apply. The buoys are spread-out in accordance with the depth of the river. Lt. Vls. No. 60 (old number) now carries the words Jui Dan, and is in approximately the same position. Lt. Vls. Ch'ang Chiang K'ou was replaced end-1974 for repairs, by a buoy with Radar reflector.

Documents: Clearance takes place quickly. On arrival the following documents are required:

6 Crew Lists.
Health Clearance Certificate.
List of Effects.
Declaration of Navigational Equipment. Make, type and quantity of Sextants, Binoculars, Radio Station Equipment and Emergency Signal, must be quoted.

If no pre-printed Chinese Forms are on board, the Authorities will accept the vessel's own forms, and will themselves carry out the transfer of information to their own documents.

When proceeding to another port within the People's Republic of China, only the Seamen's Books, Landing Permit and Seamen's Club Purchasing Cards are required. The Authorities will still require a list of Chinese currency remaining on board but only wish to know the total sum and not the amounts held by individual Crew members.

Pilotage: Pilots are requested via Shanghai Coastal Radio. Installation of a VHF service is planned within the next three years, but at present the pilot boat is not fitted with VHF, and no radio service is available for pilotage. Installation of Port Radar Service is planned within the next five years, but is presently not available.

Shanghai Harbour Control is equipped with VHF, and Pilots communicate with Harbour Control on Channel 10 concerning ship's movements. Traffic is passed in the Chinese language only and may be operated by the Pilot. A total of up to five Pilots board the vessel together with the Agent of the Harbour Authority. The Pilot boarding position is approximately Lat. 31° 05′ N., Long. 122° 01′ E. The main pilot craft is usually at anchor in that position, and the Pilots board from small launches. The main pilot craft corresponds closely to those used in Germany and the Netherlands, and has white superstructure and a white hull. Pilots are available day and night. Pilots are efficient, speak some English, and control the vessel most carefully. After the Pilot's boarding, no further use may be made of the vessel's own charts, and the Pilot brings his own charts with him.

Anchorage: The main quarantine and inward clearance zone is now on the Yangtse in the area of Lat. 31° 04′ N., Long. 121° 06′ E. (See 1978 Report below) and is of sufficient area to accommodate about 15 deep-sea vessels. The anchorage is good with sufficient depth for loaded vessels. The two quarantine areas shown on B.A. Chart 1602 (October 1974) have been abolished, and a new zone has been established due East of the Lt. Vls. Ch'ang Chiang K'ou, with middle point 10 miles due East of the Lt. Vls. extending about 5 miles by 5 miles.

A Notice to Mariners issued by the Shanghai branch of the China Ocean Shipping Agency, and dated December, 1974, reads as follows: "As Woosung Quarantine Anchorage is effected by the current of Changkiang, vessels anchored there are apt to drag anchor if no proper safety measures have been taken or there is negligence in keeping watch, thus resulting in grounding or collision with other vessels. To ensure safety of vessels at anchor, we hereby draw your attention to the following:

(1) Vessels waiting for berth or for other reasons drop anchor at Quarantine Anchorage, someone must be appointed to keep watch of the anchor.
(2) To have no less than 6 (six) shackles of anchor chain in the water.
(3) On the following occasions, watch should be re-inforced and, at the same time, have the engine ready against accidents:
  (a) Bad weather.
  (b) Wind force 6 and upwards.
  (c) Foggy and misty weather.
  (d) Stormy weather.
  (e) Spring tide.
(4) If a vessel is dragging anchor or any accident has happened to a vessel anchored at anchorage, the Captain of the vessel should report to this Agency *immediately*, enabling this Agency to make arrangement for sending Pilot on board or take other effective measures".

Restrictions: Permission to swing-out lifeboats must be obtained in writing from the Port Authority, through the Agent. If the request is made 24 hours in advance stating that the vessel's own country's laws require it to be done, then permission is given the same day, for the operation to be carried out the following day. Lifeboat engine trials are not permitted in view of the very intensive traffic on the Wangpoo, and the very strong current. No filming is permitted in the port area, but is permitted in the town with the exception of military installations. Electronic navigational equipment, navigational aids, echo-sounding equipment and radio may not be used except with the Pilot's permission during the approach to port.

Mooring: Mooring to buoys takes place with assistance of tug and mooring craft. Pilots manoeuvre vessel to forward buoy with use of the anchor which remains paid-out after tying up, and is only raised prior to sailing. Approximately one to one-and-a-half shackles used. Vessel is moored to buoys with four lines fore and aft, and slip-wires. Lines are paid-out in equal lengths either side through the mooring leads and not through the Panama hawse.

Tugs: When proceeding from buoys to alongside berth, tugs provide assistance in un-mooring, but not in berthing which is conducted by Pilot without tug assistance. When leaving the berth, tugs are used to assist, and use their own lines.

Berthing: Pier installations are partly damaged and have no fendering. If possible, vessels should have their own cork or wooden fenders.

Cargo Gear: Loading and discharging is by means of ship's gear. There are three heavy-lift floating cranes with lifting capacities of about 130 tons, and of modern construction. A number of mobile cranes are available with lifting capacities of about up to 5 tons.

Currency: For vessels tied to buoys there is an hourly boat-service to the Seaman's Club where foreign currencies may be changed into Chinese Yen, and where purchases may be made.

Provisions: Stores, alcohol and cigarettes are not sealed. Fresh provisions are available depending upon time of year. Sufficient quantities are available including beer, poultry, meat and fish. Ample advance notice is required.

Telephones: Telephone calls to foreign countries are possible either from the Agency or from the main Post Office in Nanking Road.

SHIPMASTER'S REPORT: 1978.

Anchorage: The anchorage, prescribed by the Agents to await the tide is the Chang Kiang Kou Anchorage, as shown on B.A. Charts 1602 and 1199, between the following positions:

A – Lat. 31° 00′ N., Long. 122° 25′ E.
B – Lat. 31° 00′ N., Long. 122° 32′ E.
C – Lat. 30° 56′ N., Long. 122° 32′ E.
D – Lat. 30° 56′ N., Long. 122° 25′ E.

Pilotage: The pilot station is as charted on B.A. Chart 1602 in position Lat. 31° 03.5′ N., Long. 122° 12′ E.

The pilot boat is equipped with VHF (Channel 16). They do reply to calls in the English language, but they have no authority to give any information concerning dates and times of proceeding up-river. (Those orders come by radio from PENAVICO). The pilot station however gives instructions by VHF to ships approaching the pilot station to pick up the Pilot, concerning speed, which side the pilot ladder, etc.

VHF in Port: For the VHF communication in port please see "Circulars".

Shipmaster's Report above dated 1974: The information concerning Navigation, Pilotage, Documents, etc., dated 1974 is still correct and up to date, except for the anchorage area Lat. 31° 04′ N., Long. 121° 06′ E., which we cannot place.

Quarantine Anchorage and Waiting Area: Ships are boarded and cleared at Woosung Quarantine Anchorage. It is also there that ships await berthing orders. About 15 deep-sea vessels can be accommodated at Woosung.

SHIPMASTER'S REPORT: 1979

General: The vessel followed the recommendations of the latest "Guide to Port Entry" and Admiralty Sailing Directions for approaches to pilot station and entrance buoys.

However, the latest information was cabled to vessel by PENAVICO SHANGHAI, as Agents (China Ocean Shipping Co.), as appended below, and confirmed by the Pilot and Harbour Official that boarded vessel.

The notable changes are: shift of position of Chang Kiang Kou Light Vessel, and in its 'old position' is new "M-1" buoy; the channel buoys are only 'fractionally different' from those given in latest amendment of Sailing Directions.

Anchorages seem to be variable, and vessels were anchored at both positions indicated by Admiralty Sailing Directions and "Guide to Port Entry"; vessels were also anchored to the North and East of the new position of light vessel.

Pilots are recommending that vessels buy the latest Chinese Charts for up to date information on approaches to Chang Kiang Kou and all the way to the Port of Shanghai, including Woo Sung anchorage; as most charts do not have the latest buoys and Light Floats for the river passage.

Message From Penavico: (NB: Bracketed notations are Master's remarks).

Pilot Station is in 31° 03′ 30″ N., 122° 12′ 00″ E.
Dangerous area: 30° 47′ 05″ N., 123° 03′ 00″ E. *(These positions*
30° 47′ 15″ N., 123° 05′ 54″ E. *are the same*
30° 44′ 45″ N., 123° 03′ 00″ E. *as indicated*
30° 44′ 45″ N., 123° 05′ 54″ E. *on charts)*

Regular channel: between Chusan and Raffles Islands: routing, Tengting Is, Steep Is, Elgar Is, Bonham Is, Butten Is to Gutzlaff to Chang Kiang Kou, other channels between Chusan – Raffles Islands NOT ALLOWED. *(Again same as publicised . . . but be very wary of concentrations of fishing craft in this area and nets extending some distance).*

Chang Kiang Kou Light Vessel: Lat. 31° 03′ 32″ N., Long. 122° 23′ 26′ E. Fl. 6 secs. *(high intensity light).* Light buoys between Chang Kiang Kou light vessel and pilot boat:

"M-1"	31° 03′ 00″ N., 122° 18′ 42″ E.	3 Fl./6 secs.

Red and White Chequered Can Shaped:

"H 12"	31° 03′ 45″ N., 122° 14′ 28″ E.	2 Fl./3 secs. Red.
"H 14"	31° 04′ 11″ N., 122° 12′ 11″ E.	2 Fl./1.5 secs. Red.
"H 16"	31° 04′ 37″ N., 122° 09′ 54″ E.	2 Fl./3 secs. Red.
"H 18"	31° 05′ 03″ N., 122° 07′ 59″ E.	2 Fl./3 secs. Red.

White Chequered Can Shaped:

"H 11"	31° 03′ 49″ N., 122° 15′ 03″ E.	2 Fl./3 secs.
"H 13"	31° 04′ 15″ N., 122° 12′ 47″ E.	2 Fl./1.5 secs.
"H 15"	31° 04′ 41″ N., 122° 10′ 30″ E.	2 Fl./3 secs.
"H 17"	31° 05′ 07″ N., 122° 08′ 14″ E.	2 Fl./3 secs.

Approach to pilot boat at Lat. 31° 03′ 30″ N., Long. 122° 12′ 00″ E. with a line joining Chang Kiang light vessel and light buoy M-1, as demarcation line for entrance channel/departure channel is at water area within 1,100 m. North or South of demarcation line. With line joining light buoys "H 12"/"H 14"/"H 16"/"H 18" as demarcation line, water area within 1,100 m. South of line open to navigation. ATTENTION: North of line not allowed to navigation . . . end of message.

Vessel's Own Observations:

With regards the latter demarcation line: this means leaving BOTH buoys i.e. "H 12/13", "H 14/15", "H 16/17" and "H 18", on the mariners starboard hand on entering and on the port hand when departing.

Caution: These buoys are very hard to observe in (a) rough sea at night and (b) daylight in similar conditions, however they can be distinguished on the radar screen. The 'run-in' from "M-1" buoy to pilot station is not a straight course as would appear from the demarcation line of the buoys, but would entail 2/3 courses if vessel keeps close to the buoys.

The Pilot on this occasion met the vessel abeam of "H 16" buoy.

There is a VHF service now operating from the pilot station, and information will be passed on Channel 16; Pilots once on board vary their channels but most commonly used is Channel 6.

Penavico have Channel 11, used from the Woosung anchorage; they also say it can be used in port, but Pilots instructions are that it cannot be used in port. There is a set time given to vessels to listen in whilst at the anchorage, again if vessel does not have Channel 11 for direct communication then Penavico will call through Channel 16 and ask which Channel vessel has available (if nothing suitable then message will be passed on Channel 16).

Echo sounder has to be switched off when the Pilot boards.

Radar can and will be used by Pilots for river navigation and docking purposes, however they will advise vessel on this point.

Pilot boards with "Harbour Official" who appears to do the 'initial clearance' whilst proceeding up river; if vessel does not have Chinese entry forms, these will be given to vessel to fill in on way up river. (They would not accept our IMO forms or vessels forms). The "Harbour Official" will also require the Master to present the following: (1) Deadweight of vessel; (2) Summer loaded draft; (3) Light ship draft; (4) Drafts for all conditions, i.e. Winter, tropical; (5) FWA; (6) If vessel has "delta" marks then only the highest gross and nett tonnage is acceptable; (7) BHP/NHP/IHP of main engine; (8) Type of engine; (9) Capacity of fuel oil and fresh water tanks; (10) He will inspect and take down the issue date and expiry date of: Safety Equipment Certificate, Safety Radio Certificate, Safety Construction Certificate, Load Line Certificate, Tonnage Certificate, Derat, Registry. (Much of this information is again required at main clearance procedure also if vessel's first call at Shanghai, then Penavico will require all the above and more on an official printed form).

Inward bound vessels will generally anchor at Woosung Anchorage for main quarantine clearance, customs clearance and immigration clearance, I found that this was quite straightforward and was done in less than one hour.

On departure the vessel has an 'inspection'; this entails all members of the vessel mustering in an area designated by the officials, whilst they then go through the discharge books/passports and their own issue of 'shore pass'. During this period three men are detailed (one from each department) to go right round the vessel, into every cabin, locker, store rooms, etc., with the port officials.

Movement of vessels takes place 24 hours a day for berthing and unberthing.

Steaming time from Pilot to Woosung Anchorage depends largely on tides and speed of vessel but averages 3 – 6 hours, for berthing from Woosung Anchorage into Shanghai port about 2 – 3 hours. However, there are wharves right throughout the river on both sides, this time only indicates the centre of Shanghai Docks.

SHIP'S OFFICER'S REPORT: June 1979.

Vessel discharged 21,000 tons of phosphate in 30 days using 2 gangs only.

Dredging is underway in the river and the max. draft at present is 9.5 m.

The buoyage system is being changed.

SHIPMASTER'S REPORT: July 1979

Vessel on time charter to Chinese National Chartering Corporation of Peking.

Approaches: Hua Niao Shaw Light very good, solar-powered. I was advised to anchor within the Changkiangkow anchorage, this is clearly defined on Chart BA. 1602. The anchorage area is 24 square miles; depths of water vary between 6 and 9 fathoms, our draft was 29 ft. fresh water.

Pilot: Location between buoys H17/18 which is some three miles further than charted location. Pilot boards from a small motor launch, usually only one Pilot to take vessel to Woosung Quarantine area. Pilot cutter equipped with VHF Channel 16 *only.*

Woosung Quarantine/Inspection Area: This anchorage is located some 35 miles from the pilot station. After anchoring vessel awaits the arrival of one additional Pilot to assist for the journey up the river to Shanghai. In addition to the extra Pilot, the following personnel board: Harbour Master, Port Health Doctor, Immigration, Customs and Agent. On this vessel the procedure of inspection of papers, etc., was undertaken in the Owner's suite in the presence of the Master and Purser. An adequate supply of soft drinks is recommended.

The following documents were required:

7 Crew Lists, one copy to remain on board
1 Copy EAL 127-private effects, radios, cameras, etc
1 List of foreign currency on board
1 List of bonded stores
1 List of provisions
1 List of all previous ports of call for current voyage
1 Health list
1 Vaccination list of valid certificates
All ship's certificates/Register
All discharge books & CDC examined

After Inspection: Light dues certificate is issued (optional 30 days/3 months) Shore passes issued by Immigration. Friendship store passes issued to record purchases.

Alongside Kai Ping Wharf: Visit by Customs, security man placed at foot of gangway, all ships personnel checked by him before proceeding ashore.

Agents: Only one agency, the China Ocean and Shipping, could be contacted throughout the 24 hour period, by calling "Penavico" on VHF Channel 11, this proved to be a very satisfactory method of communication provided one speaks very slowly. The boarding Clerk visited the vessel every morning to attend to any ship requirements eg. Telex messages and mail.

Stevedores: Work around the clock but do stop for meal breaks, number of men per gang varied depending upon the nature of the cargo.

Density: At all stages of the tide 1000.

Fresh Water Supply: Available alongside the wharf at a rate of 50 t.ph, also available at buoys/stream – cost three times more than alongside.

Marine Bunkering: Suppliers are China Marine Bunkering & Supply Co. – Grades of fuel, Marine Fuel oil 1000 Redwood. Light diesel K/centistroke, 3-8 at 20°C and heavy diesel 20 K/centistrokes at 50°C. Very efficient service.

Consuls: Japan only.
Classification Society: Chinese only.
Cargo Surveyors: Arranged through the Harbour Authority.
Customs Bond: Normally British ships are not sealed, this also applies to European Maritime vessels except Greece, much depends upon the discretion of the Customs, however Philippino, Japanese and some Hong Kong operated vessels are sealed
Airport: Located about 25 kms N.W. from the city, the only foreign airline operators are JAL (Japan Airlines).
Important Regulations: Whilst within port limits radar *not* to be switched on without permission of Harbour Authority, this even applies once vessel entered; passed inspection, etc., and wish to do any repairs to Radar. Dock trials are not permitted
Hospitals: There is one special hospital for seafarers.
Dental Treatment: Arranged in the normal way through the Agents.
Laundry Service: Good and inexpensive compared with Europe. No dry cleaning
Sailing Inspection: Carried out one hour before sailing, passes collected, money returned to Agents, ships' papers checked, etc.
General: I found the Chinese most friendly and only eager to help and accommodate us. The Seamen's Club organises various outings to ballet, the world famous Yu Gardens, acrobatics, football matches, etc.

SHIPMASTER'S REPORT: March 1980.
Tanker's Particulars:
Ship's Length: 170.75 m. Breadth: 26.09 m. Depth: 14.9 m.
Summer Deadweight: 31,600 M/T. Draft: 11.33 m.
Loaded Shanghai: 19,897.184 M/T Chinese motor gasoline.
Sailing Draft: Forward 8.54 m. Aft 9.02 m.
Navigation: British Admiralty Charts 1601 and 1602 (T) proved most reliable with all buoys in their correct position exhibiting the correct lights. Where the channel is constantly dredged, there are a few extra buoys but they follow the normal numbering of odd on the starboard hand and even to port when proceeding up river.
Anchorage: Anchorage is obtained in the area shown S.E. of Chang Kiang Kou Light Vessel. There is a constant strong tide running here and at least 6 shackles in the water are recommended.
Pilotage: The pilot vessel is anchored at Lat. 31° 03.4′ N., Long. 122° 12′ E. The Pilots listen on Channel 16 but berthing information usually comes from the Agents "Penavico", through Shanghai Radio. When picking up the Pilot, vessels are told to approach as close to the pilot vessel as possible and the Pilot boards from a small boat. An approach to the pilot station may be made either by keeping well South of the Yangtze Channel or going up the channel until Buoy 14, then cutting down South.
Radio: Pilots listen to VHF Channel 16. The national agency "Penavico" listen on Channel 11 for all ships. Foreign ships are especially asked to listen at the following times when they will normally be contacted. 0715 hrs., 1115 hrs., 1515 hrs. and 1915 hrs.
The Agents "Penavico" also have Channel 27 if Channel 11 is busy.
Papers: The following papers are required, and must be on the Chinese printed forms:

- 2 Report of entry for foreign-going ship
- 1 Maritime declaration of health
- 1 Report on articles restricted for use in port
- 7 Crew lists
- 1 List of specified articles, foreign currencies, gold, silver belonging to the ship and/or members of the crew.
- 1 Import manifest showing goods to be imported into Shanghai

A boarding official came aboard with the Pilot and all the Chinese forms were completed en route to the quarantine anchorage. At the outer anchorage, no persons boarded.

Clearance and pratique at the quarantine anchorage took about an hour. After this all the officials and the Pilot left.

All non-Chinese are given Identity cards. Each man receives a currency card and all cash drawn on the ship is noted and stamped by the Agent. All unused cash must be returned.

Shore leave is allowed from the quarantine anchorage. There are two boats daily, one at 0900 hrs. and the other 1600 hrs. Vessels requiring this boat must hoist the flag signal "DI".

Berthing: All berthing information comes from the Agent via VHF. Berthing is carried out day or night at Kao Chiao Sha which is on the North bank of the river between Buoys 107 and 108. Berth is in position Lat. 31° 20.75′ N., Long. 121° 32.1′ E. Vessels loading berth starboard side alongside so they can turn around in the narrow river whilst still light draft. Vessels turn in the river off Buoy 110. The turn is made to starboard using the engines and a tug which pushes on the port bow. Sometimes the starboard anchor is used. At the berth one tug only is used, this not being made fast at all. It simply pushes where required.

Moorings are 4 headlines plus 2 springs forward with 4 sternlines and 2 springs aft. Whilst approaching the berth, the port anchor is run out although its usefulness is doubtful.

The actual berth is a "T" shaped concrete pier on wooden piles. It is about 400 ft. long with a maximum depth of 9.5 m. 560 ft. is about the maximum length for the berth. Springs go to the jetty whilst other lines go to the shore. Despite the heavy traffic on the river, very little surging was experienced on the berth.

No fuel, water, diesel available ex-berth. All available from a barge but not during cargo operations. No slop facilities ashore, again a barge is available if required.

No ballast to be discharged into the river without the permission of the Harbour Authorities. A written application must be made through the Agents for the authorities to inspect the ballast. After inspection, permission may then be given to start de-ballasting, This ballast check is most stringent and samples of every tank are taken plus a really good visual check carried out. The oil record book is also checked by the authorities.

Whilst at the berth, no visitors are allowed on board. Four armed border guards are on the vessel at all times. Two maintain a continuous gangway watch recording the arrivals and departures. Customs officials also stay on board throughout. Whilst at the berth, an Agents representative also stays aboard.
Facilities: Medical facilities are good and they are arranged by the ship chandler. Provisions and stores are readily available and found to be of good quality and inexpensive. The bond was not sealed.

There is a free transport to and from the seaman's club in Shanghai which was about 1 hour's drive. Photography is allowed in all areas except the docks and military areas.

Notice of readiness is only accepted during office working hours. Anything required such as cargo surveyors, tank inspectors, bills of lading or certificates of quality and quantity must be applied for in writing well in advance.

Repatriation is possible, the ship chandler provides all the necessary alien application forms.

If tankers wish to take a shore line sample at the start of loading, written permission must be applied for.

Tankers should be well advised to ballast well out to sea as the water 20 miles from shore tends to contain a lot of mud and sand.
Sailing: All unused cash, plus currency cards and passes are collected prior to sailing. Papers take about 4 hours. The maximum river draft is 9.0 m. fresh water.

Two tugs are used for unmooring, one each end and use either tug's or ship's gear. Before singling up, the anchor is pulled home if possible. Ships with deep draft have two Pilots who speak good English. Once the vessel is off the berth, the tugs depart. There seemed to be no radar assistance or traffic control on the river. Each Pilot depended greatly on the whistle and smaller craft seemed to keep the main channel clear. Pilots sometimes talked ship to ship on VHF, Channel 6.

In the main Yangtze River there are three shallow areas and if drawing 9.0 m., they cannot all be transitted in one passage. First after un-mooring day or night, the vessel clears the shallow area off Buoy 58 at high water. Anchor is then dropped with 6 shackles on deck in the anchorage just off Buoy 57. Just prior to the next high tide, vessels weigh anchor to pass shallow areas off Buoy 55 and 23, the latter being passed at high water. The minimum under keel clearance recorded was 1.0 m.

Pilots depart as close to the pilot vessel as possible, taking ships South of the channel to do this. It is up to the Master whether he remains outside the channel or goes back in it after the Pilot has left.
Conclusion: There were no musters of officers or crew. No problems were encountered and all shore personnel seemed pleasant and polite.

The berth itself was rather old with no gear at all. Ships gangway was used and ship's derrick was required to handle 2 × 6 in. hoses. Loading rate was 450 t.p.h. and the jetty was manned at all times.
Agency Notice: To the Master,
m.v. "..."
Dear Captain,

Please find attached herewith the following forms required by the Port Authorities at the Joint Inspection which is to be conducted on your vessel's arrival at the Quarantine Anchorage:

- 2 Report of Entry for foreign-going ship
- 1 Marine Declaration of Health
- 1 Report on articles restricted for use in port.
- 1 set of specified articles, foreign currencies, gold, silver belonging to ship and/or members of crew
- 7 sets Crew List

Please have the above forms filled in now and be ready to submit them to the port officials on their boarding for Joint Inspection.

Yours faithfully,
China Ocean Shipping Agency
Shanghai Branch

SHIPMASTER'S REPORT: October 1980.
Shanghai pilot vessel will now give orders about proceeding inwards to pilot vessel or remaining outside at designated anchorage. Pilot checked to make sure we had anchored in the correct anchorage. Channel buoys as per "Guide to Port Entry". See "Circulars – Guide to foreign vessels calling at Shanghai – Para 3(c)". These buoy positions and descriptions were transmitted to vessel but only 4 hours before arrival at channel entrance. Pilot vessel tends to be between Buoys 14 and 18. All other information in the Shipmaster's reports appears to be still valid.

Since about July 1980 foreigners changing money ashore are issued with Bank of China foreign exchange certificates, likewise if drawing cash from Agent. Denominations of 50, 10, 5, 1, 0.50, 0.10 yuans. The certificates (like banknotes) are printed with the following:

"The yaun expressed in this certificate is equivalent in value to the Renminbi yuan. This certificate can only be used within China at designated places. No request to register its loss will be accepted by the Bank".

The Renminbi Yuan is the official currency unit. Designated places are Seaman's Club, Seaman's Store and Friendship Store. The two former have cheaper prices for seamen. Other designated places are the tourist hotels.

For tankers, authorities require a cargo manifest of nil cargo, no special form required.

For entry papers the official Chinese forms must now be used for 'Report of Entry for Foreign-Going Ship, Crew List and List of Specified Articles, Foreign Currencies, Gold, Silver belonging to Ship and/or Members of Crew'. If not available on board before arrival then vessel must now transfer the information to the Chinese forms.

If vessel coming from what they describe as a cholera infected port then the following are required. A statement of ballast quantities and disposition (required from clean port also) and where the ballast came from, i.e. open sea or which river. They are most concerned that no ballast is imported from a cholera infected port. Ballast is inspected by quarantine officials and the slightest "rainbow". on top means the top

SHIPMASTER'S REPORT: 1978.

Anchorage: The anchorage, prescribed by the Agents to await the tide is the Chang Kiang Kou Anchorage, as shown on B.A. Charts 1602 and 1199, between the following positions:

A – Lat. 31° 00′ N., Long. 122° 25′ E.
B – Lat. 31° 00′ N., Long. 122° 32′ E.
C – Lat. 30° 56′ N., Long. 122° 32′ E.
D – Lat. 30° 56′ N., Long. 122° 25′ E.

Pilotage: The pilot station is as charted on B.A. Chart 1602 in position Lat. 31° 03.5′ N., Long. 122° 12′ E.

The pilot boat is equipped with VHF (Channel 16). They do reply to calls in the English language, but they have no authority to give any information concerning dates and times of proceeding up-river. (Those orders come by radio from PENAVICO). The pilot station however gives instructions by VHF to ships approaching the pilot station to pick up the Pilot, concerning speed, which side the pilot ladder, etc.

VHF in Port: For the VHF communication in port please see "Circulars".

Shipmaster's Report above dated 1974: The information concerning Navigation, Pilotage, Documents, etc., dated 1974 is still correct and up to date, except for the anchorage area Lat. 31° 04′ N., Long. 121° 06′ E., which we cannot place.

Quarantine Anchorage and Waiting Area: Ships are boarded and cleared at Woosung Quarantine Anchorage. It is also there that ships await berthing orders. About 15 deep-sea vessels can be accommodated at Woosung.

SHIPMASTER'S REPORT: 1979

General: The vessel followed the recommendations of the latest "Guide to Port Entry" and Admiralty Sailing Directions for approaches to pilot station and entrance buoys.

However, the latest information was cabled to vessel by PENAVICO SHANGHAI, as Agents (China Ocean Shipping Co.), as appended below, and confirmed by the Pilot and Harbour Official that boarded vessel.

The notable changes are: shift of position of Chang Kiang Kou Light Vessel, and in its 'old position' is new "M-1" buoy; the channel buoys are only 'fractionally different' from those given in latest amendment of Sailing Directions.

Anchorages seem to be variable, and vessels were anchored at both positions indicated by Admiralty Sailing Directions and "Guide to Port Entry"; vessels were also anchored to the North and East of the new position of light vessel.

Pilots are recommending that vessels buy the latest Chinese Charts for up to date information on approaches to Chang Kiang Kou and all the way to the Port of Shanghai, including Woo Sung anchorage; as most charts do not have the latest buoys and Light Floats for the river passage.

Message From Penavico: (NB: Bracketed notations are Master's remarks).

Pilot Station is in 31° 03′ 30″ N., 122° 12′ 00″ E.
Dangerous area: 30° 47′ 05″ N., 123° 03′ 00″ E. *(These positions*
30° 47′ 15″ N., 123° 05′ 54″ E. *are the same*
30° 44′ 45″ N., 123° 03′ 00″ E. *as indicated*
30° 44′ 45″ N., 123° 05′ 54″ E. *on charts)*

Regular channel: between Chusan and Raffles Islands: routing, Tengting Is, Steep Is, Elgar Is, Bonham Is, Butten Is to Gutzlaff to Chang Kiang Kou, other channels between Chusan – Raffles Islands NOT ALLOWED. *(Again same as publicised . . . but be very wary of concentrations of fishing craft in this area and nets extending some distance).*

Chang Kiang Kou Light Vessel: Lat. 31° 03′ 32″ N., Long. 122° 23′ 26′ E. Fl. 6 secs. *(high intensity light).* Light buoys between Chang Kiang Kou light vessel and pilot boat:

"M-1"	31° 03′ 00″ N.,	122° 18′ 42″ E.	3 Fl./6 secs.

Red and White Chequered Can Shaped:

"H 12"	31° 03′ 45″ N.,	122° 14′ 28″ E.	2 Fl./3 secs. Red.
"H 14"	31° 04′ 11″ N.,	122° 12′ 11″ E.	2 Fl./1.5 secs. Red.
"H 16"	31° 04′ 37″ N.,	122° 09′ 54″ E.	2 Fl./3 secs. Red.
"H 18"	31° 05′ 03″ N.,	122° 07′ 59″ E.	2 Fl./3 secs. Red.

White Chequered Can Shaped:

"H 11"	31° 03′ 49″ N.,	122° 15′ 03″ E.	2 Fl./3 secs.
"H 13"	31° 04′ 15″ N.,	122° 12′ 47″ E.	2 Fl./1.5 secs.
"H 15"	31° 04′ 41″ N.,	122° 10′ 30″ E.	2 Fl./3 secs.
"H 17"	31° 05′ 07″ N.,	122° 08′ 14″ E.	2 Fl./3 secs.

Approach to pilot boat at Lat. 31° 03′ 30″ N., Long. 122° 12′ 00″ E. with a line joining Chang Kiang light vessel and light buoy M-1, as demarcation line for entrance channel/departure channel is at water area within 1,100 m. North or South of demarcation line. With line joining light buoys "H 12"/"H 14"/"H 16"/"H 18" as demarcation line, water area within 1,100 m. South of line open to navigation. ATTENTION: North of line not allowed to navigation . . . end of message.

Vessel's Own Observations:

With regards the latter demarcation line: this means leaving BOTH buoys i.e. "H 12/13", "H 14/15", "H 16/17" and "H 18", on the mariners starboard hand on entering and on the port hand when departing.

Caution: These buoys are very hard to observe in (a) rough sea at night and (b) daylight in similar conditions, however they can be distinguished on the radar screen. The 'run-in' from "M-1" buoy to pilot station is not a straight course as would appear from the demarcation line of the buoys, but would entail 2/3 courses if vessel keeps close to the buoys.

The Pilot on this occasion met the vessel abeam of "H 16" buoy.

There is a VHF service now operating from the pilot station, and information will be passed on Channel 16; Pilots once on board vary their channels but most commonly used is Channel 6.

Penavico have Channel 11, used from the Woosung anchorage; they also say it can be used in port, but Pilots instructions are that it cannot be used in port. There is a set time given to vessels to listen in whilst at the anchorage, again if vessel does not have Channel 11 for direct communication then Penavico will call through Channel 16 and ask which Channel vessel has available (if nothing suitable then message will be passed on Channel 16).

Echo sounder has to be switched off when the Pilot boards.

Radar can and will be used by Pilots for river navigation and docking purposes, however they will advise vessel on this point.

Pilot boards with "Harbour Official" who appears to do the 'initial clearance' whilst proceeding up river; if vessel does not have Chinese entry forms, these will be given to vessel to fill in on way up river. (They would not accept our IMO forms or vessels forms). The "Harbour Official" will also require the Master to present the following: (1) Deadweight of vessel; (2) Summer loaded draft; (3) Light ship draft; (4) Drafts for all conditions, i.e. Winter, tropical; (5) FWA; (6) If vessel has "delta" marks then only the highest gross and nett tonnage is acceptable; (7) BHP/NHP/IHP of main engine; (8) Type of engine; (9) Capacity of fuel oil and fresh water tanks; (10) He will inspect and take down the issue date and expiry date of: Safety Equipment Certificate, Safety Radio Certificate, Safety Construction Certificate, Load Line Certificate, Tonnage Certificate, Derat, Registry. (Much of this information is again required at main clearance procedure also if vessel's first call at Shanghai, then Penavico will require all the above and more on an official printed form).

Inward bound vessels will generally anchor at Woosung Anchorage for main quarantine clearance, customs clearance and immigration clearance, I found that this was quite straightforward and was done in less than one hour.

On departure the vessel has an 'inspection'; this entails all members of the vessel mustering in an area designated by the officials, whilst they then go through the discharge books/passports and their own issue of 'shore pass'. During this period three men are detailed (one from each department) to go right round the vessel, into every cabin, locker, store rooms, etc., with the port officials.

Movement of vessels takes place 24 hours a day for berthing and unberthing.

Steaming time from Pilot to Woosung Anchorage depends largely on tides and speed of vessel but averages 3 – 6 hours, for berthing from Woosung Anchorage into Shanghai port about 2 – 3 hours. However, there are wharves right throughout the river on both sides, this time only indicates the centre of Shanghai Docks.

SHIP'S OFFICER'S REPORT: June 1979.

Vessel discharged 21,000 tons of phosphate in 30 days using 2 gangs only.

Dredging is underway in the river and the max. draft at present is 9.5 m.

The buoyage system is being changed.

SHIPMASTER'S REPORT: July 1979

Vessel on time charter to Chinese National Chartering Corporation of Peking.

Approaches: Hua Niao Shaw Light very good, solar-powered. I was advised to anchor within the Changkiangkow anchorage, this is clearly defined on Chart BA. 1602. The anchorage area is 24 square miles; depths of water vary between 6 and 9 fathoms, our draft was 29 ft. fresh water.

Pilot: Location between buoys H17/18 which is some three miles further than charted location. Pilot boards from a small motor launch, usually only one Pilot to take vessel to Woosung Quarantine area. Pilot cutter equipped with VHF Channel 16 *only*.

Woosung Quarantine/Inspection Area: This anchorage is located some 35 miles from the pilot station. After anchoring vessel awaits the arrival of one additional Pilot to assist for the journey up the river to Shanghai. In addition to the extra Pilot, the following personnel board: Harbour Master, Port Health Doctor, Immigration, Customs and Agent. On this vessel the procedure of inspection of papers, etc., was undertaken in the Owner's suite in the presence of the Master and Purser. An adequate supply of soft drinks is recommended.

The following documents were required:

7 Crew Lists, one copy to remain on board
1 Copy EAL 127-private effects, radios, cameras, etc
1 List of foreign currency on board
1 List of bonded stores
1 List of provisions
1 List of all previous ports of call for current voyage
1 Health list
1 Vaccination list of valid certificates
All ship's certificates/Register
All discharge books & CDC examined

After Inspection: Light dues certificate is issued (optional 30 days/ 3 months) Shore passes issued by Immigration. Friendship store passes issued to record purchases.

Alongside Kai Ping Wharf: Visit by Customs, security man placed at foot of gangway, all ships personnel checked by him before proceeding ashore.

Agents: Only one agency, the China Ocean and Shipping, could be contacted throughout the 24 hour period, by calling "Penavico" on VHF Channel 11, this proved to be a very satisfactory method of communication provided one speaks very slowly. The boarding Clerk visited the vessel every morning to attend to any ship requirements eg. Telex messages and mail.

Stevedores: Work around the clock but do stop for meal breaks, number of men per gang varied depending upon the nature of the cargo.

Density: At all stages of the tide 1000.

Fresh Water Supply: Available alongside the wharf at a rate of 50 t.ph, also available at buoys/stream – cost three times more than alongside.

Marine Bunkering: Suppliers are China Marine Bunkering & Supply Co. – Grades of fuel, Marine Fuel oil 1000 Redwood. Light diesel K/centistroke, 3-8 at 20°C and heavy diesel 20 K/centistrokes at 50°C. Very efficient service.

Consuls: Japan only.
Classification Society: Chinese only.
Cargo Surveyors: Arranged through the Harbour Authority.
Customs Bond: Normally British ships are not sealed, this also applies to European Maritime vessels except Greece, much depends upon the discretion of the Customs, however Philippino, Japanese and some Hong Kong operated vessels are sealed
Airport: Located about 25 kms N.W. from the city, the only foreign airline operators are JAL (Japan Airlines).
Important Regulations: Whilst within port limits radar *not* to be switched on without permission of Harbour Authority, this even applies once vessel entered; passed inspection, etc., and wish to do any repairs to Radar. Dock trials are not permitted
Hospitals: There is one special hospital for seafarers.
Dental Treatment: Arranged in the normal way through the Agents.
Laundry Service: Good and inexpensive compared with Europe. No dry cleaning
Sailing Inspection: Carried out one hour before sailing, passes collected, money returned to Agents, ships' papers checked, etc.
General: I found the Chinese most friendly and only eager to help and accommodate us. The Seamen's Club organises various outings to ballet, the world famous Yu Gardens, acrobatics, football matches, etc.

SHIPMASTER'S REPORT: March 1980.
Tanker's Particulars:
Ship's Length: 170.75 m. Breadth: 26.09 m. Depth: 14.9 m.
Summer Deadweight: 31,600 M/T. Draft: 11.33 m.
Loaded Shanghai: 19,897.184 M/T Chinese motor gasoline.
Sailing Draft: Forward 8.54 m. Aft 9.02 m.
Navigation: British Admiralty Charts 1601 and 1602 (T) proved most reliable with all buoys in their correct position exhibiting the correct lights. Where the channel is constantly dredged, there are a few extra buoys but they follow the normal numbering of odd on the starboard hand and even to port when proceeding up river.
Anchorage: Anchorage is obtained in the area shown S.E. of Chang Kiang Kou Light Vessel. There is a constant strong tide running here and at least 6 shackles in the water are recommended.
Pilotage: The pilot vessel is anchored at Lat. 31° 03.4′ N., Long. 122° 12′ E. The Pilots listen on Channel 16 but berthing information usually comes from the Agents "Penavico", through Shanghai Radio. When picking up the Pilot, vessels are told to approach as close to the pilot vessel as possible and the Pilot boards from a small boat. An approach to the pilot station may be made either by keeping well South of the Yangtze Channel or going up the channel until Buoy 14, then cutting down South.
Radio: Pilots listen to VHF Channel 16. The national agency "Penavico" listen on Channel 11 for all ships. Foreign ships are especially asked to listen at the following times when they will normally be contacted. 0715 hrs., 1115 hrs., 1515 hrs. and 1915 hrs.
The Agents "Penavico" also have Channel 27 if Channel 11 is busy.
Papers: The following papers are required, and must be on the Chinese printed forms:
- 2 Report of entry for foreign-going ship
- 1 Maritime declaration of health
- 1 Report on articles restricted for use in port
- 7 Crew lists
- 1 List of specified articles, foreign currencies, gold, silver belonging to the ship and/or members of the crew.
- 1 Import manifest showing goods to be imported into Shanghai

A boarding official came aboard with the Pilot and all the Chinese forms were completed en route to the quarantine anchorage. At the outer anchorage, no persons boarded.

Clearance and pratique at the quarantine anchorage took about an hour. After this all the officials and the Pilot left.

All non-Chinese are given Identity cards. Each man receives a currency card and all cash drawn on the ship is noted and stamped by the Agent. All unused cash must be returned.

Shore leave is allowed from the quarantine anchorage. There are two boats daily, one at 0900 hrs. and the other 1600 hrs. Vessels requiring this boat must hoist the flag signal "DI".

Berthing: All berthing information comes from the Agent via VHF. Berthing is carried out day or night at Kao Chiao Sha which is on the North bank of the river between Buoys 107 and 108. Berth is in position Lat. 31° 20.75′ N., Long. 121° 32.1′ E. Vessels loading berth starboard side alongside so they can turn around in the narrow river whilst still light draft. Vessels turn in the river off Buoy 110. The turn is made to starboard using the engines and a tug which pushes on the port bow. Sometimes the starboard anchor is used. At the berth one tug only is used, this not being made fast at all. It simply pushes where required.

Moorings are 4 headlines plus 2 springs forward with 4 sternlines and 2 springs aft. Whilst approaching the berth, the port anchor is run out although its usefulness is doubtful.

The actual berth is a "T" shaped concrete pier on wooden piles. It is about 400 ft. long with a maximum depth of 9.5 m. 560 ft. is about the maximum length for the berth. Springs go to the jetty whilst other lines go to the shore. Despite the heavy traffic on the river, very little surging was experienced on the berth.

No fuel, water, diesel available ex-berth. All available from a barge but not during cargo operations. No slop facilities ashore, again a barge is available if required.

No ballast to be discharged into the river without the permission of the Harbour Authorities. A written application must be made through the Agents for the authorities to inspect the ballast. After inspection, permission may then be given to start de-ballasting, This ballast check is most stringent and samples of every tank are taken plus a really good visual check carried out. The oil record book is also checked by the authorities.

Whilst at the berth, no visitors are allowed on board. Four armed border guards are on the vessel at all times. Two maintain a continuous gangway watch recording the arrivals and departures. Customs officials also stay on board throughout. Whilst at the berth, an Agents representative also stays aboard.
Facilities: Medical facilities are good and they are arranged by the ship chandler. Provisions and stores are readily available and found to be of good quality and inexpensive. The bond was not sealed.

There is a free transport to and from the seaman's club in Shanghai which was about 1 hour's drive. Photography is allowed in all areas except the docks and military areas.

Notice of readiness is only accepted during office working hours. Anything required such as cargo surveyors, tank inspectors, bills of lading or certificates of quality and quantity must be applied for in writing well in advance.

Repatriation is possible, the ship chandler provides all the necessary alien application forms.

If tankers wish to take a shore line sample at the start of loading, written permission must be applied for.

Tankers should be well advised to ballast well out to sea as the water 20 miles from shore tends to contain a lot of mud and sand.
Sailing: All unused cash, plus currency cards and passes are collected prior to sailing. Papers take about 4 hours. The maximum river draft is 9.0 m. fresh water.

Two tugs are used for unmooring, one each end and use either tug's or ship's gear. Before singling up, the anchor is pulled home if possible. Ships with deep draft have two Pilots who speak good English. Once the vessel is off the berth, the tugs depart. There seemed to be no radar assistance or traffic control on the river. Each Pilot depended greatly on the whistle and smaller craft seemed to keep the main channel clear. Pilots sometimes talked ship to ship on VHF, Channel 6.

In the main Yangtze River there are three shallow areas and if drawing 9.0 m., they cannot all be transitted in one passage. First after un-mooring day or night, the vessel clears the shallow area off Buoy 58 at high water. Anchor is then dropped with 6 shackles on deck in the anchorage just off Buoy 57. Just prior to the next high tide, vessels weigh anchor to pass shallow areas off Buoy 55 and 23, the latter being passed at high water. The minimum under keel clearance recorded was 1.0 m.

Pilots depart as close to the pilot vessel as possible, taking ships South of the channel to do this. It is up to the Master whether he remains outside the channel or goes back in it after the Pilot has left.
Conclusion: There were no musters of officers or crew. No problems were encountered and all shore personnel seemed pleasant and polite.

The berth itself was rather old with no gear at all. Ships gangway was used and ship's derrick was required to handle 2 × 6 in. hoses. Loading rate was 450 t.p.h. and the jetty was manned at all times.
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m.v. ".."
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China Ocean Shipping Agency
Shanghai Branch

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Other papers required are crew declaration (to include makers names for items like watches, radios, etc.). Ten copies of Notice of Readiness. They do not consider a vessel ready until all ballast has been discharged. They did not require lists of bridge navigational equipment or lists of pyrotechnics or lists of radio equipment.

Light dues are payable for 3 months or 30 days. For 30 days, dues are calculated at Yuan 0.90 per nett registered ton. For 3 months it is more expensive.

At quarantine anchorage, accommodation required for 2 guards. At berth same required plus accommodation for 2 Customs officials, 1 Agent and possibly 1 cargo surveyor.

Inspection is carried out on arrival at the quarantine anchorage and prior to departure berth. This was just the entry and departure formalities. No search was made and there was no crew assembly. Passes issued to everyone and collected prior to sailing.

Apparently fresh water and bunkers are available. There appeared to be no restrictions on use of radar, echo sounder, binoculars, etc.

Gasoline cargo loaded was about average S.G. with a loading temperature of 23.5°C. Cargo papers on sailing are manifests and Bills of Lading only.

TAKU BAR: 38.56 N. 117.53 E.

Also see "General" before first port.

SHIPMASTER'S REPORT.

Guide to foreign vessels calling at Taku Bar (Hsinkang, Tangku and Tientsin) issued by the Harbour Master at Tientsin.

1. Foreign vessels entering Pohai Gulf are only allowed to pass through Changshan Channel and/or Laotiehshan Channel. If the latter way is taken, the vessel must send a wireless message to "Harbour Master, Dairen" for directory 8 hours prior to passage. It should be noted that no other Channels are permitted for navigation. (Also see "Dairen").

2. Vessels passing Laotiehshan Channel for Dairen must make a detour along the East of "Encounter Rock".

3. Position of sunken dredger "Se Ho" is at Lat. 38° 31′ N., Long. 119° 10.5′ E. Vessels should keep far away from the above-mentioned area during navigation.

4. Position of Taku Light Vessel is at Lat. 38° 56′ 51″ N., Long. 117° 55′ 33″ E. Vessel may anchor N.E. of the light vessel according to different condition of vessels arrival draft, to wait for Pilot.

5. Vessel may send radiogram to "Penavico Hsinkang" (via Hsinkang Coastal Radio Station XSV, calling frequency 500 kHz, working frequency 445 kHz, reserve frequency calling 8630 kHz. Listening 8364 kHz, working hours 0000 – 2400), giving exact ETA also fore and aft draft, before entering Pohai Gulf.

6. The pilot station is at Tangku. Any foreign vessels, according to Harbour Regulations are required to have a Chinese Pilot, when entering or leaving the Port of Taku Bar, Hsinkang, Tangku and Tientsin. The Pilot will board the vessel at Taku Bar Anchorage after receipt of exact ETA given by the Master.

The Salation Light Beacon in position Lat. 38° 56′ 16″ N., Long. 118° 30′ 38″ E. shows a white flash every 3 seconds and visible at a distance of 13 miles.

Regulations Issued by the Harbour Superintendent's Office:

1. All foreign vessels (hereafter referred to as vessels) entering or leaving the port of Tientsin (hereafter referred to as this port) are required to observe strictly the provisions of the Regulations Governing the Entry and Departure of Foreign Vessels into and from Ports of the People's Republic of China (hereafter referred to as Regulations Governing Foreign Vessels) and of the Port Regulations of Tientsin.

2. On arrival at this port, vessels are prohibited to use the articles enumerated in Article VII of the Regulations Governing Foreign Vessels. Should it be necessary to repair any of the articles enumerated in Item 2 of the same article, permission to do so must be obtained beforehand from the Harbour Superintendent's Office.

3. Articles placed under seal shall not be used and the seals shall not be removed without permission. Should any of the paper seals be found falling off, the fact shall be reported to the Harbour Superintendent's Office immediately.

4. Whilst in port, vessels are not allowed to dress ship or hoist flag at half mast without the permission from the Harbour Superintendent's Office.

5. Vessels in port desiring to undertake any of the following work must first apply in writing to the Harbour Superintendent's Office. After permission is obtained the work can then be carried out at the appointed place.

(*a*) Lifeboat practice;
(*b*) Overhauling boiler, main engine, steering engine or windlass;
(*c*) Engaging in welding work or burning anything on board;
(*d*) Pumping out ballast water regardless of whether the water is contaminated with oil or not.

6. After a vessel's arrival at this port, sounding, survey sketching, photo-taking, fishing and swimming are strictly prohibited.

7. After arrival at this port, vessels are strictly prohibited to dump ballast materials, coal ashes, garbage, rubbish and mud, or to discharge dirty oil or oily bilge water into the harbour. It is also prohibited to wash double bottom oil tanks or oil deep tanks inside the harbour.

8. Vessels in port must provide secure gang ladders or gang planks with rail or manropes for passengers, crew and all workers to embark or disembark. All gangways or gang planks are to be provided with lights at night.

9. Vessels lying alongside the pier should properly cover up all their exhaust valves and discharge openings on the ship's side facing the pier.

10. Garbage bins or drums with tight covers must be provided on board. The bins or drums should not be filled to overflow. When the garbage-collecting cart comes daily to the ship to collect the garbage and rings the bell on its arrival, the ship should arrange to deliver the ship's garbage into the cart.

11. If, owing to some special reasons, a vessel desires to return to this port after departure, the Master should first telegraph to the Harbour Superintendent for permission and must act according to the instructions given.

Frontier Inspection Station:

1. All the officers and crew of a foreign vessel and the passengers on board should produce their passports or other certificates to the Frontier Inspection Station and submit to the inspection of the Station.

2. When the ship's crew or passengers in transit desire to go ashore, the Master is to apply to the Frontier Inspection Station and the passport endorsing authorities, respectively, for landing permits.

3. A landing permit is valid only at the port where it is issued. On the ship's departure, all landing permits for the crew should be returned to the Frontier Inspection Station for cancellation.

4. The time limit for going ashore is from sunrise to midnight. When any Crew member wishes to stay overnight on shore, the Master should apply for permission on his behalf. Staying overnight ashore without permission is not allowed.

5. All laws and regulations of the People's Republic of China must be observed.

Customs:

1. It is forbidden to carry the national currency of the People's Republic of China into or out of the country. Violation of this rule will render the money in question liable to confiscation.

2. The Master or crew desiring to exchange foreign currencies, gold or silver for Chinese currency should so declare to the Customs and, after the exchange, produce the bank's Exchange Slip for inspection.

3. The Master or crew desiring to carry articles ashore or aboard should report to the Customs for permission and the articles concerned are subject to Customs inspection. Sale of articles taken ashore is prohibited.

4. Exposed films or plates should be developed and submitted to the Customs for inspection before they are allowed to be carried into or out of the country.

5. Places sealed up by the Customs are not to be opened without Customs permission.

Quarantine Office:

1. During a vessel's stay in port, if any person on board is found to be in high fever or to be feverish continuously for several days (or with the swelling of the lymphatic gland), or to suffer from acute rash on the skin with or without fever, or to suffer from acute diarrhoea and in a state of collapse, or to suffer from jaundice with fever, the matter should first be reported to the Quarantine Office. The patient can go ashore for medical treatment only when he has been examined and allowed to do so by the Quarantine Officer.

2. Effective rat-guards or other rat-preventing devices should be fixed on all mooring ropes.

3. Gangways and gangplanks are not allowed to be put on to the wharf when not required. Should they be used at night, strong electric lights should be provided.

4. Should any dead rats or mice be found or any rats or mice caught on board a vessel, the fact should be reported to the Quarantine Office for the necessary inspection to be made.

The above regulations are in force at most Chinese ports.

In the fairway and on the West side of the first pier vessels may pass on 34 ft. draft. Length of pier about 1,500 ft.

Another pier is under construction, and when ready will have berths for five vessels of about 600 ft. length. The depth alongside will be 34 ft.

On the first pier 7 cranes with a capacity of about 10 tons. It was not possible to obtain information on the older berths. Four tugs with up to 1,000 h.p.

All bunkers to be brought in from Dairen.

TSINGTAO: 36.03 N. 120.20 E. (See Plan Book)

Also see "General" before first port.

SHIPMASTER'S REPORT:

Approaches: 1. Approaching from the S.W. on the authorised route in clear water, the following observations were made.

(*a*) Cape Yatall Lt. Range 20 n.m., not sighted at 10 n.m.
(*b*) Tai Kungtan Lt. Range 15 n.m., not sighted at 15 n.m.
(*c*) Ynui Shan Lt. Range 14 n.m., sighted at 15 n.m.
(*d*) Outer Harbour Fairway Buoy, sighted at 4 n.m.

2. When abeam of Tai Kungtan orders were received to proceed to inner quarantine anchorage.

3. All Inner Harbour buoy lights characteristics did not agree with the recent chart.

Documents: Port Officials board by tug using the gangway. The following papers are required.

4 copies of the Ship's particulars.
4 copies of the Crew List.
2 copies of the Crew Manifest with all foreign currency duly noted.
1 copy of the Health Declaration.
All Identity Cards.
2 copies of the letter requesting a hold survey.
9 copies of the Notice of Readiness.
Usual ship's papers, including Deck and Engineroom Logs.

Delays caused by:
(a) Crew members not holding I.D. Cards.
(b) Insufficient copies of the necessary papers supplied at Hong Kong.

Muster: After the above had been inspected, all officers and ratings were required to muster in the saloon. A search of all spaces was then carried out. Each person was required to be compared with his I.D. card, those not possessing one were eventually cleared on discharge books. The Authorities will not recognise passports held by Spanish Nationals.

Detailed Information: Required with regard to the ports at which stores and water have been obtained and a list of the ports visited in the previous six months.

Currency: Available in the form of Chinese Yen.

Cargo: (a) Delivery alongside is very poor. *(b)* Condition of cargo received on board is good. Temperatures of hard frozen cargo are well down. *(c)* Damaged cartons are replaced. *(d)* Stowage, good.

Outwards Clearance: (a) After all B/Ls have been signed and five copies of the vacant space/space used handed over. *(b)* Muster of all persons takes place in the saloon. *(c)* I.D. cards produced and shore passes handed in. *(d)* Vessels searched. *(e)* All foreign currency spent ashore has to be accounted for. Totals of money drawn and returned to Agent produced to the Customs.

Departure: Vessel leaves the berth and anchors at the Inner Quarantine Anchorage. Guards and Port Officials leave after "Clearance" papers have been handed over. Pilot leaves, vessel proceeds without the aid of a Pilot along the authorised route.

SHIPMASTER'S REPORT: 1977.

Pilot: A total of four Pilots board together with Inspection Team from a tug (black hull, white superstructure) at the pilot station. Pilots usually handle vessels very carefully and speak little English.

Piers: The bulk handling piers are equipped with shore cranes (their capacity unknown) but are poorly fendered.

Tugs: A large number of modern (and likely powerful) tugs were noted, ships lines always used.

VHF: The Port is equipped with VHF (most likely at Harbour Master's Office) and the ship's set is handled by the Pilots. After berthing it is prohibited to use it.

Tide: The rise of the tide is considerable (no figures available) and all piers seem to be well protected by any wind.

Ice: Melting ice was noted on approaching the piers (mid January 1977).

Traffic: Heavy traffic was noted there both in ocean-going and medium-sized tonnage.

SHIPMASTER'S REPORT: 1978.

The governing regulations for vessels sailing into or out of Tsingtao.

1. Vessel sailing in or out must take definite route stipulated as follows:
From 35° 56′ 24″ N., 121° 05′ 00″ E. to 35° 56′ 24″ N., 120° 46′ 42″ E. course 270° (090°) or
from 35° 43′ 15″ N., 120° 53′ 09″ E. to 35° 56′ 24″ N., 120° 46′ 42″ E. course 338° (158°)
Thence from 35° 56′ 24″ N., 120° 46′ 42″ E. course 283° (103°) to 36° 02′ 00″ N., 120° 15′ 56″ E. then alter course 000° (180°) proceed to quarantine anchorage within following four points:
36° 05′ 18″ N., 120° 15′ 34″ E. 36° 05′ 18″ N., 120° 16′ 50″ E.
36° 04′ 00″ N., 120° 16′ 22″ E. 36° 04′ 00″ N., 120° 15′ 20″ E.

2. Pilot station is within the area: with the point 36° 02′ 00″ N., 120° 18′ 16″ E. as its centre and 3 cables length as its radius.

3. Dropping and dragging anchor is strictly prohibited within the following areas:
1. The 1st prohibited area is within the following four points:
36° 04′ 00″ N., 120° 14′ 00″ E. 36° 03′ 12″ N., 120° 17′ 00″ E.
36° 03′ 27″ N., 120° 14′ 00″ E. 36° 02′ 40″ N., 120° 16′ 56″ E.
2. The 2nd prohibited area is within the following four points:
36° 02′ 42″ N., 120° 20′ 00″ E. 36° 00′ 48″ N., 120° 18′ 00″ E.
36° 03′ 36″ N., 120° 23′ 16″ E. 35° 59′ 48″ N., 120° 18′ 30″ E.

4. Vessel must advise ETA Chalientao 24 hours before ship's arrival.

5. When abeam Chalientao on ship's entry. Master should cable again immediately time abeam Chalientao and accurate time arriving Pilot station, awaiting authorities instructions attentively.

6. Proceeding on abovementioned route following stipulations should be complied with:
1. Ship's national flag and code flags should be flown in daytime.
2. Dumping rubbish and pumping out oil and oily substance are prohibited.
3. If by some reasons, vessel needs to anchor, Master should report to Harbour authorities first for permission.

7. Within the Harbour limit, the prohibited articles should not be used. In case radar required for navigation, Master should report to Harbour Authorities before using it.

8. Abovementioned regulations should be strictly complied with. Otherwise, the vessel is held responsible for all the consequences arising from the violation of the above.

Master's Observations: Approaching from South:

1. From a point W.N.W. about 5 miles from Chalientao L/H until Tsingtao a very strong set was experienced, on ebb tide, position must be checked very frequently and strong counteracting set should be applied. Deep draft vessels should take care particularly near Swallow Bank.

2. Speed was reduced when crossing 9 fm. patch (extending about 1.7 miles long across) in approximate position Lat. 35° 59.5′ N., Long. 120° 27′ E. (vessel's draft 9.95 m.).

3. It is not possible to take a course of 283° as per direction as this leads almost on the edge of Swallow Bank and edge of Pile Point. Therefore a slight change was made, from position Chalientao L/H W.N.W.×5 miles, 284° was steered till Lat. 35° 59.7′ N., Long. 120° 26′ E., thence course was altered to 287°. This course keeps vessel well clear of Swallow Bank and Pile Point.

4. The vessel can expect a cable (after cabling ETA pilot station when abeam Chalientao) giving directions, and usually the Port advises the vessel to anchor within 3 cables of pilot station, where Pilot boards later and takes the vessel to inner anchorage.

5. All the necessary lights and buoys were found working at satisfactory range and in position.

6. A slight delay can be experienced if vessel does not have inward clearance forms in Chinese prints. In this regard it is advisable to put 2/3 people on the job to facilitate quick completion of formalities (if Chinese forms are supplied by the Immigration Authorities).

7. Vessel berthed at No. 2 Mole Centre pier at high tide on a draft of 9.95 m. It was found that vessel had difficulty in getting alongside and finally secured some 3 ft. off wharf fenders. This was probably due to there being less depth. By Master's reckoning and observations, perhaps 27/28 ft. would be maximum safe depth at low tide at this pier. Vessel was shifted to after pier during the fall of tide, and on this berth by observations about 30.5 ft. would be safety draft at low tide.

8. Fresh water can be supplied without problem. Provisions are in short supply. Laundry can be done, about 3 days notice required. Medical facilities are good. Seamen's club caters to seamen's shopping and tastes. Repatriation is possible arranged by train to Peking and thence by air. Cable facilities exist but there is no telex system.

SHIPMASTER'S REPORT: September, 1979.

Documents: On arrival: 1 Report on Entry, 4 Crew Lists, 1 Import Cargo Manifest, 1 List of specified Articles, Currency, gold, etc. and all ship's certificates.

Navigation: BA Chart 876. On passing Cha Lien Tao Island, call "Tsingtao Radio" for entry instructions. The outer quarantine anchorage for which Pilot is not compulsory is in position Lat. 36° 02′ N., Long. 120° 18.3′ E. The approach is straightforward and the lighthouses are in good working order. The authorities board at the outer anchorage via pilot ladder from a tug. The use of radar in the harbour area must be sanctioned by Pilot or Harbour Authorities. All other navigational gear may be used as required.

Communications: Both Agents and Harbour Authorities have VHF with most Channels. When vessel is at Inner anchorage, Agency contact vessel twice daily for berthing times, etc.

Currency: Local Yuan available. Foreign currency can be exchanged but a receipt must be kept and produced to the Authorities prior to departure.

Draft: Up to 35 ft. alongside at discharging berth – in approach entrance off Horseshoe Reef up to 34 ft. depending on tide.

Agents: China Ocean Shipping Agency are sole Agents. They visit vessels twice daily and are also in VHF contact from their office. Communications with other countries from Tsingtao is by cable only, telex is due to be installed next year.

Medical: Hospital and doctors available.

Laundry: Excellent and not expensive.

Provisions: Not expensive but very limited in both content and availability. Not to be relied on, especially if in port for short stay.

Fresh Water: Alongside from quay – 35 t.p.h. Also available at anchorage from water barge.

Time: GMT plus 8 hours.

Immobilisation: Permitted by arrangement with Harbour Authorities.

Opening/Closing Hatches: Either ship's crew or stevedores. In the case of the latter, a charge is payable.

Garbage: Removed when requested by small barge.

Repatriation: Difficult at present as no regular air passenger flights from Tsingtao. Only way would be overnight train journey to Peking then flight to Europe.

Repairs: Possible, large repair shops and naval yards in port area.

Bunkers: Available to Chinese vessels. Gas oil also available if adequate notice given.

Cargo Working: Discharged 24,000 m/tons sulphur in 6.75 working days, using shore cranes and grabs. Discharged into railway wagons on twin rail tracks also into large "silo" adjacent to the berth. Good standard of crane operation. Cargo tonnage discharged determined by draft surveys performed by Government surveyors and ship's staff. Statement of facts drawn up by Agents.

Watchmen: One gangway guard for inspecting Crew members' passes.

Tugs: Four large tugs – one of 3,000 h.p.

Pilots: Usually three on each vessel – reasonable English.

Density: Varies between 1020 and 1025.

Tours, etc.: Tours are arrangeable via the Seaman's Club and are good value. There are no shore leave restrictions and cameras may be used. Inter ship visiting is allowed also film and book exchanges between ships.

Shore leave is possible from the Inner anchorage by tug.

Mail: From Europe by air freight via Tokyo and Peking takes 7 days.

Bond, etc.: Not sealed or inspected by Authorities. Stores Lists NOT required.

Floating Crane: Available, lifts estimated 150 tons.

General: Stevedore labour appeared plentiful – delays are occurring due to large increase in foreign trade. New berths are being planned and dredging is taking place continuously. Officials, Agents, etc. most pleasant and helpful and very eager to learn English. It is advisable to make a 'sea protest' to the Harbour Authorities if any bad weather experienced on voyage.

SHIPMASTER'S REPORT: June 1981.

Port: Qingdao (Tsingtao).
Berth: Huang Dao Oil Terminal. 36° 04′ N., 120° 13.5′ E.
Departure Draft: Forward 11.7 m. Aft 12.1 m.
Charts: BA 1255, 876, 857. Chinese (up to date) 9106, 9408, 9432.
Approach: Only by 'defined routes':
from: 35° 56′ 24″ N., 121° 05′ 00″ E. or 35° 43′ 15″ N., 120° 53′ 09″ E.
Course 270°T Course 338°T
to 35° 56′ 24″ N., 120° 46′ 42″ E.
then Course 283°T
to 36° 02′ 00″ N., 120° 18′ 16″ E. (Pilot boarding/Arrival Inspection Anchorage)
and reverse courses to same positions outward.

Entry: Arrival inspection formalities carried out at above anchorage, by boarding party of 8 persons from Agents, Customs, Immigration and Harbour Authority. We arrived at 1700 hrs. and inspection party boarded at 0930 hrs. next morning. China Ocean Shipping Agents, representatives spoke very good English and most helpful. Chinese documents required, including crew declaration form but Bonded Stores list not required and Bond not sealed. After inspection, about 30 minutes, shifted to Inner Tanker Anchorage with 2 Pilots.

Agents: China Ocean Shipping Agents, Cable: Penavico 2213 Qingdao.

VHF: Channel 16 to Qingdao Radio who will give you a channel to Agents, usually Channel 11.

Anchorage: Inner Tanker Anchorage is 1 mile North of Oil terminal with varying depths from 11 m. to 30 m.

Berths: Concrete dolphin structure, adequately fendered. West berth max. draft 12 m., berth port side to, approach from North. East berth max. draft 13 m., approach from South rounding No. 23 buoy to starboard when coming from Inner anchorage, Port side to. No shore gangway. Connection with flexible hoses so derrick required. Usual moorings. Head and stern line dolphins have small winches on them but out of order so mooring gang reluctant to handle wires.

Berthing/Unberthing: Competently carried out by 3 Pilots and 2 tugs. Tugs, Nos. 10 and 11 are 3,200 h.p. Gather vessels of our size (55,000 d.w.t.), and above only depart during daylight and on HW.

Cargo: Loaded Shengli Crude API. 23.3, loading temperature 40°C. Terminal state maximum loading rate 2,500 tonnes per hour. We achieved 1,980 t.p.h. Connection is by 2×10 in. 'Y' connectors at manifold connected to flexible hoses. After completion documents take 3/5 hours to prepare and bring on board.

Ballast: As first cargo after dry dock we received permission from Harbour Authority to deballast to sea although pumped tank bottoms ashore just in case. I gather that it is normal to deballast to shore reception at maximum rate of 600 t.p.h. and believe charge per ton is quite high so it is prudent to arrive with minimum dirty ballast.

Repairs: Appear to be quite readily available. We had some boiler tubes welded and Chief Engineer reported that the work was competently carried out. Chinese surveyors also act on behalf of Lloyds.

Fresh Water: Available at anchor from powered barge at 50 t.p.h. and also available on terminal but pressure is unreliable.

Shore Leave: Allowed from anchorage and terminal. Request for launch to be passed to Agents by VHF before 1100 hrs. and launch alongside around 1230/1300 hrs. and returns from shore between 1700/1900 hrs. There is a Seamen's Club with a new hotel attached which was opened during our stay. Seamen's Club will arrange football matches, and various tours. International telephone calls can be made from Agents' office.

Currency: Cash can be drawn from Agents but is in 'Foreign Exchange Certificates' which state on back: "The Yuan expressed in this certificate is equivalent in value to the Renminbi Yuan. This certificate can only be used within China at designated places. No request to register its loss will be accepted by the Bank". Any Chinese currency remaining must be returned to Agents before sailing. Foreign currency can be exchanged at the Seamen's Club for the same certificates. Rate of exchange June 1981 – RMB. Yuan 3.44=£1.00.

Garbage: A garbage collection boat calls every other day whilst at anchor.

General: During our 16 day stay in June there was fog during some part of nearly every day, occasionally dense.

WHAMPOA (Huangpu): 23.05 N. 113.25 E.

Also see "General" before first port.

SHIPMASTER'S REPORT: July 1981 and October 1984.

Item Nos. 6 – 9 amended by report received in October 1984.

Southern Approaches to Whampoa:

1. Vessels approaching from the South, bound for Canton and Whampoa should steer a course of 005°, so as to arrive approximately 5 miles West of Wen-Wei Chou (Gap Rock). An occasional light is exhibited from Gap Rock Lighthouse, but more often this light does not function and therefore should not be relied upon.

2. On approaching Gap Rock the first land mark that appeared on the horizon was the group of Great Ladrone Islands at a distance of approximately 20 miles on a clear afternoon. On closing Great Ladrone to a distance of about 10 miles, the group of islets to the East of Gap Rock were seen. Closing further to a range of 8 miles only, the Gap Rock was seen and identified.

3. The Gap Rock Islet is rugged in appearance and devoid of any vegetation. The lighthouse is located at the centre of the islet and differs slightly from the illustration in the Pilot, in that the dome-like structure is non-existent. The structure is slightly inclined and looks neglected.

4. The light on the Chuk Wan Shan Island is prominent and was visible at a distance of approximately 15 miles and is located at the summit. It is whitish and dome-like in appearance.

5. On identifying Gap Rock, vessel should proceed on the recommended course of 013°, keeping clear of the wreck marked 3 miles (approximately) West of Gap Rock and follow the recommended track so as to arrive at the Quarantine Anchorage demarcated West of La Sa Wei Island. It was observed that most ships prefer to anchor closer to the Ma Wan Light due to deeper waters. The anchorage off La Sa Wei affords good holding ground and shelter from all types of weather.

6. Vessels remain at this Quarantine Anchorage for a considerable length of time and all ships requirements, Pilot, berthing instructions, movements, etc., will have to be sought from the Agents "Penavico" through Canton Radio on 8490 MHz.

7. Loaded vessels may have to anchor at the Bar before entering the Chuen Pi Channel at Lat. 22° 45′ N., 113° 39′ E. (B.A. 1741) to await the next tide. Once ready for heaving anchor and swinging the vessel's bow into port direction, Pilots ask for the lights "Red" over "White" to be switched on for turning and to switch them off again after completing the turning manoeuvre.

Pilots listen on VHF Channels 9 and 16 and vessels can try to contact them once approaching La-Sa-Wei Quarantine Anchorage but vessels have to be patient as not many of shore personnel appear to understand English and they will not reply unless there is a Pilot standing by to attend.

8. The usual muster of crew is not carried out. However, a very thorough inspection is carried out by Immigration at Pratt Point, about 3.5 miles downstream (B.A. 1742). At that position the vessel drops anchor and awaits Immigration, who once on board order all the crew into one messroom, leaving wardrobes, lockers and cabin doors open. Then 4 men of the crew will be chosen, 1 to go with 1 soldier through the accommodation, 1 to go with another through the engine room and 2 others to accompany 2 other soldiers through the cargo holds. This procedure takes about 1 hour. Only after this inspection does Master obtain his clearance and is able to sail.

9. Huangpu Port (Whampoa) has been extended enormously. There are pier facilities for at least 6 medium size general cargo ships and at appprox. position Lat. 23° 03.25′ N., Long. 113° 28.5′ E. near Shuang Kang (B.A. 1742) there exists a new container and Ro/Ro pier for 3 ships.

The cargo of my vessel (ST 14 of 11,363 tonnes) of bagged urea was discharged in 62 hours after working with up to 9 gangs (5 hatches) day and night.

10. The Seaman's Club Representatives board the vessel soon after arrival and will arrange any sight seeing tours at nominal cost. Seaman's Club provides good meals and club facilities. Seaman's Store and the Friendship Stores afford good shopping at reduced prices. Ship provisions and fresh vegetables are available in abundance.

11. Vessels leaving Whampoa, Northbound will have to follow the same route unless prior approval is sought from the Agents to go through the Lema Channel.

NOTES

Please also advise Shipping Guides Ltd.

Christmas Island

CHRISTMAS ISLAND, Indian Ocean:
10.25 S. 105.43 E. **(See Plan Book)**

PORT LIMITS: The area of sea in and adjacent to Flying Fish Cove in the Territory of Christmas Island enclosed by a line commencing at a point where a line bearing 270° True from the flagstaff at Government House intersects the coastline of Christmas Island at MHW thence bearing 270° True for a distance of 2 km. thence bearing 360° True for a distance of 2 km. thence S.E. by a straight line to Rocky Point thence generally S.W. along the coastline of Christmas Island at MHW to the point of commencement.

DOCUMENTS:
Port Clearance.
2 Crew Lists.
2 Passenger Lists.
2 Manifests.
Health Certificate.

PILOTAGE: Pilot boards 1 mile West of Smith Point.

ANCHORAGES: None.

RESTRICTIONS: Daylight entry only.

MAX. SIZE: Length 630 ft., breadth 90 ft., draft 35 ft.

HEALTH: Radio pratique granted whenever possible. Information required: date of departure, last port of call, number of persons aboard, number of passengers disembarking, state of health. Contact Port Health before arrival in event of suspected disease. No automatic pratique.

RADIO: All cables to Christmas Island Radio, VIY.

VHF: Channel 16 available at all times. Channels 6, 12 and 14 available during office hours only.

TUGS: None.

BERTHING: Berthing daylight hours only. In most cases port anchor to be disconnected from cable prior to arrival; mooring gangs provided.

BULK CARGO HANDLING: The bulk loading berth is served by 2 cantilevers each capable of delivering rock phosphate at an average rate of 1,500 t.p.h. Bottom of telescopic chutes when fully raised are 50 ft. above sea level at HWS.

CRANES: On wharf, 1 Favco 20 tonne S.W.L. and 1 Babcock & Wilcox 4 tonne S.W.L.

STEVEDORES: Supplied by Agents.

MEDICAL: No notice required for medical attention. Hospital facilities available throughout 24 hours. Inoculations required: yellow fever (from endemic areas), cholera (from S.E. Asian ports). International Vaccination Certificates required.

TANKERS: Furnace and diesel oils pumped ashore simultaneously through floating pipe-lines, 8 in. and 6 in. diameter respectively.

DENSITY: 1023 constant.

FRESH WATER: Very limited quantities supplied, only in emergency.

FUEL: Very limited quantities supplied, only in extreme emergency.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: All beams and hatches to be handled by ship's crew.

CERTIFICATES: Register of Cargo Gear and Test Certificates.

CARGO GEAR: To comply with requirements of the Australian Navigation Act, 1912-58.

IDENTIFICATION CARDS: Not required.

CONSULS: Administrator's Office performs some consular functions.

SURVEYORS: Cargo Surveyors: The Harbour Master or his assistant in his capacity as Lloyd's Agent. There are no authorised hull surveyors.

REPAIRS: No facilities exist.

REPATRIATION: Only for medical emergencies.

AIRPORT: One flight every 2 weeks to Australia, 1 flight per month to Singapore and 1 flight per month to Kuala Lumpur.

TIME: GMT plus 7 hours throughout the year.

HOLIDAYS: New Year's Day; Australia Day (26th January); Hari Raya Haji; Chinese New Year – two days; Good Friday; Easter Monday; Queen's Birthday; Territory Day (1st October); Hari Raya Puasa; Christmas Day; Boxing Day.

No work performed on New Year's Day, Hari Raya Puasa, Good Friday, 1st day of Chinese New Year and Christmas Day.

POLICE/AMBULANCE/FIRE: Police Tel: 444. Ambulance Tel: 333. Fire Tel: 222.

EMERGENCY CO-ORDINATION CENTRE: The nearest Co-ordination Centre is the Coastal Surveillance Centre, Canberra. Tel: Canberra 476666. Cables: "Marineops" Canberra.

BANKS: The Bank of New South Wales, Christmas Island, Indian Ocean. Telex linked direct to head office of the Bank of New South Wales in Perth, Australia.

STORING: (See "Prelims" page viii)

1. The Island is stored purely for local needs with limited quantities and range of supplies. It would therefore only be in cases of extreme emergency that stores would be supplied to ships.
2. In such cases vessels would be stored by barge, and this would take place at any convenient time prior to or during loading.
3. Not applicable as moorings are off shore.
4. Fork lifts are available to assist in loading stores.
5. There are no Customs regulations or requirements pertaining to the loading of ship's stores.
6. Local labour is available to load stores onto ships.

TELEPHONES: Placed aboard when required by Port Authorities. No charge.

GENERAL: Ships may be ordered to leave berth at short notice if weather deteriorates.

AUTHORITY: Captain M. Lee-Emery, Harbour Master, c/o Marine Office, Christmas Island, Indian Ocean. *Tel:* 264.

NOTES

Please also advise Shipping Guides Ltd.

Colombia

GENERAL:

DOCUMENTS:

Consular Documents:

In foreign ports where cargo for Colombia is loaded, the Colombian Consulate must receive two copies of the Cargo Manifest, on a special form (Colombian Freight List), one of which is returned to the vessel and the other is filed at the Consulate.

Prior to Arrival:

Notice of arrival:

The agency must prepare the standard Colombian document for confirmation of vessel arrival, giving the characteristics of vessel and indicating the services requested: pilotage, towing, anchorage, berthing, cargo to be loaded and unloaded, as well as water, electric power, telephone, fuel and lubricants.

This form is addressed to the Director of Operations of the Marine Terminal of the Colombian Port Authority (COLPUERTOS) and is submitted in seven copies (original and three copies for the Marine Terminal and a copy each to the Port Captain, the Customs Security Office, and the Port Public Health Officer). If passengers disembark, an additional copy must be submitted to Migration.

Information on cargo for the port:

At least 24 hours in advance of the vessel's arrival, the agency must receive the following documents by airmail, with the distribution indicated:

Documents	*Customs*	*Marine Terminal*	*Agency*	*Total*
Freighted Manifest (Freight List)	–	–	1	1
Freighted Bills of Lading	1(a)	3	1	5
List of Cargo by Hatch	–	1	1	2
List of Dangerous Cargo in Transit	–	1	1	2
Stowage Plans	–	1	1	2

(a) Stamped.

Request for Port Services:

The agency must submit to COLPUERTOS, 8 hours in advance of the vessel's arrival, the following documents, in original and two copies: request for berthing crew, cranes, terminal crew, motorised equipment and storage; request for inward pilotage and towing.

On Arrival:

On the entrance of a vessel, the following documents must be submitted, either on the model forms established by LAFTA Resolution 254 (IX), or on similar forms, except the cargo manifest, which will be made out on the Colombia Freight List form.

Type of Documents	*Number and Distribution of Documents*						
Basic Forms	*Capt. Port*	*Cus. Sec.*	*Marine Term.*	*Port Pub. Health*	*Migr.*	*Agency*	*Total*
1. General Declaration	1	1	–	–	–	1	3
2. Cargo Manifest	–	1	1	–	–	–	2
3. Crew List	1	2	–	1	1	1	6
4. Passenger List	1	1	–	1	1(a)	1	5
5. Ship's Stores	1	2	–	–	–	1	4
6. Crew Effects Declaration	1	2	–	–	–	1	4
7. Maritime Declaration of Health	–	–	–	1	–	–	1
8. Mail List	–	2(b)	–	–	–	1	3
Additional Documents:							
9. Clearance from Last Port	–	–	–	–	–	–	–
10. List of Passengers in Transit	1	1		1	–	1	4
11. "No Passengers" Declaration (c)	1	2	–	1	–	1	5
12. List of Dangerous Cargo in Transit (c)	1	–	1	–	–	1	3
13. "No Mail" Declaration (c)	–	2(b)	–	–	–	1	3
14. List of Passengers' Baggage (a)	–	3	–	–	–	–	3

(a) Only for those disembarking.
(b) One copy for the Post Office.
(c) When required.

Other Requirements:

The agency provides a landing permit for each crew member and passenger, which is stamped on board by the Captain of the Port.

Prior to Departure:

Clearance for the vessel is requested from the Captain of the Port on a special form. It is prepared in triplicate (original for the vessel, one copy for the Port Captain's file and one for the agency). The following documents accompany it:

1 Crew List.
1 Passenger List or "no passengers" declaration.
1 Ship's Stores List, and
1 Fuel Supply Declaration or negative

Request for Pilotage:

At least 2 hours before departure, a request for pilotage, clearance and unberthing crew must be submitted to the COLPUERTOS Maritime Section.

FREE PRATIQUE: There is no radio pratique. The standard W.H.O. Health Certificate must be used.

PILOTAGE: Pilotage is compulsory for all vessels over 250 n.r.t. The Pilot must be requested by the Agent at least 24 hours in advance.

Berthing preference will be given as follows:

1. Warships.
2. Passenger vessels and Mail Boats on a fixed itinerary.
3. Vessels with livestock and perishable cargoes.
4. Passenger vessels not on a fixed itinerary.
5. Vessels loading cargo for export.
6. Vessels discharging cargo for import.
7. Tankers.
8. Coasters.
9. Vessels carrying explosives.

On sailing all vessels must fly the "P" flag.

Vessels at anchor can be authorised to work to lighters.

All Colombian ports are open 24 hours a day.

ARRIVAL ADVICE:

(1) The local Agent must advise to Empocol with 72/48 and 24 hours in advance the vessel's ETA.

(2) With the ETA pre-arrival advice, Owner or Master must advise the Agent the following:
   (a) Estimated arrival draft, aft and forward
   (b) Full vessel's particulars, including breadth
   (c) Vessel's side for which she must be docked (port side or starboard)
   (d) Cargo hatch distribution

(3) At least with 48 hours in advance, the Agent must receive in order to give to Empocol (together with others issued by the Agent according to the information supplied by the Master and Owner), the following documents:
   (a) 5 original copies (not photocopies) of each Bill of Lading, duly freighted and signed by the shipper
   (b) Stowage plan.

(4) Also 24 hours prior vessel's arrival, the Agent must pay to Empocol the proforma invoice which amounts to the estimated port expenses plus 25 per cent surcharge. Hence it is of paramount importance the Agent receives well in advance the funds required, in order to convert the U.S. Dollars into local currency and proceed to effect the corresponding payment.

It is important to point out that in case the above mentioned instructions are not fulfilled, or the documents are not presented and the proforma invoice is not paid in due time by the Agent, Empocol will not authorise docking and operations of the vessel.

STEVEDORES: Are supplied by the Port Authorities although it is often necessary to employ extra labour through the Agent, due to the fact that gangs are seldom complete. At week-ends, gangs required for Monday must be ordered by 1000 hrs. on Saturday. Masters should bear this in mind when sending their ETA.

Cargo in a damaged condition or showing signs of pilferage will not be handled until inspected by a Port Official and ship's officer, leaving on record the actual condition of the cargo.

Containers are discharged or loaded as all other cargo, though if they are stuffed or unstuffed immediately this must be done with the Port Labour provided.

Opening and closing of hatches, and the rigging of gear, is done by a gang of riggers. The ship's crew can do this work, but it is advisable to use Union Labour.

Rain tents are not supplied by the port.

All gear, slings, spreaders, etc., must be supplied by the ship.

Rat guards must be fitted on all mooring lines whilst in port.

PORT SECURITY MEASURES: All ports are rigorously patrolled by Port Police, and crew members are advised to carry Identification Cards at all times when ashore.

FUMIGATION: This can only be carried out alongside with the permission of the Port Authority.

GARBAGE: No garbage may be thrown overboard. This includes flakes of paint from vessels chipping or scraping the hull. No paint must be allowed to drop into the water or onto the quayside. Overboard discharges must be kept off the quay.

POLLUTION: The standard requirements for the prevention of oil pollution must be adhered to within the continental shelf off the Colombian coast.

All vessels calling at Colombian ports must have "Pollution Policy" onboard. If not onboard vessel will be heavily fined and clearance will not be granted by the Port Captaincy.

All vessels must ensure that the Oil Record Book is up to date prior to arrival, as it is likely to be inspected.

Fines can range from 50,000 to 500,000 Pesos, not including the cost of any clean up operation.

No vessel contaminating the waters of any port may sail until the corresponding fine has been paid.

Oil Tankers are not permitted to clean tanks within 60 miles of the Colombian shores. If a vessel arrives in port with dirty ballast, she will be ordered to proceed to sea beyond the 60 mile limit, and take on clean ballast.

CREW: The authorities will not allow crew to be of unkept appearance or improperly dressed at any time while the vessel is in port.

FUEL: Bunkers are only supplied to vessels which were supplied in 1972, and are actually trading to Colombia. Vessels may not take more bunkers than the amount they received in that year. Requests for bunkers must be made to Agents at least 1 week in advance.

TIME: GMT minus 5 hours. Summertime is not observed.

BARRANQUILLA: 10.58 N. 74.47 W. (See Plan Book)

DOCUMENTS:

Clearance from Last Port.
Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Cargo Gear.
Oil Pollution Certificate – Policy of Insurance.
6 Crew List.
5 Crew Personal Effects List.
5 Provision List.
5 Store List.
6 Passenger List (in transit).
6 Passenger List (disembarking).
4 Declarations of Passenger Baggages.
4 List Port Mail.
1 Sanitation Declaration.
Sets of manifests covering port cargo.

PILOTAGE: The Pilot Department of Empresa Puertos de Colombia at Barranquilla require that the vessel's Agent advises them with at least 24 hours in advance, the best vessel's ETA, together with the estimated arrival draft (fresh water).

Therefore it is important that Masters of vessels advise Agent 72, 48 and 24 hours in advance the best ETA to the port, in order to avoid any delays because of unavailability of Pilot.

The Pilot will board and leave vessels at Bocas de Ceniza, 1 mile North of the Western Breakwater, and they are not authorised anymore to pick up/leave vessels at either Cartagena or Santa Marta, except when the weather does not permit such operation at Bocas, in which case the Pilot Department will decide whether the Pilot must be picked up/left at any other place.

Radio telephone frequency of pilot station 2738 alternative 2638 or 2182 kHz and VHF Channel 16. 2 pilot boats speed 7–9 knots. Sufficient depth to allow vessels wait for Pilot in boarding position, including trade wind season end November to beginning April.

ANCHORAGE: If awaiting Pilot, anchor 1 or 2 miles West of West breakwater during non-windy season. After Pilot boards and when no berthing space at the quay, anchorage is made in the river, about 1,500 ft. off the dock in approximately 40 ft. of water. Three shackles of chain required in good holding ground.

RESTRICTIONS: Depth at the river bar is being maintained at a minimum of 34 ft., however, the actual permissible draft has been curtailed to 30 ft. or less (24 ft. in June 1984 – check with Agent) on account of silting conditions of the river and low river levels, particularly around the area known as Siape, approximately 4 miles from the dock area.

MAX. SIZE: Recommended max. LOA 600 ft. due necessity for turning vessel before sailing. Also see "Restrictions". Rate of current 2.5 knots during dry season, 4 knots in rainy season.

HEALTH: On arrival port doctor boards vessel to inspect crew Yellow Fever Certificates, also Derat Certificate. If any crew members suspected suffering contagious disease Master to radio prior arrival advising Agents accordingly. Port doctor visits vessel even if previous port was in Colombia.

RADIO: Messages to and from Agents routed through station HKB. Ship's messages should include call letters.

TUGS: Generally no tugs required for river entrance. Tugs assist berthing and turning vessels before sailing. Two tugs available of 1,200 and 800 h.p. respectively.

BERTHING: Pier length 2,375 ft. Vessels berth starboard side alongside.

CRANES: 50 ton floating crane available.

STEVEDORES: Agents should receive advance copies of stowage plan and adequate notice ETA order arrange gangs. Working hours: 0800 – 1200 hrs., second shift 1800 – 0200 hrs. No work on Sundays.

MEDICAL: All facilities available.

TANKERS: No facilities.

FRESH WATER: Available. Rate about 20 t.p.h.

FUEL: Only small quantities of gas oil available.

FIRE PRECAUTIONS: No vessel requirements. Terminal has own fire-extinguishing equipment.

GANGWAY/DECK WATCHMEN: Request watchmen through Agents.

CUSTOMS ALLOWANCES: No limitations for individual consumption.

IDENTIFICATION CARDS: Supplied by Agents.

CONSULS:

Austria
Belgium
Bolivia
Brazil
Chile
China
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Gt. Britain
Greece
Guatemala
Honduras
Italy
Jordan
Mexico
Netherlands
Nicaragua
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
U.S.A.
Venezuela

REPAIRS: Good facilities for mechanical or electrical and radio repairs.

DRYDOCKS: Only one dry dock for very small vessels.

REPATRIATION: Good facilities available.

AIRPORT: 6 km. from city. Airport served by major airlines.

TIME: GMT minus 5 hours.

HOLIDAYS: 1st January, 6th January, 8th April, 9th April, 1st May, 23rd May, 2nd June, 29th June, 20th July, 7th August, 15th August, 12th October, 1st November, 11th November, 8th December, 25th December.

POLICE/FIRE/AMBULANCE: Fire 411828, ext 38. Ambulance 410736 or 319594. Police 411937.

TELEPHONES: Arrangements available for placing telephones on board.

SPECIAL RECOMMENDATION: Masters to warn crew to close and lock cabins.

REGULATIONS: No special facilities for discharging explosives.

If explosives on board vessel not allowed berth.

DEVELOPMENTS: Two more berths under construction. Dredging under way in access channel.

AUTHORITY: Direccion General Maritime Y Portuaria – Capitania De Puerto de Barranquilla.

BUENAVENTURA: 03.53 N. 77.05 W. (See Plan Book)

DOCUMENTS: On vessel's arrival, Master must present following documents to Port Captain's Office:

Travel Memorandum.
Sole document or Consular despatch from the last port or ports where vessel disembarked or embarked passengers.
3 Crew Lists.
3 Provision Lists.
3 Lists Crew's Personal Effects.
3 Lists Passengers in transit (or negative).
3 Lists disembarking Passengers (or negative).
3 Lists port mail (or negative).
1 Sobordo or Manifest of cargo for the port.
2 Declarations of Passenger baggage, if any.

Destined to Maritime Terminal:

3 Sets Sobordos or Manifests covering port cargo (or negative).
1 Set of Bills of Lading, covering discharge cargo.
20 Tally Books for discharge cargo.

Destined to the Custom House:

3 Sets of Sobordos or Manifests for cargo destined to the port.
1 Set of Bill of Lading for port of destination.
1 Tally Book for cargo to be discharged in port.
2 Declaration Lists for Passenger baggage, if disembarking.

Destined to the Health Doctor:

Vessel's Travel Memorandum.
International Health Certificate.
1 Crew List.
List of Passengers in transit (or negative).
1 Vessel's Fumigation Certificate (for presentation only).
1 Port Passengers List (or negative).
Certificate of Exemption of Deratisation (for presentation only).

Destined to Immigration Authorities:

1 Crew List.
1 List of Transit Passengers (or negative).
1 List of Port Passengers (or negative).

Destined to Agents:

1 Travel Memorandum as above mentioned.
9 Crew Lists for Consular despatch and handling of sailing permit.
6 Lists of Passengers in transit (or negative), for Consular despatch.
6 Lists of personal effects for Consular despatch.
2 Mail Lists for the port (or negative).
3 Sets of Sobordos or Manifests covering port discharge cargo (or negative).
4 Sets of Bills of Lading covering port discharge cargo.
10 Tally Books covering discharge cargo.
2 Lists of Passenger baggage declaration for the port, if any baggage.

PILOTAGE:

(a) Entry marked by Channel having minimum depth of 3.25 fathoms low tide. Advisable enter Channel or leave wharf 1 hour after low tide and 2 hours after high tide, restricting departure during any other periods, particularly when draft exceeding 20 ft. Entry to Channel marked by Buoy No. 1 located at Lat. 3° 45′ 10″ N., Long. 77° 19′ 10″ W.

(b) 24 hours or 20 hours before reaching port, Master must cable separately to Agents, to Port Captain and to port doctor confirming hour of arrival Punta Bazan (Pilot station). Message to Agency must indicate, in addition to ETA, quantity of cargo destined for the port, number of disembarking or in-transit passengers, number of gangs required for operations, draft, mail for the port, if fresh or running water is required; fuel-oil, cash to Master or any other special requirement; whether special side of wharf is required for berthing, and whether dangerous cargo (explosive) or inflammable cargo, and what quantity. Message to Port Captain must also indicate arrival time, quantity of cargo destined to the port, number of disembarking or in transit passengers, mail, whether dangerous or inflammable cargo is brought and in what quantity, and any other data that may be considered useful in accordance with International regulations. Message to doctor must indicate arrival time, number of disembarking or in-transit passengers, and whether there are sick persons on board.

(c) Radio beacon at Punta Soldado, characteristics: Frequency, 317 kHz. Letters, B.T. Time 0000 – 2400 hrs. every day and every 10 minutes with 20 minutes of rest during 30 minutes work. Flashes 12 seconds duration.

(d) Radio-telephone in pilot station of Punta Basan (opposite to Punta Soldado), characteristics: VHF Channels 11 and 16 every day from 0600 – 2400 hrs.

(e) Since Master's advice to Agency serves as notification to pilot station, Pilot will be at Punta Bazan ready for vessel. In case of delay due to any circumstance, vessel may anchor and request Pilot by 4 short blasts.

(f) Port has 9 Pilots.

(g) Pilot ladder must be lowered a few feet from the surface. Vessel must proceed slowly in order facilitate boarding.

(h) Pilotage compulsory and available 24 hours.

Colombia

GENERAL:

DOCUMENTS:

Consular Documents:

In foreign ports where cargo for Colombia is loaded, the Colombian Consulate must receive two copies of the Cargo Manifest, on a special form (Colombian Freight List), one of which is returned to the vessel and the other is filed at the Consulate.

Prior to Arrival:

Notice of arrival:

The agency must prepare the standard Colombian document for confirmation of vessel arrival, giving the characteristics of vessel and indicating the services requested: pilotage, towing, anchorage, berthing, cargo to be loaded and unloaded, as well as water, electric power, telephone, fuel and lubricants.

This form is addressed to the Director of Operations of the Marine Terminal of the Colombian Port Authority (COLPUERTOS) and is submitted in seven copies (original and three copies for the Marine Terminal and a copy each to the Port Captain, the Customs Security Office, and the Port Public Health Officer). If passengers disembark, an additional copy must be submitted to Migration.

Information on cargo for the port:

At least 24 hours in advance of the vessel's arrival, the agency must receive the following documents by airmail, with the distribution indicated:

Documents	*Customs*	*Marine Terminal*	*Agency*	*Total*
Freighted Manifest (Freight List)	–	–	1	1
Freighted Bills of Lading	1(a)	3	1	5
List of Cargo by Hatch	–	1	1	2
List of Dangerous Cargo in Transit	–	1	1	2
Stowage Plans	–	1	1	2

(a) Stamped.

Request for Port Services:

The agency must submit to COLPUERTOS, 8 hours in advance of the vessel's arrival, the following documents, in original and two copies: request for berthing crew, cranes, terminal crew, motorised equipment and storage; request for inward pilotage and towing.

On Arrival:

On the entrance of a vessel, the following documents must be submitted, either on the model forms established by LAFTA Resolution 254 (IX), or on similar forms, except the cargo manifest, which will be made out on the Colombia Freight List form.

Type of Documents	*Number and Distribution of Documents*						
Basic Forms	*Capt. Port*	*Cus. Sec.*	*Marine Term.*	*Port Pub. Health*	*Migr.*	*Agency*	*Total*
1. General Declaration	1	1	–	–	–	1	3
2. Cargo Manifest	–	1	1	–	–	–	2
3. Crew List	1	2	–	1	1	1	6
4. Passenger List	1	1	–	1	1(a)	1	5
5. Ship's Stores	1	2	–	–	–	1	4
6. Crew Effects Declaration	1	2	–	–	–	1	4
7. Maritime Declaration of Health	–	–	–	1	–	–	1
8. Mail List	–	2(b)	–	–	–	1	3
Additional Documents:							
9. Clearance from Last Port	–	–	–	–	–	–	+
10. List of Passengers in Transit	1	1		1	–	1	4
11. "No Passengers" Declaration (c)	1	2	–	1	–	1	5
12. List of Dangerous Cargo in Transit (c)	1	–	1	–	–	1	3
13. "No Mail" Declaration (c)	–	2(b)	–	–	–	1	3
14. List of Passengers' Baggage (a)	–	3	–	–	–	–	3

(a) Only for those disembarking.
(b) One copy for the Post Office.
(c) When required.

Other Requirements:

The agency provides a landing permit for each crew member and passenger, which is stamped on board by the Captain of the Port.

Prior to Departure:

Clearance for the vessel is requested from the Captain of the Port on a special form. It is prepared in triplicate (original for the vessel, one copy for the Port Captain's file and one for the agency). The following documents accompany it:

1 Crew List.
1 Passenger List or "no passengers" declaration.
1 Ship's Stores List, and
1 Fuel Supply Declaration or negative

Request for Pilotage:

At least 2 hours before departure, a request for pilotage, clearance and unberthing crew must be submitted to the COLPUERTOS Maritime Section.

FREE PRATIQUE: There is no radio pratique. The standard W.H.O. Health Certificate must be used.

PILOTAGE: Pilotage is compulsory for all vessels over 250 n.r.t. The Pilot must be requested by the Agent at least 24 hours in advance.

Berthing preference will be given as follows:

1. Warships.
2. Passenger vessels and Mail Boats on a fixed itinerary.
3. Vessels with livestock and perishable cargoes.
4. Passenger vessels not on a fixed itinerary.
5. Vessels loading cargo for export.
6. Vessels discharging cargo for import.
7. Tankers.
8. Coasters.
9. Vessels carrying explosives.

On sailing all vessels must fly the "P" flag.

Vessels at anchor can be authorised to work to lighters.

All Colombian ports are open 24 hours a day.

ARRIVAL ADVICE:

(1) The local Agent must advise to Empocol with 72/48 and 24 hours in advance the vessel's ETA.

(2) With the ETA pre-arrival advice, Owner or Master must advise the Agent the following:
   (a) Estimated arrival draft, aft and forward
   (b) Full vessel's particulars, including breadth
   (c) Vessel's side for which she must be docked (port side or starboard)
   (d) Cargo hatch distribution

(3) At least with 48 hours in advance, the Agent must receive in order to give to Empocol (together with others issued by the Agent according to the information supplied by the Master and Owner), the following documents:
   (a) 5 original copies (not photocopies) of each Bill of Lading, duly freighted and signed by the shipper
   (b) Stowage plan.

(4) Also 24 hours prior vessel's arrival, the Agent must pay to Empocol the proforma invoice which amounts to the estimated port expenses plus 25 per cent surcharge. Hence it is of paramount importance the Agent receives well in advance the funds required, in order to convert the U.S. Dollars into local currency and proceed to effect the corresponding payment.

It is important to point out that in case the above mentioned instructions are not fulfilled, or the documents are not presented and the proforma invoice is not paid in due time by the Agent, Empocol will not authorise docking and operations of the vessel.

STEVEDORES: Are supplied by the Port Authorities although it is often necessary to employ extra labour through the Agent, due to the fact that gangs are seldom complete. At week-ends, gangs required for Monday must be ordered by 1000 hrs. on Saturday. Masters should bear this in mind when sending their ETA.

Cargo in a damaged condition or showing signs of pilferage will not be handled until inspected by a Port Official and ship's officer, leaving on record the actual condition of the cargo.

Containers are discharged or loaded as all other cargo, though if they are stuffed or unstuffed immediately this must be done with the Port Labour provided.

Opening and closing of hatches, and the rigging of gear, is done by a gang of riggers. The ship's crew can do this work, but it is advisable to use Union Labour.

Rain tents are not supplied by the port.

All gear, slings, spreaders, etc., must be supplied by the ship.

Rat guards must be fitted on all mooring lines whilst in port.

PORT SECURITY MEASURES: All ports are rigorously patrolled by Port Police, and crew members are advised to carry Identification Cards at all times when ashore.

FUMIGATION: This can only be carried out alongside with the permission of the Port Authority.

GARBAGE: No garbage may be thrown overboard. This includes flakes of paint from vessels chipping or scraping the hull. No paint must be allowed to drop into the water or onto the quayside. Overboard discharges must be kept off the quay.

POLLUTION: The standard requirements for the prevention of oil pollution must be adhered to within the continental shelf off the Colombian coast.

All vessels calling at Colombian ports must have "Pollution Policy" onboard. If not onboard vessel will be heavily fined and clearance will not be granted by the Port Captaincy.

All vessels must ensure that the Oil Record Book is up to date prior to arrival, as it is likely to be inspected.

Fines can range from 50,000 to 500,000 Pesos, not including the cost of any clean up operation.

No vessel contaminating the waters of any port may sail until the corresponding fine has been paid.

Oil Tankers are not permitted to clean tanks within 60 miles of the Colombian shores. If a vessel arrives in port with dirty ballast, she will be ordered to proceed to sea beyond the 60 mile limit, and take on clean ballast.

CREW: The authorities will not allow crew to be of unkept appearance or improperly dressed at any time while the vessel is in port.

FUEL: Bunkers are only supplied to vessels which were supplied in 1972, and are actually trading to Colombia. Vessels may not take more bunkers than the amount they received in that year. Requests for bunkers must be made to Agents at least 1 week in advance.

TIME: GMT minus 5 hours. Summertime is not observed.

BARRANQUILLA: 10.58 N. 74.47 W. (See Plan Book)

DOCUMENTS:

Clearance from Last Port.
Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Cargo Gear.
Oil Pollution Certificate – Policy of Insurance.
6 Crew List.
5 Crew Personal Effects List.
5 Provision List.
5 Store List.
6 Passenger List (in transit).
6 Passenger List (disembarking).
4 Declarations of Passenger Baggages.
4 List Port Mail.
1 Sanitation Declaration.
Sets of manifests covering port cargo.

PILOTAGE: The Pilot Department of Empresa Puertos de Colombia at Barranquilla require that the vessel's Agent advises them with at least 24 hours in advance, the best vessel's ETA, together with the estimated arrival draft (fresh water).

Therefore it is important that Masters of vessels advise Agent 72, 48 and 24 hours in advance the best ETA to the port, in order to avoid any delays because of unavailability of Pilot.

The Pilot will board and leave vessels at Bocas de Ceniza, 1 mile North of the Western Breakwater, and they are not authorised anymore to pick up/leave vessels at either Cartagena or Santa Marta, except when the weather does not permit such operation at Bocas, in which case the Pilot Department will decide whether the Pilot must be picked up/left at any other place.

Radio telephone frequency of pilot station 2738 alternative 2638 or 2182 kHz and VHF Channel 16. 2 pilot boats speed 7–9 knots. Sufficient depth to allow vessels wait for Pilot in boarding position, including trade wind season end November to beginning April.

ANCHORAGE: If awaiting Pilot, anchor 1 or 2 miles West of West breakwater during non-windy season. After Pilot boards and when no berthing space at the quay, anchorage is made in the river, about 1,500 ft. off the dock in approximately 40 ft. of water. Three shackles of chain required in good holding ground.

RESTRICTIONS: Depth at the river bar is being maintained at a minimum of 34 ft., however, the actual permissible draft has been curtailed to 30 ft. or less (24 ft. in June 1984 – check with Agent) on account of silting conditions of the river and low river levels, particularly around the area known as Siape, approximately 4 miles from the dock area.

MAX. SIZE: Recommended max. LOA 600 ft. due necessity for turning vessel before sailing. Also see "Restrictions". Rate of current 2.5 knots during dry season, 4 knots in rainy season.

HEALTH: On arrival port doctor boards vessel to inspect crew Yellow Fever Certificates, also Derat Certificate. If any crew members suspected suffering contagious disease Master to radio prior arrival advising Agents accordingly. Port doctor visits vessel even if previous port was in Colombia.

RADIO: Messages to and from Agents routed through station HKB. Ship's messages should include call letters.

TUGS: Generally no tugs required for river entrance. Tugs assist berthing and turning vessels before sailing. Two tugs available of 1,200 and 800 h.p. respectively.

BERTHING: Pier length 2,375 ft. Vessels berth starboard side alongside.

CRANES: 50 ton floating crane available.

STEVEDORES: Agents should receive advance copies of stowage plan and adequate notice ETA order arrange gangs. Working hours: 0800 – 1200 hrs., second shift 1800 – 0200 hrs. No work on Sundays.

MEDICAL: All facilities available.

TANKERS: No facilities.

FRESH WATER: Available. Rate about 20 t.p.h.

FUEL: Only small quantities of gas oil available.

FIRE PRECAUTIONS: No vessel requirements. Terminal has own fire-extinguishing equipment.

GANGWAY/DECK WATCHMEN: Request watchmen through Agents.

CUSTOMS ALLOWANCES: No limitations for individual consumption.

IDENTIFICATION CARDS: Supplied by Agents.

CONSULS:

Austria
Belgium
Bolivia
Brazil
Chile
China
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Gt. Britain
Greece
Guatemala
Honduras
Italy
Jordan
Mexico
Netherlands
Nicaragua
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
U.S.A.
Venezuela

REPAIRS: Good facilities for mechanical or electrical and radio repairs.

DRYDOCKS: Only one dry dock for very small vessels.

REPATRIATION: Good facilities available.

AIRPORT: 6 km. from city. Airport served by major airlines.

TIME: GMT minus 5 hours.

HOLIDAYS: 1st January, 6th January, 8th April, 9th April, 1st May, 23rd May, 2nd June, 29th June, 20th July, 7th August, 15th August, 12th October, 1st November, 11th November, 8th December, 25th December.

POLICE/FIRE/AMBULANCE: Fire 411828, ext 38. Ambulance 410736 or 319594. Police 411937.

TELEPHONES: Arrangements available for placing telephones on board.

SPECIAL RECOMMENDATION: Masters to warn crew to close and lock cabins.

REGULATIONS: No special facilities for discharging explosives.

If explosives on board vessel not allowed berth.

DEVELOPMENTS: Two more berths under construction. Dredging under way in access channel.

AUTHORITY: Direccion General Maritime Y Portuaria – Capitania De Puerto de Barranquilla.

BUENAVENTURA: 03.53 N. 77.05 W. (See Plan Book)

DOCUMENTS: On vessel's arrival, Master must present following documents to Port Captain's Office:

Travel Memorandum.
Sole document or Consular despatch from the last port or ports where vessel disembarked or embarked passengers.
3 Crew Lists.
3 Provision Lists.
3 Lists Crew's Personal Effects.
3 Lists Passengers in transit (or negative).
3 Lists disembarking Passengers (or negative).
3 Lists port mail (or negative).
1 Sobordo or Manifest of cargo for the port.
2 Declarations of Passenger baggage, if any.

Destined to Maritime Terminal:

3 Sets Sobordos or Manifests covering port cargo (or negative).
1 Set of Bills of Lading, covering discharge cargo.
20 Tally Books for discharge cargo.

Destined to the Custom House:

3 Sets of Sobordos or Manifests for cargo destined to the port.
1 Set of Bill of Lading for port of destination.
1 Tally Book for cargo to be discharged in port.
2 Declaration Lists for Passenger baggage, if disembarking.

Destined to the Health Doctor:

Vessel's Travel Memorandum.
International Health Certificate.
1 Crew List.
List of Passengers in transit (or negative).
1 Vessel's Fumigation Certificate (for presentation only).
1 Port Passengers List (or negative).
Certificate of Exemption of Deratisation (for presentation only).

Destined to Immigration Authorities:

1 Crew List.
1 List of Transit Passengers (or negative).
1 List of Port Passengers (or negative).

Destined to Agents:

1 Travel Memorandum as above mentioned.
9 Crew Lists for Consular despatch and handling of sailing permit.
6 Lists of Passengers in transit (or negative), for Consular despatch.
6 Lists of personal effects for Consular despatch.
2 Mail Lists for the port (or negative).
3 Sets of Sobordos or Manifests covering port discharge cargo (or negative).
4 Sets of Bills of Lading covering port discharge cargo.
10 Tally Books covering discharge cargo.
2 Lists of Passenger baggage declaration for the port, if any baggage.

PILOTAGE:

(a) Entry marked by Channel having minimum depth of 3.25 fathoms low tide. Advisable enter Channel or leave wharf 1 hour after low tide and 2 hours after high tide, restricting departure during any other periods, particularly when draft exceeding 20 ft. Entry to Channel marked by Buoy No. 1 located at Lat. 3° 45′ 10″ N., Long. 77° 19′ 10″ W.

(b) 24 hours or 20 hours before reaching port, Master must cable separately to Agents, to Port Captain and to port doctor confirming hour of arrival Punta Bazan (Pilot station). Message to Agency must indicate, in addition to ETA, quantity of cargo destined for the port, number of disembarking or in-transit passengers, number of gangs required for operations, draft, mail for the port, if fresh or running water is required; fuel-oil, cash to Master or any other special requirement; whether special side of wharf is required for berthing, and whether dangerous cargo (explosive) or inflammable cargo, and what quantity. Message to Port Captain must also indicate arrival time, quantity of cargo destined to the port, number of disembarking or in transit passengers, mail, whether dangerous or inflammable cargo is brought and in what quantity, and any other data that may be considered useful in accordance with International regulations. Message to doctor must indicate arrival time, number of disembarking or in-transit passengers, and whether there are sick persons on board.

(c) Radio beacon at Punta Soldado, characteristics: Frequency, 317 kHz. Letters, B.T. Time 0000 – 2400 hrs. every day and every 10 minutes with 20 minutes of rest during 30 minutes work. Flashes 12 seconds duration.

(d) Radio-telephone in pilot station of Punta Basan (opposite to Punta Soldado), characteristics: VHF Channels 11 and 16 every day from 0600 – 2400 hrs.

(e) Since Master's advice to Agency serves as notification to pilot station, Pilot will be at Punta Bazan ready for vessel. In case of delay due to any circumstance, vessel may anchor and request Pilot by 4 short blasts.

(f) Port has 9 Pilots.

(g) Pilot ladder must be lowered a few feet from the surface. Vessel must proceed slowly in order facilitate boarding.

(h) Pilotage compulsory and available 24 hours.

Colombia

GENERAL:

DOCUMENTS:

Consular Documents:

In foreign ports where cargo for Colombia is loaded, the Colombian Consulate must receive two copies of the Cargo Manifest, on a special form (Colombian Freight List), one of which is returned to the vessel and the other is filed at the Consulate.

Prior to Arrival:

Notice of arrival:

The agency must prepare the standard Colombian document for confirmation of vessel arrival, giving the characteristics of vessel and indicating the services requested: pilotage, towing, anchorage, berthing, cargo to be loaded and unloaded, as well as water, electric power, telephone, fuel and lubricants.

This form is addressed to the Director of Operations of the Marine Terminal of the Colombian Port Authority (COLPUERTOS) and is submitted in seven copies (original and three copies for the Marine Terminal and a copy each to the Port Captain, the Customs Security Office, and the Port Public Health Officer). If passengers disembark, an additional copy must be submitted to Migration.

Information on cargo for the port:

At least 24 hours in advance of the vessel's arrival, the agency must receive the following documents by airmail, with the distribution indicated:

Documents	*Customs*	*Marine Terminal*	*Agency*	*Total*
Freighted Manifest (Freight List)	–	–	1	1
Freighted Bills of Lading	1(a)	3	1	5
List of Cargo by Hatch	–	1	1	2
List of Dangerous Cargo in Transit	–	1	1	2
Stowage Plans	–	1	1	2

(a) Stamped.

Request for Port Services:

The agency must submit to COLPUERTOS, 8 hours in advance of the vessel's arrival, the following documents, in original and two copies: request for berthing crew, cranes, terminal crew, motorised equipment and storage; request for inward pilotage and towing.

On Arrival:

On the entrance of a vessel, the following documents must be submitted, either on the model forms established by LAFTA Resolution 254 (IX), or on similar forms, except the cargo manifest, which will be made out on the Colombia Freight List form.

Type of Documents	*Number and Distribution of Documents*						
Basic Forms	*Capt. Port*	*Cus. Sec.*	*Marine Term.*	*Port Pub. Health*	*Migr.*	*Agency*	*Total*
1. General Declaration	1	1	–	–	–	1	3
2. Cargo Manifest	–	1	1	–	–	–	2
3. Crew List	1	2	–	1	1	1	6
4. Passenger List	1	1	–	1	1(a)	1	5
5. Ship's Stores	1	2	–	–	–	1	4
6. Crew Effects Declaration	1	2	–	–	–	1	4
7. Maritime Declaration of Health	–	–	–	1	–	–	1
8. Mail List	–	2(b)	–	–	–	1	3
Additional Documents:							
9. Clearance from Last Port	–	–	–	–	–	–	+
10. List of Passengers in Transit	1	1		1	–	1	4
11. "No Passengers" Declaration (c)	1	2	–	1	–	1	5
12. List of Dangerous Cargo in Transit (c)	1	–	1	–	–	1	3
13. "No Mail" Declaration (c)	–	2(b)	–	–	–	1	3
14. List of Passengers' Baggage (a)	–	3	–	–	–	–	3

(a) Only for those disembarking.
(b) One copy for the Post Office.
(c) When required.

Other Requirements:

The agency provides a landing permit for each crew member and passenger, which is stamped on board by the Captain of the Port.

Prior to Departure:

Clearance for the vessel is requested from the Captain of the Port on a special form. It is prepared in triplicate (original for the vessel, one copy for the Port Captain's file and one for the agency). The following documents accompany it:

1 Crew List.
1 Passenger List or "no passengers" declaration.
1 Ship's Stores List, and
1 Fuel Supply Declaration or negative

Request for Pilotage:

At least 2 hours before departure, a request for pilotage, clearance and unberthing crew must be submitted to the COLPUERTOS Maritime Section.

FREE PRATIQUE: There is no radio pratique. The standard W.H.O. Health Certificate must be used.

PILOTAGE: Pilotage is compulsory for all vessels over 250 n.r.t. The Pilot must be requested by the Agent at least 24 hours in advance.

Berthing preference will be given as follows:

1. Warships.
2. Passenger vessels and Mail Boats on a fixed itinerary.
3. Vessels with livestock and perishable cargoes.
4. Passenger vessels not on a fixed itinerary.
5. Vessels loading cargo for export.
6. Vessels discharging cargo for import.
7. Tankers.
8. Coasters.
9. Vessels carrying explosives.

On sailing all vessels must fly the "P" flag.

Vessels at anchor can be authorised to work to lighters.

All Colombian ports are open 24 hours a day.

ARRIVAL ADVICE:

(1) The local Agent must advise to Empocol with 72/48 and 24 hours in advance the vessel's ETA.

(2) With the ETA pre-arrival advice, Owner or Master must advise the Agent the following:
  (a) Estimated arrival draft, aft and forward
  (b) Full vessel's particulars, including breadth
  (c) Vessel's side for which she must be docked (port side or starboard)
  (d) Cargo hatch distribution

(3) At least with 48 hours in advance, the Agent must receive in order to give to Empocol (together with others issued by the Agent according to the information supplied by the Master and Owner), the following documents:
  (a) 5 original copies (not photocopies) of each Bill of Lading, duly freighted and signed by the shipper
  (b) Stowage plan.

(4) Also 24 hours prior vessel's arrival, the Agent must pay to Empocol the proforma invoice which amounts to the estimated port expenses plus 25 per cent surcharge. Hence it is of paramount importance the Agent receives well in advance the funds required, in order to convert the U.S. Dollars into local currency and proceed to effect the corresponding payment.

It is important to point out that in case the above mentioned instructions are not fulfilled, or the documents are not presented and the proforma invoice is not paid in due time by the Agent, Empocol will not authorise docking and operations of the vessel.

STEVEDORES: Are supplied by the Port Authorities although it is often necessary to employ extra labour through the Agent, due to the fact that gangs are seldom complete. At week-ends, gangs required for Monday must be ordered by 1000 hrs. on Saturday. Masters should bear this in mind when sending their ETA.

Cargo in a damaged condition or showing signs of pilferage will not be handled until inspected by a Port Official and ship's officer, leaving on record the actual condition of the cargo.

Containers are discharged or loaded as all other cargo, though if they are stuffed or unstuffed immediately this must be done with the Port Labour provided.

Opening and closing of hatches, and the rigging of gear, is done by a gang of riggers. The ship's crew can do this work, but it is advisable to use Union Labour.

Rain tents are not supplied by the port.

All gear, slings, spreaders, etc., must be supplied by the ship.

Rat guards must be fitted on all mooring lines whilst in port.

PORT SECURITY MEASURES: All ports are rigorously patrolled by Port Police, and crew members are advised to carry Identification Cards at all times when ashore.

FUMIGATION: This can only be carried out alongside with the permission of the Port Authority.

GARBAGE: No garbage may be thrown overboard. This includes flakes of paint from vessels chipping or scraping the hull. No paint must be allowed to drop into the water or onto the quayside. Overboard discharges must be kept off the quay.

POLLUTION: The standard requirements for the prevention of oil pollution must be adhered to within the continental shelf off the Colombian coast.

All vessels calling at Colombian ports must have "Pollution Policy" onboard. If not onboard vessel will be heavily fined and clearance will not be granted by the Port Captaincy.

All vessels must ensure that the Oil Record Book is up to date prior to arrival, as it is likely to be inspected.

Fines can range from 50,000 to 500,000 Pesos, not including the cost of any clean up operation.

No vessel contaminating the waters of any port may sail until the corresponding fine has been paid.

Oil Tankers are not permitted to clean tanks within 60 miles of the Colombian shores. If a vessel arrives in port with dirty ballast, she will be ordered to proceed to sea beyond the 60 mile limit, and take on clean ballast.

CREW: The authorities will not allow crew to be of unkept appearance or improperly dressed at any time while the vessel is in port.

FUEL: Bunkers are only supplied to vessels which were supplied in 1972, and are actually trading to Colombia. Vessels may not take more bunkers than the amount they received in that year. Requests for bunkers must be made to Agents at least 1 week in advance.

TIME: GMT minus 5 hours. Summertime is not observed.

BARRANQUILLA: 10.58 N. 74.47 W. (See Plan Book)

DOCUMENTS:

Clearance from Last Port.
Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Cargo Gear.
Oil Pollution Certificate – Policy of Insurance.
6 Crew List.
5 Crew Personal Effects List.
5 Provision List.
5 Store List.
6 Passenger List (in transit).
6 Passenger List (disembarking).
4 Declarations of Passenger Baggages.
4 List Port Mail.
1 Sanitation Declaration.
Sets of manifests covering port cargo.

PILOTAGE: The Pilot Department of Empresa Puertos de Colombia at Barranquilla require that the vessel's Agent advises them with at least 24 hours in advance, the best vessel's ETA, together with the estimated arrival draft (fresh water).

Therefore it is important that Masters of vessels advise Agent 72, 48 and 24 hours in advance the best ETA to the port, in order to avoid any delays because of unavailability of Pilot.

The Pilot will board and leave vessels at Bocas de Ceniza, 1 mile North of the Western Breakwater, and they are not authorised anymore to pick up/leave vessels at either Cartagena or Santa Marta, except when the weather does not permit such operation at Bocas, in which case the Pilot Department will decide whether the Pilot must be picked up/left at any other place.

Radio telephone frequency of pilot station 2738 alternative 2638 or 2182 kHz and VHF Channel 16. 2 pilot boats speed 7–9 knots. Sufficient depth to allow vessels wait for Pilot in boarding position, including trade wind season end November to beginning April.

ANCHORAGE: If awaiting Pilot, anchor 1 or 2 miles West of West breakwater during non-windy season. After Pilot boards and when no berthing space at the quay, anchorage is made in the river, about 1,500 ft. off the dock in approximately 40 ft. of water. Three shackles of chain required in good holding ground.

RESTRICTIONS: Depth at the river bar is being maintained at a minimum of 34 ft., however, the actual permissible draft has been curtailed to 30 ft. or less (24 ft. in June 1984 – check with Agent) on account of silting conditions of the river and low river levels, particularly around the area known as Siape, approximately 4 miles from the dock area.

MAX. SIZE: Recommended max. LOA 600 ft. due necessity for turning vessel before sailing. Also see "Restrictions". Rate of current 2.5 knots during dry season, 4 knots in rainy season.

HEALTH: On arrival port doctor boards vessel to inspect crew Yellow Fever Certificates, also Derat Certificate. If any crew members suspected suffering contagious disease Master to radio prior arrival advising Agents accordingly. Port doctor visits vessel even if previous port was in Colombia.

RADIO: Messages to and from Agents routed through station HKB. Ship's messages should include call letters.

TUGS: Generally no tugs required for river entrance. Tugs assist berthing and turning vessels before sailing. Two tugs available of 1,200 and 800 h.p. respectively.

BERTHING: Pier length 2,375 ft. Vessels berth starboard side alongside.

CRANES: 50 ton floating crane available.

STEVEDORES: Agents should receive advance copies of stowage plan and adequate notice ETA order arrange gangs. Working hours: 0800 – 1200 hrs., second shift 1800 – 0200 hrs. No work on Sundays.

MEDICAL: All facilities available.

TANKERS: No facilities.

FRESH WATER: Available. Rate about 20 t.p.h.

FUEL: Only small quantities of gas oil available.

FIRE PRECAUTIONS: No vessel requirements. Terminal has own fire-extinguishing equipment.

GANGWAY/DECK WATCHMEN: Request watchmen through Agents.

CUSTOMS ALLOWANCES: No limitations for individual consumption.

IDENTIFICATION CARDS: Supplied by Agents.

CONSULS:

Austria
Belgium
Bolivia
Brazil
Chile
China
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Gt. Britain
Greece
Guatemala
Honduras
Italy
Jordan
Mexico
Netherlands
Nicaragua
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
U.S.A.
Venezuela

REPAIRS: Good facilities for mechanical or electrical and radio repairs.

DRYDOCKS: Only one dry dock for very small vessels.

REPATRIATION: Good facilities available.

AIRPORT: 6 km. from city. Airport served by major airlines.

TIME: GMT minus 5 hours.

HOLIDAYS: 1st January, 6th January, 8th April, 9th April, 1st May, 23rd May, 2nd June, 29th June, 20th July, 7th August, 15th August, 12th October, 1st November, 11th November, 8th December, 25th December.

POLICE/FIRE/AMBULANCE: Fire 411828, ext 38. Ambulance 410736 or 319594. Police 411937.

TELEPHONES: Arrangements available for placing telephones on board.

SPECIAL RECOMMENDATION: Masters to warn crew to close and lock cabins.

REGULATIONS: No special facilities for discharging explosives. If explosives on board vessel not allowed berth.

DEVELOPMENTS: Two more berths under construction. Dredging under way in access channel.

AUTHORITY: Direccion General Maritime Y Portuaria – Capitania De Puerto de Barranquilla.

BUENAVENTURA: 03.53 N. 77.05 W. (See Plan Book)

DOCUMENTS: On vessel's arrival, Master must present following documents to Port Captain's Office:

Travel Memorandum.
Sole document or Consular despatch from the last port or ports where vessel disembarked or embarked passengers.
3 Crew Lists.
3 Provision Lists.
3 Lists Crew's Personal Effects.
3 Lists Passengers in transit (or negative).
3 Lists disembarking Passengers (or negative).
3 Lists port mail (or negative).
1 Sobordo or Manifest of cargo for the port.
2 Declarations of Passenger baggage, if any.

Destined to Maritime Terminal:

3 Sets Sobordos or Manifests covering port cargo (or negative).
1 Set of Bills of Lading, covering discharge cargo.
20 Tally Books for discharge cargo.

Destined to the Custom House:

3 Sets of Sobordos or Manifests for cargo destined to the port.
1 Set of Bill of Lading for port of destination.
1 Tally Book for cargo to be discharged in port.
2 Declaration Lists for Passenger baggage, if disembarking.

Destined to the Health Doctor:

Vessel's Travel Memorandum.
International Health Certificate.
1 Crew List.
List of Passengers in transit (or negative).
1 Vessel's Fumigation Certificate (for presentation only).
1 Port Passengers List (or negative).
Certificate of Exemption of Deratisation (for presentation only).

Destined to Immigration Authorities:

1 Crew List.
1 List of Transit Passengers (or negative).
1 List of Port Passengers (or negative).

Destined to Agents:

1 Travel Memorandum as above mentioned.
9 Crew Lists for Consular despatch and handling of sailing permit.
6 Lists of Passengers in transit (or negative), for Consular despatch.
6 Lists of personal effects for Consular despatch.
2 Mail Lists for the port (or negative).
3 Sets of Sobordos or Manifests covering port discharge cargo (or negative).
4 Sets of Bills of Lading covering port discharge cargo.
10 Tally Books covering discharge cargo.
2 Lists of Passenger baggage declaration for the port, if any baggage.

PILOTAGE:

(a) Entry marked by Channel having minimum depth of 3.25 fathoms low tide. Advisable enter Channel or leave wharf 1 hour after low tide and 2 hours after high tide, restricting departure during any other periods, particularly when draft exceeding 20 ft. Entry to Channel marked by Buoy No. 1 located at Lat. 3° 45′ 10″ N., Long. 77° 19′ 10″ W.

(b) 24 hours or 20 hours before reaching port, Master must cable separately to Agents, to Port Captain and to port doctor confirming hour of arrival Punta Bazan (Pilot station). Message to Agency must indicate, in addition to ETA, quantity of cargo destined for the port, number of disembarking or in-transit passengers, number of gangs required for operations, draft, mail for the port, if fresh or running water is required; fuel-oil, cash to Master or any other special requirement; whether special side of wharf is required for berthing, and whether dangerous cargo (explosive) or inflammable cargo, and what quantity. Message to Port Captain must also indicate arrival time, quantity of cargo destined to the port, number of disembarking or in transit passengers, mail, whether dangerous or inflammable cargo is brought and in what quantity, and any other data that may be considered useful in accordance with International regulations. Message to doctor must indicate arrival time, number of disembarking or in-transit passengers, and whether there are sick persons on board.

(c) Radio beacon at Punta Soldado, characteristics: Frequency, 317 kHz. Letters, B.T. Time 0000 – 2400 hrs. every day and every 10 minutes with 20 minutes of rest during 30 minutes work. Flashes 12 seconds duration.

(d) Radio-telephone in pilot station of Punta Basan (opposite to Punta Soldado), characteristics: VHF Channels 11 and 16 every day from 0600 – 2400 hrs.

(e) Since Master's advice to Agency serves as notification to pilot station, Pilot will be at Punta Bazan ready for vessel. In case of delay due to any circumstance, vessel may anchor and request Pilot by 4 short blasts.

(f) Port has 9 Pilots.

(g) Pilot ladder must be lowered a few feet from the surface. Vessel must proceed slowly in order facilitate boarding.

(h) Pilotage compulsory and available 24 hours.

Colombia

GENERAL:

DOCUMENTS:

Consular Documents:

In foreign ports where cargo for Colombia is loaded, the Colombian Consulate must receive two copies of the Cargo Manifest, on a special form (Colombian Freight List), one of which is returned to the vessel and the other is filed at the Consulate.

Prior to Arrival:

Notice of arrival:

The agency must prepare the standard Colombian document for confirmation of vessel arrival, giving the characteristics of vessel and indicating the services requested: pilotage, towing, anchorage, berthing, cargo to be loaded and unloaded, as well as water, electric power, telephone, fuel and lubricants.

This form is addressed to the Director of Operations of the Marine Terminal of the Colombian Port Authority (COLPUERTOS) and is submitted in seven copies (original and three copies for the Marine Terminal and a copy each to the Port Captain, the Customs Security Office, and the Port Public Health Officer). If passengers disembark, an additional copy must be submitted to Migration.

Information on cargo for the port:

At least 24 hours in advance of the vessel's arrival, the agency must receive the following documents by airmail, with the distribution indicated:

Documents	*Customs*	*Marine Terminal*	*Agency*	*Total*
Freighted Manifest (Freight List)	–	–	1	1
Freighted Bills of Lading	1(a)	3	1	5
List of Cargo by Hatch	–	1	1	2
List of Dangerous Cargo in Transit	–	1	1	2
Stowage Plans	–	1	1	2

(a) Stamped.

Request for Port Services:

The agency must submit to COLPUERTOS, 8 hours in advance of the vessel's arrival, the following documents, in original and two copies: request for berthing crew, cranes, terminal crew, motorised equipment and storage; request for inward pilotage and towing.

On Arrival:

On the entrance of a vessel, the following documents must be submitted, either on the model forms established by LAFTA Resolution 254 (IX), or on similar forms, except the cargo manifest, which will be made out on the Colombia Freight List form.

Type of Documents	*Number and Distribution of Documents*						
Basic Forms	*Capt. Port*	*Cus. Sec.*	*Marine Term.*	*Port Pub. Health*	*Migr.*	*Agency*	*Total*
1. General Declaration	1	1	–	–	–	1	3
2. Cargo Manifest	–	1	1	–	–	–	2
3. Crew List	1	2	–	1	1	1	6
4. Passenger List	1	1	–	1	1(a)	1	5
5. Ship's Stores	1	2	–	–	–	1	4
6. Crew Effects Declaration	1	2	–	–	–	1	4
7. Maritime Declaration of Health	–	–	–	1	–	–	1
8. Mail List	–	2(b)	–	–	–	1	3
Additional Documents:							
9. Clearance from Last Port	–	–	–	–	–	–	+
10. List of Passengers in Transit	1	1		1	–	1	4
11. "No Passengers" Declaration (c)	1	2	–	1	–	1	5
12. List of Dangerous Cargo in Transit (c)	1	–	1	–	–	1	3
13. "No Mail" Declaration (c)	–	2(b)	–	–	–	1	3
14. List of Passengers' Baggage (a)	–	3	–	–	–	–	3

(a) Only for those disembarking.
(b) One copy for the Post Office.
(c) When required.

Other Requirements:

The agency provides a landing permit for each crew member and passenger, which is stamped on board by the Captain of the Port.

Prior to Departure:

Clearance for the vessel is requested from the Captain of the Port on a special form. It is prepared in triplicate (original for the vessel, one copy for the Port Captain's file and one for the agency). The following documents accompany it:

1 Crew List.
1 Passenger List or "no passengers" declaration.
1 Ship's Stores List, and
1 Fuel Supply Declaration or negative

Request for Pilotage:

At least 2 hours before departure, a request for pilotage, clearance and unberthing crew must be submitted to the COLPUERTOS Maritime Section.

FREE PRATIQUE: There is no radio pratique. The standard W.H.O. Health Certificate must be used.

PILOTAGE: Pilotage is compulsory for all vessels over 250 n.r.t. The Pilot must be requested by the Agent at least 24 hours in advance.

Berthing preference will be given as follows:

1. Warships.
2. Passenger vessels and Mail Boats on a fixed itinerary.
3. Vessels with livestock and perishable cargoes.
4. Passenger vessels not on a fixed itinerary.
5. Vessels loading cargo for export.
6. Vessels discharging cargo for import.
7. Tankers.
8. Coasters.
9. Vessels carrying explosives.

On sailing all vessels must fly the "P" flag.

Vessels at anchor can be authorised to work to lighters.

All Colombian ports are open 24 hours a day.

ARRIVAL ADVICE:

(1) The local Agent must advise to Empocol with 72/48 and 24 hours in advance the vessel's ETA.

(2) With the ETA pre-arrival advice, Owner or Master must advise the Agent the following:
  (a) Estimated arrival draft, aft and forward
  (b) Full vessel's particulars, including breadth
  (c) Vessel's side for which she must be docked (port side or starboard)
  (d) Cargo hatch distribution

(3) At least with 48 hours in advance, the Agent must receive in order to give to Empocol (together with others issued by the Agent according to the information supplied by the Master and Owner), the following documents:
  (a) 5 original copies (not photocopies) of each Bill of Lading, duly freighted and signed by the shipper
  (b) Stowage plan.

(4) Also 24 hours prior vessel's arrival, the Agent must pay to Empocol the proforma invoice which amounts to the estimated port expenses plus 25 per cent surcharge. Hence it is of paramount importance the Agent receives well in advance the funds required, in order to convert the U.S. Dollars into local currency and proceed to effect the corresponding payment.

It is important to point out that in case the above mentioned instructions are not fulfilled, or the documents are not presented and the proforma invoice is not paid in due time by the Agent, Empocol will not authorise docking and operations of the vessel.

STEVEDORES: Are supplied by the Port Authorities although it is often necessary to employ extra labour through the Agent, due to the fact that gangs are seldom complete. At week-ends, gangs required for Monday must be ordered by 1000 hrs. on Saturday. Masters should bear this in mind when sending their ETA.

Cargo in a damaged condition or showing signs of pilferage will not be handled until inspected by a Port Official and ship's officer, leaving on record the actual condition of the cargo.

Containers are discharged or loaded as all other cargo, though if they are stuffed or unstuffed immediately this must be done with the Port Labour provided.

Opening and closing of hatches, and the rigging of gear, is done by a gang of riggers. The ship's crew can do this work, but it is advisable to use Union Labour.

Rain tents are not supplied by the port.

All gear, slings, spreaders, etc., must be supplied by the ship.

Rat guards must be fitted on all mooring lines whilst in port.

PORT SECURITY MEASURES: All ports are rigorously patrolled by Port Police, and crew members are advised to carry Identification Cards at all times when ashore.

FUMIGATION: This can only be carried out alongside with the permission of the Port Authority.

GARBAGE: No garbage may be thrown overboard. This includes flakes of paint from vessels chipping or scraping the hull. No paint must be allowed to drop into the water or onto the quayside. Overboard discharges must be kept off the quay.

POLLUTION: The standard requirements for the prevention of oil pollution must be adhered to within the continental shelf off the Colombian coast.

All vessels calling at Colombian ports must have "Pollution Policy" onboard. If not onboard vessel will be heavily fined and clearance will not be granted by the Port Captaincy.

All vessels must ensure that the Oil Record Book is up to date prior to arrival, as it is likely to be inspected.

Fines can range from 50,000 to 500,000 Pesos, not including the cost of any clean up operation.

No vessel contaminating the waters of any port may sail until the corresponding fine has been paid.

Oil Tankers are not permitted to clean tanks within 60 miles of the Colombian shores. If a vessel arrives in port with dirty ballast, she will be ordered to proceed to sea beyond the 60 mile limit, and take on clean ballast.

CREW: The authorities will not allow crew to be of unkept appearance or improperly dressed at any time while the vessel is in port.

FUEL: Bunkers are only supplied to vessels which were supplied in 1972, and are actually trading to Colombia. Vessels may not take more bunkers than the amount they received in that year. Requests for bunkers must be made to Agents at least 1 week in advance.

TIME: GMT minus 5 hours. Summertime is not observed.

BARRANQUILLA: 10.58 N. 74.47 W. (See Plan Book)

DOCUMENTS:

Clearance from Last Port.
Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Cargo Gear.
Oil Pollution Certificate – Policy of Insurance.
6 Crew List.
5 Crew Personal Effects List.
5 Provision List.
5 Store List.
6 Passenger List (in transit).
6 Passenger List (disembarking).
4 Declarations of Passenger Baggages.
4 List Port Mail.
1 Sanitation Declaration.
Sets of manifests covering port cargo.

PILOTAGE: The Pilot Department of Empresa Puertos de Colombia at Barranquilla require that the vessel's Agent advises them with at least 24 hours in advance, the best vessel's ETA, together with the estimated arrival draft (fresh water).

Therefore it is important that Masters of vessels advise Agent 72, 48 and 24 hours in advance the best ETA to the port, in order to avoid any delays because of unavailability of Pilot.

The Pilot will board and leave vessels at Bocas de Ceniza, 1 mile North of the Western Breakwater, and they are not authorised anymore to pick up/leave vessels at either Cartagena or Santa Marta, except when the weather does not permit such operation at Bocas, in which case the Pilot Department will decide whether the Pilot must be picked up/left at any other place.

Radio telephone frequency of pilot station 2738 alternative 2638 or 2182 kHz and VHF Channel 16. 2 pilot boats speed 7–9 knots. Sufficient depth to allow vessels wait for Pilot in boarding position, including trade wind season end November to beginning April.

ANCHORAGE: If awaiting Pilot, anchor 1 or 2 miles West of West breakwater during non-windy season. After Pilot boards and when no berthing space at the quay, anchorage is made in the river, about 1,500 ft. off the dock in approximately 40 ft. of water. Three shackles of chain required in good holding ground.

RESTRICTIONS: Depth at the river bar is being maintained at a minimum of 34 ft., however, the actual permissible draft has been curtailed to 30 ft. or less (24 ft. in June 1984 – check with Agent) on account of silting conditions of the river and low river levels, particularly around the area known as Siape, approximately 4 miles from the dock area.

MAX. SIZE: Recommended max. LOA 600 ft. due necessity for turning vessel before sailing. Also see "Restrictions". Rate of current 2.5 knots during dry season, 4 knots in rainy season.

HEALTH: On arrival port doctor boards vessel to inspect crew Yellow Fever Certificates, also Derat Certificate. If any crew members suspected suffering contagious disease Master to radio prior arrival advising Agents accordingly. Port doctor visits vessel even if previous port was in Colombia.

RADIO: Messages to and from Agents routed through station HKB. Ship's messages should include call letters.

TUGS: Generally no tugs required for river entrance. Tugs assist berthing and turning vessels before sailing. Two tugs available of 1,200 and 800 h.p. respectively.

BERTHING: Pier length 2,375 ft. Vessels berth starboard side alongside.

CRANES: 50 ton floating crane available.

STEVEDORES: Agents should receive advance copies of stowage plan and adequate notice ETA order arrange gangs. Working hours: 0800 – 1200 hrs., second shift 1800 – 0200 hrs. No work on Sundays.

MEDICAL: All facilities available.

TANKERS: No facilities.

FRESH WATER: Available. Rate about 20 t.p.h.

FUEL: Only small quantities of gas oil available.

FIRE PRECAUTIONS: No vessel requirements. Terminal has own fire-extinguishing equipment.

GANGWAY/DECK WATCHMEN: Request watchmen through Agents.

CUSTOMS ALLOWANCES: No limitations for individual consumption.

IDENTIFICATION CARDS: Supplied by Agents.

CONSULS:

Austria
Belgium
Bolivia
Brazil
Chile
China
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Gt. Britain
Greece
Guatemala
Honduras
Italy
Jordan
Mexico
Netherlands
Nicaragua
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
U.S.A.
Venezuela

REPAIRS: Good facilities for mechanical or electrical and radio repairs.

DRYDOCKS: Only one dry dock for very small vessels.

REPATRIATION: Good facilities available.

AIRPORT: 6 km. from city. Airport served by major airlines.

TIME: GMT minus 5 hours.

HOLIDAYS: 1st January, 6th January, 8th April, 9th April, 1st May, 23rd May, 2nd June, 29th June, 20th July, 7th August, 15th August, 12th October, 1st November, 11th November, 8th December, 25th December.

POLICE/FIRE/AMBULANCE: Fire 411828, ext 38. Ambulance 410736 or 319594. Police 411937.

TELEPHONES: Arrangements available for placing telephones on board.

SPECIAL RECOMMENDATION: Masters to warn crew to close and lock cabins.

REGULATIONS: No special facilities for discharging explosives.

If explosives on board vessel not allowed berth.

DEVELOPMENTS: Two more berths under construction. Dredging under way in access channel.

AUTHORITY: Direccion General Maritime Y Portuaria – Capitania De Puerto de Barranquilla.

BUENAVENTURA: 03.53 N. 77.05 W. (See Plan Book)

DOCUMENTS: On vessel's arrival, Master must present following documents to Port Captain's Office:

Travel Memorandum.
Sole document or Consular despatch from the last port or ports where vessel disembarked or embarked passengers.
3 Crew Lists.
3 Provision Lists.
3 Lists Crew's Personal Effects.
3 Lists Passengers in transit (or negative).
3 Lists disembarking Passengers (or negative).
3 Lists port mail (or negative).
1 Sobordo or Manifest of cargo for the port.
2 Declarations of Passenger baggage, if any.

Destined to Maritime Terminal:

3 Sets Sobordos or Manifests covering port cargo (or negative).
1 Set of Bills of Lading, covering discharge cargo.
20 Tally Books for discharge cargo.

Destined to the Custom House:

3 Sets of Sobordos or Manifests for cargo destined to the port.
1 Set of Bill of Lading for port of destination.
1 Tally Book for cargo to be discharged in port.
2 Declaration Lists for Passenger baggage, if disembarking.

Destined to the Health Doctor:

Vessel's Travel Memorandum.
International Health Certificate.
1 Crew List.
List of Passengers in transit (or negative).
1 Vessel's Fumigation Certificate (for presentation only).
1 Port Passengers List (or negative).
Certificate of Exemption of Deratisation (for presentation only).

Destined to Immigration Authorities:

1 Crew List.
1 List of Transit Passengers (or negative).
1 List of Port Passengers (or negative).

Destined to Agents:

1 Travel Memorandum as above mentioned.
9 Crew Lists for Consular despatch and handling of sailing permit.
6 Lists of Passengers in transit (or negative), for Consular despatch.
6 Lists of personal effects for Consular despatch.
2 Mail Lists for the port (or negative).
3 Sets of Sobordos or Manifests covering port discharge cargo (or negative).
4 Sets of Bills of Lading covering port discharge cargo.
10 Tally Books covering discharge cargo.
2 Lists of Passenger baggage declaration for the port, if any baggage.

PILOTAGE:

(a) Entry marked by Channel having minimum depth of 3.25 fathoms low tide. Advisable enter Channel or leave wharf 1 hour after low tide and 2 hours after high tide, restricting departure during any other periods, particularly when draft exceeding 20 ft. Entry to Channel marked by Buoy No. 1 located at Lat. 3° 45′ 10″ N., Long. 77° 19′ 10″ W.

(b) 24 hours or 20 hours before reaching port, Master must cable separately to Agents, to Port Captain and to port doctor confirming hour of arrival Punta Bazan (Pilot station). Message to Agency must indicate, in addition to ETA, quantity of cargo destined for the port, number of disembarking or in-transit passengers, number of gangs required for operations, draft, mail for the port, if fresh or running water is required; fuel-oil, cash to Master or any other special requirement; whether special side of wharf is required for berthing, and whether dangerous cargo (explosive) or inflammable cargo, and what quantity. Message to Port Captain must also indicate arrival time, quantity of cargo destined to the port, number of disembarking or in transit passengers, mail, whether dangerous or inflammable cargo is brought and in what quantity, and any other data that may be considered useful in accordance with International regulations. Message to doctor must indicate arrival time, number of disembarking or in-transit passengers, and whether there are sick persons on board.

(c) Radio beacon at Punta Soldado, characteristics: Frequency, 317 kHz. Letters, B.T. Time 0000 – 2400 hrs. every day and every 10 minutes with 20 minutes of rest during 30 minutes work. Flashes 12 seconds duration.

(d) Radio-telephone in pilot station of Punta Basan (opposite to Punta Soldado), characteristics: VHF Channels 11 and 16 every day from 0600 – 2400 hrs.

(e) Since Master's advice to Agency serves as notification to pilot station, Pilot will be at Punta Bazan ready for vessel. In case of delay due to any circumstance, vessel may anchor and request Pilot by 4 short blasts.

(f) Port has 9 Pilots.

(g) Pilot ladder must be lowered a few feet from the surface. Vessel must proceed slowly in order facilitate boarding.

(h) Pilotage compulsory and available 24 hours.

Colombia

GENERAL:

DOCUMENTS:

Consular Documents:

In foreign ports where cargo for Colombia is loaded, the Colombian Consulate must receive two copies of the Cargo Manifest, on a special form (Colombian Freight List), one of which is returned to the vessel and the other is filed at the Consulate.

Prior to Arrival:

Notice of arrival:

The agency must prepare the standard Colombian document for confirmation of vessel arrival, giving the characteristics of vessel and indicating the services requested: pilotage, towing, anchorage, berthing, cargo to be loaded and unloaded, as well as water, electric power, telephone, fuel and lubricants.

This form is addressed to the Director of Operations of the Marine Terminal of the Colombian Port Authority (COLPUERTOS) and is submitted in seven copies (original and three copies for the Marine Terminal and a copy each to the Port Captain, the Customs Security Office, and the Port Public Health Officer). If passengers disembark, an additional copy must be submitted to Migration.

Information on cargo for the port:

At least 24 hours in advance of the vessel's arrival, the agency must receive the following documents by airmail, with the distribution indicated:

Documents	*Customs*	*Marine Terminal*	*Agency*	*Total*
Freighted Manifest (Freight List)	–	–	1	1
Freighted Bills of Lading	1(a)	3	1	5
List of Cargo by Hatch	–	1	1	2
List of Dangerous Cargo in Transit	–	1	1	2
Stowage Plans	–	1	1	2

(a) Stamped.

Request for Port Services:

The agency must submit to COLPUERTOS, 8 hours in advance of the vessel's arrival, the following documents, in original and two copies: request for berthing crew, cranes, terminal crew, motorised equipment and storage; request for inward pilotage and towing.

On Arrival:

On the entrance of a vessel, the following documents must be submitted, either on the model forms established by LAFTA Resolution 254 (IX), or on similar forms, except the cargo manifest, which will be made out on the Colombia Freight List form.

Type of Documents	*Number and Distribution of Documents*						
Basic Forms	*Capt. Port*	*Cus. Sec.*	*Marine Term.*	*Port Pub. Health*	*Migr.*	*Agency*	*Total*
1. General Declaration	1	1	–	–	–	1	3
2. Cargo Manifest	–	1	1	–	–	–	2
3. Crew List	1	2	–	1	1	1	6
4. Passenger List	1	1	–	1	1(a)	1	5
5. Ship's Stores	1	2	–	–	–	1	4
6. Crew Effects Declaration	1	2	–	–	–	1	4
7. Maritime Declaration of Health	–	–	–	1	–	–	1
8. Mail List	–	2(b)	–	–	–	1	3
Additional Documents:							
9. Clearance from Last Port	–	–	–	–	–	–	+
10. List of Passengers in Transit	1	1		1	–	1	4
11. "No Passengers" Declaration (c)	1	2	–	1	–	1	5
12. List of Dangerous Cargo in Transit (c)	1	–	1	–	–	1	3
13. "No Mail" Declaration (c)	–	2(b)	–	–	–	1	3
14. List of Passengers' Baggage (a)	–	3	–	–	–	–	3

(a) Only for those disembarking.
(b) One copy for the Post Office.
(c) When required.

Other Requirements:

The agency provides a landing permit for each crew member and passenger, which is stamped on board by the Captain of the Port.

Prior to Departure:

Clearance for the vessel is requested from the Captain of the Port on a special form. It is prepared in triplicate (original for the vessel, one copy for the Port Captain's file and one for the agency). The following documents accompany it:

1 Crew List.
1 Passenger List or "no passengers" declaration.
1 Ship's Stores List, and
1 Fuel Supply Declaration or negative

Request for Pilotage:

At least 2 hours before departure, a request for pilotage, clearance and unberthing crew must be submitted to the COLPUERTOS Maritime Section.

FREE PRATIQUE: There is no radio pratique. The standard W.H.O. Health Certificate must be used.

PILOTAGE: Pilotage is compulsory for all vessels over 250 n.r.t. The Pilot must be requested by the Agent at least 24 hours in advance.

Berthing preference will be given as follows:

1. Warships.
2. Passenger vessels and Mail Boats on a fixed itinerary.
3. Vessels with livestock and perishable cargoes.
4. Passenger vessels not on a fixed itinerary.
5. Vessels loading cargo for export.
6. Vessels discharging cargo for import.
7. Tankers.
8. Coasters.
9. Vessels carrying explosives.

On sailing all vessels must fly the "P" flag.

Vessels at anchor can be authorised to work to lighters.

All Colombian ports are open 24 hours a day.

ARRIVAL ADVICE:

(1) The local Agent must advise to Empocol with 72/48 and 24 hours in advance the vessel's ETA.

(2) With the ETA pre-arrival advice, Owner or Master must advise the Agent the following:
  (a) Estimated arrival draft, aft and forward
  (b) Full vessel's particulars, including breadth
  (c) Vessel's side for which she must be docked (port side or starboard)
  (d) Cargo hatch distribution

(3) At least with 48 hours in advance, the Agent must receive in order to give to Empocol (together with others issued by the Agent according to the information supplied by the Master and Owner), the following documents:
  (a) 5 original copies (not photocopies) of each Bill of Lading, duly freighted and signed by the shipper
  (b) Stowage plan.

(4) Also 24 hours prior vessel's arrival, the Agent must pay to Empocol the proforma invoice which amounts to the estimated port expenses plus 25 per cent surcharge. Hence it is of paramount importance the Agent receives well in advance the funds required, in order to convert the U.S. Dollars into local currency and proceed to effect the corresponding payment.

It is important to point out that in case the above mentioned instructions are not fulfilled, or the documents are not presented and the proforma invoice is not paid in due time by the Agent, Empocol will not authorise docking and operations of the vessel.

STEVEDORES: Are supplied by the Port Authorities although it is often necessary to employ extra labour through the Agent, due to the fact that gangs are seldom complete. At week-ends, gangs required for Monday must be ordered by 1000 hrs. on Saturday. Masters should bear this in mind when sending their ETA.

Cargo in a damaged condition or showing signs of pilferage will not be handled until inspected by a Port Official and ship's officer, leaving on record the actual condition of the cargo.

Containers are discharged or loaded as all other cargo, though if they are stuffed or unstuffed immediately this must be done with the Port Labour provided.

Opening and closing of hatches, and the rigging of gear, is done by a gang of riggers. The ship's crew can do this work, but it is advisable to use Union Labour.

Rain tents are not supplied by the port.

All gear, slings, spreaders, etc., must be supplied by the ship.

Rat guards must be fitted on all mooring lines whilst in port.

PORT SECURITY MEASURES: All ports are rigorously patrolled by Port Police, and crew members are advised to carry Identification Cards at all times when ashore.

FUMIGATION: This can only be carried out alongside with the permission of the Port Authority.

GARBAGE: No garbage may be thrown overboard. This includes flakes of paint from vessels chipping or scraping the hull. No paint must be allowed to drop into the water or onto the quayside. Overboard discharges must be kept off the quay.

POLLUTION: The standard requirements for the prevention of oil pollution must be adhered to within the continental shelf off the Colombian coast.

All vessels calling at Colombian ports must have "Pollution Policy" onboard. If not onboard vessel will be heavily fined and clearance will not be granted by the Port Captaincy.

All vessels must ensure that the Oil Record Book is up to date prior to arrival, as it is likely to be inspected.

Fines can range from 50,000 to 500,000 Pesos, not including the cost of any clean up operation.

No vessel contaminating the waters of any port may sail until the corresponding fine has been paid.

Oil Tankers are not permitted to clean tanks within 60 miles of the Colombian shores. If a vessel arrives in port with dirty ballast, she will be ordered to proceed to sea beyond the 60 mile limit, and take on clean ballast.

CREW: The authorities will not allow crew to be of unkept appearance or improperly dressed at any time while the vessel is in port.

FUEL: Bunkers are only supplied to vessels which were supplied in 1972, and are actually trading to Colombia. Vessels may not take more bunkers than the amount they received in that year. Requests for bunkers must be made to Agents at least 1 week in advance.

TIME: GMT minus 5 hours. Summertime is not observed.

BARRANQUILLA: 10.58 N. 74.47 W. (See Plan Book)

DOCUMENTS:
Clearance from Last Port.
Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Cargo Gear.
Oil Pollution Certificate – Policy of Insurance.
6 Crew List.
5 Crew Personal Effects List.
5 Provision List.
5 Store List.
6 Passenger List (in transit).
6 Passenger List (disembarking).
4 Declarations of Passenger Baggages.
4 List Port Mail.
1 Sanitation Declaration.
Sets of manifests covering port cargo.

PILOTAGE: The Pilot Department of Empresa Puertos de Colombia at Barranquilla require that the vessel's Agent advises them with at least 24 hours in advance, the best vessel's ETA, together with the estimated arrival draft (fresh water).

Therefore it is important that Masters of vessels advise Agent 72, 48 and 24 hours in advance the best ETA to the port, in order to avoid any delays because of unavailability of Pilot.

The Pilot will board and leave vessels at Bocas de Ceniza, 1 mile North of the Western Breakwater, and they are not authorised anymore to pick up/leave vessels at either Cartagena or Santa Marta, except when the weather does not permit such operation at Bocas, in which case the Pilot Department will decide whether the Pilot must be picked up/left at any other place.

Radio telephone frequency of pilot station 2738 alternative 2638 or 2182 kHz and VHF Channel 16. 2 pilot boats speed 7–9 knots. Sufficient depth to allow vessels wait for Pilot in boarding position, including trade wind season end November to beginning April.

ANCHORAGE: If awaiting Pilot, anchor 1 or 2 miles West of West breakwater during non-windy season. After Pilot boards and when no berthing space at the quay, anchorage is made in the river, about 1,500 ft. off the dock in approximately 40 ft. of water. Three shackles of chain required in good holding ground.

RESTRICTIONS: Depth at the river bar is being maintained at a minimum of 34 ft., however, the actual permissible draft has been curtailed to 30 ft. or less (24 ft. in June 1984 – check with Agent) on account of silting conditions of the river and low river levels, particularly around the area known as Siape, approximately 4 miles from the dock area.

MAX. SIZE: Recommended max. LOA 600 ft. due necessity for turning vessel before sailing. Also see "Restrictions". Rate of current 2.5 knots during dry season, 4 knots in rainy season.

HEALTH: On arrival port doctor boards vessel to inspect crew Yellow Fever Certificates, also Derat Certificate. If any crew members suspected suffering contagious disease Master to radio prior arrival advising Agents accordingly. Port doctor visits vessel even if previous port was in Colombia.

RADIO: Messages to and from Agents routed through station HKB. Ship's messages should include call letters.

TUGS: Generally no tugs required for river entrance. Tugs assist berthing and turning vessels before sailing. Two tugs available of 1,200 and 800 h.p. respectively.

BERTHING: Pier length 2,375 ft. Vessels berth starboard side alongside.

CRANES: 50 ton floating crane available.

STEVEDORES: Agents should receive advance copies of stowage plan and adequate notice ETA order arrange gangs. Working hours: 0800 – 1200 hrs., second shift 1800 – 0200 hrs. No work on Sundays.

MEDICAL: All facilities available.

TANKERS: No facilities.

FRESH WATER: Available. Rate about 20 t.p.h.

FUEL: Only small quantities of gas oil available.

FIRE PRECAUTIONS: No vessel requirements. Terminal has own fire-extinguishing equipment.

GANGWAY/DECK WATCHMEN: Request watchmen through Agents.

CUSTOMS ALLOWANCES: No limitations for individual consumption.

IDENTIFICATION CARDS: Supplied by Agents.

CONSULS:
Austria
Belgium
Bolivia
Brazil
Chile
China
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Gt. Britain
Greece
Guatemala
Honduras
Italy
Jordan
Mexico
Netherlands
Nicaragua
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
U.S.A.
Venezuela

REPAIRS: Good facilities for mechanical or electrical and radio repairs.

DRYDOCKS: Only one dry dock for very small vessels.

REPATRIATION: Good facilities available.

AIRPORT: 6 km. from city. Airport served by major airlines.

TIME: GMT minus 5 hours.

HOLIDAYS: 1st January, 6th January, 8th April, 9th April, 1st May, 23rd May, 2nd June, 29th June, 20th July, 7th August, 15th August, 12th October, 1st November, 11th November, 8th December, 25th December.

POLICE/FIRE/AMBULANCE: Fire 411828, ext 38. Ambulance 410736 or 319594. Police 411937.

TELEPHONES: Arrangements available for placing telephones on board.

SPECIAL RECOMMENDATION: Masters to warn crew to close and lock cabins.

REGULATIONS: No special facilities for discharging explosives.
If explosives on board vessel not allowed berth.

DEVELOPMENTS: Two more berths under construction. Dredging under way in access channel.

AUTHORITY: Direccion General Maritime Y Portuaria – Capitania De Puerto de Barranquilla.

BUENAVENTURA: 03.53 N. 77.05 W. (See Plan Book)

DOCUMENTS: On vessel's arrival, Master must present following documents to Port Captain's Office:
Travel Memorandum.
Sole document or Consular despatch from the last port or ports where vessel disembarked or embarked passengers.
3 Crew Lists.
3 Provision Lists.
3 Lists Crew's Personal Effects.
3 Lists Passengers in transit (or negative).
3 Lists disembarking Passengers (or negative).
3 Lists port mail (or negative).
1 Sobordo or Manifest of cargo for the port.
2 Declarations of Passenger baggage, if any.

Destined to Maritime Terminal:
3 Sets Sobordos or Manifests covering port cargo (or negative).
1 Set of Bills of Lading, covering discharge cargo.
20 Tally Books for discharge cargo.

Destined to the Custom House:
3 Sets of Sobordos or Manifests for cargo destined to the port.
1 Set of Bill of Lading for port of destination.
1 Tally Book for cargo to be discharged in port.
2 Declaration Lists for Passenger baggage, if disembarking.

Destined to the Health Doctor:
Vessel's Travel Memorandum.
International Health Certificate.
1 Crew List.
List of Passengers in transit (or negative).
1 Vessel's Fumigation Certificate (for presentation only).
1 Port Passengers List (or negative).
Certificate of Exemption of Deratisation (for presentation only).

Destined to Immigration Authorities:
1 Crew List.
1 List of Transit Passengers (or negative).
1 List of Port Passengers (or negative).

Destined to Agents:
1 Travel Memorandum as above mentioned.
9 Crew Lists for Consular despatch and handling of sailing permit.
6 Lists of Passengers in transit (or negative), for Consular despatch.
6 Lists of personal effects for Consular despatch.
2 Mail Lists for the port (or negative).
3 Sets of Sobordos or Manifests covering port discharge cargo (or negative).
4 Sets of Bills of Lading covering port discharge cargo.
10 Tally Books covering discharge cargo.
2 Lists of Passenger baggage declaration for the port, if any baggage.

PILOTAGE:

(a) Entry marked by Channel having minimum depth of 3.25 fathoms low tide. Advisable enter Channel or leave wharf 1 hour after low tide and 2 hours after high tide, restricting departure during any other periods, particularly when draft exceeding 20 ft. Entry to Channel marked by Buoy No. 1 located at Lat. 3° 45′ 10″ N., Long. 77° 19′ 10″ W.

(b) 24 hours or 20 hours before reaching port, Master must cable separately to Agents, to Port Captain and to port doctor confirming hour of arrival Punta Bazan (Pilot station). Message to Agency must indicate, in addition to ETA, quantity of cargo destined for the port, number of disembarking or in-transit passengers, number of gangs required for operations, draft, mail for the port, if fresh or running water is required; fuel-oil, cash to Master or any other special requirement; whether special side of wharf is required for berthing, and whether dangerous cargo (explosive) or inflammable cargo, and what quantity. Message to Port Captain must also indicate arrival time, quantity of cargo destined to the port, number of disembarking or in transit passengers, mail, whether dangerous or inflammable cargo is brought and in what quantity, and any other data that may be considered useful in accordance with International regulations. Message to doctor must indicate arrival time, number of disembarking or in-transit passengers, and whether there are sick persons on board.

(c) Radio beacon at Punta Soldado, characteristics: Frequency, 317 kHz. Letters, B.T. Time 0000 – 2400 hrs. every day and every 10 minutes with 20 minutes of rest during 30 minutes work. Flashes 12 seconds duration.

(d) Radio-telephone in pilot station of Punta Basan (opposite to Punta Soldado), characteristics: VHF Channels 11 and 16 every day from 0600 – 2400 hrs.

(e) Since Master's advice to Agency serves as notification to pilot station, Pilot will be at Punta Bazan ready for vessel. In case of delay due to any circumstance, vessel may anchor and request Pilot by 4 short blasts.

(f) Port has 9 Pilots.

(g) Pilot ladder must be lowered a few feet from the surface. Vessel must proceed slowly in order facilitate boarding.

(h) Pilotage compulsory and available 24 hours.

ANCHORAGE: Marked by Buoy No. 7, located Lat. 03° 53′ 59″ N., Long. 77° 04′ 04″ W.; depth from 33 ft. to 70 ft. and distance from wharves approximately 1,000 yards.

RESTRICTIONS: Max. draft for crossing bar is 28 ft. one hour before/after HW. Bar is located in position 03° 48′ N., 77° 19′ W.

MAX. SIZE: No restrictions on the length of vessel, depth alongside wharf approximately 12 ft. – 31 ft. low tide. Also see "Shipmaster's Report No. 3" and "No. 4".

HEALTH: *(a)* As soon as vessel anchored by Pilot within bay, Port Authorities including doctor, will board by means of ladder which must be lowered when port area entered.

(b) In case of sickness on board, Master must advise in order doctor may determine whether vessel will be under quarantine or not. This will apply even if vessel arriving from a port of the same country.

(c) Time-table for meeting vessel: Ordinary or regular time – ordinary time: 0800/1200-1400/1800 hrs.; overtime – 0700/0800-1200/1400-1800/2200 hrs. Sundays and holidays, overtime.

(d) After 2200 hrs. and up to 0700 hrs. of following day it is not possible to make arrangements for meeting vessels, unless in emergency.

RADIO: (Also see "Pilotage"). Port has receiving-transmitting radio station Buenaventura/Colradio HKC. For listening and transmitting there are following frequencies:

Listening	*Transmitting*
8354 to 8374 kHz	8574 kHz
12531 to 12561 kHz	13087.5 kHz
6265 to 6280 kHz	6386.5 kHz

In emergency: Listening: 500 kHz. Transmitting: 441 kHz. Station operates 24 hours a day.

TUGS: Normally only required for berthing. Tug operation handled by Pilot. Generally tug service consists of pushing from stern or bow as required. When necessary to use ropes, they must be supplied by vessel. 2 tugs of 1,200 h.p. each and 1 of 500 h.p.

BERTHING: Main wharf 2,126 m. long, divided into two sections, one for import cargo and one for export cargo. Facilities exist for handling container traffic.

Berthing arranged by turn according to time of anchoring in bay for each vessel. Tidal currents exist alongside berths.

Berth	*Length*	*Depth at LW*
Shed No. 1	202 m.	12 ft.
Shed No. 2 – No. 9	—	23 – 25 ft.
New Pier	80 m.	31 ft.
	597 m.	17 – 20 ft.

STEVEDORES: (See "Pilotage"). Port has at present time 80 gangs of 16 men each. The working hours during ordinary or regular time are from 0800/1130 and from 1400/1730. Overtime from 1800/2400 and from 0000/0800, and 1200/1400 (24 hours are worked).
No work from 2300 hrs. Saturday until 0700 hrs. Monday.

MEDICAL: Agent must be given advance notice of urgent medical attention. Properly equipped hospital.

TANKERS: Independent oil pier with capacity to accommodate vessels of medium size. 4×8 in. hoses for discharge of petroleum products, and 2×6 in. hoses for unloading chemicals. Average rate of discharge of gasoline is 5,000 b.p.h. (approx.) Fuel oil and chemicals 1,500 b.p.h.

DENSITY: 1012 (approx.) average.

FRESH WATER: Drinking water unlimited quantity. Delivered through hose from end of wharf. Rate of delivery: 6 t.p.h.

FUEL:

(a) Two kinds of fuel, marine gas oil and bunker "C" fuel. Characteristics of gas oil: API gravity 33.0 at 60° F. Specific gravity: 0.8602. Characteristics of bunker "C" fuel: API gravity, 13.2 at 60° F. Specific gravity, 0.9779.

(b) To take bunkers vessel must berth between warehouse 2 to 9, and for delivery of gas oil between warehouse 1 to 5.

(c) Rate of delivery (approx.), 250 b.p.h. for bunkers and 700 b.p.h. for gas oil.

(d) Deliveries depend on quantity available when order placed, consequently Agent must know well in advance (10 – 15 days) vessel's requirements.

(e) Cash payment according to prevailing prices at time of delivery; otherwise, according to contracts between Shipowner and supplier.

FIRE PRECAUTIONS: Fire station within port installations with proper equipment. In city also another fire station, co-operating if necessary.

WATCHMEN: Service necessary both by crew members' and Agents' personnel. There is no established body of watchmen; the steamship agencies carry out this work with their own personnel with previous request by Master. The port has a Port Police body and Custom House Guards which co-operate in vessels' watch.

Piracy: Mariners are advised to be alert to unusual, abnormal or hostile activities by pirates (especially during darkened hours) in the approaches to and in Buenaventura Harbour/Anchorage.

OPENING/CLOSING HATCHES: All Agents have special gangs to handle this operation and to fix the vessel's rig for discharge and/or loading. These personnel permanently stand by on board on account of climatic conditions of port with frequent and sudden rains. No prohibition against crew carrying out such operations when charter parties are involved and which stipulate that such operation must be done by crew. It is known from experience, however, that vessel's personnel are not, on occasions, sufficient to do this work.

CARGO GEAR: Ship's gear used. Also see "General".

IDENTIFICATION CARDS: Agent will supply special cards to crew and passengers in transit so that they may go ashore. Cards valid for entering and leaving port installations and for identification with the Immigration authorities. Must be returned before vessel departure.

CONSULS:

Bolivia	Tel: 2589	Panama	Tel: 2250
Ecuador	„ 2690	Spain	„ 2562
Holland	„ 2631	Sweden	„ 3270
Mexico	„ 3589	United States	„ 2501

CUSTOMS ALLOWANCES: No regulations establishing quantities which each crew member may have outside bond, but must not be excessive order avoid problems with authorities.

REPAIRS: According to port regulations vessels must at all times be ready with engines to sail, consequently repairs of engines not allowed when ship berthed at wharf. No prohibition against minor repairs on deck. When engine or deck repairs taking a long time are necessary, vessels not being loaded and/or discharged simultaneously with repairs must go to anchoring ground, since crowding of vessels at port does not permit vessel being inactive occupying space while other vessels are anchored waiting for berth.

REPATRIATION: Authorities render co-operation for change of crew and arrangements of repatriation in co-ordination with ship's Agent.

AIRPORT: Located 18 km. from Buenaventura. Serviced by a regular airline, Aerotaxi, which has several daily flights from Buenaventura to Cali and a daily flight from Buenaventura to Bogota. Small planes which take 40 minutes from Buenaventura to Cali and 1.5 hours from Buenaventura to Bogota. Airport is small and has no facilities for international flights. Agent in charge of the repatriation of a crew member must handle necessary connection in Cali or Bogota, where there are international airports.

TIME: GMT minus 5 hours. Permanent.

POLICE/AMBULANCE/FIRE: A voluntary firemen corps in the city. Alarm, Tel: 2222; Guard, Tel: 2223; Firemen of the Maritime Terminal, Tel: 2830; Ambulance, Tel: 2830; Police, Tel: 2738.

GENERAL: Provisions available. Cable service to all parts of the world. Telephone and telex service inside country and to foreign countries through Bogota. Weather conditions: generally rainy. Explosives: if the vessel is transporting dynamite and detonating caps they are placed in separate lighters, and armed guards are required on board any vessel transporting explosives. In such cases, the vessel must anchor in front of Buoy No. 9 and discharge to lighters during daylight. No vessel can berth at the wharf if transporting explosives, and only permitted with dynamite in closed hatches, which will not be opened at the wharf according to government regulations. Port is equipped with following shore cranes: 2×80,000 lb. capacity (mobile), 1×60,000 lb. capacity (mobile), 3×20,000 lb. capacity (mobile), 2×14,000 lb. capacity (mobile), and 4×10,000 capacity (3 mobile and 1 fixed). Floating cranes: 1×45 tons capacity.

Lighters available: 3 with following characteristics:

Size *Length/width*	*Capacity*	*Type*
24.40× 9.45 m.	200 tons	Flat surface
34.40× 7.60 m.	150 tons	Flat surface
38.80×10.60 m.	150 tons	Flat surface

No refrigeration space available.

SHORE LEAVE: Permitted (with ID cards).

DELAYS: At anchorage in Bay average delay of 1 day while waiting for berth. On account of the rainy condition of the port, discharge or loading is at times stopped up to 12 hours.

DEVELOPMENTS: Improvement in wharf installations, warehouses and equipment and dredging is scheduled to deepen the depth alongside wharf.

SHIPMASTER'S REPORT No. 1: 1978.

Pilotage: Normally the Pilot boards at Punta Bazen but can be arranged at No. 1 Buoy at request of Master as most shallow water is from No. 1 Buoy to No. 5 Buoy.

Anchorage: Vessels are warned not to anchor near No. 1 Buoy or at Punta Bazen because of piracy. Pirates steal ships' cargoes at these anchorages.

Buoys: All buoys marked on chart are not dependable (for example the No. 1 Buoy has been shifted 070° about 1 mile).

Berthing: Depth 9 m. at LW, capacity for 12 ocean going vessels.

Stevedores: For general cargo, each gang 6 – 8 persons. Working hours 0800 – 1130, 1400 – 1730, 1800 – 2300, 0000 – 0300 hrs.

Watchmen: Policemen engaged on board on arrival as gangway watchmen and hatch watchmen. Vessel to victual those persons.

Caution: Strong tidal current up to 3 knots in this port, vessel must keep strict watch when anchored and when berthed.

Shallower depth may exist due to silting at fairway and at inner side of the pier.

SHIPMASTER'S REPORT No. 2: 1978.
Whilst at the port we were boarded by two well organised gangs of thieves. The first incident took place in the Roads, when thieves managed to steal cases of whisky and a Xerox machine from No. 1 L/H before being seen and chased off by the ship's crew. The second incident, which could have had serious consequences, occurred whilst at anchor in the estuary awaiting sufficient water to cross the river bar. Here, an aggressive, well disciplined gang, armed with parangs and staves boarded, and only after a running skirmish with the ship's officers did they retreat having stolen one box of cargo from No. 2 L/H. A constant two-man deck patrol has been in operation since arriving at Buenaventura, but the only method of deterring these experienced thieves is effective hold security.

SHIPMASTER'S REPORT No. 3: August 1979.
Silting of Berths: Whilst berthed at No. 2 considerable problems have been experienced due to lack of water alongside the berth (See Plan).

The berth is charted as having 9.1 m. alongside, maximum draft of vessel being 7.64 m. However, 2 hours before first LW alongside, the vessel had clearly taken the mud and began to come off the wharf. Considerable slacking was necessary in order to prevent parting of moorings. At LW the vessel had come to rest 30 ft. off the quay fore and aft whilst still maintaining reasonable weight on moorings. After draft was indicating 7.00 m. and vessel listed 3° to port. This tide was particularly low, being −0.5 m. below chart datum. It had been previously observed from anchorage that the previous vessel alongside, a large Colombian vessel, had been having similar problems but it was noted that she had been 2 ft. deeper draft.

As the tide flooded the vessel was gradually heaved alongside, but it was 2 hours after LW before she was fully alongside. Similar tending of moorings was necessary during the following 4 days alongside. However, it was found beneficial to give her a list to port which had the effect of lessening the movement of the berth. During this period, 4 hours cargo work was lost at each LW (2 hours before and after) as the derricks could not plumb the wharf. However, I am assured that we were not paying for this lost period. In addition, the Chief Engineer experienced considerable cooling problems due to the intake of mud, leaves and organic matter.

On the Sunday during the period alongside when there is normally no cargo work, all 10 vessels alongside were shifted out to anchor so that soundings could be taken by the Port Authority. The vessel was returned to Berth No. 3, but there proved to be a similar lack of water. (See Plan).

The silt alongside these berths is very soft mud and therefore does not pose any danger to the hull, however the situation is entirely unsatisfactory and as can be seen from the Plan, soundings alongside the jetty show depths of 3 m. to 4 m. less than charted. I am told by the Agent and Port Authority that a large contract dredger is due to begin work within one month.

SHIPMASTER'S REPORT No. 4: November 1979.

Vessel called at Buenaventura recently, drawing 27 ft. The vessel was berthed 1 hour before HW and experienced no difficulty getting alongside the berth. The draft was then reduced to 25 ft.

However, on the falling tide, the vessel could not be kept alongside and also listed 2.5°. On sounding the berth I found only 20 ft. of water at low tide.

On taking up the matter with the Agents I was informed that it is quite normal to sit on the bottom, which is soft mud. Furthermore, the berths have not been dredged in the last 10 years and the depth of 24 ft. cannot be relied upon.

I am also advised that plans are afoot for a massive dredging operation, due to commence sometime in November this year.

AUTHORITY: Puertos de Colombia, Terminal Maritimo de Buenaventura, Apartado 570, Buenaventura, Colombia. *Tel:* 24421, 24425. *Telex:* 052371. *Cables:* Termarit. *Contact:* Jorge Armando Solano Aconcha, Manager.

CARTAGENA (Incl. Mamonal and Ecopetrol): 10.26 N. 75.33 W. (See Plan Book)

DOCUMENTS:

Clearance from last Port.
7 Crew lists.
Ships papers and Certificates.
Oil Pollution Certificates.
7 Personal effects lists.
3 Sets of cargo manifests of each port with respective bills of lading.
Tally books of cargo for each port.
Health declaration, Certificate of Vaccination, Derat Certificate.
7 Lists of passenger to disembark (or negative).
7 Lists of passengers in transit (or negative).

PILOTAGE: Compulsory. Boarding position, around Lat. 10° 19′ 05″ N., Long. 75° 36′ 10″ W. 2 Pilot boats, black hull, white superstructure. Speed 6 knots. Sound signals, 4 long blasts for all type of vessels. Radio: VHF – standing by on Channels 11 and 16. Also Channels 6 and 26 to shift. Service 24 hours every day. At Central Radio Terminal there is A.M. radio on frequency 2738 and 2638 kHz and VHF.

ANCHORAGE: Anchorage in foul weather or other reasons 0.5 mile S.W. from Buoy No. 1. For vessels awaiting berth in Cartagena, South from Punta Castillo Grande. For tankers in Mamonal, West of the pier of Refineria Ecopetrol.

RESTRICTIONS: Entry day or night.

MAX. SIZE: Cartagena: length 600 ft., beam 79 ft., draft 30 ft. (for berthing).

Tankers: length 850 ft., beam 110 ft., draft 38 ft. Tankers anchor and berth in port of Mamonal, within bay, using same approach.

HEALTH: Doctor requires the Crew Lists with data of vaccination. International regulations in cases of contagious sickness or epidemic are carried out.

RADIO: Radio Barranquilla – HKB

VHF: Pilot station, pilot boat, Terminal Superintendent and Agents on Channel 16.

TUGS: Compulsory for all vessels over 2,000 g.r.t. at Cartagena and in Mamonal.

BERTHING: Also see "Developments".

Port has two piers: Berth No. 1, outside length 202.60 m., depth 28 ft.; inside length 184.76 m., depth 30 ft.; Berth No. 2, outside length 184.76 m., depth 28 ft. A new marginal dock is in service with length 258 m. and depth 26 ft., located West of piers. Between the two piers there is a 134 m. dock with 26 ft. depth. Docking and un-docking around the clock. Berthing shifts or turns: 1st, Passenger vessels (Tourist). 2nd, Cargo vessels with live animals. 3rd, Vessels with mail. 4th, Cargo vessels according to arrival in port.

Cranes and Cargo Handling Equipment:

Truck cranes: 2×30 tons capacity; 2×12 tons capacity; 3×10 tons capacity.

Fork lift trucks: 23×62,000 lbs.; 2×45,000 lbs.; 7×15,000 lbs.; 58×7,000 lbs.; 38×6,000 lbs.

Tractors: 26.

Trailers: 42.

STEVEDORES: Can be requested with 24 hours notice. Work starts at 0700, 1000, 1400 and 1800 hrs. Services for Mondays must be requested on Saturdays before 1000 hrs. Ship starting work after a Holy Day, must request personnel the day before the Holy Day, before 1500 hrs. Stevedores finish working at 0200 hrs. Saturdays at 1800 hrs. No work on Sundays, January 1st; Good Friday; November 11th; December 25th; May 1st. When ship is delayed there is a conventional waiting time of 4 hours, after that time stevedores retire charging the vessel with 4 hours work (union arrangement). Port authority charges commence when Pilot boards on arrival and cease when the Pilot disembarks on sailing.

BULK HANDLING FACILITIES: Grain unloading undertaken with clamshell or vacuum equipment for bagging on the Quay. Rate in excess of 1,200 tons for a 16 hour shift.

MEDICAL: Requests for medical service through Telecom Radio Station. 6 hospitals. Medicine faculty and medical personnel first class. Also dental services. Vaccinations can be given.

TANKERS:

(a) Ecopetrol: Empresa Colombiana de Petroleos. Muelle Nestor Pineda. Position: within bay of Cartagena, 5 miles N.E. of bay entry (Boca Chica). Port formed by two ocean platforms, with two protections at each side, 0.5 mile distance from Mamonal Bay. Depth 54 ft. with 6 interconnecting lines. Pilotage: through "Mooring Master" of port. Entry restrictions, none; 24 hours service. Tankers dimensions: length 850 ft., beam 110 ft., draft 38 ft., tonnage 40,000 d.w.t. Tugs: compulsory. Tide: 1 ft. 6 in. fluctuation. Fresh water: can be obtained when berthed, 4 in. diameter pipe-line. Precautions against fire: fuel cannot be delivered by barges when vessel is berthed. Pipe-line delivery of bunker fuel oil available. General: requested that vessel arrive with minimum ballast (clean if possible). No dirty ballast to be pumped into the bay. Violation subject to fine. If impossible to arrive with clean ballast, dirty ballast will be discharged through cargo line. Rate of pumping: fuel oil 10,000 B/H; diesel oil 11,000 B/H.

(b) Mamonal: Muelle Refineria Ecopetrol. 7 miles (approx.) South of Cartagena Town and 5 miles East of Boca Chica Entrance Channel. Approaches and Pilotage: same as for Cartagena (see above). Mooring Master boards about 0.5 mile off dock and remains aboard whilst vessel at Mamonal. Mooring Master has to be provided with own cabin and victualling. Max. Size: length 850 ft., beam 110 ft., draft 38 ft. Berth: "T" shaped platform with dolphins. Lines to buoys off both bows and from stern, 2 mooring lines should be joined together for starboard quarter line. Ballast: no dirty ballast to be pumped into bay. If possible arrive with clean ballast; dirty ballast can be discharged ashore. The shore deballasting facilities consist of 1 tank with 75,000 bbls. capacity; the pipeline is 2,835 ft. long and of 16 in. diameter. Three hoses of 8 in. diameter are connected for deballasting. Fresh water: not available except at Cartagena. Fuel: available, Bunker "C" and diesel oil. Also see "Shipmaster's Report" – 1979.

FRESH WATER: Available at all berths.

FUEL: Requirements should be ordered at least 8 – 10 days in advance, via the vessel's Agent.

Agent requires the following details:

(i) Vessel's name and nationality.
(ii) Daily consumption at sea and in port.
(iii) BHP.
(iv) N.r.t. and g.r.t.
(v) Next port after Colombia.
(vi) Port of origin.
(vii) ETA.
(viii) Quantity and type of bunkers required.

DENSITY: 1015 (At Mamonal)

WATCHMEN: Watching service at the gangway and deck. Officially this service is done by port's guards. It is recommended that members of crew assist in this service.

CLOSING/OPENING HATCHES: Undertaken by port stevedores.

IDENTIFICATION CARDS: Agents supply cards signed by Port Captain and Master.

CONSULS:

Costa Rica	40583	Italy	41583
Chile	44942	Mexico	44601
Denmark	43669	Netherlands	41750
Ecuador	42645	Nicaragua	41362
Finland	43669	Norway	45752
France	41290	Spain	42685
Germany	20162	Sweden*	47503

*Consular representative.

DRY DOCK/REPAIRS: Commercial Shipyard "Conastil":

Synchrolift 120 m. length, 22 m. width. Lifting capacity 5,000 tons.

8 repair positions ashore; 4 with a capacity of 5,000 tons and 4 with a capacity of 10,000 tons.

600 m. length of piers with 18 ft. depth with all services and repair facilities.

Mechanical, fitting, welding, electrical, motor, and carpentry shops.

SURVEYORS: The following cargo inspectors and surveyors are available: Saybolt, P&I, Lloyd's Register of Shipping, American Bureau of Shipping, Bureau Veritas and Germanischer Lloyd.

REPATRIATION: Facilities available for crew changes.

AIRPORT: Runways for large jets. Flights to Miami on Saturdays and Sundays, (5 flights) served by Avianca, Sam, Aerocondor. Lacsa serves 2 flights weekly to Maracaibo and Caracas. (Sunday and Friday). Connections through Barranquilla and Bogota airports for Europe and USA.

TIME: Colombian official time: 5 hours behind GMT. Permanent.

HOLIDAYS: Eighteen days of holidays during year, but at terminal there is no service on following dates only: New Year Day (January 1st); Good Friday (Viernes Santo); Labour Day (May 1st); Cartagena Independence Day (November 11th); Christmas Day (December 25th). During the days December 24th and other holidays there is 24 hour service with 50% surcharges.

POLICE/AMBULANCE/FIRE:

Police Radio patrol	04
Red Cross	20360
Hospital Universitario	22380
Hospital Bocagrande	40270
Hospital Naval	40248
Clinica de Manga	40762
Clinica Cartagena	20910
Ambulance of Terminal	Channel 16 VHF
Firemen of Terminal	Channel 16 VHF
Firemen of Cartagena	42222, 20903

TELEPHONES: May be placed aboard.

SHORE LEAVE: Crew allowed disembark. Every member of crew is given card signed by Port Captain and Master of the vessel.

REGULATIONS: To clear the wharf if required for tourist vessels or export cargo vessels.

SERVICES: Contact: Maritima Comercial Agencia Naviera Ltda., P.O.Box 207, Cartagena, Colombia. *Tel:* 45-557, 45-752 and 46-532. After Hours: 43-481. *Telex:* 37804 Marco Co.

Services: Ships agency, ship chandler, launch and tug service, private Pilot, medical assistance for sick crew, crew repatriation, etc.

GENERAL: Cartagena can be entered or left at any time day or night. Vessels can also berth or unberth in dry season or rain seasons, and services are rendered during 24 hours.

There is a very tight security system with a detachment of 145 port police, watch towers, dogs, sodium vapour lighting, access control, full identification, cargo control unit. This new unit, and the administrative controls that complement it, has reduced losses to near vanishing point.

The port has international communications with telex, phone and cable. Complete marine service with VHF and can communicate with Bogota and the other Colombian ports with S.S.B. radio.

DEVELOPMENTS: From 1983 it is projected to have a depth of 36 ft. at all berths.

No. 1 Marginal Berth will be available for container vessels, with ship's gear until 1985.

SHIPMASTER'S REPORT: 1976.

Advice of ETA should be telexed from Cristobal and confirmed by radio upon departure from that port. Agents also request that they are advised prior to vessels arrival, of commodity and tonnage for discharge in each hatch. This should be included in the telex from Cristobal to enable them to arrange the labour and equipment for unloading.

Pilot boards from a black hulled motor launch, about a half mile outside Boca Chica. The launch flies "H" flag by day and white over red lights at night. The Pilot has a portable VHF radio and works on Channel 16. If the pilot boat is not waiting on arrival he can be summoned by sounding 4 blasts on the whistle, at which signal he appears from the pilot station at Fuerte San Jose, on the Northern side of the entrance. The prevailing wind would normally make the starboard side the lee side for the pilot ladder on arrival.

There are 2 piers, each capable of taking 1 large vessel on each side. Depths vary from 28 ft. to 31 ft. The piers are in good condition and are well fendered. A tug is available and assists in berthing by pushing vessel alongside. The tug also stood by on departure but was not used. Cartagena has now become a popular cruise port and on occasions when 2 cruise liners are in port at the same time, delays could be incurred to cargo vessels.

Cargo for discharge consisted of palletised milk powder. The stevedores worked well and achieved an average rate of discharge of 16 pallets (24 tons) per hour. Ship's gear is used, there being no cranes on the piers. There is a 30 ton floating crane available for heavy lifts. Fork lift trucks etc., are hired by the Agents from various sources in the town.

Precautions should be taken against theft by locking up everything possible. It is customary to employ 3 shore watchmen who are fed on board.

No difficulties were experienced with the arrival papers and in this respect much assistance was received from the Agents at Cristobal in preparing Manifests, etc. It is essential that in future, Bills of Lading and Manifests covering cargo for discharge at Colombian ports, are placed on board before departure from vessels final loading port.

Fresh water and provisions are available but Agents should be notified of any requirements whatsoever prior to arrival. Landing Cards, supplied by Agents and signed by Master are required for shore leave.

The following papers are required on arrival:

Clearance from previous port.
Register.
Health Declaration.
*4 Lists Crew personnel effects.
*7 Passenger lists (or negative).
7 Lists dry/bonded stores.
*4 Lists Deck and Engine Stores.
*7 Crew lists (1 with vaccination dates to be attached to health declaration)
*3 Lists commodity/tonnage for discharge in each hatch and tonnage of transit cargo.
2 Lists ship's information (Tonnages, owners, length, fuel and water on board, etc.)
4 Lists mail for discharge (or negative).
*8 sets Sobordos (manifests) with Bills of Lading (2 to be freighted in US dollars)
15 Tally books in alphabetical order of cargo marks. (for use of tally clerks in discharge)

*Require to be Consular stamped before arrival.

SHIPMASTER'S REPORT: August, 1979.

Approaches: Cape Santa Domingo shows up at 35 miles on radar. During Summer months May to September strong N.E. winds with heavy swell are prevalent in the approaches.

Thunderstorms and squalls are usual in Summer near the coast with a marked shift in wind.

Boca Chica Light and Fairway Buoy Light are conspicuous. Bancas Salmedina Light on wreck merges with shore lights from the West.

Generally even with strong N.E. winds in Summer it is fairly calm off Fairway Buoy, even if blowing strongly a few miles further seaward.

Pilotage: Pilot boards off Fairway Buoy, usually starboard side, using gangway/pilot ladder arrangement.

The pilot station is on Isla Draga on the South side of Boca Chica Channel, 24 hour service maintained.

The proper launch is a large black hulled craft but at present (August '79) it is being re-engined. A small pleasure type craft is being used at present of very low speed and light construction. In the bay the Pilots have a turbo craft, small but very fast. The Boca Chica Pilots are a Government service and dock vessels at public piers only, otherwise take vessels to area off private piers and hand over to private Pilot, same when leaving. Pilots speak some English.

The private Pilot at Mamonal Pier is good and speaks good English.

VHF: Appear to use Channel 16 only.

Boca Chica: The narrow entrance to Cartagena Bay Channel well lighted by buoys as per British Admiralty Chart. Max. draft 38 ft. accepted. Sometimes cross currents are Southerly across the entrance with strong Northerly winds. Course steered 086°.

Anchorages: For Mamonal Oil Pier, 1 mile S.W. of pier, with 3 shackles, whole of bay affords good shelter and all the bay is compulsory pilotage.

Berths: Mamonal Pier virtually due East of Boca Chica Channel. It is owned by Ecopetrol and leased to Amocar Refinery behind the berth. Both state owned. Max. size 75,000 d.w.t. (approx.).

Draft: Limited by Boca Chica Channel. This vessel's draft: 41 ft. 3 in. forward and 50 ft. aft.

Jetty: Vessel berthed heading North. A short jetty, length 50 m. with pipe gantry and dolphin each end connected by catwalk. Total length 100 m.

The pier ashore is for the pipes and has a narrow catwalk. No stores could be loaded along jetty. No fresh water on the berth. Gangway is a problem and is nearly impossible to land. Ships wih long "B.O.T. type" can be landed on the jetty. We lowered ours to the water and used mooring boat which is on constant stand-by at jetty.

Fenders in a bad state of repair. The aft dolphin has no fender and vessel is kept off by port quarter buoy line. Fender is under repair.

Tugs: Generally two small tugs used for pushing, however, we used only one. A larger tug of 2,500 h.p. should be back in service after repairs.

Mooring: (See plan). The first two lines fast each end are the springs, then the port quarter line aft to keep vessel off the damaged dolphin.

A line boat is used which goes backwards and forwards each end. The berth is approached from the South and port anchor is let go off the berth. Vessel eventually had 5 shackles in water. It takes about three hours from picking up Boca Chica Pilot to all fast.

Cargo: The pier handles gasoline, ammonia, propane and butane outward and crude oil inward. About 6,000 tonnes a month of ammonia is shipped for export.

About three 40,000 ton shipments of crude per month are brought in mostly from the Colombian Pacific coast but an occasional Nigerian shipment is also received.

Hoses: All flexible hoses, no Chicksan arms. Ammonia 8 in. 150 ASA with gate valve at ship's manifold, flexible wire braided with rubber covering. Joints liable to leak. Generally two connected ready, but we had to use three and P&O 'Galara' class have to use four due to high freeboard.

No vapour line. No Nitrogen purging. Shore labour connect. Can take up to 1.5 hours to connect/disconnect.

Rate: Maximum Ammonia rate 450 t.p.h. Four pumps at refinery, using two only seems to make 50 t.p.h. difference. Emergency stop – recirculates on jetty.

Survey: Bill of Lading on ship's tanks.

Loading Master: Speaks good English and very helpful. He requires a cabin as does a Pollution Inspector, Agent's runner and Surveyor.

Pratique: No radio pratique available.

N.O.R.: Signed by Pier Master on behalf of 'AMOCAR' refinery on arrival alongside or at anchor if waiting for berth.

Holidays: Public holidays with banks closed. 1st January, 1st May, 20th July, 7th August, 25th December.

Documents:

5 Crew Lists.
2 Personnel Effects.
2 Store Lists.
Vaccination List.
Maritime Declaration of Health.
Ship's Papers.

Generally very good co-operation with four persons boarding, none on departure, Agent brings clearance. Require to sight register, load line certificate, radio certificate, safety certificate and DTI/P&I Pollution certificate.

In some publications a document called 'SOLE' form is mentioned. The Agent said this was a form from Colombian Consul at last port to say all papers in order but no longer required. Shore passes valid for 3 days are issued, no photographs required. Passes are not returned.

Customs: Will only board between 0700 hrs. and 1900 hrs. If the vessel has not cleared before 1900 hrs. she cannot start cargo. This is a new law by the Port Captain since the end of July 1979, previously he used to issue a waiver and allow loading but some Agencies didn't apply to him and started before Customs came with waiver. A meeting is due to be held before the end of August 1979 on this subject between Agencies, Customs and Port Captain. This means, at present, that it is not advisable to pick up the Boca Chica Pilot between 1730 hrs. and 0530 hrs. as vessel will not be able to work cargo and will probably have to pay an extra day's port costs as they are on 24 hour arrival Pilot basis.

Communications: Barranquilla "HKB". Frequencies: 476; 6463.5; 8666; 13087.5. HF: Channels 5/6; 6, 8, 12 MHz.

Telex: Good.

Telephones: To Europe from Cartagena, 2 to 3 hours delay.

Bunkers/Fresh Water: At Bay piers, can easily be obtained by barge.

Agent: Did not seem aware of new Port Captain decree on not starting cargo at night which cost extra days port charges, which could have been avoided, until he boarded with Customs.

Apart from the above, very good and attentive. Can be contacted on VHF Channels 16 and 6. A "runner" is on board all the time with a walkie-talkie.

I was told that crew changes are easily done as long as 24 hours notice is given for Immigration clearance. It is quite normal for ships to sail with crew members adrift and as long as Master gives Agent letter of authority for hotel costs and air ticket there are no problems with the Authorities. The nearest British Consul is in Bogota.

Airport: A few miles North of city, of international standard, served by the local airline 'Avianca' and others, plus Pan Am, Southern, American, Braniff with daily flights to United States direct. It takes about 2 hours by plane to Bogota the capital, planes operate on a shuttle principle with connections at Bogota to Europe daily by KLM, British Airways, Lufthansa, Air France, etc.

Shore Leave: It takes about 20 minutes from Amocar Refinery (At foot of Mamonal jetty) to Cartagena by bus. Rate of exchange: Pesos to Dollar = 40.

Thieving/Stabbing: All officials and Pilot advised us to make sure we had a very good deck patrol with no ladders overside, thieving at Bay Berths is rife. Also make sure you have some strong weapon with you and you lock yourselves in at night as people have been stabbed in bed when woken by thieves. Lock everything up.

Developments: Considerable developments have taken place in the area in recent years. Cartagena is a big tourist centre from Venezuela and the U.S.

Exports include coffee, fruit, lumber, tobacco, precious metals and petroleum products.

Good road and rail communications exist with Bogata the capital taking about 18 hours.

The Eastern shore of the bay is being developed as an industrial area. The following piers and sea island are in evidence.

ECOPETROL sea island (Nestor Pinead Terminal) takes up to 100,000 d.w.t. tankers, 54 ft. at the berth but limited by Boca Chica Channel. Chicksan connections. FW piped to berth, mooring to buoys. Used for export of fuel oil and other petroleum products. Situated just North of Brujas Island.

Cement Jetty	in position:	Lat. 10° 20.4′ N., Long. 75° 30.9′ W.
Soda Pier	in position:	Lat. 10° 19.9′ N., Long. 75° 30.85′ W.
Syncrolift	in position:	Lat. 10° 19.7′ N., Long. 75° 30.8′ W. 15,000 d.w.t. commissioned early 1980.
LPG Barge Pier	in position:	Lat. 10° 19.4′ N., Long. 75° 30.8′ W.
Mamonal Pier	in position:	As charted
Industrial Berth	in position:	Lat. 10° 17.3′ N., Long. 75° 30.4′ W.
Products Pier	in position:	Lat. 10° 18.2′ N., Long. 75° 30.55′ W.
Products Pier	in position:	Lat. 10° 18.2′ N., Long. 75° 30.7′ W.

Considerable barge traffic with big pusher tugs use the River Dique, which comes out in the Southern part of the bay, this joins up with the River Rio Magdalena in the interior and to Barranquilla, etc.

AUTHORITY: Puertos de Colombia, Terminal Maritimo de Cartagena, Apartado Aereo 94, Nacional 200, Cartagena. *Tel:* 40280, 40281. *Cables:* Termarit.

COVENAS (Gulf of Morresquillo): 09.25 N. 75.42 W.

See "General" before first port.

DOCUMENTS:

3 Crew Lists.
Passenger List.
Customs Documents.
Manifests.
Bill of Lading.
Ships Papers.
Clearance Ballast Manifest.
Crew's Personal Effects Declaration.
Vaccination Certificates.
Stores List.

PILOTAGE: Advise ETA 72, 48, 24 hours in advance. Pilot leaves dock on sighting vessel. Ship boarded approx. 1 mile N.W. of sea buoy or at anchorage. Pilot boat is 25 ton tug, 60 ft. length, 500 h.p., steel hull.

ANCHORAGE: Vessels arriving at night anchor 1 mile N.E. of lighted marker buoy. Bottom – mud.

RESTRICTIONS: Docking only during daylight 0500 – 1730 hrs. Undocking – any time.

MAX. SIZE: Length 800 ft., draft 42 ft. 6 in. Depth in approach channels 42 ft. Mean tidal range 18 in. Current 3 knots (max.).

HEALTH: Quarantine Officials board ship at berth or at anchor. Accommodation ladder should be rigged for Quarantine and Customs Officials. From December to March ladder should be rigged on port side due to prevailing North wind.

RADIO: Radio traffic addressed "Sagoc Tibu" via Barranquilla Radio or Cartagena Radio.

TUG: Tug-pilot-boat leaves dock on sighting vessel.

BERTHING: Vessels use starboard anchor with approx. 5 lengths of chain, and 2 starboard mooring buoys aft; 2 port mooring buoys aft and 2 port mooring buoys forward. All mooring lines should be 120 fathoms. Prevailing wind 310°. Terminal is a sea-berth approx. 1 mile from illuminated marker buoy. The berth has now been taken over by Ecopetrol and may be used in future for the discharge of imported crude.

MEDICAL: Doctor on call at any time. Twelve-bed hospital.

LOADING: Hoses connected on port side 2×10 in., each 2.5 tons, to be lifted by ship's boom and winch. Pipe-line 20 in. 7,300 ft. from pump station to berth. Average pumping rate: 2,000 t.p.h. Max. pressure ashore: 120 psi. 3 grades of oil handled by same pipe-line. Approx. API gravity of crudes: heavy Barco 32.5, Cicuco 45.5, Valasquez/Barco mix 24.0°.

DENSITY: 1021.

FUEL: See "General" before first port.

IDENTIFICATION CARDS: If required by Customs, issued by Sagoc.

CONSULS/REPAIRS/DRYDOCKS/FUEL/FRESH WATER: None.

REPATRIATION: Only if sick crew member left ashore after vessel sails.

AIRPORT: Barranquilla. Flights to U.S.A., Europe and other South American countries.

TIME: Eastern standard time. GMT minus 5 hours.

HOLIDAYS: Loading carried on during holidays and week-ends.

SHORE LEAVE: At discretion of Captain. Crew uses private motor vessel at own risk.

REGULATIONS: Vessels should arrive with clean ballast. No dirty ballast to be pumped into bay, violation subject to penalties. If impossible to arrive with clean ballast, dirty ballast will be discharged through cargo lines and 3,000 barrels of dirty water displaced into vessel. Capacity of slop receiving facility unlimited.

DELAYS: Only when other vessels occupying mooring.

AUTHORITY: Ecopetrol.

POZOS COLORADOS TERMINAL: 11.09 N. 74.15 W.

(See Plan Book)

DOCUMENTS: See "Santa Marta".

LOCATION: North Coast of Colombia, approx. 6 miles S.W. of Santa Marta.

PILOTAGE: Mooring Master will meet vessels approx. 1 mile seaward of terminal location. He will remain on board throughout the vessel's stay and should be provided with accommodation.

MAX. SIZE: Berth in approx. 55 ft. of water and can accommodate vessels of up to 69,000 d.w.t. with max. draft 45 ft.

CLEARANCE: Port Authorities board with Mooring Master to enter ship and attend all formalities.

BERTHING: Vessels lie in berth in approx. due North heading; vessel's lines run by means of mooring launch to stern, quarter, and breast buoys. Vessels up to 20,000 d.w.t. require at least 5 good manilla lines; vessels in excess of 20,000 d.w.t. require at least 7 good manilla lines. These lines must be of not less than 120 fathoms length. Synthetic lines of equivalent strength may be used. Vessels equipped with wire mooring winches may use wires in lieu of fibre lines. When mooring, required use both bower anchors, each having at least 150 fathoms of chain and be prepared handle 5-ton lift on starboard side at ship's manifold. Because of rigidity of submarine hose, a small movement of vessel out of correct position could damage submarine equipment. Extreme caution must be exercised to assure that vessel is correctly moored. During loading operation slack must be kept out of submarine hose by adjustment of vessel's anchor and lines.

BALLAST: The utmost care must be exercised by all tankers to avoid any contamination of the terminal bay waters, since the entire area is a developing tourist resort. This means that absolutely no deballasting or disposal of bilge water must take place in the bay. Shore deballasting facilities can handle up to 84,000 bbls. if ship provides advance warning.

FUEL: No bunkers available at terminal. See "General" before first port.

REPAIRS: Limited repair facilities available in Santa Marta, approximately 6 miles from terminal.

MEDICAL: Doctor and hospital located at Santa Marta.

CONSULS: No consular office in vicinity of terminal. Nearest Consuls, located in Barranquilla, approx. 35 miles distant.

SHORE LEAVE: Through the ship's Agent, shore leave can be arranged, but sufficient crew must remain on board to handle emergencies.

GENERAL: No petroleum inspection services. No ship's stores.

SHIPMASTER'S REPORT: November, 1984.

1. The Terminal is now used exclusively for the import of gasoline.
2. *Mooring:* Forward: 2 anchors and 1 starboard breast line to buoy.
   Aft: Lines to 5 buoys, 3 of which require double lines (8 ropes in total aft).

N.B. All ropes require a 'long drift' as buoys are well away from ship. Wire ropes not suitable for this terminal. (Mooring is a long procedure).

3. Pilot and 'Loading Master' joined at anchor – awaiting tide – and stayed on board throughout stay; in addition 10 personnel have to be fed.
4. *Port Papers:* All ship's documents required for sighting and expiry dates (except, in our case, Ship's Register).

Agents advised the following required:
4 Crew Lists (provided 12 copies and all 'required').
3 Personal Effects Lists (provided 9 copies and all 'required').
3 Stores Lists (provided 4 copies and all 'required').
3 Bonded Lists (provided 4 copies and all 'required').
N.B. Federal Police require at least 2 Crew Lists with complete names not just surnames and initials ('difficult' with Indian crew).

5. *Stores:* Fresh provisions.
6. *Shore Leave:* Shore Passes issued, no problems except for distance to shore. Passes to be returned prior to sailing.
7. No repairs possible – no fresh water – no bunkers.
8. *Discharge:* With 1×12 in. line but fitted with 10 in. reducer to 24 in. undersea line to shore, about 2 km.

Can accept 15,000 bbls./p.h. subject to 7 kg./sq.cm. pressure.

9. *Weather:* (November) Very heavy swell running but this was reported as being very unusual for this time of year. Vessel rolled heavily.

OPERATORS: Chevron Petroleum Co.

PUERTO BOLIVAR: 12.16 N. 71.57 W. (See Plan Book)

LOCATION: Puerto Bolivar is at the entrance of Bahia Portete, a natural bay on the North coast of Colombia's Guajira Peninsula, located at Lat. 12° 16′ N., Long. 71° 57′ W. It is on the Caribbean, about 350 km. N.E. of Barranquilla.

PILOTAGE: Compulsory.

APPROACHES: *Channel:* Vessels will enter and leave the port by a dredged channel 4 km. in length that connects the turning basin with the open sea. The channel's allowable ship's draft is 17 m. (max.). Depth 18.0 m.

Turning Basin: Allowable ballasted draft is 9.0 m. (max.). Depth 11.5 m. Vessels scheduled to load will enter the circular turning basin where they are completely stopped, then turned by tugs to berth at the coal pier, port side to.

VHF: VHF Radio Channels 6 and 16; call "Puerto Bolivar" for anchoring or berthing instructions. Normal marine communications will be available.

TUGS: Use of tugs compulsory.

BERTHING: *Cerrejon Coal Terminal:* The single coal berth will be in operation 24 hours daily, year round. It will have 3 breasting dolphins and is designed for a maximum ship size of 150,000 d.w.t., 300 m. LOA, 45 m. beam, and 17 m. draft. Vessel to berth port side alongside.

Vessels will normally load on a first come, first served basis.

Ships to load must arrive with clean ballast carried in segregated ballast tanks, with holds swept clean and, in the case of ore-oil or OBO vessels gas free.

The maximum distance between the bottom of the shiploader boom and MLW is 23 m. at either the ship's rail or the hatch cover. The average tide is 0.35 m.

BULK HANDLING FACILITIES: *Railroad:* The 150 km. mine to port railroad is dedicated to handling Cerrejon coal.

Stockpile: Maximum storage is 1.7 million metric tons (tonnes), live storage is 1 million tonnes.

Weighing: Belt scales will determine cargo weight with an accuracy of ±0.5%.

Sampling: The Ramsey automatic sampler operates according to ASTM standards.

Analysis: ASTM standards are applied.

Shiploader: One linear loader can handle up to 10,000 tonnes/p.h.

Trimming: Spout trimmed.

MEDICAL: First aid treatment is available, but not on a routine basis. Extreme emergencies must be handled at Barranquilla.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: No facilities for major repairs.

REPATRIATION: Because of the port's remoteness, it is suggested that seamen neither join or leave at Puerto Bolivar.

AIRPORT: The nearest international airport is at Barranquilla.

TIME: Local time is GMT minus 5 hours.

GENERAL: Puerto Bolivar is a full entry port.

Port charges, while not yet established, should be comparable to those at other major coal ports. Charges will be made for pilotage and tug service. Full agency service will be provided at a fee. Intercor will be the owner's fee-paid Agent.

This coal port is being constructed to exclusively handle Cerrejon coal. All major components of the mine, railroad and port will be completed in 1985. The coal terminal goes into full operation at the beginning of 1986. During the last half of 1985, temporary facilities to load ships of up to 150,000 d.w.t. will be available.

AUTHORITY: *Operator:* Exxon Coal International, 396 Alhambra Circle, Coral Gables, Florida 33134 U.S.A. *Tel:* (305) 441-6152. *Telex:* 51-9159.

SANTA MARTA (Including Puerto Prodeco): 11.15 N. 74.14 W. (See Plan Book)

DOCUMENTS:

For the Port Captain:
1 Clearance from Last Port.
Voyage Report.
1 Crew List.
1 List of Passengers for Santa Marta.
1 List of Passengers in transit.
1 List of Provisions.

Vessel Certificates: (these only need to be shown)
Registration Certificate.
Load Line Certificate.
Classification Certificate.
Safety Equipment Certificate.
Radiotelegraphy Safety Certificate.
Construction Certificate.
Cargo Handling Equipment Safety Certificate.
Oil Pollution Certificate.

For Port Health Authority:
Derat Certificate.
Maritime Health Declaration.
Crew List with dates of vaccination.
List of Passengers for Santa Marta.
List of Passengers in Transit.

For Customs:
3 Cargo Manifests.
3 Crew Lists.
3 Lists of Passengers for Santa Marta.
3 Lists of Passengers in Transit.
3 Lists of Crew Personal Effects.
3 Lists of Provisions.
3 Mail Lists.
1 Single Document.

For Agencies:
Voyage Report.
6 Crew Lists.
6 Lists of Passengers for Santa Marta.
6 Lists of Passengers in Transit.
6 Crew Personal Effects Lists.
2 Lists of Mail for the port.
4 Cargo Manifests.
4 Bills of Lading.
2 Cargo Stowage Plans.

PILOTAGE: Pilot Boarding Station Lat. 11° 14.7′ N., Long. 74° 14′ W. Information regarding ETA should be relayed to Agent, who will advise Port Authority.

ANCHORAGES: When it is not possible to come alongside a berth immediately, the vessel may anchor within the area included within the following coordinates.

Lat. 11° 14′ 45″ N., Long. 74° 13′ 15″ W.
Lat. 11° 14′ 45″ N., Long. 74° 14′ 00″ W.
Lat. 11° 14′ 15″ N., Long. 74° 13′ 25″ W.
Lat. 11° 14′ 15″ N., Long. 74° 14′ 00″ W.

Seabed is rocky and sandy, with depths about 120 ft.

Vessels should anchor in the lee of the Morro Grande and Morro Paqueno (large and small headlands), particularly during the months of December to March, when there is a strong N.E. wind.

RESTRICTIONS: None. Good visibility throughout year. Difference in tides negligible.

MAX. SIZE: 730 ft. length, 40 ft. draft. No limit to beam. Oil carriers: refer to Pozos Colorados.

PRATIQUE: Pratique granted by Port Captain who visits vessel immediately on arrival. Doctor also attends on this visit.

RADIO: Barranquilla Radio or Cartagena Radio; radio stations messages relayed by telex to Sta. Marta. Ship's Agents use same system. Terminal Office may be contacted on radiotelephone, 2738 kHz.

TUGS: Join vessels just before entrance to inner harbour; they may use own lines or vessels lines.

BERTHING:

Quays	*Length*	*Minimum Depth*
No. 1	540 ft.	42 ft.
No. 2	540 ft.	47 ft.
No. 3	760 ft.	37 ft.
No. 4	465 ft.	28 ft.
No. 5	465 ft.	35 ft.

Facilities exist for container traffic. 30,000 tons silo for grain storage and discharge facilities for up to 5,000 tons per day.

BULK HANDLING FACILITIES: *Puerto Prodeco:*
Location: Lat. 11° 09′ N., Long. 74° 13′ W.
Depth: 18.0 m.
Loading: At anchorage 1 mile – 2 miles offshore.
Working: 24 hours a day, 7 days a week.
Facilities: 4×1,500 d.w.t. barges for carrying coal.

Barges loaded at pier at a rate of 8,000 tonnes per day.

STEVEDORES: ETA to be given 72 and 24 hours before arrival, indicating number of gangs required. Unloading rate of general merchandise 10 t.p.h., and homogeneous cargoes around 15/20 tons.

No work from 2300 hrs. Saturday until 0700 hrs. Monday.

MEDICAL: Advance notice required whenever special medical attention needed on arrival; hospital available.

TANKERS: See "Pozos Colorados".

DENSITY: Tropical sea salt water density.

FRESH WATER: Available alongside docks: delivery (approx.) 10 t.p.h.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Deck watchmen supplied by Agent.

OPENING/CLOSING HATCHES: By special gang ordered by Agent.

SHIP CERTIFICATES: Load Line, Cargo Gear, Classification, Lifeboat, Main Engines, Radio Equipment, Fire Fighting Equipment, Ship's Register, Officers' Certificates (licences).

CUSTOMS ALLOWANCES: (Tobacco), 2 cartons of cigarettes per man. All other tobacco will be sealed by Customs. (Wine and/or Spirits), 1 open bottle of liquor permitted per crew member. All other spirits will be sealed by Customs.
IDENTIFICATION CARDS: Given by Port Captain once quarantine is cleared.
CONSULS: The following countries have consulates in Santa Marta.

		Phone
Belgium	Cra. 1a. No. 22-80	2404
Costa Rica	Avda. Libertador No. 33-47	2199
Dominican Republic	Cra. 21 No. 15-99	
Ecuador	Calle 12 No. 16-E-93	2643
Finland	Edificio de los Bancos Oficina No. 605	5317
Guatemala	Calle 11 No. 1C-23 P.8	4048
Italy	Iroka el Rodadero Building.	
Netherlands and Sweden	Calle 15 No. 3-94	3403
Norway	Calle 11 No. 1-C-23 Dpto. 306	3501
Panama	Calle 25 No. 18A-105	
Peru	Calle 16 No. 1-92	3420
Spain	Calle 19 No. 3-26	3559

REPAIRS: Only minor welding.
REPATRIATION: Facilities available.
AIRPORT: 19 miles from town.
TIME: 75th Meridian time, Eastern standard time. GMT minus 5 hours.
HOLIDAYS: New Year (January 1st); Church Holiday (April 12th); Labour Day (May 1st); Local Holiday (July 29th); Church Holiday (December 24th); Christmas Day (December 25th); Church Holiday (December 31st). No work on New Year's Day, Labour Day, Local Holidays, Christmas Day. Work until 1600 on other holidays.
POLICE/AMBULANCE/FIRE: Police, Tel: 6079; Ambulance, Tel: 3116 – 5555; Fire, Tel: 6091 – 4545 – 6055.
SHORE LEAVE: Granted after quarantine cleared.
DELAYS: Up to 12/14 hours because of shortage of docking space.
AUTHORITY: Port Captain.

TUMACO: 01.49 N. 78.45 W.

DOCUMENTS:
- 5 Crew Lists.
- 5 Stores Lists.
- 5 Passenger Lists (local, in transit, or negative).
- 1 Sanitation Declaration.
- 12 Complete sets Manifests.
- 3 Mail Certificates (when not included in Manifest).

PILOTAGE: Compulsory. Entrance to the port can only be made during the day by vessels with a max. draft of 19 ft. – 20 ft., due to the bar between Buoy Nos. 2 and 3.

For the Tumaco Terminal vessels are boarded by the Pilot at No. 1 Sea Buoy.

ANCHORAGE: Sufficient area available in depths of 25 ft. to 35 ft.
RESTRICTIONS: Entrance channel depth 20 ft. Height of tide varies from 8 ft. to 12 ft.
HEALTH: On arrival, port doctor boards vessel to inspect crew Yellow Fever Certificates, also Derat Certificate. If any crew members suspected suffering contagious disease Master to radio prior arrival advising Agents accordingly. Port Doctor visits vessel even if previous port was in Colombia.
RADIO: Ships must communicate with the Texaco Head Office in Bogota, who will then inform the Terminal. The Terminal can be reached using VHF Channel 16 at a range of up to 30 miles.
BERTHING: Wharf is 310 m. long. Depth alongside averages 30 ft. Berthing for two vessels of 4,000 – 5,000 tons.
TANKERS: Vessels moor to 7 buoys, using both anchors. Ships Head 255°T. Max. size 55,000 d.w.t.

Manifold connections are 12 in., although 10 in. and 8 in. reducers are available. Hoses are connected on the starboard side.

The Mooring Master will remain on board throughout, and accommodation must be provided. Fresh water not available.

FRESH WATER: Available from wharf.
FUEL: Supplied by Esso Colombia, by barge.
CARGO GEAR: Terminal owns 3 cranes of 5 to 15 tons capacity.
AIRPORT: Suitable for DC.4 type aircraft, situated 4 km. from port.
DEVELOPMENTS: Programme for deepening the port to 33 ft. at HW.
AUTHORITY: Empresa Puertos de Colombia.

TURBO: 08.06 N. 76.43 W.

ANCHORAGES: Anchorage 2.5 to 3 miles off mouth of Leon River, used for loading bananas from barges.
CLEARANCE: Vessel must first proceed to Punta las Vacas for official visit of Port Authorities to obtain clearance.
MOORING: With sea and wind from the North, loading operations are not possible unless vessel employs the "Baltic Moor".

On arrival at the Leon River Anchorage, vessels should let go a couple of shackles. After that, a 3 in. to 3.5 in. wire (or mooring line) is passed from the after leads on the poop, along the ship's side, outside and clear of everything. This wire is to be shackled to a number three chain shackle.

By heaving in the wire and slacking the chain as required (about a 60° angle) vessel will give the necessary shelter to banana barges, for normal cargo operations.

SHIPMASTER'S REPORT: 1976. *Chart used No. 24515 (American).*
Vessels ordered to Turbo first proceed for clearance off Turbo town and anchor in position about 1 mile West of Pta. Las Vacas Lighthouse (Lat. 08° 04′ N., Long. 76° 45′ W.). The lighthouse, which is situated on the Southern end of Pta. Las Vacas is not readily identifiable from the N.W. until within about 2 miles and the light is reported to be poor. The chart in the area of Pta. Turbo, about 4 miles Northward of Pta. Las Vacas, does not correspond to the radar picture presented, and therefore a berth of at least 2 miles is recommended.

After clearance by Port Authorities at Turbo vessels should proceed to Pinchindi, about 7 miles W.S.W. of Pta. Las Vacas, for loading during the period December to May. It is reported that during the season May to December vessels load off the mouth of the Rio Leon, about 7.5 miles S.S.E. of Pta. Las Vacas. Approaches to this berth apparently pose no problems and the loading position is reported to be close to a buoy off the river mouth, the position of which could not be confirmed.

There is no Pilot available at Turbo.

Vessels loading at Pinchindi should steer to pass about 1.5 to 2 miles S.E. of Boca Pinchindi. When the black buoy, Fl. 3 sec. (marked on chart No. 24515) bears about 335° true, but not less than 315° true course should be altered to bring the buoy right ahead and anchorage should be taken up as convenient on this bearing. The black buoy referred to above is very difficult to pick up against the land, and in February 1976 was extinguished. There are two mooring buoys to the Eastward of the black flashing buoy. These are unlighted and not marked on the chart. Positions of these mooring buoys are as follows, bearings and distances from the black Fl. 3 sec. buoy: BWVS 83.5° true×380 m. R 99.5° true×760 m. These mooring buoys are more readily identifiable from the offing than the Fl. 3 sec. buoy, particularly the red one, which is painted in "International Orange". However it should be borne in mind that this buoy may have just received a new coat of paint at the time this report was written. The red buoy may be seen over the land which lies on the Eastern side of the anchorage before course is altered for the final approach. Vessels of draft up to 25 ft. may anchor up to within about 300 m. of the Fl. 3 sec. buoy in about 22 m. of water.

As the wind strengthens during the afternoon to about force 5/6 from between N. and N.E., and due to the proximity of other vessels in the anchorage, it was considered advisable to use two anchors; the vessel in fact used port anchor with 4 shackles on deck and starboard anchor underfoot. This prevented the vessel from yawing more than a maximum of about 15°, while other vessels moored with only one anchor were observed to be yawing considerably more during the afternoon breeze.

Winds, during the period while the vessel was at Turbo (February 2-4) were predominately from North to N.E. and no significant currents were observed in the anchorage described above.

Caution is advised while navigating in this anchorage at night, as vessels loading logs often have large unlighted timber rafts alongside. It should also be borne in mind that tugs, lighters and launches are often unlighted, and radar echoes from these might easily be mistaken for those of the buoys. While the radar echoes of the land in this anchorage are quite clear, they do not in any way correspond with the chart.

No opportunity presented itself for checking soundings, however, on the vessel's track arriving and sailing soundings on the whole agreed with charted depths.

Loading of bananas is carried out in the anchorage using mechanical conveyors from lighters through vessels sideports, and on the whole was found to be quick and efficient.

No fresh water or provisions are available at Turbo. Indeed no facilities whatever are available from ashore. There is no radio station, although banana shippers "Uniban" have VHF 16 in their office during office hours, Spanish language only. Agents for United Brands Company have VHF Channel 16, call sign is "Casanova".

Caution should be exercised when taking any navigational advice from Officials in Turbo as this may at times be misleading and it is questionable whether persons proffering advice regarding best anchorage position etc. are in possession of all facts necessary for safe navigation in the area.

Documents Required for Inward Clearance at Turbo:
- 1 Clearance from last port.
- 6 Crew Lists.
- 5 Passenger Lists (Nil passengers to be declared).
- 5 Disembarking Passengers.
- 5 Mail Lists (No mail to be declared).
- 1 Maritime Declaration of Health.
- 1 Vaccination List.
- 6 Manifests.

Ships Certificates for Inspection:
- Register.
- Safety Equipment Certificate.
- Safety Radio Certificate.
- Radio Station Certificate.
- Cargo Gear Certificate.
- Derat Certificate.
- Ships Capacity Plan.

In addition to above list of documents required, the following are also to be presented to Authorities on arrival:
2 Store Lists. 2 Crews Personal Effects.

SHIPMASTER'S REPORT: February 1979.
Pilotage: It is necessary to take a Pilot at Punta Las Vacas for entrance to the bay. Thereafter, any movement inside the bay will also require a Pilot.

SHIPMASTER'S REPORT: July 1979.

Vessel arrived Pta. Las Vacas anchorage at 0207 hrs. 30th July. Cleared Port Officials and proceeded to R. Leon Anchorage where vessel anchored at 1010 hrs. to port anchor, 4 shackles in water. Rigging gangs boarded at 1330 hrs. 31st July and completed rigging hatches at 1900 hrs. Loading commenced at 2230 hrs. and completed at 1210 hrs. 2nd August. All gear and labour off vessel at 1220 hrs. At the start there was no co-operation from the stevedores and repeated requests for information regarding which side doors and how hatches and derricks were required to be rigged met with no response until such time as the riggers boarded. It was then expected that the vessel could do everything at one and the same time. To commence only starboard side doors were used but on completion of No. 5 hatch it was decided to work No. 2 hatch both sides, once again no mention of doubling No. 2 hatch was made although the question had been asked repeatedly, the stevedore assured the Chief Officer that the port side doors would not be required. No information regarding quantity of bananas to be loaded or number of Bills of Lading was forthcoming and there was a very definite language barrier until it was made clear that any Bills would be claused "mixed". From this point co-operation improved and the language problem became less difficult. During loading there were numerous delays for weather, machinery breakdowns on the barges and waiting for cargo to arrive alongside. Before cargo operations commenced vessel was requested to "point" the ship using a rope from the port quarter to the port anchor cable and this was attempted with varying amounts of cable paid out, before operation could be completed the wind died down and wind and tide were acting against one another with result that operation was ineffective.

Turbo must now be regarded as being on a par with "ports" regarding theft and all precautions taken, many horrific reports on theft were heard from other vessels; however, if vessel was obviously taking all precautions then generally after being looked over, vessel is left alone. One case concerning a crew member and radio took place but his property was recovered by Cargo Supervisor and Customs Official, although culprit was not apprehended.

SHIPMASTER'S REPORT: August 1981.

Pilots are now compulsory at Turbo and board with the inspection party off Pta. Las Vacas. They also board after loading is completed and leave off Pta. Vacas.

The larger United Brands banana vessels now use overhead conveyors for loading instead of the sideports.

NOTES

Please also advise Shipping Guides Ltd.

Republic of Comoros

PORT DZAOUDZI (Ile Mayotte): 12.50 S. 45.10 E.

SHIPMASTER'S REPORT: August 1982

Mayotte Island is situated in position Lat. 12° 46′ S., Long. 45° 13′ E. in the Indian Ocean and known to be one of the Comoro group of Islands, but it is under the administration of French Government. It has no connection with the Comoro Government. Therefore, vessels calling "Zaoudzi" should hoist French National flag. Population is mostly Muslims. The island is surrounded by a barrier reef which is broken by many small passages but the main passage to arrive Ilot Zaoudzi is via Passe Mount Zamboro. This passage is deep but very narrow with a width of 9 cables safe water in between the Eastern extremity of Recif du Nord and the N.W. extremity of Grand Recif du Nord-East. It leads to the anchorage off Ile Pamanazi and the Ile Dzaoudzi, where vessels work cargo on anchor moorings. The maximum draft permissible is 40 ft. The inhabitants of the island speak French, Arabic and a mixture of Somali and other African languages. There is nobody who can speak English, therefore care should be taken while arranging Pilot and entry to the Zaoudzi harbour.

DOCUMENTS: On arrival Harbour Master and Customs Officer boards the vessel.

Customs Officer requires: 2 copies Cargo Manifest; 2 Crew Lists; Bonded and Provision Stores Declaration Lists. (2 copies).

Harbour Master requires: 2 Crew Lists; 1 Vaccination List; 1 copy Cargo Manifest.

No other documents are asked for. Agent does not require any documents, not even ship's papers. Agents are only interested in ship's husbandry.

PILOTAGE: Pilotage is optional but Port Authorities should be notified on VHF Channel 16 when entering the M'Zamboro Passage in good time. Large vessels calling first time must arrange Pilot by cable with correct ETA. Messages to Agents should clearly indicate whether Pilot will be required or not. In case cable should not reach in time, then vessels should call on VHF Channel 16 and ask Harbour Master to send the Pilot. In that case vessel has to wait about 2 hours close to barrier reefs. Pilot boards the vessel about 1.5 miles off the passage M'Zamboro. There are only two Pilots who belong to French Navy.

ANCHORAGES: Vessels should only call or enter the barrier reefs in daytime, that is from sunrise to 3 hours before sunset. Therefore, daytime approaches should be maintained. There are no good anchoring grounds outside or inside Recif du Nord. Vessels arriving after hours have to keep on steaming until day breaks. However in case of emergency a temporary anchorage can be made on Banc de la Prudente, 2 miles N.W of Ile M'Zamboro. This anchorage should be used with utmost care because of poor holding ground. In case vessels can cross barrier reefs and shallows from the Passe M'zamboro entrance to Bancs Jameaux (position: Lat. 12° 40′ S., Long. 45° 08′ E.), then she can anchor in depths where it is safe and sound, or she can make, if time permits, to arrive straight to Zaoudzi anchorage.

Anchorage around Dzaoudzi: Vessel can anchor anywhere in between l'Mogne Amiri and Ile Dzaoudzi and main island coast named Mamutzu. It is better to confirm anchoring position with Harbour Master. Sometimes if it becomes necessary, then Harbour Master boards the vessel near mooring buoy in position Lat. 12° 45.47′ S., Long. 45° 15.87′ E. Therefore, it is of prime importance to establish communication on VHF Channel 16 with Harbour Master at all times.

MAX. SIZE: There is no restriction on the size of the vessel, because there are no berths. Every vessel has to anchor and work cargo, however drafts are taken into consideration. Max. draft permitted 40 ft. (12.19 m.). Vessel's engines and steering should be very reliable while navigating through passage to Zaoudzi.

HEALTH: All persons are required to have valid health certificates against Cholera. Yellow fever vaccination not required, but can be arranged if ship requires.

COMMUNICATION/ETA's: There is no direct communication between ships at sea and Ile Mayotte. In the Admiralty Radio signals there is listed Dzaoudzi station, but in actual fact there is no station, therefore all cables to Zaoudzi Agents should be routed through Reunion Radio only. Ile Mayotte has direct connection with Reunion Island, therefore messages can be sent via Reunion Radio for quick despatch. But from experience it is found that cables normally arrived at Mayotte Agents very late. Therefore, ETA and other requirements should be sent to Agents with a margin of 5 to 6 days.

On arrival off M'Zamboro passage vessels can call "Zaoudzi Harbour Control" on VHF Channel 16. The range of their VHF is about 25 miles. Therefore vessels can call "Zaoudzi Harbour" when 25 miles off and arrange passage through barrier reefs to Zaoudzi. Pilots are always booked by cable, because it takes a long time for Pilot to arrive outside M'Zamboro Pass from Zaoudzi.

TUGS: No tugs, one towing boat is available for towing the barges and lighters.

BERTHING: There are no berths, all vessels have to anchor.

STEVEDORES/CARGO HANDLING: Agents work as stevedores, they arrange lighters and labour. There is no limit in ordering labour but lighters are limited. Therefore cargo discharging rate is affected.

If continuous flow of lighters is available then bagged cargo could be discharged at the rate of 100–150 tons per hook per day. There is no night work. During Ramadan they work from 0700 hrs. to 1600 hrs. and no work in the night. During normal days they work from 0700 hrs. to 1900 hrs. There is no floating crane. About 4 steel barges and remainder are wooden sail boats which carry 10 to 20 tonnes at a time.

DENSITY: 1025.

FRESH WATER: Abundance of fresh water on the island but no arrangements to supply to the ships. In case of emergency naval barge which has desalting plant can supply small quantity of evaporated water (up to 40 to 50 tonnes) provided it is arranged 7 days in advance. This is very expensive, therefore it should be avoided.

MEDICAL: Good hospitals are available in Zaoudzi and Momutzu. All kinds of cases are dealt with.

PROVISIONS: Very small quantities of meat, fish, vegetables and fruits are available. Ship's personnel can only go and buy it. There is little variety of vegetables or fruits. Vegetables: Lettuces, local spinach, French beans, local onions and potatoes, etc.

Fruits: Apples from South Africa, bananas, coconuts and when in season pineapples are available but in small quantities.

FUEL: Nothing can be arranged.

GANGWAY WATCHMEN: This is a very peaceful island, no pilferage, therefore watchmen are not kept or arranged.

OPENING/CLOSING HATCHES: It is normally done by ship but in case of frequent rains and with special cargo like rice or wheat, extra labour could be arranged with Agents.

CUSTOMS ALLOWANCES: No restrictions on any type of goods. Bonded stores are not sealed, therefore no limit on allowances.

CARGO GEAR: Only ship's gear is used, however rope slings are arranged by the stevedores.

SHORE LEAVE: No restrictions on shore leave and no passes are issued.

CONSULS: No Consulates. Difficulties if any, can be handled by Mayotte Administration.

REPAIRS: No workshop. No repairs possible by shore persons.

REPATRIATION: There are three flights a week from Ile Pamanzi Airport to Reunion Island only, i.e. on Tuesday, Thursday and Saturday. Repatriation can be arranged on these days.

TIME: GMT plus 3 hours. No variation in the time throughout the year.

HOLIDAYS: French administrative holidays i.e. 1st January, 1st May, and 25th December (Christmas Day), the local people enjoy Muslim rites holidays such as Eid-ul-Fitar, Eid-ul-Azha, 10th of Muharam holidays. The labour works on Saturdays and Sundays.

GENERAL: *Communications: While at Anchor:* Ships are allowed to use their transmitters for sending cables. However, cables can be sent through Post Office. Ship to shore communication is by VHF Channel 16 for Port Control and VHF Channel 12 with Agent's office, during office hours only.

Currency: French franc is the local currency. There are two banks: Banco de Franco, (one on Zaoudzi Island and other on Mamuzu). U.S. dollars can be changed either at the banks or direct at shops. No other currency is accepted in the shops.

AUTHORITY: Commandant Porto de Zaoudzi, Mayotte.

AGENT: There is only one Agent at the moment who is M/S Societe Mohoraise d'Acconage de Representation et de Transit (short form SMART), Dzaoudzi Mayotte. Cable address: SMART Dzaoudzi. They work ship to shore communication via VHF Channel 12 – only during office hours, i.e. from 0800 to 1600 hrs. If one wishes to communicate during night hours, one should call VHF Channel 16 and ask Port Control to inform "SMART" to call the ship on VHF Channel 12, then communications can be established.

NOTES

Please also advise Shipping Guides Ltd.

Congo, Peoples' Republic of

DJENO TERMINAL: 04.56 S. 11.54 E. (See Plan Book)

LOCATION: The loading point is located 3,800 m. from the coast in position Lat. 4° 56′ 35″ S., Long. 11° 54′ 15″ E., that is to say 9.5 miles S.S.E. of the main Pointe Noire Lighthouse.

NAVIGATION:

Djeno Lighthouse: Position Lat. 04° 55′ 01″ S., Long. 11° 55′ 45″ E.

The Terminal has a prohibited area which is covered by the red sector of light. No vessel may enter this area between depths of 50 m. and 70 m. as there are offshore production installations, underwater pipe-lines and the loading point within the red sector from approximately S. 3° W. to S. 73° W. Also vessels may not proceed inside 25 m. depth of the red sector without a Pilot on board.

The lighthouse has the following characteristics:

17 m. metallic tower, aluminium colour;

Light is regular occulting light at 4 second intervals, light 29 m. above MHWS.

Range of white light 18 miles and red light 15 miles.

SBM: Equipped with radar reflector and white light with 60 flashes per minute, range 6 miles. The floating pipe extending over a radius of 245 m. round the buoy is lit by small white intermittent lights.

PILOTAGE: Compulsory. Pilotage is carried out by Pilots from Pointe Noire (See "Shipmaster's Report"). Call signals for the Pilot are those provided for by the International Code. The Pilot station keeps a permanent watch on VHF Channel 16. Pilot boarding position: Lat. 4° 47.44′ S., Long. 11° 48.10′ E.

Limits of Pilotage Zone: South, parallel 5° 07′ S.; West, meridian 11° 46′ E.; North, parallel 4° 42′ S.

During the day, when leaving the mooring, request for Pilot is to be made to the Port Commander's Office 3 working hours before the hour of departure. If vessel is ready to leave and the Pilot has not boarded, he may be called by means of the following signal, International flag "G" and at the same time 3 long blasts on the ship's whistle.

If departure should be during the night, request for Pilot should be made to the Port Commander's Office before 1700 hrs., indicating as near as possible the probable time of departure.

Should any changes take place in the time of departure the Port Commander's Office is to be advised at least 1 hour in advance in order that the vessel should not incur any surcharge. During these hours call for the Pilot shall be made at the Port Commander's Office by the ship's Master or his representative.

Sound Signals: The use of ship's whistle is forbidden between 1700 and 0600 hrs.

Should Pilot be required at any time on a Sunday, order should be placed before 1200 hrs. on Saturday. Should a Pilot be required on a public holiday, order should be placed by 1700 hrs. on the day prior to holiday.

ANCHORAGE: Vessels loading at Djeno may anchor in Pointe Noire Roadstead, 1 mile North of the Outer Dyke Light.

MAX. SIZE: Maximum permissible draft 16 m. (52 ft. 6 in.). However, Elf Congo may reduce this draft if weather conditions are unfavourable. Also see "Berthing" and "Developments".

HEALTH: The Pilot may act for the Hygiene Department, Pointe Noire if instructed to do so by Pointe Noire.

RADIO: Call signal "TNA".

Permanent watch on 500 and 2182 khz from 0600 to 1800 hrs.

Transmits on 8,722 kHz	from 0930 to 0945 hrs.	(GMT)
	from 1030 to 1045 hrs.	„
	from 1330 to 1445 hrs.	„
	from 1530 to 1545 hrs.	„
	from 1730 to 1800 hrs.	„
on 13,101 kHz	from 0630 to 0645 hrs.	„
	from 0730 to 0745 hrs.	„
	from 0830 to 0900 hrs.	„
	from 1700 to 1715 hrs.	„

Elf Congo Terminal: Watch VHF Channel 12 – 156.1 MHz whilst tanker at the loading point.

Pointe Noire Office: Call signal: "Echo Lima". Watch radiotelephony – 2182 kHz.

Management of Port of Pointe Noire: Watch VHF Channel 16 – 156.8 MHz permanent.

Advice of Arrival: Tankers shall have their arrival at Djeno notified by their consignees 72 and 24 hours in advance.

Thereafter, they shall notify any appreciable change in their ETA.

TUGS: Three tugs available from Pointe Noire. 1,000 h.p., 600 h.p. and 1,800 h.p. Request for tugs should be made at least 3 hours in advance and before 1700 hrs. if required during the night. For berthing, mooring boats will be supplied by Elf Congo.

BERTHING: The loading point of Elf Congo at Djeno is of an SBM type, with single mooring at the bow.

The vessel is moored by the bow to a buoy consisting of a cylindrical frame of diameter 10 m. and 4.35 m. high.

This buoy is moored by chains to 6 drilled piles. Anchor moorings extend over a radius of 300 m. around the buoy.

A 40 in. sea-line connects the tank farm with the loading point; the buoy is connected to the sea-line by 2 lines of flexible hoses 20 in.

The loading point is provided for the mooring and loading of full-loaded tankers of approximately 40,000 d.w.t. – 140,000 d.w.t. and half-loaded tankers of 240,000 d.w.t.

Depth of water at the buoy is 22 m.

Notice of Readiness: Shall be sent to Elf Congo.

MOORING: Mooring ropes supplied by Elf Congo. The vessel shall be ready to take aboard two mooring ropes, one on the starboard bow and the other on the port bow. Each rope consists of 42 m. of nylon of 13 in. circumference and 5 m. of 47 mm. diameter chain. Each rope is equipped with a polypropylene lead of 10 in. circumference, 105 m. long for one and 45 m. for the other.

Leads are passed to the vessel by a motor boat. The vessel shall have two ropes ready at the bow to take them aboard.

Mooring can be carried out by day as well as by night, weather and sea permitting.

The derrick shall be rigged before arrival on the port side with a minimum hook SWL of 5 tons.

The ship's manifold shall be made ready on the port side for connection of the two 16 in. flexible hoses.

Flexible Hoses: Loading of vessels carried out through 2 lines of 220 m. of 20 in. flexible floating hose, terminating in 2×20 m. sections of 16 in. flexible hose. Manifold connections on board shall be 16 in. ASA flanges. Elf Congo can supply 10 in. to 16 in. reducers.

During connection and disconnection of the flexible hoses, assistance by the crew is essential, in particular for the handling of the winches and derricks. During the whole stay of the vessel at the loading point, the Pilot shall maintain safety watch on board and also assume the duties of head of loading in the absence of a representative of Elf Congo.

The Elf Congo service vessel shall remain at the disposal of the Pilot and shall remain alongside the tanker or nearby. A ladder must be kept permanently alongside the vessel so as to permit access by the team in charge of the flexible hoses.

LOADING: Loading may be carried out with a maximum flow of 8,000 cu.m./h. with two 20 in. lines or 5,500 cu.m./h. with a single 20 in. line, finished with 2×16 in.

Inspection of tanks after deballasting and after loading shall be undertaken in the presence of the Elf Congo loading representative.

The Terminal shall place on board the vessel sealed samples of the cargo.

Twenty minutes before the end of loading, the vessel shall warn the Terminal by VHF so that pumping may be stopped accordingly.

The ship's Master shall be fully responsible for the manoeuvring of the valves and safety of the cargo on board.

DEBALLASTING: The Djeno storage installation is not equipped to receive dirty ballast. The vessel shall, therefore, arrive with a clean ballast.

Any vessel arriving with dirty ballast may be forced to leave the loading point and delay arising therefrom shall be fully incumbent on it. Acceptance of Notice of Readiness will be rectified accordingly.

It is forbidden to throw into the sea any cinders, burning materials, objects and waste of any kind.

The ship's Master shall be responsible for any leaks on board. Such leakage shall be stopped immediately.

Scuppers shall be plugged during the whole loading time.

SAFETY: The ship's Master shall be responsible for safety aboard the vessel at all times. Sufficient crew members must be aboard the vessel at all times for handling moorings and fire appliances. The vessels main engines must be kept ready at all times. A watch should be maintained to ensure that no undue stress is placed on the moorings and that the floating pipe-lines do not rub against the vessel. Also the vessel should not be allowed to come into contact with the single buoy mooring which may be caused by changes in current, wind direction or other reasons.

Smoking outside of authorised area, use of naked lights, or tools liable to cause sparks not allowed.

Vessel's anchors should be secured in the hawse pipe. No repairs allowed whilst at the mooring also no stores or equipment may be handled on the deck whilst at the mooring.

Whilst Loading: All hull valves shall be kept closed except those required for water circulation. The scuppers on the main deck shall be blocked. Two fire hoses shall be connected and placed one at each end of the vessel. The fire lines should be under pressure at all times.

If there is a fire aboard a vessel moored at the SBM, the following sound signal shall be given on the vessel's whistle: continuous short blasts. The Master of the vessel shall immediately take charge of fire fighting operations.

MEDICAL: There is one hospital, 2 clinics and several doctors.

FRESH WATER: Drinkable water at quays inside the port of Pointe Noire or by tanker of 200 tons in roadstead under shelter (minimum delivery 100 tons).

FUEL: Not available at Djeno. Vessels proceed to tanker berth at Pointe Noire.

REPAIRS: Workshops at Pointe Noire. Facilities for repairing radar and radios.

WATCHMEN: Compulsory.

TIME: GMT plus 1 hour.

AIRPORT: 6 km. from the port of Pointe Noire. 1 or 2 flights daily to Brazzaville. 1 or 2 flights daily from Brazzaville to Europe.

CONSULS: At Pointe Noire: French Consulate, Tel: 94.00.02. Federal German Consulate, Tel: 94.00.10.

GENERAL: *Charts:* French chart No. 3357 and B.A. chart No. 3206.

Stores: A ship chandler at Pointe Noire can supply vessels with any foodstuffs required.

Territorial Waters: The sovereignty of the Republic of the People of Congo extends to 30 nautical miles as from the lowest sea watermark along the coast.

Boat Service: A motor boat can be rented through the consignee. Elf Congo motor boats must not be used by the tanker crew except for an urgent medical evacuation.

Meteorology: The rainy season extends from November to May with a maximum in February and March.

Visibility: visibility can be reduced to less than 1 mile in June, July and August.

Sea: mean density of the sea at the loading point is 1025. Sea temperature varies between 27°C in February (austral Summer) and 22°C in August (austral Winter).

Tide: tide is of a semi-diurnal type. Mean amplitude of spring tides is 1.60 m.

Wind: S.S.W. generally less than 15 knots.

Swell: generally S.S.W. less than 2.50 m. with periods of 10 to 12 seconds.

Current: sector S. to S.S.E. generally less than 1.5 knots on surface.

The current can change to the North without any apparent reason for a period rarely greater than 2 days.

DEVELOPMENTS: In 1983 second loading buoy was installed at about 1,500 m. from the existing buoy in an area with 29 m. water depth.

The connection between buoy and tanker is by 2 floating flexible hoses, approx. 220 m. long and 20 in. in diameter, each ending in a length of 30 m. of 16 in. flexible hose. Connection to the tanker manifold is by 16 in. hose.

SHIPMASTER'S REPORT: (1976): Received prior to above report and updated 1982.

Documents: Papers required on arrival;

Last port clearance.
2 copies Crew lists.
2 copies Vaccination Certificates dates.
2 copies Stores list and bond.
1 copy Crew Personal effects lists.

Pilot and Agent do all paper work.

Approaches: Pointe Noire shows up well on radar at 25/30 miles, but Djeno and the SPM are poor. The phosphate wharf shows up well and projects out from the land about 2 miles S.E. of Pointe Noire Breakwater.

Also see "Shipmaster's Report" of approaches to Pointe Noire.

Pilotage: Pointe Noire has 4 working Pilots, one of whom, on the rota system serves Djeno when a tanker arrives.

Both Pilot and Loading Master board from a fast Pilot launch off Pointe Noire and an assortment of mooring ropes and chains and messengers are taken aboard from a work boat which is also met 2 miles West of the breakwater. After that is completed, vessel proceeds the 9.05 miles to the SPM at Djeno.

Max. Size: Depth of water at SPM is 22 m. and the max. draft is 52 ft. 6 in. (16.0 m.).

Berthing: Mooring to the buoy consists of:

Port and starboard mooring ropes, 42 m. of 13 in. circumference nylon and 5 m. of chain, polyprop messengers 10 in. circumference are attached to each rope for the initial haul-in. Port line first. Derrick to be rigged on the port side and manifolds to be ready port side to receive two 16 in. hose connections.

No dirty ballast reception facilities ashore, vessel must arrive with clean ballast. Crew moor vessel with assistance of 3 shore crew and advice of Loading Master who is on foc'sle head and liaises with Pilot on bridge.

Crew bring on board cargo hoses and connect same. Pilot and Loading Master remain on board throughout with Pilot changing every 24 hours.

OPERATOR: Elf Congo, Terminal de Djeno, B.P. 761, Pointe Noire, Congo. *Tel:* 94.20.41. *Telex:* Elfco 8239 Kg.

POINTE NOIRE: 04.47 S. 11.49 E. (See Plan Book)

PORT LIMITS: *Pointe Noire Pilotage area limits:*

South: 5° 07′ S.
West: 11° 46′ E.
North: 4° 42′ S.

DOCUMENTS: On arrival, the Captain must hand over to:

The Agents:

4 Crew Lists.
4 Lists of Crew Boys.
4 Passenger Lists or negative.
4 Lists of Ports of Call.
2 Lists of Crew Personal Effects.
2 Stores Lists.
5 copies of Cargo Manifest.
1 List Narcotics.
1 List Arms.
1 List Ammunition.
1 List Animals.
Master's copy of B/L.

Harbour Authorities:

1 Arrival Form issued by Port of Pointe Noire.
1 Departure Form issued by Port of Pointe Noire.

Health Authorities:

1 Vaccination List for crew members.
1 Declaration of Health (form issued by the port of Pointe Noire).
Vaccination cards for the whole crew.

PILOTAGE: Compulsory. Telegraphic address: Harbour Master's Office of the Port of Pointe Noire. Pilot station can be contacted by VHF Channel 16; 24 hour service.

Boarding position: Pilot boards 1 mile North of the green channel light buoy.

Tankers awaiting a Pilot for the SBM at Djeno should wait 2 miles West of the main light at Pointe Noire.

APPROACHES: *Shipmaster's Report:*

The approach to Pointe Noire from the West using Chart 4105 Freetown to Luanda is clear of dangers as far as our experience goes. After crossing the 200 m. (100 fathom) line, the soundings are consistent with a gently shelving coast until there is 30 m. – 40 m., 3 miles West of Pointe Noire breakwater.

Approaching Pointe Noire from the West the radar picture of the coast about 20 miles North of Pointe Noire is very similar to Pointe Noire itself. This could confuse and lead one to think that the ship is further South than she really is, but the cluster of oil rigs should be a good guide.

There is a cluster of oil rigs with flares S.S.W. by 13 miles from Pointe Noire main lighthouse, with another cluster about due South by 17 miles, both good radar targets. Do not go in between these clusters. Watch out for numerous small dugouts, etc. fishing.

New oil rigs with 1 flare were constructed in 1977 in position Lat. 4° 28.8′ S., Long. 11° 15.4′ E.

RESTRICTIONS: Minimum draft allowed for ore-carrying vessels of more than 130 m. drawing alongside at Quay G: 20 ft. aft and 15 ft. forward. Max. draft allowed for all vessels: 31 ft. at any hour. Max. draft allowed for ore carriers leaving Quay G will be 34 ft. 4 in. after dredging of the channel in 1980 (1 hour before high tide). Tying to mooring buoy can be done only between sunrise and sunset.

Max. draft tankers 33 ft. 6 in. Tankers to enter in same period as departing ore carriers (1 hour before high tide).

HEALTH: Port Health Officer boards immediately on berthing. Compulsory vaccinations: smallpox, yellow fever and cholera.

RADIO: Pointe Noire Radio, call sign TNA. Continuous service on 500 and 2182 kHz from 0600 to 1800 hrs. GMT. Transmission on 8722 kHz. TNA from 0930 to 0945, 1030 to 1045, 1330 to 1445, 1530 to 1545, 1730 to 1800 hrs. GMT; on 13101 kHz. TNA from 0630 to 0645, 0730 to 0745, 0830 to 0900, 1700 to 1715 hrs.

Shipmaster's Report: If vessel is coming from the South it is advisable to pass messages through Luanda.

RADAR/VHF: The Harbour Master's Office has a VHF set (call Channel 16) but no radar.

TUGS: 2 tugs 1,800 h.p. and 900 h.p. Tugs normally join the vessel as soon as it crosses the passage. The vessel's own lines are usually used.

BERTHING:

	Length	Draft Permitted
Quay D: Berth 1	720 m.	24 ft.
" 2		26 ft.
" 3		28 ft.
" 4		29 ft.
" 5		29 ft.
Quay G: Ore Berth	530 m.	34 ft. 04 in. (See "Restrictions")
Tanker Berth	—	33 ft. 06 in.
Mole 1: Timber Berths	350 m.	31 ft.
Lighter Berth	—	12 ft.

Potash Berth: 4 miles Southward of Pointe Noire. Max. draft 44 ft.

STEVEDORES: The Agent requires the following information 48 hours in advance, in order to arrange gangs: precise ETA; number of gangs required for unloading/loading; distribution per hold unloading/loading; draft, fore and aft – before 0600 hrs. in the morning on weekdays counting as overtime; before 0600 hrs. Saturday mornings for the weekend or day before holiday also counted as overtime.

MEDICAL: Notice for medical attention not needed. There are 2 private clinics.

TANKERS: Diameter of loading/unloading lines: 6 in.=aircraft fuel. 10 in.="white product". 12 in.=1500 fuel. Hoses=8 in.

Also see "Djeno Terminal".

DENSITY: 1025 on average. Only slight variations according to tides.

FRESH WATER: 2 hoses can be connected at each berth.
Rate: 20 t.p.h. per hose.

FUEL: Ordered from suppliers: Hydrocongo. Pipe-line supply to tanker berth and berths Nos. 1 and 8.

FIRE PRECAUTIONS: The port must be informed of ETA of tanker 24 hours in advance.

GANGWAY/DECK WATCHMEN: Compulsory for tankers and gas carriers.

OPENING/CLOSING HATCHES: Usually the crew's responsibility. Can be carried out by the stevedore for payment.

CUSTOMS ALLOWANCES: No limit – must be stated on crew declaration, and quantities must be accurately stated.

CARGO GEAR: Derricks to be in good condition. There are 2 cranes at the new jetty.

IDENTIFICATION CARDS: Seaman's cards or passport needed.

CONSULS: France, Tel. 94.00.02–94.00.03. Germany (Federal) 94.00.10.

REPAIRS: Most repairs for the deck and engines are possible. Also facilities for electronic repairs.

DRY DOCKS: One slipway for vessels up to 800 tons.

REPATRIATION: Every facility for crews equipped with a crew card and passport.

AIRPORT: 6 km. from the port. 1 to 2 flights per day to Brazzaville. 1 to 2 flights per day from Brazzaville to Europe.

TIME: Local time is GMT plus 1 hour.

HOLIDAYS: 1st January (1 day's holiday); 1st May (2 days' holiday); 31st July (1 to 2 days' holiday); 15th August (2 to 3 days' holiday); 1st November; 25th December (1 day's holiday).

POLICE/AMBULANCE/FIRE: Police 17; Fire 94.00.49; Ambulance 94.00.49, 94.21.98.

TELEPHONE: Cannot be connected on board ship but there is one in the middle of Quay D for the use of vessels.

GENERAL: As the Congolese Customs are very strict, the drawing up of the store list and crew declaration should be carried out very carefully, as the slightest error is penalised and a fine imposed.

Stores are expensive and not easily obtainable. Fish available also fruit and vegetables but not in the Rainy Season.

SHORE LEAVE: No restrictions.

PORT REGULATIONS: In the event of congestion, vessels are obliged to work at night and on Sundays, and if they refuse to do this, they may be relegated to the roadsteads and thereby lose their turn to draw alongside.

DELAYS: *Shipmaster's Report:* Occasionally tankers are delayed for long periods as the shore tanks may be full.

SHIPMASTER'S REPORT: Mail takes between 3 and 7 days from Pointe Noire to Paris, and Pilot assures that it is reliable.

SHIPMASTER'S REPORT: March 1980.
Documents: See "Guide to Port Entry".
Pilotage: Compulsory. Pilot boards in position 4° 45.5′ S., 11° 45.9′ E. 24 and 12 hours notice required.
Anchorage: Position 4° 47.2′ S., 11° 49.4′ E.
Restrictions: Vessels able to enter and leave at any stage of the tide day or night.
Max. Size: Max. draft 31 ft.
Health: Quarantine Authority require 12 hours notice of arrival.
Tugs: 1 tug available.
Radio: Luanda or Portishead. No replies locally.
VHF: Pilot and Port Authority on Channel 16.
Berthing: Position 4° 46′ S., 11° 50′ E. Distance from entrance to berth less than 1 mile. Nature of bottom sand and mud. Vessel able to dock and undock at any stage of the tide day or night. There are facilities for loading coal in bulk. No quay cranes available, ships gear used. There is no link span for ro/ro vessels. Usual precautions taken with regard to security, no losses suffered. There is sufficient equipment for handling palletised cargo. Ship's gear is used for handling containers and the necessary shore equipment is available.
Density: 1025.
Fresh Water: Available.
Fuel: Bunker fuel oil, diesel oil and lubricating oils available.
Medical: Doctor and hospital available.
Provisions: Fresh provisions available but expensive as they are flown in from South Africa. Meats and groceries also available.
Repairs: Small repair facilities and small machine shop available.
Airport: Local airport with flights to Brazzaville.

AUTHORITY: Direction du Port de Pointe-Noire, P.O.Box 711, Pointe-Noire, Rep. Populaire du Congo.
Tel: 94.00.52.

AGENT: Ponteco-Socopao, BP 714/664, Pointe Noire, Peoples Republic of Congo. Cable address "Freight Pointe Noire". Telex: 8201 and 8252. Tel. 94.11.21 and 94.11.27.

NOTES

Please also advise Shipping Guides Ltd.

Cook Islands

AVARUA, (Including Avatiu) Rarotonga:
21.12 S. 159.47 W. (See Plan Book)

DOCUMENTS:

Health: International Maritime Declaration of Health.

Customs: (Immigration)
2 Manifests of Cargo showing weight or measurement (basis on which freight calculated).
2 Crew Lists.
2 Passenger Lists (landing and transit). Each disembarking passenger to complete a landing card and baggage declaration.
Clearance from Last Port.

Agent: 5 Manifests of Cargo. 1 Crew List. 1 Passenger List.

PILOTAGE: Not compulsory at present. However, Pilot available. Arrange through vessel's Agent 24 hours notice of ETA. Pilot boards from 35 ft. steel tug *Avatiu.* Craft painted blue hull, white superstructure. Tug equipped with VHF Channels 6, 12, 14 and 16. Pilot normally boards 0.75 miles off entrance Avatiu on line of leads.

ANCHORAGES: *Avarua:* As shown on Admiralty Chart No. 1264. Prevailing wind is S.E. and the anchorage is safe except in some instances when wind and/or sea are fresh from N.W. through N.E. 4 to 5 shackles of cable in the water has been found the most satisfactory in normal circumstances in 25 fathoms.

RESTRICTIONS: None. Anchorage, in 25 fathoms, is well defined with cross leads.

MAX. SIZE: No restrictions.

HEALTH: Vessel should radio "Porthealth Rarotonga" not less than 24 hours before arrival giving ports of call for preceding 3 weeks, number of crew, number of passengers, state of health and requesting free radio pratique.

RADIO: Call sign ZKR continuous listening watch on 2182, 4125 and 8257 kHz, also Channel 16 on the VHF. Weather forecasts are broadcast daily by R/T on 2207 kHz, and 12395.1 kHz at 0615 hrs. GMT and 1815 GMT after a preliminary call on 2182 kHz.

VHF: Harbour Master has VHF for communication between vessel and office on Channels 6, 12, 14 and 16. Listening watch on Channel 16 between the hours 0800 – 1200 and 1300 – 1600 (local time) from Monday to Friday. Harbour Master can be contacted after hours by arrangement through vessel's Agent.

TUGS: Small tug available (1.25 ton bollard pull) to assist with mooring.

BERTHING: *Avatiu:* Vessels berth port or starboard side to as may be necessary, berth 320 ft. in length having a depth alongside of 20 ft. MLWS. Swinging basin for vessels not over 270 ft. in length. Draft 18 ft. aft, 16 ft. forward.

STEVEDORES: Arranged by ship's Agent.

MEDICAL: Medical and hospital facilities available. International vaccinations/inoculations required depending on prior ports of call.

TANKERS: Small tanker from Fiji, using ship's hose for discharge. The transfer of bulk fuel takes place at N.E. end of the Outer Eastern Wharf in Avatiu Harbour.

DENSITY: 1025.

FRESH WATER: Available in limited quantities (alongside berth).

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: By crew or stevedores to vessel's convenience.

TOBACCO ALLOWANCE: 200 cigarettes, or half pound tobacco or 50 cigars.

WINE AND/OR SPIRIT ALLOWANCE: Allowance is 1 opened bottle of either wine or spirits, or a reasonable quantity of beer per person, for consumption on board. Under no circumstances may any wines, spirits or beer be brought ashore.

CARGO GEAR: Ship's gear for discharging and loading, 12 ton heavy lift crane available.

IDENTIFICATION CARDS: Not required.

CONSULS: New Zealand only is represented by a New Zealand Representative.

REPAIRS: Not available.

REPATRIATION: Confined to repatriation of crew landed for hospitalisation.

AIRPORT: Rarotonga International Airport is 2 miles away.

TIME: GMT plus 10 hours.

HOLIDAYS: Cargo cannot be worked on any Sunday or on Good Friday and Christmas Day. Other Holidays: Boxing Day (26th December); New Year's Day; Easter Monday; ANZAC Day (25th April); Queen's Birthday (1st Monday in June); Constitution Celebrations (4th Monday in August).

POLICE/AMBULANCE/FIRE: Ring exchange operator.

TELEPHONES: No connection available at present. Telephone available at Wharf Gate for emergency services.

GENERAL: Bananas available at times. Green vegetables are always difficult to obtain. Oranges, lemons, mandarines available March-August, pineapples November-February.

SHIP SUPPLY SERVICE: There are no ship-to-shore services available as a regular daily schedule. However, there are occasions when vessels are anchored off the Avatiu Harbour or in the 'Roads' that requests for boat transport are provided by the small tug of this Department after application by the Shipping Agent for its services.

The Agent is The General Manager of the Waterfront Commission. Telex: 62002. Rarotonga, Cook Islands.

DEVELOPMENTS: Harbour development at Avatiu although not completed, is currently in use and accommodating vessels of about 1,200 tons and 260 ft. in length.

AUTHORITY: Department of Trade, Labour & Transport, P.O.Box 61, Rarotonga, Cook Islands. *Telex:* Shipping RG 2202. *Cables:* Labcom, Rarotonga. *Contact:* Bruce Graham, Chief Administration Officer (Harbours). Captain A. N. Lewis, Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Costa Rica

GENERAL:

DOCUMENTS: *Prior to Arrival:* Arrival Notice: In practice, owing to the closeness of other ports of call, the shipping Agent notifies the Port Authority 48 to 72 hours in advance of the vessel's arrival. 24 hours before the vessel's arrival in the Pilot Waiting Zone, the Agency must report in writing to the Port Authority (Dockmaster) the vessel's time of arrival and the company that owns it. 12 hours before arrival, the time of arrival is confirmed, also in writing. One of these two written notices must contain the distribution list of the cargo to be unloaded, although failure to submit this information shall not delay docking. In addition, the number of longshoremen for loading and unloading, and if necessary, the number of launches or feluccas that will be required if the pier is occupied on both sides (Puntarenas) must be reported. Failure to confirm the time of arrival may result in losing the vessel's turn in docking.

Copies of the arrival notice should be sent to the Port Captain's Office, which performs the functions of Migration, Customs Administration, Customs Security, Delegate of the Ministry of Agriculture and Livestock (MAG) and the Veterinary Health Officer. In addition, copies must be submitted to the shipping agent and Customs for them to report to their clients on the arrival of the shipments and to initiate import procedures.

Information on cargo for the port

It is recommended that the shipping Agency send by airmail 2 Cargo Manifests and 2 copies of the Bills of Lading; 1 copy of each document shall be kept for the Agency's internal use, and the other shall be used to report to the Customs Agents and the cargo consignees.

On Arrival:

Type of Documents	*Number and Distribution of Documents*					
Basic forms	*Captain of Port*	*Customs*	*Maritime Health*	*MAG*	*Port Authority*	*Total*
General Declaration	1	1	–	1	–	3
Cargo Manifest	12(a)	5	–	–	3	20
Crew List	3(b)	–	1	–	–	4
Passenger List	1	1	1	–	–	3
Ship's Stores List	–	1	1	1(d)	–	3
Crew Effects Declaration	–	–	–	–	–	–
Maritime Health Declaration	–	–	1	–	–	1
Mail Guide	–	–	–	–	–	1(e)
Additional Documents:						
Visaed Clearance Permit	1	–	–	–	–	1
Consular Manifest	–	2	–	–	–	2
Crew List (f)	–	1	–	–	–	1
Passenger List (f) (g)	1	1	–	–	–	2
Maritime Health Declaration (f)	–	1	–	–	–	1
Cargo Tally Books	–	15(h)	–	–	–	15

(a) To be distributed among customs agents.
(b) A copy remains in the control booth at the exit of the port area.
(c) Sometimes checks vaccination certificates.
(d) Inspects meat in ship's stores (Ministry of Agriculture & Livestock).
(e) If there is a mail bag, the list is submitted to the ship's Agent.
(f) With consular visa.
(g) A visaed "no passengers" declaration is also required, when appropriate.
(h) For use of Customs and the Port Authority.

Other Requirements:

The Agency must provide a card to each crew member and passenger, which is stamped by the Captain of the Port and filled out on board. The card is used when passengers and crewmen go ashore and return on board the ship.

Prior to Departure:

The clearance permit is requested from the Captain of the Port 24 hours in advance of the ship's departure, or immediately upon its arrival, if the ship is to remain less than 24 hours in the port. The cost of the form is five colons, plus the amount for any overtime.

The clearance permit requires Customs Clearance (certification that there are no charges pending) and remains in force up to 24 hours after the requested departure time.

CALDERA: 09.54 N. 84.43 W. (See Plan Book)

LOCATION: The Port of Caldera is located in the Gulf of Nicoya in position Lat. 09° 54′ 44″ N. and Long. 84° 43′ 14″ W.

DOCUMENTS:

2 Copies of the Stowage Plan.
3 Copies of the Cargo Manifest.
18 Check Books.
1 Copy of the Crew List.
1 Copy of the Passenger List.
General Ship's Declaration.
Stores List.
Cargo Equipment Certificates.
Maritime Declaration of Health.

PILOTAGE: Compulsory.

ANCHORAGE: Anchorages are defined on a chart supplied by the Port Authority.

HEALTH: The Doctor and Health Service inspect the vessel prior to discharge of cargo.

RADIO: Radio service available throughout 24 hours.

Arrival advice: ETA should be sent 2-5 days before arrival and confirmed not later than 12 hours before arrival.

TUGS: Compulsory for berthing and unberthing.

BERTHING:

No. of Berths	*Length (m.)*	*Depth (m.)*	*Max. d.w.t.*
1	210	11.0	25,000
1	150	10.0	15,000
1	130	7.0	5,000

CARGO HANDLING FACILITIES: The port is equipped to handle general cargo, containers, roll-on/roll-off and solid bulk cargoes.

Cranes: Mobile cranes and stacker trucks of varying capacities, also other modern port equipment. See "Port Equipment".

Bulk Cargoes: The Port Authority owns and operates a discharge system with pneumatic suction units and silos for storage.

Port Equipment: In its first stage, operations at Caldera will be supported by the following equipment:

Fork lifts: 28×3 ton, 5×6 ton, 1×10 ton, 1×35 ton.
Flat Beds: 20×8 ton, 5×30 ton.
6 Towing tractors.
4 Mobile cranes from 10 tons to 127 tons.
3 Trucks.

Containers: Container reefer station with capacity to handle 20 TEU's.

STEVEDORES: The Port Authority provides stevedores throughout 24 hours.

TANKERS: *Caldera Bay:* Buoy mooring for tankers about 1,000 ft. offshore. Vessels moor using starboard anchor and lines to 3 buoys astern. Hoses connected on port side by ship's crew.

MEDICAL: Medical services can be provided at a clinic in the port or at a hospital 17 km. from the port.

FRESH WATER: Provided by the Port Authority.

FIRE PRECAUTIONS: Vessels must comply with all the port requirements regarding fire prevention, contamination and safety to navigation within the port.

GANGWAY/DECK WATCHMEN: At the discretion of the Port Authority. All vessels anchored in the port must be adequately covered by watchmen service.

AIRPORT: International airport 90 km. from the port. There are plans to build an international and local airport adjacent to the port.

TIME: Local time is GMT minus 6 hours.

HOLIDAYS: The port works throughout 24 hours, except Good Friday.

TELEPHONE: Telephones may be placed onboard on request. International and local telephone and telex services available on shore.

IDENTIFICATION CARDS: On landing, crew members and passengers in transit must carry identity documents which are to be submitted to the Port Authority.

REGULATIONS: The vessel, the Owner and his Agent must comply with all the arrangements set out in the Port Services Regulations and the General Tariff. The Port Authority will supply these regulations on request.

DEVELOPMENTS: In the medium term, the second stage of the port complex of Caldera will be constructed, with which the current capacity will be doubled to 1,200,000 tons per annum.

SHIPMASTER'S REPORT: October 1982

Draft: Forward 5.6 m. Aft 8 m.

Pilot: Pilot boards vessel 2 miles S.W. off end of breakwater.

Tugs: 2 tugs available, one is compulsory for berthing. We employed one pushing and the other as a line boat taking 2 stern lines ashore.

Berthing: Vessel let go port anchor to 2 shackles in water with view to it being used to draw vessel away from quay on leaving.

Line Gangs: Good – 4 men per gang.

Tie-up: 4 headlines and 2 springs each end. This proved sufficient throughout stay, even though moderate surge from swell was experienced.

Gangway: A shoreside gangway was available and used. Gangway/line watchman was provided by Port Authority.

Quay: Modern concrete construction 490 m. in length. 50 tonne bollards and good solid, non spring loaded rubber fenders – both placed every 20 m. along quay.

Electricity, telephone and water all supplied to wharf.

Cargo: Port has good lighting and good sized sheds. Container storage area under construction.

No shoreside cranes at present – proposed 40 tonne capacity container gantry.

Fork lifts are plentiful and in good working order.

AUTHORITY: Instituto Costarricense de Puertos del Pacifico, 001-5400 Puntarenas, Costa Rica. *Tel:* 63-40-06 and 63-40-23. *Telex:* 6045 Incop Cr. *Contact:* Lic. Rodrigo Arauz Bonilla, Presidente Ejecutivo.

GOLFITO: 08.37 N. 83.10 W. (See Plan Book)

DOCUMENTS:

2 certified copies of Clearance from Last Port.
6 certified copies of Crew List and 6 copies for distribution.
6 certified copies of Passenger List and 6 copies for distribution.
2 certified copies of Cargo Manifest and 25 copies for distribution.
4 certified copies of Stores Provisions List and 6 copies for distribution.
3 sets of Bills of Lading.

PILOTAGE: No Pilot in port. Bananera Company sends a launch to pilot vessel to quay if requested. Arrival has to be notified at least 24 hours in advance.

ANCHORAGES: Anchorage area to S.E., diagonal towards end of quay. Depth: 35 ft. – 50 ft. Area 1,000 m. by 300 m. approx. Quay distance: approx. 500 m. Sufficient space for 4 vessels.

RESTRICTIONS: Vessel allowed to enter at any time, day or night.

MAX. SIZE: Length of quay is 1,040 ft., enough for two steamers to berth, one in banana berth and the other in cargo berth, each one of 450 ft. Depth 35 ft. alongside.

HEALTH: Any vessel that enters this port has to be in possession of a Sanitary Manifest (Sanitary Maritime Declaration) signed by Master of vessel. In case of any suspected disease or fever aboard, Master to notify by radio to Port Authorities and vessel to wait outside the limit of territorial waters until clearance is given.

RADIO: Station call sign TIM, frequencies 8478 and 500 kHz. Working hours 0400 – 1300 GMT.
Notice of Arrival: Radio Agent at least 24 hours before arrival advising date and time of arrival, number passengers disembarking, if any, amount of cargo to discharge in metric tons, number of gangs required to work on board. This information is required by Port and Customs Authorities.
TUGS: No tugs. A launch from the Cia. Bananera takes lines from vessel to quay.
BERTHING: Vessels berth starboard side to. Vessels of Compania Bananera have preference.
STEVEDORES: Bananera Company controls gangs. Advance notice required. Work possible 24 hours a day.

MEDICAL: Bananera Company has a hospital for its employees. They can give assistance if a request through the Agency has been made 24 hours in advance. On arrival of vessel a valid vaccination certificate of each member of crew has to be shown.
TANKERS: Can berth in cargo area if length is less than 450 ft., depth is 35 ft. Diameter of pipe-lines 8 in. and 6 in.
FRESH WATER: Bananera Company supplies any quantity at a rate of 50 t.p.h. through shore hoses.
FUEL: Diesel and fuel oil available from time to time.
GANGWAY/DECK WATCHMEN: Available but not compulsory. Customs guard on gangway.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CUSTOMS ALLOWANCES: No limit on board but only one packet cigarettes when going ashore. No alcohol may be taken ashore.

IDENTIFICATION CARDS: Required.
CONSULS: Nicaragua, Honduras and Panama represented locally.
REPAIRS: Company Bananera of Costa Rica has a workshop that can do small repairs such as soldering or small winch repairs.
REPATRIATION: Can be arranged.

AIRPORT: One airport one mile from port. Serviced by two airlines "Lacsa Airlines" with two daily flights, one at 0700 hrs. and the other at 1030 hrs. "Ave Airlines" offer only one daily flight, Sundays included, at 0700 hrs. "Lacsa" has no Sunday flights.
TIME: GMT minus 6 hours.

HOLIDAYS: 1st January, no work can be arranged; 19th March, work at double time; Easter Thursday, no work can be arranged; Easter Friday, no work can be arranged; 11th April, work at double time; 1st May, no work can be arranged; Corpus Christi, work at double time; 29th June, work at double time; 2nd August, work at double time; 15th August, work at double time; 15th September, no work can be arranged; 12th October, work at double time; 8th December, work at double time; 25th December, no work can be arranged. Stevedores are not obliged to work Sundays and holidays if not voluntary.
POLICE/AMBULANCE/FIRE: It is sufficient to ask operator for connection with the desired department.

TELEPHONES: No facilities on board vessels.
SHORE LEAVE: Crew are allowed on shore.
DELAYS: Only when quay is occupied by vessels of Compania Bananera de Costa Rica, which have preference.

SHIPMASTER'S REPORT: January 1980.
Documents: As per "Guide to Port Entry". Documents to be certified by Costa Rican Consul at last port.
Pilotage: No Pilot available.
Restrictions: It is advisable to berth and unberth during daylight hours. Vessel can enter and leave at any stage of the tide.
Max. Size: Safe draft in channel (United Brands) 30 ft. Mean tide range 10.5 ft.
Tugs: None available.
VHF: Agent on Channels 16 and 14.
Berthing: Vessel berthed at the Banana Wharf which is 2 miles from the entrance and is 1,000 ft. in length. There is a banana elevator at the N.W. end.
Docking: Starboard side alongside: Approached Golfito as per Pilot Book, steering North until leading marks bear 047° then steer on leading marks at dead slow speed to pass 2 cables S.E. of Beacon 'A'. With ebb tide running vessel sets to the S.E. when approaching Beacon 'B'.

Vessel stopped and way taken off when about 3 cables from wharf, then proceeded to a position between Beacon 'F' and shore to attempt to turn round to port with port anchor on the bottom, however anchor did not hold against engine, so hove up anchor and turned short to starboard. Final approach to wharf made at an angle of about 30°, let go port anchor when approaching close to wharf and canted stern well in to wharf to pass heaving line. No noticeable current when close to wharf. When in position, port anchor had 3 shackles in water.
Unberthing: Left on ebb tide with another vessel moored close astern. Singled up to headline and spring forward, tightened up on anchor cable and hove on headline to cant stern off. Very short ahead movements and full starboard rudder necessary to achieve this, as current had little effect. Anchor did not hold sufficiently to pull head off the wharf, so came astern on engine until sufficiently clear of wharf to make port turn to leave harbour.

Very little wind on docking or undocking.
Facilities: The following are available: Fresh water, fresh provisions, minor repairs, airport, telex, bunker "C", diesel oil, doctor and hospital.

No dry docking facilities, no laundry service and no lubricating oils available.
Consuls: Nicaragua, Honduras and Panama.

General: Cautions: Beacon 'G' destroyed (January 1980). Rear range lights/marks 047° have very little horizontal separation. There is a small buoy in the approximate position of Beacon 'G' but exact position not established.

If vessel is loading on the Banana Berth, the secondary leading marks will probably be obscured by that vessel's superstructure.

Poor holding experienced when anchoring off the berth.

SHIPMASTER'S REPORT: July 1984.
Documents: As per "Guide to Port Entry".
Pilotage: Not available.
Restrictions: Vessels may enter/leave at any stage of the tide day or night as long as the lights are working and they are familar with the port.
Max. Size: Max. LOA 680 ft. Max. draft alongside 30 ft. Tidal range 10.5 ft. Limiting conditions are the swinging room between Beacons "4-G" and "6-F" and the wharf.
Tugs: None available or necessary.
Radio: Limon Radio "TIM" and Slidell Radio "WMU".
VHF: Bananera on Channels 16, 14, 6 and 8.
Berthing: See "Report" below.
Density: 1010.
Equipment: 1 small mobile crane. 4 banana elevators. 2×3 ton fork lift trucks.
Report: Berthing at Golfito:

From a position 2.8 miles due South of Curupacha Point Light the vessel was turned onto the channel leading marks (047°T) and speed reduced to pass Beacon "H-2" at dead slow ahead, a course of 049°T was required to maintain the leads in line with Buoy "4-G". Beacons "4-G" and "6-F" have now been replaced with square white buoys, same light characteristic as the original beacons. S.S.W. of Beacon "B-3" turned onto leads 036°T. Both these leading marks are quite small and the front triangle is not easy to make out against the steel work of the shed.

A very small tidal stream was observed passing Beacon "4-G" setting approximately West.

Rounding Beacon "4-G" the ship was swung to starboard to bring the channel marks 2 points on the port bow then commenced swinging to port using engines and rudder the ship was brought to within heaving line distance and a head line landed, the vessel now lying at approximately 45° to the wharf. Despite several engine movements she would not swing any further to port. The line boat (an old ships lifeboat) lacked power, and dedication of the crew to pull a rope ashore in an attempt to land a stern line and control the stern while using the engine to back against the tide.The tidal stream was noticibly stronger the closer the ship came to the wharf, running parallel to the wharf in a N.W.'ly direction. After the failure of the boat to land a stern line I decided to berth port side to. By the time the stern line was inboard the vessel was being carried rapidly N.W.'wards and lying bows on at 90° to the wharf. The head line was let go and the vessel backed off to about 300 ft. and commenced swinging to starboard with the engines. Due to the stronger current closer to the wharf the swing to starboard was checked on each astern movement. The starboard anchor was let go to one shackle to control the bows. The use of the anchor proved very effective and the ship was steered alongside dredging the anchor through the mud. Berthing safely port side to at 1310 hrs., nearly 3 hours after HW.

Departure: Sailing time was set for 2 hours after HW with the tide running diagonally out under the wharf. Singled up to after backspring, head line and for'd spring and with all lines slack I expected the ship to be set off the quay by the tide, but she remained alongside.

The after spring was let go and the stern canted off by heaving on the head line, finally the engines were used against the for'd back spring to cant her to approximately 60° to the wharf. Let go for'd and came astern until the poop as in a line between Beacons "7-D" and "5-C" then commenced turning short around to starboard, the tide carried the ship down to line up on the 036°/216° leads nicely and course was set down the channel to sea.

Conclusions: 1. the ebb tide sets N.W. along the wharf and is about 50% stronger than the flood.

2. Berthing starboard side to is preferred as sailing is much easier at any state of the tide, but should not be attempted after HW.

3. Considering the ease with which the ship dredged the anchor I would say that the holding ground is poor and due to the limited swinging room and the necessity to use a short scope cable I would not recommend waiting at anchor within the harbour.

A safe waiting anchorage can be found approximately 6 miles S.W. of the entrance channel in depths of 60 ft., firm mud and shell.

4. No reliance should be placed on the line boat.

5. Use of the anchor should be considered when berthing either side to, even under ideal conditions, as this would greatly reduce the number of engine movements and conserve engine starting air.

AUTHORITY: Instituto Costarricense de Puertos del Pacifico, 001-5400 Puntarenas, Costa Rica. *Tel:* 63-40-06 and 63-40-23. *Telex:* 6045 Incop Cr. *Contact:* Lic. Rodrigo Arauz Bonilla, Presidente Ejecutivo.

PUERTO LIMON: 10.00 N. 83.01 W. (See Plan Book)

DOCUMENTS: Required by Port Authorities at Port Limon:

2 certified copies of Clearance from last port. (Zarpe) (original and dup.)

Crew List, 1 original legalised copy. 5 copies not legalised.

Passenger List, 1 original, 1 copy. 5 additional copies not legalised (if no passengers carried, this must be stated on the same document).

Maritime Health Certificate, 1 original, 1 copy.

Provisions List, not legalised : 7 copies.

Stowage Plan, not legalised : Total cargo on board, 4 copies.

Hatch List, not legalised: Total cargo on board, 4 copies.

Cargo Manifest, legalised (Manifiestos de carga): From each calling port. 1 original, 1 copy. 30 additional copies, not legalised.

Bills of Lading – 4 sets.

Local Agents or General Agents require the following documents urgently, by Air Mail (Special Delivery), from each calling port directly to address in San Jose, Costa Rica.

2 sets Cargo Manifest – copies

2 sets Ship's Declaration

2 sets Bills of Lading.

If there are Ocean Freight rates to be collected at destinations, please send Agent by Air Mail (registered), the 3 originals and 2 copies, in order to get the payment of the freight rates in time.

Data in every document must be in Spanish or with proper translation.

PILOTAGE: Pilot boards ship with Port Authorities about 1 mile from pier. Also see "Shipmaster's Report".

ANCHORAGES: One mile off piers.

MAX. SIZE: See "Berthing".

HEALTH: In the event of contagious disease or fever being suspect on board, agency should be advised immediately.

RADIO: Call letters TIM, frequency 500 kHz and 8478 kHz – working hours 0400 to 1300 GMT.

Notice of Arrival: Radio Agent at least 24 hours before arrival, advising date and time of arrival, number passengers disembarking (if any), amount of cargo to discharge in metric tons, number of gangs required to work on board. This information is required by Port and Customs Authorities.

VHF: Port Authority on VHF Channel 16. All vessels anchoring in the port must communicate with the Pilot office on Channel 16.

TUGS: Are available and are required.

BERTHING:

Berth No.	*Usage*	*Depth (ft.) Fore*	*Aft*	*LOA (ft.)*
1	Conventional	32	29	600
2	Conventional	25	26	400
3	Conventional	29	30	450
4	For small craft			
5	Conventional	12	16	300
6	Ro/Ro	28	30	300
7	Conventional	29	35	500
8	Conventional	30	30	500
9	Conventional	18	28	200
10	Ro/Ro	32	30	800
11	Containers	33	33	705*
12	Containers	33	33	705

*35 ton container crane available.

Note: Measurements are given in feet. Berth Nos. 1–2 have a length of 1,020 ft. In order to use No. 2 berth Agents need to know or check LOA of the vessel at No. 1 berth, if it is less than 520 ft. it is possible to berth a vessel.

STEVEDORES: ETA should be sent to Agent in due time. There are 2 stevedoring companies who work throughout 24 hours.

MEDICAL: Medical attention and hospital facilities available.

TANKERS: See "Puerto Moin".

FRESH WATER: Available and obtained alongside pier delivered by hose, 1.5 to 2 t.p.h.

FUEL: Any quantity can be obtained as there is a refinery at Limon.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: One package cigarettes to take ashore. Not allowed to take alcohol ashore.

IDENTIFICATION CARDS: They are needed and supplied by the Agent.

CONSULS:

Colombia	Tel: 58.02.21	Nicaragua	Tel: 58.04.47
Ecuador		Norway	58.01.83
France	58.02.21	Panama	58.09.65
Honduras	58.03.13		

SURVEYORS: Lloyds, ABS and Norske Veritas.

REPAIRS: Minor repairs only.

REPATRIATION: Facilities available.

AIRPORT: Five miles from city. 2 daily flights (except Sundays) to San Jose International Airport. Also air taxi service to the whole country.

TIME: Local time minus 6 hours.

HOLIDAYS: Holidays and days on which the port will remain closed:

1st January from 1200 hrs. to 0600 hrs. following day; Holy Thursday and Good Friday from 0001 hrs. on Thursday to 2400 hrs. on Friday; 1st May from 0001 hrs. to 2400 hrs.; 12th October from 0001 hrs. to 2400 hrs.; 24th December 1800 hrs. – 26th December 0001 hrs.

POLICE/AMBULANCE/FIRE: Police Tel: 117; Red Cross Ambulance Tel: 580125; Fire Tel: 118.

SHORE LEAVE: Crew members are allowed to go ashore.

SHIPMASTER'S REPORT: May 1984.

Before leaving Gulfport I contacted Standard Fruit Company at Bocaraton, Florida. They confirmed that the Pilot boards off Limon breakwater. They also confirmed that there is a heavy surge alongside the berths in Moin Bay due to the prevailing swell and that shore springs are not normally available at the cargo berths although they are supplied to tankers.

This vessel possesses 2×6 in. nylon tails and 2×3.25 in. mooring wires and these were made ready.

A cable was sent to the Agent at Limon requesting information concerning berthing arrangements. A reply was received to the effect that the ship would berth at the "German Wharf". This conveyed nothing to me at the time.

It turned out that the "German Wharf" is, in fact, the new container berth in Puerto Limon. This berth does not appear on the navigational chart but is shown in the plan section of "Guide to Port Entry".

The old banana berth at Puerto Limon is no longer used and all banana loading takes place at Puerto Moin. The Pilot confirmed that there is a heavy surge at Limon/Moin and also that newcomers to the trade are boarded off Limon whilst regular traders are met by the Pilot off Moin fairway buoy.

The "German Berth" is not supplied with shore springs and there is a considerable surge alongside. We secured starboard side to using 4 lines and 1 spring at each end plus the 2 wires with nylon tails. It is considered that the latter are essential in this port as considerable chaffing of the polypropylene lines can be expected.

The berth is provided with very effective sprung fenders but these ensure that the ship is held several feet off the quay. No shore gangway is supplied and access was by way of the accommodation ladder which was landed on the quay at an angle of about 30° to the ship's side. To avoid damage to the ladder due to surge it is essential that particularly secure moorings be used.

A powerful tug is available at Limon and another at Moin.

AUTHORITY: Junta de Administracion Portuaria y de Desarrollo Economico de la Vertiente Atlantica (JAPDEVA), Administracion Portuaria, Apartado "T", Puerto Limon, Costa Rica, Central America. *Tel:* 58.10.43. *Telex:* Japuer 8518. *Contact:* Captain Claus. P. Hueiten.

PUERTO MOIN: 10.00 N. 83.05 W. (See Plan Book)

DOCUMENTS: Required by Port Authorities at Port Moin:

2 Certified copies of Clearance from last port (Zarpe original and dup).

Crew List: 1 original legalized copy, 5 copies not legalised.

Passenger List: 1 original, 1 copy, 5 additional copies; not legalised (if no passengers carried; this must be stated on the same document).

Maritime Health Certificate: 1 original, 1 copy.

Provisions List, not legalised: 7 copies.

Stowage Plan, not legalised: Total cargo on board, 4 copies.

Hatch List, not legalised: Total cargo on board, 4 copies.

Cargo Manifest, legalised (manfiestos de carga): From each calling port 1 original, 1 copy, 30 additional copies, not legalised.

Bills of Lading: 4 sets.

Local Agents or General Agents require the following documents urgently, by air mail (special delivery), from each calling port directly to address in San Jose, Costa Rica.

2 sets Cargo Manifests – copies.

2 sets Bills of Lading.

2 sets Ship's Declaration.

If there are Ocean Freight rates to be collected at destinations, please send Agent by air mail (registeres), the 3 originals and 2 copies, in order to get the payment of the freight rates in time.

Data in every document must be in Spanish or with proper translation.

PILOTAGE: Pilot boards off Puerto Limon breakwater if first visit. Regular visitors take Pilot near Puerto Moin fairway buoy.

Also see "Puerto Limon" – Shipmaster's Report.

ANCHORAGES: One mile off piers.

MAX. SIZE: Tankers up to 35 ft. draft. Also see "Berthing".

HEALTH: In the event of contagious disease or fever being supected on board, Agency should be advised immediately.

RADIO: Call letters TIM, frequency 500 kHz and 8478 kHz; working hours: 0400 to 1300 GMT.

Notice of Arrival: Radio Agent at least 24 hours before arrival, advising date and time of arrival, number of passengers disembarking (if any), amount of cargo to discharge in metric tons, number of gangs required to work on board. This information is required by Port and Customs Authorities.

VHF: Port Authority on VHF Channel 16. All vessels anchoring in the port must communicate with the pilot office on Channel 16.

TUGS: Available if required.

BERTHING:

Berth No.	*Usage*	*Depth (ft.) Fore*	*Aft*	*Length (ft.)*
1	Bananas	39	39	659
2	Bananas	39	39	659
3	Ro-Ro – Oil Pier (MIXT)	47	47	715

STEVEDORES: ETA should be sent to Agent in due time. There are 3 stevedoring companies who work throughout 24 hours.

MEDICAL: Complete medical attention and hospital facilities available.

TANKERS: Berth No. 3 (oil pier) 47 ft. draft.

Shore Lines:

Black/White: 2×20 in. lines and
2×10 in. hoses

Av. gas: 1×6 in. line and 1×6 in. hose.

LPG: 1×6 in. line and 1×6 in. hose.

Bunkers: 1×8 in. line and 1×8 in. hose.

FRESH WATER: Obtained alongside.

FUEL: Any quantity can be obtained as there is a refinery at Limon.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: One package cigarettes to take ashore. Not allowed to take alcohol ashore.

IDENTIFICATION CARDS: They are needed and supplied by the Agent.

CONSULS:

Colombia	58 – 02 – 21	Ecuador	58 – 01 – 60
Honduras	58 – 03 – 13	Nicaragua	58 – 01 – 83
France	58 – 02 – 21	Panama	58 – 09 – 65
Norway	58 – 01 – 83		

SURVEYOR: Lloyd's, ABS and Norske Veritas.
REPAIRS: Minor repairs only.
REPATRIATION: Facilities available.
AIRPORT: Five miles from city, 2 daily flghts (except Sundays), to San Jose International Airport. Also air-taxi service to the whole country.
TIME: Local time GMT minus 6 hours.
HOLIDAYS: Holidays and days on which the port will remain closed: From 0001 hrs. to 2400 hrs. 1st January, Holy Thursday and Good Friday; 1st May, 15th September, 12th October, 25th December.
POLICE/AMBULANCE/FIRE: Police tel. 117; Red Cross ambulance tel. 58 – 01 – 25; Fire tel. 118.
SHORE LEAVE: Crew members are allowed to go ashore.
AUTHORITY: Junta de Administracion Portuarias y de Desarrollo Economico de la Vertiente Atlantica (J.A.P.D.E.V.A.), Apartado "T", Puerto Limon, Costa Rica, Central America. *Tel:* (San Jose) 22-10-14. (Limon) 58-04-17. *Cables:* Japdeva.

PUNTARENAS: 09.58 N. 84.49 W. (See Plan Book)

DOCUMENTS:
2 certified copies of Clearance from Last Port.
6 certified copies of Crew List and 6 copies for distribution.
6 certified copies of Passenger List and 6 copies for distribution.
2 copies of Cargo Manifest and 25 copies for distribution.
4 certified copies of Stores/Provisions List and 6 copies for distribution.
3 sets of Bills of Lading.
PILOTAGE: Pilots are available and compulsory, arranged by Agent. Signal for Port Captain and other officials is 2 long blasts.
MAX. SIZE: Length 500 ft., max. draft 26 ft.
RESTRICTIONS: Recommended that vessels not equipped with radar enter in daylight only.
ANCHORAGE: Vessels should keep Eastward of four submarine cables originating at Puntarenas where suitable anchorage may be found in 6 – 7 fathoms depth. Vessels should anchor as near the pier as safety permits to facilitate boarding by port officials.
HEALTH: Any vessel that enters this port has to be in possession of a Sanitary Manifest (Sanitary Maritime Declaration) signed by Master of vessel. In case of any suspected disease or fever aboard, Master to notify by radio to Port Authorities and vessel to wait outside the limit of territorial waters until clearance is given.
RADIO: Station call sign TIM, frequencies 8478 and 500 kHz. Working hours 0400-1300 GMT.
Notice of Arrival: Radio Agent at least 24 hours before arrival advising date and time of arrival, number passengers disembarking, if any, amount of cargo to discharge in metric tons, number of gangs to work on board. This information is required by Port and Customs Authorities.
TUGS: None available.
BERTHING: Vessels usually moor in daylight only. Unmooring night and day.
Muelle Nuevo: Pierhead runs East/West, connected to shore by 350 ft. gangway. One special heavy mooring line supplied from pier in addition to ship's ropes. Heavy surge experienced at the berth. Inner berth, length 107 m., max. depth 24 ft. Outside berth, length 147 m., max. depth 28 ft.

There are lighters available for hire for vessel working cargo at the anchorage.
STEVEDORES: Available for work 24 hours a day.
MEDICAL: Facilities available at Puntarenas.
FRESH WATER: Available only from pier at Puntarenas.
FUEL: Not available.
IDENTIFICATION CARDS: Required.
TIME: GMT minus 6 hours.
TELEPHONES: No connection to vessels.
SHORE LEAVE: Allowed at Puntarenas.

SHIPMASTER'S REPORT: 1978.
Anchorage: Vessel originally anchored in the area marked (Pilots) on Chart B.A. 1931, but subsequently moved in to a position with the Light on the Pier bearing 332°(T) – 9 cables and lay to the starboard anchor, 3 shackles, in 6 fathoms of water. Other ships and draft permitting, it is safe to anchor 5 cables off the pier.

This is a quiet, safe anchorage. A Pilot is not used arriving and sailing from the anchorage, but is compulsory if berthing.
Berthing: There are two berths on the pier. As the port was very congested, we remained at anchor.
Communications: With the Charterer's Agents when at anchor, were by VHF, Channel 16. Long-range communication was by radio.
Documents: As per "Guide to Port Entry".
Cargo Work: Due to congestion, we waited 3.5 days to start work, although we only had a small quantity of cargo for discharge. When work did start, discharge was continuous and at a good rate.

I understand that ship's loading export cargo receive preference for labour.
Pratique: Granted on arrival.
Provisions: Available, but great care is necessary with regard to price and quality.
Fresh Water: Normally available only when alongside the pier. As we were very short of water by the time we had been in port for a few days, we managed to obtain a minimum supply from a tug. This can only be obtained as an emergency measure.
General: It was noted that the Light on the Pier was flashing letter "P" in the Morse Code and was not Gp. Occ. (4) as shown on the Chart.
Shore Leave: A launch service was arranged through the Agents for this purpose.

AUTHORITY: Instituto Costarricense de Puertos del Pacifico, 001-5400 Puntarenas, Costa Rica. *Tel:* 63-40-06 and 63-40-23. *Telex:* 6045 Incop Cr. *Contact:* Lic. Rodrigo Arauz Bonilla, Presidente Ejecutivo.

NOTES

Please also advise Shipping Guides Ltd.

Cuba

GENERAL:

ARRIVAL ADVICE: ETA messages should be sent to Mambisas Havana when Havana is the first port of call, or to Mambisas (at port of call) and Mambisas Havana simultaneously, when the first port is other than Havana.

Mambisas Agency at the port where vessel was nominated for operation or call will advise Port Authorities and concerned parties, but this in no way relieves Masters from any specific obligation to advise other parties according to Charter Party, or orders received from Owners, Managers, Charterers, etc., to such effect. The following list of Agencies is in geographical order, starting from the Westernmost port Head Agency on the North coast (Mariel) in an Easterly direction, and from East to West on the South coast, ending at the sub-Agency of Nueva Gerona.

Mariel: (including Santa Lucia, Bahia Honda and Cabanas): Mambisas Mariel.
Havana: Mambisas Havana.
Matanzas: Mambisas Matanzas.
Cardenas: Mambisas Cardenas.
Isabela de Sagua: Mambisas Sagua la Grande.
Caibarien: Mambisas Caibarien.
Nuevitas: Mambisas Nuevitas.
Puerto Padre: (including Manati): Mambisas Puerto Padre.
Antilla: (including Banes, Felton, Preston, Nicaro, Tanamo and Vita): Mambisas Antilla.
Moa: (including Punta Gorda): Mambisas Moa.
Baracoa: Simon Baracoa.
Guantanamo: Mambisas Caimanera.
Santiago de Cuba: Mambisas Santiago de Cuba.
Manzanillo: (including Pilon, Niquero, Media Luna and Ceiba Hueca): Mambisas Manzanillo.
Guayabal: Mambisas Santa Cruz Del Sur.
Jucaro: Mambisas Nuevitas.
Boca Grande: Mambisas Nuevitas.
Cienfuegos: (including Tunas de Zaza and Casilda): Mambisas Cienfuegos.
Nueva Gerona: Mambisas Nueva Gerona.

PILOTAGE: Pilotage is compulsory for all foreign and Cuban vessels at all Cuban ports.

DOCUMENTS: Required on arrival at *every* port:

Sanitary Authorities:
1 Bill of Health.
1 Crew List.
2 Passenger Lists (if any).
Vaccination cards and derat certificate will be inspected by Authorities.

Immigration Authorities:
3 Crew Lists.
3 Passenger Lists (if any).

Customs Authorities:
3 Crew Lists.
3 Passenger Lists, including baggage (if any).
3 Crew Personal Effects Lists.
3 Copies Foreign Money List.
2 Provisions Lists.
2 Spares and Stores Lists.
3 Cargo Manifests (if any cargo on board).
3 In-Ballast Manifests (if no cargo on board).
3 Manifests of Cargo in care of the Master (if any).
1 Copy of Clearance from Last Port.

Agents:
4 Crew Lists.
3 Cargo Manifests
2 Copies each Bill of Lading.
3 Manifests of cargo in care of the Master.
6 Hatch Lists.
6 Stowage Plans.

Shipmaster's Comment: One Crew List returned to vessel stamped by Customs/Immigration for next port.

CERTIFICATES REQUIRED:
Ship's Register.
Safety Equipment.
Load Line.
Safety Radio.
Safety Construction.
Derat.

Instructions for Master of Vessel: How to process Custom's Model Dirad-7, in connection with crew's money control and personal effects.

Custom's inspector when boarding the vessel besides carrying out their usual duties, should deliver to the Master duly legalized, as many of these forms as members of the crew are reported on Crew List.

Legalization of these forms consists of Customs Inspector's signature, Customs stamps and consecutive numbering which indicates quantity of forms delivered to Master.

2. Ship's Master or Officer in charge should fill in only those spaces of the form as: crew member's name, number of passport, as well as ship's name and date of arrival in port, on the first page of the card.

Besides amount of money delivered to the crew member, date of delivery and signature must be shown as evidence that the crew member has been provided with the money, with signature of the Master alongside, all of this information appears on page 2 of the form (card).

In case crew member requires additional amount during vessel's stay in port, notation should be entered following the first, in same way.

3. No crew members, except the Master, are allowed to come in or leave the Custom House premises without presenting this form to the Custom's Inspector at the gate, who will enter therein the pertinent notations.

All these forms legalized by Customs must be carefully kept for subsequent delivery to Customs upon vessel's departure, even those that might become useless.

Should a crew member require more than 1 form because of that previously delivered having been filled up, or become useless, Master will give a new one which the crew member will present, together with the previous one, to Custom's Inspector at the gate. Thereafter, notations should be entered in the new form, the previous one must be returned to Master for subsequent delivery to Customs.

If at any time more forms are required because those previously delivered have become exhausted, they should be requested from Ship Clearance Department of the Custom House, phone 61-8572. After 1800 hrs. these should be requested from Guard Room, phone 6-9698.

4. Upon ship's sailing, Master will gather all the forms from the crew, delivering same to Custom's Inspector who boards the vessel and will perform the following verifications:
(a) To see that none of the legalization forms are missing.
(b) To verify that such forms have no alterations, erasures, etc.
(c) To add up total spent by all crew members and to verify it with amount settled with ship's Agents Consignatarias Mambisas.

5. Non-compliance with above instructions will subject the violator to corresponding penalty.

Director of Customs.

LOCAL TIME: Official local time in all Cuban territory is that for the 75th West Greenwich Meridian and there is a difference of 5 hours compared to GMT, that is, 1200 hrs. GMT is equivalent to 0700 hrs. local time.

From the last Sunday in April to the last Sunday in September, Summer Daylight Saving Time is in effect and the difference then is only of 4 hours, that is, 1200 hrs. GMT is equivalent to 0800 hrs. local time.

HEALTH AND SANITARY REQUIREMENTS: Free pratique is automatic for vessels coming direct from another Cuban port; from foreign countries, usual procedure of Sanitary Inspection applies. In case of suspected disease or fever on board, Master must radio Mambisas Agency in order to advise the Health Office.

All crew and passengers must have vaccination cards up to date.

Below is copy of warning sent to us by a ship's Master. The words in italics are the Master's comments.

National Veterinary Medicine Institute
Warning
Master:

You are kindly requested to comply with and acknowledge this warning regarding veterinary sanitary regulations and also to inform your crew members of same.

One Green Vet. Form given to ship to take to next Cuban port, one copy for ship also.

1. Refrigerators of vessels which contain in their victuals meat and meat products originated in countries declared as being affected with foot-and-mouth disease, Rinderpest, Vesicular stomatitis, African swine fever and other diseases non existent in the Republic of Cuba, shall be sealed while remaining in our territorial waters.

Sealed.

2. Milk, butter, cheese, fish and poultry products, as well as canned meat, and meat and meat products from Australia, New Zealand and Canada, are not subject to this procedure for the time being.

All victuals of animal origin must be declared to the Frontier Veterinary Services Officer.

3. Prohibitions:
(a) Arriving in port with live food animals (cattle, swine, poultry, etc.) on board, unless duly authorised by the Animal Health Authorities of the Republic of Cuba;

If pets on board – not allowed ashore.

(b) Unloading or releasing of any species of pet animals. These animals (birds included) are subject to quarantine control on board;
(c) Unloading of victuals of whatsoever origin, including those not subject to sealing procedures;
(d) Arriving in port with compartments or receptacles containing garbage;

Dump rubbish at sea 6 miles out from Cuba.

(e) Scattering of garbage containing food scraps, portions or other wastes of animal origin, or throwing them overboard into the sea or onto shore.

Cover garbage drums.

4. Ratguards must be placed once the vessel has docked.
Fines if not done or if they fall off!

5. Footwear and clothing of the crew members of ship coming from countries known to be affected with diseases dangerous to the fauna of the Republic of Cuba shall be subject to fumigation with formaldehyde gas.

6. Non-compliance of the sanitary regulations, or any action aimed to prejudice or evade them, shall be regarded as an offence liable to a fine of not less than $500.00 (Cuban Official Currency), or to the implementation, at the expense of the transgressor, of appropriate quarantine measures intended to minimise the consequences resulting therefrom.

The following is reproduced from a booklet given to Masters of arriving vessels. The booklet is produced by the Ships' Agent and dated 1973.

Comments are made throughout the text by the Master who supplied us with the booklet – such comments are reproduced in italics.

PORT REGULATIONS: In order that you may be properly informed, on not only Port and Cuban Government Regulations, but also on various matters related to the loading and/or discharging operations of your vessel, we wish to bring to your attention the following:

1. Crew Regulations (Important Notice to Masters)

(a) The Customs Authorities have put into effect new Regulations which the Masters of all vessels arriving at Cuban ports are under obligation to observe. The regulations in question are as follows:

First: The Master of the vessel is obliged to deliver to the Customs Authorities at the port of arrival the complementary documents to the Manifest, which comprise:

(a) List of crew belongings including objects, property of each crew member which he maintains on board for his use, such as, for instance, electric shaving machines, watches, radios, soaps, etc. *(4 copies required at every port – Declare everything in personal possession).* See "Shipmaster's Report".

(b) Detailed list of all articles transported by crew members free of charge, including those which are for his use on board, or that may be destined to other persons, such as for instance perfume, umbrellas, dresses, ladies stockings and lingerie, cloth to make dresses, etc. *(4 copies every port – declare everything and place in bond.)*

(c) Foreign currency whether convertible or not, must be declared in the list of the crew members' belongings and kept in the ship's safe as long as the vessel remains in port *(4 copies required every port – placed in ship's safe).*

Narcotics List – 4 copies morphine only. Provisions List – not listed but requested.

(d) Each crew member must declare the articles referred to in paragraphs (a) (b) and (c) immediately upon vessel's arrival, since Harbour Officers may search the vessel at any time they should deem convenient.

Second: Each crew member may keep in his cabin up to 200 cigarettes for a single time each day.

Third: The importation into, and the exportation from the Republic of Cuba of Cuban currency is forbidden, and no crew member may have in his possession any amount in excess of that delivered to him by Master.

(Collected and sealed in safe).

Fourth: Each crew member is allowed to have in his possession, only 1 of each of those above mentioned articles which are for his use on board. Any article in excess should be kept in the bond store.

Fifth: Any article not declared, or possessed by the crew member in excess of the amount allowed, also Cuban currency not properly accounted for, and any foreign currency which he may have in his possession will be confiscated and should circumstances warrant, the courts of law will be informed, the latter having the right to impose penalties involving imprisonment of up to 6 years, or fines, depending on the value of the objects found in the crew member's possession.

Immediately following the arrival of the vessel, the Master is under obligation to make these regulations known to each and every crew member, as the Customs Authorities will consider that the Master and the crew have been put on notice as to what is herein provided at the moment the vessel has been cleared through Customs, insofar as concerns any violation of the above referred to regulations.

Masters are likewise required to provide a place or space sufficiently ample to deposit the articles transported by the crew free of charge or, in other words, those articles referred to in paragraph (b) above.

(a) Crew are not allowed to buy personal effects on shore.

(b) No crew member or passenger of vessels arriving at Cuban ports from abroad is allowed to disembark until the vessel has been cleared by the Immigration Authorities.

(c) Crew members including Officers and Masters must be provided with immigration passes to go ashore. Upon vessel's arrival the gangway-inspector will deliver to each crew member a pass and will at the same time pick-up his passport or seamen's book. At the time when the crew member returns to the ship he will give the pass to the inspector who, in turn, will deliver the passport to the crew member.

Loss of the pass will result in a fine of $25.00.

(d) Owing to the repeated infringements on the part of crew members of existing regulation covering shore passes, and the difficulties which such infringements bring about, the Provincial Chief of the Cuban Ministry of the Interior has issued Order No. 12, dated August 11th, 1971, establishing the following:

1. Shore passes for crew members, including Masters, are only valid from 1800 to 2200 hrs. Infringements of this timetable will result in the impositions of fines as follows:

Suggest check about shore leave on arrival.

1st infringement	US $25.00
2nd infringement	$50.00
For each subsequent infringement	$100.00

Note: Above fines are accumulative. For instance, if a crew member infringes shore pass regulations for the first time, during a call of his vessel at a Cuban port and commits another infringement on a subsequent call, the latter is considered as a second infringement and fined accordingly, etc.

(See Shipmaster's Reports, Havana and Cienfuegos).

2. Shore passes are confined to the city limits of the port where the ship is lying, and each territorial infringement is subject to a fine of US $100.00.

2. Sanitary Regulations

(a) Following docking, crew members are not allowed to go down to the pier to fix the rat guards or the gangway until the Sanitary Inspection *(Free Pratique)* has been completed.

(b) Thereafter, rat guards are to be kept in proper place in order to avoid fines *(Authorities very strict with regard to this rule).*

(c) Hereunder we copy Resolution No. 24 of the Direction of Customs dated June 30th, 1972.

Circular No. 16

For general knowledge and most strict fulfilment, Resolution No. 24 of the Direction of Customs is copied hereunder:

Whereas – Customs are obliged to fulfil and enforce local laws as well as International Conventions which Cuba has signed, among which are those related to International Sanitary Control, being of great concern to this Direction the dangerous carelessness of some National and foreign Masters who, when ships are docked, do not place rat guards on their mooring lines with docks or barges.

Whereas – The above represents a dangerous situation for the public health of our country and for our economy, which might result in the introduction into our country of epidemics such as bubonic pest or others transmissible by rats, which must be avoided by all means.

Therefore – Exercising the powers vested in me,

I Resolve:

First – Customs will take care that the ships have properly placed each and all of the rat guards on their mooring lines with dock and barges.

When it is detected that said rat guards have not been placed on some of the mooring lines, the Chief of Customs of the Terminal should notify the Master that he shall be liable to as many fines as there are rat guards missing, according to law.

Second – Upon being served with the notice referred to in the preceding paragraph, the Master shall also be notified that if on subsequent days the rat guards are not placed, the Customs may impose a fine higher than the previous one.

Third – All dispositions contained in Resolution No. 73 of October 11th, 1965, made known by Circular No. 2 of June 2nd, 1970, and all of this Direction which oppose fulfilment of this Resolution are hereby cancelled.

Given at Havana on June 30th, 1972.
Director of Customs

(d) Vessels proceeding from countries affected by aphthous fever or bovine plague *(foot-and-mouth or swine fever)* are subject to fumigation including crew members' clothes/shoes.

Veterinary Sanitary Control – Complete sealing of ships' refrigerators which contain dangerous victuals.

1. It is hereby instructed that the refrigerators of Cuban and foreign flag vessels which contain in their victuals meats and cattle products originating in countries affected by bovine pest, vesicular stomatitis, African pork pest and other animal diseases not existent in Cuba, must be completely sealed.

Exempt from the above are cattle products industrially canned, salted butter and cured cheese destined to be consumed only aboard ship.

2. To the end of this Circular, the following countries shall be considered clean or disease free: Canada, Japan, Australia, New Zealand, Ireland and Northern Ireland.

3. Only ships' refrigerators which contain victuals of animal origin shall be sealed. Compartments where vegetables and other victuals are kept, will not be sealed.

4. Ships' refrigerators will be opened once a day, under sanitary or Customs supervision to permit withdrawal of meat and cattle products. (*US $5.00 each time).*

5. Meats and other animal products purchased in Cuba must be so placed in the refrigerator that they will not enter into contact with similar products purchased abroad.

6. Sealing of ships' refrigerators will apply to vessels on berth as well as to vessels at anchorage.

7. Sealing must be performed in an effective manner. To this end, it is necessary to verify that it was done correctly; a sufficient enough depression of the seal which makes it impossible to withdraw the wire.

The breaking of the seal will result in a fine. Fines in the interior of the Republic will be processed by the Customs through Consignatarias Mambisas, copies of the resolutions to be forwarded to the Provincial Direction of Veterinary Sanitary Control.

8. From the date of this Circular, sealing procedures will be put into effect simultaneously in the port of Mariel, Havana, Matanzas, Cardenas, Nuevitas, Santiago de Cuba, Guayabal, Jucaro and Cienfuegos.

In the other ports of the Republic, it will be put into effect gradually, but in the least possible time.

VETERINARY SANITARY CONTROL
Border Service,
Havana, July 1st, 1971

3. Labour Regulations

In accordance with Resolution No. 298 of December 2nd, 1958, issued by the Cuban Labour Ministry, it is forbidden for vessels' crews, during their stay in port, to do work that should be performed by port labourers, such as loading or discharging, rigging booms, driving winches, (opening and closing hatches), cleaning holds, laying wood or paper dunnage, construction of stalls, etc. Therefore you should apply to us in writing, so that arrangements can be made for the necessary port labour to perform such work.

Please note that if any of the work described were to be done by ship's crew, port labourers must be paid as if they had actually performed the services.

(Ship's crew opened and closed Macgregor hatches).

4. Bunkers

Should your vessel be bunkering at this port, it is necessary that we be notified in advance, so that appropriate arrangements can be made not only with the local suppliers, but also to comply with government regulations, which provide that funds to cover the cost of bunkers be received from the Owners *or Charterers* prior to delivery. Since this procedure takes a few days, it is suggested that any request for bunkers be made with due anticipation.

When delivery of bunkers is to be made in the port of Havana, the order or requisition must be sent to the suppliers at least 2 days in advance of the desired date of delivery, and 3 days in advance when delivery is to be made at a port other than Havana.

5. Galley Oil or Coal

The above requirements for bunkers do not, of course, apply to galley oil or coal as this item, if needed, is to be purchased directly by the ship from a shipchandler.

6. Cleaning

In accordance with Port Regulations, this work must be performed by local shore labour. The cleaning work done by shore labour is limited to only the sweeping of cargo compartments. Port Regulations forbid the washing of the ship within the premises of the harbour. *(See Charter Party).*

7. Garbage: *(Vessel needed 10 drums).*

Port Regulations forbid the throwing of garbage on to the pier or into the sea while the vessel is within the harbour limits. Infringements of regulations which prohibit throwing garbage and refuse in the bay will be a fine of US $100.00 for the first infringement, and US $200.00 for each subsequent one.

All other infringements to be fined as already established.

The provisions of Order No. 12 to become effective from August 26th, 1971.

According to Sanitary Regulations vessels must arrive at each Cuban port of call with the garbage deposits or tanks empty. Any garbage must be thrown into the high seas at no less than 6 miles from the coast. Non-compliance of this regulation will be subject to a fine against the ship.

8. Cash to Master *(Owners must remit cash in advance).*

Cash advances authorised by Owners or Charterers will be supplied to the Master upon request. Such request is to be made during office hours and the money will be delivered at the Agent's place of business.

Upon completion of loading and/or discharging operations, any unused funds must be handed over to the Local Agent; in other words, money left over from a cash advance drawn at one port cannot be returned or used at any other port.

However, further cash advances may be requested at the next Cuban port of call.

9. Damage to Cargo

As you undoubtedly realise, it is necessary to establish with the utmost degree of accuracy possible with whom the responsibility for damage to cargo lies, whether for vessel's or stevedores' account. To ascertain this, the Terminals in Cuba employ Damage Inspectors to take note of all cargo that is found on board in damaged condition prior to its discharge from the ship, and the Master or Chief Officer is asked to sign in acknowledgement. Therefore, we suggest that in order to avoid unnecessary discrepancies between the vessel and the Terminal, and to properly protect the Owners' interests, you please instruct your cargo officer to coordinate his work in this connection with that of the Terminal Damage Inspector. Upon completion of discharge operations, the Terminal will submit to the Master for signature the relevant Survey Report and Outturn Report.

Should you note protest owing to bad weather whilst on voyage, 1 copy of the Note of Protest should be delivered to us for our records.

10. Stevedore Damage to the Ship *(Stevedores usually repair damage).*

Any damage caused to the vessel during the loading and/or discharging operation, should be reported immediately to the Head Discharging Foreman on the Terminal, followed by a written notice to us in duplicate. Such notice should be made out within 24 hours following the incident to allow sufficient time to make arrangements for the necessary repairs.

11. Repairs for Vessel's Account

Any repair work to be done for vessel's account must be requested in writing, sufficiently in advance of vessel's estimated departure in order to obtain from the repair shop the budget for the work, in the event of course, that the job can be done locally.

12. Engine Repairs or Engine Overhaul while in port

In the event vessel requires engine repairs or an engine overhaul (usually performed by the ship's crew) while berthed at a pier or dock in port, it is necessary that the Master so informs his Agents before undertaking such work in order that his Agents may, in turn, notify all parties concerned.

Read Charter Party/"Baltime" usually 24 hours' notice for engine cleaning.

The reason for this is that it may be necessary to shift the vessel from one berth to another to facilitate or continue loading/discharging operations, and it is necessary to know in advance if the vessel can move with her own engines or whether tugboats will be required for the movement. In the latter case it is of course understood that the cost of tugboats will be for vessel's account.

13. Redelivery

If your vessel is to be re-delivered at this port, this should be made known to us as soon as possible after arrival here, for although we may be aware of this fact, there is a possibility we might be lacking the necessary details concerning the terms of re-delivery.

14. Lowering Boats *(Apply in writing)*

Port regulations prohibit the lowering of boats except for fire drill or to do maintenance work of the ship (painting, etc.). For either of those purposes, a permit is required from the Harbour Master, and the crews of such boats are not allowed to land on any pier or board any vessel in the harbour. Please be informed that our Ministry of the Interior has issued the following instructions to be strictly observed by the Masters of all foreign vessels during their stay at Cuban ports:

(a) When a vessel is carrying out paint work or similar tasks while in port, at the end of the day's work the craft or boat used to perform the work should under no circumstances remain in the water, but must be hoisted aboard to be again lowered the following day or whenever the work is resumed.

15. Radio Communications

Vessels within harbour limits are not allowed to transmit messages by radio.

16. Port Expenses

The bills covering port expenses will be submitted for your approval and signature, prior to vessel's departure from this port, regardless of the fact that such expenses might be for Owner's or Charterer's account, as this can subsequently be easily determined by examination of the Charter Party. However, if we are to obtain reimbursement for the amounts expended to cover port expenses, it is necessary that your approval and signature be secured.

Mark Owner's account or Charterers' account.

17. Stowaways

(a) Kindly request all ship's officers that every possible precaution should be taken to prevent stowaways.

(b) Whenever the Master of a vessel finds a stowaway on board, either in port or outside the port's limits but within Cuban territorial waters, he is under obligation to deliver same to the Immigration Authorities. If the stowaway is found outside the port, the Master must report this by radio so that the stowaway may be picked up by a port authority boat, to be subsequently delivered to the Immigration Authorities.

(c) At no time are the Masters of vessels allowed to lower rope ladders or ropes on the vessel opposite the dock where the ship is berthed.

18. Wood Dunnage:

Can be supplied at the port of Havana.

In the outports, wood dunnage can also be supplied but occasionally it is very difficult to obtain and therefore it is advisable for vessels in ballast for loading bagged sugar to obtain wood dunnage at last port of call before arriving in Cuba.

19. Loading Sugar

Whenever your vessel is assigned to load sugar the following precautions are to be taken:

(a) Cleaning and Dunnaging of Hatches: You must be extremely careful to have the vessel's hatches thoroughly dry, clean and without odour, as well as properly dunnaged to the satisfaction of the shippers, before starting loading.

(b) Cleaning Holds: In order to avoid damage to the sugar cargo during the voyage, please make proper arrangements for the closing of holds before starting loading in 'tweendecks.

(c) Tally: With respect to the dispute that occasionally arises between the vessel and the shippers during the course of loading sugar shipments regarding the number of bags delivered on board, which results in the issuance of a letter of guarantee by the latter, in many instances without real justification, we wish to inform you that the only document with official validity is the tally sheet prepared by the shore tallyman assigned to each loading hatch, and that if you wish to verify the accuracy of said tallying it is necessary that you appoint an officer or a member of your crew to count the cargo jointly with the shore tallyman, as this is the only possible way of avoiding discrepancies in the checking of the bags actually delivered on board.

Consequently, we request that you please keep the above in mind, as this will tend to reduce if not completely eliminate, the problems which are now being confronted.

20. Agency Office Hours

We list hereunder our office hours:

From Monday to Friday: 0800 to 1200, 1300 to 1700.
Saturday: 0800 to 1200.

Our representatives will call on the ship as regularly as possible to discuss with the Master any matter or problem he may have in connection with the operations of his vessel; however, such calls are contingent upon the volume of work, for which reason we suggest that the Master calls at our office when any matter arises which requires immediate attention.

VHF Communication System

The VHF (150 MHz) communication system is officially established between our Havana Agency and ships in port or close to port. For the time being, service will be provided during the Agency's regular office hours only, but this work schedule will be expanded in the near future.

It is hoped the establishment of this service will be instrumental in speeding up those operations in which we intervene.

Havana Pilot Channel 16. Agent's Channel 12.

21. Crew Mail

An Officer or crew member should call at the office regularly to pick up crew mail; however, the mail will be sent aboard whenever possible.

22. Medical and Dental Services

Any man requiring medical or dental attention should be sent to our office whenever possible, with a letter from Master containing full name and rank, at 0800 or 1300 hrs. from Monday to Friday, and we will see to it that he is promptly sent in a car to the hospital and back to the ship afterwards.

In the event of an accident or serious illness, please contact Mambisas Agency on the phone, and an ambulance will be sent immediately to transport the man to the hospital.

Failure on the part of the ship to comply with the instructions herein contained, automatically relieves the Agent of any responsibility which non-compliance might bring about.

FROM INFORMATION BOOKLET COMPILED BY MAMBISAS AGENCIES

USE OF SOUND SIGNALS IN PORT: It is prohibited to use sound signals except those internationally known for safe navigation, fire or emergency.

DRY DOCK: There is a dry dock at the port of Havana with berthing capacity of 440 ft. length and 91 ft. width which can accommodate vessels up to 23 ft. draft.

SURVEYORS: Following surveyors are established in Cuba:

Cuban Maritime Regulation Surveyors, Bureau Veritas, Lloyd's Register, German Lloyd and U.S.S.R. Ship's Register.

Above listed surveyors should be contacted through the Consignataria Mambisas main office.

EIGHT HOURS DAILY WORK: We wish to call attention to the fact that although the working periods observed at the various Cuban Ports vary considerably, as for example, the port of Jucaro where the period is from 0600 – 1000 hrs., 1200 – 1600 hrs.; Caibarien 0700 – 1100 hrs., 1200 – 1600 hrs.; Havana 0700 – 1300 hrs., 1300 – 1900 hrs. etc., and others from 0700 – 1100 hrs., 1300 – 1700 hrs.

Labour Legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

HOLIDAYS:

National Anniversaries	*Holidays*
January 1st.	July 25th.
May 1st.	July 27th.
July 26th.	Sundays
October 10th.	

REPATRIATION: There are good facilities and repatriation can be arranged through Mambisas Agency.

SHIPMASTER'S COMMENTS: Also see "Shipmaster's Report" for Nuevitas dated February 1984.

Fresh Water: Always take full fresh water. Water barges available at Havana and Santiago. No fresh water at Jucaro or Boca Grande.

Documents: Sample crew manifest to avoid confiscation: 2 Radios, packet of paints, tape recorder (Akai), gloves, speakers, star plotter, cassette tapes, set of ship plans, earphones, plastic mac, 3 prs. sunglasses, dress uniform, calculator, battle dress uniform, matchstick model ship, brown suit, plastic battleship model, blue coat, bridge coat, 10 packs glue, grey trousers, 1 pk. razor blades, 3 khaki shirts, 1 Fernox medicine, 1 Savlon cream, 3 khaki shorts, 3 balsa cement, 5 uniform shirts, 1 stop watch, 1 briefcase, 2 coloured shirts, 1 tee shirt, 1 knapsack, 6 uniform white shirts, 1 photographic bag, 3 white shorts, assorted films, 4 ties, 2 cravats, 1 brown cardigan, 1 pullover, 1 dressing gown, 1 pair longjohns, 1 pr. sandals, 2 alarm clocks, 1 sextant, 4 watches, 1 boiler suit, 3 plastic trays, 2 beakers, 1 belt, 2 toy engines, cellotape, 14 wagons, gold braid, 8 points, keys, 8 curved rails, tape recorder cords, 4 vests, swimming trunks, 5 pants, 1 blue socks, 5 brown socks, 6 white socks, 1 cap cover, 1 pr. pyjamas, 1 silk scarf, 1 pr. black shoes, 1 pr. brown shoes, toilet articles, 1 copy stand, 1 enlarger, assorted chemicals, powersaw, typewriter, calculator, adding machine, 4 packs tea, 4 cameras, 1 lens, 1 light meter, 3M duplicator, binoculars, Sanyo tape cassette, assorted perfumes and curios. 1 kitbag, 1 flip-flops.

200 cigarettes, 1 spirits, number cans of beer, number of bottles of wine.

If in doubt – put it in a suitcase and lock it in the bonded store!

SHIPMASTER'S REPORT: December 1983.

All foreign currencies must be declared and it may be used freely ashore.

A landing pass and foreign currency pass is issued to each member of the crew and they are to be accompanied by Seaman's ID Card or Discharge Book when going ashore.

A cabin is to be set aside and marked Transit Room. Would advise that anything and everything that is not required during your stay in Cuba be put in a suitcase and lodged in the Transit Room which is sealed on arrival and then left alone. All cameras must be placed under seal on arrival (i.e. in the Transit Room). Permission is granted to use them in Havana but was not allowed in Nuevitas.

A strict Customs search usually follows arrival with every cabin and compartment thoroughly searched. This vessel was not searched by Customs at Havana but was at Nuevitas.

Prior to departure from each Cuban port the vessel is searched by Harbour Master Guards.

On the whole relationship between ship and Authorities was good. The Agents proved very helpful and telex communication was satisfactory.

Only meats of origin U.S.A., Australia and New Zealand are permitted to be used whilst vessel is at a Cuban port.

The Port Authorities are very strict regarding rat guards which must be checked at frequent intervals, also garbage which must be placed in sealed bags ready for collection by shore labour.

ANTILLA: 20.50 N. 75.44 W. **(See Plan Book)**
(and sub-ports of Felton, Nicaro and Preston)

LOCATION: The Port of Antilla is located on the North side of Nipe Bay, on the North Coast of Cuba: Lat. 20° 50′ N., Long. 75° 44′ W.

Nipe is the largest bay in Cuba and is considered among the biggest in the world.

Within Nipe Bay there are 3 ports: Felton, Preston and Antilla, Antilla being the head port of a region, and very important because of its natural resources in agriculture, mining, etc., as well as for sugar industries close to the port.

The Antilla Agency attends also at the following ports: Preston, Felton, Nicaro, Banes, Tanamo and, temporarily at Vita.

Nipe Bay is suitable for large vessels of any length and up to 20 m. draft, which can anchor in the vicinity of buoy No. 9, (La Estrella Shoal) inside the triangle formed by Pt. Saetia, Pt. Berraco and La Estrella Shoal.

Antilla is a very efficient port in all respects but as a sugar shipping port ranks among the best in the nation.

ENTRANCE TO PORT: Entrance to Nipe Bay is safe and free of risks. Limitations as to length and draft of vessels are only those imposed by the places of operations or ports.

Entrance channel is ample (0.75 miles wide at its head and 0.33 miles at its narrowest point, located South of Pt. Caimanes), having a minimum depth of 150 ft. up to Saetia Anchorage.

From Saetia up to Antilla piers the distance is 10 miles.

Navigating toward Western Nipe Bay, in the direction of Antilla, after Saetia is past, to the South can be seen: Cayagima Cove, Point Cobos, the mouth of Mayari River and the Port of Preston.

To the North can be seen after departing from Saetia: the town of Ramon, located on high lands at the back of Melilla Cove, Pt. Berraco, Pt. Las Chivas, Honda Cove, Pt. Salinita, Hermenegildo Cove, Pt. Negra, Felipe Cove, Pt. Carbonera and Pt. Salina.

From the latter onward, Antilla's piers channel is navigated, and to the North can be seen Pt. Barrancones, Marbella Cay and finally the town and port of Antilla.

PILOT: *Where Pilot should be taken and distance to place of operation:*

The place where Pilots board the vessels nominated to perform operations at Antilla, Preston, Felton, Banes or Nicaro, is located at 1 mile N.E. of Point Mayari, that is in an East/West line from Pt. Mayari lighthouse on the course of the bearings indicated by the port chart.

The exact position where Pilots board vessels is: Lat. 20° 47′ 46″ N., Long. 75° 32′ 15″ W.

From this point the distances to the ports are:

	Miles to pier	*Miles to anchorage*
Antilla	13	13.5
Preston	6.5	6.5
Felton	5	4
Nicaro	13	12
Banes	17	17
Fondeadero Saetia	2.5	

Point Mayari Lighthouse consists of a conical/cylindrical steel tower, painted aluminium, 40 ft. tall and its light is visible up to 10 miles away.

As the pilot station is located in Antilla, upon receipt of an ETA message from an incoming vessel, Mambisas Agency immediately informs the Pilots who depart accordingly to Saetia to await the vessel.

Once the Pilot is in Saetia it is almost impossible to communicate with him, therefore Masters must exert care in sending ETA messages to Antilla in order to offer the Pilots the closest ETA at Pt. Mayari, thus avoiding unnecessary problems for Pilots or delays to ship.

ANCHORAGES: Anchorages at Nipe Bay are used only when waiting for berth, or at Saetia, to await favourable tide to enter Banes or Nicaro.

No operations are performed at anchorages.

Saetia Anchorage: Located about 1,000 m. West of Pt. Carenero (Saetia).

Limitations: Draft 20 m., Length: No limitations. Swinging area: About 800 m.

3 vessels (557 ft. in length) or one supertanker can be accommodated at this anchorage.

The bottom is soft mud but anchors hold well, ships usually anchor with 4 or 5 shackles of chain.

In front of this anchorage is the small town and beach of Saetia.

Usually this anchorage is used by vessels destined for Felton or to await favourable tide to enter the ports of Banes or Nicaro.

La Chiva Anchorage: Located at about 1.25 miles from Pt. Berraco, to the North on the Melilla Heights, the small town of Ramon can be seen.

Limitations: Draft 20 m., Length: No limitations. Swinging area: About 900 m.

Can accommodate two 557 ft. length vessels or 1 supertanker.

The bottom is hard sandy mud with loose stones and anchor holding is good. It is sheltered from the winds by Melilla Heights.

Ships usually anchor with 3 or 4 shackles of chain.

This anchorage is used for similar reasons as Saetia.

Cajimaya Anchorage: Located just in front of the port of Felton.

Limitations: Draft 32 ft., Length 600 ft. Swinging area: About 400 m.

2 vessels can be accommodated at anchorage.

The bottom is soft mud but anchors hold well.

Sheltered from winds by Saetia mountains, ships usually anchor with 3 or 4 shackles of chain.

This anchorage is used by vessels awaiting berth at Felton.

Pt. Salinas Anchorage: Located about 500 m. S.S.W. of buoy marking Salina Grande Shoal; Antilla Town is about 3 miles to the N.W. and at a similar distance is Preston to the S.S.W.

Limitations: Draft 31 ft., Length: No limitation. Swinging area: About 500 m.

Four or five regular size vessels can be accommodated at this anchorage.

The bottom is soft mud but anchors hold well.

It is not sheltered from winds, being located in a spot where, when there is bad weather, the sea becomes rough.

Usually vessels anchor with 3 shackles of chain.

This anchorage is used by vessels awaiting berth at Antilla.

Preston Anchorage: Located about 1,200 m. N.N.W. of the head of Preston pier; to the South of the small town of Guatemala (formerly Preston) sugar mill can be seen.

Limitations: Draft 30 ft., Length: No limitations. Swinging area: About 1,000 m.

Three or four regular size vessels can be accommodated at this anchorage.

The bottom is soft mud but anchors hold well, anchorage is open to the winds.

Usually vessels anchor with 3 shackles of chain, depending on wind force.

This anchorage is used by vessels awaiting berth at Preston.

Corojal Anchorage: Located about 320 m. N.W. from Antilla pier head, just in front of Antilla town.

Limitations: Draft 18 ft., Length 557 ft. Swinging area: About 180 m.

Anchorage can accommodate 1 vessel only.

Bottom is soft mud but anchors hold well.

Anchorage is open to the winds and vessels anchor with 2 shackles of chain, depending on wind force.

This anchorage is used to wait for Port Doctor visit in cases of incoming vessels from foreign countries and also to await berth at Antilla.

Antilla Anchorage No. 2: Located about 700 m. from Antilla pier head. Limitations: Draft 23 ft., Length 500 ft. Swinging area: About 300 m. Anchorage can accommodate 1 vessel only.

Bottom is soft mud but anchors hold well.

It is open to the winds and vessels anchor with 3 or 4 shackles of chain. If strong winds do blow, then vessels drop another anchor to reduce the swinging action.

This anchorage has the same use as Corojal Anchorage.

Saetia, La Chiva and Cajimaya Anchorages have no transportation service; the remaining anchorages have launch service available, if requested by Masters.

MAX. SIZE: Vessels' maximum official draft and length allowed to enter or sail from Antilla are: Length 557 ft., draft 21 ft. fore, 23 ft. aft.

Regarding length of 557 ft., it is the maximum advisable for dry cargo vessels.

Tankers having a length of 610 ft. have called at this port to load molasses.

Entrance to or sailing from Nipe Bay and Antilla can be effected either during day or night-time.

CLEARANCE: All Port Authorities, Port Doctor, Customs, Immigration and Captain of the Port have their offices at Antilla. Vessels may proceed directly to sub-ports without entering Antilla for clearance. Port Authorities clear ships at sub-port when necessary.

Launch service is the preferable means of transportation used by the Port Authorities to the various sub-ports under Antilla jurisdiction.

There are Custom House Delegations at sub-ports of Preston, Nicaro, but no Immigration. The Custom House Delegate at the sub-port of Nicaro also acts as Delegate for the Captain of the Port.

Although there is no Port Doctor Delegate at the sub-ports, the General Hospital Doctors may act as such, if requested, in order to give a quick entry to the ship.

Notwithstanding the above, in those cases when a ship is coming from a Cuban or foreign port, destined to Nicaro, and happens to lose the slack water tide, it will be necessary for the ship to anchor at Saetia (Antilla) and to wait the next tide. In these particular cases the Port Authorities give entry to the ship at Saetia anchorage, and it is not necessary for another Port Authority visit at the sub-port of Nicaro.

RADIO: At Antilla, means of communications are: Telephone, telegraph, radiograms RCA System, telex and Post Office.

The Antilla Agency is connected to the National Telex System, which is the quickest means of communication.

Vessels proceeding to Cuba can communicate with Mambisas Antilla Agency through "CLA" Havana Radio Station which immediately relays the messages to Antilla by radiograms, telegraph or telex.

Masters must send their ETA messages simultaneously on VHF Channel 16 to Mambisas Antilla and Mambisas Havana.

TUGS: No tug is required for entry to Antilla. There is a tug available 24 hours of the day, but service must be requested at least 24 hours in advance. Name, *Macabi;* length, 81 ft. 1 in.; width, 24 ft. 0 in.; gross tonnage, 183.53; net tonnage, 86.00; motor, one diesel; h.p., 750; speed, 8.5 knots.

BERTHING: The 3 berthing spaces of this port have standard gauge railroad tracks.

Each pier is connected with 1 railway which is independent of the others, but with no car outlet at end of piers, consequently, to perform any movement, it is necessary to take out the remaining cars. For that reason, there is no road connecting the piers, and since piers are not paved, trucking operations cannot be performed.

Pier No. 4

North Side: Length 458 ft., maximum length vessel allowed 557 ft., draft 17 ft. forward and 23 ft. aft.

South Side: Length 458 ft., maximum length vessel allowed 557 ft., draft 21 ft. forward and 23 ft. aft.

The construction of this pier is concrete, that is the platform and the piling. It is protected by hard wood fenders and has a fixed red light at the S.W. end.

Cargo handled: Bagged raw sugar, molasses, general cargo.

Coast Pier: Length 398 ft., draft 20 ft. even keel., maximum advisable vessel length for operation 455 ft.

Construction of this pier is similar to Pier No. 4, concrete piling and platform, and, in fact, is really a continuation of Pier No. 4 South Side and for that reason if a vessel longer than 455 ft. is docked at this pier, it is in detriment to the operations of vessel docked at No. 4 South Side, which will have part of its length outside the pier.

Cargo handled by this pier: Bagged sugar, general cargo, gasoline, kerosene and diesel oil.

Diesel oil, kerosene, gasoline: Connections 1×8 in., 1×6 in. and 1×4 in. diameter.

STEVEDORES: Working periods – loading sugar; Monday to Friday – 0700/1100–1300/1700 hrs. Saturday – 0700/1100–1300/1700 hrs. Sunday – no work performed.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Capacity: Three ships can be performing sugar loading operations simultaneously, although the labour force available is for a total of 12 gangs.

1. Raw Sugar: *(a)* Loading rate: 1,330 bags of raw sugar (of the 220-pound type) per 4 hours per gang. *(b)* Bags per sling: 6 bags of raw sugar (of the 220-pound type).

2. Refined Sugar: *(a)* Loading rate: 2,100 bags of refined sugar (of the 100-pound type) per 4 hours per gang. *(b)* Bags per sling: 12 bags of refined sugar (of the 100-pound type).

No shore crane available at this port, but there are 5 machine throwers for bulk sugar operations, grates and canvas funnel, etc. These machines function with diesel motors.

Sugar bags are opened in the square of the hatch.

TANKERS: Molasses pumping rate is at an average of 35,000 gallons per hour. Two connections 1×8 in., 1×12 in. diameter.

MEDICAL: There is a hospital where crew members may be hospitalised.

WATER: *(Potable or for boilers):*

Small amounts of water (about 30 tons) can be delivered if requested 48 hours in advance.

Water is brought to the port by railroad tank-cars from distant places, and is pumped directly to ships by portable pump.

Water deliveries at Antilla are deficient and not reliable, because on occasions there are no tank-cars available.

Price: $4.83 per ton FOB, delivery rate 15 t.p.h.

Daily delivery rate cannot be determined due to unreliability of transportation.

FUEL: Not available.

PAPER/WOOD DUNNAGE: It is advisable that vessels nominated for operations at Antilla, or any of the ports listed as attended by Antilla Agency, arrive with enough wood dunnage.

Wood dunnage, although not impossible to obtain, sometimes is hard to secure, and to avoid delays it is better to have the vessel supplied at a prior port of call.

Paper is supplied if ordered at least 3 days in advance.

REPAIRS: No repairs can be performed.

DEVELOPMENTS: It is planned to build at this port, among other improvements, a bulk raw sugar shipping plant.

AGENT: Attending the port of Antilla, and the sub-ports of Preston, Nicaro and Felton, also the port of Banes.

Agency Address: Empresa Consignataria Mambisa, Agencia Antilla, Ave. Wenceslao Aguilera No. 55, Apartado No. 52, Antilla, Prov. de Oriente. Telephone: 8248 and 8225 (office); 158 and 159 (night). Telex: 021124. Cables: Mambisas Antilla.

Agency VHF works on Channel 16.

Mail and Parcels: Should be sent to our Main Offices at Havana from where it will be sent to Antilla by the quickest means possible.

SUB-PORTS:

Distance from Antilla to:

Preston (Guatemala), 7 miles.
Felton, 11 miles.
Nicaro, 14 miles.

To the port of Banes, which is attended by Antilla Agency, 50 km. From Antilla to Banes highway transportation is used.

Time from Antilla to:

Sub-port	*Launch*	*Highway*
Preston	1 hour	1 hour 45 minutes
Felton	1 hour 30 minutes	2 hours 15 minutes
Nicaro	2 hours	3 hours

There is only a regular launch service from Antilla to Nicaro, leaving daily from coastal pier Antilla at 0900 hrs., arriving Nicaro at 1100 hrs.

(a) SUB-PORT OF PRESTON (GUATEMALA):

LOCATION: This port is located on the North coast of Cuba: Lat. 20° 46′ N., Long. 75° 40′ W.

Preston is one of the 3 ports located within Nipe Bay and is situated on the South coast of said bay, on a peninsula named "Punta Tabaco", S.E. of Antilla.

Traditionally this port has shipped the production of "Guatemala" sugar mill (formerly "Preston") which ranks among the biggest in the sugar industry.

Mayari River flows to the East and close to the port, and maintenance dredging is necessary alongside pier to preserve the depth required.

Dredging is effected at the West side of pier as the East side is not used.

PILOT: From the place where Pilots board the vessels to Preston pier the distance is 6.5 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: As is described under Antilla, up to Pt. Carenero (Saetia), the channel is common to the 3 ports located in Nipe Bay.

On reaching Pt. Carenero, vessels take a course Northwestward in the direction of the buoy marking "La Estrella" Shoal and then take a course W.S.W. up to Preston pier.

On the North side can be seen: Pt. Piedra, Melilla Cove and on the hills the town of Ramon. Pt. Las Chivas and the rest of coast of the bay up to Antilla port and town, which is clearly visible.

On the South side can be seen: The entrance to Cajimaya Cove and Felton town, Pt. Cobos, light buoy No. 5 marking "La Estrella" Shoal, the mouth of Mayari River and lastly the town and port of Preston.

There are no limitations as to vessel's length, and max. draft allowed is 25 ft., which is imposed by pier's depth.

Entrance to or sailing from Preston can be effected during day or night-time, generally without tugboat assistance, except when there is flood tide or wind interference, then tugboat assistance is required.

TIDAL VARIATION: Tidal variation at this port averages from 2.25 ft. to 2.5 ft.

CLEARANCE: See "Antilla". Port Doctor, Immigration and Port Captain travel from Antilla to Preston to give ship's entry. Custom Delegation at this sub-port, only occasionally, and in order to avoid delay Preston Hospital Doctor clears the ship.

Vessel can proceed directly to this sub-port, since Port Authorities come from Antilla to give ship's entry.

RADIO: See "Antilla".

TUGS: See "Antilla". No tug available, but can be obtained from Antilla.

BERTHING: Preston pier is located at the Northern extremity of Punta Tabaco.

Its construction is entirely of hardwood, including its piling, and at the moment it is not in good condition and requires rebuilding.

Along the pier run double standard railroad tracks but there is no outlet at pier's end.

Guatemala Pier: (Formerly Preston Pier) Overall length: 1,036 ft. – berthing length: 586 ft. Draft: 25 ft. even keel. No limitations as to vessel's length. Water available, but bunkers not available.

No cargo operations are conducted in the bay.

STEVEDORES: Loading sugar – working period (max. 4 gangs). Monday to Friday: 0700/1100–1300/1700 hrs. Saturday: 0700/1100 hrs. Sunday: No work is performed.

General cargo: No discharging operation is performed at this port.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Raw sugar-loading rate: About 1,330 bags of raw sugar (of the 220-pound type) per 4 hours per gang.

Bags per sling: 6 bags of raw sugar (of the 220-pound type).

Operational capacity: At this sub-port only one vessel at a time can be operated.

Refined sugar: No refined sugar has been shipped by this sub-port.

Equipment: There is one movable shore crane available with lifting capacity of about 60 tons with 75° boom inclination. Boom length 50 ft. Crane is mounted on a railroad flat car which is operated by steam supplied by an adapted boiler. As the greater part of the year this crane remains idle, it is possible that its lifting capacity might have decreased. Five grates, but no thrower machines.

TANKERS: Molasses pumping rate average of 75,000 gallons per hour.

Fuel Oil: 2 connections – 1×8 in., 1×10 in. diameter.

Molasses: 2 connections – 1×8 in., 1×10 in. diameter.

MEDICAL: There is a hospital at Preston which offers very good service to ship's crew. In cases requiring special attention, patients can be taken to Holguin, where there are reliable specialists.

WATER: *(Potable or for Boilers):* Delivered by pipe-line to ships while docked to Preston pier. Delivery rates: During sugar harvesting season, from 5 to 10 tons daily, only during night-time, otherwise from 40 to 50 tons daily, depending upon the pressure on the line.

FUEL: Not available.

REPAIRS: No repairs can be performed at Preston.

TRANSPORTATION: Usually transportation between Preston and Antilla (and other nearby ports) is performed by launch and also by road.

From Preston there are the following distances and travelling time to:

	by launch	*by road*
Antilla	7 miles – 1 hour	1 hour 45 minutes
Nicaro	8 miles – 1 hour	1 hour 15 minutes
Felton	5 miles – 45 minutes	45 minutes

COMMUNICATIONS: Vessels cannot communicate directly with Preston. Means of communications between Felton and Antilla (and other nearby ports) is only by telephone.

Telephone communications are rather irregular and sometimes are the cause of delays in urgent matters.

PORT AUXILIARY EQUIPMENT: This port has no auxiliary equipment.

AGENT: See "Antilla".

(b) SUB-PORT OF NICARO (LENGUA DE PAJARO) LEVISA BAY:

LOCATION: This port is located on the North Coast of Cuba:

Lat. 20° 43′ N., Long. 75° 33′ W.

The port of Nicaro is situated inside Levisa Bay, on a small peninsula named "Lengua de Pajaro", located at the Southwestern part of the bay.

Levisa Bay is landlocked, sheltered and moderately ample. Its shores are rather irregular due to numerous points, creeks, coves and inlets. The centre of the bay is free of cays, but close to the coast and around it, there are several cays.

Ample zones of shoals almost entirely cover its extension, except the channels and the anchorage zones.

Nicaro region is very rich in mineral fields and the port is used principally to export the production of the mining enterprise located there.

At the West side and next to Levisa Bay, Nipe Bay is located, and to the East, having a common entrance, which is divided as a fork by Pt. Dos Bahias, is Cabonico Bay.

PILOT: Distance from the place where Pilots board the vessels to Nicaro anchorage is 12 miles, to Nicaro pier 13 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: The entrance channel for the port of Nicaro is difficult for vessels over 350 ft. length, due to its narrowness and because of having sharp turns, some of them forming angles of almost 90°. Also, its bottom and banks are rock and coral. Regarding draft it offers no obstacles as there are about 174 ft. and 47 ft. depths max./min. respectively.

To minimise all risks and perform a fairly safe crossing of the entrance channel, while entering to or sailing from this port, the following measures must be accomplished:

(i) Entrance or sailing to be effected only during daylight hours, at slack water.

(ii) Tugboat assistance is required for vessels exceeding 350 ft. in length.

(iii) Vessel's length should not exceed 500 ft., being the extreme max. length allowed, if really necessary, 513 ft.

(iv) Simultaneous entrance or sailing of 2 or more vessels is not permitted.

Channel is navigable by only one course.

Max. draft allowed to vessels operating at Nicaro pier is 28 ft. forward and 29 ft. aft. (at low tide).

As vessels larger than 350 ft. length require tugboat and it is obtained from the nearby port of Antilla, it is necessary that vessels assigned to perform operations at Nicaro advise their ETA with sufficient time in advance to vessel's arrival.

The restrictions for vessels to sail or enter this port during night-time are due to the port conditions such as: lack of light buoys in the bay and the channel, as well as the inherent dangers in the channel due to its narrowness and its winding shape.

TIDAL VARIATION: Tidal variation at this port averages from 2.25 ft. to 2.5 ft.

ANCHORAGES: There are two anchorages at Nicaro:

Anchorage No. 1: Located at about 1,200 m. S.W. of Pt. Gorda and 1,500 m. N.N.E. of Raton Cay.

Limitations: Draft: 30 ft. – Vessel's length: 513 ft.

Swinging area: About 200 m.

Can accommodate 1 vessel only.

Soft mud bottom but anchors hold well.

It is open to the winds. Usually vessels anchor with 2 or 3 shackles of chain.

Anchorage No. 2: Located at about 1,000 m. N.E. of pier's head.

Limitations: Draft: 30 ft. Vessel's length: 513 ft.

Swinging area: About 200 m.

Can accommodate 1 vessel only.

Soft mud bottom but anchors hold well.

It is open to the winds, usually vessels anchor with 2 or 3 shackles of chain.

At both anchorages launch service is available at Master's request.

CLEARANCE: Although Nicaro, under Cuban Customs Laws and Regulations, is a sub-port of Antilla, all Authorities are located at Nicaro (delegations).

RADIO: Vessels proceeding to Cuba can communicate with Antilla Agency through "CLA" Havana Radio Station which promptly relays the message to Antilla.

Vessels cannot communicate directly with the port of Nicaro.

Masters must send their ETA messages simultaneously to Mambisas Antilla and Mambisas Havana.

Means of communications at Nicaro are:

Long distance telephone, RCA System Radiograms and telegraph.

Telephone communications are rather irregular and difficult, therefore any instruction or sudden change in previous instruction to vessels operating at Nicaro may not be delivered in time.

TUGS: Obtained from port of Antilla. Therefore it is recommended that when vessels are assigned to this sub-port, advice of their ETA be given with sufficient time prior to vessels' arrival. Particulars of tugboats are shown under "Antilla" information.

BERTHING: The place of operation of Nicaro is its pier, a large installation built of reinforced concrete, 690 ft. long, of which, counting from the head of pier, 450 ft. corresponds to the berthing area, and the remaining 240 ft. is the narrow part of pier connecting with the shore, not used for operations.

Along both sides of pier run railroad tracks of standard gauge, and also trucks can operate.

At the South side of pier, mounted on rails, there is a gantry crane.

The boom of the crane is about 50 ft. long and although mounted on the South side, can also operate at the North side, which is not often done because it loses much in efficiency and speed.

The crane is electrically powered and its accessories are: A grab 1.5 tons and another 3 tons capacity, steel slings, special slings for loading nickel, etc. It can lift up to 20 tons.

All this equipment, excluding ship's tackle, is the only one available for loading or discharging at this port.

Both sides of pier have muddy bottom.

Nicaro Pier.

Overall length: 690 ft. Berthing length: 450 ft.

Max. length allowed to vessels: 513 ft.

No bunkers available.

North Side:

Draft: 26 ft. 6 in. forward and 29 ft. aft.

Kind of cargoes handled by this side: Bagged raw sugar, general cargo, fuel oil, diesel oil and liquid ammonia.

Water available by pipe-line.

Tanker Information:

Liquid ammonia: 2×6 in. diameter.

Fuel oil: 2×8 in. diameter.

Diesel oil: 1×6 in. diameter.

South Side:

Draft: 28 ft. forward and 29 ft. aft.

Kind of cargoes handled by this side:

Anthracite coal, nickel oxide, nickel sinter, bagged raw sugar, general cargo.

Water available by pipe-line.

This side of pier was dredged in 1969.

Port can operate 2 vessels at a time: One dry cargo vessel loading or discharging and 1 tanker vessel.

At the present time the port does not have enough personnel to operate 2 dry cargo vessels at a time.

No cargo operations are carried out in the bay.

STEVEDORES: Loading or unloading of general cargo, nickel, mineral coal, etc., is performed by port workmen of sub-port of Nicaro.

Raw sugar-loading rate. At present, average loading rate in a period of 4 hours per gang, is about 1,330 bags.

Bags per sling (Guatemala sugar): 6 bags of raw sugar (of 220 pound type) per sling. Nicaragua sugar: 6 bags of raw sugar (of 220 pound type) per sling. Sugar bags from sugar mills Guatemala and Nicaragua are transported from respective mills to Nicaro in railroad flat cars, already slung.

Refined sugar. No refined sugar is exported.

General cargo discharging rate. General cargo of a fragile nature and careful handling: about 5 tons per gang hour. General cargo of sturdy nature and easy handling about 20 tons per gang hour.

Bagged cargo: about 30 tons per gang hour.

Mineral coal: at present the shore crane is averaging 110 t.p.h.

Nickel: at an average of 800 bags (26 tons) per gang hour.

Bulk sugar: no bulk sugar equipment available. In those cases when bulk sugar operations are performed, the necessary equipment is obtained from sub-port of Preston.

Working Hours: Sugar: Monday to Friday: 0700 – 1100 hrs., 1300 – 1700 hrs. Saturday: 0700 – 1100 hrs.

Nickel loading and other cargoes: Monday to Friday: 0800 – 1130 hrs.,1230 – 1700 hrs. Saturday: Same periods.

On Sundays the port does not perform any work, except discharging of tanker vessels.

Labour legislation presently in force provides that the numbers of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

TANKERS: No molasses or alcohol re-loaded. Only fuel oil, liquid ammonia and gas oil are discharged. Average discharging of fuel oil at present is about 400 t.p.h. Liquid ammonia discharge averages about 27 metric t.p.h.

MEDICAL: Hospital at Nicaro offers good service to ships' crew members. In case of special attention, the patient can be taken to Holguin, where there are reliable specialists.

Dental care is available at Levisa, 6 km. distant.

WATER: *(Potable or for boilers):* It is supplied to vessels while docked to Nicaro pier (both sides). Average delivery rate: 30 t.p.h.

Water is delivered usually by night in order not to disturb the Nickel Plant production, although, occasionally it is delivered during the daytime. Vessels must furnish the hoses.

FUEL: Not available.

REPAIRS: There is no repair shop at this port.

DISTANCES: The nautical distance between Nicaro and Antilla for vessels drawing over 6 ft. draft is 24 miles. For small craft drawing less than 6 ft. the distance is 14 miles. By highway, 130 km. from Nicaro to Antilla.

Sea transportation takes 1 hour 45 minutes, and highway 2 hours 30 minutes. There is a daily launch service between Nicaro and Antilla. Launch leaves Antilla 0930 hrs. arriving at Nicaro at 1130 hrs. and a launch leaves Nicaro at 0930 hrs. arriving at Antilla at 1130 hrs.

AUTHORITY: Sub-port of Nicaro is under Antilla Custom House jurisdiction. There is a Custom House Delegate at this sub-port, who acts as a Delegate of the Captain of the Port.

Vessels at Nicaro are handled by personnel of Antilla offices who visit Nicaro, and are located at Oficina de la Marina, Tel. 216. In case this office is closed, these personnel could also be contacted through Customs House telephone of Nicaro.

AGENT: Antilla Agency personnel attend. Agent has a small office, close to the pier, telephone number 62.

(c) SUB-PORT OF FELTON:

LOCATION: This port is located on the North Coast of Cuba: Lat. 20° 44′ 45″ N., Long. 75° 35′ 40″ W.

Felton, as are Antilla and Preston, is located in Nipe Bay and is the closest port to the Bay entrance.

It is located 1.75 miles to the S.W. of Saetia, just in Cajimaya Cove and 3 miles East of Preston.

At the present time this port mainly handles the importations of raw materials for the fertiliser plant in the vicinity of the port.

PILOT: From the place where Pilot boards the vessel to Felton Pier there is a distance of 5 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: As described under Antilla, up to Pt. Carenero (Saetia), the channel is common to the three ports located in Nipe Bay.

On reaching Pt. Carenero, vessels turn course Southward seeking Felton Channel and after four changes in the pilotage route the port is seen.

The most remarkable points of visual orientation after Pt. Carenero is sailed past, are:

On the East side: Saetia Cay, Points Campeador No. 1, 2 and 3; light buoys Nos. 1-A and 3-A (green light) and the unlit buoys indicating the port channel.

On the West side: Pt. Cobos, Pt. Largo, the town of Felton and the unlit buoys marking the channel.

Entrance to the port up to Cajimaya Anchorage can be effected either in day or night-time, but docking or undocking is performed only during daylight hours, if it is not windy.

Limitations as to draft and length of vessels are those imposed by the place of operation or Cajimaya Anchorage. Anchorage for this port is Cajimaya Anchorage, but Saetia Anchorage can also be used.

TIDAL VARIATION: Tidal variation at this port averages from 2.25 ft. to 2.5 ft.

CLEARANCE: Vessels can proceed directly to Felton, as Port Authorities from Antilla are taken by launch to visit vessel at Felton pier, or at sea in Cagimaya Anchorage.

RADIO: Ships can communicate with Felton by wireless via CLA, but it is recommended that ETA messages be given to Mambisas Antilla and Mambisas Havana simultaneously.

The means of communication between Felton and Antilla are telephone and telegraph.

BERTHING: The place of operation of Felton is a solid coastal-pier built of concrete, although vessels are not docked directly at it.

Vessels are berthed to 3 solid steel dolphins, the first and the third being spaced 350 ft. apart.

Dolphins are located at about 50 ft. from the side of the pier and therefore vessels are 50 ft. off the pier.

Pier is located at the East side of that portion of land on Nipe Bay and runs from North to South.

Besides the three solid dolphins, vessels are secured also to two mooring buoys located 250 m. to the West, in front of and parallel to the pier.

There is an electric shore crane mounted on rails that runs along the pier, which is used mainly for the discharge of bulk raw materials for fertilisers, with a 4 ton grab. If the grab is removed the crane is capable of lifting up to 40 tons, and can be used for the discharging of heavy equipment, such as tractors, bulldozers, etc. This crane has a wide field of operation.

Also in operation at this port is a device called "Unicular", a kind of hopper-car, which runs on rails from the hatch of the vessel to the pier, and is loaded by ship's gear to its full capacity of 3 tons.

Taking into consideration the characteristics of pier, the manoeuvring basin and the approach channel to place of operations, the following regulations must be followed:

Vessels up to 500 ft. length:

Can dock without tugboat assistance, during daylight hours, if the wind and sea do not interfere with the manoeuvres.

Same conditions for undocking.

Maximum draft allowed 28 ft.

Vessels longer than 500 ft. and up to a maximum of 557 ft. length:

(a) Assistance of tugboat, of 750 h.p. or more, is required.
(b) Vessels must dock with bow facing North.
(c) Docking must be effected during flood tide.
(d) Condition of sea and wind at the time of docking must be taken into consideration in order to avoid interference of wind and sea with the manoeuvres.
(e) Maximum draft allowed is 26 ft. or 27 ft., depending on the type of vessel, its manoeuvrability, etc.

Tanker Information: Fuel oil: 1×8 in. diameter.

For discharging fertiliser raw materials or fuel oil, 24 hours a day are worked, Saturdays and Sundays included. For general cargo, when occasionally discharged, from 0700 hrs. to 1500 hrs. Monday to Saturday. Berthing space of this port only permits operating 1 vessel at a time.

No cargo operations conducted in bay.

MEDICAL: There is a small hospital at Felton where crew members requiring medical and dental care are attended.

Cases requiring surgical or specialised treatment, are sent either to Mayari Hospital or Lenin Hospital, at Holguin.

FRESH WATER: Temporarily no water available at Felton.

FUEL: Not available.

REPAIRS: Cannot be performed at this port.

TRANSPORTATION: Usual means of transportation between Felton and Antilla, and other nearby ports, is by launch and also by road.

From Felton there are the following distances and travelling time to:

	By launch	By road
Antilla	11 miles – 1 hr. 30 min.	2 hrs 30 min.
Nicaro	3 miles – 30 min.	50 min.
Preston	4 miles – 40 min.	1 hr.

AUTHORITY: The Port Authorities are located at Antilla and visit Felton as necessary.

AGENT: See "Antilla". Mail should be sent through Antilla's main office by registered mail. Spares by railway express to Antilla.

BANES: 20.54 N. 75.41 W.

LOCATION: Banes is located on the North coast of Cuba: Lat. 20° 53′ N., Long. 75° 40′ W.

Banes is a sheltered, landlocked port located next and to the West of Nipe Bay.

Traditionally this port used to ship raw sugar and molasses, that is, the production of "Nicaragua" sugar mill, formerly "Boston".

Due to limitations imposed by the characteristics of this port to the length of vessels, and the constant increase in size and tonnage of vessels operating currently in Cuba, gradually the port lost its use and importance, and nowadays is only used for coastal trade.

While approaching Banes, the points of visual orientation are:

Banes Bay Light, shown from a red iron skeleton structure, 30 ft. above sea level, situated about 400 yds. Southward of Pt. Fuerte. A small house located on the Southern side of the entrance to bay, and the port entrance itself, cliffs at both sides and forming a remarkable canyon.

Banes port mouth lighthouse is located on the Western extremity of Caracolillo Beach, between Pt. Fuerte and Pt. Penasco.

At the extremity of Pt. Penasco there is a masonry house, visible up to 2 or 3 miles away.

PILOTAGE: Vessels should pick up Pilot at 20° 53′ N., 75° 29′ W., 1 mile N.E. of Banes Canyon Lighthouse. Pilot station located at Embarcadero (Banes). Agent informs Pilot of ship's arrival by means of local telephone. Distance from point where Pilot boards vessel to pier is about 6 miles.

RESTRICTIONS: Entrance is through narrow channel with sharp turns where there is a strong current. For this reason vessels can only enter on slack water tide and during daylight. Assistance of tug necessary for entering and sailing. Bottom and banks are rock and coral. Depth about 60 ft.

MAX. SIZE: Max. length due to characteristic of channel is of 360 ft. Due to insufficient water at pier, and in bay, ships are limited to draft 19 ft. forward and 23 ft. aft.

Average of about 2 ft. 4 in. between high and low tides.

ANCHORAGES: *Macabi Anchorage:* Located S.S.W. of Nicaragua Pier.

Limitations: Max. draft 31 ft., max. length 360 ft. Swinging area: About 620 m.

Anchorage can accommodate 2 or 3 vessels.

Bottom is soft mud but anchors hold well and vessels anchor with 3 or 4 shackles of chain.

TUGS: At present no tug available, but when needed same is requested from Antilla. Particulars of tug shown under Antilla information.

RADIO: Ships can communicate with port by wireless via CLA, but recommended that ETA message be sent to Antilla Agency, simultaneously advising Mambisas Havana.

MEDICAL: There is a hospital where sick crew members may be hospitalised. Dental care is also available.

FRESH WATER: Fresh water supplied, delivered by 3 in. diameter pipeline, with average delivery 4 t.p.h.

FUEL: Not available.

BERTHING: Nicaragua Pier (formerly Banes Pier): Length 240 ft., max. length allowed to vessels 360 ft., draft 19 ft. forward and 23 ft. aft.

The pier is built entirely of wood and in need of repairs.

Only 1 vessel can be berthed.

At the present time only cargo handled is the discharge of fuel oil (coastal trade).

Tanker Information: Fuel oil: 1×8 in. diameter.

No cargo operations performed at anchorage.

STEVEDORES: *Working Periods:* For discharge of fuel oil: 24 hours a day, 7 days a week.

Dry cargo vessels operate Monday to Friday: 0700 – 1100 hrs., 1300 – 1700 hrs. Saturday: 0700 – 1100 hrs. Sunday: No work performed.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday; and 4 hours on Saturday, for a total of 44 hours weekly.

REPAIRS: No repairs can be effected at this port.

TRANSPORTATION: Transportation between Nicaragua Pier and Antilla or Banes is by road. From the pier to Banes there is a distance of 15 km. and to Antilla 50 km.

COMMUNICATIONS: Only means of communications between Antilla and Banes are telephone and telegraph.

PORT AUTHORITIES: All Port Authorities are located at Antilla except Port Captaincy which is located at Banes.

Authorities travel from Antilla to clear vessels at Banes.

AGENT: See "Antilla".

For information regarding ship's operations, Antilla Agency should be contacted. Antilla office personnel travel to Banes to attend vessels operating there. Any mail should be addressed to Antilla Agency. Spare parts by railway express.

BARACOA: 20.21 N. 74.30 W. (See Plan Book)

(Sub-ports: Moa and Punta Gorda)

LOCATION: This port is located on the North coast of the extreme Eastern portion of Cuba in Oriente Province:

Lat: 20° 21′ N., Long: 74° 30′ W.

Its bay is fan shaped and is almost in its entirety sand and mud bottom, 325 yds. in width at its entrance, and opens out to 1,150 yds. in a N.W. and S.W. direction, and 800 yds. in breadth.

Its shores are bordered by sand banks.

"Buren", an isolated rock visible only at low tide, lies about 30 yds. North-Westward of Pt. Barlovento; the sea always breaks on it; it is steep-to and constitutes the only danger.

S.E. of the town is Miel Bay where excellent anchorage is available.

PILOTAGE: Pilots board vessels 2 miles off port. Pilot station located in Baracoa City. Distance from point where Pilots board vessels to operation place (anchorage) is about 2 miles.

RESTRICTIONS: Vessels can enter port only during daylight.

MAX. SIZE: Entrance channel straight – without turns. Vessels up to 400 ft. length and 28 ft. draft can enter through Channel. Two to 3 ft. rise of tide.

TUGS: Not available.

RADIO: Vessels navigating to Baracoa can communicate with the port Agency through "CLA" Havana Radio Station which relays the messages promptly to Baracoa.

Masters must send their ETA messages simultaneously to Simon Baracoa and Mambisas Havana.

STEVEDORES: No pier at this port. Vessels anchor in bay for operations. Several barges, capacity 100 tons.

Only one vessel can be handled at a time.

Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Discharge rate: about 80 tons daily per gang.

MEDICAL: There is a general hospital for sick crew.

FUEL/FRESH WATER/REPAIRS: Not available.

TRANSPORTATION: Transportation to and from Baracoa is difficult.

There is daily air service and also bus service to Moa and other towns in the province, but best advisable means of travel is by car.

AUTHORITY: Port Authorities located at Baracoa. They have Delegation at Sub-port of Moa.

AGENT: (Sub-agency): Empresa Nacional de Cabotaje, Calle 1ro. de Abril No. 14, PO Box No. 27, Baracoa, Oriente, Cuba. Cable: "Simon Baracoa".

When needed to obtain information regarding ships operating at Moa or Punta Gordo, sub-agency at Baracoa should be contacted. When office closed, telephone number 81 should be called. Mail and parcels to be sent directly to Baracoa Agency.

SUB-PORT OF MOA (Moa Bay): 20.41.15 N. 74.52.30 W.

Vessels can proceed directly to sub-ports of Moa and Punta Gorda where they are visited by Customs Authorities.

LOCATION: The port of Moa is situated in the rear part of Yaguasey Bay, where in an artificial inner harbour lies the pier of Moa, and at the entrance of the inner harbour a small coastal trade pier.

Both the port of Moa and the sub-port of Punta Gorda mainly handle the imports and exports of the huge mining enterprise, Major Pedro Soto Alba.

PILOTAGE: Pilots board vessels at Moa Port mouth which is distant about 2 miles from entrance. Pilot station located at Punta Gorda at distance of about 5 miles from port entrance. Distance from point where Pilot boards vessel to Darsena de Moa (pier) is about 4 miles; to Moa Anchorage about 2 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: Entrance channel to Moa is almost straight having two very slight turns, minimum depth on its course is 40 ft. and length and draft limitations to enter to or sail from this port are those imposed by Moa pier and inner harbour:

Draft: Vessels drawing 28 ft. 6 in. can enter/sail at any tide, those drawing more than 28 ft. 6 in. up to 30 ft. only at high tide.

Length: 500 ft.

Channel bottom from its head up to the pier is as follows: From the head to Grande or Del Medio Shoal, coral and rocks; then up to Yaguasey Bay, coral and mud; and on its final stretch to the pier, hard red mud.

Length of channel: 1,560 m.; minimum width 200 m. and maximum 720 m.

For both, Moa and Punta Gorda, entrance to or sailing from, can only be performed during daylight.

As tidal currents average only 1.25 m.p.h., and since the inner harbour is almost devoid of currents, it is not necessary to wait for slack water for entering, sailing or crossing the channels.

Approaching the port of Moa, at both sides of port entrance, strings of breakwaters can be seen.

Behind the Western side breakwater, Moa Grande Cay is conspicuous and a lighthouse rises at about the middle of its North coast.

ANCHORAGES: Moa: *Anchorage No. 1:* Located Northward of Fabrica River and S.E. of Pt. Pajaros: Lat. 20° 40′ 38″ N., Long. 74° 53′ 10″ W.

Minimum depth: 38 ft. Swinging area: 250 m.

Anchorage No. 2: Located Northward of Fabrica River and South of the Eastern extreme of Moa Grande Cay: Lat. 20° 40′ 35″ N., Long. 74° 53′ 28″ W.

Minimum depth: 37 ft. Swinging area: 250 m.

Anchorage No. 3: Located N.W. of Del Medio Shoal: Lat. 20° 40′ 32″ N., Long. 74° 54′ 04″ W.

Minimum depth: 68 ft. Swinging area: 300 m.

Anchorage No. 4: Located Northward of Del Medio Shoal: Lat. 20° 40′ 43″ N., Long. 74° 52′ 30″ W.

Minimum depth: 41 ft. Swinging area: 250 m.

Although above anchorages are listed under the port of Moa, they can be used if necessary, for shipping or unloading cargoes destined to Punta Gorda.

TIDAL VARIATION: Tidal variation at these ports averages 30 in.

TUGS: Tug used at Moa for docking. Tug operated by Mining Enterprises.

RADIO: There is a Government Radio Station at Moa.

Vessels navigating to Cuba can communicate with Mambisas Moa through "CLA" Havana Radio Station and the message will be relayed to Moa by telegraph or telex.

Masters must send their ETA messages to Moa or Punta Gorda, simultaneously to Mambisas Moa and Mambisas Habana.

BERTHING: *(a) Moa Pier* (Also known as Moa Darsena): It is a solid concrete construction in an artificial inner harbour. Berthing length: 308 ft. Max. length permitted to vessels: 500 ft. Draft: Vessels drawing 28 ft. 6 in. can enter/sail at any tide, those drawing more than 28 ft. 6 in. up to 30 ft. only at high tide.

Due to pier dimensions, only 4 hatches can be worked at a time, but despite above limitations, occasionally larger vessels have been operated.

Cargo handled by this pier: Importation: Bulk sulphur, empty ore containers, occasionally general cargo.

Exportation: Nickel and cobalt concentrate in containers and drums.

Coastal trade: Discharge of fuel oil, diesel oil, kerosene, gasoline, sulphuric acid.

Tanker Information: Mining Enterprise: Gasoline/kerosene: one connection 6 in. diameter. Fuel oil: 4 connections 8 in. diameter.

ICP: Gasoline/kerosene/diesel oil: one connection 6 in. diameter.

(b) Coastal Trade Pier: It is a small coastal pier for small vessels, located at the entrance of the inner harbour. Constructed of piles and filled with earth.

Cargo handled by this pier: Coastal trade, general cargo.

No cargo operations in the bay.

STEVEDORES: *Working Hours:* Monday to Friday 0700 – 1100 hrs., 1300 – 1700 hrs. Saturdays 0700 – 1100 hrs.

EQUIPMENT: 1 shore crane 30 tons with 3 tons grab; 4 contact grabs; 2 trucks 30 tons capacity each; 1 pay loader; 2 fork lift trucks; 1 stationary crane; 1 steel barge 500 tons capacity; 1 tugboat (2 diesel engines 180 h.p. each).

Loading/discharging operations: Raw material for the nickel plant is imported as well as fuel oil. Nickel concentrate is exported.

Loading/discharging rate – Nickel (in containers): loaded at a rate of approximately 30 tons per hour-gang.

MEDICAL: Industrial Hospital where crew members can be hospitalised. General Hospital at Baracoa.

FUEL: Not available.

FRESH WATER: Delivery at rate of about 10 t.p.h.

REPAIRS: There are machine shops at nickel plant where small emergency repairs can be performed.

AUTHORITY: Port Doctor, Customs and Port Captain Delegations at this sub-port. Immigration Delegate is the same one who attends vessels at Baracoa and other sub-ports. Vessels can proceed directly to Moa where they are cleared by Port Authorities. Means of transportation from Baracoa to Moa or other sub-ports are: air, launch and overland (jeep). Customs House inspectors travel from Moa to Baracoa.

Baracoa to Moa about 32 miles distant. Following services used: by plane, 20 minutes; by launch, 6 hours; by jeep, 5 hours. Daily flights and regular bus services.

AGENT: Empresa Consignataria Mambisa, Agencia Moa, Reparto "Rolo Monterrey" No. 163, Moa, Prov. de Oriente. Telephone: 429 (day and night). Cable: Mambisas Moa.

Nickel loading and other cargoes: Monday to Friday: 0800 – 1130 hrs., 1230 – 1700 hrs. Saturday: Same periods.

On Sundays the port does not perform any work, except discharging of tanker vessels.

Labour legislation presently in force provides that the numbers of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

TANKERS: No molasses or alcohol re-loaded. Only fuel oil, liquid ammonia and gas oil are discharged. Average discharging of fuel oil at present is about 400 t.p.h. Liquid ammonia discharge averages about 27 metric t.p.h.

MEDICAL: Hospital at Nicaro offers good service to ships' crew members. In case of special attention, the patient can be taken to Holguin, where there are reliable specialists.

Dental care is available at Levisa, 6 km. distant.

WATER: *(Potable or for boilers):* It is supplied to vessels while docked to Nicaro pier (both sides). Average delivery rate: 30 t.p.h.

Water is delivered usually by night in order not to disturb the Nickel Plant production, although, occasionally it is delivered during the daytime. Vessels must furnish the hoses.

FUEL: Not available.

REPAIRS: There is no repair shop at this port.

DISTANCES: The nautical distance between Nicaro and Antilla for vessels drawing over 6 ft. draft is 24 miles. For small craft drawing less than 6 ft. the distance is 14 miles. By highway, 130 km. from Nicaro to Antilla.

Sea transportation takes 1 hour 45 minutes, and highway 2 hours 30 minutes. There is a daily launch service between Nicaro and Antilla. Launch leaves Antilla 0930 hrs. arriving at Nicaro at 1130 hrs. and a launch leaves Nicaro at 0930 hrs. arriving at Antilla at 1130 hrs.

AUTHORITY: Sub-port of Nicaro is under Antilla Custom House jurisdiction. There is a Custom House Delegate at this sub-port, who acts as a Delegate of the Captain of the Port.

Vessels at Nicaro are handled by personnel of Antilla offices who visit Nicaro, and are located at Oficina de la Marina, Tel. 216. In case this office is closed, these personnel could also be contacted through Customs House telephone of Nicaro.

AGENT: Antilla Agency personnel attend. Agent has a small office, close to the pier, telephone number 62.

(c) SUB-PORT OF FELTON:

LOCATION: This port is located on the North Coast of Cuba: Lat. 20° 44′ 45″ N., Long. 75° 35′ 40″ W.

Felton, as are Antilla and Preston, is located in Nipe Bay and is the closest port to the Bay entrance.

It is located 1.75 miles to the S.W. of Saetia, just in Cajimaya Cove and 3 miles East of Preston.

At the present time this port mainly handles the importations of raw materials for the fertiliser plant in the vicinity of the port.

PILOT: From the place where Pilot boards the vessel to Felton Pier there is a distance of 5 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: As described under Antilla, up to Pt. Carenero (Saetia), the channel is common to the three ports located in Nipe Bay.

On reaching Pt. Carenero, vessels turn course Southward seeking Felton Channel and after four changes in the pilotage route the port is seen.

The most remarkable points of visual orientation after Pt. Carenero is sailed past, are:

On the East side: Saetia Cay, Points Campeador No. 1, 2 and 3; light buoys Nos. 1-A and 3-A (green light) and the unlit buoys indicating the port channel.

On the West side: Pt. Cobos, Pt. Largo, the town of Felton and the unlit buoys marking the channel.

Entrance to the port up to Cajimaya Anchorage can be effected either in day or night-time, but docking or undocking is performed only during daylight hours, if it is not windy.

Limitations as to draft and length of vessels are those imposed by the place of operation or Cajimaya Anchorage. Anchorage for this port is Cajimaya Anchorage, but Saetia Anchorage can also be used.

TIDAL VARIATION: Tidal variation at this port averages from 2.25 ft. to 2.5 ft.

CLEARANCE: Vessels can proceed directly to Felton, as Port Authorities from Antilla are taken by launch to visit vessel at Felton pier, or at sea in Cagimaya Anchorage.

RADIO: Ships can communicate with Felton by wireless via CLA, but it is recommended that ETA messages be given to Mambisas Antilla and Mambisas Havana simultaneously.

The means of communication between Felton and Antilla are telephone and telegraph.

BERTHING: The place of operation of Felton is a solid coastal-pier built of concrete, although vessels are not docked directly at it.

Vessels are berthed to 3 solid steel dolphins, the first and the third being spaced 350 ft. apart.

Dolphins are located at about 50 ft. from the side of the pier and therefore vessels are 50 ft. off the pier.

Pier is located at the East side of that portion of land on Nipe Bay and runs from North to South.

Besides the three solid dolphins, vessels are secured also to two mooring buoys located 250 m. to the West, in front of and parallel to the pier.

There is an electric shore crane mounted on rails that runs along the pier, which is used mainly for the discharge of bulk raw materials for fertilisers, with a 4 ton grab. If the grab is removed the crane is capable of lifting up to 40 tons, and can be used for the discharging of heavy equipment, such as tractors, bulldozers, etc. This crane has a wide field of operation.

Also in operation at this port is a device called "Unicular", a kind of hopper-car, which runs on rails from the hatch of the vessel to the pier, and is loaded by ship's gear to its full capacity of 3 tons.

Taking into consideration the characteristics of pier, the manoeuvring basin and the approach channel to place of operations, the following regulations must be followed:

Vessels up to 500 ft. length:

Can dock without tugboat assistance, during daylight hours, if the wind and sea do not interfere with the manoeuvres.

Same conditions for undocking.

Maximum draft allowed 28 ft.

Vessels longer than 500 ft. and up to a maximum of 557 ft. length:

(a) Assistance of tugboat, of 750 h.p. or more, is required.
(b) Vessels must dock with bow facing North.
(c) Docking must be effected during flood tide.
(d) Condition of sea and wind at the time of docking must be taken into consideration in order to avoid interference of wind and sea with the manoeuvres.
(e) Maximum draft allowed is 26 ft. or 27 ft., depending on the type of vessel, its manoeuvrability, etc.

Tanker Information: Fuel oil: 1×8 in. diameter.

For discharging fertiliser raw materials or fuel oil, 24 hours a day are worked, Saturdays and Sundays included. For general cargo, when occasionally discharged, from 0700 hrs. to 1500 hrs. Monday to Saturday. Berthing space of this port only permits operating 1 vessel at a time.

No cargo operations conducted in bay.

MEDICAL: There is a small hospital at Felton where crew members requiring medical and dental care are attended.

Cases requiring surgical or specialised treatment, are sent either to Mayari Hospital or Lenin Hospital, at Holguin.

FRESH WATER: Temporarily no water available at Felton.

FUEL: Not available.

REPAIRS: Cannot be performed at this port.

TRANSPORTATION: Usual means of transportation between Felton and Antilla, and other nearby ports, is by launch and also by road.

From Felton there are the following distances and travelling time to:

	By launch	By road
Antilla	11 miles – 1 hr. 30 min.	2 hrs. 30 min.
Nicaro	3 miles – 30 min.	50 min.
Preston	4 miles – 40 min.	1 hr.

AUTHORITY: The Port Authorities are located at Antilla and visit Felton as necessary.

AGENT: See "Antilla". Mail should be sent through Antilla's main office by registered mail. Spares by railway express to Antilla.

BANES: 20.54 N. 75.41 W.

LOCATION: Banes is located on the North coast of Cuba: Lat. 20° 53′ N., Long. 75° 40′ W.

Banes is a sheltered, landlocked port located next and to the West of Nipe Bay.

Traditionally this port used to ship raw sugar and molasses, that is, the production of "Nicaragua" sugar mill, formerly "Boston".

Due to limitations imposed by the characteristics of this port to the length of vessels, and the constant increase in size and tonnage of vessels operating currently in Cuba, gradually the port lost its use and importance, and nowadays is only used for coastal trade.

While approaching Banes, the points of visual orientation are:

Banes Bay Light, shown from a red iron skeleton structure, 30 ft. above sea level, situated about 400 yds. Southward of Pt. Fuerte. A small house located on the Southern side of the entrance to bay, and the port entrance itself, cliffs at both sides and forming a remarkable canyon.

Banes port mouth lighthouse is located on the Western extremity of Caracolillo Beach, between Pt. Fuerte and Pt. Penasco.

At the extremity of Pt. Penasco there is a masonry house, visible up to 2 or 3 miles away.

PILOTAGE: Vessels should pick up Pilot at 20° 53′ N., 75° 29′ W., 1 mile N.E. of Banes Canyon Lighthouse. Pilot station located at Embarcadero (Banes). Agent informs Pilot of ship's arrival by means of local telephone. Distance from point where Pilot boards vessel to pier is about 6 miles.

RESTRICTIONS: Entrance is through narrow channel with sharp turns where there is a strong current. For this reason vessels can only enter on slack water tide and during daylight. Assistance of tug necessary for entering and sailing. Bottom and banks are rock and coral. Depth about 60 ft.

MAX. SIZE: Max. length due to characteristic of channel is of 360 ft. Due to insufficient water at pier, and in bay, ships are limited to draft 19 ft. forward and 23 ft. aft.

Average of about 2 ft. 4 in. between high and low tides.

ANCHORAGES: *Macabi Anchorage:* Located S.S.W. of Nicaragua Pier.

Limitations: Max. draft 31 ft., max. length 360 ft. Swinging area: About 620 m.

Anchorage can accommodate 2 or 3 vessels.

Bottom is soft mud but anchors hold well and vessels anchor with 3 or 4 shackles of chain.

TUGS: At present no tug available, but when needed same is requested from Antilla. Particulars of tug shown under Antilla information.

RADIO: Ships can communicate with port by wireless via CLA, but recommended that ETA message be sent to Antilla Agency, simultaneously advising Mambisas Havana.

MEDICAL: There is a hospital where sick crew members may be hospitalised. Dental care is also available.

FRESH WATER: Fresh water supplied, delivered by 3 in. diameter pipeline, with average delivery 4 t.p.h.

FUEL: Not available.

BERTHING: Nicaragua Pier (formerly Banes Pier): Length 240 ft., max. length allowed to vessels 360 ft., draft 19 ft. forward and 23 ft. aft.

The pier is built entirely of wood and in need of repairs.

Only 1 vessel can be berthed.

At the present time only cargo handled is the discharge of fuel oil (coastal trade).

Tanker Information: Fuel oil: 1×8 in. diameter.

No cargo operations performed at anchorage.

STEVEDORES: *Working Periods:* For discharge of fuel oil: 24 hours a day, 7 days a week.

Dry cargo vessels operate Monday to Friday: 0700 – 1100 hrs., 1300 – 1700 hrs. Saturday: 0700 – 1100 hrs. Sunday: No work performed.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday; and 4 hours on Saturday, for a total of 44 hours weekly.

REPAIRS: No repairs can be effected at this port.

TRANSPORTATION: Transportation between Nicaragua Pier and Antilla or Banes is by road. From the pier to Banes there is a distance of 15 km. and to Antilla 50 km.

COMMUNICATIONS: Only means of communications between Antilla and Banes are telephone and telegraph.

PORT AUTHORITIES: All Port Authorities are located at Antilla except Port Captaincy which is located at Banes.

Authorities travel from Antilla to clear vessels at Banes.

AGENT: See "Antilla".

For information regarding ship's operations, Antilla Agency should be contacted. Antilla office personnel travel to Banes to attend vessels operating there. Any mail should be addressed to Antilla Agency. Spare parts by railway express.

BARACOA: 20.21 N. 74.30 W. **(See Plan Book)**

(Sub-ports: Moa and Punta Gorda)

LOCATION: This port is located on the North coast of the extreme Eastern portion of Cuba in Oriente Province:

Lat: 20° 21′ N., Long: 74° 30′ W.

Its bay is fan shaped and is almost in its entirety sand and mud bottom, 325 yds. in width at its entrance, and opens out to 1,150 yds. in a N.W. and S.W. direction, and 800 yds. in breadth.

Its shores are bordered by sand banks.

"Buren", an isolated rock visible only at low tide, lies about 30 yds. North-Westward of Pt. Barlovento; the sea always breaks on it; it is steep-to and constitutes the only danger.

S.E. of the town is Miel Bay where excellent anchorage is available.

PILOTAGE: Pilots board vessels 2 miles off port. Pilot station located in Baracoa City. Distance from point where Pilots board vessels to operation place (anchorage) is about 2 miles.

RESTRICTIONS: Vessels can enter port only during daylight.

MAX. SIZE: Entrance channel straight – without turns. Vessels up to 400 ft. length and 28 ft. draft can enter through Channel. Two to 3 ft. rise of tide.

TUGS: Not available.

RADIO: Vessels navigating to Baracoa can communicate with the port Agency through "CLA" Havana Radio Station which relays the messages promptly to Baracoa.

Masters must send their ETA messages simultaneously to Simon Baracoa and Mambisas Havana.

STEVEDORES: No pier at this port. Vessels anchor in bay for operations. Several barges, capacity 100 tons.

Only one vessel can be handled at a time.

Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Discharge rate: about 80 tons daily per gang.

MEDICAL: There is a general hospital for sick crew.

FUEL/FRESH WATER/REPAIRS: Not available.

TRANSPORTATION: Transportation to and from Baracoa is difficult.

There is daily air service and also bus service to Moa and other towns in the province, but best advisable means of travel is by car.

AUTHORITY: Port Authorities located at Baracoa. They have Delegation at Sub-port of Moa.

AGENT: (Sub-agency): Empresa Nacional de Cabotaje, Calle 1ro. de Abril No. 14, PO Box No. 27, Baracoa, Oriente, Cuba. Cable: "Simon Baracoa".

When needed to obtain information regarding ships operating at Moa or Punta Gordo, sub-agency at Baracoa should be contacted. When office closed, telephone number 81 should be called. Mail and parcels to be sent directly to Baracoa Agency.

SUB-PORT OF MOA (Moa Bay): 20.41.15 N. 74.52.30 W.

Vessels can proceed directly to sub-ports of Moa and Punta Gorda where they are visited by Customs Authorities.

LOCATION: The port of Moa is situated in the rear part of Yaguasey Bay, where in an artificial inner harbour lies the pier of Moa, and at the entrance of the inner harbour a small coastal trade pier.

Both the port of Moa and the sub-port of Punta Gorda mainly handle the imports and exports of the huge mining enterprise, Major Pedro Soto Alba.

PILOTAGE: Pilots board vessels at Moa Port mouth which is distant about 2 miles from entrance. Pilot station located at Punta Gorda at distance of about 5 miles from port entrance. Distance from point where Pilot boards vessel to Darsena de Moa (pier) is about 4 miles; to Moa Anchorage about 2 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: Entrance channel to Moa is almost straight having two very slight turns, minimum depth on its course is 40 ft. and length and draft limitations to enter to or sail from this port are those imposed by Moa pier and inner harbour:

Draft: Vessels drawing 28 ft. 6 in. can enter/sail at any tide, those drawing more than 28 ft. 6 in. up to 30 ft. only at high tide.

Length: 500 ft.

Channel bottom from its head up to the pier is as follows: From the head to Grande or Del Medio Shoal, coral and rocks; then up to Yaguasey Bay, coral and mud; and on its final stretch to the pier, hard red mud.

Length of channel: 1,560 m.; minimum width 200 m. and maximum 720 m.

For both, Moa and Punta Gorda, entrance to or sailing from, can only be performed during daylight.

As tidal currents average only 1.25 m.p.h., and since the inner harbour is almost devoid of currents, it is not necessary to wait for slack water for entering, sailing or crossing the channels.

Approaching the port of Moa, at both sides of port entrance, strings of breakwaters can be seen.

Behind the Western side breakwater, Moa Grande Cay is conspicuous and a lighthouse rises at about the middle of its North coast.

ANCHORAGES: Moa: *Anchorage No. 1:* Located Northward of Fabrica River and S.E. of Pt. Pajaros: Lat. 20° 40′ 38″ N., Long. 74° 53′ 10″ W.

Minimum depth: 38 ft. Swinging area: 250 m.

Anchorage No. 2: Located Northward of Fabrica River and South of the Eastern extreme of Moa Grande Cay: Lat. 20° 40′ 35″ N., Long. 74° 53′ 28″ W.

Minimum depth: 37 ft. Swinging area: 250 m.

Anchorage No. 3: Located N.W. of Del Medio Shoal: Lat. 20° 40′ 32″ N., Long. 74° 54′ 04″ W.

Minimum depth: 68 ft. Swinging area: 300 m.

Anchorage No. 4: Located Northward of Del Medio Shoal: Lat. 20° 40′ 43″ N., Long. 74° 52′ 30″ W.

Minimum depth: 41 ft. Swinging area: 250 m.

Although above anchorages are listed under the port of Moa, they can be used if necessary, for shipping or unloading cargoes destined to Punta Gorda.

TIDAL VARIATION: Tidal variation at these ports averages 30 in.

TUGS: Tug used at Moa for docking. Tug operated by Mining Enterprises.

RADIO: There is a Government Radio Station at Moa.

Vessels navigating to Cuba can communicate with Mambisas Moa through "CLA" Havana Radio Station and the message will be relayed to Moa by telegraph or telex.

Masters must send their ETA messages to Moa or Punta Gorda, simultaneously to Mambisas Moa and Mambisas Habana.

BERTHING: *(a) Moa Pier* (Also known as Moa Darsena): It is a solid concrete construction in an artificial inner harbour. Berthing length: 308 ft. Max. length permitted to vessels: 500 ft. Draft: Vessels drawing 28 ft. 6 in. can enter/sail at any tide, those drawing more than 28 ft. 6 in. up to 30 ft. only at high tide.

Due to pier dimensions, only 4 hatches can be worked at a time, but despite above limitations, occasionally larger vessels have been operated.

Cargo handled by this pier: Importation: Bulk sulphur, empty ore containers, occasionally general cargo.

Exportation: Nickel and cobalt concentrate in containers and drums.

Coastal trade: Discharge of fuel oil, diesel oil, kerosene, gasoline, sulphuric acid.

Tanker Information: Mining Enterprise: Gasoline/kerosene: one connection 6 in. diameter. Fuel oil: 4 connections 8 in. diameter.

ICP: Gasoline/kerosene/diesel oil: one connection 6 in. diameter.

(b) Coastal Trade Pier: It is a small coastal pier for small vessels, located at the entrance of the inner harbour. Constructed of piles and filled with earth.

Cargo handled by this pier: Coastal trade, general cargo.

No cargo operations in the bay.

STEVEDORES: *Working Hours:* Monday to Friday 0700 – 1100 hrs., 1300 – 1700 hrs. Saturdays 0700 – 1100 hrs.

EQUIPMENT: 1 shore crane 30 tons with 3 tons grab; 4 contact grabs; 2 trucks 30 tons capacity each; 1 pay loader; 2 fork lift trucks; 1 stationary crane; 1 steel barge 500 tons capacity; 1 tugboat (2 diesel engines 180 h.p. each).

Loading/discharging operations: Raw material for the nickel plant is imported as well as fuel oil. Nickel concentrate is exported.

Loading/discharging rate – Nickel (in containers): loaded at a rate of approximately 30 tons per hour-gang.

MEDICAL: Industrial Hospital where crew members can be hospitalised. General Hospital at Baracoa.

FUEL: Not available.

FRESH WATER: Delivery at rate of about 10 t.p.h.

REPAIRS: There are machine shops at nickel plant where small emergency repairs can be performed.

AUTHORITY: Port Doctor, Customs and Port Captain Delegations at this sub-port. Immigration Delegate is the same one who attends vessels at Baracoa and other sub-ports. Vessels can proceed directly to Moa where they are cleared by Port Authorities. Means of transportation from Baracoa to Moa or other sub-ports are: air, launch and overland (jeep). Customs House inspectors travel from Moa to Baracoa.

Baracoa to Moa about 32 miles distant. Following services used: by plane, 20 minutes; by launch, 6 hours; by jeep, 5 hours. Daily flights and regular bus services.

AGENT: Empresa Consignataria Mambisa, Agencia Moa, Reparto "Rolo Monterrey" No. 163, Moa, Prov. de Oriente. Telephone: 429 (day and night). Cable: Mambisas Moa.

Nickel loading and other cargoes: Monday to Friday: 0800 – 1130 hrs., 1230 – 1700 hrs. Saturday: Same periods.

On Sundays the port does not perform any work, except discharging of tanker vessels.

Labour legislation presently in force provides that the numbers of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

TANKERS: No molasses or alcohol re-loaded. Only fuel oil, liquid ammonia and gas oil are discharged. Average discharging of fuel oil at present is about 400 t.p.h. Liquid ammonia discharge averages about 27 metric t.p.h.

MEDICAL: Hospital at Nicaro offers good service to ships' crew members. In case of special attention, the patient can be taken to Holguin, where there are reliable specialists.

Dental care is available at Levisa, 6 km. distant.

WATER: *(Potable or for boilers):* It is supplied to vessels while docked to Nicaro pier (both sides). Average delivery rate: 30 t.p.h.

Water is delivered usually by night in order not to disturb the Nickel Plant production, although, occasionally it is delivered during the daytime. Vessels must furnish the hoses.

FUEL: Not available.

REPAIRS: There is no repair shop at this port.

DISTANCES: The nautical distance between Nicaro and Antilla for vessels drawing over 6 ft. draft is 24 miles. For small craft drawing less than 6 ft. the distance is 14 miles. By highway, 130 km. from Nicaro to Antilla.

Sea transportation takes 1 hour 45 minutes, and highway 2 hours 30 minutes. There is a daily launch service between Nicaro and Antilla. Launch leaves Antilla 0930 hrs. arriving at Nicaro at 1130 hrs. and a launch leaves Nicaro at 0930 hrs. arriving at Antilla at 1130 hrs.

AUTHORITY: Sub-port of Nicaro is under Antilla Custom House jurisdiction. There is a Custom House Delegate at this sub-port, who acts as a Delegate of the Captain of the Port.

Vessels at Nicaro are handled by personnel of Antilla offices who visit Nicaro, and are located at Oficina de la Marina, Tel. 216. In case this office is closed, these personnel could also be contacted through Customs House telephone of Nicaro.

AGENT: Antilla Agency personnel attend. Agent has a small office, close to the pier, telephone number 62.

(c) SUB-PORT OF FELTON:

LOCATION: This port is located on the North Coast of Cuba: Lat. 20° 44′ 45″ N., Long. 75° 35′ 40″ W.

Felton, as are Antilla and Preston, is located in Nipe Bay and is the closest port to the Bay entrance.

It is located 1.75 miles to the S.W. of Saetia, just in Cajimaya Cove and 3 miles East of Preston.

At the present time this port mainly handles the importations of raw materials for the fertiliser plant in the vicinity of the port.

PILOT: From the place where Pilot boards the vessel to Felton Pier there is a distance of 5 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: As described under Antilla, up to Pt. Carenero (Saetia), the channel is common to the three ports located in Nipe Bay.

On reaching Pt. Carenero, vessels turn course Southward seeking Felton Channel and after four changes in the pilotage route the port is seen.

The most remarkable points of visual orientation after Pt. Carenero is sailed past, are:

On the East side: Saetia Cay, Points Campeador No. 1, 2 and 3; light buoys Nos. 1-A and 3-A (green light) and the unlit buoys indicating the port channel.

On the West side: Pt. Cobos, Pt. Largo, the town of Felton and the unlit buoys marking the channel.

Entrance to the port up to Cajimaya Anchorage can be effected either in day or night-time, but docking or undocking is performed only during daylight hours, if it is not windy.

Limitations as to draft and length of vessels are those imposed by the place of operation or Cajimaya Anchorage. Anchorage for this port is Cajimaya Anchorage, but Saetia Anchorage can also be used.

TIDAL VARIATION: Tidal variation at this port averages from 2.25 ft. to 2.5 ft.

CLEARANCE: Vessels can proceed directly to Felton, as Port Authorities from Antilla are taken by launch to visit vessel at Felton pier, or at sea in Cagimaya Anchorage.

RADIO: Ships can communicate with Felton by wireless via CLA, but it is recommended that ETA messages be given to Mambisas Antilla and Mambisas Havana simultaneously.

The means of communication between Felton and Antilla are telephone and telegraph.

BERTHING: The place of operation of Felton is a solid coastal-pier built of concrete, although vessels are not docked directly at it.

Vessels are berthed to 3 solid steel dolphins, the first and the third being spaced 350 ft. apart.

Dolphins are located at about 50 ft. from the side of the pier and therefore vessels are 50 ft. off the pier.

Pier is located at the East side of that portion of land on Nipe Bay and runs from North to South.

Besides the three solid dolphins, vessels are secured also to two mooring buoys located 250 m. to the West, in front of and parallel to the pier.

There is an electric shore crane mounted on rails that runs along the pier, which is used mainly for the discharge of bulk raw materials for fertilisers, with a 4 ton grab. If the grab is removed the crane is capable of lifting up to 40 tons, and can be used for the discharging of heavy equipment, such as tractors, bulldozers, etc. This crane has a wide field of operation.

Also in operation at this port is a device called "Unicular", a kind of hopper-car, which runs on rails from the hatch of the vessel to the pier, and is loaded by ship's gear to its full capacity of 3 tons.

Taking into consideration the characteristics of pier, the manoeuvring basin and the approach channel to place of operations, the following regulations must be followed:

Vessels up to 500 ft. length:

Can dock without tugboat assistance, during daylight hours, if the wind and sea do not interfere with the manoeuvres.

Same conditions for undocking.

Maximum draft allowed 28 ft.

Vessels longer than 500 ft. and up to a maximum of 557 ft. length:

(a) Assistance of tugboat, of 750 h.p. or more, is required.
(b) Vessels must dock with bow facing North.
(c) Docking must be effected during flood tide.
(d) Condition of sea and wind at the time of docking must be taken into consideration in order to avoid interference of wind and sea with the manoeuvres.
(e) Maximum draft allowed is 26 ft. or 27 ft., depending on the type of vessel, its manoeuvrability, etc.

Tanker Information: Fuel oil: 1×8 in. diameter.

For discharging fertiliser raw materials or fuel oil, 24 hours a day are worked, Saturdays and Sundays included. For general cargo, when occasionally discharged, from 0700 hrs. to 1500 hrs. Monday to Saturday. Berthing space of this port only permits operating 1 vessel at a time.

No cargo operations conducted in bay.

MEDICAL: There is a small hospital at Felton where crew members requiring medical and dental care are attended.

Cases requiring surgical or specialised treatment, are sent either to Mayari Hospital or Lenin Hospital, at Holguin.

FRESH WATER: Temporarily no water available at Felton.

FUEL: Not available.

REPAIRS: Cannot be performed at this port.

TRANSPORTATION: Usual means of transportation between Felton and Antilla, and other nearby ports, is by launch and also by road.

From Felton there are the following distances and travelling time to:

	By launch		By road
Antilla	11 miles –	1 hr. 30 min.	2 hrs. 30 min.
Nicaro	3 miles –	30 min.	50 min.
Preston	4 miles	40 min.	1 hr.

AUTHORITY: The Port Authorities are located at Antilla and visit Felton as necessary.

AGENT: See "Antilla". Mail should be sent through Antilla's main office by registered mail. Spares by railway express to Antilla.

BANES: 20.54 N. 75.41 W.

LOCATION: Banes is located on the North coast of Cuba: Lat. 20° 53′ N., Long. 75° 40′ W.

Banes is a sheltered, landlocked port located next and to the West of Nipe Bay.

Traditionally this port used to ship raw sugar and molasses, that is, the production of "Nicaragua" sugar mill, formerly "Boston".

Due to limitations imposed by the characteristics of this port to the length of vessels, and the constant increase in size and tonnage of vessels operating currently in Cuba, gradually the port lost its use and importance, and nowadays is only used for coastal trade.

While approaching Banes, the points of visual orientation are:

Banes Bay Light, shown from a red iron skeleton structure, 30 ft. above sea level, situated about 400 yds. Southward of Pt. Fuerte. A small house located on the Southern side of the entrance to bay, and the port entrance itself, cliffs at both sides and forming a remarkable canyon.

Banes port mouth lighthouse is located on the Western extremity of Caracolillo Beach, between Pt. Fuerte and Pt. Penasco.

At the extremity of Pt. Penasco there is a masonry house, visible up to 2 or 3 miles away.

PILOTAGE: Vessels should pick up Pilot at 20° 53′ N., 75° 29′ W., 1 mile N.E. of Banes Canyon Lighthouse. Pilot station located at Embarcadero (Banes). Agent informs Pilot of ship's arrival by means of local telephone. Distance from point where Pilot boards vessel to pier is about 6 miles.

RESTRICTIONS: Entrance is through narrow channel with sharp turns where there is a strong current. For this reason vessels can only enter on slack water tide and during daylight. Assistance of tug necessary for entering and sailing. Bottom and banks are rock and coral. Depth about 60 ft.

MAX. SIZE: Max. length due to characteristic of channel is of 360 ft. Due to insufficient water at pier, and in bay, ships are limited to draft 19 ft. forward and 23 ft. aft.

Average of about 2 ft. 4 in. between high and low tides.

ANCHORAGES: *Macabi Anchorage:* Located S.S.W. of Nicaragua Pier.

Limitations: Max. draft 31 ft., max. length 360 ft. Swinging area: About 620 m.

Anchorage can accommodate 2 or 3 vessels.

Bottom is soft mud but anchors hold well and vessels anchor with 3 or 4 shackles of chain.

TUGS: At present no tug available, but when needed same is requested from Antilla. Particulars of tug shown under Antilla information.

RADIO: Ships can communicate with port by wireless via CLA, but recommended that ETA message be sent to Antilla Agency, simultaneously advising Mambisas Havana.

MEDICAL: There is a hospital where sick crew members may be hospitalised. Dental care is also available.

FRESH WATER: Fresh water supplied, delivered by 3 in. diameter pipeline, with average delivery 4 t.p.h.

FUEL: Not available.

BERTHING: Nicaragua Pier (formerly Banes Pier): Length 240 ft., max. length allowed to vessels 360 ft., draft 19 ft. forward and 23 ft. aft.

The pier is built entirely of wood and in need of repairs.

Only 1 vessel can be berthed.

At the present time only cargo handled is the discharge of fuel oil (coastal trade).

Tanker Information: Fuel oil: 1×8 in. diameter.

No cargo operations performed at anchorage.

STEVEDORES: *Working Periods:* For discharge of fuel oil: 24 hours a day, 7 days a week.

Dry cargo vessels operate Monday to Friday: 0700 – 1100 hrs., 1300 – 1700 hrs. Saturday: 0700 – 1100 hrs. Sunday: No work performed.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday; and 4 hours on Saturday, for a total of 44 hours weekly.

REPAIRS: No repairs can be effected at this port.

TRANSPORTATION: Transportation between Nicaragua Pier and Antilla or Banes is by road. From the pier to Banes there is a distance of 15 km. and to Antilla 50 km.

COMMUNICATIONS: Only means of communications between Antilla and Banes are telephone and telegraph.

PORT AUTHORITIES: All Port Authorities are located at Antilla except Port Captaincy which is located at Banes.

Authorities travel from Antilla to clear vessels at Banes.

AGENT: See "Antilla".

For information regarding ship's operations, Antilla Agency should be contacted. Antilla office personnel travel to Banes to attend vessels operating there. Any mail should be addressed to Antilla Agency. Spare parts by railway express.

BARACOA: 20.21 N. 74.30 W. (See Plan Book)

(Sub-ports: Moa and Punta Gorda)

LOCATION: This port is located on the North coast of the extreme Eastern portion of Cuba in Oriente Province:

Lat: 20° 21′ N., Long: 74° 30′ W.

Its bay is fan shaped and is almost in its entirety sand and mud bottom, 325 yds. in width at its entrance, and opens out to 1,150 yds. in a N.W. and S.W. direction, and 800 yds. in breadth.

Its shores are bordered by sand banks.

"Buren", an isolated rock visible only at low tide, lies about 30 yds. North-Westward of Pt. Barlovento; the sea always breaks on it; it is steep-to and constitutes the only danger.

S.E. of the town is Miel Bay where excellent anchorage is available.

PILOTAGE: Pilots board vessels 2 miles off port. Pilot station located in Baracoa City. Distance from point where Pilots board vessels to operation place (anchorage) is about 2 miles.

RESTRICTIONS: Vessels can enter port only during daylight.

MAX. SIZE: Entrance channel straight – without turns. Vessels up to 400 ft. length and 28 ft. draft can enter through Channel. Two to 3 ft. rise of tide.

TUGS: Not available.

RADIO: Vessels navigating to Baracoa can communicate with the port Agency through "CLA" Havana Radio Station which relays the messages promptly to Baracoa.

Masters must send their ETA messages simultaneously to Simon Baracoa and Mambisas Havana.

STEVEDORES: No pier at this port. Vessels anchor in bay for operations. Several barges, capacity 100 tons.

Only one vessel can be handled at a time.

Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Discharge rate: about 80 tons daily per gang.

MEDICAL: There is a general hospital for sick crew.

FUEL/FRESH WATER/REPAIRS: Not available.

TRANSPORTATION: Transportation to and from Baracoa is difficult.

There is daily air service and also bus service to Moa and other towns in the province, but best advisable means of travel is by car.

AUTHORITY: Port Authorities located at Baracoa. They have Delegation at Sub-port of Moa.

AGENT: (Sub-agency): Empresa Nacional de Cabotaje, Calle 1ro. de Abril No. 14, PO Box No. 27, Baracoa, Oriente, Cuba. Cable: "Simon Baracoa".

When needed to obtain information regarding ships operating at Moa or Punta Gordo, sub-agency at Baracoa should be contacted. When office closed, telephone number 81 should be called. Mail and parcels to be sent directly to Baracoa Agency.

SUB-PORT OF MOA (Moa Bay): 20.41.15 N. 74.52.30 W.

Vessels can proceed directly to sub-ports of Moa and Punta Gorda where they are visited by Customs Authorities.

LOCATION: The port of Moa is situated in the rear part of Yaguasey Bay, where in an artificial inner harbour lies the pier of Moa, and at the entrance of the inner harbour a small coastal trade pier.

Both the port of Moa and the sub-port of Punta Gorda mainly handle the imports and exports of the huge mining enterprise, Major Pedro Soto Alba.

PILOTAGE: Pilots board vessels at Moa Port mouth which is distant about 2 miles from entrance. Pilot station located at Punta Gorda at distance of about 5 miles from port entrance. Distance from point where Pilot boards vessel to Darsena de Moa (pier) is about 4 miles; to Moa Anchorage about 2 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: Entrance channel to Moa is almost straight having two very slight turns, minimum depth on its course is 40 ft. and length and draft limitations to enter to or sail from this port are those imposed by Moa pier and inner harbour:

Draft: Vessels drawing 28 ft. 6 in. can enter/sail at any tide, those drawing more than 28 ft. 6 in. up to 30 ft. only at high tide.

Length: 500 ft.

Channel bottom from its head up to the pier is as follows: From the head to Grande or Del Medio Shoal, coral and rocks; then up to Yaguasey Bay, coral and mud; and on its final stretch to the pier, hard red mud.

Length of channel: 1,560 m.; minimum width 200 m. and maximum 720 m.

For both, Moa and Punta Gorda, entrance to or sailing from, can only be performed during daylight.

As tidal currents average only 1.25 m.p.h., and since the inner harbour is almost devoid of currents, it is not necessary to wait for slack water for entering, sailing or crossing the channels.

Approaching the port of Moa, at both sides of port entrance, strings of breakwaters can be seen.

Behind the Western side breakwater, Moa Grande Cay is conspicuous and a lighthouse rises at about the middle of its North coast.

ANCHORAGES: Moa: *Anchorage No. 1:* Located Northward of Fabrica River and S.E. of Pt. Pajaros: Lat. 20° 40′ 38″ N., Long. 74° 53′ 10″ W.

Minimum depth: 38 ft. Swinging area: 250 m.

Anchorage No. 2: Located Northward of Fabrica River and South of the Eastern extreme of Moa Grande Cay: Lat. 20° 40′ 35″ N., Long. 74° 53′ 28″ W.

Minimum depth: 37 ft. Swinging area: 250 m.

Anchorage No. 3: Located N.W. of Del Medio Shoal: Lat. 20° 40′ 32″ N., Long. 74° 54′ 04″ W.

Minimum depth: 68 ft. Swinging area: 300 m.

Anchorage No. 4: Located Northward of Del Medio Shoal: Lat. 20° 40′ 43″ N., Long. 74° 52′ 30″ W.

Minimum depth: 41 ft. Swinging area: 250 m.

Although above anchorages are listed under the port of Moa, they can be used if necessary, for shipping or unloading cargoes destined to Punta Gorda.

TIDAL VARIATION: Tidal variation at these ports averages 30 in.

TUGS: Tug used at Moa for docking. Tug operated by Mining Enterprises.

RADIO: There is a Government Radio Station at Moa.

Vessels navigating to Cuba can communicate with Mambisas Moa through "CLA" Havana Radio Station and the message will be relayed to Moa by telegraph or telex.

Masters must send their ETA messages to Moa or Punta Gorda, simultaneously to Mambisas Moa and Mambisas Habana.

BERTHING: *(a) Moa Pier* (Also known as Moa Darsena): It is a solid concrete construction in an artificial inner harbour. Berthing length: 308 ft. Max. length permitted to vessels: 500 ft. Draft: Vessels drawing 28 ft. 6 in. can enter/sail at any tide, those drawing more than 28 ft. 6 in. up to 30 ft. only at high tide.

Due to pier dimensions, only 4 hatches can be worked at a time, but despite above limitations, occasionally larger vessels have been operated.

Cargo handled by this pier: Importation: Bulk sulphur, empty ore containers, occasionally general cargo.

Exportation: Nickel and cobalt concentrate in containers and drums.

Coastal trade: Discharge of fuel oil, diesel oil, kerosene, gasoline, sulphuric acid.

Tanker Information: Mining Enterprise: Gasoline/kerosene: one connection 6 in. diameter. Fuel oil: 4 connections 8 in. diameter.

ICP: Gasoline/kerosene/diesel oil: one connection 6 in. diameter.

(b) Coastal Trade Pier: It is a small coastal pier for small vessels, located at the entrance of the inner harbour. Constructed of piles and filled with earth.

Cargo handled by this pier: Coastal trade, general cargo.

No cargo operations in the bay.

STEVEDORES: *Working Hours:* Monday to Friday 0700 – 1100 hrs., 1300 – 1700 hrs. Saturdays 0700 – 1100 hrs.

EQUIPMENT: 1 shore crane 30 tons with 3 tons grab; 4 contact grabs; 2 trucks 30 tons capacity each; 1 pay loader; 2 fork lift trucks; 1 stationary crane; 1 steel barge 500 tons capacity; 1 tugboat (2 diesel engines 180 h.p. each).

Loading/discharging operations: Raw material for the nickel plant is imported as well as fuel oil. Nickel concentrate is exported.

Loading/discharging rate – Nickel (in containers): loaded at a rate of approximately 30 tons per hour-gang.

MEDICAL: Industrial Hospital where crew members can be hospitalised. General Hospital at Baracoa.

FUEL: Not available.

FRESH WATER: Delivery at rate of about 10 t.p.h.

REPAIRS: There are machine shops at nickel plant where small emergency repairs can be performed.

AUTHORITY: Port Doctor, Customs and Port Captain Delegations at this sub-port. Immigration Delegate is the same one who attends vessels at Baracoa and other sub-ports. Vessels can proceed directly to Moa where they are cleared by Port Authorities. Means of transportation from Baracoa to Moa or other sub-ports are: air, launch and overland (jeep). Customs House inspectors travel from Moa to Baracoa.

Baracoa to Moa about 32 miles distant. Following services used: by plane, 20 minutes; by launch, 6 hours; by jeep, 5 hours. Daily flights and regular bus services.

AGENT: Empresa Consignataria Mambisa, Agencia Moa, Reparto "Rolo Monterrey" No. 163, Moa, Prov. de Oriente. Telephone: 429 (day and night). Cable: Mambisas Moa.

Nickel loading and other cargoes: Monday to Friday: 0800 – 1130 hrs., 1230 – 1700 hrs. Saturday: Same periods.

On Sundays the port does not perform any work, except discharging of tanker vessels.

Labour legislation presently in force provides that the numbers of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

TANKERS: No molasses or alcohol re-loaded. Only fuel oil, liquid ammonia and gas oil are discharged. Average discharging of fuel oil at present is about 400 t.p.h. Liquid ammonia discharge averages about 27 metric t.p.h.

MEDICAL: Hospital at Nicaro offers good service to ships' crew members. In case of special attention, the patient can be taken to Holguin, where there are reliable specialists.

Dental care is available at Levisa, 6 km. distant.

WATER: *(Potable or for boilers):* It is supplied to vessels while docked to Nicaro pier (both sides). Average delivery rate: 30 t.p.h.

Water is delivered usually by night in order not to disturb the Nickel Plant production, although, occasionally it is delivered during the daytime. Vessels must furnish the hoses.

FUEL: Not available.

REPAIRS: There is no repair shop at this port.

DISTANCES: The nautical distance between Nicaro and Antilla for vessels drawing over 6 ft. draft is 24 miles. For small craft drawing less than 6 ft. the distance is 14 miles. By highway, 130 km. from Nicaro to Antilla.

Sea transportation takes 1 hour 45 minutes, and highway 2 hours 30 minutes. There is a daily launch service between Nicaro and Antilla. Launch leaves Antilla 0930 hrs. arriving at Nicaro at 1130 hrs. and a launch leaves Nicaro at 0930 hrs. arriving at Antilla at 1130 hrs.

AUTHORITY: Sub-port of Nicaro is under Antilla Custom House jurisdiction. There is a Custom House Delegate at this sub-port, who acts as a Delegate of the Captain of the Port.

Vessels at Nicaro are handled by personnel of Antilla offices who visit Nicaro, and are located at Oficina de la Marina, Tel. 216. In case this office is closed, these personnel could also be contacted through Customs House telephone of Nicaro.

AGENT: Antilla Agency personnel attend. Agent has a small office, close to the pier, telephone number 62.

(c) SUB-PORT OF FELTON:

LOCATION: This port is located on the North Coast of Cuba: Lat. 20° 44′ 45″ N., Long. 75° 35′ 40″ W.

Felton, as are Antilla and Preston, is located in Nipe Bay and is the closest port to the Bay entrance.

It is located 1.75 miles to the S.W. of Saetia, just in Cajimaya Cove and 3 miles East of Preston.

At the present time this port mainly handles the importations of raw materials for the fertiliser plant in the vicinity of the port.

PILOT: From the place where Pilot boards the vessel to Felton Pier there is a distance of 5 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: As described under Antilla, up to Pt. Carenero (Saetia), the channel is common to the three ports located in Nipe Bay.

On reaching Pt. Carenero, vessels turn course Southward seeking Felton Channel and after four changes in the pilotage route the port is seen.

The most remarkable points of visual orientation after Pt. Carenero is sailed past, are:

On the East side: Saetia Cay, Points Campeador No. 1, 2 and 3; light buoys Nos. 1-A and 3-A (green light) and the unlit buoys indicating the port channel.

On the West side: Pt. Cobos, Pt. Largo, the town of Felton and the unlit buoys marking the channel.

Entrance to the port up to Cajimaya Anchorage can be effected either in day or night-time, but docking or undocking is performed only during daylight hours, if it is not windy.

Limitations as to draft and length of vessels are those imposed by the place of operation or Cajimaya Anchorage. Anchorage for this port is Cajimaya Anchorage, but Saetia Anchorage can also be used.

TIDAL VARIATION: Tidal variation at this port averages from 2.25 ft. to 2.5 ft.

CLEARANCE: Vessels can proceed directly to Felton, as Port Authorities from Antilla are taken by launch to visit vessel at Felton pier, or at sea in Cagimaya Anchorage.

RADIO: Ships can communicate with Felton by wireless via CLA, but it is recommended that ETA messages be given to Mambisas Antilla and Mambisas Havana simultaneously.

The means of communication between Felton and Antilla are telephone and telegraph.

BERTHING: The place of operation of Felton is a solid coastal-pier built of concrete, although vessels are not docked directly at it.

Vessels are berthed to 3 solid steel dolphins, the first and the third being spaced 350 ft. apart.

Dolphins are located at about 50 ft. from the side of the pier and therefore vessels are 50 ft. off the pier.

Pier is located at the East side of that portion of land on Nipe Bay and runs from North to South.

Besides the three solid dolphins, vessels are secured also to two mooring buoys located 250 m. to the West, in front of and parallel to the pier.

There is an electric shore crane mounted on rails that runs along the pier, which is used mainly for the discharge of bulk raw materials for fertilisers, with a 4 ton grab. If the grab is removed the crane is capable of lifting up to 40 tons, and can be used for the discharging of heavy equipment, such as tractors, bulldozers, etc. This crane has a wide field of operation.

Also in operation at this port is a device called "Unicular", a kind of hopper-car, which runs on rails from the hatch of the vessel to the pier, and is loaded by ship's gear to its full capacity of 3 tons.

Taking into consideration the characteristics of pier, the manoeuvring basin and the approach channel to place of operations, the following regulations must be followed:

Vessels up to 500 ft. length:

Can dock without tugboat assistance, during daylight hours, if the wind and sea do not interfere with the manoeuvres.

Same conditions for undocking.

Maximum draft allowed 28 ft.

Vessels longer than 500 ft. and up to a maximum of 557 ft. length:

(a) Assistance of tugboat, of 750 h.p. or more, is required.
(b) Vessels must dock with bow facing North.
(c) Docking must be effected during flood tide.
(d) Condition of sea and wind at the time of docking must be taken into consideration in order to avoid interference of wind and sea with the manoeuvres.
(e) Maximum draft allowed is 26 ft. or 27 ft., depending on the type of vessel, its manoeuvrability, etc.

Tanker Information: Fuel oil: 1×8 in. diameter.

For discharging fertiliser raw materials or fuel oil, 24 hours a day are worked, Saturdays and Sundays included. For general cargo, when occasionally discharged, from 0700 hrs. to 1500 hrs. Monday to Saturday. Berthing space of this port only permits operating 1 vessel at a time.

No cargo operations conducted in bay.

MEDICAL: There is a small hospital at Felton where crew members requiring medical and dental care are attended.

Cases requiring surgical or specialised treatment, are sent either to Mayari Hospital or Lenin Hospital, at Holguin.

FRESH WATER: Temporarily no water available at Felton.

FUEL: Not available.

REPAIRS: Cannot be performed at this port.

TRANSPORTATION: Usual means of transportation between Felton and Antilla, and other nearby ports, is by launch and also by road.

From Felton there are the following distances and travelling time to:

	By launch	By road
Antilla	11 miles – 1 hr. 30 min.	2 hrs. 30 min.
Nicaro	3 miles – 30 min.	50 min.
Preston	4 miles – 40 min.	1 hr.

AUTHORITY: The Port Authorities are located at Antilla and visit Felton as necessary.

AGENT: See "Antilla". Mail should be sent through Antilla's main office by registered mail. Spares by railway express to Antilla.

BANES: 20.54 N. 75.41 W.

LOCATION: Banes is located on the North coast of Cuba: Lat. 20° 53′ N., Long. 75° 40′ W.

Banes is a sheltered, landlocked port located next and to the West of Nipe Bay.

Traditionally this port used to ship raw sugar and molasses, that is, the production of "Nicaragua" sugar mill, formerly "Boston".

Due to limitations imposed by the characteristics of this port to the length of vessels, and the constant increase in size and tonnage of vessels operating currently in Cuba, gradually the port lost its use and importance, and nowadays is only used for coastal trade.

While approaching Banes, the points of visual orientation are:

Banes Bay Light, shown from a red iron skeleton structure, 30 ft. above sea level, situated about 400 yds. Southward of Pt. Fuerte. A small house located on the Southern side of the entrance to bay, and the port entrance itself, cliffs at both sides and forming a remarkable canyon.

Banes port mouth lighthouse is located on the Western extremity of Caracolillo Beach, between Pt. Fuerte and Pt. Penasco.

At the extremity of Pt. Penasco there is a masonry house, visible up to 2 or 3 miles away.

PILOTAGE: Vessels should pick up Pilot at 20° 53′ N., 75° 29′ W., 1 mile N.E. of Banes Canyon Lighthouse. Pilot station located at Embarcadero (Banes). Agent informs Pilot of ship's arrival by means of local telephone. Distance from point where Pilot boards vessel to pier is about 6 miles.

RESTRICTIONS: Entrance is through narrow channel with sharp turns where there is a strong current. For this reason vessels can only enter on slack water tide and during daylight. Assistance of tug necessary for entering and sailing. Bottom and banks are rock and coral. Depth about 60 ft.

MAX. SIZE: Max. length due to characteristic of channel is of 360 ft. Due to insufficient water at pier, and in bay, ships are limited to draft 19 ft. forward and 23 ft. aft.

Average of about 2 ft. 4 in. between high and low tides.

ANCHORAGES: *Macabi Anchorage:* Located S.S.W. of Nicaragua Pier.

Limitations: Max. draft 31 ft., max. length 360 ft. Swinging area: About 620 m.

Anchorage can accommodate 2 or 3 vessels.

Bottom is soft mud but anchors hold well and vessels anchor with 3 or 4 shackles of chain.

TUGS: At present no tug available, but when needed same is requested from Antilla. Particulars of tug shown under Antilla information.

RADIO: Ships can communicate with port by wireless via CLA, but recommended that ETA message be sent to Antilla Agency, simultaneously advising Mambisas Havana.

MEDICAL: There is a hospital where sick crew members may be hospitalised. Dental care is also available.

FRESH WATER: Fresh water supplied, delivered by 3 in. diameter pipeline, with average delivery 4 t.p.h.

FUEL: Not available.

BERTHING: Nicaragua Pier (formerly Banes Pier): Length 240 ft., max. length allowed to vessels 360 ft., draft 19 ft. forward and 23 ft. aft.

The pier is built entirely of wood and in need of repairs.

Only 1 vessel can be berthed.

At the present time only cargo handled is the discharge of fuel oil (coastal trade).

Tanker Information: Fuel oil: 1×8 in. diameter.

No cargo operations performed at anchorage.

STEVEDORES: *Working Periods:* For discharge of fuel oil: 24 hours a day, 7 days a week.

Dry cargo vessels operate Monday to Friday: 0700 – 1100 hrs., 1300 – 1700 hrs. Saturday: 0700 – 1100 hrs. Sunday: No work performed.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday; and 4 hours on Saturday, for a total of 44 hours weekly.

REPAIRS: No repairs can be effected at this port.

TRANSPORTATION: Transportation between Nicaragua Pier and Antilla or Banes is by road. From the pier to Banes there is a distance of 15 km. and to Antilla 50 km.

COMMUNICATIONS: Only means of communications between Antilla and Banes are telephone and telegraph.

PORT AUTHORITIES: All Port Authorities are located at Antilla except Port Captaincy which is located at Banes.

Authorities travel from Antilla to clear vessels at Banes.

AGENT: See "Antilla".

For information regarding ship's operations, Antilla Agency should be contacted. Antilla office personnel travel to Banes to attend vessels operating there. Any mail should be addressed to Antilla Agency. Spare parts by railway express.

BARACOA: 20.21 N. 74.30 W. (See Plan Book)

(Sub-ports: Moa and Punta Gorda)

LOCATION: This port is located on the North coast of the extreme Eastern portion of Cuba in Oriente Province:

Lat: 20° 21′ N., Long: 74° 30′ W.

Its bay is fan shaped and is almost in its entirety sand and mud bottom, 325 yds. in width at its entrance, and opens out to 1,150 yds. in a N.W. and S.W. direction, and 800 yds. in breadth.

Its shores are bordered by sand banks.

"Buren", an isolated rock visible only at low tide, lies about 30 yds. North-Westward of Pt. Barlovento; the sea always breaks on it; it is steep-to and constitutes the only danger.

S.E. of the town is Miel Bay where excellent anchorage is available.

PILOTAGE: Pilots board vessels 2 miles off port. Pilot station located in Baracoa City. Distance from point where Pilots board vessels to operation place (anchorage) is about 2 miles.

RESTRICTIONS: Vessels can enter port only during daylight.

MAX. SIZE: Entrance channel straight – without turns. Vessels up to 400 ft. length and 28 ft. draft can enter through Channel. Two to 3 ft. rise of tide.

TUGS: Not available.

RADIO: Vessels navigating to Baracoa can communicate with the port Agency through "CLA" Havana Radio Station which relays the messages promptly to Baracoa.

Masters must send their ETA messages simultaneously to Simon Baracoa and Mambisas Havana.

STEVEDORES: No pier at this port. Vessels anchor in bay for operations. Several barges, capacity 100 tons.

Only one vessel can be handled at a time.

Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

Labour legislation presently in force provides that the number of hours to be worked is 8 hours daily, from Monday to Friday, and 4 hours on Saturday, for a total of 44 hours weekly.

Discharge rate: about 80 tons daily per gang.

MEDICAL: There is a general hospital for sick crew.

FUEL/FRESH WATER/REPAIRS: Not available.

TRANSPORTATION: Transportation to and from Baracoa is difficult.

There is daily air service and also bus service to Moa and other towns in the province, but best advisable means of travel is by car.

AUTHORITY: Port Authorities located at Baracoa. They have Delegation at Sub-port of Moa.

AGENT: (Sub-agency): Empresa Nacional de Cabotaje, Calle 1ro. de Abril No. 14, PO Box No. 27, Baracoa, Oriente, Cuba. Cable: "Simon Baracoa".

When needed to obtain information regarding ships operating at Moa or Punta Gordo, sub-agency at Baracoa should be contacted. When office closed, telephone number 81 should be called. Mail and parcels to be sent directly to Baracoa Agency.

SUB-PORT OF MOA (Moa Bay): 20.41.15 N. 74.52.30 W.

Vessels can proceed directly to sub-ports of Moa and Punta Gorda where they are visited by Customs Authorities.

LOCATION: The port of Moa is situated in the rear part of Yaguasey Bay, where in an artificial inner harbour lies the pier of Moa, and at the entrance of the inner harbour a small coastal trade pier.

Both the port of Moa and the sub-port of Punta Gorda mainly handle the imports and exports of the huge mining enterprise, Major Pedro Soto Alba.

PILOTAGE: Pilots board vessels at Moa Port mouth which is distant about 2 miles from entrance. Pilot station located at Punta Gorda at distance of about 5 miles from port entrance. Distance from point where Pilot boards vessel to Darsena de Moa (pier) is about 4 miles; to Moa Anchorage about 2 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: Entrance channel to Moa is almost straight having two very slight turns, minimum depth on its course is 40 ft. and length and draft limitations to enter to or sail from this port are those imposed by Moa pier and inner harbour:

Draft: Vessels drawing 28 ft. 6 in. can enter/sail at any tide, those drawing more than 28 ft. 6 in. up to 30 ft. only at high tide.

Length: 500 ft.

Channel bottom from its head up to the pier is as follows: From the head to Grande or Del Medio Shoal, coral and rocks; then up to Yaguasey Bay, coral and mud; and on its final stretch to the pier, hard red mud.

Length of channel: 1,560 m.; minimum width 200 m. and maximum 720 m.

For both, Moa and Punta Gorda, entrance to or sailing from, can only be performed during daylight.

As tidal currents average only 1.25 m.p.h., and since the inner harbour is almost devoid of currents, it is not necessary to wait for slack water for entering, sailing or crossing the channels.

Approaching the port of Moa, at both sides of port entrance, strings of breakwaters can be seen.

Behind the Western side breakwater, Moa Grande Cay is conspicuous and a lighthouse rises at about the middle of its North coast.

ANCHORAGES: Moa: *Anchorage No. 1:* Located Northward of Fabrica River and S.E. of Pt. Pajaros: Lat. 20° 40′ 38″ N., Long. 74° 53′ 10″ W.

Minimum depth: 38 ft. Swinging area: 250 m.

Anchorage No. 2: Located Northward of Fabrica River and South of the Eastern extreme of Moa Grande Cay: Lat. 20° 40′ 35″ N., Long. 74° 53′ 28″ W.

Minimum depth: 37 ft. Swinging area: 250 m.

Anchorage No. 3: Located N.W. of Del Medio Shoal: Lat. 20° 40′ 32″ N., Long. 74° 54′ 04″ W.

Minimum depth: 68 ft. Swinging area: 300 m.

Anchorage No. 4: Located Northward of Del Medio Shoal: Lat. 20° 40′ 43″ N., Long. 74° 52′ 30″ W.

Minimum depth: 41 ft. Swinging area: 250 m.

Although above anchorages are listed under the port of Moa, they can be used if necessary, for shipping or unloading cargoes destined to Punta Gorda.

TIDAL VARIATION: Tidal variation at these ports averages 30 in.

TUGS: Tug used at Moa for docking. Tug operated by Mining Enterprises.

RADIO: There is a Government Radio Station at Moa.

Vessels navigating to Cuba can communicate with Mambisas Moa through "CLA" Havana Radio Station and the message will be relayed to Moa by telegraph or telex.

Masters must send their ETA messages to Moa or Punta Gorda, simultaneously to Mambisas Moa and Mambisas Habana.

BERTHING: *(a) Moa Pier* (Also known as Moa Darsena): It is a solid concrete construction in an artificial inner harbour. Berthing length: 308 ft. Max. length permitted to vessels: 500 ft. Draft: Vessels drawing 28 ft. 6 in. can enter/sail at any tide, those drawing more than 28 ft. 6 in. up to 30 ft. only at high tide.

Due to pier dimensions, only 4 hatches can be worked at a time, but despite above limitations, occasionally larger vessels have been operated.

Cargo handled by this pier: Importation: Bulk sulphur, empty ore containers, occasionally general cargo.

Exportation: Nickel and cobalt concentrate in containers and drums.

Coastal trade: Discharge of fuel oil, diesel oil, kerosene, gasoline, sulphuric acid.

Tanker Information: Mining Enterprise: Gasoline/kerosene: one connection 6 in. diameter. Fuel oil: 4 connections 8 in. diameter.

ICP: Gasoline/kerosene/diesel oil: one connection 6 in. diameter.

(b) Coastal Trade Pier: It is a small coastal pier for small vessels, located at the entrance of the inner harbour. Constructed of piles and filled with earth.

Cargo handled by this pier: Coastal trade, general cargo.

No cargo operations in the bay.

STEVEDORES: *Working Hours:* Monday to Friday 0700 – 1100 hrs., 1300 – 1700 hrs. Saturdays 0700 – 1100 hrs.

EQUIPMENT: 1 shore crane 30 tons with 3 tons grab; 4 contact grabs; 2 trucks 30 tons capacity each; 1 pay loader; 2 fork lift trucks; 1 stationary crane; 1 steel barge 500 tons capacity; 1 tugboat (2 diesel engines 180 h.p. each).

Loading/discharging operations: Raw material for the nickel plant is imported as well as fuel oil. Nickel concentrate is exported.

Loading/discharging rate – Nickel (in containers): loaded at a rate of approximately 30 tons per hour-gang.

MEDICAL: Industrial Hospital where crew members can be hospitalised. General Hospital at Baracoa.

FUEL: Not available.

FRESH WATER: Delivery at rate of about 10 t.p.h.

REPAIRS: There are machine shops at nickel plant where small emergency repairs can be performed.

AUTHORITY: Port Doctor, Customs and Port Captain Delegations at this sub-port. Immigration Delegate is the same one who attends vessels at Baracoa and other sub-ports. Vessels can proceed directly to Moa where they are cleared by Port Authorities. Means of transportation from Baracoa to Moa or other sub-ports are: air, launch and overland (jeep). Customs House inspectors travel from Moa to Baracoa.

Baracoa to Moa about 32 miles distant. Following services used: by plane, 20 minutes; by launch, 6 hours; by jeep, 5 hours. Daily flights and regular bus services.

AGENT: Empresa Consignataria Mambisa, Agencia Moa, Reparto "Rolo Monterrey" No. 163, Moa, Prov. de Oriente. Telephone: 429 (day and night). Cable: Mambisas Moa.

SUB-PORT OF PUNTA GORDA: 20.38.30 N. 74.51.15 W.

LOCATION: Punta Gorda is located at about 3.5 miles East of Moa and consists of an anchorage where loading is effected by means of barges.

APPROACHES: Entrance channel to Punta Gorda is the same as for Moa, and once the first stretch of it up to Del Medio Shoal is sailed past, it turns to the East, following a winding course, having four turns. The turns themselves are difficult but what makes them really dangerous is the lack of proper buoying and navigational signals.

Maximum width of channel is 300 m. and minimum 200 m. Maximum length and draft to enter to or sail from Punta Gorda are as follows: Length: 442 ft.; Draft: 28 ft.

RESTRICTIONS: Vessels can enter only during daylight.

PILOTAGE: Pilots board vessels at Moa port mouth. Pilot station located at Punta Gorda at a distance of about 5 miles from port mouth.

Distance from point where Pilot boards vessels to the anchorage (loading place) is about 4.5 miles.

ANCHORAGES: Located North of Punta Gorda and East of Pt. Yagrumage.

TUGS: One tug which tows 1 or 2 barges as necessary. Work performed day and night.

RADIO: Through Simon – Baracoa by Inalambrica (cable).

LOADING: *Punta Gorda Anchorage:* Located North of Punta Gorda and East of Pt. Yagrumage: Lat. 20° 38′ 55″ N., Long. 74° 51′ 13″ W.

Minimum depth: 31 ft. Max. draft allowed to vessels: 28 ft. Max. length allowed to vessels: 442 ft. Swinging area: 300 m.

Vessels operating at Punta Gorda load their cargo by means of barges.

Only cargo handled at this anchorage is loading of bulk refractory chromium.

STEVEDORES: Chrome, at average loading rate of 1,000 tons (approx.) per day of 24 hours. Loading operations carried out at anchorage. There are 2 wooden barges 130 tons capacity each; 1 tugboat; 2 trucks 10 tons capacity each; 1 pay loader; 1 shore crane.

MEDICAL: No hospital at Punta Gorda. Crew members can be attended to at Moa or Baracoa Hospital.

FUEL/REPAIRS: Not available.

FRESH WATER: No water available at anchorage but can be supplied at Moa pier (Darsena).

AUTHORITY: Customs Delegation at this sub-port. Vessels can proceed directly to Punta Gorda. Port Authorities from Baracoa travel to Punta Gorda for clearance. Moa Port Doctor clears vessels at Punta Gorda. From Baracoa to Punta Gorda, following ways of transportation used: air, launch and overland, which takes 20 minutes, 5 hours and 4.5 hours respectively. No regular transportation.

AGENT: Empresa Consignataria Mambisa, Agencia Moa, Reparto "Rolo Monterrey" No. 163, Moa, Prov. de Oriente. Telephone: 429 (day and night). Cable: Mambisas Moa.

Punta Gorda is attended by Mambisas Moa Agency personnel.

CAIBARIEN: 22.32 N. 79.28 W.

LOCATION: This port is located on the North coast of Cuba: Lat. 22° 32′ N., Long. 79° 28′ W.

Port operations are effected at Frances Cay Anchorage, 16 miles from the City of Caibarien.

In rough weather, operations are generally suspended, because it is not possible for the lighters to remain alongside ship.

In spite of the fact that all cargo operations are effected by lighterage, this port is most efficient and very often surpasses the cargo rates of other ports.

PILOTAGE: Pilots board vessels 0.5 mile from Catalina buoy (entrance) of Cay Frances anchorage. Pilot station located at Cay Frances at place known as Punta del Asta. Usual means of communication is radiotelephone, which is available at Port Captain's Office in Cay Frances, close to pilot station. Advice also given by motor-launch.

Distance from point where Pilots board vessels to:

Inner anchorage (La Caldera)	– 2 miles
Outer anchorage (La Poza)	– 0.5 mile
Outer anchorage (Port Buoy)	– at same place where Pilots board vessels.

ANCHORAGES: Cay Frances anchorage easily accessible, free of shoals and reefs. Bottoms at anchorage "Caldera" and "Poza" are mud and sand. Bottom at third anchorage (port buoy anchorage) is stone, but free of reefs.

Frances Cay Light, group occulting white, visible 8 miles away, stands on an iron skeleton structure 36 ft. high, on the Western end of the Cay.

Vessels can enter or sail Cay Frances anchorage with any length and with max. draft up to 35 ft. When vessels draw less than 20 ft. they proceed to inner anchorage (La Caldera): over 20 ft. and up to 26 ft. to the outer anchorage (La Poza); and those over 26 ft. proceed to third anchorage (port buoy).

Following regulations must be observed during vessels stay at Cay Frances Road:

(1) Vessels arriving with draft of 19 ft. 6 in. or less:

(a) All ships arriving with draft of 19 ft. 6in. or less must proceed to inner anchorage and remain in this anchorage until reaching draft of 20 ft. even keel.

(b) Any Master refusing proceed to inner anchorage with draft of 19 ft. 6 in. or less, incurs penalty of extra charge of about 7 cents on each bag of sugar delivered in port (payable to crew of sugar barges employed in transportation of cargo from shore warehouse to anchorage at Cay Frances).

(2) Shifting or changes of anchorages:

(a) Vessels must remain at place where official Pilot orders anchoring.

(b) Not permitted to shift or change from place indicated by official Pilot of the port without authorisation from Custom House Officer-in-charge on board the vessel. All shifts and changes to be done only under supervision and command of local Pilot.

(c) Master will notify Custom House Officer on board when shiftings or changes of anchorage places required.

In event aforementioned orders not followed or observed by Ship's Master and/or ship's officers, a penalty or fine minimum $500 (five hundred dollars) will be charged to the vessel, and will have to be paid by Master prior to departure from this port. Besides penalty, no cargo will be delivered to ship anchored in any other place, other than indicated by local Pilot.

Tidal variation averages 2 ft.

Vessels can enter during day and night-time.

RADIO: Means of communications between Caibarien and Frances Cay is radiotelephony.

Several tugboats operating at this port are also equipped with radiotelephony; likewise stevedores enterprise, Port Captaincy and the molasses reservoir (Ponton San Pascual).

The official radiotelephony hours of communication are: 0800 – 0900, 1100 – 1400 and 1600 hrs., but after these hours, other communications can be established, when needed, upon request.

At Caibarien there are the following means of communication: National wireless telegraphy, telegrams, long distance telephone and Post Office.

Mambisas Caibarien Agency is connected with the National Telex System and this is the best means of communication with this port.

Vessels navigating to Cuba can send their messages to Caibarien through "CLA" Havana Radio Station which relays the messages promptly to Caibarien.

Masters must send their ETA messages simultaneously to Mambisas Caibarien and Mambisas Havana.

Pilot VHF works on Channel 16.

TUGS/BARGES: It is not necessary to use tug for entering/sailing, but following tugboats used for towing barges.

Tug Name	*Length*	*Speed*	*H.P.*
Gonzalez Lines	75 ft.	8/9 knots	250
Cmdte. Fajordo	55 ft.	8/9 knots	300
Jose Marti	60 ft.	8/9 knots	180

BARGES: Following barges available:

Name	*Capacity Bags*	*Capacity Approx. Long Tons*
Transporte No. 1	2,860	328
Transporte No. 4	2,860	328
Transporte No. 3	2,860	328
Transporte No. 8	2,860	328
Transporte No. 10	2,860	328
Transporte No. 11	2,860	328
Patana Punta Alegre No. 1	2,860	328
Patana Cadagua	2,860	328
Patana Victoria	2,860	328
Patana Americana No. 2	3,640	417
Patana Miriam Lourdes	2,080	240
Lanchon Antonio	2,080	240
Lanchon Marcelo	2,080	240
Lanchon Emilio	2,080	240
Lanchon Armando	2,080	240
Lanchon Dolores	1,040	120
Lanchon Juanita	1,040	120
Lanchon Laura	845	97
Lanchon Marianela	845	97
Lanchon Gloria	715	82
Lanchon Elvira	680	78
	45,945	5,163

STEVEDORES: Sugar working periods: Monday to Friday 0700 to 1100 hrs. and 1300 to 1700 hrs. Saturdays 0700 to 1100 hrs. Sunday, no work is performed unless urgent.

Although bagged raw sugar is reported as an exportation product of the port, for the last 2 years no sugar has been exported through Caibarien.

Loading rate: About 1,000 bags of raw sugar per gang-period. For each gang, not less than 1,950 bags are placed alongside vessel for each 8 hours working period.

For vessel able to make faster reception, it is possible some days for about 3,000 bags to be loaded.

Bags per sling: 5 bags per sling loaded.

Work capacity: 2 vessels can be operated simultaneously.

General cargo: Only empty jute bags imported and discharging rate approx. 20 tons per gang hour.

TANKERS: Only blackstrap molasses exported by this port. When tankers arrive drawing less than 20 ft. or in ballast, they dock at Pontoon or Hulk *San Pascual*, proceeding generally to complete at another port.

On other occasions they are shifted from Pontoon (Hulk) *San Pascual*, to outer anchorage "La Poza" where they complete cargo which is delivered by barges.

Average pumping rate 55,000 gallons per hour.

MEDICAL: There is a hospital at Caibarien for sick crew members.

BUNKERS: No bunkers available.

FRESH WATER: No water available.

DUNNAGE: No wood available, paper available if requested well in advance.

REPAIRS: Minor repairs only. Repair shops at Caibarien, but due to distance from Caibarien to Cay Frances, it is difficult and expensive to perform repairs.

TRANSPORTATION: Transportation means to and from Caibarien are poor, although railroad and bus services are available.

Best means of transportation is by train or bus to Santa Clara and from there transportation is available to any place or city.

AUTHORITY: All port authorities located at Caibarien 16 miles from Cay Frances anchorage, where they travel by launch or motor-boat to clear vessels.

AGENT: Empresa Consignataria Mambisa, Agency Caibarien, Calle 4 No. 305 (second floor), Apartado No. 72, Caibarien, Prov. de Las Vilas. Telephone: 3-1805 (office) 3-3215 (night). Telex: 041186. Cable: Mambisas Caibarien.

As Caibarien has no air mail or air express service, all mail and parcels should be sent to our Havana main offices from where it will be relayed by the quickest means to Caibarien.

CARDENAS: 23.03 N. 81.12 W. (See Plan Book)

Cardenas is the Northernmost port of Cuba being in a large bay 9 miles wide N.W. to S.W. and from 6 to 10 miles long from West to East.

It is a shallow bay with muddy bottom.

PILOTAGE: Pilots board vessels in vicinity of Cayo Piedras.

Pilot station at Cardenas. Distance from where Pilot boards to the pier is 16 miles, and to Cayo Diana 6 miles.

APPROACHES: Entrance to port is effected between Mono Cay and Piedras Cay.

The channel head is located at a point almost equidistant to Blanco Cay and the end of Hicacos peninsula, but closer to the latter.

It is an artificial channel but it has no narrowness and no turns.

Its bottom is rock, sandy at the head and for the first mile, and muddy all the rest of its course.

In front of the pier the channel opens in the shape of a funnel forming around it the inner harbour or basin.

Approaching Cardenas, the most conspicuous points of visual orientation are:

Piedras Cay lighthouse which stands 78 ft. above high tide, a stone cylindrical construction on a white building, its white light visible up to a distance of 14 miles.

Southwestward of Piedras Cay the long ribbon of white sands of Varadero Beach can be seen, and in the background the hotels and buildings.

To the S.E. Diana Cay lighthouse, a 38 ft. high metal tower and the string of cays such as: Chalupa, Romero, Blanco, etc.

RESTRICTIONS: Considering that from the place where Pilots board the vessels up to the pier or vice-versa takes about 4 hours, including manoeuvres, vessels must commence manoeuvres to enter or sail from this port at least 3 hours before dusk. Vessels are allowed a maximum length of 560 ft., max. draft of 20 ft. 6 in. at any tide, and 22 ft. at high tide. Tidal variation averages 2 ft.

In case of large vessels, it is necessary to wait for slack water for crossing the channel stretch known as Buba Channel, about 2 miles long, between Buba and Diana Cays.

ANCHORAGES: *Bay Anchorage No. 1:* Located 1.25 miles Northward of pier, about a mile in extension and a draft of 15 ft.

Bay Anchorage No. 2: Located 2 miles Northward of pier, about a mile in extension and a draft of 15 ft.

Poza Diana Cay Anchorage: Located about 7 miles from pier, about 1.25 miles in extension, draft 30 ft.

Los Meritos Anchorage: Located about 12 miles from pier, about 1 mile in extension, draft 23 ft.

Piedras Cay Anchorage: Located 16 miles from pier in the open sea, unlimited swinging area, draft 40 ft.

RADIO: Vessels navigating to Cuba can communicate with Mambisas Cardenas through "CLA" Havana Radio Station which immediately relays the messages to Cardenas.

While navigating in Cuban waters approaching Cardenas, vessels can communicate by radiotelephone with "CLW" Cardenas Radio Station at 2760 kHz.

Masters must send their ETA messages simultaneously to Mambisas Cardenas and Mambisas Havana.

TUGS: Normally tug not required to assist berthing, but when vessels have to berth head to shore, assistance of tug is necessary.

BERTHING: The only place of operation at Cardenas is its pier.

It is of solid reinforced concrete construction having double standard railroad tracks along the length of pier, on each side. It is also well paved and trucking operations can be performed alone or in combination with railroad operation.

Railroad cars do not interfere with cargo operations, as once emptied they can be carried out by shifting them to the second track or by going around the pier by the opposite side.

Tankers discharging fuel can be operated at either side or at the pier head.

There are 3 fresh water intakes on each side and 1 at the head of the pier.

Pier is capable of operating 5 vessels at a time, that is: 4 regular size vessels, 2 at each side, and a tanker at the head.

Both sides of pier are of equal length and have same facilities, being at the N.W. and the S.W. sides.

Cardenas Pier:
Length 319 m. (1,014 ft.), width 80 m. (262 ft.), draft alongside 24 ft. Max. draft allowed for vessels' operations 20 ft. 6 in. at any tide, 22 ft. at high tide.

The dock has space to dock 4 vessels (2 at each side) and a small size vessel at the head of pier, but personnel available at present time is enough for working only 1 dry cargo vessel and a tanker vessel discharging fuel oil. Dredging of the port has recently been completed and there is a plan to increase port personnel

No operations at bay or anchorage performed at this port.

STEVEDORES: Export of refined sugar and alcohol. Port has the following auxiliary equipment: 1 shore crane, 3 fork lift trucks, 4 conventional tractors, 3 rail tractors.

Working periods: loading sugar from Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.; Sunday: no work performed.

When vessel does not achieve daily rate during regular hours, work is carried out from 1900 to 2300 hrs.

Raw sugar loading rate: about 1,138 bags (of the 220-pound type) loaded per 4 hours per gang. This is not a fixed rate but when exceeded stevedores to be paid extra. Bags per sling: 4 bags of raw sugar (of the 220-pound type) loaded per sling.

Refined sugar: about 2,500 bags (of the 100-pound type) or 2,272 bags of 50 kilos, loaded per 4 hours per gang period. This is not a fixed rate, but when it is exceeded an additional payment must be made. Bags per sling: 12 bags (of the 50-kilo type and 100–pound type) loaded per sling.

Bulk: Only grates are available for loading bulk sugar.

TANKERS: Discharge of fuel oil: There are 4 intakes at the pier: Two at North side, 1 at the head and 1 at South side.

Pipe-lines 8 in. and all connections 6 in. in diameter.

MEDICAL: Cardenas General Hospital and a clinic.

FRESH WATER: Pier has 7 water intakes connected to a water reservoir which is supplied by tank-trucks and/or railroad tank-cars.

Delivery rate: 20 t.p.h.

Daily delivery rate dependent upon transportation available.

FUEL: Not available.

REPAIRS: No repair shop at this port.

DUNNAGE: No wood available. Paper available if requested well in advance.

TRANSPORTATION: Transportation to and from Cardenas is good.

To Havana there are scheduled bus departures about every 2 hours, to Varadero every 30 minutes, and also several departures to Sagua la Grande, Isabela and other nearby cities.

AUTHORITY: All port authorities located at Custom House building.

AGENT: Consignataria Mambisa, Agencia Cardenas, Calle 2 entre Cespedes y Ave. 2da., Apartado No. 2847, Cardenas, Prov. de Matanzas. Telephone: 306 (office); 4840 (night). Telex: 052168. Cables: Mambisas Cardenas.

All urgent mail and parcels should be sent to our main offices at Havana from where it will be relayed to Cardenas by the quickest means possible to ensure prompt delivery.

Ordinary and non-urgent mail or parcels can be sent directly to Mambisa's Cardenas Office.

CIENFUEGOS: 22.09 N. 80.27 W. (See Plan Book) including sub-port of Casilda (Port Trinidad), and sub-port of Tunas de Zaza:

LOCATION: Cienfuegos Bay, by its natural characteristics, offers ample protection for vessels within port premises. It is about 10 miles long, from North to South and 3 miles wide, from East to West, surrounded by high ground and mountains.

The Coastal outline is rugged inside the bay, due to numerous points and creeks and at the widest part of the bay, to the N.W., is the city of Cienfuegos and some of the port's installations, and further, to the North of the city, the remainder and most modern of the port installations.

PILOTAGE: The Pilot boards the vessel at 0.5 miles S.W. of Los Colorados lighthouse at the following geographical position:

Lat. 22° 01′ 33″ N., Long. 80° 26′ 53″ W.

From this place to the different places of operation of the port there is a distance of 7 to 8 miles.

Pilot station is located at Jagua Castle, on the West coast of the bay, just in front of and to the West of Pasa Caballos Point.

Pilot service is available 24 hours daily and they have a 24 hours watch, and advice of arriving or sailing ships is announced by a semaphore station.

ENTRANCE TO PORT/CONDITIONS: Entrance to port is performed by a channel which begins between the points of Los Colorados and Sabanilla and runs for 3 miles up to La Milpa Point. From La Milpa the channel continues toward the interior of the bay firstly by the South and afterwards by the West of Carenas Cay up to the General Anchorage.

From the General Anchorage vessels can proceed either to the piers at the South of the port or to the North anchorage and the installations of the North Zone.

The bottom of the channel is muddy and its various depths are as follows:

From the head of the channel up to Las Milpas max. depth is 214 ft. at lighted buoy No. 3 and minimum of 68 ft. at the West of Pasa Caballos Point.

From La Milpa up to General Anchorage minimum is 48 ft. and from then on up to the North Anchorage minimum of 40 ft.

The channel has 2 sharp turns only, but adequate precautions must be taken when entering Cienfuegos harbour, always with Pilot on board, which is compulsory at all ports. The first turn of 68° is at Pasa Caballos Point and because this is the narrowest part of the channel where Tidal currents flow strongly, it is here where precautions should be exerted.

The second turn of 98° is at West of Carenas Cay, but due to the width of the channel at this point and the fact that tidal currents have no great effect, manoeuvres are easier at this turn.

No tugboat required for entering or sailing from this port and vessels with a length of 207 m. have entered without tugboat assistance but for

SUB-PORT OF PUNTA GORDA: 20.38.30 N. 74.51.15 W.

LOCATION: Punta Gorda is located at about 3.5 miles East of Moa and consists of an anchorage where loading is effected by means of barges.

APPROACHES: Entrance channel to Punta Gorda is the same as for Moa, and once the first stretch of it up to Del Medio Shoal is sailed past, it turns to the East, following a winding course, having four turns. The turns themselves are difficult but what makes them really dangerous is the lack of proper buoying and navigational signals.

Maximum width of channel is 300 m. and minimum 200 m. Maximum length and draft to enter to or sail from Punta Gorda are as follows: Length: 442 ft.; Draft: 28 ft.

RESTRICTIONS: Vessels can enter only during daylight.

PILOTAGE: Pilots board vessels at Moa port mouth. Pilot station located at Punta Gorda at a distance of about 5 miles from port mouth.

Distance from point where Pilot boards vessels to the anchorage (loading place) is about 4.5 miles.

ANCHORAGES: Located North of Punta Gorda and East of Pt. Yagrumage.

TUGS: One tug which tows 1 or 2 barges as necessary. Work performed day and night.

RADIO: Through Simon – Baracoa by Inalambrica (cable).

LOADING: *Punta Gorda Anchorage:* Located North of Punta Gorda and East of Pt. Yagrumage: Lat. 20° 38′ 55″ N., Long. 74° 51′ 13″ W.

Minimum depth: 31 ft. Max. draft allowed to vessels: 28 ft. Max. length allowed to vessels: 442 ft. Swinging area: 300 m.

Vessels operating at Punta Gorda load their cargo by means of barges.

Only cargo handled at this anchorage is loading of bulk refractory chromium.

STEVEDORES: Chrome, at average loading rate of 1,000 tons (approx.) per day of 24 hours. Loading operations carried out at anchorage. There are 2 wooden barges 130 tons capacity each; 1 tugboat; 2 trucks 10 tons capacity each; 1 pay loader; 1 shore crane.

MEDICAL: No hospital at Punta Gorda. Crew members can be attended to at Moa or Baracoa Hospital.

FUEL/REPAIRS: Not available.

FRESH WATER: No water available at anchorage but can be supplied at Moa pier (Darsena).

AUTHORITY: Customs Delegation at this sub-port. Vessels can proceed directly to Punta Gorda. Port Authorities from Baracoa travel to Punta Gorda for clearance. Moa Port Doctor clears vessels at Punta Gorda. From Baracoa to Punta Gorda, following ways of transportation used: air, launch and overland, which takes 20 minutes, 5 hours and 4.5 hours respectively. No regular transportation.

AGENT: Empresa Consignataria Mambisa, Agencia Moa, Reparto "Rolo Monterrey" No. 163, Moa, Prov. de Oriente. Telephone: 429 (day and night). Cable: Mambisas Moa.

Punta Gorda is attended by Mambisas Moa Agency personnel.

CAIBARIEN: 22.32 N. 79.28 W.

LOCATION: This port is located on the North coast of Cuba: Lat. 22° 32′ N., Long. 79° 28′ W.

Port operations are effected at Frances Cay Anchorage, 16 miles from the City of Caibarien.

In rough weather, operations are generally suspended, because it is not possible for the lighters to remain alongside ship.

In spite of the fact that all cargo operations are effected by lighterage, this port is most efficient and very often surpasses the cargo rates of other ports.

PILOTAGE: Pilots board vessels 0.5 mile from Catalina buoy (entrance) of Cay Frances anchorage. Pilot station located at Cay Frances at place known as Punta del Asta. Usual means of communication is radiotelephone, which is available at Port Captain's Office in Cay Frances, close to pilot station. Advice also given by motor-launch.

Distance from point where Pilots board vessels to:

Inner anchorage (La Caldera)	–	2 miles
Outer anchorage (La Poza)	–	0.5 mile
Outer anchorage (Port Buoy)	–	at same place where Pilots board vessels.

ANCHORAGES: Cay Frances anchorage easily accessible, free of shoals and reefs. Bottoms at anchorage "Caldera" and "Poza" are mud and sand. Bottom at third anchorage (port buoy anchorage) is stone, but free of reefs.

Frances Cay Light, group occulting white, visible 8 miles away, stands on an iron skeleton structure 36 ft. high, on the Western end of the Cay.

Vessels can enter or sail Cay Frances anchorage with any length and with max. draft up to 35 ft. When vessels draw less than 20 ft. they proceed to inner anchorage (La Caldera): over 20 ft. and up to 26 ft. to the outer anchorage (La Poza); and those over 26 ft. proceed to third anchorage (port buoy).

Following regulations must be observed during vessels stay at Cay Frances Road:

(1) Vessels arriving with draft of 19 ft. 6 in. or less:

(a) All ships arriving with draft of 19 ft. 6in. or less must proceed to inner anchorage and remain in this anchorage until reaching draft of 20 ft. even keel.

(b) Any Master refusing proceed to inner anchorage with draft of 19 ft. 6 in. or less, incurs penalty of extra charge of about 7 cents on each bag of sugar delivered in port (payable to crew of sugar barges employed in transportation of cargo from shore warehouse to anchorage at Cay Frances).

(2) Shifting or changes of anchorages:

(a) Vessels must remain at place where official Pilot orders anchoring.

(b) Not permitted to shift or change from place indicated by official Pilot of the port without authorisation from Custom House Officer-in-charge on board the vessel. All shifts and changes to be done only under supervision and command of local Pilot.

(c) Master will notify Custom House Officer on board when shiftings or changes of anchorage places required.

In event aforementioned orders not followed or observed by Ship's Master and/or ship's officers, a penalty or fine minimum $500 (five hundred dollars) will be charged to the vessel, and will have to be paid by Master prior to departure from this port. Besides penalty, no cargo will be delivered to ship anchored in any other place, other than indicated by local Pilot.

Tidal variation averages 2 ft.

Vessels can enter during day and night-time.

RADIO: Means of communications between Caibarien and Frances Cay is radiotelephony.

Several tugboats operating at this port are also equipped with radiotelephony; likewise stevedores enterprise, Port Captaincy and the molasses reservoir (Ponton San Pascual).

The official radiotelephony hours of communication are: 0800 – 0900, 1100 – 1400 and 1600 hrs., but after these hours, other communications can be established, when needed, upon request.

At Caibarien there are the following means of communication: National wireless telegraphy, telegrams, long distance telephone and Post Office.

Mambisas Caibarien Agency is connected with the National Telex System and this is the best means of communication with this port.

Vessels navigating to Cuba can send their messages to Caibarien through "CLA" Havana Radio Station which relays the messages promptly to Caibarien.

Masters must send their ETA messages simultaneously to Mambisas Caibarien and Mambisas Havana.

Pilot VHF works on Channel 16.

TUGS/BARGES: It is not necessary to use tug for entering/sailing, but following tugboats used for towing barges.

Tug Name	*Length*	*Speed*	*H.P.*
Gonzalez Lines	75 ft.	8/9 knots	250
Cmdte. Fajordo	55 ft.	8/9 knots	300
Jose Marti	60 ft.	8/9 knots	180

BARGES: Following barges available:

Name	*Capacity Bags*	*Capacity Approx. Long Tons*
Transporte No. 1	2,860	328
Transporte No. 4	2,860	328
Transporte No. 3	2,860	328
Transporte No. 8	2,860	328
Transporte No. 10	2,860	328
Transporte No. 11	2,860	328
Patana Punta Alegre No. 1	2,860	328
Patana Cadagua	2,860	328
Patana Victoria	2,860	328
Patana Americana No. 2	3,640	417
Patana Miriam Lourdes	2,080	240
Lanchon Antonio	2,080	240
Lanchon Marcelo	2,080	240
Lanchon Emilio	2,080	240
Lanchon Armando	2,080	240
Lanchon Dolores	1,040	120
Lanchon Juanita	1,040	120
Lanchon Laura	845	97
Lanchon Marianela	845	97
Lanchon Gloria	715	82
Lanchon Elvira	680	78
	45,945	5,163

STEVEDORES: Sugar working periods: Monday to Friday 0700 to 1100 hrs. and 1300 to 1700 hrs. Saturdays 0700 to 1100 hrs. Sunday, no work is performed unless urgent.

Although bagged raw sugar is reported as an exportation product of the port, for the last 2 years no sugar has been exported through Caibarien.

Loading rate: About 1,000 bags of raw sugar per gang-period. For each gang, not less than 1,950 bags are placed alongside vessel for each 8 hours working period.

For vessel able to make faster reception, it is possible some days for about 3,000 bags to be loaded.

Bags per sling: 5 bags per sling loaded.

Work capacity: 2 vessels can be operated simultaneously.

General cargo: Only empty jute bags imported and discharging rate approx. 20 tons per gang hour.

TANKERS: Only blackstrap molasses exported by this port. When tankers arrive drawing less than 20 ft. or in ballast, they dock at Pontoon or Hulk *San Pascual*, proceeding generally to complete at another port.

On other occasions they are shifted from Pontoon (Hulk) *San Pascual,* to outer anchorage "La Poza" where they complete cargo which is delivered by barges.

Average pumping rate 55,000 gallons per hour.

MEDICAL: There is a hospital at Caibarien for sick crew members.

BUNKERS: No bunkers available.

FRESH WATER: No water available.

DUNNAGE: No wood available, paper available if requested well in advance.

REPAIRS: Minor repairs only. Repair shops at Caibarien, but due to distance from Caibarien to Cay Frances, it is difficult and expensive to perform repairs.

TRANSPORTATION: Transportation means to and from Caibarien are poor, although railroad and bus services are available.

Best means of transportation is by train or bus to Santa Clara and from there transportation is available to any place or city.

AUTHORITY: All port authorities located at Caibarien 16 miles from Cay Frances anchorage, where they travel by launch or motor-boat to clear vessels.

AGENT: Empresa Consignataria Mambisa, Agency Caibarien, Calle 4 No. 305 (second floor), Apartado No. 72, Caibarien, Prov. de Las Vilas. Telephone: 3-1805 (office) 3-3215 (night). Telex: 041186. Cable: Mambisas Caibarien.

As Caibarien has no air mail or air express service, all mail and parcels should be sent to our Havana main offices from where it will be relayed by the quickest means to Caibarien.

CARDENAS: 23.03 N. 81.12 W. (See Plan Book)

Cardenas is the Northernmost port of Cuba being in a large bay 9 miles wide N.W. to S.W. and from 6 to 10 miles long from West to East.

It is a shallow bay with muddy bottom.

PILOTAGE: Pilots board vessels in vicinity of Cayo Piedras.

Pilot station at Cardenas. Distance from where Pilot boards to the pier is 16 miles, and to Cayo Diana 6 miles.

APPROACHES: Entrance to port is effected between Mono Cay and Piedras Cay.

The channel head is located at a point almost equidistant to Blanco Cay and the end of Hicacos peninsula, but closer to the latter.

It is an artificial channel but it has no narrowness and no turns.

Its bottom is rock, sandy at the head and for the first mile, and muddy all the rest of its course.

In front of the pier the channel opens in the shape of a funnel forming around it the inner harbour or basin.

Approaching Cardenas, the most conspicuous points of visual orientation are:

Piedras Cay lighthouse which stands 78 ft. above high tide, a stone cylindrical construction on a white building, its white light visible up to a distance of 14 miles.

Southwestward of Piedras Cay the long ribbon of white sands of Varadero Beach can be seen, and in the background the hotels and buildings.

To the S.E. Diana Cay lighthouse, a 38 ft. high metal tower and the string of cays such as: Chalupa, Romero, Blanco, etc.

RESTRICTIONS: Considering that from the place where Pilots board the vessels up to the pier or vice-versa takes about 4 hours, including manoeuvres, vessels must commence manoeuvres to enter or sail from this port at least 3 hours before dusk. Vessels are allowed a maximum length of 560 ft., max. draft of 20 ft. 6 in. at any tide, and 22 ft. at high tide. Tidal variation averages 2 ft.

In case of large vessels, it is necessary to wait for slack water for crossing the channel stretch known as Buba Channel, about 2 miles long, between Buba and Diana Cays.

ANCHORAGES: *Bay Anchorage No. 1:* Located 1.25 miles Northward of pier, about a mile in extension and a draft of 15 ft.

Bay Anchorage No. 2: Located 2 miles Northward of pier, about a mile in extension and a draft of 15 ft.

Poza Diana Cay Anchorage: Located about 7 miles from pier, about 1.25 miles in extension, draft 30 ft.

Los Meritos Anchorage: Located about 12 miles from pier, about 1 mile in extension, draft 23 ft.

Piedras Cay Anchorage: Located 16 miles from pier in the open sea, unlimited swinging area, draft 40 ft.

RADIO: Vessels navigating to Cuba can communicate with Mambisas Cardenas through "CLA" Havana Radio Station which immediately relays the messages to Cardenas.

While navigating in Cuban waters approaching Cardenas, vessels can communicate by radiotelephone with "CLW" Cardenas Radio Station at 2760 kHz.

Masters must send their ETA messages simultaneously to Mambisas Cardenas and Mambisas Havana.

TUGS: Normally tug not required to assist berthing, but when vessels have to berth head to shore, assistance of tug is necessary.

BERTHING: The only place of operation at Cardenas is its pier.

It is of solid reinforced concrete construction having double standard railroad tracks along the length of pier, on each side. It is also well paved and trucking operations can be performed alone or in combination with railroad operation.

Railroad cars do not interfere with cargo operations, as once emptied they can be carried out by shifting them to the second track or by going around the pier by the opposite side.

Tankers discharging fuel can be operated at either side or at the pier head.

There are 3 fresh water intakes on each side and 1 at the head of the pier.

Pier is capable of operating 5 vessels at a time, that is: 4 regular size vessels, 2 at each side, and a tanker at the head.

Both sides of pier are of equal length and have same facilities, being at the N.W. and the S.W. sides.

Cardenas Pier:
Length 319 m. (1,014 ft.), width 80 m. (262 ft.), draft alongside 24 ft. Max. draft allowed for vessels' operations 20 ft. 6 in. at any tide, 22 ft. at high tide.

The dock has space to dock 4 vessels (2 at each side) and a small size vessel at the head of pier, but personnel available at present time is enough for working only 1 dry cargo vessel and a tanker vessel discharging fuel oil. Dredging of the port has recently been completed and there is a plan to increase port personnel

No operations at bay or anchorage performed at this port.

STEVEDORES: Export of refined sugar and alcohol. Port has the following auxiliary equipment: 1 shore crane, 3 fork lift trucks, 4 conventional tractors, 3 rail tractors.

Working periods: loading sugar from Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.; Sunday: no work performed.

When vessel does not achieve daily rate during regular hours, work is carried out from 1900 to 2300 hrs.

Raw sugar loading rate: about 1,138 bags (of the 220-pound type) loaded per 4 hours per gang. This is not a fixed rate but when exceeded stevedores to be paid extra. Bags per sling: 4 bags of raw sugar (of the 220-pound type) loaded per sling.

Refined sugar: about 2,500 bags (of the 100-pound type) or 2,272 bags of 50 kilos, loaded per 4 hours per gang period. This is not a fixed rate, but when it is exceeded an additional payment must be made. Bags per sling: 12 bags (of the 50-kilo type and 100–pound type) loaded per sling.

Bulk: Only grates are available for loading bulk sugar.

TANKERS: Discharge of fuel oil: There are 4 intakes at the pier: Two at North side, 1 at the head and 1 at South side.

Pipe-lines 8 in. and all connections 6 in. in diameter.

MEDICAL: Cardenas General Hospital and a clinic.

FRESH WATER: Pier has 7 water intakes connected to a water reservoir which is supplied by tank-trucks and/or railroad tank-cars.

Delivery rate: 20 t.p.h.

Daily delivery rate dependent upon transportation available.

FUEL: Not available.

REPAIRS: No repair shop at this port.

DUNNAGE: No wood available. Paper available if requested well in advance.

TRANSPORTATION: Transportation to and from Cardenas is good.

To Havana there are scheduled bus departures about every 2 hours, to Varadero every 30 minutes, and also several departures to Sagua la Grande, Isabela and other nearby cities.

AUTHORITY: All port authorities located at Custom House building.

AGENT: Consignataria Mambisa, Agencia Cardenas, Calle 2 entre Cespedes y Ave. 2da., Apartado No. 2847, Cardenas, Prov. de Matanzas. Telephone: 306 (office); 4840 (night). Telex: 052168. Cables: Mambisas Cardenas.

All urgent mail and parcels should be sent to our main offices at Havana from where it will be relayed to Cardenas by the quickest means possible to ensure prompt delivery.

Ordinary and non-urgent mail or parcels can be sent directly to Mambisa's Cardenas Office.

CIENFUEGOS: 22.09 N. 80.27 W. (See Plan Book) including sub-port of Casilda (Port Trinidad), and sub-port of Tunas de Zaza:

LOCATION: Cienfuegos Bay, by its natural characteristics, offers ample protection for vessels within port premises. It is about 10 miles long, from North to South and 3 miles wide, from East to West, surrounded by high ground and mountains.

The Coastal outline is rugged inside the bay, due to numerous points and creeks and at the widest part of the bay, to the N.W., is the city of Cienfuegos and some of the port's installations, and further, to the North of the city, the remainder and most modern of the port installations.

PILOTAGE: The Pilot boards the vessel at 0.5 miles S.W. of Los Colorados lighthouse at the following geographical position:

Lat. 22° 01′ 33″ N., Long. 80° 26′ 53″ W.

From this place to the different places of operation of the port there is a distance of 7 to 8 miles.

Pilot station is located at Jagua Castle, on the West coast of the bay, just in front of and to the West of Pasa Caballos Point.

Pilot service is available 24 hours daily and they have a 24 hours watch, and advice of arriving or sailing ships is announced by a semaphore station.

ENTRANCE TO PORT/CONDITIONS: Entrance to port is performed by a channel which begins between the points of Los Colorados and Sabanilla and runs for 3 miles up to La Milpa Point. From La Milpa the channel continues toward the interior of the bay firstly by the South and afterwards by the West of Carenas Cay up to the General Anchorage.

From the General Anchorage vessels can proceed either to the piers at the South of the port or to the North anchorage and the installations of the North Zone.

The bottom of the channel is muddy and its various depths are as follows:

From the head of the channel up to Las Milpas max. depth is 214 ft. at lighted buoy No. 3 and minimum of 68 ft. at the West of Pasa Caballos Point.

From La Milpa up to General Anchorage minimum is 48 ft. and from then on up to the North Anchorage minimum of 40 ft.

The channel has 2 sharp turns only, but adequate precautions must be taken when entering Cienfuegos harbour, always with Pilot on board, which is compulsory at all ports. The first turn of 68° is at Pasa Caballos Point and because this is the narrowest part of the channel where Tidal currents flow strongly, it is here where precautions should be exerted.

The second turn of 98° is at West of Carenas Cay, but due to the width of the channel at this point and the fact that tidal currents have no great effect, manoeuvres are easier at this turn.

No tugboat required for entering or sailing from this port and vessels with a length of 207 m. have entered without tugboat assistance but for vessels from 207 m. up to a max. of 225 m. entering or sailing from Cienfuegos should take the following measures:

Only during daylight hours, during slack water and the assistance of 2 suitable tugboats. Vessels of 4,000 g.r.t. or larger can sail from the port only at slack water to avoid the risks of tidal currents at Pasa Caballos turn, but this measure does not apply to incoming vessels which can enter at any time.

The port of Cienfuegos can be entered at day or night time.

At the entrance to the port, at Los Colorados Point, there is a lighthouse also named Los Colorados which rises 83.1 ft. above high tide, located at Lat. 22° 02′ 04″ N., Long. 80° 26′ 29″ W.

The lighthouse is painted in a white-yellowish shade and flashes white light every 5 seconds visible 21.8 miles away.

ANCHORAGES: The bay of Cienfuegos has ample anchorage zones.

The most important are: General anchorage at about the middle of the bay and North anchorage, at the North part of the bay.

Regarding the capacity and conditions of Cienfuegos anchorages it can be said that they meet the requirements of the largest vessel which presently or in future could enter this port.

North Anchorage: Located on the North part of the bay, at the Zone N.W. of the city and South of Tricontinental Pier and Ramirez Cove.

This zone is located between: Lat. 22° 09′ and 22° 09′ 30″ N. and Long. 80° 28′ and 80° 28′ 30″ West.

Although the bottom is soft mud the anchors hold perfectly well and securely.

Minimum depth of anchorage is 40 ft. and it can accommodate several large vessels with sufficient swinging area. Vessels anchor with 3 shackles of chain.

At this place vessels await berth, bunker or water, etc. and also can discharge or load by means of barges.

General Anchorage: Located in the middle of the bay and covers a square space limited by Pt. Gorda and Jaragua Cove at the South and Pt. Majagua and Pt. Salinas at the North:

(Lat. 22° 07′ – 22° 08′ 15″ N. – Long. 80° 27′ 15″ – 80° 28′ W.).

Minimum depth is 48 ft. Bottom is soft mud but in spite of this anchors hold well and securely. Usually vessels anchor with 3 shackles of chain.

At this anchorage vessels await berth, bunker, water, provisions, etc. and also can discharge or load by means of barges.

Quarantine and Explosives Anchorage: Located at 0.5 mile off Pt. Barril.

As indicated by its name, this anchorage is used in case of quarantine to vessel or when carrying explosive cargo. The bottom is soft mud having a depth of 50 ft. Vessels anchor at this anchorage with 3 shackles of chain.

ICP Submarine Pipe-line Anchorage (Formerly Standard Anchorage): Located on the West side of Pt. Majagua.

The submarine pipe-line is 2,900 ft. long from the intake up to the deposit tanks, 12 in. in diameter. The connection is 8 in. in diameter.

Vessels berth to 3 mooring buoys aft, using both anchors. Minimum depth at this place is 58 ft.

The only product handled is fuel oil, which averages a rate of discharge of 420 metric t.p.h.

Berthing operation performed only during daylight hours.

Fertilisers Plant Submarine Pipe-line Anchorage: Located at the South of Ramirez Cove.

A fuel oil pipe-line 2,310 m. long, 16 in. in diameter with a 10 in. connection. The naphtha pipe-line is 10 in. in diameter with a 10 in. connection.

Vessels berth to 3 mooring buoys aft and use starboard anchor of the ship. The official draft is 31 ft. even keel. The bottom is soft mud.

Vessels discharging naphtha must pump, after discharging same, about 200 tons of fresh water. Water must be taken at prior ports of call as delay may result to vessel if Cienfuegos water barge is not able to supply the water.

Average rates of discharge are:

Naphtha: 400 t.p.h.

Fuel oil: 450 t.p.h.

Berthing operation to this place performed only during daylight.

Thermoelectric Plant Submarine Pipe-line Anchorage: Located on the North side of the North Anchorage.

Pipe-line is 14 in. in diameter and 6 in. connection.

Vessels berth to 3 mooring buoys aft and to another mooring buoy at the port side forward and use the starboard side anchor. Minimum depth is 38 ft.

Only product handled is fuel oil which can be discharged at an average rate of 500 t.p.h.

Berthing operation can be performed only during daylight hours.

MAX. SIZE: Max. length with which vessels can enter port is 700 ft. with draft up to 37 ft. making use of the best conditions, such as slack water, and daylight. Tidal variation about 1 ft. 6 in.

RADIO: Vessels navigating toward Cuba can communicate with Mambisas Cienfuegos Agency through "CLA" Havana radio station which relays the message to Cienfuegos immediately.

When navigating in Cuban waters and nearing Cienfuegos, vessels can communicate directly through "CLC" Cienfuegos radio station which immediately informs Mambisas Cienfuegos Agency of any message received and the Agency can answer through "CLC", which also have radiotelephony system.

Masters must send their ETA messages simultaneously on VHF Channel 16 to Mambisas Cienfuegos and Mambisas Havana.

There is complete telephone service: Local, long distance and International.

RCA System radiograms have national and international service.

There are also the Wireless Service, Government Public Telegraph Service and Post Office.

Our Agency can communicate with Havana and the rest of the parts by telex, this service being the most reliable and quickest of the means of communication.

Cienfuegos telex number is 04218.

BERTHING:

	Draft in ft.	
	Fore	Aft
Tricontinental Pier: East Side (Bulk Sugar)	32	33
West Side (General Cargo)	26	28
Pablo E. Guzman Pier: West Side (Discharge of clean petroleum products)	27	30
East Side: Out of use		
Molasses Terminal: Loading of molasses	33	33
ICP Submarine Pipe-line: Discharge of Fuel Oil	58	58
Olimpia Medina Pier: General Cargo	24.5	25.5
Fertilisers Plant Submarine Pipe-lines: Discharge of Naphtha & Fuel Oil	31	31
Thermoelectric Plant Submarine Pipe-line: Discharge of Fuel Oil	38	38
North Anchorage: Discharge/Loading of General Cargo	40	40
General Anchorage: Discharge/Loading of General Cargo	48	48
Quarantine and Explosives Anchorage:	50	50

Tricontinental Pier: Located on the North coast of the bay, at the West of Manaca Cove, in front of the city of Cienfuegos.

It is a solid construction of reinforced concrete, 206 m. (676 ft.) long and 43 m. (141 ft.) wide. The East side of the pier is specially conditioned for loading bulk raw sugar and has 2 cranes, mounted on rails, that run along the length of pier, each capable of loading 600 tonnes/p.h.

Although the length of the pier is 206 m., at the East side the berthing length is only 165 m., because at the shore end there are 2 resting bases for the cranes, where they remain when idle.

In direct line with the pier is the parabolical warehouse, which is capable of holding 90,000 tonnes of bulk raw sugar. Next to it is the receiving station of the plant, where a continuous flow of railroad hopper cars discharge the sugar coming from many sugar mills in Las Villas and Matanzas provinces.

The West side of the pier is being used as a general cargo discharging berth, but the future planning for this side is for discharge of bulk wheat, to supply the flour mill, now under construction.

Tricontinental Pier

East Side:

Berthing length: 542 ft., overall length: 666 ft.

Max. length of vessel to dock and operate: 615 ft.

Drafts: 32 ft. fore, 33 ft. aft.

Cargo handled this side: Loading of bulk raw sugar.

Fresh water available by pipe-line.

West Side:

Overall and berthing length: 666 ft.

Draft: 26 ft. fore, 28 ft. aft.

Cargo handled this side: Discharge and loading of general cargo.

Fresh water available by pipe-line.

Docking to this pier can be effected either in day or night-time because it is well lit.

All operations, except loading bulk raw sugar, must be effected by means of trucks because although railroad tracks reach the shore end of pier, there are no tracks alongside.

Vessels nominated to load bulk raw sugar at Cienfuegos, must arrive at Tricontinental pier clean and ready to load and any undesirable dunnage material must be discharged at other ports or piers, due to the fact that it has only sufficient personnel to attend the mechanical loading and there are no stevedores available.

Pablo E. Guzman Pier (Formerly Ferrocarril Pier): Located on the N.W. side of the city, between Pt. Arenas and Pt. Verde.

It is only used to discharge clean petroleum products and for supplying diesel oil bunker to vessels.

It is of steel and concrete construction with rubber and wood fenders.

Fixed light at pier permits night docking.

The bottom at both sides of pier is soft mud.

West Side:

Length: 300 ft.

Vessel's max. length for docking: 610 ft.

Width: 73 ft.

Draft: 27 ft. fore, 30 ft. aft.

Cargo handled by this side: Discharge of diesel oil, kerosene and gasoline*. Connection diameter: 8 in.

Discharging rate: About 400 t.p.h.

East Side: Out of use

*Although three different products are discharged, only one can be discharged at a time, as there is only one pipe-line to shore tanks.

Olimpia Medina Pier (Formerly Cacicedo Pier): Located on the South side of the city at Marsillan Cove.

Only one vessel can be worked, being of concrete construction with wooden/rubber fenders. The fenders are going to be replaced as at the present they are not suitable.

It has a fixed bearing light in order to dock vessels at night.

Cargoes can be handled either by trucks or railroad as the place is paved and has railroad tracks alongside.

Length: 383 ft. Width: 45 ft.

Draft: 24 ft. 6 in. fore, 25 ft. 6 in. aft.

The bottom alongside pier is soft mud.

Operations performed at this pier are usually loading or discharge of general cargo.

Also see "Anchorages".

TANKERS: Molasses Terminal Berth *(Formerly Naticorp Pier):* Located on the West coast of Pt. Majagua, this installation consists of a wooden narrow passage 1,804 ft. long ending at a steel platform along which runs the pipe-lines, one 16 in. and other 12 in., and a catwalk.

Loading of molasses is performed through three connections, diameter 8 in. each, but in the near future they are going to be replaced by 10 in. diameter connections.

Docking can be effected only during daylight hours.

Vessels berth to 4 solid dolphins, 2 mooring buoys aft, and 2 fore, across the head of the installation.

Draft: 33 ft. even keel (not official)(†).

Max. length: 610 ft., Loading rate: 350 t.p.h.

(†)This place has been dredged recently (Former draft 30 ft. – 30 ft. 6 in.) but new official draft has not been released at the moment of publication, and mentioned draft is only the result shown by previous experience. Also see "Anchorages".

STEVEDORES:

Mondays to Fridays:	0700 – 1100 hrs., 1300 – 1700 hrs.
Saturdays:	0700 – 1100 hrs.

Although the above are the official working hours of the port of Cienfuegos, frequently 3 shifts of 8 hours each are worked, commencing at 0640 hrs. Also on Sundays a shift is worked from 0640 to 1100 hrs. This is done whenever all conditions, including personnel and weather, are favourable.

The port can operate 9 ships simultaneously as follows:

1 Loading bulk raw sugar.
2 Loading or discharging general cargo (docked).
1 Loading or discharging general cargo (on anchorage).
1 Loading molasses.
4 Tanker vessels discharging petroleum products.

Through this port all kinds of cargoes are imported with the exception of bulk wheat and bulk fertilisers.

Exports: Bulk raw sugar, molasses and occasionally general cargo.

Coastal trade consists mainly of discharge of petroleum products, and other kinds of coastal trade cargoes are seldom handled by this port.

The following equipment is owned and operated by the port:

4 Tugboats: 2 – 150 h.p., 1 – 168 h.p., 1 – 120 h.p.
8 Cargo Barges: 3 – 100 tons, 3 – 130 tons, 1 – 150 tons, 1 – 180 tons.
1 Fuel Oil Barge: 240 tons.
1 Water Barge: 200 tons.
1 Floating Crane: 35 tons.

All bulk raw sugar is shipped by the Bulk Raw Sugar Shipping Plant by means of modern mechanical equipment and bulk raw sugar ex-bags is not shipped through this port.

MEDICAL: Two hospitals, General Hospital and Mutualist Clinic (formerly Sanatorio de la Colonia Espanola), where sick crew members can be hospitalised.

FUEL: Regular bunkers can be obtained at this port (whatever type of diesel oil or fuel oil may be stored in the shore tanks at the time of delivery).

Fuel oil is supplied to vessels by means of barge, capacity 240 tons which is towed to the place where ship is operating or berthed.

Diesel oil is supplied by docking at pier, by pipe-line.

If any tanker vessel is operating at "Pablo E. Guzman" pier, delivery must wait until tanker finishes operations and leaves pier.

Mixtures of fuel and diesel oil, IFO, (Intermediate fuel oil), cannot be obtained at this port.

FRESH WATER: *(Potable or for Boilers):* Delivered by means of barge, capacity 200 tons, which at the present time is in bad condition, having frequent breakdowns and is often out of operation. It is going to be replaced, but until such time water delivery by barge must be considered as only a possibility, not to be depended upon, so it is unreliable.

Water can be obtained at either side of Tricontinental Pier at an average rate of 10 t.p.h.

REPAIRS: Repair shop available, but can only carry out winch repairs and other light work.

SHIPMASTER'S REPORT: May 1979.

Documents:

1 Copy Maritime Declaration of Health.
1 Copy Clearance from Previous Port.
De-Rat Certificate or Exemption.
1 Copy Cargo or Ballast Manifest.
10 Copies Crew Lists.
5 Copies Personal Effects (including new clothing). All individual Crew Lists must have Christian names as well as Surnames – initials not sufficient.
3 Copies Provisions Lists. Meats and weights to be separated by countries i.e. Beef (Argentina) 200 lbs., Beef (U.K.) 400 lbs., etc.
4 Copies Stores Lists.
1 Copy Vaccination List. Apparently no vaccination necessary for Cuba.
4 Copies Currency Lists. All currency placed in Master's safe together with jewellery, valuables etc., and sealed.

N.B. Crew only allowed: 1 watch, 1 radio, 1 tape-recorder and 6 cassettes, remainder to be bonded.

Officials: On arrival ship is boarded by Doctor who gives pratique, after which ship is boarded and sealed by Customs and Immigration. After this the Customs Control Board, and the ship is searched from stem to stern.

There is also a search when the ship sails although the search is not so thorough and they only seem to be looking for stowaways.

Meat and fish room are sealed throughout stay but sanitary inspectors board every day (and charge 5 pesos per visit) to take out sufficient selected stores for the day.

Pilotage: Compulsory.

Anchorage: Safe anchorage inside the bay only. Outside the entrance the water is too deep. There is sufficient room for anchorage of 15 vessels. Depth 8 fathoms. The bottom is soft mud which gives very good holding ground.

Restrictions: There is a whirlpool in the entrance at "Pasa Caballos Turn" at various states of the tide when navigation is not possible during a rising tide. Sailing is only possible between HW and LW when the tide is ebbing.

Max. Size: Max. permissible draft 38 ft., tidal range about 1.5 ft., max. LOA 207 m.

Radio: The radio room is sealed throughout the stay.

VHF: VHF Radio in Pilots and Agents office. The Pilots all seem to speak English. There is no VHF on pilot launches, they were expecting new sets.

Tugs: One tug available, 1,200 h.p.

Berthing: Tricontinental East Pier: Max. draft 31 ft. forward, 33 ft. aft. However the berth is being dredged to 38 ft. Max. LOA 200 m. Length of pier 555 ft. Tidal range approximately 1.5 ft. Density 1022.

Vessel loaded bulk sugar and with full ballast (except No. 3 deep tank) vessel had 5 ft. clearance at the ship's side rail.

Bulk sugar loaded from conveyor belt on the shore which is said to have a very accurate weightometer incorporated.

Loading rate with one loader 400 tonnes p.h. and with two loaders 1,000 tonnes p.h.

The warehouse on the quay is said to hold 30,000 tonnes.

Work carried out throughout 24 hours.

The stowage factor of the bulk raw sugar was 43.8 cu. ft./metric tonne.

The berth is very well fendered, however the after mooring points were poor.

Fuel: Available. Grade not known.

Fresh Water: Available. Rate 10 t.p.h. Also available by water barge.

Medical: Two hospitals and doctor available. Vaccinations by the port doctor were said to be free but ship was charged by the Agents.

Repatriation: Possible.

Repairs: Engine work can be done with permission for immobilisation.

Shore Leave: Shore pass not to be in any way defaced or shore leave for that person will be stopped. Shore leave is only allowed between 1800 hrs. and 2400 hrs., and any person late back will be fined. Ship's pass and Seaman's Discharge Book is handed to guard at bottom of gangway who issues another pass. This has to be exchanged for another pass further up the dock where all money is counted, all valuables are written on pass, time ashore is entered on pass and then one is free to proceed to the town by bus. There is no seaman's mission or any places of recreation, etc.

The same procedure has to be gone through on the return to the vessel.

General: The spare propeller must be sighted before loading can commence.

Flags: Courtesy flag must be higher than house flag.

Lifeboat: Lifeboats can be swung out.

Painting: Punt can be used for shipside painting.

Stores: Fruit and eggs very cheap and plentiful and of good quality.

Refuse: Garbage must be in covered containers which are sprayed together with the ship's fridges, storerooms, galley and pantries on vessel's arrival.

Ratguards: Ratguards must be on all ropes throughout vessel's stay and must not be allowed to fall or blow off or vessel is fined. Many rats were seen in the dock area.

DUNNAGE: This port has conditions and facilities to supply dunnage materials, but specially in the case of wood dunnage, requisition must be placed at least 5 days before delivery date.

AUTHORITIES: All port authorities are located at port of Cienfuegos.

From Cienfuegos to Casilda and Tunas de Zaza, following transportation can be used: railroad, trucks, barges.

It takes from 2 to 5 hours, according to transport conditions, to travel from Cienfuegos to Casilda or Tunas de Zaza.

Distance, by sea, from Cienfuegos to Casilda 45 miles; to Tunas de Zaza 80 miles. Suggested that railroad or highway be used to travel from Cienfuegos to Casilda or Tunas de Zaza. There is daily omnibus and auto service from Cienfuegos to Casilda and Tunas de Zaza.

There is a daily flight Havana – Cienfuegos which arrives at Cienfuegos around 1130 hrs. and departs for Havana at about 1200 hrs.

Also a daily departure of passenger railroad service Cienfuegos – Havana.

Bus line Cienfuegos – Havana has scheduled departures every 2 hours.

Other bus lines have excellent service to Camaguey, Santa Clara and other cities.

Taxi service is available to any point within city limits or to any place or city and should be requested to our Cienfuegos Agency.

AGENT: Empresa Consignatarias Mambisas, Agencia Cienfuegos, Avenida 50 2712, POB 420. *Tel.* 5718 – 6422 (Night: 6715 and 5332). *Telex:* 04218. *Cables:* "Mambisas Cienfuegos".

Recommended that all correspondence or instructions be sent through Havana main office. Cienfuegos Agency attends ships that operate at Casilda and Tunas de Zaza. For any information concerning vessels operating at these sub-ports, Cienfuegos Agency should be contacted.

Mail should be sent by airmail, parcels and spare parts by air express.

Any mail or parcels received at Havana by our Main Office, destination Cienfuegos, are sent daily by air express to Cienfuegos Agency, which use the same method from Cienfuegos to Havana.

SUB-PORT OF CASILDA: 21.45 N. 79.59 W.

LOCATION: The Port of Casilda is located on the South coast of Cuba. Lat. 21° 45′ N., Long. 79° 59′ West.

This is the shipping port for Trinidad, distance 3 miles from Casilda.

The town of Casilda and the port are situated on the North shore of a safe, landlocked small bay, shoal over its greater part.

PILOTAGE: Vessels should pick up Pilots at Cayo Blanco. Distance from point where Pilot boards vessels to pier is 9 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: Jobabo channel is the main entrance to this port and runs East of Blanco Cay.

Channel bottom is soft mud and on its course has a difficult "S" shape turn where precautions should be taken, nevertheless tugboat is not required for entering or sailing manoeuvres.

Entrance to port can be effected only during daylight hours and Masters must take notice that if vessel arrives before daybreak and Pilot is required in order to anchor and wait for daylight, an extra charge will be incurred.

In the same manner, if vessel arrives at dusk, it is probable that she cannot enter port, because docking must take place during daylight hours.

ANCHORAGES: The port has several anchorages, such as: "La Poza", located at bay, 17 ft. draft; "Bajo del Medio", an area 2.5 square miles, draft 25 ft.; "Jobabo" 26 ft. draft.

Also N.E. of Blanco Cay there are anchorage areas, having 40 ft. draft, and more.

MAX. SIZE: Vessels can enter and sail with max. draft of 25 ft. and length up to 565 ft. Tidal variation about 2 ft.

RADIO: Vessels navigating to Cuba can send their messages via "CLA" Havana Radio Station, which immediately relays the message to our Cienfuegos Agency.

While navigating in Cuban waters, Masters can contact "CLC" Cienfuegos Radio Coastal Network, which also relays the messages promptly to Cienfuegos Agency, and can answer them by the same system.

Station "CLC" also has radiotelephony.

Masters must send their ETA messages simultaneously to Mambisas Cienfuegos and Mambisas Havana.

TUGS: None.

BERTHING: Casilda pier is built in the shape of an "L" the upright part of the "L" being the West side and the inferior part the South side.

Vessels docked at pier can be supplied limited quantities of fresh water and also, if necessary, electric power 110/220/440 volts.

Pier has railroad tracks along its length and at the paved West side trucking operations can be effected.

South side is not paved and is mostly used for operating tankers.

Coastal Pier No. 1: (East Side):

Length: 520 ft. Max. length permitted: 565 ft. Draft: 25 ft.

Cargoes handled on this side:

Importation: General cargo, wood pulp, lumber, caustic soda, etc.

Exportation: Bagged refined and raw sugar.

Coastal Trade: Occasionally general cargo.

Docking only during daylight hours.

Coastal Pier No. 2: (South Side):

Length: 390 ft. max. length permitted: 565 ft. Draft. 25 ft.

Cargoes handled by this side:

Importation: Fuel oil and crude oil, and occasionally diesel oil.

Exportation: Alcohol.

Coastal Trade: Fuel oil and crude oil, and occasionally diesel oil.

Two vessels can operate simultaneously at Casilda:

One at the West side of pier loading sugar or discharging dry cargo, and another at the South side discharging petroleum products or loading alcohol.

During dry spells it is possible to operate 2 dry cargo vessels, one on each side of pier, but this is not advisable as both vessels will be worked at half capacity because of limit of labour.

No operations at bay or anchorage performed at Casilda.

STEVEDORES: Working periods:

Monday to Friday 0600/1000 hrs., 1200/1600 hrs.; Saturday 0600/1000 hrs., 1200/1600 hrs.; Sunday when necessary, same periods.

Raw sugar loading rate: 1,200 sugar bags, loaded per gang per day. Bags per sling: 6 sugar bags per sling. Operation capacity: only one vessel can operate.

Refined sugar loading rate: 1,500 bags per gang per day. Bags per sling: 12 bags loaded per sling.

Shore crane: No shore crane available.

Bulk sugar equipment: no bulk sugar equipment available.

Warehouses: 2 warehouses with capacity for storage of 70,000 bags of sugar. No. 1 (at the pier) 40,000 bags (250 lb.). No. 2 (at the Real Street) 30,000 bags.

TANKERS: Fuel/Crude Oil: 1×8 in. diameter.

Diesel Oil: 1×6 in. diameter.

Alcohol: 1×5 in. diameter.

Also see "Berthing".

MEDICAL: Sick crew members can be sent to General Hospital.

FUEL/REPAIRS: Not available.

FRESH WATER: Vessels can be supplied with fresh water, delivered by means of electric turbine at the pier. Delivered at average of 30 t.p.h.

DUNNAGE: Wood dunnage is not available at Casilda. Paper dunnage is available if requested well in advance as there is a small stock in the port, and if vessel's requisition exceeds port's stock, difference can be brought from the paper mill nearby.

TRANSPORTATION: Transportation to or from Casilda is difficult.

Railroad system connects Casilda with Trinidad continuing to Cumbre, where it joins the Central railroad system, or to the city of Placetas, located on the Central highway system. From Cumbre railroad travel is available to any place in Cuba, likewise at Placetas by road.

There are also roads to Cienfuegos and Sancti Spiritus.

AUTHORITIES: Port Captain, Custom Authorities and Port Doctor travel from Trinidad to Casilda.

AGENT: If any information required regarding ships operating at Casilda, Cienfuegos Agency should be contacted. Agent in the port available, but difficult to contact. Telephone number 2077.

Crew mail or any other mail should be sent to Havana main office, from where it is sent to Cienfuegos.

SUB-PORT OF TUNAS DE ZAZA: 21.37 N. 79.32 W.

Seaport of Sancti Spiritus. Port lies about 1.25 miles North of Point Ladrillo.

PILOTAGE: Pilot may board vessels either at Breton Channel or Tunas Channel.

Distance from point where Pilot boards vessel entering through Breton Channel to Tunas de Zaza anchorage is 8 miles. From place where Pilot boards vessel entering through Tunas Channel is 1.5 miles. Pilot station for Tunas Channel, located at Cayo Zaza de Fuera. For Breton Channel, entrance of Breton, that is, 8 miles from anchorage.

MAX. SIZE: Two channel entrances for this port; one through Breton Channel, which is with turns, but not dangerous. Vessels can enter or sail through this channel drawing up to 29 ft. The other one through Tunas Channel, has no turns. Vessels can enter and sail through this channel, drawing up to 22 ft. No length restrictions.

Tidal variation 1 ft. 6 in. Vessels can enter day and night.

RADIO: Via Radio Havana, for relay through Cienfuegos Agency.

TUGS: 3 tugs: *Arturo, Don Juan,* and *Tuinicu,* which tow up to 6 barges.

BERTHING: All operations are effected at anchorages.

Inner Anchorage: Located about 1.25 miles South-Westward of the town. Draft: From 24 ft. to 27 ft. Soft mud bottom.

(b) *Outer Anchorage:* Located South of Pt. Ladrillos. Draft: 30 ft. (load only up to 29 ft.). Soft mud bottom.

Only one vessel at a time can be handled.

There are 9 barges available for loading sugar with total loading capacity of 7,500 bags. Sugar loading rate: 1,500 bags per gang daily. Bags per sling: 6 sugar bags loaded per sling.

Bulk sugar equipment: None.

STEVEDORES: Working periods – loading sugar: Monday to Friday 0600/1000 hrs., 1200/1600 hrs.; Saturday 0600/1100 hrs., 1200/1600 hrs.; Sunday: when necessary.

MEDICAL: For sick crew members, there is a general hospital at Sancti Spiritus.

FUEL/REPAIRS: None.

FRESH WATER: No water available.

DUNNAGE: None.

TRANSPORTATION: There are two daily car services, and also road transportation is possible by bus but car service is preferable.

AUTHORITIES: There are Custom House and Captain of the Port Delegations at this sub-port. Customs also acts for Immigration. Port Doctor located at Zaza del Medio.

Vessels can proceed directly to this sub-port where they are visited by port authorities. Means of transportation used by port authorities to give entry is by launch service.

At this sub-port Custom House and Captain of the Port have delegations, but not port Doctor.

AGENT: Vessels operating at this sub-port are attended by personnel from Cienfuegos Agency.

Mail should be sent to Havana for forwarding to Tunas de Zaza.

GUANTANAMO: 19.59 N. 75.10 W. (See Plan Book)

LOCATION: Guantanamo is an ample, sheltered, landlocked bay of an approximate extension of 11 miles.

The mouth of the port is formed by 2 points: Point Leeward on the West side and Point Windward on the East side. Point Windward is round shaped, drab olive coloured and with arid cliffs, where, on a grey painted building is located a lighthouse, the white light of which flashes twice every 20 seconds and is visible up to a distance of 26 miles. Point Leeward is low, having a landing field.

For description purposes, Guantanamo Bay may be divided into what could be considered outer harbour and inner harbour. The outer harbour is rugged having a number of creeks with several cays, mostly in the centre. This outer harbour is almost entirely occupied by the United States of America Naval Base and it is convenient to make clear that the merchant vessels nominated for operations at Boqueron, located in the inner harbour, do not need any permit or authorisation of said Naval Base.

The inner harbour is most ample, practically free of cays and widening out forms 2 bays, separated by Point Manati. The bay located at the N.E. is known as Joa Bay.

Guantanamo City is located at a distance of 23 km. inland, in the most important coffee-growing district of Cuba.

Guaso River flows into the Northwestern extreme of Guantanamo Bay and Guantanamo River at St. Nicolas Point.

PILOTAGE: Pilots board vessels at distance of 1 mile from Buoy No. 1 at port entrance.

Distance from where Pilots board vessels to: General anchorage: 7.5 miles. "Boqueron" Pier: 7 miles.

RADIO: Vessels navigating toward Cuba can communicate with Mambisas Caimanera Agency through "CLA" Station at Havana and the message will be relayed to Caimanera by telegraph service.

Masters must send their ETA messages simultaneously to Mambisas Caimanera and Mambisas Havana.

At Caimanera there are the following services:

Telephone, local and long distance, telegraph and Post Office.

There is no telephone communication between Caimanera and Boqueron.

APPROACHES: Wide entrance channel with mud bottom and free from navigational hazards.

ANCHORAGES: Max. draft 25 ft. to 27 ft. Swinging area 400 m.

MAX. SIZE: Vessels can enter with max. draft up to 19 ft. and length 1,610 ft. (tankers), 500 ft. (cargo vessels). Tidal variation is from 1.5 ft. to 2.5 ft. depending on season.

TUGS: Not available.

BERTHING: The pier is a solid concrete construction 504 ft. long and 60 ft. wide.

Along the pier run 4 railway tracks of standard gauge.

Molasses is loaded at the North side only, but sugar can be loaded at both sides of the pier.

Although the draft at either side of pier is 22 ft., vessels load only up to 19 ft., owing to the draft of the port channel.

Boqueron Pier:

(a) North Side:
Length: 504 ft. Draft: 22 ft.
Cargo handled: Molasses and bagged raw sugar.
(b) South Side:
Length: 504 ft. Draft 22 ft.
Cargo handled: Bulk raw sugar.

Two vessels can operate simultaneously:

A tanker loading molasses at the North side of the pier, and another vessel loading sugar at the South side.

STEVEDORES: Sugar and molasses loading operations are carried out at this port.

Working periods loading raw sugar: From Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; at night time whenever necessary. Saturday 0700/1100 hrs.; at night time whenever necessary. Sunday: above-mentioned periods, whenever necessary.

Bagged sugar loading: 780 bags loaded per gang-period. Sugar bags per sling: 4 sugar bags per sling.

Capacity: Two vessels can load simultaneously at Boqueron Pier.

Raw sugar in bulk: Four complete sets of machines and 10 grates.

TANKERS: Molasses pumping rate average of about 35,000 gallons per hour.

MEDICAL: At Caimanera there is a modern hospital equipped for both medical and dental services, where crew members are attended when required.

In serious cases or when highly specialised medical care is required, the patients are sent by ambulance to Guantanamo Regional Hospital.

FRESH WATER: Can only be supplied by Boqueron Pier through 2.5 in. pipe-line. Delivery rate is 10 t.p.h. Vessel must furnish hoses.

FUEL/REPAIRS: Not available.

TRANSPORTATION: Transportation between Caimanera and Boqueron is effected only by means of launches.

Distance between Caimanera and Boqueron is 1.5 miles.

From Caimanera to Guantanamo, travelling could be effected either by railroad or paved highway and for both routes the distance is 23 km.

There are 3 daily scheduled trains and 14 modern bus departures, travelling time being approximately 40 minutes.

From Guantanamo to Havana there is a scheduled bus service with several departures daily. Travelling time from Guantanamo to Havana by bus is 16 hours. Also there is a daily departure at 1230 hrs. of an airway service Guatanamo/Santiago/Havana.

There is a very efficient service of minibuses for the transportation of travellers to and from the airport.

From Guantanamo to Santiago de Cuba there is also bus service with several departures daily, travelling time being 2 hours.

DUNNAGE: Although dunnage materials can be obtained at Guantanamo, if possible, it is preferable that vessel arrives supplied with same, because sometimes the requisition of the vessel may be higher than the port stock, and that could mean delays.

Whenever necessary to request dunnage materials at this port, the requisition should be made not less than 5 days in advance of vessel's arrival.

AUTHORITY: All Port Authorities are located at Caimanera where Mambisas Agency Office also is located. Caimanera lies across the bay, just in front of Boqueron Pier, at a distance of 1.5 miles.

AGENT: Empresa Consignataria Mambisa, Linea No. 9 entre Marina y Correos, Apartado No. 5, Caimanera, Guantanamo, Prov. de Oriente. Telephone: 23. Cable: Mambisas Caimanera.

Agency VHF works on Channel 16.

Mail and Parcels: Must be sent to our Main Offices at Havana, because vessels loading sugar at Guantanamo usually load their cargo in a very short time and all mail and parcels received would be sent to Guantanamo or a second loading port, whichever is deemed to ensure delivery.

HAVANA: 23.09 N. 82.21 W. (See Plan Book)

Havana is a natural, landlocked, well sheltered harbour and the most important port of the country owing to its port facilities and for being the capital.

PILOTAGE: Compulsory. For requesting Pilot, in daytime or at night, ships shall use signals established in International Signal Code, also they can direct light signal to Morro semaphore and make sound signals at intervals.

Pilot service is compulsory for all foreign ships more than 40 gross tons.

Master must inform Pilot: port of origin, illness of any person on board, or if ship is carrying explosive or easily inflammable materials, in which case the ship shall be anchored in special berths and shall be under control of port authorities.

Any ship in port requiring immediate Pilot services should either call telephone numbers: 62–3602 or 62–2896; or hoist "G" Flag, sound 2 prolonged blasts.

Pilots board vessels approximately 1 mile from port mouth, although in some cases, especially at night-time, they will go out about 3 miles to meet incoming vessels.

Pilot station located at San Pedro St. No. 2. Telephones: 62–3602 and 62–2896.

Distance from where Pilots board vessels up to port anchorage or wharves is about 1 mile.

APPROACHES: The port is entered through a straight channel with Morro Castle to the East, La Punta Castle to the West.

The bottom is muddy, with no narrowness, but at the entrance there is a strong current which is to be taken into consideration in the entry manoeuvres of any vessel.

Port can be entered to or sailed from, either in day or night time and it is not necessary to wait for slack or favourable tide, except tankers drawing 37 ft. which can enter only at high tide.

While approaching Havana the most remarkable points of visual orientation are its tall buildings and Morro Castle, located on the East side of the entrance.

ANCHORAGES: There is an ample anchorage zone area where loading and discharging operations are performed.

MAX. SIZE: Max. draft in channel at low tide is 12.8 m. Max. draft in main anchorage is 10.06 m., minimum depth throughout the bay (except the refinery) is 10.06 m. Tankers can enter drawing up to 11.28 m., as they take special course once they are inside bay. Tidal variation about 45 cm.

RADIO: Vessels navigating to Cuba can communicate with Mambisas Havana through "CLA" Havana Radiotelegraphy Station which relays the message immediately to us by telex.

While approaching Havana vessels can communicate by VHF radiotelephony with:

Mambisas Agency: Channel 12.
Pilots: Channel 16.
Both, Agency and Pilots, are on the air 24 hours of the day.
Masters must send their ETA messages to Mambisas Havana.
The following means of communication are available at Havana:
Cable: C.L.A. International, R.C.A., Western Union.
Telephone: Local, long distance and international.
Telex: Local, National telex system and international.
Airmail and Air Express: National and international.

At our main offices in Havana there are two telex machines, which is the quickest means of communication available.

TUGS: Supplied by Port Authority.

BERTHING: The port is divided into numerous docks, which are detailed below.

Andres Gonzalez Lines Dock: This dock is used for the discharge of fertilisers in bulk and coal. It is 332.2 m. long with drafts that vary from 5.18 m. to 9.14 m. There are railway connections and an overhead discharge crane.

Sierra Maestra Terminal:

Pier	*Length of Pier* (m.)	*Max. draft with which vessels may perform operations* (m.)
Pier No. 1 (North Side)	201.8	9.14 – 10.06
Pier No. 1 (South Side)	201.8	9.14 – 10.06
Pier No. 2 (North Side)	201.8	9.14 – 10.06
Pier No. 2 (South Side)	183.5	9.14 – 10.06
Pier No. 3 (North Side)	190.5	9.14 – 10.06
Pier No. 3 (South Side)	171.3	9.14 – 10.06

There is one warehouse at each of these piers and all have rail connections. The terminal is used for loading and discharging general cargo.

Margarito Iglesias Terminal:

Pier	*Length of Pier* (m.)	*Max. draft with which vessels may perform operations* (m.)
Pier No. 1 (North Side)	135	6.10
Pier No. 1 (South Side)	135	6.10
Pier No. 2 (North Side)	135	6.10
Pier No. 2 (South Side)	135	6.10
Pier No. 3 (North Side)	135	5.49
Pier No. 3 (South Side)	135	5.49

Both these general cargo piers have a warehouse, each with a capacity of 22,304 cu.m.

All piers have rail connections. The terminal is used for loading and discharging of general cargo.

Havana Central Pier: This pier, which is used for discharging and loading general cargo, is on the North side. Length 132.3 m., width 60.95 m. Depth alongside 9.45 m. at Bay end or East side, 8.84 m. at centre and 7.92 m. at its West shore end. On South side, length 146.3 m., width 60.95 m. Depth alongside 9.75 m. at the Bay end or East side of the pier, 7.92 m. at the centre and 5.79 m. at its West or shore end. Pier has a sheltered warehouse capacity of 21,285 cu.m. and a railroad siding connected with main track.

Aracelio Iglesias Terminal: This terminal used in the discharge and loading of general cargo, consists of a dock and a pier. The dock is 174.6 m. long and 13.41 m. wide and depth alongside ranges from 6.10 m. to 7.92 m. Dock has one sheltered warehouse with capacity of 110,463 cu.m. Pier (North side), length 157.8 m., width 31.70 m., depth 11.28 m. at the East or Bay end, 9.14 m. at centre and 7.31 m. at shore or West end.

Pier (South side), length 152.1 m., width 31.70 m. with depth alongside of 10.36 m. at East or Bay end, 10.36 m. at the centre and 8.23 m. at the West or shore end.

Pier has a sheltered warehouse with a capacity of 30,880 cu.m.

Both dock and pier have railroad siding connecting with the main track.

Juan Manuel Diaz Terminal: The terminal used in discharge and loading of general cargo consists of two docks and one pier. Dock No. 3: Length 158.8 m., width 17.07 m. with depth alongside of 6.40 m. at the N.E. end, 6.70 m. at the centre and 7.92 m. at S.W. end. Dock has a sheltered warehouse with a capacity of 50,230 cu.m. Pier (North side) length 152.4 m., width 38.10 m., depth alongside 10.67 m. at the Bay end or East side, 9.14 m. at centre and 6.10 m. at the West or shore end. Pier (South side), length 161.5 m., width 38.10 m. with depth alongside of

10.36 m. at Bay end or East side, 9.14 m. at centre and 7.31 m. at the shore or West end. Dock No. 2: Length 146.6 m., width 9.45 m. and depth alongside 6.40 m. at N.E. end, 6.70 m. at centre and 7.92 m. at S.W. end. Pier has sheltered warehouse with capacity of 39,821 cu.m. while Dock No. 2 has a sheltered warehouse with capacity of 112,471 cu.m. Both docks and pier have railroad sidings connecting with main track.

La Coubre Dock: No longer in operation.

Tallapiedra Dock: This dock used in discharge of lighters, has a length of 138.1 m., depth alongside 4.27 m. at N.E. end, 5.73 m. at centre and 4.57 m. at the S.W. end.

Antonio Guiterras Dock: This dock, used in the discharge of lighters of heavy lifts, from vessels performing operations in Bay, is 258.1 m. long, depths alongside (from Tallapiedra Pier No. 2) 7.92 m., 6.40 m., 5.49 m. and 3.35 m. If no lighter is used, vessels drawing up to 7.01 m. only can berth at this dock.

Osvaldo Sanchez Docks: These docks used chiefly in discharge of lumber. Dock No. 1 (formerly Atares), is 130.5 m. in length, 9.14 m. wide with depth alongside 6.70 m. at N.E., 7.01 m. in centre and 7.31 m. at the S.W. end. Dock No. 2 (formerly Vaccaro) is 155.7 m. long, 9.14 m. wide with depths alongside of 7.92 m., 6.40 m., 3.66 m. and 5.18 m. These docks have sheltered warehouses. There are no sidings.

Melones Dock: This dock has installation for discharge of fuel oil as well as an overhead crane for discharge of fertilisers and coal. Dock length 218.8 m., width 10.67 m. Depth alongside 5.49 m. at the N.E. end, 3.96 m. in centre, 3.05 m. at the S.E. end. Not in operation at present due to shallow draft. No sidings. Storage in open.

Puerto Pesquero de la Habana: Consists of Pote Dock, Hacendados Pier and Dock which have the following facilities.

Dock	Length (m.)
No. 1	259.9
No. 2	153.9
No. 3	224.9
No. 4	157.5
No. 5	157.5

Drafts: Minimum 7.31 m. Maximum 7.92 m.

Haiphong Terminal: (Formerly Maritima). This dock is used for the discharge and loading of general cargo. Length of dock 532.5 m., width 21.94 m. and depth alongside 9.75 m. to 10.67 m., along entire length of dock. This dock has 2 large warehouses and sidings, although at present only trucking operations are performed. It has 12 gantry cranes with a maximum lifting capacity of about 12 tons and berthing space for 3 average sized vessels, but in the near future will have two additional berths.

Manuel Porto Pena Terminal: Terminal consists of the following docks:

Manuel Porto Pena (formerly Burrus): Dock used for discharge of bulk shipments of grain. Equipped with elevator and silos having storage capacity of approximately 20,000 tons. Permitted discharge rate of approximately 1,200 tons per day. Length of dock, 167.6 m., width 7.92 m. and depths alongside 7.92 m. and 9.29 m.

Manuel Porto Pena No. 1: This dock used in discharge and loading of general cargo and sugar is 96 m. in length and 10.67 m. wide with depths alongside from 7.01 m. to 8.23 m. Dock has one sheltered warehouse and railroad sidings.

Manuel Porto Pena No. 2: This dock is used for loading and discharging sugar and general cargo. Length 136.2 m., width 10.88 m. with depth alongside of 7.92 m. at S.E. end, 7.62 m. at centre and 8.23 m. at the N.W. end. No warehouse, but is equipped with railroad sidings and has installations for discharge of fuel oil.

Manuel Porto Pena No. 3: This dock used for discharge and loading of general cargo is 201 m. in length and 9.14 m. wide, with depth alongside 9.75 m.

Turcios Lima (Grain Silo Dock), installation for discharge of bulk shipments of grain. There are 36 grain silos and 18 part silos with a total capacity of 30,000 tons. Unloading rate 100 t.p.h. This dock has 1 sheltered warehouse and railroad sidings, and installations for the discharge of fuel oil and gasoline.

Manuel Porto Pena Berth No. 17: Length 170 m., depth 10 m.

Extractora de Aceite Berth: This dock is not in use at present.

Quinto de Regla Pier: This pier used mainly for loading of sugar. Pier (South side) 189.6 m. long, 10.36 m. wide with depth alongside 8.23 m. at S.W. or Bay end, 7.62 m. at the centre and 5.18 m. at the S.E. end. Pier (North side), length 104.5 m. width 16.46 m., depth alongside 8.53 m. at N.W. or Bay end, 7.92 m. at centre and 6.70 m. at the N.E. end. Pier has railroad sidings.

Fresser Pier: This pier has installations for loading molasses. Pier (South side), 141.7 m. in length, 9.14 m. in width with depth alongside 8.23 m. at S.W. or Bay end, 7.62 m. at the centre and 7.01 m. at S.E. end. Pier (North side), 124.1 m. in length, 9.14 m. in width with depths alongside of 6.70 m. at N.W. or Bay end, 7.92 m. at the centre and 7.62 m. at West end. This side of pier used only for docking purposes.

Edificios No. 1 and No. 2: These docks used in discharge of fertilisers also have installations for loading/unloading molasses.

Edificio No. 1 Dock: Length of dock 157.2 m., width 7.62 m. with depths alongside 6.40 m. – 6.70 m. of water throughout whole dock.

Edificio No. 2 Dock: Length 115.8 m., with 32.91 m. with depth alongside 5.79 m. at N.E. end, 4.27 m. at the centre and 4.27 m. at S.W. end. No operations are performed at this dock due to its shallow draft. Sheltered warehouses with a total capacity of 64,645 cu.m.

Fertiliser processing plant.

Facilidades Maritimas Dock: This dock used chiefly for loading of molasses and discharge of tallow and chemical products, has length of 248 m., width 7.92 m. and depth alongside 7.62 m. at N.E. or Bay end, 7.92 m. at centre and 7.01 m. at S.E. end. Dock has railroad sidings and is suitable for docking.

Nico Lopez Pier Nos. 1 and 2: (Minimum depth at LW 11.12 m.). These piers are used exclusively in discharging fuel oil, gasoline, etc., and are operated by oil refineries. Pier No. 1 (North side), length 313 m., depth alongside 10.97 m. at Eastern or shore end, 10.67 m. at centre and 10.36 m. at West or Bay end. Pier No. 2 (South side), length 313 m., depth alongside 10.97 m. at East or shore end, 10.67 m. at centre and 10.36 m. at West or Bay end. Pier No. 2 (North side), length 301.7 m. with depth alongside of 10.67 m. at East or shore end, 10.97 m. at the centre and 11.58 m. at the West or Bay end.

CONTAINER/RO-RO FACILITIES: Available.

EQUIPMENT: As the port of Havana owns and operates a large number of auxiliary equipment, only the most important of those are listed here:

Four floating cranes: (1×100 tons) (3×35 tons) lifting capacity.

40 shore cranes: ranging from 30 tons to 5 tons lifting capacity.

Six cargo barges: 125/150 tons cargo capacity.

Nine tugboats: (1×1,200 h.p.) (1×860 h.p.) (1×540 h.p.) and remaining 6 are from 325 to 165 h.p.

STEVEDORES: Monday to Friday: working periods 0700 – 1300 hrs. and 1300 – 1900 hrs., although if necessary, 2 additional periods of 6 hours each may be worked. Saturday: Same as above. Sundays: No work performed.

Raw Sugar: Approximately 1,400 bags of raw sugar loaded per gang period. Six raw sugar bags loaded per sling. Loading raw sugar on 3 vessels simultaneously.

Refined Sugar: Approximately 3,800 bags of refined sugar (of 50 kg.) loaded per gang period. 12–15 bags loaded per sling.

General cargo: Approximate average discharging rate per gang hour:

General cargo about		10.0 tons
Bagged merchandise	up to 51 kg.	16.0 tons
Bagged merchandise	up to 92 kg.	17.0 tons
Bagged merchandise	more than 92 kg.	19.0 tons
Wood		8.4 tons
Fertilisers:		
Superphosphate		9.9 tons
Simple Superphosphate		8.1 tons
Ammonium		9.0 tons
Potash		9.9 tons
Muriate (Chloride)		10.5 tons
Sulphur		10.3 tons
Phosphoric Rock		11.9 tons
Triple Phosphate		8.0 tons
Sodium Silicate		9.0 tons
Ferromanganese		9.0 tons
Floating Cranes:		
Pablo Sandoval		100 tons – boom 51 m.
Frank Pais		25 tons – boom 10 m.
Matilde		6 tons– boom 9 m.

TANKERS: Average pumping rate of molasses is about 60,000 gallons per hour. Average pumping rate of fuel variable, from 3,000 up to 15,000 b.p.h. Also see "Berthing".

TELEPHONES: May be installed on board at Master's request.

MEDICAL: Crew members requiring medical attention are treated at "Commander Fajardo" Hospital where they can be hospitalised if necessary.

Those cases requiring dental care are treated at "10 de Octubre" Dental Clinic.

FUEL: Vessels can be supplied with bunkers at Havana, and following types are available:

Regular diesel oil, regular fuel oil, I.F.O. mixtures (intermediate fuel oil).

Diesel oil is supplied by a 350 ton capacity barge, and fuel oil by a 1,500 ton capacity vessel which is towed to piers or anchorage in order to fulfill deliveries. This vessel also delivers the I.F.O. mixtures and is named 'Playa Colorada'.

I.F.O. mixtures are prepared at the following viscosity degrees: 50 – 200 – 400 – 600 – 800 – 1,000 and 1,500 maximum. (Redwood International Scale, at 100°F).

I.F.O. mixtures are only available at the port of Havana.

Note to Chief Engineers: It is advisable when ordering I.F.O. mixtures to specify always maximum and minimum allowable viscosity of the product.

FRESH WATER: Vessels can be supplied with fresh water by barge in the bay. Six barges available with capacities of 350, 200, 320, 350, and 60 tons. Average rate of delivery about 100 t.p.h.

REPAIRS: Reliable repair shop (Tel: 62.0009).

DRY DOCK: Dry dock operated by Empresa de Talleres Maritimos, an operating unit of Empresa de Navegacion Mambisa. Berthing capacity 134 m. in length and 27.73 m. width, and can handle vessels up to 7.01 m. draft.

East Lateral: Length 194.4 m., width 11.58 m., depth alongside 10.06 m. at Bay end, 8.84 m. at centre and 5.49 m. at shore end.

West Lateral: Length 225.5 m., width 11.58 m., draft 7.01 m. at Bay end, 7.62 m. at centre and 6.10 m. at shore end.

DUNNAGE: Dunnage materials are available at this port but must be requested 3 days in advance of intended delivery.

FIRE PRECAUTIONS: Port of Havana has a fire extinguishing ship, kept on permanent watch duty by Safety Corp. who can be reached through telephone number 6–0777.

AIRPORT: Jose Marti International Airport is 15 km. from the port.

HOLIDAYS: Liberation Day (January 1st), Labour Day (May 1st), Day of National Rebellion (July 26th), Commemoration of Wars of Independence (October 10th). July 25th and 27th are also holidays.

GENERAL: (1) The port of Havana is approachable 24 hours a day, and dock Pilots keep permanent watch duty on their stations located in surroundings of harbour channel, very close to beacon marker of Pila de Neptuno.

(2) Any ship approaching port in daytime shall hoist national flag, merchant flag, and quarantine flag, not lowering the latter until granted "pratique" by doctors in charge of sanitary inspection. At night she shall

show only quarantine lights as prescribed by International Sanitary Regulation.

(3) In case of emergency, ships at anchor shall immediately contact land through Official Radiophone Station CLT, available 24 hours a day, through 2260 kHz. In very urgent cases, CLT can be contacted through 2182 kHz CLT services are free of charge.

(4) Ships moored to piers standing off pier heads at night must keep visible red light at the ship's extremity facing the sea.

(5) Every moored ship must strengthen its lines on first warning from Port Authorities when deemed necessary due to bad weather.

(6) Small boats belonging to ships are not authorised to be used for crew or passengers' service within port limits unless otherwise duly authorised by Harbour Master.

(7) When berthing, ratguards must be placed on all mooring ropes.

(8) Port provides boats to dispose of ship's wastes. Services provided free of charge and can be requested through ship's Agent.

SHIPMASTER'S REPORT: November 1978.

Pilotage: Compulsory. Advise Agent of vessel's ETA. Pilot boards 1 to 0.5 miles N.W. of Pta. Barloventa.

Restrictions: Vessel is able to enter and leave during hours of darkness and at any stage of the tide.

Max. Size: Max. draft for cargo vessel 33 ft. and for tankers 37 ft.

Tugs: There are 3 large tugs and 7 small tugs available (145–860 h.p.). Vessel is able to dock and undock without the assistance of tugs.

Radio: Havana Radio "CLA".

VHF: Port Authority and Pilot operate on Channel 13. Agent on Channel 12.

Fresh Water: Available.

Repairs: Facilities available.

Fuel: Bunker fuel oil and diesel oil available.

Medical: Doctor and hospital available.

Facilities: Laundry services available, telex available but unreliable. Groceries and meat available but in limited quantity.

Berthing: Terminal Sierra Naestra Berth No. 3 South:

Position of berth: Lat. 23° 08′ 25″ N., Long. 82° 20′ 42″ W. Distance from entrance 1 mile. Max. size of vessel that can berth LOA 520 ft., beam no restriction. Max. draft 29 ft. Least depth of water in channel from sea to berth 40 ft. Range of tide 1.5 ft. Vessel is able to dock and undock at any stage of the tide day or night.

Bulk Handling Facilities: Two grain silos available.

Cranes: 1 quay equipped with 12 cranes, capacity unknown. 4 floating cranes available, 1×100 tons, 3×75 tons capacity.

Special Cargo Handling Facilities: Ro/Ro facilities available. There are facilities for handling palletised cargo and containers, also there is a reasonable amount of storage space for containers.

Stevedores: Stevedores are allocated by Port Authority and the vessel has no say in the number of gangs supplied. There are a limited amount of steel barges.

Density: 1014.

General: On arrival, vessel waited 2 hours outside for a Pilot then entered harbour where we waited another two and a half hours for a ship to sail, no ship sailed and no other reason given for delay.

Docked starboard side to Sierra Maestra No. 3 South depth 24 ft. forward, 37 ft. aft, 1 tug pushing. Pilots good.

Officials boarded shortly after arrival, following documents required:

Port Health:	1 Health declaration. 3 Crew lists. 1 Vaccination list. All vaccination books.
Immigration:	All discharge books. (To be inspected) 5 Crew lists.
Customs:	3 Personal declarations. (In detail) Cargo plan. 5 Crew lists. Cargo Manifests. Pornography in bond.
Agriculture:	2 Crew lists. 1 Provisions list. (Comprehensive) Cargo plan.

Personal declaration must include watches, cameras, radios, tape recorders, presents, new clothes and money all of which must be placed under seal. One watch and 1 radio allowed to be retained by each Crew member and 1 camera by Master. Advisable to have all above collected prior to arrival.

Vessels normally searched by police and anything found, i.e., watch, radio, money, new clothes and cameras, etc., confiscated whether declared or not. To the surprise of officials this vessel was not searched.

All crew are issued with a shore pass with the exception of the Master. Shore leave extends from 0800 hrs. to 2400 hrs., extension may be obtained but only on special request to the Agent. Shore passes must show the money issued and must be signed by the Master.

On going ashore money and other articles are checked together with watches, jewellery and lighters, etc., and entered on the pass. Should any shortage or excess be found on return a fine will be imposed. On return money remaining is entered on the pass and anyone taking ashore more than the amount shown on the pass will have it confiscated (this actually happened in Isobela).

Communications outside Cuba are difficult, telexes are accepted by Agents but certainly not always sent the day handed in.

Incoming telexes can be delayed up to 6 days. Telephone calls may be made but usually take 3 to 5 hours by which time offices in Europe are closed. In an emergency British Embassy will transmit urgent messages via direct radio link. Embassy most pleasant and helpful. As will be seen by foregoing, it is essential that schedule made with Portishead and Charterers informed to send all messages via this station.

Stevedores very co-operative but due to uncertainty of transport and information on number of gangs, time of completion was uncertain until last day. All discharge was direct to trucks.

Agriculture Department demand that all garbage be placed in plastic bags with neck tied (they supply bags if none on board and charge vessel). Bags collected twice weekly and shore labour do all handling. All meats except New Zealand and Australian sealed. Daily issue of New Zealand and Australian meats given and fridges resealed, any other meats required must be purchased ashore.

Fuel oil, diesel oil and fresh water available by barge but time of delivery uncertain therefore water must be ordered well in advance of requirement. Agents advised fuel would arrive Thursday morning, eventually arrived Monday night. Diesel oil had arrived prior to the fuel with no advice given to the vessel that vessel was bunkering at all.

Fresh vegetables in very limited supply, though Chandler seemed keen to sell meats.

Repair firm and dock exist but after being promised labour for 3 days and none arriving repairs cancelled.

SHIPMASTER'S REPORT: April 1979.

Documents:

12 Crew Lists
3 Store Lists
3 Declarations
3 Currency Declarations
3 Vaccination Lists

Points of note:

(a) Anchorage is very close to coast and in cable area, recommend drifting about 5 miles from coast.
(b) Contact made via Morro Signal Station, VHF Channel 16.
(c) Pilot boards about 1 mile from entrance and they do not appear to work at night.
(d) The port is heavily polluted.
(e) When we sailed we had to wait for 5 hours till a tug was available.
(f) The vessel may lower its gangway for the Pilot to leave but it then must be raised until Port Officials arrive.
(g) All crew must be sighted by Immigration and are handed their discharge books.
(h) All cameras, gifts, items purchased during voyage and not in use, extra radios, watches, etc., and "magazines" must be placed in bond. All except the "magazines" should be declared.
(i) All currency must be declared and placed in safe and sealed. If cash purchases made from Chandler, e.g. Cigars, they must be paid for with Canadian or U.S. dollars. The Customs attend with Chandler and open safe for correct amount to be removed.
(j) Cuban pesos issued by Agent and any not used must be returned. Each person is issued with a card and the amount drawn is entered, then each time they return from shore the Immigration guard enters the amount remaining.
(k) Immigration guard issues passes. He is always on duty, crew member hands his discharge book to him and he gives him a pass. This pass has the time that he must be back onboard by, normally 2400 hrs., extensions may be obtained by advising Agent 24 hours in advance. Fines may be imposed for returning late. On return the guard takes the pass and discharge book is returned.
(l) Port Health insist that all rubbish be put in polythene bags and these bags put in bins with lids. The port maintains a garbage disposal service which attends on request.
(m) All meat, if not of New Zealand, Australian, Canadian or American origin must be placed under seal.
(n) The Agent can be contacted by VHF. Call "Mambisa" on Channel 12, office hours only.
(o) Postal service not recommended as very slow.
(p) Berthed at Turcios Lima. 33 ft. alongside. The discharger has two heads and moves the length of the berth. Wheat was discharged at an average of 60 tonnes per hour. Work was on a 24 hour basis.
(q) All hatches were inspected even though only one was to be discharged.
(r) The vessel was not searched but we were told that it could happen at anytime during our stay.
(s) The Officials who attended this vessel were all very friendly and helpful.

SHIPMASTER'S REPORT: December 1983.

Documents:

10 copies Crew List.
3 copies Stores List.
2 copies Deck and Engine Stores.
Personal Declaration Forms (1 copy plus 1 per individual crew member.)
Currency Declaration List.
Drugs List.

Accommodation ladder required for boarding officials.

Pilotage: Compulsory. ETAs should be sent via Agent 72, 48 and 24 hours prior to arrival. Pilot boards at entrance to harbour.

Anchorages: Only available inside harbour.

Vessels await entrance instructions 5 miles North of Morro Light.

Restrictions: Vessels may dock/undock day or night, at any stage of tide.

Max. Size: Max. length 280 m., draft 32 ft.

Radio: Havana Radio.

VHF: Havana Radio – Channels 16, 13 and 11. Pilots – Channels 16 and 11. Port Authority – Channel 16. Agents – Channel 16 and 10.

Tugs: 7 tugs of various sizes available.

Berthing: Vessel loading potatoes; berth 2.1 miles from Harbour entrance. Max. LOA 575 ft., max. beam 80 ft. Max. draft – for'd 22 ft., aft 32 ft. Nature of bottom at berth was mud. Depth in channel 33 ft.

10.36 m. at Bay end or East side, 9.14 m. at centre and 7.31 m. at the shore or West end. Dock No. 2: Length 146.6 m., width 9.45 m. and depth alongside 6.40 m. at N.E. end, 6.70 m. at centre and 7.92 m. at S.W. end. Pier has sheltered warehouse with capacity of 39,821 cu.m. while Dock No. 2 has a sheltered warehouse with capacity of 112,471 cu.m. Both docks and pier have railroad sidings connecting with main track.

La Coubre Dock: No longer in operation.

Tallapiedra Dock: This dock used in discharge of lighters, has a length of 138.1 m., depth alongside 4.27 m. at N.E. end, 5.73 m. at centre and 4.57 m. at the S.W. end.

Antonio Guiterras Dock: This dock, used in the discharge of lighters of heavy lifts, from vessels performing operations in Bay, is 258.1 m. long, depths alongside (from Tallapiedra Pier No. 2) 7.92 m., 6.40 m., 5.49 m. and 3.35 m. If no lighter is used, vessels drawing up to 7.01 m. only can berth at this dock.

Osvaldo Sanchez Docks: These docks used chiefly in discharge of lumber. Dock No. 1 (formerly Atares), is 130.5 m. in length, 9.14 m. wide with depth alongside 6.70 m. at N.E., 7.01 m. in centre and 7.31 m. at the S.W. end. Dock No. 2 (formerly Vaccaro) is 155.7 m. long, 9.14 m. wide with depths alongside of 7.92 m., 6.40 m., 3.66 m. and 5.18 m. These docks have sheltered warehouses. There are no sidings.

Melones Dock: This dock has installation for discharge of fuel oil as well as an overhead crane for discharge of fertilisers and coal. Dock length 218.8 m., width 10.67 m. Depth alongside 5.49 m. at the N.E. end, 3.96 m. in centre, 3.05 m. at the S.E. end. Not in operation at present due to shallow draft. No sidings. Storage in open.

Puerto Pesquero de la Habana: Consists of Pote Dock, Hacendados Pier and Dock which have the following facilities.

Dock	*Length* (m.)
No. 1	259.9
No. 2	153.9
No. 3	224.9
No. 4	157.5
No. 5	157.5

Drafts: Minimum 7.31 m. Maximum 7.92 m.

Haiphong Terminal: (Formerly Maritima). This dock is used for the discharge and loading of general cargo. Length of dock 532.5 m., width 21.94 m. and depth alongside 9.75 m. to 10.67 m., along entire length of dock. This dock has 2 large warehouses and sidings, although at present only trucking operations are performed. It has 12 gantry cranes with a maximum lifting capacity of about 12 tons and berthing space for 3 average sized vessels, but in the near future will have two additional berths.

Manuel Porto Pena Terminal: Terminal consists of the following docks:

Manuel Porto Pena (formerly Burrus): Dock used for discharge of bulk shipments of grain. Equipped with elevator and silos having storage capacity of approximately 20,000 tons. Permitted discharge rate of approximately 1,200 tons per day. Length of dock, 167.6 m., width 7.92 m. and depths alongside 7.92 m. and 9.29 m.

Manuel Porto Pena No. 1: This dock used in discharge and loading of general cargo and sugar is 96 m. in length and 10.67 m. wide with depths alongside from 7.01 m. to 8.23 m. Dock has one sheltered warehouse and railroad sidings.

Manuel Porto Pena No. 2: This dock is used for loading and discharging sugar and general cargo. Length 136.2 m., width 10.88 m. with depth alongside of 7.92 m. at S.E. end, 7.62 m. at centre and 8.23 m. at the N.W. end. No warehouse, but is equipped with railroad sidings and has installations for discharge of fuel oil.

Manuel Porto Pena No. 3: This dock used for discharge and loading of general cargo is 201 m. in length and 9.14 m. wide, with depth alongside 9.75 m.

Turcios Lima (Grain Silo Dock), installation for discharge of bulk shipments of grain. There are 36 grain silos and 18 part silos with a total capacity of 30,000 tons. Unloading rate 100 t.p.h. This dock has 1 sheltered warehouse and railroad sidings, and installations for the discharge of fuel oil and gasoline.

Manuel Porto Pena Berth No. 17: Length 170 m., depth 10 m.

Extractora de Aceite Berth: This dock is not in use at present.

Quinto de Regla Pier: This pier used mainly for loading of sugar. Pier (South side) 189.6 m. long, 10.36 m. wide with depth alongside 8.23 m. at S.W. or Bay end, 7.62 m. at the centre and 5.18 m. at the S.E. end. Pier (North side), length 104.5 m. width 16.46 m., depth alongside 8.53 m. at N.W. or Bay end, 7.92 m. at centre and 6.70 m. at the N.E. end. Pier has railroad sidings.

Fresser Pier: This pier has installations for loading molasses. Pier (South side), 141.7 m. in length, 9.14 m. in width with depth alongside 8.23 m. at S.W. or Bay end, 7.62 m. at the centre and 7.01 m. at S.E. end. Pier (North side), 124.1 m. in length, 9.14 m. in width with depths alongside of 6.70 m. at N.W. or Bay end, 7.92 m. at the centre and 7.62 m. at West end. This side of pier used only for docking purposes.

Edificios No. 1 and No. 2: These docks used in discharge of fertilisers also have installations for loading/unloading molasses.

Edificio No. 1 Dock: Length of dock 157.2 m., width 7.62 m. with depths alongside 6.40 m. – 6.70 m. of water throughout whole dock.

Edificio No. 2 Dock: Length 115.8 m., with 32.91 m. with depth alongside 5.79 m. at N.E. end, 4.27 m. at the centre and 4.27 m. at S.W. end. No operations are performed at this dock due to its shallow draft. Sheltered warehouses with a total capacity of 64,645 cu.m.

Fertiliser processing plant.

Facilidades Maritimas Dock: This dock used chiefly for loading of molasses and discharge of tallow and chemical products, has length of 248 m., width 7.92 m. and depth alongside 7.62 m. at N.E. or Bay end, 7.92 m. at centre and 7.01 m. at S.E. end. Dock has railroad sidings and is suitable for docking.

Nico Lopez Pier Nos. 1 and 2: (Minimum depth at LW 11.12 m.). These piers are used exclusively in discharging fuel oil, gasoline, etc., and are operated by oil refineries. Pier No. 1 (North side), length 313 m., depth alongside 10.97 m. at Eastern or shore end, 10.67 m. at centre and 10.36 m. at West or Bay end. Pier No. 2 (South side), length 313 m., depth alongside 10.97 m. at East or shore end, 10.67 m. at centre and 10.36 m. at West or Bay end. Pier No. 2 (North side), length 301.7 m. with depth alongside of 10.67 m. at East or shore end, 10.97 m. at the centre and 11.58 m. at the West or Bay end.

CONTAINER/RO-RO FACILITIES: Available.

EQUIPMENT: As the port of Havana owns and operates a large number of auxiliary equipment, only the most important of those are listed here:

Four floating cranes: (1×100 tons) (3×35 tons) lifting capacity.

40 shore cranes: ranging from 30 tons to 5 tons lifting capacity.

Six cargo barges: 125/150 tons cargo capacity.

Nine tugboats: (1×1,200 h.p.) (1×860 h.p.) (1×540 h.p.) and remaining 6 are from 325 to 165 h.p.

STEVEDORES: Monday to Friday: working periods 0700 – 1300 hrs. and 1300 – 1900 hrs., although if necessary, 2 additional periods of 6 hours each may be worked. Saturday: Same as above. Sundays: No work performed.

Raw Sugar: Approximately 1,400 bags of raw sugar loaded per gang period. Six raw sugar bags loaded per sling. Loading raw sugar on 3 vessels simultaneously.

Refined Sugar: Approximately 3,800 bags of refined sugar (of 50 kg.) loaded per gang period. 12–15 bags loaded per sling.

General cargo: Approximate average discharging rate per gang hour:

General cargo about		10.0 tons
Bagged merchandise	up to 51 kg.	16.0 tons
Bagged merchandise	up to 92 kg.	17.0 tons
Bagged merchandise	more than 92 kg.	19.0 tons
Wood		8.4 tons
Fertilisers:		
Superphosphate		9.9 tons
Simple Superphosphate		8.1 tons
Ammonium		9.0 tons
Potash		9.9 tons
Muriate (Chloride)		10.5 tons
Sulphur		10.3 tons
Phosphoric Rock		11.9 tons
Triple Phosphate		8.0 tons
Sodium Silicate		9.0 tons
Ferromanganese		9.0 tons

Floating Cranes:

Pablo Sandoval	100 tons – boom 51 m.
Frank Pais	25 tons – boom 10 m.
Matilde	6 tons – boom 9 m.

TANKERS: Average pumping rate of molasses is about 60,000 gallons per hour. Average pumping rate of fuel variable, from 3,000 up to 15,000 b.p.h. Also see "Berthing".

TELEPHONES: May be installed on board at Master's request.

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(2) Any ship approaching port in daytime shall hoist national flag, merchant flag, and quarantine flag, not lowering the latter until granted "pratique" by doctors in charge of sanitary inspection. At night she shall

show only quarantine lights as prescribed by International Sanitary Regulation.

(3) In case of emergency, ships at anchor shall immediately contact land through Official Radiophone Station CLT, available 24 hours a day, through 2260 kHz. In very urgent cases, CLT can be contacted through 2182 kHz CLT services are free of charge.

(4) Ships moored to piers standing off pier heads at night must keep visible red light at the ship's extremity facing the sea.

(5) Every moored ship must strengthen its lines on first warning from Port Authorities when deemed necessary due to bad weather.

(6) Small boats belonging to ships are not authorised to be used for crew or passengers' service within port limits unless otherwise duly authorised by Harbour Master.

(7) When berthing, ratguards must be placed on all mooring ropes.

(8) Port provides boats to dispose of ship's wastes. Services provided free of charge and can be requested through ship's Agent.

SHIPMASTER'S REPORT: November 1978.

Pilotage: Compulsory. Advise Agent of vessel's ETA. Pilot boards 1 to 0.5 miles N.W. of Pta. Barloventa.

Restrictions: Vessel is able to enter and leave during hours of darkness and at any stage of the tide.

Max. Size: Max. draft for cargo vessel 33 ft. and for tankers 37 ft.

Tugs: There are 3 large tugs and 7 small tugs available (145–860 h.p.). Vessel is able to dock and undock without the assistance of tugs.

Radio: Havana Radio "CLA".

VHF: Port Authority and Pilot operate on Channel 13. Agent on Channel 12.

Fresh Water: Available.

Repairs: Facilities available.

Fuel: Bunker fuel oil and diesel oil available.

Medical: Doctor and hospital available.

Facilities: Laundry services available, telex available but unreliable. Groceries and meat available but in limited quantity.

Berthing: Terminal Sierra Naestra Berth No. 3 South:

Position of berth: Lat. 23° 08′ 25″ N., Long. 82° 20′ 42″ W. Distance from entrance 1 mile. Max. size of vessel that can berth LOA 520 ft., beam no restriction. Max. draft 29 ft. Least depth of water in channel from sea to berth 40 ft. Range of tide 1.5 ft. Vessel is able to dock and undock at any stage of the tide day or night.

Bulk Handling Facilities: Two grain silos available.

Cranes: 1 quay equipped with 12 cranes, capacity unknown. 4 floating cranes available, 1×100 tons, 3×75 tons capacity.

Special Cargo Handling Facilities: Ro/Ro facilities available. There are facilities for handling palletised cargo and containers, also there is a reasonable amount of storage space for containers.

Stevedores: Stevedores are allocated by Port Authority and the vessel has no say in the number of gangs supplied. There are a limited amount of steel barges.

Density: 1014.

General: On arrival, vessel waited 2 hours outside for a Pilot then entered harbour where we waited another two and a half hours for a ship to sail, no ship sailed and no other reason given for delay.

Docked starboard side to Sierra Maestra No. 3 South depth 24 ft. forward, 37 ft. aft, 1 tug pushing. Pilots good.

Officials boarded shortly after arrival, following documents required:

Port Health:	1 Health declaration.
	3 Crew lists.
	1 Vaccination list.
	All vaccination books.
Immigration:	All discharge books. (To be inspected)
	5 Crew lists.
Customs:	3 Personal declarations. (In detail)
	Cargo plan.
	5 Crew lists.
	Cargo Manifests.
	Pornography in bond.
Agriculture:	2 Crew lists.
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Personal declaration must include watches, cameras, radios, tape recorders, presents, new clothes and money all of which must be placed under seal. One watch and 1 radio allowed to be retained by each Crew member and 1 camera by Master. Advisable to have all above collected prior to arrival.

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Fresh vegetables in very limited supply, though Chandler seemed keen to sell meats.

Repair firm and dock exist but after being promised labour for 3 days and none arriving repairs cancelled.

SHIPMASTER'S REPORT: April 1979.

Documents:

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Points of note:

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(c) Pilot boards about 1 mile from entrance and they do not appear to work at night.
(d) The port is heavily polluted.
(e) When we sailed we had to wait for 5 hours till a tug was available.
(f) The vessel may lower its gangway for the Pilot to leave but it then must be raised until Port Officials arrive.
(g) All crew must be sighted by Immigration and are handed their discharge books.
(h) All cameras, gifts, items purchased during voyage and not in use, extra radios, watches, etc., and "magazines" must be placed in bond. All except the "magazines" should be declared.
(i) All currency must be declared and placed in safe and sealed. If cash purchases made from Chandler, e.g. Cigars, they must be paid for with Canadian or U.S. dollars. The Customs attend with Chandler and open safe for correct amount to be removed.
(j) Cuban pesos issued by Agent and any not used must be returned. Each person is issued with a card and the amount drawn is entered, then each time they return from shore the Immigration guard enters the amount remaining.
(k) Immigration guard issues passes. He is always on duty, crew member hands his discharge book to him and he gives him a pass. This pass has the time that he must be back onboard by, normally 2400 hrs., extensions may be obtained by advising Agent 24 hours in advance. Fines may be imposed for returning late. On return the guard takes the pass and discharge book is returned.
(l) Port Health insist that all rubbish be put in polythene bags and these bags put in bins with lids. The port maintains a garbage disposal service which attends on request.
(m) All meat, if not of New Zealand, Australian, Canadian or American origin must be placed under seal.
(n) The Agent can be contacted by VHF. Call "Mambisa" on Channel 12, office hours only.
(o) Postal service not recommended as very slow.
(p) Berthed at Turcios Lima. 33 ft. alongside. The discharger has two heads and moves the length of the berth. Wheat was discharged at an average of 60 tonnes per hour. Work was on a 24 hour basis.
(q) All hatches were inspected even though only one was to be discharged.
(r) The vessel was not searched but we were told that it could happen at anytime during our stay.
(s) The Officials who attended this vessel were all very friendly and helpful.

SHIPMASTER'S REPORT: December 1983.

Documents:

10 copies Crew List.
3 copies Stores List.
2 copies Deck and Engine Stores.
Personal Declaration Forms (1 copy plus 1 per individual crew member.)
Currency Declaration List.
Drugs List.

Accommodation ladder required for boarding officials.

Pilotage: Compulsory. ETAs should be sent via Agent 72, 48 and 24 hours prior to arrival. Pilot boards at entrance to harbour.

Anchorages: Only available inside harbour.

Vessels await entrance instructions 5 miles North of Morro Light.

Restrictions: Vessels may dock/undock day or night, at any stage of tide.

Max. Size: Max. length 280 m., draft 32 ft.

Radio: Havana Radio.

VHF: Havana Radio – Channels 16, 13 and 11. Pilots – Channels 16 and 11. Port Authority – Channel 16. Agents – Channel 16 and 10.

Tugs: 7 tugs of various sizes available.

Berthing: Vessel loading potatoes; berth 2.1 miles from Harbour entrance. Max. LOA 575 ft., max. beam 80 ft. Max. draft – for'd 22 ft., aft 32 ft. Nature of bottom at berth was mud. Depth in channel 33 ft.

10.36 m. at Bay end or East side, 9.14 m. at centre and 7.31 m. at the shore or West end. Dock No. 2: Length 146.6 m., width 9.45 m. and depth alongside 6.40 m. at N.E. end, 6.70 m. at centre and 7.92 m. at S.W. end. Pier has sheltered warehouse with capacity of 39,821 cu.m. while Dock No. 2 has a sheltered warehouse with capacity of 112,471 cu.m. Both docks and pier have railroad sidings connecting with main track.

La Coubre Dock: No longer in operation.

Tallapiedra Dock: This dock used in discharge of lighters, has a length of 138.1 m., depth alongside 4.27 m. at N.E. end, 5.73 m. at centre and 4.57 m. at the S.W. end.

Antonio Guiterras Dock: This dock, used in the discharge of lighters of heavy lifts, from vessels performing operations in Bay, is 258.1 m. long, depths alongside (from Tallapiedra Pier No. 2) 7.92 m., 6.40 m., 5.49 m. and 3.35 m. If no lighter is used, vessels drawing up to 7.01 m. only can berth at this dock.

Osvaldo Sanchez Docks: These docks used chiefly in discharge of lumber. Dock No. 1 (formerly Atares), is 130.5 m. in length, 9.14 m. wide with depth alongside 6.70 m. at N.E., 7.01 m. in centre and 7.31 m. at the S.W. end. Dock No. 2 (formerly Vaccaro) is 155.7 m. long, 9.14 m. wide with depths alongside of 7.92 m., 6.40 m., 3.66 m. and 5.18 m. These docks have sheltered warehouses. There are no sidings.

Melones Dock: This dock has installation for discharge of fuel oil as well as an overhead crane for discharge of fertilisers and coal. Dock length 218.8 m., width 10.67 m. Depth alongside 5.49 m. at the N.E. end, 3.96 m. in centre, 3.05 m. at the S.E. end. Not in operation at present due to shallow draft. No sidings. Storage in open.

Puerto Pesquero de la Habana: Consists of Pote Dock, Hacendados Pier and Dock which have the following facilities.

Dock	*Length* (m.)
No. 1	259.9
No. 2	153.9
No. 3	224.9
No. 4	157.5
No. 5	157.5

Drafts: Minimum 7.31 m. Maximum 7.92 m.

Haiphong Terminal: (Formerly Maritima). This dock is used for the discharge and loading of general cargo. Length of dock 532.5 m., width 21.94 m. and depth alongside 9.75 m. to 10.67 m., along entire length of dock. This dock has 2 large warehouses and sidings, although at present only trucking operations are performed. It has 12 gantry cranes with a maximum lifting capacity of about 12 tons and berthing space for 3 average sized vessels, but in the near future will have two additional berths.

Manuel Porto Pena Terminal: Terminal consists of the following docks:

Manuel Porto Pena (formerly Burrus): Dock used for discharge of bulk shipments of grain. Equipped with elevator and silos having storage capacity of approximately 20,000 tons. Permitted discharge rate of approximately 1,200 tons per day. Length of dock, 167.6 m., width 7.92 m. and depths alongside 7.92 m. and 9.29 m.

Manuel Porto Pena No. 1: This dock used in discharge and loading of general cargo and sugar is 96 m. in length and 10.67 m. wide with depths alongside from 7.01 m. to 8.23 m. Dock has one sheltered warehouse and railroad sidings.

Manuel Porto Pena No. 2: This dock is used for loading and discharging sugar and general cargo. Length 136.2 m., width 10.88 m. with depth alongside of 7.92 m. at S.E. end, 7.62 m. at centre and 8.23 m. at the N.W. end. No warehouse, but is equipped with railroad sidings and has installations for discharge of fuel oil.

Manuel Porto Pena No. 3: This dock used for discharge and loading of general cargo is 201 m. in length and 9.14 m. wide, with depth alongside 9.75 m.

Turcios Lima (Grain Silo Dock), installation for discharge of bulk shipments of grain. There are 36 grain silos and 18 part silos with a total capacity of 30,000 tons. Unloading rate 100 t.p.h. This dock has 1 sheltered warehouse and railroad sidings, and installations for the discharge of fuel oil and gasoline.

Manuel Porto Pena Berth No. 17: Length 170 m., depth 10 m.

Extractora de Aceite Berth: This dock is not in use at present.

Quinto de Regla Pier: This pier used mainly for loading of sugar. Pier (South side) 189.6 m. long, 10.36 m. wide with depth alongside 8.23 m. at S.W. or Bay end, 7.62 m. at the centre and 5.18 m. at the S.E. end. Pier (North side), length 104.5 m. width 16.46 m., depth alongside 8.53 m. at N.W. or Bay end, 7.92 m. at centre and 6.70 m. at the N.E. end. Pier has railroad sidings.

Fresser Pier: This pier has installations for loading molasses. Pier (South side), 141.7 m. in length, 9.14 m. in width with depth alongside 8.23 m. at S.W. or Bay end, 7.62 m. at the centre and 7.01 m. at S.E. end. Pier (North side), 124.1 m. in length, 9.14 m. in width with depths alongside of 6.70 m. at N.W. or Bay end, 7.92 m. at the centre and 7.62 m. at West end. This side of pier used only for docking purposes.

Edificios No. 1 and No. 2: These docks used in discharge of fertilisers also have installations for loading/unloading molasses.

Edificio No. 1 Dock: Length of dock 157.2 m., width 7.62 m. with depths alongside 6.40 m. – 6.70 m. of water throughout whole dock.

Edificio No. 2 Dock: Length 115.8 m., with 32.91 m. with depth alongside 5.79 m. at N.E. end, 4.27 m. at the centre and 4.27 m. at S.W. end. No operations are performed at this dock due to its shallow draft. Sheltered warehouses with a total capacity of 64,645 cu.m.

Fertiliser processing plant.

Facilidades Maritimas Dock: This dock used chiefly for loading of molasses and discharge of tallow and chemical products, has length of 248 m., width 7.92 m. and depth alongside 7.62 m. at N.E. or Bay end, 7.92 m. at centre and 7.01 m. at S.E. end. Dock has railroad sidings and is suitable for docking.

Nico Lopez Pier Nos. 1 and 2: (Minimum depth at LW 11.12 m.). These piers are used exclusively in discharging fuel oil, gasoline, etc., and are operated by oil refineries. Pier No. 1 (North side), length 313 m., depth alongside 10.97 m. at Eastern or shore end, 10.67 m. at centre and 10.36 m. at West or Bay end. Pier No. 2 (South side), length 313 m., depth alongside 10.97 m. at East or shore end, 10.67 m. at centre and 10.36 m. at West or Bay end. Pier No. 2 (North side), length 301.7 m. with depth alongside of 10.67 m. at East or shore end, 10.97 m. at the centre and 11.58 m. at the West or Bay end.

CONTAINER/RO-RO FACILITIES: Available.

EQUIPMENT: As the port of Havana owns and operates a large number of auxiliary equipment, only the most important of those are listed here:

Four floating cranes: (1×100 tons) (3×35 tons) lifting capacity.

40 shore cranes: ranging from 30 tons to 5 tons lifting capacity.

Six cargo barges: 125/150 tons cargo capacity.

Nine tugboats: (1×1,200 h.p.) (1×860 h.p.) (1×540 h.p.) and remaining 6 are from 325 to 165 h.p.

STEVEDORES: Monday to Friday: working periods 0700 – 1300 hrs. and 1300 – 1900 hrs., although if necessary, 2 additional periods of 6 hours each may be worked. Saturday: Same as above. Sundays: No work performed.

Raw Sugar: Approximately 1,400 bags of raw sugar loaded per gang period. Six raw sugar bags loaded per sling. Loading raw sugar on 3 vessels simultaneously.

Refined Sugar: Approximately 3,800 bags of refined sugar (of 50 kg.) loaded per gang period. 12–15 bags loaded per sling.

General cargo: Approximate average discharging rate per gang hour:

General cargo about		10.0 tons
Bagged merchandise	up to 51 kg.	16.0 tons
Bagged merchandise	up to 92 kg.	17.0 tons
Bagged merchandise	more than 92 kg.	19.0 tons
Wood		8.4 tons
Fertilisers:		
Superphosphate		9.9 tons
Simple Superphosphate		8.1 tons
Ammonium		9.0 tons
Potash		9.9 tons
Muriate (Chloride)		10.5 tons
Sulphur		10.3 tons
Phosphoric Rock		11.9 tons
Triple Phosphate		8.0 tons
Sodium Silicate		9.0 tons
Ferromanganese		9.0 tons

Floating Cranes:

Pablo Sandoval	100 tons – boom 51 m.
Frank Pais	25 tons – boom 10 m.
Matilde	6 tons – boom 9 m.

TANKERS: Average pumping rate of molasses is about 60,000 gallons per hour. Average pumping rate of fuel variable, from 3,000 up to 15,000 b.p.h. Also see "Berthing".

TELEPHONES: May be installed on board at Master's request.

MEDICAL: Crew members requiring medical attention are treated at "Commander Fajardo" Hospital where they can be hospitalised if necessary.

Those cases requiring dental care are treated at "10 de Octubre" Dental Clinic.

FUEL: Vessels can be supplied with bunkers at Havana, and following types are available:

Regular diesel oil, regular fuel oil, I.F.O. mixtures (intermediate fuel oil).

Diesel oil is supplied by a 350 ton capacity barge, and fuel oil by a 1,500 ton capacity vessel which is towed to piers or anchorage in order to fulfill deliveries. This vessel also delivers the I.F.O. mixtures and is named 'Playa Colorada'.

I.F.O. mixtures are prepared at the following viscosity degrees: 50 – 200 – 400 – 600 – 800 – 1,000 and 1,500 maximum. (Redwood International Scale, at 100°F).

I.F.O. mixtures are only available at the port of Havana.

Note to Chief Engineers: It is advisable when ordering I.F.O. mixtures to specify always maximum and minimum allowable viscosity of the product.

FRESH WATER: Vessels can be supplied with fresh water by barge in the bay. Six barges available with capacities of 350, 200, 320, 350, and 60 tons. Average rate of delivery about 100 t.p.h.

REPAIRS: Reliable repair shop (Tel: 62.0009).

DRY DOCK: Dry dock operated by Empresa de Talleres Maritimos, an operating unit of Empresa de Navegacion Mambisa. Berthing capacity 134 m. in length and 27.73 m. width, and can handle vessels up to 7.01 m. draft.

East Lateral: Length 194.4 m., width 11.58 m., depth alongside 10.06 m. at Bay end, 8.84 m. at centre and 5.49 m. at shore end.

West Lateral: Length 225.5 m., width 11.58 m., draft 7.01 m. at Bay end, 7.62 m. at centre and 6.10 m. at shore end.

DUNNAGE: Dunnage materials are available at this port but must be requested 3 days in advance of intended delivery.

FIRE PRECAUTIONS: Port of Havana has a fire extinguishing ship, kept on permanent watch duty by Safety Corp. who can be reached through telephone number 6–0777.

AIRPORT: Jose Marti International Airport is 15 km. from the port.

HOLIDAYS: Liberation Day (January 1st), Labour Day (May 1st), Day of National Rebellion (July 26th), Commemoration of Wars of Independence (October 10th). July 25th and 27th are also holidays.

GENERAL: (1) The port of Havana is approachable 24 hours a day, and dock Pilots keep permanent watch duty on their stations located in surroundings of harbour channel, very close to beacon marker of Pila de Neptuno.

(2) Any ship approaching port in daytime shall hoist national flag, merchant flag, and quarantine flag, not lowering the latter until granted "pratique" by doctors in charge of sanitary inspection. At night she shall

show only quarantine lights as prescribed by International Sanitary Regulation.

(3) In case of emergency, ships at anchor shall immediately contact land through Official Radiophone Station CLT, available 24 hours a day, through 2260 kHz. In very urgent cases, CLT can be contacted through 2182 kHz CLT services are free of charge.

(4) Ships moored to piers standing off pier heads at night must keep visible red light at the ship's extremity facing the sea.

(5) Every moored ship must strengthen its lines on first warning from Port Authorities when deemed necessary due to bad weather.

(6) Small boats belonging to ships are not authorised to be used for crew or passengers' service within port limits unless otherwise duly authorised by Harbour Master.

(7) When berthing, ratguards must be placed on all mooring ropes.

(8) Port provides boats to dispose of ship's wastes. Services provided free of charge and can be requested through ship's Agent.

SHIPMASTER'S REPORT: November 1978.

Pilotage: Compulsory. Advise Agent of vessel's ETA. Pilot boards 1 to 0.5 miles N.W. of Pta. Barloventa.

Restrictions: Vessel is able to enter and leave during hours of darkness and at any stage of the tide.

Max. Size: Max. draft for cargo vessel 33 ft. and for tankers 37 ft.

Tugs: There are 3 large tugs and 7 small tugs available (145–860 h.p.). Vessel is able to dock and undock without the assistance of tugs.

Radio: Havana Radio "CLA".

VHF: Port Authority and Pilot operate on Channel 13. Agent on Channel 12.

Fresh Water: Available.

Repairs: Facilities available.

Fuel: Bunker fuel oil and diesel oil available.

Medical: Doctor and hospital available.

Facilities: Laundry services available, telex available but unreliable. Groceries and meat available but in limited quantity.

Berthing: Terminal Sierra Naestra Berth No. 3 South:

Position of berth: Lat. 23° 08′ 25″ N., Long. 82° 20′ 42″ W. Distance from entrance 1 mile. Max. size of vessel that can berth LOA 520 ft., beam no restriction. Max. draft 29 ft. Least depth of water in channel from sea to berth 40 ft. Range of tide 1.5 ft. Vessel is able to dock and undock at any stage of the tide day or night.

Bulk Handling Facilities: Two grain silos available.

Cranes: 1 quay equipped with 12 cranes, capacity unknown. 4 floating cranes available, 1×100 tons, 3×75 tons capacity.

Special Cargo Handling Facilities: Ro/Ro facilities available. There are facilities for handling palletised cargo and containers, also there is a reasonable amount of storage space for containers.

Stevedores: Stevedores are allocated by Port Authority and the vessel has no say in the number of gangs supplied. There are a limited amount of steel barges.

Density: 1014.

General: On arrival, vessel waited 2 hours outside for a Pilot then entered harbour where we waited another two and a half hours for a ship to sail, no ship sailed and no other reason given for delay.

Docked starboard side to Sierra Maestra No. 3 South depth 24 ft. forward, 37 ft. aft, 1 tug pushing. Pilots good.

Officials boarded shortly after arrival, following documents required:

Port Health:	1 Health declaration. 3 Crew lists. 1 Vaccination list. All vaccination books.
Immigration:	All discharge books. (To be inspected) 5 Crew lists.
Customs:	3 Personal declarations. (In detail) Cargo plan. 5 Crew lists. Cargo Manifests. Pornography in bond.
Agriculture:	2 Crew lists. 1 Provisions list. (Comprehensive) Cargo plan.

Personal declaration must include watches, cameras, radios, tape recorders, presents, new clothes and money all of which must be placed under seal. One watch and 1 radio allowed to be retained by each Crew member and 1 camera by Master. Advisable to have all above collected prior to arrival.

Vessels normally searched by police and anything found, i.e., watch, radio, money, new clothes and cameras, etc., confiscated whether declared or not. To the surprise of officials this vessel was not searched.

All crew are issued with a shore pass with the exception of the Master. Shore leave extends from 0800 hrs. to 2400 hrs., extension may be obtained but only on special request to the Agent. Shore passes must show the money issued and must be signed by the Master.

On going ashore money and other articles are checked together with watches, jewellery and lighters, etc., and entered on the pass. Should any shortage or excess be found on return a fine will be imposed. On return money remaining is entered on the pass and anyone taking ashore more than the amount shown on the pass will have it confiscated (this actually happened in Isobela).

Communications outside Cuba are difficult, telexes are accepted by Agents but certainly not always sent the day handed in.

Incoming telexes can be delayed up to 6 days. Telephone calls may be made but usually take 3 to 5 hours by which time offices in Europe are closed. In an emergency British Embassy will transmit urgent messages via direct radio link. Embassy most pleasant and helpful. As will be seen by foregoing, it is essential that schedule made with Portishead and Charterers informed to send all messages via this station.

Stevedores very co-operative but due to uncertainty of transport and information on number of gangs, time of completion was uncertain until last day. All discharge was direct to trucks.

Agriculture Department demand that all garbage be placed in plastic bags with neck tied (they supply bags if none on board and charge vessel). Bags collected twice weekly and shore labour do all handling. All meats except New Zealand and Australian sealed. Daily issue of New Zealand and Australian meats given and fridges resealed, any other meats required must be purchased ashore.

Fuel oil, diesel oil and fresh water available by barge but time of delivery uncertain therefore water must be ordered well in advance of requirement. Agents advised fuel would arrive Thursday morning, eventually arrived Monday night. Diesel oil had arrived prior to the fuel with no advice given to the vessel that vessel was bunkering at all.

Fresh vegetables in very limited supply, though Chandler seemed keen to sell meats.

Repair firm and dock exist but after being promised labour for 3 days and none arriving repairs cancelled.

SHIPMASTER'S REPORT: April 1979.

Documents:

12 Crew Lists
3 Store Lists
3 Declarations
3 Currency Declarations
3 Vaccination Lists

Points of note:

(a) Anchorage is very close to coast and in cable area, recommend drifting about 5 miles from coast.
(b) Contact made via Morro Signal Station, VHF Channel 16.
(c) Pilot boards about 1 mile from entrance and they do not appear to work at night.
(d) The port is heavily polluted.
(e) When we sailed we had to wait for 5 hours till a tug was available.
(f) The vessel may lower its gangway for the Pilot to leave but it then must be raised until Port Officials arrive.
(g) All crew must be sighted by Immigration and are handed their discharge books.
(h) All cameras, gifts, items purchased during voyage and not in use, extra radios, watches, etc., and "magazines" must be placed in bond. All except the "magazines" should be declared.
(i) All currency must be declared and placed in safe and sealed. If cash purchases made from Chandler, e.g. Cigars, they must be paid for with Canadian or U.S. dollars. The Customs attend with Chandler and open safe for correct amount to be removed.
(j) Cuban pesos issued by Agent and any not used must be returned. Each person is issued with a card and the amount drawn is entered, then each time they return from shore the Immigration guard enters the amount remaining.
(k) Immigration guard issues passes. He is always on duty, crew member hands his discharge book to him and he gives him a pass. This pass has the time that he must be back onboard by, normally 2400 hrs., extensions may be obtained by advising Agent 24 hours in advance. Fines may be imposed for returning late. On return the guard takes the pass and discharge book is returned.
(l) Port Health insist that all rubbish be put in polythene bags and these bags put in bins with lids. The port maintains a garbage disposal service which attends on request.
(m) All meat, if not of New Zealand, Australian, Canadian or American origin must be placed under seal.
(n) The Agent can be contacted by VHF. Call "Mambisa" on Channel 12, office hours only.
(o) Postal service not recommended as very slow.
(p) Berthed at Turcios Lima. 33 ft. alongside. The discharger has two heads and moves the length of the berth. Wheat was discharged at an average of 60 tonnes per hour. Work was on a 24 hour basis.
(q) All hatches were inspected even though only one was to be discharged.
(r) The vessel was not searched but we were told that it could happen at anytime during our stay.
(s) The Officials who attended this vessel were all very friendly and helpful.

SHIPMASTER'S REPORT: December 1983.

Documents:

10 copies Crew List.
3 copies Stores List.
2 copies Deck and Engine Stores.
Personal Declaration Forms (1 copy plus 1 per individual crew member.)
Currency Declaration List.
Drugs List.

Accommodation ladder required for boarding officials.

Pilotage: Compulsory. ETAs should be sent via Agent 72, 48 and 24 hours prior to arrival. Pilot boards at entrance to harbour.

Anchorages: Only available inside harbour.

Vessels await entrance instructions 5 miles North of Morro Light.

Restrictions: Vessels may dock/undock day or night, at any stage of tide.

Max. Size: Max. length 280 m., draft 32 ft.

Radio: Havana Radio.

VHF: Havana Radio – Channels 16, 13 and 11. Pilots – Channels 16 and 11. Port Authority – Channel 16. Agents – Channel 16 and 10.

Tugs: 7 tugs of various sizes available.

Berthing: Vessel loading potatoes; berth 2.1 miles from Harbour entrance. Max. LOA 575 ft., max. beam 80 ft. Max. draft – for'd 22 ft., aft 32 ft. Nature of bottom at berth was mud. Depth in channel 33 ft.

There are no fenders on the quays at Havana. Ensure that there are ample fenders on board.

Cranes: No cranes at cargo quay. 1 floating crane available, capacity 175 tons.

Bulk Cargo Facilities: Silos available for grain. Grabs available for handling coal/coke.

Specialised Cargo Handling Facilities: Facilities available for Ro/Ro vessels.

Equipment to handle palletised/break bulk/20 ft. – 40 ft.containers available. Ample storage areas for containers, etc.

Steel lighters available for work at anchorage.

Stevedores: Satisfactory work carried out by stevedores.

Medical: Doctor and hospital facilities available.

Fresh Water: Available.

Fuel: Bunker fuel oil, diesel and lubricating oils are available.

Consuls: Majority of nations are represented.

Repairs: Can be undertaken.

Surveyors: Lloyds' and Salvage Surveyors available.

Services: Laundry service, telex, limited supply of fresh provisions, groceries and meats available.

All international telephone calls had to be made through the Merchant Seaman's Club.

DEVELOPMENTS: There is a plan to build a new terminal for discharge of bulk cargoes such as fertilisers, coal, etc. between the area comprised by the piers Quinto de Regla and Facilida des Maritimas (Aguilera).

Under this plan, Quinto pier and Chemical dock will cease to operate, and Facilidades Maritimas (Aguilera) dock will be shortened in its actual length (814 ft.).

AUTHORITIES: Ministry of Transport.

All port authorities located at Custom House building. Means of transportation used by authorities to clear vessel is launch. Each authority has its own launch for these services.

AGENT: Empresa Consignataria Mambisa, Agencia Havana, Lamparilla y Oficios, P.O. Box No. 1785, Havana, Cuba. Telephone: 61 – 1159 (day and night), 61 – 6706 – Agency Export Dept., 61 – 9068 – Agency Clearance Dept. Cable: Mambisas Habana. Telex: 051148 and 051197.

Agency VHF works on Channel 12.

ISABELA DE SAGUA: 22.52 N. 80.00 W.

(See Plan Book)

Although the port of Isabela is not located in a bay and lies on a small peninsula oriented S.W./N.E., it is a fairly protected harbour because a barrier of cays, lined from N.W. to S.E., forms a protective levee against the roughness of the sea and the force of the winds.

Behind the port and town of Isabela, to the S.E., and as if splitting the small peninsula in two, Sagua La Grande river flows into the sea.

Isabela is mostly a sugar shipping port but also handles a rather important amount of import cargoes.

In the vicinity of Isabela, besides several sugar mills, there are an Electro-Chemical Industry and a very important foundry.

PILOTAGE: Pilots board vessels about 1 or 2 miles out from Nos. 1 and 2 buoys. Pilot station located at Custom House building, Isabela de Sagua. Distance from place where Pilots board vessels to anchorage is 7 miles.

From seaward by stages, the bottom is sandy, coral reef and hard rock, mud and rock under mud, mud and clay.

Turns in channel are not dangerous but there are narrows with dangerous currents.

ANCHORAGES: *Inner Anchorage No. 1:* This anchorage is located about 300 m. N.W. from the piers and can be considered part of the manoeuvring basin.

Bottom is soft mud but anchors hold well with 3 shackles of chain.

Draft allowed: 24 ft. or 25 ft. depending upon vessel's length.

Swinging area: About 250 m.

Vessels load or discharge at this anchorage by means of barges.

Inner Anchorage No. 2: This anchorage is located close to and South of Palomo Cay.

Bottom is soft and mud but anchors hold well with 3 shackles of chain.

Draft allowed: 4.4 m.

Swinging area: Unlimited.

Several vessels can be accommodated.

Vessels load or discharge at this anchorage by means of barges but it is chiefly used for vessels awaiting berth.

Outer Anchorage: Located East of Del Cristo Cay and about 8 miles from the port of Isabela, and also known as Ingles Anchorage.

Bottom is mud and coral reefs but anchors hold well with 3 or 4 shackles of chain.

This anchorage is marked with a well lighted buoy.

Vessels can load safely up to 32 ft. 8 in. draft.

Loading or discharging is effected by means of barges.

Operations can be performed at this anchorage when there are good weather conditions.

RESTRICTIONS: Entry and sailing only during daylight due to lack of lights in channel.

MAX. SIZE: Max. draft 23 ft. Max. length 500 ft. Tidal variation about 2.5 ft.

PORT EQUIPMENT: 3 Tugboats (250 h.p. each). 1 Water launch (30 tons capacity). 6 Barges (200 tons cargo capacity each). 1 Transportation Launch.

BERTHING: Isabela operation places (piers) are located on the North coast of the peninsula previously mentioned.

Formerly 4 piers were operated by the port but due to shallowness alongside Begueristain pier, nowadays the latter is used only for small craft and barges drawing 10 ft. maximum. Another berth, Garcia pier, is out of service undergoing repairs, the date of completion of which has not yet been determined.

Amezaga Pier: This consists of a solid concrete well paved construction.

As double standard gauge railroad tracks run along the length of pier, operations can be performed either by railroad or trucks, or a combination of both.

Although it has 2 sides, only the Eastern is used for vessel operations, because at the West side the depth alongside is 9 ft. only.

East Side: Length 324 ft., draft allowed 24 ft. 0 in. (7.32 m.), width 35 ft.

Cargo handled by this pier: General cargo, bagged cargoes, bagged raw and refined sugar, etc.

Alfert Pier: Draft allowed 21 ft. (6.4 m.) Ship's max. length 557 ft. (170 m.).

This pier consists of an all-hardwood construction not in good condition, needing repairs, which are taking place.

It has standard gauge railroad tracks connecting with the main tracks and is not suitable for trucking operations.

East Side: Length 450 ft., Width 30 ft., draft allowed 21 ft. 6 in. (6.40 m.).

Tanker information: Molasses: 2 × 8 in. diameter connections.

Loading rate: 200 t.p.h.

Cargoes handled by this side: General cargo, molassses, bagged sugar.

West Side: Length 450 ft., width 30 ft., draft 21 ft. 6 in. (6.40 m.).

No operations performed at this side due to shallowness alongside.

Beguiristain Pier: Max. vessel's length 525 ft. (160 m.), Draft. (West side) 18 ft. (5.40 m.).

Length 540 ft., width 30 ft.

East side of this pier is out of service due to shallowness alongside.

STEVEDORES: Raw Sugar loading rate: 1,300 bags of raw sugar (of 250-lb. type) loaded per 4 hour-gang period, or 1,490 (of 220-lb. type). From 4 to 5 bags loaded per sling. From lighters, 5 bags.

Refined Sugar: 2,360 bags of refined sugar (50 kg.) are loaded per 4 hour-gang period. 12 bags loaded per sling.

Operational capacity: Three vessels can be operated simultaneously.

Equipment for bulk sugar: Twelve grates available but trimming performed with shovellers.

Loading Raw Sugar – Working periods: From Monday to Friday 0700–1100 hrs., 1300–1700 hrs. Saturday 0700–1100 hrs.

General cargo operations occasionally performed at this port, for which above periods apply.

TANKERS: Molasses average pumping rate 40,000 g.p.h.; alcohol average pumping rate 70/77,000 g.p.h. No fuel oil or ammonium discharging operations performed.

FUEL: Not available.

FRESH WATER: Fresh water supplied by barge water-tug up to max. 40–60 tons daily depending on efficiency of aqueduct. Capacity of barge 30 tons. Delivery rate 60 tons per day. Water can be supplied at any pier or inner anchorage.

REPAIRS: Minor repairs can be effected at Isabela de Sagua, larger repairs to be effected at Sagua la Grande, where two repair shops available: Fundicion Marfarlane Nacionalizada and Talleres Esponda Nacionalizado.

MEDICAL: Crew members requiring medical or dental care are treated at Sagua La Grande Hospital, where they can be hospitalised if necessary. At Isabela there is only a Polyclinic.

DUNNAGE: Dunnage material, specially wood dunnage, is difficult to obtain at Isabela.

Paper dunnage can be obtained if ordered well in advance.

TRANSPORTATION: Means of transportation to and from Isabela are: train, bus or car.

From Isabela to Sagua La Grande there is a distance of about 17 km. by road or train.

From Sagua La Grande to Santa Clara there is a distance of about 50 km. by road.

From Santa Clara there are numerous means of communications to any place or city in Cuba.

There are bus lines Sagua/Cardenas, Sagua/Havana, Sagua/Santa Clara, Sagua/Isabela.

SHIPMASTER'S REPORT: November, 1978.

Pilotage: Pilot boards 1.5 miles N.E. Cayo Cristo lighthouse in position Lat. 23° 02′ N., Long. 79° 59.4′ W. Pilotage is compulsory. ETA should be sent to vessel's Agent.

Max. Size: Max. LOA 606 ft. Max. beam 75 ft. Max. draft 23 ft. I would suggest the max. size as being 520 ft. LOA, 70 ft. beam and 22 ft. max. draft. Tidal range 2 ft.

Tugs: 3 tugs available each approx. 140 h.p.

Radio: Havana Radio "CLA".

VHF: Not available.

Documents: 8 crew lists. 1 vaccination list, health declaration, 4 currency lists (crew and ships). (Also see "General").

Consuls: Nearest are in Havana.

Berthing: Espg. De Amezuga Berth: Position Lat. 22° 56′ 54″ N., Long. 80° 00′ 40″ W. Distance from berth to entrance 7 miles. Max. size of vessel that can be safely berthed, LOA 520 ft., beam 70 ft. and deepest draft 22 ft. Least depth of water in channel from sea to berth 25 ft. Vessel able to dock and undock at any stage of the tide also vessel able to dock and undock during hours of darkness at times. Special bulk facilities handled at the port include Molasses. There are no quay cranes, Ro Ro facilities or floating cranes.

Medical: Doctor and hospital available in Sagua La Grande at a distance of 10 miles from the port.
Stevedores: Believe there are a total of 8 gangs available for working of general cargo. There are steel and wooden dumb barges available (length 75 ft., beam 30 ft.).
Density: 1004.
General: Documents required: 3 Manifests (Crew Declarations); 8 Crew Lists; 4 Bonded Stores Lists; 4 Provision and Meats Lists; 4 Currency Lists (Crew and Ship's); Certificate of Sanitary/Veterinary Inspection (from last Cuban port); 1 Stowage Plan; Cargo Manifest.

Seals may be opened coastwise but advise not to, with exception of meats.

All conditions as Havana except shore leave only 1800 – 2200 hrs., except Master, extension granted for officers to 2400 hrs. if requested via Agent.

Only chandler 70 miles away.

Fresh water available at 8 t.p.h. (amount may be limited) but must be ordered immediately on arrival if required. We did not order until the last day as we believed we were bound for a U.S.A. Gulf Port, it took 8 hours to hook up and a lot of pressure on Agent.

Berth unsuitable for this size of vessel though using mooring buoys vessel lay securely moored. Concrete pier with wooden fendering slightly dilapidated in places but quite adequate. Pier 320 ft. long and 4 ft. high. Stern secured to 2 mooring buoys, one each quarter, distance approx. 200 ft., but buoy moorings are believed to be suspect. No cargo can be worked at No. 5 except by lighters. Harbour Master states largest vessel suitable for this berth 120 m. LOA. Depth alongside by soundings 22 ft. Forward, 26 ft. aft. Pilots good.

Gangway must be used, as companion ladder will not reach quay.

Channel requires local knowledge but it is well buoyed.

Cargo discharge depends on supply of trucks. Can only work one truck at each hatch therefore to speed up discharge last day two gangs No. 4 discharged into lighter offshore.

AUTHORITY: All port authorities located at port of Isabela de Sagua.

When vessels at anchorage awaiting berthing, authorities transported by tug-boat for clearing purposes.

AGENT: Empresa Consignataria Mambisa, Agencia Isabela de Sagua, P.O.Box 18, Isabela de Sagua, Prov. de Las Villas. Tel: 32 (office) 25 (night). Telex: 041184. Cable: Mambisas Sagua La Grande.

Pilot VHF works on Channel 16.

Cables, messages should be addressed "Mambisas Sagua la Grande", but recommended be sent through main office "Mambisas Havana". ETAs should be sent simultaneously to both.

JUCARO: 21.37 N. 78.51 W.

(including the sub-ports of: Boca Grande, Palo Alto and Santa Maria)

APPROACHES: Vessels proceeding to Jucaro sub-ports must call first at Jucaro for Port Authority's clearance.

Tidal variation 1 ft. 6 in. It is not necessary to await slack water before entering. Recommended that *(a)* vessels arriving from Cuban ports situated to the East of Jucaro, such as Caibarien, Puerto Padre, Manati, Vita, Banes, Antilla, Sagua de Tanamo, Moa, Baracoa, etc., or from foreign ports, should enter Jucaro Port through Breton Channel, and *(b)* all vessels not exceeding 22 ft. draft proceeding from those Cuban ports situated to the West of Jucaro, such as Havana, Mariel, Matanzas, Cardenas, Isabela de Sagua and Cienfuegos, should enter Jucaro port through Tunas Channel.

DOCUMENTS:

10 Crew Lists.
10 Passenger Lists (if passengers on board only).
10 Manifests of Cargo (or ballast).
4 Customs Crew Declaration (including currency).
4 Ship's Provision Stores, including bonded and narcotics.
1 Health Declaration.
1 Vaccination List.
Clearance from Last Port.
Derat Certificate.

PILOTAGE: Pilots board vessels which enter through Breton Channel at Buoy No. 2, which is situated to East of channel entrance, 21° 08′ 18″ N. 79° 30′ 24″ W. with water depth 33 ft. Through this channel vessels can enter drawing up to 29 ft. with max. length 800 ft. Bottom is coral reef. There are dangerous turns at "pasa" of Baandra until Ana Maria Cays have been passed.

For vessels which enter through Tunas Channel, Pilots board at No. 2 Buoy which is situated to East of Channel entrance, Lat. 21° 31′ N., Long. 79° 41′ 21″ W. Through this channel vessels can enter drawing up to 22 ft.

No pilot station. Pilots are to be notified of vessel's arrival 24 hours in advance. Distance from place where Pilots board vessels to Jucaro anchorage is 50 miles.

From Jucaro Anchorage to:

Boca Grande Sub-port	– 14 miles
Palo Alto Sub-port	– 5 miles
Santa Maria Sub-port	– 24 miles

RESTRICTIONS: Vessels can enter and sail through both channels day and night.

ANCHORAGES: Loading places, ex-lighters. Three anchorages (very good holding ground), namely, No. 1 Anchorage – 6 miles from the port at South of Obispo Cay, depth 24 ft. No. 2 Anchorage – 7 miles from the port at S.E. of Obsipo Cay, depth 27 ft. No. 3 Anchorage: Anchorage 8 miles from the port and 1 mile to Eastward of No. 2 anchorage, depth 30 ft.

RADIO: Call "Jucaro Radio" on 2182 kHz, will answer on 2760 kHz.

VHF: Pilot boat, Port Captain and Agency equipped with VHF and work on Channel 16.

LOADING: This port only exports bagged refined sugar in 100 kilos jute bags or 50 kilos cotton bags, molasses and fresh fruits.

Fuel oil is discharged either imported or by coastal trade.

Working periods: Monday to Friday 0600 – 1000 hrs., 1200 – 1600 hrs.; Saturday 0600 – 1000 hrs., 1200 – 1600 hrs. It is possible to work overtime, also possible to work Sundays and holidays, if required.

Work carried out on a piece-work basis, and at an average of 2,000 bags per gang-period. 6 sugar bags loaded per sling.

Refined sugar: Work is carried out on a piece-work basis and loading rate averaged about 4,000 bags of the 50 kilo type and 2,000 of the 100 kilo type per gang-period.

Sugar in bulk: Venezuela and Ecuador sugar mills have 5 thrower machines each for distributing sugar in vessels' hatches. Loading carried out by cutting sugar bags through grates placed on vessels' hatches.

Shore cranes: None.

TANKERS: Average pumping rate of molasses 20,000 g.p.h.

FUEL/REPAIRS: Not available.

FRESH WATER: No water available.

OPENING/CLOSING HATCHES: By crew.

PROVISIONS: Available, but expensive.

TRANSPORTATION: Distance between Jucaro Port and its sub-ports:

To Santa Maria	– 31 miles
To Boca Grande	– 15 miles
To Palo Alto	– 9 miles

Motor launches are used between port and sub-ports, and take 4.5 hours, 2.5 hours and 1.25 hours between Jucaro and Santa Maria, Boca Grande, and Palo Alto respectively.

By automobile, 3.5 hours to Santa Maria and 2 hours to Boca Grande. No highway from Jucaro to Palo Alto.

MEDICAL: There are two hospitals at Ciego de Avila where sick crew members can receive attention. Distance between Jucaro and Ciego de Avila is 27 km.

SHIPMASTER'S REPORT: 1977.

Lines to the barges to be provided with rat-guards.

Very strict regulations concerning crew declaration of effects, currency and pornography.

All personal effects of crew members will be sealed by Customs, even their used clothes, allowing them out only a couple of clothes changes, one carton of cigarettes and one bottle of spirits.

Advisable to instruct crew members to declare all currency and not to try to take any money ashore. They could not use or change it and could run into a great deal of trouble.

Vessel's deck, engine and accommodation will be searched by Port Authority party.

Shore leave allowed only from 1800 to 2200 hrs.

Smallpox and cholera vaccination available on request. Crew members without a valid smallpox vaccination certificate will not be granted shore leave.

No kind of restrictions for the Master, whose shore leave is unlimited. Strict Customs regulations do not affect him.

No amenities available ashore.

Loading of oranges fast if available. About 200 tons per gang shift.

Pre-cooling of cargo chambers is not required. Oranges stowed in two tiers of four cartons with battens in between. Maximum height of eight cartons. Stowage factor about 95.

AUTHORITY: Custom House, Captain of the Port and Immigration, located at Jucaro. Port doctor located at Ciego de Avila.

AGENT: Empresa Consignataria Mambisa,
Agencia Nuevitas,
P.O. Box No. 350,
Puerto Tarafa, Nuevitas,
Prov. de Camaguey.
Telephone: 3-1435 (office),
3-6025 (night).
Telex: 031151.
Cable: Mambisas Nuevitas.

Mambisas Nuevitas Agency also attends at the port of Nuevitas.

Jucaro and Boca Grande are attended by Nuevitas Agency personnel.

Any information about vessels operating at Jucaro or Boca Grande should be requested from our main offices at Havana or to Nuevitas Agency because it is extremely difficult to communicate directly with the Agent attending the vessel. Agents at Jucaro and Boca Grande communicate periodically with Nuevitas Agency which relays the information to our main office.

SUB-PORT OF BOCA GRANDE:

LOCATION: About 15 miles East of Jucaro.

APPROACHES: See "Jucaro".

PILOTAGE: See "Jucaro". Distance from place where Pilots board vessels to Boca Grande is 64 miles. Entrance channel: same as for Jucaro. Tidal variation 1 ft. 6 in.

ANCHORAGES: Anchorage No. 1: Located 3 miles off Boca Grande Firth. Draft 24 ft. Anchorage No. 2: Located 5 miles off Boca Grande Firth. Draft 30 ft. Both these anchorages have soft mud bottom.

Kind of cargoes handled. Importation, fuel oil. Exportation, bagged refined sugar, molasses. Coastal trade, discharge of fuel oil.

LOADING: At present only refined sugar is exported. All sugar-loading operations are carried out at anchorage by means of lighters. Following lighters available:

Barges	*Capacity* (50 kg. bags)	*Capacity* (100 kg. bags)
Ana	4,900	2,500
Loretto	4,400	2,100
Mascot	4,400	2,100
F 55	4,400	2,100
Trusco 89	5,100	2,980
Angel	3,440	1,700

Working Periods: Monday to Friday 0600/1000 hrs., 1200/1600 hrs.; Saturday 0600/1000 hrs., 1200/1600 hrs. When working is performed on Sundays, same periods apply.

Work is performed on a piece-work basis, and average loading rate is about 2,000 bags, basis 6 bags per sling, and 100 kilo bags. Only one vessel can be worked at a time.

TUGS: Three tugs available.

TANKERS: Discharging operations at No. 1 or No. 2 anchorages. Discharging rate approximately 20,000 g.p.h.

There are also steel barges for transportation of molasses and/or sugar:

Guanales: 100 ft.×30 ft.×7 ft. Sugar capacity: 1,600 bags. Molasses capacity: 65,000 gallons.

Loreto: 100 ft.×30 ft.×7 ft. Sugar capacity: 1,600 bags. Molasses capacity: 65,000 gallons.

Each of these barges has 4 tanks measuring 15 ft.×36 ft.×7 ft. Capacity: 3,780 cu.ft. or 28,274 gallons each tank. Total capacity: 113,100 gallons. Each barge can load a max. of 400 tons of molasses and each is equipped with steam pump.

COMMUNICATIONS: Launch transportation. It takes 2.5 hours for travelling from Boca Grande to Jucaro or Santa Maria. Captain of the Port's radio-telephone is used as means of communication.

All communication and instructions for vessels operating at this sub-port must be given to Nuevitas Agency.

SHIPMASTER'S REPORT: Port will not be operational after 1977.

MANZANILLO: 20.20 N. 77.12 W. (See Plan Book) (and sub-ports of Ceiba Hueca, Media Luna, Niquero and Pilon (Ensenada de Mora).)

PILOTAGE: Pilots board vessels at Cabo Cruz. Pilot station located at Cabo Cruz and Pilots communicate with Manzanillo by means of radio-telephone. Distance from place where Pilots board vessels up to Manzanillo through Madrona Channel is 68 miles. Through Palomino Channel (Coloradas de Fuera) is 55 miles.

APPROACHES: *(a)* Madrona Channel: This channel has sharp and narrow turns. Bottom is of soft mud. Max. draft with which vessels can enter through this channel is 33 ft. Channel has depth not less than 35 ft. Vessels must wait for slack or favourable tide to proceed through this channel. No tug is necessary.

(b) Palomino Channel: This channel has turns, but they are less sharp and less narrow than those of Madrona Channel. Bottom is of soft mud. Max. draft with which vessels can enter through this channel is 20 ft. No tug is necessary.

The average tidal variation is 1 ft. 6 in.

RESTRICTIONS: Due to present conditions of channel lights and distance, it is suggested that vessels enter and sail only during daylight.

ANCHORAGES: Inside harbour: No. 1, draft 24 ft. Distance from shore 1 mile. Use: sugar/general cargo.

Outside harbour: No. 2, draft 29–30 ft. No. 3, draft 33 ft. Distance from shore 1.5 miles to 2 miles. Use: sugar/general cargo. Although about 40 ft. depth at this anchorage, it is limited to 33 ft. which is official draft of the entrance channel. Vessels have been loaded at this anchorage up to 33 ft. 6 in. draft.

ICP Submarine Pipe-Line Anchorage: The submarine pipe-line anchorage is located as follows:

Lat.: 20° 21′ 12″ N. – Long.: 77° 10′ 21″ W.

There is no limitation to the length of vessels operating at this place and maximum official draft is 28 ft.

Distance from shore is about 2 miles and the transportation means are the tugboats of the stevedore enterprise Terminales Mambisas.

The vessel is secured to 4 buoys and the mooring is performed by Terminales Mambisas tugboats and personnel.

The pipe-line is 8 in. (203 mm.) in diameter and connection is 6 in. (152 mm.).

The cargo handled is: Discharge of kerosene, gasoline and diesel oil.

The prevailing winds are those of the first quadrant.

EQUIPMENT: The port has 6 barges of 200 tons cargo capacity, 2 of 140 tons and 1 of 100 tons, this last one having a derrick capable of lifting up to 2 tons.

There are 3 tugboats servicing the port:

"Punta Morrillo" the biggest and most powerful, capable of towing 5 barges, "Aracelio Iglesias" and "Cdte. Turcios Lima" which can tow 3 barges each.

These tugboats are also used to transport shore/vessel personnel from shore to anchorage or vice versa.

There are no cranes or pay loaders in the port.

LOADING: Sugar-loading operations performed at anchorage by lighters.

At sugar mill "La Demajagua", town of Calicito, at a distance of 2 km. from the sugar mill, there is a small pier with a draft of 10 ft. where the barges are loaded with bagged raw sugar for vessels operating at Manzanillo.

At sugar mill "Francisco Castro Ceruto", town of Campechuela, at 500 m. from the sugar mill there is a pier with a draft of 12 ft. where barges are loaded with bagged raw sugar for vessels operating at Manzanillo or Ceiba Hueca.

For the discharge of barges with import cargoes the coastal pier of Manzanillo Fishing Port is used, about 3 km. distance from the city.

Bulk cargoes are not handled by this port except the discharge of petroleum products.

Docks are suitable for reception and handling of import and export cargo (bulk cargo excepted). They have railroad tracks of non-standard gauge, which connect with warehouses.

Sugar and general cargo: Working periods. Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

2,000 raw-sugar bags loaded per gang per day of 8 hours.

DISCHARGING: Rates:

Bagged cargo (of 100 lb.)	approx. 25 t.p.h.
Bagged cargo (of 200 lb.)	approx. 35 t.p.h.
Iron	approx. 7 t.p.h.
Wood	approx. 8 t.p.h.
Jute bags	approx. 15 t.p.h.

FUEL/FRESH WATER: Not available.

REPAIRS: Mechanic and foundry shop under control of Industry Ministry, where light repairs of machine parts can be performed.

COMMUNICATIONS: Distance from Manzanillo to:

Ceiba Hueca:	15 miles by sea, 32 km. by highway
Media Luna:	23 miles by sea, 45 km. by highway
Niquero:	45 miles by sea, 79 km. by highway
Pilon:	90 miles by sea, 130 km. by paved highway, which reaches up to 15 km. from Niquero whereafter a dirt road must be used to reach Pilon. Dirt road distance of 40 km. During rain season a jeep is used to travel by this road.

Car is used to travel from Manzanillo to above sub-ports, and takes: to Ceiba Hueca 1 hour; to Media Luna 1 hour; to Niquero 2 hours and to Pilon 3 hours (in rainy season about 5 hours).

Daily car services from Manzanillo to Niquero; to Pilon there are trucks specially prepared for this service.

There is direct communication between Manzanillo and its sub-ports by telephone or telegraph.

In Manzanillo there is a long distance telephone service, radiograms, telegrams and Post Office.

Ocean-going vessels navigating to Cuba can communicate by radiotelegraphy, contacting "CLA Havana" station, which relays the messages to Manzanillo by telex.

Vessels navigating in Cuban waters can communicate any message by means of radiotelephony, contacting "CLM Coastal Network", Manzanillo. CLM station relays the messages to Manzanillo Agency by direct telephone call.

The Manzanillo Agency is connected to the National Telex System and the Manzanillo number is 02321. This is the quickest method of communication with Manzanillo Agency.

ETA messages should be given simultaneously to "Mambisas Manzanillo" and "Mambisas Havana".

MEDICAL: There is a hospital at Manzanillo where sick crew members can receive attention.

DUNNAGE: Vessels nominated for loading sugar in Manzanillo or any of its sub-ports must arrive supplied with wood dunnage because in the Manzanillo Jurisdiction it is extremely difficult to obtain wood dunnage.

Dunnage paper can be supplied if requested in advance.

AUTHORITIES: All Port Authorities, Custom House, Immigration Port Doctor, Port Captain are located at Manzanillo.

Vessels can proceed directly to any of the sub-ports, where Manzanillo Port Authorities travel to give clearance, but advance information must be given to these Authorities for the corresponding permit, as Manzanillo regulations provide that vessels must enter Manzanillo as Custom Official Port.

AGENT: Empresa Consignataria Mambisa, Sairiol No. 243 e/Dr. Codina y Saco, Apartado No. 22, Manzanillo, Prov. de Oriente. Cable Address: Mambisas Manzanillo. Telex: 02321 – Telephones: 2533 (Office) 2430 (Night).

(a) SUB-PORT OF CEIBA HUECA:

Vessels may proceed direct to sub-ports (see Manzanillo under "Authorities").

PILOTAGE: Pilots board vessels at Cabo Cruz. Distance from place where Pilots board vessels up to Ceiba Hueca pier is about 42 miles.

APPROACHES: See Manzanillo information. For operations at Ceiba Hueca it should be noted that the pier has a depth of only 19 ft. towards the sea end for loading. Tidal variation about 1 ft. 6 in.

BERTHING: A motor-boat is required to assist in handling lines to pier and buoys. Boat is brought from Manzanillo.

LOADING: As Ceiba Hueca pier is in bad condition, it is only used currently to dock small tankers (325 ft. length) to discharge fuel oil, or to load molasses (max. 500 ft. length) across the head of the pier, securing ship to 2 mooring buoys port side and 2 starboard side.

(a) Indio Diaz Machado Pier (Formerly Ceiba Hueca Pier):
Length 130 m. (426 ft.), draft 19 ft.
Discharge of fuel oil: Connection 8 in. diameter.
Loading of molasses: Pipe-line 16 in., 2 connections 8 in. each.

(b) Ceiba Hueca Anchorage: Located at 1 mile N.W. of pier.
Max. draft allowed is 33 ft.
The bottom at anchorage is soft mud.

Two vessels can be operated simultaneously: One loading sugar and another discharging fuel or loading molasses at the pier.

There is railroad of non-standard gauge from the sugar mill warehouse to the dock platforms.

Working periods: Monday to Friday 0700–1100 hrs., 1300–1700 hrs.; Saturday 0700–1100 hrs.

2,000 bags are loaded per gang-period. 6 bags per sling.

TANKERS: Vessels are loaded with molasses at Ceiba Hueca pier and average pumping rate is 25,000/30,000 g.p.h. Tankers with fuel oil are also operated.
FUEL/REPAIRS: Not available.
FRESH WATER: Vessels can be supplied. Delivery made through pipeline alongside vessel. Average delivery rate is about 1 t.p.h. (due to low pressure).
MEDICAL: Crew members requiring medical attention are treated at the Polyclinic of the nearby town of Campechuela.

When hospitalisation or specialised medical care is required, patients are sent to Manzanillo Hospital.
COMMUNICATIONS: Government telegraph communication between Manzanillo and Ceiba Hueca up to 1800 hrs. however, there is a telephone line which communicates by means of relay with "La Demajagua" sugar mill, which has direct telephone communication with Manzanillo. This communication is only during sugar-mill office hours, and it is very poor due to above relay.

SHIPMASTER'S REPORT: October, 1984. (see "Late Plans" in Volume 1).

Vessel loaded sugar in Bulk.

A new berth (constructed 1981) consisting of the following:

1. A long passage way from land to seaward having a length of about 500 m. containing the belt which carries the sugar.
2. Seven square dolphins 5 m.×5 m. constructed of cement with rubber fenders and 1 bollard on each. Distance between the first and seventh dolphins is about 250 m.
3. One semi-circle cement construction about 40 m. length containing the movable conveyor.

The conveyor has a capacity of about 500 tonnes/p.h. – 600 tonnes/p.h. Loading operations can be done only into 3 cargo holds and then vessel has to shift by means of warping. No tug available or shore mooring men. It is best to leave a seaman ashore for any rope moving.

The berth is affected by strong N.E.'ly – S.E.'ly winds and precautions must be taken during vessel's shifting.

Max. sailing draft allowed 32 ft. The channel is marked with 3 pairs of buoys. No night mooring or unmooring. All other details as per "Guide to Port Entry".

AGENT: Vessels operating at this sub-port attended by Manzanillo Agency Personnel.

(b) SUB-PORT OF MEDIA LUNA:

Vessels may proceed direct. (See Manzanillo under "Authorities").
PILOTAGE: Pilots board vessels at Cabo Cruz. Distance from place where Pilots board vessels to Media Luna is about 38 miles.
APPROACHES: See "Manzanillo".
MAX. SIZE: Max. draft for vessels to enter and carry out loading operations at this sub-port is 33 ft. Tidal variation 1 ft. 6 in.
LOADING: Loading operations are carried out at anchorage where vessels can load up to 33 ft. Barges and tug-boats are used from Manzanillo.

Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

2,000 bags are loaded per gang-period. Vessels can only work with 3 or 4 gangs. Only one vessel can work at a time.
TANKERS: No facilities.
FUEL/FRESH WATER/REPAIRS: Not available.
MEDICAL: There is a hospital and also a polyclinic at Media Luna where sick crew members receive medical or dental care.

Whenever hospitalisation or specialised medical care is required, patients are sent to Manzanillo Hospital.
COMMUNICATIONS: There is direct telephone service with Manzanillo, also telegraph and post office.
AUTHORITIES: See "Manzanillo".

(c) SUB-PORT OF NIQUERO:

Vessels may proceed direct. (See Manzanillo under "Authorities").
PILOTAGE: Pilots board vessels at Cabo Cruz. Distance from place where Pilots board vessels to Niquero Pier is 15 miles. Tidal variation 1 ft. 6 in.
LOADING: Pier length 400–450 ft., depth up to 23 ft. (North and South sides). There are railroad tracks of different gauges and sidings for shifting of flat cars.

Working periods: Monday to Friday 0700 – 1100 hrs.,1300 – 1700 hrs.; Saturday 0700 – 1100 hrs.

2,000 bags loaded per gang-period. 6 bags loaded per sling.

Although Niquero pier has two sides for docking, sugar mill can only supply sugar for working 1 vessel at a time unless overtime be worked at both sugar mill, warehouse and pier.
FRESH WATER: Can be delivered at pier by means of tank cars, capacity 8 tons. About 5 – 6 tank cars can be delivered daily but operation has to be performed outside loading hours.
FUEL/REPAIRS: Not available.
TANKERS: No facilities.
MEDICAL: All crew members requiring medical or dental attention are treated at Niquero Hospital, where they can be hospitalised if necessary.
COMMUNICATIONS: Long-distance telephone communication between Manzanillo and Niquero sugar-mill office. Distance from sugar-mill office to pier is about 5 km.
AGENT/AUTHORITIES: See "Manzanillo".

(d) SUB-PORT OF PILON (ENSENADA DE MORA):

Vessels may proceed direct to sub-ports (see Manzanillo under "Authorities").
PILOTAGE: Pilot boards vessel at Cabo Cruz.
APPROACHES: From Cabo Cruz to Pilon mouth entrance is open sea. From Pilon mouth to the pier is through channel, with rocky bottom and turns.
ANCHORAGES: Permitted draft up to 23 ft.
MAX. SIZE: Max. draft permitted for vessels entering and sailing harbour is 20 ft. Tidal variation 1 ft. 6 in. Cargo vessel 450 ft. – 470 ft. length, tankers 500 ft. length.
LOADING: Berth length 150 m., depth 20 ft. (presently in bad condition). Sugar and molasses loading are performed at this berth. There is a railroad track of non-standard gauge between the sugar mill and the berth.

Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

2,000 bags of sugar loaded per gang per day of 8 hours. 6 bags loaded per sling. In cases when winches are slow, the number of bags per sling is increased. Only one vessel can operate at this berth at a time.
TANKERS: Molasses average pumping rate is 25,000 – 30,000 g.p.h. One connection 8 in. diameter, 12 in. pipe-line.
FUEL: Not available.
FRESH WATER: Can be delivered at berth by pipe-line. Average delivery rate about 1 t.p.h.
MEDICAL: Medical attention and dental care rendered at Pilon Hospital.
COMMUNICATIONS: Government telegraph at Pilon. Also local telephone between sugar-mill office and Niquero, where there is Inalambrica system.

AGENT/AUTHORITY: See "Manzanillo".

MARIEL: 23.01 N. 82.46 W. (See Plan Book)
(and sub-ports of Cabanas, Bahia Honda and Santa Lucia)

PILOTAGE: Pilots board vessels about 1 mile from entrance of port. Vessels proceeding to sub-ports of Cabanas and Bahia Honda must pick up Pilot at same place. Pilot station located at 84 street, 5/a and 7/a, Barrio Boca. No telephone communication.

Distance from position where Pilots board vessels to:

Pier of Unit No. 1	– 1.25 miles
Anchorage	– 2.50 miles
Pier of Unit No. 2	– 2.75 miles

APPROACHES: Entrance channel where buoy No. 1 is situated is over a sand bank with 50–55–60 ft. depth. No. 3 buoy situated in 32 ft. of water on rocky bottom, but having close by a depth of 95 ft. No. 5 buoy situated in 30 ft. of water on sand having close by a depth of 33 ft. max. This channel is 328 ft. wide (approx.).
ANCHORAGES: General anchorage – swing area 450 m., depth 29 ft.

Punta Gorda anchorage – swing area 340 m., depth 36 ft.

Cargo operations do not take place at anchorages.
RESTRICTIONS: Vessels can enter and sail during day and night hours, but this should be checked in each case prior to vessel's arrival as on occasions the buoys are missing.
MAX. SIZE: Max. draft with which vessels can enter and sail through channel is 30 ft. and max. length of 610 ft. Tidal variation 16 in. Also see "Berthing".
BERTHING: All places of operation at this port are located on the East coast of the bay: Unit No. 1 close to the port entrance; Cement Plant pier located just in front of Pt. Gorda and Unit No. 2 located at the North of the town of Mariel.

All operations at Mariel piers are effected by means of trucks.

(a) Unit No. 1, Berth No. 2 (N.W.): Length 134 ft., max. draft allowed 22 ft. Used mostly for general cargo and bulk fertiliser.

(b) Cement Plant Pier: Length: 544 ft. Draft: Vessels with a length under 500 ft. can dock with a draft of 29 ft. even keel.

This pier is used only to discharge fuel oil destined either for the Cement or the Thermoelectric Plants.

Vessels over 500 ft. and up to 610 ft. can enter with a draft of 27 ft. fore and 29 ft. aft. Assistance of a large tugboat (850 h.p.) or 2 smaller ones is necessary for vessels exceeding 532 ft. and up to 610 ft. length.
Tanker information: Fuel Oil: 1×8 in. diameter.

(c) Unit No. 2: This installation is located at the North side of the town of Mariel.

It consists of 3 berthing spaces, that is, a pier 607 ft. long by 267 ft. wide, built of concrete, but earth filled and not properly paved.

Berth No. 5 (N.E.): Draft: 21 ft. fore and 23 ft. aft. Length: 607 ft.
Berth No. 6 (N.W.): Draft: 25 ft. fore and 27 ft. aft. Length 267 ft.
Berth No. 7 (S.E.): Draft 29 ft. even keel – Length: 607 ft.
Cargo handled by this unit: Bulk fertilisers, general cargo and lumber.
Water available by tank-truck.

(d) A new plant for shipping bulk raw sugar is operating at new pier, draft 30 ft.
STEVEDORES: Working periods: Monday to Saturday 0700/1300 hrs., 1300/1900 hrs., 1900/0100 hrs.

Raw sugar: 845 bags loaded per gang-period. 9 bags per sling. Only one sugar vessel can operate at a time.

General cargo: discharging rate: from 6 to 9 tons per gang hour.
Bagged merchandise: about 13 tons (100 lb. bag type).
Iron: about 18 tons (fluctuates according to type of iron).
Wood: 12 tons (approx.).
Fertilisers: Muriate of potash: 10 to 13 tons.
Sulphate of ammonia: 8 to 10 tons.
Superphosphate simple: 15 to 18 tons.
Shore cranes: There is one caterpillar (PH movable crane with boom of 80 ft. length, and which can lift 12 tons).

FUEL/REPAIRS: Not available.

FRESH WATER: Can be supplied at Unit No. 2 berth by means of tank-truck with capacity of 5 tons. In dry season supplied only during night time.

MEDICAL: No hospital. Crew members requiring medical attention are sent to Havana.

AUTHORITIES: Located at Mariel as follows:

Customs House and Immigration: Ave. 65. 126 Street and 128 Street.
Captain of the Port: Playa "La Boca" at the entrance of the port.
Port Doctor: 128 Street. Ave. 67. and Litoral.

Distance from Mariel to:

Cabanas (anchorage):	25 km. 45 minutes by car.
Cabanas (pier):	57 km. 1 hour 47 minutes by car.
Bahia Honda:	73 km. 2 hours by car.
Santa Lucia:	250 km. 4 hours by car.

Car is hired for transportation to above sub-ports. There is daily transportation only between Mariel and Cabanas anchorage.

AGENT: Consignataria, Mambisa, Agencia Mariel, Ave. 65 No. 12411 entre 124 y 126, Apartado No. 5, Mariel. *Tel:* 63 (office), 69 (night). *Telex:* 051110. *Cable:* "Mambisas Mariel".

Pilot Works VHF on Channel 16.

Mariel Agency also attends the ports of Bahia Honda, Cabanas and Santa Lucia.

(a) SUB-PORT OF CABANAS:

Vessels assigned to Cabanas do not have to enter Mariel for clearance, but must pick up Pilot at Mariel port entrance.

PILOTAGE: See "Mariel".

Distance from position where Pilots board vessels to Cabanas is 12 miles.

APPROACHES: Entrance channel has sandy bottom on Eastern side, and rocky bottom on Western. It is about 70 m. wide.

ANCHORAGES: Excellent anchorage is available about 620 m. S.E. of Pt. Mangle, with draft well above port's operations draft.

This is a very desirable anchorage as it offers protection in all weathers.

There is another anchorage about 4.5 miles distant from Gloria Rock.

MAX. SIZE: Max. draft permitted for entry and sailing is 19 ft., and max. length 574 ft. Tidal variation 1 ft. 4 in.

RESTRICTIONS: Vessels should enter and sail only during daylight.

BERTHING: Present name: ECA "Pablo de la Torriente Brau". Former name: "Almacenes de Cabanas". Length 360 ft. (max. length permitted 450 ft.), depth 20 ft.

This dock is commonly known as "Orozo Dock", which is used in shipments of raw sugar. There are railroad tracks of standard gauge.

If for any reason a tugboat is required, tugboat 'Caharata' is available, if requested in advance.

LOADING: Working periods: raw sugar: Monday to Friday 0700 – 1100 hrs., 1300 – 1700 hrs.; Saturday 0700 – 1100 hrs.

845 bags are loaded per gang-period. 6 bags loaded per sling.

FUEL/FRESH WATER/REPAIRS: Not available.

MEDICAL: Crew members requiring medical care are attended at Cabanas Polyclinic. In those cases requiring hospitalisation or specialised medical treatment, they are sent to Havana.

AGENT/AUTHORITIES: See "Mariel". There is a Port Captain and Immigration at Cabanas.

(b) SUB-PORT OF BAHIA HONDA:

Vessels assigned to load at Bahia Honda do not have to enter Mariel for clearance, but must pick up Pilot at Mariel port entrance.

PILOTAGE: See "Mariel". Distance from position where Pilots board vessels to Bahia Honda is 21 miles.

APPROACHES: The entrance channel has sandy bottom on Eastern side, and rocky bottom on Western and is approximately 150 m. wide up to Corojal Anchorage.

RESTRICTIONS: Entry and sailing only during daylight and necessary to await favourable tide.

ANCHORAGES: Draft 28 ft. Swing area 300 m. Max. length permitted 623 ft. Anchorage used for completion of sugar loading by means of barges that are brought from Havana.

MAX. SIZE: Length 450 ft. and max. ship draft for proceeding up to Corojal anchorage is 28 ft. Tidal variation 1 ft. 4 in.

BERTHING: Dock: "Central Harlem" (formerly "Bahia Honda"):

Length 260 ft., draft 19 ft. Dock is commonly known as Sugar Dock of Harlem Sugar Mill. It has railroad track of standard gauge.

LOADING: Sugar working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

845 bags of raw sugar are loaded per gang-period as minimum (more than the above stipulated amount is always loaded). Only one vessel can load at a time.

BUNKERS/WATER/DUNNAGE/REPAIRS: No facilities.

MEDICAL: Crew members requiring medical care are attended at Bahia Honda Polyclinic. Those cases requiring hospitalisation or specialised medical treatment are sent to Havana.

AGENT/AUTHORITY: See "Mariel".

(c) SUB-PORT OF SANTA LUCIA: 22° 44′ N. 83° 59′ W.

Vessels assigned to Santa Lucia do not have to enter Mariel for clearance, nor to pick up Pilot.

PILOTAGE: Pilots board vessels at Pasa Honda, 2 miles off the phosphorescent buoy. No pilot station. Advice of ships' arrival is given to Custom House Delegation by cable. Distance from place where Pilots board vessels up to first anchorage is 4 miles.

APPROACHES: Channel approximately 200 m. width, rocky bottom. It has two turns with dangerous narrows. Tidal variation averages 18 in.

LOADING: There are the following anchorages:

1st Anchorage: Has depth of 30 ft., but vessels are limited for sailing to max. draft of 15 ft., and length 500 ft.

2nd Anchorage: Has depth of 20 ft., but vessels are limited for sailing to max. draft of 18 ft.

3rd Anchorage: Open sea without draft limitation.

Working periods: Work is performed all day (during daylight) including Saturday and Sunday.

Average loading rate is about 900 tons daily, but rate might be improved in the following cases:

1. Vessels with more than 3 hatches available.
2. Vessels with booms (not of the crane type) since loading is performed by grabs which are to be rigged in order to perform quick loading.
3. Provided only one vessel performs operations (2 vessels may be loaded simultaneously but above rate cannot be complied with).

Loading at this sub-port is by means of grabs rigged to vessel's boom. In cases where vessel has no booms, but cranes, the loading is carried out very slowly as buckets are used in such cases, and having to shovel mineral into buckets delays loading operations.

There are 6 barges for loading mineral with a capacity of 150 tons each.

TUGS: 2 tugs, *Adis* and *Julita* which can tow 2 barges each.

FUEL/FRESH WATER/REPAIRS: Not available.

MEDICAL: Crew members requiring medical care are attended at Santa Lucia Polyclinic. Those cases requiring hospitalisation or specialised medical treatment are sent to Pinar del Rio Hospital, distance 80 km. from Santa Lucia.

AGENT/AUTHORITIES: See "Mariel".

Port Authorities use launches for clearing vessels. Agents use a car to travel from Mariel to Santa Lucia which takes 4 hours.

There are Custom House and Port Captain Delegations at the sub-port of Santa Lucia.

MATANZAS: 23.03 N. 81.34 W. (See Plan Book)

Matanzas Bay is open and most ample, being about 5 miles long and 2.75 miles wide.

Its waters are deep and only start losing depth at about 150 yds. from shore; for this reason it is most suitable to accommodate large vessels, regardless of length or draft.

Occasionally the prevailing winds affect and interfere with docking and undocking manoeuvres.

Within bay limits, 3 rivers flow:

San Juan and Yumuri Rivers, which empty into the South-Western extreme of the bay, after crossing the city of Matanzas; and Canimar which drains into the S.E. of the bay.

PILOTAGE: Pilots board vessels about 3 miles after passing the port entrance, in front of Electrical Plant and close to Empresa Consolidada del Petroleo Pier (Texas). Pilot station located at Reynold Garcia Pier (Terminal Maritima). Tel. number 2688.

Distance from place where Pilots board vessels to:

I.C.P. (Texas) Pier	
Reynold Garcia Pier (Terminal Maritima)	– 200 m.
Juan A. Morales Bayona (Cubadist)	– 300 m.
Jose Luis Dubrocq (formerly Fomento)	– 500 m.
Frank Pais (Armour)	

APPROACHES: There are three entrance channels:

(i) North Channel: 50 ft. minimum depth with muddy bottom.
(ii) South Channel: 80 ft. minimum depth with rocky bottom.
(iii) Middle Channel: 22 ft. maximum draft. Because of the limited draft of this channel, it is seldom used.

The most remarkable points of visual orientation while approaching Matanzas are:

Point Maya Lighthouse, which rises 58 ft. above high tide, flashing white light visible up to 13 miles away, located on the East side of the port mouth.

To the West the Pan de Matanzas mountain and to the East the mountain range known as Tetas de Camarioca, 7 miles inland, with three distinct summits.

While entering the port at night-time, on the West side of the entrance, there is a huge brightly illuminated building of a tannery which can be used as a landmark to determine where to pick up Pilot, as the location is 700 m. after sailing past the building.

Tidal variation at this port averages 1 ft. 6 in.

RESTRICTIONS: Vessels can enter or sail at night but Port Authorities should be advised in advance.

ANCHORAGES:

Indio Anchorage: depth 17 ft.; swing area 120 m.
South Anchorage: depth 30 ft.; swing area 230 m.
Del Medio Anchorage: depth 27 ft.; swing area 200 m.
West Anchorage: depth 21 ft.; swing area 150 m.
North Anchorage: depth 25 ft.; swing area 150 m.
Casacajales Anchorage: depth over 30 ft.

BERTHING: At Matanzas Port there are 5 separate berthing installations of which, Jesus Menendez Pier, formerly known as Texas Pier, has been out of use for some time.

All port installations are located on the N.W. shore of the bay.

Jose Luis Dubrocq Pier was enlarged and rebuilt in 1970 and all piers and the bay have been recently dredged, these works having been completed at the beginning of 1973.

Jesus Menendez Pier (formerly Texas Pier): Length 794 ft., draft 28 ft. Used to discharge fuel oil.

Presently no operations are performed at this pier due to the bad condition of its solid dolphins. Pier itself is in good condition and may be used as soon as solid dolphins are replaced.

Frank Pais Pier (formerly Armour Pier): It is a solid construction of concrete and stones.

Although it has two sides, only the West side is used, the East side being out of use. Length 350 ft., draft 22 ft.

Cargo handled by this pier: Only coastal trade discharge of: Fuel oil, diesel oil, gasoline, kerosene and occasionally cement or general cargo.

Reynold Garcia Pier (formerly Terminal Maritima Pier): The pier is of solid concrete construction at the entrance of which the pilot station and the stevedores' office are located.

North Side: Length 450 ft., draft 32 ft. Cargo handled by this side: Exportation: Bagged refined sugar, dextrana, rayon, liqueurs, etc. Import: Occasionally dry cargo (general cargo), liquid ammonia.

South Side: At this side of pier are the mechanical installations of the bulk raw sugar shipping plant. Length 529 ft., draft 32 ft.

Cargo handled by this side: Exportation: Bulk raw sugar, occasionally bagged refined sugar, dextrana, rayon, liqueurs, etc. Importation: Can be used if no sugar is scheduled to be shipped.

Morales Bayona Pier (formerly Cubadist Pier): It is a steel and concrete construction, consisting of a long narrow passage along which run the molasses and water pipe-lines, and a catwalk.

At this installation tankers berth to 2 solid dolphins and 2 mooring buoys fore and aft. Max. length permitted to vessels 615 ft., draft 32 ft.

Cargo handled by this pier: Exportation of molasses and alcohol.

Jose Luis Dubrocq Pier (formerly Fomento Maritimo Pier):

Section No. 1: Recently enlarged and rebuilt; at this time 2 heavy overhead cranes are being installed for discharging of bulk fertilisers. This installation is a coastal pier. Length 600 ft., draft 32 ft.

Cargo handled by this Section: Import: General cargo, bulk fertilisers, bagged cargoes, lumber, etc. Export: General cargo.

Section No. 2: Length 532 ft., draft 27 ft.

Cargo handled by this Section: Similar to Section No. 1.

Trucking operations are usual at this pier.

STEVEDORES: Monday to Friday: 0700 – 1100 hrs., 1300 – 1700 hrs. Saturday: 0700 – 1100 hrs. Sundays: No work performed unless in special cases.

Raw sugar: 855 raw-sugar bags loaded per gang-period. 5 bags loaded per sling.

Refined sugar: 2,004 refined-sugar bags (50 kg. type) are loaded per gang-period (797 of 100 kg. type).

12 bags of 50 kg. type per sling; 6 bags of 100 kg. type.

General cargo: average rate of discharge of other kinds of cargo varies depending on the type.

Average rate of fertiliser discharge about 11 tons per gang-hour.

Crane: one steam crane with a boom of 60 ft. which can lift about 40 tons. Crane is mounted on railroad tracks and is used only at Jose Luis Dubrocq pier.

Bulk sugar: The installation of bulk sugar throwers operated by Empresa Consolidada del Azucar, at Reynold Garcia Pier, is by system of conveyor and distribution crane which runs from Parabolicos warehouses up to the end of the pier. A special structure protects the conveyor.

The crane runs on special rail throughout the pier (fore and aft) stopping at each vessel's hold. In cases where the vessel has projecting superstructure, she has to be separated from the pier.

Average loading rate is about 350 t.p.h., depending on the type of vessel. On vessels without tweendecks, an average of 43 t.p.h. has been attained.

Weights of shipment estimated on draft and information provided by Master. Notations are entered in Bill of Lading declaring quantity as subject to amount discharged at destination, which is supervised by Cuban Producers' Representative.

TANKERS: Discharge of fuel oil: 1 connection 6 in. diameter.

Discharge of gasoline/kerosene/diesel oil: 1 connection 6 in. diameter.

Alcohol: Pipe-lines 10 in. diameter, 2 connections 8 in. diameter.

Molasses: Pipe-lines 12 in. diameter, 4 connections 8 in. in diameter.

FRESH WATER: Water available by pipe-line only while docked to the underlisted piers:

Reynold Garcia: Delivery rate: From 7 to 10 t.p.h.
Morales Bayona: Delivery rate: From 10 to 12 t.p.h.
Jose Luis Dubrocq: Delivery rate: From 5 to 7 t.p.h.

FUEL: No bunkers available.

REPAIRS: Can be performed by Cearra y Trabazo.

COMMUNICATIONS: Long-distance telephone, Corporacion Inalambrica Cubana, Press wireless, Government telegraph, postal communication, railroad and buses.

Vessels can communicate through CLA via Cardenas and/or Havana.

MEDICAL: Following hospitals where sick crew members can receive attention: Civil Hospital, Army Hospital, Clinica Moderna, Clinica Villar, Clinica Matanzas.

AUTHORITIES: Located as follows:

Port Doctor:	Milanes St. No. 2. Tel. 2672 (home tel. 2338).
Immigration:	Santa Teresa St. No. 19. Tel. 2695.
Port Captain:	Muelle del Real. Tel. 2469.
Custom House:	Versalles St. e/Navia and Riech St. Tel. 2269 (home tel. 2339). (Chief of Custom House watching services.)

AGENT: Empresa Consignataria Mambisa, Agencia Matanzas, Milanes No. 29427, Apartado No. 245, Matanzas. Telephone: 2519 and 3079 (office), 3819 (night). Telex: 05232. Cable: Mambisas Matanzas.

Ocean going vessels navigating to Cuba can communicate with our Matanzas Agency by radiotelegraphy, contacting "CLA" Havana Station, which relays the messages immediately to Matanzas.

Our Matanzas Agency is connected to the National Telex System and its number is 05232. This is the quickest method of communication with Matanzas Agency.

Masters must send their ETA messages simultaneously to Mambisas Matanzas and Mambisas Havana.

Matanzas Agency VHF works on Channel 16 during office hours.

NUEVA GERONA (Isla de Pinos): 21.58 N. 82.56 W. (See Plan Book)

Isla de Pinos is the largest island of Los Canarreos Archipelago, located on the South coast of Cuba, just in front of Batabano Gulf and the boundary between Pinar del Rio and Havana provinces.

Isla de Pinos is 54 km. long from North to South and 58 km. from East to West. (2,200 sq. km.). The North coast is 229 km. long and the South coast 98 km.

Nueva Gerona Anchorage lies in front of the mouth of Las Casas River.

PILOTAGE: Pilots board vessels at Punta Frances. Distance from place where Pilots board vessels to loading berth is about 34 miles. No pilot station. Chief Pilot is located at No. 3 St. Mo. 612 e/ 6 and 8 Streets, Nueva Gerona, Isla de Pinos.

APPROACHES: Entrance channel or passage from the Gulf to the bank is about 2 miles wide. Bottom throughout the 34 miles is mud (from entrance to anchorage in front of Las Casa River). No dangerous turns or narrows.

RESTRICTIONS: Entry and sailing only during daylight.

ANCHORAGES: Gerona Anchorage: Located just in front and close to the mouth of Las Casas river. Draft 19 ft. No limitations regarding length. Swing area is 600 ft.

Loading of fruits at anchorage is performed only when shipment is effected in vessels whose draft does not permit them to enter through the river.

Auxiliary equipment for exportation of fruits: 2 barges, 1 tugboat.

Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

Whenever sufficient cargo is supplied by the packing plant, the loading rates should be about 120 tons per gang in 8 hours.

MAX. SIZE: Max. draft up to which vessels can load out of the river is 19 ft. Tidal variation 1 ft.

BERTHING: Nueva Gerona Pier: Located about 2 miles up river. Length 200 ft. Max. length allowed to vessels, 90 m. (295 ft.). Draft 14 ft. 6 in.

FUEL/REPAIRS: Not available.

FRESH WATER: Available only at berth.

MEDICAL: General hospital "Heroes de Baire", where sick crew members can receive attention.

COMMUNICATIONS: There are telephone, telegraph and cable (Inalambrica) communications, also air postal service.

AUTHORITIES: Port Authorities are located at Nueva Gerona.

It is strongly recommended that when vessels are assigned to this port, all measures be taken for perfect co-ordination between Agents, Pilots and Port Authorities, and Masters should give ETAs in advance.

SUB-AGENT: Empresas Nacional de Cabotaje, Calle 14 entre 1ra. y 3ra, Nueva Gerona, Isla de Pinos. Tel.: 33 – Telex: 051115. Cable: Mambisas – Nueva Gerona.

NUEVITAS: including Pastelillo, Puerto Tarafa, and Bufadero: 21.33 N. 77.16 W. (See Plan Book)

The port lies on a peninsula orientated from West to East, and all port installations are located on the North of said peninsula: Tarafa on the Western extreme, Bufadero and Cement Pier at about 0.5 miles East of Tarafa, and Pastelillo at the Eastern extreme.

The city of Nuevitas is located about 4.5 km. to the S.W. of Tarafa. The city spreads widely from the shores of Guincho Bay.

Neuvitas Bay has an extension of 57 square miles, but despite its extension, owing to its geographical configuration, is fairly well sheltered and can accommodate vessels of large tonnage. Bottom of the bay is mostly hard mud, but there are areas of sand and others where it is sandy/muddy.

(a) PASTELILLO:

PILOTAGE: Pilots board vessels at Punta Practicos, 1 mile from buoy No. 1.

The following are the distances from the place where Pilot boards the vessel up to: Pastelillo: 8 miles; Bufadero: 10 miles; Tarafa: 10.75 miles.

Pilot station is located at Nuevitas and usual means of communications with it are telephone or car.

APPROACHES: Entrance to or sailing from this port is only effected at slack water in order to avoid tidal currents.

Usually entrance or sailing from port is performed during daylight hours but incoming vessels, which have advised their ETA well in advance and draw 30 ft. or less can enter during night-time at slack water, if all the navigational signals and marks are in good order. If any lighted buoy is out of service, night entrance or sailing are not performed.

Channel bottom is rocky/sandy along most of its entire course but if crossing the channel with official draft allowed to vessels, there are no difficulties regarding draft as there is ample depth.

Limitations as to draft and length to enter to or sail from Nuevitas are as follows: draft 33 ft., length 650 ft.

Limitations as to draft for crossing the bay interior channels are:

Entrance channel up to Botijuela Anchorage:	35 ft.
La Estrella Channel up to Pastelillo:	33 ft.
Channel between Pastelillo and Tarafa:	26 ft. 6 in.

ANCHORAGES: *La Poza Anchorage:* Located near Pt. Practicos. Geographical position: Lat. 21° 36′ 46″ N., Long. 77° 05′ 11″ W. Limitations: Draft 38 ft., length none. Swinging area: Unlimited. Can accommodate one vessel. Distance from shore: 400 m.

Botijuela Anchorage: Located S.E. of Ballenato Grande Cay. Geographical position: Lat. 21° 31′ 34″ N., Long. 77° 10′ 39″ W. Limitations: Draft 35 ft., length 650 ft. Swinging area: 400 m. Can accommodate 15 average type vessels. Distance from shore: 2 miles.

Pastelillo Anchorage: Located East of Pastelillo. Geographical Position: Lat. 21° 32′ 34″ N., Long. 77° 12′ 38″ W. Limitations: Draft 20 ft., length 500 ft. Swinging area: 200 m. Can accommodate 2 vessels. Distance from shore: 0.25 miles.

Guincho Anchorage: Located East of Pt. Guincho. Geographical Position: Lat. 21° 31′ 57″ N., Long. 77° 14′ 00″ W. Limitations: Draft 16 ft., length 250 ft. Swinging area: 100 m. Can accommodate 1 small vessel. Distance from shore: 1.25 miles.

Tarafa Anchorage: Located to the N.W. of "D" pier. Geographical position: Lat. 21° 34′ 30″ N. Long. 77° 14′ 45″ W. Limitations: Draft 22 ft., length 525 ft. Can accommodate 1 vessel. Distance from shore: 400 m.

MAX. SIZE: Up to 575 ft. length – 33 ft. draft. Up to 610 ft. length – 31 ft. draft. Tidal variation 1 ft. 6 in.

BERTHING: *Pastelillo Pier:* North Side: Length 458 ft., width 55 ft., max. draft 33 ft.

Depths alongside from shore end to pier head: 31 – 35 – 37 – 37 – 37 – 36 – 37 ft.

Cargo handled by this side: General cargo, equipment, machinery, bagged raw and refined sugar, molasses, etc.

South Side: Length 458 ft., width 55 ft., max. draft 33 ft.

Depths alongside from shore end to pier head: 24 – 33 – 34 – 33 – 36 ft.

It is well cared for and recently underwent complete repairs, being the topping-off berth for sugar and molasses loading of the port, as well as the deep draft berth for vessels with import cargoes.

Petroleum products (fuel oil, diesel oil, gasoline and kerosene) for the use of the whole Camaguey province, are discharged at this pier.

The pier has railroad sidings connecting with the main tracks but it is not suitable for trucking operations.

STEVEDORES: Working periods: Monday to Friday, 0700/1300 hrs., 1300/1900 hrs.; Saturday, 0700/1300 hrs., 1300/1900 hrs.; Sunday, no work is performed.

Raw Sugar: loading rate: max. 1,800 bags per gang in 6 hours. Minimum fixed rate 975 bags in 4 hours or equivalent in 6 hours. 6 bags loaded per sling.

Loading Capacity: 2 sugar vessels can perform sugar loading operations simultaneously.

Refined Sugar: this type of shipment is not regularly performed.

Loading rate: 3,300 bags of 100 lb. each are loaded per gang in a 6-hour period.

General Cargo: discharging rate is about 11 to 12 t.p.h.

EQUIPMENT: The port owns and operates the following equipment: 6 fork lift trucks; 7 tractors; 3 trailers; 6 tow motors; 5 shore cranes (from 5 to 20 tons lifting capacity); 2×300 ton capacity cargo barges; 1 (1,200 h.p.) tugboat.

TANKERS: Molasses pumping rate about 85,000 g.p.h.

FUEL: Currently the only bunkers available at Nuevitas are Regular Fuel Oil, which is the type of fuel oil stored at shore tanks.

Deliveries are effected only at Pastelillo Pier by pipe-line gravity from the deposit tanks and due to the method used, are slow.

Bunkers must be requested well in advance.

FRESH WATER: Can be supplied at No. 4 pier. Delivered by means of railroad tank cars, each with capacity of approximately 34 tons. Delivery rate about 20 t.p.h.

REPAIRS: Repair Shop "Boga" incorporated in the Industry Ministry.

MEDICAL: There is a municipal hospital where sick crew members can receive attention.

COMMUNICATIONS: Vessels navigating to Cuba can communicate with Mambisas Nuevitas Agency through "CLA" Havana Radio Station which relays the message promptly to Nuevitas.

When navigating in Cuban Waters nearing Nuevitas, vessels can communicate directly with "CLK" Coastal Radio Network Nuevitas by radiotelegraphy at 500 kHz, general call, 446 kHz, for working. Radiotelephony frequency 2760 or 2182.

This Coastal Network Station rapidly relays any message to Mambisas Nuevitas Agency.

Masters must send their ETA messages simultaneously on VHF Channel 16 to Mambisas Nuevitas and Mambisas Havana.

SHIPMASTER'S REPORT: March 1980.

General Cargo: There are 3 piers for handling general cargo, all in the same place at Tarafa. All about the same length, and ships can moor both sides.

Fresh Water: Fresh water can be supplied at anchorage and at all piers by barges (about 200 tons).

Agent: The Agent "Mambisas" has an office just outside the gate (large green house) and listens on VHF Channel 12 from 0900 – 1100 hrs. and 1500 – 1700 hrs.

SHIPMASTER'S REPORT: November 1981.

Pilotage: Compulsory. 12 hours' notice required.

Restrictions: Vessel can enter and leave port during hours of darkness. Vessel can only enter and leave at slack water due to narrow entrance.

Max. Size: Length 511 ft., beam 70 ft., max. draft 24 ft.

Tugs: Available and should be used.

Radio: CLK.

VHF: Pilot on Channels 16 and 13. Port Authority on Channel 13. Agent on Channel 12.

Consuls: None.

Services: The following services are available: Fresh water, fresh provisions in small quantities, laundry service, telex, bunker fuel oil, diesel oil, lubricating oil, doctor and hospital.

Agents: Nearest Agent in Havana.

Berthing: Location: Lat. 21° 34′ N., Long. 76° 14.5′ W.

Vessel berthed at Berth B. Distance from entrance to berth 12 miles. Least depth of water in channel from sea to berth 8 m. Max. tidal range at berth 1 m. Nature of bottom mud. Density 1025.

Facilities Available: Limited bulk handling facilities, no ro-ro, no floating cranes. Equipment available for handling palletised cargoes. No facilities for handling containers.

Anchorage: The anchorage is 6 miles from the berth. Vessels with draft of over 20 ft. have to anchor in channel.

Barges: Fresh water barge available.

Tankers: Tanker terminal available.

SHIPMASTER'S REPORT: February 1984.

We recently loaded a cargo of bagged sugar in Nuevitas, Cuba. Thanks to your publication, all crew had made out complete Personal Effects lists, and most of their valuables had been placed in cases and placed in the bond.

On berthing, I was presented with a set of Customs Regulations which stated what had to be placed in bond during the ship's stay in Cuba. This says (in English) Quote: "On arrival Cuban port all Masters of any ships must put under transit room that not be of personal use so as toys, guns, ammunitions, spirits, cigarettes, narcotics and kinds of pornographic pictures". No mention is made of cameras.

The day after berthing, the ship was searched by the Port Captain, who confiscated two cameras belonging to crew members, even though these had been declared. According to the Agent in Cuba, these people had no right to take these articles, and he was certain he would get them back. However, despite numerous requests and letters, they were not returned on sailing.

The above may prove of assistance to other ships.

See "Shipmaster's Comments" in "General" before first port.

AUTHORITIES: Located at Nuevitas.

Authorities travel from Nuevitas to clear the vessels for whichever of the 3 berths they may have been assigned, i.e. Pastelillo, Tarafa or Bufadero.

Means of transportation for port authorities from Nuevitas to the loading/discharging berths is automobile or launches.

AGENT: Empresa Consignataria Mambisa, Agency Nuevitas, P.O.Box No. 350, Puerto Tarafa, Nuevitas, Prov. de Camaguey. Telephone: 3-1435 (office), 3-6025 (night). Telex: 031151. Cable: Mambisas Nuevitas.

Mambisas Nuevitas Agency also attends the port of Jucaro and subport of Boca Grande.

(b) SUB-PORT OF TARAFA:

PILOTAGE: See "Pastelillo". Distance from place where Pilots board vessels to Tarafa is about 10.75 miles.

APPROACHES: See "Pastelillo".

RESTRICTIONS: Vessels can enter or sail only during daylight and should wait for slack water.

BERTHING: *Tarafa Terminal:* This terminal consists of 3 solid concrete piers, each with railroad sidings connecting with the main tracks and also suitable for trucking operations.

It is capable of operating 7 vessels simultaneously: 6 average size vessels and 1 medium or small.

Cargo handled at Tarafa Terminal: General cargo, equipment, machinery, bagged cargoes, fresh and canned fruits, sugar, etc.

Tarafa Pier "B": North Side: Length 480 ft., width 65 ft., max. draft 19 ft.

Depths alongside from shore end to pier head: 19 – 23 – 25 – 25 – 25 – 28 ft.

South Side: Length 480 ft., width 65 ft., max. draft 19 ft.

Depths alongside from shore end to pier head: 14 – 21 – 20 – 22 – 22 – 24 – 25 ft.

Tarafa Pier "C": North Side: Length 437 ft., width 61 ft., max. draft 26 ft.

Depths alongside from shore end to pier head: 26 – 25 – 26 – 29 – 31 ft.

South Side: Length 437 ft., width 61 ft., max. draft 26 ft.

Depths alongside from shore end to pier head: 23 – 23 – 25 – 25 – 25 – 26 – 27 ft.

Tarafa Pier "D": North Side: Length 768 ft., width 65 ft., max. draft 27 ft.

Depths alongside from shore end to pier head: 28 – 29 – 31 – 32 – 33 – 34 – 33 – 34 ft.

South Side: Length 477 ft., width 65 ft., max. draft 26 ft.

Depths alongside from shore end to pier head: 19 – 27 – 29 – 29 – 30 – 30 – 29 – 28 ft.

STEVEDORES: Working periods – raw sugar, loading rate, refined sugar, general cargo, etc., same as for Pastelillo. 6 sugar vessels can operate simultaneously. No crane available.

FUEL: No bunkers usually supplied at this terminal, but in special cases bunkers have been supplied at Pier "B".

FRESH WATER: Can be supplied at Pier "B", "C", and "D".

SHIPMASTER'S REPORT: December 1983.

Documents: See Havana "Shipmaster's Report: December 1983."

Pilotage: Compulsory. 24 hours' notice should be given via Agent. Pilot boards at No. 1 buoy (entrance to bay).

Distance from entrance to berth is 12 miles through a very narrow channel with sharp bends. This channel may only be transited at slack water during daylight.

Charted depth in channel was 4 fathoms but we found at least 30 ft. Tidal range 0.5 m. Currents of 2 – 4 knots are experienced 2 hours after HW or LW.

Anchorages: Available in centre of bay at Lat. 21° 31′ N. Long. 77° 11.5′ W.

Restrictions: See "Pilotage".

Max. Size: Max. LOA 650 ft., max. draft in channel 33 ft.

Radio: Neuvitas.
VHF: Pilot and Port Authority use Channel 16.
Tugs: At least 3 tugs available.
Berthing: Vessel berthed at Tarafa "B" pier (Lat. 21° 34.2′ N., Long. 77° 14.7′ W.). This vessel (length 575 ft.) was very much the maximum size for this pier. Max. draft at East end – 19 ft. Mean tidal range at berth was 18 in.

Nuevitas has 3 piers for receiving and exporting general cargoes. The 3 piers are "B", "C", "D", with berths on North and South sides of each. Lengths of piers are said to be "B" 480 ft., "C" 437 ft. and "D" 766 ft. The South side of "B" Pier is silted up limiting the draft to about 17 ft.

We were offered "C" Berth 437 ft. which I rejected as being unsafe for this size of vessel. The Pilot and Port Officials agreed with me.

The vessel berthed North side of "B" Pier. Only 470 ft. of pier was usable as heavy boulders and mud extended from the East end of the berth consequently 110 ft. of the vessel overlapped the jetty into the stream where a current of from 1 to 2 knots can be experienced. Every use was made of bollards and horn cleats on the quay, some of which were very dubiously secured to the wharf. All available leads on the vessel were used, even so there are no means or facilities for breasting the stern in. During a heavy squall the ship was about 12 ft. off the jetty.

"D" Berth is the only suitable berth for this size of vessel. Unfortunately it is used only for receiving bulk fertiliser.

Other berths off the Port are only used for the export of sugar and cargoes moved by rail trucks.

Vessel must depart berth 2 hours prior to slack water in order to transit channel at slack water.
Cranes: None.
Bulk Cargo Facilities: "D" Pier is for discharge of bulk fertiliser; ship's gear used.
Stevedores: Available and satisfactory.
Medical: Doctor and hospital facilities available.
Fresh Water: Available.
Fuel: Limited quantities of bunker fuel, diesel and lubricating oils available.
Consuls: Nearest at Havana.
Dry Docks: None.
Surveyors: Salvage Surveyor available.
Airport: Local airport.
Services: Telex facilities. Limited supplies of fresh provisions, groceries and meats.
AUTHORITIES: See "Pastelillo".

(c) SUB-PORT OF BUFADERO:

PILOTAGE: See "Pastelillo". Distance from place where Pilots board vessels to Bufadero is 10 miles.
APPROACHES: See "Pastelillo".
RESTRICTIONS: Vessels drawing over 25 ft. 3 in. should await high tide for shifting to anchorage.

For entering/sailing, vessels should wait for slack water and only during daylight.
MAX. SIZE: Max. draft with which vessels can enter/sail to/from Bufadero is officially up to 25 ft. 3 in. but actually up to 25 ft. 6 in. Length 600 ft. Tidal variation 1 ft. 6 in.
BERTHING: Pier, length 557 ft.; draft, North side, 25 ft.; draft, South side, 25 ft.

This pier is only used for molasses and fuel oil. Average pumping rate of molasses is 70,000 g.p.h. Only South side is in operation.

Cement Dock: This is a concrete coastal dock where bulk cement is shipped by means of silo-trucks. It is located West and close to Bufadero Pier. Length 275 ft., width 31 ft. Depths alongside from East to West: 14 – 16 – 18 – 16 – 16 ft.
FUEL/FRESH WATER/REPAIRS: Not available.
AUTHORITIES: See "Pastelillo".

PUERTO PADRE-Cayo Juan Claro: 21.17 N. 76.32 W. (and sub-port of Manati) **(See Plan Book)**

It is a safe, sheltered and ample port, situated at one of the richest and important sugar cane zones of the nation.

In the neighbourhood of the port there are 2 sugar producing colossus: Antonio Guiteras sugar mill, 8 km. away and Jesus Menendez sugar mill, distance 18 km. Both of these mills are among the biggest and most modern in Cuba.

The port itself is located on the West coast of Cayo Juan Claro and is named Puerto Carupano.

Cayo Juan Claro is connected with the mainland at its extreme Southern tip by a narrow gauge railroad and parallel to the tracks runs a road recently built.

Both the railroad and the road communicates with the city of Puerto Padre, sugar mills of Antonio Guiteras and Jesus Menendez.

Cayo Juan Claro and Cayo Puerco, divide the bay into two parts. The part located at the West is Puerto Padre bay and that at the East is known as Chaparra Bay.
PILOTAGE: Pilots board vessels at entrance, not less than 1 mile from mouth of port. Distance from place where Pilots board vessels to pier is about 2.5 miles.
APPROACHES: Funnel-shaped at entry. 2 turns, but the one to take into consideration when manoeuvring vessels over 525 ft. is "Careneoro" turn. Vessels with a length of 565 ft. have entered this port. Bottom is rocky in entrance channel and muddy in bay.
RESTRICTIONS: Vessels can enter only during daylight and must wait for slack water for entering/sailing due to current in the channel.
MAX. SIZE: Vessels can sail with max. draft of 25 ft. up to length of 500 ft. Over 500 ft. length with draft up to 24 ft. Max. length permitted 557 ft. Tidal variation 2 ft. 3 in.
ANCHORAGES: *Official Anchorage:* Located at Puerto Padre Bay at following position: Lat. 21° 14′ 46″ N., Long. 76° 33′ 34″ W.

Max. length permitted 170 m.

Vessels usually anchor by 3 or 4 shackles of chain but there is enough swinging area for 8 or 9 shackles.

Draft allowed to vessels 25 ft. Anchorage bottom is mud and shells.

Quarantine Anchorage: Located East of Cayo Juan Claro at Chaparra Bay, about 2 miles from the piers.

Max. length permitted is 170 m. and depth is over the port official draft.

Vessels usually anchor by 3 or 4 shackles of chain, but there is enough swinging area for 10 shackles. Anchorage bottom is mud and shells.
BERTHING: Pier Nos. 1 and 2 are located on the West side of Cayo Juan Claro.

Salt Mill Pier is located on the East coast of the entrance channel, just in front of Pt. Gracia, and about 1.75 miles from Pier Nos. 1 and 2.

(a) Pier No. 1 (Formerly known as Sugar Pier): It is a coastal pier built entirely of hard wood.

Two narrow gauge railroad tracks run along the length of the pier.

Loaded cars enter by the North end of pier and after discharging are taken out by the South end.

Trucks can operate at this pier, but are not used for sugar cargoes.
Length 523 ft., max. length permitted to vessels 557 ft. Width 32 ft.
Draft 27 ft. – 28 ft.
Cargo handled by this pier:
Importation: Occasionally general cargo or jute bales.
Coastal trade: Occasionally general cargo.
Water available by railroad tank-cars.
Berthing operation performed only during daylight hours.

(b) Pier No. 2 (Formerly known as Molasses and Oil Pier): It is a steel and hard wood construction 271 ft. long, of which 235 ft. corresponds to a passage 7 ft. wide along which run the pipe-lines and a catwalk, ending in a platform 36 ft.×36 ft.

Vessels operating at this pier, berth across it, forming a "T" shape.

Length 271 ft., max. length permitted 557 ft. Draft 26 ft. – 28 ft. Width 7 ft.
Platform 36 ft.×36 ft.
Cargo handled by this pier:
Export: Molasses.
Coastal trade: Discharge of fuel oil.
Berthing operation performed only during daylight hours.

(c) La Salina Pier: Located at the entrance channel East coast, just in front of Pt. Gracia.

It is a small coastal pier built to ship coastal trade cargo of salt.
Berthing length 44 ft. Width 22 ft. Max. length allowed 192-200 ft.
Draft 12 ft.
STEVEDORES: Working periods: Monday to Friday 0700 – 1100 hrs., 1300 – 1700 hrs.; Saturday 0700 – 1100 hrs.

Raw sugar: loading rate max. 1,430 raw sugar bags loaded per gang period. Minimum is 650 bags. 5 bags loaded per sling. Only one vessel can operate at a time. Empty jute bags have been discharged and average discharge rate is about 45 metric tons per gang period. No crane available.

Sugar in bulk: 5 thrower machines for loading sugar in bulk.
TANKERS: Molasses average pumping rate 50,000 g.p.h. Fuel oil, discharging rate 45,000 g.p.h. Gas oil discharging rate 35,000 g.p.h.

Puerto Padre Pier No. 2: Fuel Oil: One connection 8 in. diameter. Diesel Oil: One connection 8 in. diameter. Molasses: Two connections 8 in. diameter.
FUEL: Not available.
FRESH WATER: Can be supplied at No. 1 pier by pipe-line. Delivery rate 17 t.p.h.
REPAIRS: Port has no repair shop, but in event winch damage or any other light repairs, this work can be carried out at the Sugar Mill "Central Antonio Guiteras" Repair Shop.
MEDICAL: General Hospital at Puerto Padre where sick crew members can receive attention.
IMPROVEMENT OF PORT FACILITIES: At the present time new deposit tanks for petroleum products are being built to increase greatly the port storage.

Also a water reservoir and an above ground tank will be built, and in the future it will be possible to supply water by pipe-line to vessels docked at Pier No. 2.
AUTHORITIES: Port Doctor and Custom House are located at Puerto Padre. Immigration at Chaparra. Port Captain at Cayo Juan Claro.

Distance from Cayo Juan Claro where all cargo operations are performed to Puerto Padre is 3 miles. Means of transportation between Puerto Padre and Cayo Juan Claro: motor-boat, railroad, and automobile.

From Puerto Padre to Cayo Juan Claro it takes: by motor boat 30 minutes; by automobile 5 minutes; railroad 20 minutes.

Means of communications available at Puerto Padre: telephone, cable (Inalambrica), telegraph and postal service. Vessels can communicate with Puerto Padre via CLA Havana.
AGENT: Office Address: Cayo Juan Claro (Puerto Carupano). Tel.: 210-2 (office), 108-2 (night). Cable: Mambisas Puerto Padre. Telex: 021122.

Agency works VHF on Channel 16.

Postal Address: Empresa Consignataria Mambisa, Agencia Puerto Padre, Apartado No. 38, Central Antonio Guiteras, Delicias, Prov. de Oriente.

Puerto Padre Agency personnel also attends the port of Manati.

Botijuela Anchorage: Located S.E. of Ballenato Grande Cay. Geographical position: Lat. 21° 31′ 34″ N., Long. 77° 10′ 39″ W. Limitations: Draft 35 ft., length 650 ft. Swinging area: 400 m. Can accommodate 15 average type vessels. Distance from shore: 2 miles.

Pastelillo Anchorage: Located East of Pastelillo. Geographical Position: Lat. 21° 32′ 34″ N., Long. 77° 12′ 38″ W. Limitations: Draft 20 ft., length 500 ft. Swinging area: 200 m. Can accommodate 2 vessels. Distance from shore: 0.25 miles.

Guincho Anchorage: Located East of Pt. Guincho. Geographical Position: Lat. 21° 31′ 57″ N., Long. 77° 14′ 00″ W. Limitations: Draft 16 ft., length 250 ft. Swinging area: 100 m. Can accommodate 1 small vessel. Distance from shore: 1.25 miles.

Tarafa Anchorage: Located to the N.W. of "D" pier. Geographical position: Lat. 21° 34′ 30″ N. Long. 77° 14′ 45″ W. Limitations: Draft 22 ft., length 525 ft. Can accommodate 1 vessel. Distance from shore: 400 m.

MAX. SIZE: Up to 575 ft. length – 33 ft. draft. Up to 610 ft. length – 31 ft. draft. Tidal variation 1 ft. 6 in.

BERTHING: *Pastelillo Pier:* North Side: Length 458 ft., width 55 ft., max. draft 33 ft.

Depths alongside from shore end to pier head: 31 – 35 – 37 – 37 – 37 – 36 – 37 ft.

Cargo handled by this side: General cargo, equipment, machinery, bagged raw and refined sugar, molasses, etc.

South Side: Length 458 ft., width 55 ft., max. draft 33 ft.

Depths alongside from shore end to pier head: 24 – 33 – 34 – 33 – 36 ft.

It is well cared for and recently underwent complete repairs, being the topping-off berth for sugar and molasses loading of the port, as well as the deep draft berth for vessels with import cargoes.

Petroleum products (fuel oil, diesel oil, gasoline and kerosene) for the use of the whole Camaguey province, are discharged at this pier.

The pier has railroad sidings connecting with the main tracks but is not suitable for trucking operations.

STEVEDORES: Working periods: Monday to Friday, 0700/1300 hrs., 1300/1900 hrs.; Saturday, 0700/1300 hrs., 1300/1900 hrs.; Sunday, no work is performed.

Raw Sugar: loading rate: max. 1,800 bags per gang in 6 hours. Minimum fixed rate 975 bags in 4 hours or equivalent in 6 hours. 6 bags loaded per sling.

Loading Capacity: 2 sugar vessels can perform sugar loading operations simultaneously.

Refined Sugar: this type of shipment is not regularly performed.

Loading rate: 3,300 bags of 100 lb. each are loaded per gang in a 6-hour period.

General Cargo: discharging rate is about 11 to 12 t.p.h.

EQUIPMENT: The port owns and operates the following equipment: 6 fork lift trucks; 7 tractors; 3 trailers; 6 tow motors; 5 shore cranes (from 5 to 20 tons lifting capacity); 2×300 ton capacity cargo barges; 1 (1,200 h.p.) tugboat.

TANKERS: Molasses pumping rate about 85,000 g.p.h.

FUEL: Currently the only bunkers available at Nuevitas are Regular Fuel Oil, which is the type of fuel oil stored at shore tanks.

Deliveries are effected only at Pastelillo Pier by pipe-line gravity from the deposit tanks and due to the method used, are slow.

Bunkers must be requested well in advance.

FRESH WATER: Can be supplied at No. 4 pier. Delivered by means of railroad tank cars, each with capacity of approximately 34 tons. Delivery rate about 20 t.p.h.

REPAIRS: Repair Shop "Boga" incorporated in the Industry Ministry.

MEDICAL: There is a municipal hospital where sick crew members can receive attention.

COMMUNICATIONS: Vessels navigating to Cuba can communicate with Mambisas Nuevitas Agency through "CLA" Havana Radio Station which relays the message promptly to Nuevitas.

When navigating in Cuban Waters nearing Nuevitas, vessels can communicate directly with "CLK" Coastal Radio Network Nuevitas by radiotelegraphy at 500 kHz, general call, 446 kHz, for working. Radio-telephony frequency 2760 or 2182.

This Coastal Network Station rapidly relays any message to Mambisas Nuevitas Agency.

Masters must send their ETA messages simultaneously on VHF Channel 16 to Mambisas Nuevitas and Mambisas Havana.

SHIPMASTER'S REPORT: March 1980.

General Cargo: There are 3 piers for handling general cargo, all in the same place at Tarafa. All about the same length, and ships can moor both sides.

Fresh Water: Fresh water can be supplied at anchorage and at all piers by barges (about 200 tons).

Agent: The Agent "Mambisas" has an office just outside the gate (large green house) and listens on VHF Channel 12 from 0900 – 1100 hrs. and 1500 – 1700 hrs.

SHIPMASTER'S REPORT: November 1981.

Pilotage: Compulsory. 12 hours' notice required.

Restrictions: Vessel can enter and leave port during hours of darkness. Vessel can only enter and leave at slack water due to narrow entrance.

Max. Size: Length 511 ft., beam 70 ft., max. draft 24 ft.

Tugs: Available and should be used.

Radio: CLK.

VHF: Pilot on Channels 16 and 13. Port Authority on Channel 13. Agent on Channel 12.

Consuls: None.

Services: The following services are available: Fresh water, fresh provisions in small quantities, laundry service, telex, bunker fuel oil, diesel oil, lubricating oil, doctor and hospital.

Agents: Nearest Agent in Havana.

Berthing: Location: Lat. 21° 34′ N., Long. 76° 14.5′ W.

Vessel berthed at Berth B. Distance from entrance to berth 12 miles. Least depth of water in channel from sea to berth 8 m. Max. tidal range at berth 1 m. Nature of bottom mud. Density 1025.

Facilities Available: Limited bulk handling facilities, no ro-ro, no floating cranes. Equipment available for handling palletised cargoes. No facilities for handling containers.

Anchorage: The anchorage is 6 miles from the berth. Vessels with draft of over 20 ft. have to anchor in channel.

Barges: Fresh water barge available.

Tankers: Tanker terminal available.

SHIPMASTER'S REPORT: February 1984.

We recently loaded a cargo of bagged sugar in Nuevitas, Cuba. Thanks to your publication, all crew had made out complete Personal Effects lists, and most of their valuables had been placed in cases and placed in the bond.

On berthing, I was presented with a set of Customs Regulations which stated what had to be placed in bond during the ship's stay in Cuba. This says (in English) Quote: "On arrival Cuban port all Masters of any ships must put under transit room that not be of personal use so as toys, guns, ammunitions, spirits, cigarettes, narcotics and kinds of pornographic pictures". No mention is made of cameras.

The day after berthing, the ship was searched by the Port Captain, who confiscated two cameras belonging to crew members, even though these had been declared. According to the Agent in Cuba, these people had no right to take these articles, and he was certain he would get them back. However, despite numerous requests and letters, they were not returned on sailing.

The above may prove of assistance to other ships.

See "Shipmaster's Comments" in "General" before first port.

AUTHORITIES: Located at Nuevitas.

Authorities travel from Nuevitas to clear the vessels for whichever of the 3 berths they may have been assigned, i.e. Pastelillo, Tarafa or Bufadero.

Means of transportation for port authorities from Nuevitas to the loading/discharging berths is automobile or launches.

AGENT: Empresa Consignataria Mambisa, Agency Nuevitas, P.O.Box No. 350, Puerto Tarafa, Nuevitas, Prov. de Camaguey. Telephone: 3-1435 (office), 3-6025 (night). Telex: 031151. Cable: Mambisas Nuevitas.

Mambisas Nuevitas Agency also attends the port of Jucaro and sub-port of Boca Grande.

(b) SUB-PORT OF TARAFA:

PILOTAGE: See "Pastelillo". Distance from place where Pilots board vessels to Tarafa is about 10.75 miles.

APPROACHES: See "Pastelillo".

RESTRICTIONS: Vessels can enter or sail only during daylight and should wait for slack water.

BERTHING: *Tarafa Terminal:* This terminal consists of 3 solid concrete piers, each with railroad sidings connecting with the main tracks and also suitable for trucking operations.

It is capable of operating 7 vessels simultaneously: 6 average size vessels and 1 medium or small.

Cargo handled at Tarafa Terminal: General cargo, equipment, machinery, bagged cargoes, fresh and canned fruits, sugar, etc.

Tarafa Pier "B": North Side: Length 480 ft., width 65 ft., max. draft 19 ft.

Depths alongside from shore end to pier head: 19 – 23 – 25 – 25 – 25 – 28 ft.

South Side: Length 480 ft., width 65 ft., max. draft 19 ft.

Depths alongside from shore end to pier head: 14 – 21 – 20 – 22 – 22 – 24 – 25 ft.

Tarafa Pier "C": North Side: Length 437 ft., width 61 ft., max. draft 26 ft.

Depths alongside from shore end to pier head: 26 – 25 – 26 – 29 – 31 ft.

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Tarafa Pier "D": North Side: Length 768 ft., width 65 ft., max. draft 27 ft.

Depths alongside from shore end to pier head: 28 – 29 – 31 – 32 – 33 – 34 – 33 – 34 ft.

South Side: Length 477 ft., width 65 ft., max. draft 26 ft.

Depths alongside from shore end to pier head: 19 – 27 – 29 – 29 – 30 – 30 – 29 – 28 ft.

STEVEDORES: Working periods – raw sugar, loading rate, refined sugar, general cargo, etc., same as for Pastelillo. 6 sugar vessels can operate simultaneously. No crane available.

FUEL: No bunkers usually supplied at this terminal, but in special cases bunkers have been supplied at Pier "B".

FRESH WATER: Can be supplied at Pier "B", "C", and "D".

SHIPMASTER'S REPORT: December 1983.

Documents: See Havana "Shipmaster's Report: December 1983."

Pilotage: Compulsory. 24 hours' notice should be given via Agent. Pilot boards at No. 1 buoy (entrance to bay).

Distance from entrance to berth is 12 miles through a very narrow channel with sharp bends. This channel may only be transited at slack water during daylight.

Charted depth in channel was 4 fathoms but we found at least 30 ft. Tidal range 0.5 m. Currents of 2 – 4 knots are experienced 2 hours after HW or LW.

Anchorages: Available in centre of bay at Lat. 21° 31′ N. Long. 77° 11.5′ W.

Restrictions: See "Pilotage".

Max. Size: Max. LOA 650 ft., max. draft in channel 33 ft.

Radio: Neuvitas.
VHF: Pilot and Port Authority use Channel 16.
Tugs: At least 3 tugs available.
Berthing: Vessel berthed at Tarafa "B" pier (Lat. 21° 34.2′ N., Long. 77° 14.7′ W.). This vessel (length 575 ft.) was very much the maximum size for this pier. Max. draft at East end – 19 ft. Mean tidal range at berth was 18 in.

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We were offered "C" Berth 437 ft. which I rejected as being unsafe for this size of vessel. The Pilot and Port Officials agreed with me.

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"D" Berth is the only suitable berth for this size of vessel. Unfortunately it is used only for receiving bulk fertiliser.

Other berths off the Port are only used for the export of sugar and cargoes moved by rail trucks.

Vessel must depart berth 2 hours prior to slack water in order to transit channel at slack water.

Cranes: None.
Bulk Cargo Facilities: "D" Pier is for discharge of bulk fertiliser; ship's gear used.
Stevedores: Available and satisfactory.
Medical: Doctor and hospital facilities available.
Fresh Water: Available.
Fuel: Limited quantities of bunker fuel, diesel and lubricating oils available.
Consuls: Nearest at Havana.
Dry Docks: None.
Surveyors: Salvage Surveyor available.
Airport: Local airport.
Services: Telex facilities. Limited supplies of fresh provisions, groceries and meats.
AUTHORITIES: See "Pastelillo".

(c) SUB-PORT OF BUFADERO:

PILOTAGE: See "Pastelillo". Distance from place where Pilots board vessels to Bufadero is 10 miles.
APPROACHES: See "Pastelillo".
RESTRICTIONS: Vessels drawing over 25 ft. 3 in. should await high tide for shifting to anchorage.

For entering/sailing, vessels should wait for slack water and only during daylight.

MAX. SIZE: Max. draft with which vessels can enter/sail to/from Bufadero is officially up to 25 ft. 3 in. but actually up to 25 ft. 6 in. Length 600 ft. Tidal variation 1 ft. 6 in.
BERTHING: Pier, length 557 ft.; draft, North side, 25 ft.; draft, South side, 25 ft.

This pier is only used for molasses and fuel oil. Average pumping rate of molasses is 70,000 g.p.h. Only South side is in operation.

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FUEL/FRESH WATER/REPAIRS: Not available.
AUTHORITIES: See "Pastelillo".

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It is a safe, sheltered and ample port, situated at one of the richest and important sugar cane zones of the nation.

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The port itself is located on the West coast of Cayo Juan Claro and is named Puerto Carupano.

Cayo Juan Claro is connected with the mainland at its extreme Southern tip by a narrow gauge railroad and parallel to the tracks runs a road recently built.

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APPROACHES: Funnel-shaped at entry. 2 turns, but the one to take into consideration when manoeuvring vessels over 525 ft. is "Careneoro" turn. Vessels with a length of 565 ft. have entered this port. Bottom is rocky in entrance channel and muddy in bay.
RESTRICTIONS: Vessels can enter only during daylight and must wait for slack water for entering/sailing due to current in the channel.
MAX. SIZE: Vessels can sail with max. draft of 25 ft. up to length of 500 ft. Over 500 ft. length with draft up to 24 ft. Max. length permitted 557 ft. Tidal variation 2 ft. 3 in.
ANCHORAGES: *Official Anchorage:* Located at Puerto Padre Bay at following position: Lat. 21° 14′ 46″ N., Long. 76° 33′ 34″ W.

Max. length permitted 170 m.

Vessels usually anchor by 3 or 4 shackles of chain but there is enough swinging area for 8 or 9 shackles.

Draft allowed to vessels 25 ft. Anchorage bottom is mud and shells.

Quarantine Anchorage: Located East of Cayo Juan Claro at Chaparra Bay, about 2 miles from the piers.

Max. length permitted is 170 m. and depth is over the port official draft.

Vessels usually anchor by 3 or 4 shackles of chain, but there is enough swinging area for 10 shackles. Anchorage bottom is mud and shells.

BERTHING: Pier Nos. 1 and 2 are located on the West side of Cayo Juan Claro.

Salt Mill Pier is located on the East coast of the entrance channel, just in front of Pt. Gracia, and about 1.75 miles from Pier Nos. 1 and 2.

(a) Pier No. 1 (Formerly known as Sugar Pier): It is a coastal pier built entirely of hard wood.

Two narrow gauge railroad tracks run along the length of the pier.

Loaded cars enter by the North end of pier and after discharging are taken out by the South end.

Trucks can operate at this pier, but are not used for sugar cargoes.
Length 523 ft., max. length permitted to vessels 557 ft. Width 32 ft.
Draft 27 ft. – 28 ft.
Cargo handled by this pier:
Importation: Occasionally general cargo or jute bales.
Coastal trade: Occasionally general cargo.
Water available by railroad tank-cars.
Berthing operation performed only during daylight hours.

(b) Pier No. 2 (Formerly known as Molasses and Oil Pier): It is a steel and hard wood construction 271 ft. long, of which 235 ft. corresponds to a passage 7 ft. wide along which run the pipe-lines and a catwalk, ending in a platform 36 ft.×36 ft.

Vessels operating at this pier, berth across it, forming a "T" shape.
Length 271 ft., max. length permitted 557 ft. Draft 26 ft. – 28 ft. Width 7 ft.
Platform 36 ft.×36 ft.
Cargo handled by this pier:
Export: Molasses.
Coastal trade: Discharge of fuel oil.
Berthing operation performed only during daylight hours.

(c) La Salina Pier: Located at the entrance channel East coast, just in front of Pt. Gracia.

It is a small coastal pier built to ship coastal trade cargo of salt.
Berthing length 44 ft. Width 22 ft. Max. length allowed 192-200 ft.
Draft 12 ft.

STEVEDORES: Working periods: Monday to Friday 0700 – 1100 hrs., 1300 – 1700 hrs.; Saturday 0700 – 1100 hrs.

Raw sugar: loading rate max. 1,430 raw sugar bags loaded per gang period. Minimum is 650 bags. 5 bags loaded per sling. Only one vessel can operate at a time. Empty jute bags have been discharged and average discharge rate is about 45 metric tons per gang period. No crane available.

Sugar in bulk: 5 thrower machines for loading sugar in bulk.

TANKERS: Molasses average pumping rate 50,000 g.p.h. Fuel oil, discharging rate 45,000 g.p.h. Gas oil discharging rate 35,000 g.p.h.

Puerto Padre Pier No. 2: Fuel Oil: One connection 8 in. diameter. Diesel Oil: One connection 8 in. diameter. Molasses: Two connections 8 in. diameter.

FUEL: Not available.
FRESH WATER: Can be supplied at No. 1 pier by pipe-line. Delivery rate 17 t.p.h.
REPAIRS: Port has no repair shop, but in event winch damage or any other light repairs, this work can be carried out at the Sugar Mill "Central Antonio Guiteras" Repair Shop.
MEDICAL: General Hospital at Puerto Padre where sick crew members can receive attention.
IMPROVEMENT OF PORT FACILITIES: At the present time new deposit tanks for petroleum products are being built to increase greatly the port storage.

Also a water reservoir and an above ground tank will be built, and in the future it will be possible to supply water by pipe-line to vessels docked at Pier No. 2.

AUTHORITIES: Port Doctor and Custom House are located at Puerto Padre. Immigration at Chaparra. Port Captain at Cayo Juan Claro.

Distance from Cayo Juan Claro where all cargo operations are performed to Puerto Padre is 3 miles. Means of transportation between Puerto Padre and Cayo Juan Claro: motor-boat, railroad, and automobile.

From Puerto Padre to Cayo Juan Claro it takes: by motor boat 30 minutes; by automobile 5 minutes; railroad 20 minutes.

Means of communications available at Puerto Padre: telephone, cable (Inalambrica), telegraph and postal service. Vessels can communicate with Puerto Padre via CLA Havana.

AGENT: Office Address: Cayo Juan Claro (Puerto Carupano). Tel.: 210-2 (office), 108-2 (night). Cable: Mambisas Puerto Padre. Telex: 021122.

Agency works VHF on Channel 16.

Postal Address: Empresa Consignataria Mambisa, Agencia Puerto Padre, Apartado No. 38, Central Antonio Guiteras, Delicias, Prov. de Oriente.

Puerto Padre Agency personnel also attends the port of Manati.

SUB-PORT OF MANATI: 21.24 N. 76.48 W.

The Port of Manati lies on an arm in the sea, through the centre of which runs a narrow and deep channel, leading to the shallow bay of Sabanalamar or Manati.

This arm in the sea is about 3 miles long and 800 m. wide at the entrance mouth, between Pt. Roma and Pt. Jesus, and 700 m. at its end, when it reaches Sabanalamar Bay.

Manati is located on the West coast of the arm in the sea, at about 2.5 miles from Pt. Roma and 0.5 miles from the end of it.

The port of Manati exports the production of sugar mill Argelia Libre formerly known as Manati.

PILOTAGE: Pilots board vessels about 1 mile from entrance. No pilot station. Pilots located at Manati and ETA notice to be given to them well in advance. Distance from place where Pilots board vessels to pier is about 3 miles.

APPROACHES: Narrow channel, very deep (minimum depth 38 ft.) Bottom is irregular, parts where it is sandy and others rocky.

RESTRICTIONS: Not necessary to await slack water for entry/sailing; but considering large tonnage of vessels presently entering port for topping-off, if there is a strong current Pilots wait until current loses strength in order to avoid accidents. Vessels can enter and sail only during daylight.

ANCHORAGES: Swing area 600 ft. (approx.). Owing to reduced space, this anchorage is not safe for anchoring vessels drawing over 26 ft.

MAX. SIZE: Incoming vessels draft limitations:

	Vessel length	*Max. draft*
Liberty type vessels	442 ft.	30 ft.
Vessels up to	500 ft.	26 ft.
Vessels up to	525 ft.	20 ft.
Vessels up to	560 ft.	17 ft.

In some exceptional cases 560 ft. length vessels have entered this port but it is advisable to nominate this type of vessels to operate at any other suitable ports because at Manati the max. advisable length allowed to vessels is 525 ft.

Tidal variation, 2 ft. 6 in.

BERTHING: Manati Pier has the shape of an "L" and projects from the West coast of the arm of sea toward the centre of it seeking the border of the deep channel.

It goes straight out and then turns Northward in a 90° angle.

The 90° angle constitutes its South end, and from there to the head of pier, or North end, it is 465 ft. long, having at this end a fixed red light.

As is clear by the above description, pier has an East and a West side, but only the East side is used because the West side does not have enough water to operate vessels.

It is a hard wood construction supported by concrete piles. Bottom alongside pier is soft (mud and sand) along three-quarters of its length from North to South except at the South end where it becomes shallow, hard and rocky, which renders worthless about 70 ft. of docking space.

Pier has double standard railroad tracks and a single narrow gauge track. It is not possible to operate trucks at this pier.

Manati Pier (Also known as La Gloria Pier): Length 465 ft. Max. length allowed 525 ft. Max. draft 30 ft. 6 in.

Tanker Information: Molasses: 2 connections 8 in. in diameter. Fuel Oil: 1 connection 8 in. in diameter.

STEVEDORES: Loading sugar: working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs., 1300/1700 hrs. When necessary, work is performed at night. Sunday is also worked when required. 1,040 sugar bags loaded per gang period; 6 sugar bags loaded per sling. Only one vessel can operate at a time. No refined sugar operations performed. No shore crane available. Sugar mill has 5 grates and 3 machines for spreading sugar in hatches.

TANKERS: Molasses pumping rate 25/30,000 g.p.h. Fuel oil pumping rate at average of 1,700 b.p.h.

FUEL: Not available.

FRESH WATER: Supplied by pipe-line at pier. Pipe-line 2 in. in diameter and delivery at an average rate of 15 – 16 t.p.h. Amount that can be delivered depends on supply at sugar mill. Supply not to be depended upon.

REPAIRS: Sugar mill repair shop for minor repairs. Welder available.

MEDICAL: Crew members requiring medical attention are treated at Manati Polyclinic, but the majority of cases are treated at Argelia Libre Hospital, where there is also a Dental Clinic.

Cases requiring surgical or specialised treatments are sent to Lenin Hospital at Holguin.

COMMUNICATIONS: Long-distance telephone communication between Manati and Puerto Padre; although difficult owing to fact that there are only two lines from Manati and they are almost always congested. There are some occasions when an entire day is spent trying to obtain communication without result. Victoria de las Tunas telephone operator serves on occasions as "relay".

Vessels cannot communicate by radio with this port.

AUTHORITIES: Under Cuban Custom laws and regulations, Manati is a sub-port of Puerto Padre, therefore all Authorities are located at Puerto Padre, nevertheless vessels nominated for operations at Manati can proceed directly to the port, where authorities clear the vessels.

AGENT: Manati is attended by Mambisas Puerto Padre Agency personnel and there is no office at Manati, however, the Agent attending a vessel at Manati can be reached at Minaz office, tel. 146. At night and for urgent matters he can be reached at Manati Chief Pilot tel. 144-15.

SANTA CRUZ DEL SUR (and sub-ports of Manopla and Guayabal): 20.42 N. 77.59 W. **(See Plan Book)**

PILOTAGE: Pilots board vessels close to buoy indicating entrance channel (Cuatro Reales) between "La Ceiba" bank and Carapacho Cay Lighthouse. Distance from place where Pilots board vessels (Cuatro Reales Channel) to Santa Cruz anchorage is 11 miles.

APPROACHES: Entrance channel has depth of 45 ft. Bottom is mud, gravel and loose sand. In the narrowest part of channel is a turn of about 20 degrees.

RESTRICTIONS: Vessels cannot enter/sail at night. Not necessary to wait for slack water for entering/sailing.

ANCHORAGES: No. 1, 24 ft.; No. 2, 26 ft.; No. 3, 36 ft.; No. 4, 40 ft. Sugar-loading operations were performed at anchorages. There were 10 barges available which are presently operating at the sub-port of Santa Maria (Jucaro). Similarly, the tugs which were used at this port are at present operating at Jucaro.

MAX. SIZE: Vessels can enter/sail through channel with any draft and length subject official draft of the port which is 35 ft. Tidal variation 1 ft. 5 in.

LOADING: Raw sugar: working periods: Monday to Friday 0600/0800 hrs., 0830/1100 hrs., 1200/1530 hrs.; Saturday 0600/0800 hrs., 0830/1030 hrs.; Sunday: when it has been necessary, work has been performed.

Loading rate: 1,950 bags loaded per gang period. 6 bags loaded per sling. Only 1 vessel can operate at a time. No crane available.

Refined sugar – no operations performed.

Raw sugar in bulk – no sugar in bulk is shipped by this port. Bulk sugar is shipped by the sub-port of Guayabal.

TANKERS: No tankers operate at Santa Cruz del Sur proper.

COMMUNICATIONS: Long-distance telephone communication with Guayabal can be established through San Francisco Sugar Mill. Telegraph can also be used. There is no telephone or telegraph communication beteen Santa Cruz and Manopla.

At Santa Cruz del Sur there are long-distance telephone, Government telegraph and postal service. Vessels can communicate with Santa Cruz by telegraph via Radio Havana.

MEDICAL: No hospital. The nearest hospital where sick crew members can be attended to is located at Camaguey, 80 km. from Santa Cruz.

FUEL/WATER/REPAIRS: Not available.

AUTHORITIES: Port Authorities are located at this port. Launch services are used by Port Authorities to clear vessels.

Distance from Santa Cruz del Sur to Manopla: 14 miles; Guayabal: 14 miles. From Santa Cruz to Manopla by sea 1.5 hours; by road 1 hour. To Guayabal by sea 3 hours; by road 2.5 hours.

No daily transportation between Santa Cruz and its sub-ports. Launch or automobile are to be hired for this purpose.

AGENT: Empresa Consignatarias Mambisas, Calle Carretera s/n, PO Box 49, Santa Cruz del Sur, Camaguey. Tel. 11 (night 65 and 26–8). Cables: "Mambisas Santa Cruz del Sur".

(a) SUB-PORT OF MANOPLA:

PILOTAGE: After Pilot boards vessel at Cuatro Reales Channel, vessel proceeds to Santa Cruz for clearance, thence takes another Pilot and proceeds to sub-port of Manopla, 14 miles distant from Santa Cruz.

APPROACHES: See Santa Cruz. Entrance channel to sub-port of Manopla – Canal de Media Luna, Canal de los Bayameses, where vessels anchor, is a mile wide, bottom soft mud. No dangerous turns. Vessels of any length can enter and the anchorage depth is 24–40 ft. Official permitted draft 35 ft. Vessels can enter/sail only during daylight. Not necessary to wait for slack water for entering/sailing. Tidal variation 1 ft. 6 in.

LOADING: Anchorage No. 1: 26 ft.; No. 2: 40 ft. Loading sugar operations were performed at above anchorages by means of barges. The following barges and tugboats were available:

Macareno No. 1	– capacity: 329 metric tons, 2,870 bags of raw sugar or 75,000 gallons of molasses.
Macareno No. 2	– capacity: 329 metric tons, 2,870 bags of raw sugar or 75,000 gallons of molasses.
Eulalia	– capacity: 269 metric tons, 2,350 bags of raw sugar. Has no tanks.
Miguelito	– capacity: 269 metric tons, 2,340 bags of raw sugar. Has no tanks.
Josefa	– capacity: 269 metric tons, 2,340 bags of raw sugar or 48,000 gallons of molasses.

Tug: *Fox* – length 66 ft., breadth 14 ft., 165 h.p. Tows the fleet of barges utilised at Manopla.

TANKERS: Average pumping rate of molasses 20,000 g.p.h.

COMMUNICATIONS: No long-distance telephone communication. There is telegraph service which works up to 1800 hrs.

FUEL/WATER/REPAIRS: Not available.

AUTHORITIES: See "Santa Cruz".

(b) SUB-PORT OF GUAYABAL: **(See Plan Book)**

PILOTAGE: After Pilots board vessels at Cuatro Reales Channel, they proceed directly to sub-port of Guayabal (a distance of 27 miles), where Customs clearance takes place. Also see "Shipmaster's Report".

APPROACHES: Dredged channel 2,474 m. in length, 60 m. in width with average depth of 30 ft.

ANCHORAGES: Suitable for vessels with draft up to 40 ft.

MAX. SIZE: Official draft for the port is 35 ft., but Pilots advise max. draft with which vessels may sail from the berth is 32 ft. 6 in. at HW, with max. length 510 ft.

BERTHING: The West side of the pier is specially designed for loading bulk raw sugar mechanically and is the deepest side where vessels can be loaded up to 32 ft. 6 in. for sailing at high tide or up to 30 ft. 6 in. to sail at any time.

It must be understood that such draft of 32 ft. 6 in. is given only for sailing loaded, but does not indicate that an arriving vessel with 32 ft. 6 in. draft can dock, even at high tide.

This situation is originated by the dimensions of the manoeuvring area around the pier.

Max. draft allowable for vessels arriving to complete cargo at Guayabal (molasses, alcohol, or sugar) at the West side of pier is 27 ft.

A tanker nominated for discharging fuel oil at Guayabal must arrive with a max. draft of 30 ft. 6 in. to be docked at the West side, bow facing shore, and must discharge until a draft of 27 ft. or less is attained, in order to turn around and sail out.

At the East side of the pier vessels can dock bow facing shore, with max. draft of 24 ft. fore and 27 ft. aft.

Vessels nominated to load bulk raw sugar at Guayabal must arrive clean and ready to load.

Any undesirable material or any remaining dunnage materials, must be discharged at a previous port, because at Guayabal the only available personnel are those operating the equipment of the Bulk Raw Sugar Terminal and no stevedores are available.

When jute bales or any other cargo is discharged at Guayabal, stevedores from other ports are used.

The pier is a solid and well cared construction of concrete.

Guayabal Pier:

(a) West. Length 508 ft., max. draft allowed 32 ft. 6 in. (for sailing high tide), 30 ft. 6 in. (for sailing any tide), max length of vessel 200 m.

On this side is where the equipment for loading bulk sugar operates. The boom of the equipment can reach out up to 10.36 m. (34 ft.), from the outer edge of the pier.

Vessels loading bulk raw sugar can be supplied with water at a rate of 5 t.p.h. as long as the loading equipment is working and 10 t.p.h. when it is not working.

Cargoes handled by this side: Bulk raw sugar, molasses and alcohol. Occasionally: Fuel oil, jute bales and spare parts for sugar mills.

(b) East. Length 508 ft., max draft allowed 24 ft. fore and 27 ft. aft (bow facing shore), max. length 200 m.

STEVEDORES: Sugar loading in bulk. Loading of molasses and alcohol takes place frequently. Fuel oil and general cargo discharge.

Working Hours: Monday to Friday: 0600–0800 hrs., 0830–1100 hrs.,1200–1530 hrs.

Saturday: 0600–0800 hrs., 0830–1030 hrs.

Sunday: When it has been necessary, work has been performed.

Sugar in bulk – at pier there is an installation operated by electric motor control which moves a convex-shaped conveyor and transports the bulk sugar from warehouse to the vessel. 2 thrower machines, 600 and 400 t.p.h. respectively. Average loading rate about 250 t.p.h. although occasionally average of 400 tons has been obtained. There is some time lost on account of shifting the crane. Occasionally shovellers are required, and work continues 24 hours a day.

General cargo – it is not customary to receive general cargo at this sub-port, although on occasion bales of empty jute bags have been received, destined to neighbouring sugar mills. At present there are no facilities for discharge of general cargo, and no shore cranes available.

TANKERS: Shipment of molasses and alcohol is quite frequent. Vessels discharging fuel oil may berth with max. draft of 27 ft. without touching bottom, which is of soft mud.

COMMUNICATIONS: Communications between Guayabal and Santa Cruz del Sur are rather poor.

By means of relays Guayabal/Amancio Rodriguez/Camaguey, telephone communication may be obtained with Havana and other Cuban ports, but owing to the relay system necessary to obtain communication, it is of dubious value in urgent matters.

Radiograms (RCA) can be sent/received by means of telephone call Guayabal – Camaguey.

In the Bulk Sugar Terminal there is telex, but due to limitations of lines it is frequent to encounter difficulties to obtain communication.

ETA messages from Masters should be sent Mambisas Santa Cruz del Sur and Mambisas Habana, simultaneously.

FUEL/REPAIRS: Not available.

FRESH WATER: Supplied at pier by pipe-line at average rate of delivery 10 t.p.h.

SHIPMASTER'S REPORT: 1978.

Documents/Customs:

Crew Declaration (Manifest)	6 copies
Steward's store list	6 copies
Deck/Engine store list	6 copies
Maritime Declaration of Health	3 copies
Dangerous drugs list	6 copies
Slop chest/Bonded stores	6 copies
Explosives list (Distress Rockets, etc.)	6 copies
List of foreign currency	5 copies
List of ship's equipment, i.e. films, binoculars, T.V.s, sextant, etc.	4 copies

All foreign currency, cameras, dangerous drugs, and crew presents to take home were all sealed up in the bond locker along with its contents. Meat room sealed up. Although all our meat is of Australian or New Zealand origin, some of the lamb had a USA wrapper on it which made it American meat and this is not acceptable in Cuba. As far as I can understand the meat from Australia, New Zealand, Japan, USSR, only is acceptable in Cuba. Valid smallpox vaccinations are required.

Pilotage: Pilots are arranged by the Agent at Santa Cruz del Sur, (Mambisas). The boarding station shown on charts and mentioned in Pilot Books is now non-existent. Instead the Pilot comes direct from Santa Cruz when a ship is expected and boards the vessel between No. 2 Buoy and No. 4 Buoy South of the entrance to Cuatro Reales Channel. Vessel then proceeds to Guayabal, where it is necessary to anchor off the port for clearance.

Approaches: The navigable width of the approach channel, is at present 50 m., the buoys being moved accordingly, with an average depth of 32 ft. The centre alignment of the approach channel is 011.5° T. This is indicated by two fixed leading marks. The forward one, a metal pole with a yellow triangle mark, apex up, at night a fixed red light. The rear mark is a yellow triangle apex up, attached to the top of a water tank (on a framework tower) at night a fixed green light. This leading line leads "down" the Eastern side of the one and only jetty, along the top of the elevated (roofed-over) conveyor belt.

SHIPMASTER'S REPORT: April 1984.

Vessel loaded raw sugar in bulk:

Documents:

9 copies Crew List.#
3 copies Animal List.
2 copies List of Ports.
4 copies Narcotics.
4 copies Arms and Ammunition.
5 copies Provisions.
3 copies Store List.
3 copies Bonded List.
1 copy Vaccination.
4 copies Crew Currency.*
4 copies Total Currency.+
2 copies Crew's Effects @

Notes:

#On sailing they requested another 6 Crew Lists.

*Crew Currency List – With all paper money that every crew has in his possession also the coins.

+Total Currency List – With the total amounts of foreign currency held by crew and vessel. i.e. US Dollar 4,525.00; German Mark 150.00; Greek Drachmas 25,500; Japanese Yen 15,000, etc., including total coins.

@ Crew's Effects – Vessel is provided with special forms. Each form in duplicate is to be filled for each crew member.

Pilots: Pilot comes aboard at Canal de Cuatro Reales. Same Pilot berths the vessel and remains on board until loading completed to unberth and sail the ship.

Approaches: Dredged channel. Vessels can sail at high water with draft up to 32 ft. No night sailing, berthing or unberthing.

Max. Size: Vessels of about 210 m. length are handled.

Berth: Works in progress to lengthen the berth by about 40 m. Up until now the first 20 m. are in preparation.

Max. draft alongside West side of Pier, 35 ft. aft and 33 ft. for'd.

Equipment: 1 convex-shaped conveyor with trimmer machine. Average loading rate 600/650 tonnes/p.h. 24 hours continuous working. The boom extends about 35 ft. and is about 30 ft. – 32 ft. above sea level.

Sugar in bulk loading at about 300,000 tonnes per month. No sugar loaded in bags.

Fresh Water: Available ex-wharf, rate about 3 t.p.h. at a cost of about US$2.70 per ton.

Doctor: Crew must go to another town, but usually no transportation, except emergencies.

Repatriation: Possible. Crew will travel by boat to Santa Cruz del Sur (about 3 hours), and then by car to Havana (about 12 hours), where the International Airport is located.

Ship Chandler: Comes from another port, charging about US$100.00 for transportation.

Population: Population of this port about 1,500.

AUTHORITIES: Port Captain and Immigration's Delegations at Guayabal. Customs delegate travels from Santa Cruz to Guayabal to conduct clearance. Distance 24 miles (by sea) from Guayabal to Santa Cruz. By road 60 km. Time 3 hours by sea and 2 hours by road.

AGENT: Postal Address; Empresa Consignataria Mambisa, Agencia Guayabal, Apartado No. 49, Santa Cruz del Sur, Prov. de Camaguey.

Office Address: Guayabal Bulk Sugar Terminal, 3rd Floor, Tel: No. 45–6 and No. 8. Telex: 031126. Cables: Mambisas Santa Cruz del Sur.

SANTIAGO DE CUBA: 19.50 N. 75.52 W.

(See Plan Book)

PILOTAGE: Pilots board vessels 1 mile from mouth of port. Pilot station located in small Cay at entrance of bay known as Gramma Cay (formerly Smith Cay). Launch service is only means of communication available between Santiago de Cuba and Gramma Cay. Pilots also have office located at Custom House building with telephone communication. Distance from place where Pilots board vessels to: Piers 5 miles; Anchorage 4.5 miles; Refinery Pier 2.5 miles.

APPROACHES: The entrance, up to a distance of 0.5 mile, has a rock bottom. Thereafter, for a distance of 1 mile muddy bottom, and remaining 2.5 miles is soft mud. There are some turns, and the channel and entrance to the port are narrow.

RESTRICTIONS: Vessels can enter and sail only during daylight from 0600 to 1800 hrs.

ANCHORAGES: *Inner Anchorage:* Located from the North of Ratones Cay up to the West of Buoy No. 20. Can accommodate several vessels. Limitations to vessels: Draft 30 ft., length 702 ft.

Outer Anchorage: Located West of Pt. Gorda and just in front of refinery piers. Can accommodate 1 or 2 vessels and is used mainly by tankers. Max. draft: 36 ft. Max. length allowed 702 ft.

Also see "Shipmasters' Reports".

MAX. SIZE: Vessels with a length of 702 ft. and a draft of 36 ft. can enter up to the refinery, provided they arrive during early morning hours. Tidal variation 1 ft. 3 in.

BERTHING:
Luis F. Mena Gil Dock (Formerly Malecon): This installation comprises the whole zone known as Malecon del Puerto and consists, mainly, of a docking area 1,345 ft. long, which, being able to operate three vessels, are regarded as West, Centre, and East berths, but there is no mark or boundary between any of the berths.

West of the Western berth is under construction, but already in operation, a new berth, temporarily known as Western extreme berth and, East of the Eastern berth is a berthing space for barges.

This dock is built of concrete, and was rebuilt and paved recently. As standard gauge railroad tracks run along the length of dock, operations can be performed either by railroad or trucks, or a combination of both.

The particulars of each berth are:
Western Extreme Berth: (New Berth): (Known as Malecon Extremo Oeste):

Max. length allowed: 100 m. Draft: 18 ft.

Cargo handled at this berth: general cargo, cement, etc.

Western Berth: (Known as Malecon Oeste):

Draft allowed: 24 ft. fore, 25 ft. aft.

Cargo handled at this berth: bagged raw sugar, general cargo and occasionally lubricating oil.

Centre Berth: (Known as Malecon Centro):

Draft allowed: For Loading: 28 ft., leaving pier at high tide. Under these conditions, vessels rest in 1 ft. of almost liquid mud but this does not interfere with sailing manoeuvres.

For Docking Loaded: 27 ft. even keel. Cargo handled at this berth: bagged raw sugar, general and heavy cargoes.

Eastern Berth: (Known as Malecon Este):

Draft allowed: 23 ft. fore, 26 ft. aft.

Cargo handled at this berth: light general cargo, molasses and petroleum products.

Ferrocarril Pier: This pier out of use since 1972 but rebuilt recently. It is a concrete construction ending in a small platform but vessels do not moor directly to the dock but to 4 solid dolphins; first and last dolphins being 400 ft. apart. Vessels are also secured to belaying cleats situated on shore.

This installation is used for shipping molasses but there is a possibility that pipe-lines for petroleum by-products will be installed, although this has not been confirmed.

Length: 240 ft. Draft allowed: 26 ft.

Rolando Roca Pacheco Pier (Formerly La Maritima): This pier is a complete concrete construction, (both platform and pilings) rebuilding of which was finished in 1973; the installation is in very good condition in all respects, permitting truck and trailer operations alongside vessel, as well as railroad operations, because tracks cross just in front of the pier shore entrance.

North Side: Length: 650 ft. Max. length allowed: 600 ft.

Draft allowed: 25 ft. fore, 26 ft. aft.

Cargo handled at this side: General cargo.

South Side: Length: 650 ft. Max. length allowed: 600 ft.

Draft allowed: 26 ft. fore, 27 ft. aft.

Cargo handled at this side: General cargo.

Romero Pier: This pier is a concrete construction, and although in rather fair condition, needs repairs.

All cargo handled at this pier is on the basis of a trucking operation only.

It is used chiefly for coastal trade vessels but also by medium size vessels, such as refrigerated ships.

East Side: Length: 492 ft. Max. length allowed: 400 ft.

Draft allowed: 14 ft. fore, 19 ft aft.

Cargo handled at this side: general cargo, bagged cement, etc.

West Side: Length 492 ft. Max. length allowed: 400 ft.

Draft allowed: 20 ft. fore, 23 ft. aft.

Cargo handled at this side: General cargo, bagged cement, refrigerated cargo such as lard, butter, frozen fish, etc.

Frank Pais Pier (Formerly La Molinera): This installation consists of a long narrow passage, at the end of which the vessel is berthed across the installation to 4 solid dolphins. It is used for the discharge of bulk grain (wheat and maize) by mechanical means through conveyors and pipe-lines.

There is no limitation as to length of vessels. Draft allowed: 30 ft.

Cement Plant Pier (Known as Muelle del Cemento): This berth is a coastal pier that can accommodate one vessel.

It is used only for loading cement, either by silos/truck depending upon whether bulk or bagged cement is involved. This installation is well paved and all operations are performed by means of trucks.

As the pier is not long enough, there are solid dolphins at each end of pier, in order to berth securely vessels up to 460 ft. long.

Length: 290 ft. Max. length allowed: 460 ft.

Draft allowed: 22 ft. fore, 23 aft.

Refinery Pier: This pier is located at a small peninsula on the West coast of the bay, its orientation being from North to South and therefore its sides are West and East.

It is a solid, well cared for, concrete construction, having similar facilities at both sides.

Length: 789 ft. Max. length allowed: 702 ft.

Depth: 40 ft. Max. draft allowed: 36 ft.

EQUIPMENT: One floating crane: 35 tons lifting capacity; 10 shore cranes: ranging from 16 to 5 tons lifting capacity; 40 tractors; 21 fork lift trucks: 70 h.p.; 13 trucks.

Besides, there are several tugboats ranging from 1,200 to 150 h.p., also several cargo barges and other minor port auxiliary equipment not listed.

STEVEDORES: Working periods: Monday to Friday 0700/1300 hrs., 1300/1900 hrs.; Saturday the same; Sunday worked only if vessel completing cargo.

Raw Sugar: Loading rate about 1,200 bags loaded per gang period; 6 bags loaded per sling. 2 vessels can load sugar simultaneously.

General Cargo – approximate discharging rates:

General cargo	7–8 tons per gang hour
Bagged cargo	15 tons per gang hour
Iron	7 tons per gang hour
Wood	3 standards
Fertilisers	15 tons per gang hour

Shore Crane – there is movable crane with boom of 75 ft. length and lifting capacity about 19 tons.

Bulk sugar – 5 thrower machines available.

TANKERS: Average pumping rate: Molasses 30,000 g.p.h. Fuel oil 13,000 b.p.h.

COMMUNICATIONS: Radio telegrams, radiotelephony, telegraph and telephones. R.C.A., Inalambrica. All-American, Prewi, radio and Government telegraph. Also air, railroad and bus services.

Vessels can communicate with Santiago de Cuba through CLM and RCA.

MEDICAL: Sick crew members can be attended at Santiago Provincial Hospital.

FUEL: Fuel oil and diesel oil available. Delivery rate about 7,000 b.p.h.

FRESH WATER: Can be supplied docked/anchored.

REPAIRS: Following repair shops: Joaquin Lamas, Giron.

DEVELOPMENTS: Since 1973 all port facilities admitting repair or rebuilding are included in a plan in order to improve port facilities.

Through this plan several installations have already been rebuilt and others are undergoing repairs.

This plan also includes the installation of water pipe-lines to all piers where possible, in order to supply the vessels while operating.

Luis F. Mena Gil Wharf will be the first to have water installation to supply vessels.

There is a plan for the dredging of the port in the very near future.

SHIPMASTER'S REPORT: April 1979.
Also see "Shipmaster's Report" from Havana dated April 1979.
Documents:

12 Crew Lists.
5 Store Lists.
5 Declarations.
5 Currency Declarations.
5 Vaccination Lists.

These were all required even though the vessel had only come from Havana. Also a large number of transit documents were issued in Havana for entry here. Bond and safe seals may be opened whilst vessel at sea.

Points of Note:

a. No anchorage, recommend drifting about 5 miles from coast.
b. See Havana Report.
c. See Havana Report.
d. Port reasonably free of pollution, but large amount of construction in progress in harbour area.
e. No tugs appeared when we berthed.
f. At grain elevator shore gangway used.
g. No crew inspection.
h. See Havana Report.
i. See Havana Report.
j. See Havana Report.
k. Same system as Havana but shore leave from 1800 to 2200 hrs., and travel to town by launch. Also only allowed in area shown on pass. In this port fines are imposed for being late back or going outside area of pass. First time 25 peso, second time 50 peso and third time pass revoked. Only ten persons allowed ashore at any one time and a list of those going ashore must be presented to the Immigration guard before 1000 hrs. that day.

On Saturday and Sunday 16 persons are allowed ashore till 2400 hrs. and 2300 hrs. respectively.

l. See Havana Report.
m. See Havana Report.
n. As Havana, except Channel 16.
o. See Havana Report.
p. Berthed at grain elevator. 30 ft. alongside. The discharger has 2 heads and is fixed, the ship has to be warped up and down the quay. Wheat discharged at average 50 tonnes p.h. Work on a 24 hour basis.
q. All hatches again inspected.
r. As Havana, vessel was searched here 4 days after arrival. The search was carried out by the police and was very thorough. It included checks on money and goods declared and under seal. The radio room was sealed at the time.
s. See Havana Report.
t. Customs issue may be obtained every 3 days if required. I believe this applies in Havana as well.
u. In light of this vessel's experience I would advise any vessel proceeding to Cuba to carry at least one month's reserve provisions.

SHIPMASTER'S REPORT: April, 1981.
VHF: Santiago Pilots and the Agents "Mambisas Santiago" are both available on VHF Channel 16 at all hours.
Restrictions: There are no restrictions as to the times for entry and departure of vessels. Pilots are available 24 hours and I believe it has been so for the last two years.
Awaiting Pilot: Owing to the large depths, bad holding ground (rocky bottom) and frequent fresh winds, it is not advisable to anchor outside the harbour entrance. This was my opinion which the local Pilots have confirmed and have definitely advised against anchoring. If there is any delay in embarking the Pilot, the vessel should keep steaming.

AUTHORITIES: Located at Custom House building.

AGENT: Empresa Consignataria Mambisa, Agencia Santiago de Cuba, Jose Antonio Saco No. 10, Apartado No. 522, Santiago de Cuba, Prov. de Oriente. Telephones: 7489 and 2834 – Night: 3128. Telex: 02220. Cable: Mambisas Santiago de Cuba.

Agency VHF works on Channel 16.

TANAMO: 20.44 N. 75.20 W. (See Plan Book)

LOCATION: Tanamo Bay is moderately ample, landlocked, having numerous cays dispersed within. High ground surrounds the bay, except by the East and S.E. It is 3.5 miles long by 1.25 miles wide.

Tanamo is mainly a sugar shipping port, but also exports molasses and receives coastal trade shipments of fuel oil.

Tanamo exports the production of Frank Pais sugar mill, formerly Tanamo. At about 12 km. from the port are the town of Cayo Mambi and Frank Pais sugar mill.

PILOTAGE: Pilot boards about 1 mile from entrance. Pilot station located at entrance of port mouth. Usual means of communication is by launch. Distance from place where Pilots board vessels to: Punta Gorda Dock: 5 miles; Cayo Mambi Dock: 7 miles.

ENTRANCE TO PORT/CONDITIONS/LIMITATIONS: Entrance to port is effected through a channel in the form of an "S" with turns up to 90°.

The bottom is rock and sand, its maximum width being 175 m., located between the shoals at both sides of the entrance, and its minimum width 160 m., located in the vicinity of Pt. Gitana.

Channel tends to narrow in the middle of its course and it is here where precautions should be exerted, because it is considered dangerous. In its deepest part the channel is 162 ft. deep, and its minimum depth is 66 ft.

Limitations as to length and draft of vessels to enter to or sail from this port are those imposed by the place of operation, Punta Gorda Pier:

Draft 19 ft. fore, 22 ft. aft, length 535 ft.

Due to the strong tidal currents it is necessary to wait for slack water, to enter to or sail from this port, which can be effected only in daylight.

Vessels up to 500 ft. length do not require tugboat assistance, but from 500 ft. up to 535 ft. tugboat assistance is required.

Due to pier's length, vessels nominated to load sugar should not exceed a length of 450 ft.

ANCHORAGES: Del Medio Cay Anchorage:

Located at about 500 m. West of Bruja Cay.
Draft 28 ft., max. length allowed 535 ft.
Swinging area: About 350 m.
Soft mud bottom but anchors hold well.
It is sheltered from the winds, except those from the S.E.
In the rainy season, when rivers overflow, currents can be felt.

BERTHING: The place of operation at Tanamo is the pier, located on the West coast of the bay at a small town named Punta Gorda. Pier is built of concrete but is not well cared for and is in need of repairs. Some wooden aggregate at South side of pier crumbled away and interferes with loading No. 1 hatch of vessels. Stern hatches are loaded first, and afterwards the vessel is run astern in order to load No. 1 hatch.

Pier has double narrow gauge railroad tracks at each side.

Sides of the pier are North and South.

Punta Gorda Pier: Length 357 ft., max. length allowed 450 ft.
Drafts: South Side: 19 ft. fore, 22 ft. aft.
North Side: 14 ft. fore, 19 ft. aft.

STEVEDORES: Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.; Sunday no work performed.

Raw sugar: 975 sugar bags loaded per gang period. 6 sugar bags loaded per sling.

Refined sugar: 1,875 bags of 100 lb., loaded per gang period. 12 bags of 100-lb. type loaded per sling.

General Cargo: Working periods same as for sugar.

There is berthing space for 2 vessels, but due to lack of port personnel, it is advisable to operate only 1 vessel at a time.

TANKERS: Molasses average pumping rate: 20,000 g.p.h. Fuel oil average pumping rate: 11,750 b.p.h.

Tanker vessels up to 535 ft. can enter and operate at pier.
Fuel oil: 1 connection 12 in. in diameter.
Molasses: 1 connection 8 in. in diameter.

COMMUNICATIONS: Only means of communication at Tanamo is telephone service. However this service is not to be depended upon and it is advisable to notify Antilla Agency well in advance of any instructions or changes pertaining to vessel's operations.

Transportation means to and from Tanamo are rather poor. Transportation between Tanamo and Antilla (and other nearby ports) is performed by car.

Last 4 km. of road to reach Tanamo are embankment roads in very bad condition which can be transited only by jeep or truck.

There is a rail car service up to Cayo Mambi.

Best advisable means of travelling is to travel to Nicaro by road and from there fly to Santiago or Havana.

FRESH WATER: Can be supplied at Punta Gorda, delivery by pipe-line at rate of 5 t.p.h.

FUEL/REPAIRS: Not available.

MEDICAL: There is no hospital at Tanamo. Crew members requiring medical care are treated at Cayo Mambi. If specialised treatment or hospitalisation is required, patients are sent to Mayari Hospital or Lenin Hospital at Holguin.

AUTHORITIES: Under Cuban Customs laws and regulations, Tanamo is a sub-port of Antilla. Some of the Authorities have delegations at Cayo Mambi, others are located outside of Tanamo, but if ETA message is given sufficiently in advance, all Authorities travel to Tanamo, where they wait to clear the vessel.

AGENT: Tanamo is attended by Antilla Agency personnel.

VITA (sub-port of Gibara – Oriente Province): 21.05 N. 75.57 W. (See Plan Book)

LOCATION: Vita is a small, sheltered, landlocked bay on the North coast of Oriente province.

Vessels within its premises are well protected against all kinds of weather.

This port handles the export of the production of Rafael Freyre sugar mill, formerly Santa Lucia. As it is close to the town of Santa Lucia and due to the former name of the sugar mill, this port is also known as Santa Lucia Oriente.

PILOTAGE: Pilots board vessels 3 miles from entrance channel. Pilot station located at Vita. Interior telephone communication. Distance from place where Pilots board vessels to dock: 5 miles.

APPROACHES: Owing to narrowness of channel, turns may be considered as dangerous for vessels over 450 ft. length.

While approaching Vita, on the East side of port entrance, Pt. Barlovento lighthouse can be seen, located: Lat. 21° 06′ 01.1″ N., Long. 75° 57′ 39.4″ W., 45 ft. high, above high tide, white light of which flashes twice every 6 secs., visible up to 10 miles away.

RESTRICTIONS: Entry and sailing only during daylight.

MAX. SIZE: Max. draft with which vessels can enter/sail is 27 ft. at high tide and 26 ft. at low tide. Tidal variation averages 2.9 ft. Max. length 500 ft. (although vessels with length of 550 ft. have entered this port).

ANCHORAGES: Vita anchorage is located at about 190 m. from the pier, but as there is insufficient swinging area, it is only recommended as suitable for medium sized vessels.

BERTHING: The pier is located at a village named Vita on a peninsula which projects from the South shore of Vita bay.

The pier lies across the end of the mentioned peninsula, orientated from East to West; the berthing space is the North side since the South side is partially attached to shore.

Along the length of the pier and connected to Rafael Freyre sugar mill, runs single narrow gauge railroad tracks.

Vita Pier: Length 300 ft. Max. length allowed: 500 ft. Draft allowed: 26 ft.
Importation: Jute bales, bagged fertilisers.
Exportation: Bagged raw sugar, molasses.
Coastal Trade: Discharge of fuel oil.
Only 1 vessel can be operated.

STEVEDORES: Working periods: Monday to Friday 0700/1100 hrs., 1300/1700 hrs.; Saturday 0700/1100 hrs.

800–1,100 sugar bags loaded per gang period. Four sugar bags are loaded per sling.

TANKERS: Average pumping rate (molasses) 25,000 g.p.h.

COMMUNICATIONS: Means of communication of Vita are telephone and telegraph.

Telegraph service is slow for urgent matters. Telephone service at Vita is irregular due to bad lines and, sometimes, it is very difficult to establish communication.

These facts must be taken into consideration when a vessel is operating at Vita, because orders to Vita or information from the port almost always takes 2 or 3 days to reach destination.

Vessels navigating to Cuba can communicate with Antilla Agency through "CLA" Havana Radio Station which relays the message promptly to Antilla.

Vessels cannot communicate directly with Vita.

Masters must send their ETA messages simultaneously to Mambisas Antilla and Mambisas Habana.

MEDICAL: Crew members requiring medical attention are treated at Santa Lucia Hospital.

In cases where surgical or specialised medical treatment is required patients are sent to Gibara Hospital or Lenin Hospital at Holguin.

FUEL/REPAIRS/DUNNAGE: Not available.

FRESH WATER: Can only be supplied in exceptional cases. Delivery by 2-in. diameter pipe, by gravity. Delivery average 3 t.p.h. Recommended that Masters always check availability in advance.

TRANSPORTATION: Transportation to and from Vita is difficult and best advisable means is by car or to travel to the city of Holguin, from where transportation is available to any place or city of Cuba by bus, train or airway.

AUTHORITIES: All Port Authorities are located at nearby towns, but travel to Vita in order to clear vessels.

Under Cuban Custom laws and regulations, Vita is a sub-port of Gibara.

AGENT: The port of Vita is temporarily attended by Mambisas Antilla Agency personnel.

Cyprus

DHEKELIA "A": 34.58 N. 33.44 E. (See Plan Book)

Sovereign Base Area

DOCUMENTS:
3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration.
1 Crew Declaration.
1 Store List (for cigarettes, spirits, etc.).
2 Manifests (Customs forms).

PILOTAGE: Compulsory for berthing. The tanker berth is situated in open roadstead. Pilot available through Harbour Master at Larnaca.

MAX. SIZE: Tankers up to 550 ft. length with max. draft 30 ft.

HEALTH: Pratique granted by Health Authorities after boarding on arrival. No pratique necessary when vessel arrives from another port in Cyprus.

RADIO: Walkie-talkie radios used.

TUGS: Available.

BERTHING: Two conventional buoy moorings for tanker discharging fuel oil to Dhekelia "A" Power Station. Depth of water 10.7 m. Bottom sand and mud.

Tank top is 57 ft. above sea level. Distance from end of flexible hose to tanks 2,464 ft. Pipe-line 8 in.

MEDICAL: Necessary for Agent to receive advance notice of medical attention required. Hospital facilities available.

DENSITY: 1025.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: See "Larnaca".

IDENTIFICATION CARDS: When on shore leave, seamen's books required.

TIME: GMT plus 2 hours. No changes during the year.

AUTHORITY: Electricity Authority of Cyprus, 15 Photis Pittas Street, Nicosia. *Tel:* 62001. *Telex:* 2432 Grid Cy. *Cables:* Grid, Nicosia. *Contact:* The General Manager.

DHEKELIA "B": 34.58 N. 33.45 E. (See Plan Book)

Sovereign Base Area

DOCUMENTS:
3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration.
1 Crew Declaration.
1 Store List (for cigarettes, spirits, etc.).
2 Manifests (Customs forms).

PILOTAGE: Compulsory for berthing. The tanker berth is situated in open roadstead. Pilot available through Harbour Master at Larnaca.

MAX. SIZE: Tankers up to 735 ft. length with max. draft 41 ft.

HEALTH: Pratique granted by Health Authorities after boarding on arrival. No pratique necessary when vessel arrives from another port in Cyprus.

RADIO: Walkie-talkie.

TUGS: Available.

BERTHING: Three conventional buoy moorings for tanker discharging fuel oil to Dhekelia "B" Power Station. Depth of water 15.85 m.

MEDICAL: Necessary for Agent to receive advance notice of medical attention required. Hospital facilities available.

DENSITY: 1025.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: See "Larnaca".

IDENTIFICATION CARDS: When on shore leave, seamen's books required.

TIME: GMT plus 2 hours. No changes during the year.

AUTHORITY: Electricity Authority of Cyprus, 15 Photis Pittas Street, Nicosia. *Tel:* 62001. *Telex:* 2432 Grid Cy. *Cables:* Grid, Nicosia. *Contact:* The General Manager.

LARNACA: 34.55 N. 33.39 E. (See Plan Book)

PORT LIMITS: As defined by Cyprus Law, the port limits are: That part of the coastline and the territorial waters of Cyprus contained within a line drawn 089° to the high seas from Livadhia Church Belfry and a line drawn 089° from Mosque (Hala Sultan Tekke) on Admiralty Chart No. 851 of 8th August, 1941.

DOCUMENTS:
4 Crew Lists.
4 Passenger Lists.
4 Transit Passenger Lists for passenger ships only.
1 Arrival Declaration.
1 Crew Declaration for dutiable goods.
3 Stores List (cigarettes, spirits, etc.).
2 Manifests (Customs Forms).
1 Customs General Declaration.
1 Fire Arms Declaration.
1 Health Declaration.
1 Cargo Gear Declaration.

PILOTAGE: Ships are not allowed to enter the port or berth at the mooring buoys outside the breakwater port without Pilot, unless permission is granted by the Port Authority. Pilot boards vessel at roadstead. Master must give 24 hours notice of ETA to vessel's Agents to enable them inform the Port Manager in time. Pilot boats is off-white colour with words "Larnaca Pilots" written on the sides in blue letters. Pilot may be contacted on VHF Channels 16/14 during office hours 0730 – 1330 hrs. and Channel 14 at any other time during port operations. Pilot's telegraphic address is "Port Manager, Larnaca Cyprus". Tel: 041-53563.

ANCHORAGES: Open roadstead.

Prohibited Anchorage:

Positions of Prohibited Anchorage:
1. Lat. 34° 54′ 39″ N., Long. 33° 38′ E.
2. Lat. 34° 54′ 16.8″ N., Long. 33° 41′ E.
3. Lat. 34° 52′ 48″ N., Long. 33° 38′ E.
4. Lat. 34° 52′ 48″ N., Long. 33° 41′ E.

Positions of Prohibited Anchorage obstruction of the Port Entrance:
1. Lat. 34° 55′ 21″ N., Long. 33° 37′ 49″ E.
2. Lat. 34° 55′ 21″ N., Long. 33° 40′ 18″ E.
3. Lat. 34° 55′ 55″ N., Long. 33° 39′ 03″ E.
4. Lat. 34° 55′ 55″ N., Long. 33° 40′ 37″ E.

RESTRICTIONS: See "Max. Size" and "Berthing". Rise of tide up to 1.5 ft.

MAX. SIZE: For berthing in the port, vessels must not exceed 500 ft. LOA. However, vessels of few feet in excess may receive berthing permission if vessel's manoeuvrability and prevailing weather conditions permit.

The port is dredged to 31 ft. (9.5 m.) Max. draft allowed 9 m. (9.25 m. at HW with approval). The height of the quay above sea level is 2.30 m.

Tankers discharge outside port at mooring buoys. Draft up to 32 ft. Max. LOA 600 ft.

HEALTH: Pratique is required at Cyprus first port of call only. Pratique is granted either before or after berthing as appropriate.

RADIO: Cables sent through "Cyprus Radio", call sign: 5BA.

RADAR/VHF: Port Manager Larnaca and Pilot service on VHF Channel 16.

TUGS: Port Authority tugs join vessels outside breakwater using ship's lines. 3 tugs available.

BERTHING: Vessels may berth inside port between 0600 hrs. and midnight, but may unberth and sail until midnight. Cargo vessels are allowed to berth during night-time provided berth space is available and vessel will immediately operate with at least 1 gang.

Quay length: (a) Main quay 666 m. and (b) Floating pontoon quay 200 m. Ro-Ro ramp available in Northwestern basin of the port.

Warehouse Space: 6,000 sq.m.

Container and General Cargo paved Stacking Areas: 150,000 sq.m.

Equipment: 1×35 ton level luffing crane. 8×5 – 16 ton mobile cranes. 4×15 – 40 ton fork-lift trucks for container handling. 17×2 – 8 ton fork-lift trucks. 36×10 – 40 ton trailers and 5 tractors.

BRIDGES: None.

STEVEDORES: 24 hours notice of ETA to Agent is required to enable him arrange gangs.

MEDICAL: It is necessary for Agents to receive advance notice of at least 2 – 3 hours before vessel's arrival. Hospital facitlites constantly availble. Smallpox vaccination is necessary; other inoculations or vaccinations are required according to prevailing circumstances.

TANKERS: Diameter of discharge lines up to 12 in. Max. draft 32 ft. Discharging takes place at mooring buoys outside port. Position of buoys Lat. 34° 54.75′ N., Long. 33° 39′ E. No slop discharge facilities.

Buoy berths outside port:

Oil Tankers Berths:

Cyprus Petroleum Refinery: Berth: LOA 214 m. Max. draft 11.6 m. Depth of water 13.7 m.

Petrolina: Stern discharge facilities only. LOA 214 m. Max. draft 11 m. Depth of water 13 m. Slop tank 2,000 tonnes.

Gas Tankers Berths:

Mobil: Pipe diameters: 3 in. for liquid, 2 in. for vapour. Depth of water 13 m. LOA 110 m.

Cinergas: Pipe diameters: 4 in. for liquid, 2 in. for vapour. LOA 110 m. Depth of water 9 m. Draft 8.5 m.

Central Gas: Pipe diameters: 3 in. for liquid, 2 in. for vapour. LOA 110 m. Depth of water 6.5 m. Draft 6 m.

DENSITY: 1025.

FRESH WATER: Facilities available on quay. Delivery by hoses at about 50 t.p.h.

FUEL: 12 hours advance notice is required. Available in unlimited quantities.

FIRE PRECAUTIONS: No tankers are allowed in the port. Vessels and operators must comply with internationally applicable regulations concerning explosives and dangerous goods.

CONSULS: Italy, Sweden, Denmark, Portugal, Finland.

CUSTOMS ALLOWANCES: 50 grams tobacco or 40 cigarettes, and 0.25 litres spirits, 0.25 litres wines, per man per day.

For reasons of administrative convenience, issues of high duty goods for use by Crew on board will be made every 3 days, beginning with the first day of the ship's arrival in Cyprus waters. For each member of the Crew (other than the Master, the Chief Officer and the Chief Steward) each issue will consist of, 120 cigarettes or an equivalent quantity of other tobacco goods. 1 bottle of spirits, and 3 bottles of wine.

Each issue for the Master, the Chief Officer and the Chief Steward of ocean-going vessels will consist of: 200 cigarettes, 2 bottles of spirits and reasonable quantity of wine they may request.

Concessions to Crew landing from ship. On coming ashore, for a short period, 50 grams of tobacco, or 40 cigarettes per day or part thereof.

The above allowances are in force for all Cyprus ports.

REPAIRS: Minor repairs and overhauls may be carried out.

DRY DOCKS: Not available.

SURVEYORS: Lloyd's, Bureau Veritas, Registro Italiano Navale, Germanischer Lloyd.

GANGWAY/DECK WATCHMEN: Not necessary but available.
HATCHES: Opened and closed by crew.
CARGO GEAR: Load or discharge may be effected either by ship's or shore gear. 35 ton heavy lift crane available.
REPATRIATION: Facilities are available.
AIRPORT: Larnaca International Airport 3 miles from Larnaca Port. Daily flights to Europe and Middle East.
TIME: GMT plus 2 hours. Summertime – GMT plus 3 hours (last Sunday in March to last Sunday in September).
HOLIDAYS: Every Sunday; 1st January; 6th January; 25th March; 1st May; 28th October; 29th October; Good Friday; Saturday following Good Friday; Easter Monday; First Day of Kurban Bairam; Birthday of Prophet; First Day of Ramazan Bairam; Christmas Day; Boxing Day.

Work can be arranged on any holiday other than New Year's Day, Christmas Day, and Easter Sunday.
POLICE/AMBULANCE/FIRE: Dial 199.
EMERGENCY CO-ORDINATION CENTRE: Port Manager Tel: 53563. Res. Tel: 52171/55542/57043. Marine Police Tel: 52001.
TELEPHONES: Line available for placing telephone on board.
SERVICES: Compass adjusting; Radar; Radio telephones; Gyro compass repairs; hull scraping and engine repairs.
SHORE LEAVE: Crew members are allowed ashore.
IDENTIFICATION CARDS: Shore leave passes are issued. Seaman's Book or Passport required whilst ashore.
REGULATIONS: Port Manager's permission is required for: immobilising engine, cleaning or repairs whilst vessel alongside quay, lowering lifeboats and use of ship's radio. Port and Customs clearance required before departure. Cyprus flag to be hoisted on mast from 0800 hrs. to sunset. Landing of dogs or other animals not allowed; also discharging of fruits, vegetables and eggs unless authorised by Produce Inspection Office. Disposal of garbage and waste strictly prohibited both in port and Cyprus waters.
DELAYS: According to prevailing circumstances but normally no delays.
GENERAL: Weather conditions permit entrance and working of ships all the year round.

Garbage collection and disposal service available to vessels.
AUTHORITY: Cyprus Ports Authority, 23 Crete Street, P.O. Box 2007, Nicosia, Cyprus. *Tel:* 50100. *Telex:* 2833 CYPA. *Cables:* Cyports. *Contact:* The General Manager.

Larnaca Port, Larnaca, Cyprus. *Tel:* 041-53563 or 53405. *Telex:* 2833 Cypa. *Cables:* Port Manager, Larnaca. *Contact:* Port Manager.

AGENT: Gulf Agency Co. (Cyprus) Ltd., P.O.Box 546, Larnaca, Cyprus. Tel: 52897. Telex: Via Athens Office: 216344, 218687 or 214548 ("GAC GR") or Cyprus Office 3967 Gaship Cy. Cables: Gacship, Larnaca.

LATCHI: 35.03 N. 32.27 E.

DOCUMENTS: See "Limassol".
ANCHORAGE: 0.5 miles North of Mavroli Pier, depth 10 fathoms.
MAX. SIZE: No restrictions on size.
HEALTH: All necessary action to obtain pratique made by Agent in the event of any suspected disease on board, necessary action and precautions taken by Health Authorities.
RADIO: Cyprus Radio – call sign 5BA on 500 or radio telephone 2182.
TUGS: None available.
BERTHING: Mavroli Pier in Khrysokhou Bay, in position 35° 03′ 15″ N. 32° 27′ 10″ E. bearing 072° approximately 3.2 miles from Latchi. Necessary to have Cyprus flag, and to have gangway and not a rope ladder for Authorities and stevedores to board.
STEVEDORES: ETA advice required order arrange gangs at least 24 hours. Loading rate 2,000 tons per day. Loading from 6 barges, average capacity 45 tons each.
MEDICAL: Agent to receive 24 hours notice. Hospital facilities available at Ktima, 24 miles from Terminal at Limni. Each member of crew to possess valid vaccination certificate.
DENSITY: 1025.
FRESH WATER: None available.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Unnecessary.
OPENING/CLOSING HATCHES: Done by the crew.
CUSTOMS ALLOWANCES: See "Limassol".
IDENTIFICATION CARDS: Required.
CONSULS: No consuls at Terminal.
REPAIRS: No repairs can be carried out.
REPATRIATION: Can be arranged through Larnaca International Airport.
AIRPORT: Larnaca Airport 70 miles away, served by regular airlines.
TIME: GMT plus 2 hours. Permanent.
HOLIDAYS: See "Limassol".
POLICE/AMBULANCE/FIRE: Such services arranged through Agent.
TELEPHONES: No arrangements exist for placing on board.
SHORE LEAVE: Landing permits obtainable from local Police Authorities by lodging passports or seamen's books.
AUTHORITY: Cyprus Ports Authority, Nicosia. *Contact:* General Manager.

LIMASSOL: 34.40 N. 33.03 E.

DOCUMENTS:
1 Arrival Declaration.
4 Crew Lists.
4 Passenger Lists (the latter in case of passenger vessels).
4 Transit Passenger Lists.
1 Fire Arms Declaration.
1 Stores Declaration.
1 Declaration signed by each member of Crew stating dutiable goods in their possession.
1 Form of appointment of Agent.
1 Maritime Declaration of Health.
PILOTAGE: Ships are not allowed to enter the port or to berth at the mooring buoys outside the breakwater port without Pilot, unless permission is granted by the Port Authority. Pilot boards vessel at roadstead. Master must give 24 hour's notice of ETA to vessel's Agents to enable them inform the Port Manager in time. Pilot's Telegraphic Address is Port Manager, Limassol, Cyprus. Tel.: 051-65246.
ANCHORAGE: No specific boundary but ships usually anchor about 0.5 mile S.E. of lighter basin entrance where depth is 8 fathoms or S.S.E. of the entrance to the new breakwater port.
RESTRICTIONS: See "Max. Size" and "Berthing". Rise of tide up to 1.8 ft.
MAX. SIZE: *Old Port:* Vessels berthing must not exceed 265 ft. LOA and 14 ft. draft.

New Breakwater Port: Depth alongside 11 m. Max. draft 10.5 m. No LOA limit on ships entering and berthing. The height of quay above sea level is 2.30 m.
HEALTH: Pratique is required at first Cyprus port of call only. Pratique is granted either before or after berthing as appropriate.
RADIO: Cables sent through "Cyprus Radio", call sign: 5BA.
RADAR/VHF: No port radar service. Port Manager and Pilots equipped with VHF radiotelephone operating on Channels 16 and 10 during office hours only.
TUGS: Port Authority tugs join vessels outside breakwater using ships' lines. 2 tugs, 1,320 h.p. and 750 h.p.
BERTHING: Vessels may berth inside port between 0600 hrs. and sunset, but may unberth and sail until midnight. Cargo vessels are allowed to berth during night-time provided berth space is available and vessels will immediately operate with at least 1 gang.

Quay Length: 1,280 m. Ro-Ro vessels can discharge/load on the quays.

Warehousing Space: 40,700 sq.m.
Paved Yard for Containers (full and empty): 300,000 sq.m.
Paved Stacking Area for General Cargo: 111,000 sq.m.
Grain Silo: Modern, (recently built) with a 30,000 tonnes storage capacity, connected with the quay via an overhead conveyor belt.

Equipment: 60 ton floating crane. 35 ton level luffing crane. 36 ton mobile container crane on pneumatic tyres. Twenty 3-16 ton and four 45-60 ton mobile cranes. Four 7-15 ton fork lifts and seven 32 ton van carriers for container handling. Eighty-eight 3-60 ton fork lifts for general cargo handlng. One hundred and fourteen 3-25 ton trailers, fifteen tractors and other auxiliary equipment.

2×40 ton gantry cranes for container handling at the East Quay.
STEVEDORES: 24 hours notice of ETA to Agent is required to enable him arrange gangs.
MEDICAL: It is necessary for Agent to receive advance notice of at least 2–3 hours before vessel's arrival. Hospital facilities constantly available. Inoculations or vaccinations are required according to prevailing circumstances.
TANKERS: Not allowed to berth in the port. No slop discharge facilities.
FRESH WATER: Facilities available on quay.
FUEL: 12 hours' advance notice is required. Vessels can bunker LFO or Gas Oil whenever available. Both delivered by tanker lorry.
FIRE PRECAUTIONS: No tankers are allowed in the port. Vessels and operations must comply with internationally applicable regulations concerning explosives and dangerous goods.
CONSULS: Belgium, Holland, Italy and France.
REPAIRS: A floating dock 66 m. long and 18 m. wide capable of lifting a 1,200 tons light ship is in operation.
SURVEYORS: Lloyds, Bureau Veritas, Registro Italiano Navale, Germanischer Lloyd.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By crew or stevedores.
CUSTOMS ALLOWANCES: 50 grams tobacco or 40 cigarettes, and 0.25 litres spirits, 0.25 litres wines, per man per day.

For reasons of administrative convenience, issues of high duty goods for use by crew on board will be made every 3 days, beginning with the first day of the ship's arrival in Cyprus waters. For each member of the crew (other than the Master, the chief officer and the chief steward) each issue will consist of, 120 cigarettes or an equivalent quantity of other tobacco goods, 1 bottle of spirits and 3 bottles of wine. Each issue for the Master, the chief officer and the chief steward of ocean-going vessels will consist of: 200 cigarettes, 2 bottles of spirits and reasonable quantity of wine they may request. Concessions to crew landing from ship. On coming ashore, for a short period, 50 grams of tobacco, or 40 cigarettes per day or part thereof.
CARGO GEAR: Load or discharge may be effected either by ship or shore gear. 35 tons heavy lift crane, 36 ton mobile container crane on pneumatic tyres and 60 tons floating crane available.
REPATRIATION: Facilities available for effecting crew changes and arranging any necessary repatriations. Usually arranged with Agent.
AIRPORT: Larnaca International Airport served by regular lines, situated 43 miles from Limassol.
HOLIDAYS: Every Sunday; 1st January; 6th January; 25th March; 1st May; 28th October; 29th October; Good Friday; Easter Monday; First Day of Kurban Bairam; Birthday of Prophet; First Day of Ramazan Bairam; Christmas Day; Boxing Day. Work can be arranged on any holiday other than New Year's Day, Christmas Day, and Easter Sunday.

Cyprus

DHEKELIA "A": 34.58 N. 33.44 E. (See Plan Book)

Sovereign Base Area

DOCUMENTS:

3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration.
1 Crew Declaration.
1 Store List (for cigarettes, spirits, etc.).
2 Manifests (Customs forms).

PILOTAGE: Compulsory for berthing. The tanker berth is situated in open roadstead. Pilot available through Harbour Master at Larnaca.

MAX. SIZE: Tankers up to 550 ft. length with max. draft 30 ft.

HEALTH: Pratique granted by Health Authorities after boarding on arrival. No pratique necessary when vessel arrives from another port in Cyprus.

RADIO: Walkie-talkie radios used.

TUGS: Available.

BERTHING: Two conventional buoy moorings for tanker discharging fuel oil to Dhekelia "A" Power Station. Depth of water 10.7 m. Bottom sand and mud.

Tank top is 57 ft. above sea level. Distance from end of flexible hose to tanks 2,464 ft. Pipe-line 8 in.

MEDICAL: Necessary for Agent to receive advance notice of medical attention required. Hospital facilities available.

DENSITY: 1025.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: See "Larnaca".

IDENTIFICATION CARDS: When on shore leave, seamen's books required.

TIME: GMT plus 2 hours. No changes during the year.

AUTHORITY: Electricity Authority of Cyprus, 15 Photis Pittas Street, Nicosia. *Tel:* 62001. *Telex:* 2432 Grid Cy. *Cables:* Grid, Nicosia. *Contact:* The General Manager.

DHEKELIA "B": 34.58 N. 33.45 E. (See Plan Book)

Sovereign Base Area

DOCUMENTS:

3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration.
1 Crew Declaration.
1 Store List (for cigarettes, spirits, etc.).
2 Manifests (Customs forms).

PILOTAGE: Compulsory for berthing. The tanker berth is situated in open roadstead. Pilot available through Harbour Master at Larnaca.

MAX. SIZE: Tankers up to 735 ft. length with max. draft 41 ft.

HEALTH: Pratique granted by Health Authorities after boarding on arrival. No pratique necessary when vessel arrives from another port in Cyprus.

RADIO: Walkie-talkie.

TUGS: Available.

BERTHING: Three conventional buoy moorings for tanker discharging fuel oil to Dhekelia "B" Power Station. Depth of water 15.85 m.

MEDICAL: Necessary for Agent to receive advance notice of medical attention required. Hospital facilities available.

DENSITY: 1025.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: See "Larnaca".

IDENTIFICATION CARDS: When on shore leave, seamen's books required.

TIME: GMT plus 2 hours. No changes during the year.

AUTHORITY: Electricity Authority of Cyprus, 15 Photis Pittas Street, Nicosia. *Tel:* 62001. *Telex:* 2432 Grid Cy. *Cables:* Grid, Nicosia. *Contact:* The General Manager.

LARNACA: 34.55 N. 33.39 E. (See Plan Book)

PORT LIMITS: As defined by Cyprus Law, the port limits are: That part of the coastline and the territorial waters of Cyprus contained within a line drawn 089° to the high seas from Livadhia Church Belfry and a line drawn 089° from Mosque (Hala Sultan Tekke) on Admiralty Chart No. 851 of 8th August, 1941.

DOCUMENTS:

4 Crew Lists.
4 Passenger Lists.
4 Transit Passenger Lists for passenger ships only.
1 Arrival Declaration.
1 Crew Declaration for dutiable goods.
3 Stores List (cigarettes, spirits, etc.).
2 Manifests (Customs Forms).
1 Customs General Declaration.
1 Fire Arms Declaration.
1 Health Declaration.
1 Cargo Gear Declaration.

PILOTAGE: Ships are not allowed to enter the port or berth at the mooring buoys outside the breakwater port without Pilot, unless permission is granted by the Port Authority. Pilot boards vessel at roadstead. Master must give 24 hours notice of ETA to vessel's Agents to enable them inform the Port Manager in time. Pilot boats is off-white colour with words "Larnaca Pilots" written on the sides in blue letters. Pilot may be contacted on VHF Channels 16/14 during office hours 0730 – 1330 hrs. and Channel 14 at any other time during port operations. Pilot's telegraphic address is "Port Manager, Larnaca Cyprus". Tel: 041-53563.

ANCHORAGES: Open roadstead.

Prohibited Anchorage:

Positions of Prohibited Anchorage:
1. Lat. 34° 54′ 39″ N., Long. 33° 38′ E.
2. Lat. 34° 54′ 16.8″ N., Long. 33° 41′ E.
3. Lat. 34° 52′ 48″ N., Long. 33° 38′ E.
4. Lat. 34° 52′ 48″ N., Long. 33° 41′ E.

Positions of Prohibited Anchorage obstruction of the Port Entrance:
1. Lat. 34° 55′ 21″ N., Long. 33° 37′ 49″ E.
2. Lat. 34° 55′ 21″ N., Long. 33° 40′ 18″ E.
3. Lat. 34° 55′ 55″ N., Long. 33° 39′ 03″ E.
4. Lat. 34° 55′ 55″ N., Long. 33° 40′ 37″ E.

RESTRICTIONS: See "Max. Size" and "Berthing". Rise of tide up to 1.5 ft.

MAX. SIZE: For berthing in the port, vessels must not exceed 500 ft. LOA. However, vessels of few feet in excess may receive berthing permission if vessel's manoeuvrability and prevailing weather conditions permit.

The port is dredged to 31 ft. (9.5 m.) Max. draft allowed 9 m. (9.25 m. at HW with approval). The height of the quay above sea level is 2.30 m.

Tankers discharge outside port at mooring buoys. Draft up to 32 ft. Max. LOA 600 ft.

HEALTH: Pratique is required at Cyprus first port of call only. Pratique is granted either before or after berthing as appropriate.

RADIO: Cables sent through "Cyprus Radio", call sign: 5BA.

RADAR/VHF: Port Manager Larnaca and Pilot service on VHF Channel 16.

TUGS: Port Authority tugs join vessels outside breakwater using ship's lines. 3 tugs available.

BERTHING: Vessels may berth inside port between 0600 hrs. and midnight, but may unberth and sail until midnight. Cargo vessels are allowed to berth during night-time provided berth space is available and vessel will immediately operate with at least 1 gang.

Quay length: (a) Main quay 666 m. and (b) Floating pontoon quay 200 m. Ro-Ro ramp available in Northwestern basin of the port.

Warehouse Space: 6,000 sq.m.

Container and General Cargo paved Stacking Areas: 150,000 sq.m.

Equipment: 1×35 ton level luffing crane. 8×5 – 16 ton mobile cranes. 4×15 – 40 ton fork-lift trucks for container handling. 17×2 – 8 ton fork-lift trucks. 36×10 – 40 ton trailers and 5 tractors.

BRIDGES: None.

STEVEDORES: 24 hours notice of ETA to Agent is required to enable him arrange gangs.

MEDICAL: It is necessary for Agents to receive advance notice of at least 2 – 3 hours before vessel's arrival. Hospital facitlites constantly availble. Smallpox vaccination is necessary; other inoculations or vaccinations are required according to prevailing circumstances.

TANKERS: Diameter of discharge lines up to 12 in. Max. draft 32 ft. Discharging takes place at mooring buoys outside port. Position of buoys Lat. 34° 54.75′ N., Long. 33° 39′ E. No slop discharge facilities.

Buoy berths outside port:

Oil Tankers Berths:

Cyprus Petroleum Refinery: Berth: LOA 214 m. Max. draft 11.6 m. Depth of water 13.7 m.

Petrolina: Stern discharge facilities only. LOA 214 m. Max. draft 11 m. Depth of water 13 m. Slop tank 2,000 tonnes.

Gas Tankers Berths:

Mobil: Pipe diameters: 3 in. for liquid, 2 in. for vapour. Depth of water 13 m. LOA 110 m.

Cinergas: Pipe diameters: 4 in. for liquid, 2 in. for vapour. LOA 110 m. Depth of water 9 m. Draft 8.5 m.

Central Gas: Pipe diameters: 3 in. for liquid, 2 in. for vapour. LOA 110 m. Depth of water 6.5 m. Draft 6 m.

DENSITY: 1025.

FRESH WATER: Facilities available on quay. Delivery by hoses at about 50 t.p.h.

FUEL: 12 hours advance notice is required. Available in unlimited quantities.

FIRE PRECAUTIONS: No tankers are allowed in the port. Vessels and operators must comply with internationally applicable regulations concerning explosives and dangerous goods.

CONSULS: Italy, Sweden, Denmark, Portugal, Finland.

CUSTOMS ALLOWANCES: 50 grams tobacco or 40 cigarettes, and 0.25 litres spirits, 0.25 litres wines, per man per day.

For reasons of administrative convenience, issues of high duty goods for use by Crew on board will be made every 3 days, beginning with the first day of the ship's arrival in Cyprus waters. For each member of the Crew (other than the Master, the Chief Officer and the Chief Steward) each issue will consist of, 120 cigarettes or an equivalent quantity of other tobacco goods. 1 bottle of spirits, and 3 bottles of wine.

Each issue for the Master, the Chief Officer and the Chief Steward of ocean-going vessels will consist of: 200 cigarettes, 2 bottles of spirits and reasonable quantity of wine they may request.

Concessions to Crew landing from ship. On coming ashore, for a short period, 50 grams of tobacco, or 40 cigarettes per day or part thereof.

The above allowances are in force for all Cyprus ports.

REPAIRS: Minor repairs and overhauls may be carried out.

DRY DOCKS: Not available.

SURVEYORS: Lloyd's, Bureau Veritas, Registro Italiano Navale, Germanischer Lloyd.

GANGWAY/DECK WATCHMEN: Not necessary but available.
HATCHES: Opened and closed by crew.
CARGO GEAR: Load or discharge may be effected either by ship's or shore gear. 35 ton heavy lift crane available.
REPATRIATION: Facilities are available.
AIRPORT: Larnaca International Airport 3 miles from Larnaca Port. Daily flights to Europe and Middle East.
TIME: GMT plus 2 hours. Summertime – GMT plus 3 hours (last Sunday in March to last Sunday in September).
HOLIDAYS: Every Sunday; 1st January; 6th January; 25th March; 1st May; 28th October; 29th October; Good Friday; Saturday following Good Friday; Easter Monday; First Day of Kurban Bairam; Birthday of Prophet; First Day of Ramazan Bairam; Christmas Day; Boxing Day.

Work can be arranged on any holiday other than New Year's Day, Christmas Day, and Easter Sunday.
POLICE/AMBULANCE/FIRE: Dial 199.
EMERGENCY CO-ORDINATION CENTRE: Port Manager Tel: 53563. Res. Tel: 52171/55542/57043. Marine Police Tel: 52001.
TELEPHONES: Line available for placing telephone on board.
SERVICES: Compass adjusting; Radar; Radio telephones; Gyro compass repairs; hull scraping and engine repairs.
SHORE LEAVE: Crew members are allowed ashore.
IDENTIFICATION CARDS: Shore leave passes are issued. Seaman's Book or Passport required whilst ashore.
REGULATIONS: Port Manager's permission is required for: immobilising engine, cleaning or repairs whilst vessel alongside quay, lowering lifeboats and use of ship's radio. Port and Customs clearance required before departure. Cyprus flag to be hoisted on mast from 0800 hrs. to sunset. Landing of dogs or other animals not allowed; also discharging of fruits, vegetables and eggs unless authorised by Produce Inspection Office. Disposal of garbage and waste strictly prohibited both in port and Cyprus waters.
DELAYS: According to prevailing circumstances but normally no delays.
GENERAL: Weather conditions permit entrance and working of ships all the year round.

Garbage collection and disposal service available to vessels.
AUTHORITY: Cyprus Ports Authority, 23 Crete Street, P.O. Box 2007, Nicosia, Cyprus. *Tel:* 50100. *Telex:* 2833 CYPA. *Cables:* Cyports. *Contact:* The General Manager.

Larnaca Port, Larnaca, Cyprus. *Tel:* 041-53563 or 53405. *Telex:* 2833 Cypa. *Cables:* Port Manager, Larnaca. *Contact:* Port Manager.

AGENT: Gulf Agency Co. (Cyprus) Ltd., P.O.Box 546, Larnaca, Cyprus. Tel: 52897. Telex: Via Athens Office: 216344, 218687 or 214548 ("GAC GR") or Cyprus Office 3967 Gaship Cy. Cables: Gacship, Larnaca.

LATCHI: 35.03 N. 32.27 E.

DOCUMENTS: See "Limassol".
ANCHORAGE: 0.5 miles North of Mavroli Pier, depth 10 fathoms.
MAX. SIZE: No restrictions on size.
HEALTH: All necessary action to obtain pratique made by Agent in the event of any suspected disease on board, necessary action and precautions taken by Health Authorities.
RADIO: Cyprus Radio – call sign 5BA on 500 or radio telephone 2182.
TUGS: None available.
BERTHING: Mavroli Pier in Khrysokhou Bay, in position 35° 03′ 15″ N. 32° 27′ 10″ E. bearing 072° approximately 3.2 miles from Latchi. Necessary to have Cyprus flag, and to have gangway and not a rope ladder for Authorities and stevedores to board.
STEVEDORES: ETA advice required order arrange gangs at least 24 hours. Loading rate 2,000 tons per day. Loading from 6 barges, average capacity 45 tons each.
MEDICAL: Agent to receive 24 hours notice. Hospital facilities available at Ktima, 24 miles from Terminal at Limni. Each member of crew to possess valid vaccination certificate.
DENSITY: 1025.
FRESH WATER: None available.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Unnecessary.
OPENING/CLOSING HATCHES: Done by the crew.
CUSTOMS ALLOWANCES: See "Limassol".
IDENTIFICATION CARDS: Required.
CONSULS: No consuls at Terminal.
REPAIRS: No repairs can be carried out.
REPATRIATION: Can be arranged through Larnaca International Airport.
AIRPORT: Larnaca Airport 70 miles away, served by regular airlines.
TIME: GMT plus 2 hours. Permanent.
HOLIDAYS: See "Limassol".
POLICE/AMBULANCE/FIRE: Such services arranged through Agent.
TELEPHONES: No arrangements exist for placing on board.
SHORE LEAVE: Landing permits obtainable from local Police Authorities by lodging passports or seamen's books.
AUTHORITY: Cyprus Ports Authority, Nicosia. *Contact:* General Manager.

LIMASSOL: 34.40 N. 33.03 E.

DOCUMENTS:

1 Arrival Declaration.
4 Crew Lists.
4 Passenger Lists (the latter in case of passenger vessels).
4 Transit Passenger Lists.
1 Fire Arms Declaration.
1 Stores Declaration.
1 Declaration signed by each member of Crew stating dutiable goods in their possession.
1 Form of appointment of Agent.
1 Maritime Declaration of Health.

PILOTAGE: Ships are not allowed to enter the port or to berth at the mooring buoys outside the breakwater port without Pilot, unless permission is granted by the Port Authority. Pilot boards vessel at roadstead. Master must give 24 hour's notice of ETA to vessel's Agents to enable them inform the Port Manager in time. Pilot's Telegraphic Address is Port Manager, Limassol, Cyprus. Tel.: 051-65246.
ANCHORAGE: No specific boundary but ships usually anchor about 0.5 mile S.E. of lighter basin entrance where depth is 8 fathoms or S.S.E. of the entrance to the new breakwater port.
RESTRICTIONS: See "Max. Size" and "Berthing". Rise of tide up to 1.8 ft.
MAX. SIZE: *Old Port:* Vessels berthing must not exceed 265 ft. LOA and 14 ft. draft.

New Breakwater Port: Depth alongside 11 m. Max. draft 10.5 m. No LOA limit on ships entering and berthing. The height of quay above sea level is 2.30 m.
HEALTH: Pratique is required at first Cyprus port of call only. Pratique is granted either before or after berthing as appropriate.
RADIO: Cables sent through "Cyprus Radio", call sign: 5BA.
RADAR/VHF: No port radar service. Port Manager and Pilots equipped with VHF radiotelephone operating on Channels 16 and 10 during office hours only.
TUGS: Port Authority tugs join vessels outside breakwater using ships' lines. 2 tugs, 1,320 h.p. and 750 h.p.
BERTHING: Vessels may berth inside port between 0600 hrs. and sunset, but may unberth and sail until midnight. Cargo vessels are allowed to berth during night-time provided berth space is available and vessels will immediately operate with at least 1 gang.

Quay Length: 1,280 m. Ro-Ro vessels can discharge/load on the quays.

Warehousing Space: 40,700 sq.m.
Paved Yard for Containers (full and empty): 300,000 sq.m.
Paved Stacking Area for General Cargo: 111,000 sq.m.
Grain Silo: Modern, (recently built) with a 30,000 tonnes storage capacity, connected with the quay via an overhead conveyor belt.

Equipment: 60 ton floating crane. 35 ton level luffing crane. 36 ton mobile container crane on pneumatic tyres. Twenty 3-16 ton and four 45-60 ton mobile cranes. Four 7-15 ton fork lifts and seven 32 ton van carriers for container handling. Eighty-eight 3-60 ton fork lifts for general cargo handlng. One hundred and fourteen 3-25 ton trailers, fifteen tractors and other auxiliary equipment.

2×40 ton gantry cranes for container handling at the East Quay.
STEVEDORES: 24 hours notice of ETA to Agent is required to enable him arrange gangs.
MEDICAL: It is necessary for Agent to receive advance notice of at least 2–3 hours before vessel's arrival. Hospital facilities constantly available. Inoculations or vaccinations are required according to prevailing circumstances.
TANKERS: Not allowed to berth in the port. No slop discharge facilities.
FRESH WATER: Facilities available on quay.
FUEL: 12 hours' advance notice is required. Vessels can bunker LFO or Gas Oil whenever available. Both delivered by tanker lorry.
FIRE PRECAUTIONS: No tankers are allowed in the port. Vessels and operations must comply with internationally applicable regulations concerning explosives and dangerous goods.
CONSULS: Belgium, Holland, Italy and France.
REPAIRS: A floating dock 66 m. long and 18 m. wide capable of lifting a 1,200 tons light ship is in operation.
SURVEYORS: Lloyds, Bureau Veritas, Registro Italiano Navale, Germanischer Lloyd.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By crew or stevedores.
CUSTOMS ALLOWANCES: 50 grams tobacco or 40 cigarettes, and 0.25 litres spirits, 0.25 litres wines, per man per day.

For reasons of administrative convenience, issues of high duty goods for use by crew on board will be made every 3 days, beginning with the first day of the ship's arrival in Cyprus waters. For each member of the crew (other than the Master, the chief officer and the chief steward) each issue will consist of, 120 cigarettes or an equivalent quantity of other tobacco goods, 1 bottle of spirits and 3 bottles of wine. Each issue for the Master, the chief officer and the chief steward of ocean-going vessels will consist of: 200 cigarettes, 2 bottles of spirits and reasonable quantity of wine they may request. Concessions to crew landing from ship. On coming ashore, for a short period, 50 grams of tobacco, or 40 cigarettes per day or part thereof.
CARGO GEAR: Load or discharge may be effected either by ship or shore gear. 35 tons heavy lift crane, 36 ton mobile container crane on pneumatic tyres and 60 tons floating crane available.
REPATRIATION: Facilities available for effecting crew changes and arranging any necessary repatriations. Usually arranged with Agent.
AIRPORT: Larnaca International Airport served by regular lines, situated 43 miles from Limassol.
HOLIDAYS: Every Sunday; 1st January; 6th January; 25th March; 1st May; 28th October; 29th October; Good Friday; Easter Monday; First Day of Kurban Bairam; Birthday of Prophet; First Day of Ramazan Bairam; Christmas Day; Boxing Day. Work can be arranged on any holiday other than New Year's Day, Christmas Day, and Easter Sunday.

TIME: GMT plus 2 hours. Summertime GMT plus 3 hours in force from last Sunday in March to last Sunday in September.
POLICE/AMBULANCE/FIRE: Tel: Police 75611; Ambulance 63111, Fire Brigade 52191 or 999.
TELEPHONES: Available on request, for placing on board.
SERVICES: Compass adjusting, servicing of radar, R/T, echo sounders.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Shore leave passes are issued. Seaman's Book or Passport required whilst ashore.
SHIP SUPPLY SERVICES:

1. Brasal Off-Shore Services Limited, P.O.Box 1518, Limassol.
2. Vasos Aivaliotis Limited, 4 Ermou Street, P.O.Box 110, Limassol.
3. Messrs. Thesseas Savva, 118 Franklin Roosevelt Avenue, P.O.Box 114, Limassol.
4. Mercury Divers Company Limited, P.O.Box 114, Limassol.

REGULATIONS: Port Manager's permission is required for: immobilising engine, cleaning or repairs whilst vessel alongside quay, lowering lifeboats and use of ship's radio. Port and Customs clearance required before departure. Cyprus flag to be hoisted on mast from 0800 hrs. to sunset. Landing of dogs or other animals not allowed; also discharging of fruits, vegetables and eggs unless authorised by Produce Inspection Office. Disposal of garbage and waste strictly prohibited both in port and Cyprus waters.
DELAYS: According to prevailing circumstances but normally no delays.
GENERAL: Weather conditions permit entrance and working of ships all the year round.
DEVELOPMENTS: A new administration complex expected to be operating by end of 1984.
AUTHORITY: Cyprus Ports Authority, Headquarters, 23 Crete Street, P.O.Box 2007, Nicosia, Cyprus. *Tel:* 50100. *Telex:* 2833 Cypa. *Cables:* Cyports. *Contact:* The General Manager.

Limassol Port, Limassol, Cyprus. *Tel:* 65246 or 66022 (Limassol). *Cables:* Port Manager, Limassol. *Contact:* John Ghighis, Port Manager.

AGENT: Gulf Agency Co. (Cyprus) Ltd., P.O.Box 1141, Limassol, Cyprus. Tel: 68222/8. Telex: 2817 and 2744 ("Gacship Cy"). Cables: "Gacship", Limassol.

MONI: 34.42 N. 33.11 E. (See Plan Book)

Sovereign Base Area
DOCUMENTS:

3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration
1 Crew Declaration.
1 Store List (for cigarettes, spirits, etc).
2 Manifests.(Custom forms).

PILOTAGE: Compulsory for berthing. The tanker berth is situated in open roadstead. Pilot available through Harbour Master at Limassol.
MAX. SIZE: Tankers up to 600 ft. length with max. draft 40 ft.
HEALTH: Pratique granted by Health Authorities after boarding on arrival. No pratique necessary when vessel arrives from another port in Cyprus.
RADIO: Communication by Walkie-talkie
TUGS: Available.
BERTHING: Electricity Authority of Cyprus. Three conventional buoy mooring for tanker discharging fuel oil to Moni Power Station. Depth of water 18.20 m.

Cyprus Cement Factory. Depth of water 9.75 m.

MEDICAL: Necessary for agent to receive advance notice of medical attention required. Hospital facilities available.
TANKERS: Flange at end of flexible line is ASA 300 – 15 in. OD. (12×1 in. holes. 13 in. P.C.D.)

Loading signals – 1 blast, stop pumping. 2 blasts start pumping.

DENSITY: 1025
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: See "Larnaca".
IDENTIFICATION CARDS: When on shore leave, seamen's books required.
TIME: GMT plus 2 hours. No changes during the year.
SHIP SUPPLY SERVICES:

1. Brasal Off-Shore Services Limited, P.O.Box 1518, Limassol.
2. Vasos Aivaliotis Limited, 4 Ermou Street, P.O.Box 110, Limassol.
3. Messrs. Thesseas Savva, 118 Franklin Roosvelt Avenue, P.O.Box 114, Limassol.
4. Mercury Divers Company Limited, P.O.Box 114, Limassol.

AUTHORITY: Electricity Authority of Cyprus (Headquarters), P.O.Box 4506, Nicosia, Cyprus. *Tel:* 62001 (Nicosia). *Telex:* 2432 Grid Cy. *Cables:* Grid Nicosia. *Contact:* The General Manager.

Moni Power Station, Electricity Authority of Cyprus, P.O.Box 471, Limassol, Cyprus. *Contact:* Power Station Superintendent.

VASSILIKO BAY: 34.43 N. 33.19 E.

LOCATION: 13.5 miles due East of Limassol and 1.5 miles West of Zyghi (Lat. 34° 42′ 46″ N., Long. 33° 18′ 37″ E.)
PILOTAGE: Pilots available for berthing and shifting operations. Can be contacted on VHF Channel 16, working frequency 12. Owners or Master of vessel must give by cable/radio ("Helco Nicosia" or "Vascem Nicosia" 48) notice of vessel's ETA 24 hours in advance. Message of ETA must also include:

(a) Name/call sign of vessel.
(b) Nationality.
(c) Length, draft, gross and n.r.t.

Tugs available from Larnaca port. 12 hours' notice in advance is required.

MAX. SIZE: Vessel's LOA, 150 m.; Breadth, no restriction; Draft 8.40 m.
HEALTH: For Pratique, vessel must cable name and nationality, last port of call, number of crew and passengers, and condition of health on board. For vessels calling first at another port in Cyprus, pratique is automatic.
RADIO: "Cyprus Radio".
BERTHING: Length of quay, 540 m. Depth at LW, 9 m.
LOAD/DISCHARGE: Can be effected by shore equipment and/or ship's own gear.

Bulk cargoes (i.e. Pyrites, Cement, Copper, Chrome, Ore, Gypsum Rock, Phosphate Rocks, Coal, etc.) and liquid chemical cargoes (i.e. Liquid Ammonia, Sulphuric Acid).

CRANES: 3 mobile cranes of 30 tonnes SWL capacity each are constantly available. Services of an 80 tonne mobile crane can be also secured on request.
SPECIALISED CARGO-HANDLING FACILITIES: Facilities for roll-on/roll-off traffic and for handling liquid chemicals are available.
TANKERS: One pipe-line to buoy berth, depth of water, 12.19 m. Position of buoys, Lat. 34° 42′ 42″ N., Long. 33° 18′ 42″ E.
FRESH WATER: Available.
FUEL: Full bunkering facilities available, provided by tank tankers or a small tanker.
OPENING/CLOSING HATCHES: Ship's crew.
REPATRIATION: Crew changes and repatriation facilities available.
AIRPORT: Distance 35 miles; served by regular operators.
TIME: GMT plus 2 hours.
HOLIDAYS: 1st January, 6th January, 25th February, 25th March, 1st April, 12th April, 13th April, 15th April, 1st May, 3rd June, 15th August, 1st October, 28th October, 24th December, 25th December, 26th December.

Port workers will abstain from work on 1st January, 13th April, 14th April, 15th April, 1st May, 15th August and 25th December, but they may normally work on overtime basis during the rest of the holidays.

AUTHORITY: Vassiliko Cement Works Ltd., Headquarters, P.O.Box 2281, Nicosia, Cyprus. *Tel:* 42005-10 (Nicosia). *Telex:* 2039 Vascem Cy. *Cable:* Vascem, Nicosia.

NOTES

Please also advise Shipping Guides Ltd.

Turkish Republic of Northern Cyprus

FAMAGUSTA: 35.07 N. 33.57 E. (See Plan Book)

DOCUMENTS:
1 Arrival Declaration Form.
1 Maritime Declaration of Health.
1 Crew List.
4 Passenger Lists.
1 List of Ship's Stores.
1 Personal Declaration of Crew (wines, spirits, tobacco, cigarettes, cigars, jewellery, cameras, watches, arms and ammunition, etc.)
1 Appointment of Agent Form.
1 Cargo Manifest (If not forwarded by airmail).
1 Dangerous Cargo List.

PILOTAGE: Masters to cable ETA 24 hours before arrival to Agents so as to enable them to arrange berthing and pilotage. Pilotage is compulsory for ships in excess of 300 g.r.t.

In normal weather conditions Pilot boards vessel at Turning Buoy or at anchorage. In rough weather conditions, Pilot may advise Master to proceed to entrance of Outer Harbour, where Pilot will board the vessel. Communications between pilot stations and vessels approaching port and/or anchored at roadstead by VHF Channel 16.

Pilot Boat: Open motor launches, light grey colour, flying Pilot's flag, light and sound signals for Pilot.

Requirements: International signals apply.

ANCHORAGES: Vessels not berthing on arrival, to anchor at roadstead; East of flashing buoy (Lat. 35° 08′ 55″ N., Long. 33° 56′ 06″ E.) which marks the entrance to the channel.

Exposed to: N.E., E. and S.E. winds. In case of very bad weather, a safe anchorage to be sought further North, near Boghaz area.

Small vessels may anchor within the breakwater in depth of 5.5 m. to 7.3 m.

RESTRICTIONS: Passenger vessels (Vessels built to carry more than 12 passengers) allowed to enter port up to 2300 hrs., provided such vessels will be at Turning Buoy by that time and also if berth space is available.

Cargo vessels allowed to berth until sunset provided berth space is available.

No tide restrictions, but for vessels entering Inner Basin max. draft 22 ft. and for Outer Basin max. draft 30 ft.

MAX. SIZE:

Inner Harbour:	Max. permissible draft 6.7 m. (22 ft.)
	Max. permissible LOA 131 m. (430 ft.)
Outer Harbour:	Max. permissible draft 9.15 m. (30 ft.)
	Max. permissible LOA 220 m. (722 ft.)

Height of quay above sea level is 1.8 m.

The approach channel to the Outer Harbour is 10.30 m. deep and mean width of entrance 183 m. Range of tide: 0.45 m.

HEALTH: Pratique is required only at first port of call in Northern Cyprus. Pratique is granted either before or after berthing as appropriate.

RADIO/VHF: "Northern Cyprus Radio" R/T 2182, VHF Channel 16. Famagusta Pilots equipped with VHF radio-telephone operating on Channel 16 and 14 during office hours.

TUGS: 3 tugs of 410 h.p., 630 h.p. and 1,000 h.p. available. Tugs join vessel at entrance of Outer Basin and ship's lines are used. Use of tugs is at the discretion of Pilot. No charges made for the use of first tug. If more than one tug is required they may be hired on hourly basis.

BERTHING: According to rotation of ships with exception of passenger and citrus ships. Vessels may berth alongside between 0600 hrs. and sunset, unberthing of ships between 0600 hrs. and midnight including weekends and official holidays.

Inner Harbour Quay: Length: 540 m.
Outer Harbour Quay: Length: 655 m.

Ro-Ro vessels may berth either bows on or stern to the quay.

CRANES: A floating crane lifting 60 tons at 20 m. 14 mobile cranes of different lifting capacities.

STEVEDORES: Gangs to be ordered by 1500 hrs. previous day. For Saturday and Sunday work, gangs to be ordered by 1500 hrs. Friday. It is also possible to apply for gangs during the weekdays a.m. and/or p.m. subject to gangs available.

Average rate of discharge: General cargo, 10 – 15 tons, bagged cargo, 15 – 20 t.p.h. per gang.

Working hours weekdays 0800 – 1200 hrs., 1300 – 1700 hrs., overtime work until 2300 hrs. is possible, but with extra charge.

MEDICAL: Advisable for Masters to include in ETA message to Agents if any medical attention required; hospital and private clinic facilities available. Smallpox vaccination necessary; other inoculations or vaccinations according to prevailing circumstances.

DENSITY/TIDE: Mediterranean salt sea water. Difference of 1 ft. – 2 ft. between low and high water.

FRESH WATER: Water hydrants installed alongside quay, both at Inner and Outer Basins and delivery through hoses; rate of delivery 10 – 15 tonnes per hydrant per hour.

Note: Certain limitations to quantities deliverable can be possible during Summer months (June-September) owing to general shortage of water.

FUEL: No bunkering facilities alongside quay. Limited fuel deliveries to vessels alongside quay can be made by lorry tankers of 8 – 10 tons each.

GANGWAY/DECK WATCHMEN: Not obligatory, but may be used if Master requires.

OPENING/CLOSING HATCHES: Carried out by ship's crew; stevedores on board are sometimes willing to assist but they are not obliged to do so.

CARGO GEAR: Mostly supplied by shore stevedores or other contractors against payment. Any gear supplied by the vessel should be certified to the effect that it is tested and found to be suitable for the purpose used.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams tobacco, and 0.75 cl. spirits, 0.75 cl. wine per man per week.

For reasons of administrative convenience, issues of high duty goods for use by crew on board is being made every week.

The Master, Chief Officer and the Chief Steward of ocean going vessels may be granted more quantities of the above high duty goods as may be considered reasonable by Customs Authorities, on request.

The above allowances are in force in all Northern Cyprus ports.

IDENTIFICATION CARDS: Passports and/or sailor's passes are accepted by the Police and Immigration Authorities.

On ship's arrival, passports and/or sailor's passes are retained by the Immigration Authorities against the issue of Landing Cards which are used until the ship's departure when the passports and/or sailor's passes are returned to the Master.

REPAIRS: Minor repairs for deck and engine can be carried out at local workshop. Cement boxes and plating both above and underwater can be carried out.

DRY DOCKS: No dry docks. 2 slipways operate at South end of port and can take vessels up to 500 tons burden.

SURVEYORS:
(1) Cargo surveyors available.
(2) Refet L. Egemen & Co., Nicosia. Sub-Agent of Catoni Agents, Mersin, Turkey, who are the representative of Lloyd's in Mersin, Turkey (for insurance purposes but not for classification).

AIRPORT: Ercan Airport, 30 miles from Famagusta. Connections to U.K. and Middle East countries via Turkish airports.

TIME: GMT plus 2 hours.

HOLIDAYS: Recurrent official port and Customs holidays:

First weekday of January, 13th February, 23rd April, 1st May, 19th May, 27th May, 20th July, 30th August, 29th and 30th October, Ramazan Bairam (1st, 2nd and 3rd days), Kourban Bairam (1st, 2nd, 3rd and 4th days), Birthday of Prophet.

If the above holidays fall on a Sunday, the following day is considered to be an official holiday.

All ports closed for work with the exception of shipping traffic on New Year's Day and on 1st May.

POLICE/AMBULANCE/FIRE: Police Headquarters Tel: 036-65310, 036-65321. Ambulance Tel: 036-65328, 036-62876. Fire Brigade Tel: 036-65389.

EMERGENCY CO-ORDINATION CENTRE: Not specially available, but Famagusta pilot station Tel: 036-65388, 036-64790 and/or Port Headquarters Tel: 036-62626, 036-62627, 036-62951 may be of assistance.

TELEPHONES: Public telephone boxes available on the quayside.

GENERAL: Flag of Northern Cyprus to be hoisted on mast from 0800 hrs. to Sunset.

Landing of dogs or other animals not allowed. Disposal of garbage and waste strictly prohibited both in port and territorial waters. Garbage and waste are collected by the municipality against a nominal fee, through Agents.

Charts: Relevant Admiralty Publications: B.A. Chart 847, 851, List of Lights Vol. E., Mediterranean Pilot Vol. V., Tide Tables Vol. I. (European Waters).

Free Port: Part of the Outer Harbour is being used as a Free Port, adjacent to which is the Industrial Free Zone with a maximum development area of 554,964 sq.m.

The Free Port and Zone is managed by the Free Port Manager who is responsible to the Board of Directors and function under the auspices of the Ministry of Trade and Industry.

Directorate: Tel: 036-66164, 036-64775. Telex: 57140 Mslb Tk.

SERVICES: Compass adjusting; radar repairs; scraping and painting ship's sides.

BANKS: Messrs., Midland Bank (Overseas Branch) Ltd., in the U.K. is the official correspondent of the following local Banks:

Name	*Address*	*Telex:*
Turkish Bank Ltd.	Famagusta	57138 Trba Tk 57103 Otaf Tk
Is Bank (A.S.)	Famagusta	57179 Isbm Tk
Credit Bank Ltd.	Famagusta	57246 Kklb Tk

STORING: See "Prelims" on page viii.
1. Vessel can be stored by barge or truck.
2. No regulations concerning barge storing. Customs Stores Regulations applicable.
3. Trucks can proceed alongside at the berth from a close distance of 2 ft. from the edge of the quay walls.
4. Fork lift trucks can be used on the jetty to handle storing.
5. Customs storage charges in force.
6. Local Riggers can be employed to assist with storing.

SHORE LEAVE: All crew members allowed ashore after free pratique granted. Each crew member to carry Landing Card.

REGULATIONS: Authority is required from Harbour Master: for immobilising engine for cleaning or repairs whilst vessel alongside quay; for lowering lifeboats; for using ship's radio; for sailing (Port and Customs Clearances are required).

Ships berth by rotation according to time of arrival. However, passenger and cruising vessels as well as ferryboats can berth (maximum 2 berths) on priority.

DELAYS: Delays in berthing are very seldom. Slight congestion of 1 or 2 days during citrus export season.

AUTHORITY: Ministry of Communications & Works, Department of Ports, Famagusta, Northern Cyprus.

Postal Address: The Director of the Department of Ports, Famagusta (Gazi Magosa) via Mersin 10, Turkey. *Tel:* 036-62626, 036-62627, 036-62951. *Contact:* Necati S. Kadir, Director of Ports.

Harbour Master's Office: *Tel:* 036-65388, 036-64790.

Also see "General".

TIME: GMT plus 2 hours. Summertime GMT plus 3 hours in force from last Sunday in March to last Sunday in September.
POLICE/AMBULANCE/FIRE: Tel: Police 75611; Ambulance 63111, Fire Brigade 52191 or 999.
TELEPHONES: Available on request, for placing on board.
SERVICES: Compass adjusting, servicing of radar, R/T, echo sounders.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Shore leave passes are issued. Seaman's Book or Passport required whilst ashore.
SHIP SUPPLY SERVICES:

1. Brasal Off-Shore Services Limited, P.O.Box 1518, Limassol.
2. Vasos Aivaliotis Limited, 4 Ermou Street, P.O.Box 110, Limassol.
3. Messrs. Thesseas Savva, 118 Franklin Roosevelt Avenue, P.O.Box 114, Limassol.
4. Mercury Divers Company Limited, P.O.Box 114, Limassol.

REGULATIONS: Port Manager's permission is required for: immobilising engine, cleaning or repairs whilst vessel alongside quay, lowering lifeboats and use of ship's radio. Port and Customs clearance required before departure. Cyprus flag to be hoisted on mast from 0800 hrs. to sunset. Landing of dogs or other animals not allowed; also discharging of fruits, vegetables and eggs unless authorised by Produce Inspection Office. Disposal of garbage and waste strictly prohibited both in port and Cyprus waters.
DELAYS: According to prevailing circumstances but normally no delays.
GENERAL: Weather conditions permit entrance and working of ships all the year round.
DEVELOPMENTS: A new administration complex expected to be operating by end of 1984.
AUTHORITY: Cyprus Ports Authority, Headquarters, 23 Crete Street, P.O.Box 2007, Nicosia, Cyprus. *Tel:* 50100. *Telex:* 2833 Cypa. *Cables:* Cyports. *Contact:* The General Manager.

Limassol Port, Limassol, Cyprus. *Tel:* 65246 or 66022 (Limassol). *Cables:* Port Manager, Limassol. *Contact:* John Ghighis, Port Manager.
AGENT: Gulf Agency Co. (Cyprus) Ltd., P.O.Box 1141, Limassol, Cyprus. Tel: 68222/8. Telex: 2817 and 2744 ("Gacship Cy"). Cables: "Gacship", Limassol.

MONI: 34.42 N. 33.11 E. (See Plan Book)

Sovereign Base Area
DOCUMENTS:

3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration
1 Crew Declaration.
1 Store List (for cigarettes, spirits, etc).
2 Manifests.(Custom forms).

PILOTAGE: Compulsory for berthing. The tanker berth is situated in open roadstead. Pilot available through Harbour Master at Limassol.
MAX. SIZE: Tankers up to 600 ft. length with max. draft 40 ft.
HEALTH: Pratique granted by Health Authorities after boarding on arrival. No pratique necessary when vessel arrives from another port in Cyprus.
RADIO: Communication by Walkie-talkie
TUGS: Available.
BERTHING: Electricity Authority of Cyprus. Three conventional buoy mooring for tanker discharging fuel oil to Moni Power Station. Depth of water 18.20 m.

Cyprus Cement Factory. Depth of water 9.75 m.
MEDICAL: Necessary for agent to receive advance notice of medical attention required. Hospital facilities available.
TANKERS: Flange at end of flexible line is ASA 300 – 15 in. OD. (12×1 in. holes. 13 in. P.C.D.)

Loading signals – 1 blast, stop pumping. 2 blasts start pumping.
DENSITY: 1025
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: See "Larnaca".
IDENTIFICATION CARDS: When on shore leave, seamen's books required.
TIME: GMT plus 2 hours. No changes during the year.
SHIP SUPPLY SERVICES:

1. Brasal Off-Shore Services Limited, P.O.Box 1518, Limassol.
2. Vasos Aivaliotis Limited, 4 Ermou Street, P.O.Box 110, Limassol.
3. Messrs. Thesseas Savva, 118 Franklin Roosvelt Avenue, P.O.Box 114, Limassol.
4. Mercury Divers Company Limited, P.O.Box 114, Limassol.

AUTHORITY: Electricity Authority of Cyprus (Headquarters), P.O.Box 4506, Nicosia, Cyprus. *Tel:* 62001 (Nicosia). *Telex:* 2432 Grid Cy. *Cables:* Grid Nicosia. *Contact:* The General Manager.

Moni Power Station, Electricity Authority of Cyprus, P.O.Box 471, Limassol, Cyprus. *Contact:* Power Station Superintendent.

VASSILIKO BAY: 34.43 N. 33.19 E.

LOCATION: 13.5 miles due East of Limassol and 1.5 miles West of Zyghi (Lat. 34° 42′ 46″ N., Long. 33° 18′ 37″ E.)
PILOTAGE: Pilots available for berthing and shifting operations. Can be contacted on VHF Channel 16, working frequency 12. Owners or Master of vessel must give by cable/radio ("Helco Nicosia" or "Vascem Nicosia" 48) notice of vessel's ETA 24 hours in advance. Message of ETA must also include:

(a) Name/call sign of vessel.
(b) Nationality.
(c) Length, draft, gross and n.r.t.

Tugs available from Larnaca port. 12 hours' notice in advance is required.
MAX. SIZE: Vessel's LOA, 150 m.; Breadth, no restriction; Draft 8.40 m.
HEALTH: For Pratique, vessel must cable name and nationality, last port of call, number of crew and passengers, and condition of health on board. For vessels calling first at another port in Cyprus, pratique is automatic.
RADIO: "Cyprus Radio".
BERTHING: Length of quay, 540 m. Depth at LW, 9 m.
LOAD/DISCHARGE: Can be effected by shore equipment and/or ship's own gear.

Bulk cargoes (i.e. Pyrites, Cement, Copper, Chrome, Ore, Gypsum Rock, Phosphate Rocks, Coal, etc.) and liquid chemical cargoes (i.e. Liquid Ammonia, Sulphuric Acid).
CRANES: 3 mobile cranes of 30 tonnes SWL capacity each are constantly available. Services of an 80 tonne mobile crane can be also secured on request.
SPECIALISED CARGO-HANDLING FACILITIES: Facilities for roll-on/roll-off traffic and for handling liquid chemicals are available.
TANKERS: One pipe-line to buoy berth, depth of water, 12.19 m. Position of buoys, Lat. 34° 42′ 42″ N., Long. 33° 18′ 42″ E.
FRESH WATER: Available.
FUEL: Full bunkering facilities available, provided by tank tankers or a small tanker.
OPENING/CLOSING HATCHES: Ship's crew.
REPATRIATION: Crew changes and repatriation facilities available.
AIRPORT: Distance 35 miles; served by regular operators.
TIME: GMT plus 2 hours.
HOLIDAYS: 1st January, 6th January, 25th February, 25th March, 1st April, 12th April, 13th April, 15th April, 1st May, 3rd June, 15th August, 1st October, 28th October, 24th December, 25th December, 26th December.

Port workers will abstain from work on 1st January, 13th April, 14th April, 15th April, 1st May, 15th August and 25th December, but they may normally work on overtime basis during the rest of the holidays.
AUTHORITY: Vassiliko Cement Works Ltd., Headquarters, P.O.Box 2281, Nicosia, Cyprus. *Tel:* 42005-10 (Nicosia). *Telex:* 2039 Vascem Cy. *Cable:* Vascem, Nicosia.

NOTES

Please also advise Shipping Guides Ltd.

Turkish Republic of Northern Cyprus

FAMAGUSTA: 35.07 N. 33.57 E. (See Plan Book)

DOCUMENTS:

1 Arrival Declaration Form.
1 Maritime Declaration of Health.
1 Crew List.
4 Passenger Lists.
1 List of Ship's Stores.
1 Personal Declaration of Crew (wines, spirits, tobacco, cigarettes, cigars, jewellery, cameras, watches, arms and ammunition, etc.)
1 Appointment of Agent Form.
1 Cargo Manifest (If not forwarded by airmail).
1 Dangerous Cargo List.

PILOTAGE: Masters to cable ETA 24 hours before arrival to Agents so as to enable them to arrange berthing and pilotage. Pilotage is compulsory for ships in excess of 300 g.r.t.

In normal weather conditions Pilot boards vessel at Turning Buoy or at anchorage. In rough weather conditions, Pilot may advise Master to proceed to entrance of Outer Harbour, where Pilot will board the vessel. Communications between pilot stations and vessels approaching port and/or anchored at roadstead by VHF Channel 16.

Pilot Boat: Open motor launches, light grey colour, flying Pilot's flag, light and sound signals for Pilot.

Requirements: International signals apply.

ANCHORAGES: Vessels not berthing on arrival, to anchor at roadstead; East of flashing buoy (Lat. 35° 08′ 55″ N., Long. 33° 56′ 06″ E.) which marks the entrance to the channel.

Exposed to: N.E., E. and S.E. winds. In case of very bad weather, a safe anchorage to be sought further North, near Boghaz area.

Small vessels may anchor within the breakwater in depth of 5.5 m. to 7.3 m.

RESTRICTIONS: Passenger vessels (Vessels built to carry more than 12 passengers) allowed to enter port up to 2300 hrs., provided such vessels will be at Turning Buoy by that time and also if berth space is available.

Cargo vessels allowed to berth until sunset provided berth space is available.

No tide restrictions, but for vessels entering Inner Basin max. draft 22 ft. and for Outer Basin max. draft 30 ft.

MAX. SIZE:

Inner Harbour: Max. permissible draft 6.7 m. (22 ft.)
Max. permissible LOA 131 m. (430 ft.)
Outer Harbour: Max. permissible draft 9.15 m. (30 ft.)
Max. permissible LOA 220 m. (722 ft.)

Height of quay above sea level is 1.8 m.

The approach channel to the Outer Harbour is 10.30 m. deep and mean width of entrance 183 m. Range of tide: 0.45 m.

HEALTH: Pratique is required only at first port of call in Northern Cyprus. Pratique is granted either before or after berthing as appropriate.

RADIO/VHF: "Northern Cyprus Radio" R/T 2182, VHF Channel 16. Famagusta Pilots equipped with VHF radio-telephone operating on Channel 16 and 14 during office hours.

TUGS: 3 tugs of 410 h.p., 630 h.p. and 1,000 h.p. available. Tugs join vessel at entrance of Outer Basin and ship's lines are used. Use of tugs is at the discretion of Pilot. No charges made for the use of first tug. If more than one tug is required they may be hired on hourly basis.

BERTHING: According to rotation of ships with exception of passenger and citrus ships. Vessels may berth alongside between 0600 hrs. and sunset, unberthing of ships between 0600 hrs. and midnight including weekends and official holidays.

Inner Harbour Quay: Length: 540 m.
Outer Harbour Quay: Length: 655 m.

Ro-Ro vessels may berth either bows on or stern to the quay.

CRANES: A floating crane lifting 60 tons at 20 m. 14 mobile cranes of different lifting capacities.

STEVEDORES: Gangs to be ordered by 1500 hrs. previous day. For Saturday and Sunday work, gangs to be ordered by 1500 hrs. Friday. It is also possible to apply for gangs during the weekdays a.m. and/or p.m. subject to gangs available.

Average rate of discharge: General cargo, 10 – 15 tons, bagged cargo, 15 – 20 t.p.h. per gang.

Working hours weekdays 0800 – 1200 hrs., 1300 – 1700 hrs., overtime work until 2300 hrs. is possible, but with extra charge.

MEDICAL: Advisable for Masters to include in ETA message to Agents if any medical attention required; hospital and private clinic facilities available. Smallpox vaccination necessary; other inoculations or vaccinations according to prevailing circumstances.

DENSITY/TIDE: Mediterranean salt sea water. Difference of 1 ft. – 2 ft. between low and high water.

FRESH WATER: Water hydrants installed alongside quay, both at Inner and Outer Basins and delivery through hoses; rate of delivery 10 – 15 tonnes per hydrant per hour.

Note: Certain limitations to quantities deliverable can be possible during Summer months (June-September) owing to general shortage of water.

FUEL: No bunkering facilities alongside quay. Limited fuel deliveries to vessels alongside quay can be made by lorry tankers of 8 – 10 tons each.

GANGWAY/DECK WATCHMEN: Not obligatory, but may be used if Master requires.

OPENING/CLOSING HATCHES: Carried out by ship's crew; stevedores on board are sometimes willing to assist but they are not obliged to do so.

CARGO GEAR: Mostly supplied by shore stevedores or other contractors against payment. Any gear supplied by the vessel should be certified to the effect that it is tested and found to be suitable for the purpose used.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams tobacco, and 0.75 cl. spirits, 0.75 cl. wine per man per week.

For reasons of administrative convenience, issues of high duty goods for use by crew on board is being made every week.

The Master, Chief Officer and the Chief Steward of ocean going vessels may be granted more quantities of the above high duty goods as may be considered reasonable by Customs Authorities, on request.

The above allowances are in force in all Northern Cyprus ports.

IDENTIFICATION CARDS: Passports and/or sailor's passes are accepted by the Police and Immigration Authorities.

On ship's arrival, passports and/or sailor's passes are retained by the Immigration Authorities against the issue of Landing Cards which are used until the ship's departure when the passports and/or sailor's passes are returned to the Master.

REPAIRS: Minor repairs for deck and engine can be carried out at local workshop. Cement boxes and plating both above and underwater can be carried out.

DRY DOCKS: No dry docks. 2 slipways operate at South end of port and can take vessels up to 500 tons burden.

SURVEYORS:

(1) Cargo surveyors available.
(2) Refet L. Egemen & Co., Nicosia. Sub-Agent of Catoni Agents, Mersin, Turkey, who are the representative of Lloyd's in Mersin, Turkey (for insurance purposes but not for classification).

AIRPORT: Ercan Airport, 30 miles from Famagusta. Connections to U.K. and Middle East countries via Turkish airports.

TIME: GMT plus 2 hours.

HOLIDAYS: Recurrent official port and Customs holidays:

First weekday of January, 13th February, 23rd April, 1st May, 19th May, 27th May, 20th July, 30th August, 29th and 30th October, Ramazan Bairam (1st, 2nd and 3rd days), Kourban Bairam (1st, 2nd, 3rd and 4th days), Birthday of Prophet.

If the above holidays fall on a Sunday, the following day is considered to be an official holiday.

All ports closed for work with the exception of shipping traffic on New Year's Day and on 1st May.

POLICE/AMBULANCE/FIRE: Police Headquarters Tel: 036-65310, 036-65321. Ambulance Tel: 036-65328, 036-62876. Fire Brigade Tel: 036-65389.

EMERGENCY CO-ORDINATION CENTRE: Not specially available, but Famagusta pilot station Tel: 036-65388, 036-64790 and/or Port Headquarters Tel: 036-62626, 036-62627, 036-62951 may be of assistance.

TELEPHONES: Public telephone boxes available on the quayside.

GENERAL: Flag of Northern Cyprus to be hoisted on mast from 0800 hrs. to Sunset.

Landing of dogs or other animals not allowed. Disposal of garbage and waste strictly prohibited both in port and territorial waters. Garbage and waste are collected by the municipality against a nominal fee, through Agents.

Charts: Relevant Admiralty Publications: B.A. Chart 847, 851, List of Lights Vol. E., Mediterranean Pilot Vol. V., Tide Tables Vol. I. (European Waters).

Free Port: Part of the Outer Harbour is being used as a Free Port, adjacent to which is the Industrial Free Zone with a maximum development area of 554,964 sq.m.

The Free Port and Zone is managed by the Free Port Manager who is responsible to the Board of Directors and function under the auspices of the Ministry of Trade and Industry.

Directorate: Tel: 036-66164, 036-64775. Telex: 57140 Mslb Tk.

SERVICES: Compass adjusting; radar repairs; scraping and painting ship's sides.

BANKS: Messrs., Midland Bank (Overseas Branch) Ltd., in the U.K. is the official correspondent of the following local Banks:

Name	*Address*	*Telex:*
Turkish Bank Ltd.	Famagusta	57138 Trba Tk 57103 Otaf Tk
Is Bank (A.S.)	Famagusta	57179 Isbm Tk
Credit Bank Ltd.	Famagusta	57246 Kklb Tk

STORING: See "Prelims" on page viii.

1. Vessel can be stored by barge or truck.
2. No regulations concerning barge storing. Customs Stores Regulations applicable.
3. Trucks can proceed alongside at the berth from a close distance of 2 ft. from the edge of the quay walls.
4. Fork lift trucks can be used on the jetty to handle storing.
5. Customs storage charges in force.
6. Local Riggers can be employed to assist with storing.

SHORE LEAVE: All crew members allowed ashore after free pratique granted. Each crew member to carry Landing Card.

REGULATIONS: Authority is required from Harbour Master: for immobilising engine for cleaning or repairs whilst vessel alongside quay; for lowering lifeboats; for using ship's radio; for sailing (Port and Customs Clearances are required).

Ships berth by rotation according to time of arrival. However, passenger and cruising vessels as well as ferryboats can berth (maximum 2 berths) on priority.

DELAYS: Delays in berthing are very seldom. Slight congestion of 1 or 2 days during citrus export season.

AUTHORITY: Ministry of Communications & Works, Department of Ports, Famagusta, Northern Cyprus.

Postal Address: The Director of the Department of Ports, Famagusta (Gazi Magosa) via Mersin 10, Turkey. *Tel:* 036-62626, 036-62627, 036-62951. *Contact:* Necati S. Kadir, Director of Ports.

Harbour Master's Office: *Tel:* 036-65388, 036-64790.

Also see "General".

TIME: GMT plus 2 hours. Summertime GMT plus 3 hours in force from last Sunday in March to last Sunday in September.
POLICE/AMBULANCE/FIRE: Tel: Police 75611; Ambulance 63111, Fire Brigade 52191 or 999.
TELEPHONES: Available on request, for placing on board.
SERVICES: Compass adjusting, servicing of radar, R/T, echo sounders.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Shore leave passes are issued. Seaman's Book or Passport required whilst ashore.
SHIP SUPPLY SERVICES:

1. Brasal Off-Shore Services Limited, P.O.Box 1518, Limassol.
2. Vasos Aivaliotis Limited, 4 Ermou Street, P.O.Box 110, Limassol.
3. Messrs. Thesseas Savva, 118 Franklin Roosevelt Avenue, P.O.Box 114, Limassol.
4. Mercury Divers Company Limited, P.O.Box 114, Limassol.

REGULATIONS: Port Manager's permission is required for: immobilising engine, cleaning or repairs whilst vessel alongside quay, lowering lifeboats and use of ship's radio. Port and Customs clearance required before departure. Cyprus flag to be hoisted on mast from 0800 hrs. to sunset. Landing of dogs or other animals not allowed; also discharging of fruits, vegetables and eggs unless authorised by Produce Inspection Office. Disposal of garbage and waste strictly prohibited both in port and Cyprus waters.
DELAYS: According to prevailing circumstances but normally no delays.
GENERAL: Weather conditions permit entrance and working of ships all the year round.
DEVELOPMENTS: A new administration complex expected to be operating by end of 1984.
AUTHORITY: Cyprus Ports Authority, Headquarters, 23 Crete Street, P.O.Box 2007, Nicosia, Cyprus. *Tel:* 50100. *Telex:* 2833 Cypa. *Cables:* Cyports. *Contact:* The General Manager.

Limassol Port, Limassol, Cyprus. *Tel:* 65246 or 66022 (Limassol). *Cables:* Port Manager, Limassol. *Contact:* John Ghighis, Port Manager.

AGENT: Gulf Agency Co. (Cyprus) Ltd., P.O.Box 1141, Limassol, Cyprus. Tel: 68222/8. Telex: 2817 and 2744 ("Gacship Cy"). Cables: "Gacship", Limassol.

MONI: 34.42 N. 33.11 E. (See Plan Book)

Sovereign Base Area
DOCUMENTS:

3 Crew Lists.
4 Passenger Lists.
1 Arrival Declaration
1 Crew Declaration.
1 Store List (for cigarettes, spirits, etc).
2 Manifests.(Custom forms).

PILOTAGE: Compulsory for berthing. The tanker berth is situated in open roadstead. Pilot available through Harbour Master at Limassol.
MAX. SIZE: Tankers up to 600 ft. length with max. draft 40 ft.
HEALTH: Pratique granted by Health Authorities after boarding on arrival. No pratique necessary when vessel arrives from another port in Cyprus.
RADIO: Communication by Walkie-talkie
TUGS: Available.
BERTHING: Electricity Authority of Cyprus. Three conventional buoy mooring for tanker discharging fuel oil to Moni Power Station. Depth of water 18.20 m.

Cyprus Cement Factory. Depth of water 9.75 m.

MEDICAL: Necessary for agent to receive advance notice of medical attention required. Hospital facilities available.
TANKERS: Flange at end of flexible line is ASA 300 – 15 in. OD. (12×1 in. holes. 13 in. P.C.D.)

Loading signals – 1 blast, stop pumping. 2 blasts start pumping.

DENSITY: 1025
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: See "Larnaca".
IDENTIFICATION CARDS: When on shore leave, seamen's books required.
TIME: GMT plus 2 hours. No changes during the year.
SHIP SUPPLY SERVICES:

1. Brasal Off-Shore Services Limited, P.O.Box 1518, Limassol.
2. Vasos Aivaliotis Limited, 4 Ermou Street, P.O.Box 110, Limassol.
3. Messrs. Thesseas Savva, 118 Franklin Roosvelt Avenue, P.O.Box 114, Limassol.
4. Mercury Divers Company Limited, P.O.Box 114, Limassol.

AUTHORITY: Electricity Authority of Cyprus (Headquarters), P.O.Box 4506, Nicosia, Cyprus. *Tel:* 62001 (Nicosia). *Telex:* 2432 Grid Cy. *Cables:* Grid Nicosia. *Contact:* The General Manager.

Moni Power Station, Electricity Authority of Cyprus, P.O.Box 471, Limassol, Cyprus. *Contact:* Power Station Superintendent.

VASSILIKO BAY: 34.43 N. 33.19 E.

LOCATION: 13.5 miles due East of Limassol and 1.5 miles West of Zyghi (Lat. 34° 42′ 46″ N., Long. 33° 18′ 37″ E.)
PILOTAGE: Pilots available for berthing and shifting operations. Can be contacted on VHF Channel 16, working frequency 12. Owners or Master of vessel must give by cable/radio ("Helco Nicosia" or "Vascem Nicosia" 48) notice of vessel's ETA 24 hours in advance. Message of ETA must also include:

(a) Name/call sign of vessel.
(b) Nationality.
(c) Length, draft, gross and n.r.t.

Tugs available from Larnaca port. 12 hours' notice in advance is required.

MAX. SIZE: Vessel's LOA, 150 m.; Breadth, no restriction; Draft 8.40 m.
HEALTH: For Pratique, vessel must cable name and nationality, last port of call, number of crew and passengers, and condition of health on board. For vessels calling first at another port in Cyprus, pratique is automatic.
RADIO: "Cyprus Radio".
BERTHING: Length of quay, 540 m. Depth at LW, 9 m.
LOAD/DISCHARGE: Can be effected by shore equipment and/or ship's own gear.

Bulk cargoes (i.e. Pyrites, Cement, Copper, Chrome, Ore, Gypsum Rock, Phosphate Rocks, Coal, etc.) and liquid chemical cargoes (i.e. Liquid Ammonia, Sulphuric Acid).

CRANES: 3 mobile cranes of 30 tonnes SWL capacity each are constantly available. Services of an 80 tonne mobile crane can be also secured on request.
SPECIALISED CARGO-HANDLING FACILITIES: Facilities for roll-on/roll-off traffic and for handling liquid chemicals are available.
TANKERS: One pipe-line to buoy berth, depth of water, 12.19 m. Position of buoys, Lat. 34° 42′ 42″ N., Long. 33° 18′ 42″ E.
FRESH WATER: Available.
FUEL: Full bunkering facilities available, provided by tank tankers or a small tanker.
OPENING/CLOSING HATCHES: Ship's crew.
REPATRIATION: Crew changes and repatriation facilities available.
AIRPORT: Distance 35 miles; served by regular operators.
TIME: GMT plus 2 hours.
HOLIDAYS: 1st January, 6th January, 25th February, 25th March, 1st April, 12th April, 13th April, 15th April, 1st May, 3rd June, 15th August, 1st October, 28th October, 24th December, 25th December, 26th December.

Port workers will abstain from work on 1st January, 13th April, 14th April, 15th April, 1st May, 15th August and 25th December, but they may normally work on overtime basis during the rest of the holidays.

AUTHORITY: Vassiliko Cement Works Ltd., Headquarters, P.O.Box 2281, Nicosia, Cyprus. *Tel:* 42005-10 (Nicosia). *Telex:* 2039 Vascem Cy. *Cable:* Vascem, Nicosia.

NOTES

Please also advise Shipping Guides Ltd.

Turkish Republic of Northern Cyprus

FAMAGUSTA: 35.07 N. 33.57 E. (See Plan Book)

DOCUMENTS:

1 Arrival Declaration Form.
1 Maritime Declaration of Health.
1 Crew List.
4 Passenger Lists.
1 List of Ship's Stores.
1 Personal Declaration of Crew (wines, spirits, tobacco, cigarettes, cigars, jewellery, cameras, watches, arms and ammunition, etc.)
1 Appointment of Agent Form.
1 Cargo Manifest (If not forwarded by airmail).
1 Dangerous Cargo List.

PILOTAGE: Masters to cable ETA 24 hours before arrival to Agents so as to enable them to arrange berthing and pilotage. Pilotage is compulsory for ships in excess of 300 g.r.t.

In normal weather conditions Pilot boards vessel at Turning Buoy or at anchorage. In rough weather conditions, Pilot may advise Master to proceed to entrance of Outer Harbour, where Pilot will board the vessel. Communications between pilot stations and vessels approaching port and/or anchored at roadstead by VHF Channel 16.

Pilot Boat: Open motor launches, light grey colour, flying Pilot's flag, light and sound signals for Pilot.

Requirements: International signals apply.

ANCHORAGES: Vessels not berthing on arrival, to anchor at roadstead; East of flashing buoy (Lat. 35° 08′ 55″ N., Long. 33° 56′ 06″ E.) which marks the entrance to the channel.

Exposed to: N.E., E. and S.E. winds. In case of very bad weather, a safe anchorage to be sought further North, near Boghaz area.

Small vessels may anchor within the breakwater in depth of 5.5 m. to 7.3 m.

RESTRICTIONS: Passenger vessels (Vessels built to carry more than 12 passengers) allowed to enter port up to 2300 hrs., provided such vessels will be at Turning Buoy by that time and also if berth space is available.

Cargo vessels allowed to berth until sunset provided berth space is available.

No tide restrictions, but for vessels entering Inner Basin max. draft 22 ft. and for Outer Basin max. draft 30 ft.

MAX. SIZE:

Inner Harbour: Max. permissible draft 6.7 m. (22 ft.)
Max. permissible LOA 131 m. (430 ft.)
Outer Harbour: Max. permissible draft 9.15 m. (30 ft.)
Max. permissible LOA 220 m. (722 ft.)

Height of quay above sea level is 1.8 m.

The approach channel to the Outer Harbour is 10.30 m. deep and mean width of entrance 183 m. Range of tide: 0.45 m.

HEALTH: Pratique is required only at first port of call in Northern Cyprus. Pratique is granted either before or after berthing as appropriate.

RADIO/VHF: "Northern Cyprus Radio" R/T 2182, VHF Channel 16. Famagusta Pilots equipped with VHF radio-telephone operating on Channel 16 and 14 during office hours.

TUGS: 3 tugs of 410 h.p., 630 h.p. and 1,000 h.p. available. Tugs join vessel at entrance of Outer Basin and ship's lines are used. Use of tugs is at the discretion of Pilot. No charges made for the use of first tug. If more than one tug is required they may be hired on hourly basis.

BERTHING: According to rotation of ships with exception of passenger and citrus ships. Vessels may berth alongside between 0600 hrs. and sunset, unberthing of ships between 0600 hrs. and midnight including weekends and official holidays.

Inner Harbour Quay: Length: 540 m.
Outer Harbour Quay: Length: 655 m.

Ro-Ro vessels may berth either bows on or stern to the quay.

CRANES: A floating crane lifting 60 tons at 20 m. 14 mobile cranes of different lifting capacities.

STEVEDORES: Gangs to be ordered by 1500 hrs. previous day. For Saturday and Sunday work, gangs to be ordered by 1500 hrs. Friday. It is also possible to apply for gangs during the weekdays a.m. and/or p.m. subject to gangs available.

Average rate of discharge: General cargo, 10 – 15 tons, bagged cargo, 15 – 20 t.p.h. per gang.

Working hours weekdays 0800 – 1200 hrs., 1300 – 1700 hrs., overtime work until 2300 hrs. is possible, but with extra charge.

MEDICAL: Advisable for Masters to include in ETA message to Agents if any medical attention required; hospital and private clinic facilities available. Smallpox vaccination necessary; other inoculations or vaccinations according to prevailing circumstances.

DENSITY/TIDE: Mediterranean salt sea water. Difference of 1 ft. – 2 ft. between low and high water.

FRESH WATER: Water hydrants installed alongside quay, both at Inner and Outer Basins and delivery through hoses; rate of delivery 10 – 15 tonnes per hydrant per hour.

Note: Certain limitations to quantities deliverable can be possible during Summer months (June-September) owing to general shortage of water.

FUEL: No bunkering facilities alongside quay. Limited fuel deliveries to vessels alongside quay can be made by lorry tankers of 8 – 10 tons each.

GANGWAY/DECK WATCHMEN: Not obligatory, but may be used if Master requires.

OPENING/CLOSING HATCHES: Carried out by ship's crew; stevedores on board are sometimes willing to assist but they are not obliged to do so.

CARGO GEAR: Mostly supplied by shore stevedores or other contractors against payment. Any gear supplied by the vessel should be certified to the effect that it is tested and found to be suitable for the purpose used.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams tobacco, and 0.75 cl. spirits, 0.75 cl. wine per man per week.

For reasons of administrative convenience, issues of high duty goods for use by crew on board is being made every week.

The Master, Chief Officer and the Chief Steward of ocean going vessels may be granted more quantities of the above high duty goods as may be considered reasonable by Customs Authorities, on request.

The above allowances are in force in all Northern Cyprus ports.

IDENTIFICATION CARDS: Passports and/or sailor's passes are accepted by the Police and Immigration Authorities.

On ship's arrival, passports and/or sailor's passes are retained by the Immigration Authorities against the issue of Landing Cards which are used until the ship's departure when the passports and/or sailor's passes are returned to the Master.

REPAIRS: Minor repairs for deck and engine can be carried out at local workshop. Cement boxes and plating both above and underwater can be carried out.

DRY DOCKS: No dry docks. 2 slipways operate at South end of port and can take vessels up to 500 tons burden.

SURVEYORS:

(1) Cargo surveyors available.
(2) Refet L. Egemen & Co., Nicosia. Sub-Agent of Catoni Agents, Mersin, Turkey, who are the representative of Lloyd's in Mersin, Turkey (for insurance purposes but not for classification).

AIRPORT: Ercan Airport, 30 miles from Famagusta. Connections to U.K. and Middle East countries via Turkish airports.

TIME: GMT plus 2 hours.

HOLIDAYS: Recurrent official port and Customs holidays:

First weekday of January, 13th February, 23rd April, 1st May, 19th May, 27th May, 20th July, 30th August, 29th and 30th October, Ramazan Bairam (1st, 2nd and 3rd days), Kourban Bairam (1st, 2nd, 3rd and 4th days), Birthday of Prophet.

If the above holidays fall on a Sunday, the following day is considered to be an official holiday.

All ports closed for work with the exception of shipping traffic on New Year's Day and on 1st May.

POLICE/AMBULANCE/FIRE: Police Headquarters Tel: 036-65310, 036-65321. Ambulance Tel: 036-65328, 036-62876. Fire Brigade Tel: 036-65389.

EMERGENCY CO-ORDINATION CENTRE: Not specially available, but Famagusta pilot station Tel: 036-65388, 036-64790 and/or Port Headquarters Tel: 036-62626, 036-62627, 036-62951 may be of assistance.

TELEPHONES: Public telephone boxes available on the quayside.

GENERAL: Flag of Northern Cyprus to be hoisted on mast from 0800 hrs. to Sunset.

Landing of dogs or other animals not allowed. Disposal of garbage and waste strictly prohibited both in port and territorial waters. Garbage and waste are collected by the municipality against a nominal fee, through Agents.

Charts: Relevant Admiralty Publications: B.A. Chart 847, 851, List of Lights Vol. E., Mediterranean Pilot Vol. V., Tide Tables Vol. I. (European Waters).

Free Port: Part of the Outer Harbour is being used as a Free Port, adjacent to which is the Industrial Free Zone with a maximum development area of 554,964 sq.m.

The Free Port and Zone is managed by the Free Port Manager who is responsible to the Board of Directors and function under the auspices of the Ministry of Trade and Industry.

Directorate: Tel: 036-66164, 036-64775. Telex: 57140 Mslb Tk.

SERVICES: Compass adjusting; radar repairs; scraping and painting ship's sides.

BANKS: Messrs., Midland Bank (Overseas Branch) Ltd., in the U.K. is the official correspondent of the following local Banks:

Name	*Address*	*Telex:*
Turkish Bank Ltd.	Famagusta	57138 Trba Tk 57103 Otaf Tk
Is Bank (A.S.)	Famagusta	57179 Isbm Tk
Credit Bank Ltd.	Famagusta	57246 Kklb Tk

STORING: See "Prelims" on page viii.

1. Vessel can be stored by barge or truck.
2. No regulations concerning barge storing. Customs Stores Regulations applicable.
3. Trucks can proceed alongside at the berth from a close distance of 2 ft. from the edge of the quay walls.
4. Fork lift trucks can be used on the jetty to handle storing.
5. Customs storage charges in force.
6. Local Riggers can be employed to assist with storing.

SHORE LEAVE: All crew members allowed ashore after free pratique granted. Each crew member to carry Landing Card.

REGULATIONS: Authority is required from Harbour Master: for immobilising engine for cleaning or repairs whilst vessel alongside quay; for lowering lifeboats; for using ship's radio; for sailing (Port and Customs Clearances are required).

Ships berth by rotation according to time of arrival. However, passenger and cruising vessels as well as ferryboats can berth (maximum 2 berths) on priority.

DELAYS: Delays in berthing are very seldom. Slight congestion of 1 or 2 days during citrus export season.

AUTHORITY: Ministry of Communications & Works, Department of Ports, Famagusta, Northern Cyprus.

Postal Address: The Director of the Department of Ports, Famagusta (Gazi Magosa) via Mersin 10, Turkey. *Tel:* 036-62626, 036-62627, 036-62951. *Contact:* Necati S. Kadir, Director of Ports.

Harbour Master's Office: *Tel:* 036-65388, 036-64790.

Also see "General".

KALECIK (Gastria Bay): 35.19 N. 33.59 E. (See Plan Book)

DOCUMENTS: See "Famagusta".
PILOTAGE: Not compulsory. If required, supplied from Famagusta.
ANCHORAGES: Anywhere within the limits of Gastria Bay. Occasional storms mainly from North, N.E. and N.W. directions. No hazards or sandbars exist. Vessels can approach from any direction as there is no approach channel.
NAVIGATION AIDS: Soon after the construction of the installations it was deemed necessary to establish a lighthouse in the vicinity of Cape Elia.

Characteristics:
Name: Cape Elia Lighthouse.
Place: 10 nautical miles N.E. of Famagusta.
Position: Lat. 35° 19.5′ N., Long. 34° 02.8′ E.
Characteristics of Light: Fl. 10 secs.
Range of Light: 15 nautical miles.
Period and Phase: Fl. 1 sec., ec. 9 secs.
Arc of Visibility: 360°.
Colour and Peculiarity of Lighthouse: Concrete tower with horizontal black and white stripes.
Height in metres of building from base to vane: 11 m.
Height in metres of centre of lantern above MHWS: 31 m.

RESTRICTIONS: None, but advance notice should be given by cable.
HEALTH: See "Famagusta".
RADIO/VHF: No radio or VHF facilities at this port. Ships calling at Kalecik should communicate with Northern Cyprus Radio or Famagusta Pilot Station.
TUGS: Not required. Private mooring boats available to assist in the mooring operations.
BERTHING: Tanker terminal with underwater pipe-lines extending 410 m. into the sea. Operated by Cyprus Turkish Petroleum Products Co. Ltd. Lat. 35° 19.1′ N., Long. 33° 59.4′ E.

Ships moored between two buoys which have a distance of 160 m. from one to the other, also using anchors. Max. depth 9.0 m.

Concrete Pier with a conveyor belt and crane. Operated by Boghaz Industry & Mining Co. Ltd. which solely used for exportation of cement, etc. Lat. 35° 19′ N., Long. 34° 00.1′ E.

Length of the pier 42 m. At a distance of 44 m. from the far end of the pier there is a dolphin used for mooring purposes. Ships of 100 m. LOA may have a safe berth alongside. Depth of the water alongside the pier is 6.0 m. Installation suitable for unloading and/or loading of bulk and bagged cargoes with a maximum hourly rate of 250 tons.

STEVEDORES: Privately arranged by the Shippers.
MEDICAL: See "Famagusta".
TANKERS: See "Berthing".
DENSITY: Not affected by tide.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: See "Famagusta".
CARGO GEAR: Ship's gear.
IDENTIFICATION CARDS: See "Famagusta."
REPAIRS: Minor deck and engine repairs may be carried out by local workshops.
DRY DOCKS: No dry docks.
AIRPORT: Ercan Airport 50 miles from port.
TIME: GMT plus 2 hours.
HOLIDAYS: See "Famagusta".
POLICE/AMBULANCE/FIRE: See "Famagusta".
TELEPHONES: Available at the nearby installations.
GENERAL: Flag of Northern Cyprus to be hoisted on mast from 0800 hrs. to sunset.
SERVICES: See "Famagusta".
SHORE LEAVE: All crew members allowed ashore after free pratique granted.
REGULATIONS: Authority is required from the Harbour Master Famagusta for using ship's radio. For sailing, Port and Customs Clearances are required.
DELAYS: No delays.
AUTHORITY: Harbour Master and Senior Pilot – Famagusta.
Tel: 036-65388, 036-64790.

KYRENIA: 35.20 N. 33.19 E. (See Plan Book)

DOCUMENTS: See "Famagusta".
ANCHORAGES: N.W. of the entrance light (Lat. 35° 20′ 18″ N., Long. 33° 19′ 24″ E.) 0.5 miles off and in an approx. depth of 12 – 13 fathoms. Exposed to N.W. and Easterly winds.
RESTRICTIONS: Breakwater Harbour.

Channel: The approach channel 5.5 m. deep and decreasing to 3.0 m. from the lighthouse towards the basin.
Depth within the basin: 3.2 m.
Depth alongside the quay walls: 3.0 m.

MAX. SIZE: Max. permissible draft 2.6 m. (8.5 ft.). Max. permissible LOA: 35 m.
HEALTH: See "Famagusta".
RADIO/VHF: R/T 2182 and VHF Channel 16 (office hours only).
TUGS: A small tug of 150 h.p. and a motor launch of 80 h.p. available.
BERTHING: See "Developments".
FRESH WATER: Available.
FUEL: By tanker lorries.
DRY DOCKS: A slipway in the Eastern corner of the basin suitable for slipping small pleasure craft with a max. length of 10.0 m. (All minor repairs may be carried out).
CUSTOMS ALLOWANCES: See "Famagusta".
AIRPORT: Ercan Airport, 25 miles from port.
TIME: GMT plus 2 hours.
HOLIDAYS: See "Famagusta".
POLICE/AMBULANCE/FIRE: Police Headquarters Tel: 081-52125, 081-52014, 081-52015. Ambulance Tel: 081-52266. Fire Brigade Tel: 081-52111.
TELEPHONES: No arrangements exist for placing on board.
SERVICES: Compass adjusting, radar repairs, scraping and painting ship's sides.
SHORE LEAVE: All crew members allowed ashore after free pratique granted.
IDENTIFICATION CARDS: See "Famagusta".
REGULATIONS: Authority required from Harbour Master for cleaning or repairs of the vessel, for lowering lifeboats, for using ship's radio. For sailing, Port and Customs Outward Clearances are required.
GENERAL: Kyrenia Harbour is mainly used by yachts and small fishing boats. However the port may be used by small passenger ferry boats and hydrofoils during the Summer i.e. 16th April to 1st November. Very little cargo, exception fish and fruit, passes through this port. No facilities for cargo operations.

Flag of the Northern Cyprus to be hoisted on mast from 0800 hrs. to sunset.

Landing of dogs or other animals not allowed. Disposal of garbage and waste strictly prohibited both in port and territorial waters. Garbage and waste are collected by the municipality against a nominal fee, through Agents.

Relevant Admiralty publications: B.A. Charts 2632, 237, 2074, 2606. Mediterranean Pilot: Vol. V. List of Lights: Vol. E.

DEVELOPMENTS: Construction of a new harbour with a quay of max. length of 300 m. (max. depth approx. 8.0 m.) providing berthing facilities for ro-ro and motor ferries and at least two landing stages for hydrofoils, has already been started and it is anticipated that the new harbour will be operational early in 1986.
AUTHORITY: Harbour Master, Kyrenia. *Tel:* 081-52100.

XEROS (Karavostassi – Morphou Bay): 35.08 N. 32.50 E. (See Plan Book)

DOCUMENTS: See "Famagusta".
PILOTAGE: Not available, but obtainable from Famagusta Port if Master considers necessary. Guidance to the moorings given by the harbour launches.
ANCHORAGES: Anywhere 1 mile offshore between Vouni Palace and Pendayia Hospital, which is exposed to West and North winds.
RESTRICTIONS: None, but advance notice should be given by cable.
HEALTH: See "Famagusta".
RADIO/VHF: "Northern Cyprus Radio" R/T 2182, VHF Channel 16.
TUGS: Not required. Two motor launches available for assisting in mooring operations.
BERTHING:
Xeros Pier: Lat. 35° 08′ 16″ N., Long. 32° 49′ 14″ E. Length 400 ft., depth of water on the far end of the jetty 11 ft. Jetty equipped with an electric crane of 5 tons lifting capacity.
Iron Jetty: Lat. 35° 08′ 18″ N., Long. 32° 50′ 10″ E. Jetty installed with conveyor and extends 433 m. into sea. Installation suitable for ore loading, depth of water alongside pierhead about 10 fathoms. Ships berth on the far end of the jetty with supporting lines run to the mooring buoys, also using their anchor and/or anchors according to the prevailing weather conditions.
STEVEDORES: Arranged by shippers.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: See "Famagusta".
AIRPORT: Ercan Airport 53 miles from port.
TIME: GMT plus 2 hours.
HOLIDAYS: See "Famagusta".
POLICE/AMBULANCE/FIRE: Police Headquarters Tel: 07717-322. Ambulance Tel: 07717-351. Fire Brigade Tel: 071-42200.
SHORE LEAVE: Crew members allowed ashore.
REGULATIONS: Ship's boat may be lowered and used with the permission of the Officer-in-Charge.
DELAYS: Very seldom.
GENERAL: Flag of Northern Cyprus to be hoisted from 0800 hrs. to sunset.
AUTHORITY: Officer-in-Charge, Port and Customs Department.
Tel: 07717-340, 07717-334.

Denmark

GENERAL (See Plan Book)

CUSTOMS ALLOWANCES: For use on board during the stay in Denmark a total of 40 cigarettes or 40 grammes of tobacco, 0.25 litres of alcohlic liquors and 0.25 litres of wine can be released per member of the crew a day.

Tobacco may be released for 5 days' consumption at a time, i.e. 200 cigarettes, alcoholic liquors and wine may be released for 3 or 4 days' consumption, i.e. 1 bottle containing 0.25 or 1.0 litres.

ROUTEING: A routeing system has been established, so ships with a draft up to 17 m. (55.77 ft.) can pass the Great Belt. Ships bound for the Baltic are restricted to a draft of 15 m. (49.21 ft.) owing to shallow waters N.E. of Gedser.

For the passage through Danish waters by ships with a d.w.t. of more than 40,000 tons or with a draft of 13 m. or more, we would like to draw your attention to the "IMO–recommendation of Nov. '75 on navigation through the entrances to the Baltic Sea", and to the radio reporting system established by the Danish Ministry of Commerce.

ROUTE "T" (17 metres Transitroute) – THE SOUND – RADIO REPORTING SERVICE (Shippos): With the object of ensuring the safety of navigation of large ships passing through Danish waters and also of reducing the risk of oil pollution resulting from the grounding and collision of tankers, the Danish Government has established a transitroute between Skagen and the area N.E. of Gedser with a minimum depth of water of 17 m. The route is named "Route T".

The route is marked by lightbuoys and lights, the Decca coverage is good and Danish Pilot assistance is available. Portable Decca equipment can be hired for use during the passage through Danish waters and can be taken on board at the pilot stations Skagen or Allinge (Bornholm). Under ice conditions Danish icebreakers, as far as possible, render a free assistance to shipping.

In spite of the good buoyage, navigation through Danish waters presents, however, in certain areas difficulties to large ships on account of narrow waters, sharp bends, strong currents and shallow depths. Furthermore there is an intensive East and Westbound ferry traffic in Store Baelt, particularly in the area immediately South of Sprogo.

Therefore a radio reporting service (SHIPPOS) has been established the rules of which are given in the following.

The Inter-Governmental Maritime Organisation (IMO) has adopted a recommendation on navigation through the entrances to the Baltic Sea according to which ships with a deadweight-tonnage of over 40,000 tons or with a draft of 13 m. or more shall fulfil certain conditions about equipment, navigation, etc.

IMO has furthermore adopted a recommendation according to which certain tankers shall use Pilot when navigating in the Sound.

The Baltic Sea States have established a radio position reporting system which provisionally with a trial period of two years is in force from the 1st July, 1981. This system forms an integral part of the Danish SHIPPOS-system, which means that ships in Danish waters shall only send reports according to the SHIPPOS-system.

Ships to which the Baltic system apply and which

1. are navigating in the Baltic Sea Area East of the SHIPPOS-reporting line of "MOEN",
2. pass the line Stevns Klint – Falsterbo, or
3. arrive at or depart from harbours on the Swedish West coast, in the Federal Republic of Germany (Baltic coast) and in the German Democratic Republic

shall send reports according to the rules of the Baltic radio position reporting system, which are published in the Danish Notices to Mariners.

Rules concerning radio reporting service in Danish waters – SHIPPOS:

1. With the objects of ensuring the safety of navigation and of reducing the risk of pollution of Danish coasts and waters as may result from grounding or collision of oil tankers, gas carriers and chemical tankers a reporting service has been established for the purposes mentioned below:
   a. To inform shipping about large ships' movements, so that smaller ships can take into account the limited manoeuvrability of those and in order to avoid the risk of large ships meeting one another in areas difficult to pass.
   b. To inform ships about navigational hazards en route and deviations from normal conditions of current, water level, and wave height.
   c. To notify the ferry traffic South of Sprogo about the passage of large ships.
   d. To facilitate the authorities early and effective pollution combatting action in case of an accident.
   e. To notify the authorities immediately about any deficiency which could affect safe navigation and the marine and coastal environment, and about ships' observation of considerable pollution.
2. The reporting service applies to:
   a. all ships of 20,000 tons gross tonnage and above,
   b. all ships with a draft of 13 m. and more,
   c. all loaded chemical tankers of 1,600 tons gross tonnage and above, and
   d. all loaded gas carriers of 1,600 tons gross tonnage and above.
3. Messages to the reporting service shall be sent over a Danish coast radio station as telegrams addressed to SHIPPOS Aarhus.

The transmission of reports from ships is free of charge.

Information about position of large ships, mentioned under 2, a. or b., participating in the radio reporting service will be broadcast over VHF as "SHIPPOS INFORMATION" by the coast radio stations Lyngby Radio and Skagen Radio.

The broadcast will include information about actual water levels and serial numbers of Navigational Warnings in force for Route T.

The broadcast will be preceded by an announcement over Channel 16, informing about the Channel used for the broadcast.

The information will be broadcast every third hour according to the table below, preferably by using the mentioned Channels. Other Channels might be used, which – if occasion should arise – will appear from the preceding announcement on Channel 16.

Position of VHF-station	*VHF-Channel*	*Time GMT*	*Serviced by*
Skagen	4	0220, 0520, 0820, etc.	Skagen Radio
Laeso	2		
Arnholt	7	0205, 0505, 0805, etc.	Lyngby Radio
Fornaes	5		
Rosnaes	2		
Langeland	5	0220, 0520, 0820, etc.	Lyngby Radio
Hyldager	25		
Mon	2		

4. Ships which are **inward bound** en route to a Danish port or to the Baltic Sea shall when passing the latitude through Skagen Rev (57° 45′ N.) send a *Sailing Plan* (see "Drafting of Messages") to "SHIPPOS Aarhus".

During their voyage ships shall send *Position Reports* (see "Drafting of Messages") when passing the following latitudes (reporting lines) (see Plan Book):

a. 56° 45′ N.
b. 56° 00′ N.
c. 55° 40′ N.
d. 54° 40′ N. (West of Gedser)
e. When passing Sundet N.
f. When passing the position of Mon S.E. Lightvessel.

Ships **outward bound** (from the Baltic Sea) shall when passing the position of Mon S.E. Lightvessel send a *Sailing Plan* and during their voyage send *Position Reports* when passing the reporting lines mentioned above under a.–e.

5. Ships which en route through Danish waters do not pass the latitude through Skagens Rev or the position of Mon S.E. Lightvessel shall in sufficient time before passing first reporting line during the voyage send a *Sailing Plan* to "SHIPPOS Aarhus".

6. Upon **arrival** at a Danish port and when passing the latitude of Skagens Rev outward bound ships shall send a *Final Report* (see "Drafting of Messages") to "SHIPPOS Aarhus".

7. About two hours before **departure** from a Danish port ships shall send a *Sailing Plan* to "SHIPPOS Aarhus".

8. If destination is changed, or if after transmission of a report **changes** occur which result in a time difference of more than 30 minutes from the estimated time of passing the next reporting line, or – for ships en route to a Danish port – the estimated time of arrival, the ship shall as soon as possible send a *Change Report* (see "Drafting of Messages") to "SHIPPOS Aarhus".

9. If during the voyage through Danish waters deficiencies occur, which might reduce the normal and safe manoeuvring capabilities of the ship, or a situation arises, which can endanger the marine environment and the adjacent areas, ships shall as soon as possible send an *Incident Report* (see "Drafting of Messages") to "SHIPPOS Aarhus". An Incident Report shall also be sent when observing a considerable pollution by oil or another substance, which is considered to be harmful to the marine and coastal environment.

10. Due to the intense East- and Westbound ferry traffic in Store-Baelt South of Sprogo the following special rules apply for ships of 20,000 tons gross tonnage and above and for ships with a draft of 13 m. and more when navigating in this area:

About one hour before passing the ferry route the ferries shall if possible be informed thereof on VHF. The call shall be made on Channel 16 and the information should be sent on Channel 10 or another available Channel (see "Drafting of Messages").

Ships which cannot operate VHF are requested to inform "SHIPPOS Aarhus" two hours before passing the ferry route about the estimated time of the passing.

Upon receipt of such information the ferries will endeavour to navigate so that risk of collision, as far as possible, does not arise. If, nevertheless, risk of collision does arise, the International Regulations for Preventing Collisions at Sea must always be applied.

This special rule can also apply for ships with a draft of 10 m. and more regardless of tonnage.

Drafting of messages:

1. Messages transmitted in accordance with the Rules concerning radio reporting service in Danish waters shall be sent over a Danish coast radio station as telegrams addressed to SHIPPOS Aarhus.

To ensure brevity of messages and to reduce the possibilities of mistakes the following designations shall be used for reporting lines (see Plan Book):

Latitude 57° 45′ N.: SKAGEN
Latitude 56° 45′ N.: ANHOLT W. or ANHOLT E.
Latitude 56° 00′ N.: HATTER
Latitude 55° 40′ N.: ASNAES
Latitude 54° 40′ N.: KELDSNOR or ALS
The line Nakkehoved – Kullen: SUNDET N.
Position of Mon SE. Lightvessel: MOEN

Positions, other than the above mentioned, shall be given in latitude and longitude or by stating name of port.

2. All messages shall begin with the word BAREP ("BALTIC REPORT") as the first word in the text.

The messages shall be drafted according to the following format:

Information	*Designator*	*Text*
Code-word		BAREP
Type of Report	A	(a 2-letter group:) "SP" (Sailing Plan) "PR" (Position Report) "FR" (Final Report) "CR" (Change Report) "IR" (Incident Report)
Ship	B	(Name/Call sign)
Date/Time (GMT)	C	(a 6-digit group giving day of month – first two digits – hours and minutes – next four digits – suffixed by "ZULU") (e.g. 041330Z)
Position	D	(reporting line) (name of departure port) or (name of arrival port)
	X	(a 4-digit group giving latitude in degrees and minutes suffixed by "N" and a 4-digit group giving longitude in degrees and minutes suffixed by "X") (e.g. 5610N 1230E)
True course	F	(a 3-digit group)
Speed in knots	G	(a 2-digit group)
Route information	H	(intended route) (e.g. "Route T", "via Sundet" or "West of Samso")
Destination and ETA (GMT)	I	(destination port and a 6-digit group as under "C" suffixed by "ZULU")
Estimated time (GMT) of passing next reporting line and its designation	K	(a 6-digit group as under "C" suffixed by "ZULU" and reporting line)
Miscellaneous:	L	
Cargo		"CARGO" (general type and amount of cargo)
Draft		"DRAFT" (draft in metres)
Pilot		"PILOT" (if Pilot is on board)
IMO-certificate (only when transporting chemicals or liquefied gas in bulk)		"IMO" (if ship is in possession of a certificate of acceptance according to the IMO-code for the construction and equipment of ships carrying dangerous chemicals in bulk and liquefied gases in bulk)
Deficiencies		"DEFICIENCIES" (1. deficiencies which can reduce normal manoeuvring capabilities 2. accidents which might cause pollution 3. spill of oil or other harmful substances 4. observation of considerable pollution)

3. The different types of reports shall contain information according to the following table:

Type of report	A	B	C	D/E	F	G	H	I	K	L Cargo	L Draft	L Pilot	L IMO	L Deficiencies
SP	XX	XX	XX	XX	—	XX	XX	XX	XX	XX	XX	XX	XX	X
PR	XX	XX	XX	XX	X	—	X	—	XX	—	—	X	—	X
FR	XX	XX	XX	XX	—	—	—	—	—	—	—	X	—	X
CR	XX	XX	XX	XX	X	X	X	X	X	—	—	—	—	X
IR	XX	XX	XX	XX	—	—	—	—	—	XX	—	XX	XX	XX

XX = always to be included
X = to be included if appropriate

4. *Sailing Plan* ("SP") shall be sent
(a) when passing latitude 57° 45′ N. ("SKAGEN") inward bound,
(b) when passing the position of Mon SE. Lightvessel ("MOEN") outward bound (leaving the Baltic Sea),
(c) in sufficient time before passing the first reporting line during the voyage if passage has not taken place as mentioned under (a) or (b), and
(d) about 2 hours before departure from a Danish port.

Specimen Message 1:
SHIPPOS AARHUS =
BAREP

A.	SP
B.	NONSUCH/MBCD
C.	041800Z
D.	SKAGEN
G.	15
H.	ROUTE T – NORTH OF BORNHOLM
I.	KARLSHAMN 052200Z
K.	042300Z – ANHOLT E
L CARGO	FUEL OIL 10,000 TONS
L DRAFT	9
L PILOT	PILOT NOT EMBARKED =

Specimen Message 2:
SHIPPOS AARHUS =
BAREP

A.	SP
B.	NOBODY/DLAN
C.	171000Z
D.	VEJLE
G.	12
H.	ALONG EASTCOAST OF JUTLAND
I.	BERGEN NORWAY 190600Z
K.	171600Z – HATTER
L CARGO	CAUSTIC SODA 600 TONS
L DRAFT	6
L PILOT	PILOT EMBARKED IN FJORD
L IMCO	YES =

5. *Position Report* ("PR") shall be sent when passing
(a) Latitude: 56° 45′ N. ("ANHOLT W." or "ANHOLT E.")
(b) Latitude: 56° 00′ N. ("HATTER")
(c) Latitude: 55° 40′ N. ("ASNAES")
(d) Latitude: 54° 40′ N. ("KELDSNOR" or "ALS")
(e) The line Nakkehoved – Kullen ("SUNDET N.")
(f) Position of Mon SE Lightvessel inward bound ("MOEN")

Specimen Message 3: (Same ship as in Specimen Message No. 1)
SHIPPOS AARHUS =
BAREP

A.	PR
B.	NONSUCH/MBCD
C.	042300Z
D.	ANHOLT E
K.	050230Z – HATTER =

Specimen Message 4: (Same ship as in Specimen Message No. 2)
SHIPPOS AARHUS =
BAREP

A.	PR
B.	NOBODY/DLAN
C.	171600Z
D.	HATTER
K.	171900Z – ANHOLT W
L DEFICIENCIES	GYRO BREAKDOWN =

6. *Final Report* ("FR") shall be sent
(a) when passing Latitude 57° 45′ N. ("SKAGEN") outward bound
(b) upon arrival at a Danish port.

Specimen Message 5:
SHIPPOS AARHUS =
BAREP

A.	FR
B.	NOTHING/FGHS
C.	050230Z
D.	SKAGEN =

7. *Change Report* ("CR") shall be sent if destination is changed or if earlier transmitted times are changed more than 30 minutes.

Specimen Message 6: (The ship in Specimen Message No. 4 will arrive at reporting line ANHOLT W. later than expected)
SHIPPOS AARHUS =
BAREP

A.	CR
B.	NOBODY/DLAN
C.	171800Z
E.	5620N 1130 E
K.	172030Z – ANHOLT W =

8. *Incident Report* ("IR") shall be sent as soon as possible.
(a) when deficiencies occur which might reduce the normal and safe manoeuvring capabilities of the ship, e.g. break-down in the main propulsion engine, steering gear or defect in radar or gyro,
(b) when an accident (e.g. grounding) occurs, which might cause pollution,
(c) in case of spill of oil or other harmful substance, and
(d) when observing considerable pollution, which does not come from own ship.

Specimen Message 7:
SHIPPOS ARRHUS =
BAREP

A.	IR
B.	NONSUCH/MBCD
C.	050125Z
E.	5715 N 1130 E
L DEFICIENCIES.	MAJOR OIL SLICK 2 MILES WEST OF ME =

9. *Passage of the Ferry Route South of Sprogo* shall be reported on VHF to the ferries, call sign FERRYLEADER, about 1 hour before passing. The call shall be made on Channel 16 and the report shall be transmitted on Channel 10 or on another available Channel.

Specimen Message 8:
FERRYLEADER THIS IS SPICA = EXPECT TO PASS SPROGO AT 0830 =

Pilotage within Route T: Pilots performing pilotage duties through Route T (the 17 m. Transit Route) and to Bornholm, can be obtained at Skagens Rev.

For vessels entering Danish waters from the North Sea/Skagerrak Pilots can be ordered from "SKAWPILOT", Skagen, via a coast radio station. The following details are to be given:

1 Name and callsign.
2 ETA position from where pilotage is required.
3 Gross tonnage and draft.
4 Sea speed.
5 Pilotage requirements.

Pilots should be ordered 12 hours prior to ETA Skagens Rev and the message should be confirmed or corrected 3 hours prior to ETA Skagens Rev.

The pilot station keeps a continuous watch on VHF, Channel 16.

Pilots performing pilotage duties through Route T to Skagen can be obtained at Allinge on Bornholm.

For vessels entering Danish waters from the Baltic Sea the Pilots can be ordered from Dragor Pilot Station via a coast radio station. The details to be given are mentioned under 1 – 5 above.

Pilots should be ordered 18 hours prior to ETA Bornholm and the message should be confirmed or corrected 3 hours prior to ETA Bornholm.

Pilots will board vessels either East or West of Hammerodde Lighthouse depending on the weather.

The Pilots have been instructed to act in accordance with the rules of navigation as given in the IMO recommendation on navigation through the entrances to the Baltic Sea and to report on ships not fulfilling the conditions about equipment, signals etc., which are given in the recommendation.

The Pilots have furthermore been instructed, that it may be necessary for ships with a draft of 13 m. or more to anchor owing to the weather and sea conditions and to the sea level, and that ships with a draft of more than 15 m. under normal conditions will not be able to pass through the entrances to the Baltic Sea.

Anchorages: If anchoring is considered necessary the following anchorages should be preferred:

(a) Off Skagen.
(b) Off Sjaellands Rev.
(c) N.W. of Rosnaes.
(d) Off Romso.
(e) Off Keldsnor.

Furthermore anchoring is possible in most places along the route depending on the draft of the ship.

It must be emphasized, that for ships with a draft of 13 m. or more anchoring may be necessary owing to the weather and sea conditions in relation to the size and draft of the ship and to the sea level.

Electronic position-fixing equipment: IMO recommends that ships with a draft of 13 m. (42 ft. 7 in.) or more when navigating through the entrances to the Baltic Sea should have on board suitable electronic position-fixing equipment.

With proper notice (a minimum of 24 hours) ships not fitted with such equipment can rent a portable Decca receiver on application to Racal-Decca Navigator Aktieselskab, Kalvebod Brygge 20, 1560 Kobenhavn V., Danmark. Tel: (01) 12 83 10. Telegram: DECCAMAR.

The Decca receiver can be installed when passing Skagen or Bornholm.

The installation time is about 1 hour and the receiver can be installed by day and night.

The pilot station will assist with the arrangement and will also on request give information about fees for hire.

The Decca receiver can be delivered fitted for one of the following voltages:

DC: 24 v./32 v., 110 v. and 220 v.; AC: 85-260 v., 40-440 Hz.

It is quite important when requesting rent of Decca receiver to state the voltage available on board.

The receiver can remain on board until the ship again leaves Danish waters at Skagen, or it can be dismounted in a port in Denmark, Sweden, Finland or the Federal Republic of Germany.

Payment for rent and installation is to be settled through Racal-Decca Navigator Aktieselskab.

Recommendation on navigation through the entrances to the Baltic Sea:

The assembly,

Being aware of the close relationship between safety of navigation and the prevention of pollution from ships,

Being also aware of the urgent need to protect the vulnerable Baltic Sea area which has been designated a special area against pollution,

Noting that the navigation of large ships through the entrances to the Baltic Sea area constitutes, due to risk of grounding or collision, a potential danger of pollution of the entrances and due to the strong sea-current also pollution of the entire Baltic area,

Noting also that this passage at several places will be difficult to navigate.

Taking note of

Resolution 5: Intentional Pollution of the Sea and Accidental Spillages adopted by the International Conference on Marine Pollution, London 1973,

Resolution A. 159 (ES. IV): Recommendation on Pilotage and

Resolution A. 156 (ES. IV): Recommendation on the Carriage of Electronic Position-Fixing Equipment.

Recommends the following,

(a) That ships over 40,000 d.w.t. when passing through the entrances to the Baltic Sea, in view of the fact that 17 m. is the max. obtainable depth without dredging in the area North-East of Gedser and that the charted depths, even under normal conditions, may be decreased by as much as 2 m. due to unknown and moving obstructions, should:

(i) not pass the area unless they have a draft with which it is safe to navigate through it taking into account the possibility of depths being as much as 2 m. less than charted as mentioned above, additionally taking into acount the possible changes in the indicated depth of water due to meteorological or other effects,

(ii) participate in the radio position reporting system operated by the Government of Denmark,

(iii) in certain areas in Store-Baelt (Hatterrev, Vengeancegrund and in the narrow route East of Langeland) when constrained by their draft show the signal prescribed in Rule 28 in the International Regulations for Preventing Collisions at Sea, 1972,

(b) That ships with a draft of 13 m. or more should furthermore:

(i) be equipped with a VHF radiotelephone installation, fitted with appropriate frequencies,

(ii) have on board suitable electronic fixing equipment to make use of hyperbolic systems which will provide sufficient fixing accuracy for navigating in this area.

(iii) use for the passage the pilotage services locally established by the coastal States.

(iv) be aware that anchoring may be necessary owing to the weather and sea conditions in relation to the size and draft of the ship and to the sea level and in this respect take special account of the information available from the Pilot and from radio navigation information services in the area.

(c) That a routeing system be established so that ships referred to and complying with the recommendations contained in paragraphs (a) and (b) above can safely navigate into the Baltic.

Recommendation on the use of pilotage services in the Sound:

The assembly,

Recalling Article 16(i) of the Convention on the Inter-Governmental Maritime Organisation concerning the functions of the Assembly,

Being aware of the close relationship between the safety of navigation and the prevention of pollution from ships,

Being also aware of the urgent need to protect the vulnerable Baltic Sea area, which has been designated a special area, against pollution,

Noting that the navigation of large oil tankers and chemical tankers and gas carriers through the Sound as an entrance to the Baltic Sea area constitutes, due to the risk of grounding or collision, a potential danger of pollution of the Sound, and also, due to the strong sea-current, a potential danger for pollution of the entire Baltic Sea area.

Noting also that at several places this passage is difficult to navigate,

Bearing in mind:

(a) Resolution 5 on International Pollution of the Sea and Accidental Spillages, adopted by the International Conference on Marine Pollution, 1973,

(b) Resolution A. 159 (ES. IV) on pilotage,

(c) MSC/Circ. 158 of 5 April 1974 on control of movements of chemical tankers and gas carriers,

(d) Resolution A. 339 (IX) on Navigation through the Entrances to the Baltic Sea,

Recommends that oil tankers in loaded condition with a draft of 7 m. or more, and all loaded chemical tankers and gas carriers, irrespective of size, when navigating in the part of the Sound which is limited by a line connecting Svinbadan Lighthouse and Hornbaek Harbour and a line connecting Skanor Harbour and Aflandshage (the Southernmost point of the Amager Island), should use the pilotage services established by the Governments of Denmark and Sweden.

PILOTAGE: Notice to all Masters Entering the Baltic Sea concerning Deep-sea Pilotage:

The IMO recommends that ships which wish to avail themselves of Deep-sea Pilots in the area of the Baltic should only take Deep-sea Pilots licensed by a Pilotage Authority of a Baltic coastal state, i.e. Denmark, Finland, the German Democratic Republic, the Federal Republic of Germany, the Polish People's Republic, Sweden and the Union of Soviet Socialist Republics (IMO-Resolution A.480 (XII)).

Such licensed Deep-sea Pilots are in possession of a red identity card.

The Pilotage Authorities of the Baltic coastal states draw special attention to the following rule which came into force on 1st January, 1983:

Deep-sea pilotage in the Baltic Sea Area shall be performed by Deep-sea Pilots from the respective ports of departure of the Baltic coastal states only, including the Kiel-Holtenau Locks, the Sound and the Belts. A Deep-sea Pilot shall disembark from a ship at the first port of call and shall return home as soon as possible.

If the ship wants further advice by a Deep-sea pilot it is the responsibility of the local Pilotage Authority of that port to supply such a Deep-sea Pilot.

AABENRAA: 55.02 N. 09.26 E. (See Plan Book)

LOCATION: Aabenraa is situated on the East Coast of Jylland (Jutland) in the Aabenraa Fjord.

DOCUMENTS: Crew list, passenger list, tobacco list, stores list, loadline certificate (all vessels above 150 g.r.t.), safety equipment (all cargo vessels of 500 g.r.t. and over), derat, tonnage and nationality, clearance from last port of call, cargo documents.

PILOTAGE: Not compulsory, but recommended for vessels over 2,000 g.r.t. Telegraphic address: "Pilot – Aabenraa". Short notice about 2/4 hours – VHF Channel 16. Small red motor-boat flying international pilot flag. Normally located middle of Aabenraa Fjord.

Larger ships usually take Pilot by Skaw L/V. Pilots to be ordered by ETA-telegrams to "Skawpilot Skagen", at least 12 hours in advance. Skawpilot listening on VHF Channel 16.

ANCHORAGES: Aabenraa Fjord or Road. Depths: about 75 ft. – 80 ft.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Depth of water in the Channel, at the Sonderjyllandskajen and at the Oil Jetty 11.0 m. Max. length at the Oil Jetty 200 m. No restriction on beam.

Depth of water in dry cargo basins from 4.0 m. to 8.5 m. No length or breadth restrictions. No tide – occasionally low water of 3 ft. – 5 ft. in heavy gales from West. Entry day or night.

HEALTH: In event of disease or fever on board, vessel's Agent to be informed before arrival.

RADIO: Blavand Radio or Lyngby Radio.

VHF: The port is equipped with Channels 12, 13 and 16.

TUGS: There are no tugs stationed in the port, however, tugs of 1,400 h.p. – 3,600 h.p. available at 24 hrs. notice.

BERTHING: There are 3 basins, a dry cargo pier and a tanker berth.

Sydhavn: 250 m. quay, depth 4.0 m.

Gammelhavn: 500 m. quay, depth 7.5 m.

Nyhavn: 500 m. quay, depth: first 160 m., 8.5 m., next 130 m., 7.5 m., remaining 210 m., 6.5 m.

Sonderjyllandskajen: 250 m. quay, depth 11 m.

Oil Jetty: "T"-head with breasting dolphins, depth 11 m.

For the port the mean water-level is 0.0. Extreme high water level is plus 1.5 m. and extreme low water is minus 1.4 m. due to strong North/Easterly gales and strong South/Westerly gales. There are no currents except in connection with the tide. The port can be entered day and night, and is generally open for navigation throughout the year and in case of ice-difficulties during Winter, state-owned icebreakers will keep the port open for navigation.

DENSITY: Average water density in port area 1015.

CRANES: 2 electrical coal/coke/grain/gravel cranes – 5.5 tons and 4.3 tons.

1 mobile crane – lifting capacity 30 tons.
3 mobile cranes – lifting capacity 23 tons.
1 mobile crane – lifting capacity 11 tons.
1 auto crane – lifting capacity 30 tons
1 front loader
1 fork lift – 4 tons capacity

Tractors and similar modern machinery also available.

STEVEDORES: Stevedores arranged by Agent.

MEDICAL: 12 hours notice required to arrange for doctor to come on board. Hospital in Aabenraa.

TANKERS: Load/discharge connection 6 in. or 8 in. Also see "Berthing". Facilities for dirty ballast available.

FRESH WATER: Day and night from shore line, 25 – 30 t.p.h.

FUEL: All grades available by barge or truck. Minimum 24 hours notice.

GANGWAY/DECK WATCHMAN: Can be arranged.

OPENING/CLOSING HATCHES: By crew.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not needed.

CONSULS: German; Finnish; Norwegian; Swedish; British.

REPAIRS: All types of deck and engine repair are possible.

DRY DOCK: Shipyard with floating dock of 600 tons lifting capacity.

SURVEYORS: Lloyds and N.V. available.

REPATRIATION: Facilities exist for effecting crew changes.

AIRPORT: Skrydstrup. Distance from airport is 25 km. Airport is served by regular airlines.

TIME: Local time is GMT plus 1 hour.

POLICE/AMBULANCE/FIRE: Dial "000".

TELEPHONES: Available for placing on board at the Sonderjyllandskajen.

SHORE LEAVE: Crew members allowed ashore.

DELAYS: Normally no delay except during severe Winters due to ice between mid December and end March.

AUTHORITY: Aabenraa Havnevaesen, Havnekontoret, 6200 Aabenraa. *Tel:* (National) 04-622514, (International) 454-622514.

AABORG: 57.03 N. 09.55 E. **(See Plan Book)**

DOCUMENTS:

Ship's Register.
Load-line Certificate. (All vessels over 150 g.r.t.)
Road Safety Certificate.
Safety Equipment Certificate.
Derat Certificate or Exemption.
1 Crew List.
Stores List.
Crew Personal Effects List.
Cargo Manifest or Bills of Lading.

PILOTAGE: Compulsory at Hals Bar for ships drawing more than 5 m. Pilot boards at Hals Bar Light. Pilot boat equipped with VHF Channel 16. The Western entrance at Logstor is only navigable in daylight for vessels under 4 m. draft.

Larger vessels usually take Pilot by Skaw L/V. Pilots to be ordered by ETA-telegrams to "Skawpilot Skagen", at least 12 hours in advance. Skawpilot listening on VHF Channel 16.

Also see "Bridges".

ANCHORAGE: Vessels may anchor in Limfjord or Aalborg Roads, depths 9 m. – 15 m.

RESTRICTIONS: The port is situated in Limfjord, 16 miles from entrance at Hals. Controlling factor is depth at Hals Bar. 10.4 m. MLW. Night entry permitted. Also see "General" before first port and "Bridges".

MAX. SIZE: Max. draft for crossing Hals Bar 9.5 m.

HEALTH: Pratique granted by Customs Officers who bring Health Declaration for Masters to complete. In event of suspected disease or fever on board radio details to Agent before arrival.

RADIO: Radio stations to be used: Skagen and Lyngby, Port Authority, Pilot Station. Tugs and Bridges can be contacted on VHF Channel 16.

TUGS: Eight tugs available from 250 h.p. to 2,000 h.p. Not compulsory except through bridges for vessels over 1,500 d.w.t.

BERTHING: Aalborg on North and South sides of Limfjord. Total quayage 11.5 km., whereof public quays 10.1 km. All main quays suitable for vessels able to cross Hals Bar. Depths alongside 7.5 m. to 10.0 m.

Vendsysselvaerket Power Station wharf, depth 10.0 m.
Lindholm Pier Cement factory wharf, depth 7.8 m.
Rordal Cement factory wharf, depth 7.5 m. – 9.3 m.

Nefo Coal Pier, depth 9.0 m. owned by Nordjylands Electric Co. and managed by Elsam. Max. LOA 260 m., max. draft 8.5 m. 2×12 ton cranes. Discharge rate for coal 10,000 tonnes per day.

BRIDGES: Two lift bridges cross Western end of Aalborg harbour. Horizontal opening 30 m. Only vessels bound for Lindholm Pier are affected.

Close South East of the power station is an overhead power cable (vertical clearance 50 m.) which spans the fjord. Pilotage is compulsory for vessels over 800 g.r.t.

MEDICAL: Doctors, hospital facilities available.

FRESH WATER: Supplied by pipe-line at all berths.

FUEL: All grades available.

DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally by crew with assistance of stevedores.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	Tel.	(08)	13 23 33
Brazil	"	"	13 12 33
Finland	"	"	13 30 33
France	"	"	12 09 00
Great Britain	"	"	13 12 33
Greece	"	"	13 31 00
Iceland	"	"	12 44 33
Netherlands	"	"	13 42 33
Norway	"	"	12 14 24
Spain	"	"	18 50 99
Sweden	"	"	12 00 51

REPAIRS: All hull and machinery repairs can be effected.

DRY DOCKS: One dry dock for vessels up to 119 m. long. Three floating docks max. capacity 20,000 tons (80,000 d.w.t.).

CUSTOMS ALLOWANCES: See "General" before first port.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours (April – September).

HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day; Ascension Day; Whit Monday; Christmas Day; Boxing Day. Half-holidays; May 1st, June 5th and December 24th.

REPATRIATION: Aalborg Soefarts Service (Seamen's Service) Tel: (08) 17 12 12.

POLICE/AMBULANCE/FIRE: Tel: 000

TELEPHONES: Installed by request at certain quays.

SHORE LEAVE: No restrictions.

AIRPORT: Situated 3 miles from town centre.

DEVELOPMENTS: Aalborg has considerable areas under development for industry. In connection with this, preparations are being made for the building of new public harbour facilities. On the South bank of the fjord the Port Authority has available a 3.2 km stretch of coast with an area of approx. 206 hectares. This area is in connection with a new industrial and residential district of approx. 400 hectares. According to present plans approx. 7,000 m. of new quayage can be built here. Investments are estimated at 350 mill. Kr. Factories within the electronic and textile sectors are already established here and a continuous expansion goes on. On the site a special harbour with a quayage of 660 m. and with facilities for unit load ships as well as conventional cargo ships, with warehouses and administration blocks etc. was constructed during 1972 as base port for the Royal Greenland Trade Department's routes calling at all ports in Greenland. Enterprises undertaking construction, repairs and maintenance of oil rigs etc., for offshore activities have also settled on this site.

AUTHORITY: Port of Aalborg Authority, 104 Vesterbro, DK-9000 Aalborg, Denmark. *Tel:* (08) 122777. *Telex:* 69933 Aalbhv Dk. *Contact:* J. E. Kruhoffer, General Manager. H. Plougheld, Harbour Master.

AEROESKOEBING: 54.54 N. 10.25 E.

DOCUMENTS: See "Copenhagen".

PILOTAGE: Contact using VHF Channel 16, Tel: (09) 521253.

MAX. SIZE: Length 70 m., beam 17 m., draft 4.5 m.

HEALTH: See "Copenhagen".

RADIO: Lyngby Radio OXZ.

VHF: Harbour Master/Pilot Channel 16.

TUGS: Not compulsory, pilot boat assists if necessary. Larger tugs can be ordered on request.

BERTHING: 3 berths available.

CRANES: 1 mobile crane available.

STEVEDORES: Ordered by Agents.

MEDICAL: Doctors and hospital facilities available.

FRESH WATER: Available.

FUEL: Available.

FIRE PRECAUTIONS: Normal fire precautions.

CONSULS: None.

REPAIRS: Small repairs possible.

DRYDOCKS: None, however there is one slipway for vessels up to 350 tons.

GANGWAY/DECK WATCHMEN: Not necessary.
HATCHES: Opening/closing carried out by crew.
AIRPORT: Local airport 9 km. away, with private connections to Copenhagen. Nearest commercial airport at Odense.
TIME: GMT plus 1 hour; Summertime (March – September) GMT plus 2 hours.
HOLIDAYS: Normal Danish holidays.
POLICE/AMBULANCE/FIRE: Dial 000.
SHORE LEAVE: Permitted.
IDENTIFICATION CARDS: Not required.
BANKS: Den Danske Bank and Sydfynsk Discontobank.
STORING: By truck alongside.
AUTHORITY: Harbour Master L. Andersen. *Tel:* 45-9-521253.

AGENT: W. Nielsen & Co., P.O. Box 20, DK 5970, Aeroskobing. Tel: 45-9-521150. Telex: 50583. Cables: Williamco.

ARHUS: 56.09 N. 10.13 E. (See Plan Book)

DOCUMENTS:
- Ship's Register.
- Derat Certificate.
- Load Line Certificate (all vessels above 150 g.r.t.).
- Radio and Equipment Security Certificate (all cargo vessels on 500 g.r.t. and above).
- Customs Passport from last port of call.
- Spirits and Tobacco List specifying stock in hand for ship and crew.

PILOTAGE: Pilotage only compulsory for tankers carrying certain products. Harbour Pilot normally boards 1-2 miles outside port.

Larger vessels usually take Pilot by Skaw L/V. Pilots to be ordered by ETA-telegrams to "Skawpilot Skagen", at least 12 hours in advance. Skawpilot listening on VHF Channel 16.

Vessels leaving harbour or changing berth should report at least 15 minutes in advance, to the pilot station on Channel 16 or 12, or to the harbour office. If the movement is delayed, a further report should be sent 10 minutes in advance.

ANCHORAGE: Anchorage in roads – good holding ground. Nature of bottom: clay.
RESTRICTIONS: No restrictions. Night entry permitted. Also see "General" before first port.
MAX. SIZE: Oil port 36 ft. General cargo port up to 33 ft. Container terminal up to 36 ft. Eastern Division 39 ft. Coal terminal 44 ft. No tide.
HEALTH: Necessary formalities carried out by customs on arrival.
RADIO: Radio stations to be used: Skagen and Lyngby. Pilot station and tugs can be contacted on VHF Channel 12 and 13 – emergency 16.
TUGS: 3 tugs available. Call by VHF.
CARGO HANDLING FACILITIES: 7 cranes for coal, fertilisers, sulphur, ore, etc.; max. capacity per crane, 120 t.p.h. 9 cargo handling cranes up to 2.5 tons and 9 cranes up to 5 tons. 3 mobile cranes up to 4 tons.

Container Terminal: Minimum depth of water 10 m. (33 ft.). Max. depth of water 11.0 m. (36 ft.). Total quay length 816 m. (2,677 ft.). 1 cargo handling and container crane up to 50 tons. 3 gantry container cranes up to 40 tons. Fork lifts up to 40 tons.

Roll-on/Roll-off: 1 movable and 4 solid roll-on/roll-off berths. Fork lifts up to 40 tons. Several berths for liquid chemicals and LPG carriers.

Private Cranes: Coal terminal: Length 450 m. depth 13.5 m. 2 gantry cranes, combined capacity 1,000 t.p.h. 4 travelling cranes on carriage bridges for handling of coal, coke, fertilizer, and broken stone, etc., capacities 5–7.5 tons. 1 travelling crane on fixed bridge for handling of sand, stone and gravel, etc., capacity 90 t.p.h. 2 travelling cranes on carriage bridges for handling of general cargo, capacity 1.5 tons. One floating crane up to 20 tons.

Private Suction Plants, etc.: 4 grain suction plants, capacities of 60–100 t.p.h. 1 grain elevator, capacity of 35 t.p.h. 4 grain loading pipes. 6 cup elevators for copra and soya beans (80 t.p.h. each). 4 suction elevators for copra and soya beans (125 t.p.h. each). 1 loading pipe for copra and soya beans.

Arhus Stevedore Company:

	No.	Capacity (tons)
Fork trucks with telescopic yoke for top lifting of containers	8	40
	2	30
Fork trucks with top-lift for empty containers	6	12.5
Fork trucks	25	3-7
Electric pallet lifters	5	3
Shovel trucks for stowing	6	
Terminal tractors with appurtenant swan's necks	15	
Terminal Carriages	52	

STEVEDORES: Available. Ordered by Agents.

Normal working hours: Mondays/Fridays 0700–16.30 hrs. Work on Saturdays, Sundays and Holidays is on full overtime terms only.

Meal hours: 0830–0900 and 1200–1300 hrs.

Shifts: Labour can be employed Mondays/Fridays at 0700 hrs. and at 1000 hrs., although the 0700 hr. shift is by far the best supported.

On Fridays and on a day preceding a holiday labour can also be employed at 1300 hrs. (for overtime work generally).

Furthermore labour can be transferred from a completing vessel to another job within normal working hours provided certain union regulations are observed. Crew is not allowed to load, discharge or run the winches under normal circumstances.

Overtime: Can be worked round the clock against overtime pay. The rates for the first 3 hours are plus approximately 50% and all following hours plus 100%.

First shift is from 0700–2100 hrs. and next from 2100–0700 hrs. the following morning.

Week-end work: Can be ordered as late as Friday 1300 hrs. (deadline) but ordering during Thursday gives a far better position for making a good arrangement.

MEDICAL: All medical services possible. Call Pilots if medical attendance required aboard.
TANKERS: Discharge lines: 4 in., 6 in., 8 in., 10 in. and 12 in. Quay 201–203, max. oil discharging 1,200 cu.m./hr. Quay 202 and 124, 1,000 cu.m./hr., and quay 120, 800 cu.m./hr. Berth 313 depth 12.0 m.
FRESH WATER: Most berths supply by shore installations, otherwise barge.
FUEL: All grades available.
FIRE PRECAUTIONS: Tankers discharging: Fire watch. Special harbour fire fighting on tugs.
DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Normally by crew with assistance of stevedores.
IDENTIFICATION CARDS: Not required.
CONSULS: Belgium, Tel. (06) 19.95.22; Brazil, Tel. (06) 12.88.88; Finland (06) 29.21.00; France (06) 11.22.22; Germany (06) 12.32.11; Great Britain (06) 17.66.33; Greece (06) 27.12.66; Iceland (06) 13.40.00; Italy (06) 16.77.88; Japan (06) 12.58.55; Netherlands (06) 12.81.88; Norway (06) 14.41.11; Spain (06) 12.46.44; Sweden (06) 27.32.33.
REPAIRS: Most repairs and overhauls possible. See "Dry Docks".
DRY DOCKS: Dannebrog Vaerft A.S. The shipyard possesses a large repair section and specializes, among other things, in extending ships and in undertaking comprehensive re-building. But all kinds of ships' repairs and overhauls of machinery are performed in its modern workshops. It employs a staff of 500–600, and it has recently invested in new cranes, floating docks, and workshops.

Dock No. 1 has a lifting capacity of 19,000 tons. Dock size – 190 m. × 25 m.

Dock No. 2 has a lifting capacity of 4,000 tons. Dock size – 110 m. × 22.8 m.

There is also one minor slipway in the Port of Arhus, and the city possesses all sorts of service workshops which are available to ships needing installations or repairs of electronic or mechanical equipment in either the engine room, the catering department, or on deck.

REPATRIATION: Arhus Sofarts Service. Tel. (06) 19.13.33.
AIRPORT: 32 km. from port.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summertime (April to October).
HOLIDAYS: 5 day week, but loading and discharging can be effected on Saturdays and Sundays on payment of overtime. See "Copenhagen".
POLICE/AMBULANCE/FIRE: Tel. "000".
TELEPHONES: At several piers.
SHORE LEAVE: No restrictions.
DEVELOPMENTS: Extension of the Eastern Harbour: A multi-terminal, quay length 450 m., ro/ro ramp, water depth 12.0 m., 2 cranes. Completion October 1985.

Container Terminal: A fourth container gantry crane, 40 tons capacity, available September 1985.

AUTHORITY: Port of Arhus Authority, Europaplads 2, DK-8000, Arhus C, Denmark. *Tel:* (06) 13.33.33. *Contact:* The Harbour Master.

ASNAES: 55.40 N. 11.05 E. (See Plan Book)

PORT LIMITS: When boarded by Harbour Pilot at the Firth of Kalundborg; or when at anchorage at the Firth waiting for berth.
DOCUMENTS:
- Ship's Register.
- Load Line Certificate.
- Safety Radio Certificate.
- Safety Equipment Certificate.
- Derat or Exemption Certificate.
- Construction Certificate.
- Certificate of Insurance or other financial security in respect of civil liability for oil pollution damage.
- 2 Crew Lists.
- Tobacco and Spirit List covering all goods on board belonging to crew, officers, Master, ship's bar or passengers.
- Cargo Manifest or Bill of Lading.

PILOTAGE: Pilotage not compulsory. Harbour Pilot boards at entrance of Kalundborg Firth; bigger ships usually take Pilot by Skaw light vessel about 130 miles from Kalundborg. Skaw as well as Harbour Pilots listening on VHF Channel 16.

Pilots to be ordered by ETA–telegram to Agents at least 24 hours in advance.

ANCHORAGE: Large vessels anchor in 16 m. of water outside between Roesnaes and Asnaes; S.W. to N.W. winds cause swell, but holding ground is good.
RESTRICTIONS: No entry restrictions; arrival day and night and no tide with normal winds. Also see "General" before first port.
MAX. SIZE: Oil Berth: depth alongside: 13 m.

Old Coal berth: Depth alongside: 11 m. Length of quay: 285 m.
New Coal Berth: Depth alongside: 13 m. Length of quay: 216 m. However, vessels with length of 290 m. acceptable as there are dolphins between the Oil Berth and the New Coal Berth.

Ash Berth: Depth alongside: 8.0 m.

HEALTH: No special restrictions as to free pratique, which will be granted by authorities on arrival.
RADIO: Lyngby Radio.
VHF: Channel 16 to pilot station (also Skaw Pilot).
RADAR: No radar installations.
TUGS: At Firth of Kalundborg – 2/3 miles from port – ships' lines to be used.

BERTHING: One oil berth: length 200 m. (a further length of ships at about 100 m. acceptable for berthing alongside the dolphins). Max. safe arrival draft: 41 ft. (12.5 m.).

Old Coal Berth: length 285 m. Max. safe arrival draft: 35 ft. (10.67 m.). 4 cranes available.

New Coal Berth: length of quay: 216 m. (See "Max. Size"). Max. safe arrival draft: 12.67 m. 2 cranes available.

Ash Berth: Safe draft 25 ft. (7.65 m.). Loading only, by pipe-line from 6,000 cu.m. silo.

DENSITY: Brackish – about 1011.

STEVEDORES: Private stevedores to be ordered through receivers – coal discharge rate: about 700 t.p.h.

New Coal Berth: Discharge rate about 850 t.p.h.

MEDICAL: All medical and hospital facilities available. No advance notice necessary.

TANKERS: 2 discharge hoses (a possibility of 3) of 8 in. each. Average discharge rate 3,000 t.p.h., max. back pressure 14 kg. Also see "Berthing".

FRESH WATER: Available by pipe-line at the berth. Rate 10 t.p.h.

FUEL: Available by barge or truck.

CONSULS: Swedish and Norwegian at Kalundborg. Others at Copenhagen.

REPAIRS: All types of smaller repairs can be carried out.

DRY DOCKS: No dry dock available.

SURVEYORS: Messrs. Caleb Brett has a local office in Kalundborg SGS Inspection (Danmark) A/S has office in Copenhagen.

GANGWAY/DECK WATCHMEN: Not recommended.

HATCHES: Opening/closing hatches to be carried out by crew.

AIRPORT: Nearest at Copenhagen (100 Km.).

CUSTOMS ALLOWANCES: See "General" before first port.

REPATRIATION: All repatriation can be arranged normally via Copenhagen 100 km. from Kalundborg.

TIME: GMT plus 1 hour (from Late September– Late March). GMT plus 2 hours (from Late March–Late September).

HOLIDAYS: Saturday/Sunday normally no work, also no work on holidays declared as official Danish holidays.

POLICE/AMBULANCE/FIRE: 0–0–0 all alarms.

TELEPHONES: No telephone connection on board.

EMERGENCY CO-ORDINATION CENTRE:

Radio: VHF Channel 16 Lyngby Radio – will contact the Authorities involved.

BANKS: Kjoebenhavns Handelsbank A/S, Holmens Kanal 12, 1091 Copenhagen K.
Telex: 12186 HACO DK.
A/S Den Danske Bank, Holmens Kanal 12, 1092 Copenhagen K.
Telex: 15880 DDBFX DK.
Privatbanken A/S, Boersgade 4, 1215 Copenhagen K.
Telex: 27196 PRIVCO DK.

STORING: See "Prelims" page viii.

1. Vessel can be stored from barge and truck.
2. No restrictions – can be stored during discharging.
3. Trucks can proceed alongside.
4. Fork lift trucks can be used on the Jetty.
5. No special customs' regulations except: spirits and tobacco, and other goods under bond to be declared to Customs before unloading/loading.
6. Local riggers can be employed.

SERVICES: No tank-cleaning facilities; all other services to ships can be arranged through specialists from Copenhagen.

SHORE LEAVE: No restrictions for shore leave.

IDENTIFICATION CARDS: Shore passes necessary.

AUTHORITY: *Owners of the Port:* Isefjordvaerket I/S, Parallelvej 19, 2800 Lyngby. *Telex:* 37500. *Tel:* 2-883200.
Local Office: Asnaes Power Station, Asnaesvej, 4400 Kalundborg.
Tel: 3-511500.

ASSENS: 55.15 N. 09.53 E. (See Plan Book)

LOCATION: On West side of Funen in Little Belt. Open all year except in severe weather when Little Belt may be frozen.

DOCUMENTS:

Customs Declaration for Ships, Form G25.
Maritime Declaration of Health, Z2 Ln 00-146.
Master's Declaration, Arrival, P650-010 (3/79).
Ice-Breaker Dues, Form G92 (only from 15th December – 31st March).
Crew List.

All Forms can be obtained from the Agent.

PILOTAGE: Not compulsory. Pilot requires 4 hours' notice. Pilot boarding points are 1-2 miles North or South of Assens. If necessary, Pilot can board in Little Belt.

ANCHORAGES: In the Roads North of Assens and SW of Assens.

MAX. SIZE: Vessels up to 130 m. LOA, max. draft 7 m. and max. beam 20 m. No tides.

RADIO: Lyngby Radio (OXZ).

VHF: There is a VHF station at the pilot station, Channel 16.

RADAR: There is radar in the tug used by the Pilot.

TUGS: There is a small tug, for larger tugs 6 hours' notice to be given. Ship's lines are used.

BERTHING: Loading/discharging normally takes place in the Northern Basin, depth 7 m., which is served by railway. The total length of quays is 400 m., made up of 100 m. on the North side, 170 m. on the East side and 130 m. on the South Side.

CRANES: 2 mobile cranes each max. 32 tons.

STEVEDORES: Working hours 0700-1600, Monday to Friday. Overtime by arrangement.

MEDICAL: Full hospital facilities available without prior notice.

FRESH WATER: Good quality potable water available in unlimited quantities.

FUEL: Can be delivered, if sufficient notice given.

REPAIRS: Most types of repairs can be undertaken at the shipyard.

DRY DOCKS: One floating dock for ships up to 1,350 tons, max. length 80 m. and 15 m. beam. 1 slipway for ships up to 300 tons, max. length 60 m. and 9.5 m. beam.

GANGWAY/DECK WATCHMEN: Not necessary.

HATCHES: Opening/closing done by crew.

CUSTOMS ALLOWANCES: See "General" before first port.

AIRPORT: Odense, 50 km. away. Daily connections to Copenhagen.

TIME: GMT plus 1 hour; Summertime GMT plus 2 hours from March to September.

HOLIDAYS: Usual Danish holidays.

POLICE/AMBULANCE/FIRE: Dial 000.

TELEPHONES: Available aboard vessels.

STORING: See "Prelims" page viii.

1. Vessels can be stored by truck.
3. Yes.
4. Yes.

SHORE LEAVE: Permitted.

DELAYS: Normally no delays.

AUTHORITY: Assens Kommune, Harbour Office, Ndr. Havnevej 3, DK-5610 Assens. *Tel:* (09) 713165-713580. *Contact:* N. Hald-Andersen, Harbour Master.

AGENT: A. Fage-Pedersen A/S, Strandgade 19, DK5610, Assens. Tel: 09-711200. Telex: 50301 (Fage DK). Cables: Shipping (Lloyds Agent).

BANDHOLM: 54.50 N. 11.30 E. (See Plan Book)

DOCUMENTS:

1 Crew List.
1 Passenger List.
1 Stores List.
1 Manifest or Bill of Lading.

PILOTAGE: Not compulsory. Pilot boards vessel at Sea Buoy off Vejroe from pilot vessel, hull painted green and "LODS" on each side of the hull. Pilot ordered through Agent, telephone 03–88 80 11 four hours prior arrival at Sea Buoy. VHF Channel 16. Telephone number of Pilot Station 03-89 49 75/03-89 41 52 day/night.

ANCHORAGE: Near Sea Buoy off Vejroe.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Max. length 100 m., draft 5.0 m.

HEALTH: Normal quarantine rules.

RADIO: Lyngby Radio or Kiel Radio.

TUGS: None.

BERTHING: Sheltered harbour with 366 m. of stone quays available and easily accessible. Depth of water at entrance 5 m. Depth at old quays, 4.4 m. At new quay 244 m. there is 5.8 m. average depth. Electric coal crane to discharge 60 t.p.h with grab. Average daily rates: Coal and coke 500 – 1,000 tons. Grain elevator, loading or discharging capacity 110 t.p.h. storage capacity 25,000 tons.

STEVEDORES: Ordered by Agent. Working hours Monday to Friday 0700 – 1600 hrs. Saturday no work.

MEDICAL: Doctors, hospital facilities available.

FRESH WATER: Supplied from quay installations.

FUEL: Available.

OPENING/CLOSING HATCHES: Carried out by crew.

GANGWAY/DECK WATCHMEN: Not necessary.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not required.

REPAIRS: Small deck and engine repairs possible.

AIRPORT: Maribo Airport, about 15 km. away.

TIME: GMT plus 1 hour.

HOLIDAYS: See "Copenhagen".

POLICE/AMBULANCE/FIRE: Dial 0-0-0 and ask for Police, Ambulance or Fire Brigade.

TELEPHONE: Not available on board vessels.

SHORE LEAVE: Allowed.

GENERAL: Tide normally 1 ft.

AUTHORITY: Harbour Master.

AGENT: Alfr. Hovmand, Shipbroker, Havnepladsen 6, Bandholm, DK-4930 Maribo. Tel: 03-88 80 11. Telex: 40256 Hoban Dk.
Cables: "Hovmandship, Maribo".

COPENHAGEN: 55.42 N. 12.37 E. (See Plan Book)

DOCUMENTS:

1 Crew List.
2 Passenger Lists.
1 List giving stock of stores and provisions.

Customs officers bring form to be signed by Captain indicating that no epidemic diseases are on board. Formal Bill of Health signed by Danish Consul in port of departure is not necessary.

PILOTAGE: Telegr. address: Coppilot-Copenhagen. Tel. 01 38 67 00. Pilotage not compulsory. ETA minimum 1 hour. VHF Channel 16. Pilot boats painted red. "Pilot" painted in white on side. Pilot flag "G" (white light) – VHF. Pilot comes on board at Middelgrund Fort (Pilot for Drogden at the same place). Pilot boards by ship's ladder.

Bigger ships usually take Pilot by Skaw L/V. Pilots to be ordered by ETA–telegrams to Skawpilot Skagen, at least 12 hours in advance. Skawpilot listening on VHF Channel 16.

ANCHORAGE: Depth 11 m., 1 mile North of Middelgrund Fort.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Limited by draft only. Depths in the port, 10 m.; in the Oil Harbour, 10.5 m.; at the Oil Pier, 12.0 m.

HEALTH: See "Documents". If fear of suspected disease or fever: yellow flag – VHF.

RADIO: Lyngby Radio: OXZ. VHF Channel 16 to all installations. ETA cables to Agents and receivers, preferably by Lyngby Radio.

RADAR/VHF: No port radar. VHF Channel 16.

TUGS: Towage not compulsory. Tugs join ships at entrance to port. Ship's hawsers only.

BRIDGES: Larger ships must take Pilot and tugs to pass the bridges down to the South Harbour.

The Knippelsbro and Langebro and Sjaellandsbroen will be closed experimentally for passage as follows:

	Knippelsbro/Langebro	*Sjaellandsbroen*
Monday – Friday	0000 – 0550 hrs.	0000 – 0600 hrs.
	0615 – 0655 hrs.	0615 – 0655 hrs.
	0735 – 0900 hrs.	0735 – 0900 hrs.
	1500 – 1800 hrs.	1500 – 1800 hrs.
		2000 – 2400 hrs.
Saturday	0000 – 0655 hrs.	0000 – 0600 hrs.
	0735 – 0900 hrs.	0615 – 0655 hrs.
	1200 – 1230 hrs.	0735 – 0900 hrs.
	1300 – 1330 hrs.	1200 – 1230 hrs.
	1800 – 2400 hrs.	1300 – 1330 hrs.
		2000 – 2400 hrs.
Sundays and Holidays	0000 – 0800 hrs.	
	1200 – 1800 hrs.	
	2000 – 2400 hrs.	
15th May – 15th September		0000 – 0600 hrs.
		1000 – 1700 hrs.
		2000 – 2400 hrs.
16th September – 14th May		0000 – 0700 hrs.
		1000 – 1700 hrs.
		1800 – 2400 hrs.
Constitution Day 5th June	1200 – 1300 hrs.	1200 – 1300 hrs.
Christmas Eve 24th December and New Year's Eve 31st December	1800 – 2400 hrs.	1800 – 2400 hrs.

CONTAINER TERMINAL: At the Levant quay in the free port. Quay length 665 m., depth alongside 10 m. 2 Container cranes capacity 32 tons, also two luffing cranes of 50 tons and 5 tons capacity for general cargo. Horizontal handling by two straddle carriers and a number of front loaders.

STEVEDORES: ETA earliest possible by VHF and not later than noon on the day before loading or discharging is intended to be commenced.

MEDICAL: No advance notice necessary. Hospitals available.

TANKERS: 10/12 berths according to size.

Provestens Oil Harbour: depth at		
	Quay 1:	10.5 m.
	Quay 2:	9.1 m.
	Quay 3:	9.1 m.
	Quay 4:	10.5 m.
	Quay 5:	10.5 m.
	Oil Pier North:	6.0 m.
	Oil Pier East:	12.0 m.

Length and beam unimportant. Slop barge available.

FRESH WATER: From quay or water boat.

FUEL: All grades available. At bunker station, no notice required, delivery 24 hours a day. By lighter in port or in roads; 10 hours notice preferred.

FIRE PRECAUTIONS: Ready hawsers fore and aft. No engine repairs.

GANGWAY/DECK WATCHMEN: Deemed unnecessary.

OPENING/CLOSING HATCHES: To be opened by ship's crew.

CERTIFICATES: To be on board:

Ship's Register.
Radio Safety Certificate.
Safety Equipment Certificate.
International Load Line Certificate.
Derat Certificate.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not necessary except in Oil Harbour, where the Port Authority deliver the cards.

REPAIRS: All types of repairs possible.

DRY DOCKS: Respective lengths, 787 ft. 5 in., 712 ft. 11 in. and 478 ft.

REPATRIATION: Facilities exist for changing crew and arranging any necessary repatriation.

CONSULS: The following countries are represented.

Argentina
Australia
Austria
Bangladesh
Belgium
Bolivia
Brazil
Bulgaria
Canada
Chile
China
Colombia
Costa Rica
Cuba
Cyprus
Czechoslovakia
Dominican Republic
East Germany
Egypt
El Salvador
Finland
France
Ghana
Great Britain
Greece
Guatemala
Guinea
Haiti
Honduras
Hungary
Iceland
India
Indonesia
Iran
Iraq
Ireland
Israel
Italy
Ivory Coast
Japan
Korea
Kuwait
Lesotho
Liberia
Libya
Luxembourg
Malaysia
Malta
Morocco
Mauritania
Mexico
Monaco
Nepal
Netherlands
Nicaragua
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Romania
San Marino
Saudi Arabia
Senegal
Somalia
South Africa
Spain
Sri Lanka
Sudan
Sweden
Switzerland
Thailand
Tunisia
Turkey
Uganda
Upper Volta
United States
U.S.S.R.
Venezuela
West Germany
Yugoslavia

AIRPORT: 6 miles from centre. Direct lines for all parts of the world.

TIME: GMT plus 1 hour.

HOLIDAYS: New Year's Day (January 1st); Maundy Thursday; Good Friday; Easter Monday; Prayer Day; Ascension Day; Whit Monday; Christmas Day (December 25th); Boxing Day (December 26th).

Half holidays: Labour Day (May 1st); Constitution Day (June 5th); Christmas Eve (December 24th).

Working hours: 0700-1630 with 2 half-hour meal breaks.

Overtime work on Saturday and Sunday should be ordered by 1130 hrs. on Friday.

The working hours vary slightly from port to port as some start at 0730 and others at 0800 hrs., but a 42.5 hour week is common to all.

POLICE/AMBULANCE/FIRE: Call "000".

TELEPHONES: In many berths telephones can be placed on board ships.

GENERAL: Customs Authorities supervision of ship's provisions and bonded stores is carried out in the Free Port in the same way as in Customs Port. In this connection the Free Port is not a Free Port.

SERVICES: All services available (tank cleaning, discharge of tank washings, compass adjusting etc.).

SHORE LEAVE: No restrictions.

AUTHORITY: Port of Copenhagen Authority, Nordre Toldbod 7, DK–1259 Copenhagen K. *Tel:* (01) 144340. *Telex:* 15439.
Cables: "Copenport". *Contact:* Harbour Master.

ENSTED: 55.01 N. 09.26 E. (See Plan Book)

Also refer to "Aabenraa".

DOCUMENTS: See "Aabenraa".

PILOTAGE: See "Aabenraa".

ANCHORAGES: See "Aabenraa".

HEALTH: In event of disease or fever on board, vessels Agent to be informed before arrival.

RADIO: Blaavand or Lyngby Radio.

TUGS: Large vessels may require towage assistance on entering and leaving Ensted Harbour. 24 hours notice is required to call a Svitzer tug.

VHF: Pilot on Channels 12 and 16.

BERTHING:

Oil Terminal: Largest vessels which can be accommodated at the Oil Pier: (Berth No. 1).

Length overall	350 m.
Beam	no limits
Water depth	18 m.
Bow/centre	165 m.
Max. height water-level/manifold	26.5 m.

Coal Terminal: Largest vessels which can be accommodated at the Deep Sea Coal Berth:

Max. Length Overall	350 m.
Max. Beam	No restriction.
Water Depth	18 m.
Discharging facilities for coal	1×40 ton unloading crane and 1× continuous unloader (1,550 cu.m./hour)
Total outturn/24 hours	40,000 tonnes
Height from water level to hatchcoaming	20 m.
Outlay of cranes from quay side to centre grab	38 m.
Max. distance between centre of cranes (grabs)	285 m.

STEVEDORES: To be informed by Agent.

DENSITY: 1015.

MEDICAL: A few hours notice required to arrange for doctor to come on board. Hospital in Aabenraa.

BERTHING: One oil berth: length 200 m. (a further length of ships at about 100 m. acceptable for berthing alongside the dolphins). Max. safe arrival draft: 41 ft. (12.5 m.).

Old Coal Berth: length 285 m. Max. safe arrival draft: 35 ft. (10.67 m.). 4 cranes available.

New Coal Berth: length of quay: 216 m. (See "Max. Size"). Max. safe arrival draft: 12.67 m. 2 cranes available.

Ash Berth: Safe draft 25 ft. (7.65 m.). Loading only, by pipe-line from 6,000 cu.m. silo.

DENSITY: Brackish – about 1011.

STEVEDORES: Private stevedores to be ordered through receivers – coal discharge rate: about 700 t.p.h.

New Coal Berth: Discharge rate about 850 t.p.h.

MEDICAL: All medical and hospital facilities available. No advance notice necessary.

TANKERS: 2 discharge hoses (a possibility of 3) of 8 in. each. Average discharge rate 3,000 t.p.h., max. back pressure 14 kg. Also see "Berthing".

FRESH WATER: Available by pipe-line at the berth. Rate 10 t.p.h.

FUEL: Available by barge or truck.

CONSULS: Swedish and Norwegian at Kalundborg. Others at Copenhagen.

REPAIRS: All types of smaller repairs can be carried out.

DRY DOCKS: No dry dock available.

SURVEYORS: Messrs. Caleb Brett has a local office in Kalundborg SGS Inspection (Danmark) A/S has office in Copenhagen.

GANGWAY/DECK WATCHMEN: Not recommended.

HATCHES: Opening/closing hatches to be carried out by crew.

AIRPORT: Nearest at Copenhagen (100 Km.).

CUSTOMS ALLOWANCES: See "General" before first port.

REPATRIATION: All repatriation can be arranged normally via Copenhagen 100 km. from Kalundborg.

TIME: GMT plus 1 hour (from Late September– Late March). GMT plus 2 hours (from Late March–Late September).

HOLIDAYS: Saturday/Sunday normally no work, also no work on holidays declared as official Danish holidays.

POLICE/AMBULANCE/FIRE: 0–0–0 all alarms.

TELEPHONES: No telephone connection on board.

EMERGENCY CO-ORDINATION CENTRE:

Radio: VHF Channel 16 Lyngby Radio – will contact the Authorities involved.

BANKS: Kjoebenhavns Handelsbank A/S, Holmens Kanal 12, 1091 Copenhagen K.
Telex: 12186 HACO DK.
A/S Den Danske Bank, Holmens Kanal 12, 1092 Copenhagen K.
Telex: 15880 DDBFX DK.
Privatbanken A/S, Boersgade 4, 1215 Copenhagen K.
Telex: 27196 PRIVCO DK.

STORING: See "Prelims" page viii.

1. Vessel can be stored from barge and truck.
2. No restrictions – can be stored during discharging.
3. Trucks can proceed alongside.
4. Fork lift trucks can be used on the Jetty.
5. No special customs' regulations except: spirits and tobacco, and other goods under bond to be declared to Customs before unloading/loading.
6. Local riggers can be employed.

SERVICES: No tank-cleaning facilities; all other services to ships can be arranged through specialists from Copenhagen.

SHORE LEAVE: No restrictions for shore leave.

IDENTIFICATION CARDS: Shore passes necessary.

AUTHORITY: *Owners of the Port:* Isefjordvaerket I/S, Parallelvej 19, 2800 Lyngby. *Telex:* 37500. *Tel:* 2-883200.
Local Office: Asnaes Power Station, Asnaesvej, 4400 Kalundborg. *Tel:* 3-511500.

ASSENS: 55.15 N. 09.53 E. (See Plan Book)

LOCATION: On West side of Funen in Little Belt. Open all year except in severe weather when Little Belt may be frozen.

DOCUMENTS:

Customs Declaration for Ships, Form G25.
Maritime Declaration of Health, Z2 Ln 00-146.
Master's Declaration, Arrival, P650-010 (3/79).
Ice-Breaker Dues, Form G92 (only from 15th December – 31st March).
Crew List.
All Forms can be obtained from the Agent.

PILOTAGE: Not compulsory. Pilot requires 4 hours' notice. Pilot boarding points are 1-2 miles North or South of Assens. If necessary, Pilot can board in Little Belt.

ANCHORAGES: In the Roads North of Assens and SW of Assens.

MAX. SIZE: Vessels up to 130 m. LOA, max. draft 7 m. and max. beam 20 m. No tides.

RADIO: Lyngby Radio (OXZ).

VHF: There is a VHF station at the pilot station, Channel 16.

RADAR: There is radar in the tug used by the Pilot.

TUGS: There is a small tug, for larger tugs 6 hours' notice to be given. Ship's lines are used.

BERTHING: Loading/discharging normally takes place in the Northern Basin, depth 7 m., which is served by railway. The total length of quays is 400 m., made up of 100 m. on the North side, 170 m. on the East side and 130 m. on the South Side.

CRANES: 2 mobile cranes each max. 32 tons.

STEVEDORES: Working hours 0700-1600, Monday to Friday. Overtime by arrangement.

MEDICAL: Full hospital facilities available without prior notice.

FRESH WATER: Good quality potable water available in unlimited quantities.

FUEL: Can be delivered, if sufficient notice given.

REPAIRS: Most types of repairs can be undertaken at the shipyard.

DRY DOCKS: One floating dock for ships up to 1,350 tons, max. length 80 m. and 15 m. beam. 1 slipway for ships up to 300 tons, max. length 60 m. and 9.5 m. beam.

GANGWAY/DECK WATCHMEN: Not necessary.

HATCHES: Opening/closing done by crew.

CUSTOMS ALLOWANCES: See "General" before first port.

AIRPORT: Odense, 50 km. away. Daily connections to Copenhagen.

TIME: GMT plus 1 hour; Summertime GMT plus 2 hours from March to September.

HOLIDAYS: Usual Danish holidays.

POLICE/AMBULANCE/FIRE: Dial 000.

TELEPHONES: Available aboard vessels.

STORING: See "Prelims" page viii.

1. Vessels can be stored by truck.
3. Yes.
4. Yes.

SHORE LEAVE: Permitted.

DELAYS: Normally no delays.

AUTHORITY: Assens Kommune, Harbour Office, Ndr. Havnevej 3, DK-5610 Assens. *Tel:* (09) 713165-713580. *Contact:* N. Hald-Andersen, Harbour Master.

AGENT: A. Fage-Pedersen A/S, Strandgade 19, DK5610, Assens. Tel: 09-711200. Telex: 50301 (Fage DK). Cables: Shipping (Lloyds Agent).

BANDHOLM: 54.50 N. 11.30 E. (See Plan Book)

DOCUMENTS:

1 Crew List.
1 Passenger List.
1 Stores List.
1 Manifest or Bill of Lading.

PILOTAGE: Not compulsory. Pilot boards vessel at Sea Buoy off Vejroe from pilot vessel, hull painted green and "LODS" on each side of the hull. Pilot ordered through Agent, telephone 03–88 80 11 four hours prior arrival at Sea Buoy. VHF Channel 16. Telephone number of Pilot Station 03-89 49 75/03-89 41 52 day/night.

ANCHORAGE: Near Sea Buoy off Vejroe.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Max. length 100 m., draft 5.0 m.

HEALTH: Normal quarantine rules.

RADIO: Lyngby Radio or Kiel Radio.

TUGS: None.

BERTHING: Sheltered harbour with 366 m. of stone quays available and easily accessible. Depth of water at entrance 5 m. Depth at old quays, 4.4 m. At new quay 244 m. there is 5.8 m. average depth. Electric coal crane to discharge 60 t.p.h with grab. Average daily rates: Coal and coke 500 – 1,000 tons. Grain elevator, loading or discharging capacity 110 t.p.h. storage capacity 25,000 tons.

STEVEDORES: Ordered by Agent. Working hours Monday to Friday 0700 – 1600 hrs. Saturday no work.

MEDICAL: Doctors, hospital facilities available.

FRESH WATER: Supplied from quay installations.

FUEL: Available.

OPENING/CLOSING HATCHES: Carried out by crew.

GANGWAY/DECK WATCHMEN: Not necessary.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not required.

REPAIRS: Small deck and engine repairs possible.

AIRPORT: Maribo Airport, about 15 km. away.

TIME: GMT plus 1 hour.

HOLIDAYS: See "Copenhagen".

POLICE/AMBULANCE/FIRE: Dial 0-0-0 and ask for Police, Ambulance or Fire Brigade.

TELEPHONE: Not available on board vessels.

SHORE LEAVE: Allowed.

GENERAL: Tide normally 1 ft.

AUTHORITY: Harbour Master.

AGENT: Alfr. Hovmand, Shipbroker, Havnepladsen 6, Bandholm, DK-4930 Maribo. Tel: 03-88 80 11. Telex: 40256 Hoban Dk. Cables: "Hovmandship, Maribo".

COPENHAGEN: 55.42 N. 12.37 E. **(See Plan Book)**

DOCUMENTS:

1 Crew List.
2 Passenger Lists.
1 List giving stock of stores and provisions.

Customs officers bring form to be signed by Captain indicating that no epidemic diseases are on board. Formal Bill of Health signed by Danish Consul in port of departure is not necessary.

PILOTAGE: Telegr. address: Coppilot-Copenhagen. Tel. 01 38 67 00. Pilotage not compulsory. ETA minimum 1 hour. VHF Channel 16. Pilot boats painted red. "Pilot" painted in white on side. Pilot flag "G" (white light) – VHF. Pilot comes on board at Middelgrund Fort (Pilot for Drogden at the same place). Pilot boards by ship's ladder.

Bigger ships usually take Pilot by Skaw L/V. Pilots to be ordered by ETA–telegrams to Skawpilot Skagen, at least 12 hours in advance. Skawpilot listening on VHF Channel 16.

ANCHORAGE: Depth 11 m., 1 mile North of Middelgrund Fort.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Limited by draft only. Depths in the port, 10 m.; in the Oil Harbour, 10.5 m.; at the Oil Pier, 12.0 m.

HEALTH: See "Documents". If fear of suspected disease or fever: yellow flag – VHF.

RADIO: Lyngby Radio: OXZ. VHF Channel 16 to all installations. ETA cables to Agents and receivers, preferably by Lyngby Radio.

RADAR/VHF: No port radar. VHF Channel 16.

TUGS: Towage not compulsory. Tugs join ships at entrance to port. Ship's hawsers only.

BRIDGES: Larger ships must take Pilot and tugs to pass the bridges down to the South Harbour.

The Knippelsbro and Langebro and Sjaellandsbroen will be closed experimentally for passage as follows:

	Knippelsbro/Langebro	*Sjaellandsbroen*
Monday – Friday	0000 – 0550 hrs.	0000 – 0600 hrs.
	0615 – 0655 hrs.	0615 – 0655 hrs.
	0735 – 0900 hrs.	0735 – 0900 hrs.
	1500 – 1800 hrs.	1500 – 1800 hrs.
		2000 – 2400 hrs.
Saturday	0000 – 0655 hrs.	0000 – 0600 hrs.
	0735 – 0900 hrs.	0615 – 0655 hrs.
	1200 – 1230 hrs.	0735 – 0900 hrs.
	1300 – 1330 hrs.	1200 – 1230 hrs.
	1800 – 2400 hrs.	1300 – 1330 hrs.
		2000 – 2400 hrs.
Sundays and Holidays	0000 – 0800 hrs.	
	1200 – 1800 hrs.	
	2000 – 2400 hrs.	
15th May – 15th September		0000 – 0600 hrs.
		1000 – 1700 hrs.
		2000 – 2400 hrs.
16th September – 14th May		0000 – 0700 hrs.
		1000 – 1700 hrs.
		1800 – 2400 hrs.
Constitution Day 5th June	1200 – 1300 hrs.	1200 – 1300 hrs.
Christmas Eve 24th December and New Year's Eve 31st December	1800 – 2400 hrs.	1800 – 2400 hrs.

CONTAINER TERMINAL: At the Levant quay in the free port. Quay length 665 m., depth alongside 10 m. 2 Container cranes capacity 32 tons, also two luffing cranes of 50 tons and 5 tons capacity for general cargo. Horizontal handling by two straddle carriers and a number of front loaders.

STEVEDORES: ETA earliest possible by VHF and not later than noon on the day before loading or discharging is intended to be commenced.

MEDICAL: No advance notice necessary. Hospitals available.

TANKERS: 10/12 berths according to size.

Provestens Oil Harbour: depth at		
	Quay 1:	10.5 m.
	Quay 2:	9.1 m.
	Quay 3:	9.1 m.
	Quay 4:	10.5 m.
	Quay 5:	10.5 m.
	Oil Pier North:	6.0 m.
	Oil Pier East:	12.0 m.

Length and beam unimportant. Slop barge available.

FRESH WATER: From quay or water boat.

FUEL: All grades available. At bunker station, no notice required, delivery 24 hours a day. By lighter in port or in roads; 10 hours notice preferred.

FIRE PRECAUTIONS: Ready hawsers fore and aft. No engine repairs.

GANGWAY/DECK WATCHMEN: Deemed unnecessary.

OPENING/CLOSING HATCHES: To be opened by ship's crew.

CERTIFICATES: To be on board:

Ship's Register.
Radio Safety Certificate.
Safety Equipment Certificate.
International Load Line Certificate.
Derat Certificate.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not necessary except in Oil Harbour, where the Port Authority deliver the cards.

REPAIRS: All types of repairs possible.

DRY DOCKS: Respective lengths, 787 ft. 5 in., 712 ft. 11 in. and 478 ft.

REPATRIATION: Facilities exist for changing crew and arranging any necessary repatriation.

CONSULS: The following countries are represented.

Argentina
Australia
Austria
Bangladesh
Belgium
Bolivia
Brazil
Bulgaria
Canada
Chile
China
Colombia
Costa Rica
Cuba
Cyprus
Czechoslovakia
Dominican Republic
East Germany
Egypt
El Salvador
Finland
France
Ghana
Great Britain
Greece
Guatemala
Guinea
Haiti
Honduras
Hungary
Iceland
India
Indonesia
Iran
Iraq
Ireland
Israel
Italy
Ivory Coast
Japan
Korea
Kuwait
Lesotho
Liberia
Libya
Luxembourg
Malaysia
Malta
Morocco
Mauritania
Mexico
Monaco
Nepal
Netherlands
Nicaragua
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Romania
San Marino
Saudi Arabia
Senegal
Somalia
South Africa
Spain
Sri Lanka
Sudan
Sweden
Switzerland
Thailand
Tunisia
Turkey
Uganda
Upper Volta
United States
U.S.S.R.
Venezuela
West Germany
Yugoslavia

AIRPORT: 6 miles from centre. Direct lines for all parts of the world.

TIME: GMT plus 1 hour.

HOLIDAYS: New Year's Day (January 1st); Maundy Thursday; Good Friday; Easter Monday; Prayer Day; Ascension Day; Whit Monday; Christmas Day (December 25th); Boxing Day (December 26th).

Half holidays: Labour Day (May 1st); Constitution Day (June 5th); Christmas Eve (December 24th).

Working hours: 0700-1630 with 2 half-hour meal breaks.

Overtime work on Saturday and Sunday should be ordered by 1130 hrs. on Friday.

The working hours vary slightly from port to port as some start at 0730 and others at 0800 hrs., but a 42.5 hour week is common to all.

POLICE/AMBULANCE/FIRE: Call "000".

TELEPHONES: In many berths telephones can be placed on board ships.

GENERAL: Customs Authorities supervision of ship's provisions and bonded stores is carried out in the Free Port in the same way as in Customs Port. In this connection the Free Port is not a Free Port.

SERVICES: All services available (tank cleaning, discharge of tank washings, compass adjusting etc.).

SHORE LEAVE: No restrictions.

AUTHORITY: Port of Copenhagen Authority, Nordre Toldbod 7, DK–1259 Copenhagen K. *Tel:* (01) 144340. *Telex:* 15439.
Cables: "Copenport". *Contact:* Harbour Master.

ENSTED: 55.01 N. 09.26 E. **(See Plan Book)**

Also refer to "Aabenraa".

DOCUMENTS: See "Aabenraa".

PILOTAGE: See "Aabenraa".

ANCHORAGES: See "Aabenraa".

HEALTH: In event of disease or fever on board, vessels Agent to be informed before arrival.

RADIO: Blaavand or Lyngby Radio.

TUGS: Large vessels may require towage assistance on entering and leaving Ensted Harbour. 24 hours notice is required to call a Svitzer tug.

VHF: Pilot on Channels 12 and 16.

BERTHING:

Oil Terminal: Largest vessels which can be accommodated at the Oil Pier: (Berth No. 1).

Length overall	350 m.
Beam	no limits
Water depth	18 m.
Bow/centre	165 m.
Max. height water-level/manifold	26.5 m.

Coal Terminal: Largest vessels which can be accommodated at the Deep Sea Coal Berth:

Max. Length Overall	350 m.
Max. Beam	No restriction.
Water Depth	18 m.
Discharging facilities for coal	1×40 ton unloading crane and 1× continuous unloader (1,550 cu.m./hour)
Total outturn/24 hours	40,000 tonnes
Height from water level to hatchcoaming	20 m.
Outlay of cranes from quay side to centre grab	38 m.
Max. distance between centre of cranes (grabs)	285 m.

STEVEDORES: To be informed by Agent.

DENSITY: 1015.

MEDICAL: A few hours notice required to arrange for doctor to come on board. Hospital in Aabenraa.

BERTHING: One oil berth: length 200 m. (a further length of ships at about 100 m. acceptable for berthing alongside the dolphins). Max. safe arrival draft: 41 ft. (12.5 m.).

Old Coal Berth: length 285 m. Max. safe arrival draft: 35 ft. (10.67 m.). 4 cranes available.

New Coal Berth: length of quay: 216 m. (See "Max. Size"). Max. safe arrival draft: 12.67 m. 2 cranes available.

Ash Berth: Safe draft 25 ft. (7.65 m.). Loading only, by pipe-line from 6,000 cu.m. silo.

DENSITY: Brackish – about 1011.

STEVEDORES: Private stevedores to be ordered through receivers – coal discharge rate: about 700 t.p.h.

New Coal Berth: Discharge rate about 850 t.p.h.

MEDICAL: All medical and hospital facilities available. No advance notice necessary.

TANKERS: 2 discharge hoses (a possibility of 3) of 8 in. each. Average discharge rate 3,000 t.p.h., max. back pressure 14 kg. Also see "Berthing".

FRESH WATER: Available by pipe-line at the berth. Rate 10 t.p.h.

FUEL: Available by barge or truck.

CONSULS: Swedish and Norwegian at Kalundborg. Others at Copenhagen.

REPAIRS: All types of smaller repairs can be carried out.

DRY DOCKS: No dry dock available.

SURVEYORS: Messrs. Caleb Brett has a local office in Kalundborg SGS Inspection (Danmark) A/S has office in Copenhagen.

GANGWAY/DECK WATCHMEN: Not recommended.

HATCHES: Opening/closing hatches to be carried out by crew.

AIRPORT: Nearest at Copenhagen (100 Km.).

CUSTOMS ALLOWANCES: See "General" before first port.

REPATRIATION: All repatriation can be arranged normally via Copenhagen 100 km. from Kalundborg.

TIME: GMT plus 1 hour (from Late September– Late March). GMT plus 2 hours (from Late March–Late September).

HOLIDAYS: Saturday/Sunday normally no work, also no work on holidays declared as official Danish holidays.

POLICE/AMBULANCE/FIRE: 0-0-0 all alarms.

TELEPHONES: No telephone connection on board.

EMERGENCY CO-ORDINATION CENTRE:

Radio: VHF Channel 16 Lyngby Radio – will contact the Authorities involved.

BANKS: Kjoebenhavns Handelsbank A/S, Holmens Kanal 12, 1091 Copenhagen K.
Telex: 12186 HACO DK.
A/S Den Danske Bank, Holmens Kanal 12, 1092 Copenhagen K.
Telex: 15880 DDBFX DK.
Privatbanken A/S, Boersgade 4, 1215 Copenhagen K.
Telex: 27196 PRIVCO DK.

STORING: See "Prelims" page viii.

1. Vessel can be stored from barge and truck.
2. No restrictions – can be stored during discharging.
3. Trucks can proceed alongside.
4. Fork lift trucks can be used on the Jetty.
5. No special customs' regulations except: spirits and tobacco, and other goods under bond to be declared to Customs before unloading/loading.
6. Local riggers can be employed.

SERVICES: No tank-cleaning facilities; all other services to ships can be arranged through specialists from Copenhagen.

SHORE LEAVE: No restrictions for shore leave.

IDENTIFICATION CARDS: Shore passes necessary.

AUTHORITY: *Owners of the Port:* Isefjordvaerket I/S, Parallelvej 19, 2800 Lyngby. *Telex:* 37500. *Tel:* 2-883200.
Local Office: Asnaes Power Station, Asnaesvej, 4400 Kalundborg. *Tel:* 3-511500.

ASSENS: 55.15 N. 09.53 E. (See Plan Book)

LOCATION: On West side of Funen in Little Belt. Open all year except in severe weather when Little Belt may be frozen.

DOCUMENTS:

Customs Declaration for Ships, Form G25.
Maritime Declaration of Health, Z2 Ln 00-146.
Master's Declaration, Arrival, P650-010 (3/79).
Ice-Breaker Dues, Form G92 (only from 15th December – 31st March).
Crew List.
All Forms can be obtained from the Agent.

PILOTAGE: Not compulsory. Pilot requires 4 hours' notice. Pilot boarding points are 1-2 miles North or South of Assens. If necessary, Pilot can board in Little Belt.

ANCHORAGES: In the Roads North of Assens and SW of Assens.

MAX. SIZE: Vessels up to 130 m. LOA, max. draft 7 m. and max. beam 20 m. No tides.

RADIO: Lyngby Radio (OXZ).

VHF: There is a VHF station at the pilot station, Channel 16.

RADAR: There is radar in the tug used by the Pilot.

TUGS: There is a small tug, for larger tugs 6 hours' notice to be given. Ship's lines are used.

BERTHING: Loading/discharging normally takes place in the Northern Basin, depth 7 m., which is served by railway. The total length of quays is 400 m., made up of 100 m. on the North side, 170 m. on the East side and 130 m. on the South Side.

CRANES: 2 mobile cranes each max. 32 tons.

STEVEDORES: Working hours 0700-1600, Monday to Friday. Overtime by arrangement.

MEDICAL: Full hospital facilities available without prior notice.

FRESH WATER: Good quality potable water available in unlimited quantities.

FUEL: Can be delivered, if sufficient notice given.

REPAIRS: Most types of repairs can be undertaken at the shipyard.

DRY DOCKS: One floating dock for ships up to 1,350 tons, max. length 80 m. and 15 m. beam. 1 slipway for ships up to 300 tons, max. length 60 m. and 9.5 m. beam.

GANGWAY/DECK WATCHMEN: Not necessary.

HATCHES: Opening/closing done by crew.

CUSTOMS ALLOWANCES: See "General" before first port.

AIRPORT: Odense, 50 km. away. Daily connections to Copenhagen.

TIME: GMT plus 1 hour; Summertime GMT plus 2 hours from March to September.

HOLIDAYS: Usual Danish holidays.

POLICE/AMBULANCE/FIRE: Dial 000.

TELEPHONES: Available aboard vessels.

STORING: See "Prelims" page viii.

1. Vessels can be stored by truck.
3. Yes.
4. Yes.

SHORE LEAVE: Permitted.

DELAYS: Normally no delays.

AUTHORITY: Assens Kommune, Harbour Office, Ndr. Havnevej 3, DK-5610 Assens. *Tel:* (09) 713165-713580. *Contact:* N. Hald-Andersen, Harbour Master.

AGENT: A. Fage-Pedersen A/S, Strandgade 19, DK5610, Assens. Tel: 09-711200. Telex: 50301 (Fage DK). Cables: Shipping (Lloyds Agent).

BANDHOLM: 54.50 N. 11.30 E. (See Plan Book)

DOCUMENTS:

1 Crew List.
1 Passenger List.
1 Stores List.
1 Manifest or Bill of Lading.

PILOTAGE: Not compulsory. Pilot boards vessel at Sea Buoy off Vejroe from pilot vessel, hull painted green and "LODS" on each side of the hull. Pilot ordered through Agent, telephone 03–88 80 11 four hours prior arrival at Sea Buoy. VHF Channel 16. Telephone number of Pilot Station 03-89 49 75/03-89 41 52 day/night.

ANCHORAGE: Near Sea Buoy off Vejroe.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Max. length 100 m., draft 5.0 m.

HEALTH: Normal quarantine rules.

RADIO: Lyngby Radio or Kiel Radio.

TUGS: None.

BERTHING: Sheltered harbour with 366 m. of stone quays available and easily accessible. Depth of water at entrance 5 m. Depth at old quays, 4.4 m. At new quay 244 m. there is 5.8 m. average depth. Electric coal crane to discharge 60 t.p.h with grab. Average daily rates: Coal and coke 500 – 1,000 tons. Grain elevator, loading or discharging capacity 110 t.p.h. storage capacity 25,000 tons.

STEVEDORES: Ordered by Agent. Working hours Monday to Friday 0700 – 1600 hrs. Saturday no work.

MEDICAL: Doctors, hospital facilities available.

FRESH WATER: Supplied from quay installations.

FUEL: Available.

OPENING/CLOSING HATCHES: Carried out by crew.

GANGWAY/DECK WATCHMEN: Not necessary.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not required.

REPAIRS: Small deck and engine repairs possible.

AIRPORT: Maribo Airport, about 15 km. away.

TIME: GMT plus 1 hour.

HOLIDAYS: See "Copenhagen".

POLICE/AMBULANCE/FIRE: Dial 0-0-0 and ask for Police, Ambulance or Fire Brigade.

TELEPHONE: Not available on board vessels.

SHORE LEAVE: Allowed.

GENERAL: Tide normally 1 ft.

AUTHORITY: Harbour Master.

AGENT: Alfr. Hovmand, Shipbroker, Havnepladsen 6, Bandholm, DK-4930 Maribo. Tel: 03-88 80 11. Telex: 40256 Hoban Dk.
Cables: "Hovmandship, Maribo".

COPENHAGEN: 55.42 N. 12.37 E. (See Plan Book)

DOCUMENTS:

1 Crew List.
2 Passenger Lists.
1 List giving stock of stores and provisions.

Customs officers bring form to be signed by Captain indicating that no epidemic diseases are on board. Formal Bill of Health signed by Danish Consul in port of departure is not necessary.

PILOTAGE: Telegr. address: Coppilot-Copenhagen. Tel. 01 38 67 00. Pilotage not compulsory. ETA minimum 1 hour. VHF Channel 16. Pilot boats painted red. "Pilot" painted in white on side. Pilot flag "G" (white light) – VHF. Pilot comes on board at Middelgrund Fort (Pilot for Drogden at the same place). Pilot boards by ship's ladder.

Bigger ships usually take Pilot by Skaw L/V. Pilots to be ordered by ETA–telegrams to Skawpilot Skagen, at least 12 hours in advance. Skawpilot listening on VHF Channel 16.

ANCHORAGE: Depth 11 m., 1 mile North of Middelgrund Fort.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Limited by draft only. Depths in the port, 10 m.; in the Oil Harbour, 10.5 m.; at the Oil Pier, 12.0 m.

HEALTH: See "Documents". If fear of suspected disease or fever: yellow flag – VHF.

RADIO: Lyngby Radio: OXZ. VHF Channel 16 to all installations. ETA cables to Agents and receivers, preferably by Lyngby Radio.

RADAR/VHF: No port radar. VHF Channel 16.

TUGS: Towage not compulsory. Tugs join ships at entrance to port. Ship's hawsers only.

BRIDGES: Larger ships must take Pilot and tugs to pass the bridges down to the South Harbour.

The Knippelsbro and Langebro and Sjaellandsbroen will be closed experimentally for passage as follows:

	Knippelsbro/Langebro	*Sjaellandsbroen*
Monday – Friday	0000 – 0550 hrs.	0000 – 0600 hrs.
	0615 – 0655 hrs.	0615 – 0655 hrs.
	0735 – 0900 hrs.	0735 – 0900 hrs.
	1500 – 1800 hrs.	1500 – 1800 hrs.
		2000 – 2400 hrs.
Saturday	0000 – 0655 hrs.	0000 – 0600 hrs.
	0735 – 0900 hrs.	0615 – 0655 hrs.
	1200 – 1230 hrs.	0735 – 0900 hrs.
	1300 – 1330 hrs.	1200 – 1230 hrs.
	1800 – 2400 hrs.	1300 – 1330 hrs.
		2000 – 2400 hrs.
Sundays and Holidays	0000 – 0800 hrs.	
	1200 – 1800 hrs.	
	2000 – 2400 hrs.	
15th May – 15th September		0000 – 0600 hrs.
		1000 – 1700 hrs.
		2000 – 2400 hrs.
16th September – 14th May		0000 – 0700 hrs.
		1000 – 1700 hrs.
		1800 – 2400 hrs.
Constitution Day 5th June	1200 – 1300 hrs.	1200 – 1300 hrs.
Christmas Eve 24th December and New Year's Eve 31st December	1800 – 2400 hrs.	1800 – 2400 hrs.

CONTAINER TERMINAL: At the Levant quay in the free port. Quay length 665 m., depth alongside 10 m. 2 Container cranes capacity 32 tons, also two luffing cranes of 50 tons and 5 tons capacity for general cargo. Horizontal handling by two straddle carriers and a number of front loaders.

STEVEDORES: ETA earliest possible by VHF and not later than noon on the day before loading or discharging is intended to be commenced.

MEDICAL: No advance notice necessary. Hospitals available.

TANKERS: 10/12 berths according to size.

Provestens Oil Harbour: depth at		
	Quay 1:	10.5 m.
	Quay 2:	9.1 m.
	Quay 3:	9.1 m.
	Quay 4:	10.5 m.
	Quay 5:	10.5 m.
	Oil Pier North:	6.0 m.
	Oil Pier East:	12.0 m.

Length and beam unimportant. Slop barge available.

FRESH WATER: From quay or water boat.

FUEL: All grades available. At bunker station, no notice required, delivery 24 hours a day. By lighter in port or in roads; 10 hours notice preferred.

FIRE PRECAUTIONS: Ready hawsers fore and aft. No engine repairs.

GANGWAY/DECK WATCHMEN: Deemed unnecessary.

OPENING/CLOSING HATCHES: To be opened by ship's crew.

CERTIFICATES: To be on board:

Ship's Register.
Radio Safety Certificate.
Safety Equipment Certificate.
International Load Line Certificate.
Derat Certificate.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not necessary except in Oil Harbour, where the Port Authority deliver the cards.

REPAIRS: All types of repairs possible.

DRY DOCKS: Respective lengths, 787 ft. 5 in., 712 ft. 11 in. and 478 ft.

REPATRIATION: Facilities exist for changing crew and arranging any necessary repatriation.

CONSULS: The following countries are represented.

Argentina
Australia
Austria
Bangladesh
Belgium
Bolivia
Brazil
Bulgaria
Canada
Chile
China
Colombia
Costa Rica
Cuba
Cyprus
Czechoslovakia
Dominican Republic
East Germany
Egypt
El Salvador
Finland
France
Ghana
Great Britain
Greece
Guatemala
Guinea
Haiti
Honduras
Hungary
Iceland
India
Indonesia
Iran
Iraq
Ireland
Israel
Italy
Ivory Coast
Japan
Korea
Kuwait
Lesotho
Liberia
Libya
Luxembourg
Malaysia
Malta
Morocco
Mauritania
Mexico
Monaco
Nepal
Netherlands
Nicaragua
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Romania
San Marino
Saudi Arabia
Senegal
Somalia
South Africa
Spain
Sri Lanka
Sudan
Sweden
Switzerland
Thailand
Tunisia
Turkey
Uganda
Upper Volta
United States
U.S.S.R.
Venezuela
West Germany
Yugoslavia

AIRPORT: 6 miles from centre. Direct lines for all parts of the world.

TIME: GMT plus 1 hour.

HOLIDAYS: New Year's Day (January 1st); Maundy Thursday; Good Friday; Easter Monday; Prayer Day; Ascension Day; Whit Monday; Christmas Day (December 25th); Boxing Day (December 26th).

Half holidays: Labour Day (May 1st); Constitution Day (June 5th); Christmas Eve (December 24th).

Working hours: 0700-1630 with 2 half-hour meal breaks.

Overtime work on Saturday and Sunday should be ordered by 1130 hrs. on Friday.

The working hours vary slightly from port to port as some start at 0730 and others at 0800 hrs., but a 42.5 hour week is common to all.

POLICE/AMBULANCE/FIRE: Call "000".

TELEPHONES: In many berths telephones can be placed on board ships.

GENERAL: Customs Authorities supervision of ship's provisions and bonded stores is carried out in the Free Port in the same way as in Customs Port. In this connection the Free Port is not a Free Port.

SERVICES: All services available (tank cleaning, discharge of tank washings, compass adjusting etc.).

SHORE LEAVE: No restrictions.

AUTHORITY: Port of Copenhagen Authority, Nordre Toldbod 7, DK–1259 Copenhagen K. *Tel:* (01) 144340. *Telex:* 15439.
Cables: "Copenport". *Contact:* Harbour Master.

ENSTED: 55.01 N. 09.26 E. (See Plan Book)

Also refer to "Aabenraa".

DOCUMENTS: See "Aabenraa".

PILOTAGE: See "Aabenraa".

ANCHORAGES: See "Aabenraa".

HEALTH: In event of disease or fever on board, vessels Agent to be informed before arrival.

RADIO: Blaavand or Lyngby Radio.

TUGS: Large vessels may require towage assistance on entering and leaving Ensted Harbour. 24 hours notice is required to call a Svitzer tug.

VHF: Pilot on Channels 12 and 16.

BERTHING:

Oil Terminal: Largest vessels which can be accommodated at the Oil Pier: (Berth No. 1).

Length overall	350 m.
Beam	no limits
Water depth	18 m.
Bow/centre	165 m.
Max. height water-level/manifold	26.5 m.

Coal Terminal: Largest vessels which can be accommodated at the Deep Sea Coal Berth:

Max. Length Overall	350 m.
Max. Beam	No restriction.
Water Depth	18 m.
Discharging facilities for coal	1×40 ton unloading crane and 1× continuous unloader (1,550 cu.m./hour)
Total outturn/24 hours	40,000 tonnes
Height from water level to hatchcoaming	20 m.
Outlay of cranes from quay side to centre grab	38 m.
Max. distance between centre of cranes (grabs)	285 m.

STEVEDORES: To be informed by Agent.

DENSITY: 1015.

MEDICAL: A few hours notice required to arrange for doctor to come on board. Hospital in Aabenraa.

TIDE: No tide – arriving and sailing day and night.
FRESH WATER: Fresh water from shore line 5 t.p.h.
FUEL: Available by barge or truck.
OPENING/CLOSING HATCHES: By crew.
CONSULS: Norway, Germany, Finland, Sweden and Great Britain.
REPAIRS: All types of deck and engine repairs are possible.
REPATRIATION: Facilities exist for effecting crew changes.
AIRPORT: Skrydstrup. The distance from airport is 25 km. Airport is served by regular airlines via Copenhagen.
POLICE/AMBULANCE/FIRE: Telephone number 000.
SHORE LEAVE: Crew members are allowed ashore.
TELEPHONES: Available for placing on board.
AUTHORITY: Soenderjyllands Hoejspaendingsvaek, Flensborgvej 185, DK. 6200 Aabenraa. *Tel:* (International +45) 4 624231. *Telex:* 52140 SHDK. *Contact:* N. E. Pedersen, Habour Master.
AGENT: Aabenraa Shipping Agency Ltd. (Aabenraa Skibsagentur ApS). Kilen 29 (P.O.Box 31), DK. 6200 Aabenraa. Tel: (International +45) 4 627700 (day and night). Telex: 52160 AGENCY DK. Cables: Shipagency Aabenraa.

ESBJERG: 55.28 N. 08.26 E. (See Plan Book)

DOCUMENTS:
Tonnage Certificate.
Derat or Exemption Certificate.
1 Crew List.
1 Crew Personal Effects List.
Stores List.
Cargo Manifest or Bill of Lading.
Dangerous Cargo List.

PILOTAGE: Advance notice of 12 hours prior to ETA pilot station at "Graadyb Barre" is required. This ETA to be confirmed/altered 3 hours prior to actual time of arrival.

Message can be given via coast radio station "Blaavand Radio" (OXB) or via Port Authority's VHF – watch is kept on Channel 16. (Tel: (05) 129200).

Cable address: "Pilotstation Esbjerg".

Telephone: 05-121065.

Two pilot vessels, painted orange, with "PILOT" painted in white on sides stationed in the port of Esbjerg. One is a 71 g.r.t. vessel (tug) and one is a fast launch.

Both vessels equipped with VHF Channel 16 and carrying signals as prescribed. Pilot boards outside Graadyb Barre, at buoy No. 2. Vessels awaiting Pilot or high tide should anchor approximately 1 mile West of buoy No. 2. Large vessels wait 2 miles from buoy No. 2.

Pilot is not compulsory except for tankers over 500 d.w.t. and when tugs are assisting in berthing.
ANCHORAGES: There are anchorage areas West of buoy No. 2 (depth 35 ft. at MLWST).
RESTRICTIONS: No ice to impede navigation. No ice dues charged. Also see "General" before first port.
MAX. SIZE: Pilot Restrictions: Max. length accepted: 220 m. (approx.). Breadth: No restrictions. Max. draft accepted: 31 ft. 02 in.

Entry to port is through a dredged channel over Graadyb Barre, width 200 m., depth 9.3 m. at MLWST.

Tide: Difference between normal high water and normal low water is 4 ft. (approx.). Max. current 2.5 knots – 3 knots.
RADIO: Blaavand Radio, call sign OXB. In position Lat: 55° 33′ N., Long: 08° 06′ E.
TUGS: Tugs join vessel at Esbjerg Roads. Ship's own hawsers must always be used. 3 tugs available of 1,500, 1,900 and 1,900 h.p.
BERTHING:

	Approach at MLWST	*Berth at MLWST*
Trafikhavn	31 ft.	22 ft.–35 ft.
Foergehavn	28 ft.	15 ft.
Outer Foergehavn for Roll-on/Roll-off vessels	28 ft.	28 ft.
Dokhavn	22 ft.	22 ft.
Englandskaj	31 ft.	25 ft.
Osterhavn	31 ft.	22 ft.
Osterhavn – New Berth (when entering max. draft 31 ft. LOA 705 ft.)	31 ft.	35 ft.
Sonderhavn	31 ft.	22 ft.–31 ft.
Fishery Harbour – Consumption	15 ft.	15 ft.–17 ft.
Fishery Harbour – Industrial Fish	17 ft.	17 ft.–18 ft.

For berthing in Trafikhavn with vessels of (approx.) 5,000 d.w.t. or more the Pilots require "Slack Water" – i.e. high or low water.

Max. draft for berthing on high water: 31 ft. 02 in.
Max. draft for berthing on low water: 26 ft. 00 in.

CARGO HANDLING: The Port of Esbjerg has no specially equipped berths besides the tanker berths, and container terminals for lift-on/lift-off equipped with one travelling gantry crane 32 tons, but private companies own suction plants for discharge/loading of feeding stuffs. Furthermore, mobile cranes also with grabs and stationary coal cranes are available. Container terminals for roll-on/roll-off. Vessels with own gear can however be handled successfully, at different berths. 22 mobile cranes, capacity between 5 and 180 tons, 97 trucks, capacity between 1.5 and 42 tons, 9 bobcats, 1,200 trailers 20 and 40 ft. and 30 tugmasters.
STEVEDORES: Gangs are mustered daily at 0700, and 1000 hrs. ETA should be given to above hours to ensure that gang(s) are available on arrival. Working hours are from 0700 to 1630 and meal hours are 0830–0900 and 1200–1300. No work on Saturdays. Overtime can be arranged.
MEDICAL: Medical attention can be arranged at any time. Modern hospital facilities available.
TANKERS:
Trafikhavn: Depth in approaches to oil berths in Trafikhavn MLWST 31 ft. (MHWST 36 ft.)

Old Oil berth No. 101: Depth alongside old oil berth No. 101 MLWST 35 ft. (MHWST 40 ft.)

New Oil berth No. 102: Depth alongside new oil berth No. 102 MLWST 25 ft. (MHWST 30 ft.)

The length between the outer point of No. 101 and the opposite outer point of No. 102 is 1,200 ft.
Osterhavn: Depth in approaches to oil berth in Osterhavn MLWST 31 ft. (MHWST 36 ft.). Max. length 735 ft., max. draft 31 ft. 2 in.
Powerstation Vestkraft No. 506: Depth alongside Powerstation Vestkraft No. 506 MLWST 35 ft. (MHWST 40 ft.).

Under normal weather conditions Pilot states to be able to berth tankers with a LOA of max. 735 ft.
FRESH WATER: Can be delivered at all berths. Capacity 20 t.p.h.
FUEL: All viscosities available by road tanker. Marine Gas Oil also by tanker vessel. 4 hours should be given, always during office hours.
FIRE PRECAUTIONS: A fire watch is necessary when loading/discharging oil and petrol, if flash point is under 50.
GANGWAY/DECK WATCHMEN: Watchman is not essential, but advisable.
OPENING/CLOSING HATCHES: This can be done by members of ship's crew, or by stevedores at an additional charge of 8%.
IDENTIFICATION CARDS: Not necessary.
CONSULS:

Belgium	tel. (05) 13 26 00
Finland	tel. (05) 12 40 00
France	tel. (05) 12 31 33
Germany	tel. (05) 12 75 44
Gt. Britain	tel. (05) 13 08 11
Iceland	tel. (05) 12 51 00
Netherlands	tel. (05) 12 13 11
Norway	tel. (05) 12 61 22
Sweden	tel. (05) 12 82 22

CUSTOMS ALLOWANCES: See "General" before first port.
REPAIRS: All types of deck and engine repairs can be effected.
DRY DOCKS: No dry docks, but slipways: Slipway No. 1 for trawlers, own weight max. 125 tons; Slipway No. 2 for vessels, own weight max. 250 tons; No. 3 – 500 tons; No. 4 – 750 tons.
REPATRIATION: Ample facilities for effecting crew changes and arranging repatriations.
AIRPORT: 8 km. from centre of town. Daily flights to Copenhagen.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer (6th April – 28th September).
HOLIDAYS: New Year's Day (Jan. 1); Maundy Thursday; Good Friday; Easter Day; Day after Easter Day; the 4th Friday after Easter; Ascension Day; Whit Sunday and Whit Monday; Christmas Day and Boxing Day. Permission to load/discharge on these days obtainable.
POLICE/AMBULANCE/FIRE: In case of emergency, dial "000" and ask for: Brand (fire), Politi (police), or Ambulance. Regular Tel. numbers are: Police 12 46 66; Ambulance and Fire Dept. (Falck/Zonen) 12 82 99.
TELEPHONES: Possible to have telephones installed on board.
SERVICES: No tank-cleaning equipment available. For discharge of tank washings apply to Port Master's Office Tel. 12 92 00. Compass adjusting can be effected.
SHORE LEAVE: Normally granted.
DEVELOPMENTS Extension of the Harbour towards the East, and modernization of Trafikhavn and Sonderhavn.
AUTHORITY: Port of Esbjerg Authority, Hulvejen, P.O. Box 2, DK–6701 Esbjerg, Denmark. *Tel:* (05) 12 41 44. *Contact:* B. O. Juhl, Deputy Manager. Aa Fischer, Port Captain. V. V. Leisner, General Manager.
AGENT: J. Lauritzen EFTF., Amerikavej 1, P.O. Box 100, DK-6700 Esbjerg. Tel. (45–5) 12 31 33. Telex 54133 and 54155. Cables: "Lauritzen".

FREDERICIA: 55.35 N. 09.46 E. (See Plan Book)

DOCUMENTS:
1 copy Bill of Lading for all cargo (manifests are not required).
1 copy Manifests for Dangerous Cargo.
2 copies Crew List.
2 copies List of Dutiable Goods.
2 copies Stores Lists.

PILOTAGE: Three Pilots available for docking purposes and for through traffic to any place in Denmark or the Baltic. Pilots have a 24-hour watch and are located on the top floor of the KFK grain silo in the West Harbour. Can be contacted day or night over VHF radio Channel 16, working 12 and 13, or Tel. 05-920959. Pilotage is compulsory for tankers carrying chemicals or LPG and for all other tankers above 2,500 d.w.t.

Bigger ships usually take Pilot by Skaw L/V. Pilots to be ordered by ETA-telegrams to "Skawpilot Skagen", at least 12 hours in advance. Skawpilot listening on VHF Channel 16.
ANCHORAGE: To avoid hindrances to docking or undocking ships, ships of over or about 4,000 d.w.t. are requested to anchor off Trellenes. Smaller ships will find good anchoring conditions in Strib Bugt.
RESTRICTIONS: Day and night entry possible, least depth in the approach channel is 15.0 m. Also see "General" before first port.

MAX. SIZE:

	Max. draft acceptable
Kastels Harbour	11.70 m.
Old Harbour	5.3 m. to 7.20 m.
Shipyard Harbour	2.80 m.
Dock Entrance	4.60 m.
West Harbour	6.70 m. to 8.70 m.
Mollebugt Harbour	8.70 m. to 11.70 m.

Also see "Tankers".

HEALTH: See "Copenhagen".
RADIO: VHF Channel 16.
TUGS: Tugboats from Svitzer's Salvage Enterprise is stationed in Fredericia, but any amount of tugs are available, when ordered previously.

BERTHING:
Mollebugt Harbour: Quays Nos. 24, 25, 26 and 27 Length 610 m., depth 9 m. – 12 m.

Facilities for container traffic and ro/ro traffic. 40 ton gantry crane and 3×25-ton gantry crane with hook and grab, max. capacity 300 t.p.h. 2 mobile cranes, capacity 6 to 36 tons. Railtracks. Facilities for temporary storage of goods. Modern quayside warehouses.

Gas, Oil & Chemicals Harbour: Quays Nos. 18, 19, 20, 22 & 23 for tankers. Quays Nos. 18 & 19, length 90 m., depth 7 m. in berth. Equipped for loading and discharging gas tankers.

Quay No. 20 – Jetty I. 15 m. depth in berth. Hydraulically operated hose handling gear for discharging petrol and oil products. 10 in. and 12 in. ASA. Connection range between + 0.4 and 18.5 m. above MWL.

Quay No. 22 – Jetty II. 11 m. depth in berth. Equipped for discharging petrol and gas products and bitumen. 6 in. and 8 in. hoses and 6 in. marine hose handling gear.

Quay No. 23 – Jetty III. 7.5 m. depth in berth. Equipped for discharging liquid chemical products. 4 in. DIN hoses.

West Harbour: Quays Nos. 13 to 17. Length 670 m., depth 7 m. – 9 m. in berth.

Facilities for container traffic, ro/ro traffic. 25-ton gantry crane with hook and grab, max. capacity: 300 t.p.h. 6-ton gantry crane with hook and grab, max. capacity: 150 t.p.h. 2 mobile cranes, capacity 6 to 36 tons. 2 gantry cranes* 5-tons. Suction plant* available for discharging feedstuffs – max. capacity: 80 t.p.h. Railtracks. Facilities for temporary storage of goods. Bulk terminal for loading feedstuff max. capacity 300 t.p.h.
Modern quayside freezing and storage facilities.

Shipyard Harbour: Quays Nos. 8 to 12. Length 500 m., depth 5.0 m. – 6.5 m. in berth. Modern repair and equipment piers with workshops. Slipways available for 75-ton and 1,000 ton light displacement. Floating dock 80 m. × 14.5 m. max. capacity: 1,200 ton light displacement. Floating dock 150 m. × 23.05 m. max. capacity: 8,000 tons light displacement. Dry dock facilities 110 m. × 22 m., 5.1 m. access depth. Average docking/sailing time: 45 mins.

Old Harbour: Quays Nos. 6 & 7. Length 200 m., depth 5.6 m. – 7.5 m. in berth. Mobile cranes, capacity: 6 to 36 tons. Suction plant* available for discharging grain – max. capacity 60 t.p.h. Facilities for discharging liquid chemical products. Railtracks. Facilities for temporary storage of goods.

Kastels Harbour: Quays Nos. 1 & 2. Length 450 m., depth 12 m. in berth. Mobile cranes, capacity: 6 to 36 tons. Loading facilities for bulk fertiliser* – max. capacity: 250 t.p.h. Grab crane* – max. capacity: 300 t.p.h. Siwertell worm conveyor – max. capacity: 600 t.p.h. Facilities for loading and discharging liquid chemical products and ammonia. Railtracks. Facilities for temporary storage of goods. Preference for vessels destined for the Superfos Company.

* Private.

CARGO HANDLING FACILITIES: The Port possesses all types of modern facilities for loading and discharging. Crane facilities include a 40 ton gantry crane, 4 grab cranes with a max. capacity of 300 t.p.h. and a number of grab and hook cranes and mobile cranes with capacities ranging from 6 to 36 tons. There are ample facilities for container and ro/ro traffic. The suction plant* is capable of handling up to 80 t.p.h. and the Siwertell worm conveyor equipment* has a max. capacity of 400 t.p.h. In addition, there are modern facilities for handling liquid chemicals, gas, petrol and oil products and bitumen. There are also facilities for handling fertiliser* – max. 250 t.p.h. The Port has a rail network freeze/cold stores*, approximately 6,000 sq.m. modern warehouse space and ample facilities for temporary quayside storage.

* Private.

STEVEDORES: Ordinary working hours Monday to Friday: 0700 – 0830 hrs., 0900 – 1200 hrs., 1230 – 1600 hrs. Night gangs on week days must be ordered no later than 1230 hrs. the same day. Working overtime weekends is possible, but gangs must be ordered no later than Friday 1230 hrs. Average output per 8-hour day, loading or unloading general cargo, is 200 tons per gang.

MEDICAL: Hospitals available.
TANKERS:

	Berth 18 (liquid gas)	*Berth 20*	*Berth 22*	*Berth 23 (Chemicals)*
Max length acceptable (approx.)	90 m.	275 m.	230 m.	150 m.
Max. beam acceptable	no limit	no limit	no limit	no limit
Max. draft acceptable	6.40 m.	13.00 m.	10.70 m.	7.20 m.
Depth in berth	6.70 m.	15.00 m.	11.00 m.	7.50 m.
Water Density (approx.)	1015	1015	1015	1015
Type of berth	Quay	T-Head	T-Head	T-Head
Nature of bottom	Sand	Sand	Sand	Sand
Hose connections	Amidsh.	Amidsh.	Amidsh.	Amidsh.

	Jetty I	*Jetty II*
Max. length acceptable (approx.)	190 m.	274 m.
Max. beam acceptable	No limit	No limit
Max. draft acceptable	10.00 m.	13.25 m.
Depth in berth	10.30 m.	15.00 m.
Density of water (approx.)	1015	1015
Type of berth	T-head	T-head
Nature of bottom	Sand	Sand
Hose connections	Amidship	Amidship

Jetty I – Chicksan arms – for vessels discharging bitumen and other special products, and for loading fuel-oil, gas-oil, gasoline, diesel fuel, and LPG.

Jetty II – Curacao hosehandling gear – for vessels discharging and loading crude, fuel-oil-handling subject to size of vessel.

Pilotage: Pilotage is compulsory for tankers carrying chemicals or LPG, and for all other tankers above 2,500 d.w.t.

Dirty Ballast Reception: Oily ballast reception facilities available – maximum quantity 5,500 cu.m.

Restrictions: Height from normal water level to hose connections must not exceed 15.90 m. during discharging and ballasting.

Communication: The port is equipped with VHF station – Channels 16, 12 and 14.

FUEL: Available.
FRESH WATER: Available ex wharf. Rate 10–50 t.p.h.
GANGWAY/DECK WATCHMEN: Available upon request.
OPENING/CLOSING HATCHES: Stevedores or crew.
CERTIFICATES:

Ship's Register.
Load Line Certificate.
Radio Safety Certificate.
International Safety Certificate.
Derat Certificate.

CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Required.
CONSULS: Finland, France, Iceland, Netherlands, Norway, and Sweden.
REPAIRS: All repairs undertaken with modern equipment. Also see "Berthing – Shipyard Harbour".
DRY DOCKS: Length 354 ft., breadth 72 ft. Max. depth at Dock gate 16 ft. 06 in. Slipway available for ships up to 1,000 tons, light displacement (divers available). Also see "Berthing – Shipyard Harbour".
AIRPORT: At Billund and Beldringe 35 miles from Fredericia.
REPATRIATION: All facilities exist.
TIME: GMT plus 1 hour.
HOLIDAYS: See "Copenhagen".
POLICE/FIRE/AMBULANCE: Police 921577; Ambulance 924000; Fire 921573; Emergency 000.
TELEPHONES: Both oil piers have telephones in the watchmen's room but for local calls only.
SHORE LEAVE: Allowed.
AUTHORITY: Port of Fredericia, Sdr. Voldgade 21, 7000 Fredericia. *Tel:* 05-920255. *Contact:* P. Tophoj – Harbour Master.

FREDERIKSHAVN: 57.28 N. 10.33 E. (See Plan Book)

DOCUMENTS: Ship's papers, 2 Crew Lists, 1 Passenger List, 2 Bills of Lading, 1 Manifest, 1 Customs declaration of tobacco and spirits for Officers and crew, 1 Customs declaration (TOLDPAS) if arrived from port in EEC or Scandinavia.
PILOTAGE: Call the Pilot either over the coast radio station "Skagen Radio", call sign "OXP", telephone 445566. Pilot outside the harbour boards at the buoy 1.7 miles S.E. of the harbour entrance. The pilot boat is a small blue and red painted motorboat. ETA required as soon as possible.
ANCHORAGE: In the roads South of the red leading lights in 10 m. water depth. Good holding ground. At the entrance to the fishing harbour between the pierheads for a width of 50 m. on each side of the heads, anchoring is prohibited (submarine cable).
RESTRICTIONS: Vessels coming from or entering the naval base and the fishing harbour must wait for ships entering or leaving the commercial harbour. Maximum speed Frederikshavn L/B – to harbour 12 knots, in outer basin – 7 knots, Harbour – 3 knots. Entering the Naval Base without special permission prohibited. Ships entering the harbour must if necessary wait outside for ships leaving the harbour. Also see "General" before first port.
MAX. SIZE: Max. length about 200 m., depth in harbour 8 m. Tide about 0.3 m.
HEALTH: Use international quarantine signals. If suspected disease or fever on board cable the Agent to arrange everything to obtain pratique as soon as possible.
RADIO: Nearest coast radio station "Skagen Radio", call sign "OXP".
VHF: The harbour office is fitted with VHF Channels 16, 12 and 13. Watch kept day and night. Vessels must call the Harbour Office before entry and leaving.
TUGS: Tugs join vessel outside the harbour between the buoy and the harbour entrance. Only the ship's line to be used.
BERTHING: No special requirement for berthing in the harbour, but several big ferries are running in and out during day and night and sailing after a time schedule. Vessels must call the harbour office, VHF Channel 16, for permission to enter and before leaving the berth.
BULK HANDLING FACILITIES: One grain berth, with 8 m. depth alongside, equipped with suction pipe capacity 60 t.p.h. approx.

Ferry berths in Harbour, depth 6.4 m. to 8 m., equipped for handling containers and roll-on/roll-off traffic.

TANKERS: Oil quay max. depth 8 m., Hoses 8 in. diameter. Reducing pieces may be necessary. Slop water discharging and cleaning can be done by oil-separator. Tankers max. draft 8 m.
DENSITY: 1,020 (approx.).
STEVEDORES: ETA advices are required before 0900 hrs. in order to arrange gangs for discharge/loading the same day.
MEDICAL: No special requirement is necessary for medical attention. The town has all ordinary medical and hospital facilities.
FRESH WATER: Supplied by water hydrants on all quays.
FUEL: All kinds of fuel are available and no advance notice is necessary.
FIRE PRECAUTIONS: No smoking and no open fire if discharging oil.

Fire watchman from the Harbour Authority required if discharging gas, dangerous chemicals and ammunitions, etc. Besides the watchman, the Harbour Authority will require restricted access to vessel.
GANGWAY/DECK WATCHMEN: Not compulsory but available if required.
OPENING/CLOSING HATCHES: Ship's crew open and close the hatches. If necessary the longshoremen can do it for extra pay.
CUSTOMS ALLOWANCES: See "General" before first port.
CONSULS:

Finland	Tel. 421466	Norway	Tel. 422299
France	„ 422155	Sweden	„ 422922
Germany	„ 420011	Iceland	„ 425333

REPAIRS: Three steel shipyards and one wood shipyard doing all types of repairs.
SURVEYORS: Cargo Inspector – B. K. Mortensen, Ahaven 17. Tel: 08-425064.
DRY DOCKS: Four dry docks, two floating docks and two small slips. Dimensions of largest dry dock: length 212 m., breadth 32.2 m. and depth 7 m. Largest floating dock: length 129 m., breadth 28 m., depth 6.5 m., capacity 7,500 tons.
REPATRIATION: Agent will arrange repatriation. All facilities for changing crew.
AIRPORT: Aalborg Airport, 60 km. from port, several daily flights to Copenhagen.
TIME: Local time GMT plus 1 hour.
HOLIDAYS: Weekends, Easter, Whitsun, Christmas, New Year and two Danish holidays in the Spring.
POLICE/AMBULANCE/FIRE: Police, Tel. 08-421444; Ambulance, Tel. 08-422222; Fire, Tel. 08-420801; in emergency dial 000.
SERVICES: Separating of slop water, compass adjusting, oil bunkering, repairing all kinds of navigation instruments and provisions.
STORING: (See "Prelims" p. viii) All stores available. Fork lift trucks can assist. Trucks can proceed alongside at berth. Local riggers can be employed. No difficulties with paperwork (Customs).
BANKS: National and local.
SHORE LEAVE: After clearing inwards, crew members are allowed ashore without special permission.
AUTHORITY: Havnekontoret, Langerak 2, DK-9900 Frederikshavn. *Tel:* 08-421740, 08-420298. *Contact:* Captain B. K. Mortensen, Port Captain.

GEDSER: 54.34 N. 11.56 E.

LOCATION: Gedser is situated on the Southern extremity of the island of Falster.
PORT LIMITS: A line drawn between the two outer pier heads defines the limit of the harbour.
DOCUMENTS: Customs Declaration, Crew Lists, Passenger Lists, Ship's Log and Safety Certificates.
APPROACHES: Three entrance channels lead to the harbour, the main channel (Rodsand Rende) has a width of 150 m. and a depth of 6.2 m. (20.3 ft.). The harbour can be entered by day and night.
PILOTAGE: It is recommended that all vessels over 500 tons use a Pilot. Requests for a Pilot must be made at least 6 hours before arrival to Guldborgsund Pilot Office in Nykobing (Falster) over Lyngby Radio or VHF Channel 16.
RADIO: Lyngby Radio.
BERTHING: Gedser Harbour is considered a ferry harbour where De Danske Statsbaner (Danish State Railways), Deutsche Bundesbahn (West German Railways) and Deutsche Reichsbahn (East German Railways), have first priority to the harbour and Rodsand Rende.
MEDICAL: Full hospital facilities in Nykobing (Falster). Doctor in Gedser. Tel: (03) 879440.
DENSITY: Between 1% and 1.4%.
FRESH WATER: Available.
CUSTOMS ALLOWANCES: EEC Rules apply.
REPATRIATION: Hourly bus connections to Nykobing (Falster) with daily train connections from Nykobing (Falster) to Copenhagen.
AIRPORT: Kastrup Airport at Copenhagen.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Police in Gedser. Tel: (03) 879021. Ambulance and Fire Brigade in Nykobing (Falster). Tel: (03) 851807.
TELEPHONES: There are no arrangements for placing telephones on board.There is a post and telegraph office close by the harbour.
SHORE LEAVE: Is possible for crew members with valid passport or visa. There is no need for identity cards.
GENERAL: *Tides and Currents:* Tidal range 0.3 m. Winds from N.E. can raise water level by 1.8 m.; winds from S.W. can lower water level by 1.5 m.

Lifeboat Station: A lifeboat is stationed by the harbour.
AUTHORITY: Danske Statsbaner, Montergade 1, 3, 1116 Kobenhavn K, Denmark. *Tel:* (01) 140400, *Cable:* DSBtrans.

Harbour Master, Gedser. *Tel:* (03) 879145 ext. 30 or (03) 855012.

GRENAA: 56.25 N. 10.56 E. (See Plan Book)

PORT LIMITS: A Line drawn between the outer breakwater heads.
DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
1 Crew Personal Effects List.
1 Ship's Bonded Stores List.
1 Stores List.
1 Animal/Pets List.
1 Health Certificate.
Ship's Log.
Last Port Clearance.
1 Bill of Lading.
1 Cargo Manifest.

Safety certificates: Construction, Equipment, Safety Equipment, Load Line, Radio and Oil Pollution Prevention.
PILOTAGE: Pilotage is not compulsory except for laden tankers with hazardous liquid chemicals or tankers with uncleaned tanks which have carried hazardous liquid chemicals.

The pilotage regulations do not apply to Masters who have been to Grenaa Harbour at least 5 times in the last 6 months.

Ships approaching Grenaa Harbour should be aware of the "Kalkgrunden" a calcareous reef just outside the harbour entrance, stretching Easterly for approximately 7 cables and with 1 m. depth.

Notice of ETA and request for Pilot must be made to the Agent and/or to the pilot station with 24 hours and 12 hours notice.

There are telex facilities. VHF Channel 16 is continuously watched and ETA may be confirmed or adjusted on this frequency.

Pilot boat is 8 m. LOA, white upperwork and blue hull with the word "PILOT" on each side.

The usual international signals may be displayed by vessels requiring a Pilot.

The usual pilot boarding point is 0.5 miles N.E. of harbour entrance.
BUOYAGE: IALA "System A".
ANCHORAGE: Anchorage is best North of the harbour with depth of 7 m. to 9 m. The holding ground is fine hard sand.
RESTRICTIONS: No restrictions, except that larger vessels should not approach the Easterly breakwater head closer than 80 m. in the area East and Southeast of this.

Also be aware of the "Kalkgrunden" (see "Pilotage").
MAX. SIZE: Vessels up to 100 m. LOA, 14 m. breadth and draft 6.2 m.
HEALTH: Normally Free Radio Pratique will be granted.
RADIO: Lyngby Radio (OXZ) is the long range area station.
VHF: At the harbour office, open for communications on Channel 16 each week-day between 0800 hrs. and 1200 hrs.

A continuous watch is maintained at the pilot station on Channel 16.
RADAR: There is no Port Control Radar but the pilot boats are radar equipped.
TUGS: No tugs available.
BERTHING: There are four general cargo berths.

No. 1: Length 210 m., depth 5.7 m.
No. 2: Length 110 m., depth 6.3 m.
No. 3: Length 80 m., depth 7.2 m.
No. 4: Length 125 m., depth 7.2 m.
Sydhamn: Length 176 m., depth 4.5 m.

Bulk and general cargo is handled at Nos. 1, 3 and 4, whereas container and Ro-Ro handled at No. 2 berth.
CRANES: There are two mobile cranes of 32 tonnes and 25 tonnes.
BRIDGES: There are no bridges or other restrictions to prevent access to the port.
STEVEDORES: Working hours from 0700 – 1600 hrs., Monday to Friday. Evening and night shift as well as week-end labour can be arranged.
MEDICAL: Full hospital facilities available without prior notice.
TANKERS: *Oil Pier:*

North Side: Length 140 m., depth 6.50 m.
South Side: Length 140 m., depth 6.50 m.

Slop discharge facilities in accordance with the Helsinki Convention.
DENSITY: 1018 (average).
FRESH WATER: Good potable water available in limited quantities at a rate of 10 t.p.h.
FUEL: All kinds of fuel can be delivered by road. Longest possible notice is desirable.
CONSULS: Vice-Consulates exist for Norway and Sweden.
REPAIRS: There are two shipyards as well as an engine building factory with repair facilities.
DRY DOCKS: No dry docks, but 5 slipways, where up to 300 tonnes deadweight is available.
SURVEYORS: Lloyd's sub-agent. Agents from other Classification Societies and Surveyors can be brought from Aarhus at short notice.
GANGWAY/DECK WATCHMEN: Gangway and deck watchmen not necessary, but can be arranged.
OPENING/CLOSING HATCHES: Normally handled by ship's crew.
CUSTOMS ALLOWANCES: See "General" before first port.
CARGO GEAR: Ship's gear or mobile cranes/conveyors from shore.
REPATRIATION: 25 km. to Tirstrup Airport with international flights to London and domestic scheduled flights to Copenhagen with international connections.

Railway connection to Aarhus.

Ferry connection to Zealand (Hundested) and Sweden (Varberg and Helsingborg).

All facilities exist for changing of crew and repatriation of seamen.

Repatriation and change of crew can be arranged on the Roads for ships passing Grenaa en route to and from the Baltic.
TIME: Local time is European Standard Time, GMT plus 1 hour. Summertime is used.
POLICE/AMBULANCE/FIRE: Emergency 000; Police 321011; Ambulance 322222; Fire 320812.

TELEPHONES: There are no arrangements for placing telephones on board.

HOLIDAYS: *Official Holidays:* New Year's Eve (half day), New Year's Day, Maundy Day, Good Friday, Easter, Whitsun, Labour Day (half day), Ascension Day, Constitution Day (5th June, half day), Christmas Eve (half day) Christmas Day.

Work can be arranged except Christmas Day and Good Friday.

SERVICES: A Compass Adjuster resides at the Port. Decca and Radio repairs possible.

Facilities for reception of Oil, oily mixtures, sewage, garbage, etc., exist in accordance with the Helsinki Convention.

SHORE LEAVE: No restrictions.

IDENTIFICATION CARDS: No identification cards required.

REGULATIONS: No unusual regulations for the port.

DELAYS: No delays can normally be expected.

BANKS: All major Danish banks are present in Grenaa.

EMERGENCY CO-ORDINATION CENTRE: Danish Coast Guard, S.O.K. Kystværnsvej, Aarhus. *Tel:* 06-131822. Outside office hours – 123099.

STORING: Vessel can be stored by truck alongside. Local Riggers can be employed to assist with storing.

SHIP SUPPLY SERVICES: Storing possible on the Roads. Contact shipbroker G. Ostergaard I/S. Telex No: 63489 Broker Dk. Tel: (06) 32.02.44.

Ship Supply Services in our area is:

Grenaa Road Buoy No. 4 in position: Lat. 56° 25′ N., Long. 11° 06′ E.

Ship-to-Ship transport:

2 pilot boats with capacity for 10 people and 1 tonne stores, provision.

1 supply ship with capacity for 10 people and about 10 tonnes stores, provison.

1 supply ship with capacity for 12 people and about 50 tonnes stores, provision.

1 tug boat of 49 g.r.t. and 500 h.p.

Larger tugs can be arranged, as we are Agents for A/S Em.Z. Svitzer and "Goliath".

Ostergaard can arrange crew change with helicopter, but it is very expensive. Tirstrup airport is only 30 km. from Grenaa Roads. Transport of sick crew members can be arranged with helicopter from the Navy and vessel can make an order on VHF Channel 16 through Lyngby Radio.

AUTHORITY: Harbour Master, Grenaa Harbour, Nordhavnsvej 1, DK-8500 Grenaa, Denmark. *Tel:* 06-321204. *Cables:* Harbourmaster, Grenaa. *Contact:* J. A. Ovesen, Harbour Master or E. Stein Laursen, Assistant Harbour Master.

GULFHAVN: 55.12 N. 11.16 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Load Line Certificate.
Safety Radio-telephone Certificate.
Derat Certificate or Exemption Certificate.
Exact list of tobacco, cigarettes and spirits showing the vessel's and the crew's supply on arrival.
Bill of Lading (if vessel is carrying cargo).
Copy of the crew list is required by Kuwait Petroleum Refining (Denmark) A/S.

PILOTAGE: 3 Pilots and pilot vessel available. Pilot acts as Berthing Master. May be requested to board vessels at any place in the proximity of Gulfhavn.

Pilot vessel equipped with VHF Channels 6, 10, 12, 16 of which Channel No. 6 used for ship-to-ship communication. Pilot station also equipped with VHF Channels 12, 13 and 16. Pilot can be contacted at the station on Channel 16.

A vessel's ETA should be communicated by Master to Agent, 72, 48 and 24 hours prior to arrival. Agent will keep Refinery advised and make necessary arrangement with Pilot.

Bigger ships usually take Pilot by Skaw L/V. Pilots to be ordered by ETA-telegrams to "Skawpilot Skagen", at least 12 hours in advance. Skawpilot listening on VHF Channel 16.

ANCHORAGES: Korsor; Roads: depth 20 m. (65.6 ft.). Bottom sand, good holding ground. Width of area about 2 square nautical miles. Gulfhavn Roads: depth 30 m. (98.4 ft.). Bottom clay. Good holding ground. Width 0.5 nautical mile. Length 1.5 nautical miles.

Power cables running between Zealand and Agersoe Island (marked on charts) must be avoided.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Max. draft at normal tide is 15.5 m.

VHF: Call sign "Gulfhavn" Channels 12, 14 and 16, on 16, 24 hours a day.

TUGS: None available locally. If required 24 hours notice must be given. Pilot will advise if weather conditions demand use of tugs (in good time).

BERTHING: Oil pier is a T-shaped structure on which 4 berths provide – 1 berth for 120,000 d.w.t. tankers, 1 for 30,000 d.w.t. tankers, 1 for 5,000 d.w.t. tankers and 1 for smaller vessels up to 500 d.w.t.

Depths alongside:	Berth 1	16.0 m. (52.5 ft.)
	Berth 2	12.0 m. (39.4 ft.)
	Berth 3	7.5 m. (24.6 ft.)
	Berth 4	4.5 m. (14.8 ft.)

Adequate lifting facilities to assist in hose connecting and handling of necessary hose equipment should be ready on arrival. Refinery representative will board on arrival and discuss discharging/loading operation.

Berth No. 1

Berth 1 is equipped with mechanically operated Woodfield hose-handling structure. The booms are 12.2 m. (40 ft.) long. Berth is primarily equipped for handling incoming crude, but can be used for other purposes (gasoils, intermediate and heavy fuels) when not being occupied by crude vessels.

The booms are arranged in the following sequence of product handling:

Boom No.	*Size of booms and contents*
1	10 in. Ballast water
2	12 in. Crude oil
3	12 in. Crude oil
4	12 in. Crude oil
5	8 in. Intermediate and heavy fuel

The sequence is from South to North or from right to left as you face the shore.

The distance from Danish Mean Sea Level to the highest position of centre line of manifold is 17.0 m. (55.8 ft.).

In addition to the oil products handled on Berth No. 1 there are the following other connections on the pier:

Size of connection	*Contents*
6 in.	Ballast water
6 in.	Gas oil
6 in.	Intermediate and heavy fuel
4 in.	Tetra methyl lead

A hydraulic gangway is installed at No. 1 Berth.

Berth No. 2

Berth No. 2 is equipped with mechanically operated hose-handling structure (Woodfield). The booms are 9.1 m. (30 ft.) long.

The booms are arranged in the following sequence of product handling:

Boom No.	*Size of booms and contents*
1	10 in. Ballast water and crude oil
2	10 in. Intermediate and heavy fuel
3	12 in. Intermediate and heavy fuel
4	10 in. Diesel fuel
5	10 in. Diesel fuel
6	10 in. Gasoline
7	10 in. Gasoline – FCC components

The sequence is similar to pier No. 1, i.e., South to North.

The distance from Danish Mean Sea Level to the highest position of centre line of manifold is 15 m. (49.2 ft.).

In addition to the oil products handled on Berth No. 2, there are the following other connections on the pier:

Size of connection	*Contents*
6 in.	Intermediate and heavy fuel
6 in.	Gas oil
6 in.	Ballast water
6 in.	Kero and Jet fuel
6 in.	Naphtha
6 in.	Light virgin naphtha
6 in.	Gasoline
6 in.	Gasoline – FCC components

In addition to the oil products handled on Berth No. 2 and No. 3, Berth Nos. 3 and 4 can also handle L.P.G. (liquid petroleum gas). All connections on Berth Nos. 3 and 4 are 6 in. Berth No. 3 also handles Bitumen (Asphalt).

Mooring: If wires are used for mooring, polypropylene tails are required.

MEDICAL: Hospital at Slagelse. Tel: Slagelse (03) 52 19 00.

DENSITY: Ranges between 1023 and 1007, dependent on season and weather conditions.

FRESH WATER: Available at all 4 berths. Limited to 160 tons. Supplied with a pumping rate of 20 t.p.h.

FUEL: Bunker fuel available at all 4 berths. 24 hours' notice required.

FIRE PRECAUTIONS: The harbour is not equipped with fire-fighting vessel. Fire-fighting equipment is stationed on quay.

GANGWAY/DECK WATCHMEN: Available if required.

IDENTIFICATION CARDS: Required by crew.

CONSULS:

Finnish Consulate: (Mr. Sv. Mogensen) 10 Oernumvej, DK-4220 Korsoer, Tel. (03) 57 00 13.

Norwegian Consulate: (Mr. G. Sjelle) Jens Baggesensgade 35, DK-4220 Korsor, Tel. (03) 57 00 06.

German Consulate: (Mrs. K. Poulsen) Batterivej 7, Korsoer, DK-4220. Tel. (03) 57 05 86.

All other consulates are situated in the Copenhagen area.

REPAIRS: Small deck and engine repairs can be carried out on request with permission.

REPATRIATION: Facilities exist via Agent.

AIRPORT: Copenhagen 120 km. away.

TIME: GMT plus 1 hour.

POLICE/AMBULANCE/FIRE: Police Skelskor (03) 59 61 00; Ambulance Skelskor (03) 59 47 07; Fire Refinery 222.

TELEPHONES: A public telephone box situated at the foot of the jetty.

SHORE LEAVE: Allowed, but personnel not allowed to walk in refinery area. Transport will be arranged from ship to refinery entrance upon request.

AUTHORITY: Korsoer Toldkontrol.

Kuwait Petroleum Refining (Danmark) A/S, Gulfhavn, 4230 Skaelskor, Denmark. *Tel:* (03) 59 49 00. *Telex:* 40033. *Cables:* Kupdanref. *Contact:* E. W. Davies, Refinery Manager.

HADERSLEV: 55.15 N. 09.29 E.

DOCUMENTS: See "Copenhagen".
PILOTAGE: Aarosund Pilot station.
ANCHORAGES: Aarosund.
RESTRICTIONS: Impossible to enter Haderslev by night since there are no lights in the fjord. Also see "General" before first port.
MAX. SIZE: Length 110 m.; width 17 m.; depth 4.9 m.
HEALTH: See "Copenhagen".
RADIO: Lyngby Radio.
TUGS: None available.
MEDICAL: Advance notice required if hospital facilities are required.
FRESH WATER: Fresh water from quay.
FUEL: Available by lorry.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Carried out by the crew.
CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Not needed.
CONSULS: Swedish, French, Belgian.
REPAIRS: Small repairs available.
REPATRIATION: No facilities.
AIRPORT: 15 km. from Haderslev.
TIME: GMT plus 1 hour.
HOLIDAYS: Discharging can be arranged on holidays.
POLICE/AMBULANCE/FIRE: Police, 045 2 2525; Ambulance, 000; Fire, 000.
TELEPHONES: No facilities.
SHORE LEAVE: Allowed.
AUTHORITY: J. C. Hansen, Havnen, Box 11, 6100 Haderslev, Denmark. *Tel:* (04) 522404. *Cables:* Maltsand. *Contact:* J. C. Hansen.

HELSINGOR (Elsinore): 56.02 N. 12.37 E. (See Plan Book)

DOCUMENTS:
1 Cargo Manifest.
2 Crew and Passenger Lists.
2 Tobacco Lists.
2 Stores Lists.
Measurement Certificate or Registry Certificate.

PILOTAGE: Call Pilot by hoisting Pilot Flag "G", or Morse signal "PT". Cable Address: "Helsingorpilot". Alternatively contact by VHF.
VHF Channel 16, Frequency 156.80 MHz (receiving frequency)
VHF Channel 13, Frequency 156.65
VHF Channel 12, Frequency 156.60

One hour's notice required before arrival at port. Pilot cutter, green hull, yellow superstructure, "Pilot" painted on superstructure. Boarding North of, South of and East of the port of Helsingor. Waiting area 0.5 mile South of the port of Helsingor. Helsingor Pilots are also sea Pilots for Kattegat, the Belts, The Orestraights and the Baltic.
ANCHORAGE: South of the port, in the roads of Helsingor, depths from 19 m. to 25 m. with sand or loose clay bottom.
RESTRICTIONS: Following signals are given from the lighthouse situated on the head of the Southern pier: prohibition to sail is signalled by red rapid flashes in the harbour direction and green flashes out towards the approaches. Entering and sailing prohibition is signalled by red rapid flashes both sides. "Vessels moving in the harbour" is signalled by yellow flashes out towards the approaches, yellow in towards the harbour. Ship departing waits for ship entering. When a vessel gives signal to enter (1 long whistle or blast) it is regarded as an entering vessel.
MAX. SIZE: Up to 21 ft. 06 in. draft. Also see "General" before first port.
RADIO: Harbour Office of Helsingor call VHF Channel 16, shift to Channels 12 or 13 for working.
TUGS: Tugs come from Copenhagen at 2–3 hours notice.
BERTHING: Vessels berthed in order of arrival.
MEDICAL: Hospital and medical facilities available.
FUEL: Not available.
FRESH WATER: Approx. 15 tons of fresh water per hour delivered through 1.5 in. hoses at the berths.
WATCHMEN: Not required.
CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Crew need passports.
REPAIRS: Helsingor Reparationsvaerft A/S (Elsinore Repair Yard Ltd.) undertake all forms of repair work.
DRY DOCKS: Dock No. 1: 155 m. long, 21.5 m. wide, 6.4 m. depth. Dock No. 2: 116 m. long, 16.5 m. wide, 5.5 m. depth.
AIRPORT: 1 hour by car from Copenhagen International Airport.
TIME: GMT plus 1 hour.
HOLIDAYS: Work can be performed all the year round.
POLICE/FIRE/AMBULANCE: Police Tel. 02.211448; Ambulance/Fire Tel. 02.222222.
TELEPHONES: Telephones are only available on board in particular circumstances.
SHORE LEAVE: Crew are free to go ashore.
AUTHORITY: Helsingor Havnekontor, Sophie Brahesgade 1, 3000 Helsingor. *Tel:* 02 210515. *Contact:* G Oldenburg Jorgensen, Harbour Master.

HOLBAEK: 55.43 N., 11.43 E.

PILOTAGE: Hundested Pilotage Authority.
MAX. SIZE: Max. draft 5.6 m.
VHF: Channel 12.
TUGS: Available.
STEVEDORES: Working hours: 0700–1600 Monday to Friday. No weekend work.
MEDICAL: Services available.
FRESH WATER: Available.
FUEL: Available.
CONSULS: Norway and Sweden.
REPAIRS: Possible.
DRY DOCKS: No facilities.
CUSTOMS ALLOWANCES: Kalundborg Custom House is the authority.
REPATRIATION: Facilities available.
AIRPORT: Nearest airport at Copenhagen (Kastrup).
AUTHORITY: Holbaek Port Authority, 4300 Holbaek, Denmark. *Tel:* 03/43 01 61. *Contact:* Aage Hyrup, Harbour Master.

HORSENS: 55.52 N. 09.52 E. (See Plan Book)

DOCUMENTS:
Crew List
List of Tobacco.
Manifest (for Agents and Stevedores).
Bills of Lading (for Agent's use).
Ship's papers:
International Load Line Certificate.
Certificate of Register (international letter of measurement).
Derat Certificate.
Radio Safety Certificate.

PILOTAGE: Pilot station is situated at Juelsminde. Normally pilot boat will be located South of Lillegrund.
VHF: Channels 6, 12 and 16. Advance notice of 2 hours required.
ANCHORAGE: No special anchorages at the firth; vessels may anchor where safe navigation permits – attention is called to cable area at Hjarno Sound.
RESTRICTIONS: See "General" before first port.
MAX. SIZE: Max. length, approx. 500 ft.; max. breadth, approx. 70 ft.; max. draft, approx. 22 ft. A dredged channel 32 m. wide and 6.9 m. deep leads to the harbour.
HEALTH: Inform Agent or Port Authorities in advance in event of any suspected disease or fever on board. Normally no necessary procedure to obtain pratique. Pratique is automatic after calling at another Danish port.
RADIO: VHF at Harbour office, Channels 9, 12, 13 and 16.
TUGS: Tug "Vitus" stationed in the harbour.
STEVEDORES: For working Monday morning ETA must be given Friday during office hours. Otherwise ETA must be given the day before work to commence. One suction apparatus for discharging grain. Normally the cargo is handled by shore cranes. There are 2 coal cranes and 5 piece-goods cranes available.
MEDICAL: No advance notice required. Hospital facilities available.
TANKERS: Discharge lines diameter: 6 in. and 8 in. Four berths for tankers, 1 at Esso with 5.6 m. of water alongside, 1 at DAK with 6.9 m. of water, 1 at KH with 6.9 m. of water and 1 at Nynas Johnson.
FRESH WATER: Delivered alongside from shore connections.
FUEL: All types of light fuel available.
GANGWAY/DECK WATCHMEN: No service of watchmen necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew, but can be done by stevedores.
CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Not needed.
CONSULS: Finland, 05-623433; Norway, 05-624666; Sweden, 05-624411; France, 05-623288.
REPAIRS: No shipyard – only small repairs can be carried out.
REPATRIATION: No special facilities for effecting crew changes exist.
AIRPORT: Distance from airport about 50 km., with regular airlines.
TIME: GMT plus 1 hour.
POLICE/AMBULANCE/FIRE: Dial 000. Fire alarms placed around the port.
TELEPHONES: Not available on board vessels.
SHORE LEAVE: Allowed.
DELAYS: No delays can normally be expected. Larger ships with big draft may expect delay during nights with poor visibility. They have to wait for daylight in order to enter port through dredged channel.
AUTHORITY: Havnemesteren, Havnen 45, 8700–Horsens. *Tel:* 05-621014. *Contact:* Jorgen M. Olsen, Harbour Master.
AGENT: Wilh. Chr. Bech Rederi- & Skibsmaeglerforretning. Jens Hjernoesvej 22, dk–8700 Horsens. Phone: 5–62 65 66. After office hours: 5–64 35 50 – 61 08 10 – 62 29 56 – 65 75 75. Telegrams: "Brokerbech". Telex: 61616.

KALUNDBORG: 55.41 N. 11.06 E. (See Plan Book)
Also see Port of Asnaes.

DOCUMENTS: Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Derat Certificate or exemption.
Bill of Lading (if cargo).
Crew List.

Customs need a Tobacco and Spirit List, showing the vessel's and the crew's supply by arrival.

PILOTAGE: Not compulsory. Pilot station situated at Kalundborg, telegram: Kalundborg Pilot, Tel: Kalundborg 03.51.08.89. Green vessel carrying international signal flag or lights for Pilot. Contact by VHF Channels 16, 12 and 6. Pilot is taken on board at the entrance of Kalundborg Fjord.

Bigger ships usually take Pilot by Skaw L/V. Pilots to be ordered by ETA-telegrams to "Skawpilot Skagen", at least 12 hours in advance, Skawpilot listening on VHF Channel 16.

ANCHORAGE: Large vessels anchor in 42 ft. of water outside between Rosnaes and Asnaes; S.W. to N.W. winds cause swell but holding ground is good. Small vessels anchor between Gisselore Point and Harbour, from where channel leads to harbour.

Tankers: The anchorage is approximately 4 – 5 miles W.N.W. of the Oil Pier. Particulars regarding the anchorage will be given by the Pilot.

RESTRICTIONS: *Tankers:* Depth in channel and at entrance 39 ft. 4 in., entrance width 131 ft. Also see "General" before first port and "Tankers".

Kalundborg Harbour: Depth of Entrance Canal: 10.0 m. Bottom width of Entrance Canal: 40.0 m.

MAX. SIZE: See "Berthing" and "Tankers".

HEALTH: Pratique granted by Customs Officers who bring Health Declaration for Masters to complete. In event of suspected disease or fever on board radio details to Agent before arrival.

RADIO: *Arrival Message:* The Masters of crude or deep-sea vessels are requested to advise the refinery through their Agents of their ETA 72 hours in advance, and again 24 hours before ETA. For other vessels operating in Scandinavian waters, a 24 hours ETA notice will be required. For coastal traffic in Danish waters, ETA is required when departing for Kalundborg. If there should be any significant change in the ETA over 2 hours, additional advice is required.

VHF: Harbour office on Channel 16 (0700 – 1600 hrs.).

TUGS: Available, normally join vessel off harbour, often using vessel's lines. If tug's lines are used, an extra charge will be made.

Tankers: The required number of tugs will be ordered through the Agent in accordance with the agreement between the Pilot and the Pier Captain.

For vessels between 16,500 d.w.t. and 70,000 d.w.t. the following tug assistance will normally be required: One 1,700 h.p. tug forward on starboard side and 2 tugs of 1,800 h.p. and 400 h.p. aft.

For vessels over 70,000 d.w.t. an additional tug of minimum 1,000 h.p. will normally be required.

For all traffic to and from Pier C, tug assistance must be used in all cases where a vessel of 10,000 d.w.t. and over is already moored at Pier B.

Also see "Tankers" Pier Traffic Restrictions.

BERTHING:
Kalundborg Harbour:

West Harbour: Length 400 m., width 60 m., depth 6 m. – 7 m. Quay I: Length 250 m., depth 6.0 m. Quay II: Length 125 m., depth 7.0 m. Quay III: Length 80 m., depth 7.0 m.

East Harbour: Length 260 m., width 130 m., depth 7 m. – 8 m. Quay VI: Length 240 m., depth 8.0 m. Quay VII: Length 170 m., depth 7.0 m. Quay VIII: Length 70 m., depth 7.0 m. Quay IX: Length 280 m., depth 7.0 m. Quay X: Length 245 m., depth 7.0 m.

South Harbour: Oil Quay: Length 170 m., depth 9.5 m. Quay XII: Oil and General Cargo, length 220 m., depth 10 m. Quays No's II and XII equipped with ramps.

Railway on quays in the East and the South Harbour. Two cranes (privately operated), capacity 40 to 60 t.p.h. One mobile crane to lift 6 tons. One mobile crane to lift 15 tons. One gantry crane to lift 14 – 25 tons.

CRANES: The following cranes are available from the Port Authorities:

1. One Coles mobile crane (with hook).
Carrying capacity in hook is 1.5 – 7.5 tons with 7.62 m. and 3.05 m. jib respectively.

2. One P.P.M. 25.01 mobile crane (lattice crane).
Carrying capacity with 4 m. jib: 21 tons. Lift height 9 m.
Carrying capacity with 6 m. jib: 12 tons. Lift height 19 m.
Carrying capacity with 17 m. jib: 2.5 tons. Lift height 12 m.
The crane can be mounted with a 1,500 litre prehensile scoop to unload grain, gravel, fertiliser, etc.

3. One 10-ton 12/25-ton gantry rocker crane.
Lift height above rails 22 m. in hook operation.
Carrying capacity with 20 m. jib (13.5 m. from quayside): 12 tons.
Carrying capacity with 13 m. jib (6.5 m. from quayside): 25 tons.
Mounted with 5,000 litre prehensile scoop: 6 tons excluding weight of scoop with 20 m. jib.

4. One P.P.M. 23.09 mobile crane (telescope).
Carrying capacity with 4 m. jib: 15.2 tons. Lift height 14.5 m.
Carrying capacity with 6 m. jib: 8.7 tons. Lift height 20.0 m.
Carrying capacity with 15 m. jib: 2.3 tons. Lift height 21.5 m.

5. One 12-ton 14/25 tons gantry rocker crane.
Lift height above trails 25 m. in hook operation.
Carrying capacity with 28 m. jib (18.5 m. from quayside): 14 tons.
Carrying capacity with 18 m. jib (14.5 m. from quayside): 25 tons.
Mounted with 6,000 litre prehensile scoop: 7 tons excluding weight of scoop with 28 m. jib (18.5 m. from quayside).

Also see "Berthing".

TANKERS: *Operator:* Dansk Esso A/S.

Pier A: For deep-sea vessels. Max. draft 41 ft. up to 70,000 d.w.t. For larger vessels between 70,000 and 100,000 d.w.t. the max. draft is 40 ft.

Max. arrival displacement 115,000 tonnes. Max. LOA of deep-sea vessels 860 ft. Max. freeboard during discharge 46 ft.

Crude discharge is via 2×12 in. hoses to the 30 in. crude pipe-line to the refinery, approximately 2 km. in length.

Bunker/Heavy Fuel deliveries through 14 in. line and 12 in. hose to the vessel. There are 10 other products, all in 10 in. lines and 10 in. hoses connected to the vessel. The products are:
Naphtha/LVN.
Regular/Premium Gasoline.
Kerosene.
Auto Diesel.
Heating Oil.
Marine Diesel.
Fuel Oils: LFO, LSHFO, LPHFO.

Ballast is discharged through 1 by 10 in. and 1 by 12 in. hose into a 14 in. pipe-line.

Crude Import: For all crude vessels equipped with C.O.W. 100% C.O.W. is required of all tanks. For crude vessels not fitted with C.O.W. a 6 hours clincage rundown is required of all tanks.

Pier B: For vessels up to 16,000 d.w.t. (under special circumstances vessels up to 25,000 d.w.t. can be accepted). Max. draft 33 ft. Bunker/Heavy Fuel deliveries through 14 in. and 12 in. hose to the vessel. There are 10 other products all in 10 in. lines and hoses connected to the vessel. The products are:
Naphtha/LVN.
Regular/Premium Gasoline.
Kerosene.
Auto Diesel.
Heating Oil.
Marine Diesel.
Fuel Oils: LFO, LSHFO, LPHFO.

Ballast is discharged through 1×10 in. and 1×12 in. hose into 14 in. pipe-line.

Pier C: For vessels up to 5,000 d.w.t. Max. draft 21 ft. Max. LOA 360 ft. Products are:
Regular/Premium Gasoline.
Naphtha (discharging).
Kerosene.
Auto Diesel/Heating Oil.
Marine Diesel.
Fuel: HFO, LFO, LSHFO.

Loading is through 6 in. hose over the vessel's rail, LPG is loaded though a 4 in. hard arm, and asphalt over 6 in. steel arm.

Ballast can be discharged into a 6 in. line.

Pier D: No facilities available.

The above maximum drafts for Pier A, B and C are based on normal water level in the Fjord.

Pier Traffic Restrictions: Restrictions for movements of vessels under varying weather conditions:

All Piers will be closed for in and outgoing traffic if the wind force is over 23 m./sec. (9 Bs).

Pier A & B, if the wind direction is between S.W. and N.N.W. and the wind force is between 15 m./sec. (7 Bs) and 23 m./sec. (9 Bs) tug must be used.

Pier C, If the wind direction is between S.W. and N.E. and the wind force is between 15 m./sec. (7 Bs), and 23 m./sec. (9 Bs) tug must be used.

Woodfield Loading Arms: If the wind force is over 23 m./sec. (9 Bs), all discharging/loading via loading arms will be stopped. Valves on shore line and vessel closed, and the system drained free of oil. It is the Pier Foreman's duty to enforce the above wind restrictions. His decisions will be based on actual measurements of the meteorological conditions.

Discharging and Loading Rates: Crude discharge rate is 38,000 Bbls. or about 5,000 t.p.h. Maximum inline pressure is 105 p.s.i.g. except for LPG where the maximum pressure is 250 p.s.i.g.

Approach Speed and Engine Check: Vessels approaching the Pier for berthing without tug assistance must slow down to an absolute minimum speed before passing the Outer Dolphin. Before reaching this point, a test of a true and realistic reverse manoeuvre must have been carried out to make sure that the system is functioning correctly.

Traffic Passing the Pier: There is a brisk ferry boat traffic in the Outer Harbour. Approximately 40 times a day a ferry passes the Outer Pier Head in a distance of 100 m. – 300 m.

Dry cargo vessels up to about 10,000 d.w.t. call at the Kalundborg Harbour and will be passing the Outer Pier at a distance of approximately 500 m. from the Pier Head. The vessels pass at slow speed.

Tank/dry cargo vessels call at the nearby power plant which is equipped to handle vessels of 70,000 and 20,000 d.w.t., respectively. (See Port of Asnaes.)

Wind Conditions: The prevailing wind is from West, but most of the heavy winds and storms come from N.W.

Wind velocities exceeding 15 m./sec. (7 Bs) occur on the average about 20 days a year from S.W., about 15 days from West, 40 days from N.W. and 25 days from North.

Tide and Current: The difference between the average high-tide and average low-tide is approximately 0.3 m.

A storm from N.W. can give a high-tide of approximately 1.3 m. over normal daily average, whereas a storm from S.E. can result in a tide 0.9 m. below daily normal average.

There is practically no current at the Pier.

Wave Height at the Pier: The highest waves at the Pier will occur when the wind is from W.N.W.

The theoretical average wave height exceeds 0.7 m. for approximately 35 days a year, and an average wave height of 1 m. will be exceeded about 6 days a year.

Signal Flag: Vessels must, when loading/discharging, carry signal flag "B" during the day from sunrise to sunset, and a red light during the night.

Sanitary Regulations: The Standard Regulations for Danish Harbours governing sanitation also apply to Kalundborg Oil Pier.

Trash and galley refuse must not be thrown overboard. Special containers for refuse are placed on the Pier.

Precautions must be taken to prevent discharge from toilet, bathroom, etc. onto the Pier.

Gangway: Vessel to provide a safe gangway.

Laundry: Requirements should be given to the Agent's representative immediately on arrival. Laundry to be ready for delivery on arrival. A complete list is required.

Visitors: Only persons on business are allowed on the Pier. Visitors, as guests of the Master, are allowed to board vessels provided there is a request from the Master to the Pier Office. Further details for obtaining permits for visitors can be obtained from the Pier Office.

Telephone: For short distance calls a coin telephone is provided in the Pier Office building; for long distance calls arrangement must be made through the vessel's Agent.

STEVEDORES: Available, ordered by Agent, no ETA to stevedores necessary.

BALLAST: All ballast is to be discharged into the shore ballast tank. This tank is a 30,000 bbls. tank, and usually there is approximately 20,000 bbls. room available.

Disposal of ballast overboard is prohibited. Engine room or pump room bilges must not be pumped overboard when in Danish waters.

Sea valves will be sealed on vessel's arrival and must not be broken without approval by the Pier Captain or his substitute. Ballast for entering the harbour should be carried in a minimum number of tanks, and all other tanks stripped so as to minimize the time required for ballast discharge when alongside the Pier.

MEDICAL: Hospital and doctors available.

DENSITY: 1011.

FRESH WATER: Available, supplied from shore by hose, about 15 t.p.h. 25 t.p.h. in Oil Harbour.

FUEL: All grades available, 24 hours ETA required by truck or barge (Dansk Esso, BP).

FIRE PRECAUTIONS: No smoking allowed.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not required.

CONSULS: Norway: Mr. Jorgen Moller, Consul. Tel: (03) 51.19.01.

Sweden: Mr. H. Meredin Petersen, Vice-Consul. Tel: (03) 51.00.51.

REPAIRS: All types of repairs available.

DRY DOCKS: None. Slipways for fishing boats only.

REPATRIATION: All facilities exist.

AIRPORT: Nearest at Copenhagen about 80 miles from Kalundborg. Served by regular airlines.

TIME: GMT plus 1 hour.

HOLIDAYS: New Year's Day; Easter Thursday; Good Friday; Easter Monday; Ascension Day; 1st May; Whit Monday; Prayer Day; 5th June; Christmas Day; 2nd Christmas Day. No work can be carried out.

SHORE LEAVE: Allowed.

POLICE/AMBULANCE/FIRE: Police (03) 51.14.48. Hospital: (03) 51.10.01.

BANK: Den Danske Bank, Kordilgade 18, DK – 4400 Kalundborg. Tel: (03) 51.08.00. Open 9.30 a.m. – 4.00 p.m. (closed Saturday and Sunday).

SHIP SUPPLY SERVICES: Schierbeck's Supply Service, Njalsgade 21, 2300 Copenhagen S. Tel: 01-57 00 66 (day and night). Cables: Schierbeck Copenhagen. Telex: 31143. Maximum cargo 8 and 40 tons. Maximum 12 passengers.

Kalundborg Supply Service, Ulshojvej 25, 4400 Kalundborg. Tel: 03-51 20 42 and 51 69 17. Maximum cargo 10 tons. Maximum 12 passengers.

Service: 24 hours.

Rendezvous position for deep draft vessels:
Lat. 55° 43.5′ N. Long. 10° 47.8′ E.

Notice: 6 hours' notice required through Agent.

Supply vessel: "Kalundborg Supply" is an ultra modern supply boat equipped to the standards approved by the Danish Government Inspection of Ships.

She was built and delivered in 1982 and has 2×150 h.p. engines with twin screw which delivers a service speed of 16.5 knots. Her loading capacity is 10 tons with a deck space of 5 m.×3 m.

DELAYS: Due to ice between 15th December and 31st March.

AUTHORITY: Kalundborg Port Authority, P.O. Box 50, Radhuset, DK – 4400 Kalundborg, Denmark. *Tel:* Harbour Board (03) 51.33.11. Harbour Master (03) 51.01.88.

KOGE: 55.27 N. 12.12 E. (See Plan Book)

DOCUMENTS: For Customs vessels require:
Vessels of 150 ton and upwards, Load Line Cert.
Vessels of 300 ton and upwards, Load Line Cert., Radio Safety Cert.
Vessels of 500 ton and upwards, Load Line Cert., Radio Safety Cert., Equipment Safety Cert.
For all passenger vessels also Safety Cert.
For stevedores vessel shall have Bills of Lading, Manifests and Loading plans.

PILOTAGE: Pilotage compulsory for all tankers and vessels over 300 g.r.t. or 750 d.w.t. Vessel to call Pilot 2 hours before arrival. VHF on pilot station and pilot boat. Watch on Channel 16. Normal international light and sound signals used. Pilot boat located about 2 nautical miles East of port. No difference in bad weather.

ANCHORAGES: 1–2 nautical miles East of port with good bottom conditions.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Max. permissible length, 150 m.; max. permissible draft, 7 m.

HEALTH: Normal quarantine rules.

RADIO: Lyngby Radio or any other radio station in Denmark.

TUGS: 1 tug of 300 h.p. available. Additional tugs can be obtained from Copenhagen.

STEVEDORES: Normal ETA and description of vessel required.

MEDICAL: Doctor and hospital assistance available; other facilities to be obtained from Copenhagen.

TANKERS: Only 1 tanker berth, no specific requirements. LPG also handled.

FRESH WATER: Water from wharf.

FUEL: Products are delivered in Koge, others from Copenhagen.

FIRE PRECAUTIONS: Normal fire precautions. Tankers cannot request to go to berth before loading/discharging. 2 fire watchmen from the fire department.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not needed.

CONSULS: Nearest at Copenhagen.

REPAIRS: Small repairs.

DRY DOCKS: 2 small slipways for vessels up to 200 tons.

REPATRIATION: No facilities exist.

AIRPORT: Nearest in Kastrup Lufthavn; Copenhagen about 40 km. away.

TIME: GMT plus 1 hour.

HOLIDAYS: Normal Danish holidays, change from year to year. Normally work can be arranged.

POLICE/AMBULANCE/FIRE: Ambulance and Fire (03) 653300; Police 651448 or use alarm 000.

TELEPHONE: No arrangements exist for placing on board.

GENERAL: The North Port of Koge, "Nordhavn", Lat. 55° 27′ 4″ N., Long. 12° 11′ 7″ E. Length of quayage 300 m. Depth 5.5 m.

WIND: Wind between N.E. and S.E. can give up to 1.6 m. HW and West wind up to 0.9 m. LW.

SERVICES: Pilot makes compass adjustments.

SHORE LEAVE: Allowed.

AUTHORITY: Harbour Master, Havnen 39, 4600 Koege. *Tel:* 03–650113.

KOLDING: 55.29 N. 09.29 E. (See Plan Book)

DOCUMENTS: See "Copenhagen".

PILOTAGE: Pilot station in Skaerbaek at mouth of Kolding Fjord. Tel. (05) 562017. VHF Channel 16.

ANCHORAGES: At Skaerbaek.

RESTRICTIONS: See "General" before first port.

MAX. SIZE: Maximum permissible length 200 m. Max. draft: 7.0 m.

RADIO: Lyngby Radio.

TUGS: Available.

STEVEDORES: Obtained through Agents.

MEDICAL: Hospital facilities available.

FRESH WATER: Available from quay. (12kr. per ton).

FUEL: Available.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not needed.

CONSULS:
Austria: H. C. Overbeck, Havnepladsen, Kolding. Tel. (05) 523555.
Finland: J. Borum, Haderslevvej 25, Kolding. Tel. (05) 521233.
Malta: Chr. Hindkjoer, Fabriksvej 27, Kolding. Tel. (05) 525533.
Norway: Eduard Christensen, Gl. Kongvej, Kolding, Tel. (05) 520560.
Peru: M. Ohmeyer, Hobbelskoven 29, Kolding. Tel. (05) 528981.
Sweden: Ove Gronborg, Osterbrogade 14, Kolding. Tel. (05) 522711.

REPAIRS: Only small repairs can be carried out.

AIRPORT: Distance from Billund Airport 40 km. Billund Airport is served by regular airlines.

TIME: GMT plus 1 hour.

HOLIDAYS: See "Copenhagen".

POLICE/AMBULANCE/FIRE: Police, Tel. (05) 522800; Ambulance, Tel. (05) 522222; Fire, Tel. (05) 522222, Help, Tel. 000.

TELEPHONES: Telephones obtainable on board.

SHORE LEAVE: Allowed.

AUTHORITY: Havnemesterens Kontor, Jens Holmsvej 1, 6000 Kolding. *Tel:* 05-520594. *Contact:* P. D. Klaaborg, Harbour Master.

KORSOR: 55.20 N. 11.08 E. (See Plan Book)

DOCUMENTS: See "Copenhagen".
PILOTAGE: Not compulsory. ETA and request for Pilot must be made to Belt Pilot 4 hours before arrival via VHF Channel 16.
ANCHORAGES: 0.5 miles S.W. of buoy "Nygrund". It is prohibited to anchor inside the outer pier.
MAX. SIZE: LOA 225 m., and 7.5 m. draft. Tidal variation 0.3 m.
RADIO: Lyngby Radio OXZ.
VHF: Korsor Harbour on Channels 16, 13 and 12. Tugs are worked on Channel 12.
RADAR: Pilot boats are radar equipped. There is no Port Control Radar.
TUGS: Available. 24 hours notice to Agents, via Lyngby Radio, must be given.
CRANES: 1 mobile crane of 24 tons, 4 cranes with grabs. Further equipment may be obtained at short notice.
BULK CARGO FACILITIES: Grain elevator with three pneumatic dischargers.
SPECIALISED CARGO-HANDLING FACILITIES: At present, one berth for ro/ro traffic. A second berth for ro/ro vessels is due to become operational in 1983.
BRIDGES: There are bridges between Gl. Havn and Inderhavn. Max. LOA 100 m., beam 18 m., draft 5.7 m., allowed to pass under these bridges.
STEVEDORES: Working hours 0700 – 1600 hrs. (1 shift), Monday to Friday. Night shifts by arrangement.
MEDICAL: Hospital at Slagelse, 15 km. away.
FRESH WATER: Available.
FUEL: Available by tank truck, if sufficient notice given.
CONSULS: Norwegian, German, Swedish and Finnish.
DRY DOCKS: None. One slipway of 600 tons displacement.
SERVICES: Compass adjuster available.
GANGWAY/DECK WATCHMEN: Not necessary.
HATCHES: Opening/closing normally done by ship's crew.
AIRPORT: Nearest at Copenhagen, 1 hour 10 minutes by rail.
TIME: GMT plus 1 hour. Summertime GMT plus 2 hours from March to September.
HOLIDAYS: Usual Danish holidays.
GENERAL:

Chart: Danish chart No. 143, Storebaelt between Langeland – Sprogoe, covers this port, which lies 3 miles East of Route T.

Ferry Traffic: Attention is drawn to the intense ferry traffic between Korsor and Nyborg.

AUTHORITY: Korsor Port Authority, Tarnborgvej, DK4220, Korsor. *Tel:* 03-570085. *Contact:* A. Skjold Hansen, Harbour Master.

KYNDBY: 55.49 N. 11.53 E. (See Plan Book)

PORT LIMITS: Vessel is considered to be an "arrived ship" when alongside the quay or at anchorage waiting for berth.
DOCUMENTS:

- Ship's Register.
- Load Line Certificate.
- Radio Safety Certificate.
- Safety Equipment Certificate.
- Derat Certificate or exemption.
- 2 Crew Lists.
- Cargo Manifest or Bills of Lading.
- Construction Certificate.
- Certificate of Insurance or other financial security in respect of civil liabilities for oil pollution damage.
- Tobacco and Spirit List, covering all goods on board belonging to crew, officers, Master, ship's bar or passengers.

PILOTAGE: Pilotage not compulsory. Pilot boards at the entrance of Isefjord and takes the vessel to the port and berths her. Pilots listening on VHF Channel 16.

Pilots to be ordered by ETA telegram to Agent at least 24 hours in advance.

ANCHORAGE: Larger vessels anchor in 15 m. – 20 m. of water either in the Isefjord or outside the entrance to the Isefjord. Holding ground good.
RESTRICTIONS: Arrival only by daylight. No tide under normal conditions. Vessel's draft entering Isefjord not to exceed 22 ft. Also see "General" before first port.
MAX. SIZE: *Oilberth:* depth alongside: 21 ft. 6 in., one berth length 570 ft.

Coalberth: depth alongside 23 ft.

HEALTH: No special restrictions as to free pratique, which will be granted by authorities on arrival. Suspected disease or fever must be telegraphed to Agents before arrival.
RADIO: Lyngby Radio.
VHF: Channel 16 to pilot station (also Skaw Pilot).
RADAR: No installation.
TUGS: Available. Join at Isefjord, outside the entrance to the port of Kyndby, ship's lines to be used.
BERTHING: One Oilberth: length 570 ft., draft 21 ft. 6 in. One Coalberth: 530 ft. long, draft 22 ft. Water brackish.
CRANES: As berth private, only handling own coal cargoes – 3 cranes available.
STEVEDORES: Private stevedores to be ordered through receivers – coal discharge – rate per crane per hour: about 200 tons.
MEDICAL: All medical and hospital facilities available, no advance notice necessary.
TANKERS: 2 discharge hoses, one of 12 in. and one of 16 in.

No slop facilities.

One tanker berth, safe arrival draft: 21 ft. 6 in. Average discharge rate: 1,000 t.p.h.

DENSITY: Brackish.
FRESH WATER: By hose from quay – 10 t.p.h., D. Kr. 2.50 per ton.
FUEL: Available from all bigger companies by trucks or barge from Copenhagen – about 40 miles from Kyndby.
FIRE PRECAUTIONS: No specific precautions.
CONSULS: Nearest Copenhagen about 40 miles from Kyndby.
REPAIRS: All types of smaller repairs can be carried out.
DRY DOCKS: No dry dock available.
SURVEYORS: All bigger Classification Societies represented in Copenhagen about 40 miles from Kyndby.
GANGWAY/DECK WATCHMEN: Watchmen not necessary but available.
OPENING/CLOSING HATCHES: To be carried out by crew.
CUSTOMS ALLOWANCES: See "General" before first port.
CARGO GEAR: Shore coal cranes.
REPATRIATION: Can be arranged normally via Copenhagen about 40 miles from Kyndby.
AIRPORT: About 40 miles to Airport in Copenhagen.
TIME: GMT plus 1 hour (from late September – late April). GMT plus 2 hours (from late April – late September).
HOLIDAYS: Saturday/Sunday normally no work, and further no work on holidays declared as official Danish holidays.
POLICE/AMBULANCE/FIRE: 0–0–0 all alarms.
TELEPHONES: No telephone connection on board.
SERVICES: No tank-cleaning facilities; all other services to ships can be arranged through specialists from Copenhagen.
SHORE LEAVE: No restrictions.
IDENTIFICATION: No shore passes necessary.
REGULATIONS: None.
DELAYS: None.
DEVELOPMENTS: None at the present time.
AUTHORITY: Private port owned by: Elektricitetsselskabet "Isefjordvaerket" I/S., Strandvejen 102, DK–2900 Hellerup. *Tel:* 451627100 and 452883200. *Telex:* 37500 IFV DK. *Cables:* Isekraft.

Local office: Kyndbyvaerket.

MASNEDOEVAERKET: 55.00 N. 11.53 E.

LOCATION: Masnedoevaerket is situated on the island of Masnedoe, which is connected to Sjaelland by a bridge 150 m. East of the harbour.
DOCUMENTS:

- Ship's Register.
- Load Line Certificate.
- Safety Radio Certificate.
- Safety Equipment Certificate.
- Safety Construction Certificate.
- Derat Certificate or Exemption.
- Bill of Lading.
- Crew List.

Customs need a Tobacco and Spirit List, showing the vessel's and the crew's supply on arrival. Nearest Customs at Naestved.

PILOTAGE: Pilot boarding ground off Masnedo N.W. flak. Sea Pilots available from Spodsbjerg, Korsor or Gronsund.
APPROACHES: From West via Smalandsfarvandet depth of water 24 ft. From South East via Gronsund, max. draft permitted 16 ft. 6 in. From Pilot boarding ground, there is a buoyed channel, dredged to 7 m., with leading lights.
ANCHORAGES: Off the entrance channel.
MAX. SIZE: LOA 120 m., beam 25 m. and draft 6.8 m.
TUGS: Available on request, not normally used by vessels less than 4,500 d.w.t.
BERTHING: Power station quay 270 m. long, depth alongside 7 m.
CRANES: There are 2×7.5 ton travelling cranes and 1×100 ton crane.
BRIDGES: Storstromsbroen has a vertical clearance of 26 m. A new bridge will be consecrated in 1985 across the Storstrom with a vertical clearance of 21 m. Power lines with 36 m. vertical clearance lie to the West of the harbour.
FRESH WATER: Available from hose on the quay.
FUEL: Available by tank truck.
REPAIRS: Minor repairs can be carried out at nearby machine shops.
AIRPORT: Copenhagen, 60 miles distant.
AUTHORITY: SEAS-Sydostsjaellands Elektricitets Aktieselskab, Tingvej 7, 4690, Haslev, Denmark. *Tel:* 03-692700. *Telex:* 40234. *Cables:* Seas. *Contact:* Boye Dyrekaer.

MIDDELFART: 55.30 N. 09.44 E. (See Plan Book)

DOCUMENTS: See "Copenhagen".
PILOTAGE: Not compulsory. Middelfart Pilot Station operates on Channel 16.
MAX. SIZE: 5,000 d.w.t. – 6,000 d.w.t., 6.5 m. draft.
TUGS: Available at short notice.
BERTHING: New Harbour: 2 quays, one of 190 m. length, depth 6.5 m., the other of 100 m. length, depth 5.7 m.

Old Harbour: 2 quays, one of 100 m. length, the other of 80 m. length, depth 6.5 m. at both quays.

Private Wharves: A. C. Hansens Quay, length 90 m. max., draft 4.6 m. Open to public traffic.

Nordiske Kabel & Trpdfabrikkers Quay, max. length 100 m., depth 7 m.

CRANES: One 15 tonne mobile crane. One 3 tonne crane at A. C. Hansens Quay. Mobile cranes of all sizes available at short notice.

BULK CARGO FACILITIES: Cranes and forklifts of 2 – 15 tonnes. Crane at A. C. Hansens Quay for bulk stores.
STEVEDORES: Working hours: 0700 – 1600 (overtime possible).
Rates of Work: Bulk Cargo: 200 t.p.h. Iron, etc.: 180 t.ph.
MEDICAL: Local hospital available.
FRESH WATER: Available.
FUEL: All grades of fuels and lubricants available at short notice.
DRYDOCKS: One slip for vessels up to 100 tonnes.
CUSTOMS REGULATIONS: See "General" before first port.
AIRPORT: At Billund and Beldringe, both 30 km. away.
TELEPHONES: This service is available aboard ships at all berths by prior arrangement through the Agent. Standard rates apply.
AUTHORITY: Middelfart Havn, Havnegade 79, DK-5550, Middelfart, Denmark. *Tel:* 09-410253. *Contact:* Mogens Jensen, Harbour Master. Office hours 1100 – 1200 hrs.

AGENT: Middelfart Shipping, 2B, Brogade, 5500 Middelfart. Tel: 09-410072. Telex: 58240 "Miship DK". Cable: Midship (Lloyds Sub-Agent).

NAESTVED: 55.14 N. 11.45 E. (See Plan Book)

DOCUMENTS: See "Kalundborg".
PILOTAGE: Compulsory between the entrance to Karrebaeksminde and Naestved for all ships over 150 g.r.t. VHF Channel 16. Tel. 03 – 727366 and 03 – 742397.
ANCHORAGES: 1 – 2 miles S.W. of head light in Karrebaeksminde in 10 m. – 12 m. depth.
RESTRICTIONS: Only navigable from half hour before sunrise to half hour after sunset, and according to tides. Also see "General" before first port.

Use of tug compulsory through bridge for vessels over 1,800 d.w.t.
MAX. SIZE: Max. length 100 m. Max. draft 5.60 m. with breadth 12.20 m. Max. breadth 14.40 m. with draft 4.80 m.
HEALTH: See "Kalundborg".
RADIO: Lyngby Radio. VHF Channel 16.
TUGS: m/s "Eno" 360 h.p. VHF. Ship's lines. Also see "Restrictions".
BERTHING: No berthing in Karrebaeksminde. Naestved 3 quays: 365, 270, 170 m., all with depth 6 m.
BRIDGES: One in Karrebaeksminde, total width 22.0 m. with open bridge, free side height is 20.0 m. Also see "Restrictions".
MEDICAL: Hospital available.
FRESH WATER: Available from quay, 10 t.p.h.
FUEL: All grades. Deliveries by lorry only.
AIRPORT: Kastrup Airport, Copenhagen 90 km. away.
TIME: GMT plus 1 hour.
SHORE LEAVE: No restrictions.
AUTHORITY: Naestved Havnekontor, Toldbodgade 4, 4700 Naestved. *Tel:* 03 – 720056. *Contact:* E. Andersen, Harbour Master.

NAKSKOV: 54.50 N. 11.08 E. (See Plan Book)

DOCUMENTS:
Tonnage Certificate.
Load Line Certificate.
Valid Derat Certificate (renewal at Nakskov possible).
Crew Declaration.
3 Crew Lists.
PILOTAGE: At Albuen at the entrance of the firth. The pilot station named "Belt Pilot". VHF Channel 16. Notice of ETA to be given as early as possible and not later than 4 hours before arrival.
ANCHORAGES: Safe anchorage in port area for smaller vessels or outside on the Roads in Langelandsbaelt. The pilot station will advise best position depending on wind and current.
RESTRICTIONS: Sailing to and in the harbour at night-time with help of projector and with good visibility only. Also see "General" before first port.
MAX. SIZE: D.w.t.: Approx. 2,000 tons. Draft: 19 ft., Length: 660 ft., Breadth: 70 ft., Height: None – no bridges to pass.
RADIO: Lyngby Radio.
VHF: Operated by Harbour Office during daytime only on Channel 16.
Also communication via the pilot station on VHF Channel 16.
All movements to be reported to the Agent only.
TUGS: Tug available with 24 hours notice.
BERTHING: Protected from all winds. Depth up to 20 ft. 6 in. (6.3 m.) 7,500 ft. of quay. In the fairway leading up to the harbour there is a depth of 20 ft. 6 in. (6.3 m.), distance about 6 miles. Max. draft in Fairway 19 ft.
BRIDGES: No bridges to pass. Airdraft unlimited.
STEVEDORES: Arranging gangs for work after noon, notice to be given to the stevedores latest 0900 hrs. For work in the morning, notice to be given to the stevedores the day before latest noon.
CARGO HANDLING FACILITIES: Tracks along the quays in connection with the railway station and all Danish Railways. Also good road connections.

3 grain silos: 4,000, 12,000 and 15,000 tons. 3 grain elevators loading rate 120, 80 and 50 t.p.h. respectively. 1 grain elevator discharging rate 40 t.p.h.

4 mobile belt conveyors loading up to 110 t.p.h.
2 mobile cranes (22 and 32 tons capacity) – also grab and polygrab.
3 forklifts 2.0 – 3.5 tons available. Up to 4.5 tons on request.
3 miniloaders (Bobcats) for discharging of bulk cargoes.
MEDICAL: Treatment all kinds possible, including hospital. Medical attention at dentist, eye and ear specialist normally requires 24 hours notice if possible.
DENSITY: Fresh water.
FRESH WATER: Available from quay or by truck.
FUEL: Available.
CONSULS: Dutch, Finnish, French, Norwegian and Swedish.
REPAIRS: Blacksmith and electrical workshops available to carry out some repairs on deck and engine.
SURVEYORS: At present no surveyors at Nakskov. Must be ordered from Copenhagen.
GANGWAY/DECK WATCHMEN: Not necessary.
DRY DOCKS: Shipyard provided with 2 dry docks up to 32,000 d.w.t., building slips up to 35,000 d.w.t. Cranes to lift up to 100 tons.
OPENING/CLOSING HATCHES: Always carried out by crew.
CUSTOMS ALLOWANCES: 40 cigarettes or 40 grams tobacco, 0.25 litre spirits and 0.25 litre wine per man per day.
CARGO GEAR: Loading/discharging always effected by shore gear, unless otherwise agreed in C/P.
REPATRIATION: Facilities available.
AIRPORT: Small airport for taxi flights close to the port. About 160 km. to the nearest airport served by regular world-wide airlines.
TIME: GMT plus 1 hour. May-September, Summertime GMT plus 2 hours.
POLICE/AMBULANCE/FIRE: Police Tel: 921448. Ambulance Tel: 921744. Fire Tel: 923041. Emergency Tel: 000.
EMERGENCY CO-ORDINATION CENTRE: Soevaernets Operative Kommando (SOK), Aarhus. Call via Radio Stations Lyngby, Roenne, Skaw or Blaavand.
BANKS:
Lollands Bank A/S, DK-4900 Nakskov. Telex: 47542.
Den Danske Bank A/S, DK-4900 Nakskov. No telex.
Handelsbanken A/S, DK-4900 Nakskov. No telex.
STORING: See "Prelims" page viii.
1. Vessel can be stored by truck.
2. Trucks can proceed alongside ship.
3. Fork lift can be used.
4. Customs documents from supplier to be shown at the Customs House before loading the stores. In case of bonded stores the loading will be supervised by Customs Officer.
SHORE LEAVE: The crew are allowed ashore, but depending of nationality not allowed to leave the town without permission.
IDENTIFICATION CARDS: Seaman's Book is sufficient.
GENERAL: Provisions to be supplied from a supermarket. If bonded stores are required this has to be delivered by a ship Chandler at another port – transportation fee then to be paid – usually about DKR 300 – depending on distance and order given.
AUTHORITY: Nakskov Havn, Havnen, DK-4900 Nakskov. *Tel:* 3-920313. *Contact:* Harbour Master.

AGENT: Casper Andrea's Eftflg, P.O.Box 66, DK-4900 Nakskov, Denmark. Tel: 03-923333. Telex: 47545 Andrea Dk, Telegrams: Andrea Nakskov.

NYBORG: 55.19 N. 10.49 E.

DOCUMENTS:
Health Declaration.
Customs Declaration.
PILOTAGE: Required notice ETA 6 hours. Pilot boat VHF Channel 16. Belt Pilot, station Spodsbjerg Tel: 09 – 50 15 35, Office Nyborg 09 – 310089.
ANCHORAGE: South of Knudshoved Lighthouse. Depth 16 m. (52 ft.). Small vessels anchor S.W. of Avernakke Pynt.
RESTRICTIONS: See "General" before first port.
MAX. SIZE: Avernakke Pynt Bro (Oilpier) draft 32 ft. length about 600 ft. Vesterhavn draft 24 ft. length about 400 ft.
RADIO: Lyngby Radio.
VHF: Harbour office of Nyborg, call Channel 16, shift to Channels 12 or 13 for working.
TUGS: One tugboat normally stationed in the port. Tugs required notice 8-10 hours.
STEVEDORES: Ordered by Agent.
MEDICAL: Hospital facilities available.
TANKERS: Discharge at Avernakke. Discharge lines 8 in. and 10 in.
DENSITY: About 1005.
FRESH WATER: Supply by pipe-line to berths.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Not compulsory.
OPENING/CLOSING HATCHES: Crew allowed open and close, otherwise according Charter Party.
CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Not required.
CONSULS: Finland 129151, Norway 119111, Sweden 310106.
In Odense (near Nyborg);

France	115515	Netherlands	119060
Germany (F.R.)	141414	Iceland	131800
Great Britain	132301	Spain	136644

REPAIRS: Most repairs possible.
DRY DOCKS: Floating Dock: 1,000 d.w.t.; Slipway 70 d.w.t.
AIRPORT: Nearest airport, Beldringe, Odense.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day, Ascension Day; Whit Monday; Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Police 311448; Ambulance 000; Fire 000.
SHORE LEAVE: No restrictions.
AUTHORITY: Nyborg Havn, Havnepladsen 10, 5800 Nyborg. *Tel:* (09) 310587. *Contact:* Orla Willads Petersen, Harbour Master.

NYKOBING (Falster): 55.55 N. 11.41 E. **(See Plan Book)**

DOCUMENTS:

Ship's Register.
Loadline Certificate.
Derat Certificate.
Crew List stating quantity of cigarettes, cigars, tobacco, cigarette paper, spirits, wine and guns.
Cargo List.

PILOTAGE: Pilot ordered through Agents or VHF Channel 16 (Guldborg Pilot) and will board at Skellerev or Argus Ground (both outside Guldborg Bridge).

ANCHORAGE: (Sand) By Skellerev, S.E. of Argus is safe ground.

RESTRICTIONS: Port only accessible by daylight, max. draft 19 ft. 6 in., max. breadth for passing Guldborg bridge 25 m. Entrance from South (Gedser) not recommended, as depth of water in the Southern part of Guldborgsund only amounts to 8 ft. Also see "General" before first port.

RADIO: For vessels coming through the Kiel Canal, Kiel Radio could be used, otherwise nearest station Lyngby Radio.

TUGS: Available on request.

BRIDGES: Vessels calling Nykobing Falster have to pass Guldborg Bridge about 8 miles North of harbour. Bridge, breadth 25 m., opens by request after sunrise and half an hour after sunset (from 1st Nov. to 1st March from half an hour before sunrise). When requesting passage use international flag "N" on half foremast and give one long and one short blast.

STEVEDORES: Ordered by Agents on receiving vessel's ETA.

MEDICAL: No advance notice required for medical attention.

FRESH WATER: Supplied from quay installations.

FUEL: All grades obtainable – delivered by tank lorry.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCES: See "General" before first port.

IDENTIFICATION CARDS: Not necessary.

CONSULS:

Finland
Germany (F.R.)
Netherlands
Norway
Sweden

REPAIRS: Small deck and engine repairs possible.

AIRPORT: Nearest at Copenhagen (2 hours by train).

TIME: GMT plus 1 hour.

HOLIDAYS: New Year; Maundy Thursday; Good Friday; Easter Monday; Prayer Day; 1st May (Labour Day, half only); Ascension Day; Whit Monday; Constitution Day (5th June, half only); Christmas and Second Christmas Day.

POLICE/AMBULANCE/FIRE: Dial 0-0-0 and ask for police, ambulance or fire service.

SHORE LEAVE: Crew members may go ashore without any restrictions.

AUTHORITY: Havnekontoret, Tommergade 4, 4800 Nykobing Falster. *Tel:* (03) 850563. *Contact:* Allan Forne.

NYKOBING (Mors): 56.48 N. 08.52 E.

PORT LIMITS: A line drawn between Orodde Point in a S.W.'ly direction to Refshammer Point defines the seaward limits of the port.

DOCUMENTS: See "Copenhagen".

PILOTAGE: Pilotage is compulsory for vessels more than 200 b.r.t. when passing the Oddesund-bridge, and for vessels with a draft more than 2.8 m. when passing Logstor. Vessels arriving from the West (North Sea) shall contact Thyboron Pilot 3 hours before arrival Thyboron Canal. Vessels arriving from the East (Kattegat) shall contact Hals Barre Pilot 3 hours before arrival Hals Barre Lighthouse. Both stations listen on VHF Channels 16 and 12. When passing Logstor, the Pilots there will take over; also working Channels 16 and 12.

ANCHORAGES: Anchoring is prohibited in the buoyed channel to Nykobing (Mors) harbour and in the white sector from Glyngoere Lighthouse. Good sand holding ground North and East of Orodde Pt.

RESTRICTIONS: None, tankers can be moved during the hours of darkness.

MAX. SIZE: Vessels up to LOA 105 m., beam 25 m. and 4.3 m. draft (SW).

HEALTH: Danish rules apply.

RADIO: Blaavand, Skagen or Lyngby Radio are working on VHF, MF and HF.

VHF: See "Pilotage" and "Radio".

RADAR: None.

TUGS: Available if necessary.

BERTHING: General and bulk cargo can be handled at two berths. The East Pier is 70 m. long but vessels up to 105 m. LOA can be berthed. The South Pier is 57 m. long. Least depth at the inside berth is 4.3 m.

CRANES: 1 mobile crane 25 tonnes without advance notice and 1 mobile crane 15 tonnes with short notice.

BRIDGES: (a) "Sallingsundbroen" connecting the island of Mors to Salling is situated 1 nautical mile S.E. of Nykobing Mors harbour. Max. vertical clearance is 26 m.

(b) "Oddesundbroen" connecting Thyholm and Struer is situated between Nykobing and Thyboron.

(c) When coming from Kattegat two bridges are to be passed. Firstly "Limfjordsbroen" connecting Aalborg and Norresundby, then "Aggersundbroen" N.E. of Logstor.

STEVEDORES: Working hours Monday – Friday 0700–1630.

MEDICAL: Full hospital facilities available without prior notice.

TANKERS: There is one berth for tankers, length 63 m. but vessels up to 75 m. LOA can be berthed, depth 4.3 m. One pipe-line only for diesel oil (150 mm.).

DENSITY: 1027.

FRESH WATER: Available, rate 2.5 t.p.h.

FUEL: Available, delivered by trucks.

CONSULS: None.

REPAIRS/DRYDOCKS: Soeren Larsen & Soenner Shipyard, 7900 Nykobing Mors. Tel: 07–721544 Telex: 66698 SLS – DK. Cables: SLS – Yard. Patent slipway up to 350 t., light ship. All kinds of deck and engine repairs. Shipbuilding up to 499 b.r.t.

SURVEYORS: Lloyd's Agents, P. H. Hoejgaard Jensen Aps. 8 Asmusvaenget DK 8530 Hjortshoej, Aarhus. Tel: 06–196500. Aalborg Survey Association, 4 Vesteraa DK 9000, Aalborg. Tel: 08–166022.

GANGWAY/DECK WATCHMEN: Not necessary.

HATCHES: Opening/closing carried out by crew.

CARGO GEAR: Loading/discharging normally done by shore gear.

REPATRIATION: All facilities exist for crew changes and repatriation.

AIRPORT: At Thisted (45 km.) and Karup (70 km.). Several departures daily to Copenhagen.

TIME: GMT plus 1 hour. Summertime from March to September (GMT plus 2 hours).

HOLIDAYS: No cargo work on all Danish local holidays.

POLICE/FIRE/AMBULANCE: In emergency dial 000. Otherwise Police: 721800, Ambulance and Fire: Falck 721222.

TELEPHONES: Available onboard for naval vessels only.

SERVICES: Compass adjusting.

SHORE LEAVE: No restrictions.

IDENTIFICATION CARDS: Not necessary.

DELAYS: Normally no berthing delays.

DEVELOPMENTS: None.

AUTHORITY: Morsoe Kommune, Jernbanevej 7, 7900 Nykobing Mors. *Tel:* 07–721488. *Contact:* B. F. Nielsen, Harbour Master, Havnekontoret, 7900 Nykobing Mors. *Tel:* 07–720049.

ODENSE: 55.25 N. 10.23 E. **(See Plan Book)**

DOCUMENTS:

Ship's Register.
Load Line Certificate.
Radio Safety Certificate.
Safety Equipment Certificate.
Derat Certificate or exemption.
1 Crew List.
1 Stores List.
1 Crew Personal Effects List.
1 Cargo Manifest or Bills of Lading.

PILOTAGE: Compulsory for all tankers and for all other vessels of 750 d.w.t. and over. Odense Pilot boards just North of light-buoy 2A outside of Gabet. In bad weather the Pilot will board inside of Gabet between light-buoys 2 and 4. Send request for Pilot 6 hours and 1 hour in advance.

ANCHORAGE: Inside of Gabet in depths of 7.5 m. Larger vessels anchor outside of Gabet.

RESTRICTIONS: Port is entered through dredged canal, minimum 35 m. wide, 7.5 m. deep. Navigation usually throughout the year. Ice-breaker assistance available if necessary. Vessels over 3,000 d.w.t. enter in daylight only. Speed limit of 6 knots in entrance canal. Arriving ships must wait for vessels leaving port. Also see "General" before first port.

MAX. SIZE: Draft, max. 6.7 m. fresh water, length, max. 160 m. controlled by swinging basin and draft. Permissible draft for vessels over 100 m. in length to be obtained from Agent.

HEALTH: Pratique granted by Customs Officers who bring Health Declaration for Masters to complete. In event of suspected disease or fever on board radio details to Agent before arrival.

RADIO: Lyngby Radio.

VHF: Port Authority and tug communicate on Channel 12, Odense Pilot on Channels 16 and 12.

TUGS: Tug is available (660 h.p.). Not compulsory but necessary for large vessels. Tug normally joins vessels in port. Large vessels at Gabet. Ship's line.

BERTHING: Three harbour basins including 4,200 m. of quays with depth of 7.5 m. alongside. Coal quays at Fynsvaerket, depth 7.5 m. alongside.

CRANES: At Basin I: 1×3.5 ton crane with grab if needed.

At Basin II: 1×3.5 ton crane with grab if needed.

At Basin III: 2×6 ton cranes, 1 with grab if needed; 1×15 ton crane and 1×50 ton crane.

Quay along the canal: 5 private cranes with grab.

At Fynsvaerket: 3 cranes with grab and 1 continuous unloader.

Also available in the port: 1×6 ton mobile crane and 1×16.5 ton mobile with grab if needed. No floating cranes.

BULK CARGO FACILITIES: 5 private suction-installations for grain, etc. Coal and chemicals are handled by crane.

SPECIAL CARGO FACILITIES: Berths available for handling of containers and ro/ro traffic.

BRIDGES: No bridges but power lines max. height 45 m.

STEVEDORES: To be arranged through Agent.

MEDICAL: Doctors and hospital facilities anytime. Arrange through Agent.

TANKERS: Two berths length 160 m. each, depth 7.5 m. also one jetty, depth 6 m.

DENSITY: 1003.

FIRE PRECAUTIONS: In addition to the usual precautions a firefighter is posted at the vessel while in the port when the cargo is petrol, kerosene, etc.

AIRPORT: Situated 15 km. from the harbour. 3 – 5 flights a day to and from Copenhagen.

POLICE/FIRE/AMBULANCE: Dial 000 and ask for service required.
CONSULS: All European countries represented.
FRESH WATER: Available by pipe-line at all berths. Rate: 10 – 15 t.p.h.
FUEL: All grades available by road transport.
CUSTOMS ALLOWANCES: See "General" before first port.
TIME: GMT plus 1 hour. Summertime GMT plus 2 hours.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day; Ascension Day; Whit Monday; Christmas Day; Boxing Day.

Half-holidays: May 1st, June 5th and December 24th. Work can be arranged.

REPAIRS: All engine and boiler repairs can be effected.
DRY DOCKS: One 500,000 d.w.t. and two 100,000 d.w.t. dry docks in Lindoe Shipyard.
SURVEYORS: N.V. and Lloyd's.
HATCHES: Normally opened by ship's crew.
REPATRIATION: Can be arranged.
TELEPHONES: No telephones on board.
SERVICES: Compass adjustment can be arranged.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not necessary.
REGULATIONS: Nothing unusual.
DELAYS: None.
AUTHORITY: Odense Port Authority, Londongade 1, DK-5000 Odense C, Denmark. *Tel:* (09) 120025. *Contact:* Harbour Master.

RANDERS: 56.29 N. 10.04 E. (See Plan Book)

DOCUMENTS:
2 Crew Lists.
2 Lists with statement of each crew member's cigarettes, tobacco and spirits.
PILOTAGE: Apply for Pilot 6 hours before arrival. VHF Channel 16, one hour before. Pilot station, Tel: 06-485024.
ANCHORAGE: Outside Entrance buoy in 8 m.
RESTRICTIONS: Only vessels less than 1,000 d.w.t. may enter at night. Also see "General" before first port.
MAX. SIZE: Max. length, 475 ft.; breadth, 57 ft.; draft, 19 ft.
HEALTH: No special requirements.
RADIO: Lyngby Radio and Skaw Radio.
VHF: VHF service from Harbour Office, Channel 16, icebreaking 16.
TUGS: 900 h.p. tugs available – use ship's lines.
BERTHING: 76 berths available. Depth alongside 7 m.
STEVEDORES: Ordered by Agents. Working periods: Monday to Friday 0730 – 1130 hrs., 1200 – 1615 hrs. Saturday no work.
MEDICAL: Hospital facilities available.
TANKERS: 6 in. and 8 in. discharge lines; no slop facilities.
DENSITY: Brackish in port area. No tide.
FRESH WATER: Shore installations.
FUEL: All grades. Deliveries by lorry only.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Tonnage Certificate, Derat Certificate, Load Line Certificate.
CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Not required.
CONSULS: Norway (06) 42 61 00, Finland (06) 42 51 11, Sweden (06) 420022, Iceland (06) 42 55 55.
REPATRIATION: Several hotels and Seamans' Home.
REPAIRS: Engine repairs and minor repairs.
SURVEYORS: Arranged by Agent.
AIRPORT: Tirstrup Airport 40 km. from Randers, 5 – 7 daily connections with Copenhagen.
TIME: GMT plus 1 hour in Winter. Summertime from April-October.
HOLIDAYS: 1st January (New Year); Maundy Thursday, Good Friday, Easter Monday; 1st May from 1200 hrs. (Labour Day); Whit Monday from 1200 hrs.; 24th December from 1200 hrs.; 25-26th December (Christmas).
POLICE/AMBULANCE/FIRE: Tel. 000.
AUTHORITY: Harbour Master, Randers Havnevaesen, Ostervold 46, 8900 Randers. *Tel:* 06 – 421057. *Contact:* G. Drachmann.

RODBY: 54.39 N. 11.20 E. (See Plan Book)

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Stores List.
1 Manifest or Bill of Lading.
PILOTAGE: As the harbour is so easily accessible there is no Pilot. A person with local knowledge may be engaged by calling ferry "Danmark" VHF 16.
ANCHORAGES: At a distance of 1.5 – 2 miles, bearing S.E. – S.S.E. of approaching buoy, depth of water 10 m.
RESTRICTIONS: See "General" before first port.
REGULATIONS: Ferries owned by D.S.B. or D.B. (Trainferries) have priority using the entrance.
MAX. SIZE: Largest vessel: Length 80 m. Draft 4.5 m. Depth of water in North and West Basin: 5 m. N.E. Storm can give rise of up to 1.5 m. S.W. Storm can give fall of 1.2 m. on daily depth.
HEALTH: No Certificates required.
RADIO: All messages via "Lyngby Radio" and Port Radio, VHF Channel 16, working Channels, 8, 10 and 11.
TUGS: None.
BERTHING: Quay length 518 m. equipped with 1 mobile crane 25 tons capacity. Two grain silos, loading capacity 60 – 90 t.p.h.
STEVEDORES: Provided by "Rodby Shipping" Tel: 03.905522. Telex: 40022; Shipbroker A. Hovmand, Tel: 03.888011, Telex: 40256; Shipbroker H. Kristiansens Eftf, Sakskobing, Tel: 03.894434.
MEDICAL: 2 hospitals available.
FRESH WATER: Can be supplied alongside the quay.
FUEL: Obtainable alongside the quay.
OPENING/CLOSING HATCHES: By crew or stevedores, ship's option.
CERTIFICATES: On arrival, ship's register only.
CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Not required.
AIRPORT: Maribo Airport, 14 km.
SHORE LEAVE: After clearing inwards, Crew members are allowed to go ashore without special permission.
AUTHORITY: Havnekontoret, Ostre Kaj 3, 4970 Rodby. *Tel:* 03.905722 and 03.905606 (Harbour Master). *Contact:* Johs Rasmussen, Harbour Master, *Tel:* 03.855522 (private).

RONNE: 55.06 N. 14.42 E. (See Plan Book)

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Customs Declaration.
1 Declaration for crew's tobacco, spirits, etc.
1 Declaration of Health.
1 Declaration to Police, number of crew, passengers, etc.
1 Bill of Lading (or Manifest).
PILOTAGE: Apply for Pilot via Ronne or Lyngby Radio, advance notice not less than 1 hour. Pilot listens continuously on VHF. Call Ronne Pilot or Ronne Harbour. Area where Pilot to be taken on board is by Ronne light-buoy, 2 miles S.W. of the harbour; if weather bad pilot boat guides the ship inside the breakwater and then Pilot boards.
ANCHORAGE: No safe anchorages outside the harbour.
RESTRICTIONS: See "General" before first port.
MAX. SIZE: Max. length 400 ft. – 450 ft., draft 22 ft. There is no tide.
HEALTH: No special procedure necessary, but if there is suspected disease or fever on board or ship comes from area with fever, etc., call for quarantine doctor. If ship's last call was Danish port pratique automatic.
RADIO: Ronne Radio, call-sign OYE; or Lyngby Radio, call-sign OXZ.
VHF: Listens on Channel 16. Working Channels 12 and 13. Same in tug and Pilot boat. Mainly traffic concerning pilotage and harbour operations.
RADAR: Located at Pilot station, mostly look-out aid, but advice on entering can be given.
TUGS: Normally join the vessel inside breakwater; ship's lines to be used.
BERTHING: 3 berths equipped with hydraulic ramps for roll-on/roll-off traffic via stern or head only, one of which is suitable for ships up to 450 ft. length, 65 ft. beam, draft 21 ft.

3 berths for sand loading 400 – 600 t.p.h., for vessels up to 350 ft. length, 21 ft. draft.

2 berths for macadam loading 400 t.p.h., for vessels up to 300 ft. length, 21 ft. draft.

1 grab-crane, capacity 100 t.p.h. is situated on pier 13.

3 mobile cranes with capacities up to 30 tons are available for both hook and grab operations.

Also berths for handling coal and grain.

STEVEDORES: To arrange gangs Monday morning, advices have to be given Friday before 1100 hrs. To arrange work other days, notice must be given before 1600 hrs. the day before.
MEDICAL: Hospital facilities are available. It is not necessary to give advance notice.
TANKERS: Two berths for coastal tankers draft up to 22 ft., length up to 300 ft. For tankers of 1,500 d.w.t. and upwards, Pilot is compulsory when entering and leaving the port.
FRESH WATER: Available 10 – 12 t.p.h.
FUEL: Light fuel, Redwood 200 sec. Heavy fuel 3500 sec., also 1000 and 1500 sec. Notice 6 hours ETA.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Carried out by crew.
CERTIFICATES: Nationality Cert., Derat Cert., Load Line Cert. Radio Cert. (Safety Cert. for passenger ships only).
CUSTOMS ALLOWANCES: see "General" before first port.
IDENTIFICATION CARDS: Not needed.
CONSULS: The following countries are represented in Ronne: Sweden, Finland, France, Netherlands, Norway and West Germany.
REPAIRS: All kinds of repairs can be carried out.
SURVEYORS: Available from Copenhagen. The Harbour Master has from time to time been appointed by insurance companies and surveyors to carry out hull and cargo surveys.
DRY DOCKS: Only small ships up to 350 tons.
REPATRIATION: Possible.
AIRPORT: 3 miles, served 3 – 5 times per day by SAS to Copenhagen.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours from April 6th to September 28th.
HOLIDAYS: New Year's Day; Easter, 3 days Thursday, Friday, Easter Day (Monday); May 1; Whit Monday; June 5; Christmas Eve; Christmas Day; 2nd Christmas Day. Cargo work only possible for foodstuff, etc.
SERVICES: Compass adjustment at Duc d'Albe in Southern part of Forhavn.

BANKS: No American or European banks in this area, most Danish banks have connections with the major international banks.

Kobenhavns Handelsbank, Ronne Branch. Tel: (03) 95 22 11, Telex: 48155 ROCO DK.

Bornholmerbanken, Ronne. Tel: (03) 95 00 61, Telex: 48117 BORNBK DK. Connected to Den Danske Provinsbank, Copenhagen, American Express International Banking Corp., London and Midland Bank Ltd., London.

Andelsbanken, Ronne. Tel: (03) 95 20 01. This bank is a branch of Andelsbanken, Copenhagen, which has telex: 27086 DK. Connected to London & Continental Bankers Ltd., London, Internationale Genossenschaftsbank, Basel Switzerland and Europaischer Genossenschaftsbank, Zurich, Switzerland.

EMERGENCY CO-ORDINATION CENTRE: Emergency operations in Danish waters are co-ordinated by the Royal Danish Navy. Emergency operations in the area around Bornholm are co-ordinated and guided by the Royal Danish Navy Surface Rescue Centre. Tel: (03) 95 20 10. No telex number is available, but on request by telephone the rescue centre can answer by telex.

STORING: (See "Prelims, page viii").

1. Vessels can be stored both by truck and by barge, but as all loading and discharging is taking place alongside piers, barges are never used for storing ships. Furthermore, no special barges are available for that purpose.
2. There are no special regulations concerning the storing of ships. Normally ships do not take large quantities of stores at Ronne.
3. Trucks can proceed alongside ships on all piers except on pier 12 (oil pier), where the truck must remain about 80 yards from the ship.
4. Likewise fork lifts can be used on all piers except pier 12.
5. Customs regulations regarding bonded stores only.
6. Normally only the ship's crew employed.

SHORE LEAVE: Allowed.

AUTHORITY: Ronne Havnevaesen, Havnekontoret, Finlandsvej 3, 3700 Ronne, Denmark. *Tel:* 03-950678. *Contact:* John Lou, Harbour Master.

Harbour Board (Municipal): Ronne Kommunes Havneudvalg, Landemaerket 26, 3700 Ronne, Denmark.

SKAELSKOR: 55.15 N. 11.18 E. (See Plan Book)

Admiralty Charts 2597 and 2118 cover the approaches to and the port of Skaelskor. Depth at the entrance to port is 4.5 m.

DOCUMENTS: See "Copenhagen".

PILOTAGE: Not compulsory. Pilot to be ordered via Agents with minimum 6 hrs. notice. Pilot vessel is equipped with VHF; Channels 16, 12, 10 and 6.

ANCHORAGES: Available outside Skaelskor Fjord.

RESTRICTIONS: Entering the port at night is permitted only by vessels equipped with a searchlight.

MAX. SIZE: Max. draft 4.2 m., max. length 60 m., max. beam 10 m.

HEALTH: Usual Danish regulations apply.

RADIO: Lyngby Radio.

VHF: See "Pilotage".

TUGS: None.

BERTHING: Outer harbour: depth 4.5 m., 200 m. quayage. Inner Harbour: depth 3.8 m., 120 m. quayage.

CRANES: 1 mobile crane with 7 tons lifting capacity.

BULK CARGO FACILITIES: 1 belt conveyor available for loading grain.

MEDICAL: Facilities available.

TANKERS: No dirty ballast facilities available.

DENSITY: Varies from 1007 to 1023.

FRESH WATER: Available.

FUEL: Available.

REPAIRS: Can be undertaken.

DRYDOCKS: None.

SURVEYORS: Available.

REPATRIATION: Can be arranged.

AIRPORT: Nearest at Copenhagen.

TIME: GMT plus 1 hr.; Summertime (March – September) GMT plus 2 hrs.

TELEPHONES: No facilities for placing telephones on board vessels exist.

AUTHORITY: Municipality of Skaelskor: Skaelskor Kommune, Naestvedvej 15, DK-4230, Skaelskor. *Tel:* (03) 594271. *Contact:* J. Boas or R. Larsen.

AGENT: Aage C. Frederiksen I/S, P.O.Box 4, DK. 4230 Skaelskor. Tel: 453 594002. Cables: "Shipbroker". Telex: 40222 (ACF DK).

SKAERBAEK: 55.31 N. 09.37 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Load Line Certificate.
Radio Safety Certificate.
Safety Equipment Certificate.
Derat Certificate or exemption.
1 Crew List.
Stores List.
Crew Personal Effects List.
Cargo Manifest or Bills of Lading.

PILOTAGE: Not compulsory. Pilot joins at mouth of Kolding Fjord. Can be contacted by VHF Channel 16.

Bigger ships usually take Pilot by Skaw L/V. Pilots to be ordered by ETA-telegrams to Skawpilot Skagen, at least 12 hours in advance. Skawpilot listening on VHF Channel 16.

ANCHORAGE: Off Skaerbaek in depths of 39 ft.

RESTRICTIONS: See "Tankers" and "General" before first port.

MAX. SIZE: LOA 250 m. Max. draft 38 ft.

RADIO: Lyngby Radio.

TUGS: Available, at short notice.

BERTHING: Power station wharf: 253 m. length; depth alongside 23 ft. Oil Jetty: depth 39 ft.

CRANES: 2×12 ton coal cranes.

STEVEDORES: Working hours: Monday to Friday 0700–1530 hrs.

TANKERS: One berth, depth 39 ft. (11.9 m.). Max. length between bow/stern and manifold 127 m. (417 ft.). 3×12 in. discharge arms, rate 4,000 t.p.h.

MEDICAL: Medical attention available, nearest hospitals at Kolding and Fredericia.

DENSITY: 1017 (approx.).

REPAIRS: Local machine shops can manage small repair jobs.

DRYDOCKS: None.

FRESH WATER: Obtainable from quay.

FUEL: Available by barge from Fredericia.

CONSULS: Nearest at Kolding. Distance 15 km.

REPATRIATION: Possible.

AIRPORT: Billund or Odense, both approximately 50 km. distant, and with daily flights to Copenhagen.

CUSTOMS ALLOWANCES: See "General" before first port.

TIME: GMT plus 1 hour.

HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Prayer Day; Ascension Day; Whit Monday; Christmas Day; Boxing Day. Half holidays: May 1st, June 5th and December 24th.

AIRPORT: Billund Airport, 40 km. distant.

AUTHORITY: I/S Den Sydostjydske Faellescentral Skaerbaekvaerket, Dk 7000 – Fredericia *Tel:* 05/562466 or 05/562733. *Telex:* 51145. *Cables:* Elship Fredericia.

SKAGEN: 57.43 N. 10.36 E. (See Plan Book)

DOCUMENTS: Crew List, Tobacco List, Stores List, Derat Certificate, Health, Tonnage, Nationality and Cargo documents.

PILOTAGE: Local Harbour Pilot available on request to the Harbour Office. Sea Pilot may take vessels to all harbours on the East coast of Jutland, to the Sound, and through the Great Belt to the Baltic Sea. Tel: 08445566 or VHF Channel 16.

ANCHORAGES: Off the harbour entrance.

APPROACHES: The entrance between the outer moleheads is 75 m. wide and facing S.E. Approaching vessels should – when 400 m. from the entrance – keep the leading lights in line bearing 334°. Entering vessels have right of way over departing vessels. Maximum speed inside the outer harbour is 3 knots.

Tides and Current: Tidal range 0.3 m. Gale from W. may raise the sea level by 1.4 m. and from E. lower it by 0.9 m. Winds from S.S.W. – W. cause N.E. going current and those from N. – E. – S.E. cause S.W. going current. The prevailing current runs N.E., up to 2 knots.

MAX. SIZE: Largest vessels which can enter Skagen Harbour: Length 125 m., beam 18 m., draft 5.7 m.

VHF: Day and night watch on Channel 16 by Port Captain's Office.

BERTHING: The harbour consists of 6 basins. Depths: Outer Harbour 6.0 m.; East Basins I & II 6.0 m.; Auction Basin 5.0 m.; Middle Basin 4.5 m.; West Basin 4.5 m.; Pound Net Basin 3.5 m.

FRESH WATER: Available.

FUEL: Available by barge.

DRYDOCKS: Yards with slips for vessels up to 50 m. length and 600 tonnes displacement.

GENERAL: Imports: Oil; Exports: Fishmeal and other fish products.

AUTHORITY: Skagen Havn, Havnekontoret, Havnevagtsvej 30, DK 9990 Skagen, Denmark. *Tel:* No. 08–441060. *Contact:* Bruno Thaibert, Harbour Captain.

SONDERBORG: 54.55 N. 09.47 E.

DOCUMENTS:

Ship's Register.
Crew List.
Radio Safety Certificate.
Load Line Certificate.
Safety Equipment Certificate.
Customs Declaration.

PILOTAGE: Vessels exceeding 6.5 m. in draft or 4,000 gross tonnage use Northern entrance where Pilot boards vessels North of Snogbaek Hage, or further North if required.

Vessels coming from South, Pilot boards off the Middelgrund.

VHF: Radio on pilot station, Channel 16, 12 and 13. For Pilot and Harbour Master tel: 04-422765.

RESTRICTIONS: No restrictions on night entry. No tide. Current mostly North-going with a maximum speed of 3 knots. N.E. to Easterly winds raise water level up to 1 m. West to North-Westerly winds lower the water level by the same amount.

MAX. SIZE: From South passing through the harbour bridge, 4,000 g.r.t., draft 6.5 m.

From North 30,000 g.r.t., draft 9.5 m., airdraft 33 m., LOA 200 m.

TUGS: Available; 6 hours notice required.
BERTHING: *South Harbour:* Mainly used by passenger vessels and fishing boats.

North Harbour: Concrete quay about 800 m. long, depth alongside 7.5 m. Plywood factory, dolphin moorings with depth of 9.0 m.

Mooring facilities at heavy dolphins over 650 m., 25 m. from shore and along paved road, water depth 9.0 m. Generally used for laying up.
CARGO GEAR: Discharging and loading by ship's own gear or by mobile cranes of which the harbour have three, with a max. lifting capacity of 30 tons (60 ton crane).
BRIDGES: King Chr. X's Bridge divides Soenderborg port into South-Harbour and North-Harbour. The bridge is a double wing bascule bridge with an opening width of 30 m. For passage call "Soenderborg Bridge" on VHF Channel 16 regarding opening times.

North of the harbour, the Alssundbridge crosses the sound. The bridge has a horizontal clearance of 150 m., and a vertical clearance of 33 m.
MEDICAL: Full hospital facilities available without prior notice.
FRESH WATER: Supplied by pipe-line to berths.
FUEL: Available day and night.
REPAIRS: Routine maintenance and smaller engine repairs can be carried out. There is no shipyard or slipways in port.
CONSULS: Finland, Netherlands and Norway.
AIRPORT: In Sonderborg, with regular flights to Copenhagen.
TIME: GMT plus 1 hour.
STORING: Vessel may be stored by truck or barge. Trucks may proceed alongside, fork lift trucks and riggers may be used.
AUTHORITY: Sonderborg Havnekontor, Norrebro 1, 6400 – Sonderborg. *Tel:* 04-422765. *Contact:* Lass Andersen, Harbour Master and Pilot.

STEGE: 54.59 N. 12.17 E.

LOCATION: Stege is situated in a sheltered bay on the N.W. coast of Moen.
DOCUMENTS:
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Derat Certificate or exemption.
Bill of Lading (if cargo).
Crew List.

Customs need a Tobacco and Spirit List, showing the vessel's and the crew's supply on arrival. Customs clearance effected at Naestved.
APPROACHES: From the West, Stege is approached via Masnedsund. From the Baltic via Bogestrom Channel (2.1 m. depth). There is an entrance channel, 5 miles long and dredged to 4.1 m., leading to the port.
PILOTAGE: Local Pilots from Masnedoe, meet the vessel off the entrance channel. Sea Pilots can be taken from Spodsbjerg, Korsor or Gronsund.
ANCHORAGES: In Ulvsund, off the entrance channel.
RESTRICTIONS: Daylight navigation only. During winter, harbour may close due to ice.
MAX. SIZE: LOA 80 m. and 3.8 m. draft. Tidal range 0.3m.
VHF: Pilots can be contacted by VHF.
BERTHING: 800 m. of quayage in a series of basins.
Depths are: (i) N. Harbour 3.7 m. – 4.2 m.
(ii) Outer Harbour up to 4.3 m.
(iii) Sugar Factory Harbour 4.4 m.
(iv) Inner Harbour 3.7 m.
CRANES: 1 crane, 3.5 tons, at Sugar Factory harbour. 1 5 ton mobile crane.
BRIDGES: Storstromsbroen has a vertical clearance of 26 m. A new bridge will be constructed in 1985 across the Storstrom with a vertical clearance of 21 m. (completed February, 1984). Power lines with 36 m. vertical clearance lie to the West of Masnedoevaerket. To the East of Masnedoevaerket, there is a bascule bridge with 25 m. horizontal clearance. Dronning Alexandrines Bridge has a vertical clearance of 26 m. across Ulvsund.
STEVEDORES: Working hours: 0700 – 1600.
MEDICAL: Local hospital available.
FRESH WATER: Available.
FUEL: Available.
REPAIRS: Machine shop available.
DRYDOCKS: None. 1 slip for vessels up to 150 tons.
AIRPORT: Copenhagen, 110 km. distant.
AUTHORITY: Mon Kommune, Ved Stranden 4, DK-4780 Stege, Denmark. *Tel:* 03-814018. *Contact:* Gunner Andersen, Harbour Master.

AGENT: Ole H. Jorgensen, Box 7, DK-4780, Stege. Tel: 03-814018. Telex: 40301 (Ohjstg Dk).

STIGNAESVAERKETS: 55.12 N. 11.15 E.

(See Plan Book)

DOCUMENTS:
3 Crew Lists.
2 Crew Declarations.
2 Ship's Stores Lists.
Usual Ship's Documents.
PILOTAGE: Vessels to apply for a Pilot through their Agent. ETA to be given 48, 24 and 12 hours prior to arrival.

Pilot boat equipped with VHF Channels 16, 13 and 12.

Pilot boat painted orange on hull and wheelhouse. Pilot boat stationed on Agersoe.

For vessels coming from the North, Pilots board at Korsoer. For vessels coming from the South, Pilots board at Egholm Flak.
ANCHORAGE: Korsoer Roads, depth 20 m., bottom sand, good holding ground. With area of about 2 nautical square miles.

Gulfhavn Roads, depth 30 m., bottom clay, good holding ground. Area 0.5 nautical miles, width and length 1.5 nautical miles.
RESTRICTIONS: None.
MAX. SIZE: Coal berth: Length 300 m. Max. beam. 43 m. Max. draft 17 m.
Oil Pier: Draft 15 m.
Ash Berth: Under construction.
HEALTH: Usual regulations.
RADIO: Skagen Radio or Lyngby Radio.
VHF: Stigsnaesvaerkets Havn, Channels 16, 14 and 12.
RADAR: None.
TUGS: No tugs stationed at Stigsnaes, ship's lines to be used. Minimum of 12 hours to arrange tugs.
BERTHING: Coal Berth: length 300 m., depth 18 m., max. draft 17 m. – discharging by shore equipment.

Oil Pier: Length no restrictions, depth 16 m., max. draft 15 m., discharge by shore equipment.

Ash Berth: Under construction.
CRANES: 2×20 tonne cranes at coal berth, travel 280 m., height from water 22 m. Outlay 30 m. Designed average discharging about 750 tonnes/p.h.
BULK CARGO FACILITIES: See "Berthing" and "Cranes".
SPECIALISED CARGO/HANDLING FACILITIES: None.
BRIDGES: None.
STEVEDORES: None.
MEDICAL: If not urgent, no notice required. Doctor, dentist and hospital available.
TANKERS: 1 Berth, depth 16m., max. draft 15 m. Average discharge 60,000 tonnes/24 hour.

1×12 in. and 2×16 in. booms. The 12 in. boom can hydraulically connect to 8 in., 10 in. and 12 in. flanges, all standards. The 16 in. boom can hydraulically connect 12 in., 14 in. and 16 in. flanges, all standards.
DENSITY: 1007 – 1023.
FRESH WATER: By hose, 15 tonnes/p.h. 10 dkr/tonne.
FUEL: Not available.
FIRE PRECAUTIONS: No special precautions.
CONSULS: Norwegian and Finnish consuls nearby, others in Copenhagen (120 km.).
REPAIRS: Small repairs can be carried out.
DRY DOCK: None.
SURVEYORS: 1. Caleb Brett and S.G.S. have local representatives.

2. Lloyd's Register, American Bureau and Bureau Veritas must be requested from Copenhagen (120 km.).
GANGWAY/DECK WATCHMAN: None.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: 1 bottle of spirits, 1 bottle of wine, 200 gm. tobacco or 200 cigarettes.
CARGO GEAR: Coal berth, Oil Pier and Ash Berth (under construction) all by shore gear.
REPATRIATION: Possible.
AIRPORT: Distance to Copenhagen airport 120 km. Served regularly by all international airlines.
TIME: GMT plus 1 hour. Summertime (from end March to end September) GMT plus 2 hours.
HOLIDAYS: Depending on situation.
POLICE/AMBULANCE/FIRE: Tel: 000.
EMERGENCY CO-ORDINATION CENTRE: None.
TELEPHONES: None.
SERVICES: Most services can be ordered through Agent.
BANKS: Skaelskoer Bank a/s. Tel: (03) 596070. Telex: 40139.
STORING: See "Prelims" page viii.
1. By truck.
2. Yes.
3. Yes.
4. Yes.
5. None.
6. Yes.

SHORE LEAVE: Crew can always leave vessel and go ashore.
IDENTIFICATION CARDS: Seamens' book sufficient.
REGULATIONS: None.
DELAYS: None.
DEVELOPMENTS: Ash Berth under construction South of Oil Pier.
AUTHORITY: S.E.A.S., Stigsnaesvaerket, DK-4230 Skaelskoer. *Tel:* (03) 596011.

AGENT: T. C. Christensen & Co. (Stigsnaes), P.O.Box 69, 4230 Skaelskoer. Tel: (03) 594816. Telex: 40221 (Teecee Dk).

SVENDBORG: 55.03 N. 10.38 E. (See Plan Book)

DOCUMENTS:

Certificate of Registry.
Freeboard Certificate.
Radio Safety Certificate.
Derat Certificate.
Crew List.

PILOTAGE: Telegraphic address, "Pilotstation, Svendborg". For contacting pilot boat on VHF, use Channel 16. International signals for Pilot. In Eastern entrance Pilot boards at Thuro Rev. In Western entrance Pilot boards at Lehnskov, or if ordered at, Skrams Flak.
ANCHORAGE: At Lunkebugt (Eastern entrance) and by Lehnskov (Western entrance).
RESTRICTIONS: See "General" before first port.
MAX. SIZE: Longest ship ever docked was 541 ft. long, 67 ft. breadth, draft 21 ft. 06 in. Shorter ships may enter with deeper draft.
HEALTH: Pratique automatic.
RADIO: All Danish coast stations can be used. (See "Horsens".)
TUGS: Normally tugs stationed in Svendborg, ships wanting tugs order through Agent before arrival.
BRIDGES: 1 mile West of harbour a bridge crosses the sound. Free height 33 m.
STEVEDORES: Ordered by Agent.
MEDICAL: Doctors and hospital service always available.
DENSITY: Approx. 1024.
FRESH WATER: Available at all piers. 20 t.p.h.
FUEL: No bunker lines. Diesel can be delivered by tank lorries.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Not needed.
CONSULS: Vice-Consulates: Norway, Tel. 09 21 31 17; Sweden, 09 21 14 10; Finland, 09 21 22 21; W. Germany, 09 21 15 39; Iceland, Tel. 09 21 18 83.
REPAIRS: All repairs to deck and machinery carried out by shipyard.
DRY DOCKS: Floating docks for ships up to 10,000 tons weight.
REPATRIATION: Facilities exist.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day; the day before Good Friday; Good Friday; Easter Monday; May 1st; Ascension Day; May 5th; Prayer Day; Whit Monday; June 5th; 25th and 26th of December.
FIRE/AMBULANCE/POLICE: Call 000.
TELEPHONE: No telephone for ships.
SERVICES: Compass adjusting.
SHORE LEAVE: No restrictions concerning shore leave for crew. Dogs not allowed to go ashore.
AUTHORITY: Port Authority of Svendborg, Jessens Mole 9, 5700 Svendborg, Denmark. *Tel:* 09 – 210657. *Contact:* Harbour Master.

TUBORG HAVN: 55.44 N. 12.35 E. (See Plan Book)

DOCUMENTS: Same as Copenhagen.
PILOTAGE: Not compulsory except for tankers loading with petrol. For Pilot call Copenhagen Pilot (see Pilot Information for Copenhagen).
ANCHORAGE: See "Copenhagen".
MAX. SIZE: Max. draft 6.0 m., 4,000 d.w.t.
HEALTH: See "Copenhagen".
RADIO: Lyngby Radio: OXZ. VHF Channel 16 to all installations. ETA cables to Agents and receivers preferably by Lyngby Radio.
TUGS: Can be obtained from Copenhagen.
CRANES: Mobile cranes up to 110 tons can be obtained from Copenhagen.
SPECIALISED CARGO-HANDLING FACILITIES: Shore ramp for Ro/Ro traffic. Modern container-handling equipment available.
MEDICAL: No advance notice necessary. Hospitals available.
FRESH WATER: From water boat.
FUEL: All grades available by lighter. 10 hours notice preferred.
CONSULS: See "Copenhagen".
GANGWAY/DECK WATCHMEN: Not necessary.
HATCHES: Opening and closing carried out by ship's crew.
REPAIRS: All forms of deck and engine repairs can be effected.
CUSTOMS ALLOWANCES: 200 cigarettes. 1 bottle wine, 1 bottle spirits.
REPATRIATION: See "Copenhagen".
AIRPORT: Copenhagen airport 14 miles (23 km.) from Tuborg port. Connections to all parts of the world.
TIME: GMT plus 1 hour. Summertime is kept.
HOLIDAYS: See "Copenhagen".
POLICE/AMBULANCE/FIRE: Dial 000.
TELEPHONES: Not available on board.
SERVICES: Services available for compass adjusting, radio and radar repairs.
SHORE LEAVE: No restrictions.
AUTHORITY: Tuborg International a/s, 50 Strandvejen, DK-2900 Hellerup, Denmark. *Tel:* (1) 29 33 11. *Telex:* 16347 Tubor DK. *Cables:* Tuborg Copenhagen. *Contact:* F. V. Theilade, Assistant Harbour Master – Tuborg Havn.

VEJLE: 55.42 N. 09.33 E. (See Plan Book)

DOCUMENTS: Required on arrival:

2 Crew Lists.
2 Passenger Lists.
1 Tobacco List.
1 National Reg. Certificate.
1 Load Line Certificate.
1 Tonnage Certificate.
1 Manifest.
1 Bill of Lading.
1 Derat Certificate.
1 Radio Safety Certificate.
1 Clearance inward and outward.
1 Safety Certificate.

PILOTAGE: Pilot station now at Juelsminde, radio Pilot Vejle VHF Channel 16 – 3 hours notice of ETA. The Pilot will embark and disembark at Rosenvold Hage on the N-side of the fjord.
ANCHORAGE: (1) At Rosenvold Hage, (2) at Traeskohage.
RESTRICTIONS: See "General" before first port and "Developments".
MAX. SIZE: Length max. 550 ft., max. draft 23 ft.
HEALTH: Pratique procedure is carried out by customs dept.
RADIO: Lyngby Radio, OXZ, Blaavand Radio OXB.
TUGS: Available inside port, ship's lines.
STEVEDORES: Available. 0700 hrs. start must be informed 24 hours in advance.
MEDICAL: Hospital facilities available day and night with doctors available 24 hours per day.
TANKERS: 2 tanker berths, max. draft 23 ft. No slop tank available. Diameter of discharge lines 8 in. and 6 in.
DENSITY: Average density 1020.
FRESH WATER: Delivered from lines on piers. 14 t.p.h.
FUEL: All grades available. No advance notice required.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Carried out by crew.
CUSTOMS ALLOWANCES: See "General" before first port.
IDENTIFICATION CARDS: Not needed.
CONSULS: Vice-Consuls: Greece, 821929; Norway, 829122; Spain, 820233; Germany, 820011.
REPAIRS: Deck and engine repairs can be undertaken.
DRY DOCKS: None.
REPATRIATION: No facilities.
AIRPORT: Billund 32 km., 3 flights per day.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day; Easter; 1st May, Whit Sunday, Christmas holidays. Cargo work can be done on overtime except 1st May (Labour Day).
POLICE/AMBULANCE/FIRE: Police, tel. 821744; Ambulance, 822244; Fire, 822244.
TELEPHONES: No arrangements exist for placing on board.
SHORE LEAVE: Allowed.
DEVELOPMENTS: A highway-bridge is built over the fjord over the entrance-channel about 1 mile outside the harbour entrance.
Max. height over the channel, 40 m.
AUTHORITY: Vejle Havn, 7100 Vejle, Denmark.

VORDINGBORG (South Harbour – formerly Masnedsund): 54.59 N. 11.54 E. (See Plan Book)

DOCUMENTS: See "Copenhagen".
PILOTAGE: Available from Masnedoe Pilot Station, Tel: 03-772170.
ANCHORAGE: Vordingborg Roads.
RESTRICTIONS: See "General" before first port.
MAX. SIZE: Draft 21 ft. max., breadth 25 m. (depending on vessel's height) owing to passage of bridge before entering harbour. Width of bridge opening 25 m. At a height of 25 m., width of opening 22 m. due to angle of raised bridge.
RADIO: Lyngby Radio.
TUGS: Available from Nakskov, Korsoer, Copenhagen. Notice for towage about 6 – 8 hours.
BERTHING: Berths equipped for handling grain, ore, coal, liquid chemicals and LPG carriers.
Masnedoe Power Station: See Port of Masnedoevaerket.
BRIDGES: Passage of bridge 25 m. wide, opening day and night. Bridge normally in radio contact with pilot station. Fully lighted. Approach to power station from the West – pier situated just to the West of opening bridge, and therefore no passage.

In the approach to Vordingborg and power station passage are overhead power cables, max. air-draft 36 m.
STEVEDORES: Local stevedores ordered by Agent.
MEDICAL: Hospital available.
FRESH WATER: Supplied by pipe-line to berths.
FUEL: All common fuels available.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed to open and close, otherwise as per C/P.
CERTIFICATES:

Registered Certificate of Tonnage.
Derat Certificate.
Construction Certificate.
Load Line, and Equipment Certificate on first call.

CUSTOMS ALLOWANCES: See "General" before first port.
CARGO GEAR: 2 mobile cranes, one grain-sucker and elevator.
IDENTIFICATION CARDS: Not required.
CONSULS: At Copenhagen.
REPAIRS: Most repairs, engine and equipment available. Electronic service only available from Copenhagen.
DRY DOCK: No local dry dock. Nakskov/Copenhagen nearest.
HOLIDAYS: See "Copenhagen".
POLICE/AMBULANCE/FIRE: Police 03-771448; Ambulance, Fire Brigade 0-0-0.
AUTHORITY: Vordingborg Kommunes, Havnevaesen, 4760 Vordingborg.

Djibouti, Republic of

DJIBOUTI: 11.36 N. 43.08 E. (See Plan Book)

PORT LIMITS: *Maritime Limits:* The reference data for the delimitation of the maritime zone coming under the port of Djibouti are as follows:

Point I: The pyramid situated on the right bank of the mouth of the Oued Ambouli.

Point II: Lat. 11° 36′ N., Long. 43° 08′ E.
Point III: Lat. 11° 39′ N., Long. 43° 06′ E.
Point IV: Lat. 11° 39′ N., Long. 43° 10′ E.
Point V: Lat. 11° 37′ N., Long. 43° 08′ E.

DOCUMENTS: Crew List for ship's Agent. Crew Manifests and Manifests of Passengers in transit or for disembarkation, for whom disembarkation cards are to be completed. Presentation of Health Declaration and verification of compulsory immunisations by the health representative.

The following documents are required, preferably prior to the arrival of the vessel.

	Cargo Manifest	*Freight Manifest*	*Dangerous Cargo List*	*Stowage Plan*	*Hatch List*
For Djibouti Port Authorities	6	—	2	—	—
For Stevedores	3	—	—	1	1
For Agent	1	2	—	—	—
If transhipment, additional	2	—	—	—	—
To be despatched by airmail or airfreight in due time, prior ship's arrival at Djibouti	3	1	1	1	1
On board vessel and if impossible by airmail or airfreight	7	1	1	—	—

Derat Certificate: At the present time Derat cannot be carried out at Djibouti, but the Port Health Authority, after inspection, are empowered to extend expired certificates by one month.

PILOTAGE: Pilotage is compulsory for all vessels with a nett tonnage in excess of 300 tons and is available 24 hours a day, throughout the year.

Pilots board inward bound vessels between No. 1 Buoy and No. 2 Buoy. Outward bound vessels normally disembark their Pilot between No. 2 Buoy and No. 4 Buoy. Pilot boats are painted white and carry the flag "H" by day and the usual lights by night.

An internationally approved pilot ladder on the lee side with man-ropes, and suitably illuminated at night time, must be available.

Vessels calling for Pilots at departure if unable to contact the pilot station on VHF should sound 3 long blasts on whistle or siren half an hour prior to sailing, this signal also calls the tug and mooring gang.

ANCHORAGE: Anchorage zone is within following limits:

1. Eastern limit: a line parallel to and 0.25 miles West of the North passage.
2. Southern limit: Latitude 11° 37′ N.
3 Western limit: a bearing with the Western extremities of Penguin and Ambouli Banks in alignment.

It is forbidden to anchor 1.5 cables on each side of the alignment of Ambouli and d'Ayabele Lights.

Average depth is of 15 m. to 20 m. Anchor holding is excellent, even with a strong S.W. monsoon when there is often a heavy swell.

It should be noted that anchorages within a quarter of a mile of either side of the entry transit line is strictly prohibited.

APPROACHES: Djibouti Bay can be reached from 2 channels – North and East. Only the Northern one is marked.

The Traditional Channel – The "North" Pass: The port, which has easy access by day or night, is normally entered by the North Channel, vessel after rounding Ras Bir, passing to the Northwards of Musha and Maskali Islands until the transit towers situated to the Westward of the town are sighted. The two transit towers, when in line, bear 184° (T) from seaward. Both towers exhibit quick flashing lights which at night time may be easily seen at a distance of 9 miles. In daytime the two towers may be located by first sighting Mount Direction, a distinctive conical hill to the Southward. The nearest transit tower is a white rectangular building with a single wide vertical black stripe while the further tower is a white rectangular building with two broad horizontal stripes.

When on the leading line proceed to Buoy No. 2 on the Heron Bank, where the Pilot will board; the Master is advised to await the Pilot slightly North of Buoy No. 2.

The "South" or "East" Channel: The Southern or Eastern approach for vessels entering passes South of Musha and the Maskali Islands after clearing the Arab Bank. Vessels using this approach must keep at least 1 mile North of the Heron Bank until they reach the transit line described above. The Pinqouin Bank Buoy situated West of the transit line makes a good check point.

The Northern channel is usually used for vessels proceeding in a N.N.E. direction.

The Eastern channel is not marked, and is not recommended for vessels approaching the port. Approaching from the East of the island of Musha by day can be dangerous if visibility is poor.

RESTRICTIONS: Entry during the day or night. Highest tide 2.90 m. Mean tide is approximately 1.60 m., and lowest are 0.20 m. Tidal currents are very weak in bay and rarely exceed 1 knot.

HEALTH: Generally free pratique by radio can be granted to all ships applying through Coastwise Station Djibouti Radio. Ships must radio in plain or international code, a maximum of 12 hours and a minimum of 4 hours prior to arrival in port. In all cases, when Pilot boards vessel he gives Master a copy of Maritime Health Declaration which must be filled in by Master and countersigned by ship's doctor, if the crew includes one. An examining official comes on board when vessel arrives to receive the Maritime Health Declaration. Smallpox Certificate required from all travellers coming from all countries. Cholera and Yellow Fever Certificates required from all travellers coming from an infected area, excepting children of under 6 months of age.

MAX. DRAFT: Cargo vessels 32 ft. Vessels bunkering 36 ft. Tankers (white products) 32 ft. Tankers (black products) 36 ft.

MAX. SIZE: Entrance to inner roads dredged to 11 m. depth.

RADIO: *Via the Harbour Master's Office:* For short distance communications, ships can link up with the Harbour Master's Office, by VHF radio-phone: the Harbour Master's traffic unit is equipped with a VHF station for broadcasting and receiving on Channel 12 (156.6 MHz) and Channel 16 (156.8 MHz). These links are solely for the exchange of nautical information between the Harbour Master's Office and vessels (confirmation of ETA; ship's draft; and orders concerning the boarding time of the Pilot and dropping the anchor to wait for Pilot.)

Via Djibouti Coastal Station: For medium or long distance communications, ships can link up with the shore through the coast station at Djibouti, by radio telephone or telegraph. This station can meet all requirements from ships using the port of Djibouti. It handles official and private communications and is permanently on watch.

Call sign J2A maintains a continuous 24 hours listening watch on 500 kHz and replies on 464 kHz.

For long distance communication using the call sign "J2A8", the station maintains listening watches between 0400 hrs. and 1000 hrs. GMT and 1200 hrs. to 1715 hrs. GMT on 8682 kHz. Traffic lists are transmitted at 0400 hrs., 0600 hrs., 0800 hrs., 1200 hrs., 1400 hrs. and 1600 hrs. GMT.

In the 12 megacycle band using the call sign "J2A9", the station works on the frequency 12,782 kHz between 1000 hrs. and 1200 hrs. GMT. Traffic lists are transmitted at 1000 hrs. and 1100 hrs. GMT.

Radio-telephony: Djibouti Radio (J2A) service covers the following:

(a) The station can cover medium distances through radio-telephone, from 1605 kHz to 2850 kHz.

Call sign: Djibouti/Radio/J2A.
Call frequency: 2182 kHz.
Working frequency: 2586 kHz.
Power: 1 Kw.

It is open for the international calls (2182 kHz) at the following times:
From 0500 – 0900 hrs., and from 1300 – 1500 hrs. GMT.

(b) VHF
Listening Channel 16 (156.8 MHz).
Working Channel 20 and 24 (24 hours).

Vessels can link up with subscribers of the automatic telephone system in Djibouti.

Radio telegrams sent to ships at sea must be delivered to the telegraphic section at the post office, Ave de la Republique, during office hours.

TUGS: In Winter (slight Easterly monsoon), a single tug is generally sufficient for manoeuvring. In Summer during the Khamsin period, berthing or sailing often requires 2 tugs. There is a 1,500 h.p. diesel tug *Aboubaker Pacha;* a 1,800 h.p. tug, *A. Rimbaud;* a 1,400 h.p. diesel tug *Henri Lambert;* a 1,000 h.p. tug *Administrateur Bernard* and 1 auxiliary 600 h.p. tug. All tugs equipped with fire fighting equipment.

The Port Authority of Djibouti is planning to purchase a new tug of 2,200 h.p. (diesel). It will be placed into service in 1985.

BERTHING:

Quay	*Length* (m.)	*Depth* (ft.)	*Usage**
No. 1	180	31	L, D, B
No. 2	220	39	L, D, B, Containers
No. 5	230	24	L, D, B
Boutre Quay	120	18	
No. 6	170		L, D, B, Ro-Ro
No. 7	263	26	L, D, B
No. 8	202	31	L, D, B, Refrig.
No. 9 (dolphins)	200	27	B, Lay-by Berth
No. 10 (dolphins)	270	36	B, Discharge Black Oils
No. 11 (dolphins)	170	36	B
No. 12 (dolphins)	270	39	B, Discharging Black and White Products
No. 13	210	32	L, D, B, Discharge of White Products and Liquid Gas and Loading of Molasses in bulk

*KEY = L = Loading.
D = Discharging.
B = Bunkering.

CRANES: There are no cranes on quays, but the port has 3 mobile cranes of 15 tons, 25 tons and 35 tons capacity plus a floating crane for the handling of heavy-lifts of 80 tons capacity.

BULK CARGO FACILITIES: Molasses can be handled.

SPECIALISED CARGO HANDLING FACILITIES: Open ground and shedded areas for containers, Roll-on/Roll-off traffic and Quay for the traffic of lighters.

BRIDGES: None.

STEVEDORES: Two companies available, office hours from 0700 to 1730 hrs. Stevedoring 24 hours.

Working Hours: Normal working hours are 0700 – 1200 hrs. and 1300 – 1800 hrs. Overtime can be worked between 1900 – 2400 hrs., and if necessary to finish a vessel, between 0100 – 0600 hrs. It should be noted that Friday is the normal day of rest and all work on this day is at overtime rates.

MEDICAL: Port Medical Service directed by medical practitioner specialised in industrial medicine is situated in a building neighbouring the port offices. It operates a dispensary. Passengers and sailors in transit are treated by private doctors from town who may visit the ships. Serious cases can be hospitalised in Djibouti's civil or military hospitals.

TANKERS: Reception lines: Berths 12 to 13 specially equipped for reception of bunkering products are linked with installations of the petroleum companies by a 16 in. dock-line and 12 in. (FO) and another of 12 in. (DO). Pier No. 10 is connected to the installation with a dock-line of 12 in. Rate of discharging can reach between 2,000 and 2,500 t.p.h. Reception of white products is assured from Quay No. 13 by an 8 in. line; for gas there is a 4 in. line.

Shipmaster's Report: July 1982.
Pilot advises max. draft for loaded tankers is 14.0 m.

FRESH WATER: Each quay provided with 3 – 5 (200 mm.) water-hydrants. Delivery of 40 cu.m. of water per hour. Regardless of the season, there is never any shortage of fresh water.

FUEL: A complete range of different viscosities and products is available. Meets all the usual requirement of bunkering vessels. Ample supplies of fuel and diesel oil are always available. Normal rate 200 – 300 t.p.h. but 800 t.p.h. possible.

Suppliers: B.P., Caltex, Esso, Mobil, Mory, Shell and Total.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

IDENTIFICATION CARDS: Required.

CONSULS:

Belgium
China
Egypt
Ethiopia
France
Great Britain
India
Iraq
Italy
Libya
Oman
Saudi Arabia
Somalia
Sudan
Sweden
Yemen (N)
Yemen (S)
U.S.A.
U.S.S.R.
West Germany

REPAIRS: Small repairs available.

SURVEYORS: Agent of the American Bureau of Shipping: Gellatly Hankey, BP 81, Djibouti. Tel: 35 20 12.

Agent of Bureau Veritas, Germanischer Lloyd and Nippon Kaiji: Cie. Maritime Auxiliaire d'Outre-Mer (CMAO), BP 89, Djibouti. Tel: 35 06 42.

Agent of Lloyds Register: Gellatly Hankey, BP 81, Djibouti. Tel: 35 20 12.

Insurance Companies:

L'Union des Assurances de Paris (CMAO), BP 89. Tel: 35 20 22.
Lloyd's Assurances (Gellatly Hankey), BP 81. Tel: 35 18 58.
Salvage Association (Gellatly Hankey), BP 81. Tel: 35 18 58.
Groupement Francaise d'Assurances (MARILL), BP 57, Djibouti. Tel: 35 16 50.

REPATRIATION: Good facilities exist.

AIRPORT: International airport at Ambouli (7 km.), with international and regional flights every day of the week.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day (1st January); Aid Seghir (El Fithir) and the following day; Labour Day (1st May); Aid El Kebir and the following day; Muslim New Year (1st Mouharam); National Holiday (27th June); Mouloud El Nabi; Al yarah wal Mirage.

Dates referring to religious holidays vary every year, particularly where Muslim holidays are concerned. Loading and discharging operations as well as bunkering can be carried out during all of above holidays when other services are also available.

POLICE/AMBULANCE/FIRE: In emergency Tel: 17 and 18. A detachment of the fire brigade is on permanent duty in the port area.

Fire Brigade – 35 05 22, Police 37 07 80.

TELEPHONES: Available on every berth, international calls on request.

SHORE LEAVE: Allowed.

BANKS: Indo Suez Mer Rouge, Banque de l'Indochine et de Suez – Mer Rouge. Registered Office: 10 Place Lagarde – Djibouti B.P.88. Tel: 35 30 16. Telex: 6829 DJ. Telegrams: "Indomer Djibouti".

Banque pour le Commerce et l'Industrie – Mer Rouge BCIMR (Branch of the Banque Nationale de Paris) B.P.2122. Tel: 35 08 57, 35 08 58, 35 08 59. Telex: 5821 DJ. Telegraphic Address: "Mericomi Djibouti".

The British Bank of the Middle East. Registered Office: 99 Bishopsgate, London B.P.2112. Tel: 35 32 91, 35 32 93, 35 32 92. Telex: 5826 DJ.

Bank of Credit and Commerce International S.A., Registered Office: 39 Bd. Royal, Luxembourg. Agency at Djibouti: 10 Avenue Pierre Pascal, B.P.2105. Tel: 35 17 41. Telex: 810 FS.

Banque de Djibouti et du Moyen-Orient S.A., Head Office, 6 rue de Marseille, Djibouti B.P.1471, Rep. of Djibouti. Tel: 351178, 351190. Telex: 5943 Banco Djib. Branch of the Middle East Bank Ltd., Dubai, U.A.E.

Commercial Bank of Ethiopia, Head Office, Addis Ababa (Ethiopia), Djibouti Branch: rue de Marseille, Djibouti B.P.187. Tel: 352101, 352102. Telex: Ethio Bank 5835 DJ.

Commercial and Savings Bank of Somalia, Head Office, B.P.203 Mogadisho. Branch of the Commercial and Savings Bank of Somalia. Office: Place Lagarde, Tel: 353666, 351282. Telex: Savcom 5879 DJ.

EMERGENCY CO-ORDINATION CENTRE: Being formed.

STORING: In the port of Djibouti, vessels are bunkered at all the quays, and are supplied with fresh water (without limitation as to the amount requested), whilst they are carrying out their commercial operations of loading or discharge of cargo).

DEVELOPMENTS: *Extension of Equipment for Containerised Traffic:*

1. At the end of 1984, two jib cranes on rails will be installed on quays 1 and 2. Max. lifting capacity under spreader 35 tonnes.
2. Mobile land equipment: 4 heavy front-loading fork-lifts of 32 tonnes capacity; 2 light front-loading fork-lifts of 12 tonnes capacity; 8 tractors and trailers, of which 6 trailers for 20 ft. and 40 ft. containers.
3. Construction of a refrigerated store. This store has been built to the South of Quay No. 8, and brought into service at the end of 1983. It is intended to control the distribution of fresh and deep-frozen food to local traders, ships and redistribution to country areas (variation of temperature of 45°: from −30°C to +15°C). The covered area will be 1,530 sq.m. with a storage capacity of 2,450 cu.m.
4. The placing into service of a duty-free shop.
5. Quay Nos. 1, 2, 7 and 12 out of service from October 1984 due to construction work.

GENERAL:

Tides: The highest tides reach 2.9 m., the average tide is around 1.6 m., and the lowest drop to 0.20 m.

Tidal currents are very weak in the bay, only rarely exceeding one knot. They usually move Eastwards during the ebb tide, and Westwards during the flood tide.

Winds: From October to the beginning of May moderate Easterly winds dominate. During the S.W. monsoon, from the middle of June to early September, there are frequent gales from the West (Khamsin), when the sea becomes rough or very rough. There is little or no wind in May and September.

Swell: The sea is usually very calm in the outside roadstead, in the anchoring zone protected in the East by the Heron Bank. In normal weather the swell does not exceed 1 m. During the Khamsin period, it can reach 2.0 m. – 2.5 m. However, there is no undertow inside the port.

SHIPMASTER'S REPORT: September, 1979.

Approaches: After passing Muskali Beacon on approaching, the leading lights, during daytime (183.5° True) are often not visible due to the sun's glare. At night these make an excellent approach.

Pilotage: Do not proceed beyond No. 2 Heron Bank Buoy. Pilot boat 12 m., blue hull, white top and displaying Pilot signals.

Radar/VHF: Channel 12 for calling and operations. No Port radar.

Hatches: Opening/Closing normally carried out by ship's crew.

General: Provisions both fresh and dry available, but expensive.

AUTHORITY: Port Autonome International de Djibouti, P.O.Box 2107, Djibouti, Republique de Djibouti. *Tel:* 35 23 31/37. *Telex:* Portauto 5836 DJ. *Cables:* Dirport Djibouti and Comport Djibouti. *Contact:* M. Djilani Ali Bourhan, Port Director/General Manager. Michel Daniel, Port Commandant.

NOTES

Please also advise Shipping Guides Ltd.

Dominica

PORTSMOUTH: 15.32 N. 61.29 W. (See Plan Book)

Portsmouth is an anchorage port principally engaged in the export, by lighter, of bananas and the export of agricultural produce by small inter-island vessels.

Documentation required is as for "Roseau". Safe anchorage is available anywhere within the port with distance off dependent on the size of vessel. Pilotage is not compulsory and if required must be obtained at the Roseau Pilot Station.

No alongside facilities (except those for lighters) exist and no cargo handling equipment is maintained.

A steel piled/concrete decked "L" shaped pier 225 ft. long, 40 ft. wide with 12 ft. of water at the head provides lighterage berthing and accommodates inter-island sloops, schooners and motor vessels. Final planning of upland and equipment is yet to be undertaken.

All enquiries in the respect of the use of the port of Portsmouth should be addressed to the Port Authority, Roseau.

MEDICAL: A Cottage Hospital is available.

POLICE/AMBULANCE/FIRE: Police Tel. 5222, Ambulance Tel. 5237 (Hospital), Fire Tel. 5215, Custom House Tel. 5255.

BANKS: See "Roseau".

EMERGENCY CO-ORDINATION CENTRE: See "Roseau".

STORING: See "Roseau".

SURVEYORS: See "Roseau".

SHIPMASTER'S REPORT: January, 1979.

Pilotage: Not compulsory or required.

Restrictions: Vessels may enter or leave at any stage of the tide during day or night.

Tugs: None available.

VHF: Not available.

Anchorage: Vessel anchored with the lighter jetty bearing 100°, distance 4 cables. Depth of water 70 ft. Cargo is delivered to the vessel by small lighters which are towed from a timber and steel jetty owned by Geest Line. Loading of bananas is carried out through side doors only. The quality of work was good.

Services Available: Doctor and airport (fresh water, fuel and other services are not available).

AUTHORITY: Dominica Port Authority, P.O.Box 243, Roseau, Dominica. *Tel:* 4431/2/3. *Telex:* 8617 Damb Do. *Cables:* Domport. *Contact:* O. M. Norris, General Manager (Home *Tel:* 4375).

ROSEAU: 15.17 N. 61.24 W. (See Plan Book)

PORT LIMITS:

Lat. 15° 19′ 00″ N., Long. 61° 24′ 29″ W.;
Lat. 15° 21′ 00″ N., Long. 61° 24′ 29″ W.;
Lat. 15° 21′ 00″ N., Long. 61° 23′ 09″ W.

DOCUMENTS: Port Authority requires before commencement of discharge, 2 copies of the vessel's manifest, and 1 stowage plan or hatch block sheet. Masters are advised that these should be airmailed ahead of the arrival. On arrival, documents required are:

Port Authority:
Ship's Register to sight.
International Health Declaration.
1 Crew List.
1 Passenger List.
1 Hazardous Cargo List.

Customs:
Clearance from last port.
1 Stores List.
2 Personal Effects Declaration.
1 Manifest.
1 Crew List.
1 Passenger List.

Immigration:
1 Crew List.
1 Passenger List.

PILOTAGE: Pilotage is compulsory for berthing all vessels in excess of 100 g.r.t. Pilotage is available for anchorage on request. Pilots will board in approx. position Lat. 15° 17′ 54″ N., Long. 61° 24′ 50″ W. The pilot boat will display International code "H" by day and a white light over red light by night. Requests for Pilots should be made 24 hours in advance either through the vessel's Agent or by cable to "Domport". Vessels may contact the Port Authority through Dominica Port Radio on VHF Channel 16 from 0800 – 1600 hrs., and for 2 hours in advance of the vessel's ETA.

ANCHORAGE: A restricted area exists in Woodbridge Bay between:

Lat. 15° 19′ 00″ N., Long. 61° 24′ 15″ W.,
Lat. 15° 18′ 00″ N., Long. 61° 24′ 15″ W.,
Lat. 15° 18′ 00″ N., Long. 61° 24′ 00″ W.

and vessels may not anchor therein, except under General Manager's instructions. Anchorage may be taken South of this area and in Roseau Roadstead 1.5 – 2 cables offshore in 15 – 30 fathoms depending on the vessel's size. All anchorages are steep-to and care should be exercised so as not to drag off the bank when anchoring.

MAX. SIZE: See "Berthing".

HEALTH: International Declaration of Health. In addition any death, fever or suspected contagious disease should be notified in advance to Agents or Port Authority by cable or radio.

RADIO: HF/SSB. 8281.2 – Monday – Friday 1200 – 2000 hrs. Also see "Pilotage".

TUGS: None.

BERTHING: Woodbridge Bay Ocean Berth Length 500 ft., min. depth 36 ft. MLWOST.

Schooner berth 120 ft. with a depth alongside of 9 ft. (inshore) to 36 ft.

Roseau Jetty, Length 93 ft. min. depth 18 ft. (Out of commission due to hurricane damage).

STEVEDORES: Stevedores and longshoremen arranged by Dominican Stevedores Ltd.

CARGO HANDLING FACILITIES:

Mechanised Cargo Handling: Breakbulk cargo is handled palletised on ships/shippers/port pallets. Adequate forklift trucks, trailers, and tractors are available to work all berths. Small inter-island vessels can be discharged by 5 ton mobile cranes (2). Containers up to 20 d.w.t. can be handled ashore if placed on port trailers by ship's gear. Ro-Ro barges capable of trimming to ramp height of +10 ft. are accommodated on the South end of Woodbridge Bay Pier.

TANKERS: Petroleum products are presently handled at 5 different anchorages on the West coast.

L.P.G.: Woodbridge Bay (2) max. draft 12 ft. floating hose from vessel.

Mogas – Gasoil (Dieselene), Kerosene, Sprayoils: Rockaway (2), 1 mile North of Woodbridge Bay, draft 18 ft. 800/900 ft. floating hose from ship.

Boiler Fuel (Bunker C): Belfast, 2 miles North of Rockaway, max. draft. 18 ft. (up to 25 ft., if vessel equipped for stern discharge) 4 in. submarine line.

Bulk Edible Oils and Soap Chemicals: Belfast max. draft 14 ft., 4 in. floating hose (200 ft.) from shore.

The above are single anchor, stern-to berths with stern lines to shore posts. Vessels should have at least 4 ropes available aft and provision to bend 2 lines together.

The above are private facilities but pilotage is available. In the case of Woodbridge Bay (L.P.G.) pilotage is compulsory. Tankers in their ETA advice should include their cargo by products and their draft.

MEDICAL: One Government general hospital, one private group medical clinic and one private dental clinic are available.

On board visits by a doctor can be arranged.

Where possible advance notice should be given.

DENSITY: Approx. 1025.

FRESH WATER: Available alongside all berths at a cost of EC $15.00 for 1,000 gals.

FUEL: Dieselene (Gas oil) available in limited quantities ex-tank wagon at all berths. Other grades not available.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: Beam and board hatches, crew or stevedores; Ship's option. Patent Hatches; ship's crew.

CERTIFICATES: Previous port clearance; ship's register, to sight.

CUSTOMS ALLOWANCES: 200 cigarettes, or 0.5 lb. tobacco or 25 cigars, 26 ounces of spirits per crew member.

IDENTIFICATION CARDS: Dock passes for crew members will be issued through the vessel's Agents.

CONSULS: (Or Consular Agents).

		Business	Residence
France	C. A. Butler	Tel. 2033	Tel. 1146
Netherlands	W. A. Astaphan	3221	2524
Belgium	Achille L. Pinard	2781	2756

REPAIRS: Minor and emergency repairs can be arranged. Engines and deck gear cannot be put out of service without permission of the Port Manager.

SURVEYORS: Lloyd's Agent available for cargo survey. A non-assigned Hull Surveyor is available.

REPATRIATION: Limited inter-island flight capacity to nearest international airports – Guadeloupe, Martinique, Antigua, Barbados.

AIRPORT: Melville Hall 37 miles. Inter-island services only. Canefield Airstrip 2 miles – Charter aircraft and Air Guadaloupe.

TIME: GMT minus 4 hours.

HOLIDAYS: New Year's Day, Carnival (Mardi Gras) 2 days. Good Friday, Easter Monday, Labour Day, Whit Monday, August Monday, National Day (Nov. 3rd – 4th), Union Conference Day (A Sunday in November), Christmas Day, Boxing Day.

Minimum working: Can be arranged on these days, but it is not advised over the Carnival or National Day Holidays.

POLICE/AMBULANCE/FIRE: Police Tel. 2222 or call on 2182 kHz., Fire Tel. 2888, Ambulance Tel. 2321.

At anchor or away from a telephone, blow 3 short and 1 prolonged blast at frequent intervals until acknowledged on VHF Channel 16 or by lamp.

TELEPHONES: On board service can be provided at the Ocean Wharf, Woodbridge Bay (discontinued at present due to hurricane damage).

SERVICES: Assistance can be given for emergency repairs to electronic equipment, compass adjusting and D/F calibration subject to advance notice. Provisions can be obtained, but advance notice should be given especially for fruit and vegetables of high quality.

SHORE LEAVE: After inward clearance, there are no restrictions on shore leave. Masters are advised to note that immigration law holds the vessel/owner/agent, financially reponsible for any crew member or intransit passenger left behind (for whatever cause). Vessel's having no accredited Agent will be required to satisfy Immigration Authorities before outward clearance is granted.

BANKS: Barclays Bank International Ltd., Royal Bank of Canada, Bancque Antilles Francais. The National Commercial & Development Bank of Dominica has international correspondents.

EMERGENCY CO-ORDINATION CENTRE: Port Authority connected with other Regional Port Authorities and U.S.C.G. VHF Channel 16, HF, S.S.B. Standby 2182 and 8281.2. Working 4136.3, 4139.5, 8284.4, 12421.0, 12424.5, 16565.0 and16568.5.

STORING: Vessel can store by truck. No facilities to store by barge. Trucks may proceed alongside for direct delivery/discharge, subject to Port Authority agreement. Fork lift trucks may be used. Vessels must be cleared outward for duty free concessions. Riggers available to assist with storing.

SHIPMASTER'S REPORT: 1979.
Pilotage: Compulsory. Pilot boards 0.5 miles off the quay and requires two hours notice of vessel's arrival.
Restrictions: Vessel is able to enter or leave at any stage of the tide day or night.
Max. Size: M.V. "Oriana". LOA – 804 ft., draft 30 ft.
Tugs: Not available. Vessels able to dock and undock without the aid of tugs.
VHF: Channel 16.
Berthing: One berth only available with wooden fenders. A heavy swell may be experienced whilst alongside berth as it is very exposed. Loading rate for bananas is 16 t.p.h. per gang. There is ample mechanised equipment for loading palletised cargoes. There is also storage space for breakbulk and palletised cargoes. The quality of the labour was good. There is no equipment for handling containers and there is no storage space for containers (containers can be handled ex-ship's gear at about 10 units per hour). Accommodation ladder required.
Services Available: Fresh water, fresh provisions, airport, hospital and doctor (no fuel, repair facilities or other services available).

AUTHORITY: Dominica Port Authority, P.O.Box 243, Roseau, Dominica. *Tel:* 4431/2/3. *Telex:* 8617 Damb do. *Cables:* Domport. *Contact:* O. M. Norris, General Manager (Home *Tel.* 4375).

NOTES

Please also advise Shipping Guides Ltd.

Dominican Republic

GENERAL

DOCUMENTS:

Vessels calling at Dominican ports require a complete Dominican consular despatch from every loading port as well as from the last foreign port of call. Should there be no Dominican Consulate at the respective loading port, the Agents should prepare 3 copies of the manifest to be delivered to Customs. If no Dominican Consulate at the last foreign port of call, the Agent will attend to all the formalities required by the local port authorities.

Derat Exemption Certificate will be required by the Port Doctor.

Additional papers, besides consular despatch, required by authorities are as follows:

Port Doctor:
1 copy crew list.
1 copy landing/transit passenger list.

Harbour Master:
Port clearance from last port of call.
3 copies crew list.
3 copies landing/transit passenger list.
3 copies negative passenger list (if none landing).
3 copies arms list.

Customs:
2 copies crew list.
2 copies arms list.
2 copies landing/transit passenger list.
2 copies negative passenger list (if none landing).
2 copies stores list.
1 copy tallybook.

Immigration:
2 copies crew list.
2 copies landing/transit passenger list.

Police:
1 copy crew list.
1 copy landing/transit passenger list.

Department of Agriculture:
1 copy stores list.
1 copy tallybook.

Agency:
1 copy crew list.
1 copy landing/transit passenger list.
4 copies manifest (if not airmailed previously).
2 copies each B/L (if not airmailed previously).
7 copies tallybook.

Additional lists, etc., required are:
10 crew lists.
10 landing/transit passenger lists.
5 negative passenger lists (if none landing).
5 arms lists.
3 stores lists.
9 tallybooks.
4 copies cargo manifest (if not previously airmailed).
2 copies B/L (if not previously airmailed).

HOLIDAYS: New Year's Day (January 1st); Our Lady of High Grace (January 21st); Duarte's Day (January 26th); Independence Day (February 27th); Good Friday (Variable); Labour Day (May 1st); Corpus Christi (Variable); Restoration of Independence (August 16th); Our Lady of Mercy (September 25th); Christmas Day (December 25th).

Regular working hours of stevedores: 0800–1200 hrs., 1400–1800 hrs., Mondays to Fridays and 0800–1200 hrs. Saturdays.

Regular working hours of the Port Authority are from 0800–1600 hrs. Mondays to Fridays and 0800–1200 hrs. on Saturdays.

Saturday: Overtime is payable to labour for work performed after 1200 hrs. Pilots and government officials are paid overtime rates all day, but Customs personnel are only paid overtime rates after 1200 hrs.

The above holidays are legal in the Dominican Republic and for the diplomatic and consular representations abroad.

Work can be performed on all Sundays and holidays against payment of overtime to labour, Pilots, Customs and government officials.

TIME: GMT minus 4 hours all year round.

SPARES: Same can be withdrawn same day of arrival via air express. No Customs duties assessed as brought under Customs custody on board vessel. Airwaybill should be addressed to Agent, with clear indication that it covers spares for such and such a vessel.

SECURITY: Stevedores board vessel with special passes issued for vessel in question. Any other visitors must obtain pass from Harbour Master's Office. Nevertheless it is definitely recommended that all cabins be kept locked. This also applies to hatches that are not being worked.

POLLUTION: No garbage, refuse, etc., can be thrown overboard. Vessels liable to heavy fines for oil pollution, etc.

PLAGUE CONTROL: All lines leading to shore must be protected by ratguards. Non-compliance subject to Customs fines.

AGENT: Asociacion de Navieros de Santo Domingo, Calle Jose Contreras No. 108, P.O.Box 923, Santo Domingo, Republica Dominicana. Tel: (809) 533-4931.

AZUA (Puerto Viejo): 18.30 N. 70.40 W.

See "General" before first port.

PILOTAGE: Ordered by Agent; vessel should wait for Pilot at a distance of 0.5 miles from the port.

ANCHORAGE: In the approaches, depth is 28 ft.

RESTRICTIONS: Berthing during daylight only.

HEALTH: Pratique is obtained by Agent. In case of infectious illness the whole crew is put in quarantine.

TUGS: Not available.

BERTHING: Finger pier, length 650 ft., width 120 ft. Dredged to 35 ft.

MEDICAL: Necessary for Agent to receive advance notice of required medical attention. Doctor available.

FRESH WATER: Delivered by truck.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Required.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCES: Bonded stores are sealed.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Minor repairs only.

REPATRIATION: Facilities available.

AIRPORT: Situated 170 miles from port.

POLICE/AMBULANCE/FIRE: Tel: 175.

TELEPHONES: None available on board.

SHORE LEAVE: Allowed.

AUTHORITY: Comandancia de Puerto de Azua RD.

AGENT: See "General" before first port.

BARAHONA: 18.10 N. 71.10 W.

See "General" before first port.

PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone frequency 2738. Pilot boards approximately 1.5 miles outside the port. Pilot also on VHF Channel 16.

ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.

RESTRICTIONS: No entry or departure at night.

MAX. SIZE: 575 ft. length; 29 ft. draft.

HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.

RADIO: When within range, Santo Domingo Radio.

TUGS: One small tug available, ship's lines used.

BERTHING: Sugar molasses wharf, depth 28 ft. General gypsum wharf, depth 30 ft.

STEVEDORES: ETA's required 24 and 12 hours before arrival to arrange gangs.

MEDICAL: Medical attention can be arranged after vessel is cleared, preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.

TANKERS: Discharge at molasses wharf.

DENSITY: Salt water inside harbour.

FRESH WATER: Pipe-line at wharves, ship's hoses used.

FUEL: Small quantities of diesel available by truck from Santo Domingo.

GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.

OPENING/CLOSING HATCHES: Can be performed by crew or stevedores.

CUSTOMS ALLOWANCES: Bond is sealed, but can be opened at Master's request.

IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.

CONSULS: All Consuls at Santo Domingo.

REPAIRS: Minor repairs only.

REPATRIATION: Can be arranged.

AIRPORT: Distance to airport 230 km.

POLICE/FIRE/AMBULANCE: Police, Tel: 417; Ambulance, Tel: 441; Fire, Tel: 348 or 398.

TELEPHONES: Shore telephone alongside ship connected to Sugar Mill.

SHORE LEAVE: Allowed.

GENERAL: No boats to be lowered without official permission.

AUTHORITY: Comandante de Puerto.

AGENT: See "General" before first port.

BOCA CHICA: 18.27 N. 69.35 W.

See "General" before first port.

PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone frequency 2738 kHz, and 2638 kHz. Pilot also on VHF Channel 16. Pilot boards 1 mile outside the harbour.

ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.

RESTRICTIONS: No entry or departure at night.

MAX. SIZE: 400 ft. length; 25 ft. draft.

HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.

RADIO: When within range, Santo Domingo Radio.

TUGS: One small tug available, ships lines used for docking.

BERTHING: Depth alongside 24 ft.

STEVEDORES: ETA's required 24 and 12 hours before arrival to arrange gangs.

MEDICAL: Medical attention can be arranged after vessel is cleared, preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.

TANKERS: Only small propane gas tankers can be accommodated.
DENSITY: Salt water inside harbour.
FRESH WATER: Pipe-line connection at dock, low pressure, ship's hoses used.
FUEL: Only available by truck from Santo Domingo.
GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.
OPENING/CLOSING HATCHES: Can be performed by crew or stevedores.
CUSTOMS ALLOWANCES: Bond is sealed, but can be opened at Master's request.
IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.
CONSULS: All Consuls at Santo Domingo.
REPAIRS: Minor repairs only.
REPATRIATION: Can be arranged.
AIRPORT: 6 km. to airport, served by regular airlines with numerous flights daily.
POLICE/FIRE/AMBULANCE: At Santo Domingo.
TELEPHONES: No connection to vessels.
SHORE LEAVE: Allowed.
AUTHORITY: Comandante de Puerto.

AGENT: See "General" before first port.

CABO ROJO: 17.55 N. 71.39 W.

See "General" before first port.
PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone, frequency 2738. Pilot boards 2 miles off the port.
ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.
RESTRICTIONS: Entry and departure permitted daylight only.
MAX. SIZE: 600 ft. length; 40 ft. draft.
HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.
RADIO: When within range, Santo Domingo Radio.
TUGS: No tugs available.
BERTHING: Alcoa Private Wharf, bauxite only. Mechanical loading, no stevedores.
MEDICAL: Medical attention can be arranged by Alcoa after vessel is cleared, preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.
TANKERS: One tanker at a time could be accommodated.
DENSITY: Salt water inside harbour.
FRESH WATER: Sometimes available.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.
OPENING/CLOSING HATCHES: Performed by crew.
CUSTOMS ALLOWANCES: Bond is sealed, but can be opened at Master's request.
IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.
CONSULS: All Consuls at Santo Domingo.
REPAIRS: Not possible.
REPATRIATION: Can be arranged.
AIRPORT: Distance to airport 360 km.
POLICE/FIRE/AMBULANCE: Contact Port Authority.
TELEPHONES: Telephone on dock connected to Alcoa office.
SHORE LEAVE: Allowed.
GENERAL: No boats to be lowered without official permission.
AUTHORITY: Comandante de Puerto.

AGENT: See "General" before first port.

LA ROMANA: 18.27 N. 69.01 W.

See "General" before first port.
PILOTAGE: Compulsory. Ordered by Agents on receipt of vessel's ETA, 72, 48 and 24 hours before arrival. Pilot launch painted white with grey cabin and with letters "LP-24" painted on sides. Pilot boards 1.5 miles from port entrance (N.E. of Catalina Island). Contact Pilot on 2738 and 2638. Pilot also on VHF Channel 16.
ANCHORAGE: West of Isla Catalina in depths of 15 to 18 fathoms.
RESTRICTIONS: No entry or sailing in hours of darkness.
MAX. SIZE: Length: 580 ft. Draft: arrival 25 ft., sailing 28 ft.
HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.
RADIO: Santo Domingo Radio, HIX2, frequency 2738 kHz. Near the port, use Centromana Radio on same frequency.
TUGS: One tug of 620 h.p. available. Extra charge for use of tugs line.
BERTHING: One concrete pier 720 ft. long. Depth 28 ft.
STEVEDORES: To be ordered 4 hours before commencing work.
MEDICAL: Doctors and hospital facilities available. Medical attention can be arranged after vessel is cleared, preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.
TANKERS: Berth for 1 tanker at the pier. Discharge lines 10 in., 8 in., and 4 in.
DENSITY: 1025.
FRESH WATER: Available from 2 in. pipe-line on pier. Very low rate of supply.
FUEL: Available by truck from Santo Domingo.
WATCHMEN: To be provided by vessel. Compulsory gangway watch kept by Customs Guards.
OPENING/CLOSING HATCHES: Generally by ship's crew.
CUSTOMS ALLOWANCES: Seamen may take ashore only 2 packets of cigarettes and no alcohol.
IDENTIFICATION CARDS: Shore passes issued by Immigration Officer.
REPAIRS: Only minor repairs can be effected.
REPATRIATION: Arranged via Santo Domingo.
AIRPORT: Distance 70 km.
POLICE/FIRE/AMBULANCE: Police, 235; Ambulance, 455; Fire, 455.
TELEPHONES: In dock office, ask Sugar Mill for number required.
SHORE LEAVE: Allowed.
AUTHORITY: Comandante de Puerto.

AGENT: See "General" before first port.

MANZANILLO: 19.43 N. 71.45 W.

See "General" before first port.
PILOTAGE: Compulsory. Pilot comes from Puerto Plata. Boards incoming vessels about 1 mile from the dock. (The Pilot's working hours from 0800 to 1200 hrs., 1400 to 1700 hrs.; a fee charged after working hours. A fee is also charged for movements in harbour.) Ships will be received Saturdays and Sundays and at night for the same rate for the Pilot. Contact Pilot on 2738 and 2638, also on Channel 16 VHF.
ANCHORAGE: Vessels that cannot be docked on arrival will find safe anchorage to the East of the dock where there is plenty of swinging room, in about 20 fathoms of water, with good holding ground of mud and sand.
APPROACHES: Coast Guard Service recommend that a ship, entering Manzanillo Bay from the East, should stay well out until it has rounded shoals surrounding Seven Brothers Islands. At approximately Lat. 19° 58′ N. a course of 127° will bring it into the bay near the wharf. A ship arriving from the West should stay about 6 miles off Cape Haitian Light. When abreast the light a course of 111° will lead into the Bay a short distance North of the pier.
RESTRICTIONS: Entry and departure day and night.
RADIO: Radio Station HIL31. This station is private and for the use of Grenada Co. only. Messages of ETA, etc. from vessels should be sent via Miami WAX or New Orleans Radio WNU.

Vessels bound for Manzanillo, should radio their ETA to Santo Domingo Pilot Station daily, from 0600 to 1800 hrs. on frequency 2738 and 2182.

Vessels having single sideband equipment may also contact Radio Instituto Agriario Dominicano at Manzanillo, at wavelength 2670 and 2638 kHz from 0700 to 1200 hrs. and 1400 to 1700 hrs. EST.
TUGS: No heavy duty tugs available but there is a launch for the handling of ship lines. Tug available from Puerto Plata if required due to size of vessel.
BERTHING: Prevailing winds are Easterly and sometimes interfere with docking or undocking. On the East side vessels should dock bow in, since there is not enough room to swing vessels safely around for a port docking. On the West side vessels can dock either side to the pier, depending on the direction and force of the wind. In general banana vessels will be docked on West side of the pier and cargo vessels on the East side. Pier has a concrete deck 744 ft. long, 72 ft. wide. Both sides of the pier are protected with a pine fender system. The water depth at land end of pier is 10 ft. and at the seaward end 40 ft.
MEDICAL: Small dispensary in Manzanillo. Hospital facilities in Monte Cristi, 30 km. away.
STEVEDORES: Available.
FRESH WATER: Available for ships calling at this port only.
FUEL: None available.
GANGWAY/DECK WATCHMEN: Carried out by crew.
OPENING/CLOSING HATCHES: Crew or stevedores.
CUSTOMS ALLOWANCES: Each crew member will be allowed to take ashore one only opened package of cigarettes.
CREW IDENTIFICATION CARDS: Required.
REPAIRS: Small repairs carried out only.
REPATRIATION: Facilities available.
SHORE LEAVE: Members of crew are allowed to go ashore at this port, but Masters should caution them not to take on their persons any dutiable articles, as the Customs will search such men upon landing and should any such articles be found on their persons, this will be treated as an attempt to smuggle; severely punishable offence.
AUTHORITY: Comandante de Puerto.

AGENT: See "General" before first port.

PALENQUE: 18.12 N. 70.11 W.

SHIPMASTER'S REPORT (1976). Updated 1984.

The vessel called at Punta Palenque to discharge a cargo of feedstock from Venezuela. The SBM is located in position 18° 12.2′ N. 70° 11.3′ W. and operated by Refineria Dominicana.
DOCUMENTS:
7 Crew Lists.
2 Store Lists.
1 Crew Effects List.
2 Passenger Lists.
2 Lists of Arms & Ammunition.
2 Lists of Narcotics.
1 Health Declaration.
Clearance last Port.

PILOTAGE: Pilotage is compulsory. Mooring and unmooring 24 hours a day. Pilot boards about 1 mile Southwest of SBM.

Pilot boat, a small tug with black hull and white superstructure, is equipped with VHF Channels 16 & 14, call sign Punta Palenque Pilot. Pilot moors the vessel with the assistance of the Loading Master who gives directions on the focs'le. The tug delivers the mooring gear consisting of 2 nylon tails put on vessel's bits and shackles. The nylon tail will be shackled to SBM mooring lines. These mooring lines consist of about 100 ft. nylon rope and 10 ft. chain. The chain is heaved inboards by means of 1 wire and 1 nylon or polyprop messenger and connected to nylon tails on vessel's bits.

MAX. SIZE: Vessels up to 260 m. in length with max. draft of 14.6 m. A circle of 2000 ft. around the buoy with a min. depth of 50 ft.

HEALTH: Radio Pratique not available.

RADIO: As crude is supplied from Punta Cardon, Venezuela, Masters to send ETA Punta Palenque before sailing from Cardon, handing the message to Cardon Agents for them to transmit via telex system. Messages should include draft on arrival, number of crew, whether any sickness on board. Messages to be sent to Refidomsa, Santo Domingo and copy to Agent.

TUGS: Not available for mooring itself. Messengers to and from SBM are handled by a small work boat.

BERTHING: Single Buoy Mooring, property of Refineria Dominicana S.A. (Telegraphic Address: Refidomsa), located about 2,500 m. offshore, or 2.5 miles S.W. of Punta Palenque light. Nature of bottom: sand over coral. Buoy fitted with Radar Reflector and flashing red light.

Loading Master plus 3 men remain on board.

Connection amidships, port side.

LOADING: Shore Line System: From shore to ship:

1×28 in. line from tank farm to shore 750 m.
1×28 in. submarine line 2,550 m.
2×16 in. underwater hose systems from seabed to buoy.
2×16 in. floating hoses, about 165 m. long.
2×12 in. hoses to ship's manifold 27.5 m. long.
Maximum rate of discharge: 4,800 cu.m./hr.
Maximum back pressure: 150 p.s.i.
Product: Crude oil discharge.
Storage: 450,000 barrels.

REPAIRS: None available.

GENERAL: No navigational hazards approaching Punta Palenque from the South. SBM shows on radar at a distance of about 11 miles.

Reference: B.A. charts 3689, 471; West Indies Pilot Volume 1, Supplement No. 3 1975.

Weather: Wind: N.E. Trades

Current: Predominating from East to West but sometimes shifting to opposite direction for short periods. Velocity about 1.5 knots.

Services: Fresh water, provisions, fuel oil and diesel oil not available. No medical assistance. Shore leave not permitted, repatriation not possible.

Master's Remarks: When approaching from the South, the coast of Dominican Republic gives a good radar target. SBM could be picked up at about 11 miles distance, however, the red flashing light of SBM is very poor. Punta Palenque Pilot could be contacted at a distance of 30 miles.

Authorities: After vessel is moored Pilot acts as Agent together with a senior Custom Officer who came on board with the Pilot. Two junior Custom Officers will stay on board during the stay in port, also Loading Master and/or his assistant. Pilot delivers outward clearance.

SHIPMASTER'S REPORT: (1977). Updated 1984

DOCUMENTS: Last port clearance.

8 Crew lists.
8 Passenger Lists (nil).
3 Stores lists.
5 Firearms declarations.
1 Vaccination list.

To be legitimised by Dominican Consulate if possible, otherwise notarised by the Chamber of Commerce at sailing port or pay local requirements fee.

PILOTAGE: Pilotage compulsory. Pilot boards 1 mile S.W. of S.B.M. which is the waiting area. ETA required by Pilot at least 6 hours before arrival. The vessel cannot under any circumstances dock without the Pilot as the Loading Master is stationed on the forecastle head and advises Pilot of helm and engine requirements when approaching S.B.M.

ANCHORAGE: Temporary anchorage on the coastal bank to the West of S.B.M. to suit vessel's draft.

RESTRICTIONS: A vessel may enter and leave the port during hours of darkness and at any stage of the tide.

MAX. SIZE: Max. length 854 ft. Max. draft 48 ft.

TUGS: 1 tug available, tug attends on arrival and departure bringing to and removing from the vessel all the gear required for mooring (Snotters, Strops, etc.). At night the tug also illuminates the hose string as the buoy light is poor.

RADAR: The radar reflector on the S.B.M. is excellent and gives out a good echo at 10 miles.

BERTHING: Position of S.B.M. 18° 12′ N., 70° 11.4′ W.

Terminal Operator: Refineria Dominicana De Petroleo S.A. (Refidom SA).

At the time of berthing depth of water under the keel by echo sounder was 45 ft., the nature of the bottom at the berth was sand and coral.

As stated above the vessel is able to dock and un-dock at any stage of the tide day or night.

When 1 mile from the S.B.M. (waiting area) vessel approaches the buoy on a N.E. heading parallel to the hose strings and then turns the vessel to stem the current flow.

Moorings: Plaited ropes with cable chafing lengths shackled between the two plaited ropes. Snotters to the bitts from the central panama lead.

The port derrick to be rigged in advance to accept mooring gear from the tug and lift hoses (2×12 in. string).

Hoses: S.B.M. hoses connected to the ships manifold (2×12 in.). Distance from the S.B.M. to the shore tanks is 1.5 miles. Shore booster pump not available, steam jacket or similar facilities not available. Max. pressure on line 125 p.s.i., max. weight to be lifted 5 tons. Product Handled: Crude Oil. Ships accommodation ladder not required.

DENSITY: 1025.

SERVICES: None of the following are available; fresh water, provision, repairs, airport, surveyors, fuel oil, doctor, hospital, laundry, slop facilities.

TIME: Pilot advises time is GMT minus 4 hours (throughout the year).

GENERAL: Vessel's ETA by telex to be given to Santo Domingo from the last port of call, any changes should be passed to the Agent through 'Curacao Radio' as at no time whilst on passage from Punta Cardon could traffic be passed through 'Santo Domingo Radio'. The Pilot acts for Agent, Customs and Immigration (with Port Captain in attendance) leaving with papers, cables and telex, consignees documents etc., after the vessel is all fast. The ship's official documents were not examined. 2 custom guards and the Loading Master remain on board and should be provided with cabins and meals.

The Loading Master accepts the Notice of Readiness and ullages, specific gravity and temperatures of the cargoes given by ship's staff, he also maintains VHF contact with the Agent in Santo Domingo through the refinery.

The Loading Master, Berthing Master and Sailing Pilot all speak English. VHF contact made with the refinery when 45 miles from the S.B.M. who then passed our amended ETA to the Pilot.

SHORE LEAVE: Not possible.

AUTHORITY: Refineria Dominicana De Petroleo, S.A., Apartado 1439, Santo Domingo, Republica Dominicana. *Tel:* 533-3161. *Telex:* 3460342 (ITT), 3264320 (RCA). *Cables:* Refidom. *Contact:* D. Roffel, Superintendent.

PUERTO DUARTE (El Botado): 19.12 N. 69.26 W.

See "General" before first port.

PILOTAGE: Pilot will board vessels between No. 2 Buoy and No. 4 Buoy.

TUGS: Not available.

BERTHING: Finger pier, length 230 m. Depth alongside 30 ft.

FUEL: Available by truck.

REPAIRS: Not possible.

GENERAL: *Chart:* No. 917.

AUTHORITY: Captain of the Port.

PUERTO PLATA: 19.49 N. 70.41 W.

See "General" before first port.

PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone, frequency 2738 and 2638. Pilot boards 0.5 miles from port entrance. Pilot also on VHF Channel 16.

ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.

RESTRICTIONS: Night entry not recommended.

Depth at entrance 42 ft., depth on bar 37 ft. HW and 34 ft. LW, depth in harbour 30 ft. to 35 ft.

HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.

RADIO: When within range, Santo Domingo Radio.

TUGS: Tugs not available.

BERTHING: One wharf 30 ft. alongside. Pier 496 ft. long, 135 ft. wide. Facilities include water, electricity, warehouses. New pier recently constructed is 934 ft. long, with depth alongside 35 ft., also 144 ft. wide.

CRANES: Not available.

STEVEDORES: ETA's required 24 hours and 12 hours before arrival to arrange gangs.

MEDICAL: Medical attention can be arranged after vessel is cleared preferably ashore. Minor cases are dealt with locally, more serious cases are transported to Santo Domingo.

TANKERS: Berth at molasses/petroleum berth.

DENSITY: Salt water inside harbour.

FRESH WATER: Pipe-line at wharves. Ship's hoses used.

FUEL: Diesel and fuel oil available by truck from Santo Domingo.

GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.

OPENING/CLOSING HATCHES: Can be performed by crew or stevedores.

CUSTOMS ALLOWANCES: Bond is sealed, but can be opened at Master's request.

IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.

CONSULS: Germany (F.R.) – Mr. E. T. Heinsen.

REPAIRS: Minor repairs only.

REPATRIATION: Can be arranged.

AIRPORT: Distance 250 km.

POLICE/FIRE/AMBULANCE: At Santo Domingo.

TELEPHONES: Nearest in Customs House alongside wharves.

SHORE LEAVE: Allowed.

GENERAL: No boats to be lowered without official permission.

AUTHORITY: Comandante de Puerto.

AGENT: See "General" before first port.

RIO HAINA: 18.25 N. 70.01 W. (See Plan Book)

See "General" before first port.

PILOTAGE: Pilot boards from small boat flying a flag with a white "P" on a black background, about 1.0 mile from harbour entrance. Contact Pilot on 2738 or 2638 and Channel 16 VHF.

RESTRICTIONS: It is recommended to sail during daylight only.

MAX. SIZE: Max. draft 30 ft. 6 in.

TUGS: 2 tugs, 1,200 h.p. and 850 h.p.

BERTHING: 12 berths available. Vessels going to load sugar swing inside the harbour with the aid of a tug, and berth starboard side to the quay. Ship's gangway is recommended. There is sometimes quite a swell running inside the harbour. The port anchor is used for berthing and unberthing.

LOADING: Sugar is loaded by 3 mechanical loaders which are fixed so that large vessels are required to shift along the quay to load in end hatches. Loading rate is quoted as being 350 t.p.h. Cargo quantities are given in short tons.

At least one beam has to be removed from each hatchway to allow loader to enter.

Possible to load 8,500 ton vessel within 24 hours.

SPECIALISED CARGO HANDLING FACILITIES: Roll-on/Roll-off facilities on East bank of river. Container gantry crane destroyed by hurricane. Mobile cranes available for container and bulk cargo discharge.

FRESH WATER: *Shipmaster's Report:* October 1982. Fresh water can be supplied alongside fertilizer plant and container quay only, ship's hoses used.

FUEL: Fuel oil, diesel and intermediate fuels available from bunker barge.

REPAIRS: Minor repairs in Santo Domingo.

DEVELOPMENTS: Berth under construction. On completion there will be 750 m. of berthing space for 3 Ro/Ro vessels.

SHIPMASTER'S REPORT: March 1984.

Four Buoys have been installed in front of the entrance to the port and are not in line with the leading lights when entering. On the starboard side there are 2 red buoys (Fl. red) and on the port side 2 black buoys (Fl. green).

AUTHORITY: Autoridad Portuaria Dominicana.

AGENT: See "General" before first port.

SAN PEDRO DE MACORIS: 18.30 N. 69.12 W.

See "General" before first port.

PILOTAGE: ETA required 24 hours before arrival. Pilot meets vessels 0.5 miles from buoy. Pilot Radio Station frequency is 2738 and 2638 also VHF Channel 16. In the event of bad weather vessel should remain 3 miles South of the buoy. Pilot boards from small unmarked motor boat.

ANCHORAGE: One mile South of the lighthouse; depth 60 ft.

RESTRICTIONS: Channel depth 28 ft. Up to 480 ft. length, no restrictions. Arrival is preferable during daylight hours. Departure daylight hours only.

MAX. SIZE: Vessels of 600 ft. length have berthed alongside. Draft up to 27 ft. maximum.

Larger vessels leaving port after loading may require to use port anchor to manoeuvre around sharp bend in buoyed channels just inside harbour entrance.

HEALTH: In case of illness or death on board, send a cable before arrival; doctors available.

RADIO: Radio Station, frequency 2738, call Radio Pilot de San Pedro de Macoris.

TUGS: Compulsory. Tug joins vessel inside the port – 150 ft. from the quay. One tug 500 hp.

BERTHING: Quay No. 1, 900 ft. long, 25 ft. depth; Quay No. 2, 600 ft. long, 25 ft. depth; Quay No. 3, 600 ft. long 24 ft. depth.

Large vessels arriving to load swing inside the harbour using starboard anchor and berth port side to quay. At a later date barges are placed between the ship and quay, to permit greater draft, and Pilot receives extra payment for doing so. Use of gangway is recommended.

LOADING: Vessels loading sugar use ship's gear and ship has to supply rope slings. The chains on the centre sections of MacGregor hatches are broken, and a gap of about 2 ft. made, through which the bags of sugar are bled into the holds at the rate of about 220 tons per gang per day. Only 6 bags per sling are lifted at a time. Stevedores cover hatch openings with tarpaulins when loading is completed for the day. They will make up any extra slings that are required if ship supplies rope.

TANKERS: Oil line diameter 8 in. Max. pressure 60 p.s.i.

FRESH WATER: Available.

FUEL: Supplied by truck.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Crew.

CUSTOMS ALLOWANCES: Only sufficient for port consumption. Allowed take only 2 open packets cigarettes ashore.

IDENTIFICATION CARDS: Required.

CONSULS: Great Britain Vice-Consul only. Others at Santo Domingo.

REPAIRS: Minor repairs only.

AIRPORT: Airport is located at 40 km. distance.

TELEPHONES: No telephones on board.

REGULATIONS: Rat guards to be fitted on all ropes. No boats to be lowered without official permission.

REPATRIATION: Can be arranged.

SHORE LEAVE: Allowed.

AUTHORITY: Comandante de Puerto.

AGENT: See "General" before first port.

SANTO DOMINGO: 18.28 N. 69.53 W. (See Plan Book)

See "General" before first port.

PILOTAGE: Pilot arranged by Agent on basis of Master's advance notice of ETA. Pilot and Agents can be contacted by radio telephone, frequency 2738, 2182, and 2638 kHz. Pilot boards 1.5 miles off breakwaters. Pilot also on VHF Channels 12 and 16.

ANCHORAGE: Deep water anchorage available outside port. Pilot will advise best location.

RESTRICTIONS: If draft over 24 ft., Master should advise Agent before arrival. Berthing after dark not advisable for petroleum and grain berths.

MAX. SIZE: Length over 650 ft. inadvisable. Max. draft 30 ft. 06 in. at grain berth, 29 ft. for tankers at 28 ft. at general cargo berth.

HEALTH: Pratique granted after Health Authorities have boarded and cleared vessel. In case of disease aboard notify Agents before arrival. Pratique is automatic when proceeding from another port in the same country.

RADIO: When within range, Santo Domingo Radio.

TUGS: Join vessel inside port. Ship's lines used. 2 tugs available, 1,200 h.p. and 800 h.p.

BERTHING: 7 berths for vessels up to 600 ft. length. Depths 18 ft. – 28 ft.

Daylight berthing only for vessels proceeding to private Tallow/Soda terminal and Cement Wharf. Shore cranes up to 80 tons capacity available.

BRIDGES: Vessels proceeding up river, height limited to 95 ft. above waterline.

STEVEDORES: ETA's required 24 and 12 hours before arrival to arrange gangs.

MEDICAL: Medical attention can be arranged after vessel is cleared, preferably ashore.

TANKERS: One berth, draft 29 ft., at Sans Souci.

DENSITY: Brackish inside harbour. Effect of tide negligible.

FRESH WATER: Pipe-line alongside berths. Ship's hoses used.

FUEL: Fuel oil, intermediate fuel and diesel available ex-tanker berth. At other berths by bunker barge.

GANGWAY/DECK WATCHMEN: Compulsory gangway watch kept by Customs guards.

OPENING/CLOSING HATCHES: Performed by crew or stevedores.

CUSTOMS ALLOWANCES: Bond stores are sealed.

IDENTIFICATION CARDS: Shore passes are provided by Immigration Authorities.

CONSULS: All Consuls at Santo Domingo.

REPAIRS: Minor repairs only.

DRY DOCK: Can accept vessels up to 320 ft. long, 50 ft. beam and 17 ft. draft.

REPATRIATION: Can be arranged.

AIRPORT: Distance, 26 km.; served by regular airlines with numerous flights daily.

POLICE/FIRE/AMBULANCE: Police, San Domingo 682-3000; Ambulance, San Domingo 682-4288; Fire, San Domingo 682-2000.

TELEPHONES: No connection to vessels.

SHORE LEAVE: Allowed.

GENERAL: No boats to be lowered without official permission.

DEVELOPMENTS: Santo Domingo's Sans Souci tourism wharf, phase 1, is now under construction on the Eastern side of Santo Domingo harbour.

Phase 1 of the project comprises the construction of a dock with a platform measuring 250 m. in length by 31.40 m. in width. Totally made out of precast prestressed concrete members, it is designed to accommodate simultaneously two 20,000 metric ton displacement passenger ships or one of 50,000 metric tons. Besides the dock itself, there is a 20,000 sq. ft. passenger terminal building to be built which will be equipped with all the services and facilities necessary to allow cruises to originate in the new port.

Also under construction is a 1,000 metric ton potable water reservoir with a 50,000 g.p.h. pumping station.

The site selected, the Eastern shore of Ozama River, is 15 minutes by car from Santo Domingo's Las Americas International Airport.

The entire harbour will be dredged to a minimum depth of 35 ft. below mean sea level.

The Sans Souci tourism wharf completed. Depth 28 ft.

Phase 2 and Phase 3 consist of berthing facilities for one 20,000 metric ton displacement passenger ship each; construction of these additional berths has not yet been ordered by the Government.

AUTHORITY: Comandante de Puerto.

AGENT: See "General" before first port.

Ecuador

GENERAL

REPORTING: All vessels on entering within 200 miles of the Ecuadorian coastline should contact Guayaquil Naval Radio Station HCG on 8360 MHz and advise ETA at port and name of Master. If no contact is made, keep a copy of message and log on times it was intended to be passed. This copy must be given to the Agent on arrival.

DOCUMENTS:

Consular Documents:

In the port of origin of the voyage to Ecuador or in the last foreign port where there is a consulate before the vessel's arrival in the country, the following documents are to be submitted to the Consul for approval on model forms DIMERC 100 to 107, in 5 copies:

(a) Cargo Manifest.
(b) Crew List.
(c) Passenger List or "no passenger" declaration.
(d) In-transit Passenger List or "no in-transit passenger" declaration.
(e) Ship's Stores List.
(f) Crew's Effects Declaration.
(g) Maritime Health Declaration.
(h) Mail List.

The original set of these documents remains on board the vessel, the duplicate and triplicate are submitted to the Customs Administration, if they refer to cargo, and to the Captain of the Port, if they refer to the crew or passengers. The quadruplicate is sent to the Ministry of Foreign Affairs, and the quintuplicate remains in the Consul's files.

Prior to Arrival:

Arrival Notice: 72 hours before the vessel's arrival in the pilot waiting area, the shipping agency shall submit to the Port Authority the arrival notice form, on a special port format or its own format, containing basic data on the vessel and the request for services (pilotage, towage, berthing, etc.).

The vessel's arrival time should be communicated to the following authorities 24 hours in advance: Captain of the Port, Customs, Customs Police, Migration and Maritime Health.

Information on cargo for the port: The agency shall submit to the Port Authority the following documents by the deadlines indicated:

(a) General Import Cargo Manifest, in triplicate	24 hours before start of operations
(b) Import Bill of Lading, complete set	At the time operations start
(c) Cargo Stowage Plan by hatch	24 hours before start of operations
(d) Cargo List (breakdown of cargo)	24 hours before start of operations
(e) Container Contents List	24 hours before start of operations
(f) Dangerous cargo List	48 hours before vessel's arrival in the pilot waiting area
(g) Tally books, 15 copies (must be true copy of Bills of Lading and have an alphabetical index)	6 hours before start of operations.

On Arrival:

On entrance of the vessel, the following documents should be submitted on DIMERC forms 100 to 107, which, although they follow LAFTA/OAS forms 1 to 6, differ from them in that they bear the seal of Ecuador and must satisfy the following requirements:

Type of Documents	*Number and Distribution of Documents*					
Basic Forms:	*Captain of Port*	*Customs Police*	*DIMERC*	*Migra-tion*	*Maritime Health*	*Total*
1. General Declaration	1	1	–	–	–	2
2. Cargo Manifest	1	2	1	–	–	4
3. Crew Roll	1	2	–	1	1	5
4. Passenger List (a)	1	2	–	1	1	5
5. Ship's Stores (b)	1	2	–	–	–	3
6. Crew's Effects Declaration (c)	–	2	–	–	–	2
7. Maritime Health Declaration (e)	–	–	–	–	1	1
8. Mail List	–	2(d)	–	–	–	2
Additional Documents:						
9. Clearance Permit from Last Port	1	–	–	–	–	1
10. In-transit Cargo Manifest	1	1	1	–	–	3
11. "No Passenger" Declaration	1	2	–	1	1	5
12. "No Passenger" Declaration or In-transit Passenger List	1	2	–	1	1	5
13. Cargo Manifest (e)	–	2	–	–	–	2
14. Crew List (e)	2	–	–	–	–	2
15. Passenger List (e)	2	–	–	–	–	2
16. Ship's Stores (b)	–	2	–	–	–	2
17. Crew's Effects Declaration (c)	–	2	–	–	–	2
18. Maritime Health Declaration	–	2	–	–	–	2
19. Mail List (e)	–	2	–	–	–	2
20. Cargo Bill of Lading	–	–	1 set	–	–	1 set
21. Passengers' Baggage List	1	2	–	–	–	3
22. List of Unaccompanied Baggage or "no baggage list"	1	2	–	–	–	3

(a) Does not indicate sex.
(b) Has additional column for storage place.
(c) Omit crew signature column.
(d) One copy for the Postal Service.
(e) With Consular visa.

Prior to Departure:

Before departure, a complete set of the general export cargo manifests and a complete set of the export loading bills of lading are submitted to the Port Authority.

Clearance of vessel shall be requested from the Captain of the Port on a special form, which is submitted in 2 copies, each of which is to be accompanied by the following documents:

General Declaration	1
Crew List	1
List of Passengers or "No Passenger" Declaration	1
Stores List	1

The Captain of the Port returns to the ship the original clearance permit, duly certified, and retains one copy for his file.

In addition, 2 hours before departure, a clearance form must be submitted to the Customs Police, and a list of embarked passengers or a "no passenger" declaration and a list of crew changes is to be submitted to Migration.

PRATIQUE: Radio Pratique is not normally granted. Notice of arrival should be given at least 24 hours prior to arrival to Radio Naval Guayaquil, call sign HCG. Listens on 500 kHz, 8,385 kHz and 8,320 kHz. Answers back on 8,472 kHz and 8,475 kHz.

The message should read as follows:

CAPUERTO
MEDICO SANIDAD
ADMINISTRADOR ADUANA followed by name of port
IMMIGRATION

"vapor . . . 1 . . . 2 . . . procedente . . . 3 . . . no enfermos abordo, no explosivos, no pasajeros para . . . 4 . . . pasajeros en transito . . . 5 . . . tons carga para descargar . . . 6 . . . sacos correo para descargar eta boya . . . 7 . . . agencia . . . 8 . . . 9 . . . Capitan. or in translation (original must be sent in Spanish).

SS . . . 1 . . . 2 . . . from . . . 3 . . . no sick on board, no explosives, no passengers for Guayaquil (or name of port) . . . 4 . . . passengers in transit . . . 5 . . . tons cargo to discharge . . . 6 . . . bags of mail to unload ETA Sea Buoy . . . 7 . . . Agency . . . 8 . . . 9 . . . Captain.

1. Name of the vessel.
2. Nationality of the vessel.
3. Last port and port of call.
4. Number of passengers in transit (logically, if there are passengers for the port call, instead of saying (no pasajeros para . . . the correct number would be indicated).
5. Number of weight tons of cargo for the port.
6. Number of bags of mail.
7. Estimated hour of arrival at Sea Buoy, or Buoy No. 1 off Data.
8. Agent's name.
9. Master's name.

The same message should be sent to the ship's Agent.

When quoting arrival times use GMT or Ecuadorian Time (GMT minus 5 hours). Summer time is not kept.

The boarding party usually arrives on berthing.

The Vaccination Certificates should be ready in the same order as the Crew Lists.

FLAG: The national flag has yellow, blue and red horizontal stripes. The yellow is twice the width of the others. Government vessels show the national Arms in the centre of the flag.

All foreign vessels will fly the flag from the highest mast.

PILOTAGE: Pilotage is compulsory for all vessels over 500 tons gross. Vessels should await the Pilot off the Sea Buoy at all ports unless instructed to the contrary. The Pilot must be requested by the Agent at least 12 hours in advance. They are available 24 hours a day, every day of the year.

STEVEDORES: The stevedores are drawn from the 4 respective unions in rota. The foremen are generally selected by the Agent. The same gang will work the ship until completion, working around the clock if necessary. Gangs will start work at virtually any hour.

Opening and closing of ships hatches is undertaken by the stevedores and also the rigging of gear. Even though the stevedores receive payment for rigging anyway, it is advisable to use the ship's crew.

Cold fresh water and lavatories must be made available to the stevedores.

Tally clerks are selected in a similiar way to the stevedores.

WATCHMEN: 1 or 2 Customs guards will remain on duty, nevertheless the use of watchmen is advised.

GARBAGE: Before docking all vessels should cover all discharge points to prevent material or water being deposited on the quayside. The dumping of any waste is strictly forbidden except in an emergency. No oil may be dumped within 50 miles of the coast, and Ecuador strictly enforces the Anti-Pollution laws.

RAT GUARDS: These must be placed on all mooring lines while the vessel is in port. This rule is strictly enforced.

FIRE DRILL: Periodical fire drills are held. The signal is 6 short blasts. Smoking on dock is prohibited, and cigarettes must not be thrown through port holes.

CREW: Shore leave is permitted except at the tanker berths. Each man must carry an identity card. It is difficult to sign on a foreign crew member in Ecuador, unless he has been left behind by another company vessel. A visa is not required for replacements arriving from abroad, but the crew member must have a passport or seaman's book, together with a letter from the ship operator stating name of vessel to be joined.

In declaring personal effects, all new purchases must be listed, as well as electrical devices, typewriters, sextants, etc.

The Master has the right to issue or annul boarding passes if he has the approval of the Port Authority.

As a rule visitors are not allowed entry to the Port Area, although special permits are given to certain vendors. They may come on board solely at the discretion of the Master.

BALAO TERMINAL (Esmeraldas): 01.02 N. 79.44 W.
(See Plan Book)

LOCATION: The Terminal Petrolero de Balao is comprised of the area between the following geographical co-ordinates:

Lat. 00° 55′ 00″ N, Long. 79° 40′ 00″ W.
Lat. 01° 04′ 00″ N, Long. 79° 40′ 00″ W.
Lat. 00° 55′ 00″ N, Long. 79° 46′ 00″ W.
Lat. 01° 04′ 00″ N, Long. 79° 46′ 00″ W.

The Terminal Petrolero de Balao consists of 2 mooring areas: The SBM area for loading crude oil; and the TEPRE area for loading refined products.

The terminal has a storage area for crude oil situated on a hill 180 m. above sea level made up of 6 storage tanks that constitute the final leg of the Trans-Ecuadorian Oil pipe-line.

Each of the tanks has a 332,000 barrel capacity (or 13,524,000 gallons, 42 gallons per barrel). The tanks are 18 m. high and 60 m. in diameter.

Manifolded to each tank are 2 pipes that gravity feed the SBM's. One is 42 in. in diameter and the other 36 in.

The Offshore Terminal at Balao is made up of 2 SBMs nominated "X" and "Y" Buoys and a terminal for refined products (TEPRE).

Relative Location: "X" Buoy (SBM – West) designed for ships up to 100,000 d.w.t., is located 4.5 miles N.W. of the mouth of the Esmeraldas River (Rio Esmeraldas). "Y" Buoy (SBM – East), designed for ships up to 100,000 d.w.t., is situated 3.3 miles from the coast at its closest point and 1 mile on True bearing 081° from "X" Buoy. Both are at a minimum depth of 120 ft. LWS.

Tankers with a maximum of 1,000 ft. between perpendiculars, a maximum beam of 135 ft., and a maximum draft of 52 ft., can moor at the buoys. There should be between 400 ft. and 525 ft. between the bow of the tanker and the underwater manifold.

The TEPRE area is composed of a Conventional Buoy Mooring System (CBM), and forms a parallelogram with an East-West axis.

The mooring facility can receive ships between 6,000 d.w.t. and 20,000 d.w.t. A tolerance of 10% less for ships in the lower range is provided for. The minimum depth of available water is 14 m. DLWS and the greatest admissible draft that will not cause damage to the underwater installations is 10 m.

Geographical Location:
SBMs:
Buoy "X" (SBM – West) Lat. 01° 02′ 03″ N., Long. 79° 42′ 57″ W.
Buoy "Y" (SBM – East) Lat. 01° 02′ 12″ N., Long. 79° 41′ 52″ W.
Terminal for Refined Products (CBM):
Buoy A – Lat. 01° 01′ 3″ N., Long. 79° 40′ 7″ W.
Buoy B – Lat. 01° 01′ 3″ N., Long. 79° 40′ 5″ W.
Buoy C – Lat. 01° 01′ 1″ N., Long. 79° 40′ 5″ W.
Buoy D – Lat. 01° 01′ 1″ N., Long. 79° 40′ 7″ W.

DOCUMENTS: For the official reception of the vessel, the Port Authorities, presided over by the Superintendent and Shipping Agent, will come aboard immediately upon arrival of the ship. In order to be declared in Free Pratique, the tanker must have the following documents ready:

Sailing documents from the last port of call.
Crew List (4 copies).
Declaration of Stores.
Declaration of Personal Effects of Crew Members (2 copies).
List of Passengers (6 copies).
Cargo Manifest (4 copies).
Bill of Lading (2 copies).
General Declaration (5 copies).
Ship's Register.
TOVALOP or P&I Insurance.

PILOTAGE: Pilotage is compulsory. The ship will approach to a distance of 1.5 miles North of Buoy "X".

According to Ecuadorian law pilotage is mandatory and Masters must obey all Statutory Laws and Regulations such as: The Code of Maritime Police; the Pilotage Regulations; and the Operations Regulations for Oil Terminals.

The following dispositions must also be followed:

(a) The officer responsible for boarding and putting ashore the Pilot is the officer on duty.
(b) The vessel must have an accommodation ladder and/or a pilot ladder.
(c) The length of the ladder must not exceed 30 ft. If the distance between the water level and the access point to the main deck is greater than 30 ft., a combination of one section of pilot ladder and another of accommodation ladder must be used.
(d) The pilot ladder must be properly secured and placed on both sides of the vessel.
(e) At night the pilot ladder and its immediate vicinity must be adequately illuminated.
(f) The top of the ladder must be so arranged that the Pilot can safely pass on to the deck of the vessel.
(g) The ladder must be maintained in good condition and its rungs must remain horizontal upon boarding and going ashore. The surface of the rungs must be rough.
(h) The ladder must be stable in such a way that each step rests on the side of the vessel and with spacers placed at least every 10 ft. in order to prevent the ladder from turning.
(i) Nylon ladders must not be used.

Pilotage Area: This area is within the following co-ordinates:
(a) Lat. 01° 00′ 00″ N., Long. 79° 40′ 00″ W.
(b) Lat. 01° 00′ 00″ N., Long. 79° 46′ 00″ W.
(c) Lat. 01° 04′ 00″ N., Long. 79° 40′ 00″ W.
(d) Lat. 01° 04′ 00″ N., Long. 79° 46′ 00″ W.

The waiting area, the anchorage area and the berthing area are included in this zone.

The Waiting Area: The area to wait for the Pilot is 1 mile North of Buoy "X".

The Anchorage Area: The vessels that must anchor upon arrival will proceed to the waiting area 1.5 miles North of Buoy "X" (SBM – West) and with the Pilot on board will navigate to the anchorage area found between:
(a) Lat. 01° 00′ 30″ N., Long. 79° 44′ 00″ W.
(b) Lat. 01° 00′ 30″ N., Long. 79° 46′ 00″ W.
(c) Lat. 01° 02′ 00″ N., Long. 79° 44′ 00″ W.
(d) Lat. 01° 02′ 00″ N., Long. 79° 46′ 00″ W.

Operation Area for Tankers: This area, where mooring Buoys "X" and "Y" are found, is located between:
(a) Lat. 01° 00′ 00″ N., Long. 79° 40′ 00″ W.
(b) Lat. 01° 00′ 00″ N., Long. 79° 44′ 00″ W.
(c) Lat. 01° 03′ 00″ N., Long. 79° 40′ 00″ W.
(d) Lat. 01° 03′ 00″ N., Long. 79° 44′ 00″ W.

LIGHTS: *SBM Lights:*
Characteristics:

Buoy "X" (SBM – West)		Buoy "Y" (SBM – East)	
Light	Amber	Light	Amber
Flash	1.2 secs.	Flash	0.7 secs.
Dark	6.8 secs.	Dark	0.3 secs.
Period	8.0 secs.	Period	1.0 sec.
Range	5.3 miles	Range	5.3 miles

Lights at the terminal for refined products:

Light	Yellow
Flash	1 sec.
Dark	3 secs.
Period	4 secs.
Range	5 miles

APPROACHING: The most outstanding sights approaching Balao are: The Coquito Lighthouse, located 2 miles West of Punta Este (entrance of Rio Esmeraldas); the crude storage tanks in Balao on a hill (186 m. above sea level) visible from approximately 20 miles; and Punta Gorda, a craggy rise situated approximately 4.4 miles S.W. of Punta Coquito. The prominent points are easily detected by radar.

From Punta Las Palmas to Punta Gorda the coast consists of cliffs and small valleys for about 5 miles in a West by S.W. direction.

Punta Gorda, a craggy rise with nearby cliffs, has a reef that extends half a mile offshore North of the point. From Punta Gorda to Punta Sua, about 9.5 miles East by S.E., the coastline is low except for the cliffs close to Punta Gorda.

ANCHORAGE: While awaiting berthing at the offshore terminal ships can anchor in the following area:
(1) Lat. 1° 00′ 30″ N., Long. 79° 44′ 00″ W.
(2) Lat. 1° 00′ 30″ N., Long. 79° 46′ 00″ W.
(3) Lat. 1° 02′ 00″ N., Long. 79° 44′ 00″ W.
(4) Lat. 1° 02′ 00″ N., Long. 79° 46′ 00″ W.

MAX. SIZE: See "Location".

RADIO: Vessels bound for Balao must advise their ETA to the Superintendencia and their Agents, 72 hours and 24 hours before arrival. The message must contain vessel's name, ETA, Master's name.

VHF: The Pilots listen on Channel 16 (VHF) then change to Channel 14 once contact has been established.

The Terminal maintains a 24 hour watch on VHF-FM frequency 156.800 kHz, Channel 16, with an approximate range of 40 – 60 miles. Once contact has been made with the tanker, either Channel 14 or any other channel designated by the radio operator will be used.

TUGS: 5 tugs available, all radio equipped.

MOORINGS: *(SBM's):* The SBMs "X" and "Y" have rotating tables on which the oil handling and mooring devices are mounted. These can turn in the direction of the tanker.

The mooring ropes: Each buoy has 2 mooring ropes for securing to the bow and these are permanently attached to the buoy. Each rope is 185 ft. long and 15 in. thick and is connected to 30 ft. of 2 in. chain that is secured to the bitts of the ship with cable grommets and mooring shackles provided by the Terminal.

TEPRE CBM: The underwater manifold is located 2.1 miles from shore at the end of the product pipe-line. Its function is to distribute the products from the dispatch lines to the tanker or to the product re-cycling lines, whatever the case may be. The underwater manifold also houses the deballasting line.

The tankers are loaded by underwater hoses connected to the product loading outlets on the underwater manifold. The hoses are hoisted onboard the tanker once it is properly moored to the buoy field.

How the buoy field is secured: Stud Link grade U2 0.5 in. chain.
Rupture Tension 223 tons.
Working Tension 159 tons.

Anchors: Conventional, according to design specifications recommended by R.I.N.A. (Italian National Register).

Each buoy is secured by a chain to the anchor in order to avoid displacement by wind, current, or the tension of the ship. They are anchored with enough weight to avoid drifting.

BERTHING: Mooring operations will take place during daylight hours under normal weather conditions.

The unmooring operations will take place 24 hours a day.

Mooring Turn (Arrival): Priority for tying up is determined by the ship's time of arrival in port. In any case, those that arrive first have priority if and when they have received authorisation from the Direccion General de la Marina Mercante y del Litoral to operate freely.

The port derrick must be rigged and ready for use on arrival and vessels should be warned that the weight of each hose is at least of 5 tons under favourable conditions. This will be used to lift the floating deballasting/loading hoses as well as crates of materials that will be delivered by a terminal tugboat at the anchorage before the mooring operations begin.

For the mooring operations the ship must provide the following personnel and materials, which must be ready on the foredeck:

Personnel:
- First Officer on deck
- Boatswain
- 2 winch operators
- 2 seamen to handle the ropes.

Materials:
- 2 winches that work
- 2 mooring lines 2.5 in. in diameter; 600 ft. long
- 2 nylon mooring lines 1 in. × 10 ft.
- 2 manila heaving lines 0.25 in. diameter × 30 ft.
- 1 nylon or polypropylene mooring line 2.5 in. in diameter and 300 ft. long centre astern.

Mooring: The approach and mooring of the tanker will take place with the aid of the Pilot from Balao and the Loading/Mooring Master from the CEPE-TEXACO Consortium in accordance with the Operation and Tariff Regulations for Oil Terminals.

When the vessel is at a reasonable distance from the berth, the mooring tugboat will take 2 of the ship's warping lines. Tie these to the mooring lines which are attached to the buoy and bring them on board. As the buoy ropes come clear of the water, it will be noted that chains are attached to them. These chains are to be secured to the bitts in such a manner that the nylon is outside of the external length of the ship so the chains absorb any chafing if the buoy lines cross the bow. There are 2 buoy lines. Power must be available at all times on all deck winches and windlass while the vessel is at the berth.

A mooring line must be available aft, secured to the bitt and of sufficient length to enable a tug boat to pick up the eye and tow it off to re-position the vessel if necessary.

Mean Time For Operations At The Terminal: Subject to the differences of each ship, the following times can serve as a guide:

1. Approach to the buoy from anchorage	50 minutes
2. Approach from waiting area	30 minutes
3. Loading the equipment used for mooring and connecting the hoses	20 minutes
4. Mooring	30 minutes
5. Lifting and connecting the hoses	80 minutes
6. Disconnecting the hoses	40 minutes
7. Casting off from buoys	10 minutes
8. Unloading personnel and equipment	25 minutes

HOSES: *Buoys "X" and "Y":* Lifting, connecting, disconnecting, lowering and other operations will be performed by a special team from shore under the Loading/Mooring Master's orders with assistance of the ship's deck officer. Port derrick must be rigged and ready for use before mooring operation begins.

Members of the ship's crew will be required to operate the winch or winches. Particular care should be taken during the hose handling operation in order to avoid serious damage to the hoses, the plastic floats and buoys on the plate edges, rails, etc.

BALLAST: *Deballasting:* The Terminal is not able to receive slops on shore, therefore its discharge is prohibited.

All clean ballast must be pumped ashore, with the exception of vessels especially equipped with clean segregated systems which are reserved for ballast only. Vessels so equipped will be permitted to pump segregated ballast overboard after being accepted and approved by shore inspectors.

After the tanks have been inspected and approved by the Terminal, deballasting will commence under the supervision of the Loading/Mooring Master. Upon completion the tanks will be inspected again and if ready for loading, a certificate will be signed by a representative of the consortium.

For the water processing of ballasted tankers, the Balao Terminal has an adequate system that starts in the hoses of the buoys and passes through a submarine pipe going to a preseparator, where it hits and separates: first the water of the hydrocarbons, then goes to a decantation pool, where it stays 48 hours and after goes to a final separator in which are collected the last traces of hydrocarbons and finally the clean water is drained to the sea.

LOADING: Loading is through SBM's which are 49.5 ft. in diameter and held, each one in position by fixed chains secured to piles sunk into the sea bed.

Buoy "X" is equipped with a 750 ft. length and 20 in. self float loading hose which is manifolded to two 105 ft. length and 12 in. tail hoses. Buoy "Y" is equipped with a 20 in. hose and is manifolded in the same fashion as Buoy "X".

1. Loading ratio. Not withstanding greater capacity, currently the loading rate has been reduced to 32,000 bbls./p.h. at both buoys with a minimum of 10,000 bbls./p.h. and maximum pressure of 100 p.s.i. on land.

2. Under no circumstances will the vessel be loaded at a rate greater than that requested by the Master. It is the Terminal's responsibility to maintain the requested loading rate.

3. The load on top system is accepted at this terminal and vessels are requested to arrive with slop tanks "settled out".

UNMOORING: The Loading Master will advise to Texaco Control the estimated time for the completion of loading and will ask for Official Pilot. Then, hose disconnecting operation is undertaken aboard ship. After the unmooring takes place, the tug boat comes alongside the ship to transfer all materials and personnel that have been used during the operation. Then the vessel will proceed to the anchorage area where anchored it will await loading and sailing documents.

TEPRE OPERATIONS: *Mooring and Unmooring at the Terminal for Refined Products:* The Pilot on duty will be in charge of mooring and this will take place according to the wind and current conditions.

Loading: Once the vessel is secured, loading will be directed by the State Petroleum Corporation of Ecuador (CEPE). For this, 3 divers, 4 hosemen and 1 loading supervisor will come to the vessel and together with the ship's crew, connect the hoses.

Description of the Operation: Once the tanker's derrick is ready, a diver will dive to the ocean floor with a hook that will be attached to the hose of the product to be loaded. Once on deck, the hose will be connected to the ship's manifold.

Loading rates:

Product	*Designed Rate* (cu.m.p.h.)	*Admissable Rate* (cu.m.p.h.)
Gasoline	636	700
Kerosene/Diesel	477	650
Fuel Oil	800	1,100

Deballasting	(d.w.t.)	
Tanker	6,000	300
Tanker	12,000	400
Tanker	20,000	600

Diameter of Flexible Product Hoses	*(in.)*
Fuel Oil	10
Gasoline	10
Kerex/Diesel	10

Deballasting: The same system used for loading will be employed for deballasting differing only in that the ship will pump to shore.

Products: The products that are currently being loaded at the TEPRE terminal are: Gasoline, diesel, kerex and bunker.

MEDICAL: The city has two hospitals: Hospital Delfina Torres de Concha and Hospital Franlin Tello Mercado.

FRESH WATER: Available in limited quantities. If more than 200 tons are needed, this must be requested 72 hours in advance.

FUEL: Limited availability and only in emergencies.

CONSULS: Colombia: Calle Sucre s/n entre Piedrahita y Manuela Cãnizarez. Tel: 713-661.

Chile: Calle Colon y 10 de Agosto. Tel: 710-045.

France: Av. Eloy Alfaro y Salinas.

Panama: Av. Kennedy 1100, Las Palmas. Tel: 710-370 and 711-180.

REPAIRS: Only minor repairs can be carried out and this is with the exclusive authorisation of the Superintendencia. These must not jeopardize the safety of the vessel or the installations.

REPATRIATION: Only if the person has all the necessary documents (passport, certificates, etc.).

TIME: GMT minus 5 hours.

SHORE LEAVE: Considering local operating conditions, permission to come ashore is subject to the approval of Migracion y Extranjeria (Immigration) and must be requested by the vessel's Agent. Transportation must be provided by the Agent and subject to the rates established by the respective authorities.

SERVICES: Yagua General Services Ltd. can offer the following services:
- Launch services.
- Water supply.
- Hospital medical attention.
- Shipchandler.
- Crewmember exchange, etc.

They could also be appointed as protecting Agent of any particular vessel.

GENERAL: *Flags:* The quarantine flag must be flown by the vessel when approaching the Balao Terminal. It must be lowered once the ship has been declared in Free Pratique.

The National Flag of Ecuador will be permanently flown while the ship is at the Terminal.

Contraband: Ecuadorian law is rigorous in reference to contraband. The Master must instruct his subordinates to avoid taking cigarettes, cigars, tobacco, alcoholic beverages, drugs, etc. to the shore.

These articles must be reported before arriving at the Terminal and with their respective lists put under the Master's custody during the ship's stay.

In no way will commercial transactions between crew members and Terminal employees or third parties be tolerated.

Visitors: With the exception of Terminal personnel and other employees whose duties require them to board (Port Authorities, Ministry of Natural Resources Inspectors etc.), all visitors are strictly forbidden. Exceptions to this rule will require the authorisation of the Superintendencia.

Watches: Permanent watches must be maintained on board; on deck as well as in the engine room. These watches must have sufficient crew members to move the ship in case of emergency.

Charts: National charts: I.O.A. 1002 Port of Esmeraldas. Ed. December 20, 1982. Foreign charts: N. 021033 (HO-1176).

Wind and Currents: The predominant wind and marine currents throughout the year are S.W. During the rainy season (December – May), however, the wind and current suffer a slight change and at times come from the N.E. and North.

In the berthing area the currents often vary and will oppose the direction of the wind and cause the ship to yaw strongly.

Tide: The tide in syzygy comes up 13 ft., in quadrature 11.5 ft. The tidal currents have been reported (1956) at a rate of 1.5 knots, a little stronger during low tide.

REGULATIONS: (Not all Regulations printed). Due to the fact that Balao is very close to Las Palmas, Atacames, Sua, etc., any pollution will cause serious damage to the beaches and fishing grounds. Therefore, ships are obliged to avoid any possible pollution of local waters that would be caused by pumping crude oil, diesel, or other fuels or oily mixtures from the engine room bilges.

In the piloting area the traffic of small craft such as fishing vessels, coasting vessels engaged in cabotage is absolutely prohibited with the sole exception of small craft used in the reception and mooring of tankers and these must be authorised by the Superintendencia.

Masters Responsibility: While the ship is at this Terminal, the Master will continue to be responsible for the security of the vessel.

While the ship remains at the buoys, its main engines must be ready for any emergency. If they are turbines they must be in reverse.

Vessel's Obligations in Port:

1. It is the obligation of the Master of the ship, or his representative, to receive the Pilot and the Loading/Mooring Master at the gangway, and provide them with all the information they may need.

2. The Master will delegate the First Officer or another responsible officer to receive the Port Authorities at the gangway and provide them with the documents and other information they may request while on board.

3. The Master must present the Superintendencia with a Certificate of Pollution Insurance issued by TOVALOP, the Ship's Register and any other document that may be required.

4. Meals must be provided for Superintendencia personnel and Customs, Police, etc. that are on duty.

5. A cabin and meals must be provided for the Loading/Mooring Master on duty during the loading operation.

6. The ship must provide meals for the 4 hosemen on board.

7. Meals and cabins must be provided for the Superintendencia's Safety and Pollution Control Inspectors when necessary.

8. Meals and a cabin must be provided for the Pilot if on board at mealtime.

9. All required materials and personnel must be placed at the disposition of the Terminal's Representative so that he can adequately carry out his job especially for easy and safe access of personnel on board.

10. The ship must provide personal assistance and other facilities required by the Ministry of Natural Resources Engineers on duty, so that they can efficiently control and inspect the oil being loaded and the tanks used.

Reports to the Superintendencia: During their stay in Port, the Master of the tanker must report any problem on board concerning:

1. Breaches in safety measures during mooring, deballasting, loading and unmooring operation.

2. Oil spills produced by bad hose connections, breaks in the hoses, filtration due to improper plugging of scupper holes, or any other reason.

3. Pollution caused by bilge pumping, tank washing, or any other operation that is not permitted.

4. Any abnormal situation that might affect the operating safety of the tanks.

5. Personnel accidents during work.

6. Theft on board or discovery of commercial transactions between crew members and Terminal workers etc. (contraband)

7. A copy of the measurements on board once the vessel is loaded.

Safety Regulations: The deck officer on duty must check the list of questions one by one to make sure the vessel's safety measures are in order. Some of the points that must be observed are as follows:

11. Are the mooring lines in good condition? (TEPRE – 12 nylon or polypropylene lines according to the tonnage of the tanker. SBM – 2 nylon or polypropylene lines, 600 ft. long.)

12. Are the short lines in good condition? (TEPRE: 12 short nylon lines, 1 in. thick and 10 ft. long each one.)

13. Is the derrick in good condition and has capacity for at least 5 tons?

24. Is the hydrocarbon log up-to-date? Check it!

25. Is the Master aware of the port regulations?

Safety Precautions for Ships:

1. Verify that mooring conditions are in accordance with Terminal requirements.

2. As a safety measure during operations, ships headed for Balao to load crude oil must arrive with enough ballast to correspond to 25% to 30% of its cargo capacity and down no more than 10 ft. by the stern.

9. The red flag, BRAVO, must be raised during the day and a red light must shine at night.

10. Ashtrays in the smoking room must contain water.

11. Due to the underwater chains, pipes and hoses, it is absolutely forbidden to use anchors close to the buoys.

12. All of these rules will be enforced by the Safety and Pollution Control Inspectors, along with the Loading and Mooring Masters.

AUTHORITY: Superintendencia del Terminal Petrolero de Balao, Casilla 286, Esmeraldas, Ecuador. *Tel:* 711-100, 712-100. *Telex:* 7579. *Contact:* Fernando Gavilanes Granja, Superintendent.

AGENT: *Main Office:* Yagua Ltd., Shipping Agency, P.O.Box No. 69, Quito, Ecuador. Victor Hugo 114e, Isla Pinzon, (Jipijapa), Quito, (Ecuador). Cable: Yagua Quito (Ecuador). Telex: 022220 Yagua Ed (Monday through Friday. See Operations Office for Saturdays and Sundays). Tel: 554-484, 554-485, 543-429.

Operations Office: Avenida Kennedy 1100 (Las Palmas). Cable: Yagua Esmeraldas (Ecuador). Tel: 710-370, 711-180 (available 24 hours a day). Telex: 7589 Yagua Ed.

Also on VHF Channels 16, 6, 12 and 71.

ESMERALDAS: 01.00 N. 79.39 W. (See Plan Book)

PORT LIMITS: Between the meridians 79° 38′ W. and 79° 39′ W. and the parallels 00° 59′ N. and 01° 02′ N.

NAVIGATION AIDS: The port complex of Esmeraldas has navigational aids consisting of the installation of 6 lighted buoys which mark the access channel to the port; 1 landfall buoy in the waiting area for Pilots; 4 lights located at the head of quays, 2 on the 2 breakwaters (principal and secondary) which limit the commercial quay and in the accesses to the dock of the Fishing Port and 2 pairs of leading lights – one pair at the top of Coquito Hill to the S.W. of the port and another pair near to the residential area of Tachina towards the S.E. of the port.

DOCUMENTS: The documents required by the Port Authorities on arrival of vessels are as follows:

Clearance From Last Port.
4 General Declarations.
1 Health Declaration.
5 Lists of Crew Members.
5 Lists of Passengers.
6 Sets of Cargo Manifests.
4 Sets of Bills of Lading.
1 Stevedoring Plan.
Certificate of tonnage and radio to be checked.

PILOTAGE: Pilotage is compulsory.

Prior to commencement of manoeuvring and navigation, the Pilot will require from the Master the following information: conditions of steering, conditions of ship machinery, condition of the aids to navigation, conditions which may limit the manoeuvres which are about to be effected, the draft forward and aft, nature of the cargo, availability of mooring lines and the system of anchorage.

The Pilot will require the presence of the Master of the vessel on the bridge at all times during manoeuvres.

ANCHORAGE: The area for awaiting the Pilot and quarantine is located between meridians 79° 39′ 15″ W. and 79° 40′ 00″ W. and the parallels 01° 01′ 00″ N. and 01° 01′ 50″ N.

MAX. SIZE: The port is limited to receiving vessels not greater than 200 m. LOA and 35 ft. max. draft.

RADIO: The Port of Esmeraldas currently has no radio service, but the Terminal of Balao: Lat. 01° 02′ N., Long. 79° 44′ W., which is relatively close, has a radio service.

To communicate through Balao, vessels arriving at Esmeraldas must advise or communicate their ETA to the Naval Superintendency of Esmeraldas, 72 and 24 hours prior to arrival. Messages must contain the names of the vessel, ETA and name of the Master.

24 hours listening out is maintained on HF-SSB-2182 – 2136.3 kHz call-up frequency and 4139 – 6210 kHz working frequency and on Channel 16. Generally vessels will have contact with this channel at a distance of 20 to 30 miles from the port. Channel 14 will be used for contact between the vessel and the Naval Superintendency before arrival in port.

BERTHING: All systems of maritime transport of general cargo (ro-ro, lash, USO multiple and containers with own crane equipment) can be used in the Port of Esmeraldas, since there is:

An ample dock of some 35 hectares with direct access. The port is not affected by winds, tides or undertow.

A marginal quay, 350 m. long and 26 m. wide at its forward part, giving facilities for handling and transfer of any kind of cargo.

Areas of free spaces for the storage of containers, semi-trailers and other types of cargo with an area of 66,000 sq.m. A closed warehouse of some 6,000 sq.m. area, and areas reserved for future usage of 110,000 sq.m.

A ramp for ro-ro vessels whose position is perpendicular to the quay designed so that vessels operating in loading and unloading are not interrupted by tidal differences.

Equipment for handling containers, semi-trailers, palletised cargo and others. Mobile cranes 2×60 tons, 2×35 tons, 2×15 tons, 20 loaders of 7.5, 6 and 3 tons and 8 trucks with platforms.

STEVEDORES: The port offers services to vessels without any restrictions and uninterrupted during all days of the year, 24 hours a day, with the exception of the 24th December when work is interrupted from 1700 hrs. until 0800 hrs. on the 26th December and the 31st December from 1700 hrs. until 0800 hrs. on the 2nd January.

MEDICAL: Doctors available.

FRESH WATER: Available.

FUEL: Available.

DEVELOPMENTS: The second stage of port works which have been projected, comprise:

Construction of a container quay 210 m. long with a storage area of 8 hectares.

A marginal quay 140 m. long with the same characteristics as the quay of 350 m. long and is a continuation of it, which will permit the berthing of 3 deep-sea vessels at one time.

Two additional warehouses of 6,000 sq.m. each.

Open air storage surface areas covering 3.5 hectares.

Extension of electric and sanitary services to the new areas.

SHIPMASTER'S REPORT: June 1979.

Navigation: Two orange coloured beacons on the land to the East side of the river, act as leading marks (bearing 166°T) from approx. 4 miles to seaward, right up to the entrance of the port. They are not lit. Depths along this line were not less than 100 m.

Off the entrance to the port, two orange coloured beacons on the West side near Coquitos Point Lighthouse, are the leading marks into the harbour. They are not lit. Entering the harbour, the deep water shoals rapidly to about 12 m., but at no time were echo soundings of less than 11.5 m. MLWS encountered either in the entrance, or in the manoeuvring area inside, or alongside. Beacons mark the extremities of the breakwaters but they are not lit.

Two buoys mark the East and West edges of the deep water channel outside of the breakwater. They are lit. Further buoyage is planned to mark the deep water area.

Pilots: 2 Pilots on board, 1 to communicate with each tug. Only 1 Pilot and 1 tug equipped with 'walkie-talkie' radios.

Tugs: 2 square bowed American type river-barge pusher tugs are available and they have adequate power to assist in manoeuvring on and off the berths. Unfortunately, the 2 vertical posts on their bows are likely to cause sharp indentations in vessels' bow and stern plating when the tugs are used for pushing. They should only push against the flat vertical surfaces of the hull.

Berthing/Facilities: There are 2 berths and a ro/ro facility, but only 2 large vessels can be accommodated alongside at any one time. A large cargo shed is under construction opposite Berth No. 2, and the container and open cargo areas have been surfaced. Both berths are to be supplied with bunkering and fresh water facilities, but these are not operative at present time. No actual assessment of cargo handling equipment could be made, but it was noted that there were 2×30 ton mobile cranes and 5×7.5 ton forklift vehicles in the parking area in the compound. The Agent reported that low-loaders and trailers were available for the movement of containers and that forklifts could be hired for use in the hatches.

The loading of bundles of balsawood was carried out directly from lorries which brought the cargo alongside and the rate of loading was about 165 bundles (20,600 board feet) per gang hour.

At present the harbour is somewhat obstructed by anchored fishing boats and small craft, but these are to be shifted to the new fishing port being constructed to the South of the main harbour.

AUTHORITY: Autoridad Portuaria de Esmeraldas, Casilla 280, Esmeraldas, Ecuador. *Tel:* 711-910, 710-800, 711-996. *Telex:* 7586 Aupesm-Ed. *Cables:* Aupesm. *Contact:* Ing. Teddoro Moroan Moran, Manager.

GUAYAQUIL: 02.12 S. 79.52 W. (See Plan Book)

DOCUMENTS:

Port Doctor:

Derat Certificate.
Maritime Declaration of Health.
Crew Roll.
Passenger List.
Passenger List in Transit.

Harbour Master's Office:

Voyage Report.
Clearance from last port.
Crew Roll with original visa from Ecuador Consul in first port of voyage (3 copies).
Passenger List with original visa from Ecuador Consul in embarking port, or declaration that they have no visa, signed by Master (2 copies).
Passenger List in transit signed by Captain or declaration that they have no passengers in transit (2 copies).
Provisions List, Stock and Medicines on ship (3 copies).
Cargo Manifest in transit (1 copy).
Combustible or inflammable Cargo (1 copy).

Customs:

8 copies of Manifest.
Sealed envelope of Manifests, consular and commercial invoices and non negotiable vouchers.
Cargo index and copy of Cargo Manifest in direct transit (8 copies).
A Register (8 copies) of spare parts for vessel and provisions.
Crew Roll and detailed list (8 copies) of personal belongings of officers and crew.
Passenger List, with indication of their suitcases and list of suitcases that travel without their owners; in this case should be specified the port where they were put on board and personal declaration of each passenger (8 copies).
If the vessel with ballast, Master will be obliged to produce (besides the ballast certificate) documents already mentioned in each respect. Master or Maritime Agency will produce a written statement to Customs within 12 hours from arrival of vessel whether they decide to take any cargo for exporting. If not loading vessel must leave within the following 24 hours.

Immigration:

Crew List signed by Master.
Passenger List of those who disembark there or a declaration of none for this port, signed by Master.
Passenger List in transit, or a negative declaration signed by Master. In case of having passengers to disembark in this port, Master should produce passports and visas.
Crew identification cards or similar documents.
Inspection of ship by Authorities will be done (compulsory) within 3 hours of arrival, usually as soon as ship berths, or in quarantine.

PILOTAGE: Vessels approaching port to notify their arrival by Naval Radio Station HCG, 24-hour service, frequency 8476 kHz and 500 kHz. Traffic list broadcast every hour on 8476 kHz.

Advance notice of not less than 12 hours required, addressed to Capuerto Aportuaria Agencia in either English or Spanish with the following details: date, and time of ETA, destination (whether Buoy No. 1 or Puna), maximum draft, cargo details, details of passengers or mail, and if Pilot required.

Pilot Station for Puerto Maritime: Situated in position Lat. 02° 43′ 18″ S., Long. 80° 17′ 30″ W. Pilot boat needs 1 hour to go from Pilot station to Buoy No. 1. Contact by VHF Channel 16, 24-hour service. Pilot boat is wooden, 45 ft. long, black hull, white cabin, with letter "P" on sides. During day carries blue flag with letter "P" and by night has regulation pilot lights.

Pilot Station for River Guayas: Situated in village of Puna. Pilot boat requires a minimum of 30 minutes to move from Pilot station to vessel. Vessels requiring Pilot signal Morse letter "X" by lamp or sound.

Pilot boat has grey iron hull, white cabin with Lancha de Practicos written on both sides. By day carries blue flag with letter "P". By night regulation pilot lights.

ANCHORAGES: *Puerto Maritime:* 1 mile South and 2 miles West of sea buoy in position Lat. 2° 44′ 26″ S., Long. 80° 24′ 44″ W. Min. depth in the area is 35 ft.

Guayas River: Inside area between bearings 180° and 135° from the lighthouse of Punta Mandinga at Puna, 1 mile from the lighthouse.

MAX. SIZE: Max. length for ships entering Puerto Maritime is 650 ft., with a max. draft of 33 ft. Vessels of deepest draft should begin to enter 1 hour before high tide. For Guayas River max. length 600 ft., max. draft 23 ft. 6 in.

HEALTH: Procedure to obtain free pratique is to produce health certificates to port doctor upon arrival. To get free pratique by radio, ship must radio to port doctor any changes in health situation on board since leaving last port.

TUGS: Normally join vessel beyond Buoy No. 80. Tugs are compulsory, also use of their lines is compulsory. Cost of both services is included in total cost of port duties.

BERTHING:

Berth	*Length* (m.)	*Depth* (ft.)	*Remarks*
Marginal Pier	960	31	5 berths
New Port			
Berth 1A	185	33	Bananas,
1B	185	33	General,
1C	185	33	Containers
1D	151	33	Bulk, sugar, grain, vegetable oil

BRIDGES: No bridges that restrict traffic either in Estero Salado nor in Guayas River, but ships that are to berth in village of Eloy Alfaro (Duran) should take into consideration height of telephone lines between Guayaquil and El Islote, minimum height 48 ft.

STEVEDORES: Radio message to ship's Agent will give agency enough data to make all arrangements required for operations of loading/discharging. In Maritime Terminal an average discharge/loading rate of 25 metric t.p.h. per hook.

MEDICAL: If ship requires medical attention, a notice of 12 hours should be given to Agents. Guayaquil Hospital and clinics are available.

TANKERS: Discharge asphalt in Guayas River at a special quay, max. draft 23 ft. 6 in. Discharge of petrol for aviation in Puerto Maritime is to lighters, max. draft permitted is 33 ft.

DENSITY: 1012.

FRESH WATER: Available. Three pipes at each berth delivering at a rate of about 20 metric t.p.h. each.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Capitania del Puerto provides members of the Policia Maritima. Ships to supply watchmen with food.

OPENING/CLOSING HATCHES: Carried out by crew.

CERTIFICATES: All ship's certificates required.

CUSTOMS ALLOWANCES: Each member of crew allowed 600 cigarettes. Each Crew member or passenger allowed 1 litre of wine and 1 litre of spirits.

IDENTIFICATION CARDS: Not required.

CONSULS:

Argentina
Belgium
Bolivia
Brazil
Chile
Colombia
Costa Rica
Denmark
Dominican Republic
Finland
France
Germany (F.R.)
Great Britain
Greece
Guatemala
Haiti
Honduras
Israel
Italy
Japan
Lebanon
Mexico
Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
Philippine Republic
Portugal
Salvador
Spain
Sweden
Taiwan
U.S.A
Uruguay
Venezuela

REPAIRS: All types of deck and engine repairs are possible.

DRY DOCKS: Dry dock with capacity of 3,600 metric tons.

REPATRIATION: Facilities for effecting crew changes and arranging any necessary repatriation.

AIRPORT: Airport is 8 miles from Maritime Terminal and has scheduled international flights.

TIME: Local time is GMT minus 5 hours. There are no alterations during year.

HOLIDAYS: 1st January; Good Friday, 1st and 24th May; 24th and 25th July; 10th August; 9th and 12th October; 2nd and 3rd November; 25th December. Only on the 1st January and 25th December is there no working in port.

POLICE/AMBULANCE/FIRE: For any of these services call 211 (interno del Puerto).

TELEPHONES: Arrangements for placing telephone on board ships on request.

SHORE LEAVE: Allowed.

PURSER'S REPORT: (March 1975)
The government have now issued their own set of papers. These must be made out in sets of seven (7) ie:– Seven Crew Lists. Seven Passenger Lists, Seven Crew Customs Declaration Forms, Seven Cargo Manifests, Seven Dangerous Cargo Manifests (if carried), Seven Lists of Mail (if none – nil returns on sheet), Seven General Declarations. One (1) Maritime Health Form. Seven Stores Lists.

All Forms should be certified by Ecuadorian Consul or friendly Nation at Port of departure.

AUTHORITY: Capitan del Puerto de Guayaquil, Puerto Maritimo.

LA LIBERTAD: 02.12 S. 80.55 W. (See Plan Book)

DOCUMENTS: Port clearance is effected at La Libertad.

The following papers must be ready for presentation to the authorities on arrival:

1 Bill of Health signed by the Master and visaed by the Ecuadorian Consul at port of departure.
1 Ballast Certificate visaed by Ecuadorian Consul at port of departure.
6 copies of Cargo Manifest (if any cargo for the port).
6 copies Bills of Lading.
9 Crew Lists (original visaed by Ecuadorian Consul at port of departure).
9 Passenger Lists for the port (if no passengers state "without passengers"). If applicable, the list should show names, sex, age, nationality, port of embarkation, occupation and whether married or single. Passengers must make a declaration of their luggage on Ecuadorian Form No. 94.
9 Stores Lists.
5 Lists of Crew's personal effects (new articles only).
4 Lists of unaccompanied baggage (if none, state "without them").
4 Lists of Encomiendas (list of small private parcels to be landed in Ecuador – if none, state "without them").
4 Lists of Mail (if none, state "without them").

If there is no Ecuadorian Consul at the port of departure, the documents must be visaed by the Consul of a friendly nation.

PILOTAGE: Compulsory. Pilots boarding in position Lat. 2° 08′ S. – Lat. 2° 10′ S. and Long. 80° 55′ W. – Long. 80° 56′ W. ETA should be given to port 12 hours before arrival. Open roadstead.

ANCHORAGE: No limitations except depth 36 ft.

Vessels proceeding to oil terminal should anchor about 1 mile N.N.E. of the mooring buoys (which are about 15,000 ft. off-shore) where the Port Authorities and Mooring Master board. The anchorage is an open roadstead with sandy bottom.

RESTRICTIONS: *Tankers:* Daylight berthing only.

MAX. SIZE: *Tankers* – LOA 650 ft.
Beam 84 ft.
Loaded draft 34 ft. 6 in. max.
Depth MLWS at mooring is 43 ft.

HEALTH: Vessels arriving from foreign ports should fly appropriate International Code signals to advise state of health and request free pratique. Vessels put in quarantine required to fly signal QL all the time they are in port until Port Health Authority advises to the contrary.

RADIO: ETA messages may be sent by radio to Radio Naval, HCG Guayaquil Radio, 8476 kHz, 500 kHz. Radio Naval would then repeat the message to the Naval Station in Salinas, or to the Telegraph Office. Radio Naval has VHF/RT and Telex.

TUGS: Only tankers require tugs to berth at the buoys. Other vessels work cargo at anchor.

BERTHING: No wharves for large vessels, only for coasters.

STEVEDORES: Arranged by Agent; separate ETA not required.

MEDICAL: If urgent medical attention required, Master should radio details in advance. All facilities available.

TANKERS: The Anglo-Ecuadorian Oil Fields Terminal is located in Santa Elena Bay. Four small marker buoys indicate the seaward end of the submarine pipe-line. An Easterly current usually prevails, rate being from 0.5 to 1.5 knots. There is one 14 in. submarine pipe-line fitted with two 10 in. flexible hoses for connecting to ship. Max. loading rate is about 450 t.p.h, and max. pressure is about 150 p.s.i.

Mooring Master assists in berthing vessels. Vessels are moored port side to, using starboard anchor off the starboard bow and mooring buoys for lines to the port bow and astern. Vessels moored during daylight hours only; however, they may unmoor at any hour of the day or night. Recommended that at least 1 tank of clean ballast be retained on board vessels until mooring has been completed. Ballast will then be pumped overboard. Vessels should be equipped with three 9.5 in. or 10 in. (circ.) – 200 fathom hawsers for use in mooring and 7 rope stoppers each at least 3 fathoms long. The following signals are used in connection with the loading of cargo.

By day: Start loading 2 long blasts of vessel's whistle or siren, 1 red flag hoisted; stop loading 4 long blasts of vessel's whistle or siren, flag hauled down.

By night: Start loading, 2 long blasts of vessel's whistle or siren, 1 red light hoisted; stop loading, 4 long blasts of vessel's whistle or siren, 1 red light hauled down.

To summon the launch, 3 long blasts are to be blown on the vessel's whistle.

DENSITY: 1028

FRESH WATER: Not available.

FUEL: Bunkers available, but have to be requested 72 hours prior to arrival in order to make transport arrangements.

CONSULS: There is no consular representation of any country at La Libertad. The nearest are at Guayaquil.

GANGWAY/DECK WATCHMEN: Available, but not compulsory.

OPENING/CLOSING HATCHES: Can be done by the crew or stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine/spirits per man.

IDENTIFICATION CARDS: Required.

REPAIRS: Anglo-Ecuadorian Oil Fields Company can effect small repairs.

REPATRIATION: Can be effected from port of Guayaquil.

AIRPORT: At Guayaquil, 130 km. away, served by regular airlines.

TIME: GMT minus 5 hours.

HOLIDAYS: January 1st; Carnival; Good Thursday; Good Friday; May 1st; May 24th; July 24th; August 10th; October 9th; October 12th; November 2nd; November 3rd; December 25th.

TELEPHONES: No connections to vessels possible, except at tanker moorings which is direct to loading installation only.

SHORE LEAVE: Permitted.

GENERAL: Dirty ballast or slops not admissible at La Libertad.

AUTHORITY: Terminal Superintendence La Libertad.

MANTA: 00.56 S. 80.43 W. (See Plan Book)

DOCUMENTS:

A. List of documents, 2 copies (Port Authority 1, the latter will sign a copy for Purser).
B. Sailing Permit from last port. 1 copy for Port Authority representative, who will copy the permit and give original to Captain of Port.
C. General Declaration, 5 copies – Health Department 1, Captain of Port 1, Immigration 1, Custom House 1, and Port Authority 1.
The document will contain (see Note No. 4 below):
1. General data on ship, voyage, cargo and passengers.
2. Health Declaration.
3. Stores Declaration.
4. Under remarks – any pertinent item.
Should be signed by Master and ship's Doctor or, if no doctor aboard, by Purser. For further details, see Note No. 3 at end of this Article.
D. List of passengers destination Manta, including list of their baggage, 4 copies – Customs 1, Immigration 2, Port Authority 1.
E. List of Passengers in transit, 3 copies – Immigration 2, Port Authority 1.
F. Crew List (including and indicating any members leaving vessel at Manta), 4 copies – Customs 1, Immigration 1, Captain of Port 1, Port Authority 1.
G. Manifest of Cargo for discharge at Manta including transhipment 4 copies – Customs original and copy, Port Authority 2.
H. Unaccompanied Baggage List including baggage for any member of the crew, who may disembark, 3 copies – Customs 2, Port Authority 1.
I. Mail Manifest, 2 copies – Post Office 1, Port Authority 1.
J. Checking Books, 5 copies, plus 1 copy for each point of possible discharge of cargo from vessels for Port Authority.
K. Bills of Lading, 1 complete set for Port Authority.
L. List of vessel supplies including liquors, cigars, cigarettes, other tobacco products, matches, lighters, clothes, novelties, and provisions will be maintained in Purser's Office for review by Custom House.
M. Tissue Manifest, hatch list and cargo plan. 1 copy of each for Port Authority prior to arrival of vessels. These papers to be sent by air mail as per regulations.
N. Ballast Certificates will be used instead of manifests when vessels do not carry any cargo.
O. General Manifest. This manifest will include all cargo loaded during voyage which will include all cargo in transit – 1 copy. General manifest will be maintained in Purser's Office for review by Custom House, and be accessible for Customs at all times.

Note No. 1: All papers (items A to K) will be delivered to representative of Port Authority who will check them against list of documents to be receipted for Purser. Port Authority will subsequently distribute documents to interested parties as indicated above.

Note No. 2: Port Authority reserves the right to refuse berthing facilities until all documents received. Of course, this authority will be handled with discretion to avoid unnecessary or unwarranted delay to vessels, passengers, and cargo.

Note No. 3: All ship's papers will be filed in Port Authority Office, and authorities noted herein are welcome to inspect them whenever they wish to do so.

Note No. 4: General Declaration should contain the following:

A. Name of vessel, length and registered tonnage.
B. Owners.
C. Voyage number and ports of call on voyage.
D. Total number of passengers aboard.
E. Total tonnage (of 1,000 kilos) of cargo aboard.
F. Total number of passengers for Manta.
G. Total tonnage (of 1,000 kilos) of cargo for Manta.
H. Health Declaration.
I. Stores Declaration that ship's consumable foodstuffs and consumable supplies are under lock and key; that the slop chest, shop, and store-rooms containing liquors, cigars, cigarettes, other tobaccos, matches, lighters, clothes, novelties, sports material, toilet articles, cosmetics, medicines, etc. have been locked and sealed with metallic non re-usable seals with serial numbers. The seals are identifiable by their non-repeat numbers.
All vessels should have these seals aboard and should equip doors and door frames with suitable secure hardware through which seals can be passed. (Model of the form for the above document may be obtained from the Port Authority).

Note No. 5: Baggage listed as cargo should not also be listed as baggage or vice versa.

PILOTAGE: Compulsory. Pilot boat by day will show blue flag at mast head; by night red light 2 ft. 6 in. below mast head light, both visible around the horizon.

Pilot will board at point located at distance of 0.5 miles, 045° from Manta Lighthouse (Lat. 00° 56′ 20″ S., Long. 80° 43′ 02″ W.). He will immediately proceed to conduct ship to inner harbour and dock at assigned pier or anchor in assigned anchorage.

Vessels will not have to anchor, but will reduce speed to steerageway and stop propeller. Lower pilot ladder so Pilot may board safely. Pilot will act as Representative of Port Authority. Other Officials and Representative of steamship Agency will embark once ship has tied up.

Pilotage compulsory for all foreign vessels over 500 tons, with following exceptions:

(1) Fishing craft, yachts, tugs, barges and other craft of less than 500 tons total displacement whose handlers are suitably licensed by Captain of the Port of Manta.

(2) Vessels of the Ecuadorian Navy.

Note: Masters of large vessels and handlers of small craft who do not follow all rules of safety, including Rules of the Road may lose their right to navigate within jurisdiction of the Port Authority and may be subject to additional sanctions.

ANCHORAGES: Free anchorage area located around a point 1 mile from Manta Lighthouse (Lat. 00° 56′ 03″ S., Long. 80° 43′ 01″ W.). Depth 45 ft. Anchorage inside breakwater will be assigned by Pilot.

RESTRICTIONS: No restrictions upon entry. Vessels up to 32 ft. draft may enter at any time of day or night.

MAX. SIZE: Max. permissible length 600 ft., breadth 60 ft., draft 32 ft.

HEALTH: Radio pratique granted all ships in accordance with International Sanitary Regulations. Health documents will be delivered to boarding officer of Port Authority. When pratique granted by radio, not necessary for port doctor to board vessel.

In request by radio for pratique, vessels should give following data 12 to 24 hours before arrival.

A. Date and hour of expected arrival.
B. Number of Ecuadorian passengers.
C. Number of alien passengers.
D. Statement regarding existence or non-existence of communicable diseases aboard.

RADIO: Manta HCM 8372 kHz. Radio telephone 2182 kHz. VHF Channels 5, 6, 12, 16, 24, 25 and 26.

TUGS: A 1,200 h.p. tug, joins vessel in vicinity of pier. Ship's lines usually used. Use of tug for docking and undocking is at discretion of Port Authority.

BERTHING: Berth will be assigned by Pilot at boarding time.

Berthing Facilities:

2 Piers Length 200 m. for vessels with draft up to 10 m. Roll-on/Roll-off facility at one pier.

Marginal Quay, length 150 m., for vessels with draft up to 7.5 m.
Marginal Quay, length 150 m., for vessels with draft up to 5.7 m.
Marginal Quay, length 150 m., for vessels with draft up to 3.8 m.

Cranes: Mobiles cranes with capacity 12 – 35 tons.

Storage Area: 10,000 sq.m. of open storage available.

STEVEDORES: Arrangement for stevedores made by ship's Agent prior arrival.

FRESH WATER: Fresh water available in small quantities.

FUEL: Diesel oil available in small quantities by truck.

FIRE PRECAUTIONS: Regular fire precautions should be taken by all ships. Smoking should be prohibited in any section of the ship used for cargo. No smoking on the weather deck, cargo decks, and the ship's holds, whether cargo being worked or not. Smoking around hatches or at cargo winches must be prevented.

Smoking should be restricted to the passenger section of vessels, and to officers' and crew's quarters where suitable receptacles are available.

Persons including officials can be fined or refused entrance to terminal at discretion of Port Authority for careless or intentional disregard of reasonable fire prevention precautions.

Port Authority reserves right to inspect cargo working sections of vessel, to check precautions against fire, and to determine whether there are any undue accumulations of combustible materials.

Pumps and other fire fighting equipment aboard should be maintained in a state of readiness as long as vessels are in the terminal.

GANGWAY/DECK WATCHMEN: Custom police keep watch at the gangway.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCES: Tobacco, small amounts for personal use while in port. Wine and/or Spirits, wines and liquors by the glass for consumption on board while in port.

CARGO GEAR: Ship should have cargo nets, but Port Authority can provide cargo nets at extra cost.

IDENTIFICATION CARDS: Crew members should have identification cards while ashore at all times.

CONSULS:

Chile: Mr. Marino Concha Richards, Manuel J. Calle 200, Tel: 610-151.
Colombia: Dr. Anibal Ramirez Angel, Tel: 610-989 – Malecon.
Germany: Mr. Jorge Appenzauser, Tel: 611-169.
Italy: Romulo Massari P. P.O. Box 4847. Tel: 610-395.
Panama: Dagoberto Santana Morona.

REPAIRS: No repair facilities available.

REPATRIATION: Repatriation of crew members through Port of Guayaquil.

AIRPORT: Airport with 2,500 m. runway. Flights to Quito at 1050 hrs. on Monday, Wednesday, Friday. From Portoviejo (36 km.) flights to Quito on Tuesday, Thursday, and Saturday. Air taxis on request.

TIME: Local time GMT minus 5 hours.

HOLIDAYS: No movement of cargo within the terminal on 1st May, Christmas Day, or after 2000 hrs. on the 31st December, or on New Year's Day.

POLICE/AMBULANCE/FIRE: Police 610-900; Ambulance 612-014; Fire 610-100.

TELEPHONES: Telephone service can be obtained at Terminal Office, at same rate as public telephones.

SHORE LEAVE: Crew members are welcome ashore.

AUTHORITY: Autoridad Portuaria de Manta.

PUERTO BOLIVAR: 03.14 S. 80.01 W.

DOCUMENTS:

3 Voyage Memorandums.
2 Maritime Health Declarations.
1 Consular Despatch.
1 Port of Origin Certificate.
10 Crew Lists.
8 Stores Lists.
3 Individual Declaration List for each member of the crew.
8 Lists Passengers Disembarking at this port.
8 Lists Passengers in transit.
4 Luggage, Mail and Commissions Lists.
4 Manifest of Cargo Lists.

Documents for Port's Authority should be supplied by Agents:

1. General Cargo Manifest in complete sets (Importation in triplicate, Exportation one set).
2. Bill of Lading, complete sets: Importation (one set), Exportation (one set) at time of sailing.
3. Export Customs House Clearance Document (one set). This document is replaced by the Bill of Lading.
4. Certificate of Ballasting.
5. Request for Mooring Berth.
6. Stevedore's cargo plan per hatch.
7. Muster-roll of cargo.
8. Tally books: 15 copies in Spanish. These must be in accordance with the current Tally Law.

PILOTAGE: Send ETA through Radio Naval of Guayaquil 24 hours before arrival. Pilot will board vessel on the port side 1 mile from the Sea Buoy on arrival and disembark on the starboard side. In case Pilot not available it is recommended to anchor 1 mile from "Punta Jambeli" between the buoy and the lighthouse of Lambeli. Pilot boat is steel, black hull and white cabin, it carries pilot signals in accordance with International Regulations. Service available 24 hours a day. Pilotage is compulsory.

ANCHORAGES: Pilot will indicate recommended anchorage.

RESTRICTIONS: Depths 30 ft. at LW, from 0600 to 1800 hrs. draft allowable 30 ft. From 1800 to 0600 hrs. draft allowable 27 ft.

MAX. SIZE: At Espigon Quay depths alongside 30 ft. inner end to 36 ft. at quay head.

HEALTH: On the arrival of vessel the authorities come on board. If there are no illnesses aboard, the doctor gives free pratique. In case of any illness, Master should advise by radio and the vessel waits in quarantine for the visit of Port Health Doctor.

RADIO: Radio Naval of Guayaquil, Radio Naval of Puerto Bolivar VHF available call pilot station on Channel 16, effective reception 30 miles.

TUGS: 2 tugs available one at 1,200 h.p. and one of 500 h.p Usually, ship's lines are used. This service is free.

BERTHING: At Espigon Quay should be carried out within 1 hour before or after slack water. Tidal currents of 1 – 3 knots in dry season and 3 – 5 knots in Winter are at right angles to berthing face of the quay.

Wind: From 000° in the morning, speed 3 – 5 knots. From 210° in the afternoon and night, speed 3 – 5 knots.

STEVEDORES: Agents take charge of gangs.

MEDICAL: Hospitals, clinics and dental surgery in Machala, 6 km. from the port. There is also a medical service for vaccination.

DENSITY: Salt water.

FRESH WATER: Only available by tanker truck, capacity 7 tons.

FUEL: No fuel in this port. In case required one has to contact Guayaquil and they send it by small tankers.

GANGWAY/DECK WATCHMEN: The Agent names 1 or 2 watchmen for the vessel besides the Maritime Police and Coast Guard.

OPENING/CLOSING HATCHES: Carried out by shore gang supervised by someone on board.

CERTIFICATES: Vessel's Register and Tonnage Declaration required.

CUSTOMS ALLOWANCES: 100 cigarettes per person and 1 bottle wine or spirits per person.

IDENTIFICATION CARDS: Not necessary.

CONSULS: Consul of Peru, Tel: 920608.

REPAIRS: There are no facilities in this port.

REPATRIATIONS: The Immigration Office can arrange.

AIRPORT: Distance to the airport is 6 km. It has 6 daily flights in connection with Guayaquil.

TIME: GMT minus 5 hours; there is no change.

HOLIDAYS: No work from 1700 hrs. on 24th December till 0800 hrs. on 26th December, and 1700 hrs. on 31st December till 0800 hrs. on 2nd January; Carnival; Maundy Thursday; Good Friday and Saturday; 1st May; 24th and 25th July; 9th October.

POLICE/AMBULANCE/FIRE: There are services.

TELEPHONES: Can be connected to the vessel.

GENERAL: When the vessel is anchored, landing service is done by launches. They are called by 1 long whistle and 2 short ones. This service works 24 hours a day.

At Night: A flashing light is to be used to call launches and not the whistle.

SHORE LEAVE: Passengers or crew do not need any special permit to land.

DEVELOPMENTS: A marginal pier for general cargo is being built. Length of pier 360 m.

SHIPMASTER'S REPORT: 1978

Fresh Water: Water is available at anchorage by a barge of 48 ton capacity, at a cost of 120 Sucre (US $4.80) per ton. For ships berthed alongside, water is delivered by modern trucks of 7 or 8 ton capacity, at a cost of 70 Sucre (US $2.80) per ton.

Surveyor: A non-exclusive surveyor acting for Lloyds, Det Norske Veritas, and the Japanese Classification Society, is based at Guayaquil. Loadline survey and engine survey work done. He travels by air from Guayaquil (45 minutes).

Watchmen: One Customs and one Naval guard are obligatory, and should be fed and provided with room to sleep. Ship's crew should be employed day and night, one as accommodation watchman and one as deck watchman. Store-rooms should be locked up, and all loose equipment and lifeboat equipment stowed in lockers or accommodation. Only one accommodation door should be left unlocked, and a ship's watchman posted there, day and night.

Banana Cargoes: Loaded through side doors from the quay or from barges, or both together. No cranes, derricks or mechanised equipment used. About 400 men employed at one time. Very fast.

Casual Labour: This is freely available for painting hull, cleaning engine room, etc. The usual rate of $1 per hour with double for the foreman is now rising, some ships paying $1.50 during 1978. Overtime after 6 p.m., usually double. Possibly negotiable.

PURSER'S REPORT: See "Quayaquil".

AUTHORITY: Port Captain.

Egypt, Arab Republic of

GENERAL

NAVIGATION REGULATIONS:

The following rules for ships navigating in the Gulf of Suez have been approved by IMO.

1.1 Ships should take into account that crossing traffic may be encountered in the traffic junction Eastward of Ain Sukhna and in the precautionary area off Ras Shukheir, and should be in a high state of readiness to manoeuvre in these areas.

1.2 Exceptional care is needed, when overtaking another ship within a lane, not to enter the separation zone or force the overtaken ship to do so.

1.3 Ships navigating in the Gulf of Suez are requested to keep continuous listening watch on the Suez Gulf Traffic Information Broadcasts and report any aids to navigation which are malfunctioning or are out of position and which are not already included in the Suez Gulf Traffic Information Broadcasts.

2.1 All ocean ships should have their radar in effective use by day and night throughout the passage between Shaker Island and Suez Port as an aid to achieving maximum feasible lane conformity and avoiding risk of collision. Particular care is required for strict adherence to the confines of relevant traffic lanes.

2.2 Ships preceding South from Suez should be alert for tankers heading for the Sumed Oil Terminal off Ain Sukhna.

2.3 Northbound tankers heading for Sumed Oil Terminal should report their intention of using the traffic junction off Ain Sukhna on the appropriate frequencies.

2.4 All ships North and Southbound when navigating through the precautionary area off Ras Shukheir or in the vicinity of the July oilfield should avoid overtaking in the traffic lanes in these areas.

2.5 All ships including service and supply craft serving the oil workings in July, Ramadan and Morgan oilfields proceeding in and out of Ras Shukheir oil terminal, should only cross the South and Northbound traffic flow through the precautionary area off Ras Shukheir. Within the precautionary area local rules relating to crossing traffic apply.

2.6 Tankers leaving the Ras Shukheir oil terminal and intending to join the Northbound traffic lane should only do so when no through Southbound traffic is in the vicinity and should always report their movements to other ships beforehand on VHF.

2.7 Ships anchored in the designated waiting area for Ras Shukheir should ensure that they are never less than 0.25 mile from the edge of the Southbound traffic lane and should pay special regard to their correct light signals for ships at anchor. They should also show their deck lights.

AIN SUKHNA: 29.32 N. 32.24 E. (See Plan Book)

Also see "General" before first port.

LOCATION: Ain Sukhna Sea Terminal is situated in the Northern end of the Gulf of Suez.

The position of the sea terminal is: Lat. 29° 32′ N., Long. 32° 24′ E. As a reference point, there is a light which is exhibited from a metal structure standing close to the seaward side of an old abandoned lighthouse on Ras Abou Darag.

DOCUMENTS: All vessels calling at Ain Sukhna have to deliver directly their official documents, as indicated below, to SUMED's Port Authority:

Certificate of Registry.
Load Line Certificate.
Safety Certificate.
Derat Certificate.
Radio Certificate.
Suez Canal Tonnage Certificate when applicable.
Panama Canal Tonnage Certificate when applicable.

Vessel's official documents, after being reviewed, will be handed to the vessel's Master after discharging and before vessel departs from SUMED's port.

PILOTAGE: SUMED's Mooring Master and his assistant board the tanker 2 miles Southeast of buoy "S2".

Notifications: ETA messages should be sent by cable via Alexandria/Port Said Radio on leaving previous port. Cables should be prefixed "For urgent delivery send via Telex 54108 or 54033 SUMED UN" and be confirmed 72, 48 and 24 hours prior to arrival. (Day and Night berthing and operation). Arrival draft should be indicated.

LOCATION OF BUOYS: (SBMs)

S1:	Lat. 29° 35′ 16″ N.	Long. 32° 23′ 35″ E.
S2:	Lat. 29° 34′ 12″ N.	Long. 32° 22′ 42″ E.
S3:	Lat. 29° 35′ 17″ N.	Long. 32° 22′ 16″ E.

The 3 SBMs are painted orange and have the following characteristics:

Lights: A flashing light, activated by an automatic photo-electric sun switch.

Light frequencies are as follows:

SBM No. 1	Morse Code A
SBM No. 2	Morse Code B
SBM No. 3	Morse Code C

Fog Horn: An acoustic signal with an approximate range of 2 miles.

Hose Line Marker Beacons: 3 flashing lights with the following characteristics are fitted to the floating hose strings to mark the line during darkness.

Flashing character 1-10 at 20-60 flashes/minute activated by an automatic photo-electric sun switch. Lens: white.

Radar Reflector: Each buoy is provided with an octahedral radar reflector constructed in stainless steel with a diameter of 0.5 m. installed on top of the rope guard.

ANCHORAGES: Tankers can anchor to the S.E. of the buoyfield.

RESTRICTIONS: *Maximum weather conditions for occupying SBMs:*

The SBMs are designed to accommodate tankers up to the following weather conditions.

Wind velocity (knots)	35 (65 km./hr.)
Maximum tidal range	2.0 m.
Maximum wave height	3.4 m.
Maximum surge/seiche conditions	0.5 m.
Current: Surface	2.0 knots.
Seabed	1.0 knot.

The above conditions are not relevant to the safety of the ship but to the safety of the buoys. Consequently the Mooring Master shall have the authority to decide whether the ship should remain moored or vacate the buoy due to adverse weather conditions.

MAX. SIZE: The three berths are spaced one from the other so that each has:

Mooring Area Radius: 410 m. for S1 and S2 (accommodates vessels up to 285,000 d.w.t.); 320 m. for S3 (accommodates vessels up to 13,000 d.w.t.); Manoeuvring Area Radius: For S1 and S2, 1,220 m.; For S3, 915 m.

Water Depth and Draft Limitations:

For S1 and S2:	85 ft. minimum water depth
	75 ft. maximum draft
For S3:	65 ft. minimum water depth
	55 ft. maximum draft

HEALTH: Vessels proceeding to Ain Sukhna must be in possession of the following documents:

(a) Maritime International Declaration of Health.
(b) Valid Derat or Derat Exemption Certificate.
(c) Valid Smallpox Vaccination Certificates for all passengers and crew members.
(d) Certificates of inoculation against any communicable diseases prevailing at the Ports of departure.

Masters are required to immediately notify SUMED by cable in the manner outlined in "Radio – ETA" in case of any epidemic diseases or illness onboard while the vessel is bound for Ain Sukhna. The same message is to be conveyed to the terminal as soon as an HF or VHF contact is established, at least 6 hours before arrival.

RADIO: *ETA:* In order to avoid undue delays it is essential that Masters of vessels proceeding to Ain Sukhna terminal cable their ETAs to "SUMED" Alexandria.

The cable to be prefixed quote "to be conveyed via telex (54108) or (54033) SUMED UN operations office-oil movement" unquote.

ETA notifications to be sent as follows:

Immediately upon sailing from loading port/s
In case of a change in ETA exceeding 6 hours
72, 48 and 24 hours prior to arrival.

Confirmation of ETA: An additional contact can be made with the Ain Sukhna Terminal on HF 2182 kHz 24 hours before arrival.

Moreover, Masters are required to contact the terminal on VHF 6 hours before arrival on Channel 16 (or preferably Channels 78 and 79 if available).

Information from the vessel: All vessels proceeding to unload their cargoes at Ain Sukhna are required to convey the following information to SUMED.

(a) Immediately upon sailing from loading port/s vessel is to cable, in the manner outlined in "Radio – ETA" the following information:

(i) ETA (in GMT) and expected arrival draft at Ain Sukhna, vessels are requested to arrive even keel.
(ii) All B/L data and ship's figures at loading port/s, stating quantity of free water on board after loading.
(iii) Whether the vessel loaded on top of slops stating grades of crude that were commingled with residues, quantity and API of contents of slop tank/s.
(iv) If the vessel is loaded with more than one grade of oil, Master is requested to confirm ability to unload according to the sequence agreed upon with the shipper (vessel's owner or charterer as the case may be).
(v) SUMED is to be immediately notified in the case any repairs are required that could delay commencement of discharging.
(vi) Estimated time for unloading the cargo if no restrictions are imposed by shore.

(b) On arrival at Ain Sukhna the following written information is to be handed to SUMED's Mooring Master:

(i) Whether vessel equipped with inert gas system. Vessels arriving with gas inerting blankets should, on arrival depressurise their system sufficiently to allow visual sampling and ullaging of cargo tanks. Upon completion of ullaging, pressurisation of inerting system shall be resumed and maintained throughout discharge.
(ii) Whether the vessel has external impressed cathodic protection.
(iii) Vessel's readiness to connect 2×16 in. hoses ASA 150.
(iv) The pressure which the vessel expects to maintain at the ship's rail and which is required to be a minimum of 100 p.s.i. unless otherwise specifically requested in writing by shore.
(v) Whether vessel requests to perform crude washing and in the affirmative the relevant check list should be filled in by the Master. See "Crude Oil Washing" under "Discharging".
(vi) Full names and addresses of Owners, Managers and Charterers of the vessel and their Agents in Egypt if any.
(vii) Whether the tanker's Owners/Bareboat Charterers are members of a P & I club stating name and address of such club, if available.

Information from Terminal:

The following information will be given to the vessel upon arrival at the anchorage area or when SUMED's Pilot boards the vessel:

(i) Any expected pre-mooring delays and their likely duration.
(ii) Any special mooring instructions.
(iii) Details of any restrictions on discharging rate.

All such restrictions and their duration will be confirmed in writing by SUMED.

VHF: Channels 16, 78 and 79.

TUGS: Tug "Sukhna" 3,200 h.p. with fire fighting and with anti-pollution equipment is available as required.

Mooring Launches: 500 h.p. mooring launches assist in mooring and hose operations.

BERTHING: Ain Sukhna Sea Terminal consists of 3 sea berths all of which are single point mooring buoys (SBMs).

2 large buoys for vessels up to 285,000 d.w.t. and 1 small buoy for vessels up to 120,000 d.w.t.

Subject to SUMED's prior approval and acceptance in each case the buoys can accommodate vessels larger than those specified above within the following limits:

Large Buoys (S1 and S2)	up to 350,000 d.w.t.
Small Buoy (S3)	up to 200,000 d.w.t.

maintaining all other length and draft limitations. Each of the larger buoys is connected to shore by a submarine line 48 in. (1.22 m.) in diameter and approximately 8 km. in length.

The small buoy is connected to shore by a submarine line 42 in. (1.067 m.) in diameter and approximately 5 km. in length.

Ropes: All SBMs are equipped with twin 15 in. circumference nylon ropes each 180 ft. long ending with a 20 ft. chafing chain 2.3125 in. diameter. A support buoy is connected to the chain.

The port side mooring rope has a 350 ft. polypropelene 10 in. pick-up rope with a 3ft. soft eye at the end.

The starboard side is the same but the pick-up rope is only 150 ft., 10 ft. or 12 ft. snotters with shackles are used for connecting the chafing chain to ship's bollard.

Mooring Master Duties: When the Mooring Master boards he will advise the ship's Master or officer in charge of the bridge on the approach to the berth, arrangements for mooring and unmooring, connecting and disconnecting of the hoses, and all other operations within the berthing area. The Mooring Master will submit and receive from the Master all forms, documents and papers required, to be filled and signed or received by the Master.

Adequate Lighting: There must be adequate search lights rigged on both wings of the bridge when mooring at night to facilitate running lines to the buoys.

VHF: The Mooring Master will be in direct charge of the portable VHF ship to shore radio telephone communications.

Mooring: Pick up from the mooring boat:

2 wire rope snotters of 12 ft. or 20 ft. length (to suit tanker bollard location).

Weight of 12 ft. 80 kg	23.8 in. diameter
Weight of 20 ft. 135 kg.	23.8 in. diameter

2 bow shackles 55 tons SWL (weight of shackle = 43 kg.) or 2 bow shackles 75 tons SWL (weight of shackle = 68 kg.) for tankers over 130,000 d.w.t.

Tool box.

Move these items to bow.

Slip the soft eye of the snotter onto bollard having a good lead to forward fairlead. The forward winches should be tested, drained and be in good working order.

Ensure that both anchors are secured by stoppers in the hawse pipe. Anchors must not be dropped at the berth.

Prepare messenger line, (about 10 in. circumference × 500 ft. length polypropylene), and pass through the forward fairlead and lower as directed by Mooring Master, starting at the port side.

The mooring boat will fasten this messenger to the 10 in. 350 ft. polypropylene pick-up line on the buoy mooring system.

Upon the boat's signal, heave away until the chafing chain is in the fairlead or Panama lead with the support buoy close outside.

Shackle the free end of the wire snotter to the open end link of the chafing chain.

Ease back on the pick-up line until the weight falls on the bollard wire snotter.

Should the vessel have a "SMITS" type towing bracket, release the pin, install the open link and lead the pick-up so that the end link of chain is directly fastened to the open link with the bow shackle.

Same procedure will be adopted to the starboard polypropylene pick-up rope of 150 ft. length connected to the buoy mooring system.

Mooring Sequence:

Prompt Berthing: SUMED will make every effort to moor ships arriving according to agreed schedules as promptly as operational circumstances permit.

Notice of Readiness: To be tendered when vessel arrives at Ain Sukhna anchorage area provided that vessel is ready in all respects to unload her cargo. NOR will be accepted according to SUMED's agreement with the relevant shipper.

Arrival Time: Arrival time will be considered at the time the vessel anchors.

Cargo Operations: Vessel moored to the SBMs must limit their stay to the allowed berth occupancy time stipulated in the transportation agreement between SUMED and the relevant shipper.

Unless vessel sizes are otherwise classified in the said agreement the allowed berth occupancy time is as follows:

MDWT	Hours
More than 285	52
Over 240 to 285	42
From 200 to 240	36
Less than 200	28

Delay due to weather: In the event that berthing delayed on account of adverse weather conditions the vessels will maintain their position in line.

Port Closure: Should vessels be requested to vacate the berth on account of adverse weather conditions closing the port, they shall keep in contact by VHF with the terminal in order to be readily available for re-entry as soon as the terminal so requires, after weather conditions permit.

Port Re-opening: When the port is re-opened discharging will recommence according to the firm schedules agreed upon with SUMED's shippers.

Vessel refusal: SUMED reserves the right to decline to berth a specific vessel should it consider that such vessel's condition or facilities are unsafe.

Unmooring: Take the weight of the moorings on the pick-up starting with the starboard side first, using windlass. Unshackle the wire snotter (or unpin the "SMITS" brackets).

Slack the pick-up until the support buoy is in the water. Pay out the pick-up line (as ship clears from the berth). Return the wire snotters, bow shackles and tool box to mooring boat prior to Mooring Master's departure.

The tug and mooring launches will be in attendance.

HOSES: SBMs No. 1 and 2 contain twin crude floating hose strings each 297.2 m. (975 ft.) in overall length consisting of:

23 hoses	24 in. × 35 ft.
1 hose	24 in./20 in. × 35 ft.
1 hose	20 in./16 in. × 35 ft.
2 hoses	16 in. × 35 ft.
1 hose	16 in. × 30 ft.

SBM No. 3 contains twin crude floating hose strings each 243.9 m. (800 ft.) in overall length.

Each consists of:

19 hoses	20 in × 35 ft.
1 hose	20/16 in. × 35 ft.
2 hoses	16 in. × 35 ft.
1 hose	16 in. × 30 ft.

All tail hoses are 16 in. in diameter and the gear attached to each of the 16 in. crude oil hose tails consists of a lifting eye, butterfly valve, spool piece with camlock and light weight blind flange.

The camlock is suitable only for connections with tanker manifold flange of 16 in. ASA 150.

Quick Release Safety Couplings: Quick coupling (Camlock) are connected at each hose end and they will be used as follows:

In case of emergency the butterfly valve shall be immediately closed and the quick coupling immediately disconnected.

Hose Connecting and Disconnecting: The connecting and disconnecting of cargo hoses shall be performed by the crew of the vessel under instructions from SUMED's Mooring Master.

Preparations: The tanker crew are required to lift 2×16 in. crude hose strings and connect them to the vessel's port side manifold.

To avoid delays the following items should be prepared prior to berthing, otherwise the vessel will not be considered ready to discharge.

3×16 in. standard 150 ASA flange connections in position on selected lines for discharging crude oil.

Port derrick with a minimum 10 ton SWL rigged for maximum height and load lifting. The derrick shall be guyed to plumb the vessel's rail-hose bolster bar at the vessel's manifold.

If possible, the topping lift of the boom shall be on its own winch. All winches shall be tested, drained and in ready running condition.

Drip trays, sand bags, dispersant and fire fighting equipment in position.

A steel basket to contain tools, gaskets, nylon lifting slings and other equipment for lifting on board from the mooring boat.

Equipment to be Onboard Before Berthing: In order to expedite the connection of the hoses the following equipment must be available.

2 polypropelene messenger lines
(about 10 in. circumference 500 ft. long).
Sledge hammer.
Large crowbar.
Large marlin spike.
Large flashlight.
Bags of sand.

Manifold on the port side must be used:

All manifolds to be ready with 16 in. flange ASA 150.
Hose derrick rigged.
Derrick fall fitted with cargo hook 10 ton SWL.
Heaving line.
2 × 1-1-2 ton pullers.
Copper hammer.
Steel spike.
Spare bolts and 16 in. gaskets.
Nylon lifting slings.

DISCHARGING:

Terminal Design: The design of the discharging terminal is based on the following flow rates with crude oil characteristics as follows:

Viscosity = 17 cst
Specific gravity = 0.867 kg/cu.cm.

SBMs No. 1 & 2	Max.	12,500 tonnes/p.h. 200 p.s.i.
	Min.	7,400 tonnes/p.h. 100 p.s.i.
SBMs No. 3	Max.	7,400 tonnes/p.h. 120 p.s.i.
	Min.	5,900 tonnes/p.h. 100 p.s.i.

Inert Gas System: Vessels equipped with inert gas system are to depressurise tanks before berthing in order to allow for sampling and ullaging upon arrival and after completion of discharge to check remainders on board. Pressurisation of inerting system should be resumed as soon as ullaging and sampling are completed and throughout the discharge.

Crude Oil Washing: COW is usually acceptable if the ship can maintain an average flow rate of no less than 7,400 tonnes/p.h. (100 p.s.i. at ship's rail throughout discharging). However, COW is subject to the terminal's approval depending on both operational circumstance and if this operation has been previously carried out by the vessel.

When vessel requests permission to perform COW the Master must respond in writing to the "Crude Oil Wash Checkoff List".

COW of slop tank is prohibited.

Crude Oil Wash (COW) – Checkoff List: Vessels requesting permission to perform crude oil wash while unloading at Ain Sukhna, are requested to respond to the following checkoff list:

Inert gas system is fully operational and tested.

Each tank will be positively pressurised and method of recording pressure will be available.

Each tank will be kept below 8% oxygen before and during operation.

Inert gas system flue gas oxygen content will be continuously monitored and maintained below 8% oxygen.

Oxygen alarm in cargo control room set to give visual indication when to abort crude washing.

Pressures in cargo tanks are available to vessel's control room personnel.

Washing systems have permanent steel pipework and will be pressure tested to 10 to 15 p.s.i. above expected working pressure but to minimum of 150 p.s.i. prior to use.

All tank openings are sealed and remote tank gauging system is operational.

All necessary throttling of discharge for crude spraying will be done on vessel's valves.

There is a responsible designate person in charge of operation. (Give name.)

Effective communication will be maintained between vessel and shore.

Water will not intrude into the crude wash cycle.

Washing to be commingled and discharged at the same time with the rest of the cargo.

Previous crude wash exprience of key personnel is (list).

Tanks crude washed last 2 voyages are (list).

Any additional vessel requirements or comments.

Emergency Communication: If ship-to-shore communication fails the ship's whistle shall be sounded continuously. Discharging shall be immediately stopped and will not be resumed until communications have been re-established.

Overside Lighting: During night discharging sufficient overside lighting must be provided to readily detect any oil spill so that immediate appropriate action may be taken.

International Code of Signals: During discharging operations the following signals shall be displayed:

By Day : The International Code flag "B".
By Night : A red light visible all round the horizon for distance of at least 2 miles.

Unloading Procedures: Upon being informed by the vessel's Master or responsible officer that the vessel is ready to start discharging, the Mooring Master will contact the Terminal Control Room to co-ordinate the commencement of unloading in accordance with the terminal's instructions.

The control room operator will normally give a "standby warning" by VHF approximately 10 minutes before the shore tanks are ready to receive cargo.

When the request to commence discharging is received the Mooring Master will ensure that discharging commences at slow speed. This starting procedure will always be adhered to.

Discharging will commence utilising 1 pump only with circulating system and when it has been confirmed that there is no significant rise in pressure on the discharging line which could indicate a blocked or closed valve on the shore or ship's discharging system, the crude oil will be discharged at the steady operating flow previously agreed upon.

Should there be any significant rise in pressure, discharging must be immediately stopped. The ship will be advised to check the on-board systems, take any necessary remedial steps and inform the terminal's control room.

At the same time the underwater and floating hoses should be checked to ensure that there are no obstructions.

Should the Master be requested to increase or decrease the cargo discharging rate this should be promptly implemented provided the vessel's pumps are capable of an increased rate.

SUMED may allow vessels to simultaneously ballast while unloading provided they are equipped to properly segregate the ballast and avoid any possible commingling with the cargo. Pumping ballast water into the sealine is strictly prohibited.

Any suspension and subsequent resumption of discharging of cargo must be logged both ashore and in the "Tanker Time Sheet".

All events regarding mooring, commencement, termination of unloading, stoppages, if any, and unmooring are both logged and recorded ashore at the terminal's control room as and when they are received from the Mooring Master.

These events shall jointly be logged in the Tanker Time Sheet by the vessel's Master and SUMED's Mooring Master.

Vacating Berth: Vessels shall vacate berth immediately after disconnection of hoses, allowing the least possible time to take ballast if essential for the safe manoeuvering of the vessel while vacating the berth.

Emergency Shut-Down: In case of emergency such as fire, sudden deterioration of sea and weather conditions, failure in ship to shore communications, etc, the discharging operations must be immediately suspended at the request of the Mooring Master. The ship's discharging pumps must be stopped immediately, the butterfly valves of the floating hoses and the manifold valves must be closed.

Depending upon the reasons causing the emergency, the ship's Master and Mooring Master will decide whether or not to disconnect the hoses and vacate the berth. In case of dispute the final decision will be taken by the Mooring Master.

Sampling: Representative samples of the cargo will be taken either from the vessel's cargo tanks or from the online automatic samplers.

The samples will be divided into 3 equal portions of about 1 gallon each, one portion will be handed to the quality control laboratory, the second to the ship's Master (sealed by SUMED) and the third retained by SUMED for 60 days (sealed by the Master).

The ship's Master will sign a receipt on receiving the ship's sealed and stamped container of the sample.

MEDICAL: Neither medical nor hospital facilities are provided by SUMED. In case urgent medical assistance is required the vessel should contact SUMED's Harbour Master by VHF radio. Private doctors and facilities are available at Suez.

REPAIRS: Masters of vessels discharging at Ain Sukhna Terminal are instructed that under no circumstances may engines be shutdown for repairs whilst their vessel is moored to the SBMs. There are no facilities at Ain Sukhna Terminal for repairs. Repair facilities are available at Suez.

It is emphasised that all vessels at the SBMs must be prepared to clear immediately on instructions from the Mooring Master.

CONSULS: Consular or diplomatic representatives for most maritime nations are represented in Cairo.

REPATRIATION: Crew changes are only permitted in cases of emergency.

SHORE LEAVE: There is no shore leave for personnel of vessels whilst at Terminal.

WEATHER:

Climate: The climate in the Ain Sukhna area is generally good. Summers are hot and dry and winters are relatively cool.

The visibility is usually excellent with few sand storms and infrequent fog. Sub-zero temperatures are unknown and there are very few rain squalls.

Summary of Weather Statistics (1884 – 1967):

Average rainfall year	0.8 in.
Mean maximum temperature	84°F (29°C)
Mean minimum temperature	62°F (16.7°C)
Extreme maximum temperature	111°F (44°C)
Extreme minimum temperature	35°F (1.7°C)
Average relative humidity	60%

Winds: The prevailing winds at Ain Sukhna are from the N.W. throughout the year.

Tides: The tidal range is up to a maximum of 7.4 ft.

Waves: The estimated characteristics of the 100 year extreme waves are:

Maximum height	12.0 ft. (3.7 m.)
Maximum crest elevation	11.0 ft. (3.3 m.)
Period	7.5 secs.
Length	280 ft. (85 m.)
Speed	22 knots (41 km./hr.)
Direction from	North

Tidal Streams: At Ain Sukhna the tidal streams set parallel to the coast line Northwards on the flood tide and parallel to the coast Southwards on the ebb tide. Maximum rate is 0.5 knots (0.9 km./hr.) at the surface.

Currents: There is no fixed current in this area and any flow is caused entirely by the prevailing tidal stream and winds.

Sea Salinity: The Red Sea and Gulf are extremely saline and salinity is around 40,000/50,000 parts per million.

Sea Temperature: The surface temperature of the sea ranges between 66°F (19°C) in February and 80°F (26.7°C) in August.

GENERAL:

Navigation: When entering, manoeuvering or leaving the Port Limits of Ain Sukhna, the Master has to conform with the conditions setforth in this Manual and has to adhere to the 1972 International Regulations for preventing Collisions at Sea which will be complied with at all times.

The Master guarantees that his vessel fulfils all navigational and worthiness conditions in particular those required for vessels carrying dangerous cargo, (crude oil) in accordance with the provisions setforth in the Appendix for vessels carrying Dangerous cargo annexed to Rules of Navigation of the Suez Canal Authority to the extent that such provisions are applicable.

Master should submit the respective certificate and declarations whenever required in this respect.

Helicopters (available in emergencies): Should the services of a helicopter be required by SUMED for any purposes whatsoever the vessel will be given a minimum of 30 minutes warning notice before the helicopter's approach in order that cargo operations can be stopped and all tanks and vents closed.

A responsible officer should be on deck to assist the helicopter in making the approach to the vessel. Although the safety of the helicopter remains at all times the responsibility of its pilot, helicopter services shall not be employed in any event without the express prior consent of Shipper and vessel's Master.

Supplies: Stores and supplies are available through an Agent and can be delivered from Suez to Ain Sukhna anchorage area after unloading but entirely at the vessel's own risk.

Government Officials: A.R.E. officials, such as Customs Director, Quarantine Officer and Immigration Officer are stationed at Ain Sukhna. Should Customs guards be stationed on board vessels whilst moored it is expected that vessels will extend all courtesies to them and or other officials while on board.

Ship's Readiness: This terminal is an open roadstead and therefore, during the time a ship is moored, the engines must be ready with full power for immediate use.

Vessels at berths must clear immediately upon advice of the Mooring Master or as directed by SUMED's terminal superintendent. Ship's personnel should be at their respective stations at all times during mooring, unmooring and cargo transfer operations.

Courtesy Flag: All vessels are required to fly A.R.E. Ensign on the foremast during daylight hours.

Quarantine Regulations: The rules governing quarantine regulations are the same as for Suez.

Unauthorised Craft: The presence of unauthorised craft alongside is extremely hazardous.

SUMED prohibits the boarding of individuals other than those authorised to do so in the bona fide conduct of the vessel's operation. No unauthorised person is allowed to board the vessel whether at anchorage or while moored.

Contraband: SUMED prohibits unauthorised craft from coming alongside vessels. To avoid the possibility of undesirable items getting aboard vessels, it is requested that Masters discourage craft coming alongside whilst the vessel is in the terminal.

AGENCY SERVICES: Not required under normal circumstances.

TIME: GMT plus 2 hours.

AUTHORITY: Arab Petroleum Pipeline Company (Sumed Un).

Headquarters: 9 Amin Yehia St., Zizinia, Alexandria. *Tel:* 61579, 64138, 64139. *Telex:* 54295, 54380 Sumed Un.

Central Operations: 16 Syria St., Roushdt, Alexandria. *Tel:* 42975, 43940, 44939. *Telex:* 54108, 54033 Sumed Un.

ALEXANDRIA: 31.09 N. 29.53 E. (See Plan Book)

DOCUMENTS:

4 copies of Crew List.

Complete set of Manifests covering all cargo on board showing names of shippers and consignees.

4 copies List of passengers in transit.

Landing cards for passengers landing finally in A.R.E. and for those landing in A.R.E. in transit.

4 copies List of passengers finally landing in A.R.E. (if any) together with their addresses in A.R.E.

Deck log books showing date of last call at a A.R.E. port, completed up to the time of arrival.

For Quarantine: Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

1 Crew List and 1 Passenger List.

Derat Certificate should be handy for inspection.

Clearance from Last Port.

For Immigration Officer:

Arrival Immigration Form, duly completed.

1 Passenger List.

List of Passengers finally landing, in duplicate.

Crew List.

Valid passport with entry visa is required for landing in A.R.E. for passengers landing. Emergency visa can be granted on arrival if so required.

For Customs Use:

Bonded Store List, in duplicate.

Crew List and passengers' List in duplicate, showing rate of consumption of each.

PILOTAGE: Compulsory. Pilot boards off harbour entrance. International code signals used.

Vessels are not to proceed from the waiting area (Lat. 31° 12.6′ N., Long. 29° 44.5′ E. with radius of 1.5 miles) without a Pilot onboard.

RESTRICTIONS: Entrance channels 36 ft. depth, being dredged to 50 ft. Arriving vessels should keep 50 miles offshore between sunset and sunrise.

MAX. SIZE: Up to 34 ft. draft.

RADIO: Alexandria Radio, call sign SUH, operating 24 hours daily on 444, 500 and 8578 kHz and between 0600 to 1800 GMT on 12,974 kHz. Also harbour VHF Channel 16.

HEALTH: On entering, vessels must hoist the International Quarantine Signal for compulsory quarantine. Any sickness must be reported to the doctor. The Quarantine Doctor meets ships whilst entering the port and ships are boarded in turn.

In the event of a vessel arriving from a port that has been internationally declared infectious and the incubation period has not yet expired at the time of the ship's arrival at an A.R.E. port, the vessel is put under compulsory Quarantine, moored at an isolated berth and no shore contact is allowed. Nevertheless the ship can still carry out her normal operations on condition that all shore personnel are holding valid vaccination and/or inoculation certificates issued by the Quarantine Administration. The ship's personnel should also carry International Vaccination and/or Inoculation Certificates. Final landing passengers, not carrying such certificates, will be landed under Quarantine supervision and will be kept isolated at the lazarette until incubation period is over.

Pratique may be granted prior to ship's arrival provided the following conditions are adhered to:

(1) The vessel must be a regular liner known to the Quarantine Authorities and have a doctor on board.

(2) Details shown on the Quarantine Statement should be wirelessed to the Quarantine Authorities 24 hours prior to ship's arrival.

(3) Masters of vessels must declare before their arrival any accidents, which might have taken place on board prior to the arrival in port.

(4) The ship must not have called at any infected port.

TUGS: 5 tugs available up to 1,200 h.p.

BERTHING: Alongside quays in depths up to 34 ft.

Refrigerated cargoes should be direct delivery.

Ro/Ro facilities available.

Cement to silos and bagged in heavy cloth (no paper bags permitted).

Coal: Discharged at Berth Nos. 63 and 64. Max. draft 33 ft. 4×25 ton cranes. Rate 10,000 tonnes per day.

TANKERS: Petroleum Basin: in West part of Outer Harbour, Berth Nos. 3 and 4, depth alongside 38 ft., max. length 700 ft., draft 34 ft. Berth Nos. 3 and 4: in East part of Outer Harbour. Stern to moorings.

It has been reported that tankers are required to take on ballast in excess of that deemed to be necessary by the Master, even in fine weather. One Master was ordered to bring his forward draft to 21 ft. Once the vessel was alongside a charge was made for deballasting the vessel.

FRESH WATER: Available by barge, and alongside most quays.

FUEL: Available by barge.

MEDICAL: All facilities available. International Vaccination Certificates required.

REPAIRS:

Alexandria Shipyard: Builds vessels up to 40,000 tons. One drydock capacity 85,000 d.w.t., cranes with up to 30 tons capacity. One drydock capacity 20,000 d.w.t., cranes with capacity up to 30 tons. Fully equipped engineering workshops capable of carrying out extensive repairs alongside quays length 1,200 m. Depth alongside 11 m.

Alexandria Ship Repair Co.: Ship repairs including engine repairs and boiler repair. Fully equipped workshops.

The Egyptian Shipbuilding and Repairs Co.: Floating dock for ships up to 12,000 d.w.t. 100 ton floating crane. All types of hull and machinery repairs possible.

TIME: GMT plus 2 hours.

HOLIDAYS: See "Suez Canal".

DEVELOPMENTS: Container terminal to be completed 1984. Depth alongside 14.0 m. 2×42 tonne gantry cranes available.

Grain elevator (Berth Nos. 81/82) to be constructed. Capacity 6,000 tonnes. Grain silo of 100,000 tonnes to be constructed. Completion mid-1985.

Control tower with radar and VHF being constructed.

Approach channel to be widened to 220 m. and deepened to 13.0 m.

Dekehila: New port 28 miles West of Alexandria. There will be 1,792 m. of quays with depths up to 19.0. m. Bulk terminal to be operational early 1986.

SHIPMASTER'S REPORT: 1976

Approaches: Ships making the passage from Port Said to Alexandria are obliged to keep to the route laid down by the Egyptian Authorities. The coastline is rather featureless and a good operational radar is invaluable. Radar conspicuous objects were found to be – Ras el Barr Lighthouse and fort, forts numbers 2 & 4, the forts and lighthouses at Brulos and at Rosetta Mouth and also Nelson Island.

The anchorage can be identified from a considerable distance by the number of ships at anchor off the port – often more than fifty. The prohibited area marked on Chart No. 243 to the East of Great Pass is ignored and ships anchor as convenient but as near to the pilot ground as possible. Ras el Tin Lighthouse, Great Pass Beacon and the Minaret (248) were found to be good marks. There is a latticed beacon to the West of Great Pass Beacon which should not be confused with the latter. The new beacon is not marked on the chart and was stated by the Pilot to be for a new channel which is being constructed.

Arrival Procedure: It is important to register one's arrival with the Alexandria Port Control as soon as possible. This is done by means of VHF.

At 1100 hrs. (approx.) a traffic list is broadcast and ships mentioned should contact Port Control and obtain berthing instructions. They will probably be told to move in to the pilot boarding ground 2 miles N.W. of Great Pass Beacon. When there, they should anchor again and await either further instructions or the unannounced arrival of the Pilot.

Berthage is decided at a meeting held around Noon so there may be a supplementary traffic list around 1400 hrs. In any case, it is a good idea to call Port Control at least once a day to remind them that you are still awaiting a berth.

A Pilot will take the ship into the anchorage in the Outer Harbour where Health, Immigration etc. officials board and clearance given. The Agent may also board. The main radio transmitter is sealed at this time. The ship will then await allocation of a berth.

Anchorages: At the anchorage outside the port depths vary from 20 to 30 fathoms but the holding ground seems to be good. This ship lay comfortably with 7 shackles of cable out. Ships usually leave each other ample room in case of bad weather. There are good anchor bearings.

The anchorages inside the Outer and Inner Harbours are very congested and the holding ground (said to be sand) is not good. Time spent at anchor here can be a very anxious period.

The ship was anchored in the Inner Harbour just off the end of the Passenger Quay. When it was pointed out to the Pilot that, in the Master's opinion, she was too close to the 3 fathoms line at the old Aircraft Moorings, the Pilot stated that it would be all right because the ship wouldn't swing that way. If the vessel had swung the other way she would have gone aground.

At 0300 hrs. the following morning the ship began to swing onto the sand bank. Fortunately there was no wind and it was possible to turn her, weigh anchor and find another anchorage. A call to Port Control on VHF was made for a tug and Pilot but was not acknowledged.

The main engine should be kept at very short notice when at anchor inside the harbour.

The accommodation ladder should never be left down while at anchor but should be raised and lowered as required.

It is usually an easy matter to hail a passing boat and bargain for a trip either ashore or to another ship. However, all ship movements and boatwork are officially prohibited after dark.

Pilotage: The pilot launches are Fairmiles (ex H.D.M.L.s) painted light blue with white wheelhouses and the word 'Pilot' in black on the side of the bridge.

All the Pilots employed spoke good English and were competent. They board at any time during the day and often without the slightest warning. They order tugs as they think necessary.

The beacons and leading marks in the Great Pass were good but the Fairway Buoy at the outer end of the channel is no longer there. Most of the mooring buoys marked on Chart No. 3119 have either been removed or changed.

As a result of experience, the Pilots have considerable skill in handling ships in very congested situations and they are to be relied upon.

Arrival Formalities: These are carried out at the Outer Harbour Anchorage. A list of documents required follows.

Documents:

2 Health Declarations*
1 Crew Customs Manifest
1 Arrival Form†
1 Stores List
1 Bond Stores List
8 Crew Lists‡

* Supplied by Quarantine Officers
† Brought out by Agent.
‡ This is the minimum number required.

Notes: Customs Manifests, stores lists and crew lists should be typed out on plain paper – there does not appear to be any proper forms.

Immigration Officers wish to see all Dis 'A' Books and will then issue Shore Passes which will have to be filled in by the ship. On departure, the Officials ask for the passes but, if they have not been collected will only request that they be destroyed when the ship sails.

Berthage: Every foot of wharfage is used and space is at a premium. This ship lay at Berths 16 to 20 and in both cases had ships ahead and astern with very little room between.

Berth 16 has unequal but good fendering, Berth 20 has none at all. Both are concrete wharves. There are an adequate number of bollards.

Berths 16 and 20 are both at the Passenger Quay and the soundings obtained by hand lead are shown on the plan. In theory, telephones are available at both berths. Water is laid on but the pipe is of small bore and delivery is slow (about 8.5 t.p.h.). Arrangements should be made through the Agent.

Berthage is said to be under the sole control of the Harbour Master. Ships may be ordered to berth, shift or move out to anchor without any warning. It should be noted that the Pilots always insist that Agents are told of a move the day before. In no case did this ship receive official notice. It is wise to hand a written notice to the Agent informing him of the time required to prepare the main engine for a move. However, in our case, the Agent did not bother to forward the information to the Harbour Master.

Being at the Passenger Terminal means that a cargo vessel has to move out to anchor frequently to allow passenger ships to berth. Unfortunately there seems to be only one other berth with enough water alongside for a fully loaded ship such as our vessel.

Repairs: Repair firms are available. There is a shipbuilding yard and graving and floating docks. Radio and radar servicing as well as gyro are available. There is a Lloyd's Register surveyor.

There is an abundance of small firms offering to do scaling and painting quite cheaply.

Medical: The Agent will arrange for a doctor to visit the ship if required. Unless special equipment and/or facilities are necessary, this is the best arrangement.

Repatriation: Apparently available via Cairo Airport.

Stores: Only small quantities of fresh fruit and vegetables were bought and these were good and cheap but the Catering Officer should be prepared to bargain.

Bunkers: The barges arrived alongside without any warning. There were separate barges for D.O. and I.F.O. The pumping rate for D.O. was 75 t.p.h. and for I.F.O., 143 t.p.h. It is reported that it is advisable to check the viscosity of fuel.

Communications: While at anchor outside the port, the ship's radio station is available and is by far the best means of communication.

Port Control, Pilots and launches all use Channel 16 both for calling and working. Making contact with Port Control to report arrival or request information is a matter of perseverance.

Agents: Memphis Shipping Agencies.

There is a main office in the city (Sesostris St.) to which the Master must go to draw money. Two hours will be needed for this plus an hour for travelling. In addition there are two offices in the Main Hall of the Passenger Terminal between Berths 16 and 20.

The Agents will arrange for doctor, waterman and watchmen. They will advance cash to the Master.

Garbage: Subject to negotiations with a private company. An old lighter will be moored alongside while the ship is in port. All garbage should be thrown into it. It is completely uncovered and after a while, in Summer time, would probably become highly offensive.

Fresh Water: Although there was no reason to suspect the water supply, Stabochlor was added as a precaution. As the ship may be sent out to anchor without notice for an unspecified time, it is wise to keep the water tank topped up.

Watchmen: The civilian watchmen employed were obtained through the Agent.

Two uniformed guards are put aboard by one or other of the authorities. Both the official and civilian guards will stop and search stevedores and take from them the cargo they have taken.

Tugs: These are arranged by the Pilot. There are several ranging from old coal burners to fairly modern diesels and they are well handled and efficient.

Cargo Work: It is supposed to be against the law to work frozen cargo during daylight hours. Therefore work was mainly carried on between 1700 and 0500 hrs. with a break about 2300 hrs., the same labour working through.

A gang consists of a total of 20 men. There is a foreman, two winchmen and eight stevedores in the hatch. The rest work ashore and on the lorries. The men in the hatch 'spell' each other and this is a major cause of lost time.

The butter and cheese was loaded onto pallets which were landed on the lorries and the cargo transferred. There are three pallets per gang but shortages often occur and the gear is not very good, two of the pallets breaking under load.

Crane and Velle derrick drivers were generally competent.

Lloyds Agency was asked to appoint a surveyor to witness the opening of the hatches and later to conduct a continuous survey during discharge. The surveyor was particularly helpful at the commencement of discharge. His firm asked for and received an advance of one hundred Egyptian pounds in cash from the ship because payment through the Agent was said to be slow.

Miscellaneous: Photography is forbidden within the port area and a permit must be obtained to take a camera ashore.

It is important to fit rat guards. A fine of £20 may be imposed for each one not fitted.

There is at least one floating crane with a SWL of 150 tons.

The Port Surveyor will ask to see the Suez Canal Certificate. If this has been retained by the Canal Authorities, he will require a signed statement to that effect.

Departure: The Agent will inform the various authorities of the expected time of departure.

Immigration Officers will board to check any changes in the crew.

The Agent will put aboard the clearance and the sanitary clearance and the senior official guard will demand a written statement that all crew are aboard.

The Sea Pilot will board with the Harbour Pilot. The latter disembarks into a motor boat as soon as the ship is clear of the berth, the former when she is clear of the Great Pass. If the weather is rough, a pilot ladder will be required outside instead of the accommodation ladder.

SHIP'S OFFICER'S REPORT: September 1979.

Arrival: On arrival at waiting area (BA Chart 243), vessel is required to register with "Alexandria Port Control" on VHF Channel 16.

The following information is required:

Ship's name and country of registry.
Time (local) of anchoring in waiting area.
Length overall and max. draft.
Description and tonnage of cargo for discharge at port.
Bearing and distance from Ras el-Tin Lighthouse.
Last port of call.
Name of Agent in Alexandria.

It is also necessary to confirm arrival time by W/T, with the Harbour Master and ship's Agent via Alexandria Radio on 454 kHz or 8578 kHz.

Traffic Lists, giving the names of vessels programmed for port entry that day, are generally broadcast on VHF Channel 16 at 0600 hrs. and 1400 hrs. daily. However, times may be altered without prior warning or list may be omitted altogether.

Fresh Water: Fresh water is unavailable in August at anchorage. Within port, fresh water is available from barge said to contain 150 tons, at an approx. rate of 40 t.p.h. No information on water supply at berths.

Also see "General" below.

Services: Doctor and hospital facilities are available on order via Agents or chandler.

Chandlers will approach vessel at anchorage – complete proof of identity should be obtained before trading commences. Also see "General" below.

Local labour is available for tank cleaning.

General:

(1) All telegrams via Alexandria Radio to addresses in Alexandria should contain a request for confirmation of receipt from addressee.

(2) Within the first 24 hours of anchoring the vessel is besieged by numerous persons, claiming to be chandlers, Agent's runners, watermen, receivers of the cargo, etc. Their proof of identity should be most carefully checked.

(3) The fresh water situation during this vessel's anchorage was desperate. It appears that from late July to mid-September, no water is available for vessels outside the harbour. Rationing is required on board, even if a water barge is ordered for the next day. Several ships ran out of fresh water at the anchorage during our stay and had to lower their boats to obtain minimal supplies from nearby ships. A good supply can apparently be obtained at Cyprus. Stores will not be brought out to the anchorage and boats cannot be ordered through Alexandria Port Control for medical or personnel transport.

AUTHORITY: Alexandria Port Authority, 106 El Horreya Street, Alexandria, Egypt. *Tel:* 34321/4. *Telex:* 54147. *Contact:* Commodore Ali Saleman, Harbour Master. Captain Ahmed Hossain, Deputy Harbour Master. Captain Maroni, Deputy Chairman.

HAMRAWEIN: 26.15 N. 34.12 E.

APPROACHES: *Daytime Leading Marks:*

Front mark: 26° 15′ 05.984″ N. 34° 12′ 01.622″ E.
Rear mark: 26° 15′ 01.46″ N. 34° 11′ 54.95″ E.

BERTHING: Length of quay – 67 m. Max. draft 33 ft. Conveyor belt and mechanical apparatus available. Daily average loading rate 4,000 tons. In addition to mooring bollard on the quay there are four mooring buoys.

MARSA AL HAMRA (El Alamein): 30.59 N. 28.52 E.

WEPCO Terminal

The Mono Mooring Buoy is in an open and unsheltered roadstead. The mooring buoy is located at Lat. 30° 58.7′ N., Long. 28° 52.2′ E. It is 53 miles on a bearing of 255° from Ras-el-Tin Lighthouse, Alexandria, and 3 miles offshore in approximately 66 ft. of water.

DOCUMENTS:

4 copies Crew List.

Deck log books showing date of last call at a A.R.E. port, completed up to the time of arrival.

Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

Derat Certificate should be handy for inspection.

Clearance from Last Port.

Bonded Store List, in duplicate.

Crew List and Passengers' List in duplicate, showing rate of consumption of each.

PILOTAGE: The S.-S.W.-W. quandrant from the buoy is a Prohibited Anchorage Area. Gebisa Reef is at Lat. 30° 58′ 30″ N., Long. 28° 49′ 10″ E., at 2.7 miles on a bearing of 260° from the buoy.

The mooring buoy carries a light, flashing red 6 times per minute, and visible all round to a distance of 4.5 – 5 miles in clear tropical weather. It also has a fog horn, sounding "U" and a radar reflector.

Surface current sets East at 10 miles offshore at the rate of 1 knot. Maximum rise and fall of tide in the mooring area is 2 ft.

Vessel arriving should approach to within 2 miles North of the buoy, where they will be met by the Harbour Master or Pilot who will advise the ship's Master on approaches to the mooring buoy, mooring and unmooring.

RESTRICTIONS: Normally vessels are moored during daylight hours only, but permission can be obtained to sail at night.

HEALTH: Hoist International Code Quarantine Signals when entering. Any sickness must be reported to local authorities.

RADIO: The commercial radio station at Alexandria will handle WEPCO radio traffic. Alexandria Coast Radio Station (call sign SUH) operates 24 hours a day on 444, 500 and 8,578 kHz, and between 0600 hrs. and 1800 hrs. GMT on 12,974 kHz.

Ships nearing Al Hamra Terminal may contact the terminal by FM/VHF radio on 156.70 MHz or 2182 kHz.

While at the mooring, ship-to-shore communication is by portable VHF radio-telephone units, under the direct charge of the Mooring Master. The terminal uses Channel 10 VHF for all communications.

TUGS: Not available and not required.

BERTHING: 2 good lines must be ready on the forecastle to be sent to the buoy plus a further 2 lines for use as messengers. Ship's lifting gear must be ready near the port manifold for lifting and connecting 2×12 in. hoses, with proper reducers if the manifold does not fit 12 in. hose with 150 ASA standard flanges. The total weight per hose assembly is approximately 5 tons. Maximum loading rate is 3,700 t.p.h.

A pilot ladder must be safely rigged for immediate use and long enough to reach the Mooring Master's launch. At night adequate lighting must be rigged overside to enable the Mooring Master to approach and board the ship safely, and searchlights should be rigged on both sides of the bridge to assist in running lines to the buoy.

BALLAST: No dirty ballast may be pumped overboard, and it is the ship's Master's responsibility to ensure that no oil – whether crude, diesel, bunker or bilge – is pumped or spilled into the waters of and surrounding the Terminal. Ballast can be pumped ashore through one or both of the floating hoses direct to disposal facilities on shore.

CUSTOMS ALLOWANCES: Present regulations at El Alamein allow each seaman to retain in his possession a maximum of 50 cigarettes or 1 ounce of tobacco or 5 cigars. All other smoking items must be collected and listed before arrival. The list will be checked by Customs before sealing the locker, and any discrepancies will be subject to fines.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: Nearest hospital facilities are at Alexandria, at least 90 minutes drive from the terminal.

First Aid could be provided and if necessary, transportation to hospital in Alexandria.

TIME: GMT plus 2 hours.

AUTHORITY: Western Desert Operating Petroleum Company – (WEPCO), Borg El Saghr Building, P.O.Box 412, Alexandria, Egypt. *Tel:* 28710/17/18/19. *Telex:* 54075 Un. *Cables:* Wepoil Alexandria.

RAS BUDRAN: 26.56 N. 33.08 E.

PILOTAGE: SUCO (Suez Oil Company) Pilot/Mooring Master boards approximately 2 miles West of SBM, together with an Assistant Pilot and 3 riggers. Vessel provides lee on a course away from the shore.

Accommodation ladder on vessel's starboard side normally not necessary as use of pilot ladder will suffice. Accommodation ladder should only be used under fine and calm weather conditions.

ANCHORAGES: Anchorage area in position Lat. 28° 52.5′ N., Long. 33° 06.9′ E., with 1 mile radius. This area has been surveyed and is considered clear of any obstruction. Anchoring outside the area is prohibited.

RESTRICTIONS: Weather conditions may prevent berthing. This is the case when wind speed exceeds 25 knots. Vessel will then remain in the anchorage until weather improves. Daylight berthing only. Unberthing anytime.

MAX. SIZE: 250,000 d.w.t. and 27.4 m. draft.

RADIO/VHF: SUCO installation is to be supplied with relevant information on lifting gear, connections, ballast/segregated/dirty and quantity.

On the berth (SBM) communications by VHF Channels 12 (24 hours listening) and 74 (Marine Office, 0700 – 1800 hrs.). HF 2638 kHz to be used in case of VHF breakdown or emergency.

TUGS: 1 supply vessel/tug which is equipped for fire fighting, available on a standby basis and berthed behind the port's breakwater, 1.8 miles East of SBM.

BERTHING: Approach is to be made into the wind which is normally from a steady direction (313°).

Standard SBM berthing procedure. 2 mooring boats used.

AKD stopper cannot be used. Instead 2 snotters are provided by the terminal. Vessel's mooring rope (not messenger) must be used to take SBM's pick-up rope on board. For this one mooring rope on each side is needed. Mooring tackle is too heavy for a small diameter messenger line. Monkey-face on mooring chain will be locked to shackle of snotter. Vessel's heading when on SBM approximately 315°.

HOSE CONNECTION: Riggers will assist vessel's crew with positioning mooring gear and with connecting the cargo hose.

1 cargo hose only. Port derrick rigged to lift hose (weight of full hose approximately 9 tonnes). Diameter of hose 20 in., connection 16 in. Vessel to supply reducers.

LOADING: One submarine line from shore to buoy; diameter 36 in. Loading by pumps, and gravity during start up and top off. Pumping rate maximum 6,000 tonnes per hour, depending on size of vessel's manifold. Before loading, cargo tanks are dipped by an independent Inspector and a Terminal Inspector. If dirty ballast is retained on board until the next discharge port then amount of water and oil on top will be checked.

Density of Ras Budran Crude is approximately 0.900/15°C. Temperature when received on board approximately 31°C.

Immobilisation of engines at SBM not permitted.

BALLAST/POLLUTION: Only segregated clean ballast may be pumped overboard after Master has signed letter which states that all responsibility lies with the vessel in case of pollution. Vessel has to pay for clean up operation and additional fine of 15,000 US dollars.

Dirty ballast reception facilities being installed, however, no information as to when operational.

MEDICAL: Medical assistance can be given by SUCO doctor in emergencies.

DENSITY: 1030.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: Not available.

REPATRIATION: Possible in an emergency only.

RAS GHARIB: 28.21 N. 33.06 E.

A natural port at the Western side of Suez Gulf sheltered by the Cape and a chain of reefs.

DOCUMENTS:

4 copies Crew List.

Derat Certificate should be handy for inspection.

Clearance from Last Port.

Bonded Store List, in duplicate.

Crew List and Passengers' List in duplicate, showing rate of consumption of each.

Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

PILOTAGE: Compulsory. International Pilot flag must be hoisted and Pilot will board vessel on arrival. Vessels should approach the anchorage from South-eastward and wait Southward of the Prohibited Anchorage until boarded by the Harbour Master who will pilot them either to moorings or to an anchorage clear of the prohibited area of the pipe-lines.

2 pairs of leading beacons stand about 4 and 5.5 cables, beside 3 others that stand about 12 cables Southward of Ras Gharib light-structure. About 2 cables further Southward are 2 leading beacons. All the above beacons are difficult to identify until close inshore.

ANCHORAGES: Ras Gharib Anchorage, South-westward of the Cape, affords some shelter, but a moderate swell round the Cape is experienced on most days. Vessels can obtain anchorage in depths of about 5 fathoms.

During most of the year there are Northerly winds, force 3 – 5, but in December and January there are occasionally calms. On very rare occasions, there are Southerly gales of short duration which make the anchorage untenable.

The Northerly wind causes some swell in the anchorage, but it is not normally severe enough to interfere with the working of lighters or boats of moderate size. It is, however, unpleasant for small boats, except alongside the piers, which are well protected.

Except in the vicinity of the piers, there is usually some swell on the beaches. There is practically no rainfall and sand storms occur only very occasionally and they do not interfere with work in the anchorage.

Anchorage is prohibited, owing to the existence of pipe-lines, within an area indicated by pecked lines on the chart.

HEALTH: On entering, vessels must hoist the International Quarantine Signal for compulsory quarantine. Any sickness must be reported to the doctor, specially when it is presumed that the sick will be hospitalised.

The vessel's personnel should carry international vaccination and/or inoculation certificates.

TUGS: 2 tugs, 400 h.p. and 80 h.p. available.

BERTHING: There is an ore pier where vessels may berth with max. draft of 11 ft. without any restrictions in length. Vessels with deeper draft may discharge whilst at anchorage on to supply boats.

Two cranes are available with capacities of 30 and 35 tons. Towage is also available.

TANKERS:

	Northern Pier No. 1	*Southern Pier No. 2*	*New Pier No. 3*
Depth at the pier	27 ft.	36 ft.	78 ft.
Max. permissible draft	24 ft.	32 ft.	55 ft.
Max. length for tanker	450 ft.	600 ft.	980 ft.
Min. length for tanker	350 ft.	500 ft.	600 ft.
Diameter of crude hose	18 in.	18 in.	30 in.
Diameter of water hose	10 in.	12 in.	18 in.
Min. capacity of tanker's derrick	5 tons	5 tons	5 tons
Loading capacity (t.p.h.)	650	1,200	2,000
Max. permissible load (tons)	8,000	30,000	100,000

Cargo: Ras Gharib Blend. API 24.1. Loading temperature 92°F/33°C.

SUPPLIES: Transit and fresh provisions as well as deck and engine stores provided by the United Arab Contracting and Marine Supply Company.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: Present regulations allow each seaman to retain in his possession a max. of 50 cigarettes or 1 ounce of tobacco or 5 cigars. All other smoking items must be collected and listed before arrival. The list will be checked by Customs before sealing the locker, and any discrepancies will be subject to fines.

TIME: GMT plus 2 hours. GMT plus 3 hours (1st May – 30th September).

AGENCY: See "Suez Canal".

RAS SHUKHEIR: 28.08 N. 33.17 E. (See Plan Book)

Also see "General" before first port.

ADVICE OF ARRIVAL: It is important that ships establish radio contact with "GUPCO" (Gulf of Suez Petroleum Co.) when 3 days distant from Terminal and maintain this contact until just previous to arrival at the Terminal. All ships should send a 72 hour ETA message to "Panintoil Cairo" giving the best estimate of ship's arrival time at the Terminal. This ETA message should also include a definite statement of the details of any equipment required from shore for connecting submarine hoses to ship's manifold. Further ETA messages should be sent to "Panintoil Cairo" when the vessel is 24 hours and 12 hours distant from Ras Shukheir and at any other time any appreciable change occurs in the original ETA or those subsequent thereto. The 12 hour ETA should include a positive statement regarding ship's readiness to load on arrival and the number of hours that will be required to discharge ballast after ship is berthed in mooring.

6 hours before arrival, tankers should call Ras Shukheir on VHF Channel 16 to be advised if berthing is available or not, also to be advised of the approximate time for berthing.

DOCUMENTS:

4 copies Crew List.

Deck log books showing date of last call at an A.R.E. port, completed up to the time of arrival.

Derat Certificate should be handy for inspection.

Clearance from Last Port.

Bonded Store List, in duplicate.

Crew List and Passengers' List in duplicate, showing rate of consumption of each.

Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

PILOTAGE: Compulsory. International Pilot Flag must be hoisted and Pilot will board vessel on arrival. Ras Shukheir Lighthouse is located in Lat. 28° 08′ 15″ N., Long. 33° 16′ 20″ E. It is a white flashing light, flashing every 3 seconds and visible for 10 miles.

Gebal Gharib, situated about 18 miles South-westward, 5,742 ft. high. It makes a nearly perfect equilateral triangle with Ras Shukheir and Ras Gharib Lighthouse. Ras Gharib Lighthouse is an excellent landmark whether by day or night for vessels approaching from North, but caution should be exercised since this Light is obscured from 308° to the Westward. The sea-berth buoys are unlit.

The company's Mooring Master will meet all incoming tankers about 2 miles from Ras Shukheir Terminal on a bearing of 290/300° from Ras Shukheir Lighthouse and will advise ship's personnel in mooring and unmooring, raising and lowering of hoses.

Vessels are requested to have a pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach the Mooring Master's launch. If at night, adequate lighting must be rigged overside for the Mooring Master to approach the side and climb the ladder safely.

ANCHORAGES: There are a number of oil well installations, structures and submarine pipelines located in the Gulf of Suez opposite Ras Shukheir Terminal and approaching vessels are warned of these obstacles in manoeuvring and anchoring. Vessels should approach from the Eastward and if necessary anchor S.E. of the sea berth.

Never anchor North of the sea berth.

Tankers should only anchor in Ras Shukheir Anchorage Area which is located as follows:

Lat. 28° 04′ 30″ N.
Long. 33° 22′ 30″ E. (with radius of 0.5 miles).

RESTRICTIONS: The Ras Shukheir Terminal operates 24 hours per day, 7 days a week. Ships are loaded and unmoored at any hour, weather and other circumstances permitting. Vessels are moored during daylight hours only, however, an exception may be made at the discretion of the Terminal.

HEALTH: The vessel's personnel should carry international vaccination and/or inoculation certificates.

RADIO: The Alexandria or Port Said coast radio stations will handle GUPCO radio traffic. Ships may contact GUPCO through their cable address "Gupcoil Cairo". The message will be received on their Cairo Radio Telegraph Office local teleprinter circuit, tape perforated and relayed to the Ras Shukheir Terminal.

Cables from Ras Shukheir Terminal to the ships would be handled in the same manner. The Alexandria or Port Said coast radio stations transmit traffic lists at regular intervals listing the call signs of all ships for which they have traffic on hand. Thus any ship hearing its call sign in the traffic list of the coast station would call the coast station immediately after the traffic list.

VHF: When ships are near Ras Shukheir Terminal, they may use their FM/VHF radios to contact the Terminal using 160.70 MHz or 160.80 MHz (Channels 2 and 4).

BERTHING: One pier where vessels with max. length of 76 m. are allowed to berth alongside with a max. draft of 15 ft. Vessels may discharge whilst at anchorage and propeller type lighters are available for such cargo operations.

Four cranes with capacities of 15, 30, 40 and 50 tons respectively are available together with floating crane with capacity up to 200 tons. Towage is also available.

TANKERS:

	Seaberth No. 1	*Seaberth No. 2*	*Seaberth No. 3*
Depth	75 ft.	95 ft.	90 ft.
Max. permissible draft	55 ft.	55 ft.	50 ft.
Max. length for Tankers	1,200 ft.	1,200 ft.	800 ft.
Min. length for Tankers	750 ft.	750 ft.	600 ft.
Numbers of Crude hoses	3	3	2
Diameter of Crude hoses	12″	12″	12″
Diameter of Ballast hose	12″	12″	12″
Min. capacity of Tanker's derrick	5 tons	5 tons	5 tons
Loading capacity (t.p.h.)	6,000	4,000	3,000
Max. permissible load (tons)	175,000	175,000	70,000

SUPPLIES: Transit and fresh provisions as well as deck and engine stores provided by United Arab Contracting and Marine Supply Co.

SUBMARINE HOSE LOADING BERTH: Tanker is loaded by means of submarine pipe-lines to which are attached 2 or 3 hoses for loading and 1 hose for discharging ballast. A 36 in. pipe-line transports the oil and a 24 in. line in No. 1 Seaberth, or 16 in. lines in Nos. 2 and 3 Seaberths transports the dirty ballast to a ballast pit ashore. The loading berths are located approximately 3,580 ft. offshore in a water depth of approximately 80 ft. The loading and ballast lines are laid in the same trench and run in a direction 055°. The mooring buoys are numbered 1, 2, 3, 4, 5 and 6, starting No. 1 North of the mooring and running consecutively in a clockwise direction.

LOADING READINESS AND ARRIVAL TIME: The company will make every effort to load vessels upon arrival or as promptly as berth is available, weather permitting. Notice of Readiness will not be accepted as at time of arrival unless the vessel is in all respects ready to load. Arrival time will be considered as the time the Mooring Master boards the vessel or the time that vessel anchors, whichever occurs first.

FRESH WATER: Not available.

FUEL: Not available.

REPATRIATION: Not recommended.

CUSTOMS ALLOWANCES: Present regulations allow each seaman to retain in his possession a max. of 50 cigarettes or 1 ounce of tobacco or 5 cigars. All other smoking items must be collected and listed before arrival. The list will be checked by Customs before sealing the locker, and any discrepancies will be subject to fines.

TIME: GMT plus 2 hours.

AUTHORITY: *Operator:* Gulf of Suez Petroleum Co. – GUPCO, (P.O. Box 2400) Palestine Street, 4th Sector, New Maadi, Cairo, Egypt. *Tel:* 506985, 503064. *Telex:* 92248 Gupco Un. *Cables:* Gupcooil, Cairo. *Contact:* Captain Nashaat Khodair, Marine Superintendent.

AGENCY: See "Suez Canal".

SAFAGA: 26.46 N. 34.00 E.

DOCUMENTS: The following documents are required on arrival:

Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

1 Crew List and 1 Passenger List.

Derat Certificate should be handy for inspection.

Clearance from Last Port.

Complete set of Manifests covering all cargo on board showing names of shippers and consignees.

4 copies List of Passengers in Transit.

4 copies Crew List.

Deck log books showing date of last call at an A.R.E. port, completed up to the time of arrival at Port Said or Suez.

PILOTAGE: Compulsory. International pilot flag must be hoisted and Pilot will board vessel on arrival. Masters should endeavour to arrive at the N. end of the island by sunrise, at Safaga Port by early morning; the light behind them will show up the reefs clearly. Wind, light in the morning, gains strength during the day, making tying up more difficult. A beacon (Morewood Beacon), visible a mile off, is erected on the Southern spit of the island. After rounding the spit, Masters keep 5 cables clear of visible reefs and enter the harbour keeping the 2 large beacons to the North of the pier in line. Anchorage is then indicated by a small red or white flag. The Manager, or his representative, of the Safaga Phosphate Company will meet ships in launch with instructions on berthing.

MAX. SIZE: Safe draft in the fairway, over reefs and alongside pier: 27 ft. 6 in.

HEALTH: On entering, vessels must hoist the International Quarantine Signal for compulsory quarantine. Any sickness must be reported to the doctor especially when it is presumed that the sick will be hospitalised.

The vessel's personnel should carry international vaccination and/or inoculation certificates.

BERTHING: There are 2 mooring buoys marked B and C and 2 mooring posts marked A and D.

(1) The anchor position is marked by a small red or white flag. When mooring, manila ropes only should be used, as wire ropes can be run out afterwards when ship is alongside.

(2) Due to rocky nature of sea bottom, it is very desirable that ship in coming into berth, does not override her anchor, as, if this happens, chain is apt to foul coral bottom and cause trouble later on.

(3) Endeavour to have all way off ship when anchor position is reached. Drop anchor as close to flag as convenient and go astern. If necessary check cable when 2 shackles have been paid out.

(4) Run rope to Buoy C, run rope to Buoy B, run rope to Post D, then run rope to Post A. Run Spring to S1, S2, S3, and pull alongside. Company's launches will run all ropes.

(5) If wind is blowing strongly off shore, a Spring may be run to S3, immediately a good rope to Buoy B is made fast.

(6) The best way to reach the anchor position is to steer straight for same, keeping Buoy C on port side. This will keep vessel clear of Buoy C and when anchor is dropped, the stern should swing clear of this Buoy. If it does not, a rope can be run to S3 and the stern pulled in before falling back on pier.

(7) With anchor dropped as shown, 6 shackles should see No. 1 hatch at the pier, but if chain is slackened carelessly, it may foul bottom and be insufficient to reach pier.

If visibility is very good, a course can be made between the Hyndman and Cannon Reefs, and altered to bring the beacons referred to into line.

Rock phosphate and ground phosphate are loaded at this port for shipment all over the world. The mines are situated some 30 km. away and are connected by company's own railway. Rock phosphate loaded (1,000 metric tons per day) from elevator and phosphate in bags by ship's gear.

Cargo vessels can berth alongside a new quay of 600 m. with a draft of 27 ft. Quay used for loading and discharging general cargo. It can accommodate 2 medium size vessels and one large vessel. Part of the quay is used by vessels discharging aluminium.

STEVEDORES: Canal Stevedoring Co.

SERVICES: Water, deck and engine stores and provisions provided by Egyptian Contracting and Marine Supply Co.

TIME: GMT plus 2 hours.

HOLIDAYS: See "Suez Canal".

DEVELOPMENTS: Grain berth to be extended to accommodate vessels up to 900 ft., 42 ft. draft and 75,000 d.w.t. Travelling gantry will have a discharge rate of 600 t.p.h.

SHIPMASTER'S REPORT: January 1981.

Pilotage: Vessels enter the inner anchorage without Pilot, and are allocated an anchor position by the Harbour Master. Pilotage for berthing is compulsory, and the Harbour Master acts as Pilot.

Entry or departure at night is forbidden, without special permission from the Naval Authorities.

Anchorages: Vessels are allocated an anchor berth in the inner harbour by the Harbour Master. Vessel anchored in the Northern part of the anchorage, with Morewood Beacon bearing 135.5° × 2.8 miles, in 30 m. of water, with 6 shackles of cable out, and no difficulties were experienced, despite a period when wind from the North of force 5, gusting 6, occurred when the ship had a 3,000 tonne coaster alongside.

Approaches: Vessel arrived off Safaga Island at approximately 2130 hrs. and no difficulty was experienced in anchoring with Morewood Beacon bearing 334° × 11 cables. The N.E. point of Safaga Island, and the headland near Bir Safaga showed up well on radar, as did Morewood Beacon, once identified.

Upon entering harbour the next morning at first light, a little difficulty was experienced in locating the leading beacons. From outside the harbour, the most prominent object visible is the alumina silo and elevator, and this uncharted feature being mistaken initially for the charted phosphate transporter, we were looking in the wrong place. Once sighted, however, the beacons were found to show up well in the early morning light. (These leading beacons are fitted with Fixed Red lights, but these are only turned on when Naval Vessels are entering or leaving port by night). A can shaped mooring buoy situated in the middle of the inner anchorage just North of the leading line is of assistance, but the buoys marking the dredged channel are non-existent. This mooring buoy is a handy turning point for ships proceeding to the Northern part of the anchorage.

A partly ruined beacon is visible on the sand spit at the Southern end of Safaga Island approximately 3 cables from Morewood Beacon.

Of the two stranded wrecks charted on the S.W. shore of the inner anchorage, the Northern one (marked PA) has been salvaged. The Southern one is conspicuous, and afloat at high water. It is reported that this one may well be salvaged soon.

There appeared to be little or no tidal stream or current to speak of in the inner anchorage, vessel lying to the wind most of the time.

Max. Size: The largest size of ship handled is about 50,000 tonnes d.w.t., with a max. draft of about 11 m.

Radio: There is no radio station at Safaga, and telephone/telex links are minimal. Harbour authorities wishing to communicate with ships entering use VHF sets of ships alongside. We maintained a normal sea watch (1 Radio Officer) both at anchor and alongside, and good communications were obtained with Portishead Radio.

Tugs: There are no tugs available.

Berthing:

Commercial Wharf: Approximately 500 m. in length.

This has 3 berths at present. No. 1 Berth is the one at the N.E. end, No. 2 Berth in the middle, and the alumina berth at the S.W. end.

Nos. 1 and 2 Berths are kept exclusively for the discharge of wheat; cement ships use the alumina berth by private arrangement. Depth alongside No. 2 Berth is officially 9.1 m., but reported deeper. (We berthed drawing 9.6 m.) and at No. 1 Berth the depth is stated to be 9.7 m. alongside, but 11.0 m. if barges are placed between the ship and the quay. Works are in progress to extend the commercial wharf Northeastwards from No. 1 Berth almost up to the Naval Wharf, which extends as marked on the chart.

The Oil Jetty charted to the South of the town is reported to be part of the Naval Base.

Cargo Handling: Bulk wheat is discharged by portable pneumatic conveyors (vac-u-vators) into hoppers on the quay, where it is bagged and taken away by lorry. (Discharge rate for this vessel approximately 1,900 tonnes/day).

Alumina is discharged direct to the silo by fixed elevator.

Cranes: There are no cranes on the wharves. It was reported that there is a mobile floating crane, of 15 tonnes SWL at 35 m. radius, although this was not seen by us. A small floating crane is in use for the extension works.

Medical: A doctor is available, and will visit ships at the inner anchorage. Cholera Vaccination Certificates are required, and the doctor will do vaccinations.

Density: 1030.

Fresh Water: There is a limited supply of fresh water, the quota being 500 tonnes a month for all ships, but this is expensive. A price of $12.00 per tonne was quoted.

Fuel: No fuel oil of any kind available.

Consuls: None locally.

Repairs: The nearest repair facilities are at Suez.

Gangway/Deck Watchmen: Employment by the ship of shore watchmen is compulsory, and they have to be accommodated on board both alongside and at the inner anchorage. Whilst shore labour is onboard, a policeman is placed on board to guard the ship's accommodation.

Shore Leave: Permitted, passes being issued when ships are alongside, although apart from one hotel there is very little to do in Safaga. Agents can arrange trips to the River Nile, Valley of the Kings, etc., but special passes are required.

General: Provisions: Fresh provisions are available in season, and a chandler will visit ships without prior appointment.

Cargo Handled:

The principal activities of the port are:

(i) Import of wheat: approximately 100,000 tonnes/month.

(ii) Import of alumina: 60 – 75,000 tonnes/month. (3 – 4 ships).

(iii) Import of cement: 13 – 15,000 tonnes/month. (1 – 2 ships).

(iv) Export of phosphates: approximately 20,000 tonnes/month. (1 – 2 ships).

(i), (ii) and (iv) are all under the control of the Egyptian Government, (iii) is carried out privately.

SHIPMASTER'S REPORT: September 1982

1. Pilot does not board on arrival. Ships have to enter port without Pilot, even with no port chart, as I just found out, when a ship came in without a chart. Pilot only gave advice by VHF.

There are very good visible leading markers (red and white), also 5 buoys have been laid out marking the dredged canal. They are ordinary unlit mooring buoys. Pass between these buoys with the leading beacons 310° True and vessel is clear of dangers. On the 5th buoy, which is (single) on vessel's starboard side vessel can turn out of the channel and proceed to any place outside the 310° lead.

2. Discharging grain, draft limit 36 ft. 6 in., berthing against 2 lighters to keep vessel in deep water. After discharging to 31 ft. lighters are taken away and vessel goes alongside. With 30 ft. vessel shifts to Berth No. 2 to finish. Daily rate of discharge is about 3,600 tonnes.

3. The price of fresh water is US$15 per tonne. Water comes by pipeline from Nile River not by barge from Suez.

4. Berthing: Use starboard anchor. A motorboat takes first 2 headropes then 2 stern ropes ashore and then heave the ship alongside. Pilots are careful.

Mooring: Have 3 headropes, 2 breastlines and 1 spring ready (same aft).

When shifting from Berth No. 1 to No. 2 ship does not shift along the berth but makes a new berthing due to anchor.

SHIPMASTER'S REPORT: January 1983.
Pilotage: The Harbour Master has ceased allocating anchorage and ships now anchor wherever they like inside bay. Our vessel is 610 ft. long and drawing 36 ft. 6 in. and like your earlier report arrived and anchored half a mile South of Morewood Beacon at 2140 hrs. and moved up to anchor four cables from grain berth in the morning. Passage over reef crossing bay (apart from clearly shown leads) is now marked by four mooring buoys and channel is 13 m. depth.
Berthing: There is now a 900 h.p. tug to assist. The new berth towards the Naval Wharf is nearing completion. We berthed at No. 1 drawing 11.13 m. with barges between ship and quay.
Fresh Water: Now costs U.S.$19.75 per tonne. Service is prompt when needed.

AUTHORITY: Ports and Lights Administration.

AGENCY: See "Suez Canal".

SIDI KERIR: 31.06 N. 29.37 E. (See Plan Book)

DOCUMENTS: Free zone area, no entry documents to the offshore terminal are required.
PILOTAGE: SUMED's Mooring Master and his assistant board the tanker 2 miles North of Buoy A1.
Notifications: ETA messages should be sent by cable via Alexandria/Port Said Radio on leaving previous port. Cables should be prefixed "For urgent delivery send via Telex 54108 or 54033 SUMED UN" and be confirmed 72, 48 and 24 hours prior to arrival. (Day and night berthing and operation). Arrival draft should be indicated. Vessels should arrive with a trim of 8 ft. by the stern and appropriate ballast to ensure that propeller is completely submerged.
LOCATION OF BUOYFIELD: (SBMs)

A1: Lat. 31° 06′ 26″ N., Long. 29° 36′ 46″ E.
A2: Lat. 31° 05′ 32″ N., Long. 29° 35′ 38″ E.
A3: Lat. 31° 04′ 24″ N., Long. 29° 35′ 37″ E.
A4: Lat. 31° 04′ 54″ N., Long. 29° 37′ 39″ E.
A5: Lat. 31° 05′ 40″ N., Long. 29° 38′ 24″ E.

ANCHORAGES: Tankers can anchor to the North and N.W. of the buoyfield.
MAX. SIZE: The five berths are spaced one from the other so that each has:

Mooring Area Radius: 410 m. for A1 and A2 (accommodate vessels up to 285,000 d.w.t.); 320 m. for A3, A4 and A5 (accommodate vessels up to 130,000 d.w.t.); Manoeuvring Area Radius: For A1 and A2, 1220 m.; For A3, A4 and A5, 915 m.

Water Depth and Draft Limitations:

For A1 and A2:	85 ft. minimum water depth
	75 ft. maximum draft
For A3, A4 and A5:	60 ft. minimum water depth
	52 ft. maximum draft

RADIO: All messages to be sent via Alexandria/Port Said Radio. Sidi Kerir has a HF long range radio working on 2182 kHz and 4142.5 kHz.
VHF: Channels 16, 78 and 79.
TUGS: Tug "Kerir" 3100 h.p. with fire fighting and anti-pollution equipment is available as required.
Mooring Launches: 500 h.p. mooring launches assist in mooring and hose operations.
BERTHING: *Ship's Derrick:* The ship's derrick should be capable of lifting 10 tons and rigged on the port side ready on arrival to take the gear on board for berthing the ship and connecting the hoses.
Hoses: Each berth has two cargo hoses with a 16 in. connection (ASA 150). There is a ballast unloading facility with 16 in. connection. Connection of hoses to be performed by the vessel under the supervision of SUMED's Mooring Master.
SUPPLIES: No bunkers or supplies are available or permitted.
MEDICAL: Private doctors and hospitals are available in Alexandria.
SHORE LEAVE: There is no shore leave for personnel of vessels loading at Sidi Kerir Terminal (disembarkment from vessels is strictly forbidden except in emergencies).
AGENCY SERVICES: Not required under normal circumstances.
TIME: GMT plus 2 hours.

SHIPMASTER'S REPORT: *General:* Sidi Kerir is the Northern end of the pipe-line from Ain Sukhna in the Gulf of Suez. The pipe-line is owned by the Arab Petroleum Pipeline Co. and operated by SUMED Co. (Suez – Mediterranean).

The Sidi Kerir Terminal (Tankfarm) position is at Lat. 31° 03′ N., Long. 29° 40′ E. There are at the moment 5 SBMs for loading vessels, more are planned for the future. The buoy field is marked by the following points: "A" Lat. 31° 08′ N., Long. 29° 37′ E., "B" Lat. 31° 04′ N., Long. 29° 31′ E., "C" Lat. 31° 01′ N., Long. 29° 35′ E., "D" Lat. 31° 05′ N., Long. 29° 41′ E.

The area within ABCD is a prohibited anchorage area and may not be entered without a Pilot.

The position of the 5 SBMs is within the area:

1. Lat. 31° 06.7′ N., Long. 29° 35.7′ E. For loading Arabian Light & Kirkuk Crude.
2. Lat. 31° 05.9′ N., Long. 29° 36.9′ E. For loading Arabian Light & Kirkuk Crude.
3. Lat. 31° 04.6′ N., Long. 29° 36.9′ E. For loading Arabian Light & Kirkuk Crude.
4. Lat. 31° 05.0′ N., Long. 29° 37.9′ E. For loading Arabian Light & Kirkuk Crude.
5. Lat. 31° 05.1′ N., Long. 29° 38.6′ E. For loading Basrah Crude.

(a) The current sets usually from N.W. at about 0.5 knots but may increase during Summer to 1 knot; there is no considerable tide.

(b) References: BA Chart 3356; BA Pilot Book 49, 6th edition 1976.

Documents: One crew list, one ship's stores list and clearance from last port.
Pilotage: Pilot also acts as Loading Master and boards vessel at the anchorage. A pilot ladder/accommodation ladder combination is to be rigged on the starboard side. Vessels must give a lee for the pilot launch. Pilots work preferably during daylight hours.
Anchorage: The anchorage is one to two miles North of the buoyfield in 20 to 40 fathoms of water. There is good holding ground on sandy bottom; no shelter during Northerly winds or swell. The port closes during strong winds and swell. An open sea approach; no dangers on the way to the anchorage. The coastline is low desert and gives a poor echo, the best radar echo during the approach was the tankfarm and the pipe-line.
Max. Size: Max. draft 70 ft. No limit on size of vessel.
Radio: ETA information to be given preferably via Alexandria Radio to telex number 54108 attention "SUMED operations – Alexandria" at 72, 48, 24 hours prior to arrival. Initial message should give call sign; Summer deadweight; Summer draft; cargo requirements with name of crude and approximate quantity required in cubic metres and long tons, also maximum loading rate required in cubic metres; last port; whether vessel carries 2 × 16 in. reducers.
Health: Free pratique is given by the Pilot/Loading Master.
Tugs: One tugboat, 5000 h.p., is on standby at the buoyfield and will assist on request.
Berthing: The vessel moors to a SBM. The mooring equipment, 2 wire slings, 2 shackles and a toolbox, are taken from the launch.
SBM Loading Berth: The hoses are connected by the ship's crew under the supervision of the Loading Master. The (2×16 in.) hoses are of a floatable type with a Camlock connection.

The maximum loading rate is given as 15.000 cu.m./h. or as requested by vessel. Before completion of cargo the pumps are stopped and the balance loaded by gravity. At the present time the dirty ballast facilities are under construction.
Repairs/Drydocks: At Alexandria about 12 miles to the East. No facilities at Sidi Kerir.
Time: GMT plus 2 hours.
Density: 1026.
Supplies/Services: None.
Authority: The Pilot/Mooring Master acts as Government Representative.

AUTHORITY: Arab Petroleum Pipeline Co. – (SUMED), 9 Amin Yehia Street, P.O.Box 2056, Zizinia, Alexandria, Egypt. *Tel:* 64138, 64139. *Telex:* 54108 Sumed. *Cables:* Sumed Alexandria.

SUEZ CANAL (including Port Said and Suez): (See Plan Book)

Also see "Rules of Navigation".
DOCUMENTS:

The following documents are required on arrival:
The last Classification Certificate issued.
Information concerning a vessel transiting the canal.
4 copies Crew List.
Ship's Register and Suez Canal Special Tonnage Certificate.
General arrangement and capacity plans of the vessel, if transiting the Suez Canal for the first time, or, undergone any alterations.
Suez Canal Authority's double bottom tanks capacity form.
Navigability form.
Complete set of Manifests covering all cargo on board showing names of shippers and consignees.
4 copies List of Passengers in Transit.
Landing cards for passengers landing finally in the A.R.E. and for those landing in the A.R.E. in transit.
4 copies List of Passengers finally landing in the A.R.E. (if any) together with their addresses in the A.R.E.
Deck Log Books showing date of last call at an A.R.E. port, completed up to the time of arrival at Port Said or Suez.
Mail Waybills for ports beyond Suez Canal ports and alternatively, a document from the Master is required (cargo and passenger ships only).
Quantity of bunkers, water and cargo on board.
Free Pratique Certificates issued by the local Quarantine Doctor.

In case of a Northbound vessel loading or discharging alongside quay staying more than 24 hours in Suez, the following documents should also be presented.

(1) Load Line Certificate.
(2) Safety Equipment Certificate.
(3) Radio Safety Certificate.
(4) Documents covering names and ratings of ship's officers and their certificates.

For Pilot's Use:

(1) Arrival form of the Suez Canal Authority.
(2) Declaration "E" form for dangerous cargo on board in transit.
(3) Any other documents relating to shipments of dangerous cargo, radio-active or fissile.

N.B. Plain Suez Canal Forms are normally handed to Master by Pilots or ship's Agents, to be filled on arrival and also for use on consequent voyages.

Quarantine Authorities:

Quarantine Questionnaire in duplicate (Form No. 15 Q.A.) showing all ports of call, as well as dates of sailings for the last 30 days, nature of cargo on board, destination, as well as sickness among crew or passengers, if any, specially when it is presumed that the sick will be hospitalised. These forms can be filled on arrival if not available on board before arrival.

1 Crew List and 1 Passenger List.

Derat Certificate should be handy for inspection.

Clearance from last port.

Passports:

For Immigration Officer the following documents are required on arrival:

Arrival Immigration form, duly completed.

1 Passenger List.

List of Passengers finally landing, in duplicate.

Crew List.

Valid passport with entry visa is required for landing in A.R.E. for passengers landing. Emergency visa can be granted on arrival if so required.

For Customs Use:

(1) Bonded Store List, in duplicate.

(2) Crew List and Passengers' list in duplicate, showing rate of consumption of each.

Shipmaster's Report: January 1984.

Crew Personal Effects Declaration – Not required.
Bonded Stores Declaration – Not required.
Stores List – Not required.
The Bonded Store is not sealed.

The ship's Log books are not taken ashore but the Certificate of Registry is taken in Port Said and returned at Suez.

Circulars: Issued by Canal Shipping Agencies Company, Port Said:

Circular No. 42/81: To all Shipowners and Masters.

We append hereunder free translation of Circular No. 2004/T81 received from the Deputy Manager, Transit Section, Suez Canal Authority, Port Said:

"It has been noticed that the necessary notification which should be given before the ship's entry in harbour in case of carrying dangerous cargo on board is neglected by Masters who also fail to fulfil the relative declarations, as stipulated in the Suez Canal Authority's Rules of Navigation Appendix for Vessels Carrying Dangerous Cargo (Edition 1977), which may expose both the vessel and the port to risks arising from the goods in question.

Kindly, therefore, draw the attention of Owners and Masters to the necessity of adhering to the said rules, noting that the Master will be entirely responsible navigably and criminally for any occurrence which may arise from failure to give the required notification, inaccuracy of details or omitting to take the necessary precautions on board".

Circular No. 23/82: To all Shipowners and Masters.

We once again should like to draw your kind attention to the fact that some Owners abroad do not provide the Protection Centre, Nuclear Researches Centre of the Atomic Energy Establishment, Cairo with sufficient information in respect of such shipment on board their vessels.

In this connection, we would refer to our Circular No. 3/79 dated 6th January, 1979, text of which is quoted hereunder for your easy reference.

"According to Circular No. 4/3BA-406012, dated 1st September, 1964 and the amending Circulars issued by the Transit Section of the Suez Canal Authority and also the Suez Canal Authority's Rules of Navigation Appendix for Vessels Carrying Dangerous Cargo, Edition 1977, the transport of radioactive substances carried by vessels transiting the canal are subject to protective conditions concerning transportation and transit, as specified therein, with the object of ensuring the safety of the said water channel and its environment.

However, it has lately been noticed that due attention is not given by Shipowners and Shippers abroad to forwarding the relative complete data which must reach the Atomic Energy Establishment before each shipment with regard to substances of Group 1 or on shipment with regard to substances of Group 2, this being in accordance with Item 3 of the aforesaid circulars and also Chapter 3 of the Appendix in question.

Kindly, therefore, advise Shipowners and Shippers that all the said conditions should be fulfilled, especially regarding the complete information relating to radioactive substances which should be sent immediately upon its receipt to: Head of the Protection Section, Nuclear Researches Centre, Atomic Energy Establishment, Atomic Energy Post Office, Cairo.

This will enable us to take the necessary action to safeguard public interest.

We add that it is of vital importance that you also supply your Agents with all the required relative information and documents sufficiently in advance, to enable them to take the necessary action with both the Suez Canal Authority and the Atomic Energy Establishment in Cairo.

HEALTH: On entering, vessels must hoist the International Quarantine Signal for compulsory quarantine. Any sickness must be reported to the doctor specially when it is presumed that the sick will be hospitalised. The Quarantine doctor meets the ships whilst entering the port and the ships are boarded in turn. To get a quick clearance and not to be left for later attendance, Masters are requested to receive the doctors as soon as they board and to have the following documents ready:

Quarantine Forms in Duplicate: When inserting the ship's register net tonnage special care should be taken in indicating same on the 2 quarantine forms (Form No. 15 Q.A.) as the dues are calculated on that tonnage, as incorrect information may cause complications.

Derat Certificate should be handy for inspection.

Clearance from Last Port should also be handy.

All ports at which the vessel has called as well as dates of sailings for the last 30 days should be inserted in the form.

Quarantine Signals:

By day: "Q" flag (signifying vessel healthy). *"Q" Over first substitute (QQ).* (Vessels have cases of infectious diseases more than 5 days ago, and there have been unusual mortality among the ratings or crew on board.) *"Q" over L flag (QL)* signifying (vessel is infected and has cases of infectious diseases less than 5 days ago.)

By night: red light over white: The flags and lights must remain hoisted until free pratique is granted. Ships in transit under Quarantine through the Suez Canal will use the same signals until they clear the other end of the Canal.

Important: In the event of a vessel arriving from a port that has been internationally declared infectious and the incubation period has not yet expired at the time of the ship's arrival at an A.R.E. port the vessel is put under compulsory Quarantine, moored at an isolated berth and no shore contact is allowed. Nevertheless, the ship can still carry out her normal operations on condition that all shore personnel are holding valid vaccination and/or inoculation certificates issued by the Quarantine Administration. The ship's personnel should also carry International Vaccination and/or Inoculation Certificates. Final landing passengers, not carrying such certificates, will be landed under Quarantine supervision and will be kept isolated at the lazarette until incubation period is over.

Pratique Granted by Radio: Pratique may be granted prior to ship's arrival provided the following conditions are adhered to:

(1) The vessel must be a regular liner known to the Quarantine Authorities and has a doctor on board.

(2) Details shown on the Quarantine Statement should be radioed to the Quarantine Authorities 24 hours prior to ship's arrival.

(3) Masters of vessels must declare before their arrival any accidents, which might have taken place on board prior to the arrival in port.

(4) The ship must not have called at any infected port.

RADIO: *Authorised Personnel Checks:* Masters of vessels are requested to contact the Suez Canal Authority via its wireless station "SUQ" (watch frequencies 425 kHz, 454 kHz and 468 kHz) whenever they want to make sure of the identity of any Suez Canal personnel embarking their vessels, either in the approaches or in the harbours or in the Canal waters. Also in case of any urgent complaints which may need quick investigation.

BERTHING:

Port Said:

Places or Names	*No. of Berths*	*Nos.*	*Length of berth* (m.)	*Length of berth* (ft.)	*Length of vessel* (m.)	*Length of vessel* (ft.)	*Remarks*
Isolated Berths*	3	1	280	919	232	761	
		2	250	820	202	662	
		3	314	1,030	266	872	
Outer Harbour Basin	10	1 A	245	803	197	646	
		2 A	300	984	252	827	
		3 A	without limitation				Vessel heading 270°
		4 A					
		5 A					
		6 A					
		7 A					
		8 A					
		9 A.N.					
		9 A.S.					
	5	4 A.E.	....		107	350	Vessel heading 090°
		5 A.E.					
		6 A.E.					
		8 A.E.					
		9 A.E.					
Red Berths*	7	0 R	140	459	92	301	On the Western side of channel
		1 R	245	804	197	646	
		2 R	290	951	242	794	
		3 R	238	780	190	623	
		4 R	295	968	297	975	
		5 R	162	532	114	374	
		6 R	280	919	232	761	
Black Berths*	7	1 N	270	886	193	633	On the Eastern side of channel
		2 N	170	558	122	400	
		3 N	270	886	222	728	
		4 N	205	672	157	515	
		5 N	220	721	172	563	
		6 N	225	738	177	580	
		7 N	230	754	182	596	
Navy House	6	1			61	200	
		2			61	200	
		3			101	330	
		4			168	550	
		5			168	550	
		6			168	550	
Cherif Quay			Alongside				
Abbas Quay			Alongside				
Hussein Basin	17				91 to 180	300 to 620	South of the inflection point North of the inflection point
E Berths*	4	1 E	325	1,066	277	879	Depth 28 ft.
		2 E	280	919	232	742	Depth 31 ft.
		3 E	250	820	202	662	Depth 32 ft.
		4 E	220	721	172	563	Depth 32 ft.

**Note:* In good weather the length on buoys may be increased from 3 m. to 9 m. according to the length of the berth and height of the vessel.

Quays at Port Said: The Suez Canal Authority has built new quays to enable vessels to berth alongside at Cheriff and Abbas Basins. Length about 1300 m. Height about 2 m. from sea level. Also 14 cranes of 3 tons lifting capacity each, running on rails have been installed. Maximum draft allowed is 27 ft. The best part of these quays is ready and vessels with full cargo for discharge are now berthing alongside. Vessels drawing more than 27 ft. have to lighten their cargo into lighters to that draft before berthing.

The distance between Bollards 23 and 24 South of deep Abbas Quay (30 m.) has been reserved for the berthing of one Ro/Ro vessel by the stern, within the present allowed draft (27 ft.).

Height of quay from sea level: 2 m.
Average tide all year: from 40 to 50 cm.
Thickness of fender: about 50 cm.
Breadth of quay edge: from 50 to 60 cm.

Developments: Container quay length 350 m. under construction. Depth 45 ft. 2 cranes will be installed.

An additional 250 m. quay is planned for 1986 and will serve as a multi-purpose quay and be equipped with a gantry crane.

Suez:

Port Ibrahim: Port Ibrahim is the port of Suez. It consists of North and South basins.

North Quay: The North basin has, on the North side, a quay length of 2,415 ft. a total breadth of 975 ft. and depth of 26 ft. at high tide. Quay can accommodate 4 large ships.

Berths 4 and 5, where stores are available, are suitable for general cargo.

Khedivial Quay: Berths Nos. 9, 10 and 11, length 119 ft., depth 24 ft. at high tide.

Mobile cranes available; 5 tons, 15 tons and 30 tons capacity.

Pilgrim's Quay: (Pontoon Berth) No. 6, 1 berth, length 1,000 ft., draft 26 ft.

Adabiya Quay: This quay is situated on the Western shore of the Suez Bay, and is under the control of the Naval Authorities. The max. draft is 26 ft. 06 in. and can accommodate 4 large vessels. Max. length of vessel allowed to berth alongside quay 500 ft. Mainly bulk wheat discharge and direct delivery of general cargo.

Marakib Quay: Situated at the entrance of the Canal depth 28 ft.; can accommodate passenger and cargo vessels.

Storage Capacity at Suez:

North Quay	40,150 sq. ft.
Pilgrims Quay	20,952 sq. ft.
Khedivial Quay	8,448 sq. ft.
	69,550 sq. ft.

While stacking spaces on the quays are: 332,050 sq. ft.

TUGS: Highly qualified crew are available on board several tugs owned by the Suez Canal Authority in Port Said, Suez and in all Suez Canal stations. These tugs assist vessels to berth in Port Said harbour as well as in Canal if a case arises. It is left solely to the Canal Authority to decide whether more than 1 tug is needed (free of charge) to assist any ship to moor in the Port Said harbour, but if a Master of a vessel finds it necessary to employ an extra tug for berthing or if he needs a tug for any other reason, such an operation will then be charged against the vessel.

Salvage Tug Boats:
(1) 3,200 h.p. *Mounir, Moawen 1, Moawen 2.*
(2) From 3,500 to 5,000 h.p. *Antar, Bassel, Barei, Fahd.*
(3) 6,400 h.p. *Mared, Shahm.*

Harbour Tug Boats:
1,600 h.p. *Bori, Wakar, Chadid, Hout, Kirsh, Morgan, Shabar.*

STEVEDORES: As stated in the ETA messages, Masters are advised to include in their messages details of cargo to be discharged in either Port Said or Suez, hatch by hatch and gangways required, if possible. All loading and discharging operations in Port Said harbour and Suez Roads are effected by lighters. There are steel lighters, and self-propelled barges available for this purpose that will allow rapid work to be carried out. At Port Said several reefer ships are provided with flat floating pontoons to facilitate discharge of cargo. At Port Said the draft of water does not allow ships to be berthed alongside quays to carry out cargo operations except in Cherif and Abbas Quays which accommodate vessels up to 27 ft. and consequently same are carried out also from and into lighters which are brought alongside the vessels whilst at anchor.

MEDICAL: It is very essential for Agent to receive advance notice of required medical attendance at least 24 hours prior to ship's arrival. All ordinary medical supplies are available and prescriptions are executed at any time at moderate prices and delivered during ship's stay in port. Medical assistance at Port Said and Suez is available. Consultations on board could be arranged through ship's Agent at any time by day or night. Reliable dentists are available at Port Said and could be consulted on board, if necessary, and during the following period at their clinics: From 0900 to 1300 hrs. and from 1600 to 1900 hrs.

Oculists are available for consultations at town clinics in Port Said during usual working hours. Opticians are also available at Port Said. The following hospitals are available with ample first, second and third class accommodation, accepting patients irrespective of nationality at reasonable charges:

At Port Said	*At Suez*
Al Mabarra Hospital	Al Mabarra Hospital
Notre Dame de la Deliverande Hospital	Abou El-Azayem Hospital
Two General Government Hospitals	General Government Hospital
T.B. Hospital	Isolation Hospital
Isolation Hospital	Ophthalmic Hospital
Ophthalmic Hospital	

Ship's personnel should carry international vaccination and/or inoculation certificates if a vessel is arriving from a port that has been internationally declared infectious and the incubation period has not yet expired at the time of arrival.

FRESH WATER: Available for supply ex self-propelled barges to any quantities required at all times with minimum supply of 50 tonnes for vessels exceeding 500 tonnes gross provided vessels inside the harbours, vessels at anchorage areas minimum supply quantity is 200 tonnes.

TANKERS: There is a bunkering station at Port Said harbour which can accommodate 4 tankers with not more than 38 ft. draft for the purpose of discharging their cargo of fuel or diesel oil to the different oil bunkering companies.

Tankers in Suez discharging bunkers and changing crew do so in the New Suez Terminal or the Suez Petroleum Basin. Tankers in Port Said discharge bunkers only.

Oil Storage: There is ample tank storage for bulk petroleum products.

New Suez Terminal: The terminal is situated in Suez Roads.
(1) Presently one berth has been reconstructed and is used by tankers chartered by EGPC.
(2) Minimum depth of water at LWOST in the approach Channel is 8 ft.
(3) Minimum depth of water at LWOST alongside each berth is 38 ft.
(4) Maximum safe length of tanker applicable 750 ft.
(5) Six pipe lines each berth:–
4 lines × 20 in.
2 lines × 16 in.
1 line × 4 in. (fresh water)
(6) All types of oil products can be handled at this berth.
(7) No facilities are available at present for reception of ballast.

Suez Petroleum Basin:
Jetty No. 4 can take tanker length 500 ft. with 26 ft.draft.
Jetty No. 5 Max. length 530 ft. Max. draft 26 ft.
Jetty No. 7 Max. length 570 ft. Max. draft 26 ft.
There are sufficient pipes for discharge.

FUEL: Different grades of fuel oil are available from different firms. It is customary that the Master should advise in his ETA message of the vessel's requirements, fuel or diesel oil, at least 24 hours prior to ship's arrival into port. Bunkering is by contract between the Owners and the different bunkering firms, and nominations should be arranged for each vessel separately between the Owners and Head Office of the bunkering firm abroad, and for which payment is also effected abroad. Only the Compagnie Orientale des Petroles accepts payment in cash out of Shipping Account No. 2 for supplies effected by them and in which case a nomination is not required. Vessels can be berthed in the oil installation and thus can effect their bunkering requirements through pipe-lines. Tankers which are not gas-free, cargo vessels carrying dangerous materials and passenger vessels, which are moored opposite the town, can be supplied with requirements of fuel and diesel oil ex self-propelled barges with max. capacity of 700 tons.

Port Said: Vessels can also be supplied at the anchorage areas and in Port Berths by means of supply tankers and self-propelled barges respectively.

Suez: Bunkering always done ex-barges.

FIRE PRECAUTIONS: In accordance with the Suez Canal Authority's regulations, tankers and vessels carrying dangerous materials must comply with their requirements, concerning fire regulations.

OPENING/CLOSING HATCHES: In accordance with Charter Parties, the opening and closing of hatches are dealt with as instructed in this Agreement, but for vessels carrying out minor cargo operations, it is customary that stevedores open and close ships' hatches against ships' account. To expedite vessel's transit, it is always recommended that ship's crew, during vessel's entering into the harbour should open the hatches and rig ship's derricks in order that they may be ready for cargo operations immediately upon ship's arrival at either Port Said or Suez.

CARGO GEAR: These are normally supplied by the stevedores to comply with the nature of cargo discharged or loaded from cargo ships. Rope lengths and other cargo gear may be additionally required to expedite ship's discharge.

GANGWAY/DECK WATCHMEN: In both basins Cherif and Abbas at Port Said, where cargo vessels are normally berthed, ships' gangways can be used for disembarkation and embarkation. Passenger vessels are moored in special berths, i.e. Red Buoys, opposite the town, and can be supplied with 1 or 2 floating bridges (snake pontoon) which can connect the ship with the shore to enable the transit passengers and members of crew to proceed ashore. Cargo ships and other vessels mooring at the different buoys must lower their gangway to facilitate disembarkation and embarkation of ship's personnel as well as different officials. As far as Suez is concerned, all vessels must lower their gangway for the same purpose stated above. A deck watchman is recommended.

Also see "Police/Ambulance/Fire".

Circular No. 74/84:

1. Each vessel tanker and/or floating unit of any type which berths in Port Said and/or Suez either to transit the Suez Canal and/or to carry out operations has to engage watchmen in the following procedure:

Gross Tonnage of Floating Unit	*Minimum No. of Watchmen to be engaged Per Unit*
(a) Up to 999 tons	1 watchman
(b) From 1,000 tons to 2,999 tons	2 watchmen
(c) From 3,000 tons and over	3 watchmen
(d) Passenger ships	According to Master's requirements with a minimum of 3 watchmen.
(e) Large cargo ships	

2. Each Contactor has to submit to the Master a list showing names of watchmen engaged and their serial numbers.

3. The vessel has to ascertain that each watchman is in possession of an identity card and/or badge bearing a serial number, photo and name of the marine contractor through whom he has been engaged.

4. Masters are kindly requested not to sign blank receipts as it is recommended to keep a copy of same onboard for perusal in case of need.

5. Any incident concerning watchman's attitude on board has to be reported immediately to the Agents so that necessary steps can be accomplished on the spot for the safeguard of ship's interests.

Circular No. 86/84:

On the occasion of the current security precaution measures adopted at present, kindly advise Owners and Masters to the following steps:

1. Upon ship's arrival in Canal waters, security personnel may board vessels with at least two persons with certified identity cards issued by the Suez Canal Security Directorate. The above procedure is a part of security plan to safeguard ships' transit in the Canal due to the prevailing circumstances.
2. Utmost care and accuracy to be taken in relaying information about ship's tonnage and all particulars concerning cargoes onboard, thus complying with manifests, avoiding ship's delay or checking.
3. Special attention to be given on passing information for expected vessels either from the North or the South, and immediate notice for any alteration to be relayed to concerned parties with a minimum period of 6 hours before arrival at Anchorage Area to avoid being delayed.

CUSTOMS ALLOWANCES: Every member of crew is entitled to have 1 carton of cigarettes, 8 ounces of tobacco, and 1 bottle of spirits for his own consumption during ship's stay in Port Said, Suez Canal transit, until vessel exits the Canal or vice-versa. Same applies to passengers, and a limited quantity of bonded stores can be permitted in public rooms and bars on passenger ships. Crew and passenger list, in duplicate, showing the amount in possession of each must be ready on vessel's arrival for submission to the Customs Representatives who normally proceed on board on arrival to seal up the Bonded Stores.

IDENTIFICATION CARDS: Every member of crew must have a seaman's book deposited with the Officer in charge for inspection, if so required by the Immigration Authorities. If a vessel is stopping in Port Said or Suez for a lengthy time, these seamen's books are normally taken off the ship by the said Authorities and kept in their departing office pending ship's sailing day when they are placed on board by the proper officer on a previous advice. Identity cards are also needed if a crew member wishes to proceed ashore for a short visit to the town or for proceeding to any excursion inland.

CONSULS: The following countries have Consulates or Consular Agencies in Port Said:

Denmark
Finland
Greece
India
Italy
Netherlands
Norway
Panama
Republic of China
Spain
Sweden
U.K.
U.S.A.
U.S.S.R.
West Germany

The following countries have Consular Agencies in Suez:

Denmark
Finland
Norway
Sweden

REPAIRS: Most types of repairs whether temporary or permanent can be carried out here by the Suez Canal Authority's shipyard or its subsidiary companies, under the supervision of the appropriate surveyors, if necessary. Suez workshops are well equipped for undertaking all kinds of marine repairs to hull, main and auxiliary engines, boilers, navigation aids, radar and cooling, and installations.

Vessels carrying explosives are not allowed to carry out repairs. Tankers loaded or in ballast but not gas free are not allowed to carry out repairs, except in cases of force majeure of which the Canal Authority is sole judge. Gas-free tankers must present Gas-free Certificate before they are allowed to carry out any repairs. If unavailable, a chemist approved by the Suez Canal Authority can be appointed for testing the tanks and issuing the Gas-free Certificate. The aforementioned restrictions are applicable at Port Said only and not at Suez where vessels anchor at roads and are of no danger.

Other Repair Facilities: Exist at Port Said for air conditioning, wireless telegraphy, radar, course and rudder recorder, refrigerators, and refrigerating units.

All kinds of repairs to echo sounding devices are carried out at Port Said and Suez by experienced specialists at reasonable charge. In Port Said different types are dealt with by the Port Said Engineering Works with the exception of Raytheon radar, B.T.H. radar and Cossor radar which are represented by the Eastern Electronics. The electrical repair workshop in Suez is operated by Suez Electronics.

DRY DOCKS: A floating dock of 25,000 tons, capable of docking vessels up to 50,000 d.w.t., is available at Port Said as well as a dry dock at Suez. Sufficient notice is required to book the date for either the floating or the dry dock.

Repair facilities are available at Suez, where a dry dock is suitable to accommodate vessels up to 8,000 d.w.t.

Dimensions:

Extreme length to inner sill	464 ft.
Breadth at entrance	73 ft.
Height of water over keel blocks:	
at Spring tide	22 ft. fore, 26 ft. 3 in. aft
at Neap tide	19 ft. fore, 23 ft. 3 in. aft

The max. draft at which a vessel can use the dry dock is 17 ft. fore and 20 ft. aft. Deeper drafts may be arranged with the management.

The Suez Canal Authority's Floating Dock and Shipyard is situated at the Northern entrance of the Suez Canal, opposite to Port Said lighthouse.

Ships up to 50,000 d.w.t. may undergo all kind of repairs in the shortest possible time. Tankers, by gas-freeing during their voyage from their home harbour to Port Said, will save at least 4 days if they carry out their repairs in our dock.

CREW CHANGES:

By law, only the official State Agents are permitted to handle reception or repatriation of crew in Egypt.

Crew members arriving at Cairo Airport to join a vessel must have a letter of introduction addressed to the Manager of Cairo Shipping Agency, 7 Abdel Khalek Tharwat Street, P.O.Box 468, Cairo, telephone number 745755 or 745863. This introductory letter is to be produced immediately upon arrival to the representative attending at the airport.

Note: A representative is usually in attendance when the crew member steps off the bus and passes through the doors at the entrance hall. Distance from the bus about 20 m. – 25 m. – just in front of the banks.

Visas can be obtained at the airport.

The Suez Canal Authorities have also stipulated the following requirements for arriving crew members:

(a) Be of same nationality as the vessel's flag.
(b) Be in possession of a contract signed and stamped by the shipowners.
(c) Be holding a valid Seaman's Book.

Note: Crew members joining vessels at Suez Canal are not permitted to bring with them spare parts, equipment, electrical apparatus, etc., for vessels unless the goods in question are accompanied by an air waybill which must indicate the words "in transit", together with an invoice from the suppliers stating description and value of the goods.

Principals are requested to telex their Agent giving full details of crew changes including names, flight numbers, dates and times of arrival.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: *General Holidays 1983.*

February 22nd	Unity Day
May 1st	Labour Day
May 9th	Sham El Nessim (Spring Holiday)
June 18th	Evacuation Day
July 10th – 13th	Ramadan Bairam (End Of Ramadan)*
July 23rd	Revolution Day (National Day)
September 16th – 20th	Courban Bairam (Pilgrimage Feast)**
October 6th	Armed Forces Day
October 7th	Islamic New Year***
October 24th	Suez Day
December 16th	Mouled El Nabi (Birth of the Prophet)

*Possibly observed July 11th – 14th
**Possibly observed September 17th – 21st
***Possibly observed following day.

The Dates of the Islamic holidays are stated approximately. Working hours: 0600–1800 hrs. Overtime: 1800–0600 hrs. Friday is the weekly day of rest but it does not affect labour.

If a holiday falls on a Friday it is possible that the following working day will be decreed a holiday also.

Ramadan: Thirty days' fast and how it affects labour; Cargo operations can be carried out at night and on Fridays and General Holidays against payment of overtime rates. Arrangements should be made on the previous working day to enable Customs to delegate the necessary personnel in time.

Local Holiday

Port Said:
December 23rd — Port Said Day

AIRFREIGHT: The Official State Agents are the only Agents legally entitled to handle airfreighted consignments such as parcels, spares, etc., and the following procedure should always be followed:

All parcels should indicate:

(a) Name of vessel to which consignment is intended and port of delivery.
(b) Name of Official State Agent.
(c) The wording . . . . "delivery at Cairo Airport to Cairo Shipping Agency only, on behalf of (insert name of Official State Agent)".
(d) All parcels to be encircled with a wide self-adhesive tape, coloured red. In addition a self-adhesive label to be affixed bearing the name of Cairo Shipping Agency and also the name of the Official State Agent in large capital letters.
(e) The parcel and air waybill must indicate the words "in transit".
(f) Suppliers of the spare parts must always be instructed to enclose with the parcel, copy of their invoice stating description of the contents and value and to ensure that the commodity of the cargo can be indicated precisely on the relative Bill of Lading.

Note: Crew members joining vessels at Suez Canal are not permitted to bring with them spare parts, equipment, electrical apparatus, etc., for vessels unless they are accompanied by an air waybill and an invoice duly completed as instructed above. Please note that any goods for vessels arriving with embarking crew members must also follow precisely points (e) and (f) as indicated above otherwise the Customs Authorities will refuse to release such goods "in transit".

In order to enable check upon airfreighted consignments, Principals are requested to telex advise their Agent giving full details of flight number, date, air waybill number, etc.

Circular No. 19/83: Dated 8th February, 1983.

Parcels of spare parts, equipment and electrical apparatus arriving care of crew members without transit shipping documents.

Reference is made to our previous circulars, dealing with the above subject, ending with No. 101/82, dated 31st October, 1982, requesting you to kindly ascertain that the air waybill covering a parcel of spare parts must show that same is "In Transit".

The object of the present circular is to bring to your kind attention that, considering that, according to Regulations, a crew member is allowed to be accompanied only by his personal effects, the Customs Authorities refuse to release "In Transit" other goods, such as spare parts, various equipment, electric apparatus of high value (T.V., video etc.) arriving care of crew members. As already explained, the goods in question should be accompanied by an air waybill and an invoice duly completed as described previously.

Kindly, therefore, arrange for parcels of spare parts, equipment, apparatus etc. not to be forwarded care of crew members unless they are accompanied with complete shipping documents, otherwise it will not be possible to have them released "In Transit".

Circular No. 114/1983:

We would refer to our various Circulars ending with No. 19/1983 (see above), dated 8.2.1983, dealing with the necessity of instructing Suppliers of spare parts to ensure that:

(a) the parcels be accompanied by copies of invoices showing description of their contents and its value.
(b) that the relative Bills of Lading should point out the commodity of the cargo precisely.

Moreover, you are also kindly requested to make certain that the respective Air Waybill should clearly show that the parcel is "In Transit", indicating the vessel's name to enable the Customs to avoid dealing with the parcels as "Import Cargo", which irregularity causes much complication and delay.

In this respect, it is also recommended that parcels be airfreighted to Cairo four days before ship's arrival, taking into consideration the weekends and official holidays.

AIRPORT: The distance between the international airport at Cairo and Port Said or Suez is normally 2.5 hours. International airlines serve this airport. Cairo Shipping Agency is on constant contact with Agent for the necessary instructions.

In the interest of all and in order not to lose any time and to avoid any restrictions when sending crew members by plane to join their respective vessels, it is essential that the Agent concerned should notify by cable in good time the flight number as well as the time and date of the arrival in Cairo, thus enabling the Agent to notify Cairo Shipping Agency for the necessary clearance and as to whether they should be sent to join their vessels.

POLICE/AMBULANCE/FIRE: Vessels which are moored in the harbour either in Port Said or Suez requiring assistance from the Port Police, should hoist the International Code Signal (YM). There is always a police guard appointed by these Authorities on each ship in either Port Said or Suez harbour. First-aid assistance can provide ambulances at a request through the Agent. In case of fire on board when in port, the Master must inform the Port Authorities (the Suez Canal Authority) imediately and at the same time give a general warning by means of a long blast of whistle or siren and be prepared to move his ship to another berth if so required. The Suez Canal Authority own 7 tugs and other craft distributed in various points of the Canal with individual output from 10 to 950 t.p.h. well equipped with fire-fighting appliances, ready for use at any moment.

Police guards are placed onboard vessels in Suez Roads for vessels' protection.

TELEPHONES: There are no telephone facilities available in Port Said except at Berth No. 4 Red where passenger ships are normally berthed, and this can be connected when snake pontoon is fixed with ship's gangway.

SERVICES: Port Said and Suez being situated at a middle point between the East and the West, have become an ideal centre for replenishing stores and provisions which can be obtained in bond or from town.

Delivery of provisions and stores is effected 24 hours a day at Port Said and Suez.

It is recommended that Masters should order their requirements prior to their arrival with a view to avoiding any delay specially for ships joining the 0700 hrs. convoy Southbound.

Deck and engine stores are ample and are also available and sold at (in bond) prices.

Paints: All kinds (bottom, boot-top, topside, enamel, engine ready mixed, heat resisting, varnishes) are also available at "in bond" prices. Painting of ships or undertaking any maintenance work on board is permitted while ship is in port waiting to join the North or the Southbound convoys as well as while transiting the Suez Canal.

The following companies are represented here:

International Marine Paint	Sole agent in Egypt: International Shipping Enterprise.
Hemples Marine Paint Camrex Marine Paint	Represented by The Egyptian Marine Supply and Contracting Co. (cable address: "Consup")

Chemicals: The following chemical firms are represented in Port Said and Suez:

Gamlen & Co.	Represented by The Egyptian Marine Supply and Contracting Co. (cable address: "Consup")
Bird Archer/Norus (Tommons & Chartes) Chemicals. Drew Chemicals Cameroid Products. Paroline Chemicals Cameroid Products. Walker Bow.	Represented by The International Marine Services Co. (cable address: "Marinco")
Houseman Marine Chemicals	International Shipping Enterprise

Grease and lubrication oils. Available from:

Esso Petroleum Co.
Misr Petroleum Co. (ex Shell)
Mobil Oil Co.
Caltex Oil Co.
Ocean Oil Co.
Wisure Oil Co.
Fina Oil Co.
Gulf Oil Co.
Castrol Burma Oil.

An advance notice of 48 hours is necessary to arrange for lubricating oils and/or bunkers required.

Charts: Admiralty Charts are available at Port Said from the Egyptian Marine Supply and Contracting Co. If any order has to be supplied at Suez, arrangements can be made for the required charts to be sent there.

Defense Mapping Agency, Washington and British Admiralty Charts available from International Shipping Enterprise, who also act as distributor for Pains-Wessex Marine distress signals and line-throwing equipment.

Cigarettes: American and British cigarettes are available "in bond".

Technical Gases: Technical gases are also available at Port Said and Suez, and empty containers can be exchanged.

Fish: Bream, prawns, crab, rock fish available throughout the year; Mullet available June/February; Slip soles available November/March.

Vegetables: Beans, beetroots, cauliflower, cabbages, carrots, eggplant, endive, garlic, herbs, lettuce, marrows, parsley, radishes, spinach, tomatoes, turnips, escarole, onions, potatoes: *available throughout the year.*

Green peas, celery, pumpkins: *available January/March.*

Artichokes: *available October/April.*

Parsnips, spring onions: *available November/May.*

Green pepper, mint, lady's finger: *available June/September.*

Capsicum: *available May/December.*

Cucumber: *available February/December.*

Lemons, limes: *available throughout the year.*

Fresh figs, fresh dates: *available August/October.*

Bananas: *available October/June.*

Grapefruits, oranges, tangerines, *available October/May.* (When out of season import citrus are available).

Apricots: available May/June.

Water melons, sweet melons: *available May/October.*

Grapes: *available June/October.*

Plums, peaches: *available June/October.*

Mangoes: *available August/September.*

Pears: *available August/October.*

Apples: *available November/February* (also imported the whole year).

Eggs: Eggs are available throughout the year.

Meat: Fresh meat is only supplied to vessels having a Mohammedan Crew after permission is obtained from the Customs. Other vessels are supplied with "frozen" in bond.

Laundry: Well equipped, reliable and fast services are available at Port Said, through the ship's contractor. Ship's laundry is usually delivered within 24 hours. For vessels remaining a few hours in Port Said and transiting the Canal, their laundry could be collected, washed and ironed and then transported to Suez by special car or lorry for delivery to them there.

Garbage: No refuse or ashes are allowed to be thrown whilst ships are moored in Port Said, transiting the Canal or in Suez Roads. Small barges are available in Port Said and Suez for disposal of garbage or ashes, which craft can be obtained at a reasonable hire.

Motor Launches and Tugs Hire: Motor launches and tugs required for extra service are charged for as under:

At Port Said:

Motor launches per hour at day time, pt. 60 each; night-time, pt. 75 each; motor launches per day, pt. 300 each; night, pt. 450 each.

At Suez:

Motor launches per hour, pt. 1,250 each; tugs per hour, pt. 5,000 each.

Divers: Suez Canal Authority's Divers as well as other Contractors' experienced divers are available, capable of carrying out any kind of underwater repairs including welding and fees are subject to the kind of job to be performed. Anchors and other articles left behind by any ship in Canal waters are retrieved on no cure no pay basis.

SHORE LEAVE: Crew members are allowed ashore provided that they obtain a shore leave pass issued by the Immigration Authorities through the local Agent. They can proceed ashore by means of motor launches or rowing boats at their own expense. For vessels mooring opposite the town and connected with the shore by snake pontoon, crew, together with passengers, can proceed ashore free of charge.

DEVELOPMENTS: There is a modernisation plan underway at Suez.

When the modernisation is complete, cargo handling will be largely mechanised, resulting in a great increase in the port's capacity. The first stage of the expansion will provide 3 multi-purpose berths, shoreside installation, container-handling facilities, and grain storage facilities. An offshore grain pier connected to onshore storage silos is expected to be built during the next phase.

Second Stage (Suez Canal): It aims at deepening the Canal to step its wet cross-section to about 5,000 sq.m. and the permissible draft to 67 ft., thus allowing tankers up to 260,000 d.w.t. to transit fully loaded, tankers up to 300,000 d.w.t. partially loaded and tankers up to 400,000 d.w.t. in ballast. Completion expected in 1988.

SHIPMASTER'S REPORT No. 1: *Suez Canal Transit (South/North) (1976)*

C. Guardafui light was clearly seen and identified at a range of 39 miles.

There was an oil rig operating Southwards of the Cape in approximate position Lat. 11° 44′ N., Long. 51° 21′ E.

The Straits of Bab El Mandeb were congested but the traffic separation scheme seems to be satisfactory. The passage of the Red Sea does not seem to be any different from the past.

When passing Aden, a preliminary message was sent to the Suez Agent. This was of doubtful value but it is advisable to send a message addressed to 'Port Authorities Suez', via station SUK, giving the following information:–

Ship's name and flag.
Whether transit of canal is desired.
Destination.
Where from.
Cargo aboard.
Whether any dangerous cargo carried.
Draft.
ETA at – 23° North, Straits of Gubal, Suez.

All radio messages through the Egyptian radio stations must have a signature, i.e. 'Master'.

The ETAs can be updated as necessary. The message to the Port Authorities is mandatory.

Approaches: The Gulf of Suez is congested by oil rigs – particularly in the vicinity of Ras Shukheir and the Ramadan and July oil fields where there are many rigs and flares and supply vessels crossing the Gulf. One oil rig was working in the middle of the fairway East of Ras Dib. With poor visibility, if a Southbound convoy were to be met in this region, it might be wise to proceed at manoeuvring speed.

Most of the lights in the Gulf are extinguished but Newport Rock lighthouse, the buoys and other lights in Suez Bay are working and are efficient.

A pilot cutter operates just South of the waiting area but an approaching ship will be called by signal lamp from ashore, asking for the ship's name and making "VHF". Contact is then established on Channel 16, changing to 6 when the ship will be told whether to anchor in the waiting area or remain underway until the Pilot boards.

Pilotage: The Pilot boards from a launch by means of the accommodation ladder (which should be lowered to within 3 ft. of the water) and takes the ship to her designated anchorage in Suez Bay.

Arrival Formalities: Quarantine and Customs authorities (about 8 people) board the ship at the anchorage together with the Agent. The accommodation ladder is used for all boarding and disembarkation within the canal. It should be raised when not actually in use otherwise the ship will be boarded by numerous "Businessmen".

A list of forms required is listed below but there are others which the various authorities bring with them and some are presented for filling in more than once and by different officials. This ship's transit was delayed because the Agents had not received funds from London. Deck log books for the past six months have to be landed.

The Suez Canal Cargo Declaration Form (in duplicate) is handed to the Pilot who disembarks at Ismailia.

At Anchor: With 3 shackles out, this ship lay comfortably at A8 berth. Some difficulty, however, was found in reconciling the various anchor bearings with the chart.

A bumboatman will seek permission to set up shop aboard. Care should be taken to agree methods of payment beforehand.

A listening watch should be kept for Suez Control on Channel 6. Water can be ordered through the Control and will be delivered in a large water boat carrying about 300–400 tonnes. Rate of delivery is about 50 t.p.h.

Convoy lists are made out at about 0300 hrs. and ships can call Suez Control soon after that to learn their convoy number and time of Pilot boarding. Convoys can start as early as 0500 hrs. This vessel was number 10 and hove up at 0830 hrs. Our searchlight was brought out at 1700 hrs. and the boats at 0500 hrs. We were asked to carry 4 extra boats but Pilots advise against this as the time taken to unload 6 boats can cause delay at the other end of the canal.

Transit: The Pilots change at Ismailia. The convoys cross in the Great Bitter Lake, anchoring as necessary. There is now one convoy from each end every day.

A Harbour Pilot takes over on reaching Port Said and, as soon as the searchlight and boats have been off-loaded and the ship has entered the approach channel, he disembarks.

The Agent will board at Port Said with yet another form to be filled in and he will return the log books.

Documentation:

2 Health Forms (Egyptian)
1 Passport Form (Egyptian)
1 D.B. Tank Statement (Egyptian)
1 Radio Frequencies Form
2 Cargo Declarations
*4 Cargo Manifests
8 Crew Lists

Plus several others which will be produced by the various officials.

*It was explained that our company's vessels do not carry cargo manifests but the Agent said that a typed statement of the amount of cargo aboard, destination and where loaded would suffice.

SHIPMASTER'S REPORT No. 2:

Suez Canal Transit (South/North) – (1976)

After clearing Aden a radio message was sent to the Port Authorities Suez via Port Said Radio advising them of the following:

Ship's name and flag.
Whether desire transit.
Destination and last port.
Cargo aboard total tonnage and type of cargo.
Whether dangerous or explosive cargo carried.
Draft.
British tonnages gross and nett.
Date Suez Canal Certificate issued.
Tonnages gross and nett from Suez Canal Certificate.
Advice as to whether searchlight required.
ETAs 23° North, Straits of Gubal, Suez.

During the passage in the Red Sea both Port Authorities and Agents received up-dated ETA messages. When using SUK radio to give updated ETA this station advised that a cable was necessary to be sent to Port Authorities Port Safaga via SUK giving ETA Strait of Gubal.

Navigation in the Red Sea does not seem to be any different from the past. The Traffic separation scheme in the Straits of Bab El Mandeb seems satisfactory.

Straits of Gubal and passage in the Gulf of Suez was in daylight. Especially in the Straits of Gubal very few seem to adhere to any form of traffic separation scheme. There is no doubt that if it were night time or poor visibility then it would be advisable to be on 'Stand-by'. There is now an oil rig Lat. 27° 57′ N., Long. 38° 41.2′ E., or 349°, 5.7 miles from Ashrafi Lt. Ho.

The Ramadan and July Oil Field area has many oil supply ships, most of the Southbound traffic was met in the Straits of Gubal thus further North it was very quiet.

The ship was anchored in the waiting area South of Newport Rock but alas this area shown as being to the East of the 2 green flash buoys is *now wrong!* The waiting area is to the S.E. of the most Southern Green flash buoy. About 1 mile South of the previous position. Evidently there is shoaling in the old area and ships have grounded.

On arrival at the waiting area the ship had to anchor as the Southbound convoy was clearing. A tug with Pilot Signal closed the ship to ask for information with regard to tonnages, cargo etc. After first vocal contact Channel 6 VHF was used. The ship was not called up by lamp nor did the Port Control answer any VHF requests etc. It would seem that if the Tug is on station advice is received from there. They did not, however, attempt to advise the ship that the waiting area had been altered.

As the ship anchored a boat came alongside with two watchmen but as I had not requested these and the visitors had not boarded they were sent ashore.

Later a Pilot boarded via the accommodation ladder to shift the ship from the waiting area to a designated anchorage, in our case '1B'. Ship was anchored in '1B' by 0030 hrs. on 12th, having arrived at the waiting area at 1947 hrs. on the 11th.

As the ship had some essential repairs to the main engine which would only take a short time, engines were immobilised. Pilot had advised that 0800 hrs. would be earliest time for transit. During the middle watch the area was hit by a fierce short lived blow from a Southerly direction. Although the vessel did not drag, ships close by did. It was necessary to pay out more cable to ensure a bulk carrier cleared us comfortably. During this time a ship called Port Control to say they had dragged some 3 to 5 cables.

As the weather for some 3 hours was considered bad for small boats the first of the visitors did not board until 0515 hrs.

The Canal Surveyor, who was the first to board was quite helpful and pleasant. He took the Suez Canal Tonnage Certificate for verification as the ship was making a first transit. This I have been informed will be returned to the Company in about 2 months.

Later other officials boarded about 0700 hrs. The Agent also came off with the mail. The 2 electricians for the searchlight insisted on being given a cabin or they would not remain on board. As there was no spare cabin, except one in the crew accommodation, I endeavoured to explain that a reasonable shelter had been built on the after end of No. 2 hatch. It transpired that in the end I moved a patient who had tonsilitis out of the hospital. Later the Canal Pilot informed me that the electricians cannot be so demanding provided a reasonable shelter is provided.

Documentation was found to be as advised in the report above. One small difference is that the Cargo Declaration form is only required as 1 copy and is now in English with one form for South to North ship's and another for North to South ships.

At the moment there is only the 1 convoy each way per day. Hours of commencing transit seem a little doubtful. I gather that first Southbound ship leaves Port Said at 0200 hrs. while the first Northbound ship now leaves Suez at 0800 hrs.

Searchlight and 2 boats were brought alongside and loaded in ample time prior to the Canal Pilot boarding at 0909 hrs. I gather that because of the 'bad' weather for those few hours the delivery of searchlights and boats was delayed. Also no advice was obtainable on the VHF after 0300 hrs. with regard to convoy number or time of proceeding. About 20 minutes' notice was given over the VHF.

The Transit was quite straight forward. Ship was anchored in the North Anchorage, Bitter Lakes for 3.5 hours, the Southbound convoy passing. Transit was commenced at 0947 hrs. At Ismailia the Pilot changed. He took the Cargo Declaration with him.

Port Said was reached at 0033 hrs. on the 13th. The Sea Pilot boarded here as did the Agents who returned the Ship's Register and Log Books which had been landed at Suez. The ship had to keep moving while the boats and searchlight and personnel were either offloaded or disembarked. At night this is not easy and the whole crew are required to ensure a safe and quick operation. Once these matters were completed the Sea Pilot left well within the breakwater. Accommodation ladder was used at all times for Pilots, Officials and Agents boarding and disembarking. Fairway Buoy was abeam at 0148 hrs. on the 13th.

On the Eastern Banks of the Canal there is much work being done with levelling ground and widening the canal. Also in the Little Bitter Lake. *According to the Pilot 2 convoys from North will be put into operation in about 1 month.*

SHIPMASTER'S REPORT: September 1979.

The Pilot advises that vessels anchoring further South than the 0.5 mile limit South of No. 1 Buoy at Suez may not receive Pilot.

SHIPMASTER'S REPORT: June 1982.

Suez Canal – Northbound.

Vessel was 8th in convoy and joined convoy at about 0600 hrs. On arrival Suez contact Suez Agent on VHF Channel 6 or 13. When Northbound and messages are sent to Agents at Port Said we found it was necessary to repeat the messages to Agents at Suez otherwise you do not receive any advance information. The Port Said Agents pass the messages to Suez Agents but Suez Agents do not repeat to the ship.

We transited with experimental loaded draft of 46 ft., plus one tug escort. The tug changes twice during transit so have altogether 3 tugs during transit. If the Pilot gives a bad report about the vessel then SCA will assign 2 tugs, one ahead and one astern.

According to the Pilots, maximum permissible draft is either 50 ft. or 52 ft.

We were clear of Canal about 1730 hrs. and full away 1 hour later.

In the Gulf of Suez there are now drilling rigs in the traffic lanes but they give out good and regular navigational warnings.

SHIPMASTER'S REPORT: October 1983.

Anchorages: Northbound:

Anchorage area for Northbound VLCCs, 3rd generation container ships and vessels over 38 ft. draft is rarely used as Agents are understandably reluctant to board vessel there.

To ensure prompt transit vessel should anchor in the Northern waiting area. However, it would be prudent for deep draft ships arriving after midnight to anchor in the deep draft area and move to the Northern anchorage around 0800 hrs.

SHIPMASTER'S REPORT: July 1984.

ETAs and information on ship's data were sent after departure Jeddah as per Shipmaster's Reports No. 1 and 2 to both Agents "Assiuship Suez" and Port Authorities Suez and updated at entering Gubal Straits. First VHF contact was made by Chabana Shipchandlers who called us and relayed our message in Arabic to the Port Authorities. Pilot station called vessel only after having anchored at the outer waiting anchorage to tell us that we were anchored in a wrong position while at least 12 other ships were anchored in the prohibited anchorage area. However, the pilot station did not come back so the vessel stayed anchored where she was. When vessel approached the waiting area several heavily manned and well equipped business motorboats approached and besieged the ship and could only be stopped from entering the ship by placing seamen along the ship's rail. I knew these businessmen from years ago but they seemed to have become more aggressive by trying to enter the ships and they even followed the ship to the inner anchorage which they had never done before. The Pilot boarded the ship at very short notice and brought her inside. Clearing by Agent and Immigration was as usual, the only difference I noted was that the logbook did not have to be handed to be checked ashore. The next morning (Friday!) vessels were not called as usual to receive their number and Pilot boarding time. The Pilot suddenly came on board without any notice and therefore it is wise to have the engine standing by all the time while expecting to join the convoy. Suez Canal passage was as usual and vessel left the Canal through the new channel.

SHIPMASTER'S REPORT: August 1984.

Egypt maintains Summer Time of GMT plus 3 hours from 1st March to 1st October.

Vessel transited Canal Northbound. At the time of the Pilot boarding at Suez the Canal boat had not yet arrived although the boatmen were on board. The Pilot on being informed, contacted the Port Control and then asked if vessel would agree to using a lifeboat if the need arose. This was agreed and vessel transited Canal.

AUTHORITIES: The Suez Canal Authority, Ismalia, Egypt. *Tel:* Ismailia 2201. *Cables:* Sucanal Ismailia. *Telex:* Sucan 92153 and 63238 (Ismailia), Scaps Un 63256 (Port Said). *Contact:* Director of Transit.

Port Said Port Authority.

Suez Port Authority.

AGENCY: Canal Shipping Agencies Company is responsible for shipping agencies in the Canal, Suez Gulf and Egyptian Red Sea ports, through 4 branches at Port Said for each of which there is a branch at Suez and 1 in Cairo. Their names are:

Port Said Head Office: 26 Palestine Street, P.O.Box 262. Tel: 20662/20666. Telegrams: Canaship. Telex: 63075 Agen Un.

Suez Office – Port Tewfik: Canal Shipping Agencies Co. Bldg., Canal Street. Tel: 2639 (02) 773561. Telegrams: Canaship. Telex: 63055 Agency Un.

Branches (Port Said):

Assiut Shipping Agency, Port Said. 9 Mostafa Kamel Street, P.O. Box 128, Telegrams: Assiuship. Telex: 63262 Asut Un and 63138 Assiu Un. Tel: 20522 20523.

Asswan Shipping Agency, Port Said, 8 El Goumhouria Street, P.O. Bag. Telegrams: Swana. Telex: 63261 Swan Un or 63291 Swana Un. Tel: 20790/20793.

Damanhour Shipping Agency, 40 El Goumhouria Street, P.O.Box 126. Telegrams: Damanship. Telex: 63264 and 63146 Daman Un. Tel: 20351/20356.

El Menia Shipping Agency, Port Said, 31 El Goumhouria Street, P.O.Box 328 and 130. Telegrams: Minship. Telex: 63263 or 63034 Meni Un. Tel: 20675/20677.

Branches (Suez Offices – Port Tewfik):

Assiut Shipping Agency, Canal Shipping Agencies Co. Bldg., Canal Street. Telegrams: Assiuship. Telex: 63108 Asuez Un. Tel: 2790 and 3025.

Asswan Shipping Agency, Canal Shipping Agencies Co. Bldg., Canal Street. P.O.Box 4. Telegrams: Swana. Telex: 63104 Ssuez Un. Tel: 3216.

Damanhour Shipping Agency, Canal Shipping Agencies Co. Bldg., Canal Street. P.O.Box 4. Telegrams: Damanship. Telex: 63055 Agency Un. Tel: 3176 and 3009.

El Menia Shipping Agency, Canal Shipping Agencies Co. Bldg., Canal Street. P.O.Box 4. Telegrams: Minship. Telex: 63106 Msuez Un. Tel: 3018 and 3085.

Cairo Branch:

Cairo Shipping Agency, Cairo. 7 Abdel Khalek Tharwat Street, P.O. Box 468. Telegrams: Maragent. Telex: 92673 Marg Un. Tel: 745755, 745836.

Offices at Safaga, Kosseir and Ras Gharib:

Telegrams: Canaship. Telephones: Safaga 10, Kosseir 14, Ras Gharib 71.

N.B.: Safaga, Kosseir and Ras Gharib to be contacted via Kosseir Radio around the clock.

Port Said offices to be contacted via Alexandria or Port Said Radio around the clock.

Suez offices to be contacted via Alexandria or Port Said Radio around the clock.

TRANSIT SERVICE: Gulf Agency Company operate a Suez Canal Transit Service the purpose of which is to assist Owners and Shipmasters with the numerous formalities applicable to transit of the Canal including supervising the pre-payment of Canal Dues and ensuring no delay in entering or clearing the Canal. Full details of the service are obtainable from Gulf Agency Co. (Greece) Ltd., P.O.B. 17071, Kolonaki, 10024 Athens, Greece. Telex: 216344, 218687, 214548.

SUEZ CANAL – RULES OF NAVIGATION*

Part I Navigation
Part II Canal and Lakes (Characteristics)
Part III Communications – Signals

*Not all the Rules of Navigation are printed herein. Part IV is concerned with tonnage and dues and the Appendix with carriage of dangerous goods.

GENERAL

Article 1: Transit Through the Suez Canal

(a) Transit through the Suez Canal is open to vessels of all nations, subject to their complying with the conditions stated in the present Rules of Navigation and all the references and circulars which shall be issued by the Suez Canal Authority. They will constitute an integral part of these rules, and the provisions of the International Regulation for Safety Of Life At Sea, and its amendments, as well as the provisions of the International Regulations for Preventing Collision at Sea, and all laws, orders and regulations issued by the A.R.E. Government.

However, the Suez Canal Authority reserves the right to refuse access to the Canal Waters, or order the towage or convoying of vessels considered dangerous or troublesome to navigation in the Canal. Non or erroneous declaration of dangerous cargo (see "Article 47 Bis").

(b) By the sole fact of using the Canal Waters, Masters and Owners of vessels bind themselves to accept all the conditions of the present Rules of Navigation, with which they acknowledge being well acquainted, to conform with these conditions in every respect, to comply with any requisition made with a view to their being duly carried out, and to adhere to the Canal Authority's private Code of Signals as shown in Part III of these Rules.

Article 2: Agents

Every vessel other than warships intending to transit the Suez Canal or staying at Port Said or Port of Suez, or in the Suez Canal Basins or docks must have a recognised Shipping Agent.

The Egyptian Authorities are to be notified of intended transit of warships in the Suez Canal : *Viz* : Ministry of Foreign Affairs, Ministry of Defence as well as Ports and Lights Administration.

Article 3: Canal Waters (Definition)

Canal Waters mean the Canal proper, and the access channels thereto,[1] the waters within the Canal Authority's Concession adjacent to the Canal proper and Port Said Harbour and Port of Suez.

The Canal proper, as to its length, is reckoned to run from Km. 3.710 West Branch for vessels entering from Port Said Harbour and from Km. 1.333 East Branch for vessels entering through the East Approach Channel, to Hm. 3 at Suez, including the 2 channels of the Great Bitter Lake and all Canal by-passes.

As to its width the Canal is bounded by the banks when they are above water; when the banks are submerged, the width of the Canal is limited to the perpendiculars at the point of intersection of the submarine bank with the horizontal plane corresponding to the max. draft authorised including squat.

Article 4: Responsibilities

When in Canal Waters, the Owners and/or Operators of any vessel or floating structure of any description are responsible for any damage and consequential loss it may cause either directly or indirectly to the Canal Authority properties or personnel without option for the Owners and/or Operators to release themselves from responsibility by purely and simply abandoning the vessel, floating structure or wreck.

The words "Owners and/or Operators" for the purpose of the present article, shall be construed to mean person, persons or corporate body responsible for the vessel at the time of the navigational accident or incident.

Moreover, the vessel guarantees to indemnify the Canal Authority in respect of any claim against the latter by reason of any damage whatsoever she may cause either directly or indirectly to third parties.

The vessel waives the right to claim against the Suez Canal Authority for any damages caused by third parties that she may sustain while in Canal Waters.

Vessels carrying petroleum or dangerous cargo must comply with these regulations and also with the Appendix to the Rules of Navigation for vessels carrying dangerous cargo.

Article 5: Temporary Delaying of Vessels

The Canal Authority may delay a vessel for the purpose of investigating any claim or dispute that may arise, or any formal or informal complaint, or allegation of violation of the laws of the Canal.

A vessel may be delayed until in the opinion of the Canal Authority, its tenderness, trim, list, cargo, hull, machinery have been put into such condition as will make the vessel reasonably safe for her passage through the Canal.

No claim for damages is accepted or considered because of any such temporary delaying of vessels.

Article 6: Pilotage

Pilotage is compulsory for all vessels whatever their tonnage,[2] when entering, leaving, moving, changing berth or shifting in Canal Waters or Port Said and Port of Suez harbours.

Any exemption must be explicitly authorised by the Suez Canal Authority (See Art. 11(e)).

Article 7: Changing Berth in Road Anchorages

Vessels in Port Said Anchorages Area (Northern and Southern Anchorages), Suez VLCCs and 3rd generation container ships Anchorage, Suez Roads, the Bitter Lakes or Timsah Lake are not authorised to change berth or anchorage without explicit authorisation from the Suez Canal Authority.

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[1] Port Said Eastern and Western Entrance channels, Suez Entrance channel which includes the Port of Suez Eastern channel leading to the Canal entrance.

[2] Except Egyptian vessels under 300 Tons Suez Canal Gross Tons authorised to work in Canal Port and Accesses and Egyptian fishing vessels under 300 tons S.C.G.T. This does not apply for the Canal proper.

PART I – NAVIGATION

CHAPTER I: SUEZ CANAL FEATURES

SECTION I: Approaches

Article 8: Port Said (See Plan Book)

Ten miles before arrival to Approach Buoy,(3-1)(3-2)(4) all vessels arriving from seaward should contact the Suez Canal Harbour Office by VHF (Channel 16). If not able to, by R/T (2182 kHz) or by W/T via S.U.Q. for instructions (see Part III Articles 87 and 88).

Approach Buoy: Position: Lat. 31° 25′ 30″ N., Long. 32° 22′ 00″ E. Height 10 m., black and yellow horizontal bands.

Daymark: 2 black cones points in.

At Night: Group flashing white light (9) every 13 seconds.

Fitted with a Racon and fog horn.(5)

(3-1) See Plan Book.

(3-2) For the safety of navigation at Port Said Approaches it is recommended to all vessels arriving from sea to avoid entering Port Said Anchorage Areas during the movement of vessels leaving Port Said Anchorage Areas to enter Port Said Harbour or Canal (from about 0100 hrs. to 0500 hrs.), and that until the said movement has ended.

Vessels are to contact Port Said pilot boat for information.

(4) All buoys in the Canal and access channels may be replaced temporarily by others of smaller size.

(5) Not fitted at time of printing.

(A) ANCHORAGE AREAS(6): The incoming vessels have two anchorages.

(1) The Northern Area

(i) For VLCCs, and vessels over 38 ft. draft.

(ii) The area is limited as follows:

North Limit Latitude	31° 25′ 00″ North
South Limit Latitude	31° 23′ 12″ North
East Limit Longitude	32° 20′ 30″ East
West Limit Longitude	32° 16′ 00″ East

(6) All vessels arriving from sea have to anchor in the berth allocated to them by the Suez Canal Port Authority.

(iii) V Berths: Centre of Circle (radius 750 m.)

Berth	*Latitude*	*Longitude*
V1	31° 23′ 42″ North	32° 19′ 30″ East
V2	31° 24′ 30″ North	32° 19′ 30″ East
V3	31° 23′ 42″ North	32° 18′ 30″ East
V4	31° 24′ 30″ North	32° 18′ 30″ East
V5	31° 23′ 42″ North	32° 17′ 30″ East
V6	31° 24′ 30″ North	32° 17′ 30″ East
V7	31° 23′ 42″ North	32° 16′ 30″ East
V8	31° 24′ 30″ North	32° 16′ 30″ East

(iv) Vessels at anchor in this area when entering the Canal (East Channel) will proceed between the East and West Buoys at Hm. 135.(7)

At. Hm. 150 (East) a buoy is fixed to be used as a lead when approaching the 2 Entrance Buoys of Hm. 135 (course 194°).

Hm. 150 Buoy: Red Can shape. Red St. Andrew's Cross. At Night: Occulting red (1) every 4 seconds.

Hm. 135 Buoys: West: Black Cone shape. At Night: Quick flashing green light. East: Red Can shape. At Night: Quick flashing red light.

(7) All the buoys in the Suez Canal and its approaches are fitted with Radar Reflectors.

(2) The Southern Area

(i) For all other vessels(8) (maximum draft 38 ft.)

(ii) The area is limited as follows:

North Limit Latitude	31° 23′ 03″ North
South Limit Latitude	31° 21′ 15″ North
East Limit Longitude	32° 20′ 30″ East
West Limit Longitude	32° 16′ 42″ East

(8) If number of ships exceeds 12, they are to anchor N.W. of Middle Buoy indicating the West Limit of the Anchorage Area.

(iii) C Berths: Centre of Circle (radius 500 m.)

Berth	*Latitude*	*Longitude*
C1	31° 21′ 30″ North	32° 20′ 06″ East
C2	31° 22′ 06″ North	32° 20′ 06″ East
C3	31° 22′ 42″ North	32° 20′ 06″ East
C4	31° 21′ 30″ North	32° 19′ 24″ East
C5	31° 22′ 06″ North	32° 19′ 24″ East
C6	31° 22′ 42″ North	32° 19′ 24″ East
C7	31° 21′ 30″ North	32° 18′ 42″ East
C8	31° 22′ 06″ North	32° 18′ 42″ East
C9	31° 22′ 42″ North	32° 18′ 42″ East
C10	31° 21′ 30″ North	32° 18′ 00″ East
C11	31° 22′ 06″ North	32° 18′ 00″ East
C12	31° 22′ 42″ North	32° 18′ 00″ East
C13	31° 21′ 30″ North	32° 17′ 18″ East
C14	31° 22′ 06″ North	32° 17′ 18″ East
C15	31° 22′ 42″ North	32° 17′ 18″ East

N.B. North, Middle and South Buoys of West Limit Port Said Anchorage area are cancelled – to be deleted in:

Admiralty Chart No. 234.

(iv) Vessels at anchor in this area will enter the port of Port Said through the West Approach Channel as follows:

(a) Take on their starboard: Fairway, No. 8, No. 7 and No. 6 Buoys.

(b) On the port are 3 yellow buoys showing yellow lights.

(c) On reaching No. 5 pair of buoys at Hm. 80 showing occ. green and red, one every 4 seconds, they will proceed through the Old Channel to port (course 217.5°).

(3) West Limit Buoys of Anchorage Areas North of Port Said (See Plan Book).

The West Limit of the 2 Anchorage Areas is marked by 3 black buoys as follows:

(a) Northern Buoy with a black ball day mark and showing white isophase by night (3 seconds). Lat. 31° 25′ 18″ N., Long. 32° 17′ 20″ E.

(b) Middle Buoy on the extreme West of the line separating the anchorage berthing areas showing occulting white (1) every 3 seconds. Lat. 31° 22′ 48″ N., Long. 32° 17′ 20″ E.

(c) Southern Buoy with 2 cones, points up, as day mark and showing quick flashing white. Lat. 31° 21′ 04″ N., Long. 32° 17′ 20″ E.

(4) Prohibited Area for Anchorage

The area between the East limit of the 2 anchorage areas and the approach channels is prohibited for anchorage to all vessels and floating units.

(B) DANGEROUS AREAS

(1) Wreck. A wreck buoy is situated on the Western side of a sunken ship at Hm. 195 West of the approach channel:

Lat. 31° 25′ 19″ North Long. 32° 23′ 00″ East.

Height 5 m., painted black and red horizontal bands, with day mark 2 black balls. Showing group flashing white (2) every 10 seconds. (See Plan Book).

(2) Dumping Areas. The hopper dredgers, dredge underway for several months every year in the entrance channels and dump in the following areas.

3,140 m. East of the axis of the East channel at Hm. 140.

Lat. 31° 20′ 48″ North Long. 32° 25′ 48″ East.

4,000 m. East of the axis of the East channel at Hm. 80 approximately.

Lat. 31° 18′ 42″ North Long. 32° 24′ 42″ East.

(C) PORT SAID APPROACH CHANNELS

(1) Buoyage (See Plan Book – "Suez Canal North Entrance").

The Port Said West approach channel extends from the port of Port Said till Hm. 80 where it joins the East approach channel.

The Port Said East approach channel extends from the land boundary, East of Port Said, till Hm. 195.

The 2 channels are marked, on each side, by light buoys of 5 m. height. The light is red on the Eastern side and green on the Western.

(a) East Approach Channel (See Plan Book).

The buoys of the East Approach Channel are black cone shaped in the West and red can shaped in the East, showing by night flashing lights, except: the 2 buoys indicating the Northern end of the channel, at Hm. 195, are Isophase (2 secs. on, 2 secs. off). The distance between them is 745 m.

(b) Junction of East and West Approach Channels

Three yellow buoys mark the junction of the East and West approach channels. They are placed at Hm. 83, Hm. 95 and Hm. 105.

Buoy at Hm. 83: Yellow in colour, is fitted with a yellow St. Andrew's cross day mark and shows by night group flashing yellow (5) every 20 seconds.

Buoy at Hm. 95: Yellow in colour, shows a fixed yellow light.

Buoy at Hm. 105: Yellow in colour, is fitted with a yellow St. Andrew's cross day mark and shows by night group flashing yellow (4) every 15 seconds.

(c) West Approach Channel

The buoyage of the West approach channel of Port Said harbour, is as follows:

(i) Port Said Fairway Buoy (See Plan Book).

Off Port Said, a fairway light buoy, height 10 m., painted black with yellow vertical stripes, surmounted by a day mark 2 cones point out, and showing group flashing white light (3) every 10 seconds.

Lat. 31° 21′ 18″ North Long. 32° 20′ 42″ East.

(ii) The buoys of the West approach channel are black cone shaped in the West and red can shaped in the East and show fixed lights, except the Northern buoy on the West side of the channel which shows occ. green (1) every 4 seconds (Buoy No. 5 of Hm. 80).

(2) Navigation

(a) Northbound Vessels: (i) All Northbound vessels use the East Approach Channel. The end of the navigable channel is the pair of buoys at Hm. 195. (course 014°). From Hm. 195, vessels are to steer North (000°) for 5 miles before altering course.

(ii) Vessels leaving Port Said harbour to sea, use the West Approach Channel (course 037.5°) till Hm. 80 where it joins the East Approach Channel (course 014°) till Hm. 195. From Hm. 195, vessels are to steer North (000°) for 5 miles before altering course.

(iii) Vessels of the Northbound convoys wishing to enter Port Said Harbour shall proceed through the East Approach Channel till Hm. 195, then steer North (000°) for 5 miles and then steer for the berth allocated by the Harbour Office.(9)

(9) This is to avoid crossing incoming vessels to the Northern Anchorage Area.

(b) Southbound Vessels: The maximum draft authorised for Southbound vessels is limited to 40 ft.(10) in accordance with the tables giving the maximum draft according to the vessel's breadth.

(10) Maximum draft will be increased to 42 ft. on further notice.

(i) VLCCs, in ballast or partially loaded, 3rd generation container ships and vessels having a draft of more than 38 ft. and up to 40 ft.(11) maximum, have to use the East Approach Channel (course 194°).

The said vessels enter the channel between flashing green buoys of Hm. 165 and Hm. 135.

(11) Maximum draft will be increased to 42 ft. on further notice.

(ii) All other vessels, either transiting the Canal or berthing at Port Said, have to enter through the West Approach Channel (course 188°) from the entrance, passing between the West green buoys and the East yellow buoys till Hm. 80, then *alter course* to 217.5° passing between green and red buoys, till Port Said Harbour.

(D) BREAKWATERS:

(1) The breakwater protecting the West Approach Channel is situated to the West of the channel and extends from land boundary till Hm. 73 with a submerged part from Hm. 50. This part is marked by cigar shaped unlit buoys.

(2) Two breakwaters protect the East Approach Channel. The Eastern extends 2 km. from the land boundary; the Western, 0.5 km.

Each breakwater has a small fixed white light on its end.

Article 9: Suez (See Plan Book)

Five miles before arrival at the First Separation Zone Buoy, all vessels coming from sea should contact the Suez Canal Harbour Office by VHF Channel 16. If not able to, contact by R/T (2,182 kHz) or by W/T via S.U.Q. for instructions. (See Part III, Articles 87 and 88).

(A) Separation Zone

A Separation Zone has been established. It is a rectangular area extending 0.3 miles on each side of the line connecting the two Separation Buoys mentioned hereafter. All vessels arriving or leaving have to pass the Separation Zone Buoys(12) on their Port side.

Separation Zone Buoy No. 1 (Southern Buoy):
Lat. 29° 39′ 36″ North Long. 32° 32′ 00″ East

Height 5 m., yellow in colour with a yellow St. Andrew's Cross daymark and a fog horn. Showing flashing yellow light (1) every 2 seconds.

Separation Zone Buoy No. 2 (Northern Buoy):
Lat. 29° 48′ 27″ North Long. 32° 32′ 03″ East

Height 5 m., yellow in colour with a yellow St. Andrew's Cross daymark. Showing group flashing yellow light (4) every 15 seconds.

(B) Anchorage Area for Northbound VLCCs, 3rd Generation Container Ships, and Vessels Over 38 ft. Draft

This Anchorage Area is indicated by the following buoys:

(1) South Shoal Buoy:
Lat. 29° 38′ 48″ North Long. 32° 35′ 54″ East

Black, cone shaped, showing a green isophase light, (2 seconds ON – 2 seconds OFF); fitted with a 12 mile Racon. (Not fitted at time of printing).

(2) Buoy "K":
Lat. 29° 41′ 12″ North Long. 32° 38′ 42″ East

Black, cone shaped, showing a fixed green light.

(3) Buoy "L":
Lat. 29° 45′ 00″ North Long. 32° 38′ 42″ East

Height 5 m., black, cone shaped and showing a flashing green light.

(4) Conry Rock Buoy:
Lat. 29° 48′ 18″ North Long. 32° 34′ 09″ East

Height 5 m., black, cone shaped, and showing group flashing green light (2) every 7 seconds; fitted with a 5 mile Racon. (Not fitted at time of printing).

(i) V Berths: Centre of Circle (0.41 nautical miles)

Berth	*Latitude*	*Longitude*
V1	29° 46′ 30″ North	32° 35′ 00″ East
V2	29° 45′ 30″ North	32° 35′ 00″ East
V3	29° 45′ 30″ North	32° 36′ 00″ East
V4	29° 45′ 00″ North	32° 37′ 00″ East
V5	29° 44′ 30″ North	32° 36′ 00″ East
V6	29° 44′ 30″ North	32° 35′ 00″ East
V7	29° 44′ 00″ North	32° 37′ 00″ East
V8	29° 43′ 30″ North	32° 36′ 00″ East
V9	29° 43′ 30″ North	32° 35′ 00″ East

(C) Waiting Area for other Northbound Vessels

The area bounded by:

Conry Rock Buoy	Lat. 29° 48′ 18″ North	Long. 32° 34′ 09.0″ East
Buoy (M)	Lat. 29° 50′ 00″ North	Long. 32° 35′ 18.0″ East
Buoy (N)	Lat. 29° 50′ 39″ North	Long. 32° 35′ 18.0″ East
Spherical Buoy (D)	Lat. 29° 51′ 20″ North	Long. 32° 35′ 18.0″ East
Spherical Buoy (C)	Lat. 29° 52′ 00″ North	Long. 32° 35′ 18.0″ East
Spherical Buoy (B)	Lat. 29° 52′ 08″ North	Long. 32° 34′ 34.0″ East
Spherical Buoy (A)	Lat. 29° 52′ 15″ North	Long. 32° 33′ 51.0″ East
Buoy Hm. 60.00 E	Lat. 29° 52′ 22″ North	Long. 32° 33′ 07.5″ East
Buoy Hm. 70.50 E	Lat. 29° 51′ 48″ North	Long. 32° 33′ 13.0″ East
Buoy Hm. 80.50 E	Lat. 29° 51′ 16″ North	Long. 32° 33′ 17.0″ East
Position (R)	Lat. 29° 48′ 36″ North	Long. 32° 33′ 12.0″ East

Vessels coming from South have to pass East of the Buoy No. 2 and anchor in the Waiting Area.

Those leaving for sea (coming from North) have to pass West of Buoy No. 2 in position:
Latitude: 29° 48′ 27″ North Longitude: 32° 32′ 03″ East

(D) – Arrival to Suez of Northbound Vessels

Vessels coming from South have to pass East of the Buoy No. 2 and anchor in the Waiting Area. Those leaving for Sea (Coming from North) have to pass West of Buoy No. 2 in position: Lat. 29° 48′ 36″ N., Long. 32° 32′ 00″ East.

(E) – Prohibited Area for Anchorage. The area bounded by:

	Latitude	Longitude
Hm. 80.5 E.	29° 51′ 16″ North	32° 33′ 17″ East
Hm. 80.5 W.	29° 51′ 15″ North	32° 33′ 06″ East
Position (P)	29° 48′ 36″ North	32° 30′ 54″ East
Position (R)	29° 48′ 36″ North	32° 33′ 12″ East

is strictly prohibited for anchorage for all ships.

All ships have to comply with above instructions, until further notice.

(F) – Suez Entrance Channel

(Including the Eastern Channel leading to the Canal Entrance).

This channel is used for vessels entering or leaving Suez Canal and also by those entering Port of Suez and using its anchorages (13).

Buoyage of Suez Entrance Channel.

This channel is buoyed as follows:

(1) A pair of light buoys at Hm. 80.5 (entrance buoys):

(i) The Eastern Buoy, height 5 m., black, cone shaped and showing a green occulting light (1) every 4 seconds.

(ii) The Western Buoy, height 5 m., red, can shaped and showing an occulting red light (1) every 4 seconds.

The distance between the Eastern and Western Buoys is 340 m.

(2) Proceeding Northward, the channel is marked on both sides by light buoys, height 5 m.

(i) On the Eastern side of the channel, the buoys are black, cone shaped and show a flashing green light.

They are placed as follows:
Hm. 70.50
Hm. 60.00
Hm. 44.40
Hm. 19.00
Hm. 10.00

(ii) On the Western side, the buoys are red, can shaped and show a flashing red light.

They are placed as follows:
Hm. 70.50
Hm. 60.00
Hm. 44.40
Hm. 21.00
Hm. 17.20

Course: From the entrance buoys (Hm. 80.50) (New Port Rock Channel) to the green light buoy of Hm. 19.00.
Northbound: 352.5°
Southbound: 172.5°

(G) – Canal South Entrance

The Canal South entrance is marked by 2 light buoys, height 7 m.

(1) The Eastern at Hm. 3.00 is black, cone shaped and showing occulting green light (1) every 4 seconds.

(2) The Western at Hm. 1.00 is red, can shaped and showing occulting red light (1) every 4 seconds.

(H) Port of Suez: Port of Suez is delimited by the imaginary line which extends from Ras Adabya to Eyoun Moussa and comprises the coastal zone North of this line, up to Suez Canal entrance.

(1) Navigation

(a) General Rules:

(i) All vessels shall conform to the International Regulations for preventing Collision at Sea.

(ii) Navigation in the port is limited to approved channels only.

(iii) Crossing or overtaking in the channels is strictly forbidden.

(iv) Vessels must proceed in the port with caution and at reduced speed.

(v) Vessels must not let go their anchors except in the anchorage.

(b) Traffic Regulation:

(i) Vessels entering the port from sea and vessels leaving the port for sea.

These movements shall be effected through the Western channel, except for vessels to which the following anchorages have been allocated: 1C – 2C – 3C – 4C – 5C. They should use the Eastern channel.

(ii) Vessels entering the Canal from the Port, the Zone N.W. of Green Island, anchorages 8C to 16C and anchorage groups A and B shall pass through the Western channel, then South of Green Island to join the Eastern channel and then proceed to the entrance of the Canal.

Vessels entering the Canal from the Zone N.E. of Green Island and Anchorages 1C to 7C shall proceed directly from their anchorages to the entrance of the Canal.

If the number of vessels exceeds the number of anchorages, vessels in excess shall anchor South of the Western channel, parallel to anchorages 2A, 4A, 6A, 4B and 7B, making sure to leave the Western channel clear for navigation at all times.

Vessels entering the Canal from the Zone South of Green Island and anchorages 1D to 6D shall proceed directly from their anchorages to the entrance of the Canal; or if leaving for sea, shall use the Eastern Channel.

(iii) Vessels coming from the Canal shall proceed to sea through the Eastern Channel. If anchoring in the Zone N.W. of Green Island or anchorages 8C to 16C and anchorage groups A and B, shall proceed through the Eastern Channel, then the Western Channel, until reaching the designated anchorage. If anchoring in the Zone N.E. of Green Island or anchorages 1C to 7C, they shall proceed directly from the Canal to the designated anchorage.

(c) Priority of Movement in the port:

Priority of movement in the port shall be as follows:

(i) Vessels coming out of the Canal.

(ii) Vessels proceeding to the Canal.

(iii) Vessels coming from sea must wait outside the port until the Eastern channel is clear.

(iv) Vessels leaving the anchorages of the Port of Suez.

(v) Vessels coming out of the Basins (Ibrahim Basin – Adabeya – Petroleum Basin).

(vi) Vessels using the New Petroleum Jetty.

(d) Priority of Passage in the Eastern Channel:

Vessels leaving:

(i) The Canal.

(ii) Anchorages of Port of Suez, and proceeding Southward to sea, have to pass through the Eastern channel.

Ships approaching Port of Suez from seaward should wait outside until the channel is clear.

(e) Prohibited Area:

The area enclosed by the pecked line drawn from (a) to (b) to (c) to (d) to (e) and thence to (a), as mentioned below, is dangerous to navigation:

(a) 151.0° – 17.3 cables from Green Island Light
(b) 223.0° – 20.1 „ „ „ „ „
(c) 210.0° – 28.3 „ „ „ „ „
(d) 160.5° – 26 „ „ „ „ „

Buoys:
Buoy 1A 309.0° – 6.0 cables from Newport Rock Light
Buoy 2A 281.5° – 20.9 „ „ „ „ „
Buoy 3A 278.5° – 26.9 „ „ „ „ „

These buoys show flashing red light (1) every 5 seconds.

(12) See Plan Book.

(13) The max. draft authorised for vessels using Ibrahim Basin, the Petroleum Basin or El Adabya must not exceed 26 ft. at HW.

(2) Buoyage of Port of Suez:

Position of Green Island Light: Lat. 29° 54′ 39″ North, Long. 32° 31′ 48″ East.

(a) Eastern Channel (East of Green Island) is limited by the following buoys:

(i) In the East:

Buoy	*From Green Island Light*	*Distance (m.)*
Hm. 3.00 East	057.5°	2620
Hm. 10.00 East	070°	2030
Hm. 19.00 East	095°	1590
Hm. 44.40 East	144°	3250
Hm. 60.00 East	153°	4695
Hm. 70.50 East	164°	5720
Hm. 80.50 East	159°	6695

(ii) In the West:

Buoy	*From Green Island Light*	*Distance (m.)*
Hm. 1.00 West	049°	2560
Hm. 17.20 West	081°	1360
Hm. 21.00 West	117°	1320
Hm. 44.40 West	150°	3110
Hm. 60.00 West	157°	3580
Hm. 70.50 West	160°	5630
Hm. 80.50 West	162°	6630

(b) Shallow water in the Green Island Zone is limited as follows:

North Buoy bearing 000° at a distance of 1,490 m. from Green Island Light, showing flashing green light (1) every 2 seconds.

Red Buoy of Hm. 17.20.

Red Buoy of Hm. 21.00.

South-West Buoy bearing 239.5° at a distance of 780 m. from Green Island Light, showing group flashing green (3) every 7 seconds.

West Buoy bearing 308° at a distance of 820 m. from Green Island Light, showing group flashing green (2) every 5 seconds.

Oil Jetty quick flashing white light.

(3) Anchorages of Port of Suez:

Anchorage	*Bearing of Green Island Light*	*Distance from Green Island Light (cables)*
(a) Group "A":		
1A	308.0°	6.1
2A	333.0°	7.2
3A	334.5°	4.2
4A	358.0°	6.4
5A	018.0°	3.9
6A	023.0°	7.1
7A	048.0°	5.8
8A	041.5°	8.9
9A	061.5°	8.2
10A	083.0°	7.2
(b) Group "B":		
1B	101.5°	14.4
2B	092.5°	12.1
3B	078.0°	12.4
4B	064.0°	13.9
5B	090.0°	15.2
6B	098.0°	17.25
7B	071.5°	17.2
8B	095.0°	20.2
9B	086.0°	20.3
10B	079.5°	15.1
11B	089.5°	17.9
12B	090.5°	22.2
13B	078.0°	19.3
(c) Group "C":		
1C	220.0°	11.8
2C	208.5°	11.5
3C	187.5°	11.2
4C	235.0°	8.5
5C	214.5°	8.1
6C	170.5°	9.4
7C	161.0°	10.6
8C	158.0°	8.55
9C	142.0°	9.3
10C	143.0°	12.3
11C	133.5°	12.0
12C	144.0°	6.58
13C	121.5°	6.5
14C	104.0°	6.7
15C	097.0°	4.7
16C	073.5°	4.8
(d) Group "D": (Not to be used until further notice).		
1D	346.0°	12.9
2D	004.0°	12.6
3D	021.0°	13.4
4D	035.0°	14.5
5D	041.0°	16.7
6D	047.0°	18.4
(e) Group "H":		
1H	298.0°	12.0
2H	308.0°	14.3
(f) Adabeya Anchorage:		
1	059.0°	28.3
2	054.0°	28.8

(4) In Bad Weather When Harbour is Closed:

(a) Vessels coming from sea:

It is recommended not to enter the Port of Suez when it is closed by foul weather which prevents the Pilots from boarding the vessels.

However, any vessel who would like to enter on her own responsibility will have to contact the Suez Canal Authority wireless station (SUQ) and ask permission for doing so, giving her draft and length in feet, by the following cable:

"I wish to enter Suez Anchorage on my own responsibility. Length...........................ft. Draft.................................ft."

If permission is granted, the Master will receive the following cable:

"Port is closed. Entering on your own responsibility. Available Anchorage ...."

(b) Vessels coming out from the Suez Canal:

In case when the embarkation of the Road Pilot is not possible the following cable will be sent to the ship:

"Owing to bad weather Road Pilot will not board your ship".

The following will be added in case the vessel would ask for an anchorage:

"Available Anchorage..............................."

(c) Vessels anchored in the Port of Suez leaving for sea:

Vessels who would like to sail on their own responsibility, will have to hoist the signal for Pilot, send the following cable to SUQ and wait for orders:

"I wish to go to sea on my own responsibility. Please confirm".

They may proceed if they receive the cable:

"You may proceed to sea on your own responsibility".

Article 10: Roads and Harbour Pilot Signals:

Vessels requiring a Pilot for:

(a) Entering from sea

(b) Sailing out to sea

(c) Changing berth

(d) Entering the Canal

should hoist a black ball over G by day and 3 white lights by night in a vertical line. These signals are to be hoisted where can best be seen.

SECTION II

Article 11: Pilotage:

(A) Pilotage is compulsory in Canal waters.

All vessels [14] entering or leaving Canal waters, must take a Pilot.

However, the Suez Canal Authority reserves the right to put on board vessels under 1,500 tons gross a tug Master and under 800 tons gross a patron conducteur, instead of a Pilot.

Men of war and any vessel carrying dangerous cargo must have a Pilot regardless of their tonnage.

Roads Pilots, on boarding vessels arriving from sea, hand over to the Master the present Rules, the Declaration of State of Navigability and the Pilotage Form.

[14] See footnote as attached to Article 6.

(B) Port Said:

VLCCs, 3rd generation containers, and vessels over 38 ft. draft are piloted from Northern anchorage area for Canal transit through the East Approach channel. Other vessels, either for local trade or intending to transit the Canal, are piloted from Fairway Buoy to berths in the harbour through the West channel. Vessels are piloted between Port Said harbour and Port of Suez by Canal Pilots who are relieved at Ismailia. Northbound vessels either through East or West Branches are piloted till Hm. 80.00.

(C) Port of Suez:

VLCCs, large bulk carriers, 3rd generation containers, and vessels over 38 ft. draft are piloted from anchorage area South of Conry Rock for Canal transit. Other vessels are piloted from waiting area to anchorage area in the Port of Suez. These vessels are also piloted from Port of Suez by Canal Pilots who are relieved at Ismailia. Southbound convoy and vessels in Port of Suez Anchorages sailing South are piloted to Hm. 80.50. Pending Master's request, piloting may end at Hm. 44.4 (Newport Rock).

Vessels have to maintain course through the channel till the last pair of buoys keeping the separation zone on the port side.

(D) Master and Pilot:

(1) Master:

When a vessel is transiting the Canal, the Master or his qualified representative should be present at all times on the bridge; he has to keep the Pilot informed concerning any individual peculiarities in the handling of the vessel so that the Pilot might be in a position to give better advice to control the navigation and movement of the vessel.

(2) Pilot:

The duties of Pilots commence and cease at the entrance buoys of Port Said and Port of Suez. He only gives advice on manoeuvring the vessel, courses to steer, etc. He puts at the disposal of the Master his experience and practical knowledge of the Canal, but as he cannot know the defects or difficulties of manoeuvring every vessel, the responsibility falls completely upon the Master. The Pilot has to ensure the execution by the vessel of:

(a) The Articles of Rules of Navigation.

(b) The orders of transit given by Movement Control.

The manoeuvre and orders are carried out under the direction of the Master who is solely responsible.

It is therefore for the Master, taking into account the indications given by the Pilot, to give the necessary orders to the helm, to the engines, and tugs. If, in the interest of quick manoeuvres the Master thinks it preferable to allow the Pilot to give orders direct, manoeuvres carried out in these circumstances shall be considered as having been carried out on the order of the Master and on his sole responsibility.

Masters are held solely responsible for all damage or accidents of whatever kind resulting from the navigating or handling of their vessels directly or indirectly by day or night.

(3) The Pilot must inform the Movement Control Office or the Port officials immediately by WT and/or VHF or UHF if their advice and/or their orders, regarding the safety of navigation are not accepted or respected by the vessel.

The vessel in this case if underway is considered navigating without Pilot and an additional due of 15,000 Egyptian Pounds is charged.

(E) Moving in Suez Canal Waters without Pilot's assistance:

(1) Unless explicitly authorised by the Suez Canal Authority:–

(a) Whenever a vessel moves in Canal Waters or Port Said Harbour without having a Pilot on board she shall be charged an additional due of 15,000 Egyptian Pounds[15].

(b) An additional due of 3,600 Egyptian Pounds shall be charged to vessels moving in Port of Suez Anchorages, or entering or leaving Basins at Port of Suez without having a Pilot on board.

These dispositions do not apply in the event of the Pilot being suddenly unable to carry on with his duties owing to sickness or death, in this case the Master must:

Warn the vessels astern of his intended manoeuvre by means of the visual and sound signals as well as VHF and W/T.

Reduce speed and make fast if in the Canal, or the entrance channels; or anchor if in the Lakes.

The Movement Office at Ismailia is to be informed at all times by UHF and confirmed by W/T.

(2) Exceptions:

In case of bad weather to the extent of not allowing pilotage in Canal Approach channels, Masters will be authorised by notice from the Suez Canal Port Offices, to sail with their vessels on their own responsibility at the following positions:

(a) For Southbound convoy, from Km. 162 to sea.

(b) For Northbound convoy, from Hm. 30 in East Port Said channel Northward.

(c) For vessels leaving Port Said Harbour through West Approach channel, from Hm. 30 Northward.

(d) For vessels anchoring in Port of Suez anchorages wishing to head to sea, also for vessels in Waiting Area wishing to enter Port of Suez anchorage area.

(e) For vessels entering Port Said Harbour either for transiting Canal or for trade, through West Approach channel till Hm. 50 approximately where Roads Pilot will board vessels.

(f) For vessels entering Port Said East Approach channel, between Hm. 165 and Hm. 135 from VLCCs anchorage area to join Southbound convoy, Canal Pilot will board vessels at Km. 0 of East Port Said channel.

(g) For VLCCs and other large vessels joining Northbound convoy from new anchorage area South of Conry Rock, Canal Pilots will board vessels at Km. 161 approximately.

(h) For other vessels joining Northbound convoy from Port of Suez anchorages, Canal Pilots will board vessels at Km. 161 approx.

N.B.: (1) For items c, d, e, f, g and h, the time of proceeding will be fixed by Suez Canal Port Authority.

(2) In all cases advice will be given if necessary by shore radars to vessels[16].

(F) Calling Pilots unnecessarily:

When a vessel signals for Pilot, and it is found when boarding that she is not ready to get underway in the limited time, the vessel is liable to be delayed and Pilot disembarked. The vessel will pay extra pilotage dues for the new Pilot as mentioned before.

(G) Extra Pilots:

(1) Additional Pilots shall be assigned in the following cases:

(a) Vessels over 80,000 SCGT.

(b) Vessels having cargoes or installations impeding visibility from inside the wheelhouse (obstructions to all-round view).

(c) If a Pilot is disembarked and relieved by another Pilot, in case of slow speed vessels, vessels having troubles which prevent continuation of transit with same convoy, or vessels that have to transit by day only.

(d) If vessel has no accommodation for the Pilot to rest while anchored in Bitter Lakes or making fast in mooring places for a long period.

(e) An extra Pilot for assisting the Pilot in charge, may be assigned on Master's request or by the Canal Authority if deemed necessary.

(2) A due of L.E. 200 (200 pounds) for every additional Canal Pilot and L.E. 100 (100 pounds) for every additional Roads Pilot is charged.

CHAPTER II ARRIVAL AND PREPARATION FOR TRANSIT

SECTION I: Pre-Arrival of Vessels

Article 12: Booking for transit

Vessels may book for transiting the Canal. The booking notice shall reach the Suez Canal Authority Offices not later than four days prior to the transit date. It must contain the name, nationality of the vessel, her type (container, Ro-Ro, etc. . . .) her draft, Suez Canal Gross Tonnage and deadweight tonnage.

Vessels booking for fixed date will have priority to catch the convoy on that date, if they arrive within the time limit defined by the present Rules.

Booking can be cancelled or altered by notice to the Suez Canal Authority offices at least 24 hours before the date booked, otherwise the vessel shall be charged 100 (one hundred) Egyptian Pounds.

In case of VLCCs and similar vessels, this charge will be 1,000 (one thousand) Egyptian Pounds on account of the special arrangements made by S.C.A.

Vessels arriving without previous booking will catch the convoy if capacity of movement in the Canal permits, otherwise they may catch the following convoy.

Article 13: Notice of Arrival

Masters of vessels fitted with wireless apparatus are requested to transmit the following information to their Agents, 48 hours prior to the vessel's arrival.

The name and nationality of the vessel, her ex-name if any.

Suez Canal gross tonnage and deadweight tonnage.

Whether they intend transiting or merely stopping in the harbours and, in this case, mention the duration of stay required.

The ETA.

Whether they carry dangerous cargo, stating quantity and class according to IMO's regulations.

Number of crew on board plus number of passengers on board and their nationalities.

Furthermore, upon arrival anchorage areas vessels have to contact the Harbour Office by VHF (Port Said on Channel 9 – Port of Suez on Channel 15) giving full details either for transit or stoppage in harbour.

Vessel carrying dangerous cargo: Advance notice of arrival must reach the Canal Authority Offices at least 48 hours before the vessel's arrival to the Canal entrances'. Masters of vessels carrying dangerous cargo, are required to furnish the Canal Authority with the detailed list of the dangerous goods they have on board, stating quantity and their IMO Classification. Moreover, the Master must inform the S.C.A.office by wireless telegraphy (SUQ) – NOT V.H.F.– of the above mentioned information as soon as possible. Non or erroneous declaration of dangerous cargo (see "Article 47 Bis").

The above mentioned list, sent directly or through the shipping agency, must reach the Suez Canal Authority offices at least 48 hours before the vessel's arrival; failing which the vessel may be subject to delay before being authorised to enter the Canal Waters.

Article 14: Contacting Port Offices on Arrival

(a) Vessels have to contact the harbour office by VHF[17].

(1) Ten miles before arrival at Approach Buoy off Port Said.

(2) Five miles before arrival at separation Zone Buoy No. 1 off Port Suez.

(b) When in touch, give the following information:

(1) Latitude and longitude.
(2) Vessel's name.
(3) Vessel's call sign.
(4) Suez Canal official number, if any.
(5) Suez Canal gross tonnage and deadweight tonnage.
(6) Draft.
(7) Loaded or not.
(8) Kind of cargo.
(9) If transiting the Canal for the first time she has to send[18]:
 (i) Date of building.
  Having Suez Canal Tonnage Certificate or not.
  Date of issue if any.
  Call sign or official number.
 (ii) Length overall.
 (iii) Beam.
 (iv) Type of engines.

This information will assist the Harbour Master to identify the vessel through his radar, acquire and assign her identification "ID" tag which will follow her path until the other end.

(c) If failing to contact by the assigned Channels, Masters may use, with the consent of the Harbour Master through the International R/T (2182 kHz) or SUQ (W/T), any of the following frequencies:

(1) 156.650 (Channel 13) Port Said.
(2) 156.600 (Channel 12) Port Said.
(3) 156.550 (Channel 11) Port of Suez.
(4) 156.700 (Channel 14) Port of Suez.

(d) Any vessel who does not contact the Port offices during her approach is subject to delays in catching the convoys.

(e) When berthing, changing berth or sailing, the Master must handle the mooring ropes by means of ship's boats or mooring boats of a firm approved by the Suez Canal Authority.

Article 15: Documents to be produced

(a) Suez Canal Special Tonnage Certificate.
(b) Certificate of Registry.
(c) Statistical Declaration.
(d) Extract from the vessel's official documents and information concerning the vessel's type and her cargo (containers, barges, etc.).
(e) Declaration concerning the use of double bottom tanks and the lower parts of the high tanks.
(f) Declaration concerning vessels in ballast.
(g) Declaration of State of Navigability (see Art.79).
(h) The last Classification Certificate issued.
(i) Any other information necessary for transiting the Canal.

The Master of a vessel wishing to transit the Canal must register at the Canal Authority offices and pay the various dues.

He must furnish the Canal Authority's officials with all the particulars requested.

The vessel must in addition comply with the requirements of the A.R.E. Government Authorities.

In case the Authority deems it necessary to be supplied with a new Seaworthiness Certificate, the following Classification Societies are recognised to deliver same:

(1) Lloyd's Register of Shipping.
(2) Bureau Veritas Francais.
(3) American Bureau of Shipping.
(4) Registro Navale Italiano.
(5) Germanischer Lloyd.
(6) Norske Veritas.
(7) U.S.S.R. Register.
(8) Nippon Kaiji Kyokai.
(9) Polski Rejestr Statkow.

Notice from Director of Transit: Dated July 1983.

Seaworthiness Certificates are accepted by the Suez Canal Authority in Arabic or English. If written in any other language, it is to be translated in one of these two above mentioned languages and duly certified by the Embassy or Consulate of the Arab Republic of Egypt.

In case of impossibility of obtaining said translation, it may be translated by the Embassy or Consulate to which the vessel belongs, in Egypt.

Failing to do same, a Seaworthiness Certificate is to be obtained locally from one of the recognised Classification Societies in the Canal Zone.

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[15] Vessels under 300 tons SCGT are subject to Rules of Navigation for small craft.

[16] Vessels in Port Said Anchorage Area (Northern and Southern Anchorages), Suez VLCCs Anchorage and Waiting Area, the Bitter Lakes or Lake Timsah, if changing berth or mooring without explicit authorisation from the Suez Canal Authority, shall be charged an additional due of 3,600 Egyptian Pounds.

[17] Port Said on Channel 16 – Port of Suez on Channel 16.

[18] In all cases the Master must inform whether aiming to transit the Canal or just stay in the harbour.

(A) Warships:

Warships transiting the Suez Canal Waters must be provided with a Suez Canal Special Tonnage Certificate showing the Suez Canal Gross and Net Tonnages.

If such document is not onboard, the Commanding Officer has to give, in writing, the following information:

(1) Name of Ship.
(2) Name of Commanding Officer.
(3) Call sign of the ship (Radio Call).
(4) LOA, beam overall and depth of the ship.

As long as the ship is not provided with the Suez Canal Special Tonnage Certificate, transit dues will be levied on the temporary Gross Tonnage product of the empirical formula without any allowance till the presentation of the documents required.

(B) Erroneous Declarations:

If the Canal Authority Officials discover false information concerning the cargo carried[19] or the ship's situation ballast or loaded, resulting from the shipping clerk's or the Master's negligence, in statistical declarations held, the tolls difference will be doubled.

The tolls difference means the difference between the correct and the wrong amount of transit dues.

[19] e.g. The carriage of sweet water as cargo and declared as ship's water ballast; the omission of declaring the presence or quantity of containers on the weather deck or any cargo onboard, passengers, etc.

Article 16: Stay in the Harbour

(a) The Master is responsible for the mooring of his vessel in Port Said harbour and Port of Suez.

(b) He must pay special attention to the instructions in the following paragraphs.

(c) When the vessel is moored to the buoys, the mooring ropes must be watched to ensure safe mooring. If two vessels are moored to the same buoy, when one leaves, the other must adjust her moorings.

(d) Masters must comply with the Harbour Master's advice regarding mooring ropes during the stay of their vessel in port; especially when, in case of expected bad weather, it is necessary to increase the moorings if required.

(e) When a vessel is moored with her stern to the bank, the Master must keep himself continuously informed of the depth of water aft, to avoid grounding on the submerged slope either as a result of the settling of the vessel as she loads, or her proximity to the bank.

(f) At night, the vessel, whether moored or manoeuvring, must show the lights prescribed by the International Regulations for Preventing Collisions at sea, in addition to the Suez Canal Light Signals.

(g) Unless authorised, barges alongside a vessel must not be more than two abreast.

(h) It is forbidden to try projectors, or to turn the propellers during the process of warming-up, in the absence of the Pilot, or without informing him when onboard.

(i) Vessels must not put their engines out of working order for any reason whatsoever without permission from the Canal Authority.

(j) The Master must always keep onboard sufficient crew to ensure efficient handling of the moorings, fire fighting and damage control.

(k) The Harbour Master or his delegate should have free access onboard to ensure the carrying out of the Regulations, to verify the vessel's seaworthiness, and to ascertain that dangerous cargo onboard complies with the Suez Canal Regulations.

Article 17: Change of Berth

(a) If the Master wishes to change the berth of his vessel, he should notify the Harbour Office stating the desired time when the shift should take place. A tug or more will be imposed to assist in the manoeuvres.

The change of berth will take place at the time fixed by the Harbour Office. A Pilot will be sent to the vessel in due time.

(b) Shifting at the Master's request and the tugs used are charged for as per rates set down by the Suez Canal Authority.

(c) Charges for shifting due to erroneous or incomplete declarations by the Master must also be paid by the vessel.

(d) When necessary, the Harbour Master may order a vessel to shift; when so ordered, it should be made as quickly as possible. In such a case it is free of charge.

SECTION II: Preparations for Transiting the Canal

Article 18: Measures taken before entering the Canal

All vessels ready to enter the Canal must have their ladders and jib-booms run in, their boats swung in and any derricks or cranes obstructing the view forward, lowered.

Article 19: Mooring Ropes

At least 6 flexible floating mooring ropes of appropriate size for the vessel, in good condition, fitted with spliced eyes, must be in readiness for any emergency, at suitable points on deck. All arrangements must be made for their quick handling. For vessels equipped with tension mooring wires the number of floating ropes may be reduced to 4. It is to be noted, however, that any mooring lines, likely to produce sparks by their manipulation are absolutely forbidden on board petroleum tankers, LPG or LNG or any vessel carrying flammable substances.

It is recommended that:

(a) One of the ropes which is selected as "first line ashore" must be of floating material to ensure quick securing to the shore.

(b) Wires should not exceed 5.5 in. circumference to facilitate handling.

(c) All vessels should have:

Two fire ropes (wire) made fast, one forward and one aft, and hung over the vessel's side ready for use in case of emergency.

Article 20: Mooring Boats

(a) Vessels transiting the Canal must have mooring boats as mentioned hereafter hired from a mooring company approved by the Suez Canal Authority. In case no mooring boats from the said company are available, ship's boats if suitable for mooring in the Canal can be used and must be manned by shore crew, hired from the same mooring company. Each boat is to be manned by three men.

(b) One mooring boat or one motor boat for vessels under 2,500 tons gross, SCGT (SCGT = Suez Canal Gross Tonnage).

(c) One mooring boat and one motor boat or two mooring boats for ships from 2,500 to 30,000 tons SCGT.

(d) Two motor boats for vessels over 30,000 tons SCGT.

(e) Ships may ask for additional motor boats or mooring boats according to Master's request. These mooring boats must be in constant readiness for lowering to run the ropes to the mooring posts without any delay during the transit of the vessel. (Vessels contravening (b), (c) and (d) above will not be permitted to transit).

(f) Ships must be fitted with lifting appliances capable of lifting mooring boats of 3 tons weight. Ship's derricks to be 5 ton SWL. (Vessels not having lifting appliances ready will have their transit postponed).

Further to the above concerning the necessity of equipping vessels with derricks of a capacity not less than 5 tons each.

In case the capacity of the vessels' derricks is less than 5 tons, Master should advise either the mooring company through his Agents, or the Suez Canal Authorities, Harbour Office, upon arrival at either of the Canal Ports in order to supply the ship with suitable mooring boats from the Canal Mooring Company.

These vessels are required to have their lifeboats in constant readiness for mooring and unmooring operations in case the Canal Mooring Company is unable to provide them with the required mooring boats. Each life boat will be manned by 3 shore crew from the Mooring Company.

The Canal Mooring Company have declared that the new mooring boats weigh 3 tons each in accordance with the specifications from Expert Bureau and needs derricks not less than 5 tons capacity.

(g) Ships may carry extra mooring boats for safety of navigation. However, LPG, LNG and Loaded Tankers are not allowed to carry any extra boats.

(h) The handling of mooring boats must be carried out well clear from the ship's propellers.

Article 21: Spreaders (Slings)

Container ships are advised to have their own spreaders (slings) to assist unloading and reloading containers in case of necessity. Those carrying different sizes of containers must have their own spreaders.

Article 22: Indicators

There must be a rudder angle indicator and an engine RPM indicator in the wheelhouse so located and illuminated as to be easily visible by the Pilot.

Article 23: Bow Anchors

The bow anchors must be ready to let go. (If only one anchor, see Article 57, paragraph f).

Article 24: Accommodation and Pilot Ladders

(a) Pilot Ladder: In anchorage areas, outside the Canal, North or South, pilot ladders can be used to embark and disembark Pilots.

The ladder shall be secured in such position that each step rests firmly against the vessel's side and so that the Pilot can have safe access to the vessel. Whenever the distance from sea level to the point of access to the vessel is more than 12 ft. (or 3.65 m.), access from the pilot ladder to the vessel shall be by means of an accommodation ladder or other equally safe and convenient means.

The treads of the pilot ladder shall not be less than 19 in. long, 4.5 in. wide and 1 in. in thickness. Steps shall be joined in such a manner as will provide a ladder of adequate strength with treads maintained in a horizontal position and not less than 12 in. or more than 15 in. apart.

A man-rope properly secured, and a safety line shall be available and ready for use if required. Handholds are to be provided to assist the Pilot to pass safely and conveniently from the head of the ladder into the vessel or on to the vessel's deck and vice versa.

If necessary, spreaders shall be provided at such distance as will prevent the ladder from twisting.

Arrangements shall be such as:

(1) The rigging of the ladder, the embarkation and disembarkation of the Pilot is supervised by a responsible officer of the vessel.

(2) A self igniting life buoy is to be available at hand.

(b) Accommodation Ladders: Accommodation ladders are to be used in the Canal, harbours and lakes to embark and disembark Pilots.

In case no accommodation ladder is available, or difficult to rig, the vessel has to inform S.C.A. before entering harbour or Canal. The change of Pilot which is originally carried out at Ismailia, will take place in the Bitter Lakes after anchoring. In such case, the vessel will be charged an extra 200 L.E. (Egyptian Pounds) as pilotage dues for each relieving Pilot.[20]

[20] Ships with freeboard of less than 10 ft. may use pilot ladder.

Article 25: Efficiency of Vessel's Equipment

Before entering the Canal it must be ascertained that main engines, steering gear, engine room, telegraph, rudder angle and r.p.m. indicators, W/T, VHF and radar are in good working order.

Every vessel navigating in the Suez Canal Waters under the advice of the Suez Canal Pilot, should maintain bridge and engine bell books.

In the bridge bell book, each engine movement and the time of its transmission from the bridge to the engine room is to be recorded as well as in the engine room bell book.

No vessel is required to maintain any bell books if equipped with an automatic device which produces a permanent legible record of every engine movement.

The bell books and the automatic records referred to, must be handed, upon request, to the Suez Canal Officials for the purpose of investigation if necessary.

Note: Gyro Pilot should not be utilised on board during the transit of the Suez Canal, the ordinary steering Telemotor apparatus is to be utilised, making sure of the steersman's ability, with a view to realising the safety of navigation and avoiding any risk of error involving grounding or any other accident.

Article 26: Deck Cargo

Deck cargo is to be stowed in a way so as to provide a clear view from the navigating bridge while transiting the Canal, as well as not to affect the vessel's stability.

The deck cargo should not protrude more than half the vessel's breadth on any side with a maximum of 15 m. if breadth exceeds 30 m.[21]

Note: Vessels having a deck cargo protruding in excess of the fixed limit, may be exceptionally granted authorisation to transit on the following conditions:

Each case is to be studied separately. If authorisation is granted, an additional due of 2 per cent of the transit dues is levied on each foot or fraction of foot in excess.

Article 27: Water Ballast

Vessels in ballast must fill spaces intended to be used for carrying water ballast in such proportion as the Officials of the Suez Canal Authority may direct.

Article 28: Searchlight

(A) Before transiting the Canal, the vessel should be provided with a searchlight (projector) of the following characteristics:

1. Minimum range of radiation of single beam 1,800 m. ahead (brightness of 1 Lux approximately at the atmospheric transmission factor = 0.85).
2. The power of the lamp must give a luminous intensity of single light beam not less than 3×10^6 (3 million) candela, which is equivalent to high efficiency incandescent lamp of:
   2,000 Watts for vessels up to 30,000 S.C. tons gross.
   3,000 Watts for vessels over 30,000 S.C. tons gross.
3. The drum and stand should be of high corrosion resisting material and can be operated both horizontally and vertically.
4. The front glass must be of hardened type and can stand rapid cooling.
5. The reflector must be in two halves of precise ground glass mirror of highest quality or of polished aluminium having at least 95% the reflective capacity of the glass mirror.
6. The two halves of the reflector can be brought together (zero position) to make a single reflector light beam and can be parted to give two separate light beams each of 5° at least, on the horizontal level with adjustable dark sector from 0 to 10°.
7. The searchlight drum must be watertight (presssure test 0.25 kg./sq.cm.) and gastight (according to the classification rules for the vessel's electric appliances within dangerous areas) and provided with a vent-out to which a flexible hose can be fitted on the drum to dissipate the heated air out of the searchlight in addition to a safety vent.
8. The searchlight must be equipped with 2 lamps carrier that can be turned into position to let the lamp exactly in the focus of the reflector, and the current must be switched on automatically.
9. The electric system (switches, plug, socket and cables) must be of first class marine type. The degree of protection IP 55 or similar standards.
10. The searchlights must have a certificate for the "type test" issued by one of the Classification Societies (Lloyd's Register, etc.). The original to be submitted to Suez Canal officials and thereby after test by S.C.A. inspection the searchlight can be accepted.

(B) For vessels carrying petroleum products, LPG, LNG, or flammable substances, or vessels Not Gas Free, the searchlight must be gastight and all electrical connections leading to it should be insulated. If a device for expelling the hot air from the interior of the searchlight exists, exit of the air must be effected in a place devoid of flammable gas. For safety reasons it has been decided that on all vessels of whatever type, electric cable installations for searchlight and all electrical connections leading to it must be permanently fixed, insulated and gastight.

At the end of the cables a fixed and gastight socket should be installed close to the searchlight.

(C)The searchlight, to be approved, must have a Certificate for the 'Type test' issued by one of the recognised Classification Societies, which will be submitted to the Suez Canal Authority Inspector, and be tested in the Canal and proved to be in good working order. On board vessels electrically propelled or having electrically driven gear (steering, winches, etc. . . .) the number of generators and their individual power output must be sufficient to ensure uninterrupted functioning of the searchlight in the event of stoppage of one of the generators.

No exception to this rule will be allowed except when there is an independent generator and circuit on board specifically set apart for the searchlight.

(D) This projector can be hired locally from the Canal Mooring and Light Company.

(E) For vessels fitted with their own projector, 2 shore electricians should operate it during the transit.

(F) Vessels with bulbous bow, may be provided with searchlight on condition that top of bulbous bow be lower than sea level by not less than 10 ft.

However, LPG and LNG vessels, without any exception, must be provided with their own searchlight.

Vessels entering the Canal, direct from sea through East Branch must also be provided with their own searchlight.

Article 29: Overhead Lights (Deck Lights)

Overhead lights visible all round the horizon with a minimum range of 200 m. (roughly 650 ft.).

Article 30: Bridge Wing Projectors

Bridge wing projectors on either side of the bridge must be fitted to show the Canal banks clearly during the transit and mooring operations.

Characteristics: Power about 4 LUX at an atmospheric transmission factor (T = 0.74) and minimum range 200 m.

Article 31: Funnels

Funnels must be lit to facilitate the identification of the vessel by night.

Article 32: Bridge and Engine Room Communication

Communication system between engine room and bridge must be in good working condition.

Article 33: Pumping Draining Arrangements

The pumps and pumping arrangements including valves, pipes and strainers from holds as well as from the engine and boiler spaces must be in good working condition.

Article 34: Watertight Bulkheads and Doors

All watertight bulkheads and doors are required to be in good efficient condition.

Article 35: Draft Marks

All vessels shall have the draft plainly marked and painted upon the stem, amidships (including Plimsoll Mark and Deck Line) and stern post or rudder post.

Article 36: Whistles and/or Sirens Must Always be Ready for Use

As prescribed in Part III, Article 93.

Article 37: Fire Fighting Equipment on Vessels

As prescribed in Article 61.

Article 38: Side Doors

When side doors are used for boarding, and the minimum vertical distance between the waterline and the bottom of the side door is less than six feet, they should be closed immediately after embarking and disembarking of Pilot and during transit through the Canal.

Article 39: Manning Vessels

The crew of vessels intending to transit the Canal should have efficient and good knowledge of their vessel and be sufficient in number to permit safe handling of the vessel during transit.

Article 40: Deck Watch & Engine Room

When underway in Canal Waters the vessels shall keep a full watch on the bridge and in the engine room, as well as anchor watch.

Article 41: Special Arrangements for VLCCs

(See Article 58).

Article 42: Accommodation

A suitable (Officer Class) accommodation is to be put at the Pilot's disposal while at anchor in the Bitter Lake or made fast in mooring places alongside the Canal. In case of no suitable accommodation available, the vessel will pay extra dues of LE200 (two hundred Egyptian Pounds) for each relieving Pilot. She may be delayed if no relieving Pilot is available.

A sheltered place is to be provided for the mooring boatmen (6 to 9 men according to the size of the vessel) and 2 shore electricians for the projector, during transit.

Article 43: Vessels Carrying Timber

The timber deck cargo shall be compactly stowed, lashed and secured in a way that it shall not hinder navigation and allow safe access on deck. The loading must not exceed the Tropical Timber Load Line (LT). The height of the deck cargo above the weather deck shall not exceed one third of the extreme breadth of the vessel.

Article 44: Life Saving Appliances

Life saving appliances for vessels navigating in the Canal Waters should meet with the requirements of the International Convention for the Safety Of Life At Sea.

Article 45: Anchor Watch

An anchor watch has to be added during bad weather or poor visibility and when advised by the Pilot.

Article 46: Stoppage in Canal

When anchored in the Bitter Lakes, Lake Timsah or stopped in the Canal, the engines should always be ready for use.

If failing to comply with any of the previous requirements, a vessel may be delayed from joining the convoy and/or may be subject to special arrangements for her transit. This includes imposing convoying tug boats. Access to the Canal may also be refused.

SECTION III: Interdiction to Enter Canal

Article 47: A vessel will not be allowed to transit the Canal in any of the following cases:

(a) Any vessel considered by the Suez Canal Officials, dangerous for navigation.

(b) If carrying dangerous cargo and not conforming to the Appendix of Rules of Navigation for vessels carrying dangerous cargo.

(c) If having a list more than 3 degrees.

(d) If trimmed in a way causing bad manoeuvrability.

(e) If having deck loads protruding from vessel's sides in a manner endangering the safety of transit (see Article 26).

(f) If the vessel is tender or loaded in a manner that dangerously affects her stability.

(g) If her draft is in excess of the maximum permitted according to these Rules.

(h) For VLCCs and ULCCs if there is strong wind.

(i) The Suez Canal Authority may consider delaying the entry to the Canal in cases of bad weather.

Article 47 Bis:

(a) The Suez Canal Authority reserves the right to refuse access to Canal Waters to any vessel in case of non or erroneous declaration of the presence of dangerous cargo on board such as ammunition, explosives, radioactive substances, etc.

(b) If the dangerous cargo mentioned in para (a) is discovered during the transit, the Suez Canal Authority reserves the right to refuse access to Canal Waters to this vessel for a period not exceeding two years. An additional due of 30,000 L.E. (thirty thousand Egyptian Pounds) will be imposed for this violation.

SECTION IV: Proceeding to the Canal

Article 48: General

Masters shall ask for Pilots by clearly displaying "G" flag by day and 3 white lights at night, at least two hours before the time they expect their vessel to be ready to get underway. *Singling Up* should not be before the Pilot is on board. When several vessels are ready to get underway at the same time, the order of their sailing will be fixed by the Canal Authority.

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[21] Containers on containerships are not considered as deck cargo. Specially built vessels and barges carrying drillers or bulky deck cargo to be studied separately.

All vessels must stop whenever the passage ahead is not clear. They must slow down passing collapsed or under repair banks, as well as when passing all vessels in sidings, hoppers, dredgers and other floating plants made fast.

As soon as a vessel is made fast, she must hoist the signals pendant No. 2 by day and red light aft at night. The vessel must be ready to slack down ropes or cut them if need be. Engines must always be ready for manoeuvring.

CHAPTER III: CONVOY SYSTEM – Maximum Dimensions, Towage and Escorting

SECTION I: Convoy System

Article 49: Formation of Convoys

A 3 convoy system is applied in the Suez Canal.

(A) *Northbound Convoy*

Starts about 0520 hrs. at Km. 160 and consists of 2 groups of vessels.

(1) *Group A*

(a) Third generation container ships, LPG and LNG, speed of transit 14 km./hr.[22]

(b) Loaded VLCCs, conventional loaded tankers and heavy bulk carriers,[23] speed of transit 13 km./hr.[22]

(2) *Group B*

Cargo and other vessels anchored in Suez Anchorages.

The speed of transit of this group is 14 km./hr.[22] The Northbound convoy has a free run from Port of Suez till Port Said. It passes through the East Kabrit Channel, the Eastern Dredged Channel in the Bitter Lakes, the Deversoir East Channel, the East Channel of Lake Timsah, the East Channel of Ballah By-pass and the East Channel from Km. 17 Northward.

In case the Northbound convoy has to stop in the Bitter Lakes due to traffic situation of Southbound convoy or any emergency:

Container vessels heading the convoy will drop anchor in the North of the East anchorage areas of the Bitter Lakes. Escorted VLCCs stop in Bitter Lake East Dredged Channel, assisted by the escort tugs and other extra tugs, available in the Bitter Lakes, if needed. Super tankers and heavy bulk carriers following the VLCCs will make fast in Kabrit East Branch, North Berths.

Vessels of over 35 ft. draft in the cargo group will make fast in Kabrit East Branch. Vessels with drafts of 35 ft. or less in the group will proceed through Kabrit West Branch to the East anchorage area of the Bitter Lakes, if East Branch is not clear.

(B) *Southbound Convoy (N1)*

Starts about 2330 hrs. at Km. 17 and consists of 2 groups of vessels.

(1) *Group A,* consists of vessels who are made fast in Canal West Branch from Km. 14 to Km. 4 and Port Said Harbour. The first vessel of this group will proceed as soon as the last vessel Northbound enters the East By-pass at Km. 17. Speed of transit is 14 km./hr.[22]

(2) *Group B,* consists of vessels anchored in the new anchorage areas to the N.W. of Port Said, third generation container ships, VLCCs in ballast and vessels of over 38 ft. draft. This group will be headed by the container ships and the first vessel will enter through the Port Said East Approach Channel as soon as the last vessel Northbound clears Hm. 150. The speed of transit is 14 km./hr.[22]

The Southbound convoy has a free run to the Bitter Lakes. It passes through the East branch of Ballah By-pass, the East Channel of Timsah Lake, the Deversoir West Channel and anchors in the Western anchorages in the Bitter Lakes.

The sequence of vessels when route continues from Bitter Lakes will be the third generation container ships, followed by VLCCs in ballast and then other vessels. The first ship of the Southbound convoy will regulate speed to cross the last Northbound vessel abeam of Kabrit station.

(C) *Third Convoy (N2)*

A third convoy, Southbound, according to intensity of traffic from North or South. Max. draft 35 ft., max. beam 115 ft.

In case of forming a second Southbound convoy the starting time from Port Said will be at 0600 hrs. and up to 0800 hrs. Vessels will make fast in Ballah West Branch and continue route after last Northbound vessel clears Km. 60.

Vessels not authorised to join this convoy are the following:
Loaded tankers carrying Petroleum Grades A – B – C and similar substances.
Tankers in ballast (Non Gas Free).
LPG and LNG.
Vessels carrying Group 1 dangerous cargo (explosives).
Vessels carrying chemicals in bulk.
Vessels carrying radioactive substances.

NOTICE: Issued by Canal Shipping Agencies Company, Port Said:

Circular No. 80/83:

We have been advised by Suez Canal Authority that as a trial from 23.7.83 convoy timing will be as follows:

First Convoy from Port Said:
From 0100 hrs. until 0500 hrs.
Followed by small vessels up to 5,000 tons until 0600 hrs.
(Limit time arrival waiting area 1800 hrs.).
(Latest time for hoisting the signal asking for Pilot 2030 hrs.).

Second Convoy from Port Said:
From 0700 hrs. until 0900 hrs.
(Limit time arrival waiting area 0200 hrs., instead of 2400 hrs.).
(Latest time for hoisting the signal asking for Pilot 0300 hrs.).

Following vessels are not permitted to join second convoy:
A – Tankers loaded petroleum flash point −23°C.
B – LPG.
C – LNG.
D – Tankers carrying chemicals in bulk.
E – Vessels carrying radioactive materials.

Convoy from Suez:
A – Containers and Ro-Ro vessels from 0615 hrs.
B – Tankers from 0700 hrs. followed by ordinary vessels until 1130 hrs.

Masters have to send by radio to the Agents the following information at least 48 hours before vessel's arrival.
Gross and net tonnage indicated by the Suez Canal Special Tonnage Certificate and date of latest certificate.
Gross and net tonnage indicated by Registry Certificate and date of latest certificate.
Vessel's nationality.
Owner's name.
Type of vessel (cargo – container ship – LASH vessel – Ro/Ro, etc.).
If vessel has previously transited canal under her present or former name. Affirmatively mention date of last transit.
If any alteration has been made in the vessel's particulars. In case no alterations made, they have to send "Particulars No Change".

Circular No. 90/83

Second Convoy from North (Convoy N2)

We would like to inform you that it has been decided as from the 23rd July, 1983, to authorise the following categories of vessels to join the second convoy from North (Convoy N2) and, therefore, to moor at Ballah Loop:
Loaded tankers carrying Petroleum Grades B – C and similar substances (Flash Point +23°C).
Tankers in ballast NGF.
Vessels carrying Group 1 dangerous cargo (Explosives).

Consequently, vessels NOT ALLOWED to join the Convoy N2 that has to moor at Ballah Loop, are:
1. Loaded tankers carrying Petroleum Grade A and similar substances (Flash Point −23°C).
2. LPG and LNG vessels.
3. Vessels carrying chemicals in bulk.
4. Vessels carrying radioactive substances.

Circular No. 20/84

As from 1.2.84 vessels with beam and draft as indicated in table below are authorised to use the Ballah West Branch:

Beam		*Draft*		*Beam*		*Draft*	
ft.	m.	ft.	in.	ft.	m.	ft.	in.
141	42.98	38	00	151	46.02	35	1.5
142	43.28	37	11	152	46.33	34	10
143	43.59	37	7.5	153	46.63	34	6
144	43.89	37	4	154	46.94	34	2
145	44.20	37	00	155	47.24	33	10.5
146	44.50	36	8	156	47.55	33	7
147	44.80	36	4	157	47.85	33	3
148	45.11	36	00	158	48.16	32	11
149	45.41	35	8.5	159	48.46	32	7.5
150	45.72	35	5	160	48.77	32	4

Circular No. 25/84: **Ballah West, Beam/Draft**

Further to our Circular No. 20/84 concerning vessels authorised to use Ballah West Branch, please note that for vessels of the Second Southbound convoy (N2), making fast at Ballah West Branch, the beam must not exceed 141 ft. and draft 38 ft.

Article 50: Limit Time of Arrival to Join Convoys

Also see Article 49 – "Notices".

(A) *Southbound convoy*

(1) 3rd generation container ships, VLCCs in ballast and loaded vessels over 38 ft. draft who will anchor in the new anchorage area (V berths) N.W. of Port Said and declared by Agents ready for transit, have to reach the anchorage area before 1800 hrs.

(2) Other ships entering from Port Said harbour have to reach the anchorage area before 1800 hrs.

(3) Ships arriving after 1800 hrs. and not later than 2400 hrs. will join the second convoy either from Port or direct from sea and be declared by Agents ready for transit, providing the capacity of the Canal permits.

(B) *Northbound convoy*

(1) Ships anchoring South of Conry Rock: 3rd generation container ships, VLCCs, super tankers, heavy bulk carriers and vessels over 38 ft. draft, have to reach the anchorage area (V berths) and be declared by Agents ready for transit before 2400 hrs.

(2) Other vessels who will anchor in the anchorages of the Port of Suez, have to reach the waiting area and be declared by Agents ready for transit before 0200 hrs.

(C) In all cases the documents required should be produced before the passage of the vessel to the Canal office at Port Said or Port Tewfik.

Article 51: Courses to Keep on Leaving for Sea

(A) *At Port Said*

Vessels of Northbound convoy have to maintain course through the East approach channel till Hm. 195 then alter course North 000° for five miles before altering to destination.

(B) *At Port of Suez*

Vessels proceeding to sea have to maintain course through the channel till the last pair of buoys, then keep the separation zone on the port side till the separation zone Buoy No. 1.

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[22] Without current and in good weather conditions.

[23] Draft over 38 ft. or length over 950 ft. B.P.

[22] Without current and in good weather conditions.

SECTION II: Maximum Dimensions (Vessel's Sizes and Drafts)

Article 52: Dimensions of Vessels Authorised to Transit

These dimensions are given hereunder:

(a) *Max. length:* No restrictions.

(b) *Max. beam:* 210 ft.

(c) *Max. draft:* The tables A, B and C give the maximum draft authorised in relation to the beam of vessel according to the following:

(i) *Table "A":* For vessels in ballast transiting in either direction.

(ii) *Table "B":* For loaded vessels transiting Southbound. The speed of transit being 14 km./hr.

(iii) *Table "C":* for loaded vessels transiting Northward and includes two tables C-1 and C-2.

(a) Table C-1 gives the draft for vessels transiting at speed of 13 km/hr.

(b) Table C-2 gives the draft for vessels transiting at speed of 14 km./hr. (including LPG, LNG vessels and vessels carrying chemicals in bulk).

In these Tables the beams are given in metres and feet and the drafts in feet only.

Article 53: Progressive Increase in Draft

(A) For loaded vessels the max. draft for each vessel according to tables B and C or her tropical loadline whichever is less is to be reached gradually by successive steps.

(B) For each step of increase a vessel has to effect an experimental satisfactory transit before being admitted to the following step.

(C) Vessels transiting the Canal for the first time have to undergo an experimental transit at the draft preceding the max. draft indicated.

Notes:

1. (a) Vessels allowed to transit at a draft of over 50 ft. up to maximum 53 ft. must prior to those drafts effectuate an experimental satisfactory transit at a draft of 50 ft. max. and not less than 49 ft. 9 in.

(b) Sisterships are not to get benefit of authorisation granted to a particular ship of the group.

2. Vessels with beam over 200 ft. and up to 210 ft. are allowed to transit only in calm weather, i.e. beam wind not exceeding 10 knots.

3. Northbound LPG, LNG vessels and vessels carrrying chemicals in bulk, are subject to the Tables of Beam and Draft for vessels proceeding at 14 km./hr. speed.

For safety measures they are included in the "tankers" group.

(a) Chemicals in bulk vessels are included in the "tankers" group **only** when they are **loaded.**

(b) LPG and LNG vessels are included in the "tankers" group either loaded or in ballast and they are put ahead of the loaded tankers.

4. Vessels with Load Line Certificate not mentioning the amount of Freeboard of their Tropical Load Line and consequently do not have the Tropical Load Line marked on their sides, will be authorised to transit Suez Canal with a maximum draft up to the SUMMER Load Line only, or the maximum allowed draft Tables A, B, C-1 and C-2, whichever be the less.

Table "A" Vessels in Ballast.

Max. draft for different beams for vessel from North or South.

Beam	*Up to* 160 ft. (48.77 m.)	*Over* 160 ft. *Up to* 190 ft. (48.77 m. *up to* 57.91 m.)	*Over* 190 ft. *Up to* 210 ft. (57.91 m. *up* *to* 64.00 m.)
Draft in feet	*Recommended*		*Maximum*
	Fore 25 *Aft* 29	*Fore* 28 *Aft* 32	*Fore* 29 *Aft* 33

Note: Vessels with beam up to 190 ft. or 57.91 m. are not authorised to transit at a draft over 33 ft.

Table "B" – Loaded Vessels.

Note: For technical considerations LPG and LNG vessels *in ballast* are admitted to transit the Canal at draft of 33 ft.

In case of use of fresh water for ballast, vessel loses the privilege of being in ballast, and therefore, dues will be levied on the basis of laden vessel.

1. *Maximum draft for different beams for loaded vessels transiting Southbound Speed 14 km./h.*

Beam				*Draft*	
ft.	*in.*	*m.*	*cm.*	*ft.*	*in.*
156	00	47	55	42	00
	03		63	41	11
	06		70		11
	09		78		10
157	00		85		09
	03		93		08
	06	48	00		08
	09		08		08
158	00		16		06
	03		23		05
	06		31		05
	09		39		04
159	00		46		03
	03		54		02
	06		62		02
	09		69		01
160	00		77		00
	03		84	40	11
	06		92		11
	09	49	00		10
161	00		07		09
	03		15		08
	06		22		08
	09		30		07
162	00		38		06
	03		45		05
	06		53		05
	09		61		04
163	00		68		03
	03		76		02
	06		83		02
	09		91		01
164	00		99		00
	03	50	06	39	11
	06		14		11
	09		22		10
165	00		29		09
	03		37		08
	06		44		08
	09		52		07
166	00		60		06
	03		67		05
	06		75		05
	09		82		04
167	00		90		03
	03		98		02
	06	51	05		02
	09		13		01
168	00	51	21	39	00
	03		28	38	11
	06		36		11
	09		43		10
169	00		51		09
	03		59		08
	06		66		08
	09		74		07
170	00		82		06
	03		89		05
	06		97		05
	09	52	04		04
171	00		12		03
	03		20		02
	06		27		02
	09		35		01
172	00		42		00
	03		50	37	11
	06		58		11
	09		65		10
173	00		73		09
	03		81		08
	06		88		08
	09		96		07
174	00	53	03		06
	03		11		05
	06		19		05
	09		26		04
175	00		34		03
	03		42		02
	06		49		02
	09		57		01
176	00		64		00
	03		72	36	11
	06		80		11
	09		87		10
177	00		95		09
	03	54	02		08
	06		10		08
	09		18		07
178	00		25		06
	03		33		05
	06		41		03
	09		48		02
179	00		56		00
	03		63	35	11
	06		71		09
	09		79		08
180	00		86		06
	03		94		05
	06	55	02		05
	09		09		04
181	00		17		03
	03		24		02
	06		32		02
	09		40		01
182	00		47		00
	03		55	34	11
	06		63		11
	09		70		10
183	00	55	78	34	09
	03		85		08
	06		93		08
	09	56	01		07
184	00		08		06
	03		16		05
	06		23		05
	09		31		04
185	00		39		03
	03		46		02
	06		54		02
	09		62		01
186	00		69		00
	03		77	33	11
	06		84		11
	09		92		10
187	00	57	00		09
	03		07		08
	06		15		08
	09		23		07
188	00		30		06
	03		38		06
	06		45		06
	09		53		06
189	00		61		06
	03		68		06
	06		76		06
	09		83		06
190	00		91		05
	03		99		05
	06	58	06		05
	09		14		05
191	00		22		05
	03		29		05
	06		37		05
	09		44		05
192	00		52		05
	03		60		05
	06		67		05
	09		75		05
193	00		83		05
	03		90		05
	06		98		05
	09	59	05		05
194	00		13		04
	03		21		04
	06		28		04
	09		36		04
195	00		44		04
	03		51		04
	06		59		04
	09		66		04
196	00		74		04
	03		82		04
	06		89		04
	09		97		04
197	00	60	04		03
	03		12		03
	06		20		03
	09		27		03

Table "B" continued

Beam				Draft	
ft.	*in.*	*m.*	*cm.*	*ft.*	*in.*
198	00	60	35	33	03
	03		43		03
	06		50		03
	09		58		03
199	00		65		03
	03		73		03
	06		81		03
	09		88		03
200	00		96		03
	03	61	04		03
	06		11		03
	09		19		03
201	00		26		02
	03		34		02
	06		42		02
	09		49		02
202	00		57		02
	03		64		02
	06		72		02
	09		80		02
203	00		87		02
	03		95		02
	06	62	03		02
	09		10		02
204	00		18		02
	03		25		02
	06		33		02
	09		41		02
205	00		48		01
	03		56		01
	06		64		01
	09		71		01
206	00		79		01
	03		86		01
	06		94		01
	09	63	02		01
207	00		09		01
	03		17		01
	06		25		01
	09		32		01
208	00		40		00
	03		47		00
	06		55		00
	09		63		00
209	00		70		00
	03		78		00
	06		85		00
	09		93		00
210	00	64	01		00

Table "C-1"

Max. draft for different beams for loaded vessel transiting Northward.

Speed 13 km./hr.

(loaded tankers and heavy bulk carriers)

Beam				Draft	
ft.	*in.*	*m.*	*cm.*	*ft.*	*in.*
140	00	42	67	53	00
	03		75	52	11
	06		82		11
	09		90		10
141	00		98		09
	03	43	05		08
	06		13		08
	09		20		07
142	00		28		06
	03		36		05
	06		43		04
	09		51		03
143	00		59		03
	03		66		02
	06		74		01
	09		81		00
144	00		89	51	11
	03		97		10
	06	44	04		09
	09		12		08
145	00		20		07
	03		27		07
	06		35		06
	09		42		05
146	00		50		03
	03		58		02
	06		65		01
	09		73		00
147	00		80	50	11
	03		88		10
	06		96		09
	09	45	03		08
148	00	45	11	50	07
	03		19		06
	06		26		05
	09		34		04
149	00		41		03
	03		49		02
	06		57		01
	09		64		00
150	00		72	49	11
	03		80		10
	06		87		09
	09		95		08
151	00	46	02		08
	03		10		07
	06		18		06
	09		25		05
152	00		33		04
	03		40		03
	06		48		02
	09		56		01
153	00		63		00
	03		71	48	11
	06		79		10
	09		86		09
154	00		94		08
	03	47	01		07
	06		09		06
	09		17		05
155	00		24		04
	03		32		03
	06		40		02
	09		47		01
156	00		55		00
	03		63	47	11
	06		70		10
	09		78		09
157	00		85		08
	03		93		07
	06	48	00		06
	09		08		05
158	00		16		04
	03		23		03
	06		31		02
	09		39		01
159	00		46		00
	03		54	46	11
	06		62		10
	09		69		09
160	00		77		08
	03		84		07
	06		92		06
	09	49	00		05
161	00		07		04
	03		15		03
	06		22		02
	09		30		01
162	00		38		00
	03		45	45	11
	06		53		11
	09		61		10
163	00		68		09
	03		76		08
	06		83		08
	09		91		07
164	00		99		06
	03	50	06		05
	06		14		04
	09		22		03
165	00		29		02
	03		37		00
	06		44	44	11
	09		52		10
166	00		60		09
	03		67		08
	06		75		07
	09		82		06
167	00		90		05
	03		98		04
	06	51	05		03
	09		13		02
168	00		21		01
	03		28		00
	06		36	43	11
	09		43		10
169	00		51		09
	03		59		08
	06		66		07
	09		74		06
170	00		82		05
	03		89		05
	06		97		04
	09	52	04		03
171	00		12		02
	03		20		01
	06		27		00
	09		35	42	11
172	00	52	42	42	10
	03		50		09
	06		58		08
	09		65		07
173	00		73		06
	03		81		05
	06		88		04
	09		96		03
174	00	53	03		02
	03		11		01
	06		19		00
	09		26	41	11
175	00		34		10
	03		42		09
	06		49		08
	09		57		07
176	00		64		06
	03		72		05
	06		80		04
	09		87		03
177	00		95		02
	03	54	02		01
	06		10		00
	09		18	40	11
178	00		25		10
	03		33		09
	06		41		08
	09		48		07
179	00		56		06
	03		63		05
	06		71		04
	09		79		03
180	00		86		02
	03		94		01
	06	55	02		01
	09		09		00
181	00		17	39	11
	03		24		10
	06		32		09
	09		40		08
182	00		47		07
	03		55		06
	06		63		05
	09		70		04
183	00		78		03
	03		85		02
	06		93		01
	09	56	01		00
184	00		08	38	11
	03		16		10
	06		23		09
	09		31		08
185	00		39		07
	03		46		06
	06		54		05
	09		62		04
186	00		69		03
	03		77		02
	06		84		01
	09		92		00
187	00	57	00	37	11
	03		07		10
	06		15		09
	09		23		08
188	00		30		07
	03		38		06
	06		45		05
	09		53		04
189	00		61		03
	03		68		02
	06		76		01
	09		83		00
190	00		91	36	11
	03		99		11
	06	58	06		10
	09		14		10
191	00		22		09
	03		29		09
	06		37		08
	09		44		08
192	00		52		07
	03		60		07
	06		67		06
	09		75		06
193	00		83		05
	03		90		05
	06		98		04
	09	59	05		04
194	00		13		03
	03		21		02
	06		28		02
	09		36		01
195	00		44		01
	03		51		00
	06		59	35	11
	09		66		11

Table C-1 continued

Beam				Draft	
ft.	in.	m.	cm.	ft.	in.
196	00	59	74	35	10
	03		82		10
	06		89		09
	09		97		09
197	00	60	04		08
	03		12		08
	06		20		07
	09		27		07
198	00		35		06
	03		43		06
	06		50		05
	09		58		05
199	00		65		04
	03		73		04
	06		81		03
	09		88		03
200	00		96		02
	03	61	04		02
	06		11		01
	09		19		01
201	00		26		00
	03		34		00
	06		42	34	11
	09		49		11
202	00		57		10
	03		64		10
	06		72		09
	09		80		09
203	00		87		08
	03		95		08
	06	62	03		07
	09		10		07
204	00		18		06
	03		25		06
	06		33		05
	09		41		05
205	00		48		04
	03		56		04
	06		64		03
	09		71		03
206	00		79		02
	03		86		02
	06		94		01
	09	63	02		01
207	00		09		00
	03		17		00
	06		25	33	11
	09		32		11
208	00		40		10
	03		47		10
	06		55		09
	09		63		09
209	00		70		08
	03		78		08
	06		85		07
	09		93		07
210	00	64	01		06

Table "C-2"

Speed 14 km./hr.

Beam				Draft	
ft.	in.	m.	cm.	ft.	in.
166	00	50	60	42	00
	03		67		00
	06		75	41	11
	09		82		11
167	00		90		10
	03		98		10
	06	51	05		09
	09		13		09
168	00		21		08
	03		28		08
	06		36		07
	09		43		07
169	00		51		06
	03		59		06
	06		66		05
	09		74		05
170	00		82		04
	03		89		03
	06		97		03
	09	52	04		02
171	00		12		01
	03		20		01
	06		27		00
	09		35	40	11
172	00		42		10
	03		50		09
	06		58		09
	09		65		08
173	00		73		07
	03		81		06
	06		88		06
	09		96		05
174	00	53	03	40	04
	03		11		03
	06		19		03
	09		26		02
175	00		34		01
	03		42		00
	06		49		00
	09		57	39	11
176	00		64		10
	03		72		10
	06		80		09
	09		87		09
177	00		95		08
	03	54	02		08
	06		10		07
	09		18		07
178	00		25		06
	03		33		05
	06		41		05
	09		48		04
179	00		56		03
	03		63		02
	06		71		02
	09		79		01
180	00		86		00
	03		94	38	11
	06	55	02		11
	09		09		10
181	00		17		09
	03		24		08
	06		32		08
	09		40		07
182	00		47		06
	03		55		05
	06		63		05
	09		70		04
183	00		78		03
	03		85		02
	06		93		02
	09	56	01		01
184	00		08		00
	03		16	37	11
	06		23		11
	09		31		10
185	00		39		09
	03		46		08
	06		54		08
	09		62		07
186	00		69		06
	03		77		05
	06		84		05
	09		92		04
187	00	57	00		03
	03		07		02
	06		15		02
	09		23		01
188	00		30		00
	03		38	36	11
	06		45		11
	09		53		10
189	00		61		09
	03		68		08
	06		76		08
	09		83		07
190	00		91		06
	03		99		06
	06	58	06		05
	09		14		05
191	00		22		04
	03		29		04
	06		37		03
	09		44		03
192	00		52		02
	03		60		02
	06		67		01
	09		75		01
193	00		83		00
	03		90		00
	06		98	35	11
	09	59	05		11
194	00		13		10
	03		21		09
	06		28		09
	09		36		08
195	00		44		08
	03		51		07
	06		59		06
	09		66		06
196	00		74		05
	03		82		04
	06		89		04
	09		97		03
197	00	60	04		03
	03		12		02
	06		20		01
	09		27		01
198	00	60	35	35	00
	03		43		00
	06		50	34	11
	09		58		11
199	00		65		11
	03		73		10
	06		81		10
	09		88		09
200	00		96		09
	03	61	04		09
	06		11		08
	09		19		08
201	00		26		07
	03		34		07
	06		42		06
	09		49		06
202	00		57		05
	03		64		04
	06		72		04
	09		80		03
203	00		87		03
	03		95		02
	06	62	03		01
	09		10		01
204	00		18		00
	03		25		00
	06		33	33	11
	09		41		11
205	00		48		11
	03		56		10
	06		64		10
	09		71		09
206	00		79		09
	03		86		09
	06		94		08
	09	63	02		08
207	00		09		07
	03		17		07
	06		25		06
	09		32		06
208	00		40		05
	03		47		04
	06		55		04
	09		63		03
209	00		70		03
	03		78		02
	06		85		01
	09		93		01
210	00	64	01		00

Article 54: Speed

The speed of convoys is the following:

(a) Southbound: 14 km./hr.

(b) Northbound:

(1) 13 km./hr. for loaded tankers and bulk carriers group.

(2) 14 km./hr. for ordinary group.

SECTION III: Towage and Escorting

Article 55: Canal Authority Tugs

(A) At Port Said Harbour, tugs may be placed at the disposal of Masters if the Canal Authority deems it necessary. No charge is made for the assistance given by these tugs to transiting vessels for mooring and getting underway. In all other cases, a charge is levied by the Suez Canal Authority. Vessels manoeuvring in the harbour are required to provide their own ropes. Wire tow-ropes are not allowed.[24]

(B) In other cases, tugs can be hired for mooring, towing or getting a vessel afloat. Charges paid by the vessel will be according to rates set by Suez Canal Authority.

(C) In accordance with the terms of Article 57 of the present Chapter, the Officials of the Canal Authority may impose on certain defective vessels, or vessels carrying dangerous cargo, a tug or more for towing or escorting during transit of the Canal.

In such cases, charges are paid according to rates set by Suez Canal Authority.

(D) The Master of a vessel using a tug placed at his disposal has the exclusive direction and control of the manoeuvres of both the vessel and the tug.

(E) Whatever may be the conditions or circumstances under which the Canal Authority tugs are made use of by a vessel, the Master of the vessel is responsible for any damage or accidents whatsoever resulting directly or indirectly from the use of the said tugs, including damage which may occur to the tugs themselves, and to equipment.

Article 56: Use of Private Tugs

Shipowners are authorised to have their vessel towed or conveyed by their own tugs under their entire responsibility. Such tugs must be approved by the Suez Canal Authority. Apart from the special towage dues, tugs belonging to private owners are subject to the strict observance of all the parts of the rules relative to vessels manoeuvring, in transit or berthing.

Towing arrangement must be supervised and approved by the Suez Canal Authority personnel.

Article 57: Cases of Imposed Tugs

Chargeable tugs shall be imposed during Canal transit, at the tariff hire rate, in the following cases:

(a) The Canal Authority may require any vessel to take a tug or tugs through the Canal, when in its judgement such action is necessary to ensure safety to the vessel or to the Canal.

(b) LPG and LNG of over 80,000 tons (SCGT). It is also requested that a steering light, to be lit at night, be fitted on the extremity of the tanker's bows.

(c) Any vessel without mechanical power, or the machinery of which is (or becomes) disabled, or steers badly, or which is liable to become unmanageable for any reason, shall be towed through the Canal.

(d) Bad view vessels owing to deck cargo, containers, cranes or constructions impeding the view from the wheelhouse and wings.

(e) Vessels with defective indicators, or vessels without indicators, on their second trip through the Canal.

(f) Vessels unable to use one of her two anchors.

Article 58: Escorting

The escort of VLCCs, ULCCs, large bulk carriers and other vessels will be as follows:

(a) Loaded vessels under 110,000 d.w.t. will be escorted by 1 tug if for technical reasons the Suez Canal Authority finds it necessary, or when the vessel's draft exceeds 45 ft.

(b) Loaded vessels from 110,000 d.w.t. to 150,000 d.w.t. will be escorted by 1 tug.

(c) Loaded vessels over 150,000 d.w.t. will be escorted by 2 tugs.

(d) Vessels in ballast over 200,000 d.w.t. will be escorted by one tug.

Above mentioned vessels have to prepare 2 polypropylene ropes 16 in. circumference[25] to join the stern to the tug during stopping operations. The ropes should be eye spliced to fit in the quick release hook on the tug and with adequate length to give distance between fore of the tug and stern of vessel at about 50 m. On the vessel these ropes will be made fast on stern bitts port and starboard. The eyes will be hanging over the stern about 2 m. above water and lashed with rope stoppers to break loose when necessary.

Transit of drilling rigs and towed units:

1. (a) Drilling vessels.
   (b) Drilling rigs loaded on special vessels are to be escorted by a Suez Canal tug.
2. (a) Drilling rigs with self steering power.
   (b) Drilling rigs without self steering power.
   (c) Drilling rigs with legs which can be lifted so that nothing extends under the rig's bottom.

The above are to be assisted by a Suez Canal tug aft and another Suez Canal tug as escort, in addition to a powerful tug forward to make speed in the Canal not less than 12 km. per hour over the ground. They must also be in good state of stability.

3. Drilling rigs with legs that cannot be lifted and a part remains under the rig's bottom: Each case has to be studied separately to decide whether the unit is allowed to pass the Canal or not.

4. Other towed units are not allowed to transit Suez Canal, unless they are towed by a tug suitable to the size of the unit and powerful enough to maintain a speed in the Canal not less than 12 km. per hour over the ground, in addition to the assisting Suez Canal tugs, whenever found necessary by Suez Canal officials.

General:

(a) All enquiries concerning the possibility and/or approval of transit of towed units, drilling rigs, dredgers, etc., are to be submitted by the Owners of the units or Local Official Agency, accompanied by a General Arrangement plan and all particulars of the unit: name, LOA, beam, draft, height, self steering, etc.

The application must reach the Suez Canal Authority (Directorate of Transit, Ismaila, Egypt) not less than two weeks before sailing of the unit from its base.

(b) Any towed unit must be supplied with floating mooring ropes in good condition and suitable in number (more than six) and size according to the dimensions of the unit.

(c) A responsible person and a crew of at least 10 persons must be on board the unit during the transit.

(d) A valid Seaworthiness Certificate for the towage through Suez Canal must be available.

(e) The unit must comply with the Suez Canal Regulations.

(f) If the transit is authorised a survey of the unit shall be made on the arrival, in order to take the definite steps and make the final arrangements for the transit, if it complies to Suez Canal Rules.

(g) The transit is subject to the circumstances of the Navigation in the Canal, and the weather conditions.

CHAPTER IV: ACCIDENTS – LEAKS – PRECAUTIONS AGAINST FIRE AND POLLUTION

Article 59: Accidents

(A) Whenever a vessel underway is accidently stopped, she must, if other vessels are following, attract their attention by giving five or six short blasts on the whistle or siren. This signal is to be repeated at short intervals. It means "I am reducing speed and may have to stop and make fast". Vessels stopped accidentally at night, must in addition, immediately replace their white light astern with a red light.

In case of grounding, the Master must immediately hoist the following:

	By Day	*By Night*
Passage clear for tugs	Black Ball Pendant No. 2	Red Light
Passage not clear for tugs	Black Ball; Pendant No. 2; International Code Flag "N".	2 Red Lights.

Send also a radio message stating whether a tug is required or not, whether or not passage is clear for the tug and whether lightening is necessary, etc.

(B) When a vessel runs aground, the Canal Authority Officials are alone empowered to order and direct all operations required to get the vessel afloat and if necessary, have her unloaded and towed. Nevertheless, Masters remain responsible for all damages or accidents of any kind which may be the direct or indirect consequence of the grounding.

All attempts on the part of other vessels to refloat a vessel aground are strictly prohibited.

(C) When a vessel grounds or stops in the Canal itself in consequence of an accident other than a collision, the Canal Authority, in order to clear the way with all possible speed, and to get her underway, will assist with the necessary tugs to refloat her, free of charge. If, once afloat, and the Canal Officials find it necessary to tow or escort the vessel by one tug or more, she must from that moment, pay towage charges as set down by Suez Canal Authority, moreover, it is understood that the vessel bears all expenses necessary for repairs of any damage or breakdown which might interfere with her getting underway regardless of the time when such damage or breakdown takes place.

(D) When a vessel grounds or stops outside the Canal itself or if the grounding or stoppage is due to a collision, all charges for getting the vessel afloat, towing, unloading, reloading, etc., are payable by the vessel and must be settled as per statement drawn up by the Canal Authority before the vessel leaves Port Said or Port of Suez.

(E) Whenever a collision appears probable, vessels must not hesitate to run aground should this be necessary to avoid it.

(F) When a vessel or floating structure of any description runs aground or strands or sinks or is left abandoned, either in the Canal itself or in one of its ports, Waiting or Anchorage Areas, and the Canal Authority deems it an obstruction or a menace to navigation in Canal Waters, the Authority has the right to take of its own accord such action as may be necessary for the purpose of removing or destroying the vessel or floating structure by whatever means the Canal Authority may select and at the risk and expense of the Owner of, or the person responsible for the vessel or the floating structure. The Suez Canal Authority has – in this case – the right to sell the vessel or the floating structure or the wreck salvaged or all of them together in public auctions with a view to covering all kinds of expenses.

Article 60: Leaks

In the case of leaks, when in harbour the Master must inform the Harbour Office at once. When in Canal or anchored in lakes, he must inform immediately the Movement Office. He must at the same time make the appropriate International Signal and call attention by sounding a prolonged blast on the whistle or siren; and take all necessary measures to stop the leakage and ensure the safety of the vessel.

The Suez Canal Authority Officials whose decision shall be final may order any action deemed necessary in the best interest of all concerned: change of berth or mooring, beaching, taking the vessel out to sea. The Master is nevertheless responsible for all damage or accidents arising directly or indirectly from the salvage operations.

Article 61: Fire Fighting

(A) Vessels transiting the Canal should be equipped with the fire fighting equipment in accordance with the requirements of the International Convention for the Safety of Life at Sea. All equipment should be in a good and efficient condition.

(B) Fire hoses with suitable nozzles attached shall be connected to the outlets of fire lines at all times while in Canal Waters. Sufficient hoses shall be connected to reach all parts of the vessel.

(C) Approaching Canal Waters, as precautionary measures, all vessels must have a fire wire hanging over the side ready for use fore and aft, before entering Canal Waters.

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[24] Wire tow-ropes should not be confused with the fire-wire ropes made fast onboard and fitted with an eye splice or connecting shackle hanging over the side as required. See Article 61 (C).

[25] For vessels under 100,000 d.w.t., if their draft is over 45 ft.

Article 62: Fire Onboard

(A) In case of fire onboard, when in harbour the Master must inform the Harbour Office at once. When underway or in the Canal or anchored in Lakes or made fast in Canal, he must inform the Movement Office.

He must at the same time make the appropriate International Signal and call attention by sounding a prolonged blast on the whistle or siren. He must make ready to get underway if required to do so.

(B) Neighbouring vessels must in such cases also be ready to change berth.

(C) Masters are responsible for the use onboard their vessels of fire fighting appliances and installations and for the stability and safety of their vessel.

(D) *The Suez Canal Officials will co-operate with the Master for the purpose of directing the fire fighting operations.*

The vessel's crew shall co-operate with the Suez Canal Authority personnel.

(E) If in the opinion of the Canal Authority Officials, whose decision shall be final – there is a risk of fire spreading, they may order any action deemed necessary in the best interest of all concerned (change of mooring, beaching, taking vessel out to sea); it is understood that Masters are nevertheless responsible for all damages or accidents arising directly or indirectly from outbreaks of fire or salvage operations.

Article 63: Fuelling

A vessel at fuel berth or while being supplied by fuel in Waiting Areas shall at all times be ready for immediate fire fighting. She shall keep up steam and be ready to move on short notice.

Article 64: Pollution

Before arrival from sea at either of the Terminal Ports, vessels should comply with the requirement of appropriate Convention currently in force.

(A) Discharge of Substances Polluting Water

Vessels must not discharge or throw into the Canal Waters any polluted water ballast, heavy slops, engine or fire room polluted bilge water, oil or any other substances that will cause pollution.

In case of violation, the vessel shall be charged an additional due of 10,000 L.E. (Ten Thousand Egyptian Pounds), shall be liable for any damage resulting from the pollution and shall pay all expenses incurred for its removal. Moreover, she may be prevented from transiting the Canal.

In case of leakage of any polluting material from a vessel, due to any reason, the Master, the Owners and/or operators of the vessel shall be liable for any damage resulting from the pollution and shall pay all expenses incurred for its removal.

(B) Dumping Garbage

Dumping Garbage is Strictly Forbidden

In case of violation, the vessel will be charged an additional due of 1,000 L.E. (One Thousand Egyptian Pounds).

If a vessel is anchored in Canal Waters for a considerable length of time, she may get rid of garbage by requesting garbage lighter alongside.

(C) Whenever a vessel observes *oil spill* in Canal Waters, she must at once inform the Suez Canal Authority with the following information if possible.

(i) The place and area covered by spill.
(ii) The direction of motion of the spill.
(iii) If known, the name of vessel causing the spill.

CHAPTER V: Prohibitions and Charges

General

When a vessel is in Canal Waters, either in anchorage areas or ports or during transit, the following is prohibited:

Article 65: Use of Anchors and Thrusters

Masters must avoid anchoring and using the thrusters in the Canal, except in case of absolute necessity.

Article 66: Misuse of Whistle or Siren

The sounding of a whistle or siren is prohibited except for giving any authorised or required signal, as mentioned in Part III, Article 93.

Article 67: Firing Shots

(A) Firing shots is not allowed.

(B) An additional due of 200 L.E. (two hundred Egyptian pounds) will be imposed for violation of this rule.

Article 68: Picking up Object from Water

(A) Whenever any object or merchandise whatsoever falls overboard, it must be immediately reported to the Canal Authority. If it is considered that the picking up cannot be effected by the vessel without impeding transit, the Canal Authority will proceed to carry it out, at the expense of the vessel.

(B) An additional due of 200 L.E. (two hundred Egyptian pounds) will be imposed for violation of this rule.

Article 69: Riveting, Welding etc.

(A) Riveting, welding, burning, metal cutting or similar operations requiring the use of heat, are not allowed unless authorised by the Suez Canal Authority.

(B) An additional due of 500 L.E. (five hundred Egyptian pounds) will be imposed for violation of this rule.

Article 70: Pollution

(A) See Article 64 and following.

(B) An additional due of 10,000 L.E. (ten thousand Egyptian pounds) will be imposed for discharge of substances polluting water. Besides, the vessel may be prevented from transiting the Canal any more.

(C) An additional due of 1,000 L.E. (one thousand Egyptian pounds) will be imposed for throwing waste.

Article 71: Direct Lights

Under no circumstances shall the rays of any blinding lights be directed to the bridge or any other direction which would interfere with the safe navigation of other vessels.

Article 72: Embarking and Disembarking of Persons

(A) Unless authorised by the Canal Authority or Port Officials, no person shall embark or disembark from a vessel while passing through the Canal or in Ballah, Timsah Lake or the Bitter Lake.

(B) An additional due of 200 L.E. (two hundred Egyptian pounds) will be imposed for violation of this rule.

Article 73: Boats, other than the Canal Authority's own are not allowed to come alongside vessels underway or manoeuvring except the following at their own risk.

(A) Quarantine and police boats.
(B) Mooring boats.
(C) The ship's Agent's boats.

Article 74: Vessel Overtaking Another

(A) Vessels proceeding in the same direction are not allowed to overtake one another while underway in the Canal Waters and ports unless authorised by the Suez Canal Control Office.

(B) An additional due of 500 L.E. (five hundred Egyptian pounds) will be imposed for violation of this rule.

Article 75: Boat Drills

(A) No rowing or sailing boat drills are allowed except after authorisation.

(B) An additional due of 200 L.E. (two hundred Egyptian pounds) will be imposed for violation of this rule.

Article 76: Venting

(Tank openings to be closed through the whole transit).

(A) Venting of gas for the purpose of tank cleaning is prohibited in Canal Waters.

(B) An additional due of 10,000 L.E. (ten thousand Egyptian pounds) will be imposed for violation of this rule.

Article 77: Long Stay

(A) Unless due to conditions of traffic or incidents in the Canal, transiting vessels should not remain more than 24 hours in Port Said berths, anchorages in Port Said and Port of Suez roads, Timsah Lake or Bitter Lakes.

(B) An additional due of 2 P.T. (two Egyptian piastres) per Suez Canal net ton/day will be imposed.

Article 78: Vessels Having Damaged Container With Dangerous Cargo

If upon arrival of a vessel in waiting areas or port or while transiting the Canal, it is found that a container of dangerous cargo has been damaged or is leaking, the Master of the vessel has to notify the Suez Canal Port Authority at once. In cases of dangerous situations the vessel may be ordered to leave the port or waiting area for sea.

Article 79: Declaration of State of Navigability

I, the undersigned, Master of the..

(a) Certify that my ship satisfies the conditions laid down in Part I, Articles 22 and 25 of the Navigation Regulations and that, in particular, the engines and the steering gear are in good working order(*).

(b) Declare that my ship has, at the present time, the following defects in engines or steering gear(*).

(c) I declare, also, that the wireless installations of my ship permit to transmit on the frequencies hereafter, in kHz: Telegraphy...............kHz. Telephony...............kHz.

(d) I state also that my ship is/is not (*) fitted with a rudder angle indicator and engine r.p.m. indicator on the bridge in such a position that the Pilot may read both without having to move away from his station and that the rudder angle indicator/engine r.p.m. indicator(*) is/are in good working condition.

I undertake to bring to the notice of the Suez Canal Authority, before my ship enters the Canal, any defects, not specified above, which may appear.

Made at Port...................., the........................
Signature.........................

(*)Delete where inapplicable.

PART II – CANAL AND LAKES

CHAPTER VI: CANAL AND LAKES

Article 80: Canal and Approaches

(A) Length of the Navigable Channel

(1) East Approach Channel (Port Said).

(a) Distance from outer pair of buoys at Hm. 195 to Hm. 94.90 where it joins the West Approach Channel is 10.010 km.

(b) Distance from Hm. 94.90 to the pair of revolving lights at Km. 3.000^{E} is 12.490 km.

(2) West Approach Channel (Port Said).

(a) Distance from Fairway Buoy to Port Said Lighthouse is 11 km.

(b) Distance from Port Said Lighthouse (Km. 0.000) or (Km. 3 East Branch) to Ismailia is 78.5 km.

(c) Distance from Ismailia to Port Tewfik (Km. 162.250) is 83.750 km.

(d) Distance from Port Tewfik (Km. 162.250) to the outer pair of buoys Hm. 80.50 is 8.500 km.

(e) Total length of the navigable channel is 193.250 km.

(B) Characteristics of the Navigable Channel (Canal and Approaches).

(1) North Approaches

(a) East Port Said Approach Channel from Hm. 195 to Km. 1.333 East.

(i) Depth of water 20.00 m.

(ii) Channel width measured at 20 m. depth – Hm. 195.00, 745 m.; Hm. 80.00 East, 400 m.; Km. 1.333 East, 120 m.

(iii) Side Slopes

Natural land side slopes, ranging from 5/1 near shore to about 20/1 in the off-shore part.

(b) West Port Said Approach Channel from Hm. 95.00 to Port Said

(i) Depth of water 14.00 m.

(ii) Channel width measured at 12.50 m. depth – Hm. 95.00, 600 m; Hm. 25.00, 350 m.

(2) Canal Cross Sections (See Plan Book)

(a) The Canal cross sections are trapezoidal in shape, having side slopes of 4/1 in the Northern part up to Km. 61.00 and of 3/1 in the Southern part. Toussoum Zone is the only place where the Western slopes are 2.5/1.

(b) Tables of main dimensions of cross sections all through the Canal (See below).

(c) Both sides of the Canal are provided with mooring bollards.

(3) South Approach from Hm. 0.00 (Km. 162.250) to Hm. 80.50

(a) Depth of water 23.50 m.

(b) Channel width measured at 18 m. depth Hm. 0.000 to Hm. 80.50, 298.00 m.

(c) Side slopes 3/1.

(C) Depth and Width of Different Parts of the Canal

i. *Main Canal and Bitter Lake West Channel*
ii. *Canal East Branches and Bitter Lake East Channel*

i. *Main Canal and Bitter Lake West Channel*

Kilometric Position		*Designation of Different Parts of the Canal*	*Theoretical Depth*	*Width of Canal at 18 m. Depth*	*Width of Canal at 14 m. Depth for West Branches*	*Remarks*
Origin point of Km.		*Axis of Port Said Lighthouse*	*Metres*	*Metres*	*Metres*	
From Km.	To Km.					
0.000	1.450	Ismail Basin	13.00			
1.450	3.650	Basins for Coal and Fuel oil vessels	13.00			
3.729	4.890	Junction	15.00			
4.890	5.878	Straight line	15.00			
6.410	16.663*	Straight line	15.50		151	
16.663	17.000*	Junction	15.50 – 19.50		151 – 172	
17.000	19.000	Southern entrance to Port Said By-pass	19.50	Variable		
19.000	30.414	Straight line	19.50	119		
30.414	32.350	Northern Approach to encoche (cut)	19.50	119 – 246		
32.350	32.950	East encoche of Km. 32	19.50	246		
32.950	33.950†	Southern approach to encoche (cut)	19.50	246 – 104		
33.950	49.512	Straight line	19.50	104		
49.512	51.477	Northern approach to Ballah Loop	19.50	Variable		
51.477	51.800	Straight line	18.50		146	
51.800	52.054	Straight line	15.50		146	
52.054	53.512	Curve of Km. 53	15.50		Variable	
53.512	54.098	Approach to curve	15.50		160.64 – 146	West Branch Ballah Loop
54.098	56.871	Straight line	15.50		146	
56.871	58.797	Curve of Km. 57	15.50		Variable	
58.797	59.269	Approach to curve	15.50		157.82 – 146	
59.269	59.900	Straight line	15.50		146	
59.900	60.308	Straight line	18.50		146	
60.308	60.333	Curve of Km. 61	18.50		146 – 146.10	
60.333	63.419	Curve of Km. 61	18.50 – 19.50	Variable		
63.419	64.514	Approach to curve	19.50	143.96 – 118		
64.514	71.164	Straight line	19.50	118		
71.164	71.964	Approach to curve	19.50	118 – 148		
71.964	75.311	"S" Curves	19.50	148		
75.311	76.025	Straight line	19.50	148		
76.025	77.370	Curve (Centre on West Bank)	14.50		102 – 173	
77.370	77.672	Junction	14.50 – 14.00		173 – 226	
77.672	77.912	Junction	14.00		226 – 282	West Branch Timsah Lake
77.912	79.943	Curve of Lake Timsah (Centre on East Bank)	13.50			
79.943	80.312	Straight line	13.50 – 15.50			
80.312	80.384	Junction	15.50		94 – 80	
80.384	81.250	Straight line	15.50		80	
82.575	85.027	Straight line	19.50	148		
85.027	87.414	Curve of Km. 85	19.50	148		
87.414	88.814	Approach to curve	19.50	148 – 118		
88.814	92.950	Straight line	19.50	118		
92.950	93.050	Junction to Syphons Zone	19.50	118 – 198		
93.050	93.446	Syphons Zone	19.50	198		
93.446	95.000	Junction to Deversoir by-pass	19.50	Variable		
95.000	95.250	Junction to West Branch	17.25		188 – 152	Deversoir West Branch
95.250	100.200	Straight line	15.50		152	
100.200	101.050	Junction	14.50		152 – 411.43	
101.050	103.957 W. 104.160 E.	Junction	14.50		411.43 – 250	Bitter Lakes West Channel
104.160	114.749	West Channel	14.50		250	
114.957	115.603	Junction	14.50		from approx. 400 to 152	Kabrit – Loop West Branch
115.603	122.100	Straight line	15.50		152	
122.100	125.507	Curve of Km. 122	19.50	Variable		
125.507	129.499	Straight line	19.50	148		
129.499	131.975	Curve of Km. 130	19.50	148		
131.975	133.175	Approach to curve	19.50	148 – 118		
133.175	144.714	Straight line	19.50	118		
144.714	147.164	Encoche of Km. 146	19.50	Variable		
147.164	153.524	Straight line	19.50	118		
153.524	154.724	Approach to curve	19.50	118 – 148		
154.724	155.724	Curve of Km. 154	19.50	148		
155.724	156.274	Straight line	19.50	148		
156.274	159.998	Curve of Km. 157	19.50	148		
159.998	161.050	Straight line	19.50	148		
161.050	162.250	Southern approach of the Canal	19.50	148 – 309		

*For this part the existing depth is 14 m. and the width varies between 85 m. and 86 m. The shown depths and widths will be achieved by end of 1981.

†The Southern approach to the encoche of Km. 32 will be amended in future.

ii. *Canal East Branches and Bitter Lake East Channel*

Kilometric Position *Origin point of Km.* From Km.	 To Km.	*Designation of Different Parts of the Canal* *Axis of Port Said Lighthouse*	*Theoretical Depth* *Metres*	*Width of Canal at 18 m. Depth* *Metres*	*Width of Canal at 14 m. Depth for West Branches* *Metres*	*Remarks*
1.500 E.	15.465 E.	Straight line	19.50	114		Port Said By-Pass
51.449 E.	51.785 E.	Curve of Km. 51 East	19.50	104		East Branch Ballah – Loop
51.785 E.	59.943 E.	Straight line	19.50	104		
76.032	76.519	Straight line	19.50	148		Timsah By-Pass
76.519	78.900 E.	Curve of Timsah	19.50	148		
78.900 E.	80.949 E.	Encoche of Km. 82	19.50	Variable		
80.949 E.	81.692 E.	Curve of Timsah	19.50	148		
95.000	95.250	Junction to East branch	19.50	243.55 – 210.99		Deversoir East Branch
95.250	96.000	Junction to East branch	19.50	210.99 – 148		
96.000 E.	100.666 E.	Straight line	19.50	148		
100.666 E.	102.600 E.	Straight line	19.50	148		
102.600	105.030	Curve	18.50	Variable		Bitter Lakes East Channel
105.030	112.860	Main Channel	18.50	364		
112.860	114.200	Junction	18.50	Variable		
114.200	114.956	Junction with Kabrit – Loop	19.50	Variable		Kabrit – Loop East Branch
114.956 E.	115.144 E.	Junction	19.50	from approx. 250 to 118		
115.144 E.	118.000 E.	Straight line	19.50	118		
118.000 E.	121.937 E.	Straight line	19.50	118		
121.937 E.	122.100 E.	Beginning of Km. 122 curve	19.50	118		

(D) Bends in the Canal

(1) The bends in the navigable channel have the following characteristics:

(a) Radius of navigation line = 5,000 m.

(b) Width of channel at −11.00 m., depth = 190 m.

(c) Width of channel at −18.00 m., depth North of Km. 61.000 (side slopes 4/1) = 134 m.

(d) Width of channel at −18.00 m., depth South of Km. 61.000 (side slopes 3/1) = 148 m.

(e) At the ends of two bends, there is usually a funnel made to allow increasing the width of the channel gradually from 160 m. to 190 m. (at −11.00 m. depth).

(f) Locations of beginning and end of each bend are included in the following table:

Canal Bends	*Kilometric indication of beginning point*	*Kilometric indication of end point*
Km. 53	Km. 52.050	Km. 53.520 West
Km. 57	Km. 56.870	Km. 58.800 West
S. "Curves"	Km. 71.960	Km. 75.300
Timsah Curve	Km. 76.520	Km. 81.700 East
Km. 85	Km. 85.030	Km. 87.400
Km. 103	Km. 102.600	Km. 105.030 West
Km. 130	Km. 129.500	Km. 131.980
Km. 146	Km. 145.500	Km. 146.330
Km. 154	Km. 154.700	Km. 155.720
Km. 157	Km. 156.280	Km. 160.000

(2) At the approaches of the by-passes, bends are made with radius more than 5,000 m. Location of these bends are included in the table hereafter.

Approaches	*Kilometric indication of beginning point*	*Kilometric indication of end point*
Km. 51	Km. 49.510	Km. 51.480 West
		Km. 51.790 East
Km. 61	Km. 60.310 West	
	Km. 59.940 East	Km. 63.300
Km. 122	Km. 121.940 East	
	Km. 122.500 West	Km. 125.510

(E) By-Passes and Loops

(1) Port Said By-Pass (See Plan Book)

A new by-pass is dredged East of Port Fouad starting at Km. 17.000 and extending straight to join the existing Port Said Roadstead at Hm. 94.90 and continuing until Hm. 195. This channel (By-Pass) will be used for the exit of Northbound ships, the entry of VLCCs in ballast and vessels with draft over 38 ft. coming from North.

Characteristics and dimensions: The kilometric marks are followed by letter "E" to distinguish them from those of the West branch. The inland part (from Km. 1.500 E. to Km. 15.465 E.) width (at 18 m. depth) is 114 m. with side slopes 4/1 and depth 19.5 m., fitted with bollards on the Western side, spaced every 100 m.

The seaward part (from Km. 1.500 E. to Hm. 94.90 E.) with width (at −20 m. depth) ranging from 120 m. at Km. 1.333 E. to 400 m. at Hm. 80.00 E. with natural side slopes (average 5/1 – 10/1).

Two revolving lights, one on each bank to indicate the entrance of Canal from East Approach channel at Km. 3.000 E.

(2) Ballah Loop (See Plan Book)

Between Km. 51 and 61 the Canal is doubled in the East, by a branch. The zone comprising the 2 branches of the Canal limited by the North and South ends where the 2 branches meet, is called "Ballah Loop".

In the East Branch the kilometric marks are followed by letter "E". The length of the East Branch is 8.490 km.

	West Branch	*East Branch*
Kilometric marking of North end	51.477	51.449 E.
Kilometric marking of South end	60.333	59.943 E.

Slope of bank 4/1. In the West branch 15 mooring posts are situated on the Eastern bank and numbered South to North.

(3) Timsah By-Pass (See Plan Book).

Between Km. 76.580 and Km. 81.700 E.

Characteristics and dimensions

The kilometric marks are followed by letter "E". Length: 5.110 km. counted at right angle from Km. 76.578 to Km. 81.700. Width: 148 m. at a depth of 18 m. Slope: The side slope is 3/1. The radius of its axis is 4905 m. The by-pass will be used by North and Southbound vessels.

(4) Deversoir By-Pass (See Plan Book)

A new branch is dredged East of the existing channel at Deversoir zone. This branch begins at Km. 95.000 and joins the main East channel in the Great Bitter Lake at Km. 104.160. The branch will be used by Northbound vessels.

Dimensions

Width: 148 m. at 18 m. depth. Depths: 19.500 m. from Km. 95.000 to Km. 100.670; 19.900 m. from Km. 100.670 to Km. 102.600; 18.500 m. from Km. 102.600 to Km. 104.160. Side slope: 3/1.

(5) Kabrit By-Pass (See Plan Book)

The By-Pass is situated to the East of the main Canal. It begins at Km. 114.960 and ends at Km. 122.100. It is 250 – 118 m. wide at a depth of 18 m., the bank slope is 3/1. The By-Pass is separated from the main Canal by a submerged island at a depth between 2 and 6 m. The width of the island varies between 200 m. in the North and 66 m. in the South. Some mooring bollards have been installed on the submerged island to be used in case of emergency. The two extremities of the submerged island are marked at Km. 114.970 and 122.150 by a light buoy painted horizontally white and red and showing a flashing white light. The by-pass (East channel) is to be used by Northbound vessels. Southbound vessels use the West channel.

Article 81: Lakes

(A) Lake Timsah (See Plan Book)

Lake Timsah extends from Km. 76.500 to Km. 80.520. In the presence of the new Timsah By-Pass, Lake Timsah will be used mainly as an anchorage area.

(B) Great Bitter Lake (See Plan Book)

There are 2 dredged channels in the Great Bitter Lake. The East is the main channel about 364 m. wide at 18.00 m. depth and dredged to 18.50 m. for Northbound vessels. The West channel 250 m. wide at 14.00 m. and dredged to 14.50 m. depth for Southbound vessels.

These channels divide the Great Bitter Lake into two anchorage areas, one to the East and the other to the West.

Article 82: Floating Bridges

The fixed parts of floating bridges are outside the line of navigational buoys. The bridges may be rigged day or night.

CHAPTER VII: BUOYAGE SYSTEM IN THE CANAL

Article 83: Buoyage

The navigable channel is marked by pairs of light buoys. On the East side Black buoys showing Green lights. On the West side Red buoys showing Red lights.

In the straight parts, the distance between each pair is 1.5 km. in the North Section, and 1.0 km. in the South Section. In the curves the distances will be less than 1.0 km. All buoys in the Canal and its approaches are fitted with radar reflector.

Article 84: Location of Buoys in the Suez Canal See Plan Book.

CHAPTER VIII: TIDES AND CURRENTS IN SUEZ CANAL

Article 85

The Suez Canal is divided in three main sectors according to the nature of tide in each.

The characteristics of each can be summarised as follows:

(A) The Northern Sector

This part is located between Port Said and the Great Bitter Lake.

1. The height of tide at Port Said co-oscillates with the tides of the Mediterranean sea with 0.50 m. extreme tidal range (difference between highest and lowest levels) at Spring tides. This tidal range decreases gradually going South, to be about 0.20 m. at the entrance of Lake Timsah.
2. In this sector, the peak tidal current may reach 1.0 knot (in case of no wind).
3. Currents can be doubled by strong prevailing winds.
4. Peak currents occur about 50 minutes after predicted HW and LW at Port Said.

5. The duration and velocity of currents in this sector are greatly affected by the relative mean sea levels between the Mediterranean sea, the Bitter Lakes and the Red Sea as follows:

(a) *In Summer:* Between July and October, the mean sea level at Port Said is slightly higher than that of the Bitter Lakes. This difference (which reaches its maximum about 0.20 m. in September), due to the great evaporation at the Bitter Lakes, causes the *predominance of the Southward* current in duration and velocity.

(b) *In Winter:* Between December and May, the mean sea level at the Bitter Lakes is slightly higher than that of Port Said. This difference which reaches its maximum of about 0.30 m. in January, causes the *predominance of the Northward* current in duration and velocity.

(B) The Lakes (Timsah and Bitter Lakes)

1. The Lakes along the Canal have an important role in dampening the effects of sudden meteorological changes.

2. The Bitter Lakes with a surface of about 250 sq.km. reduce the vertical movement of the tide to a minimum between Km. 100 and Km. 130.

3. The high Spring tidal range (MHWS) in the Great Bitter Lake may reach 0.25 m.

4. The phase of the vertical tide in the Great Bitter Lake is about 3 hours later than that of Port Tewfik.

5. The vertical tide in Lake Timsah is almost in phase with the tide in the Great Bitter Lake.

(C) The Southern Region

This part is located between Port of Suez and the Bitter Lakes.

1. The height of tide at Suez co-oscillates with the tides of the Red Sea with extreme tidal range of about 1.90 m. at Spring tides. This range decreases gradually going North till the Bitter Lakes entrance where it is 0.15 m. at Genefa.

2. The tidal volume of the Bitter Lakes is very large compared to the tidal volume of the Southern section. Consequently the currents are relatively strong and almost uniform between Port Tewfik and Genefa.

3. In this region the Northward current is called *Flood* and the Southward current is called *Ebb*.

4. Peak currents about 50 minutes after predicted HW and LW at Port Tewfik.

5. At the entrance of the Canal, Km. 159, the *Flood* tide starts at an average of 3 hours after the LW at Suez. The *Ebb* tide 3 hours after HW in Suez.

6. Generally in Summer, the duration of the *Ebb* exceeds the average of 6 hours. In Winter, the *Flood* is the predominant. The *Ebb* is prolonged by "Strong Northerly Winds". The *Flood* is prolonged by "Strong Southerly Winds".

7. In this region the average peak current is about 1.5 knots. In Spring tides, current may reach 2.5 knots.

8. The change of current occurs 5 to 10 minutes later in the bottom of the Canal, than on its surface.

Article 86: Weather Forecast

Six meteorological stations are installed on the Canal area. Information about local weather will be passed to vessels through Pilots.

PART III – COMMUNICATIONS – SIGNALS.

CHAPTER IX: RADIOCOMMUNICATIONS

Article 87: Wireless and Radio Telephony

Masters of vessels are requested to contact the Suez Canal Authority via its wireless station "SUQ" (watch frequencies 425 kHz, 454 kHz and 468 kHz) whenever they want to make sure of the identity of any Suez Canal personnel embarking their vessels, either in the approaches or in the harbours or in the Canal waters. Also in case of any urgent complaints which may need quick investigation.

(A) Vessels must have their W/T and/or Radio Telephony apparatus in good working order before entering the Canal.

They must also be fitted with a VHF set easily operated from the bridge. It will have the frequency range of 156 to 174 MHz (Channels 8, 9, 11, 12, 13, 14, 15 and 16). If not, they will rent one from the Suez Canal Authority for the transit.

(B) "SUQ" transmits on a frequency of 421 kHz.

Vessels communicating with SUQ must transmit on a frequency of 425 kHz, 454 kHz or 468 kHz.

(C) Master shall place their wireless apparatus at the disposal of Pilots during transit through the Canal.

(D) In addition, vessels arriving at Port Said or Port of Suez from sea can call by Radiotelephony.

Article 88: Radiotelephony (VHF)

(A) Radiotelephony for vessels from sea

(1) *At Port Said*

(a) Harbour Office: Call Sign: "Port Said 16" (HP-1) 156.800 MHz. Working Channel 13 (Inner Harbour), Channel 12 (Outer Harbour).

(b) Pilot Vessel and Radar Guidance:

(i) Outside the Harbour: Call Sign: "Port Said 12" (HP-2) 156.600 MHz.

(ii) Inside the Harbour: Call Sign: "Port Said 13" (HP-3) 156.650 MHz.

(iii) East Branch: Call Sign: "Port Said 8".

(c) Measurement Office: Call Sign: "Port Said 73" (M) 156.675 MHz.

(2) *At Port of Suez*

(a) Harbour Office: Call Sign: "Suez 16" (HP-1) 156.800 MHz.

(b) Pilot Vessel and Radar Guidance:

(i) Outside the Harbour: Call Sign: "Suez 11" (HP-2) 156.550 MHz.

(ii) Inside the Harbour: Call Sign: "Suez 14" (HP-3) 156.700 MHz.

(c) Measurement Office: Call Sign: "Suez 74" (M) 156.725 MHz.

(B) Radiotelephony in the Canal (UHF)

Channel No.	*Transmission Frequency MHz.*	*Reception Frequency MHz.*	*Function*
1	415.350	412.850	V/Ls from North (SB)
2	415.600	413.100	V/Ls from South (NB)
3	415.850	413.350	Emergency (EM)
4	416.600	414.100	In Port of Suez Harbour HP (T)
5	416.350	413.850	In Port Said Harbour HP (S)
6	416.125	413.600	Emergency Critical (EMC) (V/Ls out of convoy)

Escorting Tugs – Towing Tugs

Channel 1 – 414.750 MHz.
Channel 2 – 414.775 MHz. } another set
Channel 3 – 414.800 MHz.

Note: Channel 9 (156.450 MHz.) may be used as stand-by Channel at Port Said or Port of Suez.

CHAPTER X: THE SUEZ CANAL VESSEL TRAFFIC MANAGEMENT SYSTEM (SCVTMS)

Article 89: Overview

The SCVTMS is a new integral system for traffic management in the Suez Canal. The system offers the following services:

(a) Continuous monitoring of vessel's position, speed, off-track and gap by means of highly accurate computerised tracking radars (at Port Said, Port Tewfik and Great Bitter Lake), also a dedicated Loran-C position fixing chain (covering the Canal and its approaches).

(b) A dedicated voice communication network that enables direct and uninterrupted communication between Pilots and Movement Centres.

(c) A computerised data base containing vessel's information and transit requirements (e.g. early booking) files.

This system greatly enhances safety of transit in the Suez Canal.

Article 90: Sequence of Events for Vessels Transiting The Canal.

(a) At each Port, a radar covers approximately 35 km. offshore. A vessel approaching the Canal at either end(26) is requested to call the Port Office on one of the frequencies listed in Chapter IX of the present Part. The Harbour Pilot boarding the vessel will have his own portable transceiver. The vessel is requested to declare her position when anchored in the anchorage area (if instructed to do so).

(b) When calling the Port Office for the first time, the vessel is requested to give her international call sign and her Suez Canal file number (if any). This file number will be registered on a special card by the Suez Canal Authority and given to any vessel transiting after June 30th, 1981. If the vessel does not carry a file number, she should so advise the Port Office. This file number is used by the computerised data base system in retrieving data pertaining to the vessel.

(c) Approaching the roads, the vessel is requested to call the Port Office declaring her international call sign. This is essential to start radar tracking of the vessel's speed, position, off-track and separation distances. Before entering the road, the Port Office monitors the vessel by radar.

(d) The Port Office follows the vessel as long as the Harbour Pilot is on board. On entering the Canal, the Canal Pilot will board. On boarding, the Canal Pilot will have a special set (Carry On Receiver Transmitter, called CORT) receiving Loran-C signals from SCVTMS dedicated chain continuously. The time difference calculated by the CORT is not displayed at the CORT. Instead, this information is continuously sent by the CORT to Ismailia centre where it is used to calculate vessel's speed, position, off-track and separation distances.

Circular No. 73/84:

Masters of vessels transiting the Suez Canal are hereby kindly requested to render all facilities and necessary assistance to the Canal Technician boarding their vessels for the purpose of supervising the Electronic CORT during Canal passage.

Article 91: Some Considerations to be Taken into Account

(a) The CORT should be mounted on the West wing of the vessel. The area around should be clear of any obstruction within 10 ft. radius. A trained technician will mount the CORT in place and operate it before disembarking. The CORT power is self-sufficient and does not need any attendance while in operation. At the other end of the Canal it is dismounted by a SCA technician.

(b) After mounting and operating the CORT, the Pilot is requested to report same to Ismailia Movement Office through VHF or UHF (Canal Pilots are equipped with portable UHF sets linked to Ismailia Movement Office). The Pilot is also requested to declare his approximate position, the vessel's "SCA" file number and "Call sign". This is essential to start the Loran-C tracking of the vessel.

(c) Vessels will be tracked simultaneously by radar and Loran-C at the Great Bitter Lake area.

(d) When approaching either end of the Canal (Km. 3 East Port Said Branch or Km. 162.000), the respective Port Office will be handed the responsibility of following up the vessel to sea.

(e) On passing either end, the Canal Pilot will declare his position together with the vessel's call sign and file number.

(f) The Harbour Pilot will then board the vessel while the CORT will be dismounted by a SCA technician.

(g) Any changes in the vessel's characteristics should be reported to Canal Officials to be filed in SCA vessel's file.

CHAPTER XI: SIGNALS

Article 92: Generalities

All signals used in Canal Waters are shown hereafter.

All flags and pendants to be hoisted by vessels, as shown hereafter, should be those in the International Code of Signals.

Night signals shall be hoisted where best seen by other vessels.

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(26) Ten miles before arrival to Approach Buoy at Port Said. On Passing Separation Zone Buoy No. 1 at Port of Suez.

Article 93: Sound Signals

(A) Normal Manoeuvre

(1) The International Regulation for Preventing Collision at Sea Signals.

"One short blast": I am altering my course to starboard.

"Two short blasts": I am altering my course to port.

"Three short blasts": I am operating astern propulsion.

(2) The signal 5 or 6 short blasts repeated several times at short intervals to say: "I am reducing speed and may have to stop or make fast".

At night besides the blasts, four to five long flashes with the Aldis lamp or signal mast lamp.

(3) The signal one prolonged blast to attract attention. The expression "short blast" means a blast of about 1 second duration.

The expression "prolonged blast" means a blast of 4 to 6 seconds duration.

(B) Obstruction in Channel in all Circumstances

A vessel which under any circumstances causes or finds obstruction in the channel must immediately warn the vessels in the vicinity.

That warning is given by whistle or siren:

4 long blasts meaning: "The channel is not free".

That warning must be repeated every 3 minutes until vessels concerned have answered in the same manner. As soon as they hear the signal mentioned above, the vessels take steps to stop and instruct a Radio Watch, to receive full details of the alert given by the vessel that sent the said signal. The vessel should maintain Radio Watch until otherwise advised.

(C) Engine or Steering Failure Approaching Dredger

In case of engine or steering failure making the vessel not under command, while approaching a dredger, the vessel has to give the signal one long blast followed by two short blasts (– · ·).

(D) Vessel Mooring Voluntarily for Fog or Sand

During the mooring manoeuvre, the vessel sounds every 2 minutes a series of 6 short blasts.

Once made fast (Signal Garage Volontaire hoisted), the vessel must rapidly ring the bell for 5 seconds at intervals not exceeding one minute. For vessels over 350 ft. (106.75 m.) they will have to ring the bell forward and in addition a gong aft, at intervals not exceeding one minute, (a gong or any other instrument which tone and sound will be different to that of the bell forward).

These signals are stopped when the vessel is told that all vessels concerned have been notified of her mooring.

(E) Vessel Aground or Across Canal

See Article 93 (B) Obstruction in Channel.

(F) Between Vessels and Tugs

(1) Vessel Aground in Canal

Signals between a vessel aground in the Canal and a tug.

These signals are for manoeuvre of refloating, as long as the vessel has one of the grounding signals.

Pull slowly	(– ·)
Increase	(– · ·)
Stop	(– –)
Slack the line	(– – ·)
I am to let go	(– – · ·)

These signals are to be repeated by the tug.

(2) Vessel Towed in the Canal

Signals between a vessel towed in the Canal and a tug.

Radiotelephony is used as communication between ship and tug, besides the following signals.

By Day (Flag)		*At Night (Sound)*
Slow speed	: "A" hoisted above bridge	(– ·)
Half speed	: "A" hoisted half way	(– · ·)
Normal Tow	: "A" hoisted right up	(– · · · ·)
Steady	: "A" lowered	(– –)

(Or sound signals if considered surer).

The sound signals are to be repeated by the tug. The flag signal remains flying as long as the tug is to give the signalled speed. By day, every change of flag signals is followed by a long blast.

(G) Signals Between VLCCs and Escort Tugs

(1) Attention to Start Manoeuvre

Prolonged blasts given by the ship.

(2) Stern Tug

Bring my stern to starboard	(·)
Bring my stern to port	(· ·)
Keep my stern in the axis	(· · ·)
Pull my stern aft slowly	(· · · ·)
Increase pulling my stern up to half speed astern	(· · · · ·)
Increase pulling my stern up to full speed astern	(· · · · · ·)
Stop pulling (very long blast)	(——)

(3) Forward Tug

Give me a push on starboard bow	(–)
Give me a push on port bow	(– –)
Stop pushing	(– – –)

Article 94: "See Plan Book", pages P263 – P280.

WADI FIRAN: 28.44 N. 33.13 E.

An open anchorage on Sinai coast in the Gulf of Suez about 85 nautical miles South of Suez.

There are 6 large and conspicuous storage tanks in 2 parallel rows of 3 tanks each lined on shore near the pumping station and painted with aluminium.

DOCUMENTS:
4 Crew Lists.
2 Stores Lists.
2 Vaccination Lists.

PILOTAGE: Pilot boards each tanker at anchorage.

ANCHORAGE: About 0.75 miles W. to S.W. of No. 1 Berth.

RESTRICTIONS: Mooring and unmooring during daylight only.

RADIO: It is essential that vessels bound for Wadi Firan give 72 hours and 24 hours notice to both "Petmisr Cairo 2049 UN" and "Cop UN 2449", to be accepted on the berth without delay. Contact Abu Rudeis on VHF Channel 16 and/or Channel 6 when in range. There is no radio station at Abu Rudeis. Pilots working on Channels 6 and 8.

VHF: VHF radio is used for communication between tanker and pumping station. Also see "Radio".

TUGS: One tug of 2,000 h.p. available for mooring and unmooring.

BERTHING: Tankers must approach berth from West, never from North, and must follow same track on their departure to be entirely clear of shallow water. Tankers at berth will be connected to shore pumping station by submarine hoses for pumping crude oil.

One mooring launch available. Both ship's anchors are used, the port anchor first. Normally 4 or 5 × 5.5 in. circumference stern wires from buoy are taken on board. Special care should be taken when mooring in Southerly winds. If blowing strong, berthing may be delayed.

	Berth 1	*Berth 2*	*Berth 3*
LOA (ft.)	1,200	1,000	Under
Max. Draft (ft.)	75	58	Design
Max. d.w.t.	75,000	50,000	
Under water crude line (in.)	24	16	13⅜
Hose connection	Amidships 12 in.	Astern 12 in.	Amidships 8 in.

Reception facilities for 5,000 cu.m. of dirty ballast.

Two tankers can moor simultaneously but only one may load.

DENSITY: 1032.

FRESH WATER: No. 3 Berth has 1×10 in. sealine and 1×8 in. hose for fresh water discharge. But not available to vessels.

FUEL: Not available.

AUTHORITY: Belayim Petroleum Co., 155, Sharia Mohamed Farid, Cairo, Egypt. *Tel:* 913233 (5 lines). *Telex:* 92449, 92373. "Petbl Un". *Cables:* "Petrobel". *Contact:* Captain Wassim Rady, Manager – Marine Division.

NOTES

Please also advise Shipping Guides Ltd.

El Salvador

ACAJUTLA: 13.35 N. 89.50 W. (See Plan Book)

PORT LIMITS: Not determined.

DOCUMENTS:

Consular Documents:

Only the requirement for visa of shipments of firearms and narcotics, which must be carried out at the port of embarkation, remains in force.

Prior to Arrival:

Arrival Notice:

24 hours before the vessel's arrival, notification is submitted in writing to the Autonomous Port Executive Committee (CEPA) on the time of arrival and the number of stevedores that will be needed. The CEPA serves as a kind of single shipping agency. In that capacity, it arranges for entrance and clearance of vessels, payment to other Official Agencies and draws up the port account for the ship's Agent.

Information on Cargo for the Port:

Prior to the vessel's arrival, the following documents are to be submitted to CEPA:

16 copies of the Cargo Manifest.
1 set of the Shipper's Manifest.
1 Mail Guide.
4 copies of the cargo distribution for each hold.
1 Stowage Plan.
1 List of Container Contents.
14 to 16 Cargo Tally Books, depending on the number of stevedores.

If this information is not available before the vessel's arrival, it may be submitted at the time of the reception visit (boarding party).

On Arrival:

Type of Documents	*Number and Distribution of Documents*				
Basic Forms	*Captain of Port*	*Customs*	*Plant Health*	*CEPA*	*Total*
General Declaration	1	1	1	1	4
Cargo Manifest	1	2	1	16	20
Crew List	2	1	1	1	5
Passenger List	2	1	1	1	5
Ship's Stores List	1	1	1	1	4
Crew's Effects Declaration	–	–	–	–	–
Maritime Health Declaration	1	–	–	–	1
Mail List	–	–	–	1	1
Additional Documents:					
Clearance from Last Port	1	–	–	–	1
Consular Manifest	–	1	–	–	1
Set of Bills of Lading	–	–	–	1	1
Cargo Distribution	–	–	–	4	4
Contents of Containers	–	–	–	1	1
Stowage Plan	–	–	–	1	1
Cargo Tally Books	–	–	–	14/16	14/16

Prior to Departure: The CEPA draws up the clearance permit and has it signed by Customs before submitting it to the Captain of the Port. When loading and unloading is completed, a representative of the Captain of the Port delivers the clearance permit on board.

PILOTAGE: Compulsory. *(a)* Vessels should apply for Pilots calling VHF radio station through Channel 27 which operates on 157.36 MHz to receive and 161.95 MHz to transmit. Channel 16 operates on 156.8 MHz ships calling and safety.

Notice of ETA must be made to Port Manager not less than 48 hours before arrival at the port limits. Confirmation of ETA is required 10 hours before arrival. VHF radio station is on service 24 hours a day, so vessels may call at any time. *(b)* Pilot boards vessel between one or two km. before arrival at the port limit; where vessels should stay with engine running, Pilot ladder ready. Gangways should be raised and folded. Derricks and cranes inboard and anchors ready for berthing. Pilot is equipped with walkie talkie for communicating with tugs. *(c)* Inform radio station if cargo manifests are carried on board or if they were air mailed to vessel's Agent.

ANCHORAGE: There is no specific anchorage area. Water depth is over 15 m. Bottom nature: Sand laying over volcanic tuff.

RESTRICTIONS: Vessels can berth any time day or night. Main engines should always be on short notice, due to swell as mooring lines often break. Vessels are advised to make use of extra shore mooring lines which may be provided if Agent makes request. The least depth in the berths is 30 ft.

MAX. SIZE: "C" Pier (breakwater berth) has 12 m. of water alongside and can berth vessels of up to 40,000 d.w.t. It is well fendered. Containerised, general and bulk cargoes can be handled at this pier.

Also see "Tankers".

HEALTH: On arrival, vessel should always fly a yellow flag. If there is any suspicion of illness aboard, Master has to inform by radio 24 hours in advance, indicating nature of disease and all details.

RADIO: Advise ETA to Agents at San Salvador 96, 48, 24 and 12 hours before arrival. Telex available at Port Facilities. Area Code 301. Telex No. 27000.

VHF: There is no special time for calling. VHF service is open 24 hours a day. Contact through Channels 16 and 27.

Business operations: Channel 27 receives on 157.36 MHz and transmits at 161.95 MHz.

Channel 16 and 156.8 MHz for ship calling and safety.

RADAR: There is no port radar service.

TUGS: Tug lines are not used. If required, the tug's line will be used and the charge is included in the docking and undocking services. There are four tugs available with the following capacities: 800, 1,200, 1,400 and 1,800 h.p. Tugs meet vessels off the docks at all times.

SPECIALISED CARGO HANDLING FACILITIES: Pier "A" with liquid cargo facilities for vegetable, animal and mineral oil, as well as chemical liquids.

BERTHING: Vessels can berth in safety at any time during day or night.

In the case of cargo vessels it should be stressed that the swell experienced alongside is sometimes a serious problem and Masters would be well advised to make use of the shore lines offered on hire to save undue wear and tear on their moorings.

Berth	*Max. Draft (m.)*	*Depth at MLW (m.)*	*Vessel Length (m.)*
A–1	9	10	140
A–2	10	12	160
B–3	9	10	140
B–4	10	12	195
B–5	9	10	180
B–6	9	10	180
C–7	12	13.7	128
C–8	12	13.7	128

There are three piers. The first one "A" consists of a breakwater mole 760 m. long. The access mole in its first section from land side to pier "B" has a width of 10.50 m. and is 260 m. long. The second section from Pier "B" to Pier "A" has a width of 7 m. and is 180 m. long. The overall length of access is 450 m.

Pier "A" is 37 m. width and 310 m. long, it consists of a mooring dock with two berths called "A–1" and "A–2", for general bulk and liquid cargoes and has a transit shed of 4,500 sq.m. At the end of Pier "A" is constructed another breakwater section in a N.W. direction, in line with the existing Pier "A", connecting this pier with the Pier "C" with a length of 35 m. Then direction of Pier "C" is changed to the North, with an angle of 30° and extended over 270 m. with a width of 18 m. This breakwater offers two berths, "C–7" and "C–8", capable of handling containerised, general and bulk cargoes.

The third pier called "B", with four berths is 370 m. long and has a free width of 28 m. This pier handles containerised (max. gross weight 20 tonnes), general and bulk cargoes.

CRANES: Two semi-portic cranes of 3 tonnes capacity are available at Pier "A". At Pier "B" there is a 25 tonnes crane for general bulk and containerised cargoes. Pier "B", berths "B–5" and "B–6" as well as Pier "C", berths "C–7" and "C–8", have no cranes available and vessels are required to use their own cranes or derricks.

BULK CARGO FACILITIES: For berthing length of quays and max. permissible draft in salt water at MLW see "Berthing".

Cargoes handled: Importation: Grains, fertiliser, soda ash, phosphoric rock sulphur, soya flour, etc.

Exportation: Raw sugar cane, cotton seed meal and flour, grains, etc.

Berth Equipment: 25 tonne cranes which operates for imports at Berth "B–3" and "B–4" and unloads vessels with clamshells of different capacities ranging from 5 cu.m. to 9 cu.m., and feeds the conveyor systems through a hopper of 85 tonnes. Maximum height of discharging gear above MWL: 19 m.

Conveyor System: Two belt conveyor systems exist for importation and exportation. Both systems interconnected with port warehouses as well as private silos and warehouse facilities. Loading/discharge rates: 500 tonnes/p.h.

BRIDGES: None.

STEVEDORES: ETA advice required to arrange gangs, should be made 12 hours before vessel's arrival. A line handling gang is always standing by and also attends gangways without charge. Stevedores are available for nightwork.

Average load and discharge rates:

General cargo	35 tonnes/p.h.
Bulk cargo	190 tonnes/p.h.
Liquid cargo	110 tonnes/p.h.

MEDICAL: There are doctors in the port who attend normal cases and specialists and hospitals in Sonsonate City (20 km. by road) and at San Salvador, capital of the Republic, 85 km. from the port.

TANKERS: Mooring at RASA (Refineria de Acajutla Sociedad Anonima). This refinery is the property of Esso Standard Oil and Shell Petroleum Co.

Buoy berth: Depth of water is about 15 m. Diameter of buoy hoses: 2×25 cm. for clean products and one of 75 cm. for crude and fuel oil. There are no facilities for residue discharge.

DENSITY: 1027.

FRESH WATER: Delivered by hoses. Rate approximately 40 t.p.h., cost US$1.60 per metric ton.

FUEL: Possible to supply diesel (Grade "2") and Bunker "C" only in limited quantities, delivered by tank truck. Viscosities: Bunker "C" 175 sec. Saybolt furol. Diesel 40 sec. Saybolt universal.

FIRE PRECAUTIONS: Inspection of hoses; no smoking; not allowed to weld or light any kind of fire; isolation of the place of loading and discharging operations; fire equipment to be ready to use at all times.

CONSULS: There is a Consular representative of The Republic of Guatemala at this port and most countries have Consular representatives in San Salvador City, Capital City, at 85 km. from the port.

REPAIRS: Possible to make minor engine and deck repairs. Other repairs can be carried out at Capital City, San Salvador. Any repairs that will delay sailing of vessel cannot be made without previous and specific authorisation of the Port Manager.

DRY DOCKS: None.

SURVEYORS: At the port there is P & I representative and surveyor and independent marine surveyors. G.L. Surveyor at San Salvador City.

GANGWAY/DECK WATCHMEN: Gangway is watched by Customs Police and marine members without charge. Deck watchmen available on request.

HATCHES: The opening and closing of hatches is carried out by stevedore gangs, and its costs are included in the loading or discharging tariff rate. Whenever vessel's Master decides to carry out these operations with his crew, a stand-by charge will be debited.

CUSTOMS ALLOWANCES: Customs only allow tobacco for personal use to be taken out of the vessel. Not allowed to take any wine or spirits out of the vessel.

CARGO GEAR: Ship's gear has to be used on request. Semi-portic cranes for general cargo may be used at Berths "A–1" and "A–2". Heavy lift crane at Berths "B–3" and "B–4". This crane is also used to unload bulk cargoes to a conveyor belt system.
REPATRIATION: There are facilities for repatriation, it is also possible to effect crew changes.
AIRPORT: The "El Salvador International Airport" is 134 km. from the port (by road), which is served by regular airlines.
TIME: No alterations in time during the year; local time is GMT minus 6 hours.
HOLIDAYS: The port has the following official holidays:

(*)1st January; 2nd February; (b) Thursday, Friday and Saturday of Easter Week; (*)1st May; (c) 10th May; 3rd and 6th August; 15th September; 15th October; (*)2nd November; (a) 24th; (*)25th and (a) 31st December.

(*) No work.
(a) Port operations cease at 0700 hrs.
(b) Port operations cease at 1700 hrs. on Thursday until 2300 hrs. on Saturday (Easter Week).
(c) 10th of May port operates only from 0700 hrs. until 1500 hrs.

POLICE/AMBULANCE/FIRE: National Police (Sonsonate) Tel: 51-0838; Ambulance (Sonsonate) Tel: 51-0374 – 51-0200; Fire Department (CEPA, Acajutla) Tel: 52-3200.
TELEPHONES: No possibilities of installing telephones aboard.
SERVICES: No facilities to discharge tank-washings. No equipment for tank cleaning or facilities to adjust compasses. Minor electronic repairs at Agent's request.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Valid passport must be shown to Authorities on request.
REGULATIONS: None.
DELAYS: Normally there are no delays to be expected during berthing, loading, discharging or bunkering. Bunkering operates at a slower rate than normal loading and discharging.
GENERAL: Quarantine Authorities pay strict attention to garbage and any residue must be kept aboard properly covered. It is forbidden to drop garbage or any residue in the sea whilst vessel is in the port area.

In the case of swell, special hawsers and wires can be requested on hire at US$ 1.50 on every 1,000 g.r.t. per day or part of a day.
DEVELOPMENTS: CEPA intends to provide specialised facilities for handling containers by means of a 300 m. pier with a depth of 12.5 m. MLLW. It will have an electric crane of 40 tonnes capacity and a ramp for Ro-Ro vessels. It will be in service late in 1984.

SHIPMASTER'S REPORT: 1979.
Port Limits: No port limits stated.
Documents:
Clearance from last port.
5 Crew Lists.
4 Voyage Memorandums.
4 Store Lists.
4 Passenger Lists, (negative required).
1 Ship's Health Declaration.
Manifests prepared by the Agent:
2 Copies for the Customs.
1 Copy for the Port Captain.
1 Copy for Quarantine Inspector.
16 Copies for the Stevedores.

Customs seal the spirits and tobacco, but not the beer. No private declarations required.

Boarding party of about 8 persons board the vessel with the Agent who will attend to documents and other needs of Officials.
Pilotage: Pilotage is compulsory, Pilot boards vessel up to 3 miles from "A" Pier.
Restrictions: Vessels can berth any time day or night, main engines should always be on short notice, due to swell at berths, as moorings often part. Vessels are advised to make use of extra shore moorings provided, these can be requested via the Agent.

The least depth at the berths is 30 ft.
Max. Size: "C" Pier (outer berth) has 46 ft. of water alongside and can take vessels of up to 40,000 d.w.t., it is well fendered. General cargo and liquid cargo can be handled at this berth.
Health: Standard Health message to be sent to Agents who will make the necessary arrangements, every vessel coming in should fly the "Q" flag, this is to avoid fines.
Radio: Advise ETA to Agents at San Salvador 96, 48, 24 and 12 hours before arrival. For Telex messages use "WLO" Mobile. For W/T messages use "KSF" San Francisco.

For Port Control use VHF Channels 16 and 27. (Range 40 miles). Hours of operation 24 hours. Call sign: "Acajutla Tower" also R/T on 2182, 2163 and 2169 kHz. Tugs work on 2182, 2163, 2196, 2638 and 2738 kHz.
Radar: There is no Port Radar service.
Tugs: There are three tugs available with the following power: 800 h.p., 1,200 h.p. and 1,800 h.p. Tug's lines are used at no extra charge.
Berthing:

Pier	*Berth No.*	*Depth* (m.)	*Remarks*
"A"	1	10.0	General cargo, 2×3 ton cranes. Liquid cargo (Berth No. 1)
	2	12.0	
"B"	3	9.1	General cargo, bulk cargo. 25 ton crane on Pier "B".
	4	9.1	
	5	9.1	
	6	9.1	
"C"	7	14.0	General cargo, liquid cargo No cranes available.
	8	14.0	

Stevedores: Arranged by the Agents, and based on information passed in ETA advise, vessels arriving from New Zealand may well be at the port before the cargo plans arrive. Stevedores work round the clock.
Medical: Doctor available but nearest hospital 13 miles away, Doctor will board the vessel, advise the Agents before arrival.
Density: Observed density 1025.
Fresh Water: Available at about 20 t.p.h.
Fuel: Only available in emergency.
Provisions: Limited quantity available, 24 hours notice required.
Fire Precautions: Tugs have fire fighting equipment on board. As no phones on board, contact can be made on VHF with "Acajutla Tower".
Consuls: British Vice-Consul at Sansonate 14 miles away from the port.
Repairs: Minor repairs only possible.
Dry Dock: No dry dock available.
Surveyors: Arie Van-Helden (Lloyd's Agents only), San Miguel, Cutuco, La Union.
Gangway/Deck Watchmen: Shore gangway available and recommended due to swell at the port, full deck patrol necessary during night time.
Hatches: For safety it is better to open and close the hatches with the ship's crew, which is allowed at this port.
Cargo Gear: Ship's gear and shore cranes used depending on which berth the vessel at.

There are no Reefer points ashore. There are no Tower Units ashore. Containers can be landed on Flats. Fork Lift trucks are well maintained.
Repatriation: Not advisable from this port.
Airport: Ilopango Airport is 8 miles from San Salvador, flights from this airport connect with international flights at Mexico City.

There are three flights a week from Mexico City to London.
Holidays: December 25th, January 1st, also Special Holiday for this region being August 5th and 6th. (From 1500 hrs. 5th to 1900 hrs. on the 6th).
Police/Ambulance/Fire: This is covered by the Agent who remains on board all the time the vessel is in port, the Agent will require a room to live in whilst he remains on board.
Services: No special services available.
Shore Leave: Permitted.
Identification Cards: Not required, but Crew Members are advised to carry some means of identification.
Regulations: No unusual regulations.
Delays: Vessels have to leave the berth due to swell, this decision is left to the Master of the ship.
General: Vessels alongside the berth, move quite a lot, but the shore fenders are well maintained. Stevedores will unpack containers on board the vessel.

AUTHORITY: Comision Ejecutiva Portuaria Autonoma (CEPA), Boulevard de Los Heroes, Torre Roble, San Salvador, El Salvador, Central America. *Tel:* San Salvador (Area Code 503) 24-1133; Acajutla 52-3200. *Telex:* (Area Code 301) 20-0194. *Cables:* CEPA. *Contact:* Pedro L. Mena A., Port Manager, Acajutla.

LA LIBERTAD: 13.29 N. 89.19 W.

CLOSED TO CARGO VESSELS SINCE MAY 1976

DOCUMENTS: Required:
By Port Captaincy
Clearance from last port called.
2 Crew Lists.
1 Store List.
1 Passengers List. In case passengers disembarking, passports to be countersigned by the migration delegate have to be shown.
1 Voyage Memorandum.
1 Manifest of Cargo from each port.
By Doctor Delegate of Health
Health Certificate.
1 Voyage Memorandum.
By Quarantine Delegate
Voyage Memorandum.
Crew List.
Cargo Manifest, one for each port.
By CEPA Delegate
Voyage Memorandum.
Crew List.
2 Store Lists.
Cargo Manifest (5 copies).
Tally Books for cargo.
Number of tons of diesel on board.
Number of tons of water.
By Customs Delegate
Voyage Memorandum.
1 Crew List.
Passenger List.
Store List.
Cargo Manifests countersigned by the Consuls each port of origin and 7 more copies for each one.

PILOTAGE: Vessels requiring a Pilot use International Code signals. No official pilot service.
ANCHORAGE: Depths of 60 ft. available. Vessels can anchor at a minimum distance of 1 km. from the quay. All dry cargo vessels work cargo at the anchorage. No quay berths available.
HEALTH: On arrival vessel should anchor and wait visit of Port Authorities. Any suspected diseases should be notified 24 hours in advance.

RADIO: VHF Service with transmission and receiving frequency of 27.075 MHz. In the dock the set is 100 watts AM, transmitter/receiver by 3 Channels:

Channel 1, 2163 kHz calling the tugboats.
Channel 2, 2182 kHz calling and Safety.
Channel 3, 2196 kHz calling the ships.

In the tugs, the sets are 60 watts AM, transmitter/receiver by 5 Channels:

Channel 1, 2163 kHz calling the dock.
Channel 2, 2182 kHz calling and Safety.
Channel 3, 2196 kHz calling the ships.
Channel 4, 2638 kHz calling the ships.
Channel 5, 2738 kHz calling the ships.

The following set is a monitor to receive emergency calls: 2163 and 2196 kHz.

TUGS: No tugs required or available.

STEVEDORES: 24 hours notice required to arrange gangs and barges.

MEDICAL: Inform Agent as soon as possible to arrange a medical visit. The port has doctors to attend normal cases, and there are specialists and hospitals in San Salvador (capital of the Republic) at 35 km. by road from this port.

TANKERS: At Esso Standard Oil, S.A. terminal, vessels anchor and moor to 3 buoys about 900 yards S.E. of the shore and about 1,000 yards S.S.W. of the pier. Pipe-line extends from La Puntilla in a S.E. direction. Two pipe-lines for discharging products to Esso Standard Oil, S.A. The end of each pipe-line is marked by a metallic buoy, the cargo hoses for No. 1 and No. 2 pipe-lines are connected by separate chain to a "Spreader" which by single chain is attached to a metallic marker buoy. On the "Spreader" there is marked, by welding, 1 and 11 where the chains are attached, indicating what pipe-line they are connected to. Ship's crew is used in connecting and disconnecting cargo hoses.

Vessels should moor only on high water during daylight hours; however, they may unmoor day or night. Launch available for mooring and running lines. Approach is made from the Eastward on a true course 270°, a marker buoy is placed temporarily at a distance of 700 ft. seaward from end of pipe-lines to guide vessel in mooring operations. The marker buoy should be passed on the inside at a distance of 50 ft. Port anchor should be dropped first when the end of the pier is in true bearing 006°. When about 7 shots of chain have run out, the starboard anchor should be dropped. The stern of vessel will swing or may be worked to Northward (starboard). A mooring line should be run to the port stern buoy from port side assisting in swinging the vessel into position. Vessel should tie up securely with 3 lines to each buoy, and anchor spread 60° with 60 – 76 fathoms of chain on each. The eyes of all lines to buoys should be well protected to prevent chafing on the buoys. When in position, the pipe-line hose buoy is taken on board at the starboard side.

DENSITY: Salt water.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: There is a service of watchmen provided by Customs.

OPENING/CLOSING HATCHES: Carried out by stevedores.

SHIP CERTIFICATES:

Ship's Register.
Derat Certificate.
International Health Certificates required.

CUSTOMS ALLOWANCES: Only tobacco for personal consumption may be taken ashore. No wine or spirits to be taken ashore.

CARGO GEAR: Vessels' cargo gear to be in good condition with certificates of capacity and safety.

IDENTIFICATION CARDS: Not required if crew members possess passports.

CONSULS: In the capital, San Salvador, 35 km. from the port, there are consulates for most countries.

REPAIRS: It is not possible to have repairs.

REPATRIATION: Facilities available.

AIRPORT: There is an international airport served by regular airlines in San Salvador, distance approximately 46 km. from the port.

TIME: GMT minus 6 hours. No alteration.

HOLIDAYS: Festivals: Saturday of the Holy week, 14th April, 10th May, 22nd June, Corpus Christi, 5th August, 12th October, 24th October, 5th November, 7th December, 24th December, 31st December. Legal holidays: 1st January, Maundy Thursday and Good Friday, 1st May, 6th August, 15th September, 2nd November, 8th December, 25th December. The port is only completely out of work on the following days: 1st January, Good Friday and 25th December.

POLICE/AMBULANCE/FIRE: National Police (La Libertad), 35-3175; Ambulance (San Salvador), 21-9406; Fire (San Salvador), 21-8661.

TELEPHONE: It is not possible to place telephones on board.

GENERAL: Quarantine Authorities prohibit removal of meat from the vessel.

SHORE LEAVE: Crew is allowed to go ashore.

AUTHORITY: Comision Ejecutiva Portuaria Autonoma (CEPA), Torre Roble, Boulevard De Los Heroes, San Salvador, El Salvador. *Tel:* 24-1133. *Telex:* (301) 20-194. *Cables:* CEPA. *Contact:* Ing. Julio O. Gavarrete L., Port Division Manager.

LA UNION (Cutuco): 13.20 N. 87.50 W.

(See Plan Book)

DOCUMENTS: *Consular Documents:*

Only the requirement for visa of shipments of firearms and narcotics, which must be carried out at the port of embarkation, remains in force.

Prior to Arrival:

Arrival Notice:

24 hours before the vessel's arrival, notification is submitted in writing to the Autonomous Port Executive Committee (CEPA) on the time of arrival and the number of stevedores that will be needed. The CEPA serves as a kind of single shipping agency. In that capacity, it arranges for entrance and clearance of vessels, payment to other Official Agencies and draws up the port account for the ship's Agent.

Information on Cargo for the Port:

Prior to the vessel's arrival, the following documents are to be submitted to CEPA:

16 copies of the Cargo Manifest.
1 set of the Shipper's Manifest.
1 Mail Guide.
4 copies of the cargo distribution for each hold.
1 Stowage Plan.
1 List of Container Contents.
14 to 16 Cargo Tally Books, depending on the number of stevedores.

If this information is not available before the vessel's arrival, it may be submitted at the time of the reception visit (boarding party).

On Arrival:

Type of Documents	*Number and Distribution of Documents*				
Basic Forms	*Captain of Port*	*Customs*	*Plant Health*	*CEPA*	*Total*
General Declaration	1	1	1	1	4
Cargo Manifest	1	2	1	16	20
Crew List	2	1	1	1	5
Passenger List	2	1	1	1	5
Ship's Stores List	1	1	1	1	4
Crew's Effects Declaration	–	–	–	–	–
Maritime Health Declaration	1	–	–	–	1
Mail List	–	–	–	1	1
Additional Documents:					
Clearance from Last Port	1	–	–	–	1
Consular Manifest	–	1	–	–	1
Set of Bills of Lading	–	–	–	1	1
Cargo Distribution	–	–	–	4	4
Contents of Containers	–	–	–	1	1
Stowage Plan	–	–	–	1	1
Cargo Tally Books	–	–	–	14/16	14/16

Prior to Departure: The CEPA draws up the clearance permit and has it signed by Customs before submitting it to the Captain of the Port. When loading and unloading is completed, a representative of the Captain of the Port delivers the clearance permit on board.

PILOTAGE: Obtained usually through Agent, can be cable-requested to Port Captain-La Union. Fenadesal has availability to dock and undock vessels any time required.

ANCHORAGE: La Union Bay – up to 34 ft. Approximately 14 Class II and a large number of Class III anchorage berths are available in the harbour. 5 Class II berths are in the vincinity of the pier in depths of 33 ft. to 30 ft., and approximately 9 more, in depths of 70 ft. to 30 ft., are just Westward of Isla Zacatillo. The first area has a mud bottom; the second is sandy and rocky. The large number of Class III berths are in an area Northward of the pier and in the area between the 2 anchorages providing Class II berths. The least depth in each of the areas is 25 ft. A large number of relatively unsheltered anchorage berths of all classes are available outside the harbour in the Gulf of Fonseca.

RESTRICTIONS: Enter any time – preferable on flood tide with draft over 24 ft.

MAX. SIZE: Largest vessel that can be accommodated in harbour would occupy an anchorage berth with a min. depth of 43 ft. and a diameter of 3,300 ft. Largest vessel that can be accommodated alongside wharf would occupy a berth with least depth of 25 ft.; length is not a limiting factor, although a max. 550 ft. is recommended due to strong currents, 3 – 4 knots, and pressure on part of any vessel extending for any greater distance beyond length of wharf.

HEALTH: Disease should be reported. Pratique necessary on each occasion.

RADIO: Direct to Agents or Fenadesal, Telex: 20-194, Area 301, San Salvador.

TUGS: No tugs required.

BERTHING: Berthing usually carried out on slack tides due to cross currents, up to 3 – 4 knots. The estimated military port capacity is 1,800 tons of general cargo per day. Port can accommodate 2 standard-type ocean-going cargo vessels, and possibly one alternative class T/C (small ocean-type tanker under favourable conditions) alongside berths, and approximately 14 ocean-type cargo vessels, and a large number of Class III (coaster-type cargo vessels) at anchorage berths. Roll-on/roll-off pier, depth alongside 16 ft. LW.

STEVEDORES: Prior advice preferable. Stevedore force consists of 9 gangs of up to 16 men per gang for on-board work. Similar gangs are available on pier, and up to 300 labourers, crane and fork-lift operators comprise shore gangs.

MEDICAL: Services available – no special restrictions.

TANKERS: Drafts 25/34 ft. fore and aft. Tankers of up to 550 ft. in length can be accommodated at either side of pier, where adequate connections of 6 in. – 8 in. and 10 in. pipe-lines are located. Largest vessel that can be accommodated alongside would occupy a berth with a least depth of 25 ft.; length is not a limiting factor, except as noted previously.

FRESH WATER: Four 2 in. connections on each side; volume estimated at 10 t.p.h

FUEL: Bunkers and diesel – can be delivered when berthed.

GANGWAY/DECK WATCHMEN: Not required – National Marines on guard.

OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCE: Not controlled, but restricted ashore.
IDENTIFICATION CARDS: Passes for leaving ship to have Master's signature.
CONSULS: Only Honduras is represented.
REPAIRS: No facilities.
REPATRIATION: Can be arranged.
AIRPORT: "El Salvador", 102 miles away in the "Comalapa's Valley".
TIME: GMT minus 6 hours. No alterations.
HOLIDAYS: Easter Thursday, Good Friday. Port not worked only on those dates.
POLICE/AMBULANCE/FIRE: In La Union – Close to the Port.
TELEPHONES: Available.
SHORE LEAVE: Allowed.
AUTHORITY: Ferrocarriles Nacionales de El Salvador (Fenadesal), Cutuco-La Union, El Salvador. *Contact:* Fernando Rodriguez Yudice, Port Manager.

Ferrocarriles Nacionales de El Salvador, Apartado Postal 2292, San Salvador, El Salvador C.A. *Tel:* 21-8940, 22-9000. *Telex:* (301) 20-194. *Cables:* Fenadesal.

NOTES

Please also advise Shipping Guides Ltd.

Equatorial Guinea

GENERAL

PIRACY/TERRITORIAL WATERS: *Shipmaster's Report:* Whilst steaming from Lagos towards Douala (passing North of the island Fernando Poo which is considered the normal route) the vessel was hailed at 0640 GMT by Equatorial Guinean Patrol Boat "LP 009" with two 20 mm. double automatic guns pointed at vessel. The vessel's position was Lat. 03° 48.4′ N., Long. 09° 03.0′ E. (about 10 nautical miles from the island).

An Officer with the rank of Lieutenant and 2 men boarded the vessel. They claimed that the vessel had violated Equatorial Guinean territorial waters having passed inside the 12 nautical mile limit. The Officer wished to take a crew member ashore to prove that the vessel has been boarded, but when the vessel's Master protested, the Officer claimed cases of whisky as proof. Having no alternative, the vessel's Master was forced to accept and the patrol boat departed 0745 GMT.

BATA: 01.52 N. 09.46 E. (See Plan Book)

SHIPMASTER'S REPORT

Roadstead with single point mooring buoy connected to the shore with 6 in. pipe-line, 6 in. hose: (everything in a deplorable state). No tugs or Pilots available. Master should have local knowledge when approaching berth in hours of darkness. Vessels are moored with 2 anchors forward and 2 ship's lines (plus two 8 in. shore lines) to the single point mooring buoy. 5 lengths of 15 m. hose available. Preferable stern discharge connection to be used. Max. pressure: 4 kg./sq.cm. All grades through this line. Linewash of water in between the different grades. There is rubber ball for cargo separation.

ADVICE: 1. In view of the deplorable state of buoy, lines and hose, Master should be very careful in mooring his vessel – which has to be done by himself – in order not to damage same.

2. Master should have ship's motorboat ready to run ship's lines to the buoy because motor launch, which is supposed to do this is very old and liable to breakdown at a crucial moment.

3. Anchors should be dropped in a position S.W. of the buoy in order to stay well clear of the unmarked wrecks, in good holding ground with 4 to 5 lengths of chain.

4. Tidal currents move the ship relative to the mooring buoy – so it is necessary to heave anchors tight – bearing in mind that the construction, etc. of the buoy is very weak.

5. The buoy carries a light but the light does not work. Anyway mooring after dark is not advisable.

DOCUMENTS: Only a small customs post available here:

1 Cargo Manifest.
1 Store Manifest.
1 Crew List.

CUSTOMS ALLOWANCES: No restrictions – no sealing of bonded stores.

SHORE LEAVE: Allowed by ship's boat.

RADIO COMMUNICATION: None. Though there are officially coast radio stations in this country, they do not operate on schedule. Telegrams should be sent via coastal radio stations of other countries. No VHF. Also see "Purser's Report", Rey Malabo.

PUERTO MACIAS (Puerto Nuevo): 01.49 N. 09.44 E.

Situated about 1 mile South of the mouth of the Rio Ekuku. This is quite a new jetty – developed in 1973 – shaped like the letter "L", where the long leg of this "L" is connected to the shore and 4 dry cargo vessels can moor alongside the short leg in about 14 m. of water. Every vessel has on her off-shore side 2 mooring buoys to assist in mooring and unmooring. No tugs available. Though it is stated that a Pilot is available, this information should be treated as unreliable. The pier is used for the discharge of general cargo and the loading of logs and sawn wood. According to information received this jetty will be made available to tankers for discharge of oil products.

DOCUMENTS: See "Bata". This new jetty falls under the jurisdiction of Bata Authorities.

RADIO COMMUNICATION: See "Bata".

SHIPMASTER'S REPORT: October 1979.

Documents:

Crew List	6 copies	(vessel's care)
Passenger List	6 copies	(vessel's care)
List of Ports of Call	6 copies	(vessel's care)
Crew Declaration	6 copies	(vessel's care)
Store List	6 copies	(vessel's care)
Cargo Declaration	2 copies	(vessel's care)
Arms & Ammunition	2 copies	(vessel's care)
List of Narcotics	2 copies	(vessel's care)
List of Animals on Board	2 copies	(vessel's care)
Vaccination List	2 copies	(vessel's care)
Cargo Manifest for discharge cargo	6 copies	(vessel's and loading port Agent's care)

Authorities boarded the ship on the Roads.

Pilotage: Pilot is available, native, has knowledge of local currents and winds, otherwise is not skilled. Speaks only Spanish.

Anchorage: Half a mile West of the breakwater or further in depths from 12 to 25 m., sand, the holding ground is good but swell can be heavy.

Restrictions: Berthing possible only during daylight.

Berthing: The jetty can accommodate four ships, two on each side but at present all mooring buoys are removed, except Buoy No. 8. For this reason only ships equipped with stern anchor could be moored outside, to keep herself (with anchor) clear from the breakwater owing to swell, current and wind from S.W. Also the inner berth is not protected against the swell, because the breakwater was constructed of concrete piles. According to information the mooring buoys will be replaced in near future.

Loading/discharging with ship's gear, no shore cranes available. Oil products can be discharged by pipe line connected with shore storage tanks.

Stevedores: Available, arranged through Agent of shippers/receivers.
Medical: Hospital facilities available, but there is total shortage of drugs.
Fresh Water: Available from quay.
Opening/Closing Hatches: Normally done by crew.
Customs Allowance: No limit. No sealing of bonded stores.
Shore Leave: No restrictions. Identification cards not needed.
Airport: There is an airport close to Bata with flights to the capital (Malabo) and Douala.
Time: GMT plus 1 hour.
Currency: Ekuela.
Stores: Not available.

REY MALABO, (formerly Santa Isabel): 03.46 N. 08.48 E.

Situated on the Island of Macias Ngueme Biyogo (formerly Fernando Poo) Capital of the Republic of Equatorial Guinea.

DOCUMENTS:

9 Crew Lists.
3 Stores Manifests.
3 Crew declarations.
2 Lists of Arms and Ammunition.
4 Lists of Ports of Call.
2 Passenger lists or negative.

GENERAL: No tugs.

PILOTS: Effectively none. Only a locally informed inhabitant of this port comes on board to inform the Master, he is equipped with a large scale Spanish chart of this bay, but he has no nautical knowledge and he does not know how to handle a ship.

Note: 1. Masters should bear in mind that they have to manoeuvre and moor the vessel themselves.

2. In view of the continuous breakdowns (and insufficient power) of the mooring-launch it is absolutely necessary to have the ship's motor boat at stand by to run the ship's mooring-lines ashore.

MOORING PROCEDURE: Tanker berth: old jetty (muelle viejo). The ship should be moored stern-to to this jetty. On entering the port with the lights in line starboard anchor is dropped in the middle of the bay and the ship has then to manoeuvre around with her own engines, till in line with the berth.

N.B. Because there is very seldom anybody present at the jetty to accept the mooring lines (on arrival as well as on departure) the vessel's crew should be kept on stand by to do this job.

ARRIVAL/DEPARTURE: Between 0600 and 1800 hrs.

TANKERS: Preferably stern discharge into a 6 in. line with 6 in. hose. All grades through one line – Linewash with water in between – pressure 4 kg./sq.cm. max.

DRY CARGO VESSELS: Berth at a new jetty on the West side of the bay. No cranes available.

ADVICE: 1. Masters should be very careful when dropping their anchors as some vessels (Man of war) moor with their sterns to the dry cargo jetty and have their anchors in the middle of the bay. These anchors are very easily fouled by incoming vessels anchors. A useful suggestion might be to put anchor buoys on the anchors in order to show another incoming ship their position.

2. Because it is quite difficult to manoeuvre a tanker around in this bay without any tug assistance, it should be borne in mind that when the wind is over Force 2 manoeuvring with a sizeable vessel is apt to falter, and no assistance can be expected from any quarter.

DEPARTURE: Vessels are free to leave within mentioned hours without Pilot.

RADIO COMMUNICATION: See "Bata".

CUSTOMS ALLOWANCE: No limit – no sealing of bonded stores.

SHORE LEAVE: No restrictions, but with own motor boat.

Currency: Eq. Guinea Peseta = Spanish Peseta.

PURSER'S REPORT:

Documents:

9 Crew Lists.
9 Passenger Lists (Marked "none" if no passengers on board).
3 Customs Declarations.
3 Stores and Provisions.
4 Arms and Ammunition.
1 Vaccination List (Cholera and Yellow Fever).
9 Cargo Manifests.

Stores: No stores were purchased at this port, advise top up prior to calling at this port.

Mail: Advisable to send to next big port.

Bata: Same papers as above. No officials come out to the ship at this port, however, papers should be kept ready. Vessels moor to a buoy for discharge.

SHIPMASTER'S REPORT: May 1984.

Pilotage: There are no Pilots at Malabo. Masters are expected to berth the vessel themselves on receiving instructions from Agents via VHF to proceed to the berth. If requested an Agents' representative may board the vessel but they are not persons with nautical knowledge and can be helpful only in communicating with the mooring boat.

Berth: The general cargo berth on the S.E. side of the bay is 200 m. long and fitted with good fenders. Depths alongside vary from 6.0 m. at the extreme S.E. end to about 7.0 m. one third of the length from the end and nearly 9.0 m. at the N.W. end of the pier.

There is no definite draft restriction but a vessel with a maximum after draft of 24 ft. can safely berth alongside. Off the pier the water is deep with depths of 14 m. to 17 m.

Berthing Procedure: Vessels berth starboard to without using anchor. After passing the red buoy about 20 m. off to port swing to starboard to bring vessel as close to and as parallel to the pier as possible. Mooring boat takes the ship's lines ashore.

Unberthing Procedure: Using headline and forward springs swing vessel off pier sufficiently to drop astern to the centre of the bay. Then swing using engines to proceed out. (Note: It is advisable not to attempt berthing or unberthing if the wind is unfavourable, particularly with large vessels. There are no other craft in the port other than two mooring boats).

Cargo Handling: Vessels discharge cargo using their own gear. There is one small wooden barge fitted with outboard motor for handling small consignments. There are no lighters or towing boats or tugs in Malabo.

Radio Communications: All the radio stations in Equatorial Guinea are unreliable and mostly not operating. Messages should be sent via Douala or some other major coastal station.

Lights: None of the lights shown on the chart were functioning. At night only vessels with radar should approach close. There has been a complete breakdown of the power supply to the town of Malabo for 8 weeks. It is uncertain when the power supply will resume.

Consulates: Spanish, Belgian, French, American, U.S.S.R. and Cameroon.

Fresh Water: Available, laid on to the pier, good pressure.

NOTES

Please also advise Shipping Guides Ltd.

Ethiopia

ASSAB: 13.01 N. 42.44 E. (See Plan Book)

PORT LIMITS: A line drawn from Ras Gombo to the Northern point of Umm al Baher (Islands) to Southern point of Umm al Baher, then to Ras Marcanah.

DOCUMENTS:
5 Manifests for transit passengers and passports.
5 Manifests for landing passengers and passports.
5 Crew Lists.
1 Complete Crew Provisions List.
1 Crew Personal Effects List.
1 Store List.
6 Cargo Manifests.

PILOTAGE: Compulsory Pilots take tankers in and out of oil harbour only during daytime. Pilots embark about 1 mile N.N.E. from Northern extremity of breakwater. Commercial harbour gives 24 hour service. Vessels calling Assab must advise Agent through Assab Coastal Radio Station by call sign ETC. Assab Radio Signal Station is available.

ANCHORAGES: Assab Bay provides good anchorage in 42 ft. to 48 ft. of sand and coral bottom, good holding ground. Generally weather in Assab can be divided into two: Summer time and Winter time weather, during Summer (May–September) Northerly wind blows with a maximum force of 3/4 BS. During Winter time (October-April) South-easterly local monsoon winds blow usually 5/6 BS but reaching force 7/8 BS during daytime and generally drop at night. This 7/8 BS force is mainly experienced about December to February.

RESTRICTIONS: There are 2 entrances, the North and the South entrance, the depth at the entrances is 38 ft. Least width 1,300 ft.

Vessels of any size enter or leave port during hours of darkness except tankers, and vessels carrying dangerous cargo. In these cases, where vessels are carrying explosives or other dangerous cargoes, Agents of calling vessels must notify the Port Office in advance of discharging and/or loading of explosives. Inflammable and other highly dangerous cargoes in commercial harbour are permitted from 0600 to 1800 hrs. local time.

MAX. SIZE: Largest vessels which can enter commercial harbour 200 m. LOA, 80 ft. beam, 34 ft. draft.

HEALTH: Quarantine and sanitation services available. Quarantine officer boards arriving vessels and necessary medical clearance given.

RADIO: Coastal radio station available *(a)* Position Lat. 13° 01′ 24″ N., Long. 42° 44′ 38″ E.

(b) Coastal radio station in service for 13 hours per day 0700 hrs. to 2200 hrs. Call sign ETC. Transmits traffic lists on 489 kHz after a preliminary announcement on 500 kHz, 30 minutes past each odd hour starting at 0500 and ending 1700 hrs. (0530, 0730, 0930, hrs. etc.).

(c) Transmit traffic lists on 6509 at 0500, 0900 and 1300 hrs. and searches 6265.5 – 6280.5 between 0515 – 0600, 0915 – 1000, and 1315 – 1400 hrs.

(d) Transmit traffic lists on 8618 at 0700, 1100 and 1500 hrs. and searches 8354 – 8374 between 0715 – 0800, 1115 – 1200 and 1515 – 1600 hrs.

(e) Rates shall include station charges and charge of transmission over telecommunication network within Ethiopia.

(f) Accepts ship letter telegrams (SLT) from ships for delivery in Assab.

(g) For radio telephone service. Station keeps watch and replaces on 2182 for radio telephone service at 0615 – 0700, 0815 – 0900, 1015 – 1100, 1215 – 1300, 1415 – 1500, 1615 – 1700 hrs. and transmits traffic same hours on 4379.3. Service hours will be extended to 24 hours.

VHF: VHF system is in operation in the port area.

TUGS: Tug service compulsory for ships over 300 n.r.t. 3 tugs of 600, 1,200 and 1,400 h.p. attend ships during arrival and departure.

BERTHING:
(a) North Half Jetty 1,620 ft. length, 36 ft. depth.
(b) South Half Jetty.
 (i) 1115 ft. length and 33.8 ft. depth.
 (ii) 459 ft. length and 29.5 ft. depth.
 (iii) 164 ft. length and 19 ft. depth

Fenders are good and protect ships from impact; harbour is modern and has modern breakwater 711 m. length. 7 large vessels can be accommodated at a time. In addition stern ramp ro/ro vessels are accommodated at the ends of the North and South Jetties.

Salt Loading Terminal: Located 1.7 miles from the Commercial Harbour, salt loading ships drawing up to 33 ft. are berthed at this terminal using 2 anchors and mooring to buoys and dolphins. Not in use at present time.

STEVEDORES: 14 stevedoring agencies, any kind of cargo can be discharged and loaded. Skilled labourers and loading/discharging capacity are respectively 30-15 t.p.h. Crane lift capacity 50 tons.

Normal working hours: 0700 to 0600 hrs. (23 hours a day).

MEDICAL: 1 hospital in town and clinic in port. When sick person on board, hoist (by day) International code flag "W", (by night) 3 lights in vertical line upper one red, and middle and lower, white lights. Doctor may be called on board at any time to attend sick crew or passengers by arrangement with Agents.

TANKERS: Oil harbour about 1.5 miles S.E. of commercial harbour with draft 33 ft. Crude oil discharging terminal 500 m. from Southern end of breakwater open sea buoy berth – tankers of 800 ft. length, and 36 ft. draft can be accommodated. Diameter of pipe-line for loading and discharging black products – 16 in., white products 10 in.

Tankers at the Shell Berth are moored by dropping 2 anchors and tying up 2 ropes from each quarter to the buoys, and 1 rope from each quarter to the dolphins. All grades of oil in bulk discharged into shore storage tanks from this harbour, and fuel oil is discharged from the Commercial Harbour.

In Assab, the petroleum installations are of Shell Red Sea Co., Mobil Oil East Africa Co. and Ethiopian Petroleum Corporation

DENSITY: At berths is 1030 while the tides are negligible for all seasons; max. 1 ft.

FRESH WATER: Available. Supplied upon request by Agent and can be delivered at 60 t.p.h.

FUEL: All grades available, at commercial harbour. Advance notice necessary. Rate of 300 t.p.h.

FIRE PRECAUTIONS: Modern fire brigade.

GANGWAY/DECK WATCHMEN: Watchmen on deck necessary, and rate arranged as per agreement of employer and employee.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CERTIFICATES: All ship's International Certificates should be on board.

CUSTOMS ALLOWANCES: Tobacco, 400 cigarettes. Wine and/or Spirits. 1 litre or bottle of spirit.

CARGO GEAR: Different types of certified cargo handling equipment available.

IDENTIFICATION CARDS: Needed.

CONSULS: Only Italian Consulate in Assab, others in Addis Ababa.

REPAIRS: Minor repairs can be carried out at Port Office workshop.

REPATRIATION: Possible.

AIRPORT: 15 km. from Assab.

TIME: GMT plus 3 hours.

HOLIDAYS: See "Massawa".

POLICE/AMBULANCE/FIRE: Port Police Tel: 60049; Hospital Tel: 60119; Port Office fire brigade Tel: 60102.

GENERAL: 1 modern hotel and 1 motel available in town.

SHORE LEAVE: Crew allowed ashore, with boarding passes.

DEVELOPMENTS: Ro/Ro berth and tug berth to be constructed. Work to commence mid-1985.

SHIPMASTER'S REPORT: January 1983.

VHF: VHF system is installed. Call sign "Assab Signal Station". Working Channel 12.

Medical: No dentist available in city.

Fresh Water: Available in emergencies only, Port Authority advises that all vessels should take sufficient water at previous port.

Our vessel was supplied with 20 tons of water every other day, which was arranged by cargo receiver's Representative.

We advise that water should be purified before drinking.

Repairs: Not possible. No oxygen or acetylene available.

General: No spares of any description available. Provisions can be supplied in small quantities.

AUTHORITY: Ministry of Communication, Department of Marine.

MASSAWA: 15.37 N. 39.28 E.

PORT LIMITS: The coastline of Gurgussum Peninsula, at Lat. 15° 39′ N. to a point Lat. 15° 39′ N., Long. 39° 30′ E. to Lat. 15° 35′ N., Long. 39° 30′ E. to the coastline at Lat. 15° 35′ N., Long. 39° 26′ 50″ E.

DOCUMENTS:
2 sets Manifests.
2 sets Bills of Lading.
5 Crew Lists.
5 Passenger Lists.
2 Stores Lists.

APPROACHES: Through North Channel and South Channel. In channel, in direction of leading lights 243°, max. depth 31 ft. (but alongside 30 ft.) Marking buoy showing a wreck in position approximately 200 m. S.E. of North Breakwater.

PILOTAGE: Pilotage is compulsory for all vessels over 100 n.r.t. Pilot section headed by a Chief Pilot and 2 other Pilots.

There is 1 pilot boat. ETA should be given to Agent who will inform Pilot 72 hours prior to arrival. Signal tower located in port area contacts vessel on arrival informing Agent and Pilot, and receiving or transmitting by Morse lamp messages to and from vessel.

ANCHORAGES: 8 cables East of main lighthouse. Anchorage North of leading light not recommended.

Tides: Normally the range of tide varies between 1.5 and 2.0 m., but during spring tide season the range varies up to 3 m.

MAX. SIZE: Length 520 ft., draft 30 ft.

HEALTH: Doctor normally boards with Pilot, but can be asked to board together with Customs and Immigration while vessel on roads. All crew members must be vaccinated against yellow fever, and possess necessary certificates. Derat and other health certificates required. Derat cannot be effected at Massawa, but exemption certificate can be obtained.

RADIO: Assab Radio, call sign ETC, Djibouti Radio, or Aden Radio may be used. Asmara Radio, call sign ETC 2, working hours 0500 to 1700 GMT. Radio-telegraphy and radio-telephone services.

TUGS: Compulsory. Join vessel in port.

3 tugboats are available, two of 350 h.p. and the third 1,000 h.p. The smaller motor tugboats used for assistance mainly within the port limits, and the deep-sea salvage motor tugboat, for salvage operations, but whenever conditions demand, is also employed for assistance within the port.

BERTHING: Vessels normally drop anchor before berthing.

Commercial Harbour: 6 berths, namely 1 to 6, and the overall distance from Berth No. 1 to Berth No. 6 is 907 m. These berths normally used by vessels handling general cargo, bagged cargo and livestocks. Depth of water at mean low water springs (MLWS) is shown below:
Berth No. 1 – 16 ft. 6 in.
Berth No. 2 – 24 ft. 6 in.
Berth No. 3 – 28 ft. 6 in.
Berth No. 4 – 28 ft. 0 in.
Berth No. 5 – 27 ft. 0 in.
Berth No. 6 – 30 ft. 0 in.

Salt Berth: This is a single berth where vessels load salt in bulk. The depth at the berth is 32 ft. Max. draft 29 ft. Loading with the help of conveyor belt at the rate of about 300 t.p.h.

Cement Berth: Depth 18 ft.

American Jetty: Depth 18 ft.

However, dredging will be carried out to accommodate vessels of a greater draft in the future.

STEVEDORES: Radio 24 hours' notice of ETA stating number of gangs required. Loading discharging rates 5 t.p.h. on general, 10 – 15 t.p.h. on bagged cargo.
DENSITY: 1025.
MEDICAL: Notice should be given to Agent only when specialist needed. Hospital treatment available. Dental facilities available at Asmara, 110 km. away.
TANKERS: AGIP, Arkiko Oil Station Terminal: Max. draft for entering channel 29 ft.

Total Pier, depth alongside 36 ft., max. draft 30 ft.
FRESH WATER: Supplied alongside, Max. rate 600 tons per day or by barge of 50 tons on roads. Barge can be loaded/discharged in 8 hours.
FUEL: Can be obtained alongside oil terminals and at Berth Nos. 5 and 6 for heavy fuel only. Diesel can be supplied by lorries alongside. No bunker barge available.
GANGWAY/DECK WATCHMEN: Compulsory when alongside.
OPENING/CLOSING HATCHES: Normally by labourers, but can be done by crew.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per man. New allowance can be delivered after 1 week. Wine/Spirits: 1 bottle of wine/spirits (opened). Wine and beer quantity necessary for the stay in port allowed upon reasonable request on arrival.
IDENTIFICATION CARDS: Not needed. Immigration gives port entry card (without crew member's name) which must be given back prior to departure. In case of loss a fine is likely.
CONSULS: Italian Vice-consulate, Box 62. Tel: 52214. Other consulates at Addis Ababa for Belgium, France, Gt. Britain, Italy, Sudan, U.S.A. and others.
REPAIRS: Good workshops for minor engine repairs. Slipway for vessel up to 600 g.r.t.
REPATRIATION: Via Asmara by chartered air-taxi, then by international flights. Or Massawa-Asmara by road, 110 km., asphalt road (daily convoy).
TIME: GMT plus 3 hours.
HOLIDAYS: January 7th (Christmas Day – Coptic); January 19th (Epiphany); March 2nd (Victory of the Battle of Adowa); March 13th (Prophet's Birthday); April 6th (Victory Day); April 23rd (Good Friday – Coptic); April 25th (Easter Sunday – Coptic); May 1st (Labour Day); September 11th (New Year's Day); September 12th (Abolition of Feudalism); September 27th (Finding of the True Cross); October 6–8th Id-al-Fatir; December 18th Id-al-Kebir and Sundays.
POLICE/AMBULANCE/FIRE: Police, Tel: 52425; Ambulance, Tel: 52234-5-6; Fire Brigade, Tel: 52220.
TELEPHONES: Possible to place telephones on board. Arranged by Agent.
SERVICES: Radar and gyro compass technician available, but special spare parts not available.
SHORE LEAVE: Crew cannot leave vicinity of Massawa without special immigration permit.
AUTHORITY: Department of Marine.

NOTES

Please also advise Shipping Guides Ltd.

Ethiopia

ASSAB: 13.01 N. 42.44 E. (See Plan Book)

PORT LIMITS: A line drawn from Ras Gombo to the Northern point of Umm al Baher (Islands) to Southern point of Umm al Baher, then to Ras Marcanah.

DOCUMENTS:

5 Manifests for transit passengers and passports.
5 Manifests for landing passengers and passports.
5 Crew Lists.
1 Complete Crew Provisions List.
1 Crew Personal Effects List.
1 Store List.
6 Cargo Manifests.

PILOTAGE: Compulsory Pilots take tankers in and out of oil harbour only during daytime. Pilots embark about 1 mile N.N.E. from Northern extremity of breakwater. Commercial harbour gives 24 hour service. Vessels calling Assab must advise Agent through Assab Coastal Radio Station by call sign ETC. Assab Radio Signal Station is available.

ANCHORAGES: Assab Bay provides good anchorage in 42 ft. to 48 ft. of sand and coral bottom, good holding ground. Generally weather in Assab can be divided into two: Summer time and Winter time weather, during Summer (May–September) Northerly wind blows with a maximum force of 3/4 BS. During Winter time (October-April) South-easterly local monsoon winds blow usually 5/6 BS but reaching force 7/8 BS during daytime and generally drop at night. This 7/8 BS force is mainly experienced about December to February.

RESTRICTIONS: There are 2 entrances, the North and the South entrance, the depth at the entrances is 38 ft. Least width 1,300 ft.

Vessels of any size enter or leave port during hours of darkness except tankers, and vessels carrying dangerous cargo. In these cases, where vessels are carrying explosives or other dangerous cargoes, Agents of calling vessels must notify the Port Office in advance of discharging and/or loading of explosives. Inflammable and other highly dangerous cargoes in commercial harbour are permitted from 0600 to 1800 hrs. local time.

MAX. SIZE: Largest vessels which can enter commercial harbour 200 m. LOA, 80 ft. beam, 34 ft. draft.

HEALTH: Quarantine and sanitation services available. Quarantine officer boards arriving vessels and necessary medical clearance given.

RADIO: Coastal radio station available *(a)* Position Lat. 13° 01′ 24″ N., Long. 42° 44′ 38″ E.

(b) Coastal radio station in service for 13 hours per day 0700 hrs. to 2200 hrs. Call sign ETC. Transmits traffic lists on 489 kHz after a preliminary announcement on 500 kHz, 30 minutes past each odd hour starting at 0500 and ending 1700 hrs. (0530, 0730, 0930, hrs. etc.).

(c) Transmit traffic lists on 6509 at 0500, 0900 and 1300 hrs. and searches 6265.5 – 6280.5 between 0515 – 0600, 0915 – 1000, and 1315 – 1400 hrs.

(d) Transmit traffic lists on 8618 at 0700, 1100 and 1500 hrs. and searches 8354 – 8374 between 0715 – 0800, 1115 – 1200 and 1515 – 1600 hrs.

(e) Rates shall include station charges and charge of transmission over telecommunication network within Ethiopia.

(f) Accepts ship letter telegrams (SLT) from ships for delivery in Assab.

(g) For radio telephone service. Station keeps watch and replaces on 2182 for radio telephone service at 0615 – 0700, 0815 – 0900, 1015 – 1100, 1215 – 1300, 1415 – 1500, 1615 – 1700 hrs. and transmits traffic same hours on 4379.3. Service hours will be extended to 24 hours.

VHF: VHF system is in operation in the port area.

TUGS: Tug service compulsory for ships over 300 n.r.t. 3 tugs of 600, 1,200 and 1,400 h.p. attend ships during arrival and departure.

BERTHING:

(a) North Half Jetty 1,620 ft. length, 36 ft. depth.
(b) South Half Jetty.
  (i) 1115 ft. length and 33.8 ft. depth.
  (ii) 459 ft. length and 29.5 ft. depth.
  (iii) 164 ft. length and 19 ft. depth

Fenders are good and protect ships from impact; harbour is modern and has modern breakwater 711 m. length. 7 large vessels can be accommodated at a time. In addition stern ramp ro/ro vessels are accommodated at the ends of the North and South Jetties.

Salt Loading Terminal: Located 1.7 miles from the Commercial Harbour, salt loading ships drawing up to 33 ft. are berthed at this terminal using 2 anchors and mooring to buoys and dolphins. Not in use at present time.

STEVEDORES: 14 stevedoring agencies, any kind of cargo can be discharged and loaded. Skilled labourers and loading/discharging capacity are respectively 30-15 t.p.h. Crane lift capacity 50 tons.

Normal working hours: 0700 to 0600 hrs. (23 hours a day).

MEDICAL: 1 hospital in town and clinic in port. When sick person on board, hoist (by day) International code flag "W", (by night) 3 lights in vertical line upper one red, and middle and lower, white lights. Doctor may be called on board at any time to attend sick crew or passengers by arrangement with Agents.

TANKERS: Oil harbour about 1.5 miles S.E. of commercial harbour with draft 33 ft. Crude oil discharging terminal 500 m. from Southern end of breakwater open sea buoy berth – tankers of 800 ft. length, and 36 ft. draft can be accommodated. Diameter of pipe-line for loading and discharging black products – 16 in., white products 10 in.

Tankers at the Shell Berth are moored by dropping 2 anchors and tying up 2 ropes from each quarter to the buoys, and 1 rope from each quarter to the dolphins. All grades of oil in bulk discharged into shore storage tanks from this harbour, and fuel oil is discharged from the Commercial Harbour.

In Assab, the petroleum installations are of Shell Red Sea Co., Mobil Oil East Africa Co. and Ethiopian Petroleum Corporation

DENSITY: At berths is 1030 while the tides are negligible for all seasons; max. 1 ft.

FRESH WATER: Available. Supplied upon request by Agent and can be delivered at 60 t.p.h.

FUEL: All grades available, at commercial harbour. Advance notice necessary. Rate of 300 t.p.h.

FIRE PRECAUTIONS: Modern fire brigade.

GANGWAY/DECK WATCHMEN: Watchmen on deck necessary, and rate arranged as per agreement of employer and employee.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CERTIFICATES: All ship's International Certificates should be on board.

CUSTOMS ALLOWANCES: Tobacco, 400 cigarettes. Wine and/or Spirits. 1 litre or bottle of spirit.

CARGO GEAR: Different types of certified cargo handling equipment available.

IDENTIFICATION CARDS: Needed.

CONSULS: Only Italian Consulate in Assab, others in Addis Ababa.

REPAIRS: Minor repairs can be carried out at Port Office workshop.

REPATRIATION: Possible.

AIRPORT: 15 km. from Assab.

TIME: GMT plus 3 hours.

HOLIDAYS: See "Massawa".

POLICE/AMBULANCE/FIRE: Port Police Tel: 60049; Hospital Tel: 60119; Port Office fire brigade Tel: 60102.

GENERAL: 1 modern hotel and 1 motel available in town.

SHORE LEAVE: Crew allowed ashore, with boarding passes.

DEVELOPMENTS: Ro/Ro berth and tug berth to be constructed. Work to commence mid-1985.

SHIPMASTER'S REPORT: January 1983.

VHF: VHF system is installed. Call sign "Assab Signal Station". Working Channel 12.

Medical: No dentist available in city.

Fresh Water: Available in emergencies only, Port Authority advises that all vessels should take sufficient water at previous port.

Our vessel was supplied with 20 tons of water every other day, which was arranged by cargo receiver's Representative.

We advise that water should be purified before drinking.

Repairs: Not possible. No oxygen or acetylene available.

General: No spares of any description available. Provisions can be supplied in small quantities.

AUTHORITY: Ministry of Communication, Department of Marine.

MASSAWA: 15.37 N. 39.28 E.

PORT LIMITS: The coastline of Gurgussum Peninsula, at Lat. 15° 39′ N. to a point Lat. 15° 39′ N., Long. 39° 30′ E. to Lat. 15° 35′ N., Long. 39° 30′ E. to the coastline at Lat. 15° 35′ N., Long. 39° 26′ 50″ E.

DOCUMENTS:

2 sets Manifests.
2 sets Bills of Lading.
5 Crew Lists.
5 Passenger Lists.
2 Stores Lists.

APPROACHES: Through North Channel and South Channel. In channel, in direction of leading lights 243°, max. depth 31 ft. (but alongside 30 ft.) Marking buoy showing a wreck in position approximately 200 m. S.E. of North Breakwater.

PILOTAGE: Pilotage is compulsory for all vessels over 100 n.r.t. Pilot section headed by a Chief Pilot and 2 other Pilots.

There is 1 pilot boat. ETA should be given to Agent who will inform Pilot 72 hours prior to arrival. Signal tower located in port area contacts vessel on arrival informing Agent and Pilot, and receiving or transmitting by Morse lamp messages to and from vessel.

ANCHORAGES: 8 cables East of main lighthouse. Anchorage North of leading light not recommended.

Tides: Normally the range of tide varies between 1.5 and 2.0 m., but during spring tide season the range varies up to 3 m.

MAX. SIZE: Length 520 ft., draft 30 ft.

HEALTH: Doctor normally boards with Pilot, but can be asked to board together with Customs and Immigration while vessel on roads. All crew members must be vaccinated against yellow fever, and possess necessary certificates. Derat and other health certificates required. Derat cannot be effected at Massawa, but exemption certificate can be obtained.

RADIO: Assab Radio, call sign ETC, Djibouti Radio, or Aden Radio may be used. Asmara Radio, call sign ETC 2, working hours 0500 to 1700 GMT. Radio-telegraphy and radio-telephone services.

TUGS: Compulsory. Join vessel in port.

3 tugboats are available, two of 350 h.p. and the third 1,000 h.p. The smaller motor tugboats used for assistance mainly within the port limits, and the deep-sea salvage motor tugboat, for salvage operations, but whenever conditions demand, is also employed for assistance within the port.

BERTHING: Vessels normally drop anchor before berthing.

Commercial Harbour: 6 berths, namely 1 to 6, and the overall distance from Berth No. 1 to Berth No. 6 is 907 m. These berths normally used by vessels handling general cargo, bagged cargo and livestocks. Depth of water at mean low water springs (MLWS) is shown below:

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Berth No. 4 – 28 ft. 0 in.
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Berth No. 6 – 30 ft. 0 in.

Salt Berth: This is a single berth where vessels load salt in bulk. The depth at the berth is 32 ft. Max. draft 29 ft. Loading with the help of conveyor belt at the rate of about 300 t.p.h.

Cement Berth: Depth 18 ft.

American Jetty: Depth 18 ft.

However, dredging will be carried out to accommodate vessels of a greater draft in the future.

STEVEDORES: Radio 24 hours' notice of ETA stating number of gangs required. Loading discharging rates 5 t.p.h. on general, 10 – 15 t.p.h. on bagged cargo.
DENSITY: 1025.
MEDICAL: Notice should be given to Agent only when specialist needed. Hospital treatment available. Dental facilities available at Asmara, 110 km. away.
TANKERS: AGIP, Arkiko Oil Station Terminal: Max. draft for entering channel 29 ft.
Total Pier, depth alongside 36 ft., max. draft 30 ft.
FRESH WATER: Supplied alongside, Max. rate 600 tons per day or by barge of 50 tons on roads. Barge can be loaded/discharged in 8 hours.
FUEL: Can be obtained alongside oil terminals and at Berth Nos. 5 and 6 for heavy fuel only. Diesel can be supplied by lorries alongside. No bunker barge available.
GANGWAY/DECK WATCHMEN: Compulsory when alongside.
OPENING/CLOSING HATCHES: Normally by labourers, but can be done by crew.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per man. New allowance can be delivered after 1 week. Wine/Spirits: 1 bottle of wine/spirits (opened). Wine and beer quantity necessary for the stay in port allowed upon reasonable request on arrival.
IDENTIFICATION CARDS: Not needed. Immigration gives port entry card (without crew member's name) which must be given back prior to departure. In case of loss a fine is likely.
CONSULS: Italian Vice-consulate, Box 62. Tel: 52214. Other consulates at Addis Ababa for Belgium, France, Gt. Britain, Italy, Sudan, U.S.A. and others.
REPAIRS: Good workshops for minor engine repairs. Slipway for vessel up to 600 g.r.t.
REPATRIATION: Via Asmara by chartered air-taxi, then by international flights. Or Massawa-Asmara by road, 110 km., asphalt road (daily convoy).
TIME: GMT plus 3 hours.
HOLIDAYS: January 7th (Christmas Day – Coptic); January 19th (Epiphany); March 2nd (Victory of the Battle of Adowa); March 13th (Prophet's Birthday); April 6th (Victory Day); April 23rd (Good Friday – Coptic); April 25th (Easter Sunday – Coptic); May 1st (Labour Day); September 11th (New Year's Day); September 12th (Abolition of Feudalism); September 27th (Finding of the True Cross); October 6–8th Id-al-Fatir; December 18th Id-al-Kebir and Sundays.
POLICE/AMBULANCE/FIRE: Police, Tel: 52425; Ambulance, Tel: 52234-5-6; Fire Brigade, Tel: 52220.
TELEPHONES: Possible to place telephones on board. Arranged by Agent.
SERVICES: Radar and gyro compass technician available, but special spare parts not available.
SHORE LEAVE: Crew cannot leave vicinity of Massawa without special immigration permit.
AUTHORITY: Department of Marine.

NOTES

Please also advise Shipping Guides Ltd.

EUROPEAN ECONOMIC COMMUNITY

Tanker Check List

(For oil, gas and chemical tankers of 1,600 g.r.t. and over – whether fully or partly laden – including those empty but not yet degassed or purged of hazardous residues entering European Economic Community ports).

A. Vessel identification

Name of vessel — Owner
Flag — Call sign — Year built
Port of registry — Length overall — Gross tonnage
Classification society
Class notation — Hull — Machinery
Propulsion machinery — Output
Agent
Draft: forward — amidships — aft
Kind of cargo loaded (according to tank loading plan) — Volume of cargo loaded

B. Safety installations aboard

	In good working order		Deficiences
1. Construction and technical equipment	Yes	No	
Main and auxiliary engines	☐	☐	
Main steering gear	☐	☐	
Auxiliary steering gear	☐	☐	
Anchor gear	☐	☐	
Fixed fire-extinguishing system	☐	☐	
2. Navigational equipment			
Manoeuvring characteristics available	☐	☐	
First radar installation	☐	☐	
Second radar installation	☐	☐	
Gyro compass	☐	☐	
Standard magnetic compass	☐	☐	
Radio direction-finding apparatus	☐	☐	
Echo-sounding device	☐	☐	
Other electronic position fixing aids	☐	☐	
3. Radio equipment			
Radiotelegraphy installation	☐	☐	
Radiotelephony installation (VHF)	☐	☐	

C. Safety certificates and other documents

	Certificates/documents valid on board	
	Yes	No
Cargo ship safety construction certificate	☐	☐
Cargo ship safety equipment certificate	☐	☐
Cargo ship safety radiotelegraphy certificate	☐	☐
Ship safety radiotelephony certificate	☐	☐
Load line certificate	☐	☐
Classification certificate	☐	☐
Oil liability certificate	☐	☐
Oil record book filled in	☐	☐

D. Officers and ratings

	Yes	No
Master		
Chief mate	☐	☐
Second mate	☐	☐
Third mate	☐	☐
Chief engineer	☐	☐
First engineer officer	☐	☐
Second engineer officer	☐	☐
Third engineer officer	☐	☐
Radio officer	☐	☐
Total number of ratings	Deck	Engine room
Deep-sea Pilot taken aboard	☐	☐

Date — Signature of the Master or, if he is indisposed, of the deputy

Falkland Islands

PORT STANLEY: 51.42 S. 57.51 W. (See Plan Book)

PORT LIMITS: West of the line joining Mengeary Point and Cape Pembroke.

DOCUMENTS:
2 Copies Crew Lists.
2 Copies Passenger Lists.
2 Copies Customs Documents.
Health Document.
Manifest and Bills of Lading.
Ship's Papers.
Ship's Certificates.

PILOTAGE: Pilotage should be requested via Cable & Wireless Radio Station. 24 hours notice of arrival required. Frequency 2182.

ANCHORAGES: For large vessels, the anchorage is somewhat confined; except S. of Navy Point, where there is good swinging room in depths of from 8.2 m. to 10.4 m. (27 ft. to 34 ft.). There is good anchorage N.N.E. of the cathedral, but, owing to the prevailing strong W. winds, a vessel may have some difficulty in turning, when leaving this position. The best time to leave is after 1800 hrs. or before 0800 hrs. as, unless there is a widespread area of bad weather over the islands, the wind, which is local, is seldom strong between these hours. The holding ground is good, and vessels have not dragged during winds of up to force 8, though a second anchor is often necessary.

The bottom of the harbour is stiff mud, which is very noisome and sticky; it is necessary to allow plenty of time for cable washing when weighing.

Two oil barges and numerous small boats, none of which exhibit a riding light at night are moored at the South side of the harbour.

RESTRICTIONS: No restrictions on entry.

RADIO: Cable & Wireless Ltd.

VHF: Port Radio, call sign "Port Control", listening on Channel 16 from 0800 - 1200 hrs. and 1315 - 1630 hrs.

RADAR: No port radar service.

TUGS: No harbour tugs.

BERTHING: Falkland Islands Company jetty with a depth of 1.5 m. at its head. T shaped Head.

CRANES: 1×5 ton crane.

BULK CARGO FACILITIES: Nil, drummed cargoes only are handled.

STEVEDORES: 1 week's notice required. If Falkland Islands Company charter vessel (4 voyages a year) is being worked then stevedores will not be available until work on the charter vessel has been completed.

MEDICAL: Advance notice required.

TANKERS: Advance information should be sought.

DENSITY: Full salt water.

FRESH WATER: Available at night. Delivery by direct hose. Cost £2 per ton +33% of the cost of the labour involved.

FUEL: Fuel is available only by special arrangement with the Ministry of Defence. Grade 47 Cetane (viscosity cSt 100° F – 1.8; s.g. at 15° C – 0.840). Delivery by lighter and pump.

FIRE PRECAUTIONS: Normal safety requirements.

CONSULS: Norwegian.

REPAIRS: Minor repairs to machinery.

DRY DOCKS: Nil.

SURVEYORS: Not available.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: By ship's crew.

CUSTOMS ALLOWANCES Quantity permitted by crew is one bottle of spirits, 200 cigarettes or 1 lb. of tobacco, 6 bottles of wine, 1 case (24 cans) beer.

CARGO GEAR: There is 1×5 ton crane. Ship's gear may be used.

AIRPORT: 5 miles from Port.

TIME: GMT minus 4 hours. Summer time from October to end of March.

HOLIDAYS: Cargo can be handled on the 10 public holidays.

POLICE/AMBULANCE/FIRE: Police – 95; Fire – Exchange; Ambulance – 54.

TELEPHONES: Connection possible at rate of £30 a year.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Seamans book sufficient.

REGULATIONS: No particular or unusual regulations.

DELAYS: Delays may be experienced if berthing alongside only commercial jetty if firms charter vessel is being handled. Four voyages a year: – turn around 1 week.

DEVELOPMENTS: No port developments under way.

AUTHORITY: Harbour Master, Customs and Harbour Dept., Port Stanley, Falkland Is. *Tel:* 22. *Contact:* L. J. Halliday, Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Faroe Islands

KLAKKSVIK: 62.14 N. 06.35. W. (See Plan Book)

DOCUMENTS:
One of Each:
Crew List.
Passenger List.
Custom Documents (one list crew's quantity of tobacco and spirits).
Health Document.
Manifest.
Bill of lading.

PILOTAGE: Not compulsory but available. Give ETA via Torshavn Radio, OXJ, 1 or 2 hours before arrival, and Pilot will meet vessel in Roads. International signals can always be used. VHF Channels 16, 12, and 6 in use.
ANCHORAGE: In Roads in 12 to 20 fathoms; good anchorage.
RESTRICTIONS: No restrictions upon entry.
MAX. SIZE: Up to 450 ft. length, but draft must not exceed 20 ft.
HEALTH: Pratique usually automatic.
RADIO: Torshavn Radio, OXJ, is only coast station in Faroe Isles.
TUGS: No tugs available.
BERTHING: Ships will be berthed on arrival, if ETA announced 12 hours before arrival.
STEVEDORES: Ship's Agent will arrange stevedores.
MEDICAL: Inform doctors before arrival. Hospital facilities available.
TANKERS: Only small tankers, up to 2,000 – 3,000 tons can be handled.
FRESH WATER: Available from quay. 30 t.p.h.
FUEL: Diesel oil available, usually without notice (or short notice).
GANGWAY/DECK WATCHMEN: Watchmen usually unnecessary, but available if desired.
OPENING/CLOSING HATCHES: Normally done by crew.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes. Wine and/or Spirits, 1 bottle of wine and 1 of spirits.
IDENTIFICATION CARDS: Not needed.
CONSULS: British, Tel: 5109 and 5489; Norwegian, Tel: 55018 and 55353.
REPAIRS: All types of deck and engine repairs possible. Slipways for ships up to 200 ft. length.
REPATRIATION: Small changes in crew can usually be arranged and, for example, sick seamen/fishermen are often sent home, when recovered.
AIRPORT: Nearest airport on Vagoy, about 6 hours travelling. Regular flights, 6 a week.
TIME: GMT. Permanent.
HOLIDAYS: Cargo work can be arranged on holidays.
POLICE/AMBULANCE/FIRE: Police 5348; Ambulance 5464; Fire 04.
TELEPHONES: Can be arranged on board at one berthing place, at about 50.00 kr plus dues for conversations.
SERVICES: Compass adjusting, day and night.
SHORE LEAVE: Crew members allowed ashore.
DELAYS: Normally there are none.
DEVELOPMENTS: Two new quays under construction, 1 with a depth of 7.0 m. Completion expected 1984.
AUTHORITY: Klakksvikar Havn, P.O.Box 26, 3870 Klakksvik.

AGENT: Christen Joensen Stengavegur, P.O.Box 179, 3870 Klaksvik, Faroe Islands. Cables Christen Joensen. Tel: Klaksvik 55922.

SOERVAAG: 62.04 N. 07.18 W.

DOCUMENTS:
Bill of Lading.
Customs Documents (including Crew List).
Ship's Certificate (stating size of ship).

PILOTAGE: Ships can call Pilot via Torshavn Radio. Pilot has good knowledge of local conditions.
ANCHORAGES: Danish Chart No. 82 – on Soervaag fjord – can be recommended as good. Bottom gravel.
RESTRICTIONS: Difference between high and low water up to 2 m. on Spring tide and up to 1 m. on neap tide.
MAX. SIZE: Largest vessel reported in Soervaag was 12,000 d.w.t. tanker. Harbour about 150 m. long and formed with one long pier and another 1 stretching from it. Draft at pier 8 m. Pier runs N.E./S.W.
HEALTH: Ships coming from countries having epidemic-disease have to fly the flag "Q". No persons allowed connection with shore, before official doctor given free pratique. Doctor comes from Midvaag or Wesmannahavn and can be at Soervaag in half hour.
RADIO: Only civilian radio on Faroe Islands is Torshavn-Radio (Int. call sig.: OXJ) via this radio ships can call for medical assistance and weather forecast. These 2 services are free. All traffic to Faroe Islands via Torshavn-Radio.
TUGS: No actual tugs can be obtained, but many small vessels which can be used as tugs.
BERTHING: Captains should take care when berthing not to come on to East side of pier – owing to very low water.
STEVEDORES: Arranged through A/S NI. Niclasen, Soervaag, or Harbour Master.
MEDICAL: Hospital in Torshavn with all facilities.
TANKERS: Ordinary pier also used by tankers (draft 8 m.) size of load/discharge-lines: 3 in. and 6 in.
FRESH WATER: Ships can obtain fresh water direct from pier.
FUEL: Marine diesel fuel; turbo-jet A1–100; gasoline-petroleum.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Masters have to make arrangements with stevedores, receivers or shippers.
CUSTOMS ALLOWANCES: Tobacco, each crew member is allowed to have 200 cigarettes or 250 gm. of tobacco. Wine and/or Spirit, crew members not allowed any wine or spirit. Master allowed 2 bottles every second day.
IDENTIFICATION CARDS: Not required.
CONSULS: Belgium, Finland, Greece, Iceland, Norway, Spain, U.K., West Germany, Brazil, France, Holland, Italy, Portugal, Sweden.
REPAIRS: Small deck and engine repairs carried out.
DRY DOCKS: On Skaalefiord, dry dock up to 1,500 d.w.t.
REPATRIATION: Available.
AIRPORT: Faroe Island has 1 airport – only 3 km. from Soervaag. During Summertime daily services to Bergen, Norway and Copenhagen, and weekly services to Glasgow.

During Wintertime weekly services to above destinations.

TIME: GMT. Permanent.
HOLIDAYS: Same as Denmark.
POLICE/AMBULANCE/FIRE: Police 8; Ambulance 8; Fire 4 or 46.
TELEPHONE: Telephones can be placed on board.
SHORE LEAVE: Crew members are allowed ashore.
REGULATIONS: Per ordinary regulations in Danish Ports. Harbour dues to be paid before ship's departure.
DELAYS: Usually none.
AUTHORITY: Harbour Master.

TORSHAVN: 62.00 N. 06.45 W.

DOCUMENTS: See "Klakksvik".
PILOTAGE: Not compulsory. Can be obtained through Torshavn Radio 2182 kHz or Channel 16 VHF (Harbour Office).
ANCHORAGES: Due South of breakwater in depths about 30 fathoms.
MAX. SIZE: Max. draft 25 ft. This is only restriction.
HEALTH: Pratique usually automatic.
RADIO: Torshavn Radio, OXJ.
TUGS: No tugs available.
STEVEDORES: Must be arranged with the Agent.
FRESH WATER: 100 t.p.h., by pipe-line.
FUEL: All kinds of fuel at 100 t.p.h.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: Tobacco (1 carton); litre of spirits or 2 litres of wine.
IDENTIFICATION CARDS: Not required.
REPAIRS: All kinds are possible.
DRY DOCKS: Slipway for vessels up to 1,000 tons.
REPATRIATION: Can be arranged.
AIRPORT: Regular airlines, 2 hours by car from Airport.
TIME: GMT. Summertime GMT plus 1 hour (late March – late September).
HOLIDAYS: Cargo work can be arranged on holidays.
POLICE/AMBULANCE/FIRE: Police, 11448; Ambulance, 13540; Fire, 000.
TELEPHONES: No facilities.
SERVICES: Compass adjusting only.
SHORE LEAVE: Allowed.
AUTHORITY: Torshavnar Havn, Torshavn, Faroe Islands. *Tel:* 1-1762. *Contact:* Hogni Mohr.

TRANGISVAAG: 61.33 N. 06.50 W.

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Bill of Lading.
1 Bonded Store List.

PILOTAGE: When Pilot required pre-arrange with Agent by telegram or telephone, 2 hours notice ETA wanted. Pilot boat is local fishing-boat, usually boarding vessel at harbour entrance.
ANCHORAGE: Safe sheltered harbour up to 30 fathoms deep along the entrance transit bearing. Vessels anchor 1 cable offshore in 8 fathoms, clay bottom.
RESTRICTIONS: Vessels may enter harbour day and night.
MAX. SIZE: Vessels may berth with draft up to 7 m.
HEALTH: Pratique granted if no contagious illnesses aboard and all arrival formalities accomplished by the boarding officials.
RADIO: Torshavn Radio, call signal OXJ, 24 hours service, listens 2482 kHz, replies and transmits traffic on 1778 kHz, traffic lists on 1778 kHz 35 minutes past each even hour. VHF service: Channel 16 (156.80 MHz) Channel 26 (161.90 MHz). All ETA messages, etc. must be routed through Torshavn Radio.
TUGS: None; if required local fishing-boats are capable to act as tugs.
BERTHING: Tveraa at Northern side of fjord. Outer side of quay 280 m. length and 20/21 ft. alongside. Inner side length 170 m. and 15 ft. alongside. Quay is for general cargo, fish and salt.

Harbour basin length 58 m., depths 7 ft. to 18 ft. alongside.

Drelnes on South side of fjord. Quay length 89 m. Depth alongside outer side 23 ft.; inner side length 43 m. depth 22 ft.

STEVEDORES: Enable Agent to arrange gang important obtain in good time accurate ETA from vessel. Work normally not carried out on Sundays.
MEDICAL: Advance notice to Agent preferable, good hospital facilities for both surgery and medicine.

DENSITY: 1024.
FRESH WATER: Water available at main quay, rate 50 t.p.h.
FUEL: Diesel gas oil available, 50 t.p.h., no advance notice required.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed to open and close hatches.
CUSTOMS ALLOWANCES: Each crew member allowed 200 cigarettes or 200 grams tobacco out of Bond. Limited quantity wine and spirits.
IDENTIFICATION CARDS: Not needed.
CONSULS: Spanish Vice-Consul.
REPAIRS: Local marine repair companies can undertake all repairs of general nature to deck, engines, hull, electric and radio equipment, etc. Slipway available for small vessels.
REPATRIATION: May be arranged by sea or air.
AIRPORT: (Vagar) Served by regular airlines, located 50 miles from Trangisvaag.
TIME: GMT, no alterations during the year.
HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day; Ascension Day; Whit Monday; Christmas Day; Second Christmas Day; work not carried out these days.
POLICE/AMBULANCE/FIRE: Police Tel: 10 and 53; Ambulance 134; Fire 159.
TELEPHONES: Usually not placed aboard, but can be arranged.
SHORE LEAVE: Allowed.
SHIP SUPPLY SERVICE: Contact Vaktar-OE Bjargin-Gartenastan, Torshavn, Faroe Islands.
DEVELOPMENTS: New quay under construction as extension of existing quay.
AUTHORITY: Tvoroyrar Havn, 3880 Tvoroyri, Faroe Islands. *Tel: 71055. Contact:* Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Fiji Islands

LABASA: 16.26 S. 179.22 E.

SHIPMASTER'S REPORT: January 1983.

Vessel called to load raw bulk sugar.

PORT LIMITS: Port limit is up to the entrance of Mali Passage.

DOCUMENTS:

1 Crew Personal Property Declaration.
8 Crew Lists.
5 Passenger Lists.
4 Stores Lists.
3 Parcels Lists.
4 Maritime Declarations.
3 Form 'D' Regulation 46.
Maritime Declaration of Health.
1 Vaccination List.
1 Copy Fiji Quarantine Ordinance cap–92.

PILOTAGE: Compulsory. Agent arranges booking for Pilot. Pilot boards at entrance to Mali Passage from 30 ft. long, white hulled boat (no flag). Docking/undocking carried out during daylight hours only. Pilotage is also available for inshore passages to Suva, Lautoka, etc. Reef navigation is carried out by Pilots during daylight hours only.

ANCHORAGES: Safe anchorage is available only after passing Mali Passage; about 6 miles to the S.E.

If vessel arrives early, she can drift safely about 20 miles N.N.W. of Mali Passage.

RESTRICTIONS: Docking/undocking only during daylight hours. Max. draft 10.5 m.

MAX. SIZE: LOA 174 m., draft 10.5 m. Max. shipment available 27,000 tonnes as this is the max. storage capacity at Labasa.

HEALTH: Anti-malarial squad boards vessel with Pilot. They inspect and spray the vessel; only then is pratique granted.

If vessel is coming from a "Malaria Infested" region, spraying is done twice daily during the vessel's stay in port.

TUGS: None available. 2 mooring boats are used for taking lines ashore.

BERTHING: *Malau Wharf:* Length 150 m., depth alongside 11 m. Vessel berthed starboard side to, using 1 head/sternline, 2 breastlines and 1 spring at each end.

As the sugar loader is fixed, this mooring system enabled vessel to shift fairly easily when loading in different hatches.

Caution must be exercised while docking, undocking and shifting to avoid contacting the middle piled dolphins of the wharf, as they are unfendered and non-loadbearing.

No tidal restrictions for wharf or port.

BULK HANDLING FACILITIES: Raw bulk sugar: 400 t.p.h./24 hours a day.

MEDICAL: Facilities available in local hospital and from private practitioners.

DENSITY: 1024.5.

FRESH WATER: Not available.

FUEL: Available at Suva only. Very expensive.

SURVEYORS: Pilot carries out hatch inspection prior to loading.

GANGWAY/DECK WATCHMEN: None.

HATCHES: Attended to by crew.

AIRPORT: Local airport with connections to Suva and Lautoka.

HOLIDAYS: Most of the population is of Indian descent, hence some Indian holidays observed.

TELEPHONES: No telephone provided for berth.

DELAYS: Normally 12 hours documentation time (non-laytime) after completion is provided for in the Charter Party; which may not be necessary.

GENERAL: *Exchange rate:* 1 Fiji $ = 0.95 US$, can be changed at bank only.

Communications: Well connected via Suva. Telexes can be sent via Suva or Lautoka, by telephoning Agent's office there.

Formalities, Clearance, etc: Labasa is not a 'Port of Entry' (about 2 vessels per month call here). Pilot, Agent, Surveyor, Customs, Immigration, Agricultural Inspector, Malaria Prevention Squad, etc., all have to come from Suva or Lautoka. Customs Officer *only* stays on board the vessel until departure.

Pilferage: None reported.

Bonded Stores: Not available.

Provisions: No shipchandler. Fresh fruit, vegetables, etc., are available at reasonable prices from the local market, about 8 miles from the wharf.

LAUTOKA, (Vuda Point): 17.36 S. 177.26 E. (See Plan Book)

DOCUMENTS/HEALTH: Refer to "Suva".

PILOTAGE: Not compulsory at present. However, most vessels avail themselves of a Pilot, who boards at Navula Passage, 20 miles South of Lautoka. Masters should telegraph to their Agents ship's ETA at Navula and indicate whether they require a Pilot or not at least 24 hours in advance.

Note: Radio communications with Fiji can be difficult and Masters are advised that telephone or telex messages worked via New Zealand or Australia direct to their Agents are far more reliable.

The Pilot normally boards from a 26 ft. wooden launch, blue hull with white superstructure, buff cabin top with orange liferaft on forward cabin. The pilot vessel can be contacted on VHF 16/6. Listening watch only when vessels are expected. Pilot normally boards 1 mile seaward of the passage on the leads. In heavy weather it may be necessary for a vessel to enter the passage to embark the Pilot. There is no anchorage outside the passage.

Vessels requiring pratique should anchor approximately 1 mile to the Westward of Vio Island in Lautoka Harbour. If prior arrangements have been made through Agent, Health Officers may board inside Navula (The Health Officers inspect vessels only from 1 hour after sunrise to 1 hour prior to sunset). The Pilot for those vessels not employing one from Navula but requiring a Pilot for berthing will board at the Quarantine Anchorage off Vio Island.

ANCHORAGES: The whole of the area enclosed by a circle of diameter approximately 1 mile between Vio Island and Pinder Reefs is an acceptable anchorage with depths ranging from 9 to 13 fathoms.

MAX. SIZE: Minimum depth in approaches to wharf 32 ft., depth alongside 36 ft. Generally speaking, any vessel not exceeding 32 ft. draft can be accommodated. Main wharf is only 457 ft. long but overhangs are allowable, ("Oriana" LOA 804 ft., berths at Main Wharf), dolphins for mooring lines being situated off each end of the wharf. Range of tide approximately 5.5 ft. at springs and 3 ft. at neaps, but state of tide does not affect the foregoing.

At Vuda Point, the tanker berth of Lautoka, tankers in the 18,000 to 24,000 d.w.t. class can be handled. This is a submarine pipe-line installation, the ship mooring to 4 buoys, available depth being about 36 ft.

VHF: Port Control on Channels 12 and 16 during normal office hours.

TUGS: No tugs available. Can be obtained from Suva if reasonable notice is given.

BERTHING: Berthing and unberthing at Vuda Point only in daylight. Berthing at Lautoka is at discretion of Harbour Master or Pilot, but in normal conditions is effected at any hour of day or night.

Berthing in Lautoka is generally effected port side to.

Wharf	*Length*	*Depth*
Queens West	457 ft.	36 ft.
Queens North	257 ft.	24 ft.
Queens East	423 ft.	12 ft.
*F.S.C.	271 ft.	32 ft.

*Bulk sugar loading installation for Fiji Sugar Corporation Ltd.

FUEL: Diesel fuel is available at the North and East berths on Queens Wharf.

FRESH WATER: Fresh water is available at all berths, there may be some restrictions in the dry season.

TANKERS: See "Max. Size". No slop discharge facilities. Discharge line 8 in. diameter.

DENSITY: 1025.

CONSULS: None.

REPAIRS: Only comparatively minor repairs can be effected such as welding jobs and repairs to pumps and other auxiliaries.

SURVEYORS: Not available.

REPATRIATION: Repatriations can be effected through vessel's Agents.

AIRPORT: Nandi International Airport is 16 miles from Lautoka. Frequent flights to all parts of the world by several major airlines operating through Nandi.

TIME: GMT plus 12 hours. No alterations to clocks.

HOLIDAYS: *Public holidays:* 1984.

New Year's Day	2nd January
Good Friday	20th April
Easter Saturday	21st April
Easter Monday	23rd April
Queen's Birthday	18th June
Bank Holiday	6th August
Fiji Day	8th October
Deepwali	24th October
Prince Charles' Birthday	12th November
Prophet Mohammed's Birthday	7th December
Christmas Day	25th December
Boxing Day	26th December

POLICE/AMBULANCE/FIRE: Dial 000 in emergency. Police, 60222; Ambulance, 60399; Fire, 60211.

SERVICES: Tank-cleaning labour and labour for painting, chipping, etc. can be provided, but no equipment. No facilities for discharge of slop tanks etc. Compass adjustments can be arranged.

Telephone connection on wharf (3 lines). Police post on wharf.

AUTHORITY: Ports Authority of Fiji, G.P.O. Box 780, Suva, Fiji. *Tel:* 312-700. *Telex:* 2203 PAF FJ. *Cables:* Pafiji Suva. *Contact:* Director General.

LEVUKA: 17.41 S. 178.51 E. (See Plan Book)

DOCUMENTS:

Goods carried in unregistered space (C.E. 148) (1 only).
List of articles in possession of Crew, Officers and Master (1 only).
Crew List (8 only).
Passenger List (8 only).
Parcel List (2 only).
Primary Health Report (1 only).
Special Malaria Forms (1 only).
Vaccination Certificates (1 for each person).
Derating Certificates (1 only).

PILOTAGE: Pilots are arranged through Agents.

MAX. SIZE: Length 560 ft. Max. draft 25 ft.

HEALTH: Radio pratique may be granted when any vessel has not visited any malarious port and Master declares that crew and passengers are healthy and vessel has not come from any area where internationally quarantinable diseases are endemic or in epidemic.

Vessel may then enter port by day or night. On berthing, Master must immediately deliver to Quarantine Officer fully completed Primary Health Report and Derat or Derat Exemption Certificate. If there is any suspected case of disease or fever on board, vessel must be anchored at Quarantine Anchorage until cleared by Port Medical Authority. Pratique is automatic if a vessel has been granted pratique at another port in Fiji.

TUGS: No tug service available.

BERTHING: Only 1 vessel berthing at a time.

Berthing in Levuka is generally effected starboard side to, outside Queens Wharf. Both dry cargo ships and tankers use the one berth available for overseas shipping at Levuka.

Wharf	*Length*	*Depth Alongside*
Outer Face	255 m. (837 ft.)	7.9 m. (26 ft.)
Inner Face	208 m. (683 ft.)	6.7 m. (22 ft.)

STEVEDORES: Estimated time of arrival of any vessel and tonnage of cargo to be discharged should be received at least 24 hours from time of arrival.

MEDICAL: Normal hospital facilities are available. Specialist services not available but can be arranged for within 24 hours. Smallpox, cholera and yellow fever valid Vaccination Certificates are required to be held by ship's crew and passengers except those coming from New Zealand, Australia, Kiribati, Tuvalu, Tonga or Samoa.

TANKERS: Load and discharge lines 8 in. steel pipe. 1 berth only.

DENSITY: 1025.

FRESH WATER: Available only during normal working hours, which is from 0600 to 1600 from Monday to Thursday, and Friday up to 1500. Rate of delivery of water is about 15 t.p.h.

FUEL: Light marine diesel only – viscosity kin. at 100°F. = 3.4.

FIRE PRECAUTIONS: Bunkering only permitted during period between sunrise and sunset.

GANGWAY/DECK WATCHMEN: Services of watchman highly recommended to stop unauthorised persons from going on board.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCES: All crew and Officers will be issued with 25 cigarettes per day. A maximum of 4 days' allowance may be given at any one time. Cigars or tobacco may be taken in lieu of cigarettes. Masters and other Officers may be allowed to keep in their possession small quantities of liquor.

Daily allowances: spirits, 1 reputed quart to Master; beer, 2 reputed quarts to other Officers; spirits, 0.25 reputed quart to other Officers; beer, 2 reputed quarts to Master.

IDENTIFICATION CARDS: Not compulsory.

CONSULS: None.

REPAIRS: Minor engine repairs are possible, but deck and major engine repairs could be carried out at Port of Suva, which is about 57 miles away.

REPATRIATION: Facilities exist for repatriation.

AIRPORT: Is situated on island of Viti Levu and the distance is about 200 miles. It is served by regular airlines (international). Connections twice daily from local airport, 12 miles from port.

TIME: GMT plus 12 hours.

HOLIDAYS: Working of cargo is not permitted on Sundays, Good Friday and Christmas Day. Application to work on Sundays to be made to the Ports Authority of Fiji at Levuka.

Public Holidays (1984): See "Lautoka".

POLICE/AMBULANCE/FIRE: Police, 44222; Ambulance, 44015; Fire, 44014.

TELEPHONES: Arrangements may be made with Postmaster for installing telephone on board.

GENERAL: Rat guards must be affixed to all shore moorings or cables greased when alongside to prevent the advent of rats.

SHORE LEAVE: All crew members are allowed shore leave unless there is a special restriction from any Government authorities.

DELAYS: No berthing at night (lines cleared by Quarantine Authorities). Bunkering from sunrise to sunset. No loading or discharge during rain.

AUTHORITY: Port Authority of Fiji, G.P.O.Box 780, Suva, Fiji. *Tel:* 312-700. *Telex:* 2203 Paf Fj. *Cables:* Pafiji Suva. *Contact:* Director General.

SUVA: 18.08 S. 178.26 E. **(See Plan Book)**

PORT LIMITS: A vessel is considered to be an "arrived vessel" having passed the West Reef Beacon at the entrance to Suva Harbour.

DOCUMENTS:

1 Last Port of Clearance Certificate.
2 Declaration of Nett and Unregistered Tonnage form.
8 Passenger Lists.
8 Crew Lists.
6 Stores Lists (for high duty goods).
Passenger liners are required to submit Transit Passenger Lists and also a letter of Guarantee from Master.
Vaccination Certificates for Passengers and Crew.
Derat Certificates.

PILOTAGE: Arranged through vessel's Agents. 24 hours notice of ETA with confirmation 12 hours before arrival. Suva Harbour Control should be contacted on Channel 16 and 20 VHF when within VHF range. Pilot vessel is a white clipper bow launch with word "Pilot" in black on each side and will leave wharf 30 minutes before signalled ETA of vessel. Pilots board on leads 5 miles from front lead. Vessels may stand in on leads to meet pilot vessel. Vessels are advised to provide 2 manropes for pilot ladder which will usually be required on the port side. No anchorage for vessels awaiting a Pilot.

ANCHORAGES: Safe anchorage may be found in depths of 10 to 20 fathoms within the harbour. Holding is good, mud bottom.

RESTRICTIONS: Vessels may enter at any time of day or night.

MAX. SIZE: No length or draft limitation for conventional vessels entering port. Largest vessel regularly entering is 42,000 tons.

HEALTH: Health authorities require that vessels cable details of ports visited within 50 days of ETA. Radio pratique will be granted to vessels which are healthy and have not visited a port in a malarial area within 50 days. Health authorities board and inspect any vessel which has visited a malarial port within 50 days and will spray any vessel which has visited a malarial port. Authorities board from a launch as vessel enters harbour. Quarantine Officer will sight Maritime Declaration of Health and Deratisation Certificate on boarding. No further pratique formalities are required in Fiji ports other than first port of entry.

RADIO: Suva Radio, call sign 3 DP. 500 kHz., 24 hours listening watch.

VHF: Port Control maintains a 24-hour port radio control watch at Suva on VHF Channels 16 and 20. The call sign is "Suva Harbour Control".

TUGS: One tug available – 1,125 h.p. Compulsory for vessels of 3,000 g.r.t. and upwards.

BERTHING: Vessels berth port or starboard side to King's Wharf or port or starboard side to Walu Bay Wharf as may be necessary. King's Wharf is 495.0 m. in length, having a least depth alongside of 11.6 m. at MLWS at the North end and 10.6 m. at the South end, whilst Walu Bay Wharf is 183.0 m. in length, having a least depth alongside of 9.0 m. MLWS.

Vegetable Oil: Vessels loading vegetable oils berth at Walu Bay or North King's Wharf.

LPG Carriers: Berth North King's Wharf or Walu Bay.

STEVEDORES: Arranged by ship's Agents.

Working Hours:

Day Shift:	0800 –c 1300 hrs.	: 5 hours
	1300 – 1400 hrs.	: unpaid meal break
	1400 – 1600 hrs.	: 2 hours
		7 hours
Afternoon Shift:	1600 – 2100 hrs.	: 5 hours
	2100 – 2200 hrs.	: unpaid meal break
	2200 – 2400 hrs.	: 2 hours
		7 hours
Night shift:	2400 – 0500 hrs.	: 5 hours
	0500 – 0600 hrs.	: unpaid meal break
	0600 – 0800 hrs.	: 2 hours
		7 hours

MEDICAL: Advance notice of medical assistance is desirable. Hospital facilities available. Current international vaccination certificates required.

TANKERS: Discharge lines 8 ins. diameter. Tankers discharge at King's Wharf, North and South Berths. Depths alongside 42 ft. No residue discharge facilities.

DENSITY: Salt water, density 1025 approx. No tide effect on density.

FRESH WATER: Available at all berths. Delivery rate 30 t.p.h. per hose.

FUEL: Furnace fuel oil, diesel fuel oil, gas oil available by prior arrangement through oil company.

GANGWAY/DECK WATCHMEN: Employment of deck/gangway watchmen is recommended and normally provided by ship's Agents.

OPENING/CLOSING HATCHES: Normally opened and closed by stevedore labour but crew may be employed at Master's discretion.

CERTIFICATES:

Load Line.
Certificate of Registry.
Safety Equipment Certificate.
Radio Certificate.
Derat Certificate.
Maritime Declaration of Health.

CUSTOMS ALLOWANCES: 1 oz. tobacco per man per day. No alcohol.

IDENTIFICATION CARDS: Not compulsory.

CONSULS: *Diplomatic Heads of Missions Resident in Fiji:*

Australian High Commissioner	H.E. Mr. Colin McDonald
British High Commissioner	H.E. Mr. Roger A. R. Barltrop
French Ambassador	H.E. Mr. Robert Puissant
Indian High Commissioner	H.E. Mr. C. P. Ravindranathan
Japanese Ambassador	H.E. Mr. Ken Ikebe
New Zealand High Commissioner	H.E. Lindsay J. Watt
Papua New Guinea High Commissioner	H.E. Mr. Naime Doko
Ambassador for the People's Republic of China	H.E. Mr. Shen Zhiwei
Tuvalu High Commissioner	H.E. Mr. Kitiseni Lopati
United States Ambassador	H.E. Mr. Fred J. Eckert
Malaysian Ambassador	H.E. Mr. Abdul Karim Bin Marzuki
South Korean Ambassador	H.E. Mr. Sung Kwoo Kim

Consular Representatives in Fiji:

Denmark	Mr. A. Dickson
Finland	Mr. S. L. Christian
Italy	Mr. R. M. Warner
West Germany	Mr. Gerald Barrack
Mexico	Mr. Simon C. Israel
Nauru	Mr. Francis Garoa
Netherlands	Mr. R. J. Woodman
Norway	Hon. Senator Sir Robert L. Munro
Pakistan	Mr. Rahim Zullah
Philippines	Mr. Abdul Lateef
Sweden	Mr. Aminiasi Katonivualiku

REPAIRS: Engine and deck repairs may be carried out at local machine shops.

REPATRIATION: Facilities exist for crew changes and repatriation.
AIRPORT: 15 miles to Nausori (Suva) Airport, serving Pacific Islands on weekly basis. Numerous daily flights to Nandi International Airport.
TIME: Local time is 12 hours ahead of GMT.
HOLIDAYS: See "Lautoka".
Cargo is not worked on Public Holidays.
POLICE/AMBULANCE/FIRE: Police, 311222; Hospital, 313444; Ambulance, 312439; Fire, 22688; Emergency, 000 for any of the above services.
TELEPHONES: Telephone connections to ships are provided.
SERVICES: Compass adjusting may be carried out.
SHORE LEAVE: Allowed.
DELAYS: Delays are not usual except for rain during hurricane season from November to April.
AUTHORITY: Ports Authority of Fiji. G.P.O.Box 780, Suva, Fiji. *Tel:* 312-700. *Telex:* 2203 Paf Fj. *Cables:* Pafiji Suva. *Contact:* Director General.

OUT PORTS OF SUVA: Customs and Pilot are embarked at Suva or Lautoka.

Ellington: Lat. 17.20° S., Long. 178.14° E. Private wharf for loading sugar and molasses from Raki Raki Mill.

Naikorokoro: North Coast of Kandavu. Anchorage for loading sawn timber.

Savu Savu: Lat. 16.47° S., Long. 179.21° E. Government wharf for local coast trade and anchorage for cruise vessels.

Vatia Point: Lat. 17.25° S., Long. 177.46° E. Private wharf for discharging explosives and fuel to gold mines.

NOTES

Please also advise Shipping Guides Ltd.

Finland

EKENAS/TAMMISAARI: 59.58 N. 23.26 E.

DOCUMENTS:

International or Finnish Measurements Certificate.
1 Personal Effects List.
1 Ship's Provisions List.
2 Crew Lists (passengers to be included).
1 Customs Declaration (official forms supplied by the Customs Authorities).
4 Manifests.
2 Bills of Lading.

PILOTAGE: Pilots for Ekenas/Tammisaari applied for at Hango Pilot Station by approaching pilot station outside Hango/Hanko, where pilot boat will meet vessel right outside pilot station.

Telegram address: Hango Pilot.

MAX. SIZE: Max. draft 15.1 ft. (4.6 m.). No other restrictions. At Skogby, draft up to 24 ft. – No tide.

RADIO: Hanko Radio, Call sign OFI.

TUGS: Normally no tugs stationed at Ekenas but can be arranged from Koverhar or Hanko (12 nautical miles and 20 nautical miles from Ekenas respectively).

BERTHING: Two quays at Ekenas: "Trakajen", length about 160 ft.; "Stenkajen", length about 500 ft.

3 mobile cranes, capacities 27, 36 and 56 tons are available. Two of the mobile cranes are equipped with grabs suitable for discharging of bulk cargoes such as coal, coke, china clay, ball clay, salt and grain.

Situated about 6 nautical miles from Ekenas is Skogby Sawmill Quay. Depth alongside 24 ft. Skogby Sawmill exports packed sawn goods and chipboard, mainly to U.K.

STEVEDORES: ETA to be given to Agent 1400 hrs. Finnish time on the day before arrival in order to prepare loading/discharging (Stevedore: J. A. Westerlund).

MEDICAL: Hospital treatment can be arranged when needed.

DENSITY: 1001.

FRESH WATER: Fresh water is delivered to the ship's side by means of hose in summertime. Also at Skogby.

FUEL: Bunkering available at Ekenas by means of tank trucks.

CUSTOMS ALLOWANCES: 200 cigarettes permitted for each crew member. 1 open bottle of 1 litre wine or spirit is allowed for each crew member over 18 years of age.

REPAIRS: Minor electrical and deck repairs may be carried out.

AIRPORT: Nearest airport is Helsinki Airport, situated about 100 km. from Ekenas.

HOLIDAYS: On Saturdays and days preceding Church holidays, the eve of Independence Day, the day preceding May Day, on Whitsun Eve and on New Year's Eve the working day consists of four working hours, starting from 0700 hrs. or 0800 hrs. and lasting to 1100 hrs., or 1200 hrs. respectively without break for meals. May Day, Independence Day, (6th December), Easter Saturday, Midsummer Eve and Christmas Eve are considered as labour free days.

POLICE/AMBULANCE/FIRE: Police, Tel. 002; Ambulance, Tel. 14100; Fire, Tel. 000.

TELEPHONES: There are no arrangements for placing telephones on board the vessel but telephone calls can be made from the Harbour Constable's Office.

SUPPLIES: Ship stores and provisions can be ordered from Hango through Agent.

SHORE LEAVE: Shore leave allowed for crew members.

IDENTIFICATION CARDS: Not needed.

OPENING/CLOSING HATCHES: Normally carried out by crew.

AUTHORITY: Hamnkontoret i Ekenas, Postbox 52, SF-10601 Ekenas. *Tel:* 911 – 12364. *Telex:* 13 – 121 Sbrok Sf. *Contact:* Rolf Artzen, Harbour Master.

HAMINA: 60.34 N. 27.11 E. (See Plan Book)

PORT LIMITS: A vessel is considered to be an "arrived vessel" subject to Charter Party Terms, when arrived at roads.

DOCUMENTS: Normally required:

1 Crew List.
1 Passenger List.
3 Manifests.
1 Bill of Lading of each consignment.

Customs Documents:
1 Special List (personal effects).
1 Provision List (Ship's Articles).

Ship's Papers Required:
Safety Equipment Certificate.
Radio Safety Certificate.
Construction Certificate.
International Tonnage Certificate.
International Load Line Certificate.
Certificate of Registry.
Tonnage Dues and Ice Dues Certificates if vessel called earlier.

PILOTAGE: Sea Pilot boards at Orrengrund. Fairway 33 miles from Orrengrund to Hamina, depth 9.0 m. New Fairway 38 miles long depth 10.0 m. VHF radio telephone Channel 16; pilot boat: hull red, superstructure yellow. Vessels coming from Eastward can take Pilot at Haapasaari (Aspo), but must order Pilot by radio via Coast Radio Station at least 6 hours before ETA Haapasaari.

Harbour Pilotage: Harbour Pilot takes over at Roads. Harbour pilot boat: hull black, superstructure yellow, word "Pilot" painted with black letters. Harbour pilotage optional.

ANCHORAGES: 2 anchorages with good holding grounds at Roads.

RESTRICTIONS: Usually no restrictions. Max. draft 10.0 m. Port open throughout year.

MAX. SIZE: Draft is governing factor. No tide but prolonged Easterly winds can cause lower water level, which must be checked before entering berths.

HEALTH: Bill of Health not required. In case suspected disease or fever on board, doctor to be contacted, preferably via Agent, by radio before arrival.

RADIO: Vessels in Baltic Sea usually contact Helsinki Radio/OHC, A1 and OHG, A3. VHF Channels 16 and 26. Vessels in Eastern part of Gulf of Finland contact Kotka Radio/OHF, A1 and OFU, A3. VHF Channels 16, 25 and 27.

RADAR/VHF: There is no land radar service. Harbour is equipped with VHF radio telephone, Channels 16 and 12. Also see "Radio".

TUGS: Join vessels at Roads. Ship's lines usually used.

BERTHING:

Quay	*No.*	*Draft* (m.)	*Length* (m.)
Coal Quay		6.9	345
Lakulahti (L)	L1 – 2	8.6	216
	L3 – 8	7.9	591
L5 – Ro/Ro		7.9	
Hiirenkari	1 – 2	7.9	158
	3	8.4	110 also Ro/Ro
	4 – 5	8.6	200
HK6 – Ro/Ro		7.4	
Hailikari		3.9	62
Palokangas	PK1	10.0	176 also Ro/Ro
Oil Pier	1	7.4–9.0	
	2	10.0	
Roads		7.9–8.6	
Outer Roads		10.0	

CRANES:

	No.	*Capacity/Tons*	*Type*
Coal Quay	3	5	
	2	6.5	
	7	5 – 36	mobile
Hiirenkari Quay	1	33	container

STEVEDORES: ETA is expected in good time before arrival.

MEDICAL: Advance notice helpful but not compulsory. Hospital facilities available at town.

TANKERS: Possibility to discharge oily water ballast.

Also see "Berthing".

DENSITY: 1003.

FRESH WATER: Available at majority of quays; elsewhere supplied by boat.

FUEL: Fuel and diesel oils available at short notice. Delivery by tank truck.

GANGWAY/DECK WATCHMEN: Shore watchmen available, Sundays and holidays 100% extra.

OPENING/CLOSING HATCHES: Crew close automatic hatch covers. Hatches to be covered manually are usually covered by stevedores.

CUSTOMS ALLOWANCES: Tobacco: Master 200 cigarettes or 200 grams tobacco. Others, 100 cigarettes or 100 grams tobacco. Wine and/or Spirit: Master, 3 bottles wine or spirits. Others, 1 bottle.

CONSULS: Great Britain, Denmark, Netherlands, Norway, Sweden.

REPAIRS: Minor repairs effected.

REPATRIATION: There are facilities for repatriation.

AIRPORT: Helsinki Airport, distance 145 km. Regular flights.

TIME: Local time is GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: New Year's Day (Jan. 1); Epiphany (Jan. 6); Good Friday; Easter Monday; Labour Day (May 1); Ascension Day; Whit Monday; Midsummer Day; All Saints' Day; Independence Day (Dec. 6); Christmas (Dec. 25 and 26); Midsummer's Eve.

POLICE/AMBULANCE/FIRE: Police 1; Ambulance 1; Fire 000.

TELEPHONES: None available for placing on board.

REGULATIONS: Regular terminal vessels have preference at certain berths.

AUTHORITY: Port of Hamina Authority, PL 14, SF-49401 Hamina. *Tel:* 952-54940. *Contact:* Tapio Mansikka, Harbour Master. S. Vaulo, Port Director.

HANKO: 59.49 N. 22.58 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Crew List.
Manifests.
Bills of Lading.
Provisions List.
Health Certificate.

PILOTAGE: Compulsory, distance from sea to port is 6 miles. Pilot boat painted red, arriving outside Russaro called by radio via Hanko Radio or by flag, sound or Morse: "G".

ANCHORAGES: Inside Gustavsvarn.

RESTRICTIONS: Draft 26.5 ft., length/breadth no restriction; no tide.

RADIO: Cable Agents giving ETA via Hanko or Helsinki Radio.

RADAR: At pilot station; service for ships entering port, contact by ship's radio.

TUGS: In Winter harbour tug boat helps ships to and from the quay.

BERTHING: Advise Pilot. Depths at piers 19 ft. – 29 ft. Quay height about 6 ft. above sea level. Shore fenders keep vessel about 2 ft. off quay. Special quays for roll-on/roll-off traffic.

Quay	*Permitted draft in feet*	*Length of quays metres*
Germany	19	150
Great Mole	22 04 in.	704
Notholms	24	275
	26	150
Free Harbour	25	170
Kone Oy	20	125 (railway connection and shore cranes).
Deep Quay	43	300

CRANES:

	No.	*Capacity/tons*	*Type*
Great Mole	1	6	Movable
	2	3	"
Notholms quay	1	2.5	"
	2	5	" 1 with grabs
	1	40	"

Free Harbour: One mobile crane, lifting capacity 40 tons. 21 fork lift trucks available.

STEVEDORES: Ordered by Agents.
FRESH WATER: Delivered from shore installations during daytime. Rate of delivery about 20 t.p.h.
FUEL: Delivered by rail cars only.
DENSITY: 1005.
WATCHMEN: Available but not compulsory.
HATCHES: Crew allowed to open and close hatches.
CUSTOMS ALLOWANCES: No restrictions in the Free Port, outside about 200 cigarettes and limited amount spirits per man.
IDENTIFICATION CARDS: Not required.
CONSULS: Denmark, Iceland, Netherlands, Norway, Spain, Sweden.
REPAIRS: Small repairs possible.
SURVEYORS: Surveyors and cargo inspectors available.
TIME: Local time GMT plus 2 hours. GMT plus 3 hours in Summer.
POLICE/AMBULANCE/FIRE: Police 003; Fire 005; Ambulance 82228.
STORING: Storing possible by barge or truck. Fork lift trucks and riggers available.
AUTHORITY: Port of Hanko, Bulevardi 15, 10900 Hanko. *Tel:* (911) 83131. *Contact:* Tom Luoma, Port Director, *Tel:* (911) 81217.
Harbour Master, *Tel:* (911) 81201.

HELSINKI: 60.10 N. 24.57 E. (See Plan Book)

DOCUMENTS: See "Oulu".
PILOTAGE: Compulsory. ETA required 24 hours prior arrival. At present there are 3 different channels available for vessels approaching Helsinki.

1. Helsinki Lighthouse-Harmaja-Helsinki. This may be considered the main approach to Helsinki. Helsinki Lighthouse is situated in the Gulf of Finland, off the outermost shoals South of Helsinki, at a distance of about 22 km. from the port. The channel is navigable by vessels drawing up to 9.6 m. (31 ft. 6 in.). Pilots are picked up from the pilot station at Harmaja.

2. Helsinki Lighthouse-Melkki-Helsinki. This 11 m. channel leads from Helsinki Lighthouse, passing between the islands of Pihlajasaari and Melkki, to Ferry Berth 4 in the West Harbour. The fairway is navigable at all times of day or night, and is lit and marked with buoys that allow for passage under winter ice conditions. Pilots are picked up from the Harmaja Pilot Station.

3. Porkkala-Helsinki. A 10 m. deep fairway leads from the open sea from a point 9 km. West of the Porkkala Lighthouse, and joins a 9 m. coastal channel leading to Helsinki just North of the Suvisaaristo group of islands. Merging with this channel is the one from the West of Porkkala, which joins on the Southern side of Stor Trask, and a channel from the East, which meets it North of Pihlajasaari. Both these are navigable to a depth of 7.9 m. The Pilot is taken on from the Porkkala Pilot Station.

Harmaja Sea-Pilot Station: Tel. 668 122. Harbour Pilots at Harbour Office: Tel. 169-3777 or 631251.
ANCHORAGES: Good anchorage available outside harbour, depth 26 ft. – 32 ft. clay bottom.
MAX. SIZE: Draft 31 ft., length no limit.
HEALTH: See "Oulu".
VHF: Harmaja Pilots, Porkkala Pilots and Port Authority call VHF Channel 16 or 13.
DIRECTION FINDING: Harmaja Radio Beacon (frequency 298.8 kHz. Signal "HA") transmits:
Non-directional radio signals, with a modulation frequency of 395 kHz. By listening to these signals with a direction finding receiver, equipped with frame aerial, a ship can determine her bearing to the beacon.
Harmaja lighthouse and Helsinki lighthouse fitted with "Racon" for 3 cm. radar (X-area).
DEPTH OF CHANNELS:
From Helsinki to East 9 m.
From Helsinki Lighthouse to Helsinki 9.6 m. and 11.0 m.
From sea South via Porkkala 9.0 m.
TUGS: Several available: charges based upon time when tug leaves station berth until moment of return to same station.
BERTHING: Port and equipment owned by Municipality of Helsinki. 5 principal parts of port are South Harbour and West Harbour, Sornainen Harbour, and Herttoniemi and Laajasalo Oil Harbours.

Foreign passenger traffic is concentrated on the South Harbour.

West Harbour handles main part of transoceanic traffic; heavy goods and container terminal in West Harbour fitted with 1 container crane and 1 multi-purpose crane (lifting capacity of each 40 tons), also silos of 2 flour-milling plants (Vaasan mylly Oy and State Granary), into which grain discharged by suction. On silo quay pneumatic grain unloader owned by State Granary travels along 71 m. long bridge alongside ship to be unloaded. Equipment is 30 m. above quay level and range of suction pipe 11 m. from edge of quay. Unloading equipment can handle 100 t.p.h. Mass export articles such as cellulose, paper and wood goods, loaded chiefly in this harbour. In West Harbour is free-zone warehouse, which offers same privileges as free port.

The Sornainen Harbour operates mainly as a North Sea general cargo harbour. The area contains a coal harbour.

Herttoniemi and Laajasalo form the oil harbour, where the leading oil companies have oil storage tanks and their own piers.

See Tables below and opposite.

South Harbour:

					Lifting cranes and ramps		
South Harbour		*Length (m.)*	*Depth (m.)*	*Depths[1] alongside (m.)*	*Number and type of crane*	*Lifting capacity tons*	*Radius (m.)*
Olympia Quay	LP 1[2]	150	7.9	7.5			
" "	LP 2	190	7.9	8.3			
Makasiini Quay	LP 3	140	7.9	7.0			
" "	LP 4	130	6.9	7.0			
Pakkahuone Quay		135		5.5			
Lubeck Quay		95	3.5	2.5 – 3.5			
Keisarinluoto Quay		75		3.0			
Linna Quay		96		3.0			
Katajanokka Quay		70		3.5			
" "	LP 5[3]	1084	9.0	8.5 – 9.0	4 Portal cranes	1.5–3	20/11
" "	LP 6[4]						
" "	LP 7[4]						
Private Pier		280	9.6	10.0			

			Ramp details		
Quay		*Height above mean water*	*Width*	*Centre line from quay side*	*Max. axle load Max. bogie load*
Olympia Quay					
Adjustable ramp	LP 1	1.8 m. – 3.35 m.	12.0 m.	9.5 m.	30 (60) tons
Adjustable ramp	LP 2	1.4 m. – 3.5 m.	22.0 m.	14.0 m.	
Makasiini Quay					
Fixed ramps	LP 3 and LP 4	1.65 m. – 2.2 m.	16.5 m.	8.2 m.	
Katajanokka Quay					
Fixed ramp	LP 5	2.3 m. – 2.7 m.	15.0 m.	10.8 m.	
Fixed ramp	LP 6	1.5 m. – 2.10 m.	20.0 m.	10.0 m.	
Adjustable ramp	LP 7	1.5 m. – 3.2 m.	13.0 m.	11.0 m.	

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[1] Minimum depth from mean water mark to bottom. [2] Olympia Terminal. [3] Passenger Terminal K5. [4] Katajanokka Terminal.

Berthing (continued)

West Harbour:

West Harbour		*Length (m.)*	*Depth (m.)*	*Depths[1] alongside (m.)*	*Lifting cranes and ramps* *Number and type of crane*	*Lifting capacity tons*	*Radius (m.)*
Salmisaari Quay		124	7.3	8.0			
Tammasaari Quay		135	6.9	7.8			
Energy Board Oil Quay		60	8.9	10.0			
Jaalaranta Quay		20		3.9			
Saukko Quay	LP5	527	8.9	5.2 – 8.5	1 Container crane for 20 ft. – 40 ft. containers	40	24
Jatkasaari Quay		1,335	8.9	3.4 – 9.8	Cranes for general cargo:		
,, ,,			8.9		23 portal cranes	1.5 – 6.0	15 – 12.5
	LP1		8.9		1 stationary crane	10 – 25	19.5 – 9.5
,, ,,	LP2		8.9				
Sampo Quay		187	8.9	5.5			
Valtameri Quay	LP 3	210	11.0	11.0	1 Multi-purpose crane	30.5 – 40	23.3
Melkki Quay	LP 4	220	11.0	12.1	Hook	10	25.8
Silli Quay		177		3.4–5.5			
Hietalahti Quay		165		6.5–7.0			
Munkkisaari Quay		360	8.9	7.3–8.2	Pneumatic grain unloader[2]	100 t.p.h.	
Hernesaari Quay		260	8.9	7.3			
Rudus Quay		48					

Ramp details

Quay		*Height above mean water*	*Width*	*Centre line from quay side*	*Max. axle Load Max. bogie load*
Jatkasaari Quay					
Fixed ramp	LP 1	2.60 m. – 3.00 m.	20.5 m.	10.3 m.	50 tons
Adjustable ramp	LP 2	1.15 m. – 4.25 m.	17.0 m.	11.0 m.	50 tons
Valtameri Quay					
Adjustable ramp	LP 3	1.85 m. – 4.15 m.	17.0 m.	11.0 m.	52 tons
Melkki Quay					
Fixed ramp	LP 4	1.30 m. – 2.60 m.	31.0 m.	17.5 m.	
Soukko Quay					
Floating ramp	LP 5	1.30 m. – 2.60 m.	28.5 m.	14.25 m.	
Hernesaari Quay					
Floating ramp		2.4 m. – 3.0 m.	11.4 m.	10.0 m.	10 (16) tons

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[1] Minimum depth from mean water mark to bottom. [2] Belonging to the state granary.

Sornainen Harbour:

Sornainen Harbour		*Length (m.)*	*Depth (m.)*	*Depths[1] alongside (m.)*	*Lifting cranes and ramps* *Number and type of crane*	*Lifting capacity tons*	*Radius (m.)*
Hanasaari Quay		648	9.0	7.0 – 9.6	2 Portal cranes for discharging of coal[2]	6.2	16.6
					1 Stationary crane	150.0 50.0 30.0	10.0 18.0 20.0
Oy Partek Quay		100	5.5	6.0			
Parru Quay	LP 1A	155	9.0	8.5	4 Portal cranes	6.0	16.6
Sompa Quay	LP 1	912	9.0	8.2			
	LP 2		9.0	7.0	Cranes for general cargo:		
	LP 2A			7.0	1 universal crane	30.5 – 40	24.3
					Container/Grab hook	10.0	26.8
						11 cu.m.	24.3
	LP 3			7.5	6 Portal cranes	3–5	22.8 – 14.8
Sompa Eastern Quay		399	6.1	5.5	Cranes for general cargo:		
					2 Portal cranes	3–5	22.3 – 14.3

Ramp details

Quay		*Height above mean water*	*Width*	*Centre line from quay side*	*Max. axle load Max. bogie load*
Parru Quay					
Adjustable ramp	LP 1A	0.7 m. – 3.8 m.	17.0 m.	11.0 m.	50 tons
Sompa Quay					
Adjustable ramp	LP 1	1.2 m. – 3.9 m.	19.0 m.	12.5 m.	35 (70) tons
Fixed ramp	LP 2	1.5 m. – 2.6 m.	14.0 m.	10.0 m.	
Floating ramp	LP 2A	1.9 m. – 2.5 m.	18.5 m.	9.25 m.	22 (44) tons
Adjustable ramp	LP 3	1.4 m. – 4.3 m.	15.0 m.	13.0 m.	50 tons

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[1] Minimum depth from mean water mark to bottom. [2] Belonging to the municipal electricity works.

BULK HANDLING FACILITIES: Specially equipped berths for handling bulk cargoes in Sornainen Harbour. Berths equipped for containers or roll-on/roll-off traffic in West Harbour (40-ton container crane and multi-purpose crane) and Sornainen Harbour.

STEVEDORES: 24 hours ETA required. Companies available of which 2 specialise in discharging timber and coal.

Working hours: Weekdays, 0700 – 1600 hrs. and 1600 – 2230 hrs. Saturdays, 0700 – 1500 hrs. Lunch break weekdays and Saturdays 1100 – 1130 hrs.

MEDICAL: Agents to be informed by radio if fever suspected.

TANKERS: Max. draft 9.6 m.

Herttoniemi and Laajasalo form together the oil harbour of Helsinki, where the leading oil companies have oil tanks and their own piers.

Harbour	*Quay length* (m.)	*Depth alongside* (m.)	*Depth of channel* (m.)
Herttoniemi Oil Harbour:			8.0
Oil pier	2×96	8.25	
Oljynpuristamo Co's pier	100		
Elo Co's pier	24		8.0
Laajasalo Oil Harbour:			9.6
Shell Co's pier	32	10.0	
Esso Co's pier	30	10.6	
Neste Co's pier	58	10.2	

DENSITY: Fresh water.

FRESH WATER: Unlimited amount available by hoses from hydrants at quays.

FUEL: All grades available; any amount at short notice.

GANGWAY/DECK WATCHMEN: Recommended but not necessary.

OPENING/CLOSING HATCHES: Crew/Stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle wine or spirits each man.

IDENTIFICATION CARDS: Not needed.

CONSULS: All maritime countries are represented in Helsinki.

REPAIRS: All types available.

DRY DOCKS: *Valmet Oy Helsinki Shipyard:*

Dock	*Extreme length* (m.)	*Breadth at entrance* (m.)	*Depth on sill* (m.)	*Location*
Dry dock 1	120	18	6.5	Suomenlinna
Dry dock 2	141	15	4.9	Suomenlinna
Dry dock 3	380	56	8.5	Vuosaari

Dock	*Extreme length* (m.)	*Max. draft above keel* (m.)	*Lifting power tons*	*Location*
Floating dock	165	7.8	12,000	Vuosaari

Oy Wartsila Ab Helsinki Shipyard:

Dock	*Extreme length* (m.)	*Breadth at entrance* (m.)	*Depth on sill* (m.)	*Location*
Dry dock 1	142	20	6.6	Hietalahti
Dry dock 2	208	34	9.5	Hietalahti

REPATRIATION: Available.

AIRPORT: Distance to airport 25 km. Flights every day all over Europe.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: New Year's Day (1st January); Epiphany; Good Friday; Easter Monday; Workers' Holidays (1st May); Ascension; Whit Monday; Midsummer Day; All Saints' Day; Independence Day (6th December); Christmas Eve; Christmas Day (25th December); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Police 002; Ambulance 006; Fire 005. General alarm 000.

TELEPHONES: Available.

SERVICES: Compasses are adjusted by competent adjusters approved by the Board of Navigation. For compass adjustment the port has constructed piles or buoys with direction markings. These appliances can be used also for radio direction-finders.

Vessels using the compass-adjustment facilities must have on board a Harbour Pilot, who is entitled to the same compensation as for harbour pilotage.

CLASSIFICATION SURVEYORS: Lloyd's Register of Shipping, Bureau Veritas, American Bureau of Shipping, Germanischer Lloyd, Det Norske Veritas.

ICEBREAKERS: *Teuvo*, length 39.9 m., breadth 12.9 m., fitted with 2 combined water/foam cannons for fire fighting purposes, total capacity of 300 cu.m.p.h. VHF-telephone: call OIEV.

During ice seasons one of the following Government icebreakers assigned to assist ships from open water to harbour area and vice versa:

	Length (m.)	*Breadth (m.)*
Varma	86.5	21.2
Apu	86.5	21.2
Tarmo	84.0	21.1
Voima	83.5	19.4
Sampo	74.6	17.4
Murtaja	74.1	17.4
Karhu	74.1	17.4
Hanse	74.6	17.4
Sisu	104.7	23.8
Urho	104.7	23.8

Masters should communicate with icebreakers between January and March.

DEVELOPMENTS: *New Quay in the West Harbour:* The new ferry-berth (LP 4), was finished in 1981 and the draft of which is 11 m. The quay will be furnished with a 40 ton multipurpose crane.

AUTHORITY: Port of Helsinki Authority, Etelaranta 10, P.O.Box 26, 00131 Helsinki 13, Finland. *Tel:* 358-0-1691. *Telex:* 124913. *Contact:* Mr. Eljas Muurinen, Managing Director (*Tel:* 169 3801.) Mr. Juha Lainio, Harbour Master (*Tel:* 169 3775).

INKOO: 60.01 N. 23.55 E.

PILOTAGE: Pilot station is Porkkala pilot station. Pilotage service 24 hours a day, VHF watch on Channels 16 and 13, 24 hours a day. Notice must be given 2 hours before arrival at boarding place (Lat. 59° 54′ N., Long. 24° 12′ E.). Distance from boarding place to harbour area about 14 miles. Pilot may also be ordered by telephoning Helsinki 2984112.

APPROACHES: Max. draft 13 m., turning place for large vessels (over 200 m. LOA) is 1 mile East of harbour area.

MAX. SIZE: See "Berthing".

ANCHORAGES: 2-4 miles S.W. of Sommaro Island.

VHF: Call sign "Inkoo Harbour", watch maintained 16 hours a day on Channel 16.

TUGS: Tugs are available at any time, notice required is same as Pilot. If the vessel is over 200 m. LOA tug joins at Fagero Island about 5 miles before harbour area, otherwise tugs join at the turning place 1 mile before harbour area. Tugs use ship's lines.

BERTHING:

Oy Lohja Harbour: Max. draft 7.8 m.

Coal Quay: Length 175 m., 2 cranes, 10 tons and 6 tons by hook and half the capacity by grab.

Paper Quay: Length 140 m., mobile cranes available.

Imatran Voima Oy Inkoo Power Plant: Max. draft 13 m. and 10 m.

Total length of quay 455 m., max. draft 13 m. at the East part of the quay (240 m.), and the West part, max. draft 10 m. (length 215 m.). 3 cranes, 10 tons each by hook and half the capacity by grab, working area 410 m.

Inga Hamn – Inkoon Satama Oy: Same as the East part of Inkoo Power Plant.

FRESH WATER: Available.

DENSITY: 1004.

DEVELOPMENTS: Dredging underway.

AUTHORITY: *Oy Lohja Harbour:* Oy LK-Shipping AB, 10210 Inkoo, Finland. *Tel:* (International) 3580218121. *Telex:* 1418 Lkin Sf. *Cables:* Elcoy. *Contact:* Rolf Danielsson.

Imatram Voima Oy, Inkoo Power Plant Harbour: Imatram Voima Oy, Inkoo Power Plant, 10210 Inkoo, Finland. *Tel:* (National) (09)-2180410; (International) 35802180410. *Telex:* 1422 Ivoin Sf. *Cables:* Imatranvoima Inkoo. *Contact:* Kenneth Kullstrom.

JAKOBSTAD (Alholmen): 63.42 N. 22.42 E.

(See Plan Book)

DOCUMENTS:

International Measurement Certificate.
3 Manifests.
2 Bills of Lading of each consignment.

Customs Documents:

1 Crew List.
1 Special List (personal effects).
1 Provision List (ship's articles).

Important: If the vessel is calling at two or more Finnish ports, 2 of each of these lists are to be produced at the first port of call.

PILOTAGE: VHF Channel 16, MF 2182 kHz. Anchorage for vessel awaiting a Pilot: outside the lighthouse "Kallan". Pilot boat equipped with radar.

ANCHORAGES: On inner roads called "Ado Roads", depth 8 m.

MAX. SIZE: Max. draft in the inner harbour 9.0 m. No tide.

HEALTH: See "Oulu".

RADIO: Vasa Radio Station. Gamlakarleby/Kokkola VHF Channel 28.

TUGS: Tugs (1,300 h.p.) are normally stationed in the harbour. Ship's lines to be used.

BERTHING: New Quay: Length 200 m., depth 7.4 m.

Old Quay: Length 180 m., depth 4.9 m. (inside), 6.0 m. (outside).
Busko Quay (Ro/Ro Berth): Length 160 m., depth 7.4 m.
Laucko Quay: Length 150 m., depth 9 m.
Elevator Quay: Depth 6 m.

CRANES: 6 mobile cranes available.

STEVEDORES: 1st shift Monday to Saturday 0700 – 1600 hrs. (meal hours 1100 – 1200 hrs.); 2nd shift Monday to Friday 1600 – 2400 hrs. To commence loading at 0700 hrs. notice must be given latest at 1600 hrs. the day before, or before 1200 hrs. if commencing at 1600 hrs.

MEDICAL: Advance notice not required. All facilities available.

TANKERS: Vessel's draft must not exceed 9.0 m.

DENSITY: Fresh water.

FRESH WATER: From pipe-line alongside quay.

FUEL: Light Fuel Oil and Heavy Fuel Oil available.

GANGWAY/DECK WATCHMEN: Watchmen recommended.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Derat Certificate to be kept on board.

CUSTOMS ALLOWANCES: Tobacco: 100 cigarettes per 3 days for each crew member. Wine and/or Spirits: 1 bottle per 6 days for each man over 20 years of age.

IDENTIFICATION CARDS: Not needed.
CONSULS: Danish, Tel: 10144; Swedish, Tel: 10444.
REPAIRS: All types of repairs possible.
REPATRIATION: Crew changes can be effected.
AIRPORT: Kronoby Airport about 30 km. from Jakobstad. 4 flights daily.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: 1st and 6th January; Good Friday; Easter Eve; Easter Monday; Labour Day (1st May); Ascension Day; Midsummer Eve; Whit Monday; 6th December (Independence Day); 25/26th December; All Saints' Day.
POLICE/AMBULANCE/FIRE: Police 002; Ambulance and Fire 005.
TELEPHONES: Connection for telephone on board available.
DEVELOPMENTS: A ramp for passenger ships under construction, depth 6 m. Ready for use 1984.

The new depth will be 9 m. in the fairway to port and at the quay under construction.
AUTHORITY: Jakobstad Port Authority, SF 68600 Pietarsaari, Finland. *Tel:* 967-10034. *Contact:* Ingmar Fagerudd, Harbour Master.

KASKO (KASKINEN): 62.23 N. 21.13 E. (See Plan Book)

DOCUMENTS:

2 Crew Lists.
2 Customs Lists.
2 Passenger Lists.
Manifest, Bill of Lading, etc.

Between 1st December – 30th April (Winter) ice breaker available. The Finnish Ice Class Certificate, (required since 1984) can be obtained in Kaskinen.
PILOTAGE: Pilot boards 4 miles outside pilot station. Pilot boat or station can be called by radio telephone 2182 or VHF Channel 16. Notice is not required. Pilot can be called, daytime flag "G" or "PT", night-time by Morse "PT".
ANCHORAGES: Safe areas of anchorages, 3 miles W.S.W. of pilot station Salgrund, depths 10 m. – 20 m.
MAX. SIZE: Max. draft 8 m.
HEALTH: Pratique automatic. In case of sickness onboard, contact the Agent.
RADIO: Vasa Radio.
VHF: VHF Channel 16 (Salgrund Pilot).
TUGS: None.
BERTHING:

Pier 112 m. length, 8.5 m. depth
Pier 35 m. length, 7.0 m. depth
Pier 130 m. length, 6.8 m. depth

DENSITY: 1004.
STEVEDORES: Available; rates about 250 – 300 tons pulp per work gang.
MEDICAL: Hospital available.
FRESH WATER: By pipe-line.
FUEL: Available by tank truck.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes. Wine/Spirit: 1 bottle spirit.
CONSULS: None.
REPAIRS: Only small repairs.
AIRPORT: Distance to Vasa Airport 100 km. Served by regular airlines.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: See "Oulu".
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 006; Fire 005.
TELEPHONE: Can be connected. No cost for connection.
SHORE LEAVE: Allowed.
GENERAL: Port is the most Northern in Finland which under reasonable conditions can be kept open throughout Winter.
AUTHORITY: Kasko Hamnkontor (Harbour Office), 64260 Kaskinen, Finland. *Tel:* 962 – 27201. *Contact:* Matti Vihanto, Harbour Master.

KEMI (Ajos): 65.40 N. 24.31 E. (See Plan Book)

LOCATION: Ajos harbour is a municipal port owned and managed by the city of Kemi. It is located at Ajos, about 10 km. (6 nautical miles) South of Kemi, Lat. 65° 40′ N., Long. 24° 31′ E. The area is shown on Finnish Charts Number 275 and Number 59.
APPROACHES: The distance from Kemi lighthouse to the harbour is about 21 nautical miles (39 km.). The minimum width of the channel is 100 m. (328 ft.), and approved depth up to the oil harbour is 10 m. (32.8 ft.).

The water level varies between +1.5 m. and −0.75 m. (+5 ft. and −2.5 ft.) depending on winds (water level rises during Southerly and falls rapidly during Northerly winds). There are no tides in the area.

During normal winters the harbour is frozen from the beginning of December to the end of May. Over this period the channel from the open sea to the harbour area is kept navigable by state-owned ice-breakers. The Finnish Board of Navigation determines the restrictions and requirements for vessels allowed to enter the harbour during this period. The port has been kept open throughout the year since 1971.
DOCUMENTS: Documents to be handed over after berthing:

2 Crew Lists.
1 Provision List.
1 Special List (Customs).
Tonnage Certificate.
The usual Cargo Documents.

PILOTAGE: Pilot boards from "Kemi I" Lighthouse or Nukkujanmatala Lighthouse. VHF and radio telephone watch maintained.
RESTRICTIONS: Ships can enter and leave Ajos harbour 24 hours a day.
MAX. SIZE: Sea to Fairway at Ajos. Max. draft 10 m. Sea to Fairway at Veitsiluoto. Max. draft 7.1 m. Also see "Berthing".
RADIO: *Entering the Harbour:* Time passing Kiel/Holtenau/Copenhagen is to be given via Harnosand Radio, Mariehamn Radio or Stockholm Radio.

ETA to be given 12 hours before the calculated time of arrival.

Notice is to be given to the pilot station, which is situated at the S.W.-end of Ajos Island via VHF Channels 16/13 two hours before ETA at the pilot embarking point, which is between Kemi lighthouse and lighthouse Nukkujanmatala depending on the weather.

The notice is to include the name, call sign and the nationality of the vessel, n.r.t., the draft and length of the vessel, time of arrival (at the Pilot's boarding site) and tugs needed for berthing.
TUGS: Icebreaker tugs of 3,500 h.p., 1,300 h.p. and 600 h.p. Ship's lines used.
BERTHING:

Quays:	*Length* (m.)	*Depth* (m.)	*Permitted draft* (m.)
Oil Quay	90	11.5	10
No. 1	420	7.8–8.8	6.8–7.8
No. 2	315	4.5–9.4	3.9–9.4
No. 3	185	5.9	5.3
No. 4	168	5.9	5.3
Ro/Ro Berth	—	6.8	—

CRANES: Mobile cranes. 2×6 tons capacity; 2×55 tons capacity; 18×5 tons – 25 tons capacity.
FRESH WATER: Available at Quay Nos. 1 and 2.
FUEL: Available.
DENSITY: 1001.
AIRPORT: At Lautiosaari, Tel: 53519.
TIME: GMT plus 2 hours.
TELEPHONES: Lines on the quays at Berth Nos. 1 and 2 and the Ro/Ro Berth.
POLICE/AMBULANCE/FIRE: Police Tel: 16981. First Aid Tel: 23931.
AUTHORITY: Port of Kemi Authority, E. Rantakatu 30, 94100 Kemi 10, Finland. *Tel:* 980-21056. *Contact:* Heikki Honkaheimo, Port Captain, *Tel:* 980–32667 (after hours).

KOKKOLA (Yxpila): 63.50 N. 23.08 E.

DOCUMENTS:

2 Crew Lists.
2 Customs Lists.
2 Passenger Lists.
Manifest, Bill of Lading.

PILOTAGE: Pilot boards 2 miles North of Tankar Pilot Station. Pilot on VHF Channel 16. Distance to port 12 miles.

The vessel's ETA must be given at least 6 hours in advance of arrival at pilot station.
ANCHORAGES: 1 mile North of the breakwater.
RESTRICTIONS: *Winter Navigation:* The port is open round the year. Ice class restrictions apply in Winter.
MAX. SIZE: No restrictions except draft 9.5 m.
VHF: Vassa Radio VHF Channel 28. Kokkola Harbour Office Channel 16.
TUGS: 2 tugs available,: 400 h.p. and 1,500 h.p. Normally ship's lines used.
BERTHING:

	Length	*Max. draft*
Shore Quay (South side)	323 m.	9.5 m.
Shore Quay (North side)	100 m.	7.1 m.
Stone Pier	137 m.	7.1 m.
Outokumpu Quay	210 m.	9.5 m.
Kemira Quay	160 m.	9.5 m.
Packhouse Quay	126 m.	4.4 m.
Oil Quay	83 m.	9.5 m.

STEVEDORES: Normally working Monday-Friday 0700 – 2400 hrs. On Saturday 0700 – 1200 hrs.
CRANES: 2×8 ton cranes at Shore Quay. 1×10 ton crane at Outokumpu. 1×8 ton crane at Kemira Quay. 5 mobile cranes 10 – 41 tons.
BULK CARGO FACILITIES: Discharging belt for zinc concentrate at Outokumpu Quay. Loading and discharging facilities for fertilisers at Shore and Kemira Quays.

Liquid Chemicals: Discharging lines for phosphorus and nitric acid at Kemira Quay. Loading lines for sulphurous acid at Oil Quay.
TANKERS: Discharging lines for oil at Outokumpu and Oil Quay.
MEDICAL: 6 km. to hospital in Kokkola.
DENSITY: 1002.
FRESH WATER: Available at berths.
FUEL: Available.
REPAIRS: Small deck and engine repairs can be carried out.
AIRPORT: Kokkola Airport 19 km.
REPATRIATION: Crew changes and repatriation can be carried out.
SHORE LEAVE: No restrictions.

CONSULS (Vice-Consuls): Sweden Tel: 968/11141; Norway Tel: 968/13791; Denmark Tel: 968/14444.
DEVELOPMENTS: The channel and port will be dredged to max. draft 11 m. by 1987. A new quay will be built in 1986.
AUTHORITY: Kokkola Harbour Office, Satamakatu 53, 67900 Kokkola 90, Finland. *Tel:* 968/26295. *Telex:* 76148 Koksa Sf. *Contact:* Pertti Tilus, Harbour Director. Hans Biskop, Harbour Master.

KOTKA: 60.28 N. 26.57 E. (See Plan Book)

DOCUMENTS:
Crew List.
Passenger List.
1 copy of Cargo Manifest.
1 copy of every Bill of Lading.
Ship's Register.
Ice Certificate.
Customs Manifest for Stores, for ship and individual.
PILOTAGE: On arrival off Orrengrund, contact Orrengrund Pilot by VHF. On arrival off Kotka, contact Harbour Pilot Kotka, VHF Channels 11, 13, 14, 16. Depth in approaches 32 ft. 10 in.
ANCHORAGES: Havouri Roads, Kukouri Roads and at the entry to the harbour. All 39 ft. 6 in. depths.
MAX. SIZE: Max. draft 32 ft. 10 in.
HEALTH: In case of sickness on board, contact the Agents before entering the port.
RADIO: Kotka Radio call sign OHF.
VHF: See "Pilotage".
TUGS: Tugs normally join the vessel in the harbour entrance. Ship's lines are to be used. 3 tugs available, 4,000 h.p., 1,650 h.p., and 630 h.p.
BERTHING:

Quay	*Permitted Draft (ft.)*	*Length (m.)*
Central Harbour	16-24	1,000
North Quay	21-33	226
Middle Quay	25-29.5	540
East Quay	24-29.5	380
Bulk Quay (Poland Quay)	27.5	360
Sunila Quay	22-26	400
Inner Roads	12-24	
Outer Roads	25-29	
Halla, East Harbour	14-23	250
Oil Harbour	29-33	
Oy Valmet AB	16-24	155
Power Plant (Mussalo) Coal Quay	26	200
Oil Quay	33	
Hietanen Terminal Harbour	26-33	740

CRANES: 30 shore cranes with capacity of 3-60 tons.
SPECIALISED CARGO-HANDLING FACILITIES: Hietanen Terminal Harbour, consisting of 4 ro-ro berths and 3 conventional berths.
MEDICAL: Master to advise by Radio Kotka on arrival if medical attendance required aboard.
TANKERS: 2 tanker berths, draft 32 ft. 10 in. Also see "Notice".
DENSITY: 1.0033.
FRESH WATER: All berths are equipped with water pipe-lines, but in Sunila port only supplied by tugs.
FUEL: All grades of fuel available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally by the crew.
SHIP CERTIFICATES: List of Certificates to be on board:
Passenger Ship Safety Certificate.
Cargo Ship Safety Construction Certificate.
Cargo Ship Safety Equipment Certificate.
Cargo Ship Safety Radio-telephone Certificate.
Cargo Ship Safety Radio-telegraphy Certificate.
Exemption Certificate.
Nuclear Passenger Ship Safety Certificate.
Nuclear Cargo Ship Safety Certificate.
Derat Certificate.
CUSTOMS ALLOWANCES: For passengers: Tobacco: 200 cigarettes or 0.2 lb. of other manufactured tobacco. Wine and Spirits: 1 litre.
CONSULS:

Belgium	Tel. 61 000	Iceland	Tel. 14260
Denmark	Tel. 11 440	Netherlands	Tel. 190111
France	Tel. 63 100	Norway	Tel. 190111
Germany (F.R.)	Tel. 190111	Spain	Tel. 190111
Great Britain	Tel. 11 709	Sweden	Tel. 190111

REPAIRS: All types of repairs can be carried out.
DRY DOCKS: 3 floating docks. Docking dimensions for vessels:
Valmet: length 127.2 m., beam 20.1 m., draft 6.8 m./5,000 tons.
Wartsila: length 130 m., beam 19.7 m., draft 5.8 m./4,500 tons.
Wartsila: length 96 m., beam 16.5 m., draft 4.5 m./2,500 tons.
REPATRIATION: Facilities exist.
AIRPORT: Nearest Helsinki-Vantaa, 140 km.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: New Year's Day (Jan. 1st); Epiphany (Jan. 6th); Moving Holidays; Easter Holiday, 4 days (Sunday included); Ascension Day, 1 day; Whitsunday, 2 days (Sunday included); Midsummer Day, 3 days (Sunday included); All Saints' Day, 1 day (first Saturday of Nov.); Christmas Holidays (Dec. 24th-26th). Other free days: May 1st; Dec. 6th (Independence Day). Cargo work can be done on all above holidays.
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 000; Fire 000.
TELEPHONES: On some berths telephones placed on board.
GENERAL: It is prohibited to let or throw any substance or refuse causing pollution or shoaling in the harbour area.
SERVICES: Compass adjusting service available.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not required.
NOTICE: Port Authority Notice to Masters.
Instructions Concerning Waste Disposal:

The Port Authority of Kotka informs you hereby that in the Port of Kotka the rules and regulations concerning the protection of the marine environment of the Baltic Sea Area as stated in the Helsinki Convention have to be followed by all ships.

On the strength of this convention no wastes shall be discharged into the water while the ship is in the port area. Breaking of these rules cannot be accepted. The Port Authority will check that the instructions are observed without exception.

While your ship is in the port a necessary amount of sacks for waste disposal will be delivered to the ship. The waste emanating from your ship shall be put into these sacks and before the departure of your ship the sacks shall be delivered *by your crew* to the waste container in the vicinity of the berth of your ship.

In case you want to get rid of oily residues please inform the Harbour Master either through your Agent or directly. For the reception of these wastes the Port Authority does not charge you separately as the cost of this service is included in the general waste disposal fee.

In case your ship is a tanker loading oil products and you wish to dispose of oily water such as tank washing water or ballast water it has to be agreed separately with the Port Authority.

All questions in connection with the waste disposal service will be answered by the Harbour Master (Tel: 11672).

Signed: Port Director.
AUTHORITY: Port Authority of Kotka, Laivurinkatu 7, SF-48100 Kotka 10. *Tel:* 952 – 181200. *Telex:* 53144. *Cables:* Port Authority. *Contact:* Ilmari Elo, Port Director.

KOVERHAR: 59.52 N. 23.13 E.

DOCUMENTS:
Ship's Register.
Crew List.
Manifests.
Bills of Lading.
Provisions List.
Health Certificate.
PILOTAGE: Compulsory. There are 2 approaches: (1) Via Ajax, max. draft in fairway 33 ft. Pilot arrives from pilot station at Hanko. Distance to port 11 miles.
(2) Via Hanko, max. draft in fairway is 28 ft. Pilot arrives from pilot station at Hanko, Tulludden (Tel. Hanko 82246, radio-telephone, VHF). Station has radar. Distance to port 23 miles.
MAX. SIZE: Max. draft alongside quay 30 ft. Max. LOA 190 m. Max. breadth 23 m. No tide.
RADIO: Cable Agents giving ETA via Hanko and Helsinki Radio.
TUGS:
Ingrid 700 h.p. *Waija* 1,850 h.p.
BERTHING: Length 250 m., depth 30 ft. Quay 6 ft. above sea level.
New berth, length 120 m., depth 30 ft. Quay 6 ft. above sea level.
CRANES: Two of 13 tons and one of 12.5 tons capacity.
STEVEDORES: Ordered by Agent.
FRESH WATER: Available rate 20 cu.m./hr.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per man.
IDENTIFICATION CARDS: Not required.
REPAIRS: Small repairs possible.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 12660; Fire 43100.
AUTHORITY: Ovako Oy AB., Koverhar, SF-10820 Lappvik. *Tel:* 911-43100. *Telex:* 13152 Kovsh Sf. *Cables:* Koverhar Ekenas. *Contact:* Rainer Sandberg, Harbour Master.

KRISTINESTAD: 62.16 N. 21.23 E.

DOCUMENTS:
Ship's Measurement Certificate.
2 Crew Lists.
Cargo Manifest.
Copy Bill of Lading.
2 Provision Lists and Tobacco Lists for Customs.
Ice Certificate 1.12–3.4.
PILOTAGE: Pilot boards at Hojerstein Light Buoy. At least 2 hours ETA required. Pilot boat has red painted hull, white marking "L" on bow, and deck house yellow. Pilot station situated on Hoggklubb Island South of Kristinestad, International pilot call signals to be used, also radio telephone 2182 and VHF Channel 16.
ANCHORAGES: Good safe holding ground off Adgrund. Depth 10 m.
MAX. SIZE: For general cargo and timber, 20 ft. draft in old port. For tankers, 33 ft. in the oil port. Depth at new coal harbour 33 ft.
See also "Tankers".
RADIO: Messages through coastal stations. Also Kristinestad VHF Channel 24. Also see "Pilotage".
TUGS: 1 tug available 240 h.p. Additional powerful tugs available with sufficient notice.

BERTHING: No special requirements. Pilot gives orders for berthing.
Inner Wooden Quay. Length 75 m., depth alongside 15 ft.
Outer Stone Quay. Length 250 m., depth alongside 20 ft.
There are 3 mobile cranes of 10 tons capacity.

SPECIALISED CARGO HANDLING FACILITIES: Bulk cargoes can be discharged at quay, 4 portable cranes available. There is one ramp for roll-on/roll-off ships in oil harbour at Bjorno.

New coal harbour at Bjorno Power Station, depth alongside 10.0 m. Berth is equipped with one conveyor for handling self-discharging vessels.

STEVEDORES: Advise ETA and gangs required as stipulated in charter-party. Also when laytime will commence to count. Only timber cargoes loaded.

Normal working hours 0700 – 1600 hrs. all weekdays.

DENSITY: 1004.

MEDICAL: Hospital facilities available.

TANKERS: Oil harbour at Pohjolan Voima Oy, power station at Bjorno. Depth 33 ft. (10 m.) alongside the oil pier. One berth for tankers. Discharge capacity with two 10 in. pipe-lines 2,500 t.p.h. Fresh water supply to tankers available from shore installation rate 30 t.p.h.

FRESH WATER: Fresh water supply by shore installation. Any amount available.

FUEL: Fuel available by tank cars of about 20 tons capacity at short notice.

GANGWAY/DECK WATCHMEN: Not compulsory at Timber Pier. Compulsory in oil harbour, according to rules of Board of Navigation.

OPENING/CLOSING HATCHES: Normally carried out by crew, but on request may be handled by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per 6 days, per man. Wine/Spirit allowance: One bottle per man.

CARGO GEAR: BOT Certificates. No additional requirements.

CONSULS: Danish, tel. 962-12350.

REPAIRS: No shipyards, but welding pipe-line electric repairs possible.

SURVEYORS: Surveyors and Cargo Inspectors available.

AIRPORT: Nearest airports in Vaasa and Pori within 100 km., several flights per day.

TIME: Local time GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: See "Oulu".

POLICE/AMBULANCE/FIRE: Police Station of Kristinestad 12055 or 002; Ambulance 11626; Fire Brigade 005.

TELEPHONE: Public telephones on the pier.

GENERAL: Timber pier in Port of Kristinestad closed from the end of December to the middle of April owing to ice. Oil port will be kept open according to the general ice situation of Gulf of Bothnia.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Not required.

EMERGENCY CO-ORDINATION CENTRE: Kummalgrund Coast Guard Station: Tel: 962-29142 (Kristinestad) or VHF Channel 16.

STORING: Vessels may be stored by truck which may proceed alongside. No special Customs regulations in force. Riggers and fork lift trucks available.

AUTHORITY: Kristinestad Harbour Office, 64100 Kristinestad, Finland. *Tel:* 962-11051. *Contact:* Sakari Laipio, Harbour Master.

LOVISA (Valkom): 60.25 N. 26.16 E. (See Plan Book)

PILOTAGE: Pilot arrives from pilot station at Orrengrund (Tel. 915–565334, radio telephone). Station equipped with radar. Distance to port 12 miles.

APPROACHES: Depth in fairway (Orrengrund – Valko) – 7.3 m.

TUGS: 1 tug available, 1,250 h.p., between December and April.

BERTHING:
Middle Quay: Length 280 m., depth 7.30 m.
Connection Quay: Length 115 m., depth 7.30 m.
Roll-on/Roll-off Berth: Length 20 m., depth 7.30 m.
South Pier (East Side): Length 130 m., depth 8.50 m.
Inner Harbour: Length 80 m., depth 4.20 m.
In 1984 the depth at all quays will be 8.50 m.

CRANES: 6 mobile cranes, lifting capacity 6 – 36 tons. 2 shore cranes, lifting capacity 6 tons. 1 shore crane lifting capacity 6 – 28.5 tons.

DENSITY: 1003.

DEVELOPMENTS: Depth in fairway increased to 8.50 m. (1984). Land area from 23 ha. to 76 ha. (1983-90). Loading depth to 8.50 m. (1984).

AUTHORITY: Lovisa Port, 07910 Valkom, Finland. *Tel:* Port Director: 915-565514. Harbour Master: 915-565163. *Contact:* Pekka Pajunen, Port Director. Bengt Sandvik, Harbour Master.

MARIEHAMN: 60.06 N. 19.56 E. (See Plan Book)

PORT LIMITS: The Southern boundary of the port is on a line between Lat. 60° 03.5′ N., Long. 19° 56.1′ E. and Lat. 60° 04.2′ N., Long. 19° 55′ E.

DOCUMENTS:
1 Crew List.
1 Passenger List.
3 Provision Lists.
2 Special Lists (in possession each crew member – cigarettes, tobacco, spirit, radios, etc.).
2 Bills of Lading.
Registered Tonnage Certificate.

PILOTAGE: Pilot arrives from station at Lotsberget in Westerhamn harbour, and meets entering vessels about 2 nautical miles S.W. of Marhallan lighthouse. 3 hours' notice of ETA is required. Pilot station and cutter are fitted with VHF radio and keep watch on Channel 16, 24 hours a day. Working Channel is 13. Pilot can also be ordered by cable via Mariehamn Radio.

Pilot can also be taken from Nyhamn pilot station 12 miles from the port. Nyhamn has VHF, Radio 2182 kHz and Radar.

At Nyhamn, Sea Pilot may be obtained for the Baltic Sea, Bay of Bothnia and Bay of Finland.

ANCHORAGES: Good anchorages North of Grano Island in 10 m. to 20 m. water.

MAX. SIZE: Ships of 160 m. length and 7 m. draft can enter the port, but require twin screw and bow thruster for safe manoeuvring.

RADIO: Mariehamn Radio, call sign OHM on telegraphy and OFH for telephony. Connected to the public telegraph and telephone service.

VHF: Following stations keep watch on VHF Channel 16: Mariehamn Radio, Mariehamns Pilot, Mariehamns Hamn (Harbour Office), Sjobevakningen Mariehamn. (The Coast Guard at Mariehamn.)

TUGS: 1 tug of 320 h.p. available. The m/s *Gustaf Erikson* belongs to the Alands Lifeboat Society. Usually ships' lines are used.

BERTHING: *Quays for Passenger Vessels:*

Berth No.	*Length* (m.)	*Depth* (m.)	*Remarks*
1A	100	5.0	
1B	150	6.0	
2	120	3.5	
3	70	6.0	
4	120	6.5	Fitted for Ro/Ro traffic.
5	140	7.0	

Power Station Pier: Depth 5.0 m.

CRANES: 7 mobile cranes can be rented. Maximum lift, 2 cranes of 25 tons and 5 of 16 tons on the shortest radius.

SPECIALISED CARGO-HANDLING FACILITIES: 2 berths for roll-on roll-off traffic, used by car ferries.

STEVEDORES: Ordered by Agents. ETA in good time to obtain gangs.

DENSITY: 1005.

TANKERS: Max. LOA 100 m. Depth alongside 5.5 m.

MEDICAL: All services available.

FRESH WATER: Most berths supplied by shore installations about 15 t.p.h., otherwise by truck.

FUEL: Only diesel oil, no heavy products.

GANGWAY/DECK WATCHMEN: Available but not necessary.

OPENING/CLOSING HATCHES: Normally done by crew.

CERTIFICATES: International Tonnage Certificate or National Tonnage Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes and limited amount spirits for each crew member.

CONSULS: Denmark 11 454, Netherlands 12 070, Iceland 21 849, Norway 12 050, Sweden 11 624, U.S.S.R. 11 524, West Germany 11 410.

REPAIRS: Most repairs possible.

DRY DOCKS: Slipway for small vessels, max. about 3-400 d.w.t.

SURVEYORS: No permanent surveyors at Mariehamn.

REPATRIATION: Mariehamn is a good place for repatriation, with many connections to Sweden and to the Finnish mainland every day, with car-ferries and aeroplanes. About 1 million tourists visit Aland Island every year.

AIRPORT: About 5 km. from town, daily traffic to Stockholm and Abo/Turku.

TIME: GMT plus 2 hours. Summertime GMT plus 3 hrs.

HOLIDAYS: See "Oulu".

POLICE/AMBULANCE/FIRE: Police 002 or 11 126; Ambulance 005, Fire 005 or 11 000.

TELEPHONES: Available at berths for passenger ships.

IDENTIFICATION CARDS: Not needed for Scandinavian citizens. Passports for all others.

AUTHORITY: Port of Mariehamn, Harbour Office, Box 5, SF-22101 Mariehamn, Finland. *Tel:* 928-13962. *Contact:* Captain Uno J. Gottberg, Harbour Master.

NAANTALI: 60.28 N. 22.01 E. (See Plan Book)

DOCUMENTS:
Health Certificate.
Crew List.
Passenger List.
Dangerous Cargo List.
Ship's Register.

PILOTAGE: Pilot compulsory at Uto Pilot station. When approaching Uto communicate via VHF Channel 16 – ETA, name of vessel, destination, draft. Change of Pilot takes place in Lohm. Harbour Pilots available at the port. Distance Uto-Lohm, 25 miles. Lohm-Naantali, 28 miles.

ANCHORAGES: Good safe anchorage in harbour area. Max. draft for vessels 10 m.

MAX. SIZE: Maximum permissible length for tankers 210 m., main quay – maximum length for any vessel 150 m.

HEALTH: International Quarantine flag required in case of suspected disease or fever including preliminary report by VHF, otherwise ask Agent.

RADIO: Hanko Radio; Mariehamn Radio; VHF Turku 26; VHF Mariehamn 27; VHF Korpo 23.

VHF: Communication on Channel 16, own working Channel 11.

RADAR: When Radar Service needed, ask Agent.

CONSULS (Vice-Consuls): Sweden Tel: 968/11141; Norway Tel: 968/13791; Denmark Tel: 968/14444.
DEVELOPMENTS: The channel and port will be dredged to max. draft 11 m. by 1987. A new quay will be built in 1986.
AUTHORITY: Kokkola Harbour Office, Satamakatu 53, 67900 Kokkola 90, Finland. *Tel:* 968/26295. *Telex:* 76148 Koksa Sf. *Contact:* Pertti Tilus, Harbour Director. Hans Biskop, Harbour Master.

KOTKA: 60.28 N. 26.57 E. (See Plan Book)

DOCUMENTS:
Crew List.
Passenger List.
1 copy of Cargo Manifest.
1 copy of every Bill of Lading.
Ship's Register.
Ice Certificate.
Customs Manifest for Stores, for ship and individual.
PILOTAGE: On arrival off Orrengrund, contact Orrengrund Pilot by VHF. On arrival off Kotka, contact Harbour Pilot Kotka, VHF Channels 11, 13, 14, 16. Depth in approaches 32 ft. 10 in.
ANCHORAGES: Havouri Roads, Kukouri Roads and at the entry to the harbour. All 39 ft. 6 in. depths.
MAX. SIZE: Max. draft 32 ft. 10 in.
HEALTH: In case of sickness on board, contact the Agents before entering the port.
RADIO: Kotka Radio call sign OHF.
VHF: See "Pilotage".
TUGS: Tugs normally join the vessel in the harbour entrance. Ship's lines are to be used. 3 tugs available, 4,000 h.p., 1,650 h.p., and 630 h.p.
BERTHING:

Quay	*Permitted Draft (ft.)*	*Length (m.)*
Central Harbour	16-24	1,000
North Quay	21-33	226
Middle Quay	25-29.5	540
East Quay	24-29.5	380
Bulk Quay (Poland Quay)	27.5	360
Sunila Quay	22-26	400
Inner Roads	12-24	
Outer Roads	25-29	
Halla, East Harbour	14-23	250
Oil Harbour	29-33	
Oy Valmet AB	16-24	155
Power Plant (Mussalo) Coal Quay	26	200
Oil Quay	33	
Hietanen Terminal Harbour	26-33	740

CRANES: 30 shore cranes with capacity of 3-60 tons.
SPECIALISED CARGO-HANDLING FACILITIES: Hietanen Terminal Harbour, consisting of 4 ro-ro berths and 3 conventional berths.
MEDICAL: Master to advise by Radio Kotka on arrival if medical attendance required aboard.
TANKERS: 2 tanker berths, draft 32 ft. 10 in. Also see "Notice".
DENSITY: 1.0033.
FRESH WATER: All berths are equipped with water pipe-lines, but in Sunila port only supplied by tugs.
FUEL: All grades of fuel available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally by the crew.
SHIP CERTIFICATES: List of Certificates to be on board:
Passenger Ship Safety Certificate.
Cargo Ship Safety Construction Certificate.
Cargo Ship Safety Equipment Certificate.
Cargo Ship Safety Radio-telephone Certificate.
Cargo Ship Safety Radio-telegraphy Certificate.
Exemption Certificate.
Nuclear Passenger Ship Safety Certificate.
Nuclear Cargo Ship Safety Certificate.
Derat Certificate.
CUSTOMS ALLOWANCES: For passengers: Tobacco: 200 cigarettes or 0.2 lb. of other manufactured tobacco. Wine and Spirits: 1 litre.
CONSULS:

Belgium	Tel. 61 000	Iceland	Tel. 14260
Denmark	Tel. 11 440	Netherlands	Tel. 190111
France	Tel. 63 100	Norway	Tel. 190111
Germany (F.R.)	Tel. 190111	Spain	Tel. 190111
Great Britain	Tel. 11 709	Sweden	Tel. 190111

REPAIRS: All types of repairs can be carried out.
DRY DOCKS: 3 floating docks. Docking dimensions for vessels:
Valmet: length 127.2 m., beam 20.1 m., draft 6.8 m./5,000 tons.
Wartsila: length 130 m., beam 19.7 m., draft 5.8 m./4,500 tons.
Wartsila: length 96 m., beam 16.5 m., draft 4.5 m./2,500 tons.
REPATRIATION: Facilities exist.
AIRPORT: Nearest Helsinki-Vantaa, 140 km.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: New Year's Day (Jan. 1st); Epiphany (Jan. 6th); Moving Holidays; Easter Holiday, 4 days (Sunday included); Ascension Day, 1 day; Whitsunday, 2 days (Sunday included); Midsummer Day, 3 days (Sunday included); All Saints' Day, 1 day (first Saturday of Nov.); Christmas Holidays (Dec. 24th-26th). Other free days: May 1st; Dec. 6th (Independence Day). Cargo work can be done on all above holidays.
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 000; Fire 000.
TELEPHONES: On some berths telephones placed on board.
GENERAL: It is prohibited to let or throw any substance or refuse causing pollution or shoaling in the harbour area.
SERVICES: Compass adjusting service available.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not required.
NOTICE: Port Authority Notice to Masters.
Instructions Concerning Waste Disposal:

The Port Authority of Kotka informs you hereby that in the Port of Kotka the rules and regulations concerning the protection of the marine environment of the Baltic Sea Area as stated in the Helsinki Convention have to be followed by all ships.

On the strength of this convention no wastes shall be discharged into the water while the ship is in the port area. Breaking of these rules cannot be accepted. The Port Authority will check that the instructions are observed without exception.

While your ship is in the port a necessary amount of sacks for waste disposal will be delivered to the ship. The waste emanating from your ship shall be put into these sacks and before the departure of your ship the sacks shall be delivered *by your crew* to the waste container in the vicinity of the berth of your ship.

In case you want to get rid of oily residues please inform the Harbour Master either through your Agent or directly. For the reception of these wastes the Port Authority does not charge you separately as the cost of this service is included in the general waste disposal fee.

In case your ship is a tanker loading oil products and you wish to dispose of oily water such as tank washing water or ballast water it has to be agreed separately with the Port Authority.

All questions in connection with the waste disposal service will be answered by the Harbour Master (Tel: 11672).

Signed: Port Director.

AUTHORITY: Port Authority of Kotka, Laivurinkatu 7, SF-48100 Kotka 10. *Tel:* 952 – 181200. *Telex:* 53144. *Cables:* Port Authority. *Contact:* Ilmari Elo, Port Director.

KOVERHAR: 59.52 N. 23.13 E.

DOCUMENTS:
Ship's Register.
Crew List.
Manifests.
Bills of Lading.
Provisions List.
Health Certificate.
PILOTAGE: Compulsory. There are 2 approaches: (1) Via Ajax, max. draft in fairway 33 ft. Pilot arrives from pilot station at Hanko. Distance to port 11 miles.
(2) Via Hanko, max. draft in fairway is 28 ft. Pilot arrives from pilot station at Hanko, Tulludden (Tel. Hanko 82246, radio-telephone, VHF). Station has radar. Distance to port 23 miles.
MAX. SIZE: Max. draft alongside quay 30 ft. Max. LOA 190 m. Max. breadth 23 m. No tide.
RADIO: Cable Agents giving ETA via Hanko and Helsinki Radio.
TUGS:
Ingrid 700 h.p. *Waija* 1,850 h.p.
BERTHING: Length 250 m., depth 30 ft. Quay 6 ft. above sea level.
New berth, length 120 m., depth 30 ft. Quay 6 ft. above sea level.
CRANES: Two of 13 tons and one of 12.5 tons capacity.
STEVEDORES: Ordered by Agent.
FRESH WATER: Available rate 20 cu.m./hr.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per man.
IDENTIFICATION CARDS: Not required.
REPAIRS: Small repairs possible.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 12660; Fire 43100.
AUTHORITY: Ovako Oy AB., Koverhar, SF-10820 Lappvik. *Tel:* 911-43100. *Telex:* 13152 Kovsh Sf. *Cables:* Koverhar Ekenas. *Contact:* Rainer Sandberg, Harbour Master.

KRISTINESTAD: 62.16 N. 21.23 E.

DOCUMENTS:
Ship's Measurement Certificate.
2 Crew Lists.
Cargo Manifest.
Copy Bill of Lading.
2 Provision Lists and Tobacco Lists for Customs.
Ice Certificate 1.12–3.4.
PILOTAGE: Pilot boards at Hojerstein Light Buoy. At least 2 hours ETA required. Pilot boat has red painted hull, white marking "L" on bow, and deck house yellow. Pilot station situated on Hoggklubb Island South of Kristinestad, International pilot call signals to be used, also radio telephone 2182 and VHF Channel 16.
ANCHORAGES: Good safe holding ground off Adgrund. Depth 10 m.
MAX. SIZE: For general cargo and timber, 20 ft. draft in old port. For tankers, 33 ft. in the oil port. Depth at new coal harbour 33 ft.
See also "Tankers".
RADIO: Messages through coastal stations. Also Kristinestad VHF Channel 24. Also see "Pilotage".
TUGS: 1 tug available 240 h.p. Additional powerful tugs available with sufficient notice.

BERTHING: No special requirements. Pilot gives orders for berthing.
Inner Wooden Quay. Length 75 m., depth alongside 15 ft.
Outer Stone Quay. Length 250 m., depth alongside 20 ft.
There are 3 mobile cranes of 10 tons capacity.

SPECIALISED CARGO HANDLING FACILITIES: Bulk cargoes can be discharged at quay, 4 portable cranes available. There is one ramp for roll-on/roll-off ships in oil harbour at Bjorno.

New coal harbour at Bjorno Power Station, depth alongside 10.0 m. Berth is equipped with one conveyor for handling self-discharging vessels.

STEVEDORES: Advise ETA and gangs required as stipulated in charter-party. Also when laytime will commence to count. Only timber cargoes loaded.

Normal working hours 0700 – 1600 hrs. all weekdays.

DENSITY: 1004.

MEDICAL: Hospital facilities available.

TANKERS: Oil harbour at Pohjolan Voima Oy, power station at Bjorno. Depth 33 ft. (10 m.) alongside the oil pier. One berth for tankers. Discharge capacity with two 10 in. pipe-lines 2,500 t.p.h. Fresh water supply to tankers available from shore installation rate 30 t.p.h.

FRESH WATER: Fresh water supply by shore installation. Any amount available.

FUEL: Fuel available by tank cars of about 20 tons capacity at short notice.

GANGWAY/DECK WATCHMEN: Not compulsory at Timber Pier. Compulsory in oil harbour, according to rules of Board of Navigation.

OPENING/CLOSING HATCHES: Normally carried out by crew, but on request may be handled by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per 6 days, per man. Wine/Spirit allowance: One bottle per man.

CARGO GEAR: BOT Certificates. No additional requirements.

CONSULS: Danish, tel. 962-12350.

REPAIRS: No shipyards, but welding pipe-line electric repairs possible.

SURVEYORS: Surveyors and Cargo Inspectors available.

AIRPORT: Nearest airports in Vaasa and Pori within 100 km., several flights per day.

TIME: Local time GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: See "Oulu".

POLICE/AMBULANCE/FIRE: Police Station of Kristinestad 12055 or 002; Ambulance 11626; Fire Brigade 005.

TELEPHONE: Public telephones on the pier.

GENERAL: Timber pier in Port of Kristinestad closed from the end of December to the middle of April owing to ice. Oil port will be kept open according to the general ice situation of Gulf of Bothnia.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Not required.

EMERGENCY CO-ORDINATION CENTRE: Kummalgrund Coast Guard Station: Tel: 962-29142 (Kristinestad) or VHF Channel 16.

STORING: Vessels may be stored by truck which may proceed alongside. No special Customs regulations in force. Riggers and fork lift trucks available.

AUTHORITY: Kristinestad Harbour Office, 64100 Kristinestad, Finland. *Tel:* 962-11051. *Contact:* Sakari Laipio, Harbour Master.

LOVISA (Valkom): 60.25 N. 26.16 E. **(See Plan Book)**

PILOTAGE: Pilot arrives from pilot station at Orrengrund (Tel. 915–565334, radio telephone). Station equipped with radar. Distance to port 12 miles.

APPROACHES: Depth in fairway (Orrengrund – Valko) – 7.3 m.

TUGS: 1 tug available, 1,250 h.p., between December and April.

BERTHING:
Middle Quay: Length 280 m., depth 7.30 m.
Connection Quay: Length 115 m., depth 7.30 m.
Roll-on/Roll-off Berth: Length 20 m., depth 7.30 m.
South Pier (East Side): Length 130 m., depth 8.50 m.
Inner Harbour: Length 80 m., depth 4.20 m.
In 1984 the depth at all quays will be 8.50 m.

CRANES: 6 mobile cranes, lifting capacity 6 – 36 tons. 2 shore cranes, lifting capacity 6 tons. 1 shore crane lifting capacity 6 – 28.5 tons.

DENSITY: 1003.

DEVELOPMENTS: Depth in fairway increased to 8.50 m. (1984). Land area from 23 ha. to 76 ha. (1983-90). Loading depth to 8.50 m. (1984).

AUTHORITY: Lovisa Port, 07910 Valkom, Finland. *Tel:* Port Director: 915-565514. Harbour Master: 915-565163. *Contact:* Pekka Pajunen, Port Director. Bengt Sandvik, Harbour Master.

MARIEHAMN: 60.06 N. 19.56 E. **(See Plan Book)**

PORT LIMITS: The Southern boundary of the port is on a line between Lat. 60° 03.5′ N., Long. 19° 56.1′ E. and Lat. 60° 04.2′ N., Long. 19° 55′ E.

DOCUMENTS:
1 Crew List.
1 Passenger List.
3 Provision Lists.
2 Special Lists (in possession each crew member – cigarettes, tobacco, spirit, radios, etc.).
2 Bills of Lading.
Registered Tonnage Certificate.

PILOTAGE: Pilot arrives from station at Lotsberget in Westerhamn harbour, and meets entering vessels about 2 nautical miles S.W. of Marhallan lighthouse. 3 hours' notice of ETA is required. Pilot station and cutter are fitted with VHF radio and keep watch on Channel 16, 24 hours a day. Working Channel is 13. Pilot can also be ordered by cable via Mariehamn Radio.

Pilot can also be taken from Nyhamn pilot station 12 miles from the port. Nyhamn has VHF, Radio 2182 kHz and Radar.

At Nyhamn, Sea Pilot may be obtained for the Baltic Sea, Bay of Bothnia and Bay of Finland.

ANCHORAGES: Good anchorages North of Grano Island in 10 m. to 20 m. water.

MAX. SIZE: Ships of 160 m. length and 7 m. draft can enter the port, but require twin screw and bow thruster for safe manoeuvring.

RADIO: Mariehamn Radio, call sign OHM on telegraphy and OFH for telephony. Connected to the public telegraph and telephone service.

VHF: Following stations keep watch on VHF Channel 16: Mariehamn Radio, Mariehamns Pilot, Mariehamns Hamn (Harbour Office), Sjobevakningen Mariehamn. (The Coast Guard at Mariehamn.)

TUGS: 1 tug of 320 h.p. available. The m/s *Gustaf Erikson* belongs to the Alands Lifeboat Society. Usually ships' lines are used.

BERTHING: *Quays for Passenger Vessels:*

Berth No.	*Length* (m.)	*Depth* (m.)	*Remarks*
1A	100	5.0	
1B	150	6.0	
2	120	3.5	
3	70	6.0	
4	120	6.5	Fitted for Ro/Ro traffic.
5	140	7.0	

Power Station Pier: Depth 5.0 m.

CRANES: 7 mobile cranes can be rented. Maximum lift, 2 cranes of 25 tons and 5 of 16 tons on the shortest radius.

SPECIALISED CARGO-HANDLING FACILITIES: 2 berths for roll-on roll-off traffic, used by car ferries.

STEVEDORES: Ordered by Agents. ETA in good time to obtain gangs.

DENSITY: 1005.

TANKERS: Max. LOA 100 m. Depth alongside 5.5 m.

MEDICAL: All services available.

FRESH WATER: Most berths supplied by shore installations about 15 t.p.h., otherwise by truck.

FUEL: Only diesel oil, no heavy products.

GANGWAY/DECK WATCHMEN: Available but not necessary.

OPENING/CLOSING HATCHES: Normally done by crew.

CERTIFICATES: International Tonnage Certificate or National Tonnage Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes and limited amount spirits for each crew member.

CONSULS: Denmark 11 454, Netherlands 12 070, Iceland 21 849, Norway 12 050, Sweden 11 624, U.S.S.R. 11 524, West Germany 11 410.

REPAIRS: Most repairs possible.

DRY DOCKS: Slipway for small vessels, max. about 3-400 d.w.t.

SURVEYORS: No permanent surveyors at Mariehamn.

REPATRIATION: Mariehamn is a good place for repatriation, with many connections to Sweden and to the Finnish mainland every day, with car-ferries and aeroplanes. About 1 million tourists visit Aland Island every year.

AIRPORT: About 5 km. from town, daily traffic to Stockholm and Abo/Turku.

TIME: GMT plus 2 hours. Summertime GMT plus 3 hrs.

HOLIDAYS: See "Oulu".

POLICE/AMBULANCE/FIRE: Police 002 or 11 126; Ambulance 005, Fire 005 or 11 000.

TELEPHONES: Available at berths for passenger ships.

IDENTIFICATION CARDS: Not needed for Scandinavian citizens. Passports for all others.

AUTHORITY: Port of Mariehamn, Harbour Office, Box 5, SF-22101 Mariehamn, Finland. *Tel:* 928-13962. *Contact:* Captain Uno J. Gottberg, Harbour Master.

NAANTALI: 60.28 N. 22.01 E. **(See Plan Book)**

DOCUMENTS:
Health Certificate.
Crew List.
Passenger List.
Dangerous Cargo List.
Ship's Register.

PILOTAGE: Pilot compulsory at Uto Pilot station. When approaching Uto communicate via VHF Channel 16 – ETA, name of vessel, destination, draft. Change of Pilot takes place in Lohm. Harbour Pilots available at the port. Distance Uto-Lohm, 25 miles. Lohm-Naantali, 28 miles.

ANCHORAGES: Good safe anchorage in harbour area. Max. draft for vessels 10 m.

MAX. SIZE: Maximum permissible length for tankers 210 m., main quay – maximum length for any vessel 150 m.

HEALTH: International Quarantine flag required in case of suspected disease or fever including preliminary report by VHF, otherwise ask Agent.

RADIO: Hanko Radio; Mariehamn Radio; VHF Turku 26; VHF Mariehamn 27; VHF Korpo 23.

VHF: Communication on Channel 16, own working Channel 11.

RADAR: When Radar Service needed, ask Agent.

TUGS: Harbour icebreaker tug *Naantali* 1,200 h.p., equipped with bow steering propeller. Use ship's lines. Additional tugs on application from Turku.
BERTHING: No special requirements. Harbour/Drafts: No tide. Main quay, length 328 m., draft 10 m. Timber quay, length 110 m., draft 8.0 m. 3 car-ferry piers, length 80 m./125 m./95 m., drafts 9 m./6.4 m./6.0 m. Lubricating Oil pier/Car Ferry pier, length 95 m., draft 6.6 m. Sugar quay, length 32 m., draft 4.5 m.
CRANES: 2 cranes owned by electric powerplant of 6 tons each.
BULK CARGO FACILITIES: Grain handled by two pneumatic elevators and belt conveyor, Loading/Discharging 200 t.p.h., maximum reach for outlet/inlet 15 m. and 18.7 m., maximum height above quay level 9.0 m. and 16.0 m. when loading, discharging limits are 11.6 m. and 18.6 m., 200 m. of main quay intended to be for handling of grain, 128 m. for coal,, which is handled by 2 cranes of 6 tons each and belt conveyor, discharging rate about 300 t.p.h.
SPECIALISED CARGO-HANDLING FACILITIES: Roll-on/roll-off traffic possibility.
STEVEDORES: Available, ordered by Agent.
MEDICAL: Advise by radio prior arrival if medical attendance required aboard.
TANKERS: Oil Harbour, Neste Oy. Discharge lines ashore 10 in., 12 in., 18 in., Diameter of cargo hoses and respective draft of tanker berths:
Berth No. 1, 6 in., 5.7 m.
Berth No. 2, 10 in., 10.0 m.
Berth No. 3, 8 in., 10 in., 12 in., 11.5 m.
DENSITY: 1007.
FRESH WATER: Supplied by shore installations at most berths.
FUEL: All grades available.
FIRE PRECAUTIONS: Usual precautions.
GANGWAY/DECK WATCHMEN: Available. Tankers compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: 200 cigarettes/200 gm. tobacco and 1 bottle spirits/wine.
CONSULS: In Turku 17 km. away.

Austria	Tel:	342230	Honduras	Tel:	395495
Belgium	„	393666	Iceland	„	652211
France	„	382111	Italy	„	20510
Germany F.R.	„	334800	Norway	„	27922
Great Britain	„	382322	Sweden	„	331310
Greece	„	334704	U.S.S.R.	„	336441

REPAIRS: Small repairs can be carried out, ask Agent.
DRY DOCKS: None, see Turku. Naantali shipyard owned by Wartsila Oy, Rauma-Repola Oy and Valmet Oy, new buildings, main dimension of building dock 220 m. × 70 m., outfitting dock 180 m. × 125 m., sill depth 8.2 m.
SURVEYORS: Ask Agent.
REPATRIATION: Good connections.
AIRPORT: 20 km. distant. Regular service.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: New Year's Day, Epiphany, Good Friday, Easter Monday, Labour Day, Whit Monday, Midsummer, All Saints' Day, Independence Day, (6th December), Christmas.
TELEPHONES: A telephone connection available at Main Quay and Quay No. 22.
SERVICES: Facilities for discharge of tank-washings, 10,000 cu. m. (Oil Harbour). Compass adjusting, ask Agent.
SHORE LEAVE: No restrictions for crew members.
IDENTIFICATION CARDS: Not required.
REGULATIONS: Oil pollution strictly prohibited. Dumping of waste, refuse, etc., also prohibited.
DELAYS: Usually no delays.
POLICE/AMBULANCE/FIRE: Police 751 133; Ambulance 751 123, Fire Brigade 005.
AUTHORITY: Naantalin Satamalaitos, 21100 Naantali, Finland. *Tel:* 921 – 755111. *Contact:* Harbour Manager or Hannu Haatainen, Assistant Harbour Master.

OULU: 65.02 N. 25.26 E. (See Plan Book)

PORT LIMITS: The seaward boundary of the port is drawn West of Oulu Roads. The arriving vessel passing the line Hermanni Island – Kyrokari Ice Buoy is inside the boundaries and if necessary to anchor on the roads, is considered to be an "arrived vessel".

Port consists of four separate parts: Toppila, Nuottasaari, Oritkari and Vihreasaari harbours.
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Customs Documents.
2 Crew Bond Declarations.
2 Ship's Bond-store Lists.
Derat Certificate.
4 Manifests.
2 Bills of Lading.
Ship's Register, Certificate of tonnage.
PILOTAGE: Vessel requiring Pilot applies from Marjaniemi. Pilot station, Lat. 65° 02′ 4″ N., Long. 24° 34′ E., near West point of Hailuoto Island. Pilots require 12 hours' notice of ETA to Peltinmatala lightbuoy (Pilots) or to alternative position 3 miles North of Kelmi lightbuoy. Pilot boat red coloured displaying usual international pilot signs. Pilot station equipped with HF (2182) and VHF, listening on Channels 16 and 13, radar and RC. Morse signalling by light. No specific requirements on part of Pilots boarding, only safe pilot ladder according to rules. Anchorage near lightbuoy Peltinmatala, when awaiting for Pilot in fine weather; in bad weather advisable to ride against weather and wind. Pilot for Oulu can also be obtained near the "Kemi 1" light-tower. Vessels with a draft more than 8.0 m. must use this fairway and apply for Pilot either from Marjaniemi or "Kemi 1" pilot station, wireless 2182 or VHF Channels 16 and 13.
ANCHORAGES: Safe anchorage on Oulu roads. There are no safe anchorages West of Hailuoto Island.
RESTRICTIONS: Day and night service, no tides. Winter season, contact ice-breaker 24 hours in advance on HF (2182), or VHF Channel 16.
MAX. SIZE: *Marjaniemi Fairway:* 8.0 m. *Kemi Fairway:* 10.0 m.
Toppila Harbour: Toppila Quay depth 6.1 m., Hietasaari Quay, depth 6.1 m.
Oritkari Harbour: Main Quay, depth 9.0 m. Stern Door Quay, depth 7.0 m. North Quay, depth 10.0 m.
Nuottasaari Harbour: Main and Chemical Quay, depth 6.4 m.
Vihreasaari Harbour: Oil Quay, length 72 m., depth 10.0 m. Bulk Quay, length 150 m., depth 10.0 m.
Also see "Berthing".
HEALTH: No special rules existing in obtaining pratique. If disease or fever is suspected on board report to ship's Agent; will contact the Health Authority for necessary arrangements.
RADIO: Vaasa Radio (North Quarken). Close to Hailuoto Island call "Oulu Radio" VHF Channel 27 or Channel 24.
RADAR/VHF: At Marjaniemi Pilot station, radar range 30 miles. Contact with HF (2182) or VHF (Channel 16). All ice-breakers keep watch on frequency 2182 and VHF (Channel 16).
TUGS: Tug optional, but for vessels over 140 m. long use is advisable. Tug ("Alpo", 500 h.p.) will meet on Oulu Roads according to agreement; customary to use ship's lines.
BERTHING: *Toppila Harbour:* Depth 5.0 – 6.1 m. Toppila Quay length 992 m. Hietasaari Quay length 600 m.
Nuottasaari Harbour: Main Quay, length 320 m. Waiting Quay, length 130 m.
Oritkari Harbour: Main Quay, length 270 m. Stern Door Quay, length 85 m. North Quay, length 170 m. Facility for Ro/Ro service.
Vihreasaari Harbour: Oil Quay, length 72 m. Bulk Quay, length 150 m.
CRANES:

	No.	*Capacity (tons)*	*Reach of arm (m.)*	*Type*
Nuottasaari Harbour	1	5	12	Movable
Toppila	1	5	12	„
Toppila	1	3	12	„
Vihreasaari	1	6	22	„
Vihreasaari	1	8	26	„

CARGO HANDLING FACILITIES: Toppila Harbour is equipped with 2 cranes, Vihreasaari Harbour with 2 cranes and Nuottasaari Harbour with 1 crane to load and discharge bulk cargoes and general cargoes with hook. 10 mobile cranes available from stevedores in all ports.

Roll-on/roll-off berth is adjacent to the Oritkari Harbour.

Oritkari Harbour is built to mechanically handle paper cargoes.

Free zone warehouse in Toppila (700 sq.m.) and free zone area in Oritkari (18,000 sq.m.). Warehouses in Toppila and Oritkari of 31,500 sq.m. There is a large amount of open storage in all harbours.
BRIDGES: No bridges. Electric cable across Toppila fairway, 50 m. above water.
STEVEDORES: 24 hours' notice of ETA to be given to Agent who arranges necessary gangs.
MEDICAL: Medical attention arranged through Agent, 2 – 4 hours' notice required. Good hospital facilities available.
TANKERS: One principal tanker berth in Vihreasaari Oil Harbour, depth 10.0 m. Discharge lines of 12, 14 and 18 in. Pressure 10 kg./sq.cm.
DENSITY: Fresh water.
FRESH WATER: Available at main berths and Oil Harbour from pipeline, cost about 9.00 mk/ton. Elsewhere water is delivered by boat, cost about 10.00 mk/ton.
FUEL: Small quantities of all grades available, delivered by lorries.
GANGWAY/DECK WATCHMEN: Watchmen recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew. Stevedores will do it by order of Master and will charge as shipwork.
CERTIFICATES:
Nationality Certificate.
Measuring Certificate.
Load-line Certificate.
Classification Certificate.
Safety Equipment Certificate.
Radio Safety Certificate.
Derat Certificate.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 200 gm. pipe tobacco or equal amount of cigars allowed to each member of crew. Wine and/or Spirit: One bottle wine or spirit allowed for each member of the crew.
CARGO GEAR: Tested cargo gear to international safety regulations. Test certificates to be on board vessel.
IDENTIFICATION CARDS: Not needed.
CONSULS: Sweden, Norway, Denmark, Great Britain and Netherlands.
REPAIRS: Minor deck and engine repairs carried out. Docking only for small tug boats.
SERVICES: Compass adjusters and ship's cleaning.
DRY DOCKS: One small slipway. Max. vessels of 25 m. length and 8 ft. draft.
REPATRIATION: Good facilities for effecting crew changes and to arrange necessary repatriation.
AIRPORT: Oulu Airport 15 km. from harbour served by regular airlines. Six daily flights to Helsinki and six flights from Helsinki to Oulu with continuous connection to Kemi and Rovaniemi.
TIME: Local time GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: General holidays in Finland: New Year's Day (January 1st); Good Friday; Easter Monday; Labour Day (May 1st); Independence Day (December 6th); Christmas Day (December 25th); Boxing Day (December 26th).

POLICE/AMBULANCE/FIRE: Fire 005, Reserve 006; Ambulance 006, Reserve 005; Police 002, Reserve 003.
TELEPHONES: A telephone connection available in all harbours.
SHIP SUPPLY SERVICE: English speaking Pilots keep watch round the clock at Oulu pilot station on VHF Channels 13 and 16. The have pilot boats for ship-to-shore transport in emergency cases. In other cases Oulu Harbour Radio keeps English speaking watch in office hours VHF Channels 13 and 16. At other times the Pilots help to translate messages to tugowners. Oulu Harbour and a few private Owners have tugboats for service around the clock. Vaasa Coastal Radio has watch around the clock on Channels 16 and 27. They can arrange a helicopter in emergency cases for service in whole Bay of Bothnia area.
DEVELOPMENTS: Railway and storehouse at Oritkari North Quay will be completed 1985-86.
AUTHORITY: Port of Oulu Authority, Harbour Office of Oulu, 90520 Oulu 52, Finland. *Tel:* 981 – 344266. *Cables:* Satama. *Contact:* Veikko Lauriala, Harbour Master. Tel: 343632.

PARGAS: 60.18 N. 22.18 E. (See Plan Book)

DOCUMENTS:
3 Crew Lists.
1-2 Custom Provision Lists.
1-2 Custom Special Lists.
2 Passenger Lists.
2 Copies each Bill of Lading.
Tonnage Certificate and in special instances other regular documents.

PILOTAGE: On arrival at Pargas, from Gulf of Finland, from Baltic via Uto, from Gulf of Bothnia via Enskar, information of ETA to be given in good time to respective pilot stations. VHF Channel 16 for calling, 13 for further communication. Charge for pilotage in accordance with official Finnish tariff. Harbour Pilot available, but not compulsory, and can be ordered through Sea Pilot.
ANCHORAGES: Well sheltered and safe anchorage, immediately outside harbour area.
MAX. SIZE: Maximum depth both in channel and along quay 6.70 m. As regards length of quay and possibilities for a quick dispatch, it is desirable (though not an absolute stipulation) that discharging vessel be a bulk carrier with the engines aft.
HEALTH: Free pratique automatic for all vessels, but temporary exceptions in and according to regulations issued by W.H.O. and Authorities may occur.
RADIO: Radio-telephone contact with Agent and consignee/shipper is obtained via Mariehamn, radio-call 2196 kHz, reply 1852 OHF; or via Hango, radio-call 1967 kHz, reply 2649 OFO. Contact with VHF is made via Abo, Channel 26.
TUGS: A small motor tug of 200 h.p. available.
BERTHING: Directions to berth via nearest pilot station, Pargasport. Quay level above water 1 – 2 m., dependent on berth.
Length of quays, 800 m. 2 electric coal-discharging bucket cranes and one electric conveyor belt.
STEVEDORES: Arrangements will be made by Agent, who must be advised of ETA previous day to enable arrange men, trucks, etc.
MEDICAL: Medical Officer available locally. Necessary examination and taking of tests usually done in Abo. Regular appointment with local physician can be arranged by telephone with Agent or doctor.
DENSITY: Brackish water 1002.
FRESH WATER: Delivery from installation on quay.
FUEL: No local supply. In case of need delivery by truck from Abo.
GANGWAY/DECK WATCHMEN: Available but not necessary.
OPENING/CLOSING HATCHES: Must always be performed by crew.
CERTIFICATES: Normally tonnage certificate only but in special instances other regular ship's documents may also be needed.
CUSTOMS ALLOWANCES: Tobacco, Wine and/or Spirits. In accordance with the decision of Customs Authorities.
CONSULS: See "Turku".
REPAIRS: Facilities for arranging small repairs on deck and engine in Pargas, but usually carried out by reliable companies in Abo.
DRY DOCKS: No local docking facilities. See "Turku".
AIRPORT: Nearest airport in Abo. Distance about 25 km.
HOLIDAYS: Whit Monday, Midsummer (2 days), All Saints' Day, Independence Day (6th December), Christmas (25th December). Work in harbour carried out during these days only under very pressing circumstances.
POLICE/AMBULANCE/FIRE: Police 744048; Ambulance 744064; Fire 005; Life-saving Corps 356595.
TELEPHONE: No facilities for placing telephone on board. Telephone available on quayside.
SHORE LEAVE: No restrictions for crew members.
IDENTIFICATION CARDS: Not required.
DELAYS: Vessels dispatched in order of arrival. Usually no delays occur as work has generally been carried out within the time limit stipulated in C/P. Port activity aimed at good dispatch of vessels, and consequently work in 2 shifts has been arranged.
AUTHORITY: Oy Partek Ab., 21600 Pargas, Finland. *Tel:* 921-742111. *Telex:* 62220. *Cables:* Pkpar Finland. *Contact:* Karl-Erk Lindholm, Manager of Shipping Department.

PATENIEMI: 65.06 N. 25.23 E. (See Plan Book)

OPERATORS: Oulu Oy Sawmill. Port used for export of timber only, about 120,000 cu.m. per year. 12 km. North of Oulu.
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Customs Documents.
2 Crew Bond Declarations.
2 Ship's Bond Store Lists.
Derat Certificate.
4 Manifests.
2 Bills of Lading.
Ship's Register, Certificate of Tonnage.

PILOTAGE: Pilot station at Marjaniemi. Marjaniemi – Oulu Roads 40 nautical miles, 7.0 m. depth. Oulu Roads – Pateniemi 6.0 m. depth.
ANCHORAGES: Safe anchorage on Oulu roads. There are no safe anchorages West of the Hailuoto Island.
RESTRICTIONS: Day and night service, no tides. Winter season, contact ice-breaker 24 hours in advance on HF (2182), or VHF Channel 16.
MAX. SIZE: Only dry cargo vessels use this terminal. Max. draft 6.0 m. Length 100 m. (approx.).
HEALTH: No special rules existing in obtaining pratique. If fever or disease suspected on board to be reported to ship's Agent, he will contact Health Authority for necessary arrangements.
RADIO: "Vaasa Radio" (North Quarken). Approaching Oulu contact Agent through "Vaasa Radio". Close to Hailuoto Island call "Oulu Radio" VHF Station, Channel 27.
RADAR/VHF: At Marjaniemi Pilot station, radar range 30 miles. Contact with HF (2182) or VHF (Channel 16). All ice-breakers keep watch on frequency 2182 and VHF (16).
TUGS: Tug optional. Tug will meet on Oulu Roads, according to agreement. Customary to use ship's ropes.
BERTHING: One berth of 85 m. enabling one vessel of medium size to load at quay. Depth at quay is 6.61 m.
STEVEDORES: 24 hours' notice of ETA to be given to Agent, who arranges necessary gangs.
MEDICAL: Medical attention arranged through Agent. 2–4 hours' notice required. Good hospital facilities available.
DENSITY: Fresh water.
FRESH WATER: Available and delivered by boat and from pipe-line.
FUEL: Small quantities of all grades available, delivered by lorries.
FIRE PRECAUTIONS: Smoking prohibited in timber yards.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew. Stevedores will do it by order of Master and will charge as ship work.
CERTIFICATES:
Nationality Certificate.
Measuring Certificate.
Load Line Certificate.
Classification Certificate.
Safety Equipment Certificate.
Radio Safety Equipment.
Derat Certificate.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 200 gm. pipe tobacco or equal amount of cigars allowed to each member of crew. Wine and/or Spirit: 1 bottle wine or spirits is allowed for each member of the crew.
CARGO GEAR: Tested cargo gear to international safety regulations. Test certificates to be on board.
CONSULS: British (Consul), Danish, French, Dutch, Italian, Norwegian and Swedish Vice-Consuls at Oulu.
SERVICES: Compass adjusters and ship's cleaning (no tank-washing).
REPATRIATION: Good facilities for effecting crew changes and to arrange necessary repatriations.
AIRPORT: Oulu Airport about 25 km. from harbour served by regular airlines. 7 daily flights to Helsinki and 6 flights from Helsinki to Oulu with continuous connection to Kemi and Rovaniemi.
TIME: Local time GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: General Holidays in Finland: New Year's Day (January 1st); Epiphany; Good Friday; Easter Monday; Labour Day (May 1st); Ascension Day; Whit Monday; Midsummer Day; All Saints' Day; Independence Day (December 6th); Christmas Day (December 25th); Boxing Day (December 26th).
POLICE/AMBULANCE/FIRE: Fire Tel: 005, Reserve Tel: 006; Ambulance Tel: 006, Reserve Tel: 005; Police Tel: 002.
REGULATIONS: Oil pollution strictly prohibited. Considerable number of logs lying in water and damages are ship's responsibility.
SHORE LEAVE: Crew members allowed ashore without restrictions.
IDENTIFICATION CARDS: Not needed.
AUTHORITY: Oulu Oy, Head Office, P.O.Box 196, SF-90101 Oulu 10, Finland. *Tel:* Int +35881221411. *Telex:* 32125.
Sawmill Industry at Pateniemi: *Tel:* Int +35881 510555. *Telex:* 32274. *Contact:* Shipping Department.

PORI, (including Mantyluoto, Reposaari and Tahkoluoto): 61.36 N. 21.29 E. (See Plan Book)

PORT LIMITS: The line between the lighthouses on Mantyluoto and Reposaari.
DOCUMENTS:
Ship's Register.
Crew List.
Passenger List.
Customs Documents.
Manifests.
Bills of Lading.

PILOTAGE: Pilot compulsory. Cable address: Luotsiasema, Mantyluoto (pilot station Mantyluoto), VHF Channel 16 or frequency 2182. 24 hour service by pilot boats from Mantyluoto pilot station, boats red-painted, international light or sound signals. Pilot to be taken 4 miles off Mantyluoto. In heavy fog, if required, pilot station able to navigate vessels into harbour by radar, provided vessel has corresponding equipment.

ANCHORAGES: Reposaari Roads and outside the breakwater.
RESTRICTIONS: Depth in the channel 8.6 m.
MAX. SIZE: No other restrictions, but max. draft 25 ft. (7.6 m.).
Tahkoluoto Oil Harbour: Max. draft: 10.0 m.
Tahkoluoto Bulk Harbour: Max. draft: 10.0 m. Length of the quay 145 m. In September 1985 the Deep Water Harbour will be available. Length of quay 400 m. max. draft 15.3 m.
Reposaari: Max. draft: 3.9 m.
RADIO: Inform Agents giving ETA via Helsinki Radio, Hanko Radio, or Mariehamn Radio, or VHF Channel 26, Pori.
TUGS: 5 tugs available from 200 h.p. up to 3,520 h.p. Tugs normally join the vessel near the quays. Tugs use ship's lines.
BERTHING:

		Depth of water	
	Quay	*(at normal water)*	
Quay	*Section*	*(m.)*	*(ft.)*
Kivilaituri	II	6.0—6.5	20—21
	III	4.5—5.5	15—18
Betonilaiturin lansipaa	IV	7.0	23
Betonilaiturin itapaa	V	6.5	21
	VI	3.9	13
Vasikkaniemen etelalaituri	VII	3.9	13
	VIII	6.5	21
Vasikkaniemen paalaituri	IX	7.0	23
Vasikkaniemen pohjoislaituri	X	8.1	27
Kirrisannan laituri	XI	8.3	27
Reposaaren laituri	XII	4.5	15
Tahkoluodon laituri	XIII	11.5	38

CRANES:

	Quay	*Cranes*	
Quay	*Section*	*Number*	*Capacity*
Betonilaiturin lansipaa	IV	2 2	3 tons 3/5 tons
Betonilaiturin itapaa	V	—	—
	VI	—	—
Vasikkaniemen etelalaituri	VII VIII	2	5 tons
Vasikkaniemen paalaituri	IX	1	25 tons
Vasikkaniemen pohjoislaituri	X	4 1	6 tons 15/30 tons
Kirrisannan laituri	XI	1	200 tons
Reposaaren laituri	XII	—	—
Tahkoluodon laituri	XIII	—	—

CARGO HANDLING FACILITIES: Three Ro/Ro berths, 30-ton and 40-ton cranes able to handle containers.
Tahkoluoto Bulk Harbour: Transhipment berth equipped with conveyor, rate 1,200 t.p.h. Unloading capacity at new Deep Water Harbour is 1,000-1,400 t.p.h. by Siwertell travelling ship unloader.
STEVEDORES: The vessels receive workers in the order in which they enter the harbour. ETA advices appreciated in order to facilitate arranging gangs.
MEDICAL: No advance notice for medical attention required. Hospital facilities available.
TANKERS: Berth No. 13. Max. draft 10.0 m.
DENSITY: 1004.5.
FRESH WATER: Supply by shore installation.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: This work normally carried out by crew.
CERTIFICATES: Load Line Certificate; and during Winter season Ice Dues Certificate which issued by authorities for each season.
CONSULS: Vice-Consuls: Britain, tel. 939/443122; Denmark, tel. 939/443122; Netherlands, tel. 939/443222; Norway, tel. 939/443222; Sweden, tel. 939/11141.
REPAIRS: Most repairs possible.
AIRPORT: Distance from airport 22 km. Served regularly by Finnair.
TIME: Local time 2 hours ahead of GMT. 3 hours ahead in Summer. (end March – end September.)
GENERAL: Harbour icebreaker "Porin Karhu", 3,500 h.p. available.
AUTHORITY: Port of Pori Authority, 28880 Pori 28, Finland. *Tel:* 39–443200. *Contact:* Hannu Sjoros, Harbour Master.

PORKKALA (Kantvik): 60.05 N. 24.23 E.

(See Plan Book)

Documents and all general information, refer to "Helsinki".
PILOTAGE: A Pilot can be obtained from the Pilot Station of Porkkala, Tel. 90–2984 112 or VHF Channels 13 and 16. Distance to port about 14 miles. Pilotage in the harbour area may be carried out only by State-appointed Pilots. Pilotage in the harbour is not obligatory.
MAX. SIZE: Maximum draft 30 ft. 2 in. (9.2 m.).
APPROACHES: There are four official ship routes leading to the port of Porkkala (Kantvik) of Suomen Sokeri Osakeyhtio. The deepest one is 9.2 m. (30 ft.) and the shallowest one is 5.5 m. (18 ft.). The port does not have an ice-breaker of its own and the fairway is kept open by means of the State's ice-breakers.
CLEARANCE: The customs formalities of the port are attended to by the Custom House of Helsinki.
TUGS: A small motor tug of 200 h.p. available. Bigger tug, if needed can be ordered from Helsinki or from Inkoo.
BERTHING: The port of Porkkala (Kantvik) is owned by Suomen Sokeri and it is located at Kantvik. Directly in the vicinity of the port there is the factory of Suomen Sokeri Osakeyhtio (sugar mill). The port basin has 3 quays:
The outer quay is 110 m. long, draft 9.2 m. (30 ft. 2 in.).
The inner quay is 50 m. long, draft 5.3 m. (17 ft. 4 in.).
The fairway of the port basin is 120 m. wide, narrowing up at its end to 76.5 m. South quay (at the South bank of Kantvik Bay) is 60 m. long, draft 9.2 m. (30 ft. 2 in.).
DENSITY: 1004.
CRANES: Two cranes, capacity 8 tons. One crane is on the outer quay and one on the South quay. Also one 3-ton mobile crane.
FRESH WATER: Available at quays.
CONSULS: Nearest in Helsinki.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally by the crew.
AIRPORT: Nearest Helsinki, distance 45 km.
TIME: Local time is GMT plus 2 hrs. GMT plus 3 hours in Summer.
HOLIDAYS: On Saturdays, Sundays and General Holidays in Finland no cargo work is done.
POLICE/AMBULANCE/FIRE: Contact the Gatehouse of Factory.
TELEPHONES: Can be arranged on board. Telephone calls can be made from the Harbour Office during day-time.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not needed.

SHIPMASTER'S REPORT: The sugar discharging berth for Porkkala is at Kantvik, situated in Lat. 60° 05′ N., Long. 24° 23.25′ E., about 21 miles West of Helsinki.

The Pilot for the port is embarked at the position indicated on British Admiralty Chart No. 2331, 115° 3.5 miles from Porkkala lighthouse. From there to the berth is 12 miles and the passage presents no difficulties. It is well lit, and there is ample water. The least depth recorded was 31 ft. and that was alongside the berth. There is a powerful tug for assisting in berthing and unberthing.

The discharging berth, alongside which vessels lie port side to, is modern and well fendered. It is sheltered from most directions. Unfortunately, the berth is short for a 500 ft. vessel, and additional moorings have to be placed from amidships.

There is only 1 crane on the berth and to work either of the end hatches a shift would be necessary. Work was continuous while the vessel discharged her part cargo at Kantvik, and an out-turn rate of 100 t.p.h. was achieved.

Fresh water is readily available from the Jetty, and presumably, fuel could be obtained by lighter from Helsinki. Telephones in the dock offices are available for official use.

There is a bus service to and from Helsinki, the journey taking about 40 minutes.

AUTHORITY: Suomen Sokeri Oy, Harbour Master.

PORVOO (Skoldvik): 60.18 N. 25.33 E.

(See Plan Book)

The harbour is a private oil harbour owned and managed by Neste Oy.

The harbour is located at Skoldvik in the municipal area of Porvoo about 45 km. (28 miles) East of Helsinki, Lat. 60° 18′ N., Long. 25° 33′ E. The area is shown on Finnish Marine Chart Nos. 17 and 902.

The distance from the Kallbadagrund Lighthouse to the harbour is 20.5 nautical miles (38 km.). The minimum width of the harbour channel is 270 m. (885 ft.) and the approved depth is 15.3 m. (50 ft.).

The water level varies between +1.5 m. and −0.75 m. (+5 ft. and −2.5 ft.) depending on the wind. There are no tides in the area.

The Winter period is from January to the end of April. During this time the channel from the open sea to the harbour is kept open by icebreakers owned by the State. The Finnish Board of Navigation determines the requirements for vessels allowed to enter various ports during this period.

Officially, the extra charges for the Winter period are collected from 1st December to 30th April.
DOCUMENTS: The following documents shall be handed over after berthing:
4 Crew Lists.
2 Lists of Visitors.
3 Passenger Lists.
1 Provision List.
1 Special List (Customs).
Ship's Register, Certificate of Tonnage.
The usual Cargo Documents.
PILOTAGE: Pilotage is compulsory. The Pilots are Sea Pilots employed by the State. They also perform the pilotage inside the port area.

The pilot station is at the outer end of Emsalo Island. Vessels entering from the sea are boarded by the Pilot at Kallbadagrund, Lat. 59° 59.1′ N., Long. 25° 36.1′ E.

The Pilot shall be called by using the international code, VHF Channels are 13 and 16.

The Sea Pilots serve as Docking Masters berthing the vessel with the help of 2 tugs when the vessel is over 15,000 tons.

RESTRICTIONS: Vessels can enter and leave the harbour 24 hours a day. However, vessels whose keel clearance is minimal are not allowed to berth in darkness or under unfavourable wind conditions.

In bad Winter, port may be closed by ice between January and April although normally kept open by ice-breakers.

MAX. SIZE: Up to about 260,000 d.w.t. Max. draft 15.3 m.

HEALTH: Bill of Health not required. In case suspected disease or fever on board, radio Agent full details before arrival to advise Port Health Officer in advance.

RADIO: Notice of arrival shall be given 12 hours before the calculated time of arrival by the ship's Agent (Helsinki Radio). Two hours before arrival at the boarding site for the Pilot, the same notice shall be sent, including

1) The name and the nationality of the vessel
2) Net registered tonnage
3) The time and date of the notice
4) The draft of the vessel
5) Time of arrival at the boarding site for the Pilot.

VHF: The harbour office is open 24 hours a day. It is provided with the VHF station "Neste". The following Channels are available: 6, 9, 13, 15, 16, 17 and 21. Telex connection is 17-46 Neste Sf.

TUGS: The harbour tugs "Esta", "Kari", "Aulis" and "Esko" owned by Neste are available to handle vessels. Respective capacities are:

"Esta"	1,000 kW	(1,330 h.p.)
"Kari" "Aulis" "Esko"	2,352 kW	(3,200 h.p.)

Vessels over 80,000 d.w.t. need additional tugs, which the ship's Agent shall order from Helsinki.

The ship's own lines shall be used for towing.

Tug to stand-by whilst vessel discharging.

BERTHING: There are 6 berths available for discharging crude oil and loading of oil products. An additional berth is available for handling of petrochemical products.

Loading and discharging is possible around the clock. During the icefree period all berths are surrounded by oil booms.

Berth 1:	Face direction 023° 42′ Water depth 12.6 m. (41 ft.) Maximum vessel size about 50,000 d.w.t.
Berth 2:	Face direction 128° 42′ Water depth 17.6 m. (57 ft.) Maximum vessel length 330 m. (1,082 ft.) without special permission N.B. Vessel to be moored starboard side alongside Shore gangway Maximum reach of loading arms +21.5 m. (+70 ft.) from sea level
Berth 3:	Face direction 128° 42′ Water depth 17.6 m. (57 ft.) Maximum vessel length 280 m. (918 ft.) N.B. Vessel to be moored starboard side alongside Shore gangway Maximum reach of loading arms +19.5 m. (+64 ft.) from sea level
Berth 4:	Face direction 017° 56′ Water depth 15.3 m. (50 ft.) Maximum vessel size about 150,000 d.w.t.
Berth 5:	Face direction 002° 58′ Water depth 8 m. (26 ft.) Maximum vessel size about 8,000 d.w.t.
Berth 8:	Face direction 004° 42′ Water depth 13.5 m. (44 ft.) Maximum vessel size about 40,000 d.w.t.
Berth 9:	(Formerly Kymi Kymmene Oy, Svartback Harbour). Face direction 333° 18′ Water depth 7.3 m. Maximum vessel size about 7,000 d.w.t.

The water depths correspond to the normal water level.

All loading arm flanges are ANSI 150 lb. RF. For tugs and cargo vessels there are separate berths in the harbour.

DISCHARGING/LOADING: The usual methods are applied in discharging and loading. While discharging and loading the safety rules for Neste tank vessels and oil harbours shall be followed.

Crude oil can be discharged simultaneously at a maximum of three berths. However, at Berths 2 and 3 only one ship at a time can be discharged because of a common pipe-line.

LPG is butane or propane. As there is one common pipe-line for LPG loading, only one ship at a time can be loaded.

Berth 8 is used for benzene loading, capacity 500 cu.m./h. and propylene loading, capacity 400 cu.m./h.

During cargo handling adequate crew shall be on board. A gangway watchman is not required.

Loading and Discharging Facilities:

Berth 1: Discharging rate 5,000 cu.m./h., shore line 24 in. diameter, arms No. 12 and No. 13, 2×12 in. diameter.

Loading rate for heavy fuel oil 3,500 cu.m./h., shore line 20 in. diameter, arms No. 12 and No. 13, 2×12 in. diameter.

Loading rate for diesel oil 2,000 cu.m./h., shore line 14 in. diameter, arm No. 14, 1×12 in. diameter.

Loading rate for gasoline 2,000 cu.m./h., arm No. 15, 1×12 in. diameter.

Loading rate for jet fuel 500 cu.m./h., arm No. 16, 1×8 in. diameter.

Deballasting 1,000 cu.m./h., arm No. 12, 1×12 in. diameter.

Bunkering rate 600 cu.m./h., arm No. 11, 1×8 in. diameter.

All flanges ANSI 150 lb., RF.

LPG Loading rate 80 cu.m./h., hose 1×4 in. diameter, flanges ANSI 300 lb., RF.

Berth 2: Discharging rate 12,000 cu.m./h., main shore line 40 in. diameter, arms No. 22, No. 23 and No. 24, 3×16 in. diameter.

Loading rate for heavy fuel oil 5,000 cu.m./h., arm No. 22, 1×16 in. diameter.

Deballasting 1,000 cu.m./h., arm No. 22, 1×16 in. diameter.

Bunkering rate 600 cu.m./h., arm No. 21, 1×10 in. diameter.

All flanges ANSI 150 lb., RF.

Berth 3: Discharging rate 6,000 cu.m./h., main shore line 40 in. diameter, arms No. 34 and No. 35, 2×12 in. diameter.

Loading rate for heavy fuel oil 5,000 cu.m./h., arms No. 34 and No. 35, 2×12 in. diameter.

Loading rate for diesel oil 2,500 cu.m./h., arm No. 33, 1×12 in. diameter.

Deballasting 1,000 cu.m./h., arm No. 35, 1×12 in. diameter.

Bunkering rate 600 cu.m./h., arm No. 37, 1×8 in. diameter.

All flanges ANSI 150 lb., RF.

Berth 4: Discharging rate 6,000 cu.m./h., shore line 24 in. diameter, arms No. 42, No. 43 and No. 44, 3×12 in. diameter.

Loading rate for heavy fuel oil 4,000 cu.m./h., shore line 20 in. or 24 in. diameter, arms No. 42 and No. 43 or No. 43 and No. 44, 2×12 in. diameter.

Loading rate for diesel oil 2,000 cu.m./h., arm No. 40, 1×12 in. diameter.

Loading rate for gasoline 2,000 cu.m./h., arm No. 45, 1×12 in. diameter.

Loading rate for straight-run naphtha 1,500 cu.m./h., arm No. 40, 1×12 in. diameter.

Deballasting 1,000 cu.m./h., arm No. 42, 1×12 in. diameter.

Bunkering rate 600 cu.m./h., arm No. 41, 1×8 in. diameter.

All flanges ANSI 150 lb., RF.

Berth 5: Discharging rate 1,000 cu.m./h., arm No. 51, 1×8 in. diameter.

Loading rate for heavy fuel oil 1,000 cu.m./h., arm No. 51, 1×8 in. diameter.

Loading rate for diesel oil 1,000 cu.m./h., arm No. 52, 1×8 in. diameter.

Loading rate for gasoline 1,000 cu.m./h., arm No. 53, 1×8 in. diameter.

Deballasting 1,000 cu.m./h., arm No. 51, 1×8 in. diameter.

Bunkering rate for heavy fuel oil 600 cu.m./h., arm No. 51, 1×8 in. diameter.

Bunkering rate for diesel oil 40 to 1,000 cu.m./h., arm No. 52, 1×8 in. diameter and hose 1×2 in. diameter.

All flanges ANSI 150 lb., RF.

LPG Loading rate 80 cu.m./h., hose 1×4 in. diameter, flanges ANSI 300 lb., RF.

Berth 8: Loading rate for benzene 500 cu.m./h., arm No. 81, 1×8 in. diameter.

Loading rate for phenol 100 cu.m./h., hose 1×6 in. diameter.

Loading rate for propylene 400 cu.m./h., hose 1×8 in. diameter.

Loading rate for oily water 100 cu.m./h., hose 1×4 in. diameter

Loading rate for acetone 300 cu.m./h., arm 1×8 in.

Flanges for propylene loading ANSI 300 lb., RF.

All other flanges ANSI 150 lb., RF.

Berth 9: (Formerly Kymi Kymmene Oy, Svartback Harbour).

Loading rates for:

Styrenemonomer	500 cu.m./h.
Ortoksylene	500 cu.m./h.
Hexanol	500 cu.m./h.
Glykol	60 cu.m./h.
Oktanol	500 cu.m./h.
VCM	45-200 cu.m./h.
Isobutene	270 cu.m./h.
Ethylene	270 cu.m./h.
Vinylasetate	200 cu.m./h.
Alfol-610	500 cu.m./h.

BALLAST: There are facilities for discharging ballast at oil berths. However, discharging can be effected simultaneously only from 2 berths.

The capacity of the ballast handling system of the refinery is 30,000 cu.m. and the maximum discharging rate at each berth is 1,000 cu.m./h. Ballast over 5,000 cu.m. must be reported 48 hours prior to arrival.

The harbour office collects a charge to cover treatment costs for receiving ballast.

No ballast can be discharged at Berth 8. However, in near future, flushing water for the tanks can be discharged provided that the pollutants can be handled in the Neste waste water treatment system. In that case the capacity is 100 cu.m./h.

MEDICAL: In emergency a doctor can be called on board. To call ambulance, dial 69-2222. The nearest hospitals are in Porvoo and in Helsinki. Ship's Agent helps in other medical problems, such as providing medicines.

DENSITY: 1006.

FRESH WATER: Drinking water can be supplied from:

Berths 1, 4 and 5	25 cu.m./h.
Berths 2 and 3	50 cu.m./h.(2 connections)
Berth 8	20 cu.m./h.

FUEL: Bunkering facilities are installed at oil berths. Two grades are available, marine fuel oil and marine diesel oil.

The bunkering capacities:

Marine fuel oil	600 cu.m./h.
Marine diesel oil	up to 1,000 cu.m./h.

The diesel oil can be delivered through product lines. Bunkers must be ordered with 72 hours' notice addressed to Neste Marine Product Sales, Telex: Hki 12-4641.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine or spirits for each man.

GANGWAY/DECK WATCHMAN: Not required.

REPAIRS: Only minor repairs can be effected following the safety rules and with the permission of the harbour office.

REPATRIATION: Disembarking is possible. A foreigner needs a passport. Distance to Porvoo is 20 km. (12.5 miles) and to Helsinki 45 km. (28 miles).

AIRPORT: There are daily flights from Helsinki – Vantaa Airport with good connections all over the world. Distance to the airport is about 50 km. (30 miles).

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

TELEPHONE NUMBERS: After berthing a telephone connected to the local automatic exchange will be placed on board all vessels, the respective dial numbers being:

Berth 1	23333
Berth 2	23334
Berth 3	23335
Berth 4	23336
Berth 5	23337
Berth 8	23341
Important Numbers:	
Harbour Office	23339 or 147700/2380 and 2381
Customs	23293
"Esta"	23350
"Kari" "Aulis" "Esko"	23423
Fire Alarm/ Ambulance	69-2222

Bus Connections, Taxi:

Bus connection daily to Porvoo from 0700 to 2300 hrs.

Taxi 24 hours	tel. Nos.
Neste Oy Taxi Station	23245
Pekema Oy Taxi Station	23390
K-O Johansson	22252

GENERAL: *Inspections:*

To avoid oil accidents, an inspection based on the checking list is carried out before loading/discharging to find out the preparedness of the vessel to act in an emergency.

Vessels loading/discharging oil products are surrounded by oil booms.

Inspections are carried out and loading/discharging is supervised by the Loading Master, whose instructions must be followed. If he is not on board, he can be contacted by telephone, No. 23339 or 147700/2381.

REGULATIONS: In addition to the existing Finnish laws, statutes and other regulations the Port Regulations of Neste Oil Harbour must be followed.

Some excerpts:

Entering the Harbour: Vessels carrying explosives or flammable liquids or gases shall observe what has been separately laid down concerning such cargo. The vessel shall show the prescribed caution sign in the harbour area.

Traffic in the Port Area: In the port area the speed of the vessel shall be according to the circumstances, so that no harm or danger shall be caused to anyone. Oil booms, underwater jobsites etc. shall be passed with special care. The maximum speed allowed in the port area is 6 (six) knots, unless otherwise stated by the Harbour Office.

Berthing of the Vessel: Without urgent need, anchorage is prohibited in the marked fairway, in the vicinity of the submarine pipe-lines or cables or in any place where the vessel may disturb the traffic.

The vessel shall be moored alongside the berth appointed by the Harbour Authorities and it shall not be removed without permission.

While berthing or unberthing or whilst moored at the berths the relevant safety precautions shall be taken to avoid any damage to the berths.

All ships' scuppers must be plugged or closed by mechanical means so that no water, steam or dirt comes into contact with the berth or its immediate vicinity.

A sufficient crew shall be maintained on board to ensure that the ship can be removed, if necessary.

Prevention of Shallowing and Contamination of the Harbour: In the port area it is prohibited to discharge oil or oil-emulsified water. In the Baltic Sea the existing restrictions must be observed.

The jettisoning of garbage and refuse is prohibited in the port area. The blowing of tubes and boilers of the ship while at the berth is prohibited.

AUTHORITY: Neste Oy, Porvoo Works, Harbour Office, 06850 Kulloo, Finland. *Tel:* 15-23339. *Telex:* 1746. *Contact:* Simo Vilkki, Harbour Master.

RAAHE (LAPALUOTO): 64.41 N. 24.29 E. (See Plan Book)

PORT LIMITS: Vessel is considered to be an "arrived vessel" subject to Charter Party Terms, when passing breakwaters if not ordered to anchor near Raahe Lighthouse by Port Authority.

DOCUMENTS:

Crew Lists.
Passenger List.
Ship's Register.
Custom List.
Provisions List.

PILOTAGE: Compulsory. To avoid delay in obtaining a Pilot the Owners, Master or Agent of the ship bound for Raahe must report vessel's ETA 6 hours in advance of ETA. ETAs must be confirmed or corrected not less than 2 hours prior to ETA by VHF contact with pilot station on Channel 16.

Pilots board and disembark by pilot cutter (red) near Raahe Lighthouse (Lat. 64° 39′ N., Long. 24° 13′ 5″ E.). Day and night service.

ANCHORAGES: Vessels can anchor outside Raahe Lighthouse, depth 15-20 m. No anchorages inside breakwaters.

RESTRICTIONS: No restrictions night entry.

MAX. SIZE: Lapaluoto Harbour, depth inside 5.4 m., outside 6.7 m. Length 140 m.

Rautaruukki Oy Harbour; depth 7.8 m., length 200 m. (approx.).
Ore Harbour, depth 6.7 m.

RADIO: Helsinki Radio, 2182 kHz, call sign OHG, Mariehamn Radio, 2182 kHz, call sign OFH; Vaasa Radio 2182 kHz and VHF Channels 16, 24 and 27, call sign OFW.

RADAR/VHF: No port radar services. Pilot station. Radio, 2182 kHz, VHF Channel 16. Rautaruukki Oy Harbour Office, VHF Channel 16 and tugboat "Rautaluoto" VHF Channel 16.

TUGS: Tug *Rautaluoto* 600 h.p.

STEVEDORES: Rautaruukki Oy, in Steelworks Harbour, Lapaluoto private firms.

SPECIALISED CARGO – HANDLING FACILITIES: Lapaluoto Harbour, no shore cranes, Ore Harbour (Helmi), only conveyor. Rautaruukki Oy Harbour, import quay equipped with three 12.5-ton shore cranes and conveyor; export quay equipped with one 12.5-ton and one 40 ton shore crane, straddle carriers and equipment for handling steel and general goods.

LIFEBOAT STATION: Lifeboat cutter "Niilo Saarinen", 360 h.p., 10 knots. Radio 2182 kHz, VHF Channel 16, Radar, fire and drainage pump 4,000 litres/minute. Alarm through National Lifeboat Service, Pilot or Police Stations.

DENSITY: Average density 1002.

FRESH WATER: Available at all berths in Rautaruukki's harbour.

FUEL: Small quantities available, one day's notice required.

FIRE PRECAUTIONS: No special precautions in Lapaluoto Harbour.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally by the crew.

CUSTOMS ALLOWANCES: About 200 cigarettes and limited amount spirits per man.

CONSULS:

Denmark 31146 – 37269
Norway 31146 – 37269
Sweden 37300 – 37007

REPAIRS: Raahe Oy, Mechanical Workshop. Slip for small ships.

DRY DOCKS: None.

AIRPORT: Oulunsalo Airport, about 60 km. from Raahe.

REPATRIATION: Crew changes and repatriation can be carried out without difficulties.

TIME: Local time is GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: New Year's Day; Twelfth Night; Good Friday; Easter Monday; Labour Day (1st May) holiday when no work takes place; Ascension Day; Whitsun Monday; Midsummer Day; All Saints' Day; Independence Day (6th December); Christmas Day and Boxing Day.

POLICE/AMBULANCE/FIRE: Police 37911; Ambulance; Fire and First Aid 005.

SHORE LEAVE: No restrictions.

IDENTIFICATION CARDS: Not required.

GENERAL: Government ice-breaker assistance available when needed.

AUTHORITY: Rautaruukki Oy, Harbour Office, 92170 Raahensalo, Finland. *Tel:* 982-302304. *Telex:* 32132. *Cables:* Rautaruukki, Raahe. *Contact:* Captain R. Rahja, Harbour Master. Tel: 982-302304.

RAUMA: 61.08 N. 21.30 E. (See Plan Book)

PORT LIMITS: Southern entrance port limit when passing Tankkarit, northern entrance port limit when passing Riskonpoella.

DOCUMENTS: 2 Crew Lists and 1 Passenger List. Ship's Register, Customs Documents, Ship's Papers, etc. (Ship's Agent will give the necessary advice).

PILOTAGE: Pilot station at Kylmapihlaja-island, Lat. 61° 08′ 7″ N., Long. 21° 18′ 4″ E. International Pilot signals, VHF Channels 16 and 13. Fairways: Valkeakari 6.5 m.; deep passage 9.0 m.

ANCHORAGES: Ample area for anchorage in Archipelago.

RESTRICTIONS: Entrance: North Channel 6.5 m., South Channel 9.0 m., max. draft 9.0 m. Harbour open all year round.

MAX. SIZE: Draft limit only.

HEALTH: Event any suspect contagious disease ask for orders by wireless. Port Regulations do not allow such a ship to come alongside or closer than 350 yards. Pilot must not leave ship before allowed by the Doctor. Pilot does not board an infected ship but ship piloted to safe anchorage by pilot boat.

RADIO: Helsinki Radio, Hanko Radio, Mariehamn Radio and nearest station Vaasa Radio.

VHF: Vaasa VHF, intermittent watch on Channels 16, 26 and 28. Channel 16 used for calling Pilot, tug etc. Channels 13 and 12 for further operations.

RADAR: When required pilot station radar used for advising Pilot onboard.

TUGS: 3 ice-breaker tugs available (up to 3,500 bhp) 24 hours per day. 2 hours' notice recommended.

BERTHING:

Quay	Length (m.)	Depth Alongside (m.)	Remarks
Petajas	170	10.5	Bulk Cargo
Iso-Hakuni	100	10.5	Ro-Ro
Hakuni	270	6.5	General Cargo
Central	410	6.6 – 7.3	General Cargo
Laitsaari	280	9.15	General Cargo
Suoja	110	5.7	General Cargo
Chemical I	100	5.5	Liquid Cargo
Chemical II	110	7.2	Liquid Cargo
Oil	125	9.15	Oil Carriers
Kallistus	400	4.0	Small ships, tugs, etc.

CRANES: 2×6 tons; 1×5 tons; 2×3 tons. 15 mobile cranes 5 – 42 tons available.

STEVEDORES: 24 hours' notice to Agent recommended.

BULK CARGO FACILITIES: Part of Central Quay for bulk carriers, shore cranes, max. draft 7.0 m.

Petajas Quay for bulk carriers, max. draft 9.0 m. (depth alongside 10.5 m.).

Facilities for grain cargo.

SPECIALISED CARGO – HANDLING FACILITIES: No special equipment for containers, but containers can be handled by harbour cranes and mobile cranes.

Good berths for roll-on/roll-off traffic.

Oil slop discharge to tanks available.

Different kinds of liquid chemicals can be handled in special berths.

MEDICAL: Advance notice recommended if possible. Hospital available (231 beds).

TANKERS: See "Berthing".

DENSITY: 1004 – 1003.

FRESH WATER: Fresh water available on quay, except Petajas Quay where water delivered by tugs. Charges depending on amount taken. An extra fee is charged if tug is used.

FUEL: Fuel brought by tank-trucks.

GANGWAY/DECK WATCHMEN: Available if wanted. Watchmen supplied by private company.

OPENING/CLOSING HATCHES: Performed by ship's crew or by Stevedores at request of ship.

CUSTOMS ALLOWANCES: Tobacco: 6 day's ration (about 200 cigarettes or 200 gm. tobacco). Wine and/or Spirits: 1 opened bottle of wine or liquor, subject to Customs Regulations.

CARGO GEAR: Central quay shore gear available. Other quays mobile gear or ship's gear.

CONSULS: Denmark, Norway and Sweden.

REPAIRS: All types available.

DRY DOCKS: Rauma-Repola Oy: Dry dock 159 m.×21.7 m.×7.3 m. All sorts of repairs. Hollming Oy: Slipway for ships up to 600 d.w.t.

Cranes: Movable electric crane up to 80 tons.

SURVEYORS: Ship's Agent will give advice.

REPATRIATION: Repatriation and signing on or off.

AIRPORT: Pori – airport 50 km. away. Regular connections.

TIME: Local time is 2 hours ahead of Greenwich (Long. 30° E.). GMT plus 3 hours in Summer.

HOLIDAYS: See "Turku".

POLICE/AMBULANCE/FIRE: Police, 002 and 003; Ambulance, 006; Fire alarm, 005.

TELEPHONES: Oil quay, Laitsaari Quay and Iso-Hakuni Quay.

SERVICES: Compass adjusting facilities and compass adjusters.

SHORE LEAVE: No restrictions.

IDENTIFICATION CARDS: Normally no identification card needed but passport or seaman's book preferable.

DELAYS: No delays in berthing, loading and discharging weather permitting.

DEVELOPMENTS: New warehouses and storage fields under construction.

Bulk berth to be completed December 1984.

AUTHORITY: Port of Rauma Authority, 26100 Rauma, Finland. *Tel:* 358 38 13000. *Telex:* 65182 Raupo Sf. *Cables:* Rauma Habour Master. *Contact:* General Manager or Harbour Master.

SAIMAA CANAL AND PORTS IN LAKE AREA OF SAIMAA (See Plan Book)

APPROACH CHANNELS: The canal can be reached from the international waters of the Gulf of Finland through an approach channel South of Someri. The channel passes the Island of Vihrevoi and continues, at the Island of Malyj Vysotski, as the Vysotski-Viipuri Channel, from which the approach channel departs at a distance of 10 km. from Malyj Vysotski. The length of the approach channel from the point of departure to the Brusnitchnoe Lock is 14 km. The distance from the international water area to the Island of Vihrevoi is 94.5 km. and the length of the section Vihrevoi-Malyj Vysotski 12 km. The total length of the channel from the territorial waters of the Soviet Union to the Brusnitchnoe Lock is thus 131 km.

From the territorial waters of Finland the canal may be reached through the so-called coastal channel starting from the Finnish border at the island of Santio and joining the above sea channel at the Island of Vihrevoi. The length of the channel from the border to Vihrevoi is 49 km. and the overall length to the Brusnitchnoe Lock is 85.5 km. The channel and its refuge harbours have been marked on the Soviet sea charts Nos. 1131 and 1132 and on Finnish charts Nos. 11 and 12. The coastal channel may only be used by Finnish vessels while vessels of other nationalities must use the sea channel, except for foreign tugs.

Canal: The length of the canal on the Finnish side of the border is 23.3 km. and that of the part on the Soviet side 19.6 km. The overall length of the Saimaa Canal is thus 42.9 km. The average difference in the height between Lake Saimaa and the Gulf of Finland is 75.6 m. The canal has 8 locks, the heights of fall of which range between 5.54 m. and 12.69 m. Earth transports will use the 7 moving bascule bridges and the 6 stationary bridges across the canal.

NAVIGATION SEASON: The natural openwater season of the Saimaa Canal lasts on average 211 days. Since most vessels navigating in the Canal have been strengthened and inspected for navigation in ice, a season of navigation of nine months has lately been reached, the season beginning in early April and ending in January. The goal is to prolong little by little the season to ten months long.

The opening and closing of the season of navigation on the Canal is decided each year by the Finnish and Soviet Saimaa Canal Delegates. The opening will be announced not later than 1 day before the opening day and the closing not later than 7 days before the closing day.

During the season of navigation the Saimaa Canal and the other deep channels are kept open 24 hours a day.

PILOTAGE: *Use of Pilot is compulsory in the Soviet territory:* Pilotage in the Soviet water area is carried out by the Soviet Pilot Service. Pilotage is needed when using the outer channel between Vihrevoi – Brusnitchnoe and when using the coastal channel between the border – Brusnitchnoe. All vessels must use Pilot on these channel sections.

Pilotage on the Saimaa Canal: Pilotage on the section Brusnitchnoe – the lock of Malkia is carried out by canal pilots subordinated to the Saimaa Canal Office. All vessels, excluding small Finnish vessels less than 25 m. in length, shall use a Pilot when proceeding through the Canal. The Canal Office may grant upon application to a Master of a vessel the right to navigate a certain vessel on the Canal without a Pilot provided that the Master of the vessel has passed an examination required for the purpose.

Pilot must be ordered 12 hours in advance of point of receipt of Pilot: In navigation from the Gulf of Finland the Pilot must be ordered from the Viipuri Section of Inflot 12 hours before the arrival at the point where the Pilot is taken on board. The order must be checked four hours before the start of the pilotage. When using the coastal channel it is recommended, however, that the checking is done 6 hours before the start of the pilotage. To avoid excessive work by the Pilot Service and to eliminate delays special attention is to be paid to the accuracy of the time the pilotage is to be started, particularly in the last notifications.

In navigation from the Lake Saimaa the Pilot must be ordered from the Canal Office 12 hours before entrance into the Canal. The order must be checked two hours before the pilotage is to be started.

In navigation from the Gulf of Finland a Canal Pilot need not be ordered separately. Similarly, a Soviet Pilot for the approach channel need not be ordered separately when the vessel proceeds from Lake Saimaa.

Pilotage in the water system of Saimaa: Pilotage in the water system of Saimaa is carried out by Pilots of the National Board of Navigation in Finland. The order for Pilots shall be made 6 hours before the start of the pilotage to the pilot stations of Saimaa of the National Board of Navigation in Finland.

MAX. SIZE: The canal can be used by vessels with dimensions not exceeding the following:

Length	82.0 m.
beam	11.8 m.
draft	4.35 m.
height of mast	24.5 m.

The draft of a vessel in tow, however, shall not exceed 4.5 m. For vessels larger than those mentioned above, a permit for navigation on the canal may be granted upon application to the Canal Office of the Saimaa Canal.

The permit may contain regulations concerning the structure or equipment of the vessel or special provisions pertaining to navigation of the vessel on the canal such as good manoeuvrability, liability to wait or speed restrictions.

The Canal Office of the Saimaa Canal may also grant a vessel or equipment with slightly larger dimensions, carrying exceptional cargo, a Trip Let Pass for one passage through the canal.

The Rules and Regulations for Traffic on the Saimaa Canal also contain more detailed directions – among others on the permissible dimensions of vessels in tow and timber rafts using the open canal sections.

NEW VESSELS: When designing new vessels, to be used also in traffic through the Saimaa Canal, the designers are advised to consult the main dimensions and the structure of the vessels with the canal authorities. The conditions of navigation in the canal depend, first of all, on manoeuvrability, though certain other factors are also important.

MAXIMUM PERMISSIBLE SPEED AND TIME OF PASSAGE: The highest permissible speed on the actual channel of the Saimaa Canal is 9 km./hr. for vessels with a draft greater than 3.9 m. For vessels navigating on lesser drafts the speed is graduated within the limits of 9–15 km./hr. depending on the draft. In the lake parts of the Canal the highest permissible speed varies between 15–18 km./hr. depending on the size of the vessel. Detailed regulations available from the Canal Office. The time of passage through the part of the Canal provided with locks (mouth of the Canal on Lake Saimaa–Lock of Brusnitchnoe) is 5–8 hours depending on waiting time at locks caused by heavy traffic volumes, and on size of vessels.

SIGNS AND SIGNAL LIGHTS: The sign system of the approach channel of the Saimaa Canal, the canal and the channels on Lake Saimaa is adequate to ensure safe navigation throughout the day, also at night and in poor visibility.

The approach channel is provided with beacons, light buoys and signs in accordance with the lateral system. The signs have been erected by Soviet authorities. The illumination and the signalisation systems of the Saimaa Canal are based on the same principles with beacons and signs, but in the signal system of the canal, sign lanterns, signboards, line markers, water traffic signs and radar reflectors have been used. The colour of sign lanterns is orange on the West bank and green on the East bank of the canal. In marking of the lake channels of Saimaa according to the cardinal and lateral system, leading and warning lights, light buoys, range beacons, landmarks and signs have been used. Information of the marking of the water system of Saimaa has been issued as a booklet by the National Board of Navigation in Finland: "Sisavesistojen loistot I 1976" – "Beacons of Inland Water Areas I 1976".

RADIO: There are two radiotelephone networks for marine use in the sphere of influence of the Saimaa Canal. On the frequency of 160 MHz reserved for actual marine radio communications there are also the Pilot radiotelephone and the public radiotelephone networks.

The Pilot radiotelephone network covers all stationary radiotelephone equipment at all locks, on the Kansola Bascule Bridge, at pilot stations and in the traffic office in the administrative building at Mustola as well as portable radiotelephone apparatus used by canal Pilots. The radiotelephone equipment of the canal Pilots operate on Channel 11 of the international marine radio. The telephone of the Brusnitchnoe Lock and the Lock of Malkia and the radio telephone in the Administrative Centre of the canal are also provided with a general calling and safety Channel 16.

When approaching from the sea the vessel makes a radio contact with the Brusnitchnoe Lock by using Channel 11. After this all radio communications required by navigation on the canal also use Channel 11. On Lake Saimaa, radio communications move over to Channel 13 on which the traffic office of the Saimaa Canal and the pilot station of Lauritsala are also able to operate.

The general radiotelephone network on Lake Saimaa (the so-called Saimaa Radio) uses Channels 23–28 of the international marine radio. The network covers the entire region of the water system of Saimaa extending from Lappeenranta to Iisalmi and Lake Pielinen. Channel 24 is the calling channel of the Saimaa Radio.

Two marine radio stations for general traffic have been built at Nuijamaa and Virolahti especially for navigation on the Saimaa Canal. Both radio stations are on duty and they are remote-controlled from the Coast Station of Kotka. The stations have the calling and safety Channel 16 and a calling Channel 24 for public traffic. The Nuijamaa Station operates on Channel 28 and the Virolahti Station on Channel 23. The range of the Nuijamaa Station extends from South of Viipuri to Southern Saimaa and the range of the Virolahti Station covers the entire Bay of Viipuri. The stations can be called either on Channel 16 or on the operating Channel. The Kotka Radio calls vessels either on Channel 16 or 24.

The principal purpose of both the Saimaa and the Kotka Radios is to ensure the communications of the safety service of navigation. These stations may also be used to transmit calls to the public telephone network – also to foreign countries – or vice versa, to receive calls from the public telephone network.

AUTHORITIES:

Canal Office of the Saimaa Canal, 53420 Lappeenranta 42, Finland. *Tel:* 953-85255. *Telex:* 58236 Tvlsk Sf.

National Board of Public Roads and Waterways in Finland, Waterways Department, Opastinsilta 12 (Box 33), 00521 Helsinki 52, Finland. *Tel:* 90-1541. *Telex:* 121108.

The Viipuri Section of Inflot. *Tel:* Viipuri 12-85 and 52-01. *Telex:* 121521. *Cables:* Inflot, Viipuri.

THE HARBOURS OF THE LAKE AREA OF SAIMAA:

Mustola Harbour:

Situated in the Saimaa Canal.
Authority: The town of Lappeenranta, Harbour Office,
Address: Satamatie, 53900 Lappeenranta 90, Finland.
Tel: 953-518841.
Room for four ships, draft 4.35 m.
Warehouse terminal of 3,200 sq.m., first class storage yard of 10,000 sq.m., second class storage yard 30,000 sq.m.
Electricity, water, telephone etc. services available.
Harbour Master, Tel: 518841.

Kaukas Industrial Harbour:

Owner: Oy Kaukas Ab.
Address: 53200 Lappeenranta 20, Finland.
Tel: 953-5141.
Telex: 58211.
Room for one ship, draft 4.35 m.
Pilotage distance from the canal entrance 1.5 nautical miles.

Rapasaari Harbour:

Authority: The town of Lappeenranta, Harbour Office.
Address: Satamatie, 53900 Lappeenranta 90, Finland.
Tel: 953-518841
Room for one ship, draft 4.35 m.
First class storage yard of 3,000 sq.m., second class storage yard of 2,000 sq.m. Railway connection.
Pilotage distance from the canal entrance 6 nautical miles.
Harbour Master, Tel: 518841.

Joutseno Harbour:

Authority: The Community of Joutseno.
Address: 54100 Joutseno, Finland.
Tel: 953-34221.
Room for one ship, draft 4.35 m.
First class storage area 3,000 sq.m.
Pilotage distance from the canal entrance 13 nautical miles.

Vuoksi and Kaukopaa Industrial Harbours:

Situated in the town of Imatra.
Owner: Enso-Gutzeit Oy.
Address: 55800 Imatra 80, Finland.
Tel: 954-31866.
Telex: 5710.
Room in both quays for one ship, draft 4.35 m.
Pilotage distance from the canal entrance 25 nautical miles.

Ristiina Harbour:

Authority: The Community of Ristiina.
Address: 55800 Ristiina, Finland.
Tel: 955-41310.
Room for one ship, draft 4.35 m.
First class storage yard of 5,000 sq.m.
Pilotage distance from the canal entrance 49 nautical miles.

Savonlinna Harbour:

Authority: The town of Savonlinna, Technical Office.
Address: Olavinkatu 40, 53130 Savonlinna 30, Finland.
Tel: 957-12771.
Room for one ship, draft 4.35 m.
First class storage yard of 7,000 sq.m., second class storage yard of 6,000 sq.m. Railway connection.
Electricity, water, telephone, etc., services available.
Pilotage distance from the canal entrance 84 nautical miles.
Harbour Master, Tel: 12771.

Joensuu Harbour:

Authority: The town of Joensuu, Harbour Office.
Address: Ukonniemi, 80220 Joensuu 20, Finland.
Tel: 973-824521.
Room for three ships, draft 4.35 m.
Sawed timber roof of 1,200 sq.m., first class storage yard of 6,000 sq.m., second class storage yard of 60,000 sq.m. Railway connection.
Electricity, water, telephone, etc., services available.
Pilotage distance from the canal entrance 188 nautical miles.
Harbour Master, Tel: 824521.

Varkaus Oil Harbour (Akonniemi):

Owner: Vapo Oy.
Address: Akonniemi, 78710 Varkaus 71, Finland.
Tel: 972-13672.
Room for one tanker, draft 4.35 m.
Pilotage distance from the canal entrance 123 nautical miles.

Varkaus Harbour:

Authority: TVL/Kuopion piiri.
Address: Box 117, 70101 Kuopio 10, Finland.
Tel: 971-84522.
Room for one ship, draft 4.35 m.
Harbour is located in the lock of Taipale. It is a waiting berth for ships passing the lock of Taipale. A. Ahlstrom Oy uses it for shipping paper.
Pilotage distance from the canal entrance 125 nautical miles.

Industrial Harbour of A. Ahlstrom Oy:

Owner: A. Ahlstrom Oy.
Address: Box 14, 78101 Varkaus 10, Finland.
Tel: 972-251.
Telex: 4315.
Room for two ships, draft 4.2 m.
Water, etc., services available.
Pilotage distance from the canal entrance 126 nautical miles.

Kumpusaari Harbour:

Authority: The town of Kuopio, Harbour Office.
Address: 70100 Kuopio, Finland.
Tel: 971-121411.
Room for two dry cargo ships and for one tanker, draft 4.20 m.
Warehouse terminal of 2,500 sq.m., sawed timber roof of 2,000 sq.m., first class storage yard of 25,000 sq.m., second class storage yard of 28,000 sq.m. Railway connection.
Electricity, water, telephone, etc., services available.
Pilotage distance from the canal entrance 168 nautical miles.
Harbour Master, Tel: 121411.

Kelloniemi Oil Harbour (in Kuopio):

Owner: Oy Esso Ab.
Address: Kelloniemi, 70460 Kuopio 46.
Tel: 971-343333.
Room for one tanker, draft 4.20 m.
Pilotage distance from the canal entrance 169 nautical miles.

Siilinjarvi:

There are two quays, each with berthing for one vessel, in the community Siilinjarvi, draft 4.20 m.
Owners: Kemira Oy, 71800 Siilinjarvi, Tel: 971-421144.
Lohja Oy, 71800 Siilinjarvi, Tel: 971-431300.
Pilotage distance from the canal entrance 181 nautical miles.

TOLKKINEN (Tolkis): 60.20 N. 25.35 E.

PILOTAGE: Pilot arrives from port station at Emsalo (tel. 915 – 27710). Station equipped with VHF, radiotelephone and radar. Pilot boards between Kalbadagrund and Porvoo Lighthouse. Pilotage distance to port 22 miles.
APPROACHES: Max. draft of fairway from sea to roads 15.0 m., and from Roads to quay 7.0 m.
TUGS: Several tugs available from oil harbour.
BERTHING: Tolkis North Quay, depth 7.0 m. Tolkis South Quay, depth 5.2 m. Oil Harbour (see "Porvoo").
CRANES: Tolkis South Quay equipped with 1 movable crane. Lifting capacity 2.5 tons with grab and 5 tons with hook. Several mobile cranes up to 70 tons available for hire.
STEVEDORES: Working hours from 0700 – 1600 hrs. 4 – 5 gangs available Monday to Friday. On Saturday only 1 gang.
FUEL: Small quantity available by tank-car.
FRESH WATER: Fresh water available. Rate 8 t.p.h.
DENSITY: 1004.

AGENT: Oy Borga Stuveri Ab., 06750 Tolkis, Finland. Tel: 915 – 24530. After office hours: Tel: 915 – 143952. Telex: 1758 clear sf. Cables: Stevedore. Contact: Captain Christer Lindstrom.

TORNIO: 65.51 N. 24.09 E. (See Plan Book)

The outer harbour of Tornio is Roytta situated about 6 miles S.W. of Tornio.
DOCUMENTS:
2 Crew Lists.
2 Provisions Lists.
Passenger List.
One set of Bills of Lading, Ship's Papers, Health Documents.
PILOTAGE: Ajos pilot station VHF Channel 16. Pilot to be taken on board by lighthouse "Kemi 2" in position 65° 30.3′ N., 24° 22.5′ E., 10 miles from Ajos.
ANCHORAGES: In Roads, depth is 24 ft.
MAX. SIZE: At same time there can be 2 vessels of 100 m. – 120 m. length, draft 21 ft. 06 in.; 2 vessels of 50 m. – 60 m. length alongside Main Quay; and 2 vessels of 50 m. – 60 m. length, draft 14 ft. at Old Quay.
RADIO: Vaasa Radio/OHX or Harnosand Radio, Sweden/SAH.
TUGS: No tug available at Tornio. To be ordered from Kemi 12 hours before arrival.
CRANES: Three 20 ton mobile cranes for general cargo and several cranes for discharging bulk cargo.
STEVEDORES: Ordered by Agent (Telex 35 – 12). Agent must be given 24 hours ETA. Normal working time 0700 – 1100 hrs., 1200 – 1600 hrs. and 1600 – 2400 hrs. (Two shifts).
DENSITY: Fresh water.
FRESH WATER: Fresh water can be delivered by tank lorry (8 tons).
FUEL: Ordinary fuel by lorries from Kemi.
OPENING/CLOSING HATCHES: By the ship's crew.
CUSTOMS ALLOWANCES: 200 cigarettes or 200 grams tobacco and 1 bottle spirits.
CONSULS: France tel. 40473; Sweden tel. 23651; Norway 14411.
REPAIRS: No docks but accommodation for small repairs.
AIRPORT: At Kemi, 20 km. from Tornio; served by Finnair.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
POLICE/AMBULANCE/FIRE: Police 003; Fire 005; Ambulance 006; Salvage 47472.
AUTHORITY: Tornion Satamakonttori, PL60, SF-95400 Tornio, Finland. *Tel:* 980 – 40416. *Contact:* J. Arvola, Harbour Master.

TURKU (Abo): 60.27 N. 22.15 E.

DOCUMENTS: See "Oulu".
PILOTAGE: Telegram to Agent with 24 hours ETA to Sea Pilot station (State Pilots) Uto. Contact pilot station via Hango Radio or at shorter distance by VHF. Coastal Radar service available. When approaching port ETA by VHF to Port Information Centre, international Channel 12 for Harbour Pilot. Cutter whilst in action, same Channel, but takes orders from Information Centre only.

Pilot cutters painted red with white circular field marked "L" on the bows. Flying flag in daylight, showing red and white lights vertically at night. Coming out when required to pilot station 0.75 mile from Main Harbour. Call signals: International flag "G", at night 3 long blasts. No special boarding measures. All ships arriving from sea will get necessary information from Sea Pilot, whose service is compulsory. Harbour Pilot not compulsory.
ANCHORAGES: Outer anchorage at Bay of Airisto, 2 miles from Port, 15 – 18 m. In practice all ships taken into port without anchoring or waiting.
MAX. SIZE: Maximum draft in Commercial Harbour 30 ft. fresh water. In Oil Harbour 29 ft. 6 in. fresh water. Length and breadth of minor importance. No tides.
HEALTH: International Quarantine flag required in case of suspected disease or fever including preliminary report by VHF, otherwise, ask Agent.
RADIO: Hango (Hanko) Radio and Mariehamn Radio. In addition these have telephone and VHF service. Local telephone network on VHF Channel 26.
TUGS: Off Harbour Pilot station, Pikisaari/Beckholmen, further out on application. Advisable apply for tugs in advance. 4 tugs available.
BERTHING: Priority given to arriving and departing passenger ships on regular lines. 6 hydraulic stern loading roll-on/roll-off berths and 3 without hydraulics..
Total length of quays 4,896 m.

Canal Bank quay	Depth 27 ft.
West quay	Depth 30 ft.
Coal quay	Depth 18 ft.
Oy Wartsila A/B	Depth 18 ft.
Linnanselka/Slottsfjarden quay	Depth 27 ft.

Container facilities available.
Also see "Developments".
CRANES:

Quay	*No.*	*Capacity (tons)*	*Reach of arm (m.)*	*Type*
Canal bank	7	5.0	15	Movable
	1	7.0-5.0	5.5-12	,,
Linnanselka/ Slottsfjarden	7	5	20	,,
	2	60-40	20-24	,,
	9	6	20	,,
Oy Wartsila Ab Turku Shipyard (only for dock work)		100-40-10	17.5 35-36	Stationary
Valmet Oy Pansion Telakka	1	30-6	19-39	Floating for dockwork only

DENSITY: 1004.
STEVEDORES: Agent should be well informed about ETA and Master's Requirements. Normal working hours: 0700 – 2230 hrs.; Saturdays and days preceding public holidays 0700 – 1430 hrs. The Post Office: 0900 – 1600 hrs. Saturdays and days preceding public holidays 0900 – 1400 hrs.
MEDICAL: All medical and hospital facilities available. No special requirements regarding inoculations, etc.
TANKERS: No special requirements. Small slop discharge facilities. 1 berth, depth 29 ft. 6 in. for larger ships.
FRESH WATER: From pipe-lines along berths. Approx. 5 fmk. per ton.
FUEL: Most grades available. No advance notice neccessary if from motor vehicles. In case of greater quantities: from Oil Harbour only. This requires advance notice to Agent.
GANGWAY/DECK WATCHMEN: Gangways to be rigged out so that they do not obstruct quay crane movements. Watchmen customary, but not necessarily hired.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CONSULS: The following countries are represented by Consuls or vice-consuls in Turku: Austria, Belgium, Denmark, France, Great Britain, Greece, Honduras, Iceland, Italy, Norway, Portugal, Spain, Sweden and U.S.S.R.
REPAIRS: All types of repairs possible.
DRY DOCKS: Graving dock: length 600 ft. (183 m.), width of sluice gate 85 ft. (26 m.), depth on sill 26 ft. 3 in. (8.0 m.).

Floating dock: lifting capacity 4,000 tons, max. length of ship 358 ft. (109 m.), inner width 59 ft. (18 m.) max. draft 16 ft. 6 in. (5.0 m.). By agreement the shipyard's 80-ton crane can be used in port traffic if such is needed. Tel. 359 500, Telegrams "Wartsila". Telex 62-228.
Valmet Shipbuilding Group:
Floating Dock: 155.0×23.4×7.0 m., lifting capacity 8,500 tons.
REPATRIATION: Yes, good connections everywhere.
AIRPORT: 4 miles from port, regular lines.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: New Year's Day (January 1st); Twelfth Night (January 6th); Good Friday; Easter Bank Holiday; Midsummer Day; All Saints' Day; Independence Day (December 6th); Christmas Day; (December 25th); Boxing Day (December 26th).
POLICE/AMBULANCE/FIRE: Fire 005; Police 002; Ambulance 006.
GENERAL: Ice-breakers maintain Winter traffic. 2,000 and 800 h.p.
TELEPHONES: Ships' telephones available.
IDENTIFICATION CARDS: Not needed.
DEVELOPMENTS: Entrance channel to Main Harbour to be dredged to 33 ft. in 1984. Container Harbour being built. Outer Harbour planned. New Shed (No. 26) of 4,500 sq.m. in service, intended mainly for Ro/Ro traffic. Draft alongside 27 ft.

New bulk shed under construction and will be in service mid-1984.
AUTHORITY: Port of Turku Authority, Linnankatu 80, SF-20100 Turku 10, Finland. *Tel:* 21–764 111. *Telex:* 62190 Port Sf. *Contact:* Captain H. E. Pettersson, Harbour Master.

UUSIKAUPUNKI: 60.48 N. 21.24 E.

APPROACHES: 3 fairways lead to harbour through sheltering archipelago; Uto-Uusikaupunki, 78 miles; Isokari-Uusikaupunki, 13 miles; Kylmapihlaja-Uusikaupunki, 24 miles.

Good sheltered anchorage in the roads. Depth of fairways 10.0 m.

DOCUMENTS:

Agent will prepare during clearance:
- 2 Ship's Report.
- 1 Declaration List, Arrival (Board of Navigation).
- 1 Declaration List, Departure (Board of Navigation).

To be prepared before Arrival:
- 2 Provision Lists (own provision of the ship).
- 2 Special Lists (must be signed by each member of the crew).
- 2 Crew Lists.
- Bill of Admeasurement.
- Certificate of Registry.
- Ice-class Certificate (during Winter months, 1st December-30th April, issued by hull surveyor).
- Bill of Lights (issued by Customs).

PILOTAGE: Embark Pilot at Isokari or Uto Pilot Stations. Distance through archipelago Isokari-Uusikaupunki 13 miles, Uto-Uusikaupunki 78 miles. Under normal circumstances first fairway recommended. During Winter months, if ice-situation difficult in Gulf of Bothnia, traffic goes via Uto.

Both pilot stations equipped with radio 2182 kHz, Channels 16 and 24, VHF duplex-Channels 18, 20 or 22 and radar. Pilot-boat red, with letter "L" and fitted with VHF Channels 13 and 16. Pilot boards usually between Sandback-Isokari, to where "Hauteri" light leads in line 134.5°–314.5° (T). Notice of ETA at least 4 hours prior reaching station.

ANCHORAGES: Many areas of safe anchorages in Archipelago. Pilot advises.

RESTRICTIONS: No entry restrictions. No tide. During North and East winds sea-level can fall about 40 cm. below normal, which may sometimes delay deep loaded vessels reaching port.

MAX. SIZE: Longest quay 340 m. depth alongside 10 m.

HEALTH: Pratique not necessary. In the event of any disease/fever on board or in last port of departure, vessel has to inform before arrival, hoist quarantine-flags, or in darkness 2 lights, red light above white, showing all round horizon.

RADIO: Mariehamn Radio OFH; Helsinki Radio OHG.

TUGS: 2 available; normally tugs join vessel at port, ship's lines used.

BERTHING: *Kemira Quay:* 340 m. long, owned by fertiliser factory Kemira Oy, has depth 10 m. alongside, two 8 ton cranes, two discharging pipes, one for discharging ammonia at minus 32° C and one for sulphur acid. Discharging capacity depending material 140-170 tons/hour/crane and loading/discharging bags 45-50 tons/hour/crane.

Esso Quay: 40 m. long, owned by Oy Esso AB, depth in channel and alongside 5 m. Terminal is used for discharging LP gas.

Telakka Quay: 140 m. long, owned by Uudenkaupungin Telakka Oy, has depth alongside 5 m. Quay is only used for ship repairs, and fitting works for new buildings. There is also a floating dock with 5,000 ton capacity.

Hepokari Pier: 90 m. long and 18 m. breadth, owned by town. Channel and alongside depth 7 m. There is terminal on South side for Ro-Ro traffic.

Saunasilta Quay: 60 m. long and depth 3.5 m., owned by town. Used only by small coasters.

STEVEDORES: Available. Contact Agent.

MEDICAL: Hospital facilities, vaccination, certificates, etc., available. Contact Agent.

TANKERS: For discharging and loading liquid ammonia – Marine Loading arm "Luceat/Chiksan, Type RCMA" 8 in., ASA 300.

DENSITY: No tide, density 1004.

FRESH WATER: Water-hoses, about 20 t.p.h.

FUEL: Fuel available, contact Agent.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: All certificates according to International Convention for the Safety of Life at Sea, Class Certificate, etc.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per each member of the crew. Wine and/or Spirit: 1 bottle wine or spirit per each member of the crew.

CARGO GEAR: No additional requirements.

CONSULS: None.

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: Uudenkaupungin Telakka Oy has a floating dock, lifting power 5,000 tons, draft 6.1 m., breadth 19.6 m., and length 130 m.

REPATRIATION: Facilities exist for effecting crew changes and arranging any necessary repatriations.

AIRPORT: Distance to Turku Airport about 90 km. Airport is served by regular Airlines.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: Official Holidays are: New Year's Day (January 1st); May 1st; Midsummer Day (Saturday between June 20th and June 26th); Independence Day (December 6th). Usually no work on those days.

POLICE/AMBULANCE/FIRE: Police 002 or 3002; Ambulance 3005; Fire 005 or 3005.

TELEPHONES: Available.

SHORE LEAVE: Crew members are allowed ashore.

IDENTIFICATION CARDS: Not needed.

AUTHORITY: Uusikaupunki Harbour Office, Satamantie 9, Uusikaupunki. *Tel:* 922 – 22963. *Cables:* Satamatoimisto. *Contact* Harbour Office.

VAASA: 63.06 N. 21.36 E. (See Plan Book)

DOCUMENTS:

- 3 Crew Lists.
- 3 Passenger Lists.
- 2 Customs Documents.
- 2 Health Documents.
- 5 Manifests.
- 5 Bills of Lading.

PILOTAGE: Pilot vessel not cruising in open sea. Meets ship 2 miles N.W. of Vaasa Lighthouse (Lat. 63° 14.36' N., 20° 55.75' E.).

Pilot signals: Letter "G" as flag, light or sound. Radio telephone call: Pilots watching 24 hours on 2182 kHz, also VHF.

Pilot vessel: 30 ft. motor yacht with wheelhouse and radar. Hull red all over with letter "L" painted on bow.

Harbour Pilot available from Vaasa Pilot Station Tel. 39 725.

ANCHORAGES: To Pilot's advice.

RESTRICTIONS: No locks. Fairway lit all the way.

No tide, but water level may be reduced by up to 20 in. in Spring and early Summer, or increased by 10 in. to 25 in. in Autumn.

MAX. SIZE: Depth alongside piers up to 29 ft. 4 in. At the Oil Harbour, max. recommended LOA is 610 ft., depth 26 ft. 3 in.

HEALTH: See "Documents" – no restrictions. Hospital and Doctor for any purpose available.

RADIO: Vaasa Radio – OFW 2803 kHz.

RADAR/VHF: No radar service in port area. Pilot vessels at sea pilot stations equipped with radar. VHF radios on pilot stations, harbour tug-boat and Harbour Office. Channels 16, 13 and 12.

TUGS: Harbour tug-boat and ice-breaker m/s *Vaasa* available 24 hours. 650 h.p. Radio telephone/VHF – call sign OGWE. Charge according to size.

BERTHING: 2 piers of 180 m. length and the Reins Quay of 240 m. length. Depth 26 ft. 3 in. to 29 ft. 4 in. New Coal Quay length 145.9 m., depth 29 ft. 4 in. There are three 5-ton cranes on the South Pier.

The Ferry Pier, 106 m. and 118 m. length, depth alongside 5.0 m. with berths for Ro-Ro traffic.

The Oil Harbour is at Vasklot. Depth alongside 26 ft. 3 in. Tankers discharge through three arms of 500 mm. and 400 mm. diameter.

STEVEDORES: ETA as usual according to C/P to Agent, etc.

MEDICAL: If serious illness advance notice to Agent necessary. Coastguard has an aeroplane stationed at Vaasa; coast radio station will advise and arrange.

DENSITY: Nearly fresh water 1002-1004. No tide.

FRESH WATER: Available, no limit. Direct from quay-side, through pipes, rate about 25 t.p.h.

FUEL: All grades of bunker fuel available – direct from oil jetty or by lorries to berth.

FIRE PRECAUTIONS: Dry cargo ships; no smoking in holds. Tankers: usual restrictions. Tankers with petrol cargo not allowed to berth at dry cargo piers.

GANGWAY/DECK WATCHMEN: Not compulsory, ship's own crew can be used. Police watchmen available.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES:
- Safety Equipment Certificate.
- Stability Certificate.
- Load Line Certificate.
- Derrick and Hoisting Gear Test Certificate.
- Derat Certificate.
- Nationality Certificate.
- Measurement Certificate.
- Ice-class Bill.

CUSTOMS ALLOWANCES: Tobacco: Max. 200 cigarettes per man or 50 gm. of tobacco. Wine/Spirit: Maximum 1 bottle of each per man to be opened and used on board only.

CARGO GEAR: Cargo gear test book to be in order – all gear to be tested within a year otherwise risks for breaks in discharging/loading.

IDENTIFICATION CARDS: Not needed.

CONSULS:
- Belgium
- Denmark
- France
- Great Britain
- Netherlands
- Norway
- Sweden

REPAIRS: Shipyard in Vaasa. All deck and engine work can be carried out; slip for ships up to 1,500 d.w.t. Nearest dry dock Rauma. Harbour tug acting as salvage vessel, diver on board, all kinds of underwater cutting and welding, pumps, etc.

REPATRIATION: Can be carried out easily.

AIRPORT: Vaasa Airport (about 8 miles from town) served by regular airlines, domestic and abroad, Stockholm, U.K., Continent, etc.

TIME: Local time GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: Working hours in port: 0800 – 1200 hrs., 1300 – 1700 hrs. Monday to Friday, Saturday: 0800 – 1200 hrs. Sunday free. Working days in port: Monday to Saturday. Working days ashore: Usually Monday to Friday. All banks closed on Saturday. Shops open all weekdays. Other holidays: 6th December – Independence Day – Christmas, etc., as usual.

TELEPHONES: Can be arranged on board.

POLICE/AMBULANCE/FIRE: Tel. numbers Vaasa: Police 002; Ambulance 003; Fire 006. Ambulance, Aeroplane, Coast Guard: Vaasa 114 859.

GENERAL: Ships approaching port of Vaasa in Winter time (January-May) when sea area icebound, have to call any of Government ice-breakers operating in area or to inform Harbour Authorities of exact ETA – engine power, size and nationality, and whether strengthened for ice or not. Call signs, etc., for Government ice-breaker can be obtained from nearest coast radio station.

SERVICES: Compass adjusting available.

DELAYS: Only Winter time when Government ice-breaker is arranging, waiting or assisting in outbound convoys of ships.

AUTHORITY: Vaasa Harbour Office, SF-65170 Vaasa 17, Finland. *Tel:* 358-61-112162. *Contact:* Lars Holmqvist, Harbour Master.

VEITSILUOTO: 65.42 N. 24.37 E. (See Plan Book)

DOCUMENTS: Usual documents for Finnish ports. In addition the Harbour Master requires a copy of the Crew List.
PILOTAGE: Inwards compulsory for vessel in foreign trade. Boarding about 8 miles before Ajos. Ajos Pilot Station may be contacted on VHF Channel 16.
ANCHORAGES: Good holding ground about 1 mile from Rautakallio and by Koivuhauta 2 miles from harbour entrance.
RESTRICTIONS: No tide. Entry by day or night. Approach Channel, depth 7.1 m. It is recommended that vessels longer than 150 m. and with a minimal keel clearance avoid berthing in dark or under unfavourable weather conditions at Veitsiluoto harbour.
MAX. SIZE: See "Berthing".
VHF: Make initial contact on Channel 16.
HEALTH: See "Oulu".
TUGS: Available when required, charges according to net tonnage. Use ship's lines.
BERTHING: Length of Quay 552 m.
Berth Nos. 1 & 2: Total length 95.5 m. Depth 4.9 m.
Berth Nos. 3, 4 & 5: Total length 235 m. Depth 7.1 m.
Berth Nos. 6, 7 & 8: Total length 222 m. Depth 7.1 m.
CRANES: No shore cranes available. Load/discharge by ship's gear or mobile cranes.
SPECIALISED CARGO – HANDLING FACILITIES: One Ro/Ro berth, no special equipment.
STEVEDORES: Ordered by Agent.
MEDICAL: Hospital at Kemi. Masters to advise if medical attendance required aboard.
FRESH WATER: Available at short notice. Rate 7 t.p.h.
FUEL: Ordinary fuel, diesel and gas oil. Deliveries by lorries only.
FIRE PRECAUTIONS: No special precautions. Company's fire-fighting corps.
GANGWAY/DECK WATCHMEN: Available, ordered by Agent.
OPENING/CLOSING HATCHES: By crew.
IDENTIFICATION CARDS: Not required.
CONSULS: Norway, others at Kemi.
REPAIRS: Available at Kemi.
SERVICES: Radar repairs possible in Kemi.
AIRPORT: At Kemi, approx. 15 km. from port.
POLICE/AMBULANCE/FIRE: The nearest emergency services are available through the Alarm Centre of the Veitsiluoto Company, telephone number 22. If you phone outside the Company, call first 8141 (the number of the Company), and then ask for number 22.
SHORE LEAVE: Crew members allowed ashore.
DELAYS: Not normally expected.
REGULATIONS: Port regulations delivered to ship on arrival.
AUTHORITY: Veitsiluoto Oy, SF-94800 Kemi 80, Finland. *Tel:* (980) 8141/5542. *Telex:* 3614 Vto Sf. *Contact:* Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

France

GENERAL

NOTICE TO MARINERS: No. 2005/81

Regulations concerning vessels laden with hydrocarbons (including) oil or other dangerous cargoes approaching French ports.

Regulations have been promulgated by the French Authorities concerning vessels laden with hydrocarbons (including oil) or other dangerous cargoes in the approaches to French Mediterranean ports and the ports in Corse.

Any such vessel intending to enter French territorial waters (including Corse) from seaward, or to sail from a French port or anchorage, is required to signal certain details to the Prefet Maritime of the Third Region at Toulon 6 hours beforehand. Should there be any subsequent change in the vessel's intended movements, or in her material state, a further signal should be made. All such vessels are required, throughout their stay in French territorial waters, except when lying alongside in port, to maintain radio watch on Channel 16 or the local frequency, if applicable.

Any such vessel which suffers significant damage at sea, or the threat of damage, from whatever cause, while within 50 miles of the French coasts, is required to signal certain details to the Prefet Maritime at Toulon. Subsequent developments must be reported, including the time of requesting assistance, the expected time of its arrival and the actual time of arrival. Any ship joining the damaged vessel to render assistance is required to signal details to the Prefet Maritime, and to render reports on the casualty on arrival. These signals are informative and do not constitute a request for rescue or assistance.

For details of all signals required above see *Admiralty List of Radio Signals, Vol. 6.*

Vessels exceeding 1,600 gross tons laden with hydrocarbons (including oil) or other dangerous cargoes must not approach the French coasts within 7 miles, unless instructed to do so by the French authorities or within the port approach channels listed below. Exceptions to this rule are made in the channel between Corse and Capraia, where the minimum distance is reduced to 5 miles, and in the Bonifacio Strait.

Such vessels approaching, or departing from, the ports of Port-la-Nouvelle, Sete, l'Espiguette, Golfe de Fos, Marseille, Toulon, Antibes, Ajaccio, Porto Vecchio, Solenzara, Lucciana and Bastia are required to use the charted port approach channels. When in these channels such vessels are priority vessels and must display Flag "B" of the International Code by day, and exhibit one red light, visible all round, at night. The provisions of Rule 9 of the *International Regulations for Preventing Collisions at Sea (1972)* explicitly apply.

NOTICE TO MARINERS: No. 2379/81.

Regulations concerning tankers laden with hydrocarbons and vessels carrying dangerous cargoes navigating in the approaches to the N. and W. coasts of France.

The French authorities have issued the following regulations concerning the above mentioned vessels.

(a) **Laden vessels exceeding 1,600 tons gross** must keep at least 7 nautical miles from the French coast, unless otherwise instructed by a Prefet Maritime, except within:–

The N.E.-bound lane of the Dover Strait traffic separation scheme.

Race of Alderney.

The access channels to the following ports:

Dunkerque, Calais, Boulogne, Dieppe, Fecamp, Le Havre-Antifer, Rouen, and the ports of the lower Seine, Caen/Ouistreham, Cherbourg, Granville, Val de Saire transhipment area, Saint-Malo, Saint-Brieuc, Roscoff, Brest, Douarnenez, Concarneau, Lorient, ports of the Loire, Les Sables-d'Olonne, La Rochelle/La Pallice, Ports of the Gironde, Bayonne.

(b) **Vessels intending to enter French territorial waters (12 miles) or to sail from a French port or anchorage,** are required to inform Marine Brest and Marine Cherbourg 6 hours beforehand, either by radio or through the port authority, giving the following details:–

Prefix	SURNAV FRANCE
A	Name, nationality and call sign.
B	Date and time (GMT) suffixed "Z".
C	Position.
E	Course.
F	Speed.
I	Destination.
J	Date, time (GMT) and position of entering French territorial waters or of getting underway.
K	Date, time (GMT) and position of leaving French territorial waters, or of arriving at destination in French waters.
N	RT watch being maintained.
P	Draft.
Q	Cargo: type (as defined in MARPOL 73) and quantity.
R	Whether manoeuvring ability is normal or impaired by defects in propulsion, steering or anchoring equipment.
S	Whether operational fitness is normal or impaired by defects in radar, radio, safety or ballasting equipment.

Any subsequent changes should be reported immediately.

Constant listening watch must be maintained on Channel 16, or a frequency specified for this purpose by a local authority throughout the period the vessel is in French territorial waters, except when lying alongside in a port.

(c) **Vessels within French territorial waters suffering from an impairment of normal navigational or manoeuvring capability,** are required to take such an action as the Prefet Maritime may require to ensure, the safety of navigation and to avoid the threat of pollution.

(d) **Vessels within 50 nautical miles of the French coast suffering damage or having defects,** are required to report to Marine Brest and Marine Cherbourg any occurrence (collision, stranding, incident on board or external) which could result in damage to the vessel or cargo.

Any vessel going to the assistance of the damaged vessel is also required to make a report.

These reports are informative and do not constitute a request for rescue or assistance.

Requests for assistance, if required, should be made in accordance with international regulations, keeping Marine Brest and Marine Cherbourg informed.

The damaged and the assisting vessel are required to take such action as the Prefet Maritime may direct with a view to avoiding danger to navigation and threat of pollution, whether they are in French territorial waters or international waters.

Form of signalled report to be made by the damaged vessel:–

Prefix	SURNAV AVARIES
A	Name, nationality and call sign.
B	Date and time (GMT) suffixed "Z".
C	Position.
E	Course.
F	Speed.
I	Destination.
J	Time (GMT) and nature of a call for assistance or towage.
K	Name of assisting vessel, if present, or ETA (GMT).
M	Name and telegraphic address of Owner, Charterer and any French consignee.
N	Radio watch being maintained.
P	Draft.
Q	Cargo: type (as defined in MARPOL 73) and quantity.
R	Nature of damage or development of the situation.
T	Any other information.

Subsequent developments are also to be reported.

Form of signalled report to be made by the assisting vessel:– Prefix and A to I as above, but details applicable to the assisting vessel.

J	Date, time (GMT) and position of casualty.
K	Name, nationality and call sign of casualty.
L	Course of casualty, or destination, if known.
M	Speed of casualty, if known.
N	Radio watch being maintained.
Q	Cargo of casualty if known.
R	Damage of casualty.
T	Any other information.

Further reports on the casualty are required after arrival.

(e) **Laden vessels exceeding 1,600 tons approaching or departing from the following French ports:–**

Saint-Malo, Saint-Brieuc, Roscoff, Brest, Douarnenez, Concarneau, Lorient, ports of the Loire, Les Sables-d'Olonne, La Rochelle/La Pallice, ports of the Gironde, Bayonne.

are required to comply with the following regulations:–

To use the authorised approach and entry channels and waiting areas.

Inform the Port Authority on entering the approach channel.

When in these channels and waiting areas, display Flag B of the International Code of Signals by day and exhibit one red light at night, clearly visible all round.

Anchoring or waiting in the approach and entry channels is not permitted except in emergency, in which event the Port Authority must be informed as soon as possible.

Vessels crossing approach or entry channels should do so as nearly as possible at right angles to the channel and well clear of vessels in the channel.

These regulations do not in any way absolve Masters and Pilots from the requirement to comply with the International Regulations for Preventing Collisions at Sea (1972).

For further details of signals required by the above regulations see *Admiralty List of Radio Signals Vol. 6.*

Similar messages must be sent to Marine Toulon by vessels in the Mediterranean.

Navigation in the French Territorial Waters:

Any ship as specified above must keep permanently 7 nautical miles off the French Coast, except:

1. When entering a French harbour, in the specified channel leading to this harbour;
2. In the N.E. lane of the Dover Straits Separation Scheme;
3. In the Channel of Corsica between the Italian island of Capraia and the Corsican shore, where the limit is reduced to 5 nautical miles.

DISTRESS, SEARCH AND RESCUE:

Search and Rescue operations are controlled by the following organisations:

1. Centre Regional Operational de Surveillance et de Sauvetage pour la Manche-Mer du Nord (CROSSMA) covers the North coast of France from the Belgian border to Mont St. Michel (48° 38′ N., 1° 31′ W.). Stations at Cap Gris Nez (50° 52′ N., 1° 35′ E.). and Jobourg (49° 41′ N., 1° 54.5′ W.) maintain a continuous watch on 2182 kHz and VHF Channels 16 and 11.

2. Centre Regional Operational de Surveillance et de Sauvetage Corsen-Ouessant (CROSSCO) covers the N.W. coast of France from Mont St. Michel to the latitude of Pointe du Raz (48° 02′ N.). A station at Corsen (48° 25′ N., 4° 48′ W.) maintains a continuous watch on 2182 kHz and VHF Channels 16 and 11.
3. Centre Regional Operational de Surveillance et de Sauvetage pour L'Atlantique (CROSSA) covers the Atlantic coast of France from the latitude of Pointe du Raz (48° 02′ N.) to the Spanish border. Stations at Etel (47° 39′ N., 3° 12′ W.) and Soulac (45° 31′ N., 1° 07′ W.) maintain a continuous watch on 2182 kHz and VHF Channel 16.
4. Centre Regional Operational de Surveillance et de Sauvetage Mediterranee (CROSSMED) covers the Mediterranean coast of France. A station at Toulon (43° 06′ N., 6° 00′ E.) maintains a continuous watch on 2182 kHz, 2677 kHz and VHF Channel 16. A station at Agde (43° 18′ N., 3° 30′ E.) maintains 0500–2100 watch from 15th June to 15th September on 2182 kHz, 2677 kHz and VHF Channel 16.

AJACCIO, Corsica: 41.55 N. 08.44 E. (See Plan Book)

DOCUMENTS:

Cargo vessels:
1 Stores List.
1 Personal Effects List.
1 Crew List.
1 Passenger List.
2 Manifests.
Ship's Register.

Passenger Vessels:
1 Stores List.
1 Personal Effects List.
3 Crew Lists.
3 Passenger Lists.
Ship's Register.
2 Manifests.

PILOTAGE: No advance notice required for regular ships. Vessels call Pilot with 3 blasts on ship's siren. Pilot boat flies usual Pilot flag. Pilot joins approaching vessel at a line Isolella/Chapelle des Grecs. Available 24 hours a day. Pilot boat has VHF Channel 6.

ANCHORAGES: Several safe anchorages in harbour which can be indicated by Pilot.

MAX. SIZE: Length 200 m., draft 7 m. At anchor, no limit.

HEALTH: Health Officer boards on arrival. Pratique automatic unless suspected contagious disease on board, when it is necessary to notify Agent or Health authorities in advance by cable.

RADIO: ETA cables, etc., via Grasse Radio, Marseilles Radio or Ajaccio Radio. VHF Channel 24. Captain of the Port. Tel: (95) 21.68.34.

TUGS: None available.

BERTHING: Regular vessels have priority at all berths.

CRANES: Up to 20 tons.

STEVEDORES: Advice should be sent 24 hours prior to arrival. French vessels have priority of labour.

MEDICAL: Advance notice required Tel: 21.52.08. All hospital facilities available. Except in the case of an epidemic in any country from which the vessel has sailed, no inoculations or vaccinations are necessary.

TANKERS: Max. draft 6 m., length 110 m. Preferably with bow thrust unit. Gas tankers also preferable with bow thrust unit.

FRESH WATER: Available at all berths, except Gas Berth.

FUEL: All grades available, 48 hours notice required.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Ship's Register.

CUSTOMS ALLOWANCES: Tobacco, 2 oz. or 200 cigarettes per member of crew. Wine, no restrictions. Spirits 1×20 oz. bottle.

IDENTIFICATION CARDS: Required.

CONSULS: Greek, Dutch, Monaco, Danish, Swedish, Finnish.

REPAIRS: Minor repairs can be carried out.

SURVEYORS: None.

DRY DOCKS: None.

REPATRIATION: Can be arranged by Ship's Agents.

AIRPORT: 8 km. from port. Served daily by Air France regular lines.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: 1st January; Easter Monday; Whit Monday; 1st May; 14th July; 15th August; 1st November; 11th November; 25th December. Cargo work can be arranged on all dates except 1st November.

POLICE/AMBULANCE/FIRE: Police 0.17; Ambulance 21.50.50 (SAMU); Fire 0.18.

TELEPHONES: Can be placed on board warships only.

BANKS: Banque de France, Tel: (95) 21.00.05. Telex: Banfra Ajacc 460083; Banque Internationale pour l'Afrique Occidentale, Tel: (95) 21.34.75. Telex: Bancafr 460291; Banque Worms, Tel: (95) 21.00.13. Telex: BWOR 460032; Banque Nationale de Paris, Tel: (95) 21.54.90. Telex: 460894 BNP; Credit Lyonnais, Tel: (95) 23.37.42 and (95) 21.51.26. Telex: 460824 Credion Ajacc; Societe Generale, Tel: (95) 21.41.30. Telex: 460757 Sogener Ajacc.

EMERGENCY CO-ORDINATION CENTRE: Crossmed Toulon, Tel: (94) 27.27.11. Telex: 430024 Cromd.
Affaires Maritimes, Tel: (95) 21.55.53. Telex: Afmar Ajacc 460690.

STORING: Stores and bunkers by truck only. Trucks may go alongside except at gas berth and tanker berth. Fork lift trucks available. Dockers available to assist.

GENERAL: Galley waste, etc., must not be discharged inside the bay, but into special containers at berth.

AUTHORITY: Departmental de L'Equipement de la Corse du Sud, Terre Plein de la Gare, 20184 Ajaccio. *Tel:* (95) 23.31.12. *Telex:* Corsequi 460943. *Contact:* Port Director.

Capitainerie du Port, Gare Maritime, 20000 Ajaccio. *Tel:* (95) 21.68.34. *Contact:* R. Lemai, Harbour Master.

ANTIBES: 43.35 N. 07.08 E. (See Plan Book)

DOCUMENTS:

(a) For Harbour Master:
Ships Papers.
Declaration of Exit and Entry.
Crew List.
Passenger List.

(b) For Customs:
Health Declaration.
Provision List.

PILOTAGE: Not obligatory for yachts. Port cannot receive pleasure boats longer than 40 m. Ensure pilotage authorities advised of ETA. VHF Channel 9 day and night.

ANCHORAGE: In winds of N.E. to S.E. anchorage in front of Antibes not advised. Recommended anchor in Bay de Golfe-Juan, in shelter of Cap d'Antibes, in direction of Juan-les-Pins. In winds from N.W. to S.W., good anchorages on East face of Cap d'Antibes, Bay of Garoupe, Bay of La Salis, Bay of Ilette.

RESTRICTIONS: Night entry not advised.

MAX. SIZE: For yachts in the old port, length 23 m., width 6 m., draft 3.5 m. For tankers, 1 berth only in tanker outer port. Max. length 110 m., draft 7 m.

VHF: Port Captain on VHF Channel 9 throughout 24 hours.

TUGS: None.

TANKERS: A berth against dolphins, in Outer Port and strictly reserved for unloading refined fuels. See "Max. Size".

FRESH WATER: Oil companies have water point on berth in Outer Port.

FUEL: For pleasure boats only.

CONSULS: None.

REPAIRS: For pleasure boats only. 2 slipways for boats of max. length 30 m.

REPATRIATION: Must be arranged through Consulates at Nice.

AIRPORT: Nice, Cote d'Azur. 15 km.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

POLICE/AMBULANCE/FIRE: Tel. Police 33.58.58 and 17; Ambulance 18; Fire 18 and 33.65.00.

SERVICES: Water and electricity on each pier.

AUTHORITY: Capitainerie du Port d'Antibes, Port Vauban, S.A.E.M. de Gestion, Port Vauban. *Tel:* (93) 34.74.00/01. *Contact:* J. Pluym, Le Commandant du Port.

BASTIA, Corsica: 42.41 N. 09.27 E.

DOCUMENTS: See "Ajaccio".

PILOTAGE: Address, Vieux Port 20, Bastia. Tel. 315095. VHF Channel 16. Pilot boats, 12 m. long, black and white with navigation and pilotage lights. Previous advice to Pilots necessary before arrival. Pilot boards in bay of Porto Vecchio, North of the citadel.

ANCHORAGE: Anchoring not recommended in Easterly winds. Depth 15 m. to 30 m. in Porto Vecchio Bay. Bastia harbour: up to 4.50 m. deep.

RESTRICTIONS: Ships may enter harbour any time.

MAX. SIZE: Max. length: 160 m.; draft 7 m.

TUGS: None available.

BERTHING: Ships berth in order of arrival. Accommodation for about 10 ships. General Cargo.

Mooring carried out by watermen. Same address as Pilots.

MEDICAL: Medical controls made by Customs officer. Doctor available.

FRESH WATER: Supplied ashore.

FUEL: Available in small amounts.

FIRE PRECAUTIONS: General rules. One wharf reserved for tankers.

GANGWAY/DECK WATCHMEN: Night watchman supplied by Agent.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: None on entry, 10 packets cigarettes when leaving. Wine/spirits unlimited when leaving.

IDENTIFICATION CARDS: Required.

CONSULS: Nearest at Ajaccio.

REPATRIATION: No facilities exist.

AIRPORT: Bastia 20 km. from ports. Departures every day to continent.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

POLICE/AMBULANCE/FIRE: Police, 1881; Ambulance, 2281 733–2686; Firemen, 018-088.

TELEPHONES: As a rule telephone is put only on naval ships.

SHORE LEAVE: Crew may go ashore.

AUTHORITY: Bureau du Port, Quai de la Sante, Bastia. *Tel:* 31-31-12. *Contact:* J. Fusella, Port Captain.

BAYONNE: 43.30 N. 01.28 W. (See Plan Book)

DOCUMENTS:
- 3 Crew Lists.
- 3 Passenger Lists.
- 3 Lists of Provisions on Board.
- 3 Individual Lists of Tobacco and Spirits.
- 3 Manifests of Cargo.
- 1 Set Bills of Lading.

PILOTAGE: Station extends 3 miles between the parallel of Ondres to the North and the limit of French territorial waters to the South. When weather permits, the pilot boat comes out of l'Adour and comes alongside ships near the light buoy situated W.N.W. of the port entrance. Contact Pilot at least 12 hours before arrival relaying through Bordeaux Arcachon Radio and stay on radio watch in the pilot zone. VHF Channel 12.

ANCHORAGE: Ships must not anchor in the river.

RESTRICTIONS: In bad weather ships are led to take the Pilot at the pilot boat which is based on St. Jean-de-Luz and are led either towards l'Adour or to the anchorage of St. Jean-de-Luz.

When alongside, even in fine weather, a swell may be experienced causing lines to part.

MAX. SIZE: The Adour is accessible to ships of 160 m. length (15,000 – 20,000 tonnes). Depth at the mouth varies with the seasons and are maintained by dredging. They are never less than 7 m. during Summer but during Winter can be reduced following Westerly storms. The height of the tide has to be added to these depths but the draft can never exceed 8.0 m.

HEALTH: A Declaration of Health Form is lodged by the Customs Service on arrival; it must be completed by the Master. In case of a suspect illness, advise Agent 24 hours in advance.

RADIO: Bordeaux – Arcachon Radio. The signal tower on the South side of the mouth, and the Harbour Master's Office, in the tower, has a VHF radio station, Channel 12.

TUGS: 1 tug available, 1,250 h.p., 10 tons bollard pull. Request for tug through the Agent. Tug waits at the entrance to the Adour.

BERTHING: When working berth is occupied, vessel is directed to a waiting berth. Large ships or those carrying dangerous cargo can be requested to wait outside the entrance.

Berth	*Max. Length Vessel*	*Recommended Draft*
Socadour	150 m.	29.5 ft.
Cement Wharf	160 m.	24 ft.
Satec Wharf	160 m.	24 ft.
Grain Silo	130 m.	23 ft.
SNPA Sulphur Quay	150 m.	25 ft.
Other berths	120 m.	22 ft.

BULK HANDLING FACILITIES: Silos with capacity 60,000 tonnes (maize). Rate 450 t.p.h.

3 silos, total capacity 10,000 tonnes at Armand Gommes Quay.

Phosphate handled at Boucau Quay with 3 cranes of 10 tonnes capacity, feeding conveyor belts with capacity 350 t.p.h. – 400 t.p.h.

CRANES: Edmond Foy Quay: 3×3 ton and 2×6 ton cranes.
Pierre Le Roy Quay: 4×3 – 4 tonne cranes.
Boucau Quay (Socadour): 2×10 tonne cranes.
Marcel Forgues Quay: 1×10 tonne and 1×8 tonne crane.
Jean Letellier Quay (private): 1×10 tonne crane.
Armand Gommes Quay: 2×3 – 4 tonne cranes.

STEVEDORES: Arrival must be notified to Agent 24 hours in advance.

MEDICAL: Medical attendance can be organised by the Agent without advance notice, Hospital and private clinic available. However, if medical attendance required as soon as the ship arrives, particularly at night, it is advisable to send a radio message 12–15 hours before the arrival of the ship.

TANKERS: No installation to receive residues. Two berths for unloading of refined products. Refinery de Midi: max. length 120 m., max. draft 6 m. Saint Gobain, length 150 m. max. draft. 24 ft.

FRESH WATER: Available at each berth, minimum supply 3 cu.m.

FUEL: Available by arrangements in advance through Agent or suppliers.

GANGWAY/DECK WATCHMEN: Not obligatory except for ships with dangerous merchandise on board.

OPENING/CLOSING HATCHES: Generally carried out by the crew.

CUSTOMS ALLOWANCES: 200 grammes or 250 grammes of tobacco for each crew member and for 8 days (must without fail be declared in the individual list of provisions). 1 bottle of wine or spirits (must without fail be declared in the individual list of provisions).

IDENTIFICATION CARDS: Not necessary – seaman's identity card sufficient.

CONSULS:
Belgium
Brazil
Chile
Spain
Finland
Great Britain
Norway
Peru
Portugal
Sweden
Uruguay

REPAIRS: Running repairs to hull, machinery, radio and radar can be effected.

SURVEYORS: Bureau Veritas. Tel: 25.20.44.

DRY DOCK: Usable length 98 m. Length on stocks 94.1 m. Width of entry 15 m. Depth above sill, neap tides 4.5 m., spring tides 6 m.

REPATRIATION: Possible for all countries as well as crew changes.

AIRPORT: At Biarritz: 7 km. away. Regular service with Paris. Two services per week to and from London.

TIME: European Standard Time: GMT plus 1 hour and GMT plus 2 hours from 2nd April to 1st October.

HOLIDAYS: 1st January; Easter Sunday/Monday; May 1st; Ascension Day; Whit Sunday/Monday; 14th July; 15th August; 1st November; 25th December.

POLICE/AMBULANCE/FIRE: Police, telephone 17 or 55.84.09., Anglet: 17 or 03.76.10 Boucau: 17 or 55.29.53. St. Leon Hospital: 63.50.50. Fire Station: 18 or 59.21.84.

TELEPHONES: Telephones on board not possible.

SHORE LEAVE: Crew are authorised to go ashore.

AUTHORITY: Direction Departementale de L'Equipement Alles Maritimes, 64109 Bayonne. *Tel:* (59) 25.43.60 *Contact:* Ch. Lesbordes, L'Ingenieur Des T.P.E.

Capitainerie du Port, 128 Av. de L'Adour, Anglet. *Tel:* 63.11.57. *Telex:* Porbayo 55 04 57.

BORDEAUX (inc. Verdon, Bassens, Ambes, Pauillac, Blaye): 44.50 N. 00.34 W. (See Plan Book)

DOCUMENTS:
- Tonnage Certificate.
- 2 copies Provisions List.
- 2 copies Personal Effects List.
- 2 copies Crew List.
- Customs Clearance.
- Crew Manifests.
- Check List.

PILOTAGE: No Vessel may enter the waters of the Gironde Mouth without permission of the Harbour Master's Office.

Vessels should announce their arrival at BXA Buoy at least 24 hours in advance to the Commandant du Port de Bordeaux through Coast Station Arcachon – Bordeaux Port Radio. In addition they should contact the pilot boat and confirm their ETA and speed 12 hours in advance The ship will be able to keep in touch with the pilot boat where radio watches are kept as follows.

1. On 500 kHz (radio) and 2182 kHz (radiotelephone): permanent watches from 0800 to 1000 hrs. GMT. 1200 to 1400 hrs. GMT. 1600 to 1800 hrs. GMT. 2000 to 2200 hrs. GMT.

2. On 2182 kHz, a general RT call (both in French and in English) at the end of each radio contact with the Pilots' station at Le Verdon.

These contacts are made on 1743 kHz at the following hours (GMT) 0030 – 0300 – 0500 – 0630 – 0717 – 0915 – 1030 – 1230 – 1430 – 1600 – 1715 – 2000 – 2124.

Upon request a special radio contact can be obtained at any time.

Under normal weather conditions, the pilot boat remains between the landing buoy and the West channel entrance. In bad weather the Pilot is sent on board as soon as boarding becomes possible, usually around buoy No. 10.

Vessels sailing from ports between Santander and Lorient, these ports included, must send their estimated arrival times, when sailing from these ports.

Small coasting vessels, for which pilotage is not compulsory, must also signal their ETA, 24 hours in advance by radio and their Masters must signal their arrival to the pilot boat, so that their position in the channel be known to all. They shall keep a permanent liaison on VHF with the Harbour Master's Office at Le Verdon port.

Having indicated arrival at BXA and corrected the ETA, if the difference from the previous forecast is more than an hour, vessels may communicate with the pilot boat, which maintains:

1. Permanent watch on 2182 kHz (radiotelegraphy).
2. Permanent watch on VHF Channel 16 (156.8 MHz).

Vessels less than 70 m. long, for which pilotage from the sea to Verdon is not compulsory, may embark river Pilot at Le Verdon providing Masters have advised the pilot station accordingly. Pilots can be contacted on VHF Channels 12 and 16.

ANCHORAGE: The normal waiting anchorage area is the Roadstead of Le Verdon, depth 10 m. to 12 m. and sand silt bottom. The big tankers with more than 10 m. draft find a good anchoring area in the Saintonge Roadstead with a depth of 15 m. to 20 m. (sand silt bottom).

MAX. SIZE: Verdon Petroleum Harbour. Tankers up to 350 m. length or approximately 230,000 d.w.t. can be accepted, with 50% load.
Bec d'Ambes: Tankers up to 32 ft. 6 in. draft, 210 m. length.
Pauillac: Tankers up to 32 ft. draft, 240 m. length.
Bassens: Vessels up to 34 ft. draft.
Blaye: Vessels up to 25 ft. draft.

RESTRICTIONS: The great entrance to the Gironde estuary (Western entrance) is dredged to a depth of 13.50 m. under the zero of French sea charts. It permits the sailing in of ships with a draft of 15 m. (49 ft.) at practically all tides.

HEALTH: Vessel should ask for free pratique by radio at least 12 hours before arriving at port. Message should be addressed to Sanipor – Bordeaux routed via Bordeaux/Arcachon Radio. Otherwise, pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive free pratique, Master should radio Agent before arrival, advising full details.

Health Control: Vaccination Centre, 110 bis, quai des Chartrons (Shed 14). Tel: 52.53.12 or 90.91.21 ext. 397.

RADAR/VHF: Port radar is in operation in the Gironde estuary and approaches. Vessels may contact this station for navigation information by calling Verdon Port Radio on VHF Channel 14.

RADIO: Arcachon Bordeaux Port Radio: Radiotelephony 1,862 kHz. Radiotelegraphy 421 kHz.

Port Authority by VHF: Calling band 156.8 MHz Channel 16. Traffic band 156.6 MHz Channel 12 (port). Traffic and 156.7 MHz Channel 14 (radar).

Pilots: Telegraphy: watch on 500 kHz at the prescribed hours. Telephony: continuous watch on 2,182 kHz. VHF: continuous watch on Channel 6.

Every vessel fitted with HF radio equipment shall keep a constant watch and be in contact with "Arcachon-Bordeaux-Port-Radio" Station when navigating in the area between the landing buoy and her berth, or at least watch at the sending times of this station, when moored and awaiting orders.

Every vessel fitted with VHF radio equipment, shall also keep permanent watch and maintain contact with the Port Operations Station on 156.6 MHz (Channel 12) when navigating in the zones indicated below, or when moored and awaiting orders.

Le Verdon zone: call "Radar-Verdon".

Bordeaux zone: call "Port-Bordeaux".

TUGS: Tug assistance is available as ordered by the Pilot. Tugs will join vessels at the following places: In Verdon Roads for vessels mooring at Verdon. In Pauillac Roads for vessels mooring at Pauillac. At Buoy BA1 for vessels mooring at Ambes. Off the Harbour Basins for vessels mooring at Bordeaux Docks.

As a rule ship's tow-lines are used; when a tug line is required there will be an additional charge.

BERTHING: *Le Verdon Deep Water Terminal:* 2 containership berths, length 600 m., depth alongside 13 m. at LW; slip for quarter ramp Ro/Ro's. Handling operations carried out 24 hours a day 7 days a week. 100 power points for reefer containers. 3 container gantry cranes (1×32 ton and 2×40 tons capacity below spreader). One is multi-purpose and can work with a 30 ton grab for bulk unloading.

Riverside Quays: 18 berths depth alongside 7.5 m. – 9 m. at LW. Electric cranes available. 6 berths are now reserved as waiting berths.

Enclosed Docks: 2 basins joined by a lock 25 m. wide. Entrance effected by two locks of the following dimensions: Large lock 146 m. long 22 m. wide. Small lock 100 m. long 14 m. wide. Depth of water in the basins is maintained at 6.50 m. These are now used only for repairs and yachting.

Queyries: 493 m. long, depths offered are 7 m. alongside. 4×6 ton cranes.

Bassens-Amont: 1,225 m. long, depth alongside at LW. up to 9.5 m. (7 berths). The quay caters for general trade. Equipped with 9 cranes of 4/6 tons, 2 of 12/15 tons, 2 Caillard cranes 15/24 tons, the upper sector has been developed as a heavy bulk berth able to accommodate ore carriers of 40,000 d.w.t. ladened with 30,000 tons of cargo. Ships can be unloaded at a rate of 10,000 tons per day. This upper sector is available for phosphate cargoes.

The heavy bulk storage zone has a capacity of 128,000 cu.m. It is served by two railway sidings with road/rail weighbridges for redispatch.

One of the berth at Bassens-Amont is equipped to cater for molasses which can be stored in 3 reservoirs.

Bassens-Amont is also the centre of the ports phosphate traffic, bound for neighbouring industries and stocked in a silo depot, which is linked to the quay by a conveyor belt network.

During the last quarter of 1982, the bulk trades received at Bassens-Amont, ceded their place to general cargo. In the context of this redevelopment, which enables better throughput rates and more flexibility, a 6,000 sq.m. shed has been built. Containers are already provided with a storage yard of 12,000 sq.m. in the first sector and will have on completion, 20,000 sq.m. in the second sector; they are handled by 2 Caillard cranes of 15/24 tons.

Bassens-Aval: 11 berths, total length 1,474 m. Depth alongside 9.50 m. – 11.0 m. at LW. 15×4 ton cranes, 2×2.5 – 6 ton cranes, 2×15 ton – 24 ton Caillard cranes and 5×15 ton – 25 ton Ceretti cranes.

A Bulk terminal is available with discharge capacity 2,000 t.p.h. Max. size 120,000 d.w.t.

In addition there are facilities for heavy bulk goods, coal; forest products terminal; grain conveyors of 150 t.p.h., 400 t.p.h., 600 t.p.h. and 900 t.p.h.

Blaye: Public berth 8.0 m. draft, 170 m. long.

Pauillac: Public berth for vessels drawing up to 10 m. Total quay length 290 m.

Also see "General".

TANKERS: *Verdon Terminal:* Main berth. The ship is berthed on elastic dolphins (steel pipes) with an available depth of 17 m. Ship makes fast with own hawsers on four mooring dolphins, two up and two down on the wharf and set back about 35 m. from the face. This mooring is strengthened by very flexible steel warp hawsers of 55 and 60 mm. diameter. Five hawsers of this type may be placed at each end of vessel according to needs and weather conditions. Ships must have strong chain or claw-stoppers for turning on bitts.

For crude oil, the berths have following equipment: 1×30 in. line connecting the main berth to storage; 1×16 in. line connecting the coaster berth to the foresaid lines; 2 lines for bunkering. Discharge rate, 10,000 t.p.h.

Arms for connecting pipe-lines to ship. Connecting of the crude oil pipe-lines is made by ASA type, 16 in. Mannesmann arms (4 at main berth – 1 at the coaster berth). The Port Authority has a number of connecting collars in various dimensions and types. Ships are requested to inform before arrival on the type and data of their own collars. Connecting to the bunkering line is made by flexible hoses (ships must use their own handling gear).

Fire wire must be rigged on forecastle and poop, the eye 1 m. (3 ft.) above the water (all the time) when ship is light. Each fire wire must have a 10 m. (30 ft.) coil laying between bitts and fair lead.

If no other request, the ship is assisted by 2 tugs (with Kort nozzle 23 ton thrust) one of which stays at disposal during the call.

Secondary berth. This berth is for the use of shuttle-service ships, lighters and coasters, depth of 7.0 m. alongside.

Fire-fighting line. A 12 in. line supplies the wharf and the 2 berths with sea water under pressure. At each berth there are fire-fighting hydrants. The first help material for fire-fighting is ready to use at each call. It includes spray nozzles, water and foam hoses, emulsion liquid containers, powder extinguisher systems (movable and portable).

Bunkering. Supply is made by lighters mooring at the coaster berth. Securing of lighters alongside tankers is forbidden, except with special permission of the Port Authority.

Telephone. Telephone is connected to every ship on arrival. In that way the ship is regularly connected to the French telephone network (Tel. No. 59.63.28 – Le Verdon).

Pauillac: Oil installation operated by Shell, 33 ft. alongside.

Ambes: Terminal for tankers up to 210 m. length, 32 ft. 6 in. draft. Operated by Societe Elf and Esso. Also see "Shipmaster's Report" – dated June 1981.

Bassens: See "Report" date March 1981.

DENSITY: Verdon 1023 to 1015. Pauillac 1026 to 1000. Ambes approximately 1000. Bordeaux approximately 1000.

FUEL: Vessels wishing to bunker during their call at Bordeaux-Le Verdon, shall make known their needs of quantity and quality to their Agents or consignees before arrival in port. Requests must be forwarded, 48 hours in advance (at least), to one of the bunkering Agents of the following companies:

Shell – Bassens. Tel: 06.29.20.
Esso – Worms. Tel: 90.93.80.
ELF/SIMA. Tel: 50.56.70.
B.P. Floirac. Tel: 86.53.25.
Total C.F.R. Tel: 29.63.87.

A very large proportion of the bunkering fuels comes from the Shell refinery at Pauillac. These fuel-oils are mainly intermediate oils made by viscosity mixing between 80 and 460 centistocks (at 50°). Orders must therefore be for a quantity of at least 400 tons.

The quality control of mixtures is carried out by the Shell refinery laboratory, whose opening hours are: Monday: from 0400 to 1630 hrs. Tuesday, Wednesday, Thursday, Friday & Saturday: from 0400 to 2000 hrs.

MEDICAL: All facilities available. Malaria and cholera vaccinations can be performed at the Military Hospital or at the Port Vaccination Centre (Shed 14).

CONSULS:

Algeria	98 44 90	Kampuchea	44 27 41
Austria	48 57 57	Liberia	29 22 10
Belgium	29 59 86	Madagascar	44 78 81
Benin	52 32 69	Mexico	52 88 70
Bolivia	52 68 17	Monaco	29 26 12
Brazil	52 83 57	Morocco	52 34 34
Canada	96 15 61	Netherlands	29 16 75
Chile	34 19 50	Norway	52 52 41
Colombia	44 78 37	Peru	08 25 35
Costa Rica	92 79 63	Philippines	81 35 01
Denmark	29 24 10	Portugal	52 19 50
Dominican Rep.	08 43 63	Senegal	44 19 90
El Salvador	67 20 53	Spain	52 80 20
Finland	44 94 45	Sweden	90 91 88
Great Britain	52 28 35	Switzerland	52 18 65
Greece	29 43 13	Tunisia	44 99 20
Guatemala	08 23 92	United States	52 65 95
Honduras	92 79 63	Upper Volta	08 13 70
Iceland	50 84 68	Venezuela	47 19 67
Italy	52 24 89	West Germany	08 60 20
Ivory Coast	44 12 42		

DRY DOCKS: There are 3 dry docks and 5 small covered docks. Dimensions of the largest graving dock are 247 m. length 34 m. width 13.40 m. depth.

REPAIRS: Ateliers de Realisations Navales et Industrielles, Cours Dupre-de-St-Maur, Bordeaux. Tel: 50.83.83.

Les Ateliers et Chantiers du Sud-Ouest, 162 quai de Brazza, Bordeaux. Tel: 86.37.28.

Ateliers et Chantiers Auroux, 7 boulevard Chanzy, Arcachon. Tel: 83.32.62.

Anciens Ets Mounerat et Gaussens, 99 a 107 rue Bourbon, Bordeaux. Tel: 39.75.06.

Service de Travaux et d'Etudes Maritimes et Industrielles, 236 boulevard Godard, Bordeaux. Tel: 50.40.35.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of alcohol per man.

IDENTIFICATION CARDS: Crew men going ashore should carry passport or identity card.

AIRPORT: Situated 10 km. from Bordeaux. Frequent and Daily flights to most parts of Europe and North Africa. Good internal service.

POLICE/FIRE/AMBULANCE: Police 17; Ambulance 17; Fire 18.

TELEPHONES: Can be connected on board vessels moored at quays in Bordeaux, Bassens, Ambes, Pauillac, and Verdon.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May, no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); All Saints' Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available). N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.

Le Verdon Container Terminal: Operational 24 hours per day, 365 days per year.

BANKS:

Le Verdon:

B.N.P., 36 rue de la Plage, Soulac. Tel: 59.86.11.
Credit Agricole, Le Verdon. Tel: 59.61.25.
Credit Maritime, 41 rue de la Plage, Soulac. Tel: 59.88.76.

Pauillac:

B.N.P., 10 rue Albert 1er. Tel: 59.05.71.
Credit Agricole Mutuel, rue Ferdinand Buisson. Tel: 59.00.25.
Credit Lyonnais, place de Lattre-de-Tassigny. Tel: 59.03.85.
Societe Bordelaise de C.I.C., rue Albert 1er. Tel: 59.06.49.
Societe Generale, place Michel-Montaigne. Tel: 59.08.60.

Blaye:
B.N.P., 27 cours de la Republique. Tel: 42.29.10.
Credit Agricole Mutuel, rue Paul Tardy. Tel: 42.29.54.
Credit Commercial de France, 13 cours du Port. Tel: 42.00.37.
Credit Mutuel, 6 place Rabotte. Tel: 42.27.13.
Credit Mutuel et Paysan d'Aquitaine, 33 cours de la Republique. Tel: 42.13.89.
Credit de Nord, 1 rue Andre Lamande. Tel: 42.00.45.
Societe Bordelaise de CIC, 31 ter. cours de la Republique. Tel: 42.00.33.

Ambes:
Credit Agricole Mutuel, place du 11 Novembre. Tel: 20.10.90.
Societe Generale, rue Mal Leclerc. Tel: 20.10.62.

Bassens:
Credit Agricole Mutuel, 12 avenue St. Exupery. Tel: 06.27.96.
Societe Centrale de Banque, St. Exupery. Tel: 06.14.69.

Bordeaux:
Banque de l'Aquitaine, 27 rue Esprit-des-Lois. Tel: 44.66.44
Banque de France, 15 rue Esprit-des-Lois. Tel: 44.56.66.
Banque de l'Indochine et de Suez, 15 allees de Chartres. Tel: 44.07.67.
Banque Internationale pour l'Afrique Occidentale, 28 rue Ferrere. Tel: 48.12.12.
Banque Nationale de Paris, 40 cours du Chapeau-Rouge. Tel: 90.92.96. – 87 quai des Chartrons. Tel: 29.60.20.
Banque de Paris et des Pays-Bas, 50 cours du Chapeau-Rouge. Tel: 44.80.05.
Banque Populaire du Sud-Ouest, 5 place Jean-Jaures. Tel: 44.84.26.
Banque Rothschild, 5 pi. des Quinconces. Tel: 52.79.90.
Banque Worms, 14 allees de Tourny. Tel: 44.51.20.
Barclays-Bank S.A., 4 rue Esprit-des-Lois. Tel: 52.64.61.
Credit Commercial de France, 10 allees d'Orleans. Tel: 90.93.25.
Credit Lyonnais, 13 cours de l'Intendance. Tel: 90.91.23.
Credit du Nord, 2 cours du XXX-Juillet. Tel: 90.93.90.
International Westminster Bank Ltd., 32 allees d'Orleans. Tel: 48.10.43.
Societe Bordelaise de Credit Industriel et Commercial, 42 cours du Chapeau-Rouge. Tel: 52.49.25.
Societe Centrale de Banque, 60 cours de l'Intendance. Tel: 44.73.56.
Societe Generale, 28 cours de l'Intendance. Tel: 90.91.74.

GENERAL:

Mooring Regulations: Vessels fitted with radio equipment, which, for any accidental cause, (engine damage, fog, etc.) are obliged to moor or ground at any point in the area between the landing buoy "BXA" and the "Ponts de Pierre" (Stone Bridges) at Bordeaux and Libourne, must immediately indicate their mooring or grounding position, by cable to the Harbour Master, Bordeaux. In all cases, the text of the message must specify whether the moored or grounded vessels interferes or not with shipping.

Berthing: Berthing is carried out on the advice of the Pilot, following instructions from the Harbour Officers.

Special precautions are recommended during Spring Tide periods to ensure that vessels in the river are held fast to the quay.

The following instructions apply:

Special Instructions for Securing Vessels at the Quay During Spring Tide Periods (K › 90).

Given the disturbances caused by the strong currents of tides with a K of over 90, the securing of vessels on the quay must receive unremitting attention.

Pilots shall pay close attention to the mooring lines, for which the Master remains constantly responsible.

Masters shall follow Pilot's instructions and provide all means asked for in terms of both manpower and equipment.

A strict surveillance is necessary to ensure that lines remain correctly secured by adjusting them according to the height of the tides.

A sufficient number of crew shall be kept on board, to carry out any handling which might eventually be ordered by the Harbour Officers.

Fire Fighting: 1. All vessels berthed in the Port of Bordeaux, be they loading, discharging, or under repair, must have permanently on board a sufficient watch to keep effective surveillance, to take all preventive measures and to fight any fire on board.

2. It falls to the Master or the watch, and this under their sole responsibility, to use the signalling equipment at their disposal.

3. Communication and signalling equipment. Telephones and fire hydrants available on all quays.

4. Fire fighting is carried out under the direction of the Master, but gangs intervening, especially the fire brigade, remain under the command of their respective officers.

The ship's crew must be able to guide the rescue teams. A plan of the ship and her loading plans, in particular those showing the location of dangerous goods on board, shall be put at their disposal on arrival. Where there is a risk of the fire spreading, for which the Harbour Master is the sole judge, he shall lead operations and order all necessary steps to be taken to safeguard public interests.

REPORT: The following report was received from a Ship Operator in March 1981.

Michelins Reception Facilities at Bassens:

1. The equipment consists of 2 pipes: One 10 in. diameter with a normal capacity of 500 cu.m./h.and the other 6 in. diameter. These capacity limits result from the meter which is fitted. Either pipe can be used independently according to conditions and features of the ship's pumps and equipment. The absolute maximum pressure allowed in whole system is 10 bars.

Length of pipes:
2,315 m. for 10 in. pipe.
2,274 m. for the 6 in. pipe.

The equipment incorporates a meter post consisting of a Smith LB 250 volumeter normal temperature – 3 degrees normal pressure, 8 bars accuracy, 0.2 outputs of between 110 and 570 cu.m./.h. The equipment does not include a vapour return line.

2. Deliveries must be made by tanker vessels specifically designed and fully equipped for carriage and refrigerated liquid gases. The liquid must be delivered at a temperature of between −2° and −5° Celcius when measured at the ship's discharge connection.

The ship must be fitted with suitable pumping equipment, in full working order and of a capacity sufficient to maintain throughout the whole unloading operation and under the condition of temperature and pressure already specified, an hourly delivery rate at least equal 1/16th the total shipment and in any case not less than 100 cu.m./h. As indicating the pumps must be specifically designed for the movement of butadiene in the order that any premature failure, or suction of gas, be avoided. A further reason for the pumps and compressors being in perfect condition is that the quay is public and any delay prejudicial to the movement of vessels requiring to use it. The ship's discharge equipment must include a security device capable ensuring at all times, both under normal conditions and in the event of accidental or unforeseen mishandling that the delivery pressure at the connection point for the hose never exceeds 10 bars.

The ship must have lifting gear (derrick, hoist, etc.) with a minimum 2 tons capacity and sufficient reach to maintain the flexible hose at right height, even at low tide. The ship must be capable of completely emptying each tank and the systematic use of nitrogen must be avoided, as it is detrimental to the manufacturing process.

To enable receivers to prepare for cargo, following information required at least one week prior arrival of vessel.

1. The position of discharge outlets in relation to central axis of vessel and to the level of the deck.

2. Type and diameter and thread dimensions of the sampling connection.

3. Diameter and details of the ship's outlet union.

4. The details of the discharging equipment for each pump or compressor.

5. The normal and maximum rates of discharge and pressure of delivery should be given.

The vessel is equipped with 2 sampling positions in the middle and lower positions of each tank.

Notice of Arrival: Either the seller or the carrier must give to the Bordeaux Authorities (Port Autonome de Bordeaux) notice of the estimated arrival of the vessel at Bassens either 7 days advance of the tanker getting under way at the previous port of call should this be less than 7 days before arrival. Confirmation of the arrival of the vessel off the Gironde Fairway/Buoy (BXA) must be given to the Bordeaux Port Authorities by cable, telex or other means at least 24 hours in advance.

If the vessel is likely to arrive during a weekend, Michelin Bassens must be informed by Friday mid-day at the latest, otherwise operations will not be able to commence before 0800 hrs. on Monday.

Discharge: The ship's crew must scrupulously observe all general security regulations, together with any particular ones laid down by the officials appointed by the Bordeaux Port Authority to supervise the safety of discharging operations.

Receivers cannot be held responsible for any mishandling, excessive pressure or untimely purging that may occur during the discharge operation due to the vessel, or for the consequences of any failure to observe the security regulations by any person not employed by Michelin.

On arrival of the ship, Michelin, assisted by the crew, will connect up the shore line to the ship's outlets union by means of flexible hose. The ship's crew will be responsible for the use of their own lifting equipment (crane and derricks) for the raising of the flexible pipe to a sufficient level above the quay so as to take into account the tide. Jointly with representatives of the ship and the sellers, Michelin will proceed with, the drawing of samples from each tank (for quality control).

The Liaison of Discharging Procedures: Michelin's representatives are to be introduced to the crew members appointed to the discharging operation.

Throughout the duration of the discharging operations the rate and pressure of the output must remain constant and within the agreed limits in order that the metering equipment shall function correctly. On having completed discharge of the liquid from the last tank, the ship must cease pumping to permit:

The meter post personnel to by-pass the meters.

Michelin in conjunction with the representatives of the seller and the ship, to check the remaining cargo (the weight of liquid butadiene discharged thus being determined).

The gas can then be pumped out – the quantity being determined by measuring the difference in pressure and temperature of the ship's tanks, on the assumption that it contains only gas both before and after pumping out.

Unloading Completion: On the representatives of the sellers and the ship agreeing that the discharge of the butadiene has been satisfactorily completed, the receiver's personnel and the ship's crew will uncouple the flexible hose.

In the event that after complete discharge of all liquid, it is agreed between the ship and the seller to pump out the gas, the quantity involved will be calculated by measuring the difference in pressure and temperature of the ship's tanks, on the assumption that they held only gas both before and after pumping.

SHIPMASTER'S REPORT: June 1981.

Bordeaux – Bec d'Ambes: If proceeding further up river then Sea Pilot leaves at Le Verdon and River Pilot boards. Pilot gives an Inwards Declaration which (different from EEC check list) is to be completed and handed to Port Officer after boarding.

Reference Admiralty List of Radio Signals, Volume 6, 1980, Part 1, Page 205, paragraph (2), vessels wishing to enter La Gironde should address the 24 hour message to "Capiport Bordeaux" and 3 hours before entering French Territorial Waters should request, via 'Capiport' permission to enter La Gironde. These messages are free of charge.

Port regulations require the berthing (River Pilot) Pilot to stand-by, together with 1 tug, until a loaded vessel has lightened to 28 ft. fresh water maximum draft.

When berthing starboard side to then one tug on port bow and second tug just for pushing.

Usually, first ropes on board are one shore head wire and one shore head breast. Final moorings usually 2 shore heads, 2 shore breast, (fore and aft) and 2 shore stern lines, and 2 springs each end from ship.

The shore moorings consist of a chain cable connected to the shore, this is connected to a 57 mm. wire which is made fast on board. The wires are hove on board by means of a messenger (ship) which is attached to a small size, long length pennant attached to the 57 mm. wire. The shore end of the 57 mm. wire is attached to a chain cable thus creating a 'catenary effect' which proves very good in keeping the vessel alongside. For berthing there is one shore rigger each end to advise and assist.

For unberthing one rigger boards to assist in singling up to 1 shore wire and one back spring each end. He then goes ashore by pilot ladder. Vessels berth day and night depending on tide.

Agent requires in advance the distances from bow and stern to centre of manifold.

AUTHORITY: Port Autonome de Bordeaux, Palais de la Bourse, 2 Place Gabriel, 33075 Bordeaux-Cedex. *Tel:* (56) 90.91.21. *Telex:* 570617 Pablv. *Cables:* Poronom – Bordeaux. *Contact:* P. Valls, Director General. Harbour Master – Ext. 183, 184, 185, 186, 187.

AGENT: See "Paris".

BOULOGNE SUR MER: 50.43 N. 01.35 E.

(See Plan Book)

DOCUMENTS: As for "Calais".

PILOTAGE: Compulsory for vessels over 60 m. length. Vessels can communicate with pilot station, tel. 31.36.08, through Boulogne Radio. When pilot launch is at sea, contact by VHF Channel 12.

The most favourable boarding point is between the sea buoy and the wreck buoy situated 1.5 miles to the South, or slightly nearer the land if there are strong Westerly winds. In any event, the surf created by the Carnot breakwater must be avoided by keeping at least 1 mile off shore. If Pilot is not immediately available, vessel must wait in Outer Roads, if necessary at anchor, until further instructions received. On no account should vessel attempt to enter Carnot Roads without Pilot.

ANCHORAGE: The outer anchorage for large vessels is midway between Bassure de Baas and the Carnot Breakwater. Anchorage prohibited in the main approach channel.

RESTRICTIONS: Entrance depends on tidal conditions. For larger vessels best to enter the breakwaters at slack water which occurs 2 hours before time of high tide. Arriving vessels are obliged to contact Harbour Master's Office immediately by radio, or VHF Channel 12.

MAX. SIZE: For outer harbour: length, 230 m.; draft, 10.67 m. springs, 11.00 m. neaps. Max. d.w.t., 35,000 (approx.). Bassin Loubet: length, 130 m.; draft, 7.5 m. springs, 7.75 m. neaps.

RADIO: Boulogne Radio, call sign FFB, also on VHF Channel 25.

HEALTH: Pratique given by Customs Officers who board on arrival. In case of suspected disease on board, Master should radio Agents prior arrival advising details.

TUGS: Will meet vessel as requested by Master on Pilot's advice.

BERTHING:

Sarraz-Bournet Dock: Europe Quay, 775 m., depth 11 m.; Ore Quay, 240 m., depth 11 m. max. rate 12,000 tonnes per day.

Carnot Basin: Mooring on dolphins for Ro-Ro vessels up to 146 m. long, beam 14 m. – 32 m., depth 9 m., max. draft 8.5 m. Connection to the open area by ramp capable of taking up to 175 tons.

Loubet Basin: (Closed by a lock, depth 5.50 m.) Huguet Quay, 240 m. for Ro-Ro/Lo-Lo vessels up to 132 m. LOA; Voisin Quay, 700 m. (for refrigerated vessels up to 135 m. LOA).

Fore-Port and Tidal Port: Cross-channel terminal with 3 ramps (one of which is dual level/double lane for new generation car ferries), capacity 40/175/144-228 tons. Can accept car ferries up to a length of 145 m. and a draft of 4.50 m.

Hoverport: Can receive 3 hovercraft at same time.

The station can accommodate the transit of 10,000 passengers a day. Direct connection by railway with Paris.

The port offers 70,000 sq.m. of warehouses and 150,000 sq.m of open storage area. 250,100 sq.m. of cold storage space.

A silo enables 42,500 tons of clinker to be stored for loading directly on to vessels at a rate of 1,200 t.p.h.

CRANES: 2×10 tons jib cranes for ore and 1 gantry for clinker (rate 1,000 t.p.h.). 24×0.6 tons, 6×3 tons, 1×5 tons, 12×6 tons cranes and 2×12.5/20 ton clinker transporters.

1 heavy lift pontoon, lifting capacity 130 tons.

FRESH WATER: Supplied by pipe-line to all berths.

FUEL: SMCL quay can supply marine fuel. Quay is limited to vessels less than 100 m. length and 5 m. draft, otherwise fuel obtainable by tanker lorry from Dunkirk.

OPENING/CLOSING HATCHES: Performed by crew.

CONSULS: Great Britain, Tel: (21) 30-25-11.

Finland, Tel: (21) 30-44-55.
Ireland, Tel: (21) 30-54-04.
Sweden, Tel: (21) 30-31-11.

REPAIRS: Only quick repairs may be effected because of congestion at the quays. Slipway for vessels up to 2,500 tons.

SURVEYORS: Soemari, 52 Rue Blanzy – Pourre, 62200, Boulogne-sur-Mer. Tel: (21) 922200. Telex: 110013.

Bureau Veritas, Building A, Boulevard Gambetta, 62200 Boulogne-sur-Mer. Tel: (21) 315240.

TIME: GMT plus 1 or 2 hours according to the time of the year.

HOLIDAYS: No work Sundays and legal holidays.

POLICE/AMBULANCE/FIRE: Police, Tel: 30.12.34; Ambulance/Fire, Tel: 18.

EMERGENCY CO-ORDINATION CENTRE: At Sea: Crossma, Gris Nez. Tel: (21) 928666. Telex: 130680. In Port: Port Directorate and Port Captaincy.

TELEPHONES: Can be connected on board vessels at Quay de L'Europe.

BANKS: Banque de France, 1 place d'Angleterre. Telex: 110902.

Banque de la Henin, 80 Grande Rue.
Banque Nationale de Paris, 14 rue Victor Hugo. Telex: 110016.
Banque Populaire du Nord, 87 rue Thiers.
Banque Scalbert Dupont, 32 place Dalton. Telex: 110018.
Barclays Bank (SA), 85 Grande Rue. Telex: 135886.
Compagnie Bancaire (Societe Cooperative d'Etudes et de Gestion du Groupe de la), 99 Grande Rue. Telex: 110999.
Credit Agricole, 85 Boulevard Mariette.
Credit Commercial de France, 48 rue Thiers. Telex: 160184.
Credit Lyonnais, 45 rue Victor Hugo. Telex: 110048.
Credit Maritime Mutuel, Quai Chanzy. Telex: 810756.
Credit Mutuel C.M.A.A., 24 rue des Pipots.
Credit du Nord, 37 rue Faidherbe. Telex: 110971.
Societe Generale, 60 rue Victor Hugo. Telex: 110044.
Union Francaise de Banques (U.F.B.), 99 Grande Rue. Telex: 110999.

STORING: See "Prelims", page viii.

1. Storing by lorries.
3. Lorries can proceed alongside at berth.
4. Ship's stores can be loaded by any means.
5. Fuel is free of taxes, the same applies to provisions (within proportions estimated by Customs with relation to the number of crew members).

SHORE LEAVE: Permitted, no restrictions.

DEVELOPMENTS: To the West of the mole of the Sarraz-Bournet Dock, it is envisaged that a 400 m. quay for commercial traffic will be provided.

AUTHORITY: Service Maritime des Ports de Boulogne-sur-Mer, 96 Boulevard Gambetta, 62321 Boulogne-sur-Mer-Cedex. *Tel:* (21) 301000. *Telex:* 110968 Sermar F. *Contact:* Directeur de l'Exploitation du Port.

AGENT: See "Paris".

BREST: 48.24 N. 04.30 W.

(See Plan Book)

DOCUMENTS: See "Dunkirk".

PILOTAGE: Pilots do not stay out at sea, but only go to meet ship at estimated time of arrival as sent by ship. Normally pilot boat positioned on the line Toulinguet lighthouse and Beuzec (or Charles Martel) buoy, about 2.5 miles N.W. Toulinguet lighthouse. If strong S.W. wind, pilot boat waits for ship at entrance of Camaret Bay, about 1.5 miles N.E. Toulinguet lighthouse. If sea too rough to allow pilot boat to sail out, boat waits for ship at entrance of Brest Roads, near Portzic lighthouse.

Ships proceeding Brest must send last message giving ETA Pilot station (stating if *local time or GMT*), about 5 hours before arrival. Message to be addressed *"Brest Pilot Office"* through Brest Le Conquet radio station (call sign FFU). Day and night watch at pilot office. Radio station phones message direct as soon as received. Any alteration in ETA should be passed pilot office immediately.

Pilot boat sails from Brest harbour about 1.5 hours before ship's ETA, and 0.5 hour later pilot boat takes radiotelephony watch on 2182 kHz, calling ship from time to time on same frequency. Ships fitted with radiotelephony should listen and call on 2182 kHz. Pilot boat also equipped VHF Channels 16, 9, 6, 12 and Pilot office Channel 9.

ANCHORAGE: At Pilot's discretion. Anchoring in main approaches restricted as indicated on charts.

RESTRICTIONS: Entry subject draft and height of tide on day in question. Two entrances to port, one dredged to 6 m. below zero of charts and the other 5.8 m. below zero. Depth at quays varies according berth from 6 m. to 11 m. below zero.

MAX. SIZE: Inside harbour, max. length 320 m. Draft up to 35 ft. subject to tide.

HEALTH: If from foreign port, cable Maritime Health Service 48 or 24 hours prior arrival requesting free pratique. If risk of contagious disease exists, vessel will be held in roads until cleared. If from another French port, free pratique automatic.

RADIO: Brest Le Conquet – FFU.

TUGS: Two port tugs of 4,000 h.p. and 1,900 h.p. Tugs join vessel at main entrance to port. Marine National places tugs at ship's disposal for all port movements. Generally, tow rope supplied by tug at additional charge.

One French salvage tug belonging to the Abeille Company is stationed at the port, but only gives assistance for vessels requiring aid outside the port area.

BERTHING: According to draft, ships may have to wait in roads before berthing, depending on height of tide in fairways. Also see "Restrictions".

Commercial Harbour Facilities:

Deck	*Quay*	*Utilisation*	*Length (m.)*	*Depth (m.)*	*Equipment*	*Storage*	
						Covered	*Open air*
1	West	Wine, Other goods Railways	200	–6	Mobile cranes 4 ton at 22 m.	55,000 HL 3,500 sq.m.	5,000 sq.m.
2	West	Other goods, Railways	110	–5	Mobile cranes 4 ton at 22 m.	1,200 sq.m.	1,500 sq.m.
3	"Eperon"	Refrigerated goods, Other goods	140	–9	2 cranes 3/6 ton at 22 m.	12,000 cu.m. (–30°)	
5	West	Refrigerated goods, Other goods, Railways	170	–7	2 cranes 6 ton at 22 m.	30,000 cu.m. (+4°)	
5	North	Refrigerated goods, Other goods, Railways	300	–7	mobile cranes 4 ton at 22 m.	36,000 cu.m. (+4°)	7,000 sq.m.
6	East	Cereals, Wood, Other goods, Railways	300	–10 to –8	1×100 tons/hour pneum. unloader 2 cranes 8 ton at 30 m. (12 tons at 20 m.) 1 crane 6 ton at 22 m. redler 450 t.p.h.	30,000 ton silo 2,500 sq.m.	8,000 sq.m.
6	West	Hydrocarbons	150	–8			
6	East	Cereals, Coal, Other goods	175	–9	2 cranes 8 tons at 30 m. (12 tons at 20 m.) Conveyor belts (500 t.p.h.)	14,000 sq.m.	20,000 sq.m.
6	Coaster		110	–6	Bulk re-loading stacker (900 t.p.h.)		
6	South	Containers, Cereals, Wood, Other goods, Railways	230	–12	1 crane 30 ton at 33 m. (40 ton at 24 m.) 2 cranes 8 tons at 30 m. Conveyor belts (1,000 t.p.h.)	Silos 32,000 tons	35,000 sq.m.

BULK HANDLING FACILITIES: *Agro-foodstuffs Bulk Terminal:* 3 Piers: 6th South: 230 m. in length, 12 m. in depth (lowest tide).

6th East: 175 m. in length, 10 m. in depth (lowest tide) equipped with conveyor belts having a capacity of 1,000 t.p.h. and 550 t.p.h. respectively, connected to both.

Soya France silos (beans for flour making) capacity: 32,000 tons.

Public silos capacity: 32,000 tons.

Mixed loading capacity for road and rail transport of 800 tons per day.

5th East: 300 m. in length, 10 m. in depth (lowest tide) equipped with a conveyor belt of a capacity of 500 t.p.h., connected to a silo of a storage capacity of 20,000 tons.

The terminal allows bulk carriers of 80,000 d.w.t. to 100,000 d.w.t. rapid unloading at the rate of 15,000 tons per day of cargo such as: soya (bean of meal), manioc, grain cereals, as well as the possibility of rapid reloading of barges.

Also see "Berthing".

STEVEDORES: Agent has responsibility of making all arrangements for unloading, and is in touch with stevedores who arrange necessary gangs.

MEDICAL: Hospitals and clinics available. In the case of ship needing medical assistance, request should be addressed to Maritime Health Service through Conquet Radio Station, advising ETA, where vessel coming from and state of patient.

TANKERS: One berth for receipt of refined products destined for local storage tanks. Berth length 142 m., dredged alongside to a depth of 10 m. below zero of charts over an area 250 m. long and 30 m. wide.

FRESH WATER: All berths have fresh water supply. Apply to Chamber of Commerce who make necessary arrangements. Loading rate 13-15 t.p.h.

FUEL: Delivered by Societe de Depot des Petroles Cotiers and by Societe Maritime des Petroles.

TANK CLEANING: Station situated at the Southern extremity of the East Mole. Can operate 4 Victor Pyrate machines simultaneously. Equipped with 3 boilers to supply steam, 3 pumps, oily water separator and an extractor for solid residues.

The tank-cleaning station is connected by pipe-line to Repair Quays No. 1, 2 and 3 where tankers of 550,000 d.w.t. may be accommodated.

The new tank-cleaning and bunkering station, situated behind the dry-docks No. 2 and 3 is operational.

This station will be connected by pipe-lines to dry docks No. 2 and 3, all repair quays and so to the 6 South for bunkering facilities.

It will include four sections:

A tanker cleaning section with oil-water separator (2,000 cu.m.p.h.);

An oil-treatment section to transform the recovered oil in commercialisable products;

A bunkering section with tanks of 35,000 cu.m.;

A section that will be able to separate the solid residues of tankers.

WATCHMEN: Compulsory for ships carrying dangerous materials, non gas-free tankers, vessels with chemical products, munitions, etc.

CERTIFICATES:

Nationality.
Gross Tonnage.
Classification.
Derat.
Vaccination.

CUSTOMS ALLOWANCES: Tobacco, Wine/Spirit. Ship's provisions must be under seal.

CONSULS: The following countries are represented by Consuls at Brest:

Belgium
Chile
Denmark
Finland
German (Federal Republic)
Netherlands
Norway
Portugal
Spain
Sweden

REPAIRS: Repair Quay No. 1 at the South of the dry dock No. 2. Length: 320 m.; Depth: 9 m. to 9.50 m.

Repair Quays Nos. 2 and 3. Length: 608 m.; Depth: 8.30 m. to 10.70 m. Can accommodate vessels up to 550,000 d.w.t. (Pierre Guillaumat, Bellamya, Batilus, Prairial).

Repair Quay No. 4. Length: 400 m.; Depth 11 m.

Repair Quay No. 5. Length: 400 m.; Depth: 12.5 m.

continued next column

These two quays are situated to the North and to the South of the dry dock No. 3.

The 5 floating repair piers totalling 1,700 m. in length in water at a depth varying between 9 m. to 12.5 m. at the lowest tide, and connected to a tanker cleaning and bunkering station specially equipped to handle slop and residue from ship tanks.

Several modern lifting machines, among which:

1 crane of a capacity of 80 tons at 25 m.

1 crane of a capacity of 150 tons at 38 m.

Piers and dry docks equipped with electricity, steam, compressed air, oxygen, acetylene, telephone, potable water and fire fighting equipment.

DRY DOCKS: *No. 1:* Dimensions 225 m. by 26.77 m., entrance sill 4 m. below datum, situated at the Northeast angle of Basin No. 5. The entrance lock can receive 2 vessels simultaneously, 1 of 75 m. length and the other of 150 m. length, with some adjustments.

Max. draft, at Spring tides: 11.50 m.; at neap tides: 10 m.

No. 2: Dimensions 338 m. by 55 m. Can accept tankers of up to 280,000 d.w.t. Entrance sill 7.25 m. below datum. Dock situated in the Southeast of the Industrial Port Zone. Can accept vessels of the following dimensions.

At mean Spring tides: length 335 m.; beam 50 m.; draft 12.50 m.

At neap tides: length 335 m.; beam 50 m.; draft 10 m.

No. 3: Dimensions 420 m. by 80 m. Can accept vessels of 550,000 d.w.t. Entrance sill: 9 m.

AIRPORT: At Guipavas, 7 km. from Brest – 3 daily services to Paris.

TIME: Local time GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

POLICE/AMBULANCE/FIRE: Police 444850 and 445861; Police Secours 17; Ambulance and Fire Brigade 18 or 442766.

TELEPHONES: Can be placed aboard at certain berths.

SERVICES: Degassing station, tank-cleaning and slop discharge, adjustment of chronometers, chart and document department, weather forecasting, permanent daytime service for signing on crew, barometer adjustment. Also Compass and D/F adjusting.

Port Weather Service: Port Office, 30 Bis, Quai Commandant Malbert. Health Service: Quai Commandant Malbert.

DEVELOPMENTS: A new port industrial zone with an area of 100 hectares, and frontage of approx. 1,800 m. which will enable the construction of quays with depths of 10 m. – 12 m.

Furthermore, the Port is studying a vast plan to develop the commercial port, so that the latter may adapt itself to the requirements of modern maritime transport (1985-90).

AUTHORITY: Port de Brest, Direction Departementale de l'Equipement, Arrondissement de Brest, 2 rue Alderic-Le Comte, 29200 Brest-Cedex, France. *Tel:* 80.13.44 (12 lines). *Telex:* 940586. *Contact:* M. Mahe, Ingenieur des Ponts et Chaussees.

AGENT: See "Paris".

CAEN: 49.13 N. 00.21 W. (See Plan Book)

DOCUMENTS:

3 copies Crew List.
3 copies Provisions List.
3 copies Crew Personal Effects List.
Derat Certificate or exemption.

PILOTAGE: Pilot boat is on station from 2.5 hours before HW until 3 hours after HW. Vessels can contact the Pilot on VHF Channels 12 and 16. The pilot boat is stationed in the outer port of Ouistreham and goes out to the roads on vessels approach. International code flag signals are used to call Pilot.

Caen Pilot boat has a black hull with white stripe. The words "Pilote Caen" are written in white letters on the hull. During the Summer months the pilot boat is replaced by a launch bearing the same markings. As soon as the Pilot boards he will hand the Master an Entry Declaration to be completed.

ANCHORAGE: While waiting for the tide vessels may anchor in the vicinity of the light-buoy in Ouistreham Roads. The position of this buoy is Lat. 49° 19′ 50″ N., Long. 00° 14′ 18″ W. The buoy is positioned in depth of 10 m. Anchorage is open to winds from West through North to East; good holding ground. Currents do not exceed 2 knots at spring tides.

RESTRICTIONS: Dimensions of locks – East Lock length 181 m., width 18 m. West Lock length 225 m., width 28.45 m.

The locks are open to navigation from 2 hours before HW to 3 hours after HW. The locks can be used up to a maximum of 1 hour before/after these times by special permission of the Harbour Master and payment of additional dues.

Maritime Canal, length 14 km. The canal is dredged to 9.89 m. depth up to Herouville Dock. Vessels proceeding to the docks at Herouville and Calix must pass 2 bridges: Herouville 30 m. wide and Colombelles 30 m. wide.

Vessels proceeding to new dock must also pass the bridge at Calix, 21.76 m. wide. Maximum speed authorised in the Maritime Canal is 7 knots.

Maximum air draft for New Dock and St. Pierre Dock, 33 m.

MAX. SIZE: *Daytime:* Length 205 m., beam 23.5 m., draft 28.8 ft. sea water.

Night-time:

Blainville/Herouville	Length 160 m.	Beam 20 m.	Draft 25.9 ft. SW.
Calix	Length 150 m.	Beam 20 m.	Draft 25.9 ft. SW.
New Dock	Length 135 m.	Beam 16 m.	Draft 21.4 ft. SW.

HEALTH: Free pratique is automatic for all ships. Health control is carried out by Customs Officers under the direction of the Havre Port Health Office. For ships coming from ports in Africa, Asia, or Pacific Islands a Maritime Declaration of Health is required.

In case of suspected epidemic or fever on board Master must advise the port authorities who will instruct him to proceed to an appropriate anchorage to be boarded by the Port Health Doctor.

RADIO: Nearest radio station Boulogne Radio, call sign FFB.
VHF: Vessels may communicate with the Harbour Master's Office by VHF Channels 12 and 68. This service only operates during the hours when the locks are operating.
TUGS: The use of 1 or 2 tugs is recommended for vessels over 16.50 m. beam.

BERTHING:

Dock	*Quay*	*Facilities*	*Length (m.)*	*Draft (F.W.)*
Saint Pierre	Vendeuvre	Reserved for pleasure boats	280	4.0
	Cafarelli		150	4.0
Nouveau Bassin	President	4 cranes 5 t	150	7.0
	Hippolyte Lefevre	Cereals machinery rate: one 200 t.p.h.		
	President Gaston Lamy	4 cranes 3 t; 1 crane 5 t 2 cranes 15 t	550	6.5
	De Normandie	3 cranes 5 t; 1 crane 8 t 1 crane 10 t	375	5.8
De Calix	Calix	3 cranes 6 t	140	8.60
		Storage of Molasses: 13,500 t		
		Roll-on/Roll-off Berth	180	7.6
D'Herouville	President Delaunay	1 crane 5 t; 4 cranes 6 t	370	8.95
	Mole a charbon	Private berth, 4 cranes 8 t	200	8.95
Blainville	Blainville	Cereals machinery rate 400 t.p.h. 1 crane 6 t; 3 cranes 20 t; 2 cranes 26 t	560	8.95

STEVEDORES: Arranged by Agent on basis of ETA provided by vessel before arrival.
MEDICAL: Doctors and hospital facilities available.
TANKERS: There is a tanker berth (D.P.C.) in Calix Dock, max. draft 8.60 m. Gas-freeing is prohibited.
FRESH WATER: Available at all berths, rate about 5 – 10 t.p.h.
FUEL: Can only be supplied by tanker lorries.
WATCHMEN: Not compulsory during daylight hours from 0600 hrs. to 1800 hrs.
OPENING/CLOSING HATCHES: This work is normally carried out by the crew.
CUSTOMS ALLOWANCES: Amount of tobacco and alcohol for crew consumption must be declared on the stores list. Quantities held out of bond are at Customs discretion.

IDENTIFICATION CARDS: Not required.
CONSULS: The following countries are represented locally:
Denmark Tel: 82.33.13
Norway Tel: 82.05.42
Finland Tel: 97.33.27
Sweden Tel: 82.21.76
REPAIRS: Deck and machinery repairs can be carried out by local workshops. Nearest dry docks at Le Havre or Cherbourg.
REPATRIATION: Can be arranged.
AIRPORT: Situated 12 km. from the port. There are no regular services, but an air taxi with 5 seats can arrange connections to international airports.

TIME: GMT plus 1 hour or GMT plus 2 hours in Summertime.
HOLIDAYS: Work is carried out on legal holidays. No work on "Jours de Fetes" and Sundays.
POLICE/FIRE/AMBULANCE: Police Tel: 17; Fire Tel: 18; Ambulance Tel: 18.
TELEPHONES: Can be connected on board ships. Quayside telephone situated in Blainville Dock.

SHORE LEAVE: Allowed.
AUTHORITY: Ingenieur des Ponts et Chaussees, Chef de l'Exploitation, Direction Departmentale de l'Equipment, B.P. No. 37, 14035 Caen Cedex.

Commandant du Port, Pont de la Fonderie, B.P. 37, 14035 Caen Cedex. *Tel:* (31) 82.12.88, 82.36.36. *Telex:* 170213 FT.
AGENT: See "Paris".

CALAIS: 50.58 N. 01.50 E. **(See Plan Book)**

DOCUMENTS:
Ship Register.
Manifest of Cargo.
Bill of Lading
3 Lists of Provisions on board.
4 Lists of Articles held by Crew.
3 Lists of Crew.
List of open spaces.
Health Certificate, endorsed by Master on arrival.
Derat or Exemption.
For tankers, Certificate of Cargo Specification and Certificate of vessel's suitability to transport inflammable liquids in bulk.
PILOTAGE: Compulsory when entering or leaving harbour, except for ships less than 50 m. length. Pilotage area: 3 miles from piers. Ships required to give notice of their arrival 18 hours before, through Boulogne Radio. Pilot waits between buoys CA4 and CA6. Pilot boat: Black, white side stripe, bearing the inscription "Pilote Calais". She is equipped with VHF, Channel 6 and Channel 16.
ANCHORAGES: Between CA6 and CA8, 15 m. to 17 m. deep, sand and gravel. Good anchorage. When bad weather from North, ships are advised to stand out to sea or anchor in the roads of Les Dunes. Ship will receive instructions from Pilots or Harbour Captain's office when to enter roads of Calais.
RESTRICTIONS: Harbour channel 130 m. wide. In channel and outer harbour, depths are maintained at 8.40 m. MWL. Vessels should enter harbour preferably about 2.5 hours before high tide or half an hour after high tide. Because of the shape of sluice at the entrance larger vessels cannot have direct access to the Bassin Carnot at certain tides. These vessels may lighten in outer port, at "Quai Paul Devot", where depth is 9 m. LWOST.
MAX. SIZE: "Bassin Carnot", 150 m. max. length; "Bassin Ouest", (West Dock) 110 m. max. length; "Quai P. Devot", 190 m. max. length; "Bassin Carnot", 19 m. max. beam; "Bassin Ouest", 16 m. max. beam. Max. draft: 9.00 m. (29 ft. 6 in.). Port accessible to vessels of 20,000 d.w.t.
HEALTH: Sanitation controls can arrange deratisations and exemptions. International Vaccination Certificates required for ships coming from an epidemic zone.
RADIO: Messages through Boulogne Radio. ETA must reach pilotage station or Harbour Master's offices 18 hours before arrival. Near Calais, ships equipped with VHF can call Harbour Master on Channel 12 or pilotage station on Channel 16.
TUGS: Generally join ships at end of the piers. Towing ropes are generally ships own but can be supplied by tug.
BERTHING: Max. height of tide 7.30 m. Depth on dock sills 2 m. LWOST.

At West dock, entrance between 1.5 hours before and half an hour after high tide. In Bassin Carnot, entrance between 3 hours before and 1 hour after high tide.

There are 2 berths equipped for handling roll-on/roll-off traffic, situated in Bassin Carnot.
CRANES:

Maritime Station Quay	Electric cranes – 6 tons	3
Paul Devot Quay	Electric crane – 6 tons with automatic scoop	1
	Electric crane – 12 tons with automatic scoop	1
	Electric cranes – 15 tons with automatic scoop	2
Transit Station	A block of 2 gantries able to handle a load of 40 tons (containers)	
West Basin		
South Quay of the West Basin	Electric crane – 3 tons	1
	Electric cranes – 6 tons	2
	Electric cranes – 6 tons with automatic scoops	2
Carnot Basin		
Vistule Quay	Electric cranes – 6 tons	2
Loire Quay	Electric cranes – 6 tons	3
	Electric cranes – 6 tons with automatic scoops	6
	Electric cranes – 12 tons with automatic scoop	2
	Electric gantries – 6 tons with raisable forepeak and equipped with weights and automatic scoops	2
Crespin Quay	Electric cranes – 6 tons with automatic scoops	3
Fournier Quay	Electric cranes – 6 tons	5
	Electric crane – 12 tons with automatic scoop	1
Volga Quay	Electric cranes – 6 tons	2
	Electric cranes – 6 tons with automatic scoops	2

Dry Dock: One electric crane – 15 tons. 2 mobile cranes of 1/9 tons complete the lifting machinery of the Public Equipment of the Port.

BRIDGES: Swing bridges (West Dock) and draw bridges (Bassin Carnot) are situated on sluices.
STEVEDORES: Informed by Agent of tonnage, nature and condition of cargo.
MEDICAL: All facilities available.
TANKERS: Two posts provided for tankers: "Quai Paul Devot" for medium-sized tankers. "Bassin Ouest" (West Dock) for small tankers. "White and black" products can be accepted at "Bassin Ouest". Only "black" products admitted at "Quai P. Devot". Tankers are allowed to enter harbour only by daytime. They must leave as soon as operations are finished. Hoses 10 in. and 12 in. in diameter. Barges discharged with a 10 in. hose.
DENSITY: Salt.
FRESH WATER: Supplied from hydrants on wharves.
FUEL: Any fuel can be supplied by tank lorry of large capacity.
GANGWAY/DECK WATCHMEN: Ships must be guarded.
OPENING/CLOSING HATCHES: As a rule hatches are opened/closed by crew.
CUSTOMS ALLOWANCES: Tobacco: No limit for foreign ships, but the quantity must be declared on the lists of articles held by crew.
IDENTIFICATION CARDS: Identification cards and seamen's books are required.
CONSULS: *Vice-Consuls:*
Netherlands, M. G. Dumont, 12 Bd. des Allies, Calais.
Denmark, M. J. Mulard Jr., Place de Suede.
Finland, M. H. Ravisse, 12 Bd. des Allies.
Greece; M. P. Foissey, 12 Bd. des Allies.
Norway, M. Y. Lefebvre, 12 Bd. des Allies.
Sweden, M. T. Pagniez, 198 Rue des Quatre Coins.
United Kingdom, M. Russel, 331 Avenue de Saint-Exupery, Calais.
REPAIRS: Deck and engine repairs possible.
DRY DOCKS: One, 153 m. long, 21 m. wide. Depth at sill, 7.45 m.
REPATRIATION: Pilot boats and tugs may trans-ship equipment or hands in outer roads.
AIRPORT: Calais, Dunkirk (International), 7 km. away.
TIME: GMT plus 1 hour. Spring and Summer GMT plus 2 hours.
HOLIDAYS: 1st January; Easter Monday; 1st May; Ascension Day; Whit Monday; Tuesday afternoon following 1st Sunday of July (local feast); 14th July; 15th August; 1st November; 11th November; afternoon of 24th December; 25th December; Sundays.
POLICE/AMBULANCE/FIRE: Police 17; Ambulance 34.39.24; Fire 18.
SHORE LEAVE: Crew are allowed ashore.
AUTHORITY: Directeur de L'Exploitation du Port de Calais, Place de L'Europe, 62225 Calais, Cedex. *Tel:* (21) 96-63-00. *Telex:* Sermar 160758 F. *Contact:* P. Rattier, Port Director.
AGENT: See "Paris".

CALVI, Corsica: 42.34 N. 08.46 E. (See Plan Book)

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Provisions List
1 Cargo List.
1 List of Articles (new and customs-barred) in possession each crew member – cameras, binoculars, radios, cigarettes, spirits, etc.
1 Health Declaration.
PILOTAGE: Not compulsory. If required, telephone pilot station at Bastia, Tel: (95) 315095.
ANCHORAGE: Outside port for cruise vessels.
MAX. SIZE: Draft 6.5 m.; length 140 m.
RADIO: Within 50 miles call Ajaccio Radio VHF Channel 16. Then connected over Channel 23 to telephone network.
TUGS: None available.
STEVEDORES: 24 hours accurate ETA necessary for ordering gangs. No work on Sundays and official holidays.
CARGO GEAR: Only a few nets and slings available; all other gear must be supplied by ship. Ship's derricks used.
FRESH WATER: Available at very slow pumping rate.
FUEL: Not available.
REPAIRS/CONSULS: None.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
AUTHORITY: Capitainerie du Port, Quai Landry, 20260 Calvi, Corsica. *Tel:* (95) 650521.

Affaires Maritimes, Quai Landry, 20260 Calvi, Corsica. *Tel:* (95) 650171.

CANCALE: 48.40 N. 01.51 W.

Used by fishing and pleasure vessels only.
PILOTAGE: Pilot available from St. Malo. Tel: 56.23.66.
BERTHING: 2 public wharves, depths from 0.5 m. to 13 m. at spring tides.
CRANES: One 3 ton crane available.
MEDICAL: Hospital facilities available at St. Malo, 15 km. distant.
FRESH WATER: Available in small quantities.
FUEL: Diesel oil available by truck.
AIRPORT: Nearest at Dinard, 30 km. away.
AUTHORITY: Direction de l'Equipement, B.P. 121, 1 Rue de la Corse, 35402 St. Malo. *Tel:* 566545.

CANNES: 43.33 N. 07.01 E.

DOCUMENTS:
To be sent on departure from previous port.
3 copies of Passenger List.
1 copy of Crew List.
Required on arrival:
4 copies of List of Passengers, showing Christian name, surname, age, date and place of birth, nationality.
2 Crew Lists.
5 copies of a Special Arrival form (supplied on arrival).
PILOTAGE: No Pilot station at Cannes. A tender with Company's flag on top of its mast will meet the vessel: *(a)* If ship is proceeding to anchorage No. 1, in Golfe de la Napoule, about half a mile South of the lighthouse at end of Cannes port Pier (Quai Lauboeuf); *(b)* If ship is proceeding to either anchorage No. 2 or 3, in Golfe-Juan, half a mile North of Ile Ste Marguerite.

The tender will lead to anchorage and will give 1 blast of the siren when correct position has been reached. At night, tender has a fixed white light at top of its mast, which replaces the flag. Should it not be possible to advise by wireless before arrival at anchorage and weather conditions making it necessary for ship to anchor at either position No. 2 or 3, boat will meet ship in Golfe de la Napoule, 2 miles South of Cannes port lighthouse. In this event, ship must proceed to anchorage No. 2 or 3 as appropriate, steaming to South of Ile St. Honorat, whilst tender will proceed by channel between Ile Ste Marguerite and the mainland.
ANCHORAGE: Advice of anchorage is passed to Captain via Grasse Radio or Monaco Radio, VHF Channel 16 usually about 1 hour before arrival. There are 3 anchorages, any of which may be used according to the weather:

No. 1 off the port of Cannes, approximately half a mile South of end of breakwater, used by calm sea or by East or N.E. winds.

No. 2 is situated to North of Ile Ste Marguerite, used by S.E. or S.W. or South winds.

No. 3 to the East of Cap de la Croisette, used by West or N.W. winds.

It could happen during the call, winds may change direction and movement from anchorage No. 1 to No. 2 or No. 3 become necessary. Shift takes about 1 hour.
HEALTH: Port officials will embark immediately the ship anchors. Free pratique may be granted by wireless telephone 1 hour before arrival at ship's surgeon request stating: "no illness on board".
FRESH WATER: One water barge (capacity 65 tons) and 2 water barges (capacity 20 tons) available.

12 hours notice required for orders up to and including 100 tons. 24 hours notice required for amounts in excess of 100 tons. Pumping rate 30–40 cu.m./hr. with one or two boats.
GANGWAY/DECK WATCHMEN: Watchmen for gangways should be provided by ship and passengers are requested to present their landing cards every time they use the gangways.
AUTHORITY: Capitainerie du Port.

CHERBOURG: 49.38 N. 01.38 W. (See Plan Book)

DOCUMENTS:
Declaration of Health.
Manifest of Provisions on Board.
Manifest of Crew's Possessions.
Manifest of Cargo – in certain cases.
Manifest of Equipment.
DEEP SEA PILOTAGE: Pilots board off "CH1" Buoy. Radio ETA to "Cherbourg Pilots" Telex 170952. (48 and 6 hours notice.) On approaching Cherbourg contact Cherbourg Signal Station on VHF Channel 16 confirming ETA.
HELICOPTER SERVICE:
Air Affaires – Heli-Services, Aerodrome de Cherbourg – Maupertus, B.P.1 – Gonneville, 50840 Fermanville. Tel: (33) 44.56.96. Telex: 171348 Helip.

Description of Services: A 24 hours – 7 days per week service, within a radius of 150 nautical miles of Cherbourg, to and from ships without the necessity of reducing speed or changing course, in any sea conditions.

The positioning and pick-up of persons are accomplished either by landing or by winching on all types of vessels, serving even small coasters and fishing boats.

Doctor and stretchers for injured personnel available within minutes of your call.

Note the possibility to put technicians and specialists on board for up to 12 hours work while underway and take them ashore again.
Recommended Procedure:

(A) 48 hours before	Please cable through Saint Lys Radio (FFL) or any radio station to Heli-Services Cherbourg Telex 171348 HELIP the following information: (a) ship's name (b) state you require Helicopter and reason for request (c) ETA rendezvous point requested (d) VHF in good order or not (e) Confirm full landing, restricted or winching area available.
(B) 24 hours before	With the same radio procedure confirm your ETA.

(C) 4 hours before — Call "Jobourg Traffic" (French Marine Traffic Centre) on VHF 16/11 to confirm your ETA. Heli-Services office is directly connected with Jobourg Traffic and transmit information concerning rendezvous point and helicopter operation.

(D) When helicopter is flying, its pilot contacts you on VHF. Give information about relative wind and start locked key homing signal on 410 kHz.

Services are assured 24 hours per day with two hours' notice, or immediately in case of emergency.

Rendezvous Points:

Standard Points

For normal operations, 4 rendezvous points are recommended.

Point A: 13 nautical miles North of Cap de la Hague.

Point B: 10 nautical miles North of Cap Levi.

Point C: 5 nautical miles North of Cap Levi (prohibited area for tankers).

Point D: 27 nautical miles North of Cap Levi (ships West bound)

However, if desired by the Master, the helicopter can meet the vessel at any point.

PILOTAGE: Requests for pilotage must indicate arrival time at the buoy CH1. They may be addressed to Agent or direct to pilot station, telegraphic address "Pilotage Cherbourg" Telex: 170952, or through the Homet look-out station by means of the usual signals. To avoid delay it is well to warn the pilot station 4 hours in advance of arrival. As a general rule, the pilot boat always comes out, whatever the weather. In bad weather, the vessel follows the pilot boat and Pilot boards as soon as shelter permits.

ANCHORAGE: Anchoring must be made strictly according to the instructions of the Pilot so as not to get in the way of movements and anchorage of steamers. Depths vary from 6 m. to 12 m. in safe anchorages.

RESTRICTIONS: In the wet dock, the bridge is opened 1 hour before until 1 hour after high water.

MAX. SIZE:

			Depth average tide	
	Length (m.)	*Breadth (m.)*	*Spring (m.)*	*Neap (m.)*
In the Roads	No Limit	No Limit	11	12.50
Trans-Atlantic Dock	No Limit	No Limit	7.0–12.5	8.5–14.0
Mielles Dock	150		5.00	6.50
Oil berth at Querqueville	200	31	9.0	10.50
Berth Amiot	100		3.0	4.50
Ro/Ro No. 1	130	20	7.0	8.50
Ro/Ro No. 2	200	30	8.0	9.50

Ro/Ro No. 3: (Quai de France – South). Length: No limit. Width: 44 m. Depth: 12 m.

HEALTH: From French port to French port, no formalities. From foreign port to French port, request for free pratique (yellow flag). In case of sickness on board, warn the Agent in advance. No crew member may leave ship before consultation and agreement of Port Doctor.

RADIO: The stations which offer the best facilities are Boulogne Radio, Brest le Conquet Radio, and St. Lys for ships which are a long way off.

TUGS: Tugs generally join vessel in the main approaches. With regard to the tow rope, a charge is made.

BRIDGES: Only the swing bridge at the entrance to the wet dock, which is opened on request from 1 hour before until 1 hour after high tide for the entry and exit of ships.

STEVEDORES: Agent needs ETA, to arrange personnel and equipment to be used for handling cargo.

CRANES: 35 ton capacity gantry for road/rail container and kangaroo operations. 40 ton capacity mobile crane for container and kangaroo operations. 30 to 90 ton floating cranes. Various mobile cranes for light and heavy lifts. Fleet of tugmasters and fork-lift trucks.

Also see "Berthing".

MEDICAL: Advise Agent of any requirements at the same time as ETA. There are 2 hospitals, civil and military, both very well equipped.

TANKERS: There is only one discharge berth, max. draft 9 m.

FRESH WATER: Water points on all quays.

FUEL: Available from local suppliers – Esso, Shell, etc.

WATCHMEN: Every ship in port must have a watchman, usually a crew member.

OPENING/CLOSING HATCHES: At the discretion of Master, crew may perform this.

CUSTOMS ALLOWANCES: Free allowance for each crew member – 200 cigarettes or 50 cigars, and 1 litre of alcohol. Common Market Countries – Crew: 300 cigarettes, 75 cigars and 1.5 litres of alcohol.

IDENTIFICATION CARDS: Each crew member must carry his seaman's card.

CONSULS:

Belgium
Portugal
Denmark
Finland and Norway
Haiti
Venezuela
Greece
Sweden
Great Britain

REPAIRS: All types of hull and engine repairs are possible.

DRY DOCK: Commercial Port's dock: length 75 m., width 14 m.

		Max. dim. of vessel able to enter	
Dry Dock Nos.	*Sill Length (m.)*	*Length (m.)*	*Breadth (m.)*
N. Drydocks			
1	90.00	97.85	18.50
2	100.00	107.85	18.50
3	100.00	107.85	18.50
4	90.00	97.85	18.50
S. Drydocks			
5	200.00	206.40	25.70
6	180.00	184.00	22.15
7	69.30	75.75	17.30
Homet	235.00	248.00	35.00

REPATRIATION: Can be arranged.

AIRPORT: At Moupertuis, 12 km. from Cherbourg. There are no regular services in the immediate vicinity.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: January 1st; Easter Sunday/Monday; May 1st; Ascension; Whitsun Sunday/Monday; July 14th; Assumption; 15th August; November 1st; Victory Day, November 11th; Christmas Day, December 25th.

BERTHING:

Name of Dock	*Name of Quay*	*Use*	*Number/type of lifting equipment* (H.d. = Heavy duty)	*Length of quays (m.)*	*Open storage area (sq.m.)*	*Sea level chart (m.)*	*Lock Nos.*
Trans-Atlantic	France	Containers, general-cargo, passengers, various other services	4 cranes 7.5 t, 13 t in tandem	620	22,000	−12	None
Trans-Atlantic	Normandie	General-cargo, Ro/Ro car carriers, various other services	2 cranes 7.5 t, 13 tons in tandem	500	50,000	−10	None
Car Ferry	Post No. 1	Ro/Ro freight and passenger	H.d. linkspan ramp for vehicles, passenger jetty and terminal	120	20,000	−6	None
Freight Ferry	Post No. 2	Ro/Ro freight	H.d. linkspan 17 m. wide capacity 280 t	150	33,000	−8	None
Trans-Atlantic	Post No. 3	Ro/Ro	Capacity 65 t	620			
Les Mielles	Les Mielles	Construction for offshore and various heavy-lift operations	Gantry, 600 t capacity various h.d. mobile cranes	400	330,000 construction 105,000 Ro/Ro storage	−5	None
Les Flamands	None	Ro/Ro and container freight storage	1 crane 7.5 t, 2 cranes 120 t	240	480,000	−1.3	None
Querqueville	Oil dock	Bulk petroleum		200		−9	None
Commercial Basin	Alexandre III l'Entrepot	Fishing Coasters		800		−4	One
Navy Yard		Construction and repairs (drydocks)	Various				Seven
Commercial Dock		Drydock		75			One

POLICE/AMBULANCE/FIRE: Police: 44.20.22. Ambulance: 53.13.29. Fire: 53.01.23.
TELEPHONE: Generally, ships do not request the installation of a telephone line, unless for a prolonged stay. It is only possible on the steamer berth, price 15 F.
DEVELOPMENTS: Deep draft berths (13.0 m. depth), length 300 m. to be built.
AUTHORITY: Capitainerie du Port, Pont Tournant, 50.100 Cherbourg, France. *Tel:* (33) 53.10.42. *Telex:* 170849 (Port Director).

Direction Departementale de L'Equipement:, Allee Du President Leon Menut, 50100 Cherbourg. *Tel:* (33) 430133. *Telex:* 170011 Didello (Saint Lo).

AGENT: See "Paris".

CONCARNEAU: 47.52 N. 03.55 W. (See Plan Book)

DOCUMENTS:
Ship's Registration Certificate.
Cargo Manifest.
Stores List.
Crew Personal Effects List.
List of Crew and Passengers with dates of Vaccinations.

PILOTAGE: The pilotage area is limited to the East by alignment of the sea marks of Point of Raguenes (Lat. 47° 47′ N., Long. 03° 48′ W.) and the Ile Verte (Lat. 47° 46′ 40″ N., Long. 03° 48′ W.), to the South by the Parallel of the "La Jument Buoy" (Lat. 47° 39′ N., Long. 04° 01′ 20″ W., to the South of the Glenan Islands), to the West by the meridian of the "Basse Rouge" Buoy.

Pilotage is not required for vessels with an overall length of less than 40 m., except for tankers carrying oil products or gas.

It is recommended to warn the Pilot 24 hours in advance, indicating the most accurate ETA (Tel: 97.15.47).

The pilot craft is not stationed at sea. The Pilot generally boards to the South of the Cochon Tower or, on request, between Cochon Tower and the Ile aux Moutons; the craft carries the "H" flag by day and white flashing lights at night.

If the state of the sea does not permit the Pilot to board, the pilot craft makes the signal "T" (by flag or morse code) signifying: "follow-me, the Pilot will board in the shelter of the Peneroff Breakwater". If the state of the sea does not allow the pilot craft to come out, it stations itself in the shelter of the Peneroff Breakwater and makes the signal "BT".

Access: It is not advisable for vessels of a certain size whose Masters do not know the channel well to proceed without a Pilot, at LW in particular, to the North of the line Beg-Meil – Trevignon Point.

ANCHORAGE: *Main Roads:* Vessels anchor in the bay, on request, on a muddy bottom, on the alignment at 028.5° from the Beuzec church tower through the la Croix lighthouse.

Small Roads: Vessels anchor in the small roads sheltered from the North to Southeast by East, in 8 m. of water and a bottom of sand and mud, on the access alignment or to the West of this alignment.

At night, when on the access alignment, as soon as the Lanriec Light appears, the alignment is opened so as to see the Beuzec Light to the left of the La Croix Light, and when the Lanriec Light disappears, the vessel anchors in 8 m. of water.

The recommended landing stage is on the La Croix Breakwater.

Kersos Cove (Lat. 47° 52′ N., Long. 03° 55′ W.): It is possible to anchor here sheltered from winds from North to South by East, but with a reduced turning area. Vessels anchor half way between the Kersos Tower and the coast to the N.E. in 3 m. – 5 m. water with a good holding ground of sand and mud.

MAX. SIZE: *Tankers:* By day: 91 m. overall; by night: 81 m. overall.
Other vessels: By day: 101 m. overall; by night: 91 m. overall.
RADIO: Contact Conquet Radio.
VHF: Tugs on Channel 6 on weekdays during working hours from 0800 – 1200 hrs. and 1400 – 1800 hrs.
TUGS: 2 tugs available on demand, meet vessels near Cochon Light, large vessels use a tug for berthing.
BERTHING: As Concarneau is essentially a fishing port, a commercial vessel of a certain size cannot enter without the authorisation of the port services, who must prepare a quay berth for her in advance.

The port of Concarneau includes the port of la Croix located to the West of the La Croix Lighthouse, a fore-port and a rear-port separated by the peninsula on which is Ville-Close. The Lanriec Passage connecting these two port areas is cleared at 3 m. depth and marked by 5 light towers.

Port de la Croix: It is protected from West winds by a breakwater, and by a quay to the North. The depth at the bottom of the mole is 3 m. The port is used by fishing vessels.

Fore Port: In the middle of the fore port are 2 lines of pontoons each 70 m. long enabling 280 pleasure craft with a draft of 2.5 m. approx. and length of 10 m. to berth.

Along the Peneroff Quay, deposits formed by a hard bottom covered by a thin layer of muddy water from 1 m. to 2 m. Along Ville-Close, the bottom dries from 2 m. to 5 m. Along the North face of the South Breakwater, a slipway permits careening of craft.

Rear Port: The Rear Port is comprised of 1,537 m. of mooring quay.
Aiguillon Quay: Depth 1 m., length 110 m.
Carnot Quay: Depth 2.50 m., length 250 m.
Lin Quay: Depth 2.50 m., length 250 m.
East Quay: Depth from 2.50 m. to 5 m., length 140 m.
Petrol Tanker Quay: Depth 5 m., length 95 m.
Sand Quay: Depth 5 m., length 25 m.
Right Bank Moros Quay: Depth 5 m., length 257 m.
Left Bank Moros Quay: Depth 5 m., length 220 m.
A Ship's Lift Pier: Depth 5 m., length 90 m.

These quays receive fishing and commercial vessels and vessels under repair. The vessels are positioned according to their characteristics and the nature of the goods to be unloaded or taken on board.

CRANES: 1 × 17.5 tonne (East Quay), 4 × 2.0/13.0 tonnes (mobile).
MEDICAL: Municipal Hospital at Porzou. Tel: (16-98) 97.10.60.
CUSTOMS ALLOWANCES: *Tobacco:* Fixed at 30 grams per day, at sea, per person.

Alcohol: The equivalent of 5 centilitres of rum at 42° per day, at sea, per person.

These allowances are free of tax for use on board, but may not be landed.

IDENTIFICATION CARDS: Any National Identity Documentation will suffice.
POLICE/AMBULANCE/FIRE: Police Tel: 97.17.17; Ambulance and Fire Brigade Tel: 18.
FRESH WATER: Available.
FUEL: Available.
DRY DOCKS: Synchrolift available. Max. capacity 2,000 tons; max. LOA 95 m.; max. keel length 76 m.; max. beam 14 m.; max. draft 5.50 m. Fresh water, electricity, compressed air and cranes available.

There is a slipway which can accommodate vessels of 350 tonnes.

AIRPORT: At Quimper – Pluguffan 30 km. from the town. Twice daily flights to Paris and flights to London during the Summer months.
AUTHORITY: Monsieur le Directeur, Departemental de l'Equipement, Cite Administrative de Kerfeunteun, 2900 – Quimper. *Tel:* (16.98) 95.70.32. *Telex:* 940.424.

Capitanerie du Port, Quai Est, B.P. 96, 29182 Concarneau. *Tel:* (16.98) 97.33.80. *Contact:* L. Tanguy, le Commandant de Port.

DIEPPE: 49.55 N. 01.04 E. (See Plan Book)

DOCUMENTS:
4 Crew Lists.
2 Lists of Stores.
1 Loading Manifest.
1 Passenger List.
1 Declaration (furnished by Agent) stating that ship possesses up-to-date Safety Certificates.
1 Health Declaration.

PILOTAGE: Pilot boards 4 miles from breakwaters. Pilotage is compulsory in this area except for vessels less than 50 m. long equipped with VHF (Channel 12). Pilot boat is ready to put to sea from 2.5 hours before to 1 hour after high tide when a vessel is expected. During this period maintains radio telephone watch. VHF Channel 12.

All vessels must send ETA to the pilotage authority of the Seine/Rouen/Dieppe at least 5 hours prior to arrival in the Dieppe Roads, any delay greater than 2 hours or where a tide is missed must be signalled at least 3 hours before the initially ETA. Vessels not obliged to take on a Pilot must indicate in their ETA whether or not a Pilot is needed.

Address: PILSEINE – 21 rue du Mont Diboudet – Rouen, Telephone (35) 71 68 50; Telex 770575.

APPROACHES: Coming from the West, immediate landfall is Cap d'Ailly which is passed at 3 miles distance and then vessels proceed to the landfall buoy of Dieppe marked D.1. (East Cardinal, black yellow black, very quick flashing light, 3 flash every 5 seconds and a bell).

Location: Lat. 49° 57′ 15″ N., Long. 1° 01′ 20″ E., or 2.5 miles to the N.W. of the port entrance.

The cliffs which surround Dieppe give very good radar echoes.

ANCHORAGE: It is recommended to anchor in zone bounded by following points: *(a)* Lat. 49° 56′ 55″ N., Long. 01° 04′ E.; *(b)* Lat. 49° 58′ 40″ N., Long. 01° 02′ 45″ E.; *(c)* Lat. 49° 57′ 42″ N., Long. 00° 59′ 20″ E.; *(d)* Lat. 49° 55′ 50″ N., Long. 01° 00′ 30″ E.

This anchorage area includes buoy D.I and depths are from 6 m. to 12 m. with sand and broken shell bottom. Larger vessels anchor approximately half a mile to North of buoy D.I in depths of 10 to 12 m.

Forbidden anchorage: It is forbidden to anchor in the area defined by the following points: Lat. 49° 56′ 55″ N., Long. 01° 05′ 29″ E. – Lat. 49° 56′ 25″ N., Long. 01° 03′ 03″ E. – Lat. 49° 56′ 05″ N., Long. 01° 04′ 50″ E.

RESTRICTIONS: The lock gates of the commercial basins are only open from two hours before to one hour after high tide. Vessels remain at anchorage in the roads until the gates are opened. Large vessels enter preferably at the time of high tide to benefit to the maximum from the level of water under the keel and the best conditions of navigation.

Entry and leaving: Vessels entering must arrive in the roads at the latest 25 minutes after high tide, except for large vessels which must be in the roads at the latest at high tide. Vessels leaving must be ready at the latest 30 minutes after high tide.

Entry and leaving signals: Entry and leaving signals are exhibited on the signal post on the West jetty and on the repeater post of the fore port (signals in accordance with the Lisbon Convention of 23rd October, 1930.) At the Colbert Sluice and at the various locks the signals are simplified.

MAX. SIZE: Vessels LOA 155 m. and beam 21.5 m. can enter. In certain cases vessels of LOA 165 m. may be permitted to enter.

Colbert Lock (Dimensions of Lock): 230 m. length, 37 m. width, controls entrance to Inner harbour, where depth maintained about 7.50 m.

Canada Docks: length 154 m.; width, 21 m.; draft 8 m.
Paris Dock: length 154 m.; width 21 m.; draft 7 m.

Opening of Canada and Paris basins: 2 hours before to 1 hour after full tide, night or day. The port is accessible to vessels up to 10,000–12,000 d.w.t.

HEALTH: Pratique given by Customs officers who board on arrival. In case of suspected disease, Master required to radio details to Agent in advance.

RADIO: Boulogne Radio (FFB). *Arrival advice.* Masters of vessels must send to the Port Authority, 24 hours in advance, or at the latest when leaving the previous port where this is located less than 24 hours away, the expected time of arrival in the roads, indicating the name of the vessel, tonnage, length, beam, the date and time of arrival, maximum draft of the vessel on arrival, the nature and tonnage of various items of its cargo and hazardous cargo (in transit or to be landed), possible damage to the ship, its equipment or to the cargo. A rectifying message must be sent in the event of a change. Address: Port Captaincy: 1 Quai de la Cale – Dieppe. Telephone (35) 84 10 55 – Telex: MARDIEP 180414F.

VHF: Dieppe Radio maintains continuous watch on Channels 2 and 24 and calls vessels on Channel 16. The Port Authority (Call sign "Dieppe Port") maintains watch on Channel 12.

TUGS: 3 tugs available (1,400 h.p., 750 h.p., 600 h.p.). Requests for use must be made to the Port Captaincy. Two tugs in service at all times.

BERTHING:

Dock	*Quay*	*Facilities*	*Length (m.)*	*Sea level chart*
Paris	Norvege	1 roll-on/roll-off ramp (80 t.)	715	7.5/9
	Maroc	6 noria conveyors for banana handling	600	7.5/9
Canada	Indes	1 grain bagging funnel	150	7.5/9
	Quebec	grain silo (cap. 12,000 tons). Capacity 500 t.p.h.	160	7.5/9
Avant-Port	Henri IV	1 roll-on/roll-off ramp (40 t.)	380	4.5/5 minimum
Arriere-Port	Quai Guynemer	1 roll-on/roll-off ramp (120 t.)		

Handling Capacities:

	Loading:
Colza oil	200 t.p.h. (from the quay)
Colza grains	60 tons/man hour
Grain and wheat	500 t.p.h. (silo)
Rough timber	23 to 28 cu.m./man hour
	Unloading:
Colza oil	(taken from quay)
Colza grains	50 tons/man hour
Sand and gravel	100 to 150 tons/man hour
Bananas	about 3,000 cartons/man hour
Citrus fruit on pallets	55 to 65 pallets/man hour
Citrus fruits not palletised (cases, cartons, crates)	16 to 21 tons/man hour
Pre-slung timber	about 80 cu.m./man hour
Bulk timber	about 25 cu.m./man hour
Iron and steel	50 to 60 tons/man hour

CRANES: One 30 ton crane at Quay de Tonkin. One mobile crane, 40 ton and jib 40 m.

Quay Cranes: 6×3 ton, 2×3/6 ton, 2×6/12 tons and 6×2 ton gantry cranes.

BRIDGES: There are 3 bridges without vertical obstacles, and to request opening of the Colbert Bridge give 3 long blasts on the ship's whistle, to call for the opening of the Admiral Rolland Bridge give 3 long blasts on the whistle, and for the opening of the Jehan Ango Bridge give 2 long blasts on the whistle.

STEVEDORES: Normal hours are 0800–1200 and 1400–1800. Possible to work from 1800–2200 to complete operations. No work on Sundays or holidays.

MEDICAL: All medical facilities available.

FRESH WATER: Supplied by pipe-line. There are a great number of outlets on the quay.

FUEL: Available in small quantities; delivered by tanker lorry.

GANGWAY/DECK WATCHMEN: Available if required.

IDENTIFICATION CARDS: Embarkation card or passport is sufficient.

CONSULS:

Norway
Sweden
Denmark
Netherlands

REPAIRS: Good facilities exist, all types carried out.

DRY DOCKS: Dry dock in the inner harbour, dimensions 130 m.×18 m. It can receive ships 129×17 m. One lift of 300 tons and 7 repair sites.

SURVEYORS: Bureau Veritas at Dieppe; Lloyd's at Le Havre and Rouen; American Bureau of Shipping at Le Havre; Det Norske Veritas at Le Havre.

OPENING/CLOSING HATCHES: According to agreement, either by crew or stevedores.

CUSTOMS ALLOWANCES: EEC countries – 300 cigarettes 1.5 litres of spirits and an exemption of 600 francs. Antilles: 400 cigarettes, 1 litre of spirits of more than 22°; Africa: 400 cigarettes and 1 litre of spirits of more than 22° and an exemption of 140 francs per passenger.

REPATRIATION: Good facilities.

AIRPORT: Dieppe Saint Aubin (3 kms.) has two daily connections with Shoreham, England. The nearest main airport is Paris.

TIME: GMT plus 1 hour, but during the period from beginning April to end September (six months) the legal time is advanced by 1 hour (GMT +2).

HOLIDAYS: 1st January; Good Friday; Easter Monday; Ascension Day; Whit Monday; 1st May; 14th July; 15th August; 1st November; 11th November; 25th December.

POLICE/AMBULANCE/FIRE: Police (Duquesne Quay) 84-87-32 or 17. Fire and Ambulance 18 or 84-33-00.

TELEPHONES: No connections on the quays.

SERVICES: Compass adjusting, etc. available.

SHORE LEAVE: Allowed.

AUTHORITY: Port de Dieppe, Quai de la Cale, 76208 Dieppe. *Tel:* (35) 84.10.55. *Telex:* Mardiep 180414 F. *Contact:* P. Leminicier, Commandant du Port.

AGENT: See "Paris".

DONGES: Refer to Nantes.

DUNKIRK: 51.03 N. 02.24 E. (See Plan Book)

PORT LIMITS: The seaward boundaries of the port within which a vessel is considered to be an "arrived ship" is the Dyck Lightship or the Roads if the ship comes from the East.

DOCUMENTS:

Entry Bill (all information about ship), given by Pilot to Master, who fills it in and gives it to Harbour Officer.

To be given to Customs:

3 Crew Lists.
3 Passenger Lists.
Manifest or copy.
Form for increase of tonnage.
Declaration of open spaces.
3 Lists of objects held by crew.

PILOTAGE: Pilotage station limits – there are 2 pilotage zones.

1. The Outer Zone which is limited:
   To the West by the meridian of Calais Lighthouse (Long. 01° 51′ E.);
   To the East, by the meridian of Long. 2° 27′ E.;
   To the North, by the line situated 3 miles seawards of the LW mark;
   To the South, by the Calais Pilotage Zone, the coast and the Inner Zone defined below.
2. The Inner Zone limited:
   To the West by meridian Long. 02° 08′ E.;
   To the North, by a continuous broken line constituted by the parallel Lat. 51° 03′ N., the line of the coast, the meridian Long. 02° 20′ E., the parallel Lat. 51° 04′ 30″ N.;
   To the East by the meridian of Dunkirk Lighthouse;
   To the South by the end of the water levels of the autonomous port of Dunkirk.

Pilotage is compulsory in Inner Zone for ships over 150 n.r.t. or ships of max. length 50 m., or with dangerous cargo.

Pilotage compulsory in Outer Zone for ships not fitted with VHF, or over 1,000 nett tons or max. length 100 m. or with dangerous cargo.

Vessels coming from the West should call Pilots 12 hours before arrival or when leaving the former harbour. Vessels coming from the East should call Pilots 2 hours before arrival. ETA based on time of arrival at Dyck Lightship, should be given through Boulogne Radio (telegraphy) or by radiophone (2182 kHz). ETA to state: ETA (at pilot station). Length of the ship. Draft. Place where the Pilot is requested: Dyck/Dunkirk Light Vessel; Dunkirk Roads; Zuydcoote Pass.

ETA will be considered null and void if vessel does not arrive within 2 hours of stated ETA.

In vicinity of pilot boat, vessels may communicate with Pilots by VHF Channel 16, or R/T 2182 kHz or by Aldis lamp or flag signals when pilot boat is in sight. Telegraphic address of Pilot: Piloduk. Telex: 820902.

Pilot boat is about 50 m. long, black hull with white horizontal stripe, "Pilot Dunkerque" written on hull. Black funnel with white anchors insignia.

Pilot boat is positioned between Dyck Lightship and Buoy CA.2. In bad weather, pilot boat stays on radio watch but may leave for a more sheltered place, or put into port.

Ship's Departure: Sailings must be ordered at the Harbour Office, pilot station, towage office and linemen's office.

Pilots: For a sailing between 0800 and 2000 hrs. 1.5 hours' notice is necessary to Pilot for the ships moored in Dunkirk-East (Mardyck Bassin excepted) a 2 hours' notice for ships moored in Mardyck Bassin and Dunkirk-West.

For a sailing between 2000 hrs. and 0800 hrs. vessels are required to give notice to the pilot office before 1600 hrs. and to order the Pilot before 1800 hrs.

ANCHORAGES: Large vessels waiting for entrance must anchor in the area West of Dyck Light Vessel. In bad weather, ships may anchor off English coast, in the roads of Les Dunes, with good mooring ground of sand and mud 20 m. deep. On the Roads of Dunkirk, ships must anchor East of buoy E.1 so as not to disturb the entrance of ships.

RESTRICTIONS/MAX. SIZE: Movement of vessels: Normal operating conditions. Exceptionally, dispensations may be given by port services after study of specific cases.

Eastern Port

VIA CHARLES DE GAULLE LOCK:

ENTRY: By day: Passage to breakwaters from sunrise to sunset.

Before high tide (HW −3 hours). Length 250 m. or under – max. draft 12 m.

After high tide (HW +2 hours). Length 280 m. or under if vessel is engine-driven and length 265 m. or under if vessel is turbine-driven – max. draft 14.20 m. Beam 44 m. or under (reduced to 42 m. if lock defences are not in good condition).

After agreement of Captaincy/Pilotage/Tugs is obtained, a second vessel can be taken at the entrance, up to 2 hours after high tide, providing its draft is 12.80 m. or under and beam 39 m. or under.

If tugs have to be changed during the entry manoeuvres of 2 large vessels, the Master of the vessel using the tugs must be warned in advance by a message from the Captaincy.

At Night:

Before high tide (HW −3 hours). Length 250 m. or under – max. draft 12 m. Beam 39 m. or under.

After high tide (HW +2 hours). Length 250 m. or under – max. draft 12.50 m. Beam 39. m. or under.

SAILING:

If length 251 m. or over and beam 39 m. or over, register for sailing between 1 hour before sunrise and 1 hour after sunset, except for berth AP 1, vessel with bow facing West, where the limit is 2 hours before sunset.

From tide-coefficient 95 onwards (h=5.85 m.) no registration required between HW – 3.5 hours and HW – 0.5 hours.

If the length is between 250 m. – 251 m. and beam is under 39 m. sailing registration possible from 0500 to 2200 hrs. (Summer and Winter) except for tankers, where length is still limited to 250 m. and beam under 39 m.

If length is under 250 m. and beam is under 39 m. sailing registration day and night without restriction.

VIA WATIER LOCK:

Passage prior to high tide: Max. draft 11.50 m. – beam 32 m. or under.
Passage after high tide: Max. draft 11 m. – beam 32 m. or under.
Max. length (before or after HW).

By Day: Length 230 m. or under with no vessel at Mole V. Length 220 m. or under with vessel at Mole V.

By Night: Length 220 m. or under with no vessel at Mole V. Length 210 m. or under with vessel at Mole V.

VIA TRYSTRAM LOCK:

Max. draft 8 m. – beam 22 m. Length 150 m. or under on leaving port, Tixier Lock pumps stopped on Pilot's request. Length 140 m. or under on entering port, Tixier Lock pumps stopped on Pilot's request.

BP BERTHS:

By day and by night, on direct entry or with tow relinquished: Length 250 m. or under. Draft 12.50 m. or under (this can be extended to 12.80 m. max. dependent on water level in basins).

DRY DOCK 6 – DOVER – PANAMA QUAYS:

Large vessels may manoeuvre in good visibility and wind less than Force 5 Beaufort.

Max. dimensions of vessels admitted to dry dock 6:

Length 280 m.×beam 44 m.×draft 6.50 m. Bow/8.5 m. Stern. (After improvement of access defences in Dock 6 – 290 m. × 44 m. will be possible).

On Relinquishing Tow: Entry and sailing registration on Dock 6:

By day, registration from sunrise less 1 hour to sunset less 2 hours for vessels length 251 m. or over and beam 39 m. or over.

Registration from 0500 hrs. to 2200 hrs. if length between 250 m. and 251 m. and beam under 39 m. No limit on registration time if length is 250 m. or under and beam is under 39 m.

Entry direct of vessels length over 250 m. and/or beam over 39 m.: passage to jetties when daylight fading – latest time 2 hours before sunset.

Direct sailing to sea from Dock 6 of vessels length over 250 m. and/or beam over 39 m.: Registration 3 hours before sunset.

Note: Mole V, Eastern section, must be clear for vessels of length over 250 m. swinging in front of Dry Dock 6, Dover and Panama Quays, and Watier Amont Quay free for passage of vessels of length over 250 m. via Brocquaire Channel.

RECOMMENDED DRAFTS FOR SAILING OR TOW RELINQUISHING MOVEMENTS

Length	150 m.-180 m.	180 m -205 m.	205 m.-230 m.	230 m.-280 m.
Draft	B 5 m.-S 6 m.	B 6 m.-S 7 m.	B 7 m.-S 8 m.	B 9 m.-S 10 m.

B=Bow, S=Stern. (except for repairs)

Western Port:

FLANDERS TANKER BERTH:

In Normal conditions of Dredging – Entry: Passage to jetties from sunrise to 1 hour before sunset.

Before high tide (3 hours before HW at Dunkirk East). Coefficient under 80 draft 20.50 m. Coefficient over 80 draft 20 m.

After high tide (HW at Dunkirk East plus 2.5 hours). All coefficients draft 22 m.

Tugs must be present at "DW 13/DW 14" 45 minutes before theoretical time of passage to berths of the tanker they are serving.

Theoretical Number of Tugs:

D.w.t.	D.w.t.	No. of tugs	
under	125,000	3	According to Pilot's request
125,000 –	175,000	4	According to Pilot's request
175,000 –	250,000	5	According to Pilot's request
250,000	and over	5 or 6	According to Pilot's request

Sailing: Sailing registration from 1 hour before sunrise to 1 hour before sunset.

With coefficient over 95, no sailing registration from HW – 3 hours to time of HW. The interval between registration time for sailing of a tanker from the Flanders Tanker Berth at the time of passage to the jetties of an incoming tanker must not be less than 4 hours.

Recommended draft on sailing:

Length 280 m. or under	Length over 280 m.
8 m. bow/9 m. stern	9 m. bow/10 m. stern

No. of tugs to be used:

D.w.t. under 150,000 tons – 3 according to Pilot's request.
D.w.t. over 150,000 tons – 4 according to Pilot's request.

Note: Wherever possible, between buoys DW 14 and DW 16, large vessels leaving Dunkirk East should not cross tankers entering Dunkirk West.

OPERATION OF S.F. BP OIL BASIN BERTHS:

North BP Berth:

Max. draft 12.5 m.	Length 250 m.
Max. distance stern/connection	127 m.

Middle BP Berth:

Max. draft 12.5 m.	Length 245 m.
Max. distance stern/connection	122.5 m.

South BP Berth:

Max. draft 10.5 m.	Length 230 m.
Max. distance stern/connection	120 m.

Coaster Berth – North Face:

(a) West Part, from Bollard 2.5 to Bollard 7 (quay length 80 m.) – Max. draft 6.5 m.

(b) East Part, to the East of Bollard 7 (length of quay 90 m.) – Max. draft 7.5 m.

Max. length of vessels admitted to coaster berth is 120 m. with a draft of 6.5 m.

Coaster Berth – South Face: Solely reserved for river traffic.

Bunker Berths: Reserved for bunkering craft.

Note: The drafts shown correspond to a minimum water depth in the basins of 5.3 m.

At all BP berths, vessels are positioned bow facing West.

Simultaneous usage of BP North and Middle Berths is only possible, under normal conditions, if the total beam of the 2 vessels in question is less than 70 m., otherwise the manoeuvring of these vessels, both on entry and sailing, can only be envisaged by day and in fine weather.

Vessels of larger dimensions than those covered by this note can be admitted to the following berths only after prior study and subject to special conditions of draft, berthing and securing cables, etc.

Overflow rafts: See Article 412 of Permanent Instruction No. 57.

Max. length of vessels, with draft of 12.5 m. transitting Brocquaire Channel is fixed at 250 m.

HEALTH: For ships coming from *(a) All European Countries:* Declaration of Health is not obligatory but general International Certificates are controlled. *(b) Other Harbours:* Admission subject to Declaration of Health and usual controls of certificates. Admissions in free pratique only in daytime except special cases (intervention of a physician). Request for free pratique may be made to Sani-Port, Dunkirk, through Boulogne Radio. In case of necessity, health service can – on request – intervene at night.

RADIO: Dunkirk Harbour Station (FFF), VHF call sign "Dunkerque Port", for messages about port service through VHF Channels 73 and 16. Communications other than in VHF made through Boulogne Radio (FFB).

VHF: Dunkirk Port Station maintains continuous watch on VHF, Channels 73 and 16.

RADAR: There is radar at the control tower of harbour. It is not a guiding radar.

TUGS: Tugs normally join vessel between buoys DW.28 to DW.30 and DW.16. Smaller vessels are joined by tugs in the outer port.

On departure tugs must be ordered with a 2 hour notice for Dunkirk-East and a 4 hour notice for Dunkirk-West. Moreover, for manoeuvring between 1900 hrs. and 0700 hrs. tugs must be reserved before 1600 hrs. and ordered before 1800 hrs.

It is possible to cancel or delay any order for tugs, without indemnity, provided this request is done with a 1 hour (daytime) and 2 hours' (night-time) notice for Dunkirk-East, with a 2 hours' (daytime) and 4 hours' (night-time) notice for Dunkirk-West.

Also see "Restrictions".

BERTHING: Berthing priority is decided by Port Captain's office. Vessel is informed by radio of the location and priority given to her.

Dock	Quay	Length	Min. Depth of water
1	Freycinet I	495.7 m.	6.90 m.
1	Freycinet II	251.5 m.	7.30 m.
1	Freycinet III	496.7 m.	7.80 m.
	Front du mole 1	187.3 m.	7.20 m.
2	Freycinet IV	430.6 m.	7.60 m.
2	Freycinet V	630.0 m.	7.40 m.
	Front du mole 2	146.0 m.	7.70 m.
3	Freycinet VI	528.4 m.	9.10 m.
3	Freycinet VII	516.8 m.	9.40 m.
	Front du mole 3	114.3 m.	9.00 m.
4	Freycinet VIII	558.3 m.	9.20 m.
4	Freycinet IX	500.6 m.	8.80 m.
	Front du mole 4	126.4 m.	7.40 m.
5	Freycinet X	484.5 m.	11.20 m.
5	Quai du silo	120.2 m.	10.10 m.
5	Freycinet XI	446.8 m.	11.00 m.
	Front du mole 5	406.6 m.	10.30 m.
6	Freycinet XII	715.9 m.	12.80 m.
6	Fond de darse 6	177.6 m.	12.50 m.
6	Freycinet XIII	702.2 m.	12.70 m.
	Front du mole 6	165.6 m.	4.20 m.
	Upstream West Watier Lock	104.0 m.	4.80 m.
	Quai des Monitors (Tidal Quay)	431.2 m.	5.00–7.00 m.
Oil Port	N. station	105.0 m.*	13.20 m.
Oil Port	N. central station	95.0 m.*	13.20 m.
Oil Port	S. central station (1)	95.0 m.*	11.20 m.
Oil Port	N. coasting station	200.0 m.	7.00 m.
Oil port	S. coasting station	200.0 m.	3.50 m.
Bassin Maritime	Grain berth	195.0 m.	14.20 m.
Bassin Maritime	Quai Usinor No. 5 & 6	703.5 m.	14.20 m.
Bassin Maritime	Quai Usinor No. 2, 3 & 4	649.1 m.	14.00 m.
Bassin Maritime	Quai Usinor No. 1	277.3 m.	6.80 m.
Bassin Maritime	Heavy cargo berths No. 1 & 2	507.5 m.	16.00 m.
Bassin Maritime	Heavy cargo berth No. 3	174.5 m.	12.00 m.
Bassin Maritime	Heavy cargo berth No. 4	262.0 m.	12.40 m.
Bassin Maritime	Berths for general cargo (E. section for barges)	282.5 m.	5.10 m.
Bassin Maritime	General cargo berth	618.0 m.	14.80 m.
Bassin de Mardyck	Appt C.F.R. Poste Est (2)	170.0 m.*	12.40 m.
Bassin de Mardyck	Appt C.F.R. Poste Quest	65.0 m.*	16.00 m.
Bassin de Mardyck	Quais des C.M.P. (3)	85.0 m.	6.90 m.
Bassin de Mardyck	Quai de l'Escaut	643.0 m.	12.00 m.
Fore-port – West	Appt petrolier C.F.R. (4)	105.0 m.*	23.00 m.
Dunkirk West			
Quai d'Alsace	Ferry berth	132 m.	5.00 m.
Quai de Lorraine	Ro/Ro and Container berths	260 m.	7.00 m.
		500 m.	13.30 m.
Quai de Flandre	Ro/Ro and Container Berths	423.4 m.	13.30 m.
Quai Pondereux Ouest	Heavy Cargo	270 m.	21.80 m.

(Bed: Length 340 m.×100 m. width)

(1) Maximum length of vessels permitted: See "Tankers" – S.F.B.P. Oil Basin Berth.

(2) Maximum length of vessels permitted:

E. station of CFR berth 250 m.
W. station of CFR berth 280 m.

(3) Maximum length of vessels permitted: 105 m.

(4) Maximum length of vessels admitted: approx. 360 m.

*platform

CRANES:

Electric Cranes: 125	Cranes of 3 t	Cranes of 6 t	Cranes of 10 t	Cranes of 15 t	Cranes 7.5/10 t
Quai de reparations			1		
Quai a marchandises diverses			2	3	
Freycinet I		4			
Freycinet III		4			
Freycinet IV		4			
Freycinet V		5			
Freycinet VI		2	1		4
Freycinet VII		7	1		
Freycinet VIII		8			
Freycinet IX		5	2		
Freycinet X		4	4		1
Freycinet XI		3			4
Freycinet XII		3			8
Fond de Darse VI					
Freycinet XIII		2	2		4
Quai de Suez					
Quai de l'Escaut			2	4	

2 Sugar Loaders at Freycinet IX.
1 Cereal Loader at Freycinet XI.
1×50 ton Crane at Quai de l'Escaut.

Floating Cranes:

Number of cranes	Lifting power	Outreach measured from the pontoon max.	Outreach measured from the pontoon min.	Height under hook	Power agent	Type	Equipment hooks	Equipment tonnes
1 (bigue)	250	7.20	5.00	32.00	Steam	Construction hollandaise	2	125
	125	15.70	8.00	50.50			2	62.5
							1	5
1 (Dravo)	90	13.10	5.20	30.00	Diesel electr.	Dravo	1	90.7
	68.90	23.10	5.20	17.10			1	15
	15	30.10	7.70	41.4/20.6				

Mobile Cranes (Port Services): 1 at 6/10 tons and 2 at 17/36 tons. Possibility of mobile cranes from other yards.

BRIDGES: Bridges of locks and wet docks are closed to navigation for short periods to allow trains or work hands to go. The maritime traffic is practically never disturbed.

BULK HANDLING FACILITIES: Bulk Quay No. 1, formerly known as the ore quay. Equipped with 3 gantry cranes. Principally used for iron ore destined for Usinor Dunkirk and Usinor Valenciennes. There is a loader for clinker at the Western part of the Quay.

Bulk Quay No. 2, a common quay with 2 berths belonging to the Dunkirk Port Authorities. Equipped with 2 polyvalent iron ore/coal gantry cranes. This quay is accessible for largest ships able to enter the port. Used to discharge coal destined for the Usinor coke mill, also receives coal for other operators, manganese ore and all iron ores for receivers other than Usinor.

Bulk Quay No. 3, an extension of the Usinor Quay for iron ore cargo. Equipped with 3 gantries of 50 tons capacity. Permissible draft 14.20 m.

Phosphate Quay, situated West of Bulk Quay No. 2. Berth is 600 m. long with a min. depth alongside of 14.8 m. Bulk carriers of 80,000 d.w.t. with a draft up to 14.2 m. can be accommodated.

Unloading equipment consists of 3 cranes with grabs, each with a max. discharge capacity of 565 t.p.h.

Cereal berth is accessible to 80,000 d.w.t. ships. Along its internal face, coasters, lighters and 3,000 ton pushed convoys can be tied up. Handling operations are secured by 2 pneumatic gantries at a max. rate of 600 t.p.h.

Sugar is handled at Freycinet No. 9 silo capacity 83,000 tonnes.

CONTAINER FACILITIES: *Dunkirk-West:* Quai de Lorraine and Quai de Flandre. Total length 1,200 m. equipped with 4 container gantry cranes capable of lifting 45 tons on spreaders for 20 ft.–40 ft. units.

ROLL-ON/ROLL-OFF FACILITIES: *Dunkirk-West:* Quai d'Alsace is equipped for direct transhipment of vehicles, trailers and wagons. Quai de Lorraine and Quai de Flandre are provided with movable steel ramps for direct transhipment of vehicles and trailers.

Dunkirk-East: Quay Freycinet VII, the berth South of Freycinet VI, has been provided with a fixed ramp for roll-on/roll-off for ships up to 8 m. draft and 22 m. beam, and Quay Freycinet XIII, South part, is fitted with a fixed ramp for ships up to 12.50 m. draft.

OIL TANKERS: The following tanker berths are available:
West Port: Flanders Oil Berth: max. draft 22 m. Discharge lines to Total Refinery, and to the B.P. Refinery. The access channel has been dredged to a depth of 22 m. at L.W. The turning circle at the entrance to the Outer Port West has a diameter of 1,400 m. Max. discharge rate 20,000 cu.m./hr.

East Port: S.F.B.P. Oil Dock: North wharf, max. draft 12.50 m. Loading/discharging pipes 26 in. diameter, bunker line 10 in. diameter.

Middle wharf North, max. draft 12.50 m. Loading/discharging lines 2 of 22 in. and 3 of 16 in. lines, bunker line 16 in. diameter.

Middle wharf South, max. draft 12 m. Dimensions of lines as for Middle wharf North.

Coasters Wharf, max. draft 7.50 m. Diameter of loading/discharge lines 6 in.

Bassin de Mardyck Oil Port: Appt C.F.R. – Poste Est. Max draft 12.50 m., Poste Ouest draft 14.20 m.

Facilities for discharge of dirty ballast are available at all main tanker berths.

Stocknord Pier: Pier of length 440 m. with 4 platforms.

P.1 – For barges only.

P.2 – For barges and coasters up to 85 m. length and 8.50 m. draft.

P.3 – Oil and Gas. For vessels up to 280 m. length and 14.20 m. draft.

P.4 – Gas only. Max. length 160 m. and draft 10.3 m.

C.P.A. Quay: Berth at Mole V. Mainly for Fuel and Vegetable Oil. For vessels up to 250 m. length and max. draft 9.60 m.

GAS TANKERS:
Appt. C.F.R.: Bassin de Mardyck: 1 berth for butane and propane. East side of pier for vessels up to 11.60 m. draft.

Stocknord: Bassin de Mardyck. The total length of the quay is 440 m. with a width of 30 m.

Alongside this quay, are berths or platforms P1, P2, P3 and P4.

P1: Oil only.

P2: Oil only.

P3: Coasters of 90 m. LOA and tankers of 280 m. LOA, d.w.t. 100,000 tonnes on East side of pier.

P4: Coasters LOA minimum 60 m. and gas-carriers of LOA max. 160 m., max. d.w.t. 10,000 tonnes on West side of pier.

Products: LPG, ethylene, FR and PP.

P3 can take LPG products and chemical products: vessels up to 280 m. length.

Distance from P3 to storage areas: approx. 800 m. with a 10 in. line. Nitrogen in gas-form available on site (2 in. and 3 in.).

P4 is for vessels of LOA 160 m. max. with a d.w.t. of 10,000 tonnes, and a max. draft of 10.3 m. Beam – no limits.

Products: LPG, derivates, propylene, ethylene, butadine. 10 in. lines and arm flanges of 8 in. ASA 300. Products can be refrigerated or at ambient temperature.

Connection with P3 and with the storage areas.

Nitrogen in gas-form on the quay (2 in. and 3 in.).

Length of platform: 25 m. Width of platform: 12 m. Height above water line: 5 m.

Loading and discharge by 8 in. Luceat arms.

Tidal movement at the quay is minimal: approx. 1.0 m. min./max. Predominant winds from the West.

Transhipment from vessel to vessel can take place at berths P3 and P4 by connection line between the two berths.

The possibility of transhipment with a first vessel berthed and a second connected to it is accepted. For this to happen:

1. Advise the authorities minimum of 24 hours before the operation.
2. A technician must be on hand.
3. The owner must supply hoses and defences.
4. Port rights and occupation of the quay is to be discussed with the owner.
5. A tug must be available for both vessels.
6. If the wind is blowing above force 5, the operation must be stopped and the connected vessel must go out to the roads with Pilot and tug, if the quay which can accept the type of vessel is not free.
7. Transhipment from vessel to vessel via connection lines from berth P4 and berth P3. If during this operation a priority vessel must at all costs berth, the operation of transhipment must be stopped and one of the vessels must connect up to continue the operation or go out into the roads (Pilot and tug necessary).

Port Entry: It must be emphasised that the depth of water at the port entrance towards the Mardyck basin at Charles de Gaulle lock, foreport East is 14.20 m. max. with a beam of 44 m.

Storage facilities: At approx. 800 m. from the Stocknord quay. 2 LPG – Propylene storage points of around 3,500 cu.m. each take propane for the account of the company CDF Chimie. They have a service pressure of 15 kg/sq.cm. and a temperature of −10°C.

From these 2 facilities, it is possible to load/discharge to and from lorries (18 tonnes) or trucks (45 tonnes).

Consumption of vapocracker (set for between 300 tonnes and 500 tonnes per day) is with the use of propane and naphtha.

List of storage points at Stocknord:

2×3,500 cu.m.	Propane–butane–Btd–propylene operating pressure 15 kg/sq.cm. Minimum temperature −10°C.
1×17,000 cu.m.	C2
1×17,000 cu.m.	C3
1×9,000 cu.m.	C4
8×6,000 cu.m.	Essences
9×6,000 cu.m.	Pyrolised essences
6×20,000 cu.m.	Naphtha, gasoil, diesel and fuel oil
2×2,000 cu.m.	(drums) chemical products
1×1,000 cu.m.	(drums) chemical products

Trains–trucks: Stocknord can hire, load, discharge trucks or lorries.

By truck: convoys of 1,000 tonnes of all products and throughout France.

By lorry: 15–20 tonnes LPG–ethylene, etc.

By truck: 45–50 tonnes each, filling in groups of 6; for each group of trucks filling takes approx. 20 minutes for all liquid products.

Nitrogen: Possibility of degassing at berths P3 and P4 (from 800 to 1,000 cu.m. per hour of nitrogen in gas-form).

Heater: Currently, there is a propylene land-based heater (350 cu.m./hour) of the steam type working from −47°C to +5°C.

This heater can be connected to the lines of the new propane storage facilities: time involved, approximately 1 month.

STEVEDORES: Each Master will contact his consignee.
MEDICAL: Hospitals and all medical facilities.
DENSITY: Salt.

FRESH WATER: Available in unlimited quantities. Numerous hydrants on all wharves.

FUEL: Supplied by barges or tank lorries if no connection at wharf. Fuel, diesel and gas oil available. Requests for bunkers must be made 48 hours in advance to Agents.

FIRE PRECAUTIONS: The preventive measures are taken for tankers are those of the I.M.O. recommendations. Rounds of the port officers. Ship's Master is given instructions of the harbour concerning tankers if necessary when filling the I.M.O Checklist. In case of storm, the Harbour Officer can stop loading or discharging.

GANGWAY/DECK WATCHMEN: Guarding is strongly advised.

OPENING/CLOSING HATCHES: Carried out by crew.

CERTIFICATES:
- Certificate of Nationality.
- International Certificate of Tonnage.
- Certificates from the Classification Office where ship is registered, especially:
- Certificate of Freeboard.
- Classification Certificate, engine and boiler.
- Classification Certificate, hull.
- Classification Certificate, electric equipment for tankers.
- List of Hoisting Apparatus.
- Derat Certificate.
- TOVALOP Certificate or similar for tankers.

CUSTOMS ALLOWANCES: Tobacco: Amount allowed for each member of crew: 200 cigarettes or 200 gramme tobacco. Wine and/or Spirits: 1 bottle.

IDENTIFICATION CARDS: An official identity certificate is compulsory ashore (passport, identification card, seaman's book, etc.).

CONSULS:
- Belgium
- Brazil
- Denmark
- Finland
- Germany
- Gt. Britain
- Greece
- Italy
- Luxembourg
- Netherlands
- Norway
- Portugal
- Spain
- Sweden

REPAIRS: All repairs possible.

DRY DOCKS:

	Usable at top	length at bottom	Level sill m.	Admissable draft of ship	Max. length of ship m.	Max. beam of ship m.
Dry Dock No. 5	112.72	108.05	2.05	6.30 m.	107	13.5
Dry Dock No. 3	90.36	86.40	0.55	5.40 m.	80	13
Dry Dock No. 4	192.98	190.77	1.85	7.05 m.	160	21

Dry Dock No. 6: Length 310 m. Width 50 m. Max. length of vessel 280 m. Max. beam 44 m. Max. draft bow 6.50 m., Stern 8.50 m. Crane 1×25 tons capacity available.

Floating Docks: *Characteristics of the dock*	*Dock 13,000 T*	*Dock 20,000 T*
Overall length	170.20 m.	206.00 m.
Length on blocks	159.80 m.	185.00 m.
Width	24.60 m.	32.00 m.
Optimal characteristics of ships which can be docked		
Overall length	175.00 m.	215.00 m.
Overall beam	23.00 m.	30.00 m.
Maximum draft	6.50 m.	8.30 m.
Variation of draft allowed	3 cm./m.	2 cm./m.
Cranes	2 of 10 t.	2 of 7 t.

AIRPORT: Calais, Marck, 35 km.; International airport of Lille Lesquin, 80 km.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: 1st January; Easter; Whitsuntide; 1st May; 14th July; 15th August; 1st November; 11th November; Christmas. On public holidays, handling operations can be carried out from 0600 hrs. to 1200 hrs.

POLICE/AMBULANCE/FIRE: Police 17; Ambulance 66.60.54; Firemen 18.

TELEPHONES: In wet dock 6, in the tankers' harbour, at the quay for minerals, at the wharf for cereals, in the Dry Docks and Repair Quay, a telephone on board can be obtained and connected to the general system.

SERVICES: No specific port equipment for gas-freeing. Dirty ballast can be received at all oil terminals and by barges of the Port Service. Compass adjustment, radio repairs.

SHORE LEAVE: Crew are allowed ashore.

AUTHORITY: Port Autonome de Dunkerque, Terre-Plein Guillain, B.P.6534, 59386 Dunkerque Cedex 1. *Tel:* 659922. *Telex:* 820055 Poronom, Dunkq. *Contact:* M. Kerisel, Port Director.

Harbour Office: East Harbour 659922. West Harbour 684172, *Telex:* Capdk 130972 F.

AGENT: Jolasry (France), 11 Rue des Arbres, P.O.Box 1502, Dunkirk, France. Telex: 82911. Tel: 669901.

FECAMP: 49.46 N. 00.22 E. (See Plan Book)

DOCUMENTS:
- 2 Crew Lists.
- 2 Custom Lists.
- 1 Health Form.
- Ship's Register.
- Cargo Manifest.
- Bills of Lading.

PILOTAGE: Pilots informed of arrivals by Agents. Pilots wait at port station 2 hours before high water each tide. Inform Harbour Master by VHF Channel 16.

ANCHORAGE: Half mile West of jetties.

MAX. SIZE:

Spring Tides: Length 105 m., beam 17.0 m., draft 7.25 m.

Neap Tides: Length 105 m., beam 17.0 m., draft 6.00 m.

HEALTH: Pratique obtained when Customs Officer boards few minutes after berthing.

RADIO: Boulogne Radio.

VHF: Harbour radio station keeps watch on Channel 16.

Vessel arriving at Fecamp, or waiting in roadstead must keep watch on Channel 16.

TUGS: None.

BERTHING:

Berth	*Depth (m.)*	*Length (m.)*	*Remarks*
Outer Harbour			
Grand Quai	1.50	140	Heavy swell by W.N.W. wind.
		80	Moorings for local fish boats.
		60	Swell absorber (N.E. end)
Inner Harbour			
Quai de la Peche	−1.50	52	
Bassin Freycinet			
Quai de la Marne	−1.00	190	
Apppontement Quai de la Marne	−1.00	150	
Quai de Verdun Est	−1.50	150	
Quai de Verdun Ouest	−1.50	170	
Bassin Berigny			
Quai Berigny Est	+0.25	200	Heavy swell during opening of watergates by W.N.W. wind.
Quay Sadi-Carnot	−1.50	300	
Quai de la Mature	−1.50	90	

STEVEDORES: Informed by Agents (available).

CRANES:

Mobile Cranes: 1×180 tonnes, 3×40 tonnes, 2×160 tonnes.

Electric Cranes: 2×6 tonnes, 4×3 tonnes, 1×500 tonnes.

MEDICAL: Notice not required for medical attention. Doctors and hospital always ready.

FRESH WATER: Available from shore (pipes each 50 m. on quay).

FUEL: No fuel in port. Available only by lorries for bunkering.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: By crew.

CERTIFICATES: In accordance with international regulations:
- Load Line.
- Radio Equipment.
- Safety Equipment.
- Derat, etc.

CUSTOMS ALLOWANCES: About 200 cigarettes per man; wine/spirits at Customs Officer's discretion.

IDENTIFICATION CARDS: Not required.

CONSULS:

Consulate of Norway	tel. 28.00.08.
Vice-Consulate of Denmark	tel. 29.22.86.

REPAIRS: Possible.

DRY DOCKS: 1 slipway for vessels of maximum 1,500 tons displacement, total available length 75.60 m.

Max. water height in dock: 7.50 m. dredged down to minus 2.50 m.

Max. forward draft for access: 1.80 m.

REPATRIATION: Agents carry out these operations.

AIRPORT: Paris is the nearest.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Arrangements for working during holidays can be made if necessary.

POLICE/AMBULANCE/FIRE: Police, tel. 0.17 and 28.06.68; Ambulance, tel. 28.31.91 and 28.09.59; Fire, tel. 0.18.

TELEPHONES: No arrangements for placing telephone on board.

SERVICES: No possibilities for tank cleaning, etc. Compass adjusting available if necessary.

SHORE LEAVE: Always possible for crew members to go ashore.

AUTHORITY: Chambre de Commerce et d'Industrie de Fecamp, Palais Consulaire. 2 Place Bellet, B.P. 126, 76400 Fecamp. *Tel:* (35) 28.00.99. *Telex:* 190452. *Contact:* J. Saunier, Director General of Services. J. York, President.

Port Authority: 16 Grand Quai, 76400 Fecamp. Tel: 28.23.76.

Port Office: Passe Gayant, 76400 Fecamp. Tel: 28.25.53.

GRANVILLE: 48.50 N. 01.37 W. (See Plan Book)

DOCUMENTS: See "Calais".

PILOTAGE: Pilotage not compulsory for ships of less than 45 m. length, except for those carrying dangerous cargo. Pilots board from fishing boats carrying regulation marks of a pilot boat, and maintain position at Videcoq buoy when a vessel is expected.

Limits of Granville pilotage are: 1. On entering, towards the West, the line joining "la Pierre d'Herpin", and Chausey lighthouse. To the North, alignment of Chausey lighthouse and "le Pignon". 2. On leaving, alignment of Mont. St. Michel through Champeaux Point. Ships bound Granville required notify ETA 18 hours in advance.

Telegraphic address: Telex 170002 SCAC Granville – Ship's Agency – Handling. Telex 170777 Monsieur LeFranc, Marine Broker.

1.5 hours before to 1.5 hours after high tide contact with Port Officer (tel. 50.12.45 and 50.17.75 Granville) can be established by relay through "Coastal" Stations. During same hours contact can be made with pilot boat and with Port Office by VHF Channel 12 (port wave band 156.6).

ANCHORAGE: At landfall buoy of Le Videcoq.

RESTRICTIONS: Draft restrictions apply at neap tides. Width of Lock – 20 m. Length – 40 m.

MAX. SIZE: Vessels 115 m. long, 18 m. wide and with a max. draft of 7.50 m. may enter the tidal basin during 6 days, twice a month with effect from a tidal coefficient of about 80.

For a vessel of this size, it is recommended to give advance notice of arrival as far ahead as possible at the commencement of tides with a coefficient of 80.

Entry of a deep draft vessel may make it necessary to close the tidal basin more quickly after high tide.

Speed in the channel, the fore port and the tidal basin is limited to 5 knots.

HEALTH: Pratique arranged by Customs.

RADIO: Boulogne Radio for ships coming from the North. Brest-Le Conquet Radio for ships coming from the South.

TUGS: Port not equipped with tugs. Pilot boats used as "pushers" for port manoeuvres, or for carrying hawsers to tying-up points.

BERTHING: Determined according to nature of cargo.

Tidal Basin: 3 electric cranes (2 × 7 tons and 1 × 6 tons) serve the South quay, and 1 × 10 tons serves the North and East quays.

Open areas, warehouses and storage silo capable of receiving all goods in bulk, bags or packages.

Internal transport: rail and road.

Fore Port: Open area and mobile cradle capable of hauling up vessels up to 100 tons. 1 × 5 ton crane on cradle. Repair yards.

West Quay: Between tidal basin and fore-port – solely for fish discharge and auction. Quay to be lengthened by 110 m. and widened by 14 m.

STEVEDORES: Work hours 0800/1200, 1400/1800. Overtime possible.

HOLIDAYS: See "Calais". Local holiday, Mardi Gras afternoon.

MEDICAL: Hospital available. Tel. 50.11.37. Also Medical Centre.

TANKERS: 2 berths for unloading domestic fuels through 8 in. pipes.

DENSITY: 1025.

FRESH WATER: Available at all quays, international connections.

FUEL: Available from tanker lorry to commercial vessels at 48 hours notice.

OPENING/CLOSING HATCHES: Carried out by crew.

GANGWAY/DECK WATCHMEN: Available on request.

CUSTOMS ALLOWANCES: Tobacco. 200 cigarettes. Wines and spirits. 1 bottle spirits.

CONSULS: None.

REPAIRS: Possible. Also radio repairs.

REPATRIATION: Paris, 3.5 hours by train.

AIRPORT: 10 km. from the port at Breville. Air-taxi and commercial flights.

TIME: Local Time GMT plus 1 hour in Winter and GMT plus 2 hours in Summer (1st April – 1st October).

POLICE/AMBULANCE/FIRE: Police Tel. 50.11.16; Fire Service 18; Ambulance 50.11.37.

GENERAL: Marina with 1,050 berths at Herel. Max. length 15 m. Max. depth available 2.75 m.

AUTHORITY: Le Commandant de Port, Port de Granville, Terre-Plein de L'Ecluse, 50400 Granville, France. *Tel:* (33) 50.17.75 or 50.12.45. *Contact:* R. Ragel, Port Officer.

HONFLEUR: 49.25 N. 00.14 E. (See Plan Book)

DOCUMENTS: See "Rouen".

PILOTAGE: Served by "Pilotage de la Seine" (address: 9 Chaussee Kennedy, 76 le Havre). Ships bound for Honfleur are received on the Carosse Roads (Rade de la Carosse) where the following signals should be made for summoning a Pilot. By day – flag "G" of the international code of signals. By night – in Morse by signalling lamp.

Complementary signals which can be used on arriving on the roads. By day – globe or ship's national flag hoisted at masthead. By night – red light at main masthead. At all times, sound signal of 5 long blasts.

Advice of ETA and draft in salt water is to be given to Rouen Port at least 5 hours prior arrival roads, as well as to Agent.

Similarly, vessels anticipating a delay of more than 2 hours after their reported ETA should notify Rouen Port or the pilot boat of this at least 3 hours before the time originally reported.

Before arriving on the roads, ships should call pilot station "Rouen-Pilot" which keeps a permanent VHF watch on Channels 16 and 11.

A Pilot is obligatory for every ship of more than 55 m. length.

RESTRICTIONS: Access to port made through channel 100 m. wide, protected by 2 dykes about 500 m. long, which leads to outer harbour. A tidal port, Honfleur possesses 3 basins:

Dock	*Length*	*Width*	*Sluice width*
West Dock	128 m.	77 m.	10.50 m.
East Dock	295 m.	71 m.	16.50 m.
Carnot Dock	788 m.	108 m.	13.00 m.

East Dock joins outer harbour: ships of more than 70 m. long must anchor in Carnot Dock which spans from East.

MAX. SIZE: Port can receive ships 100 m. long and 15.50 m. wide berthing in East Dock; but with Carnot Dock, only ships less than 12.50 m. wide can enter. Drafts vary according to tides: 6.00 m. with average spring tide, 4.70 m. in average slack water, and subject to variations because of silting up of harbour which necessitates frequent dredging.

HEALTH: Bill of Health is under the jurisdiction of Customs office of Honfleur. Hospital nearby.

RADIO: Boulogne Radio, Brest Radio or St. Lys Radio. A permanent watch is maintained by Rouen Port on Channel 16 and 11. Disengagement frequency after call on Channel 16 is Channel 71.

TUGS: If necessary are provided by "La Societe des Abeilles" of Le Havre.

BERTHING:

Name	*No. of Berths*	*Depth (m.) Neaps*	*Depth (m.) Springs*	*Equipment*	*Remarks*
Bassin Republique Quai Nord	3	5.10	6.27	Rail track 1×6 ton crane on rails	2 Berths equipped with pipeline
Quai Tostain	3	5.10 4.60	6.27 5.77	—	—
Bassin Carnot Quai Nord	2	5.10	6.27	Rail track. 1×4 ton crane	Cereals and various cargoes.
Quai S.W. and South Approach	7	5.10	6.27	1×6 ton crane, rail track, 4×5 ton cranes	1 berth for coasters
Wharf	1	5.10	6.27	—	Fishing vessels and pleasure craft.
Bassin de L'Ouest	2	3.60	4.77		
Avant Port	1	5.10	6.27	2×15 ton cranes	
Quai en Seine	1				

1 "Richier" crane on tyred wheels available for use in the Port. Capacity: 30 tons at 3.50 m., 3.5 tons at 15 m.

TANKERS: Berth "Miroline" on dolphins in River Seine for tanker of 35,000 tons eventually after lightening according to the depth conditions.

FRESH WATER: Available. Supplies arranged through Agent.

FUEL: Supplies arranged through Agent.

AIRPORT: 12 km. from Port.

AUTHORITY: H. Pincon; Ingenieur Divisionnaire des T.P.E., La Lieutenance, BP 45, 14600 Honfleur. *Tel:* (31) 89.20.02. *Telex:* 170196. *Note:* Harbour Master at same address.

ILE ROUSSE: Corsica: 42.39 N. 08.56 E.

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
1 Provisions List.
1 Cargo List.
1 List of Articles (new and Customs-barred) in possession each crew member – cameras, binoculars, radios, cigarettes, spirits, etc.
1 Health Declaration.

PILOTAGE: Not compulsory.

ANCHORAGE: Outside of port for cruise vessels.

RESTRICTIONS: None.

MAX. SIZE: Draft 5 m; length 160 m.

RADIO: Within 50 miles call Ajaccio Radio VHF Channel 16. Then connected over Channel 23 to telephone network.

TUGS: None available.

BERTHING: Depths alongside 2.0 m. – 6.0 m.

STEVEDORES: 24 hours accurate ETA necessary for ordering gangs. No work on Sundays and official holidays.

CARGO GEAR: Only a few nets and slings available; all other gear must be supplied by ship. Ship's derricks used.

FRESH WATER: Available at very slow pumping rate.

FUEL: Not available.

REPAIRS/CONSULS: None.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

AUTHORITY: Bureau du Port de Commerce, Ile Rousse, Corsica. *Tel:* (95) 60-00-68.

LA CIOTAT: 43.10 N. 05.36 E. (See Plan Book)

PILOTAGE: Chantiers Navals de La Ciotat (C.N.C.). have 2 Pilots.

ANCHORAGES: Good anchorages available in La Ciotat Bay. Anchoring in the harbour is forbidden.

APPROACHES: La Ciotat Bay is situated between Toulon and Marseilles. The bay is sheltered from North and N.W.'ly winds. The "Bec de L'Aigle", height 155 m., makes an easily recognisable landmark for the approach to the harbour.

The entrance channel to the harbour has a depth of 7 m.

MAX. SIZE: Largest vessel 380 m. long, 60 m. beam and 7.5 m. draft.

VHF: Signal station keeps watch on Channel 16 from 0630 – 2100 hrs.

TUGS: 2 tugs of 180 h.p. and 200 h.p.; tugs also available from Marseilles.

BERTHING: Harbour is formed by 6 moles. Depth in harbour varies from 1.32 m. to 7.62 m., vessels drawing up to 7.31 m. can enter. Total quayage 1,610 m. There are two basins near the main harbour specially equipped for pleasure craft.

CRANES: Electric cranes: 1×250 tonnes, 1×120 tonnes, 1×50 tonnes, 2×40 tonnes, 1×20 tonnes, 3×6 tonnes and 1×5 tonnes. One floating crane of 80 tonnes. All cranes belong to C.N.C.

MEDICAL: Private clinics and local hospital available.

FRESH WATER: Available from C.N.C.

FUEL: Available.

DRY DOCKS: Building Dry Dock: 360 m. × 60 m. × 9 m.

No. 1 Slipway: 228 m. × 39.30 m. with lifting apparatus for 7 – 150 tonnes.

No. 2 Slipway: 172 m. × 31 m. with lifting apparatus for 5 – 150 tonnes, one 660 tonne gantry crane and one 500 tonne gantry crane.

AIRPORT: Marseilles (Marignane) 55 km. away.

POLICE/AMBULANCE/FIRE: Police – Tel: (42) 839000. Fire – Tel: 18.

AUTHORITY: Capitainerie du Port de la Ciotat, Mole Berouard, 13600 La Ciotat. *Tel:* (42) 084384. *Contact:* H. Carcassonne, Harbour Master.

LA NOUVELLE: 43.01 N. 03.04 E. (See Plan Book)

DOCUMENTS:
1 Passenger List.
4 Crew Lists.
2 Stores Lists.
1 Cargo Manifest.
Bill of Health.
Safety Certificates.

PILOTAGE: Vessels call Pilot on VHF Channels 15 and 16. 3 pilot boats available. International Code pilot signals used.

MAX. SIZE: For port entry: Length 140 m., beam 20 m., draft 6.50 m. Tanker sea line: Max. draft 18m.

HEALTH: Pratique is given by Customs Officers who board vessel on arrival. In case of suspected disease on board, Master should radio Agents advising details before arrival.

TUGS: Not available. There are several launches to assist in mooring.

BERTHING: Effected in the order in which vessels arrive. Specialised berth for Roll-on/Roll-off available.

STEVEDORES: Arranged by consignees.

MEDICAL: Doctors available at La Nouvelle. Nearest hospital is at Narbonne, 27 km. away.

TANKERS: 1 sea line berth at buoys in depth of water greater than 18 m. 4 dolphin berths in the oil dock, max. draft 7.00 m. One of these berths is used for LPG cargoes. No slop disposal facilities.

DENSITY: 1025.

FRESH WATER: Supplied at all town berths.

FUEL: Available from several suppliers.

FIRE PRECAUTIONS: Usual safety regulations strictly applied. A barrage can be positioned across the channel to contain burning oil.

OPENING/CLOSING HATCHES: Optional, performed by stevedores or crew.

CUSTOMS ALLOWANCES: Each crewman allowed to retain only sufficient for his own consumption while in port. It is forbidden to take alcohol ashore.

IDENTIFICATION CARDS: Any person going ashore should carry a passport or identity card.

CONSULS: No local representation.

REPAIRS: Not possible ashore, except very minor ones.

REPATRIATION: No difficulties.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: In principal, no work done on legal holidays.

POLICE/FIRE/AMBULANCE: Police, tel. 480011; Fire, 480017; Ambulance, 480011.

TELEPHONES: No connections can be made on board.

SHORE LEAVE: No restrictions.

AUTHORITY: Ponts et Chaussees, Service Maritime, 34 Avenue de la Mer, 11210 Port la Nouvelle. *Tel:* (68) 48.00.37.

AGENT: See "Marseilles".

LA ROCHELLE/LA PALLICE: 46.10 N. 01.14 W. (See Plan Book)

DOCUMENTS:
4 Cargo Manifests, or Manifest of Ballast.
Certificate of Cargo Space.
3 Bills of Lading.
Ship's Provisions List.
6 Crew Lists.
3 Passenger Lists.
Health Declaration.
Derat Certificate or Exemption.
Certificate of Crew Personal Effects.

PILOTAGE: Access from sea is through Pertuis d'Antioche, the strait between Isle of Re and Isle of Oleron. Pilotage compulsory for all vessels over 55 m. length. Pilot launch named *Armeria*, meets vessels at Chauveau Buoy in position Lat. 46° 06′ 05″ N., Long. 01° 16′ W. Contact Pilot via VHF Channel 16, 2 hours before arrival. ETA should be given to Agent 12 hours before arrival.

Vessels which do not receive berthing instructions on arrival should wait in the vicinity and South of Chauveau Buoy, keeping watch on VHF Channel 16.

ANCHORAGE: Vessels which do not receive berthing instructions on arrival should wait at anchor in the vicinity and 0.5–1.0 miles South of Chauveau Buoy. Keeping watch on VHF Channel 16.

Tanker Anchorage: Lat. 46° 05′ N., Long. 01° 15′ W.

RESTRICTIONS: Vessels in excess of 360 ft. length can enter Inner Basin only from 2 hours before to 1 hour after high water. Loaded tankers over 5,000 d.w.t. may enter tidal harbour in daylight hours only.

MAX. SIZE: Oil Pier: 120,000 d.w.t. Draft 53 ft. Outer pier mole, draft 30 ft.-40 ft. Tidal harbour, length 560 ft., draft 29 ft. Wet dock (inner basin), max. beam 69 ft., draft 25 ft. 6 in. neaps, 30 ft. springs.

HEALTH: Pratique given by Customs Officers who board on arrival. In case suspected disease on board, radio Agent in advance advising details.

RADIO: Bordeaux-Arcachon Radio.

TUGS: Join vessels either in outer roads or inner roads of La Pallice. Normally tugs' lines are used.

STEVEDORES: Normal working hours for stevedoring are: 0800 to 1200 hrs. and 1400 to 1800 hrs. 2 hours overtime may be worked from 1800 to 2000 hrs. When a quick despatch must be given to a vessel, an 8-hour shift can be arranged, from 0500 to 1300 hrs. and 1400 to 2200 hrs. during the week, and 0500 to 1300 hrs. on Sundays and holidays.

MEDICAL: All facilities available. Advance notice should be given if assistance required on arrival.

TANKERS: Only refined products are discharged at La Pallice.
1. Oil berths situated at South of Outer Mole.
West Side: Metal loading arm. Petroles de L'Ouest – 12 in.
Picoty – 16 in.
East Side: Metal loading arm. Petroles de L'Ouest – 10 in.
Picoty – 12 in.
2. Oil berths at North quay in tidal harbour in depths of 26 ft.
Raffineries du Midi: Pipe-line of 250 mm. diameter, hoses 200 mm. diameter.
Petroles de L'Ouest: Pipe-line of 300 mm. diameter, hoses 250 mm. diameter.
Total: Pipe-line of 200 mm. diameter, hoses of 150 mm. diameter.
Essence Aux Armees: Pipe-line and hoses of 200 mm. diameter.

FRESH WATER: Available from all wharves. No barges available. Loading rate from the quay 60-75 t.p.h.

FUEL: Supplied by tank trucks only.

FIRE PRECAUTIONS: Tanker berths are enclosed. Smoking is prohibited on the tanker berths.

OPENING/CLOSING HATCHES: Performed by ship's crew.

GANGWAY/DECK WATCHMEN: Available from shore if required. Necessary for tankers loading/discharging cargo.

CUSTOMS ALLOWANCES: 200 cigarettes and bottle wine/spirits per man.

IDENTIFICATION CARDS: Crewmen going ashore should carry passports or identity cards.

CONSULS:

Denmark	Tel: 41.10.66	Norway	Tel: 42.60.37
Finland	„ 42.60.32	Panama	„ 42.13.44
Greece	„ 42.13.44	Peru	„ 42.13.44
Italy	„ 41.35.94	Spain	„ 41.03.94
Netherlands	„ 34.98.66	Sweden	„ 42.13.44

REPAIRS: All kinds of deck, hull and engine repairs can be carried out by Ateliers et Chantiers de La Rochelle-Pallice.

Vessels not exceeding 21 m. beam may be repaired in the inner basin. Larger vessels are repaired at berths outside the inner basin.

DRY DOCKS: 2 dry docks in Inner Basin: 577 ft.×72 ft. and 351 ft.×41 ft.

REPATRIATION: Can be arranged without difficulty.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: New Year (1st January), no labour available; Easter Sunday, possibility of labour with overtime; Easter Monday, no labour available; Labour Day (1st May), no labour available; Ascension Day, possibility of labour with overtime; Whit Sunday, possibility of labour with overtime; Whit Monday, no labour available; National Day (14th July), no labour available; Assumption Day (15th August), no labour available; All Saints' Day (1st November), no labour available; Armistice Day (11th November), possibility of labour with overtime; Christmas Day (25th December), no labour available.

N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100% extra.

POLICE/AMBULANCE/FIRE: Police Secours 17; Commisariat Central 41.22.44; Ambulance 18; Fire Service 18.

TELEPHONES: Telephones are available at all berths at the mole, and are obligatory for vessels handling dangerous cargo.

SHORE LEAVE: Allowed, no restrictions.

GENERAL: Old harbour at La Rochelle is used only by fishing vessels and pleasure craft.

AUTHORITY: Capitainerie des Ports de La Rochelle, Terre-Plein de l'Ecluse, B.P. 2042, La Pallice, 17009 La Rochelle Cedex, France. *Tel:* 42.60.12. *Telex:* Capipor 791780 F. *Contact:* D. Campion, Le Commandant des Ports.

AGENT: See "Paris".

LE CHATEAU d'OLERON: 45.53 N. 01.11 W.

Very small fishing port on Ile d'Oleron. Entrance to port is 9 m. wide.

BERTHING: Tidal harbour with 350 m. of quayage. Depths alongside from 4.9 m. HW to zero at W.

CRANES: One 2.5 ton crane available.

REPAIRS: Minor repairs only.

AUTHORITY: Monsieur l'Ingenieur Des Ponts Et Chaussees, 17000 Le Chateau d'Oleron *Contact:* B. Mayereau, Harbour Master.

AGENT: M. Le Boutillier, 106, Bd. Emile Delmas, P.O.Box 2038. 17009, La Rochelle-Pallice. Tel: (46) 421344. Telex: 790742 ("Ships 790742 F"). Cables: "Daylight – La Rochelle".

LE HAVRE (Including Antifer): 49.30 N. 00.07 W. (See Plan Book)

DOCUMENTS: At arrival in-bound bill tendered by Pilot to be filled up and signed by Master specifying ship's data and more especially open spaces occupied (shelter) and dangerous cargo on board. After berthing:

The Master must also complete the inwards declaration as soon as the Pilot comes onboard. Any abnormality must be reported to the Port Captaincy.

For Custom's Officers
1 Crew List.
1 Crew Declaration List (personal effects, camera, radio set, cigarettes, cigars, tobacco, etc.).
1 Ship's Store List.
1 Passengers' Manifest (disembarking).
1 Passengers' Manifest (in transit).

For Health Officers
1 Crew List.
1 Health Declaration.
Derat Certificate.
1 Passengers' Manifest (disembarking).
1 Passengers' Manifest (in transit).
Individual International Certificates of Vaccination.

For Custom Broker
1 Crew List.
1 Crew Declaration List (personal effects, camera, radio set, cigarettes, cigars, tobacco, etc.).
1 Ship's Store List.
1 Certificate of open space occupied by cargo.
1 Passengers' Manifest (disembarking).
1 Baggage Manifest (non-accompanied).
Tonnage Certificate.

For Agents
1 Crew List.
2 Passengers' Manifests (disembarking).
2 Passengers' Manifests (in transit).
2 Baggage Manifests (accompanied).
2 Baggage Manifests (unaccompanied).
2 Dangerous Cargo Manifests and usual cargo documents.

For Immigration Office
1 Crew List.
1 Passengers' Manifest (disembarking).
1 Passengers' Manifest (in transit).

PILOTAGE: ETA to be sent to Harbour Master (see "Radio"). Advisable then to confirm directly either to Pilot boat *Havre de Grace* (call sign FPCJ) or to "Havreport" between 24 and 12 hours before arrival (see "Radio"). Pilot boats have black hull with "Pilote Havre" in white letters on both sides, white funnel with black top stripe, green flag with white anchor on fore-mast. Located off Le Havre channel entrance East of the intermediate landfall buoy (LH). Pilot boat on continuous service, a helicopter is also available.

Vessels may anchor near lighthouse South of entry alignment in good weather and further off in bad weather.

Light or sound signal to be made by vessels requiring a Pilot, letter "G" in morse code.

Pilots also board by twin-screw helicopters. This method is most frequently used to bring the Pilot(s) to large tankers (only during the day), and Pilots are landed either by the craft landing on the deck or being winched down if the vessel has no landing area.

ANCHORAGES: Anchoring forbidden in the channel between both parallels 100 m. South and North of channel and in a zone 1 nautical mile long and 500 m. wide in prolongation of channel.

RESTRICTIONS: Depth in main channel 51 ft. LW. Depth in tidal basin 49 ft. LW.

Main lock entrance to enclosed basins, length 1,312 ft. width 220 ft., depth 49 ft.

Vessels berthing in tidal docks (Bassin Theophile Ducrocq) dependent on tide if draft in excess of 30 ft.

Quinette de Rochemont Lock open from 2 hours 20 minutes before high tide until 40 minutes after. During this period vessels of max. length 210 m. and max. breadth 26 m. may pass through. Otherwise max. length authorised is reduced to 180 m. In some circumstances some locks are completely closed around low tide.

CIM Berth No. 10 may receive tankers up to 300,000 d.w.t. with draft varying between 63 ft. and 68 ft. depending upon tide. Such vessels enter only by daylight and must arrive at Le Havre Buoy at least 3 hours before high water.

MAX. SIZE: Tankers: length 1,300 ft., draft (approx.) 65 ft. subject tide.

Berths of Compagnie Industrielle Maritime (C.I.M.): Max. draft recorded 20.73 m. Another vessel with following dimensions has also berthed – length 391.83 m., beam 68.05 m., 423,699 d.w.t.

Antifer (East and West Berths): Max. dimensions recorded: Length 414 m., beam 79 m., 555,051 d.w.t., draft 28.85 m.

Bulk Carriers: 149,949 d.w.t. (coal). draft 17.16 m.

HEALTH: Free pratique automatic for vessels coming direct from Continent or Italy and "Q" flag not to be flown. From other countries including Spain and Portugal usual applies. Free pratique may be obtained by radio message to Sanipor Le Havre specifying name of vessel – where coming from – total number of Crew members, number of Crew members vaccinated (yellow fever, cholera).

Tankers: For tankers it is advisable to ask free pratique by radio in order start operation as soon as vessel berths.

RADIO: Masters of ships are requested to send to Le Havre Harbour Master their expected time of arrival at Le Havre Light Buoy.

The message will be sent through radio stations of: Boulogne-Radio/FFB (working frequencies 1771 kHz and 2747 kHz) or Brest le-Conquet Radio/FFU (1806/2726 kHz).

It will give the date and time GMT of ETA, and the maximum draft. It will be sent about 12 hours before arrival and corrected by another message if necessary. This service is free. Same stations of Boulogne and Brest to be used to contact Agent and in addition Saint Lys/FFL. This ETA must be confirmed to Le Havre Port by VHF, 3 hours before arrival in the roads.

Port operation radio service: The "Havreportradio" station keeps a permanent watch on the following frequencies: 156.6 MHz (Channel 12); 156.8 MHz (Channel 16); 157.0-161.6 MHz (Channel 20 duplex). This station sends and receives all messages for the port operations control.

Ships call "Havreportradio" directly on Channels 12 or 20. Ships arriving, leaving or moored on roads *must keep watch on Channel 16.*

Ships with Pilot on board must keep watch on Channels 12 or 20 from Pilot on board until arrival at berth, and from departure of berth until disembarking Pilot. Havreportradio/FFY keeps watch on 2182 kHz. This frequency will be used only in a radius of 22 miles from Havre Light Buoy and only when it is not possible to use VHF.

RADAR/VHF: Radar assistance may be obtained by calling Le-Havre-Radar on Channel 16 (156.80 MHz). Then working frequencies are Channels 14 and 22. Radar coverage is from 20 km. to the West of the Light-Buoy and 40 km. to the West of Antifer.

TUGS: 17 tugs available, from 1,000 to 4,800 h.p. Normally join vessel inside the jetties in outer harbour. Ship's lines or tug's lines used at ship's option. Extra charge for use of tug's line. 2 tugs are equipped for fire fighting.

BERTHING: Agents generally inform Master by radio of berthing prospects, arrival time limits and any special requirements.

Dock	*Quay*	*Facilities*	*Length* (m.)	*Sea level chart* (m.)
Bassin de la Manche	Southampton	1 crane 3/6 tons	70	−5.00
	Roger Meunier	5 cranes 5/10 tons 5 cranes 4/10 tons	500	−8.50
Theophile Ducrocq	Pierre Callet	4 cranes 5/10 tons	598	−10.00
	Joannes Couvert	7 cranes 4/10 tons; 1 crane 5/10 tons 1 crane 6/10 tons	720	−10.00
	Mazeline		428	−10.00
	Mole Central 3		120	−10.00
	Mole Central 4	4, 15 ton gantry cranes Coal+minerals	194	−12.00
	Mole Central 6	Coal 2 cranes-30 tons	230	−16.00
	Methane		30	−9.00
	C.I.M.1		84	−9.50
	C.I.M.2		84	−9.50
	C.I.M.3		85	−10.00
	C.I.M.4		83	−9.50
	C.I.M.5		152	−10.00
	C.I.M.6		120	−11.00
	C.I.M.7		120	−12.00
	C.I.M.8		75	−16.50
	C.I.M.10		56	−21.00
Bassin Rene Coty	Atlantique	4 cranes 40 tons	800	−12.00
	Mole Central			−9.00
Bellot	Hermann du Pasquier	4 cranes 6 tons; 19 cranes 3 tons Cereals+fruits+general cargo	1,485	−4.00
	Jean Reinhart	3 cranes 10 tons; 3 cranes 3 tons General cargo; wood; fruit (capacity 200,000 tons)	486	−2.70
	Tonkin	Ro-Ro	100	−1.50
	Colombie	Ro-Ro	80	−1.00
	Bresil	2 cranes 6 tons; 2 cranes 10 tons	525	−2.00
Leure	Cameroun	3 cranes 6 tons	224	−1.00
	Marseille	2 cranes 6 tons. Ro-Ro	135	−0.00
	Malakoff	Bulk liquid – non oil	140	(0)
	Guinee	2 cranes 6 tons	317	−1.35
Dixieme Bassin	Rochambeau	1 crane 6 tons	237	−0.50
Citadelle	Norvege	3 cranes 6 tons	360	+1.00
Bassin	Antilles		555	−0.75
Dock	Reunion	5 cranes 6 tons	555	−0.75
Vetillart	Gironde	10 cranes 6 tons; 6 cranes 10 tons; 5 cranes 10 tons; 2 cranes 10 tons	931	0 to −1.0
	Garonne	12 cranes 3 tons	955	+1 to −1
Marcel	Rhine	4 cranes 10 tons	628	−1.50
Despujols	Moselle	2 cranes 6 tons; minerals	317	−1.50
Lancement Canal	Sepp	Refined oil	103	+3.00
Tancarville	Orcher	Refined oil	85	+1.00
Canal	Europe IV	1 crane 40 tons	270	−2.00
Bossiere	Europe I, II & III	3 cranes 40 tons	910	−6.00
	Appontement Jonction I	Refined oil	9	−1.00
	Appontement Jonction II	Refined oil	14	−1.00
	Jonction III	Refined oil	15	−6.00
Grand Canal de Havre	S.N.A.	Bulk fertilizers	140	−3.00
	Sogestral 1	Chemical	10	−5.00
	Sogestral 3	Products		−0.50
	Sogestral 5	Chemical products		−0.90
	Petrochimie	Chemical products	40	−4.00
	Lafarge	Cement	95	−3.00
	Roll-on/Roll-off	Ro/Ro 1		−3.50
		„ 2		−4.00
		„ 3	230	−3.30
	Cofaz 1	Fertilizer	230	11.5
	Cofaz 2	Liquids	175	10.5
Darse de L'Ocean	Bougainville	5 cranes 40 tons 5 cranes 10 tons	1,540	−6.50

BULK HANDLING FACILITIES: *Minerals:* 8 berths with cranes, outreach 15 m. – 37 m. Able to accept vessels up to 300 m. LOA and 150,000 d.w.t. Depths up to 16.0 m. Discharge rates up to 2,400 t.p.h.

Grain: Quai Hermann du Pasquier for ships up to 28,000 d.w.t. 4 elevators capacity 280/300 t.p.h. Max. LOA 656 ft., max. draft 29 ft. – 36 ft.

Quai Joannes-Coubert: For ships up to 60,000 d.w.t., 2 elevators each 600 t.p.h. capacity. Max. draft 33 ft. – 43 ft.

Quai des Arachides: For ships up to 6,000 d.w.t. Max. LOA 427 ft. Max. draft 24 ft.

Fruit: 7 berths available (2 banana berths). Depths up to 6.30 m. Max. LOA 300 m.

Containers: Quai de l'Atlantique: Length 800 m., 3 berths for large vessels. Depth 12.0 m.

4 gantry cranes of 40 ton capacity with 35 m. extension, at quay's edge. 2 French Railway's gantries for handling on to wagons. 1×7,000 sq.m. shed under construction near to terminal for container groupage and breaking bulk. 16 hectares open air areas. Extensive parking facilities. LASH facilities also available.

Quai de l'Europe: Length 1,800 m. 4 berths for large vessels, 3 of which are equipped to handle roll-on/roll-off traffic.

4 gantry cranes of 40 tons with 40 m. extension, at quay's edge. 1 shed 10,108 sq. m., 1 shed of 7,023 sq. m., already used for groupage and break-bulk of containers and 1 shed of 10,000 sq.m. under construction.

2 S.N.C.F. gantry cranes for loading and unloading of wagons. 45 hectares of open air areas. Extensive parking facilities.

Quai de Bougainville: Actual length 1,540 m. Equipped with 5 gantries for containers of 40 tons.

Roll-on/Roll-off: Four berthing places in the tidal basin, five berths in the wet dock, eight berthing places in the non-tidal docks.

Liquid Chemicals: At the berths of "Societe Normandie de L'Azote", "Sogestrol", and "Petrochimie" along the "Ofrand – Canal du Havre", 7 berths available, depths 0.5 m. – 5.0 m. For vessels of 80 m. – 240 m. LOA and 7,000 – 45,000 d.w.t.

LPG: 4 berths available, depths up to 9.0 m. For vessels up to 75,000 cu.m. and LOA of 240 m.

CRANES: Also see "Berthing".

76 quay cranes of 2.5 tons – 10 tons. 8 jib cranes at depots.

16 rail mounted jib cranes (3 cereals and 13 containers).

9 rail mounted jib cranes for unloading (cereals and minerals).

5 rail mounted jib cranes for loading (cereals and minerals).

4 floating cranes (8 tonnes, 90 tonnes, 125 tonnes and 200 tonnes).

3 mobile cranes (1×25 tonnes and 2×30 tonnes).

1 land derrick of 650 tonnes.

BRIDGES: No special restrictions. Opened upon request. Master will be informed as above in case any bridge stopped for repairs.

STEVEDORES: 2 Normal shifts (0700-1500 hrs. and 1500-2300 hrs.) every week-day including Saturday. Night shift in overtime 2300-0700 hrs. For fruits and reefer cargo and passenger ships possible working 2 hours overtime before morning shift to start at 0500 hrs. subject ordering gang the previous day at 0600 hrs., with 23 hours notice to stevedores. Night gang ordered the same day at 1400 hrs. with 9 hours notice to stevedores (same consequently involves 36 hours and 12 hours notice to Agents for morning and night overtime respectively).

For vessel completing loading/discharging may order 2 hours overtime from 1500 to 1700 hrs. after morning shift or only 1 hour overtime from 2300 to 2400 hrs. after afternoon shift. No possibility of dividing the shift of 8 hours. Consequently time lost between completion of work and end of shift is charged to the vessel at the cost of about Frs. 560.00 per hour (depending upon type of cargo).

No work possible on Sunday and legal holidays nor during night between Sunday or holiday and next working day. Necessary to give Agent soonest possible accurate ETA and hatch partition in order to enable his arranging work at the best, keeping in mind that shift cannot be split.

Work done with shore crane. Ship's derricks used only exceptionally. No hatch tents available from shore.

It is compulsory to put a net under the gangway before starting work, for lack of which stevedores refuse to go on board.

MEDICAL: It is not necessary for Agent to receive advance notice of required medical attention except when Master requests a doctor on board. The Master must after berthing inform Agent of number of patients and nature of disease, name of patient, rank, in order Agent may arrange corresponding appointment with doctors, dentists, specialists, etc. Hospital facilities available provided admission ordered by local doctor.

Inoculation. Yellow fever – effected only at the hospital once per week on Thursdays 1400 to 1500 hrs. Other inoculations may be effected by local doctors (with appointment).

TANKERS: Diameter of connections at different berths of C.I.M.: No. 3, 4 and 5, 10 in.; 6 and 7, 12 in.; 8 and 10, 16 in.

9 additional berths available for refined products. Max. LOA 270 m. (50,000 tons), depth 6.0 m.

Tankers calling first time at Le Havre recommended to inform Agents of position of manifold connection. Slop reception facilities available up to 1,000 t.p.h.

Berth	*Max LOA (m.)*	*Depth (m.)*	*Pumping rate t.p.h.*	*Max d.w.t.*
C.I.M. 1	175	10.00	900 (essence)	22,000
C.I.M. 2	198	10.00	1000 (essence)	22,000
C.I.M. 3	242	10.00	2000 (crude)	50,000
C.I.M. 4	200	10.00	4000 (crude)	30,000
C.I.M. 5	230	10.00	4000 (crude)	40,000
C.I.M. 6	260	12.00	5000 (crude)	90,000
C.I.M. 7	278	12.00	7000 (crude)	100,000
C.I.M. 8	320	17.00	10/15,000 (crude)	230,000
C.I.M. 10	350	21.00	15/20,000 (crude)	280,000
Antifer W	500	29.80	15/20,000 (crude)	550,000
Antifer E	500	29.80	15/20,000 (crude)	550,000
Mazeline 1	350	10.00	800 (gas-oil fuel)	
M.C. 3	220	10.00	1000 (gas-oil fuel)	45,000
M.C. 4 Ext.	280	12.00	700 (gas-oil fuel)	90,000

Also see "Report".

Antifer:

The Port of Le Havre – Antifer, attached to the port of Le Havre which covers it administratively, is a port on the coast, located 4 km. South of Cape Antifer, at Saint-Jouin-Bruneval.

It is an oil terminal, designed to accommodate during a first stage vessels of 550,000 d.w.t. and of 28.5 m. draft (Also see "Max. Size").

The port comprises: A breakwater 3,500 m. long protecting the port in its Northern area and starting at Groin Point, 3 km. South of Cape Antifer. A manoeuvring zone. A dry-land area of 35 hectares at the foot of the cliffs intended for hydrocarbon storage and for port operation installations. A 8 hectare service port. A mooring installation with 2 positions for tankers. The oil discharged into storage tanks is pumped away to installations in Le Havre port, by means of a pipe-line of 42 in. dia. and 25 km. long.

Tides and Currents: At Antifer, the influence of the Seine estuary is much less than at Le Havre. The tidal curve is of the sinusoid type, without, however, being perfectly symmetrical. Slack water only lasts a short while (about 20 minutes). With winds from the North to East, there is a drop of about 0.25 m. to 0.50 m. increasing with the amplitude of the swell.

With winds from the South to N.W., passing through a Westerly point, there is either a slight drop (0.15 m.) or a rise corresponding to the extent of swell and sometimes reaching 0.75 m.

Tidal currents are alternating in their direction and generally parallel to the coastline. With Spring tides they reach a speed of 3 knots.

The breakwater protects the port from the action of ebb currents.

Access: Vessels coming into the Port of Le Havre-Antifer will find 35 miles from the coast landfall buoys "A0", "A1" at the limit of the 50 m. depths.

Access is as follows: *An Approach Route* of a width of 3 miles and extending from the landfall buoys "A0" and "A1" on a bearing of 118.5° for 22.7 miles.

A Waiting Area which has the approach route on its Southern edge. It has the form of a trapezium 2 miles in length. The Western commencement of the large base of this area is marked by buoy "A3". It incorporates 2 anchoring areas: the N.W. area for vessels of more than 25 m. draft, and the S.E. area for vessels of less than 25 m. draft. The 2 areas are separated by buoy "A5".

A Connecting Area trapezoidal in shape and 2.5 miles in length, connecting the approach route to the approach channel.

An Approach Channel, 1,000 m. wide, marked on its Northern edge by buoys "A8", "A12", "A14", "A16", "A18", and on its Southern edge by buoys "A7", "A9", "A17". This channel is orientated in the same direction as the approach route on a bearing of 118.5°. Buoys "A7", "A8" and "A9" form at the entry of the channel a triangle easily identifiable by radar.

An Access Channel 3.5 miles long, 700 and then 550 m. wide and on a bearing of 127.5°. It is marked by 4 pairs of buoys: "A19/A20", "A21/A22", "A23/A24", "A25/A26". Its depth is 25 m.

A Separation Area adjacent to and to the South of the access channel, allowing vessels on entering to make a half-turn to come out of the channel and then come if necessary to the waiting area. The centre of this area is marked by buoy "DA".

A Swinging Area sheltered by the main breakwater, marked to the South by buoy "A27", and to the East by buoy "A29". This area is dredged to a depth of 24.70 m.

The conditions of current (direction and force) and the height of the tide determine, in terms of the drafts of vessels, the periods during which the port may be entered, and which are somewhere between full and low tides.

Vessels must, therefore, on leaving the separation area, follow entry instructions given to Masters by the Pilots, with the agreement of the Port Captaincy of Havre-Antifer.

Pilotage: The Pilot is taken onboard in the waiting area in the disengagement area by means of a pilot boat, a launch or the helicopter allocated to the Le Havre pilotage service.

Port: To the North of the swinging area, is the mooring area dredged to 26 m. allowing access to 2 alongside berths which have depths of water of 29.80 m.

The service port is reserved for the mooring of tugs, pilot boats, anti-pollution equipment (booms) and servicing equipment.

Arrival Advice: Masters of vessels destined for Antifer, as well as those whose vessels may enter either Le Havre or Antifer, must send to the Harbour Master of Le Havre a message stating the date and time GMT of their arrival at the Antifer landfall buoys or at the Le Havre lightship and stating the draft of their vessel.

This message must be sent via a coastal station at least 12 hours in advance and confirmed by a VHF message 3 hours prior to arrival at the landfall buoys of Antifer or at the lightship. In return, the vessel will receive from the Havre Port station all information and necessary instructions.

Radio: The Antifer Port Control (call sign HAVRE-ANTIFER) listens out permanently on the following frequencies:

156.8 MHz. (Channel 16)
157.10 – 161.7 MHz. (Channel 22) VHF

If Channel 22 is not available on board the vessel, Channel 14 (156.7 MHz) can be used after having first called up on Channel 16.

Radio communications are used for: Port operations (movements of vessels) and guiding vessels during times of fog.

Radar Assistance: During times of fog, radar assistance is supplied to vessels by the radar located on La Heve lighthouse (guidance provided by the Semaphore Lookout of Le Havre) as well as by the radar of the Oil Terminal (guiding provided by the Captaincy of Antifer from the Buoy "A–16"). Vessels requiring radar guidance must start by requesting it on the call-up frequency (Channel 16). Only after an affirmative reply can they switch in to the connections affected by radar, taking necessary precautions (listening out in advance) not to disturb a guiding process already taking place. Assistance is given in strict rotation of requests. Information is supplied free of charge in French and in no way renders the Port Authority responsible. Such information covers the following: route clear or not, vessels anchored or under way in the vicinity, successive positions in relation to the landfall buoys, possible position of the pilot vessel, then guidance in the channel as far as the swinging area and mooring area.

Syledis: A system of aid to navigation and to manoeuvring, covering the receipt on board the vessels of parameters covering in particular the position, the speed, is in the course of being tried out. It requires the Pilot bringing on board a small transmitter/receiver.

Aids to Manoeuvring: In order to facilitate swinging manoeuvres and mooring of large tankers, the port of Antifer has 3 lights of different colours, the positions and characteristics of which are as follows:

Access guiding light (on the open storage area at the foot of the cliffs) – light with red, white, green sectors, regularly flashing (4 secs.) the red sector to the North the green to the South.

Guiding lights for coming alongside (on the breakwater).

West light (position 3) – light of red, white, green sectors, regularly flashing (4 secs.) – Red sector to the East, green to the West.

East light (position 2), light of red, white, green sectors, flashing twice (6 secs.), red sector to the West, green to the East.

Each quay berth is equipped with aids for mooring comprising luminated panels showing the distance to the berthing point of the bow and the stern of the vessel; the speed (in cm./sec.) of approach or pulling away of the bow and stern of the vessel in relation to the berthing point.

Fresh Water/Fuel: Supplied by pipe-lines on the berth (S.H.M.PP. depot).

Cranes: 2 cranes of 2.5 tons capacity on the berth (1 per position). Berth for heavy items in the service port – handling by mobile crane.

Floating Equipment: Pontoon for transporting heavy items.

Tugs: Stationed in the service port are 1 or 2 tugs of 4,000 h.p. Other tugs required for manoeuvring come from Le Havre.

Pollution: Barrages laid on pontoons in the service port can be very quickly placed into service.

General Information:

The Port Captaincy is situated on the open land area of the Service Port.

Telephone: 22.81.40 Extension 886 or 987.
Pilot's office: At Le Havre Pilot's Office.
Customs: In the C.I.M. operational building (1st floor).
Towing: The Les Abeilles Company on the pontoon in the service port.
Police: In the C.I.M. operational building (1st floor).
C.I.M. Depot: 27.21.10 – 21.21.77.
S.H.M.PP. Depot: 27.20.73.

Communications: By buses from Saint Jouin. The airport of Le Havre – Octeville is 16 km. to the South of Antifer.

Control tower: Tel. 46.38.02.
Operating: Tel. 46.09.81.

DENSITY: In outer port and tidal docks: salt water. In inside docks brackish. Density depending upon season and amount of fresh water brought in by river Seine and Canal de Tancarville.

FRESH WATER: Most berths supplied by shore hydrants. Otherwise by barge minimum quantity invoiced then being 50 cu.m. Overtime charged in addition. Late cancellation of barge invoiced.

FUEL: All grades available, viscosities from 200 sec. to 3000 sec. Redwood. Minimum 48 hours advance notice required to prepare barges.

FIRE PRECAUTIONS: Dangerous cargo must be declared on "Inbound Bill" and in order not to delay vessel's entry it is highly recommended to inform Agent of quantity and exact nature of dangerous cargo on board 48 hours prior to arrival, thus enabling Agent to get in touch with Harbour Master and take necessary steps which may go from a single smoking prohibition up to a fire-picket on the quay during all the call.

Tankers: A "Notice to Master's of ships loading/unloading hydrocarbons" is handed to Master upon arrival. This notice specifies *inter alia:* repairs, ventilation/cleaning of tanks, handling of goods subject to Harbour Master's authorisation. All naked lights and fires prohibited, boiler furnaces and galley ranges excepted, such exception cancellable on simple order of Harbour Master or Depot Manager.

GANGWAY/DECK WATCHMEN: Compulsory, by ship's crew. Sworn watchmen in uniform and equipped with a VHF set may be obtained from the Port Authority per hour for day and night, working days and holidays. Some other companies may also supply watchmen (not sworn) at lower prices.

OPENING/CLOSING HATCHES: May be done by stevedores at the same price as shifting of cargo depending upon the type of cargo and consequent number of men included in the gang.

It is highly recommended to carry out opening by the crew before beginning of shift to avoid both loss of time and expensive charges and also risk of accident to stevedores who are sometimes not well aware of vessel's closing system.

It is emphasised that for reefer cargo stevedores wait for cold exhaust half an hour after opening hatches before getting down in the holds. Consequently it is strongly advised to stop ventilation and start opening hatches with crew about 1 hour before beginning of shift keeping in mind that for reefer cargo, the morning shift may commence at 0500 hrs.

CERTIFICATES:

Tonnage Certificate.
Safety Construction Certificate.
Loadline Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derat Certificate.
Cargo Gear Register.

(Fresh water analysis certificate may also be requested.)

CUSTOMS ALLOWANCES: 200 cigarettes or 200 grammes tobacco plus 1 bottle spirit (must be mentioned on crew declaration list). Crew members may obtain extra allowance but only after 5–6 days' call.

CARGO GEAR: Cargo handling usually carried out by means of shore cranes. Hatch-tents to be supplied by vessel.

CREW IDENTIFICATION CARDS: Not required. Recommended to have passport or seaman book to go ashore.

CONSULS: The following countries have representatives at Le Havre:

Argentina
Belgium
Brazil
Chile
Colombia
Costa Rica
Denmark
Dominica
Ecuador
Finland
Germany
Great Britain
Greece
Guatemala
Haiti
Honduras
Italy
Ivory Coast
Japan
Liberia
Madagascar
Mexico
Netherlands
Norway
Panama
Peru
Portugal
Salvador
South Africa
Spain
Sweden
Switzerland
Uruguay
Venezuela

REPAIRS: 11 berths for vessels up to 350 m. Depths up to 10.0 m. 2 berths can accept vessels up to 550 m. LOA.

Societe Nouvelle des Ateliers et Chantiers du Havre (SNACH), 30 rue Jean-Jacques Rousseau, 76090 Le Havre. Tel: (35) 26.81.66 Telex: 190 322 F.

Specialises in: Ship repairs (boilers, engineering, fitting out, electricity); Alterations and conversion; Jumboisation.

Compagnie Generale de Reparation (COGER), Route du Mole Central, P.O. Box 1359, 76065 Le Havre Cedex. Tel: (35) 25.35.43. Telex: 190 964 F COGER.

Specialises in: Ship repairs (boilers, engineering, fitting out, electricity); Alterations and conversion; Jumboisation.

Caillard-Normandie, Ship repairs, Rue Bellot, P.O. Box 534, 76058 Le Havre Cedex. Tel: (35) 25.81.23. Telex: 190 321 F. Le Havre yard of the Company.

Ateliers Francais de l'Ouest. Head Office: 15 bd de l'Amiral Bruix, 75016 Paris. Tel: 502.12.20. Telex: 613 357. Offices in: Dunkerque, Le Havre, Rouen, Dieppe, Brest, Saint-Nazaire.

Also see "Dry docks".

DRY DOCKS:

Graving docks	*Overall length (m.)*	*Inside length at block level (m.)*	*Entrance width at block level (m.)*	*Depth above blocks (m.)*
International Ship Repair Centre				
Floating Dock	310.00	290.00	53.00	(9.70*)
Dry Dock VII	319.00	313.00	38.00	(−7.75)
Citadelle Dry Docks				
Dock I	70.30	67.50	9.20	(+2.85)
Dock II	73.00	70,00	11.15	(+2.05)
Dock III	90.00	87.00	14.15	(+1.95)
Eure Dry Docks				
Dock IV	184.10	180.04	28.12	(−0.85)
Dock V	168.75	158.20	19.00	(−0.85)
Dock VI	131.00	126.00	14.20	(−0.00)

High tides vary from (+5.80) to (+8.30). *Maximum draft.

New floating dock, capacity 220,000 tonnes.

SURVEYORS:

Bureau Veritas, 71 bd. de Strasbourg, 76600 Le Havre. Tel: (35) 22.69.23.

American Bureau of Shipping, 4 rue Andre Caplet, 76600 Le Havre. Tel: (35) 42.39.83.

Det Norske Veritas, 19 quai George-V, 76600 Le Havre. Tel: (35) 42.69.93 and 42.26.05.

Germanischer Lloyd, 20 rue Begouen, 76600 Le Havre. Tel: (35) 46.50.71. 110 rue Gustave Flaubert, 76600 Le Havre. Tel: (35) 43.75.18.

Lloyd's Register of Shipping, 7 rue Pierre Brossolette, 76600 Le Havre. Tel: (35) 42.42.15.

REPATRIATION: Except if airplane chartered by Owners, all crew have to pass through Paris.

AIRPORT: Le Havre airport 7 km. from the centre of the town, with a runway of 1,800 m. × 40 m. may receive chartered planes up to 40 tons total weight (50 T. with special authorisation). Regular flights from and to Orly (Paris Airport) twice a day, holidays excepted.

TIME: GMT plus 1 hour from 26th September to 28th March and GMT plus 2 hours 28th March to 26th September.

HOLIDAYS: New Year's Day (January 1st); Easter Monday; Labour Day (May 1st); Ascension Day; Whit Monday; National Holiday (July 14th); Assumption B.V. Mary (August 15th); All Saint's Day (November 1st); Armistice Day (November 11th); Christmas Day (December 25th). No work possible except for passenger ships and tankers the latter being loaded/discharged round the clock every day.

POLICE/FIRE/AMBULANCE: Police 17 or 48.15.20; Fire Brigade 48.05.77 or 18; Ambulance 42.30.68 or 42.46.46; Hospital 42.77.83.

TELEPHONE: Possible at most berths.

SHORE LEAVE: Authorised within port and town area. Foreign seamen wishing to go further and more especially to Paris must obtain police authorisation and consequent pass.

REGULATIONS: Vessels carrying dangerous cargo must when on roads or in the entrance channel, show the red flag by daylight or 1 red light by night-time. When leaving the port they must keep their Pilot up to the end of the channel.

Vessels arriving with hazardous cargoes must declare same to Port Control 48 hours prior to arrival.

General: When the Pilot comes on board, he hands to the Master a file containing:

A leaflet showing a map of the port, the position of the fire brigade points, call-up points in the event of fire, fire-fighting hydrants, a list of important telephone numbers, a list of VHF Channels monitored by the Captaincy.

One copy, with map, of the the Maritime Prefect's decrees covering the circulation of vessels in the roads and channel, and in particular oil tankers.

An entry declaration which the Master must complete and which enables a check to be made that the hazardous material transported has already been the subject of a prior declaration to the Captaincy.

On berthing, instructions are handed to vessels:

– either by the ship's Agent where conditioned goods are involved.

– or by the operator of the berth for bulk carriers (liquid or liquified hydrocarbons, chemical products).

Furthermore, for these vessels, a check-list in accordance with that recommended by the IMO must be completed and signed jointly by the vessel and the terminal, prior to commencement of commercial operations.

REPORT: June 1982.

Requirements when vessels call to load/discharge LPG at Norgal:

Further to difficulties encountered for some months now in receipt or despatch of vessels, we would like the associates of NORGAL (or their customers) to let us know by telex, as soon as possible and for each operation, information of a general, technical and administrative kind, *those sections which are an obligatory nature being preceded by the sign* (+).

1. *General Information:*
   + Name of vessel and its ETA (expected date of arrival in the roads).
   + Nature of the operation (import, export, transit under Customs control).
   + Approximate quantity in tonnes and product and possibly the breakdown of capacity confirmed by a telex from the interested associate.
   Name of consignee (if possible).
2. *Technical information:*
   + Temperature of product.
   On board pressure.
   Hourly pumping capacity.
   Height of manifold in relation to water level.
   Dimension and series of manifold flanges.
   Laydays and possibly demurrage.

Receiving possibilities at NORGAL

Propane:

a) If temperature = 42°C and max. pressure 30 mb. (with return of gas) : 1,000 tonnes per hour.
b) If temperature = –10°C and max. pressure 3 bars : 300 tonnes per hour.
c) If full pressure : 80 tonnes per hour.

Butane:

a) If temperature = 10°C and max. pressure 30 mb. (with return of gas) : 1,000 tonnes per hour.
b) If full pressure : 70 tonnes per hour.

Characteristics of vessels:

Maximum length : 250 m.
Total displacement : 67,000 tonnes.
Depth of water : 12.5 m (41 ft.).

Quality if product admissible:

French commercial standards, for butane, the temperature must not be less than –8°C for a tv of 0 bar (effective).

3. *Administrative information (for Customs).*

a) *Imports:*
+ Product origin.
+ Price per tonne and currency of invoicing.
+ Kind of contract (f.o.b., c. and f., c.i.f.). If contract is f.o.b. state the amount of freight and insurance per tonne. If contract c. and f. state amount of insurance.
+ Invoice weight (at level acceptable to Customs).
+ Bank domiciliation (name of bank, number of pay office, number of domiciliation file) or the bank domiciliation file.

Note: The invoice and possibly the original of the Certificate of Origin justifying exemption form Customs duty (T2L, Certificate type "A", Certificate EUR1) must be sent to us *as quickly as possible* to be attached to the Customs entry or to put right this entry as quickly as possible.

b) *Exports:*
+ Consignee of the invoice and final destination.
+ Price per tonne and currency of invoicing.
+ Kind of contract (f.o.b., c. and f., c.i.f.). If contract is c. and f. or c.i.f., state f.o.b. value.
+ Invoice weight (as recognised and acceptable to Customs).
+ Name of domiciling bank and number of pay-office.

Note: The export invoice must be sent to us urgently for settlement at the end of the month.

c) *Transit under Customs control:*

(i) *Receipt.*
+ Declaration of Transit A42, if it has not been able to be placed on board.
+ Amount of freight per tonne for payment of VAT, where a foreign vessel is involved.

(ii) *Despatch.*
+ Consignee and Customs Office of destination.
+ Number of derogation of flag monopoly if a foreign vessel is involved. This number is required by Customs before loading.

DEVELOPMENTS: The new oil terminal of Havre-Antifer, built to the South of Cape Antifer has installations enabling vessels of 550,000 d.w.t. to be received at all states of the tide except at LW on neap tide. Shelter is created by a protective mole 3,520 m. in length. At the foot of the cliff, there will be a service port and open-air work areas. An access channel 550 m. wide to a depth of 25 m. will be dredged.

A second stage will see the provision of two further installations after further deepening of the sea to 30 m. in order to take vessels of 1,000,000 d.w.t.

Multipurpose Bulk Centre: Work is to begin in 1984 on a Multipurpose Bulk Centre which will be situated on the South bank of the Havre Ship Canal and in its initial phase will be accessible to vessels drawing 14 m. (46 ft.) i.e. vessels of up to 85,000 d.w.t. fully laden or of 150,000 d.w.t. with about 100,000 to 110,000 tonnes of cargo aboard. Equipment for reloading into barges will be added in the second phase.

The berth will be 250 m. (820 ft.) long and is expected to have a discharging capacity of 2,400 tonne an hour.

Completion expected mid-1985.

AUTHORITY: Port of Le Havre Authority, Terre-Plein de la Barre, B.P. 1413, 76067 Le Havre Cedex. *Tel:* (35) 22.81.40 *Telex:* 190663 Port Havre.

Harbour Master's Office: Boulevard Kennedy, 76600 Le Havre. *Tel:* 22.81.40 Ext. 350. *Telex:* 190663. *Cables:* Havreport.

AGENT: Jolasry (France), 35 Avenue Du 129°, P.O.Box 846, 76060 – Le Havre. Telegraphic address "Jolasry". Tel: 42.18.32 and 42.12.05. Telex: 190708.

LES SABLES D'OLONNE: 46.29 N. 01.47 W.

(See Plan Book)

PORT LIMITS: Entrance to wet dock constitutes port limits.

DOCUMENTS:

2 copies Crew and Passenger Lists.
2 copies Personal Effects Lists.
2 copies Stores Lists.
1 copy Cargo Manifest from ship's papers for Customs Authorities and all Bills of Lading, Ship's Papers, etc.

PILOTAGE: Pilotage is compulsory for all vessels equal to or exceeding 50 m. in length and for oil and gas tankers.

The compulsory pilot boarding points are two straight lines from "La Petite Barge" Buoy (Lat. 46° 28.9′ N., Long. 01° 50.6′ W.), to "Le Phare des Barges", and to "La Peruse" rock.

Confirmation of ETA can be given to the Agent or Pilot. Tel: (51) 32-60-97.

Channel 16 VHF is continuously watched as soon as Pilot is on board. Pilot boat is 9 m. long (black and white hull).

ANCHORAGE: Vessels awaiting Pilot may anchor in the waiting area with sand bottom. They can use pilot services in bad weather.

MAX. SIZE: Vessels up to 100 m. LOA and beam 16 m. Draft 4.8 m. to 6.2 m., dependent on tides.

HEALTH: Customs take action against suspected diseases or fever on board when vessel arrives.

RADIO: Saint Nazaire & Arachon Radio. All ETA and other messages should be in local time.

VHF: Harbour Authorities keep watch on Channel 16 during opening of lock gates. At neap tides, the watch is kept for 1 hour 30 minutes before and after HW.; at Spring tides for 2 hours before and after HW.

RADAR: There is no Port Control Radar.

TUGS: None, pilot boat assists.

BERTHING: Max. beam 16 m. to allow passage through lock gates. Max. LOA 100 m.

BRIDGES: None.

CRANES: Mobile cranes 5 tons – 10 tons.

STEVEDORES: Working hours from 0700 – 1200 hrs. and 1200 – 1900 hrs. No work on Saturdays.

MEDICAL: Full hospital facilities available.

FRESH WATER: Available in unlimited quantities, with 6 to 12 hours prior notice.

FUEL: By lorry from Nantes or La Pallice.

REPAIRS: Small repairs carried out if sufficient spares available.

SURVEYORS: None.

HATCHES: Opening/closing carried out by vessel's crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 2 litres of spirits per person.

REPATRIATION: Possible.

AIRPORT: At Nantes, 87 km. distant. 6 – 7 flights daily.

TIME: GMT plus 1 hour. Summertime GMT plus 2 hours (March to September).

HOLIDAYS: Port is open all year round.

POLICE/AMBULANCE/FIRE: Police, Tel: 17; Ambulance, Tel: 951953; Fire, Tel: 18.

SHORE LEAVE: When Immigration and Customs requirements have been satisfied, there is no restriction on crew shore leave so long as they rejoin the vessel before departure.

SERVICES: Compass adjusting.

DEVELOPMENTS: None.

AUTHORITY: Mr. le Ingenieur des Ponts et Chaussees, Service Maritime. Quai Dingler, 85100 Les Sables d'Olonne. *Tel:* (51) 32-62-61.

Mr. Keroulle, Harbour Master: *Tel:* (51) 32-11-79.

AGENT: Yves Lambot, 10 Quai Emmanuel-Garnier, B.P.: 65, 85102 Les Sables d'Olonne, Cedex. Tel: (51) 951010. Telex: 710634.

LIBOURNE: 44.55 N. 00.15 W.

APPROACHES: Channel Buoyed and dredged to 4.0 m. – 5 m. below LW.

RESTRICTIONS: Max. air draft 25.0 m.

BERTHING: One wharf managed by the Chamber of Commerce, length 65 m., depth 4.5 m. Berth can accommodate vessels up to 120 m. LOA.

CRANES: 2×15 ton, 1×20 ton, 2×30 ton and 1×45 ton.

AUTHORITY: Service Maritime de la Gironde.

Operator: Chambre de Commerce et d'Industrie de Libourne, 125 Avenue Georges Pompidou, B.P. 162 33503 Libourne Cedex. *Tel:* (57) 51.71.11. *Telex:* 570598. *Contact:* Jean-Loup Metivet, Chief of Mission.

LORIENT: 47.45 N. 03.21 W.

(See Plan Book)

DOCUMENTS:

Cargo Manifest or Manifest of Ballast.
Certificate of Cargo Space.
Bills of Lading.
Ship's Register.
6 Crew Lists.
3 Passenger Lists.
Health Declaration.
Derat Certificate or Exemption.
Declaration of Crew Personal Effects.

PILOTAGE: Compulsory for all vessels over 60 m. length. Vessels must contact pilot station advising ETA at least 6 hours before arrival by radio to the pilot station. On arrival at the Outer Roads or Groix vessels should call Pilot by VHF Channel 16. The pilot launch will be standing by from 1 hour before to 1 hour after the ETA previously advised by the ship. The pilot station is manned 24 hours per day. Pilot station telephone number 371480.
ANCHORAGE: The Outer Roads of the port are open to winds from the S.E. to S.W. Vessels waiting to enter the port may anchor in depths of 15 m. – 20 m., sand and shell bottom, good holding ground.

Mooring buoys are positioned off Port Tudy on the North coast of Ile de Groix. These buoys are reserved for the use of the French Navy. There are prohibited zones for anchoring due to presence of submarine cables, marked on chart.
RESTRICTIONS: There are 2 entry channels to the port. The South Channel, depth 3.6 m. is used exclusively by local fishing boats. The West Channel is marked by the alignment of Kerbel Light and Lohic Light. The depth in this channel is 7 m. Both channels are very well marked.

Traffic signals are hoisted at Port Louis Citadel as follows: Red flag or red light – entry prohibited. Green flag or green light – exit prohibited. Red over green flags or lights – port closed.

Tankers: Vessels carrying more than 500 cu.m. of hydrocarbons, or other dangerous cargoes in bulk, intending to navigate North of Les Trois Pierres Tr., should report 6 hours in advance to "Marine Lorient" and Port Captain giving details of cargo and of any defects which may affect manoeuvrability. Such vessels should establish contact with Vigie Port Louis giving ETA at Les Trois Pierres on arrival, or Kéroman Mole (Lat. 47° 43.7′ N., Long. 3° 21.9′ W.) on departure. Other vessels may obtain information about such movements on Channel 16.
HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessels should not receive free pratique, Master should radio Agent before arrival, advising full details.
RADIO: Use local station Radio Conquet or Radio Saint-Nazaire.
TUGS: 1 tug of 1,000 h.p., 2 tugs of 700 h.p., 3 tugs of 250 h.p. belonging to the French Navy.

1 tug of 700 h.p. at the fishing port (Morbihan Chamber of Commerce & Industry) and 1 tug of 1,800 h.p.

1 tug of 1,500 h.p. to be purchased.
BERTHING: Kergroise Quays, 568 m. Max. length of vessels 250 m. Depth of water 10.5 m.

8 cranes in service including 2×30 ton cranes.
TANKERS: The Oil Jetty is 112 m. long and can accommodate tankers up to 180 m. length, max. draft 10 m.
FRESH WATER: Can be supplied from the quays at Kergroise and at the Oil Jetty. Rate 10 t.p.h.
REPAIRS: Minor deck and engine repairs can be carried out. Slipways can accommodate 6 fishing boats at the same time. There are 3 dry docks the largest of which is 186.20 m. long×26.33 m. wide.
MEDICAL: All facilities available. Local maritime and civil hospitals.
IDENTIFICATION CARDS: Crewmen going ashore should carry passport or identity card.
CONSULS: Norway, Denmark, Netherlands and Sweden.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May, no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); All Saints' Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available). N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.
POLICE/FIRE/AMBULANCE: Police Tel: 21.19.16; First Aid Tel: 17; Ambulance Tel: (97) 65.33.44; Fire Tel: 18.
DEVELOPMENTS: One new berth, length 150 m. Depth of water 10 m. Will be ready early 1985.
AUTHORITY: Capitainerie du Port, Il Bd. J. Cartier, 56110 Lorient, France. *Tel:* 37.11.86. *Telex:* Marilor 950887 F. *Contact:* Harbour Master.

AGENT: See "Paris".

MARANS: 46.18 N. 01.00 W.

LOCATION: Marans is situated on the Sevre-Niortaise River.
PILOTAGE: Compulsory. Pilot boards at La Pallice.
RESTRICTIONS: Entry during daylight hours only.
MAX. SIZE: Length 60 m., beam 10 m., draft 3.2 m. (at Neaps), 4.0 m. (at Springs).
BERTHING: 3 berths available.
CRANES: One 3 ton electric crane.
BULK CARGO FACILITIES: One grain silo in the port.
REPAIRS: Minor repairs only.
AUTHORITY: Monsieur l'Ingenieur des Ponts et Chaussees, Le Port, 17230 Marans. *Tel:* (46) 01-10-35. *Contact:* Mr. P. Quenet, Harbour Master and Chief Engineer.

AGENT: See "Le Chateau d'Oleron".

MARSEILLES: 43.18 N. 05.25 E. (See Plan Book)

(a) Old Port to Estaque *(b)* Port de Bouc/Lavera/Caronte/Etang-de-Berre/La Mede *(c)* Fos

(a) OLD PORT TO ESTAQUE

DOCUMENTS:
Inward Declaration (Printed Form presented by Pilot on boarding).
Ships Register.
Declaration of Health.
3 Crew Lists.
2 Provisions Lists.
2 Lists of Passengers in Transit.
2 Lists of Passengers disembarking.
1 List of Ports where cargo is loaded for Marseilles.
Cargo Manifests and Bills of Lading.
1 List of Crew Personal Effects.

PILOTAGE: *Arrival:* Contact port authority by VHF on Channel 16, changing to Channel 12. M.W. Station, call on 2049 kHz. Station on 1939 kHz. ("Marseille Port") Compulsory. 21 pilot launches, mostly painted black, wooden hulls with white anchor insignia on the bow.

Contact pilot station and pilot boats by VHF Channel 8.

Southern Entrance: Pilot boards between "Le Frioul" and "Chateau d'If" island. Max. recommended draft 27 ft. in good weather.

Northern Entrance: Pilot boards at Estaque roads. In case of strong N.W. winds or for all deeper draft vessels the Northern entrance is preferred.

Vessels anchoring in roads without a Pilot will still incur full pilotage fee.

On departure, 15 to 30 minutes notice sufficient to order Pilot and tugs.
ANCHORAGE: Estaque Roads.
MAX. SIZE: Draft dependent on berth depth up to max. of 14.5 m.
HEALTH: Free pratique automatic vessels coming direct from continent or Italy and "Q" flag not to be flown. From other countries – including Spain and Portugal – usual procedure applies. Unless special arrangement for passenger liners free pratique not given by radio also practice issuing Health or Customs clearance on sailing now discontinued.

Free Pratique by Radio: Send cable to "Saniport Marseille" through Marseille Radio between 0700 hrs. and 1900 hrs., containing the following information:

Ship's Name, ETA Marseille, from (last 3 ports in reversed order) number of crew.

Then "ZT" (my Maritime Declaration of Health has negative answers concerning the 6 health questions).

Date of Derat (exemption) Certificate.

Then "ZS" (my ship is healthy and I ask for free pratique).

Example: Balder Antwerpen ETA 17/2300 Malaga, Hamburg, Bremen crew 25 stop ZT stop 06/07/81 stop ZS. Regards Master.

From 0700 hrs. to 1900 hrs., answer of Saniport will be: "ZY" (free pratique is granted).

If free pratique is requested and granted by radio, no sanitary officials will board the vessel, no declaration must be filled in, and crew members are granted shore leave without delay. Furthermore, the "Q" flag must not be flown on arrival.

The above information was supplied to a Ship's Master by the Port Health Officials.
RADIO: Within 150 miles Marseilles Radio/FFM – otherwise St. Lys/FFL.
VHF: Port Authority on Channel 16, 6, 12 and 30. Tugs on Channel 6.
RADAR: Port and approach radar station.
TUGS: About 25 tugs available, from 250 to over 3,000 h.p. Ship's lines normally used.

BERTHING: When specific side alongside berth required. Agents radio Master prior arrival also advise Pilot. Otherwise side alongside at discretion Master after conferring with Pilot.

Berth No.	*Usable Berthing Length (m.)*	*Max. Permissible Draft (m.)*	*Remarks*
96	105	8.00	Ro/Ro berth
95	104	7.80	Wine, Rate 150 t.p.h.
94	105	7.00	Ro/Ro berth
93B	—	7.00	Ro/Ro berth
92	147	7.60	Ro/Ro berth
91	130	7.40	
90	130	7.20	Ro/Ro berth
88	155	8.00	Ro/Ro berth
87	130	8.00	
86	131	8.00	Ro/Ro berth
84	147	8.00	Ro/Ro berth
83	135	8.50	
82	135	7.75	Ro/Ro berth
81	140	7.60	Ro/Ro berth
80	130	9.00	Equipped with Ro/Ro pontoon
79	109	8.80	
78	109	9.00	
77	109	9.00	Fruit
76	109	9.60	
75	109	9.20	
74	109	9.00	Ro/Ro berth – Refrigerated Shed
70	132	9.75	Ro/Ro berth
69	131	9.75	
68	100	9.00	Equipped with Ro/Ro pontoon = 36 m.

Berth No.	Usable Berthing Length (m.)	Max. Permissible Draft (m.)	Remarks
67	120	8.10	
66	120	6.90	Ro/Ro berth
65A	80		Service berth
65	138	7.00	Ro/Ro berth
64	137	7.00	
63A	102	6.70	Waiting berth
63	127	7.00	Ro/Ro berth
60	*	8.80	*Ro/Ro berth in middle of dock
59	173	8.00	Ro/Ro berth
58	175	9.60	Banana Terminal – 4 unloaders
53	149	10.00	Air-Conditioned Shed
52	120	8.00	Waiting
51	115	7.50	
49	146		Service and marine fire brigade
48	135	8.20	Solid bulk cargoes
47	135	9.50	Solid bulk cargoes
46	106	8.50	Waiting
45	129	7.00	
44	130	7.50	Specialist paper berth
43	217 (Max. LOA 170 m.)	8.50	Oil seed and cake berth
42	150	7.00	Ro/Ro berth
41	150	7.00	
32	200	10.00	
31	200	10.00	
30	196	9.75	Specialist cereal berth
28	135	8.50	
27	150	9.00	
26	150	9.00	Ro/Ro berth
25A	100	7.00	
25	153	12.00	
24	154	12.00	
23	134	9.50	Waiting
22	145	10.50	
21	145	10.50	
20	145	10.50	Sugar
19	145	10.00	
14	227	9.70	Ro/Ro and Alumina in bulk
13	171	10.00	Refrig. store
12	171	10.00	
11	171	10.00	Cruise ship terminal
10	171	10.50	
8	157	10.70	
7	157	10.00	
6	178	9.80	
5	178	10.00	
4	140	9.65	
3	140	9.80	
2	140	9.80	
186	162	14.50	Ammunition – Explosives
185	162	14.00	
184	162	14.00	
183	162	14.50	
182	161	14.20	
181	162	14.00	Ro/Ro berth
163	no limit	13.50	Naval repair berth
161	50	2.50	Barges with heavy lifts
160	104	9.00	Naval repair berth
157	154	11.70	Ro/Ro berth
156	154	11.70	Container Terminal 40 ton crane
155	154	11.70	
154	154	11.10	
153	154	11.60	Refrigerated Shed
152	155	11.60	Ro/Ro berth
151	137	12.00	MAVRAC quay
150	136	12.00	Liquid bulk cargo
148	220	9.50	Ro/Ro berth
144	173	10.50	Ro/Ro berth
143	90	9.50	Deballasting berth, max. size 540,000 d.w.t. Also liquid gas carriers, light hydrocarbons, cleaning station
145	70	4.70	Tanker Berths
146	105	4.70	(Refined Products)
147	133	4.70	Tanker barges only
170	132	4.70	
190	450	10.60	Floating repairs quay
131	215	11.00	Naval repairs (under inert gas)
130	215	11.00	
129	216	11.00	Naval repairs – engine testing
128	127	8.50	Waiting berth
127	170	8.50	Waiting berth
126	170	8.80	Naval repairs
125	170	9.20	
124	170	9.20	
123A	78		Service – lighthouses and buoys
123	150	11.00	Naval repairs
122	150	11.00	
121	151	11.00	
120	151	11.00	
119	151	11.00	
119A	100	6.70	Naval repairs
118	160	10.00	Naval repairs
117	160	10.00	
116	160	10.50	
115	160	10.50	
115A	85	6.50	Naval repairs
114A	75		Service
114	151	10.50	
113	151	10.50	
112	151	10.50	Naval repairs
111	151	11.60	Clinker (4 cranes)
110	151	11.60	Ro/Ro (berth 109A)
109	152	11.60	
109A	68	11.60	
108			
107	355		Service
106A	70	5.70	Wine traffic. Berth No. 106.
106	120	4.50	Rate, loading 500 hl/h.
105	120	6.00	Loading 1,000 hl/h.
104A	100	6.00	Bulk wine, 3 pumps (rate 1,000 hl/h.).
104	100	6.00	Bulk wine, 1,000 h/l. loading, 1,100 h/l. discharging also livestock
103	139	4.30	Service berth
102	139	4.70	Waiting berth
101	139	3.50	
100	139	3.50	
99	139	3.50	
98	450	8.00	Fixed point – engine testing
AVB	300	8.50	Naval repairs

CRANES:

Public Quay Cranes: 1×3 tonnes; 12×3 – 5 tonnes; 54×6 tonnes and 1×20 tonnes.

Public Mobile Cranes: 1×4 – 8 tonnes; 4×6 – 12 tonnes; 5×15 tonnes; 1×35 tonnes; 3×40 tonnes.

17 drydock cranes, largest has a lifting capacity of 150 tonnes.

2 floating cranes for public use, owned by the Port Authority, capacities 90 tonnes and 150 tonnes and one floating derrick owned by the Port Authority, capacity 500/600 tonnes. There are also 2 privately owned floating cranes, largest has a capacity of 60 tonnes.

BULK HANDLING FACILITIES:

Cereals:

Pinede Dock: Berth No. 30. Storage: The Madrague Silo, owned by the Societe Fonciere et Commerciale du Silo de la Madrague, has a capacity of 30,000 tonnes in 143 cells. The silo is connected to the berth by 420 m. (1,378 ft.) of covered conveyors. The silo is outside the port area. 2 suction units, rate 200 t.p.h.

Grande Joilette Dock: Berth Nos. 69 and 70. Storage: The silo, owned by the Marseilles Port Authority, is within the port area and has a capacity of 22,000 tonnes in 99 cells. it is equipped with 4 covered conveyors, 2 of which are reversible, thus allowing the export of cereals from the silo.

Grain, Copra, Oil Seed:

National Dock: Berth No. 43. Storage: Shed 6B has a capacity of between 12,000 and 18,000 tonnes for types of grain, on the first floor, and 6,000 tonnes on the ground floor. This shed is on the quayside. Oil seed handled. 4 cranes of 6 tons capacity.

Oil Seeds: 1 public berth in National Basin.

Berth No. 43: Max. length 170 m., max. draft 8.5 m.

The oil seeds are unloaded by an automatic bucket and received on the terrace of Transit Shed 6A, which is equipped with rolling hoppers permitting discharge or storage. Output capacity 700 tonnes per shift with 2×6 tonne cranes. Storage capacity 10,000 tonnes on the first floor of Shed 6A.

Minerals in Bulk:

National Dock: Berth Nos. 47 and 48. Specifically for bulk traffic, handled by bucket-cranes. Storage: 4,000 sq.m. (43,040 sq.ft.) in the open, beside the East Quay. 4 cranes, rate 300 t.p.h. or 150 t.p.h. per crane.

3 berths on the Seaward Breakwater, Berth Nos. 109, 110 and 111. Theoretical length 151 m. each, max. draft 12 m. Storage capacity 50,000 tonnes.

These berths are equipped with 5 bucket cranes of 7 tonnes and facilities for storing clinker.

President Wilson Dock: Berth No. 14. Allocated specifically for alumina. Storage: 2 silos, with a total capacity of 11,000 tonnes, constructed by and belonging to Pechiney Cie. and Ugine Cie., to facilitate the import/export of dehydrated alumina in bulk.

There is an additional warehouse with 1,000 sq.m. on Breakwater "D" which is used for hydrated alumina. Vessels are handled via Berth No. 47 (National Basin). Storage capacity 3,000 tonnes.

Leon-Gourret Dock: Berth No. 8. Allocated specifically for bulk traffic that can be handled by grab-bucket. Storage: An open area of 4,000 sq.m. (43,040 sq. ft.) at the quayside; suitable for import/export.

Liquids in Bulk:

Mourepiane Dock: Berth No. 150. For vegetable oils and chemicals. Storage: The private company, Marseille Vrac, which operates this depot, has 32 vats of 125 to 1,640 cu.m. (4,412 to 57,892 cu.ft.), with a total capacity of 24,500 cu.m. (864,850 cu.ft.). There are pipelines to the quay for discharging tankers.

Import and Export: The major import is vegetable oil; export is chemical products in bulk.

Berth No. 143 for refined hydrocarbons.

Berth Nos. 104, 105 and 106 for wine in bulk.

Sugar:

President Wilson Dock: Berth Nos. 19 and 20. Storage: The silo, which has a capacity of 24,000 tonnes is within the port area and is owned by the Port of Marseilles Authority. Sugar is discharged by bucket-crane into hoppers which feed the conveyor belts to the silo. The total conveyor capacity is 250 tonnes per hour.

SPECIALISED CARGO HANDLING FACILITIES:

Heavy Load Berths:

In Mirabeau Basin there is a special berth (No. 161) designed to receive barges loading and unloading heavy loads. This berth is located between Berth No. 160 and the Leon Gourret Mole and consists of a quay 80 m. long into which has been built a barge basin 50 m. long by 20 m. wide with a depth of 2.5 m.

Apart from this special berth, there are 29 roll-on/roll-off berths in operation in the port of Marseilles which permit direct loading of heavy loads into ro/ro ships. There are also numerous conventional berths that can be used for vertical loading and unloading of heavy loads, with the assistance of the port's "Atlas" and "Goliath" floating cranes, which have a lifting capacity of 90 and 150 tonnes respectively and can be coupled to lift a maximum of 220 tonnes.

In addition to these floating cranes, the following floating equipment is also available:

The Port Authority's floating derrick, "Protis", which has a lifting capacity of 500 to 600 tonnes.

Various types of private floating equipment with capacities ranging from 40 to 60 tonnes.

Various public or private heavy load barges.

The Port Authority's submersible seagoing barge.

This barge is designed for transporting heavy loads, or for putting them into the water in the case of floating loads (within the limits of its deadweight capacity of 1,800 tonnes; the loading and unloading of heavy floating loads of 1,800 to 2,000 tonnes must be carried out in dry docks). The barge can be loaded vertically, horizontally (Ro/Ro), or by floating the load into the hold in the case of a floating load.

Also see "Berthing".

CONTAINER HANDLING FACILITIES: Various quays are devoted to container traffic: At the Leon Gourret mole (14.5 m. permitted draft, large open areas, railway tracks); at the Mourepiane quay, in the Mirabeau basin, where there is a new terminal:

3 public berths, Berth Nos. 155, 156 and 157, each of which has a theoretical length of 154 m. and a max. draft of 11.7 m.

Container handling equipment: 2×40 tonne Caillard gantry cranes. 4×30 tonne at 30 m. mobile cranes.

Railed tracks: 2 railway tracks alongside the quay; 1 railway track behind warehouse 20; 2 railway tracks at the Eastern limit of the dense storage area behind warehouse 20.

Area alongside the quay 35 m. wide comprising: A working area 15 m. wide equipped with 2 railway tracks and a trailer movement area; a storage area for short periods, 17 m. wide (under the rear jib of the gantries).

Storage areas covering a total of 90,000 sq.m.

BRIDGES: Turning bridge near Southern end of port – Pont d'Arenc – opens on requests. Bridge further North – Pont de la Pinede – opens: 0600 – 2200 hrs. twice each hour between 5 minutes before the hour and 5 minutes afterwards, and between 5 minutes before half hour and 5 minutes afterwards. Open continuously 2200 – 0600 hrs.

STEVEDORES: Enable Agent order gangs important obtain in good time accurate ETA from vessels. Latest times to order gangs; normal and deferred shifts 0530 hrs. same morning – night shift 1600 hrs. same day – Saturday and Sunday, 1600 hrs. Friday. Failure to give precise ETA may result in ship losing 12/24 hours also cost gang waiting time includes waiting vessel's arrival – free pratique – opening/closing hatches – rain – shifting cargo or dunnage – crane or derrick breakdowns – time lost between finishing and end of shift. Work can be arranged on following official holidays – New Year's Day, Easter and Easter Monday, Whitsun, 14th July, 15th August, 1st November, Christmas Day, 1st May holiday when no work takes place, Stevedoring hours (normal shift) Monday to Saturday, 0630 – 1300 hrs. and 1330 – 2000 hrs. (Two shifts). Sunday, 0630 – 1300 hrs., if required – one shift 0800 – 1115 hrs. and 1300 – 1615 hrs. Night work if required or short night work 2015 – 2330 hrs. No work allowed Sunday night. All necessary gear supplied by stevedores except rain tents which vessel must supply.

MEDICAL: Yellow fever inoculations only in hospital (Tuesdays and Friday). Masters to advise by radio prior arrival if medical attendance required aboard.

TANKERS: Oil traffic in the Port of Marseilles is limited to two functions: the supply of refined products to certain urban installations, and the degassing of oil tankers before they enter a dry dock for repairs.

The specialised facilities available are:

Saumaty Basin: Three berths are available for tank barges alongside Mole I: Lengths: Berth No. 145, 70 m.; Berth No. 146, 105 m.; Berth No. 147, 133 m. Max. draft 4.7 m.

The quayside discharge pipes are connected to the Mourepiane Oil Storage Depot located outside the port enclosure. The total capacity of this depot is 42,000 cu.m.; 16,000 cu.m. for white products and 26,000 cu.m. for black products.

North Outer Harbour: Berth No. 143 (max. draft 9.5 m.) in the North Outer Harbour has a dual function. Firstly, it can receive oil tankers of up to 550,000 tonnes and LNG carriers for degassing and treatment of water polluted by oil product residues during tank-cleaning. Secondly, it can receive small and medium-sized tankers for discharging oil products. The quayside discharge pipes of this berth are also connected to the Mourepiane Oil Storage Depot.

Also see "Port de Bouc" and "Fos".

DENSITY: About 1028.

FRESH WATER: Can be obtained from hydrants or quays or from water-boats. When delivered by barge, minimum quantity invoiced is 50 tons. Preferable order prior arrival to avoid delays. Minimum pumping rate 50 t.p.h.

FUEL: Ordinary fuel, also fuel oil max. 1000 secs., diesel and gas oil. Deliveries by barge only.

FIRE PRECAUTIONS: Special harbour fire-fighting corps, with two fire-fighting vessels.

WATCHMEN: Available but not compulsory.

HATCHES: Crew allowed open and close.

SHIP CERTIFICATES: On first call Registered Tonnage Certificate; thereafter not required unless gross/net tonnages changed.

CUSTOMS ALLOWANCES: About 200 cigarettes and limited amount spirits per man.

CARGO GEAR: No additional requirements; all gear supplied by stevedores except rain tents.

IDENTIFICATION CARDS: Not required.

AIRPORT: Marseille-Marignane is the second largest airport in France with 18 air companies serving 60 national and international destinations.

The international airport of Nimes-Garons (50 km. from Fos) serves the West region of the Marseilles district.

CONSULS: The following countries are represented in Marseilles:

Algeria
Argentina
Austria
Belgium
Bolivia
Brazil
Canada
Colombia
Costa Rica
Cuba
Cyprus
Denmark
Dominica
Ecuador
Egypt
Finland
Great Britain
Greece
Guatemala
Haiti
Honduras
Iceland
Israel
Italy
Ivory Coast
Japan
Lebanon
Liberia
Madagascar
Mauritania
Mexico
Morocco
Netherlands
Nicaragua
Norway
Panama
Peru
Philippines
Portugal
Senegal
Spain
Sweden
Switzerland
Thailand
Tunisia
Turkey
U.S.A.
U.S.S.R.
Uruguay
Venezuela
West Germany
Yugoslavia

REPAIRS: Most repairs and overhauls possible. Pre-advice recommended.

SERVICES:

Mourepiane Deballasting and Degassing Station: The station is located at Berth No. 143 in the North Outer Harbour which measures 680 m.×800 m. and permits the manoeuvres of very large ships. The 90 m. long berth is dredged to a depth of 9.5 m. and can receive ships of up to 550,000 tonnes.

Facilities for deballasting and degassing oil tankers:
Storage Capacity: 17,000 cu.m.
Heated Pressurised Sea Water: 80°C, 13 bars, 200 cu.m./hr.
Pressurised Steam: 15 kg./sq.m., 34 t.p.h.
Compressed Air: 4 cu.m./min. and 18 cu.m./min.
Electric Current: 3×400 V, 250 A.
Fans.
Telephone connected to the international telephone system.
Personnel for cleaning, removing and treating solid wastes.
Facilities for degassing gas tankers:
  Nitrogen: 3,000 cu.m./hr.
  Burn-Off Capacity in the 15 m. High Burner: 3,000 cu.m./hr.

DRY DOCKS:

No.	Usable Length (m.)	Usable Width (m.)	Depth (m.)	Cranes (tons)	Sea Water	Telephones
1	171	19.60	5.30	2×9	–	1 line
2	135	17.30	4.20	1×9 – 1×20	–	1 line
3	100	15.60	4.60	–	–	1 line
4	80	12.50	4.75	–	–	1 line
5	122	14.60	5.30	1×9	–	1 line
6	125	15.60	5.30	1×9	–	1 line
7	200	23.00	8.10	1×9 – 1×20	–	1 line
8	320	49.00	11.00	1×6 – 1×9 1×50	800t/h	2 lines
9	250	36.00	8.50	1×6 – 1×9 1×50	800t/h	2 lines
10	465	84.00	10.00	3×25 – 1×150	10,800t/h	12 lines possible

Fresh water and power available at all berths.

One floating dock: Usable length 165 m., usable width 25 m. Depth 6 m. 2×7 tonne cranes. Fresh water and telephone available.

POLICE/FIRE/AMBULANCE: Police (disturbance of peace): Tel: 17. Marine Fire Brigade (fire, ambulance, injury, explosion, flooding, man overboard, etc.) Tel: 18. Police and Marine Fire Brigade can also be called through the Central Watch Tower (VHF CHannel 16) or Telephone: 912166 ("Marseille Port").

DEVELOPMENTS:

1. Tracked electric cranes to be reduced from 75 to 60.
2. A fourth 30 tonne (at 30 m.) mobile crane has been ordered.

SHIPMASTER'S REPORT: October 1983.
Documents: Inward declaration required for entry. This is given to Master by Pilot for handing to Agent.
Health: Routine message to "Saniport Marseille" sufficient even for vessels arriving from Ivory Coast/Senegal. This is required but not acknowledged.
Banana Discharge: Usually at Pier No. 58, starboard side to, by side doors via conveyor belts. Usual working hours: 2 shifts 0630 – 1230 hrs. and 1400 – 2000 hrs., 6 days a week. 4 conveyors available.
Fresh Water: Available at Pier No. 58 by barge only.
Security: Stealing from accommodation is rife.

AUTHORITY: Port Autonome de Marseille, B.P. 1965, 23 Place de la Joliette, 13226 Marseille Cedex 02, France. *Tel:* (91) 919044-919066. *Telex:* 440746 Portauto Marsl. *Cables:* Portauto Marseille. *Contact:* Harbour Master.

AGENT: Jolasry (France), 20 quai du Lazaret. Tel. 91.90.86. Telex. 440821. Cables: Jolasry.

(b) PORT DE BOUC, including Port de Lavera 43.23 N. 05.00 E., Port de Berre 43.27 N. 05.10 E., Port de la Mede 43.24 N. 05.07 E. Caronte 43.24 N. 05.02 E.

(See Plan Book)

DOCUMENTS: On arrival:
- Inward Declaration (presented by Pilot on boarding).
- 1 Cargo Manifest or manifest in ballast.
- Bill of Lading.
- Ship's Register (if required).
- 6 Crew Lists (8 if Spanish or U.S.S.R. ship or ship bound for these countries).
- 3 Passenger Lists.
- Health Declaration.
- Derat Certificate.
- Bunker's Supply (3 forms).
- 1 Crew Declaration of Personal effects – cameras, binoculars, radios, cigarettes, tobacco, etc. If on inspection articles or quantities not in conformity or in excess, Master held responsible, articles removed and heavy fines imposed.

PILOTAGE: Call "Port de Bouc Control" on Channel 16. Channel 12 for traffic. Pilot must be taken to enter Port de Bouc, Fos and Port St. Louis du Rhone. Contact by Marseilles Radio or pilot boat VHF (Channel 16 for calling, Channel 14 for traffic). Pilot boards in the Roads between 2 and 2.5 miles S.W. of Bouc Tower or further out if required, for entering Port de Bouc and Fos. Motor launch black hull, white cabin, white anchor on bow, "H" flag.

ANCHORAGE: It is recommended to ask for Pilot before anchoring in Outer Roads to avoid forbidden places for ships bound for Port de Bouc and Fos.

RESTRICTIONS: No entry restrictions for Lavera. Night transit of Caronte Canal to Etang de Berre forbidden to tankers above 6,000 g.r.t. Transit of Caronte Canal to Etang de Berre is forbidden for vessels over 180 m. (598 ft.) overall and over 24 ft. draft.

Notice: *"Port Authorities Instructions Concerning Fos/Lavera Tanker Areas.*

Special Notice No. 94/81.
Re: Berthing of Tankers Loaded with Naphtha or Gasoline.

Taking into account the recurring risks encountered with tankers discharging naphtha, super gasoline, gasoline or condensate, until further notice, it has been decided that only one vessel at a time, carrying said cargo, will be allowed to discharge in above areas of Port Autonome de Marseille.

For the time being these restrictions do not apply to coasters.

Furthermore, vessels concerned, whatsoever the year of building, will only be allowed alongside providing that pump room is clean, gas free and that no product is leaking at ship's valves or pumps.

Should above conditions not be fulfilled vessels could not be accepted in above areas".

MAX. SIZE: Lavera: LOA 275 m., draft 12.80 m.
Caronte: LOA 170 m., draft 8.84 m.
Berre: LOA 180 m., beam 24 m., draft 7.0 m.
La Mede: LOA 180 m., beam 24 m., draft 7.2 m.

HEALTH: Pratique given by Customs Officers who board on arrival. In case of suspected disease on board, notify Agents by radio before arrival.

Also see "Marseilles".

RADIO: Within 150 miles traffic through Marseille Radio/FFM, otherwise St. Lys (FFL).

VHF: Port de Bouc Radio (Harbour Office) VHF used for navigation purposes only – Channel 16 for call, Channel 12 for traffic.

RADAR: Port and approach radar station.

TUGS: Eleven tugs available from 90 to 1,800 h.p. Normally join vessel in entrance channel off Port de Bouc. Only ship's lines used.

BERTHING: Lavera: 19 berths (Total berthing length 3,088 m.) for public and private use. Permitted drafts: 3 berths of 2 m. to less than 3.6 m.; 4 berths of 3.6 m. to less than 5.5 m.; 1 berth of 5.5 m. to less than 6.1 m.; 5 berths of 10 m. to less than 11 m.; 3 berths of 11 m. to less than 12.5 m.; 3 berths of 9.9 m.

1×12 tonne public mobile crane.

Lavera harbour has been specifically designed and equipped to handle refinery products and the discharge of oil tankers.

Each berth has flexible pipe connections, with articulated metal arms, supported by special cranes. The type of pipework depends on the product handled (crude or refined) and is connected to the storage tanks of:—

C.F.R. and Shell
S.F.P. – B.P. Refinery at Lavera
The maritime terminal of S.P.L.S.E., which supplies the
Esso Refinery at Fos.

Berths A1, A4, H and K1 have been designed to handle the loading and unloading of propane and chemical products.

Crude: 8 public berths in 4 basins.

Name of Berth	*No. of Berth*	*Max. Length (m.)*	*Max. Draft (m.)*
B	721	325	12.00
C	722	325	12.00
D	723	325	11.89
E	724	325	12.20
F	725	325	12.80
G	726	325	12.80

Refined Products: 12 public berths.

Name of Berth	*No. of Berth*	*Max. Length (m.)*	*Max. Draft (m.)*
A1	711	210	10.10
A2	712	210	11.10
A3	713	210	11.10
A4	714	240	12.20
B	721	325	12.00
C	722	325	12.00
D	723	325	11.89
E	724	325	12.20
F	725	325	12.80
G	726	325	12.80
K1	701	100	6.10
K2	702	88	5.30
K5	705	100	5.80
K6	706	100	5.90

Liquid Gas: 4 public berths.

Name of Berth	*No. of Berth*	*Max. Length (m.)*	*Max. Draft (m.)*
A2	712	210	11.10
A4	714	240	12.20
H	727	200*	11.80
K1	701	100	6.10

*Usable length 100 m.

Annual capacity of loading or discharge: 600,000 tons based on the 4 multi-purpose berths being exclusively used for discharge of vessels bringing propane gas.

Average output per quay 600 cu.m./h. (300 t.p.h.)

Storage capacity: The storage capacity of propane gas of the Societe GEOGAZ is 120,000 cu.m (60,000 tons).

Chemical Products (exclusively): 2 public berths.

Name of Berth	*No. of Berth*	*Berthing Length (m.)*	*Permitted Draft (m.)*
A4	714	240	12.20
H	727	200*	11.80

*Usable length 100 m.

Berth A4 is also equipped for crude oil traffic, refined oil products and for the importation of liquid gas.

Berth H can also accept liquid gas.

Annual capacity of loading or discharge: 2,700,000 tonnes if these 2 berths are exclusively used for chemical product traffic.

Discharge rate using vessels' pumps: 150 t.p.h. Loading rate using land pumps 150 t.p.h. to 300 t.p.h.

Storage capacity: Societe NAPHTACHIMIE: factory. Societe MAVRAC: 53,000 cu.m. Density 0.80 – 1.62.

Port de Bouc/Caronte: Quay berths reserved exclusively for commercial operation of sea-going vessels: Berth Nos. 780 to 786 and 2 berths for river barges.

Total length of quays: 763 m.; Usable berthing length: 1,000 m.; Permitted draft: 2 berths for barges with draft of less than 4 m.; 5 berths of 8 m. to less than 9 m.

Berths reserved for repairs afloat (Agglomerate Quay No. 787): Total length of quays: 250 m. Max. draft 4.5 m.

Equipment:

Quay cranes: 2 cranes of 3–6 tonnes
3 cranes of 6–12 tonnes
2 cranes of 12 tonnes

Seven cranes, private, forming part of the installations of the Etablissement Maritime de Caronte et de Fos (CARFOS)

Quay gantries: 2 gantries of 10–20 tonnes, private (CARFOS) used for ores, stacking and removal from stock. Lifting capacity of the most powerful: 15 tonnes.

1 phosphate reloading gantry (CARFOS) with a capacity of 400 t.p.h.

Cranes allocated to naval repairs afloat, at the Agglomerate Quay: 2 private cranes from 6 to less than 15 tonnes. Lifting capacity of the most powerful: 4–8 tonnes.

Floating cranes: 1 private crane, with a lifting capacity of 100 tonnes.

Storage:

Quay-side sheds	8,200 sq.m.	(private)
Other sheds or warehouses	4,875 sq.m.	,,
Quay-side open areas	16,000 sq.m.	,,
	10,000 sq.m.	(public)
Other open areas	8,000 sq.m.	(private)

Bulk Liquids: Vegetable or animal oils and chemical products:

1 public quay under private use (Favat installation) (Berth No. 780): Verminck Quay. Useful berthing length: 120 m. Permitted draft: 7.50 m.

Discharge of oils is effected by shipboard pumps and the relay pump of the land installations – rate 200 t.p.h.

Storage capacity: 6,000 tonnes.

The Favat storage installations located outside the port area, on private property, have a total capacity of 12,000 cu.m. These installations are connected by a network of 3 pipelines of 200,150 and 100 mm. to the discharge points at the quayside. Storage Shed: 4,000 sq.m.

Chemical products exclusively: 1 private berth (Berth No. 786): Kuhlman Quay (Ets. Kuhlman). Useful berthing length: 140 m. Permitted draft: 7.50 m. Factory storage capacity: 2,500 tonnes.

Bulk Solids: Ores, coal, heavy minerals:

5 berths at the Caronte Quay (Berths Nos. 781–785) private use granted to Etablissement Maritime de Caronte et de Fos (CARFOS).

Usable berthing length: 650 m. Permitted draft: 8.40 m.

1 quay berth for loading phosphate barges, located between berth No. 785 and berth No. 780. Berthing length: 80 m. Permitted draft: 3.50 m.

The Caronte Quay has a specialised installation comprising:

3 transporting units and weighing hoppers with a unit output of 135 t.p.h.

1 transporting unit and specialist weighing hopper specialised in wagon loading: output 150 t.p.h.

2 weighing hopper towers – unit capacity: 1,200 tons per day.

2 weighbridges (40 and 80 tonnes).

The 7 scoop cranes are emptied into weighing hoppers which in turn discharge on to conveyor belts which terminate either above wagons to be loaded, into sheds or open storage areas. Hourly capacity per crane 120–150 t.p.h.

The quay is also equipped with 2 gantry cranes of 10 to 20 tonnes used for stacking and reclaiming minerals and 1 gantry crane with a capacity of 400 t.p.h. used for reloading phosphate.

Storage capacity: 63,000 tonnes.

The CARFOS storage installations include:

3 phosphate sheds of 6,800 sq.m.

1 ilmenite shed of 550 sq.m.

1 open area of 6,000 sq.m.

Oil seeds – oil cake: 2 berths (No. 784 and No. 785) at the Caronte Quay, private use granted to CARFOS

Available berthing length: 170 m. each. Permitted draft: 8.84 m.

Storage capacity: 10,000 tonnes. These berths are also used for ores, coal and heavy minerals.

Installations and equipment: identical to those on the quays for ores, coal and heavy minerals.

Etang de Berre/La Mede:

Available berthing length: La Mede – 190 m. Berre – 560 m.

La Mede: 2 berths. Berre: 4 berths.

Access to these berths is limited by the depth of the Caronte Canal 7.32 m.

Port of La Mede: Cie Francaise de Raffinage (C.F.R.). Berth Nos. 744 and 746.

Refined oil products: 2 private berths (C.F.R.).

Name of Berth	*Berth No.*	*Type of installation*	*Available berthing length (m.)*	*Permitted draft (m.)**
West Berth	746	50 m. mooring units set out in lake	120	7.20
4	744	Pier	70	5.40

*Access to these berths limited by depth of Caronte Canal 7.32 m.

The installations of the Compagnie Francaise de Raffinage permit loading or unloading of 100–600 cu.m./h. according to product.

The installations of the C.F.R. are connected to tanks by pipelines of varying sizes under the waters of the Berre Lake and Canal from Marseilles to the Rhone.

Storage capacity: Depot of the Refinery of C.F.R. – 1,510,000 tons of refined products to which may be added 346,500 tons of crude brought by pipeline from the berths at Lavera and Fos to the Refinery.

Port de La Pointe de Berre: Cie. de Raffinage Shell Francaise (Berths No. 751 to No. 754). Refined oil products. 4 private berths.

Access to these berths limited to 7.93 m. by the depth of the Caronte Canal.

Berth Name	*Berth No.*	*Max. length (m.)*	*Permitted draft (m.)*
A	751	160	7.31
B	752	160	7.01
Salins Berth	754	160	7.01
South West (coasters)	753	80	4.80

The berthing installations of the Cie. de Raffinage Shell Francaise S.A. have connections to its tanks by specialised pipelines for the various products. They provide loading and discharge outputs from 120 to 2,500 cu.m./h. according to product.

Storage capacity: Depot of the Port de La Pointe de Berre 154,000 tons.

Storage area of the Shell Refinery 1,572,000 tons.

To the above capacities should be added 303,000 tons of crude oil brought by pipeline to the Shell Refinery from the Lavera and Fos berths.

BRIDGES: 1 railway bridge and 1 road bridge across Caronte Canal each having special times for opening. Ships of less than 21 m. height clearance may pass below the railway bridge. Motorway bridge over Caronte Canal with 44.60 m. clearance.

STEVEDORES: To enable Agent order gangs important obtain accurate ETA between 24 hours and 48 hours in advance. 2 shifts 0500 to 1300 hrs. and 1300 to 2100 hrs. normally 6 days a week. Confirmation to be made at 0900 hrs. for afternoon shift, and 1700 hrs. for next day morning.

MEDICAL: All hospital and medical facilities. Yellow fever inoculation made by appointed doctors. Masters to advise by radio prior arrival if medical attendance is required on board.

TANKERS: See "Berthing".

DENSITY: About 1028. Variable in Canal de Caronte and Etang de Berre owing to discharge of hydraulic plant of St. Chamas.

FRESH WATER: Available generally by pipes and hoses at the berths. Water barges available from Marseille.

FUEL: By barges for cargo ships and vessels in the Roads. Tankers at Lavera refuel by pipe-line at the berths. All grades available.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes every 5 days; wine/spirit: limited amount per man.

IDENTIFICATION CARDS: Seamen going ashore should carry passport or identity card.

FIRE PRECAUTIONS: Oil Harbour fitted with a system of 203 mm. (8 in.) or 254 mm. (10 in.) sea water pipes at 5 bars permanent pressure. It may be increased by pumping station up to 9 bars, and supply 500 cu.m./hr. Each wharf has 5 fire hydrants with first-aid equipment: fire hoses and spray nozzle, foam nozzle with powder cans. If fire breaks out on a ship, the hose handling gantries are protected by a screen of sprayed water. All fire equipment and installations are painted red.

There is a special fire-fighting Corps with fire vessel. Call for firemen 06.21.29 or in case of fire call Port de Bouc Control – phone 06.22.26 or 06.63.39 or VHF Channel 16.

GANGWAY/DECK WATCHMEN: Available but not essential.

OPENING/CLOSING HATCHES: Always by crew.

CONSULS: Norwegian, Swedish, Danish and Spanish consuls at Port de Bouc. Others at Marseille.

REPAIRS: Permission must be granted by Port de Bouc Harbour Master only.

DRY DOCKS: Nearest at Marseille.

REPATRIATION: All facilities for crew change and repatriation by railway or planes.

AIRPORT: Marignane Airport 40 km. and Nice Airport 230 km. (this last for SAS lines).

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Same as "Marseille".

POLICE/AMBULANCE/FIRE: Police, 06.23.74 or 07.03.31; Fire, 06.21.29 or 06.28.37.

TELEPHONE: On application can be connected on board at Lavera. Telephone ashore in other places.

SHORE LEAVE: Allowed.

SHIP SUPPLY SERVICES: *Auxiliaire Maritime:* Monsieur Seguin Technical Manager – Phone: (42) 06 09 89, 20 Cours Landrivon, 13110 Port de Bouc, France. Telex: 430 274. Regular and spot launches service. Fresh water delivery (with barge).

Port Service: Monsieur Erick Ganaye, Operations and Technical Manager, Place de Narvik, Port Petrolier, 13117 Lavera, France. Phone: (42) 81 62 30, Telex: 401 305. Shinc boat service, Interpreters, spot helicopter service, watching.

Societe Citerna: Anse Aubran 13110 Port de Bouc, France. Phone: (42) 06 09 90, Telex: 420 730. Bunkering (with no limits of tonnage).

Societe Ouvrages Sous-marins et Portuaires: Monsieur Boscolo – Director, Anse Aubran, 13110 Port de Bouc, France. Phone: (42) 06 22 44. Telex: 400 035, SHinc diving operations – wet docking. Speaking English, German and Spanish.

AUTHORITY: Port Autonome de Marseille, Capitainerie des Bassins Ouest, B.P.200, 13528 Port de Bouc Cedex. *Tel:* (42) 06.22.26. *Telex:* 410789 PORFOS. *Cables:* PORFOS. *Contact:* Harbour Master.

(c) **FOS:** 43.24 N. 04.53 E. **(See Plan Book)**

DOCUMENTS:

Inward Declaration (Presented by Pilot on boarding).

1 Cargo Manifest or Manifest in Ballast.

Bill of Lading.

Ship's Register (if required).

6 Crew Lists (8 if Spanish or U.S.S.R. ship or ship bound for these countries).

3 Passenger Lists.

Health Declaration.

Derat Certificate.

3 Bunker Supply Forms.

Declaration of crew personal effects, cameras, binoculars, radios, cigarettes, tobacco, etc.

If on inspection, articles or quantities not in conformity or in excess, Master held responsible, articles removed and heavy fines imposed.

PILOTAGE: Compulsory. Contact by Marseilles radio or direct to pilot boat by VHF Channel 16 for calling, Channel 9 for traffic. Pilot boards in the roads between 2 and 2.5 miles S.W. of Bouc Tower or farther out if required. Motor launch, black hull, white cabin, white anchor on bow, flying "H" flag.

Port de Bouc Port Control, call on Channel 16, Channel 12 for traffic. Pilot boat on Channel 16 for calling and Channel 14 for traffic.

ANCHORAGE: It is recommended to ask for Pilot before anchoring in outer roads to avoid prohibited anchorages.

RESTRICTIONS: When large tankers are proceeding in the Fos Channel, other vessels' entrance may be delayed.

Access channel for very large vessels dredged to 22 m. over a width of 250 m.

Notice: *Port Authorities Instructions Concerning Fos/Lavera Tanker Areas.*

Special Notice No. 94/81.

Re: Berthing of Tankers Loaded with Naphtha or Gasoline.

Taking into account the recurring risks encountered with tankers discharging naphtha, super gasoline, gasoline or condensate, until further notice, it has been decided that only one vessel at a time, carrying said cargo, will be allowed to discharge in above areas of Port Autonome de Marseille.

For the time being these restrictions do not apply to coasters.

Furthermore, vessels concerned, whatsoever the year of building, will only be allowed alongside providing that pump room is clean, gas free and that no product is leaking at ship's valves or pumps.

Should above conditions not be fulfilled vessels could not be accepted in above areas.

MAX. SIZE: Max. draft at Oil Jetty 22.25 m.; Solmer in Dock No. 1 – 18.6 m.; Mineral Quay in Dock No. 1 – 14.93 m. Dock No. 2 – 13.0 m.

HEALTH: Pratique given by Customs Officers who board on arrival. In case of suspected disease on board, notify Agent by radio before arrival. See also "Marseilles".

RADIO: Within 150 miles, traffic should be routed through Marseilles Radio, FFM, otherwise via St. Lys. FFL.

VHF: Channel 16 for calling. Channel 12 for traffic and Channel 14 for pilot.

RADAR: Port and approach radar station.

TUGS: Tugs normally join vessel in the entrance channel. Ship's lines are used.

GENERAL CARGO FACILITIES: *End of the Mole Between Docks 2 and 3:* 1 berth (No. 870). Serviceable length: 110 m. Max. draft: 6.50 m.

This berth permits sea-going barges to come alongside and is reserved for stern-loading Ro-Ro vessels.

Gloria Basin: On the East side of the basin: The Brule Tabac Quay for miscellaneous traffic.

3 berths (Nos. 871-873).

Berth 871: Serviceable length: 221 m. Max. draft: 11.50 m.

It is equipped with a floating ramp for ro/ro traffic.

Berth 872: Serviceable length: 222 m. Max. draft: 11.50 m.

Berth 873: Serviceable length: 222 m. Max. draft: 10.80 m.

It is equipped with a floating pontoon, permitting access for stern-loading ro/ro vessels.

Equipment: 1 quayside railway for direct transhipment; 1×40 tonne Caillard gantry crane; 2×15 tonne mobile cranes; 1×8 tonne mobile crane; a storage area of 170,000 sq.m.; a transit shed of 9,000 sq.m.

In addition to the above equipment, the Port Authority's 500/600 tonnes floating derrick "Protis" is available for use in the harbour areas of Marseilles, Port Saint Louis du Rhone and Fos.

On the West side of the basin: A deep-water quay, the Gloria, whose construction is scheduled before 1985, will be able to receive vessels of ever-increasing size which cannot be accommodated at the quays of Port Saint Louis du Rhone.

Berth 821: Solmer finished products dispatch quay.

South Dock: Length 360 m. Max. draft: 11.89 m. Equipped with 2 cranes of 50 tonnes at 26 m.

Berth 859: Private berth at the end of Dock 2, serving the installations of the Compagnie Francaise d'Entreprises Metalliques (CFEM).

Length: 120 m. Max. draft: 5.00 m.

BULK HANDLING FACILITIES: Fuel, solid minerals, ores: 3 public berths and 2 private berths.

Public Berths:

1982 FACILITIES:

3 berths Q1 (No. 851), Q2 (No. 852) and Q3 (No. 853) in Dock 1 , West Quay:

Total length of quay: 884 m. Usable length of quay: 850 m. Max. depth of water at quay side berth: 16 m.

Largest admissible ship: Deadweight capacity: 100,000 d.w.t. (approx.). Length: about 300 m. Max. draft: 49 ft. (14.93 m.).

Equipment: (Capacities for products of density = 1.3)

For discharge: 2×20 tons bucket gantry cranes (P1.P2) (2×700 t.p.h. peak output). 2×15 tons at 30 m. reach, bucket cranes (K1.K2) (2×600 t.p.h. (peak output). 2×70 cu.m. hoppers connected to cranes.

For loading: 1 continuous loading gantry C1 (Aluminium Pechiney) (1,500 t.p.h. peak output). 1 continuous loading gantry C2 for ships up to 50,000 d.w.t. (1,600 t.p.h. peak output). 1 assembly loader (tilting conveyor with feeder) for ships up to 25,000 d.w.t. (1,500 t.p.h. peak output). 1 loading berth for river barges (800 t.p.h. peak output).

Conveyors: 1 fixed reversible longitudinal conveyor belt L1 (2 speeds: 1,600 and 2,000 t.p.h. nominal). 1 fixed reversible transversal conveyor belt T1 (1,600 t.p.h. nominal). 1 train of 7 mobile conveyors (PMA) with stacker (1,600 t.p.h nominal). 1 fixed longitudinal conveyor belt LP supplying loading gantry C1. 1 fixed import transversal conveyor belt T2 (2 speeds: 1,600 and 3,400 t.p.h. nominal). 1 fixed reversible longitudinal conveyor belt L2 (2 speeds: 1,600 and 3,400 t.p.h. nominal). 1 reversible fixed longitudinal conveyor belt L3 (1,600 t.p.h. nominal). 1 second train of 7 mobile conveyors with stacker (CARFOS) (2 speeds: 1,600 and 2,000 t.p.h. nominal. 3 mobile conveyors of 36 m. (1,600 – 2,000 t.p.h. nominal).

Storage: Buffer stock: approx. 7 acres. Storage area: approx. 21 ha. Covered storage: 3,840 sq.m. shed. Whole storage capacity: approx. 900,000 cu.m. (excluding buffer stock. 25,000 tons aluminium silo (Aluminium Pechiney).

Commercial throughput subject to product specific gravity and grade, type of vessel, operating conditions.

Discharge: Three shifts daily (20 hours work) commercial rate for products from specific density 0.8 (coal) to 1.3 (bauxite, sulphur): Using 2×20 ton bucket gantry cranes: 12,000 to 16,000 t.p.day. Using 2×15 ton bucket cranes: 7,000 to 10,000 t.p.day.

Loading: Hourly commercial output for products of 0.8 to1.3 specific density: With the loading gantry C1: 600 to 1,000 t.p.h. With the loading gantry C2: 800 to 1,300 t.p.h. With combined use of assembly loader (inclinable conveyor) and feeder: 300 to 600 t.p.h. On the river barge berth: 600 t.p.h.

Annual terminal throughput capacity between 4.0 and 4.5 million tonnes per year consisting of:

3.0 to 3.5 million tonnes incoming cargo. 1.5 to 1.0 million tonnes outgoing cargo.

DEVELOPMENT IN 1983.

Maximum water depth on berth Q2: Deepened to 17.50 m.

Largest admissible vessel: Deadweight capacity: 140,000 d.w.t. (approx.). Draft: 55 ft. (16.76 m.).

Equipment: For discharge: 1 Five Cail Babcock continuous unloader (P+) for vessels up to 150,000 d.w.t. Peak output: 2,200 t.p.h. (coal). 2,700 t.p.h. (bauxite).

River barge loading berth. A new river barge loading berth with commercial output reaching (100 m. long North End): 750 t.p.h.

Conveyors. 1 fixed transversal export conveyor belt T3 supplying either conveyor belt L3 to loading gantry C2 or river barge berth.

Discharging commercial output. Three shifts daily (20 hrs. work) commercial rate on a 140,000 d.w.t. bulk carrier for product of specific density 0.8 (coal). Using: 1 continuous unloader (P+) plus 1 train of mobile conveyors: 22,000 t.p.day. Using 1 continuous unloader (P+) plus 2×15 ton bucket cranes (K1.K2) plus high capacity storage installation: 28,000 t.p.day.

Annual terminal throughput capacity. Between 5.0 and 6.0 million tonnes per year consisting of: 4.0 to 5.0 million tonnes incoming cargo. 2.0 to 1.0 million tonnes outgoing cargo.

Until the high capacity storage installation is put into service, this traffic capacity can only be reached by increasing the turnover rates of existing storage areas.

A further quay and equipment is planned to handle much larger vessels to be operational in 1986.

DRY BULK EQUIPMENT: P.M.A. equipment:

2×20 tonne bucket gantry cranes. 2 cranes of 15 tonnes at 30 m. 6 fixed conveyors. 10 public and 7 private mobile conveyors. 2 stackers on tyres. 3 feeders with a capacity of 1,500 t.p.h.; 1 of these is privately owned. 1 ship loader of 1,000 t.p.h. capacity. 1 continuous unloader with a capacity of 28,000 tonnes per day will be brought into service in 1983.

Private equipment: 2 discharging gantry cranes on the Solmer import quay. 2 cranes of 50 tonnes at 26 m. on the Solmer export quay. 1 loading gantry crane of 1,500 t.p.h. conceded to a private firm (Pechiney Co.) with the obligation to give public service on the ore quay.

Private Berths: Two private berths (Nos. 811 – 812) in Dock 1 – Eastern Quay. Ste. Solmer reception quay.

Available berthing length: 640 m. Permitted draft: 18.60 m.

Annual capacity of loading or discharge:

Solid minerals, fuels – Coal: 3,000,000 tons/year.

Ores: 4,000,000 tons/year.

The Societe Solmer Quay is equipped with 2×40 ton gantries, each having an hourly rate of discharge of 2,000 tons.

Storage Capacity: Fuel, solid minerals, Coal: 350,000 tons.

Ores: 1,000,000 tons.

Societe Solmer has a quayside open area of 360,000 sq.m. for the receipt and storage of coal and ores.

LNG FACILITIES:

At Dock No. 1. (Berth No. 830) (Owned by Gaz de France).

Length available for berthing 180 m. Max. draft 9.75 m.

2 storage tanks, for LNG in the liquid phase (−160° C.), each with a capacity of 35,000 cu. m. (1,235,500 cu. ft.) and 1×80,000 cu.m.

The pumps on the LNG Carrier discharge through articulated pipes of 300 mm. diameter (11.8 in.), 3 are specifically for discharge; one is to return the methane, in the vapour phase to the carrier.

After warming up from the liquid phase, with the addition of nitrogen to conform with the value in the French Gas Grid, the gas, in the vapour phase, is despatched by pipe-line to the underground storage at Tersanne, 214 km. from Fos (134 miles), and to Marseilles and the Cote d'Azur.

LPG FACILITIES: *Propane:* Geogaz's underground storage of 120,000 cu.m. at Lavera is connected directly by pipe-line to the oil refineries and the port

Butane: The construction of underground storage of GEOBUTANE at Lavera commenced in May 1982. Its original expected capacity of 170,000 cu.m. can now be raised to 230,000 cu.m. following a positive geological survey.

Reshipment Traffic: Over the past four years the port has established an international reputation for its technically delicate operations.

CHEMICAL PRODUCTS: One privately managed berth on the East quay of Dock 2, providing the facilities of the PCUK Company (Berth 858):

Serviceable length: 90 m.; Max. draft: 10.80 m.

This berth is reserved for the export of chemical products such as vinyl monomer chloride and washing soda.

CONTAINER HANDLING FACILITIES:

4 berths (Nos. 862–865) in Dock 2, Graveleau Quay.

Available berthing length: 910 m. Permitted draft: 13.00 m.

Annual loading or discharge capacity: 150,000 containers, i.e. 2,500,000 tonnes (approx.) (20 ft. and 40 ft.)

P.M.A. equipment: 5 Paceco quayside gantry cranes of 40 tonnes, capacity 20 – 25 containers p.h.

Private equipment for handling containers on ground surfaces:

2 transtainers (on tyres) capable of stradling 6 rows, 4 high, plus 1 service road and of lifting 40 tonnes; 15 front-lifters with 40 tonne lifting capacity; 6 fork-lift trucks with 12 tonne lifting capacity; 2 fork-lift trucks with 10 tonne lifting capacity; 10 fork-lift trucks with 3 tonnes lifting capacity; 32 park tractors with adjustable couplers; 77 skeleton trailers for containers.

Storage capacity: 15,000 containers i.e. 225,000 tonnes (approx.) (20 ft. and 40 ft.). Users have at their disposal a storage area with a total surface of 27 hectares.

Annual capacity of output or input: 150,000 containers (20 ft. and 40 ft.) i.e.: 2,000,000 tonnes (approx.) by lorries or railway. The French Railways Transcontainers terminal has 2 gantries on open areas with lifting capacity of 40 tonnes.

The terminal also has: A control centre of 2,000 sq.m.; 2 service areas of 200 m.×70 m.; a stuffing and unstuffing area of 3,200 sq.m. comprising 2 sheds of 25 m.×20 m. each.

TANKERS: Chicksan loading/discharge arms fitted at all berths. Ballast discharge ashore through pipe-line. Tank cleaning slop or oil residue not accepted through shore line, but can be disposed of by barge from Marseilles. Possibility of crude cleaning for vessels with inert gas system if cleaning does not exceed time of discharging operations.

Crude: 6 public berths, of which 2 are multi-purpose 0 and 0 Bis (Nos. 800 and 807).

Designation	*Berth No.*	*Berthing Length* (m.)	*Max. Draft* (m.)
0	800	250	12.80
0 Bis	807	250	12.80
1	801	370	20.58
2	802	350	18.90
3	803	420	22.25
4	804	420	14.00

Berths 0 and 0 Bis (800 and 807) are equipped to handle either export or import of refined products, or the loading of crude oil from a tanker moored at one of the berths 1, 2 or 3 (Nos. 801, 802, 803).

Berths 1, 2 and 3 (Nos. 801, 802, 803) are for receiving crude oil only. Berth 2 (No. 802) is specially equipped to tranship, by using special pipe-lines, crude oil from a vessel alongside at Berth 1 (No. 801) and No. 3 (No. 803).

Specialised lines, dependent upon the nature of the products, connect these berths to the oil depot of Fos, to the CRAU depot (Shell-C.F.R.-B.P.) to the Esso refinery and to the S.P.S.E. terminal, all located in Fos.

Storage Capacity:

S.P.S.E. Terminal	2,660,000 cu.m.
CRAU Depot	1,910,000 cu.m.
Esso Refinery	1,040,000 cu.m.
Total:	5,610,000 cu.m.

Berth 4 (No. 804): Located at Mole No. 2 of the oil terminal, offers in a primary stage a depth of water of 15 m. to be increased to 17 m. The berth is intended for berthing in ballast of vessels of 550,000 d.w.t. for washing out tanks prior to repair.

It also permits the reception of crude oil imports and the transhipment of crude from tankers moored at Berths 801, 802 and 803.

The maximum permissible draft is at present 14 m.

The berth is connected to the new deballasting station by a 20 in. diameter pipe-line. During the current first phase of development, this station treats only ballast of low oil content.

The berth can also be used for discharging crude from tankers with drafts up to 14.02 m., and is equipped with one 42 in. diameter discharge pipe and two 16 in. diameter discharge arms.

During the current first phase of development, this berth is not equipped with refueling pipes or boarding towers.

Refined Products: 4 berths of which 2 are multi-purpose – 0 and 0 Bis (Nos. 800 and 807).

Designation	*Berth No.*	*Berthing Length (m.)*	*Max. Draft (m.)*	*Remarks*
0	800	230	12.80	Public
0 Bis	807	200	12.80	Public
C.2	808	100	6.30	Public
Solmer	821A	100	5.50	Private

Independently of the receipt of crude oil, berths 0 and 0 Bis are equipped to handle either refined product import or export traffic, or the loading of crude oil from tankers berthed at berths 1, 2 and 3 (801, 802, 803).

Berth C.2 (No. 808) specialises in loading refined products on coastal vessels and the Solmer berth specialises in the receipt of fuel oil.

Storage Capacity:

Fos Oil Depot	522,000 cu.m.
Esso Refinery	1,023,000 cu.m.
Total:	1,545,000 cu.m.

BALLAST: *Deballasting Station:* This station is situated to the rear of the oil jetties; in the current phase of development it treats ballast of only low oil content.

Its main characteristics are as follows:

Primary separation: 4,000 cu.m/hr., with apparatus for removing sediment and the oil recovered.

Intermediate storage in a basin of 80,000 cu.m., 320 m. long by 108 m. wide by 3.50 m. deep.

Secondary separation capable of rejecting water containing less than 5 p.p.m. of crude oil and petroleum products (by infra-red measurement) with a throughput of 250 cu.m/hr.

Storage of oil-rich mixtures (slops) 4×360 cu.m.

Auxiliary installations (fire).

Storage of oil-rich mixtures, 4,520 cu.m. will shortly be in service.

FIRE PRECAUTIONS: A special fire fighting corp. operates at Fos. Tel: 062129 or Port De Bouc Control on VHF Channel 16 or Tel: 066339.

FRESH WATER: Available by pipe-line at all berths.

FUEL: Available by barge only.

MEDICAL: All hospital and medical facilities. Yellow fever inoculation made by appointed doctors. Masters to advise by radio, prior arrival, if medical attendance required on board.

REPAIRS: Ore berth can be used as a repairs berth when not required for cargo operations. Permission must be obtained for tanker repairs. No tankers repairs if vessel is not gas free. Permission given by Harbour Master only.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes every 5 days. Wine/Spirits: limited amount allowed per man.

CONSULS: Norwegian, Swedish, Danish and Spanish Consuls at Port de Bouc. Others at Marseilles.

AIRPORT: Marseilles/Marignane Airport about 60 km. distance.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

TELEPHONES: On application, telephones can be connected on board.

AUTHORITY: Port Autonome De Marseille, Capitainerie Des Bassins Ouest, B.P. 200, 13528 Port De Bouc Cedex. *Tel:* (42) 062226. *Telex:* 410789 Porfos. *Cables:* Porfos. *Contact:* Harbour Master.

NANTES: 47.14 N. 01.34 W.
ST. NAZAIRE: 47.17 N. 02.12 W. inc. DONGES: 47.18 N. 02.04 W. and MONTOIR: 47.18 N. 02.08 W.

(See Plan Book)

DOCUMENTS:

Cargo Manifest or Manifest of Ballast.
Certificate of Cargo Space.
Bills of Lading.
Ship's Register.
6 Crew Lists.
3 Passenger Lists.
Health Declaration.
Derat Certificate or Exemption.
Declaration of Crew Personal Effects.

PILOTAGE: Compulsory for vessels longer than 225 ft. owning radar/-VHF. Starts about 4 miles North of lighthouse of Le Pilier, on lightbuoy "SN 3". Pilot boat on station day and night, if weather conditions permit, West of a line drawn between "SN 3" lightbuoy and lightbuoy of "La Couronnee" about 2 miles N.N.E. If Pilot unable to come aboard he may invite ship to follow his boat until they have reached better shelter. Ships heading for one of the Loire estuary ports should give ETA at least 24 hours before arrival to Port Captain of Saint-Nazaire. Approximate time of arrival at "SN 3" buoy, the onward destination and speed should be given. VHF contact can be made direct with St. Nazaire pilot boat or "Estuaire de la Loire" pilot station.

ANCHORAGE: When Pilot service withdrawn, anchor near "SN 3" lightbuoy or in "Rade des Charpentiers". In rough sea ships heave to off harbour. In case of doubt contact pilot boat by VHF or phone. Sometimes Pilot taken aboard on "SN 3" is relieved by another who will board near the outer port of Saint-Nazaire or bring ship upstream. Vessels are not allowed to anchor before Quay Emile Cormerais and Chevire Power Station Embankment (cables).

MAX. SIZE:

St. Nazaire: South Entrance Lock: Max. LOA 200 m. Max. draft 9.30 m. Max. beam 28 m.

Montoir: Length 270 m., max. draft 17 m., minimum 15.50 m.

Donges: Length 350 m., max. draft 17 m., minimum 15.50 m.

Nantes: Length up to 225 m., max. draft 10.05 m., minimum 8.55 m.

HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive Free Pratique Master should radio Agent before arrival, advising full details.

RADIO: St. Nazaire Radio operates on 1687 MHz. It keeps a continuous watch on VHF Channel 16 and 2182 kHz.

VHF: VHF Radiotelephone must be used for giving information and obtaining clearance to navigate from the Harbour Master.

The following Channels and frequencies are used:

Channel 16	Frequency: 156.8 MHz
Channel 12	Frequency: 156.6 MHz
Channel 6	Frequency: 156.3 MHz

The Pilots can be contacted on VHF Channels 16 and 12.

A continuous watch is maintained on Channel 16.

RADAR: The radar service can be contacted on VHF Channel 16.

TUGS: *Nantes:* 4 "Abeille" tugs 500 to 550 h.p.

Donges – Montoir – St. Nazaire: 7 tugs 1,250 to 3,200 h.p. They are provided by "Union des Remorqueurs de l'Ocean".

BERTHING:

St. Nazaire: Is a port with locks. Max. draft: 31 ft. (vessels up to 20 – 25,000 d.w.t. in the best conditions of tides).

Dock Water density: 1003 to 1025.

Length of quay: 2,700 m.

Number of berths: 15.

Numerous cranes up to 12 tons and a 400 ton derrick.

Traffic: Timber, heavy loads, metallurgical products, refined products, fertilizers, grain (capacity of the grain silo: 10,000 tons. Loading rate 400 t.p.h.), oil seeds, phosphates, wine. Tanker berth – Deballasting station. Ro-Ro operations can be carried out.

Montoir: Port Authority use own steel cables to supplement ship's ropes.

Dock water density: 1000 to 1020.

Specialized facilities:

Ro-Ro berth – Max. LOA 130 m. Warehousing and 36,960 sq.m. of back up land.

LNG: 2 privately managed berths can receive gas-carriers up to 125,000 cu.m. Also see "Shipmasters Report" dated "June 1980".

Dry bulk: Length of quay 630 m., cranage 2×15 tons, 5×15/30 tons average throughput per crane 500 t.p.h. Storage facilities.

Traffic: Oil seeds, oil cakes, timber, coal.

Liquid chemicals: Connections for acids and liquids, molasses average throughput: 600 t.p.h.

Container Terminal: Length of quay: 160 m., max. draft 12.0 m. Storage facilities, 2×25 ton cranes. Ro/Ro vessels with side ramps also berth. 24 power points for refrigerated containers.

Coal: A coal berth is operational to receive ore carriers up to 140,000 d.w.t., rate 2,500 t.p.h.

Donges: Mooring of vessels to the docks No. 0, 1, 2, 3 is performed with ship's ropes. On docks No. 4, 5 and 6, Port Authority use own steel cables to which ship is secured to supplement her own ropes.

Berths Nos. 5 and 6: To reduce the time of mooring a special mooring gang can be put at Master's disposal for arrival and departure. Arrangements must be made 48 hours in advance of this service. Permanent watch on VHF Channel 16 is recommended.

Tanker berths: Can receive fully loaded tankers of 120,000 – 140,000 d.w.t. or the 280,000 d.w.t. lightened. Number of berths 6.

4 berths are designed for handling refined products and LPG. Throughput: 1,500 to 5,000 cu.m./hr.

2 berths are designed for discharging crude oil. Throughput: 10,000 cu.m./hr.

Crude connections: No. 5 berth 4×12 in. Chicksan arms, 12 holes type 150 lbs. No. 6 berth 5×12 in. Chicksan arms. 12 holes type 150 lbs. Reducers available, notice required prior to arrival.

Bunkering lines: No. 5 berth 8 in. Chicksan arm with 6 in. connection. No. 6 berth, 6 in., 8 in., or 12 in.

Paimboeuf: On the South Bank opposite Donges. One berth length 183 m., max. draft at LW. 4.5 m. Berth can accommodate 2 small vessels of 80 m. length or 1 vessel of 120 m. length. The berth is used as a waiting berth for oil barges and small vessels.

Nantes: Vessels may be moored with bow facing up or downstream. During heavy flood periods, however, bow to face upstream.

Dock water density: 1000.

Quai Chevire: Traffic: Timber and containers. 3 berths. Cranes up to 25 tons. Two 15 to 25 ton cranes are able to operate together, providing a 25 ton to 45 ton lifting capacity. Spreader available for handling 20 ft. containers (about 20 containers per hour). Storage facilities.

Quai Wilson: Length 1,472 m., 13 berths. Traffic: Heavy loads and containers in the Eastern part.

Phosphates, coal, pyrites, sulphur, salt, sugar, fruits and vegetables. Storage facilities. Numerous cranes up to 60 tons capacity.

Quai Roche-Maurice: 6 berths. Cranes up to 6 tons capacity. Discharging: phosphates, grains (loading rate 700 t.p.h.), molasses, fertilizers. Storage capacity of the grain silo: 80,000 tons.

Additional facilities for discharging oil and coaltar, chemical products, wine and various cargoes, length of quays: 1,500 m.

CRANES: 60 ton heavy lift crane at Nantes. 400 ton derrick at St. Nazaire.

BRIDGES: Vessels coming up the river to Montoir, Donges and upstream pass underneath the St. Nazaire bridge: Clearance 61 m.

STEVEDORES: Available.

MEDICAL: Facilities available at any time.

TANKERS: See "Berthing".

Degassing and deballasting operations possible at St. Nazaire, capacity 1,700 cu.m./hr.

FRESH WATER: Available at docks.

FUEL: Available in any grade or viscosity. Advance notice of at least 2 days must be given if vessel has to bunker on Saturday or Sunday. Otherwise, delivery within 36 hours by barge.

FIRE PRECAUTIONS: Usual precautions for tankers in neighbourhood of refineries. No fire, no smoking, Ground wire for ship.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Done by crew.

IDENTIFICATION CARDS: Not needed.

CONSULS:

Algeria	74.38.19	Netherlands	47.16.31
Belgium	71.57.10	Norway	71.33.35
Brazil	47.72.21 22.41.46	Portugal Spain	73.05.04 48.67.95
Denmark	71.89.13	Sweden	(46) 34.00.67
Finland	75.53.08	Switzerland	71.67.66
German (Fed. Rep.)	73.29.46	Tunisia	71.10.52
Greece	73.46.13	Great Britain	71.08.50

REPAIRS/DRYDOCKS: Very good facilities exist for all types of repair work.

St. Nazaire: "L. Joubert" graving dock, length 350 m., width 50 m. Dock can accommodate ships up to 240,000 d.w.t.

Repair pier: Dredged bed size: 720 m× 60 m; depth 8 m. Can accommodate ships up to 250,000 d.w.t. Waiting Station. Deballasting station.

Dry docks: No. 1 Ships up to 40,000 d.w.t. No. 2 Ships up to 1,500 d.w.t. No. 3 Ships up to 6,000 d.w.t.

Nantes: One 4,500 ton floating dock accommodating ships up to 130 m. long. One careening unit of 1,700 ton accommodating ships up to 100 m. long.

CUSTOMS ALLOWANCES: Tobacco: 300 cigarettes or 75 cigars. Wine; 7 pints. Spirits: up to 22° – 5.3 pints, beyond 22° – 2.7 pints. Coffee: 26 ozs. Tea: 5 ozs.

AIRPORT: *Nantes:* Good connections with French internal network (Air Inter) and also international, mainly with stop-over Paris. 5 daily flights to the capital. Direct flights to Bordeaux, Lorient, La Rochelle, Lyon, etc.

St. Nazaire: 2 daily flights to Paris.

TIME: GMT plus 1 hour, seasonal alteration.

HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May, no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); All Saints' Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available). N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.

POLICE/FIRE/AMBULANCE: Police 17; Fire 18; Ambulance 18.

TELEPHONE: Arrangements are possible.

SHORE LEAVE: No restrictions.

SHIPMASTER'S REPORT: June 1980.

Montoir: (Discharging ammonia) – See Plan Book.

Approaches: BA. 3216, 2989 and 2647, outer coverage not very good. Arrived in good visibility so shore lights gave good positions. Ile de Yeu does not show up very well on the radar until only about 16 miles off. The light on Ile de Yeu is listed on different charts as having different characteristics and in fact agreed with that in the Light List. The mainland showed up for some considerable distance but no worthwhile details were identified until well up to "SN1" buoy.

The light on "SN2" was seen about the same time as "SN1" and is much brighter. Both buoys were seen on radar at ten miles. As there are many fishing vessels, identification of these buoys in poor visibility would require a great deal of care.

Once in the "tanker channel" proceed to the pilot station as indicated on the chart.

NOTE: Remember the standard message to "Surnav France" for a tanker carrying hydrocarbons.

Pilotage: Contact made on Channel 16, working Channel 12. Good communications.

Pilot cutter is a large vessel which will come close alongside and send away a small boat. Pilot ladder virtually to the water.

The cutter surprised us by steaming towards us at full speed and we eventually met some 3 miles West of the boarding area.

Vessel may only berth (and unberth) at slack water at Montoir. Being loaded means having to arrive at the top of the tide, although if in ballast one may sail at low slack water. Should any supertankers be moving at that time, presumably having booked their tide first, vessel will not be allowed to sail. The Pilot could not confirm whether incoming ships had priority.

NOTE: Unberthing tugs and Pilot to be booked by 1800 hrs. for the following morning. Cost if unable to meet that particular slack water after ordering, in excess of £1,000 (Sterling).

Three tugs used for berthing and unberthing; tugs lines, 1 forward, 1 aft and 1 pushing amidships. Backsprings sent away first.

When unberthing vessel moves upstream to turn.

Mooring boat to handle ropes.

NOTE: There were a lot of buoys which are not marked on the chart due, no doubt, to extensive dredging operations and spoil ground dumping.

Length of pilotage to first line ashore 1 hour 30 minutes.

Berth: Consists of a small "T" jetty with a line of dolphins standing proud of it by 1.5 m. These extend from just forward of the accommodation to No. 1 tank dome, 150 m. approx.

Mooring arrangements were adequate and the linesmen were reasonably adept.

Shore gangway must be used.

It is necessary to rig the low extension to the liquid manifold as the shore chicksan has insufficient upreach. Invariably berthing port side alongside.

Storing: Prior to this call the berth operators allowed vessels to take on provisions and foodstuffs but port regulations forbid the loading of machinery items or heavy lifts during discharge.

The derrick only plumbs the after corner of the "T" jetty and all items have to be manhandled from the gate to the derrick hook.

If any items of machinery are to be landed or loaded, it is necessary to do this either before discharge or after completion; the port authorities insist on the chicksan being disconnected, merely stopping discharge is not sufficient.

Similarly they will not allow a fork lift truck to operate on the berth during pumping operations.

Lube oils were taken at this call and we were able to continue this during discharge, simply because the lines were connected before the chicksan and the lorry was still parked outside the jetty access.

However, after discharge, protest was made against the very low discharge rate and frequent stoppages; the berth operators were most upset by this and have sworn that NO STORING will be allowed there in future. This situation will obviously have to be checked very thoroughly in the event of having a large storing/lube oil programme. Barges are not allowed alongside during discharge.

Discharge: As already noted the low load/discharge line must be rigged on the port side prior to arrival.

There is no vapour return line. Ship supplied 10 in. reducer.

Storage capacity ashore is about 25,000 tonnes.

On arrival there was only a reported 2,000 tonnes in the shore tanks and they were therefore warm with consequent problems for the initial discharge. Apparently these tanks are loaded from the top, the liquid being allowed to free fall to the bottom. In the first 24 hours the discharge rate was little more than 80 t.p.h. and there was a total of 5 hours 29 minutes stoppages at shore request. We could not discover whether this was usual or if it was due to some uncommon machinery defect.

On boarding, the receivers quoted a maximum rate of no more than 400 t.p.h. and probably no more than 300 t.p.h. In fact, once the shore problems were resolved we rapidly increased to 550 t.p.h. and then up to 800 t.p.h. at times. At all times ship discharged to shore requirements, shore personnel at the chicksan communicating with the officer of the watch, but only by coming on board. No telephone contact, no walkie-talkie.

A telephone was put on board by the Agents.

Port Regulations require ship to maintain continuous VHF watch on Channel 16.

Receivers originally requested vessel to blow through lines on completion but this was not required.

Overall discharge rate 365 t.p.h.

Surveyor: Redwoods, figures taken on gauging of ship's tanks.

General: Fresh water available from quay, not costly.

Bunkers must come by barge, usual restrictions.

No film exchange possible unless with another vessel. If the depots at out ports have sufficient it may be possible to carry out an exchange if ample warning is given.

Chandler was quite good but closes over the weekend, plenty of warning should be given for unusual items.

Access to St. Nazaire by taxi, about 50 francs.

Papers: 2 Crew Declaration. 2 Stores and Bonded Stores Lists. Port Health Form; their own form, spares supplied. 1 Passenger Declaration, made up on board.

Applied for radio pratique but this was not granted prior to arrival.

Agents: Very good, very helpful with good representation on board. Local office in Donges, main office at Nantes.

Ballast: The river water is very dirty indeed, flood only being marginally less so than the ebb. High injection points only should be used.

If at all possible ballasting should only be carried out from about half flood to just beyond HW to minimise the amount of deposits within the ballast tanks. Even then an immediate programme of flushing tanks should be put into effect on clearing the river.

Density varied between 1025 and 1010.

AUTHORITY: Port Autonome de Nantes – St. Nazaire, 2 Place de L'Edit de Nantes, B.P. 1053, 44037 Nantes-Cedex. *Tel:* (40) 89.19.94. *Telex:* Poronom 700425 F. *Contact:* Harbour Master – Upstream: 18 quay Ernest Renaud, 44000 Nantes. *Tel:* 71.70.70. Downstream: 3 bis, boulevard de Verdun, 44600 Saint-Nazaire. *Tel:* 22.35.22.

AGENT: Jolasry (France), 44 Boulevard Paul-Leferme, Saint Nazaire. Telex: 71931. Tel.70-01-18.

NICE: 43.42 N. 07.17 E. (See Plan Book)

PORT LIMITS: The Port is situated in the N.E. part of the Baie des Anges (Bay of Angels) between the castle hill and the Boron Mount which form at the Nice Cape a rocky promontory towards the South.

DOCUMENTS: The Master of a vessel, when he arrives, is required to fill out an entry declaration, a copy of which is handed to him by his Agent or by the Port Captaincy.

A Crew List and a List of Passengers intended for the Port Commissariat must be drawn up before arrival at the port.

All documents required by marine regulations, i.e. health declaration, manifest, vessel's safety plan etc., . . . are required by the port services.

PILOTAGE: The pilot station operates 24 hours a day and is attended by 3 licensed Pilots. Pilotage is obligatory for vessels of LOA 50 m. and over. Pilotage is exempt for vessels of less than 50 m., and if they are equipped with VHF, vessels of less than 70 m. The licence of Pilot is valid for vessels of a length equal to or greater than 120 m. equipped with a bow thruster and VHF. Specialised vessels carrying liquid oil, gas, and toxic products are subject to pilotage.

The pilotage area of Nice-Villefranche extends as far as 3 miles from the coast between the meridians of the left bank of the Var (07° 12′ E.) and of Cap Ferrat (07° 20′ E.). Vessels must, if possible, give warning of their arrival 24 hours in advance, particularly if they intend arriving during night-time hours.

Pilots may be called up by regulation signals during the day and night or by radiotelephone to Grasse Radio or Monaco Radio both stations on VHF Channel, telephone Nice Station (85 52 41) or to the Port Captaincy (Tel. 89 50 85).

ANCHORAGE: The coast being very rocky, does not allow anchorage close to the port. The Villefranche Roads, on the other hand, offers a sheltered zone, giving very good anchorage facilities. In the Villefranche Roads, 2 buoys can be used with the permission of the Nice Captaincy, by vessels merely calling at the port or waiting for a place on the quay at the Port of Nice. There is access for vessels of all dimensions.

RESTRICTIONS: The transport and handling of dangerous or infected materials, within the limits of the Nice Port, are subjected to the requirements of decree of the 1st February 1951 which controls the transport and handling of dangerous materials in maritime ports. There is no operation in this respect at night.

All operations, prescriptions, order and stipulations as laid down in the general regulations and the local regulation covering "Port Services" are governed by the Port Commandant.

MAX. SIZE: The commercial port is accessible to vessels of 137 m. in length and 6.50 m. draft.

HEALTH: Health control at the frontiers is subject to the measures prescribed by the international health conventions; the functions of health police and health guard are entrusted to an Agent in the service of Customs and Excise. Urgent medical help can be obtained through the intermediary of the radio stations of Monaco and Grasse who establish contact directly with the department concerned.

VHF: From 15th June-17th October a Port officer is on duty 24 hours a day and listens on Channel 16.

From 17th October-15th June a Port Officer is in attendance from 0500 hrs. until the last movement. In case of urgency at night the Port Commandant can be contacted by telephone.

There are 2 Channels, i.e. 9 and 12 for communication purposes. No communication of a private nature may be handled.

RADIO: None.

RADAR: None.

TUGS: None.

BERTHING: Length of usable quays 1,600 m. having a depth of 5.0 m. – 7.50 m. and 10 berths available.

CRANES: Quai Infernet: 2×5 tons cranes on rails (scoop and hook).

Ribotti: 1 crane on rails of 3 tons capacity (hook).

Commerce: (Commercial Quay) 2 cranes on rails of 6 tons capacity (scoop and hook).

Commerce: (Commercial Quay) 2 hoppers of 50 cu.m. capacity – on rails. 2 Nellen cranes on tyred wheels, capacity 4.2 tons at the end of the jib and 8 tons at 6 m. (with tackle block).

CARGO HANDLING FACILITIES:

Material Handling Equipment: All the handling equipment is supplied by the stevedores. 1 forklift of 4 tons capacity and 11 forklifts between 4 and 8 tons capacity.

Storage Facilities: 45,000 sq. m. of open air areas. Specialised equipment for the discharge of bulk equipment (pyrite, clinker, mineral etc.)

1 specialised berth equipped with a vat-type storage system, for bulk liquids (oil or wine).

Unloading or loading capacity – cement 1,400 tons per day; various: 400 tons to 700 tons per day and per gang; ores in bulk: 1,200 tons per day with 2 hoppers, 2 cranes and 2 gangs. Bulk liquids 20 tons per day.

Facilities for Specialised Goods: 2 adjustable platforms for Ro–Ro traffic. Height of quays 1.23 m. and 3.06 m.

BRIDGES: None.

STEVEDORES: 87 professional dockers; 10 occasional dockers.

Employer – Bureau Central de la Main d'Oeuvre (B.C.M.O.) of the Port of Nice.

MEDICAL: Hospitals are situated in the town and give excellent treatment in the case of accidents or illnesses of any nature whatsoever.

Passengers coming from foreign countries are required to abide by the prescriptions of international agreements (vaccination certificates, health certificates, etc.).

TANKERS: No specialised installations. Only vessels carrying black products are accepted where the load does not exceed 2,000 tons. They may come alongside one of two quays specially designated for this purpose.

DENSITY: *Salinity:* Varies between 34 gm. and 38 gm. per litre.

FRESH WATER: It is possible to take on fresh water at all quays by connection to the main supply. Average rate of supply 15 t.p.h. – price 3.57 Fr. per ton.

FUEL: All types available.

FIRE PRECAUTIONS: The town provides fire fighting facilities. The fire station is close to the Port.

CONSULS: Algeria, Germany (Federal), Austria, Belgium, Brazil, Colombia, Ivory Coast, Republic of Benin, Denmark, Dominican Republic, Spain, U.S.A., Finland, Gabon, Greece, Ireland, Iceland, Italy, Liberia, Luxembourg, Mauritania, Monaco, Niger, Norway, The Netherlands, Peru, Philippines, St. Marino, Sweden, Switzerland, Tunisia.

REPAIRS: All possible deck and engine repairs can be carried out. There is no dry dock. Hull careening is carried out by underwater procedure.

SURVEYORS: Lloyd's of London, The Coasting Mediterranean Company, The Venturer Company, Weir (S.A.), Societe Azureenne de transports et d'affretements Maritimes, Societe Nationale Maritime Corse, Mediterranee, Pittaluga & Co., Martini & Co., Cie Charles le Borgne, Cie Fabre, Cie Fraissinet, Cie Messageries Maritimes, Nautilus Line, Barry Rogliano et Cie.

HATCHES: Hatches are opened and closed by crew.

CUSTOMS ALLOWANCES: 30 cigarettes per person per day; 1 litre of aperitif per 6 persons per day.

REPATRIATION: Airport and railway network in the town.

AIRPORT: International Airport 4 km. from the Port. Principal countries are served by international airlines.

TIME: GMT plus 1 hour (Winter). Summertime kept from April to October.

HOLIDAYS: These are staggered as far as dockers are concerned so that there is continuity of operation.

POLICE/AMBULANCE/FIRE: Police tel. 55 91 22 and 17; Ambulance tel. 89 70 70 and 18; Fire Brigade tel. 89 80 80 and 18.

TELEPHONES: Telephones can be installed on board at Papacino Quay, Entrecasteaux Quay, Quai du Commerce, Quai de la Traverse, and Quai Ribotti.

SHORE LEAVE: Crew members may disembark after checking with Police.

IDENTIFICATION CARDS: For foreign seamen a permit to come ashore is issued by the Port Police.

GENERAL: There is a bus and taxi service very close to the port also there are coastal trading entities within the Port precincts.

AUTHORITY: Departement des Alpes-Maritimes, Direction de l'Equipement, Subdivision Maritime, 2 Quai d'Entrecasteaux, B.P 3, 06 Port de Nice. *Tel:* 89.44.90. *Contact:* E. Bovis, L'Ingenieur des T.P.E., Chef de la Subdivision MAR. I.

PARIS: 48.51 N. 02.30 E. (See Plan Book)

PORT LIMITS: Within 1 km. of loading or discharging berth or, if occupied by another vessel, where the Pilot will place the vessel in agreement with the consignees.

DOCUMENTS: As Rouen is considered as the frontier port for vessels entering or leaving the Seine above this port (estuary to Rouen is known as "Seine Maritime", Rouen to Paris and beyond as "Seine Fluviale"), documents relating to vessel, crew, passengers, cargo, health, etc., are exactly the same as for Rouen and must be presented to the Agent on arrival in this port. If the vessel has never traded to ports inland from Rouen, technical inspection may be carried out in Rouen on first voyage.

PILOTAGE: As for Rouen, except that in spite of Rouen Agents being notified by Le Havre pilot station of vessels' time of entry into Seine and ETA Rouen, also in most cases of the final destination of vessel, Masters should notify by radiotelephone Rouen Agents before entry into Seine of the final destination so that "Seine Fluviale" Pilots are waiting to take the vessel from Rouen to inland destination.

ANCHORAGE: See "Rouen".

RESTRICTIONS: Above Rouen, night navigation possible on request to Rouen Agents.

MAX. SIZE: 120 m. length, 15.5 m. beam, 3.5 m. draft up to Paris; beam reduced to 11.4 m. and draft to 3.0 m. on River Oise and River Marne up to Bonneuil or even 2.8 m. on River Seine beyond Paris; airdraft is limited at 8.75 m. up to Seine and Oise Junction, at 7.7 m. up to Gennevilliers, at 6.0 m. beyond Paris, on River Oise and River Marne up to Bonneuil and at 5.5 m. on the upper section of River Seine (Montereau facilities).

HEALTH: See "Rouen".

RADIO/VHF: Vessels arriving in Seine Estuary are automatically notified to Rouen Agents. Any special messages to inland Agents or Receivers should be made by radiotelephone direct or via Rouen Agents, or by VHF to Rouen Agents when in "Seine Maritime". Pilot can always help Masters to send these messages via pilot stations. In the "Seine Fluviale" all locks have VHF and telephone by which messages can be relayed in case of accident, breakdown or delays. Pilot notifies inland Agents by telephone of such incidents.

RADAR: There is no radar service in the "Seine Fluviale". Bridge piles are equipped with radar reflectors.

TUGS: No offical tug service on "Seine Fluviale", but in case of breakdown, local tugs may be hired.

BERTHING: Many public or private facilities may be reached; main public ones are:

Quay	*Quay Length* (m.)	*Draft* (m.)	*Shed Capacity* (sq.m.)	*Remarks*
Bonneuil	3,500	3.0	21,000	Container terminal with 40 ton mobile crane.
Gennevilliers	8,000	3.5	84,000	Container terminal with 35 ton gantry and 12 ton trailers which can handle all containers from ship, barge, lorry or rail truck; ro-ro and heavy lift facilities.
Conflans-Ste Honorine	1,400	3.5	—	
Limay	1,600	3.5	17,000	3×20 ton travelling cranes.
Saint-Ouen l'Aumône	200	3.0	—	
Bruyères-sur-Oise	600	3.0	—	

CRANES: All types of cranes available from leasing or handling firms.

BULK CARGO FACILITIES: 3×1,000 t.p.h. bucket wheels for coal unloading at Vitry-sur-Seine, Champagne-sur-Oise and Porcheville power stations.

SPECIALISED CARGO HANDLING FACILITIES: Containers handled at Gennevilliers and Bonneuil-sur-Marne; Ro-Ro facilities at Gennevilliers (cars) and Evry (heavy loads); reinforced quay for heavy loads at Gennevilliers.

BRIDGES: See "Max. Size".

STEVEDORES: Available.

MEDICAL: See "Rouen".

DENSITY: River fresh water beyond the first lock.

FRESH WATER: Available at most quays.

FUEL: One barge delivers fuel and water.

CONSULS: Nearly all countries represented in Paris.

REPAIRS: *Main Yards:*

Chantiers navals d'Achères, La Croix d'Achères 78260 Achères. Tel: (3) 911.02.27. Telex: 697703 Cnacher.

Société Française de Construction Navale, 66 quai Alfred Sisley, 92390 Villeneuve-la-Garenne. Tel: (1) 794.64.46. Telex: Fracona 610998.

Chantiers Navals de la Haute-Seine, rue des Voeux Saint-Georges, 94290 Villeneuve-le-Roi. Tel: (1) 597.31.60. Telex: 691674 Auseine.

DRY DOCKS: Slips in the yards above.

SURVEYORS: Bureau Veritas, Lloyd's, American Bureau of Shipping and Norske Veritas have surveyors in Rouen or Paris.

GANGWAY/DECK WATCHMEN: Not normally considered necessary.

HATCHES: Normally opened by crew.

CUSTOMS ALLOWANCES: Same allocation per man per day as Rouen with allowance made for inland voyage.

AIRPORT: Paris "Charles de Gaulle" and "Orly".

TIME: GMT plus 1 hour (Winter), GMT plus 2 hours (Summer).

HOLIDAYS: See "Rouen".

TELEPHONES: Not available, but telephone always within short distance of quays.

SERVICES: Compass adjusting may be arranged by Rouen on outward trip.

SHORE LEAVE: Seamen's book sufficient.

AUTHORITY: Port Autonome de Paris, 2 quai de Grenelle, 75732 Paris Cedex 15. *Tel:* (1) 578.61.92. *Telex:* 204487 Poronom, Paris. *Contact:* Bruno Grange, General Manager. Rémi Loth, Head of Public Relations.

AGENT: Jolasry (France) S.A., 26, Avenue de l'Opera, 75001 Paris, France. Tel: (1) 296 14-15. Telex: Lasry 210905, Cables: "Jolasry Paris".

PORT-VENDRES: 42.31 N. 03.07 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
5 Passenger Lists.
2 Store Lists.
1 Maritime Health Declaration.
4 Cargo Manifests.
2 Bills of Lading.

Ship's Papers: Nationality Act, International Tonnage Certificate.

PILOTAGE: Three long blasts. ETA required for Agent, Pilot usually taken on outside unless in very bad weather. Call Pilot on Channel 16, 30 minutes before arrival.

MAX. SIZE: Max. length 150 m. max. draft 25-26 ft.

HEALTH: Usually Customs give free pratique. In event of suspected disease or fever on board must advise naval doctor.

RADIO: Marseille Radio (or St. Lys Radio) or Perpignan Radio.

TUGS: None available.

CRANES: 1 shore crane available only of 55 tons.

SPECIALISED CARGO-HANDLING FACILITIES: 2 Roll-on/Roll-off berths, 1 refrigerated warehouse 11,000 cu.m., and 1 warehouse of 1,200 sq.m. with temperatures regulated at 10° centigrade.

STEVEDORES: ETA to be given to Agent in order to arrange gangs (usual rate per day. 8 normal working hours). 200 tonnes per gang.

MEDICAL: Perpignan Hospital (30 km. away).

TANKERS: Berth for wine tankers with pipe-line.

DENSITY: Salt water.

FRESH WATER: Supplied by Chambre de Commerce, Port-Vendres.

FUEL: For small craft only, otherwise delivery by trucks.

DRY DOCK: 1 travelift for craft up to 150 tons.

SURVEYORS: Available from Sete or Marseilles.

OPENING/CLOSING HATCHES: Normally to be carried out by crew (or as per charter party if any).

CARGO GEAR: Load/discharge effected by ship's gear.

GANGWAY/DECK WATCHMEN: Recommended if loading dangerous cargo.

CERTIFICATES: Load Line Certificate.
International Tonnage Certificate.
Derat Certificate.

CUSTOMS ALLOWANCES: See "Calais".

IDENTIFICATION CARDS: Only seamans book required.

REPAIRS: Minor repairs only.

AIRPORT: Perpignan Rivesaltes (30 km.)

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: As for whole France – cargo work can be arranged on those days as overtime.

POLICE/AMBULANCE/FIRE: Tel. 82.00.60 or five long blasts. Officier du Port: 82.12.00.

EMERGENCY CO-ORDINATION CENTRE: Crossmed Toulon.

SERVICES: Workshop for small repairs, radio/radar repairs available, ship chandler for bonded stores, laundry.

STORING: Vessels can be stored by truck only, which are able to proceed alongside the berth. Fork lift trucks available. Customs Regulations in force.

SHORE LEAVE: Crew members are allowed ashore.

AUTHORITY: Service Maritime-Capitainerie du Port, 66660 Port – Vendres. *Tel:* 82.12.00.

AGENT: See "Paris".

PROPRIANO: Corsica, 41.40 N. 08.54 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
1 Provisions List.
1 Cargo List.
1 List of Articles (new and Customs-barred) in possession each crew member – cameras, binoculars, radios, cigarettes, spirits, etc.
1 Health Declaration.

PILOTAGE: Not compulsory.

ANCHORAGE: Outside port for cruise vessels.

MAX. SIZE: Draft 5 m.; length 160 m.

RADIO: Within 50 miles call Ajaccio Radio VHF Channel 16. Then connected over Channel 23 to telephone network.

TUGS: None available.

BERTHING: 3 basins, depths 4.0 m., 6.0 m. and 3.7 m. New Marina with 370 berths. Facilities include fresh water, electricity, telephone. Crane (12 tonne) available for lifting pleasure craft. Engine repairs also possible.

STEVEDORES: 24 hours accurate ETA necessary for ordering gangs. No work on Sundays and official holidays.

CARGO GEAR: Only a few nets and slings available; all other gear must be supplied by ship. Ship's derricks used.

FRESH WATER: Available at very slow pumping rate.

FUEL: Available. Tel: (95) 76-12-37.

REPAIRS/CONSULS: None.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

AIRPORT: Propriano Tavaria 6 km. Direct flights to Marseilles, Nice and Lyons in Summer. Daily connections Airport Campo del Oro/Ajaccio.

POLICE/AMBULANCE/FIRE: Tel. Gendermarie Propriano 76.00.17.

AUTHORITY: Administration du Port de Propriano, Quai St. Erasme, Propriano. *Tel:* (95) 76.10.40. *Contact:* Captain A. Duval, Port Captain.

QUIMPER-CORNIQUEL: 47.58 N. 04.07 W.

DOCUMENTS:

Crew List.
Passenger List.
Customs Documents.
Port Health Documents.
Manifest of Cargo.
Stores on Board.
Ship's Papers.

PILOTAGE: Pilot Station, Tel: 910640. Contact via Le Conquet Radio or St. Nazaire Radio.

If vessel's ETA changes, telephone either the Agent or the Pilot at least 3 hours before arrival.

The pilot boat is a small black launch, white bulwarks with anchor painted on bow of each side, white cabin at the stern, one mast.

Only one Pilot on duty, but will meet ship at the time given in their ETA. Pilot boards either on the bearing 346° with Lighthouse of Benodet and du Coq in alignment, or on the bearing 000° with Lighthouses of Benodet and Combrit in alignment. Vessel should come as near as possible to the entrance, Vessels are anchored at the port entrance, or in the river, and await the tide, or proceed directly to the port.

In case of bad weather, when the Pilot may not embark, vessel to follow the pilot launch on the bearing 346° up to Plage du Trez, where boarding is possible. Vessels at anchor awaiting Pilot should get under way to approach the pilot boat on the bearing 346° when they see the launch approaching.

ANCHORAGE: Depths of 11 m. in position with the Taro Tower, bearing 245°; distance 0.8 miles.

Depths of 6 m. in position with the Point of Combrit bearing 000°; distance 0.5 miles.

Depth of 9 m., bottom sand and mud, in Du Trez Anchorage at the mouth of the Odet.

RESTRICTIONS: Vessels arriving at night must anchor outside the port entrance. It is dangerous to enter the river at night as there are no lights, and the channel is restricted by yachts at anchor.

MAX. SIZE: At spring tides: length 78 m.; breadth 12 m.; draft 4.95 m. At neap tides: length 72 m.; breadth 12 m.; draft 3.40 m.

RADIO: The Port Superintendent requires 24 hours notice of arrival.

TUGS: No tugs available.

BERTHING: At one quay there is 226 m. length for coasters. One quay of 120 m. length for discharging sand. 3 cranes available.

TANKERS: There is a fuel/oil depot at Quimper-Corniquel supplied by coastal tankers from Donges. Max. draft for tankers at Quimper is 3.50 m. to 4.10 m.

FRESH WATER: 5 drinking-water hydrants situated on the quay, loading rate 12 t.p.h.

FUEL: Can be supplied by various companies from tanker lorries.

AIRPORT: Airport of Plugussan situated 5 km. from the port. 2 regular daily flights to Paris.

AUTHORITY: Ingenieur en Chef des Ponts Chaussees, Directeur Departemental de l'Equipement.

AGENT: See "Paris".

ROCHEFORT SUR MER: 45.56 N. 00.57 W. (See Plan Book)

For all general information refer to Tonnay-Charente.

MAX. SIZE: Max. permissible length: 116 m; breadth: 16 m. (ships must pass through a lock of 18 m. width).

Max. draft is 18 ft. at any tide, 21 ft. at Spring tides.

Lock: Length 104 m., width 18 m., depth 9.0 m.

POLICE/AMBULANCE/FIRE: Police 17; Ambulance 99.30.69;

AUTHORITY: Direction Departementale de L'Equipement de la Charente-Maritime, Service Maritime, Subdivision Maritime-Hydrologie, B.P. 125, Avenue William Ponty, 17306 Rochefort-Sur-Mer Cedex. *Tel:* 99.01.47. *Contact:* M. Moussion, Surveillant de Port.

ROSCOFF: 48.43 N. 03.59 W. (See Plan Book)

SHIPMASTER'S REPORT: August 1983

PILOTAGE: Send ETA at least 24 hours in advance. Pilot and Harbour Master listen on VHF Channel 16, 0700 – 1100 hrs., 1300 – 2200 hrs. Pilotage compulsory for vessels over 150 n.r.t.

Pilot boards half a mile East of Astan buoy.

BERTHING: At Port de Bloscon adjacent to Ro/Ro terminal. Modern open concrete quays with large rubber fenders. Used by fishing vessels and coasters, (approximately 1 per week).

With strong N.E. winds, conditions in the harbour can be uncomfortable.

Minimum depths as per "Plan Book". Range of tide 7.6 m. maximum.

CRANES: 2.5 tonne mobile available.

FRESH WATER: Piped on to quays.

FUEL: By road tanker.

AIRPORT: Airport at Morlaix, 13 miles away, flights to Plymouth on Tuesday, Thursday and Sunday. Daily flights to London.

TELEPHONES: Payphones available at the Ro/Ro terminal.

SERVICES: Laundry available at Roscoff.

Chandler at Brest. The Agent can arrange for small quantities to be delivered from the hypermarket at St. Pol de Leon, 2 miles.

GENERAL: Customs are based at the Ro/Ro terminal.

Daily car ferry service to Plymouth, weekly to Cork. Local train service.

ROUEN: 49.28 N. 01.04 E. (See Plan Book)

DOCUMENTS: Cargo Manifest or Manifest of Ballast, Certificate of Cargo Space. Bills of Lading. Ship's Register. 6 Crew Lists. 3 Passenger Lists. Health Declaration. Derat Certificate or Exemption. Declaration of Crew Personal Effects. Certificate of insurance for oil pollution damages (tankers over 2,000 tons).

PILOTAGE: Vessels proceeding to the ports of Rouen and Honfleur are met by pilot boat on La Carosse Roads (Rade de La Carosse). Pilotage is compulsory between the mouth of the Seine and Rouen. Vessels of 55 m. length and less can be exempt from the obligation for the lower sector of the river, and vessels of 45 m. and less for the upper sector, on condition that such vessels be equipped with suitable radar, with VHF sets and able to speak French, and that they are not carrying dangerous goods. Each vessel taking a Pilot for the downriver stage between La Carosse Roads and Villequier, or vice-versa, and a Pilot for the upriver stage between Villequier and Rouen, or vice-versa.

The following signals should be made for summoning a Pilot on La Carosse Roads: By Day: flag "G" of the International Code of Signals. By Night: in morse by signalling lamp. Failing this, the vessel should hoist her national ensign at the foremasthead.

The following additional signal can be made: 5 prolonged blasts (– – – – –) to call attention to pilot boat.

The radio station "Rouen-Pilot", located in the radar tower at Honfleur keeps a permanent watch day and night on VHF Channels 16 and 11. Masters are requested to call this station when arriving on the Roads.

Vessels leaving harbour or shifting berth should apply for a Pilot to the Pilotage Office, 21 Avenue du Mont-Riboudet, Rouen (tel: 71-68-50)

Helmsman: Masters and Owners are advised that temporary crew members inclusively steersmen for the river are available by the Boatmen Association of Rouen. In the case of an incoming ship, they should be requested by cable to Harbour Master at least 6 hours before arrival in roads.

ANCHORAGE: In the outer roads at La Carosse and at several places in the river.

Three waiting berths on buoys at Villequier.

RESTRICTIONS: The height of water above chart datum at Le Havre is broadcast on Channel 11 by Honfleur VHF port radar station.

MAX. SIZE: Vessels over 260 m. length have entered. Draft approximately 3.5 m. more than height of tide at Le Havre. Maximum about 37 ft. Port accessible to vessels of 40,000 d.w.t. fully laden and 110,000 d.w.t. partly laden.

HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive free pratique, Master should radio Agent before arrival, advising full details.

RADIO: Vessels are obliged to give their ETA and draft in salt water at least 5 hours before arrival to Rouen Information Centre via Brest – Le Conquet Radio or Boulogne Radio. The Port of Rouen Authority has introduced a VHF network of frequency modulation for port needs working on the following frequencies: Channel 16 (156.800 MHz); international safety and watch frequency. A permanent watch is maintained on this frequency at the Information Centre of the Port of Rouen.

Channel 11 (156.550 MHz) compulsory frequency to be used by all ships, boats, ferries . . . in movement between the pilot boat station and Rouen.

Channel 73 (156.675 MHz) secondary working frequency.

Special process for tankers and vessels carrying dangerous goods in bulk: For oil tankers it is compulsory, before entering the 12 miles limit, to have a VHF contact with Rouen-Pilot or with Rouen-Port, and to keep permanent VHF watch till the ship is back out of this limit.

Tankers over 250 m. length or 12 m. draft must wait for Pilot 7 miles from shore, others can come to La Carosse Roads, passing half mile South of Buoy Le Havre and remaining always South of a line marked by the buoys LH and RN.

They have obligation to announce every fault in engines, anchors or windlass, steering gear, radar, mooring gear, and their Masters must sign an inquiry paper given by the Pilot when coming on board.

PORT RADAR: Two radar stations are located respectively at the East of Honfleur and on the right bank of the river 12 miles upstream at Radicatel.

Both stations are operated from Honfleur and work as navigational aids between the first buoys of the channel and Aizier, from 2 hours after until 8 hours after low water Le Havre.

To obtain information call on VHF Channel 16 (156.800 MHz) or 11 (156.550 MHz).

Information given by this radar, at ship's option, is considered as an aid only and implies no responsibility either to the Port Authority or its Agents in any subsequent recourse to such information, which is given free of charge.

TUGS: Permanently available in the Port of Rouen. Tug assistance in the River Seine is available on request.

MOORING: See "Notice".

BERTHING: The main Maritime Port of Rouen extends from the Guillaume le Conquerant Bridge as far as La Bouille over a distance of 11 miles. Quays and wharves cover the length of both banks of the Seine. There are also 5 basins in direct connection with the river without the interposition of any locks.

On the Right Bank: St-Gervais Docks; on the Left Bank: the Timber Dock, the Rouen-Quevilly Dock, the Floating Docks tidal basin, and the "Bassin aux Hydrocarbures" at Petit-Couronne.

The extent of quayage in the Maritime Port is about 38,000 ft., and in the river docks 5,900 ft.

Between the downstream limits of the Port of Rouen and the sea are a number of maritime establishments serving local requirements. The most important of these, all of them managed by the Port Authority of Rouen, being the petroleum terminal at Port Jerome and the quays of St. Wandrille (2,000 ft.) and Radicatel (1,380 ft.).

Containers: One berth at the Quai de l'Ouest (St.-Gervais Dock) with 2×25 ton cranes, 2 berths at Rouen Quevilly Dock with 2×25 ton cranes and 2×35 ton gantry cranes.

One private berth at Radicatel Quay with a gantry crane.

2 berths at Grand Couronne Moulineaux with 2×35 ton gantry cranes.

Roll-on/Roll-off: 4 berths in service of which 2 Roll-on/Roll-off berths at Petit Couronne and Quai de Rouen – Quevilly able to load or unload rolling heavy lifts up to 400 tons (max. draft: 10 m.)

Berthing continued

Dock	Quay	Facilities	Length (m.)	Depth at low water (m.)
Charles Babin	SCAC	Storage include 1 hectare of storage space on water (logs)	101	9
	St.-Gervais	4 pipe-lines of 120 mm. diameter connected with 100,000 hl. wine sheds 1 ramp—load up to to 30 t (Vehicles and paper pulp)	—	—
Saint-Gervais	Quai de L'Ouest	5 unloading "norias" for bananas	411	8.8
	Quai de L'Ouest	6 electric cranes 6 t; 2 cranes 8 t 2 cranes 25 t (containers)		
Seine	Rive Droite	5 cranes 4 t; 11 cranes 6 t;	2636	6.3/8.8
Seine River Droite (Aval)	Skalli Silo	1 unloading machine for hard corn – 150 t.p.h. – Grain shed capacity 32,000 t		7.3
	Paper Mill Aubry	2 cranes 3 t		7.3
	Silo Soufflet	1 loading machine for cereals 600 t.p.h. – Grain shed capacity 58,000 t		6.3
	Silo Levy	1 loading machine—cereals 500 t.p.h. – Grain shed capacity 27,000 t		10.0
	Poste 19			7.5
	Silo Lecureur	1 loading machine for cereals 500 t.p.h. – Shed capacity 40,000 t		
	Poste 25	Pipelines, vegetable oils, Molasses, etc, 56,000 cu.m. specialised tanks		8.8
	Poste 27			6.6
Seine	Rive Gauche	4 cranes 6 t; 5 cranes 7.5 t; 1 crane 8 t Open storage—coal	2343	7.0/9.8
Bassin Aux Bois	Quai de France	11 cranes 7.5 t; 2 cranes 6 t Specialised newsprint; china clay	923	7.5
	Quai Neuf	Speed of cranes for cereals: 2 cranes 300 t.p.h.; 2 cranes 800 t.p.h. 1 crane 600 t.p.h. + silo 100,000 t + 50,000 t	1027	8.8
Rouen-Quevilly	Rive Nord	6 machines for unloading grains 150 t.p.h.		7.3
	Rive Sud	11 cranes 8 t; 3 cranes 7.5 t, 6 cranes 6 t, 1 ro/ro ramp capacity 400 t 2 container cranes (25 t.) 2 container gantry cranes (35 t.)	1610	10.5
Seine Rive Gauche (Aval)	Maprochim	2 gantry cranes 7 t and 1 gantry-crane 10 t (Phosphates Rhone-Poulene)	220	8.8
		1 berth for liquid ammonia, 1 pipe-line	–	10.0
	Cie Rouennaise de dechargement		290	8.8
	Poste 14			8.0
	Poste 10	Cereal; loading speed 300 t.p.h. linked with silo of 70,000 t		7.5
	Petit-Couronne (QPC)	2 electric cranes 6 t; 4 cranes 7.5 t: 3 cranes 8 t; 1 ramp capable of carrying 400 t for roll-on/roll-off	625	10.0
	SCAC	4 moving gantry cranes 7.5 t	310	8.8
	M.R.M.	oilcake, coal, flour loading machinery for cereals 3 cranes at 400 t.p.h. silo 40,000 t capacity		11.0
	SAMS	2 electric cranes 6 t;	390	8.2
	SOGEMA	2 electric cranes 8 t; 1 crane 6 t; 1 crane 5 t 2 cranes 10 t; 1 gantry crane 7 t (fertilizer)	285	8.2/10
	Petit-Couronne	Refined products and Gas pipe-lines		7.5/9.5
	Appontement Jupiter	Crude oil; pipe-lines		11.1
Moulineaux	Moulineaux	1 ramp for ships—up to 30 t (new cars)		7.5
	Moulineaux	2 container cranes 35 t	400	11.0
	Gd. Couronne	2 cranes 6 t, 1 crane 7.5 t, 1 crane 15 t		
St. Wandrille	St. Wandrille	4 cranes 15 t. and partly specialised. 2 cranes 7.5 t. coal, fertiliser	645	9.5
Radicatel	Radicatel	20,000 d.w.t. ships	420	10.0
Honfleur	Honfleur		122	9.0

STEVEDORES: From Monday to Friday:

General working schedule; 0730–1130, 1330–1730, with possible overtime.

Special working schedule 0730–1330, 1330–1930, 1930–0130 or 1930–0430, 0130–0730.

On Saturday: for all ships 0730–1330 and 1330–1800.

MEDICAL: All facilities available. Vaccination Certificates required if vessels coming from a North African port. Yellow fever inoculations required if vessel coming from South of parallel 30° N.

TANKERS: Petit Couronne, Shell, 3 berths. One berth for vessels up to 250 m. length and 11 m. draft.

Port Jerome, Esso and Mobil Oil, 2 berths for vessels up to 11 m. draft (7 berths total).

Honfleur, Miroline – 1 berth for vessels up to 9 m. draft.

Deballasting facilities available at all berths.

Report: 1982.

Petit Couronne (Butane/Propane): Max. LOA 170 m. Bollards 40 m. downstream from loading arm and 30 m. upstream from loading arm. Vessels berth with bow to seaward. Max. draft 24 ft. (7.3 m.). Height of manifold above waterline 10.0 m. Max. distance between edge and manifold of ship 4.9 m. There is no special connection for the gas phase. Diameter of discharge arm 6 in. (300 ASA).

DENSITY: Except at Honfleur, all berths are in fresh water.

FUEL: All grades available by barge.

CONSULS: The following countries are represented in Rouen: West Germany, Belgium, Denmark, Spain, Finland, Greece, Norway, Netherlands, Portugal, Algeria, Senegal, Sweden, Tunisia.

WATCHMEN: Recommended to employ watchmen on board tankers and vessels handling dangerous cargo.

HATCHES: Opening and closing hatches always performed by ship's crew.

REPAIRS: All deck, engine and radio repairs can be effected.

DRY DOCKS: Two floating docks, the largest of which is 180 m. long, 25 m. wide for vessels up to 14,000 tons.

SURVEYORS: Bureau Veritas, Lloyd's Register.

AIRPORT: Nearest Rouen-Boos. Le Havre – Octeville, 80 km. away. Paris – Orly or Paris – Roissy, 120 km. away.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Spring and Summer.

POLICE/FIRE/AMBULANCE: Police 17; Fire 18; Ambulance 15 or by VHF via Rouen-Port on Channel 11.

TELEPHONES: Can be connected on board at some berths.

IDENTIFICATION CARDS: Crewmen going ashore should carry passport or identity card.

HOLIDAYS: No labour available on the following days; New Year (1st January); Easter Monday; Labour Day (1st May); 8th May; Ascension Day; Whit Monday; National Day (14th July); Assumption Day (15th August); All Saints' Day (1st November); Armistice Day (11th November); Christmas Day (25th December).

SHIP SUPPLY SERVICE: In case of emergency (sick crew members, exceptionally urgent stores) a liaison can be established by launch with a ship when passing off Port-Jerome or off Villequier.

NOTICE:

Notice to Masters:

General Instructions: Masters shall in all circumstances comply with Port Officer's orders either verbal, written, or given through the medium of Pilots and especially the orders regarding manoeuvring in the port, towage, berth, and mooring.

Mooring: The attention of Masters is particularly drawn to the provisions contained in Section 6-01 of the Police Regulation in the Port of Rouen and River Seine (issued June 26th 1974), which stipulates as follows:

1. Vessels can moor either bow upstream or downstream, unless particular orders are issued by the Port Officers.

2. Vessels must moor with a sufficient number of bow and stern ropes, breast ropes and springs according to their deadweights.

If possible each line must be fastened on a different fixed point.

3. The mooring must be homogeneous, this means that the lines having the same function must have the same mechanical qualities.

4. The lines must be in good condition.

5. Keep a permanent watch upon the lines and their slack must be hauled at any time if necessary, and especially before the Spring tide flow.

According to the position of the berth and to meteorological conditions, when the expected height of high water in Le Havre exceeds 760 cm. (approx. tide coeff. 90), risk of bore exists. In this case moorings must be heaved tight one half hour before the expected time of local low water and ship's main engines must be available for immediate use.

It is recommended that a Pilot be on board at this time.

Further information may be obtained from either Pilots of Port Officers.

6. According to the deadweight of their vessels, the situation of the berths, the height of high water in Le Havre, Masters must take all necessary precautions as the tide is arriving.

7. Vessels which, to make their berthing easier have dropped their anchor, must, unless contrary to Port Officer's orders, heave it up, if they are berthed in the basins.

8. Vessels must have some adequate fenders both off-shore and along the quay, these fenders must have a sufficient diameter to prevent the vessel being in direct contact with the quays.

In the case of quays or wharves which are not continuous over the length of the vessel, the fenders must be carefully maintained in front of the berthing surfaces in spite of the movements of the vessel, especially at the arrival of the Spring tide flow.

9. A sufficient free space must exist near the hatch-coaming to allow easy access to the gangway.

Gangway Ladders, Foot-Bridges Giving Access to Dry Land: The link between shore and vessel must comply with the International Convention No. 32, signed in 1932 concerning the protection of people working on board ships.

Action in Case of Accident or Fire: Anyone discovering a fire, or seeing an accident, should immediately give the alarm:

either to the Harbour Master (tel: 88.81.55 or VHF Channels 11 or 16, call sign ROUEN-Port);

or directly to the Fire Brigade (tel: 18).

Measures to be Taken on Board Vessels: Fire-fighting will be under the direction of the Master, but the operating crews from shore, especially the fire-brigade, will be under the orders of their respective chiefs.

The vessel's crew should be able to guide the assistants from shore.

Plans of the ship, the cargo plan, and stowage of hazardous cargo on board, should be available on their arrival.

The Harbour Master can decide upon the shifting of the vessel, or that of neighbouring vessels. No decision such as scuttling, beaching, overloading to upset the stability, nor in general any action which may have an effect on the working of the port equipment, can be taken without the consent of the Harbour Master.

Oil tankers, or vessels loaded with dangerous cargoes, should always have a hanging wire tow-line each end ready to be hooked by a tug boat.

Cleanliness: In order to preserve the River Seine and our shore cleanliness please use plastic bags for your ship's domestic wastes.

Full bags closely fastened should be laid at the place marked by "garbage" signal. These bags will be delivered on request to your Agent.

Injury or Sickness On Board: In case of serious injury, call the fire brigade in the same way as in case of fire.

In case of sickness, a doctor can be obtained quickly by the SAMU (tel: 15).

Radio Communications: Masters of vessels are advised that they can get communications by radio-telephone with telephone subscribers ashore on metric wave-lengths (VHF).

They must call:

when below Tancarville – LE HAVRE-Radio direct on Channels 26, 28, 82 or 23 Semi-duplex;

when above Tancarville – ROUEN-Radio direct on Channels 25, 27 duplex or 21 Semi-duplex.

Do not use Channel 16 for these communications.

These radio communications are authorised when alongside berth.

Furthermore it is useful to keep watch on Channels 16 or 11. LE HAVRE-Radio and ROUEN-Radio stations use Channels 16 or 11 when they call vessels.

Notice to Masters of Vessels Proceeding to Le Havre and to Rouen: The attention of Masters of vessels bound to or from the ports of Le Havre and Rouen is drawn to the regulations laid down in by-law No. 190 of the Marine Superintendant of the 1st District appertaining to anchorage and navigation of vessels in the Le Havre roadstead dated August 21st 1972.

Masters of vessels bound to or from Rouen, without calling at Le Havre are particularly concerned with the terms of Article 2.

BORE:

1. The bore is the name given to the phenomenon caused by the arrival of the tidal wave in the river at times of high tides. The current is reversed, going from ebb to flow.

The rise in water is then very rapid, and the level of the river can rise 1 m. in less than 10 minutes.

The greater the tidal coefficient and the lower the river flow, the greater the phenomenon.

Basically, it starts to be felt in the Seine when the full tide height at Le Havre reaches or exceeds 7.6 m., i.e. for tidal coefficients equal to or greater than 90.

It is generally stronger when the coefficients are falling than when they are rising, and it is greater in Summer than in Winter.

It is also stronger when atmospheric pressure drops and West winds produce tidal heights greater than normal.

In Winter, the Seine is in flood, and the very considerable river flow attenuates considerably the effect of the bore.

On the other hand, in Summer the relatively low level of the river favours the rise in water, and the bore is then much stronger.

The bore is experienced between Caudebec and downstream of the Port of Rouen. It then weakens by virtue of various structures in the river and some basins. Upstream of the port, it is no longer present except for high tidal co-efficient.

2. Vessels berthed at quays or discharge/loading points are subject to the effect of the bore all the more when they are heavy and loaded, which makes the passage of water difficult between the keel and the bottom.

Downstream of the port, vessels are wherever possible positioned with their bows downstream. They can be assisted during the passage of the flood by a Seine Pilot and possibly tugs.

The arrival of the bore is announced on VHF by the Rouen Port Station giving the time when it will pass La Bouille, which is the downstream limit of the Port of Rouen, and where a recorder is installed. It is then easy to forecast the time of its passage at different points in the port, by knowing the time taken for the flood to go from La Bouille to different berths:

Moulineaux Roulier: 4 minutes.
MRM Silo: 8 minutes.
Sogema Quay: 10 minutes.
Petit-Couronne Quay: 15 minutes.

In principle, it occurs at the time of local low-tide, but according to circumstances, it can be advanced by almost half an hour over the theoretical expected time.

3. During very high tides, the measures to be taken before the passage of the flood are as follows:

To be well berthed and tied up and to ensure opportunely that all lines are working in the same way.

Take up the gangway.

Stop handling operations in order to disengage cranes or gantries, or disconnect tankers.

Have engines ready for manoeuvring (30 minutes before theoretical time). Engines must be started up before the flood arrives and manoeuvred so as to counter the effect of the bore during its passage. Once the bore has passed, no risks exist.

The Port Captaincy carries out continuous watch on VHF Channel 11, and can give at any time all information to vessels on the bore and its strength.

DEVELOPMENTS: Dredging operations in order to accommodate vessels of 60,000 d.w.t. at Port Jerome and Honfleur and by 1985 drafts of 32 ft. 06 in. sailing from Rouen and 38 ft. entering the river.

AUTHORITY: Port Autonome de Rouen, Capitainerie, 34 Boulevard de Boisguilbert, 76037 Rouen Cedex. *Tel:* (35) 88.81.55. *Telex:* 770865 Buropor Rouen. *Cables:* Poronom-Rouen. *Contact:* R. Fossaert, Le Commandant du Port.

AGENT: Jolasry (France), 52 Quai Gaston Boulet, Rouen. Telex: 77588. Tel.: 70-87-27.

ST. LOUIS DU RHONE: 43.23 N. 04.48 E.

(See Plan Book)

DOCUMENTS:

1 Cargo Manifest or Manifest in Ballast.
Ship's Register.
Bills of Lading.
6 Crew Lists (8 if Spanish or U.S.S.R. or ships bound to these countries).
3 Passenger Lists.
Health Declarations.
Derat Certificates.
3 Bunker Supply forms.
1 Declaration of Crew Personal Effects. If on inspection articles or quantities not in conformity or in excess, Master held responsible, articles removed and heavy fines imposed.

PILOTAGE: Compulsory for vessels exceeding 300 tons net. Contact Pilots by Marseilles Radio or by VHF Channel 16 for calling Port de Bouc Port Control, Channel 9 for traffic. Pilot boards 1 mile E.N.E. of the lighthouse on the jetty.

River Pilot required by vessels loading salt in the Rhone river, boards at the locks entrance to Port St. Louis basin.

ANCHORAGE: Suitable anchorage outside Port St. Louis keeping well clear of Fos channel.

RESTRICTIONS: The St. Louis Canal is 3,300 m. long and 63 m. wide, with a depth of 24 ft. 6 in. The lock has a length of 135 m., width 22 m., and depth 18 ft. Max. ship size: length 95 m. beam 16 m.

No entrance allowed between 2100 hrs. and 0500 hrs. except in emergency, although entrance may be effected up to 2400 hrs. if ordered before 2100 hrs.

Entrance may be delayed when large tankers are proceeding in the Fos Channel.

HEALTH: Pratique given by Customs officers who board on arrival.

RADIO: Within 150 miles use Marseilles Radio FFM, otherwise St. Lys FFL.

TUGS: Three tugs available from 500 to 1,060 h.p. Ship's lines are normally used.

BERTHING:

Quays	*No. of Berths*	*Draft*
Quai Ouest	3	6.20 m.
,, Nord	2	6.50 m.
,, East	3	6.10 m.
,, Hardon	1	5.50 m.
,, de la Suisse	3	7.92 m.
,, Charles	1	7.92 m.

SPECIAL CARGO FACILITIES:

Company	*Berth No.*	*Length (m.)*	*Max. draft (m.)*	*Remarks*
C.R.E.A.	924	100	4.5	2 berths – Military, refined products.
Frahvile	925	80	4.6	Capacity 17,550 tons. Refined products.
S.A.G.A.	919	100	7.0	Natural Gas – Loading and discharging. Berth also used by Medistock.
Sedipa	921	100	5.5	Public berth, storage capacity 9,000 tonnes. (Chemicals, vegetable and animal oils).
Soterm	923	150	7.0	Private berth (destroyed 1982) used by Soterm, Mazout and Deleup. Storage Capacity (always available): Mazout 15,000 tons. Deleup and Soterm 30,000 tons.
Gedemer	916	100	7.0	Private berth. Storage Capacity: 5,000 tonnes. (Liquid tar).

Basin	*Berth No.*	*Length (m.)*	*Max. draft (m.)*	*Remarks*
Port St. Louis/Rhone	904	110	5.5	Ro-Ro
	909	130	6.0	Ro-Ro
Tellines	951	130	7.92	Ro-Ro.
„	952	147	7.92	—
„	954	147	7.92	Ro-Ro, heavy lifts. (4 ton/sq.m. – 6 ton/sq.m.).
„	953	160	7.92	Heavy lifts (4 ton/sq.m.). Private crane, 544 tonnes capacity and Port Authority floating derrick 500/600 tonnes capacity, located at this berth.

STEVEDORES: Shifts are 0800 – 1200 hrs., 1300 – 1730 hrs. Saturday afternoon, Sunday and Holidays in overtime. Shifts of 0600 – 1200 hrs. and 1300 – 1900 hrs. count as a day each.

CRANES: Also see "Berthing".

Quay cranes: 6×3-6 tonnes. One private crane at heavy lift berth, capacity 540 tonnes.

Mobile cranes: 1×6 tonnes, 1×12 tonnes.

Floating crane: Marseilles Port Authority operate a floating derrick, capacity 500-600 tonnes.

Front Loaders: 1×30 tonnes for containers.

FRESH WATER: Available from hydrants on the quays at a rate of 100 t.p.h.

FUEL: Available only by barge or railcar.

AIRPORT: Marignane Airport distant 70 km.

AUTHORITY: Port Autonome de Marseille 23, Place De La Joliette, 13002 Marseille, France. *Tel:* (91) 91 9044 or 91 9066. *Telex:* 440746 Portauto-MARSL *Contact:* M. Pechere, Director. Captain Sicard, Harbour Master.

ST. MALO: 48.38 N. 02.02 W. (See Plan Book)

PORT LIMITS: A vessel is considered to have arrived within the Port limits, when it is within a radius of 3 miles to the North of the Grand Jardin lighthouse.

DOCUMENTS:

Ship's Register.
Store List in duplicate (ship's stores).
2 Crew Declarations of Bonded Stores.
Health Declaration.
Manifests and B/Ls.
3 Crew Lists.
3 Passenger Lists.

One Security Form (inwards declaration) with vessel's details to be handed to Port Captaincy when passing through the lock.

PILOTAGE: Compulsory for vessels over 45 m. LOA and over 150 NRT.

(1) During tidal hours, 2.5 hours before and after high water, vessels may enter into direct contact with the Pilots on VHF Channel 12. Call Sign "Pilot – St. Malo".

(2) Outside tidal hours and during working hours, vessels may call the Port Office on VHF Channel 12. Call sign "Port Control – St. Malo".

When waiting for the Pilot, vessels anchor near the "Shore Buoy" and report their arrival to the Port Office.

In good weather, the Pilot boards near the "Shore-buoy". In bad weather when the wind is from N.E. or N.W. the Pilot may guide the vessel as far as Dinard Roads, where the Pilot will come aboard.

Pilot Cutters: One cutter ("Nepture" – length 13 m., speed 9 knots) fitted with radar, relief cutter ("Pilote Vayva" – length 10 m., speed 18 knots) both fitted with radio-telephone and VHF Channels 6, 12, 14, 16, 24 and 25.

ANCHORAGE: Large vessels with draft greater than 13 m. anchor by the land-buoy. Smaller vessels may anchor in St. Malo Roads, there is sufficient swinging room for vessels with draft of 7 m. It is recommended to use a Pilot to come into this anchorage.

RESTRICTIONS: Vessels are allowed to enter from 2.5 hours before to 2.5 hours after high water. To be certain of mooring, vessels should arrive at the lock (Naye Lock: Length 150 m., width 25 m.) at least 1 hour after high water.

Depth available 20 ft. to 22 ft. at Spring tides for the Bouvet and Duguay Trouin Basins.

No movements during foggy weather. Large vessels (length greater than 100 m.) approach the lock at high-tide. Tankers lock in by themselves (no other vessel allowed in the same lock) in daytime only. Movements are carried out day and night.

Vessels with hazardous cargo and large vessels (more than 135 m. LOA) enter in daytime only.

MAX. SIZE: The height of the tide, the length of the lock and width of the channel must be taken into account.

Cargo Vessels:
(a) Overall length 150 m., beam 20 m. or
(b) Overall length 135 m., beam 21.5 m.

Max. Draft: Spring tides 9 m. Neap Tides: Equal to the depth of water in the access channel according to the tide (height of water above zero of French charts) at the time when the vessel passes through the access channel to the lock (normally 8.5 m.), 2 tugs required.

Characteristics of the Channels: Permissible dimensions for vessels: St. Malo Channel linking the Vauban Docks to Duguay Trouin and St. Servan Channel linking the Vauban Docks to Bouvet. Length 120 m., breadth 16.5 m. Depth in the docks 5 m. (sill of the channels: 5 m.)

Jacques Cartier Channel linking the Vauban Docks to Jacques Cartier. length 150 m., breadth 21 m. – at the moment – depth of the docks 3 m.

Tankers: Length 147.50 m. (443 ft.), beam 20 m. (65.6 ft.), draft see *"Cargo Vessels"* above. 2 tugs required if vessel not fitted with bow-thruster.

HEALTH: Customs Officers are appointed as Health Officers and deliver pratique. In case of suspect disease, Masters must declare it at once by radio to their Agents who will contact authorities.

RADIO: Vessels coming from West use Brest le Conquest Radio, call letters FFU. Vessels coming from North should go through Boulogne Radio, call FFB.

Arrival Advice: The requirements on arrival of large vessels must be given to the Port Captaincy 8 days in advance.

For vessels with a length less than 100 m., 48 hours notice in advance must be given.

The precise ETA mst be sent 24 hours before arrival in the Roads.

VHF:
(a) Port Office – Channels 12 and 16, 24 hours
(b) Pilot – Channels 6, 12 and 16, when awaiting a vessel.
(c) Tugs – Channels 6, 12 and 16, at the time of high tide.
(d) St. Nazaire Radio – Channels 1 or 2, for telephone communications.

Vessels call Pilot and tugs on 12 or 16 and change to Channels 6 or 8 for working.

TUGS: 3 tugs are available at St. Malo (1,500, 650 and 650 h.p.). Usually joins vessel at the end of breakwater. Ship's lines are usually used.

Towing is obligatory on entering or leaving the docks for vessels which have a length greater than 80 m., as well as for oil tankers and vessels carrying hazardous cargo whatever their size.

BRIDGES: 3 bridges can be passed during tide vacation, otherwise, notice required to open.

BERTHING: 1 Ro/Ro berth outside lock for car ferries.

Duguay Trouin Dock: Length 2,000 (commercial), 2 Ro/Ro ramps for vessels less than 120 m. (Berth Nos. 7 and 6).
1 wine store house (Berth No.13).
1 berth for molasses (Berth No. 1).
1 grain silo (Berth No. 10) 6,000 tons.

Vauban Docks: St. Louis Quay: 360 m. – marina: 700 berths.
Corsaires Quay: 385 m. comprising:
1 continuous discharging apparatus for phosphates.
2 discharge points for molasses.
1 discharge point for hydrocarbons.
1 discharge point for phosphoric acid – (1,000 t.p.h.).
2 cranes on rails – 12 tons at 14 m.
1 dry dock: 120 m. × 15.5 m.
Ro/Ro ramp: In the North part of the Corsaires Quay.

Bouvet Dock: 641 m. for commercial trade.
260 m. for discharging fish.
850 m. for activities connected with fishing.
1 slipway – for vessels less than 500 tons.
1 slipway for yachts.

Jacques Cartier Dock: Length 300 m., comprising:
1 dockyard (ACM).
2 electrical cranes of 24 tons.
Numerous sheds – vats for molasses and acid (6,000 cu.m.)

The installations of this quay will be clarified in due course. 2 cranes on rails are envisaged.

Grain Silos: 1 of 6,000 tons capacity with loading possibilities of 130 t.p.h. and 2 of 6,500 tons capacity each with loading possibilities about 100 t.p.h. each are situated in Bassin "Duguay Trouin".

CRANES: 8 mobile cranes, 5 – 12 tons and 9 electric cranes (on rails) 8 – 24 tons.

TANKERS: Tanker quay, extension of Quai Des Corsaires, length 130 m. Diameter of discharge pipe 200 mm., one mobile arm, vessels to supply reducers. Max. discharge rate, 650 cu.m./hour.

No deballasting facilities. Tankers wishing to effect repairs must leave port and wash out their tanks and obtain a gas-free certificate.

On completion of operations tankers must leave on the next tide. If a second tanker is waiting to berth she must wait in the roads.

Safety instructions are issued when the vessel passes through the locks.

BERTH ALLOCATION: Dependent upon goods to be discharged and characteristics of vessel. Bearing in mind the widths of the channels, their depth and dimensions at the foot of the quays, the height of the dock which varies on average between 11 m. and 12.5 m.

The largest vessels tie up at Quai Des Corsaires.

It is recommended that an advance notice be sent via Agents to the Port Office 15 days prior to arrival, so that the vessel may be received under the best possible conditions.

STEVEDORES: In order to have workers ready on arrival, Masters are kindly requested to give as accurate as possible ETA the day before arrival, especially if there are many ships discharging at same time.

Normal working hours 0800 – 1200 hrs., 1200 – 1800 hrs. and 2000 – 2400 hrs. from Monday to Saturday, except holidays. There is no night overtime. Dispensations may be made to finish a vessel so that she may catch the tide.

MEDICAL: Notice is required to obtain an appointment with doctors or dentists. Hospital is available in St. Malo.

DENSITY: Average density is 1022.

FRESH WATER: Can be delivered from quay. Rate 3 t.p.h. – 10 t.p.h.

FUEL: Bunkers delivered at St. Malo (with notice varying, depending on the Company – Shell 2 days, Esso 1 week, etc.) come from Donges by road lorries and cost of haulage is supported by the ship (expensive). D.O. can be obtained from local suppliers but out of contract.

FIRE PRECAUTIONS: Usual non-smoking precautions (a watchman is compulsory for tankers). In case of fire call Port Captain on VHF Channel 12.

GANGWAY/DECK WATCHMEN: Watchmen are not compulsory except for tankers.

OPENING/CLOSING HATCHES: This work is normally carried out by crew. Stevedores' cranes may help for the beams, but dockers will not touch them.

CERTIFICATES: As per International Conventions, all Safety Certificates, Load line, Radio, etc.

Important: All vessels entering the port must be up to date with safety certificates as required by international conventions. An attestation must be handed in by the Master when he passes through the lock.

CUSTOMS ALLOWANCES: 200 cigarettes, or 200 grams of tobacco, and 1 bottle of spirit per crew member.

IDENTIFICATION CARDS: Crew members must have an identification card or their seaman's book when going ashore.

CONSULS:

Netherlands	(16-99) 56.07.21.
Denmark (Vice-consul)	(16-99) 56.07.21.
Norway	(16-99) 56.07.21.
Finland (Vice-consul)	(16-99) 56.31.57.

REPAIRS: Deck and engine repairs can be carried out by shipyard or workshops. Electricians are also available. RAMAC Agency can repair radars and radios, also Radio-Ocean agency.

DRY DOCKS: One dry dock. Max. length admissible 120 m., breadth 16.0 m. and draft 8.0 m. One slipway, 500 tons. Length admissible 45 m., breadth 9 m. With sufficient notice.

REPATRIATION: Can be effected from St. Malo by train or plane.

AIRPORT: Pleutuit/Dinard Airport 10 km. from port. Wintertime, services to Jersey (C.I.), with onward flights to England and Wales. Summertime, several times per day to Jersey, London, and to Paris except week-ends.

TIME: Local time is GMT plus 1 hour. From April till September GMT plus 2 hours. ETA messages must specify GMT or Summer Time.

HOLIDAYS: French legal holidays. Stevedores do not work on Sundays or public holidays.

POLICE/AMBULANCE/FIRE: Police, 40.85.80 and 17; Ambulance and Fire, 18. Port Captaincy, Tel: 56.23.86, or VHF Channel 12.

TELEPHONES: None.

DELAYS: Berthing delay will only be due to tide. For loading or discharging, it depends what kind of cargo is handled.

Deadlines: All vessels must leave the quay once unloading has terminated. They may be towed away to another waiting berth – if need be.

Vessels are admitted to port as soon as their berth is vacant, and providing nautical conditions permit.

Time limits for loading or unloading depend on the quantity of the nature of the goods. There is no special rule governing purely port operations.

It is rare for vessels to wait in the roads.

Special Cases: Vessels are not authorised to enter or to leave the port in fog.

In storms, starting at force 8 – Pilots cannot embark, nor disembark from vessels, without danger.

With strong N.W. winds (8 to 9) the port may be ordered to be closed to prevent damage to the lock gates and to structures (bridges).

SERVICES: Compass adjusting, radar or radio repairs can be carried out.

SHORE LEAVE: Crew members are allowed ashore.

AUTHORITY: L'Ingenieur Charge de l'Arrondissement de Saint Malo, 1 Rue de la Crosse, 35400 St. Malo. *Tel:* 56.55.45. *Telex:* Dde-Atm-950-197 F. *Contact:* J. Lannou, Port Commandant, Ecluse du Naye, 35400 St. Malo. *Tel:* (16-99) 81.62.86.

AGENT: See "Paris".

SETE: 43.24 N. 03.42 E. (See Plan Book)

PORT LIMITS: The seaward boundaries of the Port within which a vessel is considered to be an "arrived vessel" are indicated as follows: To the South by a line with the red light of Eastward end of breakwater bearing 257°; to the East by a line with the church tower of Frontignan bearing 005°; to the North by coastline.

A second zone is a circle of 1 mile radius centered on a point located on the bearing 298° and at 3.2 nautical miles from Eastward end (Red Light) of breakwater. This zone is connected from a landing buoy by a channel 500 m. wide steering 326°. This area is only for big tankers from 100,000 tons up to 280,000 tons which operate at buoy IMODCO Single Point Mooring System.

DOCUMENTS:

Cargo Manifest or Manifest of Ballast.
Certificate of Cargo space.
Bills of Lading.
Ship's Register.
3 Crew Lists.
4 Passenger Lists.
Health Declaration, eventually vaccination list.
Derat Certificate or Exemption.
Declaration of Crew Personal Effects.
2 Provision Lists.

Tankers: Blue Card, TOVALOP Certificate.

PILOTAGE: Request Pilot by international signals (sound, flags, light signals) or telephone through Marseilles Radio or VHF by Sete Radio Channel 25, tel. 74.34.06 (or pilot boat VHF Channel 12). Description of pilot boats; motor launch with black hull, white band, white anchor on hull at bow. Pilot embarks between 1 and 2 miles South of breakwater in good weather. In bad weather he embarks in the shelter of l'Epi Delon. In this case make prior contact by radio or VHF (Marseille or Sete Radio) or Port Office VHF Channel 12. Provide a ladder on each side.

ANCHORAGE: In Roads from 0.5 mile to 1 mile to South of breakwater. (See "Port Limits" and "Tankers").

RESTRICTIONS: *Commercial Harbour:* In the Canal Maritime, length max. 145 m., breadth 20 m., draft 22 ft. 06 in.

Bassin a Petrole – see "Berthing".

MAX. SIZE: *Sea Line Frontignan:* South Berth: S.B.M. Tankers 280,000 d.w.t. draft 21 m. (69 ft.).

North Berth: C.B.M. Tankers up to 100,000 d.w.t. lightened draft 13.1 m. (43 ft.).

Bassin a Petrole: New Berth Tankers (P2) 35,000 d.w.t., length 225 m., draft 11 m. (36 ft.) P1 – length 140 m., draft 33 ft. P3 – Barges.

Darse No. 2 for ore carriers 210 m. length; 10.4 m. draft (34 ft.)

Commercial Harbour up to 8.5 m. draft (28 ft.).

Commercial Harbour in the Canal Maritime: max. length 140 m; breadth 20 m., draft 6.85 m. (22 ft. 06 in.).

HEALTH: Pratique given by Health Officers or by Custom's officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive Free Pratique, Master should radio Agent before arrival, advising full details.

RADIO: Marseille or Sete Radio VHF Channel 21 or 25, Port Office Channel 12. Port Authority Telex No. 480220.

TUGS: Tow line to be furnished by ships. Vessels taken in tow near the breakwaters on the North side.

BERTHING:

Bassin du Midi:	
North Quay:	Berths No. 16, 17, 18, 19 and 20 Draft 6.71 m. (22 ft.) Cranes: 4 Fives Lille, 7.5 tons at 22 m. with scoop and hook.
South Quay:	Berths No. 14 Draft 7 m. 15 Draft 6.10 m. Ro/Ro Cranes: 2 Fives Lille, 7.5 tons at 22 m.
Canal Maritime:	
Quai Paul Riquet:	Berths No.10 Draft 5.50 m. 11 Draft 6.40 m. 12 Draft 6.40 m. 13 Draft 6.10 m. All berths: Wine and general cargo. Cranes: Nil.
Quai Vauban:	Berths No. 24 Draft 3.70 m. 25 Draft 4.60 m. 26 Draft 4.10 m. Berths No. 25 and 26: wine. Cranes: Nil.
Quai Francois Maillol:	Berths No. 27 Draft 5.80 m. 28 Draft 5.20 m. 29 Draft 5.20 m. All Berths: Wine. Cranes: Nil.
Quai d'Orient:	Berths No. 7 Draft 5.50 m. 8 Draft 5.50 m. 9 Draft 5.50 m. 5 Draft 4.60 m. 6 Draft 4.60 m. Restriction: Berths 5 and 6: breadth = 15 m. All berths: Wine and general cargo. Cranes: Nil.
Quai de la Republique:	Berths No. 30A Draft 5.20 m. 30B Draft 4.30 m. All Berths: Wine. Berths No. 31 and 32 – Tugs. Berths No. 33 – Fishing repairs. Cranes: Nil.
Quai d'Alger (Algier Quay):	Berths No. 34 Draft 8.20 m. 35 Draft 8.20 m. 36 Draft 8.20 m. All Berths: Wine. Passenger Quay: Length 200 m., draft 8.20 m. For example: German m.v. Europa.
Quai du Maroc (Morocco Quay):	Berths No. 37 Draft 5.50 m. (Ro/Ro) Length 130 m. Passengers and wine.
Bassin Orsetti:	Max. Length: 170 m. Berths B1 Draft 8.25 m. B2 Draft 8.25 m. Ro/Ro B1 and B2: Passengers General cargo. B2 Ro/Ro Gare Maritime Orsetti. *Lines:* Algeria. Baleares (Spring and Summer). Cranes: 1 Fives Lille, 8 tons at 22 m. Berths: D1 Draft 8.55 m. D2 Draft 8.55 m. D3 Draft 8.25 m. Length 152 m. Ro/Ro. All Berths: General cargo. Cranes: 4 Caillard 3 tons at 22 m. 6 tons at 22 m.
Mole Masselin:	Cereals 1 berth on 180 m. of quay dredged to 11 m. 1 loading gantry of a capacity of 550 t.p.h. 1 Fives Lille crane of 7.5 tons at 22 m. with scoop and hook. 2 storage silos of 22,000 tons capacity. (annual 100,000 tonnes).
Bassin aux Petroles:	See "Max. Size" Dock No. 1 named "Colbert Dock" Berths No. E3 Draft 34 ft. 02 in. Ro/Ro. E2 Draft 34 ft. 02 in. E1 Draft 34 ft. 02 in. Cranes: 2 Caillard 6 tons at 27 m. 9 tons at 19 m. 12 tons at 14 m. 2 Caillard 8 tons at 22 m.

TANKERS: Frontignan Sea Line Terminal North berth (C.B.M.) 1 berth for tankers up to 100,000 d.w.t. lightened draft 13.1 m. (43 ft.). Two 12 in. hoses for crude oil discharge. Submarine pipe-line 28 in. diameter.

Commerial Port: 1 berth for tankers up to 35,000 d.w.t. draft 11 m. (36 ft.). Five loading arms for black and white products. 1 old berth for tankers up to 140 m. length or 10,000 d.w.t., draft 10.1 m. (33 ft.).

Slop disposal facilities available up to 1,000 cu. m. per hour. Also see "Max. Size".

Frontignan Sea Line Terminal (South berth) Mobil SBM.

Operator: Mobil Oil Francaise.

Position: 43° 22′ 12″ N., 03° 46′ 49″ E.

Restrictions: Least depth of water 92.5 ft.

Max. Size: No limit on length and beam. Max. draft 69 ft.

Pipe-line: Length, 26,000 ft. Diameter 44 in.

Hoses: 2×16 in. Bow to manifold distance should not exceed 600 ft. Connections port-side.

Max. Pressure: 125 p.s.i. at rail.

Pumping Rates: 8,500 t.p.h.

Density: 1026.

Fresh water: Not available.

Fuel: Bunker "C" available by barge, capacity 900 tons. D.O. not available.

Ballast: No facilities for receiving dirty ballast.

Vessels up to 50,000 d.w.t. normally berth at spread mooring.

Regulations and Information: When scheduled to discharge at SBM Master will receive the following standard message from Mobiltrans Ny: "Your vessel will discharge at Frontignan SBM. located 43° 22′ 12″ N., 3° 46′ 49″ E. stop 4 days prior arrival radio your Agent your ETA SETE contact "Sete Port Office" on VHF Channel 12 approximately 30 miles range advising your ETA to entrance buoy located 43° 14′ 55″ N., 3° 53′ 40″ E. Only when authorisation is granted by "Sete Port Office" you may proceed to SBM on *compulsory* route on course 326° extending 500 m. each side of line joining approach buoy to SBM. When proceeding on compulsory route your vessel shall exhibit additional marks by day 3 black shapes in a vertical line the highest and lowest 1 ball the middle 1 diamond every one spaced by 1.5 m. stop by night 3 all-round lights in a vertical line the highest and lowest red the middle white every one spaced by 2 m. stop. Pilot will board approximately 3 miles seawards from SBM on compulsory route".

Your Agents will forward the following cable: "Advise ETA type size your manifold flanges whether suitable reducers available and Smit's Bracket fitted on forecastle stop Boom to lift 16 in. ID floating hose and two 16 in. 150 ANSI standard flanges ready on portside. On forecastle have 2 polypropylene 8 in. messengers 150 fathom ready. Accommodation ladder on starboard and boat ropes each side."

The "approach buoy" referred to in para 1, is located in 43° 14′ 55″ N., 3° 53′ 40″ E. having the following characteristics: 3 m. diameter – 7 m. height mast painted with vertical strip white and red with 2 crosswise shapes, with a white light 4 flashes every 12 seconds. Proceeding inshore of this buoy and inside the 12 mile line is not allowed without prior authorisation granted by "Sete Port Office" on VHF Channel 12.

An approach channel exists between the approach buoy and the SBM extending 500 m. each side of a line joining the approach buoy to SBM and must be used as a compulsory route on a course of 326°. Same compulsory route applies for outgoing tankers leaving the SBM.

When proceeding in the approach channel the vessel shall exhibit in addition to the normal navigation signals: *by day:* 3 black shapes in a vertical line the highest and lowest 1 ball, the middle one a diamond – every one spaced by 1.5 m. *By night:* 3 all-round lights in a vertical line, the highest and lowest red, the middle one white, every one spaced by 2 m.

The Pilot boards incoming tankers and leaves outgoing tankers approximately 3 miles seawards from SBM on the compulsory route. He will stay on board during the period the vessel remains secured to the SBM.

Every vessel proceeding to or departing from the SBM which requires to anchor should use the following anchorage areas:

Anchorage A – Vessels with less than 15 m. (49 ft.) draft should anchor in the area bounded in the North by a line 0.5 miles off the breakwater, and in the East and West by meridian passing through the extremities of the breakwater, and in the South by the 20 m. (65.7 ft.) contour.

Anchorage B – Vessels having a draft of greater than 15 m. (49 ft.) should anchor in the Southern semicircle around the SBM extending between 400 m. (1,310 ft.) and 1,850 m. (6,000 ft.) from the SBM.

When a vessel is proceeding to the SBM a Marine Superintendent and a mooring team will board. Then anchors should be secured and cable pawls in the down position, deck scuppers must be plugged tight and VHF on standby on Channel 12.

Throughout the period the vessel remains at the SBM the engine should be ready and power available on deck winches and windlass.

Adequate deck lighting must be available at night, and a constant fo'c'sle watch kept on the SBM.

Propeller r.p.m. must be kept to a minimum. Intermediate ballasting may be required in order to prevent excessive strain on moorings.

While weather operational limits will depend on circumstances port regulations specify the following criteria: Vessel must cease discharge when wind is 30 knots, significant wave height 8 ft. (assumed current 2 knots) vessel must leave berth when wind is 45 knots and significant wave height is 18 ft.

The Master of every oil tanker coming to Sete to load several refined products, some of which are heated, is required to give the Port Office, a cargo plan before loading.

Masters of oil tankers are invited to follow the terms of new French Law (Arrete Prefectoral No. 491 ADM du 24 Mai 1978) specially to send a message to the French Admiralty (Prefet Maritime de Toulon) 6 hours before entering the territorial waters and 6 hours before leaving the Port of Sete (even if leaving for another French port).

FRESH WATER: Available on most quays or by lighter of 140 tons capacity during working hours. Advance notice required for Saturdays and Sundays.

REPAIRS: Handled by Scotto et Repetto: 2 slipways for handling and repair of small vessels, Mechanical workshops, General repairs.

Claverie, Mechanical workshop for heavy repairs, and boiler repairs.

Di Biase, general repairs and Mechanical workshop.

Affre, General repairs.

FUEL: All qualities available subject to advance notice given.

CONSULS:

Denmark	tel. 74.30.20.	Norway	tel. 74.31.83.
Finland	tel. 74.25.72.	Sweden	tel. 74.25.72.
Netherlands	tel. 74.25.72.		

Others at Marseilles.

WATCHMEN: Service necessary for ships loading or unloading dangerous merchandise. Optional for other ships.

CUSTOMS ALLOWANCES: 40 grammes tobacco per day per man (calculated in accordance with the length of voyage undertaken by the ship). Amount of alcohol fixed by Customs in accordance with the crew, and length of ship's stay in port. It is a matter of tolerance and not of right.

REPATRIATION: Repatriation and crew changes are easily arranged.

AIRPORT: Airport (Class B) at Montpellier-Frejorgues, located 30 km. from Sete. (30 minutes by car on the motorway), and has services to Paris, Nice, Bordeaux, Clermont-Ferrand and London. The international airport of Marseilles-Marignane is 160 km.

IDENTIFICATION CARDS: Crew men going ashore should carry passport or identity card.

TIME: GMT plus 1 hour – alteration from end of March to end of September to GMT plus 2 hours.

HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May, no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); St. Louis Day (Monday, no labour available); All Saints Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available).

N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.

DEVELOPMENTS: *Project for August 1984:* 1 Container handling gantry crane Lieber. 43 tons at 38 m. (Spreader). 35–40 containers per hour.

Berths No. G1: Draft 34 ft. Ro/Ro. G2: Draft 34 ft. ore carriers. G3: Draft 34 ft. Ro/Ro.

Cranes: 2 Peiners 7.5 tons at 30 m. 10 tons at 22.8 m. 1 Fives Lille 7.5 tons at 22 m. 2 Kangaroo Caillard 12 tons at 30 m. 16 tons at 24 m.

Darse 2 (New Dock): Berth H2: Draft 34 ft. Ro/Ro. (Project draft 13.5 m.). Berth I 1: Draft 34 ft. Ro/Ro. (Project draft 13.5 m.). Berth I 3: Length over 225 m. Draft 34 ft. (Project draft 13.5 m.). For "Panamax" ore carriers and Ro/Ro.

Project August 1984. 1 crane Delattre Levivier with scoop and hook 20 tons at 44.5 m. and 26 tons at 33 m.

AUTHORITY: Capitainerie du Port de Sete, Quai du Maroc, 34200 Sete, France. *Tel:* (67) 748820. *Telex:* 480220. *Contact:* Commandant Pierre Guillard, Commandant du Port de Sete (Harbour Master).

AGENT: See "Paris".

STRASBOURG: 48.34 N. 07.42 E. (See Plan Book)

PORT LIMITS: In Strasbourg (Lat. 48° 34′ N., Long. 7° 42′ E.), the Port Autonome extends from the Km. 285 to the Km. 297 upon the Rhine, occupying an area of 1059 ha., of which 205 ha. are water areas including 15 docks (7 have a constant level, 8 a variable level), and 2 fore-harbours.

Out of these limits, the Port Automome de Strasbourg includes 8 branches designed for the handling of building materials, and 2 ports, Marckolsheim (at Km. 242) and Lauterbourg (at Km. 349), all the branches and ports being on the left bank of the Rhine.

DOCUMENTS: The ships must hold some documents, which they have to keep at disposal of the administration or the inspection authority when required, as following:

Certificate of Survey.

Certificate of Tonnage.

Certificate of Registration.

Log-Book.

Booklet of Verification of the used oils.

Attestation for Equipments of liquified gases.

Customs Documents for the carriage of goods.

Fluvial Bill of Lading.

Rhine Manifest.

Certificate of Ability to steer the ship.

Police Regulation for the Navigation on Rhine.

A.D.N.R., regulation for carriage of dangerous goods.

the documents relating to the boilers and other tanks under pression.

PILOTAGE: The pilotage is not compulsory on the Rhine and usually the Masters do not ask for a Pilot except for Gebirge and the Haut-Rhin. A Pilot can be obtained in the port of Kehl by dialling the number 19 – 49.7851.20.70.

ANCHORAGE: The ships have at disposal an area of about 10 ha. in the North and South fore-harbours to take anchorage. Depth of water: at least 5.20 m.

RESTRICTIONS: Restrictions to navigation are to be published in the Advices to the Nautical Corporation of the Inland Water Transport.

MAX. SIZE: The max. sizes of ships allowed on the Rhine are as follows: Length: 110 m., – breadth: 11.4 m. The ships of Rhine do not exceed a draft of 4.0 m.

Dimensions of the locks: – North lock: length 125 m., breadth: 13.5 m., South lock: length 125 m., breadth: 13.5 m.

In the constant level docks, the water depth is 3.5 m., but only along the North-South axis of the port; if not there, the water depth is 2.5 m.

In the variable level docks, which are the docks with a direct communication with the Rhine, the minimum depth is 4.30 m.

These depths are given, the Rhine being supposed at its lowest bench-mark: 135 m.

HEALTH: There is no Health Service for the Rhine.

RADIO: All communications on the Rhine are performed by radio-link and radiotelephony:

VHF Channels 10 and 13: used for ship to ship communications.

VHF Channels 20 and 22: used for transmitting of nautical advice in the way shore-ship and in the reverse order.

VHF Channels 24, 25, 26 and 27: used for public communications.

RADAR: There is no radar station on shore.

TUGS: The Port Autonome de Strasbourg put at disposal of customers two tugs and one 600 C.V. pusher according to their needs.

BERTHING: 10 km. of quays can be used for mooring. Some of these quays are situated in the constant level docks (max. draft 2.5 m.), some are in the docks that link with the Rhine (max. draft 4.30 m.). Tankers berth only in the Oil Dock Harbour.

BULK CARGO FACILITIES: Grain elevators: 2 berths for loading, and 2 berths for discharging.

Loading of gravel on the Rhine by belt-conveyors (8 facilities).

Loading and unloading of hydrocarbons in the Oil Dock Harbour by 18 facilities operating each at the rate of 300 cu.m./hr.

SPECIALISED CARGO-HANDLING FACILITIES: Containers up to 40 tonnes; heavy packages up to 350 tonnes.

The two operations are carried out at the container and heavy loads terminal at Adrien Weirich Dock and utilise a length of 180 m. of quay.

A plurimodal international transport centre, "Eurofret Strasbourg", is being developed in the Southern sector of the port, close to the container terminal and including a road transport centre (10 ha.), a warehousing area (20 ha.) and an area grouping various activities (12 ha.).

BRIDGES: The head room under the bridges reaches 8.8 m. in the constant level docks.

MEDICAL: Civil Hospital, 1, place de l'Hospital, 67000 Strasbourg, Tel: 36.71.11.

DENSITY: The density of water is about 1000.

FRESH WATER: Fresh water is supplied by Ets. Koejac, Tel: 61.26.78.

FUEL: Bunkering can be arranged with the m/s *Robertsau*, G.P.S., Tel: 61.68.32 or m/s *Jumbo*, Ets. Koejac, Tel: 61.26.78.

CONSULS:

West Germany	(88) 32.61.86
Belgium	(88) 35.43.63
U.S.A.	(88) 35.31.04
Netherlands	(88) 62.90.80
Switzerland	(88) 35.00.70
Austria	(88) 35.13.94

REPAIRS/SLIP: All the repairs can be carried out at: Forges de Strasbourg — Scar, Tel: 79.41.41. 101, rue du Rhin Napoleon, 67100 Strasbourg.

Any vessel capable of using the port can use the Forge-de Strasbourg slip.

SURVEYORS: Surveyors of the Commission de Visite, named by the Commission Centrale pour la Navigation du Rhin, can be obtained by the Master.

WATCHMEN: Ship's crew, if required.

OPENING/CLOSING HATCHES: Opening and closing of the hatches are performed by the crew or by the staff of the company freighting the ship, as any other handling. Dockers do not exist in the port of Strasbourg.

REPATRIATION: All the facilities exist for effecting crew changes and arranging any necessary repatriation.

AIRPORTS: Distances from Strasbourg: Strasbourg-Entzheim: 15 km. Strasbourg-Mulhouse: 130 km. (airport Mulhouse Bale). Strasbourg-Francfort: 220 km.

HOLIDAYS: Work is stopped during the weekends and the statutory holidays. Labour can be obtained on these days if necessary.

POLICE/AMBULANCE/FIRE: Police: 17 – Ambulance 33.33.33. – Firemen: 18.

TELEPHONES: Office of the P et T, 5, rue du Port du Rhin, 67000 Strasbourg. In case of emergency: La Capitainerie du Port, 5, rue du Port du Rhin – North Lock of the Port, quai Jacoutot, can be contacted at any time. Tel: 32.49.15. There is also a public call box at the disposal of anybody at any time.

SERVICES: For the ship: Tank cleaning: SPIRSE, 14, rue de Rouen, 67000 Strasbourg, Tel: 61.40.45

Supplying of material: Koejac, quai des Belges, 67000 Strasbourg, Tel: 61.26.78.

Electronic repairs or supplies: Radio-Metzger, 17, rue de Dunkerque, 67000 Strasbourg, Tel: 35.45.42.

For the crew and various formalities (customs): La Capitainerie du Port, 5 rue du Port-du-Rhin, 67000 Strasbourg, Tel: 32.48.15.

SHORE LEAVE: The Master must introduce himself, within the 2 hours following his arrival, to the Commissariat Special du Port, 5 rue du Port du Rhin, 67000 Strasbourg, and produce the passports of the crew. The passenger ships have to comply with the regular supervision of authority. Each member of crew must be holder of an identification card or a passport when he is ashore.

REGULATION: The Reglement Particulier de Police du Port is very helpful to the Master and will let him know the particulars of the Port of Strasbourg.

DELAYS: The commercial operations begin and finish at the dates and hours shown upon the fluvial bill of lading. Every delay is subject to the payment of penalties. Except for the passenger ships, ships do not give notice of their arrival to the authority, before they enter into the port.

AUTHORITY: Port Autonome de Strasbourg, 25 Rue de la Nuée Bleue, F-67081 Strasbourg Cedex. *Tel:* (88) 32.49.15. *Telex:* 880476 Poronome Strbg. *Contact:* M. Georges Delmas, Port Director.

TONNAY CHARENTE: 45.57 N. 00.53 W.

(See Plan Book)

DOCUMENTS:
2 copies Crew List.
2 copies Ship's Stores Lists.
2 copies Crew Manifests (Tobacco List).
2 copies Passenger List (if any).
1 Declaration of Ballast.
Manifest form Last Port.
1 copy Bill of Lading (in case of any cargo to be landed).
Ship Register to be shown.
Derat Certificate or Exemption.

PILOTAGE/ANCHORAGE: Vessels have to proceed to about half a mile S.S.W. Isle of Aix Lighthouse and to drop anchor in the No. 115 alignment when safe anchorage is open (lowest tides; minimum depth of water 26 ft.).

River Pilot joins ships there, about 3 hours to 1 hour before high water, depending on draft and size of vessel concerned.

Pilot boat is equipped with VHF.

RESTRICTIONS: As the River Charente is unlighted, movements are not possible at night. However, vessels may leave anchorage in dark and come up river at daybreak (anchorage area is about 5.5 miles from the mouth of the river).

MAX. SIZE: Max. permissible LOA about 378 ft.; max. permissible draft about 17 ft. 6 in. at any tide; max. permissible draft 21 ft. 6 in. at Spring tides.

HEALTH: Free pratique is to be obtained on arrival at port. Usual yellow flag signal to be raised.

RADIO: Ships coming from South: Bordeaux-Arcachon Radio Station. Ships coming from North: Saint-Nazaire or Brest le Conquet Radio Stations.

VHF: No continuous listening out at the port. Nevertheless, vessels coming into the Roads can call up a correspondent by phone through Bordeaux – Radio – Channel 26.

TUGS: No tug is available. In case of need, tug may be obtained from La Rochelle-Pallice (about 20 miles).

BERTHING: 1 private berth for grain loading, which can take vessels up to 100 m. length. 1 berth 200 m. long for handling general cargo. 3 waiting berths. The central waiting berth can be used for handling small cargoes from 500 to 1,000 tonnes. Depth of water along the quays is an average of 6 m.

CRANES: 2×5 tonne cranes, 1×3 tonne crane, 2×5 tonne mobile cranes. All the cranes are capable of working with hooks or scoops.

BRIDGES: The Rochefort Bridge clearance over highest water is about 98 ft. (30 m.).

STEVEDORES: A 24-hour notice is required in order to arrange loading/unloading operations.

Discharge rates:	Coal – about 1,200 tons per day of 8 hours' work.
	Phosphates – about 1,500 tons per day
	Zinc concentrates – about 1,400 tons per day.
Loading rates:	Grain 2,000/2,500 tons per day.

OPENING/CLOSING HATCHES: This is the responsibility of the crew.

MEDICAL: The nearest hospital is at Rochefort (about 4 miles).

FRESH WATER: Fresh water may be obtained alongside, from hydrants, at the rate of about 10 t.p.h.

FUEL: Must be obtained from La Pallice (about 20 miles) by lorries.

REPAIRS: Small repairs may be carried out by local workshops. Nearest shipyard is at La Pallice.

REPATRIATION: Changing crew and necessary repatriation formalities may be effected.

AIRPORT: The nearest airport is La Rochelle (about 30 miles). Possible to reach Paris airports in a few hours by train.

POLICE/AMBULANCE/FIRE: Police: Rochefort H.Q. – Tel: 17; Tonnay-Charente Gendarmerie: Tel: 88.20.38; Ambulance: Tel: 99.30.69; Fire: Tel: 18 or 88.20.38.

AUTHORITY: Direction Departementale de L'Equipement de la Charente-Maritime, Arrondissement Maritime, B.P. 125, Subdivision "Maritime-Hydrologie", 17306 Rochefort-Sur-Mer Cedex.
Contact: M. Drieu, Sous-Lieutenant de Port.

AGENT: See "Paris".

TOULON: 43.07 N. 05.55 E. (See Plan Book)

DOCUMENTS:
Cargo Manifest or Manifest of Ballast.
Certificate of Cargo Space.
Bills of Lading.
Ship's Register.
6 Crew Lists.
3 Passenger Lists.
Health Declaration.
Derat Certificate or Exemption.
Declaration of Crew Personal Effects.

PILOTAGE: Pilot station is situated on Est Quay, address: B.P. 742, Toulon. Tel: (94) 410328. Pilotage compulsory for vessels over 150 g.r.t. Pilot boards 100 m. North of the semaphore station at Cap Cepet.

There are 3 mooring buoys in the Inner Harbour owned by the Navy. The buoys can be utilised by merchant ships on request and are able to accommodate vessels up to 30,000 tons displacement.

RESTRICTIONS: Entry can be made by day and night except for vessels loading with refined petroleum or dangerous cargoes which are not allowed to enter between sunset and sunrise.

MAX. SIZE: The port is approached by a channel 125 m. wide. The docks can accommodate without tug assistance ships up to 250 m. length and 8.80 m. draft.

Renovation and reconstruction work is being carried out, after which passenger vessels of over 300 m. length and cargo vessels of up to 11 m. draft will be accommodated.

HEALTH: Pratique given by Customs Officers who board on arrival. If any case of suspected disease on board or any reason why vessel should not receive free pratique, Master should radio Agent before arrival, advising full details.

TUGS: Naval Tugs. There are many harbour tugs up to 1,000 h.p. and several deep sea tugs up to 2,000 h.p. controlled by the French Navy which may be called on for assistance by the Harbour Master or Pilots.

Commercial Tugs. 2 tugs of 180 h.p. owned by the Port Authority are used to assist smaller vessels.

BERTHING: President Fournel Quay, 335 m. length, depth alongside 9 m.

East Quay, 190 m. length, depth alongside 8.50 m.

Minerve Quay, length 135 m., depth alongside 7 m.

La Seyne – Bregaillon: One Ro/Ro Berth, depth 7.0 m. Ore quay (2 berths), length 215 m., depth 9.0 m., 2×26 tonne cranes.

TANKERS: Tankers discharge at naval installations at Milhaud and Lazaret.

Total Terminal. 1 jetty berth for tankers up to 6 m. draft, and a buoy berth for vessels up to 15,000 tons displacement.

STEVEDORES: There is a permanent working force of 30 dockers which can be increased by casual labour to 60 men if required. Shifts are available for 4 hours, 8 hours or 9 hours with possibilities for overtime.

FUEL: Only available by tanker lorries.

REPAIRS: Chantiers du Nord et de la Mediterranee, Shipyard specialising in naval construction. Total length of repair quays 835 m. Heavy-lifting facilities available.

Serra Fres: Floating dock 1,700 tons, length 85 m.

All types of repairs can be carried out at the Naval Dockyard.

DRY DOCKS: Several dry docks available in the Naval Dockyard, of which 3 can accommodate vessels in excess of 250 m. length.

IDENTIFICATION CARDS: Crew men going ashore should carry passport or identity card.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: New Year (1st January, no labour available); Easter Sunday (possibility of labour with overtime); Easter Monday (no labour available); Labour Day (1st May, no labour available); Ascension Day (possibility of labour with overtime); Whit Sunday (possibility of labour with overtime); Whit Monday (no labour available); National Day (14th July, no labour available); Assumption Day (15th August, no labour available); All Saints' Day (1st November, no labour available); Armistice Day (11th November, possibility of labour with overtime); Christmas Day (25th December, no labour available). N.B. Every Sunday and day marked "possibility of labour with overtime" can be worked at the rate of 100%.

AUTHORITY: Direction Departementale de l'Equipment, Capitainerie du Port de Toulon, B.P. 1202, 83070 Toulon Cedex. *Tel:* (94) 429000, (94) 032760. *Telex:* Equip Toulon 400272.

AGENT: See "Paris".

TROUVILLE-DEAUVILLE: 49.23 N. 00.05 E.

(See Plan Book)

The port situated on mouth of River Touques, is composed of 2 parts: Trouville for small fishing vessels, and Deauville including 2 docks for cargo ships and pleasure boats.

DOCUMENTS:

1 Crew List.
1 Passenger List.
Tonnage Certificate.
2 Cargo Manifests.
Bills of Lading.
1 Crew Manifest.

PILOTAGE: Pilotage on entry and leaving is carried out by the Seine Pilots. Request for a Pilot must be made 12 hours in advance by radio or telephone, either to the Port Captaincy of Trouville-Deauville or to the Pilotage Office for the Seine at Le Havre or at Rouen. Vessels bound for Trouville/Deauville anchor in the "Rouen Waiting Area" Roads at Carosse where they take on the Pilot.

It is recommended to anchor near the pilot boat of Rouen and contact her by VHF for instructions.

ANCHORAGE: The best one is Rade de la Carosse (Lat. 49° 27′ 30″ N., Long. 0° 01′ E.).

RESTRICTIONS: No restrictions at night time. Draft allowed 2.80 m. neap tides, 4.0 m. spring tides, Entrance is dangerous with wind from N.W. to N. over force 6.

Access channel has a depth of 2.80 m. and dries out (zero on French charts). Lock gates are opened about 2 hours before time of commencement of flood tide at Le Havre. Lock gates are closed 2.5 hours after time of commencement of flood tide at Le Havre. The fore port and river quays at Trouville are uncovered at low water. The Trouville fishing port is one where craft are beached.

MAX. SIZE: Length: 210 ft. (64 m. OA); breadth: 45 ft.

RADIO: Radio-Boulogne FFB.

TUGS: No tugs available.

STEVEDORES: Loading and discharge by shore crane.

MEDICAL: All hospital facilities available.

DENSITY: 1025.

FRESH WATER: Available from quay.

FUEL: Small quantity by tank-lorry on demand.

CONSULS: See "Caen" or "Le Havre".

REPAIRS: Small repairs only.

AIRPORT: Deauville St. Gaitien 3 miles away.

AUTHORITY: Commandant du Port, Capitainerie du Port, Boulevard Cornuge, 14800 Deauville. *Tel:* (31) 88.28.71.

AGENT: See "Paris".

NOTES

Please also advise Shipping Guides Ltd.

Gabon

CAPE LOPEZ: 00.38 S. 08.43 E. (See Plan Book)

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
3 Lists of Ports of Call.
2 Manifest of Ship's Stores.
Clearance from Previous Port.

PILOTAGE: No official radio station. Pilotage not necessary to approach Port Gentil Roads.

Pilotage to Cape Lopez Terminal is assumed by Elf-Gabon Pilots, while pilotage to Pointe Clairette Terminal depends on Port Gentil Harbour Authority.

For the private tanker ports at Pointe Clairette and Cape Lopez, pilotage is compulsory. On Cape Lopez Roads Pilot will board vessel 1.5 miles offshore on a line with Cape Lopez Lighthouse bearing 255° True, distance 2.4 miles in a launch carrying proper Pilot signals. The Mooring Master will stay on board throughout the vessel's time in port to assist in mooring, hose handling and loading operations.

ANCHORAGES: The waiting anchorage position is 2 nautical miles in a 075° direction from Cape Lopez Lighthouse. Depth of water 55 m.

It is necessary to guard against violent tornadoes occurring between December and May coming from the East or the North. These tornadoes occur very suddenly and are extremely strong.

MAX. SIZE: 250,000 d.w.t. and LOA 340 m. Max. draft 20.50 m. (67 ft.).

Minimum size of vessel: LOA: 215 m. (Approx. 35,000 d.w.t.).

If vessel arrives with a part cargo from another loading port the maximum arrival deadweight acceptable is 160,000 metric tons.

RESTRICTIONS: Berthing is effected day and night, however, certain vessels may be berthed in daylight only. Unberthing is effected by day or night. Vessels must arrive with sufficient ballast and correct trim in order to manoeuvre safely.

Ballast should not be less than 30% of deadweight. Fresh water and stores are not considered as ballast; draft on arrival should not be less than 50% of loaded draft. Elf Gabon reserve the right to leave vessels which do not comply with these regulations at anchor.

Berthing is not effected in rough weather. At the berth mooring lines must be in good condition and well tended. In case of storm or tornado loading operations must cease and vessel be prepared to leave the berth if so directed by the Terminal Superintendent or Pilot.

HEALTH: Formalities carried out on berthing. However, ships remaining at anchor may have Customs and health formalities carried out through their Agent.

RADIO: *Libreville Radio:* Call sign: "TRA" keeps watch on 500 kHz and 2182 kHz from 0600 – 1800 hrs. GMT.

Elf Gabon Terminal: VHF watch on Channel 16 or 72. The working Channel of the terminal is Channel 72.

When a ship is expected, a permanent watch on VHF Channel 16 is kept by the terminal for short distance communications.

All ships must contact the terminal in advance of their arrival. Elf Gabon will inform the vessel whether berthing will take place on arrival or whether it should anchor.

Arrival Advice: Advise Agent 48 hours and 24 hours before arrival, also if any appreciable alteration thereafter.

VHF: Before vessel's arrival watch is kept on Channel 16. During loading and mooring, watch is kept on Channel 6.

TUGS: Compulsory. Owned by Elf-Gabon, can be contacted on 2182 kHz or VHF Channel 16. Ship tow lines are not required, 4 tugs are available up to 1,800 h.p. There are 2 launches for handling mooring lines.

BERTHING: Anchors are not required for mooring operations but must be ready for emergency case. Vessel berths port side alongside on 6 dolphins, heading 044° True. Depth of water along the berth is 25 m. Mooring ropes used as follows: fore and aft 3 head/sternlines, 2 breastlines, 2 springs. 2, 3, or 4 tugs are used for mooring operations, in accordance with the d.w.t. Vessel's engines must be ready for immediate operation all the time vessel is at the berth. 2 or 3 tugs will remain standing by. Ship's gangway is not required, an automatic one is supplied by Terminal.

Connecting Hoses: Connection and disconnection is carried out by Elf Gabon personnel with the assistance of the crew.

The vessel's cargo derricks are not used except in the case of absolute necessity or in the case of breakdown of the platform hoisting gear.

The 4 loading arms are 16 in. diameter, with hydraulic couplers for 16 in., 14 in. and 12 in. flanges. The arms are located on either side of the dolphins' centreline.

Reducers shall be provided by the ship for the other flange diameters.

Before connecting arms, the ship will be connected to the ship-shore bonding wire, and disconnected only after loading arm uncoupling.

Hose Handling: 5 arms. Crude: 4 × 16 in. arms. Loading rate: 12,000 cu.m./hr. Finished products (Diesel and Naphtha) are loaded by means of a 5th loading arm; 2 loading arms can be used for Fuel Oil.

Loading: Communication between ships and shore loading installations, in any case (loading, fire, etc.), will be effected on VHF Channel 72.

An Elf Gabon representative, responsible for loading and safety is on permanent watch at the berth. The Master must supply him with all relevant information and assistance required to ensure operations run smoothly.

The Master will be held entirely responsible for operating the valves and for safe loading on board his ship. If necessary, pumping speed can be reduced.

At least 10 minutes before loading is finished, the terminal should be notified of the moment pumping should be stopped.

When loading is completed, the tank ullages will be taken by a ship's officer in the presence of an Elf Gabon representative.

Average samples taken from each tank from which the crude was pumped will be furnished to the ship by the terminal.

These samples will be numbered, sealed and labelled showing the origin of the crude.

Notice of Readiness: To Elf Gabon.

BALLAST: Vessels must arrive with clean ballast only. There are no facilities for discharging dirty ballast at the terminal. In no circumstances should dirty ballast be pumped overboard.

MEDICAL: Doctors and hospital facilities available. All vaccinations can be arranged.

DENSITY: Varies between 1021 and 1025.

FRESH WATER: Fresh water supplies can be obtained within a few hours from a 120 ton barge. Apply to Port Gentil.

FUEL: 1,500 secs. and 3,500 secs. fuel can be supplied by barge or at berth whilst loading, subject to 48 hours' notice.

CUSTOMS ALLOWANCES: No restrictions for quantities tobacco and spirits held on board the ship. It is prohibited to allow dutiable articles to leave the ship.

CONSULS: France, Germany and Great Britain.

REPAIRS: There are facilities for hull and engine repairs for barges and river craft. Slipway for vessels up to 300 tons.

AIRPORT: Can be reached in 15 minutes by road. Regular services to Europe every day.

TIME: GMT plus 1 hour all the year round.

HOLIDAYS: Holidays do not affect tanker working.

POLICE/FIRE/AMBULANCE: Police tel. 17; Fire tel. 18; Ambulance tel. 23-33.

REPATRIATION: Facilities available. Contact ship's Agent.

SHORE LEAVE: Crew members are allowed ashore. There is no regular immigration control but identification papers should be carried. Bathing alongside the ship and the berth is strictly prohibited.

GENERAL: *Ships spares:* Customs require originals of invoices for clearing spares. Copies are not acceptable.

SAFETY: During the whole time the ship remains at the loading berth, the Master shall:

Maintain on board sufficient number of crew members to carry out any manoeuvre without difficulty, and to enable first fire fighting measures to be taken; maintain engines ready for manoeuvring; ensure that mooring is satisfactory without undue wear on mooring lines.

Fire Precautions: It is forbidden: To smoke, use naked flame or tools likely to create sparks outside the zones generally authorised for tankers; to carry out repairs or handling operations on deck; to turn the propellers; to use in danger areas any equipment or tools not of a type approved by a competent organisation. Elf Gabon reserve the right to take any steps considered necessary in case of danger and, in particular, to suspend loading; loading of bunkers, supplies, water, etc., will be submitted for the approval of Elf Gabon.

During loading:

All hull valves should be shut, except for those required for water circulation; all scuppers of main deck should be sealed; two fire hoses will be connected and set up, one at the bow. the other at the stern of the ship. The fire main shall be maintained under pressure at all times; two long robust steel safety ropes should be placed on the starboard side of vessel, one at the bow and one at the stern. The eyes should be maintained at the right distance from the water so that tug boats can easily catch hold of them.

Movement Restrictions:

It is forbidden to enter the zone of Elf Gabon installations without due authorisation. Smoking or use of lighters or matches are strictly prohibited.

In case of fire on board a ship moored to the loading berth, the Shipmaster shall give the alarm by sounding a series of short blasts on the siren. He is responsible for organising fire fighting and ensuring the stability and safety of his vessel, taking all the necessary steps in this respect.

Elf Gabon may order any safety measures to be taken in the general interest of everyone.

If considered necessary, during a storm, the loading operator may suspend loading and disconnect the loading arm.

Safety Look-out:

Elf Gabon have a permanent look-out on the loading platform under the orders of the chief loading operator.

Equipment at disposal of ship:

Stand-by tugs (2×2,000 h.p. minimum); mooring launches 140 h.p.; equipment permanently available at berth (water screen, hoses, etc.).

A Kleber anti-pollution barrier 500 m. in length can be launched within a few minutes.

A "Vortex" device can be used to re-pump the crude oil spilt in the sea. This crude oil is then collected in plastic tanks.

When a ship pollutes the sea, the above action and use of these devices will be charged to the vessel.

WEATHER:

Meteorology: From June to September the prevailing wind comes from S.S.E. and can reach force 6. From October to end of May, and especially during February, March and April there is a risk of tornadoes. They can come from any direction and are always very dangerous.

Tide: Mean amplitude of Spring tide is 2.20 m.

Swell: The terminal is protected from ocean swell. Wave height created by tornadoes can reach 2.50 m.

Current: Generally less than 0.5 knots but can reach 1 knot. Average direction 040° and 215°.

SHIPMASTER'S REPORT: 1977. (Updated September 1982).

This vessel is an OBO carrier of 159,250 d.w.t. and called for a part cargo of 85,000 tons of Mandji Crude.

Mandji Crude has an API of between 30.0 and 30.4 and was on this occasion loaded at 97°F.

It appears to be wax free and has a slight suspended water content.

Vessel size: Accepts vessels from 35,000 d.w.t. to 250,000 d.w.t., max. sailing draft is 67 ft.

Berth: Berth face about 420 ft. long with connected mooring posts. "Floating" type fender piles. Pilots are cautious of impacts as berth is piled into very deep soft mud. Moorings on our visit were: Forward: 3 head lines, 3 breast ropes and 2 springs. Aft: 3 stern lines, 3 breast ropes, and 2 springs. (See Plan Book).

The springs were sent ashore first, fore and aft.

All lines are run, 1 at a time, by mooring boat, and there is no problem running wire rope moorings.

There is a shore gangway mounted on a tower.

Load Rate: Total max. rate of 12,000 t.p.h. using 4 chicksan loading arms. The connections are 16 in. and hydraulically coupled.

Berthing: Straight forward operation, no significant currents, vessels tie up bow out, port side to jetty.

Berthing Operations: From end of passage to all secure was accomplished in just over 3 hours, from Pilot aboard to secure took 2 hours. Connection of the loading arms used by this vessel took 1 hour.

From commencement of singling up to Pilot away took 1.5 hours.

Tugs: There are 2 modern 3,000 h.p. Kort Nozzle tugs and 1 older tug of 2,000 h.p. stationed in the port. The larger tugs made fast fore and aft, and the smaller pushed midships. On sailing only one of the larger and the smaller tug were used. The tugs normally use their own lines and remain fast until mooring is completed.

Weather: Mild and pleasant apart from tornadoes which occur from October to May, but especially February, March and April.

These spring up without notice to very violent winds in minutes, and though it is understood loading may be suspended, the tugs are used to assist vessel to remain on the berth if required.

Bunkers: A bunker line is being installed on the jetty, a barge is used temporarily, but it is understood that delays can be expected in taking bunkers, and they must be ordered beforehand from Elf Paris.

Fresh Water: Said to be available by barge from Port Gentil.

Usage: According to the Pilot, about 12 ships a month use the berth.

Slop Reception: There are no facilities, vessels must arrive with clean pumps and clean lines.

Radio: Tugs and Pilot are on VHF 16 and Marine and Terminal Operations are on VHF 72.

Repairs: Doubtful if any repairs could be undertaken, possibly in emergency the refinery workshops would assist.

Communications: There are regular daily flights to Libreville, and connections from there worldwide with minimal delay. Flight time Cape Lopez to Paris is said to be 7 hours.

Crew Changes: Could be carried out easily from a point of transportation, but Port Gentil only has 1 hotel and 1 guest house and they are stated to be full to capacity at all times.

Medical Service: Could not be obtained because vessel berthed on Saturday. However, there is a hospital.

Chandler: The port has a chandler, but there is no local produce whatsoever, all vegetables, etc., being airlifted from France and prohibitively expensive.

Cargo: Mandji Crude at loading temperature 95° to 100°F., API 30.25, has slight percentage suspended water.

Shore Leave: Permitted, but walking through the installation is forbidden for security reasons, and transportation is apparently difficult to obtain.

General: I understood no clearing or formalities are completed until vessel is berthed.

Pilotage: Mooring Master now performs pilotage only and leaves after berthing.

Accommodation: No longer required to provide accommodation for shore people.

SHIPMASTER'S REPORT: November 1981.

The Shipmaster's report dated 1977 still correct except for the following points.

They require 3 birds and animal lists, 3 arms and ammunition lists, 3 narcotics lists and 3 copies of Notice of Readiness.

Agency listens on VHF Channel 16 during normal working hours and they also listen at 0900 and 1500 LMT on frequency 2506. Cargo papers usually take 2 hours after completion of loading. There was no problem with crew going ashore.

AUTHORITY: Elf Gabon, B.P. 525, Port Gentil, Gabon. *Tel:* (241) 75-60-00. *Telex:* 8210 – 8216 Go Elferap. *Contact:* L. A. Jean, Operations Manager.

Terminal: Cape Lopez Terminal, B.P. 524, Port Gentil, Gabon. *Tel:* 75-60-00. *Telex:* 8210. *Contact:* Terminal Manager.

AGENT: Socopao-Gabon, BP 560, Port Gentil. Tel: 752491. Cables: "Freight Portgentil". Telex: 8223.

GAMBA: 02.50 S. 09.59 E. (See Plan Book)

SEA TERMINAL: SBM.

DOCUMENTS:

Last Port Clearance.
3 lists of Last Ports (during last 3 months).
3 Stores Lists.
4 Crew Lists.
3 Personnel Effects Lists.
3 Lists of Vaccinations.
1 Notice of Readiness.

APPROACHES: The approaches to the terminal are open deep water. Gamba sea terminal fairway buoy is located in position Lat. 2° 50.1′ S., Long. 9° 56.5′ E. Black buoy. Group Occ(2) 10 secs. Visibility 4 miles.

The single buoy mooring is located in position Lat. 2° 50.1′ S., Long. 9° 58.9′ E. and exhibits a white flashing light, visible for 5 miles.

Gamba Lighthouse: Lattice tower. Red and white. Height 47 m. White flash 2/10 secs. Visibility 21 miles. Position, Lat. 02° 47.0′ S., Long. 10° 01.4′ E.

READINESS: The notice of readiness will be received and accepted by the Berthing Master at the anchoring time if the ship is delayed on request of the Terminal (scheduled delays, awaiting cargo, awaiting orders, weather conditions, etc.) or at the time of mooring if the ship is berthed on arrival.

PILOTAGE: All tankers mooring at Gamba SBM must use the Shell Gabon Pilot who should also be used for unmooring.

Berthing Master boards tankers at the following position: Lat. 02° 50.0′ S., Long. 09° 57.0′ E.

The Berthing Master and his assistant will remain on board throughout loading. The Berthing Master also acts as ship's Agent and focal point for liaison with the shore; communications with the terminal by VHF (portable sets for ships not equipped with VHF are supplied).

The pilot boat/mooring launch which assist mooring/unmooring will stand by throughout loading. For this purpose a mooring rope will be provided aft, by the tanker.

ANCHORAGES: 1.5 miles N.W. from SBM in 60 ft. depth. Vessels anchor without assistance.

RESTRICTIONS: Heavy swell and tornadoes (October to May tornadoes can come from any direction and are always dangerous).

MAX. SIZE: Max. ship size 130,000 d.w.t., weather permitting. Max. distance bow to manifold – 465 ft. Max. draft 41 ft.

HEALTH: When advising ETA include in message whether any sickness on board. In case of emergency vessels should call before or after loading at Port Gentil for medical attendance or for crew changes. For this purpose send separate message to "Marine Gamba" and to Agency.

BERTHING: Berthing takes place both by day and by night. If a Shipmaster refuses to berth by night, delays will be charged to his vessel.

Depth and draft: Depth at berth: 59 ft. From this figure must be deducted the height of the manifold which is 8 ft., thus leaving a controlling depth of 51 ft. A nominal underkeel clearance of 10 ft. is allowed to take account of ship movement caused by swell. This leaves an approved safe draft of 41 ft.

SBM Description: The buoy is 8 m. in diameter, 4 m. high. A double 16 in. manifold is provided on the turntable (one pipe is blanked) 90° clockwise from the tanker securing point. The SBM is moored by means of 8 chains which are secured to the seabed by 120 tons holding power anchors.

MOORING: Recommended that vessel should be trimmed max. 8 ft. by the stern on arrival.

Ships must have ready on the forecastle, and before approaching the SBM, four synthetic mooring lines lashed two by two each side. These mooring lines will be connected to the pickup wires by the mooring launch by means of shackles and heaved up until the triangular plates are on board and are in turn connected to the mooring wires by means of forelock shackles. If vessel is not fitted with central fairlead, the most forward fairleads on either side will be used.

Vessels moor with 2×10 in. nylon ropes (length 50 m.) from SBM secured on board ship by two 2.25 in. chain cables plus two 3.25 in. wires which provided by terminal. Berthing Master will advise in detail mooring procedure.

LOADING: A derrick should be rigged with double whip and topped on the port side for loading mooring equipment and hose lifting.

Shore Line System: SBM – 1×28 in. submarine pipe-line (total length to Terminal 7.3 km. (24,000 ft.)). Reduced to 16 in. for connection to ship's manifold (total length of floating hoses: 865 ft.).

Gamba Crude Characteristics:

Density at 15°C:	0.8663	Salinity:	20 to 35 mg/Kg
API at 60°F:	31.75	Cloud point:	39°C
BSW:	0.40%	Wax:	18%

Connection/Disconnection: Connection and disconnection are carried out by ship's crew with advice from Berthing Master. The hose is connected amidship on portside and is ended by a 16 in. reducer having A.S.A.B. 165 flanges.

If there are no suitable reducers available on board, Gamba Terminal should be advised by radio giving size of ship's manifold and pitch of bolt holes.

Loading: During the loading the Berthing Master remains on board and acts as Loading Master. He is in permanent contact with terminal by VHF.

If necessary the pumping rate can be reduced at any moment. The Loading Master will be advised at least one hour before the completion of the loading. The average loading rate is 2,500 cu.m. per hour.

Papers: The Loading Master receives by VHF shore figures from the Terminal about one hour after the completion of the loading. All documents are completed before the departure of the ship. Two sets of documents are delivered to the Master: one for his own purpose and one for the Consignee.

Engines: Engine immobilisation is forbidden at the SBM. Engines should be kept ready for use at any time at the Berthing Master's request.

RADIO: Establish contact with Gamba Radio (call sign TRP 8) soon as possible (all open days or 4 days before nomination lifting date). ETA should be sent at least 4 days before arrival in Gamba to "Marine Gamba" via Gamba Radio. Thereafter keep close contact on telephone with Gamba Radio MF (2182) and VHF Channel 16.

Gamba Radio (TRP 8) Service:

Telegraphy A1	500 W On request by Gamba Marine.
Telegraphy A1	2 kW
13070 kHz	General call and TFC list at 0900 hrs. Listen on 12 MHz band from 0900 – 0930 hrs. and on 16 MHz band from 0930 – 1000 hrs. Range about 6,000 miles.
6510 kHz	General call and TFC list at 1300 hrs. Listen on 6 MHz band from 1300 – 1330 hrs. and on 8 MHz band from 1330 – 1400 hrs. Range about 1,000 miles.
Telephony A3	2 kW Maintains watch on 2182 kHz from 0800 – 0900 hrs. and from 1400 – 1500 hrs. Working frequencies 1877 kHz and 2678 kHz. Range about 300 miles depending on atmospherics.
VHF F3	50 W. Call sign "Marine Gamba". Watch on Channel 16/12. Working on Channel 12. Range about 30 miles.

24 hours' service in French language. Watch in English language during office hours (0600 – 1100 hrs. and 1300 – 1515 hrs.).

Pilot Launch Service	
	20 W Watch on Channel 12 (when at sea). Range about 20 miles.
Terminal Gamba	
	20 W Watch on Channel 12. Range about 20 miles, used only for loading operations.

Radio Beacon: Continuous airplane radio beacon call sign GZ, frequency 359 kHz. Position: Lat. 02° 46.8′ S. Long. 10° 02.3′ E.

N.B. All times in GMT.

MEDICAL: No medical or dental facilities at Gamba (See "Health").

DENSITY: 1025.

FRESH WATER/FUEL: Not available.

REPAIRS: No facilities available.

BALLAST: There are no facilities for discharging ballast ashore. Vessels must arrive at the loading terminal with clean ballast only, apart from contents of the slop tank.

GANGWAY/DECK WATCHMEN: Not required.

CUSTOMS ALLOWANCES: No restrictions on Tobacco/Wine.

CONSULS: None, French consul in Port Gentil.

REPATRIATION: No facilities.

AIRPORT: Gamba airport is local airstrip and is connected to Port Gentil by daily service (Except Sunday). Port Gentil airport is connected to Libreville International airport by daily services. Mail reaches any European country within seven days.

TIME: GMT plus 1 hour throughout the year.

GENERAL: The use of Channel VHF 9 is forbidden.

Ship's Spares: Customs require originals of invoices for clearing spares. Copies are not acceptable.

SHORE LEAVE: Not allowed.

IDENTIFICATION CARDS: Not required.

AUTHORITY: Shell Gabon, Gamba Marine (GMA), B.P.146, Port Gentil, Republique du Gabon. *Tel:* 752651/52/53. *Telex:* Gls/Gma 8206 Go. *Cables:* Shell Gabon Port Gentil. *Contact:* Berthing Pilot, Gamba Marine.

AGENT: See "Port Gentil".

LIBREVILLE: 00.23 N. 09.26 E.

PORT LIMITS: The seaward boundaries of the port within which a vessel is considered to be an "arrived ship" and (subject to C/P terms) laytime will commence is 2 miles off shore at Libreville harbour.

DOCUMENTS: See "Port Gentil".

PILOTAGE: None available.

ANCHORAGES: Bottom of roads in Libreville slopes very gently down towards open sea. The greater the vessel's draft, the further out it must moor. e.g., ship of 7 m. to 8 m. draft will be moored approx. 1,500 m. from Harbour Pier. Ship 5 m. – 6 m. draft will be able to approach the Harbour Pier as near as 500 m. to 600 m. For reasons of safety, forbidden to come nearer, particularly during tornado season – February to May and September to December.

RESTRICTIONS: No restriction imposed on entering or leaving the Estuary. Channel marked by 5 buoys provided with radar reflectors and flashing lights. Sixth buoy, called a "landing buoy" moored in roads, where vessels moor.

MAX. SIZE: *Shipmaster's Report: March 1980.* Max. draft 7.4 m.

HEALTH: If there is sickness on board, Health Service warned by Consignor of vessels. Health Service can go on board to check state of crew's health. Immigration Service can also board to check crew list and condition of passengers, if any.

RADIO: *Libreville Radio:* Radio-telephony from 0600 to 1800 hrs. GMT on 2182 kHz, Radio-telegraphy from 0600 to 1800 hrs. GMT on 500 kHz, call sign TRA 22; from 0800 to 0830 hrs.on 13101 kHz, call sign TRA 8; from 1630 to 1700 hrs. GMT on 8722 kHz, call sign TRA 8.

TUGS: Tugs intended only for towing lighters, horse power 150 to 250, unsuitable for any harbour towing.

BERTHING: Only for lighters and small coasters with a draft of less than 3 m. Crews working unloading or loading of vessels in roads supplied by Consignor of the ship. Harbour Services have no radio apparatus. Shipping companies all have radio-telephone extensions, which allows them to be in permanent contact with vessel moored in roads. Unloading or loading operations of goods carried out by lighters which, towed by small tugs, ensure rotation between vessel in operation and quay. All this equipment belongs to shipping companies dealing with consignment of vessels in the roads. Every vessel arriving in roads must have its consignor.

STEVEDORES: Available.

MEDICAL: Hospital available, and in case of necessity, patient or patients will be admitted.

FRESH WATER: Water supply real problem, as there is no tanker to transport it. Therefore strongly recommended that any ship touching Douala coming from the North or Pointe-Noire coming from South, should fill up at one of these ports.

FUEL: There are fuel-tankers belonging to shipping companies. The tanker which provisions Libreville 2 or 3 times a week is brought alongside buoys in roads, (position: Lat. 0° 23′ 51″ N., Long. 9° 25′ 42″ E.); fuel is transhipped by sea-line to tank on shore.

FIRE PRECAUTIONS: No special precautions.

GANGWAY/DECK WATCHMEN: Carried out by crew.

OPENING/CLOSING HATCHES: This is done with the tacit agreement of the ship's Officer and the Consignor.

CARGO GEAR: Ship's own gear used.

CONSULS: None.

REPAIRS: Small repairs possible.

DRY DOCKS: None.

REPATRIATION: No facilities.

AIRPORT: 9 km. from the harbour. Links with French-speaking Africa, Switzerland, and France, also Johannesburg.

TIME: GMT plus 1 hour.

HOLIDAYS: 17th August, Independence of Gabon; 1st May, Labour Day – these are the only holidays in force.

SERVICES: None.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Required.

DELAYS: First come, first served method.

GENERAL: *Ship's Spares:* Customs require originals of invoices for clearing spares. Copies are not acceptable.

AUTHORITY: Capitainerie du Port.

AGENT: Socopao-Gabon, B.P.4., Libreville. Tel: 70.21.40 and 70.21.53. Telex: 5212. Cables: "Freight Libreville".

LUCINA MARINE TERMINAL: 03.40 S. 10.46 E. (See Plan Book)

DOCUMENTS: See "Gamba".

APPROACHES: Navigation aids:

West buoy: Gp. Occ. (2) 10 secs. Lat. 03° 40.0′ S., Long. 10° 44.3′ E. Black and white buoy showing West marker and radar reflector fitted.

North buoy: Gp. flashing (3) 10 secs. Lat. 03° 38.5′ S., Long. 10° 45.7′ E. Black and white buoy showing North marker and radar reflector fitted.

East buoy: Gp. flashing red (3) 10 secs. Lat. 03° 40.0′ S., Long. 10° 47.3′ E. Red and white buoy showing East marker and radar reflector fitted.

Platform LD 1: One white Morse code light: letter U. The flare installed on the Production platform LP 1 is very conspicuous.

Platforms LD 2, LD 3, LD 4: The beacon on these platforms consists of two white Morse code lights: Letter "U" plus 2 lights "U" 15 seconds (Fore and Aft).

SBM light: Position: Lat. 03° 39.6′ S., Long. 10° 46.2′ E. One flash 0.3 secs. each sec. Visibility 5 miles.

Storage tanker: The storage tanker is showing the lights of a ship at anchor. During the hours of darkness all deck lights are switched on.

NOTICE OF READINESS: See "Gamba".

PILOTAGE: Berthing Master boards vessel in position Lat. 03° 39′ S., Long. 10° 44′ E. Also see "Gamba".

ANCHORAGES: Vessels must anchor without assistance. Recommended anchorage in 19 fathoms about 1.5 miles N.W. of storage tanker.

RESTRICTIONS: No draft restrictions. Depth of water can be assumed to be 114 ft.

MAX. SIZE: Max. ship size 130,000 d.w.t., weather permitting. Max. distance bow to manifold – 465 ft.

HEALTH: See "Gamba".

RADIO: All messages sent to "Marine Gamba" through Gamba Radio TRP 8 (see "Gamba").

ETA: Should be sent to "Marine Gamba" via Gamba Radio. First ETA should be sent at least 4 days before arrival.

VHF: Vessels should call Marine Gamba on Channel 16 or 12 during office hours when passing Gamba area. Permanent watch on Channel 12 or 16, on the storage tanker and the mooring launch.

BERTHING:

Description and Location: The development consists of six oil producing wells, which are protected by 4 single four-pile platforms, LD 1 (Lat. 03° 41′ S., Long. 10° 44.3′ E.) – LD 2 (Lat. 03° 41.8′ S., Long. 10° 45′ E.) LD 3 (Lat. 03° 42′ 28″ S., Long. 10° 46′ 01″ E.) – LD 4 (Lat. 03° 40′ 56″ S., Long. 10° 44′ 37″ E.). Production facilities are located on four-pile platform LP 1 which is connected by a bridge to the adjacent platform LD 1. An 85,000 d.w.t. "Banio", floating unit of storage is moored by means of 10 anchors in position Lat. 03° 40′ S., Long.10° 45.8′ E. The FUS is connected with a SBM via a submarine line, length 1 km.

SBM description: The buoy is 8.5 m. in diameter and 4 m. high. Connections for submarine lines from the FUS are provided on the bottom of the centre swivel section which is free to rotate. (Other details same as Gamba).

Nylon moorings: Vessels moor with two 10 in. circ. nylon ropes from the SBM and are secured on board ship by two 56 mm. dia. stud link chains plus two 3.25 in. wires which are provided by the terminal. Both nylons are 50 m. long.

Floating hose and submarine line: 1×20 in. submarine pipe-line, length 1,100 m. from the FUS 1 floating line, length 865 ft., from SBM is reduced to 16 in. for connection to ship's manifold.

Mooring: See "Gamba".

LOADING: *Lucina Crude Characteristics:* Density at 15° C.=0.8258; API at 60° F.=39.8; B.S.W.=Nil; Salinity=3 to 5 mg/kg; Cloud point=27°C.; Wax=14%.

Loading rate: Average loading rate 3,000 cu.m.p.h.

Connection/Disconnection: See "Gamba".

DEBALLASTING: See "Gamba".

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: No facilities. Engines not to be immobilised whilst at the SBM.

REPATRIATION: Not possible.

TIME: GMT plus 1 hour throughout the year.

SHORE LEAVE: Not allowed.

GENERAL: *Ship's Spares:* Customs require originals of invoices for clearing spares. Copies are not acceptable.

AUTHORITY: Shell Gabon, Gamba Marine (GMA), B.P. 146, Port Gentil, Republique du Gabon. *Tel:* 752651/52/53. *Telex:* Gls/Gma 8206 Go. *Cables:* Shell Gabon Port Gentil. *Contact:* Berthing Pilot, Gamba Marine.

OVENDO: 00.17 N. 09.30 E. (See Plan Book)

SHIPMASTER'S REPORT 1978:

Vessel, length 156 m., breadth 22.0 m. Draft (at the time, 30 ft.).

APPROACHES: The channel buoys showed very well on radar on the 3 and 6 miles ranges, even during heavy rain, but the lights on the red buoys are poor and all buoys occasionally unlit.

ANCHORAGES: Depths in the channel and river were found to be as stated during low water with a depth of 33 ft. over all the anchorage. Maximum draft allowed at this time was 30 ft.

The holding ground is good, 4 shackles were used for a total ship weight of 19,000 tons plus a small coaster alongside.

The tides are regular with only a very short slack water period, and run at between 4 and 6 knots.

PILOTAGE: There are 2 French Pilots who may be contacted on VHF Channel 16 when in range, they are ordered by the Agent to berth vessels only, although they will pass on advice to vessels regarding anchoring.

TUGS: There is 1 tug of approximately 1,000 h.p. which assists in berthing, either towing or pushing.

BERTHING: Well fendered modern concrete quay, 450 m. in length, laid out as per plan in the Guide. The normal practice is for there to be 2 ships of around 150 m. and one smaller ship alongside at one time. The inshore side of this quay is for small craft only.

Depths alongside Berth No. 1, 23 ft.; No. 2, 18 ft. and No. 3, 22 ft.

FRESH WATER: This is obtainable while alongside the quay but only in a dire emergency at the anchorage from the tug which can supply up to 8 tons.

REPAIRS: Only very small repairs are possible and it is suggested that a receipt is obtained for any parts sent ashore.

REPATRIATION: There are 2 planes a week from Libreville to Paris and approximately 12 planes weekly to Abidjan.

SHIPCHANDLER: There is no chandler for any form of stores, the only possibility being self-purchase at the local (Libreville) supermarket. All goods are imported and therefore very expensive.

HOLIDAYS: 12th March, Gabonese independence.

MARINE CLUB: There is a marine club about 1 km. from Ovendo in the Libreville direction (swimming pool, etc.).

SHIPMASTER'S REPORT: February 1979.

DOCUMENTS: Ship's Papers (sighted), Crew Lists (5), Passenger Lists (5), Port of Call (4), Crew's Custom Declaration (1), Marine Health (1), Arms and Ammunition (1).

PILOTAGE: Pilot boards by tug which is compulsory for docking and undocking. Vessels berthed head out for sailing.

APPROACHES: Gambia Lighthouse range 20 miles is easy to pick up, channel is well marked by buoys with good radar reflectors. No Pilot is available for the channel. After last buoy proceed directly to anchorage.

Soundings taken throughout channel showed a least depth of 20 m.

ANCHORAGES: Waiting anchorage is 0.5 to 1 mile West of the wharf.

RADIO: Agent keeps watch on VHF Channel 16.

BERTHING: A new port has been built about 4 miles South of old lighter jetties at Libreville, consisting of 1 wharf at right angles to the shore in 15 m. of water, capable of docking 2 ocean-going vessels.

STEVEDORES: Slow but efficient, about 6 tons per gang man hour.

REPATRIATION: Airport 12 miles from port, 6 flights per week direct to Paris.

TRANSPORT: Available by bus or taxi to the town.

SHORE LEAVE: Allowed.

SEAMEN'S CLUB: Within 1 mile of port with bar and swimming pool.

SHIPMASTER'S REPORT: March 1980.

PILOTAGE: Pilot compulsory. Pilot boards 1 mile S.W. of Ovendo Pier and requires 24 hours' and 12 hours' notice.

ANCHORAGE: One mile S.W. of the pier.

RESTRICTIONS: Pilot advises that vessels can only berth on slack water as a 5 – 6 knot (approx.) ebb tide runs. Vessels able to sail at any time, however, it is not advisable to manoeuvre during darkness as buoys are frequently unlit. Vessels are able to proceed from sea to anchorage at any time.

MAX. SIZE: Max. draft at Ovendo is 9.2 m. Mean tidal range 1.5 m.

TUGS: One tug available.

VHF: Pilot and Port Authority on Channel 16. Agent on Channel 9.

BERTHING: The berth at Ovendo is 20 miles from the entrance. There is one jetty 450 m. in length. The mean tidal range at the berth is 1.5 m. and the bottom in the vicinity of the berth is mud. Container vessels use the port and discharge using ship's gear. There is ample handling and storage space for containers. "Delmas" container vessels use the port frequently and they take preference over most other vessels.

SERVICES: The following are available:

Fresh water (rate 25 tonnes p.h.), airport, doctor and hospital.

The following are not available:

Fresh provisions, repair facilities, dry dock facilities, machine shop, surveyors, laundry service, fuel, lubricating oils, groceries, meats and slop facilities.

GENERAL: Arriving from a S.W. direction no difficulties were encountered, Point Gonbe was visible 18 miles on the radar and later the fairway buoy was visible at 10 miles. All the channel buoys showed up at 6 to 8 miles on radar.

The Fairway Buoy is very large, similar to the type used on the American coast. Chart used 1877 (Estuaire du Gabon).

Conspicuous wreck marked in position Lat. 0° 24.4′ N., Long. 9° 17.2′ E. is no longer visible.

On entering inward I checked the buoys' positions against the land and found:

Fairway Buoy Gp. Fl.(2) 6 secs. In position. Unlit.
(Course 090°×3.2 M) Fl. G. 4 secs. In position. Lit.
(Course 115°×2.1 M) Gp. Occ(2) G. 6 secs. In position. Unlit.
(Course 115°×2.1 M) Between { Occ. R. 4 secs. In position. Unlit.
Fl. G 4 secs. In position. Unlit.
(Course 137°×3.0 M) Fl. R. 4 secs. Out of position. Unlit.
(Course 137°×6.1 M) Occ. 6 secs. In position. Lit.

After passing the Fl. R. 4 sec. buoy, vessel was about to set a course to the anchorage off the port of Libreville but was told that vessels carrying cars were to proceed to the new port of "Ovendo" some 8.5 miles further up the river.

On arrival I was told to anchor 1 mile S.W. of the new pier.

Quite a modern port as described in the "Guide to Port Entry".

Laying alongside the berth is not very comfortable when the ebb tide starts to flow, anything up to 6 knots within half an hour of HW, getting its force from three rivers, River Egoume, River Ikoy and the main river Komo.

Vessels always berth on slack water with the aid of a tug to push. Vessels can leave at any time. Port employs two French Pilots.

REPORT: 1982.

Ship Spares: Customs require originals of invoices G11 for clearing spares. Copies are not acceptable.

AGENT: See "Libreville".

PORT GENTIL: 00.43 S. 08.48 E. (See Plan Book)

LOCATION: The deep water port of Port Gentil is located between Point Clairette (Sogara Refinery) and the Alcyon Bank (CFG factory).

APPROACHES: Buoyed channel, lit at night. Minimum depth 15 m.

DOCUMENTS:

Cargo Manifest.
Store List.
Crew's Personal Effects List.
Crew List.
List of Ports of Call (not compulsory).
Health Certificate.
Ship's Official Papers.

PILOTAGE: Pilot service operates 24 hours a day. Vessels berth day and night except at Sogara Quay where berthing is daylight only.

ANCHORAGES: An anchorage area for timber vessels faces the old port. Access to the zone is by leaving to starboard a path 200 m. from the buoys of the Alcyon and Talisman Banks.

An anchorage area for waiting vessels intending to berth at the new port, or at the Sogara Refinery is to starboard of a line joining the Prince Buoy to the buoy of the Sogara route to the port.

RESTRICTIONS: See "Pilotage".

The water area in the port is clear with no obstructions apart from the Alcyon Bank running from the marker buoy to the CFG factory. Dredging carried out permits manoeuvring of vessels to Berth No. 2 of the Commercial Quay.

RADIO: Port Control on HF 2182 kHz and VHF Channel 16, Working Channel 12.

TUGS: Not required.

BERTHING: *Commercial Quay:* 350 m. of quay with 11 m. depth of water and 75 m. of quay with a depth of 2.5 m. which constitutes the barge quay. The quay bollards are spaced 30 m. apart. This quay is able to accommodate 3 × 20,000 tonne vessels.

Fish Quay: The fish quay runs at right angles to the Commercial Quay (107° – 287°). 80 m. with 8 m. depth of water; 197 m. with 7 m. depth of water.

This quay is reserved as a priority for fishing vessels, but can be partially used for berthing vessels of a commercial nature. The quay bollards are spaced 20 m. apart.

Storage: 6,000 sq.m. of covered storage, divided into 6 bays of 1,000 sq.m. each. 3 bays leased to COMACO (8 reefer points available). 3 bays leased to SOAEM (1 reefer point available). 1 Customs warehouse located in the SOAEM bay.

Open storage area: Current paved surfaces of open storage areas – 14,000 sq.m. One tarmac non-covered area of 10,000 sq.m. is in service. A second storage area of 10,000 sq.m. (approx.) will be brought into service at a later date.

STEVEDORES: Work in 3 shifts throughout 24 hours.

MEDICAL: The port infirmary is located in the Comaco Building.

TANKERS: To N.E. of Mole is a petroleum pipe-line unloading point for small tankers, tying up on buoys, max. length 70 m., draft 5 m.

Prince's Bay, point for unrefined petrol by sealine is available to North of Prince's Bay (see "Cape Lopez").

FRESH WATER: Available at commercial quay and fishing quay.

WATCHMEN: Available.

HATCHES: Opened and closed by crew.

CONSULS:

France	BP. 511	Tel: 20.86
Netherlands	BP. 792	Tel: 28.09
Sweden	BP. 518	Tel: 21.71
Switzerland		Tel: 20.19

REPAIRS/DRY DOCKS: Not available.

REPATRIATION: Obtainable on medical grounds. No facilities for crew changes.

AIRPORT: 4 km. distant. Regular services.

TIME: GMT plus 1 hour. No alterations.

HOLIDAYS: No work on Independence Day, 17th August.

SHORE LEAVE: Permitted.

GENERAL: *Ships' Spares:* Customs require original of invoices for clearing spares. Copies are not acceptable.

AUTHORITY: Direction du Port de Port Gentil, B.P. 43, Port Gentil, Gabon. *Tel:* 75-35-63. *Contact:* J. B. Pea, Le Directeur du Port.

AGENT: Socopao-Gabon, B.P. 560. Tel: 752491. Telex: 8223. Cables: "Freight".

NOTES

Please also advise Shipping Guides Ltd.

Gambia, Republic of

BANJUL: 13.27 N. 16.34 W. (See Plan Book)

DOCUMENTS:

7 Crew Lists.
7 Passenger Lists.
7 Ports of Call Lists.
Health Documents.
Deratisation (or Exemption) Certificate.
Yellow Fever Inoculation Certificates.
Customs Crew Declaration.
2 signed copies of Manifest.
Bills of Lading (may be sent in advance of vessel).

PILOTAGE: ETA and draft to be communicated to "Harbour Master Banjul" 48 hours before ETA and confirmed 12 hours before. Vessel arriving Monday ETA preferably not later than Saturday morning.

Pilot station situated in Harbour Master's Office has VHF station, calling Channel 16 (156.80 MHz) working Channels 12 (156.60 MHz) and 14 (156.70 MHz). Continuous listening watch kept 0800 – 1500 hrs. Monday – Thursday. 0800 – 1300 hrs. on Friday and Saturday. Listening watch at weekends if vessels are expected. Reception generally good within 100 nautical miles radius. Pilot boat has blue hull and white superstructure, exhibiting usual signals.

Pilotage from any point inwards from Fairway Buoy by request, but compulsory from No. 5 Buoy inwards.

ANCHORAGES: Good and spacious anchorages to the East and S.E. of Government Wharf in depths of 8 to 15 fathoms.

RESTRICTIONS: Vessels may enter and proceed to anchorage at all times and states of tides. Minimum depth in sea approach channel is 28 ft. LWOS. Average rise of spring tides 6 ft., neap tides 4 ft.

MAX. SIZE: Maximum length 600 ft. maximum draft 27 ft. (Banjul Wharf) 8 ft. (Government Wharf). For vessels anchoring only, length unlimited.

HEALTH: Vessels exhibit the appropriate International Code signals. Port Health Officer usually boards the vessel at the harbour anchorage or alongside between 0800 and 1700 hrs. daily, at all times in case of emergency.

RADIO: Banjul Radio call sign C5G. Radio Telephone 2182 kHz (calling) 2756.4 kHz. 1100 – 1200 hrs., 1400 – 1500 hrs. (weekdays) Sundays – on demand.

RADAR/VHF: Port VHF. Radar station being constructed – See "Pilotage".

TUGS: One tug of 1,000 h.p. and one 25 ft. mooring launch.

BERTHING: Banjul Wharf: Length 123 m. Breadth 19 m. Depth alongside 10 m.

Maximum permissible draft alongside; Banjul Wharf 27 ft. Government Wharf 17 ft. Government Wharf berthing face 294 ft. with 1 dolphin in line 100 ft. from North end. Mooring bollards on foreshore. Banjul Wharf berthing face 400 ft. mooring dolphin each end, set back from wharf face. Inner berth of length 335 ft. suitable for small vessels up to 17.5 ft. draft. Public Jetty berthing face 196 ft. maximum draft 11 ft.

New deep water berth similar to Banjul Wharf under construction close Northward of Banjul Wharf, completion June 1984. Also see "Developments".

BRIDGES: No bridges.

STEVEDORES: Normally 48 hours notice addressed to Agent. If arriving Monday preferable Agent notified requirements latest Friday. Normal working hours 0730 – 1900 hrs.

MEDICAL: Emergencies and cases requiring hospitalisation attended to at all times, giving as much advance notice and information as possible. Other cases attended to as convenient to ships after arrival. For certificates required see "Documents". Inoculation and vaccination yellow fever/smallpox given on request.

TANKERS: Tankers (discharging only) berth on Banjul Wharf. Maximum permissible draft 27 ft. Discharge of residue and bilge prohibited. Ballasting by permission of Harbour Master.

DENSITY: Normally salt water at Banjul, reducing to about 1020 ozs. per cu.ft. during River Gambia flood water period: August – February.

FRESH WATER: Fresh water available at Banjul wharves from hydrant. Notice of requirements should be sent with ETA. No water barge.

FUEL: Bunkering facilities available at Banjul Wharf by road tankers for reasonable quantities. Also available at Public Jetty for small craft (11 ft. draft). Advance notification required for all bunkers.

FIRE PRECAUTIONS: For tankers and vessels carrying explosives Fire Brigade will be in attendance.

GANGWAY/DECK WATCHMEN: Recommended. By arrangement with Agent.

OPENING/CLOSING HATCHES: Usually done by stevedores.

CERTIFICATES: Registry, Articles of Agreement, Load Line, Safety, Safety Equipment Radio Licence/Certificate.

CUSTOMS ALLOWANCES: Reasonable allowance of wine/spirits and tobacco/cigarettes out of bond, as per Master's request.

CARGO GEAR: In accordance with UK Factories Act. Ship's lifting gear for loading and discharging, also 4×6 ton and 1×30 ton mobile cranes available.

IDENTIFICATION CARDS: Needed.

CONSULS: In Banjul: Belgium, Denmark, France, Lebanon, Norway, Spain, Sweden. U.S.A. has resident charge d' Affairs and U.K. has High Commissioner. Senegal has resident Ambassador.

REPAIRS: Minor hull, deck and engine repairs and welding undertaken by G.P.A. dockyard.

DRYDOCK: A slipway of capacity of 500 tons displacement is included in the dockyard facilities.

REPATRIATION: Possible.

AIRPORT: Airport 14 miles from Banjul. Regular services.

TIME: GMT kept throughout the year.

HOLIDAYS: New Year's Day (1st January); Independence Day (18th February); Good Friday, Christmas Day, Boxing Day, Islamic Festivals of Eid-El-Fitr (Ramadan) and Eld-El-Kabir. No cargo work on Islamic Holidays.

TELEPHONE: Telephones installed on board at ships/Agent's request.

SHORE LEAVE: No restriction on normal shore leave.

GENERAL: Lighters may be hired for discharging ship at anchor and transhipments up river.

A private company operates a large fleet of lighters, mainly for transporting groundnut from river ports to Banjul. Ships stores: fresh vegetables, beef and fish, fruit (in season) and bonded stores are available.

Other Ports: River Ports: Kaur and Kuntaur at 118 and 150 miles upriver respectively from Banjul. River Pilots available at Banjul. Max. loaded draft 17 ft. 06 in.

DEVELOPMENTS: This envisages the commencement of Phase II of the Banjul Port Project as trade develops and ultimate embarkation of Phase III.

Work on Phase II which includes the building of a second deep water berth is underway. Length of new berth 123 m., breadth 29 m. and depth alongside 15 m. However, as the maximum depth at MLWS between No. 8 and No. 9 Buoys is 9 m. the maximum recommended draft is 8.5 m. The berth will be completed by June 1984.

AUTHORITY: Gambia Ports Authority, Wellington Street, P.O.Box 617, Banjul, Republic of the Gambia. *Tel:* 266 (Managing Director). 267 and 268 (Others). *Telex:* 2235 Gamport Gv. *Cables:* Gamports. *Contact:* Captain J. F. Leigh, Managing Director.

NOTES

Please also advise Shipping Guides Ltd.

German Democratic Republic

ROSTOCK: 54.09 N. 12.08 E. **(See Plan Book)**

DOCUMENTS:
Health Declaration.
6 Crew Lists.
2 Passenger Lists.
2 Currency Lists.
Stores List.
Cargo Documents.
Ship's Certificates.

PILOTAGE: Compulsory. Contact by VHF Channel 16, working Channel 12. Pilot boards at Warnemunde Light Buoy. International code signals used.

ANCHORAGES: In Warnemunde Roads, off port entrance, in depths of 48 ft.

RESTRICTIONS: Entrance channel from Warnemunde Light Buoy to Overseas Port at mouth of River Warnow, depth 13.0 m.

MAX. SIZE: For Overseas Port: length 230 m., beam 32 m., draft 11.58 m. (38 ft.). For City Docks: 142 m. length, 21 ft. draft. Also see "Tankers".

Berth No.	*Max. Draft*		*Remarks*
	(m.)	(ft. in.)	
03	9.45	31 0	Max. LOA 215 m.
04	11.58	38 0	(37 ft. for turbine vessels)
05	9.14	30 0	Max. LOA 215 m.
07	9.02	29 7	
16	10.36	34 0	Max. LOA 180 m.
17	11.28	37 0	
18	11.20	36 9	
21 – 23	10.06	33 0	
24	11.28	37 0	
31, 32, 36	9.75	32 0	
33	10.06	33 0	
34, 35, 37	9.45	31 0	
41 – 46	9.75	32 0	
50	9.14	30 0	
51 – 54	9.75	32 0	
63	7.62	25 0	(Ro-Ro)
64, 65	10.36	34 0	
66	9.45	31 0	
67, 68	10.36	34 0	

HEALTH: Pratique given on arrival. In case suspected disease or fever on board, radio details to Agent before arrival. Complete declaration of health required.

RADIO: Rugen Radio, call sign "Y5M".

TUGS: Available. Use of at least 1 tug is compulsory for vessels berthing and unberthing.

Sufficient number of tugs available, from 300 h.p. to 1,200 h.p. Tugs normally join vessel in front of the mole.

BERTHING: *Overseas Port:* Situated in Lower Warnow River about 3.8 miles from Warnemunde Sea Buoy.
Pier No. 1: 9 berths General goods depth 30 ft. to 34 ft.
Pier No. 2: 13 berths General goods depth 30 ft. to 33 ft.
Pier No. 3: 4 berths Bulk cargoes depth 30 ft. to 37 ft.
Pier No. 4: 3 berths Grain, Feedstuffs, Fish Meal. Depth 34 ft. – 37 ft.
Oil Pier: 3 tanker berths depth 30 ft. to 38 ft.

Chemical Port: 1 berth. Depth 29 ft. 7 in.

City Docks: In Warnow River, about 6 miles from sea. Total quay length 1,600 m. depths alongside 21 ft. and 18 ft. Grain elevators shooting capacity 42 t.p.h., suction capacity 33 t.p.h.

Warnemunde: Port for passenger service. Quay length 180 m. Depth alongside 27 ft. 06 in.

Port Control to be contacted through VHF Channel 14.

Roll-on/Roll-off terminal with facilities for 20 ft. and 40 ft. containers. Max. draft 25 ft.

CRANES: *Overseas Port:* 73 cranes and 15 crane-bridges with capacities from 3.2 – 63 tons. A self-propelled floating crane "Goliath", for heavy lifts not exceeding 100 tons is available. Heavy Lifts weighing up to 300 tonnes may be handled by means of additional 100 ton yard cranes.

City Docks: Crane capacities 2 – 10 tons.

BULK HANDLING FACILITIES: 4 berths, length of quay 900 m. Six bridges with 20 tons capacity and outreach of 40 m. Storage area 13,200 cu.m. for 90,000 tons of bulk cargo.

TANKERS: 3 berths available. Max. length 230 m., Max. draft 38 ft.
Berth No. 03, 31 ft. (max. LOA 215 m.)
Berth No. 04, 38 ft. (max. LOA 230 m.)
Berth No. 05, 30 ft. (max. LOA 215 m.)

Storage capacity of 120,000 cu.m. Max. discharge rate 2,900 cu.m. p.h.

MEDICAL: Doctors, hospitals available. Advance notice to Agent required if medical assistance necessary.

FRESH WATER: Available ex-shore hydrants.

FUEL: Available all grades fuel and gas oil by barge. Vessels calling for bunkers only, pay no harbour dues, and other fees are reduced.

REPAIRS: All repairs possible. Floating crane available. Neptun Shipyard and other repair shops situated at City Docks. Warnow Shipyard and floating dock situated in Overseas Port.

Tank cleaning, boiler cleaning and repairs.

REPATRIATION: Can be arranged if identification papers in order.

TIME: GMT plus 1 hour. Summertime, GMT plus 2 hours (24th March – 29th September).

HOLIDAYS: New Year (1st January); Good Friday; Easter Sunday; 1st May; Whit Sunday; Whit Monday; 7th October; Christmas Day; 26th December.

AIRPORT: Berlin – Schonefeld.

TELEPHONES: Ship-to-shore connections available.

POLICE/AMBULANCE/FIRE: Ambulance 366-3500; Police 366-3333; Fire 366-2222.

SHORE LEAVE: Crew members permitted ashore.

DEVELOPMENTS: Plans to build a floating island in depth of 21 m. off Rostock to accommodate tankers up to 100,000 tons. Estimated discharge rates up to 3,000 t.p.h. into smaller vessels for transfer to existing oil terminal.

New container and Ro-Ro installation to be built in the Southern harbour.

Port basin to be dredged to 14.0 m.

SHIPMASTER'S REPORT: September 1980.

VHF: While the vessel is in port, telephone calls to anywhere inside or outside Germany can be made most conveniently through "Rostock Radio" on VHF Channel 16. The working Channel is 26.

Customs: The Customs only seal the cigarettes and coffee. Spirits are not sealed. Each crew member is allowed 200 cigarettes.

Immigration: Immigration are very strict. Shore passes are issued to all crew members. All supernumeraries (e.g. wives on board), have to obtain visas which cost DM5/– each, and have to be paid to the Immigration Authorities, directly by the Master. On completion of discharge the entire ship's company (with the exception of one deck watchkeeper and one engine watchkeeper) are required to remain in their cabins with Passports/Seaman's Books, until the vessel is thoroughly searched by the Authorities for stowaways.

Density: The density of the water at the berth varies from 1000 to 1010 ozs./cu.ft.

AUTHORITY: Veb Seehafen Rostock, DDR-2500 Rostock-Uberseehafen. *Tel:* 366-3200. *Telex:* 31264. *Contact:* Mr. Silberbach, Director. Port Captain *Tel:* 366-4255.

AGENT: VEB Schiffsmaklerei, Strandstr 86, Rostock. Telex: 31265 (Head Office). Port Office, City Docks. Telex: 31265. Tel: 37081 (Ext. 367). Agency Overseas Port. Telex: 31428. Tel: 366-51171.

STRALSUND: 54.18 N. 13.06 E. **(See Plan Book)**

DOCUMENTS:
Health Declaration.
6 Crew Lists.
2 Passenger Lists.
2 Currency Lists.
Stores List.
Cargo Documents.
Ship's Certificates.

PILOTAGE: Compulsory. Contact Pilot by VHF Channel 14. Pilot stations are at Barhoeft and Thiessow. Pilot boards vessel at Gellen (N.W. entrance) and Landtief (Eastern entrance).

Entry only possible from 1 hour before sunrise to 1 hour after sunset. (N.W. entrance only).

ANCHORAGES: In the roads clear of the fairway, depths 26 ft. to 30 ft.

RESTRICTIONS: Northern entrance between breakwaters is 11 ft. 06 in. depth, used by smaller vessels only. Eastern entrance, depth 17 ft. MLW passing railway bridge, which is opened about every 3 hours.

MAX. SIZE: Vessels up to 17 ft. draft.

RADIO: Rugen Radio, call sign "Y5M".

HEALTH: Pratique given on arrival. In case suspected disease or fever on board radio details to Agent before arrival.

TUGS: Available and compulsory for vessels of over 1,000 g.r.t. berthing and unberthing.

BERTHING: Depth alongside quays up to 17 ft. maximum. Length of quays 1,100 m.

CRANES:

2 cranes	10 tons capacity; reach 20 m.
2 cranes	2 tons capacity; reach 20 m.
1 crane	5 tons capacity; reach 22 m.
2 Elevators	capacity 25 t.p.h. each.

Also a conveyor system for handling of salt with a capacity of 60 t.p.h.

FRESH WATER: Available from shore ex pipe-line.

FUEL: Gas oil and lub oil available by barge.

REPAIRS: All deck, hull and machinery repairs by local shipyards.

REPATRIATION: All facilities exist for changing crews.

AIRPORT: Berlin (Schonefeld).

MEDICAL: Doctors, hospitals available. Advance notice to Agent required if medical assistance necessary.

TIME: GMT plus 1 hour. Summertime, GMT plus 2 hours (24th March – 29th September).

HOLIDAYS: New Year (1st January); Good Friday; Easter Sunday; 1st May; Whit Sunday; Whit Monday; 7th October; Christmas Day; 26th December.

SHORE LEAVE: Crew members permitted ashore.

AUTHORITY: VEB Seehafen Stralsund, DDR-2300 Stralsund. *Tel:* 692-300. *Telex:* via 317244. *Contact:* Mr. Happ, Port Director. Harbour Master, *Tel:* 692291.

AGENT: VEB Schiffsmaklerei Rostock, Agentur Stralsund, 23 Stralsund, Hafen – Ballastkiste. Tel: 692362. Telex: 317224/25.

WISMAR: 53.54 N. 11.27 E. **(See Plan Book)**

DOCUMENTS:
Health Declaration.
6 Crew Lists.
2 Passenger Lists.
2 Currency Lists.
Stores List.
Cargo Documents.
Ship's Certificates.

PILOTAGE: Compulsory from outer roads to harbour quays. Pilot boards at Wismar Sea Buoy. International code signals used. Contact by VHF Channel 12.

ANCHORAGES: In outer roads between Hannibal Shoal and Poel Island in depths of up to 40 ft. Protected anchorage in inner roads, depths up to 30 ft.

RESTRICTIONS: Entrance to the port is through a buoyed channel 15 miles long, depth 27 ft. LW. Vessels over 125 m. LOA or 24 ft. draft enter in daylight only, turning basin 250 m. diameter.

MAX. SIZE: Length up to 170 m. Max. draft 27 ft. Vessels over 155 m. LOA, max. draft 26 ft.

HEALTH: Pratique given on arrival. In case suspected disease or fever on board radio details to Agent before arrival.

RADIO: Rugen Radio, call sign "Y5M".

TUGS: Available and compulsory for berthing and unberthing.
2 tugs of 800 h.p. Tugs join vessel according to the Pilot's instruction.

BERTHING:
Grain Quay: Max. draft 27 ft., quay length 160 m., 2 grain elevators, grain silos for 20,000 tons.
Potash Port: Max. draft 27 ft., mechanical potash loading plant, quay length 360 m., 3 loaders. Rate 600 t.p.h.
Oil Port: Max. draft 27 ft., max. length 160 m.
Timber Port: Max. draft 25 ft., quay length 400 m., 2 gantry cranes of 3.2 tons, 1 mobile crane (30 tons).
Old Port: Max. draft 16 ft., quay length 140 m., no handling operations, fishing port, waiting berths.
Seaport, Northern Quay: Max. draft 27 ft., quay length 420 m., 5 gantry cranes with a capacity from 3.2 to 12 tons. One mobile crane of 30 tons capacity and one floating crane of 100 tons capacity.
Seaport, Southern Quay: Max. draft 27 ft., quay length 500 m., 7 semi-gantry cranes with a capacity from 3.2 to 10 tons.

FRESH WATER: Available from shore hydrants at all berths.

FUEL: All grades fuel and gas oil obtainable. Vessels calling for bunkers only pay no harbour dues, and are allowed a reduction in pilotage and clearance fees. 7 days' notice required for bunkers.

REPAIRS: Repairs can be effected at Mathias-Thesen Shipyard. Floating crane available, capacity up to 100 tons.

MEDICAL: Doctors, hospitals available. Advance notice to Agent required if medical assistance necessary.

TIME: GMT plus 1 hour. Summertime GMT plus 2 hours. (24th March – 29th September).

HOLIDAYS: New Year (1st January); Good Friday; Easter Sunday; 1st May; Whit Sunday; Whit Monday; 7th October; Christmas Day; 26th December.

SHORE LEAVE: Crew members permitted ashore.

AIRPORT: Berlin, 270 km. from Wismar.

TELEPHONES: No ship to shore communications.

AUTHORITY: Veb Seehafen Wismar, DR-2400 Wismar. *Tel:* 45300. *Telex:* 318882 (Harbour Master – 318862). *Contact:* Mr. Boddin, Port Director. Harbour Master, *Tel:* 45552/2764.

AGENT: VEB Schiffsmaklerei Rostock, Agentur Wismar, 24 Wismar, Kopenhagener Strasse. Tel: 3308, 45230-32 Telex: 0318841.

NOTES

Please also advise Shipping Guides Ltd.

Federal Republic of Germany

GENERAL:

RIVER ELBE: **(See Plan Book)**

GENERAL INFORMATION ON ELBE PILOTAGE, DEEP SEA PILOTAGE, HELICOPTER AND RADAR SERVICE, ANCHORAGE ON THE RIVER ELBE.

Elbe Pilots for all ports on the River Elbe, Cuxhaven, Brunsbuttel, Butzfleth, Stadersand, HEW-Wedel and Hamburg.

Pilot Vessel: For inward bound vessels near Elbe 1 Light-vessel, a 2-masted pilot vessel with black hull and yellow funnel and "Lotse" painted in white letters on both sides of hull is stationed in approx. position Lat. 53° 59.5′ N., Long. 08° 09.0′ E. (1.5 miles E.S.E. of Elbe 1 Light-vessel).

In bad weather pilot vessels shift to East of Light-buoy "9". Such shifting is reported by Norddeich Radio in a navigational warning.

Pilot vessel can be contacted on VHF Channel 16 or 8, by showing flag "G", by sound or morse light signals.

During the night pilot vessels show the lights mandatory for pilot craft according to Rule 29 of the International Regulations for Preventing Collisions at Sea.

The vessel used for embarking Pilots will, in addition, show white flares for 30 seconds at 2-minute intervals according to Rule 36 of the International Regulations for Preventing Collisions at Sea.

Traffic Separation Scheme in the "Approaches to River Elbe": The separation zone of this traffic separation scheme also constitutes a safety zone around Elbe 1 Light-vessel. Ships are urged to give the light-vessel a good berth when passing.

Masters are requested not to leave the traffic lane in question when taking a Pilot.

There is an anchorage lying 3 miles to the N.E. of the traffic separation scheme. Special care should be applied when approaching or leaving the anchorage. See "Anchorage".

Land-based radar contact can be requested through radar station "Elbe Approach Radar Radio", on VHF Channel 19 during bad weather conditions, e.g. when visibility drops below 3,000 m., when there are ice floes, when buoys have been removed from their respective positions or when pilot vessels are leaving their positions, for further particulars please see "Radar".

PILOTAGE: Vessels requiring Elbe Pilot must order same at least 12 hours prior to arrival at Elbe 1 Light-vessel by radiotelegram to "Elbelotse Brunsbuttel".

Cable address:	"Elblotse Brunsbuttel" via Norddeich Radio, call-sign DAN
Telex:	28343 Ellots D
Telephone:	(04852) 87295

Vessels coming from nearby ports should make the request as soon as possible.

If the ETA alters, a correction should be transmitted.

Message must include:

1. Name of vessel,
2. g.r.t,
3. ETA Elbe 1 Light-vessel, date 2 figures and time of vessel's arrival 4 figures,
4. draft,
5. vessel's destination.

(For example: 1., Eleka, 2. 12854, 3. ETA Elbe 1 02 1030, 4. 24 ft. 04 in., 5. Kiel Canal).

1 hour before arrival at Elbe 1 Light-vessel Masters are advised to contact the pilot vessel by VHF Channel 16 or 8.

Compulsory District Pilotage: Pilotage is compulsory on the River Elbe to and from Elbe 1 Light-vessel for all sea-going vessels over 1,000 g.r.t., furthermore for all oil-, gas- and chemicals-tankers and, in addition, for all such tank-vessels over 10,000 g.r.t. on their way to and from Deutsche Bucht Light-vessel.

These tank-vessels over 10,000 g.r.t. have to use the Western Approach Traffic Separation Scheme Deutsche Bucht.

Pilots for these vessels will be embarked and disembarked only at the Deutsche Bucht Light-vessel by helicopter or pilot boat. See "Deutsche Bucht Pilot Service".

Furthermore, pilotage is compulsory for all bulk carriers of more than 35,000 g.r.t. and other vessels of more than 60,000 g.r.t. on the River Elbe and on their way to and from Deutsche Bucht Light-vessel; all these vessels can embark and disembark Pilots only at the Deutsche Bucht Light-vessel by helicopter or pilot boat, they have to use the Western Approach Traffic Separation Scheme Deutsche Bucht. See "Deutsche Bucht Pilot Service".

Compulsory pilotage exists for outward-bound sea-going vessels of more than 20,000 g.r.t. as far as to the outer range of the pilot vessel position at Elbe 1 Light-vessel even when, under bad weather conditions, the pilot vessel has been moved up-river.

The disembarkation of Pilots can take place by helicopter at Elbe 1 Light-vessel, if these ships are equipped with a properly marked winching or landing area according to International Chamber of Shipping (ICS) Guide to Helicopter/Ship Operations.

See "Deck-markings and Dimensions Plan" in Plan Book.

The transfer of Pilot by helicopter can also take place on container vessels, if these ships are equipped with a special platform for winching manoeuvres.

Exemptions:

The compulsory district pilotage regulations do not apply to tankers of less than 300 g.r.t. and other sea-going vessels of less than 5,000 g.r.t., provided that:

- such vessels navigate a route which the Master of the vessel in question has navigated at least 6 times within the preceding 12 months in that same vessel;
- the Master of the vessel has an adequate knowledge of the German language;
- such vessels are equipped with an operational radar as well as with an operational VHF radiotelephone installation featuring the Channels specified for the pilotage district in question.

Nevertheless, it is most advisable for any vessel to take a Pilot not only because of his local navigational knowledge but also for his familiarity with the special provisions for the River Elbe, the quarantine and Customs regulations.

Vessels exceeding 35,000 g.r.t. (except container-, passenger- and naval ships) have to take 2 Elbe Pilots, but in fog all vessels from 25,000 g.r.t. upwards must do so.

Pilotage district divided into 3 areas:

1st district: From Elbe 1 Light-vessel to Brunsbuttel (entrance of Kiel Canal) 40 miles (from Deutsche Bucht Light-vessel to Brunsbuttel 68 miles) – operated by Elbe Pilots;

2nd district: From Brunsbuttel to Hamburg Seemannshoft (entrance to Port of Hamburg) 40 miles – operated by Elbe Pilots;

3rd district: Covers the whole area of the Port of Hamburg – operated by Port Pilots.

First change of Pilots takes place at Brunsbuttel for either a Kiel Canal Pilot or a second River Pilot, the Harbour Pilot for Hamburg will embark at Hamburg – Seemannshoft.

Vessels expecting Pilot may wait in vicinity of Elbe 1 Light-vessel or Deutsche Bucht light-vessel.

Contact either the Elbe pilot vessel or the Heligoland Pilot Station on VHF Channel 8, 13 or 16.

No restriction imposed on night entry for any vessels on the River Elbe.

Current velocity 2-3 knots; mean tidal range at Outer Bar Light-buoy "9" 9 ft. 10 in.; Brunsbuttel 9 ft. 2 in. and Hamburg 10 ft. 4 in. nature of bottom, sand and mud.

River pilotage dues (Lotsabgaben) have to be paid by all vessels exceeding 300 g.r.t., irrespective of whether they have used a river Pilot or not.

Pilotage fee (Lotsgeld) will only be charged if a Pilot is employed.

Deutsche Bucht Pilot Service: A central pilot service has been established at Deutsche Bucht Light-vessel.

Elbe Pilots will be transferred: By helicopter stationed at Wilhelmshaven-Mariensiel and/Brunsbuttel-St. Michaelisdonn or by pilot vessel operating from Heligoland. There is a pilot station on the island of Heligoland equipped with VHF operating on Channels 13 and 16 and which responds to calls addressed to "Heligoland Pilot".

Vessels expecting their Pilot at Deutsche Bucht light-vessel should stand by on VHF Channel 13 or 16 on approaching the rendezvous position.

HELICOPTERS: Helicopter Pilot service is available for vessels exceeding 10,000 g.r.t. at Deutsche Bucht light-vessel.

The service to drop or uplift Pilots onto or from ships "at anchor" or "underway" can be provided day and night.

A twin-turbine powered Bell 212 S and/or Sikorsky S-76 helicopter is available for this service. Only suitably equipped vessels may have a Pilot transferred by helicopter.

There must be a properly marked landing area or a marked winching area available according to International Chamber of Shipping (ICS) Guide to Helicopter/Ship Operation.

See "Deck-markings and Dimensions Plan" in Plan Book.

If such a marking is lacking, it will not be possible for the helicopter to touch down or drop a Pliot.

These vessels have to send aforementioned information together with the ETA.

(a) Pilots for the Elbe pilotage region are to be requested 24 hours prior to arrival at the helicopter rendezvous position in the vicinity of Deutsche Bucht light-vessel by radiotelegram to "Elbelotse Brunsbuttel".

Cable address:	"Elblotse Brunsbuttel" via Norddeich Radio, call-sign DAN.
Telex:	28343 Ellots D
Telephone:	(04852) 87295

Vessels coming from nearby ports should make the request on departure or as soon as possible.

Message must include:

1. name of vessel,
2. g.r.t.,
3. ETA Deutsche Bucht Light-vessel with date 2 figures and time of vessel's arrival 4 figures,
4. draft,
5. vessel's destination,
6. whether a properly marked landing area or marked winching area is available,
7. if yes, whether to starboard or port and on which hatchway or which part of the ship.

(For example: 1. Terre, 2. 104468, 3. ETA Deutsche Bucht 11 1530, 4. 41 ft. 03 in., 5. Brunsbuttel Elbe-Terminal, 6. Landing area available, 7. on port side.)

(b) A corrected ETA should be sent to "Elblotse Brunsbuttel" 6 hours prior to the transfer operation at Deutsche Bucht Light-vessel.

(c) Send the exact time of arrival to "Elblotse Brunsbuttel" 2 hours before arrival at Deutsche Bucht Light-vessel.

In addition to this, vessels should keep watch on *VHF Channel 16, 30 minutes before arrival* so that the helicopter can contact the ship.

After radio contact is established, the vessel shall advise the helicopter pilot of the vessel's position, heading, speed and the actual wind direction and speed over the deck.

It is essential that the vessel transmit direction finding signals on 410 kHz until the helicopter is over the ship. On request of the helicopter pilot an uninterrupted (locked key) transmission should be given.

When transferring the Pilot, vessels are restricted in their ability to manoeuvre according to Rule 3(g) (iii) and (iv) and may exhibit the lights and shapes as under rule 27(b) of the International Regulations for Preventing Collisions at Sea. In addition, they may inform shipping of their manoeuvres by VHF.

In cases of defect of helicopter, poor visibility, icing conditions, inadequacy of construction of ships, or no landing or winching area markings, the Pilot will have to be embarked or disembarked by the Pilot boat at the same position.

A sea-going Pilot boat is operating from Heligoland in up to Beaufort Sea Disturbance Nos. 4 – 5 for embarking and disembarking the Pilots, if the helicopter is not available, or if the ship's construction is inadequate for helicopter transfer, or if the helicopter landing or winching area of the ship has no proper marking according to International Chamber of Shipping (ICS) Guide to Helicopter/Ship Operation. See "Deck-markings and Dimension Plan" in Plan Book.

If due to incomplete or misleading ETA information it is found at the attempted Pilot transfer by helicopter that the vessel is not properly marked and/or fitted for such transfer and the helicopter consequently has to return to base, it will be necessary to send a Pilot by boat from Heligoland, which may involve considerable delay plus the cost of the futile flight.

General: If helicopter operation cannot take place, the ship will be informed of the fact by radio telegraph via Norddeich Radio (DAN). For that purpose a permanent radio watch should be kept on 500 kHz (512 kHz if distress traffic is in progress on 500 kHz) during the approach, starting 2 hours before reaching rendezvous position at Deutsche Bucht Light-vessel.

The Master will receive further instructions by radio message or via VHF on how to proceed, if Pilot transfer is not possible.

The Heligoland pilot station can be called on VHF Channel 16 or 13 and should be addressed "Heligoland Pilot".

Vessels expecting a Pilot at Deutsche Bucht Light-vessel will be called on 500 kHz (512 kHz during distress working) or on VHF Channel 16 or 13 for information on transfer details.

RADAR: A continuous and co-ordinated chain of radar stations has been established to cover the traffic flow along the estuary of the River Elbe from a point 4 miles before passing Elbe 1 Light-vessel as far as well into the port of Hamburg.

If visibility drops below 3,000 m. and/or if particular situations arise (e.g. ice floes, withdrawn buoys, pilot vessels leaving their positions, etc.). Masters of inward-bound vessels may request land-based radar monitoring assistance from a point *4 miles* before passing Elbe 1 Light-vessel until receiving a Pilot. This service will be rendered by Elbe Pilots and is available by contacting Elbe Approach Radar Radio, VHF Channel 19.

The same service is extended to outward-bound vessels as far as *4 miles* West of Elbe 1 Light-vessel.

Once the Elbe Pilot has come aboard he will be assisted by his land-based colleagues monitoring the shore-operated radar system.

Radar Stations along the River Elbe: Elbe Approach Radar Radio, VHF Channel 19; Neuwerk Radar Radio 1, VHF Channel 18; Neuwerk Radar Radio 2, VHF Channel 5; Cuxhaven Radar Radio, VHF Channel 21; Belum Radar Radio, VHF Channel 3; Brunsbuttel Radar Radio, VHF Channel 4; Freiburg Radar Radio 1, VHF Channel 18; Freiburg Radar Radio 2, VHF Channel 22; Steindeich Radar Radio, VHF Channel 5; Hetlingen Radar Radio, VHF Channel 21; Hamburg Radar Radio, VHF Channel 3 and 19.

Each station broadcasts periodical reports, in German and English, of visibility, ice, tide, alterations of seamarks, etc. See "Admiralty List of Radio Signals".

ANCHORAGE: A deep-water anchorage for deep-draft vessels, very large crude carriers (VLCC's), and ultra large crude carriers (ULCC's) is located South of "Deutsche Bucht" Light-vessel, approx. position Lat. 54° 05′ N., Long. 07° 27′ E. Depth of water from about 34 m. to 36 m.

In the vicinity of Elbe 1 Light-vessel (3 miles to the N.E.) for large and deep-draft vessels, North of estuary, approx. position Lat. 54° 03′ N., Long. 08° 09′ E., depth of water from about 14 m. to 19 m. below chart zero.

Neuwerk Roadstead, approx. position 53° 58′ N., 08° 30′ E., depth of water from about 8 m. to 17 m. below chart zero;

Medem Roadstead, approx. position 53° 51′ N., 08° 46.5′ E., depth of water from about 5 m. to 13 m. below chart zero;

Neufeld Roadstead, approx. position 53° 51.7′ N., 09° 00′ E., depth of water from about 8 m. to 10 m. below chart zero;

N.E. Roadstead, off Brunsbuttel, permission only for 1 tide, approx. position 53° 53′ N., 09° 12′ E., depth of water from about 13 m. to 14 m. below chart zero;

Freiburg Roadstead, approx. position 53° 50.6′ N., 09° 19.5′ E., depth of water about 13 m. below chart zero;

There are further anchorages for small vessels at Sudreede (South anchorage) off Brunsbuttel, Wischhafen, Krautsand, Grauerort – and Twielenfleth Roadstead.

The bottom at all these anchorages consists of sand and mud.

DEEP SEA PILOTAGE: Ships requiring the assistance of deep-sea Pilots in the North Sea, the English Channel, or the Skagerrak shall make use only of the service of deep-sea Pilots in possession of a Deep-Sea Pilot Card issued in accordance with the Rules and Regulations for the Good Government of Deep-Sea Pilotage in the North Sea.

German deep-sea pilotage covering the North Sea, Skagerrak and English Channel is centralised with the Brotherhood of Elbe Pilots with its headquarters in Hamburg: Lotsenbruderschaft Elbe, Elbchaussee 330, 2000 Hamburg 52. Tel: (040) 824075.

German state-licensed Deep-sea Pilots for the above mentioned areas can thus be requested only from the Brotherhood of Elbe Pilots. All such Pilots hold foreign-going Master Mariner's Certificates.

They are on call to board vessels in all North Sea ports of the Continent and the United Kingdom and in ports along the coastlines of the English Channel.

Vessels will be boarded on request by these Pilots for pilotage in the North Sea, Skagerrak and English Channel.

These Pilots are experienced in handling vessels of any type and size.

Advantages: Assistance to nautical staff in heavily congested areas.

Exact knowledge of local conditions.

In order to ensure that vessels will get their deep-sea Pilots in time, the following periods of notice should be observed for ships berthed in

German ports:	9 hours prior to ETD
Continental North Sea ports:	24 hours prior to ETD
UK North Sea and Channel ports:	48 hours prior to ETD or to passing the local pilot station.

Request for services to be directed by radiotelegram to "Elbelotse Brunsbuttel".

Cable address:	"Germanpilot Brunsbuttel" via Norddeich Radio, call-sign DAN
Telex:	28343 Ellots D
Telephone:	(04852) 87246 – Mondays through Fridays from 0730 to 1530 hrs. (04852) 87295 – all other times

Deep-sea Pilots (not authorised as dual capacity River Pilots) are not allowed to pilot any vessels (whether subject to compulsory pilotage or not) on the River Elbe from Deutsche Bucht Light-vessel as far as the Port of Hamburg, regardless of whether pilot vessels are on position or not during bad weather conditions or whether or not Pilots can be embarked or disembarked during bad weather at the normal transfer position.

In order to avoid all the disadvantages caused by such a situation it is urgently advised to take a German Elbe Pilot or dual capacity River Pilot at the last North Sea or Channel port of departure whenever such bad weather conditions are foreseeable.

Extra Service:

Inward-bound vessels wishing to proceed without delay by gale or fog, as may be caused when taking a Pilot at Elbe 1 Light-vessel or Deutsche Bucht Light-vessel, can request the Elbe Pilot to come aboard at the first Channel, North Sea or Skagerrak port of call for approaching the River Elbe and non-stop onward upstream pilotage.

Advantages: Saving of time, reduced hazards.

Please observe these periods of notice:

Continental North Sea ports:	24 hours prior to ETD
UK North Sea and Channel ports:	48 hours prior to ETD or to passing local pilot station.

Request for services to be directed by radiotelegram to "Elbelotse Brunsbuttel".

Cable address:	"Elblotse Brunsbuttel" via Norddeich Radio, call-sign DAN
Telex:	28343 Ellots D
Telephone:	(04852) 87246 – Mondays through Fridays from 0730 to 1530 hrs. (04852) 87295 – all other times.

BRAKE: 53.20 N. 08.29 E. (See Plan Book)

PORT LIMITS: The government-owned piers are the commercial area of the port. A vessel is considered to be an "arrived ship" when she is moored alongside such piers, and the customs formalities are complete. Laytime will commence according to referring charter parties.

Port Authorities distribute the free berthing places in following the "Benutzungsordnung fur den Hafen Brake" which says briefly that a vessel will get a rank position in actual arriving times:

(a) for ships coming from sea: arrival "Weser lightvessel" plus 5 hours.

(b) for ships coming from Bremerhaven North Roads and Blexen Roads: departure plus 2 hours.

(c) for ships coming from Bremen: departure plus 3 hours.

DOCUMENTS:

2 Lists Ship's Stores.
2 Crew Lists.
2 Passenger Lists.
Health Certificate (forms obtainable from Pilot).
Ship's Register.

DEEP SEA PILOTAGE: See "General" before first German port.

PILOTAGE: Carried out by Weser River Pilots. The river Pilots also act as docking Pilots. Also see "Bremen" and "Bremerhaven".

ANCHORAGE: No anchorage in vicinity of Harbour. Anchorage in "Blexen Roads". For further details see "Bremen".

RESTRICTIONS: Vessels proceeding to Brake with a draft in excess of 24 ft. will be restricted by the tide.

MAX. SIZE: Max. length 265 m. (869 ft.); no restriction on beam. Max. draft 37 ft. in fresh water.

PRATIQUE: Free pratique is given by Health and Immigration Officer only. If a case of fever or disease is suspected on board radio the Agent with details before arrival.

RADIO: Cable Agent via Norddeich Radio (Call sign DAN) advising ETA and cash requirements.

RADAR/VHF: Stations from Weser lightvessel to Bremerhaven. Radar service between Bremerhaven and Brake. Radar stations have day and night service. If no fog every odd hour radar stations give on VHF or Pilot walkie-talkie report of visibility, defective buoys, anchoring ships, obstructions to navigation, and special occurrences. Direct contact between port and ship is possible on VHF.

TUGS: Available day and night in sufficient number. No extra charge for using tug's lines.

BERTHING:

New locks have been built at the inner harbour and are operating since August 1979. Dimensions: Length 95 m. (311 ft.), width 16 m. (52 ft.) Max. size of vessel to be handled will be a fully loaded vessel of 3,000 d.w.t. with a max. draft of 6.0 m.

Inner Harbour with tide-independent lock: Length of dock 1,070 m. (3,500 ft.), width 110 m. (360 ft.). Length of canal 228 m. (750 ft.), width of canal 46 m. (150 ft.), length of quay in canal 228 m. (750 ft.). Depth 4.3 m.

Riverside Berth: Total length 1,852 m. (6,075 ft.), depth at pier 13.6 m. at normal low water, tidal amplitude 11 ft. 6 in. Max. draft 37 ft. Max. length of ships not more than 265 m. (869 ft.).

This government-owned pier is divided into 2 areas. The Northern part is the crane-area with a length of 4,510 ft., the Southern part, 1,565 ft. long, is the grain-handling area.

Private Pier of the Fettraffinerie/Unimills has a length of 245 m. (804 ft.) depth 11.0 m.

SPECIALISED CARGO HANDLING FACILITIES:

Inner Harbour:
2 electric cranes to lift 1 to 5 tons.
2 bridge cranes, capacity 50 tons.
2 bridge cranes, capacity 20 tons.
1 bridge crane, capacity 15 tons.
2 whipping cranes, capacity 25 tons.
2 whipping cranes, capacity 15 tons.
Riverside Berth.

South Pier:
4 grain suction units – total capacity 1,800 t.p.h.

North and Middle Pier:
5 shore unloader and loading bridges of between 16 tons and 50 tons capacity, waterside reach 32 m. to 40 m.

4 rotating tip cranes – 14 tons to 25 tons capacity – max. reach 40 m. to 46 m.

Conveyor belts 1,280 m., max. capacity 100 cu.m.p.h.
Wagon loading station: capacity 300 cu.m.p.h.
Combined ship loader: capacity 1,000 cu.m.p.h.

Loading/discharge points for vegetable and animal oils/grease, mineral oil, molasses and other liquid products: Discharge capacity: 1,500 t.p.h.

Inner Harbour:
2 rotary tip cranes – capacity 5 tons. Reach 22 m. to 25.5 m.

Storage:
Silo installation and storage shed for grain: 270,000 tonnes.
Storage sheds: 54,500 sq.m.
Free storage areas: 82,000 sq.m.
Tank storage for grease refinery and the S. uS. "Elbe" 110,000 tonnes.

The government-owned pier is equipped for containers, but not for Roll-on/Roll-off traffic. The berth does not handle liquid chemicals.

STEVEDORES: ETA has to be reported to the Agent to arrange gangs. Stevedores are working 3 shifts around the clock on working days (Monday to Saturday); on Sundays and holidays 4 shifts are worked around the clock.

MEDICAL: Two hospitals and several doctors available at Brake. Advance notice to Agent required if medical assistance necessary.

TANKERS: Fettraffinerie Pier: Max. draft 33 ft. Discharging lines: molasses 6 in., fuel oil 8 in., diesel 10 in. and vegetable oil from 4 in. to 8 in.

DENSITY: Brake Port, Fresh water: salinity = 1002–1004.

FRESH WATER: Available both at Riverside Berth and Inner Harbour. Pumping capacity from 18 t.p.h. to 20 t.p.h.

FUEL: All grades available by bunker barges.

FIRE PRECAUTIONS: No smoking on deck. For tankers at Fettraffinerie Pier smoking only in saloon and/or messroom.

CONSULS: No Consuls; consulates at Bremen.

REPAIRS: All normal ship and engine repairs can be carried out during laytime on board.

DRY DOCKS: One dry dock at Luehring Werft, Brake, for ships with a length not in excess of 85 m. (279 ft.), nor wider than 16 m. (52 ft. 6 in.), and a max. draft of 13 ft. 1 in.

SURVEYORS: Classification Societies not represented but several surveyors available at Brake Port.

GANGWAY/DECK WATCHMEN: Crew's watchmen necessary – strong tides, current-speed 3 knots.

HATCHES: Depends on the different charter parties.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle of spirits and 2 bottles of wine.

CARGO GEAR: Load/discharge normally effected by shore-gear.

REPATRIATION: Any necessary repatriation and/or crew changes can be effected by Agents at Brake.

AIRPORT: International airport served by regular airlines at Bremen. Brake to Bremen, distance 57 km. (35 statute miles).

TIME: Local time is GMT plus 1 hour.

HOLIDAYS: New Year, Good Friday, Easter Sunday and Monday; 1st May, Ascension Day; Whitsunday and Monday, Penitentiary Day, 2 Christmas Days. Cargo work can be arranged on those days, except on New Year, Easter Sunday (1st Easter day), 1st May, Whitsunday, 1st Christmas Day, and on the days before such days till 1200 and/or 1400 hours.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 4060; Fire 112.

TELEPHONES: No arrangements to place telephones on board.

SHORE LEAVE: Shore passes are required according to customs regulations.

IDENTIFICATION CARDS: Crew members to have valid identity cards.

DEVELOPMENTS: Weser fairway depth will be increased to 12 m. (39 ft. 6 in.).

SEAMAN'S HOSTEL: Weserstr. 1A, tel. 4490.

AUTHORITY: Niedersachsisches Hafenamt Brake, Brommstrasse 2, D-2880 Brake. *Tel:* 04401/5061. *Contact:* Port Captain.

BREMEN (Including Farge): 53.07 N. 08.45 E.

DOCUMENTS: **(See Plan Book)**
3 Crew Lists.
3 Passenger Lists.
Provision and Store Lists incl. fuel oil.
Dangerous Cargo Lists.
Health Declaration.
Ship's Register.
No Customs Papers if vessel laying in Freeports at Bremen.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German port.

PILOTAGE: Compulsory for ships of more than 1,000 g.r.t. and tankers of more than 300 g.r.t. and for all ships with dangerous goods in bulk and nuclear ships, exemptions possible.

Distance from Weser light vessel to Bremerhaven 36 miles. Distance from Bremerhaven to Bremen 32 miles.

At least 12 hours before arrival at Weser light vessel Masters should cable messages to "Lotsenbruderschaft Weser zwei Bremerhaven" via Norddeich Radio. Message to include name and g.r.t. of vessel, place where Pilot required to board, day and hour of vessel's arrival, vessel's destination and fresh water draft in metres. Sea Pilots board at Weser seabuoy to Bremerhaven. River Pilots board at Bremerhaven to pilot vessels to Bremen.

Pilot station near Weser light vessel 54° 05′ 16″ N., 07° 50′ 00″ E., black painted motor vessel, black topped funnel, white lettering "Lotse" on hull. In rough weather, pilot boat may be found inside near buoys 77 and 79. Pilots may be contacted by Norddeich Radio, 2182 or 2614 kHz. or by VHF Channel 16.

River Pilots boarding at Bremerhaven also act as harbour Pilots to all ports above Bremerhaven.

ANCHORAGES:
1. About 1 mile S.W. of Weser light vessel.
2. Hoheweg Road between buoys 17 and 19.
3. Tanker Road W. of buoys 27–31.
4. Blexen Roads (South Roads) only for smaller ships.

RESTRICTIONS: Vessels proceeding to Bremen, with a draft in excess of 25 ft. will be restricted by the tide.

MAX. SIZE: Bremen: length 190 m. with draft 10.7 m., longer ships with restricted draft.

Locks: At the entrance of the Industriehafen: Length 248 m., clear width 34.1 m.

Ships passing with max. length 230 m. and 33.5 m. breadth. According to tide, docking is possible up to 9.2 m. (30 ft. 03 in.).

HEALTH: Master has to fill and sign Maritime Declaration of Health which is handed to health officer on arrival at Bremerhaven and Bremen. In case suspected disease or fever on board radio details to Port Health Bremerhaven via Norddeich Radio before arrival.

RADIO: Cable Agent via Norddeich Radio, call sign DAN, advising ETA and cash requirements.

Bremen Port Radio VHF station on Channels 3 or 16 to be used for messages to all Port Authorities including Police and Fire Brigade and Port Health in case of emergency. Bremen Lock Radio on Channel 12.

RADAR/VHF: Stations from Weser light vessel to the mouth of River Hunte and at the port area of Bremen. Radar service between Hunte and Bremen is planned. If no fog, every odd hour radar station gives by VHF or Pilot walkie-talkie, report of visibility, defective buoys, anchoring ships, obstructions to navigation and special occurrences.

Ships ordered for Bremen Industriehafen should contact "Oslebshausen Lock" via Channel 12 VHF after passing Bremerhaven.

TUGS: Tugs available at all stations according to ships request. Tugs' lines used (only) without charge.

BERTHING: Berthing at Bremen: The following harbours can be reached:

Harbour name:	*Quay Length* (m.)	*Depth (above chart datum)* (m.)
Europahafen	2,730	3.20 – 8.60
Uberseehafen	2,960	3.20 – 10.20
Holz–und Fabrikenhafen	2,600	4.20 – 8.50
Getreidehafen	570	4.00 – 11.50
Neustadter Hafen	2,700	4.00 – 11.50
Kap Horn Hafen	725	9.00
Industriehafen	3,060	3.20 – 6.20 (plus harbour water, about 3.80 m.)

Max. draft is dependent on the prevailing winds

SPECIAL CARGO HANDLING FACILITIES:

Freeports: Neustadter Hafen, Uberseehafen and Europahafen, mainly general cargo.
Quay length: 7,560 m.
Max. draft: 11.50 m.
Shed storage: 532,000 sq.m.
Porterage company: Bremer Lagerhaus-Gesellschaft.

Facilities: Air-conditioned fruit storage, refrigerated storage, consolidated cargo centre, packing centres, Ro/Ro terminals, logistics and information processing on industrial plant transports and grain handling centre.

Container Handling Facilities: Neustadter Hafen Shed 24 is equipped with 2 container cranes, suitable for 40 ft. containers. Max. lifting capacity is 45 tons. The terminal has 116 connections for reefer containers.

Shed 21 is equipped with 1 container crane, suitable for 40 ft. containers. Max. lifting capacity is 80 tons.

Roll-on/Roll-off terminal: At the head of the Europahafen, 1 berth. Max. carrying capacity 60 tons, width 8 m. Max. draft 28 ft.

At the end of shed 24 Neustadter Hafen, 1 berth. Max. carrying capacity 60 tons, width 30 m., draft 32 ft.

LASH Terminal: A LASH terminal has been appointed at Shed No. 2 Europahafen. Lash-lighter places: Lankenauer Hoft and Shed No.19 Coolhouse.

Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management.

For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:
Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m.
Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft 29 ft. 6 in.
Max. length 200 m. = 656 ft.
Max. beam 25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft 20 ft. 4 in. at low water.
Max. length 180 m. (591 ft.).
2 stationary elevators 3,000 tons per day
1 conveyor for loading bags only

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft up to 23 ft. at normal low water.
Quay length 710 m. (2,330 ft.).
Cranes 13 Grain/General cargo
Elevators 4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:	on Sundays: (overtime)
Free Port	1st shift: 0600–1200
1st shift: 0600–1400	2nd shift: 1200–1800
2nd shift: 1430–2030 (overtime)	3rd shift: 1800–2400
3rd shift: 2100–0300 (overtime)	4th shift: 2400–0600
Industriehafen/Grain Pier	
0630–1430	Industrieh/Grain Pier
1430–2030 (overtime)	0630–1230
2030–0230 (overtime)	1230–1830
	1830–2430
	0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. at LW
Osterott I	one berth max. draft 34 ft. 6 in. at LW
Osterott IV	four berths max. draft 37 ft. 8 in. at LW
Farge	two berths max. draft 29 ft. 11 in. at LW

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:

	Tel:		*Tel:*
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:

Vulkan-Gravity Dock	up to 240,000 d.w.t.
and one floating Dock	up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German Port.

PILOTAGE: See "Bremen".

Docking Pilots join vessels between Buoys 49 and 51A if bound for Ueberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short. Docking Pilots can be requested via Bremerhaven Port Radio on VHF Channel 12.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.
Dock Basins:	*Depth*
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
Verbindungshafen	36 ft.
Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.

With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.

Quay length 1,030 m. Depth 30 ft. – 36 ft.

9 cranes – 8 tons and one heavy lift bridge of 42 tons.

Car loading installations

A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.

The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

Container Terminals

2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 18 container cranes, capacity 42 tons – 54 tons.

Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

American Bureau of Shipping: Steubenstrasse, Fahrgastanlage, 2850 Bremerhaven. Tel: (0471) 46906 daytime and (04743) 276 night time.

Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

BRUNSBUTTEL 53.53 N. 09.09 E. (See Plan Book)

(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

(a) GENERAL/ELBEHAFEN/CANAL BERTH.

DOCUMENTS:
Health Certificate forms obtainable from River Pilot.
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

DEEP SEA PILOTAGE: See "General" before first German port.

Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management.

For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:
Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m.
Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft 29 ft. 6 in.
Max. length 200 m. = 656 ft.
Max. beam 25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft 20 ft. 4 in. at low water.
Max. length 180 m. (591 ft.).
2 stationary elevators 3,000 tons per day
1 conveyor for loading bags only

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft up to 23 ft. at normal low water.
Quay length 710 m. (2,330 ft.).
Cranes 13 Grain/General cargo
Elevators 4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:	on Sundays: (overtime)
Free Port	1st shift: 0600–1200
1st shift: 0600–1400	2nd shift: 1200–1800
2nd shift: 1430–2030 (overtime)	3rd shift: 1800–2400
3rd shift: 2100–0300 (overtime)	4th shift: 2400–0600
Industriehafen/Grain Pier	
0630–1430	Industrieh/Grain Pier
1430–2030 (overtime)	0630–1230
2030–0230 (overtime)	1230–1830
	1830–2430
	0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. at LW
Osterott I	one berth max. draft 34 ft. 6 in. at LW
Osterott IV	four berths max. draft 37 ft. 8 in. at LW
Farge	two berths max. draft 29 ft. 11 in. at LW

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:

	Tel:		Tel:
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:
Vulkan-Gravity Dock up to 240,000 d.w.t.
and one floating Dock up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German Port.

PILOTAGE: See "Bremen".

Docking Pilots join vessels between Buoys 49 and 51A if bound for Uberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short. Docking Pilots can be requested via Bremerhaven Port Radio on VHF Channel 12.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.
Dock Basins:	*Depth*
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
Verbindungshafen	36 ft.
Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.

With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.

Quay length 1,030 m. Depth 30 ft. – 36 ft.

9 cranes – 8 tons and one heavy lift bridge of 42 tons.

Car loading installations

A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.

The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

Container Terminals

2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 18 container cranes, capacity 42 tons – 54 tons.

Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.
Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

American Bureau of Shipping: Steubenstrasse, Fahrgastanlage, 2850 Bremerhaven. Tel: (0471) 46906 daytime and (04743) 276 night time.

Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

BRUNSBUTTEL 53.53 N. 09.09 E. (See Plan Book)

(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

(a) GENERAL/ELBEHAFEN/CANAL BERTH.

DOCUMENTS:
Health Certificate forms obtainable from River Pilot.
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

DEEP SEA PILOTAGE: See "General" before first German port.

Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management.

For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:
Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m. Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft	29 ft. 6 in.
Max. length	200 m. = 656 ft.
Max. beam	25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft	20 ft. 4 in. at low water.
Max. length	180 m. (591 ft.).
2 stationary elevators	3,000 tons per day
1 conveyor for loading bags only	

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft	up to 23 ft. at normal low water.
Quay length	710 m. (2,330 ft.).
Cranes	13 Grain/General cargo
Elevators	4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:	on Sundays: (overtime)
Free Port	1st shift: 0600–1200
1st shift: 0600–1400	2nd shift: 1200–1800
2nd shift: 1430–2030 (overtime)	3rd shift: 1800–2400
3rd shift: 2100–0300 (overtime)	4th shift: 2400–0600
Industriehafen/Grain Pier	
0630–1430	Industrieh/Grain Pier
1430–2030 (overtime)	0630–1230
2030–0230 (overtime)	1230–1830
	1830–2430
	0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. at LW
Osterott I	one berth max. draft 34 ft. 6 in. at LW
Osterott IV	four berths max. draft 37 ft. 8 in. at LW
Farge	two berths max. draft 29 ft. 11 in. at LW

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:

	Tel:		*Tel:*
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:
Vulkan-Gravity Dock up to 240,000 d.w.t.
and one floating Dock up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German Port.

PILOTAGE: See "Bremen".

Docking Pilots join vessels between Buoys 49 and 51A if bound for Uberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short. Docking Pilots can be requested via Bremerhaven Port Radio on VHF Channel 12.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.
Dock Basins:	*Depth*
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
Verbindungshafen	36 ft.
Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.

With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.

Quay length 1,030 m. Depth 30 ft. – 36 ft.

9 cranes – 8 tons and one heavy lift bridge of 42 tons.

Car loading installations

A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.

The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

Container Terminals

2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 18 container cranes, capacity 42 tons – 54 tons.

Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

American Bureau of Shipping: Steubenstrasse, Fahrgastanlage, 2850 Bremerhaven. Tel: (0471) 46906 daytime and (04743) 276 night time.

Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

BRUNSBUTTEL 53.53 N. 09.09 E. (See Plan Book)

(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

(a) GENERAL/ELBEHAFEN/CANAL BERTH.

DOCUMENTS:
Health Certificate forms obtainable from River Pilot.
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

DEEP SEA PILOTAGE: See "General" before first German port.

Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management. For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:
Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m. Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft	29 ft. 6 in.
Max. length	200 m. = 656 ft.
Max. beam	25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft	20 ft. 4 in. at low water.
Max. length	180 m. (591 ft.).
2 stationary elevators	3,000 tons per day
1 conveyor for loading bags only	

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft	up to 23 ft. at normal low water.
Quay length	710 m. (2,330 ft.).
Cranes	13 Grain/General cargo
Elevators	4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.
Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:	on Sundays: (overtime)
Free Port	1st shift: 0600–1200
1st shift: 0600–1400	2nd shift: 1200–1800
2nd shift: 1430–2030 (overtime)	3rd shift: 1800–2400
3rd shift: 2100–0300 (overtime)	4th shift: 2400–0600
Industriehafen/Grain Pier	
0630–1430	Industrieh/Grain Pier
1430–2030 (overtime)	0630–1230
2030–0230 (overtime)	1230–1830
	1830–2430
	0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. at LW
Osterott I	one berth max. draft 34 ft. 6 in. at LW
Osterott IV	four berths max. draft 37 ft. 8 in. at LW
Farge	two berths max. draft 29 ft. 11 in. at LW

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:

	Tel:		*Tel:*
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:

Vulkan-Gravity Dock	up to 240,000 d.w.t.
and one floating Dock	up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German Port.

PILOTAGE: See "Bremen".

Docking Pilots join vessels between Buoys 49 and 51A if bound for Uberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short. Docking Pilots can be requested via Bremerhaven Port Radio on VHF Channel 12.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.

Dock Basins:	*Depth*
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
Verbindungshafen	36 ft.
Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.

With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.
Quay length 1,030 m. Depth 30 ft. – 36 ft.
9 cranes – 8 tons and one heavy lift bridge of 42 tons.

Car loading installations
A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.
The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

Container Terminals
2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 18 container cranes, capacity 42 tons – 54 tons.
Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.
Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

American Bureau of Shipping: Steubenstrasse, Fahrgastanlage, 2850 Bremerhaven. Tel: (0471) 46906 daytime and (04743) 276 night time.

Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

BRUNSBUTTEL 53.53 N. 09.09 E. (See Plan Book)

(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

(a) GENERAL/ELBEHAFEN/CANAL BERTH.

DOCUMENTS:
Health Certificate forms obtainable from River Pilot.
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

DEEP SEA PILOTAGE: See "General" before first German port.

Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management.

For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:

Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m.
Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft	29 ft. 6 in.
Max. length	200 m. = 656 ft.
Max. beam	25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft	20 ft. 4 in. at low water.
Max. length	180 m. (591 ft.).
2 stationary elevators	3,000 tons per day
1 conveyor for loading bags only	

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft	up to 23 ft. at normal low water.
Quay length	710 m. (2,330 ft.).
Cranes	13 Grain/General cargo
Elevators	4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:
Free Port
1st shift: 0600–1400
2nd shift: 1430–2030 (overtime)
3rd shift: 2100–0300 (overtime)
Industriehafen/Grain Pier
0630–1430
1430–2030 (overtime)
2030–0230 (overtime)

on Sundays: (overtime)
1st shift: 0600–1200
2nd shift: 1200–1800
3rd shift: 1800–2400
4th shift: 2400–0600
Industrieh/Grain Pier
0630–1230
1230–1830
1830–2430
0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.
Holzhafen one berth max. draft 28 ft. at LW
Osterott I one berth max. draft 34 ft. 6 in. at LW
Osterott IV four berths max. draft 37 ft. 8 in. at LW
Farge two berths max. draft 29 ft. 11 in. at LW
For the following tanker berths see restrictions of the entrance lock Industriehafen
Oelhafen: several berths max. draft 14 ft. to 23 ft.
Huttenhafen: three berths max. draft 20 ft. to 24 ft.
Becken A one berth max. 22 ft.
Kalihafen one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:

	Tel:		*Tel:*
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:

Vulkan-Gravity Dock	up to 240,000 d.w.t.
and one floating Dock	up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German Port.

PILOTAGE: See "Bremen".

Docking Pilots join vessels between Buoys 49 and 51A if bound for Uberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short. Docking Pilots can be requested via Bremerhaven Port Radio on VHF Channel 12.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.
Dock Basins:	*Depth*
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
Verbindungshafen	36 ft.
Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.

With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.
Quay length 1,030 m. Depth 30 ft. – 36 ft.
9 cranes – 8 tons and one heavy lift bridge of 42 tons.

Car loading installations
A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.
The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

Container Terminals
2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 18 container cranes, capacity 42 tons – 54 tons.
Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.
Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

American Bureau of Shipping: Steubenstrasse, Fahrgastanlage, 2850 Bremerhaven. Tel: (0471) 46906 daytime and (04743) 276 night time.

Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

BRUNSBUTTEL 53.53 N. 09.09 E. (See Plan Book)

(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

(a) GENERAL/ELBEHAFEN/CANAL BERTH.

DOCUMENTS:
Health Certificate forms obtainable from River Pilot.
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

DEEP SEA PILOTAGE: See "General" before first German port.

Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management.

For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:
Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m.
Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft	29 ft. 6 in.
Max. length	200 m. = 656 ft.
Max. beam	25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft	20 ft. 4 in. at low water.
Max. length	180 m. (591 ft.).
2 stationary elevators	3,000 tons per day
1 conveyor for loading bags only	

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft	up to 23 ft. at normal low water.
Quay length	710 m. (2,330 ft.).
Cranes	13 Grain/General cargo
Elevators	4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:	on Sundays: (overtime)
Free Port	1st shift: 0600–1200
1st shift: 0600–1400	2nd shift: 1200–1800
2nd shift: 1430–2030 (overtime)	3rd shift: 1800–2400
3rd shift: 2100–0300 (overtime)	4th shift: 2400–0600
Industriehafen/Grain Pier	Industrieh/Grain Pier
0630–1430	0630–1230
1430–2030 (overtime)	1230–1830
2030–0230 (overtime)	1830–2430
	0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. at LW
Osterott I	one berth max. draft 34 ft. 6 in. at LW
Osterott IV	four berths max. draft 37 ft. 8 in. at LW
Farge	two berths max. draft 29 ft. 11 in. at LW

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:

	Tel:		*Tel:*
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:

Vulkan-Gravity Dock	up to 240,000 d.w.t.
and one floating Dock	up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
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PILOTAGE: See "Bremen".

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RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.

Dock Basins:	*Depth*
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
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Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

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Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

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With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.
Quay length 1,030 m. Depth 30 ft. – 36 ft.
9 cranes – 8 tons and one heavy lift bridge of 42 tons.

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A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.
The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

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Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.
Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

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Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

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(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

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For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

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Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management.

For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:

Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m. Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft	29 ft. 6 in.
Max. length	200 m. = 656 ft.
Max. beam	25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft	20 ft. 4 in. at low water.
Max. length	180 m. (591 ft.).
2 stationary elevators	3,000 tons per day
1 conveyor for loading bags only	

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft	up to 23 ft. at normal low water.
Quay length	710 m. (2,330 ft.).
Cranes	13 Grain/General cargo
Elevators	4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:	on Sundays: (overtime)
Free Port	1st shift: 0600–1200
1st shift: 0600–1400	2nd shift: 1200–1800
2nd shift: 1430–2030 (overtime)	3rd shift: 1800–2400
3rd shift: 2100–0300 (overtime)	4th shift: 2400–0600
Industriehafen/Grain Pier	
0630–1430	Industrieh/Grain Pier
1430–2030 (overtime)	0630–1230
2030–0230 (overtime)	1230–1830
	1830–2430
	0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. at LW
Osterott I	one berth max. draft 34 ft. 6 in. at LW
Osterott IV	four berths max. draft 37 ft. 8 in. at LW
Farge	two berths max. draft 29 ft. 11 in. at LW

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:

	Tel:		*Tel:*
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:

Vulkan-Gravity Dock	up to 240,000 d.w.t.
and one floating Dock	up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German Port.

PILOTAGE: See "Bremen".

Docking Pilots join vessels between Buoys 49 and 51A if bound for Uberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short. Docking Pilots can be requested via Bremerhaven Port Radio on VHF Channel 12.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.
Dock Basins:	*Depth*
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
Verbindungshafen	36 ft.
Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.

With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.

Quay length 1,030 m. Depth 30 ft. – 36 ft.

9 cranes – 8 tons and one heavy lift bridge of 42 tons.

Car loading installations

A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.

The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

Container Terminals

2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 18 container cranes, capacity 42 tons – 54 tons.

Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

American Bureau of Shipping: Steubenstrasse, Fahrgastanlage, 2850 Bremerhaven. Tel: (0471) 46906 daytime and (04743) 276 night time.

Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

BRUNSBUTTEL 53.53 N. 09.09 E. (See Plan Book)

(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

(a) GENERAL/ELBEHAFEN/CANAL BERTH.

DOCUMENTS:
Health Certificate forms obtainable from River Pilot.
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

DEEP SEA PILOTAGE: See "General" before first German port.

Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management.

For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:
Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m.
Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft	29 ft. 6 in.
Max. length	200 m. = 656 ft.
Max. beam	25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft	20 ft. 4 in. at low water.
Max. length	180 m. (591 ft.).
2 stationary elevators	3,000 tons per day
1 conveyor for loading bags only	

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft	up to 23 ft. at normal low water.
Quay length	710 m. (2,330 ft.).
Cranes	13 Grain/General cargo
Elevators	4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:	on Sundays: (overtime)
Free Port	1st shift: 0600–1200
1st shift: 0600–1400	2nd shift: 1200–1800
2nd shift: 1430–2030 (overtime)	3rd shift: 1800–2400
3rd shift: 2100–0300 (overtime)	4th shift: 2400–0600
Industriehafen/Grain Pier	
0630–1430	Industrieh/Grain Pier
1430–2030 (overtime)	0630–1230
2030–0230 (overtime)	1230–1830
	1830–2430
	0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. at LW
Osterott I	one berth max. draft 34 ft. 6 in. at LW
Osterott IV	four berths max. draft 37 ft. 8 in. at LW
Farge	two berths max. draft 29 ft. 11 in. at LW

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:

	Tel:		Tel:
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:

Vulkan-Gravity Dock	up to 240,000 d.w.t.
and one floating Dock	up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German Port.

PILOTAGE: See "Bremen".

Docking Pilots join vessels between Buoys 49 and 51A if bound for Uberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short. Docking Pilots can be requested via Bremerhaven Port Radio on VHF Channel 12.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	Depth at LW
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.
Dock Basins:	Depth
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
Verbindungshafen	36 ft.
Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	Depth
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.

With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.

Quay length 1,030 m. Depth 30 ft. – 36 ft.

9 cranes – 8 tons and one heavy lift bridge of 42 tons.

Car loading installations

A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.

The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

Container Terminals

2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 18 container cranes, capacity 42 tons – 54 tons.

Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

American Bureau of Shipping: Steubenstrasse, Fahrgastanlage, 2850 Bremerhaven. Tel: (0471) 46906 daytime and (04743) 276 night time.

Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

BRUNSBUTTEL 53.53 N. 09.09 E. (See Plan Book)

(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

(a) GENERAL/ELBEHAFEN/CANAL BERTH.

DOCUMENTS:
Health Certificate forms obtainable from River Pilot.
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

DEEP SEA PILOTAGE: See "General" before first German port.

Bulk handling facilities (Industriehafen):
Bulk cargoes such as steel, and steelware, coal, coke and coke breeze, timber, ore, oil, molasses, sand, stones, phosphate and further fertiliser and chemicals are handled by companies under private management.

For entering Industriehafen see "Max. Size – Locks".

Huttenhafen: Klockner-Hutte mainly handles ore, scrap, coke and coke breeze, sand, steel and steelware as slabs and coils of Klockner Iron Mill.

Quay length: 520 m.
3 gantry cranes: 12.5, 15 and 55 tons.
Storage area: 80,000 sq.m.
Discharging capacity ore: 8,000 tons per 24 hours.
Loading capacity coils: 5,000 tons per 24 hours.
Loading capacity slabs: 6,000 tons per 24 hours.

Rhenus WTAG: Mainly handles provender, coal, coke, minerals, wood products, stones a.s.o.

Quay length: 450 m.
4 cranes: 25 and 56 tons.
Storage area: 21,000 sq.m.
Loading capacity coils: 6,000 tons per 24 hours.
Loading capacity plates: 5,000 tons per 24 hours.
Loading capacity coal: 6,000 tons per 24 hours.
Quarrier and riddler: 500 tons per 24 hours.

Olhafen: Oil farm for about 100,000 tons. One tank for molasses 11,000 tons.

Kohlenhafen: Gebr. Rochling mainly handles coal, coke, ore, phosphate and logs. West Africa Terminal specialises in all kinds of general cargo and container handling.

Quay length: 750 m.
7 cranes: 5 and 50 tons.
1 coal-loader: 60 tons.
Storage area: 30,000 sq.m.
Loading capacity coal: 9,000 tons per 24 hours.
Loading capacity coke: 6,000 tons per 24 hours.
Discharging logs: 1,555 tons per 24 hours (approx.).

Kraftwerk Hafen (Power Station): At this berth only coal cargoes for use by the power station are handled. Discharging rate (2 cranes) 1,250 tons per shift.

Kalihafen: Anker-Schiffahrt handles all kinds of general cargo and is specialised in packing, decantation and sacking of chemical products.

Quay length: 500 m.
2 gantry cranes: 24 tons
4 special loaders
1 bridge for liquids
Storage area: 40,000 sq.m.

Tankfarm Defrol: Storage capacity 48,000 tons fuel.

Hafen E: Hansakai (Klembt) handles all kinds of cargoes and is specialised in coils, pipes, construction parts, heavy lifts, ore and containers.

Quay length: 285 m.
1 gantry crane: 15 tons.
4 cranes: up to 45 tons.
Storage area: 11,000 sq.m.

Wandel & Co: 60,000 sq..m. shed storage for grain and general cargo.

Hafen A: H. Menke & Co.: Quay length: 250 m. 1 tank for molasses 15,000 tons. Specialises in wine import with storage area for 20 million litres.

Bremer Lagerhaus-Gesellschaft:
Quay length: 300 m.
Storage area: 90,000 sq.m.

Other bulk handling facilities:
Granary (Getreidehafen) *near the Uberseehafen*
No locks, max. draft 35 ft. Lighterage is possible.
Berth "A" 3 elevators with a capacity of 400 t.p.h. max. length 275 m. Silo capacity 150,000 tons.

Kraftwerk Farge (Power Station)
Location: 10 miles downstream from Bremen. Only coal cargoes for the power station are handled.

Max. draft 29 ft. 6 in.
Max. length 200 m. = 656 ft.
Max. beam 25 m. = 82 ft.

3 cranes, total discharging capacity 200 t.p.h.

Rolandmuhle: tidal basin Holz- und Fabrikenhafen. Grain facility with

Max. draft 20 ft. 4 in. at low water.
Max. length 180 m. (591 ft.).
2 stationary elevators 3,000 tons per day
1 conveyor for loading bags only

J.H. Bachmann/J. Muller/Karl Gross (Holz- und Fabrikenhafen)
Facility for grain and occasionally, general cargo handling.

Max. draft up to 23 ft. at normal low water.
Quay length 710 m. (2,330 ft.).
Cranes 13 Grain/General cargo
Elevators 4×250 t.p.h. each

General cargo loading installations (Kap Horn) with 2 quays, 1×320 m. long inside Industriehafen and the other 800 m. long (at the riverside). The storage area of 100,000 sq.m. is equipped with gantry crane for handling pipes, construction parts and general.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
Regular period: 0630–1430 resp.
0600–1400
Free Port
1st shift: 0600–1400
2nd shift: 1430–2230
3rd shift: 2300–0600 (overtime)
Industrieh/Grain Pier
0630–1430
1430–2230 (overtime grain pier)
2230–0630 (overtime)

On Saturdays:	on Sundays: (overtime)
Free Port	1st shift: 0600–1200
1st shift: 0600–1400	2nd shift: 1200–1800
2nd shift: 1430–2030 (overtime)	3rd shift: 1800–2400
3rd shift: 2100–0300 (overtime)	4th shift: 2400–0600
Industriehafen/Grain Pier	
0630–1430	Industrieh/Grain Pier
1430–2030 (overtime)	0630–1230
2030–0230 (overtime)	1230–1830
	1830–2430
	0030–0630

CRANES: All piers are fitted with cranes 3/7 tons. Floating cranes up to 200 tons available.

MEDICAL: All medical facilities available. Advance notice to Agent required if medical assistance necessary.

TANKERS: Draft in fresh water.

Holzhafen	one berth max. draft 28 ft. at LW
Osterott I	one berth max. draft 34 ft. 6 in. at LW
Osterott IV	four berths max. draft 37 ft. 8 in. at LW
Farge	two berths max. draft 29 ft. 11 in. at LW

For the following tanker berths see restrictions of the entrance lock Industriehafen

Oelhafen:	several berths max. draft 14 ft. to 23 ft.
Huttenhafen:	three berths max. draft 20 ft. to 24 ft.
Becken A	one berth max. 22 ft.
Kalihafen	one berth max. 30 ft. 3 in.

Fina Oil Einswarden. Max. draft 36 ft. 6 in. Discharging lines crude oil 12 in., fuel oil 10 in., diesel 8 in.

Frisia (Gulf Oil) Einswarden. Berth for tankers up to 250 m. length, max. draft 36 ft. fresh water.

DENSITY: Fresh water.

FRESH WATER: Available by hose and barge.

FUEL: All Grades available.

FIRE PRECAUTIONS: Smoking or use of open fire not allowed all over the Port area. No smoking on deck. Tankers, smoking in saloon or messroom only.

CONSULS:	*Tel:*		*Tel:*
Austria	360 6221	Indonesia	32 50 58
Bangladesh	3160 244	Irish Rep.	32 13 73
Barbados	0471 28 388	Iceland	0471 71055
Belgium	590 7134	Italy	72 030
Benin	17 631	Liberia	66 03 1
Bolivia	66 12 30	Netherlands	32 37 26
Brazil	66 38 16	Norway	12 015
Chile	32 37 31	Panama	36 79 245
Colombia	15 707	Paraguay	32 10 01
Costa Rica	15 549	Peru	15 629
Denmark	17 68 271	Senegal	0471 73 041
Ecuador	34 20 75	Sweden	36 68 930
El Salvador	38 95 349	South Africa	32 12 61
Finland	39 83 30	Spain	34 40 90
France	23 66 85	Togo	17 641
Gambia	30 76 215	Turkey	17 10 26
Ghana	32 57 22	United Kingdom	0471 71 084
Guatemala	30 21 07	Uruguay	32 70 00
Haiti	66 05 314	USA	32 16 09
Honduras	363 25 60	Zaire	30 421

REPAIRS: All repairs possible.

DRY DOCKS:

Vulkan-Gravity Dock	up to 240,000 d.w.t.
and one floating Dock	up to 8,500 d.w.t.

SURVEYORS: All types of surveys possible.

GANGWAY/DECK WATCHMEN: Not considered necessary. But available when ordered.

HATCHES: Opening and closing normally by crew with stevedores assisting.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days further same quantities. Wine not restricted. Freeports in Bremen only Europahafen, Uberseehafen and Neustadter Hafen.

CARGO GEAR: No additional requirements. Preventers necessary.

REPATRIATION: Any time.

AIRPORT: Regular national and international flights.

HOLIDAYS: New Year's Day (no work performed); Good Friday; Easter Sunday (no work performed); Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

POLICE/AMBULANCE/FIRE: Police help 110; Fire, First aid 112.
Pilot Station Bremerhaven: Sea Pilots 4–22–20; River Pilots 4–22–89.
Pilot Station Bremen: 39–40–44.
Port Administration Bremen: 397-1.
Waterway Police: 38–20–31.
Port Medical Services: 38–34–16.
Immigration: Call Water Police.
Foreign Calls: 0010.

TELEPHONES: It is possible to rent a telephone box from Mooring Company.

REGULATIONS: Usual Port Regulations. Special Regulations for dangerous goods and Tankers.

AUTHORITY: Hafenamt Bremen, Hafenhaus Uberseehafen, 2800 Bremen 1. *Tel:* (0421) 3978504. *Telex:* 246089 (HABRE D). *Contact:* Harbour Master on duty.

AGENT: Wm. H. Muller Co. (Deutschland) GmbH. Birkenstrasse 37 Bremen 1.Tel.: (0421) 14910. Telex: 244704. Cables: "Batavier".

BREMERHAVEN: 53.33 N. 08.35 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
3 Provision and Store List incl. fuel oil.
3 Dangerous Cargo List.
Health Certificate (forms obtainable from Pilots).
Ship's Register.
No Customs Papers if vessel laying in Freeport at Bremerhaven.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German Port.

PILOTAGE: See "Bremen".

Docking Pilots join vessels between Buoys 49 and 51A if bound for Uberseehafen or near entrance of Geeste River if bound for Fischereihafen. Call sign is International Code flags PT with pennant below. Sound and flash signals are 3 long and 5 short. Docking Pilots can be requested via Bremerhaven Port Radio on VHF Channel 12.

ANCHORAGE: See "Bremen".

RESTRICTIONS: Vessels proceeding to Bremerhaven with draft in excess of 35 ft. will be restricted by tide.

MAX. SIZE: Length 340 m., draft 41 ft. in fresh water. Draft 42 ft. 8 in. in fresh water, special permission required.

HEALTH: See "Bremen".

RADIO: See "Bremen".

RADAR: See "Bremen".

VHF: "Bremerhaven Port Radio" on Channel 12.

TUGS: Tugs join vessel with docking Pilots. Tug's lines used at no extra charge.

BERTHING: There are two harbour-groups, Uberseehafen North of Geeste River and Fischereihafen South of it.

Uberseehafen:

Along Weser River:	*Depth at LW*
Columbus Quay	32 ft. – 38 ft. 08 in.
Stromkaje	40 ft. 04 in.

Dock Basins:	*Depth*
Neuer Hafen	21 ft.
Kaiserhafen I	28 ft.
Kaiserhafen II	36 ft.
Kaiserhafen III	36 ft.
Verbindungshafen	36 ft.
Nordhafen	42 ft. 08 in.
Osthafen	46 ft.

The dock basins can be reached through 2 locks:
Kaiserschleuse: length 732 ft., gate width 88 ft. without fenders; including fenders 83 ft. 7 in. depth 23 ft. at LW.
Nordschleuse: length 1,220 ft., gate width 147 ft. depth 36 ft. at LW. Max. size of vessel. length 265 m., beam 38 m. (124 ft. 07in.). Draft 42 ft. 08 in.

Fischereihafen:

Dock basins:	*Depth*
Fischereihafen I	24 ft.
Fischereihafen II	24 ft.
Handelshafen	22 ft.

Locks:
Fischereihafen-Doppelschleuse
Small lock: length 349 ft., gate width 39 ft. without fenders; including fenders 34 ft. 06 in. depth 21 ft. at LW.
Large lock: length 328 ft., gate width 98 ft. depth 21 ft. at LW.

SPECIAL CARGO HANDLING FACILITIES: All sheds are equipped with electric cranes.

With special permission of the port authorities the following maximum FW drafts are allowed.
42 ft. 8 in. = 13 m. – max. beam 40 m.
39 ft. 3 in. = 12 m. – max. beam 41 m.
35 ft. = 10.7 m. – max. beam 42 m.

The port is equipped with modern bulk, container, roll-on/roll-off and general cargo facilities.

5 floating cranes having lifting capacities of 100 tons – 500 tons.

Weserport (Osthafen) Ore transhipment installation, quay length 330 m.. Depth 14.0 m. 2 unloaders. Max. outreach 22.5 m. Total discharge capacity 2,000 t.p.h. Average rate 900 t.p.h.

Columbus Quay Passenger and general cargo facilities.

Quay length 1,030 m. Depth 30 ft. – 36 ft.

9 cranes – 8 tons and one heavy lift bridge of 42 tons.

Car loading installations

A car loading installation is situated in the Nordhafen. Quay length 875 m. Storage area 40,000 sq. m. for about 3,500 cars. The loading is done by ships' ramp.

The Car-Terminal Bremerhaven, situated in the Kaiserhafen II, has a quay length of 700 m. and a storage area of about 360,000 sq. m.

Container Terminals

2 container terminals, 1 at Stromkaje and 1 in the Nordhafen, are equipped with 18 container cranes, capacity 42 tons – 54 tons.

Depth alongside in river 46 ft. at LW. Depth at Nordhafen 42 ft. 8 in.

Kaiserhafen/Verbindungshafen offers 4 basins for general cargo handling. Quay length: 4.130 m. Storage capacity in modern sheds: about 55,000 sq.ft. 30 cranes with capacities from 3–8 tons. Two banana discharging installations, with 10 elevators and have a capacity of over 350,000 tons per year.

LASH Carriers: Special facilities are available.

MEDICAL: Hospital facilities at all Weserports. No vaccination normally required.

STEVEDORES: Ordered by Agent; no ETA advice to stevedores necessary.

Working hours:
1st shift: 0600–1400
2nd shift: 1400–2200
3rd shift: 2200–0500 (overtime)
on Saturdays:
1st shift: 0600–1400
2nd shift: 1400–2000 (overtime)
3rd shift: 2000–0200 (overtime)
on Sundays:
as Bremen Freeport.

TANKERS: Bominflot KG., Esso Kaje, Verbindungshafen. Max. draft 32 ft. 06 in.

There are several tank-cleaning boats available to receive slops at Bremerhaven.

DENSITY: 1008 – 1010.

FRESH WATER: Available by pipe-line at all berths.

FUEL: All grades available.

FIRE PRECAUTIONS: No smoking on deck. Tankers smoking only saloon or messroom.

GANGWAY/DECK WATCHMEN: Not considered necessary.

OPENING/CLOSING HATCHES: Normally by crew with stevedores assistance.

CUSTOMS ALLOWANCES: Outside freeports: 200 cigarettes for 3 days or 50 grams tobacco and 1 bottle spirits. After 3 days, further same quantities. Wine not restricted. Freeports only at Bremen (Europa and Uberseehafen), and at Bremerhaven (Kaiserhafen, Columbus Kaje and Weserport).

CARGO GEAR: No additional requirements. Preventers necessary.

IDENTIFICATION CARDS: Not required.

CONSULS: Barbados, Great Britain, Iceland, Sweden, Senegal.

REPAIRS: All repairs possible.

DRY DOCKS: There are 2 graving docks and 10 floating docks with max. capacity 75,000 tons.

SURVEYORS: (1) Caleb Brett: In Hamburg. Neustadter Weg 6, 2000 Hamburg 11. Tel: (040) 366286.

(2) Lloyd's Register of Shipping: Am Wall 102, 2800 Bremen. Tel: (0421) 310611. Also at Buckingstrasse 8, 2850 Bremerhaven. Tel: (0471) 45006.

American Bureau of Shipping: Steubenstrasse, Fahrgastanlage, 2850 Bremerhaven. Tel: (0471) 46906 daytime and (04743) 276 night time.

Bureau Veritas, District Hamburg: Spaldingsstrasse 1, 2000 Hamburg 1. Tel: (040) 230801. Telex: 02 154 26.

REPATRIATION: Any time.

AIRPORT: About 4 miles from Bremen. Regular airlines.

BANKS: (In Hamburg): Bank of America, Barclays Bank, Citibank, Lloyds Bank, Bankers Trust.

HOLIDAYS: New Year's Day (no work performed); Good Friday, Easter Sunday (no work performed), Easter Monday; Labour Day (no work performed); Ascension Day; Whit Sunday (no work performed); Whit Monday; 17th June; Prayer Day; Christmas Day (no work performed); Boxing Day.

TELEPHONE: Accidents, Police 110; Fire 112; Harbour Master and Docking Pilots 481 263/4, Telex 238564 Hba Hk D; Sea Pilots 42220; River Pilots 42289; Waterway Police 47011; Port Medical Service 40031.

EMERGENCY CO-ORDINATION CENTRE: Flottenkommando SAR Leitstelle, Meyerweg, 2392 Glucksburg. Tel: (04631) 8625-511 (Ext. 575/6).

Deutsche Gesellschaft zur Rettung Schiffbruchiger, Seenotleitung, Werderstrasse 2, 2800 Bremen 1. Tel: (0421) 504393. Telex: 0244754.

STORING: (See "Prelims" page viii).
(1) Yes
(2) Yes
(3) Yes, jetties fitted with cranes, distance to remain approx. 20 ft.
(4) Yes
(5) Equal to European Community Regulations.
(6) Yes.

AUTHORITY: Hansestadt Bremisches Amt Bremerhaven-Der Hafenkapitan, P.O.Box 100469, Columbusbahnhof, Steubenstrasse 7 B, 2850 Bremerhaven 1, West Germany. *Tel:* (0471) 481 260/1 Port Captain; (0471) 481 263/4 Harbour Master. *Telex:* 238564 Hba Hk D.

AGENT: See "Bremen".

BRUNSBUTTEL 53.53 N. 09.09 E. (See Plan Book)

(a) General/Elbehafen/Canal Berth; (b) Elbe Terminal; (c) Brunsbuttel Oil Port; (d) Ostermoor.

(a) GENERAL/ELBEHAFEN/CANAL BERTH.

DOCUMENTS:
Health Certificate forms obtainable from River Pilot.
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Bill of Lading.
Ship's Register.
For ships entering locks of Brunsbuttel for transit traffic through Kiel Canal, only ship's register required.

DEEP SEA PILOTAGE: See "General" before first German port.

PILOTAGE: *Anchorage River Elbe:* See "General" before first German port.

Pilotage Kiel Canal: Pilotage generally compulsory, vessels over 2,500 g.r.t. must employ a wheelman.

Pilot station, Tel: 04852/8088, VHF Channel 9, ETA 6 hours prior arrival Brunsbuttel Roads by cable to "Kanallotse Brunsbuttel" via Norddeich Radio (DAN), requiring Canal or Harbour Pilot at Brunsbuttel, (for example: Brigitte 1249 ETA Brunsbuttel 29 1800 3.5 m.). Pilot will board ships off the entrance to Kiel Canal.

Pilot boats are painted black with "LOTSE" in white letters on hull. Signal for Pilots is flag "G" over numeral pennant 1, sound or morse signal, VHF Channel 9.

ANCHORAGE: Vessels waiting for entrance to the Canal may anchor in N.E. anchorage, South anchorage, or Neufeld anchorage.

RESTRICTIONS: No restrictions imposed on night entry. If draft above 31 ft. 2 in. fresh water, vessels will be piloted to Brunsbuttel with flood-tide.

Dimensions of lock: length 310 m., beam 40 m.

The Canal can be navigated by vessels up to 235 m. LOA and 32.5 m. beam and draft in accordance with table below.

Length (m.)	*Beam in metres* 20	21	22	23	24	25	26	27	28	29	30	31	32	32.50
	Draft on (m.)													
160	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.1	8.9	8.9
163	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.9
166	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.1	9.0	8.9	8.8	8.7
169	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.0	8.9	8.8	8.7	8.6
172	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.1	9.0	8.8	8.7	8.6	8.5
175	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.1	9.0	8.9	8.8	8.6	8.5	8.4
178	9.5	9.5	9.5	9.5	9.4	9.3	9.2	9.0	8.9	8.8	8.7	8.5	8.4	8.3
181	9.5	9.5	9.5	9.4	9.3	9.2	9.1	9.0	8.8	8.7	8.6	8.5	8.3	8.3
184	9.5	9.5	9.5	9.3	9.2	9.1	9.0	8.9	8.7	8.6	8.5	8.4	8.3	8.2
187	9.5	9.5	9.4	9.3	9.1	9.0	8.9	8.8	8.6	8.5	8.4	8.3	8.2	8.1
190	9.5	9.4	9.3	9.2	9.1	8.9	8.8	8.7	8.6	8.1	8.3	8.2	8.1	8.0
193	9.5	9.3	9.2	9.1	9.0	8.9	8.7	8.6	8.5	8.4	8.3	8.1	8.0	7.9
196	9.4	9.3	9.1	9.0	8.9	8.8	8.6	8.5	8.4	8.3	8.2	8.0	7.9	7.8
199	9.3	9.1	9.0	8.9	8.8	8.7	8.5	8.4	8.3	8.2	8.1	7.9	7.8	7.8
202	9.2	9.1	9.0	8.9	8.7	8.6	8.5	8.4	8.2	8.1	8.0	7.9	7.7	7.7
205	9.1	9.0	8.9	8.8	8.6	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.7	7.6
208	9.0	8.9	8.8	8.7	8.5	8.4	8.3	8.2	8.1	8.0	7.8	7.7	7.6	7.5
210	9.0	8.9	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.8	7.7	7.6	7.5
214	8.9	8.8	8.6	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.6	7.5	7.4	7.4
217	8.8	8.7	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.7	7.5	7.4	7.4	7.3
220	8.7	8.6	8.4	8.3	8.2	8.1	8.0	7.8	7.7	7.6	7.5	7.4	7.3	7.3
223	8.6	8.5	8.4	8.3	8.1	8.0	7.9	7.7	7.6	7.5	7.4	7.3	7.2	7.2
226	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.7	7.5	7.4	7.4	7.3	7.2	7.1
229	8.4	8.3	8.2	8.1	7.9	7.8	7.7	7.6	7.4	7.4	7.3	7.2	7.1	7.1
232	8.4	8.3	8.1	8.0	7.9	7.7	7.6	7.5	7.4	7.3	7.2	7.2	7.1	7.0
235	8.3	8.1	8.0	7.9	7.8	7.6	7.5	7.4	7.3	7.3	7.2	7.1	7.0	7.0

Height above water-line transitting Canal must not exceed 40 m.

For Binnenhafen, as far as km. 6.00, vessels not requiring to transit Canal may enter with draft up to 10.40 m.

HEALTH: Pratique automatic for vessels entering harbour for loading or discharging, and ships passing through Canal if required. Health Certificate form does not show any infectious diseases.

RADIO: All messages to Agents and Pilots etc., through Norddeich Radio, call sign "DAN". Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships reporting station is on permanent duty at Brunsbuttel, VHF Channel 14, safety and calling Channel 16.

RADAR: Radar Service from Elbe 1 to Hamburg see "General" before first German port, but no special Port Radar Service for Brunsbuttel. Radar Service in the area of Brunsbuttel available, can be contacted through VHF Channel 4, "Brunsbuttel Radar Radio".

TUGS: 6 tugs available at Brunsbuttel. Vessel's lines used. Tugs normally join vessels bound for the Elbe Harbour on river in vicinity of Canal locks.

From the approach limit up to entry into the lock, tug assistance is mandatory for vessels in Group 6 and also such vessels which manoeuvre only with difficulty. Tugs assisting ships entering locks join vessels on canal-roads.

BERTHING: Ships lying at terminals situated on Canal bank in Inner Harbour should take into consideration that vessels must moor safely, as suction of passing ships may cause breaking of lines.

Binnenhafen: Comprises the area between lock entrance and km. 5.27.

BRIDGES: Ships transiting canal must have bridge clearance of 40 m. Otherwise no obstructions.

STEVEDORES: Ordered by Agents, no ETA to stevedores necessary.

MEDICAL: Port Medical Service by Harbour Doctors. Day and night service. Inoculations have to be ordered 24 hours prior arrival. Hospital available at Brunsbuttel.

TANKERS: Elbehafen – Oil Section:

Location: At the Elbe-River bank, about 0.5 nautical miles upstream from Brunsbuttel Canal Locks.

Depth of Water: Within the approaches, 13.50 m., alongside berth 14.70 m.

Max. Ships Dimension Acceptable: Length about 400 m. Beam unlimited. Draft 12.95 m.

Dirty Ballast/Slop Disposal: Shore Line Diameter: 20 in.

Max. Discharge rate/hour: 4,000 cu.m.

Max. Slop Quantity Acceptable: 35,000 cu.m.

Elbehafen for VLCC's: The safe mooring of vessels up to 250,000 d.w.t. has been proved and has become a matter of routine. Harbour Authorities have no objections to accept larger vessels but investigations have to be made with regard to safe mooring facilities ashore. Tankers with more than 37 ft. draft must arrive 2 hours prior to highwater at L/V. "ELBE I", in order to dock at Elbe Harbour with slack water or first ebb-tide. Vessels with draft not exceeding 37 ft. may dock during whole ebb-tide. Pilot vessels to be contacted via VHF radio Channels 13 and 16.

Canal Berth:

Location: Inside Kiel Canal Lock at South bank of the Inner Harbour of Brunsbuttel.

Depth of Water: Within the approaches 11.00 m. Alongside berth 8.20 m.

Max. Ships Dimension Acceptable: Length 150 m. Beam unlimited. Draft 8.00 m.

Shore Line Diameter: 12 in.

Max. Discharge rate/hour: 2,000 cu.m.

Max. Slop Quantity Acceptable: 35,000 cu.m.

BALLAST:

Dirty Ballast Disposal: Operator: Elbe Slop-Ex. GmbH & Co. KG Brunsbuttel, 2212 Brunsbuttel, Schleswiger Strasse 14. *Tel:* 87051. *Telex:* 028368 eslop d. *Cables:* Slopex. Capacity: 4,000 cu.m.p.h.

DENSITY: Brackish at Elbe Harbour and inside locks. Average density 1003.

FRESH WATER: Most berths supply by shore installations.

FUEL: All grades available.

Bunker stations on South side of Canal are:

Shell	– 2 berths, gas oil only.
BP	– 3 berths.
Elf	– 4 berths.
Elbe-Slop-Ex	– 2 berths.

and on the North side of Canal:

KuBi – Bunker Station – 1 berth, gas oil only.

Brunsbuttel Bunker Service – 3 berths.

FIRE PRECAUTIONS: No specific precautions except in Kiel Canal.

GANGWAY/DECK WATCHMEN: Services of watchmen not necessary but available day and night if required.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Ships entering canal and using terminals must have international ship's register. All other certificates should be valid.

CUSTOMS ALLOWANCES: Tobacco, each crew member 200 cigarettes or 50 cigars or 250 grams of tobacco. Surplus will be sealed up by Customs. Wine and/or spirits 1 bottle of spirits and 1 bottle of wine permitted for each crew member. Beer unlimited. Ships transiting canal are not affected.

IDENTIFICATION CARDS: Normally not needed. If necessary in special cases Identification Cards will be issued by Immigration.

CONSULS: All consulates available at Hamburg. Swedish Vice-Consul at Brunsbuttel.

REPAIRS: Only minor repairs can be effected. Big yards and dry docks available at Hamburg.

REPATRIATION: Crew changes can be arranged in connection with local Immigration Office.

AIRPORT: Nearest airport Hamburg. 90 km. away.

TIME: GMT plus 1 hour.

HOLIDAYS: Cargo work can be arranged on every day.

POLICE/AMBULANCE/FIRE: Police Tel: 110 and 3041. Waterway Guard Police Tel: 1012. Passport Control Tel: 87.262. Customs Tel: 8555. Hospital Tel: 3901. Fire Tel: 112.

TELEPHONES: No facilities for placing telephone on board in Kiel Canal.

DANGEROUS CARGO: Ships with dangerous cargo or tankers not gas free have to be reported to the Port Authority 48 hrs. before arrival.

AUTHORITY: Kiel Canal Authority – Wasser-und Schiffakrtsamt Brunsbuttel, 2212 Brunsbuttel 1. *Tel:* (04852) 8011 – 8016.

Harbour Authority: Hafenbehorde Brunsbuttel, Elbehafen, 2212 Brunsbuttel. *Tel:* (04852) 87044. *Contact:* Captain Dietze, Port Captain.

(b) ELBE TERMINAL

LOCATION: Elbe Terminal situated outside of locks, quay length 1,100 m.

PILOTAGE: Elbe Pilots also act as docking Pilots at Elbe Terminal.

RESTRICTIONS: For vessels bound for Elbe Terminal, Brunsbuttel, there are no restrictions with regard to length, breadth and height or with regard to day or night entry. Vessels may berth and unberth day or night.

MAX. SIZE: As the fairway of the River Elbe is being dredged, it is not possible to publish any long-term draft values. The max. admissible drafts of the various sizes of vessels intending to navigate on the River Elbe must be enquired of the authorities. The Elbe Pilots will have updated information on the latest depth and draft values.

Depth of water: Oil section: 14.70 m. below chart zero; dry cargo section: 12.70 m. below chart zero. Minimum keel clearance of 3 ft. required.

BERTHING: *Dry cargo section:* One gantry crane for handling of bulk cargoes with a capacity of 25 tons and outreach of 45 m.

3 level-luffing cranes for handling of bulk and general cargoes as well as containers. By means of syncronising 2 cranes, heavy pieces up to 45 tons can be handled.

Capacity of these cranes 12/24 tons with an outreach of 40/20 m.

2 level-luffing cranes for handling general cargo only with a capacity of 6/10 tons with an outreach of 32/20 m.

1 automatic crane with a capacity of 20 tons for handling of general cargo.

3 warehouses with a floor space of total 8,000 sq.m. available.

TANKERS: 2 Mannesmann marine loading and discharging units 12 in. diameter, each with a capacity of 1,500 t.p.h.

2 Mannesmann marine loading and discharging units 20 in. diameter with a capacity of 10,000 t.p.h.

The units are driven hydraulically. Connection to the tanker manifolds by hydraulically operated clamps.

One 30 in. pipeline to Texaco Tank Storage. Pressure admissibility of the units up to 19 Atu and a temperature up to max. +50°C (Crude oil).

Liquified Gases (Propane): 1 loading/discharging arm 250 mm. diameter, 25 bar, −50°C. 1 vapour return line 100 mm. diameter.

Also see "Regulations".

Mooring:

1. Tankers must be moored with particular care on account of the current, as handling equipment will be engaged for discharging and loading operations and therefore vessels must be moored safely. All lines must be heaved tight and secured to ensure that vessels will be firmly secured at the pier at all times.

2. Tankers exceeding 35,000 g.r.t. must be moored as shown in *Mooring Plan* (See "Plan Book") it being understood that these are minimum requirements for normal weather conditions.

3. The cross lines (wire ropes with a breaking strength of 120 tonnes) will be provided from the shore and should be belayed on bollards.

4. If at all possible, an additional two cross lines should be provided by the vessel.

5. All lines must be in perfect condition.

6. The winches to be used must be in perfect working order and capable of holding the tensile forces for which they are rated.

7. The crew must be large enough for efficient handling of the lines according to the standards of good seamanship.

8. The Port Authority may insist on calling in additional personnel for vessels not having a large enough crew to handle lines safely and quickly.

9. The Mooring Plan is based on all line systems. If no cross lines are provided from the shore, at least 1 wire rope each must be provided fore and aft by the vessel.

Fire Warp: Once the mooring operations are completed, a sufficiently strong tow-line (wire rope) must be lowered from bow and stern on the offshore side as far down as to the water surface.

Berthing/Unberthing: (a) Tankers may be berthed and unberthed only if the wind does not exceed force 7 Beaufort scale.

(b) If the visibility is at least 1 nautical mile.

Tide: The mean range of the tide at the pier is about 2.66 m. (8 ft.). The max. ebb current is 1.75 m. per second, the max. flood current is 1.5 m. per second.

Important:

1. The shore-side loading/discharge swivel arms are equipped with an automatic drift alarms. Should the vessel drift beyond the safety limit, a loud signal will be sounded and all ship-side pumps must be stopped and the lines must be checked.

2. In case of fire the Ship Fire Alarm is as follows:

1 or more tyfon blasts, each to be sounded for at least 10 seconds, in addition to sounding the General Alarm. All safety drills and precautions must be observed.

REGULATIONS: *Special Regulations for Gas Tankers:*

1. The maximum volume of gas tankers is limited to 15,000 cu.m. The volume of cargo in each single tank may not exceed 6,000 cu.m.

2. Only semi-pressurised tankers which are in possession of a valid IMO Certificate for the Transport of Butane and/or Propane according to IMO Code Resolution No. 328IX (new ships) or Resolution No. 329-LX for existing ships are permitted.

3. The gas tankers must be equipped with a refrigerating plant, which is capable of keeping the cargo at atmospheric pressure under extreme ambient conditions (45°C air temperature, 32°C water temperature). The refrigerating plant must consist of several identical units (at least 2), in case one should fail, the other to replace same fully.

4. The entire cargo (also eventual transit cargo) is to be kept in a fully refrigerated condition when entering port and while loading/discharging.

5. The release of cargo vapours for the purpose of reducing pressures and/or temperature adjustment – except in emergency cases – is forbidden.

6. Whilst gas tankers are on the River Elbe no materials like alkine (actylene), polyine (polyacethylene), allene, kumulene, MAPP gases, may be carried on board as cargo. ("Rules for the Protection of Nuclear Power Stations against Pressure Waves Resulting from Chemical Reactions" dated 1st August, 1976).

7. Vessels to dock against ebb tide with port side to. In case this requirement cannot be fulfilled due to an eventual delay during the river passage or any other unforeseeable reasons, a turning manoeuvre in a position East of the berth must be prevented (i.e. acceptance of additional tugs).

8. A wireless telephone connection is to be established between the security vessel and the personnel on the jetty, and the fire-fighting centre and the vessel. The wireless telephone connection must secure a duplex communication. Furthermore a wireless telephone communication must be established in good time prior to vessel's berthing.

9. Sufficient and suitable mooring personnel must be arranged for mooring and unmooring. The number of crew must be large enough to secure quick and a safe mooring manoeuvre. The local Harbour Authorities can order the acceptance of additional suitable personnel for this purpose.

10. The vessel must be tied up at the Elbe Harbour in such a way that a parting of the moorings (breaking, melting, burning) may not occur. At least 3 head lines, 3 stern lines, 1 fore spring and 1 after spring are to be made fast. At least 1 head line, 1 stern line and 1 spring MUST be of steel wire construction.

11. For berthing and unberthing at the Elbe Harbour Quay in way of the fire-fighting monitors at least two tugs must be accepted. The engine capacity of the tugs must be sufficient to assist the vessel in all wind, current and ice-conditions. The engine capacity of each tug must be at least 1,600 h.p. Vessels of less than 3,000 g.r.t., equipped with a working bow thruster may unberth with one tug less, weather permitting.

12. While discharging, the passing traffic is to be observed. In case a vessel comes too close, gas discharging/loading is to be stopped.

13. While handling gases, bunkering is not permitted.

14. LPG/Carriers may not be berthed at the Elbe Harbour together with laden or non-gas-free, non-inerted tankers, whose last cargo had a flash-point of below 61°C.

15. No vessels may make fast alongside a gas tanker while handling cargo.

16. During extreme meteorological circumstances (thunderstorms, hurricanes) the handling of liquid gas is to be stopped.

17. The vessel has to leave the berth immediately upon completion of cargo operations.

BALLAST: Ballasting of oil tankers during or after discharging into non-gas-free tanks is allowed only upto a volume of 50% of each tank concerned. This does not apply for inerted tanks.

DENSITY: 1003, brackish water.

FRESH WATER: Available at all berths.

GANGWAYS: Shore gangways available; for V.L.C.C.'s special gangway at hand.

FUEL: By barges. All grades available.

MINIMUM STAFF: During crude oil transfer a minimum staff shall be assigned for safe handling of cargo transfer. For tankers of 3,000 g.r.t. and more, the minimum staff shall be assigned as follows:

1 Deck Officer, 1 Engineering Officer familiar with cargo handling.
2 deckhands.

For tankers of 70,000 g.r.t. and more 2 additional deckhands are required.

TELEPHONE: Ship telephone connections are available at all berths.

AUTHORITY: *Port Operator:* Hafengesellschaft Brunsbuttel mbH, 2212 Brunsbuttel, Elbehafen. *Tel:* 8066. *Telex:* 28347 eport d.

Port Authority: Hafenbehorde Brunsbuttel, 2212 Brunsbuttel, Elbehafen. *Tel:* 87044.

(c) BRUNSBUTTEL – Oil Port

LOCATION: Oil Port situated on North side of Kiel Canal 3.5 km.

PILOTAGE: See Section (a) Canal Pilots also act as Docking Pilots.

ANCHORAGE: Anchoring near the compressed-air barrier is prohibited. The location of the barrier is indicated by rings with the inscription "Preßluftsperre".

MAX. SIZE: Max. allowed dimensions of vessel between the figure values (draft and beam) can be interpolated.

Max. Draft	*Max. Beam*
10.40 m. (34 ft. 2 in.)	27.00 m. (88 ft. 7 in.)
9.50 m. (31 ft. 2 in.)	29.00 m. (95 ft. 2 in.)
8.00 m. (26 ft. 3 in.)	32.50 m. (106 ft. 7 in.)

Max. LOA 235 m. (771 ft.)

Ships passing Kiel Canal: See "Restrictions" Kiel Canal.

BERTHING:

Berths: 3 berths (Nos. 6, 7 and 8) for tankers up to 10.40 m. (fresh water) draft.

2 berths (Nos. 4 and 5) for tankers up to 6 m. (fresh water) draft.

Oil Handling Facilties: Hoses of 6 in., 8 in. and 10 in. for handling of crude oil, diesel oil, gas oil, gasoline, tuluol, xylol and lub oil.

Mooring: Tankers are required to be moored at least by 1 steel wire fore and aft. The steel wire may be covered.

Restrictions: During loading and ballasting operations, it shall be made sure that a vapour/air mixture pressed out of the tanks is no longer flammable or toxic outside the port area. In order to achieve this without continuous checking, the pumping rate is fixed at 800 cu.m./hour maximum.

Minimum Staff: During cargo transfer a minimum staff shall be assigned for safe handling of cargo transfer. For tankers of 3,000 g.r.t. and more, the minimum staff shall be assigned as follows:

1 deck officer familiar with cargo handling.
1 engineer officer familar with cargo handling.
2 deck hands.

Fire Precautions: Fire hoses must be laid out and connected to fire line, which have to be under pressure during all cargo operations.

Fire wires must be paid out to the water level fore and aft.

1 lifeboat must be swung out into an embarkation position in order to provide an additional emergency escape.

Dirty Ballast Disposal: Not possible in the port. Available only at Elbe Terminal and Kiel Canal (inner harbour) by Elbe-Slop-Ex G.m.b.H. or by barges.

DENSITY: 1003.

FRESH WATER: Available at all berths.

FUEL: By barges. All grades available.

GANGWAYS: Shore gangways available.

AUTHORITY: Operator of cargo handling facilities:
Deutsche Texaco AG, Ostermoorer Str., 2212 Brunsbuttel. *Tel:* 2011. *Telex:* 028314.

Port Operator: Hafengesellschaft Brunsbuttel m.b.H., Elbehafen, 2212 Brunsbuttel. *Tel:* 8066. *Telex:* 028347 eport d.

Port Authority: Hafenbehorde Brunsbuttel, Elbehafen, 2212 Brunsbuttel. *Tel:* 87044.

(d) OSTERMOOR.

LOCATION: Kiel Canal Km. 5.66 (South Side).

PILOTAGE: See Section (a). Canal Pilots also act as Docking Pilots.

RESTRICTIONS: If passing through Kiel Canal, see "Restrictions" in Section (a).

MAX. SIZE: LOA 235 m. (771 ft.).

Max. draft	*Max. beam*
10.40 m. (32 ft. 02 in.)	27.00 m. (88 ft. 07 in.)
9.50 m. (31 ft. 02 in.)	29.00 m. (95 ft. 02 in.)
8.00 m. (26 ft. 03 in.)	32.50 m. (106 ft. 07 in.)

BERTHING:

Port Operator: Hafengesellschaft Brunsbuttel (PO).

Operator of Cargo Handling: AMH-Chemie GmbH (AMH).

Immigration Clearance: Will be carried out on board.

Customs Clearance: No freeport. Customs clearance will be carried out on board.

Tug Assistance: According to assignment of Port Authority.

Mooring: The use of constant tension winches is prohibited (Berth Nos. 2 and 4 only). Port Authority will allocate berth where as the exact position alongside berth will be advised by AMH. The Master is responsible for safe mooring. Additional mooring may be requested by Port Authority responsible (AMH). Bow of vessel at berth in direction Kiel Canal. Exception regulation by Port Authority.

Drinking Water: Available at Berth Nos. 1, 2 and 4 against payment (PO).

Steam and Nitrogen: Steam at No. 2 Berth and nitrogen at No. 4 Berth available from ashore.

Bunker Supply: By barges only. The Port safety regulation must be observed (Northern Basin).

Ship Repairs: Permission of AMH required.

Electricity Supply: No connections available.

Garbage Disposal: Available (PO).

Dirty Ballast Disposal: Not possible in the Port. Available only at Elbe – Port Jetty and Kiel Canal (Inner Harbour) by Elbe – Slop – Ex-GmbH.

Navigating into the North Basin: (Direction by AMH) – only after stop of cargo operations at Berth No. 4.

Gangways: At Berth Nos. 2 and 4 gangways are at hand (AMH). At Berth No. 4 and at waiting place a lifeboat has to be ready at the accommodation ladder on the offside during cargo operations.

Stop of Cargo Operations in Case of Emergency: At the sound of the signal "stay away" (·–) and fire (– – –) by loudspeaker; at the instructions given by telephone or loudspeaker; when the flashing light is in operation; at the release of the disconnection couplings; in case of fire on board.

Fire on board: The Port Supervisor of AMH has to be informed immediately. Cargo operations have to be stopped immediately. Ship has to give usual Thyphon – Fire signal ("F").

Cargo Stop in Case of Bad Weather: Berth No. 1: rainfall, windspeed 22 m./sec.; Berth Nos. 2 and 4: windspeed 26 m./sec. Disconnection at windspeed 22 m./sec.

ETA Messages: 72 hours prior to arrival to AMH via Agent with the following information: (1) Ship's name and call sign; (2) Arrival time; (3) Cargo (product and quantity); (4) Tankers: number and diameter of cargo manifold connections; (5) Any damage to hull, tanks or overboard valves. Vessels are dispatched according to accepted ETA. In any case ETA has to be repeated 48 and 24 hours before arrival.

Dangerous Cargoes: Ships with dangerous cargoes or tankers which are not gas-free have to be reported to the Port Authority 48 hours before arrival.

Ships requested to accomplish the Oil Liability Agreement (more than 2,000 tons oil onboard) must be in possession of a valid Oil Liability Certificate.

Regulation Covering the Transport of Ammonia through the Kiel Canal: In the North Sea – Baltic Canal, liquid ammonia (U.N.No. 1005) may be transported in such vehicles as fulfil the following maritime police stipulations:

1. For the vehicle, an IMO suitability certificate for the transport of ammonia must be issued in accordance with the IMO Code, Resolution 328-IX (new vessels), Resolution 329-IX or for existing vessels.

2. The loading system must be so dimensioned that at an outside air temperature of +25° Celsius and 20° Celsius for water the load can be maintained for an undetermined duration without ammonia vapour being blown out via the safety valves.

3. The re-liquification plant of the vehicle must have available a reserve capacity of at least 50 per cent of the power normally required for ship's operation, in the event that ammonia is being transported, so that in the event of an accident, including damage to the insulation, heavily vapourised contents of a tank can be safely re-liquefied.

4. On vessels with tank insulation which is not of the water repellant kind (e.g. glass or mineral wool), watertight lengthways bulkheads must be available at a distance of 760 mm. from the outer skin.

5. The loading tanks of available ships must have a clearance of at least 760 mm. from the outer skin side.

6. Vessels with a loading capacity of up to 12,000 cbm. must be equipped in addition to the requirements of section 1 with independent loading tanks of type B or C (spherical or cylindrical). The adjustment pressure of the safety valves (MARVS) must amount to at least 0.7 bars over pressure.

7. The fulfilment of the stipulations set out in Section 1 numbers 2 to 5 and in Section 2, in so far as they are necessary, must be supported by a certificate issued by a recognised Classification Society.

8. The IMO – suitability indication in accordance with Section 1 and the certificate as per Section 7 must be kept on board the vessel.

Oil tankers of more than 2,000 d.w.t. must be in possession of a valid Oil Liability Certificate.

Cargo Handling at Berth Nos. 2 and 4: Before starting cargo operations following measures are to be taken:

Confirmation of Checklist by vessel's command.
Cargo tank inspection by AMH.
Referring to "Operation plan" by AMH.
Connection of ground-wire.
Emergency towing wires (steel) must be provided at water level (Berth No. 4 only).
Installation of telephones.
Gas detectors handed on board (Berth No. 4 only).
Fire hoses must be laid out and connected to fireline, which has to be under pressure during all cargo operations (Berth No. 4 only).

Connection and disconnection of loading arms will be done by AMH personnel.

Watchmen: During cargo operations a watchman has to be on stand-by at manifold. In case of an emergency, vessel's pumps and stop valves must be able to be shut down immediately.

Minimum Crew during Cargo Transfer Operation at Berth No. 4:

1 Deck Officer } fully qualified in cargo
Ass. Eng. Officer } transfer operations
2 Deckhands
1 Watch Officer for duties other than cargo transfer.

	Berth/Products		
Brunsbuttel-Ostermoor *Loading and Discharging installations*	*Berth No. 1* *Urea bulk-bagged*	*Berth No. 2* *Heavy Fuel Oil*	*Berth No. 4* *Anhydrous Ammonia*
Loading/discharge rate with vapour return line (max.)	—	—	*800 t/h (at −33°C) 250 t/h (at ambient temp.)
Loading/discharge rate without vapour return line (max.)	—	800 t/h (‡)	*500 t/h (at −33°C) † (at ambient temp.)
Loading rate with ship loader	1,200 – 1,500 t/d, 3000 t/d (bagged) (bulk)	—	—
Loading arm flange (Number and size) (Loose flange with collar acc. DIN 2656, ND40)	—	1×200 mm.	1×200 mm. (Product) 1×100 mm. (Vapour)
Storage capacity	85,000 tons	3×20,000 cu.m., 1×10,000 cu.m. 1× 1,000 cu.m.	2×30,000 cu.m. (−33°C) 1× 3,000 m. (ambient temp.)
Working range of ship Height refers to normal water level upwards	−10.4 to +9.5 m. (bagged) −10.4 to +7.5 m. (bulk)	+0.2 to +16.0 m.	0.0 to +21.0 m.
Loader/unloader Outreach refers from dolphin vanishing line towards ship's offside.	1.0 to 26.0 m.	1.0 to 11.0 m.	1.0 to 11.0 m.
Further equipment at berths: Service limits of installed own gangways (Height refers to normal water level/top edge deck)	—	+1.0 to +12.5 m.	+1.5 to +14.5 m.
Public telephone connection against payment/number	§compulsory/87211	§compulsory/87212	§compulsory/87213
Public telephone of harbour: 8066, 8067, 8068, 8069 (PO)			
Branch line of AMH telephone system (free of charge)/telephone number of ship. Telephone No. Portmaster 2171.	—	compulsory/2180	compulsory/2181
Delivery of goods from ashore	by ship's gear	by ship's gear	with jetty-crane against payment

Remarks: *reduced discharge rate at higher cargo temperature; †only possible in exceptional cases (discharge); ‡at following conditions: P min=3 bar, T min=+55°C. Viscosity max.=35° E/+55°C; §Compulsory during loading/discharging at Berth No. 4

AUTHORITY: Port Authority (PA): Hafenbehorde Brunsbuttel, 2212 Brunsbuttel, Elbehafen. Tel: 87044 – Area Code 4852.

Port Operator (PO): Hafengesellschaft Brunsbuttel mbH, 2212 Brunsbuttel, Elbehafen. Tel: 8066 – Area Code 4852. Telex: 28347 eport d.

Operator of the Cargo Handling Facilities (AMH): AMH-Chemie GmbH, 2212 Brunsbuttel P.O.B. 1268. Tel: 82-1 – Area Code 4852. Telex: 28360 Amh D.

BUTZFLETH: 53.39 N. 09.31 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Bonded Stores Lists.
3 Crew Manifests.
Maritime Health Declaration.
Ship's Register.
Discharge Books.
Passports of Crew.
Gas Free Certificate (OBO-Carriers)

Butzfleth is not a free-port. Customs, Immigration and River Police board on arrival at berth.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

Pilotage River Terminal: Elbe Pilots also act as docking Pilots.

ANCHORAGE: Freiburg Anchorage, approx. position Lat. 53° 50.6′ N., Long. 09° 19.5′ E., depth of water up to 13 m. below chart zero; there are further anchorages for small vessels at Krautsand – and Twielenfleth Roads. (see "General" before first German Port.)

MAX. SIZE: See "Berthing".

RADAR: River Radar Service from Elbe 1 to Hamburg, see "General" before first German port, but no special Port Radar Service for Butzfleth. Radar Service in the area of Butzfleth available, can be contacted through VHF Channel 21, "Hetlingen Radar Radio" and/or VHF Channel 5, "Steindeich Radar Radio".

RADIO/VHF: All messages to Agents and Pilots, etc., through Norddeich Radio, call sign DAN. Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships' reporting station is on permanent duty at Stadersand, VHF Channel 11, safety and calling Channel 16.

Pilot boat at "Elbe-1" can be contacted on VHF Channels 13 and 16.

TUGS: 4 tugs compulsory for mooring and unmooring. To be ordered from Hamburg and Brunsbuttel through Agent.

A fire fighting tug (1,760 hp) is available 24 hours and can be reached via VHF Channel 16, also available for assistance to vessels.

BERTHING:

Aluminium Oxid Stade GmbH. (AOS): This bauxite/oxide plant, situated on the Westbank of the River Elbe, can be reached by vessels with max. drafts of 46 ft. 06 in. FW.

Quay length		*Depth at normal Low water*
Quay outside in total	325 m.	15 m. (49 ft.)
Within reach of crane	205 m.	
Quay inside	200 m.	7 m. (23 ft.)

The oxide produced at this plant, apart from being exported, is used for the mills of V.A.W. Elbewerk GmbH., Stade-Butzfleth and of Hamburger Aluminium Werk GmbH., Hamburg Finkenwerder.

Average discharging/loading rate

West African bauxite	550–600 m.t.p.h.
Brazilian bauxite	600 m.t.p.h.
Australian bauxite:	
from Gove	550–600 m.t.p.h.
from Weipa	750 m.t.p.h.
Petcoke	100–400 m.t.p.h.
Oxide ("Spout" loading)	500 m. t.p.h.

Ship's telephone connection (4146-1453) at AOS pier.

Dow Chemicals GmbH: This industry, situated close to the AOS plant, offers 2 berths for gas and chemical tankers. The water depth at the outside quay is: 15 m. (49 ft.) and at the inside quay: 9 m. (29 ft. 6 in.), both at MLW.

Restrictions for ships	*Products*	
	Inflammable	*Non Inflammable*
Length at quay outside	270 m.	300 m.
Length at quay inside	125 m.	125 m.
Draft at quay outside (FW)	13.71 m. (45 ft.)	13.71 m. (45 ft.)
Draft at quay inside (FW)	8.0 m.	8.0 m.
Beam at quay inside	18.75 m.	18.75 m.

No bunkering permitted at the DOW-berths.

Discharging rate liquid gas	approx 200 t.p.h.
Loading rate chemical products	100–800 t.p.h.

Max. Size: Vessels loading/discharging inflammable products: Max. length 270 m. Max. draft 14 m.

Vessels loading/discharging non-flammable products: Length unlimited. Max. draft 14 m.

Vessels with liquid gas and flammable products: Max. length 145 m. Max. draft 8 m. Max breadth 22 m.

Restriction: Mooring prohibited for vessels having IMO Class 2 products (liquid and/or gaseous) on board.

Simultaneous handling of gases inside and flammable products outside not permissable.

Manifolds: (Land side to sea side).

Inside Berth:		Outside Berth:	
	Methanol		P.O.
	Telone/Vidden		Per
	P.D.C.		P.G.I.
	P.O.		Tet
	Propylene		Chlorothene VG/NU
	Ethylene		EDC
			Naoh
			Methylene Chloride
			Trichloroethane
			Chloroform/Methanol

Supplies: Nitrogen and potable water.

Technical requirements on ships discharging C2/C3.

Ethylene: For loading arm horizontal clearance ships manifold to the nearest structure 2.10 m., vertical clearance from centre of manifold up 0.50 m. and down 0.60 m., flange 6 in. (300 ASA) discharge-temperature of Ethylene minimum −103°C.

Propylene: For loading arm horizontal clearance 2.20 m., vertical up 0.50 m. and down 0.50 m., flange 6 in. (300 ASA), discharge-temperature of Propylene maximum −20°C.

Further on Propylene, vessels to be guaranteed, that the vessels in Summertime are suitable for pump against a back pressure of minimum 13 kg. but preferably it should be 15 kg./16 kg.

MEDICAL: Hospital and doctor available.

FRESH WATER: Available.

FUEL: Supplied by barge from Hamburg or local supplier.

GENERAL: *Dirty Ballast:* No facilities.

Agent at Dow-Jetty: Messrs. Elbclearing, P.O. Box 5110; 2160 Stade 5. *Tel:* 04146/1033. *Telex:* 0218158 clear d.

REPAIRS: Minor repairs can be carried out.

SERVICES: Stevedores, hold cleaning, boatmen, mooring gangs, inspectors, fitters and launches.

DEVELOPMENTS: In the northern part of the port, a new pier is currently under construction (due to be completed in 1984), and which is planned to handle general and bulk cargo. It will have a free area of approximately 20,000 sq.m.

In the southern harbour, a further discharge head platform is under construction. Maximum vessel length 160 m., beam 28.0 m. and 7.50 m. depth of water (to be completed Summer 1984).

Apart from a floating crane of 20 tons and a mobile crane of 10 tons which are currently in use in the port, two jib cranes will also be installed each with 20 ton lifting capacity, for use with grabs or hooks.

AUTHORITY: Niedersachsisches Hafenamt Cuxhafen, Aubenstelle, Butzfleth, 2160 Stade 5. *Tel:* (04146) 1436. *Contact:* F. W. Bork, Manager. Captain W. Schroeder, Harbour Master.

CUXHAVEN: 53.52 N. 08.42 E. (See Plan Book)

DOCUMENTS:

Stores List.
Crew List.
Customs Manifest.
Derat Certificate.
Amerikahafen is a Customs free port.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

PILOTAGE: Pilot station situated in Old Harbour (Alten Hafen). To obtain Pilot call "Cuxhaven Port", VHF Channel 12. Pilot signal is flag "G" of International Code, or sound signal – 2 long and 2 short blasts.

ANCHORAGE: Available off Cuxhan Medem Roads, approx. position Lat. 53° 51.5′ N., Long. 08° 46.5′ E., depth of water about 6 m. – 12 m. below chart zero; further anchorages see "General" before first German Port.

RESTRICTIONS: Vessels can enter by day or night. No tidal restrictions.

Depths: Max. depth of water: 13.5 m. (45 ft.). Mean tide HW: NN+1.40 m. Mean tide LW: NN−1.50 m. Tide range is 2.90 m. (NN = approx. mean sea level).

Water depth in the basins up to 8.5 m. below MTLW. Water depth at the river quays 12 m. and 8 m. below MTLW.

HEALTH: Quarantine clearance effected at Cuxhaven. Only vessels with suspected infectious disease on board are detained.

RADAR: River Radar Service from Elbe 1 to Hamburg see "General" before first German port, but no special Port Radar Service for Cuxhaven. Radar Service in the area of Cuxhaven available, can be contacted through VHF Channel 21, "Cuxhaven Radar Radio".

RADIO: For ETA, etc., use Norddeich Radio, call sign DAN. Closer to port Elbe–Weser Radio can be contacted by VHF Channel 16.

Ships reporting station is on permanent duty at Cuxhaven, VHF Channel 12, safety and calling Channel 16.

TUGS: Tugs available and used depending on ship size and weather conditions. Cost of tugs is Hamburg Tariff plus 20%.

BERTHING:

Fahrhafen and Neue Seebaderbrucke: Modern multi-purpose Ro/Ro terminal for passengers and for handling of motor vehicles and cargo direct at the Elbe River, 300 m. quay with 8 m. depth below MTLW.

Starting point of ferries for the North Sea and the Baltic Sea, for passenger ships to Helgoland and Hamburg.

Ro/Ro linkspans (one of them for axle-loads up to 50 tons and for stern-door width up to 18 m.). Hard-standing and storage area of approx. 60,000 sq.m.

Alter Hafen: Multi-purpose harbour for shipyards and for boats to the seaside resorts and islands.

Alter Fischereihafen: Multi-purpose harbour with transhipment and outfitting quays for fishing cutters, offshore base and emergency port. Fish auction and fish handling sheds, fish industry, equipment firms, deep freeze house for 5,000 tons of goods.

Neuer Fischereihafen: Multi-purpose harbour with transhipment and equipment quays for trawlers and luggers, offshore suppliers, Ro/Ro ships, for ships carrying general cargo and for minor bulk cargo ships. Fish auction and handling sheds, fish industry, equipment firms, deep freeze house for 25,000 tons, ice production, open storage space.

Entrance and exit any time by the sea-lock. Length of lock 190 m., width of lock 24 m. and depth of lock is 9 m. below MTLW.

Amerikahafen: Multi-purpose harbour with transhipment and equipment quays for ships carrying general cargo and for minor ships carrying bulk cargo, emergency port, floating docks, transit shed, deep freeze house, open storage spaces.

Steubenhoft: Multi-purpose facility for big ocean vessels with 400 m. long quay and 12 m. water depth below MTLW. Usable for cargo, repair, trial trip and passenger ships of all sizes.

Steam and Nitrogen: Steam at No. 2 Berth and nitrogen at No. 4 Berth available from ashore.

Bunker Supply: By barges only. The Port safety regulation must be observed (Northern Basin).

Ship Repairs: Permission of AMH required.

Electricity Supply: No connections available.

Garbage Disposal: Available (PO).

Dirty Ballast Disposal: Not possible in the Port. Available only at Elbe – Port Jetty and Kiel Canal (Inner Harbour) by Elbe – Slop – Ex-GmbH.

Navigating into the North Basin: (Direction by AMH) – only after stop of cargo operations at Berth No. 4.

Gangways: At Berth Nos. 2 and 4 gangways are at hand (AMH). At Berth No. 4 and at waiting place a lifeboat has to be ready at the accommodation ladder on the offside during cargo operations.

Stop of Cargo Operations in Case of Emergency: At the sound of the signal "stay away" (·–) and fire (– – –) by loudspeaker; at the instructions given by telephone or loudspeaker; when the flashing light is in operation; at the release of the disconnection couplings; in case of fire on board.

Fire on board: The Port Supervisor of AMH has to be informed immediately. Cargo operations have to be stopped immediately. Ship has to give usual Thyphon – Fire signal ("F").

Cargo Stop in Case of Bad Weather: Berth No. 1: rainfall, windspeed 22 m./sec.; Berth Nos. 2 and 4: windspeed 26 m./sec. Disconnection at windspeed 22 m./sec.

ETA Messages: 72 hours prior to arrival to AMH via Agent with the following information: (1) Ship's name and call sign; (2) Arrival time; (3) Cargo (product and quantity); (4) Tankers: number and diameter of cargo manifold connections; (5) Any damage to hull, tanks or overboard valves. Vessels are dispatched according to accepted ETA. In any case ETA has to be repeated 48 and 24 hours before arrival.

Dangerous Cargoes: Ships with dangerous cargoes or tankers which are not gas-free have to be reported to the Port Authority 48 hours before arrival.

Ships requested to accomplish the Oil Liability Agreement (more than 2,000 tons oil onboard) must be in possession of a valid Oil Liability Certificate.

Regulation Covering the Transport of Ammonia through the Kiel Canal:

In the North Sea – Baltic Canal, liquid ammonia (U.N.No. 1005) may be transported in such vehicles as fulfil the following maritime police stipulations:

1. For the vehicle, an IMO suitability certificate for the transport of ammonia must be issued in accordance with the IMO Code, Resolution 328-IX (new vessels), Resolution 329-IX or for existing vessels.

2. The loading system must be so dimensioned that at an outside air temperature of +25° Celsius and 20° Celsius for water the load can be maintained for an undetermined duration without ammonia vapour being blown out via the safety valves.

3. The re-liquification plant of the vehicle must have available a reserve capacity of at least 50 per cent of the power normally required for ship's operation, in the event that ammonia is being transported, so that in the event of an accident, including damage to the insulation, heavily vapourised contents of a tank can be safely re-liquefied.

4. On vessels with tank insulation which is not of the water repellant kind (e.g. glass or mineral wool), watertight lengthways bulkheads must be available at a distance of 760 mm. from the outer skin.

5. The loading tanks of available ships must have a clearance of at least 760 mm. from the outer skin side.

6. Vessels with a loading capacity of up to 12,000 cbm. must be equipped in addition to the requirements of section 1 with independent loading tanks of type B or C (spherical or cylindrical). The adjustment pressure of the safety valves (MARVS) must amount to at least 0.7 bars over pressure.

7. The fulfilment of the stipulations set out in Section 1 numbers 2 to 5 and in Section 2, in so far as they are necessary, must be supported by a certificate issued by a recognised Classification Society.

8. The IMO – suitability indication in accordance with Section 1 and the certificate as per Section 7 must be kept on board the vessel.

Oil tankers of more than 2,000 d.w.t. must be in possession of a valid Oil Liability Certificate.

Cargo Handling at Berth Nos. 2 and 4: Before starting cargo operations following measures are to be taken:

Confirmation of Checklist by vessel's command.

Cargo tank inspection by AMH.

Referring to "Operation plan" by AMH.

Connection of ground-wire.

Emergency towing wires (steel) must be provided at water level (Berth No. 4 only).

Installation of telephones.

Gas detectors handed on board (Berth No. 4 only).

Fire hoses must be laid out and connected to fireline, which has to be under pressure during all cargo operations (Berth No. 4 only).

Connection and disconnection of loading arms will be done by AMH personnel.

Watchmen: During cargo operations a watchman has to be on stand-by at manifold. In case of an emergency, vessel's pumps and stop valves must be able to be shut down immediately.

Minimum Crew during Cargo Transfer Operation at Berth No. 4:

1 Deck Officer } fully qualified in cargo
1 Ass. Eng. Officer } transfer operations
2 Deckhands
1 Watch Officer for duties other than cargo transfer.

	Berth/Products		
Brunsbuttel-Ostermoor Loading and Discharging installations	*Berth No. 1 Urea bulk-bagged*	*Berth No. 2 Heavy Fuel Oil*	*Berth No. 4 Anhydrous Ammonia*
Loading/discharge rate with vapour return line (max.)	—	—	*800 t/h (at −33°C) 250 t/h (at ambient temp.)
Loading/discharge rate without vapour return line (max.)		800 t/h (‡)	*500 t/h (at −33°C) † (at ambient temp.)
Loading rate with ship loader	1,200 – 1,500 t/d, 3000 t/d (bagged) (bulk)	—	
Loading arm flange (Number and size) (Loose flange with collar acc. DIN 2656, ND40)	—	1×200 mm.	1×200 mm. (Product) 1×100 mm. (Vapour)
Storage capacity	85,000 tons	3×20,000 cu.m., 1×10,000 cu.m. 1× 1,000 cu.m.	2×30,000 cu.m. (−33°C) 1× 3,000 m. (ambient temp.)
Working range of ship Height refers to normal water level upwards	−10.4 to +9.5 m. (bagged) −10.4 to +7.5 m. (bulk)	+0.2 to +16.0 m.	0.0 to +21.0 m.
Loader/unloader Outreach refers from dolphin vanishing line towards ship's offside.	1.0 to 26.0 m.	1.0 to 11.0 m.	1.0 to 11.0 m.
Further equipment at berths: Service limits of installed own gangways (Height refers to normal water level/top edge deck)	—	+1.0 to +12.5 m.	+1.5 to +14.5 m.
Public telephone connection against payment/number	§compulsory/87211	§compulsory/87212	§compulsory/87213
Public telephone of harbour: 8066, 8067, 8068, 8069 (PO)			
Branch line of AMH telephone system (free of charge)/telephone number of ship. Telephone No. Portmaster 2171.	—	compulsory/2180	compulsory/2181
Delivery of goods from ashore	by ship's gear	by ship's gear	with jetty-crane against payment

Remarks: *reduced discharge rate at higher cargo temperature; †only possible in exceptional cases (discharge); ‡at following conditions: P min=3 bar, T min=+55°C. Viscosity max.=35° E/+55°C; §Compulsory during loading/discharging at Berth No. 4

AUTHORITY: Port Authority (PA): Hafenbehorde Brunsbuttel, 2212 Brunsbuttel, Elbehafen. Tel: 87044 – Area Code 4852.

Port Operator (PO): Hafengesellschaft Brunsbuttel mbH, 2212 Brunsbuttel, Elbehafen. Tel: 8066 – Area Code 4852. Telex: 28347 eport d.

Operator of the Cargo Handling Facilities (AMH): AMH-Chemie GmbH, 2212 Brunsbuttel P.O.B. 1268. Tel: 82-1 – Area Code 4852. Telex: 28360 Amh D.

BUTZFLETH: 53.39 N. 09.31 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Bonded Stores Lists.
3 Crew Manifests.
Maritime Health Declaration.
Ship's Register.
Discharge Books.
Passports of Crew.
Gas Free Certificate (OBO-Carriers)

Butzfleth is not a free-port. Customs, Immigration and River Police board on arrival at berth.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

Pilotage River Terminal: Elbe Pilots also act as docking Pilots.

ANCHORAGE: Freiburg Anchorage, approx. position Lat. 53° 50.6′ N., Long. 09° 19.5′ E., depth of water up to 13 m. below chart zero; there are further anchorages for small vessels at Krautsand – and Twielenfleth Roads. (see "General" before first German Port.)

MAX. SIZE: See "Berthing".

RADAR: River Radar Service from Elbe 1 to Hamburg, see "General" before first German port, but no special Port Radar Service for Butzfleth. Radar Service in the area of Butzfleth available, can be contacted through VHF Channel 21, "Hetlingen Radar Radio" and/or VHF Channel 5, "Steindeich Radar Radio".

RADIO/VHF: All messages to Agents and Pilots, etc., through Norddeich Radio, call sign DAN. Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships' reporting station is on permanent duty at Stadersand, VHF Channel 11, safety and calling Channel 16.

Pilot boat at "Elbe-1" can be contacted on VHF Channels 13 and 16.

TUGS: 4 tugs compulsory for mooring and unmooring. To be ordered from Hamburg and Brunsbuttel through Agent.

A fire fighting tug (1,760 hp) is available 24 hours and can be reached via VHF Channel 16, also available for assistance to vessels.

BERTHING:

Aluminium Oxid Stade GmbH. (AOS): This bauxite/oxide plant, situated on the Westbank of the River Elbe, can be reached by vessels with max. drafts of 46 ft. 06 in. FW.

Quay length		*Depth at normal Low water*
Quay outside in total	325 m.	15 m. (49 ft.)
Within reach of crane	205 m.	
Quay inside	200 m.	7 m. (23 ft.)

The oxide produced at this plant, apart from being exported, is used for the mills of V.A.W. Elbewerk GmbH., Stade-Butzfleth and of Hamburger Aluminium Werk GmbH., Hamburg Finkenwerder.

Average discharging/loading rate	
West African bauxite	550–600 m.t.p.h.
Brazilian bauxite	600 m.t.p.h.
Australian bauxite:	
from Gove	550–600 m.t.p.h.
from Weipa	750 m.t.p.h.
Petcoke	100–400 m.t.p.h.
Oxide ("Spout" loading)	500 m. t.p.h.

Ship's telephone connection (4146-1453) at AOS pier.

Dow Chemicals GmbH: This industry, situated close to the AOS plant, offers 2 berths for gas and chemical tankers. The water depth at the outside quay is: 15 m. (49 ft.) and at the inside quay: 9 m. (29 ft. 6 in.), both at MLW.

Restrictions for ships	*Products* *Inflammable*	*Non Inflammable*
Length at quay outside	270 m.	300 m.
Length at quay inside	125 m.	125 m.
Draft at quay outside (FW)	13.71 m. (45 ft.)	13.71 m. (45 ft.)
Draft at quay inside (FW)	8.0 m.	8.0 m.
Beam at quay inside	18.75 m.	18.75 m.

No bunkering permitted at the DOW-berths.

Discharging rate liquid gas	approx 200 t.p.h.
Loading rate chemical products	100–800 t.p.h.

Max. Size: Vessels loading/discharging inflammable products: Max. length 270 m. Max. draft 14 m.

Vessels loading/discharging non-flammable products: Length unlimited. Max. draft 14 m.

Vessels with liquid gas and flammable products: Max. length 145 m. Max. draft 8 m. Max breadth 22 m.

Restriction: Mooring prohibited for vessels having IMO Class 2 products (liquid and/or gaseous) on board.

Simultaneous handling of gases inside and flammable products outside not permissable.

Manifolds: (Land side to sea side).

Inside Berth:		Outside Berth:	
	Methanol		P.O.
	Telone/Vidden		Per
	P.D.C.		P.G.I.
	P.O.		Tet
	Propylene		Chlorothene VG/NU
	Ethylene		EDC
			Naoh
			Methylene Chloride
			Trichloroethane
			Chloroform/Methanol

Supplies: Nitrogen and potable water.

Technical requirements on ships discharging C2/C3.

Ethylene: For loading arm horizontal clearance ships manifold to the nearest structure 2.10 m., vertical clearance from centre of manifold up 0.50 m. and down 0.60 m., flange 6 in. (300 ASA) discharge-temperature of Ethylene minimum −103°C.

Propylene: For loading arm horizontal clearance 2.20 m., vertical up 0.50 m. and down 0.50 m., flange 6 in. (300 ASA), discharge-temperature of Propylene maximum −20°C.

Further on Propylene, vessels to be guaranteed, that the vessels in Summertime are suitable for pump against a back pressure of minimum 13 kg. but preferably it should be 15 kg./16 kg.

MEDICAL: Hospital and doctor available.

FRESH WATER: Available.

FUEL: Supplied by barge from Hamburg or local supplier.

GENERAL: *Dirty Ballast:* No facilities.

Agent at Dow-Jetty: Messrs. Elbclearing, P.O. Box 5110; 2160 Stade 5. *Tel:* 04146/1033. *Telex:* 0218158 clear d.

REPAIRS: Minor repairs can be carried out.

SERVICES: Stevedores, hold cleaning, boatmen, mooring gangs, inspectors, fitters and launches.

DEVELOPMENTS: In the northern part of the port, a new pier is currently under construction (due to be completed in 1984), and which is planned to handle general and bulk cargo. It will have a free area of approximately 20,000 sq.m.

In the southern harbour, a further discharge head platform is under construction. Maximum vessel length 160 m., beam 28.0 m. and 7.50 m. depth of water (to be completed Summer 1984).

Apart from a floating crane of 20 tons and a mobile crane of 10 tons which are currently in use in the port, two jib cranes will also be installed each with 20 ton lifting capacity, for use with grabs or hooks.

AUTHORITY: Niedersachsisches Hafenamt Cuxhafen, Aubenstelle, Butzfleth, 2160 Stade 5. *Tel:* (04146) 1436. *Contact:* F. W. Bork, Manager. Captain W. Schroeder, Harbour Master.

CUXHAVEN: 53.52 N. 08.42 E. (See Plan Book)

DOCUMENTS:

Stores List.
Crew List.
Customs Manifest.
Derat Certificate.

Amerikahafen is a Customs free port.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

PILOTAGE: Pilot station situated in Old Harbour (Alten Hafen). To obtain Pilot call "Cuxhaven Port", VHF Channel 12. Pilot signal is flag "G" of International Code, or sound signal – 2 long and 2 short blasts.

ANCHORAGE: Available off Cuxhan Medem Roads, approx. position Lat. 53° 51.5′ N., Long. 08° 46.5′ E., depth of water about 6 m. – 12 m. below chart zero; further anchorages see "General" before first German Port.

RESTRICTIONS: Vessels can enter by day or night. No tidal restrictions.

Depths: Max. depth of water: 13.5 m. (45 ft.). Mean tide HW: NN+1.40 m. Mean tide LW: NN−1.50 m. Tide range is 2.90 m. (NN = approx. mean sea level).

Water depth in the basins up to 8.5 m. below MTLW. Water depth at the river quays 12 m. and 8 m. below MTLW.

HEALTH: Quarantine clearance effected at Cuxhaven. Only vessels with suspected infectious disease on board are detained.

RADAR: River Radar Service from Elbe 1 to Hamburg see "General" before first German port, but no special Port Radar Service for Cuxhaven. Radar Service in the area of Cuxhaven available, can be contacted through VHF Channel 21, "Cuxhaven Radar Radio".

RADIO: For ETA, etc., use Norddeich Radio, call sign DAN. Closer to port Elbe–Weser Radio can be contacted by VHF Channel 16.

Ships reporting station is on permanent duty at Cuxhaven, VHF Channel 12, safety and calling Channel 16.

TUGS: Tugs available and used depending on ship size and weather conditions. Cost of tugs is Hamburg Tariff plus 20%.

BERTHING:

Fahrhafen and Neue Seebaderbrucke: Modern multi-purpose Ro/Ro terminal for passengers and for handling of motor vehicles and cargo direct at the Elbe River, 300 m. quay with 8 m. depth below MTLW.

Starting point of ferries for the North Sea and the Baltic Sea, for passenger ships to Helgoland and Hamburg.

Ro/Ro linkspans (one of them for axle-loads up to 50 tons and for stern-door width up to 18 m.). Hard-standing and storage area of approx. 60,000 sq.m.

Alter Hafen: Multi-purpose harbour for shipyards and for boats to the seaside resorts and islands.

Alter Fischereihafen: Multi-purpose harbour with transhipment and outfitting quays for fishing cutters, offshore base and emergency port. Fish auction and fish handling sheds, fish industry, equipment firms, deep freeze house for 5,000 tons of goods.

Neuer Fischereihafen: Multi-purpose harbour with transhipment and equipment quays for trawlers and luggers, offshore suppliers, Ro/Ro ships, for ships carrying general cargo and for minor bulk cargo ships. Fish auction and handling sheds, fish industry, equipment firms, deep freeze house for 25,000 tons, ice production, open storage space.

Entrance and exit any time by the sea-lock. Length of lock 190 m., width of lock 24 m. and depth of lock is 9 m. below MTLW.

Amerikahafen: Multi-purpose harbour with transhipment and equipment quays for ships carrying general cargo and for minor ships carrying bulk cargo, emergency port, floating docks, transit shed, deep freeze house, open storage spaces.

Steubenhoft: Multi-purpose facility for big ocean vessels with 400 m. long quay and 12 m. water depth below MTLW. Usable for cargo, repair, trial trip and passenger ships of all sizes.

Steam and Nitrogen: Steam at No. 2 Berth and nitrogen at No. 4 Berth available from ashore.

Bunker Supply: By barges only. The Port safety regulation must be observed (Northern Basin).

Ship Repairs: Permission of AMH required.

Electricity Supply: No connections available.

Garbage Disposal: Available (PO).

Dirty Ballast Disposal: Not possible in the Port. Available only at Elbe – Port Jetty and Kiel Canal (Inner Harbour) by Elbe – Slop – Ex-GmbH.

Navigating into the North Basin: (Direction by AMH) – only after stop of cargo operations at Berth No. 4.

Gangways: At Berth Nos. 2 and 4 gangways are at hand (AMH). At Berth No. 4 and at waiting place a lifeboat has to be ready at the accommodation ladder on the offside during cargo operations.

Stop of Cargo Operations in Case of Emergency: At the sound of the signal "stay away" (·–) and fire (– – –) by loudspeaker; at the instructions given by telephone or loudspeaker; when the flashing light is in operation; at the release of the disconnection couplings; in case of fire on board.

Fire on board: The Port Supervisor of AMH has to be informed immediately. Cargo operations have to be stopped immediately. Ship has to give usual Thyphon – Fire signal ("F").

Cargo Stop in Case of Bad Weather: Berth No. 1: rainfall, windspeed 22 m./sec.; Berth Nos. 2 and 4: windspeed 26 m./sec. Disconnection at windspeed 22 m./sec.

ETA Messages: 72 hours prior to arrival to AMH via Agent with the following information: (1) Ship's name and call sign; (2) Arrival time; (3) Cargo (product and quantity); (4) Tankers: number and diameter of cargo manifold connections; (5) Any damage to hull, tanks or overboard valves. Vessels are dispatched according to accepted ETA. In any case ETA has to be repeated 48 and 24 hours before arrival.

Dangerous Cargoes: Ships with dangerous cargoes or tankers which are not gas-free have to be reported to the Port Authority 48 hours before arrival.

Ships requested to accomplish the Oil Liability Agreement (more than 2,000 tons oil onboard) must be in possession of a valid Oil Liability Certificate.

Regulation Covering the Transport of Ammonia through the Kiel Canal: In the North Sea – Baltic Canal, liquid ammonia (U.N.No. 1005) may be transported in such vehicles as fulfil the following maritime police stipulations:

1. For the vehicle, an IMO suitability certificate for the transport of ammonia must be issued in accordance with the IMO Code, Resolution 328-IX (new vessels), Resolution 329-IX or for existing vessels.

2. The loading system must be so dimensioned that at an outside air temperature of +25° Celsius and 20° Celsius for water the load can be maintained for an undetermined duration without ammonia vapour being blown out via the safety valves.

3. The re-liquification plant of the vehicle must have available a reserve capacity of at least 50 per cent of the power normally required for ship's operation, in the event that ammonia is being transported, so that in the event of an accident, including damage to the insulation, heavily vapourised contents of a tank can be safely re-liquefied.

4. On vessels with tank insulation which is not of the water repellant kind (e.g. glass or mineral wool), watertight lengthways bulkheads must be available at a distance of 760 mm. from the outer skin.

5. The loading tanks of available ships must have a clearance of at least 760 mm. from the outer skin side.

6. Vessels with a loading capacity of up to 12,000 cbm. must be equipped in addition to the requirements of section 1 with independent loading tanks of type B or C (spherical or cylindrical). The adjustment pressure of the safety valves (MARVS) must amount to at least 0.7 bars over pressure.

7. The fulfilment of the stipulations set out in Section 1 numbers 2 to 5 and in Section 2, in so far as they are necessary, must be supported by a certificate issued by a recognised Classification Society.

8. The IMO – suitability indication in accordance with Section 1 and the certificate as per Section 7 must be kept on board the vessel.

Oil tankers of more than 2,000 d.w.t. must be in possession of a valid Oil Liability Certificate.

Cargo Handling at Berth Nos. 2 and 4: Before starting cargo operations following measures are to be taken:

Confirmation of Checklist by vessel's command.
Cargo tank inspection by AMH.
Referring to "Operation plan" by AMH.
Connection of ground-wire.
Emergency towing wires (steel) must be provided at water level (Berth No. 4 only).
Installation of telephones.
Gas detectors handed on board (Berth No. 4 only).
Fire hoses must be laid out and connected to fireline, which has to be under pressure during all cargo operations (Berth No. 4 only).

Connection and disconnection of loading arms will be done by AMH personnel.

Watchmen: During cargo operations a watchman has to be on stand-by at manifold. In case of an emergency, vessel's pumps and stop valves must be able to be shut down immediately.

Minimum Crew during Cargo Transfer Operation at Berth No. 4:

1 Deck Officer } fully qualified in cargo
Ass. Eng. Officer } transfer operations
2 Deckhands
1 Watch Officer for duties other than cargo transfer.

Brunsbuttel-Ostermoor *Loading and Discharging installations*	*Berth/Products* *Berth No. 1* *Urea bulk-bagged*	 *Berth No. 2* *Heavy Fuel Oil*	 *Berth No. 4* *Anhydrous Ammonia*
Loading/discharge rate with vapour return line (max.)		—	*800 t/h (at −33°C) 250 t/h (at ambient temp.)
Loading/discharge rate without vapour return line (max.)	—	800 t/h (‡)	*500 t/h (at −33°C) † (at ambient temp.)
Loading rate with ship loader	1,200 – 1,500 t/d, 3000 t/d (bagged) (bulk)	—	—
Loading arm flange (Number and size) (Loose flange with collar acc. DIN 2656, ND40)	—	1×200 mm.	1×200 mm. (Product) 1×100 mm. (Vapour)
Storage capacity	85,000 tons	3×20,000 cu.m., 1×10,000 cu.m. 1× 1,000 cu.m.	2×30,000 cu.m. (−33°C) 1× 3,000 m. (ambient temp.)
Working range of ship Height refers to normal water level upwards	−10.4 to +9.5 m. (bagged) −10.4 to +7.5 m. (bulk)	+0.2 to +16.0 m.	0.0 to +21.0 m.
Loader/unloader Outreach refers from dolphin vanishing line towards ship's offside	1.0 to 26.0 m.	1.0 to 11.0 m.	1.0 to 11.0 m.
Further equipment at berths: Service limits of installed own gangways (Height refers to normal water level/top edge deck)	—	+1.0 to +12.5 m.	+1.5 to +14.5 m.
Public telephone connection against payment/number	§compulsory/87211	§compulsory/87212	§compulsory/87213
Public telephone of harbour: 8066, 8067, 8068, 8069 (PO)			
Branch line of AMH telephone system (free of charge)/telephone number of ship. Telephone No. Portmaster 2171.	—	compulsory/2180	compulsory/2181
Delivery of goods from ashore	by ship's gear	by ship's gear	with jetty-crane against payment

Remarks: *reduced discharge rate at higher cargo temperature; †only possible in exceptional cases (discharge); ‡at following conditions: P min=3 bar, T min=+55°C. Viscosity max.=35° E/+55°C; §Compulsory during loading/discharging at Berth No. 4

AUTHORITY: Port Authority (PA): Hafenbehorde Brunsbuttel, 2212 Brunsbuttel, Elbehafen. Tel: 87044 – Area Code 4852.

Port Operator (PO): Hafengesellschaft Brunsbuttel mbH, 2212 Brunsbuttel, Elbehafen. Tel: 8066 – Area Code 4852. Telex: 28347 eport d.

Operator of the Cargo Handling Facilities (AMH): AMH-Chemie GmbH, 2212 Brunsbuttel P.O.B. 1268. Tel: 82-1 – Area Code 4852. Telex: 28360 Amh D.

BUTZFLETH: 53.39 N. 09.31 E. (See Plan Book)

DOCUMENTS:
3 Crew Lists.
3 Bonded Stores Lists.
3 Crew Manifests.
Maritime Health Declaration.
Ship's Register.
Discharge Books.
Passports of Crew.
Gas Free Certificate (OBO-Carriers)

Butzfleth is not a free-port. Customs, Immigration and River Police board on arrival at berth.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

Pilotage River Terminal: Elbe Pilots also act as docking Pilots.

ANCHORAGE: Freiburg Anchorage, approx. position Lat. 53° 50.6′ N., Long. 09° 19.5′ E., depth of water up to 13 m. below chart zero; there are further anchorages for small vessels at Krautsand – and Twielenfleth Roads. (see "General" before first German Port.)

MAX. SIZE: See "Berthing".

RADAR: River Radar Service from Elbe 1 to Hamburg, see "General" before first German port, but no special Port Radar Service for Butzfleth. Radar Service in the area of Butzfleth available, can be contacted through VHF Channel 21, "Hetlingen Radar Radio" and/or VHF Channel 5, "Steindeich Radar Radio".

RADIO/VHF: All messages to Agents and Pilots, etc., through Norddeich Radio, call sign DAN. Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships' reporting station is on permanent duty at Stadersand, VHF Channel 11, safety and calling Channel 16.

Pilot boat at "Elbe-1" can be contacted on VHF Channels 13 and 16.

TUGS: 4 tugs compulsory for mooring and unmooring. To be ordered from Hamburg and Brunsbuttel through Agent.

A fire fighting tug (1,760 hp) is available 24 hours and can be reached via VHF Channel 16, also available for assistance to vessels.

BERTHING:

Aluminium Oxid Stade GmbH. (AOS): This bauxite/oxide plant, situated on the Westbank of the River Elbe, can be reached by vessels with max. drafts of 46 ft. 06 in. FW.

Quay length		*Depth at normal Low water*
Quay outside in total	325 m.	15 m. (49 ft.)
Within reach of crane	205 m.	
Quay inside	200 m.	7 m. (23 ft.)

The oxide produced at this plant, apart from being exported, is used for the mills of V.A.W. Elbewerk GmbH., Stade-Butzfleth and of Hamburger Aluminium Werk GmbH., Hamburg Finkenwerder.

Average discharging/loading rate

West African bauxite	550–600 m.t.p.h.
Brazilian bauxite	600 m.t.p.h.
Australian bauxite:	
from Gove	550–600 m.t.p.h.
from Weipa	750 m.t.p.h.
Petcoke	100–400 m.t.p.h.
Oxide ("Spout" loading)	500 m. t.p.h.

Ship's telephone connection (4146-1453) at AOS pier.

Dow Chemicals GmbH: This industry, situated close to the AOS plant, offers 2 berths for gas and chemical tankers. The water depth at the outside quay is: 15 m. (49 ft.) and at the inside quay: 9 m. (29 ft. 6 in.), both at MLW.

Restrictions for ships	*Products*	
	Inflammable	*Non Inflammable*
Length at quay outside	270 m.	300 m.
Length at quay inside	125 m.	125 m.
Draft at quay outside (FW)	13.71 m. (45 ft.)	13.71 m. (45 ft.)
Draft at quay inside (FW)	8.0 m.	8.0 m.
Beam at quay inside	18.75 m.	18.75 m.

No bunkering permitted at the DOW-berths.

Discharging rate liquid gas	approx 200 t.p.h.
Loading rate chemical products	100–800 t.p.h.

Max. Size: Vessels loading/discharging inflammable products: Max. length 270 m. Max. draft 14 m.

Vessels loading/discharging non-flammable products: Length unlimited. Max. draft 14 m.

Vessels with liquid gas and flammable products: Max. length 145 m. Max. draft 8 m. Max breadth 22 m.

Restriction: Mooring prohibited for vessels having IMO Class 2 products (liquid and/or gaseous) on board.

Simultaneous handling of gases inside and flammable products outside not permissable.

Manifolds: (Land side to sea side).

Inside Berth:	Outside Berth:
Methanol	P.O.
Telone/Vidden	Per
P.D.C.	P.G.I.
P.O.	Tet
Propylene	Chlorothene VG/NU
Ethylene	EDC
	Naoh
	Methylene Chloride
	Trichloroethane
	Chloroform/Methanol

Supplies: Nitrogen and potable water.

Technical requirements on ships discharging C2/C3.

Ethylene: For loading arm horizontal clearance ships manifold to the nearest structure 2.10 m., vertical clearance from centre of manifold up 0.50 m. and down 0.60 m., flange 6 in. (300 ASA) discharge-temperature of Ethylene minimum −103°C.

Propylene: For loading arm horizontal clearance 2.20 m., vertical up 0.50 m. and down 0.50 m., flange 6 in. (300 ASA), discharge-temperature of Propylene maximum −20°C.

Further on Propylene, vessels to be guaranteed, that the vessels in Summertime are suitable for pump against a back pressure of minimum 13 kg. but preferably it should be 15 kg./16 kg.

MEDICAL: Hospital and doctor available.

FRESH WATER: Available.

FUEL: Supplied by barge from Hamburg or local supplier.

GENERAL: *Dirty Ballast:* No facilities.

Agent at Dow-Jetty: Messrs. Elbclearing, P.O. Box 5110; 2160 Stade 5. *Tel:* 04146/1033. *Telex:* 0218158 clear d.

REPAIRS: Minor repairs can be carried out.

SERVICES: Stevedores, hold cleaning, boatmen, mooring gangs, inspectors, fitters and launches.

DEVELOPMENTS: In the northern part of the port, a new pier is currently under construction (due to be completed in 1984), and which is planned to handle general and bulk cargo. It will have a free area of approximately 20,000 sq.m.

In the southern harbour, a further discharge head platform is under construction. Maximum vessel length 160 m., beam 28.0 m. and 7.50 m. depth of water (to be completed Summer 1984).

Apart from a floating crane of 20 tons and a mobile crane of 10 tons which are currently in use in the port, two jib cranes will also be installed each with 20 ton lifting capacity, for use with grabs or hooks.

AUTHORITY: Niedersachsisches Hafenamt Cuxhafen, Aubenstelle, Butzfleth, 2160 Stade 5. *Tel:* (04146) 1436. *Contact:* F. W. Bork, Manager. Captain W. Schroeder, Harbour Master.

CUXHAVEN: 53.52 N. 08.42 E. (See Plan Book)

DOCUMENTS:
Stores List.
Crew List.
Customs Manifest.
Derat Certificate.

Amerikahafen is a Customs free port.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

PILOTAGE: Pilot station situated in Old Harbour (Alten Hafen). To obtain Pilot call "Cuxhaven Port", VHF Channel 12. Pilot signal is flag "G" of International Code, or sound signal – 2 long and 2 short blasts.

ANCHORAGE: Available off Cuxhan Medem Roads, approx. position Lat. 53° 51.5′ N., Long. 08° 46.5′ E., depth of water about 6 m. – 12 m. below chart zero; further anchorages see "General" before first German Port.

RESTRICTIONS: Vessels can enter by day or night. No tidal restrictions.

Depths: Max. depth of water: 13.5 m. (45 ft.). Mean tide HW: NN+1.40 m. Mean tide LW: NN−1.50 m. Tide range is 2.90 m. (NN = approx. mean sea level).

Water depth in the basins up to 8.5 m. below MTLW. Water depth at the river quays 12 m. and 8 m. below MTLW.

HEALTH: Quarantine clearance effected at Cuxhaven. Only vessels with suspected infectious disease on board are detained.

RADAR: River Radar Service from Elbe 1 to Hamburg see "General" before first German port, but no special Port Radar Service for Cuxhaven. Radar Service in the area of Cuxhaven available, can be contacted through VHF Channel 21, "Cuxhaven Radar Radio".

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BERTHING:

Fahrhafen and Neue Seebaderbrucke: Modern multi-purpose Ro/Ro terminal for passengers and for handling of motor vehicles and cargo direct at the Elbe River, 300 m. quay with 8 m. depth below MTLW.

Starting point of ferries for the North Sea and the Baltic Sea, for passenger ships to Helgoland and Hamburg.

Ro/Ro linkspans (one of them for axle-loads up to 50 tons and for stern-door width up to 18 m.). Hard-standing and storage area of approx. 60,000 sq.m.

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Steam and Nitrogen: Steam at No. 2 Berth and nitrogen at No. 4 Berth available from ashore.

Bunker Supply: By barges only. The Port safety regulation must be observed (Northern Basin).

Ship Repairs: Permission of AMH required.

Electricity Supply: No connections available.

Garbage Disposal: Available (PO).

Dirty Ballast Disposal: Not possible in the Port. Available only at Elbe – Port Jetty and Kiel Canal (Inner Harbour) by Elbe – Slop – Ex-GmbH.

Navigating into the North Basin: (Direction by AMH) – only after stop of cargo operations at Berth No. 4.

Gangways: At Berth Nos. 2 and 4 gangways are at hand (AMH). At Berth No. 4 and at waiting place a lifeboat has to be ready at the accommodation ladder on the offside during cargo operations.

Stop of Cargo Operations in Case of Emergency: At the sound of the signal "stay away" (· –) and fire (– – –) by loudspeaker; at the instructions given by telephone or loudspeaker; when the flashing light is in operation; at the release of the disconnection couplings; in case of fire on board.

Fire on board: The Port Supervisor of AMH has to be informed immediately. Cargo operations have to be stopped immediately. Ship has to give usual Thyphon – Fire signal ("F").

Cargo Stop in Case of Bad Weather: Berth No. 1: rainfall, windspeed 22 m./sec.; Berth Nos. 2 and 4: windspeed 26 m./sec. Disconnection at windspeed 22 m./sec.

ETA Messages: 72 hours prior to arrival to AMH via Agent with the following information: (1) Ship's name and call sign; (2) Arrival time; (3) Cargo (product and quantity); (4) Tankers: number and diameter of cargo manifold connections; (5) Any damage to hull, tanks or overboard valves. Vessels are dispatched according to accepted ETA. In any case ETA has to be repeated 48 and 24 hours before arrival.

Dangerous Cargoes: Ships with dangerous cargoes or tankers which are not gas-free have to be reported to the Port Authority 48 hours before arrival.

Ships requested to accomplish the Oil Liability Agreement (more than 2,000 tons oil onboard) must be in possession of a valid Oil Liability Certificate.

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In the North Sea – Baltic Canal, liquid ammonia (U.N.No. 1005) may be transported in such vehicles as fulfil the following maritime police stipulations:

1. For the vehicle, an IMO suitability certificate for the transport of ammonia must be issued in accordance with the IMO Code, Resolution 328-IX (new vessels), Resolution 329-IX or for existing vessels.

2. The loading system must be so dimensioned that at an outside air temperature of +25° Celsius and 20° Celsius for water the load can be maintained for an undetermined duration without ammonia vapour being blown out via the safety valves.

3. The re-liquification plant of the vehicle must have available a reserve capacity of at least 50 per cent of the power normally required for ship's operation, in the event that ammonia is being transported, so that in the event of an accident, including damage to the insulation, heavily vapourised contents of a tank can be safely re-liquefied.

4. On vessels with tank insulation which is not of the water repellant kind (e.g. glass or mineral wool), watertight lengthways bulkheads must be available at a distance of 760 mm. from the outer skin.

5. The loading tanks of available ships must have a clearance of at least 760 mm. from the outer skin side.

6. Vessels with a loading capacity of up to 12,000 cbm. must be equipped in addition to the requirements of section 1 with independent loading tanks of type B or C (spherical or cylindrical). The adjustment pressure of the safety valves (MARVS) must amount to at least 0.7 bars over pressure.

7. The fulfilment of the stipulations set out in Section 1 numbers 2 to 5 and in Section 2, in so far as they are necessary, must be supported by a certificate issued by a recognised Classification Society.

8. The IMO – suitability indication in accordance with Section 1 and the certificate as per Section 7 must be kept on board the vessel.

Oil tankers of more than 2,000 d.w.t. must be in possession of a valid Oil Liability Certificate.

Cargo Handling at Berth Nos. 2 and 4: Before starting cargo operations following measures are to be taken:

Confirmation of Checklist by vessel's command.
Cargo tank inspection by AMH.
Referring to "Operation plan" by AMH.
Connection of ground-wire.
Emergency towing wires (steel) must be provided at water level (Berth No. 4 only).
Installation of telephones.
Gas detectors handed on board (Berth No. 4 only).
Fire hoses must be laid out and connected to fireline, which has to be under pressure during all cargo operations (Berth No. 4 only).

Connection and disconnection of loading arms will be done by AMH personnel.

Watchmen: During cargo operations a watchman has to be on stand-by at manifold. In case of an emergency, vessel's pumps and stop valves must be able to be shut down immediately.

Minimum Crew during Cargo Transfer Operation at Berth No. 4:

1 Deck Officer 1 Ass. Eng. Officer	fully qualified in cargo transfer operations
2 Deckhands	
1 Watch Officer for duties other than cargo transfer.	

	Berth/Products		
Brunsbuttel-Ostermoor Loading and Discharging installations	*Berth No. 1 Urea bulk-bagged*	*Berth No. 2 Heavy Fuel Oil*	*Berth No. 4 Anhydrous Ammonia*
Loading/discharge rate with vapour return line (max.)	—	—	*800 t/h (at −33°C) 250 t/h (at ambient temp.)
Loading/discharge rate without vapour return line (max.)	—	800 t/h (‡)	*500 t/h (at −33°C) † (at ambient temp.)
Loading rate with ship loader	1,200 – 1,500 t/d, 3000 t/d (bagged) (bulk)	—	—
Loading arm flange (Number and size) (Loose flange with collar acc. DIN 2656, ND40)	—	1×200 mm.	1×200 mm. (Product) 1×100 mm. (Vapour)
Storage capacity	85,000 tons	3×20,000 cu.m., 1×10,000 cu.m. 1× 1,000 cu.m.	2×30,000 cu.m. (−33°C) 1× 3,000 m. (ambient temp.)
Working range of ship Height refers to normal water level upwards	−10.4 to +9.5 m. (bagged) −10.4 to +7.5 m. (bulk)	+0.2 to +16.0 m.	0.0 to +21.0 m.
Loader/unloader Outreach refers from dolphin vanishing line towards ship's offside.	1.0 to 26.0 m.	1.0 to 11.0 m.	1.0 to 11.0 m.
Further equipment at berths: Service limits of installed own gangways (Height refers to normal water level/top edge deck)	—	+1.0 to +12.5 m.	+1.5 to +14.5 m.
Public telephone connection against payment/number	§compulsory/87211	§compulsory/87212	§compulsory/87213
Public telephone of harbour: 8066, 8067, 8068, 8069 (PO)			
Branch line of AMH telephone system (free of charge)/telephone number of ship. Telephone No. Portmaster 2171.	—	compulsory/2180	compulsory/2181
Delivery of goods from ashore	by ship's gear	by ship's gear	with jetty-crane against payment

Remarks: *reduced discharge rate at higher cargo temperature; †only possible in exceptional cases (discharge); ‡at following conditions: P min=3 bar, T min=+55°C. Viscosity max.=35° E/+55°C; §Compulsory during loading/discharging at Berth No. 4

AUTHORITY: Port Authority (PA): Hafenbehorde Brunsbuttel, 2212 Brunsbuttel, Elbehafen. Tel: 87044 – Area Code 4852.

Port Operator (PO): Hafengesellschaft Brunsbuttel mbH, 2212 Brunsbuttel, Elbehafen. Tel: 8066 – Area Code 4852. Telex: 28347 eport d.

Operator of the Cargo Handling Facilities (AMH): AMH-Chemie GmbH, 2212 Brunsbuttel P.O.B. 1268. Tel: 82-1 – Area Code 4852. Telex: 28360 Amh D.

BUTZFLETH: 53.39 N. 09.31 E. (See Plan Book)

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3 Crew Manifests.
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Pilotage River Terminal: Elbe Pilots also act as docking Pilots.

ANCHORAGE: Freiburg Anchorage, approx. position Lat. 53° 50.6′ N., Long. 09° 19.5′ E., depth of water up to 13 m. below chart zero; there are further anchorages for small vessels at Krautsand – and Twielenfleth Roads. (see "General" before first German Port.)

MAX. SIZE: See "Berthing".

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RADIO/VHF: All messages to Agents and Pilots, etc., through Norddeich Radio, call sign DAN. Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships' reporting station is on permanent duty at Stadersand, VHF Channel 11, safety and calling Channel 16.

Pilot boat at "Elbe-1" can be contacted on VHF Channels 13 and 16.

TUGS: 4 tugs compulsory for mooring and unmooring. To be ordered from Hamburg and Brunsbuttel through Agent.

A fire fighting tug (1,760 hp) is available 24 hours and can be reached via VHF Channel 16, also available for assistance to vessels.

BERTHING:

Aluminium Oxid Stade GmbH. (AOS): This bauxite/oxide plant, situated on the Westbank of the River Elbe, can be reached by vessels with max. drafts of 46 ft. 06 in. FW.

Quay length		*Depth at normal Low water*
Quay outside in total	325 m.	15 m. (49 ft.)
Within reach of crane	205 m.	
Quay inside	200 m.	7 m. (23 ft.)

The oxide produced at this plant, apart from being exported, is used for the mills of V.A.W. Elbewerk GmbH., Stade-Butzfleth and of Hamburger Aluminium Werk GmbH., Hamburg Finkenwerder.

Average discharging/loading rate

West African bauxite	550–600 m.t.p.h.
Brazilian bauxite	600 m.t.p.h.
Australian bauxite:	
from Gove	550–600 m.t.p.h.
from Weipa	750 m.t.p.h.
Petcoke	100–400 m.t.p.h.
Oxide ("Spout" loading)	500 m. t.p.h.

Ship's telephone connection (4146-1453) at AOS pier.

Dow Chemicals GmbH: This industry, situated close to the AOS plant, offers 2 berths for gas and chemical tankers. The water depth at the outside quay is: 15 m. (49 ft.) and at the inside quay: 9 m. (29 ft. 6 in.), both at MLW.

Restrictions for ships	*Products*	
	Inflammable	*Non Inflammable*
Length at quay outside	270 m.	300 m.
Length at quay inside	125 m.	125 m.
Draft at quay outside (FW)	13.71 m. (45 ft.)	13.71 m. (45 ft.)
Draft at quay inside (FW)	8.0 m.	8.0 m.
Beam at quay inside	18.75 m.	18.75 m.

No bunkering permitted at the DOW-berths.

Discharging rate liquid gas	approx 200 t.p.h.
Loading rate chemical products	100–800 t.p.h.

Max. Size: Vessels loading/discharging inflammable products: Max. length 270 m. Max. draft 14 m.

Vessels loading/discharging non-flammable products: Length unlimited. Max. draft 14 m.

Vessels with liquid gas and flammable products: Max. length 145 m. Max. draft 8 m. Max breadth 22 m.

Restriction: Mooring prohibited for vessels having IMO Class 2 products (liquid and/or gaseous) on board.

Simultaneous handling of gases inside and flammable products outside not permissable.

Manifolds: (Land side to sea side).

Inside Berth:		Outside Berth:	
	Methanol		P.O.
	Telone/Vidden		Per
	P.D.C.		P.G.I.
	P.O.		Tet
	Propylene		Chlorothene VG/NU
	Ethylene		EDC
			Naoh
			Methylene Chloride
			Trichloroethane
			Chloroform/Methanol

Supplies: Nitrogen and potable water.

Technical requirements on ships discharging C2/C3.

Ethylene: For loading arm horizontal clearance ships manifold to the nearest structure 2.10 m., vertical clearance from centre of manifold up 0.50 m. and down 0.60 m., flange 6 in. (300 ASA) discharge-temperature of Ethylene minimum −103°C.

Propylene: For loading arm horizontal clearance 2.20 m., vertical up 0.50 m. and down 0.50 m., flange 6 in. (300 ASA), discharge-temperature of Propylene maximum −20°C.

Further on Propylene, vessels to be guaranteed, that the vessels in Summertime are suitable for pump against a back pressure of minimum 13 kg. but preferably it should be 15 kg./16 kg.

MEDICAL: Hospital and doctor available.

FRESH WATER: Available.

FUEL: Supplied by barge from Hamburg or local supplier.

GENERAL: *Dirty Ballast:* No facilities.

Agent at Dow-Jetty: Messrs. Elbclearing, P.O. Box 5110; 2160 Stade 5. *Tel:* 04146/1033. *Telex:* 0218158 clear d.

REPAIRS: Minor repairs can be carried out.

SERVICES: Stevedores, hold cleaning, boatmen, mooring gangs, inspectors, fitters and launches.

DEVELOPMENTS: In the northern part of the port, a new pier is currently under construction (due to be completed in 1984), and which is planned to handle general and bulk cargo. It will have a free area of approximately 20,000 sq.m.

In the southern harbour, a further discharge head platform is under construction. Maximum vessel length 160 m., beam 28.0 m. and 7.50 m. depth of water (to be completed Summer 1984).

Apart from a floating crane of 20 tons and a mobile crane of 10 tons which are currently in use in the port, two jib cranes will also be installed each with 20 ton lifting capacity, for use with grabs or hooks.

AUTHORITY: Niedersachsisches Hafenamt Cuxhafen, Aubenstelle, Butzfleth, 2160 Stade 5. *Tel:* (04146) 1436. *Contact:* F. W. Bork, Manager. Captain W. Schroeder, Harbour Master.

CUXHAVEN: 53.52 N. 08.42 E. (See Plan Book)

DOCUMENTS:

Stores List.
Crew List.
Customs Manifest.
Derat Certificate.

Amerikahafen is a Customs free port.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

PILOTAGE: Pilot station situated in Old Harbour (Alten Hafen). To obtain Pilot call "Cuxhaven Port", VHF Channel 12. Pilot signal is flag "G" of International Code, or sound signal – 2 long and 2 short blasts.

ANCHORAGE: Available off Cuxhan Medem Roads, approx. position Lat. 53° 51.5′ N., Long. 08° 46.5′ E., depth of water about 6 m. – 12 m. below chart zero; further anchorages see "General" before first German Port.

RESTRICTIONS: Vessels can enter by day or night. No tidal restrictions.

Depths: Max. depth of water: 13.5 m. (45 ft.). Mean tide HW: NN+1.40 m. Mean tide LW: NN−1.50 m. Tide range is 2.90 m. (NN = approx. mean sea level).

Water depth in the basins up to 8.5 m. below MTLW. Water depth at the river quays 12 m. and 8 m. below MTLW.

HEALTH: Quarantine clearance effected at Cuxhaven. Only vessels with suspected infectious disease on board are detained.

RADAR: River Radar Service from Elbe 1 to Hamburg see "General" before first German port, but no special Port Radar Service for Cuxhaven. Radar Service in the area of Cuxhaven available, can be contacted through VHF Channel 21, "Cuxhaven Radar Radio".

RADIO: For ETA, etc., use Norddeich Radio, call sign DAN. Closer to port Elbe–Weser Radio can be contacted by VHF Channel 16.

Ships reporting station is on permanent duty at Cuxhaven, VHF Channel 12, safety and calling Channel 16.

TUGS: Tugs available and used depending on ship size and weather conditions. Cost of tugs is Hamburg Tariff plus 20%.

BERTHING:

Fahrhafen and Neue Seebaderbrucke: Modern multi-purpose Ro/Ro terminal for passengers and for handling of motor vehicles and cargo direct at the Elbe River, 300 m. quay with 8 m. depth below MTLW.

Starting point of ferries for the North Sea and the Baltic Sea, for passenger ships to Helgoland and Hamburg.

Ro/Ro linkspans (one of them for axle-loads up to 50 tons and for stern-door width up to 18 m.). Hard-standing and storage area of approx. 60,000 sq.m.

Alter Hafen: Multi-purpose harbour for shipyards and for boats to the seaside resorts and islands.

Alter Fischereihafen: Multi-purpose harbour with transhipment and outfitting quays for fishing cutters, offshore base and emergency port. Fish auction and fish handling sheds, fish industry, equipment firms, deep freeze house for 5,000 tons of goods.

Neuer Fischereihafen: Multi-purpose harbour with transhipment and equipment quays for trawlers and luggers, offshore suppliers, Ro/Ro ships, for ships carrying general cargo and for minor bulk cargo ships. Fish auction and handling sheds, fish industry, equipment firms, deep freeze house for 25,000 tons, ice production, open storage space.

Entrance and exit any time by the sea-lock. Length of lock 190 m., width of lock 24 m. and depth of lock is 9 m. below MTLW.

Amerikahafen: Multi-purpose harbour with transhipment and equipment quays for ships carrying general cargo and for minor ships carrying bulk cargo, emergency port, floating docks, transit shed, deep freeze house, open storage spaces.

Steubenhoft: Multi-purpose facility for big ocean vessels with 400 m. long quay and 12 m. water depth below MTLW. Usable for cargo, repair, trial trip and passenger ships of all sizes.

Steam and Nitrogen: Steam at No. 2 Berth and nitrogen at No. 4 Berth available from ashore.

Bunker Supply: By barges only. The Port safety regulation must be observed (Northern Basin).

Ship Repairs: Permission of AMH required.

Electricity Supply: No connections available.

Garbage Disposal: Available (PO).

Dirty Ballast Disposal: Not possible in the Port. Available only at Elbe – Port Jetty and Kiel Canal (Inner Harbour) by Elbe – Slop – Ex-GmbH.

Navigating into the North Basin: (Direction by AMH) – only after stop of cargo operations at Berth No. 4.

Gangways: At Berth Nos. 2 and 4 gangways are at hand (AMH). At Berth No. 4 and at waiting place a lifeboat has to be ready at the accommodation ladder on the offside during cargo operations.

Stop of Cargo Operations in Case of Emergency: At the sound of the signal "stay away" (·–) and fire (– – –) by loudspeaker; at the instructions given by telephone or loudspeaker; when the flashing light is in operation; at the release of the disconnection couplings; in case of fire on board.

Fire on board: The Port Supervisor of AMH has to be informed immediately. Cargo operations have to be stopped immediately. Ship has to give usual Thyphon – Fire signal ("F").

Cargo Stop in Case of Bad Weather: Berth No. 1: rainfall, windspeed 22 m./sec.; Berth Nos. 2 and 4: windspeed 26 m./sec. Disconnection at windspeed 22 m./sec.

ETA Messages: 72 hours prior to arrival to AMH via Agent with the following information: (1) Ship's name and call sign; (2) Arrival time; (3) Cargo (product and quantity); (4) Tankers: number and diameter of cargo manifold connections; (5) Any damage to hull, tanks or overboard valves. Vessels are dispatched according to accepted ETA. In any case ETA has to be repeated 48 and 24 hours before arrival.

Dangerous Cargoes: Ships with dangerous cargoes or tankers which are not gas-free have to be reported to the Port Authority 48 hours before arrival.

Ships requested to accomplish the Oil Liability Agreement (more than 2,000 tons oil onboard) must be in possession of a valid Oil Liability Certificate.

Regulation Covering the Transport of Ammonia through the Kiel Canal: In the North Sea – Baltic Canal, liquid ammonia (U.N.No. 1005) may be transported in such vehicles as fulfil the following maritime police stipulations:

1. For the vehicle, an IMO suitability certificate for the transport of ammonia must be issued in accordance with the IMO Code, Resolution 328-IX (new vessels), Resolution 329-IX or for existing vessels.

2. The loading system must be so dimensioned that at an outside air temperature of +25° Celsius and 20° Celsius for water the load can be maintained for an undetermined duration without ammonia vapour being blown out via the safety valves.

3. The re-liquification plant of the vehicle must have available a reserve capacity of at least 50 per cent of the power normally required for ship's operation, in the event that ammonia is being transported, so that in the event of an accident, including damage to the insulation, heavily vapourised contents of a tank can be safely re-liquefied.

4. On vessels with tank insulation which is not of the water repellant kind (e.g. glass or mineral wool), watertight lengthways bulkheads must be available at a distance of 760 mm. from the outer skin.

5. The loading tanks of available ships must have a clearance of at least 760 mm. from the outer skin side.

6. Vessels with a loading capacity of up to 12,000 cbm. must be equipped in addition to the requirements of section 1 with independent loading tanks of type B or C (spherical or cylindrical). The adjustment pressure of the safety valves (MARVS) must amount to at least 0.7 bars over pressure.

7. The fulfilment of the stipulations set out in Section 1 numbers 2 to 5 and in Section 2, in so far as they are necessary, must be supported by a certificate issued by a recognised Classification Society.

8. The IMO – suitability indication in accordance with Section 1 and the certificate as per Section 7 must be kept on board the vessel.

Oil tankers of more than 2,000 d.w.t. must be in possession of a valid Oil Liability Certificate.

Cargo Handling at Berth Nos. 2 and 4: Before starting cargo operations following measures are to be taken:

Confirmation of Checklist by vessel's command.

Cargo tank inspection by AMH.

Referring to "Operation plan" by AMH.

Connection of ground-wire.

Emergency towing wires (steel) must be provided at water level (Berth No. 4 only).

Installation of telephones.

Gas detectors handed on board (Berth No. 4 only).

Fire hoses must be laid out and connected to fireline, which has to be under pressure during all cargo operations (Berth No. 4 only).

Connection and disconnection of loading arms will be done by AMH personnel.

Watchmen: During cargo operations a watchman has to be on stand-by at manifold. In case of an emergency, vessel's pumps and stop valves must be able to shut down immediately.

Minimum Crew during Cargo Transfer Operation at Berth No. 4:

1 Deck Officer 1 Ass. Eng. Officer	fully qualified in cargo transfer operations
2 Deckhands	
1 Watch Officer for duties other than cargo transfer.	

Brunsbuttel-Ostermoor Loading and Discharging installations	Berth/Products Berth No. 1 Urea bulk-bagged	 Berth No. 2 Heavy Fuel Oil	 Berth No. 4 Anhydrous Ammonia
Loading/discharge rate with vapour return line (max.)		—	*800 t/h (at −33°C) 250 t/h (at ambient temp.)
Loading/discharge rate without vapour return line (max.)	—	800 t/h (‡)	*500 t/h (at −33°C) † (at ambient temp.)
Loading rate with ship loader	1,200 – 1,500 t/d, 3000 t/d (bagged) (bulk)	—	—
Loading arm flange (Number and size) (Loose flange with collar acc. DIN 2656, ND40)	—	1×200 mm.	1×200 mm. (Product) 1×100 mm. (Vapour)
Storage capacity	85,000 tons	3×20,000 cu.m., 1×10,000 cu.m. 1× 1,000 cu.m.	2×30,000 cu.m. (−33°C) 1× 3,000 m. (ambient temp.)
Working range of ship Height refers to normal water level upwards	−10.4 to +9.5 m. (bagged) −10.4 to +7.5 m. (bulk)	+0.2 to +16.0 m.	0.0 to +21.0 m.
Loader/unloader Outreach refers from dolphin vanishing line towards ship's offside.	1.0 to 26.0 m.	1.0 to 11.0 m.	1.0 to 11.0 m.
Further equipment at berths: Service limits of installed own gangways (Height refers to normal water level/top edge deck)	—	+1.0 to +12.5 m.	+1.5 to +14.5 m.
Public telephone connection against payment/number	§compulsory/87211	§compulsory/87212	§compulsory/87213
Public telephone of harbour: 8066, 8067, 8068, 8069 (PO)			
Branch line of AMH telephone system (free of charge)/telephone number of ship. Telephone No. Portmaster 2171.	—	compulsory/2180	compulsory/2181
Delivery of goods from ashore	by ship's gear	by ship's gear	with jetty-crane against payment

Remarks: *reduced discharge rate at higher cargo temperature; †only possible in exceptional cases (discharge); ‡at following conditions: P min=3 bar, T min=+55°C. Viscosity max.=35° E/+55°C; §Compulsory during loading/discharging at Berth No. 4

AUTHORITY: Port Authority (PA): Hafenbehorde Brunsbuttel, 2212 Brunsbuttel, Elbehafen. Tel: 87044 – Area Code 4852.

Port Operator (PO): Hafengesellschaft Brunsbuttel mbH, 2212 Brunsbuttel, Elbehafen. Tel: 8066 – Area Code 4852. Telex: 28347 eport d.

Operator of the Cargo Handling Facilities (AMH): AMH-Chemie GmbH, 2212 Brunsbuttel P.O.B. 1268. Tel: 82-1 – Area Code 4852. Telex: 28360 Amh D.

BUTZFLETH: 53.39 N. 09.31 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Bonded Stores Lists.
3 Crew Manifests.
Maritime Health Declaration.
Ship's Register.
Discharge Books.
Passports of Crew.
Gas Free Certificate (OBO-Carriers)

Butzfleth is not a free-port. Customs, Immigration and River Police board on arrival at berth.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

Pilotage River Terminal: Elbe Pilots also act as docking Pilots.

ANCHORAGE: Freiburg Anchorage, approx. position Lat. 53° 50.6′ N., Long. 09° 19.5′ E., depth of water up to 13 m. below chart zero; there are further anchorages for small vessels at Krautsand – and Twielenfleth Roads. (see "General" before first German Port.)

MAX. SIZE: See "Berthing".

RADAR: River Radar Service from Elbe 1 to Hamburg, see "General" before first German port, but no special Port Radar Service for Butzfleth. Radar Service in the area of Butzfleth available, can be contacted through VHF Channel 21, "Hetlingen Radar Radio" and/or VHF Channel 5, "Steindeich Radar Radio".

RADIO/VHF: All messages to Agents and Pilots, etc., through Norddeich Radio, call sign DAN. Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships' reporting station is on permanent duty at Stadersand, VHF Channel 11, safety and calling Channel 16.

Pilot boat at "Elbe-1" can be contacted on VHF Channels 13 and 16.

TUGS: 4 tugs compulsory for mooring and unmooring. To be ordered from Hamburg and Brunsbuttel through Agent.

A fire fighting tug (1,760 hp) is available 24 hours and can be reached via VHF Channel 16, also available for assistance to vessels.

BERTHING:

Aluminium Oxid Stade GmbH. (AOS): This bauxite/oxide plant, situated on the Westbank of the River Elbe, can be reached by vessels with max. drafts of 46 ft. 06 in. FW.

Quay length		*Depth at normal Low water*
Quay outside in total	325 m.	15 m. (49 ft.)
Within reach of crane	205 m.	
Quay inside	200 m.	7 m. (23 ft.)

The oxide produced at this plant, apart from being exported, is used for the mills of V.A.W. Elbewerk GmbH., Stade-Butzfleth and of Hamburger Aluminium Werk GmbH., Hamburg Finkenwerder.

Average discharging/loading rate

West African bauxite	550–600 m.t.p.h.
Brazilian bauxite	600 m.t.p.h.
Australian bauxite:	
from Gove	550–600 m.t.p.h.
from Weipa	750 m.t.p.h.
Petcoke	100–400 m.t.p.h.
Oxide ("Spout" loading)	500 m. t.p.h.

Ship's telephone connection (4146-1453) at AOS pier.

Dow Chemicals GmbH: This industry, situated close to the AOS plant, offers 2 berths for gas and chemical tankers. The water depth at the outside quay is: 15 m. (49 ft.) and at the inside quay: 9 m. (29 ft. 6 in.), both at MLW.

Restrictions for ships	*Products*	
	Inflammable	*Non Inflammable*
Length at quay outside	270 m.	300 m.
Length at quay inside	125 m.	125 m.
Draft at quay outside (FW)	13.71 m. (45 ft.)	13.71 m. (45 ft.)
Draft at quay inside (FW)	8.0 m.	8.0 m.
Beam at quay inside	18.75 m.	18.75 m.

No bunkering permitted at the DOW-berths.

Discharging rate liquid gas	approx 200 t.p.h.
Loading rate chemical products	100–800 t.p.h.

Max. Size: Vessels loading/discharging inflammable products: Max. length 270 m. Max. draft 14 m.

Vessels loading/discharging non-flammable products: Length unlimited. Max. draft 14 m.

Vessels with liquid gas and flammable products: Max. length 145 m. Max. draft 8 m. Max breadth 22 m.

Restriction: Mooring prohibited for vessels having IMO Class 2 products (liquid and/or gaseous) on board.

Simultaneous handling of gases inside and flammable products outside not permissable.

Manifolds: (Land side to sea side).

Inside Berth:	Outside Berth:
Methanol	P.O.
Telone/Vidden	Per
P.D.C.	P.G.I.
P.O.	Tet
Propylene	Chlorothene VG/NU
Ethylene	EDC
	Naoh
	Methylene Chloride
	Trichloroethane
	Chloroform/Methanol

Supplies: Nitrogen and potable water.

Technical requirements on ships discharging C2/C3.

Ethylene: For loading arm horizontal clearance ships manifold to the nearest structure 2.10 m., vertical clearance from centre of manifold up 0.50 m. and down 0.60 m., flange 6 in. (300 ASA) discharge-temperature of Ethylene minimum −103°C.

Propylene: For loading arm horizontal clearance 2.20 m., vertical up 0.50 m. and down 0.50 m., flange 6 in. (300 ASA), discharge-temperature of Propylene maximum −20°C.

Further on Propylene, vessels to be guaranteed, that the vessels in Summertime are suitable for pump against a back pressure of minimum 13 kg. but preferably it should be 15 kg./16 kg.

MEDICAL: Hospital and doctor available.

FRESH WATER: Available.

FUEL: Supplied by barge from Hamburg or local supplier.

GENERAL: *Dirty Ballast:* No facilities.

Agent at Dow-Jetty: Messrs. Elbclearing, P.O. Box 5110; 2160 Stade 5. *Tel:* 04146/1033. *Telex:* 0218158 clear d.

REPAIRS: Minor repairs can be carried out.

SERVICES: Stevedores, hold cleaning, boatmen, mooring gangs, inspectors, fitters and launches.

DEVELOPMENTS: In the northern part of the port, a new pier is currently under construction (due to be completed in 1984), and which is planned to handle general and bulk cargo. It will have a free area of approximately 20,000 sq.m.

In the southern harbour, a further discharge head platform is under construction. Maximum vessel length 160 m., beam 28.0 m. and 7.50 m. depth of water (to be completed Summer 1984).

Apart from a floating crane of 20 tons and a mobile crane of 10 tons which are currently in use in the port, two jib cranes will also be installed each with 20 ton lifting capacity, for use with grabs or hooks.

AUTHORITY: Niedersachsisches Hafenamt Cuxhafen, Aubenstelle, Butzfleth, 2160 Stade 5. *Tel:* (04146) 1436. *Contact:* F. W. Bork, Manager. Captain W. Schroeder, Harbour Master.

CUXHAVEN: 53.52 N. 08.42 E. (See Plan Book)

DOCUMENTS:

Stores List.
Crew List.
Customs Manifest.
Derat Certificate.

Amerikahafen is a Customs free port.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

PILOTAGE: Pilot station situated in Old Harbour (Alten Hafen). To obtain Pilot call "Cuxhaven Port", VHF Channel 12. Pilot signal is flag "G" of International Code, or sound signal – 2 long and 2 short blasts.

ANCHORAGE: Available off Cuxhan Medem Roads, approx. position Lat. 53° 51.5′ N., Long. 08° 46.5′ E., depth of water about 6 m. – 12 m. below chart zero; further anchorages see "General" before first German Port.

RESTRICTIONS: Vessels can enter by day or night. No tidal restrictions.

Depths: Max. depth of water: 13.5 m. (45 ft.). Mean tide HW: NN+1.40 m. Mean tide LW: NN−1.50 m. Tide range is 2.90 m. (NN = approx. mean sea level).

Water depth in the basins up to 8.5 m. below MTLW. Water depth at the river quays 12 m. and 8 m. below MTLW.

HEALTH: Quarantine clearance effected at Cuxhaven. Only vessels with suspected infectious disease on board are detained.

RADAR: River Radar Service from Elbe 1 to Hamburg see "General" before first German port, but no special Port Radar Service for Cuxhaven. Radar Service in the area of Cuxhaven available, can be contacted through VHF Channel 21, "Cuxhaven Radar Radio".

RADIO: For ETA, etc., use Norddeich Radio, call sign DAN. Closer to port Elbe–Weser Radio can be contacted by VHF Channel 16.

Ships reporting station is on permanent duty at Cuxhaven, VHF Channel 12, safety and calling Channel 16.

TUGS: Tugs available and used depending on ship size and weather conditions. Cost of tugs is Hamburg Tariff plus 20%.

BERTHING:

Fahrhafen and Neue Seebaderbrucke: Modern multi-purpose Ro/Ro terminal for passengers and for handling of motor vehicles and cargo direct at the Elbe River, 300 m. quay with 8 m. depth below MTLW.

Starting point of ferries for the North Sea and the Baltic Sea, for passenger ships to Helgoland and Hamburg.

Ro/Ro linkspans (one of them for axle-loads up to 50 tons and for stern-door width up to 18 m.). Hard-standing and storage area of approx. 60,000 sq.m.

Alter Hafen: Multi-purpose harbour for shipyards and for boats to the seaside resorts and islands.

Alter Fischereihafen: Multi-purpose harbour with transhipment and outfitting quays for fishing cutters, offshore base and emergency port. Fish auction and fish handling sheds, fish industry, equipment firms, deep freeze house for 5,000 tons of goods.

Neuer Fischereihafen: Multi-purpose harbour with transhipment and equipment quays for trawlers and luggers, offshore suppliers, Ro/Ro ships, for ships carrying general cargo and for minor bulk cargo ships. Fish auction and handling sheds, fish industry, equipment firms, deep freeze house for 25,000 tons, ice production, open storage space.

Entrance and exit any time by the sea-lock. Length of lock 190 m., width of lock 24 m. and depth of lock is 9 m. below MTLW.

Amerikahafen: Multi-purpose harbour with transhipment and equipment quays for ships carrying general cargo and for minor ships carrying bulk cargo, emergency port, floating docks, transit shed, deep freeze house, open storage spaces.

Steubenhoft: Multi-purpose facility for big ocean vessels with 400 m. long quay and 12 m. water depth below MTLW. Usable for cargo, repair, trial trip and passenger ships of all sizes.

Steam and Nitrogen: Steam at No. 2 Berth and nitrogen at No. 4 Berth available from ashore.

Bunker Supply: By barges only. The Port safety regulation must be observed (Northern Basin).

Ship Repairs: Permission of AMH required.

Electricity Supply: No connections available.

Garbage Disposal: Available (PO).

Dirty Ballast Disposal: Not possible in the Port. Available only at Elbe – Port Jetty and Kiel Canal (Inner Harbour) by Elbe – Slop – Ex-GmbH.

Navigating into the North Basin: (Direction by AMH) – only after stop of cargo operations at Berth No. 4.

Gangways: At Berth Nos. 2 and 4 gangways are at hand (AMH). At Berth No. 4 and at waiting place a lifeboat has to be ready at the accommodation ladder on the offside during cargo operations.

Stop of Cargo Operations in Case of Emergency: At the sound of the signal "stay away" (·–) and fire (– – –) by loudspeaker; at the instructions given by telephone or loudspeaker; when the flashing light is in operation; at the release of the disconnection couplings; in case of fire on board.

Fire on board: The Port Supervisor of AMH has to be informed immediately. Cargo operations have to be stopped immediately. Ship has to give usual Thyphon – Fire signal ("F").

Cargo Stop in Case of Bad Weather: Berth No. 1: rainfall, windspeed 22 m./sec.; Berth Nos. 2 and 4: windspeed 26 m./sec. Disconnection at windspeed 22 m./sec.

ETA Messages: 72 hours prior to arrival to AMH via Agent with the following information: (1) Ship's name and call sign; (2) Arrival time; (3) Cargo (product and quantity); (4) Tankers: number and diameter of cargo manifold connections; (5) Any damage to hull, tanks or overboard valves. Vessels are dispatched according to accepted ETA. In any case ETA has to be repeated 48 and 24 hours before arrival.

Dangerous Cargoes: Ships with dangerous cargoes or tankers which are not gas-free have to be reported to the Port Authority 48 hours before arrival.

Ships requested to accomplish the Oil Liability Agreement (more than 2,000 tons oil onboard) must be in possession of a valid Oil Liability Certificate.

Regulation Covering the Transport of Ammonia through the Kiel Canal: In the North Sea – Baltic Canal, liquid ammonia (U.N.No. 1005) may be transported in such vehicles as fulfil the following maritime police stipulations:

1. For the vehicle, an IMO suitability certificate for the transport of ammonia must be issued in accordance with the IMO Code, Resolution 328-IX (new vessels), Resolution 329-IX or for existing vessels.

2. The loading system must be so dimensioned that at an outside air temperature of +25° Celsius and 20° Celsius for water the load can be maintained for an undetermined duration without ammonia vapour being blown out via the safety valves.

3. The re-liquification plant of the vehicle must have available a reserve capacity of at least 50 per cent of the power normally required for ship's operation, in the event that ammonia is being transported, so that in the event of an accident, including damage to the insulation, heavily vapourised contents of a tank can be safely re-liquefied.

4. On vessels with tank insulation which is not of the water repellant kind (e.g. glass or mineral wool), watertight lengthways bulkheads must be available at a distance of 760 mm. from the outer skin.

5. The loading tanks of available ships must have a clearance of at least 760 mm. from the outer skin side.

6. Vessels with a loading capacity of up to 12,000 cbm. must be equipped in addition to the requirements of section 1 with independent loading tanks of type B or C (spherical or cylindrical). The adjustment pressure of the safety valves (MARVS) must amount to at least 0.7 bars over pressure.

7. The fulfilment of the stipulations set out in Section 1 numbers 2 to 5 and in Section 2, in so far as they are necessary, must be supported by a certificate issued by a recognised Classification Society.

8. The IMO – suitability indication in accordance with Section 1 and the certificate as per Section 7 must be kept on board the vessel.

Oil tankers of more than 2,000 d.w.t. must be in possession of a valid Oil Liability Certificate.

Cargo Handling at Berth Nos. 2 and 4: Before starting cargo operations following measures are to be taken:

Confirmation of Checklist by vessel's command.

Cargo tank inspection by AMH.

Referring to "Operation plan" by AMH.

Connection of ground-wire.

Emergency towing wires (steel) must be provided at water level (Berth No. 4 only).

Installation of telephones.

Gas detectors handed on board (Berth No. 4 only).

Fire hoses must be laid out and connected to fireline, which has to be under pressure during all cargo operations (Berth No. 4 only).

Connection and disconnection of loading arms will be done by AMH personnel.

Watchmen: During cargo operations a watchman has to be on stand-by at manifold. In case of an emergency, vessel's pumps and stop valves must be able to be shut down immediately.

Minimum Crew during Cargo Transfer Operation at Berth No. 4:

1 Deck Officer 1 Ass. Eng. Officer	fully qualified in cargo transfer operations
2 Deckhands	
1 Watch Officer for duties other than cargo transfer.	

Brunsbuttel-Ostermoor Loading and Discharging installations	Berth/Products Berth No. 1 Urea bulk-bagged	Berth No. 2 Heavy Fuel Oil	Berth No. 4 Anhydrous Ammonia
Loading/discharge rate with vapour return line (max.)	—	—	*800 t/h (at −33°C) 250 t/h (at ambient temp.)
Loading/discharge rate without vapour return line (max.)	—	800 t/h (‡)	*500 t/h (at −33°C) † (at ambient temp.)
Loading rate with ship loader	1,200 – 1,500 t/d, 3000 t/d (bagged) (bulk)	—	—
Loading arm flange (Number and size) (Loose flange with collar acc. DIN 2656, ND40)	—	1×200 mm.	1×200 mm. (Product) 1×100 mm. (Vapour)
Storage capacity	85,000 tons	3×20,000 cu.m., 1×10,000 cu.m. 1× 1,000 cu.m.	2×30,000 cu.m. (−33°C) 1× 3,000 m. (ambient temp.)
Working range of ship Height refers to normal water level upwards	−10.4 to +9.5 m. (bagged) −10.4 to +7.5 m. (bulk)	+0.2 to +16.0 m.	0.0 to +21.0 m.
Loader/unloader Outreach refers from dolphin vanishing line towards ship's offside.	1.0 to 26.0 m.	1.0 to 11.0 m.	1.0 to 11.0 m.
Further equipment at berths: Service limits of installed own gangways (Height refers to normal water level/top edge deck)	—	+1.0 to +12.5 m.	+1.5 to +14.5 m.
Public telephone connection against payment/number	§compulsory/87211	§compulsory/87212	§compulsory/87213
Public telephone of harbour: 8066, 8067, 8068, 8069 (PO)			
Branch line of AMH telephone system (free of charge)/telephone number of ship. Telephone No. Portmaster 2171.	—	compulsory/2180	compulsory/2181
Delivery of goods from ashore	by ship's gear	by ship's gear	with jetty-crane against payment

Remarks: *reduced discharge rate at higher cargo temperature; †only possible in exceptional cases (discharge); ‡at following conditions: P min=3 bar, T min=+55°C. Viscosity max.=35° E/+55°C; §Compulsory during loading/discharging at Berth No. 4

AUTHORITY: Port Authority (PA): Hafenbehorde Brunsbuttel, 2212 Brunsbuttel, Elbehafen. Tel: 87044 – Area Code 4852.

Port Operator (PO): Hafengesellschaft Brunsbuttel mbH, 2212 Brunsbuttel, Elbehafen. Tel: 8066 – Area Code 4852. Telex: 28347 eport d.

Operator of the Cargo Handling Facilities (AMH): AMH-Chemie GmbH, 2212 Brunsbuttel P.O.B. 1268. Tel: 82-1 – Area Code 4852. Telex: 28360 Amh D.

BUTZFLETH: 53.39 N. 09.31 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Bonded Stores Lists.
3 Crew Manifests.
Maritime Health Declaration.
Ship's Register.
Discharge Books.
Passports of Crew.
Gas Free Certificate (OBO-Carriers)

Butzfleth is not a free-port. Customs, Immigration and River Police board on arrival at berth.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

Pilotage River Terminal: Elbe Pilots also act as docking Pilots.

ANCHORAGE: Freiburg Anchorage, approx. position Lat. 53° 50.6′ N., Long. 09° 19.5′ E., depth of water up to 13 m. below chart zero; there are further anchorages for small vessels at Krautsand – and Twielenfleth Roads. (see "General" before first German Port.)

MAX. SIZE: See "Berthing".

RADAR: River Radar Service from Elbe 1 to Hamburg, see "General" before first German port, but no special Port Radar Service for Butzfleth. Radar Service in the area of Butzfleth available, can be contacted through VHF Channel 21, "Hetlingen Radar Radio" and/or VHF Channel 5, "Steindeich Radar Radio".

RADIO/VHF: All messages to Agents and Pilots, etc., through Norddeich Radio, call sign DAN. Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships' reporting station is on permanent duty at Stadersand, VHF Channel 11, safety and calling Channel 16.

Pilot boat at "Elbe-1" can be contacted on VHF Channels 13 and 16.

TUGS: 4 tugs compulsory for mooring and unmooring. To be ordered from Hamburg and Brunsbuttel through Agent.

A fire fighting tug (1,760 hp) is available 24 hours and can be reached via VHF Channel 16, also available for assistance to vessels.

BERTHING:

Aluminium Oxid Stade GmbH. (AOS): This bauxite/oxide plant, situated on the Westbank of the River Elbe, can be reached by vessels with max. drafts of 46 ft. 06 in. FW.

Quay length		*Depth at normal Low water*
Quay outside in total	325 m.	15 m. (49 ft.)
Within reach of crane	205 m.	
Quay inside	200 m.	7 m. (23 ft.)

The oxide produced at this plant, apart from being exported, is used for the mills of V.A.W. Elbewerk GmbH., Stade-Butzfleth and of Hamburger Aluminium Werk GmbH., Hamburg Finkenwerder.

Average discharging/loading rate

West African bauxite	550–600 m.t.p.h.
Brazilian bauxite	600 m.t.p.h.
Australian bauxite:	
from Gove	550–600 m.t.p.h.
from Weipa	750 m.t.p.h.
Petcoke	100–400 m.t.p.h.
Oxide ("Spout" loading)	500 m. t.p.h.

Ship's telephone connection (4146-1453) at AOS pier.

Dow Chemicals GmbH: This industry, situated close to the AOS plant, offers 2 berths for gas and chemical tankers. The water depth at the outside quay is: 15 m. (49 ft.) and at the inside quay: 9 m. (29 ft. 6 in.), both at MLW.

Restrictions for ships	*Products* Inflammable	Non Inflammable
Length at quay outside	270 m.	300 m.
Length at quay inside	125 m.	125 m.
Draft at quay outside (FW)	13.71 m. (45 ft.)	13.71 m. (45 ft.)
Draft at quay inside (FW)	8.0 m.	8.0 m.
Beam at quay inside	18.75 m.	18.75 m.

No bunkering permitted at the DOW-berths.

Discharging rate liquid gas	approx 200 t.p.h.
Loading rate chemical products	100–800 t.p.h.

Max. Size: Vessels loading/discharging inflammable products: Max. length 270 m. Max. draft 14 m.

Vessels loading/discharging non-flammable products: Length unlimited. Max. draft 14 m.

Vessels with liquid gas and flammable products: Max. length 145 m. Max. draft 8 m. Max breadth 22 m.

Restriction: Mooring prohibited for vessels having IMO Class 2 products (liquid and/or gaseous) on board.

Simultaneous handling of gases inside and flammable products outside not permissable.

Manifolds: (Land side to sea side).

Inside Berth:	Outside Berth:
Methanol	P.O.
Telone/Vidden	Per
P.D.C.	P.G.I.
P.O.	Tet
Propylene	Chlorothene VG/NU
Ethylene	EDC
	Naoh
	Methylene Chloride
	Trichloroethane
	Chloroform/Methanol

Supplies: Nitrogen and potable water.

Technical requirements on ships discharging C2/C3.

Ethylene: For loading arm horizontal clearance ships manifold to the nearest structure 2.10 m., vertical clearance from centre of manifold up 0.50 m. and down 0.60 m., flange 6 in. (300 ASA) discharge-temperature of Ethylene minimum −103°C.

Propylene: For loading arm horizontal clearance 2.20 m., vertical up 0.50 m. and down 0.50 m., flange 6 in. (300 ASA), discharge-temperature of Propylene maximum −20°C.

Further on Propylene, vessels to be guaranteed, that the vessels in Summertime are suitable for pump against a back pressure of minimum 13 kg. but preferably it should be 15 kg./16 kg.

MEDICAL: Hospital and doctor available.

FRESH WATER: Available.

FUEL: Supplied by barge from Hamburg or local supplier.

GENERAL: *Dirty Ballast:* No facilities.

Agent at Dow-Jetty: Messrs. Elbclearing, P.O. Box 5110; 2160 Stade 5. *Tel:* 04146/1033. *Telex:* 0218158 clear d.

REPAIRS: Minor repairs can be carried out.

SERVICES: Stevedores, hold cleaning, boatmen, mooring gangs, inspectors, fitters and launches.

DEVELOPMENTS: In the northern part of the port, a new pier is currently under construction (due to be completed in 1984), and which is planned to handle general and bulk cargo. It will have a free area of approximately 20,000 sq.m.

In the southern harbour, a further discharge head platform is under construction. Maximum vessel length 160 m., beam 28.0 m. and 7.50 m. depth of water (to be completed Summer 1984).

Apart from a floating crane of 20 tons and a mobile crane of 10 tons which are currently in use in the port, two jib cranes will also be installed each with 20 ton lifting capacity, for use with grabs or hooks.

AUTHORITY: Niedersachsisches Hafenamt Cuxhafen, Aubenstelle, Butzfleth, 2160 Stade 5. *Tel:* (04146) 1436. *Contact:* F. W. Bork, Manager. Captain W. Schroeder, Harbour Master.

CUXHAVEN: 53.52 N. 08.42 E. (See Plan Book)

DOCUMENTS:

Stores List.
Crew List.
Customs Manifest.
Derat Certificate.

Amerikahafen is a Customs free port.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

PILOTAGE: Pilot station situated in Old Harbour (Alten Hafen). To obtain Pilot call "Cuxhaven Port", VHF Channel 12. Pilot signal is flag "G" of International Code, or sound signal – 2 long and 2 short blasts.

ANCHORAGE: Available off Cuxhan Medem Roads, approx. position Lat. 53° 51.5′ N., Long. 08° 46.5′ E., depth of water about 6 m. – 12 m. below chart zero; further anchorages see "General" before first German Port.

RESTRICTIONS: Vessels can enter by day or night. No tidal restrictions.

Depths: Max. depth of water: 13.5 m. (45 ft.). Mean tide HW: NN+1.40 m. Mean tide LW: NN−1.50 m. Tide range is 2.90 m. (NN = approx. mean sea level).

Water depth in the basins up to 8.5 m. below MTLW. Water depth at the river quays 12 m. and 8 m. below MTLW.

HEALTH: Quarantine clearance effected at Cuxhaven. Only vessels with suspected infectious disease on board are detained.

RADAR: River Radar Service from Elbe 1 to Hamburg see "General" before first German port, but no special Port Radar Service for Cuxhaven. Radar Service in the area of Cuxhaven available, can be contacted through VHF Channel 21, "Cuxhaven Radar Radio".

RADIO: For ETA, etc., use Norddeich Radio, call sign DAN. Closer to port Elbe–Weser Radio can be contacted by VHF Channel 16.

Ships reporting station is on permanent duty at Cuxhaven, VHF Channel 12, safety and calling Channel 16.

TUGS: Tugs available and used depending on ship size and weather conditions. Cost of tugs is Hamburg Tariff plus 20%.

BERTHING:

Fahrhafen and Neue Seebaderbrucke: Modern multi-purpose Ro/Ro terminal for passengers and for handling of motor vehicles and cargo direct at the Elbe River, 300 m. quay with 8 m. depth below MTLW.

Starting point of ferries for the North Sea and the Baltic Sea, for passenger ships to Helgoland and Hamburg.

Ro/Ro linkspans (one of them for axle-loads up to 50 tons and for stern-door width up to 18 m.). Hard-standing and storage area of approx. 60,000 sq.m.

Alter Hafen: Multi-purpose harbour for shipyards and for boats to the seaside resorts and islands.

Alter Fischereihafen: Multi-purpose harbour with transhipment and outfitting quays for fishing cutters, offshore base and emergency port. Fish auction and fish handling sheds, fish industry, equipment firms, deep freeze house for 5,000 tons of goods.

Neuer Fischereihafen: Multi-purpose harbour with transhipment and equipment quays for trawlers and luggers, offshore suppliers, Ro/Ro ships, for ships carrying general cargo and for minor bulk cargo ships. Fish auction and handling sheds, fish industry, equipment firms, deep freeze house for 25,000 tons, ice production, open storage space.

Entrance and exit any time by the sea-lock. Length of lock 190 m., width of lock 24 m. and depth of lock is 9 m. below MTLW.

Amerikahafen: Multi-purpose harbour with transhipment and equipment quays for ships carrying general cargo and for minor ships carrying bulk cargo, emergency port, floating docks, transit shed, deep freeze house, open storage spaces.

Steubenhoft: Multi-purpose facility for big ocean vessels with 400 m. long quay and 12 m. water depth below MTLW. Usable for cargo, repair, trial trip and passenger ships of all sizes.

Steam and Nitrogen: Steam at No. 2 Berth and nitrogen at No. 4 Berth available from ashore.

Bunker Supply: By barges only. The Port safety regulation must be observed (Northern Basin).

Ship Repairs: Permission of AMH required.

Electricity Supply: No connections available.

Garbage Disposal: Available (PO).

Dirty Ballast Disposal: Not possible in the Port. Available only at Elbe – Port Jetty and Kiel Canal (Inner Harbour) by Elbe – Slop – Ex-GmbH.

Navigating into the North Basin: (Direction by AMH) – only after stop of cargo operations at Berth No. 4.

Gangways: At Berth Nos. 2 and 4 gangways are at hand (AMH). At Berth No. 4 and at waiting place a lifeboat has to be ready at the accommodation ladder on the offside during cargo operations.

Stop of Cargo Operations in Case of Emergency: At the sound of the signal "stay away" (· –) and fire (– – –) by loudspeaker; at the instructions given by telephone or loudspeaker; when the flashing light is in operation; at the release of the disconnection couplings; in case of fire on board.

Fire on board: The Port Supervisor of AMH has to be informed immediately. Cargo operations have to be stopped immediately. Ship has to give usual Thyphon – Fire signal ("F").

Cargo Stop in Case of Bad Weather: Berth No. 1: rainfall, windspeed 22 m./sec.; Berth Nos. 2 and 4: windspeed 26 m./sec. Disconnection at windspeed 22 m./sec.

ETA Messages: 72 hours prior to arrival to AMH via Agent with the following information: (1) Ship's name and call sign; (2) Arrival time; (3) Cargo (product and quantity); (4) Tankers: number and diameter of cargo manifold connections; (5) Any damage to hull, tanks or overboard valves. Vessels are dispatched according to accepted ETA. In any case ETA has to be repeated 48 and 24 hours before arrival.

Dangerous Cargoes: Ships with dangerous cargoes or tankers which are not gas-free have to be reported to the Port Authority 48 hours before arrival.

Ships requested to accomplish the Oil Liability Agreement (more than 2,000 tons oil onboard) must be in possession of a valid Oil Liability Certificate.

Regulation Covering the Transport of Ammonia through the Kiel Canal: In the North Sea – Baltic Canal, liquid ammonia (U.N.No. 1005) may be transported in such vehicles as fulfil the following maritime police stipulations:

1. For the vehicle, an IMO suitability certificate for the transport of ammonia must be issued in accordance with the IMO Code, Resolution 328-IX (new vessels), Resolution 329-IX or for existing vessels.

2. The loading system must be so dimensioned that at an outside air temperature of +25° Celsius and 20° Celsius for water the load can be maintained for an undetermined duration without ammonia vapour being blown out via the safety valves.

3. The re-liquification plant of the vehicle must have available a reserve capacity of at least 50 per cent of the power normally required for ship's operation, in the event that ammonia is being transported, so that in the event of an accident, including damage to the insulation, heavily vapourised contents of a tank can be safely re-liquefied.

4. On vessels with tank insulation which is not of the water repellant kind (e.g. glass or mineral wool), watertight lengthways bulkheads must be available at a distance of 760 mm. from the outer skin.

5. The loading tanks of available ships must have a clearance of at least 760 mm. from the outer skin side.

6. Vessels with a loading capacity of up to 12,000 cbm. must be equipped in addition to the requirements of section 1 with independent loading tanks of type B or C (spherical or cylindrical). The adjustment pressure of the safety valves (MARVS) must amount to at least 0.7 bars over pressure.

7. The fulfilment of the stipulations set out in Section 1 numbers 2 to 5 and in Section 2, in so far as they are necessary, must be supported by a certificate issued by a recognised Classification Society.

8. The IMO – suitability indication in accordance with Section 1 and the certificate as per Section 7 must be kept on board the vessel.

Oil tankers of more than 2,000 d.w.t. must be in possession of a valid Oil Liability Certificate.

Cargo Handling at Berth Nos. 2 and 4: Before starting cargo operations following measures are to be taken:

Confirmation of Checklist by vessel's command.
Cargo tank inspection by AMH.
Referring to "Operation plan" by AMH.
Connection of ground-wire.
Emergency towing wires (steel) must be provided at water level (Berth No. 4 only).
Installation of telephones.
Gas detectors handed on board (Berth No. 4 only).
Fire hoses must be laid out and connected to fireline, which has to be under pressure during all cargo operations (Berth No. 4 only).

Connection and disconnection of loading arms will be done by AMH personnel.

Watchmen: During cargo operations a watchman has to be on stand-by at manifold. In case of an emergency, vessel's pumps and stop valves must be able to be shut down immediately.

Minimum Crew during Cargo Transfer Operation at Berth No. 4:

1 Deck Officer	fully qualified in cargo
1 Ass. Eng. Officer	transfer operations
2 Deckhands	
1 Watch Officer for duties other than cargo transfer.	

	Berth/Products		
Brunsbuttel-Ostermoor Loading and Discharging installations	Berth No. 1 Urea bulk-bagged	Berth No. 2 Heavy Fuel Oil	Berth No. 4 Anhydrous Ammonia
Loading/discharge rate with vapour return line (max.)	—	—	*800 t/h (at −33°C) 250 t/h (at ambient temp.)
Loading/discharge rate without vapour return line (max.)	—	800 t/h (‡)	*500 t/h (at −33°C) † (at ambient temp.)
Loading rate with ship loader	1,200 – 1,500 t/d, 3000 t/d (bagged) (bulk)	—	—
Loading arm flange (Number and size) (Loose flange with collar acc. DIN 2656, ND40)	—	1×200 mm.	1×200 mm. (Product) 1×100 mm. (Vapour)
Storage capacity	85,000 tons	3×20,000 cu.m., 1×10,000 cu.m. 1× 1,000 cu.m.	2×30,000 cu.m. (−33°C) 1× 3,000 m. (ambient temp.)
Working range of ship Height refers to normal water level upwards	−10.4 to +9.5 m. (bagged) −10.4 to +7.5 m. (bulk)	+0.2 to +16.0 m.	0.0 to +21.0 m.
Loader/unloader Outreach refers from dolphin vanishing line towards ship's offside.	1.0 to 26.0 m.	1.0 to 11.0 m.	1.0 to 11.0 m.
Further equipment at berths: Service limits of installed own gangways (Height refers to normal water level/top edge deck)	—	+1.0 to +12.5 m.	+1.5 to +14.5 m.
Public telephone connection against payment/number	§compulsory/87211	§compulsory/87212	§compulsory/87213
Public telephone of harbour: 8066, 8067, 8068, 8069 (PO)			
Branch line of AMH telephone system (free of charge)/telephone number of ship. Telephone No. Portmaster 2171.	—	compulsory/2180	compulsory/2181
Delivery of goods from ashore	by ship's gear	by ship's gear	with jetty-crane against payment

Remarks: *reduced discharge rate at higher cargo temperature; †only possible in exceptional cases (discharge); ‡at following conditions: P min=3 bar, T min=+55°C. Viscosity max.=35° E/+55°C; §Compulsory during loading/discharging at Berth No. 4

AUTHORITY: Port Authority (PA): Hafenbehorde Brunsbuttel, 2212 Brunsbuttel, Elbehafen. Tel: 87044 – Area Code 4852.

Port Operator (PO): Hafengesellschaft Brunsbuttel mbH, 2212 Brunsbuttel, Elbehafen. Tel: 8066 – Area Code 4852. Telex: 28347 eport d.

Operator of the Cargo Handling Facilities (AMH): AMH-Chemie GmbH, 2212 Brunsbuttel P.O.B. 1268. Tel: 82-1 – Area Code 4852. Telex: 28360 Amh D.

BUTZFLETH: 53.39 N. 09.31 E. (See Plan Book)

DOCUMENTS:

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3 Bonded Stores Lists.
3 Crew Manifests.
Maritime Health Declaration.
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Discharge Books.
Passports of Crew.
Gas Free Certificate (OBO-Carriers)

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PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

Pilotage River Terminal: Elbe Pilots also act as docking Pilots.

ANCHORAGE: Freiburg Anchorage, approx. position Lat. 53° 50.6′ N., Long. 09° 19.5′ E., depth of water up to 13 m. below chart zero; there are further anchorages for small vessels at Krautsand – and Twielenfleth Roads. (see "General" before first German Port.)

MAX. SIZE: See "Berthing".

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Ships' reporting station is on permanent duty at Stadersand, VHF Channel 11, safety and calling Channel 16.

Pilot boat at "Elbe-1" can be contacted on VHF Channels 13 and 16.

TUGS: 4 tugs compulsory for mooring and unmooring. To be ordered from Hamburg and Brunsbuttel through Agent.

A fire fighting tug (1,760 hp) is available 24 hours and can be reached via VHF Channel 16, also available for assistance to vessels.

BERTHING:

Aluminium Oxid Stade GmbH. (AOS): This bauxite/oxide plant, situated on the Westbank of the River Elbe, can be reached by vessels with max. drafts of 46 ft. 06 in. FW.

Quay length		*Depth at normal Low water*
Quay outside in total	325 m.	15 m. (49 ft.)
Within reach of crane	205 m.	
Quay inside	200 m.	7 m. (23 ft.)

The oxide produced at this plant, apart from being exported, is used for the mills of V.A.W. Elbewerk GmbH., Stade-Butzfleth and of Hamburger Aluminium Werk GmbH., Hamburg Finkenwerder.

Average discharging/loading rate

West African bauxite	550–600 m.t.p.h.
Brazilian bauxite	600 m.t.p.h.
Australian bauxite:	
from Gove	550–600 m.t.p.h.
from Weipa	750 m.t.p.h.
Petcoke	100–400 m.t.p.h.
Oxide ("Spout" loading)	500 m. t.p.h.

Ship's telephone connection (4146-1453) at AOS pier.

Dow Chemicals GmbH: This industry, situated close to the AOS plant, offers 2 berths for gas and chemical tankers. The water depth at the outside quay is: 15 m. (49 ft.) and at the inside quay: 9 m. (29 ft. 6 in.), both at MLW.

Restrictions for ships	*Products* *Inflammable*	*Non Inflammable*
Length at quay outside	270 m.	300 m.
Length at quay inside	125 m.	125 m.
Draft at quay outside (FW)	13.71 m. (45 ft.)	13.71 m. (45 ft.)
Draft at quay inside (FW)	8.0 m.	8.0 m.
Beam at quay inside	18.75 m.	18.75 m.

No bunkering permitted at the DOW-berths.

Discharging rate liquid gas	approx 200 t.p.h.
Loading rate chemical products	100–800 t.p.h.

Max. Size: Vessels loading/discharging inflammable products: Max. length 270 m. Max. draft 14 m.

Vessels loading/discharging non-flammable products: Length unlimited. Max. draft 14 m.

Vessels with liquid gas and flammable products: Max. length 145 m. Max. draft 8 m. Max breadth 22 m.

Restriction: Mooring prohibited for vessels having IMO Class 2 products (liquid and/or gaseous) on board.

Simultaneous handling of gases inside and flammable products outside not permissable.

Manifolds: (Land side to sea side).

Inside Berth:	Outside Berth:
Methanol	P.O.
Telone/Vidden	Per
P.D.C.	P.G.I.
P.O.	Tet
Propylene	Chlorothene VG/NU
Ethylene	EDC
	Naoh
	Methylene Chloride
	Trichloroethane
	Chloroform/Methanol

Supplies: Nitrogen and potable water.

Technical requirements on ships discharging C2/C3.

Ethylene: For loading arm horizontal clearance ships manifold to the nearest structure 2.10 m., vertical clearance from centre of manifold up 0.50 m. and down 0.60 m., flange 6 in. (300 ASA) discharge-temperature of Ethylene minimum −103°C.

Propylene: For loading arm horizontal clearance 2.20 m., vertical up 0.50 m. and down 0.50 m., flange 6 in. (300 ASA), discharge-temperature of Propylene maximum −20°C.

Further on Propylene, vessels to be guaranteed, that the vessels in Summertime are suitable for pump against a back pressure of minimum 13 kg. but preferably it should be 15 kg./16 kg.

MEDICAL: Hospital and doctor available.

FRESH WATER: Available.

FUEL: Supplied by barge from Hamburg or local supplier.

GENERAL: *Dirty Ballast:* No facilities.

Agent at Dow-Jetty: Messrs. Elbclearing, P.O. Box 5110; 2160 Stade 5. *Tel:* 04146/1033. *Telex:* 0218158 clear d.

REPAIRS: Minor repairs can be carried out.

SERVICES: Stevedores, hold cleaning, boatmen, mooring gangs, inspectors, fitters and launches.

DEVELOPMENTS: In the northern part of the port, a new pier is currently under construction (due to be completed in 1984), and which is planned to handle general and bulk cargo. It will have a free area of approximately 20,000 sq.m.

In the southern harbour, a further discharge head platform is under construction. Maximum vessel length 160 m., beam 28.0 m. and 7.50 m. depth of water (to be completed Summer 1984).

Apart from a floating crane of 20 tons and a mobile crane of 10 tons which are currently in use in the port, two jib cranes will also be installed each with 20 ton lifting capacity, for use with grabs or hooks.

AUTHORITY: Niedersachsisches Hafenamt Cuxhafen, Aubenstelle, Butzfleth, 2160 Stade 5. *Tel:* (04146) 1436. *Contact:* F. W. Bork, Manager. Captain W. Schroeder, Harbour Master.

CUXHAVEN: 53.52 N. 08.42 E. (See Plan Book)

DOCUMENTS:

Stores List.
Crew List.
Customs Manifest.
Derat Certificate.

Amerikahafen is a Customs free port.

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE – ANCHORAGE RIVER ELBE: See "General" before first German Port.

PILOTAGE: Pilot station situated in Old Harbour (Alten Hafen). To obtain Pilot call "Cuxhaven Port", VHF Channel 12. Pilot signal is flag "G" of International Code, or sound signal – 2 long and 2 short blasts.

ANCHORAGE: Available off Cuxhan Medem Roads, approx. position Lat. 53° 51.5′ N., Long. 08° 46.5′ E., depth of water about 6 m. – 12 m. below chart zero; further anchorages see "General" before first German Port.

RESTRICTIONS: Vessels can enter by day or night. No tidal restrictions.

Depths: Max. depth of water: 13.5 m. (45 ft.). Mean tide HW: NN+1.40 m. Mean tide LW: NN−1.50 m. Tide range is 2.90 m. (NN = approx. mean sea level).

Water depth in the basins up to 8.5 m. below MTLW. Water depth at the river quays 12 m. and 8 m. below MTLW.

HEALTH: Quarantine clearance effected at Cuxhaven. Only vessels with suspected infectious disease on board are detained.

RADAR: River Radar Service from Elbe 1 to Hamburg see "General" before first German port, but no special Port Radar Service for Cuxhaven. Radar Service in the area of Cuxhaven available, can be contacted through VHF Channel 21, "Cuxhaven Radar Radio".

RADIO: For ETA, etc., use Norddeich Radio, call sign DAN. Closer to port Elbe–Weser Radio can be contacted by VHF Channel 16.

Ships reporting station is on permanent duty at Cuxhaven, VHF Channel 12, safety and calling Channel 16.

TUGS: Tugs available and used depending on ship size and weather conditions. Cost of tugs is Hamburg Tariff plus 20%.

BERTHING:

Fahrhafen and Neue Seebaderbrucke: Modern multi-purpose Ro/Ro terminal for passengers and for handling of motor vehicles and cargo direct at the Elbe River, 300 m. quay with 8 m. depth below MTLW.

Starting point of ferries for the North Sea and the Baltic Sea, for passenger ships to Helgoland and Hamburg.

Ro/Ro linkspans (one of them for axle-loads up to 50 tons and for stern-door width up to 18 m.). Hard-standing and storage area of approx. 60,000 sq.m.

Alter Hafen: Multi-purpose harbour for shipyards and for boats to the seaside resorts and islands.

Alter Fischereihafen: Multi-purpose harbour with transhipment and outfitting quays for fishing cutters, offshore base and emergency port. Fish auction and fish handling sheds, fish industry, equipment firms, deep freeze house for 5,000 tons of goods.

Neuer Fischereihafen: Multi-purpose harbour with transhipment and equipment quays for trawlers and luggers, offshore suppliers, Ro/Ro ships, for ships carrying general cargo and for minor bulk cargo ships. Fish auction and handling sheds, fish industry, equipment firms, deep freeze house for 25,000 tons, ice production, open storage space.

Entrance and exit any time by the sea-lock. Length of lock 190 m., width of lock 24 m. and depth of lock is 9 m. below MTLW.

Amerikahafen: Multi-purpose harbour with transhipment and equipment quays for ships carrying general cargo and for minor ships carrying bulk cargo, emergency port, floating docks, transit shed, deep freeze house, open storage spaces.

Steubenhoft: Multi-purpose facility for big ocean vessels with 400 m. long quay and 12 m. water depth below MTLW. Usable for cargo, repair, trial trip and passenger ships of all sizes.

CRANES:

10 portal cranes	1.5 – 10 tons capacity
1 loading bridge	8 tons capacity
1 crane for heavy loads	50 tons capacity
Various mobile cranes up to	20 tons capacity

Equipment also available to handle containers and Ro/Ro traffic.

MEDICAL: Doctors and hospitals obtainable day and night.

FRESH WATER: Available from shore pipe-line up to 50 t.p.h. Small quantities up to 15 tons may be obtained in Roads from bunker barge. There are no water barges.

FUEL: Bunker and gas oil available. Small quantities, up to 150 tons, may be obtained anytime. Otherwise according to conditions of supplying oil company.

FIRE PRECAUTIONS: No special restrictions. Ships with explosive cargo and liquid cargoes of danger class K1 and K2 not allowed in Cuxhaven Harbour.

CARGO HANDLING: A harbour for overseas ferries up to 150 m. length with Ro/Ro and container equipment.

GANGWAY/DECK WATCHMEN: Not obligatory, at Master's discretion.

OPENING/CLOSING HATCHES: Normally performed by crew. Stevedores must be paid if required to do this work.

CUSTOMS ALLOWANCES: 40 cigarettes, 1 bottle spirits and 2 bottles wine.

IDENTIFICATION CARDS: If no passport, shore pass required.

CONSULS:

Denmark, tel. 38021.
Iceland, tel. 36036/37.
Others at Hamburg/Bremen.

REPAIRS: All deck and engine repairs possible.

DRY DOCKS: Floating dock for vessels up to 110 m. length, and slipway for vessels up to 75 m. long and 13 m. beam.

REPATRIATION: All facilities available.

AIRPORT: Hamburg-Fuhlsbuttel, 130 km. away; Bremen, 110 km. away.

TIME: GMT plus 1 hour.

HOLIDAYS: New Year's Day, Good Friday, Easter Sunday, Easter Monday, 1st May, Ascension Day, Whit Sunday, Whit Monday, 17th June, Atonement Day, Christmas Day, Boxing Day. Loading/unloading can be arranged on these holidays.

POLICE/FIRE/AMBULANCE: Police, tel. 110; Harbour Police, tel. 22072; Ambulance, tel 23125; Fire, tel. 112.

TELEPHONES: At Steubenhoft and in the ferry harbour, telephones can be put on board.

SERVICES: Compass adjusting and radio repairs.

SHORE LEAVE: Allowed.

AUTHORITY: Niedersachsisches Hafenamt Cuxhaven, Am Schleusenpriel 2, P.O.Box 526, 2190 Cuxhaven. *Tel:* (04721) 37077.

AGENT: See "Hamburg".

DUISBURG-RUHRORT: 51.25 N. 06.46 E.

(See Plan Book)

LOCATION: Duisburg-Ruhrort port area, together with Hochfeld, covers a total surface of 1023 hectares on the right bank of the river between the Rhine km. 774 and 781, the Ruhr channel – 1 km., and the Rhine-Herne canal km. 1 to 2.

MAX. SIZE: Dimensions of vessels able to use the German inland waterways:

Type	*Length (m.)*	*Beam (m.)*	*Draft (m.)*	*Capacity (tons)*	*Horse Power*
Motor dry cargo vessel	38.5 – 110	5 – 11.4	2 – 3.5	300 – 2,500	100 – 2,000
Tanker	50 – 110	6.6 – 11.4	2.2 – 3.5	400 – 3,200	250 – 2,000
Train (Pushing motor vessel and barge)	150 – 186.5	9.5 – 11.4	2.5 – 3	2,530 – 4,400	800 – 2,000
Pusher tug	10 – 35	7.6 – 13.2	1.4 – 2.2		1,000 – 6,000
Dumb barge for pushing	70 – 76.5	9.5 – 11.4	2.5 – 3.7	1,240 – 2,600	

The largest pusher tugs push six barges = 15,600 tons.

RADIO: Duisburg Port Radio, VHF Channel 13.

BERTHING:

Docks	*Theoretical Depth respectively zero level above normal zero*	*Loading Depths (approx. value) Actual water level at Ruhrort water gauge*
(a) Ruhrort. Water gauge zero.	16.13 m.	
Port Entrance, Vincke Canal, Bunker Dock, North Dock, South Dock, Kaiser Dock, Port Canal, Dock A, Dock B, Dock C and Railway Dock	15.40 m.	+ 40 cm.
Werft Dock	17.05 m.	−120 cm.
(b) Duisburg. Water gauge zero.	17.00 m.	
Parallel Dock, Outer Dock, Wood Dock and Inner Dock at Marientor up to km. 3.5	16.10 m.	+ 40 cm.
Inner Dock Eastwards km. 3.5	16.50 m.	± 0 cm.
(c) Hochfeld. Water gauge zero.	17.42 m.	
South and Kultus Dock.	16.45 m.	+ 40 cm.
(d) Canal Dock Meiderich Ruhr Dock Neuenkamp		Loading depths as per inland waterways traffic regulations

CRANES: 90 cranes and travelling bridges of up to 40 tonnes lifting capacity for bulk goods and general cargo, as well as for containers. 1 heavy lift crane with 60 tonnes capacity.

BULK CARGO FACILITIES: 1 coal mixing and discharging plant with 2 car dumpers and 2 ship loaders, daily capacity up to 13,000 tonnes. Grain warehouses and silos with approx. 130,000 tonnes capacity, 4 conveyor belts, and 22 discharging plants.

Tank storage 1,327,825 cu.m. Liquid gas tank storage 20,000 cu.m.

SPECIALISED CARGO HANDLING FACILITIES: Container terminal with facilities for all means of transport Roll-on/Roll-off installation. 71 points for handling liquid gas.

STEVEDORES: Working hours: 0730 – 1600 hrs., Monday to Friday.

BRIDGES:

Bridge	*Lowest Point of Upper Structure Respectively Zero Level above Normal Zero*	*Correction Value for Calculation of Passage Height**
(a) Ruhrort. Water gauge zero	16.13 m.	—
Bridge over Railway Dock	36.10 m.	19.70 m.
Bridge over Port Entrance	34.20 m.	17.80 m.
Vincke Canal Bridge	33.10 m.	16.70 m.
Kaiser Dock Bridge	32.60 m.	16.20 m.
Port Canal Bridge	33.80 m.	17.40 m.
Bridge over the Cut Kaiser Dock/Port Canal	30.00 m.	13.60 m.
Bridge over Dock C	38.20 m.	21.80 m.
(b) Duisburg. Water gauge zero	17.00 m.	
Cable Bridge over Outer Dock	37.80 m.	20.90 m.
Road Bridge over Outer Dock	37.00 m.	20.10 m.
Marientorbrudge (clearance between bridge counter bearings 15.80 m.)		
At rest	29.30 m.	12.40 m.
Folded	Up to 33.9 m. height	Clear width 15.8 m.
	Over 33.9 m. height	Clear width 13.8 m.
Schwanentor Bridge (clearance between bridge counter bearings 15.80 m.)		
At rest	26.80 m.	9.90 m.
Lifted	34.90 m.	18.00 m.

*From the following values, the actual water level at the Ruhrort water gauge is to be deducted.

With water levels over 8.40 m. at the Ruhrort water gauge, the stop gate at the Marientor Lock is drawn in and therefore through passage to the Duisburg inner port/wood harbour is no longer possible.

AIRPORT: Dusseldorf (20 km.).

AUTHORITY: Duisburg Ruhrorter Hafen A.G., Alte Ruhrorter Strasse 42-52, Postfach (Postbox) 13 02 60, D – 4100 Duisburg 13. *Tel:* 8 031. *Cables:* Hafag. *Contact:* Y. Klaus van Lith or Dr.-Ing. Jochen Muller, Directors.

ECKERNFORDE: 54.29 N. 09.51 E.

(See Plan Book)

DOCUMENTS:

Stores List.
Customs Documents.
Cargo Documents.
Crew List.

PILOTAGE: No pilot station. No tide. In East winds, water level can increase to 1.50 m. above normal.

ANCHORAGE: Good anchorage in the Roads between N.W. to N.W. by W. bearing from the port, distance 1 to 1.5 miles. Depths 18 m. – 21 m. Anchorage not allowed in harbour area.

CLEARANCE: Customs clearance at any time subject prior notice given. If suspected diseases on board inform Health Authorities.

MAX. SIZE. In Outer Harbour, up to 5 m. draft; in Inner Harbour up to 3 m. draft.

RADIO: Radio Kiel, call sign DAO, Tel: 39011.

TUGS: No tugs.

BRIDGES: Outer and Inner Harbours separated by bascule bridge, opening to 10.7 m. width at top of bridge.

MEDICAL: Doctors and hospitals available.

FRESH WATER: Available.

FUEL: Diesel oil available. No coal.

WATCHMEN: Not available.

OPENING/CLOSING HATCHES: By ship's crew.

IDENTIFICATION CARDS: Required, if no passport.

REPAIRS: Available for fishing boats or coasters. Slipway for vessels up to 200 tons.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer (end March – end September).

HOLIDAYS: Work allowed on Sundays and official holidays subject to Harbour Master's permission.

POLICE/FIRE/AMBULANCE: Police Tel: 110. Hospital Tel: 9011. Fire Tel: 112.

TELEPHONES: Public telephones in harbour area. No installation on board.

SERVICES: Other services available from Kiel.

SHORE LEAVE: Permitted.

AUTHORITY: Stadtwerke Eckernforde GmbH, Bornbrook 1-3, 2330 Eckernforde. *Tel:* (04351) 5021. *Contact:* Mr. Wegner, Harbour Master. Mr. Poetzsch, General Manager.

ELSFLETH: 53.14 N. 08.28 E.

PORT LIMITS: The seaward boundary of the port is the entrance of River Hunte, vessels are considered to be arrived when alongside the berth or waiting berth, and Customs formalities are completed.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
1 Health Certificate.
2 Provision and Store Lists.
1 Ship's Certificate.

DEEP SEA PILOTAGE: See "General" before first German port.

PILOTAGE: Pilotage is carried out by Weser River Pilots, no Harbour Pilot available.

ANCHORAGE: No anchorage in vicinity of the harbour, see Blexen Roads.

RESTRICTIONS: Max. draft in the entrance at LW is 3.20 m.

MAX. SIZE: Max. size in daytime, length 80 m. Max. size at night-time, length 60 m., draft depends on the tide.

PRATIQUE: Pratique is given on arrival by the Health Officer. If disease or fever is suspected on board it has to be reported to the Agent.

RADIO: Cable Norddeich (call sign DAN) advising ETA and cash requirements.

RADAR/VHF: No port radar service but river radar can be used for approaching port from Weser Lightvessel to Bremerhaven. VHF Channel 21 from Bremerhaven to Elsfleth. Channel 19 from Bremen to Elsfleth.

River radar can be used for approaching port from Bremerhaven to Elsfleth (entrance of River Hunte).

Bremen Port Radar Channel 12.

VHF Channel 10 from Elsfleth to Oldenburg.

The 2 railroad bridges over the River Hunte can be called on VHF Channel 19.

TUGS: Tugs have to be ordered from Bremen or Brake, they join the vessel at River Hunte Estuary. If tug lines are used there are no extra charges.

BERTHING: 1 quay with a length of 260 m., depth alongside 150 m. = 5 m., and 110 m. = 4 m., 1 waiting berth for small vessel 3 m., 1 private berth (Omni-Pac).

2 waiting berths for vessels in inland trade. 9 vessels with length from 80 m. can use these berths. One waiting berth is by the naval college (3 berths) and the other at km. 23 on the River Hunte.

SPECIALISED CARGO-HANDLING FACILITIES: 2 cranes with 6.5 tons and 1 crane with 10.5 tons. Bulk cargo can be handled with grabs, no other special facilities.

BRIDGES: No bridges to reach the port, but all ships bound for Oldenburg are waiting at Elsfleth for opening bridges.

A flood prevention barrier has to be passed to reach the harbour.

STEVEDORES: ETA has to be cabled to the Agents to arrange gangs. Port works 3 shifts around the clock, including Sunday and holidays.

MEDICAL: Medical service is available day and night. Hospital is available at Brake.

TANKERS: No tanker berth.

DENSITY: Fresh water.

FRESH WATER: Delivered from the quay by hose.

FUEL: Fuel is delivered by bunker barges stationed in port.

FIRE PRECAUTIONS: No fire precautions.

CONSUL: None.

REPAIRS: 1 dockyard, all ship and engine repairs can be carried out.

DRY DOCKS: 2 slipways can be used.

SURVEYORS: Classification Societies have to be ordered from Bremen, surveyors available at Elsfleth.

GANGWAY/DECK WATCHMEN: A crews' watchman is necessary because of strong tidal streams, 2 – 3 knots.

HATCHES: Hatch-opening/closing to be carried out by crew.

CUSTOMS ALLOWANCES: Quantity permitted for each crew member: 100 cigarettes, 1 bottle of spirits.

CARGO GEAR: Loading/discharging is carried out by shore cranes.

REPATRIATION: Any time. Inform Agent.

AIRPORT: Airport at Bremen (50 km). Regular airlines.

TIME: Local time: GMT plus 1 hour.

HOLIDAYS: Cargo work can be arranged on those days.

POLICE/AMBULANCE/FIRE: Police: Station 2263, River 2377. Ambulance: Brake Hospital 04401 – 4060. Fire 2333.

TELEPHONES: No ship-to-shore communications.

SHORE LEAVE: Crew members are allowed ashore with valid passports.

IDENTIFICATION CARDS: No shore pass issued.

REGULATIONS: No unusual regulations for the port.

GENERAL: All ships bound for Oldenburg have to do clearance in port.

DEVELOPMENTS: A new private berth has been completed for the distillery "Pabst & Richards".

AUTHORITY: Niedersachsisches Hafenamt Brake – Hafenmeister Elsfleth, Ander Straats Kaje, Elsfleth. *Tel:* 04404 – 2202.

EMDEN: 53.23 N. 07.13 E. (See Plan Book)

PORT LIMITS: The vessel is to be considered an "arrived ship" upon having berthed at the designated waiting/loading/discharging berth, depending upon Charter-Party.

DOCUMENTS: Health Declaration (form from Sea-Pilot), Derat Exemption Certificate, Bill of Lading, Cargo Manifest, Certificate of Origin (for gas-tankers only), Certificate of Quality (for gas-tankers only), Certificate of Registry, 5 Crew Lists, 2 Crew Personal Effects Lists, 4 Slop-Chest Lists, Passports/Seamen's Books, 2 German Tanker Check Lists (for tankers and gas-tankers only).

DEEP SEA PILOTAGE: See "General" before first German Port.

PILOTAGE: Compulsory. At least 12 hours prior arrival at Pilot Station, vessel to radio "Emslotse Emden" indicating vessel's name, ETA, destination and draft. Contact pilot vessel on VHF Channel 16 or MW 500 kHz or LW 2023 kHz (daytime) and 2182 kHz (night-time).

Pilot vessel located near Wester Ems Light Buoy in approx. position Lat. 53° 37′ N., Long. 06° 24′ E.

Tankers and gas-tankers above 10,000 g.r.t. with dangerous cargo have to pick up the Pilot at the TW/DB Buoy in position: 53° 59′ 18″ N., 06° 21′ 26″ E.

During bad weather periods pilot boat is withdrawn and stationed in sheltered area near the Isle of Borkum.

ANCHORAGE: Vessels may anchor in vicinity of pilot vessel 9.5 fathoms depth. Sandy bottom.

Further anchorage possibilities in the Ems fairway half way up to Emden at "Moevensteert", 45 ft. salt water at HW.

RESTRICTIONS: Vessels drawing in excess of 26 ft. salt water have to wait for high tide to proceed to Emden proper. Tide rise about 10 ft.

Vessels with LOA/beam over 255 m./35.5 m. respectively enter and leave in daylight only.

The "Great Sea Lock": The "Great Sea Lock" has a length of 260 m. (853 ft.) and a width of 40 m. (131 ft.) restricting vessels' size to 255 m. LOA and 35.5 m. beam, but upon special permission at about 256 m. LOA and 36.5 m. beam. Depending upon vessels' constructural shape even longer ships have been accepted in the past upon special application.

MAX. SIZE: Under normal tide conditions, vessels drawing 36 ft. can enter Emden directly. Vessel drawing up to 45 ft. salt water can be lightened in river inside Isle of Borkum at the unloading berth "Moevensteert" by floating cranes until appropriate draft achieved. Capacity of floating crane 1,000 t.p.h., 2 cranes available.

Length and beam restrictions imposed by locks at Emden: max. 255 m. length and 35.50 m. width. Vessels exceeding these dimensions require prior permission.

HEALTH: Pratique granted immediately on arrival at locks by Doctor or Health Official.

RADIO: Cables should be despatched via Norddeich Radio (DAN).

VHF: Norddeich Radio (DAN): VHF Channel 16 and all known communication facilities including ship/shore telex.

Knock Radar Control Centre: VHF Channel 18.

Emden Pilot: VHF Channel 16.

RADAR: Radar service on the river "Ems" from approx. position: Lat. 53° 37.5′ N., Long. 06° 23′ E. (Westerems) or Lat. 53° 35′ N., Long. 06° 23′ E. (Hubertgat) up to port entrance. The other range (Borkumradar) works on VHF Channel 18. Further information on this Channel.

BERTHING: *Outer Harbour:* Quay length 1,539 m. – tidal harbour. Also see "Developments".

New Inner Harbour: Accessible through Sea Lock (260 m. × 40 m.) and Nesserlander Sea Lock only for vessels up to 111 m. in length and 14.50 m. width.

INNER HARBOUR:

South Quay:

Commodity: Iron ore, coal, coke, bauxite, fertilizers and other dry-bulk cargoes, also wood, steel, general cargo, containers, etc.

Pier Length: 932 m.

Depth Alongside: 12 m. permanent (salinity about 1.005).

Draft Allowed: 35 ft. inbound, 34 ft. outbound.

Number of Cranes: 8, 1 cokeloader.

Lifting Capacity: 1×7 tons, 4×15 tons, 2×25 tons, 1×40 tons. 4,000 tons/day.

Daily Capacity: Discharging iron ore, about 30,000 tons. Discharging coal, about 24,000 tons. Loading coal about 10,000 tons.

Outreach of Grabs: 35.5 m. (cranes), 12.5 m. (cokeloader).

Distance Waterline/Lower Edge Grab: 14 m. (cranes), 13 m. (cokeloader).

Conveyor Belt: Double belt system.

Storage Area: About 25,000 sq.m. concrete paved. About 76,000 sq.m. for bulk cargoes. About 4,000 sq.m. of covered storage for general and bulk cargoes.

Loading/Discharging: Ex/onto rail cars, trucks, barges.

Working Period: Monday 0600 hrs. – Saturday 2200 hrs., overtime possible.

North Quay:

Commodity: Iron ore, coal, coke, bauxite, fertilizers and other dry-bulk cargoes, also wood, steel, etc., and general cargo.

Pier Length: 520 m.

Depth Alongside: 12 m. permanent (salinity 1.005).

Draft Allowed: 35 ft. inbound, 34 ft. outbound.

Number of Cranes: 4.

Lifting Capacity: 15 tons each.

Daily Capacity: Discharging iron ore, about 30,000 tons. Discharging coal, about 20,000 tons. Loading coal, about 10,000 tons.

Outreach of Grabs: 35.5 m.

Distance Waterline/Lower Edge Grab: 14 m.

Conveyor Belt: Available.

Storage Area: About 13,000 sq.m. concrete paved. About 32,000 sq.m. for bulk cargoes.

Loading/Discharging: Ex/onto rail cars, trucks, barges.

Working Period: Monday 0600 hrs. – Saturday 2200 hrs., overtime possible.

Industrial Harbour:
Commodity: All kinds of dry-bulk commodities in smaller lots, iron and steel, and all kinds of general cargo.
Pier Length: Total about 1,000 m.
Number of Berths: 3.
Draft: Between 23 ft. – 24 ft. permanent (salinity 1.005) depending on berth.
Number of Cranes: 4, and 1 mobile crane.
Lifting Capacity: 1×5 ton, 1×10 ton, 1×10-20 ton, 1×30 ton, 1 mobile crane 30 ton.
Outreach of Cranes: 16 m. – 40 m. depending upon weight of load to be handled.
Distance Waterline/Lower Edge Grab: 18 m. – 20 m.
Storage: About 5,500 sq.m. covered storage space. About 50,000 sq.m. open storage space.
Loading/Discharging: Ex/onto rail cars, trucks, barges.
Working Period: Monday 0600 hrs. – Saturday 2200 hrs., overtime possible.

Ro-Ro Berths I and II:
Commodity: Automobiles, paper and other Ro-Ro commodities.

Berthing Length:	Terminal I	Terminal II
	325 m.	300 m.
Draft Allowed:	Max. 23 ft. permanent (salinity 1.005).	Max. 23 ft. permanent (salinity 1.005).
Number of Ramps:	1 stern ramp. 1 stern or side ramp.	1 stern ramp.
Storage:	About 43,000 sq.m. storage space.	About 31,000 sq.m. storage space

Loading/Discharging: Ex/onto rail cars, trucks.
Working Period: Monday 0600 hrs. – Saturday 1400 hrs., overtime possible.

OUTER HARBOUR: This port basin has direct connection to the Ems Fairway, i.e. it is a tidal port area. There are no restrictions as to length or beam.

VW Berth:
Commodity: Mainly used for handling Volkswagen automobiles.
Berthing Length: About 245 m.
Depth Alongside: 8.3 m. at low water (salinity about 1.007).
Draft Allowed: 26 ft. LW.
Tidal Range: About 10 ft.
Number of Cranes: None.
Cargo Handling: Side door Roll-on/Roll-off or ship's own gear, ex/onto storage, rail, truck.
Loading Rate: 1,000 – 1,500 cars/day.

Granary I and II:
Commodity: All kinds of grain products, feed stuff, etc.
Berthing Length: 450 m.
Depth Alongside: 8.3 m. at LW (salinity about 1.007).
Draft Allowed: 26 ft. fresh water at LW.
Tidal Range: About 10 ft.
Number of Elevators: 3 shore elevators, 2 floating elevators.
Outreach from Fenderline: 18 m.
Distance Waterline/Hatchcoaming: 11.5 m.
Daily Capacity: About 12,000 tons heavy grain. About 6,000 tons soya meals.
Storage Capacity: About 150,000 tons.
Working Period: Monday 0700 hrs. – Saturday 2200 hrs., overtime possible.

Ems Quay:
Commodity: General, wood, logs, containers, etc.
Pier Length: 271.7 m.
Draft Allowed: 35 ft. salt water at HW.
Tidal Range: About 10 ft.
Number of Cranes: None.
Number of Ramps: 1 quarter ramp, 1 stern ramp.
Storage Capacity: About 6,000 sq.m. of covered storage space and 25,000 sq.m. of concrete paved open storage space.

Lightening/Topping-Off of Dry-Bulk Cargoes at Emden-"Dukegat":
General: Vessels exceeding a draft of 35 ft. salt water have the possibility to lighten/top-off at the "Dukegat" anchorage free of expense to the vessel, provided the balance of the cargo is being handled at Emden proper. On occasions also just lightening of vessels destined for other ports than Emden is performed at costs to be specifically agreed upon.
Commodity: Iron ore, coal, bauxite, etc.
Location of Anchorage/Lightening-Place (Dukegat): About 20 sea miles up-river from pilot vessel between Buoys "A12" and "A14" near the Isle of Borkum.
Dimensions of Anchorage/Lightening-Place (Dukegat): About 2,750 m. long and about 700 m. wide.
Draft: Maximum allowable arrival/sailing draft 45 ft. salt water.
Number of Cranes: 2 self-propelled floating cranes equipped with 25 ton grabs and hoppers connected with conveyor-belt.
Outreach from Fenderline: Max. 25.5 m.
Distance Waterline/Lower Edge of Grab: Max. 21 m.
Capacity: Iron ore, about 1,000 t.p.h. Coal, about 750 t.p.h. (lightening), about 500 t.p.h. (topping-off).

TUGS: Sufficient tugs available, stationed at Emden Locks, ranging from 790 h.p. to 3,900 h.p. Usually tugs lines used.
BRIDGES: None.
STEVEDORES: Since main commodities consist of bulk cargoes, such as iron-ore, coal, coke, bauxite, no specific requirements.
MEDICAL: Advance notice only required in urgent cases; hospital available.
BULK HANDLING FACILITIES: See "Berthing".

TANKERS: Olhafen situated in Inner Harbour. Tankers up to 34 ft. 6 in. draft discharge to Frisia Refinery, distance about 4.5 km.

Slops may only be discharged at the Tank Cleaning installation of Thyssen Nordseewerke GmbH.

Oil Harbour:
Commodity: Crude oil, naphtha, condensates, fuel oil, gas oil.
Number of Berths: 4 (2 large and 2 smaller berths).

Docking Length:	No. 1	No. 4
	255 m.	200 m.
Draft Permanent:	34 ft. 6 in. (salinity about 1.005)	34 ft. 6 in. (salinity about 1.005)
Loading Rate:	500 t.p.h. light fuel 750 t.p.h. heavy fuel	500 t.p.h. light fuel 750 t.p.h. heavy fuel
Discharging Rate:	2,500 t.p.h. crude oil	1,500 t.p.h. crude oil
Connections:	2×12 in. max.	1×8 in. max.

Working Period: Around the clock, SHinc.

LPG Terminal:
Commodity: Butane, propane and its mixtures.
Number of Berths: 1.
Docking Length: 255 m.
Draft: Max. 34 ft. 6 in. (salinity about 1.005).
Discharging Rate: About 80 t.p.h. at above 0° (about 250 t.p.h. in the future), back pressure about 15 bar at discharging arm.
Connections: 1 discharging arm with 8 in., 300 ASA liquid connection and 1×3 in., 300 ASA vapour connection.
Shore Heater: Available.
Shore Booster: Available.
Storage: Shore tank, capacity about 30,000 cu.m.

Cargo can also be discharged directly into rail tankcars.
Distance Berth/Storage-Filling Station: About 4.5 km.
Working Period: Around the clock, SHinc.

Lightening of Tankers: There is also a tanker lightening/anchoring place at the "Dukegat" anchorage at the location of Buoys "A10" – "A12" with an allowable draft of 41 ft. SW, dimensions 1,200 m. long and 800 m. wide.

However, lightening of tankers is not customary and has not been performed recently.

DENSITY: Average density in port 1005 – 1010.
FRESH WATER: Available, supplied by barge.
FUEL: All grades available, delivered by barge by major oil companies and others.
FIRE PRECAUTIONS: All common fire precautions to be obeyed.
GANGWAY/DECK WATCHMEN: Not compulsory.
OPENING/CLOSING HATCHES: To be performed by crew.
CUSTOMS ALLOWANCES: 40 cigarettes per day/person, 0.25 litre spirits per day/person (at "Outer Harbour" and "Old Inner Harbour").
REPATRIATION: Nearest airport to Emden is Bremen (about 150 km.). There are good train connections to and from Emden. Car transportation can also be arranged upon request to Agent. A small airport is available at Emden for domestic flights and charter flights.
CONSULS: Finnish (Vice-Consul), tel. 28800, Norwegian, tel. 20118, Swedish, tel. 21904, Netherlands, tel. 21404.

REPAIRS: All kinds of repairs possible.
DRY DOCKS: 1 dry dock 218 m. × 30 m., 1 floating dock 176 m. × 27 m., 1 floating dock 138 m. × 16.8 m., 2 floating docks 92 m. × 16.2 m.
SURVEYORS: German Lloyd, Lloyd's Register, Norske Veritas, Bureau Veritas, Panama Bureau of Shipping Inc.
AIRPORT: Nearest airports Bremen and Hamburg, about 2 – 3 hours drive from Emden. World-wide connections. Flight Emden to Bremen or Hamburg possible by air-taxi.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer (25th March-30th September in 1984).
HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day (May 1st); Ascension Day; Whit Monday; June 17th; Prayer Day; Christmas Day; Second Christmas Day (December 26th). No work on New Year's Day, Easter Sunday, Whit Sunday, May 1st and Christmas Day.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 22222; Fire 112.
TELEPHONES: Telephones can be placed on board if vessel berthed Northquay, Southquay or Thyssen Nordseewerke shipyard. Public telephone boxes are available close to the berths.
SERVICES: Tank cleaning installation for slop disposal available. Oil pollution service available.
SHORE LEAVE: Shore leave possible.
IDENTIFICATION CARDS: Normally, Seamen's Book sufficient. In certain cases shore leave passes issued.
REGULATIONS: None unusual, but tankers and especially gas tankers have to apply for a special entry permission through the Agents.
DELAYS: Normally, none.
BANKS: German banks, such as Deutsche Bank, Commerzbank.
EMERGENCY CO-ORDINATION CENTRE: Local Water Police, Tel: 04921-27169/51681.
STORING: See "Prelims", page viii.

1. Yes.
2. Throughout loading operations, except for gas tankers.
3. Mainly yes.
4. Mainly yes.
5. Stores have to be cleared through Customs.
6. Yes.

DEVELOPMENTS:
New Port Development (Dollarthafen): A construction programme has been developed to build a new port basin, including a new lock (380 m.× 62 m.), on the River Ems, called the "Dollarthafen-Projekt". With such a new port basin and entrance it is aimed to take fully laden vessels of 80,000/90,000 d.w.t. with a draft of 45 ft. without lightening. Sizewise, ships of about 250,000 d.w.t. could be accommodated. Building of the project is expected to be started in 1985 – construction period about 10 years. This port expansion will create entire new industrial areas of more than 500 Hectares.

AUTHORITY: Niedersachsisches Hafenamt, Matrosengang, 2970 Emden, West Germany. *Tel:* (04921) 29034/35. *Contact:* Captain W. Kuhn or Captain A. Brinkmann.

AGENT: Johs. Fritzen & Sohn-GmbH, Neptunhaus, PO Box 1552, 2970 Emden, West Germany. Tel: 04921 20011 (day and night). Telex: 27821 Frizn C. Cables: Fritzenagent Emden.

FLENSBURG: 54.48 N. 09.26 E.

PORT LIMITS: The seaward boundary is the line between two special boundary-stones on the West and East side of the port entrance.
DOCUMENTS: 2 crew lists, 2 passenger lists, 2 stores lists (bonded stores), EG cargo lists, bills of lading, general declaration, ship's certificates.
PILOTAGE: Pilot Station Flensburg, Schiffbrucke 12, D-2390 Flensburg, Tel: (0461) 25150. Advance notice 5 hours before arriving Buoy "Flensberger Foerde" by Kiel Radio or Agent (3 hours before leaving port). Pilot boards at Buoy "Flensberger Foerde". Pilot will board in all weather if possible, otherwise pilot-boat will lead vessel to that position where Pilot can board. Not necessary to anchor. Pilot-boat is a fishing-boat with "Lotse" written in white letters on both sides. Boat will show lights prescribed by international regulations and is fitted out with VHF Channels 6, 10, 16, 25, 26, 27.
ANCHORAGES: Just outside harbour entrance, N.E. of Mittelgrund and West of Kielseng leading lights. Depths of water between 12 m. and 19 m. muddy ground; same position for Quarantine Anchorage.
The other anchorage is at Buoy "Flensberger Foerde", depth of water between 20 m. and 27 m. Bottom is mud and sand.
RESTRICTIONS: No specific restrictions; no tide, water-level variations depending only on the wind.
MAX. SIZE: Max. draft up to 7.0 m. at normal water-level.
HEALTH: Generally free pratique for ships in the North Sea and Baltic Sea trade, ships coming from overseas ports pratique granted on arrival. Inform Pilot if any suspected diseases on board. He will make necessary arrangements. A valid Derat Exemption Certificate has to be on board.
RADIO: Kiel Radio, call sign DAO, tel. (0431) 39011, telex 02-0081.
VHF: None in Flensburg Port.
RADAR: There is no Port Radar Service.
TUGS: Harbour tugs are not available. If required, Flensburger Schiffbau-Gesellschaft can supply one tug 470 h.p., provided at least 3 hours notice given, ship's lines are used.
BERTHING: Powerstation-Quay length 170 m. depth of water 7.30 m. Harnis Quay length 460 m. depth of water 6.00 m. Harnis Quay length 240 m., depth of water 7.0 m. Schiffbruck Quay length 210 m. depth of water 6.50 m. Schiffbruck Quay length 130 m., depth of water 5.0 m. Depths of water refer to normal water-level.
CRANES: Powerstation Quay 1 crane 5 tons and 1 crane 10 tons lifting capacity; Harnis Quay 4 cranes 3 – 5 tons lifting capacity; all cranes are usable for general and bulk cargo.
BULK CARGO FACILITIES: 3 elevators for feedstuff.
SPECIALISED CARGO-HANDLING FACILITIES: Not available.
BRIDGES: There are no bridges at Flensburg Port.
STEVEDORES: Agents make all arrangements. Unloading rates depend on type of cargo. Bulk cargo discharge up to 160 t.p.h. per gang.
MEDICAL: Doctors, hospitals, ambulances available day and night.
TANKERS: 2 berths for tankers up to 1,000 g.r.t. with depths of water 5.70 m. and 5.00 m.; diameter of discharge lines are NW 200; average discharge of fuel and gasoil 300 cu.m. per hour.
DENSITY: Winter-time 1015; Summer-time 1012.
FRESH WATER: Available at all berths, delivery rate about 20 cu.m./p.hr. from shore hydrants.
FUEL: Diesel available in any quantity. Fuel oil subject to 5 hours advance notice from tank lorries.
FIRE PRECAUTIONS: No specific precautions.
CONSULS: Denmark, Nordergraben 19; others at Hamburg.
REPAIRS: Flensburger Schiffbau-Gesellschaft carry out all ship repairs; outfit section equipped with one crane of 42 tons lifting capacity.
DRY DOCKS: Two floating docks with 7,500 and 1,500 tons lifting capacity.
SURVEYORS: All main Classification Societies are present at Hamburg.
GANGWAY/DECK WATCHMEN: No watchman service available.
HATCHES: Opening/closing normally done by crew. Stevedores will perform this for additional payment.
CUSTOMS ALLOWANCES: For consumption on board merchant vessels for each crew member and per day 40 cigarettes or 20 whiffs or 10 cigars or 50 grams tobacco *and* 0.25 litre spirits *and* 3 litres wine are duty-free. If the ship stays for 3 days or longer it is usual to allow threefold of the mentioned quantity. For shore leave 20 cigarettes are permitted for each person only. If a crew member leaves the ship for at least 3 days the regulations for tourists are applicable.
CARGO GEAR: All loading and discharging done by shore cranes, except elevator-work.
REPATRIATION: Possible at any time without difficulties.
AIRPORT: Hamburg-Fuhlsbuttel, 175 km. distant; 2.5 hours by train.
TIME: Winter-time GMT plus 1 hour, Summer-time GMT plus 2 hours.
HOLIDAYS: See "Hamburg". No work on official holidays.
POLICE/AMBULANCE/FIRE: Police Tel: 110, Fire/Ambulance Tel: 112.
TELEPHONES: No installation on board ships.
SERVICES: No tank cleaning and slop disposal services. Compass adjusting possible, advance notice necessary.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Not required.
REGULATIONS: No particular or unusual regulations.
DELAYS: Normally no delays.
DEVELOPMENTS: A new quay of 150 m. length and 7.5 m. depth is under construction.
AUTHORITY: Stadtwerke Flensburg GmbH, P.O.Box 2751, Batteriestrasse 48, D-2390 Flensburg. *Tel:* (0461) 487301. *Telex:* 22653 Stawfl. *Contact:* T. Lauritzen, Harbour Master.

GLUCKSTADT: 53.45 N. 09.25 W.

PORT LIMITS: Line drawn between seaward ends of North and South moles.
DOCUMENTS:
Ship's Papers.
Cargo Papers.
Despatching Papers.
Crew Lists.
PILOTAGE: Pilot to be ordered via Agent.
MAX. SIZE: Vessels up to 4.5 m. draft can pass through lock to Inner Harbour.
BERTHING: Outer Harbour: 400 m. quayage, depth 6 m. at HW.
Inner Harbour: 300 m. quayage, depth 4.5 m. at HW.
Dimensions of lock between Outer and Inner Harbours are: Max. depth 5.76 m. HW, width 13.85 m., usable width 12.85 m.
CRANES: 1×14 ton jib crane, 1×18 ton mobile crane, 1×14 ton caterpillar crane, 1×28 ton jib crane (privately owned).
STEVEDORES: Working Hours: Monday to Thursday 0700 – 1200 hrs., 1230 – 1600 hrs. Friday 0700 – 1300 hrs. Overtime to be agreed.
DRYDOCKS: One slipway for inland waterway vessels up to 500 d.w.t.
AIRPORT: Hamburg.
AUTHORITY: Amt fur Land-und Wasswirtschaft Itzehoe, Breitenburger Strasse 25, 2210 Itzehoe. *Tel:* 04821-660 662138. *Telex:* 28226 Alwitzd. *Contact:* Harbour Master, Hafenamt Gluckstadt, 2208 Gluckstadt. *Tel:* 04124-2087.

HAMBURG: 53.33 N. 09.59 E. (including Altona, Harburg and Wilhelmsburg) (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
2 Provisions and Stores Lists including Fuel Oil.
3 Dangerous Cargo Lists.
Health Certificates (forms obtainable from Pilot).
General Cargo Declaration.
Ship's Register.
Oil Liability Certificate for more than 2,000 tons of oil.
DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg" and "General" before first German port.
PILOTAGE:
Pilotage-Anchorage River Elbe: See "General" before first German port.
Pilotage Port of Hamburg: Harbour Pilots board the ships close to the Seemannshoft Station. Harbour Pilots can be called by VHF, Channel 9, call "Hamburg Pilot", morse or sound signal "G" (2 long and 1 short) or flag "G". Pilotage is compulsory for vessels with dangerous cargo and over 1,000 g.r.t.
Exceptions: Pilotage is not compulsory for vessels with dangerous cargo up to 300 g.r.t. and vessels up to 5,000 g.r.t., if: (1) the Master has called the Port of Hamburg with his ship 6 times within the last 12 months, and (2) he speaks German fluently. Advisable to use Pilots in port.
ANCHORAGE: Available at several places between Elbe 1 and Hamburg. See "General" before first German port.
RESTRICTIONS: No restrictions imposed on night entry for any vessels.
MAX. SIZE: *Inward Bound:* Vessels allowed draft of max. 45 ft. in saltwater on arrival Elbe 1 Lightvessel, may enter only on rising tide under normal weather and tide conditions.
Container ships exceeding 37 ft. draft in salt water on arrival Elbe 1 Lightvessel may enter only on rising tide.
Outward Bound: Vessels up to 35 ft. draft in fresh water on departure from Hamburg may leave at any time.
Vessels exceeding 35 ft. draft in fresh water and up to 38 ft. on departure from Hamburg-Finkerwerder Port Pilot Station may leave 1 hour after low water until 2 hours before next following high water.
Container ships up to 38 ft. draft in fresh water on departure from Hamburg may leave at any time.
Container ships exceeding 38 ft. draft in fresh water and up to 41 ft. on departure from Hamburg-Finkerwerder port pilot station may leave 1 hour to 2 hours after low water, but required to anchor at Brunsbuttel N.E. anchorage depending on tide.
Inward Bound: Vessels exceeding 300 m. length or 45 m. breadth allowed draft to max. 41 ft. in salt water on arrival Elbe 1 Lightvessel, may enter only on rising tide.
Outward Bound: Vessels allowed draft to max. 35 ft. in fresh water on departure from Hamburg-Finkerwerder port pilot station may leave 1 hour after low water until 2 hours before next following high water. Keel clearance of 10% of draft required.

Vessels demanding the rising tide will proceed according to tidal conditions in order to reach Finkerwerder Pilot Station 1 – 1.5 hours before high water.

The following Harbours can be reached:

Harbour Name	*Max. draft subject to tide and berth (ft.)*	*At any time up to (ft.)*
Dradenau Hafen	36	33
Petroleum Hafen	27 – 31	24 – 28
Griesenwerder Hafen	30 – 31	27 – 28
Waltershofer Hafen	32 – 40	29 – 37
Kuhwerder Hafen	30 – 35	27 – 32
Obere Hafen	20 – 37	18 – 29
Rethe Neuhof HGL	40	37
Kattwyk Hafen	40	37
Neuhofer Hafen	39	36
Rethe Hansamatex	30 – 34	27 – 31
Rethe Kruse	37	34
Rethe Mackprang	37	34
Rethe Stroh	35	32
Schluisgrove Hafen	33	30
Hansaport	40	37
Harburg Seehafen 4	25 – 28	22 – 25
Harburg Seehafen 3	28	25
Harburg Seehafen 2	32 – 34	29 – 31
Harburg Seehafen 1	24 – 28	21 – 25
Kraftwerk Wedel	32 – 42.5	32
Blumensandhafen	40	37

The maximum draft is dependent on the prevailing Easterly or Westerly winds.

Also see "Shipmaster's Report".

REPORT: October 1984.

The following salt water drafts are permitted:

46 ft. 00 in. S.W., for vessels up to 300 m. LOA and/or 45 m. beam.
44 ft. 06 in. S.W., for vessels up to 315 m. LOA and/or 47 m. beam.
43 ft. 06 in. S.W., for vessels up to 330 m. LOA and/or 49 m. beam.
42 ft. 06 in. S.W., for vessels up to 345 m. LOA and/or 54 m. beam.
41 ft. 06 in. S.W., for vessels up to 360 m. LOA and/or 63 m. beam.

BULK HANDLING FACILITIES:

Grain	*Draft*	*Maximum Length*	*Number of elevators*	*Capacity total/hour*
Hamburg-Kuhwerder Hafen	36 ft.	656 ft.	4	900 tons
Hamburg-Rethe/Stroh	40 ft.	886 ft.	3	1,000 tons
Hamburg-Rethe/Kruse	42 ft.	820 ft.	3	900 tons
Hamburg-Rethe/Makprang	42 ft.	886 ft.	11	1,300 tons
Hamburg-Neuhof	43 ft.	902 ft.	4	1,300 tons

There are 11 floating elevators with a capacity of 350/450 t.p.h.

	Quay length (ft.)	*Max. safe draft (F.W.)*	*Max. height discharging gear above high water level (ft.)*
Coal and Minerals:			
Hamburg-Harburg II	1,720	40 ft.	66
Elbehafen Brunsbuttelkoog Gmbh	1,968	37 ft.	98
Coal:			
Hamburg-Strandhafen	560	36 ft. 6 in.	No restriction
Hamburg-Wedel	1,050	42 ft. 6 in.	No restriction
Fertilisers:			
Neuhof-Kalikai	1,215	40 ft.	60
Minerals:			
Hamburger-Stahlwerke	1,340	40 ft.	82
Hansaport	1,850	45 ft.	No restriction
Petcoke/Oxide:			
Hamburger Aluminium Werk Gmbh	600	36 ft.	No restrictions
Bauxite/Oxide:			
Aluminium Oxid Stad Gmbh (AOS)	1,080	43 ft.	62

ETA: Master's telegrams via Norddeich Radio, call sign DAN, are passed on to Agent 24 hours a day, week-ends and holidays inclusive. For this reason it is advisable that Masters communicate with Agent via Norddeich Radio.

In order to avoid delay and extra charges Masters should cable their ETA at least 12 hours prior to arrival at pilot station Elbe I to "Elbelotse Brunsbutelkoog" via Norddeich Radio, stating the following details:

1. Name of vessel.
2. Gross register tons.
3. Date (2 figures).
4. Time (4 figures).
5. Place where Pilot is required.
6. Place of destination.
7. Draft in metres (4 figures).

For example:

Eta Fjordaas	41079	12	1600	Elbeone	Hamburg	1214
(1)	(2)	(3)	(4)	(5)	(6)	(7)

1 hour before arrival at Elbe I lightvessel Masters are advised to contact the pilot cutter by VHF Channel 13 or 16.

BRIDGES: To be passed by vessels bound for basins South of Kohlbrand.

Bridge	*Situated*	*Max. breadth (ft.)*	*Height above normal H.T. (ft.)*	*Depth at normal H.T. (ft.)*
Kohlbrand Brucke (a high-bridge)	across the Kohlbrand near Neuhof	558	175.5	48
Kattwyk Brucke (a drawbridge)	across the Suder Elbe, before Harburg	328	168	43.6
Rethe Brucke (a drawbridge)	across the Rethe, near Reiherstieg	164	130.3	41

HEALTH: Master required complete health certificate when Pilot boards. Only vessels with infectious diseases are subject to detention.

RADIO: All messages to Agents, etc., through Norddeich Radio, call sign "DAN". Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships reporting stations are on permanent duty:

Cuxhaven: Call "Cuxhaven Elbe Port Radio" on VHF Channel 12, safety and calling Channel 16.

Brunsbuttel: Call "Brunsbuttel Elbe Port Radio" on VHF Channel 14, safety and calling Channel 16.

Stadersand: Call "Stadersand Elbe Port Radio" on VHF Channel 11, safety and calling Channel 16.

Hamburg: Call "Hamburg Elbe Port Radio" on VHF Channel 12, safety and calling Channel 16.

Hamburg Port Radio (Port Authority): VHF Channel 14 and 16.

RADAR: River Radar Service from Elbe 1 to Hamburg, see "General" before first German port.

Hamburg Radar Service "Hamburg Radar Radio", VHF Channels 3 + 19 at the lower end of Seemannshoeft, VHF Channels 80 + 7 at the Western and Southern part of harbour, VHF Channels 63 + 5 at upper part East of Koehlbrand.

TUGS: Normally join incoming vessels at Harbour pilot station at Finkerwerder. Vessels' lines usually used. If tugs lines required, an extra charge is made.

STEVEDORES: Ordered by Agents, no additional ETA's required.

Working hours

Monday to Friday	First shift 0650 to 1500 hrs. Second shift 1500 to 2310 hrs. Third shift 2310 to 0650 hrs.
Saturdays, Sundays and holidays	First shift 0700 to 1300 hrs. Second shift 1300 to 1900 hrs. Third shift 1900 to 0100 hrs. Fourth shift 0100 to 0700 hrs.

Work performed after 1500 hrs. Monday to Friday, on Saturdays after 1300 hrs., on Sundays and holidays is at overtime rates.

CONTAINER HANDLING FACILITIES:

	Burchardkai	*Tollerort Terminal (SHED 90/91)*	*Africa Terminal*	*Euro-Kai KG aA Griesenw. Damm*	*Unikai (SHED 73)*	*Unikai (SHED 75 and 77)*
Length (m.)	2,500	1,130	1,480	890	438	613
Number of Berths	8 (2 Ro/Ro)	7	7	3 – 5	3	3
Depth (m.)	10 – 14.5	10.5 – 12.5	11	11 – 13	12	
Open Storage Area (sq.m.)	1,350,000	200,000	80,000	470,000	38,600	
Shed Area (sq.m.)	143,000	30,000	45,000	23,000	26,800	
Cranes (Lifting capacities each)	4 bridges 53 tons 2 cranes 45 tons 5 bridges 43 tons 1 bridge 38 tons 2 cranes 25 tons 6 cranes 3 tons 2 mobile cranes 36 tons 2 mobile cranes 38 tons	3 bridges 48 tons 2 cargo-tainer twin-cranes up to 50 tons 6 cranes 15 tons 12 cranes 3 – 5 tons	1 bridge 55 tons 7 cranes 33 tons 2 cranes 10 tons 2 cranes 8 tons 2 cranes 5 tons 1 crane 3 tons 1 mobile crane 20 tons	4 bridges 45 – 53 tons 2 mobile cranes 15 tons 3 constackers	3 bridges 50 tons 8 cranes 3 tons 1 mobile crane 30 tons 2 floating cranes 25 – 30 tons 2 grabs 8 – 12 tons	3 cranes 50 tons
Other Facilities	3 railway transtainers 30 tons 2 transtainers 45 tons for bulk general 44 van-carriers 42 trucks 223 forklifts (1.5 – 18 tons) 302 junctions for cooltainers 3 weighing-machines 5 workshops for repairs computer (DEC 11/70 with online system)	11 van carriers 8 tugmasters 2 transtainers of 35 tons each 106 forklifts max. 15 tons	78 forklifts 18 trailers, 10 – 35 tons 3 tugmasters	8 van carriers 30 – 40 tons 70 forklifts max. 30 tons 25 trailers 2 container-top-spreader carriers	forklift trucks six 20 ft. – 40 ft. container-toplifters 40 tons	4 transtainers 44 tons

TANKERS:

	No. of berths	*Max. Draft (FW)*
Kohlfleethafen (Esso/B.P.)	2	43 ft.
Petroleumhafen (B.P.)	10	36 ft.
Kattwyk Hafen (Shell)	2	44 ft.
Kattwyk Hafen (Petronord)	1	44 ft.
Blumensandshafen	1	44 ft.
Neuhof (Hansamatex)	4	35–43 ft.
Neuhof (Schindler)	1	36 ft.
Harburg Seehafen 4 (Esso)	2	34 ft.
Tankerlager Moorburg	1	40 ft.
Stadersand (Lower Elbe)	1	35 ft.

Tanker cleaning and gas freeing facilities at Neuhof Hansamatex, Kattwyk Hafen (Shell) and some dolphin berths by boats.

DENSITY: Fresh water.

FRESH WATER: Available from shore at most berths. Also supplied by barge.

FUEL: All grades available from oil berths, or supplied by barge.

WATCHMEN: Can be hired for all purposes. Normally arranged by Agent.

OPENING/CLOSING HATCHES: Normally by crew with the assistance of stevedores; otherwise, according to charter party.

CUSTOMS ALLOWANCES: No restrictions in the freeport area on board a ship. While not on board the ship in the freeport area or outside the freeport during shore leave or temporary leaving the ship up to 3 days, each Crew member allowed 20 cigarettes, 5 cigars and 50 grams tobacco. These quantities change when paying off – up to 200 cigarettes or 50 cigars or 250 grams tobacco.

CONSULS:

Consuls:	Tel:		Tel:
Botswana	43 17 70	Mauritania	24 52 64
Iran	410 30 74	Monaco	3 49 61
Iceland	333 52 13	Morocco	367 00 31
Ivory Coast	33 09 09	Niger	77 11 41
Jamaica	3 00 11	Nigeria	410 30 15
Lebanon	44 98 28	Senegal	31 10 11
Luxemburg	82 69 94	Somalia	36 70 92
Madagascar	220 10 18	Tunisia	220 17 56
Malaysia	82 43 43	Uruguay	47 90 62
Malta	33 15 97	Western Samoa	237 31 208
Consul Generals:			
Argentina	34 20 51	Ireland	48 92 50
Austria	44 60 04	Italy	44 61 51
Bangladesh	3 60 81	Japan	44 13 96
Belgium	41 70 75	Korea	410 20 31
Bolivia	47 20 02	Liberia	24 45 74
Brazil	44 06 51	Malawi	24 71 73
Canada	35 18 05	Mali	45 50 34
Chile	45 75 85	Mexico	44 87 74
Colombia	45 28 12	Netherlands	32 44 11
Congo	220 11 41	Nicaragua	45 11 00
Costa Rica	279 65 36	Norway	34 34 55
Cyprus	410 39 11	Panama	34 02 18
Denmark	44 70 57	Paraguay	47 47 41
Dominican Rep.	47 40 84	Peru	47 67 45
Ecuador	44 31 35	Philippines	44 29 52
Egypt	410 10 31	Portugal	34 34 78
El Salvador	3 70 01	Sweden	44 84 53
Finland	35 15 11	Switzerland	44 06 46
France	44 14 07	Sierra Leone	280 24 28
Gabon	36 14 41	Spain	44 36 20
Ghana	32 25 81	Sri Lanka	36 71 40
Greece	44 07 72	South Africa	41 29 61
Great Britain	44 60 71	Thailand	220 63 56
Guatemala	250 54 34	U.S.S.R.	229 52 01
Haiti	46 40 11	U.S.A.	44 10 61
Honduras	24 27 21	Venezuala	410 12 41
India	33 80 36	Yugoslavia	44 45 04
Indonesia	22 10 99		

REPAIRS: All deck, hull and machinery repairs can be carried out by local shipyards at Hamburg. Underwater repairs and cleaning can be effected by divers with special equipment.

DRY DOCKS: *Blohm and Voss,* tel. 3061: 6 floating docks with lifting capacities up to 50,000 tons. Graving dock, capacity up to 320,000 d.w.t.

Howaldtswerke Deutsche Werft, tel. 7411: 9 floating docks, with lifting capacities up to 53,000 tons.

Norderweft, tel. 311001: 2 docks, for vessels up to 4,000 tons d.w.t. and slipway for vessels up to 60 m. length.

There are other slipyards providing floating docks with lifting capacities of up to 5,000 tons.

SURVEYORS: Cargo inspectors available, contact Agent.

Lloyd's Register, American Bureau, Bureau Veritas and Salvage Association are represented.

REPATRIATION: Crew changes and repatriation can be carried out without difficulty.

AIRPORT: Distance 15 km., served by Lufthansa with flights worldwide.

TIME: GMT plus 1 hour. There is summertime from 28th March (0300 hrs.) until 26th September (0300 hrs.) – GMT plus 2 hours (1982).

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day (May 1st); Ascension Day; Whit Monday; National Day (June 17th); Prayer Day; Christmas Day; Boxing Day. No work on New Year's Day, Easter Sunday, May 1st, Whit Sunday and Christmas Day.

POLICE/FIRE/AMBULANCE: Police 110; Fire 112; Ambulance 110; Port Medical Service 321021 (or call Hamburg Port Radio on VHF hannel 14).

TELEPHONES: Telephones can be placed onboard at all berths. No telephone connections for vessels at dolphins.

EMERGENCY CO-ORDINATION: Call Police (Tel: 110) or Hamburg Port Radio on VHF Channel 14.

BANKS: Deutsche Bank, Adolphsplatz 7, 2000 Hamburg 11. Tel: 040-3771. Telegraphic Address: Deutbank Hamburg. Telex: 212535.

Commerz-Bank AG, Ness 7, 2000 Hamburg 7. Tel: 040-361311. Telegraphic Address: Commerzbank Hamburg. Telex: 212391.

Dresdner Bank AG, Jungfernstieg 22, 2000 Hamburg 36. Tel: 040-3581. Telegraphic Address: Dreba Hamburg. Telex: 212098.

And others.

STORING: See "Prelims" page viii.

1. Vessels can be stored by barge or truck.
2. Vessels can store from barge during loading or discharging, except on tanker berths.
3. The truck can proceed alongside at the berths.
4. Fork lift trucks can be used for handling stores.
5. No Customs regulations in the Freeport area, outside the Freeport arranged by Agent.
6. Local riggers can be employed, arranged by Agent or ship chandler.

SHORE LEAVE: No restriction.

IDENTIFICATION CARDS: No shore passes issued. Seaman's Book or Passport is sufficient.

DEVELOPMENTS: Silo capacity for bulk cargo handled by pneumatic elevators is increased up to 500,000 tons at deep water. Capacity of further 500,000 tons is available. Maximum depth for bulk cargo vessels 40 ft. – 44 ft. See "Max. Size".

Dredging of the Lower Elbe to 13.5 m. at mean low tide completed.

Port Extension Area. An industrial port area of 4,600 ha. with access for large sea-going vessels up to 120,000 d.w.t. is under development.

Hansaport: The new ore/coal terminal at Sandauhafen (operational from 1977) has a capacity of 15 millions tons p.a. Length of the two berths: 560 m; depth of water: 15 m. (MLW). Vessels up to 270,000 d.w.t. (partially lightened) will be able to berth.

SHIPMASTER'S REPORT: 1978.

Recently vessel called at Hamburg to load a full load of steel beams for Iran under Time Charter. Originally charterers had asked me to calculate the full load with maximum S.W. draft of 38 ft. 00.875 in. with 10.5 in. F.W.A. and the weight came to more than 39,000 long tons. But later when we arrived at Hamburg, while checking with Port Authorities it was learnt that though vessels are allowed to come in with 42 ft. – 43 ft. drafts fresh water, no vessels excepting, at times fast container vessels are allowed draft more than 36 ft. fresh water. This is generally not known to many operators even in Hamburg.

AUTHORITY: Freie und Hansestadt Hamburg, Behorde fur Wirtschaft, Verkehr und Landwirtschaft.

Amt fur Hafen, Schiffahrt und Verkehr Hafendirektion – Oberhafenamt – Baumwall 7, 2000 Hamburg 11. *Tel:* 34 912 326 (office hours), and 740 3151 (day and night). *Telex:* 0213606 OHHH D and 02174999 OHHH D. *Cables:* Mercur Behoerde Hamburg. *Contact:* Captain E. Paschburg, Harbour Master.

AGENT: Wm. H. Muller & Co., (Deutschland) G.m.b.H., Monckebergstrasse 31, D-2000 Hamburg 1. Tel. (040) 33.54.76. Telegrams "Batavier". Telex 2162926.

HOLTENAU, Kiel Canal: 54.22 N. 10.09 E.

(See Plan Book)

For entrance from Baltic, refer to "Kiel".

For entrance from Elbe, refer to "Brunsbuttel".

LOCATION: Holtenau is a part of the town of Kiel, it is located on the Northern side of the entrance to the Kiel Canal.

BERTHING: The outer harbour of Kiel-Holtenau (Lat. 54° 22.2′ N. Long. 10° 09.2′ E.) in the N.E. part of the old lock fore port, with water depths of 3.5 to 4.5 m. and 280 m. long quay location serves vessels up to 3.5 m. draft, 85 m. long and 13 m. beam as a berthing point. At the quay not more than 3 ships with a total beam of 28 m. can lie next to each other. To the West of this, is a 125 m. long berthing pier, known as Kumobrucke, with 4.5 m. draft alongside for vessels up to 3 m. draft, 40 m. long and 8.5 m. beam. No more than 2 vessels may lie alongside each other.

Between this pier and the shore is a yacht harbour for pleasure craft.

The inner harbour, to the East of the Holtenau Road-bridge, can only be reached through the lock of the Kiel Canal. From the berths in the inner harbour, vessels may not enter the locks without a Pilot if they are obliged to take on a Pilot for the Kiel Canal.

The Gasworks quay, just to the West of the New Locks, has a length of approx. 210 m. and a nominal depth of 10.4 m. The quay has cranes with a lifting capacity up to 8.5 tons. Vessels up to 160 m. in length and up to 9.7 m. draft can tie up at the Gasworks quay. To the West of it, is an approx. 94 m. long quay with piers for Wik-Holtenau passenger ferries.

To the East of the Holtenau Road-bridge is an approx. 536 m. long quay belonging to Zerssen and Co. This location is used mainly for fitting out and bunkering of vessels. On the North side of the inner harbour ships with dimensions permissible for the Kiel Canal can tie up at the dolphins but only with special permission of the Kiel Canal Authority.

SERVICES: In Holtenau are a Service Station of the German Hydrographic Institute, a pilot station, a border police station, a water police station, Customs control, Port Doctor, Sailors' Central Control, Sailors' engagement office, and a sailors' hostel.

An office for marine charts and nautical publications is located at the lock; good facilities exist for the quick supply of ships' equipment, victuals and fuels. Repairs to machinery installations, radar and wireless apparatus, supply of spare parts, and also the exchange of crews can be arranged without long voyage delay virtually whilst a vessel is passing through the canal. Shipbrokers' services are available.

AUTHORITY: Wasser-und Schiffahrtsamt Kiel-Holtenau, Schleuseninsel 2, P.O.Box 8068, 2300 Kiel 17. *Tel:* (0431) 385-1. *Telex:* 02-92836.

ITZEHOE: 53.56 N. 09.33 E. (See Plan Book)

DOCUMENTS:
2 Bonded Stores Lists
2 Crew Manifests
2 Crew Lists

PILOTAGE: Pilot available. Pilot boards at the entrance to the River Stor.

RESTRICTIONS: Entering River Stor at HW only. Proceeding to Itzehoe during daylight only. Departure from Itzehoe about 1 hour prior to HW.

MAX. SIZE: Length: 60 m. due to bends in river. Beam 12 m. Airdraft 18.50 m. due to height of Storbridges. Draft 3.80 m.

RADIO/VHF: Elbe Weser Radio on VHF Channel 16.

RADAR: *Radar Chain River Elbe:*
From "Elbe 1" Light-vessel to entrance River Stor:
Elbe – Ansteuerung-Radar VHF Channel 19
Neuwerk – 1-Radar VHF Channel 18
Neuwerk – 2-Radar VHF Channel 5
Cuxhaven – Radar VHF Channel 21
Belum – Radar VHF Channel 3
Brunsbuttel – Radar VHF Channel 4
Freiburg – 1-Radar VHF Channel 18
Freiburg – 2-Radar VHF Channel 22

Also see "General" before first port.

BERTHING: Total length: 450 m.

Depth alongside: At HW 4m.; at LW 1.90 m. (tidal range 2.10 m.). Bottom consists of soft mud.

CRANES: 2×3.5 tons lifting capacity and about 13 m. outreach and 1×5 tons lifting capacity and 12.5 m. outreach are available.

BULK HANDLING FACILITIES: *Grain:*

Loading: By 1 elevator-pipe about 80 t.p.h. for heavy grain. By conveyor-belt about 40 – 50 t.p.h. for heavy grain.

Discharging: By 1 suction with elevator pipe about 35 – 40 t.p.h. heavy grain. By grab/conveyor-belt 50 – 60 t.p.h. heavy grain.

Grain silos of 35,000 tons capacity.

MEDICAL: Medical, hospital and dental facilities available.

DENSITY: Fresh water.

FRESH WATER: Available.

FUEL: All grades available by road tanker.

REPAIRS: Radio, radar, nautical equipment, engine, electrical and minor hull repairs possible.

SURVEYORS: Caleb Brett and SGS available from Hamburg.

Independent Marine Surveyors available at Brunsbuttel and Hamburg.

CUSTOMS ALLOWANCES: Customs allow each crew member 200 cigarettes and 1 bottle of spirits for consumption onboard.

OPENING/CLOSING HATCHES: Usually by crew.

REPATRIATION: Possible.

AIRPORT: Nearest airport at Hamburg.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: 1st January, Good Friday, Easter Monday, 1st May, Ascension Day, Whit Monday, 17th June, Prayers Day, 25th/26 December.

POLICE/AMBULANCE/FIRE: Police Tel: 110. Fire and Ambulance Tel: 112.

SERVICES: Provisions, stores, nautical publications and charts available.

AUTHORITY: Hafenbehorde, Hafenamt der Stadt Itzehoe, Postfach 308, D-2210 Itzehoe, West Germany.

AGENT: Sartori & Berger, P.O.Box 1140, 2212 Brunsbuttel. Tel: (04852) 8091. Cables: Sartoriberg Brunsbuttel. Telex: 028324.

KIEL: 54.19 N. 10.10 E. (See Plan Book)

DOCUMENTS:
Stores List.
Bills of Lading.
Manifest.
Crew List.
Health Declaration.
Derat. Certificate.
If loading/unloading cargo, following also required:
Ship's Stores List.
Crew Possessions List.
Cargo Manifest.
Bills of Lading.
Customs Declaration.

Local Agents will advise Master on board regarding these Clearance Documents.

PILOTAGE: For Kieler Forde, vessels over 1,000 g.r.t. and oil-, gas- and chemical tankers must take a Pilot.

Vessels proceeding in the approach area or through the Kiel Canal are obliged to take on a Pilot.

Vessels and push-type trains, as well as tug trains, having the greatest possible max. draft of 3.1 m. and belonging to traffic group 1 are exempted from the obligatory pilot service. Vessels which must take on a canal Pilot are those with a beam exceeding 15 m. or whose gross register tonnage is more than 2,500 tons. Pilot station, tel. 362858. ETA required in advance. Pilot boat can be found near Kiel Lighthouse and also off the entrance to Kiel Canal. Pilot boats are yellow with "Lotse" painted on both sides. Signal for Pilot is flag "G" over numeral pennant 1. Pilots for Kiel Harbour also available and recommended if port is not familiar. Also see "Shipmaster's Report".

ANCHORAGE: Safe anchorages at Holtenau-Reede and at Heikendorf-Reede for vessels up to 9.7 m. draft.

RESTRICTIONS: Non gas-free tankers must give advance notice of arrival and will require chemist's certificate before entering harbour area.

Speed limit 10 knots South of line Bulk/Ehrenmal Laboe. Also see "Shipmaster's Report".

MAX. SIZE: For Nordhafen and ships passing Canal, 235 m. length, 32.5 m. beam and 40 m. above the water level. For vessels up to 160 m. in length, the max. permitted draft is 9.5 m. In the case of vessels with length in excess of 160 m. and over 20 m. breadth, the max. permissible draft are shown in the following table (draft data in dm.).

Vessel Length (m.)	*Vessel's Breadth (m.)* 20	21	22	23	24	25	26	27	28	29	30	31	32	32.5
	Max. permissible draft (dm)													
160	95	95	95	95	95	95	95	95	94	93	92	91	89	89
163	95	95	95	95	95	95	95	94	93	92	91	90	89	88
166	95	95	95	95	95	95	95	94	93	92	91	90	89	88
169	95	95	95	95	95	95	94	93	92	90	89	88	87	86
172	95	95	95	95	95	94	93	92	91	90	88	87	86	85
175	95	95	95	95	95	94	93	91	90	89	88	86	85	84
178	95	95	95	95	94	93	92	90	89	88	87	85	84	83
181	95	95	95	94	93	92	91	99	88	87	86	85	83	83
184	95	95	95	93	92	91	90	89	87	86	85	84	83	82
187	95	95	94	93	91	90	89	88	86	85	84	83	82	81
190	95	94	93	92	91	89	88	87	86	84	83	82	81	80
193	95	93	92	91	90	89	87	86	85	84	83	81	80	79
196	94	93	91	90	89	88	86	85	84	83	82	80	79	78
199	93	91	90	89	88	87	85	84	83	82	81	79	78	78
202	92	91	90	89	87	86	85	84	82	81	80	79	77	77
205	91	90	89	88	86	85	84	83	82	80	79	78	77	76
208	90	89	88	87	85	84	83	82	81	80	78	77	76	75
210	90	89	87	86	85	84	83	81	80	79	77	76	75	74
214	89	88	86	85	84	83	82	80	79	78	76	75	74	74
217	88	87	85	84	83	82	80	79	78	77	75	74	74	73
220	87	86	84	83	82	81	80	78	77	76	75	74	73	73
223	86	85	84	83	81	80	79	77	76	75	74	73	72	72
226	85	84	83	82	80	79	78	77	75	74	74	73	72	71
229	84	83	82	81	79	78	77	76	74	74	73	72	71	71
232	84	83	81	80	79	77	76	75	74	73	72	72	71	70
235	83	81	80	79	78	76	75	74	73	73	72	71	70	70

Depth at harbour quays: Binnenhafen 10 m.; Scheerhafen 10.30 m. Bulk carrier of 35,000 d.w.t. draft 35 ft. has discharged at Scheerhafen.

HEALTH: If suspected infectious disease on board, inform harbour authorities by radio in advance.

RADIO: Kiel Radio, call sign DAO. Tel. 39011.

VHF: Kiel Port radio on continuous watch during office hours on Channel 16, working on Channel 11.

TUGS: If required tugs normally join vessel just off berth. Can be ordered by Kiel Radio or through Agents.

BERTHING: No particular restrictions except for vessels in distress, or carrying explosives or tankers not gas-free. In these cases special permission of Harbour Authorities required for berthing.

Binnenhafen: Length of quay 2,500 m. Depths up to 10 m. 4 cranes with capacity up to 24 tons, also 2 mobile cranes 12 tons and 45 tons.

There is a mobile Roll-on/Roll-off bridge, 18 m. wide. Max. axle pressure 70 tons and 3 berths with immovable ramps for Ro/Ro transhipment.

At Sartori-Kai there is a silo with a capacity of 16,000 tons, and at mouth of the River Schwentine another with capacity of 17,000 tons and discharge rate of 80 t.p.h.

Oslo-Kai: The terminal is for the exclusive use of passenger and car ferries. Depth of water 7.5 m.

Schweden-Kai: The terminal is for exclusive use of passenger and car ferries.

Scheerhafen: Length of quay 300 m. Depth 10.3 m. There are 2 modern high capacity cranes capable of lifting up to 10 tons. There is also a privately owned tanker unloading facility with storage capacity of about 70,000 cu. m. and facilities for receiving dirty ballast.

Nordhafen: Situated in the Kiel Canal. Length of quay 2,000 m. depth 11 m. Facilities available include a floating Roll-on/Roll-off bridge with permissible axle pressure of 60 tons, 6 cranes with capacities up to 25 tons, a 70,000 ton silo with drying capacity of 70 t.p.h. and 2 elevators each with capacity 125 t.p.h. 1 mobile crane 40 tons.

MEDICAL: Doctors, hospitals, ambulances available. Advance notice to Agents recommended if medical assistance required. Vessels coming from European ports need Derat Certificate. Vessels from other ports need in addition International Vaccination Certificates.

For all cases of poisoning needing special and urgent treatment telephone 597 3268, Medical University Clinic, Schittenhelmstrasse.

TANKERS: Unloading/Loading/Bunkering berths operated by private companies; slop discharge facilities available.

FRESH WATER: Available at all quays.

FUEL: All grades available. Preferable to order in advance through Agents.

FIRE PRECAUTIONS: Tankers should be prepared to leave port at any time. To be berthed with bow heading seaward. A valid Gas-free Certificate given by chemist in Kiel district is required before entering harbour area.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Normally by ship's crew. Can be arranged by stevedores if required.

CUSTOMS ALLOWANCES: 20 cigarettes per man per day. No alcohol.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	tel. 75079	Netherlands	tel. 3017235
Chile	tel. 30932	Norway	tel. 706600
Finland	tel. 3011601	Panama	tel. 51296
Liberia	tel. 63060	Sweden	tel. 3017/235

REPAIRS: All types of repairs possible.

DRY DOCKS: *Floating Docks.* No. 1, 1,500 tons; No. 2, 22,500 tons; No. 4, 6,000 tons; No. 9, 6,000 tons; No. 20, 1,700 tons.

Dry Docks: No. 5, 794 ft. long, 95 ft. wide; No. 6, 661 ft. long, 95 ft. wide; No. 7, 1,018 ft. long, 164 ft. wide; No. 8, 951 ft. long, 144 ft. wide. No. 8A, 1,395 ft. long, 292 ft. wide.

REPATRIATION: No restrictions. Can also be arranged in the locks of Kiel Canal by local Agents. Valid passports required.

AIRPORT: At Kiel, local flights to Hamburg. Nearest international airport at Hamburg, about 100 km. away.

TIME: GMT plus 1 hour. Summertime plus 2 hours.

HOLIDAYS: New Year's Day, Good Friday, Easter (2 days), Ascension Day, Whitsun (2 days), 17th June, Atonement Day, Christmas (2 days). Work can be arranged on above holidays except Good Friday and Christmas Eve.

POLICE/FIRE/AMBULANCE: Police, tel. 110, alternatively 51171; Ambulance, tel. 44112, alternatively 61036; Fire, tel. 112.

TELEPHONES: Installed on wharves and Oslo quay (ferries to Scandinavia). Public phones near quays.

SERVICES: All services available.

SHORE LEAVE: Allowed.

GENERAL: *Garbage/Sewage Removal:* Container for discharging of garbage must be taken. Barges for discharging of sewage/slops and bilge water are availabe.

SHIPMASTER'S REPORT: 1980.

"KIEL PILOTS" can be contacted on VHF Channel 16 and Channel 14, 2 hours before arriving at Kiel Lighthouse, for a Pilot for Kiel Harbour.

For vessels intending to transit the canal, send a message at least 3 hours in advance to "FORDE LOTSE" – KIEL by radio giving ETA, draft, g.r.t. and destination. Any request to arrange a Pilot at the other end of the canal may also be included in the message.

The maximum air draft allowed in the canal is 40 m. (from water line to highest point of the ship).

AUTHORITY: Hafenkapitan, Hafenamt der Stadt Kiel and Hafen und Verkehrsbetriebe der Stadt Kiel, Bollhornkai I, P.O. Box 2367, D 2300 Kiel 1. *Tel:* 901 1073. *Telex:* 292511 HVBKI D.

Wasser-und Schiffahrtsamt Kiel-Holtenau, P.O.Box 8068, 2300 Kiel 17. *Tel:* (0431) 385-1. *Telex:* 02-92836.

KIEL CANAL: (See Plan Book)

For entrance from Baltic, refer to "Kiel".
For entrance from Elbe, refer to "Brunsbuttel".

RADIO: Advise ETA at Elbe I Lightvessel (or Kiel Lighthouse). Confirm ETA 12 hours before arrival at Pilot Station.

VHF: Approaching from the Baltic Sea, Kiel Radio listens on Channel 16 VHF and will notify the Kiel Pilot.

GENERAL:

Additional information required prior to Kiel Canal transit: As a result of security regulations which became effective in 1978, the following regulations issued by the competent Authorities must be complied with when transiting the Kiel Canal.

Vessels which are potentially dangerous, which include pushing and towing units, carrying material listed in the special material list in bulk (see "Wilhelmshaven"), or after discharging mineral oil or petroleum products with a flash point below 35°C and still not gasfree or inert, including Reactor vessels, must report as follows:

1. Coming from the North Sea or from a port within the River Elbe District.

24 hours before entering the River Elbe, in writing, at the latest after clearing the last port:

(a) to the Wasser-und Schiffahrtsamt (Cuxhaven),
Deichstrasse, 2190 Cuxhaven. Telex: 232154.

And additionally when transiting the Kiel Canal:

(b) to the Wasser-und Schiffahrtsamt Kiel-Holtenau,
Aussenstelle Kiel-Holtenau, (KA),
Schleuseninsel, 2300 Kiel 17. Telex: 292836.

With the following information:

1. Name and Call Sign of vessel.
2. Nationality of vessel.
3. Overall length and draft of vessel.
4. Port of departure and destination port.
5. Details and quantity of cargo with particulars of the stated dangerous cargo according to the special material list.
6. If chemicals are carried, a declaration that the vessel is in possession of a certificate as required by the IMO code for Chemical Tankers as "New Ship".
7. A declaration of any known defect in the vessel or its cargo.
8. Name of the Owners of the vessel.

2. Coming from the Baltic Sea

24 hours before entering Kiel Bay, in writing, at the latest after clearing the last port:

To the Wasser-und Schiffahrtsamt Kiel-Holtenau,
Aussenstelle, Kiel-Holtenau (KA)
Schleuseninsel, 2300 Kiel 17 – Telex 292836

giving the same information as required in 1. above for vessels entering the River Elbe.

3. Coming from a port within the Kiel Canal Range

Reports as per 1. and 2. have to be given.

To conform with the pilotage regulations for Kiel Bay and the River Elbe, the above mentioned vessels which are potentially dangerous are obliged to engage the services of a Pilot.

Further instructions are in force for above mentioned vessels when navigating within the River Elbe and Kiel Bay, as well as when transiting the Kiel Canal, or passing certain points. Pilots will advise the Masters of vessels of the relevant regulations and assist.

Potentially dangerous sea-going vessels of up to 300 g.r.t. and inland water-craft will be exempted from the requirement to take a Pilot if:

(a) they are fitted with an operational radar set ready for use in addition to VHF radio with Channels 12, 14, 15 and 22.

(b) the Master on board has made at least 6 voyages within the last 12 months through the pilotage district.

AUTHORITY: Wasser-und Schiffahrtsamt Kiel-Holtenau, Schleuse, 2300 Kiel 17. *Tel:* (0431) 385-1. *Telex:* 02-92836.

LUBECK (including Travemunde): 53.52 N. 10.40 E. (See Plan Book)

DOCUMENTS:

2 Crew Lists.
1 General Declaration for Arrival and Departure.
1 Health Declaration.
2 Cargo Manifests.
2 Stores Lists.
1 Ship's Particulars form.
Crew Manifest.
Bills of Lading.
Customs Declaration.
Derat Certificate.

PILOTAGE: Compulsory for vessels over 300 g.r.t. Pilot station situated at Travemunde, near foot of Nordermole. Pilots board vessels in anchorage area. International signals used by Pilots and by vessels requiring a Pilot. Contact by VHF Channel 13 and 20.

RESTRICTIONS: Channel from Lubeck "A" buoy to Stadthafen is well lit and navigable by vessels fitted with radar in all weathers.

Depths: from "A" buoy to Travemunde (Nordermole) 10.5 m.; from Nordermole to Siechenbucht, 10 m.; channel to NWK power station, 9.5 m.; channel to Stadthafen 9.5 m. The river Trave narrows from 130 m. at seaward end to 90 m. at Stadthafen.

MAX. SIZE: Dependent on berth depth and approaches. Vessels up to 15,000 d.w.t. can reach Stadthafen. Also see "Restrictions".

HEALTH: Radio pratique possible. Pilot will ask Master to complete Health Declaration.

RADIO: Lubeck Radio, VHF Channel 27. Harbour Radio service used by Pilots, tugs, and other vessels.

TUGS: At Stadhafen vessels over 1,600 B.R.T. require 1 tug and vessels over 2,500 B.R.T. require 2 tugs.

BERTHING:

Travemunde: Passenger ferry harbour. North side river berths I and II, 7.5 m. depth; Kaiserbrucke, 100 m. length, 9.0 m. depth; Ostpreussen, 190 m. length, 7.0 m. depth; Priwall (South side), 180 m. length, 5 m. depth. 7 berths for Roll-on/Roll-off and passenger traffic each 140 m. – 220 m. length, 7 m. – 9.5 m. depth.

1 berth with railway connection. (Berth No. 6.)

Industriehafen: Depth alongside, 7.8 m.

N.W.K. Power Station: Depth alongside, 9.5 m.

Stadthafen: 27 km. from sea. Total length of quays 7.6 km. The harbour depth is 6 m. – 9.5 m.

Elbe Lubeck Canal: Navigable by barges up to 1,200 tons.

CRANES: 1 – 200 ton floating crane, 1 – 40 ton, 1 – 25 ton, 1 – 12 ton, also 3 ton cranes.

BRIDGE: Herrenbrucke is 56 m. wide and 22 m. above water level. Can be opened for vessels requiring higher clearance.

MEDICAL: All facilities available. Hospital near docks at Travemunde, and at Lubeck.

TANKERS: Two berths, length 150 m. Max. draft 8 m. and 8.5 m.

FRESH WATER: Available by barge at any location.

FUEL: Gas oil by barge, fuel at berth at Scandinavia Kaj in Travemunde.

CONSULS: Denmark, Norway, Austria, Sweden, Iceland and Finland.

REPAIRS: Several shipyards available for deck and engine repairs.

DRY DOCKS: Floating docks for vessels up to 13,500 tons (45,000 tonnes d.w.t.).

SURVEYORS: Addresses of inspectors and classification society representatives can be obtained from the Chamber of Commerce and Industry at Breite Strasse 6 – 8, Lubeck.

Germanischer Lloyd, Schwartauer Allee 84a.

OPENING/CLOSING HATCHES: By crew.

REPATRIATION: All facilities available.

AIRPORT: Hamburg, 1.5 hours by bus or train.

TIME: GMT plus 1 hour.

HOLIDAYS: 1st January, Good Friday, Easter Sunday, Easter Monday, 1st May, Ascension Day, Whit Sunday, Whit Monday, 17th June, Atonement Day, Christmas Day, Boxing Day.

POLICE: Lubeck River Police, tel. 3 34 40; Travemunde River Police, tel. 74141.

BANKS: *Lubeck:* Commerzbank, Breite Strasse 52/54. Dresdner Bank, Breite Strasse 83/87. Handelsbank in Lubeck, Kohlmarkt 7 – 15. Deutsche Bank, Sandstrasse 11 – 15.

Lubeck-Travemunde: Commerzbank, Vorderreihe 50. Deutsche Bank, Vorderreihe 35. Handelsbank in Lubeck, Vorderreihe 62.

STORING: See "Prelims", page viii.

1. Vessels can be provisioned by lighters and lorries at all berths.
2. No limitation of time for provisioning.
3. Lorries can go right alongside vessels, provided the loading and unloading operations permit.
4. At virtually all berths (with exception of the Wood Pier at Lubeck-Travemunde) fork lifts can be used.
5. Customs procedure as in all German ports.
6. There is always the possibility of obtaining riggers.

TELEPHONES: Ship telephone connections at ro/ro berths.

SHORE LEAVE: Allowed.

AUTHORITY: Hafen und Seemannsamt, Hafenkapitan, (Port Captain), An der Untertrave 107, Lubeck. *Tel:* 0451 – 12 – 23600. *Telex:* 026893 Hllueb D.

NORDENHAM: 53.29 N. 08.29 E. (See also Bremen and Bremerhaven) (See Plan Book)

DOCUMENTS:

Cargo Papers & Ship's Certificate.	2 Personal Manifests.
1 Stores List.	Derat Certificate.
3 Crew Lists.	

DEEP SEA PILOTAGE: See "General" before first German port.

PILOTAGE: Pilot boards off the Weser Light Vessel. Docking Pilot will board off Bremerhaven.

ANCHORAGE: Sea anchorage off Weser Lightvessel or the Hoheweg Light. Max. draft 30 ft. River anchorage for vessels with a draft of 20 ft. off Blexen, 1 mile above Bremerhaven.

RESTRICTIONS: No restriction on night entry except vessels with a length exceeding 260 m. and a draft of 38 ft. Vessels with a draft exceeding 32 ft. will be controlled by tidal conditions. Controlling depth in channel 11 m. MLW. In the port 9 m. to 12 m. at MLW (Midgard Pier).

MAX. SIZE: (The max. drafts are estimated).

Midgard Pier: (a) Bulk cargo berth, total length 1,068 ft. max. beam 120 ft., max. draft 42 ft. 08 in. (FW).

(b) Oil Berth No. 1 (combined with Southern part of 'a'), max. length 850 ft., beam 120 ft., draft 42 ft. 08 in.

(c) Oil Berth No. 2, max. draft 42 ft. 08 in. (FW).

(d) Granary, quay length 188 m., draft 38 ft. – 40 ft. (FW) weather permitting.

Guanowerk, max. length 550 ft., max. draft 30 ft. (FW) (approx.).
Preussag, max. length 550 ft., draft 27 ft.
Midgard (ex-Asbestos Wharf): Max. length 820 ft. (250 m.) up to a draft of 38 ft. 06 in. (FW).

Also see "Tankers".

HEALTH: Pratique granted immediately on arrival in port by Health Official.

RADIO: Norddeich Radio Dan or Elbe Weser Radio (VHF Channel 16).

RADAR: No port radar available. Radar for entrance see "Bremerhaven".

TUGS: Ample available from Bremerhaven. Tug's lines used.

BERTHING: The following industrial works and companies within the port area of Nordenham possess a berth each for sea-going vessels which serve only their private supplies and requirements. These berths are situated North of Midgard Pier.

1. Norddeutsche Seekabelwerke Aktiengesekkschaft, (production of cables).
2. Felten & Guilleaume Schsltanlagen GmbH (production of electric appliances, motors, etc.).
3. Preussag Boliden. Length of quay 230 m., depth of water 32 ft. 10 in. (approx.) 2 cranes of 10 and 5 tons. Capacity 200 and 90 t.p.h. respectively. Storage capacity, 50,000 tons (coal or ore). 10,000 tons (metal blocks), 5,000 cu.m. (sulphuric acid).
4. Guano-Werke Aktiengesellschaft (s.a.) (phosphates and fertilisers). Length of quay 165 m. 1 gantry crane and 1 mechanical unloader for bulk cargo.
5. Erdolwerke Frisia Aktiengesellschaft (tanks for the storage of mineral oils).
6. Vereinigte Flugtechnische Werke GmbH (production of airplanes).
7. Midgard (ex-Asbestos).
8. Weser Tanklager Gesellschaft mbH (storage of mineral oils, bunker oil station of BP).
   Connections: Gas oil 2×8 in., fuel 1×8 in.
9. Titangesellschaft mbH (production of titandioxide).

Midgard (ex-Asbestos): Length 210 m. Extra mooring dolphins North and South of wharf 50 m. from each end of wharf. Depth alongside 12.5 m. at MLW. 2 mechanical unloaders for discharge of minerals into conveyor system of factory.

SPECIAL CARGO HANDLING FACILITIES:

Midgard Pier:

No. 1. Bulk cargo berth for discharging and loading. Length of quay 710 m. Depth 12 m. Five bridges with a lifting capacity of 22 tons each. Max. outreach 26 m. Capacity: 30,000 tons ore per 24 hours. 15,000 tons of coal per 24 hours. Connections for mineral oil and molasses.

No. 2. Oil berth. Length of quay 170 m. Depth 9.5 m. Three pipelines 10 in. to 12 in. diameter for fuel oil, diesel oil and gas oil. No shore steam or facilities for dirty ballast available.

No. 3. Granary. Length of quay 188 m. Depth 12 m. Two elevators with a total discharge capacity of 700 t.p.h. Loading rate to vessels 300 t.p.h. Storage capacity of 46,000 tons.

STEVEDORES: 24 hours' notice required. Notice required Friday morning for week-end work.

1st shift: 0600 – 1400 hrs.
2nd shift: 1400 – 2200 hrs.
3rd shift: 2200 – 0600 hrs. (overtime).

On Saturdays: (grain and other bulk cargoes).

1st shift: 0600 – 1400 hrs. (overtime).
2nd shift: 1400 – 2200 hrs. (overtime).
3rd shift: 2200 – 0600 hrs. (overtime).

MEDICAL: Hospital available; advance notice only required if urgent cases.

TANKERS: Diameter of lines 8 in.

Shell Berth: Max. size 34 ft.

Weser Tankerlager: Max. size 200 m., length 32 ft. draft at LW.

T-shaped mooring lines attached to pontoons fore and aft, middle lines are attached to the shore. Length of lines 100 m.

Also see "Special Cargo Handling Facilities".

DENSITY: Average density of water 1005 – 1012.

FRESH WATER: Fresh water available at a rate of 15 t.p.h. per hose price DM 5.40 per ton.

FUEL: All grades available; delivery by barge; 2 days' notice required.

FIRE PRECAUTIONS: Special regulations for vessels loading or discharging explosives.

CONSULS: See "Bremerhaven".

REPAIRS: Minor repairs can be carried out. Ample facilities for major repairs at Bremerhaven.

DRY DOCKS/SURVEYORS: See "Bremerhaven" or "Bremen".

WATCHMEN: Not necessary but available if required by Master.

OPENING/CLOSING HATCHES: Normally by crew but if by stevedores extra charges will apply.

CUSTOMS ALLOWANCES: Each crew member 200 cigarettes or 30 cigars or 30 grammes of tobacco and 1 bottle of spirits for a running period of 3 days.

CARGO GEAR: In most cases loading and discharging is effected with shore gear. Special equipment can be ordered from Bremerhaven.

REPATRIATION: Possible by air via Bremen or Hamburg.

AIRPORT: Bremen, distance 70 km., 1 hour by car. Hamburg, 200 km., 3 hours by car.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 2052; Fire 112.

TELEPHONES: Available on request.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Not issued.

REGULATIONS: Port regulations for the Midgard Pier including special regulations for handling of explosives.

DELAYS: None except waiting for high tide (see "Restrictions").

AUTHORITY: Asbestos Corporation, GmbH., P.O. Box 58, 2890 Nordenham 21. *Tel:* 04731/3630. *Telex:* 238312 Acgnh. *Cables:* Asbestos.

"Midgard" DSAG, Midgardstr. 50, Nordenham. *Tel:* 4731/811. *Telex:* 238317. *Cables:* Midgard Nordenham. *Contact:* Mr. Werner, General Manager. Mr. Gocht, Pier Inspector.

PAPENBURG: 53.06 N. 07.23 E. (See Plan Book)

LOCATION: Papenburg is 20 nautical miles above Emden on the Ems seaway at km. 0.0 and on the inland waterway Dortmund – Ems canal at km. 225.82.

PILOTAGE: The Sea Pilot is taken on board from the pilot cutter at Westerems and the district and Port Pilot at the Emden Pilot Station. All vessels over 1,000 g.r.t. (sea-going), and all oil, gas and chemical tankers require a Pilot.

RESTRICTIONS: *Lock operating times:* From 1st March to 30th September, Monday to Saturday, from 0600 to 2000 hrs.

From 1st October to 28th February, Monday to Saturday, from 0700 to 1800 hrs.

Lockings outside operating times, and on Sundays and Holidays must be promptly reported, at the latest half an hour prior to normal lock operating times, by telephone 04961/2640 or via VHF Channel 13.

Also see "Bridges".

MAX. SIZE: Vessels with a max. draft of 4.8 m. can reach the port during MWST. Vessels with a greater draft must discharge at Leerort.

VHF: Communications with the bridges and lock-keeper are on Channel 13.

BERTHING: The port is connected to the Ems by a lock 26 m. wide and 152 m. long. The port has a foreport (300 m. long and 80 m. wide), the sluice canal (1,900 m. long and 65 – 90 m. wide), the Southern Industrial Port (500 m. long and 100 m. wide), the Dever Port (450 m. long and 80 m. wide), the railway dock (300 m. long and 50 m. wide), the Werft Port 200 m. long and 100 m. wide), the Turm Canal (300 m. long and 35 m. – 60 m. wide, which can be reached through a 17.6 m. wide railway bridge), and the yacht marina. Depths vary from 3.5 m. to 6 m.

Of the 3,500 m. of the Spundwand Quay, 2,300 m. are devoted to cargo handling.1,200 m. of this is provided with railway lines. The total length of the port railway facility is 6,700 m. 40,000 cu.m. of open free storage space can be used for bulk cargo accommodation. Further open and covered storage areas, together with silo facilities, for approx. 11,000 tonnes cargo are available through companies operating within the port.

CRANES: In the port area there are 2 heavy lift cranes up to 120 tons (a total 230 ton capacity), 1 heavy lift crane 140 tons, 1 heavy lift crane 50 tons, 7 jib cranes 2.5 – 10 tons, 1 gantry crane 6 tons with a 52 m. long traverse, 1 crane 6.5 tons, 1 crane 5 tons, 2 cranes 1 ton, 2 mobile cranes 11 tons and 40 tons, 1 floating crane 6 tons, 1 mobile conveyor belt 100 t.p.h., 2 grain handlers 30 t.p.h. and 40 t.p.h.

BRIDGES: At Ems km15.02 the Leerort road rotary bridge has to be passed; West opening 29 m. and East opening 31 m. passage width. Opening times from sunrise to sunset and after prior report by telephone 0491/2992 and VHF Channel 13.

At Ems km6.9, the railway folding bridge has to be passed (Weener). The passage width is 24 m. Opening times are as per the current traffic plan. The bridge is manned daily, also Sundays and holidays, from 0400 to 2200 hrs. Telephone 04951/2065 and VHF Channel 13.

Both bridges have a passage height when closed of 3.50 m. at MWST.

FRESH WATER: Available.

FUEL: Available.

REPAIRS: Vessels up to 30,000 tons, length 250 m. and width 35 m. can be repaired at the local shipyards.

DRY DOCKS: A drydock of 90 m. length and 16 m. width is available.

POLICE/AMBULANCE/FIRE: Water Police Tel: 04961/4144 or 04961/2634 (After hours).

DEVELOPMENTS: The port installations are currently being extended by the Industry Port – North which will be approximately 1,000 m. long and 100 m. wide.

AUTHORITY: Hafenamt Papenburg-Ems, Post Box 14 40, 2990 Papenburg 1, West Germany. *Tel:* 04961 821. *Contact:* W. Hermanns (A.O.H. *Tel:* 04961-3169).

Town Port Authority, Sea Lock, 2990 Papenburg 1, West Germany. *Tel:* 04961/2640.

STADERSAND: 53.37 N. 09.32 E.

Oil Terminal in Elbe River operated by Hamburger Mineralolwerke.

DOCUMENTS:
3 Crew Lists.
3 Personal Effects Lists.
3 Stores Lists.
Cargo Documents.
Ship's Register.

DEEP SEA PILOTAGE: See "General" before first German port.

PILOTAGE: See "General" before first German Port.

RESTRICTIONS: Draft calculated by adding 31 ft. to height of tide and allowing 3 ft. keel clearance.

MAX. SIZE: Max. LOA 230 m. Max. beam 32 m. Max. draft (M.H.W.) 11.50 m. Max. size 60,000 d.w.t.

HEALTH: Health Certificate brought on board by River Pilot for Master to complete.

RADIO: All messages to Agents, etc., through Norddeich Radio, call sign DAN. Closer to port Elbe-Weser Radio can be contacted by VHF Channel 16.

Ships' reporting station is on permanent duty at Stadersand, VHF Channel 11, safety and calling Channel 16.

RADAR: River Radar Service from Elbe 1 to Hamburg see "General" before first German Port, but no special Port Radar Service for Stadersand. Radar Service in the area of Stadersand available, can be contacted through VHF Channel 21, "Hetlingen Radar Radio".

TUGS: Available. Meets vessel off the berth.

BERTHING: 1 tanker berth at T-head jetty. 1 pipe-line × 300 mm. diameter, 2 hoses × 200 mm. diameter, permissible pressure 12 bars. Max. discharge rate 1,200 t.p.h.

DENSITY: Brackish.

FRESH WATER: Only obtainable by barge from Hamburg. Minimum quantity supplied is 200 tons.

FUEL: Only obtainable by barge.

CUSTOMS ALLOWANCES: 100 cigarettes and 1 bottle wine/spirits per man.

CONSULS AND GENERAL INFORMATION: Refer to "Hamburg".

AUTHORITY: *Operator:* Nordwestdeutsche Kraftwerke Aktiengesellschaft, Tanklager Stadersand, P.O.Box 1780, 2160 Stade. *Tel:* 04141/15–1 and 15–460. *Telex:* 218140. *Cables:* Fiatlux Stade.

AGENT: See "Hamburg".

WILHELMSHAVEN: 53.31 N. 08.10 E. **(See Plan Book)**

DOCUMENTS: Tanker check list with statement of vessel's deficiencies to be provided and delivered to the Sea Pilot before commencing pilotage.

Oil Port	2 Crew Lists. 1 Health Declaration (Form supplied by Pilot). Derat Exemption Certificate. Passports/Seamen's Books. Vaccination List.
Harbour Docks	2 Crew Lists. 1 Health Declaration. 2 Cargo Manifests. 2 Stores Lists.

DEEP SEA PILOTAGE: See "General" before first German port.

PILOTAGE: Jade pilot boats are 2-masted and have yellow funnels with black tops; the black hull has white inscription "Lotse" on both sides. By day flag "1" below flag "G" of international code is flown; by night, signal is to be given by morse signals, in bad weather by whistle or morse signals.

Pilot vessel stationed at mouth of Weser. To call Pilot for Jade, in addition to International Code signals the signal "J" is hoisted by day or flashed by Morse lamp at night. The same signal can be made on whistle in bad visibility. When pilot boat operations are impracticable due to bad weather, pilot vessels will move inward to a position between Weser lightbuoys 15/Mellum 1 and 17.

Inward bound vessels with draft exceeding 16 m. or with gross tonnage exceeding 60,000 g.r.t. may take the Harbour Pilot only seaward of Jade lightbuoys 28 and 31.

ETA required 12 hours prior arrival at pilot station at lightvessel "Weser" (unmanned) and 24 hours prior arrival pilot station at lightvessel "Deutsche Bucht". Pilot vessel transmits and receives on VHF Channel 16.

Pilots for *Outward* bound vessels are to be ordered as follows:

1. At least 2 hours, prior to ETD.
2. For departures between 1900 hrs. and 0800 hrs. the Pilot has to be ordered by 1700 hrs.

Pilotage is compulsory as follows:

1. On navigation stretches inward of the respective outer position of pilot vessel, Wilhelmshaven Roads excluded for:
   (a) oil, gas and chemical tankers
   (b) other vessels exceeding 1,000 g.r.t.
2. On navigation stretches between pilot station at "Deutsche Bucht" Lightvessel and the respective outer position of pilot vessel for:
   (a) oil, gas and chemical tankers exceeding 10,000 g.r.t.
   (b) other seagoing vessels exceeding 60,000 g.r.t.
3. On navigation stretches between the position of the pilot vessel shifted up the "Weser" due to bad weather and lightvessel "Weser" for:
   (a) Vessels exceeding 20,000 g.r.t.; oil, gas and chemical tankers excluded.
   (b) Car carriers and Ro-Ro vessels exceeding 10,000 g.r.t.
4. Federal Government vessels and Federal navy ships are exempted.

Vessels exempted from compulsory pilotage have to order shore based radar assistance at visibilities less than 3,000 m. from the radio station of the Wilhelmshaven Radar and Information Centre (Revierzentrale) when navigating the stretches between lightvessel "Weser" (unmanned) and Wilhelmshaven. This station is to be called "Jade-Radar" on VHF Channels 16/20.

Vessels confined to the dredged channel due to their draft and/or exceeding 60,000 g.r.t. take 2 Sea Pilots at "Deutsche Bucht" Lightvessel.

Helicopter pilot service is available for vessels above 50,000 g.r.t. at "Deutsche Bucht" Lightvessel.

ANCHORAGE:

1. Deep water Roads for large tankers South of lightvessel "Deutsche Bucht".
2. Roads for large and deep-draft vessels S.E. of lightvessel "Weser" (unmanned).
3. Tanker Road Schillig for tankers not exceeding 250,000 d.w.t. and/or 13.5 m. draft.
4. Schillig Roads for all vessels – tankers exempted – not exceeding 13.5 m. draft.
5. Quarantine anchorage for vessels under quarantine.
6. Explosives anchorage for vessels carrying explosives or ammunition.
7. Tanker Roads North, S.E. of Lightbuoy 40 for tankers which are loaded or waiting for loading berth. A safety distance of at least 300 m. between vessels at anchor has to be maintained. Maximum draft 13.5 m.
8. Tanker Roads South, South of Lightbuoy 48/A1/Reede 2 for tankers being unloaded and not yet de-gassed and not exceeding 280 m. length. Maximum draft 13.5 m. When anchored vessels are turning with the tide, measures like tug assistance against covering the Arngast light sector or drifting to the West side of the fairway to diminish time and circle of turning.
9. Wilhelmshaven Roads, usually for smaller vessels waiting for sea lock passage.
10. Road for small vessels up to 20 m. in length.
11. Actual sounding plans are to be observed because changes of depths are possible.

Transhipment of goods according to IMDG Code Nos. 1 (explosives), 2 (gases) and 3 (inflammable liquids) is prohibited on the Jade including Roads.

Request for bunkering permit is to be addressed to "Wasser- und Schiffahrtsamt Wilhelmshaven" via radio station "Jade-Revier-Radio" on Channel 16/20 VHF.

RESTRICTIONS: No restrictions on night entry. Vessels draft exceeding 55 ft., will be controlled by tidal conditions.

Also see "General".

Traffic Safety Measures for Large Vessels:

Vessels with draft exceeding 17 m. will be guided by police vessels showing quick flashing blue light when navigating the Precautionary Area between lightbuoys DB 18/Jade and DB 19/Jade. All other vessels are requested to give way to these vessels restricted by their draft.

During the navigation of vessels exceeding 200 m. in length in the Precautionary Area, the radio station "Deutsche Bucht-Revier-Radio" transmits navigational warnings every 15 minutes on VHF Channel 80 in German and English language. Warnings will be announced on VHF Channel 16.

The following is a translation from German.

Quote

83/4995 Federal Republic of Germany. German Bight. Coast radio station and reporting system established. Information reports and safety reports will be broadcast.

1. Coast radio station established:

Position: Lat. 54° 11.0′ N., Long. 7° 53.0′ E. (approx.), Helgoland Lighttower.

Remarks: The coast radio station Deutsche Bucht Revier Radio has been established at Helgoland. The station provides the reporting system in the approaches of rivers Jade, Weser and Elbe as well as broadcasting information and safety reports on Channel 80 and 16, H24.

2. Reporting system:

Vessels over 150 m. in length and all tankers carrying gas, chemicals, oil and oil products in accordance with §30 Abs. 1 of the Seeschiffahrtstraben-Ordnung (traffic regulations for waterways navigable by seagoing vessels in the Federal Republic of Germany) which navigate Eastbound in the traffic separation scheme "Feuerschiff Deutsche Bucht, Westansteuerung" are urgently requested when passing lightbuoy TW9 in position Lat. 54° 08.0′ N., Long. 7° 08.7′ E. (approx.) to give notice to the coast radio station Deutsche Bucht Revier Radio and to report as follows:

(a) Vessel's name.
(b) Call Sign.
(c) Length.
(d) Draft.
(e) Gross Tonnage.
(f) Last Port of Call.
(g) Port of Destination.
(h) Position.
(i) Speed.
(j) ETA at lightbuoy DB 18/Jade and lightvessel "Weser" or lightvessel "Elbe 1".

Vessels which already have given notice in accordance with §58 Abs. 2 and 3 of the Seeschiffahrtstraben-Ordnung (24-hours'-notice) have to report (d), (e), (f) and (g) only when there are any changes.

Vessels which are participating in the reporting system and break their passage before passing lightbuoy DB 18/Jade should inform again the coast radio station Deutsche Bucht Revier Radio when passage is continued.

3. Information reports:

Information is broadcast by the coast radio station Deutsche Bucht Revier Radio every h+00 and h+30 in German and English on VHF Channel 80. Reporting range for special events covers the area contained within the arc of a circle radius 26 nautical miles centred on Helgoland light tower.

4. Safety reports:

Passing of "Precautionary Area" in N.S./S.N. direction by vessels of 200 m. in length and more and by gas- and chemical tankers in accordance with §30 Abs. 1 Seeschiffahrtstraben-Ordnung, as well as by other vessels in exceptional cases is broadcast as a warning to all other vessels. This safety report is broadcast by coast radio station Deutsche Bucht Revier Radio every 15 minutes after information report. The safety reports are announced on VHF Channel 16 and broadcast on VHF Channel 80 in German and English.

Remarks: The former vessel reporting system in the area "Precautionary Area/Traffic separation scheme Terschelling – Deutsche" is cancelled.

(WSA Wilhelmshaven, 21.12.1983 [100])

Unquote.

Remarks: Radio station named under No. 1 with all activities is operated from the Wilhelmshaven radar and information centre.

Shipping Regulations and Restrictions:

1. Vessels, including those being towed or pushed, which exceed a length of 50 m., have to report in advance before navigating the Jade to radio station "Jade-Revier-Radio" on VHF Channel 20. Report must contain the name of vessel, position and destination. This is not applicable for vessels obliged to report according to No. 2.

2. Vessels, including those being towed or pushed, carrying dangerous goods in accordance with the Annex No. 1 (list of substances – see Annex No. 1 before "Authority") to the traffic regulations for waterways navigable by seagoing vessels in the Federal Republic of Germany or being not de-gassed or not inerted and vessels with nuclear propulsion must report 24 hours before navigating the Jade, however not later than departure from last port of call, to "Wasser- und Schiffahrtsamt" Wilhelmshaven.

Report must contain following statements:
(a) Name and call sign of vessel.
(b) ETA at lightbuoy "TW 9" or "3" (Jade).
(c) Nationality.
(d) Length and draft.
(e) Last port of call and destination.
(f) Type, quantity and IMDG Code No. (see Annex III).
(g) When carrying chemicals or liquefied gases, indication whether a valid certificate according to IMO Code for chemical tankers or gas tankers is existing on board.
(h) Declaration about deficiencies of ship or cargo.
(i) Ship's owner or authorised Agent.

This report must be given in written form to Wasser- und Schiffahrtsamt Wilhelmshaven.

Above specified vessels must observe the following conditions when navigating the Jade:

(a) Navigation on the Jade, including leaving a berth or anchorage, is not allowed at visibilities less than 1,000 m. This applies to vessels up to 2,000 d.w.t. at visibilities less than 500 m., if they carry or have carried oil or oil products with a flash point of more than 35°C after the last tank cleaning or degassing, providing that they are equipped with a gyro compass or a tested magnetic compass.

(b) Continuous radio contact with radio station "Jade-Revier-Radio" on VHF Channel 16/20 must be made safe, also when communicating with other stations.

(c) A faultless working radar device has to be in operation and must be under permanent observation by an experienced person at reduced visibilities.

(d) Use of automatic steering gear is not allowed.

(e) Tank covers must be kept closed.

3. All vessels specified above under Nos. 1 and 2 have to report to radio station "Jade-Revier-Radio" on VHF Channel 20 when passing the following positions:
(a) Lightbuoy 3.
(b) Lighthouse Minsener Oog – breakwater A (Buhne A).
(c) Lightbuoy 35/Hooksiel 1.

Reports must contain ship's name, position, speed and passing time.

Lock Restrictions:

The sea lock opening times for No. 4 dock are announced in daily maritime bulletins. Coastal radio station "Wilhelmshaven Lock Radio" working on Channel 13 VHF during official service hours.

Dimensions of lock: 390 m. long, 57 m. wide and depth of 11.47 m. MLW. However, only smaller vessels use dock harbour as bollards for mooring larger ships not yet available.

See "Annex No. 2" before "Authority".

MAX. SIZE: Max. size fixed for navigating the Jade:
(a) Draft, entering: 20 m. (65 ft. 07 in.)
leaving 19 m. (62 ft. 04 in.)
(b) Length: 350 m.
(c) Beam: 52 m.

Vessel exceeding these dimensions must apply for a permit of navigation to "Wasser- und Schiffahrtsamt Wilhelmshaven".

See "Annex No. 3" before "Authority".

Keel clearance of at least 8.5% of draft required. Also see "Tankers".

RADAR: *Jade Radar, Wilhelmshaven Radar and Information Centre (Revierzentrale Wilhelmshaven):*

Jade Radar Chain extends from lightbuoy DB 19/Jade to lightbuoy 56. Radar information and shore based radar assistance is available to all ships. The Wilhelmshaven Radar and Information Centre is continuously in service and to be called "Jade-Radar" concerning radar services or "Jade-Revier-Radio" in all other cases on VHF Channels 16/20. This area station performs radar control and observations and is executing traffic regulations and all other traffic affairs on the navigable waters of the Jade. Information about traffic movements, dredging activities, disturbances, tidal and weather conditions will be given on request and is transmitted as situation report every even hour (H + 15 m.) in German language on VHF Channel 20. The orders issued by this station are to be observed.

RADIO: Norddeich Radio, call sign DAN. Elbe-Weser Radio can be contacted by VHF Channel 16.

Radio advice prior to arrival: Advise Agent 7 days before arrival:
1. Ship's name and call sign, ETA in GMT.
2. Nationality.
3. Draft forward and aft.
4. Cargo on board and slop information.
*5. Number and diameter of cargo manifold connections.
6. Discharge rate per hour.
7. Loading rate per hour.
8. Quantity of ballast on board.
9. Ballasting rate per hour.
*10. Leaks in the hull or overboard valves, if any.
*11. Inert or non inert gas report.
*12. Request for crude wash.
*13. Request for repairs.
14. Valid oil liability certificate.
15. Heli-landing/winching area.
16. VHF Channel 20 in good working order.

*Details must be with Agent at least 48 hours before arrival.

ETA to be confirmed 72 hours before arrival, and whenever ETA changed by more than 30 minutes.

Notify Agents of tug requirements.

HEALTH: Radio pratique possible. Sea Pilot will hand Health Declaration to Master. If one of the questions is answered "Yes", Pilot will advise Port Health Officer. A valid derat. exemption must be produced.

TUGS: Compulsory. Tankers normally require at least 4 tugs of minimum 1,500 h.p. for berthing. Tugs meet tankers at anchorage near Buoy "43". Only tug lines are used, charge inclusive. Tugs join vessels at Buoy "35" when proceeding to Mobil Oil Terminal.

VLCC's meet the tugs at Buoy "33" (Mobil Oil) or at Buoy "39", when they are bound for NWO.

BERTHING: *Wilhelmshaven Dock Harbour:*

The following dock harbours can be reached:

Harbour Name	*Max. draft*		*Quay length*
Handelshafen	16 ft. 05 in.		600 m.
Grosser Hafen	20 ft. – 26 ft.	Bontekai about	500 m.
Verbindungshafen	18 ft.	Sudwestkai about	200 m.
Nordhafen			
Hannoverkai	38 ft. (11.6 m.)		312 m.
Luneburgkai	26 ft. (7.9 m.)		205 m.
Lay-up Berth (Dolphins)	41 ft. (12.5 m.)		350 m.
Ausrustungshaven			
Schleusenhaupt			
Ehem. 3 Einfahrt (Lay-up berth)	19 ft.		140 m.

SPECIAL CARGO HANDLING FACILITIES: There is no Container or Roll-on/Roll-off-traffic at Wilhelmshaven.

BULK HANDLING FACILITIES: Figdor is the operator of cargo handling in the Handelshafen with its connection to railway, road and canal-system.

Equipment: Two modern gantry cranes of 8 – 15 tons and efficient mobile cranes. Storage facilities for bulk cargo to an amount of 70,000 tons, 1 silo with a capacity of 720 cu.m. and 2,000 sq.m. storage sheds for bulk and general cargo.

Also see "Tankers" – Niedersachsenbrucke.

CRANES: Bontekai and Sudwestkai without shore cranes, but mobile cranes available. One floating crane for heavy lifts up to 100 tons is also available.

TANKERS: *Nord-West Oelleitung Terminal:* Position Lat. 53° 33′ N., Long. 08° 08′ E. Distance from lightvessel "Weser", 24 miles. Type of Berth, Finger Pier "T" head. Density 1025. Current velocity, 3-4 knots. Mean tidal range, 11 ft. 09 in. Nature of bottom, sand and mud. Vessels may berth and unberth day or night. Vessels exceeding 55 ft. draft enter only on rising tide. Fresh water available, Diesel and Fuel "C" available. When discharging, full capacity of ship's pumps required. Normal residues and sediments are acceptable without any water. Shore gangway available. Vessels berth port or starboard side alongside.

No limit on length or beam. Max. draft, Berth No. 1 and No. 2 – 61 ft. Berth No. 3 – 51 ft. and Berth No. 4 – 66 ft.

Berth Number	*Grades Handled*	*Pipe-lines No/Dia.* (in.)	*Length* (ft.)	*Load – Discharge Rate* (t.p.h.)	*Maximum Pressure* (lbs.)	*Hoses* (in.)
No. 1	Crude Oil	1×30	4920	8000	220	4×12
No. 2	Crude Oil	1×30	4595	8000	220	4×12
No. 3	Crude Oil	1×30	4920	6000	220	3×12
No. 4	Crude Oil	1×40	5500	12800	375	4×16
No. 1	Fuel Oil	1×24	5920	250/500	110	1× 6
No. 2	Fuel Oil	1×24	5575	250/500	110	1× 6
No. 3	Fuel Oil	1×24	5905	250/300	110	2×12
No. 4	Fuel Oil	—	—	500/700	110	various

Use of berths is only allowed for transhipment of infiammable liquids of subclasses 3.1, 3.2 and 3.3 with low (< −18°C), medium (−18° to +22.9°C) and high (+23° to +61°C) flash point.

Mobil Oil Terminal: Berth Nos. 1 and 1A. Position Lat. 53° 37′ 28″ N., Long. 08° 08′ 30″ E. Distance from lightvessel "Weser", 20 miles. Type of berth, Sea Island. Density, 1025. Current Velocity, 3-4 knots. Mean tidal range 10 ft. 6 in. Nature of bottom, sand and mud. Least depth of water from port entrance to berth, 18.5 m. (60 ft. 09 in.) at MLW. Vessels may berth or unberth day or night. Vessels exceeding 55 ft. draft enter only on rising tide. Fresh water available by barge. Fuel "C" and Diesel available. Dirty ballast facilities available, capacity 29,000 cu.m. seawater, 17,900 cu.m. fresh/brackish water, discharge rate, 2,400 cu.m./hr. Vessels berth port or starboard side alongside. All ballast, including clean ballast, to be discharged ashore.

Shore gangway available. An under keel clearance of 1 m. is required at Berth No. 1A at MLW.

Berth No. 1. Max. LOA, 1,150 ft. Min. length, 800 ft. Max. draft, 65 ft. Depth at MLW 68 ft. 11 in.

Berth No. 1A. Max. LOA, 650 ft. Min. length, 500 ft. Max. draft at HW, 48 ft. 2 in. Depth at MLW, 41 ft.

Berth Number	*Grades Handled*	*Pipe-lines No/Dia.* (in.)	*Length* (m.)	*Load – Discharge Rate* (cu.m./h.)	*Hoses* (in.)
No. 1	Crude Oil	1×44	5000	17500	4×16
	Heavy Fuel Oil	1×30	3000	3200	2×16
No. 1A	Heavy Fuel Oil	1×30	3000	3200	3×12
	Light Fuel Oil	1×20	3000	3200	2×12
	Gasoline	1×12	3000	950	1×10

Use of Island Jetty (berth 1/1A) is only allowed for transhipment of inflammable liquids of subclasses 3.1 and 3.3 with low (less than −18°C) and high (+23° to +61°C) flash point.

Mobil Oil Terminal: (Also see "Shipmaster's Report"). Berth Nos. 2 and 3. Position Lat. 53° 37′ 12″ N., Long. 08° 07′ 36″ E. Distance from Weser large sea buoy, 20 miles. Type of berth, "L"-head jetty. Density, 1025. Current velocity, 3 – 4 knots. Mean tidal range, 10 ft. 6 in. Nature of bottom, sand and mud. Least depth of water from port entrance to berth 7.5 m. (24 ft. 7 in.) at MLW. Vessels may berth or unberth day or night. Vessels up to 21 ft. 4 in. may berth and unberth any time. Fresh water by barge. Diesel and Fuel "C" available. Dirty ballast facilities same as Berth Nos. 1 and 1A. Max. deballasting rates, Berth No. 2, 2×10 in. 1,800 cu.m./hr. Berth No. 3, 2×8 in. 500 cu.m./hr.

All ballast, including clean ballast, to be discharged ashore. Min. distance ship's side to manifold, 1.5 m. If reducer required to match shore flanges, at least 1.8 m. Shore gangway available. A keel clearance of 1 m. is required at MLW until silting developments after dredging can be firmly assessed. Vessels berth port or starboard side alongside.

Max. LOA, 400 ft., min. LOA, 263 ft. will be reduced to 180 ft. Beam, no limit. Max. draft, 31 ft. 8 in. (at HW). Depth of water at MLW 24 ft. 7 in.

Berth Number	*Grades Handled*	*Pipe-lines No/Dia* (in.)	*Length* (m.)	*Load – Discharge Rate* (cu.m./h.)	*Hoses* (in.)
No. 2	Heavy Fuel Oil	1×20	2000	2600	2×10
	Light Heating Oil	1×20	2000	2400	2×10
No. 3	Heavy Fuel Oil	1×16	2000	475	1× 8
	Light Heating Oil	1×20	2000	550	1× 8
	Gasoil	1×10	2000	550	1× 8
	Gasoline	1×12/1×10	2000	950/550	2×10/8
	LPG	1×8	2000	400	1× 6

Use of berth No. 2 is only allowed for transhipment of inflammable liquids of class 3 with flash point < −18° to +61°C.

Use of berth No. 3 is only allowed for transhipment gases (class 2) and inflammable liquids of subsclasses 3.1, 3.2 and 3.3 —flash point see above under Nord-West Oelleitung Terminal).

Voslapper Groden Jetty (ICI-Jetty):

Position: Lat. 53° 37′ 59″ N., Long. 08° 05′ 46″ E.

Traffic Bridge of 1,346 m. length ends in L-shaped cargo handling pier of 675 m. length. Traffic bridge is fitted with two tracks of 5.5 m. and 3.5 m. width, all cables and pipes are led lengthwise upon the bridge to the pier connections.

Berth No. 1 at the seaward end is provided for 1 tanker of 20,000 d.w.t. – 60,000 d.w.t., but not yet in operation. Berths No. 2 and 3 (inner side) are provided for tankers of 400 d.w.t. – 7,000 d.w.t., limited by a maximum depth of 8.5 m. at MLW.

Use of berth No. 2 is only allowed for transhipment of Ethylene (class 2, UN No. 1038).

Use of berth No. 3 is only allowed for transhipment of Vinyl Chloride Monomer (class 2, UN No. 1068) and its residue LE and HE or Ethylene Dichloride (subclass 3.2, UN No. 1184).

Berths may only be used by gas and chemical tankers which conform with IMO recommendations and which have a valid certificate to that effect as follows:

1. Resolution A 328 (IX) Code for the Construction and Equipment of Ships carrying liquefied Gases in Bulk,
2. Resolution A 329 (IX) Recommendations concerning Ships not covered by the Resolution 328 (IX),
3. Resolution A 212 (VII) Code for the Construction and Equipment of Ships carrying dangerous chemicals in Bulk.

All stores, fresh water exempted, must be taken onboard from seaward side. These activities are prohibited during cargo handling or taking ballast.

Also see under "General".

Harbour areas (NWO, Mobil Oil and ICI) may be exceptionally navigated by auxiliary and supply vessels if this is absolutely necessary for the transhipment or ship operations according to Port Regulations, providing these vessels comply with the safety requirements. All other vessels are excluded.

Niedersachsenbrucke: (Lower Saxony Bridge) The "Niedersachsen Bridge" which belongs to the state of Lower Saxony is equipped with a fuel oil discharge unit for supplying a large nearby plant. Small ships can be discharged by a portal crane of 15–18 tons. The land-side berth of the loading pontoon running parallel to the Ufer is about 12 m. depth, so that loaded tankers up to a size of 35,000 d.w.t. can come alongside this pontoon. Furthermore, on this pontoon a loading installation for caustic soda is available. A bulk discharger unit with a hourly capacity of 1,200 tons serves coal to a large nearby plant. Vessels of 80,000 d.w.t. and a draft up to 15 m. can be accommodated. Vessels up to a maximum deadweight tonnage (approx. 135,000 tons) must apply for a special permit to be issued by Port Authority.

Drinking water in adequate quantities is available at all shipment pontoons in the Jade.

Bunker and diesel oil is available in adequate quantities from Nord-West Ollleitung and Mobil Oil A.G. At the "Niedersachsen Bridge" it is necessary to order a bunker vessel in advance.

Also see "Developments".

DENSITY: Brackish water.
BRIDGES: 3 swing bridges affect entering dock harbour; these are opened to coincide with lock opening times.
STEVEDORES: 24 hours' notice required. Bulk cargo discharge rate about 150 t.p.h.
MEDICAL: All medical facilities available.
FRESH WATER: Available by pipe-line.
FUEL: All grades available. 2 days' notice required.
REPAIRS: Jadewerft Wilhelmshaven Dockyard (Handelshafen) for small repairs and a floating dock with a capacity of 1,100 tons.
GANGWAY/DECK WATCHMEN: Shore watchman recommended to attend telephone.
OPENING/CLOSING HATCHES: Usually by ship's crew.
CUSTOMS ALLOWANCES: Oil port is Customs free port. In dock harbour each man allowed 5 cigars or 40 cigarettes, or 50 grams tobacco and 50 pieces of cigarette paper; 1 unopened bottle wine/spirits.
IDENTIFICATION CARDS: Required in oil port.
CONSULS: Denmark Tel: 41061. Sweden Tel: 26266. Finland Tel: 8021.
REPAIRS: Facilities available for all deck and engine repairs. Repairs affecting main engine or steering gear intended to be carried out at the berths or at Wilhelmshaven Anchorage, must be authorised by NWO, Mobil Oil A.G. and Port Authorities, when sufficient security tugs will be ordered to stand by. No additional charge for tugs if ordered before arrival. Permission for repairs depends on prevailing weather conditions and should be requested before arrival.
DRY DOCKS: Floating docks for vessels of 8,000 and 1,000 tons respectively. 1 small dry dock 50 m. by 10 m. by 2.8 m.
REPATRIATION: All facilities available.
AIRPORT: Local airport at Wilhelmshaven-Mariensiel, available for helicopters and small aircrafts. Nearest international airport at Bremen, distance 102 km.
TIME: GMT plus 1 hour.
HOLIDAYS: 1st January; Good Friday; Easter Sunday; Easter Monday; 1st May; Ascension Day; Whit Sunday; Whit Monday; 17th June; Atonement Day; Christmas Day; Boxing Day. Work may be arranged on Easter Monday, Ascension Day, Whit Monday and Boxing Day.

Not observed in oil ports.

POLICE/AMBULANCE/FIRE:
Police: Tel: 52400.
NWO Oil Port: Fire/Ambulance Tel: 621.
Mobil Oil AG.: Fire/Ambulance Tel: 551328.
ICI: Jetty Operator Tel: 882 460.
Fire/Ambulance Tel: 882 310.
Niedersachsen Bridge: Fire/Ambulance Tel: 50308 or 26121.
Dock Harbour: Tel: 112 or 26121.

TELEPHONES: May be placed on board all tankers in oil port. At some locations in dock harbour, installation by Post Office, who require 2 days' notice.
SERVICES: All services available including tank-cleaning, diving, compass adjusting, etc.
SHORE LEAVE: Allowed.
GENERAL: *Federal Republic of Germany. Jade. Measures to direct traffic during the passage of LPG:* On the River Jade from the sea to Wilhelmshaven all vessels are to observe, with effect from February 19th, 1981, the following regulations during the passage of LPG and chemical tankers.

1. *Prohibition to navigate the River Jade from the sea to Wilhelmshaven.*
Vessels with a capacity of more than 7,000 d.w.t. carrying substances in accordance with No. 1 (Gases) of the version currently in force of the Annex (List of substances) – see "Annex No. 1 before "Authority" – to the traffic regulations for waterways navigable by seagoing vessels in the Federal Republic of Germany, ethylene dichloride or vinyl chloride monomer residues may not navigate the River Jade from the sea to Wilhelmshaven.
2. *Obligation to report to the shipping authorities in the case of vessels carrying sodium hydroxide.*
In the case of vessels carrying sodium hydroxide to and from the ICI plant, the regulations concerning the obligation to report to the shipping authorities in accordance with §58 para. 2, 3 and 4 of the traffic regulations or waterways navigable by seagoing vessels in the Federal Republic of Germany are in force.
3. *Passing Distances:*

3.1. Overtaking or passing vessels not confined to the channel must observe a passing distance of at least 150 m. from vessels with a capacity of less than 7,000 d.w.t. carrying substances as per No. 1 above.
3.2. Vessels with a capacity of less than 7,000 d.w.t. carrying substances as per No. 1 above must observe a minimum distance of 150 m. when passing vessels confined to the channel and vessels riding at anchor and when overtaking all vessels.
3.3. In cases of doubt, the appropriate instructions for the observance of these regulations are to be obtained in good time from the VHF radio station of the Wilhelmshaven Radar and Information Service.

4. *Prohibition to encounter and to overtake*

4.1. Vessels with a capacity of less than 7,000 d.w.t. carrying substances as per No. 1 above may encounter or overtake neither each other nor all other vessels with a capacity of more than 3,000 d.w.t. on the following stretches of the Jade:
Between Buoy Nos. 1/2 and 7/4,
17/14 and 23/20,
33a/32 and 41/40.
4.2. Vessels confined to the channel have right of way on the above-mentioned stretches.
4.3. The observance of these directions will be controlled and, if necessary, regulated by the above-mentioned VHF radio station, whose instructions are to be followed.

5. Vessels with a capacity of less than 7,000 d.w.t. carrying substances as per No. 1 above are to report in good time to the above-mentioned VHF radio station via radiotelephone on Channel 18 (shortly Channel 20) before reaching the stretches named in 4.1 above.

Particular atttention is drawn to the observance of the obligation to the shipping authorities prescribed as per Section A, Part II, No. 3 of the additional regulations to the traffic regulations for waterways navigable by seagoing vessels in the Federal Republic of Germany of the Wasser- und Schiffahrtsdirektion Nordwest in the version of 8th February, 1984.

Regulations Within the Entrance to the Sea Lock – New Outer Harbour – (Neuer Vorhafen) and the Sea Lock in Wilhelmshaven (extract of rules):

1. Areas within the Outer Harbour and the Sea Lock belong to the safety zone of Naval Base.
2. Port Authority within these areas is the Naval Port Captain.
3. Traffic direction inward and outward Sea Locks is performed by Wasser- und Schiffahrtsamt Officials.
4. Use of port facilities may be restricted or refused in consequence of certain reasons if deemed necessary by Port Authorities.
5. Vessels with dangerous cargoes have to obtain special authorisation issued by Port Authorities and civil permission before entering.
6. Vessels exceeding 150 g.r.t. may be obliged to take a Harbour Pilot.
7. Vessels are obliged to give notice to the radio station "Wilhelmshaven-Lock" on VHF Channels 16/13 before entering. Naval radio station is operating on VHF Channels 16/11.
8. Lock signals and preliminary lock signals are to be observed. This applies also to signals given by Naval Authorities.
9. Military safety zones must be passed at reduced speed but without delays. Bow anchors must be kept ready to drop.
10. Sailing vessels may not hamper other vessels.
11. Only in cases of distress is it allowed to go alongside within the Outer Harbour.
12. Photographing, fishing, bathing, diving, use of pyrotechnics and operation of position-finding devices and ship's wireless station – exempt for navigational use – is not allowed.
13. Pollution of water within harbour areas is prohibited.

DEVELOPMENTS: *Liquid Gas Berth:* To the North of Mobil Oil A.G. The existing ICI Terminal (see "Tankers") is planned to be extended for transhipment of L.N.G.

"Lower Saxony Bridge" (Niedersachsen Bridge): The "Niedersachsen Bridge" is to be extended. It is planned to provide facilities for the loading and discharge of large vessels up to 250,000 d.w.t. with dry and liquid bulk cargoes.

Dredging: Maintenance dredging in progress.

ANNEX NO. 1:
(List of dangerous substances which have to be reported) Annex III to the traffic regulations for waterways navigable by seagoing vessels in the Federal Republic of Germany:

1. *Liquefied Gases*	*IMDG Code No.*
Acetaldehyde	1089
Ammonia, anhydrous	1005
Anhydrous-hydrogen-chloride	1050*
Anhydrous-hydrogen-fluoride	1052*
Butadiene	1010
Butane	1011
Butane/propane mixtures	1011 or 1978
Butylenes	1012
Chlorine	1017
Dimethylamine	1032
Ethyl chloride	1037
Ethane	1961
Ethylamine (monoethylamine)	1036
Ethylene	1038
Ethylene oxide	1040
Methane (LNG) 2043	1972
Methyl acethylene propadiene mixture	1060
Methyl bromide	1062
Methyl chloride	1063
Propane	1978
Propylene	1077
Sulphur dioxide	1079
Vinyl chloride monomer	1086

2. *Chemicals*	*UN-No.*
Acetic acid	1842 or 2789
Acetic anhydride	1715
Acetone cyanohydrin	1541
Acetonitrile	1648
Acrylic acid	2218
Acrylonitrile	1093
Adiponitrile	2205
Allyl alcohol	1098
Allyl chloride	1100
Aniline	1547
Benzene	1114
Benzyl chloride	1738
Isobutyl acrylate	2527
n-Butyl acrylate	2348
n-Butyl ether	1149
Buthyl methacrylate	2227
Isobutyraldehyde	2045
n-Buthyraldehyde	1129
Camphor oil	1130
Carbolic oil	—
Carbon disulphide	1131
Carbon tetrachloride	1846
2-Chlorethanol (ethylene chlorohydin)	1135*
Chlorobenzene	1134
Chloroform	1888
Chlorohydrines, crude	—
Chloroprene	1991
Chlorosulfonic acid	1754
Coal tar naphtha	2553 or 1138
Cresols (mixed isomers)	2076
Crotonaldehyde	1143
Cyclohexanone	1915
Cyclohexylamine	2357
Dibutylamine	2248
1.1-Dichloroethane	2362
Ethylene dichloride	1184
Dichloroethylether	1916
1.1-Dichloropropane	*
1.2-Dichloropropane	1279
1.3-Dichloropropane	*
Diethylamine	1154
Dimethylamine (⩽40% Aq)	1160
Dimethyl ethanolamine	2051
Dimethylformamide	2265
1.4-Dioxane	1165
Diisopropylamine	1158
Epichlorohydrin	2023
Ethyl acrylate	1917
Ethyl ether	1155
Ethyl methacrylate	2277
Ethylene cyanohydrin	—
Ethylene diamine	1604
Ethylene dibromide	1605
Formaldehyde 37% aqueous solution	1198
Formic acid	1779
Furfural	1199
Isoprene	1218
Isopropylamine	1221
Mesityl oxide	1229
Mesityloxid	1919
Methylacrylate	1230*
Methyl isocyanate	2480*
Methyl methacrylat	1247
& Methylstyrene	2303
Monoethylamine solutions (72% or/less)	2270
Mononitrobenzene	1662
Morpholine	2054
Motor fuel anti-knock compounds	1649
Nitric acid, 70% and over	2031
2-Nitropropane	2608
o- and *p*-Nitrotoluene	1664
Oleum	1831
Paraldehyde	1264
Pentacholorethane	1669
Phenol	2312
Phenylisocyanate	2487*
Phosphorusoxychloride	1810*
Phosphorustrichloride	1809*
Phosphorus (yellow or white)	2447
Propionic acid	1848
Isopropylamine	1221
n-Propylamine	1277
Propylene oxide	1280
Prydine	1282
Styrene monomer	2055
Tetrachloroethane	1702
Tetrahydrofuran	2056
Toluene diisocyanate	2078
Triethylamine	1296
n- and *iso*-Valeraldehyde	2058
Vinyl acetate	1301
Vinyl ethyl ether	1167*
Vinylidene chloride	1303
Vinyl toluene	2618

3. *Mineral (crude) oil and mineral oil products*

4. *Remark:*

4.1 Substances not covered by IMDG Code are marked above with*.
In force since 1st March, 1983.

ANNEX NO. 2: *Data of Wilhelmshaven Sea Lock:*
Operation hours of Wilhelmshaven Sea Lock:

Monday-Friday	0600 – 1830 hrs.
Saturdays	0630 – 1600 hrs.
Sundays and holidays	0800 – 1600 hrs.

Beyond these hours the lock will be operated when service is ordered at least 2 hours before end of normal working hours (call Lock Master, VHF Channel 16/13 or Tel: 30 40 84/26 311) as follows:

Monday-Friday		0500 – 0600 hrs.
	and	1830 – 2200 hrs.
Saturdays		0500 – 0630 hrs.
	and	1600 – 2200 hrs.
Sundays and holidays		0600 – 0800 hrs.
	and	1600 – 2000 hrs.

Dimensions of Wilhelmshaven Sea Lock:

Length between gates	390 m.
Length usable	360 m.
Breadth between lock-basin walls	60 m.
Breadth between fenders	57 m.
Depth (above mean high tide)	14.75 m.

(Vessels in ballast up to 250,000 d.w.t. have passed without difficulties.)

In case of doubt, German text of lock regulations is authoritative.

ANNEX NO. 3

Standard Form

Wasser- und Schiffahrtsamt
Wilhelmshaven Wilhelmshaven, the......... of 1984
3-31-NVi /84

Official Permit of Navigation
No. /84

The Master of the tanker "..........................." has been granted official permission to navigate the Jade shipping channel on the grounds of the application made by the Agency................................, dated the .... of .... 1984 and in accordance with the stipulations contained in §57 subparagraph 1, No. 1 of the National Maritime Shipping Routes regulations (Seeschiffahrtsstrassenordnung) of the 3.5.1971 (Federal Gazette Bulletin 1, page 641), amended by the fifth ordinance for the amendment of the national maritime Shipping Routes Regulation dated the 16.2.1983 (Federal Gazette Bulletin 1, page 87). The transfer of this permit is forbidden unless authorised by the Waterway Authority (Wasser- und Schiffahrtsamt) Wilhelmshaven.

The validity of this permit expires on the .... of .... 1984 and applies to a single passage of the shipping channel in both directions. Such permission does not authorise the holder to encroach on or to prejudice the rights of third parties or to encroach on or to take into use objects being in possession of others neither does it supercede any necessary administrative measures in connection with any other lawful regulation or any agreements of a private and legal nature which may be, if occasion arises, concluded with the Government of the Federal Republic of Germany.

The above permit has been granted in accordance with the instructions laid down in the following documents:

(a) The application submitted by the Agency ....
dated the........... of 1984

(b) The National Maritime Shipping Routes Regulation of the 3.5.71 (Federal Gazette Bulletin 1, page 641) in the version of the 1.3.1983 (FGB 1 page 87-97).

(c) The proclamation of the Wasser- und Schiffahrtsdirektion Nordwest in connection with the National Maritime Shipping Routes Regulation dated the 1.3.1983 in the version of the 10th of January 1984 (official gazette No. 27 of the 8th of February 1984).

(d) The International Regulations for Preventing Collisions at Sea 1972 (SeeStrO), (Federal Gazette Bulletin 1 1977, page 813) in the version of the 1.6.1983 (FGB 1 page 521-524).

(e) The Schedule of Costs of the Federal Maritime Authorities in connection with shipping dated the 19.9.1977 (Federal Gazette Bulletin 1 page 1781), finally amended 23rd December 1982 (FGB 1 page 2092).

(f) The Ordinance concerning the administration and order of the pilot districts Weser I and Weser II/Jade dated the 23.1.1981 (official gazette No. 35 of the 20.2.1981) in the version of the 23rd December 1983 (official gazette No. 3 of the 5th January 1984).

This permit is issued subject to the following conditions and stipulations:

1. Shore based radar assistance has to be ordered well in time before commencement of river passage at the Wilhelmshaven Radar and Information Centre (Revierzentrale) via "Jade-Revier-Radio" (VHF Channel 16/20).
2. In case of a visibility of less than 1,000 m. the entrance into the Jade shipping channel or the departure from a berth or anchorage is not permitted.
3. In case of wind in gale force (Beaufort 8-9) or more the commencement of river passage is not permitted.
4. The relative speed of 10 knots laid down in the tidal navigation schedule for the Jade up to the lightbuoy "..............." must be complied with, taking into account the maritime traffic in the channel.
5. Before commencement of the passage in the channel, tidal gauge must be obtained sufficiently well in advance to ensure that the tide will permit an underkeel clearance, expressed as percentage of the maximum draft of the ship during the passage until vessel is taken over by the tugs, as follows:
   (a) Inward bound:
   from sea to buoy No. 25: 10%
   from buoy No. 25 to jetties: 8.5%
   (b) Outward bound: 15%
6. Before commencement of the passage, it is essential to ensure that the complete propulsion and steering equipment as well as all other manoeuvre and anchor devices are capable to operate without any restrictions, even when subjected to the increased stresses resulting from extreme manoeuvring conditions. Should, for any reason whatsoever, the passage in the channel need to be interrupted, the immedate assistance of sufficient tugs must be requested in order to maintain the ship on its course in the shipping channel, or if necessary, to allow the ship to be turned within the channel, taking the draft into account.
7. The turning or mooring manoeuvre must be carried out with adequate assistance of tugs in the manner mandatory in the harbour of Wilhelmshaven. Up to fresh breeze (5 Beaufort) total pulling force of at least ....tons is necessary.
   With strong breeze (6–7 Beaufort) a pulling force of at least ....tons is necessary.
   When mooring at low tide (to be considered only at a draft less than 16 m.) the total pulling force has to be increased respectively at least for another ....tons additionally.
   The total pulling force must be distributed among at least 6 tugs.
8. The stipulations contained in the above paragraphs 1–7 apply also to the casting-off manoeuvre and to the subsequent return seaward passage. For the casting-off manoeuvre, depending on wind conditions and with agreement of the pilots, the number of tugs and total pulling force may be reduced, as long as the safe execution of the manoeuvres is ensured.

This permit is issued subject to the following stipulations and instructions.

The right to issue any future necessary additions, amendments or supplements to the above instructions, or the right to cancel the permit are reserved, should this be deemed necessary to ensure the safety and the easy flow of shipping traffic or the prevention of dangers caused by shipping operations.

This permit can be cancelled immediately when one of the above specified conditions and for stipulations is not observed.

Charges:

In connection with the issue of this permit and in accordance with the scale of charges (No. 2) of the Schedule of Costs of the Federal Maritime Authorities dated the 19.9.77 (Federal Gazette Bulletin I, page 1781) finally amended 23rd December 1982 (FGB I page 2092)
a fee of ....DM
has been laid down.
In addition and in accordance with §2 (2)
of the above schedule, expenses of ....DM
The total sum due is ....DM

These charges should be made payable to account number 290 010 11 of the Bundeskasse Bremen with the Landeszentralbank Bremen, quoting the following cash remark "1203 – 111 01 WSA Wilhelmshaven", free of charge to the recipient, not later than the ....

Payments to any account other than that quoted will be disregarded.

Advice in respect of judicial right:

An appeal against this decree can be lodged with the local maritime authorities, Wasser- und Schiffahrtsamt Wilhemshaven, Mozartstrasse 32, within one calendar month, either in writing, or by appearing in person to register an appeal.

In cases of doubt, the German issue of this permit is authoritative.

Der Vorstand
des Wasser- und Schiffahrtsamtes
Wilhelmshaven
Im Auftrage

Seeoberkapitan

SHIPMASTER'S REPORT: Mobil Sea Island (Platform):

Position: Between Jade River Buoy Nos. 18 and 19.

Pilotage: Sea Pilots (2) board/leave at Deutsch Bucht Light Vessel by helicopter.

Berthing Pilots (2) board/leave about 2 to 3 miles North of Sea Island by launch.

Pilotage straightforward to Weser Light Vessel where river passage begins.

Two bad bends here make strict attention to steering and helmsman necessary.

Passage Time:

Inward (VLCC – half cargo)		
	Sea Pilotage	3 hours 50 minutes
	Berth Pilotage	54 minutes
	Mooring	57 minutes
	Pilotage distance	41 miles
Outward (VLCC – Ballast)		
	Berthing Pilotage	39 minutes
	Sea Pilotage (to 8 miles South of Light Vessel)	2 hours 24 minutes
	Pilotage distance	31 miles

Helicopters: Base for the 3 German rivers at Wilhelmshaven.

First contact 1 to 2 hours before arrival at Deutsch Light Vessel via Norddeich Radio Channel 16-27 when ETA confirmed and that vessel is familiar with helicopter procedures.

Thereafter continuous watch on Channel 16 VHF until helicopter contact will require continuous calling on 410 kcs and listening out on Channel 9 VHF until operation completed.

Berthing/Unberthing: Carried out at slack water only. Deep laden VLCCs on HW only. Ballast or half-loaded VLCCs on either slack water. Deep laden VLCCs can only proceed inward on flood tide.

River passage at Buoy No. 3 begins about 4 hours before local HW at Wilhelmshaven and is proceeding according to fixed tide schedule.

Minimum underkeel clearances to be observed:

1. Inward bound:
   (a) from sea to Buoy No. 25: 10%.
   (b) Buoy No. 25 to jetties: 8.5%.
2. Outward bound:
   jetties to sea: 15%.

Tugs: Six tugs used for any VLCC movement, 1 forward, 1 aft and 4 "pushers". Additional tugs have to be ordered well in advance.

Moorings: Standard VLCC mooring arrangement. Springs run out first.

Cargo: 4×16 in. Chicksan booms available. Discharge rates compatible with modern VLCC facility. Official outturn figures average 1.5% less than ship figures.

Crude Oil Washing: Subject prior permission this is allowed.

Air Pollution: Monitoring of gas emission from tank venting system carried out during ballastings. If readings high, ballasting rate must be adjusted to keep readings within set parameters (parameters not known).

Documentation: As per "Guide". *Important that Certificate of Financial Responsibility is on board otherwise vessel fined (up to a maximum of D.M. 10,000).*

Shore Leave: Permitted. Ferry is on call when required from Island to mainland berth. Refinery jeep is then on call from Gate House. It is forbidden to walk in Refinery area. Taxis can be called from Gatehouse.

General: The Sea Island is in the "free port" area, therefore, no personal effects lists or other customs problems. Authorities inflexible if certification problems arise (Certificate of Financial Responsibility).

AUTHORITY:

1. *Shipping Authority:* (Competent for nautical affairs and concerns of waterway maintenance, accidents, pilotage, traffic directions and police, radar etc. within or with effect to Federal Waterways.) Wasser- und Schiffahrtsamt (Waterway and Shipping Office) Wilhelmshaven, Mozartstrasse 32, 2940 Wilhelmshaven. *Tel:* (04421) 26311 or (after office hours) (04421) 41287. *Telex:* Wsawr 25 34 07. *Contact:* Captain Stockhorst or Captain Hanken.
2. *Port Authority:* (Competent for harbour affairs within harbour limits, exempt municipal and military areas). Niedersachsisches Hafenamt (Lower Saxony Port Office), Wilhelmshaven, Kieler Strasse 31, 2940 Wilhelmshaven. *Tel:* (04421) 26247 Port Captain. *Contact:* Captain Boege or Captain Schmidt.
3. *Municipal Port Authority:* (Competent for harbour affairs within municipal harbour limits) Stadt Wilhelmshaven, Rathausplatz, 2940 Wilhelmshaven. *Tel:* (04421) 297786. *Contact:* Captain Muehlinghaus.

NOTES

Please also advise Shipping Guides Ltd.

Ghana

GENERAL:

HEALTH: *Pratique Procedure:*

1. The Port Health Officer or authorised officer shall grant pratique to a ship as soon as the following conditions shall have been properly complied with:

(a) The Master shall complete accurately to the best of his knowledge and belief a Maritime Declaration of Health Form.

The Declaration shall be countersigned by a ship's surgeon if one is carried and shall be delivered to the Port Health Officer or authorised officer.

(b) The answers to the questions in the Declaration shall clearly indicate the absence of any infectious disease on board during the voyage or on arrival of the ship, and that the ship has not called at any infected area or had direct contact during the voyage with any ship from any infected area or having on board any case of infectious disease, and shall satisfy that Port Health Officer or authorised officer that the granting of pratique shall not be attended by any danger.

(c) The Master or any other person on board including a ship's surgeon, if one is carried, shall accurately and, completely answer any other questions put to him by the Port Health Officer or authorised officer in regard to the sanitary condition of the ship, the health of the passengers and crew or of any ship with which there has been direct contact during the voyage, and shall furnish any such officer with all such information and assistance as he may reasonably require.

2. In the event of any suspected disease or fever on board a ship before arrival at the port and any other circumstances requiring the attention of the Port Health Officer, the Master shall:

(a) If the ship is equipped with a suitable radio transmitting apparatus and is due to arrive at a radio receiving port, send before arrival, either directly to the Port Health Officer or through an Agent approved by him, a radio message to that effect.

(b) If the ship is not so equipped or is due to arrive elsewhere than at a radio receiving port, notify the Port Health Officer immediately on arrival of the presence on board of such infectious disease, or suspected conditions.

Any radio message sent shall:

(a) embody such of the items of information as are applicable;

(b) be sent so as to reach the Port Health Officer not more than 12 hours, and not less than 4 hours, before the expected arrival of the ship;

(c) if it is in code, conform with the section relating to standard quarantine messages of the 1931 International Code of Signals.

3. Any ship arriving at its first port of call in Ghana from a foreign port shall be deemed to have come from an infected local area, and shall be required to comply with the provisions as to flags and signal lights as prescribed until granted free pratique by the Port Health Officer or authorised officer.

The following signals are to be shown on arrival within 3 miles of land, by vessels requiring or required to show their state of health:

(a) in the daytime i.e. during the whole of the time between sunrise and sunset.

(i) "Q" flag signifying "my ship is 'healthy' and I request free pratique" or;

(ii) "Q" flag over first substitute ("QQ") signifying "my ship is 'suspect', i.e. I have had a case or cases of infectious disease more than 5 days ago, or there has been unusual mortality among the rodents on board my ship" or;

(iii) "Q" flag over "L" flag ("QL") signifying "my ship is infected" i.e. I have had a case or cases of infectious disease less than 5 days ago.

(b) by night i.e. during the whole of the time between sunset and sunrise, a red light over a white light, the lights being not more than 6 ft. apart shown at the peak or where the signal can best be seen from the shore, and exhibited only when the ship is within the presence of a port signifying "I have not received free pratique".

(c) Any ship displaying the appropriate signal in accordance with the provisions of paragraph (3) above shall, as soon as practicable, be visited by the Port Health Officer or authorised officer, who shall grant pratique or take such other steps as may be necessary before granting pratique.

4. A ship which has been granted free pratique at its first port of call in Ghana which has not been declared an infected area shall not be required to obtain further pratique at another port in Ghana.

Vaccination requirements in respect of persons arriving in Ghana

All officers, crew and passengers of every ship arriving at any port in Ghana shall be in possession of valid Certificates of vaccinations against yellow fever and cholera.

Where a person arrives at any port in Ghana and is unable to produce a valid Certificate as required, the Port Health Officer or the authorised officer shall require such person to be vaccinated on the spot or to present himself at a place or places for the purposes of being vaccinated.

Under no circumstances should any officer, crew or passenger disembark if he is not in possession of any valid Certificate against yellow fever and cholera.

CUSTOMS REGULATIONS: *Pre-Entry System:*

Customs Authorities have introduced a 'Pre-Entry System' whereby importers are expected to process their Customs Bills of Entry in advance, at least 7 clear days prior to vessel's arrival, failing which a penalty is imposed by Customs on importer/consignee. To avoid a situation where importers will hold Agent/Owners responsible for refund of penalties for late submission of Manifest with Customs, it is essential that shipowners are requested to let Agent receive all cargo manifests at least 10 days prior to vessel's arrival in order for Agent to lodge with Customs Authorities advance manifest for the benefit of importers. Recently, most cargo documents have been received late and in some cases manifests have been received when vessel is in port. It is suggested that manifests are airfreighted to ensure early receipt.

SALTPOND (Bonsu): 05.05 N. 01.00 W.

LOCATION: 9 km. South of Saltpond village in position Lat. 05° 04′ 47″ N., Long. 01° 00′ 25″ W.

TUGS: One tug available to assist with berthing and connecting hoses.

BERTHING: Ship to ship transfer through 1,200 ft. floating hose. Depth of water 85 ft.

The platform "Agpi" is permanently moored. The storage vessel is named "Farmer". Loading time for 20,000 tons is 24 hours. Product is named "Saltpond Crude" or "Bonsu Crude".

OPERATOR: Agripetco Ghana Inc.

TAKORADI: 04.53 N. 01.45 W. (See Plan Book)

PORT LIMITS: Are shown on Admiralty Chart 3102 and covers an area of about 1.5 miles to 2 miles outside harbour entrance.

DOCUMENTS:

Customs:

2 Stores Lists.
2 Lists Crew Personal Effects.
1 Bill of Health.
6 Crew Lists with dates of yellow fever inoculations.
6 Passengers Lists or 'Negative'.
6 Vessel's Itinerary Lists.
1 Freighted Cargo List.
1 Unfreighted Cargo List.
1 Set Bills of Lading.
1 Clearance from last Port.

Immigration Officer:

1 Crew List.
1 List Ports of Call.
1 List of Passengers, if any.
All crew and Passengers' Passports.
Advice to Immigration of any stowaway.

PILOTAGE: Pilotage compulsory for ships berthing alongside or on the moorings. Pilot boards within port limits. International code signals used. Pilotage for entering vessels from 0600 – 1800 hrs. and for leaving vessels from 0600 – 2300 hrs.

ANCHORAGES: Vessels may anchor outside the harbour without Pilot. Depth at moorings 22 ft. to 35 ft.

RESTRICTIONS: Depth at harbour entrance 35 ft. MLW.

MAX. SIZE: Up to 28 ft. draft for berthing alongside. Up to 33 ft. at buoys. Also see "Tankers".

HEALTH: See "General" before first Ghana port.

RADIO: Radio Takoradi. The station is a Coast Station and only operates on H.F. and M.F. equipment. The call sign for this station is 9GA.

VHF: Signal station Channel 14. 24 hour service for all information with regard to Pilots, berthing, etc.

RADAR: No radar services available.

TUGS: Tugs normally join the vessel outside port entrance. Tugs' assistance is compulsory to be ordered through Signal Station. 2 tugs of 1,350 h.p. and 1 of 850 h.p. available.

BERTHING: Additional coir springs from shore required at all berths.

Cargo discharging and/or loading at the buoy berths is by ships' own gear.

Berth	*Max. Length Vessel*	*Max. Draft*
Manganese	520 ft.	28 ft. 0 in.
2 Wharf	550 ft.	26 ft. 0 in.
3 Wharf	500 ft.	28 ft. 6 in.
4 Wharf	600 ft.	28 ft. 0 in.
5 Wharf	270 ft.	28 ft. 0 in.
6 Wharf	500 ft	29 ft. 0 in.
Bauxite	505 ft.	32 ft. 0 in.
Coal Wharf	250 ft.	14 ft. 0 in.
Oil Wharf	600 ft.	29 ft. 3 in.
1 Buoy	550/610 ft.	F.32 ft. 6 in. A.34 ft. 0 in. (If ship 610 ft. max. 27 ft. 6 in.)
2 Buoys	550 ft.	F.30 ft. 6 in. A.31 ft. 0 in.
3 Buoys	570 ft.	27 ft. 0 in.
4 Buoys	520 ft.	F.27 ft. 0 in. A.30 ft. 0 in.
5 Buoys	510 ft.	F.24 ft. 0 in. A.27 ft. 0 in.
6 Buoys	480 ft.	F.24 ft. 0 in. A.26 ft. 0 in.
7 Buoys	450 ft.	F.23 ft. 0 in. A.25 ft. 0 in.
8 Buoys	400 ft.	F.21 ft. 0 in. A.22 ft. 0 in.
9 Buoys	340 ft.	18 ft. 0 in.

CRANES: There are 35 Portal Cranes at the Port. Of these 15 cranes of 3 tons each and 1 crane of 15 tons lifting capacity are at the wharf berths for loading and discharging vessels. The remaining 19 cranes – 6 of 10 tons, 1 of 7 tons, 1 Butters crane of 15 tons and 9 of 3 tons are placed at the West Wharf to cater for the loading and discharging of logs and other commodities. Two of 5 tons are at the Cargo Platform to load and discharge other commodities. In addition there are 20 gantries for loading and discharging sawn timber.

There are no cranes at the buoy berths and ships are expected to use their own gear. Also, there are no floating cranes at this Port.

BULK CARGO FACILITIES: There are 2 berths for the loading of dry-bulk cargo – manganese ore and bauxite. In the case of grain, coal, fertilisers, sulphurs, copra, etc., discharge can be done at any of the wharf berths. The loading rate of manganese ore is approximately 333 long tons per hour; and the loading rate of bauxite is 330 long tons per hour.

SPECIALISED CARGO-HANDLING FACILITIES: The port does not have container or Ro/Ro handling facilities.

BRIDGES: There are no bridges at the port.

STEVEDORES: Berthing meetings are held daily between the Port Authority and all Port Operators with the view to determining ETA and EDD of vessels to enable the stevedoring companies to arrange for gangs and determine the relevant rates and charges.

Normal working hours: weekdays 0700 hrs. to 1200 hrs. and 1400 hrs. to 1700 hrs. Saturdays 0700 hrs. to 1200 hrs.

Gangs required for Sunday work should be ordered before 1130 hrs. previous day. For weekday work, gangs should be ordered before 1500 hrs. previous day.

MEDICAL: It is absolutely necessary for the Agents to be notified in advance of the required medical attention so that necessary arrangements for medical exercise be carried out immediately on the vessel's arrival. Also see "General – Health".

TANKERS: Oil tankers moor on the North side of Lee breakwater. 1 berth suitable for ships of 600 ft. length, draft 29 ft.

Pipe-line: 805 m. long, pipe size 8 in. for all grades of petroleum and Bitumen.

Discharge Rate:

Petroleum	–	Premium Mogas	150 t.p.h.
		Regular Mogas	150 t.p.h.
		A.G.O.	200 t.p.h.
		Kerosene	200 t.p.h.
Bitumen	–	80/110–142 cu.m./hr.	
		60/70 –154 cu.m./hr.	
		12/18 –337 cu.m./hr.	

DENSITY: Salt water.

FRESH WATER: There is fresh water at all wharf berths and delivery is by means of water hydrant and/or water barge of 448,000 gallons capacity. Fresh water is also delivered at the buoy berths by 2 water barges (capacity 200 tons). The rate of delivery is as follows:

By hydrant	–	11,000 g.p.h.
By barge	–	11,000 g.p.h.

FUEL: 2 grades available, Fuel and Gas Oil. Advance notice is necessary.

Fuel – 1,500 gallons per second through pipe-lines.
Gas Oil – 37.8 gallons per second through mobile tanker.

FIRE PRECAUTIONS: 6 firemen ordered to standby with fire engine. "No Smoking" notices are posted at considerable distances from the tankers.

CONSULS: There are no consuls in this Port. High Commissioners and Ambassadors are in Accra.

REPAIRS: Minor repairs can be effected, slipway for vessels up to 500 tons. Small drydock for vessels up to 100 ft. length.

DRY DOCK: There is no large drydock in this port but there is 1 small drydock capable of accommodating vessel of 100 ft. long, 25 ft. wide and 8.5 ft. draft.

SURVEYOR: Lloyds representation only operates in this Port.

GANGWAY/DECK WATCHMEN: Provision of Gangway, Deck and Hatch Watchmen is absolutely necessary to prevent stealing, pilferage and smuggling on board ships.

HATCHES: Hatches are normally opened and closed by the stevedoring gangs or, at times, by the ship's crew.

CUSTOMS ALLOWANCES: Quantity permitted for each member of the crew to be held Out of Bond is as follows: Tobacco 100 grammes; Spirit 0.75 litres; Wine 0.75 litres.

CARGO GEAR: Load/discharge is affected by the Port Authority's shore gear. There is 1 heavy lift crane of 15 tons capacity which is used for heavy lifts. Where the cargo exceeds the lifting capacity of the shore crane, the ship's jumbo derrick is sometimes used.

REPATRIATION: The Immigration Department is responsible for signing on and off on the advice of the shipping company.

AIRPORT: The distance of the airport from the Port is approximately 2 miles. It is served by regular airline to and from the capital city of Accra; and the number of flights is 2 per week.

TIME: The Greenwich Meridian Time is applied to this Port as the Greenwich Meridian passes through this country.

HOLIDAYS: The holidays at the Port are as follows; New Year's Day (1st January); Redemption Day (13th January); Independence Day (6th March); Good Friday (non-working day); Holy Saturday; Easter Monday; Republic Day (1st July); Christmas Day (25th December) (non-working day); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Telephone 999 for all 3 services.

TELEPHONES: Presently no arrangements exist for installing telephone on board ships.

SERVICES: There is no special service for tank cleaning, tank-washing or compass adjustment.

SHORE LEAVE: Every member of the crew is free to go ashore at any time of the day or night after the Immigration Officer has issued shore passes to that effect on the ship's arrival.

IDENTIFICATION CARDS: Seamen's Book or Passport is sufficient to identify any seaman. Also see "Shore Leave".

REGULATIONS: Ship's are not allowed to discharge on board explosives or petroleum without prior approval of the Port Manager. Ships are not allowed to berth after 1800 hrs.

DELAYS: Delays in berthing a ship occur when all berths are occupied; delays also occur when repairs are being carried out on any of the berths.

AUTHORITY: Ghana Railway and Ports Authority.

AGENT: Scanship (Ghana) Limited, P.O. Box 329, Takoradi. Tel: 35.31, 36.50, 35.33. Telex: 2181 and 2182 Accra. Cables: "Scanship Takoradi".

TEMA: 05.38 N. 00.01 E. (See Plan Book)

DOCUMENTS:

Arrival.

2 copies List of Stores.
2 copies Crew Declaration Forms.
1 Bill of Health.
6 Crew Lists with vaccinations lists for yellow fever.
6 copies of Passenger List (or "nil" passenger list).
Valid certificates for cholera and yellow fever vaccinations.
6 lists of Ports of Call.
2 Freighted Cargo Manifest.
7 Unfreighted Cargo Manifest.
1 B/L's set.
Port clearance from Last Port.

Departure – Port clearance visaed by Customs.

PILOTAGE: For Main Harbour pilotage for all vessels of more than 100 net tonnage, when arriving or leaving harbour, or shifting berth, but for both Fishing Harbours obtainable on request.

Time of pilotage as follows for Main Harbour:

(a) Dry cargo vessels: arrivals 0600 – 1800 hrs.; departure 0600 – 2300 hrs.
(b) Tankers: arrivals daylight only; sailings 0600 – 2300 hrs.
(c) Valco-carriers: all handling, during daylight only.

For fishing harbours: during daylight only.

Vessels arriving or wishing to enter harbour must await Pilot between E. and S.W. off outer water light, about 1 mile distance. Ships embarked by Pilots from 0600 hrs., according to time of arrival Quarantine Anchorage.

ANCHORAGES: Good anchorage, three-quarters to two miles from E.N.E. to S.W. off main entrance with depth 30 ft. to 60 ft. with good holding ground. Eastern area of anchorage is more comfortable, without additional swell reflected from main breakwater.

RESTRICTIONS: Ships' Arrival, 0600 – 1800 hrs. (on special request to 2000 hrs.). Ships' Departure, 0600 – 2300 hrs.

MAX. SIZE: Ships up to 800 ft. and draft of 32 ft.

HEALTH: All crew require valid certificates of vaccination against yellow fever which are inspected by Port Health Authorities. In case of any suspected disease or fever on board. Agent of the vessel should be notified in advance by radio. Also see "General" before first Ghana Port.

RADIO: All messages to Agents through their own VHF radio – Channels 6, 12 and 20.

VHF: The ports are equipped with VHF radio telephones, Channels 13, 14 and 16. Channel 16 is the international listening channel and Channel 14 is the port working channel. Channel 13 can be used if required, or if the other channels are not available. Signal station request LOA and draft in feet and last port of call.

TIDES: Maximal tides rise 6 ft. 2 in., minimal tides rise 3 ft.

PREVAILING WINDS: Light to fresh breeze from W. and S.W. during all year, except December to February when N.E. Harmathan is dominating with poor visibility. Dangerous winds are tornadoes from East, May to July, but occasionally isolated tornadoes are to be expected from January to December. There is a swell in harbour, especially after tornadoes, when lying alongside the berths.

HARBOUR: Harbour consists of 3 basins:

(a) The large basin of Main Harbour, formed by Main Breakwater 6,250 ft. long, and Lee Breakwater, 3,650 ft. long.
(b) Outer Fishing Harbour, East of Lee Breakwater.
(c) Inner Fishing Harbour on Northern side of former one.

Entrance to Main Harbour 800 ft. wide and together with the approaches has minimal depth of 35 ft. (Admiralty Chart Datum to which all depths refer).

Ships entering Harbour 2–3 cables before entrance roll heavily, up to 4–8° during some seasons. Ships deeper than 30 ft. enter only during high tide with maximum possible draft limit 32 ft. during neap tide. Bottom of harbour consists of sand and mud, with frequent hard rocky ground. Depth increases in direction of Main Breakwater. Two pairs of mooring buoys in depth of 34–36 ft. Inside harbour, alongside Lee Breakwater is an Oil Wharf for tankers with depth of 34 ft.

Obstruction: Sunken fishing vessel at No. 3 Buoys.

TUGS: Use of 1 tug compulsory for all ships over 2,000 g.r.t. and 2 tugs over 5,000 g.r.t. (but at Pilot's option), and 2 tugs compulsory for tankers and Valco-carriers. 3 Diesel Tugs 1,380 h.p. in service. 2 tugs available for duty between 0600 and 2100 hrs., otherwise 1 tug. Tug's wires to be used.

BERTHING: Quay No. 1 – 4,300 ft.; Quay No. 2 – 2,900 ft.

Berths	*Length*	*Max. Draft*
1	600 ft.	31 ft. 6 in.
2	600 ft.	28 ft. 6 in.
3	480 ft.	25 ft. 0 in.
4	600 ft.	25 ft. 9 in.
5	600 ft.	25 ft. 6 in.
6	600 ft.	24 ft. 6 in.
7	600 ft.	25 ft. 0 in.
8	600 ft.	25 ft. 0 in.
9	600 ft.	25 ft. 0 in.
10	600 ft.	25 ft. 0 in.
11	600 ft.	25 ft. 0 in.
12	600 ft.	25 ft. 6 in.
Oil Berth	Ships up to 800 ft.	32 ft. 0 in.
Valco Berth	Ships up to 575 ft.	32 ft. 0 in.

Berths No. 6 and 7 for loading cocoa-beans, equipped with 4 high-speed conveyers, transporting bags directly to ship's hold, from 4 cocoa sheds (totalling 2,400,000 cu. ft.) situated at Westerly corner of harbour.

Usually ships moor starboard side to berths No. 1, 2, 6–9 and portside to berths No. 3, 4, 5, 10–12.

SPECIALISED CARGO-HANDLING FACILITIES: 3 special berths for bulk cargoes only. Berth No. 10 for grain only. It is equipped with 1 elevator for sucking/discharging.

Valco Berth for handling bulk cargoes such as alumina, pitch/coke and alminium fluoride. It is also equipped with 2 elevators for sucking/discharging.

Berth No. 8 is partly meant for pumping/discharging of liquid/bulk chemicals such as tallow and alicane.

Cranes, Outloaders:

Quay No. 1	Portal Cranes	Cap.	(2) 5 ton	(2) 7.5 ton	(6) 3 ton
Quay No. 2	,, ,,	,,	(2) 5 ton		(6) 3 ton
		,,	(1) 5 ton	(3) 10 ton	

Cocoa Conveyor System: 4 Outloaders, each 30-35 t.p.h.
or : 2 Outloaders on high speed =70 t.p.h.

STEVEDORES: Available. Dry cargo is handled from 0730 hrs. to 1230 hrs. and from 1400 hrs. to 1700 hrs. on normal working hours, and overtime after 1700 hrs. to 2000 hrs. (for finishing ships 2030 hrs.) and on Saturdays p.m., Sundays and holidays. Oil Wharf and Valco Berth are working around the clock.

Gangs required for Sunday work should be arranged before 1130 hrs. previous day. For weekday work, gangs should be arranged before 1500 hrs. previous day.

Stevedores provided by Ghana Handling Company Ltd., Atlantic Port Services and Speedline Stevedoring Company Ltd.

TANKERS: Tankers always moored starboard side to dolphins, and ropes to breakwater and bow-buoys. Crude oil pumped to refinery, by ship's pumps, a distance of 18,000 ft.

North of Oil Wharf about 2 cables on same breakwater is Valco Berth for discharging of bulk materials for "Valco" aluminium smelter (mostly alumina). Narrow channel 250 ft. wide with depth 33 ft. 6 in.

FRESH WATER: Water pipes alongside all wharves, and under State's sanitary control.

FUEL: Fuel and diesel-oil available by tanker-trucks only. No coal-bunkers available.

DENSITY: About 1024.

FIRE PRECAUTIONS: Oil tankers when moored alongside must have "Fire Wires" hanging over the bow and stern on the outboard side of the vessel. These must be lowered to the water's edge and securely made fast on board so that they can be used to tow the ships away if necessary in an emergency. Two large fire fighting pumps and "snorkels" are mounted at the oil wharf. A floating boom to prevent the spread of oil spillage must be put in position around tankers loading and discharging. The Master of the ship should be warned to lower the guy ropes securing the boom to the ship, so that the boom is afloat at all times and not lifted up as the vessel's draft changes.

REPAIRS: Good marine workshop.

DRY DOCKS: There are two (2) drydocks.

Drydock No. 1: Serviced by 60 tonnes and 20 tonnes travelling cranes. Capacity: 100,000 d.w.t. Length: 910 ft. (277.4 m.). Width (entrance): 149 ft. (45.4 m.) Width (inside wall): 155 ft. (47.2 m.). Draft (entrance): 22 ft. (6.7 m.) (to be deepened in future). Flooding time empty dock: 2 hours (approx.). Dewatering time: 4 hours (approx.).

Drydock No. 2: Serviced by 45 tonnes and 25 tonnes mobile cranes. Length: 350 ft. (106.7 m.). Width: 44 ft. (13.4 m.). Draft (entrance): 18 ft. (5.5 m.). Flooding time of empty dock: 4 hrs. (approx.). Dewatering time: 4 hrs. (approx.).

Also there is one slipway with length 127 ft. (38.7 m.); width: 41 ft. (12.5 m.) and hauling capacity: 150 tonnes.

Fitting out quay: 600 ft. (182.9 m.). Draft: 14 ft. (4.3 m.) to be deepened. Crane: 15 ton travelling crane.

SURVEYORS: Lloyds and Bureau Veritas are represented at the port.

GANGWAY/DECK WATCHMEN: Services of watchmen necessary and compulsory.

HATCHES: Opening/closing of hatches is normally carried out by stevedores.

CUSTOMS ALLOWANCES: Per crew member: Tobacco: 100 grammes; wine: 0.75 litres; Others: 0.75 litres.

REPATRIATION: Facilities exist for effecting crew changes.

AIRPORT: Situated 18 miles from the port.

TIME: GMT. No alterations during the year.

HOLIDAYS: New Year's Day (January 1st); Independence Day (March 6th); Good Friday; Holy Saturday; Easter Monday; Labour Day (May 1st); Republic Day (July 1st); Christmas Day (December 25th); Boxing Day (December 26th). Cargo work can be arranged on those days on request.

SHORE LEAVE: Every member of the crew is free to go ashore at any time of the day or night after the Immigration Officer has issued shore passes to that effect after clearing inwards.

IDENTIFICATION CARDS: Shore passes issued are sufficient.

REGULATIONS: No unusual regulations for the port.

POLICE/AMBULANCE/FIRE: Telephone Nos: Police: 999 and 2936; Ambulance: 999; Fire: 999 and 2822.

GENERAL: Recommended to send ETA message at least 24 hours in advance. Essential that ETA message reaches Agent's office before 1430 hrs. Monday-Thursday or before 1000 hrs. Friday for weekends because of booking of gangs. Ships from Abidjan should also send 48 hours ETA message.

DEVELOPMENTS: Provision of Container Depot.

Rehabilitation of equipment, plant and civil structures. Modernisation of oil berth.

SHIPMASTER'S REPORT: (1976)

Good W/T. D.F. signals are obtained from Accra and Lome and with this vessel's equipment Marconi Type 758E will give a reliable position to within 2 miles. The 100 fathom contour line was accurate to within 1 mile where we crossed it. Within 20 miles the land definition is excellent on Radar. There is now an Oil Rig 137° 3.2 miles from the Eastern end of the main breakwater. This is an excellent seamark and is well lit at night. Native fishing craft are met with from about 10 miles offshore and show lights when fishing at night but reliability regarding these lights is doubtful.

VHF contact with the port Signal Station is good, although there was very heavy traffic during our stay outside waiting to berth 5.5 days, but I was allowed to use the main transmitter when berthed to inform Owners that we were alongside, at anchor no restrictions are placed on vessels using their wireless transmitters.

The pilotage is efficient although the tug was late in attending us when berthing this caused no difficulty.

The entrance to the Harbour is good, plenty of water all about if you have to wait for the Pilot, which we did. (He was moving a fishing vessel, and we had to cruise for about twenty minutes, after having come to the entrance on instructions that he would board there).

There were never less than 18 ships waiting for berthing.

W/T contact with Portishead was good.

SHIPMASTER'S REPORT: (1977)

From Southwards – a strong Easterly set experienced 24 hours prior to arrival and along the coast to Cape Palmas after departure.

Radar (in our case) of the land poor until 15 miles off when ships at anchor off the port gave the first and the best targets. Breaksea Point light good and sighted at full range.

Ship really needs to be on "standby" with engines ready on approach to the 100 fathom line, when the first of the many mainly unlit and poor radar target fisherman are encountered, and really are in dense packs all along the coast in the shallower waters. There is no point in adjusting speed for a daylight arrival, the earlier the better as port operates on a mainly first-come basis. Equally of little point to try and pick a selected anchorage, ships are to be found anchored over quite a wide area – avoid as per pilot book the "prohibited anchorage" and the 10 fathom rocky shoulder that runs parallel with the coast. There are invariably 12 ships or more at anchor even some large ships completely unlit and possibly unmanned.

The port as other Masters have reported is well run, Pilots, tugs etc., well trained and competent under normal conditions. The port is overbusy and accommodating and handling far more tonnage than ever designed for and commonplace to have ships double-berthed. Essential to be well moored and precautions taken against the scend and surge that enters the harbour under certain conditions.

Communication: W/T HF poor and ship unable to make direct radio contact with Ghana until well within M/F range.

VHF: All port signals are given on Channel 14, and VHF discipline on this frequency poor when local ships are at anchor or in the near vicinity. Liner Agencies reputedly keep watch on Channel 16, but we were unable to raise them or make any contact before berthing.

Stevedores: Worked well throughout, though some delay initially experienced whilst fork-lift trucks small enough to work in our hatches and under the coamings were obtained, some pallets having to be broken down in stow to be discharged. Hours of work – actual – this is without the ship being consulted in any way, but seemingly common practice throughout the port, were 0730 hrs. non-stop through to 1930 hrs. Some pilferage – mainly of spilt milk powder, no visible signs of any security control as such. Discharge rate overall (crane and ships gear) milk powder 13 tons per gang per hour; frozen meat 8.64 tons per gang hour.

Stevedores toilets: Essential that ship arrives with overside latrines bow and stern ready and rigged.

Noting Protest: It might well be wise to include need to note protest in arrival message. We berthed late Friday to find Consulate in Accra closed as from midday for the weekend.

Stores: The point cannot be over emphasised (and all ships must be given prior warning to pre-store accordingly) that ordinary every day stores are virtually non-available and the fresh provisions (vegetables, salads, eggs and even much of the fruit) that are available are highly priced.

Shore leave: Ship was warned by other ships, the Agents, Mission Staff etc. not to go ashore at all with muggings and robberies commonplace even in daylight (wrist watches prime targets). The Agency lays on a minibus seemingly as a matter of course, to run ships' staff to and fro. We in fact with use of the above bus and local taxis did not experience any problems and found local people friendly and hard working.

AUTHORITY: Ghana Ports Authority, P.O.Box 150, Tema, Ghana. *Tel:* 2631–9 *Cables:* "Harbours". *Contact:* Commander Keith Dadzie, Director of Port Services.

AGENT: Scanship (Ghana) Ltd., P.O.Box 64 Tema. Tel. 26.51 and 25.71. Cables "Scanship Tema". Telex 2181 and 2182 Scanship Accra.

Gibraltar

GIBRALTAR: 36.08 N. 05.21 W. (See Plan Book)

DOCUMENTS:
5 Crew Lists.
5 Passenger Lists.
Arrival Report, to be completed when receiving Pratique.
International Maritime Declaration of Health.
Ship's Register.
Load Line Certificate.
Derat Certificate.
Ship's Articles.
Certificate of Insurance in respect of Civil Liability for Oil Pollution Damage.
Stowaway Report.

PILOTAGE: Pilotage compulsory for all navigation (except direct *departure* from anchorage). Give notice of arrival through Agents 24 hours in advance furnishing maximum draft. Ships approach off Rosia Bay where Pilot (available day and night) boards vessel. Pilot boat painted black and flies international Pilot flag. To call Pilot: sound, and fly flag "G" or call Gibraltar Port on VHF Channel 16 and pass message on Channel 12.

ANCHORAGES: In open bay, good safe anchorage, depths vary from 5 to 40 fathoms. Vessels normally anchor in area West of Harbour Moles.

RESTRICTIONS: *Note:* British waters in the Bay of Gibraltar extend to the Median Line drawn in accordance with the 1958 Geneva Convention on the Territorial Sea and Contiguous Zone (see Admiralty Chart D 1448). However, part of those waters, lying North of 3 Qk. fl. buoys, are considered by the Spanish Authorities to be within the limits of the Port of Algeciras/La Linea (Spanish Notice to Mariners 49/1563/67 of 9 December 1967), and the Spanish Authorities have claimed Spanish port dues in respect of vessels anchoring between the Median Line and the line of buoys.

The waters in dispute form only a small part of the anchorages available to shipping calling at Gibraltar.

MAX. SIZE: If anchoring in bay, any size. Max. draft alongside, 31 ft. 6 in.

HEALTH: Vessels are usually boarded by Port Authorities off the Southern end of the Detached Mole: if everything found satisfactory Pratique is granted immediately. Masters should advise Agents by radio before arrival of any illness on board so that Port Doctor may board vessel with Port Authorities.

RADIO: Gibraltar Radio, call sign ZDK.

VHF: Communicate with Port Authorities by VHF international calling Channel 16, pass message on Channel 12, many other channels available (24 hour service).

TUGS: 7 tugs, 500 h.p. – 1,600 h.p. When required for berthing alongside, tugs meet vessels off Mole. Ship's ropes sometimes used.

BERTHING: Cruise Liners and vessels calling for bunkers or water can be berthed on both sides of Western Arm. Outer side is 490 m. long with draft up to 9.60 m. The inner side is 450 m. long and max. draft is 8.53 m. Ships of deeper draft can be accommodated on half tide basis according to tide. Vessels calling for repairs or lay up can be berthed at the Detached Mole. There are also 5 berths of 100 m. in length available to vessels discharging general and bulk cargoes.

Masters required to advise ship's draft when giving ETA. Cruise ships are only charged 25% of normal berthing charge.

Ships calling for bunkers and/or fresh water and not conducting operations involving passengers or cargo are only required to pay 12.5% of the normal berthing charges providing the stay alongside does not exceed 8 hours in addition to the bunkering/water period.

Vessels coming in solely for bunkers are exempted from tonnage dues.

CARGO HANDLING: Container berth at No. 2 Jetty available for vessels up to 350 ft. in length, max. draft 26 ft. Containers are also discharged at No. 1 Jetty.

STEVEDORES: Agents automatically advise stevedoring company on receipt of ETA from ship.

MEDICAL: Masters should advise Agents when giving ETA if medical attention is required on board. Adequate hospital facilities available.

TANKERS: Max. draft at discharging berths 31 ft. 06 in. Diameter of discharging lines 14 in. fuel oil, 10 in. diesel oil and gas oil.

DENSITY: 1025.

FRESH WATER: Available at Mole from pipe-lines, delivery rate 60/80 t.p.h. Water can also be delivered at anchorage from barge, delivery rate 40/50 t.p.h.

FUEL: A quick and efficient bunkering service is provided on a 24-hour basis at alongside and anchorage berths. Ships arriving at night are required to give prior notice before 1600 hrs. on the day of arrival. The requirement is the same on Sunday and weekdays.

Fuel of various grades is supplied to shipping throughout the year from piped installations at all alongside berths (with the exception of the Detached Mole) using the latest metered bunkering techniques. The grades include marine fuel, thin, fuel, marine diesel fuel and gas-oil. Ships at the Detached Mole and in the Commercial Anchorage were serviced by lighters. This supply to ships is handled as a joint venture by the Shell International, Mobil, Chevron, Texaco and B.P. oil companies and is managed by the Shell Company of Gibraltar Limited, who own the main share of the installations.

The bunkering installation at Gibraltar, which was the first in the world to provide metered deliveries at shipside, includes 2 Fisher-in-Line blending units to ensure rapid delivery of fuel oils of any viscosity. Oil bunkers are normally delivered at 200 – 250 t.p.h. per connection subject to the ship's acceptance capacity. Similar rapid bunkering is provided in the anchorage by a lighter of 880 tons fuel capacity and a total capacity of 1,000 tons including bulk lubricants.

GANGWAY/DECK WATCHMAN: Not necessary but available if required.

OPENING/CLOSING HATCHES: Normally effected by stevedores.

CUSTOMS ALLOWANCES: No restriction whilst on board. Crew members may bring ashore small quantity for their immediate personal use.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	Tel: 78353	Liberia	Tel: 78318
Denmark	„ 77151	Netherlands	„ 75968
Finland	„ 74813	Norway	„ 78352
France	„ 78830	Portugal	„ 75330
Greece	„ 77956	Sweden	„ 77151
Italy	„ 78123	Thailand	„ 78301
Israel	„ 75955		

International Direct Dialling (I.D.D.) in operation.

REPAIRS: Deck and engine repairs possible. Underwater operations including repairs and cleaning of vessel's hull.

DRY DOCKS: 4 dry docks (Admiralty) available subject Naval requirements. Largest 871 ft.×125 ft., smallest 260 ft.×46 ft.

REPATRIATION: Facilities exist for repatriating Crew members.

AIRPORT: Regular flights to London (Gatwick). Distance to airport about half mile.

TIME: GMT plus 1 hour in Winter, plus 2 hours in Summer.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; May Day; Commonwealth Day (24th May); Spring Bank Holiday; Summer Bank Holiday; Queen's Birthday; Christmas Day; Boxing Day. Cargo work can be effected at overtime rates on these holidays except on Good Friday and Christmas Day when no cargo work is carried out. Bunkering is effected on any of these holidays except on Good Friday and Christmas Day.

POLICE/AMBULANCE/FIRE: Police and Ambulance 72222; Fire 73333.

TELEPHONES: Telephone can be placed onboard at cruise ship berth. Telephones can also be placed on vessels under repair at the Detached Mole, through Admiralty Telephone Exchange, cost about £10.

DEVELOPMENTS: An unstuffing shed is under construction at the Container Terminal. This shed will give a covered area of 1,200 sq.m. During 1982, 3,307 containers were landed.

GENERAL: Advisable that vessels calling for bunkers and only stopping in port for few hours should radio their requirements prior to arrival to ensure avoiding delay.

SHIPMASTER'S REPORT: 1980: Offport Call. (Updated 1982).

VHF: Lloyds on Channels 16 and 14. Port and Pilots on Channels 16 and 12.

Pratique: Cable for free pratique 18 hours ahead. Standard message. Do not expect reply.

Pilot: Boards from small black hulled motor boat off Rosia Bay. Good lee required. Contact when South of Europa Point.

Anchoring: Not necessary for offport call with under 1 hour's wait. One anchor required ready with forecastle party on stand-by.

Agent/Quarantine Officer: Board off South end of Detached Mole.

Procedure: Require 5 Crew Lists and 1 Health Declaration. They also look at Register and Derat Certificate.

For British crew joining and leaving ALC3 and ALC5 are required to be filled in, so joining members must sign on immediately.

Time: Depends on numbers and ranks joining and leaving, but in October 1980, 9 officers left and 6 joined, procedure took 30 minutes with total off hire of 1 hour and 32 minutes.

General: Money: Sterling easily available in all denominations but make sure you cable in for Agent to arrange during bank hours.

Films: Walport from 'Restano' films and Vidpak – 48 hours' notice.

Agent: Very efficient, on prior request supplied British newspapers and up-to-date Lloyds Index.

Anchorage: Northern limit of tanker anchorage – East to West line 1 cable South of North End Detached Mole (Qk. Fl. G.), ("C" Head) – good anchorage 3–5 cables off mole – single anchor good holding.

For ships awaiting repairs or orders, North limit – East to West line North End South Mole (Fl. 2 sec.) – "A" Head.

Current: (From Pilot). Strong Southerly setting current up to 4 knots, with East wind, off moles.

Lloyds signal station: Approaching Gibraltar, will pass all messages to Pilots and Agent.

Port expenses: Agent quoted total off port (including Pilot) £650.

AUTHORITY: Captain of the Port, Port Office, North Mole, Gibraltar. *Tel:* 77754. *Telex:* 2223 Admsec Gk. *Cables:* Gibport. *Contact:* Captain F. J. Hayward, Captain of the Port.

AGENT: Lambert Brothers (Gibraltar) Ltd., 47 Irish Town. Cables: "Lambert-Gibraltar". Tel. 72685. Telex 2222. Ship's Agents, Insurance Agents, Travel Agents.

Greece

ACHLADI: 38.53 N. 22.50 E.

DOCUMENTS: See "Stylis".
PILOTAGE: Compulsory. Pilot station is in Achladi Village port about 2 miles from the factory. Pilot is a practical seaman who has experience and knowledge of local waters. There is a pilot boat, painted white, flying the International Pilot flag "H". VHF is installed, working frequency Channel 12. Pilot also serves Stylis port and Agia Marina.
ANCHORAGES: The waters which surround the port are free from dangers. Good holding ground with depths from 25 to 30 fathoms.
MAX. SIZE: Max. draft alongside is 60 ft.
VHF: Port Authority on Channels 7 and 12.
TUGS: For large vessels, tugs must be ordered from Volos.
BERTHING: Achladi port is a new construction belonging to the factory of Agroinvest S.A. It is a private berth about 200 m. in length standing about 2 m. above sea level and is well protected by rubber fenders. It was constructed in order to serve factory for loading and/or discharging their products, such as animal food, flour, wheat, maize, etc. Maximum permissible draft along the pier is 60 ft.

The factory is visible just after passing Akra Tapia. It is a conspicuous building due to the height of silos and warehouses. Two fixed green lights show the ends of the berth.
CRANES: Loading/discharging by ship's gear. Mobile cranes may be hired by arrangement with local Agent.
STEVEDORES: Working hours for unloading 0700 hrs. – 1430 hrs. and 1700 hrs. – 2300 hrs. Loading carried out 24 hours.

Loading rate for grain 100 t.p.h. Unloading rate up to 280 t.p.h.
FRESH WATER: Available but quite expensive. Vessel will be supplied by truck/barge only.
FUEL: Not available.
REPAIRS: Minor repairs can be carried out in Stylis or Lamia.
GENERAL: No stores or provisions available.
DEVELOPMENTS: A silo for grain is under construction on the pier.
AUTHORITY: Stylis Harbour Authority, Stylis, Greece. *Tel:* (0238) 22329.

AGHIOS NIKOLAOS (St. Nikolo-St. Nicholas), Crete: 35.12 N. 25.43 E.

DOCUMENTS:
- 4 Crew Lists.
- 2 Passenger Lists.
- 1 Cargo Manifest.
- 1 Spares List.
- 1 Stores List.
- 1 List Crew Personal Effects.
- Maritime Health Declaration.
- 1 Provisions List.

PILOTAGE: Not compulsory. No Pilot station. Private Pilot who can be used if needed. However, not always available. Area of Pilot's boarding is N.E. or S.E. of Aghioi Pandes Islet, depending weather conditions. Anchorage waiting place in same area. Call Pilot with signal "G". Small fishing vessels (length 13.0 m.) fitted with VHF can indicate position of anchorage if advised by Agent.
ANCHORAGES: (a) Harbour of St. Nikolaos, depth 3 – 5 fathoms. (b) Usual anchorage for vessels over 500 tons gross, South or S.E. of Nikolo Islet (Admiralty Chart No. 2536 B) and at a distance of 0.5 – 1.0 miles from the mainland, depth 10 – 40 fathoms respectively. (c) Poros Bay for small and large vessels, only when North and N.W. fresh gales, depth 16 – 27 fathoms.
RESTRICTIONS: Care to be taken off North entrance to port owing to rocky shoals, depth 5 m. Entrance from the S.W. is free of obstructions.
MAX. SIZE: Vessels of up to 100 m. length and 9.0 m. draft can enter the port. At oil bunkering installation outside the port, vessels of any size can be accommodated.
HEALTH: If from another Greek port free pratique is automatic and access to and from vessel granted on permission of Port Authorities. Port doctor visits all other vessels.
RADIO: No local radio station. Cables to Agent or Port Authority through "Athinai Radio", "Heraklion Radio" or "Rhodes Radio".
TUGS: One tug available.
BERTHING: Berthing position designated by Port Authority.
STEVEDORES: 10 permanent port stevedores available, but further 5 men can be engaged. Cargo worked by vessel's own gear.
MEDICAL: No advance notice of medical attendance required. Medical attention by town doctors available. Government hospital with all facilities.
TANKERS: No tanker berths. Vessels moor to buoys. Oil line 6 in. diameter.
DENSITY: 1025.
FRESH WATER: At new pier 3 hydrants, hose diameter 2.5 in. for supplying water. At the bunkering installation at Katsini Bay there is water storage tank capacity 500 cu. m. for supply to deep-sea vessels. Loading rate about 49 t.p.h. Delivery by flexible hose connection from the mooring buoys. Fresh water not available at the present time at the bunkering installation as they have ceased operating.
FUEL: Small quantities transported by tank truck are available from the pier.
HATCHES: Opened/closed by stevedores.
CUSTOMS ALLOWANCES: 2 packets cigarettes per crew member per day.
CARGO GEAR: No shore facilities. All cargo worked with ship's own gear.
CONSULS: None.
REPAIRS: Only minor repairs.
SURVEYORS: None.
REPATRIATION: Crew replacement and repatriation available.
AIRPORT: At Iraklion distance 66 km. 2 or 3 flights per day to Athens.
TIME: GMT plus 2 hours. GMT plus 3 hours late March to late September.
HOLIDAYS: In addition to standard Greek holidays, local holidays are Ascension Day (date not fixed), and St. Nicholas Day (6th December).
POLICE/AMBULANCE/FIRE: St. Nicholas Police tel. 100. State Hospital, tel. 22369. Fire tel. 22674 or 28905. Port Police tel. 22312. Area code for St. Nicholas 0841.
TELEPHONES: Available for yachts only.
SERVICES: Tank cleaning and hold cleaning.
SHORE LEAVE: Permitted with Port Authority pass.
STORING: Possible by truck or barge. Trucks may proceed alongside. No fork lift trucks available. Riggers available.
REGULATIONS: *(a)* Vessels are not allowed to approach Aghioi Pandes (goat reserve). *(b)* No refuse or other waste matter of any description allowed to be thrown overboard from vessel. *(c)* No visitors permitted without Port Authority permission.
DEVELOPMENTS: During next 5 years *(a)* deepening of Port Basin, *(b)* Provision of 1 shore crane, *(c)* construction of breakwater — length 200 m.
AUTHORITY: Port Authority of Aghios Nikolaos, Crete.
Contact: M. Iconomakis (Lieut-Commander), Harbour Master.

AGIA MARINA: 38.54 N. 22.36 E.

DOCUMENTS: See "Stylis".
PILOTAGE: Compulsory. Pilot can be boarded at Stylis Anchorage or Agia Marina. Pilot and pilot boat is the same as for the port of Stylis.
VHF: Stylis Port Authority on Channels 7 and 12.
TUGS: See "Stylis".
BERTHING: Agia Marina Port is an open port on the North side of Maliakos Kolpos. It is a private port belonging to Metalia Voxitou Elefsinos A.E. (Skalistiris Enterpr. S.A.).

The port of Agia Marina is visible just after passing Akra Drepanon and is 2 miles West of the main port of Stylis. A red fixed light shows the head of the elevator.

The berth, consisting of poles only, can accommodate cargo vessels up to 30 ft. draft for loading bauxite and/or chrome ore in bulk, cargoes come from the mines of Mount Parnassos and Mount Iti. Vessels calling at Agia Marina have to make fast to poles and are secured alongside the poles. Communication with the shore is effected only by motor boat which can be hired through local Agents. The loading takes place using an electric elevator and the rate is about 1,000 tons daily.

The port is lee to the wind and it has been reported that even with a Force 8-9 wind, vessels can stay in position without any difficulty. The vessel has to drop anchor in order to facilitate shifting(s) as elevator is immovable, also for better securing. The waters around are clear, with good holding bottom, the depth of which varies from 7 to 13 fathoms.
STEVEDORES: Working hours – 24 hours daily.
FRESH WATER: Not available. Can be obtained at Stylis, where max. draft allowed is 18 ft. 6 in.
FUEL: Not available. See "Stylis".
REPAIRS: Minor repairs can be carried out at Stylis or Lamia.
GENERAL: Stores and provisions available in limited quantities.
AUTHORITY: Stylis Harbour Authority, Stylis, Greece. *Tel:* (0238) 22329.

AGIOI THEODOROI: 37.55 N. 23.05 E.

DOCUMENTS:
- 7 copies Crew Lists (European and Asian).
- 2 copies Dates of Vaccinations/Inoculations.
- 1 copy Cargo Manifest.
- 2 copies List of Provisions and Stores (these are supplied on forms issued by Agent printed in Greek/English).
- 2 copies Officers'/Crews' personal declaration, on forms supplied by Agent in Greek/English, covering all high duty items, radios cameras, etc.
- 1 copy declaration of ships' cash on board, form supplied by Agent in Greek but made out in front of Master.
- 2 copies of Masters' declaration that all high duty goods have not been put under seal, and that he is responsible for any loss or landing of same without proper authority.

All passports and/or Seamen's books to be produced *if* requested by Immigration.

On completion of loading, documentation takes about 2 hours.
PILOTAGE: Compulsory. Pilot boards S.S.E. of port, about 1 mile off the outer jetty. No pilot boat as such; uses either a tug or mooring boat. Pilot is arranged by Agents who are based in Piraeus (1 hour by car). No means of radio contact between vessel and Pilot station.
ANCHORAGES: A reasonably safe anchorage can be obtained in position 0.5 mile off the outer jetty in a depth of 20 to 25 fathoms with a sandy bottom.
MAX. SIZE: Max. draft 70 ft.
TUGS: 2 tugs used for berthing, and 1 on sailing.

BERTHS: There are 3 main berths with 2 smaller berths for coastal vessels. The largest and outermost berth can accommodate vessels of 250,000 tons fully loaded, maximum discharge/loading rate at this berth being 5,000 t.p.h. The other berths can accommodate vessels of up to 50,000 tons fully loaded with maximum discharge/loading rate of 3,000 t.p.h. All berths are equipped with four 10 in. Chicksans. They are situated in an open position for winds from the South and West but provided ample moorings are put out, there should be no cause for concern.

Vessels can berth at any time day or night.

MOORINGS: Standard moorings on to dolphins which are well fendered and hold the vessel about 4 feet clear of the manifold complex. Vessels require their gangway but no derricks are required. 1 or 2 anchors are used depending on the berth used.

FRESH WATER: Fresh water for other than drinking purposes is available from the jetty, but drinking water has to come by barge from Piraeus for which 2 days' notice is required.

FUEL: Available alongside. Rate 3,500 cu.m./hr. for fuel oil and 600 cu.m./hr. for diesel.

REPAIRS: No facilities. Nearest port for repairs is Piraeus.

CUSTOMS: Bonded locker is sealed. Allowance 200 cigarettes or equivalent in tobacco or cigars per man (7 days) and a part bottle of wine and spirits is permitted per man (7 days). All Tobacco/cigars/cigarettes placed under seal. Crew excess must be declared on provision list in separate column for same.

SHORE LEAVE: Shore leave is allowed, passes being issued on arrival which must be handed in prior to sailing.

AUTHORITY: Motor Oil (Hellas) Refineries.

ALEXANDROUPOLIS: 40.51 N. 25.54 E.

DOCUMENTS:

Port Authority:

2 Crew Lists.

1 Passenger List (if any).

If from abroad Maritime Declaration of Health.

If Greek flag, articles and log book, and declaration of foreign exchange.

Customs:

3 Lists of Stores and Provisions.

1 Crew List.

Master's personal declaration that all stores not held in bond will remain on board.

PILOTAGE: No pilot service. If Master requires pilotage assistance an experienced local boatman is available, but Agent must be advised of ETA in advance order to arrange for this Pilot to await vessel about 1 mile outside port.

ANCHORAGES: Depth inside port 18 ft. 06 in., mud bottom. Depth increases outside port to about 10 m. at distance of 1 nautical mile.

Area around port subject to strong S.E./S. winds especially during Winter. During strong winds vessels can seek shelter off Samothraki Island. In strong winds port is considered safe but because of occasional large waves loading is stopped. Winds from other directions do not affect port work.

MAX. SIZE: Vessels with draft not exceeding 18 ft. can enter safely.

HEALTH: Vessels from foreign countries can enter harbour and obtain free pratique during the period from sunrise until 2200 hrs. Vessels having suspected contagious disease on board should remain outside harbour until visit of medical officer, and await further instructions.

TUGS: None.

BERTHING: At least 24 hours' notice of ETA to be passed to Agent in order to obtain allocation of berth from Port Authority.

STEVEDORES: Prior notice to be passed to Agent order arrange gangs. Rate of cargo working: General cargo about 100 tons per gang every 8 hours. Bagged cargo about 100 tons per gang every 8 hours. Coal about 80 tons per gang every 8 hours. Timber about 120 cu.m. per gang every 8 hours. Vessels must use own gear for loading/discharging.

MEDICAL: No advance notice required. 1 Government General Hospital, 3 clinics. Doctors' services readily available.

TANKERS: There is a floating pipe-line. Tankers with a draft of 18 ft. can discharge diesel oil and gasoline.

FRESH WATER: 10 hydrants available. Delivery rate about 5 t.p.h. (each), but delivery rate reduced when 2 or more hydrants in use.

FUEL: No bunker C fuel available. Supplies of diesel oil possible from road-tankers.

FIRE PRECAUTIONS: No port fire brigade. In emergency fire brigades must be called from Alexandroupolis.

WATCHMEN: Not available, and if required must be supplied by vessel.

HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCES: One packet cigarettes allowed out of bond for each crew member, for each day in port. Wine/beer no restrictions. Spirits, Master allowed one bottle.

CARGO GEAR: Load/discharge by ship's own gear.

IDENTIFICATION CARDS: Shore pass issued against crew list and seamen's book. Passes obtainable from Port Authorities.

CONSULS: Consul-Agent of France. Tel. 26–720 and Consul-Agent of Italy. Tel: 28–384.

REPAIRS: Only minor repairs available.

REPATRIATION: Facilities for crew changes and repatriation.

AIRPORT: 5 km. distant. 2 daily flights to and from Athens.

TIME: GMT plus 2 hours. Summertime GMT plus 3 hours.

HOLIDAYS: 1st January; 6th January; Whit Monday; 25th March; Good Friday; Easter Monday; 1st May; 14th May (local); 15th August; 28th October; 6th December; 25th December; 26th December, and all Sundays. Cargo work can be arranged on these days, subject to payment of additional charges.

POLICE/AMBULANCE/FIRE: Police station, 26352; Security Police, 26220; Ambulance, 25272; Fire, 26222. Port Police, 26468 (VHF 12).

TELEPHONES: No facilities for telephones on board.

SHORE LEAVE: Permitted.

DEVELOPMENTS: (a) Supplementary works are being performed outside along the West breakwater.

(b) Dredging works have already been started again inside the port.

AUTHORITY: Port Authority of Alexandroupolis. *Tel:* 26468 (VHF Channel 12). *Contact:* G. Tsironis (Lieut-Commander), Harbour Master.

ARGOSTOLI, Cephalonia: 38.12 N. 20.29 E.

DOCUMENTS:

3 Crew Lists.

3 Passenger Lists.

Customs Clearance.

2 Cargo Manifests.

Bills of Lading (copy).

4 Ship's Stores List.

4 Lists of Crew's Personal Effects.

Ship's Papers.

Crew Vaccination List.

PILOTAGE: No Pilot station.

ANCHORAGES: Vessels anchor in roads 0.5 miles N.N.W. from Entrance light. Max. channel draft 19 ft.

MAX. SIZE: Up to 19 ft. draft.

HEALTH: Free pratique given by Port Health doctor.

RADIO: Patras Radio. No VHF.

TUGS: None available.

MEDICAL: Advance notice not required except in urgent cases. For vessels arriving from foreign countries crew require vaccination certificates.

TANKERS: Small tankers discharge at DEH Power Terminal.

FRESH WATER: Can be supplied from the pier using ship's hoses.

FUEL: Small quantities available, but only for yachts.

OPENING/CLOSING HATCHES: Performed by ship's crew.

CUSTOMS ALLOWANCES: 50 cigarettes allowed for each crew member.

CONSULS: No local representation.

REPAIRS: Only minor machinery repairs can be carried out.

REPATRIATION: By air to Athens (once daily) or by ferry-boat.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summertime.

HOLIDAYS: Local holidays are 21st May, 16th August and 20th October, in addition to national holidays. Work may be arranged at double rates.

POLICE/FIRE/AMBULANCE: Police 22200; Ambulance 22515; Fire service available.

TELEPHONES: Can be connected on board vessels without charge.

SHORE LEAVE: Allowed.

AUTHORITY: Cephalonia Harbour Office.

ASPROPYRGOS: 38.02 N. 23.36 E. (See Plan Book)

DOCUMENTS: All usual certificates including Registry, Safety, Cargo Gear, Radio, Derat, Last Port Clearance and:

9 Crew Lists

2 Vaccination Certificates

Cargo Manifest

List of Spares

Maritime Declaration of Health

1 Vaccination List

4 Crew Effects Declaration

Passenger List

Cargo Documents

2 Special Customs Forms in triplicate

2 Store Lists

PILOTAGE: Cable Agent 72, 48, 24 hours in advance advising ETA. Agent informs Pilot Office of vessel's arrival time. Piraeus Pilots can be contacted on VHF Channel 12 for calling. Pilot boards vessel 0.5 miles S.E. of Piraeus Breakwater.

ANCHORAGES: See "Eleusis" and "Piraeus".

RESTRICTIONS: Max. 60,000 d.w.t., max. permissible draft to enter Eleusis Bay is 35 ft. 6 in.

HEALTH: Pratique is in accordance with International Regulations. Pratique automatic if arriving from another Greek port.

RADIO: Athens (SVA).

VHF: Operative throughout 24 hours on Channels 16, 12, 7 for Pilots and 16, 12, 7, 19 for Eleusis Coastguard. Aspropyrgos Refinery on Channels 8, 14 and 74.

RADAR: None.

TUGS: Usually join vessel at the entrance of the channel, ship lines always used.

BERTHING:
Position of berth: Lat. 38° 01′ 34″ N., Long. 23° 35′ 36″ E. Pilot will advise Master of berthing place in accordance with Port Authority instructions. Usually berthing with port side to at crude oil berth; with starboard side to at oil products berth and with the stern to at LPG berth.

According to the Pilot it is preferable to use ropes for mooring.

Also see "Tankers".

MEDICAL: Advance notice not required; clinic available in town of Eleusis if required.

TANKERS: One berth, depth 38 ft. 9 in., with 3 unloading arms (8 in. diameter each) for discharging crude oil. The max. acceptable pressure at the unloading arms is 9 kg./sq.m.

One berth, depth 38 ft. 9 in., with 3 loading arms (8 in. diameter each) for oil products.

One berth, depth 23 ft. 8 in., for loading LPG and oil products with flexible hoses, 6 in. diameter each.

There is one pier for small tankers (coasters) with max. depth 26 ft.

DENSITY: 1025.

FRESH WATER: Can be supplied from the piers (up to a maximum quantity of 300 cu.m. per vessel).

FUEL: Not available at present.

FIRE PRECAUTIONS: Fire wires rigged fore and aft on outboard side of vessel. Deck scuppers plugged. Spark arresters to be fitted on tank openings. Earth connections made. Patrols made by Port Officers.

In the case of a storm, the Dock Master can stop discharge of vessels. The refinery fire fighting procedure is followed.

CONSULS: None.

REPAIRS: While alongside, maintenance of any kind on board is strictly prohibited. In case of an emergency, the issuing of a special written "cold or hot work" permit is necessary.

DRY DOCKS: See "Eleusis".

GANGWAY/DECK WATCHMEN: Not required.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 open bottle of wine/spirit allowed per crew member.

REPATRIATION: All facilities available for crew changes and repatriation.

AIRPORT: Direct overseas flights available via Athens airport at Hellinicon.

TIME: GMT plus 2 hours; Summertime (March to September) GMT plus 3 hours.

POLICE/AMBULANCE/FIRE: All emergency services are available through the terminal office. Fire alarms are installed throughout the jetty. Fire tel: 300. Ambulance tel: 311, Police tel: 353.

SERVICES: Compass adjusting. Electronic equipment services.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Shore passes issued by Port Authority.

AUTHORITY: *Operators:* Hellenic Aspropyrgos Refinery, 18 Hermou St., T.T. 126, P.O.B. 649, Athens, Greece. *Tel:* 3236601, 3236974. *Telex:* 21.5442, 21.5443 (Ref Gr). *Cables:* Refaspr.

Contact: A. Tzouros.

Aspropyrgos Refinery: *Tel:* 5573252-5, 5573491-4, 5573226.

CHALKIS: 38.27 N. 23.36 E.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
2 Cargo Manifests.
2 Stores and Spares Lists.
2 Crew Personal Effects Lists.
Health Certificate.

PILOTAGE: Pilotage is compulsory.

Application for Pilot to be made by radio through Agent to Chalkis Port Authority. ETA required at least 8 hours before arrival.

Apply for Pilot through VHF Channel 12, or through radio/telephone on 2364 kHz calling Harbour Master, Chalkis.

Pilot boards from black motor-boat with white horizontal stripes, about 10 m. length, in a position about 1 mile – 1.5 miles North of the light buoys of the Northern Port.

The pilotage area extends from 1 mile North of red and green light buoys, North of Evripos Bridge, and to the South of Euboea, 2.5 miles from Bourtzi Point.

The anchorage for vessels coming from the North of Euboea and awaiting Pilot is at the centre of the Euboean coast off Lighthouse Kakokefali, North of the 2 light buoys and outside the bearing 020°/200° which is the axis of vessels passing in and out of Evripos Strait.

Safe anchorage for vessels coming from South of Euboea and awaiting Pilot is 1 nautical mile South of Bourtzi Point.

ANCHORAGES: *(a)* In the basin of South Port clear of vessels passing in the Straits. Depths over 21 ft.

(b) In North Port between the light buoys and Kakokefalis lighthouse and outside the axis of course 020°/200°. In depths of 10–15 fathoms.

(c) Anchorage mentioned in "Pilotage" above, depths of 10 fathoms.

RESTRICTIONS: Entry restricted only by depth. Max. draft 21 ft. For vessels intending to pass Evripos Strait having draft 19 ft., passage possible only at slack tide or with following tide. Full details in Evripos Straits Operations Regulations.

There is also a restriction in Steno Straits where there is an overhead cable 38 m. above sea-level.

MAX. SIZE: Max. draft 21 ft. in daytime and 19 ft. at night for vessels entering port. For vessels navigating Evripos Strait max. length 110 m., max. draft 19 ft., breadth 20 m. and subject to local regulations.

HEALTH: Pratique not required if coming from another Greek port. Otherwise international pratique regulations are applied.

RADIO: No local radio, all messages should be passed through Athinai Radio.

TUGS: 1 tug available, joins vessel off the berth. Ship's tow lines used. Tug is compulsory for vessels over 1,000 g.r.t. Tug used only for berthing and unberthing.

BERTHING: Berthing in both the North Port and the South Port can only be effected at slack water subject to available tide.

BRIDGES: Passage above Evripos Bridge can only be effected at slack water or with following tide.

STEVEDORES: Loading, discharging, carried out with ship's gear. Notice must be given by Agent to stevedores not less than 6 hours before vessel's arrival.

Cargo working rates: General cargo 80–100 tons every 8 hours. Bagged cargo 100–150 tons every 8 hours. Timber 70 cu.m.–90 cu.m. every 8 hours.

MEDICAL: Agent should be advised beforehand if medical assistance required on arrival. Clinic facilities available. Vaccination certificates required.

DENSITY: Average 1025.

FRESH WATER: Drinking water can only be supplied in small quantities by tanker lorry.

FUEL: Can be supplied in small quantities by tanker lorry.

WATCHMEN: Not required.

HATCHES: Opening and closing hatches can be effected by ship's crew or by workers if requested.

CUSTOMS ALLOWANCES: Crew members each allowed 1 packet of cigarettes per day. Only the Master is allowed 1 or 2 bottles of alcohol while vessel in port.

IDENTIFICATION CARDS: Shore passes are issued by port authorities.

CONSUL: France, Tel: 2574.

DRYDOCKS/REPAIRS: Khalkis Shipyards S.A., P.O.Box 18, Khalkis, Greece. Tel: (0221) 31502, 31512. Telex: 272143, 272180.

Shipyard has 3 floating docks (max. size 48,000 d.w.t.) and a lay-by berth for major repairs.

REPATRIATION: No difficulties as there are excellent communications with Piraeus. Also see "Shipmaster's Report".

AIRPORT: Nearest is Athens International Airport.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: 1st January; 6th January; 25th March; 21st April; Good Friday; Easter Monday; Easter Sunday; 21st May; 15th August; 28th October; 6th December; 25th and 26th December. Local holiday 26th July.

POLICE/FIRE/AMBULANCE: Port police 22580; Fire 23333; Ambulance 22282.

TELEPHONES: Cannot be connected on board.

SHORE LEAVE: Allowed.

DELAYS: Only waiting for suitable tides.

DEVELOPMENT: A pier 240 m. is under construction at Vourkos in the South Port; depth alongside 26 ft.

SHIPMASTER'S REPORT: June 1981.

The name appears to be pronounced Halkis but according to local people the spelling can be Chalkis, Khalkis, Halkis or Kalkis.

To repatriate Indian crew Agent requires names of those persons leaving at least 48 hours in advance. Crew usually cleared through Immigration 48 hours beforehand and through Customs when they leave the vessel. Immigration office closes at 1300 hrs. and all day Sunday. For British personnel, Immigration can be arranged 24 hours beforehand. All personnel must ensure that anything declared on the manifest such as cameras, radios etc., are crossed off on being taken ashore otherwise vessel will be fined if these items not sighted by Customs when vessel sails.

The bridge lowers and retracts under the road on the South side.

According to the Pilot the maximum tidal rate is 4 knots although it does appear faster at times.

AUTHORITY: Chalkis Port Authority.

CORFU (Kerkyra): 39.37 N. 19.56 E. (including Kalifoka and Kefalomandouko)

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
Maritime Declaration of Health.
3 Stores Lists.
3 Spares Lists.

PILOTAGE: At least 24 hours before arrival ETA should be passed to Port Authority on 2182 kHz, answering on 2830 kHz also VHF Channels 7 or 12 and Telex No. 332111. Vessels requiring Pilot during daytime should hoist letter "G" of international code, and sound letter "G" in the morse code on ship's whistle at intervals. Vessels should await Pilot in position Lat. 39° 38′ N., Long. 19° 57′ E. nearest to the coast of Ptychia Island (Vido) and Corfu, depending on weather conditions.

ANCHORAGES: Safe anchorages in the area between Vido Island and coasts of Corfu, depth about 30 m. During strong N.W. winds there is safe anchorage in the roadstead at Garitsa Bay at a distance of 0.5 miles from the shore where depth in excess of 20 m.

RESTRICTIONS: Only during unfavourable weather conditions or lack of berthing space.

MAX. SIZE: Draft 7.0 m.

HEALTH: Port Health Officer boards vessel on arrival and examines health declaration. In cases of suspected disease or fever on board the Health Officer will examine entire crew and passengers.

RADIO: Radio Kerkyra. 2182 and 2830 kHz.

VHF: Radio Kerkyra on Channel 26. Port Authority on Channels 7 and 12.

TUGS: One tug – "Hermes".

BERTHING: Vessels should prepare fenders prior going alongside berth.
STEVEDORES: At least 24 hours advance notice of ETA required order arrange gangs. There are 3 silos for the discharge of bulk grain at Mandouki.
MEDICAL: Agent should be advised in advance of any medical requirements. Medical clinics available.
DENSITY: 1025. Max. height of tide 0.6 m.
FRESH WATER: Available through 2 in. hoses. Cost 140 drachmas per ton (approx.).
FUEL: For yachts in the new harbour there is a diesel-oil tank, capacity 10 tons. Also available from road tanker for all vessels alongside.
FIRE PRECAUTIONS: Loading/discharging of inflammable liquids and explosives generally forbidden without permission of Port Police. The anchorage for vessels carrying inflammable liquids or explosives is between Lazareto Islet and N.W. of breakwater point.
WATCHMEN: Required.
HATCHES: Opened and closed by stevedores. Hold cleaning service available.
CUSTOMS ALLOWANCES: Crew of Greek vessels are not allowed more than immediate requirements out of bond. Seamen signing off and passengers leaving the vessel are allowed 200 cigarettes.
IDENTIFICATION CARDS: Required.
CONSULS:

Belgium: S. Savanis, 44 Alexandras Av. Tel: 33788.
Brazil: K. Palatianos, 124 Kapodistriou St. Tel: 30767.
Denmark: V. Patras, 140 Xen. Stratigou St. Tel: 38712.
France: M. Paipetis, 22 Iak. Polyla St. Tel: 26312.
W. Germany: D. Zervos, 11 Alexandras Av. Tel. 31453, 32027.
Great Britain: I. Karidi-Patrikioy, 11 Alexandras Av. Tel: 30055.
Italy: Mic. Viegio, 10 Alexandras Av. Tel: 37351.
Netherlands: Aris Bogdanos, 2 Dimarchoy Manesi St. Tel: 29642.
Norway: K. Kondis, 5 Donzelot St. Tel: 32423.
Spain: Spiridon Pogiagos, Eygeniou Voulgareos St. Tel: 29969.
Sweden: Adam Bogdanos, 5 Donzelot St. Tel: 29469.

REPAIRS: Facilities for minor repairs only.
DRY DOCK: Largest dry dock 20 m. length, 2 m. depth.
REPATRIATION: Facilities for crew changes and repatriation available.
AIRPORT: 2 km. from port. During winter 2 flights daily to Athens. During summer frequent daily flights to Athens, Thessalonika and abroad.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: Local holidays are 21st May, 11th August and 12th December. In addition Corfu observes standard Greek holidays.
POLICE/AMBULANCE/FIRE: Port Police, tel: 32655, 30481; Police, tel: 23661; Ambulance, tel: 39403, 30033, 30562; Fire, tel: 29255, 39533.
TELEPHONES: Telephones only available for placing onboard for special cases.
GENERAL: Prevailing wind is from the N.W. Anchorage in the new harbour unsatisfactory due to mud bottom.
SHORE LEAVE: Allowed.
REGULATIONS: Forbidden to approach Lazareto Islet.
AUTHORITY: Kentrikon Limenarchion Kerkiras (Port Authority of Corfu), Xenofontos Stratigoy 4, GR 491 00 Corfu, Greece. *Telex:* 332111. *Contact:* Themistoclis Panaioannou.

ELEUSIS (including Skaramanga): 38.02 N. 23.33 E.

DOCUMENTS:

4 Crew Lists.
4 Passenger Lists.
Bill of Lading.
2 Lists of Stores and Provisions.

PILOTAGE: Piraeus Pilot Station regulations are operative.
ANCHORAGES: Port offers safe anchorage. Bottom mud and sand.
RESTRICTIONS: After sunset and for vessels intending to enter Eleusis port through Salamis Channel, it is imperative to give 6 hours' notice of expected time of arrival to Port Authorities of Eleusis, in order to obtain special permission from the naval yard of Salamis.
MAX. SIZE: No limitations to length and breadth at the installations or at the main port. Max. permissible draft of vessel entering Eleusis Bay is 35 ft. Max. draft at berths is 33 ft. Also see "Tankers".
HEALTH: For vessels arriving from other Greek ports, pratique is automatic. Vessels arriving from foreign ports boarded by Health Officer who grants free pratique.
RADIO: Athinai, 2182 kHz.
TUGS: Join vessel outside Piraeus Harbour and formalities much same as Piraeus.
BERTHING: Overall length of jetties and quay at Eleusis 715 m. Max. depth over 80 m. of jetty length is 33 ft. with depths of 26 ft. elsewhere.
SPECIALISED CARGO-HANDLING: Loading/discharging of iron ore is carried out by *(a)* Holivourgiki Co., which owns a pier of 180 m. long and from 26 ft. to 36 ft. depth, equipped with 4 cranes with average discharge rate of 6,000 t.p.h., and *(b)* by Metallia Voxitou Elefsinos Co., which offer a special anchorage with buoys. Loading is effected by means of silo.

Loading/discharging of fluid chemicals or liquid gas are carried out by Petrogas Co. to their private pier of 35 m. long and 15 ft. depth.
MEDICAL: Advance notice not required. Clinic available in town of Eleusis if required.
TANKERS: Operating companies supply reducing pieces. No facilities for residue discharge. *(a)* Esso Pappas: length 160 m.; breadth 30 m.; depth at pier 30 ft. *(b)* Greek Refineries: length 93 m.; breadth 12.70 m.; depth 7 m. *(c)* Texaco: length 80 m.; breadth 6 m.; draft 4.50 m. *(d)* Mamidakis: length 40 m.; breadth 5 m.; draft 27 ft.

Shipmaster's Report: June, 1981.

Petrola petroleum harbour just West of Elefsis town.

Petrola is owned by John Latsis Co. The terminal has their own VHF Channel 66 alpha, also use Channel 12 but this usually congested.

Moorings: Normally 3, 2, 1. Normally 2 tugs. Pilots employed by Petrola and come on board after Sea Pilot has taken vessel through the Bay. Fresh water available from jetty.
FRESH WATER: Barge delivery available.
FUEL: Available ex-wharf at tanker installations subject advance notice. Can be supplied by barge at other locations.
FIRE PRECAUTIONS: The usual precautions applicable to oil installations. During operations of white liquid (petrol, spirits, etc.) regulations require a tug to be standing by.
HATCHES: Usually opened and closed by crew and subject additional payment by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine/spirits allowed per Crew member out of bond.
CONSULS: None.
REPAIRS: All grades of repairs can be carried out at Eleusis shipyard, and also at Skaramanga (see "Dry Docks").
DRY DOCKS:
Hellenic Shipyards Co.

Skaramanga Shipyard: Situated on the coast between the Port of Piraeus and Eleusis Bay. Shipyard is 8 miles by road from Athens and 7 miles from Piraeus; driving time 25 and 20 minutes respectively.

Mailing address: Hellenic Shipyards Co. Athens: 4 Academias St. Tel: 36.11.142. Cables: Shipyard, Athens. Telex: 215123.

Skaramanga: Tel: 55.73.351, 55.73.471. Cables: Shipyard, Athens. Telex: 215293, 215396.

Office hours at Skaramanga: 0815 hrs. to 1715 hrs. (weekdays), 0815 hrs. to 1345 hrs. (Saturdays).

Floating Docks

Main Particulars	*Dock No. 1*	*Dock No. 2*	*Dock No. 3*
Lifting capacity	30,000 tons	22,000 tons	25,500 tons
Docking capacity (d.w.t.)	72,000 „	37,000 „	60,000 „
Length overall	826 ft.	673 ft.	760 ft.
Length on keel blocks	760 „	605 „	693 „
Breadth inside banks	121 „	105 „	111 „
Breadth outside banks	147 „	129 „	136 „
Ht. of WL above keel blocks	28 „	28 „	28 „
Pumping time (Minutes)	120	80	100

Skaramanga Yard's three floating docks have been designed in such a way as to eliminate delays of any kind in the raising of large vessels and to ensure that the work is carried out in minimum time and with the least possible inconvenience to the crew living on board.

The basic equipment of the docks is the following; Two 5-ton cranes, 2 fire extinguishing pumps 120 cu.m. per hour at 90 m. WC, DC current supply to ships 1200 A 220 V, AC current supply to ships 600 A 440 V 60 cycles, multipoint welding rectifier 2500 A, 2 oil pumps for supply of fuel oil from the dock to the vessel 60 cu.m. per hour at 50 m., 2 compressors 17 cu.m. per minute at 7 atu, emergency diesel generator set 200 KVA, foam fire extinguishing system, steam boiler and water distilling plants.

Shipmaster's Report: 1978.

Tankers may discharge residue at the deballasting station of Hellenic Shipyards, max. output 500 cu.m./hour.

Graving Docks

1. Capacity 500,000 tons. Length 420 m., breadth 75 m., depth 9.5 m.
2. Capacity 250,000 tons. Length 327 m., breadth 53.6 m., depth 9.25 m.

Ships are manoeuvred at the dock entrance with the assistance of two 5-ton capstans situated on each side of the entrance gate. They are then shifted inside the docks by two 15-ton auto-tensioning winches and hauling-in trolleys (mules) running on tracks on each side along the dock subway.

The dock floor is fitted with specially designed keel blocks for easy fitting and removal and with electrically operated side blocks.

The Graving Dock is served by two 100-ton cranes, one 50-ton crane and a small 5-ton crane.

A fleet of 5 powerful tugs is on hand at Skaramanga Yard to assist docking and undocking operations of all vessels calling at the yard.

Eleusis Shipyards S.A. is located 27 km. outside Athens. The site was chosen on account of the several advantages it presents. The bay is well protected from strong winds, sources of raw materials are available in the vicinity of the ward, and adequate transportation, power, and telecommunication facilities can service the needs of yard.

Athens Office: 67 Athinas Street, Athens 112. Tel. 349 053. Cables "Helnafel Athinia". Telex 215215 Esc Gr.

Yard: Eleusinia, Eleusis. Tel. (01) 5535111. Cables: "Helnafel Eleusis". Telex: 215684 Yard Gr and 215690 Yard Gr.

Floating Docks: Three floating docks are available with the following specifications:

	No. 1	*No. 2*	*No. 3*
Length	162 m.	227.5 m.	252 m.
Breadth at entrance	23 m.	33 m.	41 m.
Draft over keel blocks	6.30 m.	8 m.	9.40 m.
Lifting capacity	11,500 m. tons (20,000 d.w.t)	20,000 m. tons (60,000 d.w.t.)	30,000 m. tons (115,000 d.w.t)
Cranage	5 t at 15 m.	12 t at 20.6 m.	12 t at 20 m.

Quay Wall: The 640 m. long quay wall is equipped with 40 and 15 ton cranes, range 30 m.; power 220 volts DC 100 amp. – 42 volts DC 25 amp. – 280 volts AC 630 amp. Floating crane, 50 tons capacity.
Tugs: Available for manoeuvring purposes at all times.

AIRPORT: Athens Airport. Regular international flights.
HOLIDAYS: Cargo operations can be effected during usual Greek holidays, following submission of application to Harbour Workers' Union and subject cost increase of 75% above normal.
POLICE/AMBULANCE/FIRE: Eleusis Police Station 46674; Ambulance 46503; Fire Brigade 0199.
SPECIAL PRECAUTIONS: See "Piraeus".
AUTHORITY: Eleusis Port Authority.

IRAKLION (Heraklion), Crete: 35.20 N. 25.10 E.

(See Plan Book)

DOCUMENTS:

4 Cargo Manifests.
4 Crew Lists.
4 Passenger Lists.
Declaration of Crew's Personal Effects.
List of Stores and Provisions.
Maritime Declaration of Health.
Vaccination Certificates.

PILOTAGE: Pilotage area extends 0.5 to 1 mile N.E. of breakwater. Advance notice of ETA should be passed to Agents order arrange Pilot. Contact may be made with Pilot station on VHF Channel 12 during daylight, also when within distance of 3–12 miles, and subject prior agreement of calling time, communication can be effected by radio–telephone via Radio Iraklion – Pilot station telephone 286133. International pilotage signals apply. Pilot boat is wooden boat 12 m. length, hull colour black, with white deckhouse, carrying black board with word "Pilot" in white letters. In bad weather vessels should proceed close to entrance of port for Pilots boarding.

A cement pillar has been installed on the end of the extension of the North breakwater. Fl. G. every 3 seconds, visible 9 miles. The pilot boat is equipped with VHF, range 50 miles.

ANCHORAGES: Anchorage East of port entrance is forbidden owing to numerous underwater cables. In good weather conditions anchorage to be found 0.75 mile Northwards of North breakwater with Enetic Castle bearing 180°. In bad weather conditions, best anchorage is at a distance of about 5 nautical miles to the W. of the North breakwater and at a distance of 3 miles from the coast (Ellinoperamaton Haven); depth of water requires a big scope of anchor chain.

MAX. SIZE: Max. length 250 m., draft 29 ft.–29ft. 6 in. Usual rise and fall of tide 1 ft. but increasing with South winds and decreasing with North winds.

HEALTH: International regulations apply for obtaining free pratique. In the event of suspected disease vessel will remain under quarantine until cleared. Pratique is automatic if arriving from another Greek port.

RADIO: Radio Iraklion – SUH 2128 kHz.

TUGS: Tug of 1,300 hp. operated by Nicolas E. Vernicos. Telephone Piraeus 4527812-4522337 (24 hours).

BERTHING: Pilot will advise Master of berthing position.

STEVEDORES: Port authority owns 3 cranes but they are seldom used. Cargo operations usually conducted by use of ship's own gear. Discharge rates per gang in 8 hours: bulk cargo 100 tons, bagged cargo 140 tons, liquid cargo subject ship's equipment – transportation by barges, timber 100 cu. m.

MEDICAL: Advance notice should be passed to Agents if requiring medical attention. Clinics and medical treatment available.

TANKERS: Only very small tankers discharge in Iraklion Port and Ellinoperamaton Haven. At Iraklion, tankers discharging liquid fuel are required to berth at East breakwater (fuel pier). Attendance of fire brigade and 1 tug standing by is compulsory.

DENSITY: 1020.

FRESH WATER: Available ex-berth or ex-barge. Rate of delivery ex-berth about 500 tons per 24 hours.

HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCES: 2 packets of cigarettes per day per crew member allowed out of bond, and one 500 ml. bottle wine/spirits for whole time of vessel's stay in port.

IDENTIFICATION CARDS: Shore passes issued by Port Authorities.

CONSULS:

Belgium	tel. 282520 and 282296
Denmark	tel. 282253
Finland	tel. 284860 and 283860
France	tel. 282347
Germany	tel. 282266 and 285400
Netherlands	tel. 282615
Norway	tel. 282667
Sweden	tel. 282476 and 285859

REPAIRS: Minor repairs available by machine shops in town of Iraklion. No facilities for deck repairs.

AIRPORT: Distance 5 km. Now an international airport with numerous flights.

TIME: GMT plus 2 hours, GMT plus 3 hours end March – end September.

HOLIDAYS: Usual Greek holidays plus local holidays of 25th August and 11th November. Cargo work can be arranged on holidays subject additional costs.

POLICE/AMBULANCE/FIRE: Police, tel. 282241, 282430, 282316; Ambulance, tel. 282894, 282638; Fire, tel. 283555, 282333.

AUTHORITY: Port Fund of Iraklion.

ISTHMIA, Corinth Canal (including Sousakion and Corinth): 37.55 N. 23.00 E.

(See Plan Book)

DOCUMENTS: (For Sousakion only).

Port Authorities	*Customs*
Crew List.	Customs papers and declarations.
Passenger List.	Cargo Papers.
Ship's Certificates.	List of Stores and Provisions.
Health Certificates.	List of Crew's Personal Effects.
Certificate of Anchorage Dues.	

PILOTAGE: There are 16 Pilots for the Corinth Canal. Telegraphic address of Canal is "Corinth Canal", tel. 0741-24452, telex: 232164 Dico Gr. Master of vessel must give at least 4 hours' notice of ETA in order to avoid delay. For Pilot signals, etc., see article 7 of the New Company of the Corinth Canal "Regulation of Navigation and Tonnage".

ANCHORAGES: Open anchorage in Isthmia Bay.

RESTRICTIONS: Corinth Canal closed every Tuesday from 0600 hrs. to 2000 hrs. in order for maintenance work to be effected.

MAX. SIZE: The max. draft of ships negotiating the Canal, in relation to their width, is defined as below, assuming normal water level and normal weather conditions.

Width	*Maximum draft*
16.0 to 16.5 m.	6.2 m.
15.5 to 16.0 m.	6.2 m.
15.0 to 15.5 m.	6.6 m.
14.5 to 15.0 m.	6.8 m.
14.0 to 14.5 m.	7.0 m.

The max. draft for vessels of less than 14.0 m. width is 7.2 m. The max. width must not exceed 18.3 m. (60 ft.).

Special instances will be examined by the Master and the Canal Service in collaboration.

HEALTH: (For Sousakion only). Pratique effected by health department of the Port Authority assisted by temporarily engaged doctor. In cases of suspected contagious disease vessel will be held under quarantine and if necessary fumigation will be conducted at Piraeus.

VHF: Corinth Canal Pilots on VHF Channel 11. Harbour Master at Isthmia on Channel 19. Harbour Master at Corinth on Channels 19 and 12.

TUGS: Join vessel near Canal entrance at Isthmia and Possidonia. Ship's lines always used.

BERTHING: In Sousakion at private factory pier. No berths at Isthmia.

MEDICAL: Agent should be advised in advance of number of crew needing medical assistance, also information of any vaccination required.

FRESH WATER: Not available either at Sousakion or in the Canal.

FUEL: No fuel available at Corinth.

CUSTOMS ALLOWANCES: Each crew member allowed 200 cigarettes out of bond and 1 bottle wine/spirits.

CARGO GEAR: Loading/discharging by ship's gear.

AIRPORT: 100 km. distance.

TIME: GMT plus 2 hours.

POLICE/FIRE/AMBULANCE: Telephone Harbour Master of Isthmia Tel. No.: 22129.

DELAYS: Possible delay up to 1.5 hours in transiting Canal if another vessel already transiting canal from opposite direction.

GENERAL: Passage via the Corinth Canal is a *Transit*.

SHIPMASTER'S REPORT: (Corinth) 1977.

Vessel: 5,700 g.r.t., 9,200 d.w.t., Summer draft 24 ft. 07 in., LOA 409 ft. 05 in.

Documents: No special entry papers required and if anchoring to await the berth Customs and Immigration will usually board at anchorage.

Port of Corinth: The port has no VHF communications but messages can be passed through the Corinth Canal Pilot Station on Channel 11. Pilot will then telephone Agents.

Anchoring off the port in the case of delay is possible but cannot be described as safe due to the close proximity of land or shoal water. Holding ground, however, is good. This vessel anchored with Corinth Breakwater light bearing 248° in about 16 fathoms of water using 6 shackles of cable. Vessel rode out a force 7/8 gale from the North without dragging but with the cable fully stretched the bridge was only 2.3 cables from the breakwater and too close for comfort. A second anchorage was used with the breakwater light bearing 232° and the ship's bridge 5.6 cables from the breakwater in about 18 fathoms of water. Again with the cable fully stretched this gave a clearance off the nearest shoal water of 3 cables, 6 shackles of cable being used. This is a slightly more comfortable position and again gale force winds were experienced without dragging. The vessel did drag in this position but not until winds were gusting to force 9 as a prelude to very severe storm conditions in which no anchorage of this nature would have been satisfactory. The bottom is stiff grey mud and care must be taken when anchoring not to impede the traffic approaching the canal entrance. Anchoring further to the Westward in order to increase the clearance from shoal water, etc., is not recommended as in addition to the much greater depth of water the holding ground deteriorates, becoming crumbly mud.

A boat can be provided by the Agents for use as a liberty boat when at anchor and there is no objection on the part of the Authorities to using the ship's boats for runs ashore.

A first examination of the chart (B.A. Chart No. 1600) will not indicate anywhere to berth a vessel of this size. However, dredging work has been carried out and the berth is on the S.E. side of the breakwater where there is room for a vessel of this size and for one small coaster in addition. The breakwater itself is slightly different in shape from that shown on the chart and building and dredging work are still in progress at its seaward end. The green flashing buoy shown on the chart is no longer in position but a light of similar characteristics is now shown from a structure on the breakwater end.

Maximum draft for berthing is 6.7 m. (22 ft.) and on this vessel's first call soundings between ship and quay when alongside indicated depths of between 24 ft. and 26 ft., depths outside the ship being some 5 ft. greater.

A Pilot is available, and is of great assistance. He is an experienced shipmaster and has very good local knowledge. A small tug is presently employed shifting barges and cranes employed in harbour works and it is sometimes possible to use his services. This is dependent upon the tugmaster. He is particularly useful when undocking to hold the stern off the quay.

Initial approach to the berth is bow on until the starboard anchor has been let go which should be done at such a distance from the berth so as to allow 4 shackles of cable in the water when the vessel is alongside. Vessel is gradually swung on the anchor, long head and stern ropes are run by boat, and vessel is so brought alongside port side to.

The undocking operation is straightforward, the bow being pulled off the quay by means of the anchor. The only danger is that of the propeller coming into contact with the quay and here the services of the tug are valuable.

Docking and undocking in strong winds from any direction would be hazardous and in many cases impossible. Docking is always done in daylight and I do not recommend undocking at night either although this would be possible under calm conditions. An added disadvantage of undocking in evening time would be that the vessel would arrive at the Narrows ferry crossing in the dark.

The Pilot agrees with this appraisal of the situation.

The quay itself is smooth concrete usually well fendered with rubber tyres and with good mooring posts. Vessel should be well secured as strong winds from a Northerly direction are experienced particularly in Winter.

There is a concrete apron some 3 metres wide alongside the ship and clear of this a considerable unsurfaced area on to which cargo is discharged. This area is very wet and dirty during rain.

Fresh water is available but 7 lengths of ship's hose are necessary to reach the outlet. A permanent water main is in the process of being laid alongside the ship.

Cargo operation: This is controlled by the 'Carton Pack' plant manager, there being no stevedore as such. Ship's gear is used and normally 3 gangs of stevedores.

The working day is from 0800 to 1700 hrs., evening overtime being unusual. Seven day working is possible but all overtime is subject to the plant working to receive the cargo.

Stevedores can discharge rapidly from the ship lifting 2 rolls of linerboard at a time but there are frequent stoppages due to congestion on the quay which reduces the overall discharge rate to about 25–27 rolls per gang hour. Although head and end clamps are provided by Charterers (carried on board) stevedores refuse to use these and all discharge is by rope sling. Rolls are landed on wooden platforms (timber supplied by Charterers) and then rolled by hand clear of the concrete apron. Two or possibly 3 fork lifts are used to load rolls from here onto lorries for transportation to the plant a short distance away.

Damage rate is high due to rolls becoming wet and dirty on the unsurfaced quay with bands being broken and outer layers torn. Further damage is caused by the fork lifts when loading the lorries.

No improvement in discharging conditions can be seen unless the quay is surfaced with proper drainage and unless Charterers are prepared to provide clamp machines for handling the rolls on the quay. Care should be taken when signing final outturn report as of course damages are written up to make it appear that they took place before discharge.

Weyerhaeuser are fully conversant with the situation.

Agents: Situated in Piraeus which is some 90 km. away. They use sub-Agents in Corinth.

The sub-Agents are not geared for handling a foreign-going ship. To obtain action on major items it is best to telephone Agent in Piraeus direct.

Bunkers: Basically not available but diesel oil has been taken, having been brought from Piraeus by road tanker and with ten days ordering notice.

Repairs: These cannot be carried out except by bringing repairers from Piraeus at very high cost.

Lloyds' surveyor is obtainable from Piraeus, this being best arranged directly by the ship.

Provisions: These can be obtained locally and are of acceptable quality. There is no ship chandler as such and the system is for the Catering Officer to visit various suppliers with the Agents, pick his purchases and then leave Agents to collect and deliver to the ship.

Shore Leave: Passes are required and are renewed each visit. They should be available for return to Immigration on departure.

Corinth Canal: This vessel passed through the canal on the 4th November, 1977 on a draft of 3.6 m. forward and 4.74 m. aft.

Application should be made in advance to the Canal Authority quoting the minimum draft obtainable.

The transit presented no difficulties.

SHIPMASTER'S REPORT: (Corinth) December 1984.

Pilotage: One private Pilot.

Restrictions: Berthing daytime only. Unberthing anytime day or night.

Loading/Discharging: Vessel loaded iron pipes, rate 600 tons to 700 tons per gang, per 8 hour shift by ship's gear. Working only during daytime (never night-time).

Vessel discharged iron plate in coils, rate 600 tons per gang, per 8 hour shift by shore crane.

Cargo Handled: Vessel loaded iron pipes, porcelain in powder and fruit in boxes. Vessel discharged iron plate in coils and paper for boxes in rolls.

AUTHORITY: Port Authority of Isthmia, *Tel:* (0741) 22129 (Harbour Master).

Harbour Master at Corinth *Tel:* (0741) 24574.

Corinth Canal Co. S.A., Ippocratous 88, Athens. *Tel:* 36.32. 185/6/7. *Telex:* 210721. *Cables:* Didriko Athens.

Isthmia Office: *Tel:* (0741) 24452. *Telex:* 0232 164 Dico Gr. *Cables:* Didriko Corinth. *Contact:* Dim. Benardos, Director.

ITEA: 38.26 N. 22.25 E.

DOCUMENTS:

6 Crew Lists.
4 Passenger Lists.
Cargo Manifest.
Bills of Lading.
2 Lists of Ship's Stores and Spares.
Health Declaration.
Ship's Certificates.

PILOTAGE: Vessel should advise ETA at least 24 hours before arrival through the telegraphic office of Itea. Pilots are called with the assistance of the Port Authority on VHF Channel 12.

Pilot boards 1 mile S.E. jetty lighthouse. Pilot boat painted black with white deckhouse, the word "Pilot" is painted in white letters on both sides. On the bow is painted "PY21".

In bad weather vessel should enter harbour without Pilot and anchor using both anchors.

ANCHORAGES: Available inside the harbour and in Aggolis Gulf. Safe anchorage in the vicinity of the jetty head in depths of 8 m. – 10 m.

RESTRICTIONS: Vessel may enter harbour day or night. Harbour anchorage suitable for vessels up to 60 ft. draft.

MAX. SIZE: Max. LOA 130 m., Max. draft 6.0 m. Also see "Berthing."

HEALTH: Pratique is given on arrival by the port medical officer.

RADIO: Contact possible through Hellas coastal radio.

VHF: Contact with Port Authority and Pilot made on Channel 12.

TUGS: None available.

BERTHING: One pier. East side can accommodate one vessel with max. LOA 83 m. and draft 6.0 m. West side can accommodate one vessel max. LOA 130 m. and draft 6.0 m.

Parnassos: Bauxite loading facility. Max. size 30,000 d.w.t. Loading by conveyor.

Elefsinos: Bauxite loading facility. Max. size 10,000 d.w.t. with tide of 25 cm. – 60 cm. Loading by conveyor.

STEVEDORES: Gangs should be ordered in advance by Agents on basis of Master's ETA. Loading and discharging is effected by ship's gear.

MEDICAL: 24 hours' notice preferred if any medical requirements. Vaccination can be arranged within 24 hours. Hospital in Amfissa, 13 km. from the port.

TANKERS: There are no special installations for loading/discharging tankers.

FIRE PRECAUTIONS: There are no specific precautions.

GANGWAY/DECK WATCHMEN: Required, Master to appoint crew member.

CARGO GEAR: Loading/unloading by ship's gear.

AIRPORT: Nearest airport at Athens, distance approximately 210 km.

DENSITY: 1025.

FRESH WATER: Not available.

FUEL: Not available.

HATCHES: Hatches are opened and closed by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 opened bottle of alcohol is allowed each man.

IDENTIFICATION CARDS: Needed for crew men going ashore.

CONSULS: No local representation.

REPAIRS: No facilities for repairs.

REPATRIATION: Can be arranged.

TIME: GMT plus 2 hours. End March to end September GMT plus 3 hours.

HOLIDAYS: Cargo work can be effected on all holidays on payment of overtime.

Official Holidays: January 1st; January 6th; Holy Monday; First Monday of Lent; Good Friday; Easter Sunday; Monday after Easter; 25th March; 1st May; Ascension Day; 6th August; (Local Holy Day); 15th August; 28th October; 6th December; 25th December; 26th December.

POLICE/AMBULANCE/FIRE: Police: Tel. 32222; Ambulance: Tel. 28400; Fire: Tel. 28199.

TELEPHONES: Not available.

REGULATIONS: There are general and specific regulations for the Port of Itea.

DELAYS: Delays in loading can seldom be expected.

DEVELOPMENTS: Extension and widening of the existing breakwater and the construction of a second breakwater.

AUTHORITY: Port Authority of Itea.

KALAMAKI: 37.52 N. 23.01 E.

SHIPMASTER'S REPORT:

DOCUMENTS: See "Piraeus".

PILOTAGE: Arranged by Agent.

MAX. SIZE: Max. draft 38 ft. (Additional one foot of draft by arrangement).

TUGS: Berthed without tug. Agent can arrange small tug from Corinth Canal.

BERTHING: Berth for discharging soya beans at Kalamaki Soya Mills (Refinery).

Bulk Handling facility: Fixed steel tower with two suction pipes capable of a total of 250 tonnes/p.h. but generally slower. Vessel to shift from hatch to hatch. Outreach of arms about 16 m.

The berth is not marked on the chart – B.A. 1600 and U.S. D.M.A. 54289. It is situated on the North shore of the Sarnikos Kolpos near the Eastern entrance to the Corinth Canal (Dhiorix Korinthou). When alongside, the Canal Breakwater Lt. Ho. was bearing 253°×0.64 miles and Akra Sofia 195°×1.14 miles. Starboard side to.

Mooring bollards are adequate, there being four suitable for backsprings on the short face (about 64 m.) of the 'T' jetty and one on shore for the headlines. At the Eastern side of the berth there is a new berth set in from the line of the jetty consisting of four concrete dolphins each with a bollard and three of our sternlines were made fast to these. Between this new berth, which is for discharging logs, and the leg of the 'T' jetty there is a facility for loading the products of the Soya Oil refinery into coasters. Tyre fenders on the 'T' jetty are few.

On approaching the berth from Eastwards it is recognisable by the dark grey ribbed metal silos and the lattice steel tower of the discharging unit.

FRESH WATER: Obtainable by truck 15 tonne capacity or by barge from Piraeus. Pipe for loading water from trucks will have to be extended by ship's hoses particularly if working cargo in forward hatches. Cost per truck about 3,000.00 Drachmas. Agent says price for barge supply is comparable to truck if a large quantity is required.

STEVEDORES: *Working Hours:* Continuous – Workers supplied by plant.

AGENT: *Sub-Agents:* G. Karagiorgis of Corinth. Cables: "Kaskoutas Corinth".

KALAMATA: 37.02 N. 22.07 E. (See Plan Book)

PORT LIMITS: The seaward boundaries of the port within which a vessel is considered to be an "arrived vessel" and (subject to Charter-Party Terms) laytime commences to count are 0.5 mile from the breakwater red light, where Pilot boards.

DOCUMENTS:

3 Crew Lists, plus 3 additional for passenger vessels.
3 Crew personal effects lists, plus 3 additional for passenger vessels.
3 Deck, Engine and Steward department store lists.
1 Cargo Manifest.
All ship's official documents.
2 Crew vaccination lists, plus 2 additional for passenger vessels.
1 Health declaration.
The above are not necessary for incoming vessels from Greek ports.

PILOTAGE: Notice of ETA required 48 hours before arrival. There is VHF listening and transmitting on Channel 12 on continuous basis. Range 30 miles.

Pilot boards 0.5 miles East of the breakwater red light, weather permitting.

ANCHORAGES: Vessels awaiting Pilot may anchor 0.75 miles East of the breakwater red light.

MAX. SIZE: Vessels up to 29 ft. draft may enter harbour, for berthing alongside.

HEALTH: Port Health doctor boards vessel on arrival or alongside the berth. Master required to produce Fumigation Certificate, vaccination list and Declaration of Health. Health visit not necessary for vessels coming from a Greek port or West European ports.

RADIO: Athens Radio, call sign SVA, on R/T which covers the Kalamata region also R/T stations of Patra Kerkyra and Hiraklion.

TUGS: No tugs available.

BERTHING: Agents require details of vessel's draft in advance to get berthing permission from Harbour Authorities. Total length of piers – 1,200 m. Covered storage: 3,500 sq.m. Open storage: 22,000 sq.m.

SPECIALISED CARGO-HANDLING FACILITIES: There is a silo for grain. 2 electric pumps for liquids; 1 mobile crane, lifting capacity 40 tons; 2 forklifts.

STEVEDORES: Number of gangs required to be advised Agent in good time.

MEDICAL: Doctors and medical assistance available. Also private and public hospitals.

FRESH WATER: Available in any quantity at berths. No barges.

FUEL: Can only be supplied by road tankers – subject to advance notice.

DENSITY: 1018.

WATCHMEN: If required can be arranged from shore.

HATCHES: Can be opened and closed either by crew or by stevedores subject to regulation payments for this work.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per man.

CONSULS: France, Finland and Sweden.

REPAIRS: Minor repairs can be effected in shore machine shops. No dry docks.

REPATRIATION: Can be arranged by car, train or air.

AIRPORT: Situated 6 miles away. Flights to Athens 1/2 times a day.

TIME: GMT plus 2 hours in Winter. GMT plus 3 hours in Summer (end March – end September).

HOLIDAYS: Additional local holidays are Ascension Day and St. Dionysio's Day.

POLICE/FIRE/AMBULANCE: Police tel. 22218; Fire tel. 28273/4; Ambulance tel. 25555/27420; Tourist Police tel. 23187. District Code Number 0721.

SHORE LEAVE: Allowed. Shore passes issued by Harbour Authorities.

DEVELOPMENTS: In the near future a Free Zone will exist. A mobile crane with sufficient capacity to handle loading/unloading of containers is to be purchased. Additional open storage to be available.

AUTHORITY: Kalamata Port Office, Kalamata. *Tel:* 0721/22218. *Cables:* "Kalamata Port Office". *Contact:* Harbour Master.

KALI LIMENES, Crete: 34.56 N. 24.49 E.

DOCUMENTS: Vessels may arrive for bunkering without obtaining free pratique. However, if pratique is effected, vessels should have ship's papers ready for inspection, also 4 Crew Lists, 4 Passenger Lists, Cargo Manifest and a List of Stores and Provisions.

PILOTAGE: 1 private Pilot employed by the bunkering company SEKA who undertakes pilotage for vessels calling for bunkers. Pilot boat is a small boat equipped with signal lamp. Pilot boards about 1 to 2 miles S.S.E. of Aghios Pavlos (St. Paul) Islet. Vessels awaiting Pilot may anchor 1.5 miles East of Aghios Pavlos Islet.

ANCHORAGES: (See "Pilotage") Vessels may anchor in area between Aghios Pavlos Islet and Mavronissi, which is a safe anchorage.

MAX. SIZE: Vessels in ballast of up to 280,000 d.w.t. and max. draft 14 m. can enter port.

HEALTH: Vessels arriving from foreign ports wishing to obtain free pratique should cable Agents to arrange for boarding of Health Inspector. Free pratique automatic if arriving from another Greek port.

TUGS: There is 1 tug, but it is seldom used.

MEDICAL: Agent should be advised well in advance if medical assistance required. There are no hospitals or other local facilities and doctor has to be called from nearest town.

TANKERS: 3 berths North of Aghios Pavlos Islet (position Lat. 34° 55′ 45″ N., Long. 24° 48′ 30″ E.), max. draft 14 m.

FRESH WATER: Unlimited supplies available.

FUEL: Unlimited supplies, all grades of fuel, diesel and luboils available subject adequate advance notice. Supplied by Mobil and Seka S.A.

FIRE PRECAUTIONS: Portable foam fire extinguishers.

CUSTOMS ALLOWANCES: 200 cigarettes permitted to each crew member to be held out of bond, and 1 bottle of wine/spirits.

CONSULS: None.

REPAIRS: None.

AIRPORT: At Iraklion, 75 km. distant.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

SHORE LEAVE: Permitted if free pratique requested and granted.

SHIPMASTER'S REPORT: 1976. (Updated 1984).

Pilotage: Pilot boards about 1 mile South of Aghios Pavlos.
Anchorage: Half a mile E.N.E. of Mavronissi, depth of water 30 ft.
Max. Size: According to Pilot; 300,000 d.w.t. in ballast and max. draft 44 ft.
Pumping Rate: Fuel – 1,000 t.p.h., diesel – 200 t.p.h.
ETA: Send ETA 48 hours in advance through Radio Athens. The bunker station can be reached direct on VHF Channels 16 – 14.

KATAKOLON: 37.39 N. 21.20 E. (See Plan Book)

DOCUMENTS:

Maritime Health Declaration.
Usual Ship's Certificates.
3 Crew Lists.
3 Passenger Lists.
2 Lists of Stores and Provisions.
2 Lists of Crew's Personal Effects.

PILOTAGE: Not compulsory. Port has 1 private Pilot whom vessel may use provided sufficient advance notice passed through Agent.

ANCHORAGES: Vessels can anchor at a distance of 2 cables from the head of the breakwater (bearing 300°). Safe anchorage for vessels of up to 30 ft. draft between positions 37° 40′ N. 21° 19′ E. and 37° 40′ N. 21° 20′ E.

MAX. SIZE: Max. safe draft 24 ft. Depth inside port 8 m. Length of pier 204 m.

STEVEDORES: No advance notice required. No shore facilities. Vessels load/discharge with own gear.

MEDICAL: No medical assistance in Katakolon, but facilities exist at the town of Pyrgos 13 km. distant.

FUEL: Not available ex-berth, but can be delivered by tank truck from Patras or Kalamata.

FRESH WATER: Available. Capacity 20 cu.m./hr.

HATCHES: Usually opened and closed by crew but this work can be carried out by stevedores subject consent of Port Authority. Cost as agreed between Master and stevedores.

IDENTIFICATION CARDS: Passes issued by Port Authority.

CONSULS: None.

REPAIRS: Not available in Katakolon. Small quantities of engine spares available in Pyrgos.

AIRPORT: Andravis Airport 26 km. distant. Flights to Athens twice weekly.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: Usual Greek holidays plus local holidays of 6th December and 17th December.

POLICE/AMBULANCE/FIRE: Police and Immigration, tel. 41202; Fire brigade (Pyrgos), tel. 22633; Ambulance (Pyrgos), tel. 22344.

TELEPHONES: No facilities for placing on board.

SHORE LEAVE: Permitted.

AUTHORITY: Port Authority of Katakolon.

KAVALLA: 40.55 N. 24.25 E.

DOCUMENTS:

5 Crew Lists.
2 Lists of Foreign Exchange.
4 Passenger Lists.
2 Cargo Manifests.
2 Lists of Crew Personal Effects.
Copies of Bills of Lading and usual Ship's Certificates.

PILOTAGE: 24 hours' notice of ETA to be passed to Agents or direct to Port Authorities. Vessels requiring Pilot should indicate with light and sound signals code letter "G" on arrival 5 miles from Kavalla Lighthouse. Pilot boat is a tug 9 m. length. Pilot usually boards about 0.5 mile from breakwater light. In event bad weather, Pilot does not board, and vessel may take refuge N.W. of Cape Prinos at the head of Thasos Island. If strong South or S.W. winds prevailing, vessels recommended take refuge Eleftheron Bay. Vessels awaiting a Pilot may anchor 0.5 mile South of Kavalla Lighthouse.

ANCHORAGES: 0.5 to 2 miles South of Kavalla Lighthouse, depth 30 m. to 40 m. Bottom sand and mud.

MAX. SIZE: Max. length 150 m. with proportionate breadth. Max. draft 27 ft. Tidal range 2 ft.

HEALTH: Doctor boards vessel with Port Officer. Maritime Declaration of Health and Derat Certificate required. In case suspected disease or fever on board, Master should radio Port Authorities in advance. Pratique is automatic if arriving from another Greek port.

RADIO: No local radio station. Cables may be routed through Athinai Radio.

MEDICAL: Advance notice of medical requirements necessary. General hospital in Kavalla and numerous private clinics.

TANKERS: See "Prinos".

DENSITY: 1025.

FRESH WATER: Available at berth.

FUEL: None.

HATCHES: Opened and closed by crew.

CARGO GEAR: Vessel should have cargo gear ready on arrival in order to avoid delay.

CONSULS:

France	Tel: 3163	Netherlands	Tel: 3265
Finland	Tel: 3467	Sweden	Tel: 3669

REPAIRS: Minor repairs available.

AIRPORT: Distance 7 km. One flight daily to Athens.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: Standard Greek holidays. Local holiday 29th June.

POLICE/FIRE: Police, Tel: 3291; Fire, Tel: 1999.

AUTHORITY: Kavalla Port Authority.

KYMASSI: 38.49 N. 23.32 E. **(See Plan Book)**

LOCATION: Lat. 38° 48.6′ N., Long. 23° 31.5′ E.

The port is on the Northern part of Nissos Evvoia. Vessels load magnesite in bulk, and firebricks on pallets.

DOCUMENTS: Crew list and usual documents for Greece.

PILOTAGE: Pilot boards about 5 cables off the berth.

APPROACHES: See "Shipmaster's Report".

RESTRICTIONS: No berthing during night-time.

RADIO: ETA and other relevant information sent by radio to the Sub-Charterer's Agents, Financial Mining Industrial and Shipping Corp., in Athens. Cable Address: "Epichiris, Athens".

VHF: Approaching Kymassi VHF contact only with Harbour Master's Office on Channel 12 during working hours (and Channels 14 – 16).

TUGS: There are no tugs in the area, except pilot boat.

BERTHING: Safe draft alongside is 26 ft. 6 in., salt water. Ship berths alongside 2 dolphins which are very well fendered with numerous rubber tyres. On approach the port anchor is let go and as the ship snubs round to port an off-shore mooring line is run by the pilot boat aft to the off-shore mooring buoy, to which the ship's line is made fast. The next line is run to inshore mooring buoy the same way. Then vessel is made fast to strong bollards.

LOADING: Carried out via a sophisticated conveyor system, the main tower of which is on curved track, thus allowing flexibility in loading either forward or aft for all the length of the vessel without any shifting, this is necessary only when loading palletised cargo. Also see "Shipmaster's Report".

BANKS: National Bank of Greece in Mandoudi. Foreign banks in Chalkis.

EMERGENCY CO-ORDINATION CENTRE: Nearest at Chalkis 60 km.

STORING: See "Prelims", page viii.

1. Yes.
2. Yes, vessel can store from barges during loading.
3. Trucks can proceed alongside.
4. Yes.
5. Declaration to Customs.
6. No.

SURVEYORS: Cargo inspectors and surveyors come from Piraeus.

SHIPMASTER'S REPORT: March 1979.

The port is on the Island of Nissos Evvoia. Vessel loaded a cargo of bulk magnesite ore (deadburned).

Documents: Crew List. Usual documents for Greece. However, as the ship had already cleared into Greece at Corinth, the Bond had to remain sealed from that port to Kymassi. Leaving Corinth a photo-stat copy of all papers handed in at that port was placed on board duly stamped by Customs for production at Kymassi. Register and usual certificates were taken by Agent to authorities and returned with Pilot plus clearance before sailing.

Pilotage: Pilot boards about 5 cables off the berth. He gave advance advice about the time the other ship was to sail and when he expected to board.

Approaches: Although no large scale British Admiralty Chart of the area or port on board, the approach was made without any difficulty. The 100 fathom line runs approximately 1 to 1.5 miles off the land. The ore loading berth is on the South side of the Bay with fairly steep to land on the Northern side. As ship has to swing to lie head out to sea, it is better according to the Pilot to approach keeping towards the North side of the Bay. Anchoring is not advised unless very good weather due to depth of water and poor holding ground. The Pilot, via VHF, advised us to lie off as the berth was occupied when we arrived. The ship berthed was due to sail around 1200 hrs., we arrived at 0900 hrs.

Radio: ETA and other relevant information was sent by radio to the Sub-Charterer's Agents, Financial Mining & Industrial Corp., in Athens. Cable address 'Epichiris – Athens'. There were no problems clearing messages.

Approaching Kymassi there was no response on VHF until the ship was within 4 miles of the port, when the Pilot answered on Channel 16 and we worked on Channel 12.

Berthing: Ship heads towards the loading jetty, a high concrete structure of "Y" shape with the ship berthing against the two arms. Both these are well fendered with numerous rubber tyres. On approach the port anchor is let go and as the ship snubs round to port an off-shore mooring line is run by the boat aft to the off-shore mooring buoy. This buoy has a slip toggle arrangement to which the ship's line is made fast. The next line run is the inshore after line which is taken to a mooring buoy inside the line of the berth. A head rope was then run to the pier and to a strong bollard.

The anchor cable was slacked and ship hove alongside by the head and stern ropes, the offshore stern rope being slacked as required. Back-spring was led to a bollard on the jetty as was the spring from aft. A further headrope was run to the bollard on the pier and aft a second rope to the inshore buoy plus a bight to a bollard on the pier.

Loading: Carried out via a sophisticated conveyor system, the main tower of which is on a curved track, thus allowing flexibility in loading either forward of aft in a hatch. It is necessary to shift ship to load each hatch.

Two grades of magnesite were loaded. One grade in No. 2 hatch, (first loaded), then the other grade between No. 1 and No. 3 hatches. When No. 2 was completed it was necessary to warp the ship astern to load No. 1 and later warp ahead to load No. 3 hatch.

Loading commenced at 1540 hrs. on the 17th and was completed at 0650 hrs. on the 18th. Allowing for shift ship plus change of gangs ashore it averaged out at a loading rate of 556 tonnes per hour.

The loader has an adjustable spout which ensures that the cargo can be readily trimmed to ensure a good flat stow on completion of space without any need for trimmers. The loader is operated with regard to the spout and slewing from a control box situated on the draw-bridge section of the loader. A very dusty cargo.

General: Whilst the vessel was alongside a small ship berthed using a Mediterranean moor, two anchors down and stern moored to a buoy. This berth is further inside the Bay. The vessel loaded her cargo from lighters.

Agents: The Agent from the Financial, Mining and Industrial Corp. was most helpful and attentive to his duties. He appears to work long hours as he also supervises the loading and works continuously. He also attends to advising when it is necessary to shift ship.

AUTHORITY: Harbour Master of Kymassi, Mandoudi, Evia Island, Greece. *Tel:* 0227-22020. Also VHF Channels 12, 14 and 16. *Contact:* George Sakalis, Harbour Master.

LAVRION: 37.42 N. 24.04 E. **(See Plan Book)**

DOCUMENTS:

Maritime Declaration of Health with Crew's Vaccination Cards.
Cargo Manifests.
4 Crew Lists.

PILOTAGE: Address of Pilot station, Port Authority of Lavrion. Pilot boat is a motor launch 8 m. long, black hull with white stripe flying code flag "H". Vessels requiring Pilot should flash or sound letter "G". Pilot boards about half a mile from Green Light (Ak. Ergastiria). In event of bad weather, boarding position is inside the buoy. Vessels awaiting Pilot should anchor close to the Green Light depending on vessel's size.

ANCHORAGES: See "Pilotage".

MAX. SIZE: Max. length 130 m. (approx.), max. draft 21 ft.

HEALTH: Health Officer and Port Officer board vessel on arrival. Maritime Declaration of Health should be submitted to Health Officer who examines any sick crew. Free pratique is not automatic.

VHF: Pilot boat equipped with VHF.

BERTHING: Harbour open to S.E. winds, but otherwise sheltered and safe. There are two quays: one 330 ft. length, depth alongside 20 ft., and one of 260 ft. length, depth alongside 13 ft.

Mining company owns bridge elevator with capacity of 700 tons per day.

STEVEDORES: Advance notice required in order to arrange gangs. No shore cargo equipment, and cargo operations effected by ship's gear.

MEDICAL: Medical assistance available.

FRESH WATER: Can be supplied to vessels alongside berth from tanker trucks.

FUEL: Only small quantities available as existing fuel tank only 10 tons capacity. Can be supplied by tank trucks from Piraeus.

HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCES: 200 cigarettes per crew member allowed out of bond.

REPAIRS: Minor repairs only.
AIRPORT: Athens Airport, distance 45 km.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
POLICE/AMBULANCE/FIRE: Police, tel. 25218; Ambulance, tel. 25340; Fire, tel. 25249.
HOLIDAYS: Local holiday 26th July.
AUTHORITY: Port Authority of Lavrion.

MEGARA (Agia Trias): 37.58 N. 23.24 E.

(See Plan Book)

BERTHING: Pier owned by Hellenic Aspropyrgos Refinery S.A. in position Lat. 37° 58′ 11″ N., Long. 23° 24′ 17″ E. (working 24 hours.)

Pier projecting 205 m. from shore with berthing head 63 m. long. Single berth with depth of 42 ft. 6 in. at S.W. end. 44 ft. at N.E. end. 46 – 50 ft. available at 1 m. from the berth.

With suitable fendering berth can accommodate vessels up to 65,000 d.w.t.

Tankers discharge cargoes by 3 flexible hoses of 8 in. diameter each. The maximum acceptable pressure at the unloading hoses is 8 – 9 kg./sq.cm.

FRESH WATER: Not available.
FUEL: Not available.

For additional information see "PACHI OIL TERMINAL".

AUTHORITY: *Operator:* Hellenic Aspropyrgos Refinery S.A., 18 Hermou Street, T.T. 126. P.O.Box 649, Athens, Greece. *Tel:* 3236601, 3236974. *Cables:* Refaspr. *Telex:* 215442, 215443, Ref Gr. *Contact:* A. Tzouros.

MILOS ISLAND (Adamas, Voudia Bay):

(See Plan Book)

LOCATION: Adamas Harbour 36° 41′ N., 24° 28′ E.

Voudia Bay: 36° 45′ N., 24° 31′ E. (on the N.E. side of Milos Island).

DOCUMENTS:

4 Crew Lists.
3 Passenger Lists.
2 Provisions Lists.
2 Personal Effects Lists.
Vaccination Certificates.
Derat Certificate.
Manifest (in duplicate).
Certificate of Registry.
Load-line Certificate.
Safety Equipment Certificate.
Radio-telegraphy Certificate.
Certificate of Measurement.

PILOTAGE: No Pilot station. Vessels requiring a Pilot should sound 3 blasts on ship's siren. Pilot boards from small motor-boat. Agents may contact Pilot in advance of requirement by telephone.

ANCHORAGES: Safe anchorage in all parts of Milos Bay, where Adamas port is situated. Main anchorage in Milos Bay is on East side of Bombardos Cape, which has a lighthouse showing a fixed green light.

MAX. SIZE: Any size vessel may enter Adamas Port but berthing alongside is restricted to vessels of 16 ft. draft.

Ore loading berth at Voudia Bay (Privately owned by Messrs. Silver and Baryte Ore Mining Co.). No facilities for tankers. Ore loading Berth at Kanaba (Privately owned by Micobar Ore Mining Co.).

HEALTH: Authorities require 24 hours' notice of arrival in order to grant free pratique to vessels arriving from a non-infectious country. Free pratique cannot be granted at Milos to vessels having disease on board nor to those arriving from an infected area. Such vessels are required to proceed to a main Greek port (Piraeus, Syros, etc.) to obtain health clearance.

RADIO: Athens Radio and Heraklion Radio.
TUGS: Not available.
STEVEDORES: Loading/discharging at Adamas is by means of ship's gear. Bagged cargo loading rate is 250 t.p.h. At Voudia Bay and Kanaba, bulk ore is loaded at a rate of 500 to 800 t.p.h. (Conveyor Belt).
MEDICAL: No hospitals, nor private clinics available. There are 3 doctors and 1 dentist resident on the Island. There is an airport on the Island with regular services to Athens. Also in case of illness, the possibility of an emergency service.
FRESH WATER: Available to vessels alongside using ship's hoses. Delivery alongside up to 30 cu. m. in 12 hours.
FUEL: Small quantities lubricants available.
OPENING/CLOSING HATCHES: Opened and closed by crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 opened bottle of spirits per person. Customs office at Adamas Harbour. Tel: 0287-41644.
REPAIRS: Minor oxy-acetylene repairs available.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
HOLIDAYS: Sundays and customary holidays. Cargo work can be arranged on these days at 75% increase on tariff rates.
TELEPHONES: Police 21-204; Port Authority 41-607.
SHORE LEAVE: Permitted.
DELAYS: Strong Southerly winds may delay berthing, or force vessel to leave loading berth at Voudia Bay.
DEVELOPMENTS: Intentions to extend existing wharf up to 70 m. with depth increases up to 30 ft. (This development has been delayed for economic reasons).

SHIPMASTER'S REPORT No. 1: *Voudia Bay:* Fresh water is available using vessel's own hoses. Limited quantity of provisions are available. Hire of polypropylene ropes of 150 m. length is possible.

It is advisable to close ventilators before loading due to excessive dust.

Pilot remains on board during loading.
Cargo: Perlite.
Loading rate for bulk: 250 t.p.h.
Loading rate for bags: 18–20 t.p.h.

SHIPMASTER'S REPORT No. 2: *Voudia Bay and Milos Island:* Situated on the N.E. corner of the island of Milos. When approaching from the S.E. the most prominent features are the scarred terrain, the factory building and the silo which is situated just above the berth. The loading gantry has both fixed red and white lights on and is conspicuous.

Anchorage: The vessel anchored in a position with the loader bearing 302° T. distance 7.5 cables in 48.5 m. of water using 5 shackles of cable, the holding appeared to be good. The recommended anchorage is in a position with the loader bearing 328° distance 5 cables where holding is reported to be good. There was another vessel in that position at the time.

Caution: This anchorage is not recommended in strong South to S.E. winds due to the seas that build up in the Bay. Vessels are recommended to go to the North of Pilonisi Island and anchor in a position N.W. of the North West point, a distance of not less than 3 cables. This island is now joined to the main island by rubble from the factory, this is not shown on the Chart (1832).

Method of Berthing: (See Plans). Approach to the berth is made heading in a N.W.'ly direction, keeping the Northernmost buoy (A) close to the starboard side and when the bow is passed about a third of the ship's length, the starboard anchor is let go and let run until about 4 shackles on deck, then it is checked, in the meantime a boat will take a breastrope from for'd, run from the port shoulder lead (1). Once this is ashore and the vessel begins to cant to starboard, the bow is worked into position by heaving on the breastrope and slacking the cable until there is about 6 shackles on the latter. Meanwhile, a line is run from the starboard quarter (2) to buoy (B). A word of caution here, the berth is designed to take vessels up to 23,000 tons, so for a small vessel it will be necessary to have 2 ropes joined together for moorings (2), (4) and (5). The next line sent away is one from the Port Quarter to ashore as a breastrope (3), the stern is then brought into position in a similar manner to the bow. As the prevailing wind is from ahead usually, the next rope sent away is the head line (4) and finally the stern line (5). The latter two are used for shifting the vessel under the loader. Directly under the loading gantry, there is a dolphin arrangement to keep the vessel off the cliff, but on completion of mooring, the vessel should end up about 6 ft. to 10 ft. off this.

Caution: In strong South to S.E. winds, the berth becomes dangerous and vessels have to leave and go to anchor and it is often necessary to leave the ropes on the buoys etc. as it is not possible to let them go. It is also advisable to retain some ballast on board for berthing.

There are 2 Pilots, both speaking English, the younger, an ex-Chief Officer has the better command of English and was the source of a lot of this information.

On leaving the berth, the last rope to be let go is (2) and with a smaller vessel, this can safely let go while weighing anchor. Vessel will then proceed to another anchorage close to, to secure, obtain clearance and clean up.

Loading Procedure: Loading is done by a chute and at an approximate rate of 300 tonnes per hour. The cargo is very dusty and everything should be securely battened down and it is strongly advisable to wear goggles and protective masks on deck as the dust is choking and if it gets in the eyes, they should not be rubbed as it is abrasive and can cause permanent damage. Eyes should be washed out. The ship will advise what weight she can take, and as the weighing procedure ashore is liable to break down after the first 500 tonnes, vessel is loaded according to draft, which has to be carefully checked, as when stipulating amounts required per hatch, they will not necessarily keep to this unless told. A boat is available for checking the draft, 1 blast on the whistle will summon it. Only method of getting ashore is by boat, so it is necessary to have the starboard gangway down. Both foreman and boatman have a fair knowledge of English, but foreman does not come aboard but stays on the loader, so it is necessary to shout instructions etc. The foreman will advise on shifting for position required, this is done with the aid of frequent blasts on a pocket whistle. Only one man comes aboard and that is to tend the chute.

There appears to be a continual short swell which makes draft reading a little difficult.

Entry and Clearance: Agent, Doctor, Customs and Harbour Master boarded the vessel at anchor and entered her there. Forms on board were not acceptable, but they transferred them to their own. I understand that the only acceptable forms are the standard IMO forms, and if there are any of these on board they should be used.

Forms required:
2 Crew Declarations.
3 Crew Lists.
2 Bonded Stores List.
2 Stores Lists.
1 Vaccination list (Including Cholera).

There are various other forms to sign, but these are prepared by the Agent. The Health Declaration is made out by the doctor in his book. The Agent, who is from the Mining Company, spoke very good English.

Weather: Northerly winds predominate during the Summer and can become quite strong during September, mainly from midnight to noon.

AUTHORITY: Port Authority of Milos, Adamas Harbour, Milos Island, Greece. *Tel:* 0287-41607.

Silver & Baryte Ores Mining Co., 21a Amerikis Street, Athens 135, Greece.

MITILENE (incl. Geras Bay and Pamfyllon): 39.06 N. 26.35 E **(See Plan Book)**

PORT LIMITS: A vessel is considered to be an "arrived ship" and laytime will commence at the working hours that follow the delivery of the Master's Notice of Readiness.

DOCUMENTS:

Quarantine:
Maritime Declaration of Health.
Valid Derat Certificate.
International Vaccination Certificates.

Customs:
2 Crew's Effects Declarations.
2 Ship's Stores Declarations.
2 Bonded Goods Declarations.
2 Crew Lists.

Immigration:
1 Crew List.

Port Authority:
1 Crew List.
1 Passenger List.
Ship's Certificates or Memorandum.
Ship's Papers.

PILOTAGE: It is not compulsory, but, if required, the services of experienced Mercantile Marine officers, having knowledge of the port, can be obtained.

ANCHORAGES: Off the Outer Port, in depths of about 18 m.; extreme end East of Kastro Peninsula (or Fokiotrypa) light, bearing due North.

RESTRICTIONS: Entry is not allowed after sunset.

MAX. SIZE: Length 120 m. – draft 17 ft. at Inner Port; length 160 m. – draft 28 ft at Outer Port.

HEALTH: The Authorities must receive a 24 hour advance notice for the ETA of the vessel with information about the port of origin, the cargo, the number of crew and passengers and the port of destination; details of any suspected disease or fever on board must be included in that notice. Pratique is automatic only for vessels entering after calling at another Greek port.

RADIO: "Athinai (Athens) Radio", "Limnos Radio", "Chios Radio", call signs SVA, SVL, SVX respectively.

VHF: Port Authority's VHF radiocommunication; Channel 12 for calling.

BERTHING: See "Plan Book". For drafts see "Max. Size".

STEVEDORES: At least 8 hours' advance notice for the number of stevedores required.

MEDICAL: In case of illness on board the Master should cable details prior to arrival. Hospital and dental facilities are available. Vaccination cards required.

TANKERS: At Geras Bay (Mamidakis) and Pamfila (Purfina).

FRESH WATER: Available from the quay through pipes. Cost per ton about 70 Drs.

FUEL: Supplied by tanker trucks only; advance notice required.

FIRE PRECAUTIONS: No more than the usual ones.

CONSULS:

Belgium	Tel. 28494	Netherlands	Tel. 28760
France	Tel. 28151	Sweden	Tel. 28494

REPAIRS: Local machine shops undertake very minor repairs.

SURVEYORS: Lloyd's Register.

HATCHES: Opening and closing is normally carried out by crew.

CUSTOMS ALLOWANCES: For each member of the crew: tobacco – 200 cigarettes, Wine/Spirits – one bottle and wine.

CARGO GEAR: Load/discharge effected by ship's own gear.

REPATRIATION: There are facilities for effecting crew changes and arranging any necessary repatriation.

AIRPORT: Distance 8 km. It is regularly served by "Olympic". Flights to Athens and Thessaloniki.

TIME: GMT plus 2 hours. GMT plus 3 hours during Summertime from April till September.

HOLIDAYS: January 1st, New Year's Day; January 6th, Epiphany; Ash Monday; March 25th, National Holiday; Good Friday; Easter Monday; May 1st, Labour Day; Whit Monday; August 15th, Assumption; October 28th, National Holiday; December 25th, Christmas Day; December 26th, Boxing Day.

Cargo work can be arranged on these days after consultation with the union of stevedores.

POLICE/AMBULANCE/FIRE: Police, Tel. 100 and 22021; Hospital, Tel. 28412 and 22005; Fire Brigade, Tel. 199 and 22055.

EMERGENCY CO-ORDINATION CENTRE: Hellenic Coast Guard Emergency Co-ordination Centre (S.A.R. Chamber) in Piraeus. Telephones: 4112500 and 4173238. Telex: (021) 2022, 2273 and 2239 Yen Gr.

BANKS:
Bank of Greece, Prokymaia Telex: 297110 Bngr Gr.
National Bank of Greece, Prokymaia. Telex: 297106 Nbg Gr.
Commercial Bank of Greece, Prokymaia. Telex: 297103 Cbmy Gr.
Ionian & Popular Bank of Greece, P. Kountouriotou & Alkaiou. Telex: 297109 IPMY GR.
Agricultural Bank of Greece, Vournazon 2. Telex: 297108 Ate Gr.
Credit Bank, P. Kountouriotou 33. Telex: 297151 Ccb Gr.

STORING: Vessel can be stored by truck only. Trucks can proceed alongside at the berth.

SHORE LEAVE: No restrictions.

IDENTIFICATION CARDS: Shore passes are issued.

DELAYS: Normally there are no delays.

SHIP SUPPLY SERVICE: Ant. Picoulos Shipping Agency, Prokymaia, Mitilene. Office Tel: 23720, 27000, 24933. Home Tel: 22341. Telex: 297120.

A launch of 11 m. length available for ship to shore transport of personnel and/or essential stores and/or sick crew members if allowed.

AUTHORITY: Hellenic Coast Guard, Island of Lesbos Port Authority, Mitilene Port Authority, Prokymaia, Mitilene 81100, Greece. *Tel:* 28827, 28647, 24115. *Contact:* Commander B. Ch. Antypas.

MYKONOS: 37.26 N. 25.25 E.

Vessels in excess of 22,000 d.w.t. have been accommodated. Loading of Barytes ore at rates up to 5,000 tons per day. In Winter when North winds prevail conditions are satisfactory for loading: however, loading position considered unsafe when S.W. or West winds prevailing. When sufficient cargo is available vessels can load in 2 days.

PACHI: 37.58 N. 23.23 E. **(See Plan Book)**

DOCUMENTS: All usual certificates including Registry, Safety, Cargo Gear, Radio, Derat, Last Port of Clearance and:
9 copies Crew Lists.
2 copies Vaccination Certificates.
1 copy Cargo Manifest.
1 copy List of Spares.
1 copy Maritime Declaration of Health.
1 copy Vaccination List.
4 copies Crew Effects Declaration.
1 copy Passenger List.
1 copy Cargo Documents.
2 Special Customs Forms in triplicate.
2 copies Stores Lists.

PILOTAGE: Cable Agent 72, 48, 24 hours in advance advising ETA. Agent informs Pilot Office of vessel's arrival time. Piraeus Pilots can be contacted on VHF Channels 7 and 12. Pilot boards vessel North of Kanaria Islands.

ANCHORAGES: See "Piraeus".

RESTRICTIONS: None.

MAX. SIZE: Pachi Oil Terminal is able to accept vessels for discharging crude oil from 20,000 d.w.t. to 600,000 d.w.t., max. draft 29 m. The depth at the head of the pier is 31 m.

HEALTH: Pratique is in accordance with International Regulations. Pratique automatic if arriving from another Greek port.

RADIO: Athens (SVA).

VHF: Piraeus Pilots and Eleusis Coastguard operate a 24 hour service on Channels 16, 12 and 7. Hellenic Refinery operates on Channel 16.

RADAR: None.

TUGS: Usually join vessel near to the berth. Ship's lines always used.

BERTHING:

Location of berth: Lat. 37° 58′ 25″ N., Long. 23° 22′ 50″ E.

Pilot will advise Master of berthing place in accordance with Port Authority instructions. Usually berthing with starboard side alongside with 3 head lines, 4 breasts, 2 springs, 3 stern lines, 4 breasts and 2 springs depending on the size of the vessel. According to the Pilot, it is preferable to use ropes for head and stern lines.

MEDICAL: Advance notice not required; clinic available in town of Eleusis if required.

TANKERS: There is one berth with 4 unloading arms 16 in. diameter each. The maximum and minimum height of the manifolds to the ship is 35.5 m and 2 m. respectively above sea level.

The maximum accepted pressure at the unloading arms and of the crude oil system is 11 bars (150 p.s.i.) and the maximum accepted flow rate through each unloading arm is 4,000 cu.m./.hr. (Total for all four unloading arms 16,000 cu.m./.hr.).

DENSITY: 1025.

FRESH WATER: Not available at present.

FUEL: Not available at present.

FIRE PRECAUTIONS: Fire wires rigged fore and aft on outboard side of vessel. Deck scuppers plugged. Spark arresters to be fitted on tank openings. Earth connections made. Patrols made by Port Officers.

In the case of a storm, the Dock Master can stop discharge of vessels. The refinery fire fighting procedure is followed.

CONSULS: None locally. Consuls at Athens and Piraeus.

REPAIRS: While alongside, maintenance of any kind on board is strictly prohibited. In case of an emergency, the issuing of a special written "cold or hot work" permit is necessary.

DRY DOCKS: See "Eleusis".

GANGWAY/DECK WATCHMEN: Not required.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 open bottle of wine/spirit allowed per crew member.

REPATRIATION: All facilities available for crew changes and repatriation.

AIRPORT: Direct overseas flights available via Athens airport at Hellinicon.

TIME: GMT plus 2 hours. Summertime (March to September) GMT plus 3 hours.

HOLIDAYS: None affecting cargo operations.

POLICE/AMBULANCE/FIRE: All emergency services are available through the Terminal Office. Tel: 26480 – 26580. Fire alarms are installed throughout the jetty. Eleusis Coastguard (01) 5543504.

TELEPHONES: This service is available aboard ship by prior arrangement through the Agents. Standard rates apply.

SERVICES: Compass adjusting. Electronic equipment services.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: Shore passes issued by Port Authority.

AUTHORITY: *Operators:* Hellenic Aspropyrgos Refinery, S.A., 18 Hermou St., T.T. 126, P.O.Box 649, Athens, Greece. *Tel:* 3236601, 3236974. *Telex:* 215442, 215443. *Cables:* Refaspr. *Contact:* A. Tzouros.

Eleusis Port Police.

PATRAS (including Rio): 38.14 N. 21.45 E. (See Plan Book)

DOCUMENTS: Port Authorities: 2 Crew Lists, Customs: Declaration of Cargo and Passengers.

PILOTAGE: Advance notice of ETA to be passed to Agents who arrange Pilot. Vessels without Agents should advise authority of ETA through Athens Radio, or on arrival outside harbour make International Code sounds and signals for vessels requiring a Pilot. Pilot boat is small boat carrying pilot flag. Pilot usually boards less than 1 mile outside harbour entrance. VHF contact possible with Port Authority and Pilot on Channel 12.

ANCHORAGES: Patras Roads are usually safe; when very strong W./N.W. winds blow, vessels may anchor at Nafpaktos Roads.

RESTRICTIONS: Port entrance has depth of 32 ft. At main harbour vessels having draft in excess of 28 ft. cannot berth. The limit at the new berth is 32 ft. draft. There is 1 red and 1 green light buoy in position of the intended line of extension to Northern part of breakwater (extension of 250 m.) where work is in progress. Buoys are about 600 m. from permanent lights marking North entrance to the harbour, and indicate shallow water.

MAX. SIZE: Vessels of less than 34 ft. draft. No restrictions on length or breadth. Height of tide, max. 0.55 m., does not affect size of vessel.

HEALTH: Pratique in accordance with International Regulations.

RADIO: Athens Radio.

TUGS: Two tugs, 900 h.p. and 1,200 h.p. Use of tug compulsory for all vessels over 1,000 tons gross. Joins vessel at entrance to harbour. Ship's lines used.

Tugs also available on request to Nicolas E. Vernicos. Tel: Piraeus 4527812-4522337 (24 hours).

BERTHING: In accordance with allocation given by Port Authority. Also see "Developments".

STEVEDORES: Advance notice of ETA required in order to arrange berth and order number of gangs to commence work immediately. General cargo rate about 80–100 t.p.h./gang, bulk cargoes 75–90 tons. 7 shore cranes, capacity up to 25 tons available. One shore crane capacity 118 tonnes with container handling facilities.

TANKERS: No facilities at Patras, but Texaco-Restis berth at Rio for vessels up to 18 ft. and 2,500 tons alongside. No residue discharge facilities.

FRESH WATER: Supply line connected to all berths. Rate 30 t.p.h.

FUEL: Deliveries by tank trucks at Patras. Available at Texaco-Restis berth at Rio.

FIRE PRECAUTIONS: Vessels refuelling or discharging explosives or flammable materials must apply to Port Fire Brigade to stand by.

WATCHMEN: Advisable to employ night-watchmen on large vessels.

HATCHES: Usually opened and closed by crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine/spirits allowed out of bond for each Crew member.

IDENTIFICATION CARDS: Crew are supplied with passes by Port Authority.

CONSULS:

Belgium
Denmark
Finland
France
Germany
Italy
Netherlands
Sweden
Switzerland

REPAIRS: Very minor repairs only.

REPATRIATION: All facilities for crew changes and repatriation.

AIRPORT: None.

TIME: Summertime GMT plus 3 hours end March to end September, otherwise GMT plus 2 hours.

HOLIDAYS: In addition to general Greek holidays and Sundays, local holidays are 8th September, 30th November. Work can be arranged on these days subject to payment of additional charges.

POLICE/AMBULANCE/FIRE: Port Police, tel. 277–622; Patras Police Station, tel. 277–261; Ambulance, tel. 274–444; Fire Brigade, tel. 199. The port has a fireboat.

TELEPHONES: Facilities for connecting on board.

SHORE LEAVE: Permitted.

DEVELOPMENTS: *(a)* Outer breakwater to be extended 600 m. in total.

(b) 4.7 m. is the depth along the newly constructed quay between Custom's House and fish steps.

(c) St. Nicolas Pier – length: 200 m. – is now available for berthing ships on both sides. Depths alongside are equal to those in North and South basins.

(d) Astingos Pier is reconstructed now having a 160 m. length on the South side and a 180 m. length on the North side. Depths alongside are same as in the basins.

(e) Crane with capacity of 250 tons to be purchased.

AUTHORITY: Port Authority of Patras, St. Othons Amlios 85, Patras, Greece. *Tel:* 061-277 093. *Contact:* The Technical Manager.

PIRAEUS: 37.57 N. 23.38 E. (See Plan Book)

(Including AGHIOS GEORGIOS 37.57 N. 23.36 E.; DRAPETZONA 37.56 N. 23.37 E.; and PERAMA 37.58 N. 23.35 E.)

DOCUMENTS: All usual certificates including Registry, Measurement, Inspection, Load-line, Fumigation, Passenger Safety, Cargo Gear, and Radio.

9 Crew Lists.
2 Vaccination Certificates.
Cargo Manifest.
List of Provisions and Stores.
List of Spares.
Maritime Declaration of Health.
1 List Vaccination Dates.
1 Crew Effects Declaration.

Customs:

2 Special Forms in Triplicate.
1 Stores List.
Master's Declaration of typewriters and adding machines, etc.
Crew Passports, or Seamen's Books.
Passenger Passports.

PILOTAGE: Cable Agent well in advance advising ETA. Agent informs pilot office of vessel's arrival time.

Pilots can be contacted on VHF Channel 16 for calling, Channels 7 and 12 for communication. Pilot boat is a wooden vessel about 10 m. length with black-painted hull, word "Pilot" painted in white.

Vessels requiring Pilot should signal letter "G" by morse light or by ship's whistle. Pilot boards vessel about 1.5 miles off entrance to harbour, except when very strong South winds prevailing, in which case vessel advised by VHF or by signal light that conditions impossible for Pilot boarding, and whether vessel permitted enter harbour at Master's risk.

If awaiting Pilot, anchorage is possible inside pilotage area of Piraeus – Aghios Kosmas – Piraeus Anchorage – Perama Anchorage – Megara Anchorage (Pachi).

ANCHORAGES: As above. Depths between 9 and 35 fathoms.

RESTRICTIONS: No restrictions for Aghios Georgios Harbour or Drapetzona excepting draft. Harbours open throughout 24 hours for entry and departure subject prevailing weather conditions. No tidal restrictions.

MAX. SIZE: (also see "Tankers") Aghios Georgios max. draft 32 ft. Drapetzona max. draft 38 ft. Piraeus max. draft 36 ft.

RADIO: Athinai Radio – SVA.

TUGS: Usually join vessel outside harbour, always using ship's lines. Over 30 tugs available. 10 of less than 1,000 h.p. and remainder over 1,000 h.p.

Nicolas E. Vernicos Shipping Co. Ltd., operate 10 tugs, 500 – 4,000 h.p. Available for towage and salvage. Tel: 4527812, 4522337 (24 hours). Telex: 212450 Vern Gr. VHF Channel 6.

BERTHING: Agent must advise Piraeus Harbour Authorities in order to secure berth allocation. 20,000 m. of quay space. 9 Ro/Ro ramps available.

CRANES: 3 container cranes, lifting capacity 41 tons.

56 electric wharf cranes with capacities of 2 to 27 tons installed along the wharf of the main port and at the dry and floating docks.

51 mobile cranes with capacities of 3 to 20 tons.

19 Straddle-carriers for containers, capacity 30 tons each.

4 floating cranes with capacities of 15, 30 and 2×100 tons.

BULK HANDLING FACILITIES: Silo suction-duct installations capable of moving grain at up to 130 t.p.h. and storage facility for 40,800 tons, as well as 2 mobile suction-duct units for bulk grain-cargoes.

One gantry crane lifting capacity 10 tons, used for coal and bulk cargoes installed at Hercules Port. Pier length 200 m., max. LOA 160 m., max. beam 17 m., max. draft 10 m. Average daily rate for coal 1,000 – 1,200 tonnes.

STEVEDORES: Agent must submit letter of application to Piraeus Port Authorities for number of gangs required also time required to commence cargo work. Discharge usually effected with ship's own gear.

Normal work on loading/discharge of goods in the port is carried out by 2 regular shifts, the morning shift (0800 – 1400 hrs.) and the afternoon shift (1500 – 2100 hrs.). Likewise, upon application of the interested parties (ship-owners, Agents, consignees, shippers, etc.), and provided approval of the competent P.P.A. Service is obtained, a third, night shift can be assigned to the job if the necessary workers and operators are available. This shift is again of 7 hour duration, from 2100 – 0330 hrs. or can be extended to the morning hours if necessary. Exceptionally in the case of work on refrigerator vessels, on which work during the Summer period is limited to the afternoon hours, the Service can assign workers and operators of loading/discharge machinery, starting from 1630 hrs., for a 7 hour period which can be extended, if conditions warrant, to the morning of the next day. Loading/discharge work may also be undertaken on Sundays and other non-working days (holidays) such work being considered as totally extra, being burdened with extra charges accordingly.

MEDICAL: All medical and hospital facilities available. No advance notice required except in special cases.

TANKERS: Discharging effected at private installations.

Shell	max. draft 32 ft.	Petrolles	max. draft 29 ft.
B.P.	max. draft 36 ft.	Fina	max. draft 28 ft.
Elvyn	max. draft 26 ft.	Mobil	max. draft 48 ft.

D.E.H. max. draft 36 ft. (outside steam generator factory, no facilities for going alongside).

DENSITY: 1025.

FRESH WATER: Available alongside berths. For vessels at anchor, water can be delivered by barges (capacity 150 – 240 tons) belonging to Piraeus Harbour Authority at 50% additional cost.

FUEL: Gas oil, fuel oil and mixtures of both to a certain viscosity available. Advance notice of requirements should be sent to Agent order complete customer's requirements.

WATCHMEN: Required.
HATCHES: Opened and closed by stevedores.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per crew member allowed out of bond. Wine/spirits, 1 bottle.
CARGO GEAR: Before commencement of loading or discharge, cargo gear is examined by Piraeus Harbour Authorities.

IDENTIFICATION CARDS: Passes required for seamen going ashore.
CONSULS:
Belgium
Costa Rica
Cyprus
Denmark
Ecuador
Finland
Iceland
Italy
Liberia
Netherlands
Norway
Panama
Philippines
Senegal
Somalia
South Africa
Spain
Sweden

REPAIRS: Facilities available for all kinds of deck and engine repairs.
DRY DOCKS: (A) Two permanent drydocks at Piraeus (i) Length 136.4 m., depth 9.27 m.; (ii) Length 93.3 m., depth 8.0 m.

(B) Two floating docks at Perama. (i) Length 202 m., depth 40 m., capacity 15,000 tons. (ii) Length 113.8 m., depth 28 m., capacity 4,000 tons.

Also see Eleusis and Syros.

SURVEYORS: American Bureau of Shipping, Filellinon 1-3, Piraeus. Tel: 4527611/4.
Bureau Veritas, 85 Akti Miaouli, Piraeus. Tel: 4173270, 4517124, 4120673.
Det Norske Veritas, 5-7 Filellinon Street, Piraeus. Tel: 4525333/4.
Germanischer Lloyd, Kanari 8 & Hatzikiriakou Street, Piraeus. Tel: 4513123.
Lloyd's Register of Shipping, 87 Akti Miaouli, Piraeus. Tel: 4523529, 4523942.
Nippon Kaiji Kyokai, 117 Notara Street, Piraeus. Tel: 4523529, 4525777.
Registro Italiano Navale, 35-39 Akti Miaouli, Piraeus. Tel: 4520011.
Panama Bureau of Shipping, 23 Akti Miaouli, Piraeus. Tel: 4110807.
Hellenic Register of Shipping, 23 Akti Miaouli, Piraeus. Tel: 4177632.

REPATRIATION: All facilities for crew changes and repatriation.
AIRPORT: Athens Airport 14 km. distant from main harbour. Regular international flights.
TIME: GMT plus 2 hours. GMT plus 3 hours – end March to end September.
HOLIDAYS: In addition to Sundays, local holidays are: 1st January; Epiphany; Whit Monday; 25th March; Good Friday; Easter Monday; 1st May; Holy Trinity; 15th August; 28th October; 12th December; 25th December; Boxing Day.

Cargo work can be arranged on these days subject extra payment of 75%.

POLICE/AMBULANCE/FIRE: In emergency telephone Harbour Office 188 or 4511-183. Subsidiary Harbour Department Tel: 4612-876. Harbour Guard Aghios Georgios Tel: 4612-876. Harbour Guard Drapetzona Tel: 4511-183. Police Tel: 100. Fire Service Tel: 199.
TELEPHONES: Telephone connection on board can be made.

BANKS: *Greek Banks in Piraeus:*
Bank of Attica S.A. Tel: 4124659.
Bank of Crete. Tel: 4522633.
Bank of Greece. Tel: 4121484.
Commercial Bank of Greece. Tel: 4174721.
Commercial Bank of Greece (Shipping Dept.). Tel: 4520370
Credit Bank of Greece. Tel: 4174392.
Ergobank S.A. Tel: 4130234. Shipping Branch Tel: 4115626.
Ionian & Popular Bank. Tel: 4174101. Shipping Branch Tel: 4522367.
National Bank of Greece. Tel: 4174101. Shipping Branch Tel: 4522611.
Piraeus Bank S.A. Tel: 4122648.

Foreign Banks:
Algemene Bank Nederland NV. Tel: Piraeus 4522305.
American Express. Tel: Piraeus 4121665.
Arab Bank Ltd. Tel: Athens 3230818.
Arab Hellenic Bank. Tel: Athens 3250820.
Banca Commerciale Italiana. Tel: Athens 3246014.
Bank of America. Tel: Piraeus 4527251.
Bank of Nova Scotia. Tel: Piraeus 4118711.
Bank Saderat Iran. Tel: Athens 3249531.
*Bankers Trust Company. Tel: Athens 3229835.
Banque de Paris et des Pays Bas. Tel: Piraeus 4137202.
Barclays Bank International Ltd. Tel: Piraeus 4510207.
*Bayerische Vereinsbank. Tel: Athens 3639315.
Citibank NA. Tel: Piraeus 4523511.
Continental Bank. Tel: Piraeus 4112711.
Grindlays Bank Ltd. Tel: Piraeus 4111753.
*Hambros Bank Ltd. Tel: Athens 3227243.
Marine Midland Bank. Tel: Piraeus 4520350.
Midland Bank plc. Tel: Piraeus 4136403.
*Morgan Grenfell Co. Ltd. Tel: Athens 3606456.
National Westminster Bank Ltd. Tel: Piraeus 4529215.
*Nederlandse Scheepshypotheekbank. Tel: Piraeus 4523946.
*Schiffshypothekenbank zu Lubeck Aktiengesellsch. Tel: Piraeus 4523657.
Societe Generale. Tel: Athens 3255001.
The Chase Manhattan Bank. Tel: Piraeus 4113711.
The First National Bank of Chicago. Tel: Athens 3602311.
Williams & Glyn's Bank. Tel: Piraeus 4527483.
*Representative.

SERVICES: Compass adjusting, tank cleaning. No facilities for discharge of tank residues.
SHORE LEAVE: Permitted.

SPECIAL PRECAUTIONS: *Ship's Speed in Port:* Incoming or outgoing vessels must keep speed steady, provided weather conditions and vessel's manoeuvrability allow to do so, but never to exceed 5 knots.

Pollution in the Harbour: Throwing overboard of ballast, objects of any kind, oil, food rejects, and dirt in general is strictly prohibited. All such rejects can be jettisoned after ship's exit from the harbour and at a distance not less than 16 miles from the nearest coast. Alternatively, all such rubbish can be thrown in a special rubbish-collecting vessel in the port.

Sea Pollution by Bunker Oil or Sediments: The jettisoning of oil products generally in any port or roadsteads less than 50 miles from the coast is strictly prohibited. Similarly prohibited is the pollution of the sea by jettisoning of oil-sediments during dry-docking or repairs of vessels.

Pollution of the Air: Strictly forbidden is the de-sooting of boilers of all vessels at Greek ports. Similarly prohibited is the exit of gases in the form of smoke, which poisons the atmosphere and endangers public health.

Overloading: If upon arrival or sailing the Port Authorities ascertain overloading of the vessel, heavy fines are imposed.
DEVELOPMENTS: Container terminal under construction. Length 800 m., depth 14 m. Completion expected 1984.
AUTHORITY: Port of Piraeus Authority, 2, Il Merarchias Street, Piraeus. *Tel:* 4520910/919. *Telex:* 21-2187 Olp Gr. *Cables:* Olp – Piraeus. *Contacts:* Alexandros Zarkadas, Chairman; George Prassianakis, General Manager; Dion Stathopoulos, Exploitation Service Head; Panayiotis Valassopoulos, Harbour Master.

PRINOS: 40.56 N. 24.31 E.

SHIPMASTER'S REPORT: May 1984.

ANCHORAGE/PILOTAGE: Tankers using this terminal are required to anchor approximately 0.5 miles South of the breakwater at Kavalla town if a waiting period is involved but other than that vessels pick up the Pilot and Loading Master in the vicinity of the berth. Vessels which have had to anchor off Kavalla pick up the Pilot and Loading Master from Kavalla and proceed to the berth with them.
TUGS: Two tugs are available to assist with mooring operations.
BERTHING: B.A. chart No. 1086 shows a tanker mooring of superbuoy size which is incorrect. Actual berthing arrangement is an open sea moor using both anchors forward run out to about 9 shackles on each anchor and aft making fast to 3 buoys using 3 lines to each buoy. The buoys are orange in colour exhibiting an orange light flashing every 5 seconds.
LOADING: Product is stabilised crude. API 31.12. Average temperature 72°F. Loading rate approx. 1,700 t.p.h. Manifold connection 1 × 10 in. hose. There are no dirty ballast facilities. At the end of loading there may be a delay of up to 3 hours whilst waiting for cargo papers.

PROTI ISLAND: 37.05 N. 21.32 E.

SHIPMASTER'S REPORT: July 1981.

LPG Transfer Anchorage:
CHART: B.A. 719.
LOCATION: About 12 miles North of Pilos. Ship has to go to Pilos inwards and generally outwards to clear Customs and Immigration.
ANCHORAGES: For ship-to-ship transfers, only two anchorages are allowed – to West and North of Proti Island, both in deep water of 60 fathoms.

The Western anchorage is safe in Northerly or Easterly winds, very unsafe in Westerly or Southerly winds. Northern anchorage used in West or Southerly winds. Prevailing winds in Summer are from the North. Generally reasonably good position can be found 0.5 miles off the coast in both cases.

In bad weather vessels are allowed to shelter to the East of the Island, which is an excellent anchorage in all winds with little to no swell and good holding ground. Unfortunately the local population do not like ships in the area and exert pressure on the local authorities to move the vessel if it can be seen, as it can, when anchored to the East of Proti Island.
VHF: Pylos Port Authority on Channel 12.
CURRENT: Generally sets at 0.5 knots, but can be variable.
FENDERS/HOSES: Stored at Marathos, the local fishing village, during the Summer season.
PERIOD: The area is used for LPG transfers from May to December. Between December to May Karamata Bay is used.
SERVICES: Agents: J. Vrettakos and J. Giannopoulos have office in Marathos manned when a ship is working at Proti Island.

Stores: Small quantities can be brought out by the local fishing boats. Large quantities have to come up from Pilos by tug. Stores can be warehoused at Pilos, until required.

Doctor: For Cholera injections, comes from Kalamata, charge $34.00 plus $4.50 per person. Doctor will come out to ship in calm weather otherwise injections done in Agent's office. Yellow Fever can only be done in Athens. For general medical attention, there is a doctor in the village, or hospital at Karamata one hour away.

Water: Fresh water can be brought from Pilos at $10.00 per tonne, minimum 200 tonnes. The sea water is so clean that ship's plant can make fresh water.

Money: Customs rule, no Greek Drachmas to overseas seamen, they must use their own currency and exchange.

Reliefs/Crew Exchange: For large scale crew changes this has to be planned well in advance with permission from Athens. This is because the local population do not like a lot of foreign seamen moving about, Marathos is not an immigration landing point (Comes under Karamata) but the ship clears inwards and outwards at Pilos, a different district. A few officer changes present no problems.

The total number of joining/leaving with their documents numbers, nationality, flight numbers (arrival and departure), must be telexed by Owner to Agent at least four days in advance of movement.

Customs Allowance: Very strict (every 10 days), advisable to take full crew issue to cut costs of visits.

Lloyd's Surveyor: From Piraeus, minimum 2 days, charge US $1,500.00 per 2 days.

Cargo Surveyor: Redwood from Kalamata. Surveyor checks inward and outward for quantity transhipped (not individual shipments). Cost $340.

Boat Service: Standard charge $82.00, basis 4 round trips per day to Marathos. Local boatmen use fishing boats who are generally very good. Last boat back 2300 hrs.

Local Facilities: Marathos is a quiet fishing village with a few tourists in Summer. The local population do not like any trouble from ships' crews and will get the authorities to stop shore leave at the slightest sign of trouble.

Storing Costs:		
	Tug from Pilos on small amount basis	$800.00
	Tug from Pilos on 40 tonne basis	$2,500.00
	Riggers at Pilos per tonne	$25.00
	Customs at Pilos	$83.00
	Barge Pilos Bay per tonne	$33.00
	Crane Hire Pilos – straight charge	$333.00
	Pilot at Pilos in and out	$250.00

Generally most facilities and items are obtainable in this area as long as sufficient notice given.

Cargo Transhipment: 'Naftomar' the Greek company have sole rights to transhipment in the area. Their representative (a former LPG Master and Mate) stays in Marathos when a ship is working off Proti Island. He does all the co-ordinating. Contact can be made on VHF Channel II call sign "Nestor".

The representative is very helpful. Usually about a day's notice is given for a ship and as they all have to call at Pilos before coming to Proti Island a further 4 hours' notice is given.

NO coming alongside at night. Vessels leave at night with complete safety.

All the vessels are around 3,000 cu.m. (semi-pressure vessel type). Propane can be taken at about 150 m.t.p.h. and Butane at 250 m.t.p.h.

Various ships are used – Generally Greek under 'Naftomar' flag but Panamanian, Norwegian and Japanese. Generally co-operation good.

We obtained a receipt for each shipment signed by 'Naftomar' representative. A local fishing boat transfers lines on coming alongside.

Hose connection/disconnection done by ship's crew. The hoses we had were new 'British Compoflex' like our own and no trouble. They also gave us some old hoses as vapour return which we did not use.

Fenders: 3×2 m. Yokohama type as primary and old truck tyres as secondary. We kept the fenders at all times except when weather bad with ship alongside when she took them with her to get away and fishing boats brought them back to us.

AUTHORITY: Port Authority of Pylos, Pylos Messinias, Greece. *Tel:* 0721-22225. *Telex:* 252101. *Cables:* Limenarchon-Pylos. *Contact:* Harbour Master.

PYLOS (including Sfaktiria and Navarino Bay):

36.55 N. 21.42 E.

DOCUMENTS:

For Port Authorities

1. For ships under the Greek flag and foreign flag vessels of Greek ownership.
   Inspection of all Ship's Papers.
   7 Crew Lists with full details of crew members' home addresses.
   For passenger vessels – 6 Passenger Lists including passport details, that is, number, date of issue and nationality.
2. Foreign Flag Vessels.
   Inspection of all Ship's Papers.
   3 Crew Lists.

For Customs

Crew Personal Effects List.
1 Crew List.
Passenger List.
Lists of goods or effects to be sent ashore.
3 Lists of Stores and Spares.
Bills of Lading.
Cargo Manifest.

PILOTAGE: No Pilot station. There is a private Pilot employed by the bunkering company named G. Mamidakis Limited. Agent and/or bunkering company should be advised in advance of vessel's ETA order arrange Pilot to meet vessel at entrance of Navarino Bay and take vessel to oil installations at Sfaktiria Bay.

ETA should be passed by radio telephone at least 48 hours before arrival and thereafter confirming ETA within 24 hours of arrival. If ETA has not been passed by radio, vessel should wait at entrance to Navarino Bay, and request Pilot by signalling letter "G" by flashing light or ship's whistle.

ANCHORAGES: Safe anchorage may be made in all areas of Navarino Bay except within red sector of Helonaki Islet light.

MAX. SIZE: Any size vessel can enter and anchor in Navarino Bay. The small harbour of Pylos is only suitable for small vessels.

HEALTH: Doctor visits vessels that require free pratique, and those coming from infected ports. Master and Health Officer together sign Maritime Declaration of Health. Free pratique continues when vessel arrives from another Greek port. A vessel in transit must have free pratique if remaining in port more than 24 hours. Infected vessels or suspected vessels remain under quarantine in accordance with existing health regulations.

RADIO: Athinai Radio.

TUGS: No tugs available.

STEVEDORES: Labour requirements passed by radio at least 24 hours prior arrival. No shore loading/discharging facilities and this work effected by ship's gear. Average rate load/discharge 100 tons per gang every 8 hours.

MEDICAL: Agent should be advised by cable prior arrival of medical and medicant requirements. There are two chemists and a Red Cross hospital. Yellow-fever and cholera vaccination certificates required.

TANKERS: Sfaktiria Island Installation (ESAPP. G. Mamidakis Limited). 2 flexible hoses diameter 6 in. and 1 gas oil hose diameter 2.5 in. No facilities for residue discharge. At Pylos small harbour there is a jetty 100 m. length, the head of which is reserved for small tankers carrying wine and spirits, which moor stern to quay. At head of pier, depth of water about 4 m., but within short distance from pier, depth increases to 10 m. Only 1 vessel of 12 ft. to 15 ft., draft can moor stern to quay at any time. Loading/discharging is effected through flexible and portable pipelines belonging to Gialovi Wine Factory at Pylos, and cargo is transported by special tank trucks.

DENSITY: 1023 in harbour basin and whole of Navarino Bay.

FRESH WATER: Master or Agent must apply in writing to Customs Authority, and application is to include notice from water supplier giving quantity to be supplied and cost of supply. Water barge capacity 200 tons. Rate of supply 160 t.p.h. by canvas hoses. Barge belongs to Maritime Agency I. Vrettakos, Pylos. Water also available alongside Pylos harbour quay.

FUEL: Mamidakis Fuel Installations at Sfaktiria Island. Vessels should give 48 hours' notice to Mamidakis (Athens Office, address: Eleftheriou Venizelou 56; Tel. 622543) Pylos Tel. 22282.

FIRE PRECAUTIONS: No unusual fire precautions at Sfaktiria Installations, but at main port of Pylos authorities do not allow loading/discharging of 2 vessels at same time, as the only 2 berths available are very close to each other.

WATCHMEN: Usually not necessary to employ watchmen, but if required, available.

HATCHES: Usually opened and closed by crew.

CUSTOMS ALLOWANCES: 2 packets of cigarettes per crew member/day allowed out of bond according to duration in port and this quantity to be declared on Stores List. Store orders for supply of additional quantities are allowed on the basis of the number of crew and the length of voyage, basis 2 packets per day per crew member. 1 opened bottle wine/spirits allowed out of bond.

IDENTIFICATION CARDS: Shore passes issued against submission of seamen's books.

REPAIRS: 3 workshops for minor repairs.

REPATRIATION: Crew changes and repatriation facilities available.

AIRPORT: Kalamata Airport, 40 km. from Pylos. Kalamata/Athens flights every day at 17.50 hrs. Athens/Kalamata every day flights at 19.10 hrs.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: *(a)* Standard Government Holidays; *(b)* Local holidays: 9th May (St. Nicholas) holiday for port workers; 24th September; 20th October (Anniversary of Battle of Navarino). During these holidays, cargo work can be arranged subject overtime payment.

POLICE/AMBULANCE/FIRE: Police (Pylos) 223-16; Greek Red Cross Hospital Pylos 223-15; Kalamata Fire Brigade 28373.

TELEPHONES: No facilities for placing on board.

GENERAL: Very severe fines imposed on oil pollution.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Work in progress to extend existing Pylos harbour pier to 215 m. length, 20 m. width, and 15 m. depth at head of pier. Depth inside pier to be 10 m.

SHIPMASTER'S REPORT: July 1981.

Time: GMT plus 2 hours Winter, plus 3 hours Summer as per A.L.R.S. Vol. No. 5.

Chart: Pilos/Navarine Bay – BA 211.

General: Pilos: A fairly busy port for ships taking stores and water and changing personnel.

Navarine Bay is well sheltered and generally deep.

Bay can be entered and left with safety as long as vessels keep well up to Pilos Island (Baba Island) off Cape Kypri, shoals exist on the Southern shore.

Pilot: Advise Agent 24 hours in advance. Pilot boards about 1 mile outside heads in calm weather, otherwise inside, from slow motorboat.

Pilot speaks little English, uses mostly sign language but seems competent.

VHF: Pilos Port Authority and Pilot on Channel 12 when expecting vessels. Agents work Channel 11, Call Sign "Nestor" when expecting vessels (unofficial).

Anchorage: In area 8.5 cables N.W. of Pilos Jetty (5 shackles).

Bay: Navarine Bay is good and sheltered. An 8 fathom patch in centre as per BA Chart 211.

Agent says 300,000 d.w.t. tankers drawing up to 15 m. draft have anchored in Bay.

New jetty for small craft at Pilos (nearly finished – July 1981).

Current: Outside Heads generally South going at rate of 0.5 knots.

Tug: 1 tug (1,000 h.p.) owned by principal Agency, called "Nestor", sometimes not at Pilos but at Karamata.

Agents: Principal Agents: J. Vrettako and J. Giannopoulos with offices in Athens, Karamata, Pilos and Marathos.

Pilos office: Telex: 252152 Vret GR. Tel: 0723-22-255/22-219. Cables: "Tainaron".

Very good and helpful.

Services/Supplies: Pilos: A 20 tonne crane on jetty owned by Agents.

Water: Fresh Water is plentiful at $4.00 per tonne minimum 20 tonnes in Navarine Bay.

Supplies: Generally good, although advance notice required. If frozen provisions required this must be stipulated.

Unitor Gas: Limited range held by Agents. Oxygen/acetylene, R22/12 has to come from Athens area (2 days' notice).

International Paint: From Piraeus full range (2 days' notice).

Lub Oil: Most brands including Chevron from Piraeus in drums (2 days' notice).

Repairs: Very limited at Karamata about one hour away, otherwise full range at Piraeus. Parts for repair can be sent by truck to Piraeus and return the next day if an emergency, but generally allow three days.

Fuel: Very limited supply H.O. and D.O. in Pilos but negotiations under way to expand local facility.

Walport Films: By arrangement with Agency in Skaramanga (2 days' notice).

Airport: At Karamata – local airport one hour away. Olympic Airways daily flight from and to Athens. Arrives at 1800 hrs. and leaves at 1900 hrs. (40 minute flight).

International flights from Athens. To catch internal flight to Karamata you must land in Athens not later than 1600 hours.

Communications: Roads poor, takes 6 hours to get to Athens. Telephone services – internal reasonable, overseas poor.

Boat Service: From anchorage to town in Navarine Bay easily arranged at $5.00 per ship per trip.

Customs/Immigration: Customs very strict. Basic issue only allowed but best take out for all crew members. Immigration check all crew books inward and outward. Greek shore passes required with crew members photo attached. Forms: All on Greek Papers.

1 copy Ship's Particulars.
2 copies General Stores Declaration.
2 copies Bond Store Declaration.
1 copy Crew Declaration.
6 copies Crew List (U.S.A. style).

AUTHORITY: Port Authority of Pylos.

RHODES (including Akantias): 36.25 N. 28.17 E.

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
1 Cargo Manifest.
1 Stores and Provisions List.
Usual Ship's Documents.

PILOTAGE: 24 hours' notice required by Rhodes Port Authority. Pilot boards 1 mile from port.

ANCHORAGES: Suitable anchorage up to a distance of 300 m. from the port East of the pier extension.

RESTRICTIONS: Port entry can be difficult and sometimes impossible with strong North or N.E. winds.

MAX. SIZE: Up to 24 ft. draft.

RADIO: Rodos Radio, 2182 kHz.

BERTHING: Pilot will advise Master of berthing place in accordance with Port Authority instructions.

2 diesel motor-driven cranes capacity 2 tons and 3 tons available for discharging. No facilities for containers.

STEVEDORES: 24 hours advance notice required in order to arrange gangs.

MEDICAL: General hospital and private clinics available.

FRESH WATER: Available – supplied by canvas hoses.

FUEL: Deliveries only by tank trucks.

HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCES: 60 cigarettes per day per crew member and 1 bottle wine/spirits per crew member allowed out of bond.

CONSULS:

France	Tel. 2318	Sweden	Tel. 3379
Germany	,, 7479	Turkey	,, 3362
Italy	,, 7432		

REPAIRS: Minor repairs only.

AIRPORT: Distance 15 km. During Winter, flights twice daily to Athens, and during Summer, flights 5 times daily.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: 1st January, 6th January, 7th March, 25th March, Good Friday, Easter Monday, 21st May, 15th August, 28th October, 8th November, Christmas Day, Boxing Day.

POLICE/AMBULANCE/FIRE: Police, tel. 7690 or 2220; Ambulance, tel. 2555; Fire Brigade, tel. 3333.

DELAYS: Sometimes necessary to remain outside harbour up to 3 hours to allow coastal passenger vessels to berth if other berths are full.

DEVELOPMENTS: Extension of the Merchant Port Pier by 110 m. to North and 140 m. to S.E. Also an extension of the new harbour (Akantias) pier, to the East of the Marine Harbour. Length to be 480 m. with a depth of 6.5 m. alongside.

AUTHORITY: Central Port Authority of Rhodes.

STYLIS: 38.55 N. 22.37 E.

DOCUMENTS: The usual Documents for all Greek Ports are required i.e. Cargo Manifest, Crew List, Store Lists, Personal Effects, Ship's Certificates, Oil Book, Cargo Gear Book, Exchange Declaration.

PILOTAGE: Compulsory. Pilot can be boarded at Stylis anchorage which is half a mile South of the Island of Kaloyiros. Pilot is a practical seaman who has experience and knowledge of local waters.

Vessels entering Stylis port must pass through the channel of 2 flashing green and 2 flashing red sea buoys and be in the line with the main light situated on the pier, flashing orange.

There is a pilot boat painted white flying the international Pilot's letter "H". VHF is installed and the working frequency is Channel 12.

There are 4 white launches available for hire (capacity 10 – 20 passengers). VHF is installed and the working frequency is Channel 10. These are for Pilots and Crew Members of anchored vessels.

ANCHORAGES: See "Pilotage".

The Gulf of Maliakos is a safe anchorage for laid up vessels. Position should be given upon request to the Ministry of Merchant Marine, Piraeus.

MAX. SIZE: Max. draft 18 ft. 6 in.

VHF: Port Authority on Channels 7 and 12.

TUGS: No tugs are available. For large vessels being laid up at Maliakos Kolpos tugs and Pilot must be ordered from Volos.

BERTHING: Stylis port is an open port on the North side of Maliakos Kolpos and consists of berths on the North side and of shallow waters on the South side which break at low tide. The berths total about 450 m. in length, forming the Greek letter π. The draft varies along the 3 berths with a max. of 18 ft. 6 in. at HW and 17 ft. at LW.

CRANES: No crane railway system is installed. Loading and/or discharging operations take place only by ship's gear or by mobile cranes which can be hired through the local Agents from Stylis/Lamia and/or Volos.

STEVEDORES: Working hours: 0800 hrs. – 1700 hrs. daily.

FRESH WATER: Fresh water available 24 hours. Rate 30 cu.m.p.h. Vessels must use their own hoses.

FUEL: No bunkers available. Vessels can be supplied only by barge and/or trucks ordered from Volos/Athens/Salonica.

REPAIRS: Minor repairs can be carried out.

STORING: A limited quantity of stores and provisions are available in Stylis. Transit stores are not available.

HOLIDAYS: Agios Athanassios on January 18th, Agios Nikolaos on December 6th.

GENERAL: No warehouses are available on the docks.

The main exported goods are olives and olive oil in tins/drums, reels of cables, cotton, etc. The imported goods are timber, machinery, paper, etc.

DEVELOPMENTS: A dredger is widening the channel and deepening the Harbour in order to accommodate vessels up to 20 ft. draft.

AUTHORITY: Stylis Harbour Authority, Stylis, Greece. *Tel:* (0238) 22329. *Contact:* Lieutenant Commander John Kioupis, Harbour Master.

SUDA BAY, Crete: 35.29 N. 24.09 E.

PORT LIMITS: Suda Bay.

DOCUMENTS:

3 copies Crew List.
Cargo Manifest.
Agency Manifest.
Transit Manifest.
Ship's Store or Instruments Manifest.
Clearance from the last Port of Call.
All the necessary certificates according to International Laws and Conventions.

PILOTAGE: Not compulsory – pilotage service is non existent.

ANCHORAGES: Safe anchorage area in the Port of Suda according to the Port Authority instructions.

RESTRICTIONS: Permission for departure or arrival after sunset is given by the Suda Navy Base.

MAX. SIZE: Permissible length 200 m., breadth 10 m.

HEALTH: Pratique is compulsory for all ships coming from ports outside Greece.

VHF: Helles Radio VHF Channel 16.

TUGS: None.

BERTHING: Cargo pier, depth up to 32 ft. Grain silo with similar depth alongside.

CRANES: None.

BULK CARGO FACILITIES: Bulk cargo discharging gear available.

SPECIALISED CARGO-HANDLING FACILITIES: Fork lift trucks available.

BRIDGES: None.

STEVEDORES: Available.

MEDICAL: Hospital facilities available.

TANKERS: There are no oil discharging installations or facilities for tankers.

FRESH WATER: Installations for the supply of fresh water available.

FUEL: Available in limited quantities.

FIRE PRECAUTIONS: Fire brigade service at Chania.

CONSULS: West Germany and France.

REPAIRS: Limited facilities.

DRY DOCKS: None.

SURVEYORS: None.

WATCHMEN: Services of watchmen are not necessary and are non existent.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle of spirits.

CARGO GEAR: Only with ship's gear.

REPATRIATION: Two flights and one passenger ship daily for Athens.
AIRPORT: Airport 15 km. from Suda Bay. Regular air service, two flights per day.
TIME: In Winter GMT plus 2 hours, in Summer GMT plus 3 hours.
POLICE/AMBULANCE/FIRE: Police 89271, Ambulance 22550, Fire 22432.
TELEPHONES: Arrangements do not exist for placing telephones on board.
SHORE LEAVE: Crew members are allowed ashore.
IDENTIFICATION CARDS: Shore passes are required.
REGULATIONS: Taking photographs of Suda Bay is strictly prohibited.
EMERGENCY CO-ORDINATION CENTRE: The Port Authority of Chania.
STORING: See "Prelims", page viii.
1. Yes. 4. Yes.
2. Yes. 5. —
3. Yes. 6. Yes.
DELAYS: Short delays only.
DEVELOPMENTS: No plans for new installations.
AUTHORITY: Port Authority of Chania, Chania, Crete, Greece. *Contact:* F. Psaras, Harbour Master.

SYROS: 37.26 N. 24.56 E.

DOCUMENTS: *Ships under the Greek flag* – documents required are:
Ship's Register.
Seaworthiness Certificate.
Log Books and Ship's Papers.
Load-line Certificate.
Radio Station Licence.
Fumigation Certificate.
4 Crew Lists.
2 Passenger Lists.
Ships under foreign flag, Greek owned – documents required are:
Ship's Articles.
Load-line Certificate.
Seaworthiness Certificate.
Ship's Papers.
Radio Station Licence.
Fumigation Certificate.
4 Crew Lists.
1 Passenger List.
Ships under foreign flag – documents required are:
Seaworthiness Certificate.
Fumigation Certificate.
Load-line Certificate.
Radio Station Licence.
2 Crew Lists.
1 Passenger List.
PILOTAGE: Pilot to be ordered by ship's Agent at least 24 hours before arrival notifying approximate ETA. Pilot boards from private motor launch, about 0.5 miles off the port, weather permitting. In bad weather Pilot boards in harbour entrance.
ANCHORAGES: Vessels awaiting Pilot anchor outside the harbour South of a line between the green breakwater light and the North end of Gaidaros Island. Anchorage in the Southern part of the harbour in depths of 20m. – 30 m.
MAX. SIZE: Length 200 m. Vessels of shallow draft may go alongside the Neorion Pier or moor stern to the pier. Deeper-draft vessels remain at anchor in the harbour.
HEALTH: Free pratique is given when ship's declaration of health has been endorsed by a Health Officer.
RADIO: Loutsa Radio.
TUGS: 2 tugs available. Tugs usually join vessel 1 mile from harbour entrance. Payment for use of tug's line is obligatory.
STEVEDORES: At least 1 day's notice required to arrange gangs.
MEDICAL: No advance notice required if medical assistance needed. Hospital and general clinic available.
TANKERS: Discharge alongside terminal of A. E. Seica at Lazareta, near the entrance to the harbour.
DENSITY: 1026.
FRESH WATER: Limited quantity can be supplied by private company. Delivered by barge.
FUEL: Can be supplied by A. E. Seica, by barge or pipe-line.
WATCHMEN: Not required.
HATCHES: Opened and closed by ship's crew.
CUSTOMS ALLOWANCES: Each man allowed 40 cigarettes per day for period not exceeding 5 days. Each man allowed 1 opened bottle of spirits. No restrictions for wine.
IDENTIFICATION CARDS: Shore passes are issued on production of seamen's books or passports.
CONSULS: France – Tel: 3–62. Netherlands – Tel: 7–20.
REPAIRS/DRYDOCKS: Neorion Syros Shipyards can undertake any kind of engine and hull repairs and alterations. Holds LTC licence for piston reconditioning.

	Floating Dock 1	*Floating Dock 2*
Capacity	75,000 d.w.t.	40,000 d.w.t.
Lifting Capacity	25,000 tons	15,000 tons
Length overall	230 m.	195 m.
Width between sidewalls	35 m.	33.5 m.
Pumping Time	160 minutes	100 minutes
Cranes	2×10 tons	1×15 tons 1×10 tons
Quay Space	1,800 m.	
Floating Cranes	1×70 tons capacity and 1×200 tons capacity	
Travelling Cranes	Up to 40 tons capacity	

Tank cleaning station with storage capacity of 7,000 tons and separator capacity of 3,000 tons of dirty ballast and slops per hour.

4 tugs of which one is an ocean going salvage tug.

Machine shop, plate shop, foundry containing the most modern equipment.

Gritblasting.

Service Agency for Sulzer Bros. Ltd., Lister Ltd., B+W, Caterpillar SA, SKL Ltd., MWM, MAN.

Resident Classification Surveyors: Lloyds Register of Shipping, American Bureau of Shipping.

Neorion Shipyards Syros Ltd., Syros, Greece. Telex: 0293123 Neorion Syros. Tel: 010-281 22001.
REPATRIATION: Can be arranged.
TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.
REGULATIONS: Port Captain should be contacted for any queries not covered by lists of regulations provided on arrival.
HOLIDAYS: Work may be arranged on all holidays on payment of 75% additional to tariff.
POLICE/FIRE/AMBULANCE: Police 6-10; Fire 3-33; Ambulance 5-55.
TELEPHONES: Cannot be connected on board.
SHORE LEAVE: Crew may go ashore after pratique is given, carrying shore leave passes issued by Port Authority.
DEVELOPMENTS: Port being dredged to permit entry of larger vessels. Shipyard installing facilities for building vessels up to 15,000 tons.

SHIPMASTER'S REPORT: February 1983.
Vessel called for bunkers only.
Documents: Not required for bunker call.
Pilotage: Recommended, not known whether compulsory or not. Vessel could undock without Pilot, however, Pilot necessary for docking.
Pilot boards 1 mile East of harbour entrance.
Chart: B.A.1833 – Plans in the Kirkladhes.
Restrictions: No restrictions on night berthing at bunker dolphin. No tidal restrictions.
Radio: Limnos and Athens. Cable address "Sekavin Syros" for bunkers.
VHF: Pilot and Bunker Agent operate on Channel 12.
Tugs: One medium size tug used aft for mooring and unmooring. Vessel cannot moor/unmoor without aid of tugs.
Berthing: 'Seka' bunker dolphin 214°T×3 cables from Fl.G. 3s. breakwater light. Berth is 2.5 cables from harbour entrance.

Vessel berthed head 040°T, with 7 shackles out on each anchor. Bunker dolphin just forward of bridge, starboard side. 4 mooring lines run from main deck and 1 spring from poop. All short nips from main deck.

Berth appears unsafe but we found that vessel remained alongside in strong winds.

Soundings taken at stern when moored gave 13 m. of water.

Vessel is restricted by draft, and distance from manifolds to dolphin.
Density: 1025.
Fuel: Bunker fuel oil and diesel available. Rate 200 t.p.h.

Shore installation used 6 lengths of hose (6 in. diameter) which were lifted aboard by shore derrick from bunker dolphin. The hoses were manhandled forward to the vessel's midship manifold. Same hoses used for both products.

No lighters available for bunkering.
Repairs: Facilities available.
Dry Docks: Available.
Airport: No local airport.
Authority: No authorities boarded.
Agent: No Agent in attendance for bunker call.

AUTHORITY: The Harbour Office of Syros.

THESSALONIKI (Salonica): 40.38 N. 22.56 E.

(See Plan Book)

PORT LIMITS: A vessel is considered as an "arrived vessel", when she has passed the line connecting the Small Kara Point and Paliomanna light buoy.
DOCUMENTS: For Greek flag and Greek-owned vessels:
List of Foreign Exchange.
Crew list (additional for Port Authority).
All vessels:
4 Crew Lists (Port Authority, Customs, Immigration and Health).
1 List of Stores.
1 List of Personal Effects.
Copies of Bills of Lading and Cargo Manifest.
PILOTAGE: Apply for Pilot through VHF Channel 12 or by international code signals. Pilot meets vessel about 1,000 m. S.E. of breakwater light (white). Pilot boat is small motor-boat carrying pilot flag.
ANCHORAGES: Area from 500 m. to 1,000 m. S.E. of port offers safe anchorage.
MAX. SIZE: Average safe depth of water 9.50 m. Two berths with depth 11.50 m.
HEALTH: Health Officer boards vessels from foreign ports to grant free pratique.
RADIO: Radio Thessalonika. 24 hours' notice of ETA required to obtain berth and stevedores.
VHF: Operative throughout 24 hours on Channel 12, Central Port Authority.
TUGS: 3 tugs from 500 h.p. – 1,800 h.p. owned by Nicolas E. Vernicos, also available for salvage and towage contracts.
MEDICAL: Advance notice not required – all facilities available.

SPECIALISED CARGO-HANDLING FACILITIES: The port has silos of capacity 20,000 tons (rate 150 t.p.h.), a cold storage of 2,110 cu. m. of which 470 cu. m. is deep-freeze chambers and 1,640 cu. m. refrigerated chambers.

AGET Installation: 1 berth for discharging cement in bulk by specially constructed ships equipped with automatic discharging gear. Max. draft 30 ft.

CRANES: 36 electrically driven dock cranes of 3 tons–27 tons capacity. 22 mobile cranes of 3.5 tons–30 tons capacity. 1 floating crane of 70 tons capacity. Forklifts up to 25 tons. 2×35 ton straddle carriers.

TANKERS: 1. *Esso-Pappas installation. (a)* Sea Island berth capable of accommodating 2 vessels of 24,000 tons and 14,000 tons respectively. Max. draft 32 ft. 8 lines, diameter 16 in. (1); 10 in. (3); 4 in. (3); 6 in. (1). *(b)* 7 buoy mooring for vessel of up to 80,000 tons. Max. draft 44 ft. Submarine 34 in. pipe-line for crude oil discharge. 2 flexible discharge lines 10 in. diameter.

2. *Mamidakis Installation.* Stern discharge berth. Max. draft 32 ft. 2 submarine lines enable 2 grades of cargo to be discharged through 8 in. line at 200 t.p.h. and 6 in. line at 160 t.p.h.

3. *Ethyl Oil Berth,* length 320 m., depth alongside 10 m.

DIRTY BALLAST: 2 tanks of 600 tons each and 1 of 6,000 tons are available for the reception of dirty ballast at Esso-Pappas installation.

The discharge overboard of any oil or oil contaminated water is strictly forbidden and every precaution must be taken to avoid pollution.

DENSITY: 1025.

FRESH WATER: Unlimited supplies available.

FUEL: Unlimited quantities available. Usual notices required. Suppliers B.P., Shell, Esso-Pappas, Mamidakis.

FIRE PRECAUTIONS: One firefighting launch of 2 × 480 h.p. and one fire fighting station.

WATCHMEN: If required, cost by private negotiation.

HATCHES: Opened/closed by crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirits allowed out of bond for each crew member.

CARGO GEAR: Adequate shore gear available.

IDENTIFICATION CARDS: Passes issued to crew members of foreign vessels.

CONSULS:

Austria
Belgium
Bulgaria
Chile
Denmark
Finland
France
Germany
Italy
Japan
Mexico
Netherlands
Norway
Peru
South Africa
Spain
Sweden
Switzerland
Turkey
U.K.
U.S.A.
Yugoslavia

REPAIRS: Only minor repairs.

REPATRIATION: Facilities for crew changes and repatriation available.

AIRPORT: Distant 12 km. S.E. of town. 6 flights daily to Athens.

TIME: GMT plus 2 hours. GMT plus 3 hours in Summer.

HOLIDAYS: (National): 1st January, 6th January, 25th March, Good Friday, Easter Monday, 1st May, 15th August, 28th October, Christmas Day, Boxing Day. (Local): 26th October. Work may be arranged on holidays at double costs.

POLICE/AMBULANCE/FIRE: Port Police, tel. 531-502; Ambulance, tel. 531-531; Fire, tel. 199.

TELEPHONES: Facilities available for placing on board.

SHORE LEAVE: Permitted without restriction. For tankers, the Master should arrange transport with Agent for seamen to the landing pier in Thessaloniki Harbour. Seamen will not be permitted to pass through refinery area.

DEVELOPMENTS: 6th Pier under construction. Length 660 m., width 600 m. and depth 11.5 m. One section will be used as a container terminal.

AUTHORITY: Port Authority of Thessaloniki, Thessaloniki, Greece. *Tel:* 031-526221 (ext. 112). *Telex:* 412-536 Thpa Gr. *Contact:* E. Sophianopoulos or Panos Mamalis, General Manager.

VOLOS: 39.21 N. 22.56 E. (See Plan Book)

DOCUMENTS:

Nationality Certificate.
Measurement Certificate.
Crew Lists (5 copies).
Derat Certificate.
Health Documents of Crew.
Cargo Gear Book.
Safety:
  (a) Passenger Ship Safety Certificate.
  (b) Cargo Ship Safety Construction Certificate.
  (c) Cargo Ship Safety Equipment Certificate.
  (d) Cargo Ship Radiotelegraphy or Radiotelephony Certificate.
  (e) Exemption Certificate.
  (f) Nuclear Passenger Ship Safety Certificate.
  (g) Nuclear Cargo Ship Safety Certificate.
International Load Line Certificate (1966).
Certificate for Inspection of Life Raft.
Oil Book and International Sewage Pollution Prevention Certificate (1973).

PILOTAGE: Compulsory. Pilot boards about 1 mile outside port. Pilot boat is small launch coloured grey and black.

ANCHORAGES: Suitable anchorage situated 1–2 miles outside harbour in depths of 14 m. to 20 m.

RESTRICTIONS: Vessels in excess of 10,000 tons unable enter at night.

MAX. SIZE: Max. draft 30 ft., no limitation on length or breadth.

HEALTH: Port Officer acts as Health Officer and pratique effected on doctor's advice. If arriving from another Greek port, pratique automatic.

VHF: Port Authority on Channel 12.

TUGS: Join vessel at entrance to harbour. 7 tugs, 280 h.p., 380 h.p., 465 h.p., 480 h.p., 640 h.p., 860 h.p. and 1,080 h.p.

BERTHING: Ro/Ro facilities available.

Dock	*Length*	*Depth*
K	600 m.	8.0 m.
1	1,000 m.	9.7 m.
11	980 m.	9.7 m. (under construction)
R	270 m.	7.0 m. (under construction)

CRANES:

1	Mobile crane (For containers)	— Capacity 35 tons
1	Mobile crane	— Capacity 35 tons
3	Mobile cranes	— Capacity 10 tons
3	Crawler cranes	— Capacity 4 tons
1	Rail mounted crane at Dock 1	— Capacity 27 tons at 17 m. and 16 tons at 30 m.

Cranes under construction:

Dock 1	4 cranes	— Capacity 8 tons at 20 m. and 6 tons at 25 m.
Dock 11	2 cranes	— Same capacity as Dock 1

BULK HANDLING FACILITIES: 2 silos, capacity 15,000 tons, loading ability 370 t.p.h. Discharging ability 250 t.p.h.

STEVEDORES: Advance notice required order arrange gangs. Cargo operations handled with ship's gear and with 14 shore cranes.

MEDICAL: Advance notice of required medical attention is necessary. Hospital and medical facilities available.

TANKERS: One berth, depth alongside 27 ft.

DENSITY: 1025.

FRESH WATER: Available at all the piers of the harbour. Also available from special barge (capacity 300 tons).

FUEL: Order through Agent. Oil delivered by small tanker "KEA" at all berths capacity 182 tons fuel.

GANGWAY/DECK WATCHMEN: Ship's gangway used. Usually ship's crew.

HATCHES: Usually opened and closed by crew, but if by stevedores, additional costs apply.

CUSTOMS ALLOWANCES: 1 to 2 packets cigarettes allowed per crew member per day. 1 bottle wine/spirits allowed out of bond.

CONSULS: Germany, tel: 25379, France, tel: 25870, Sweden, tel: 22611, Italy tel: 26048, Belgium tel: 23318, Netherlands tel: 23494.

REPAIRS: Minor repairs can be effected.

SURVEYORS: Cargo inspector: Hellenic Register of Shipping.

REPATRIATION: Crew changes and repatriation can be carried out.

AIRPORT: No airport locally.

TIME: GMT plus 2 hours, Winter. GMT plus 3 hours in Summer.

HOLIDAYS: Usual Greek holidays. Local holiday 6th December; cargo work can be arranged subject to additional cost with the exception of 6th December.

POLICE/AMBULANCE/FIRE: Police, tel: 23652; Ambulance, tel: 27531; Fire, tel: 33191.

EMERGENCY CO-ORDINATION CENTRE: Ministry of Mercantile Marine (Piraeus) tel: 1/4112500-4173238.

SHORE LEAVE: No restrictions.

IDENTIFICATION CARDS: Shore passes are required.

SERVICES: Divers available for surveys and underwater repairs.

DEVELOPMENTS: Construction of a new dock at the grain silo.

SHIPMASTER'S REPORT: 1977. (Updated 1984).

Restrictions: Draft restrictions on new quays subject to maximum depth of water of 32 ft. and on the original town quays a maximum depth of water of 28 ft. East side, 26 ft. West side, 26 ft. Head. (Thus draft will have to be about 2 ft. less than depth.)

Stevedores: Working hours 0730 – 1400 hrs. and 1400 – 2100 hrs. on overtime.

Berths: Town quay (K) with approx. 800 ft. frontage on each side and cross berth approx. 385 ft. on end. No. 1 quay – "L" shaped berths with base to the shore with frontages approx. 600 ft. on North side, 1,570 ft. on East side, 505 ft. on head and 1,210 ft. on West side.

No. 2 quay – "L" shaped berths with base to the shore with frontages approx. 500 ft. on North side, 1,385 ft. on East side, 330 ft. of head and 1,520 ft. on West side (Not yet finished, see plan).

Pollution: Port regulations prohibit the scraping and scaling of ships side and the pollution of sea or port area by painting.

AUTHORITY: Volos Central Port Authority, 380 00 Volos, Greece. *Contact:* Lieutenant E. Kalabalikis, Harbour Master. *Tel:* 421-24179. Vice Harbour Master, *Tel:* 421-20115. Port Police Office. *Tel:* 421-24179. Safety Navigation Office, *Tel:* 421-24758. *Telex:* 282170.

YALI ISLAND: 36.40 N. 27.08 E. (See Plan Book)

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Cargo Manifest.
Bills of Lading.
List of Ship's Stores and Spares.
Health Declaration.
Ship's Certificates.

PILOTAGE: A Mooring Master is available from Piraeus. Mooring Master boards at the anchorage.
ANCHORAGES: Safe anchorage in the roads (36° 39′ N., 27° 09′ 30″ E.) except in strong Southerly winds.
MAX. SIZE: Max. LOA 230 m., max. beam 24 m., max. draft 11 m.
HEALTH: Port Authorities will board by launch from Nissyros to arrange free pratique. Any sick crew members will be disembarked to Nissyros by the same launch.
VHF: Contact Yali Quarry on Channel 8.
TUGS: Available.
BERTHING: The vessel is moored at loading berth on 8 buoys in addition to port anchor. During loading operations vessels have to be shifted from hatch to hatch.
BULK CARGO FACILITIES: Loading Berth is located at the end of the conveyor belt shiploader. The shiploader is on a cement construction, about 500 m. offshore. The cargo is carried by conveyor belt to the spout. The raising and slewing of the spout is controlled by the operator from the control desk to allow trimming of the cargo.
STEVEDORES: Workers are employed by private loading company.
MEDICAL: Nearest medical and hospital facilities are at the island of Kos, 7 miles North of Yali.
FRESH WATER: None available.
FUEL: Not available.
HATCHES: Opened and closed by ship's crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 opened bottle of spirits are allowed for each man.
CONSULS: No local representation.
REPAIRS: No facilities exist.
AIRPORT: Nearest at Kos with daily flights to Athens during the Summer. 4 flights a week during the Winter.
HOLIDAYS: Do not affect vessels loading.
SHORE LEAVE: Allowed.
GENERAL: *Pilots Recommendations for Mooring:*

1. Pilot's motorboat at position P1 (see "Plan Book") when direction of wind N.E., North, N.W., West, S.W.W. or when wind force is less than Force 3 on the Beaufort scale. Pilot's motorboat at position P2 (see "Plan Book") when direction of wind East, S.E., South, S.W. and with wind Force over Beaufort 3.
2. Vessels are always berthed with starboard side towards the loading station.
3. Have ready following moorings:
   (a) Fore – Portside 1 × 200 fathoms manila or nylon ropes – Starboard side 2 × 200 fathoms manila or nylon rope and
   (b) Aft – Portside 2 manila or nylon ropes (should be 200 fathoms long) – Starboard side 2 × 200 fathoms manila or nylon rope.

Note: The 200 fathoms aft starboard side ropes are required only in the initial stage of mooring to bring the ship in her final position.

4. Secure lines as follows:
   (a) Manila or nylon ropes to each of Buoy Nos. 3, 4, 5, 6, 7, 8.
   (b) Manila or nylon rope(s) to either Buoy No. 1 or No. 2 according to ship's size.
5. Vessel to have portside anchor chain lowered (1.5 shackles) when vessel is about 400 yards away from anchoring point.
6. On arrival have portside gangway ready for immediate use.

Expedite Loading:

1. As a rule loading commences from midship holds. Vessel to be ready to shift back and forth at all hours of day and night for loading of other holds on 30 minutes' notice.
2. Have all hatches open.
3. Broom swept and washed clean holds, hold ladders and supporting beams.
4. Arrive at Yali fully ballasted.
5. If arriving at Yali 4-5 hours before sunset loading may commence before dark.
6. Shipper intends to work around the clock.
7. In case of tween decker, before arrival, remove all tweendeck hatch beams also 2 or 3 adjacent beams from the centre of Nos. 2, 3 and 4 main deck hatches.

AUTHORITY: Clerk of Mandraki, Port of Nissyros.
OPERATOR: Lava Mining & Quarrying Co., 49-51 Sof., Venizelou St., Lycovrissis, Attica, Greece. Tel: (01) 8088111. Telex: (21) 5168-9. Contact: N. G. Simeonides, Manager.
Quarry: Yali Island, Nisyros Dodecanese. Tel: (0242) 31280. Telex: (29) 2195.

NOTES

Please also advise Shipping Guides Ltd.

Greenland

GENERAL:

CUSTOMS: The Master is not allowed to distribute tax-free cigarettes or other tax-free tobacco in a Greenland port.
DOCUMENTS: Following documents must be on board:

Speed Certificate.
Crew List.
Radio Station Certificate.
Safety Equipment Certificate.
Clearance Certificate.
Health Declaration.
Tonnage Certificate.
Certificate of Registry.
Derat Certificate.
Sailing Orders.

RESTRICTIONS: Foreign-flag vessels do not normally have access to Greenland ports unless they have special permission. If such vessels have this permission, the crew may go ashore subject approval of Port Authorities and following presentation of Health Certificate or a medical check on board.
ICE INFORMATION: Ice Centre Narssarssuaq is transmitting daily at 1200 hrs. GMT and 2200 hrs. GMT the latest information of the ice in Southern Greenland Waters. Information is transmitted in Faximile (Mufax) on frequency 2780 and 6970 kHz drum speed 120. Ships can, free of charge, request telegraphic ice information from following coastal radio stations:

OZL—Angmagssalik
OZN—Prins Christian Sound
OXF—Julianehab
OZA—Frederikshab.

WATCHMEN: Ship is required to appoint a crew member as ship's guard on board.
TIME: GMT minus 3 hours. Permanent.
HOLIDAYS: As applicable to Denmark.
CONSULS: None.
WORKING HOURS: Normally from 0600 hrs. to 1800 hrs. with 2 meal breaks.
RADIO: In ports where there is a local radio station, vessels are prohibited from using ship's station for sending messages.
HEALTH: Before commencing voyage to Greenland, at the port of departure, Master is required to obtain a Health Certificate from an authorised medical practitioner, stating that there are no dangerous or contagious diseases on board, such as pest, cholera, yellow-fever, smallpox, or typhus. The crew list is to be included in this certificate stating that there are no venereal or other contagious diseases amongst the crew members. The Health Certificate is only valid if it has the stamp and signature of the Royal Danish Consul or Vice-Consul of the district in which the port of departure is situated. On arrival at the first Greenland port, the Master is to present the Health Certificate to the Port Authorities. Health Certificate may also be issued by a doctor in the first Greenland port of call.
REPORT: Immediately upon arrival of a vessel in Greenland, the Master must report to the Port Authorities.
WASTE DISPOSAL: It is forbidden to throw waste material of any description overboard into port waters.

EGEDESMINDE: 68.43 N. 52.53 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Roadstead, Inner Port (inside Bay), Anchorage, Boat Port, and Atlantic quay.
DAYLIGHT: Polar darkness from 2nd December to 11th January, and midnight sun from 22nd May to 23rd July.
CONDITIONS: *(a)* Current: flows Eastwards between the islands at Egedesminde from 3 hours before, to 3 hours after high water, following which, current flows Westwards for 6 hours. *(b)* Ice: Winter ice normally occurs from mid-December to early May, but can occur earlier, in November. New ice in the port can be up to 60 cm. thick; 1st January covering ice up to 30 cm and by 1st February about 45 cm. Icebergs sometimes enter port area and stop all shipping movement. *(c)* Tide: high tide height 2.6 m. (max. 3.1 m.). Low tide height 1.5 m. Direct West wind causes 0.3 m. rise above tidal height, and South or S.E. wind about 0.5 m. below.
PILOTAGE: No official port Pilot, but assistance arriving and sailing may be obtained from a local seafarer having good knowledge of the area. This local assistance should be ordered if required in ETA cable to Port Authority at least 24 hours prior arrival. The Port Manager usually acts as local expert as part of his normal duties.

There is VHF radio installation in office of Port Authority and it is usually possible to obtain VHF contact within 30 miles of Egedesminde.

Local area expert will board vessel from port boat at meeting place usually arranged just outside entrance to port.

No special pilotage regulations and no Outer Anchorage where Pilot may be taken on board. However, in waters North and N.E. of port entrance vessels may stop or proceed at very slow speed in order to embark local expert.
ANCHORAGES: No special anchorages, and vessel is only allowed to anchor for a short period at the entrance to port subject permission of Port Authority.
MAX. SIZE: Largest vessel to berth alongside Atlantic quay was length 136 m., breadth 20 m., draft 6.2 m.
ENTRY: Day or night.
TUGS: None. 2 port boats to take lines and assist mooring.
RADIO: Local radio station "OYR". RDF station beacon East of the town. Radio link between Egedesminde and Transitoen, and between Transitoen and Roeveo.
BERTHING: Atlantic Quay. Length 70m., depth alongside 8.1 m., at medium low tide and 10.7 m., at medium high tide. Height of quay at medium tide about 1.5 m., above w/l. 1 × 5 ton mobile crane and some fork-lift trucks used in discharging.
MEDICAL: Hospital, doctor and dentist available.
FRESH WATER: Available at Atlantic Quay and at tank-station.
FUEL: Only gas-oil available for local fishing vessels from the tank-station.
REPAIRS: Shipyard for repairs to wooden fishing vessels. Machine shop also available. Slip for small vessels (250 tons).
AIRPORT: Heliport.
SALVAGE: Salvage-station in the area.
SERVICES: Radar and radio technicians available.
AUTHORITY: Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

FAERINGEHAVN: 63.41 N. 51.34 W.

(Also see "General Information" at beginning of Greenland Section).
DOCUMENTS: Bill of Health: Doctor's certificate mentioning each member of crew by name to be free of contagious diseases. This document to be signed by Consulate in the port of delivery to be prepared by competent authority, passengers excluded. One Manifest with Bill of Lading. Ordinary Ship's Papers.
PILOTAGE: As a rule Pilot can be ordered in the months May-October, notice 12 hours before arrival is required.
ANCHORAGE: Inside fjord area.
RESTRICTIONS: None.
MAX. SIZE: Oil-carriers about 26,000 d.w.t., draft 40 ft. Ordinary cargo-ships 20 ft.
HEALTH: Master to apply with documents at harbour office for free pratique.
RADIO: Godthab Radio: OXI, connected Faeringehavn by Telex and Telephone.
VHF: Oil company and fishing company are listening on VHF during working hours.
TUGS: Salvage tug stationed on West coast of Greenland. Stationed at Faeringehavn May–October, no fixed rates.
BERTHING: Natural port, anchorage for the largest vessels. Wharf, 225 m. with 5 m. at L.W.
STEVEDORES: None, but fishing and service company "Nordafar" may act as stevedores.
MEDICAL: Local sick room and nurse available in Summer. For medical service, apply Godthab.
TANKERS: Load/discharge lines 6 in. and 8 in. Smaller diameters for bunkering when necessary.
FRESH WATER: Only available May to November.
FUEL: Available. Light fuel, gas oil, aviation turbine fuel A1, gas oil, oct. 97.
GANGWAY/DECK WATCHMEN: Not required (ship's crew).
OPENING/CLOSING HATCHES: Must be carried out by ship's crew.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Small repairs only. Workshop available May to November.
REPATRIATION: Available, via Godthab by air to Copenhagen.
AIRPORT: Nearest airport is Godthab, distance 35 miles regular airlines.
TIME: GMT minus 3 hours.
HOLIDAYS: Danish holidays.
POLICE/AMBULANCE/FIRE: Police tel. Faeringehavn 34; Ambulance Faeringehavn 25.
TELEPHONES: Not available on board.
GENERAL: Bunker station open all year; during Winter-time sometimes difficulties caused by ice.
SHORE LEAVE: Allowed.
DELAYS: Bunker station closes for arrivals between 2200 hrs. and 0600 hrs. local time.
AUTHORITY: Kontrolloren, (Harbour Master).

Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

FREDERIKSHAB: 61.59.7 N. 49.40.8 W.

(Also see "General Information" at beginning of Greenland Section)
LOCATION: The port is in the inner part of a small bay.
DESCRIPTION: Atlantic Quay; fishing quay; anchorage.
CONDITIONS: *(a)* Current: none. *(b)* Ice: big ice reaches to the North of the port; smaller ice reaches the port especially to the North, but South of the port it is usually ice-free. The best period of finding the port ice-free is between March/April and the end of August. *(c)* Tide: height of average high water is 3.8 m., low water 2.0 m. (max. 2.4 m.).
PILOTAGE: Pilot should be requested in ETA cable via Frederikshab radio. Pilot will meet vessel at Satuarssugssuaq (Fyroen).
ANCHORAGE: S.E. of Skarvo. Holding ground is not good and anchoring should be carried out at very slow speed.
MAX. SIZE: Length 100 m., draft about 6 m.
ENTRY: Day or night.
TUGS: None. Port boats assist in mooring.
RADIO: Radio station "OXI". RDF station beacon East of the town.

BERTHING: Atlantic Quay. Length 90 m., depth alongside at average low tide, 7 m., depth in harbour about 10 m. Cranes up to 5 tons capacity and fork-lifts trucks used in discharging.
MEDICAL: Hospital, doctor and dentist available.
FRESH WATER: Available alongside Atlantic Quay.
FUEL: Refuelling quay, depth about 5 m., Gas-oil and diesel oil available.
AIRPORT: Heliport.
REPAIRS: Workshop for repairs to wooden fishing vessels. Machine shop available. Slip for small vessels (250 tons).
GENERAL: Police Station, Fire Brigade, radar and radio technicians, and service for IFD rubber dinghies: Cable address "Fladeservice FRH".
AUTHORITY: Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

GODHAVN: 66.56 N. 53.40 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Port consists of a mooring inside a bay.
DAYLIGHT: Polar darkness from 25th November to 15th January, and midnight sun between 19th May and 26th July.
CONDITIONS: Ice: Winter ice is fast from November–December until end May or beginning of June. Thickest observed Winter ice is about 100 cm.
ENTRY: Day or night. Port is open from May to November. Between mid-April until May the port can only be used by specialised tonnage.
PILOTAGE: Boarding point arranged with Port Authority in ETA advices.
ANCHORAGE: Good anchorage in the bay – outer port.
MAX. SIZE: Largest vessel to date length 100 m., draft 6.5 m.
TUGS: None. Port boats assist with mooring.
RADIO: Extended from Egesminde "OYR". RDF Station beacon.
BERTHING: Quay length 12 m. depth alongside 4.0 m. at MLWS. Vessel moors to 2 anchors and stern-lines to the shore. Mobile cranes on shore capacity up to 5 tons. Depths in bay about 6.82 m.
MEDICAL: Hospital. Doctors and dentist available.
GENERAL: Arctic Scientific Station, Fire Brigade, Cable Office.
AUTHORITY: Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

GODTHAB: 64.10 N. 51.44 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Narrow entry to port, but well protected, with good modern berths and anchorages.
CONDITIONS: *(a)* Current: sometimes strong between anchorage and the berths. *(b)* Ice: only very occasional large quantities of ice reach the port and into the fjord. If ice in area South of Godthab, S.W. storms force drift ice into the fjord. In recent years the port has begun to freeze over in Winter, and small vessels have at times become icebound. *(c)* Wind: S. and S.W. storms spring up suddenly but only last for brief periods. *(d)* Tide: height of high water 4.4 m. (max. 5.1 m.); low water 2.1 m.
ENTRY: Port open day and night all year round.
DAYLIGHT: Godthab situated South of the border for midnight sun and Polar darkness.
PILOTAGE: Port Manager normally acts as Pilot for ships, but is not an authorised Pilot. Pilotage may be arranged by VHF contact with Authority during normal working hours.
ANCHORAGES: Good anchorages available inside fjord. Larger vessels should anchor close to Rypeo and in Malene Bugt.
MAX. SIZE: Largest vessel to berth at Atlantic Quay was length 135 m., breadth 17 m., and draft 7 m.
TUGS: None. 2 port boats to take lines and assist mooring.
RADIO: Local radio station "OXI". 24 hours notice of ETA should be passed to Authority, cable address "Handelschefen Gothab". Radio beacon at Kookoerne.
BERTHING: Larger vessels should contact Port Authority before approaching port at night-time. Atlantic Quay, length 170 m., has a depth alongside 7 m., approx. for the most Northerly 120 m., and between 4.5 – 5 m. at MLWS for the most Southerly 50 m.

Vessels normally berth starboard side alongside, unless fitted with bow thrusters, when a port side berthing is feasible. Mobile cranes capacity 5 tons.

Schooner Quay is 52 m. long, with a depth of 4.7 m., approx. Vessels normally berth bow Westward.

On the Coastal Passenger Quay length 30 m., depth 5.4 m., vessels usually berth with bow to the North.

There are several other small quays for the use of trawlers, and cutters, and a sand discharging berth length 30 m., depth 5 m.
TANKERS: Tankers can anchor and stern moor out from the gas installations, using an oil pipe-line connection. A mooring arrangement has been established for tankers of 25,000 – 30,000 d.w.t. below the tank and gas farm on the hillside.
MEDICAL: Hospital, doctors and dentists available.
FRESH WATER: Available at Atlantic Quay.
FUEL: Small quantities gas-oil available at Atlantic quay.
REPAIRS: Slip for small vessels (40 tons) and minor repairs. Slip for vessels up to 1,860 tons, repairs possible for steel and wooden ships.
AIRPORT: Runway 950 m. × 30 m.
GENERAL: Police, Fire Brigade, radar and radio technicians, radio station post, and cable office.
AUTHORITY: Director of Commerce who also acts as Port Manager.

Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

HOLSTEINSBORG: 66.56 N. 53.40 W.

(Also see "General Information" at beginning of Greenland Section)
LOCATION: Harbour is situated on Northern side of Tommermandsoen.
CONDITIONS: *(a)* Tide: average height of high tide 3.5 m. (max. 4.4 m). low tide 2 m. *(b)* Ice: Winter ice up to 1 m. thick. Ice normally occurs from December to March or April.
ENTRY: Port open day and night, and normally all year round.
PILOTAGE: Arrange with Authority through Holsteinsborg's radio, cable address "Director of Commerce Holsteinsborg". Pilot meets vessel at Jakobs Skaer, 2 miles S.W. of Mollersoe.
ANCHORAGE: Large vessels can anchor outside port and discharge into barges.
MAX. SIZE: Largest vessel that can berth alongside Atlantic quay, length 136 m., breadth 20 m., draft 6.2 m.
TUGS: None. Port boats take lines and assist mooring.
RADIO/VHF: Radio station extended from Egesminde "OYR". VHF connection in Port Director's office. Radio technicians available, cable address "Polar Radio".
BERTHING: Atlantic Quay, length 60 m., depth alongside 6 m., at average low water. Height of quay 2 m., above w/l. If berth occupied, loading/discharging of larger vessels at anchorage with barges. At Atlantic Quay there is a mobile crane with capacity of 3 tons and fork-lift trucks. Belt conveyor for coal.

Offshore Quay: Length 20 m. with depth of 6 m. at LW.
MEDICAL: Hospital, doctors and dentists available.
FRESH WATER: Obtainable at Atlantic Quay.
REPAIRS: Slip for small vessels (250 tons). Repairs possible to wooden ships. Machine shop available.
AIRPORT: Heliport.
GENERAL: Post and cable offices. Telephones not normally available for connection on board, but vessels at anchor can call Port Director's office on VHF during daytime.
AUTHORITY: Director of Commerce who acts as Port Master and Harbour Master.

Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

IVIGTUT: 61.12 N. 48.10 W.

(Also see "General Information" at beginning of Greenland Section)
OPERATORS: A/S Kryolitselskabet Oresund.
CONDITIONS: *(a)* Current: strongest about 3 hours before and 3 hours after high water, and vessels arriving and sailing should take this into consideration. *(b)* Tide: height of average high tide 3 m. (max. 3.4 m.), low tide 1.6 m. *(c)* Wind: calm for about half the year otherwise winds are usually from South or S.E. The dangerous winds for moored ships are the infrequent storms from North or N.E.; these storms seldom occur but if they do occur they do so in the Autumn. *(d)* Ice: Winter ice usually occurs from December onwards in the fjord outside Ivigtut and disappears in the beginning of April. Outside Ivigtut Winter ice always occurs, sometimes reaching a thickness of about 1 m. Information concerning ice conditions always obtainable on telegraphic request to GLK.
ENTRY: Day and night and usually all year round.
PILOTAGE: No official Pilot but an acting Pilot can be arranged through connection with Port Authority, cable address "Manager Ivigtut", at least 24 hours prior arrival.
MAX. SIZE: Largest vessel to have berthed at Kryolit Pier was length 102 m., breadth 14 m., draft 6.2 m.
RADIO: Julianehaab Radio "OXF" or Gronnedal Radio "OVC".
VHF: Gronnedal Radio listens on VHF 24 hours.
TUGS: None. Motor-boat will assist mooring.
BERTHING: Kryolit Quay, depth alongside about 7 m. height of pier about 2 m. above w/l. Berthing during daylight only. Kryolit not exported from mid-December to end March. Crane capacity 3 tons.
FRESH WATER: Available.
FUEL: Deliveries of small quantities of gas-oil.
REPAIRS: Machine tool workshop. Diver assistance obtainable.
MEDICAL: Hospital in Ivigtut, but doctors and dentists are in Gronnedal.
AUTHORITY: Ivigtut Cryolite Mines.

Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

JAKOBSHAVN: 69.13 N. 51.06 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Port is a narrow open bay, entrance to the N.W., having outer port and inner port. In outer port is Atlantic Quay and bunkering station, and inner port has another quay and a fishing harbour.
CONDITIONS: *(a)* Tide: height of average high tide 2.8 m. (max. 3.3 m.) low tide 1.6 m. *(b)* Wind: usually East to N.E. In Autumn winds are strong especially in the morning. *(c)* Ice: impression can be gained when approaching port that port is closed due to icebergs. On closer approach channels between icebergs will be found but if these openings appear too narrow a wider passage should always be found to the North. *(d)* "Kanele": a natural phenomenon that occurs at this port causing regular and heavy swell, height up to 2 m. Wave characteristic, long and flat, frequency about 6 minutes. Pilot should be consulted for full information.
ENTRY: Port usually open day and night, from mid May to end November.
DAYLIGHT: Polar darkness between 1st December and 12th January and midnight sun between 21st May and 24th July.

PILOTAGE: A Pilot should always be used by larger vessels and request made to Port Authority in ETA cable. Pilot boarding place to be agreed with Authority.
MAX. SIZE: Largest vessel to berth at Atlantic Quay was length 93 m., draft 6.8 m.
RADIO: Egesminde Radio.
TUGS: None. Port boats take lines and assist mooring.
BERTHING: Outer port depth 6.5/7 m., inner port 5.5/6 m. Atlantic Quay length 40 m. Depth alongside Atlantic Quay 7 m. at average low tide. Height of quay about 1.1 m. above w/l. Permission to enter port should be obtained prior arrival from Port Authority. Mobile crane capacity 5 tons, also fork-lift trucks.
MEDICAL: Hospital, doctors and dentists available.
FRESH WATER: Obtainable alongside Atlantic Quay.
AIRPORT: STOL airstrip available for internal flights.
REPAIRS: Machine workshop. Crane for lifting small vessels, capacity 50 tons.
GENERAL: Police, Fire Brigade, Port and cable office.
AUTHORITY: Director of Commerce who acts as Port Manager.
Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

JULIANEHAB: 60.43 N. 46.02 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Port is an open bay, facing South with Atlantic Quay.
CONDITIONS: *(a)* Current: flows N.W., but in Southern part of port from little current effect. *(b)* Tide: average height of high tide 2.8 m. (max. 3.2 m.); low tide 1.4 m. *(c)* Ice: drift ice between January and July occasionally fills whole port. *(d)* Wind: the most frequent wind is from East or N.E., normally occurring as storms during Winter months and as strong winds in Summer. Winds can be violent and cause rapid rise in temperature. Very secure moorings are advisable.
PILOTAGE: Port office is equipped with VHF which should always be used to contact Port Authorities before arrival, and to arrange Pilot's boarding position.
MAX. SIZE: Largest vessel to berth at Atlantic Quay was length 100 m. and draft 6 m.
ENTRY: Port open day and night normally throughout year, but from 1st January to 1st August, only available to specially constructed tonnage.
TUGS: None. Port boats take lines and assist mooring.
RADIO: Local radio station. Radio beacon station at Simiutaq about 10 miles West of entrance to Julianehab Fjord.
BERTHING: Atlantic Quay – length 60 m., depth alongside between 7/9 m. on average high tide and 1 quay, length 60 m., depth alongside 4.8 – 7.2 m. for small vessels. Height of quay is 1.3 m. above w/l. Mobile cranes, lifting capacity up to 5 tons.
MEDICAL: Hospital, doctor and dentist available.
FRESH WATER: Available from Atlantic Quay during Summer months.
FUEL: Gas-oil available at Atlantic Quay.
REPAIRS: At repair quay there is a stationary crane lifting capacity 35 tons. Slip for small vessels (250 tons) and minor repairs. Machine shop available.
AIRPORT: Heliport.
AUTHORITY: Director of Commerce – acting as Port Manager.
Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

MARMORILIK: 71.07 N. 51.17 W. (See Plan Book)

DOCUMENTS:
International Load Line Certificate.
Safety Raid Certificate.
PILOTAGE: Optional for coastal vessels entering Davis Strait. Agents are to make arrangements if Pilot required.
GENERAL DESCRIPTION: The berth is located at the North end of the West side of Agfardlikavsa Fjord.

Agfardlikavsa Fjord, West Greenland, (entrance approximately Lat. 51° 18′ W., Long. 71° 08′ N.) is located at the end of the larger Qaumarujuk Fjord.

Qaumarujuk Fjord, the Northeastern arm of Ingnerit, has its entrance between Qegertanguit and the Western extremity of Akuliarusikavsak, a mainland projection about 2.5 nautical miles S.E. Ingnerit is one of the largest of the branch fjords and flows into Umanak Fjord. It is entered between Tuperssuatsiait, the S.E. extremity of the Alfred Wegener Peninsula, and Akuliaruseq, a point about 4 miles S.S.E. The waters of the Umanak Fjord flow into the Nordost Bay.

The Agfardlikavsa Fjord is separated from the Qaumarujuk Fjord by a shallow, narrow bar. Depth at the centre of the sill is approximately 30 m.

There is a considerable surface water run-off along the Fjord walls including occasional rock slides. The bottom of the Fjord is filled with 6 to 8ft. of fine silty materal.

Marmorilik (Lat. 71° 08′ N., Long. 51° 18′ W.) lies on the S.E. side of the Qaumarujuk Fjord at the Western entrance point of the Agfardlikavsa Fjord.

The larger fjords and Nordost Bay are encumbered with islets and rocks requiring extreme care in navigation. In particular, a shoal is known to exist some 350 m. N.W. of Marmorilik Point and extra care is required in this vicinity.
ANCHORAGE: There is an anchorage at Agfordlikowsa in depths of 20 m. to 35 m. Tankers can anchor near the berth in depths of 24 to 50 m., but must be aware of an unmarked 6m. shoal about 300° True, and 375 m. (approx.) from the discharge point.
MAX. SIZE: Max. d.w.t. 36,500. Min. depth alongside ore terminal is 12.5 m. at LW.
RADIO: Ship-to-shore communications will be maintained using the following frequencies: 2182 kHz, 2210 kHz and 2738 kHz.

Information on ice conditions in the fjord can be obtained from shore personnel. During loading operations, Greenex will supply the vessel with 2 portable radio transceivers for communications between the carrier and the loading control station.
TUGS: 1 tug available, 720 h.p. The tug will assist with berthing and unberthing if required, and will break up any thin ice in the vicinity of the berth and entrance to the fjord.
BERTHING: The Marine Terminal isused for loading ore carriers up to 36,500 d.w.t. The berth consists of 4 breasting dolphins with bollards for springs and breast-lines. On the shore are 7 bollards for head and stern lines spread over a distance of 366 m. The min. depth of water alongside is 12.5 m. at LW.

Vessels normally berth port-side alongside and use the starboard anchor to assist in berthing. No. 1 hatch is lined up under the loader as it is the first hatch to be loaded.

Initially the headlines go to the Northernmost dolphin and stern lines to the Southernmost bollard on the shore.

Loading: Zinc and lead are loaded with a luffing and slewing shiploader. The ship-loader is fitted with a 20 ft. conveyor to distribute the cargo in the hold. Communication is maintained between the vessel and control room by portable radios. The average loading rate is 500 metric t.p.h.

Notice of readiness will not be accepted at time of arrival at the dock unless the vessel is in all respects ready to load.

General Cargo: Unloaded into barges with vessel's gear and towed ashore to a separate lightering dock located about 500 m. N.E. of the ore terminal.
MEDICAL: Emergency medical and dental treatment can be arranged and should, when possible, be requested by the vessel's Master in his ETA message to the mine site office.
TANKERS: Diesel fuel oil and turbo-fuel are stored in a tank farm located on-shore about 500 m. West of the point at Marmorilik on Qaumarujuk Fjord, at an elevation of 50 m.

Vessels usually berth using both anchors, 5 shackles on the port anchor, and about 4.5 shackles on the starboard anchor, using a heavy chain from the stern to the S.E. point of the oil installation. The chain is available from the shore. Tankers can also moor to the N.N.W. of the oil installation, but must remain outside the 6 m. line.

The tanker hoses are connected to an 8 in. flange connection for diesel oil or a 4 in. hose adaptor with dust-cap for turbo-fuel. The static head on the lines is about 70 m. when the tanks are full. An anti-static cable is provided.

On the shore, there are two 50 ton bollards and one 20 ton stock. No breasting or mooring dolphins are provided.
FRESH WATER: Not available.
FUEL: Not available.
REPAIRS: No facilities.
TIME: Standard time is GMT minus 3 hours.
GENERAL: *Repairs:* While alongside the dock, no repairs are to be undertaken that will prevent the main propulsion machinery from being activated at very short notice.

Vessel's Whistle: The vessel's whistle shall be operational during operations. One long blast on the whistle means "Emergency – stop operations".
AUTHORITY: Greenex A/S.
Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

NARSSARSSUAQ (Isrecognosceringsstation): 61.08 N. 45.26 W.

(Also see "General Information" at beginning of Greenland Section)
DESCRIPTION: Ice outlook station, with quay.
CONDITIONS: *(a)* Current: occasional strong N.W. current.
(b) Tide: average height of HW 3 m. (max. 3.6 m.) LW 1.6 m.
(c) Wind: S.E. wind sometimes reaches typhoon strength.
(d) Ice: in Winter ice thickness sometimes reaches 1 m. Ice breaker not available.
PILOTAGE: Not available. Base representative should be advised of ETA well in advance of arrival.
TUGS: None. Port boats assist mooring.
MAX. SIZE: Largest vessel to berth at quay was length 130 m., draft 8 m.
ENTRY: Open season from mid-May to mid-October. During season, port open day and night.
RADIO: Julianehab Radio "OXF".
VHF: Extended from Julianehab.
BERTHING: Quay length 140 m., depth alongside (West) 6 m. – 11 m. (East) 5 m. – 8 m. Height of pier 2 m. above w/l. 2 vessels may berth, 1 on either side of quay. Heavy mooring equipment on the quay, and should be used by larger vessels. Mobile cranes capacity up to 4 tons, and fork-lift trucks.
WATER: Obtainable at quay, about 80 tons per single off-take.
AIRPORT: Landing-strip for aircraft. Ice station usually uses Twin Otter aircraft and S61 Helicopter.
AUTHORITY: Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

NORTH STAR BUGT (Thule Air Force Base): 76.36 N. 68.52 W.

(Also see "General Information" at beginning of Greenland Section)

DESCRIPTION: Supply port for the Thule Air Force Base. Port is operated by and belongs to the U.S. Air Force.

DAYLIGHT: Polar darkness from 1st November to 10th February and midnight sun from 23rd April to 20th August.

CONDITIONS: *(a)* Ice: port is frozen over from end October to beginning July. From beginning of November, large areas of compact ice appear, and these can sometimes be up to 20 miles wide. During May, compact ice areas commence breaking up; however, large quantities of drift ice remain along the coast until end July. Winter ice is normally about 180 cm. thick. *(b)* Temperature: in January and February average temperature is 29° below zero. In July, June and August, average temperature is usually above freezing-point, but for the rest of the year it is below freezing. *(c)* Tide: mean Spring tide is 3 m. (max. 3.4 m.). Mean neaptide 1.7 m.

ENTRY: Normally, port is open early July depending upon ice situation.

PILOTAGE: No authorised Pilot, but American Port Authority assists in mooring and should be advised of ETA well in advance.

ANCHORAGE: Good holding ground in depth between 20 m. and 40 m., but anchoring should only be carried out following advice of Port Authority.

MAX. SIZE: Largest vessel to berth alongside quay was length 130 m., and draft 7 m.

TUGS: None. Port boats assist mooring.

BERTHING: 2 vessels may berth at the quay. Depth alongside about 7 m. Height of pier about 2 m. above MHW. Mobile cranes and fork-lift trucks; however, equipment varies from year to year and Port Authorities should be contacted well in advance. 3 amphibious craft for vessels discharging in the roadstead.

FRESH WATER: Available alongside quay.

AIRPORT: Two rescue helicopters stationed at this base.

REGULATIONS: The area is a Military Defence area and special permission is necessary to enter the port. Shore leave is prohibited.

MEDICAL: Hospital, doctor and dentist available.

AUTHORITY: U.S. Air Force.

Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

SONDRE STROMFJORD (Camp Lloyd): 66.58 N. 50.57 W.

(Also see "General Information" at beginning of Greenland Section)

DESCRIPTION: Port is used for the supply of an American base, transit port for passenger carriage, and for air communication to Copenhagen. Port has a quay and a sea terminal for tankers.

DAYLIGHT: Camp Lloyd is situated South of the border for polar darkness but has a midnight sun from 15th June to 1st July.

CONDITIONS: *(a)* Current: the current at entrance and at the West of Sondre Stromfjord is N.E. at flood tide, and S.W. at ebb tide, and can reach a speed of 7 knots. *(b)* Tide: high water at Camp Lloyd is about 3 hours later than at the entrance of Sondre Stromfjord. Height of average high tide 3 m. (max. 3.6 m.). Low tide 1.6 m. *(c)* Ice: Sondre Stromfjord is frozen during winter throughout whole of inner harbour, but about 55 miles from Camp Lloyd, ice thickness varies from 5 cm. to 90 cm. *(d)* Winds: strong winds can occur from East and S.E.

ENTRY: On account of ice, the fjord is closed from beginning of January to end-June, but can be used day or night from beginning of July to end-October.

PILOTAGE: No authorised Pilot, but Harbour Master will assist berthing.

ANCHORAGES: Good anchorages about 2 miles S.E. of Emmons Pynt in depth of about 40 m. Great care should be taken in anchoring, since sea bottom is shelving.

RADIO: ETA should be given well in advance of arrival to the Royal Greenlandic Commercial Representative and also to the Port Authority. The arrival should be reported at least 24 hours in advance through GLK. The Harbour Master can be contacted on 2716 kHz and this contact should be established at least 1 hour before vessels arrival.

BERTHING: *(a)* A quay which is located North of Emmons Pynt, depth alongside only 3 m. *(b)* Tanker sea terminal about 700 m. S.S.E. of Emmons Pynt where there is mooring with discharge lines. Depth of water 24 m. – 26 m. on the South side of the mooring position; 15 m. at the mooring, and 10 m. on Northern side of mooring with rapid shelving to the North.

The Port Authorities should be contacted before mooring at the sea terminal. There are mobile cranes with lifting capacity up to 5 tons, and fork-lift trucks.

MEDICAL: Hospital, doctor and dentist available.

REGULATIONS: Camp Lloyd is an American Defence Area and is restricted. American supply ships have preference in mooring at all installations.

AIRPORT: Heliport.

AUTHORITY: The Royal Greenlandic Commercial Representative – Harbour Master.

Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

SUKKERTOPPEN: 65.25 N. 52.54 W.

(Also see "General Information" at beginning of Greenland Section)

LOCATION: Harbour situated on S.E. side of Manitsoq Island, and has Atlantic Quay.

CONDITIONS: *(a)* Tide: height of average high water 4.2 m. (max. 4.8 m.), low water 2 m. *(b)* Ice: Winter ice occurs from December to April. *(c)* Wind: advisable not to enter harbour area if winds are strong. Most obstructive winds are storms from South or S.W.

ENTRY: Port open day and night, normally all year round.

PILOTAGE: Pilot is arranged by cable to Sukkertoppen Radio when giving ETA, which should be sent well in advance. Pilot will meet vessel as arranged outside the harbour, or at Faltings Skoer.

RADIO: Extended from Godthab "OXI".

TUGS: None. Port motor-boats assist mooring.

MAX. SIZE: Largest vessel that can berth at Atlantic Quay is length 100 m., draft 6 m. Vessels up to 4,000 tons have used the port.

BERTHING: Depth in harbour is about 27 m. and alongside Atlantic Quay. Length 60 m. with depth of about 6.2 m. Height of quay is about 2 m. above w/l. Cranes up to 5 tons capacity and fork-lift trucks.

WATER: Available at quay.

REPAIRS: Repair workshop for repairs to wooden fishing vessels. Machine shop available. Slip for small vessels (225 tons).

MEDICAL: Hospitals, doctors and dentist available.

AIRPORT: Heliport.

GENERAL: Telex, telephones, Police, Fire Brigade.

AUTHORITY: Director of Commerce.

Gronlands Tekniske Organisation, Direktoratet, Hauser Plads 20, 1127 Copenhagen K, Denmark. *Tel:* (01) 13 84 72. *Telex:* 22979. *Cables:* Gronlandteknik.

NOTES

Please also advise Shipping Guides Ltd.

Grenada

ST. GEORGE'S: 12.02 N. 61.46 W.

DOCUMENTS:
Health Authority: Health Declaration.
Customs: Stores List, Crew Declaration, 2 Crew Lists, Passenger List, Clearance from last port.
Immigration: 2 Crew Lists, 2 Passenger Lists.

PILOTAGE: Compulsory for anchoring and berthing for vessels over 450 g.r.t. Notice must be given before 1500 hrs. for vessels requiring berthing between 1700 hrs. and 0700 hrs. the following day.

Pilot boards at Pilot Station 0.5 miles N.W. of the red flashing buoy.

ANCHORAGE: Vessels anchor in position 12° 02′ N., 61° 46′ W.

RESTRICTIONS: Vessels are berthed between 0530 to 2400 hrs. Unberthing may be done in certain circumstances outside of the above hours.

MAX. SIZE: Single screw vessels up to 600 ft. LOA, approximately, depending on type and machinery equipment of the vessel, this size may be increased. Max. draft 28 ft.

VHF: 25 watt base station – Grenada Ports Control (J3YA) Channels 6, 11, 12, 13, 16, 22A, 26, 68. Hours: 0800 – 1600 hrs., Monday to Friday.

Mobile station (J3YA) 5 watt, Channels 6, 11, 12, 13, 16, 22A. Hours flexible but mainly limited from 0600 to 2200 hrs. Monitors Channel 16.

St. Georges Pilot (J3YB) Channels 6, 11, 12, 13, 16 and 22.

TUGS: Not available.

BERTHING: Length of berth 791 ft. Depth alongside 30 ft. (minimum). Berth owned by the Government of Grenada.

Berthing in hours of darkness is carried out. Palletised and container cargoes are loaded and unloaded by ship's gear.

MEDICAL: Doctor and general hospital available.

STEVEDORES: Available.

TANKERS: A tanker berth exists at the bulk storage terminal at Grand Mal approximately 1.5 miles North of St. George's. Another terminal exists 100 yard South of Green Bridge at the Northern limit of the town of St. George's. A minimum depth of 26 ft. exists between the mooring buoys at this Terminal.

Due to shallows, manoeuvring in the area of the Grand Mal terminal is difficult and is not carried out during the hours of darkness. It is also not recommended to attempt berthing at the Queens Park Terminal during the hours of darkness due to lack of navigation ranges.

FRESH WATER: Available.

FUEL: This can be arranged with sufficient notice.

SURVEYORS: Michael Forshaw. Tel: 2881.

AIRPORT: Air services provided by Leeward Island Air Transport with regular services to and from Grenada.

HOLIDAYS: New Year's Day, Corpus Christi, Independence Day (February 7th), Good Friday, Easter Monday, Labour Day (May 1st), Whit Monday, August Bank Holiday (Monday), Christmas Day, Boxing Day.

TELEPHONES: No dockside telephone available.

GENERAL: *Charts:* B.A. Chart No. 2830.
Fire Service: Local fire service near docks (36 m.).

DEVELOPMENTS: New port developments being carried out by the Grenada Ports Authority commencing early 1983, comprising 250 ft. schooner wharf in basin behind finger pier, equipment for container handling being supplied. Container storage space being provided under Development plan.

SHIPMASTER'S REPORT: April 1982.
Anchorage: Anchored in position with George Pt. 120°(T), distance 0.5 m.
Restrictions: Contrary to report dated January 1979 Pilot boarded at 2015 hrs. and vessel alongside at 2130 hrs. Length of vessel 165 m. Entry possible up to 2300 hrs., after which there are no Linesmen. Vessels able to sail at anytime by special arrangement.

AUTHORITY: Grenada Ports Authority, Burns Point, St. Georges, Grenada, West Indies. *Tel:* 3013, 3418. *Telex:* 3418 Min. *Cables:* Grenada Port Authority. *Contact:* Michael T. Forshaw, Port Manager. Sydney Coard, General Manager.

NOTES

Please also advise Shipping Guides Ltd.

Guadeloupe

BASSE TERRE: 15.59 N. 61.44 W. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Manifests.
Health Declaration Form.
6 Lists of stores on board.
Passenger List.
Clearance from last port.

PILOTAGE: Not available.

ANCHORAGE: On an 18 fathom bank North of the pier 2 cables from the shore.

RESTRICTIONS: Vessel can berth and unberth at any stage of the tide, but if vessel's first call, recommend berthing during daylight only.

MAX. SIZE: Max. LOA 300 m. Max. beam 30 m. There is 32 ft. – 36 ft. alongside but an allowance should be made for a 3 ft. swell, therefore would suggest max. draft approx. 29 ft.

HEALTH: Authorities require 24 hours notice of the vessel's arrival.

RADIO: Fort-de-France call sign "FFP" (high frequency) and Destrellan call sign "FFQ" for medium wave.

VHF: Port Authority on VHF Channel 16.

TUGS: Not available, however a small boat will assist in running lines if the Port Authority is advised in sufficient time on VHF Channel 16.

CRANES: 30 ton mobile crane available.

STEVEDORES: Working hours: 0700 – 1100 hrs. and 1300 – 1700 hrs. Extension possible.

FRESH WATER: Available.

MEDICAL: Doctors and hospital available.

DENSITY: 1025.

CONSUL: None, nearest consuls at Pointe-a-Pitre.

SERVICES: Fresh provisions, groceries and meats available. The following are not available: repair facilities, dry dock, machine shop, airport, surveyors, laundry services, bunker fuel oil, diesel oil, lubricating oil and slop tanks.

WEATHER: The swell is between 3 ft. and 4 ft. from a S.E. direction. The wind is mainly from an Easterly direction.

DEVELOPMENTS: New berth for ferries under construction. Expected to be ready late 1984.

AUTHORITY: Guadeloupe Port Authority, Place Cours Nolivos, 97100 Basse-Terre, Guadeloupe. *Tel:* 81-09-15 and 81.11.21. *Telex:* 919710 GL. *Contact:* Mr. Claude Julienne, Port Director.

POINTE-A-PITRE: 16.13 N. 61.32 W. (See Plan Book)

DOCUMENTS:
6 Manifests. See (a).
6 Crew Lists.
3 Stores Lists.
3 Crew Declaration. See (b).
6 Passenger Lists.
4 Declaration of Health.
2 Bills of Lading.
1 Clearance from Last Port.
6 Entrance Declaration.

(a) In addition, 2 sets of Manifests must be airmailed to arrive 72 hours before arrival in Pointe-a-Pitre.

(b) This Declaration must indicate all new and used personal effects.

PILOTAGE: Pilot meets vessels at "Mouchoir Carre" buoys. Advance notice of ETA to be passed 24 hours, and VHF Channel 16, 1 hour before arrival.

ANCHORAGE: Consult charts.

RESTRICTIONS: Max. length 210 m., max. tonnage 26,000 g.r.t. Max. draft 9 m.

MAX. SIZE: See "Restrictions".

HEALTH: Port Health board on arrival.

RADIO: Destrellan Radio, also on VHF.

TUGS: None available.

BERTHING: 9 berths available, 8 additional for petroleum, sugar, cement, flour mill, bananas, ro-ro and containers. Depth alongside up to 33 ft.

Tourist Port:
Quay No. 1: Length 150 m.
Quay No. 2: Length 180 m.
Quay No. 3: Length 145 m.
Quay No. 4: Length 145 m.

Commercial Port:
Quay No. 5: Length 150 m. Roll-on/Roll-off.
Quay No. 6: Length 170 m. Roll-on/Roll-off.
Quay No. 7: Length 150 m.
Quay No. 8: Length 150 m.

Industrial Port:
Quay No. 9: Length 180 m., depth 8.0 m. Mineral Berth.
Quay No. 10: Depth 8.0 m. Storage capacity 30,000 cu.m.
Quay No. 11: Sugar Berth. Storage capacity 70,000 cu.m. Loading rate 750 t.p.h.
Quay No. 12: Grain vessels, flour and feed.
Quay No. 13: Located at Jarry.
Quay No. 14: See "Container Terminal".

Industrial Area: The industrial area of Jarry offers 40 hectares of open storage at the water's edge.

Container Terminal:
Quay No. 14: Length 787 ft., depth 36 ft.
The container terminal is equipped with 2 × 40 ton Paceco-ACB cranes.

STEVEDORES: 24 hours advance notice of ETA required (72 hours if vessel arrives on Monday). Working hours 0700–1100 and 1300–1700.

MEDICAL: Clinics and Hospital facilities available.

TANKERS: Only tankers having less than 9 m. draft can enter the harbour.

FRESH WATER: Available day and night if requested in advance.

FUEL: Available F.O. 350 seconds Redwood, D.O. for gas oil. Delivered by road tankers.

CONSULS:
Belgium
Denmark
Ecuador
Great Britain
Haiti
Italy
Lebanon
Netherlands
Norway
Spain
Sweden
Venezuela

REPAIRS: Workshops available.

GANGWAY/DECK WATCHMEN: Available on request.

HATCHES: Usually opened and closed by crew. Stevedores will at Master's request but at ship's expense.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle per man.

CARGO GEAR: Ship's gear used.

REPATRIATION: All facilities available.

AIRPORT: 3 miles from the harbour with daily flights to Paris, Miami and New York.

TIME: GMT minus 4 hours. No alterations during the year.

HOLIDAYS: New Year's Day; Shrove Tuesday; Ash Wednesday; Carnival; Good Friday; Easter Monday; Labour Day (1st May); Ascension Day; Whit Monday; National Day; (14th July); Souls' Day; Armistice; Christmas Day.

POLICE/AMBULANCE/FIRE: Police: 83.00.05 or 83.13.17; Ambulance: 83.03.96; Fire Department: 83.00.23.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: I/D or passport required.

REGULATIONS: No particular regulations.

DEVELOPMENTS: 1 deep-water berth length 300 m. for container terminal, 1 berth length 160 m.

AUTHORITY: Guadeloupe Port Authority, Quai Lardenoy, (P.O.Box 485), Pointe-a-Pitre 97165, Guadeloupe. *Tel:* (590) 836313. *Telex:* 919710 GL. *Contact:* R. Anne-Rose, Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Guam

GUAM (Apra Harbour): 13.26 N. 144.39 E.

(See Plan Book)

DOCUMENTS: Guam is a United States Territory in the Western Pacific and official documentation is as for mainland U.S. ports, including visaed crew list completed at port of departure prior to Guam. Vessels should have a stock of American Crew Lists Form I-148 and Form I-95A. The American Alien Crewman Landing Permit is acceptable and preferred. This is the plastic identification card previously issued on the U.S. coast.

Required on arrival:
- Vaccination Cards.
- Visaed Immigration Crew List.
- 4 Crew Lists.
- 4 Passenger Lists.
- 1 Store List.
- Clearance from last port.
- Cargo Papers.

Have ready Immigration Form I-94 for each passenger and Form 1-95 for each alien unless they have I-184 plastic Identification Card. Shore Passes not required. Crew Customs Declaration not required.

PILOTAGE: It is advisable to have on board U.S. charts for Guam: C & GS 4197 Apra Harbour. 4196 Guam Approaches.

Pilot available 24 hours a day. Weather permitting, Pilot will board outside breakwater upon Master's request.

ANCHORAGE: Harbour – range 084° True, 2 green lights. Strong set across harbour entrance, Navy recommends 10 knots entering. Quarantine Anchorage at Middle Ground, Outer Harbour, depth 45 ft.

RESTRICTIONS: The Harbour Master of the Port Authority of Guam, is in complete control of the approaches to Guam and it is essential to obtain clearance and permission to enter Guam from "Harbour Master" Port Authority, call sign KUF-810 at least 24 hours prior to arrival. Permission is readily granted with the condition to request permission again 2 hours prior to arrival at Guam. This time from Guam Control, call sign KUF-810 and NRV (USCG).

MAX. SIZE: Max. LOA 230 m. (Berths "F4", "F5" and "F6"). Depth alongside Berth "F5" – 10.97 m. at HW.

Berth "F3". Max. LOA 182.80 m. Depth 9.75 m. at HW.

Max. beam for container vessels is 33.55 m.

HEALTH: If from suspect port, Inspector boards at anchorage or at pier for thorough check. Grants pratique.

RADIO: Harbour Master Radio Station, call sign KUF-810 ship/shore watching 24 hours. Use of USCG Station "NRV" for best service if unable to reach KUF-810 due to limitation of range.

Notice to Ship's Agents: (20th August, 1980)

The Harbour Master's Control Tower is operating on a 24 hour basis. The following VHF frequencies are guarded and monitored:

156.8 MHz – Channel 16
156.6 MHz – Channel 12
156.65 MHz – Channel 13

In addition, Control Tower personnel will be monitoring S.S.B. with the following procedure:

2182.0 kHz continually.

4143.6 kHz – (4B). Every hour on the half hour for a period of 5 minutes.

8291.1 kHz – (8A). Every hour at 35 minutes after the hour for a period of 5 minutes.

12432.3 kHz – (12B). Every hour at 40 minutes past the hour for a period of 5 minutes.

The Port Authority solicits your co-operation in the matter of keeping the Harbour Master advised of all arrivals, departures, and other pertinent information whereby we may best serve the maritime industry.

VHF: Masters of vessels approaching should keep watch on Channels 12, 13 and 16.

TUGS: 3 tugs (1,200 h.p.) available throughout 24 hours. Tugs can be contacted direct on VHF Channels 16, 13 and 19.

BERTHING: Vessels may berth Port or Starboard side upon request of the Master or Agent at "F3", "F4", "F5" except "F6" port side to, 1 large tug and 1 small tug normally used. Ship's gangway is required. Local information from Pilots states that after completion of Berth F-1 (Gorco Oil Berth), a submerged wreck was discovered, said to be a 500 ft. long cargo vessel, and lies across and below the vessel in this berth, on the Eastern side of the jetty. It is advisable not to drop anchors – should they have to be used – until vessel has passed over the wreck. There have been instances of forward springs or breastlines becoming fouled in this wreck during operations.

TANKERS: *Mobil Pier:* Berth "G". Depth alongside 39 ft.

Gorco Berth: Berth "F1". Depth alongside 55 ft. Ship to pier hoses – 10 in. Crude shore line 24 in. (7 miles to tanks). Diesel/general line 16 in.

CRANES: 1 (Manitowoc) × 140 ton, 1 (P&H) × 40 ton and 1 × 35 ton.

2 Paceco rail mounted container gantry cranes for handling 20 ft., 27 ft. or 40 ft. containers. 30 fork lifts, capacity 3 – 20 tons, including a Hystainer with special spreader for handling containers.

IMMIGRATION:

1. *Prior to Departure for Guam:*
   A. Visaed Crew List: Prepare 1 Crew List on U.S. Form I-418 and have it visaed by a U.S. Consulate at a port prior to Guam. Without this, crew shore leave may be denied.
   B. Passengers must have a valid passport and also must have an appropriate U.S. Visa whether landing or not on Guam.
   C. Intransit passengers do not need U.S. visa if the Owners of the vessel have signed a contract called "Immediate and Continuous Transit Agreement" with the Commissioner of Immigration at Washington, D.C.
2. *Prior to Arrival at Guam:*
   A. Passenger List, Form I-418 prepare 3 copies of Passenger List on U.S. Form I-418 (for Immigration, Customs and Agent).
   B. Passenger Landing Card: Form I-94. Prepare or have on hand, 1 U.S. Form I-95A for each alien crew member. Not required if crew member is a permanent resident with U.S. I-184 laminated "Crewman's Landing Card". Not required of U.S.A. Citizens. Please present form I-95A in appropriate Seaman's passport or identification book. Form I-95A can be used repeatedly for future arrivals of same crewman on same ship at any United States Port.
3. *Upon Arrival at Guam:*
   A. U.S. Federal Immigration Inspector boards upon arrival at pier, must see all passengers with their passport and Form I-94 and all crew members with their passport or identification books and Form I-94A or Form I-184.
   B. Passengers and crew are required to be ready for inspection immediately upon docking at Guam.
   C. No shore leave and no visitors or stevedores may board until this Immigration inspection is complete. The Inspector will advise Master when he has completed his inspection of passengers and of crew.
4. *Prior to Departure from Guam:*
   A. Intransit Passengers: Pick up from intransit passengers the Form I-94 and hand to Agent before departing from Guam. These must be returned by Agent to U.S. Immigration as passenger departure records.
   B. Alien crew member joining at Guam: Pick up from them the Form I-94 which they used to enter the U.S.A. These must be returned to U.S. Immigration by Agent as permanent records.

SECURITY: Guam Government Official usually boards at pier, examines vaccination cards and inspects Steward's stores and slop chest. Also represents U.S. Customs. Requires 1 Crew List, 1 Passenger List, 1 Store List, Clearance from last port, later issues new clearance from Guam which Agents bring to ship. Normally does not seal stores or slop chest.

MARINE GUARD: Required when docked at Ammunition Pier, requires 1 Crew List.

FUEL: Marine Diesel Oil available by truck at any pier and by pipe-line at Berth "F3". Black oil available by pipe-line at Berth "F6". Both products also available by pipe-line at Berth "F1" (Gorco Pier) and the Mobil Pier. The distribution companies are Exxon, Gorco and Mobil. Infrequent fuel delivery restriction occurs when ammunition vessel working.

FRESH WATER: Very good, available any quantity, meter service.

STORES: Available but considered expensive. Produce from U.S.A.; meats from U.S.A. and N.Z.; milk is recombined in quart cartons, white, chocolate or buttermilk. Order milk day prior to delivery; tropical fruits seldom available; ice in blocks or cubes. Prices wholesale, except under 1 case lots when at retail. Delivered to ship's gangway or hook.

LAUNDRY: Also dry-cleaning available 3 days service at U.S.A. prices. 1-day service extra. Delivered to ship's gangway or hook.

MEDICAL: Foreign ships use Guam Memorial Hospital or other clinics in town. American ships use U.S. Naval Dispensary in Harbour area, or in emergency U.S. Naval Hospital near Agana, 10 miles distant. Certificates required signed by Master. Patient returns to vessel by taxi at vessel's expense. Dispensary hours for merchant seamen Monday to Friday 0800 – 1200 and 1300 – 1600 hrs. At other times, if emergency, use the U.S. Navy Hospital. Doctors will not normally visit ships.

Dentists: Private dentists only. Usual hours 0900 – 1700 hrs., Saturday to 1200 hrs.

REPAIRS: Commercial Yard and Casamar Yard available. Navy Yard, repairs by U.S. Naval Ship Repair Facility (SRF), subject to prior Navy commitments, and requires cash deposit in advance. Payment to be made for work done successfully or not. "No Cure No Pay" does not apply.

TIME: GMT plus 10 hours.

POLICE/FIRE/AMBULANCE: Ambulance U.S. Naval Dispensary, Harbour Area, Tel: 339-4224/4227. Fire Tel: 22222. Police – Naval Station Security, Harbour Area Tel: 333-2988. Police – Guam Civilian Police, Tel: Agana 777-9811

BANKS: Bank of America, Bank of Guam, Bank of Hawaii, Chase Manhattan Bank, Citibank, First Hawaiian Bank, Hong Kong and Shanghai Banking Corp.

AUTHORITY: Port Authority of Guam, P.O.Box 1445, Agana, Guam 96910. *Tel:* 477-9931, 477-8752, 477-8697. *Telex:* 7216157. *Contact:* Roy P. Duenas, General Manager. Frank Santos, Harbour Master.

Guatemala

GENERAL

DOCUMENTS:

Consular Documents:

Masters are required to:

1. Obtain a health and clearance permit, issued by the competent authority at the last port of call, and certified by the Guatemalan Consul, and;
2. Submit 5 copies of a general manifest of articles carried to each port of the country, approved by the Guatemalan Consul at the port of loading, and also, separate copies of the manifest for in-transit articles unloaded.

If no articles bound for the country are carried, a ballast manifest should be submitted.

Prior to Arrival:

Arrival Notice:

There is no minimum period for advance notice of the vessel's arrival, because Authorities exercise a degree of flexibility. However, it is recommended that notice be submitted in writing to the following sometime in advance: The Captain of the Port, Customs Administration and Customs Supervision of Unloading, Migration Delegate, Maritime Health, Plant Health Delegate and Port Watch. Notification must also be sent to the following agencies of the Port Authority: Port Administrator, Office of the Chief of Operations, Office of the Chief of Docks, Import Division, Export Division, Invoicing Division, Container Section (if any) and Pilots Division.

Information on Cargo for the Port:

If the vessel carries cargo to be discharged at the port, the following information will be submitted to the Port Authority:

Stowage Plan.
Cargo Distribution List.
Heavy Cargo List.
Amount of Exports.

If containers are carried to the port, 8 copies of the list of container contents and 8 copies of the list of complete shipments and of mixed shipments (for more than one consignee) are to be submitted to the Container Section.

This information may be submitted upon the vessel's arrival, so that no delays in the work will be experienced for that reason.

On Arrival:

Type of Documents	*Number and Distribution of Documents*						
Basic Forms	*Captain of Port*	*Customs*	*Security*	*Maritime Health*	*Immigration*	*Plant Health*	*Port Authority*
General Declaration	1	1	1	1	–	1	1
Cargo Manifests	1	7	–	–	–	1	12
Crew List	1	1	2	1	1	1	1
Passenger List	1	1	2	1	1	1	1
Ship's Stores List	1	1	1	–	–	1	1
Crew Effects Declaration	1	1	1	–	–	–	–
Maritime Declaration of Health	–	–	–	1	–	–	–
Mail List(a)	–	–	–	–	–	–	–
(a) Delivered to Post Office.							
Additional Documents:							
Clearance from Last Port	1	–	–	–	–	–	–
Consular Manifests	–	1	–	–	–	–	–
Consular Manifests from each Port of Loading	–	1	–	–	–	–	–
Sets of Bills of Lading	–	–	–	–	–	–	2
"No Passengers" Declaration	1	1	2	1	1	1	1
List of In-Transit or "No In-Transit Passengers" Declaration	1	1	2	1	1	1	1
Tally Books	–	3(b)	–	–	–	–	3(b)

(b) According to the number of stevedores requested, more than 2 copies.

Other Requirements:

Requests for permission to load and unload are submitted to Customs, each on stamped paper and also, when appropriate, a request for overtime work.

Prior to Departure: The clearance permit is requested from the Captain of the Port 4 hours in advance, after obtaining clearance from Customs, on a clearance permit application, which is submitted on stamped paper.

CHAMPERICO: 14.17 N. 91.55 W.

DOCUMENTS:

Clearance from Last Port.
Travel Memorandum (original and 4 copies).
Declaration of Maritime Health.
Derat Exemption Certificate.
5 Crew Lists.
5 Passenger Lists or "no passengers" Declaration.
5 Provision Lists.
5 Dangerous Cargo, inflammable or explosives declaration.
5 Mail Lists or "no Mail" Declaration.
Manifests of Cargo from each port (original and 11 copies).
Bills of Lading from each port.
Vaccination Certificates for whole crew.
12 Ballast Manifests, if no cargo on board.

PILOTAGE: None.

ANCHORAGES: Without limit but recommended *not to anchor* less than 1 km. from beach.

MAX. SIZE: Vessels work cargo at anchorage in depth consistent with vessel's draft.

HEALTH: Give notice of any suspicious illness or fever on board when the doctor comes for official visit.

RADIO: ETA cables through Cristobal (Panama).

VHF: Channel 16.

TUGS: No tugs required.

STEVEDORES: No advance notice necessary. Possible to arrange gangs within an hour.

MEDICAL: Adequate advance notice required depending on gravity of case. Hospital 30 minutes away and possible to arrange transport for patient, also to arrange for doctor on board. Crew must have current International Vaccination Certificates.

TANKERS: No facilities for tankers.

DENSITY: Changes from 1.0226 gr./cu.cm. in October to 1.0270 gr./cu.cm. in April. Percentage of salt: Changes from 30.5 parts per thousand in October to 36.4 parts per thousand in April. Temperatures: an annual average of 28.5° C.

FRESH WATER: Free within port limits.

FUEL: No facilities.

GANGWAY/DECK WATCHMEN: Available upon request.

OPENING/CLOSING HATCHES: Either by crew or by stevedores.

CUSTOMS ALLOWANCES: Without limit on board. Prohibited to take tobacco, wine or spirits ashore.

CARGO GEAR: Ship's gear used for loading/discharging.

IDENTIFICATION CARDS: Not needed.

CONSULS: None.

REPAIRS: Minor repairs only.

REPATRIATION: All facilities available.

AIRPORT: International airport 3 hours distant with regular flights all over world.

TIME: GMT minus 6 hours. No alterations to clock during year.

HOLIDAYS: No work on 1st January, Maundy Thursday and Good Friday, 1st May and 25th December. The rest of the year work day and night.

POLICE/AMBULANCE/FIRE: All available.

TELEPHONES: Cannot be placed on the vessels.

GENERAL: Possible to supply provisions, especially vegetables and shell-fish at good prices.

SHORE LEAVE: No restrictions.

DELAYS: Some days in April and October the surge is very strong and work has to be suspended.

DEVELOPMENTS: Project to build a modern port with an entrance channel, artificial bay and capacity for 8 merchant vessels and facilities for fishing ships and tourist ships.

AUTHORITY: Empresa Portuaria Nacional de Champerico, 10A Calle 3-31, Zona 1, Guatemala City, Guatemala. *Tel:* 25-4-47, 85-2-16, 53-54-57. *Cables:* Epnac. *Contact:* Cnel. Antonio Batres Barreda, President. Gregorio Cifuentes Administrator.

PUERTO BARRIOS: 15.44 N. 88.36 W.

DOCUMENTS:

Clearance from Last Port.
Crew List, 1 legalised and 9 copies.
Passenger List 1 legalised and 7 copies or negatives.
Cargo Manifest, 1 legalised and 21 copies.
Stores/Provisions List 3 copies.
Voyage Memorandum 4 copies.
Bills of Lading, 2 sets.
Declaration of Health.

PILOTAGE: Pilot boards 2 miles off Puerto Barrios, from small unmarked launch. If awaiting Pilot, vessel may anchor about three miles North of Puerto Barrios, keeping port entrance clear. No VHF.

ANCHORAGE: In Santo Tomas Bay, depths up to 6 fathoms.

MAX. SIZE: Length 600 ft., draft 30 ft.

HEALTH: Advise Agent in advance if any fever or contagious disease suspected on board. Otherwise pratique granted on arrival. Officials board only between 0600 hrs. and 1800 hrs.

RADIO: Coastal radio in Costa Rica, call sign TIM operating on 8485 kHz.

TUGS: No tugs available.

BERTHING: One pier owned by International Railway used to discharge fuel oil. 1,000 ft. berthing length on each side. A flag is shown on the pier to indicate where vessel will berth. Berthing recommended during daylight hours only. Tankers discharge on South side of the pier.

See "Shipmaster's Report" for Santo Tomas de Castilla.

FRESH WATER: Available at the pier.

FUEL: Not available.

MEDICAL: Doctor available. All crew require International Vaccination Certificates.

CUSTOMS ALLOWANCES: Normal daily consumption on board. No tobacco, wine or spirits to be taken ashore.

IDENTIFICATION CARDS: Required.

TIME: GMT minus 6 hours; no alterations during the year.

SHORE LEAVE: Allowed.

AUTHORITY: Commandante del Puerto.

SAN JOSE: 13.55 N. 90.50 W. (See Plan Book)

DOCUMENTS:

Clearance from Last Port.
Crew List, 1 legalised and 4 copies.
Passenger List, 1 legalised and 7 copies.
Passengers in Transit List, 4 copies.
Cargo manifest, 1 legalised and 19 copies.
Stores/Provisions List, 3 copies.
Voyage Memorandum, 4 copies.
Cargo Check Lists, 18 copies.
Mail List, 7 copies.
Bills of Lading, 2 sets.
Baggage Declaration, per passenger, 4 copies.
Declaration of Health.

PILOTAGE: Not required and no resident Pilots available, except for Tankers where services of a Pilot could be made available upon request.

ANCHORAGE: San Jose is a lighter port (open roadstead). Vessels anchor about 0.25 mile from pierhead in 8–9 fathoms of water.

RESTRICTIONS: Normally no pratique granted after 1900 hrs., although in some instances and if prior arrangements made, vessels could be received by Port Authorities up to 2300 hrs. Tankers moor in daylight only.

MAX. SIZE: Size immaterial since no docking facilities. Cargo transported from vessel to pier and vice-versa by means of steel lighters or barges of 35 tons capacity each. This applies to dry cargo only. Bulk, liquid cargo at respective terminals (oil and oil by-products, imports, and molasses export), where vessels proceed after pratique.

HEALTH: Pratique automatic (0700 hrs. to 1900 hrs.), irrespective of previous port of call. Master's obligation to notify Authorities on arrival of any suspected disease and/or fever on board, in order that adequate precautions taken.

RADIO: Messages should be routed via Guatel.

TUGS: None available or required for manoeuvring vessels.

BERTHING: New port 2 miles East of San Jose Pier. The principal mole is 800 m. long and is dredged to 10.0 m.

STEVEDORES: No gangs available after 2100 hrs., unless another vessel is working in port. Rate of discharge/loading: dry cargo: 15–20 tons per gang hour. Max. gangs available: 3. Bulk cargo handled ten times faster.

MEDICAL: Hospital available. No vaccination/fever certificates required.

TANKERS: 2 buoy berths for tankers. Discharging lines 8 in. diameter. Esso Terminal: Mooring Master assists berthing. IRCA Terminal: Stern discharge.

FRESH WATER: None available.

FUEL: None available.

GANGWAY/DECK WATCHMEN: None required or necessary.

OPENING/CLOSING HATCHES: By stevedores.

CUSTOMS ALLOWANCES: On board, no restrictions, but no crew member allowed to bring ashore more than amount required for personal use.

CARGO GEAR: Ship's gear used for loading and discharging dry cargo. Vessels must bring own lines to tie lighters alongside.

IDENTIFICATION CARDS: Necessary for those on shore leave.

CONSULS: All Consulates located in Guatemala City, where vessels' Agents, when and if required, have special documents legalised. Normally, however, Agents can take care of regular certifications required, through port officials, who are authorised to certify documents in absence of a consul of a particular nation.

REPAIRS: No facilities available.

REPATRIATION: Possible. Usually arranged by Agents in cooperation with vessel's Agent in Guatemala City.

AIRPORT: Nearest airport Guatemala City, 108 km. due North of San Jose. Daily flights to and from all parts of world.

TIME: Central Standard Time, GMT minus 6 hours. No changes during year.

HOLIDAYS: January 1st; Holy Thursday; Good Friday; Easter Saturday; March 19th; May 1st; June 30th; July 25th; September 15th; October 20th; November 1st; December 24th; December 25th; December 31st.

POLICE/AMBULANCE/FIRE: These can be contacted through Agent at San Jose and/or Guatemala City.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Allowed.

DELAYS: Only 2 dry-cargo vessels can work simultaneously. A third vessel must await departure of 1 of the first 2. Only 1 tanker can work at each bulk liquid cargo terminal.

SHIPMASTER'S REPORT: September, 1978.

Approach was direct from the Pacific. A good landfall was made. San Jose main Light was observed to be Isophase, rather than Occulting, every 20 seconds.

Anchorage: Vessel anchored in a position with the head of the Iron Wharf bearing 011°(T) – 8 cables. We lay to 4 shackles of cable on the starboard anchor, in 13 fathoms of water. Despite a considerable swell at times, the vessel did not drag her anchor. If anchoring, vessels do not take a Pilot.

Berthing: Ocean-going vessels and at times, due to the swell, almost any vessel, cannot berth alongside the wharf. While we were at San Jose a tanker of about 20,000 d.w.t. berthed stern-on with both anchors down, to load molasses.

I understand that, if no tanker is expected, general cargo ships are sometimes berthed in this manner. The tanker employed a Pilot.

Communications; If at anchor, it is best to keep radio watches and maintain long-range communications in this way. When working cargo, the Supervisor is in VHF communication with the Agents, but this facility is not available outside of working days.

Charterer's Agents: Transmares S.A., of Guatemala City, who send a representative to San Jose while a ship is there. They are efficient and helpful.

Documents: As per "Guide to Port Entry". It was not possible to get any documents legalised prior to arrival, but this was arranged by Agents, as also was legalisation of documents for subsequent Central American ports.

Cargo Work: Continuous, weather and the supply of lighters permitting. There are only 3 general cargo gangs in the port and only 2 ships can be worked at a time. The first ship gets 2 gangs, the second ship 1 gang. Many delays were experienced waiting for lighters, and 2 full days discharging time were lost due to the size of the swell.

This is not a very serious problem alongside the ship, but makes discharge of the lighters at the wharf impossible.

Rate of discharge of coiled steel rods was 55 tons per gang-hour, net of delays awaiting barges.

Pratique: Granted on arrival.

Provisions: Not purchased.

Fresh Water: Unobtainable at the anchorage.

Shore Leave: Permitted, but one has to take one's chances of getting a ride to and fro on the lighters. Not many people went ashore and fortunately none were stranded when work was suspended.

SANTO TOMAS DE CASTILLA: 15.42 N. 88.37 W. (See Plan Book)

DOCUMENTS:

Clearance from Last Port.
Crew List, 1 legalised and 9 copies.
Passenger List, 1 legalised and 7 copies.
Passengers in Transit List, 4 copies.
Cargo Manifest, 1 legalised and 21 copies.
Stores/Provisions List, 3 copies.
Voyage Memorandum, 4 copies.
Cargo Check List, 18 copies.
Mail List, 7 copies.
Bills of Lading, 2 sets.
Baggage Declaration, per passenger 4 copies.
Declaration of Health.

PILOTAGE: Compulsory for all vessels arriving, leaving and manoeuvring within the port limits and available 24 hours a day. Pilot can be taken on board at 2 stations on ship's request, one at Cape Three Point (Tres Puntas) and the other 1 to 2 miles North of Villedo lighthouse.

The pilot station and the Control Office of Maritime Traffic of the Navy maintains listening on R.T. frequencies 2738 kHz, and Channel 16 VHF.

The pilot craft are painted white, flying a red and white flag by day, and red and white lights by night, they have VHF radio, but no radar.

The pilot craft base is the Santo Tomas de Castilla Quay, as well as the pilot station, and they will proceed to provide service once requested by the Ship's Agents.

The ladder for the Pilot to board must be positioned on the lee side of the vessel 1 m. above the water, but any alternative may be agreed between the Pilot and the Master of the vessel.

ANCHORAGE: Vessels with a draft up to 24 ft. can anchor about 1 mile to the North of Villedo Lighthouse, leaving the main channel free, but vessels drawing more water should anchor a little further away from the lighthouse.

The Pilots will anchor vessels with less than 24 ft. draft in the inner bay, i.e. nearer to the port, depending on the position of vessels anchored.

APPROACHES: As aids to navigation, there is a lighthouse at Cabo Tres Puntas, Ox-Tongue Lighthouse, Heredia Lighthouse, Villedo Lighthouse, the access channel together with the manoeuvring basin being marked by light buoys, driven by batteries recharged by solar energy.

RESTRICTIONS: The channel has a depth of 32 ft., at the marginal quay there can be a minimum depth of 24 ft., this will be deepened to 30 ft.

Vessels may sail from the port at any time of the day or night, holidays, etc., and vessels arriving after 1800 hrs. must make special arrangements via their agent in the port with the authorities for berthing.

HEALTH: In case of any contagious illness or fever on board the Sanitary Authority will be informed through respective Agent and vessel will moor to be examined by doctor in charge whether to subject vessel to quarantine or not. No automatic pratique.

RADIO: ETA cables to Agent and Receiver made through Florida Radio, Lantana (WDE) in the U.S.A.

VHF: The distance at which VHF communication can be established with the Santo Tomas de Castilla pilot station is 16 nautical miles, i.e. the distance at which Cabo Tres Puntas (Three Points Cape) is from the port.

When the Pilot is manoeuvring, communication with the tugs is via Channel 12 VHF.

TUGS: It is compulsory to use at least 1 tug for any type of manoeuvre; depending on the size, structure, location where the manoeuvre is being executed, and the state of the weather, the Pilot will decide upon the use of a second tug. The port currently has available 2 tugs, and in the near future a third tug will enter into service.

BERTHING: The quay is marginal with a length of 914.51 m., being divided into 6 berths of 152.40 m. (approx.) each. The depth of water alongside the quay is 29 ft., the water is saline, and for discharge and loading of goods, facilities are available for day and night work. The vessel's own gear and equipment is used, and in special cases shore equipment. It is necessary that prior to the arrival of the vessel's relevant and general information be provided regarding the cargo carried by the vessel, so as to allocate the corresponding berth, as well as equipment and storage warehouses.

CRANES: The port currently has 3 mechanical scoops (type P&H), 2 with a lifting capacity of 35 tons and 1 with a capacity of 7.5 tons. A mobile jib crane on rails capable of covering a distance of 450 m. approx., and with a lifting capacity of 30 tons. There is also a fixed crane with a lifting capacity of 50 tons. The Authority has no floating cranes.

The port can work conventional vessels, container and Ro/Ro ships, solid and liquid bulk carriers, and for operating solid bulk carriers, the Authority has a Buhller unit with a capacity of 100 t.p.h. discharge and mechanical scoops with grabs. Liquid bulk carriers visiting the port discharge and load products via tubes and hoses, conveniently installed along the quay.

SPECIALISED CARGO HANDLING FACILITIES: There are 4 berths for Ro/Ro vessels operation.

For handling container ships there is 2 Straddler carriers with a lifting capacity of 40 tons and stowage at 3 high, 2 Raygo-Wagner fork-lifts with 40 tons lifting capacity and stacking height to 3 high, 2 spreaders, 1 for 40 ft. and 1 for 20 ft. containers, 9 winches and 8×40 ft. platforms.

STEVEDORES: The port authority provides the stevedoring service in accordance with the applications for service submitted by port agents. Ordinary time from 0700 to 1200 hours and from 1400 to 1700 hours. Overtime from 1800 to 2400 hours.

MEDICAL: No advance notice necessary. Hospital facilities and ambulance service available. International vaccination certificate required.

TANKERS: Diameter of pipe-lines 16 in. and load/discharge lines 14 in. No slop discharge facilities. Only 1 mooring berth for tankers and max. draft permitted 30 ft. Also see "Shipmaster's Report".

DENSITY: 1015.

FRESH WATER: Pipe-lines alongside quay. Delivered by hoses belonging to port. Rate 15 t.p.h.

FUEL: Available by lorry or port authority tugs, no advance notice required. (Bunker: 60°, and diesel: 38°).

FIRE PRECAUTIONS: No specific precautions for tankers. Hydrants and fire brigade available to combat fires, besides tug's services and Coast Guard ships of Navy. Dangerous areas to be clearly signposted.

GANGWAY/DECK WATCHMEN: Not essential. If necessary provided free by port.

OPENING/CLOSING HATCHES: Normally by crew.

CUSTOMS ALLOWANCES: Tobacco, Wine and/or Spirits: No definite quantity and usually regulated by the Master.

IDENTIFICATION CARDS: Passes issued to each crew member.

CONSULS:

El Salvador
Honduras
Mexico
Germany
Italy
Sweden
Holland

REPAIRS: Only minor deck and engine repairs.

REPATRIATION: Possible.

AIRPORT: In Puerto Santo Tomas de Castilla there is no airport. There is an airport at Puerto Barrios 8 km. away, and flying time from there to the capital, Guatemala City, is 45 minutes. There is no regular airline, but it is possible to hire air taxis.

TIME: GMT minus 6 hours.

HOLIDAYS: 1st January; 7th March; Maundy Thursday and Good Friday; 1st May; 30th June; 15th September; 20th October; 1st November; 25th December.

No work 1st January, Good Friday or 25th December.

TELEPHONES: No facilities for placing telephones on board.

BANKS: Central Bank of Guatemala.

SHORE LEAVE: Possible.

SHIPMASTER'S REPORT: 1976

Approaches: No difficulty once position is ascertained approaching the Gulf of Honduras. The Pilot boarded 3 miles North of the Villedo Shoal Beacon. Pilots have VHF Channel 16 call Porto Barrios Pilots. Only 1 pilot speaks English so if he is on duty there is no difficulty in communications.

The lights on the approach beacons are said to be unreliable but all were found to be good radar targets.

At the present time a dredger is working on a new approach channel to give a 32 ft. buoyed channel past Puerto Barrios up to Santo Tomas de Castilla.

General: The area is still recovering from the severe earthquake some 8 months ago in which the finger pier at Puerto Barrios was destroyed. This now constitutes a submerged hazard while in the channel on the approaches to Santo Tomas de Castilla. The channel is poorly marked and at present there are numerous survey buoys which can be confusing.

The berth is stern to at the Eastern end of the cargo jetty at Santo Tomas using 2 anchors and backing up to 10 ft. off the jetty from where the hose is passed up to the stern line by a mobile crane. The connection is made by the ship's crew. There is a 1 × 8 in. hose for all grades into a 10 in. shore line which is approximately 5 km. long. The requested back pressure of 8.5 kg. was easily maintained using 2 pumps.

AUTHORITY: Empresa Portuaria Nacional – Santo Tomas de Castilla, *Tel:* 0480060, 0480611, 0480588, 539098. *Telex:* Stomas GU 719. *Contact:* Carlos Tan. G, Deputy Manager.

NOTES

Please also advise Shipping Guides Ltd.

Guinea, Republic of

CONAKRY: 09.30 N. 13.44 W.

DOCUMENTS:
7 Crew Lists – Crew list with vaccination date for health service.
5 Passenger Lists.
5 Lists Port of Call (the last ports).
3 Stores Lists.
3 Lists Crew Declaration (personal effects).
5 Manifests of Cargo (if any).
2 Copies of Bills of Lading.

PILOTAGE: Telegraphic address Pilot station: "Harbour Master's Office, Conakry". Pilot meets vessels N.E. of sea buoy Tonnelier.
ANCHORAGE: Safe deep anchorage.
RESTRICTIONS: No entry at night. Channel depth 8 m. MLW.
MAX. SIZE: 600 ft. long. Max. draft for tankers 31 ft. – 32 ft. HW.
HEALTH: Valid yellow fever inoculation Certificates.
RADIO: Conakry Radio 2182-2586 kHz.
TUGS: 2 new tugs, 27 tons bollard pull, recently delivered. Tugs normally connect to starboard side. Ship's lines used.
BERTHING: All tankers berth according to HW. No berthing at night. Berthing 0700 hrs. to 1900 hrs. 10 berths, max. depth 11.5 m.
STEVEDORES: ETA to "Navalguinee" in order arrange gangs.
MEDICAL: Advance notice required for medical service, hospital facilities available.
TANKERS: Pipe-line 5,280 ft. long, 10 in. diameter. 2 tanker berths, 31 ft./32 ft. high-water max. draft at these berths.
DENSITY: 1016 in the port with particular relation to state of tide.
FRESH WATER: Available by connection from pier. Rate of delivery with good pressure 30 t.p.h.
FUEL: Not available.
FIRE PRECAUTIONS: Special fire service for tankers.
GANGWAY/DECK WATCHMEN: Compulsory, particularly for tankers. Large gangs of thieves have boarded vessels in daylight in the port and have stolen cargo from containers and holds.
OPENING/CLOSING HATCHES: Normally by crew. Stevedores if requested by Master.
CERTIFICATES: Derat Certificate, Log Book.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes out of bond. Wine and/or Spirit, 1 litre of spirit and 1 litre of wine per day out of bond.
IDENTIFICATION CARDS: Necessary.
CONSULS: All major maritime nations.
REPAIRS: None available.
REPATRIATION: All facilities exist for effecting crew changes and arranging repatriation to Europe.
AIRPORT: International airport distant 15 km. served by regular airlines.
TIME: GMT plus 1 hour.
HOLIDAYS: New Year's Day (1st January); Women's National Day (9th February); Labour Day (1st May); 1958 Referendum Day (28th September); Independence Day (2nd October); All Saint's Day and Guinea Army's Day (1st November); Anniversary of the Basic Law of 8th November 1964 (8th November); Assumption (15th August); Anniversary of Youth's Creation (J.R.D.A.) (26th March); Christmas (25th December).

Varying holidays which depend on the position of moon: Ramadan – End of fasting; Tabaski – Pilgrimage day at Mecca; Mahouloud – Day after Prophet Mahomed's Birthday.

Work available during holidays, except Labour Day, Independence Day, Ramadan and Tabaski.
POLICE/AMBULANCE/FIRE: Police 17; Ambulance 16; Fire 18.
TELEPHONES: Not possible to place telephones on board.
SERVICES: None.
SHORE LEAVE: Crew allowed ashore.

SHIPMASTER'S REPORT: 1974.

There are no shore or harbour lights in operation. The Tonnelier Buoy is off station together with all channel buoys other than Nos. 3, 6 and 9 all of which are unlit. There is no plan to replace or re-light these navigation marks.

Only 1 tug is available.

Fresh water can only be obtained by Fire Brigade Tanker truck of 4 tonnes capacity at a cost of £1.60 per tonne. This water if received needs chlorination and boiling before use.

Consuls – There is no British Consular Officer resident in this port. The nearest is located at Dakar in Senegal.

Repatriation of crew members by air is possible but difficult. Procedure is as follows;

Air ticket must be purchased outside Guinea. Airline then advises their office at Conakry that purchase has been made. Airline office at Conakry in turn advise ship's Agents when ticket and flight are available. Only then can Immigration formalities be commenced. Entry and exit visas are required and the overall operation may take up to one week.

Time – GMT is kept.

In the rainy season vessels should be prepared for the African Tornado. This usually occurs at night and produces winds reaching 90/100 knots from calm in a matter of minutes. It is as quickly over. The best indication of approach of this weather is a steep rise in the barometer, the highest winds usually Northerly being experienced during the rise.

Vessels berthed at the banana berth should be well fendered as they are subject to considerable movement due to invisible ground swell. A slight starboard list when alongside is an advantage.

SHIPMASTER'S REPORT: 1975.
Radio: Conakry Radio not working on radio telephony as stated, although same information given in List of Coast Stations. (Freetown Radio helped me with the relaying of my messages to Conakry and Europe).
Fresh Water: Only available by truck loads and after written application to Harbour Master, stating exact amount required. (Water is very expensive).
Identification Cards: Seamen's Books or passports used. (No landing permits issued).
Time: GMT.

AUTHORITY: Harbour Master.

PORT KAMSAR: 10.39 N. 14.37 W. (See Plan Book)

DOCUMENTS:
1 Vaccination List.
5 Crew Lists.
5 Passenger Lists.
1 Crew Declaration (Personal effects) List.
1 Stores List.
5 Last Ports of Call Lists.
7 Manifests of Cargo.
5 Copies Bills of Lading.

To ensure the best possible turn-round for general cargo vessels complete sets of the required cargo documents should be made available to the authorities by hand of the Master. Delays have been occasioned by the late arrival of documents sent by post. It would be of help for the Master to send hatch distribution and the amount of refrigerated cargo, if any, at the same time as ETA.
Quarantine, Immigration and Customs: Representatives of the departments board after the vessel has been made fast alongside. The Quarantine Flag "Q" should be flown by arriving vessels.
ARRIVAL ADVICE: Masters are required to send ships ETA, addressed to Harbour Master and/or Shipping Superintendent C.B.G., through Port Kamsar Radio Station, 7 days, 5 days, 3 days and 1 day before arrival at Port Kamsar.
APPROACHES:
Approaches to Rio Nunez: Port Kamsar formerly known as Kakande is located on the East bank of the Rio Nunez river and is approximately 17 km. from the sea.

Vessels bound for Port Kamsar will find there are few natural features to aid a landfall. The most prominent feature is Cape Verga situated to the Eastward of the Rio Nunez entrance. This cape can be observed by radar at a distance of approximately thirty miles. At present the light on Cape Verga is extinguished.

To the Westward of the Rio Nunez entrance are the Compony Shoals and Conflict Reef. These are screened by a series of light buoys and vessels approaching from the West should keep them well on the port hand. (See "Buoyage System" below).

Another prominent feature is Gonzales Rock on the starboard side close to the entrance to Rio Nunez. During daylight the hull and superstructure of a wreck stranded 765 ft. bearing 049.75° from the old Gonzales light structure is visible and may be picked up by radar at a distance of between ten and fifteen miles. A light buoy is positioned screening the rocks and is identified as buoy No. VII. The true position of the wreck is: 10° 24′ 24″ N., 14° 41′ 18″ W.

Vessels proceeding to Port Kamsar should anchor and await the arrival of the Pilot in the area bounded by Latitudes 10° 26′ N and 10° 28′ N. and Longitudes 14° 44′ W. and 14° 46′ W.
Kamsar Buoyage System: Approaches to Rio Nunez – Sea Buoys

No.	*Shape–Colour*	*Position* *N.*	*W.*	*Characteristic*	*Visibility (miles)*
I	Red cylindrical	10° 20.0′	15° 28.5′	GP. FL. 3 Ev. 15 sec.	5
II	Red cylindrical	10° 12.3′	15° 25.5′	FL. 10 secs	5
III	Red cylindrical	10° 09.4′	15° 12.1′	GP. FL 4 Ev. 15 secs	11
IV	Red cylindrical	10° 13.5′	15° 01.5′	GP. FL. 2 Ev. 10 secs	5
V	Red cylindrical	10° 19.2′	14° 52.5′	GP. FL. 3 Ev. 10 secs	5
VI	Red cylindrical	10° 25.5′	14° 47.5′	FL. 5 secs	5
VII	Black conical	10° 23.5′	14° 44.5′	GP. FL. G 4 Ev. 10 secs	2.6
VIII	Red cylindrical	10° 29.5′	14° 43.9′	FL. 10 secs	5

Charts of the area are as follows:
British Admiralty:
600 Cacheo River to Iles de los.
1562 Rio Nunez and Riviere Compony.
United States Naval Oceanic Office:
51580 Ponta Caio to Cap Verga.
Service Hydrographique de la Marine (These charts are recommended by the Port Captain):
6148 Embouchure du Rio Nunez.
6228 Acces au Rio Nunez.
6288 Abords du Port Kakande.

Rio Nunez Transit: The channel from the mouth of Rio Nunez to the bauxite loading wharf at Port Kamsar is 17 km. in length and 120 m. wide and is well marked by 21 light buoys. The channel is subdivided into an inner and outer channel, the bottom of which consists of mud and sand.

The inner channel extends from the bauxite wharf to point "F" and is dredged to between 8.25 and 8.50 m. below Reference Datum Level (R.D.L.) which is defined at +0.15 m. above the lowest water registered (British Admiralty Tide Tables L.L.W.S. = 0.00).

The outer channel extending from point "F" seaward is dredged to a depth of 9.00 m. below R.D.L. increasing to a depth of – 12.00 m. from km. 15.3 to the sea.

The turning, waiting basin for inbound vessels is dredged to –7.75 m. below R.D.L. the bottom of which is mainly mud and it is good holding ground.

PILOTAGE: Pilotage service is compulsory for all vessels over 150 ft. LOA. Vessels under 150 ft. LOA will also be required to have a Pilot aboard on their first calls, but may be exempt thereafter by consent of the Harbour Master and approval of the Port Director.

Pilots are supplied from the Director's Office. Pilots board vessels in the designated waiting area. When conditions are too unfavourable for a Pilot to board the vessel at the designated area the Pilot will pass instructions by VHF radio, Aldis lamp or loud hailer from the pilot boat, and the vessel will follow the pilot boat in until conditions are suitable for boarding.

Pilot boats are fitted with VHF radio can be contacted on Channel 16 or 12.

ANCHORAGE: See "Approaches".

RESTRICTIONS: Pilots are now berthing ore carriers of any size (up to 225 m. LOA, which is the largest size of ship calling at Port Kamsar) at any stage of tide, including with the half ebbing current of Spring tides during the dry season. However, this performance can be limited during Spring tides in the rainy season.

MAX. SIZE: Max. LOA 225 m. Shipmaster reported max. draft at LW 42 ft. 8 in.

HEALTH: Authorities board when vessel is alongside the berth. Yellow fever and Cholera vaccination certificates required.

RADIO: The Port Radio Station is operated by the Post, Telegraph and Telecommunications Department. The equipment includes a 5 kW. transmitter (both voice and telegraph) with the following frequencies.

A.

Frequency	*Power*	*Mode*	*Call Letters*
6383 kHz	5,000 Watts	A 1	3X0 27
8702 kHz	5,000 Watts	A 3	3X0 28
12885 kHz	5,000 Watts	A 3	3X0 29
484 kHz	1,000 Watts	A 1	3X0 30
500 kHz	1,000 Watts	A 1	3X0

NOTE: *Watchhours are at the GMT times shown below:*

0800 – 0850	500 kHz
0850 – 0950	6383 kHz
0950 – 1100	500 kHz
1100 – 1200	6383 kHz
1600 – 1700	500 kHz
1700 – 1800	6383 kHz
2000 – 2100	500 kHz
2100 – 2200	6383 kHz

B. *Port Operations:*

(1) A new SSB radio telephone set will shortly be installed and be operated on the following frequencies and watchkeeping hours:

Frequency	*Power*	*Mode*	*Call Letters*	*Watch Hours*
2182 kHz	150 Watts	A3H	3X04	8000–1200,
8702 kHz	150 Watts	A3J	3X028	1330–1730
12885 kHz	150 Watts	A3J	3X029	and as required

(2) VHF Channels 16 and 12. Watchkeeping hours: 0800 – 1200; 1330 – 1730 and as required.

C. A Radio Direction Finder has been installed and is operating with the following characteristics:

Position:	10° 39′ 41″ North 14° 36′ 25″ West
Frequency:	308 kHz
Signal:	KAM — · — · — — —
Power:	100 Watts
Range:	150 miles (approx.)
Operating Time:	Continuous

D. A further means of communication is through Port Kamsar Post Office through which international connections may be made.

Telegraphic address: BCTR KAMSAR.
Telex : 817 Kamsar.

TUGS: Two tugs in service (1×825 h.p., 1×2,800 h.p.).

BERTHING: Located 17 km. from the channel entrance is the bauxite wharf.

The area alongside the wharf has been dredged to a depth of 13.5 m. below R.D.L. Fendering is separate from the wharf proper, and consists of 12 flexible steel dolphins spaced 21.6 m. apart and protruding 4 m. from the face of the wharf.

A vessel proceeding to the bauxite wharf will normally swing off the berth and make fast port side to, heading seaward, during the flood tide. If the berth is occupied the vessel will be anchored in the turning basin to await the berth.

There is a single loading berth at the wharf. The longest vessel berthed had a LOA of 225 m., which is considered to be the maximum length permissible.

The mobile shiploader has a travel of 165 m., and an outreach of 21 m. from the outside face of the fendering. It is rated at about 4,000 tonnes/hour.

A vessel's air draft, i.e. distance from the waterline to the top of the hatch coaming, must not exceed 13.72 m. (45 ft.) at Highest High Water.

Weight of bauxite loaded is determined by a formula using deadweight survey and weightometer. The weightometer is used for loading runs.

Stowage factor of the dried bauxite is 28 cu.ft./long ton.

Bauxite vessels sail from Port Kamsar during the flood tide. Maximum departure draft is regulated according to tidal conditions.

Facilities for the discharge of petroleum products are also available on the bauxite wharf. Attached to the shiploader is a chicksan arm with an 8 in. connection. This feeds 2 main lines, 1×16 in. line for Bunker "C", and 1×8 in. line for Diesel. Discharge rates average about 450 tonnes/hour at 100 lbs. per sq. in. back pressure at the ships pumps.

Storage facilities are three 10,000 tons Bunker "C" tanks, and two 3,000 tons diesel tanks.

At the same wharf there is a 6 inch line for the discharge of petrol (gasoline) by the same tankers bringing diesel oil. Discharge rates average 60 cu.m.p.h. The storage facilities are two 1,400 cu.m. tanks.

There are 2 small general cargo wharves located at the entrance to the Dougoufissa Creek, where vessels of up to 100 m. LOA with a maximum draft of 6 m., may berth. As there is only 3.5 m. at Lowest Low Water, these vessels will be aground at low water periods.

One of these wharves is equipped with a heavy lift crane – derrick with a maximum S.W.L. of 110 tons. Safe Working Loads are as follows:–

Radius of derrick (metres)	*Lifting capacity (tons)*	*Height under hook (metres)*
16.5	110	29
26	75	23
32 (max.)	45	11

The derrick is also equipped with a secondary hook with a capacity of 20 tons.

Two 400 tons and two 200 tons barges are available for loading and discharging midstream.

WIND/WEATHER/TIDE: In the Rio Nunez approach area waves up to 4 m. can be encountered. At the entrance to the fairway or channel they are generally less than 1 m. high during the rainy season, and less than 0.5 m. high in the dry season. Waves and swell in the inner channel and harbour area are generally very moderate.

The tide, in the the proximity of the buoyed channel, runs N.N.E. and S.S.W. at 2.5 knots under normal conditions, but can reach 4.5 knots during Spring tides in the rainy season.

The flood tide runs parallel with the line of the bauxite loading wharf at a speed of up to 4 knots. The ebb tide, augmented by water coming out of the Dougoufissa Creek, runs through the bauxite wharf at an angle of approximately 20° at a speed of up to 4.5 knots on spring tides in the rainy season, tending to set the vessel off the wharf. It is therefore absolutely essential to tend moorings continuously, particularly on the stern of a loading vessel.

The density of the Rio Nunez at the bauxite loading wharf varies between 1013 (rainy season) and 1028 (dry season) at high water.

Port Kamsar has a typical tropical climate, which is characterised by two separate seasons.

Rainy season from June to October

Maximum rainfall	is during July and August mainly at night.
Relative humidity	is 70 to 80% during the day and 90 to 95% at night.
Temperatures	range from 17°C to 38°C, with an average of between 22°C to 28°C.
Wind conditions	Variable from between South and West, Force 3 to 6 Beaufort Scale. Possible tornados from between North and N.E. with wind reaching force 10 Beaufort Scale for short periods.

Dry season from November to May

Little rainfall.

Relative humidity	is 30% to 50% during the day, and 80% to 90% at night. There is often coastal fog in the mornings.
Temperatures	range from 15°C to 42°C, with an average of between 20°C to 35°C.
Wind conditions	Light breezes from the Southwest to West, force 1 to 3 Beaufort Scale.

MEDICAL: Hospital facilities at Port Kamsar are available only on an emergency basis.

TANKERS: See "Berthing".

FRESH WATER: Available in limited quantity on an emergency basis.

TIME: GMT.

HOLIDAYS: New Year's Day (1st January); Labour Day (1st May); Anniversary P.D.G. (14th May); Independence Day (2nd October); Victory Day (22nd November); Christmas Day (25th December); Tabaski (Variable date); Ramadan (Id il Fitri) (Variable date).

All Sundays are also declared Public Holidays. The President may also, at his discretion, declare any other day to be a Public Holiday.

The loading of bauxite is generally continued without stoppage for Public Holidays.

General cargo will not, except in special circumstances, be worked on Victory Day, Tabaski and Ramadan (Id il Fitri). All other Public Holidays are normally worked.

SHORE LEAVE: Crew members are not granted shore leave at present.

GENERAL: *Stores:* Provisions are scarce and therefore not available to calling vessels.

Gangways: Vessels must provide and attend their own gangways. A vessel berthing at the bauxite wharf should have its gangway swung out and ready to lower.

Normal practice of the port is for the foot of the gangway to be heaved out and landed on the wharf after the vessel is fast alongside.

Port Directors Office: The office of the Port Director is solely responsible for the operation of Port Kamsar, which includes the provision of Pilotage, tugs and launches.

The Office acts as sole Agent for all vessels calling at Port Kamsar, including the normal ships business functions performed by ships Agents.

SHIPMASTER'S REPORT: (1974)

Density: Varies from 1013–1028 according to season.

Fresh Water: Available, rate 20 t.p.h. Not recommended as drinking water.

Repairs: Small repairs can be carried out in an emergency.

Airport: Nearest airport is Conakry which is 8 hours away by car.

SHIPMASTER'S REPORT: August 1983.

Documents:

1 Vaccination List.	5 Ports of Call Lists.
5 Crew Lists.	7 Manifests of Cargo.
1 Crew Declaration.	5 copies Bills of Lading.
5 Passenger Lists.	5 Stores Lists.

Agent, Doctor, Customs, Immigration and Shippers Representative board on arrival alongside to clear vessel. Later during office hours a gentleman from the Maritime Inspection Department will board to inspect vessel's certificates etc. On ship's first visit he will issue a numbered chit which should be *retained* for future visits. A shippers' representative will board on arrival to carry out a deadweight survey. He usually accepts Chief Officer's figures for ballast, bunkers, fresh water, etc., which he should have ready. 3 Immigration, Customs, etc., Officers live on board for the duration of vessel's stay alongside. A room and food must be provided for them.

Approaches: Are fairly straightforward following the pecked line route on Charts B.A. 600 and 1560, however this with the benefit of a 'Satnav'. Currents in that area were found over several voyages to be unpredictable and at times quite strong. No. III Buoy is equipped with a Racon which can be detected at distances of between 13 and 18 miles and should be passed keeping it to the South, thence inwards keeping to the South likewise of Nos. IV and V Buoys (also pecked line route) proceeding to the anchorage after passing Buoy V, or if entering port directly from sea to the pilot station usually about 1 mile South of No. 8 Buoy. Here the pecked line (Charts B.A. 1560 & 1562) should be adhered to in order to avoid the shoal patch S.S.W. of No. 8 Buoy.

Buoy III appears to be about 3 miles South of charted position and Buoy IV even further out of position. At the time of writing the light on Buoy III is extinguished, however the Racon is working well. Ile Binari and Ile Gonzales show up well on the radar. Rocher Gonzales upon which lies a conspicuous wreck, shows on the radar as a double blip and has been found most useful for obtaining fixes. Unfortunately neither the light or Racon on the reef work. Most of the buoys show up well on the radar and are visible for about 6 miles (conditions allowing). Off the river mouth flood tide sets Northeasterly and the ebb Southwesterly.

Pilotage: 3 pilots available. Pilots should be called on VHF Channel 16 about one and a half hours before arrival, they are supposed to keep a 24 hour watch, however if many vessels are waiting at anchor this is not always the case.

If berth is unnoccupied, Pilot will meet vessel 1 mile South of No. 8 Buoy and conduct vessel through an 8.25 mile channel, well buoyed, 120 m. in width with a least depth of 8.25 m. to the inner anchorage and turning basin dredged to 10.0 m. Both anchors should be run out ready and a man standing by them for the channel passage. If entering on the flood tide (on which vessels must berth) immediately on entering the basin, vessel is swung to port and port anchor let go to one shackle (in water) until vessel has swung to flood, she is then dredged astern to a position N.W. of and handy to the berth, when anchor is weighed and vessel proceeds to berth. An adequately powerful tug assists in the operation. On weighing port anchor the starboard anchor must be ready in case of need on berthing.

If berth is occupied but no other ships waiting, vessel will enter as above, but when in position pay out cable and come to anchor. Holding ground is reputed good. As vessels of or near this size must sail one hour before high water Pilot rejoins about 1.5 hours before high water, cable is shortened and vessel dredged astern as above to await the sailing of berthed ship.

Anchorages: As will be seen on the charts the anchorage and pilot station area indicated is close to shoal water. I therefore found it preferable to anchor about 5 miles West of Rocher Gonzales. The holding ground is reputed to be good though I have never had opportunity to put this to the test.

Radio: Early ETAs have to be sent via Portishead Radio, however as these have to pass through Conakry and overland communications are poor, it is not unusual for these to be lost or badly delayed. It is therefore important to establish communication via Kamsar Radio as early as possible. Our earliest has been about 3 days from the port, when I have considered it worthwhile to repeat the 3 day ETA direct. The evening watch hours seem to be the best. Agents do not reply to requests for 'prospects'. First advice therefore is from the Pilots.

VHF: See "Pilotage".

Tugs: See "Berthing".

Berthing: If more than one vessel, waiting turn, order is: Vessel berthed, next on turn at inner anchorage, the rest anchored outside awaiting turn. Turns are not necessarily in order of arrival. If a ship is without laydays she must wait until laydays are allotted or until ships within laydays have loaded even though may have arrived later.

Bauxite Berth: An L shaped jetty extending about 6.25 cables from shore, it is well fendered with modern sprung fenders, depth alongside 13 m. Vessel berths port side to the quay head to flood. Tie up, forward 6 head ropes and 2 springs, aft 6 stern/breast ropes and 2 springs. On Spring tides and particularly during the rainy season, a very strong ebb sets at an angle across vessel's stern setting it off the quay. If need be the tug 'Dougoufissa' can be called on VHF Channel 16, either direct or via Pilots (depending on one's French) to stand by and/or assist by pushing vessel to quay.

There is no shore gangway. Ship's gantry must be landed on quay. As usual the space for it to run is restricted and it must be carefully kept out of the way of the loader.

Berth is equipped with a travelling loader with an outreach of 21 m. Max. airdraft to coamings (hatchcovers for siderollers) is 45 ft. Loading rate is up to 60,000 tons per day working around the clock. However during the rainy season and particularly if there is a run of ships, loading rate is limited by the capacity of the driers, about 1,500 t.p.h. for ships loading dry ore.

Max. sailing draft varies with height of tide and river, and will be calculated by the Pilot before he leaves the ship on berthing.

On sailing, Pilot will board 1.5 hours before high water (day or night) at which time vessel should be ready to single up as she must leave the berth promptly 1 hour before high water.

Fresh Water: Not available.

Repairs: No facilities for repairs.

Shore Leave: Not permitted.

Crew Mail: Mail left with Agents is forwarded to Brussels direct by air every Friday.

AUTHORITY: Port Director, Direction du Port.

NOTES

Please also advise Shipping Guides Ltd.

Guinea Bissau, Republic of

BISSAU: 11.51 N. 15.34 W.

DOCUMENTS:

Entrance Declaration.
Clearance from the last Port of Call.
List of all Passengers on Board, either in transit or disembarking in Bissau.
Provisions List.
List of the Crew Members Effects.
2 Lists of Passengers Baggage.
List of Cargo to disembark in Bissau, Baldeade (Bolama) or otherwise in transit to be disembarked in another port.
List of Cargo (inside sealed envelope).

PILOTAGE: Pilot's base and radio beacon located at Caio Point, (small island at the entrance of Geba's Channel). To call the Pilots and/or the radio beacon, send telegram to Servicosmarguine, informing of the ETA at Caio; pilotage is compulsory.

ANCHORAGE: Between Bissau and the Ilheu do Rei.

MAX. SIZE: Draft 26 ft.

HEALTH: Visit of port doctor compulsory if ship has no doctor, or if permission for exemption has not been requested; permission can be requested by radio. When needed, the health services in Bissau can be used by passengers or crew members. Yellow fever and smallpox vaccinations required.

RADIO: Station call sign CQF weekdays on at 0900, 1300, 1600, 1800 hrs. GMT. Sundays 0900 and 1100 hrs. GMT. Frequency 500 kHz, CW.

TUGS: 1 tug of 320 h.p. and 1 of 800 h.p. available.

BERTHING: Ponte, Cais de Bissau, length 131 m., width 25 m., depth 8 m.

Equipment: 4 × 6 ton cranes; 2 × 12 ton stacker trucks; 2 × 4 ton stacker trucks; 4 × 2 ton stacker trucks; 2 × towing tractors – 6 tons; 16 × 6 ton trucks; 1 × 35 ton towing tractor; 1 × 25 ton platform; 1 × 50 ton towing tractor; 1 × 50 ton platform; 2 × suction machines for 80 t.p.h.; 2 × 35 m. conveyor belts; 1 × 40 m. conveyor belt.

STEVEDORES: 1,500 stevedores available for loading and unloading cargo.

FRESH WATER: Available; pumping rate, 10 t.p.h.

FUEL: Diesel available; pumping rate, 6 t.p.h.

CONSULS: W. Germany, U.S.A., Algeria, Brazil, China, Democratic Republic of Korea, Cuba, Egypt, France, Nigeria, Portugal, Libya, Sweden, U.S.S.R., Netherlands, Lebanon.

REPAIRS: Small repairing work can be done on machinery or ship's hull.

AIRPORT: 7 km. from Bissau; 2 flights to Lisbon per week, 1 flight per week to Moscow, 1 flight per week to Algiers and 4 flights per week to Conakry.

TIME: GMT minus 1 hour all year round.

HOLIDAYS: *National Holidays:* 1st January; 20th January; 8th March; 1st May; 3rd August; 24th September; 14th November; 25th December, Days of Ramadan and Tabasky.

POLICE/AMBULANCE/FIRE: Police, tel. 213957; Fire, tel. 118.

TELEPHONES: Line connection land-ship, if requested to the Post Office Authorities.

DEVELOPMENTS: "T" shaped pier length 290 m. with head length 260 m. under construction, completion 1987.

SHIPMASTER'S REPORT: November 1979.
Vessel from Dakar; bound for Bissau. Speed 14 knots, draft 6.10 m.
Report on the River Entrance to Bissau:
The vessel was proceeding on course 172° (T) and positions taken at various intervals as follows:

0920 hrs.: Cabo Roxo Lt. Ho. Brg. 054° (T) × 20.5 miles
0930 hrs.: Cabo Roxo Lt. Ho. Brg. 047° (T) × 22.0 miles

At 0920 hrs. minimum sounding was taken at 4.0 m. under the keel and Westerly set was applied.

At 0930 hrs. the vessel altered course to 137° (T).

1025 hrs.: Pta. Cabaceira Pt. Brg. 081° (T) × 31 miles
1145 hrs.: Pta. Cabaceira Pt. Brg. 057° (T) × 26.1 miles
1210 hrs.: Pta. Cabaceira Pt. Brg. 048° (T) × 21.5 miles

From 0930 hrs. onwards, poor fixes due to poor radar targets of land points.

From 1020 hrs. the vessel steered various courses to the Fairway Buoy at Lat. 11° 47.3′ N., Long. 16° 41.8′ W., due to strong currents.

At 1145 hrs. Fairway Buoy was found not in position and the vessel altered course and steered heading for pilot station at Caio Island. Caio Island Western Point was picked up on radar at about 16 nautical miles.

Visibility throughout was hazy and poor, about 3-4 nautical miles due to sand dust. Radio beacon at Caio Island was not working. Aero Radio Beacon at Bissau appeared to be unreliable.

1345 hrs.: Vessel anchored South of Caio Island awaiting Pilot.
1415 hrs.: Pilot onboard.

Pilot station at Caio Island had no VHF or other possible means for communication with the vessel. Vessel had to anchor and await Pilot. The Pilot boat is small with a weak engine and at times not working. The Pilot may have to be picked up by own lifeboat. The River Pilot did not speak any English, only Portuguese and was unable to give proper orders to the helmsman. Navigation in River Geba to Bissau was mostly done by the vessel's officers. Entrance and departure from Bissau cannot be done during the night, as most lights and buoys are unlit. On arrival at Bissau the vessel has to anchor 4 cables N.E. of the jetty and await Harbour Pilot.

1808 hrs.: Vessel anchored at Bissau, 4 cables N.E. of jetty.
1900 hrs.: Vessel berthed at Bissau, starboard side alongside the jetty.

The Harbour Pilot was able to communicate in English. Berthing and unberthing is preferred on flood tide. Current alongside berth up to 3.5 knots. Maximum depth alongside at low water was 20 ft. 3 soundings were taken at low water alongside the wharf: West end: 7.40 m., middle: 6.10 m., East end: 9.30 m., length of wharf 131 m.

Discharging was slow. The vessel stayed 4 days in port to discharge 1,364 m/tons flour in bags of 50 kg. Cargo worked from 0800 hrs. to 2300 hrs. daily. No cargo work at night due to heavy pilferage from the cargoes, ship's watchmen were kept in all hatches during discharging.
Day of Departure:

0715 hrs.: Vessel left berth.
1210 hrs.: Vessel anchored at Caio Island.
1220 hrs.: Pilot disembarked by ship's lifeboat.
1305 hrs.: Vessel continued voyage.

On departure the pilot boat at Caio Island was not working and the vessel had to use her own lifeboat to disembark the Pilot.

Max. Size: LOA 131 m.
Anchorage: Good anchorage 4 cables N.E. of the wharf. Depth 6 – 7 fathoms, holding ground was good.
Pilotage: Pilot station on Caio Island which is 50 nautical miles West of Bissau. Request for pilotage is compulsory, via Agent.
Restrictions: Entry by night is difficult as most lights are unlit and the current rises at up to 3.5 knots on the flood and ebb tides, also the navigation aids are poor.
Tugs: Not available.
Berthing: Length of wharf 131 m., depth alongside at low water 20 ft. (FW).
Cargo Handling Facilities: General cargo only handled, there are no lighters, container or Ro-Ro facilities.
Cranes: 2 mobile cranes, maximum capacity 15 tonnes.
Repairs: Not possible.
Fuel: Not available.
Fresh Water: Supply to the wharf is unreliable.
General: Provisions not available.
Medical: No services available.
Airport: There is a twice weekly air service from Bissau to Europe. Distance to airport 7 km.

AUTHORITY: Junta Autonoma dos Portos da Guine, P.O.Box 382, Bissau, Guinea-Bissau. *Tel:* 2797 (Administrator's Office), 2783 (Secretariat). *Cables:* Porto, Bissau. *Contact:* Port Director.

NOTES

Please also advise Shipping Guides Ltd.

Guyana

ESSEQUIBO RIVER (Bartica): 06.24 N. 58.37 W.

DOCUMENTS: See "Georgetown".
PILOTAGE: Pilots are stationed at Georgetown. ETA to be given 24 hours in advance to Pilot station. Pilotage compulsory. Pilot boards from black cutter 5 cables N.W. of the Outer Georgetown Light.

Essequibo light (steel framework tower with red and white horizontal bands) marks seaward end of Essequibo main ship channel. Vessels in vicinity of Demerara Pilot station should listen for pilot boat on VHF Channel 16.
RESTRICTIONS: The Essequibo Bar is composed of hard mud and sand. The least depth of water is 3 ft. less than for Demerara Bar. Vessels should not attempt to cross the Essequibo Bar drawing more than 3 ft. less than that predicted for the Demerara Bar.
MAX. SIZE: Controlled by Bar draft predictions.
HEALTH: Pratique given at Georgetown when Pilot boards. If vessel is suspect or infected, Master to advise Harbour Authority by radio before arrival.
RADIO: Demerara Radio call sign 8RB operating on 2182 kHz. Georgetown Lighthouse operates VHF Channel 16 and HF 2738 kHz 24 hours a day. Also SSB 8281.2 kHz.
TUGS: Not available.
MEDICAL: Hospital at Georgetown and Bartica.
DENSITY: 1000, fresh water.
FRESH WATER: Not available.
FUEL: Not available.
OPENING/CLOSING HATCHES: By ship's crew.
CUSTOMS ALLOWANCES: Up to 200 cigarettes and 1 bottle wine or spirits per man. Only 40 cigarettes may be taken ashore at any time.
CONSULS: At Georgetown.
REPAIRS: Government dry dock situated at Mazaruni, approximately 40 miles up river at junction of Essequibo and Mazaruni rivers. Extreme dimensions; 160 ft. by 35 ft.
AUTHORITY: Harbour Authority, Transport and Harbours Department, Water Street, Stabroek, Georgetown, Guyana. *Tel:* 02-67842. *Cables:* Transport Guyana. *Contact:* Captain I. N. Roman, Harbour Master.

GEORGETOWN: 06.49 N. 58.10 W. (See Plan Book)

PORT LIMITS: Seaward by an arc of a circle with radius 1 nautical mile, with the Georgetown lighthouse as centre.
DOCUMENTS:
Certificate of Registry.
8 Crew Lists.
8 Provisions and Stores Lists.
4 Passenger Lists.
Customs Documents:
2 Reports of Ship's Stores (Form C1).
2 Lists of Crew Personal Effects (Form C2).
1 List of Unmanifested Cargo (Form C3).
12 Health Declaration Forms (W.H.O.2)
Health Documents for Crew (1 copy for each crew member).
5 Cargo Manifests.
5 Bills of Lading.
PILOTAGE: Vessels apply for Pilots through local Agents or direct to Chief Pilot, Georgetown, through "Demerara Radio, 8 Romeo Bravo", 12 hours in advance of ETA at pilot station when vessel is proceeding in to Georgetown Harbour. Pilot boarding ground is in North-Western quadrant of circle with radius 5 cables and centre the Outer Georgetown Light. Normal international day or night signals for "I require a Pilot" are used. All pilot cutters are painted black (hull) and white (superstructure) with the word "Pilot" painted in white on black ground. Cutters are approximately 60 ft. in length.
ANCHORAGES: There are 5 with a least depth of approximately 20 ft. MLWS named A to E from North to South. Vessels are safely anchored at any of the above anchorages 1.5 cables to 2 cables from Georgetown park line. Bottom is soft mud and provides good holding ground.
RESTRICTIONS: No entry restrictions except those on draft imposed by the bar at estuaries.
MAX. SIZE: Draft 20 ft. 6 in.
HEALTH: Radio Pratique is not given, and pratique is only given at Georgetown. This normally involves a visit from the Health Authorities if the vessel is clear. If a vessel is "suspect" or "infected" Master should advise Harbour Authority by special message through Demerara Radio or Georgetown Lighthouse and await advice of Port Health Officers; meanwhile, if in the vicinity of Georgetown, vessel may anchor at the specified quarantine anchorage near the Outer Georgetown Buoy as entry into the limits of the port without the authority of the Ministry of Health is prohibited if the vessel is suspect or infected.
RADIO: Name of radio station "Demerara Radio", call sign "8RB", always standing by on 2182 kHz., will give latest weather report or RDF bearings on request. Georgetown Lighthouse operates VHF Channel 16, HF 2738 and SSB 8281.2 kHz.
RADAR: No service available.
TUGS: At present, vessels dock stem on to the tide without aid of tugs. However, tugs could be provided if urgently required.
BERTHING: There are 6 main wharves privately and government owned, situated along the river frontage at Georgetown and varying in length from 210 ft. to 730 ft. Depths alongside range from 16 ft. to 20 ft. at low water springs, but as the bottom is soft mud vessels may safely lie aground alongside. Ships work cargo with their own appliances.
BULK HANDLING FACILITIES: The sugar berth is 416 ft. in length with least depth alongside of 18 ft. MLWS and can accommodate vessels up to 530 ft. in length. Loading rate is 500 t.p.h. using 2 chutes. Vessels should not be more than 63 ft. beam.
CRANES: No heavy lift cranes available. Ship's gear has to be used. No floating cranes.
BRIDGES: Demerara Harbour Bridge: Floating bridge with retractor span situated 4.2 miles from mouth of river. Arrangements for passing are made by Agents. Bridge operators keep radio watch on VHF Channel 16.

STEVEDORES: Ship's Agent normally arranges for gangs in accordance with cargo plans or Master's cable advice. Gangs are unionised. Stevedores work around the clock every day of the week though they are paid overtime between hours of 1600 and 1900 and they earn time-and-a-half or double time on public holidays according to which one of the 12 public holidays they work.
MEDICAL: No special advance notice of required medical attention is necessary, and hospital facilities are always available.
TANKERS: There are no residue discharge facilities at this port. There are 4 tanker berths in the Georgetown area.
Rome Terminal (Shell) – depth alongside is 11.0 ft.
Ramsburg Terminal (Esso) – depth alongside 16 ft.
Ramsburg Terminal (Texaco) – depth alongside 11.0 ft.
Providence (Guyoil) – depth alongside 8.5 ft.
Size of pipe-lines: 6 in.
DENSITY: Average density in port is 1015, though during the rainy season (March-May; October-December) density of water may be as low as 1000 at low water in the harbour.

FRESH WATER: Fresh water is available, and is delivered alongside. The ship is required to pay for labour, overtime, etc., involved in the delivery.
FUEL: In case of emergency, providing advance notice is given by Master, vessels may be partially bunkered at any of Shell, Texaco or Esso installations. Vessels may be required to go alongside 2 hours before high water and leave not later than 1 hour after high water at the above-mentioned installations. Grades of fuel available are "Bunker C" and diesel fuel.
CONSULS: (and Embassies)
Belgium
Brazil
Canada
China (People's Republic)
Colombia
Costa Rica
Cuba
Denmark
Egypt
France
Germany (G.D.R.)
India
Italy
Jamaica
Japan
Korea
Libya
Mexico
Netherlands
Norway
Panama
Sweden
Trinidad & Tobago
United Kingdom
U.S.A.
Venezuela
Yugoslavia
FIRE PRECAUTIONS: There are no stated precautions other than regulations against pumping out residual heavy oil (e.g. "Bunker C"). Ships having cargoes of ammunition, high explosives, dynamite, etc., are required by Harbour Regulations to anchor North of Georgetown Lighthouse prior to proceeding alongside wharf to unload and/or proceeding up river.
GANGWAY/DECK WATCHMEN: Services of watchmen are necessary and can be obtained through a watchman's pool by ships' Agent. Armed gangs of robbers have boarded vessels and stolen quantities of ship's stores.
OPENING/CLOSING HATCHES: Normally carried out by ship's crew.
CUSTOMS ALLOWANCES: Each crew member is permitted up to 200 cigarettes aboard held out of bond, but is only allowed to take ashore 40 at any time. Only on a *final discharge* would a member of crew be permitted a tobacco allowance of half-a-pound. Each crew member is allowed to keep out of Bond, 1 (one) bottle of wine or spirits, but is prohibited from taking any of it ashore. Each member of crew is allowed tax-free only one-sixth gallon wine and one-sixth gallon spirits *when he is finally discharged.*
CARGO GEAR: Ship's gear.
IDENTIFICATION CARDS: Not required.
REPAIRS: Every type of deck or engine repair is undertaken at Guyana National Engineering Corporation (GNEC) dry dock. Above waterline and engine-room repairs of any type are undertaken on vessels exceeding the dimensions mentioned below while vessel is anchored in the stream. Also see "Dry Docks".
SURVEYORS: Lloyds and Bureau Veritas. No cargo inspectors available.
DRY DOCKS: GNEC Dry dock: A graving dock 210 ft. × 37 ft. 9 in. at entrance situated South of GNEC No. 2 Wharf, which is State owned and operated on normal commercial lines. 198 ft. length of dry dock is on blocks. Breadth: top 46 ft. 4 in., bottom 40 ft. 9 in., depth on sill at HWOST 92 ft.

Government Dry dock: Situated at Mazaruni approx. 40 miles upriver at junction of Essequibo and Mazaruni rivers is a graving dock and has extreme dimensions of approx. 160 ft.×35 ft.
REPATRIATION: Arrangements normally made through ship's Agents.
AIRPORT: Timehri International Airport is situated approx. 30 miles South of Georgetown with highway connection and is served by many intercontinental airlines.
TIME: 3 hours behind GMT. No alterations made to clocks during the year.
HOLIDAYS: New Year (January 1st); *Eid-ul-Ahza; *Phagwah; Republic Day (February 23rd); Good Friday; Easter Monday; Labour Day (May 1st); *Youman Naubi; Caribbean Day (July 5th); Commonwealth Day (First Monday in August); *Deepavali; Christmas Day (December 25th); Boxing Day (December 26th). *Religious holidays are variable.
POLICE/AMBULANCE/FIRE: Tel. 999. There are Police/Ambulance/ Fire Stations on the waterfront.
TELEPHONES: Could be arranged through Coast Station 8RB.

BANKS: Chase Manhattan Bank N.A., Bank of Guyana Building, Church Street, Georgetown, P.O.Box 101080, Telex: Chase Bk, GY 2222.

Barclays Bank Int. Ltd., 48 Water Street, Georgetown, Telex: Barclay GY 2248.

STORING: See "Prelims", page viii.

(1) Yes. (2) Yes. (3) Yes. (4) Yes. (5) Yes. (6) Yes.

SHORE LEAVE: Granted by Immigration Boarding Officer.

DELAYS: Only when berths are occupied.

AUTHORITY: Transport and Harbours Department, Battery Road, Kingston, Georgetown. *Tel:* 02-59350. *Cables:* Transport – Guyana. *Contact:* Captain I. N. Roman, Harbour Master.

LINDEN: 06.00 N. 58.17 W.

DOCUMENTS: See "Georgetown".

PILOTAGE: Pilots are stationed at Georgetown. ETA to be given 12 hours in advance to pilot station. Pilotage compulsory. Pilot boards from black cutter 5 cables N.W. of the Outer Georgetown Light.

From Georgetown to Linden and Linden to Georgetown, pilotage not compulsory, but advisable to use G.N.E.C. pilots.

RESTRICTIONS: Governed by depth of water at Demerara River Bar. Entrance normally at HW. Max. speed limit on the river is 10 knots.

ANCHORAGES: Vessels proceeding to Linden in ballast and drawing less than 15 ft. may anchor beyond Southern limit of Georgetown. Depths 16 ft. – 18 ft. MLWS.

MAX. SIZE: Draft 21 ft. 6 in.

HEALTH: Pratique given at Georgetown by Health Authorities. If vessel is suspect or infected, Master to advise Harbour Authority by radio before arrival.

RADIO: Demerara Radio call sign 8RB operating on 2182 kHz. Georgetown Lighthouse operates VHF Channel 16 and HF 2738 kHz, 24 hours a day. Also SSB 8281.2 kHz.

TUGS: Not available.

BERTHING: There are 2 bauxite berths accommodating vessels of up to 570 ft. One loader for metal grades has an airdraft of 29 ft. 8 in. and a loading rate of 800 t.p.h. The second loader for calcined bauxite has an airdraft of 34 ft. and a loading rate of 350 t.p.h.

The Alumina berth has a travelling tower with an airdraft of 64 ft. and a loading rate of 400 t.p.h. Max. beam of vessel 85 ft.

MEDICAL: Hospital at Georgetown.

DENSITY: 1000, fresh water.

FRESH WATER: Can be supplied.

FUEL: Can be supplied.

OPENING/CLOSING HATCHES: By ship's crew.

CUSTOMS ALLOWANCES: Up to 200 cigarettes and 1 bottle wine or spirits per man. Only 40 cigarettes may be taken ashore at any time.

CONSULS/REPAIRS: At Georgetown.

AUTHORITY: Transport and Harbours Department, Battery Road, Kingston, Georgetown. *Tel:* 02 – 59350. *Cables:* Transport Guyana. *Contact:* Captain I. N. Roman, Harbour Master.

NEW AMSTERDAM (Everton, Berbice): 06.14 N. 57.31 W.

DOCUMENTS: See "Georgetown".

PILOTAGE: Pilots are stationed at Georgetown. ETA to be given 24 hours in advance to pilot station. Pilotage compulsory. Pilot boards from black cutter 5 cables N.W. of the Outer Georgetown Light.

RESTRICTIONS: The Berbice Bar is composed of fairly hard mud. Vessels may cross the Berbice Bar on even keel loaded to 2 ft. less than the Demerara Bar predictions.

MAX. SIZE: Controlled by Bar draft predictions.

HEALTH: Pratique given at Berbice by Health Authorities. If vessel is suspect or infected, Master to advise Harbour Authority by radio before arrival.

RADIO: Demerara Radio call sign 8RB operating on 2182 kHz. Georgetown Lighthouse operates VHF Channel 16 and HF 2738 kHz, 24 hours a day. Also SSB 8281.2 kHz.

TUGS: Not available.

BERTHING: The Bauxite berth is about 1,500 ft. long, and has a fixed loading arm with an average loading rate of 500 t.p.h. The airdraft is 36 ft.

There is a strong ebb current of about 4–5 knots, although the flood runs at about 3 knots.

MEDICAL: Hospital at Georgetown.

DENSITY: 1000, fresh water.

FRESH WATER: Can be supplied.

FUEL: Can be supplied.

OPENING/CLOSING HATCHES: By ship's crew.

CUSTOMS ALLOWANCES: Up to 200 cigarettes and 1 bottle wine or spirits per man. Only 40 cigarettes may be taken ashore at any time.

CONSULS/REPAIRS: At Georgetown.

AUTHORITY: Transport and Harbours Department, Battery Road, Kingston, Georgetown. *Tel:* 02-59350. *Cables:* Transport Guyana. *Contact:* Captain I. N. Roman, Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Guyane (French Guyana)

DEGRAD-DES-CANNES (Main Port): 04.51 N. 52.16 W.
LE LARIVOT (Secondary Port): 04.54 N. 52.22 W.
CAYENNE (Secondary Port): 04.56 N. 52.20 W.
KOUROU (Secondary Port): 05.09 N. 52.40 W.
SAINT LAURENT-DU-MARONI (Secondary Port): 05.30 N. 54.02 W.

LOCATION: Degrad-des-Cannes – 15 km. from Cayenne.
Le Larivot – 10 km. from Cayenne.
Kourou – 60 km. from Cayenne.
Saint-Laurent-du-Maroni – 250 km. from Cayenne.

PILOTAGE: Notice of ETA and request for a Pilot no less than 24 hours before ETA at Degrad-des-Cannes Channel Buoy and 48 hours for Saint-Laurent and Kourou.

Station de Pilotage de Guyane, Port du Degrad-des-Cannes, 97300 – Remire. Tel: 31.37.23.

ANCHORAGES:
1. At Sea Buoy at Cayenne.
2. At Sea Buoy at Degrad-des-Cannes.
3. At Salut Island (Iles du Salut).

RESTRICTIONS: Permanent dredging underway. Recommended that vessels approach at high tide.

Depth of water in channels:
Cayenne-Larivot (10 km.): 0.90 m. + height of tide.
Degrad-des-Cannes (15 km.): 2.50 m. + height of tide.

HEALTH: French Regulations apply.

RADIO: Cayenne Radio.

VHF: Harbour Master and Pilot Station on Channel 16.

BERTHING: Berth at Degrad-des-Cannes on the Mahury River, length of concrete wharf is 300 m., max. LOA 160 m. Roll-on/Roll-off facilities available. Discharge of general cargo and containers by ship's gear.

TANKERS: *Degrad-des-Cannes:* Steel wharf with dolphins. Min. LOA 80 m. Max. LOA 130 m.
Le Larivot: Concrete wharf. Max. LOA 100 m. Depth 4.9 m.

FRESH WATER: Available.

FUEL: By road tanker.

REPAIRS: Limited facilities available.

REPATRIATION: Rochambeau Airport. Connecting flights to France, Suriname and Brazil.

TIME: GMT minus 3 hours.

POLICE/AMBULANCE/FIRE: Contact Harbour Office at Degrad-des-Cannes.

GENERAL: Customs and Frontier Police at Degrad-des-Cannes.

DEVELOPMENTS: New berth under construction at Degrad-des-Cannes (length 130 m.).

AUTHORITY: *Port Director:* M. le Directeur, Departemental de l'Equipement, 40 Avenue Leopold Heder, B.P. 338, 97305 – Cayenne, Cedex.

Port Manager: M. l'Ingenieur Subdivisionnaire du Service Maritime, Port du Degrad-des-Cannes, B.P. 1106, 97305 – Cayenne, Cedex. *Tel:* 31.41.11. *Telex:* 910346 FG. *Contact:* M. de Thoisy, Port Manager.

Harbour Master: M. le Commandant des Ports de Guyane, Port du Degrad-des-Cannes, B.P. 1106, 97305 – Cayenne, Cedex. *Tel:* 31.41.11. *Telex:* 910346 FG.

NOTES

Please also advise Shipping Guides Ltd.

Haiti

GENERAL

REQUIREMENTS CONCERNING DOCUMENTARY REQUIREMENTS PRIOR TO ARRIVAL:

Advice of Arrival: The arrival of the vessel must be announced 48 hours in advance, and in writing, to the Port Captaincy and to the Port Authority, with indication of the vessel's characteristics, the cargo which will be discharged and loaded, and requirements concerning supply of water, etc.

Information Concerning Cargo Intended for the Port: The Agency must receive in good time by air mail 6 copies of the Cargo Manifest and 2 copies of the Bills of Lading. In the event that it is not possible to supply these documents by mail, the information must be provided by telex to the Agency so that the latter may draw them up.

The Cargo Manifests are distributed to the Port Authority, the Haiti Terminal (private concern handling cargo consolidation), to the Ministry of Commerce, the Ministry of Finances and to the Agency.

REQUIREMENTS RELATING TO THE RECEIPT OF THE VESSEL:

Reception Commission: The vessel is received by representatives of the Port Health, Immigration, Customs, International Police, National Port Authority and the Agency.

Documentation Required: On the arrival of the vessel, the following documents are required, OEA/ALALC, IMO and certain other documents being acceptable.

	No of Copies and Distribution					
Type of Document	*Health*	*Immigration*	*Customs*	*Police*	*NPA*	*Agency (a)*
General Declaration	–	–	1	–	1	1
Cargo Manifest (b)	–	–	–	–	1	–
Crew List	1	1	3	1	–	1
List of Passengers	–	1	2	–	–	–
List of Stores	–	–	2	–	–	–
Declaration of Crew Effects	–	–	2	–	–	–
Maritime Health Declaration	1	–	–	–	–	–
Mail List	–	–	–	–	–	1
Arms and Ammunition Manifest	–	–	1	1	–	1

(a) The Agency requires additional copies of the Crew List, the Passenger List, the Stores List, the Arms and Ammunition Manifest, etc., dependent upon the destination of the vessel, in accordance with the requirements of Consular Clearance.

(b) Required in the event that the manifest has been received, or information regarding the cargo, in advance of the arrival of the vessel; if not, the agency requires 4 or 6 copies for distribution amongst the different authorities.

REQUIREMENTS CONCERNING DOCUMENTATION ON SAILING:

Documentation on Sailing: At the request of the Agency, the Customs issue a clearance with which permission to sail is applied for from the Port Captaincy. The latter's permit is used for requesting the services of the Pilot from the National Port Administration.

An Outgoing Manifest is presented to Customs which also contains a sworn statement (sworn statement of the Master of a vessel with cargo, or sworn statement of the Master of a vessel in ballast), and the List of Passengers. If the vessel is sailing with cargo, it is presented in 6 copies; if in ballast, in 4 copies.

CONSULAR INTERVENTION:

Consular Documentation: In accordance with the 1963 Customs Code, Article 119, the Master of a vessel loading cargo for Haiti, or his representative, must sign before the Consul a Declaration sworn as to the truthfulness of the manifest. This article is transcribed as follows:

Quote:

Article 119, *Oath.* Masters of vessels or their representative, at the time of having their manifests visaed, shall give the following oath which shall be transcribed by the Consul at the bottom of the manifest: I swear that this manifest contains exactly the packages shipped on board my vessel, that the quantities are in agreement with those shown on the Bills of Lading. I declare that I will accept all penalties which I may incur for offence against the Customs Law. I give my hand hereto.

Unquote.

In general, Consular Clearance has to be obtained at each port from the first at which cargo is loaded for Haiti. For this purpose, the Consul requires 6 copies of each of the following documents:

General Declaration.
Cargo Manifests or In Ballast.
Crew List.
List of Passengers or Negative.
Stores List.

The Consul returns 3 copies of the documents, which must go with the vessel, and 6 envelopes, i.e. 1 for each of the following Authorities:

General Customs Administration.
Director of Customs.
Department of Commerce.
Fiscal Department.
Finance Department.
Customs Collector.

The 6 envelopes are not always received, and at times only 2 copies of the visaed documents are given back. The Authorities apply a certain tolerance when it is established that the Consular Fees have been paid at the Consulate or at destination.

CAP HAITIEN: 19.46 N. 72.12 W.

GENERAL: For all general information refer to "Port-au-Prince".

APPROACHES: The current is about 3 knots in the entrance to the port when the river is in flood.

ANCHORAGE: Vessels which are unable to moor alongside because of deeper draft are anchored off the wharf.

BERTHING: The wharf at Cap Haitien was constructed by the Compania Industrial Maritima. The construction is in reinforced concrete. It extends for a length of 900 ft. in an Easterly direction and comprises 3 sections. The most important section is 600 ft. long and has berths for deep sea vessels on the South side in depths of 30 ft. The Western section, nearest the shore, is 300 ft. long with variable depths of 7 ft. to 9 ft. alongside, with berths for motor vessels of small tonnage and sailing ships. The central section accommodates the customs offices. 2 metal warehouses border the East and West ends of the wharf. Between the warehouses is 1 fixed crane of 30 tons capacity.

FRESH WATER: Fresh water is available at Cap Haitien.

FUEL: Available, only in drums.

DEVELOPMENTS: Ro/Ro Berth length 100 m., under construction. Main pier length 250 m., under construction. Cruise ship pier length 170 m., to be constructed.

MIRAGOANE: 18.25 N. 73.04 W. (See Plan Book)

GENERAL: For all general information refer to "Port-au-Prince".

BERTHING: The facilities at Miragoane are 1 small jetty for loading and discharging general cargo with a max. depth alongside of 18 ft.

There is a wharf for loading bauxite, belonging to the Reynolds Company, with a depth alongside of 34 ft. Total annual export about 350,000 tons.

PORT-AU-PRINCE: 18.33 N. 72.21 W. (See Plan Book)

Also see "General" before first port.

DOCUMENTS:

Shipmasters Report: October 1982.

Clearance from Last Port.
6 Crew Lists.
3 Nil Passenger Lists.
3 Provisions/Stores Lists.
3 Crew Personnel Effects Lists.
2 Ports of Call Lists.
1 Vaccination/Inoculation List.

PILOTAGE: Pilotage is compulsory for all movements of ships in the port. The Pilot boards to the West of the fairway buoy and is accompanied by port officials, i.e. Port Doctor and Representatives of Immigration, Police and Customs. These officials insist on using the accommodation ladder to board the vessel. Masters must arrange with their respective Agents the time which they will require a Pilot to leave the port. If they are ready to depart before the hour arranged they may call the Pilot by 3 blasts of the ship's whistle.

Berthing from 0530 hrs. – 2100 hrs. except Sundays and holidays.

APPROACHES: The port of Port-au-Prince is situated at the extreme S.E. of the bay. It can be approached from the North and from the South by 2 channels.

One may approach from the N.E. by the Saint-Marc channel or from the West by the Gonave channel, between Trou-Forban Point and the village of Ca-Ira. The bay extends between Trou-Forban Point in the North and the village of Ca-Ira about 20 miles to the South. The position of Ca-Ira is 18° 32′ N. 72° 39′ W. From Ca-Ira the South coast of the bay extends about 2 miles N.E. and about 12 miles East to Pointe Lamentin.

ANCHORAGE: Vessels must anchor to the West of the large red buoy No. 29 or at the quarantine buoy, situated about 1.5 mile N.N.W. of buoy No. 29. A bottom of sand over coral is to be found all over this region in depths of 10 to 18 fathoms.

Vessels may anchor or depart at any hour of the day or night.

In order to facilitate the rapid movement of vessels, these are normally anchored in order of arrival.

WEATHER: The Bay of Port-au-Prince is nearly always calm except at certain times of the year; for example, during the months from May to November, occasional strong winds may interrupt normal loading and discharging movements.

A light breeze from the East or N.E. blows after dawn, but in the afternoon a breeze 3 times stronger blows in the opposite direction.

The height of the tide is only 1.5 ft. Currents in the port are almost negligible, except that, when mooring or unmooring a vessel, one should pay attention to a Northerly current of about a quarter of a knot.

RADIO: All deep-sea vessels which enter the territorial waters of Haiti are obliged to advise the Port Radio Station.

The radio station is situated at the Bureau de Port. It is in operation 24 hours a day.

Visual light signalling may also be carried out as far as it is possible to do this.

The following apparatus is used at the radio station:

1. VHF Radio – Channels 6, 12, 16 and 18.
2. Medium frequency, SSB compatible frequencies 2182 kHz, 2738 kHz. Power 150 watts, range about 250 miles.

In addition to the VHF Channels, the Pilots may use radio-telephone on the following frequencies: 2182 and 2738 kHz.

The general call and distress frequency 2182 kHz is monitored continuously.

All messages addressed to the Port Authorities and messages concerning pilotage must be handled at this radio station.

Masters are particularly required to give the radio station, as soon as they arrive, the following information:

Vessel's draft and net tonnage, amount of cargo for discharge by hatch, number of gangs required.

The telephone number of the radio station is 2 – 3235.

48 hour ETA message to APN also to include details of the vessel, expected time of departure, quantity and nature of cargo to be handled.

TUGS: The port has at present a tug of 2,000 h.p. available at all times. The tug is compulsory for ship from 1,000 tons gross and upwards. At all times 2 aluminium launches, each 30 ft. long, are available for Pilot's use.

BERTHING: The New Port facilities are presently in service, located 600 ft. North of and parallel to the existing pier.

Prime features of new facilities are:

Length of berthing space: 1,400 ft.
Width of apron 93 ft.
Container crane on rails on the apron with 30 tons capacity equipped to handle 20 ft., 35 ft. and 40 ft. containers.
Ro/Ro platform.
Depth alongside 32 ft. MLW.

Finger Pier: Length 1,250 ft., width 60 ft. Ro/Ro platform on North side. On the South side there is 1,250 ft. of berthing space, depth 25 ft. – 30 ft. On the North side there is 540 ft. of berthing space, depth 32 ft.

At the outer end of the finger pier there is a dolphin berth for passenger vessel. Length 888 ft., depth alongside 32 ft. Vessels may berth on both sides.

There is an angular portion of 100 ft. between Quays No. 1 and 2 which may not be used for mooring, but which the bow of the ship may overhang. Vessels must be secured by at least 2 mooring cables at the bow and at the stern.

The Port Authorities require for vessels manoeuvring in the port a minimum of 2 ft. of water under the keel. This regulation may be modified by special authorisation of the Chef de Port.

In addition to the public pier, there are 5 jetties belonging to private companies used for handling products in bulk. These jetties belong to the following companies:

A. La Hasco, sugar refinery established at Port-au-Prince.
B. La Minoterie, flour mill situated at Laffiteau.
C. Le Ciment d'Haiti SA, cement factory situated at Fonds Mombin.
D. Jean Ackmed, fuel installation situated at Simonette.
The above jetties are established on the North side of the bay.
E. Installations of Shell Company and Tropigas on the South side of the bay, equipped with their own mooring buoys for tankers.

CARGO HANDLING: For vessels loading and discharging at the public pier, cargo is transported on railway trucks of 25 tons max. capacity.

1 quay is equipped for container ships. 1 quay is equipped to handle Roll-on/Roll-off traffic.

STEVEDORES: Loading and discharging of ships is carried out by gangs of private workers who are engaged by the ship's Agents under the supervision of a chief stevedore. The working gangs use the ship's own equipment for loading and discharge.

Handling rates are normally about 15 t.p.h. for general cargo, or about 25 t.p.h. for heavy articles, such as drums, planks, bundles of steel rods, etc.

Normal working hours in the port are from 0700 hrs. to 1900 hrs. from Monday through Saturday. Overtime is payable for work required at other than these hours and also for work required on Sundays and holidays.

FRESH WATER: Drinking water is available alongside; however, the ship must provide its own connections. Rate of loading varies from 4 t.p.h. to 10 t.p.h.

FUEL: There is no service for coal bunkers. Fuel oil may be supplied by tanker truck.

REPAIRS: There are no proper facilities for ship's repairs although minor repairs may be effected by small private workshops ashore.

MEDICAL: There are adequate medical facilities, pharmacies and hospitals.

AIRPORT: An international airport for jet planes connects Haiti with principle U.S. and Caribbean points. A local air service connects Port-au-Prince with principal towns of the Republic.

FIRE-FIGHTING EQUIPMENT: The Port Authority has a fire fighting squad equipped for early assistance. There is a town fire service organised by the Army and working in close cooperation with the Port.

HOLIDAYS: *Legal Holidays:*

Independence Day (1st and 2nd January); Labour Day (1st May); Flag Day (18th May); Ascension Day; Assumption (15th August); All Saints (1st November); Commemoration Day (13th November); Discovery of Haiti (5th December).

Authorised Holidays:

Lundi-Gras (half-day); Mardi-Gras; Good Thursday; Good Friday; Pan-American Day (14th April); President's Day (22nd June); Dessaline's Anniversary (17th October); United Nations Day (24th October); Fete des Morts (2nd November).

SERVICES: Fresh provisions are obtainable locally.

There are no facilities for refuse collection, but nevertheless it is forbidden to throw refuse, cinders or any other polluting material overboard.

Launches used for the transport of tourists are available at Port-au-Prince and these are operated by private companies. The Port Authority does not take an active part in the traffic of tourist passengers. Those who disembark on the wharf from cargo vessels or cruising liners must make their way on foot to the taxi station to take part in excursion tours. However, the majority of tourists coming on passenger liners anchored in the roads disembark by launches belonging to the Department of Tourism. They disembark at the Quai Colomb, which is under the authority of the Department of Tourism.

SHIPMASTER'S REPORT: 1975.

Documents:

Clearance from last port.
4 Crew Lists.
4 Passenger Lists.
2 Cargo Manifests.
18 Cargo Check lists.
International Declaration of Health.
Vaccination/Inoculation List (1) with valid dates.
International Vaccination Cards, these may be examined by Port Health.

Pilotage: Compulsory, 24 hour service arriving/departing. Require ETA to Agent 24 hours in advance. Pilot Station may be contacted on voice radio 2182 kHz, 2738 kHz and VHF Channels 16 and 12. Pilots board at quarantine anchorage buoy. Pilot boat has yellow hull and superstructure, 2 ft. freeboard. "Pilot" clearly painted on hull.

Anchorages: The harbour affords good anchorage in depths of 5 to 14 fathoms, clear of the entrance ranges southward. The Quarantine Anchorage is located about 2.5 miles East-northeastward of Pointe Lamintin.

Restrictions: See Sailing Directions for Prohibited Anchorages.

Max. Size: This ship is 495 ft. in length, with 69 ft. beam, we were accommodated easily. Passengers ships of 620 ft. in length are regular callers at the port. Maximum depths at the pier is 30 ft. Mean High Water Interval at the port is 8 hours 23 minutes. Spring tides rise 1.5 ft. Currents in the approach set East in the Canal de la Gonave, and Northwest in the Canal de Saint Marc. All buoys, lights, and navigation aids are unreliable.

Health: Pratique is now granted at the dock. Ship displays "Q" flag until cleared.

Radio: ETAs to Agents/receivers are best sent through WNU (Tropical Radio) at New Orleans, Louisiana or ITT station at Lantana, Florida, these stations then telex direct. Port Pilots will relay messages to Agents on voice radio 2738 kHz. Short range reception on voice radio has been experienced.

Berthing: Main pier, has 1,700 ft. of berthing space on its Southern side with depths of 18 ft. to 29.5 ft. Ship's always berth port side to, using the starboard anchor to assist in docking and undocking. A T-head pier with a pipe-line is located 2 miles Westward of the city. Mooring buoys lie off the end of this pier. It has been reported, (unverified) that this pier accommodated a tanker 560 ft. long, with a draft of 31.5 ft. in 1957.

Stevedores: Advise Agent tons per hatch at least 24 hours prior to arrival. Maximum amount of labour is available. Rate of discharging/loading is approximately 18 to 30 tons per gang hour on sacks, bales, cases, general cargo. Work after midnight is overtime with charges quite high.

Medical: Give Agent prior notice for any required medical attention. 3 hospitals available. Minor dental work can be accomplished. International Certificates with Cholera are required.

Density: 1025 as per this ship's test.

Fresh Water: None available at this time.

Fuel: None available at this time.

Developments: A 25 million dollar port expansion and construction project commenced October 1975. This new area is located 800 ft. North of the general cargo pier. From the shore in a Westerly direction the new pier shall extend 1,685 ft. in length, 469 ft. in width, with a working apron on the South side 81 ft. from the end of the ship's side. The pier will contain 2 warehouses; one 207 ft. by 1,101 ft., and the other 180 ft. by 447 ft. The Eastern end shall have 2 separate Roll-on/Roll-off sections. A container crane on rails shall traverse the entire South side working apron, capable of loads not to exceed 30 long tons. Dredging and filling has commenced and they are working towards a 30 ft. maximum depth at completion.

Gangway/Deck Watchmen: Cost unknown, supplied by Agent. Gangway watchman is recommended. If transit cargo is pilferable, I recommend using crew members for cargo hold security.

Hatches: (Automatic hatches) opening/closing normally carried out by stevedores with crew member supervision.

Customs Allowances: Bonded stores were not sealed, store lists were not required. Ship allowed each crew member 200 cigarettes. Local Customs Officials make no special requirements.

Cargo Gear: All loading/discharging by ship's gear. Fork lifts are available. There is a shortage of pallets and railroad flat cars which are used to accept cargo direct from the ship's gear on the dock. Warehouse space is limited.

Identification Cards: Shore passes not required, none issued by local authorities.

Consuls: United States of America; Panama; Lebanon; Republic of China, France.

Repairs: No facilities available.

Dry Docks: None available.

Repatriation: Possible.

Airport: 1 major airport. Located 40 minutes from the port area. Daily flights to North America. (Miami and New York)

Time: GMT plus 5 hours. No alterations to clocks during the year.

Holidays: December 5th Columbus Exploration Day; Christmas, New Year's Eve, New Year's Day. Cargo work can be arranged on most holidays at overtime rates.

Police/Ambulance/Fire: Utilise Agent for emergencies of this type, or have watchman make use of telephone from dock. "Fire". There are no international hose fittings on the dock, and limited means of handling shipboard fires from ashore.

Telephones: None available for placement on board the ship.

Services: Special services non-existent.

Shore Leave: Crew members are allowed ashore. No curfews, no passes required.

Port Regulations: Nothing unusual or out of the ordinary.

Delays: Possible berthing delays exist due to ship congestion. Delays in discharging may occur due to lack of warehouse space, pallets, or rail cars.

Agents: Agents and most officials including watchmen and stevedore supervisors speak English. All official documents and ship's clearance papers are written in French. The language spoken is predominately French (patois) with inflections that are easy on the ears, but difficult to utilise operationally.

AUTHORITY: Autorite Portuaire Nationale, Port de Port-au-Prince, B.P. 616, Port-au-Prince, Haiti.

NOTES

Please also advise Shipping Guides Ltd.

Honduras

GENERAL

DOCUMENTS:

Consular Documents:

Masters shall submit for certification to the Honduran Consul or Consular Agent residing in the port of loading 4 copies of the general manifest of goods carried for the Honduran port to which it is bound. 3 copies are to be left with the Consul or Agent, and 1 copy, with the certification and receipt to be provided by the Honduran official, is to be retained. The Consul will retain 1 copy in his files, the other 2 shall be sent by the earliest mail to the Secretariat of the Treasury and the Customs Administrator.

Prior to arrival:

Arrival notice:

The chief of operations of the National Port Authority (ENP) must be notified in writing no more than 24 hours and no less than 8 hours in advance, of the time and date of the vessel's arrival. This notice is received on working days up to 1600 hrs., but for holidays, the request must be submitted the day before up to 1100 hrs.

The Captain of the Port, Customs, Migration and Maritime Health must be notified of the arrival within the same period indicated above.

Information on cargo for the port:

If available, the following documents must be submitted: 4 copies of the cargo manifest, a set of bills of lading, 3 copies of the cargo list, 3 copies of the container contents list, and information on the cargo to be loaded. In addition, the following copies of the cargo index must be provided, according to the type of goods: 4 to 6 for Customs, 14 to 18 for the National Port Authority; 1 for each depot of the agency to take part, and 1 for general control.

The ENP also allows this information to be submitted after the official visit (boarding party).

Port services request:

The arrival notice submitted to the ENP also serves as a request for pilotage, docking and port services.

On arrival:

Type of Documents	*Number and Distribution of Documents*					
Basic Forms	*Port Captain*	*Customs*	*Migration*	*Maritime Health*	*Agriculture Inspection*	*Total*
General Declaration	1	1	–	–	1	3
Cargo Manifest	–	5	–	–	1	6
Crew List	–	3	1	–	1	5
Passenger List	1	2	1	–	1	5
Ship's Store List	1	1	–	1	1	4
Crew Effects Declaration	–	–	–	–	–	–
Maritime Declaration of Health	–	–	–	1	–	1
Mail List	–	–	–	–	1	1(a)
Additional Documents						
Clearance from Last Port	1	–	–	–	–	1
Visaed Clearance from Last Port	–	1	–	–	–	1
"No Passengers" Declaration	1	2	1	–	1	5
List of Passengers In-Transit or "No In-Transit Passengers" Declaration	1	2	1	–	1	5
Cargo Manifest (b)	–	1	–	–	–	1
Crew List (b)	–	1	–	–	–	1
Passenger List (b)	–	1	–	–	–	1
Ship's Stores List (b)	–	1	–	–	–	1

a. Submitted to the shipping Agent.
b. With Consular visa.

Prior to departure:

Clearance must be requested from the Captain of the Port, on a special form at least 2 hours before the vessel's estimated time of departure. The form must be cleared by the Customs Chief of Exports and the Customs Administrator, therefore copies of the export cargo manifest must be submitted to Customs.

In the case of the terminals of Puerto Cortes, 30 copies of all documents are prepared, of which the vessel carries (aside from the original sailing permit and the maritime health declaration) an original and 24 copies of the cargo manifest (or ballast manifest), the crew list, passenger list, the mail and firearms list, the ship's stores list, and 2 sets of the bills of lading.

In addition, when the ship sets sail, 3 freighted cargo manifests, 2 sets of the bills of lading, a crew list, a passenger list, a mail and firearms list, and a ship's stores list must be submitted to the Chief of Docks. A copy of each of the following documents must be submitted to the Maritime Guard: sailing permit, cargo manifest, crew list, mail and firearms list, and ship's stores list.

When the ship leaves for Guatemala, it should have 34 copies of all documents, because 4 copies are submitted to the Consul.

For ships leaving for the United States, the clearance document is in Spanish, with 6 copies to be distributed locally, plus 18 copies of the cargo manifest, in English, of which 16 are carried on board ship, 1 copy is sent to San Pedro Sula and the other remains in possession of the shipping agency.

Request for pilotage:

Requests for pilotage and unberthing of the vessel are submitted to the National Port Authority at least 2 hours before clearance.

AMAPALA: 13.18 N. 87.39 W.

COMMERCIAL OPERATIONS AT THIS PORT HAVE BEEN SUPERSEDED BY THE NEW PORT OF SAN LORENZO

LA CEIBA: 15.46 N. 86.50 W.

SHIPMASTER'S REPORT: 1979.

DOCUMENTS:

10 copies of Crew List
6 copies of Store List
6 copies of Bonded Stores List
4 copies of Vaccination List
Mail Report
Passenger Report

PILOTAGE: Compulsory. Pilot boards 0.5 miles from the pier. 2 hours' notice required.

ANCHORAGE: Good anchorage 5 cables, 129° from pier, depth of water 40 ft.

RESTRICTIONS: Vessels able to berth and unberth at any stage of the tide day or night. Limiting factors are length and forward draft of vessel.

MAX. SIZE: Max. LOA 600 ft. However, the after end of the vessel would overhang end of berth (This vessel loaded to 23 ft. draft).

HEALTH: Quarantine Officials operate between 0600 hrs. and 1800 hrs. 2 hours' notice of arrival required.

RADIO: HRW – Standard Fruit operate from their own radio station. They handle vessel's traffic on 6350.5, 8560 and 12750 kHz. They also listen on 500 kHz and 8 MHz.

Hours of Operation: (GMT) 1355 – 1410, 1455 – 1510, 1555 – 1610, 1955 – 2010, 2055 – 2110 and 2355 – 0010.

VHF: The Agent is on Channel 16.

TUGS: Not available. Vessel is able to dock and undock without assistance of tugs.

BERTHING: One berth only available which is a finger type pier at right angles to the shore. Nature of the bottom at the berth is sand. Vessels normally berth port side to, and load through the side doors.

Mooring gang (6 men) come aboard with the Pilot to assist. The bananas are loaded direct from the rail cars using spiral elevators. It is usual to load all decks at the same time.

There are no facilities for handling bulk cargoes or Ro/Ro vessels. There are no shore cranes or floating cranes. There is no storage space for breakbulk cargo or palletised cargo.

Fendering: Pier fendered with the usual Standard Fruit type fendering, vertical uprights on a horizontal "V" bellows on horizontal girders.

CHARTS: B.A. Chart No. 513 (Isla Roatan to Puerto Cortes) and U.S.G. 5393 (positions on this chart are 2.5 miles W.S.W. of B.A. chart).

CONSULS: None.

SERVICES: Fresh water, fresh provisions, airport, telex, doctor, hospital, groceries and meats all available.

Labour: Shore labour is available for contract work such as scavenge cleaning, hull painting, etc. The work carried out during our stay was satisfactory and the rate for the foreman was US $1.50 per hour and workmen US $1.00 per hour.

AUTHORITY: Empresa Nacional Portuaria, Apartado Postal No. 215, La Ceiba, Honduras, Central America. *Tel:* 42-2712 (Superintendent), 42-0297, 42-0394, 42-0397, 42-2044. *Telex:* 8007 Enaporto Ho. *Cables:* Enportuaria. *Contact:* Roberto Dip H., Port Superintendent.

PUERTO CORTES: 15.50 N. 87.55 W. (See Plan Book)

DOCUMENTS:

Health Declaration, 2 copies.
Zarpe or Clearance Permit from the Last Port.
General Cargo Manifest (in ballast if that is the case) of all the cargo to be discharged in Puerto Cortes, 14 copies.
Crew List, 10 copies.
Passengers in transit, or no passenger declaration, 10 copies.
Derat Certificate, only if first on board call.
Stores List, 8 copies.
Mail Sacks declaration (negative or positive).
Bills of Lading, 3 complete sets.
Hatch list, 5 copies.
Tally Books, 15 copies.

All the original documents must be signed and stamped by the Honduran Consul at the port before calling Honduras and should be made out in Spanish. Documents for cargo destined to any Honduras Free Zones need not be signed by Honduras Consul.

If no consul of Honduras available, documents to be legalised by consul of a friendly nation or by the Chamber of Commerce, stating the facts.

PILOTAGE: Compulsory for vessels over 300 g.r.t. ETA to the Agent, 72, 48 and 24 hours ahead of arrival required. Pilot on VHF Channels 16 and 6.

ANCHORAGES: Once the ship enters the bay, *if no berth space has been notified to the Master,* she should anchor at a distance beyond 0.5 miles from the nearest pier, and wait for the boarding of the official party in order to be granted free pratique.

RESTRICTIONS: Vessels may enter the port day or night but are not visited by Port Authorities between 2000 hrs. to 0600 hrs., except in special cases.
MAX. SIZE: Dry cargo vessels up to 30 ft. draft. Tankers up to 30 ft. draft.
HEALTH: Pratique granted after Port Authorities (including doctor) board vessel, between 0600 hrs. – 2000 hrs. Pratique granted if no contagious illnesses aboard, otherwise quarantine restrictions imposed. No automatic free pratique when arriving from another port in Honduras.

All crew members to be vaccinated against yellow fever and smallpox. Vaccinations not available in Honduras.
RADIO: Port Authority operates a station HQSU, monitoring 2738 kHz, but by arrangement can reply on other frequencies. Telegrams to be routed via Hondutel. Lantana WOE, New Orleans WNU, Limon TIM, Balbao NBA and Miami WAX.

Ship's radio not to be used in port except for communication with the port authority. Vessel is fined if there is a violation. Also see "VHF".
VHF: Puerto Cortes Radio: Call sign "Cortes Radio". Channel 16.
Hours: Weekdays 0600–2200; Saturdays 0800–1200 and Sundays 0600 – 1200, 1300, 1700, 1800, 2200, every week except January 1st, Good Friday, May 1st and December 25th.
BERTHING: The Agent to supply information as to berth, and time of docking. Pilot will board the vessel and berth it, assisted by a launch to pass ropes. Departure should be effected when the despatch documents are on board and operations finished.

Pier No. 1 (Texaco Pier), for tankers or ships loading diesel or lub-oil; max. draft 30 ft.
Pier No. 2 (Banana Pier) length is 810 ft., depth 24 ft.
Pier No. 3 (General Cargo and Ro/Ro Pier) 630 ft., depth 30 ft.
Pier No. 4 (General Cargo and Ro/Ro Pier) Length 1,112 ft., depth 30 ft.
Pier No. 5 (Container Terminal, it also handles dry bulk cargo) length 1,127 ft., depth 33 ft.

CRANES: One P & H 125 ton capacity crane, one Paceco Container Crane 45 ton capacity at No. 5 pier and eight cranes of varying capacities.
BULK CARGO FACILITIES: Pier No. 5 (Container Terminal) is used as a multi-function pier, it is used to handle grain, ores, fertilisers and bulk sugar. It is large enough to be able to handle both operations simultaneously.
STEVEDORES: Vessels must give accurate ETA at least 24 hours in advance to enable Agents order necessary gangs. Gangs ordered 0700 and 2100 hrs. working 12 hours (daytime) and 9 hours (night-time) excluding the meal hours (0600–0700; 1200–1300; 1700–1800 and 2300–2330). No work on Holy Friday, May 1st (Labour Day), on other holidays work is possible with double payment.
MEDICAL: No advance notice necessary for medical attention, except in very urgent cases. At San Pedro Sula (35 miles by road) very good medical service can be obtained but several medical clinics are serving this Port. No inoculations required but Master should possess International Health Cards for each member of crew.
TANKERS: Discharge at Texaco Oil Refinery, cable address "Reftexa". Also see "Shipmaster's Report" – June 1981.
DENSITY: 1028/1030.
FRESH WATER: Water available at wharf face at 100 ft. intervals. Rate approximately 8 t.p.h. – 10 t.p.h. However, it is advisable to arrive with sufficient water as there is a shortage due to a recent earthquake.
FUEL: All grades available. 24 hours notice is required for good service.
GANGWAY/DECK WATCHMEN: Shore watchmen not usually required and this service left to discretion of the Master.
OPENING/CLOSING HATCHES: On liners normally by crew with assistance of stevedores, otherwise according Charter Party.
CERTIFICATES: On first call, Registered Tonnage Certificate; thereafter not required unless gross/net tonnage be changed.
CUSTOMS ALLOWANCES: No restrictions, free use on board. Customs officials check no sales ashore.
IDENTIFICATION CARDS: Identification card must be shown to gate watchman when crew members come back aboard.
CONSULS: None in the port. American Consulate and others at Tegucigalpa, 200 miles by road.
REPAIRS: Local marine repair companies can undertake limited repairs of general nature; pre-advice recommended.
REPATRIATION: All facilities available for effecting crew changes and repatriation by sea or air.
AIRPORT: International Airport Ramon Villeda Morales served by regular airlines. 35 miles by road.
TIME: GMT minus 6 hours, no changes during year.
HOLIDAYS: January 1st; April 14th; May 1st; Thursday, Friday and Saturday in Easter week; August 15th; September 15th; October 3rd, 12th and 21st; and December 25th. Cargo work can be arranged on those days, except on Good Friday, and May 1st (Labour Day).
TELEPHONES: Connections to all countries of the world from the Empresa Hondurena de Comunicaciones, located just outside main port gate, cable services also available.
SHORE LEAVE: Permitted without restrictions.
GENERAL: It appears that many of the stowaways discovered recently, are seafarers with a good knowledge of where to conceal themselves.

Local authorities are taking steps to restrict access to vessels by unauthorised persons, but Masters should take special precautions in this respect.

SHIPMASTER'S REPORT: September 1978.
Pilotage: Pilotage compulsory. Pilot boards 2–4 cables off the berth, advance notice of 72, 48, and 24 hours required.
Restrictions: Vessels can enter and leave at any stage of the tide day and night. Vessels are able to leave the berth in an emergency without use of Pilot if a tug available. Least depth of water in channel from sea to berth about 35 ft.
Max. Size: LOA 600 ft. Depth of water at banana berth is 33 ft. forward and 38 ft. aft. Max. draft 30 ft. There is a shoal patch about 150 ft. ahead of the berth.
Health: Authorities require 72, 48 and 24 hours notice of arrival.
Radio: Radio stations used when approaching the port were "WNU" and "TIM".
VHF: Port Authority, Pilot and Agent on Channel 16. Channel 14 also available.
Tugs: There are 2 tugs available, each 1,250 h.p. Vessels are able to dock and undock without the use of tugs.
Berthing: Banana Pier – Position 15° 50.05′ N., 87° 57.35′ W. Distance from berth to entrance 2 miles. The nature of bottom at the berth is coral, mud and sand. Prior to arrival it is an advantage to have all derricks up as various equipment has to be brought on board.

Always starboard side alongside, starboard side banana lids can be opened on all decks prior to arrival.

The banana elevators are extremely close to the quay side and usually moved to the East end of the berth for docking purposes, but as vessel is making fast they are moved into position. Leave starboard gangway turned in until alongside and elevators moved. It is a good idea to turn in overside light fittings and on no account have a starboard list. The bollards are situated on the edge of the quay. The quay is concrete with wooden face, only about 1.5 ft. above the water.

Fresh water was limited due to recent hurricane and repairs to the water line, however 100 tons was obtained.

Four elevators used for loading. Work carried out around the clock, best hatch rate 48 t.p,h,

Ro-Ro facilities available, vessel moors with 2 anchors and stern to the quay. There are facilities for handling containers. Presently the container area is being expanded.
Currency: Lempiras. Two to the U.S. Dollar. If cable sent in advance U.S. Dollars can be obtained.
Diversion: Agents request, if diverted to a Honduran port, a diversion cable must be sent to the Agents of that port giving time/date/nationality/port of departure/and ETA. (This helps Agents with the documentation).
Medical: Doctor and hospital available.
Tankers: The Texaco Pier accepts tankers with a draft of 30 ft.
Fresh Water: Available.
Fuel: Bunker fuel, diesel oil and lubrication oils available.
Density: 1025.
Repairs: Facilities available for small repairs.
Surveyors: Available.
Services: Fresh provisions, groceries, meats and laundry services available. Contract work such as deck and engine room cleaning and painting can be undertaken, however, prices of contractors should be compared.

SHIPMASTER'S REPORT: June 1981.
Berth: Texaco Refinery.
Arrival Draft: Forward 33 ft. 01 in., Aft 33 ft. 01 in.
Density: 1025.
Hoses: 1×6 in. and 2×8 in. clean products; 3×8 in. dirty products.
Pumping Distance: 4,000 ft.
No. of Berths: One.
Tidal Restrictions: None.
Bunker: Bunker "C" and diesel oil.
Bunkering Rate: 2,000 b.p.h.
Depths at LW: Bow, 33 ft.; stern, 40 ft. (by sounding).
Max. Size: LOA 700 ft., beam 90 ft., draft 33 ft.
Products Handled: Crude oil, fuel oil, diesel, kerosene.
Loading/Discharging Rate: 18,000 b.p.h.
Fresh Water: Limited supplies.
Ballast Facilities: None.
Distance from Sea to Berth: 2 miles.
Channel: Width 2,000 ft., minimum depth 35 ft.
Current: Variable/strong.
Docking/Undocking: Any time.
Tug: One required docking and undocking.
Depth Alongside: Minimum 37 ft.
Silting: Rapid.
Bottom: Sand.
Total Length of Dock: 250 ft. Condition: Good/moderate.
Chart: DMA 28000, 28160, 28162, 28163 or HON. 002 – 003.

SHIPMASTER'S REPORT: August 1981.

Entrance recommended via buoyed channel close to Punta Cabballos light which is normally unlit and has NO radio beacon. Pilot will board one mile North of channel if requested via VHF Channel 16. Large vessels are instructed by Port Authorities to anchor at least 0.75 miles from piers. One tug only is available – 900 h.p. approx.

Fresh water at banana pier strictly limited to 50 tons per vessel. Launch service available to vessels at anchor, cost $10 per trip.

AUTHORITY: Empresa Nacional Portuaria, P.O.Box 18, Puerto Cortes, Honduras C.A. *Tel:* 55-0326. *Telex:* 8007 Enaporto Ho. *Cables:* Enportuaria. *Contact:* Enrique Vitanza F., General Manager.

SAN LORENZO: 13.25 N. 87.27 W. (See Plan Book)

LOCATION: On the mainland of the Pacific Coast of Honduras near to the city of San Lorenzo, Valle.

PORT LIMITS: *Port Jurisdiction:* Lat. 13° 21′ 51″ N., Long. 87° 26′ 15″ W. Lat. 13° 24′ 51″ N., Long. 87° 25′ 13″ W.

Laytime: In the opinion of the Agent laytime will commence when vessel received by Port Authorities and pratique granted. Vessel will be received when docked or at anchorage in the port (but not at pilot station).

DOCUMENTS: List of documents requested on arrival of vessels at the port of San Lorenzo (all documents must be written in Spanish and without these documents serious delay of starting operations on board vessel are foreseen).

	Port Doctor	Captain	Port Authorities	Customs	Food Inspector	Immigration	Agency	Agency by Mail
1. Sanitary Declarations	1	—	—	—	—	—	—	—
2. Vaccination List	1	—	—	—	—	—	—	—
3. Clearance Last Port	—	1	—	—	—	—	—	—
4. Voyage Memorandum	—	1	—	1	1	—	2	—
5. Crew List	—	1 Leg.*	—	2 Leg.*	—	1	1	—
6. Store List	—	1 Leg.*	—	2 Leg.*	1	—	1	—
7. Passenger List	—	1 Leg.*	—	2 Leg.*	—	1	1	—
8. Transit Passenger List	—	1 Leg.*	—	2 Leg.*	—	1	1	—
9. Cargo Manifest	—	1 Leg.*	—	1 Leg.*				
				4 copies	1	—	10	2
10. Freight Manifest	—	—	2	—	—	—	2	—
11. Tally Books	—	—	15	5	—	—	10 on board	—
12. Mail List	—	—	—	2	—	—	2	—
13. Copies B/L	—	—	—	—	—	—	2	2
14. Stowage Plan	—	—	—	1	—	—	2	2
Hatch Lists	—	—	—	—	—	—	1	—
Ballast Manifest	—	1 Leg.*	—	2 Leg.*	—	—	1	—

Documents 1/2/3/4 – only from last port.

Documents 5/6/7/8/9/10/11/12/13/14 – from all ports where cargo has been loaded.

If the vessel will arrive without cargo for the port of Amapala/San Lorenzo documents as stated Ballast and Manifest (Manifiesto on Lastre) from the last port only before arrival are requested.

Leg.* = Legalized by Honduras Consul – or by consul of a friendly nation.

If there is no consul of any friendly nation, by Port Captain, BUT in this case one copy of each manifest should be sent to: Secretaria de Economia y Hacienda, Tegucigalpa, D.C. Honduras CA and to Administracion de Aduanas, Amapala, Honduras C.A. by airmail and certified.

PILOTAGE: Compulsory. Distance from sea buoy to berth – 16 nautical miles.

Pilot station at San Lorenzo is last buoys painted black/white in position: Lat. 13° 12′ 03″ N., Long. 87° 35′ 15″ W. Pilot will board the vessel about 1.0 miles – 1.5 miles South of the Sea Buoy, after coming down the Bay from San Lorenzo for about 2 hours' cruise by pilot boat.

Pilot recommends the best arrival time at Sea Buoy to be 3 hours prior to HW.

Two hours before arrival pilot station vessel must call Agent's office at San Lorenzo via VHF Channel 10 in order to send Pilot.

Pilot boat has white and green upper works, black hull with the word "San Lorenzo" on poop. Pilot boat on VHF Channel 16.

ANCHORAGE: Buoy in position: Lat. 13° 12′ 03″ N., Long. 87° 35′ 15″ W.

RESTRICTIONS: All incoming vessels must wait at the Sea Buoy located at the entrance of the access channel, where vessels will be boarded by the Pilot.

The access channel to the port of San Lorenzo is being provided with light buoys however, vessels may only berth/unberth during daylight hours. This is due to the tide variation and the prevailing fog in the channel at night. The seaward buoy is the pilot station. Depth of access channel at LW is 30 ft., width 122 m., and length 30 km.

MAX. SIZE: Depth alongside 32 ft. at LW. Vessels with draft 23 ft. may enter/sail at any time and vessels with draft 30 ft. – 31 ft. at HW.

HEALTH: If no disease on board reported by Master, no special procedure necessary.

The local authorities require all Crew members of vessels visiting Honduras to have valid vaccination certificates against yellow fever and cholera.

Such vaccinations are not available in Honduras and Crew members should be vaccinated at a convenient port prior to calling at Honduras.

RADIO: No radio station at San Lorenzo.

VHF: A continuous watch is maintained in office hours on Channel 16, after hours and on holidays, the watch is intermittent.

All calling should be on Channel 16. Tug works on Channel 12. Intership working is on Channel 6. Agents on Channel 10.

TUGS: One tug available. Tug normally join the ship about half mile from the berth. Use of tug compulsory.

BERTHING: "T" shaped pier with 4 berthing places.

Berth No. 1: 157 m. long. Depth alongside 10.67 m.
Berth No. 2: 139 m. long. Depth alongside 10.67 m.
Berth No. 3: 116.43 m. long. Depth alongside 6.70 m. (Inner).
Berth No. 4: 134 m. long. Depth alongside 6.70 m. (Inner).

Equipment: 2 cranes capacity 30 tons and 25 tons. One additional 140 tonnes crane is planned. 10 fork lifts, 6 × 6,000 lbs.; 4 × 15,000 lbs. 4 yard trucks.

Facilities: General Cargo Warehouse: 2,408 sq.m.; Lumber Shed: 1,204 sq.m.; Piling Sugar Warehouse: 3,072 sq.m. (10 tons capacity); Open Side Warehouse, for cotton: 1,806 sq.m.; 2 molasses tanks, capacity 1 million gallons; open storage 32,913 sq.m.

STEVEDORES: Arranged by Agents, working around the clock with breaks for meals.

Shifts: 0700 – 1200, 1300 – 1700, 1800 – 2300 and 2400 – 0600 hrs.

Cargo Handling Rates:

Resin:	15 tonnes per gang/hour.
Coffee:	30 tonnes per gang/hour.
Lumber:	20 tonnes per gang/hour.
Timber:	25 tonnes per gang/hour.
Cotton:	15/20 tonnes per gang/hour (100 bales).
Molasses:	145 tonnes per hour.
Sugar:	50 tonnes per gang/hour (2 gangs).
Meat:	10 tonnes per gang/hour.
Cars:	15/20 per hour.
General cargo:	8/10 tonnes per gang/hour.
Cement:	30 tonnes per gang/hour (in bags).
Wire/iron bars:	40 tonnes per gang/hour.

MEDICAL: Nearest hospital in Choluteca City, 30 minutes by car. Minor cases can be attended by doctor at San Lorenzo.

TANKERS: No facilities.

FRESH WATER: Good quality potable water available in unlimited quantities.

FUEL: Only if required, and if sufficient notice given to the Ship's Agency.

CONSULS: Consulates exist for the following countries:

Nicaragua, El Salvador in Choluteca City, 30 minutes by car from San Lorenzo.

Consulates for other countries in Tegucigalpa, the capital, (90 km.) 2 hours by car from San Lorenzo.

REPAIRS: Not available.

DRY DOCKS: None available.

GANGWAY/DECK WATCHMEN: Not recommended and not necessary.

HATCHES: By stevedores.

CUSTOMS ALLOWANCES: Tobacco/Wine; spirits are not allowed to be held out of bond.

REPATRIATION: Immigration Offices in town and in Tegucigalpa. Flights leave daily from Tegucigalpa. (90 km. from San Lorenzo).

AIRPORT: In Tegucigalpa, 90 km., 2 hours by car. Connections to Miami/New Orleans/Houston/Panama/Mexico and all Central American countries.

HOLIDAYS: January 1st, April 14th, May 1st, August 10th, September 15th, October 3rd, 12th and 21st, December 25th and Thursday, Friday and Saturday of the Easter week.

Work can be arranged excepting May 1st, September 15th and Holy Friday during Easter week.

SHORE LEAVE: Allowed. Restrictions placed on crew from some countries. Crew members to shore passes.

TIME: GMT minus 6 hours, no alteration during year.

TELEPHONES: None.

STORING: See "Prelims" page viii.

1. Vessels are stored by truck.
2. Trucks can proceed alongside the berth.

3/4. Fork lift trucks can be used on the jetty to handle stores. Truck must be hired.

5. There is no Custom Regulation in force regarding storing.
6. Local riggers can be employed to assist with storing.

SURVEYORS: Not locally available but can be called through Agency. Lloyd's Sub-Agency San Lorenzo, c/o Servicios Portuarios SA, San Lorenzo, Honduras, C.A.

EMERGENCY CO-ORDINATION CENTRE: Firstly Port Superintendent must be called using VHF Channel 16. Also Honduran Coast Guard can be called on the same Channel.

BANKS: At Tegucigalpa: Bank of America, Bank of London & Montreal, Banco Atlantida and Banco Ahorro Hondureno.

GENERAL:

Chart: Honduras Chart No. 004.

Tidal Variation: 2.5 m. – 4.0 m.

Prevailing Winds: From South and East.

Flags: Flags required:

1. The country's flag where the ship is registered.
2. The Honduran flag.
3. The yellow (Quarantine) flag (according to the case).
4. The red flag (according to the case).

AUTHORITY: Empresa Nacional Portuaria (E.N.P.), San Lorenzo, Valle, Honduras. *Tel:* 92. *Telex:* To be installed. *Contact:* A. Andres Casco, Port Superintendent.

AGENT: Servicios Portuarios, S.A. (SEPOSA) POB 35 Tegucigalpa, D.C., Honduras. Telex 1183 Uhler Ht or 4003 Seposa Ho. Tel: 22-8000, 22-5409.

TELA: 15.47 N. 87.30 W. (See Plan Book)

DOCUMENTS:

1 original Clearance
1 „ Health Certificate.
1 „ 12 copies Manifest.
1 „ 11 „ Cargo Book.
1 „ 8 „ Store List.
1 „ 8 „ Crew List.
1 „ 8 „ Passenger List.
1 „ Baggage.
1 „ Voyage Memorandum.

All documents must be in Spanish; Cargo Book should be in alphabetical order.

PILOTAGE: Permanent Pilot not available but can be supplied upon request. There is a small boat that assists docking by handling mooring lines from vessel to wharf. 48 hours advance notice of ETA required.
ANCHORAGES: 1 mile out from wharf, 100 ft. or more; no boundaries.
MAX. SIZE: Max. permissible length 485 ft., breadth no restrictions, draft 30 ft.
Shipmaster's Report: August 1981.

Max. length possible 569 ft. on draft of 25 ft. 6 in.
HEALTH: Agents arrange pratique; in case of disease or fever aboard, the vessel will be placed in quarantine for a minimum of 5 days.

Valid Vaccination Certificates against yellow fever and cholera required. These vaccinations are not available in Honduras.
RADIO: WNU New Orleans and TIM Puerto Limon via Tropical Radio.
VHF: Base Station call sign "Telarailco Tela". A continuous watch is maintained from 2 hours prior to vessel's arrival. All calling should be on Channel 16.
TUGS: No tug available.
BERTHING: Time for berthing is from 0600 hrs. to 2000 hrs.
General Cargo Berth: East side of pier, starboard side alongside.
Banana Berth: West side of pier, port or starboard side alongside, depending on which side elevator space is required (See "Shipmaster's Report" – 1979). 4 elevators available, type camel back. Rate per elevator 3,500 boxes per hour.
Depths: West side has 35 ft. depth at the northern point, 32 ft. in the middle and 27 ft. 6 in. at its southern end, while the east side has 35 ft. depth at its northern point, 33 ft. at the middle and 30 ft. at its southern end.
STEVEDORES: ETA advice should be given 48 hours prior to arrival in order to arrange gangs. Labour rates are subject to surcharge of 25%, 50%, 75% and 100% to cover overtime, depending on hour or day worked.

Gangs: For bananas: 180 men, 3 gangs. General cargo: No restrictions.
MEDICAL: Hospital facilities available.
TANKERS: Discharging lines only, crude 12 in., diesel 6 in., spray oil 6 in. Berth available for 1 tanker, max. permitted draft 30 ft.
DENSITY: Average density in port is 1029.
FRESH WATER: Delivered by hoses at rate of 100 gallons per minute.
FUEL: Available, rate 250 t.p.h.
FIRE PRECAUTIONS: Extinguishers and water hoses available.
GANGWAY/DECK WATCHMEN: Watchmen can be obtained at daytime rates plus 25%, 50%, 75% and 100% to cover overtime, depending on the hour or day worked.
OPENING/CLOSING HATCHES: Work done by stevedores.
CERTIFICATES: Health and derat certificates needed.
CUSTOMS ALLOWANCES: 1 carton cigarettes and 1 bottle wine or spirits for each man.
CARGO GEAR: Must have current valid certificate for ship's gear.
IDENTIFICATION CARDS: Required.
CONSULS: None.
REPAIRS: Only minor repairs.
REPATRIATION: Repatriation can be made on request by Master.
AIRPORT: Distance from wharf to airport is about 80 km. served by regular airlines; 4 flights per day which connect with Pan Am every day.
TIME: GMT minus 6 hours.
HOLIDAYS: January 1st, work possible; April 14th, work possible; May 1st, not possible; September 15th, work possible; October 3rd, work possible; October 12th, work possible; October 21st, work possible; December 25th, work possible. Thursday, Friday and Saturday of Holy Week – work possible except Friday.
POLICE/AMBULANCE/FIRE: Contact telephone operator.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: Ship chandler and launch service available.
GENERAL: Ships must have Honduran flag on board.
SHORE LEAVE: Crew members allowed ashore, providing they do not have any diseases.
DELAYS: Delays can be expected any time there are 2 ships docked.

SHIPMASTER'S REPORT: February 1979.
Contrary to the previous information on this Port, "Vessel" berthed starboard side alongside.
Pilots: None available at present.
Berthing: Used port anchor, head out. The mooring boat meets vessel at the end of the jetty. It is a white painted boat with a small cabin. Very helpful in assisting with the lines, going from forward to aft as required. It is of great advantage to have a mooring rope on the fore deck starboard side, ready to lead forward as due to the Northerly wind and swell, vessel soon drops astern.

The beach shelves fairly fast, and with a ship of this length (575 ft.) a good guide is not to let the bow pass the end of the jetty. A depth of 24 ft. was recorded when sounding round when alongside, only 30 ft. astern of the ship.

The jetty itself has a sprung centre of about 350 ft. long with rubber tyres along same, unfortunately secured by chains which ruins the overside paintwork when the ship surges in the swell.
Additional moorings: The Tela Rail Co. is at present renewing the coir springs on the berth. The shore labour assisted at all times with the moorings as the ship was loaded, also when shifting ship at midnight.
Cargo Gear: The shore side derricks have to be "Doubled up". The existing runners doubled back and shackled to the preventer lug and a snatch block used. It is one straight lift and pulled on board by the single runner on the off-side derrick. The "Hallen" was used at No. 4 hatch but the preference was to use "Double Gear" at No. 3. The "Lift aboard" elevators are 3.7 tonnes, but at the jetty end they run on a steel roller, which is placed on a large steel plate.
Loading: Vessel loaded all hatches, No. 5 being through the side doors and later when No. 1 had finished vessel shifted ahead to give more depth of water aft. Due to a labour shortage we only loaded any three hatches at one time.

Cargo is brought onto the pier by train with several small shunts a shift, very little time lost during shunts.
Fresh Water: Available at slightly differing pressures, rate varies between 5 and 7 tonnes per hour.
Labour: All key personnel speak very good English and are extremely helpful. It is not necessary to keep crew on "Captive Time" for shifting ship during the night, Foreman and labour are only too pleased to assist.

SHIPMASTER'S REPORT: August 1981.

Engines should be kept at immediate notice while alongside, especially from December till May as swell may increase with little warning.

Shore labour for deck/engine room cleaning and painting are readily available.

Two mooring buoys shown on U.S. and B.A. charts to West of piers DO NOT EXIST.

AUTHORITY: Tela Railroad Company, Exportation Department, Tela, Honduras. *Tel:* (504) 48-2108. *Telex:* 448706 TrrexPth Ho.

Contact: F. A. Betancourt, Port Superintendent.

Head Office: Apartado Postal No. 30, San Pedro Sula, Cortes, Honduras, C.A. *Telex:* 5532 Trailco Ht.

NOTES

Please also advise Shipping Guides Ltd.

Hong Kong

HONG KONG: 22.18 N. 114.10 E. (See Plan Book)

HARBOUR LIMITS: (Approximately): Western Entrance – the N.S. line between S.E. extremity of Tsing Yi Island and the flashing light at S.W. corner of Green Island. Eastern Entrance – the N.E./S.W. line between the on-shore FL.W and the FL.R lights either side of the Lei Yue Mun Pass.

DOCUMENTS:

Marine Department (arrival)

Marine Department Shipping Report (Form MO. 618).
Certificate of Registry and/or Tonnage Certificate.
Certificate of Fitness (all vessels carrying chemicals in bulk if applicable).
Passenger ship: Safety Certificate.
Passenger or cargo ship: Load Line Certificate.
Cargo ship: Radio Certificate.
Cargo ship: Safety Equipment Certificate.
Cargo ship: Safety Construction Certificate.
Ship's Articles of Agreement with the crew (if the ship is British, or is a foreign ship belonging to a nation not represented by a consul in Hong Kong).
1 copy Safety Manning Declaration.
Derat Certificate or Derat Exemption Certificate.
1 copy of the ship's Passenger List (if specifically requested).
Clearance Certificate from the Last Port.
1 copy of the Import Cargo Manifest (if specifically requested).
5 copies of the Dangerous Goods Manifest (if applicable).
Compulsory Insurance Certificate (Tankers).

Note: All the above documents/forms must be submitted to the Ocean Shipping Control Section, Entry and Clearance Office, of the Marine Department within 24 hours of a ship's arrival with the exception of the Dangerous Goods Manifest which should be submitted at least 48 hours prior to the vessel's arrival.

Marine Department (departure)

Application for Port Clearance (Form MO. 618).
5 copies of the ship's export Dangerous Goods Manifest (if specifically requested).
1 copy of the ship's Export Cargo Manifest (if specifically requested).

Port Health Officer (arrival only)

Maritime Declaration of Health.
1 copy of the ship's Passenger List.
1 copy of the Crew List.
Derat Certificate or Derat Exemption Certificate (whichever is applicable).
International Vaccination Certificate against smallpox for each passenger and Crew member on board who has, within the preceding 14 days visited a smallpox infected country.

Note: The above documents/forms must be produced for the inspection of the Port Health Officer on boarding at the quarantine anchorage.

Department of Trade, Industry and Customs (arrival and departure)

2 copies of the ship's Import/Export Cargo Manifest. 1 copy for Manifest Check Section, Trade Licensing Branch, 14th Floor, Ocean Centre and the other 1 copy for Manifest Section, Industry and Economic Division, Census and Statistics Department, 20th Floor, Kai Tak Commercial Building.
1 copy of Import/Export Statement in respect of dutiable goods (Forms TIC 309 and TIC 309A).
2 copies of the declaration in respect of dutiable stores required during a vessel's stay in port (Form TIC 303).

Immigration Officer (arrival)

2 Transit-Passenger Lists.
2 Landing-Passenger Lists.
3 Crew Lists.

Note: The above forms must be produced for the inspection of the Immigration Officer on boarding after the ship has been 'cleared' by the Port Health Officer.

Immigration Officer (departure)

2 Lists Passengers boarding.
2 Lists Transit Passengers.
2 Crew Lists.

Post Office (arrival only)

1 copy of the Ship's Mail Manifest.

Hong Kong Police

1 copy of The List of Arms and Ammunition on board (Nil return required) to be handed in at the Entry and Clearance Office with Marine Department papers.

ARRIVAL ADVICE: It is mandatory for Shipmasters to cable MARDEP Hong Kong 24 hours before arrival requesting permission to enter Hong Kong waters and advising ship's name, nationality, type of vessel, total number of persons on board, ETA abeam of Waglan Island and reason for call. It is not permitted to enter Hong Kong waters until permission has been granted. It is mandatory for all vessels over 300 tons gross to carry VHF radiotelephone capable of operating on Hague Plan frequencies and to make contact with the Port Communications Centre on Channel 12 before entering Hong Kong waters and thereafter at specified calling points. They should report their position, ETA at pilot station, final berth, and intended route inwards, East or West. If entering from the East then the vessels mast height above the water should also be reported. (This is needed for information to the airport where the runway extends close North of the Hung Hom fairway). Shipmasters are also asked to report any other relevant information such as dangerous goods on board. If the vessel is taking a Pilot, reference should be made to the 'Sailing Directions' in the China Sea Pilot Vol. I, with regard to the positions of the pilot stations, and Pilots should only be embarked or disembarked at these points. Additional radio reports to MARDEP during the vessels inward or outward passage aid in the safe movement of all vessels in the port and approaches.

APPROACHES: A. (Dry-cargo and container vessels): The approaches are reasonably free from hazards and are well marked by day and night. Vessels working at buoys with drafts up to 11.2 m. are requested to enter port via the Western Entrance. Other vessels with drafts up to 10.9 m. may enter via Lei Yue Mun entrance.

B. (Tankers): Tankers without a gas free certificate are prohibited from transit through Victoria Harbour. Tankers which berth at Tsing Yi Island, Lamma Island, Ap Lei Chau, Tsuen Wan and Tap Shek Kok are requested to use the Western approaches and tankers with drafts up to 10.6 m. for Kwun Tong are requested to use the Eastern approaches. A channel has been dredged at Hongkong Electric Company Wharf at West Lamma Island for the purpose of accommodating vessels at 13.8 m. draft.

C. Buoyage. The system of buoyage used in Hong Kong has been changed from the Uniform to the IALA System.

Compulsory traffic separation lanes are in force for both the East and West approaches. Up-to-date Admiralty charts should be consulted for details.

PILOTAGE: Although pilotage is not compulsory in the port (to be compulsory in 1985), Pilots licensed by the Pilotage Board are available to board ships at either entrance on request. The Hong Kong Pilots Association, provide pilotage services. Pilots generally board in-bound ships using the Eastern entrance in the vicinity of the Lei Yue Mun "TCS4" Buoy (Lat. 22° 16.4′ N., Long. 114° 16.3′ E.) and disembark at the same point from outward-bound ships. At the Western entrance, Pilots embark and disembark to the West of Green Island. It is a contravention of Regulation 21(1) of the Shipping and Port Control Regulations, 1978, for any vessel to pick up or discharge a Pilot within a distance of one nautical mile from the centre of either the Lei Yue Mun Pass or Sulphur Channel. Maximum speed inside harbour, 8 knots.

ANCHORAGES: Examination anchorages (quarantine and immigration) for clearance inwards are situated within the harbour limits to cover the entry of shipping from East and West. The principal dangerous goods anchorages are situated at the Western end of the harbour and at Pun Shan Sek (tankers), whilst there are others at Junk Bay, Tsuen Wan and Rocky Harbour.

An anchorage for the discharge of logs has been designated. This was necessary because logs, which were being discharged and stored within harbour limits were endangering small craft, waterside installations and navigation.

The Western examination anchorage works 24 hours a day whereas the Eastern examination anchorage works from 0700 hrs. – 1800 hrs.

MAX. SIZE: Largest vessels calling regularly have been, dry-cargo container vessels, length over 292 m., with drafts up to 11.6 m.; tankers length over 900 ft., draft 48 ft. Maximum size governed by draft of vessel. No limit as to length and beam. Draft in harbour: "A" class mooring buoys 5.5 m. to 11.2 m. "B" class mooring buoys 5.3 m. to 8.8 m.

PRATIQUE: *Conditions under which a vessel may be granted radio pratique:*

(a) The vessel must not have called at a smallpox and/or plague infected port within 14 days prior to arrival at Hong Kong.

(b) If the vessel has called at a cholera infected port within 5 days prior to arrival at Hong Kong, the Chief Port Health Officer or his delegated officer has full discretion in the granting of radio pratique.

(c) There are not more than 24 passengers on board at the time of arrival.

(d) A vessel carrying more than 24 passengers may be granted radio pratique if there is a ship's surgeon on board.

(e) The Master must furnish, through his shipping company or Agent, the following cabled information to the Port Health Office not more than 30 hours and not less than 8 hours before his expected time of arrival at Hong Kong:

(i) ports of call with dates of departures during the 14 days prior to arrival;
(ii) numbers of passengers and crew members on board;
(iii) a statement that all persons on board are healthy and in possession of valid International Certificates of Vaccination against smallpox for those who, within the preceding 14 days have visited a smallpox infected country;
(iv) a statement indicating whether any case of infectious disease has occurred on board during the voyage;
(v) whether any person on board is sick;
(vi) the date of issue of the Derat or Derat Exemption Certificate;
(vii) whether the ship is an oil tanker, a cargo ship, a container ship or a LASH ship; and
(viii) whether foodstuffs are carried as cargo on board ship.

Notes:

1. Applications for radio pratique must be made by shipping companies or Agents. Application forms should be sent to Port Health Office, Li Po Chun Chambers, First Floor, Des Voeux Road, Central, during normal office hours (0900 to 1700 hrs. on Mondays to Fridays and 0900 to 1300 hrs. on Saturdays).

2. For urgent cases outside normal office hours, shipping companies or Agents may apply for radio pratique by telephone to the Port Health Office, Hong Kong Airport (Tel. 3–829284) during the following hours:

Mondays to Fridays	1700 to 2300 hrs.
Saturdays	1300 to 2300 hrs.
Sundays and Public Holidays	0900 to 2300 hrs.

All necessary information together with supporting documents must be submitted later in writing to Port Health Office, Li Po Chun Chambers.

3. No radio pratique will be granted between 2300 and 0900 hrs.

4. When radio pratique is granted, shipping companies or Agents will be responsible for notifying the Master concerned.

5. The granted radio pratique will automatically expire 24 hours after the stated expected time of arrival at Hong Kong.

6. The granted radio pratique will no longer be valid if there is any change in the health status on board the vessel concerned during the period from the submission of the application to the actual time of arrival

of the vessel at Hong Kong. This means that the Master of the vessel concerned will have either to re-apply through his shipping company or Agent, giving the additional information, or to display the appropriate signal when approaching the Quarantine Anchorages:

Day: International Code flag "Q"

Night: A red light over a white light in a vertical line, 6 ft. apart.

7. Ships granted radio pratique will be required to display the following signal when entering Hong Kong waters:

Day: International Code flag "T.O."

Night: 3 white lights in a vertical line, 6 ft. apart.

8. Maritime Declaration of Health and Passengers and Crew list will have to be collected by the shipping companies or Agents and delivered during office hours to the Port Health Office, Li Po Chun Chambers within 24 hours of the ship's arrival.

Also see "Notices".

IMMIGRATION: Immigration formalities take place at the Eastern or Western Examination Anchorages after clearance by the Port Health Authorities. Immigration launches are on duty 24 hours a day in the Western anchorage and from 0630 hrs. to 1800 hrs. in the Eastern anchorage throughout the year.

RADIO: Cable Agent via Radio Hong Kong call sign "VPS".

Signal Stations. 3 signal stations operated by the Marine Department are situated in the Eastern and Western approaches to, or within, the harbour limits as follows:

Eastern approaches: Waglan Island, (Lat. 22° 11′ N., Long. 114° 18.1′ E.). Western approaches: Green Island (Lat. 22° 17.2′ N., Long. 114° 06.6′ E.).

Marine Department Port Communications Centre, Lat. 22° 17.4′ N., Long. 114° 9.0′ E.

The Marine Department Port Communications Centre can be contacted by telex, by cable and by VHF radio-telephone on Hague Plan Channel 12. Additionally, the above stations are manned 24 hours a day throughout the year and contact can be made by means of international code flags, or by signal lamp. Communication between the stations is provided by teleprinter circuit, land-line telephone and by radio. Telex: Marine Department Port Communications Centre is equipped with telex No. 63607. Answerback MDPCC HX.

It is mandatory for the Master of every ship arriving within signalling distance of any of the above signal stations to hoist the national colours and (if one shall exist) the house flag and the signal letters of the ship, and to identify the vessel to the signal station by visual signals if requested. On recognition of a ship in the approaches to Hong Kong, the name is immediately relayed by teleprinter to the Port Communications Centre of the Marine Department, and the ship's owners or Agents can be notified on request.

Wireless Telegraphy: Radio communication apparatus on board a merchant vessel is not permitted to be used while the vessel is within Hong Kong territorial waters except in the following circumstances:

When a vessel is proceeding through Hong Kong territorial waters such apparatus may be used to communicate on minimum power with the nearest coast station or, if communication with the nearest coast station is impracticable and the safe navigation of the vessel so requires, with a more distant coast station or another vessel;

For the purpose of summoning assistance on an occasion of danger to the life of any person or to the vessel;

For the purpose of carrying out experimental tests for which permission in writing must first be obtained.

During the period when tropical cyclone signals 8, 9 or 10 are in force, radio and television stations will extend their hours of operation around the clock, and will undertake broadcasting of tropical cyclone warnings in English and Chinese, at two minutes to the hour and half past the hour. Should the expected local conditions so warrant, warnings will be broadcast at quarter to and quarter past the hour. Warnings in English will be broadcast by individual announcers at each station. Radio Television Hong Kong and Commercial Radio will provide a Chinese announcer to broadcast warnings in Chinese from the broadcasting studio at the Royal Observatory.

If conditions are expected to worsen, tropical cyclone warnings may continue after the normal close down time of the stations, or commence before the usual starting time in the morning even though only the No. 1 signal is in force at that time. After consulting the Director, Royal Observatory, the Director of Broadcasting will decide whether or not to adopt either of these courses. He will inform Commercial Radio, HK-TVB, RTV of his intentions as early as possible.

Frequencies: Radio Television Hong Kong – Radio 1 (Chinese) 640 kHz: Radio 2 (Chinese) 94 MHz, 103.5 MHz, 103.1 MHz; Radio 3 (English) 545 kHz; Radio 4 (English) 91 MHz, 100.5 MHz, 100.9 MHz; Radio 5 (English) 96 MHz, 105.5 MHz. Commercial Radio – English Service 1050 kHz; Chinese Services Channel 1, 850 kHz, Channel 2, 610 kHz.

All ships bound for Hong Kong must obtain permission from Mardep before entering the waters of Hong Kong. A contravention of this direction will render offending Masters liable to a fine of twenty thousand dollars and to imprisonment of one year. When applying for permission to enter the waters of Hong Kong Masters must provide the following information to Mardep (1) Nationality (2) Number of people on board (3) Type of vessel (4) Reason for call (5) ETA abeam Wanglan Island. You are required to answer all signals including those passed from Royal Navy vessels patrolling the approaches to H.K. when approaching Hong Kong – Mardep Hong Kong.

VHF: Port Communications Centre, Marine Department Hong Kong Port Radio call sign "Mardep" Channel 12, 24 hours listening watch. Range up to 35 miles.

Maritime VHF Radio-telephone Service (Hague Plan): This service operates in Hong Kong on 3 international channels, Nos. 16, 26 and 27. Channel 16 (156.8 MHz) is the simplex distress and calling frequency on which contact is made between shore and ship before changing over to either of the public correspondence channels, No. 26 or 27. The latter are duplex channels and Hong Kong transmits on 161.9 MHz and receives from ships on 157.3 MHz for Channel 26; transmits 161.95 MHz, receives 157.35 MHz for Channel No. 27.

Local connection to the service is *via* the Hong Kong Telephone Company and is made in the same way as for overseas radio-telephone calls by dialling "100". The local operator should then be informed that a telephone call is required on "the Maritime VHF Hague Plan Service". The operator will ask for details of the call, such as the name of the ship and the person required, and will then connect the call *via* Cable Wireless. Calls can also be sent from ship to shore. The range is about 50 miles and the service is available at all times of the day and night.

Harbour phones: If requested the Hong Kong Telephone Company will install and maintain VHF radio telephones on ships at buoys in the harbour for the duration of the ship's stay in port. Calls may be made between any two ships so equipped and between a ship and any telephone number on the Hong Kong Telephone Company network.

Ship to shore service: Hong Kong Telephone Company will also provide ship to shore telephone service by means of land lines at selected wharf locations. The Container Port is included.

Also see "Notices".

Shipmaster's Report: VHF Channel 6 is used for maritime disaster.

TUGS: Available for berthing and unberthing. Advanced booking is required. See Table B on page 584.

WHARVES: *China Merchants S.N. Co. Limited* – berths suitable for coastal shipping:

		Length (ft.)	*Depth (ft.)*
West Point	Berth No. (1) E.	320	35
	Berth No. (2) W.	320	35
H. K. and Kowloon Wharf Co.			
	Ocean Terminal	1,250	35
	Pier No. (3) S.	600	32
	Pier No. (3) N.	600	34
	Pier No. (4) S.	700	32
	Pier No. (4) N.	700	33
	Pier No. (5) S.	800	34
	Pier No. (5) N.	800	36
Kwai Chung Container Terminal			
	6 berths	7,500	40

CONTAINER CRANES: Modern Terminals Ltd. – 7 cranes.

Hong Kong International Terminals – 7 container gantry cranes.

BERTHING: Berthing of dry cargo vessels alongside wharf can be performed any time during day and night. Berthing at tanker wharf not permissible after sunset, depending on size of vessel or other special circumstances. Ships carrying explosives must obtain permission from the Marine Department before berthing is allotted.

Boatmen: Labour to handle ships' mooring lines when berthing and unberthing at any of the wharves in Hong Kong waters is supplied by the owners of the wharf concerned, the cost being included in the berthing fee. For berthing at a Marine Department mooring buoy it is usual for the ship's Agent to arrange for boatmen to handle the ship's slip wire and anchor cable, unless the ship's crew undertake this task. The services of boatmen are generally obtained through the Hong Kong Pilots Association.

Mooring Buoys: See "Max. Size" All ships are required to secure to Marine Department mooring buoys by their chain cable (vessel to supply shackle). The maximum length of a ship permitted to berth at an "A" class mooring is 182 m., the swing circle encompassing each buoy having a radius of 213 m. The maximum length of a ship permitted to berth at a "B" class mooring is 137 m., the radius of swing circle around such buoys being 167 m. It is therefore within the limits of safety for a vessel, when secured to a Marine Department mooring, to slack out to "1 shackle on the windlass" and still clear ships berthed at adjacent buoys, except in exceptional circumstances. As all Marine Department moorings are of the 1-legged type, it is permissible, should circumstances make it necessary, for a ship, when attempting to secure to a mooring, to drop an anchor at not less than 15 m. from the buoy without fouling the mooring chain. It should be noted, however, that 3 moorings sited within the man-of-war anchorage are either of the 2 or 3-legged type, and it is therefore not permissible to use an anchor when berthing.

44 "A" class mooring buoys and 28 "B" class mooring buoys for ocean going vessels. One "B" class mooring buoy is available at Yam O Bay, Lantan Island, for vessels with cargoes of logs.

BULK HANDLING FACILITIES: *China Light & Power:*

Location: Castle Peak.

Berth: Length 545 m. Depth 20 m. Max. draft 12.9 m. (limited by channel depth 13.7 m.). Max. Beam 42 m. LOA no restrictions.

Cargo: Discharge rate for coal 15,000 tons per day. Also see "Developments".

Hong Kong Electric Co. Ltd.:

Location: Lamma Island.

Berth: Depth 15.8 m. Max. draft 13.8 m. Max. LOA 270 m. Max. beam 40 m.

Cargo: 2 unloaders for coal, rate 15,000 tons per day.

CRANES: Available up to 700 tons.

STEVEDORES: The following table shows the average handling rates per gang hour:

Cargo	*Place*	*Load tons per gang hour*	*Discharge tons per gang hour*
General	Wharf	12	15
General	Stream	10	12
Bale or bag	Wharf	20	25
Bale or bag	Stream	15	20

Stevedores work 24 hours per day except Mid-Autumn Festival and Chinese New Year Holidays.

TANKERS: Any leaking of oil to water will be subjected to heavy fines. If not gas-freed, not allowed through harbour. Max. draft for berthing 42 ft. See Table A on page 584.

Table A. OIL INSTALLATIONS

Company	*Location*	*Length of berth*	*Depth alongside (Chart Datum)*	*Grade of oil*	*Capacity (water tons)*	*Delivery rate*	*Hose connection*
(i) Shell Co. (H.K.) Ltd.	Kwun Tong	670′	34′	Boiler fuel	4,500	120	6″
				Marine diesel fuel	4,200	140	6″
	Tai Kok Tsui	180′	10′	Boiler fuel	610	20	2″
				Marine diesel fuel	220	25	2″
	North Point	140′	10′	Gas oil	1,740	27	2″
	Ap Lei Chau	900′	60′	Boiler fuel	143,000	400	10″
				Marine diesel	18,000	400	10″
				Gas oil	25,600	450	8″
(ii) Caltex Oil Hong Kong Ltd.	Tsuen Wan	700′	35′	Boiler fuel	47,820	350	10″
				Gas oil	13,600	200	6″–8″
(iii) Mobil Oil Hong Kong Ltd.	Tsing Yi	700′	38′	Boiler fuel	39,000	500	10″
				Marine diesel	26,000	300	8″
				Kerosene	17,000	300	8″
(iv) H.K. Oil Co. (Gulf Products)	Tsuen Wan	292′	28′	Boiler fuel	22,589	300	8″
				Marine diesel fuel	2,794	200	6″
	Tsing Yi	700′	40′	Boiler fuel	39,000	500	10″
				Marine diesel fuel	26,000	300	8″

Tankers use the Mobil Oil Terminal under a joint users agreement with Mobil Oil Hong Kong Ltd.

Company	*Location*	*Length of berth*	*Depth alongside (Chart Datum)*	*Grade of oil*	*Capacity (water tons)*	*Delivery rate*	*Hose connection*
(v) Esso Standard Oil (H.K.) Ltd.	Tsing Yi	920′	52′	Boiler fuel, Marine diesel and white oil	342,000	500	10″
	North Point	150′	10′	White oil	400	7	4″
(vi) Peninsular Petroleum Co.	Tsing Yi	700′	45′	Kerosene, Marine diesel	58,000	300	10″
				LPG – Gas Oil	50,000	600/700	
(vii) China Resources Ltd	Ngan Ying Chau	820′	40′	Boiler Fuel	232,900	820	12″
				Marine Diesel			
				White oil			
(viii) China Resources Ltd	Tsing Yi	640′	40′	Boiler Oil	20,000	—	12″
				Marine Diesel			

(i) 1 tug is normally required for ships berthing and unberthing. A shore telephone is available at the berth. Shore electrical supply is not available. Fresh water available from shore and by lighter. Berthing facilities available only for small coasters, ferries and harbour craft.

(ii) 1 tug is normally required for ships berthing and unberthing. A shore telephone is available at the berth. Shore electrical supply is not available. Fresh water available by lighter only.

(iii) and (iv) 2 tugs are normally required for berthing and unberthing. A shore telephone is available at the berth. Shore electrical supply is not available. Fresh water available by lighter only.

(v) 2 tugs are normally required for ships berthing and unberthing. A shore telephone is available at the berth. Shore electrical supply is not available. Fresh water available by lighter only.

(vi) 1 tug is normally required for ships berthing and unberthing. A shore telephone is available. Shore electricity supply is not available. Fresh water available by lighter only.

(vii) 1 tug is normally required for ships berthing and unberthing. A shore telephone is available at berth. Shore electrical supply is not available. Fresh water available by lighter only.

(viii) 1 tug is normally required for berthing and unberthing. Bunker facilities available.

Table B. TUGS.

Company	*Tug*	*Power (BHP)*	*Bollard Pull (tons)*	*Propulsion*
Hongkong Towage & Salvage Company Ltd.	*Hung Hom*	3,000	40	Twin Var. Pitch/ Kort Rudders
	Kwai Chung	3,400	40	Twin Var. Pitch/ Kort Rudders
	Sung Kong	3,400	40	Twin Var. Pitch/ Kort Rudders
	Heung Kong	3,000	40	Twin Var. Pitch/ Kort Rudders
	Kau Lung	2,100	39	Single Var. Pitch/ Kort Rudder
	Lamma	2,600	36	Twin Duck-Pellers/ Kort Rudders
	Tai Tam	2,600	36	Twin Var. Pitch/ Kort Rudders
	Ngan Chau	2,400	35	Twin Var. Pitch/ Kort Rudders
	Peng Chau	2,200	30	Twin Var. Pitch/ Kort Rudders
	Lai Mun	1,860	30	Twin Var. Pitch/ Kort Rudders
	Waglan	1,700	25	Twin Var. Pitch/ Kort Rudders

Company	*Vessel*	*Power (BHP)*	*Bollard Pull (tons)*	*Propulsion*
The Far East Towage Co. Ltd.	*Shek O*	1,000	10	Steam/Single Screw/F.P.
	Tsing Yi	440	5	Diesel/Single Screw/F.P.
	Tolo	410	2	Diesel/Single Screw/F.P.
	Tathong	270	2	Diesel/Single Screw/F.P.
	Far East No. 1	2,000	25	Diesel/Twin Screw/Kort Rudders
Victoria Harbour Tug Co. Ltd.	*Howa*	3,200	45	Diesel/Twin Screw/Kort Rudders
	Kowa	3,200	45	Diesel/Twin Screw/Kort Rudders
	Lewa	2,400	34	Diesel/Twin Screw/Kort Rudders

Company	*Vessel*	*Type*	*B.H.P.*	*Notes*
H.K. & Kowloon Wharf & Godown Co. Ltd.	*Snipe*	motor tug	140	All the tugs listed here are suitable for towing lighters in the harbour.
	Heron		205	

Table C. WATER BOATS.

Company	*Vessel*	*Capacity*	*Delivery (Approx.)*
Leung Tai Kee Waterboat Co. Ltd.	Taikee No. 1	150 long tons	150-180 t.p.h.
	Taikee No. 2	120 long tons	150-180 t.p.h.
	Taikee No. 3	320 long tons	150-180 t.p.h.
	Taikee No. 5	250 long tons	150-180 t.p.h.
	Taikee No. 6	320 long tons	150-180 t.p.h.
	Taikee No. 7	130 long tons	150-180 t.p.h.
Union Waterboat Co. Ltd.	Tai Yat No. 1	270 tons	150 t.p.h.
	Tai Yee No. 2	290 tons	150 t.p.h.
	Tai Sam No. 3	300 tons	150 t.p.h.
	New No. 4	340 tons	170 t.p.h.
	Tai Ng No. 5	295 tons	150 t.p.h.
	Pier services to ocean terminal		1,500 tons/day

Table D. PORT OILERS.

Company	*Vessel*	*Grade of oil*	*Capacity-product long tons*	*Delivery rate per hour in water tons*
Shell Co. (H.K.) Ltd.	Fu Yung Shan	Boiler fuel or Marine diesel	750	450
	Shih Tou Shan	Boiler fuel or Marine diesel or White oil	750	450
	Shell Wor Fung	White oil	260	80
	Shell Shun Fung	Boiler fuel or Marine diesel	1,500	900
Caltex Oil Hong Kong Ltd.	Caltex 54	Boiler fuel or Marine diesel	400	120
	Caltex Tsuen Wan HK. 2	Boiler fuel or Marine diesel	800	280
	Caltex 111	Gas oil	40	60
	Caltex 133	Gas oil	250	100
Mobil Oil Hong Kong Ltd.	M.V. Mobil Meishan	Boiler fuel or Marine diesel	900	250
	M.V. Mobil Mei Ping	Light oil	150	50
	M.V. Mobil Mei An	Light oil	150	50
H.K. Oil Co.	Barge 101	Boiler fuel	750	350
	Barge 102	Marine diesel/Boiler fuel	500	150
	Barge 103	Gas oil	1,000	150
Esso Standard Oil (H.K.) Ltd.	M.V. Esso Tsuen Wan II	White oil	270	46
	M.V. Esso Tsing Yi	Boiler fuel or Marine diesel	1,600	500
	M.V. Esso Hok Un	Boiler fuel or Marine diesel	1,600	500

DENSITY: 1017.

FRESH WATER: Available but the supply is sometimes limited, depending on the storage levels in Hong Kong's reservoirs. The supply to ships is made at commercial wharves and from water boats. See Table C above.

FUEL: Excellent facilities exist for bunkering vessels with fuel oil and coal. Fuel oil can be obtained either at the wharves adjacent to the oil installation, or from harbour oilers owned and operated by the oil companies. Fuel oil from these vessels can be pumped on board without impeding cargo operations. Adequate stocks of good quality bunker coal suitable for coal-fired marine boilers are maintained in the port. Fuel oil available with viscosity up to 1,000 sec. Redwood. 24 hours' notice for supply is required. Also gas oil and marine diesel available. See Table D above.

FIRE PRECAUTIONS: The Fire Services Department operates six fire boats, the largest being the 350 ton "Alexander Grantham". It has an output capacity of 45,000 litres of water and 32,850 litres of foam a minute through a battery of monitors. This vessel is equipped to deal with any type of fire on any size vessel, and is designed to operate both in port and at sea.

GANGWAY/DECK WATCHMEN: Not compulsory but recommended.

OPENING/CLOSING HATCHES: Usually performed by ship's crew.

CERTIFICATES: Following certificates to be presented to the Marine Department Entry and Clearance Office before clearance could be granted:

Ship's Register and/or Tonnage Certificate.
Load Line Certificate.
Radio Certificate.
Safety Construction Certificate.
Safety Equipment Certificate.
Derat Certificate or Derat Exempt Certificate.
Last Port Clearance.

CARGO GEAR: Normal routine gear, wire and rope slings, nets, grabs, boardtrays and floating cranes up to 100 tons available.

Vessel's cargo gear must be used for working cargo at all alongside berths.

IDENTIFICATION CARDS: No identification card is required for crew or passengers going ashore. When the vessel has exceeded a stay of 14 days in port, all crew members must deliver to the Harbour Control Office, Immigration Department through the agents a signed copy of the "Immigration Arrival Card".

CONSULS: The following countries maintain consular offices in Hong Kong:

Australia
Austria
Bangladesh
Belgium
Bolivia
Brazil
Burma
Canada
Chile
China (People's Republic of)
Colombia
Cuba
Cyprus
Denmark
Dominican Republic
Ecuador
Egypt
Finland
France
Gabon
Germany F.R.
Great Britain
Greece
Guatemala
Iceland
India
Indonesia
Iran
Irish Republic
Israel
Italy
Japan
Jordan
Korea
Lebanon
Luxemburg
Malaysia
Mauritius
Mexico
Monaco
Nauru
Nepal
Netherlands
New Zealand
Nicaragua
Nigeria
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Portugal
Seychelles
Singapore
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Taiwan
Thailand
Tonga
Turkey
Tuvalu
U.S.A.
Uruguay
Venezuela

REPAIRS: In addition to ship and engine maintenance and repair work, the dockyards have facilities for many miscellaneous services such as are provided by modern dockyards. These include physical tests on materials such as anchors and cables, for which test certificates can be supplied, chemical analysis, drawing office requirements, chemical cleaning of engines and boilers, shot and sand blasting, zinc spraying to name but a few.

DRY DOCKS:

Hong Kong United Dockyards Ltd. (Tsing Yi): Two floating docks, the largest of which has a lifting capacity of 33,000 tonnes. Length 260 m. Width 38 m. Depth over blocks 8.0 m.

Euro Asia Dockyards Ltd. (Tsing Yi): One floating dock, the lifting capacity of which is 100,000 tonnes.

Yau Lian Dockyard (Tsing Yi): One floating dock and a further floating dock (188 m. × 40 m.) in Tsuen Wan Bay.

SEAMEN: All formalities connected with engagement and discharge on board British ships, and on foreign ships whose flag is not represented by a Consular Officer resident in Hong Kong, are required by law to be conducted at the Mercantile Marine Office of the Crews Division. Hong Kong continues to be one of the main recruitment centres of Asian seamen and a Seamen's Registry Office, which is an adjunct to the Seaman's Recruiting Office, under the same division, maintains records of all Hong Kong seamen. The Seamen's Recruiting Office controls the recruitment, selection and supply of Hong Kong Chinese seamen to ships requiring them, and is situated at the Yardley Commercal Building, 16/F., 3, Connaught Road West, Hong Kong.

Seamen's Travel Documents: The Hong Kong Government Seaman's Service Record Book (Seaman's Discharge Book) is issued by the Marine Department and is a record of employment. The Hong Kong Government Seaman's Identity Book is issued by the Immigration Department and enables the holder to return to Hong Kong without a visa during the validity of the book (initially 5 years, with 5 year renewals), and also within 12 months after the expiry of the validity of the book.

A Seaman's Certificate of Nationality and Identity is issued at the Immigration Department only to seamen of British nationality, whereas the Seaman's Discharge Book and the Seaman's Identity Book may also be issued to seamen resident in Hong Kong and no visa is required for return to Hong Kong.

All Crew members signing-off for repatriation must first obtain permission from the Director of Immigration. All crew arriving to join a vessel must produce a guarantee letter through the Agents responsible for all maintenances and other eventual expenses.

AIRPORT: Regular International flights. Airstrip is capable of handling any size of jet planes. Transportation from port to airport terminal about 40 minutes bus drive.

TELEPHONES: Available at all alongside berths for connection on board ship.

TIME: Standard time kept in the colony is 8 hours in advance of GMT. Summer Time, which is 1 hour in advance of Standard Time, is kept from 0330 hrs. on the first Sunday after 15th April to 0330 hrs. on the first Sunday after 15th October, each year.

HOLIDAYS: Public holidays in Hong Kong occur mainly on festivals whose date is governed by the lunar calendar.

Every Sunday; First week-day in January; Chinese New Year's Day; Second day of Chinese New Year; Third day of Chinese New Year; General holiday in lieu of that for the Ching Ming Festival; Good Friday; Day following Good Friday (Ching Ming Festival); Easter Monday; Birthday of Her Majesty the Queen; Tuen Ng Festival; First week-day in July; First Monday in August; Last Monday in August, which shall be Liberation Day; Day following Chinese Mid-Autumn Festival Day; Day following Chung Yeung Festival: Christmas Day; First week-day after Christmas Day.

POLICE/AMBULANCE/FIRE: When the services of the fire brigade, immigration, port health or police are required, appropriate signals should be made in accordance with the list of "Hong Kong Port Signals". The Marine Division of the Police is responsible for internal port security. Its fleet of launches maintain constant patrols in Hong Kong's territorial waters.

GENERAL: No waste to be disposed into harbour. A free refuse disposal service is available for domestic refuse. Ship's agents can arrange this through Marine Department. Chain required for mooring to buoy. Unnecessary use of ship's sirens prohibited.

SERVICES: Services available including tank cleaning, painting, washing, compass adjusting, calibration of direction finder, radar repairs, 24 hours' service laundry, supply of stores and provisions, motor-boats service between ship and shore.

SHORE LEAVE: Crew members are usually allowed ashore.

CLASSIFICATION SOCIETIES: American Bureau of Shipping, Rooms 1203-4, Wah Kwong Building, 48-66 Hennessy Road, Hong Kong. Tel: 5-278478.

Bureau Veritas, International Register for The Classification of Ships & Aircraft, Room 2107, International Building, G.P.O.Box 5046, Hong Kong. Tel: 5-455847/8. Telex: 74336 HX.

Det Norske Veritas (Oslo), Room 3407, Gammon House, 12 Harcourt Road, Central, Hong Kong. Tel: 5-242251. Telex: 73690.

Germanischer Lloyd, Jebsen & Co., Ice House Street, Prince's Building, P.O.Box 97, Hong Kong. Tel: 5-225111. Telex: Jeben HX.

Lloyds Register of Shipping, P.O.Box 463, 1908 Hutchison House, 10 Harcourt Road, Central, Hong Kong. Tel: 5-265317. Telex: 74747.

Nippon Kaiji Kyokai, Hong Kong Branch, Room 1703, New World Tower, 16-18 Queen's Road, Central, Hong Kong. Tel: 5-250389/0. Telex: 75213 Clasnk HX.

BANKS: Bank of America National Trust and Savings Association, St. George's Building, 2 Ice House Street, Hong Kong. Tel: 5-2675333.

Bank of Tokyo Limited, Sutherland House, 3 Chater Road, Hong Kong. Tel: 5-230091.

Banque Nationale de Paris, 23 Queen's Road, Central, Hong Kong. Tel: 5-246081.

Chartered Bank, 4-4A Des Voeux Road Central, Hong Kong. Tel: 5-22401.

Chase Manhattan Bank N.A., 280 Gloucester Road, The World Trade Centre, Hong Kong. Tel: 5-7905005.

Citibank, N.A., 8 Queen's Road Central, Hong Kong. Tel: 5-8218211.

Hang Seng Bank Limited, Hang Seng Bank Building, 77 Des Voeux Road, Central, Hong Kong. Tel: 5-8255111.

Hongkong and Shanghai Banking Corporation, China Building, 29 Queen's Road Central, Hong Kong. Tel: 5-2677111.

Manufacturers Hanover Trust Company, Alexandra House, 27th Floor, 16-20 Chater Road, Hong Kong. Tel: 5-253101.

National Westminster Bank Limited, 6th Floor, St. George's Building, 2 Ice House Street, Hong Kong. Tel: 5-247071.

Royal Bank of Canada, 18th Floor, Gloucester Tower, The Landmark, 11 Pedder Street, Hong Kong. Tel: 5-214261.

WEATHER: 1st May to 31st October usually considered as typhoon season. No operation of cargo when typhoon signal No. 3 or upward is hoisted. Also see "Radio".

DEVELOPMENTS: The central fairway has been dredged to – 36 ft. Reclamation continues in various areas within the harbour. Additional 'Public Cargo Working Areas' are near completion and others planned.

2 × 1,100 t.p.h. ship unloaders under construction at Castle Peak for China Light and Power. First unloader to be ready December 1984 and the second to be ready early 1985.

15 ha. of additional container marshalling area to be reclaimed at Hong Kong International Terminals (HIT), completion 1987/88.

2 Hitachi container handling cranes to be installed at HIT's No. 4 terminal in April 1985.

NOTICES: Marine Department Notice No. 140 of 1984 (Dated 23rd July 1984).

Quarantine Inspection – Eastern Quarantine Anchorage:

1. Owners, agents and charterers of ships are advised that the following arrangements for obtaining quarantine clearance at the Eastern Quarantine Anchorage will come into effect on 1st August 1984:

(a) From 0630 to 1300 hours daily ships should show the normal signals to request quarantine clearance.

(b) From 1300 to 1800 hours daily ships should contact the Port Control Centre on VHF channel 12 to request quarantine clearance.

(c) No quarantine clearance can be given between the hours of 1800 and 0630 hours. Ships requiring quarantine clearance during those hours should proceed to the Western Quarantine Anchorage.

2. Copies of this notice may be obtained free of charge from the Entry & Clearance Office, Rumsey Street Multi-Storey Car Park, Connaught Road, Central, Hong Kong.

Signed: Director of Marine.

Marine Department Notice No. 152 of 1984 (Dated 8th August 1984)

Notice to Owners, Agents and Masters of vessels of over 300 gross registered tons calling at Hong Kong:

Owners, Agents and Shipmasters are reminded that Vessels of more than 300 gross registered tons are required to have on board, whilst in the waters of Hong Kong, very high frequency (VHF) radiotelephone equipment. Such vessels are required to make contact with the Port Communications Centre on Channel 12 or 14 of the VHF radiotelephone before they enter the waters of Hong Kong and thereafter to make reports as specified in the Shipping and Port Control Regulations. In addition, a continuous listening watch must be maintained on the radiotelephone, on the specified channels. Failure to comply with these requirements renders the Master liable to prosecution.

Accordingly, Owners and Agents are requested to advise the Masters of vessels enroute to Hong Kong of the foregoing requirements.

The booklet, Hong Kong Shipping and Port Control Laws giving further details is available from the Marine Department Headquarters, Fairmont House, 7/F, Cotton Tree Drive, Hong Kong, price $5. You should obtain a copy of this booklet if you are in any doubt as to the laws applicable in Hong Kong.

Please note that the requirement to comply with these VHF reporting procedures does not apply to any vessel to which Part IV of the Shipping and Port Control Ordinance applies.

Signed: Director of Marine.

SHIPMASTER'S REPORT: October 1984.

Immigration: Notice to Master – Immigration Clearance on Arrival in Hong Kong (Form 1D 245A)

1. (Text) Being the Master of a vessel, you are required, on arrival of the vessel in Hong Kong, to anchor or moor the vessel at an approved Immigration Anchorage (as illustrated on the back page) for as long as may be necessary for Immigration examination, and hoist the Immigration Examination Signal until an Immigration Officer permits you to lower it. The Immigration Examination signal should be, by day, the letters H. N. N. shown by means of signal flags and, by night, 3 lights coloured WHITE in a vertical line one over the other, equally spaced at a distance of not less than 1 m. and visible from any direction at a distance of at least 1 nautical mile. Failure to comply with this requirement is an offence under the Immigration Ordinance, Cap. 115, Laws of Hong Kong and is punishable with a maximum fine of $20,000.

2. This opportunity is also taken to remind you that it is your duty to ensure that no persons leaves or boards your vessel (except a Port Health Officer or a Pilot in the course of his duty) and nothing shall be removed from or taken or placed on board your vessel before Immigration Examination.

Master's remark: Approaching the Western Quarantine Anchorage without a Pilot was difficult, because of an enormous quantity of Chinese and local junks occupying the very narrow roads, waiting for their turn to be cleared. Vessel dropped anchor at 0900 hrs. local time and first persons to board were 2 Customs Officers who came on board by means of lowered accommodation ladder. They were followed half an hour later by the doctor and thereafter by the ship's Agent and shipchandler. As soon as the yellow flag was lowered bumboat people rushed to the ship displaying their merchandise on the aft part of the ship's deck. When Immigration Officers boarded almost 3 hours later they seemed to be very upset and asked me immediately to remove all persons not belonging to the ship's crew and furthermore to write a letter to their office explaining why I let anybody board before Immigration had cleared the ship. Fortunately I had hoisted the signal H. N. N. as per Agent's advice. With few words, they cleared the vessel at 1400 hrs. and I did not have to pay a penalty. They warned me again and told me on my request, after giving me their circular 1D 245A that nobody including Customs Officers shall board the vessel except Pilot or doctor before them and whenever the Customs Officers want to board before (which is the usual case) the Master is to contact MARDEP on Channel 12 VHF, asking to contact Immigration Office to get Immigration's confirmation for the Customs to board the vessel before Immigration have cleared her. They told me furthermore not to lower the accommodation ladder and to repulse any person who tries to board.

No vessel can obtain Pre-arrival Clearance if they have one person among the crew coming from a Communist country.

Sailing without a Pilot was also not very easy and I strongly recommend Masters to take Pilots whenever entering or leaving the port of Hong Kong due to the great amount of traffic in this port.

MARDEP – Reporting Points: Vessels approaching Hong Kong from the East to report their passing to MARDEP on Channel 12 VHF at the points:

through East Lamma Channel	*through West Lamma Channel*
Wang Lan Island	Wan Lan Island
Potoi Island	Potoi Island
LCS 1 Lamma Channel Buoy	
Lamma Patch Channel Buoy	Cheung Chau Island
LCS 2 Lamma Channel Buoy	
Green Island	Green Island

AUTHORITY: Marine Department, 4F-8F Fairmont House, 8 Cotton Tree Drive, Hong Kong. *Tel:* 5-211521. *Telex:* 64553 Marhq Hx. 63607 Mdpcc Hx. *Cables:* Mardep Hong Kong. *Contact:* Director of Marine.

AGENT: Shipping & Transport Services Ltd., Room 1001-1005, Sun Hung Kai Centre, 30 Harbour Road, Hong Kong. Tel: 5-746700. Cables: Mainstay HX. Telex: 83173 Mstay HX.

NOTES

Please also advise Shipping Guides Ltd.

Iceland

AKUREYRI: 65.41 N. 18.03 W. (See Plan Book)

DOCUMENTS: See "Reykjavik".
PILOTAGE: Not compulsory but available by arrangement with Harbour Master.
APPROACHES: Natural well protected harbour formed by Oddeyri peninsula and the end of the fjord. Entrance to harbour (Pollurinn) has a width of 800 m. and depth of 47 m.
TUGS: None available.
BERTHING:

Berth	*Berth Length (m.)*	*Depth at LW (m.)*	*Remarks*
Krossanes	50	6.0	Oil, fish-oil, meat, cement
Drattarbraut			Slipway
Slippkantur	240	6.0	Ship repairs, asphalt tank
Togarabryggja 1	110	6.5	General cargo
Togarabryggja 2	67	6.5	General cargo
Londunarkantur 1	75	6.0	Fish landing
Londunarkantur 2	65	5.5	Fish landing
KEA-bryggja			Oil
Tangabryggja	65	5.5	Cattle feed
Oddeyrarbryggja	140	7.5	General cargo
Torfunefsbryggja	100	5.5	Passenger

STEVEDORES: Working hours: 0800 – 1200, 1300 – 1700.
MEDICAL: Full hospital facilities available without prior notice.
TANKERS: At Oddeyri (KEA-bryggja) and Krossanes, there are oil berths with depths alongside of 5.0 m. – 6.0 m.
FUEL: Coal and fuel by arrangement.
REPAIRS/DRYDOCKS: Two patent slips, one for vessels up to 200 g.r.t and the other for vessels up to 2,000 g.r.t. Ordinary repairs can be effected. Shipyard has a quay 230 m. long with a depth of 7.5 m. Divers available.
AIRPORT: At Akureyri, 2 km. from the port.
AUTHORITY: Harbour Committee, c/o Guomundur Sigurbjornsson, Strandgata 25, P.O.Box 407, 602 Akureyri, Iceland. *Tel:* 96-23305 and 96-22346. *Contact:* Baldvin Thorsteinsson, Harbour Master. *Tel:* 96-24391 and 96-23664.

HAFNARFJORDUR: 64.04 N. 21.58 W. (See Plan Book)

PORT LIMITS: The seaward boundary is drawn as follows:
Line 1: 020°, from Lat. 64° 02.4′ N., Long. 22° 08.0′ W. ("Hraunsnes").
Line 2: 272°, from Lat. 64° 04.7′ N., Long. 21° 59.2′ W. ("Balaklettur").
These lines cross at Lat. 64° 04.9′ N., Long. 22° 05.9′ W.
DOCUMENTS: Documents required for Customs clearance:
3 copies of Cargo Manifest
2 copies of Crew List and Passenger List
1 copy of Crew Declaration to the Customs
1 copy of Store List
Customs Clearance from Last Port.
PILOTAGE: Pilotage is compulsory for all vessels over 100 g.r.t. The Pilot usually boards the vessel 0.5 miles S.E. of the Outer Buoy (Valhusagrunn, red). Smaller vessels and Masters familiar with the port are invited to proceed to the Inner Buoy (Helgasker, green). The buoyage is IALA "System A". VHF communication with the Pilot on Channel 14.
APPROACHES: Vessels, with a draft of 7.0 m. or greater, are warned that shoals exist at Lat. 64° 04.7′ N., Long. 22° 08.8′ W. (1.5 miles×260° from Valhusagrunn Buoy).
ANCHORAGES: For vessels awaiting the Pilot, a good anchorage is to be found 1 mile S.S.E. of the Outer Buoy (Lat. 64° 04′ N., Long. 22° 04′ W.). Smaller vessels may anchor 0.4 miles North of Hvaleyrarhofdi (Lat. 64° 03.9′ N., Long. 21° 59.9′ W.).
TUGS: Hafnarfjordur Pilot and tugboat 360 h.p. is available. Further tugs can be ordered from Reykjavik.
BERTHING: The inner harbour is enclosed by 2 breakwaters. The Northern one is 200 m. long and the Southern one 450 m. Entrance channel is 150 m. wide, 9.0 m. deep, bottom soft clay.

North Quay: 255 m. long, depth 5.5 m. to 6.5 m., bottom soft clay. For general cargo and unloading fish.

Oseyrar Pier: 130 m. long and 25 m. wide, depth 2.5 m. to 4.0 m. at Southern side and 5.5 m. to 6.0 m. at Northern, bottom clay. Mainly used for fishing vessels.

South Quay: 150 m. long, depth 6.0 m. bottom clay. For general cargo vessels.

Finger Pier: 70 m. long, 10 m. wide, depth 5.5 m. to 6.5 m., bottom clay. Mainly used for unloading fish for industrial purposes and asphalt. Also see "Tankers".

CRANES: Mobile cranes of various capacities are available.
STEVEDORES: Working hours are 0800 – 1700, Monday to Friday. Overtime can be arranged.
TANKERS: *Oil Pier:* Inside the head of the Southern Breakwater is a berth for oil tankers. Depth 8.0 m., bottom soft clay. Max. draft for arriving tankers is 9.5 m.
DENSITY: 1025.
TIDAL VARIATION: Up to 4.5 m.
FRESH WATER: Available at all quays.
FUEL: Available at all quays.
CONSULS: Available at Reykjavik (10 km.).
REPAIRS: Minor repairs can be undertaken.
DRY DOCKS: None. Slipway for vessels up to 300 tons.
SURVEYORS: Lloyd's Agents and representatives for other Classification Societies are available in Reykjavik and Hafnarfjordur.
CUSTOMS ALLOWANCES: 1 bottle of spirits (0.75 litres); 200 cigarettes or equivalent; 24 bottles of beer or 1 bottle of wine.
AIRPORT: Domestic airport at Reykjavik 10 km. International airport at Keflavik 35 km.
TIME: GMT throughout year.
CARGO SURVEYORS: Konnun hf., Ingolfsstraeti 3, 101 Reykjavik. Tel: 91-28422.
DEVELOPMENTS: South Quay: New quay. Length 120 m., depth 7.5 m. – 8.0 m. To be constructed 1985/86.
AUTHORITY: Captain of the Port, Strandgata 4, 220 Hafnarfjordur. *Tel:* 91-50492, 91-53444. *Contact:* S. Hallgrimsson, Captain of the Port.
Board of Direction, Hafnarstjorn Hafnarfjardar, Strandgotu 6, 220 Hafnarfjordur, Iceland.

ISAFJORD: 66.05 N. 23.06 W.

DOCUMENTS: As for "Reykjavik".
PILOTAGE: TFZ Isafjord Radio 2182 kHz. To call Pilot use morse lamps or whistle "G".
ANCHORAGE: In Fjord, depth of 6 fathoms.
MAX. SIZE: Dry cargo vessels up to 4,000 g.r.t. Tankers up to 30 ft. draft.
HEALTH: Inform Agent.
RADIO: TFZ 2182 kHz.
TUGS: Not required.
MEDICAL: Inform Agent 1 hour in advance. Hospital available.
FRESH WATER: Always available through hose-pipes.
FUEL: All grades available advance notice required is 2 hours.
GANGWAY/DECK WATCHMEN: Necessary. Carried out by crew.
OPENING/CLOSING HATCHES: Performed by crew.
CERTIFICATES: All relevant certificates required.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes each crew member, 600 for Master; Wine/Spirits; 2 bottles for each crew member, 6 bottles for Master.
IDENTIFICATION CARDS: Not required.
CONSULS: British, German, Norwegian, Swedish, Danish.
REPAIRS: All types of repairs possible.
DRY DOCKS: 1 small dry dock available.
REPATRIATION: No facilities exist.
AIRPORT: Distance from port 2 miles, regular flights.
TIME: GMT. No change.
HOLIDAYS: Work carried out every day.
POLICE/AMBULANCE/FIRE: Police, Ambulance, Fire, Tel: 3258.
TELEPHONES: None available.
SERVICES: Compass adjusting, radar, echomaster, specialists.
SHORE LEAVE: Allowed.
AUTHORITY: Captain of the Port.

KEFLAVIK-NJAROVIK: 64.00 N. 22.33 W.

DOCUMENTS: As for "Reykjavik".
PILOTAGE: Pilotage is compulsory for vessels over 100 tons net. Pilot is available for all vessels 24 hours per day and is reached via Reykjavik Radio. Pilot boards vessel 1 mile outside Vatnsnes.
ANCHORAGE: Outside the harbour in depths of 27 m. with good holding ground.
TUGS: Use of tug is not necessary.
BERTHING: Port has concrete pier which will be extended for a length of 110 m., and a wooden quay 45 m. in length. Depth of water in harbour and alongside wharves is 20 ft. to 45 ft. Entrance is easy for access.
STEVEDORES: Working hours: 8 hours per day 0800 to 1700 hrs.
FRESH WATER: Available through hose connection on the quay.
FUEL: Available.
REPAIRS: 2 shipyards available.
AIRPORT: Keflavik International Airport is only 4 km. away.
TIME: GMT. No change.
POLICE/AMBULANCE/FIRE: All Tel. 2222.
TELEPHONES: None available on board.
SHORE LEAVE: Allowed.
AUTHORITY: Harbour Master.

NESKAUPSTADUR, Nordfjordur: 65.09 N. 13.41 W.

DOCUMENTS:
Crew List.
Passenger List.
Customs Documents.
Provision List.
Manifests and Ship's Papers.
PILOTAGE: No Pilots. Road clear, keep in middle of fjord.
ANCHORAGES: Depending wind. With North or N.W. winds anchor towards South coast and well in the fjord. When N.E. off town towards North coast, but keep clear of small boat moorings.
MAX. SIZE: Length/breadth no restriction. Main quay is 70 m. long and it is built right out to the steep bank at the coast. Depth close to jetty 7 m. but increases quickly.
HEALTH: Free pratique automatic from Customs Officer. Radio for doctor if illness on board.

RADIO: Neskaupstadur Radio 2182 kHz (TFM) 24 hour watch. VHF, Channels 16 and 26. Range approximately 40 miles.

TUGS: No tugs but large motor-boats are normally obtainable if necessary.

BERTHING: No specific requirements unless over 7 m. draft, when fendering required.

STEVEDORES: If possible 24 hours ETA. Preferably before 1600 hrs. for commencing next morning. Load or discharge rates according to goods.

MEDICAL: Always send advance notice of required medical attention. Hospital available, also 3 doctors and dentist.

TANKERS: Diameters of lines 4 in. and 6 in. Oil companies BP and Shell have their own small quays. The third company Esso uses BP jetty.

DENSITY: Normal.

FRESH WATER: Shore line on jetty. No barge.

FUEL: Diesel oil only.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Ship's Register.

CUSTOMS ALLOWANCES: 200 cigarettes a week while in Iceland. Only 1 allowance of spirit, i.e. on arrival 1 to 3 bottles according to occupation.

IDENTIFICATION CARDS: Not required.

CONSULS: Denmark tel. 199 or 330. France tel. 14 and 19.

REPAIRS: Limited repairs to engines, hull and deck. Good repairs to radars, sounders, tiller pilots, etc.

DRY DOCKS: None. 1 slipway, 450 tons.

REPATRIATION: Winter flights twice a week or more. Summer every day.

AIRPORT: Distance 3 km.

TIME: GMT, no alterations.

HOLIDAYS: Last Thursday April; 17th June; 1st May; 25th and 26th December; New Year, etc. If work is carried out 31st December, 24th December, Saturday before Easter and Whitsun double pay is claimed.

POLICE/AMBULANCE/FIRE: Telephone office at shore end jetty.

TELEPHONES: No arrangement to place telephones on board.

SERVICES: No tank-cleaning equipment. No discharge of tank-washings. Compass adjusting available.

SHORE LEAVE: Allowed.

DELAYS: None except if berth not available.

DEVELOPMENTS: No expected draft increases. New berths are under construction but will take unforeseen time.

PATREKSFJORDUR: 65.35 N. 23.59 W.

DOCUMENTS: 8 Crew Lists, Passenger Lists, Custom Documents, Health Documents, Manifests, Bills of Lading, Ship's Papers.

PILOTAGE: Pilotage not compulsory, but if needed then contact Radio Patreksfjordur on 2182 M/F.

ANCHORAGE: Anchorage is sheltered by the peninsula.

MAX. SIZE: See "Berthing".

RADIO: Radio Patreksfjordur on 2182 M/F.

TUGS: Available.

BERTHING: The entrance has a depth of 4.7 m. to 4.9 m. (15.5 ft. to 16 ft.) at LLWST. The harbour has a depth of 6.4 m. (21 ft.) at LW, and 10 m. (33 ft.) at HW. 320 m. of quayage with depths from 5.5 m. to 5.8 m. (18 ft. to 19 ft.) alongside. The harbour can be entered by day and night.

STEVEDORES: Working hours 0800 to 1900 hrs.

MEDICAL: Hospital available, contact through radio.

FRESH WATER: Available. No notice required.

FUEL: Available. No advance notice required.

REPAIRS: Machine-shop. General repairs can be effected. Diver obtainable.

AIRPORT: About 26 km. distance from harbour. Regular service, by airlines.

TIME: GMT. No change.

SHORE LEAVE: Allowed.

AUTHORITY: Patrekshofn, Patreksfiroi.

REYKJAVIK: 64.09 N. 21.56 W. (See Plan Book)

DOCUMENTS:

For the Immigration Office

1 Crew List.
1 Passenger List.

For Customs Authority

Master's Report on vessel's arrival from abroad.
Master's Certificate with Manifests of all goods.
Master's Certificate with Manifests of goods to each port of discharge.
Health Declaration.
List of Provisions and other Stores in ship.
Ordinary procedure at least 5 copies of each manifest (3 for customs).

PILOTAGE: Pilotage compulsory. Telegraphic address: Harbour Master, Harbour Office, Reykjavik. Desirable advance notice of ETA 24 hours and again notice 3 hours before expected time of arrival. VHF working Channels 12 and 14 at Pilot station and pilot boats. 24 hour watch maintained.

Pilot boat: Grey hull with red and white deckhouse. International signals used if necessary. Pilot boat leaves harbour on request and meets vessel up to 1 nautical mile off Grotta (East of Buoy 6): Most frequent boarding place is Buoy 7 Kollafjordur.

ANCHORAGE: Good anchorage at Kollafjordur in 30 to 35 m. water 1.5 miles North of Engey Lighthouse. Anchorage prohibited in neighbourhood of harbour entrance.

RESTRICTIONS: All day service. Draft in old harbour restricted at MLWST to 18 ft. In Sundahofn to 26 ft. No other restriction.

MAX. SIZE: Longest straight quay 280 m. Breadth unrestricted. Depth 26 ft. at MLWST (29 ft. at MLWNT). At present 3 installations for oil carriers to discharge through submerged pipe-lines. Moorings for about 20,000 d.w.t. ships and draft restriction to 21 ft. in the approach to one of these installations.

HEALTH: Pratique obtained through Customs Authorities. In case of suspected disease notify port office or Agent in advance.

RADIO: Reykjavik Radio TFA.

RADAR/VHF: No harbour radar. Pilot office can be contacted by VHF Channel 16. Working Channels 12 and 14.

TUGS: Tugs meet vessels on roadstead. Ship's lines used. One ocean-going tug 1,000 h.p. and 2 smaller tugs available.

BERTHING: Larger vessels preferably handled at high water.

Old Harbour: The Old Harbour is protected by two moles leaving a 100 m. wide entrance. It is divided into the Fishing Harbour (West Harbour) and General Cargo Harbour (East Harbour) where coastal passenger traffic is also served.

In the Old Harbour there are several areas for ship maintenance, the main slipways and a great number of firms specialised in services for the fleet.

Quayage is about 3,300 m. of which there are 600 m. only for smaller fishing craft. Draft at the entrance is 7.0 m. (23 ft.) at MLWST, and depth at quays 5.5 m. to 6.5 m. (18 ft. to 21 ft.). bottom is sand and mud.

Sunda Harbour – Vioeyjarsund: The new harbour area in Vioeyjarsund was opened in 1968. Since then a growing part of the general cargo has been moved through this area with a special quay for grain. The entrance to the area is not restricted and water depth is more than 8.0 m. (26 ft.) at MLWST. Length of quays is 460 m. with a water depth of 8.0 m. (26 ft.) at MLWST. Bottom is sand and mud.

Sunda Harbour – Kleppsvik: A new harbour area for general cargo is under development in Kleppsvik. The entrance will be a 50 m. wide channel dredged to 7.0 m. (23 ft.) at MLWST. The water depth at the quay will also be 7.0 m. (23 ft.). 1×32 ton container crane to be installed late 1984.

Sunda Harbour – Grafarvogur: The harbour area in Grafarvogur was opened in 1968. This area is used for discharging and storing of cement, gravel and asphalt for industries in the vicinity. Further development is planned for industries with special requirements. An approach channel has been dredged to 4.0 m. (13 ft.) at MLWST and water depth at the quay is 4.5 m. (14 ft.).

Eiosvik: In Eiosvik there is a quay for the State Fertiliser Plant. The entrance is unrestricted with deep water to the quay. Eiosvik offers the best natural site for large ships in the Port of Reykjavik.

STEVEDORES: Stevedoring must be arranged in advance preferably by Agent. Working Hours: 0800 – 1700 hrs. With labour unions permission, work may be carried out until 2200 hrs. and on Saturdays.

MEDICAL: Medical attention available without notice. For hospital stay or surgical operation advance notice desirable, either through Agent or port office.

TANKERS: Submarine pipe-lines diameter for discharging are 8 in. 3 terminals handling vessels of 7,000 – 15,000 g.r.t. Vessels moor to buoys.

DENSITY: Salinity varies from 33.6% to 35.0% giving sea water density about 1027 in average.

FRESH WATER: Water delivered from taps at quay at rate of 20 – 30 t.p.h, on the roadstead delivered by tug with 50 cu. m. water-tank.

FUEL: Grade of fuel oil 200 – 400 per second. Supplied by oil-pipe or by barge. If supplied by barge then 1 day's notice required.

FIRE PRECAUTIONS: Ordinary precautions for handling of dangerous goods applied.

GANGWAY/DECK WATCHMEN: Ship's gangway to be used. Watchmen services from ashore not necessary but can be arranged if asked for.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CERTIFICATES:

1. Certificate of Nationality.
2. International Tonnage Certificate.
3. Certificate of Seaworthiness.
4. Cargo Ship Safety Construction Certificate.
5. Cargo Ship Safety Equipment Certificate.
6. Cargo Ship Safety Radiotelegraphy Certificate or Cargo Ship Safety Radiotelephony Certificate.
7. International Load Line Certificate.

Passenger ships must have certificates No. 1, 2, 3, 7 and in addition Passenger Ship Safety Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes or equivalent. 0.75 litre beverage, 24 bottles beer.

IDENTIFICATION CARDS: Identification card must be carried.

SURVEYORS: Lloyd's Register, Norske Veritas, Germanischer Lloyd and Bureau Veritas.

REPAIRS: All kinds of ship repair possible.

DRY DOCKS: Only slipways available up to 2,000 metric tons weight. Dimensions: Length 85 m., breadth 13.6 m.

REPATRIATION: Can be arranged.

AIRPORTS: Reykjavik Airport within 10 minutes drive. Mostly for local routes. Keflavik Airport 50 km. distance, served regularly by airlines both to Europe and America.

TIME: Icelandic Summertime used all year round and is same as GMT.

HOLIDAYS: January 1 (New Year's Day); Maundy Thursday; Good Friday; Easter Monday; May 1; Ascension Day; Whit Monday; June 17 (National Day); First Monday in August (Bank Holiday); Christmas Day and Second Christmas Day. On Christmas Eve and New Year's Eve work stops at noon. Dock work goes on on Bank Holiday and by Labour Union permission work may be carried out on Saturday against overtime payment and exceptionally at night until 2200 hrs.

CONSULS:

Belgium	Consul General	Tel. 20000
Brazil	Consul	" 11500
Canada	Consul General	" 25355
Chile	Consul	" 38640
Czechoslovakia	Commercial Attache	" 19823
Denmark	Embassy	" 13747
Finland	Embassy	" 82040
France	Embassy	" 17621
W. Germany	Embassy	" 19535
Great Britain	Embassy	" 15884
Greece	Consul	" 24303
Holland	Consul General	" 11358
Israel	Consul General	" 85300
Italy	Consul General	" 11055
Japan	Consul	" 82800
Mexico	Consul	" 25430
Norway	Embassy	" 13065
Poland	Commercial Attache	" 18759
Portugal	Consul	" 86166
Spain	Vice-Consul	" 21240
Sweden	Embassy	" 82022
Switzerland	Consul	" 24209
Turkey	Consul General	" 16666
U.S.S.R.	Embassy	" 15156
U.S.A.	Embassy	" 29100
Uruguay	Consul	" 12720

POLICE/AMBULANCE/FIRE: Police (Main station) 11166; Police (Harbour Station) 10145; Ambulance 11100; Fire 11100.
TELEPHONES: Telephone connection can be arranged at some berths in the old harbour and in Sundahofn telephone connections will be at the quay.
GENERAL: Engines may not be run while ship is berthed.
SERVICES: Compass adjusting carried out by private firm as well as tank cleaning.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Normally no delay is to be expected beyond that caused by normal customs clearance.
DEVELOPMENTS: In a new harbour area – Sundahofn – quay construction, dredging and reclamation is completed. Length of quay 680 m. and 70 acres storage area under development. Discussion is taking place on new terminal for coastal traffic. Ro/Ro facilities at Sundahofn being prepared.
AUTHORITY: Reykjavik Port Authority.

SIGLUFJORD: 66.10 N. 18.50 W. (See Plan Book)

DOCUMENTS: As for "Reykjavik".
PILOTAGE: Compulsory. Pilot meets vessel about 400 m. from harbour entrance.
ANCHORAGE: East of harbour in depths according to draft 25 m. to 30 m. good holding ground. Gales from North set heavy sea, vessels then seek anchorage in small bay S.W. of Siglunes.
RADIO: Siglufjordur Radio TFX 2182 kHz.
VHF: Channels 16, 24, 26 and 27.
TUGS: None available.
BERTHING: There are several piers and wharves inside the North Mole, 4 quays used by larger vessels have depths up to 23 ft. at LW and lengths from 50 m. to 125 m.
STEVEDORES: Available. Working hours 0700 to 1200 hrs. and 1300 to 1700 hrs.; overtime can be arranged.
MEDICAL: All facilities available.
FRESH WATER: Available.
FUEL: Available in general grades only.
GANGWAY/DECK WATCHMEN: Necessary.
OPENING/CLOSING HATCHES: Stevedores normally perform this work.
CARGO GEAR: Ship's own gear (no cranes).
IDENTIFICATION CARDS: Not required.
CONSULS:
Denmark Tel. 71672 Sweden Tel. 71440
REPAIRS: For moderate size vessels can be obtained. Diver available.
TIME: GMT. No change.
POLICE/AMBULANCE/FIRE: All tel. 71170.
SHORE LEAVE: Allowed.
AUTHORITY: Siglufjardarkaupstadur, Granugotu 28, 580 Siglufjordur, Iceland. *Tel:* 71237, 71433. *Contact:* K. Rognvaldsson, Captain of the Port.

SKAGASTROND: 65.50 N. 20.20 W.

DOCUMENTS: As for "Reykjavik".
PILOTAGE: Pilots are available. When approaching port, order Pilot through Agent if required.
MAX. SIZE: Draft max. 19 ft.
MEDICAL: Doctor available but located in Blonduos 20 km. away, doctor visits Skagastrond 3 days a week.
FRESH WATER: Available.
FUEL: Available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
REPAIRS: Small repairs available.
AIRPORT: Nearest 20 km. away in Blonduos.
TIME: GMT. No change.
POLICE/AMBULANCE/FIRE: Police Station and Firemen in the port.
TELEPHONES: Available.
SHORE LEAVE: Allowed.
AUTHORITY: Captain of the Port.

STRAUMSVIK: 64.03 N. 22.03 W. (See Plan Book)

PORT LIMITS See "Hafnarfjordur".
DOCUMENTS: See "Hafnarfjordur".
PILOTAGE: See "Hafnarfjordur".
APPROACHES: See "Hafnarfjordur".
ANCHORAGE: See "Hafnarfjordur".
TUGS: See "Hafnarfjordur".
BERTHING: This harbour is operated by Hafnarfjordur. Inside the breakwater is a berth, 220 m. long and depth 12.0 m. The entrance channel is 160 m. wide with a depth of 10.0 m.
CRANES: Two 8 ton harbour cranes for handling general cargo.
BULK CARGO FACILITIES: There is a suction unloader for discharging alumina.
DENSITY: Mixed salt and fresh water.
TIDAL VARIATION: Up to 4.5 m.
FRESH WATER: Available.
FUEL: Available.
CONSULS: Available at Reykjavik (10 km.).
REPAIRS: See "Hafnarfjordur".
DRY DOCKS: See "Hafnarfjordur".
SURVEYORS: See "Hafnarfjordur".
CUSTOMS ALLOWANCES: 1 bottle of spirits (0.75 litres); 200 cigarettes or equivalent; 24 bottles of beer or 1 bottle of wine.
AIRPORT: Domestic airport at Reykjavik 10 km. International airport at Keflavik 35 km.
TIME: GMT throughout year.
CARGO SURVEYORS: Konnun hf., Ingolfsstraeti 3, 101 Reykjavik. Tel: 91-28422.
AUTHORITY: Captain of the Port, Strandgata 4, 220 Hafnarfjordur. *Tel:* 91-50492, 91-53444. *Contact:* S. Hallgrimsson, Captain of the Port.
Board of Direction, Hafnarstjorn Hafnarfjardar, Strandgotu 6, 220 Hafnarfjordur, Iceland.

VESTMANNAEYJAR: 63.30 N. 20.14 W. (See Plan Book)

DOCUMENTS:

Health Certificate.	Manifest.
Crew List.	Ship's Register.
Passenger List.	

PILOTAGE: Pilotage compulsory, day and night service. Ship to advise over Vestmannaeyjar Radio ETA. Pilot always available but 1 hour's advance ETA is required.
ANCHORAGE: There are anchorages with depths from 24 m. to 34 m., good holding ground about 0.5 miles North of harbour and on North side of peninsula in depths of 28 m. to 34 m.; this anchorage is exposed to winds between West and North.
RESTRICTIONS: No restrictions except for largest vessels. They must enter at high tide.
MAX. SIZE: 5,000 g.r.t.
RADIO: Vestmannaeyjar Radio. VHF available.
TUGS: Normally join in-coming vessels at anchorage. The use of tug is optional. 1 Tug, 500 h.p.
STEVEDORES: Available. Ordered by Agent. Working hours: 0800-1700 hrs., Monday-Friday.
CRANES: 2 mobile cranes, capacity up to 15 tons.
MEDICAL: Not necessary to receive advance notice. Hospital facilities and doctors available.
TANKERS: Discharge lines, 7 in. No deballasting facilities available.
FRESH WATER: Shore installations on every berth.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Stevedores.
CUSTOMS ALLOWANCES: For each crew member; 100 cigarettes or 20 cigars or 100 grm. tobacco, and 1 bottle spirits.
IDENTIFICATION CARDS: Not required.
CONSULS: Denmark, Germany, Great Britain, Norway, Sweden. To be called through Vestmannaeyjar Radio.
REPAIRS: All repairs possible.
AIRPORT: Local airport. Daily connection to Reykjavik.
TIME: Local time GMT.
HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day (1 May); Ascension Day; Whit Monday; National Festival Day (17 June); Prayer Day; Christmas Day (25 December). No work on New Year's Day, Good Friday, Easter Sunday, Whit Sunday, 17 June, Christmas Day.
POLICE/AMBULANCE/FIRE: All tel. 1666.
SERVICES: Radio, radar services etc. Divers available.
SHORE LEAVE: Allowed.
DEVELOPMENTS: Depth of entrance to harbour to be increased to 6.5 m. New Quays on North Side of harbour to be built in the near future.
AUTHORITY: Harbour Master.

India

GENERAL

COURTESY FLAG: Correct flag to be flown by foreign ships visiting Indian ports is Indian Merchant Navy Ensign (a red flag with a length of one and one half times the width and with National Flag of India superimposed in top quarter next to staff) and not Indian National flag.

SHIP'S OFFICER'S REPORT: Apart from the various forms and Crew Lists, etc., the Customs Boarding Officer also requires a List of Private Property in possession of the Master, officers and crew on Form No. IV in duplicate and the local Agents need 2 more copies of the same for clearing the vessel inward. This procedure is followed when a vessel arrives from abroad or even when she is arriving from an Indian Port. It is common in both the cases.

ALLEPPEY: 09.29 N. 76.23 E.

PORT LIMITS: On the North by a line drawn from the North boundary pillar (white masonry structure) to 7 fathoms of water. On the South by a line drawn from the South boundary pillar, S.W. to 5 fathoms of water and thereon West to 7 fathoms of water. On the West by a line running North to South joining the Northern and Southern boundary lines. On the East by the beach road from the North boundary pillar to a stone on the beach road 220 ft. East of South boundary pillar.

DOCUMENTS:

(a) For Port Office:

Last port clearance (original for verification and return). Ships' Registry (original for verification and return). Load Line Certificate (for perusal and return). Safety Radio Telegraphy Certificate (for perusal and return). Safety Equipment Certificate (for perusal and return). Passenger List (1). Crew List (1). Deck Cargo Certificate (1).

(b) For Customs:

Application for entry inwards. Last Port clearance. Port Office Entry Certificate. Arrival report. Particulars required by customs in approved form. Favour Parcel Certificate. Gift Parcel Certificate. Health Report. Opium Certificate. Arms and Ammunition Certificate. Import manifest. Passengers list. Stores list, crew list, and private property declaration. Ship's currency declaration. ILH receipt.

PILOTAGE: None. Open roadstead port.

ANCHORAGES: Approach to port free from navigational dangers. The anchorage, 3 miles offshore, provides good holding ground.

MAX. SIZE: Being open roadstead, vessels of any size can anchor according to draft.

HEALTH: Port Health Officer may be contacted by telegram addressed "Cyclone Alleppey" for issue of pratique certificate. Procedure to be followed in Indian Port Health Rules.

RADIO: Morse system of signalling by light and signalling by International Code flags alone are available. Vessels code can be used as call sign.

TUGS: 2 tugs owned by Port Department render services per requisitions from Agents. Tugs usually approach vessels after anchoring.

BERTHING: No Berths. Electric cranes on the pier.

MEDICAL: Government hospitals available.

DENSITY: 1025.

FRESH WATER: Only available in very small quantities.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: By stevedores.

IDENTIFICATION CARDS: Necessary only when crew land ashore.

CONSULS: Nil.

REPAIRS/DRY DOCKS: None.

REPATRIATION: Crew changes are effected subject undertaking by Owners through Agents.

AIRPORT: Cochin, 62 km. North of Alleppey. Internal flights only.

TIME: GMT plus 5.5 hours.

HOLIDAYS: For work on approved closed port holidays and national holidays labourers have to be paid extra in addition to wages.

POLICE/AMBULANCE/FIRE: Emergency (Fire and Police) 100 Alleppey Exchange.

SHORE LEAVE: Crew allowed to land. Foreigners required obtain prior permission of Police authority through Agents.

AUTHORITY: Senior Port Conservator.

BEDI BUNDER: 22.31 N. 70.02 E.

DOCUMENTS:

1 Maritime Declaration of Health.
1 Last Port Clearance.
6 Crew Lists.
6 Passengers' Lists.
4 Stores Lists.
4 Private Property List of crew and officers.
4 Certificates of Currency, Arms and Ammunition and Deck Cargo.
1 Same Bottom cargo list.
1 Hazardous Cargo List with categories.

PILOTAGE: Vessels anchor at roads as pilotage not compulsory; however, if requested in advance by Master to "Portal Bedi", ship may be piloted from Pirotan Lighthouse to Rozi Anchorage about 7 miles from port by local Pilot Guide. Pilot boards vessel off Pirotan Island Light (Lat. 22° 36′ N., Long. 69° 57′ E.).

ANCHORAGE: Lighterage port. Vessels anchor at Rozi Anchorage about 7 miles from port, where good anchorage up to 7 fathoms at LW.

HEALTH: Pratique granted on delivering Maritime Declaration of Health to Customs Officer on boarding. Vessels having touched yellow fever area prior to arrival granted free pratique by Mosquito Party to be deputed from Kandla, which can only be arranged by prior notice failing which vessel has to proceed either Kandla or Bombay for Free Pratique.

RADIO: Call sign VUK5. Working hours:

0930 – 1130 hrs.	1730 – 1930 hrs.
1330 – 1530 hrs.	2130 – 2330 hrs.

Frequency 600 m. or 500 kHz, working at 429 m. and calling at 500 m.

TUGS: Port tug available for use at anchorage.

BERTHING: No berths.

STEVEDORES: Agents and stevedores require advance ETA of 24 hours for preparing labour gangs. Daily loading is 400/500 tons for bagged cargo.

MEDICAL: 24 hours notice required for medical service. Government hospital at Jamnagar where vaccination/fever injection services available.

DENSITY: 1025.

FRESH WATER: Supplies by barge capacity 50 tons. Possible supply about 50 tons every alternate tide subject adequate supply of water in port area.

FUEL: None.

GANGWAY/DECK WATCHMEN: The services of watchmen are recommended.

OPENING/CLOSING HATCHES: By ship's crew.

CERTIFICATES:

Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derat Exemption Certificate.
Gear Certificate.

CONSULS: None.

REPAIRS: No facilities for repairs to ships.

DRY DOCKS: None.

AIRPORT: Jamnagar – 7 miles from city. Daily flight Jamnagar-Bombay.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Non-working days and work not permitted even on payment of overtime charges: Indian Republic Day; Bakri-Id; Holi; Muharram; Gokulastami; Dasehra; Diwali; Ramzan-Id.

POLICE/AMBULANCE/FIRE: District Superintendent of Police 100 and 3795; Ambulance/Casualty Department 4444; Fire 101.

SHORE LEAVE: Crew members allowed ashore in emergency or for medical treatment. Necessary police permits take 48 hours.

REGULATIONS: No launch services available for crew. Only 5 ships allowed to work at time at anchorage. Further arrivals wait turn.

DELAYS: Delay expected for loading and discharging in monsoon due to limited number of barges available.

GENERAL: Tidal port and barges loaded and sent out to ship during tide time only. Loading of barges carried out manually.

DEVELOPMENTS: The scheme of creating additional facilities, road connection, transit godowns, electrification and water supply and cranes, etc. near mouth of creek. This newly developed area is completed and connected by good all weather road with city of Jamnagar.

AUTHORITY: Port Officer.

BELEKERI: 14.43 N. 74.15 E. (See Plan Book)

PORT LIMITS: *North.* A line drawn due West from Kawada Guda Peak into the sea up to 7 fathoms of water starting from a point 50 yards above high-water mark of the shore.

East. Seashore of Belekeri Bay 50 yards above high-water mark from North Boundary Mark to rocky promontory in Lat. 14° 40′ N. including the Belekeri Creek and all branches thereof, as far as navigable and the shores and banks within 50 yards of high-water mark Spring tides including Islands. All patta lands and other private sites excluded.

South. A line drawn due West from a point 50 yards above high-water mark of rocky promontory in Lat. 14° 40′ N. into the sea up to 7 fathoms of water.

West. A line joining the two 7 fathoms points in the sea.

DOCUMENTS:

8 Crew Lists.
2 Manifests of Stores.
2 Private Property Declarations.
2 Currency Lists.
1 Maritime Declaration of Health.
3 Passenger Lists.
4 Import Manifests.
Last Port Clearance.

PILOTAGE: Not necessary. Vessels anchor in stream and in open sea. Ships can be manoeuvred under guidance of Port Officer.

ANCHORAGE: The anchorage for shallow draft vessels in open roadstead is with Kukra Island bearing 080° (T) distance about 1.5 miles in depth of 27 ft. to 29 ft. Anchorage for deep drafted vessels is with Kukra Island bearing 080° (T) distance about 2.5 miles in depth 34 ft. to 37 ft.

HEALTH: Medical Officer, Ankola acts as Port Health Officer. Free pratique to incoming vessels granted by radio. All vessels calling from foreign destination must send radio message addressed "Medical Officer, Ankola", at least 48 hours before entering, giving last port of call, number of crew, health conditions, ETA and requesting pratique; same message must be repeated to Agents also, on which pratique granted on shore. Anchoring time is pratique time. For vessels from Indian ports pratique not required. Vessels which have taken on board passengers or crew from yellow fever areas within 30 days of departure from such ports will be under quarantine. Free pratique will not be granted until Mosquito Search Party, from nearest major port (i.e. Cochin, Goa or Bombay) has inspected, disinfected and certified that ship fit for granting pratique. Master to inform Agent well in advance if arriving from yellow fever area to enable arrange Mosquito Search Party for quick pratique.
RADIO: Recommended to give ETA or pratique messages via Goa or Bombay Radio.
BERTHING: No berths.
STEVEDORES: ETA required at least 48 hours prior arrival order Agents advise Shippers and stevedores.
MEDICAL: No hospital but good medical aid given at Karwar, 20 miles distant. In case of inoculations and vaccination at least 2 days advance notice to be given for vaccines to be brought from Hubli or Belgaum, distance 100 and 150 miles respectively.
DENSITY: 1025.
FRESH WATER: Can be supplied from Karwar by water barge.
FUEL: None.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Generally done by ship's crew.
CERTIFICATES:
Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derat Certificate.
Vaccination and Inoculation Certificates.
CUSTOMS ALLOWANCES: 200 cigarettes allowed per crew member. Wine and/or Spirit: 1 bottle of light spirit and 1 bottle of hard spirit per crew member.
CARGO GEAR: Valid International cargo gear certificate not more than 12 months old. Validity shall cover whole period of loading and discharging.
IDENTIFICATION CARDS: Not required.
CONSULS/REPAIRS/DRY DOCKS: None.
REPATRIATION: Arranged from Goa or Bombay.
AIRPORT: Nearest airports Goa or Belgaumi Bombay.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Observed as declared by Port Authorities. Non-working days when work not permitted even on payment of overtime: Republic Day (26th January) and Gandhi Jayanti (2nd October).
POLICE: Tel. 49.
SHORE LEAVE: Permission may be obtained (Chinese personnel not allowed to land on shore).
AUTHORITY: Port Officer, Karwar.

BHAVNAGAR: 21.47 N. 72.08 E.

DOCUMENTS:
Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Last Port Certificate.
Manifest on prescribed form (3 copies).
Declaration of private and personal property.
Crew List.
Customs circulation copy issued by Boarding Officer of last Indian Port of call.
Place and date of Derat Certificate.
PILOTAGE: Pilotage should be arranged in advance through ship's local Agent who may be contacted via the port radio, call-sign VUJ-9. An ETA should be sent at least 48 hours in advance in order to arrange Pilot. Pilotage is compulsory. Pilot boat does not have VHF, but may be contacted by light or flag signals. Pilot station is 4.5 miles N.N.E. of Piram Island Lighthouse and Pilot boat will only be on station when the vessel is scheduled to arrive. Vessels should arrive at pilot station about 2 hours prior to time of high-water and are advised not to anchor awaiting a Pilot but to make a reciprocal course until arrival of the pilot boat.
ANCHORAGE: Vessels up to 31 ft. draft are advised to anchor about 3 miles Eastward of Perigee Light Vessel. All vessels at anchorage are loaded and discharged by means of lighters.
MAX. SIZE: Up to 500 ft. length, and up to 65 ft. breadth may berth alongside.
Permissible draft for a particular tide is arrived at by subtracting 13 ft. from predicted height of high-water for that particular tide.
HEALTH: Healthy ships are granted pratique by the Pilot. International health regulations are applicable to vessels arriving from yellow-fever areas.
RADIO: Bhavnagar Port Radio, call sign VUJ-9 should be used for routing ETA messages, and is also used by Agents in cables to shipping.
TUGS: Tug assistance is available for berthing and unberthing vessels in inner harbour. Position where tugs join the vessel is dependent upon prevailing weather conditions. Usually ship's lines are used in connections to tug.
BERTHING: Berthings are as per tides and according to permissible drafts.
STEVEDORES: The stevedoring gangs are arranged directly by Agents through approved stevedores.
MEDICAL: Medical facilities can be arranged by Master through Agent. Hospital facilities available in city of Bhavnagar which is 13 km. from port.
FRESH WATER: Fresh water supplied alongside jetty as well as at anchorage.
Shipmasters Report: Water is often in short supply, and ships may be unable to obtain any at all at the anchorage. Ships should not rely upon an evaporator to make water at the anchorage, due to the high mud content of the sea water.
FUEL: Oil bunkering available in limited quantity.
FIRE PRECAUTIONS: Alongside jetty fire-fighting facilities available. At anchorage fire-fighting facility is provided by the tug.
Usual fire precautions applicable.
GANGWAY/DECK WATCHMAN: Gangway and deck watchman are recommended.
OPENING/CLOSING HATCHES: As arranged between the Master and stevedores.
SHIP'S CERTIFICATES: Registration; Safety Equipment; Safety Radio and Telegraphy; International Load Line.
CUSTOMS ALLOWANCES: As per Customs regulations in force from time to time at Indian ports.
CARGO GEAR: Ships should possess valid Cargo Gear Certificate.
CREW IDENTIFICATION CARD: Valid international passport or identification card necessary.
CONSULS: No consulates at port. Nearest consulates are at Bombay.
REPAIRS: No repair facilities exist for the ship except repairs of minor nature which could be undertaken by private repair firms.
DRY DOCKS: Small dry dock available for repairs of vessel of up to 200 ft. length.
REPATRIATION: Possible.
AIRPORT: Bhavnagar City is served by an airport situated about 7 km. from the Port. Regular flights to Bombay are available daily.
TIME: GMT plus 5.5 hours.
HOLIDAYS: 8 holidays in all in a year declared by Port Authorities on which working of the ship can be attended at the option of the port.
POLICE/AMBULANCE/FIRE: Police force and ambulance and fire facility available from Bhavnagar City. Limited fire-fighting facility available at port.
TELEPHONES: No facility is available for providing telephones on board the ships.
GENERAL: Port equipped with 3 berths having 6 cranes with 3 ton capacity. Cranes available for loading or discharging ship's cargo.
SHORE LEAVE: Citizens of The People's Republic of China and Pakistan not allowed ashore. All other nationals are allowed to go to Bhavnagar City which is 13 km. from port for which shore passes are issued by Customs Dept.
REGULATIONS: Photography in port prohibited. No crew member allowed to take liquour ashore.
DELAYS: Delays in berthing depend upon number of ships working on berth and awaiting if any. At anchorage generally not more than 2 ships are worked at a time.
DEVELOPMENTS: Intensified dredging operations are proposed to be undertaken for increase in drafts of the vessels berthing.

SHIPMASTER'S REPORT: April, 1981.
Bhavnagar discharging anchorage is a dangerous anchorage due to strong currents and an abnormal bottom.
All Shipmasters must make contact by cable 24 hours before arrival and await appointment from Port Authorities and pilot station. VHF not available and radio station working only during daytime.
All ships must arrive at pilot station, maximum 2 hours before HW and only during daytime and in good visibility, otherwise Pilot cannot board.
For many years anchorage was used for discharging, but now closed as about 300 anchor-chains remaining on bottom. In 1981, another anchorage opened, near to the port, and up till April, 4 ships lost anchors due to strong currents and irregular bottom. Contact with shore is very difficult and at night time impossible.
Our vessel was there for discharging and from 0300 hrs. when port anchor broke with 7 shackles of chain, up till 0700 hrs. we were waiting for tugboat from shore to pick up 100 stevedores, but was impossible. At 0700 hrs. we took ship out of dangerous area without Pilot and without any assistance, with 100 stevedores onboard.
To enter Bhavnagar Port, draft no more than 17 ft. and breadth no more than 65 ft., to pass the locks.

AUTHORITY: Office of the Port Officer, Gujarat Maritime Board, New Port, "C" Jetty, Bhavnagar Ports, Bhavnagar (Gujarat), India. Pin Code No. 364005. *Contact:* Captain T. P. Patel, Port Officer. *Tel:* 24302 (office), 23763 (residence).

BOMBAY: 18.56 N. 72.49 E. (See Plan Book)

PORT LIMITS: Vessel is considered to have "arrived" when Pilot is embarked and/or when vessel is required to anchor outside pilotage area awaiting a suitable tide, as in the case of large tankers.
DOCUMENTS: See "Calcutta".
Agents to submit berthing application 15 days prior to vessel's arrival together with cargo documents.

PILOTAGE: Motor pilot vessel *"Venu"* stationed Lat. 18° 51′ N., Long. 72° 49.5′ E. White, buff-coloured funnel, "Pilot" painted black capitals, exhibiting International Signals by day/night. Call sign "ATDZ".

Minimum advance notice 24 hours to Agents and Harbour Master through Bombay Radio (VWB) and 12 hours to pilot vessel on WT. Pilot vessel contacted VHF Channels 12, 14 and 16. In case pilot vessel not on station, vessels advised anchor at Pilot station, draft permitting, and wait instructions.

Vessels must not proceed beyond Sunk Rock inwards without a Pilot. Pilot normally boards/disembarks 1 mile E.S.E. of Prongs Reef Buoy. Whenever draft restrictions apply or a berth or anchorage is not available the Harbour Master will advise the correct time at which to approach the pilot station and vessels should stand off until such time. Deep draft vessels normally enter 2 hours before High Water.

ANCHORAGES: More than 60 anchorage berths radius 1,000 ft. with depths from 38 ft. to 14 ft.; of these two 38 ft.; 30 between 30 ft. and 35 ft.; 22 between 20 and 30 ft.; remainder below 20 ft. All anchorages safe.

RESTRICTIONS: According to state of tide and draft.

MAX. SIZE: Drafts are subject to dredging, rise of tides. Drafts every month are declared by Deputy Conservator.

Name of Dock	*Max. Normal Dimensions (ft.)*		*Max. Oversize Dimensions (ft.)*	*Remarks*
Indira Dock Basin Berths	LOA	625		
	Beam	85		
	Draft	29 to 30		
Ballard Pier Extention Passenger Terminal	LOA	750		Passenger vessels including 'Queen Elizabeth II'
	Beam	95		
	Draft	30		
Ballard Pier Mole Station	LOA	600		
	Beam	85		
	Draft	29		
Harbour Wall Berths	LOA	550		
	Beam	70		
	Draft	19/20		
Victoria Dock	LOA			
	By Day	460	460	
	By Night	400	400	
	Beam	62	65 Day only	
	Draft	19	19	
Prince's Dock	LOA			
	By Day	500	500	
	By Night	460	460	
	Beam	61.03	61.03 Day only	
	Draft	17		
Prince's Dock Harbour Wall New Ferry Wharf Berths	LOA	250		
	Beam	45		
	Draft	15		
Butcher Island Marine Oil Terminal	LOA	740	780	World Bank tanker size with certain conditions
	Beam	95	130	
	Draft	33.5 to 37 depending on tides and berths	31 to 32	
	Max. Displacement	70,000 tons	70,000 tons Day time only	
Pir Pau Pier Berth	LOA	560 day light	585	Under consideration
	Beam	85	95	Under consideration
	Draft	21		

Also see "Tankers".

PRATIQUE: The Master of every vessel calling Bombay from a foreign port must send the following particulars by cable to "Quarantine Bombay" 24 hours prior to arrival and request for radio pratique:

> AAA ports of loading BBB last port of call CCC date of departure DDD ETA discharging port EEE vessel's Maritime Declaration of Health is negative and total number of crew on board all healthy FFF vessel has not called at any port in East Africa between Northernmost point of Eritrea and Southernmost point of Tanzania including Zanzibar or any other yellow fever infected area within last 30 days GGG no unusual mortality of rats on board HHH no monkeys III no persons embarked at Aden or Djibouti.

If the vessel is coming from a yellow fever area, then the Port Health Officer boards the vessel for inspection before granting free pratique.

RADIO: Bombay Coastal Station, call sign VWB.

Information regarding weather will be broadcast at 0630 hrs. and 1030 hrs. local time on 2,000 metres.

Tankers: Radio Advice: Radio Agents 96 hours before arrival giving Master's name, ETA, draft, ports visited last 30 days, vessel's gross and net tonnage, present loaded displacement, distance manifold from amidships, cargo quantities on board gradewise, and, if Bombay last discharge port, "Load-on-top" data, vaccinations required, men for doctor and dentist, supplies and cash requirements. *Failure to comply with foregoing could incur berthing delays.* Confirm ETA 48 hours before arrival. Any subsequent changes to be notified to Agents.

Note: Agents Offices are closed from Friday 1730 hrs. IST to Monday 0930 hrs. IST. Week-end messages to be in by Friday afternoon.

If wheat, flour, rice or tea required, advise quantity required and balance remaining on board, as these are restricted items in India and notice is required to release them. Radio "Quarantine Bombay" 12 hours before arrival using Standard Quarantine Messages from International Code of Signals, if vessel has called at a Yellow Fever area port within the last 30 days, whether all on board have valid Yellow Fever Vaccination Certificates or if any contagious disease is suspected.

Radio Pilot as soon as possible giving ETA, draft and any subsequent changes in ETA to the pilot vessel; call sign ATDZ Frequency: 500 kHz, working range: 800 miles, watch keeping 0400 – 0600 hrs., 0800 – 1000 hrs., 1200 – 1400 hrs., 1600 – 1800 hrs. GMT on weekdays only. These messages are free of charge.

Bombay Port Trust operates a VHF Service on Channels 12, 14 and 16. Call Sign – "Harbour Control" on a 24 hour basis for berthing control purposes.

Agents can be contacted by Bombay Radio VHF Channel 26, and thence public telephone system.

Where for any reason such as adverse weather, a vessel does not anchor on arrival the Master should ensure that the Port Authority is advised of his arrival as vessels are handled on a first-come-first-served basis.

N.B.: A Naval Signal Station is situated on the extreme south end of Bombay Is. at Colaba Pt. and all ships entering or leaving port are liable to be called up by signal lamp. Masters are required to answer such signals by lamp should their ship be called up.

Also see "VHF".

RADAR/VHF: No port radar service. Shipmaster contacts pilot vessel by ship's radio or VHF on international frequencies. Channels No. 12 and 14 also available on VHF.

TUGS: 8 tugs, 900 h.p. – 1,200 h.p. Tugs join vessel when close dock entrance and assist undocking. Ship's and tug's lines used.

BERTHING: *Indira Dock:* 21 berths, able to handle cargo vessels up to 20,000 d.w.t. Average length of berth 150 m. Most berths are equipped with 1×6 ton crane and 4×3 ton cranes.

Victoria Dock: 15 berths, able to handle vessels up to 5,000 d.w.t. Average length of berth 110 m. Most berths are equipped with 1.75 ton and 1.5 ton cranes.

Prince's Dock: Length 1,560 m. of which 1,200 m. is available for handling cargo. There are 8 berths able to handle vessels up to 5,000 d.w.t.

Ballard Pier: Length 244 m., width 110 m., when converted will handle passenger vessels up to 30,000 g.r.t. and cargo vessels up to 22,000 d.w.t.

The extension at Ballard Pier will be the new passenger terminal and will receive passenger vessels up to 30,000 g.r.t. at any stage of the tide.

CONTAINER HANDLING FACILITIES: New container terminal at Indira Dock No. 1 and 12B and Ballard Pier. Total area 12 acres. 3×35 tonnes rubber tyred gantry cranes.

A new 35 ton gantry crane has been installed.

A second container gantry crane to be erected in 1985.

CRANES: *Quay side:* Electric and Hydraulic cranes available at Indira, Prince's and Victoria Docks.

Mobile Cranes: 56 mobile cranes with capacities up to 43 tons available.

Heavy lift: Electric crane of 60 tons and steam crane of 20 ton capacity.

Floating cranes: 2 available, 60 ton and 125 ton capacity.

STEVEDORES: Supplied by Dock Labour Board. Port Trust supplies shore labour for handling cargo including stacking in sheds.

MEDICAL: Hospital facilities available. Notice in sufficient time, depending on seriousness of case, to arrange for transport, hospitalisation, etc.

TANKERS: Reducing pipe connections available at jetty. Dirty ballast tank available at Marine Oil Terminal. 3 berths at Butcher Island and 1 berth at Pir Pau exclusive to tankers. For draft details see "Max. size".

Pir Pau can handle tankers up to 16,000 d.w.t. and the Marine Oil Terminal at Butcher Island can handle tankers up to 54,000 d.w.t. at 2 berths and 36,000 d.w.t. at the other berth.

Tugs/Mooring: Two tugs required for berthing. Conditions at Pir Pau during S.W. monsoon necessitate the use of heavy wire springs which are supplied by the Bombay Port Trust.

Double back springs are required at Butchers Island on account of the Strong Ebb stream experienced there. Prior to the start of the Ebb it must be ensured that both back springs and breast lines are taut.

Normal mooring lay out includes in addition 3 head/stern ropes and 2 breast ropes fore and aft. Moorings must be tended regularly in view of strong currents and unsettled weather.

Loading: Crude oil and refined products handled through 8 in. hoses.

In order to minimise connecting up time on Crude Oil carriers reducing pieces suitable to receive 10 in. hoses (maximum 4 hoses available) should be fitted to the manifold prior to arrival alongside. The Pilot on request will inform vessel which side to the ship will be berthed.

The shore will accept ship's arrival ullage figures taken without their representatives present if this is necessary in order to avoid delay in commencing discharge.

Loading white oil tankers involves considerable line-clearing.

Handling of packed cargo not permitted during the discharge of Low Flash bulk cargo.

Fuel: Fuel Oil, Diesel Oil and Gasoil available ex-wharf. Lubricants available.

Fresh Water: Unlimited quantity of drinking and boiler water available ex-wharf and by waterboat, loaded concurrently with cargo operations.

	Delivery Rate:
Butcher Island	30 – 35 t.p.h.
Pir Pau	5 – 6 t.p.h.
Alexandra Dock	12 – 15 t.p.h.
2 Port Trust waterboats (250 tons, 130 tons)	25 t.p.h.
4 Privately owned waterboats (150 tons each)	25 t.p.h.

Tank Cleaning/Dirty Ballast: Butcher Island Berth No. 2: Line 16 in. Max. quantity acceptable 4,500 tons. Rate 1,000 t.p.h. Clean ballast may be pumped overboard.

General: During the early part of the S.W. monsoon, when the wind is South of S.W. the sea runs from the South and Masters are advised to keep their ships heading East when making a lee for the Pilot.

Crude Oil vessels discharging at Butchers Island are often required to "pump over tide" to reduce their draft before the first Low Water after berthing hence vessel should be in all respects ready to commence discharge once mooring and connecting up are completed. Discharge over the first 4 hours should be planned to reduce vessels draft bodily.

Crew landing passes are issued, and these are to be returned before sailing.

New berth at Butcher Island (4th oil berth), completed April 1984. Berth will handle tankers up to 125,000 d.w.t. with 42 ft. draft.

Also see "Report".

DENSITY: The Port of Bombay is essentially a salt water port and major fluctuations in the density occur on account of tide. Density varies mostly in monsoon period June to September.

FRESH WATER: Available all berths. By water-boat in stream, by water-mains in docks.

Ship Officer's Report: Vessel berthed at Ballard Pier, East side. Fresh water availability on pier dependent on capacity of storage tank at the time of call. The water was not available continuously and we had to wait for the tank to be refilled.

FUEL: Arranged by oil companies through Agents. Facilities at berths in docks and Butcher Island berths. No bunker facilities for vessels at anchor.

FIRE PRECAUTIONS: All regulations of Petroleum Rules (chapter 1/50 of BPT Port Rules). Port maintains fire stations, 24 hours per day, both at docks and at Butcher Island Oil Terminal. Special precautions taken for tankers at Marine Oil Terminal at Butcher Island.

GANGWAY/DECK WATCHMEN: No deck watchman supplied. BPT gangways generally available all berths except Butcher Island and Pir Pau.

CERTIFICATES:

International Safety Equipment Certificate.
International Safety Radio Telegraphy Certificate.
International Safety Radio Telephony Certificate.
International Exemption Certificate (Deratisation).
International Load Line Certificate.

CARGO GEAR: Compliance BPT Port Rules and Docks By-laws essential. Hydraulic Quay Cranes, Electric and Heavy Lift Cranes, Floating, Mobile and Crawler Cranes all available.

IDENTIFICATION CARDS: Necessary for Police/Customs authorities.

REPAIRS: All repairs possible.

DRY DOCKS: Two: "Merewether" 525 ft. long, 65 ft. 6 in. wide. "Hughes" 1,000 ft. long, 100 ft. wide.

REPATRIATION: Can be arranged, also crew changes.

AIRPORT: International Airport Santacruz, 15 miles from Bombay Harbour.

TIME: Indian standard time ahead of GMT by 5 hours and 30 minutes. No alterations to clocks are made any time.

HOLIDAYS: Holidays for the docks (when cargo handling is closed) are fixed every year. Republic Day (January); Bakri-Id (February); Holi (2nd day) (March); Muharram (March); Maharashtra Day (May Day); Buddha Jayanti (follows May Day); Independence Day (August); Ganesh Chaturthi (September); Mahatma Gandhi Jayanti (October); Dasara (October); Diwali (November); Ramzan-Id (December); Christmas Day.

POLICE/AMBULANCE/FIRE: Police 100; Ambulance 102; Fire 101.

TELEPHONES: Arrangements for placing a telephone on board ship exist at all transit sheds in Docks.

SERVICES: Tank cleaning equipment is not available. Dirty ballast accepted in tank at jetty at Marine Oil Terminal.

REGULATIONS: Stringent Port Rules and Docks By-laws detailed in "Bombay Port Rules".

DEVELOPMENTS: Satellite port in Nhava/Sheva area approved (port to handle vessels up to 70,000 d.w.t., container and bulk cargoes) also new harbour near Sassoon dock for trawlers drawing 5.5 m.

SHIPMASTER'S REPORT: September, 1979.

Anchorage: If inner anchorage berths occupied then pilot station will inform of same and vessels to anchor in Anchorage "A" or "B" West of Prongs Reef Lighthouse. The prohibited anchorage area between the zones is due to pipes and cables of the Bombay High Oilfield. Patrol vessels "Sagarika I" and "Sagarika II" inform vessels if they are beyond anchorage limits and vessels should adhere to their instructions.

Radio: Call sign "VWB". 24 hours watch. HF & MF. Vessels with good transmitter can contact Bombay directly from Port Said or Cape Town or Singapore.

Radar/VHF: VHF Channel 16 for contact with Pilots and listening watch. Call Bombay Pilots or Bombay Harbour Control. Channel 12 is port frequency for berthing or shifting.

Hatches: Opening and closing of hatches, beams, hatch covers by Stevedores. All mechanically operated hatches opened and closed by ship's crew. Rigging gangs at Owners expense may be employed for these jobs.

Stevedores: 1st shift (0800 – 1700 hrs.), 2nd shift (1700 – 2300 hrs.), 3rd shift (2300 – 0500 hrs.).

Consuls: U.S.A., Australia, Belgium, A.R.E., France, Greece, W. Germany, Japan, Liberia, Norway, Sweden, U.K., U.S.S.R. and others.

Medical: Excellent medical facilities and hospitals.

Customs: Weekly allowance of 1 bottle spirit (700 ml.) and 200 cigarettes.

Specialised Cargo Handling Facilities: Ballard Pier Berth specially reserved for container and roll-on/roll-off vessels. Another container berth and container yard being formed at Berth No. 23 I.D. As Bombay Port not full geared for mechanical handling of cargo, advance information and notice will aid Agents in arranging for specialised services and fork-lifts. Good facilities for LASH system of cargo.

Surveyors: All surveyors available. Standard marine and general surveyors.

REPORT: Pir Pau Jetty (LPG), June 1984.

Pir Pau Jetty: Datum draft 19 ft. 4 in. for Max. LOA 525 ft. Pir Pau Channel datum 13 ft. 1 in. Max. rise of tide approximately 15 ft. No berthing/unberthing between sunset and sunrise.

Pipeline/discharging facilities:

1. Refrigerated cargoes acceptable, but due design limitation of pipe-line/tank volume cargo to be heated to −10°C. before discharge. Sea water temperature at Bombay during year 18° minimum to 23° maximum.
2. Pipe-line length 5 km. diameter 8 in. ASA 300 psi, no vapour return line available.
3. Max. discharge rate 120 tonnes/p.h. at back pressure 14.5 kg/cm. (abs).
4. Vessel to carry suitable hoses making length of 75 ft. for discharge keeping in view items (2) and (3) above and to be equipped with derrick.

AUTHORITY: Bombay Port Trust, Administrative Offices Building, Shoorji Vallabhdas Marg, Bombay-400 038. *Tel:* 268011. *Telex:* 011-2345. *Contact:* Harbour Master.

CALCUTTA: 22.32 N. 88.22 E. **(See Plan Book)**

DOCUMENTS:

Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derat Certificate.
Port Clearance from Last Port.
Indian Coast Light Dues Receipt (if any).
4 copies of Crew List.
4 copies of Passenger List.
1 copy of Through Cargo Manifest.
4 copies of Stores List.
1 copy of Cargo Manifest with B/Lading for the same.
4 copies of Opium and Dangerous Drugs Certificate.
Cargo Plan.
Cargo on Deck declaration.
4 copies of Certificate of Foreign Currency.
4 copies of Certificate of Arms and Ammunition.
Letter to Assistant Collector of Customs regarding Local Agency.
Letter to Assistant Collector of Customs regarding duty on ships stores.
Application to the Inspector of Police.
3 copies of Arrival Report.
4 copies of Watches and Clock List possessed by each member of the crew.

PILOTAGE: Telegraphic address of Pilot station: VWST "Pilots Sandheads". Radio message should be sent 48 hours prior arrival giving (a) ETA Eastern Channel Lt. Vs.; (b) from . . . to . . . (either Haldia, Budge Budge, or Calcutta); (c) deepest *fresh* water draft; (d) length overall; (e) g.r.t.; (f) whether VHF is or is not on board.

Pilot boards vessel at Sandheads from pilot vessel fitted with W/T, DF, VHF, radar, echo sounder and other navigational equipment, maintains continuous watch on 500 kHz. (600 m.) and receives ETA messages of incoming vessels.

As an aid to navigation, navigable channel in river is marked with lights and channel buoys. There is a lighthouse at Sagar and downstream from this point, 2 unattended Light Vessels are stationed at Upper Gasper and Lower Gasper and 2 attended Light Vessels at Intermediate and Eastern Channel Stations. Navigable channel leading to Haldia Port from sea is 63 nautical miles and to Calcutta about 123 nautical miles. There are 15 bars in different reaches of the river, 4 of these are downstream of Haldia and the remaining 11 between Haldia and Calcutta. Since these bars are subject to fluctuations, the river is regularly surveyed and dredged as required. Owing to sharp bends, narrow channel and difficult tidal conditions the navigation of ships between ports and sea requires service of trained Pilots employed by The Port Trust. River Pilots take charge of vessels at Sandheads, navigate to Haldia/Garden Reach as the case may be and then hand over to Harbour Pilots who manoeuvre vessels to Haldia Dock or riverside jetties, moorings, or dock entrance lock at Calcutta. Movement of ships inside docks is guided by Berthing Master.

Shipmaster's Report: December 1983.

Procedure for sending ETA Sandheads Calcutta: Vessels calling at Calcutta should, along with their ETA messages to the Commander Pilot Vessel, Sandheads, also indicate the Owner's/Agent's name and only then will Master's ETA message be recorded, otherwise vessel will not be treated by Calcutta Port Trust on arrival at Sandheads for further coming up river to the port.

ANCHORAGES: Anchorage in River Hooghly at Saugor Roads, Halida Kalpi, Diamond Harbour, Royapur, Ulubaria and Garden Reach of which Royapur, Ulubaria and Garden Reach utilised only by ships on passage to and from the port in emergency. Depths of anchorages vary on day to day basis according to River Draft Forecast but on average 30 ft. deep.

RESTRICTIONS: Navigation on River Hooghly is carried out only with Pilot on board and according to tide. Speed of vessel important factor and must be declared to Pilot on board, preferably telegraphed 48 hours in advance to Pilot vessel.

MAX. SIZE: Maximum LOA 565 ft. with beam of 80 ft. for Netaji Subhas Docks and 515 ft. LOA with beam of 70 ft. for Kidderpore Docks. A vessel of 535 ft. and over can sail out as "Tide Time Sailing" only and this restricts her draft from Calcutta.

Maximum LOA of tankers for tanker terminal at Budge Budge is 620 ft. Restriction of beam for vessels berthed at Baj Baj is 85 ft. Deepest draft alongside dock berths in Netaji Subhas and Kidderpore Docks 8.70 m. At Budge Budge deepest draft at any berth 9.00 m. Berthing of vessels, depends on prevailing draft of day published in Draft Forecast for month.

PRATIQUE: Procedure for obtaining pratique: To obtain Radio Pratique incoming vessels communicate by wireless to Port Health Officer, Calcutta, Cable address: "Quarantine Calcutta":

(a) No sickness or death from sickness on board within last 15 days.
(b) No sand, earth, pig, poultry, crew or passenger taken aboard from E. Coast of Africa between Port Sudan and Durban, both ports included.
(c) Ship not touched within last 30 days any port in E. Africa between Northernmost point of Eritrea and Southernmost point of Tanzania, including Island of Zanzibar or any other yellow fever infected area.
(d) No abnormal mortality of rats or mice on board.
(e) No monkey on board.

(Item *(a)* to be sent in code under usual standard quarantine messages required by ships; rest in plain language through local wireless station.)

In case of any suspected disease or fever on board, local Agents may be contacted by cable who arrange for doctor to be sent or for removal of a patient if necessary. Vessels calling at another port in same country are exempted from obtaining pratique.

RADIO: Calcutta Radio, call sign VWC. R/T. and VHF.

Information regarding weather distributed at 1030 and 0630 hrs. local time on 2000 metres.

Also see "Pilotage".

TUGS: 15 tugs, 550 hp. – 2,200 hp. Tugs used for vessels after passing lock entrances at Netaji Subhas and Kidderpore Docks. Tugs used for vessels to turn. Vessels own lines. At Garden Reach sailing on ebb tide for "Tide Time Sailings".

BERTHING: Vessels brought in for berthing according to tide. Movements from one berth to another inside dock not dependent on tide, but according to convenience of port. Vessels berthed at riverside jetties or river moorings required to have starboard anchor unshackled in order that starboard chain could be tied to buoy on arrival. After first chain is shackled on, port anchor is unshackled and 2 pieces of chain, each 30 fathoms long are removed from port cable and sent aft by boat and made fast to buoys, etc., and tied to stern of ship. The remaining port cable is tied up to another buoy forward. Vessels at river jetties and river moorings if left during Bore Tide are to comply with following:

Half an hour before low water:

(a) Gangway to be hoisted up, if ashore.
(b) Pipe-lines disconnected and triced up (for vessels at Budge Budge Jetty).
(c) Heave tight on forward chains to keep vessel about 6 ft. off jetty or pontoon. Make sure weight is on bore springs and not on chains aft.
(d) Tighten all buoy ropes.
(e) When bores expected, all vessels in stream shall have steam on main engines, windlasses and winches and a sufficient number of officers and crew on board to tend vessel in case of emergency.

After bore made, and vessel stopped ranging, slack forward chains to old mark. Bore springs could be had through Agents from local suppliers.

Baj Baj (oil terminal) on banks of River Hooghly has river jetties, hence above instructions also apply to vessels berthed at Baj Baj Jetties.

At Baj Baj two lengths of chain provided by Port Trust for stern moorings.

Kidderpore Dock: Lock entrance: 580 ft.×80 ft. 19 general cargo berths. 2 coal berths, of which one is fully mechanised. Peak loading rate 400 m.t.p.h.

Netaji Subhas Dock: Lock entrance: 700 ft.×90 ft. 8 general cargo berths, No. 1 berth equipped with 200 ton heavy lift crane. One oil berth, Berth "C", used for unloading petroleum products. 6 additional berths available.

Garden Reach Jetties: 2 alongside berths.

Budge Budge: Also see "Tankers". 6 jetties which can accommodate vessels up to 625 ft. (190.50 m.) LOA.

Jetties were previously used mainly for petroleum products for which large storage tanks are available. With the commissioning of the Indian Oil Refinery at Haldia, movement of products by large tankers has been transferred.

These jetties are presently available for handling bulk liquids like edible oil, vegetable oil, soya bean oil, etc., for which separate storage of 59,000 m.t. capacity is under control of the State Trading Corporation.

BRIDGES: 2 bridges, 1 collapsible, 1 swing, situated inside Kidderpore Dock are open for navigation to suit convenience of port.

STEVEDORES: 48 hours notice of arrival at pilot station required by Agent.

MEDICAL: Masters in need of medical services required cable Agents. Hospital facilities. Ships leaving for foreign port or minor Indian port (where no Port Health Officer) required to ensure officers and crew have valid health certificates (for cholera and yellow fever if proceeding to a yellow fever area).

TANKERS: Not permitted discharge residue into dock (at C berth Netaji Subhas Dock).

S.G.	A.P.I. of local types of oil
0.91 and 0.94	0.9430 varying to 0.9550.

Tanker terminal at Baj Baj 13 nautical miles from Calcutta by river.

BB Jetty No. 1 for accommodating vessels of OAL				620 ft.
„ No. 2	„	„	„	430 ft.
„ No. 3	„	„	„	230 ft.
„ No. 5	„	„	„	620 ft.
„ No. 6 out of commission				
„ No. 7	„	„	„	510 ft.
„ No. 8	„	„	„	620 ft.

Deepest draft alongside jetty berths 9.0 m., but vessels brought up according to prevailing draft as per forecast.

Berthing: Vessel is moored Starboard side to at Budge Budge as follows: Port Anchor to about 6 shackles on the Port bow with the ship's Starboard cable shackled to the shore cable on the Starboard bow. 2 shore cables made fast round the bitts are used aft. These cables are crossed. An experienced shore Mooring Gang boards vessels to assist in berthing, and these men require very little help from the Ship's Crew. The operation generally takes about 1.5 to 2 hours.

The sequence is as follows: The Port anchor is dropped well off and up-stream of, the Pontoon, on the first of the Ebb tide. The vessel's bow is then swung into the forward in-shore mooring buoy by a mooring rope. This buoy is then brought close under the bow whilst the Starboard ship's cable is made fast to the shore cable. For this purpose, the Shore Mooring Gang, will, on first boarding, hang off the Starboard anchor, through the hawse pipe, leaving the first 15 fathoms of cable flaked on deck. Ship's wire rope (100 mm.), should be available for hanging off, together with 75 mm. rope, quantities will be advised by the Berthing Master for lashing the cable.

When the forward cable is fast, the stern is swung, again using mooring and are made fast round the two bitts. 75 mm. (3 in.) rope lashings will also be used here. On completion of making fast the after cables, the vessel is hove into position by the windlass. The mooring ropes are made fast to the two quarter and two bow mooring buoys and are again used when the shore Gang board to break moorings prior departure. To avoid any chance of delay in mooring, the vessel should ensure that the first shackle of her Starboard cable is free prior to arrival, and should have three joining shackles ready for use in case these are required. One ship's wire will be required forward, for hanging off the anchor, and two aft, for heaving on board the ends of the shore cables. Although the shore Mooring Gang have their own shackles, etc., at Budge Budge, it is necessary for the ship to provide a drift punch and heavy hammer for breaking the cable.

It should be noted that at Calcutta itself there are not enough shore chains to provide moorings to all vessels using the port, and in these cases vessel's Port anchor cable will be broken to provide the after moorings. All the Budge Budge Berths, however, are supplied with sufficient cables. These latter cables are anchored to swamped moorings at each berth.

During the period of Bore Tides, the above moorings may have to be supplemented by coir ropes supplied by Burmah-Shell. In such cases, and in the event of the cable moorings requiring attention during the vessel's stay at Budge Budge, the local Harbour Master, or his assistants will advise the vessel.

Shore Lines: All products handled through 150 mm. (6 in.) or 200 mm. (8 in.) hoses.

Restrictions: Handling of packed cargo not permitted during the discharge of Low Flash bulk cargo.

Fuel: Fuel oil, Diesel oil and Gas oil available ex-wharf at Budge Budge and by lighter. Lubricants available.

Fresh Water: Not available.

Tank cleaning/dirty ballast facilities: Line 100 mm./250 mm. (4 in./10 in.). Max. quantity acceptable 130/170 tonnes. Rate 60/100 t.p.h. Limited facilities for various grades. Clean ballast may be pumped overboard.

General: A continuous and strict watch especially during the hours of darkness, should be kept on the vessel, both when anchored or in the berth, in order to prevent unauthorised persons boarding the vessel.

DENSITY: Average density in port is about 1000.

FRESH WATER: Fresh water on application from Masters or Agents and preferable if at least 48 hours' notice given. Supplies through barges and direct from quay line.

FUEL: Redwood 600/700 sec. supplied at Calcutta and require at least week's notice for supplying vessels lying inside dock. Fuel also supplied at Budge Budge terminal, 3 days notice to suppliers and Port Authorities.

FIRE PRECAUTIONS: Usual non-smoking precautions and Master, Owners, Charterers or their Agents of vessels carrying import cargo or intending to load export cargo of hazardous or inflammable nature, furnish 6 copies of list of cargo involved to Traffic Manager in prescribed form, at least 10 days before vessels intend to land or ship cargo. Traffic Manager on receipt of list, categorise items enumerated in list and landing delivery and storage of such cargo be done strictly in accordance with instructions.

GANGWAY/DECK WATCHMEN: Necessary and recommended by Agents at rate of 3 watchmen per shift of 8 hours.

OPENING/CLOSING HATCHES: Normally undertaken by stevedores, unless specifically mentioned that same will be attended to by crew.

CUSTOMS ALLOWANCES: 0.25 lb. tobacco and 200 cigarettes. Wine and/or Spirit: 1 bottle of wine or spirit per head for consumption on board.

CONTRABAND: Regulations provide that a vessel shall be liable to confiscation which is or has been in Indian Customs' waters where constructed, adapted, altered or fitted in any manner for the purpose of concealing goods.

The act also provides for a fine in lieu of confiscation which could in theory be up to the value of the vessel.

Indian Customs Authorities regard vessels as subject to the regulations if they have any alterations to the normal structure of the vessel or its fittings which is not of operational value, e.g. holes cut in panelling (over bulkheads) which are frequently found concealed from view behind cabin furniture such as settees, bunks desks, wardrobes, etc. Customs invariably impose fines for such cavities even though empty of about Rs. 5,000/- for 1 or 2 cavities and increasing if more cavities are found. Fines would be substantially higher if cavities in fact contained contraband.

To minimise fines it is essential that Shipowners should instruct their Masters to organise periodic anti-smuggling searches of all accommodation and other places in the vessel by ship's officers with a view to locating any cavities or contraband and such searches, and results thereof, should be logged. Furthermore, the Customs Authorities invariably obtain a statement from the occupant of the cabin whether instructions had been issued by the Owners or Master for each officer crew member to search his own cabin for cavities or hiding places or other unusual or irregular tampering with the normal structure of the cabin and to report to the Master any such cavities, hiding-places or such other unusual tampering found at any time whilst serving on the vessel.

If no such instructions have been issued, the Customs generally regard the Owners/Master as failing to take proper anti-smuggling precautions and the risk of increased Customs fines arises.

It is suggested that appropriate instructions should accordingly be issued without delay by all Masters to their officers and crews and that each officer or crew member should acknowledge receipt in writing of such instructions. It is also emphasised that such instructions should also be notified to any officer or crew member who joins the vessel after first issue of the instructions to the existing officers and crew.

CARGO GEAR: Proof of cargo gear tested by a competent authority required.

IDENTIFICATION CARDS: Not necessary if holding seamen's books or passport.

CONSULS: (Telephone Numbers)

Australia	22–1554	Nepal	45–2024
Belgium	44–3886	Netherlands	23–4442
Bolivia	23–5615	Nicaragua	44–1329
Brazil	45–2120	Norway	22–4094
Burma	22–7071	Pakistan	44–5208
Czechoslovakia	46–4542	Panama	47–6765
Denmark	23–4069	Peru	23–2331
Dominican		Philippines	22–0514
Republic	55–5067	Poland	44–7144
Egypt	45–4168	Spain	23–5539
	and 45–2507	Sweden	23–2243
El Salvador	55–7392	Switzerland	44–8039
Finland	22–4602	Thailand	46–0837
France	23–2958	Turkey	34–2770
Greece	23–5615	USSR	44–2006
Haiti	34–2673	UK	44–5171
Italy	45–1411	USA	44–3611
Japan	44–5455	Venezuela	23–5615
Liberia	46–1164	Yugoslavia	44–6881

REPAIRS: All types of deck and engine repairs undertaken.

DRY DOCKS: 5 dry docks owned by Port Trust available. 3 in Kidderpore Docks and 2 in Netaji Subhas Docks, dimensions as follows:

Dry Dock (Kidderpore) (1) 547 ft.×69 ft.×25 ft. (2) 497 ft.×69 ft.×27 ft. (3) 350 ft.×60 ft.×23 ft. (max. length/beam of vessel allowed. No. 1: 515 ft.×64 ft. No. 2: 500 ft.×64 ft. No. 3: 335 ft.×48 ft.)

Dry Dock (Netaji Subhas) (1) 581 ft.×80 ft.×22 ft. (2) 596 ft.×80 ft. ×22 ft. (max. length/beam of vessel allowed. No. 1: 565 ft.×75 ft. No. 2: 565 ft.×75 ft.)

Netaji Subhas Dry Docks arranged in tandem and used as one dock. Power supply, compressed air and fresh and unfiltered water supply, hydraulic capstans for propeller work and cranage service including heavy-lift available all dry docks. Each dock provided with automatic telephones for use on board ships.

REPATRIATION: Facilities exist for effecting crew changes and arranging any necessary repatriation.

AIRPORT: 12 miles; served by regular international airlines with minimum 1 flight per day.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Closed Holidays (when no work is permissible): Independence Day, Republic Day, Gandhi's Birthday, Vijaya Dashami and Kali Puja.

Holidays when double wages payable: Saraswathi Puja, Netaji's Birthday; Idul Fitr, Dholjatra, Muharram, Bengali New Year, May Day, Fateh Duaz Dahan, Durgapuja, Guru Nanak's Birthday, Id and Christmas Day.

POLICE/AMBULANCE/FIRE: Police (port) tel. 45–1701 and ask Port Police or dial 100; Ambulance dial 102 or 45–4163; Fire dial 101 or 45–1701 and ask Fire Fighting Service.

TELEPHONES: No arrangements for installing telephones on board, but use of telephones from Port Trust's/Superintendent's Office on each dock.

GENERAL: *Important:* Masters of vessels in port should ensure that vessel's engines are not immobilised without prior permission of the Harbour Master.

SERVICES: Tank-cleaning equipment with minimum notice of at least 7 days. Discharge of tank-washings not permitted while vessels lying in dock. Compass and radar technicians available.

SHORE LEAVE: Seamen permitted to go ashore after cleared by Immigration Officer boarding vessel on arrival. In case of Chinese, special permission to be obtained from Immigration Authorities, through vessel's Agents.

REGULATIONS: Booklet "Dock and Jetty Handbook" supplied free by Port Trust to incoming vessels.

DELAYS: Delays occur during monsoon.

DEVELOPMENTS:

1. Container terminal (Netaji Subhas Dock) with related facilities to be set up (study underway). The aim being to increase capacity from 21,000 containers per year to 200,000 containers.
2. 11 new cranes and 16 fork lifts to be purchased.
3. Dredging (maintainance – deepening) of river to allow deeper draft vessels into Calcutta and Haldia.

SHIPMASTER'S REPORT: September,1979.

Approaches: When approaching Calcutta from South Sri Lanka it would be advisable to pick up False Point Light and then proceed to Eastern Channel Light Float at Sandheads for Pilot. During the S.W. monsoon vessels encounter long spells of overcast skies and rain hence vessels should pick up Dolphin Nose Light at Vishakhapatnam then coast up to False Point Light before branching off to Eastern Channel light vessel.

Pilotage: Pilots board at the Sandheads. For picking up Pilots from the pilot vessel, vessels will have to approach close to the Pilot, stern to stern. Separate accommodation has to be provided for Pilot.

Restrictions: None for vessels below 22 ft. draft. Those between 22 ft. and 24 ft. 6 in. may have to wait for Spring tide for entrance and departure. However, Hooghly River Authority publishes a booklet every month stating the draft restrictions for entry into Calcutta.

Berthing: Whilst entering locks, passing through cuttings and berthing, vessels should have good fenders rigged 2 ft. above the water to prevent dents and scrapes to the hull. The Port is not equipped with fenders. The coal berths at Kidderpore Docks are old. Masters should exercise caution when coming alongside these berths for waiting or loading. For tying up to riverside moorings both anchors have to be unshackled. Starboard cable lead to port buoy and port cable to starboard buoy in a cross fashion. At the stern vessels with stern cables will have to follow the same as forward. Over and above, ropes and tackles will have to be rigged for taking the initial stress of the bores before strain comes on the cable.

Tying up the vessel to the buoys at the riverside moorings can be aided by experienced shore mooring gangs at Owner's expense.

Radar/VHF: No Radar. VHF Channel 16 for contact with pilot boat or by W/T.

Customs: Very stringent about cargo particulars.

Cranes: One heavy lift quay side crane of 200 tonnes. Berths 2–5 at NS Docks fitted with electric 5 tonne cranes. Berths A & B of NS Dock and Berths 2–11 of Kidderpore Dock fitted with 3–5 tonne electric cranes of 90 ft. radius for overside discharge/loading.

Hatches: Wooden hatch boards and beams by stevedores. Mechanically operated or other hatches by ship's crew. Rigging gangs may be employed at Owners' expense.

Stevedores: 1st shift (0630–1530 hrs.) 2nd shift (1530–2230 hrs.) 3rd shift (2230–0530 hrs.).

Medical: Very good hospitals and nursing homes.

Specialised Cargo Handling Facilities: Containers can be loaded and stuffed aboard. No Roll-on/Roll-off facility.

Surveyors: A.B.S., I.R.S., L.R.S., G.L., N.V. and others. Standard marine, cargo surveyors and general surveyors also available.

General: Vessels navigating the Hooghly River should be very careful about river thieves who will board the vessel whether stopped or at anchor or making way at full speed.

AUTHORITY: Calcutta Port Trust, 15 Strand Road, Calcutta – 700001, India. *Tel:* 223451 (16 lines). *Telex:* Portcom CA 7336. *Cables:* Portcom. *Contact:* Director, Marine Department.

CALICUT: 11.15 N. 75.46 E.

PORT LIMITS: The seaward (Westward) limit of the port is the 9 fathom line.

DOCUMENTS:

Register.
Articles of agreement in the case of foreign-going vessels staying in port for more than 48 hours.
Nominal list of crew and passengers and the A & B Certificates.
Bill of Health in the case of a vessel arriving from an infected port.
Clearance from last port.
Port and Light dues receipts.
Vessel's manifest and any other document, which may be necessary.

PILOTAGE: No pilotage available.

ANCHORAGE: Anchorage is about 3 miles offshore. Mud – good holding ground.

HEALTH: In the case of all infected vessels Health Officer proceeds aboard, and in the case of all other vessels Health Officer may proceed on board and examine vessel. Master shall give every facility for examination of passengers, crew, personal effects, cargo, provisions, water-supply and any part of vessel Health Officer considers necessary to examine. Health Officer may require written declaration from medical officer (if any) of vessel or from Master (or from both) stating whether any death or sickness from an unknown or suspicious cause or any case of any disease occurred on board either during voyage or before departure, and whether any unusual mortality has been observed among rats on vessel. If Health Officer satisfied that such deaths or cases of sickness as may have occurred were not due to any of diseases specified he shall permit vessel to proceed to usual place of anchorage or berth in harbour and to discharge passengers and cargo without further restriction. Inspection by Health Officer not between sunset and sunrise except in unusual circumstances.

RADIO: Messages through Cochin Radio or Mangalore Radio.

SIGNALLING: The signal station is situated close North of the lighthouse. The station is manned 24 hours a day.

TUGS: 4 motor tugs for towing lighters.

BERTHING: No berths.

CRANES: Fixed wharf cranes with capacity of 3 tons – 10 tons on the piers.

STEVEDORES: Arranged through Agents and stevedore contractors.

MEDICAL: General Hospital and Medical College Hospital situated about 1 mile and 5 miles away respectively.

DENSITY: Sea water – 1025.

FRESH WATER: Can be supplied by port tug, max. 15 tons per day.

FUEL: Available. Small quantity of 30 tons can be provided, 48 hours notice required.

CERTIFICATES:

Registry.
Radio Telegraphy.
Safety Equipment.
Load Line Certificate.
Certificates of Competency of Master and other officers.

IDENTIFICATION CARDS: Necessary.

CONSULS: Nil.

REPAIRS: No facilities.

DRY DOCKS: Small slipway at Beypore.

SURVEYORS: The Port Officer at Calicut undertakes private surveys.

AIRPORT: Construction of airport at Calicut is under consideration by the Government. Nearest airport at Cochin, 150 km. South of the port.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Holidays declared by the State Government are holidays for the port. Cargo work can be arranged on holidays.

FIRE/AMBULANCE/POLICE: Police 100; Ambulance 100; Fire 100.

GENERAL: Ship-to-shore signalling is normally by morse light.

SHORE LEAVE: Permitted.

DEVELOPMENTS: Dredging commenced at Beypore and expected to be completed within a year or two and then ships of 18 ft. draft can be berthed alongside. Breakwater under construction and additional wharf under consideration at Beypore.

AUTHORITY: Port Officer, Calicut.

COCHIN: 09.58 N. 76.15 E.

PORT LIMITS: *Seaward Limits:* 9 nautical miles Westwards between the following 2 positions:

(a) Lat. 10° 02′ N., Long. 76° 03′ 27″ E.
(b) Lat. 9° 55′ N., Long. 76° 06′ 00″ E.

DOCUMENTS:

7 Crew Lists.
7 Passenger Lists.
1 Last Port Clearance.
4 Store Lists, including List of arms and ammunition.
5 Passengers' and Crew Personal Effects Declarations.
4 Cargo Manifests.
3 Cargo Certificates.
3 Deck Cargo Certificates.
3 Opium Certificates.
3 Currency Declarations.

PILOTAGE: Berthing arrangements, booking of Pilot, etc., normally done by Agent. Advisable send ETA messages at least 48 hours in advance to Agent. Amendments to ETA messages must be sent at least 12 hours in advance. ETA messages may also be sent to Harbour Master, Cochin Port Trust. Messages should contain time and date of arrival at Outer Roads in IST and also draft fore and aft (in salt water). 30 minutes before arrival at Fairway Buoy the Port Control to be contacted on VHF for instructions.

No Pilot vessel on station in Outer Roads. A pilot boat with red hull and white superstructure exhibiting the normal International Pilot Signal comes out to Outer Roads for embarking and disembarking Pilots. No special light or sound signal need be made for Pilots. All ships awaiting Pilot in Outer Roads must have engines ready at all times to enter harbour (unless instructed otherwise). Masters should ensure that a good pilot ladder with 2 manropes is lowered about 2 ft. above water for embarking Pilots. Also while embarking Pilot, lifebuoy must be kept handy, and a good lee given. Pilots must be escorted from and to the bridge, to the embarkation deck. Also see "Restrictions".

ANCHORAGE: Cochin Roads is open anchorage with good holding ground of oily mud. Masters are required to anchor vessels in Westerly area from North to South of Fairway Buoy within radius of 0.5 miles. Deep-drafted vessels may anchor in a Westerly direction from Fairway Buoy within a distance of 0.5 to 1 mile. To facilitate entry and departure of deep-drafted ships, Masters not to anchor in line with direction of main channel, Westward of Fairway Buoy.

RESTRICTIONS: Unless otherwise *specifically* instructed, vessels not to enter main channel at any time without Pilot on board. Pilotage compulsory for all vessels over 100 tons gross. No night entry for crude oil tankers.

MAX. SIZE: Maximum size of general cargo ships presently handled is 700 ft. LOA with max. draft 30 ft. *salt water.* Such ships taken in only during slack ebb. Tidal Conditions: In Cochin Port ebb and flood begins to run 2 to 2.5 hours after HW and LW. During monsoons, freshets are encountered and there may not be any flood for several days.

New Tanker Berth: Max. size 115,000 d.w.t. with part cargo. Max. draft 35 ft.

PRATIQUE: When a ship arrives at an Indian port, the Pilot who boards to bring vessel into harbour is authorised to give Free Pratique to healthy ships. The only exception to this procedure is if a vessel is arriving in India within 30 days of calling at 'Yellow Fever port' the vessel is put in quarantine and she is granted Free Pratique *only* after the Port Health Officer has boarded and satisfied himself that all persons on board are in possession of valid certificates against Yellow Fever and after conducting Mosquito Survey.

Once a ship has been granted Free Pratique at an Indian port, it is not necessary to apply for pratique at any subsequent Indian port she may proceed to which is automatic pratique.

Part I. The complete message comprises two parts. The first part embodying the code group on page 126 (Radio Quarantine Reports) from ships at sea e.g. ZS, ZT, ZU, ZV, etc.

Part II. The second part is in plain language and the following information must be given:

A. (i) Expected time and date of arrival in the port.

(ii) List of ports of call with dates of departure within 30 days period prior to arrival at the Indian port.

OR

'Called at' 'not called at' any port in West Coast of Africa from Senegal to Angola and Ethiopia, Somalia, Kenya or Tanzania, Brazil, Peru and any other countries North of these in South America including Trinidad, Tobago, Venezuela, Panama, Surinam, Guyane, Guatemala, Bolivia, Belize, Colombia, Costa Rica, Ecuador, Guinea, Nicaragua, etc. within 30 days.

(iii) Whether any monkeys on board.

(iv) Whether any person/crew taken aboard at Djibouti or Aden (if the ship has touched either of these ports).

(v) Number of crew and vaccination status.

(vi) Maritime Declaration of Health Questions. Whether negative 'ZT' or positive (indicated by compliments – 'ZU') as the case may be.

(vii) The message must finally embody the phrase 'Request Radio Pratique'.

B. Additional information: Name of Agent. Request for 'Radio Pratique' must also include the name of the ship's Agent in the quarantine message. The message should be sent when the vessel is not more than 12 hours and not less than 4 hours from the Indian port. If the expression 'Request Radio Pratique' is not used but the complete message outlined above has been sent in that specific form Free Pratique will be granted by the Pilot provided that 'all is well' aboard. The message should be complete, timely and specific otherwise Radio Pratique cannot be granted.

In addition to the quarantine message the Maritime Declaration of Health must always be completed and presented to the Pilot, Port Health Officer or other authorised person immediately on arrival. On verification of Maritime Declaration of Health if it is found that quarantine message sent by the Master of ship is defective then Port Health Officer has the right to cancel the radio pratique granted earlier.

Port Health Officer usually inspects all incoming ships coming from foreign ports to Indian ports and also carries out health and sanitary inspection and if satisfied gives free pratique on board the ship and certificate of clearance to sail out from Cochin port.

Note: Masters are requested to check this information with the Agents in individual Indian ports and advise us without delay, if these instructions are at variance with local requirements.

Special Reservations for India:

1. Ships having other infectious diseases besides diseases subject to the regulations, e.g., Chickenpox, Measles, Mumps (Epidemic Pariotitis), Cerebrospinal Meningitis, Whooping Cough, Malaria, Paralytic Poliomyelitis, Influenzal Pneumonia or any crew/passenger having temperature of 100°F or more for more than 2 days which is accompanied by rash, jaundice, glandular swelling or diarrhoea severe enough to interfere with normal activities should inform 'Quarantine' Cochin by message and to be brought in under QQ flag in day time and red and white light at night. Port Health Officer will board such ships and grant Free Pratique after observing health formalities.

2. Ships having passenger/crew originating from or embarking at ports of Djibouti, Massawa, Aden or Yemen and arriving within 14 days of departure from the said ports should inform 'Quarantine' Cochin and the ship to be brought in under QQ flag. Port Health Officer will board such ships and grant free pratique after observing all health formalities.

3. Healthy ships touching Aden or Djibouti and coming to Indian ports within 6 days without any passenger or crew embarking at Aden or Djibouti, should hoist 'Q' flag on approaching the port limit. The boarding Pilot in such cases shall grant Free Pratique to the ship.

If passengers or crew embarked on a ship either at Aden or Djibouti and the ship arrives at Indian ports within 6 days, such ship is required to hoist 'QQ' flag and Port Health Officer is to board the ship to eliminate the risk of Yellow Fever and grant the ship Free Pratique.

Master of such ships should send quarantine message to the Port Health Officer before arrival at the port. This message should be sent not more than 12 hours and less than 4 hours before arrival.

4. Ships carrying monkeys from Yellow Fever area and coming to Indian ports within 31 days to be brought in under 'QQ' flag and Master should send quarantine message positively. Port Health Officer will board such ships and grant pratique after observing health formalities.

5. Any ship carrying dead body, Master should send cable. Port Health Officer will board the ship to investigate the cause of death whether due to any diseases subject to the Regulations.

RADIO: Cochin Radio operates 24 hours daily, call sign VWN, however its range is limited to about 300 miles only. ETA messages may be routed through Bombay or Madras Radio which stations are directly linked with Cochin telegraphically.

VHF: VHF sets are installed in all port pilot launches, tugs, dredgers and at the Port Control Station in Harbourmaster's Office. Channel 16 is used for calling and Channels 14, 12 and 10 are available for communication. Ships awaiting berthing should maintain listening watch on Channel 16 at all times. Information regarding berthing would be generally available from Port Control at 0600 hrs., 1330 hrs. and 1800 hrs. daily. Cochin Radio maintains a VHF service which can be linked to shore telephones anywhere in India. This facility is available only between 0200 and 1400 hrs. GMT. Contact made on Channel 16 and then Channel 26 for conversation.

TUGS: Presently 3 tugs; one of 1,500 h.p., one of 1,400 h.p. and one of 1,000 h.p. An additional high powered tug, 30 tonnes bollard pull is also available. Tug's wire or ship's rope may be used at the discretion of the Pilot.

BERTHING: If particular ship required arrive at certain time, Agent informed in advance.

CARGO HANDLING: Modern systems of cargo handling such as pre-slinging, palletisation and containerisation are commonly used. The port has at present 28 wharf cranes with capacity varying from 3 tonnes to 10 tonnes, 9 mobile cranes of 10 to 40 tonnes capacity, 52 forklift trucks of 2 to 2.7 tonnes capacity and 1 floating crane of 120 tonnes capacity, 3 high powered tractors each of 180 h.p., 19 semi-trailer chassis, (10 with payload of 40 tons, 9 with payload of 20 tons) and 5 ordinary tractors and 11 trailers for cargo handling operations.

There are 8 general cargo wharf berths, 2 coal berths, 1 boat train pier jetty, 2 tanker berths, 1 open berth and 2 low wharves and 11 stream moorings. Interim facilities are also provided for handling fertiliser raw materials. Ro-Ro ships and container ships are also handled. Quay 9 open berth is being converted into a full-fledged container berth with sufficient back up area, power plug points for reefer containers, freight station etc. At present container ships use their own derricks.

STEVEDORES: Booking of gangs undertaken by Agent on receipt of ETA message.

MEDICAL: Medical attention easily available in Cochin. If medical attention required immediately on arrival, Agent to be informed when sending ETA. Valid inoculation and vaccination certificates against Cholera and Yellow Fever are essential.

Medical advices if required on high seas to be communicated to 'Quarantine' Cochin. Harbour Master/Deputy Conservator/Agents of shipping company usually arrange evacuation of serious cases for hospitalisation from anchorage.

TANKERS: LOA limited to 700 ft. at North tanker berth and 560 ft. LOA at South tanker berth. Max. draft 30 ft.

The new berth can accommodate tankers up to 115,000 d.w.t. with part cargo. Max. draft 35 ft. Products Handled: 1×750 mm. line for crude. 2×400 mm. lines for furnace oil and white oils; 4×300 mm. discharge arms. Discharge rate 4,000 tonnes/p.h.

Deep draft tankers berth only on ebb tide and during daylight hours. Ballasted or loaded tankers can sail any time.

All tankers must have fire wire fast and ready fore and aft on side facing channel.

DENSITY: Varies from 1000 to 1020 depending on tidal and weather conditions.

FRESH WATER: Supplied by barge (200 tonnes capacity) and through shore hydrants. Rs. 25/– and Rs. 40/– per 1,000 litres by barges for coasting and foreign vessels respectively. Rs. 15/– and Rs. 24/– respectively by shore hydrants.

FUEL: All grades fuel oils normally available. Essential give advance notice to Agent to make necessary arrangements.

GANGWAY/DECK WATCHMEN: Watchmen available at nominal cost. Recommended employ watchmen at gangway, on deck and in holds.

OPENING/CLOSING HATCHES: Opening hatches normally done by stevedores. Topping derricks and removing locking arrangements on hatches must be done by ship's personnel.

CARGO GEAR: All cargo gear must have valid test certificates and all other factory act requirements must be complied with.

IDENTIFICATION CARDS: Shore passes (temporary landing permits) are being issued. Seamens books cannot be used by foreigners unless with Immigration stamp.

CONSULS: United Kingdom, Norway, Italy and France have consuls at Cochin.

REPAIRS: The Cochin Shipyard now undertakes all types of deck and engine repairs.

In addition there are various other workshops who undertake engine and deck repairs. Exclusive surveyors to Lloyd's and non-exclusive surveyors to other classification societies are also available for hull/engine surveys. Repairs to radio, radar and other electronic equipment can also be arranged.

DRY DOCKS: Port dry dock can handle ships of up to 217 ft. LOA. However, not normally available for foreign craft.

The Cochin Shipyard dry dock can accommodate ships of up to 100,000 d.w.t. with max. size of ship up to 257 m. length and 38.5 m. beam. The dry dock entry draft permitted is 6.5 m.

REPATRIATION: Crew changes are carried out in this port. The Agents execute a bond before the Shipping Master before disembarkation. Repatriation undertaken by the Agents as mentioned in the said bond as well as general bond executed by them in Port Registration Office. Permission to enter India, travelling within India to the International airport through which they are leaving India and permission to leave India through Cochin port are being given by the Port Registration Office.

AIRPORT: Airport about 2 miles from harbour area. Cochin Airport handles internal flights only.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Closed holidays: Republic Day (26th January); Independence Day (15th August); Gandhi Jayanti (2nd October); 1st May and 25th December.

FIRE/AMBULANCE/POLICE: Willingdon Island Fire Station 6555; Willingdon Island Police 6005.

TELEPHONES: Arrangements can be made for telephone connections on board ships on wharf berths only.

GENERAL: Floating crane 120 tons, fire float.

SHORE LEAVE: Temporary landing permits are issued to foreign crew, subject to restrictions as per Government orders, if any.

SHIP SUPPLY SERVICE: "Ship Supply Service" is functioning at Cochin port. The Agents of the vessel arrange ship-to-shore transport of personnel and/or essential stores and/or sick crew members, etc., whenever such services are required. Usually, vessel's Agent gets these works after securing necessary clearance from the concerned Authorities and these are arranged through their ship chandlers or other contractors as the case may be. In cases of such emergencies, helicopter services are arranged by the local Agents with the Naval Authorities in Cochin with the assistance of the Port Health Officer stationed in the area.

DEVELOPMENTS: One of the existing berths (Q-9) is being converted into a full-fledged container berth. Necessary infrastructure facilities like hard-surfaced area, lighting, power plug points, etc. have been provided. The construction of a container freight station has been completed and commissioned. Tractor-chassis, trailers, etc. to handle 40 ft. and 20 ft. containers have been provided. Sophisticated equipment like transtainer crane and portainer crane will be installed in due course in order to provide full fledged container terminal facilities for handling cellular container ships at the port in view of the rapid increase of container traffic. Completion of the terminal is expected in 1985.

Fertiliser berth to handle raw materials under construction for ships up to 230 m. in length drawing 35 ft. The outer channel will be widened to 200 m. prior to the commissioning of the new berths.

SHIPMASTER'S REPORT: August 1979.
Hatches: Beams and hatchboards by stevedores and the remainder by ship's crew.
Stevedores: 1st shift 0800 – 1700 hrs., 2nd shift 1800 – 0300 hrs.

AUTHORITY: Cochin Port Trust, Willingdon Island, Cochin 682003. *Tel:* 6871. *Telex:* CN-203. *Cables:* Portrust.

Contact:	*Tel. No. Office*	*Tel. No. Residence*
Chairman	6286	6400
Deputy Chairman	6592	6420
Deputy Conservator	6417	6002
Harbour Master	6410	6859

AGENT: M. B. & Co. Ltd., P.O.Box 561, Cochin 682003, S. India. Tel: 6448. Telex: 885223.

COONDAPUR: 13.37 N. 74.40 E.

DOCUMENTS:

Inward Report
Valid Certificate of Safety
Radio Telegraphy
Safety Equipment
Safety Construction
Crew List

PILOTAGE: Optional. Vessels call at this Port for carrying ore cargo and anchor at open roadstead at a distance of about 1.25 miles to 5 miles depending upon their draft in a holding ground of sand and mud. The Agent of the ship bound for this port reports the vessel's ETA in advance. In the ETA message the name of the vessel, date and time of arrival are included.

ANCHORAGES: Good anchorage in depth over 8 fathoms at a distance approximately 5 miles from the channel bar.

Tippu Sultan Gudda Light bearing 053.5°(T) and Kodi Light bearing 080.5°(T). The Northern approaches to the Port area is rocky and the safest approach to the anchorage is from the South. Tidal range is 5 ft. Depth at bar 7 ft. at LWOST. 8 ft. – 10.5 ft. during HW.

RESTRICTIONS: No restrictions except that vessels calling at the port anchor at open roadstead.

MAX. SIZE: Vessels of smaller draft can anchor in 9 fathoms of water.
HEALTH: The Assistant Surgeon, Government Hospital, Coondapur is the Port Health Officer at the port.
RADIO: There is no radio station at the port. The nearest wireless station is at Mangalore and its call sign is "VWL".
VHF: Not available.
TUGS: There are 2 tugs/launches for towage service of sailing vessels and for special trips.
BERTHING: No berthing facilities available for ships.

1 wharf of 300 ft. in length with small stocking area.

1 RCC sheet piled wharf of 700 ft. length with vast stocking area duly electrified and a stocking platform of 180 ft. length are the only shore facilities at this port.

CRANES: None.
BULK CARGO FACILITIES: None.
STEVEDORES: Advise well in advance of ETA to shippers in order to arrange shore loading. Main cargo – ore.
MEDICAL: No advance notice except in case of serious illness to be included in arrival message. Hospital facilities available at Coondapur.
TANKERS: No facilities.
FRESH WATER: No facilities for supplying water to vessels are available. Sailing vessels crew draw their requirements of fresh water from nearby wells.
FUEL: For ocean going vessels, there is no bunkering facility. There are Oil Depots at Ganguli, Coondapur from where High Speed Oil can be supplied to small vessels in drums.
CONSULS: None.
REPAIRS: Small workshops where repair work for fishing launches, barge, etc., are undertaken.
DRY DOCKS: None.
SURVEYORS: Ship surveyors of Mercantile Marine Department at Goa and Cochin are available. Private Surveyors are available at Mangalore and Goa.
OPENING/CLOSING HATCHES: Usually by ship's crew.
CARGO GEAR: No shore facilities. Ships anchor at open roadstead and load cargo by ship's gear.
REPATRIATION: No facilities.
AIRPORT: Nearest airport is at Bajpe which is situated 73 miles South of the port.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Holidays declared by the Collector of Customs, Bangalore are followed at the port.
POLICE/AMBULANCE/FIRE: Pilot station is located at nearby Coondapur Town, Tel: 338. Ambulance facilities available at Government Hospital and Private Hospitals at Coondapur. Fire station available at Udipi 37 miles South of this port. Tel: 8333.
TELEPHONES: No arrangements exist for placing telephones on board the ship.
SERVICES: No facilities for ocean going vessels.
BANKS: Syndicate Bank and Canara Bank, Ganguli, Coondapur Taluk, South Kanara Dt., S. India. No telex facilities.
SHORE LEAVE: Crew members are allowed ashore subject to Customs formalities.
IDENTIFICATION CARD: Seaman's Book is sufficient and shore passes are issued by Customs.
DELAYS: Delays in loading can normally be expected during bad weather.
DEVELOPMENTS: None.
GENERAL: The Port of Coondapur is a riverine port which is seasonal. Open for traffic from 15th September to 15th May every year. Port is situated at the confluence of the River Hadi and Chakianadi at Ganguli village. The Port is 60 miles North of Mangalore which is the nearest railway head.

Charts: B.A. Chart No. 745. Indian No. 2019.

AUTHORITY: Port Officer, Coondapur, Ganguli P.O. Pin Code 576216, Karnataka, India. *Tel:* 72 Ganguli. *Contact:* Captain Mohan Chandy, Port Officer.

CUDDALORE: 11.43 N. 79.46 E.

DOCUMENTS:

8 Crew Lists.
8 Passengers Lists.
3 Forms of Import Manifest of Stores.
3 Lists of articles in slop chest.
3 Private Property Declaration of Crew.
3 Manifests.
3 Bills of Lading.

PILOTAGE: No pilotage. Open roadstead port.
ANCHORAGE: Vessels anchor in 5 to 7 fathoms with Cuddalore Lighthouse bearing 295° to 315°, which is most convenient anchorage for communicating with shore at all seasons of year. Nature of bottom, sand.
RESTRICTIONS: No restrictions regarding entry of vessels during day or night.
MAX. SIZE: Any size of vessel handled.
HEALTH: On arrival, Master to signal Port Health Officer stating all crew well and requesting Free Pratique. In event of any crew member suffering from suspected infectious disease, Master to advise Agents sufficiently in advance to enable Port Health Officer to board vessel on arrrival. No Free Pratique necessary whenever vessels call from another Indian port.
RADIO: No radio station. Cables routed through Madras Radio (call sign VWM).
TUGS: There are 2 tugs available. They are utilised for towing the lighters between ship to shore and vice-versa.
BERTHING: No berths.

Lighters: About 120 lighters owned by private individuals are operating for transporting cargo between ship and shore and vice-versa and handle 2,000 tonnes in total for a round trip.

Barges: 3 steel barges are available of 50 tons capacity each for lighterage purposes.

STEVEDORES: ETA advice required 72 hours in advance to enable stevedores to make adequate arrangements for handling cargo.
MEDICAL: No advance notice required unless vessel arrives with crew member requiring immediate medical attention. Seamen can be treated at Municipal Dispensary at Old Town near port and also at Government headquarters hospital in charge of District Medical Officer at New Town about 6.5 km. from port.
DENSITY: Density of water 1024 – 1025. State of tide does not affect density.
FRESH WATER: 1 steel water barge of 50 tonnes capacity is available for supplying fresh water to vessels in the Roads.
FUEL: None.
CRANES: 1 'Coles' 10 ton capacity mobile crane has been purchased for handling cargo in this port. This is a diesel electric crane.
GANGWAY/DECK WATCHMEN: Services of watchmen recommended in interest of ship to avoid pilferage. 3 watchmen night and day per shift of 8 hours.
OPENING/CLOSING HATCHES: By stevedores.
CERTIFICATES:

Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Derat Certificate.
Last Port Bill of Health.
Last Port Clearance.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes permitted for each crew member to be held out of bond. Wine/Spirit, 1 open quart bottle per crew member permitted to be held out of bond.
CARGO GEAR: Register of cargo gear and machinery to be maintained up to date and to be attested by competent authority.
IDENTIFICATION CARDS: Needed.
CONSULS: None.
REPAIRS: Minor repair facilities available.
REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriations.
AIRPORT: Nearest airport at Madras, distance 118 miles.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Cargo work arranged on all holidays except Republic Day, Gandhi's Birthday, Pongal Karinal, Masimagam, Pennayar Festival, Independence Day and Deepavali, on payment of overtime.
POLICE/AMBULANCE/FIRE: Tel. Police 24; Fire and Ambulance 99.
SERVICES: Cleaning of hatches after discharging cargo available.
SHORE LEAVE: Crew members permitted to go ashore within municipal limits.
DELAYS: No delay of anchoring of vessels. Cargo work carried out during day. No night work.
GENERAL: Private launches arranged for purposes of crew going ashore. Such launches ply between 0600 hrs. and 1700 hrs. Laundry, provisions, etc., can be arranged.
AUTHORITY: Government of Tamilnadu, Tamilnadu Port Department, P.O. Box No. 2595, Chetput, Madras 35. *Contact:* Captain I. V. G. Prasad, Port Officer, Cuddalore.

HALDIA: 22.00 N. 88.05 E. (See Plan Book)

Subsidiary deep water modern dock of Calcutta, situated on West bank of Hooghly River and 56 miles downstream of Calcutta.
DOCUMENTS, PRATIQUE: All general information; refer to "Calcutta".
RESTRICTIONS: The lock entrance lead-in jetty – 1,010 ft. (307.84 m.).

Lock: 985.5 ft. (300.38 m.) long and 130 ft. (39.62 m.) wide. Ships up to lengths of 885 ft. (269.75 m.) can be safely accommodated at Haldia Dock.

MAX. SIZE: Capital dredging in shipping channel is in progress and the results being constantly reviewed. Currently actual drafts as per draft of the day. Draft forecasts are issued 6 weeks in advance.
TUGS: 5 tugs available.
BERTHING:

1. An Oil Jetty – to provide berthing accommodation for super-tankers with LOA of approximately 780 ft. and draft up to 35 ft. See "Tankers".
2. A Finger Jetty – equipped with grab-bridge crane capable of transferring salt, rock phosphate and other bulk cargo from ship to barge, or vice versa at an average rate 5,000 tons per day.
3. A Coal Berth length 270 m. with depth alongside of 45 ft. is capable of loading bulk carriers of the 60,000 d.w.t. class. Mechanical plant capable of loading conventional ships and bulk carriers at a designed rate of 2,000 tonnes per hour. 2 wagon tipplers, capacity 1,500 m.t.p.h.; 1 conveyor belt; 2 stacker-cum-reclaimers – stacking capacity 1,500 m.t.p.h. Reclaiming capacity 1,000 tonnes; 2 Shiploaders, capacity 1,500 m.t.p.h. per loader.
4. An Ore Berth – rate of loading 5,000 t.p.h. and with provision for increasing to 8,000 t.p.h. Accommodation for carriers up to 80,000 d.w.t. 2 × 1,500 ton wagon tipplers, 4 stacker-reclaimers with capacity 1,500 m.t.p.h.; 2 shiploaders, capacity 3,000 m.t.p.h. This berth can also handle tankers.

5. A Fertiliser Berth – for ships up to 50,000 d.w.t. class. Mechanical plant for rapid mechanical discharge of finished fertiliser, rock phosphate, sulphur, etc., from bulk carriers and conventional ships at a designed rate of 1,400 t.p.h.; 1 conveyor belt, capacity 1,300 m.t.p.h. Can be extended up to the Fertiliser Factory; 2 ship unloaders, capacity 700 m.t.p.h.; covered storage for 30,000 tonnes (with provision for increase to 60,000 tonnes in future) and open storage for 15,000 tonnes, (with provision for increase to 30,000 tonnes in future).

6. Two general Cargo Berths – each with a quay of 720 ft. and 120 ft. wide and back-up area of 18 acres. Both will have adequate cranage, latest in cargo handling machinery and direct rail-road facilities. One berth will have a modern 100,000 sq. ft. transit shed and a 30-ton payload Portainer Crane for handling containers.

7. Container Terminal: The first fully-fledged Container Terminal in India with Portainer Crane for handling containers into or from ships. Back-up area 180,000 sq.ft. (16,722 sq.m.) providing storage space for over 1,000 containers at a time. Equipped with one high-speed transtainer crane capable of serving both rail and road vehicles.

TANKERS: Haldia Oil Jetty extends 180 m. into the deep water channel. The maximum velocity of current during ebb tide is 6 knots. During period March to June, Northwesterly squalls frequently blow up on inshore side of tankers moored at Haldia Oil Jetty, with reported wind speeds of up to 90 km./hr.

Vessels are programmed to berth on HW (daylight only) and port anchor is used to swing vessel for starboard side berthing. The flood stream continues to run 1.5 hours after HW and this provides sufficient time for safe mooring operations. 1 tug is in attendance when mooring. Although there is a hose handling gantry, it is not used during discharge as the hoses are reported to kink when excessive ranging occurs.

In view of the jetty being located in an area where strong tides are experienced, vessels are required to have the following moorings:

Forward – 5 head ropes	Aft – 5 stern ropes
– 3 breast ropes	– 3 breast ropes
– 3 back springs	– 3 back springs

This gives a total of 22 moorings. Doubling up of mooring ropes is acceptable to provide the above requirement provided all ropes are in good condition and of sufficient length to reach the shore bollards. After the vessel has been securely moored, ropes are turned over and the opposite eye is sent ashore. Mooring wires may be used as back springs.

In the final mooring position, the drift (distance fairlead to shore bollards/hooks) for the various moorings is a as follows:

Head and Sternlines:	Approx. 240 ft. (73 m.)
Breastlines F & A:	Approx. 125 ft. (38 m.)
Springs F & A:	Less than breastlines.

Above drifts apply to a ship with LOA 560 ft. (170.7 m.)

Hose Connections: Midships.

Shore Line System: Handles white oils, fuel oil and crude oil. 30 in. crude line with 3×12 in. connections on jetty. White oil line: 200 mm. (8 in.) to 300 mm. (12 in.) Shore lines: 1.5 km. long. Max. back pressure 7 bar (105 p.s.i.) Average rate 600 tonnes/p.h. (product).

Shore Steam: No facilities.

Bunkers/Lubricants: Not available.

Fresh Water: Available from shore in small quantities.

Tank Cleaning/Dirty Ballast Facilities: No facilities. Clean ballast may be pumped overboard.

General: Continuous and strict watch to be kept on vessel when anchored or in the berth to prevent unauthorised persons boarding.

Due to the remoteness of Haldia it is extremely difficult to arrange the formalities associated with crew members joining or leaving the ship.

In view of current and wind conditions it is recommended that a continuous watch is maintained to ensure that moorings are well tended at all times.

DEVELOPMENTS: A second oil berth is awaiting final approval.

AUTHORITY: Calcutta Port Trust, Haldia Dock Complex, Chiranjibpur, Haldia, West Bengal.

HONAVAR: 14.16 N. 74.27 E.

DOCUMENTS:

Crew Lists.
Passenger Lists.
Customs Documents.
Health Documents.
Manifests.
Bills of Lading.
Ship's Papers.

PILOTAGE: Open roadstead port. No system of pilotage. Pilot is however available, on requisition by Master or Agent.

ANCHORAGE: Distance off 3 miles, depth of 5.5 fathoms.

MAX. SIZE: No restrictions on length and breadth. Generally up to 34 ft. draft vessels can anchor within 2 miles to 3 miles from entrance.

HEALTH: Port Health Officer grants pratique as and when necessary, on requisition.

RADIO: Wireless station at Karwar.

BERTHING: No berthing facilities. Ships anchor on open roadstead.

MEDICAL: Proper hospital facilities available only at Karwar about 60 miles North. At least 24 hours advance notice ETA to be communicated to Agents.

DENSITY: Varies 1020/1025.

FRESH WATER: Very small quantities available. No arrangements for delivery to ships.

FUEL: None.

OPENING/CLOSING HATCHES: By crew.

CERTIFICATES: All ship's papers such as Certificate of Registry, WT Certificate, Safety Equipment Load Line, etc., to be on board for verification.

CARGO GEAR: Cargo gear Test Certificates, etc., to be produced.

IDENTIFICATION CARDS: Needed, if going ashore.

CONSULS: Nil.

REPAIRS: Nearest workshops undertaking major repairs available at Mormugao. Minor repairs may be carried out at Karwar.

DRY DOCKS: None.

REPATRIATION: Facilities available.

AIRPORT: Belgaum, about 178 miles.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Charter Party Holidays observed. Cargo work can be arranged on holidays. Dates of holidays vary from year to year.

POLICE/AMBULANCE/FIRE: Police 48; Ambulance 32; Fire Kumta 20.

SHORE LEAVE: Crew members are allowed ashore.

DELAYS: Generally no delays are expected.

AUTHORITY: Port Officer.

JAKHAU: 23.15 N. 68.37 E.

LOCATION: In Gulf of Kutch, on Godia Creek about 5 miles inside Arabian Sea. Port is about 7 miles West of Jakhau. Small sub-port exporting salt utilised by foreign-going and coastal traffic. Vessels calling Jakhau anchor in open roadstead about 6 miles offshore. Highest tidal range 14 ft. Current parallel to coast running about 4 knots.

AUTHORITY: Assistant Conservator Jakhau–Kutch.

KAKINADA: 16.56 N. 82.15 E.

DOCUMENTS: *(a)* To be supplied by Master on arrival:

Ship's Register.
Safety Equipment Certificate.
International Load Line Certificate.
Derat Certificate.
Last Port clearance.
ILH Dues Receipt, if coming from an Indian Port.
Crew List: 6 copies to Agents, 2 copies to Immigration Dept., 2 copies to Customs.
Customs Circulating Copy, if coming from another Indian Port.
Import Manifest of Stores (Store List).
Private Property Statement of crew and officers.

(b) Master to sign following certificates, in prescribed forms, presented by Agents, on arrival:

Port Entry.
Port Clearance.
Customs Entry.
Customs Clearance.
Departure.
Health.

PILOTAGE: No pilotage.

ANCHORAGE: *Allotment of Anchor Berths:*

Masters of vessels calling at the Port of Kakinada should cable the following information to the Port Officer directly, 24 hours before their arrival off the Port:—

(a) ETA (Indian Standard Time)
(b) Total cargo for loading/discharging at Kakinada and nature of cargo.
(c) Hatchwise distribution.
(d) Declaration of hazardous, inflammable and explosive cargo.
(e) Declaration of vessels winches in good working condition.
(f) Draft Fore and Aft.

A specimen cable covering the above is quoted below:

> "Port Officer Kakinada STOP Vessel XXX ETA Kakinada 22/10 0900 Local Time quantity loading 9,500 tonnes rice bran extractions hatch one 1,000 hatch two 2,000 hatch three 3,000 hatch four 3,000 hatch five 500 no hazardous inflammable explosives STOP All winches derricks good working condition draft fore 8 m. aft 9 m."

The above cable sent to the Port Officer (in addition to the cable sent to their Agents as per normal practice) will facilitate proper anchoring instructions from Port authorities to the Master and avoid difficulties in Port operations.

Masters should also keep watch on VHF Channel 16 to receive instructions from Port control and contact Port control on arrival at the approaches to the Port.

Specific instructions will be given by the Port Officer on VHF through Port Control in respect of anchorage positions. When once anchored as above, Masters should not shift their position without specific reanchorage position given by the Port Officer, unless in case of emergency in regard to the safety of the vessel.

Masters of vessels calling at this port are advised to be in possession of the latest navigation chart corrected up to-date. The Indian edition available is 3009 "Approaches to Kakinada Port" with an inset of Kakinada Bay.

Main engines should not be immobilised without specific permission from Port authorities.

The Godavari Point (sand spit) is extending Northwestwards at a rate of about 170 ft. per annum and a port hand buoy (flashing red) 5 secs. is installed at the tip.

The holding ground anywhere in the anchorage is considered excellent (soft mud and sand).

MAX. SIZE: No restriction. Vessels any size can enter the port.
HEALTH: Masters have to send standard quarantine message not more than 12 hours and not less than 4 hours before arrival. Pratique will be granted by Port Health Officer basing on the quarantine message, which will be instructed to the Agents. Health inspection of the vessel will be carried out by the Port Health Officer at the earliest convenience. Vessels that have touched ports in the yellow fever endemic area within the last 30 days, should send the quarantine message at least 48 hours before the expected time of arrival.
RADIO: Radio stations are Visakhapatnam and Madras.
VHF: VHF radio station is in the Port Office (Port Control) on International frequency, Channels 16 and 12, communication from ship/Port control and vice versa. If ship requires communication on Channel 12, it should be advised in advance to prepare machine accordingly.

The Port control VHF functions round the clock at the following specified times:–

0045 to 0100 hrs.
0345 to 0415 hrs.
0545 to 0615 hrs.
0745 to 0815 hrs.
1045 to 1115 hrs.
1245 to 1315 hrs.
1445 to 1515 hrs.
1745 to 1815 hrs.
1945 to 2015 hrs.
2245 to 2315 hrs.

All times Indian Standard Time.
TUGS: There are 5 small tugs and 6 Pablo Boats for towing cargo lighters.
BERTHING: 1 wharf, length 300 m. 1 floating crane, capacity 50 tons.
CARGO LIGHTERS: There are 110 cargo boats with total capacity of 9,600 d.w.t. In addition 5 self-propelled mechanised barges each of 250 d.w.t. owned by the Port Authorities.

There are also available 6 mechanised barges each 240 d.w.t. owned by Central Island Water Transport Corporation Ltd., Calcutta.
STEVEDORES: Gangs engaged by party doing stevedoring work. In case of liners, Agents attend. In case of chartered vessels, consignees/shippers attend. Master to give ETA with number of hatches to be worked on arrival. Revised ETA to be sent whenever there is change.
MEDICAL: Government general hospital available with specialists. Private nursing homes also available with efficient physicians and surgeons. Agents arrange medical aid on advance advice. Being roadstead port, launches have to be arranged, hence advance notice of 6 hours necessary through signal station while in port.
DENSITY: Ranging from 1010 to 1025.
FRESH WATER: Of the 5 mechanised barges owned by the Port Authorities, 1 mechanised barge is used for supply of fresh water up to 200 tons. Privately owned self-propelled barge is also available for supply up to 100 tons. Prior arrangements to be made through Agents of vessels 24 hours in advance.
FUEL: No fuel suppliers. In case of emergency small quantities of 10/15 tons, in 205 litre drums, can be arranged from Visakhapatnam, duty paid.
GANGWAY/DECK WATCHMEN: Arranged by stevedores.
OPENING/CLOSING HATCHES: By ship's crew only.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per head per week. Wine and Spirits: 16 oz. per head per week for those who are eligible for supply by ship.
IDENTIFICATION CARDS: Required.
CONSULS: None.
REPAIRS: No facilities. Only minor repairs to winches, welding work, casting and repairing spare parts.
REPATRIATION: Can be arranged.
AIRPORT: Visakhapatnam 105 miles, Madras 350 miles.
TIME: GMT plus 5.5 hours = IST.
HOLIDAYS: Charter Party holidays are observed. Work is done day and night. Port and Customs also work on holidays and out of office hours on payment of overtime. No work even on overtime payment on following days: Bhogi, Pongal, Kanumu. Optional holidays to labour on Chollangi Amavasya, in January.
POLICE/AMBULANCE/FIRE: Police 3052; Fire 101; Ambulance 3311.
SHORE LEAVE: Shore permits given by Port Registration Officer (Immigration).
SERVICES: Fresh and dry provisions available.
NOTARY: Available for noting protest.
DEVELOPMENTS: Development programmes include canal protection, transport facilities, navigational aids, power supply to loading/discharging points and stacking yards at shore and providing breakwater of 880 m. in length (sea wall) and mooring circle on the West side of the sand-spit known as Hope Island. The breakwater can be extended a further 3.2 km. Eastward for direct berthing of ships to serve long term needs of the port.
AUTHORITY: Port Officer.

KANDLA: 23.00 N. 70.12 E. (See Plan Book)

DOCUMENTS: To be submitted by Masters on arrival:

Customs: Crew List (3 copies).
Crew Private Property List – this should indicate all items they possess (3 copies).
Ship's Stores List (3 copies).
All valid documents of ship in English for verification of Customs Boarding Officer.
Port Health: Maritime Declaration in duplicate.
Valid crew health cards and Derat Certificate.
Agents: Stowage Plan, Cargo Manifest and Bills of Lading.

Boarding Pilot collects following documents:
4 copies Arrival Report.
4 copies Pilotage Certificate.
2 copies Crew List.

PILOTAGE: Pilot station situated Lat. 22° 49.5′ N., Long. 70° 07′ E. Loaded vessels can cross bar only during high water. Vessel to report at Pilot station 2·5 hours before high water. Masters to keep Agents closely advised of ETA and anchoring time. 12 hours advance notice to be given by Agents for Pilot. No pilot ship or telegraphic address for Pilot station (Outer Tuna buoy). Vessels can contact Kandla Tower through VHF Channel 16. Pilot station 16 miles away from port. During all weathers vessels have to anchor at above position and await Pilot.

Chart: Indian No. 2059 and 203.

Shipmaster's Report: On calling at Kandla, the Pilot advised that anchorage outside a 2 mile range from the Outer Tuna Buoy and the Pilot having to board there, increases the pilotage dues by 100 per cent.
ANCHORAGE: Vessels can anchor 1 mile S.W. of above anchoring position. Inside harbour, anchorages allotted by Port Authorities, and Pilots anchor vessels at suitable positions.

Vessels can however anchor more than 2 miles from Fairway Buoy but must pick-up Pilot within 2 miles of Outer Tuna Buoy.
RESTRICTIONS: Being a tidal port, entering and leaving of loaded vessels depends on tide, and loaded vessels can cross bar at entrance of channel only during high water.

Ships having speed of less than 9 knots through the water will not be moved in and out of the port of Kandla during hours of darkness.

Berthing and unberthing of ships at the moorings will be restricted to daylight only. Daily draft forecast for crossing Kandla Bar published at intervals by the Kandla Port Trust.

No berthing of tankers in hours of darkness; unberthing is permitted. No restriction on berthing and unberthing of cargo ships during hours of darkness.
MAX. SIZE: Max. overall length 740 ft. No breadth restrictions.

For oil tankers max. permissible overall length is 700 ft.

Draft according to water on the bar varies between 26 ft. and 32 ft.

Sogal Channel (Mid Channel) was commissioned on 29th February 1984 which is likely to give additional draft of 1 ft. i.e. 12 ft. at Chart Datum.
PRATIQUE: The Masters of all ships arriving at Kandla are required to send the Port Health Officer, Kandla (cable address "Sandgrodh") a wireless message embodying all applicable terms of information set out in the Standard Quarantine message of the International Code of Signals. In addition to the International Code message, Masters are also required to give the following information in plain language:
(a) Whether there is any abnormal mortality of rats or mice.
(b) Whether there is any monkey on board.
(c) Whether touched or embarked at Aden or Djibouti any person.
(d) Names of all ports touched en-route within preceding 30 days, with dates of departure.
(e) Request for radio pratique.

Upon anchoring at Pilot station, cable again "Sandgrodh" stating time anchored and requesting radio pratique.

In cases where the vessel has touched any yellow fever area within preceding 30 days it is necessary for Master to certify that all officers and crew/passengers on board possess valid yellow-fever certificates.

Present practice for granting pratique is by radio or by Port Health Office boarding vessels inside harbour.

If the Maritime Declaration is not in order, the Pilot refers the Master to the Port Health Officer who then boards the vessel and grants free pratique after his inspection of the vessel.
RADIO: Within a range of 35 hours off Kandla, vessels can contact Kandla Radio on call sign VWK. Before 35 hours off, Kandla can be contacted through Bombay Radio only.
BERTHING: The cargo jetty provides 5 alongside-berths with total quayage of 3,825 ft. which can accommodate ships drawing up to 30 ft. loaded draft. The cargo jetty is served with 21 electric level luffing cranes, 16 of 3 tonnes, 4 of 6 tonnes and 1 of 10 tonnes capacity for handling cargo from ships.

Additional 4×3 tonne and 1×6 tonne capacity wharf cranes to be installed.

3 mooring berths are available near the cargo jetty. In addition, there are separate moorings for *(a)* ships loading salt, *(b)* deep draft mooring for ships up to 37 ft. draft. Also see "Developments".

The Bunder basin has 3 wharves, two wharves with transit sheds. The South wharf is served with 4 quay electric level-luffing cranes of 3 tons to 10 tons capacity for handling cargo from lighters. The North Wharf is for country craft. The West wharf is provided with a 60 tons capacity electric gantry crane.

Marine unloader with rated capacity of 500 tonnes per hour for discharging bulk fertiliser and its raw materials has been commissioned.

There is a back-up storage area of 30,000 tonnes. Automatic bagging and stitching machines are also available.
STEVEDORES: Minimum 24 hours notice required for arranging stevedoring labour and gangs. Bulk fertiliser – average 650 tonnes per berth/day by conventional method. Grain – 850 tons. General cargo 250 tons per hook, subject congestion prevailing in sheds, wharves, warehouses and clearance, and on number of vessels working at particular period.

Cargo Operations:

1. At this port the unloaded/loaded LASH barges are towed by tugs which are subsequently discharged/picked up by LASH ships (operation suspended at present).

2. Regulations concerning the handling of dry-cargo are applicable to handling of cargo in barges.

3. Trucks can proceed alongside the berth and can park within the reach of the shore cranes. Cargo is loaded/unloaded from trucks directly on the wharf for shipment per vessel.

4. Forklift trucks are used to transport the cargo from the place of unloading to the stacking area and vice-versa.

5. Cargo on board the vessel is handled by Kandla Dock Labour Board workers. Packaged cargo on shore is handled by labour engaged by respective importers/exporters which are drawn from local market. Bulk cargo viz. fertiliser and wheat is handled on shore by departmental labour of Food Corporation of India

TUGS: Port tugs join ships inside harbour off berth. Ship's wires used.
MEDICAL: Private Doctors' services available for vessels at berth. For vessels at Pilot station or inner anchorages minimum advance notice of 12 hours and 6 hours respectively required. Very limited facilities of private practitioners. No hospital facilities. Inoculation and vaccination carried out by Port Health Officer (a Government body) – minimum 48 hours notice required.
TANKERS: (Also see Port of Vadinar). Tankers with max. overall length of 700 ft., 40,000 tons displacement and 34 ft. draft permitted to berth. 3 main pipe-lines connected to tanks situated about 10 km. from berth, 2 generally used for white oils and one for black oil. White-oil pipe-lines diameter 12 in. and black-oil pipe-line diameter of 16 in. In addition, one 8 in. diameter pipe-line for soyabean oil, one 3 in. diameter pipe-line for acetone and one 4 in. diameter pipe-line for formaldehyde and one 12 in. diameter pipe-line for Phosphoric Acid imported by Indian Farmers Fertiliser Co-operative Ltd.

Berthing of Ammonia Tankers at Tanker Berth No. 1 with loading/unloading arm but restriction depending on the position of manifold.

Shipmaster's Report: Tankers will sometimes be brought in to the port even though a berth may not be available at that time. Such vessel will then be moored to a mooring buoy close to the jetty, awaiting her berth at the tanker pier. Mooring to this buoy is effected by use of the vessel's starboard anchor chain, so that the anchor has to be disconnected from the chain before entering.

In securing alongside the oil-pier, tankers are required to utilise 1 insurance wire fore and aft (not supplied from shore). In addition vessel is required to use all her available ropes and wires owing to strong currents – 4 head-ropes, 2 breast-ropes, 2 springs.
DENSITY: Varies from 1020–1030.
FRESH WATER: Can be supplied through shore pipe connection and barges.
Shipmaster's Report: Water is very scarce and should be ordered at least 3 days prior arrival.
FUEL: Furnace oil (heavy oil) and light diesel oil can be supplied. Usually 12 hours advance notice required for bunkering. In event of oil tanker discharging at berth, bunker supply can only be commenced 18 hours after completion of discharge by tanker. Quantities up to 500 tons supplied by tank trucks, above 500 tons supplied through pipe-lines if berth vacant. However, any quantity can be supplied by tank trucks.
FIRE PRECAUTIONS: 3 sea water fire fighting pumps installed at oil jetty. These pumps are under charge of fire brigade officers and have adequate fire fighting equipment. A tug fully manned with fire fighting arrangements also available at short notice.
GANGWAY/DECK WATCHMEN: All ships engage 2 watchmen round the clock at gangway. To look after mooring lines, 8 mooring men (4 each at fore and aft) are engaged round the clock.
OPENING/CLOSING HATCHES: Unless specified in relative Charter Party to contrary, ship's crew to accomplish this work.
SHIP CERTIFICATES:
Registration.
Safety Equipment.
Safety Radio and Telegraphy.
International Load Line.
CUSTOMS ALLOWANCES: 200 cigarettes per week per person. Wine and/or Spirit: 2 pegs of spirit per person per day or 4 pints beer.
Shipmaster's Report: Very strict Customs supervision, particularly in regard to declaration of foreign currency.
CARGO GEAR: Ships should possess valid Cargo Gear Certificates.
IDENTIFICATION CARDS: Required. See "Shore Leave".
CONSULS: Nil.
REPAIRS: Minor repairs carried out. Chipping and painting work also carried out.
DRY DOCKS: A floating dry dock to accommodate small craft up to 240 ft. in length, 10.7 m. (35 ft.) beam and 3.1 m. (10 ft.) draft of max. weight 500 m./tons for repairs, available.
SURVEYORS:
M/s. G. P. Dave & Sons, Ramnath Bhavan, 753/754 Saurashtra Society, Sector No. 5, Gandhidham-Kutch.
M/s. J. B. BodaMarine, & General Survey Agents Pvt. Ltd., Bunglow No. 16, Gandhidham-Kutch.
M/s. Metcalfe & Hodgkinson Pvt. Ltd., Jamuna Building, Sector No. 1, Gandhidham-Kutch.
M/s Navark & Mareng, Mohan Bhuvan, 109 Oslo Society, Sector 4, Gandhidham-Kutch.
M/s. Seascan Services Pvt. Ltd., Bunglow No. 79, Sector 4, Gandhidham-Kutch.
M/s. S.G.S. Ltd., above Arjan Stores, Gandhidham-Kutch.
M/s. T.C.R.C., Alankar Guest House, Gandhidham-Kutch.
REPATRIATION: Adequate facilities available.
AIRPORT: Kandla Airport 20 km. from the port and an additional airport about 70 km. from port.
TIME: GMT plus 5.5 hours.
HOLIDAYS:

Holiday (1982)	*Date*
Republic Day	January 26th
Holi (Second Day)	March 10th
Chetichand	March 26th
Good Friday	April 9th
May Day	May 1st
Id-Ul-Fitr	July 23rd
Janmashtami	August 12th
Independence Day	August 15th
id-Ul-Azha (Bakrid)	September 28th
Mahatma Gandhi's Birthday	October 2nd
Dussehra	October 27th
Muhurram	October 28th
Diwali	November 15th
Diwali (New Year Day)	November 16th
Guru Nanak's Birthday	November 30th
Christmas Day	December 25th

TELEPHONES: Available for tankers and cargo vessels.
GENERAL: Port equipped with 21 electric level luffing shore cranes of 3 tons to 10 tons capacity used for discharging all ships alongside cargo jetty. For discharging tankers with bulk grain port's vacuvators belonging to Food Corporation of India used.

Kandla port is a prohibited area where entry and exit are restricted to those persons having bona fide work only. Masters are requested to exercise a strict check at the gangway in order to ensure that only those persons with bona fide business to transact are allowed aboard. In the event that any unauthorised person is found to be aboard the vessel, the matter should be reported to port officials and the police on duty.

Masters are requested to advise their crew in advance of arrival at Kandla that photography within the port area is strictly prohibited, and it is suggested that all cameras should be left in the safe custody of the Master in order that crew members may not violate this regulation inadvertently and become involved in legal proceedings.
SERVICES: Tank cleaning by shore labourers. Tank washings and residue not allowed to be discharged in port area.
SHORE LEAVE: Possible.
Regulations: Photography in port area prohibited. No crew members allowed to take with them liquor of any kind ashore and not permitted to drink liquor outside port limit.
DEVELOPMENTS: Berths and bar continuously under dredging and drafts will increase in future.

Berth No. 6 under construction, length 900 ft. Expected to be ready in 1984. Construction of Oil Berth in progress.
AUTHORITY: Kandla Port Trust, Administrative Building, P.O.Box 50, Gandhidham-Kutch, India. *Tel:* 2001. *Telex:* 105-208. *Cables:* Port Trust Kandla. *Contact:* The Chairman.

KARWAR: 14.48 N. 74.06 E. (See Plan Book)

PORT LIMITS: *North:* A line drawn from Dayamada Point to Parker Rock.
East: Seashore of Karwar Bay from Dayamada Point to Badchidar Point 50 yards above high-water mark including Baithkiol Cove, Kalinady and all branches thereof as far as navigable and the shores and banks within 50 yards of high-water mark Spring tides including all islands and thence to Mogera Guda Island (including Mogera Guda Island). All patta lands and other private sites excluded.
South West: A line drawn from Mogera Guda Island through Gudsav Sunv, Westernmost point of Mandal Island to Parker Rock.
DOCUMENTS:
8 Crew Lists.
2 Manifests of Stores.
2 Private Property Declarations.
2 Currency Lists.
1 Maritime Declaration of Health.
3 Passenger Lists (if any).
4 Import Manifests.
1 Last Port Clearance.
PILOTAGE: The approach from Northward is between Oyster Rock Lighthouse and 2 front and rear leading lights on Simshigudda and Kurmagad Islands, respectively, in positions Lat. 14° 50′ 11″ N., Long. 74° 05′ 43″ E. and Lat. 14° 50′ 33″ N. Long. 74° 05′ 59″ E. Vessels approaching from Southward may enter between Oyster Rock Light and Karwar Head. Currents in bay are negligible. Ocean-going vessels are piloted by Departmental Port Officer who is a licensed Pilot. No pilotage charges at present.
ANCHORAGE: Anchorage for shallow draft vessels is with the Port Signal Station, bearing 120° (T), distance 1 to 2 miles, or Oyster Rock Lighthouse, bearing 278° (T), distance 2.5 miles in about 24 ft. to 28 ft. of water. Anchorage for deep drafted vessels is with the signal station, bearing 099° (T), distance 3 to 3.5 miles in depths of 38 ft. to 42 ft.
RESTRICTIONS: No entry restrictions. Karwar Bay may be entered on either side of Sunghiri Island, according to draft and anchorage taken as required. A vessel can enter Karwar either by day or night after having made lighthouse on Devghad Island.
MAX. SIZE: Any size of vessel can be worked as loading and unloading operation done in open sea. Depth at Outer Roads over 7 fathoms increasing accordance distance from land.
HEALTH: District Civil Surgeon acts as Port Health Officer. Free Pratique to incoming vessels from foreign ports granted by radio. All vessels calling from foreign destination must give radio message addressed "Civil Surgeon Karwar" at least 48 hours prior entering port giving last port of call, number of crew, health conditions, approximate time of arrival and requesting pratique, same message must be repeated to Agents who obtain pratique on shore. Anchoring time is pratique time. For vessels calling from an Indian port, pratique not required.

Vessels which have taken on board passengers or crew from yellow fever areas, within 30 days of departure from such ports will be under quarantine. Free pratique will not be granted until such time as a mosquito search party, from nearest major port (e.g. Cochin, Goa or Bombay) has inspected, disinfected and certified that ship is fit for granting pratique.

Necessary for Owners or Masters to inform Agents well in advance in case of vessel arriving from yellow fever area to enable arrange mosquito search party and quick pratique.
RADIO: ETA and pratique messages should be sent via Goa or Bombay Radio as Karwar Radio has been shut down.
TUGS: No tugs necessary as vessels work in stream.
BERTHING: No berth, vessels work in open sea. Baithkol Cove is safe berthing place for lighters. Alongside wharves 10 to 12 smaller vessels can obtain safe berth with depth of 6 ft. to 8 ft.

Also see "Developments".

STEVEDORES: 48 hours notice ETA required order enable Agents advise shippers and stevedores to keep cargo and labourers ready. Main commodity export of ore. Mechanised barge loading operations in port. Ore loading rate up to 4,000 tons per day. General cargo 1,000/1,300 tons per day.
MEDICAL: Good hospital facilities exist. 2 hospitals about 1.5 miles from port. In case of inoculations and vaccination at least 2 days advance notice to be given enabling bring vaccine from nearby town (Hubli or Belgaum) distance 100 miles and 150 miles respectively.
TANKERS: No facilities for tankers.
DENSITY: 1025.
FRESH WATER: Dumb water barge for supply to vessels anchored in open Roadstead.
FUEL: No bunkering facilities for ocean-going vessels. Diesel and petrol storage depots within port for supply to small vessels.
OPENING/CLOSING HATCHES: Generally carried out by ship's crew.
CERTIFICATES:

Ship's Register.
Cargo Gear Certificates.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Derat Certificate.
Vaccination and Inoculation Certificates.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirits.
CARGO GEAR: Before commencement of loading, Master to present shippers or their Agents with valid international cargo gear certificate, which shall not be more than 12 months old. Validity of said certificate to cover whole period for loading and discharging. Fourth five-year plan includes proposals for mechanical front-end loaders, tipping trucks, mobile cranes and forklift trucks.

A 10 ton mobile crane is available.
CONSULS: None.
REPAIRS: Moderate-sized workshop in town able carry out minor deck and engine repairs.
REPATRIATION: Shipping Master arranges crew changes and necessary repatriation. Crew signing off repatriated via Goa or Bombay.
AIRPORT: No airport, or rail connections. Nearest airports Goa or Belgaum, 60 miles and 150 miles distant respectively. 2 flights per day to Bombay from Goa.
TIME: GMT plus 5.5 hours. Permanent.
HOLIDAYS: Charter party holidays declared and published every year by Honorary Secretary of the Karnatak Chamber of Commerce and Industry, Jaya Chamaraj Nagar, Hubli-20.

Non-working days when work not permitted even on payment of overtime: Republic Day (26th January) and Gandhi Jayanti (2nd October).
POLICE/AMBULANCE/FIRE: Circle Police Inspector 116; City Police Station 33; District Superintendent of Police 7; Reserve Police Headquarters 18; Ambulance 19.
SHORE LEAVE: Crew members are allowed ashore provided not of Chinese nationality.
DEVELOPMENTS: Proposed to develop port of Karwar into all-weather intermediate port, with 2 berths (the jetty 375 m. long) and 1 mechanical berth (ore berth, for vessels 40,000 d.w.t.), an approach channel and turning basin. Intended arrangements include ability accommodate up to 60,000 d.w.t. ore carriers, loading up to 8 million tons ore and 1.25 million tons other cargo per year. Also intended develop fishing harbour with facilities accommodate large-scale deep-sea fishing industry for 1 million tons fish per year. Also see "Cargo Gear".

Provision of Channel Marks:

1 Fairway buoy.
10 channel marking buoys.
Provision of a mooring boat with equipment for maintenance of buoys.
Experimental dredging.
Dredging approach channel and turning basin.
Land acquisition for future expansion.
Diversion of present main road alongside port wharf.
Improvement of Binga/Karwar Road.
Provision of 2 berths and 1 mechanical berth for ocean-going vessels.

Main berth length 172 m., depth 9.75 m. and secondary berth length 122 m., depth 7.5 m. will be ready early 1985.
AUTHORITY: Office of the Port Officer.

MADRAS: 13.06 N. 80.18 E. (See Plan Book)

PORT LIMITS: The seaward boundaries of the Port:

To the North: A line "NP" running from a point in position "N" Lat. 13° 07.2′ N. Long. 80° 17.95′ E. to a position "P" in Lat. 13° 12′ N. Long. 80° 25′ E.

To the South: A line "SQ" running from a point in position "S" Lat. 13° 04.1′ N. Long. 80° 17.25′ E. to a position "Q" in Lat. 13° 02′ N. Long. 80° 25′ E.

To the East: A line "PQ" connecting the Eastern extremities of the above described North and South boundaries, that is from point "P" in Lat. 13° 02′ N. Long. 80° 25′ E. to point "Q" Lat. 13° 02′ N. Long. 80° 25′ E.

Note: The port limits are being revised.
DOCUMENTS:

3 Private Property Lists.
3 Stores Lists (Bonded Stores).
3 Crew Lists.
1 Last Port Clearance.
1 Valid Derat Exemption Certificate.
1 Bill of Health (only if vessel has touched yellow fever areas).
3 Slop Chest Declarations.
3 Currency Declaration.
Passenger List (if applicable).

Ship's Papers:

Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Safety Construction Certificate.
Ship's articles (if vessel is Indian or Commonwealth flag).

Ship's papers to be handed over to Agent's Representative for final entry of vessel in Customs House. Same returned to Master.
PILOTAGE: Pilotage compulsory, both inward and outward, also for purpose of shifting inside harbour. Master required to advise ETA at least 24 hours before arrival, when local Agents contact Port Authorities for arranging berthing. If any berthing delay, vessel has to anchor at Outer Anchorage – anchoring point below 10 fathom line from breakwater light. Vessels requiring Pilot fly "G" flag by day and 1 white light exhibited on a conspicuous point on ship by night.
ANCHORAGE: Good anchorage found with breakwater light bearing between 240° and 300° – distance 1 mile to 3 miles.
RESTRICTIONS: No restrictions of entry, both day and night. In Bharathi Dock berthing of ships more than 50,000 d.w.t. while in a loaded condition is undertaken only during daylight hours, unberthing of ships of all sizes whether loaded or light is undertaken at all times.
MAX. SIZE: Max. length of South Quay I is 800 ft. (259 m.). Max. length of South Quay II is 518 ft. (157.88 m.). Max. length of Jawahar Dock is 1,700 ft. (518 m.) and breadth of entrance is 100 ft. (30.48 m.). Work on the extension of Jawahar Dock is in progress to accommodate vessels of 200 m. length on each side. Max. length of 900 ft. (274.31 m.) for oil tankers using the "Bharathi Dock" is in force, for the outer oil dock jetty during the fair weather season from January to October. During the North-East monsoon period, from October to January, max. size of vessel is restricted to 750 ft. (228.59 m.) with 42 ft. (12.8 m.) draft.

Draft in the enclosed harbour varies from 26 ft. (7.92 m.) to 35 ft. (10.67 m.). Draft at the outer oil berth during fair weather season is 46 ft.

Details may be obtained from the Deputy Port Conservator, Madras Port Trust, Madras – 600001.

Bharathi Dock: Vessels up to 46 ft. (14.02 m.) draft.
HEALTH: All vessels arriving from foreign ports have to apply for pratique through their radio – not earlier than 12 hours and not later than 4 hours before arrival. Pratique message to be addressed "Quarantine Madras" and worded as required by Port Authorities.

The Pilot boarding the vessel grants free pratique if the vessel is healthy in all respects – answer to all heath questions being negative.

In all other cases or if vessel is coming from yellow fever infected area within 30 days of departure or in case of any infectious disease on board, Port Health Officer boards vessel and after due inspection grants pratique.

Telegrams should take the following form: Name of vessel; ETA, in hours and date. No monkeys on board; answer to all health questions, (ports touched in last 30 days with departure dates). Request radio pratique.

Port health require to sight Derat and Vaccination Certificates when vessel due to leave before issuing clearance for Pilot and Customs who then issue port clearance.
RADIO: Coast Station Madras Radio, call sign VWM. Information regarding weather distributed twice daily. VHF communication with pilot station available around the clock to transmit and receive berthing and other operational messages. Calling frequency Channel 16 and operating frequencies Channels 14, 12 and 10.

Radar is installed on the fourth floor of M.P.T. Administrative Office Annexe Buildings.
RADAR/VHF: VHF communication available, see "Radio".
TUGS: Join vessel just inside breakwater. Vessels use own lines and no tugs' lines used/supplied. Tugs' lines are also used if required by Pilot.
BERTHING: Vessels berth at all times.

There are in all 18 general cargo/bulk cargo berths and 3 moorings. Drafts of these berths/moorings vary from 26 ft. (7.92 m.) to 35 ft. (10.67 m.).

There is an exclusive oil berth in the Outer Harbour with a draft of 46 ft.

An iron ore berth with modern mechanical loading facilities is in operation at Bharathi Dock with a draft of 46 ft. and rated capacity of 8,000 t.p.h.

There are two container berths which together have a quay length of 380 m. and draft of 10.5 m. which is being increased to 12.8 m.

The Bharathi Dock has the potential for accommodating 3 more berths one of which can be converted into a container berth.

Outer Harbour present draft is 46 ft. (14.02 m.) and it is likely to be increased.

A breakwater is under construction, extending from the Northern end of present breakwater to enable to have tranquil sea conditions in outer turning circle of Bharathi Dock.
BULK HANDLING FACILITIES: There are 4 berths, 3 in the Jawahar Dock and 1 in South Quay. Handling of iron ore has been discontinued in Jawahar Dock due to the operation of mechanised iron ore plant at the Bharathi Dock. Instead bulk cargo like barytes is handled.
CONTAINER HANDLING FACILITIES: There are two container berths with a quay length of 380 m. and draft of 10.5 m. which is being increased to 12.8 m. Two heavy duty gantry cranes of 35.5 tons capacity under spreader have been provided.

The container parking yard has a capacity for stacking 5,200 containers and is served by 2 rubber-tyred transfer cranes of 35.5 tons capacity under spreader.

5 top lift trucks of capacities varying from 25 tons to 35 tons are also available for handling containers.

The container freight station with an area of 6,300 sq. m. has been provided for stuffing and unstuffing operations.

40 reefer plug points for refrigerated containers are available with a standby generator for giving continuous power supply to reefer containers.

RATE OF DISCHARGE/LOADING:
Grains, by hooks/derricks:
Bulk: 400 tons per day per hook.
Bagged: 400 tons per day per hook.
By Vacs: 250 tons per Vac. per day.
Fertiliser: By hooks/derricks.
Bulk: 250 tons per day per hook.
Bagged: 375 tons per day per hook.
General Cargo: 225 tons per day per hook.
Liquid Cargo: About 150 t.p.h.

CRANES: One 3 ton crane and two 5 ton cranes are available at North Quay. Six 3 ton cranes, three 5 ton cranes and one 10 ton crane are available at West Quay. One crane of 50 tons, 2 cranes of 13 tons, 3 cranes of 10 tons, 3 cranes of 8 tons, 1 crane of 5 tons and 7 cranes of 3 tons available along South Quay.

Four cranes of 13 tons, two 10 ton cranes and 1 crane of 3 tons available along Eastern side of Jawahar Dock.

Two cranes of 10 tons, nine cranes of 3 tons and 1 crane of 5 tons available along Western side of Jawahar Dock.

Heavy duty floating crane 120 tons available.

BRIDGES: There are 2 bridges for pedestrian traffic only. 1 swing bridge at the entrance of Jawahar Dock and another Bascule bridge at the entrance of boat basin.

STEVEDORES: A copy of Manifest required for stevedores on board.

Working hours: 1st shift, 0600 – 1400 hrs. (Recess 1100 – 1200 hrs.); 2nd shift, 1400 – 2200 hrs. (Recess 1900 – 1930 hrs.); 3rd shift, 2200 – 0600 hrs. (Recess 0200 – 0230 hrs.).

MEDICAL: Advance notice for medical aid useful if vessel anchored/anchoring outside and not coming alongside, as it takes time to arrange for launch, etc. Medical assistance arranged easily if vessel alongside. Various hospitals and private nursing homes with modern equipment available. All crew members to be in possession of valid health cards in respect of inoculations/vaccinations against smallpox, cholera, etc. Facilities for renewal available.

TANKERS: There is an oil berth with 46 ft. (14.02 m.) draft at the Outer Harbour with 5 unloading/loading arms, 3 for unloading crude and 2 for handling refined products at a rated capacity of 1,500 tonnes per hour per arm. There are 2 moorings with 30 ft. (9.14 m.) draft in the inner harbour for non-dangerous petroleum products.

Manifold is equipped with 300 mm. quick fixing camlock coupling.

Facilities for deballasting the oil tanker are provided.

DENSITY: Varies from 1019 to 1025 according to season. No variation due to state of tide.

FRESH WATER: Available and can be supplied to vessels either through shore connections or by water barges (rate 100 t.p.h.). During Summer months due to scarcity of water, full requirements of vessel may not be possible.

FUEL: Bunkers available, but supply dependent on stock position. At least 48 hours advance notice required. Suppliers should receive nomination from their Head Office. Companies supplying bunkers are:
Indian Oil Corporation Limited.
Hindustan Petroleum Corporation Limited.
Bharat Petroleum Corporation Limited.

Usual rate of bunkering is about 40 t.p.h. to 120 t.p.h. depending on various berths. Grades of fuel available:
Fuel oil, 700 Secs. Redwood No. 1 at 100° F.
L.D.O., 70 Secs. Redwood No. 1 at 100° F.
Gas oil, 30/30 Secs. Redwood No. 1 at 100° F.

Fuel oil can be supplied by pipe-line in all berths. LDO and gas oil are supplied by tank trucks and not possible to supply at moorings in harbour.

GANGWAY/DECK WATCHMEN: Services of watchmen are compulsory and they can be engaged from Dock Labour Board.

OPENING/CLOSING HATCHES: Work of opening/closing of hatches usually depends on what Charter Party says and also type of hatches of vessel. Liner Term Vessels:- "McGregor Type" – These types of hatches are opened/closed by the crew; but, if Owners/Master desires, rigging gangs may be hired for this work at Owner's expense. Ordinary – Beams & Hatch Boards or Pontoon Type-Opening/closing of this type of hatches is done by stevedores.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes and half-ounce tobacco per week can be held by each crew member. Wine/Spirit: 1 open bottle of spirit or wine per week can be held by each crew member.

CARGO GEAR: Vessel should be in possession of valid cargo gear certificate issued by competent authority. Port Dock Safety Inspector may inspect cargo gear before or during loading/discharging in spite of vessel being in possession of a valid certificate.

IDENTIFICATION CARDS: All crew members should be in possession of their respective CDC's/Z. Cards/Passports.

CONSULS:

Belgium	Tel.	665495	Germany	Tel.	82125
United Kingdom	„	86151/2	Japan	„	665594
Sri Lanka	„	85316	Netherlands	„	86411
Denmark	„	85116	U.S.A.	„	83041
France	„	812131	U.S.S.R.	„	71112

REPAIRS: All types of deck/engine repairs possible. Experienced and established marine workshops available.

DRY DOCKS: None.

REPATRIATION: All facilities for effecting crew changes and arranging repatriation exist.

AIRPORT: The Madras Airport (Meenambakkam) about 15 miles from harbour and served by regular airlines.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Declared by authorities are observed, but work completely closed on: Pongul, Republic Day, May Day, Independence Day, Mahatma Gandhi's Birthday and Deepavali.

SHORE LEAVE: Crew members allowed ashore after securing shore passes issued by port security officer. However, they must restrict themselves to city limits.

POLICE/AMBULANCE/FIRE: Police 100; Ambulance 102; Fire 101.

TELEPHONES: Can be placed on board, but only on vessels at certain berths. All berths on West Quay, i.e. WQ 1, WQ 2, Centre Berth, WQ 3 and WQ 4, North Quay berth and berths on Jawahar docks (West) only, i.e. JD 1, JD 3 and JD 5.

SERVICES: All special services available.

PORT REGULATIONS: Normal Port Regulations. No photography allowed in harbour except with Chairman of Port Trust's permission.

DELAYS: When there is heavy arrival of bulk grain and fertiliser, vessels may expect a delay of about a week or so. General cargo vessels may expect a delay of about 2/3 days during congestion.

SHIP SUPPLY SERVICE: Madras Port does not operate off-shore ship supply services either by the Port authority or by private parties. However, certain private firms and individuals have been granted permits to ply their launches within the Port limits for the purpose of transporting ship's personnel, supply of provisions and stores for ships waiting at Outer Anchorage or for transporting sick crew members of ships.

DEVELOPMENTS: Facilities for LASH system available.

SHIPMASTER'S REPORT: September 1979.

Pilotage: For departure from berth, vessel should call pilot station one hour before readiness to sail.

Radio: "VWM" 24 hours. Vessel with powerful transmitter can contact "VWM" on HF from Singapore, Mauritius or Aden.

Surveyors: LRS, IRS and ABS. Standard Cargo and Marine Survey-services available.

AUTHORITY: Madras Port Trust, Rajaji Salai, Madras – 600 001. *Tel:* 30161 and 29115 (24 hours). *Telex:* 041-331. *Cables:* Port Trust, Madras. *Contact:* Deputy Port Conservator.

MALPE: 13.20 N. 74.42 E.

ANCHORAGE: The port is an open roadstead. Anchorage can be obtained at a distance of 0.81 km. N.W. of Daria Bahadur Ghur Island. Depth at Anchorage – 4.5 fathoms.

BERTHING: With the construction of two breakwaters, the channel in between is maintained at about 4.50 m. at LWOST. The maximum tidal range is 1.52m.

Length of Jetties:

1st	33.53 m.
2nd	15.24 m.
3rd	10.10 m.
4th	5.79 m.

FRESH WATER: Not available.

FUEL: There are oil storage depots in the Port area where HSD oil can be supplied to small vessels. For ocean going vessels there is no bunkering facility.

AIRPORT: Nearest at Bajpe (Mangalore).

TIME: GMT plus 5.5 hours.

HOLIDAYS: Holidays declared by the Collector of Customs, Bangalore.

POLICE/AMBULANCE/FIRE: Udipi – Police: Town Police Station Tel: 8444. Fire Tel: 8333.

BANKS: Syndicate Bank and Corporation Bank, Malpe P.O., Via Udipi, South Kanara Dt., South India.

GENERAL: There is a small shed for storage of cargo. Storm warning signals are hoisted on the flagstaff.

AUTHORITY: Port Office, Malpe, South Kanara Dt., South India. *Contact:* Mr. A. Jayakumar, Deputy Port Conservator, *Tel:* 8592 (Udipi)

MANDVI: 22.49 N. 69.21 E.

DOCUMENTS: Arrival: Arrival Report with ship's details, Voyage Memorandum, Crew Lists, Stores Lists.

Departure: Departure Report with ship's details, Export General Manifest, Certificate of Cargo Tonnage Loaded.

PILOTAGE: None. All vessels anchor in stream.

RESTRICTIONS: Vessels anchor in open roadstead in 3 – 5 fathoms, 2 – 2.5 miles from shore. Vessels of 9 ft. draft can reach wharves at HW and vessels drawing 12 ft. can reach Albert Edward Breakwater. Vessels having 60 – 70 tons cargo only can enter port during high tide. Highest tidal range 14 ft., average range 10 ft. Current 2 knots during fair season.

HEALTH: Government Medical Officer attends as Health Officer.

RADIO: No radio. All messages delivered through Kandla.

TUGS: Services optional. 3 tugs and 1 launch. Charges basis time and BHP.

STEVEDORING: Arranged by Agent with Port Authority.

MEDICAL: 24 hours notice required of any medical requirements.

FIRE PRECAUTIONS: Fire extinguishers are available at the port. Fire fighter is available at the Port workshops. Smoking strictly prohibited in port area.

WATCHMEN: Arranged through Agents.

HATCHES: Opened and closed by crew.

CERTIFICATES: Non-carriage of dangerous cargo, Cargo Gear Certificates, Statement that no passengers carried.

CUSTOMS ALLOWANCES: No restrictions for crew of coastal vessels. Stocks of tobacco, wine and spirits to be declared to Customs. Wines and spirits prohibited in Gujarat States but Master permitted daily quota by Customs Authorities.

REPATRIATION: No facilities.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Usually possible to arrange work on holidays.
POLICE/AMBULANCE/FIRE: Police 8; Ambulance 32; Fire 10.
SHORE LEAVE: Crew of coastal vessels only allowed ashore subject prior permission from Captain of the Port.
DELAYS: Delays to be expected in supply of cargo at times of lowest water.
GENERAL: Gulf of Kutch Ports, viz. Mandvi, Mundra, Jakhau and Koteswar administered by Director of Ports, Gujarat States, Ahmedabad. Mandvi located on Southern coast Gulf of Kutch at mouth of River Bukmavati, seasonable, tidal and intermediate ports.
AUTHORITY: Deputy Engineer & Port Officer.

MANGALORE (Minor Port): 12.55 N. 74.52 E.

PORT LIMITS:

North: A line drawn due West from the Northern boundary pillar on the seashore about 740 yards from Sultan's Battery to 9 fathoms of water.

South: The line drawn due West from the Southern boundary pillar to the seashore, about 1,000 yards below the marine yard to 9 fathoms of water.

West: The 9 fathom line between its intersections with the lines above defined as the Northern and Southern limits.

DOCUMENTS:
Crew Lists (6 copies).
Crew's Declarations for Customs (4 copies).
Store Lists (4 copies).
Currency Declaration (2 copies).
Import Manifest inclusive of Deck Cargo and bottom cargo (3 copies).
Bill of Lading (1 copy).
Ships particulars inclusive of service stand (2 copies).
Declaration of opium, dangerous drugs, gold, arms, ammunitions and explosives, monkeys on board, last and next port of call (2 copies).
Valid Safety Equipment Certificate.
Valid Construction Certificate.
Valid Radio/Tele. Certificate.
Valid Certificate of Registry.
Derat Certificate.
Vaccination Certificates.
Declaration of Health.
Arrival report and Port and Light dues receipts (2 copies).

PILOTAGE: Compulsory. ETA must be informed at least 48 hours ahead of arrival. In the message of ETA the following information must be included:
(a) Name.
(b) Nationality.
(c) Call sign of the vessel.
(c) LOA (draft, forward and aft), g.r.t. and n.r.t. of the vessel.

ANCHORAGES: Open roadstead. Vessels anchor in 7.32 m. to 10.98 m. due West of entrance and are loaded and discharged by lighters. Bar situated due West of entrance. Depth of bar 2.13 m. LWST.
RESTRICTIONS: No night pilotage.
HEALTH: Vessel arriving from foreign country sends radio message in code or otherwise to respective Agents who contact Port Health Officer accordingly. If vessel from yellow fever area Master should give prior notice to Agent to arrange for Mosquito Party from Cochin to come to Mangalore and board ship on arrival. If suspected or infected, vessel should anchor not less than 0.5 miles from all other vessels and notify Port Authorities of situation either by radio or through signal station.
RADIO: Call sign VWL on 500 kHz and 438 kHz working frequency. Tel: 24300.
TUGS: 1 Port Trust tug (210 h.p.) and 1 launch and 2 private tugs capable of towing over 600 tons each are available.
CRANES: 1×1 ton and 1×5 tons.
STEVEDORES: Stevedores available. Average loading/discharging rates per day:
(a) Iron ore 400 tons per hook (weather permitting).
(b) Fertiliser or wheat bags 200 tons per hook (weather permitting).
(c) General cargo bagged 200 tons per hook (weather permitting).

MEDICAL: 24 hours notice necessary to arrange for a doctor on board. Government Hospital and Nursing Homes available.
DENSITY: Density of 1022/3 throughout year except in September (immediately after Monsoon at beginning of shipping season) when density about 1016.
FRESH WATER: Supplied by water barge at rate of 110 tons per trip with 48 hours prior notice. Cost of supply inclusive of all charges except crew overtime on holidays. Minimum order 35 tons.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Stevedores or ship's crew, whichever to ship's advantage.
CERTIFICATES:
Ship's Registry.
Derat Certificate.
Articles of Agreement.
Dock Safety Register (cargo gear).
Radio Telegraphy Certificate.
Load Line Certificate.
Port Clearance from last port.
Bill of Health.
Safety Equipment Certificate.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 50 grams tobacco per week. Wine and spirits: 950 ml. per week.
CARGO GEAR: Derricks and boat devices to be hoisted in when not required to prevent contact with masts and sailyards of lighters alongside. Advisable that lifeboats be lowered only on non-working side.
IDENTIFICATION CARDS: Shore passes are issued.
CONSULS: None.
REPAIRS: Minor repairs to engines and gear carried out by auto-workshops.
DRY DOCKS: Small dry dock, maximum capacity 450 d.w.t. Dimensions, 110 ft.×30 ft. Depth on sill 8 ft. at MHWS. For minor repairs only.
SURVEYORS: Qualified Cargo Survey Agencies are available.

Surveyors available for Lloyd's Register, American Bureau, Bureau Veritas, etc.

REPATRIATION: Can be arranged by ship's agents or at shipping office for Indian crew.
AIRPORT: Bajpe – 20 km. away. Daily air service available to Bombay to connect with international flights.
TIME: GMT plus 5.5 hours.
HOLIDAYS: 26th January, Republic Day; 15th August, Independance Day; 2nd October, Gandhi Jayanthi; and other local holidays declared by Kanara Chamber of Commerce and Industry.
POLICE/AMBULANCE/FIRE: Tel: 100/102/101.
TELEPHONE: No arrangement for placing telephone on board.
SHORE LEAVE: No restrictions.
DELAYS: Adverse bar conditions necessitate stopping work for bad weather.
EMERGENCY CO-ORDINATION CENTRE: Relay information to Port's Signal Station through New Mangalore Port.
BANKS: State Bank of India, Main Branch, Mangalore 575 001.
GENERAL: *Weather:* During monsoon, mid-May to mid-September no communication with shore and port is officially closed. There is an All Weather Major Port at Panambur (New Mangalore Port) 9 km. North of roadstead.
Tides: Range of tide 1.22 m. to 1.52 m.
Lighters: Approximately 25 lighters are available with average capacity of 45 tons each and 3 motor launches. Depth at quay 2.44 m. LW.
AUTHORITY: Captain A. J. Lobo, Port Officer, Old Mangalore Port, Mangalore 575 001. *Tel:* 26174 (personal), 25031 (residence).

Shri K. S. Shetty, Port Engineer, Old Mangalore Port, Mangalore 575 001. *Tel:* 24814 (personal), 24815 (residence).

AGENT: See "New Mangalore".

MORMUGAO: 15.25 N. 73.47 E. (See Plan Book)

PORT LIMITS: Roughly up to 10 fathom line running North and South from Cabo to Grand Island. Vessel is considered "arrived vessel" when she comes under direction of Signal Station.
DOCUMENTS:
10 Crew Lists.
10 Passenger Lists, if any.
3 Copies of Manifest.
1 Last Port Clearance.
1 Bill of Lading in case of imports.
3 Stores Lists.
3 Personal Property Lists.
1 Letter of Authority to Agents addressed to Asst. Collector of Customs (prepared on arrival).
1 Arrival Report to Immigration Officer.
1 Customs Declaration.
1 Inward Clearance Certificate.
1 List of Particulars.
1 Deck Cargo Certificate.
1 Arrival Report.

Last 7 items to be signed by Master in port after arrival.
Ship's papers: Documents placed at disposal of port:
Ship's Registry.
Derat Certificate.
Safety Equipment.
Load Line.
Radio Telegraphy.
Indian Light Dues.
Annual Cargo Gear Certificate.
Safety Construction Certificate.

PILOTAGE: Compulsory. ETA required at least 24 hours before arrival to order Pilot. Call Pilot by international code signals on arrival at signal station or contact by VHF Channel 16.

Pilot launch is white launch showing Pilot flag. In fair weather Pilots board West of fairway buoys. In bad weather, Pilots guide vessel from launch until boarding possible. Pilot launch leaves from inner harbour with Pilot and is not stationed at any particular position. International Regulations for Pilots' ladders applicable. Vessels awaiting Pilot may anchor 2 miles West of fairway buoy 6.

RESTRICTIONS/MAX. SIZE: Pilotage around the clock during the fair weather season (October – May). Draft restricted. Deep-laden vessels await high tide. Max. draft permissible 12.0 m. Draft particulars for incoming ships to berths as detailed below.

Berth No.	*Max. Draft* (m.)	*Max. Length* (m.)
3	7.00	168
4	8.23	
5	8.23	
6	8.23	220
8	12.00	248
9	12.80	305

Vessels loading West of breakwater in fair weather: no restriction on size or draft.

HEALTH: International Regulations apply. Pratique automatic when calling from another Indian port. Pratique granted by Port Health Officer by radio. Telegraphic pratique can also be obtained from Port Health Officer cable address "Quarantine Mormugao".

Master should send quarantine message not less than 4 hours and not more than 12 hours prior to arrival indicating:

(1) Name of ship.
(2) Expected date and time of arrival.
(3) My Maritime Declaration of Health has negative answers to all 6 Health Questions or ZT or My Maritime Declaration of Health has a positive answer to question (indicated by complements) or ZU (indicated by complements 1–6).
(4) List of ports of call with dates of departure during last 30 days.
(5) Have or have not monkey on board.
(6) Have or have not any person on board embarking at Aden, Djibouti or Yemen.

Request radio pratique.

RADIO: Goa Radio, call sign VWG. Operating continuously on 500 kHz, 417 kHz, and 2182 kHz. Communication range 100 miles.

VHF radio telephone station at headland signal station, call sign Goa Port, calling Channel 16, working Channel 12.

Ships desiring to contact port on VHF should establish contact by means of *(a)* light signals, *(b)* hoisting "Z" flag, *(c)* blowing "Z" on whistle or siren.

Port VHF station attracts attention of desired ship by hoisting "Z" flag with call letters of ship or by light signalling.

VHF service restricted for port operation, ship's emergencies and movements. All messages to be addressed to Harbour Master. Third party communication not allowed.

TUGS: Tugs usually used inside breakwater. Normally push, but when towing, use ship's lines. One tug, 30 tonnes bollard pull recently acquired.

BERTHING: Deep loaded incoming vessels berthed 2 hours before high water. Vessels also use anchor and quarter line to mooring buoy to keep off berth.

BULK HANDLING FACILITIES: *Ore Berth (Berth No. 9):* Provided with a mechanical loading plant of a rated capacity of 8,000 tonnes per hour. The facility, presently capable of fully loading 60,000 d.w.t. vessels is designed to cater for 100,000 d.w.t. vessels after further dredging of entrance channel, turning circle and berth. The channel is presently dredged to −13.7 m. and berthing basin to −13.1 m.

Berth No. 6: Equipped for mechanical handling of iron ore. Loading rate about 750 t.p.h. At present vessels of 30,000 d.w.t. with a draft of 8.23 m. can be accommodated.

Ore transfer in stream: Carried out between October and May (fair weather). Vessels are loaded or topped-off to a draft of 20 m. Four floating storage vessels available, capacity 150,000 tons – 200,000 tons, rates 950 t.p.h. – 3,000 t.p.h.

STEVEDORES: Original ETA of 48 hours and a definite ETA of 24 hours required and Master should indicate stowage and gangs required before arrival, also how derrick booms must be arranged so as to enable stevedores to arrange same on arrival.

MEDICAL: No hospital facilities for any serious sickness but facilities available for first aid, which should be informed 24 hours in advance. Port Ambulance can be obtained during day-time only.

TANKERS: Discharge line 35 cm. No loading facilities. Permissible draft in fair weather 12.0 m. at Oil Berth No. 8. Max. LOA 248 m. In addition, discharge facilities are available at Berth Nos. 4, 5 and 6 with 8.23 m. draft.

DENSITY: Salt water 1025 – slightly fresh during monsoon season.

FRESH WATER: Available alongside berths also from 180 tons capacity barge. Pumped by hose at 20 t.p.h. at berth, and 30 t.p.h. from barge. Sometimes restricted to 50 tons maximum if supply is limited.

FUEL:

Grades	*Viscosities*
High speed diesel oil	Less than 45 Redwood
Light diesel oil	41 ,,
Furnace oil (also known as light fuel oil)	of 623 ,,

48 hours advance notice required.

FIRE PRECAUTIONS: During discharge of oil tanker, great care taken that no naked lights are visible nearby. Movements of unauthorised persons at point of discharge strictly restricted. Ships alongside or up to a distance of 100 ft. are advised not to emit smoke through funnel. Round the clock standby duty carried out by Fire Service, around tanker, till completion of cargo discharge.

GANGWAY/DECK WATCHMEN: Necessary to have watchmen in case of loading general cargo to protect goods. In case of loading iron ore no watchman required.

OPENING/CLOSING HATCHES: Usually by crew, unless contrary to Charter Party.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per crew member per week. Wine and/or Spirit: 4/5ths of bottle per week for each member of European crew. 2/5ths of bottle per week for each member of Asian crew as per practice.

IDENTIFICATION CARDS: Not essential but according to Immigration Rule temporary Police landing pass issued to each Crew member going on shore, valid for municipal area of Vasco town; if valid passport is possessed.

REPAIRS: No major repairs. Minor repairs only and no underwater welding facilities.

DRY DOCKS: None.

REPATRIATION: Facilities exist for changing and repatriating crew.

AIRPORT: Approx. 7 km. from harbour. One local flight daily to Bombay. No international flights from Goa and all outgoing foreign passengers have to be repatriated via Bombay.

CARGO GEAR: Certificates to be valid.

TIME: GMT plus 5.5 hours.

HOLIDAYS: New Year's Day, Republic Day, Gudi Padva, Good Friday, May Day, Id-Ul-Fitr, Independence Day, Ganesh Chaturthi, Mahatma Gandhi's Birthday, Idu's Zuha, Diwali, Muharram, Feast of St. Francis Xavier, Goa Liberation Day and Christmas Day.

TELEPHONES: No arrangements for installation of telephones on board.

POLICE/AMBULANCE/FIRE: Police 2234 through Postal Exchange; Ambulance (Health Centre) 2454 through Postal Exchange; Fire 222 or 223 through Port Exchange and 2300 through Postal Exchange.

SHORE LEAVE: Crew members allowed to go on shore with Police landing pass.

DEVELOPMENTS: Construction of a new multi-purpose general cargo berth with a depth of −11 m.

AUTHORITY: Mormugao Port Trust, Mormugao, Goa, (India) 403803. *Tel:* 2911-2916. *Telex:* 0191-219. *Cables:* Harbadmin.
Contact: Captain V. S. Gopinath, Harbour Master.

MUNDRA: 22.54 N. 69.42 E.

LOCATION: In Gulf of Kutch near Navimal Lighthouse, about 2 miles inside Bocha Creek. Port is about 6 miles West of Mundra town. Salt exporting port open for deep sea and coastal traffic. Vessels calling Mundra anchor in open roadstead 2 miles from shore. Vessels of 8 ft. draft can berth alongside jetty. Highest tidal range 17 ft. Current parallel to coastline running about 3 knots.

AUTHORITY: Assistant Conservator.

NAGAPATTINAM: 10.45 N. 79.50 E. (See Plan Book)

DOCUMENTS: To be completed by Masters of vessels on arrival:

8 Crew Lists.
8 Passenger Lists.
3 Form of Import Manifests of Stores.
3 Lists of articles in slop chest.
3 Private Property Declaration of the Crew.
3 Manifests.
3 Bills of Lading.

To be handed to Agents:

Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio Certificate.
Last Port Bill of Health.
Last Port Clearance.

PILOTAGE: No pilot station, being open roadstead port. Vessels not piloted to anchorage.

ANCHORAGE: Vessels anchor according draft and prevailing weather conditions. In fine weather, good anchorage in depths of 3.75 to 6 fathoms with lighthouse bearing 281° to 255°. Holding ground, sand and mud, good. Agents, in consultation with Port Authorities, signal Master on arrival of vessel, anchorage position for guidance.

MAX. SIZE: No restrictions. Vessels choose anchorage according to draft.

HEALTH: On arrival Master to signal local signal station, addressed Port Health Officer stating vessel arrived and no sick person on board. Agents then obtain free pratique from Port Health Authorities. In event any person having chicken-pox or smallpox on board, advisable that Master informs Agents sufficiently in advance to enable them make necessary arrangements for Port Health Officer to board vessel on arrival and obtain free pratique after Port Health Officer is satisfied that isolation arrangement on board adequate.

RADIO: Madras Radio or Colombo Radio. No radio station locally.

TUGS: 1 tug of 45 h.p. and 1 motor launch of 30 h.p. belonging to the Port Department are available, for towing lighters. Launches owned by private owners are also available for towing lighters.

BERTHING: Open roadstead port. No berths. A mobile crane of 4 tons capacity is available in the port for handling heavy cargoes.

STEVEDORES: Port usually handles fertiliser imported on Government of India account and rate of discharge per day about 750 to 1,200 tons. Advisable that ETA of vessel is passed to Agents at least 2 days in advance to enable them to advise receivers to arrange necessary gangs.

MEDICAL: No advance notice required unless sickness of serious nature when Medical Officer boards vessel on arrival. In case of sickness to officers or crew, Medical Officer boards vessel or if in condition to go ashore, necessary arrangements made to take sick crew to Doctor. District Headquarters Hospital with all medical facilities available. Special wards available for sick members of crew. Vaccination, inoculation against yellow fever, cholera, plague, etc., can be arranged.

DENSITY: 1025.

FRESH WATER: Available in limited quantities and dependent upon port getting continuous supply from municipality. 2 tanks of 14.5 tons capacity placed in lighter are sent alongside vessel and a petrol-driven pump is used to pump up water from tanks into vessel.

FUEL: Diesel oil available in a limited quantity.

GANGWAY/DECK WATCHMEN: In the interest of vessel, 2 gangway and deck watchmen daytime and at night to be employed to avoid pilferage.

OPENING/CLOSING HATCHES: Opening and closing of hatches on arrival of vessel before commencement of discharge and on completion carried out by stevedores. Time used for opening and closing of hatches not counted.

CUSTOMS ALLOWANCES: Tobacco, 1 carton per week per crew member. Wine and Spirit, Whisky or brandy 1 quart each member for a week. No restriction for beer as the issue is based on weather, etc.

IDENTIFICATION CARDS: Needed.

CONSULS: None.

REPAIRS: Minor repairs in engine room and on deck can be effected. Chipping and painting can also be arranged.
DRY DOCKS: None.
REPATRIATION: Facilities available for effecting crew changes and arrangements can be made for repatriation.
AIRPORT: Nearest airport Madras, served by regular airlines.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Observed as declared by Authorities. Vessels work on Charter Party and Government holidays but time not counted. No closed holidays but overtime charged for any work done on Government holidays and on Sundays.
POLICE/AMBULANCE/FIRE: Police 267; Ambulance 299; Fire 299. The Police and Customs Departments maintain their own W/T stations which can be contacted or utilized at times of emergency.
SERVICES: Hatch cleaning after discharge of cargo can be carried out.
BANKS: American and European banks are not available at Nagapattinam town, but are available in Madras.
EMERGENCY CO-ORDINATION CENTRE: The information should be passed on in case of a vessel in distress to the Maritime Operations Room/Sector Search and Rescue Co-ordination Centre as "Life-Saving Call" to Madras Radio for this area.

Call Sign: VWM
MADRAS
RADIO
Frequency: 500 kHz
2182 kHz
Time: Continuous.

STORING: See "Prelims" Page viii.
1. Ship's stores to be sent to vessels are loaded into lighters from port wharves, as Nagapattinam is an open roadstead port, having no berths for mooring vessels.
2. Stores can be taken from lighters both during loading and discharging.
3. Trucks can proceed only up to the wharves of the port. The approximate distance from wharves to the ship depends upon the place of anchoring of the vessel. It will be about 2 to 3 nautical miles.
4. Fork-lifts are not available.
5. Necessary shipping bills are to be filed with the Port and Customs Offices before taking in stores from the shore to the vessel.
6. Local riggers may be employed.

SURVEYORS:
1. Cargo inspectors not available.
2. Lloyd's Register and American Bureau are in Madras. Salvage Association not available.

SHORE LEAVE: Officers and members of crew allowed to go ashore and necessary passes obtained by Agents.
DELAYS: Usually no delay in anchoring vessels and generally all formalities including survey carried out on vessel's arrival. If vessel arrives between 0600 and 1400 hrs., she commences discharge same day.
GENERAL: No regular launch service between ship and shore. Agents hire out private launch and obtain permission from port office to ply launch between ship and shore, to facilitate officers and crew to go ashore and for Doctor, Agent and Port Health Officer. Port Authorities do not permit plying of launch after 1800 hrs. 3 trips arranged for launch to go to vessel and back from 0600 to 1800 hrs. every day weather permitting.
AUTHORITY: Port Officer, and Harbour Master, Port Office, P.O. Box No. 6, Nagapattinam, PIN 611001, Tamil Nadu State, India. *Tel:* 255 (office), 363 (personal), 285 (residence). *Cables:* Port Officer, Nagapattinam. *Contact:* Port Office and Harbour Master.

NAVLAKHI: 22.57 N. 70.27 E.

DOCUMENTS:
Arrival:
Last Port Clearance.
Bill of Health/Maritime Declaration of Health.
Customs Arrival Report.
Port Arrival Report.
Agent's Arrival Report.
List of Same Bottom Cargo.
Crew List (6 copies).
Import General Manifest.
Light Dues Receipts (in case the last port of call being Indian port).
Store List & Private Property List (8 copies each).
Misc. Declaration.
Departure:
Port Clearance (handed over by Customs).
Bill of Health.
Port Departure Report.
Agent's Departure Report.
Income Tax Clearance Certificate (in case of export cargo).

PILOTAGE: Not compulsory. If required an experienced local guide provided by Port Authorities. In such cases Pilot meets vessel at Tuna Buoy station about 19.5 miles from port.
ANCHORAGE: Open roadstead port. Vessels work in stream. 2 vessels can be brought to inner anchorage and work conveniently in good weather. In case a third vessel arrives, it has to anchor at Buoy No. 5 until one of the vessels sails from inner anchorage. During non-monsoon times vessels can be moored at Buoy (Navlakhi) No. 5. Chart of the approaches is No. 2017.
RESTRICTIONS: Night navigation not provided. Generally vessels' movements during daytime high water period. Vessels should arrive Tuna Buoy 3 hours before high water in daytime.
HEALTH: Port Health Officer available at Mahendrasinghji Hospital, Morbi.
RADIO: Radio messages intended for this port should be addressed either through Kandla or Bombay Radio Stations.
VHF: To be installed in the near future.
TUGS: Four tugs available, 150 h.p., 370 h.p., 350 h.p., and 240 h.p.
CARGO HANDLING: Ships lie at anchor in the stream about 2.0 km. from shore and cargo is shipped/landed through lighters. There are 17 barges of 100 tons capacity each. There are 17 godowns of 17,000 sq. m. floor area to store the cargo passing through ports. There are four 3 tonnes capacity cranes two of 5 tonnes capacity, and one of 12.5 tonnes capacity.
STEVEDORES: At least 24 hours notice to arrange gangs. Rate of loading and discharging for grains and fertilisers about 1,600 tonnes a day if 1 ship working; in case 2 vessels working simultaneously, combined average of about 1,600 tons can be maintained in fair weather days.
MEDICAL: Small dispensary exists under control of Medical Officer. Qualified extensive medical facilities available at Morbi which is 44 km. away or Rajkot about 109 km. Health Officer comes from Morbi to attend vessels, if required.
DENSITY: 1025.
FRESH WATER: Supplied only in small quantities. 1 barge with carrying capacity of about 49 tons a trip. Due to very low pressure in pipe-lines, minimum 12 hours to fill barge.
FUEL: None available. Can be arranged by Agents.
GANGWAY/DECK WATCHMEN: Necessary to appoint watchmen on board to avoid possible thefts.
OPENING/CLOSING HATCHES: Depends upon terms of working. Local stevedores generally attend to this operation but charge to vessel (Owners) in case these operations are vessel's account.
CERTIFICATES:
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Ship's Register.
Derat Certificate.

IDENTIFICATION CARDS: Customs examine and issue pass to land. But if crew go to suburbs (beyond Morbi which is 30 miles away), identity cards should be carried.
CONSULS: None.
REPAIRS: Workshop for repairs to port equipment and urgent repairs of minor nature can be carried out.
DRY DOCKS: Dry dock for repairs to port service units is under construction.
REPATRIATION: Crew being repatriated from this port would be sent to Jamnagar or Rajkot (after Customs examination) where facilities are available.
AIRPORT: Navlakhi not connected by air. In case of emergency, Jamnagar or Rajkot nearest airports.
TIME: GMT plus 5.5 hours.
HOLIDAYS: The port holidays are taken as office holidays and non-working days as Charter Party Holidays. Except for non-working days, overtime work will be carried out on payment of overtime.
POLICE/AMBULANCE/FIRE: Checkpost Police Station without telephone.
TELEPHONES: Few important offices are connected with telephones, and no telephone service can be provided on board vessel.
SHORE LEAVE: The crew members are allowed ashore on showing Identification Cards to Customs and Ports.
DEVELOPMENTS: A new lighter-wharf measuring 102 m. × 8 m. with three approaches in Sue-Side creek is under construction so as to work lighters all round the clock.
AUTHORITY: Port Officer, Port Officer's Office, Navlakhi Port.

NEW MANGALORE: 12.57 N. 74.48 E. (See Plan Book)

LOCATION: New Mangalore port is situated at 9 km. North of the existing minor port of Mangalore.
PORT LIMITS: Westward Points:
(a) Latitude: 12° 53.6′ N. Longitude: 74° 44.4′ E.
(b) Latitude: 13° 00.2′ N. Longitude: 73° 43.1′ E.

DOCUMENTS: *Quarantine:*
Declaration of Health
Derat Certificate
Vaccination Certificate
Customs:
General particulars of the vessel
Declaration of Deck Cargo and same bottom cargo
*Crew List – (8 copies)
Arrival Report – (2 copies)
Departure Report (2 copies)
General Declaration in Form No. 1 – (3 copies).
Maritime Declaration of Health – (5 copies).
*Cargo Declaration in Form No. H – i.e. Cargo for Discharge – (3 copies).
*Vessel's Stores List in Form No. III – (5 copies).
List of Private Property (Property in possession of Master, Officers and crew of vessel) in Form No. IV – (5 copies).

*These items should be prepared in advance before arrival of the vessel. The other documents can be filled in after arrival.

Port Requirements:

General Particulars of the vessel.

Declaration of Deck Cargo and same bottom cargo.

Arrival and Departure Report on Port's Form – (in duplicate).

Declaration to comply with the Regulations of the Port for granting certificate.

Immigration:

Crew List – (2 copies).

Passports for scrutinisation.

PILOTAGE: Compulsory. ETA must be informed at least 48 hours ahead of arrival. In the message of ETA the following information must be included:

(a) Name.
(b) Nationality.
(c) Call sign of the vessel.
(d) LOA, (Draft fore and aft), g.r.t. and n.r.t. of the vessel.

Telegraphic Address of the Pilot Station: New Mangalore Port Control. Tel: 7531/7428.

Pilot Boarding Station:

Latitude: 12° 54′ 55″ N. Longitude: 74° 45′ 24″ E.

VHF Channel or frequency to be used: Channel 16.

Channel or frequency to be used to contact Pilot Boat: Channel 12.

Description of Pilot Boat: Coloured in red hull and white superstructure.

Berthing and Unberthing:

(a) Berths arranged by the Committee of the Port Trust in advance.
(b) Two small tugs available for berthing and unberthing.
(c) Linesmen and boatmen are arranged through Port Trust.
(d) ETD requires minimum 1 hour advance notice to Port Control/Harbour Master's Office.

ANCHORAGE: Vessels are advised to anchor North of the Fairway Buoy and distances depending on draft of the vessel. Entry into the channel with Pilot is made with 2 transit towers with lights.

NAVIGATION AIDS: Include fairway buoy, front and rear leading lights and channel marking buoys.

APPROACHES: The port has been created by carving out of the mainland a 200-acre lagoon 13.0 m. deep. The lagoon is connected to the sea by an approach channel, 5,400 m. long, 245m. wide, 13.5m. deep and protected by 2 breakwaters each 570 m. long, constructed one on either side of the channel and extends to the 5 m. contour.

RESTRICTIONS: No restrictions. Night pilotage available.

MAX. SIZE: No restrictions on length and beam. Also see "Berthing".

HEALTH: The following radio advice is required:

(a) Name of the vessel and ETA with date.
(b) Request for Radio Pratique.
(c) International Code (ZT).
(d) International Code (ZU).
(e) List of Ports of Call with dates in last 30 days.
(f) Have/Have no monkeys on board.
(g) Have/Have no persons embarked at Aden/Djibouti.
(h) Condition of health of all on board with details of any sickness and whether all vaccinated.

RADIO: Mangalore Radio: Call sign VWL on 500 kHz., 438 kHz. Tel: 24300.

VHF: Communication facilities with Port Control on Channel 16. For Port Operations Channel 12 can be used. On arrival of the vessel general information will be given.

RADAR: No Port Radar Service.

TUGS: 2 small tugs available. Normally tug joins the vessel on base line on entrance to lagoon.

BERTHING: New Mangalore Port provides alongside berths to cater to (1) raw materials import for fertiliser factory (2) chrome ore and manganese ores (3) general cargo, (4) one shallow draft berth for smaller vessels (5) an oil jetty for handling of naphtha and other petroleum products, (6) mechanised iron-ore berth to load concentrates and handle 60,000 d.w.t. ships.

(a) 1 straight wharf of 594 m. in length consisting of 3 berths with a draft of 33 ft., 31ft. and 31 ft., respectively.
(b) 1 shallow draft berth of 22 ft. draft and 115 m. in length.
(c) 1 additional berth of 250 m. in length and a draft of 30 ft. (will be increased to 35 ft. shortly).
(d) 1 iron ore berth of length 290 m., draft 41 ft.
(e) *Tanker Berth:* – See "Tankers".

CRANES: The following electric level luffing wharf cranes are positioned at the Straight Wharf: 1×6 ton, 3×3 ton and 4×10 ton.

One iron ore loader situated at the Ore Berth for loading iron ore, cement, etc., directly to vessels through chutes.

No cranes available in other berths.

Ship has to use her own gear in those berths.

Two tyre-mounted mobile cranes available for shore operations with capacity up to 18 tons. Similar cranes of lesser (5 ton) capacity available.

BULK CARGO FACILITIES: The Straight Wharf Berths (No. 1 Berth) is reserved for Bulk Cargo Handling. Normally grains, ores, fertilisers, cement, etc., are handled at this berth.

SPECIALISED CARGO HANDLING FACILITIES: This port is not specially equipped for handling containers. But containers are handled by ship's gear and with the limited mobile equipment of the Port. Agents are allowed to use private handling equipment inside port.

At Oil Jetty liquid chemicals/oils/molasses, etc., can be handled. No facility at the moment for LPG carriers.

MEDICAL: No advance notice except in cases of serious illness to be included in arrival cable. Ample hospital facilities for treatment are available.

TANKERS: The oil jetty is located in the S.W. portion of the lagoon very near to the approach channel. The draft available at the oil jetty is 33 ft., which affords berthing facilities for 30,000 d.w.t. (length 600 ft.) product carriers and molasses loaders.

STEVEDORES: Advise before 0500 hrs. for commencing 0800 hrs. gangs and 1500 hrs. for commencing 1800 hrs. gangs.

Main commodities loaded:

Coffee – average load rate per gang per shift – 150 tonnes.

Sugar – average load rate per gang per shift – 150 tonnes.

Granite stones – average load rate per gang per shift 200 tonnes.

Fruit products and cashew kernels – average load rate per gang per shift – 3,500/4,000 cartons.

Reefer Cargo – average load rate per gang per shift – 3,500/4,000 cases.

Heavy Machinery – average load rate per gang per shift – 120 tonnes.

Iron ore concentrate through mechanised ship loader – 3,000/4,000 tonnes/hr.

Main Commodities Discharged:

Fertilisers – average discharge rate per gang per shift – 200 tonnes.

Cement – average discharge rate per gang per shift – 200 tonnes.

Grains – average discharge rate per gang per shift – 150 tonnes.

Tanker Oil – 400/500 tonnes/hr.

DENSITY: 1025.

FRESH WATER: Available at all berths. Direct delivery from shore to vessel.

Cost: Rs.24/– per ton subject to a minimum of Rs.510/– in respect of vessels other than coasting.

FUEL: Oil delivered by Indian Oil Corporation (a Government of India undertaking) by tank trucks in all berths. Major grades bunker fuel/diesel/marine lubricants can be obtained from them.

FIRE PRECAUTIONS: Only normal precautions against fire at berths.

CONSULS: No countries have Consuls at the port.

REPAIRS: Most deck and engine repairs are carried out.

DRY DOCKS: No dry docking facilities at the port.

SURVEYORS:

(a) Qualified Cargo Surveying Agencies are available.
(b) Surveyors available for Lloyd's Register/American Bureau/B.V., etc.

GANGWAY/DECK WATCHMEN: Services are available at port and compulsory. Charges are at Rs.20/– per shift per watchman.

OPENING/CLOSING HATCHES: Stevedores or ship's crew, whichever to ship's advantage.

CUSTOMS ALLOWANCES: 50 grams of tobacco or 200 cigarettes and 950 ml. wine/spirits per person per week.

CARGO GEAR: Cargo can be handled either by ship's gear or shore cranes. Shore cranes are available up to 10 tonnes capacity.

REPATRIATION: Crew changes and repatriation can be carried out.

AIRPORT: 15 km. from the harbour and 21 km. away from Mangalore City. Daily air services available to Bombay to connect with international flights.

TIME: Local time is 5 hours 30 minutes ahead of GMT.

HOLIDAYS: 26th January – Republic Day; 15th August – Independence Day; 2nd October – Gandhi Jayanthi.

No work on these days.

POLICE/AMBULANCE/FIRE: Tel: 100/102/101 respectively.

EMERGENCY CO-ORDINATION CENTRE: Relay information to Port Signal Station.

TELEPHONES: Provisions for arranging telephones on board – withdrawn by the Port in 1982.

SERVICES: Services available for tank cleaning, compass adjusting, radio/radar repairs, etc., with prior arrangements.

BANKS: State Bank of India:

Mangalore Main Branch – Telephone No. 23444/21327.

Panambur Branch: Telephone No. 7312.

STORING: See "Prelims" page viii.

(a) By truck.
(b) Barges are normally not used for storing.
(c) Trucks can proceed alongside berth.
(d) Forklifts also used on the jetty while handling palletised or heavy stores.
(e) Customs documentation and regulations are in force.
(f) Private labour is to be engaged for loading stores.

SHORE LEAVE: No restrictions – crew members are allowed to go ashore.

IDENTIFICATION CARDS: Shore passes are issued.

REGULATIONS: No regulations.

DELAYS: Priority berthing for 24 hours port stay are generally allowable for export and import general cargo ships. Otherwise berths are offered according to priority of arrival for long-duration ships.

DEVELOPMENTS: An additional berth of 250 m. now offered for traffic. The present draft of 30 ft. will be increased to 35 ft. shortly. Plans to install heavy shore cranes at berth.

NOTICE: New Mangalore Port Trust, Marine Department Panambur, Mangalore 575 010. No. 4/9/84/MDS-1. Dated 9/11/84. Notice to Mariners No. 1 of 1984.

India: West Coast – New Mangalore Port Trust.

Position: Lat. 12° 56′ N., Long. 74° 43′ E.

Details: A Marker Buoy 6 ft. diameter cylindrical in shape visible height about 5 ft. above water line painted yellow with fixed all-round white light with "Sunlight Sensor" which activates light at dusk and turns it off at dawn with visual range of 2 miles has been laid in the above position in 20 metres depth of water for securing pipe barges with tugs in transit to Bombay High from New Mangalore Port. The position of the Buoy is just outside the N.M.P. limits.

Charts Affected: India West Coast, Chart Nos. 2052 and 217.

Authority: Conservator, New Mangalore Port Trust, Panambur, Mangalore 575 010, D.K. Sgd. Deputy Conservator New Mangalore Port Trust.

SHIPMASTER'S REPORT: Updated 1982.
Documents: Same as other major Indian ports.
Pilotage: Pilot boards in vicinity of fairway buoy. Pilot boat has pilot flag atop its mast.
Restrictions: Regular night pilotage is provided at 50% surcharge.
Anchorage: North of fairway buoy as South of buoy being used as dumping ground for dredgers.
VHF: Channel 16 for calling and listening. Pilots operate on 12 and 16.
Radar: None.
Tugs: 1 × 12 tons bollard pull and 1 × 30 ton bollard pull.
Hospital: Hospital facilities good.
Hatches: Opening/closing by ships crew.
Drydocks: None.

AUTHORITY: New Mangalore Port Trust, Panambur, Mangalore 575010, South India. *Tel:* 7300 *Telex:* 0842-220 Ponm In. *Cables:* Harbojet. *Contact:* The Chairman.

AGENT: Peirce Leslie India Ltd., Shipping Division, P.O.Box 239, Bunder, Mangalore 575 001, South India. *Tel:* 23381, 23231-3. *Telex:* 0842-205 PLI IN. *Cables:* Peirceship.

OKHA: 22.28 N. 69.05 E.

DOCUMENTS: 5 copies each of Import Manifest, Crew List. Passenger List, Ship's Stores Manifest, Crew Property List.
PILOTAGE: Compulsory. Pilot station Lat. 22° 30.5′ N., Long. 69° 04.6′ E.; 1.35 miles N.W. of Samiani Light Tower.
ANCHORAGE: Roadstead anchorage near Pilot station.
MAX. SIZE: 525 ft. LOA during N.E. monsoon and 540 ft. LOA during S.W. monsoon. Max. draft variable, 22 ft. – 27 ft. depending on daily tide.
PRATIQUE: The Master should cable the Port Health Officer (Quarantine Okha) in International Health Code, requesting free pratique. If Radio Pratique is not effected, then Masters should present Maritime Declaration to the Customs Boarding Officer who is authorised to grant free pratique. If the vessel is arriving from yellow-fever area, the mosquito control team is arranged from Kandla, where the cable address of the Port Health Officer is "Sangrodh Kandla".
RADIO: Post and Telegraph Department Wireless station call sign VWO can be contacted from 0800 to 2000 hrs. I.S.T. for communication to and from Local Agents.
TUGS: Port-owned tugs join vessel while entering port channel and/or vacating it at time of berthing and/or unberthing.
BERTHING: Only daylight hours. Vessels should be ready in all respects to move berth 1.5 hours before high water at Pilot station.
Sayaji Pier – East side 27 ft. draft; West side 20 ft. draft.
Dry cargo berth – 25 ft. draft.
CRANES: Vessels use own derricks for heavy lifts. There are 2 electric cranes at the Dry cargo berth each 1.5 – 2.0 tons capacity.
BRIDGES: None.
STEVEDORES: Firm ETA including requirements order avoid delay. *(a) Exports:* Mainly cement, bauxite and chemicals and general merchandise, rate 100/125 tons per shift per hook. *(b) Imports:* Mineral oils average rate about 300 to 500 t.p.h. according to ship's pumping capacity; general cargo same rate as export.
MEDICAL: Port Health Officer always available. Well-equipped hospital at Mithapur under Tata Chemicals at a distance of about 7 miles from port. Medical aid available throughout day and night.
TANKERS: All dry cargo vessels regulations apply for tankers, particularly size, etc. 1 berth, draft 27 ft. No slop facilities.
DENSITY: 1025.
FRESH WATER: Limited. Port supplying water by barge and shore pipe-line. In normal cases 25 tons water supplied per day. In cases of emergency 40 tons water can be supplied per day.
FUEL: Available but arrangement should be made through Indian Oil Corporation; head offices at Bombay.
FIRE PRECAUTIONS: Port Department maintains a small fire station.
GANGWAY/DECK WATCHMEN: Vessel to provide own gangway watchmen. Shore-watchman available for employment on shift basis (8 hour shifts).
OPENING/CLOSING HATCHES: To be attended to by ship's crew, if not contracted with stevedores which may cost extra.
CERTIFICATES: Ship's Register, Load Line Certificate, Safety Equipment, Safety Gear, Radio.
CUSTOMS ALLOWANCES: At Customs Preventive Squad's discretion.
CARGO GEAR: Normal gear supplied by stevedores for hire.
IDENTIFICATION CARDS: Necessary.
CONSULS: None.
REPAIRS: Only minor repairs.
DRY DOCKS: None.
REPATRIATION: Necessary formalities to be completed at District Headquarters situated at Jamnagar, a distance of about 110 miles: such as Police, Health (whereas Customs formality can be completed locally).
AIRPORT: Nearest airport Jamnagar about 110 miles connected with Okha by rail and road. Only local service to Bombay daily operated.
TIME: GMT plus 5.5 hours. (I.S.T.)
HOLIDAYS: As declared by Port Authorities, cargo work can be arranged by paying usual scheduled overtime but labour's observed holidays (about 8 days in a year) completely closed.
TELEPHONES: Only for tankers by respective oil installation.
SERVICE: Tank cleaning by manual labour.
SHORE LEAVE: Crew allowed ashore after vessel cleared by immigration officer who boards vessel on arrival.
DELAYS: Delay only encountered if berth or moorings are occupied.
SHIP SUPPLY SERVICE: Off-shore ship supply service operated by J. M. Baxi and Co., Bombay.
GENERAL: Port governed by Gujarat State and all rules and regulations laid down by them in addition to Central Government rules applicable to this port. Port connected with hinterland by rail, motor transport, 300 miles by sea from Bombay, 2 tides in 24 hours, mean high water spring rise about 11.5 ft. and mean low water neap rise 9.5 ft.; current in neap tide is 2 to 3.5 knots. Wind force/direction during April/September S.W. 3/5 and in October/March N.W. to N.E. from 2/4.
AUTHORITY: Port Officer – Okha Port and Superintendent of Customs, Okha (Ahmedabad Collectorate).

PARADIP: 20.14 N. 86.42 E. (See Plan Book)

PORT LIMITS: When vessel arrives in the Roads, 0.5 miles South of Fairway Buoy in position Lat. 20° 14′ 51″ N., Long. 86° 42′ 19.30″ E.
DOCUMENTS:
8 copies Crew List.
3 copies Ship's Store List (Form No. III).
Crew Private Property List (Form. IV) including Foreign Currency Declaration.
3 copies Currency Declaration.
3 copies Passenger List, if any.
3 copies Cargo Manifest.
3 copies Survey Bottom Cargo Manifest, if any.
3 copies Deck Cargo Certificate.
3 copies Hazardous Cargo Certificate.
3 copies "No Opium" Certificate.
3 copies Arrival Pets Abroad.
3 copies Declaration for "No Monkeys on Board".
3 copies Any other Declaration.

The Master of the vessel should deposit the following documents with the Port Authorities through their Agents.
Ship Registration.
International Load Line Certificate.
Safety Radio Certificate.
Light Dues Certificate.
Safety Equipment Certificate.
Last Port Clearance.
International Health Certificate.
Derat Certificate.
Last 3 Ports Certificate.
Cavities Certificate.
Ballast Certificate.
Vaccination/Inoculation Certificate.
Arms & Ammunitions Certificate.

The Agents will return the documents to the Master before sailing of the vessel along with the Port Clearance.
PILOTAGE: Notice of ETA must be intimated to the Harbour Master by Master or Ship's Agent not less than 24 hours before ETA. Telegraphic Address: Harbourmaster, Portrust, Paradip. Telex: 674-211. Channel 16 VHF is continuously watched. The pilot boat is white and flies Pilot's flag on the mast whenever Pilot is on board. Pilot boarding point is near the Fairway Buoy.
ANCHORAGE: Anchorage particulars given in chart published as "Paradip Anchorage". Vessel can anchor depending on draft, 4 cables from Fairway Buoy, positioned 20° 14.51′ N. and 86° 42.19′ E. Pilot boards during daytime with help of Pilot launch.
RESTRICTIONS: Night navigation facilities are likely to be provided during the end of current financial year. Vessels to have maximum ballast for entering.
MAX. SIZE: LOA 800 ft. and max. draft 39 ft. inward and 42 ft. outward. Also see "Berthing".
Subject to weather conditions, longer vessels may be berthed.
HEALTH: Send usual quarantine message to "Quarantine Paradipport" 24 hours before arrival for Radio Pratique. Pilot gives free pratique on boarding vessel subject to no sick person on board. In case of suspected disease or fever on board, Port Medical Officer visits ship at anchorage/berth and cases of contagious disease are isolated and sent to nursing home.
RADIO: VHF radio installed at signal station in the Harbour Office. Calling Channel 16. Working Channel 9.
Working Hours: every even hour for 10 minutes from 0600 hrs. to 2200 hrs. and when ships are making or leaving the port.
VHF: Vessels are requested to establish contact with the control station when within VHF range (approx. 40 to 60 miles) and before entering, moving in or sailing from the port.
When within VHF range, ships are requested to give the following information:
(1) Name of ship.
(2) Ports of departure, call and destination.
(3) ETA.
(4) Vessels gross tonnage, LOA, breadth, draft and speed.
(5) Number of cases of dangerous contagious diseases on board.
(6) Type and quantity of cargo.
(7) Name of Agents and requirements.

BERTHING:
Iron Ore Berth: Capable of berthing ships of 800 ft. LOA with 11.89 m. draft. Beam limited to 40 m. for iron ore handling plant.
General Cargo Berth: Length 290 m., draft 10.69 m., beam unrestricted.
Mooring Buoy Berth: Vessels up to 800 ft. with 11.89 m. draft can be moored.
Subject to weather conditions, vessels with larger LOA can be accommodated at Iron Ore Berth and Mooring Buoy Berth.

TUGS: Two tugs of 18 tons bollard pull and 1 tug of 30 tons bollard pull are available. Tugs join vessel just inside approach channel. Ship's lines only used.

CRANES:

Type of Crane	*No.*	*Capacity*
Wharf Cranes	3	13 ton
Mobile Cranes	5	12.5 ton
Mobile Cranes	3	30 ton
Cargo Handling Equipment:		
Forklift Trucks	12	3 ton
Front End Loaders	4	2.3 cu.m. to 4 cu.m.
Rear Dumpers	16	4.5 cu.m. to 8 cu.m.
Tractor Trailers	4	5 ton
Tractor Trailer	1	10 ton
Tractor Trailer	1	20 ton
Shovel	2	3.5 cu.yd.
Bulldozer	1	180 h.p.
Tugs	2	49 h.p.

BULK HANDLING FACILITIES: 1 iron ore berth with mechanical loading plants of rated capacity 2,500 t.p.h.

SPECIALISED CARGO HANDLING FACILITIES: Semi-mechanised handling facilities for coal, chrome and other bulk cargoes are available.

STEVEDORES: Stevedores required for loading/unloading at General Cargo Berth and Mooring Berth and at Iron Ore Berth when there is no Iron-ore vessel at the Port. Average loading rates achieved for different cargoes as follows:

Cargo	*Tons per day*
Chrome-ore	1,200
Pig-iron	1,500
Coal	3,000
Iron & Steel	1,000
Foodgrains	1,500
Fertilisers	750
Other General Cargo	750

TANKERS: No facilities available at present.

MEDICAL: A 50 bed port hospital is available at the port. The crew can also be treated at the Government hospitals at Cuttack and Bhubaneswar which are 98/120 km. respectively from Paradip.

DENSITY: Varies from 1018 to 1024 with average of 1021.

FRESH WATER: Water supply is available at alongside berths and through water barges at the moorings. No water supply is given at Roads.

FUEL: HSD and furnace oil can only be procured from Cuttack on duty paid oils only. Arrangements will have to be made well in advance and the port will only provide berthing facilities for taking bunkers.

FIRE PRECAUTIONS: Tugs equipped with fire fighting arrangements are available. No fire station is available at present.

GANGWAY/DECK WATCHMEN: Necessary.

OPENING/CLOSING HATCHES: Undertaken by crew only.

CERTIFICATES:

Ship's Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Last Port of Clearance.
Derat Certificate.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per head per week. Wine and/or Spirit: 1 bottle of 24 ounces per head per week.

CARGO GEAR: Valid cargo gear certificate required.

IDENTIFICATION CARDS: Authorities issue landing pass.

CONSULS: None.

REPAIRS: Minor repair facilities exist.

DRY DOCKS: A 500-ton slipway available.

REPATRIATION: Immigration Office was opened by the Government in 1980. Repatriation of foreign personnel is permitted.

AIRPORT: Nearest airport at Bhubaneswar 120 km. Flight timings are appended below.

Winter Schedule Effective 1st October, 1982: The schedule of flights ex-Bhubaneswar will be as under with effect from 1st October, 1982.

I. *IC-497*		*Flight No.*		*IC-498*
2, 4, 6, 7		*Days of Ops*		*2, 4, 6, 7*
1140	Dep.	Delhi	Arr.	1800
1255	Arr.	Varanasi	Dep.	1645
1325	Dep.	Varanasi	Arr.	1615
1435	Arr.	Bhubaneswar	Dep.	1505

II. *IC-277*		*Flight No.*		*IC-278*
Daily		*Days of Ops*		*Daily*
1240	Dep.	Calcutta	Arr.	1350
1330	Arr.	Bhubaneswar	Dep.	1300
1400	Dep.	Bhubaneswar	Arr.	1230
1445	Arr.	Visakhapatnam	Dep.	1145
1515	Dep.	Visakhapatnam	Arr.	1115
1620	Arr.	Hyderabad	Dep.	1010

TIME: Local time GMT plus 5.5 hours.

HOLIDAYS: Charter Party holidays. Normally work carried out on all days.

POLICE/AMBULANCE/FIRE: Police 227; Ambulance 241. No fire service station at present.

TELEPHONE: No facilities for telephones on board.

SERVICES: None available.

SHORE LEAVE: Port Immigration issue shore passes to all foreign nationals excepting Chinese and Pakistanis and with shore passes crew allowed ashore.

GENERAL: *Comments on Shipmaster's Report No. 1:*

Normal Customs formalities are required. No extra attention to Customs Officials is necessary.

Fresh stores including meat and fish are available. Frozen imported meat is not available. Limited quantities of bonded stores are available.

DELAYS: Generally no delays. Vessels are given berths on "first come first serve". At the Iron Ore Berth, iron ore vessels are given priority.

DEVELOPMENTS: Second general cargo berth and extension to the short-arm completed, length 215 m. depth 10.0 m. The work on the third general cargo berth and mechanised raw-fertiliser berth will be taken up shortly. Third general cargo berth and fertiliser berths are expected to be ready by mid-1985.

The transit sheds and warehousing capacity is being expanded from 13,400 sq.m. to 34,830 sq.m.

SHIPMASTER'S REPORT No. 1: (1975). Suggest vessels follow the normal procedure for Calcutta re-arrival documents.

Customs Officials require the personal attention of the Purser to a greater extent than in any other Indian port.

Stores: Fresh stores about average quality for Indian ports. One is not advised to try to buy meat or fish as these commodites come from Cuttack, a good distance away, and frozen imported meat is not available.

SHIPMASTER'S REPORT No. 2: (1976).

Berths: Apart from 1 iron ore berth and 1 mooring berth there is now a general cargo berth. The long arm has a length of 290.65 m. and a short arm 118.40 m. The depth alongside is 36 ft. 2 ships are normally berthed at the long arm but the ship at the Southern end normally overhangs slightly (when 2 average size ships are berthed).

Stevedores: There are a number of stevedores available at the port. No notice is required.

Services: Fresh provisions are available but 24 hours notice is required for most items. Laundry can also be arranged by Agent.

AUTHORITY: Paradip Port Trust, Paradip Port, District Cuttack, Orissa, India. *Tel:* Paradip 246, 327. *Telex:* 0674-211. *Cables:* Portrust, Paradip. *Contact:* Private Secretary to Chairman.

PONDICHERRY: 11.56 N. 79.50 E.

DOCUMENTS:

Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Last Port Bill of Health.
Last Port Clearance.
Store List with Private Property Declaration in Triplicate.
Crew List (8 copies).
Light Dues Receipt.
Manifest (Import or Export).
Bill of Lading.

PILOTAGE: Not necessary as open roadstead anchorage.

ANCHORAGES: Proper anchorage in line with New Pier. 2 chimneys in line (276°) will provide good transit in day time and at night green/red light in transit with red pier light can be taken.

MAX. SIZE: Anchorage is 7 fathoms within 1 mile from New Pier.

HEALTH: Free Pratique obtained on arrival and Master expected to address message to Port Health Officer, advising that all are well on board. Free Pratique automatic for vessels calling from any Indian ports.

RADIO: Cables routed through Madras Radio (call sign VWM).

TUGS: Tug kept ready at New Pier for towing barges.

BERTHING: No berths.

STEVEDORES: 48 hours notice prior to arrival. Rate of discharge of bagged cargo 800 to 1,000 tons per day.

MEDICAL: No advance notice necessary. General Hospital and Jipmer Hospital available.

TANKERS: Transfer operations are carried out at anchorage 1.5 miles – 2.5 miles offshore.

DENSITY: 1025.

FRESH WATER: Available. Rate 50-60 tonnes per day.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Services not compulsory, but recommended to avoid pilferage. 3 watchmen day/night.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes permitted for each Crew member to be held out of bond. Wine and/or Spirit, 1 open quart bottle per Crew member permitted to be held out of bond.

IDENTIFICATION CARDS: Not needed if furnished with Crew List.

CONSULS: Only French Consulate General. Tel. 4058.

REPAIRS: Deck and Engine repairs not attended. Special arrangements can be made from Madras. Minor repairs carried out privately.

DRY DOCKS: None.

REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriation.

AIRPORT: Nearest airport is Meenambakam Airport, Madras, distant 160 km.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Observed as declared by Authorities but cargo work arranged on all holidays on payment of overtime, except on Republic Day, Gandhi's Birthday, May Day and Independence Day.

POLICE/AMBULANCE/FIRE: Police 100; Fire 101; Ambulance arranged through hospital doctor on duty, Tel: 6008.

TELEPHONES: No facilities to place on board.

SERVICES: Ship chandling and supply of stores available.

SHORE LEAVE: Crew members permitted ashore but have to remain within town limit.

DELAYS: Delays occur only under unavoidable circumstances such as Surf Declaration, Cyclone, etc. Vessels arriving at night, commence discharge operations next morning.
GENERAL: For purposes of crew going ashore, launches arranged between 0600 hrs. and 1800 hrs. weather permitting, hired from private parties. Laundry facilities, supply of fresh vegetables and provisions arranged.
DEVELOPMENTS: Additional berthing facilities for vessels up to 500 d.w.t. to be constructed, completion expected 1987.
AUTHORITY: Government of Pondicherry, Port Department, Pondicherry. *Contact:* Captain N. Selvaraje, Port Director.

PORBANDAR: 21.38 N. 69.36 E.

DOCUMENTS:

Crew Lists (6 copies).
Passenger Lists (6 copies).
Customs Documents to be prepared by Agents and signed by Master (4 copies).
Arms and Ammunition Certificate 4 copies duly signed by Master.
Health Documents: All yellow fever and cholera books should be valid on arrival as well as on departure, if they are not valid on departure Port Health Officer should visit ship and give required injection to persons for completing health books before obtaining Bill of Health.
Port Clearance: Port Clearance of last port to be submitted to Boarding Officer of Customs.
Private Property List (6 copies duly signed by Master).
Store List (4 copies duly prepared by ship's officer).
Currency Declaration (4 copies).
Bills of Lading: Bills of Lading for export cargo generally to be prepared and signed by Agents.

PILOTAGE: Compulsory for inward/outward movements for all vessels and for shifting to and from berths.
ANCHORAGE: Anchor in stream about 1.5 miles off shore. 6 fathoms at low water, with good holding ground.

Outer anchorage is with Rajah's Old Palace, about 1.5 miles South-eastward of lighthouse, bearing 085° and lighthouse bearing 026°, 4.5 fathoms to 5 fathoms sand and rock (or further out as required).
MAX. SIZE: Any size vessel at anchorage. Alongside berth – Max. LOA of vessels up to 177 m. Max. permissible draft 9.00 m. No beam restrictions.

1 mooring buoy – max. draft 7 m.

For roadstead, no restrictions on length or breadth.
HEALTH: If arriving from yellow fever area within 30 days a grant of free pratique is necessary. Mosquito Party to be deputed from Kandla, which can only be arranged by prior intimation, failing which vessel would have to proceed to either Kandla or Bombay for free pratique.
RADIO: Porbandar call sign VWY, working frequency 462 kHz and watch keeping on 500 kHz.
TUGS: Will join ships for assisting berthing/unberthing.
BERTHING: 1 alongside berth and 1 mooring buoy.
STEVEDORES: 24 hours notice required for Agents to arrange gangs.

Average rate of working – 380 to 400 tons per gang per day for general cargo.

For vessels loading bulk ores 3,000 to 4,000 tons per day with ship's gear.
Export Commodities: G.N. Extraction in bags, bulk ground nut HPS., cotton bales, frozen fish, lime and lime stone, lime powder, abrasive powder, bauxite, white clay, fruits, onion, etc.
MEDICAL: Government hospital available. There are also private hospitals.
TANKERS: Presently no facility for discharging oil.
FRESH WATER: Vessels alongside can be supplied by pipe-line and water tanker. Vessels at anchorage supplied by water barge.
FUEL: Fuel can be supplied by road tankers at berth through Indian Oil Corporation at Okha and Rajkot.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Charter Party terms.
CERTIFICATES: *(a)* Load Line Certificate. *(b)* Safety Equipment Certificate. *(c)* Safety Radio Certificate, all certificates must be valid before departure of vessel.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes permitted for use of each crew member from bonded stores of ship.

Wine and/or Spirit: Customs Officer remains on board from arrival till departure and issues required quantity of wine and spirit from bonded stores. Quota is issued every week.
CARGO GEAR: Tested cargo gear should be used for loading and discharging operations.
IDENTIFICATION CARDS: Necessary.
CONSULS: None.
REPAIRS/DRY DOCKS: A dry dock of 150 ft.×55 ft. for repairs to port crafts. Also port workshop for repairs to shore and marine equipment.
AIRPORT: 3 miles from town, daily flight to Bombay.
TIME: GMT plus 5.5 hours.
HOLIDAYS: Observed as declared by Government of Gujarat and can be worked on payment of overtime charges, but work on non-working days like Indian Republic Day, Independence Day, Holi (2nd Day), Ramnavami, Muhurram, Gokul Ashthami, Dessera, Diwali (New Year) and Ramzan-Id not possible.
POLICE/AMBULANCE/FIRE: Police Station 114; Ambulance/Fire Brigade 244.
SHORE LEAVE: Police, port and Customs permission required before landing.
GENERAL: The port is an "all weather port".
AUTHORITY: Office of the Chief Executive Officer and Vice Chairman, Gujarat Maritime Board, New Mental Hospital Building, Block No. 0/20, Ahmedabad - 380 016. *Tel:* 66610, 45116, 66270. *Cables:* Princport. *Contact:* The Chief Executive Officer and Vice Chairman, Gujarat Maritime Board, Ahmedabad-16.

The Port Officer, Gujarat Maritime Board, Porbandar – 360 575, Gujarut State, India.

PORT REDI: 15.44 N. 73.39 E.

DOCUMENTS: Arrival:

Maritime Declaration of Health Form (in duplicate).
Port Clearance from last port of call.
Ship's Stores List (in triplicate).
Crew Private Property List (in triplicate), containing full details of every article such as: cameras, radios/transistors, record players, records, watches, all types of currency, other valuable articles, souvenirs, spirits, etc.
Crew Lists (6 copies).
Ship's Currency List (in triplicate).
Arms and Ammunition Declaration.
Passenger List – if any.
Through Cargo Manifests.

Departure:

Medical Inspection or Examination Certificate (Bill of Health).
Port Clearance.
Consumed stores list in duplicate (a list of stores consumed during the stay of the vessel at port).

PILOTAGE: Compulsory. Port Officer acts as Pilot. Cable via Bombay Radio to Port Officer, Redi, Cable Address: Port Officer Vengurla, ETA of vessel 48 hours prior arrival (cable should reach Port Officer before 24 hours prior arrival). Anchor off Rairi Point – West of Rairi Point – about 1 to 1.5 miles where Port Officer boards ship to pilot to proper loading anchorage. Pilotage restricted to daylight hours only. Shifting without Pilot not permitted.

On arrival keep gangway or complete pilot ladder with manropes and step-down, ready for Pilot.

No fixed anchorage marked at Pilot station; however, vessel should not proceed beyond 1 mile from Rairi Point (for safety of vessel). Keep engine ready till Pilot boards. If vessel arrives during night hours be ready for shifting next morning.
ANCHORAGE: Anchorage Rairi Point or Redi Point (Lat. 15° 44′ N., Long. 73° 39′ E.) is a flat rocky projection, Western extremity of which is 50 ft. (15.2 m.) high. Foul ground and shoal water extend about 0.75 miles S.S.W. and about 0.5 miles Westward of this point; at Southern side of foul area is Rairi (Redi) Rock which is 36 ft. (11 m.) high and steep. Vessel should not proceed into depths of less than 6 fathoms or within 1 mile Westward in vicinity of this point without Pilot.

Loading anchorages are on both sides of Rairi Point (known as Jetty One anchorage and Jetty Two anchorage).
MAX. SIZE: No restrictions on size. This is a minor port exporting only iron ore, and vessels up to 34 ft. draft load at safe anchorage.
HEALTH: On arrival, Customs Authorities board and grant free pratique to ships arriving under normal conditions and on completion of Maritime Declaration of Health Form. Medical Officer, Candy Dispensary, Vengurla, acts as Port Health Officer (Quarantine Officer) for this port, and boards vessel at his convenience before sailing to conduct Medical Examination and grants Medical Examination Certificate (Bill of Health) on day of sailing. Certificate to be collected from Vengurla Office. No facilities for radio pratique.

If coming from yellow fever or jigger infected regions within 30 days Port Health Officer grants pratique after boarding vessel with mosquito party deputed from Bombay at Owners' cost. Mosquito Party can only be arranged on advance information failing which, vessel would have to proceed either Bombay and/or Mormugao for free pratique. Master and/or Owners to give Agents prior notice to avoid delay in arranging pratique. Vessels transitting through above infected areas for bunkers or water only do not require mosquito party for obtaining pratique.

Advisable inform Agents prior to arrival of last port of call, crew, and nationality, and if arriving from yellow fever and/or jigger infected regions, whether called only for bunkers or water, or purpose of call and vessel's health condition.
RADIO: Bombay Radio.
BERTHING: No berths. Open roadstead port.
LOADING: Port only exporting iron ore in bulk and suppliers. The Minerals & Metals Trading Corporation of India Ltd., make own arrangements to load cargo on FOBT terms. Rate between 3,000 to 4,500 tons per day per vessel if 3 vessels are working and 4,000 to 6,000 tons per day if 1 vessel is working. This rate is being achieved due to increased fleet and improvement of shore loading facilities.
MEDICAL: Preliminary medical aid available at Port Redi/Shiroda. Well-equipped hospitals situated at Savantwadi and Vengurla about 25 and 45 miles away respectively by road. Cholera inoculations done through Port Health Officer and if required this information may be passed on to Agents for arranging with Port Health Officer.
DENSITY: Average 1025.
FRESH WATER/FUEL: None.
GANGWAY/DECK WATCHMAN: Not necessary.
OPENING/CLOSING HATCHES: As per Charter Party. However, opening done by stevedores to save their time and commence loading earliest during free time.
CERTIFICATES: All certificates, particularly Cargo Gear Certificate to be in order and valid.
CUSTOMS ALLOWANCES: 200 cigarettes per week of 7 day per crew. Wine and/or Spirit, 1 bottle each per crew of spirit or beer as required.

IDENTIFICATION CARDS: Necessary.
CONSULS: None.
REPAIRS/DRY DOCKS: None.
REPATRIATION: Facilities for crew changes. 4 days advance notice required with full particulars of crew.
AIRPORT: Belgaum and/or Vascodagama 90 miles distant.
TIME: Indian Standard Time GMT plus 5.5 hours.
HOLIDAYS: Cargo work can be arranged on overtime on all holidays except 26th January, Republic Day; 2nd October, Mahatma Gandhi Birthday; 15th August, Independence Day. On these holidays work not permitted even on overtime.
SHORE LEAVE: Crew of Chinese and Pakistani nationality not allowed land on shore. Other crew permitted land only after obtaining requisite permission from Police Authorities from Ratnagiri, distant about 160 miles and thereafter from Customs Authorities. On arrival, crew list and guarantee duly signed by Master, are furnished to Police Authorities at port and telegram sent to Ratnagiri requesting landing permission from District Superintendent of Police.

Obtaining landing permission takes 3 days; and therefore, Masters requested not to allow crew members to land on shore unless written landing permission sent on board. Crew members not allowed beyond Port Redi limits, without permission obtained from Police Authorities, Ratnagiri.
REGULATIONS: Port Officer conducts Final Draft Survey on completion of loading in consultation with Master. Master's refusal to allow shifting creates complications. Master should not shift vessel without Pilot on board or permission from Port Officer; this does not apply in case of emergency.
DELAYS: Only 3 vessels (i.e. 1 at each jetty) can work at a time on a first come first served basis. Overlapping vessels have to wait turn. Waiting time about 4/5 days.
GENERAL: Regular Post and Telegraph Office about 2.5 miles from jetty.

Vessels on arrival and at departure thoroughly examined by Customs, and Masters therefore requested to ensure that crew private property list is correctly presented to Customs Authorities and its accuracy maintained throughout stay of vessel.

Ship's wireless station not to be used for despatching cables during the vessel's stay.

Discharge of bilge water and/or dirty waste oil or cargo prohibited.

Fresh vegetables, etc., supplied in limited quantity from 90 miles distance.
AUTHORITY: Port Officer.

SIKKA: 22.34 N. 69.42 E.

SHIPMASTER'S REPORT: June 1982.

DOCUMENTS: 8 Crew Lists, 6 each Personal Effects and Stores Lists, 4 Vaccination Lists, 5 Currency Lists, (Customs do like all paperwork properly prepared).

On departure 3 Crew Lists if any changes and 3 Personal Effects Lists for those who remained on board.

For personnel leaving, Customs require Currency Form (Foreign Exchange Act 1947) in duplicate (Indian Form) and International Crew Baggage Declaration (Local Form) in duplicate.

Clearance from Last Port, Register, Load Line, Derat, Safcon, Safequip and Safradio all sighted by Agent but not taken from vessel.

All personal belongings to be recorded with makes, models and numbers.
PILOTAGE: Pilot boards vessel at anchor from tug boat using ship's derrick and tug's basket if weather is rough.
ANCHORAGE: Plenty of room for anchoring with good holding ground. Contact Mother Tanker for anchor position. We berthing on flood tide, were requested to anchor 2 miles – 069° True from Mother Tanker.

Locally the storage vessel is referred to as the Mother Tanker (MT) and own ship (OS).
RESTRICTIONS: Apparently none, plenty of water. Larger vessels (this vessel 149,000 d.w.t.) are loaded from daughter tankers which go alongside OS.
HEALTH: Free pratique is granted by Customs Officer.
RADIO: To local Agent at Jamnagar via Bedi Radio VUK5. The MT (which was m.t. "Koyali") keeps an R/T watch. Would suggest contacting the MT for any advance information as nobody else would give any.
VHF: Call MT on Channel 16. While anchored/approaching Channel 11 is used after initial contact. While double banked Channel 13 is used between MT and OS. Cargo operations are conducted on UHF using MT walkie-talkies. Contact Shipindia Channel 13, who pass messages to and from Agent.
TUGS: Only one, used by Pilot and runs lines from OS to MT, not used.
BERTHING: Position off Sikka for cargo operations approximately Lat. 22° 34′ N., Long. 69° 42′ E. Apparently 140,000 d.w.t tankers are the ideal size. They berth alongside MT and can take up to a full cargo without the MT having to top up from a daughter tanker. Operations off Sikka are temporary and from 1st May to end of monsoon. Consult with Pilot about berthing and obtain all details. Vessels berth alongside when tide is running in daylight hours. Usual Yokohama fenders used, 4 for vessels less than 750 ft. LOA and 6 for vessels over 750 ft. LOA. Fenders are made fast on MT. First 2 floatable headlines from OS to MT at least 220 m. long and may require longer. They do not like using '1st ropes ashore' off reels. In our opinion '1st ropes ashore' would be quite adequate and fast enough. Then 2 floatable stern lines from OS to MT. Final moorings were from OS to MT 3 and 2 each end with no breastlines. From MT to OS 2 headlines leading aft, 2 stern lines leading forward, forward 2 springs leading from forward to aft and 2 springs aft leading from aft to forward.
TANKERS: Loading by 2×10 in. ID hoses of ASA 150 standard, 23 m. long.Their discharge rate is quoted as 12,000 t.p.h and OS receives a letter to this effect with a request for OS loading rate. However, hoses restrict rate to about 2,700 t.p.h. overall. Hoses provided by MT, reducers supplied by OS. Only ropes or wires with rope tails used for mooring. Entire operation is guided by the ICS, OCIMF, ISGOTT. Tankers being loaded by daughter tankers should anchor with port anchor and daughter tanker berths starboard side. OS port side derrick and manifolds used alongside MT. Ballast is pumped overside. Ballast draft on arrival to be such that distance from manifold to water line does not exceed 15 m. Ballast trim not to exceed 3 per cent of LOA at any time. Distance of manifold to water line must never exceed 15 m. EDP is used. Samples are taken to Bombay for analysis before B/L figures are given together with cargo quality details. API, loading temperature and pourpoint are given prior to loading. Our API was 39.48 at 60°F and loading temperature will normally be around the same as sea temperature of about 86°F (as during 1st week in June). Cargo was Indian High crude, very thin and apparently quite clean. A Loading Master boards to assist with berthing but does not live aboard. Accommodation and victuals required for Pilot, 2 Cargo Surveyors and 1 Indian Oil Representative. MT normally has 9.5 shackles of cable out. MT does COW but not usual with OS of 140,000 d.w.t. tanker.
WATCHMEN: Not necessary. The only boats allowed alongside were official boats and no other small boats were observed in the vicinity. There is no gangway between MT and OS.
CUSTOMS ALLOWANCES: 200 cigarettes. The State of Gujarat is 'dry' and no alcohol allowed ashore, except foreigners being repatriated may take one bottle.
REPATRIATION: Possible. Airport at Jamnagar. The boat journey ashore is about 2 hours but boat can only get to or leave jetty about 2 hours either side of high water. Foreigners require a visa otherwise they may travel in India but are not allowed to stay at hotels. This applies to departing and arriving personnel. Indian crew are not allowed Rupee notes of greater denomination than 20 Rupees.
AIRPORT: About 1.5 hours drive by car.
SHORE LEAVE: Possible, but due to length of journey and tidal restrictions it is not recommended.
GENERAL: In June 1982 "VQ" buoy Kachchh was missing, shore authorities were advised. A night approach is better than a daytime approach as the buoys are not easy to sight against the discoloured water (on flood tide) although the buoys and Racons show very well on radar.
DEVELOPMENTS: After the end of the SW Monsoon (1982) work will resume on the oil and gas lines to Bombay from the offshore oil-field. An SPM will probably be positioned off Bombay and this will be used during the SW Monsoon when vessels cannot load at the oil-field.

TUTICORIN: 08.45 N. 78.13 E.

PORT LIMITS: *On the North:* A line drawn due East from the boundary pillar erected to the North at Arasadi along the parallel of Lat. 08° 50′ N., to a position in Lat. 08° 50′ N., Long. 78° 22′ E.
On the East: A line joining a position in Lat. 08° 50′ N., Long. 78° 22′ E. to a position in Lat. 08° 41′ 40″ N., Long. 78° 20′ 20″ E.
On the South: A line due West from a position in Lat. 08° 41′ 40″ N., Long. 78° 20′ 20″ E. to where it meets the point 45.72 m. from the HW mark on the shore.
DOCUMENTS: Required on arrival:

4 Manifests.
2 Bills of Lading.
5 Crew Lists.
5 Passenger Lists.
4 Crew Personal Property Declaration.
4 Crew Currency Declaration.
4 Import Manifest of Store List.
2 Health Report Form.

All statutory certificates in respect of vessels in Marine, Traffic, Customs and Immigration.
PILOTAGE: Compulsory within the pilotage zone. At present pilotage is restricted from 0600 hrs. to 1800 hrs. There is no night pilotage. To avoid a delay in obtaining a Pilot, the Owner, Master or Agent of a ship bound for Tuticorin must report via their Agents at least 72 hours earlier. A vessel's ETA at least 24 hours in advance through Agent/Harbour Master. The ETA must be confirmed or amended not less that 6 hours prior to arrival. Time can be either in GMT or IST. The vessels must contact Port Signal Station on VHF Channels 16/12. In message of ETA, the following information must be included:

1. Name/call sign of the vessel.
2. Nationality.
3. Length, draft and g.r.t.
4. Last port and cargo.

Pilot Boarding Station: Vessels are required to approach the Fairway Buoy and the Pilot will board the vessel about 0.5 nautical miles East of Fairway Buoy while underway. The position is approximately 2.5 km. to 3.0 km. away from the entrance to the port basin.
ANCHORAGE: In a sector with the Fairway Buoy as centre circumscribing over an arc of 171° from 009° (T) to 180° (T) at a distance of 0.5 mile to 1.0 mile.

There is also an explosives anchorage in position Lat. 8° 44′ 48″ N., Long. 78° 14′ 22″ E.
MAX. SIZE: See "Berthing".
HEALTH: Free Pratique is issued in normal cases by the Municipal Health Officer, Tuticorin, but in the case of vessels coming from yellow fever area and jigger infection ports with 30 days it is to be issued by the Port Health Officer, Mandapam Camp.

RADIO: When vessels within 24 hours distance Tuticorin Radio could be used and call sign VWT. Otherwise according to route followed, vessels use Madras or Bombay Radio.

VHF: Signal station stands-by throughout 24 hours on Channels 12 and 16.

TUGS: Tugs (max. bollard pull 30 tons) available for berthing and unberthing inside the harbour. However, if services are required for any special service arrangements have to be made. Ships usually anchor in open roads and enter and sail without tug assistance.

BERTHING: At present 6 alongside berths are available to handle break-bulk and dry-bulk cargoes. Berths No. 1, 2, 5 and 6 are designed for ships of 168 m. length and 9.14 m. draft and berth Nos. 3 and 4 for ships of 192 m. length and 10.67 m. draft. One coal jetty is available at North Breakwater which has been designed for ships of 235 m. length and 10.67 m. draft. Pending completion of dredging in the approach channel, ships with 8.24 m. draft can enter the port at all times. Draft of 9.14 m. will be available on completion of the first phase of dredging work, which is in progress.

The berths are connected with metre gauge railway tracks and roads which are in turn connected with road and railway system to hinterland.

Further, there is an open roadstead available at the Anchorage Port. The loading and unloading operations are carried out by lighters throughout the year. Vessels of any size and draft can be handled.

Floating Craft: Sufficient number of tugs and other floating craft are available for pilotage and other operations.

Cargo Handling Facilities: 3×3 ton wharf cranes: 5×10 ton wharf cranes; 2×6 ton wharf cranes; 7 mobile cranes of 3 tons to 75 tons; 18×3 ton diesel forklift trucks; 4×2.3 cu.m. capacity bucket front end loaders and 2 diesel locos.

Storage:

2 Transit sheds 150 m.×36 m. each.
3 Warehouses 150 m×36 m. each.
1 Dangerous cargo shed 36.23 m.×20.23 m.
1 Fumigatorium 40.50 m.×18.24 m.

15 Covered transit sheds including combustible cargo shed and dutiable cargo shed with a storage capacity of 25,370 tonnes. (In Zone 'B'.)

One open platform for storage of cargo with a capacity of 61,500 tonnes. (In Zone 'B'.)

STEVEDORES: Agents require 24 hours notice of ETA for arranging gangs, and receivers for lighters. General cargo, average rate load or discharge about 1,000/1,200 tons per weather working day.

Working hours:

(i) In respect of working of vessels in the Port, period between 0600 hours to 1400 hours on working day is treated as free time, for levy of night and holiday charges. For periods outside these hours, night and holiday charges are leviable.

(ii) In respect of delivery of import cargo and admission of cargo for shipment, period between 1000 hours to 1800 hours is treated as free time for levy of night and holiday charges. For periods outside these hours on working days night and holiday charges are levied.

(iii) On holidays no free time is permissible either for working of vessels or for delivery/admission of cargo for purpose of levy of night and holiday charges.

MEDICAL: For doctor's visit on board early advice helps to arrange for tug or launch to take doctor from shore. In cases of emergency, medical attention can be arranged but there may be some delay. Hospital facilities available. Personnel should have valid inoculation and vaccination certificates. If certificates expired arrangements made for re-vaccination/re-inoculation and renewal of certificates.

TANKERS: One permanent Oil Jetty to accommodate vessels of lengths from 150 m. to 228 m. and 9.14 m. draft is available for handling petroleum products.

Pipe-lines of 457 mm. diameter for furnace oil and 356 mm. diameter for naptha.

Pending completion of the dredging of the approach channel, tankers with 8.24 m. draft only can enter port.

FRESH WATER: Available from hydrants alongside and by barges at the anchorage when no scarcity of water.

FUEL: Supplied by road tanker.

GANGWAY/DECK WATCHMEN: Engaging watchmen always done at the discretion of Masters. In case required could be engaged.

OPENING/CLOSING HATCHES: By ship's crew. If done by stevedores charges extra.

CERTIFICATES:

Ship's Register.
Safety Construction Certificate.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio & Telegraphy Certificate.
Derat Certificate.
Cargo-gear Stability Certificate.

IDENTIFICATION CARDS: Identification cards or seamen's passbook required to be presented to Police and Immigration authorities while coming on shore.

CONSUL: None.

REPAIRS: Minor repairs possible.

DRY DOCKS: A dry dock with workshop facilities has been constructed at the Port for docking and attending to repairs of port's own vessels.

REPATRIATION: Could be arranged via Madras.

AIRPORT: Nearest airport is Madurai, distance 100 miles, which could connect Madras.

TIME: GMT plus 5.5 hours.

HOLIDAYS: *Closed Holidays for 1984:*

New Year's Day	1.1.1984	Sunday
Pongal	15.1.1984	Sunday
Mattu Pongal	16.1.1984	Monday
Republic Day	26.1.1984	Thursday
Tamil New Year's Day	13.4.1984	Friday
Good Friday	20.4.1984	Friday
May Day	1.5.1984	Tuesday
Ramzan	1.7.1984	Sunday
Independence Day	15.8.1984	Wednesday
Gandhi Jayanthi	2.10.1984	Tuesday
Dussehra	3.10.1984	Wednesday
Dussehra	4.10.1984	Thursday
Moharrum	6.10.1984	Saturday
Deepavali	23.10.1984	Tuesday
Thirukarthikai	6.12.1984	Thursday
Christmas	25.12.1984	Tuesday

SHORE LEAVE: Crew allowed shore leave but movements limited to municipal limits. Must obtain shore permits from police.

REGULATIONS: Usual regulations. All crew members coming onto shore and returning to ship must report to Customs and Port Police on every trip.

SERVICES: Fish, meat and all kinds of provisions and stores are generally available.

AUTHORITY: Tuticorin Port Trust, Administrative Office, Tuticorin 628004, India. *Tel:* 21790, 21220, 21960. *Telex:* 0444-243. *Cables:* Portrust. *Contact:* The Chairman.

VADINAR: 22.31 N. 69.42 E.

LOCATION: Vadinar is in the Gulf of Kachchh about 40 miles S.W. of Kandla Port. The port has 1 Single Buoy Mooring (SBM) for crude oil tankers.

Position of SBM: Lat. 22° 30′ 34.48″ N., Long. 69° 42′ 4.07″ E.

The deep water channel from Dwarka to SBM is marked by 9 deep sea lighted marker buoys (refer Chart No. 203).

PILOTAGE: Pilotage is compulsory and the Pilots board the tankers at anchorage (Lat. 22° 33′ N., Long. 69° 38′ E.). Tanker should communicate ETA Vadinar to Harbour Master Kandla Port and local Agents, Jamnagar 72, 24 and 12 hours in advance.

VHF: Vadinar Control Tower can be contacted on VHF Channel 12 and 16.

TUGS: Port tugs and the launch join ships at the approach to SBM.

RESTRICTIONS/MAX. SIZE: VLCC's of max. 300,000 d.w.t. can be moored at the SBM. At present berthing of tankers is only in daylight hours but night berthing may start soon. Unberthing can be done during hours of darkness.

FRESH WATER: Fresh water can be supplied only by water barge.

DEVELOPMENTS: Deep water berth planned.

AUTHORITY: The Chairman, Kandla Port Trust, A.O. Building, P.O.Box No. 50, Gandhidham (Kachchh), India. *Tel:* 2001. *Telex:* 001-105-208. *Cables:* Portrust. *Contact:* Harbour Master.

VERAVAL: 20.54 N. 70.22 E.

DOCUMENTS:

Last Port Clearance.
Ship's Stores Manifest (3 copies).
Crew List (5 copies).
Private Property List of Crew (3 copies).
Same Bottom Cargo (3 copies).
Ship and Crew Currency List (3 copies).
Indian Coast Light Dues Receipt (if vessel arriving from Indian port).
Maritime Declaration of Health.
Customs Arrival Report.
Customs Declaration for arms, ammunition, etc.
Port Arrival Report.

PILOTAGE: Not required. Vessels anchor midstream.

ANCHORAGES: Veraval Light exhibited on coast near Political Residency (occ. 15 sec. 110 ft.). Known as New Lighthouse. Breakwater near harbour under 3 fathoms (5.5 m.). No perceptible tide streams in roadstead. During night/neap tide with low water ships suffer cargo feeding for about 5 hours, 4 to 5 days in month.

Anchorage depth 48 ft. to 60 ft. opposite Bhiria Temple. Good anchorage obtained with Veraval Lighthouse Bearing 317°, breakwater end. True Bearing 336.5°, Bhiria Beacon 27°.

However to avoid shifting after anchoring, for a working turn, new working anchorage zone has been suggested as hereunder. Only 3 ships can work at a time and others have to wait for a turn.

No.	*Point*	*Position Lat. Long.*	*Anchorage No.*	*Depth approx.*	*Suggested for a vessel having draft up to*
(i)	A	20° 53′ 27″ North 70° 22′ 40″ East	1	11.50 m.	8.75 m. (28 ft. 00 in.)
(ii)	B	20° 53′ 20″ North 70° 22′ 20″ East	2	12.00 m.	9.25 m. (30 ft. 00 in.)
(iii)	C	20° 53′ 03″ North 70° 22′ 33″ East	3	12.8 m.	10.00 m. (32 ft. 00 in.)
(iv)	D	20° 53′ 14″ North 70° 22′ 48″ East	4	11.00 m	8.25 m. (26 ft. 00 in.)
(v)	E	20° 53′ 16″ North 70° 22′ 33″ East	5	13.00 m.	10.25 m. (33 ft. 00 in.)

Point No.	*Veraval Lighthouse*	*Bhiria Beacon*	*Somnath Temple*
A	311°	036.5°	101°
B	321°	048°	094.5°
C	321.5°	027°	083.5°
D	312.5°	015.5°	088°
E	317.5°	034.5°	092°

RESTRICTIONS: None, day or night anchorage possible.

MAX. SIZE: No restriction.

HEALTH: (a) Bill of Health is being granted by the Resident Medical Officer of the local Hospital.

(b)Free pratique is granted by the Customs Boarding Officer, on presentation to him of "International Maritime Declaration of Health" by Master.

RADIO: Messages via Bombay Radio or Kandla Radio.

TUGS: 4 tugs, 1×340 h.p., 2×240 h.p. and 1×190 h.p.

VHF: No VHF.

BERTHING: No berths.

There are 4 lighter wharves for vessels working which can provide loading/unloading points, of which 4 have cranage facilities, crane capacity from 1.5 ton to 20 ton for heavy lifts.

Barges: There are 15 barges with 100 tons capacity each and one water/cargo barge with capacity 120 tons.

Storage Facilities:

4 transit godowns – 1,600 tons capacity.
4 platforms – 4,000 tons capacity.
53 storage godowns – 50,000 tons capacity.

STEVEDORING: Particulars of ETA and labour gangs required well in advance. Average loading/discharging:

Loading bagged cargo oilcake, etc.	225/250 tons per hook per day
Loading GN oil in drums	150/175 tons per hook per day
Discharging fertiliser (bagged)	150/200 tons per hook per day
General cargo loading/discharging	150/200 tons per hook per day

Working Hours: Port working hours: 0800 – 1200 hrs. and 1300 – 1700 hrs.

Vessel working hours: Vessels are allowed to work during recess hours and during nights which are 1200 – 1300 hrs. (recess), 1700 – 1800 hrs. (recess), 1800 – 2200 hrs. (night – 1st half), 2300 – 0300 hrs. (night – 2nd half) and 0300 – 0800 hrs. (recess).

MEDICAL: Qualified doctors and hospital facilities.

TANKERS: No tanker berths.

FRESH WATER: Water is required to be obtained from private well and is transported by port tank truck and being supplied by water barge or by tug to vessel on payment of transportation charges from private well to shore and from shore to anchorage excluding cost of water.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Not necessary unless required. Can be arranged through Agents.

OPENING/CLOSING HATCHES: Carried out by stevedores. Ships' derricks worked by crew.

CERTIFICATES:

Safety Equipment Certificate.
Load Line Certificate.
Safety Radio-Telegraphy Certificate.
Derat Certificate.
Ship's Registration Certificate.

CONSULS: None.

REPAIRS: Port is equipped with workshop and dry dock for minor repairs to tugs and barges. Minor repairs are carried out in town.

REPATRIATION: Can be arranged.

AIRPORT: Nearest airport Keshod, 30 miles from Veraval, but motor transport not easily available and advance arrangements have to be made.

TIME: Local Time GMT plus 5.5 hours.

HOLIDAYS: On which work not allowed for loading/discharging: Indian Republic Day, Holi (Second Day), Ramnavami, Mohurram (Ashura or 10th day), Gokulashtami, Dussera Diwali (New Year's Day), Ramzan-Id (Id-ul-Fitr).

POLICE/AMBULANCE/FIRE: Police 3; Ambulance 5; Fire 5.

TELEPHONES: No arrangements for placing telephones on board the ship.

SHORE LEAVE: Crews permitted ashore with permission from Customs and Port Authorities. While coming ashore and returning to ship crew should pass through Customs.

DELAYS: 3 ships can work and fourth vessel if for lifting frozen fish can work during night hours only. Fourth vessel other than frozen fish cargo wait in turn.

GENERAL: Closed for traffic between 15th May to 15th September every year due to monsoon season.

Charts: Plans of Kathinwar – Gulf of Kutch to Vijaydurg 2736. Plans of Veraval Port Roads No. 1321 and 2054.

DEVELOPMENTS: Veraval is being developed as an all weather fishery harbour working under the World Bank Project. There will be extensive facilities available at the Port. The existing breakwater is being extended by about 334 m. and another would be erected in opposite direction for about 3,200 ft. A minimum depth of water in the inner breakwater would be 17 ft. 6 in.

Including breakwater the whole scheme is likely to be completed by June 1984.

AUTHORITY: Office of the Port Officer, Veraval, Junagadh District, Pin. 362265. *Tel:* No. 1 (office). 256 (residence). *Contact:* Port Officer.

VISAKHAPATNAM: 17.41 N. 83.18 E. (See Plan Book)

PORT LIMITS: 3 nautical miles East of and parallel to 10 fathoms line of soundings may be taken as the seaward boundary of the port within which a vessel is considered to be an "arrived vessel".

DOCUMENTS:

12 copies of Crew List.
3 copies of Store List.
3 copies of Private Property List.
3 copies of Currency Declaration.
3 copies of watch lists, giving details of make and value, etc.

The vessel must possess following valid certificates:

Ship's Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio Telegraphy and Telephony Certificates.
Cargo Gear Test Certificate.
Safety and Survey Certificate.
Derat Certificate.
Last Port Clearance.

PILOTAGE: Vessels generally anchor at roadstead where Pilots board. Signal station contacts all vessels arriving and advises all information about Pilot's arrival, etc. A minimum notice of 48 hours of vessel's ETA required. Pilot ladder to be rigged on the Starboard side.

ANCHORAGE: Anchorage position to be marked with Dolphin's Nose Lighthouse bearing 270° (T) at a distance of 1.5 nautical miles.

RESTRICTIONS: *Inner Harbour:* The Inner Harbour is open to ships of 193.55 m. LOA, 9.14 m. draft and 30.48 m. beam at all stages of tide and ships of 193.55 m. LOA with a max. draft of 10.05 m. on a minimum rising tide of 0.91 m. for arrival and draft of 10.21 m. for sailing. Vessels of LOA 175.26 m. and above with draft of 9.14 m. and above can enter during daylight hours only. There are no restrictions on account of night navigation for sailing of vessels from Inner Harbour.

Outer Harbour: Vessels with 270 m. LOA, 42 m. beam, 15.3 m. draft, can sail from the Outer Harbour "OB–1" and "OB–2" berths at all times. The draft for ships entering the Outer Harbour in loaded condition is 14.3 m. No tidal restrictions. The max. permissible draft at oil mooring is 14.3 m., and LOA 260 m.

Vessels of 60,000 d.w.t. and above can enter during daylight hours only. There are no restrictions on account of night navigation for sailing of vessels from ore berths No.'s I and II.

Mooring and unmooring of vessels at Oil Mooring is restricted to daylight hours only.

MAX. SIZE: *Inner Harbour:*

Max. permissible LOA	193.55 m.
Max. permissible breadth	30.48 m.
Max. permissible draft	10. 21 m.

Outer Harbour:

Max. permissible LOA	270 m.
Max. permissible breadth	42 m.
Max. permissible draft	15.3 m.

PRATIQUE: A separate radio Free Pratique message addressed "Quarantine Visakhapatnam" must be transmitted by all vessels arriving from foreign port not less than 4 hours and not more than 12 hours prior ETA.

On information furnished therein Port Health Officer grants Free Pratique. Pilot boarding the ship for bringing her into the harbour has superceding power to cancel radio free pratique already granted. However based on information contained in Maritime Declaration Pilot also grants free pratique. In case of doubt or in case of inspection, if necessary, quarantine officer boards ship for granting clearance. No necessity for vessel to obtain Free Pratique when the vessel arrives directly from another Indian Port.

RADIO: Radio station call sign VWV. Working round clock. Range about 600 miles during daytime and 1,000 miles during night. Better to use Madras Radio Station for all communications in respect of vessels arriving from Madras side. Vessels arriving from Calcutta side, use Calcutta Radio Station. Generally Visakhapatnam Radio station is used for vessels anchored at roadstead. VHF Channel 16.

TUGS: Tugs are available. For ships entering the port, the tugs wait in the lee of the breakwater. Ship's lines and/or tug's lines are used, depending upon the mode of making fast.

BERTHING: The Inner Harbour has 15 berths of which 11 are quay berths, 3 jetty berths and 1 mooring berth, while in the Outer Harbour, there are 2 ore berths and an oil mooring berth. No specific requirements of arrival times for berthing.

CONTAINER HANDLING FACILITIES: Container handling facilities are provided at Visakhapatnam Port.

These facilities include:

Priority berthing;

An earmarked regular quay berth with a draft of 10.06 m. and LOA 168 m.;

50,000 sq. m. open storage space;

3,000 sq. m. of covered storage area;

A 150 tonne floating crane with two 150 tonne flat top pontoons for overside operations;

A 50 tonne gantry crane in the container park;

Two 50 tonne crawler mounted mobile cranes;

Four 25 ton mobile cranes;

Fleet of forklift trucks with extended forks up to a capacity of 8 tons and Truck-trailer units.

CRANES: The Port has six 10 tonne cranes, six 6 tonne and eighteen 3 tonne quay cranes, one 30 tonne stationary electric crane and one 150 tonne self-propelled floating crane in addition to various mobile equipment such as mobile cranes, forklifts, tractors and trailers and front end loaders.

BULK CARGO FACILITIES: Iron ore is loaded through a mechanical ore handling plant having a rated capacity of 8,000 tonnes per hour into ore carriers of 100,000 d.w.t., at the finger type ore jetty (OB-1, OB-2) in the Outer Harbour.

Fertiliser raw materials (i.e.) rock phosphate and sulphur on account of Coromandal Fertilisers are handled at the fertiliser berth in the bulk form by means of grabs and conveyors into a silo.

Grabs are also used for unloading fertilisers and other bulk cargoes at the Port.

SPECIALISED CARGO HANDLING FACILITIES:
Inner Harbour: *Fertiliser berth:* For the import of fertiliser raw materials vis. sulphur and rock phosphate by grab unloading on to a conveyor belt.

OR-1 and OR-2 Berths: For the handling of P.O.L.

EQ-1 and EQ-2 Berths: For the export of Manganese ore and other ores by semi-mechanical means. Portable flat belt conveyor system for handling bag cargoes.

Use of grabs for unloading bulk cargoes. Poclain Hydraulic excavator and front end loaders for handling bulk cargoes.

Outer Harbour: *OB-1 and OB-2 Berths:* For loading iron ore through a mechanical ore handling plant at a rated capacity of 8,000 tonnes per hour.

STEVEDORES: Agents must give proper notice of vessel's arrival to the stevedores not less than 48 hours to make necessary arrangements for working vessel and also to order sufficient gangs, etc.

MEDICAL: All crew and officers must possess individual international vaccination certificates against cholera before leaving this port for any foreign port. Cholera inoculation facilities available with 24 hours notice. Well-equipped hospital facilities available round the clock.

TANKERS: There are two berths in the Inner Harbour for discharging and loading oil. The max. permissible draft at these berths is 10.06 m. at High Water. In the Outer Harbour, an oil mooring berth is available to accommodate tankers of up to 100,000 d.w.t. with a draft of not exceeding 14.3 m.

DENSITY: Fluctuates from day to day between 1020 and 1023.

FRESH WATER: Normal quantities available and delivery made by Port Trust both from shore and barges.

FUEL: Indian Oil Corporation and Hindustan Petroleum Corporation supply on request either through pipe-line in some cases or by barges in other cases.

FIRE PRECAUTIONS: Fire precautions are to be observed in the port area. The Port has fire fighting equipment consisting of a fire float capable of combating fires afloat as well as ashore and 3 shore fire fighting units.

GANGWAY/DECK WATCHMEN: Necessary according to demands of local labour unions.

OPENING/CLOSING HATCHES: Stevedores.

CONSULS: None.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per head per week. Wine and/or spirit: Asian Crew 2/5 units per 3 days. Non-Asian crew 4/5 units per 3 days. Bottle of liquor equals unit.

CARGO GEAR: Valid cargo gear test certificate must be on board all vessels using ships' gear for loading or discharging.

IDENTIFICATION CARDS: Not needed if have valid seaman's books.

CONSULS: None.

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: The Port has a dry dock which is 137.2 m. long and 18.4 m. wide for port craft and small ships. It has a depth of 5.6 m. below the low water.

Hindustan Shipyard Limited's services available generally for major ship repairs. It has a dry dock which is 244 m. long and 38 m. wide. It can take in ships of 70,000 d.w.t.

REPATRIATION: Facilities exist to foreign countries via Madras, Calcutta or Bombay. About 3 days delay to obtain travel permit.

AIRPORT: Distance 14 Km. Regular daily flights to Calcutta and Hyderabad by Indian Airlines Corporation.

SURVEYORS: Available.

TIME: Indian Standard Time GMT plus 5.5 hours.

HOLIDAYS: Port's closed holidays are: Pongal, Kanumu, Republic Day, Kotha-Amavasya, Vijayadasimi, Independence Day, Gandhi's Birthday and Nagulachaviti, when work not possible even on payment of overtime.

POLICE/AMBULANCE/FIRE: Police Station 62140; Fire Station 64841 – Ext 239; Ambulance 64841 – Ext 213 (Port Hospital), Ext 275 (Ambulance).

TELEPHONES: Arrangements exist for placing telephone on board.

SERVICES: Tank cleaning facilities available.

SHORE LEAVE: Crew members allowed ashore after receiving immigration permits.

DEVELOPMENTS: A Fishing Harbour was constructed in a 24 hectare area as a by-product of the Outer Harbour. The first stage of the Fishing Harbour was commissioned in 1978, which provides accommodation to 15 trawlers and 150 mechanised boats. The second stage of the Fishing Harbour, commissioned in 1982, can accommodate 56 trawlers and 300 mechanised boats.

A slipway facilitating 6 trawlers or 12 boats at a time for repairs is also constructed at the Fishing Harbour.

Construction of an oil berth to accommodate tankers of 150,000 d.w.t. in the Outer Harbour, provision of facilities for handling of import of coal, provision of facilities for export of Alumina and import of caustic soda, construction of a general/bulk cargo berth in the Outer Harbour to accommodate 60,000 d.w.t. vessels, construction of two warehouses of a total capacity of 30,000 tonnes, provision of third wagon tippler for the iron ore handling complex, addition of tugs and other floating craft and cranes and other cargo handling equipment are some of the principal developments.

SHIPMASTER'S REPORT: 1979.
Documents: To include 5 copies of Cargo Manifest for cargo being discharged (Agent may be in possession of same). Travelling Manifest of all cargo on board.
Pilotage: Pilot boards 0.75 miles S.E. of fairway buoy. Pilot boat exhibits pilot signals by day and night.
Approaching or Departure: Vessels should head for a point 5 miles S.E. of breakwater when approaching or on departure before setting course. This keeps clear of all wrecks in the vicinity.
Radar/VHF: Channel 16. Range approximately 15 miles. Call Vizag Port or Vizag Control. Pilot station at top of the hill will advise accordingly. For departure, pilot station to be called 1 hour before departure. No port radar.
Cranes: Berth "EQ" Nos. 1, 2, 3, and 4 each have 4 cranes of 3 tonne SWL. 1 floating crane "Bheema" of 150 tonne capacity.
Stevedores: 1st shift 0630-1530 hrs.; 2nd shift 1530-2230 hrs.; 3rd shift 2230-0530 hrs.
Specialised Cargo Handling Facilities: For refrigerated frozen frogs legs or shrimps the cargo comes in properly insulated or refrigerated vans.
Surveyors: LRS, ABS, NV, BV, GL and IRS. Standard Marine and Cargo Surveyors available.
Opening/Closing Hatches: Rigging derrick, opening/closing of McGregor hatches by crew. Rigging gangs may be hired for this type of work at Owners' expense.

SHIPMASTER'S REPORT: September 1983.
Documents: On boarding, Pilot hands Master Arrival Report (in duplicate) with 24 questions to be completed and handed back to Pilot before passing Dutch Battery. The questions relate to the vessel, certificates, cargo and voyage just undertaken and it is quite a lengthy document. Recommend copy should be obtained at previous port to have all completed for arrival.

For security reasons, all cameras must be collected prior to arrival and kept in the safe custody of the Master. Pilot gives Master a Declaration to sign that no photographs will be taken of the Port Area on arrival, whilst berthed, or on departure.

The Indian Authorities are presently having meetings to come up with a single Arrival Form for vessels, to end the present duplication of information between Port Authorities, Customs, Immigration, etc.
Pilotage: On departure, Agents make tentative booking of Pilot with Port Trust, vessel then to hoist International Code Flag 'G' one hour before departure.
Radio: Visakhapatnam Radio/VWV workable about 1 day out.
Health: Send Free Pratique message stating no persons embarked at Aden or Djibouti and that there are no monkeys on board. Pilot initially grants pratique with Stamp in Deck Log Book.
Tugs: Four tugs of 32 ton bollard pull available; for deeply laden large vessels passing into Inner Harbour, 2 are required, 1 made fast right ahead, the other made fast starboard shoulder. They are necessary for vessels to negotiate the bends in the Cutting. Tugs join in the Outer Harbour and there is little time to make them fast. Therefore, Pilot asks for Aft Mooring Gang to make one of these tugs fast, as they are not required aft until vessel is in the Turning Basin.
Medical: Smallpox vaccination not required but it is recommended that personnel have Cholera and Typhoid inoculations before arrival. Stocks of these vaccinations are not usually held locally unless there is an outbreak of the disease.
Density: Varies from 1018 to 1023 depending on season and recent rainfall.
Fresh Water: Delivered by barge, hoist International Code Flags 'Y' over 'J' 2 days before required.
Repairs: Below average standard of metal work/welding. Very little assistance and spares available in electronic area.
Opening/Closing Hatches: Automatic/hydraulic type are operated by ship's crew.
Surveyors: Lloyd's (exclusive), ABS, GL, NKK, Korean Register, Int. Cargo Gear Bureau NY (non-exclusive), also Nautical Inspector for Governments of Liberia, The Bahamas and Republic of Panama.
Telephones: No shore telephone was placed on board.
Services: Very few services available.
Shore Leave: Immigration permits/shore passes to be carried at all times, issued for limited period initially.

Indian currency in notes of greater value than Rs 10/- (about US$1) not permitted inside Dock Area.
Security: Local Watchmen not particularly effective and pilfering is rife. Make the accommodation block secure with only one controlled entry/exit. Keep a strict watch over any items which cannot be removed/secured.

AUTHORITY: Visakhapatnam Port Trust, Visakhapatman 530035, Andhra Pradesh, India. *Tel:* 4841. *Telex:* 0495/235. *Cables:* Portrust. *Contact:* Harbour Master.

Indonesia

AMBON: 03.41 S. 128.10 E.

DOCUMENTS:

14 Passenger Lists.
7 Crew Lists.
2 Customs Documents.
2 Health Documents.
7 Cargo Manifests.
7 Bills of Lading.
5 Ship's Papers.
Sailing Permit.

PILOTAGE: No Pilot station. Apply for pilot boat by calling Ambon Coast Station (Ambon Radio) or fly "G" Flag. Pilot boat located at Ambon Bay. Entrance in all seasons and weathers. All parts of Ambon Bay suitable for anchorage to await Pilot.

ANCHORAGE: Areas of anchorage can take all sizes of vessel.

RESTRICTIONS: Open 24 hours. Tides do not affect entry. But when entering at night ship must anchor and await orders.

MAX. SIZE: Joos Soedarso Pier: length 187 m., breadth 35 m., draft 12 m. Wainitu Pier: length 100 m., breadth 20 m., draft 8 m.

HEALTH: Port Health Officer boards vessel together with Pilot.

RADIO: Ambon Coast Radio, call sign PKE. Operating 24 hours. Frequencies 500–470 kHz, 8472 and 8799 kHz. VHF all Channels used.

TUGS: Normally tugs do not join vessel but when necessary to use tugs call PT "Dock Waijame".

STEVEDORES: Agent arranges. 3 stevedore companies: PT. "Gotong Rojong", PT. "Mastra" and PN. "Varuna Tirta Prakarsa".

MEDICAL: Hospital facilities available. No advance notice required.

TANKERS: Berth at Wainitu Pier. Type of pipe, 6 in. and 8 in. Discharging capacity, 125 t.p.h.

FRESH WATER: Available only at Joos Soedarso Pier. Loaded by pipeline with 25 tons/hour capacity.

FUEL: Only diesel and marine fuel.

GANGWAY/DECK WATCHMEN: Deck watchmen needed, particularly for tankers.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: Cannot be held out of bond.

IDENTIFICATION CARDS: Needed by Immigration (landing permit).

CONSULS: No consuls available locally.

REPAIRS: Deck and engine repairs available. Floating dock, lifting capacity for 2,000 d.w.t.

REPATRIATION: Possible. Dealt with by Immigration through Jakarta.

AIRPORT: Distance from airport about 7 miles. Regular airline "Garuda Indonesian Airways" (GIA). 4 flights per week from Ambon to Jakarta.

TIME: Local time GMT plus 10 hours.

HOLIDAYS: Port open for 24 hours even in holidays.

POLICE/AMBULANCE/FIRE: Police and Port Health at Port. But when necessary to use fire brigade call by connecting to "Burgomaster".

SHORE LEAVE: All crew members allowed ashore with permission of Immigration.

DEVELOPMENTS: Plans for future developments dependent on Government expenditure.

AUTHORITY: Ambon Port Administration.

ARDJUNA: 05.54 S. 107.57 E. (See Plan Book)

LOCATION: Ardjuna Marine Terminal is an open, unsheltered mooring in the Java Sea, about 18.5 miles from the nearest point on the North Coast of Java.

The Terminal is approximately North 72° East distant 59 nautical miles from Jakarta.

There are 5 standard type single buoy moorings and one rigid arm single buoy mooring situated as follows:

1. A chartered crude oil Storage Tanker SBM (Buoy No. 1).
   Lat. 5° 54′ 15″ S., Long. 107° 44′ 22″ E.
2. Crude oil export SBM for tankers loading from "Arco Ardjuna" or chartered crude oil storage tanker (Buoy No. 2).
   Lat. 5° 53′ 19″ S., Long. 107° 45′ 18″ E.
3. Crude oil Storage Barge "Arco Ardjuna" SBM (Buoy No. 3).
   Lat. 5° 54′ 10.6″ S., Long. 107° 43′ 45″ E.
4. Crude oil export SBM for loading from "Arco Ardjuna" or chartered crude oil storage tanker (Buoy No. 4).
   Lat. 5° 53′ 29″ S., Long. 107° 43′ 20″ E.
5. Liquefied Petroleum Gas Storage Barge "Ardjuna Sakti" rigid-arm type SBM. (Buoy No. 5).
   Lat. 5° 53′ 10″ S., Long. 107° 44′ 13″ E.
6. Butane SBM for butane export tankers (Buoy No. 6).
   Lat. 5° 52′ 19″ S., Long. 107° 45′ 18″ E.

THE FOLLOWING ITEMS ARE OF PARTICULAR IMPORTANCE:

1. No dirty ballast.
   Tankers with dirty ballast will be rejected and will have to tender a new Notice of Readiness upon second arrival.
2. No shore leave.
3. No crew changes.
   If emergency conditions prevail, for humanitarian reasons, exceptions to the foregoing may be permitted. All expenses incurred will be for ship's account.
4. No stores available.
5. No clinic is available.
6. The laws of Indonesia govern this Terminal and all personnel are urged to abide by them.
7. During daylight hours the Indonesian flag must be flown throughout the vessel's stay in port.
8. Ardjuna time is GMT plus 7 hours throughout the year.
9. No bunkers are available.
10. Pertamina Directorate of Shipping and Telecommunications Jakarta, handles all Agency matters for tankers.
11. The Unit of Currency is the Indonesian Rupiah.
    The rate of exchange varies from time to time. The Master can obtain the current exchange rate from the Agent.
12. There are no Consulates available at Ardjuna Marine Terminal. However, there are many Embassies and Consulates represented in Jakarta 59 nautical miles S.W. of the Terminal.
13. Language of the port is English and Indonesian.
14. Only authorised personnel or visitors are permitted on the Storage Barges and/or Export Tanker.
15. No fresh water is available.
16. No slop tanks are available.
17. The Crude Oil testing laboratory is equipped to perform the following tests:
    API Gravity, B.S. & W., Pour Point and R.V.P.
    Any additional tests that may be required will be performed in Jakarta.
18. For convenience, mail for personnel on incoming tankers may be sent to the Jakarta Office of THE COMPANY for delivery to the tanker when it arrives at Ardjuna Marine Terminal. Except on an emergency basis, spare parts or other material will not be accepted for delivery to incoming tankers.

DOCUMENTS: The Harbour Master submits a Harbour Report Form for the Master to complete.

The Agent prepares the ship's documents check list form to check the validity of each document. These documents are: Certificate of Registry, Ship's Construction Certificate, Load Line Certificate, Life Safety Equipment Certificate, Safety Radio/Telephone/Telegraph Certificate; Cargo Gear Certificate; Derat Certificate or Exemption Certificate. This list is then delivered to the Harbour Master with the following documents attached: Last Port Clearance, Crew List approved by the Immigration Officer and light dues receipt if arriving from another Indonesian port. The Harbour Master issues a port clearance at departure provided clearance is also granted by the other governmental authorities. A Panamanian port clearance for Panamanian flag vessels is not required at Ardjuna.

The Immigration Officer requires 2 copies of the Crew List and will check the Ship's Articles and the passports of the crew. When these documents are found to be in order, an arrival clearance will be marked on the Crew List.

If arriving from another Indonesian port the Agent will sign a guarantee if the vessel cannot prove that light dues have been paid.

Cargo Documentation: Documents such as Bills of Lading, Quality Certificate, Quantity Certificate, Dry Certificate, Ullage Certificate, Time Loading Report, Certificate of Origin, Cargo Manifest and Master's Receipt for Documents/Samples are prepared at Ardjuna Marine Terminal. When the tanker has been loaded, the documents shall be completed and be taken aboard the tanker for the Master's signature.

Signing of these Documents by the Master will take place at the same time final departure clearance formalities are being carried out.

Notes of Protest, if any, should be handed to the Mooring Master for further delivery to Atlantic Richfield Indonesia Inc., Jakarta. Please note that the Mooring Master will acknowledge receipt of the Note of Protest only and is not authorized to accept such letters.

Departure Procedure:

Prior to the vessel's departure, the Immigration Official requires 6 copies of the Crew List to be marked for *"Departure Immigration Clearance"*, and duly signed, it will be distributed as follows:

Master of the vessel	1 copy
Harbour Master	1 copy
Customs	1 copy
Pertamina Agent	1 copy
Immigration	2 copies
Total	6 copies

The Customs Official on duty will issue the Customs 5-B Form which serves as Customs Departure Clearance.

Upon presentation of the Crew List which is signed and marked for Departure Immigration Clearance and Customs Clearance, the Harbour Master will issue the *Port Clearance*.

Final Clearance formalities will be carried out aboard the tanker, either at the Export SBM or alongside the storage barge "Ardjuna Sakti" or in the Anchorage Area, as circumstances dictate.

Before leaving the Terminal Area, the Master should advise the Terminal, the vessel's ETA at destination through the Mooring Master.

PILOTAGE: Under normal conditions, if a tanker is scheduled to berth upon arrival, the Mooring Master will board such tanker in the vicinity of the mooring area.

Tankers waiting to load shall wait their turn in the recommended anchorage area, and shall maintain radio-telephone contact with the Terminal using the International Marine Calling & Safety Channel 16 for Terminal instructions.

The Mooring Master will act on behalf of the company to sign acknowledgement of tankers' Notice of Readiness. Such notice will not be accepted for a time earlier than:

(a) the Master has received the Mooring Master onboard or
(b) the tanker shall have dropped anchor within the recommended anchorage area, and has advised the Terminal the time of anchoring.

Exception to (a) and (b) will be if the tanker is within the anchorage area awaiting arrival of the Mooring Master and has been requested by the Terminal not to anchor.

In this case N.O.R. will be accepted from the time the Terminal requested the ship not to anchor.

The company reserves the right to decline to berth a specific tanker if its condition or facilities are unsafe for berthing or loading, even though the berth may be open to other tankers.

The decision of the Atlantic Richfield Indonesia Terminal Superintendent or his designated alternate to berth or not to berth a vessel shall be final.

ANCHORAGE: For tankers requested to anchor, the recommended anchorage area is an area Northwestward from the Single Buoy Moorings enclosed by a line drawn through the following positions.

"A"	Lat. 5° 52′ 36″ S., Long. 107° 41′ 36″ E.
"B"	Lat. 5° 50′ 57″ S., Long. 107° 40′ 57″ E.
"C"	Lat. 5° 50′ 06″ S., Long. 107° 42′ 40″ E.
"D"	Lat. 5° 57′ 24″ S., Long. 107° 43′ 19.5″ E.

Prior to their arrival Masters of tankers should contact the Terminal for instructions concerning anchorage positions.

Under no circumstances should the export tanker enter the Restricted Area around the structures without a Mooring Master aboard.

The attention of Masters is drawn to the existence of underwater pipelines in the Restricted Area (see "Plan Book").

NAVIGATION AIDS:

Approaches: Approach information can be obtained by radio from the terminal. Under normal weather conditions, if a tanker is scheduled to berth upon arrival, the Mooring Master will board such tanker in the close vicinity of the mooring area.

In addition to the single buoy mooring points for export tankers and the storage barges, various oil wells and production structures are located in the immediate vicinity and the areas extending East, South and Westerly from the storage barges which constitute a hazard to navigation for mariners.

SBMs, storage barges and structures within Ardjuna Marine Terminal area display the following visual characteristics:

Export Single Buoy Moorings (Buoy No. 2, No. 4 and No. 6): A white light flashing every second, visibility 5 miles, mounted on the rotating deck of each SBM. Buoy No. 4 and No. 6 are fitted with radar reflectors.

Storage Barges "Arco Ardjuna" and "Ardjuna Sakti" and chartered vessel. By day, the black ball as required by the Regulations for Preventing Collisions at sea. The 2 storage barges at night display the lights for tankers at anchor as required by the Regulations for Preventing Collisions at sea and are equipped with automatic fog signals at the bow and at the stern.

Each barge has a bell forward as required by the Collision Regulations and gong aft, under the same rules. When visibility is restricted the Fog Signals are continuously sounded. The SBM to which the "Arco Ardjuna" is moored, is fitted with a radar reflector and a white light flashing every second visibility 5 miles. The chartered storage tanker SBM (SBM No. 1) shows a white light flashing every second visibility 5 miles.

The SBM to which "Ardjuna Sakti" is moored, shows a white light flashing alternately for a 3-second period and a 1-second period every 12 seconds, visibility 5 miles.

Crude Oil Production Platforms and Natural Gas Liquids Processing Facilities: There are 5 crude oil production platforms, 16 well platforms, 1 junction platform, 1 natural gas processing facility platform and 1 quarters platform for the natural gas facility within the Ardjuna Marine Terminal area.

"B" (Bravo) Flow Station, situated approximately 0.5 of a mile South of the "Arco Ardjuna" Barge. Indicated as BB.

"E" (Echo) Flow Station, situated 12 nautical miles Eastward of Bravo. Indicated as platform EA.

"K" (Kilo) Flow Station, located 8 nautical miles S.S.W. of Bravo. Indicated as platform KA.

"L" (Lima) Flow Station, situated 15 nautical miles West of Bravo. Indicated as platform LA.

"U" (Uniform) Flow Station, located 13 nautical miles S.S.E. of Bravo. Indicated as platform UB.

"M" (Mike) Flow Station, located 33 nautical miles West of Bravo. Indicated as platform MX.

"F" (Foxtrot) Flow Station, located 28 nautical miles E.S.E. of Bravo. Indicated as platform FC.

"NGL" The natural gas facility and quarters platforms are joined by a bridge. Their position is:

Lat. 5° 54′ 36″ S., Long. 107° 44′ 01″ E.

In addition to the above specified obstructions and navigational aids, all platforms display interrupted quick flashing white lights. The storage barges, flow stations, LNG facility and quarters platforms will brightly illuminate the areas around them at night through the use of lights for normal working purposes.

MAX. SIZE: SBM's No. 2 and No. 4 up to 100,000 d.w.t. and 200,000 d.w.t. respectively (for crude oil).

SBM No. 6 up to 50,000 d.w.t. (for butane liquids). Depth of water approximately 135 ft. below mean sea level.

RADIO: *Advice of Arrival by Cable or Telex:* It is important that incoming tankers advise Ardjuna Marine Terminal 72 hours and 48 hours before estimated time of arrival, giving the best estimate of ship's arrival at the Terminal, via:

Cable address: ARDJAK, Terminal Section, Jakarta
Telex number: 011 – 47390, Jakarta.

Time to be used for ETA is "GOLF" Time Zone of GMT plus 7 hours throughout the year.

The first message should also include the following information:

1. Name of tanker and Radio Call Sign.
2. Cargo requirements.
3. De-ballast time. (Note: If a separate/permanent ballast system is fitted on board, ability of ship to load crude oil and discharge ballast simultaneously must be stated.)
4. Maximum loading rate.
5. Arrival draft, forward and aft.
6. Last Port of Call.
7. Confirm that vessel has clean Bill of Health.
8. If there is any sickness aboard, give whatever information is available as to the possible type of sickness.
9. If cholera inoculation or smallpox vaccination required. If so, number required.
10. Distance in feet from the bow to tanker's loading manifold.

Further ETA messages should be sent to Ardjuna Marine Terminal via above cable address and Telex Number when the tanker is 24 hours and 12 hours distant from the Terminal and any other time, if any appreciable change occurs in the original ETA or those subsequent thereto.

RADIO COMMUNICATIONS:

(1) VHF/FM Radio Telephone: (International Marine Calling & Safety Channel 16, Freq. 156.800 MHz).

Masters are recommended to use this system when they arrive within radio range of the Ardjuna Marine Terminal, particularly when approaching the port. If poor visibility exists the tanker's approach may not be observed. Attention to VHF communications may be the means of avoiding delay in berthing.

During berthing the ship's radio will be under the sole control of the Master, and the storage barge radios will be under the sole control of the Terminal Marine Superintendent or his assistant.

Masters are reminded that if tankers are requested to anchor to await berthing, it is their responsibility to maintain constant listening watch on VHF Channel 16 to receive Terminal instructions.

Any delay due to failure to maintain a constant listening watch on Channel 16 will be for the ship's account, and will not be included in Lay Time calculation.

The Ardjuna Marine Terminal is equipped with VHF/FM Radio Telephone Sets and continuous watch is maintained on Channel 16 (Freq. 156.800 MHz) and Frequency 157.725 MHz.

Tankers approaching the Terminal should make initial contact on Channel 16. For subsequent inter-ship communications within the Terminal a "Handie Talkie" UHF Radio Freq. 157.725 MHz will be used by the Mooring Master.

This frequency will not be used for general purpose, unless clearance is obtained by the Terminal. This is required for safety reasons.

Should all radios on the tanker become inoperative, the emergency signal i.e. continuous blasts on the ship's whistle will be sounded to notify the Terminal of the radio failures. Upon hearing this signal from a loading tanker the storage barges will immediately stop loading to the Export Tanker until communications have again been established.

(2) High Frequency Single Side Band Radio Telephone: A voice message from incoming tankers may be relayed by HF/SSB. Atlantic Richfield Indonesia Inc., located in Jakarta, Indonesia, is interconnected to the Ardjuna Marine Terminal via local communications system and maintain a continuous watch on HF Frequency 7320 kHz (Upper Side Band A3J Mode, 100 Watts, Vertical Whip Antenna, Call Sign 8GJ9).

(3) Pertamina Control Radio Stations – HF/SSB: In the event incoming tankers are not able to contact the Ardjuna Marine Terminal on the foregoing VHF/FM Frequencies, or by HF/SSB, Pertamina maintains coastal radio stations located in Jakarta and Merak.

Pertamina Jakarta Radio, Call Sign PKI 2 may be contacted on HF/SSB per following frequencies and during the following service hours:

Frequency/kHz	*Hours/GMT*	*Keep Watch/kHz*
452	0000–2400	500
8626	0200–0400, 0500–0600, 0700–0800, 1000–1200, 1400–1500, 1700–2000,	8363.2–8364.8
12980	0000–0200, 0400–0500, 0800–1000, 1200–1400, 1600–1700, 2000–2200,	12544.8–12547.2 12559.2–12560.4
4419.4 4425.6	0100–0400, 0700–0900, 1000–1100, 1300–1500, 1800–2000	4125.0 & 4131.2
6512.6 6521.9	0000–0100, 0300–0400, 0600–0700, 1200–1400, 1800–2000	6215.5 & 6202.2
8759.2	0100–0300, 0400–0500, 0700–0800, 1100–1200, 1500–1600	
VHF	Ch. 9/16/19 0000–2400	Channel 16

Pertamina Merak Radio, Call Sign PKQ may be contacted on HF/SSB per following frequencies and during the following service hours:

Frequency/kHz	*Hours/GMT*	*Keep Watch/kHz*
452/500	0000–1600	500
8626	0100–0200, 0900–1000, 1500–1600	8363.2–8364.8 8372.8–8373.6
4419.4, 4425.6	0000–0100, 1200–1400	4125.0, 4131.2
6512.6, 6521.9	0200–0300, 0400–0500, 0800–0900,	6206.2, 6215.5
VHF	Ch. 9/16/19 0000–2400	Channel 16

Masters should request the Pertamina Coastal Radio Station to relay the necessary information to Atlantic Richfield Indonesia Inc., Jakarta attention "Terminal Section" by telephone number: 737474 (18 lines) or by Pertamina Internal Telex System number 18 which is the designated number of Atlantic Richfield Indonesia Inc., Jakarta.

HEALTH/IMMIGRATION/CUSTOMS: In accordance with practice in Indonesian ports, quarantine, immigration, pilot and call sign flags must be displayed by all vessels approaching Ardjuna. These signals shall be displayed continuously until clearance is granted. The signals are as follows: Sunrise to sunset: quarantine flag "Q". Sunset to sunrise: signal lights (red over white).

The "N" flag should be flown until the Immigration Officer boards the ship. The "G" flag (request for Pilot) should be flown until the Mooring Master boards. The vessel should also fly its call sign. As soon as the Mooring Master boards, the "G" flag should be replaced by the "H" flag which signifies that the Pilot is aboard. The tanker may fly the "P" flag if it is going to sail within 24 hours.

Indonesian Immigration, Customs and Harbour Master Officials will board the vessel after arrival to grant clearance.

Each tanker entering the port of Ardjuna must have requested and been granted Flag Dispensation prior to its arrival. At the same time, application is made for Provisional Pratique through the Directorate of Quarantine and, if granted, a cable advice is sent to the Harbour Authorities.

Port Health Clearance is issued prior to the tanker's arrival and is also valid for departure clearance.

If Provisional Pratique is not granted a Port Health Officer will be provided. All of the foregoing is arranged through and by the Agent.

Each Crew member should be in possession of an International Vaccination Card.

After the tanker is all secured, the Customs Officer will seal the stores. If arriving from a foreign port, the Agent will prepare the General Cargo Declaration form stating the cargo onboard the tanker and attaching appropriate shipping documents. If the tanker is arriving from an Indonesian port, the 5-B form issued at the last Indonesian port will be retained by Customs and the arrival clearance at Ardjuna is granted.

TUGS: There is one tug available to assist mooring/unmooring. When berthing at an SBM one mooring launch will be used to pass the line to the tanker.

The following mooring Launches will be available for running lines as required, also for transporting Government Officials, Agents and other authorised personnel to and from the export tanker.

Name and description	*Length*	*Rated HP*
(1) *Arco Ardjuna III*	40 ft.	260
(2) *Arco Ardjuna IV*	40 ft.	260
(3) *Arco Ardjuna V*	40 ft.	275

TERMINAL FACILITIES: For Crude Oil Tankers:

Export SBM's No. 2 and No. 4 are designed, during reasonable weather conditions, to handle tankers up to 100,000 d.w.t. and 200,000 d.w.t. respectively; each SBM is equipped with dual 160 ft./15 in. circumference floating braidline mooring ropes with 22 ft. long anti-chafe chains fitted, so arranged as to avoid chafe to the mooring ropes while tankers are at the buoy.

The crude oil loading hoses are connected to the ship's manifold on the port side of the Export Tanker. Tankers arriving are requested to have the derrick on the port side raised and rigged, ready to lift aboard the Terminal equipment.

Crude oil tankers are loaded through 2 strings of 16 in. I.D. floating hoses extending from the Export SBM's No. 2 and No. 4, connected to the tanker's manifold at the ends by means of the rail hoses of 12 in. I.D. All crude oil tankers not having 12 in. hose connection should provide their own reducers in such a way as not to cause any delay in the hose connecting operation. On SBM's No. 2 and No. 4 the length of the hose strings is 795 ft.

For crude oil tankers intending to load in the Ardjuna Marine Terminal, the distance from the bow to the loading manifold should not exceed 450 ft.

The minimum loading rate at the Ardjuna Marine Terminal for crude oil tankers is 15,000 bbls. per hour. Any tanker arriving unable to receive crude oil at the above rate may be rejected. Tankers loading crude oil at the SBM's No. 2 and No. 4 can accomplish a maximum loading rate of approximately 30,000 bbls. per hour.

In order to save time as well as to make the berth available for others, it is requested that ships receive crude oil as fast as it can be delivered, with due regard for safety.

Masters are reminded that for safety reasons, it is advisable to have the ship half loaded as quickly as possible. Rate can be reduced for topping off tanks. When requested by the ship to stop, cessation of crude oil flow is almost immediate.

Storage Barge "Arco Ardjuna": The company marine administrative offices, storage and laboratory for testing crude oil stock are located on board a 137,673 tons d.w.t. Storage barge of Liberian Registry designated "Arco Ardjuna".

Overall length of the barge is 467 ft. 10 in. Total crude oil capacity is 1,022,000 gross barrels, for the "Arco Ardjuna" plus approximately 2,000,000 gross barrels for the chartered crude oil storage tanker.

Loading of crude oil from the storage barge to the tankers will be through A.O. Smith Positive Displacement Meters, of which there are four, each having a maximum capacity of 12,500 bbls. per hour. "Arco Ardjuna" barge is moored on the SBM No. 3, Lat. 5° 54′ 10.6″ S., Long. 107° 43′ 45″ E.

Chartered Crude Oil Storage Tanker: The storage tanker is located at mooring SBM No. 1, the position of which is Lat. 5° 54′ 15″ S., Long. 107° 44′ 22″ E.

Ardjuna crude oil is available from the above storage tanker, by transfer through the Arco Ardjuna metering system.

Ardjuna Crude Specifications:

API gravity at 60° F	35.0 – 37.0
Reid Vapour Pressure	6.0 – 10.0 p.s.i.g.
Sulphur, % Wt.	0.06 – 0.10
Kinematic, Viscosity at 100°F	1.20 – 4.00 CS
Pour Point, °F	75+
Carbon Residue, % Wt.	0.50 – 1.45
B.S. & W, % Vol.	0.05 – 0.15
Flash (TCC), °F	Below room temperature.

For Butane Tankers:

1. Vessels arriving in the Ardjuna Marine Terminal to load Butane Plus will be berthed at the SBM No. 6 which is designed, weather permitting, to handle tankers up to to 50,000 d.w.t.

2. Butane Plus tankers are loaded through a 722 ft. long string of 6 in. I.D. floating hose extending from the SBM and connected to the tanker's portside manifold. The floating hose is equipped with a 6 in. ANSI 150, quick release Camlock flange. Tankers not having a 6 in. manifold connection must provide their own reducer to permit the loading. Failure to carry out this obligation may result in rejection of the vessel for loading and nullification of her Notice of Readiness. All costs, charges and expenses incurred therefrom will be for the ship's account.

On arrival at the terminal area, butane tankers are required to have the port derrick ready to lift the equipment necessary for berthing and loading. The weight of the loading hose to be lifted is approximately 1,500 lbs.

3. The quantity of Butane Plus delivered will be determined by the metering system consisting of 2×3 in. A.O. Smith Positive Displacement Meters. These meters are located on the NGL Plant situated approximately 3 miles S.W. of the SBM No. 6.

4. An arriving Butane Plus tanker will not be accepted for loading product if:

a. Oxygen in the tanks exceeds 8.0 mole per cent.

b. Vessel is not adequately equipped with boil-off liquefaction unit capable of liquefying all vapours coming from vessels tanks resulting from loading at the maximum rate of 115 cu.m./hr.

There is no facility for inerting butane tankers on SBM No. 6, nor is there a ship's vapour return line facility.

Masters of vessels are strongly reminded to ensure that ship's vapour compressors are in good running condition.

Failure to observe such requirement may result in cessation of the loading and any delay so caused will be for the ship's account.

5. Butane Plus tankers intending to load at SBM No. 6 will not be accepted if the bow-to-manifold distance exceeds 400 ft.

6. During the extended loading period of the Butane Plus tanker at the SBM No. 6 it is the responsibility of the vessel to ensure that all mooring lines and loading hoses are properly tended.

The Terminal Mooring Masters may at any time request the ship's securing lines to be tightened or slacked under the direction of a responsible ship's officer. This may be necessary to avoid the ship overriding the buoy. Failure to comply with such a request may result in cessation of loading and all costs, expenses or losses due to loss of production caused by such failure to comply, will be for the account of the buyer. See also "Mooring/Unmooring".

7. Masters of butane tankers are advised that raising, lowering connecting and disconnecting of butane loading hoses as well as other labours and duties on shipboard connected with the loading of cargo or maintaining mooring lines in a correct manner will be performed BY THE SHIP'S CREW DIRECTED BY A RESPONSIBLE OFFICER as required by the Mooring Master. Loading of a butane tanker is through one string of 4 in. I.D. loading hose with 150 ASA flange rating. The weight of the hose is approximately 2.5 tons. All tankers loading butane at SBM No. 6 Ardjuna Terminal must be able to connect their manifolds to the 4 in. hose. Masters are strongly reminded, that it is the ship's responsibility to provide reducers to make the connection, if the ship's manifold is not 4 in.

8. Venting of product while the vessel is within the Ardjuna Marine Terminal is not allowed. Failure to comply with this requirement may result in delay or cessation of loading and all costs, expenses or losses due to loss of production caused by such failure to comply will be for the account of the buyer.

For LPG Refrigerated Vessels:

Storage Barge "Ardjuna Sakti":

1. The LPG storage facility is a prestressed concrete barge, measuring 461 ft. in length, 136 ft. in width and having a depth of 56.4 ft.

   The barge carries 12 tanks each of which has a capacity of 31,528 barrels giving a total of 378,336 barrels.

   A pumping rate of 20,000 bbls. (1,600 metric tons) per hour can be achieved. The following operating rules have been adopted which shall apply to the lifting of products from the "Ardjuna Sakti".

2. Refrigerated LPG vessels *will not be considered ready for loading* at Ardjuna Marine Terminal *unless and until all LPG tanks contain LPG vapours and are cooled down sufficiently* to permit loading of products nominated.

3. Vessels receiving fully refrigerated products will only be acceptable for loading provided they are capable of receiving the products at their boiling points at 0.5-2.5 p.s.i.g. Such vessels must have a refrigeration system capable of liquefying all vapours coming from vessels tanks resulting from loading at the maximum rate of 20,000 bbls. per hour, and including those vapours formed as a result of heat gained by the vessel's tanks.

4. The "Ardjuna Sakti" is equipped with a vapour compressor and condensing facilities for liquefying vapours, however, no liability of any kind whatsoever, to provide the compressor and or condensing facilities for vessels use is accepted.

5. Provided a vessel has the capabilities described in paragraph (3), at the sole discretion of the Terminal Superintendent or his designated representative, in the event the vessel has difficulties with her refrigeration system, the facilities available on the "Ardjuna Sakti" may be made available to assist the vessel, provided they are operational. There is *no obligation* implied or accepted to continue to assist the vessel with chill down, even if assistance is commenced. In the event that assistance is requested and is provided all charges and expenses incurred shall be paid for by the consignee. Such charges shall include any amount payable in demurrage for all the time that chill down operations causes the vessel to exceed the allowed laytime. The conditions set out in this paragraph (5) for assisting in chill down operations shall apply to purging operations.

6. Ardjuna Marine Terminal has no facilities for inerting arriving LPG tankers. It is imperative that arriving vessels do not arrive with tanks designated to receive product "in air". Vessels arriving to load LPG will not be accepted for loading product if the oxygen in the tanks exceeds 8.0 mole per cent.

7. Loading lines and vapour return lines at the Ardjuna Marine Terminal are fitted with quick release Camlock flanges which are 12 in. ASA 150. Arriving vessels must be able to connect to these flanges. The terminal will have a limited number of spool pieces and reducers available but will accept no obligation or liability to provide them. It is the vessel's responsibility to provide a connection suitable to connect with the Camlock flanges described above. Failure of the loading vessel to present the required 12 in. ASA 150 flange for connection will result in rejection of the vessel for loading and cancellation of her Notice of Readiness. All costs, charges and expenses incurred due to rejection will be for vessel's account.

Should it be necessary to assist a ship with the use of the terminal ship vapour compressor a charge of US$250 will be made for each hour or part of an hour that the terminal ship vapour pressure is used by the ship.

8. Venting of product while the vessel is within the Ardjuna Marine Terminal is not allowed. Failure to comply with this requirement may result in delay or cessation of loading and all costs, expenses or losses due to loss of production caused by such failure to comply will be for the account of the buyer.

MOORING/LOADING/UNMOORING: The Ardjuna Marine Terminal will operate 24 hours a day, 7 days a week. Tankers will normally be berthed during daylight hours, weather and other circumstances permitting. In special circumstances at the sole discretion of the Company Terminal Superintendent night berthing may be allowed if all conditions are favourable. Unmooring will be carried out at any hour.

Tankers to be moored or manoeuvred at the Ardjuna Marine Terminal will be boarded by the Company Mooring Master within the anchorage area.

Under normal weather conditions if a tanker is scheduled to berth on arrival, the Mooring Master will board such vessel in the close vicinity of the mooring area.

All such manoeuvring of ships shall be done only in accordance with the advice of the Mooring Master, subject to the understanding that in all cases and circumstances the Master of the tanker being manoeuvred shall remain solely responsible on behalf of his vessel's owners for the safety and proper manoeuvring of his vessel.

The ship's Master, or one of his *designated and qualified deck officers, must* be on the navigating bridge at all times while the vessel is being manoeuvred.

The Mooring Master will report unsatisfactory conditions to the company Terminal Superintendent who may in turn, reject the tanker until corrections are fully made. All costs accruing therefrom will be for the vessel's account. The services of the Mooring Master are provided upon the express understanding and conditions that when any Mooring Master provided goes on board a vessel for the purpose of assisting such vessel, he becomes for such purpose the servant of the owners of the vessel and the company shall not be liable for any damage, or injury resulting from any advice, or assistance, or actions directed, or made, by such Mooring Master while on, or in the vicinity of the assisted vessel.

The tanker's cargo tanks are to be inspected by the Terminal Representative, and if suitable for loading crude oil, a signed notation to this effect will be made on the company Dry Certificate.

The Company Terminal Superintendent, or his designated alternate, shall be the sole authority to decide when the port is closed due to unsuitable weather conditions preventing normal working operations.

Various combinations of wind, sea, and tidal conditions also the size, length, ballasted trim, and handling qualities of a vessel can affect the decision to berth a vessel at Ardjuna Marine Terminal. All these factors have to be evaluated before a final berthing decision is made.

Delays to vessels using Ardjuna Marine Terminal due to the port being closed because of bad weather conditions shall not be computed as used lay time when compiling vessel's turn around time.

Request for the terminal to stop the flow of oil at a predetermined tonnage must be in writing. The request must include the statement by the ship's Master, that the company will not be held responsible for any error and that in case of the vessel being overloaded the excess cargo cannot be pumped back to the storage barge. The ship's Master will also be held responsible for any oil spills caused by this request.

The ship's Master is responsible to ensure that no communication by radio is allowed within the terminal area.

Unauthorised radio communications will be cause for cessation of all operations, except clearing of the berth, and the vessel's Notice of Readiness will be immediately nullified.

The Master of each tanker will be given a copy of the Conditions of Use of Port of Ardjuna Marine Terminal which he will be required to sign before the vessel proceeds to berth.

The vessel's personnel are responsible for the safety of the vessel and must take all necessary precautions, whether or not so advised by the Mooring Master, having in mind the hazards of the operation because of the products being handled, weather conditions and any other circumstances requiring special care or caution.

Ships are requested to have a pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach the Mooring Master's launch.

A combination of pilot ladder and ship's accommodation ladder, so arranged that the personnel can first use the pilot ladder until part way up the vessel's side, and then transfer to the accommodation ladder is recommended, especially on very large tankers. A light line should be ready to take aboard the Mooring Master's equipment.

Tankers will provide a broad lee for the Mooring Master both when boarding and leaving the ship. Adequate explosion proof lighting at night must be provided near the pilot ladder, and manifold connection area. During loading overside lighting must be provided in the vicinity of sea valves and floating hoses.

During a tanker's stay at the Export SBM, emergency towing wires shall at all times be hung over the ship's stern on each quarter of the vessel. These wires shall be secured on the bollards inboard to enable the vessel to be towed away should the need arise. They must be tended throughout to keep the eye of the wire not more than 2 ft. above the water.

Before any crude is loaded all ship's scuppers on main decks must be plugged and cemented oil tight. Approved mechanical means of closing scuppers may be accepted.

It is absolutely essential that extremely careful supervision be exercised by officers of all tankers while loading operations are in progress. A responsible ship's officer is required to be on duty continuously while the tanker is being loaded. He will be assisted by an adequate number of ship's personnel in these operations.

It is the responsibility of the vessel to ensure that all mooring lines are properly tended on loading tankers. The Mooring Master at any time, may direct an additional ship's line to be secured to the buoy and this line to be hove up or slackened off under the supervision of a responsible ship's officer so as to prevent the vessel overriding the buoy. *At all times sufficient crew must be available* to carry out under the supervision of a responsible officer, instructions given by the Mooring Master.

Masters of loading tankers are advised that raising, lowering, connecting and disconnecting of oil loading hoses as well as other labours and duties on shipboard connected with the loading of cargo or maintaining mooring lines in a correct manner will be performed *by the ship's crew directed by a responsible officer* as required by the Mooring Master. Loading of crude oil tankers is through 2×12 in. I.D. hoses with 150 ASA flange rating. The weight of each hose is approximately 2.5 tons. All tankers loading crude oil at Ardjuna Marine Terminal must be able to connect their manifolds to the 12 in. hoses. Masters are strongly reminded, it is the ship's responsibility to provide reducers to make the connection, if the ship's manifold is not 12 in.

Preparations for mooring will be advised by the terminal through VHF communication prior to tanker's arrival or by the Mooring Master before the mooring operation commences.

Crude oil tankers are required to have ready:

1. On the portside: a derrick of at least 5 tons safe working load, rigged, and ready to pick up the mooring and hose connecting gear from the Mooring Master's launch.

   This derrick subsequently will be used for raising, connecting, disconnecting and lowering loading hoses and eventually to transfer the mooring and hose connecting gear back to the launch before the tanker sails.
2. On the forecastle: at least 6 good ship's mooring lines shall be required. Two of them will be used as messenger lines for bringing aboard both terminal mooring lines from the SBM.

   The 4 remaining ship's lines will be laid out 2 and 2 on either side of the foc'sle deck, eyes about 3.5 m distant from the fairleads as advised by the Mooring Master. When the terminal mooring lines have been hove up and anti-chafe chains have been hove about halfway inboard through the fairleads, the eyes of the ship's lines will be shackled onto the end links of the chain, so arranged that in the final position of mooring, the tanker is tied to the SBM using the terminal mooring lines/chains and made fast to the ship's bollards by means of the ship's own lines. This will be backed up by 2 lengths of wire strops each 30 ft. in length and 2 in. diameter. These wires will be provided by the terminal to be used as preventer wires. These 2 wire strops will not be used as the permanent mooring system.

   Their purpose is to hold the ship safely moored in the event one or more of the ship's lines part until the crew can replace such lines.
3. Tanker loading Butane Plus at SBM No. 6 will moor in the same manner as crude oil tankers referred to in para. 2 above.

Refrigerated LPG tankers will berth alongside the starboard side of the LPG storage barge "Ardjuna Sakti". The "Ardjuna Sakti" is secured to a rigid arm single buoy mooring system which allows the storage barge to rotate according to direction of wind and tide. There are 5 large Yokohama type rubber fenders aboard the storage barge 4 of which are supported on davits. The fenders are lowered to the water prior to the berthing operation. Each fender is 6.5 m. in length the diameter of the fenders is 3.3 m. Line running launches are available to pass the mooring lines between the barge and the ship.

When secured in position the moorings will be as follows:

5 lines on the forecastle.
4 lines on the poop.
2 springs on the maindeck forward leading aft.
2 springs on the maindeck aft leading forward.

Each LPG tanker loading at Ardjuna Marine Terminal will be required to provide the above ropes. Where tension winches are available they will only be used if they can be locked in a fixed position.

EQUIPMENT: A ship may be rejected if, upon inspection, it is not properly equipped, or if it is not suitably manned, or tanks unsuitable for the cargo, or if in the case of crude oil tankers the ballast is dirty.

A vessel is suitably manned if it has a full complement of qualified officers and a crew all of whom are in a sober condition, competent and willing to carry out their duties and orders.

A ship must be equipped with a good working propulsion unit as passed by the appropriate survey society. Inoperative ships or partly inoperative ships will be rejected. Should a ship become inoperative or partly inoperative while berthed alongside the storage barge "Ardjuna Sakti" or while secured to a crude oil export single buoy mooring, it will be removed at the ship's expense.

No repairs to main engines or other essential equipment or machinery while alongside the storage barge "Ardjuna Sakti" or while secured to an export SBM may be carried out, unless with the permission of the Terminal Superintendent or his designated alternate.

Crude oil and butane tankers must lift the export hoses from the water to connect with the ship's manifold by means of its *own derricks and using its own crew.*

A vessel must have both bow anchors in good working condition. Both bow anchors and anchor cable must be of a size and standard to meet either "Lloyds" or "A.B.S." requirements, even though they may in fact, be classified by other societies.

All vessels must have ready on deck suitable stoppers for manila, synthetic lines and wires used for mooring purposes.

All vessels must have suitable winches or capstans in good working order.

Such winches or capstans must have sufficient power to heave the ship to the position required by the Terminal Mooring Master. Tankers must have the capacity to heave on the 12 in. and 15 in. braid lines used to secure them to the export SBM's. Power supply to all deck machinery must be maintained throughout the period the ship is secured alongside the storage barge "Ardjuna Sakti" or to the export SBM. Failure to comply with this requirement will result in cessation of loading and delay, and expense so caused will be for the ship's account.

To assist in vessel's turn around, ships should have all necessary gear ready on arrival. Crude oil and butane tankers must have the cargo boom on the port side raised with the cargo gear rigged and ready before the ship is boarded by the Mooring Master.

Vessels which may consider the lifting capacity of their gear to be marginal should strengthen their gear accordingly. A common way to do so is to rig a second topping lift on the boom.

Masters of crude oil tankers are reminded that the hose connecting operation will normally be carried out while the ship is deballasting.

The cargo derrick required to raise the hose from the water, must have a sufficient length of strong lifting wire rope on the winch drum to enable the cargo hook to reach the water and still have adequate turns of wire left on the drum to ensure safety.

BALLAST: Owners and Masters are responsible for observance of International Convention Laws and Indonesia Government Regulations concerning pollution of the sea, having particular regard for this area of the Java Sea.

No facilities are available for disposal of dirty ballast. It is the responsibility of the ship's Master to see that no oil of any kind is pumped or spilled overboard from his ship.

The categories of pollution include oily water from bilges, crude residual from previous voyages, or any other matter that may result in pollution of the sea. Any fines imposed shall be for ship's account.

As soon as practical after arrival, all tankers will be inspected by an Ardjuna Marine Terminal Official for dirty ballast. During discharge of ballast, similar inspections will continue.

If evidence of oil appears at any of these inspections, the ship will be rejected, and will not be accepted again until satisfactory evidence is produced that such ballast was disposed of in a proper manner. If, during inspection, or during progress of loading, it is revealed that the ship's tanks are not tight, or that oil is leaking from the ship, the ship may be rejected or refused further loading.

If the ship's tanks are found to be leaking, it will not be accepted for loading unless satisfactory evidence of repair duly certified by Lloyd's or A.B.S. Surveyors, or other recognised Surveyors is submitted. It is the responsibility of the ship's Master to see that no oil of any kind is pumped or spilled overboard from his ship. Drip pans, sand, dispersant etc. should be used at all times especially when disconnecting hoses in order to avoid any spillage of oil overboard.

Any tanker rejected because of dirty ballast or sea pollution will automatically nullify his Notice of Readiness and will lose any priority of position for loading.

A tanker must have sufficient ballast for safe handling having due regard to existing weather and sea conditions. Through a careful watch of the weather and sea conditions, frequent exchange of information between ship and terminal, and by a knowledge of the behaviour of his own ship, a ship's Master may come to the terminal with a minimum safe ballast and thus lessen any possibility of infringement of sea pollution regulations.

In addition to the lights usually displayed, vessels in the moorings discharging ballast or loading cargo during darkness will brilliantly illuminate the sea around the ship, so that any pollution will be noticeable.

Tankers equipped with a separate system of ballast tanks will be allowed to discharge ballast, and load oil simultaneously, providing approval is first obtained from the company Terminal Superintendent or his alternate.

Most responsible ship owners have adopted a system of tank cleaning using circulatory methods of transfer of tank washings on shipboard and treating these washings with chemicals.

The result is that no oil is discharged into the sea and the oil separated is collected in a slop tank. With the written permission of lifting companies, the terminal will load on top of such slops. This system is highly recommended to avoid pollution of the Java Sea.

Masters are required to certify in writing the quantity of slops remaining on board (if any). If they intend to load crude oil on top of the slops, it must be clearly stated. The Mooring Master will confirm the amount stated in writing by ullaging and calculating the slops to ensure the amount declared is correct.

Provided agreement is reached on the amount of slops the Mooring Master will confirm the amount of slops on the Dry Certificate.

Note: Separate "Slop Certificate" signed by Chief Officer and witnessed by the Mooring Master is required to substantiate calculation.

Masters are warned that inspection of ballast is strict.

If, at any time an overflow of crude oil occurs, loading will be suspended immediately and not be resumed until the oil is cleaned up and removed from the decks of the vessel and/or from the surface of the sea, and any damage is repaired and no further danger exists. It is stressed that during loading operations, the Ardjuna Cargo Controller will immediately slow down the loading rate on receipt of a request for same from the ship's deck officer – in charge of loading.

All spillages of oil must be reported immediately to the Ardjuna Terminal Superintendent, or his alternate, and subsequently a detailed report in writing submitted by the Master of the vessel concerned giving all relevant details.

FRESH WATER: No fresh water is available.
FUEL: No bunkers are available.
MEDICAL: No clinic is available.
CONSULS: There are no consulates available at Ardjuna Terminal. However, there are many embassies and consulates represented in Jakarta about 59 miles S.W. of the Terminal.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wines, beers, perfume, arms, ammunition and possibly other items have to be locked up under Customs' seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed to bring in 200 cigarettes or the equivalent in grams of tobacco or cigars.

Special allowances are made for the Master under special circumstances.

REPATRIATION: No crew changes. If emergency conditions prevail, for humanitarian reasons exceptions to the foregoing may be permitted. All expenses incurred will be for ship's account.

TIME: Ardjuna time is GMT plus 7 hours throughout the year.
SHORE LEAVE: Not allowed.

SAFETY/FIRE REGULATIONS: Safety and Fire Regulations will be strictly adhered to.

The notice "Instructions In Case Of Fire", and the notice "Safety And Fire Regulations" must be posted in prominent positions on board the export tanker by the Master, or by his designated alternate.

The Safety Check List must be jointly completed by a ship's officer designated by the Master, together with the Terminal Marine Supervisor/Mooring Master. After completing and signing the Check List both the ship's officer and Marine Supervisor/Mooring Master will retain copies.

Terminal Safety and Fire Inspections: It is the duty of the Mooring Master to make periodical inspections on board vessels in respect of any breach of the Terminal Safety and Fire Regulations.

For this purpose he must be allowed free access to all parts of the vessel at all times and must be accompanied by a responsible ship's officer to assist him in carrying out such inspections. The Mooring Master will advise the ship's Master when he wishes to make a safety inspection. It is the responsibility of the ship's Master to ensure that the Mooring Master is given every assistance to carry out this duty.

AGENCY:

General Agent: Pertamina Directorate of Shipping and Telecommunication, Pertamina Building, 6th Floor, Jl. Medan Merdeka Timur No. 1A, P.O.Box 327, Jakarta – Indonesia. Cable address: Pertaminaship Jakarta. Tel: 343806, 343781. Telex: 44450, 45348.

Procedure for Appointing Agent: FIRST. Owners should issue a letter of appointment and include a list of tanker(s) under the "Owners" management/control which are scheduled to operate in Indonesian waters and a statement that Pertamina Directorate of Shipping and Telecommunication (Pertaminaship) will be appointed as Agent to attend these vessels when calling at Indonesian ports.

Each letter of appointment must be properly endorsed by an Indonesian Embassy/Consulate. The validity of each letter of appointment is 1 year and letters must be renewed accordingly. Should a vessel, not previously listed, be introduced into service or should vessel's name be changed, a new letter of appointment must be issued for the vessel(s).

This letter of appointment, endorsed by the Indonesian Embassy/Consulate, should be sent soonest to: Pertaminaship Agency Dept., Pertamina Building, 6th Floor, Jalan Medan Merdeka Timur No. 1A, P.O.Box 327, Jakarta – Indonesia.

This SKU/loading or discharging permit application will be made by Pertaminaship to Government Sea – Communication Dept. after getting the L/A (letter of appointment).

SECOND. Owners should telex or cable appointment of Pertaminaship as General Agent to attend the vessel at Ardjuna Marine Terminal and telex/cable should be sent formally 2 weeks prior to vessel's arrival.

The following information should also be given in the telex or cable to enable the General Agent to obtain SKU/In & Out Clearance for the vessel:

1. Name of vessel.
2. Full ship particulars.
3. Port of Registry/Year built.
4. Certificate of Registration number.
5. Name of Master.
6. Number of crew.
7. Last port of call.
8. ETA Ardjuna Marine Terminal.
9. Indonesian ports of call.
10. Cargo figures (quantity to be loaded).
11. Consignee and discharging port.

THIRD. The "Owners" should promptly arrange transfer of advance funds to cover the applicable port charges and advise telegraphic transfer number to Pertaminaship.

Advance Payment: The tanker Owner or Charterer must comply with the Procedure for appointing Agent as mentioned above.

Pertamina Directorate of Shipping and Telecommunication will acknowledge receipt of cable appointment, and will request an advance deposit depending on the size of vessel, to cover the above port charges, not included corporate tax. In addition a sum of US $5,000 is to be paid as advance payment for freight tax.

Advance payment for government charges should be made payable to:

"Pertamina Agency"
Account No. 11.51.006.000.0005
Bank Negara Indonesia
Cabang Gambir
Jalan Kebon Sirih 77A
Jakarta, Indonesia.

To facilitate handling preparation, Owners/Charterers are required to telex "Pertamina Directorate of Shipping & Telecommunications" advising Telegram Transfer (T.T.) Number, the name of vessel and the port(s) of call. Telex number: 44450, 45348.

In those instances where payment exceeds the actual port charges, the balance will be credited to the Owners/Charterers account or remitted by the Agent.

Neither the Agent nor Atlantic Richfield Indonesia, Inc., will be responsible for demurrage or other charges resulting from failure to prearrange obligations in this manner.

OPERATOR: Atlantic Richfield Indonesia Inc.
Principal Offices:

Pertamina Head Office: Jalan Medan Merdeka Timur No. 1A, Jakarta, Indonesia.

Atlantic Richfield Indonesia Inc.: Panin Bank Building, Jalan Jenderal Soedirman, PO Box 63/JKT, Jakarta, Indonesia.

Atlantic Richfield International Oil and Gas Co., 444 South Flower Street, Los Angeles, California 90017, U.S.A.

Reading & Bates, Offshore Drilling Company, 3800, First Place, Tulsa, Oklahoma 74103.

Natomas International Corporation, Jalan Letjen. M.T. Haryono 58, PO Box 2759/JKT, Jakarta, Indonesia.

Independent Indonesian American Petroleum Company: Division of Natomas International Corporation, 601 California Street, San Francisco, California 94108.

Tidewater N.W. Java, Inc.: 1440 Canal Street, Suite 2100, New Orleans, La. 70112, U.S.A.

Warrior Minyak Inc.: 1776 Lincoln St., Suite 80, Denver, Colorado 80203, U.S.A.

Nominations: Tanker nominations for liftings of either Ardjuna crude oil or liquefied natural gas are co-ordinated through Atlantic Richfield Company, Los Angeles, California and Atlantic Richfield Indonesia Inc., Jakarta.

All crude oil and liquefied petroleum gas sales, also tanker chartering are arranged by the following parties in each of their respective locations. Pertamina, Atlantic Richfield Company, Reading and Bates International Petroleum Company, Natomas Company, Tide Water N.W. Java Inc. and Warrior Minyak Inc.

Tanker scheduling is co-ordinated for all of the partners through Atlantic Richfield Company, Los Angeles, California and arranged through Atlantic Richfield Indonesia Inc., Jakarta.

AUTHORITY: Chief Harbour Master/Port Captain – Tanjong Priok, No. 1. Jl. Syahbandar, Tanjong Priok. *Tel:* 021-494381. *Contact:* Captain Leo B. Siahaan, Harbour Master.

BALIKPAPAN: 01.16 S. 116.48 E.

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Derat (Exemption) Certificate.
International Loading Line Certificate.
Safety Certificate (passengers ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
10 Crew Lists and Passenger's Lists.
Ship's Articles.
2 Stores Lists.

PILOTAGE: Compulsory pilotage. Application for Pilots can be made via Radio Station or the Signal Station on Tokong Hill. Vessels arriving by night should anchor off the outer buoy and give their call sign to the Signal Station. Pilot boards in position 01° 21′ 20″ S., 116° 55′ 00″ E. Vessels leaving should order a Pilot at least 6 hours prior to departure and when leaving between 0600 – 1200 hrs. application should be made before 2000 hrs. the preceding day. If vessel's draft exceeds 70 dm. same should be mentioned in the Pilot's cable application.

APPROACH: The surrounding land is in general low with few conspicuous hill rows as background. Only the high spit on which Balikpapan is built can be used as a landmark with the regular cone-shaped hill Tokong.

RESTRICTIONS: Mooring and unmooring by day and night.

MAX. SIZE: Tankers: Shell normally permit max. LOA of 240 m., draft 11.0 m. and max. d.w.t. 70,000 tons. Drafts are restricted by the bar where the depth below chart datum is 25 ft. 3 in. Minimum keel clearance required is 1 ft. 3 in. Sailing drafts depending on rise of tide up to a max. of 33 ft. salt water.

HEALTH: Vessels arriving from abroad have to apply well in advance from the Department of Health (Quarantine Section) for provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.

TUGS: 3 tugs. 870 h.p., 1,700 h.p. and 1,500 h.p.

BERTHING: 1. Dry Cargo Jetty owned by Port Administration. Length 270 m., depth alongside 10 m. at LWS.

2. Owned by Pertamina. Dry Cargo Jetty, length 677 m. (VI, VII, New Jetty). Oil Jetty, length 1,860 m. (I, II, III, IV, V, Va, Vb, Vc). Depth alongside: 11 m. at LWS.

TANKERS: Jetties 3, 4, 5, 6, 7 and 8 are oil berths. When alongside vessels should keep 2 wires ready over the water-side so that vessels can be towed away in case of emergency.

STEVEDORES: Working hours: 0700 – 2000 hrs. Monday to Friday. 0700 – 1500 hrs. Saturdays. Sundays work possible at overtime rates.

FRESH WATER: Available in limited quantity.

FUEL: Available at the berth 200 t.p.h. Coal not available.

PORT SECURITY: Maintained by Port Security Unit (KPLP) and Police (KP.3). Crew members should be in possession of a shore-pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS ALLOWANCES: It is strictly prohibited to take undeclared foreign currency ashore. Local currency restrictions for shore-going crew may also apply. It is recommended that Masters consult the Agents with the local prevailing Customs Laws with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

AUTHORITY: Balikpapan Port Administration, Jl. Pelabuhan Balikpapan, P.O.Box 98, Balikpapan, Indonesia. *Tel:* 22246. *Telex:* 37105. *Cables:* Adpel Balikpapan. *Contact:* M. Yunis Noor.

BANYUWANGI: 08.13 S. 114.23 E.

OLD PORT NOW PRACTICALLY CLOSED FOR SHIPS. (OPENED FOR BOATS AND FISHING BOATS ONLY).

DOCUMENTS: Customs and Harbour Master requires:

Crew List.
Passenger List.
Customs Documents.
Health Certificate.
Port Clearance.
Harbour Report.
Derat Certificate.
Radio Certificate.
Certificate of Registry.

PILOTAGE: Not necessary because anchorage open.

ANCHORAGE: Position: Lat. 8° 12′ S., Long. 114° 23′ 16″ E. Depth 25 m. – 30 m.

MAX. SIZE: No restrictions, vessels must be anchored outside harbour.

HEALTH: All vessels boarded by Harbour Quarantine on arrival.

RADIO: None, moved to Meneng Port.

TUGS: 2 tug boats belong to P.T. Jakarta Lloyd, Banyuwangi Branch.

BERTHING: Distance 500 m. to 750 m. from lighthouse. Anchorage berths only.

STEVEDORES: 6 gangs available. P.T. Jakarta Lloyd, Banyuwangi Branch. 1 gang consists of 13 labourers, 1 gang boss, 1 tallyman, 2 winch drivers and 1 commander.

MEDICAL: Arranged by Department of Health.

FRESH WATER: None available.

FUEL: None available.

GANGWAY/DECK WATCHMEN: None available from shore.

OPENING/CLOSING HATCHES: Arranged by stevedores.

CUSTOMS ALLOWANCES: 50 cigarettes each crew member. Packs or tins of tobacco must be open before going ashore. Wine and/or spirits: Enough for own use, if more required must pay import duties.

CARGO GEAR: Ship's gear used. Cargo loading on board by lighter.

IDENTIFICATION CARDS: Required.

CONSULS: No local representation.

REPAIRS: No facilities.

REPATRIATION: Not possible.

TIME: GMT plus 7 hours.

HOLIDAYS: On Sundays and holidays no work carried out, but if necessary, can be arranged. No work when raining.

POLICE/FIRE/AMBULANCE: Police and ambulance available. Fire brigades belong to District and Paper Mill. Phone Nos. 352, 653, 353 and 503.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Allowed.

DELAYS: Possible during loading if it rains.

AUTHORITY: Kepala Pelabuhan (Port Administration).

BANYUWANGI (Port Meneng): 08.07 S. 114.23 E.

NEW PORT FOR LARGE VESSELS.

DOCUMENTS: Customs and Harbour Master require:

Crew List.
Passenger List.
Custom Documents.
Health Certificate.
Port Clearance.
Harbour Report.
Derat Certificate.
Radio Certificate.
Certificate of Registry.
Perfection Certificate.

PILOTAGE: Compulsory pilotage for vessels over 5,000 gross tons. Pilots must be ordered by respective Agent at least 48 hours in advance of the time their service is required.

RESTRICTIONS: Mooring and unmooring is restricted to daylight hours only.

MAX. SIZE: Draft alongside quay max. 40 ft. Present quay permits max. LOA of 500 ft. Bar 200 m. East of quay, depth below chart datum is 24 ft.

HEALTH: All vessels boarded by Harbour Quarantine on arrival.

RADIO: Name: Department of Sea Communication. Call sign: 8 AD 22 with freq. 8110 kHz, receiver SSB 5316 kHz. Shore radio station only used for district contact (used by Department of Sea Communication).

VHF: Call sign: Meneng Radio, freq. Channel 16, 14, 13, 12, used shore to ship and can be contacted about 25 miles before arriving at Meneng Port.

TUGS: 2 small tugboats are available. Both of 80 h.p., owned by P. T. Jakarta Lloyd.

BERTHING: Present berth length 110 m., to be lengthened to 200 m. Depth alongside 40 ft.

STEVEDORES: 12 gangs available P. T. Jakarta Lloyd, Banyuwangi Branch and P. T. Pelni Banyuwangi Sub. Branch.

One gang consists of 1 gang boss, 2 winch drivers, 1 Pilot and 13 labourers.

GODOWN: One transit godown 20 m. × 50 m. owned by Port Administrator and one transit godown 20 m. × 50 m. is being built.

Two 2nd line godowns, capacity 10,000 tons owned by P. T. Jakarta Lloyd Banyuwangi Branch. Open storage 10,000 sq.m., 6 godown 2nd line owned by National Logistic Board capacity +20,000 ton specially for rice.

Equipment: One forklift capacity 2.5 tons owned by Port Administrator. Five lorries at 1 ton owned by P T. Jakarta Lloyd. Crane 15 tons can be supplied if necessary.

MEDICAL: Arranged by Department of Health.

FRESH WATER: Available. Handled by Harbour Board, with a loading capacity of about 300 tons per day.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Normally by stevedores.

CUSTOMS ALLOWANCES: 50 cigarettes each Crew member. Packs or tins of tobacco must be open before going ashore. Wines and/or spirits enough for own use. If more required must pay import duties.

CARGO GEAR: Ship's gear used.

IDENTIFICATION CARDS: Required.

CONSULS: No local representation.

REPAIRS: No facilities.

REPATRIATION: Not possible.

TIME: GMT plus 7 hours.

HOLIDAYS: On Sunday and holidays no workers available, but if necessary work can be arranged, except Independence Day (17th August) and 1st Sjawal (Idul Fitri/Moslem Holiday).

POLICE/FIRE/AMBULANCE: Police and Ambulance available. Fire Brigade owned by District and Paper Mills, telephone Nos. 352, 653, 353 and 503..

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Allowed, shore pass required.

DELAYS: Possible during loading if it rains.

DEVELOPMENTS: A new port is located about 0.5 miles South of the port of Meneng. Operated under Pertamina management for oil off-loading purposes, the open roadstead harbour has a 150 m. long wharf with a 10 m. – 12 m. depth. Exact location of the port, which is especially for domestic shipping, is Lat. 8° 08′ 09″ S., Long. 114° 24′ 03″ E.

AUTHORITY: Kepala Pelabuhan (Port Administration).

BELAWAN: 03.47 N. 98.41 E. (See Plan Book)

DOCUMENTS: Upon arrival ships have to fill in the following Forms:

Harbour Report obtainable from the boarding Pilot, or from the Harbour Master.

Pilot's Certificate.

Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Derat (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's Lists.
Ship's Articles.
Other certificates and documents as required.
2 Stores Lists.

PILOTAGE: Pilotage for vessels over 500 cu.m. gross is compulsory. Location of anchorage for vessels awaiting a Pilot is Lat. 03° 54′ 50″ N., Long. 98° 45′ 50″ E., near Light Buoy No. 0 (Lat. 03° 54′ 14″ N., Long. 98° 44′ 40″ E.).

The new lighthouse at Tg. Nipa Larangan (Lat. 03° 54′ 00″ N., Long. 98° 40′ 50″ E.) with characteristic Gp. Fl (3) 20 sec. 37M 40m, will assist Masters to approach the anchorage. Before arrival Masters have to contact their Agents via Belawan Radio (PKB) and give Information about: ETA, cargo, LOA, draft etc.

To receive information, Masters may use the VHF radio on Channel 12 calling "Belawan Pilot" or "Pilot Boat".

Pilot's service available 24 hours a day.

Pilot must be ordered by the Agent at least 6 hours in advance of the time their service is required.

A Sea Pilot and Harbour Pilot embark at anchorage when berth has been allotted.

Vessels will proceed when the draft enables vessels to pass through the channel.

The channel is approximately 9 miles in length, 100 m. width and 8 m. depth at LWS with a tidal range about 2 m. and is provided with 7 light buoys and 5 light beacons.

Basin 1,350 m. length. 220 m. width.

Pilot boat is located in the harbour.

When the Pilot is on pilot vessel, "H" flag will be flown in daylight and quick flashing white light at night.

RESTRICTIONS: Bar is silting excessively and continuous dredging is necessary to keep the shallowest part at 8 m. at LWS. Narrowest part of channel is 50 m. wide. Also see "Developments".

Outer Roads about 600 m. square marked by light buoy. No pilot light vessel. This roadstead is approx. 600 m. wide, the centre of which is the range-line of the swept channel. This channel is provided with buoys and beacons.

TUGS: Join the vessels at buoy No. 11 about 1 mile from harbour. Ship's line to be used for towing line.

Port Authority Regulation:

a. Vessels with LOA less than 100 m. assisted by........................1 tug
b. Vessels with LOA from 100 m. up to 150 m. assisted by ....2 tugs
c. Vessels with LOA over 150 m. assisted by ....3 tugs

Tugs: 2×800 h.p and 1×1,200 h.p.

RADIO: Coastal Radio Station: Call sign PKT; Class A1, Frequency 8714, A2, Frequency 8754.4.

BERTHING:

Dock or Quay	*Berth No.*	*Nominal Depth below Chart Datum (m.)*	*(ft.)*	*Length of Quay (m.)*
Ocean-going Ujung Baru	104	10	33	2,187
	105			
	106			
	107			
	108			
	109			
	110			
	112			
	113			
CITRA Ujung Baru	201	7	23	
	202			
	203			
Pelabuhan Lama	022 005	6	20	138
	003 006			
	004 007			
Oil Jetty	Pertamina	10	33	60
Mooring Buoys	Pelabuhan Lama	8.5	27	

STEVEDORES: Working hours: Monday-Thursday 0800 – 1200 hrs., 1300 – 1600 hrs. Friday 0800 – 1100 hrs., 1300 – 1600 hrs. Saturday 0800 – 1200 hrs., 1300 – 1500 hrs. Overtime to be applied for from authorities concerned and is usually granted: on working-days during meal-hours, from 1600 – 2000 hrs. and occasionally till 2200 hrs.; on Sundays and holidays, except Independence Day, 1st Ramadhan, Christmas and 1st January.

CRANES: Mobile cranes, 2×15 ton capacity and 3×25 tons capacity. Floating crane 40 tons capacity. 5 shore cranes with 3 – 5 tons capacity.

FRESH WATER: Handled by the Harbour Board. Artesian wells all along the Ocean Quay with a loading capacity of about 10 t.p.h. The water is regularly laboratory checked and declared drinkable but boiling before use remains recommended. Barge with 200 tons capacity also available.

FUEL: Coal not available. Oil, at 5 points on the quay alongside godown 18 and 19 for Stanvac diesel and marine fuel oil, applications for which must be made 2 weeks in advance. Pumping capacity about 60 t.p.h. Barge with 200 tons capacity also available.

REPAIRS: Slipways available for small craft only. Machine-shops available for minor repairs. Radio repairs available, viz. the Post Telegraph and Telephone Office. Electronic repairs not available.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS: It is strictly prohibited take undeclared foreign currency ashore. Local currency restrictions may apply to shore-going crew members. It is recommended that Masters consult the Agents for the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

DEVELOPMENTS: New Quay, length 878 m. and width 25 m. to be constructed.

Dredging: The Belawan Harbour Master has issued the following guidelines in connection with dredging work being carried out:

Commencing as of September 24th, 1984, the sailing channel of the Belawan Harbour shall be dredged for the length of about 14,000 m. with a depth of 10 m. LWS. The dredger to be used is the mud sucker 'Irian Jaya'. The location of the mud to be deposited 03° 55′ 14″ N., 98° 44′ 48″ E.

All ships passing by the dredger are requested to observe all signals shown.

At the time of passing each other, the manoeuvre should be carefully conducted or it should be avoided passing each other in the middle of the channel.

Please be guided accordingly.

SHIPMASTER'S REPORT: 1976: I would inform you that all vessels are now berthed or unberthed on a round-the-clock basis, within the draft limits imposed by the dredged channel, which at present is 8 m. LWS with a tidal range of about 2 m. The Chief Pilot stated that they would berth vessels up to 10 m. draft at HW.

The pilot station is now equipped with VHF and works on Channel 12: they pass berthing information on this Channel to vessels at anchor. They use Channel 12 as a calling-up and working Channel.

AUTHORITY: Departmeen Perjubungan, Direktorat Djendral Perhubungan Laut.

BIMA: 08.25 S. 118.42 E.

DOCUMENTS:
6 Crew Lists.
6 Vaccination Lists.
6 Stores Lists.
6 Passenger Lists.
PILOTAGE: None available.
ANCHORAGE: 300 m. off the quay in depth of 16 m.
RESTRICTIONS: None, vessel may enter harbour day or night.
MAX. SIZE: Not limited at anchorage.
RADIO: Coastal Radio Station, cable address "Pelni Bima" by Post Office.
TUGS: No tugs available.
BERTHING: Entering and sailing allowed after dark. No berthing facilities except for very small ships.
STEVEDORES: Ordered by Agent. No work allowed on Muslim holidays, New Year and 17th August.
MEDICAL: 1 government hospital available.
FRESH WATER: None available.
FUEL: None available.
GANGWAY/DECK WATCHMEN: None available, Police and Customs officers posted on board.
OPENING/CLOSING HATCHES: Carried out by stevedores.
AIRPORT: Flights from Bima to Sumbawa, Ampenan and Bali by AOA Zamrud (Dakota) every Sunday, Tuesday, Thursday and Saturday.
TIME: GMT plus 8 hours.
HOLIDAYS: Muslim holidays, New Year, 17th August.
TELEPHONES: No phone connections between ship and shore available.
SHORE LEAVE: Crew members are allowed to go ashore and arranged by Agents.
DELAYS: 1 motor-boat, 4 lighters each of 15 tons and 1 lighter of 25 tons. Loading general cargo, live buffaloes and fodder. For heavy cargo max. 7 tons each lift can be handled through lighters.

BITUNG: 01.26 N. 125.12 E. (See Plan Book)

PORT LIMITS: The area between:

Lat. 01° 26′ 24″ N.	Long. 125° 11′ 30″ E.
Lat. 01° 26′ 24″ N.	Long. 125° 11′ 30″ E.
Lat. 01° 27′ 15″ N.	Long. 125° 12′ 40″ E.
Lat. 01° 25′ 25″ N.	Long. 125° 12′ 40″ E.

DOCUMENTS:
4 Crew Lists.
4 Lists Passengers in Transit.
4 Lists Passengers Disembarking.
3 Cargo Lists.
3 Provisions Lists.
List of Articles new and Customs-barred in possession of each crew member – cameras, binoculars, radios, cigarettes, tobacco, etc.
Ship's Register.
International Vaccination Certificate for Crew and Passengers.
(Especially for International Travellers.)
Health Book/Maritime Declaration of Health.
Derat Exemption Certificate.
PILOTAGE: Contact Coastal Radio Station Bitung (call sign PKM), telegram address: Bitung Port Administration; advance notice of ETA 24 hours. Pilot boats: 150 h.p. and 300 h.p. light grey. Requiring a Pilot: flag, sound and Morse Signal: "G".

Anchorage for vessel awaiting a Pilot: the area between Southern part of the Lembeh Street at: Lat. 1° 25′ 00″ N., and Lat. 1° 30′ 35″ N. at the Northern part of the street.

Ships have to anchor outside the mentioned Latitude above.
ANCHORAGE: The area between coast of Lembeh Island and coast of Sulawesi: Lat. 01° 27′ N., Long. 125° 12.3′ E.; Lat. 01° 26.2′ N., Long. 125° 13.5′ E. and Lat. 01° 26.3′ N., Long. 125° 10′ E.; Lat. 01° 25′ N., Long. 125° 10.8′ E. Depths: 42 ft. to 114 ft.
RESTRICTIONS: No restrictions on night entry.
Shipmaster's Report: Numerous fishing boats at the port entrance especially at night time, also fishing sticks, and small fishermen's houses on bamboo sticks built at sea, without lights, dangerous to navigation. Approaching or sailing from port at night time, should not be attempted.
MAX. SIZE: Draft alongside pier, max. 32 ft. L.O.A. 760 ft. or 100,000 B.R.T. (60,000 d.w.t.).
HEALTH: Vessels coming direct from other countries or coming from infected port: "Q" flag to be flown. Pratique procedure and action necessary to obtain pratique according to the International Sanitary Regulations.
RADIO: Bitung Radio (Call sign P.K.M.) for vessels to route ETA cables to Agents, Receivers, etc.

(MF–Working frequency 438 and 500 kHz, listening frequency 500 kHz, emission A.1., A.2.).
Time Schedule: 00.00—01.00
04.00—05.00 } G.M.T.
08.00—09.00
TUGS: 1 tug, 1,160 h.p. also 2 motor launches of 115 h.p.
BERTHING: For ocean-going vessels: 16 ft. – 35 ft. at wharf of 582 m. length.

For inter-island vessels: 17 ft. at wharf of 455 m. length.
STEVEDORES: Arranged by handling Agent.
Handling Rates:
Bulk cargo: 13–18 tons/gang/hour.
Bagged Cargo: 20–35 tons/gang/hour.
General Cargo: 12–15 tons/gang/hour.
MEDICAL: Masters to advise by radio prior to arrival if medical attendance required aboard. Vaccination/fever certificates required, 3 copies.
TANKERS: 1 oil jetty for domestic tankers (not general use). With 7 bunkering points alongside the 582 m. Ocean Going wharf, of which 3 are presently used. Bunker fuel is supplied directly by P.N. Pertamina (state oil company).
DENSITY: About 1030.
FRESH WATER: Available from hose connections on the pier, at a rate of 50 t.p.h., also 1 fresh water barge with the capacity of 200 tons.
FUEL: Not all grades fuel available. Diesel and marine lubricants can be supplied. 48 hours notice required. Rate 50–150 t.p.h.
REPAIRS: Some deck and minor engine repairs are possible at Bitung dockyard. Radar and electronic repair available, but not for big repairs.
DOCKYARD: P.T. IKI and P.T. Dock Surya.
GANGWAY/DECK WATCHMEN: Not needed.
OPENING/CLOSING HATCHES: Normally by crew/stevedores, otherwise according charter party.
SHIP'S CERTIFICATES: Registered Tonnage Certificate and all certificates normally required to be on board.
CUSTOMS ALLOWANCES: 100 cigarettes or 20 cigars or 100 gram. tobacco each crew member; 1 bottle wine or spirits for each crew member.

Passengers: Commodity to be worth US$25 per person or US$100 per family.
CARGO GEAR: Loading and discharging by ship's own derricks. Shore crane capacity up to 15 tons.
IDENTIFICATION CARDS: Shore pass issued by the Immigration Office for crew members at Agent's request.
CONSULS: Philippines only.
REPATRIATION: Facilities available.
AIRPORT: About 50 km. from port of Bitung. Regular airlines: Garuda Indonesian Airways (G.I.A.), Bouraq, Merpati and Mandala. All have daily flights to Makassar and Jakarta.
TIME: GMT plus 9 hours, permanent.
HOLIDAYS: New Year's Day; Idul Adha, 1st Muharam; Ascension Day; Birthday of Prophet Mohammad S.A.W.; Good Friday; Proclamation Day (August 17th); Idul Fitri, Waisak and Christmas Day.
POLICE/AMBULANCE/FIRE: Dial 111, 27, 60, 106 and 108.
SHORE LEAVE: Crew members are allowed ashore with a shore pass issued by the Immigration Office.
DEVELOPMENTS: Extension of pier (1,127 ft.) to total length of 2,430 ft.

SHIPMASTER'S REPORT: February 1980.
There is a 300 m. concrete wharf in approx. position Lat. 01° 26.2′ N., Long. 125° 11.6′ E and a naval wharf in approximate position Lat. 01° 26.5′ N., Long. 125° 12.1′ E. Fuel by road tanker is available.

AUTHORITY: Port Administrator of Bitung, Jalan Makassar, Bitung, Indonesia. *Tel:* 60, 106, 27, 105, 108, 56 and 111. *Contact:* Iljas Sudikto, Port Administrator.

CINTA TERMINAL: 05.30 S. 106.14 E. (See Plan Book)

DOCUMENTS: The following documents are required for immediate inspection by the Terminal Officials:
Maritime International Declaration of Health.
Valid Derat or Exemption Certificate.
6 copies of Crew Lists.
Passenger List, if any.
Certificates of Inoculation against any communicable diseases.
Valid Passports and/or Seaman's Certificates for all Crew members or passengers.
Notice of Readiness.
Indonesian Consular Clearance.
1 Crew Declaration of Personal Belongings.
1 Ship's Stores Inventory.
6 copies of Cargo Manifest for Cinta Terminal loading.
1 Copy of Cargo Manifest for Transit Cargo with a Summary.
1 Copy of Passenger Manifest.

Clearance from the last port of call will be required by the Government Authorities. Crew Lists and Crew Declaration of Personal Belongings must be on the approved Indonesian documents. Vessels are advised on their initial visit to the port to obtain sufficient forms for future visits.

In the normal course of events, Cinta Terminal acts as tanker agent and prepares all crude oil documents. No charges are made for these services. A tanker will be considered clear to depart Cinta Terminal when the crude oil loading documents and his outward clearance certificate have been delivered to the Master of the vessel.

EQUIPMENT: A vessel must have both bower anchors and ground tackle in good working condition and in such sizes and amounts as to meet either "Lloyd's" or "A.B.S." standards, although they may be in fact classified by other societies. It is strongly recommended that anchors have proper anchor buoys attached to each anchor.

All vessels must carry suitable stoppers for all manila or synthetic lines for mooring use.

Vessels to have suitable winches or capstans in good operating condition on the forecastle deck. Constant tension-type winches may not be used except when they can be solidly locked and the constant tension feature not used.

PILOTAGE: Pilotage is compulsory within the Terminal limits. Vessels to be moored at Cinta Terminal will be boarded by Cinta Terminal Mooring Master in the anchorage area. The Mooring Master will advise the ship's Master on approaches to the SBM, mooring, unmooring, connection and disconnecting hoses, and all other operations within the Terminal area. Vessels are requested to have a pilot's ladder, safely and securely rigged, ready for immediate use and long enough to meet the Mooring Master's launch. Vessels will provide a lee for the Mooring Master, both when boarding and leaving. Also a light line should be ready to take aboard the Mooring Master's portable radio.

ANCHORAGE: Position is Lat. 5° 25′ 25″ S., Long. 106° 11′ 09″ E. with a radius of 1 mile which must be used by vessels required to wait at anchor. Anchoring within the Terminal Area is prohibited. Mooring Masters will board arriving tankers in the anchorage area.

The holding area is West of the SBM with water depth of 18 to 20 fathoms. Holding ground is fairly good. Area is large enough for sufficient manoeuvring and swinging room for several vessels.

If a tanker is not scheduled to berth on arrival (e.g. another vessel is already in the berth, or the Terminal is closed on account of adverse weather, etc.), Master will be advised by radio and requested to anchor.

RESTRICTED/PROHIBITED AREA: The restricted/prohibited areas are encompassed as follows:

1. Zelda Area:
   a. Lat. 05° 10′ 00″ S., Long. 106° 20′ 00″ E.
   b. Lat. 05° 13′ 00″ S., Long. 106° 20′ 00″ E.
   c. Lat. 05° 10′ 00″ S., Long. 106° 24′ 00″ E.
   d. Lat. 05° 13′ 00″ S., Long. 106° 24′ 00″ E.
2. Yvone and Krisna areas:
   a. Lat. 05° 06′ 00″ S., Long. 106° 07′ 00″ E.
   b. Lat. 05° 06′ 00″ S., Long. 116° 13′ 00″ E.
   c. Lat. 05° 07′ 00″ S., Long. 106° 14′ 00″ E.
   d. Lat. 05° 11′ 00″ S., Long. 106° 14′ 00″ E.
   e. Lat. 05° 20′ 00″ S., Long. 106° 10′ 00″ E.
   f. Lat. 05° 20′ 00″ S., Long. 106° 05′ 00″ E.
3. Rama, Cinta and Utari areas:
   a. Lat. 05° 26′ 00″ S., Long. 106° 09′ 00″ E.
   b. Lat. 05° 23′ 00″ S., Long. 106° 13′ 00″ E.
   c. Lat. 05° 21′ 00″ S., Long. 106° 24′ 00″ E.
   d. Lat. 05° 33′ 00″ S., Long. 106° 19′ 00″ E.
   e. Lat. 05° 33′ 00″ S., Long. 106° 14′ 00″ E.
   f. Lat. 05° 40′ 00″ S., Long. 106° 14′ 00″ E.
   g. Lat. 05° 40′ 00″ S., Long. 106° 09′ 00″ E.

RESTRICTIONS: Weather permitting, Cinta Terminal will operate on 24 hours per day, 7 days per week. Tankers will be berthed during daylight hours only and unmoored on 24 hours basis provided the berth is not occupied and/or storage is not critical.

MAX. SIZE: *Minimum Size Tanker Acceptable:* The minimum sized tanker acceptable at the Terminal will be not less than 20,000 d.w.t.

Max. Size Tanker Acceptable: The max. sized tanker acceptable at the Terminal calling for a full cargo will be 175,000 d.w.t. Larger tankers may be accepted subject to weather conditions at the time of loading without recourse to IIAPCO for any delays.

NAVIGATION AIDS: The SBM is fitted with a 5 nautical mile white flashing light; flashing at a rate of 60 flashes per minute. The SBM is located at Lat. 5° 25′ 25″ S., Long. 106° 14′ 09″ E. and bears 318° True, approximately 51 nautical miles from the Port of Jakarta.

A large 602 ft. long barge "Cinta Natomas" is used for storage of crude oil and for accommodation and headquarters of Cinta Terminal personnel. It lies permanently anchored to an SBM Lat. 5° 26′ 40″ S., Long. 106° 14′ 42″ E. on a line bearing approximately S. 22° E. and 8,500 ft. from the location of the SBM. The barge shows lights and shapes as prescribed in the International Regulations for preventing collisions at sea for vessels engaged in underwater operation, see Rules 27 (d) and 30 (a). The barge is also equipped with a foghorn with 5 seconds on and 55 seconds off sequences forward and 5 seconds on and 55 seconds off aft, 10 seconds apart.

Platform Co-ordinates:

Cinta-A	Lat. 05° 26′ 24.46″ S.,	Long. 106° 15′ 44.73″ E.
Cinta-B	Lat. 05° 27′ 00.34″ S.,	Long. 106° 15′ 17.72″ E.
Cinta-C	Lat. 05° 27′ 00.33″ S.,	Long. 106° 15′ 19.57″ E.
Cinta-D	Lat. 05° 28′ 04.07″ S.,	Long. 106° 14′ 34.37″ E.
Cinta-E	Lat. 05° 27′ 44.93″ S.,	Long. 106° 15′ 23.22″ E.
Cinta-F	Lat. 05° 27′ 17.29″ S.,	Long. 106° 14′ 20.81″ E.
Cinta-G	Lat. 05° 26′ 49.77″ S.,	Long. 106° 16′ 11.19″ E.
Cinta-H	Lat. 05° 25′ 24.61″ S.,	Long. 106° 16′ 26.63″ E.
Cinta-P	Lat. 05° 27′ 02.51″ S.,	Long. 106° 15′ 19.25″ E.
Cinta-P1	Lat. 05° 27′ 04.63″ S.,	Long. 106° 15′ 19.25″ E.
Farida-A	Lat. 05° 10′ 52.30″ S.,	Long. 106° 19′ 44.70″ E.
Farida-B	Lat. 05° 10′ 36.50″ S.,	Long. 106° 18′ 41.60″ E.
Gita-A	Lat. 05° 22′ 11.38″ S.,	Long. 106° 22′ 45.00″ E.
Kitty A	Lat. 05° 30′ 58.85″ S.,	Long. 106° 11′ 52.82″ E.
Krisna-A	Lat. 05° 11′ 05.20″ S.,	Long. 106° 11′ 31.00″ E.
Krisna-B	Lat. 05° 12′ 18.56″ S.,	Long. 106° 12′ 28.90″ E.
Krisna-C	Lat. 05° 13′ 13.20″ S.,	Long. 106° 11′ 40.30″ E.
Krisna-D	Lat. 05° 14′ 03.50″ S.,	Long. 106° 13′ 06.25″ E.
Krisna-P*	Lat. 05° ′ ″ S.,	Long. 106° ′ ″ E.
Nora-A	Lat. 05° 30′ 06.65″ S.,	Long. 106° 18′ 50.55″ E.
Rama-A	Lat. 05° 26′ 50.23″ S.,	Long. 106° 17′ 15.95″ E.
Rama-B	Lat. 05° 26′ 25.96″ S.,	Long. 106° 19′ 54.49″ E.
Rama-C	Lat. 05° 25′ 21.00″ S.,	Long. 106° 18′ 56.60″ E.
Rama-D	Lat. 05° 27′ 03.00″ S.,	Long. 106° 19′ 00.00″ E.
Rama-E	Lat. 05° 25′ 12.65″ S.,	Long. 106° 20′ 00.84″ E.
Rama P	Lat. 05° 26′ 27.65″ S.,	Long. 106° 19′ 55.00″ E.
Selatan-A	Lat. 05° 33′ 42.30″ S.,	Long. 106° 10′ 59.10″ E.
Selatan-B	Lat. 05° 34′ 52.36″ S.,	Long. 106° 11′ 33.73″ E.
Selatan-C	Lat. 05° 35′ 17.36″ S.,	Long. 106° 10′ 18.67″ E.
Titi-A	Lat. 05° 10′ 13.39″ S.,	Long. 106° 24′ 13.24″ E.
Yvonne-A	Lat. 05° 09′ 41.28″ S.,	Long. 106° 10′ 27.87″ E.
Zelda-A	Lat. 05° 11′ 11.11″ S.,	Long. 106° 22′ 56.48″ E.
Zelda-B	Lat. 05° 11′ 09.00″ S.,	Long. 106° 21′ 18.00″ E.
Zelda-C	Lat. 05° 11′ 07.74″ S.,	Long. 106° 21′ 15.42″ E.
Zelda-D	Lat. 05° 10′ 13.61″ S.,	Long. 106° 22′ 10.93″ E.
Zelda-E	Lat. 05° 11′ 22.53″ S.,	Long. 106° 22′ 01.41″ E.
Zelda-P	Lat. 05° 11′ 10.72″ S.,	Long. 106° 22′ 54.85″ E.

*Position not supplied

RADIO/VHF:

Cable Address: "liapco Jakarta".

Telex: 44221-1A.

Operating Schedules and Frequencies: Direct communication by radio telephony between Cinta Terminal (call sign: 6ZFT) and incoming vessels will be by: amplitude modulation (A3, A3H and A3J) operation in the 2, 4, 8 and 12 MHz bands and by International Marine VHF Channel 16 (156.80 MHz).

Cinta Terminal (call sign: 6ZFT) particulars are as follows: operated by: Independent Indonesian American Petroleum Company (IIAPCO). Position: Lat. 5° 26′ 40″ S., Long. 106° 14′ 42″ E. Hours of operation: 24.

Frequencies	*Class*	*Power*	*Mode*
4456.0 kHz	A3, A3H, A3J	150 W	AM

International Marine VHF Channels:

6 – 156.30 MHz	Simplex	
12 – 156.60 MHz	Simplex	
13 – 156.65 MHz	Simplex	
14 – 156.70 MHz	Simplex	
16 – 156.80 MHz	Simplex	
20 – 157.00 MHz	Receive 161.60 MHz	Duplex
26 – 157.30 MHz	Receive 161.90 MHz	Duplex
28 – 157.40 MHz	Receive 162.00 MHz	Duplex

Notes: 6ZFT keeps continuous watch on 4456 kHz. 6ZFT keeps continuous watch on VHF Channel 16.

All communications between ships and Cinta Terminal (6ZFT) will be way of this station except should a vessel be unable to contact 6ZFT, she should send messages through: Singapore Radio/9VG or Pertamina Radio/PKI-2.

Initial Communications: It is most important that ships establish communications with the Cinta Terminal (6ZFT) not less than 72 hours prior to arrival at the Terminal, giving estimated time of arrival. Further ETA information should be sent when the vessel is 48 hours, 24 hours, 12 hours and 4 hours distant or any time a change of one hour in original ETA occurs. These messages should specifically state whether ETA is given in GMT (Z) or local time (K).

Cinta Terminal time is GMT plus 7 hours throughout the year.

The 72 hours signal should include the following:

1. Name of vessel and radio call sign.
2. ETA and date.
3. Cargo requirements.
4. Deballast time.
5. Max. loading rate.
6. Vessels draft on arrival.
7. If there is any sickness aboard or clean bill of health.
8. Last port of call.
9. Any hull, bulkhead, valve or pipe-line leaks on vessel which could affect loading or cause pollution.
10. Distance in feet from bow to vessel's loading manifold.

On receipt of the first signal from a vessel Cinta Terminal (6ZFT) will transmit a message to her giving preliminary requirements and details as to Terminal. Masters are urged to comply with this in all details in order to facilitate vessel turn-around and Government formalities.

Communications Within 4 Hours of Terminal: Once ships are within the 4 hours distance of Cinta Terminal (6ZFT) communication, valid radio-telephone communications on International marine VHF may be established on Channel 16 (156.80 mHz). This channel is monitored continuously.

Once contact has been made on Channel 16 further conversation will be conducted on a mutually compatible channel.

The 4 hours signal should confirm information on the time she will require to discharge ballast after arrival. Precise time of arrival should be given when the ship is 4 hours distant from the Terminal.

Communication in Terminal: The Mooring Master will be in direct control of all ship communications while in the Terminal Area. Any unauthorised communications will be cause for cessation of all operations excepting clearing the berth, and the vessel's Notice of Readiness will be nullified immediately.

PRATIQUE: In accordance with international practice, quarantine signals must be displayed by all vessels approaching Cinta Terminal area. These signals shall be displayed continuously until pratique is granted. By day the flag of Indonesia should be flown throughout the vessel's stay in port. The boarding officials will attend the incoming vessel from the Cinta Terminal launch.

NOTICE OF READINESS: After arrival in the anchorage area and when the tanker is in every respect ready to load, the Master may tender his Notice of Readiness. Notice of Readiness will not be accepted during periods when the Terminal is closed. The Terminal is "closed" when the weather is such that it is too rough for incoming tankers to berth. The decision regarding the opening and closing of the Terminal will rest with the Terminal Superintendent. Tenders by vessels to load crude oil cargo will be normally accepted and berth assigned to vessels in chronological order of arrival provided such vessels have current nomination for cargo valid at the time of tender, carry clean ballast (if any), and have cargo tanks in fit condition to receive cargo. Also they must be in all respects properly equipped and ready to moor. Should berthing be delayed on account of bad weather, vessels will keep their position in line.

TUGS: Tugs and/or launches may assist in berthing vessels. These are under the direct supervision and control of the Mooring Master.

BERTH DESCRIPTION: The Terminal and Production Administrative Offices are located on board the 143,000 d.w.t. crude storage barge *Cinta Natomas* permanently moored approximately 8,500 ft. on a line bearing South 22° E. from the SBM. The nearest port with facilities is Jakarta approximately 51 nautical miles South-east.

The single point mooring buoy berth (SBM) is 11 m. in diameter, and designed to handle tankers in the 175,000 d.w.t. class. The buoy is equipped with dual 12 inch floating hose with ASA 150 pound flanged connections. Both strings must be taken aboard. Loading rates will be from 13,000 to 40,000 barrels per hour range. The SBM is also provided with two permanently attached 15 inch circumference synthetic fibre floating mooring lines. These lines should be held under tension by the vessel at all times.

MOORING: Tankers are requested to have ready on the forecastle head the following:

(a) Messenger lines on the forecastle head for bringing 2 mooring lines aboard from the SBM (mininum 6 in. circumference).
(b) Mooring winches on forecastle head for handling two 12 in. circumference synthetic fibre floating mooring lines from the SBM.
(c) Adequate chafing gear to prevent damage to mooring lines.
(d) Derrick rigged and ready to pick up from launch, mooring shackles, nylon strops and hose connection gear on the port side midships.

On the near approach to the buoy a launch will attach a ship's line to one of the Terminal's floating mooring lines. This will be hove aboard and secured to the towing brackets, if the ship is so fitted, or otherwise secured by a ship's mooring wire and nylon strop previously passed aboard. The same operation will be repeated with the second mooring line.

The Mooring Master may require the vessel to unmoor at any time he deems it necessary for the safety of the vessel or mooring buoy or both, or infringement of the Terminal regulations.

HOSES: The Mooring Master along with a ship's officer will direct the ship's crew in the raising, lowering, connecting and disconnecting the oil loading hoses as well as all other labour pertaining to the loading of crude. The Terminal will not provide any labour for work done aboard the vessel.

Vessels must be adequately equipped with boom, blocks, tackle, wire runners and sundry equipment on the port side to hoist the floating hoses from the sea to the loading position. (5 tons minimum hoist size required.) Vessel's loading manifolds should be prepared for two 12 in. ASA 150 lb. flanged hose connections prior to vessel's arrival at Terminal. Where no crossover valves exist on loading manifolds it is recommended that loops between loading lines on the starboard side of these manifolds be fitted. 8 in. hose connections to be removed; also, if necessary, "Y" pieces removed so that maximum flow through the 12 in. cargo hoses will not be reduced. To assist in vessel's turnaround, tankers should have all necessary booms and cargo gear rigged and ready before ship is boarded by Mooring Master.

Vessels which may consider the lifting capacity of their gear to be marginal should strengthen their gear accordingly. A common way to do so is to rig a second topping lift on the boom.

LOADING: Before the loading begins, the Master will ensure that all Terminal and Port Regulations pertaining to the readiness of the vessel have been complied with; that the vessel is manned and in all respects ready to receive crude, and that all precautions required by the circumstances have been taken.

All communications relative to the loading of the vessel shall be routed through the Mooring Master who will remain in contact with storage barge *Cinta Natomas* constantly via portable VHF Units. In case of temporary breakdown of the portable VHF circuit, contact may be continued on International Marine Channels if the vessel is so fitted.

Should communications with the *Cinta Natomas* fail, loading ceases. An emergency cessation of loading may be effected by a continuous sounding of the ship's whistle.

The max. loading rate will be 17,000 b.p.h. (2,300 long t.p.h.). Loading will commence with one pump; when the vessel advises that the cargo is flowing into the tanks, the loading rate will be increased until the desired rate has been reached.

Vessels shall not close down against the incoming oil flow. Vessels will be held liable for damages resulting from failure to observe this precaution.

The vessel must give 30 minutes notice to the *Cinta Natomas* before starting to "top-off", and shall advise if a decrease in loading rate is desired.

The vessel must give 15 minutes' notice to the *Cinta Natomas* prior to the completion of loading, at which time the *Cinta Natomas* may reduce to one pump.

On completion of loading, all pumps will be stopped, loading hoses disconnected, and blind flanges with gaskets installed on the loading hose before lowering over the side. There should be no leakage. All cargo tank openings and pressure vacuum relief valves must be closed immediately after ullages and samples have been taken.

All documentation will be completed as soon as possible after loading is completed.

If during loading it is revealed that oil is leaking from the tanker, so as to constitute a safety or pollution hazard, loading shall cease and the tanker may have to leave the Terminal limits at the sole discretion of the Mooring Master. Completion of loading will only be undertaken if repairs have been carried out to the tanker to the satisfaction of the Mooring Master. A tanker so rejected shall not later be accepted on a subsequent visit for loading until satisfactory evidence of repair is submitted duly certified by ABS, Lloyds or other recognised surveyors.

Notice must be given by the vessel to the Mooring Master 30 minutes before vessel completes deballasting. The Mooring Master will advise the Cinta Terminal.

BALLAST: It is responsibility of the ship's Master to see that no oil (crude, bunkers, diesel or bilge) or dirty ballast is pumped or spilled overboard from his ship while in the area. Drip pans should be used, especially when disconnecting hoses, in order to prevent spillage overboard.

Before loading commences all overside scuppers shall be made oiltight. At Cinta Terminal there are no slop tanks or facilities for receiving dirty ballast. Tankers must arrive with clean ballast. In the event a tanker does have dirty ballast it will not be allowed to be pumped overboard.

A vessel must have sufficient ballast for safe handling, having due regard to existing weather and sea conditions. Through careful watch of the weather and sea conditions, frequent exchange of information between ship and Terminal, and by a knowledge of the behaviour of his own vessel, the ship's Master may come to the Terminal with a minimum of ballast and thus lessen any possibility of infringement of sea pollution regulations.

Vessels equipped with a separate system of ballast tanks will be allowed to discharge ballast and load oil simultaneously, provided approval is first obtained from the Company Mooring Master and provided Government Petroleum Inspector agrees to do so.

Discharging Ballast at Night: When any vessel is discharging ballast in darkness, the sea around the area of discharge will be adequately lighted, so that any pollution will be readily noticeable.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: No repairs are to be made while berthing or unberthing, or in the berth. All engines to be on 30 minutes standby and steam on deck at all times.

MEDICAL: At Cinta Terminal, medical and dental services are not available. In emergencies requiring hospitalisation, the patient will have to be flown by helicopter to Jakarta. All expenses will be charged to the ship owner.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wines, beer, perfume, arms, ammunition and possibly other items will be locked up under customs' seal from time of arrival of ship at the Terminal until the time of leaving territorial waters.

Each person is allowed 20 cigarettes per day of stay or 3 grams of tobacco or cigars in lieu thereof. Each man is allowed 1 litre of beer or 0.5 litres of wine per day. Special allowances are made for the Master under special circumstances.

Indonesian Customs and Immigration Officials will board the vessel as soon as possible after arrival to give inward clearance and pratique service. Indonesian Government Regulations are strictly enforced.

Contraband: The attention of Masters is called to the strict enforcement of Indonesian Regulations against smuggling. Illegal possession or landing of such items as narcotics, liquor, cigarettes, ammunition, sheath knives and similar weapons or other articles of contraband is subject to severe penalty and may result in prolonged delay of the vessel concerned.

All precautions must be taken to prevent the violation of contraband laws.

Masters are requested to inform the ship's officers and crew of the foregoing regulations pertaining to contraband, shore liberty, etc., and to be assured that all personnel completely understand.

IDENTIFICATION CARDS: Visitors must obtain a Special Pass from Indonesian Government Officials located in the Terminal and from the Company's Mooring Masters. It is recommended that visitors be restricted to a minimum due to hazards involved.

TIME: Indonesian local time is GMT plus 7 hours.

SHORE LEAVE: Shore liberty will not be granted except in cases of extreme emergency. Crew members cannot pay off or leave vessel at Terminal.

GENERAL: Safety rules and regulations are strictly enforced. The safety requirements are based upon the provisions of the Code of Safe Practices currently accepted by the Oil and Tanker Industries.

Provisions, spare parts or stores of any sort shall not be loaded from or discharged into any craft while the tanker is in or near the berth.

When a Mooring Master and his launch crew are assigned to a ship on business, it is expected that the ship will supply them with meals at the same time and in the same manner as comparable with personnel of the ship. No special meals or special foods will be required. The Terminal will keep this item to a basic minimum. The ship should also provide shelter and smoking facilities in the same manner as meals. All communictions between Terminal personnel assigned to a ship and ship's personnel should be through the Mooring Master.

AUTHORITY: IIAPCO, Division of Natomas International Corporation, P.O.Box 2759, Five Pillars Office Park, Jl. Letjen Haryono M.T.58, Jakarta, Indonesia. *Tel:* 791608. *Telex:* JKT. 47121-IA. *Cables:* IIAPCO.

DUMAI: 01.41 N. 101.27 E. **(See Plan Book)**

IMPORTANT FEATURES:

1. There are 4 CPI Oil Loading Berths, 1 Government Cargo Wharf and 1 Pertamina Refinery Wharf at Dumai. Whilst the CPI Oil Loading Berths No. 3 and No. 4 can be utilised for handling refined oil product, Oil Berth No. 4 can also be utilised for discharging crude oil. The Pertamina Refinery Wharf is for sole use of the Refinery. Besides the above wharves there are 3 more Government wharves for handling dry cargo with capacity of 1,000 d.w.t. vessel each.

2. Government Pilots moor and unmoor all vessels at Dumai harbour. CPI supervises the movements of all vessels at the CPI loading berths.

3. Safety rules are strictly enforced. The Safety requirements are based upon the provisions of the Codes of Safe Practice currently accepted by the Oil and Tanker Industries.

4. The Indonesian Government maintains a radio station (call letters "PKP") at Dumai. All incoming vessels should establish early contact with this station, in order to transmit ETA data, etc.

5. Shore liberty may normally be granted to ship's officers and crew after clearance of the vessels by harbour authorities on 24 hours basis (subject to change).

6. The laws of the Republic of Indonesia are in force at Dumai; and all personnel, for their own protection, are urged to abide by them.

7. Display of quarantine signals on approach to Dumai must be maintained, until pratique is granted. By day the flag of Indonesia should be flown throughout the vessel's stay in port.

DOCUMENTS:

International Maritime Declaration of Health.
Valid Derat or Deratisation Exemption Certificate.
12 Crew Lists.
12 Passenger Lists (if passengers carried).
Certificates of inoculation against any communicable diseases.
Valid Passports and/or Seamen's Certificates for all crew members and passengers.
Quarantine Certificates if expired, can be renewed.
Harbour report/last port clearance.
Load Line, Ship's Registry, Safety Radio, Construction and Equipment Certificates.
For Customs: 1 Crew List, 4 copies Personal Effects List, 4 copies Stores List.

APPROACHES: The Dumai Port installations can be reached by deep draft vessels by proceeding from Malacca Strait into Bengkalis and following a buoyed channel on a Southerly course for a distance of 22 miles to the junction of the Rupat Strait. Vessels must make a turn of approximately 180° to enter the Rupat Strait and thence Westerly for a distance of 33 miles to Dumai. The Bengkalis and Rupat Strait fairways have been wire-dragged clear to a depth of 24 m. and 18.3 m. LWS respectively.

Last survey was carried out from April to June 1982. Based on that survey, Dumai Sea Communication imposed the maximum draft of vessels passing Rupat Strait in/out bound Dumai Port is 17 m. (55.77 ft.) and LOA of 315 m. (1,033 ft.)

PILOTAGE: Harbour pilotage is performed by Government Pilots. The Harbour Pilot will board a vessel at anchorage for berthing or immediately on arrival at Buoy No. 22 when berth is available.

Harbour Pilot Area is:
Latitude: 01° 44′ 00″ North, Longitude: 101° 22′ 50″ East.
Latitude: 01° 44′ 00″ North, Longitude: 101° 26′ 50″ East.
Latitude: 01° 42′ 35″ North, Longitude: 101° 30′ 00″ East.
Latitude: 01° 40′ 00″ North, Longitude: 101° 30′ 00″ East.

Sea Pilots: Sea piloting for the Rupat and Bengkalis Straits is provided by the Department of Sea Communication.

According to the Dumai Port Authority's letter dated June 25, 1974, there are 2 piloting areas for Sea Pilot.

1. Bengkalis Strait and Rupat Strait from fairway buoy or Eastern part of Morong Strait to Eastern limit of Dumai Harbour Pilot Area (Long. 101° 30′ 00″ E.).

2. Rupat Strait and Bengkalis Strait from Eastern limit of Dumai Harbour Pilot Area (Long. 101° 30′ 00″ E.) to Northern limit of Sungai Pakning Harbour Pilot Area.

Pilotage is compulsory for vessels with a capacity exceeding 105 g.r.t.

6 hours prior to arrival Dumai harbour area, all vessels should contact CPI through VHF Radio Channels 10 or 16 and 69. At Fairway Buoy all vessels should hoist International Code Flag painted "White" with Code "Pilot" and contact Morong Pilot Station via Channel 16 for a "request for Pilot".

According to the Dumai Port Authority's memo dated May, 1972, effective on 1st June, 1972, all vessels proceeding to Dumai should hoist the International code flag H or PT when passing buoy No. 17 as "requesting for Pilot" and call CPI's Radio Telephone (VHF) on Channel 12. You will be informed whether or not Pilots are available, if not you may then proceed directly to Dumai Harbour anchorage area.

The practice of berthing and unberthing vessels utilising CPI mooring masters has been discontinued.

Shipmaster's Report: 1977. Sea pilotage for the Rupat and Bengkalis Straits is now compulsory. The Sea Pilot will board vessels at Fairway Buoy, position Lat. 01° 54.5′ N., Long. 101° 51.5′ E.

Contact with the pilot station "MORONG" is allowed on Channel 16.

In case the Pilot is not available, the recommended anchorage area is 0.5 mile N.N.E. from Fairway Buoy.

ANCHORAGE: The Dumai general anchorage area is North and West of oil wharves. Minimum depth of water in this area 43 ft.; 35 ft. shoal spot to East of general anchorage should be noticed. Holding ground in anchorages considered good, bottom clay. Area large with sufficient manoeuvring and swinging room for several vessels of size to be accommodated at oil wharves.

If vessels are not met by the Pilot's launch on arrival, or not instructed by the Dumai Port Control Radio to berth on arrival, it is suggested that they proceed to the recommended anchorage area.

MAX. SIZE: Length 1,033 ft., draft 55.77 ft.

Also see "Approaches" and "Shipmaster's Report" dated October, 1983 – "Circular".

RESTRICTIONS: *Requirements for Entering Restricted Maritime Zone of Sumatra:* For some years, the Rupat-Bengkalis Straits area has been designated a Restricted Maritime Zone by decree of the Government of Indonesia.

A partial exemption from the requirement to secure special Indonesian Consular Clearance before entering this Zone has been granted by the Indonesian Navy to tanker vessels proceeding to Dumai from any port in the world except Singapore. Vessels require only normal clearances from their last port to obtain entry at Dumai. Vessels diverted at sea need only normal clearance from last port and the diversion cable. All vessels inbound to Dumai from the time abreast Raleigh Bank Light Buoy until anchored off Dumai Terminal must display the following recognised signals:

By Day: The International Code Flag hoist "CAL" flown from a single hoist from the signal yard.
By Night: A red light 6 ft. above a white light both visible all around the horizon at a distance of not less than 2 miles.

Vessels should be prepared to answer identification queries from Indonesian Naval Patrol Crafts.

The forgoing is subject to change.

RADIO/VHF:

1. *Means of Communications:* The following communication systems are available for vessels proceeding to Dumai:
(a) Dumai Radio Call Letters "PKP" (Government Coastal Radio).
(b) VHF Station Channel 16 (CPI and Pertamina operated).
(c) Telex CPI No. 44386 Jakarta or 56271 Dumai.
(d) Telex Pertamina No. 45348 Perta Jakarta or 49285 Perta Jakarta.

2. *ETA Messages:* Vessels proceeding to Dumai shall send ETA Dumai message as follows:

2.1. When proceeding direct from any port other than Palembang and Singapore:
(a) 96 hours prior to arrival at Dumai, transmit ETA Dumai message by vessel's radio to "Calpaking" Dumai and "Pertaminaship" Dumai through Dumai Radio Station Call Letters "PKP".
(b) Should ETA Dumai change by 3 hours, send an amended ETA message immediately to "Calpaking" Dumai and "Pertaminaship" Dubai.
(c) 24 hours before arrival at Dumai, *confirm* or *amend* ETA Dumai to "Calpaking" Dumai and "Pertaminaship" Dumai regardless of any change in last ETA message sent.

2.2. When proceeding from Singapore:
(a) 96 hours prior to arrival at Singapore, cable ETA Dumai and estimated time of stay in Singapore to "Calpaking" Dumai and "Pertaminaship" Dumai. Include words "From Singapore" in ETA message.
(b) At Singapore, when departure time from Singapore is known, *confirm* or *amend* ETA Dumai to "Calpaking" Dumai and "Pertaminaship" Dumai through vessel's Agent in Singapore.
(c) Immediately upon departure from Singapore, and when vessel's radio can be used legally, *re-confirm* or *amend* ETA Dumai to "Calpaking" Dumai and "Pertaminaship" Dumai.

2.3. When proceeding from Palembang:
(a) At Palembang, when departure time from Palembang is known, cable ETA Dumai to "Pertaminaship" Dumai through vessel's agent in Palembang.
(b) Immediately upon departure from Palembang, and when vessel's radio can be used legally, *confirm* or *amend* ETA Dumai to "Pertaminaship" Dumai.

3. *Operating Schedule and Frequencies:* There is a Government Coastal radio station at Dumai. Any message for Dumai Terminal should be sent through this radio station which operates as follows:

Name : Dumai Radio
Call Letters : "PKP"

Time (GMT)	*Transmits*	*Listens On*
0000 – 0030	448 kHz	500 kHz
0400 – 0500	448 kHz	500 kHz
0800 – 0900	448 kHz	500 kHz
1200 – 1300	448 kHz	500 kHz
1300 – 1400	8726 kHz	8726 kHz
0030 – 0130	8726 kHz	8726 kHz
0230 – 0330	13101 kHz	13101 kHz
0630 – 0730	17184 kHz	17184 kHz
0130 – 0200	2182 kHz	2182 kHz

If contact can not be made with Dumai Radio, then you should immediately contact Singapore Radio, Call Sign "9VG" and forward your ETA message to Amoseas Singapore "RS-21349".

4. *Radio Telephone (VHF):* A CPI operated VHF station is maintained 24 hours a day, and is available for information concerning vessel's port activities.

The following channels are available:
Channel 10 with Frequency : 156.500
Channel 16 with Frequency : 156.800
Channel 69 with Frequency : 156.475

HEALTH: In accordance with international practice, quarantine signals must be displayed by all vessels approaching Dumai. These signals shall be displayed continuously until pratique is granted. These signals are: Sunrise to Sunset, Quarantine flag "Q". Sunset to Sunrise, Signal lights (red over white).

Quarantine Officer and Immigration Officer will come on board to prepare the clearance at anchorage, except when the vessel comes alongside on arrival by issuing berthing permit only (not free pratique).

TUGS: At present mooring and unmooring assistance is provided by 5 Government's 3200 h.p. diesel tugs which are stationed in the immediate vicinity of the wharves. While rendering assistance the tugboats are under orders of the Pilot on duty.

BERTHING: Incoming ships are assigned in accordance with time of arrival, product to be loaded, size of vessels, and loaded draft.

Every effort will be made to berth vessels immediately upon arrival, and to this end Master should maintain radio contact with radio telephone (VHF) Channels 12 and 16.

At Dumai there are 9 wharves. 4 wharves are Government-owned and operated cargo wharves. Another wharf is Pertamina, owned and operated for the sole use of its refinery. The other 4 wharves are C.P.I. owned and operated and referred to as Oil Wharf No. 1, Oil Wharf No. 2, Oil Wharf No. 3, and Oil Wharf No. 4. These C.P.I. wharves are utilised for loading of crude oil and can handle refinery product. These oil wharves are equipped with docking sonar for monitoring speed and distance of approaching vessels to be berthed at the wharves.

Terminal Official will relay the indicated speed and distance by walkie-talkie radio to the Pilot or Master on board vessel.

(a) Oil Wharf No. 1, located in approx. position: 01° 41′ 14″ N., 101° 28′ 07″ E. Design capacity 150,000 d.w.t. Length between outer dolphins 1,210 ft. Least depth at face of wharf 61 ft. (MLWS). In terms of vessel's size and design this would be an LOA of approx. 1,008 ft., and a draft of 57 ft. Orientation of the wharf parallels the current flow.

(b) Oil Wharf No. 2, located in approx. position: 01° 41′ 14″ N., 101° 27′ 52″ E. Design capacity 150,000 d.w.t. Length between outer dolphins 1,424 ft. 8 in. Least depth at face of wharf 59 ft. (LWS). In terms of vessel's size and design this would be an LOA of approx. 1,263 ft., and a draft of 55 ft. Orientation of the wharf parallels the current flow.

(c) Oil Wharf No. 3, located in approx. position: 01° 41′ 14″ N., 101° 27′ 42″ E. Design capacity 84,000 d.w.t. Length between outer dolphins 1,170 ft. Under favourable weather conditions capable of receiving vessels of 100,000 d.w.t. Least depth at wharf face 59 ft. (LWS). In terms of vessel's size and design this would be an LOA of approx. 940 ft. and a draft of 54 ft. Orientation of the wharf parallels the current flow at 095° – 275° true.

(d) Oil Wharf No. 4, located in approximate position 01° 41′ 14″ N., 101° 27′ 31″ E. Basic design is for 55,000 d.w.t. In terms of vessel's size and design this would be an LOA of approx. 680 ft. and a draft of approx. 46 ft. Least depth of water at face is 51 ft. (LWS). Overall length between outer mooring dolphins is 1,005 ft. 06 in. Orientation of the wharf parallels the current flow.

(e) Government Cargo Wharf No. 1, located in approx. position: 01° 41′ 14″ N., 101° 27′ 04″ E. Design capacity 16,500 d.w.t. but able to handle 23,000 d.w.t. Length between outer dolphins 750 ft. Least depth at wharf face 34 ft. (LWS). Orientation of the wharf parallels the current flow. Only mobile cranes with a maximum lifting capacity of five (5) tons are available. As no heavy lift floating crane or stationary crane is available, heavy lifts must be handled by ship's gear.

(f) Government Cargo Wharf No. 2, located next to Cargo Wharf No. 1, has designed capacity of 10,000 d.w.t.

(g) Pertamina Refinery Wharf, located in approximate position 01° 41′ 12″ N., 101° 28′ 16″ E. Design capacities, Outer Berth 100,000 d.w.t., Inner Berth 10,000 d.w.t.

CARGO: There are 3 types of cargo in Dumai at C.P.I. Terminal.

1. Sumatra Light Crude with API Gravity=34.5° approximate Pour Point ±100°F Solid Point ±95°F.
2. Duri Crude with API Gravity=22.0° approximate Pour Point ±60°F Solid Point ±55°F.
3. Pedada Crude. This crude is classified as Sumatran Light Crude.

LOADING: The Master or his representative is required to hand to C.P.I. within normal business hours a written Notice of Readiness to load.

Oil Wharf	*Size of arms*	*No. of arms*	*Size of flanges*	*Peak Cap. Sumatra*	*Av. Cap. Light crude*
No. 1	12 in.	4	12 in.	50,000	35,000
No. 2	16 in.–12 in.	3	12 in.	75,000	40,000
No. 3	12 in.	4	12 in.	50,000	35,000
No. 4	12 in.	2	12 in.	25,000	15,000

All the loading arms flanges are designed to U.S. standard flanges, faced and drilled. All these wharves have chiksan loading arms. The above peak and average capacity rates are for Sumatran Light crude. For Duri crude the above rate should be reduced to approximately 70%.

In case of low stock position, the average capacity may be reduced to approximately 50%.

Responsibility for Loading Arrangements: All operations in connection with the starting of loading, discharging, switching of tanks and topping off must be directly and personally supervised by a ship's Officer, and sufficient personnel should be on deck at all times to handle the loading and/or unloading operation.

Upon completion of loading and/or unloading, the vessel will be required to leave the wharf immediately after disconnecting hoses to await clearance at the anchorage.

Hose Handling: Wharf crews are on duty to handle loading arms and/or oil hoses on the wharf. Any required reducers and/or elbows to be fixed to ship's manifolds should be handled by ship's personnel (will not be handled by CPI personnel).

Cargo Loading Procedures: Before the loading is begun, the Master will assure that terminal and port regulations pertaining to readiness of the vessel have been complied with; that the vessel is manned and in all respects ready to receive cargo, and that all precautions required by the circumstances have been taken. When the vessel is in all respects ready, the following loading procedure will apply:

a. The chiksan arms and/or cargo hoses will be swung on board by lifting gear located on the wharves and also with the assistance of the vessel's gear if required. The required reducers and elbows to fit vessel's manifold must be connected and disconnected and taken from or to shore by ship's personnel.

b. Notice must be given by the vessel to the Head Wharfman 30 minutes before the vessel completed deballasting.

c. Loading will commence under gravity or with one pump. When the vessel advises that the cargo is flowing into tanks, the loading rate will gradually be increased until the desired rate has been reached.

d. The vessel must give 30 minutes notice to the wharf before starting to "top off", and shall advise if a decrease in loading rate is desired.

e. The vessel must give 15 minutes' notice to the wharf prior to completion of loading at which time the Head Wharfman may reduce to one pump.

f. Ship's valves shall not be closed against loading pump pressure.

g. On completion of loading, loading arms and/or cargo hoses must be drained and disconnected immediately.

h. All cargo tanks openings and pressure vacuum relief valves must be closed immediately after ullages and samples have been taken.

The vessel will be unmoored immediately after completion of loading as tide and weather condition permit.

Suspension of Oil Handling Operations: Terminal personnel are authorised to suspend oil handling operations in the event any of the safety rules mentioned under "Safety Regulations" is not observed, or in the event of non-compliance with safety rules generally observed by competent tanker personnel. Oil handling operations may also be suspended if any other danger is believed to exist.

Oil Inspectors: There is no independent agency providing oil inspection service at Dumai.

Vessel's Gangways: Vessels shall supply safe gangway from ship to shore, which shall be adequately illuminated during the hours of darkness.

BALLAST: *Pollution of Sea by Oil:* The discharge of dirty ballast within the territorial waters of Dumai port and entrance passage (Rupat and Bengkalis Straits) is strictly prohibited. Shore facilities for disposal of dirty oily ballast water is available at Dumai, however only for domestic tankers. For safe manoeuvring purposes, it is therefore compulsory that tankers arrive with sufficient clean ballast water on board to meet the requirement for minimum safe manoeuvring draft. All ballast water on board tankers other than domestic tankers loading at Dumai wharves must be pumped overboard after arrival at berth and prior to loading. If after arriving alongside, a vessel is found to have dirty ballast water on board, such vessel will be sent to sea to accomplish the necessary tank cleaning. Such action will be on the vessel's expense and CPI will not accept responsibility for the resulting delay to the vessel or any claims of the result thereof. A new Notice of Readiness to load must therefore be tendered. "Load-on-Top" procedure is expected to be carried out by each vessel loading at Dumai.

Ballast Requirements: Vessels should arrive with sufficient clean ballast water to enable safe manoeuvring under prevailing weather conditions. The accepted standard of deballasting time is 6 hours.

Deballasting Facility: Deballasting facilities have been constructed in Dumai and connected to all four CPI wharves.

However, this facility is only for domestic sailing tankers. Oceangoing tankers are strongly recommended to arrive with sufficient clean ballast water.

Minimum Draft: Minimum draft schedule recommended for various tonnage tankers are as follows:

d.w.t	*Forward*	*Aft*
a. 12,000 – 22,000	12 ft.	20 ft.
b. 22,000 – 32,000	16 ft.	24 ft.
c. 32,000 – 45,000	18 ft.	26 ft.
d. 45,000 – 60,000	19 ft.	27 ft.
e. 60,000 and over	22 ft.	28 ft.

The above is a recommendation only and the Master should use his own discretion in order to have safe manoeuvrable draft on arrival and while berthing.

READINESS: *Notice of Readiness:* The Master or his representative is required to hand to CPI or its agent at Loading port, a written Notice of Readiness to load during business hours (24 hours everyday). Receipt of such Notice of Readiness by CPI does not necessarily imply acceptance.

Every effort will be made to berth and load vessels on arrival in port.

Arrival means anchoring or arrival at anchorage area in Dumai Harbour, see "Anchorage".

Readiness to Load or Unload: The following will apply in regard to Notice of Readiness to Load or Unload.

Notice of Readiness to Load or Unload is a warranty on the part of the Master that the vessel already in port is in all respects ready to load or unload and that all tanks, pumps, pipe-lines and appurtenances of the vessel are fit to receive the cargo to be loaded or unloaded.

FRESH WATER: Fresh water is available in limited quantities at all wharves. A request statement must be submitted to the Port Authority through the vessel's agent.

FUEL: Not available.

MEDICAL: The Port Health Doctor has only limited facilities for medical treatment. If the services of more complete and/or specialised medical assistance are needed or emergency cases arise on board tankers calling at Dumai, the Port Health Doctor might refer such cases to C.P.I. hospital facilities. However, Masters of all vessels bound for Dumai are requested, if possible, to call at Singapore for medical assistance.

REPAIRS: No repairs shall be carried out to the main propulsion machinery and/or essential auxiliaries while alongside. The vessel's main propulsion machinery shall be in readiness for instantaneous use on short notice. No repair facilities ashore.

GANGWAY/DECK WATCHMEN: Strongly suggest that all Masters of tankers calling at Dumai maintain a close security watch while at anchor as well as when alongside the wharves. It is further recommended that on board the tankers unoccupied rooms should be securely locked and port holes closed before being vacated.

TIME: GMT plus 7 hours all year round.

DUMAI: 01.41 N. 101.27 E. (See Plan Book)

IMPORTANT FEATURES:

1. There are 4 CPI Oil Loading Berths, 1 Government Cargo Wharf and 1 Pertamina Refinery Wharf at Dumai. Whilst the CPI Oil Loading Berths No. 3 and No. 4 can be utilised for handling refined oil product, Oil Berth No. 4 can also be utilised for discharging crude oil. The Pertamina Refinery Wharf is for sole use of the Refinery. Besides the above wharves there are 3 more Government wharves for handling dry cargo with capacity of 1,000 d.w.t. vessel each.

2. Government Pilots moor and unmoor all vessels at Dumai harbour. CPI supervises the movements of all vessels at the CPI loading berths.

3. Safety rules are strictly enforced. The Safety requirements are based upon the provisions of the Codes of Safe Practice currently accepted by the Oil and Tanker Industries.

4. The Indonesian Government maintains a radio station (call letters "PKP") at Dumai. All incoming vessels should establish early contact with this station, in order to transmit ETA data, etc.

5. Shore liberty may normally be granted to ship's officers and crew after clearance of the vessels by harbour authorities on 24 hours basis (subject to change).

6. The laws of the Republic of Indonesia are in force at Dumai; and all personnel, for their own protection, are urged to abide by them.

7. Display of quarantine signals on approach to Dumai must be maintained, until pratique is granted. By day the flag of Indonesia should be flown throughout the vessel's stay in port.

DOCUMENTS:

International Maritime Declaration of Health.
Valid Derat or Deratisation Exemption Certificate.
12 Crew Lists.
12 Passenger Lists (if passengers carried).
Certificates of inoculation against any communicable diseases.
Valid Passports and/or Seamen's Certificates for all crew members and passengers.
Quarantine Certificates if expired, can be renewed.
Harbour report/last port clearance.
Load Line, Ship's Registry, Safety Radio, Construction and Equipment Certificates.
For Customs: 1 Crew List, 4 copies Personal Effects List, 4 copies Stores List.

APPROACHES: The Dumai Port installations can be reached by deep draft vessels by proceeding from Malacca Strait into Bengkalis and following a buoyed channel on a Southerly course for a distance of 22 miles to the junction of the Rupat Strait. Vessels must make a turn of approximately 180° to enter the Rupat Strait and thence Westerly for a distance of 33 miles to Dumai. The Bengkalis and Rupat Strait fairways have been wire-dragged clear to a depth of 24 m. and 18.3 m. LWS respectively.

Last survey was carried out from April to June 1982. Based on that survey, Dumai Sea Communication imposed the maximum draft of vessels passing Rupat Strait in/out bound Dumai Port is 17 m. (55.77 ft.) and LOA of 315 m. (1,033 ft.)

PILOTAGE: Harbour pilotage is performed by Government Pilots. The Harbour Pilot will board a vessel at anchorage for berthing or immediately on arrival at Buoy No. 22 when berth is available.

Harbour Pilot Area is:
Latitude: 01° 44′ 00″ North, Longitude: 101° 22′ 50″ East.
Latitude: 01° 44′ 00″ North, Longitude: 101° 26′ 50″ East.
Latitude: 01° 42′ 35″ North, Longitude: 101° 30′ 00″ East.
Latitude: 01° 40′ 00″ North, Longitude: 101° 30′ 00″ East.

Sea Pilots: Sea piloting for the Rupat and Bengkalis Straits is provided by the Department of Sea Communication.

According to the Dumai Port Authority's letter dated June 25, 1974, there are 2 piloting areas for Sea Pilot.

1. Bengkalis Strait and Rupat Strait from fairway buoy or Eastern part of Morong Strait to Eastern limit of Dumai Harbour Pilot Area (Long. 101° 30′ 00″ E.).

2. Rupat Strait and Bengkalis Strait from Eastern limit of Dumai Harbour Pilot Area (Long. 101° 30′ 00″ E.) to Northern limit of Sungai Pakning Harbour Pilot Area.

Pilotage is compulsory for vessels with a capacity exceeding 105 g.r.t.

6 hours prior to arrival Dumai harbour area, all vessels should contact CPI through VHF Radio Channels 10 or 16 and 69. At Fairway Buoy all vessels should hoist International Code Flag painted "White" with Code "Pilot" and contact Morong Pilot Station via Channel 16 for a "request for Pilot".

According to the Dumai Port Authority's memo dated May, 1972, effective on 1st June, 1972, all vessels proceeding to Dumai should hoist the International code flag H or PT when passing buoy No. 17 as "requesting for Pilot" and call CPI's Radio Telephone (VHF) on Channel 12. You will be informed whether or not Pilots are available, if not you may then proceed directly to Dumai Harbour anchorage area.

The practice of berthing and unberthing vessels utilising CPI mooring masters has been discontinued.

Shipmaster's Report: 1977. Sea pilotage for the Rupat and Bengkalis Straits is now compulsory. The Sea Pilot will board vessels at Fairway Buoy, position Lat. 01° 54.5′ N., Long. 101° 51.5′ E.

Contact with the pilot station "MORONG" is allowed on Channel 16.

In case the Pilot is not available, the recommended anchorage area is 0.5 mile N.N.E. from Fairway Buoy.

ANCHORAGE: The Dumai general anchorage area is North and West of oil wharves. Minimum depth of water in this area 43 ft.; 35 ft. shoal spot to East of general anchorage should be noticed. Holding ground in anchorages considered good, bottom clay. Area large with sufficient manoeuvring and swinging room for several vessels of size to be accommodated at oil wharves.

If vessels are not met by the Pilot's launch on arrival, or not instructed by the Dumai Port Control Radio to berth on arrival, it is suggested that they proceed to the recommended anchorage area.

MAX. SIZE: Length 1,033 ft., draft 55.77 ft.

Also see "Approaches" and "Shipmaster's Report" dated October, 1983 – "Circular".

RESTRICTIONS: *Requirements for Entering Restricted Maritime Zone of Sumatra:* For some years, the Rupat-Bengkalis Straits area has been designated a Restricted Maritime Zone by decree of the Government of Indonesia.

A partial exemption from the requirement to secure special Indonesian Consular Clearance before entering this Zone has been granted by the Indonesian Navy to tanker vessels proceeding to Dumai from any port in the world except Singapore. Vessels require only normal clearances from their last port to obtain entry at Dumai. Vessels diverted at sea need only normal clearance from last port and the diversion cable. All vessels inbound to Dumai from the time abreast Raleigh Bank Light Buoy until anchored off Dumai Terminal must display the following recognised signals:

By Day: The International Code Flag hoist "CAL" flown from a single hoist from the signal yard.
By Night: A red light 6 ft. above a white light both visible all around the horizon at a distance of not less than 2 miles.

Vessels should be prepared to answer identification queries from Indonesian Naval Patrol Crafts.

The foregoing is subject to change.

RADIO/VHF:

1. *Means of Communications:* The following communication systems are available for vessels proceeding to Dumai:
(a) Dumai Radio Call Letters "PKP" (Government Coastal Radio).
(b) VHF Station Channel 16 (CPI and Pertamina operated).
(c) Telex CPI No. 44386 Jakarta or 56271 Dumai.
(d) Telex Pertamina No. 45348 Perta Jakarta or 49285 Perta Jakarta.

2. *ETA Messages:* Vessels proceeding to Dumai shall send ETA Dumai message as follows:

2.1. When proceeding direct from any port other than Palembang and Singapore:
(a) 96 hours prior to arrival at Dumai, transmit ETA Dumai message by vessel's radio to "Calpaking" Dumai and "Pertaminaship" Dumai through Dumai Radio Station Call Letters "PKP".
(b) Should ETA Dumai change by 3 hours, send an amended ETA message immediately to "Calpaking" Dumai and "Pertaminaship" Dubai.
(c) 24 hours before arrival at Dumai, *confirm* or *amend* ETA Dumai to "Calpaking" Dumai and "Pertaminaship" Dumai regardless of any change in last ETA message sent.

2.2. When proceeding from Singapore:
(a) 96 hours prior to arrival at Singapore, cable ETA Dumai and estimated time of stay in Singapore to "Calpaking" Dumai and "Pertaminaship" Dumai. Include words "From Singapore" in ETA message.
(b) At Singapore, when departure time from Singapore is known, *confirm* or *amend* ETA Dumai to "Calpaking" Dumai and "Pertaminaship" Dumai through vessel's Agent in Singapore.
(c) Immediately upon departure from Singapore, and when vessel's radio can be used legally, re-*confirm* or *amend* ETA Dumai to "Calpaking" Dumai and "Pertaminaship" Dumai.

2.3. When proceeding from Palembang:
(a) At Palembang, when departure time from Palembang is known, cable ETA Dumai to "Pertaminaship" Dumai through vessel's agent in Palembang.
(b) Immediately upon departure from Palembang, and when vessel's radio can be used legally, *confirm* or *amend* ETA Dumai to "Pertaminaship" Dumai.

3. *Operating Schedule and Frequencies:* There is a Government Coastal radio station at Dumai. Any message for Dumai Terminal should be sent through this radio station which operates as follows:

Name : Dumai Radio
Call Letters : "PKP"

Time (GMT)	*Transmits*	*Listens On*
0000 – 0030	448 kHz	500 kHz
0400 – 0500	448 kHz	500 kHz
0800 – 0900	448 kHz	500 kHz
1200 – 1300	448 kHz	500 kHz
1300 – 1400	8726 kHz	8726 kHz
0030 – 0130	8726 kHz	8726 kHz
0230 – 0330	13101 kHz	13101 kHz
0630 – 0730	17184 kHz	17184 kHz
0130 – 0200	2182 kHz	2182 kHz

If contact can not be made with Dumai Radio, then you should immediately contact Singapore Radio, Call Sign "9VG" and forward your ETA message to Amoseas Singapore "RS-21349".

4. *Radio Telephone (VHF):* A CPI operated VHF station is maintained 24 hours a day, and is available for information concerning vessel's port activities.

The following channels are available:
Channel 10 with Frequency : 156.500
Channel 16 with Frequency : 156.800
Channel 69 with Frequency : 156.475

HEALTH: In accordance with international practice, quarantine signals must be displayed by all vessels approaching Dumai. These signals shall be displayed continuously until pratique is granted. These signals are: Sunrise to Sunset, Quarantine flag "Q". Sunset to Sunrise, Signal lights (red over white).

Quarantine Officer and Immigration Officer will come on board to prepare the clearance at anchorage, except when the vessel comes alongside on arrival by issuing berthing permit only (not free pratique).

TUGS: At present mooring and unmooring assistance is provided by 5 Government's 3200 h.p. diesel tugs which are stationed in the immediate vicinity of the wharves. While rendering assistance the tugboats are under orders of the Pilot on duty.

BERTHING: Incoming ships are assigned in accordance with time of arrival, product to be loaded, size of vessels, and loaded draft.

Every effort will be made to berth vessels immediately upon arrival, and to this end Master should maintain radio contact with radio telephone (VHF) Channels 12 and 16.

At Dumai there are 9 wharves. 4 wharves are Government-owned and operated cargo wharves. Another wharf is Pertamina, owned and operated for the sole use of its refinery. The other 4 wharves are C.P.I. owned and operated and referred to as Oil Wharf No. 1, Oil Wharf No. 2, Oil Wharf No. 3, and Oil Wharf No. 4. These C.P.I. wharves are utilised for loading of crude oil and can handle refinery product. These oil wharves are equipped with docking sonar for monitoring speed and distance of approaching vessels to be berthed at the wharves.

Terminal Official will relay the indicated speed and distance by walkie-talkie radio to the Pilot or Master on board vessel.

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Ballast Requirements: Vessels should arrive with sufficient clean ballast water to enable safe manoeuvring under prevailing weather conditions. The accepted standard of deballasting time is 6 hours.

Deballasting Facility: Deballasting facilities have been constructed in Dumai and connected to all four CPI wharves.

However, this facility is only for domestic sailing tankers. Oceangoing tankers are strongly recommended to arrive with sufficient clean ballast water.

Minimum Draft: Minimum draft schedule recommended for various tonnage tankers are as follows:

d.w.t	*Forward*	*Aft*
a. 12,000 – 22,000	12 ft.	20 ft.
b. 22,000 – 32,000	16 ft.	24 ft.
c. 32,000 – 45,000	18 ft.	26 ft.
d. 45,000 – 60,000	19 ft.	27 ft.
e. 60,000 and over	22 ft.	28 ft.

The above is a recommendation only and the Master should use his own discretion in order to have safe manoeuvrable draft on arrival and while berthing.

READINESS: *Notice of Readiness:* The Master or his representative is required to hand to CPI or its agent at Loading port, a written Notice of Readiness to load during business hours (24 hours everyday). Receipt of such Notice of Readiness by CPI does not necessarily imply acceptance.

Every effort will be made to berth and load vessels on arrival in port.

Arrival means anchoring or arrival at anchorage area in Dumai Harbour, see "Anchorage".

Readiness to Load or Unload: The following will apply in regard to Notice of Readiness to Load or Unload.

Notice of Readiness to Load or Unload is a warranty on the part of the Master that the vessel already in port is in all respects ready to load or unload and that all tanks, pumps, pipe-lines and appurtenances of the vessel are fit to receive the cargo to be loaded or unloaded.

FRESH WATER: Fresh water is available in limited quantities at all wharves. A request statement must be submitted to the Port Authority through the vessel's agent.

FUEL: Not available.

MEDICAL: The Port Health Doctor has only limited facilities for medical treatment. If the services of more complete and/or specialised medical assistance are needed or emergency cases arise on board tankers calling at Dumai, the Port Health Doctor might refer such cases to C.P.I. hospital facilities. However, Masters of all vessels bound for Dumai are requested, if possible, to call at Singapore for medical assistance.

REPAIRS: No repairs shall be carried out to the main propulsion machinery and/or essential auxiliaries while alongside. The vessel's main propulsion machinery shall be in readiness for instantaneous use on short notice. No repair facilities ashore.

GANGWAY/DECK WATCHMEN: Strongly suggest that all Masters of tankers calling at Dumai maintain a close security watch while at anchor as well as when alongside the wharves. It is further recommended that on board the tankers unoccupied rooms should be securely locked and port holes closed before being vacated.

TIME: GMT plus 7 hours all year round.

CUSTOMS: Ships' bonded stores will be sealed by the Indonesian Customs officials on arrival and will remain sealed until the vessels leave Indonesian waters.

REPATRIATION: Due to transportation difficulties and shortage of accommodation, normally no crew members from any vessel are allowed to disembark for repatriation purposes.

In emergency cases such as sickness and accident, however, CPI may at its own discretion and upon request of the Master of the vessel concerned, assist in the repatriation process.

SHORE LEAVE: Shore liberty may normally be granted to ship's officers and crew after clearance of the vessel by harbour authorities. Recreational facilities are not available for seagoing personnel at present and few facilities exist in Dumai. Personnel proceeding on shore liberty should be provided with ship's pass and advised that the C.P.I. compound is out of bounds with the exception of the road from the wharves to the village road. Penalties imposed for violation of harbour regulations or local laws have been severe and CPI can not intervene in such cases.

PROVISIONS: There are very limited facilities to handle ship's laundry and supply ship's provisions.

CONSULS: There are no Consuls or other foreign Government Representatives located at Dumai, or in the immediate vicinity.

WEATHER: *Tides and Currents:* The tide rise is approximately 8 ft. in the springs and approximately 5 ft. at neaps.

Max. tide currents: Flooding Easterly at 3 knots. Ebbing Westerly at 2 knots.

The general direction of the current is parallel to the faces of the wharves. There is no slack current period in the Rupat Strait during Spring tides and only a very brief period of slack current during neap tides. The current reverses its direction almost immediately. Vessels will always be berthed stemming the current flow.

Winds: The N.E. monsoon is never very steady but is most constant in January when from 20 to 40 per cent of winds are N.E. In November and December N.W. winds are the most frequent. In February the most frequent winds are N.E. The S.W. monsoon begins in late May or early June. From June to September winds in the straits are mainly S.E. but not steady. At this season squalls known as "Sumatra's" occur off the coast; they are most frequent between 2200 and 0200 hrs. Therefore, all vessels alongside the oil wharves are strongly requested to utilise manual brake on their tension winches for mooring lines.

Rain: The rainfall is heavy with yearly average from 80 to 100 inches. The wettest months are October to December or January. There are 2 comparatively dry seasons, February to March and June to August. The most intense rainfalls are in the afternoon but these heavy downpours are often short in duration. The duration of the rain is more evenly spread over 24 hours during the N.E. monsoon than during the rest of the year when rain most likely occurs in the evening and night.

Temperature: The average temperature is a little below 80°. The range in an average year is only 30°, between 65° and 95°. The daily range is from 15° to 20°. The humidity is high (70% – 90%).

SAFETY: While alongside, vessels must have the eye of towing (fire) wires lowered to the water's edge from offshore bow and quarter for emergency use. The eye of the wire should be painted white.

Emergency Facilities: The following shore fire fighting facilities are available at each wharf to assist a vessel in the initial stages of a fire at wharf.

a. Oil wharves No. 1, No. 2, No. 3 and No. 4:

One fire pump capacity 750 g.p.m.
One fire fighting monitor.
Six fire hydrants.
Two fog spray hydrants.
Two revolving nozzles underneath wharf.
1,000 ft. fire hoses of 2.5 in.
16 cans foam compound.
6×20 lbs. safety meter dry chemical powder.
One set booster hose.
One set foam equipment.
2×150 lbs. Yamato dry chemical powder fire extinguisher.

b. Tugboats: Under instructions of Port Authority, equipped with fire fighting equipment and remote controlled nozzles.

Emergency Signal:

a. The ship should sound an emergency station's signal consisting of a continuous ringing of the ship's alarm bells supplemented by a series of short blasts of the ship's whistle or siren. CPI will then take such action as is necessary.

b. A telephone is fitted on each wharf. CPI personnel should be telephoned for assistance.

If no CPI personnel are available, ship's personnel may call for emergency assistance by dialing telephone number 222 from each wharf.

After dialing state the following:

1) Your name and name of vessel.
2) The exact location of the fire.
3) The nature of the fire if possible.

c. Assistance can be summoned on VHF Radio if necessary. Use International Channel 12 or 16 on VHF. Given location and extent of assistance required.

d. Refer to Fire Instructions Pamphlet as usually given to all vessels alongside the wharves.

e. The shore signal in the event of an emergency is a fire siren or an alarm.

GENERAL: *Charts and Publications:* Masters of vessels proceeding to Dumai should obtain the latest sailing directions, charts and Hydrographic bulletins for the area.

In this respect attention is invited to the latest editions:

a. U.S. Hydrographic Office Publication 162, Sailing Directions for Malacca Strait, Cape Rachado to Singapore;

b. U.S. Hydrographic Office Chart No. 3764, Bengkalis and Rupat Straits;

c. Netherlands Hydrographic Office Chart No. 18 (East Coast of Sumatra);

d. British Admiralty Chart No. 795 (Cape Rachado to Singapore), and

e. The Indonesian Hydrographic Office Chart No. 18 covering Bengkalis and Rupat Straits.

Boarding on Arrival: A Government Pilot will board vessel on arrival if Wharf is available and will advise and assist in proceeding to wharves. A representative of your Agent will also board your vessel at anchorage or alongside one of the wharves to deliver publications and forms and will make the necessary arrangements for your vessel to load.

Port Officials: The Indonesian Government Port Authorities are located in the Government building situated along Jalan Laksamana (Laksamana Street).

General Cargo: General cargo consigned to CPI is handled at the Government Cargo Wharf at Dumai. Only mobile cranes with a maximum lifting capacity of five tons are available. As no heavy lift floating crane or stationery crane is available, heavy lifts must be handled by ship's gear.

Area requiring Sea Pilot: Bengkalis Strait and Rupat Strait from Fairway buoy or Eastern part of Morong Strait to Eastern limit of Dumai Harbour Pilot area (Longitude 101° 30′ E).

Area requiring Sea Pilot: Rupat Strait and Bengkalis Strait from Eastern limit of Dumai Harbour Pilot area (Longitude 101° 30′ E) to Northern limit of Sungai Pakning Harbour Pilot area. (Applicable to vessels bound for Sungai Pakning from Dumai or v.v.).

General: While vessels are at anchor, no physical communication is allowed with shore except in emergency cases and/or with prior approval from the Harbour Authorities.

Lowering of ship's boats is prohibited without the prior approval from the Harbour Authorities.

Pilferage has taken place recently on board tankers at Dumai anchorages and wharves. CPI of course regrets this practice, and strongly suggests that all Masters of tankers calling at Dumai maintain a close security watch while at anchor as well as when alongside, the wharves. It is further recommended that on board the tankers unoccupied rooms should be securely locked and port holes closed before being vacated. CPI also wishes to draw all Masters' attention to the practice of trading with local sampans at the anchorage, which is also a fire hazard, and will not be tolerated by CPI. We request that all possible steps be taken by ship's personnel to keep sampans away from the vessels while alongside, as loading may be stopped until this hazard has been cleared.

It should be noted that Harbour Authorities prohibited the presence of sampans near alongside vessels.

Contraband: The attention of Masters is called to the strict enforcement of Indonesian Regulations against smuggling. Illegal possession or landing of such items as narcotics, liquor, cigarettes, precious stones and metals, fire arms, ammunition, sheath knives and similar weapons, or other articles of contraband is subject to severe penalty and may result in prolonged delay of the vessel concerned.

All precautions must be taken to prevent the violation of contraband laws. CPI employees are prohibited from bringing firearms, knives, liquor, cigarettes, food stuffs or other articles ashore and shipboard personnel must not offer such items to them. Commissions for the importation of goods from other countries are not to be solicited or accepted.

Compliance: Masters are requested to inform ship's Officers and crews of the foregoing regulations pertaining to contraband, shore liberty, etc., to assure that they are completely understood, and to require the full compliance of all hands.

SHIPMASTER'S REPORT: October, 1983.

Documents: 14 Crew Lists required and all ship's personnel require passes. Immigration stamp all discharge books and/or passports on arrival and Agent will take them ashore about 1 hour before unberthing for stamping again, when all passes also returned.

Pertamina, as vessel's Agents, have own forms for N.O.R., and Dry Certificates.

Cargo Inspector has his own forms.

Berthing: Vessel (140,000 d.w.t.) berthed at No. 2 Berth, stemming the tide. 3 tugs used, 1 forward, 1 aft and 1 midships with tugs' lines. Moorings 3, 3, 2 each end. Forward headlines first then breasts then springs and aft springs first, then breasts then sternlines. 2 watchmen on board all the time and they are very efficient.

After loading and if on maximum permissible draft, (see "Circular") then vessel unberths and anchors off berth to await HW.

Density: Density varied between 1008 and 1015 depending on state of tide.

Services: Ship Chandler will arrange for a barber to come on board and will also bring on board items for sale such as batik.

A telex message sent through the Agents took 51 hours to reach Singapore.

Identification Cards: All visitors to vessel require a pass issued by Texaco. Also see "Documents".

Circular: To All Agency Tankers Calling at Port of Dumai:

Based on the circular of Dumai Harbour Master dated 14th January, 1982, Ref. No. S.DMI.AL.14/1/1982 regarding the draft limitation for vessels passing Dumai-Morong route, based on the result of the survey carried out by the Sea Communication Team, we herewith inform you that for the sake of your vessel's safety, your vessel's draft should not be more than 17 m. (max. LOA 315 m.) when passing the above mentioned route. Please be advised too, that you are recommended to pass this route during the high tide only.

Hoping you to pay your attention, we remain.

Dumai, 20th January, 1982,
Pertamina of Shipping Dumai.

AGENCY: *General Agency:* All foreign flag vessels loading crude oil in Indonesia must appoint Pertamina (state oil company) as their General Agent. The letter of Agency appointment must be legalized by the Indonesian Embassy or Consulate in the country of the party making such appointment. Pertamina will then obtain a valid General Agency Permit from the Indonesian Sea Communications Directorate General after receiving an advance payment from vessel, Owner/Charterer to cover disbursements of harbour dues, cash advances for crew, and any tax as applicable to vessel Owner/Charterer under the Indonesian tax regulations. Vessels can enter any port in Indonesia only after Pertamina has obtained the General Agency Permit.

The addresses of Pertamina Shipping Directorate are as follows:

a. Pertamina Direktorat Perkapalan dan Telekomunikasi, Jalan Jos Sudarso No. 32 – 34 Tanjong Priok Jakarta, Indonesia. Cable address: Pertaminaship Jakarta (Via Jakarta Coastal Radio "PKI-2"). Telex numbers: 49285/49221/49396 Perta Jakarta. Mailing address: P.O.Box 327.

b. Pertamina Biro Operasi Tanker/Agency Pertaminaship, Jln. Merdeka Timur No.1, Lantai 6, Jakarta Pusat, Indonesia. Telex numbers: 45348 Perta JKT and 44450 Perta IA.

c. Pertamina Direktorat Perkapalan dan Telekomunikasi, Perwakilan Dumai, Jala Datuk Laksamana, Dumai, Indonesia. Cable address: Pertaminaship Dumai (Via Radio Station "PKP").

AUTHORITY: Port Administration of Dumai, JL. Datuk Laksamana, Dumai. *Tel:* 21469, 21369, 21325, 21442. *Telex:* 56290. *Cables:* Adpel Dum. *Contact:* 0800 – 1400 hrs.

Note: Pilot Station, 21442-278-372, contact 24 hours.

C.P.I.: 434-261-278. Pertamina: 272-372.

P. T. Caltex Pacific Indonesia. (Head Office), Kebon Sirih 52, Jakarta, Java. *Tel:* 376908. *Telex:* 44386 Caltex IA. *Cables:* Calpacem.

Operating Office: Rumbai, Pekanbaru, Sumatra. *Tel:* 21377. *Cables:* Calpacem.

GEBE ISLAND: 00.03 S. 129.23 E. (See Plan Book)

LOCATION: Port of Gebe Island is situated in the Halmahera Sea, North Maluku in position Lat. 00° 03′ 50″ S., Long. 129° 22′ 44″ E.

DOCUMENTS: *Documents to be produced upon vessel's arrival:*

14 copies Crew List.
12 copies Passengers List.
5 copies Parcel List.
5 copies Store List.
8 copies Cargo Manifest.
5 copies Narcotic List.
8 copies General Information.
5 copies Personnel Effects List.
5 copies Vaccination List.
5 copies Fire Arms & Ammunition List.
International Load Line Certificate.
Maritime Declaration of Health Certificate.
Derat Certificate.
Last Port Clearance.
Safety Radio Certificate.
Harbour Report.

Ship's Inspection Team: This team consists of the Port Health Officer, Customs Officer, Harbour Master and Immigration Officer.

After the vessel has been granted Free Pratique, the Immigration Officer starts checking passports, seamen's book and crew list and then issues shore passes.

Vessel's bonded store will be sealed by Customs Officer on arrival and will remain sealed until the vessel leaves Gebe Island.

Use of ship's radio transmitter is prohibited while lying in port.

Note: It is recommended that ship's Master consult the Agents about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, narcotics, etc., to prevent unnecessary difficulties and eventually fines.

PILOTAGE: Pilotage is compulsory and there is a Pilot at Gebe Island.

Pilot boarding position: Lat. 00° 03′ 25″ S., Long. 129° 22′ 10″ E.

ANCHORAGE: Anchorage position for ore loading at Gebe Island is Lat. 00° 03′ 50″ S., Long. 129° 22′ 30″ E. Depth 65 m. LWS.

Chart: Indonesian Sea Chart No. 388.

RESTRICTIONS: Vessels may berth/unberth at any time between 0600 hrs. and 1800 hrs. local time.

Vessel may leave the loading point between 0600 hrs. and 2200 hrs.

RADIO: Cables to Adhiguna, Antam Jakarta and Ternate can be sent through Jakarta Coastal Radio Station, call sign PKE and Ternate Coastal Radio Station, call sign PKE 5.

Arrival Notice: *Owner's Advice:* Owner to advise by cable to Adhiguna and Antam Jakarta and Antam Ternate at least 8 working days notice of vessel's ETA at loading port.

Master's Advice: At least 48 hours before vessels arrival at Gebe Island, Master shall give the following information to Adhiguna and Antam Jakarta and Antam Ternate: Last port of call, draft on arrival, estimated draft on departure, quantity of nickel ore to be loaded, stowage plan, quantity and kind of commodity to be discharged and other necessary information.

Final amended arrival time must be sent at the latest 24 hours before arrival.

Previous experience has shown that one cannot rely on telegrams regarding ETA sent by Agents at last port of call to arrive on time, therefore Antam Ternate will wait for the Master's telegram before making the necessary preparations.

TUGS: Available.

CARGO HANDLING:
Lighters: A number of lighters of 120 d.w.t. to 900 d.w.t. are available.
Wharves: No facilities.
Loading/Unloading Facilities for General Cargo: No facilities.
Loading Facilities for Ore Carriers: Loading of nickel ore at Gebe loading point is done by means of ore barges.
Number of Gangs: 4 gangs are usually used by vessels equipped with cranes or derricks. If necessary stevedores can provide 6 gangs.
Loading Capacity: About 2,000 tons/24 hours per vessel depending on the type of vessel, vessel's cargo gear, weather conditions, etc.
Ore Carriers: All types of fully loaded draft ore carriers are acceptable. (Steep bottom sea around the loading point).

Vessels without cranes or derricks are not acceptable.

Minimum capacity of cranes or derricks must be 5 tons.

Unloading: Cargo for Aneka Tambang only.

STEVEDORES: Stevedoring to be performed by P.T. Antam's personnel. Loading/unloading equipment to be furnished by the vessel.

Working Hours: (WWD SHINC) Loading to be effected on weather working days of 24 consecutive hours, Sundays and holidays included (WWD SHINC), but the following National holidays are excepted:

New Year, Idul Fitri, Idul Adha, Maulid Day, Easter, Independence Day (17th August), Christmas Day (25th December), Waisyak, Nyepi, Ascencion Day, Miradz, The First Muharam.

Despatch/Demurrage money to be paid in accordance with the related contract.

Labourers: Labourers will be supplied by shipper. Making the vessel ready for loading to be done by vessel's crew members.

MEDICAL: Hospital, doctor and inoculations are available.

FRESH WATER: Not available.

FUEL: Not available.

TIME: GMT plus 9 hours.

HOLIDAYS: See "Stevedores".

AIRPORT: There are 3 flights per week between Ternate and Gebe served by chartered aeroplane. Flying time is about 60 minutes.

REPATRIATION: Can be arranged. Repatriate/s is/are to be guarded by Immigration Officer from Gebe to Jakarta via Ternate or Manado until his departure from Jakarta to the destined country.

CONSULS: None.

SHORE LEAVE: Shore pass must be carried by the crew during shore visit.

Invitation: Vessel's crew members are not allowed to invite friends, hawkers from shore aboard the vessel.

Leaving for Ternate: The crew members are prohibited to leave Gebe for Ternate, except Master and Officers who must be guided by Agents.

Local leave in Gebe is permitted as a concession.

Shore Leave Time: From 0600 hrs. to 1700 hrs. local time.

GENERAL: *Priority:* Ore carriers first come first served.

Flags to be flown by incoming vessels: Vessel's National flag, Indonesian flag, Vessel's numbers, Quarantine & Immigration flag.

Ship Chandler: None. In emergency cases, for a limited quantity, Agents can act as ship's chandler.

Fumigation: No facilities.

Vessel's Disbursement Accounts: All vessel's expenses/disbursement accounts will be charged to the related principals through the General Agents.

Local Currency: Exchange rate used in vessel's disbursement account: US $1.00=Rupiah 950.

Cash in Rupiah: Cash advance at Master's request can be supplied by Agents in a reasonable amount.

Although the port was built and owned by PT Aneka Tambang, a state mining enterprise which has been granted the concession to explore and exploit Nickel Ore at Gebe Island region, the port of Gebe Island is supervised by the government. This port has been declared a Special Nickel Ore port.

AGENCY: 1. General Agent for ore carriers:

PT Bahtera Adhiguna Jakarta, Jln. Kali Besar Timur No. 10-12, Jakarta Kota. Cable address: Adhiguna Jkt. Telex: Adhiguna Jkt. 42854. Tel: 676547, 672613.

2. General Agent for non ore carriers: To be nominated by Principals.

3. Sub Agents:

PT Aneka Tambang, Unit Pertambangan Nikel Pulau Gebe, Jln. Mangga Dua, P.O.Box 37, Ternate. Telex: 73153 Antam Ttia. Cable address: Antam Ternate. Tel: 21737.

4. Sub Agent's Head Office:

PT Aneka Tambang, Jalan Bungur Besar 24-26, P.O.Box 3513, Jakarta, Indonesia. Cable address: Aneka Tambang, Jakarta. Telex: Antam Jkt 49147. Tel: 410108

GRESIK: 07.09 S. 112.40 E.

BERTHING: Main jetty with length 284.5 m. and berthing dolphin 50 m. from jetty. Depth of water 15 m. Vessels up to 30,000 d.w.t. able to berth off seaward side and 10,000 d.w.t. on shore side.

CARGO FACILITIES: *Discharge facilities:* 15 ton grab Kangaroo crane with normal operating capacity of 300 t.p.h. and max. 550 t.p.h.

Multi-purpose conveyor to transport materials from the jetty to TSP plant – 600 t.p.h. capacity.

Pumping system for phosphoric acid from vessel to TSP plant tanks, complete with pump – 300 t.p.h. capacity.

Pumping system for ammonia −33°C from vessel to TSP plant complete with pump – 150 t.p.h. capacity.

FRESH WATER: Available.

SHIPMASTER'S REPORT (Gresik): July 1984.
Location: Lat. 07° 08.4′ S., Long. 112° 39.6′ E., about 4.8 nautical miles N.W. of Sourabaia.

Documents:

- Ship's Register
- Derat Certificate
- Load Line Certificate
- Radiotelegraphy Certificate
- Safety Equipment Certificate
- Safety Construction Certificate
- Seamen's Books

These documents will be kept ashore during the vessel's stay at Gresik.

For Gresik:

- 2 Crew Lists
- 2 Store Lists
- 2 Crew's Declaration Lists
- 1 Maritime Declaration of Health
- 1 Vaccination List
- 1 Cargo Manifest and/or
- 1 Bill of Lading

In addition for Sourabaja:

- 9 Crew Lists
- 2 Store Lists
- 2 Crew's Declaration Lists
- 1 Maritime Declaration of Health
- 1 Vaccination List
- 2 Cargo Manifests and/or
- 2 Bills of Lading

Customs: The Customs will not seal the bonded stores, but strictly controls the said quantity of narcotics.

Pilotage: Compulsory, same Pilots as for Sourabaja. ETA to be sent at least 24 hours in advance. Normally the Pilot boards the vessel when passing the Karang Jamuang Island (pilot station), but if required, specially for deep draft vessels, the Pilot will board the vessel at the outer anchorage.

Anchorage: Position Lat. 06° 51′ S., Long. 112° 45′ E., depth of water between 35 m. and 40 m.

Gresik Anchorage: Position: Lat. 07° 05.7′ S., 112° 39.8′ E., 2.5 cables off the Petro Kimia Jetty. Sandy ground, no safe anchorage.

Restrictions: Maximum depth of water 33 ft. Maximum breadth of channel: 90 m. Official allowed sea water draft 32 ft., but Pilots accept 32 ft. 06 in.

Berth: Petro Kimia Jetty (private berth). Length of berth 320 m. approx., equipped with large rubber fenders every 40 m. Depth of water between 12 m. and 15 m. Height of tide about 2.5 m.

VHF: Call "Sourabaja Pilots" on Channel 12 or Channel 16 if no reply.

If vessel enters the channel without Pilot, a second call before passing Buoy No. 5 is required.

Tugs: Same tugs as for Sourabaja.

Vessel with a length of more than 150 m. has to take 3 tugs, (one of them only for stand by).

Cranes: 2 cranes, but only one used for discharging sulphur. This crane has a discharging capacity of 300 tonnes/hr.

Working Hours: Day and night, even during "Ramadan".

Times: 0800 hrs. – 1200 hrs.
1300 hrs. – 1800 hrs.
1900 hrs. – 2400 hrs.
0100 hrs. – 0600 hrs.

Fresh Water: Available from the jetty.
Fuel: Available by barge at Sourabaja anchorage only.
Repairs: From Sourabaja.
Medical: In Sourabaja only.
Shore Passes: Given by Agent, to be returned before departure.
General: No Immigration and Port Health board the vessel at this berth. No foreign currency declaration necessary. Crew changes not allowed.

AUTHORITY: Harbour Master.

JAKARTA (Tanjung Priok): 06.10 S. 106.50 E.

(See Plan Book)

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

- Nationality (Registry) Certificate.
- Seaworthiness Certificate.
- Measurement (Tonnage) Certificate.
- Derat (Exemption) Certificate.
- International Load Line Certificate.
- Safety Certificate (passenger ships).
- Safety Equipment Certificate (cargo ships).
- Safety Radio and Radiotelephony Certificate (cargo ships).
- Certificate of Approval (ship's radio station).
- Health Book or Bill of Health.
- Vaccination Certificates.
- Last Port Clearance.
- Subscription of Light and Harbour Dues and wharfage if any.
- Crew Lists and Passenger's Lists.
- Ship's Articles.
- Other certificates and documents as required.

Ship's arrival and departure: 2 days before arrival of vessel, the ship's Agent has to inform the Port Administration, by completing appropriate forms. Copies of completed forms must also be submitted to the Harbour Master, Port Health Service, Immigration, Customs and Security for preparations of services. The Pilot may berth the vessel on request of the ship's Agent only after obtaining clearance from the Port Administrator, Harbour Master, Port Health Service and Immigration (foreign vessels only).

Before departure, port clearance is issued by the Harbour Master, after clearance has been obtained from Customs, the Port Health Service, and Immigration.

Ship's Certificate: The Ship's Certificate should be delivered to the Harbour Master through the Agent. This certificate will be returned to the Ship's Master prior to the ship's departure.

Ship's Manifest and Bill of Lading: The copy of the ship's manifest should be delivered to the Port Administrator through the Agent.

IMMIGRATION: Vessels arriving from abroad with passengers must hoist the "N" Flag. Masters have to supply the boarding Immigration Officer with Passenger's List of: *(a)* disembarking. *(b)* transhipping. *(c)* through passengers.

No persons are allowed on board until the vessel has been examined and the "N" Flag taken down. Passengers must be in possession of a valid visa: visitor's, entry or a transit visa. Those not having a visa may at the discretion of the Immigration Officer, obtain a landing permit. Members of the crew including the Master must appear in the Articles, in order to get shore permits.

PILOTAGE: Compulsory. Pilots will board the vessel at the Outer Anchorage, from 0800 – 1800 hrs.

The ship's Owner/Agent has to inform the Port Administration (the Pilotage Division) of the ship's arrival 24 hours in advance.

Walkie-talkie radio with a frequency of 27 MHz is used for communication between the pilot boats and the pilot station.

ANCHORAGE: Anchorage for vessels waiting for the Pilot is outside the breakwater.

RESTRICTIONS: Max. draft is approximately 10 m.

MAX. SIZE:

Harbour	*Length* (m.)	*Draft* (m.)
1st	150	7
2nd	170	8
3rd	170	10
Oil	170	10
Coaster	60	4
Container		10

HEALTH:

Quarantine: A vessel is in quarantine and must hoist the quarantine flag (Q, QL, QQ), when it is a vessel:

1. that comes directly from abroad (Q flag),
2. that comes from an infected Indonesian Port (Q flag),
3. that takes passengers or cargo over from vessels mentioned in items (1) and (2) (Q flag),
4. whose Master has declared that a quarantinable disease exists or is suspected on board (QL/QQ).
5. which the Port Medical Officer has declared infected or suspected with a quarantinable disease (QL/QQ).

The concerned vessel is free from quarantine measures when Free Pratique has been obtained. The Free Pratique becomes invalid when a vessel is in quarantine as stated above or a quarantinable disease occurs during the validity of Free Pratique.

The Port of Tanjung Priok is a 1st class Quarantine Port.

At the request of the ship's Owner/Agent, the Department of Health will provide "Provisional Pratique", for vessels calling directly from abroad to any Indonesian port which is not classified as a quarantine port, provided that health conditions on board comply with the required health conditions. This "Provisional Pratique" however does not relieve the vessel from quarantine measures, and it is not to be construed as "Free Pratique".

Accordingly vessels enjoying "Provisional Pratique" are still required to hoist the quarantine flag.

Vaccination/Immunization: Vaccination and Immunization against cholera can be carried out by the Port Health Service.

BOARDING AREA: Harbour Pilots, Quarantine Officer and Immigration will board the vessel at the Outer roads.

RADIO: Coastal Radio Station Call sign PKI Class A1, A2, A3; call sign PKZ Class A3.

VHF:

Harbour Master	Channel 16
Pilot	Channel 12–14
Tugboat Operations	Channel 12
Port Operations	Channel 14
Public Service	Channel 16

TUGS: Tugs are operated by the State-owned P.N. Tunda Bara, Cable address: "Coaltug", which also handle the mooring facilities. Vessels over 80 m. in length have to use at least 1 tug. 10 tugs available from 135 h.p. to 1,500 h.p. 2 tugs are equipped for fire fighting.

BERTHING:

Wharves	*Length* (m.)	*Depth* (m.)
Coaster Harbour	663	3–4
1st Inner Harbour	2,534	5–8
2nd Inner Harbour	1,900	
for coal	150	7–9
for fertilizer	150	
3rd Inner Harbour	1,080	8–10.5
Container Wharf	400	9–11.5
Conventional Wharf	500	9–11.5
Mineral Oil Harbour		
Oil Jetty (3 at 25)	75	9–10
Bogasari (wheat)	140	9–10

Buoys	Number	Capacity (tons)
West buoys	6	15,000
East buoys	10	5,000
1st Inner Harbour buoys	7	6,000
3rd Inner Harbour buoys	4	15,000
Nusantara buoys	2	5,000
Dredging Yard buoys	1	2,000

SPECIALISED CARGO-HANDLING FACILITIES: There are 2 transporters with grippers available at the coal wharf.

CRANES: *Mobile cranes:*

	No.	Capacity (tons)
Mobile cranes:	4	5
	5	20
	1	35
	14	3–20
Shore cranes/Portal cranes:	12	3
Floating cranes:	1	15
	1	60
	1	25
	1	200

STEVEDORES:

Working hours: The usual working hours at the harbour are:

Monday–Thursday	0800–1200 hrs.
	1300–1600 hrs.
Friday	0800–1100 hrs.
	1330–1600 hrs.
Saturday	0800–1200 hrs.
	1300–1400 hrs.

Overtime is allowed on request.

Shipmaster's Report: Cargo work continuous, 7 days a week. No work for 2 days at the end of Ramadan.

MEDICAL: First Aid at the scene of accident. Medical treatment or advice available on request to the Port Health Service. Hospitalisation available in general and private hospital in Jakarta.

FRESH WATER: Available by pipe-line or barge, rate 50/60 t.p.h. Barge capacity 60–350 tons.

FUEL: Available by pipe-line or barge, supplier is Pertamina.

REPAIRS: Dry-docking and repairs are carried out by the State-owned P.N. Dock.

Electronic Repair Shop: Repair of electronic navigational aids and radio can be carried out by experts.

Repair and Testing of Navigational Instruments: Carried out by experts of the Hidral (Hydrography of the Indonesian Navy) and those of the P.N. Pelni workshop. Compass can be adjusted by an expert of the above-mentioned Hidral. Testing and issuing of certificates for navigational lamps by the Pelni workshop.

DRY DOCKS: 3 floating docks, max. capacity 17,500 tons, and 7 slipways, max. capacity 3,275 tons.

GANGWAY/DECK WATCHMEN: Available if required.

CUSTOMS ALLOWANCES: Tobacco: Each crew member is allowed to carry 200 cigarettes or 50 cigars or 100 grams of tobacco ashore without paying import duty. Alcohol: There is no allowance for alcoholic drinks. Other commodities: Maximum value of US $100. Each crew member is allowed to bring personal goods in use up to maximum value of US $100.

REPATRIATION: A valid document is needed. A re-entry permit from the country concerned is sufficient, if there is no passport available.

SHIP SUPPLY SERVICE:

P.T. Harapan Insani, 25 Jalan Imam Bonjol, Jakarta. Tel: 334-032, 334-084, 334-180, 334-214, 349-971. Telex: 44912 Incate Jkt, 46855 Insani Jkt. Branch: Balikpapan (East Kalimantan).

P.T. Patra Supplies & Services, No. 3 Gedung Patra, Jalan Gatot Subroto, P.O.Box 377/KBY, Jakarta. Tel: 513-955, 511-356. Telex: 44976 Cater Ia. Branches: Balikpapan (East Kalimantan) and Singapore.

P.T. Tata Wisata, Jalan Iskandarsyah Raya No. 1, Kebayoran Baru. Tel: 713-707 (3 lines). Telex: 47331 Tata Ia.

P.T. The First Trijaya, Jalan Tanah Abang II/97, Jakarta. Telex: 45965 Fitric Jkt. Cable: Fitricate.

AIRPORT: Kemayoran International Airport is approximately 8 km. from Tanjung Priok, and Halim International Airport is approximately 25 km. Kemayoran Airport, Tel: 47031.

TIME: The Port of Tanjung Priok is located in the zone of Western Indonesian Time, which is based on the time at the meridian of 105° East Longitude.

POLICE/AMBULANCE/FIRE: Fire 291399; Security 291691/291459; Ambulance 291045/290097.

CREW IDENTIFICATION CARD: Crew members having no passport are required to carry a Seamen Identification Card (S.I.C.).

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

AUTHORITY: Tanjung Priok Port Administration, P.O.Box 98, 9 Jalan Raya Pelabuhan, Jakarta, Indonesia. *Tel:* 492208, 491233. *Telex:* 49282. *Contact:* Port Administrator.

KASIM MARINE TERMINAL: 01.18 S. 131.01 E.

(See Plan Book)

LOCATION: The terminal is located between the Island of Jef Kasim and the mainland Irian Jaya.

DOCUMENTS:

Certificate of Registry.
Load Line Certificate.
Safety Equipment.
Safety Construction Certificate.
Radio Certificate.
Derat Certificate.
12 Copies Crew Lists.
6 Copies cargo/no cargo declaration by Master
6 Vaccination Lists.
2 Crew Declaration.
2 Stores Lists.

PILOTAGE: Compulsory. Pilot boards in-bound vessels in position 00° 53′ S., 131° 10′ E. Vessels berth and unberth at any stage of the tide during the day.

Accommodation ladder is required. Also see "Anchorage". Vessels must make a lee for Pilot boat in choppy seas.

ANCHORAGES: Recommended anchorage area is 4.5 miles West of Sorong in position 00° 53′ S., 131° 10′ E. Under no circumstances should any vessel enter the restricted area around the structure at Kasim Terminal without a Mooring Master aboard. The area is marked by the dotted lines on the plan. (See "Plan Book".)

Any vessel arriving in the anchorage area after 1400 hours local time may have to wait in the anchorage area until first light the next morning to transit the Sele Strait to the terminal.

On arrival at anchorage contact "Sorong Control" on VHF Channel 16 and between hours of 0600 and 1800 contact Kasim Marine Terminal Channel 16.

Note: Terminal Marine Advisors: Ensure that vessels do not anchor within Sorong Port Limits marked on chart. If they do Harbour Master will charge double fee.

It is preferable to anchor just outside the marked area. The anchorage position recommended is outside the harbour area.

RESTRICTIONS:

	Controlling depth (MLW)	*Mean tidal range*	*Velocity of current*	*Nature of bottom*
Entrance:	51 ft.	Approx. 5ft.	Max. 7 kt.	Sand, mud
Channel:	51 ft.	"	"	Sand, rock, coral
Anchorage:	120 ft.	"	"	Rock, sand
Berth:	60 ft.	"	"	Sand, rock, coral

MAX. SIZE: The channel is swept to a depth of 57 ft. Vessels max. draft is 50 ft. Also see "Berthing".

PRATIQUE: Available night and day. Customs and Immigration board on arrival.

RADIO: *Advice for arrival:* 72 hours prior to arrival at Sorong vessels should advise the Company of their estimated time of arrival by cable sent via "Pertamina's Coastal Radio" Station at Jakarta or Government Radio Station at Sorong. They should also confirm or amend them when they are 48 hours and again 24 hours, distant from Sorong.

Cable address: Pertamina, Unit 5, Sorong.

Cable address: Pertamina – Jakarta.

Name of the station: Pertamina Jakarta Radio. Call signal: PKI-2.

Frequency	*Class*	*Power*	*Nature*	*Service (hrs.)* (GMT)	
452 kHz.	A1	1 kW	CR	0000–0200	0400–0600
				0800–1000	1200–1400
8,626 kHz.	A1	1 kW	CR	0200–0300	0400–0500
				0700–0800	1030–1200
				1400–1500	1800–2000
				2200–2300	
12,980 kHz.	A1	1 kW	CR	0100–0200	0500–0600
				0900–1030	1200–1300
				1500–1600	1700–1800
				2000–2100	2300–2400

Pertamina Sorong Radio Station: Call signal: PKY–41

Frequency	*Class*	*Service*
6518.6 kHz.	SSB	H.24
6518.6 kHz.	SSB	H.24
8755 kHz.	AM	0000–0100
8730 kHz.	AM	0200–0300

The following information should be included in the cable:

(1) Name of vessel and radio call signal.
(2) ETA in GMT and date (local time GMT plus 9 hours).
(3) Cargo requirements.
(4) Deballasting time.
(5) Maximum loading rate.
(6) If there is any sickness on board or clean bill of health.
(7) Flange dimension of vessel's manifold connection.

TUGS: 2 tugs of 45 ton bollard pull each tug.

BERTHING: Berthing is usually daylight hours but night berthing undertaken if required. It is not unusual to undock with a strong stern tide running.

Kasim Terminal is owned by Petromer Trend. Maximum size of vessel at the berth is, length 1,000 ft., beam 150 ft., and draft 50 ft. Depth of water 60 ft. (LW).

The berth is a standard type of tanker berth with 4 breasting dolphins and a loading platform set back inside the line of breasting dolphins. 4 mooring dolphins are set at intervals along the length of the berth and are fitted with quick release hooks and electric winches to handle light rope messengers.

Loading is through two 16 in. Chiksan loading arms and vessels with non-standard manifolds must provide their own reducers. Max. loading rate 60,000 bbls. p.h.

Loading arms are connected and disconnected by terminal staff.

The Kasim Marine Office is an octagonal wooden structure on piles, situated at the mouth of a small river 300 m. N.E. of the Loading Pier.

SHIPMASTER'S REPORT (Gresik): July 1984.
Location: Lat. 07° 08.4′ S., Long. 112° 39.6′ E., about 4.8 nautical miles N.W. of Sourabaia.

Documents:
- Ship's Register
- Derat Certificate
- Load Line Certificate
- Radiotelegraphy Certificate
- Safety Equipment Certificate
- Safety Construction Certificate
- Seamen's Books

These documents will be kept ashore during the vessel's stay at Gresik.

For Gresik:
- 2 Crew Lists
- 2 Store Lists
- 2 Crew's Declaration Lists
- 1 Maritime Declaration of Health
- 1 Vaccination List
- 1 Cargo Manifest and/or
- 1 Bill of Lading

In addition for Sourabaja:
- 9 Crew Lists
- 2 Store Lists
- 2 Crew's Declaration Lists
- 1 Maritime Declaration of Health
- 1 Vaccination List
- 2 Cargo Manifests and/or
- 2 Bills of Lading

Customs: The Customs will not seal the bonded stores, but strictly controls the said quantity of narcotics.

Pilotage: Compulsory, same Pilots as for Sourabaja. ETA to be sent at least 24 hours in advance. Normally the Pilot boards the vessel when passing the Karang Jamuang Island (pilot station), but if required, specially for deep draft vessels, the Pilot will board the vessel at the outer anchorage.

Anchorage: Position Lat. 06° 51′ S., Long. 112° 45′ E., depth of water between 35 m. and 40 m.

Gresik Anchorage: Position: Lat. 07° 05.7′ S., 112° 39.8′ E., 2.5 cables off the Petro Kimia Jetty. Sandy ground, no safe anchorage.

Restrictions: Maximum depth of water 33 ft. Maximum breadth of channel: 90 m. Official allowed sea water draft 32 ft., but Pilots accept 32 ft. 06 in.

Berth: Petro Kimia Jetty (private berth). Length of berth 320 m. approx., equipped with large rubber fenders every 40 m. Depth of water between 12 m. and 15 m. Height of tide about 2.5 m.

VHF: Call "Sourabaja Pilots" on Channel 12 or Channel 16 if no reply.

If vessel enters the channel without Pilot, a second call before passing Buoy No. 5 is required.

Tugs: Same tugs as for Sourabaja.

Vessel with a length of more than 150 m. has to take 3 tugs, (one of them only for stand by).

Cranes: 2 cranes, but only one used for discharging sulphur. This crane has a discharging capacity of 300 tonnes/hr.

Working Hours: Day and night, even during "Ramadan".

Times: 0800 hrs. – 1200 hrs.
1300 hrs. – 1800 hrs.
1900 hrs. – 2400 hrs.
0100 hrs. – 0600 hrs.

Fresh Water: Available from the jetty.
Fuel: Available by barge at Sourabaja anchorage only.
Repairs: From Sourabaja.
Medical: In Sourabaja only.
Shore Passes: Given by Agent, to be returned before departure.
General: No Immigration and Port Health board the vessel at this berth. No foreign currency declaration necessary. Crew changes not allowed.

AUTHORITY: Harbour Master.

JAKARTA (Tanjung Priok): 06.10 S. 106.50 E.

(See Plan Book)

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
- Nationality (Registry) Certificate.
- Seaworthiness Certificate.
- Measurement (Tonnage) Certificate.
- Derat (Exemption) Certificate.
- International Load Line Certificate.
- Safety Certificate (passenger ships).
- Safety Equipment Certificate (cargo ships).
- Safety Radio and Radiotelephony Certificate (cargo ships).
- Certificate of Approval (ship's radio station).
- Health Book or Bill of Health.
- Vaccination Certificates.
- Last Port Clearance.
- Subscription of Light and Harbour Dues and wharfage if any.
- Crew Lists and Passenger's Lists.
- Ship's Articles.
- Other certificates and documents as required.

Ship's arrival and departure: 2 days before arrival of vessel, the ship's Agent has to inform the Port Administration, by completing appropriate forms. Copies of completed forms must also be submitted to the Harbour Master, Port Health Service, Immigration, Customs and Security for preparations of services. The Pilot may berth the vessel on request of the ship's Agent only after obtaining clearance from the Port Administrator, Harbour Master, Port Health Service and Immigration (foreign vessels only).

Before departure, port clearance is issued by the Harbour Master, after clearance has been obtained from Customs, the Port Health Service, and Immigration.

Ship's Certificate: The Ship's Certificate should be delivered to the Harbour Master through the Agent. This certificate will be returned to the Ship's Master prior to the ship's departure.

Ship's Manifest and Bill of Lading: The copy of the ship's manifest should be delivered to the Port Administrator through the Agent.

IMMIGRATION: Vessels arriving from abroad with passengers must hoist the "N" Flag. Masters have to supply the boarding Immigration Officer with Passenger's List of: *(a)* disembarking. *(b)* transhipping. *(c)* through passengers.

No persons are allowed on board until the vessel has been examined and the "N" Flag taken down. Passengers must be in possession of a valid visa: visitor's, entry or a transit visa. Those not having a visa may at the discretion of the Immigration Officer, obtain a landing permit. Members of the crew including the Master must appear in the Articles, in order to get shore permits.

PILOTAGE: Compulsory. Pilots will board the vessel at the Outer Anchorage, from 0800 – 1800 hrs.

The ship's Owner/Agent has to inform the Port Administration (the Pilotage Division) of the ship's arrival 24 hours in advance.

Walkie-talkie radio with a frequency of 27 MHz is used for communication between the pilot boats and the pilot station.

ANCHORAGE: Anchorage for vessels waiting for the Pilot is outside the breakwater.

RESTRICTIONS: Max. draft is approximately 10 m.

MAX. SIZE:

Harbour	*Length* (m.)	*Draft* (m.)
1st	150	7
2nd	170	8
3rd	170	10
Oil	170	10
Coaster	60	4
Container		10

HEALTH:

Quarantine: A vessel is in quarantine and must hoist the quarantine flag (Q, QL, QQ), when it is a vessel:
1. that comes directly from abroad (Q flag),
2. that comes from an infected Indonesian Port (Q flag),
3. that takes passengers or cargo over from vessels mentioned in items (1) and (2) (Q flag),
4. whose Master has declared that a quarantinable disease exists or is suspected on board (QL/QQ).
5. which the Port Medical Officer has declared infected or suspected with a quarantinable disease (QL/QQ).

The concerned vessel is free from quarantine measures when Free Pratique has been obtained. The Free Pratique becomes invalid when a vessel is in quarantine as stated above or a quarantinable disease occurs during the validity of Free Pratique.

The Port of Tanjung Priok is a 1st class Quarantine Port.

At the request of the ship's Owner/Agent, the Department of Health will provide "Provisional Pratique", for vessels calling directly from abroad to any Indonesian port which is not classified as a quarantine port, provided that health conditions on board comply with the required health conditions. This "Provisional Pratique" however does not relieve the vessel from quarantine measures, and it is not to be construed as "Free Pratique".

Accordingly vessels enjoying "Provisional Pratique" are still required to hoist the quarantine flag.

Vaccination/Immunization: Vaccination and Immunization against cholera can be carried out by the Port Health Service.

BOARDING AREA: Harbour Pilots, Quarantine Officer and Immigration will board the vessel at the Outer roads.

RADIO: Coastal Radio Station Call sign PKI Class A1, A2, A3; call sign PKZ Class A3.

VHF:

Harbour Master	Channel 16
Pilot	Channel 12–14
Tugboat Operations	Channel 12
Port Operations	Channel 14
Public Service	Channel 16

TUGS: Tugs are operated by the State-owned P.N. Tunda Bara, Cable address: "Coaltug", which also handle the mooring facilities. Vessels over 80 m. in length have to use at least 1 tug. 10 tugs available from 135 h.p. to 1,500 h.p. 2 tugs are equipped for fire fighting.

BERTHING:

Wharves	*Length* (m.)	*Depth* (m.)
Coaster Harbour	663	3–4
1st Inner Harbour	2,534	5–8
2nd Inner Harbour	1,900	
for coal	150	7–9
for fertilizer	150	
3rd Inner Harbour	1,080	8–10.5
Container Wharf	400	9–11.5
Conventional Wharf	500	9–11.5
Mineral Oil Harbour		
Oil Jetty (3 at 25)	75	9–10
Bogasari (wheat)	140	9–10

Buoys	Number	Capacity (tons)
West buoys	6	15,000
East buoys	10	5,000
1st Inner Harbour buoys	7	6,000
3rd Inner Harbour buoys	4	15,000
Nusantara buoys	2	5,000
Dredging Yard buoys	1	2,000

SPECIALISED CARGO-HANDLING FACILITIES: There are 2 transporters with grippers available at the coal wharf.

CRANES: *Mobile cranes:*

No.	Capacity (tons)
4	5
5	20
1	35
14	3–20
Shore cranes/Portal cranes:	
12	3
Floating cranes:	
1	15
1	60
1	25
1	200

STEVEDORES:

Working hours: The usual working hours at the harbour are:

Monday–Thursday	0800–1200 hrs.
	1300–1600 hrs.
Friday	0800–1100 hrs.
	1330–1600 hrs.
Saturday	0800–1200 hrs.
	1300–1400 hrs.

Overtime is allowed on request.

Shipmaster's Report: Cargo work continuous, 7 days a week. No work for 2 days at the end of Ramadan.

MEDICAL: First Aid at the scene of accident. Medical treatment or advice available on request to the Port Health Service. Hospitalisation available in general and private hospital in Jakarta.

FRESH WATER: Available by pipe-line or barge, rate 50/60 t.p.h. Barge capacity 60–350 tons.

FUEL: Available by pipe-line or barge, supplier is Pertamina.

REPAIRS: Dry-docking and repairs are carried out by the State-owned P.N. Dock.

Electronic Repair Shop: Repair of electronic navigational aids and radio can be carried out by experts.

Repair and Testing of Navigational Instruments: Carried out by experts of the Hidral (Hydrography of the Indonesian Navy) and those of the P.N. Pelni workshop. Compass can be adjusted by an expert of the above-mentioned Hidral. Testing and issuing of certificates for navigational lamps by the Pelni workshop.

DRY DOCKS: 3 floating docks, max. capacity 17,500 tons, and 7 slipways, max. capacity 3,275 tons.

GANGWAY/DECK WATCHMEN: Available if required.

CUSTOMS ALLOWANCES: Tobacco: Each crew member is allowed to carry 200 cigarettes or 50 cigars or 100 grams of tobacco ashore without paying import duty. Alcohol: There is no allowance for alcoholic drinks. Other commodities: Maximum value of US $100. Each crew member is allowed to bring personal goods in use up to maximum value of US $100.

REPATRIATION: A valid document is needed. A re-entry permit from the country concerned is sufficient, if there is no passport available.

SHIP SUPPLY SERVICE:

P.T. Harapan Insani, 25 Jalan Imam Bonjol, Jakarta. Tel: 334-032, 334-084, 334-180, 334-214, 349-971. Telex: 44912 Incate Jkt, 46855 Insani Jkt. Branch: Balikpapan (East Kalimantan).

P.T. Patra Supplies & Services, No. 3 Gedung Patra, Jalan Gatot Subroto, P.O.Box 377/KBY, Jakarta. Tel: 513-955, 511-356. Telex: 44976 Cater Ia. Branches: Balikpapan (East Kalimantan) and Singapore.

P.T. Tata Wisata, Jalan Iskandarsyah Raya No. 1, Kebayoran Baru. Tel: 713-707 (3 lines). Telex: 47331 Tata Ia.

P.T. The First Trijaya, Jalan Tanah Abang II/97, Jakarta. Telex: 45965 Fitric Jkt. Cable: Fitricate.

AIRPORT: Kemayoran International Airport is approximately 8 km. from Tanjung Priok, and Halim International Airport is approximately 25 km. Kemayoran Airport, Tel: 47031.

TIME: The Port of Tanjung Priok is located in the zone of Western Indonesian Time, which is based on the time at the meridian of 105° East Longitude.

POLICE/AMBULANCE/FIRE: Fire 291399; Security 291691/291459; Ambulance 291045/290097.

CREW IDENTIFICATION CARD: Crew members having no passport are required to carry a Seamen Identification Card (S.I.C.).

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

AUTHORITY: Tanjung Priok Port Administration, P.O.Box 98, 9 Jalan Raya Pelabuhan, Jakarta, Indonesia. *Tel:* 492208, 491233. *Telex:* 49282. *Contact:* Port Administrator.

KASIM MARINE TERMINAL: 01.18 S. 131.01 E.

(See Plan Book)

LOCATION: The terminal is located between the Island of Jef Kasim and the mainland Irian Jaya.

DOCUMENTS:

Certificate of Registry.
Load Line Certificate.
Safety Equipment.
Safety Construction Certificate.
Radio Certificate.
Derat Certificate.
12 Copies Crew Lists.
6 Copies cargo/no cargo declaration by Master
6 Vaccination Lists.
2 Crew Declaration.
2 Stores Lists.

PILOTAGE: Compulsory. Pilot boards in-bound vessels in position 00° 53′ S., 131° 10′ E. Vessels berth and unberth at any stage of the tide during the day.

Accommodation ladder is required. Also see "Anchorage". Vessels must make a lee for Pilot boat in choppy seas.

ANCHORAGES: Recommended anchorage area is 4.5 miles West of Sorong in position 00° 53′ S., 131° 10′ E. Under no circumstances should any vessel enter the restricted area around the structure at Kasim Terminal without a Mooring Master aboard. The area is marked by the dotted lines on the plan. (See "Plan Book".)

Any vessel arriving in the anchorage area after 1400 hours local time may have to wait in the anchorage area until first light the next morning to transit the Sele Strait to the terminal.

On arrival at anchorage contact "Sorong Control" on VHF Channel 16 and between hours of 0600 and 1800 contact Kasim Marine Terminal Channel 16.

Note: Terminal Marine Advisors: Ensure that vessels do not anchor within Sorong Port Limits marked on chart. If they do Harbour Master will charge double fee.

It is preferable to anchor just outside the marked area. The anchorage position recommended is outside the harbour area.

RESTRICTIONS:

	Controlling depth (MLW)	*Mean tidal range*	*Velocity of current*	*Nature of bottom*
Entrance:	51 ft.	Approx. 5ft.	Max. 7 kt.	Sand, mud
Channel:	51 ft.	"	"	Sand, rock, coral
Anchorage:	120 ft.	"	"	Rock, sand
Berth:	60 ft.	"	"	Sand, rock, coral

MAX. SIZE: The channel is swept to a depth of 57 ft. Vessels max. draft is 50 ft. Also see "Berthing".

PRATIQUE: Available night and day. Customs and Immigration board on arrival.

RADIO: *Advice for arrival:* 72 hours prior to arrival at Sorong vessels should advise the Company of their estimated time of arrival by cable sent via "Pertamina's Coastal Radio" Station at Jakarta or Government Radio Station at Sorong. They should also confirm or amend them when they are 48 hours and again 24 hours, distant from Sorong.

Cable address: Pertamina, Unit 5, Sorong.

Cable address: Pertamina – Jakarta.

Name of the station: Pertamina Jakarta Radio. Call signal: PKI-2.

Frequency	*Class*	*Power*	*Nature*	*Service (hrs.)* (GMT)	
452 kHz.	A1	1 kW	CR	0000–0200	0400–0600
				0800–1000	1200–1400
8,626 kHz.	A1	1 kW	CR	0200–0300	0400–0500
				0700–0800	1030–1200
				1400–1500	1800–2000
				2200–2300	
12,980 kHz.	A1	1 kW	CR	0100–0200	0500–0600
				0900–1030	1200–1300
				1500–1600	1700–1800
				2000–2100	2300–2400

Pertamina Sorong Radio Station: Call signal: PKY–41

Frequency	*Class*	*Service*
6518.6 kHz.	SSB	H.24
6518.6 kHz.	SSB	H.24
8755 kHz.	AM	0000–0100
8730 kHz.	AM	0200–0300

The following information should be included in the cable:
(1) Name of vessel and radio call signal.
(2) ETA in GMT and date (local time GMT plus 9 hours).
(3) Cargo requirements.
(4) Deballasting time.
(5) Maximum loading rate.
(6) If there is any sickness on board or clean bill of health.
(7) Flange dimension of vessel's manifold connection.

TUGS: 2 tugs of 45 ton bollard pull each tug.

BERTHING: Berthing is usually daylight hours but night berthing undertaken if required. It is not unusual to undock with a strong stern tide running.

Kasim Terminal is owned by Petromer Trend. Maximum size of vessel at the berth is, length 1,000 ft., beam 150 ft., and draft 50 ft. Depth of water 60 ft. (LW).

The berth is a standard type of tanker berth with 4 breasting dolphins and a loading platform set back inside the line of breasting dolphins. 4 mooring dolphins are set at intervals along the length of the berth and are fitted with quick release hooks and electric winches to handle light rope messengers.

Loading is through two 16 in. Chiksan loading arms and vessels with non-standard manifolds must provide their own reducers. Max. loading rate 60,000 bbls. p.h.

Loading arms are connected and disconnected by terminal staff.

The Kasim Marine Office is an octagonal wooden structure on piles, situated at the mouth of a small river 300 m. N.E. of the Loading Pier.

A Mooring Master remains on board throughout the vessel's stay and is in radio contact with the tank farm, pump station and Marine Office. The berth has its own gangway which is placed onboard the ship by shore crew.

DRY CARGO BERTH: 370 ft. long with depth of 20 ft. MLWS alongside vertical steel face with rubber fendering. 2 cranes available for discharge/loading with SWL 40 tons and 60 tons.

MEDICAL: Doctor available.

FRESH WATER: Only limited supply (100 tons approx.) available. at US$2.75 per ton.

FUEL: Not available.

REPAIRS: Can be undertaken at Sorong but not at Kasim Terminal.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per man.

REPATRIATION: Possible in an emergency.

TIME: GMT plus 9 hours.

STORING: Not possible to store by truck or barge. Customs regulations state that nothing can be moved internally or externally without informing them. No riggers or equipment available.

SHORE LEAVE: No shore leave.

GENERAL: Before sailing it is necessary that Sorong Harbour Master is aboard. No stores but clinic available.

During daylight hours Indonesian flag must be flown.

AGENCY: 2 to 4 weeks before arrival, vessels must appoint as General Agent Pertaminaship, Jakarta 3234 Yos-Sudarso, P.O. Box 327, Tanjung Priok, Jakarta, Indonesia. Telex JKT 2885, Answerback: Pertamina. Tel. 290 312 (Ext. 217).

AUTHORITY: Petromer Trend Corp., Kasim Marine Terminal, Sorong, Irian Jaya, Indonesia. *Telex:* 47163 JKT. *Cables:* Trendex JKT. *Contact:* Petromer Trend, Jakarta. L. R. Zeigler, Area Manager; Captain S. Manopu, Marine Superintendent.

Jakarta Office: Five Pillars Office Park, Jalan Letjen, M.T. Haryono 58, P.O.Box 209, Jakarta. *Tel:* 791308. *Telex and Cables:* See above.

Government Authority: Kesyahbandaran Sorong, Direktorat Jenderal, Perhubungangan Laut IX, Sorong, Irian Jaya.

Harbour Master – Sorong, Iln. Jend A. Yani No. 13. Sorong. *Tel:* 21839. *Contact:* Captain Modahir or Mr. Bulganin.

KIJANG: 00.51 N. 104.37 E. (See Plan Book)

LOCATION: The Bauxite Loading Port of Kijang is situated at the S.E. coast of Bintan Island in the Riau Archipelago, in the position of Lat. 00° 50′ 44″ N. and Long. 104° 36′ 31″ E.

FLAGS: To be flown by incoming vessel:

Vessel's National Flag.
Indonesian Flag.
Vessel's Number.
Quarantine & Immigration Flag. (" Q" and "N").

DOCUMENTS: To be produced upon vessel's arrival:

12	Crew Lists
4	Passenger Lists (if any).
4	Parcel Lists (if any).
4	Store Lists.
4	Cargo Manifests.
4	Narcotic Lists.
2	General Information.
4	Fire Arms & Ammunition Lists.
4	Personal Effects Lists.
2	Vaccination Lists.
1	*Declaration of Health Certificate.
2	*Harbour Reports.
	International Load Line Certificate.
	Certificate of Registry and Tonnage.
	Certificate of Vessel's Nationality.
	Safety Equipment Certificate.
	Seaworthy Certificate.
	Safety Radio Telegraphy Certificate.
	Derat Certificate.
	Last Port Clearance.

*Forms to be supplied by Agents.

Inspection Team: This team consists of the Port Health Officer, Customs Officer, Harbour Master and Immigration Officer.

After the vessel is granted free pratique, the Immigration Officer checks passports, seamen's books & crew list and issues shore passes.

PILOTAGE: One Government Pilot available. Pilot compulsory.

Pilot's office : c/o Port Administration Tanjung Pinang.

Priority : First come first served.

There are 2 Pilot Stations:

1. Tanjung Tillie:	00° 48′ 12″ N.	104° 35′ 30″ E.
2. Temborak Laut:	00° 49′ 00″ N.	104° 41′ 30″ E.

If vessel wishes to be piloted to the port on arrival day, vessel has to arrive at the desired Pilot Station as mentioned hereunder:

1. Tanjung Tillie: Not later than 1800 hrs. local time.
2. Temborak Laut: Not later than 1600 hrs. local time.

In case vessel is long overdue (3 hours delay after Master's last ETA cable), Perbaki shall charge compensation for keeping labourers waiting, etc.

RESTRICTIONS: The height of vessel from waterline to top of hatch coaming or railing must not exceed 12.00 m. Each side deck breadth from bulwark to king post or mast must not be less than 6.50 m. and from bulwark to hatch coaming must be preferably 7.00 m. min., and 9.00 m. max. Minimum breadth 20.0 m.

MAX. SIZE: LOA 185 m. Max. draft 11.00 m.

Greater than the max. draft and LOA exceeding 185 m. might be possible after consultation with the Pilot/Harbour Master and considering the depth at entrance of the port upon departure.

RADIO: Cables to Perbaki Tanjungpinang can be sent through Dumai Radio Station, Call Sign "PKP" or through Tanjung Pinang Coastal Radio Station, Call sign "PKJ2", with working frequency/time:

8726 kHz 0730 – 0800 hrs. GMT.

Local Time — GMT plus 7 hours.

Arrival Notice: Owner's advice: Owner to advise by cable to Adhiguna, Anekatambang Jakarta and Perbaki Tanjungpinang at least 8 working days notice of vessel's ETA at loading port.

Master's advice: At least 48 hours before vessel's arrival at desired Pilot Station, Master shall give the following information to Anekatambang Jakarta and Perbaki Tanjungpinang: Last port of call, draft on arrival, quantity of bauxite to be loaded, stowage plan (hatch division for bauxite cargo), quantity and kind of commodity (ies) to be discharged — if any — and other necessary messages.

Final amended arrival time must be sent at the latest 24 hours before arrival.

Previous experience showed that one cannot rely on telegrams regarding ETA sent by Agents at last port of call arriving in due time, therefore Perbaki Tanjungpinang waits for the Master's telegram in order to make necessary preparation such as ordering Pilot, etc.

Availability of berthing space: The availability of berthing space will be confirmed by Sub-Agents.

TUGS: Available and compulsory.

BERTHING: Vessels are moored alongside 2 jetties and 7 dolphins with good nylon ropes, 5 fore, 5 aft, 1 forespring, 1 after spring, 1 fore breastline and 1 after breastline. For Spring tide a hercules wire rope (extra) is obtainable.

Same will be carried out from the Southern part of Perbaki's jetty and serves then as additional breastline. If a vessel has not got sufficient lines, same may be hired from Perbaki.

When moored alongside jetties, vessels must take special care of the moorings during hours of ebb-tide, which runs in S-N. direction.

Due to strong current in Strait of Kijang the ship's Master is kindly requested to pay attention to Sub-Agents advices.

Vessels over 20,000 d.w.t. will need extra 2 stern and 2 head lines.

Shifting Ship: Shifting ship will be done during slack water only by utilizing ship's gear and with assistance of tugboat if necessary. But to finalize loading as scheduled in stowage plan, shifting may be done even during flood/ebb tides using vessel's engine.

Jetty: There is no quay. Vessels are moored alongside 7 dolphins and 2 jetties.

Distance between the 2 extreme dolphins is 135 m.

Loading Facilities: Loading installation consists of 2 loading conveyors or stacker. Bauxite is loaded in the hold of vessel by means of conveyor belt.

Stacker can be moved vertically from 13° to 35°, but the maximum position for proper operation is only up to 18° inclination angle.

Each stacker can swing 15.00 m. (7.50 m. to inner side and 7.50 m. to outer side).

Distance between the 2 stackers in parallel position is 50.00 m.

The minimum distance between the end of stacker is 35.00 m. and the maximum is 65.00 m. (if there are king posts near bulwark, these distances might be less).

The length of stackers is 47.79 m. each. At the lowest position (13°) the end of stackers outreach about 10.50 m. from jetty seaward. (In this position the height from water line to the end of stackers is about 13.0 m. HWS).

Loading Capacity: About 400-500 t.p.h. for each stacker, however, it depends on the type of vessel, available cargo space, size of hatches, duration of trimming by bulldozer, etc.

Weighing: The bauxite is automatically weighed during loading by weightometer. The specific gravity of bauxite is around 1.25 and stowage factor around 29.

Unloading: Cargo for Aneka Tambang only.

STEVEDORES: Labourers will be supplied by Perbaki. Making the vessel ready for loading/unloading to be done by vessel's Crew members.

Loading is performed by Shipper's personnel. Loading/unloading equipments to be furnished by the vessel.

If necessary and at vessel's request, trimming of the bauxite can be done by bulldozer, except in deep tanks, cross bunkers, small holds in which bulldozer cannot operate. Weight of bulldozer is 5 tons, so double gear is compulsory when loading, discharging or shifting bulldozer. In hold where bulldozers are going to operate, all beams of upper as well as lower tween decks have to be removed. This has to be done by vessel's Crew members. Loading/unloading and shifting bulldozers (with engine off) to be done by vessel's crew members. The vessel is responsible for any damage to the bulldozers while loading/unloading or shifting.

Working Hours: Loading/unloading to be effected with Customary Quick Despatch (CQD) on weather working days, whereby Sundays, Holidays, Governmental Local Holidays and Saturdays between noon and midnight and Monday between 0000 hrs. and 0800 hrs., are always excepted.

At Shipmaster's request, work on these days can be arranged. The Ordering Party will pay the overtime charge on these excepted days.

MEDICAL: Doctor, hospital and inoculation service available.

FRESH WATER: Not available.

FUEL: Not available. The nearest bunker station is at Pertamina Tanjung Uban (Bintan Island), North Secton of Riau Strait.

Lubricants: None. In emergency cases, a limited quantity will be made available in drums.

TIME: GMT plus 7 hours.

CUSTOMS ALLOWANCES: Vessel's bonded store will be sealed by Customs Officer on arrival and will remain sealed until the vessel leaves Kijang port.

Note: It is recommended that ship's Master consult the Agents about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, narcotics, etc., to prevent unnecessary difficulties and eventually fines.

REPATRIATION: Can be arranged.
AIRPORT: Domestic airport about 9 miles from Kijang. There are regular daily flights from the said airport to Jakarta. Also a daily ferry service is available from Tanjung Pinang to Singapore. Sailing time about 4 hours.
CONSULS: None.
SHORE LEAVE: *Shore Pass:* Shore pass must be carried by Crew members during shore leave.

Invitation: Vessel's Crew members are strictly prohibited to invite friends, hawkers from shore aboard the vessel.

Anchorage: While lying at anchor waiting for berth no one is allowed to go ashore as long as vessel is not cleared.

It is also prohibited to lower lifeboats or rafts for the purpose of fishing, sailing, visiting nearby islands etc.

Leaving for Kijang and Around: Permitted.
SERVICES: *Cash Advances:* At Master's request can be supplied by Agents in a reasonable amount.

Fumigation: No facilities.

Ship's Chandlers: None. In emergency cases, Perbaki can act as ship's chandler for a limited quantity.
GENERAL:

Depths: Entrance: 10.50 m. LWS; Alongside jetty: 11.00 m. LWS

Current: Direction: At high tide, from North to South; At ebb tide, from South to North.

Velocity: Around 2–6 knots.

Chart: Indonesian Sea Chart No. 42, 44A and 44B.

Nature of bottom: Sand and soft materials.

Density: Approx. 1020.

SHIPMASTER'S REPORT: 1977.
Vessel's Dimension: Length 185.5 m. Beam 25.5 m.

Vessel sailed after loading wet bauxite ore in bulk. Vessel has previously visited the port 3 times and loaded to a draft of 11.2 m., however, due to poor tides loaded draft this voyage was 10.8 m.

Entrance to the port is from the North between Mapor Island and Merapas Island. The channel is clear and swept to 13.5 m. (chart datum) there are no navigational problems and Pilot boards in position 00° 50′ N. and 104° 43′ E. Also one can proceed onwards to the North of Kambat and Rusa Islands and then between Gabi and Riau to Tanjung Tillie anchorage. This is the accepted Pilot boarding ground and pilotage is compulsory and daytime only. The Pilot is accommodated at Tanjung Pinang but drives by car to the bauxite terminal and takes a launch from there to the vessel. He may not board upon arrival of vessel if the tide is unsuitable for berthing, as the ebb tide can reach 8 knots in Selat Kijang. There are 3 tugs available which are small, but quite adequate for berthing. The vessel proceeds past the berth then turns so as to berth starboard-side alongside. Moorings consist of 6 headlines, 1 breast line and 2 springs forward and 3 springs and 6 stern lines aft. Nylon lines are in position and can be hired as needed from the shore. The loading arms are fixed and shifting of the vessel is carried out at slack water.

Communication can be difficult at times. Tanjung Uban functions for 15 minutes in the hour and is not normally raised until day of arrival. All cables are sent through radio "PKI" Jakarta and seem to arrive at their destination. If possible despatch 3 copies of the Crew List to the port in advance as this speeds up clearance on arrival.

AGENCY:
1. *General Agents:* P. T. Pelayaran Bahtera, Adhiguna. 10-12 Jalan Kalibesar Timur, P.O. Box 1313, Jakarta, Indonesia. Cable address: Adhiguna Jakarta. Telex: Adiguna JKT 42854. Phone: 276547.
2. *Sub-Agents:* PT Aneka Tambang Unit Pertambangan Bauksit, Kijang. Address: Kijang Tanjungpinang. Cable Address: Perbaki Tanjungpinang (through Tanjung Radio Station Call Sign PKJ2 or Dumai Radio Station Call Sign PKP).
3. *Sub-Agents* (Head Office): PT Aneka Tambang. Jalan Bungur Besar 24–26 P.O. Box 2513, Jakarta, Indonesia. Cable address: Anekatambang Jakarta. Telex: Antam JKT 49147 Jakarta. Phone: 410108.

MPS Tax: So called MPS Tax (freight tax) has to be paid in advance to the Indonesian Tax Office at Jakarta, through the General Agents, Jakarta, therefore Principals are requested to remit the said MPS Tax's funds at the same time with the remittance of advance payment of ship's disbursements.

The amount of MPS Tax (about 2% of the concerned freight earned) will be advised by the General Agents, Jakarta to the Principals, if possible a few days before Principal remit advance payment.

The final calculation of the MPS Tax will be made later.
Disbursements:

Advance Payment: At least 14 days before vessel's arrival at Kijang, vessel's Principals have to remit US $4,000 to the account of the General Agents, at Jakarta, as advance payment of the related ship's disbursement.

Vessel's Disbursement Account: All vessel's expenses will be charged to the related Principals through the General Agents.
AUTHORITY: Dept. of Sea Communications.

LABUANTRING BAY: 08.44 S. 116.04 E.
AMPENAN: 08.34 S. 116.04 E.

DOCUMENTS:
Health Certificate.
1 Vaccinations List (Yellow Fever, Cholera/Typhus).
9 Crew Lists.
7 Passenger Lists (landing/transit).
4 Lists of Personal Effects.
7 Ship's Store Lists.
2 Cargo Manifests (discharge/transit).
4 Dangerous Cargo Lists.
1 Stowage Plan; all to be signed by Ship's Master and/or Chief Officer.
PILOTAGE: Normally not provided. When Pilot required, vessel must request via Agent or via Ampenan Radio at least 24 hours before arrival. Pilot service will then be given by Harbour Master from Ampenan to Labuantring Bay.
ANCHORAGE: Overseas vessels not familiar with Labuantring Bay, normally call Ampenan and await particular information and/or Pilot to enter Labuantring Bay (outer buoy). Good holding ground in about 16 m. Vessels with a draft of more than 6 m. must keep clear from channel to inner harbour. Navigating in channel without Pilot may cause difficulties; channel equipped with buoys, depth approx. 7 m.
APPROACHES: When approaching Ampenan, harbour is marked by light tower. Excellent holding ground in about 16 m.
RESTRICTIONS: Vessel may enter Ampenan and Labuantring Bay (outer buoy) day and night. Vessel not visited by port authorities between 1800 hrs. to 0700 hrs. (local time), exceptional cases allowed. Vessels are not allowed enter into inner harbour (Labuantring Bay) after sunset.
WEATHER: November till April rainy season. Quite heavy winds and rain can affect cargo work.
HEALTH: Pratique granted by port doctor after boarding vessel. Vessels from an infected port have to hoist "Q" flag. If any suspected disease or fever on board, necessary inform Agent by cable or via radio station. Treatment of crew members for illnesses other than quarantinable diseases arranged by Government's practitioners through ship's Agent.
TUGS: 1 tugboat of 125 h.p. 2 motor launches only, for cargo handling purposes.
RADIO: Ampenan Radio. Call sign PKD 9. Freq. 500 kHz and 430 kHz Times GMT: 0000–0100, 0500–0600: except Friday and Saturday: 0000–0100, 0900–1000. Sunday and holiday closed.
BERTHING: Length of quay at Labuantring Bay approx. 40 m. Vessels with a length of less than 100 m. and a draft of less than 6 m. may berth safely. Berthing at Ampenan (anchorage) for all sizes of vessel.
MEDICAL: Cable or radio before arrival if medical assistance necessary on entry. Government's hospital facilities available. Yellow Fever Certificates inspected on arrival.
TANKERS: Berthing at Ampenan.
FRESH WATER: Not available.
FUEL: Not available.
SHIP'S CERTIFICATES: Registered Tonnage Certificate, Load Line Certificate, Safety Radio Certificate, Safety Equipment Certificate, Light dues Receipt, Derat Certificate, Clearance from previous port, all to be shown on arrival.
IDENTIFICATION CARDS: All crew's passports must be certificated by Immigration Officer on arrival, whereafter to be used as shore passes.
GANGWAY/DECK WATCHMEN: Usually employed during loading and discharging operations.
CARGO GEAR: Wire and rope-slings, nets and net-slings, lighters all supplied by stevedores except rain-tents. No shore cranes available. Loading and discharging using ship's derricks.
STEVEDORES: Ordered by Agent. To enable Agent ordering necessary gangs, vessel must give accurate ETA at least 24 hours in advance. Working on Sunday and holidays allowed by agreement in exceptional cases.
OPENING/CLOSING HATCHES: Normally carried out by stevedores; ship's crew may if required by vessel to do so.
CUSTOMS ALLOWANCES: No restrictions. Custom's Officer supervises opening and resealing of bond.
CONSULS: None available locally.
AIRPORT: Served by regular airlines to Bali and Java.
TIME: GMT plus 8 hours.
HOLIDAYS: 1st January; Independence Day (17th August); Christian, Islamic and Balinese holidays as appointed by the Indonesian Government.
GENERAL: Vessels should not use ship's radio station. Harbour Police and Customs' guards on board during ship's stay in harbour.
SHORE LEAVE: Crew allowed ashore; passports required whilst ashore.
DELAYS: Normally minimal.

LHOKSEUMAWE (Including Hagu, Blang Lancang and Krueng Geukueh): 05.15 N. 97.07 E. **(See Plan Book)**

LOCATION: The port is situated on the North coast of Sumatra, Indonesia. The limits are:

North:	Lat. 05° 17′ 00″ N.	Long. 97° 02′ 00″ E. to
	Lat. 05° 17′ 00″ N.	Long. 96° 58′ 20″ E.
West:	Lat. 05° 17′ 00″ N.	Long. 97° 02′ 00″ E. to the coast.
East:	Lat. 05° 17′ 00″ N.	Long. 96° 58′ 20″ E. to the coast.

The sea buoy is in position:

Lat. 05° 15′ 22″ N. Long. 97° 07′ 02″ E. Fl. 8 sec.

Chart and Sailing Directions for the area:

Republik Indonesia Hidral No. 8 Plant Chart No. 25

Sailing Direction.

Light List.

Special Publication.

Lhokseumawe Harbour is divided into 4 areas:

1. Lhokseumawe Harbour.
2. Hagu Pertamina Special Oil Terminal.
3. Blang Lancang Pertimina Special Harbour (Arun LNG Terminal).
4. Krueng Geukueh Harbour (Fertiliser Terminal and Public Berth).

DOCUMENTS:

Cholera Vaccination Certificates for all crew members and passengers (date not exceeding 6 months).

Smallpox Vaccination Certificates for all crew members and passengers (date not exceeding 3 years).

Certificates of Inoculation against any contagious diseases.

Customs, Immigration and Harbour Master will require the following for inspection:

10 Crew Lists.
5 Crew Declaration of Personal Effects.
5 Ship's Stores Lists (inventory).
3 Passengers Lists (if any).
3 Cargo Manifests, with a summary for transit cargo.

Clearance from the Last Port of Call.

Valid passports and/or Seaman's Certificates for all crew members.

International Maritime Declaration of Health.

Valid Derat or Derat Exemption Certificate.

Arms and Ammunition Declaration.

Load Line Certificate, Ship Registry, Radio Safety/Telegraphy Certificate, Ship's Construction Certificate, Safety Equipment Certificate.

U.S.C.G. Letter of Compliance.

General Information.

In accordance with practice in Indonesian ports the vessel's national flag, the Indonesian country flag, Quarantine, Immigration and Pilot flags must be displayed by all vessels approaching Lhokseumawe Harbour. These signals shall be displayed continuously until clearance is granted.

PILOTAGE: Compulsory for any movement of the ship in harbour.

Lhokseumawe Harbour: No Pilot will board the vessel.

Hagu Special Oil Jetty: No Pilot will board the vessel.

Blang Lancang Harbour: Pilot will board the vessel at the sea buoy or in the Anchorage Area about 3 miles from the breakwater.

Krueng Geukueh Harbour: Pilot will board in the Anchorage Area or one mile from breakwater.

Master, Owner or Agent should request the Pilot 6 hours in advance for berthing and 3 hours in advance for unberthing. The vessel should be stopped when the Pilot is boarding. Call the Lhokseumawe/Blang Lancang pilot station by VHF on Channel 16 from 0800–1500 hrs. Moving the ship for berthing and unberthing available in good conditions. The limit is: for the wind not more than 8 m./sec. and swell not more than 2 ft./sec. (for CBM) and visibility not less than 1 mile.

ANCHORAGE: A vessel which has been informed by the Agent to anchor on arrival shall proceed to the designated Anchorage Area.

Anchorage Area in Lhokseumawe Harbour and Hagu Special Oil Terminal is in position:

Lat. 05° 10′ 38″ N. Long. 97° 09′ 54″ E. Depth 15 m.

There are two Anchorage Areas at Blang Lancang Pertamina Special Harbour:

1. Anchorage Area for LNG tankers:
   Lat. 05° 13′ 35″ N. Long. 97° 05′ 53″ E. Depth of water 60 m.
2. Anchorage Area for Oil tankers:
   Lat. 05° 14′ 03″ N. Long. 97° 05′ 05″ E. Depth of water 60 m.

No dry cargo ship will anchor in Blang Lancang Special Harbour. All dry cargo ships visiting Blang Lancang Special Harbour should anchor in Lhokseumawe Harbour for clearance and awaiting a berth.

All vessels visiting Krueng Geukueh Harbour should anchor in Lhokseumawe Harbour for clearance and after that move to Krueng Geukueh Harbour and drop anchor 1 mile North from breakwater in position:

Lat. 05° 15′ 04″ N. Long. 97° 02′ 42″ E.

The holding ground in the Anchorage Area is reported to be poor. All vessels are required to maintain engines on one hour's notice in good weather and 15 minutes' notice when wind speed exceeds Beaufort Scale 4 (moderate breeze).

RESTRICTIONS: If there are two LNG ships alongside the dock no other ship will move in the Blang Lancang Harbour, except P & T marine craft actually assisting the LNG tanker.

No ship will enter the harbour during night time.

No ship will enter Blang Lancang Harbour with ammunition on board.

Vessel not allowed to proceed into the Blang Lancang CBM restricted area without permission.

MAX. SIZE:

Old Lhokseumawe Harbour: Only barge and tugboats are able to moor at the dock, max. draft 4.0 m.

Blang Lancang Harbour:

LNG Dock I (North):	Max. LOA – 300 m. Max. draft – 13 m.
LNG Dock II (South):	Max. LOA – 300 m. Max. draft – 13 m.
Cargo Dock:	Max. LOA – 170 m. Max. draft – 6 m.
CBM:	Tanker with LOA – 275 m. Max. draft – 20 m.

Krueng Geukueh Harbour:

Berth A:	Max. LOA – 135 m. Max. draft – 10 m.
Berth B:	Max. LOA – 160 m. Max. draft – 10 m.

HEALTH: In order to obtain Free Pratique vessel must cable name and nationality of the ship; ports of call during the voyage; number of crew and passengers (if any); port of destination and Agent; condition of health of all onboard with details of any sickness and whether all vaccinated.

Officials will board with Pilot. Quarantine flag "Q" and Immigration flag "N" must be flown until clearance is granted.

RADIO: Ships proceeding to Pertamina/Pt. Arun: Call Lhokseumawe Radio Station, call sign PKB 20. (Owned/operated by Pertamina). Open 24 hours. See List of Radio Signals.

The following information is required.

(a) Name of Owner
(b) Name of vessel and Radio Call Sign
(c) Flag
(d) SDWT
(e) Name of Master
(f) Last port of call and departure date
(g) Discharge port and ETA
(h) Number of crew and passengers
(i) Maximum loading rate in barrels.

Dry cargo ships: Call the General Agent in Belawan. Call Belawan Radio PKB 1. (Owned/operated by Port Authority). See List of Radio Signals.

VHF: For Lhokseumawe Harbour and Krueng Geukueh Harbour: Call Lhokseumawe Port Administration Channel 16.

For Blang Lancang Harbour: Lhokseumawe Radio PKB 20 Channel 16. Marine Office Channels 16, 9 and 13. Pertamina Channels 16 and 19 (working).

For Pilot Station: Call Blang Lancang Pilot Station Channels 16 and 12.

Language: Indonesian and English.

RADAR: No radar service available.

TUGS: No tugs available in old Lhokseumawe Harbour.

Blang Lancang Harbour: 4 tugs available – 3 tugs with 4,200 h.p. 1 tug with 3,500 h.p. 2 mooring launches 540 h.p.

For Supertanker and LNG: Tanker will use the tug's lines. Tug's line will be charged by Company/Pertamina: Rates will be subject to change in accordance with operation cost and will not be subject to advanced notice.

Cargo ships will use ship's line.

In Krueng Geukueh Harbour: 2 tugs available with 1,000 h.p. Use ship's line. 1 mooring launch, 250 h.p. 1 pilot boat, 250 h.p.

BERTHING: *Old Lhokseumawe Harbour (Lhokseumawe Terminal):* A small pier with length 60 m. Construction: Piles with wood on the top. Depth 4 m. Only barges and small vessels under 500 d.w.t. can berth.

Blang Lancang Harbour (Arun Terminal): 2 special LNG docks, 400 m. length each with 10 mooring dolphins and 4 rubber fenders. Depth 14 m. at LWS.

Cargo Dock: Length of the dock 400 m. Depth 6 m. at LWS. Max. size to be berthed 180 m. LOA.

CBM: The berth which is located offshore is designed for oil tankers ranging from 30,000 d.w.t. to 100,000 d.w.t.

Max. size of tanker is limited to 895 ft. LOA and 50 ft. draft. Depth of water 30 m.

Vessel approaches berth heading 250°T between buoys 6 and 7 (see "Plan Book").

The CBM consists of 9 cylindrical mooring buoys secured by 3.5 in. stud-link chain to 30,000 lb. anchors. Some of the mooring buoys are fitted with 44 mm.×750 ft. long preventer wires for use with large ships.

Ships using the 16 in. hoses must have a derrick on the port side with SWL of 10 tons with which to lift the hoses from the seabed. The winches of ship for taking on the shore wires on the drum must be able to withstand 35 tons breaking strain.

Engines to be on one hour's notice throughout.

Kreung Guekueh Harbour (AAF Terminal): Berth A: Special fertiliser in bulk. 200 m. long with 8 dolphins (4 fenders). Depth. 10 m. at LWS. Max. size: 150 m. LOA, able to moor.

Berth B: General cargo berth. Concrete construction 300 m. long with fenders every 20 m. Depth 10 m. at LWS. Max. size 160 m. LOA able to moor.

STEVEDORES: Available from Agent.

MEDICAL: Hospital facilities available.

TANKERS: Oil tankers will be berthed at CBM using 9 buoys.

The Loading/Mooring Master will provide shore labour for connection/disconnection of the submarine hose strings. He maintains communication links with terminal.

Diameter of load line – 2×16 in. for large tankers.
– 2×8 in. for small tankers.

Ships visiting Blang Lancang should have clean ballast. No dirty ballast or slops facilities available.

API of Condensate 51 and 56.
PVP of 13 PSI. Temperature: 80°F.
Loading Rate: 60,000 bbls./p.h.

LNG tankers. Cargo hose facility arms system.

DENSITY: 1024.
FRESH WATER: Not available.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Ship's crew maintain deck watch.

Gangways: Cargo and oil tankers use ship's gangway. LNG tankers use shore gangway.

FIRE PRECAUTIONS: No smoking will be allowed on board while the ship is berthed and on the plant site of Arun Terminal, except in places approved by Harbour Master.
CONSULS: No Consul in Lhokseumawe.
REPAIRS: No facilities.
SURVEYORS: Saybolt Surveyor attends at Blang Lacang CBM.
DRY DOCKS: No facilities.
REPATRIATION: Crew changes and repatriation can be effected.
AIRPORT: About 25 km. distance from Lhokseumawe. Served by private facilities of MOI International Airport located in Medan about 530 km. from Lhokseumawe.
OPENING/CLOSING HATCHES: By stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes/10 cigars. 100 grams of tobacco. No spirits to be taken ashore.
IDENTIFICATION CARDS: Shore pass as required by Agent.
CARGO GEAR: No facilities for heavy lifts.
TIME: GMT plus 7 hours.
HOLIDAYS: For LNG and Condensate: No holidays in operation. For other vessels: Idul Fitri – Idul Adha, no operations.
POLICE/AMBULANCE/FIRE: Harbour Police: 21082. Ambulance/Fire: Contact PT. Arun: 21566.
EMERGENCY CO-ORDINATION CENTRE: Contact "PKB 1" Belawan Radio for Search and Rescue.
TELEPHONES: None.
SERVICES: None.
BANKS: B.I.: Phone 21399. B.D.N.: Phone 21342. B.B.D.: Phone 21331. B.N.I. 46: Phone 21205.
SHORE LEAVE: Possible.
DELAYS: Vessels calling at Blang Lancang CBM may be delayed if ship's mooring system is unsuitable or when berth is affected by strong winds and/or swell.
DEVELOPMENTS: SPM (position Lat. 5° 15.3′ N., Long. 97° 04.64′ E.) will be completed in 1985. Max. size: 275,000 d.w.t.

Public Quay in Krueng Geukueh Harbour to be completed mid-1985.

Iskandar Muda Fertiliser Berth at Krueng Geukueh will be completed 1985.

SHIPMASTER'S REPORT: April 1981.
Arun Terminal:
Documents: See "Jakarta".
Chart: B.A. 3584.
Berthing: There is a jetty for LNG loading. Position: Lat. 05.15 N., Long. 97.07 E.

This is an open sea loading point located just at the right hand side of the port of Blang Lancang for ships to load condensate cargo only.

Pilotage: Compulsory, Loading Master together with 4 – 6 shore personnel will assist in mooring, Pilot also onboard.

Loading: Vessel should be equipped with 10 ton derrick on port side, manifold 2×12 in. on port side, 2 mooring winches/drums, 1 minimum available at forward maindeck and 1 at after maindeck for serving the preventer wire 44 mm.×750 ft., as breast lines for 2 buoys. Vessel should also be equipped with 14 mooring lines minimum length 210 m. each for 9 mooring buoys. Loading Master will discuss the mooring procedures with Master before mooring.

Shore Facilities: None.
Agent: Pertamina, Blang Lancang, Cable Address: Pertaminaship, Jakarta.

SHIPMASTER'S REPORT: September 1983.
Arun Terminal:
Documents:

On arrival Health, Immigration and Harbour Master's Officer will board with the Agent to issue clearance.

Papers required:
Maritime Declaration of Health.
Vaccination Cards.
Derat Certificate.
Crew List (10-12 copies).
Passports/Seamen's ID Books.
Last Port Clearance.
Arrival Report (supplied by the Agent).

The Agent will require the following documents to take to the Custom House ashore:
Ship's Register.
International Loadline Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Certificate of Financial Responsibility (oil pollution).
Derat Certificate.
Immigration may take some, or all passports/ID ashore.

After these formalities have been completed 4 or 5 Customs Officers will board. They will require:
Ship's Stores List.
Crew Personal Effects List.
Cargo Manifest ('nil' declaration if applicable).

About 4 – 5 copies of each of the above should be adequate. The bond store, and possibly other storerooms, will be checked and some or all cabins will be searched.

Cargo documents should normally be ready by the time the hoses are disconnected, (about 1.25 hours after completion of loading). Return of ship's certificates, passports, and issue of port clearance, can, it is reported, cause some delay. Vessels are not allowed to wait at the berth for documentation.

Pilotage: See "Berthing".
Anchorages: A designated waiting anchorage for tankers lies about 1.25 miles North-Eastward of the berth, in depths of about 60 m. (clay).
Restrictions: Mooring carried out in daylight only; unmooring is allowed day and night.
Max. Size: The tanker berth is designed to accept vessels up to 100 MDWT, with LOA 275 m.
Approaches: Charts: BA 2777; BA 3585.

Apart from an active fishing industry operating in the area there are no navigational hazards in the approaches. There are adequate navigational lights serving Blang Lancang and Pelabuhan Blanglancang, (although neither the light or racon on the beacon at Ka Geukueh, about 1.5 miles Westward of the terminal were active 9th-15th September, 1983). The storage tanks and gas flares at the terminal are prominent day and night.

Radio: Send ETA 72, 48 and 24 hours in advance to 'Pertaminaship Jakarta'. Additional information regarding the vessel's details, last port, cargo requirements, etc., is not obligatory as far as is known but seems advisable.

Radio Station 'PKB 20', at Lhok Seumawe will handle traffic concerning navigation, cargo, etc., but watch schedules do not appear to be regular. The terminal may, via PKB 20, request information from the vessel regarding cargo requirements, loading rate, deballasting time (if applicable), number/type of mooring lines.

VHF: When within appropriate range the terminal may be contacted on VHF Channel 16; working Channels 9 and 19. The call sign is 'Arun'.
Tugs: Three tugs, each 4,200 h.p., assist the berthing. One tug is made fast forward and one aft; centre leads; tugs' towing ropes. One tug pushes at amidships as required. Two tugs attend during unberthing. Two large mooring boats are employed for mooring/unmooring.
Berthing: The terminal, owned and operated by Pertamina, together with Mobil and Japanese interests, exports Arun Natural Crude and LNG. Tankers load at a multi-buoy berth about 1.5 miles off-shore. Gas carriers load in a small artificial harbour (Pelabuhan Blang Lancang), about 1.5 miles E.S.E of the terminal. The small port of Lhok Seumawe lies about 5 miles S.E. of the terminal.

The tanker berth is located in an open roadstead in depths of 35 m. – 50 m. There are 9 mooring buoys, 2 bow buoys, 2 breasting buoys each side, 2 quarter buoys and 1 stern buoy. The tanker will require 4 bow lines, 4 breast lines and 5 stern lines. Wire ropes are acceptable, preferably with nylon tails. The bow lines should be at least 250 m. in length. Additionally the tanker will be required to pick up a 42 mm. diameter wire rope from each of the breasting buoys. Prior to berthing the vessel's mooring equipment will be inspected by the Mooring Master who will discuss the mooring operation with the Ship's Officers. The Mooring Master and Assistant will board with the Pilot at the time of berthing to supervise the mooring operation.

Accommodation on board is required for the Loading Master and one Mooring Master.

Scuba divers are in attendance to sort out any underwater problems that may occur with regard to the moorings and hoses.

Loading: Arun Natural Crude is a condensate, (akin to naptha), very light and gassy. Approximate quality details are:
API, 55; temperature, 32°C; RVP, 11 psi. Cargo is loaded via two 12 in. flexible hoses. The terminal supplies labour for connecting/disconnecting the hoses. Ship's crew required to assist and operate winch and derrick. Allow for about 6 tons lift on each hose. Maximum loading rate is 65,000 bbls/hour. The terminal meters the quantity of cargo loaded. The meter is proved at each loading and the ship should receive a proving report on completion of loading.

Medical: Treatment available.
Fresh Water: None. (Said to be available at Pelabuhan Blang Lancang).
Fuel: None. (Said to be available at Pelabuhan Blang Lancang).
Airport: There is, reportedly, an air service with Medan, about 150 miles S.E. of Blang Lancang. Medan is said to be served by international flights.
Shore Leave: Not permitted.
Developments: Plans to install an SBM, as an additional berth, have been approved, it is reported.
General:
Tides: Refer Lhok Seumawe. Tides are semi-diurnal. Spring range is 1.4 m. Rates appear to be fairly weak. A ship will generally lay windrode at the anchorage.
Weather: November to March winds from N.E. prevail. June to September winds from S.W. prevail. The area is subject to S.W'ly squalls May-September, and particularly June-August. Thunderstorms are most frequent March-April and October-November.

AUTHORITY: Lhokseumawe Port Authority, Jln. Pelabuhan No. 1, Lhokseumawe, Indonesia. *Tel:* 21181, 21881 (Port Director). *Contact:* T. Rusly Harun, Port Director; T. Saukata, Harbour Master, Tel. 21485; Dr. Zainal Abidin, Port Health, Tel. 21154; Dr. B. Lirungan, Customs, Tel. 21267, 21054; Aldian Arifin, Immigration, Tel. 21039.

MACASSAR (Ujang Pandang): 05.08 S. 119.24 E. (See Plan Book)

DOCUMENTS:

Certificate of Registry
Crew List
Log Book
Certificate of Seaworthiness
Load Line Certificate
Radio Certificate (Solas Certificate)
Health Certificate
Equipment Certificate (Solas Certificate)

Shipping documents as follows:

Manifest of cargo
Bills of Lading
Charter Party (if necessary)

PILOTAGE: Pilotage compulsory for vessels of more than 150 cu.m. in gross volumes.

To order a Pilot:

1. Contact the ship's Agent in this port via Macassar Radio (call sign PKF) by ship's radio or VHF Channel 16.
2. Also contact Macassar Pilot's station tower by VHF Channel 16.

Pilotage Information:

1. Every vessel of 71 m. LOA and over under Pilot's direction for berthing and unberthing is to use the Port Administration tugs.

There are 2 tugs available with initial letters "PA" on their blue funnel,

M.T. "Anggada VII" 800 h.p.
M.T. "Selat Tanakeke" 1,160 h.p.

2. Every vessel of 31 m. LOA and over, under Pilot's direction for berthing and unberthing is to be assisted by Port Administration mooring boat.

ANCHORAGE: The anchorage for vessels awaiting a Pilot is around the position 05° 07′ 30″ S. and 119° 22′ 30″ E. with depth of water 25 m. at LWS.

RESTRICTIONS: Every foreign vessel is to have special permission from Indonesian Government or Directorate General of Sea Communication for entering and should have representatives or handling Agent before entering this port.

Warships should contact the Indonesian Navy Commander of Territory VII (Pangdaeral VII) before entering the port.

MAX. SIZE: No length or beam restriction. Depth alongside is governing factor.

RADIO: See "Pilotage".

TUGS: See "Pilotage".

BERTHING: *Depths of water:*

Main entrance channel: 13 m. at LWS.
Soekarno wharf: 8.5 m. to 9.5 m. at LWS.
Hatta wharf: 9.5 m. at LWS.
Oil Jetty (Pertamina Jetty): 8 m. at LWS.
Anchorage in the inner waters: 11 m. at LWS.

Special attention in West monsoons (November to February):

All vessels alongside Soekarno and Hatta Wharf should use fore and aft mooring lines to buoys which are available, to prevent the beating of ship's hull against the wharf.

STEVEDORES: Stevedoring by Port Labour (UKA). Capacity for discharging: 12 ton gang/hour – General Cargo. 17 ton gang/hour – Bulk Cargo (in bags). Heavy cranes available, capacity 15 tons.

MEDICAL: Doctor and clinic available.

FRESH WATER: Available rate 50 t.p.h.

FUEL: Available, MFO 50 t.p.h.

GANGWAY/DECK WATCHMEN: There are no special deck watchmen services but can be arranged through Agent.

OPENING/CLOSING HATCHES: Work carried out by stevedores.

CUSTOMS ALLOWANCES: Tobacco. Only sufficient for personal use (500 grams tobacco or 200 cigarettes for one passenger).

Wine and/or spirits not permitted out of bond.

IDENTIFICATION CARDS: Needed by Immigration Office.

CONSULS: Japan and Norway.

REPAIRS: Minor deck or engine repairs possible.

AIRPORT: Macassar Airport, called "Mandai Airport", distance from town about 23 km.

Services: Macassar–Kendari and Jakarta–Surabaya–Macassar Manado every day (3 times a day). Macassar–Ambon–Jayapura.

TIME: Middle Indonesian Time, GMT plus 8 hours.

HOLIDAYS: Every Sunday; New Year (January 1st); Idul Adha (November 11th); 1st Muharam 1399 H. Isa Almasih (May 15th); Proclamation Day (August 17th); Mi'radj Muhammad (July 3rd); Idul Fitri (September 9th); Maulud Muhammad (February 20th); Santa Maria (May 15th); Christmas Day (December 25th). Work can be arranged at overtime rates.

POLICE/FIRE/AMBULANCE: Police, Fire 4306. Ambulance 7227.

TELEPHONES: No arrangements exist for placing telephones on board.

DELAYS: Caused by rain (bad weather).

DEVELOPMENTS: In near future, Macassar to have bonded warehouse, godown for dangerous cargoes and be able to handle containers.

AUTHORITY: Department of Communication, Directorate of Sea Communication, Port Administration Macassar. 6th Sea Communication Regional Office, Ujang Pandang.

MALILI: 02.39 S. 120.59 E. (See Plan Book)
MANGKASA: 02.44 S. 121.04 E. (See Plan Book)

OPERATOR: P.T. International Nickel Indonesia (P.T. Inco).

LOCATION: Malili and Mangkasa Tanker Terminal are situated in the Gulf of Bone, South Sulawesi about 300 miles N.E. of Ujung Pandang.

Malili:

Malili port is situated in the Gulf of Bone, South Sulawesi about 5 miles from Mangkasa sea tanker terminal.

Vessels arriving at Malili port must remain in the roads anchorage, anchorage light buoy (Qk. Fl.) in position 02° 42′ 30″ S. and 121° 01′ 40″ E. Anchorage is to the South of the buoy and having average depth of more than 20 m. (LWS)

This port *is to be assigned for* dry general cargo discharging and loading of nickel ore.

The sea chart to be used is Indonesian Chart No. 319.

Mangkasa Sea Tanker Terminal:

The terminal is located at 02° 44′ 25″ S. and 121° 04′ 00″ E. This terminal is provided for tankers of about 20,000 d.w.t. which are to be equipped with hose lifting derrick at the port side manifold.

The sea terminal itself consists of a four buoy mooring.

The hose has a diameter of 12 in. and fitted with 12 in. × 150 lb. ASA flange. The submarine pipe diameter is 20 in.

FLAGS: In accordance with the practice in Indonesian ports, the vessel's national flag, the Indonesian courtesy ensign, quarantine, immigration, Pilot and call sign flags must be displayed by all vessels approaching the port. These signals shall be displayed continuously until clearance is granted.

The above mentioned signals are:

Sunrise to sunset: quarantine flag "Q".
Sunset to sunrise: signal lights red over white.

The flag "N" should be flown until the Immigration Officer boards the ship. The "G" flag should be flown until the Pilot boards.

The vessel should also fly its call sign until the vessel is secured in the berth. These call sign flags must be flown again when the vessel is sailing until the vessel is clear of the anchorage area and the Pilot has departed.

The "G" flag should be replaced by "H" flag if the Pilot is already aboard the vessel.

The "P" flag may may be flown if the vessel is going to sail within 24 hours.

DOCUMENTS: Indonesian Immigration, Customs and Port officials will board the vessel to grant clearance. Each crew member should be in possession of an International Vaccination Card and passport.

The following documents may be required for granting pratique for the vessels arriving from foreign ports:

Certificate of Registry.
Ship's Construction Certificate.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio/Telephone/Telegraph Certificate.
Exemption Certificate.
Cargo Gear Certificate and Derat Certificate.
The last Port Clearance and Crew Lists are also required.

Flag Dispensation: All foreign vessels entering Indonesian ports must have requested and been granted Flag Dispensation prior to the arrival at the port. Also a loading or discharging permit must have been applied for from the authority concerned. All this will be done by the general Agent.

PILOTAGE: A Mooring Master will board the vessel in the anchorage area and advise the Master on all manoeuvres relative to berthing and unberthing and connecting the hoses.

Vessels are requested to make a lee and have an accommodation ladder long enough to reach the Mooring Master's launch. At night adequate lighting should be provided.

MAX. SIZE: The tanker buoy mooring is designed for a vessel of 20,000 d.w.t., 26,700 tons displacement, LOA 600 ft., and max. draft of 31 ft.

RADIO: Vessels arriving between 0700 hrs.–2300 hrs. (local time) should contact "Balantang Base" on VHF Channel 16 four hours before arrival to confirm arrival time.

Notice of Arrival: 72 hours prior to the arrival at Malili or Mangkasa tanker terminal, the Master has to cable his ETA to "Inco Ujungpandang" through Ujung Pandang coastal radio station which then, will be passed on to Malili or Mangkasa coastal radio station.

The Master has to reconfirm or amend the ETA 48 hours and 24 hours before arrival at the port.

The cable address of "P.T. International Nickel Indonesia" (P.T. "Inco") of Ujung Pandang is Nikel Indonesia Ujung Pandang.

The coastal radio station of Ujung Pandang has the following particulars:

Name of station: Ujungpandang Radio.
Call sign: PKF.
Frequency: 465–500–8686–13101 kHz (A1), and 4409–2182–6518.6–8738.4 kHz (A3).
Power: 1 kW.
Service hours: See book of Indonesia Coastal Radio Stations.
Geographical location: 05° 06′ 30″ S. 119° 26′ 20″ E.

Details of Cable: The information cable should give the following data:

1. Name of vessel and radio call sign.
2. ETA in GMT and date (local time, GMT plus 8 hours).
3. The quantity of cargo to be discharged.
4. Maximum discharging capacity (for tanker only).
5. Vessel's draft on arrival.
6. If there is any sick crew on board or clean bill of health.
7. Last port of call.
8. Any hull, bulkhead or valve leakages which may cause pollution (for tanker only).
9. Distance in feet from bow to vessel's manifold connection.
10. Flange dimensions of vessel's manifold.
11. Any requirements such as provisions, fresh water, etc.

Language: The languages used are Indonesian and English.

BERTHING: Mangkasa Sea Tanker Terminal: Mangkasa sea tanker terminal is an offshore system with 4 fixed anchors connected to buoys which have a quick release mooring system. Buoys are located to suit 20,000 tonners with 2 buoys on the bow and 2 buoys at the stern. These buoys are not lit.

Connection to tank farm is via 12 in. flexible hose joined to 20 in. undersea pipe to the tanks. The flexible hose is fitted with a 12 in.×150 lb. ASA flange.

If the jetty of Mangkasa tanker terminal or "four mooring buoys" is unoccupied and has been fixed for certain vessel, the vessel will be boarded by a Mooring Master in the anchorage area providing that the vessel in all respects ready to commence discharging her cargo. The NOR tendered by the Master concerned will be accepted at the time the Mooring Master boards.

Anchoring: A vessel which has to anchor on arrival due to certain circumstances has to inform Balantang Base (VHF Channel 16) of her exact time of arrival at the port. This is important for adjusting the acceptance of the NOR tendered, providing:

1. It is within daylight i.e. 0600 to 1800 hrs. local time. The NOR is considered to be accepted at the time the Mooring Master boards. Should the vessel have been at anchor, NOR is also accepted at the time the anchor is aweigh providing the Mooring Master is already onboard the ship.

2. It is not a public holiday or Sunday, unless the vessel is actually handled on that day.

3. The port is still open.

In addition to the above conditions, vessels arriving at an unreasonable time ahead of their last signalled estimated time of arrival will not be accepted.

Exact Time of Arrival: It is stressed that every Master has to advise the Port Control of his exact time of arrival to avoid unfavourable situations.

Work Crew Service: Mooring and unmooring, lifting, lowering, connecting and disconnecting hoses will be done by a terminal work crew under the direction of the Mooring Master. Assistance from ship's personnel in operating windlasses, winches etc., will be required.

Tanker Engines and Hose Lifting Derrick: Being an open roadstead, vessels must keep engines on stand-by during their stay in the berth. No repairs to main engines may be undertaken while in berth. Power must be kept on deck winches in case adjustments to mooring lines are found necessary. Ship's booms and deck winch must be capable of operating with a SWL in conformance with table shown on Page C2 of Appendix C to the International Oil Tanker and Terminal Safety Guide. Vessels with inadequate hose lifting equipment will be rejected.

Safety: Every vessel which berths at the buoys shall remain under the charge of the Master who will take all steps necessary to preserve the safety and security of such vessel, crew and terminal personnel who may board in the execution of their various duties.

The Master of every vessel at anchor in the designated anchorage or secured to the mooring buoys shall ensure that all parts of the vessel to which any person may be lawfully required to proceed are properly illuminated.

Efficient and easy means of access shall be provided to every vessel at anchor and at the mooring buoys and such access shall be adequately illuminated between sunset and sunrise.

No person(s) shall be permitted to board or leave the vessel other than by the gangway or other proper means provided for the purpose.

The Mooring Master may require the vessel to unmoor at any time he deems necessary for the safety of the vessel or the moorings or both or for infringement of Port Regulations.

Unsatisfactory conditions will be reported to the company's Logistic Superintendent, who is empowered to reject a vessel for future calls unless the reported deficiencies have been remedied.

Sufficient crew members must be immediately available at all times to assist with any or all operations on board the vessel at the terminal.

MEDICAL: Treatment possible at the Nickel Projects hospital at Soroako, about 60 km. from Malili.

FRESH WATER: Not available.

FUEL: Not available.

CONSULS: None.

REPATRIATION: Crew changes especially foreign crew are difficult to arrange.

REPAIRS: No facilities.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wine, beers, perfume, arms, ammunition and possibly other items have to be locked up under Customs and sealed from time the ship arrives in port until she leaves territorial waters.

Each person is allowed to bring in 200 cigarettes or equivalent in grams of tobacco or cigars. Special allowances are made for the Master under special circumstances. The Customs officials will seal the stores.

SERVICES: Provisions and stores not available.

AIRPORT: P.T. "Inco" operate a charter flight between Malili and Ujung Pandang (formerly Makassar) twice a day with a Twin Otter aircraft, flying time 1 hour.

GENERAL: *Chart:* Chart for the area is the Republic of Indonesian Chart No. 319 (The Gulf of Bone).

Facilities: Malili region in which nickel ore mine exploration is taking place is a newly opened region, isolated in the middle of the jungle. It is, therefore, not surprising if no facilities are available at present.

AGENCY: Owners have to appoint one of the Indonesian shipping companies as their general Agent for Indonesia. This shipping company will then appoint P.T. "Inco" to be their sub-agent for the port of Malili and/or Mangkasa tanker terminal to attend the arriving vessel.

The agency appointment which should be confirmed by official company letter which has to be received at least 10 days prior to the ship's arrival at Malili port or Mangkasa tanker terminal to give the general Agent a chance to arrange the necessary permits from the Indonesian government.

MUNTOK: 02.04 S. 105.10 E.

DOCUMENTS:
Register Book.
Load-line Certificate.
Derat Certificate.
Harbour Report.
Radio Certificate.
Nationality Certificate.
Safety Equipment Certificate.
Port of Call List.
Last Port Clearance.
Light dues Payment.
Health Book.
6 copies Crew List.
3 copies Store List.
6 copies Passenger List (if any).
Navy Book.
Next Port Manifest from every port.
Vaccination Certificates.
All loading Custom paper from every port.

PILOTAGE: Not available.

ANCHORAGE: Safe anchorage in 10 m.

RESTRICTIONS: None.

MAX. SIZE: 2 m. draft at quay length 100 m., breadth 30 m.

RADIO: Not available.

TUGS: 7 tugboats available for communication between shore and ships, with capacity 340 h.p. each.

BERTHING: Anchorage 165° Tg. Kalian, 2 miles from shore. Only small vessels draft 7 ft. alongside quays.

STEVEDORES: Ordered by Agent.

MEDICAL: Facilities available.

TANKERS: No facilities.

FRESH WATER/FUEL: None.

CUSTOMS ALLOWANCES: 200 cigarettes per man; 1 bottle per man.

IDENTIFICATION CARDS: Not necessary.

CONSULS/REPAIRS/DRY DOCKS: None.

AIRPORT: None.

HOLIDAYS: On Moslem holidays, no cargo work.

SHORE LEAVE: After receiving permit issued by Chief of Police.

REGULATIONS: Customs, Harbour Master, Police Maritime, visit ship on arrival.

DELAYS: Delays due shortage lighter space.

PALEMBANG: 02.59 S. 104.45 E.

DOCUMENTS: Upon arrival ships have to fill in the following Forms:
Harbour Report obtainable from the boarding Pilot, or from the Harbour Master.
Pilot's Certificate.

Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Derat (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
10 copies Crew List.
6 copies Passenger List.
2 copies Ship's Articles.
2 copies Store List.
Manifests.
Bills of Lading.

Maritime Declaration to be completed by Master upon arrival, obtainable from boarding Quarantine officer, or via Agency.

ARRIVAL: 2 days before arrival of vessel, the ship's Agent has to inform the Port Administration, by completing appropriate forms. Copies of completed forms must also be submitted to the Harbour Master, Port Health Service, Immigration, Customs and Security for preparations of services.

Agent/Owners to advise Port Administration (Pilot Division) of vessels arrival 24 hours in advance.

PILOTAGE: Compulsory, consisting of Outer (River) and Harbour Pilot. Applications should be cabled to pilot vessel via Palembang Radio Station. Pilot vessel located at station position Lat. 02° 11′ 08″ S. Long. 104° 57′ 08″ E.

The Pilot may berth the vessel on request of the ship's Agent only after obtaining clearance from the Port Administrator, Harbour Master, Port Health Service and Immigration (foreign vessels only).

Vessels arriving in afternoon and unwilling to navigate the river in darkness should not hoist the Pilot signal. The signal station is at the aforementioned pilot vessel, which answers the pilot signal as follows: By night:

A flare-up light slightly over the railing, or waving with a white light means: Pilot will soon board the vessel. 1 red light vertical over a white light means: No Pilot available, vessel allowed to proceed until Pilot is met.

MACASSAR (Ujang Pandang): 05.08 S. 119.24 E. (See Plan Book)

DOCUMENTS:
Certificate of Registry
Crew List
Log Book
Certificate of Seaworthiness
Load Line Certificate
Radio Certificate (Solas Certificate)
Health Certificate
Equipment Certificate (Solas Certificate)
Shipping documents as follows:
Manifest of cargo
Bills of Lading
Charter Party (if necessary)

PILOTAGE: Pilotage compulsory for vessels of more than 150 cu.m. in gross volumes.

To order a Pilot:

1. Contact the ship's Agent in this port via Macassar Radio (call sign PKF) by ship's radio or VHF Channel 16.
2. Also contact Macassar Pilot's station tower by VHF Channel 16.

Pilotage Information:

1. Every vessel of 71 m. LOA and over under Pilot's direction for berthing and unberthing is to use the Port Administration tugs.

There are 2 tugs available with initial letters "PA" on their blue funnel,
M.T. "Anggada VII" 800 h.p.
M.T. "Selat Tanakeke" 1,160 h.p.

2. Every vessel of 31 m. LOA and over, under Pilot's direction for berthing and unberthing is to be assisted by Port Administration mooring boat.

ANCHORAGE: The anchorage for vessels awaiting a Pilot is around the position 05° 07′ 30″ S. and 119° 22′ 30″ E. with depth of water 25 m. at LWS.

RESTRICTIONS: Every foreign vessel is to have special permission from Indonesian Government or Directorate General of Sea Communication for entering and should have representatives or handling Agent before entering this port.

Warships should contact the Indonesian Navy Commander of Territory VII (Pangdaeral VII) before entering the port.

MAX. SIZE: No length or beam restriction. Depth alongside is governing factor.

RADIO: See "Pilotage".

TUGS: See "Pilotage".

BERTHING: *Depths of water:*
Main entrance channel: 13 m. at LWS.
Soekarno wharf: 8.5 m. to 9.5 m. at LWS.
Hatta wharf: 9.5 m. at LWS.
Oil Jetty (Pertamina Jetty): 8 m. at LWS.
Anchorage in the inner waters: 11 m. at LWS.

Special attention in West monsoons (November to February):
All vessels alongside Soekarno and Hatta Wharf should use fore and aft mooring lines to buoys which are available, to prevent the beating of ship's hull against the wharf.

STEVEDORES: Stevedoring by Port Labour (UKA). Capacity for discharging: 12 ton gang/hour – General Cargo. 17 ton gang/hour – Bulk Cargo (in bags). Heavy cranes available, capacity 15 tons.

MEDICAL: Doctor and clinic available.

FRESH WATER: Available rate 50 t.p.h.

FUEL: Available, MFO 50 t.p.h.

GANGWAY/DECK WATCHMEN: There are no special deck watchmen services but can be arranged through Agent.

OPENING/CLOSING HATCHES: Work carried out by stevedores.

CUSTOMS ALLOWANCES: Tobacco. Only sufficient for personal use (500 grams tobacco or 200 cigarettes for one passenger).

Wine and/or spirits not permitted out of bond.

IDENTIFICATION CARDS: Needed by Immigration Office.

CONSULS: Japan and Norway.

REPAIRS: Minor deck or engine repairs possible.

AIRPORT: Macassar Airport, called "Mandai Airport", distance from town about 23 km.

Services: Macassar–Kendari and Jakarta–Surabaya–Macassar Manado every day (3 times a day). Macassar–Ambon–Jayapura.

TIME: Middle Indonesian Time, GMT plus 8 hours.

HOLIDAYS: Every Sunday; New Year (January 1st); Idul Adha (November 11th); 1st Muharam 1399 H. Isa Almasih (May 15th); Proclamation Day (August 17th); Mi'radj Muhammad (July 3rd); Idul Fitri (September 9th); Maulud Muhammad (February 20th); Santa Maria (May 15th); Christmas Day (December 25th). Work can be arranged at overtime rates.

POLICE/FIRE/AMBULANCE: Police, Fire 4306. Ambulance 7227.

TELEPHONES: No arrangements exist for placing telephones on board.

DELAYS: Caused by rain (bad weather).

DEVELOPMENTS: In near future, Macassar to have bonded warehouse, godown for dangerous cargoes and be able to handle containers.

AUTHORITY: Department of Communication, Directorate of Sea Communication, Port Administration Macassar. 6th Sea Communication Regional Office, Ujang Pandang.

MALILI: 02.39 S. 120.59 E. (See Plan Book)
MANGKASA: 02.44 S. 121.04 E. (See Plan Book)

OPERATOR: P.T. International Nickel Indonesia (P.T. Inco).

LOCATION: Malili and Mangkasa Tanker Terminal are situated in the Gulf of Bone, South Sulawesi about 300 miles N.E. of Ujung Pandang.

Malili:
Malili port is situated in the Gulf of Bone, South Sulawesi about 5 miles from Mangkasa sea tanker terminal.

Vessels arriving at Malili port must remain in the roads anchorage, anchorage light buoy (Qk. Fl.) in position 02° 42′ 30″ S. and 121° 01′ 40″ E. Anchorage is to the South of the buoy and having average depth of more than 20 m. (LWS)

This port *is to be assigned for* dry general cargo discharging and loading of nickel ore.

The sea chart to be used is Indonesian Chart No. 319.

Mangkasa Sea Tanker Terminal:
The terminal is located at 02° 44′ 25″ S. and 121° 04′ 00″ E. This terminal is provided for tankers of about 20,000 d.w.t. which are to be equipped with hose lifting derrick at the port side manifold.

The sea terminal itself consists of a four buoy mooring.

The hose has a diameter of 12 in. and fitted with 12 in. × 150 lb. ASA flange. The submarine pipe diameter is 20 in.

FLAGS: In accordance with the practice in Indonesian ports, the vessel's national flag, the Indonesian courtesy ensign, quarantine, immigration, Pilot and call sign flags must be displayed by all vessels approaching the port. These signals shall be displayed continuously until clearance is granted.

The above mentioned signals are:
Sunrise to sunset: quarantine flag "Q".
Sunset to sunrise: signal lights red over white.

The flag "N" should be flown until the Immigration Officer boards the ship. The "G" flag should be flown until the Pilot boards.

The vessel should also fly its call sign until the vessel is secured in the berth. These call sign flags must be flown again when the vessel is sailing until the vessel is clear of the anchorage area and the Pilot has departed.

The "G" flag should be replaced by "H" flag if the Pilot is already aboard the vessel.

The "P" flag may may be flown if the vessel is going to sail within 24 hours.

DOCUMENTS: Indonesian Immigration, Customs and Port officials will board the vessel to grant clearance. Each crew member should be in possession of an International Vaccination Card and passport.

The following documents may be required for granting pratique for the vessels arriving from foreign ports:
Certificate of Registry.
Ship's Construction Certificate.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio/Telephone/Telegraph Certificate.
Exemption Certificate.
Cargo Gear Certificate and Derat Certificate.
The last Port Clearance and Crew Lists are also required.

Flag Dispensation: All foreign vessels entering Indonesian ports must have requested and been granted Flag Dispensation prior to the arrival at the port. Also a loading or discharging permit must have been applied for from the authority concerned. All this will be done by the general Agent.

PILOTAGE: A Mooring Master will board the vessel in the anchorage area and advise the Master on all manoeuvres relative to berthing and unberthing and connecting the hoses.

Vessels are requested to make a lee and have an accommodation ladder long enough to reach the Mooring Master's launch. At night adequate lighting should be provided.

MAX. SIZE: The tanker buoy mooring is designed for a vessel of 20,000 d.w.t., 26,700 tons displacement, LOA 600 ft., and max. draft of 31 ft.

RADIO: Vessels arriving between 0700 hrs.–2300 hrs. (local time) should contact "Balantang Base" on VHF Channel 16 four hours before arrival to confirm arrival time.

Notice of Arrival: 72 hours prior to the arrival at Malili or Mangkasa tanker terminal, the Master has to cable his ETA to "Inco Ujungpandang" through Ujung Pandang coastal radio station which then, will be passed on to Malili or Mangkasa coastal radio station.

The Master has to reconfirm or amend the ETA 48 hours and 24 hours before arrival at the port.

The cable address of "P.T. International Nickel Indonesia" (P.T. "Inco") of Ujung Pandang is Nikel Indonesia Ujung Pandang.

The coastal radio station of Ujung Pandang has the following particulars:
Name of station: Ujungpandang Radio.
Call sign: PKF.
Frequency: 465–500–8686–13101 kHz (A1), and 4409–2182–6518.6–8738.4 kHz (A3).
Power: 1 kW.
Service hours: See book of Indonesia Coastal Radio Stations.
Geographical location: 05° 06′ 30″ S. 119° 26′ 20″ E.

Details of Cable: The information cable should give the following data:

1. Name of vessel and radio call sign.
2. ETA in GMT and date (local time, GMT plus 8 hours).
3. The quantity of cargo to be discharged.
4. Maximum discharging capacity (for tanker only).
5. Vessel's draft on arrival.
6. If there is any sick crew on board or clean bill of health.
7. Last port of call.
8. Any hull, bulkhead or valve leakages which may cause pollution (for tanker only).
9. Distance in feet from bow to vessel's manifold connection.
10. Flange dimensions of vessel's manifold.
11. Any requirements such as provisions, fresh water, etc.

Language: The languages used are Indonesian and English.

BERTHING: Mangkasa Sea Tanker Terminal: Mangkasa sea tanker terminal is an offshore system with 4 fixed anchors connected to buoys which have a quick release mooring system. Buoys are located to suit 20,000 tonners with 2 buoys on the bow and 2 buoys at the stern. These buoys are not lit.

Connection to tank farm is via 12 in. flexible hose joined to 20 in. undersea pipe to the tanks. The flexible hose is fitted with a 12 in.×150 lb. ASA flange.

If the jetty of Mangkasa tanker terminal or "four mooring buoys" is unoccupied and has been fixed for certain vessel, the vessel will be boarded by a Mooring Master in the anchorage area providing that the vessel in all respects ready to commence discharging her cargo. The NOR tendered by the Master concerned will be accepted at the time the Mooring Master boards.

Anchoring: A vessel which has to anchor on arrival due to certain circumstances has to inform Balantang Base (VHF Channel 16) of her exact time of arrival at the port. This is important for adjusting the acceptance of the NOR tendered, providing:

1. It is within daylight i.e. 0600 to 1800 hrs. local time. The NOR is considered to be accepted at the time the Mooring Master boards. Should the vessel have been at anchor, NOR is also accepted at the time the anchor is aweigh providing the Mooring Master is already onboard the ship.

2. It is not a public holiday or Sunday, unless the vessel is actually handled on that day.

3. The port is still open.

In addition to the above conditions, vessels arriving at an unreasonable time ahead of their last signalled estimated time of arrival will not be accepted.

Exact Time of Arrival: It is stressed that every Master has to advise the Port Control of his exact time of arrival to avoid unfavourable situations.

Work Crew Service: Mooring and unmooring, lifting, lowering, connecting and disconnecting hoses will be done by a terminal work crew under the direction of the Mooring Master. Assistance from ship's personnel in operating windlasses, winches etc., will be required.

Tanker Engines and Hose Lifting Derrick: Being an open roadstead, vessels must keep engines on stand-by during their stay in the berth. No repairs to main engines may be undertaken while in berth. Power must be kept on deck winches in case adjustments to mooring lines are found necessary. Ship's booms and deck winch must be capable of operating with a SWL in conformance with table shown on Page C2 of Appendix C to the International Oil Tanker and Terminal Safety Guide. Vessels with inadequate hose lifting equipment will be rejected.

Safety: Every vessel which berths at the buoys shall remain under the charge of the Master who will take all steps necessary to preserve the safety and security of such vessel, crew and terminal personnel who may board in the execution of their various duties.

The Master of every vessel at anchor in the designated anchorage or secured to the mooring buoys shall ensure that all parts of the vessel to which any person may be lawfully required to proceed are properly illuminated.

Efficient and easy means of access shall be provided to every vessel at anchor and at the mooring buoys and such access shall be adequately illuminated between sunset and sunrise.

No person(s) shall be permitted to board or leave the vessel other than by the gangway or other proper means provided for the purpose.

The Mooring Master may require the vessel to unmoor at any time he deems necessary for the safety of the vessel or the moorings or both or for infringement of Port Regulations.

Unsatisfactory conditions will be reported to the company's Logistic Superintendent, who is empowered to reject a vessel for future calls unless the reported deficiencies have been remedied.

Sufficient crew members must be immediately available at all times to assist with any or all operations on board the vessel at the terminal.

MEDICAL: Treatment possible at the Nickel Projects hospital at Soroako, about 60 km. from Malili.
FRESH WATER: Not available.
FUEL: Not available.
CONSULS: None.
REPATRIATION: Crew changes especially foreign crew are difficult to arrange.
REPAIRS: No facilities.
CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wine, beers, perfume, arms, ammunition and possibly other items have to be locked up under Customs and sealed from time the ship arrives in port until she leaves territorial waters.

Each person is allowed to bring in 200 cigarettes or equivalent in grams of tobacco or cigars. Special allowances are made for the Master under special circumstances. The Customs officials will seal the stores.

SERVICES: Provisions and stores not available.
AIRPORT: P.T. "Inco" operate a charter flight between Malili and Ujung Pandang (formerly Makassar) twice a day with a Twin Otter aircraft, flying time 1 hour.
GENERAL: *Chart:* Chart for the area is the Republic of Indonesian Chart No. 319 (The Gulf of Bone).

Facilities: Malili region in which nickel ore mine exploration is taking place is a newly opened region, isolated in the middle of the jungle. It is, therefore, not surprising if no facilities are available at present.

AGENCY: Owners have to appoint one of the Indonesian shipping companies as their general Agent for Indonesia. This shipping company will then appoint P.T. "Inco" to be their sub-agent for the port of Malili and/or Mangkasa tanker terminal to attend the arriving vessel.

The agency appointment which should be confirmed by official company letter which has to be received at least 10 days prior to the ship's arrival at Malili port or Mangkasa tanker terminal to give the general Agent a chance to arrange the necessary permits from the Indonesian government.

MUNTOK: 02.04 S. 105.10 E.

DOCUMENTS:
Register Book.
Load-line Certificate.
Derat Certificate.
Harbour Report.
Radio Certificate.
Nationality Certificate.
Safety Equipment Certificate.
Port of Call List.
Last Port Clearance.
Light dues Payment.
Health Book.
6 copies Crew List.
3 copies Store List.
6 copies Passenger List (if any).
Navy Book.
Next Port Manifest from every port.
Vaccination Certificates.
All loading Custom paper from every port.

PILOTAGE: Not available.
ANCHORAGE: Safe anchorage in 10 m.
RESTRICTIONS: None.
MAX. SIZE: 2 m. draft at quay length 100 m., breadth 30 m.
RADIO: Not available.
TUGS: 7 tugboats available for communication between shore and ships, with capacity 340 h.p. each.
BERTHING: Anchorage 165° Tg. Kalian, 2 miles from shore. Only small vessels draft 7 ft. alongside quays.
STEVEDORES: Ordered by Agent.
MEDICAL: Facilities available.
TANKERS: No facilities.
FRESH WATER/FUEL: None.
CUSTOMS ALLOWANCES: 200 cigarettes per man; 1 bottle per man.
IDENTIFICATION CARDS: Not necessary.
CONSULS/REPAIRS/DRY DOCKS: None.
AIRPORT: None.
HOLIDAYS: On Moslem holidays, no cargo work.
SHORE LEAVE: After receiving permit issued by Chief of Police.
REGULATIONS: Customs, Harbour Master, Police Maritime, visit ship on arrival.
DELAYS: Delays due shortage lighter space.

PALEMBANG: 02.59 S. 104.45 E.

DOCUMENTS: Upon arrival ships have to fill in the following Forms:
Harbour Report obtainable from the boarding Pilot, or from the Harbour Master.
Pilot's Certificate.

Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Derat (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
10 copies Crew List.
6 copies Passenger List.
2 copies Ship's Articles.
2 copies Store List.
Manifests.
Bills of Lading.

Maritime Declaration to be completed by Master upon arrival, obtainable from boarding Quarantine officer, or via Agency.

ARRIVAL: 2 days before arrival of vessel, the ship's Agent has to inform the Port Administration, by completing appropriate forms. Copies of completed forms must also be submitted to the Harbour Master, Port Health Service, Immigration, Customs and Security for preparations of services.

Agent/Owners to advise Port Administration (Pilot Division) of vessels arrival 24 hours in advance.

PILOTAGE: Compulsory, consisting of Outer (River) and Harbour Pilot. Applications should be cabled to pilot vessel via Palembang Radio Station. Pilot vessel located at station position Lat. 02° 11′ 08″ S. Long. 104° 57′ 08″ E.

The Pilot may berth the vessel on request of the ship's Agent only after obtaining clearance from the Port Administrator, Harbour Master, Port Health Service and Immigration (foreign vessels only).

Vessels arriving in afternoon and unwilling to navigate the river in darkness should not hoist the Pilot signal. The signal station is at the aforementioned pilot vessel, which answers the pilot signal as follows:
By night:

A flare-up light slightly over the railing, or waving with a white light means: Pilot will soon board the vessel. 1 red light vertical over a white light means: No Pilot available, vessel allowed to proceed until Pilot is met.

By day:

1. The international flag signal KYS from the International Code of Signal meaning: Pilot unable to attend due to motor defect or heavy seas. The Pilot can be picked up by ship's motor-boat.

2. The flag signal KKO meaning: No Pilot available, vessel allowed to proceed until Pilot is met.

Use of Harbour Pilot in Palembang is compulsory.

ANCHORAGE: *Musi Bar:* anchorage position Lat. 2° 08′ 30″ S., Long. 104° 58′ 30″ E., in depth of 9 fathoms, used for topping up ocean tankers from river craft.

RESTRICTIONS: Palembang is 54 miles upstream. The main entrance is the river arm between Tg. Tjarat and Tg. Gedeh.

Depths from sea to Palembang:

Outer Bar	45 DM at mean level
For incoming vessels Channel East of Pajung	42 DM ,, ,,
For outgoing vessels Channel West of Pajung	45 DM ,, ,,
Channel South of the light-buoy South of Pajung	48 DM ,, ,,
Bar of Kupang	50 DM ,, ,,
Bar downstream of Kampung-Peradjen (9 miles from Palembang)	50 DM ,, ,,
Bar downstream of S. Lais (opposite Kundur)	50 DM ,, ,,

Incoming ships have priority in passing the Outer Bar from 2 hours to 1 hour prior to HW. From 2 hours to 45 minutes prior to HW, outgoing ships have to wait between Tangjung Gedeh and Tandjung Tjarat.

Channel East of Pajung for incoming ships.

Channel West of Pajung for outgoing ships.

MAX. SIZE: Max. length 185 m. Max. draft 7.5 m.

HEALTH: Vessels arriving from abroad have to apply well in advance from the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port. The provisional free pratique is only valid for this port, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.

RADIO: Call sign PKC.

Time operating (GMT). Frequency 500/448 kHz; 0000/0100, 0400/0500, 0800/0900, 1200/1300 hrs. Frequency 8706 kHz: A.I 0100/0200, 0500/0600, 0900/1000, 1300/1400 hrs. Frequency 8799, 2 kHz: A.III 0200/0230, 0600/0630, 1000/1030 hrs.

VHF Channel 16, 20, 22, 26 and 28. Time operating (local time) 0700/1330, 1500/1730, 1900/2100 hrs.

VHF:

Harbour Master	Channel 14
Pilot	Channel 12
Tugboat Operations	Channel Not known
Port Operations	Channel 12 – 16
Safety/Security	Channel 09 – 12 – 16

TUGS: Vessels over 60 m. length are required to use at least 1 tug. 3 tugs available, 60 h.p., 650 h.p. and 1,100 h.p. 2 fire-fighting tugs at Pertamina, 750 and 850 h.p.

BERTHING: Anchorage in the vicinity of the quay, see chart for prohibited anchorage.

Harbour Board Quay: Berth length 450 m., depth alongside 5.5 m., depth front/middle 6/8 m.

Pusri Wharf (fertiliser plant) Left Bank: Wharf No. 1, length 140 m. No. 2, 116 m. No. 3, 110 m. No. 4, 120 m. Depth alongside, 8 m.

Coal Wharf – Kertapati Quay (Right Bank): Berth length 250 m., depth alongside 5.5 m. Situated 2.7 miles upstream from Harbour board quay.

Plaju and Sungai Gerong:

Wharf No.	*Length (m).*	*Depth (m).*
1	19	9
2	100	9
3	19	10
4	18	9
5	114	9
6	9	9
Lemabang	12	4.5
7	62	9
8	34	9
9	35	9
10	34	9
11	100	9
12	36	12

CRANES: *Palembang:* (Mobile cranes). 1 at 7 tons capacity, 1 at 10 tons, 3 at 15 tons, 2 at 18 tons, 1 at 25 tons and 1 at 30 tons.

There are 17 fork-lift trucks available, capacity 2 tons – 15 tons.

Pusri: 2 mobile cranes, capacity 5 and 7.5 tons. 3 shore cranes, capacity 25, 40 and 100 tons.

Plaju and Sungai Gerong: 3 Mobile cranes, capacity 15, 30 and 45 tons. 3 shore cranes, 1 at 15 tons and 2 at 5 tons.

MEDICAL: Hospital and First Aid available.

TANKERS: Pladju Terminal (Right Bank): Downstream of Harbour Board quay operated by P. N. Pertamina Unit II (Pladju) (ex-Shell).

Sungai Gerong Terminal (Right Bank): Downstream of Harbour Board quay, operated by P. N. Pertamina Unit II Sungai Gerong (ex-Stanvac).

DENSITY: 1000.

STEVEDORES: According to the requirements of the vessel concerned, labourers are requested from the U.K.A. (Port Labour Pool).

The usual working hours at the harbour are:

Monday – Thursday	0800 – 1200 hrs. 1300 – 1600 hrs.
Friday	0800 – 1100 hrs. 1300 – 1600 hrs.
Saturday	0800 – 1200 hrs. 1300 – 1400 hrs.

Overtime is allowed on request.

FUEL: Obtainable from Pertamina provided payment is arranged in advance through their Head Office in Jakarta. Delivery by pipe-line or barge.

FRESH WATER: Piped water supply is at 15/20 t.p.h., and through water barges is at 50/60 t.p.h. Water barge capacity 100 tons.

REPAIRS: Facilities available.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS ALLOWANCES: 200 cigarettes or 50 cigars or 100 grams of tobacco. There is no alcohol allowance.

TIME: The Port is located in the zone of Western Indonesian Time, which is based on the time at the meridian of 104° 46′ 36″ East Longitude.

AIRPORT: Talang Betutu Airport is approximately 12 km. from the port.

POLICE/FIRE/AMBULANCE: Security – 22386, Fire 20451/22386, Ambulance 22531.

IDENTIFICATION CARDS: Crew members having no passport are required to carry a Seaman's Identification Card (S.I.C.). A re-entry into country if there is no S.I.C.

REPATRIATION: A valid document is needed. A re-entry permit from the country concerned is sufficient, if there is no passport available.

CUSTOMS/NAVY REG.: Upon vessels arrival/departure, boarding team will come on board consisting of:

2 Navy Officers.

2 Customs Officers.

2 Health Officers (in case vessels coming from infected ports or abroad).

2 Immigration Officers (in case vessels coming from abroad only).

3 Clerks from Agents.

Nobody allowed on board until this team declares the vessel cleared.

AUTHORITY: Port Administrator.

PANARUKAN: 07.42 S. 113.56 E.

DOCUMENTS:

Port Clearance.
5 B/Model/Customs Clearances.
Customs papers.
Store List.
Crew List.
Passenger List.
Light Dues Certificate.
Seaman's Book and Health Certificate.
Ship's Registry.
Load Line Certificate.
Safety Radio Certificate.
Derat Certificate.
Certificate of Nationality.
Tonnage Certificate.
Suez Canal Certificate.
Dispensation for Deck and Engineer Officers.

PILOTAGE: Not available.

ANCHORAGE: With bearings: Patjaron Hill, 275°; white light, 128°; red light, 187°. This anchorage leaves ship 300 m. from 20 m. line and over 500 m. from 7.5 m. patch.

RESTRICTIONS: No restrictions, vessel may enter and leave port at any time.

MAX. SIZE: In anchorage position draft permissible up to 15 m.

HEALTH: Pratique will be arranged by Agent and especially if the ship is just coming from a country suspected of special disease or fever, otherwise pratique is automatic and a quarantine doctor boards.

RADIO: *(a)* Coastal station: Call sign, PKD 2; medium wave, 500 kHz; WF, 474 kHz; working hours GMT, 2400–0100 hrs., 0400–0500 hrs. *(b)* Fixed station: Call sign, 8 AD 3; short wave, 8 MHz; working hours GMT, 0100–0400 hrs., 0500–0600 hrs.

TUGS: Tugs join vessel at anchorage position. Vessel can use tug's lines and the Agent will arrange. Usual charge for use of tug's lines.

BERTHING: There are no berths alongside.

STEVEDORES: 24 hours before ETA advice needed to arrange gangs.

MEDICAL: Hospital facilities available, vaccination/fever Certificates for crew can be issued by authority.

FRESH WATER: No facilities.

FUEL: No facilities.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: No restriction as long as goods remain on board ship.

CARGO GEAR: All gear supplied by stevedores except rain tent.

IDENTIFICATION CARDS: Needed if crew going ashore.

CONSULS: No local representation.

REPAIRS: No facilities.

TIME: GMT plus 7 hours.

HOLIDAYS: Sundays, 1st January; 17th February; 9th March; 7th May; 18th May; 15th August; 17th August; 28th September; 30th November; 1st December; 25th December. Work cannot be arranged on 30th November and 17th August but on other holidays cargo work can be arranged.

SHORE LEAVE: Can be arranged.

PANGKALAN SUSU: 04.07 N. 98.13 E.

PILOTAGE: Pilot obtainable.

ANCHORAGE: Suitable anchorage for vessels up to 40,000 d.w.t. at outer bar.

TUGS: 2 tugs available, each of 400 h.p.

BERTHING: Alongside wharf max. draft 5 m., overall length 95 m. Depth at LWS 3 m.

TANKERS: Pertamina/Japanese Terminal: A single buoy mooring situated 17 km. offshore in 15 m. depth of water. Mooring designed for vessels up to 150,000 tons. Loading rate 3,000 t.p.h.

SHIPMASTER'S REPORT: December 1978.

Location: Lat. 04° 13′ 05″ N., Long. 98° 24′ 30″ E.

Time: GMT plus 7 hours.

General: Normally weather is fair with moderate variable winds. But from November to March there are very often very strong North-Easterly winds together with heavy rain showers and thunderstorms. There are 2 tides a day, following the coast-line. The current on flood tide sets from N-buoy to S-buoy, the ebb tide sets from S-buoy to N-buoy. The depths around the SBM inside of these buoys are between 18 m. to 25 m. Vessels up to 100,000 d.w.t. are berthed at the SBM. The density is approximately 1023.

For approaching B.A. Chart No. 1353 is used. The Operator of the Terminal is Pertamina, Pangkalan Susu.

Navigation: Agent in Pangkalan Susu is Pertaminaship. Cable address is Pertaminaship Pangkalan Susu. ETA cables should be sent 72, 48 and 24 hours prior to arrival. First ETA should include the requested cargo.

Pangkalan Susu Radio belongs to Pertamina. Call sign is "PKBZ". Frequency 6456.5 kHz, calling band 6 mHz. The working hours are from 0700 to 1900 hrs.

VHF Channel for calling (Susu Radio) Channel 16, working Channel 12, 19, 20 and 24 for information. No radio pratique.

On arrival vessel has to anchor 2 miles East of SBM. At the anchorage the Pilot boards with the Loading Master and 7 crew, after the vessel is cleared by the Port Authorities. All stay on board to assist berthing and connecting cargo hose, and vessel has to supply food and accommodation. Regarding food – they are all very strict Moslems. They will also stay until the loading operation is completed.

Pilotage is compulsory (Government Pilot). A vessel will berth only during daylight, but unmooring day and night. After which the vessel has to anchor to await cargo papers.

Vessel must arrive with sufficient clean ballast for berthing at the SBM. Pilot ladder only is required.

Berthing at the SBM is normal SBM procedure with messenger rope from the vessel to pick up 1 rope only from the SBM. Then 3 ship ropes, eyes going from the vessel to the SBM and then back to the vessel again. During the vessel's stay at the SBM one tug is made fast with the ship's rope aft and the tug keeps the vessel clear of the SBM.

Tugs: Three tugs are used as follows:

1 tug 300 h.p. for floating hose.
1 tug 300 h.p. for line handling during mooring.
1 tug 1,700 h.p. for towing the vessel off the SBM and keeping her clear during the whole operation.

Steam turbine vessels have to run their turbine with 3–5 revs astern during their stay at the SBM and the tug aft.

Wharves/Buoys: SBM Pangkalan Susu is situated at Lat. 4° 13′ 05″ N., and Long. 98° 24′ 30″ E. and has a diameter of 15 m. and a height of 4.4 m. The buoy is an orange colour and has a red light with 3 long flashes, also 1 floating hose with 12 in. diameter. The SBM is used for export production of Katapa Crude and North Sumatra Crude. Four buoys are situated around the SBM within 1,000 m. of the SBM. Their positions are as follows:

"N"–Buoy	Lat. 4° 13′ 38.5″ N.,	Long. 98° 24′ 30″ E.
"S"–Buoy	Lat. 4° 12′ 40.0″ N.,	Long. 98° 24′ 30″ E.
"E"–Buoy	Lat. 4° 13′ 04.0″ N.,	Long. 98° 25′ 30″ E.
"W"–Buoy	Lat. 4° 13′ 04.0″ N.,	Long. 98° 23′ 57″ E.

The depth of water is between 18 m. and 25 m. in this area.

Repairs/Dockyards: No repairs possible.

Supplies/Service: Provision supply possible. But no bunkers, water, deratting certificate, no Consuls, crew change or medical treatment available.

Cargo Operations: Terminal Operator is Pertamina, Pangkalan Susu. Cargo information can be received on Channel 19. Other information on Channel 16 (Susu Radio) 19, 20 and 24. Loading rate 2,000 t.p.h., but can be reduced to 1,600 cu.m. when necessary for topping tanks. One×12 in. cargo hose is connected from SBM to ship's manifold, for connections, ship's derrick is used on portside with minimum 5 tons load (SWL). Seven crew with Loading Master assist for connecting the hose.

API=50.0 Temp.=85°F

One hour and again half-hour before completion of loading the Loading Master is to be informed. He will then stand by for stopping the cargo. All papers are typed on board the vessel and vessel has to supply typewriters, two if possible, to reduce the waiting time. After completion of loading the vessel will anchor about 1 mile off the SBM to wait for the cargo papers to be completed (about 2 to 3 hours).

Rescue/Distress: No salvage or Coast Guard available.

Port Authority: The vessel has to anchor about 2 miles off the SBM and the Custom Officials, Immigration, Quarantine Officer and Agent will board the vessel at the anchorage, about 12 persons in all. The authorities also clear the vessel if she is also bound for Kuala Beukah. For clearance the following are requested:

12 Crew Lists; 2 Vaccination Lists; 3 Stores Lists; 3 Crew Effects Lists; 1 Health Declaration; 1 Ship's Health Book for Indonesian Ports only, if not on board it will be issued by the authorities.

Approaches: The approach is very easy. The coast line gives a very good picture on the radar for navigation. But it is very difficult to pick up the SBM on the radar due to many fishing boats and fishing houses. The fishing boats will also interfere with the approach, especially during the night, many of them are showing no lights, until the vessel is very close.

PANGKALBALAM: 02.06 S. 106.08 E.

(See Plan Book)

DOCUMENTS:

Health Documents:

Maritime Declaration of Health.
Derat Exemption Certificate.
Vaccination Certificates.
Crew and Passenger List.
Health Book.

(a) Port Health Measures: The Port Health Service is responsible for the protection of the port against the introduction or dissemination of quarantinable diseases. This responsibility is based on:
   1. The National Quarantine Law.
   2. The National Epidemiological Law.
   3. International Health Regulations.

(b) Vaccination/Immunisation:
   Vaccination and Immunisation against smallpox and cholera can be carried out by the Port Health Service. Yellow Fever prevention is carried out by the Port Health Service and General Hospital.

(c) Extermination of rats is carried out by the Port Health Service at the expense of shipping Agent.

Ship's Certificates: The Ship's Certificate should be delivered to the Harbour Master through the Agent.

The certificates will be returned to the ship's Master prior to the ship's departure.

Ship's Manifest and Bill of Lading: The copy of the ship's Manifest should be delivered to the Port Administration through the Agent.

Ship's Arrival/Departure:

(a) Two days before arrival of vessel, the ship's Agent has to inform the Port Administration, by completing appropriate forms. Copies of completed forms must also be submitted to the Harbour Master, Port Health Service, Immigration, Customs, and Security for preparation of services.

(b) Before departure Port Clearance is issued by the Harbour Master, after Clearance has been obtained from Customs, the Port Health Service and Immigration.

Immigration: Vessels carrying passengers arriving at Indonesian ports from abroad should have to show the "N" flag.

The Master is required to furnish the boarding Immigration Officer with a Passenger List showing the names of all on board and classified as:

(a) Disembarking passengers.
(b) Transhipment passengers.
(c) Through passengers (from abroad to ports outside of Indonesia).

PILOTAGE: Not available.

ANCHORAGE: Safe anchorage at green buoy, 10 m. Anchorage area: 02.05 S.106.13 E.

RESTRICTIONS: No anchoring at Eliot (red buoy).

MAX. SIZE: Length 140 m., breadth 30 m. Only vessels drafted 8 ft. allowed to discharge alongside the quays.

RADIO: Coastal Radio Station Pangkalbalam Radio, call sign PKC5.

Time Schedule:

Frequencies		*Working Times*	
2182 kHz	A.1	0000–0100	GMT
2690 kHz		0300	GMT
2090 Rx		0600	GMT
2075 Rx		0000–0600	GMT
2085 Rx			
2100 Rx			
2638 Rx			
Channel 16 VHF.			

VHF: Channels 16, 15, 10, 20, and 22.

TUGS: 4 tugboats available, owned by P.N. Djakarta Lloyd, P.T. Samudera-Indonesia, and P.T. Pelni for communication between shore and ships. Capacity 150 h.p. – 350 h.p.

BERTHING: First Wharf: Length 60 m. Depth 3 m. – 4 m.

Second Wharf: Length 60 m. depth 5.0 m.

CRANES: 2×10 tons (Port Authority), 4×10 tons and 1×4 tons (Private), All mobile cranes.

Port Authority has 2×2.5 ton fork lift trucks. 2×2.5 tons (Private) also available.

STEVEDORES: Ordered by Agent. Rates 15/20 t.p.h. per gang.

MEDICAL: First aid available at the scene of accident. Medical treatment or advice available regularly from the Port Health Service. Hospitalisation available at general and private hospital at Pangkalbalam.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: *Customs Regulations:* Ports in Indonesia are divided into:

(a) Sea Ports, i.e. ports at which foreign vessels may call without a "Flag Dispensation" from the Ministry of Communications (Directorate General of Sea Communications) and the Ministry of Finance. (Concerning the import and export of goods).

(b) Coastal Ports at which only vessels flying the Indonesian flag may call according to the Regulations.

The Port of Pangkalbalam is a Sea and Coastal Port. Vessels unloading and loading cargoes have to get a Customs Permit. The Cargo Manifest, the Ship's Store List and the List of Crew's Belongings have to be delivered to Customs within 48 hours.

Tobacco Allowance: Each crew member is allowed to carry 200 cigarettes or 100 grams of tobacco ashore without paying import duty.

Alcohol Allowance: There is no allowance for alcoholic drinks.

Other Commodities: Maximum value of US$100.

Each crew member is allowed to bring in goods for personal use up to maximum value of US$100.

IDENTIFICATION CARDS: Crew members having no passport are required to carry a Seaman's Identification Card (S.I.C.)

CONSULS: None.
REPAIRS/DRY DOCKS: None.
REPATRIATION: A valid document is needed, entry permit from the country concerned is sufficient, if there is no passport available.
AIRPORT: Pangkalpinang 14 km. Regular airlines to Jakarta and Palembang every day.
HOLIDAYS: On Moslem holidays, no cargo work.
POLICE/AMBULANCE/FIRE: Police 386 LB; Ambulance 444 OTM; Fire 326 LB.
SHORE LEAVE: After permission by Chief of Immigration.
REGULATION: Every ship on arrival must be passed by; Customs, Harbour Master, Maritime Police, Health service and Immigration Chief.
DELAYS: Due shortage of lighter space.
AUTHORITY: Pangkalbalam Port Administration, Jl. Yos Soedarso No, Pangkalpinang, Indonesia. *Tel:* 21736, 21737. *Contact:* Mr. Soenaryo, Port Administrator.

PANJANG (Lampung), Including Tarahan: 05.28 S. 105.19 E. **(See Plan Book)**

PORT LIMITS: The Southern limit of the port is along the parallel 5° 34′ S.
DOCUMENTS:
Quarantine:
Vessels arriving from abroad have to hoist "Q" flag on arrival until boarded and released by Quarantine Officer.
Documents which have to be prepared:
Declaration of Health.
Derat (Exemption) Certificate.
Valid International Vaccination Certificates.
Crew and Passenger Lists showing the validity dates of above certificates.
Immigration:
Immigration, Crew and Passenger Lists.
Crew/Passengers to be cleared.
Customs:
General Declaration of Cargoes Aboard Ship.
(Copies of each Manifest).
Crew/Passenger Lists and Personal Effects Lists.
Ship's Stores List.
Clearance from Last Port.
Harbour Master: After having filled Harbour Report (handed to Harbour Master's Office or Boarding Agent), ships have to prepare the following documents to be kept in custody of Harbour Master during ship's stay in port.
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Derat (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate(Passenger Ship).
Safety Equipment Certificate (Cargo Ship).
Safety Radio Telegraph/Telephony Certificate, and Ship's Radio-Station Certificate of Approval.
Declaration of Health.
Last Port's Clearance.
Subscription of Light and Harbour Dues and wharfage.
Crew/Passenger List.
PILOTAGE: Compulsory for vessels of 70 g.r.t. and over. Pilots are in Government Service. Pilot signals according the International Code of Signals. Boarding area is on the outer (West) side of a line of reefs, which extends from South to North on the West of the harbour basin. Pilot (7) can be ordered from the Port Administration via ship's Agents not less that 8 hours prior to berthing, and 4 hours prior to unberthing and shifting.

Pilotage information can be obtained from the Pilot Radio Station, Panjang Pilot/Panjang Radio/PKC9. VHF Channels 12 and 14, opened daily from 0030-1200 GMT. Pilotage available throughout 24 hours.
APPROACHES: *Navigational Report:* Approaching Panjang there are numerous small fishermen's houses built on bamboo sticks at sea, some without lights. Therefore approaching or sailing from Panjang at night time should not be attempted.
ANCHORAGE: Panjang Roads; outer (West) side of the reef about 2 miles from the breakwater.
MAX. SIZE: Max. draft 9.5 m.
BERTHING:
Quay A on the South side, length 172 m., depth 8 m. LW.
Quay B on the East side, length 210 m., depth 7 m. LW.
Quay C on the West side, length 138 m., depth 3 m. LW.
Quay D on the North side, length 200 m., depth 9.5 m. LW.
Oil Jetty on the South side of Quay C, length 20 m., depth 5.5 m. LW.
Oil dolphin of Pertamina in the outer basin, South side of the reefs, depth 6.0 m.
Ocean vessels can also be berthed at 3 buoys in the inner basin (harbour).
Tarahan: Terminal is one mile to the South of Panjang, operated by P.T. Tambang Batubara Bukit Asam. Berth length 170 m., depth 12.0 m., distance between dolphins 240 m. Max. LOA 179 m., max. beam 27 m., max. draft 8.0 m. Loading rate (coal) 1,150 tonnes/p.h. in the initial stages.
HEALTH: During the time that the "Q" Flag is flying no one is allowed to board or leave the vessel except with the permission of the boarding Quarantine Officer.
Also see "Documents".

RADIO/VHF:
(a) Coastal Radio Station, Panjang Radio, call sign PKC4, working hours:

1. 500/430 kHz A1:	0100 – 0130; 0400 – 0500; 0700 – 0830; 1000 – 1030 GMT.
2. 6355 kHz A1:	0200 – 0230; 0600 – 0700; 0830 – 0900; 1030 – 1100 GMT.
3. 2182/2690 kHz A3H, A3J:	0500 – 0530; 0900 – 0930 GMT;
4. 6215.5 kHz A3H, A3J:	0130 – 0200; 0530 – 0600; 1130 – 1200 GMT.
5. 8808.8, 8/8284,9 kHz A3H, A3J:	0230 – 0300; 0930 – 1000; 1200 – 1300 GMT.
6. VHF Channel 16	0000 – 0600, 0900 – 1200 GMT.

(b) Pilot Radio Station/Panjang Radio/PKC9, working hours:
Channel 12 and 14: 0030 – 1200 GMT.
Vessels are requested to report correct ETA to Pilot Radio Station 2 or 3 hours before arrival and inform the ship's particulars as follows:
Name and Nationality of the vessel.
LOA, g.r.t., draft.
Last Port and Next Port of Call.
TUGS: It is compulsory for ships with a length of 70 m. and over to use tugboats in berthing and unberthing operation.
The port owns 2 tugboats of 800 h.p. and 250 h.p.; 4 other diesel tugboats from 100 h.p. to 230 h.p. owned by the PJKA (2) and the PT. Djakarta Lloyd (2).
LIGHTERAGE: 16 lighters available, capacity between 70 and 170 tons, owned by Port Administration and Shipping Agents, can be hired for loading vessels at anchor or buoys.
STEVEDORES: There are 1,300 registered labourers; working hours 0800 – 1200 and 1300 – 1600 local time. Overtime possible after being granted by the authorities concerned; 24 hours per day working time recommended.
Gang's average capacity 20 t.p.h. for bulk cargo and 15 t.p.h. for general cargo.
MEDICAL: Medical attention can be arranged through the Agents. There is a port doctor. The general hospital is in Tanjungkarang, about 13 km. away, where sick crew members may be hospitalized.
TANKERS: See "Berthing".
FRESH WATER: Supply is handled by the Port Administration to the wharves through pipe-lines. All berths fitted with fresh water connections (6 hydrants). Capacity is normally about 72 t.p.h. No water barge available.
FUEL: Bunkering not available.
FIRE PRECAUTIONS: The Port Administration handles 1 fire-fighting truck and 1 fire trailer.
Smoking strictly prohibited in warehouses, inside the Pertamina yard, on oil-jetty, and on board tankers. During the time a tanker is discharging, fire extinguishers must stand ready on the pier.
CONSULS: No local representation.
REPAIRS: Minor repairs can be carried out.
DRY DOCKS: None available.
SURVEYORS: None available; no Classification Society is represented at the port.
GANGWAY/DECK WATCHMEN: None available.
OPENING/CLOSING HATCHES: Opening and closing of ship's hatches is normally carried out by stevedores.
CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agent about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.
CARGO GEAR: Loading and discharging effected by ship's gear. 6 mobile cranes, between 3.5 tons and 15 tons, are available from the Port Administration, as well as 17 forklifts (between 2 and 15 tons) owned by Port Administration and shipping Agents.
AIRPORT: Branti Airport situated about 34 km. from Panjang. Regular (domestic) flights, Tanjungkarang–Jakarta v.v. 4 times daily.
TIME: GMT plus 7 hours.
HOLIDAYS: Fixed dates are: New Year (1st January); Independence Day (17th August) and Christmas Day (25th December). Other holidays: Idhul Adha, First of Muharram, Maulid of the Prophet Mohammad, Good Friday, Christ's Ascension, Mi'radj of the Prophet Mohammad and Idhul Fitri (2 days).
POLICE/FIRE: Port security is maintained by the state police; tel: 31.228 (Harbour Police). Fire Brigade, tel: 31113 or 52.741.
TELEPHONES: No arrangement exists for placing telephone on board.
SERVICES: Radar and radio repairs possible.
SHORE LEAVE: Crew members are allowed ashore.
INDENTIFICATION CARDS: Shore passes needed, obtained via Agents.
DELAYS: Normal expected delays due to shortage of berthing facilities and rainy weather.
GENERAL: The port's status is general exports (rubber, coffee, pepper, timber, cattle fodder, corn, etc.)
Charts and nautical publications concerning this port are issued by the Indonesian Naval Hydrographic Office (HIDRAL).
All Government offices in the port (Except Customs) keep working hours as follows: Monday to Thursday 0730 – 1430, Friday 0730 – 1100, Saturday 0730 – 1330 (The Customs 0700 – 1600 hrs.)
Ferry Network: Panjang – Merak (West Java) vv twice a day 2300 hrs. and 1100 hrs. (Government railway ferry). 6 hour voyage.
Panjang – Jakarta: On Monday, Wednesday and Saturday 1300 hrs. by Government Boeing Jetfoil (3 hours voyage).
Srengsem (2 miles South of Panjang) – Merak: twice daily Ro/Ro ferry, 4 hours voyage.
Bakauheni (100 km. S.E. from Panjang) – Merak: Ro/Ro ferry each hour, 1.5 hours voyage. Panjang – Bakauheni 1.5 hours by car.

DEVELOPMENTS: Construction works for the extension of quay D with another 200 m. pre-stressed concrete wharf are under way, and planned for completion in 1985; including transit shed (3,000 sq.m.) directly behind new wharf.

Container – yard (25,000 sq.m.) behind new wharf.

AUTHORITY: Port Perum Branch Panjang, Directorate General of Sea Communication, Communication Dept. (Lampung – Indonesia), Jl. Sumatera Pelabuhan Panjang, Lampung, Indonesia.

Tel: (0271) 31379, 31149, 31146, 31155, 31401 (17 lines). *Telex:* 27391. *Cables:* Adpel Panjang. *Contact:* Administrator Pelabuhan Panjang or Kepala Cabang PERUM II Pelabuhan Panjang.

POLENG: 06.39 S. 112.55 E.

SHIPMASTER'S REPORT: April 1978.

LOCATION: The Poleng Terminal consists of the tanker "Lynda" moored stern first to an SBS. The "Lynda" is a tanker of some 72,000 d.w.t. The position of the "Lynda" is 06° 38′ 42″ S., 112° 55′ 23″ E.

PILOTAGE: Performed by the Master of the "Lynda".

ANCHORAGE: The anchorage position is anywhere North and West of the "Lynda" distance 1 mile. The depth of water is 26 fathoms and 9 shackles of cable is recommended.

RESTRICTIONS: The "Lynda" is moored in 180 ft. of water and there is no restriction regarding the draft or the size of ship that she can accommodate alongside.

RADIO: The Post and Telecommunications Department do not permit the use of the WT/RT on the "Lynda" so all ETA's are sent via Pertaminaship Jakarta.

Once the "Lynda" receives the ETA they then organise the 'opening of the Port' and the officials to clear the ship are ordered from Surabaja. The usual documents are required and 2 Agents come out with the officials.

VHF: The "Lynda" keeps watch on Channel 6 and only monitors Channel 16 when a vessel is expected.

BERTHING: The "Lynda" has 4 "Yokohama" type fenders on her port side for berthing. Six ropes are required at each end. Berthing is port side alongside.

The "Lynda" is loaded direct from the well and the API is 55 with a loading temperature of 84°. Normally, the API is 42-47. The pumping capability of the "Lynda" is 2,000 t.p.h. although we were only able to get 1,557 t.p.h. The cargo is loaded through 1×12 in. hose.

Prior to loading the tanks on the "Lynda" are ullaged in the presence of the Customs and the cargo calculated. This is repeated at the end of the load for the Bill of Lading figures. Clearance is granted from Poleng and all documents are signed prior to sailing. There being no early departure available.

At present they are receiving 1 ship about every 2 months, mainly topping-off operations and it is thought that the vessel may be moved to another position.

FRESH WATER: Not available.

FUEL: Not available.

STORES: Not available.

GENERAL: No Walport film exchange. All shore personnel are accommodated aboard the "Lynda". Some vessels have parted their mooring lines during the Winter months with winds of 25 knots and 8 ft. – 18 ft. seas running.

POMALAA and TANJUNG LEPEE: 04.14 S. 121.32 E.

(See Plan Book)

LOCATION: Port of Pomalaa, Kolaka, is situated in the Gulf of Bone, S.E. Sulawesi in position Lat. 04° 10′ 30″ S., Long. 121° 36′ 00″ E.

LOADING POSITIONS:

Berth: Lat. 04° 10′ 30″ S., Long. 121° 35′ 56″ E.

Anchorage position for ore loading at Pomalaa: Vessels of 15,000 d.w.t. and over, Lat. 04° 10′ 00″ S., Long. 121° 35′ 24″ E. Vessels up to 15,000 d.w.t., Lat. 04° 10′ 06″ S., Long. 121° 35′ 30″ E.

Anchorage position for ore loading at Tanjung Lepee: Lat. 04° 13′ 38″ S., Long. 121° 32′ 31″ E.

FLAGS: To be flown by incoming vessels: Vessel's National Flag; Indonesian Flag; Vessels numbers; Quarantine & Immigration Flag.

DOCUMENTS: To be produced upon vessel's arrival:

14 Crew Lists
4 Passenger Lists
5 Parcel Lists
5 Store Lists
8 Cargo Manifests
3 Narcotics Lists
3 General Information
5 Personal Effects Lists
3 Vaccination Lists
5 Fire Arms & Ammunition Lists
International Load Line Certificate
Maritime Declaration of Health Certificate
Health Book or Bill of Health
Derat Certificate
Last Port Clearance
Safety Radio Certificate
Harbour Report.

Inspection Team: This team consists of the Port Health Officer, Customs Officer, Harbour Master and Immigration Officer.

After the vessel is granted free pratique, the Immigration Officer checks passports, seamen's books and crew list and issues shore passes.

PILOTAGE: Pilotage is not compulsory and there is no Pilot at Pomalaa. Because Pomalaa waters are still declared as uncleared waters, it is advisable that vessels calling for the first time at Pomalaa, use a Pilot.

Pilot can be ordered from Ujung Pandang via Nikel Ujung Pandang not less than 72 hours before vessel's arrival at pilot station.

There are 2 pilot stations: (1) For Pomalaa loading point and berth, Lat. 04° 04′ 03″ S., Long. 121° 28′ 00″ E. (2) For Tanjung Lepee loading point, Lat. 04° 15′ 00″ S., Long. 121° 29′ 00″ E.

If vessel wishes to be piloted to the loading/unloading point on arrival day, vessel has to arrive at Pilot station before 1200 hrs. local time for Pomalaa loading point and berth and before 1400 hrs. local time for Tanjung Lepee loading point.

RESTRICTIONS: *Arriving/Departing Hours:* Arrival: from 0600 – 1800 hrs. local time. Departure: 1. Pomalaa loading point and berth: from 0600 – 1600 hrs. local time. 2. Tanjung Lepee loading point: from 0600 – 1800 hrs. local time.

Mooring: The undermentioned vessels can be moored alongside berth: General cargo vessels of max. LOA 135 m. and tankers of max. LOA 110 m.

Depths: Bar channel 11.00 m. (LWS); Alongside berth, North Pier, 5.00 m. (LWS); South Pier, 7.00 m. (LWS). At Pomalaa anchorage or loading point: for vessels of 15,000 d.w.t. and over – 13.00 m. (LWS); for vessels up to 15,000 d.w.t. – 11.00 m. (LWS). At Tanjung Lepee anchorage or loading point – 24.00 m. (LWS).

MAX. SIZE: *General Cargo:* At North Pier: LOA not to exceed 135 m. and fully loaded draft not more than 5.00 m. At South Pier: LOA not to exceed 135 m. and fully loaded draft not more than 7.00 m.

Tankers: LOA not to exceed 110 m. and fully loaded draft not more than 7.00 m.

Ore Carriers: Fully loaded draft not to exceed 11.00 m. Vessels without cranes or derricks are not acceptable. Minimum capacity of cranes or derricks must be 5 tons.

General Cargo at Anchorage: Fully loaded draft not to exceed 11.00 m.

RADIO: Cables to Nikel Ujungpandang can be sent through Ujungpandang (Macassar) Coastal Radio Station, call sign PKF.

Arrival Notice: Information required.

Owner's advice: Owner to advise by cable to Adhiguna, Aneka Tambang Jakarta and Nikel Ujungpandang at least 8 working days before vessel's arrival at loading port.

Master's advice: At least 48 hours (or 72 hours if Pilot's assistance required) before vessel's arrival in Pomalaa waters, Master shall give the following information to Adhiguna and Aneka Tambang Jakarta and Nikel Ujungpandang. Last port of call, draft on arrival, estimated draft on departure, quantity of nickel ore or ferro-nickel ingots to be loaded, stowage plan (hatch division for the respective cargo), quantity and kind of commodity(ies) to be discharged and other necessary messages. Final amended arrival time must be sent at the latest 24 hours before arrival.

Previous experience showed that one cannot rely on telegrams regarding ETA sent by Agents at last port of call in due time, therefore Nikel Ujungpandang waits for the Master's telegram in order to make necessary preparation.

Shipper/Agent's advice: Shipper/Agents shall cable the Master 3 working days before vessel's arrival indicating the loading/unloading position prepared and other necessary messages.

Ship's radio transmitter is not to be used while lying in port.

VHF: Communication by marine VHF possible with the port.

TUGS: Available.

BERTHING: The wharf consists of a concrete quay extending 70 m. seaward and 18 m. breadth.

Priority: Ore carriers. First come first served. Other vessels: Priority to be given to tankers.

Loading/Unloading Facilities for General Cargoes:

Shore facilities: A number of mobile cranes with capacities of 5 tons and 20 tons are available, also forklifts.

Lighters: A number of lighters of 70 d.w.t. up to 120 d.w.t. are available.

Loading/Unloading capacity: About 12 tons per gang per working hour, depending on the type of vessel, available cargo spaces, vessel's cargo gear, kind of cargoes, size of hatches, etc.

Unloading Facilities for Tankers:

Pipe-lines: 1 line of 10 in.×1,600 m. for M.F.O.
1 line of 8 in.×1,600 m. for I.D.O.

Pumps: 3 booster pumps with capacity of 150 cu.m./h. each.

Hoses: 4 pieces flexible hoses of 10 in.×9.40 m. with ASA 150 flanges connections.

Unloading capacity: maximum 200 t.p.h. by ship or shore pumps.

Tank farm capacity: 2×5,000 KL for M.F.O.
1×1,500 KL for I.D.O.

Tank cleaning: Tank cleaning operation is not allowed in Pomalaa waters.

Lay-time: Lay time shall commence 6 hours after N.O.R. tendered.

Loading Facilities for Ore Carriers:

General: Loading of nickel ore at Pomalaa and Tanjung Lepee loading point is done by means of barges.

Number of gangs: Usually 4 gangs are used by vessels equipped with cranes or derricks. If necessary stevedores can provide 6 gangs.

Loading capacity: About 2,000 tons/24 hours per vessel, depending on the type of vessel, vessel's cargo gear, weather conditions, etc.

Unloading: Cargo for Aneka Tambang only.

Vessels without cranes or derricks are not acceptable.

Labourers will be supplied by shipper. Making the vessel ready for loading/unloading to be done by vessel's crew members.

CONSULS: None.
REPAIRS/DRY DOCKS: None.
REPATRIATION: A valid document is needed, entry permit from the country concerned is sufficient, if there is no passport available.
AIRPORT: Pangkalpinang 14 km. Regular airlines to Jakarta and Palembang every day.
HOLIDAYS: On Moslem holidays, no cargo work.
POLICE/AMBULANCE/FIRE: Police 386 LB; Ambulance 444 OTM; Fire 326 LB.
SHORE LEAVE: After permission by Chief of Immigration.
REGULATION: Every ship on arrival must be passed by; Customs, Harbour Master, Maritime Police, Health service and Immigration Chief.
DELAYS: Due shortage of lighter space.
AUTHORITY: Pangkalbalam Port Administration, Jl. Yos Soedarso No, Pangkalpinang, Indonesia. *Tel:* 21736, 21737. *Contact:* Mr. Soenaryo, Port Administrator.

PANJANG (Lampung), Including Tarahan: 05.28 S. 105.19 E. (See Plan Book)

PORT LIMITS: The Southern limit of the port is along the parallel 5° 34′ S.
DOCUMENTS:
Quarantine:
Vessels arriving from abroad have to hoist "Q" flag on arrival until boarded and released by Quarantine Officer.
Documents which have to be prepared:
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Derat (Exemption) Certificate.
Valid International Vaccination Certificates.
Crew and Passenger Lists showing the validity dates of above certificates.
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Crew/Passengers to be cleared.
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(Copies of each Manifest).
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Safety Radio Telegraph/Telephony Certificate, and Ship's Radio-Station Certificate of Approval.
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PILOTAGE: Compulsory for vessels of 70 g.r.t. and over. Pilots are in Government Service. Pilot signals according the International Code of Signals. Boarding area is on the outer (West) side of a line of reefs, which extends from South to North on the West of the harbour basin. Pilot (7) can be ordered from the Port Administration via ship's Agents not less that 8 hours prior to berthing, and 4 hours prior to unberthing and shifting.

Pilotage information can be obtained from the Pilot Radio Station, Panjang Pilot/Panjang Radio/PKC9. VHF Channels 12 and 14, opened daily from 0030-1200 GMT. Pilotage available throughout 24 hours.
APPROACHES: *Navigational Report:* Approaching Panjang there are numerous small fishermen's houses built on bamboo sticks at sea, some without lights. Therefore approaching or sailing from Panjang at night time should not be attempted.
ANCHORAGE: Panjang Roads; outer (West) side of the reef about 2 miles from the breakwater.
MAX. SIZE: Max. draft 9.5 m.
BERTHING:
Quay A on the South side, length 172 m., depth 8 m. LW.
Quay B on the East side, length 210 m., depth 7 m. LW.
Quay C on the West side, length 138 m., depth 3 m. LW.
Quay D on the North side, length 200 m., depth 9.5 m. LW.
Oil Jetty on the South side of Quay C, length 20 m., depth 5.5 m. LW.
Oil dolphin of Pertamina in the outer basin, South side of the reefs, depth 6.0 m.
Ocean vessels can also be berthed at 3 buoys in the inner basin (harbour).
Tarahan: Terminal is one mile to the South of Panjang, operated by P.T. Tambang Batubara Bukit Asam. Berth length 170 m., depth 12.0 m., distance between dolphins 240 m. Max. LOA 179 m., max. beam 27 m., max. draft 8.0 m. Loading rate (coal) 1,150 tonnes/p.h. in the initial stages.
HEALTH: During the time that the "Q" Flag is flying no one is allowed to board or leave the vessel except with the permission of the boarding Quarantine Officer.
Also see "Documents".

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(a) Coastal Radio Station, Panjang Radio, call sign PKC4, working hours:
1. 500/430 kHz A1: 0100 – 0130; 0400 – 0500; 0700 – 0830; 1000 – 1030 GMT.
2. 6355 kHz A1: 0200 – 0230; 0600 – 0700; 0830 – 0900; 1030 – 1100 GMT.
3. 2182/2690 kHz A3H, A3J: 0500 – 0530; 0900 – 0930 GMT;
4. 6215.5 kHz A3H, A3J: 0130 – 0200; 0530 – 0600; 1130 – 1200 GMT.
5. 8808.8, 8/8284,9 kHz A3H, A3J: 0230 – 0300; 0930 – 1000; 1200 – 1300 GMT.
6. VHF Channel 16 0000 – 0600, 0900 – 1200 GMT.
(b) Pilot Radio Station/Panjang Radio/PKC9, working hours:
Channel 12 and 14: 0030 – 1200 GMT.

Vessels are requested to report correct ETA to Pilot Radio Station 2 or 3 hours before arrival and inform the ship's particulars as follows:
Name and Nationality of the vessel.
LOA, g.r.t., draft.
Last Port and Next Port of Call.
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The port owns 2 tugboats of 800 h.p. and 250 h.p.; 4 other diesel tugboats from 100 h.p. to 230 h.p. owned by the PJKA (2) and the PT. Djakarta Lloyd (2).
LIGHTERAGE: 16 lighters available, capacity between 70 and 170 tons, owned by Port Administration and Shipping Agents, can be hired for loading vessels at anchor or buoys.
STEVEDORES: There are 1,300 registered labourers; working hours 0800 – 1200 and 1300 – 1600 local time. Overtime possible after being granted by the authorities concerned; 24 hours per day working time recommended.

Gang's average capacity 20 t.p.h. for bulk cargo and 15 t.p.h. for general cargo.
MEDICAL: Medical attention can be arranged through the Agents. There is a port doctor. The general hospital is in Tanjungkarang, about 13 km. away, where sick crew members may be hospitalized.
TANKERS: See "Berthing".
FRESH WATER: Supply is handled by the Port Administration to the wharves through pipe-lines. All berths fitted with fresh water connections (6 hydrants). Capacity is normally about 72 t.p.h. No water barge available.
FUEL: Bunkering not available.
FIRE PRECAUTIONS: The Port Administration handles 1 fire-fighting truck and 1 fire trailer.

Smoking strictly prohibited in warehouses, inside the Pertamina yard, on oil-jetty, and on board tankers. During the time a tanker is discharging, fire extinguishers must stand ready on the pier.
CONSULS: No local representation.
REPAIRS: Minor repairs can be carried out.
DRY DOCKS: None available.
SURVEYORS: None available; no Classification Society is represented at the port.
GANGWAY/DECK WATCHMEN: None available.
OPENING/CLOSING HATCHES: Opening and closing of ship's hatches is normally carried out by stevedores.
CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agent about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.
CARGO GEAR: Loading and discharging effected by ship's gear. 6 mobile cranes, between 3.5 tons and 15 tons, are available from the Port Administration, as well as 17 forklifts (between 2 and 15 tons) owned by Port Administration and shipping Agents.
AIRPORT: Branti Airport situated about 34 km. from Panjang. Regular (domestic) flights, Tanjungkarang–Jakarta v.v. 4 times daily.
TIME: GMT plus 7 hours.
HOLIDAYS: Fixed dates are: New Year (1st January); Independence Day (17th August) and Christmas Day (25th December). Other holidays: Idhul Adha, First of Muharram, Maulid of the Prophet Mohammad, Good Friday, Christ's Ascension, Mi'radj of the Prophet Mohammad and Idhul Fitri (2 days).
POLICE/FIRE: Port security is maintained by the state police; tel: 31.228 (Harbour Police). Fire Brigade, tel: 31113 or 52.741.
TELEPHONES: No arrangement exists for placing telephone on board.
SERVICES: Radar and radio repairs possible.
SHORE LEAVE: Crew members are allowed ashore.
INDENTIFICATION CARDS: Shore passes needed, obtained via Agents.
DELAYS: Normal expected delays due to shortage of berthing facilities and rainy weather.
GENERAL: The port's status is general exports (rubber, coffee, pepper, timber, cattle fodder, corn, etc.)

Charts and nautical publications concerning this port are issued by the Indonesian Naval Hydrographic Office (HIDRAL).

All Government offices in the port (Except Customs) keep working hours as follows: Monday to Thursday 0730 – 1430, Friday 0730 – 1100, Saturday 0730 – 1330 (The Customs 0700 – 1600 hrs.)

Ferry Network: Panjang – Merak (West Java) vv twice a day 2300 hrs. and 1100 hrs. (Government railway ferry). 6 hour voyage.

Panjang – Jakarta: On Monday, Wednesday and Saturday 1300 hrs. by Government Boeing Jetfoil (3 hours voyage).

Srengsem (2 miles South of Panjang) – Merak: twice daily Ro/Ro ferry, 4 hours voyage.

Bakauheni (100 km. S.E. from Panjang) – Merak: Ro/Ro ferry each hour, 1.5 hours voyage. Panjang – Bakauheni 1.5 hours by car.

DEVELOPMENTS: Construction works for the extension of quay D with another 200 m. pre-stressed concrete wharf are under way, and planned for completion in 1985; including transit shed (3,000 sq.m.) directly behind new wharf.

Container – yard (25,000 sq.m.) behind new wharf.

AUTHORITY: Port Perum Branch Panjang, Directorate General of Sea Communication, Communication Dept. (Lampung – Indonesia), Jl. Sumatera Pelabuhan Panjang, Lampung, Indonesia.

Tel: (0271) 31379, 31149, 31146, 31155, 31401 (17 lines). *Telex:* 27391. *Cables:* Adpel Panjang. *Contact:* Administrator Pelabuhan Panjang or Kepala Cabang PERUM II Pelabuhan Panjang.

POLENG: 06.39 S. 112.55 E.

SHIPMASTER'S REPORT: April 1978.

LOCATION: The Poleng Terminal consists of the tanker "Lynda" moored stern first to an SBS. The "Lynda" is a tanker of some 72,000 d.w.t. The position of the "Lynda" is 06° 38′ 42″ S., 112° 55′ 23″ E.

PILOTAGE: Performed by the Master of the "Lynda".

ANCHORAGE: The anchorage position is anywhere North and West of the "Lynda" distance 1 mile. The depth of water is 26 fathoms and 9 shackles of cable is recommended.

RESTRICTIONS: The "Lynda" is moored in 180 ft. of water and there is no restriction regarding the draft or the size of ship that she can accommodate alongside.

RADIO: The Post and Telecommunications Department do not permit the use of the WT/RT on the "Lynda" so all ETA's are sent via Pertaminaship Jakarta.

Once the "Lynda" receives the ETA they then organise the 'opening of the Port' and the officials to clear the ship are ordered from Surabaja. The usual documents are required and 2 Agents come out with the officials.

VHF: The "Lynda" keeps watch on Channel 6 and only monitors Channel 16 when a vessel is expected.

BERTHING: The "Lynda" has 4 "Yokohama" type fenders on her port side for berthing. Six ropes are required at each end. Berthing is port side alongside.

The "Lynda" is loaded direct from the well and the API is 55 with a loading temperature of 84°. Normally, the API is 42-47. The pumping capability of the "Lynda" is 2,000 t.p.h. although we were only able to get 1,557 t.p.h. The cargo is loaded through 1×12 in. hose.

Prior to loading the tanks on the "Lynda" are ullaged in the presence of the Customs and the cargo calculated. This is repeated at the end of the load for the Bill of Lading figures. Clearance is granted from Poleng and all documents are signed prior to sailing. There being no early departure available.

At present they are receiving 1 ship about every 2 months, mainly topping-off operations and it is thought that the vessel may be moved to another position.

FRESH WATER: Not available.

FUEL: Not available.

STORES: Not available.

GENERAL: No Walport film exchange. All shore personnel are accommodated aboard the "Lynda". Some vessels have parted their mooring lines during the Winter months with winds of 25 knots and 8 ft. – 18 ft. seas running.

POMALAA and TANJUNG LEPEE:

04.14 S. 121.32 E. **(See Plan Book)**

LOCATION: Port of Pomalaa, Kolaka, is situated in the Gulf of Bone, S.E. Sulawesi in position Lat. 04° 10′ 30″ S., Long. 121° 36′ 00″ E.

LOADING POSITIONS:

Berth: Lat. 04° 10′ 30″ S., Long. 121° 35′ 56″ E.

Anchorage position for ore loading at Pomalaa: Vessels of 15,000 d.w.t. and over, Lat. 04° 10′ 00″ S., Long. 121° 35′ 24″ E. Vessels up to 15,000 d.w.t., Lat. 04° 10′ 06″ S., Long. 121° 35′ 30″ E.

Anchorage position for ore loading at Tanjung Lepee: Lat. 04° 13′ 38″ S., Long. 121° 32′ 31″ E.

FLAGS: To be flown by incoming vessels: Vessel's National Flag; Indonesian Flag; Vessels numbers; Quarantine & Immigration Flag.

DOCUMENTS: To be produced upon vessel's arrival:

14 Crew Lists
4 Passenger Lists
5 Parcel Lists
5 Store Lists
8 Cargo Manifests
3 Narcotics Lists
3 General Information
5 Personal Effects Lists
3 Vaccination Lists
5 Fire Arms & Ammunition Lists
International Load Line Certificate
Maritime Declaration of Health Certificate
Health Book or Bill of Health
Derat Certificate
Last Port Clearance
Safety Radio Certificate
Harbour Report.

Inspection Team: This team consists of the Port Health Officer, Customs Officer, Harbour Master and Immigration Officer.

After the vessel is granted free pratique, the Immigration Officer checks passports, seamen's books and crew list and issues shore passes.

PILOTAGE: Pilotage is not compulsory and there is no Pilot at Pomalaa. Because Pomalaa waters are still declared as uncleared waters, it is advisable that vessels calling for the first time at Pomalaa, use a Pilot.

Pilot can be ordered from Ujung Pandang via Nikel Ujung Pandang not less than 72 hours before vessel's arrival at pilot station.

There are 2 pilot stations: (1) For Pomalaa loading point and berth, Lat. 04° 04′ 03″ S., Long. 121° 28′ 00″ E. (2) For Tanjung Lepee loading point, Lat. 04° 15′ 00″ S., Long. 121° 29′ 00″ E.

If vessel wishes to be piloted to the loading/unloading point on arrival day, vessel has to arrive at Pilot station before 1200 hrs. local time for Pomalaa loading point and berth and before 1400 hrs. local time for Tanjung Lepee loading point.

RESTRICTIONS: *Arriving/Departing Hours:* Arrival: from 0600 – 1800 hrs. local time. Departure: 1. Pomalaa loading point and berth: from 0600 – 1600 hrs. local time. 2. Tanjung Lepee loading point: from 0600 – 1800 hrs. local time.

Mooring: The undermentioned vessels can be moored alongside berth: General cargo vessels of max. LOA 135 m. and tankers of max. LOA 110 m.

Depths: Bar channel 11.00 m. (LWS); Alongside berth, North Pier, 5.00 m. (LWS); South Pier, 7.00 m. (LWS). At Pomalaa anchorage or loading point: for vessels of 15,000 d.w.t. and over – 13.00 m. (LWS); for vessels up to 15,000 d.w.t. – 11.00 m. (LWS). At Tanjung Lepee anchorage or loading point – 24.00 m. (LWS).

MAX. SIZE: *General Cargo:* At North Pier: LOA not to exceed 135 m. and fully loaded draft not more than 5.00 m. At South Pier: LOA not to exceed 135 m. and fully loaded draft not more than 7.00 m.

Tankers: LOA not to exceed 110 m. and fully loaded draft not more than 7.00 m.

Ore Carriers: Fully loaded draft not to exceed 11.00 m. Vessels without cranes or derricks are not acceptable. Minimum capacity of cranes or derricks must be 5 tons.

General Cargo at Anchorage: Fully loaded draft not to exceed 11.00 m.

RADIO: Cables to Nikel Ujungpandang can be sent through Ujungpandang (Macassar) Coastal Radio Station, call sign PKF.

Arrival Notice: Information required.

Owner's advice: Owner to advise by cable to Adhiguna, Aneka Tambang Jakarta and Nikel Ujungpandang at least 8 working days before vessel's arrival at loading port.

Master's advice: At least 48 hours (or 72 hours if Pilot's assistance required) before vessel's arrival in Pomalaa waters, Master shall give the following information to Adhiguna and Aneka Tambang Jakarta and Nikel Ujungpandang. Last port of call, draft on arrival, estimated draft on departure, quantity of nickel ore or ferro-nickel ingots to be loaded, stowage plan (hatch division for the respective cargo), quantity and kind of commodity(ies) to be discharged and other necessary messages. Final amended arrival time must be sent at the latest 24 hours before arrival.

Previous experience showed that one cannot rely on telegrams regarding ETA sent by Agents at last port of call in due time, therefore Nikel Ujungpandang waits for the Master's telegram in order to make necessary preparation.

Shipper/Agent's advice: Shipper/Agents shall cable the Master 3 working days before vessel's arrival indicating the loading/unloading position prepared and other necessary messages.

Ship's radio transmitter is not to be used while lying in port.

VHF: Communication by marine VHF possible with the port.

TUGS: Available.

BERTHING: The wharf consists of a concrete quay extending 70 m. seaward and 18 m. breadth.

Priority: Ore carriers. First come first served. Other vessels: Priority to be given to tankers.

Loading/Unloading Facilities for General Cargoes:

Shore facilities: A number of mobile cranes with capacities of 5 tons and 20 tons are available, also forklifts.

Lighters: A number of lighters of 70 d.w.t. up to 120 d.w.t. are available.

Loading/Unloading capacity: About 12 tons per gang per working hour, depending on the type of vessel, available cargo spaces, vessel's cargo gear, kind of cargoes, size of hatches, etc.

Unloading Facilities for Tankers:

Pipe-lines: 1 line of 10 in.×1,600 m. for M.F.O.
1 line of 8 in.×1,600 m. for I.D.O.

Pumps: 3 booster pumps with capacity of 150 cu.m./h. each.

Hoses: 4 pieces flexible hoses of 10 in.×9.40 m. with ASA 150 flanges connections.

Unloading capacity: maximum 200 t.p.h. by ship or shore pumps.

Tank farm capacity: 2×5,000 KL for M.F.O.
1×1,500 KL for I.D.O.

Tank cleaning: Tank cleaning operation is not allowed in Pomalaa waters.

Lay-time: Lay time shall commence 6 hours after N.O.R. tendered.

Loading Facilities for Ore Carriers:

General: Loading of nickel ore at Pomalaa and Tanjung Lepee loading point is done by means of barges.

Number of gangs: Usually 4 gangs are used by vessels equipped with cranes or derricks. If necessary stevedores can provide 6 gangs.

Loading capacity: About 2,000 tons/24 hours per vessel, depending on the type of vessel, vessel's cargo gear, weather conditions, etc.

Unloading: Cargo for Aneka Tambang only.

Vessels without cranes or derricks are not acceptable.

Labourers will be supplied by shipper. Making the vessel ready for loading/unloading to be done by vessel's crew members.

CONSULS: None.
REPAIRS/DRY DOCKS: None.
REPATRIATION: A valid document is needed, entry permit from the country concerned is sufficient, if there is no passport available.
AIRPORT: Pangkalpinang 14 km. Regular airlines to Jakarta and Palembang every day.
HOLIDAYS: On Moslem holidays, no cargo work.
POLICE/AMBULANCE/FIRE: Police 386 LB; Ambulance 444 OTM; Fire 326 LB.
SHORE LEAVE: After permission by Chief of Immigration.
REGULATION: Every ship on arrival must be passed by; Customs, Harbour Master, Maritime Police, Health service and Immigration Chief.
DELAYS: Due shortage of lighter space.
AUTHORITY: Pangkalbalam Port Administration, Jl. Yos Soedarso No, Pangkalpinang, Indonesia. *Tel:* 21736, 21737. *Contact:* Mr. Soenaryo, Port Administrator.

PANJANG (Lampung), Including Tarahan: 05.28 S. 105.19 E. (See Plan Book)

PORT LIMITS: The Southern limit of the port is along the parallel 5° 34′ S.
DOCUMENTS:
Quarantine:
Vessels arriving from abroad have to hoist "Q" flag on arrival until boarded and released by Quarantine Officer.
Documents which have to be prepared:
Declaration of Health.
Derat (Exemption) Certificate.
Valid International Vaccination Certificates.
Crew and Passenger Lists showing the validity dates of above certificates.
Immigration:
Immigration, Crew and Passenger Lists.
Crew/Passengers to be cleared.
Customs:
General Declaration of Cargoes Aboard Ship.
(Copies of each Manifest).
Crew/Passenger Lists and Personal Effects Lists.
Ship's Stores List.
Clearance from Last Port.
Harbour Master: After having filled Harbour Report (handed to Harbour Master's Office or Boarding Agent), ships have to prepare the following documents to be kept in custody of Harbour Master during ship's stay in port.
Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Derat (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate(Passenger Ship).
Safety Equipment Certificate (Cargo Ship).
Safety Radio Telegraph/Telephony Certificate, and Ship's Radio-Station Certificate of Approval.
Declaration of Health.
Last Port's Clearance.
Subscription of Light and Harbour Dues and wharfage.
Crew/Passenger List.

PILOTAGE: Compulsory for vessels of 70 g.r.t. and over. Pilots are in Government Service. Pilot signals according the International Code of Signals. Boarding area is on the outer (West) side of a line of reefs, which extends from South to North on the West of the harbour basin. Pilot (7) can be ordered from the Port Administration via ship's Agents not less that 8 hours prior to berthing, and 4 hours prior to unberthing and shifting.

Pilotage information can be obtained from the Pilot Radio Station, Panjang Pilot/Panjang Radio/PKC9. VHF Channels 12 and 14, opened daily from 0030-1200 GMT. Pilotage available throughout 24 hours.

APPROACHES: *Navigational Report:* Approaching Panjang there are numerous small fishermen's houses built on bamboo sticks at sea, some without lights. Therefore approaching or sailing from Panjang at night time should not be attempted.
ANCHORAGE: Panjang Roads; outer (West) side of the reef about 2 miles from the breakwater.
MAX. SIZE: Max. draft 9.5 m.
BERTHING:
Quay A on the South side, length 172 m., depth 8 m. LW.
Quay B on the East side, length 210 m., depth 7 m. LW.
Quay C on the West side, length 138 m., depth 3 m. LW.
Quay D on the North side, length 200 m., depth 9.5 m. LW.
Oil Jetty on the South side of Quay C, length 20 m., depth 5.5 m. LW.
Oil dolphin of Pertamina in the outer basin, South side of the reefs, depth 6.0 m.
Ocean vessels can also be berthed at 3 buoys in the inner basin (harbour).
Tarahan: Terminal is one mile to the South of Panjang, operated by P.T. Tambang Batubara Bukit Asam. Berth length 170 m., depth 12.0 m., distance between dolphins 240 m. Max. LOA 179 m., max. beam 27 m., max. draft 8.0 m. Loading rate (coal) 1,150 tonnes/p.h. in the initial stages.
HEALTH: During the time that the "Q" Flag is flying no one is allowed to board or leave the vessel except with the permission of the boarding Quarantine Officer.
Also see "Documents".

RADIO/VHF:
(a) Coastal Radio Station, Panjang Radio, call sign PKC4, working hours:

1. 500/430 kHz A1:	0100 – 0130; 0400 – 0500; 0700 – 0830; 1000 – 1030 GMT.
2. 6355 kHz A1:	0200 – 0230; 0600 – 0700; 0830 – 0900; 1030 – 1100 GMT.
3. 2182/2690 kHz A3H, A3J:	0500 – 0530; 0900 – 0930 GMT;
4. 6215.5 kHz A3H, A3J:	0130 – 0200; 0530 – 0600; 1130 – 1200 GMT.
5. 8808.8, 8/8284,9 kHz A3H, A3J:	0230 – 0300; 0930 – 1000; 1200 – 1300 GMT.
6. VHF Channel 16	0000 – 0600, 0900 – 1200 GMT.

(b) Pilot Radio Station/Panjang Radio/PKC9, working hours:
Channel 12 and 14: 0030 – 1200 GMT.
Vessels are requested to report correct ETA to Pilot Radio Station 2 or 3 hours before arrival and inform the ship's particulars as follows:
Name and Nationality of the vessel.
LOA, g.r.t., draft.
Last Port and Next Port of Call.
TUGS: It is compulsory for ships with a length of 70 m. and over to use tugboats in berthing and unberthing operation.
The port owns 2 tugboats of 800 h.p. and 250 h.p.; 4 other diesel tugboats from 100 h.p. to 230 h.p. owned by the PJKA (2) and the PT. Djakarta Lloyd (2).
LIGHTERAGE: 16 lighters available, capacity between 70 and 170 tons, owned by Port Administration and Shipping Agents, can be hired for loading vessels at anchor or buoys.
STEVEDORES: There are 1,300 registered labourers; working hours 0800 – 1200 and 1300 – 1600 local time. Overtime possible after being granted by the authorities concerned; 24 hours per day working time recommended.
Gang's average capacity 20 t.p.h. for bulk cargo and 15 t.p.h. for general cargo.
MEDICAL: Medical attention can be arranged through the Agents. There is a port doctor. The general hospital is in Tanjungkarang, about 13 km. away, where sick crew members may be hospitalized.
TANKERS: See "Berthing".
FRESH WATER: Supply is handled by the Port Administration to the wharves through pipe-lines. All berths fitted with fresh water connections (6 hydrants). Capacity is normally about 72 t.p.h. No water barge available.
FUEL: Bunkering not available.
FIRE PRECAUTIONS: The Port Administration handles 1 fire-fighting truck and 1 fire trailer.
Smoking strictly prohibited in warehouses, inside the Pertamina yard, on oil-jetty, and on board tankers. During the time a tanker is discharging, fire extinguishers must stand ready on the pier.
CONSULS: No local representation.
REPAIRS: Minor repairs can be carried out.
DRY DOCKS: None available.
SURVEYORS: None available; no Classification Society is represented at the port.
GANGWAY/DECK WATCHMEN: None available.
OPENING/CLOSING HATCHES: Opening and closing of ship's hatches is normally carried out by stevedores.
CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agent about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.
CARGO GEAR: Loading and discharging effected by ship's gear. 6 mobile cranes, between 3.5 tons and 15 tons, are available from the Port Administration, as well as 17 forklifts (between 2 and 15 tons) owned by Port Administration and shipping Agents.
AIRPORT: Branti Airport situated about 34 km. from Panjang. Regular (domestic) flights, Tanjungkarang–Jakarta v.v. 4 times daily.
TIME: GMT plus 7 hours.
HOLIDAYS: Fixed dates are: New Year (1st January); Independence Day (17th August) and Christmas Day (25th December). Other holidays: Idhul Adha, First of Muharram, Maulid of the Prophet Mohammad, Good Friday, Christ's Ascension, Mi'radj of the Prophet Mohammad and Idhul Fitri (2 days).
POLICE/FIRE: Port security is maintained by the state police; tel: 31.228 (Harbour Police). Fire Brigade, tel: 31113 or 52.741.
TELEPHONES: No arrangement exists for placing telephone on board.
SERVICES: Radar and radio repairs possible.
SHORE LEAVE: Crew members are allowed ashore.
INDENTIFICATION CARDS: Shore passes needed, obtained via Agents.
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GENERAL: The port's status is general exports (rubber, coffee, pepper, timber, cattle fodder, corn, etc.)
Charts and nautical publications concerning this port are issued by the Indonesian Naval Hydrographic Office (HIDRAL).
All Government offices in the port (Except Customs) keep working hours as follows: Monday to Thursday 0730 – 1430, Friday 0730 – 1100, Saturday 0730 – 1330 (The Customs 0700 – 1600 hrs.)
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Panjang – Jakarta: On Monday, Wednesday and Saturday 1300 hrs. by Government Boeing Jetfoil (3 hours voyage).
Srengsem (2 miles South of Panjang) – Merak: twice daily Ro/Ro ferry, 4 hours voyage.
Bakauheni (100 km. S.E. from Panjang) – Merak: Ro/Ro ferry each hour, 1.5 hours voyage. Panjang – Bakauheni 1.5 hours by car.

DEVELOPMENTS: Construction works for the extension of quay D with another 200 m. pre-stressed concrete wharf are under way, and planned for completion in 1985; including transit shed (3,000 sq.m.) directly behind new wharf.

Container – yard (25,000 sq.m.) behind new wharf.

AUTHORITY: Port Perum Branch Panjang, Directorate General of Sea Communication, Communication Dept. (Lampung – Indonesia), Jl. Sumatera Pelabuhan Panjang, Lampung, Indonesia.

Tel: (0271) 31379, 31149, 31146, 31155, 31401 (17 lines). *Telex:* 27391. *Cables:* Adpel Panjang. *Contact:* Administrator Pelabuhan Panjang or Kepala Cabang PERUM II Pelabuhan Panjang.

POLENG: 06.39 S. 112.55 E.

SHIPMASTER'S REPORT: April 1978.

LOCATION: The Poleng Terminal consists of the tanker "Lynda" moored stern first to an SBS. The "Lynda" is a tanker of some 72,000 d.w.t. The position of the "Lynda" is 06° 38′ 42″ S., 112° 55′ 23″ E.

PILOTAGE: Performed by the Master of the "Lynda".

ANCHORAGE: The anchorage position is anywhere North and West of the "Lynda" distance 1 mile. The depth of water is 26 fathoms and 9 shackles of cable is recommended.

RESTRICTIONS: The "Lynda" is moored in 180 ft. of water and there is no restriction regarding the draft or the size of ship that she can accommodate alongside.

RADIO: The Post and Telecommunications Department do not permit the use of the WT/RT on the "Lynda" so all ETA's are sent via Pertaminaship Jakarta.

Once the "Lynda" receives the ETA they then organise the 'opening of the Port' and the officials to clear the ship are ordered from Surabaja. The usual documents are required and 2 Agents come out with the officials.

VHF: The "Lynda" keeps watch on Channel 6 and only monitors Channel 16 when a vessel is expected.

BERTHING: The "Lynda" has 4 "Yokohama" type fenders on her port side for berthing. Six ropes are required at each end. Berthing is port side alongside.

The "Lynda" is loaded direct from the well and the API is 55 with a loading temperature of 84°. Normally, the API is 42-47. The pumping capability of the "Lynda" is 2,000 t.p.h. although we were only able to get 1,557 t.p.h. The cargo is loaded through 1×12 in. hose.

Prior to loading the tanks on the "Lynda" are ullaged in the presence of the Customs and the cargo calculated. This is repeated at the end of the load for the Bill of Lading figures. Clearance is granted from Poleng and all documents are signed prior to sailing. There being no early departure available.

At present they are receiving 1 ship about every 2 months, mainly topping-off operations and it is thought that the vessel may be moved to another position.

FRESH WATER: Not available.

FUEL: Not available.

STORES: Not available.

GENERAL: No Walport film exchange. All shore personnel are accommodated aboard the "Lynda". Some vessels have parted their mooring lines during the Winter months with winds of 25 knots and 8 ft. – 18 ft. seas running.

POMALAA and TANJUNG LEPEE:

04.14 S. 121.32 E. **(See Plan Book)**

LOCATION: Port of Pomalaa, Kolaka, is situated in the Gulf of Bone, S.E. Sulawesi in position Lat. 04° 10′ 30″ S., Long. 121° 36′ 00″ E.

LOADING POSITIONS:

Berth: Lat. 04° 10′ 30″ S., Long. 121° 35′ 56″ E.

Anchorage position for ore loading at Pomalaa: Vessels of 15,000 d.w.t. and over, Lat. 04° 10′ 00″ S., Long. 121° 35′ 24″ E. Vessels up to 15,000 d.w.t., Lat. 04° 10′ 06″ S., Long. 121° 35′ 30″ E.

Anchorage position for ore loading at Tanjung Lepee: Lat. 04° 13′ 38″ S., Long. 121° 32′ 31″ E.

FLAGS: To be flown by incoming vessels: Vessel's National Flag; Indonesian Flag; Vessels numbers; Quarantine & Immigration Flag.

DOCUMENTS: To be produced upon vessel's arrival:

14 Crew Lists
4 Passenger Lists
5 Parcel Lists
5 Store Lists
8 Cargo Manifests
3 Narcotics Lists
3 General Information
5 Personal Effects Lists
3 Vaccination Lists
5 Fire Arms & Ammunition Lists
International Load Line Certificate
Maritime Declaration of Health Certificate
Health Book or Bill of Health
Derat Certificate
Last Port Clearance
Safety Radio Certificate
Harbour Report.

Inspection Team: This team consists of the Port Health Officer, Customs Officer, Harbour Master and Immigration Officer.

After the vessel is granted free pratique, the Immigration Officer checks passports, seamen's books and crew list and issues shore passes.

PILOTAGE: Pilotage is not compulsory and there is no Pilot at Pomalaa. Because Pomalaa waters are still declared as uncleared waters, it is advisable that vessels calling for the first time at Pomalaa, use a Pilot.

Pilot can be ordered from Ujung Pandang via Nikel Ujung Pandang not less than 72 hours before vessel's arrival at pilot station.

There are 2 pilot stations: (1) For Pomalaa loading point and berth, Lat. 04° 04′ 03″ S., Long. 121° 28′ 00″ E. (2) For Tanjung Lepee loading point, Lat. 04° 15′ 00″ S., Long. 121° 29′ 00″ E.

If vessel wishes to be piloted to the loading/unloading point on arrival day, vessel has to arrive at Pilot station before 1200 hrs. local time for Pomalaa loading point and berth and before 1400 hrs. local time for Tanjung Lepee loading point.

RESTRICTIONS: *Arriving/Departing Hours:* Arrival: from 0600 – 1800 hrs. local time. Departure: 1. Pomalaa loading point and berth: from 0600 – 1600 hrs. local time. 2. Tanjung Lepee loading point: from 0600 – 1800 hrs. local time.

Mooring: The undermentioned vessels can be moored alongside berth: General cargo vessels of max. LOA 135 m. and tankers of max. LOA 110 m.

Depths: Bar channel 11.00 m. (LWS); Alongside berth, North Pier, 5.00 m. (LWS); South Pier, 7.00 m. (LWS). At Pomalaa anchorage or loading point: for vessels of 15,000 d.w.t. and over – 13.00 m. (LWS); for vessels up to 15,000 d.w.t. – 11.00 m. (LWS). At Tanjung Lepee anchorage or loading point – 24.00 m. (LWS).

MAX. SIZE: *General Cargo:* At North Pier: LOA not to exceed 135 m. and fully loaded draft not more than 5.00 m. At South Pier: LOA not to exceed 135 m. and fully loaded draft not more than 7.00 m.

Tankers: LOA not to exceed 110 m. and fully loaded draft not more than 7.00 m.

Ore Carriers: Fully loaded draft not to exceed 11.00 m. Vessels without cranes or derricks are not acceptable. Minimum capacity of cranes or derricks must be 5 tons.

General Cargo at Anchorage: Fully loaded draft not to exceed 11.00 m.

RADIO: Cables to Nikel Ujungpandang can be sent through Ujungpandang (Macassar) Coastal Radio Station, call sign PKF.

Arrival Notice: Information required.

Owner's advice: Owner to advise by cable to Adhiguna, Aneka Tambang Jakarta and Nikel Ujungpandang at least 8 working days before vessel's arrival at loading port.

Master's advice: At least 48 hours (or 72 hours if Pilot's assistance required) before vessel's arrival in Pomalaa waters, Master shall give the following information to Adhiguna and Aneka Tambang Jakarta and Nikel Ujungpandang. Last port of call, draft on arrival, estimated draft on departure, quantity of nickel ore or ferro-nickel ingots to be loaded, stowage plan (hatch division for the respective cargo), quantity and kind of commodity(ies) to be discharged and other necessary messages. Final amended arrival time must be sent at the latest 24 hours before arrival.

Previous experience showed that one cannot rely on telegrams regarding ETA sent by Agents at last port of call in due time, therefore Nikel Ujungpandang waits for the Master's telegram in order to make necessary preparation.

Shipper/Agent's advice: Shipper/Agents shall cable the Master 3 working days before vessel's arrival indicating the loading/unloading position prepared and other necessary messages.

Ship's radio transmitter is not to be used while lying in port.

VHF: Communication by marine VHF possible with the port.

TUGS: Available.

BERTHING: The wharf consists of a concrete quay extending 70 m. seaward and 18 m. breadth.

Priority: Ore carriers. First come first served. Other vessels: Priority to be given to tankers.

Loading/Unloading Facilities for General Cargoes:

Shore facilities: A number of mobile cranes with capacities of 5 tons and 20 tons are available, also forklifts.

Lighters: A number of lighters of 70 d.w.t. up to 120 d.w.t. are available.

Loading/Unloading capacity: About 12 tons per gang per working hour, depending on the type of vessel, available cargo spaces, vessel's cargo gear, kind of cargoes, size of hatches, etc.

Unloading Facilities for Tankers:

Pipe-lines: 1 line of 10 in.×1,600 m. for M.F.O.
1 line of 8 in.×1,600 m. for I.D.O.

Pumps: 3 booster pumps with capacity of 150 cu.m./h. each.

Hoses: 4 pieces flexible hoses of 10 in.×9.40 m. with ASA 150 flanges connections.

Unloading capacity: maximum 200 t.p.h. by ship or shore pumps.

Tank farm capacity: 2×5,000 KL for M.F.O.
1×1,500 KL for I.D.O.

Tank cleaning: Tank cleaning operation is not allowed in Pomalaa waters.

Lay-time: Lay time shall commence 6 hours after N.O.R. tendered.

Loading Facilities for Ore Carriers:

General: Loading of nickel ore at Pomalaa and Tanjung Lepee loading point is done by means of barges.

Number of gangs: Usually 4 gangs are used by vessels equipped with cranes or derricks. If necessary stevedores can provide 6 gangs.

Loading capacity: About 2,000 tons/24 hours per vessel, depending on the type of vessel, vessel's cargo gear, weather conditions, etc.

Unloading: Cargo for Aneka Tambang only.

Vessels without cranes or derricks are not acceptable.

Labourers will be supplied by shipper. Making the vessel ready for loading/unloading to be done by vessel's crew members.

STEVEDORES: Stevedoring is performed by P.T. Aneka Tambang's personnel. Loading/unloading equipment to be furnished by the vessel.

Working Hours: Loading to be effected on weather working days of 24 consecutive hours Sunday and Holidays included (WWD SHINC), but the following National Holidays are excepted:

New Year (January 1st); Buddhist New Year; Hindu New Year; Independence Day (August 17th); Christmas Day (December 25th). Idul Adha, Maulid Day, Easter, and Lebaran determined by Moslem calendar and differ from year to year by international calendar. For definite dates consult Port Administrator.

Despatch/demurrage money to be paid in accordance with the related contract.

Loading/unloading to be effected with customary quick despatch (C.Q.D.) on good weather working days whereby Sundays, holidays, governmental local holidays and Saturdays between noon and midnight and Mondays between 0000 hrs. and 0800 hrs. are always excepted.

At Shipmaster's request, work on these excepted days can be arranged. The principals will pay the overtime charge on these excepted days.

MEDICAL: Doctor, hospital and inoculation services available.

TANKERS: See "Berthing".

FRESH WATER: None. In an emergency water can be supplied in limited quantity (max. 200 tonnes). This supply is intended for special ship which can berth alongside the jetties.

FUEL: Not available.

TIME: GMT plus 8 hours.

CONSULS: None.

CUSTOMS: Vessel's bonded store will be sealed by Customs Officer on arrival and will remain sealed until the vessel leaves port.

Note: It is recommended that ship's Master consult the Agents about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, narcotics, etc. to prevent unnecessary difficulties and eventually fines.

REPATRIATION: Can be arranged. Repatriant is to be guarded by Immigration Officer from Pomalaa to Jakarta via Ujung Pandang until his departure from Jakarta to the destined country.

AIRPORT: There is one flight a week between Ujung Pandang and Pomalaa, served by Merpati Nusantara Airlines (MNA) using Cassa or Oisi Planes. Flying time about 60 minutes.

GENERAL:

Cash Advances: Cash advance at Master's request can be supplied by Agents in a reasonable amount.

Fumigation: No facilities.

Survey On/Off Hire: Can be arranged.

Ship's Chandler: None. In emergency cases, for a limited quantity Agents can act as ship's chandler.

Chart: Indonesian Sea Chart No. 152.

Nature of Bottom: Sand and soft materials.

M.P.S. Tax: So called M.P.S. Tax (freight tax) has to be paid in advance to the Indonesian Tax Office at Jakarta, through the General Agents, Jakarta, therefore Principals are requested to remit the said MPS Tax's funds at the same time with the remittance of advance payment of ship's disbursements.

The amount of M.P.S. Tax (about 2% of the concerned freight earned) will be advised by the General Agents, Jakarta to the Principals, if possible a few days before Principal remits advance payment for disbursements. The final calculation of the M.P.S. Tax will be made later.

Disbursements: At least 14 days before vessel's arrival at Pomalaa, vessel's principal have to remit US$4,000 to the account of General Agents, at Jakarta as advance payment of the related ship's disbursement.

Vessel's Disbursement Accounts: All vessel's expenses will be charged to the related Principals through the General Agents.

SHORE LEAVE:

Shore Pass: Shore pass must be carried by crew whilst ashore.

Visitors: Vessel's crew members are not allowed to invite friends, hawkers from shore aboard the vessel.

Visiting Kolaka: Crew members are prohibited to leave Pomalaa for Kolaka, except Master and Officers, who must be guided by Agents. Local leave in Pomalaa concession is permitted.

Shore Leave Hours: From 0600 hrs. to 2300 hrs. local time.

AGENCY:

General Agent for Ore Carriers: PT Pelayaran Bahtera Adhiguna. 10-12 Jalan Kalibesar Timur, P.O.Box 1313, Jakarta, Indonesia. Phone 276547. Cable Address: Adiguna Jakarta, Telex: Adiguna Jkt 42854.

General Agent for Non-Ore Carriers: To be nominated by principals.

Sub-Agents: PT Aneka Tambang, Unit Pertambangan Nikel, Pomalaa. Jalan Dr. Sam Ratulangi 60, P.O.Box 213, Ujung Pandang, Indonesia. Cable address: Nikel Ujungpandang. Telephone 22237 – 22234.

Sub-Agent's Head Office: P.T. Aneka Tambang 24-26 Jalan Bungur Besar, Jakarta, Indonesia. Phone: 410108, Telex: Antam Jkt 49147. P.O.Box 2513, Jakarta.

AUTHORITY: Port Authority of Pomalaa, Pomalaa, Sulawesi Tenggara, Indonesia. *Contact:* Harbour Master.

PULAU SAMBU: 01.09 N. 103.54 E.

DOCUMENTS: Upon arrival ships have to fill in the following forms:

Harbour Report (obtainable from the boarding Pilot).

Pilot Certificate.

Also required from the Masters are:

6 copies of Crew List.

1 copy Stores List.

1 copy Personal Effects List.

PILOTAGE: Pilots are in Government Service. Pilot signals according to the International Code of Signals. Pilots can be ordered direct by cable to the Harbour Master or via the ship's Agent. Pilot boards in position Lat. 1° 10′ 38″ N., Long. 103° 52′ 12″ E.

RADIO: Vessels calling at Pulau Sambu for bunkers should communicate with PKC 2 Pladju Radio or Tunasix Singapore, or direct with Sambu Radio PKJ 51 (A3 Radio Telephone) and VHF Channel 19.

HEALTH: Vessels arriving from abroad have to fly the "Q" Flag (yellow flag) until boarded and released by the Quarantine Officer. Masters have to fill in the Quarantine Form and signed by him and the ship's surgeon, if any, and produce the following:

Health Book or Bill of Health.

Derat (Exemption) Certificate.

Valid International Vaccination Certificates of Crew members and Passengers.

Crew and Passenger's Lists showing the validity dates of above Certificates.

During the time that the "Q" Flag is flying no one is allowed to board or leave the vessel except with the permission of the boarding Quarantine Officer.

TUGS: Available.

BERTHING: Pulau Sambu has an excellent location 8 miles South of Singapore and approximately 3 miles from the International waterway. It has 2 deep water jetties with a max. depth of 36 ft., a max. length of 440 ft., and the length of the navigable channel is 1,500 ft.

FUEL: Ideally, it is necessary to advise suppliers of bunkers required at least 15 days before the ETA of the vessel. The authorities at Pulau Sambu also require the vessel to contact them 24 hours prior to their ETA.

Bunkers available: Fuel Oil, 1000 seconds, and MDO.

CUSTOMS: Masters have to declare all local currency on board. It is strictly prohibited to take local currency ashore. No limitation for foreign currency.

Master should consult the Agent about prevailing Customs regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and fines.

AUTHORITY: Department of Sea Communications.

SABANG: 05.50 N. 95.20 E. (See Plan Book)

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.

Seaworthiness Certificate.

Measurement (Tonnage) Certificate.

Derat (Exemption) Certificate.

International Load Line Certificate.

Safety Equipment Certificate (cargo ships).

Safety Radio and Radiotelephony Certificate (cargo ships).

Health Book or Bill Health and vaccination certificates.

Last Port Clearance.

Subscription of Light and Harbour Dues and wharfage if any.

Crew Lists and Passenger's Lists with vaccination dates.

Ship's Articles.

Stores List.

Passport or seaman's card remain in Immigration office until cleared and the crew to use shore pass to go on shore, issued by the Immigration.

PILOTAGE: *Approach:*

Vessel should steer on the light of Klah Island and keep at least 1 mile offshore, especially of Ujung Masam owing to an inward drift, until the bay is well open. When entering the bay, the light-buoy South of Ujung Lho Me should be kept on port side.

The Signal Station at Peunimpun reports day and night the arrival of ships, by night an unofficial white light, showing all around is shown, visible at a distance of 12 miles.

Signals by day with flags according the International Code of Signals and by night by signal lamp.

HEALTH: Vessels arriving from abroad direct have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the Port. The provisional free pratique is only valid for this Port, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.

RADIO: Sabang Radio. Call sign: PKA. Frequency: 500 kHz/438 kHz. Time: 0100–0200, 0400–0500, 0900–1000 GMT. 8473 kHz/8686 kHz. Time: 0200–0230, 1000–1030 GMT. 17184.5 kHz Time: 0230–0300, 1030–1100 GMT. VHF – Available. Power – 1 kW.

TUGS: A small tug available for mooring assistance, subject advance notice.

BERTHING: The usual anchorage in the inner roads is the North side of the bay, vessels can approach shore until in 32 m. and 29 m. depth. There is good holding ground. During S.W. or S.S.W. squalls in the West monsoon vessels have to be kept free from the quays by means of the mooring buoys moored off the berths.

Western coal wharf: usable berth length 140 m. with depths alongside of 7 m. at LWS.

Eastern coal wharf: usable berth length 150 m. depths 6.8 m. at LWS.

Commercial wharf: usable berth length 150 m. depths 8.0 m. at LWS (length: 220).

At the head of the oil jetty there is a depth of 10 m. at LWS.

FRESH WATER: Available, rate 30 t.p.h. with one hose. Usual to use 3 hoses. Water can be pumped faster if additional water pump used.

FUEL: Available from Pertamina, Jakarta if permit obtained.

REPAIRS: Minor repairs can be carried out at the West end of the Coal Wharf at the repair shop and electrical power station.

CUSTOMS ALLOWANCES: It is recommended that Masters consult the Agents about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

AIRPORT: One domestic flight a day, 15 minutes drive from the Harbour.

AUTHORITY: Department of Sea Communication.

SALAWATI: 01.21 S. 130.59 E. (See Plan Book)

OPERATORS: Pertamina – Phillips Petroleum Co. Indonesia.

LOCATION: Phillips Salawati Marine Terminal is located in the Sele Straits between the Island of Salawati and mainland Irian Jaya, Indonesia

Salawati Marine Terminal Office is located on board the storage barge “Wampum” adjacent to the export tanker mooring.

Mooring system is positioned in Latitude 1° 21′ 18″ S. and Longitude 130° 58′ 39″ E. The minimum water depth in the area of the mooring system is 51 ft.

FLAGS: In accordance with practice in Indonesian Ports, Quarantine, Immigration, Pilot and call sign flags must be displayed by all vessels approaching the anchorage. These signals shall be displayed continuously until clearance is granted. The signals are as follows:

Sunrise to sunset:	Quarantine Flag “Q”
Sunset to sunrise:	Signal Lights (red over white)

The “N” flag should be flown until the Immigration Officer boards the ship. The “G” flag (request for Pilot) should be flown until the Mooring Master boards. The vessel should also fly its call sign. As soon as the Mooring Master boards, the “G” flag should be replaced by the “H” flag which signifies that the Pilot is aboard. The tanker may fly the “P” flag if it is going to sail within 24 hours.

DOCUMENTS: The boarding team, e.g. Agent, Customs, Immigration, Port Health Officers, Harbour Master will board the vessel in the anchorage area to grant clearance.

The Customs Officer will board the vessel to seal the stores. If arriving from a foreign port, the Agent will prepare the General Cargo Declaration form stating the cargo on board the vessel and attaching appropriate shipping documents. If the tanker is arriving from an Indonesian port, the 5-B form issued at the last Indonesian port will be retained by Customs and the arrival clearance at Salawati is granted.

The Harbour Master submits a Harbour Report Form for the Master to complete. The Agent prepares the ship’s documents check list form to check the validity of each document. These documents are: Certificate of Registry, Ship’s Construction Certificate, Load Line Certificate, Safety Equipment Certificate, Safety Radio/Telephone/Telegraph Certificate, Cargo Gear Certificate and Derat/Exemption Certificate. This list is then delivered to the Harbour Master with the following documents attached: Last Port Clearance, Crew List approved by the Immigration Officer and Light Dues Receipt if arriving from another Indonesian port. The Harbour Master issues a port clearance on departure provided clearance is also granted by the other governmental authorities (A Panamanian port clearance for Panamanian flag vessels is not required at Salawati).

The Immigration Officer requires 2 copies of the Crew List and will check the Ship’s Articles and the passports of the crew. When these documents are found to be in order, an arrival clearance will be marked on the crew list.

If arriving from another Indonesian port the Agent will sign a guarantee if the vessel cannot prove that light dues have been paid.

Prior to the vessel’s departure the Immigration Official requires 2 copies of the Crew List to be marked for departure immigration clearance. The Master is given a signed copy by the Immigration official of the Crew List for departure.

Crude oil loading documents such as Bills of Lading, Quality Certificate, Quantity Certificate, Dry Certificate/Ullage Report, Time Loading Report, Certificate of Origin, Cargo Manifest and Master’s Receipt for Documents/Samples are prepared at Salawati Marine Terminal. When the tanker has been loaded, the documents shall be completed and signed by the Master. Final clearance formalities will be carried out aboard the vessel in the anchorage area.

Customs will issue the 5–B form which is for departure clearance of the vessel.

The Master should be prepared to issue:

15 copies of Crew List.
4 copies of Cargo Manifest.
4 copies of Personal Effects.
4 copies of Bonded Store List.
4 copies of Store List.
4 copies Narcotics List.
2 copies of Vaccination List.

Before leaving the terminal area, the Master should advise the terminal the Vessel’s ETA at destination.

PILOTAGE: The Salawati Terminal Pilot will board the vessel in the anchorage area for passage to the Salawati Terminal. The channel is marked with numerous Navigational Aids to permit safe passage through the Sele Strait. Vessels arriving in the anchorage area after 1400 hrs. local time (GMT + 9 hours) will be berthed at the terminal at Pilot’s discretion.

Ships are requested to have a pilot ladder safely and securely rigged and ready for immediate use, and long enough to reach the mooring launch. A combination of pilot ladder and ship’s accommodation ladder, so arranged that personnel can first use pilot ladder until part way up the vessel’s side, and then transfer to the accommodation ladder is recommended, especially on very large ships. A light line should be ready to take aboard the Mooring Master’s equipment. There should be adequate lighting at night. Vessels will provide a lee for the Mooring Master both when boarding and leaving.

ANCHORAGE: If requested to anchor, the recommended anchorage area is 4.5 miles West of Sorong in position Latitude 00° 53′ 00″ S. and Longitude 131° 10′ 00″ E. Under no circumstances should the export tanker enter the restricted area around the structures without the Mooring Master aboard.

RESTRICTIONS: The approach channel has a minimum depth of 49 ft. A minimum under keel clearance of 6 ft, is required, restricting the maximum loaded draft of an export tanker to 43 ft.

Strength of Tide: Up to 4.5 knots.

MAX. SIZE: Salawati Marine Terminal can accept vessels up to 60,000 d.w.t. Under certain weather conditions, vessels up to 100,000 d.w.t., light loaded to the equivalent of a 60,000 d.w.t. vessel may be accepted. Such acceptance is at the discretion of the Area Superintendent or his designated alternate.

The Ship’s Master must not permit his vessel to be loaded to a depth of more than 43 ft. deepest draft due to the restrictions of water depth in Sele Strait unless permitted to do so by The Company Area Superintendent or his designated alternate.

HEALTH: Each tanker entering the port of Salawati must have requested and been granted entry permit/agency permit prior to its arrival. At the same time application is made for provisional pratique through the Directorate of Quarantine and, if granted, a cable advice is sent to the harbour authorities. Port Health Clearance is issued prior to the tanker’s arrival and is also valid for departure clearance. If provisional pratique is not granted a Port Health Officer will be provided. All of the foregoing is arranged through and by the Agent.

Each crew member should be in possession of an International Vaccination Card.

RADIO: It is most important that incoming tankers contact Salawati Marine Terminal 72 hours before the estimated time of arrival. Further cables should be sent to the terminal 48 hours and 24 hours in advance of arrival, or when ETA changes by more than 3 hours. Communications with Salawati Marine Terminal can be established using one of the following links.

Sorong Coastal Radio Station

Name of Radio : Pertamina Sorong Radio

Time schedule of Pertamina Sorong radio/PKY.41

	Frequency		*Hrs. of Service*	*Emis-*	
	QSW	*QSX*	*(GMT)*	*sion*	*Remarks*
I.	6456.5	6 mc/s Common-Ch. 5/6	0000 – 0020 0100 – 0120 0200 – 0220 0300 – 0320 0400 – 0420 2300 – 2320	A1	I. Service: Mon-Thurs:2300–0500 Friday: 2300 – 0230 Saturday: 2300 – 0400
II.	6512.6	6206.2	0020 – 0100 0220 – 0300 0420 – 0500	A3J	II. Message/Telegram: QSJ: SC=40 CTMS CC=50 CTMS LC=30 CTMS
III.	4425.6	4131.2	0120 – 0200 0320 – 0400 2320 – 2400	A3J	III. Telephone Call: Minimal 3 minutes VHF : CC=4.80 GF. HF : CC=7.20 GF. byadding1.60GF(VHF) 2.40GF(HF) every 1 minute plus. (The land line charge is included in the land station charge).
IV.	156.45MHz 156.80MHz 161.55MHz	– Ch. 16 –	2300 – 0500	F3	IV. Proceed Sorong, please contact first, 2 or 3 days before arrival.

Time schedule Government Sorong Radio PKY 4.

Frequency		*Hours of Service*	*Emis-*
TX	*RX*	*(GMT)*	*sion*
500	500	0000 – 0500 0800 – 1300	A1
8461	8356 – 8374	0200 – 0300 0900 – 1000	A1
2182	2182	0000 – 0030 1000 – 1300	A3
8802.6	8270	0030 – 0100 1000 – 1100	
6204	6215	2230 – 2330	A3
6213.5	6215	0400 – 0500 0800 – 0900 0900 – 1000	
Ch. 16	Ch. 16	0000 – 0500 0800 – 1300 2300 – 2400	

Master should request Pertamina Sorong Radio to relay the necessary information to Salawati Marine Terminal.

Pertamina Coastal Radio Station

Name of Radio : Pertamina Jakarta Radio
Call Sign : PKI–2

Frequency kHz/MHz	*Class*	*Hours GMT*
452/600	A1	H24
8626	A1	0200–0400
		0500–0600
		0700–0800
		1000–1200
		1400–1600
		1700–2000
12980	A1	0000–0200
		0400–0500
		0800–1000
		1200–1400
		1600–1700
		2000–2200
4425.6	A3A/A3J	0500–0600
		0800–0900
		1600–1800
		2200–2400
6512.6/6206.2	A3A/A3J	0000–0100
		0300–0400
		0600–0700
		1200–1400
		1800–2000
8759.2/8235.3	A3A/A3J	0100–0300
		0400–0500
		0700–0800
		1100–1200
		1500–1600
156.45	F3	H24
156.80	F3	H24
161.55	F3	H24

Master should request Pertamina Jakarta Radio Station to relay the necessary information to Phillips office in Jakarta at phone no. 320108 (5 lines) or by telex to Philpetco telex No. 46798 Filpet IA.

Details of Arrival Cable:

The following information should be included in the cable sent to Salawati Marine Terminal 72 hours in advance of arrival.

1. Name of vessel and radio call sign.
2. ETA in GMT and date (Local time is GMT + 9 hours).
3. Cargo requirements.
4. Deballast time.
5. Maximum loading rate.
6. Arrival draft.
7. If there is any sickness aboard give whatever information is available as to the possible type of sickness, or confirm that vessel has clean bill of health.
8. Last Port of call.
9. Any hull, bulkhead, valve or pipe-line leaks on vessel which could effect loading or cause pollution.
10. Flange dimension of vessel's manifold connection.

Procedure for Appointing Agent:

Owners should appoint "Pertaminaship" Jakarta, as General Agent by cable/telex which in turn will appoint Pertamina Unit V as handling Agent to attend the vessel at Salawati Marine Terminal. Pertaminaship should be notified two weeks prior to tanker's arrival.

General Agents: Pertamina Directorate of Shipping & Telecommunications
Pertamina Building, 6th Floor, 1A, Jalan Medan Merdeka Timur,
P.O. Box 327,
Jakarta Pusat, Indonesia
Cable Address: Pertaminaship Jakarta
Telex No.: DKT 44450 Answerback Pertamina.
Telephone: 343806, 343781 (Tanker Agency & Operations)

Entry Permit or Agency Permit:

Each tanker entering Salawati Marine Terminal must have requested and been granted entry permit prior to its arrival. It is vital that the General Agent receives the following information two weeks before vessel's arrival to obtain agency permit for foreign vessel from the Government/Directorate General of Sea Communication:

1. Name of owners/principals and full address.
2. Name of vessel.
3. d.w.t./Call Sign/Flag.
4. Name of Master/Number of Crew.
5. Last Port of Call.
6. ETA.
7. Destination after loading.
8. Indonesian Ports of Call.

The ship's Master is responsible to ensure that no communication by radio is allowed within the terminal area. Unauthorized radio communication will be cause for cessation of all operations, except clearing of the berth, and vessel's notice of readiness will be immediately nullified.

VHF: Vessels equipped with VHF radio telephone should contact terminal on International Mobile Service Channel 16/156.80 MHz from 0000–2400 hrs. GMT. The language of the terminal is English and Indonesian.

BERTHING: The Company Area Superintendent, or his designated alternate, shall be the sole authority to decide when the port is closed due to unsuitable weather conditions preventing normal working operations.

Various combinations of wind, sea, and tidal conditions, also the size, length, ballasted trim, and handling qualities of a vessel can affect the decision to berth a vessel at Salawati Marine Terminal. All of these factors have to be evaluated before a final berthing decision is made.

After a vessel has been berthed, a terminal official will board to discuss loading arrangements. Before any crude is loaded all ship's scuppers on main decks must be plugged and cemented oil tight. Approved mechanical means of closing scuppers may be accepted. A deck inspection will be made by Salawati officials and if the vessel is suitable for loading crude oil a signed notation to this effect will be made on the Company Dry Certificate.

It is the responsibility of the vessel to ensure that all mooring lines are properly tended. Salawati personnel will constantly check the vessel's mooring and at any time may direct the lines to be heaved tighter or slackened off under the supervision of a responsible ship's officer, as circumstances warrant.

During the vessel's stay at the mooring emergency towing wires shall at all times be hung over the ship's bow and stern. These wires shall be secured to the bollards inboard to enable the vessel to be towed away should the need arise. They must be tended throughout to keep the eye of the wire not more than 2 ft. above the water.

The terminal official will report unsatisfactory conditions to the Company Area Superintendent or his designated alternate, who may, in turn, reject the ship until corrections are fully made. All costs accruing therefrom will be for the ship's account.

A ship may be rejected, if, upon inspection, it is not properly equipped, or if it is not suitably manned, or if it has dirty ballast or tanks unsuitable for the cargo as determined by the Company Area Superintendent or his designated alternate.

A vessel is suitably manned if it has a full complement of qualified officers and a crew all of whom are in sober condition, competent and willing to carry out their duties and orders.

A ship must be equipped with a good working propulsion unit as passed by the appropriate survey society. Inoperative ships, or partially inoperative ships will be rejected. Should it become inoperative while at the moorings it will be removed at the vessel's expense.

No repairs are to be made while mooring or unmooring, or at the moorings without the express permission of the Company Area Superintendent or his designated alternate.

A vessel must have both bower anchors in good working condition and in such sizes and amounts as to meet either "Lloyd's or A.B.S." standards although they may be, in fact, classified by other societies. It is strongly recommended that anchors have proper anchor buoys attached to each anchor.

All vessels must carry adequate, synthetic lines used for mooring purposes. No wire ropes should be used for mooring export tankers at this terminal. Each mooring rope must not be less than 100 fathoms in length.

To assist in vessel's turn around, the Mooring Master will advise necessary booms and cargo gear rigged and ready before the ship is berthed.

BALLAST: No facilities are available for disposal of dirty ballast.

Owners and Masters are required to observe International Convention laws and Indonesian Government regulations concerning pollution of the sea, having particular regard for this area of the Sele Strait.

It is the responsibility of the ship's Master to see that no oil of any kind is pumped or spilled overboard from his ship. Drip pans, sand, dispersant etc., should be used at all times especially when disconnecting hoses, in order to avoid any spillage overboard.

The categories of pollution include oily water from bilges, crude residual from previous voyages, or any other matter that may result in pollution of the sea.

Any fines imposed by governmental authority for pollution shall be for the vessel's account.

In the event that the Company has to settle any third party claims as a result of damages to property caused by pollution attributable in any way to the vessel, they will have the right to reimbursement by those responsible for the vessel for all expenses incurred.

In the event of oil spillage or pollution of the waters all labour and employment costs for cleaning operations will be to the vessel's account if caused by the vessel.

As soon as practical after arrival, all tankers will be inspected by a Salawati Marine Terminal Official for dirty ballast. During discharge of ballast similar inspections will continue.

If evidence of oil appears at any of these inspections, the ship will be rejected, and will not be accepted again until satisfactory evidence is produced that such ballast was disposed of in a proper manner. If during inspection, or during progress of loading, it is revealed that ship's tanks are not tight, or that oil is leaking from the ship, the ship may be rejected or refused further loading.

If the ship's tanks are found to be leaking, it will not be accepted for loading.

A tanker must have sufficient ballast for safe handling having due regard to existing weather and sea conditions and also for safe passage through the Sele Strait. Through a careful watch of the weather and sea conditions, frequent exchange of information between ship and terminal, and by a knowledge of the behaviour of his own ship, a ship's Master may come to the terminal with a minimum of ballast and thus lessen any possibility of infringement of sea pollution regulations.

In addition to the lights usually displayed, vessels at the moorings discharging ballast or loading cargo during darkness will brilliantly illuminate the sea around the ship, so that any pollution will be noticeable. The lighting will be of an approved and permanent nature.

Tankers equipped with a separate system of ballast tanks will be allowed to discharge ballast, and load oil simultaneously, providing approval is first obtained from the Company Area Superintendent or his designated alternate or independent inspector.

Most responsible ship Owners have adopted a system of tank cleaning using circulatory methods of transfer of tank washings with chemicals. The result is that no oil discharges into the sea and oil separated is collected in a slop tank. The terminal will load on top of such slops unless otherwise directed. This system is highly recommended to avoid pollution of the Sele Strait.

Masters are warned that inspection of ballast is strict.

Any tanker rejected because of dirty ballast or sea pollution will automatically nullify his notice of readiness and will lose any priority of position for loading.

LOADING: It is absolutely essential that extremely careful supervision be exercised by officers of vessels while loading operations are in progress. A responsible ship's officer is required to be on duty continuously at a point near to the tanks being loaded. He will be assisted by an adequate number of ship's personnel in these operations.

Raising, lowering, connecting, tending and disconnecting of oil loading hoses as well as other labours and duties on shipboard connected with loading of cargo or maintaining mooring lines in a correct manner will be performed by the ship's crew directed by a responsible officer as required by the terminal official. Loading of export tankers is through two loading hoses with 10 in. ASA 150 connections.

All ships using Salawati Marine Terminal must be able to connect their manifold to the 10 in. flanges. Masters are reminded that it is the ship's responsibility to provide such reducers as may be required to make the connection and that the hose connecting operation will normally be carried out while the ship is de-ballasting.

The Terminal Official will report unsatisfactory conditions to the Company Area Superintendent or his designated alternate, who may, in turn, reject the ship until corrections are fully made. All costs accruing there from will be for the ship's account.

Request for the terminal to stop the flow of oil cargo at a predetermined tonnage must be in writing. The request must include the statement by the ship's Master that the Company will not be held responsible for any error and that in case of the vessel being overloaded the excess cargo cannot be pumped back to the storage tanker. Ship's Master will also be held responsible for any oil spills caused by this request.

The export tanker must move the loading hoses from the oil storage barge by means of its own derrick and using its own crew. The cargo derrick required to raise the loading hoses from the oil storage barge side must have minimum lifting capacity (SWL) of 5 tons and have a sufficient length of strong lifting wire rope on the drum to enable the cargo hook to reach the oil storage barge side, which is approximately 45 ft. away from the tanker's side, and still have adequate turns of wire left on the drum to ensure safety. Vessels which may consider the lifting capacity of their gear to be marginal should strengthen their gear accordingly. A common way to do so is to rig a second topping lift on the boom.

An A.O. Smith metering system is used to load the export tanker.

Two loading hoses with 10 in. of ASA 150 camlock flange connections are used to load the export tanker. All vessels not having 10 in. connections must provide their own reducers.

A loading rate of approx. 20,000 bbls.p.h. can be accomplished.

If, at any time an overflow of crude oil occurs, loading will be suspended immediately, and not be resumed until the oil is cleaned up and removed from the decks of the vessels, and/or from the surface of the sea, and any damage is repaired and no further danger exists. It is stressed that during loading operations, the Salawati cargo supervisor will immediately slow down the loading rate on receipt of a request for same from the ship's deck officer in charge of loading.

All spillages of oil must be reported immediately to the Company Area Superintendent, or his designated alternate, and subsequently, a detailed report, in writing, submitted by the Master of the vessel concerned giving all relevant details.

CARGO: *Typical Salawati Crude Analysis:*

Gravity at 60°F	41° API
Reid Vapour Pressure	2.0 at 100°F
Sulphur, Wt.%	0.5%
Kinematic Viscosity at 100°F	4.2 cs
Pour Point, °F	+20°F
Carbon Residue	1.3% by weight
B S & W	0.1% by weight
Flash (PMCC),°F	Below 50°F

CARGO DOCUMENTATION: Crude oil loading documents such as Bills of Lading, Quality Certificate, Quantity Certificate, Dry Certificate, Ullage Reports, Time Loading Report, Certificate of Origin, Cargo Manifest and Master's Receipt for Documents/Samples are prepared at Salawati Marine Terminal.

When the tanker has been loaded, the documents shall be completed and be taken aboard the tanker for the Master's signature.

Notes of protest, if any, should be handed to the Company Area Superintendent or his designated alternative for further delivery to Phillips Petroleum Company Indonesia, Jakarta.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wine, beer, perfume, arms, ammunition and possibly other items have to be locked up under customs seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed to bring in 200 cigarettes or the equivalent in grams of tobacco or cigars. Special allowances are made for the Master under special circumstances. The Master should prepare two copies of the store list for Customs use.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: No clinic available.

REPAIRS: No facilities.

CONSULS: None.

REPATRIATION: Not possible. If emergency conditions prevail, for humanitarian reasons, exceptions to the foregoing may be permitted. All expenses incurred will be for ship's account.

TIME: GMT plus 9 hours throughout the year.

SHORE LEAVE: Not possible.

DELAYS: Delays to vessels using Salawati Marine Terminal due to the port being closed because of bad weather conditions shall not be computed as used lay time when compiling vessel's turn around time.

GENERAL: *Advances:*
Owners are to pay advance funds for port charges amounting to US $4,000.00 to US $9,000.00 depending on d.w.t. before vessel arrivals. Settlement should be arranged by telegraphic transfer to "Pertamina Agency" account No. 135. 15.000.000005 with the Bank Negara Indonesia 1946, Cabang Gambir, 77A Kebon Sirih, Jakarta under advice to Pertaminaship.

Logs: Masters are advised to keep careful watch on the approaches for semi-submerged floating logs which may become hazardous to safe navigation.

Charts: Charts for the area are as follows:

1. Admiralty Chart No. 3744
2. Admiralty Chart No. 3745.
3. Admiralty Chart No. 1416.
4. Indonesian Hydrographic Charts No. 213, 217 & 219.

Winds: Winds can reach a maximum of 75 m.p.h. during local storms and all vessels must make sure they carry sufficient ballast to be manoeuvrable in the restricted waters of Sele Strait during these storms.

Stores: Not available.

Visitors: Only authorized personnel or visitors are permitted on the storage barge and/or export tanker.

Crude Oil Testing: The crude oil testing laboratory is equipped to perform the following tests:
API Gravity, BS & W, Pour Point, R.V.P. and salt content. Any additional tests that may be required will be performed in Jakarta.

Flag: During daylight hours the Indonesian flag must be flown throughout the vessel's stay in port.

SHIPMASTER'S REPORT: August 1978.

General: The oil loading terminal of Salawati is jointly owned by Phillips Petroleum Co., Agip and Conoco and is operated by Phillips Petroleum Company.

The loading terminal is located on the East coast of Salawati Island at Sele Strait. Salawati marks the Western part of New Guinea and belongs to Indonesia.

Reference: Refer to B.A. Charts 3744, 3745, 1416.
Coast Pilot 35, Eastern Archipelago Volume III.

Documents: Inward and outward clearance carried out at anchorage. Watches in excess of one, radios, cassette recorders, perfume etc., will be sealed by Customs. Seal will be inspected when receiving outward clearance. Papers required for clearance:

15 Copies of Crew Lists.
4 Copies of Cargo Manifest
4 Copies of Personal Effects
4 Copies of Bonded Store List
4 Copies of Store List
4 Copies of Narcotics List
2 Copies of Vaccination List

Ship's registry taken ashore and returned on outward clearance.

Pilotage: Government Pilot and Mooring Master – usually from Kasim Terminal board at anchorage. Mooring Master acts as Pilot. From the anchorage vessel proceeds through Sangoilin Mon (Heilige Straat) and Sele Strait towards Salawati. Heilige Straat is marked by unlit buoys and beacons, privately maintained by the oil companies. The min. depth is 49 ft., max. sailing draft from Salawati is 43 ft.

Anchorage: Recommended anchorage in position Lat. 00° 53′ S., Long. 131° 10′ E. in approx. 25 fathoms of water.

Restrictions: Usually transit from anchorage towards Salawati is carried out during daylight hours only.

Vessels of 100,000 d.w.t. have been berthed at Salawati.

Health: Radio pratique not available.

Radio: Pertamina office listens on VHF Channel 16 but calls are seldom answered. Kasim Marine Terminal listens on 16 and contacts Pertamina office by telephone.

Advance notice. As per Charterer's instructions to Pertamina, Jakarta.

Tugs: Two tugs are available from Kasim Terminal to assist in berthing and unberthing.

Berthing: Berth is constructed of 2 mooring dolphins and 2 breasting dolphins with storage barge "Wampum" being moored to the Western side of dolphins and export tanker being moored to the Eastern side.

Vessel may berth port or starboard side to, depending on stage of tide. The vessel is moored with 8 ropes forward and 8 aft, ropes being handled by mooring launches.

Two hoses of 10 in. are connected to ship's manifold by ship's crew. The barge is said to have a capacity of about 70,000 LT, the maximum loading rate of Salawati crude is 20,000 bbls./hr.

Vessels not having received inward clearance by 1500 hrs. local time at the latest will have to await the following daylight before proceeding towards Salawati.

Weather/Winds: Uniformly high temperatures, high humidities and abundant rainfall. Winds are usually light, with a seasonal reversal as N.W. and S.E. Monsoon, however, winds can reach a maximum of 75 m.p.h. during local storms.

Tide: Between 2 – 5 knots at berth and in Sele Strait, rise of tide about 2 m.

Repairs: Not available.

Supplies/Services: None available.

Shore Leave: Not possible.

AGENCY: Pertamina Shipping Directorate, Jakarta, handles all Agency matters for tankers.

AUTHORITY: Phillips Petroleum Company Indonesia, P.O. Box 2766, Wisata International Building, 5th Floor, Jalan M.H. Thamrin, Jakarta, Indonesia. *Tel:* 320108 (6 lines). *Telex:* 46798 Filpet IA. *Cables:* Philpetco Jakarta. *Contact:* D. L. Griffith, Operations Manager.

SANTAN TERMINAL (Attaka): 00.06 S. 117.32 E.

(See Plan Book)

LOCATION: The Terminal is situated on the East Coast of Kalimantan, Indonesia in the Makassar Strait. It is about 80 miles North of Balikpapan.

DOCUMENTS: If arriving from a foreign port the following documents may be required for granting pratique. Certificate of Registry, Ship's Construction Certificate, Load Line Certificate, Safety Equipment Certificate, Safety Radio/Telephone/Telegraph Certificate, Exemption Certificate, Cargo Certificate and Derat Certificate. Also required will be last Port Clearance and Crew List.

Crude oil loading documents will be prepared at the Santan Terminal and when the vessel has been loaded the documents will be completed and final clearance formalities will be carried out on board.

Each Crew member should be in possession of an International Vaccination Card and Passport or Seaman's Book. Indonesian Immigration, Customs and port officials will board the vessel to grant clearance.

Flag Dispensation: Each tanker entering the Santan Terminal must have requested and been granted Flag Dispensation prior to its arrival. At the same time application should be made for provisional Pratique through the Directorate of Quarantine and if granted, a cable advice is sent to the harbour authorities. Port Health clearance is issued prior to the tanker's arrival and is also valid for departure. If Provisional Pratique is not granted a Port Health Officer will be provided. All of the foregoing is arranged through and by the Agent.

Customs and Immigration: In accordance with practice in Indonesian ports, the vessel's national flag, the Indonesian courtesy ensign, quarantine, immigration, Pilot and call sign flags must be displayed by all vessels approaching Santan. These signals shall be displayed continuously until clearance is granted.

The signals are as follows:

Sunrise to Sunset:	Quarantine Flag "Q"
Sunset to Sunrise:	Signal Lights (red over white)

The "N" flag should be flown until the Immigration Officer boards the ship. The "G" flag (request for Pilot) should be flown until the Mooring Master boards. The vessel should also fly its call sign, (signal letters). This signal may however be hauled down after the vessel is secured to the SBM. It must be flown again when the vessel is sailing and kept flying until after the vessel is clear of the anchorage area. As soon as the Mooring Master boards, the "G" flag should be replaced by the "H" flag which signifies that the Pilot is aboard. The tanker may fly the "P" flag if it is going to sail within 24 hours.

PILOTAGE: *Procedure When Berth Available on Arrival:* A vessel for which a berth is available on arrival will be boarded by a Mooring Master in the anchorage area and providing that the vessel is in all respects ready to commence loading (except for the necessary deballasting) the Notice of Readiness will be accepted at the time of the Mooring Master boarding.

If the vessel is not in all respects ready to proceed to the berth, with main engines fully manoeuvrable, mooring ropes on deck, windlasses, winches, etc., in good working order and readiness, it will not be accepted until the Mooring Master is satisfied that all these conditions are met.

Also see "Operations".

ANCHORAGE: If vessels are obliged, or instructed, to anchor, they should do so in the recommended anchorage and on no account are they to manoeuvre or anchor West of Longitude 117° 33.5′ East unless a Mooring Master is on board. The depth of water is 40 m. with a bottom of mud/clay. Holding ground is considered good.

The Southern limit of the anchorage is defined by two buoys Number "10" coloured red and Number "12" coloured red and white chequers. At night both buoys show a white light flashing 1 second every 6 seconds.

The Southerly limit of a reef on the Northern side of the anchorage area is marked with a buoy numbered "11" and coloured black. At night this buoy shows a green light flashing green 1 second every 5 seconds. Another buoy coloured with red and black horizontal bands and marked with the letter "A" shows a group flash light showing 3 white flashes every 6 seconds.

All the buoys are fitted with radar reflectors.

READINESS: *Procedure When Instructed to Anchor on Arrival:* A vessel which has been instructed by Santan Port Control to anchor on arrival should, after doing so, inform Port Control of the precise arrival time. According to the practice of the port, acceptance of the Notice of Readiness will coincide with this arrival time, providing:

a) Vessel is within scheduled date range.
b) That it is within the hours of daylight – deemed to be from 0600 hrs. local time to 1800 hrs. local time.
c) That it is not a Public Holiday or Sunday, unless the vessel is actually handled on that day.
d) That the Port is open.

An exception to clause (a) above, is when conditions allow night berthing, in which case the vessel will be accepted when the Mooring Master boards, or, should the vessel have been at anchor, when the anchor is aweigh, providing that the Mooring Master is then on board.

In addition to clauses (a), (b) and (c) above, vessels will not be accepted when arriving at an unreasonable time ahead of their last signalled estimated time of arrival. It is not the practice of the port to keep Pilots (Mooring Masters) on station in the anchorage. Santan Port Control maintains a continuous listening watch on Channel 16 VHF.

Notwithstanding anything in the foregoing, Notice of Readiness will not be accepted at a time when it is not the practice of the port to accept it.

Also see "General".

NAVIGATION:

Attaka Reef: The Attaka Reef is marked with a buoy coloured red and yellow chequers. At night it shows a white light flashing 2.5 seconds every 6 seconds.

Ship Approach Channel: The ship approach channel to the Santan Anchorage is marked with 4 buoys and numbered from seaward 2, 4, 6 & 8 respectively. At night they show a white light flashing 0.5 seconds every 2 seconds. The No. 2 buoy is positioned at Lat. 00° 04′ 7.5″ S., Long. 117° 47′ 39.5″ E. Ships should stay to the North of these buoys.

SBM: The SBM is fitted with a radar reflector and at night shows a Qk. Fl. W. light. One of the floating hose strings is fitted with two winker lights.

Inshore Area: Inshore of the SBM area a concrete pile beacon painted red and numbered "16" shows a white flashing light every 6 seconds and marks the Northerly limit of two dangerous reefs.

The work boat canal is marked by 2 buoys, the Northerly one numbered "15" and showing a white flashing light and the Southerly numbered "18" and showing a red light.

There is a beacon on each bank of the canal, at the shore line. The North bank beacon showing a white light and the South bank a red light.

Onshore Area: A radio antenna approx. 150 ft. high is located at approximately Lat. 0° 05′ 24″ S., Long. 117° 26′ 34″ E. The mast shows fixed red air lights by night on the top and midsection.

MAX. SIZE:

Minimum Size Acceptable: The minimum sized tanker acceptable at the Terminal is the T-2 Class or equivalent of not less than 17,000 d.w.t.

Maximum Size Acceptable: The maximum sized tanker acceptable at the Terminal calling for a full cargo is 125,000 d.w.t.

RADIO:

Procedure for Appointing Agent: Owner should cable: Pertamina Ship Jakarta. The cable should appoint Pertamina as Agent to attend the tanker at Santan and should be sent 2-4 weeks prior to vessel's arrival.

Advice of Arrival: 72 hours prior to arrival at the Terminal vessels should advise the company of their estimated times of arrival by cable sent via "Pertamina's" coastal radio station at Balikpapan. They should also confirm or amend ETA when they are 48 hours and again when 24 hours, distant from the Terminal.

Union Oil Company of Indonesia cable address: Pertamina Tanjungsantan.

"Pertamina's" Coastal Radio Stations:

I. Name of station – Balikpapan Radio; Call Sign – PKN 2; Frequency – Keeps watch on 2182 kHz A3, answers on 4415 kHz A3, 6520 kHz A3 (vessel's selection); Class – A3H-A3J; Power – 500 watt; Service – 24 hour; Location – Lat. 01° 16′ S., Long. 116° 50′ E.

ETA messages sent to PKN2 should be addressed:

Pertamina Tanjung Santan =
Message ....
Master...............

As long as no direct contact exists with PKN2, ships send ETAs to PKI2 (See below).

II. Name of station – Jakarta Radio; Call sign – PKI2; Frequency – 500 kHz (operates on 452 kHz), 2182 kHz answers on: 4178, 4280.5, 4363, 4410, 6457.5, 6520, 6516 kHz. 8 MHz (operates on 8628 kHz); Class – A1 500 kHz; A3 2182 kHz; A1 8 MHz; Power – 1 kW, 500 kHz, 500 watt, 2182 kHz; 1 kW 8 MHz.

Service – 500 kHz H24, 2182 kHz 0400 – 0500, 0700 – 0800, 1000 – 1100, 1500 – 1600, 2000 – 2100, 2300 – 2400 hrs. GMT; 8 MHz 0100 – 0300, 0500 – 0600, 0900 – 1000, 1100 – 1200, 1400 – 1500, 1730 – 1900, 2100 – 2200 hrs. GMT.

Location: Lat. 06° 08′ 00″ S., Long. 106° 50′ 00″ E.

ETA messages sent to PKI2 should be addressed:

Pertamina Tanjungsantan via PKN2 =
Message ....
Master...............

Details of Cable: The following information should be included in the cable:

Name of vessel and radio call sign.
ETA in GMT and date (local time is GMT+8 hours).
Cargo requirements.
Deballast time.
Maximum loading rate.
Vessels draft on arrival.
If there is any sickness aboard or clean bill of health.
Last port of call.
Any hull, bulkhead, valve or pipeline leaks on vessel which could affect loading or cause pollution.
Distance in feet from bow to vessel's loading manifold.
Flange dimensions of vessel's manifold connection if not to ANSI B76.5, B.S. 1560, Series 150 or equivalent.

VHF: Vessels equipped with VHF radio telephone should contact "Santan-Control" on Channel 16 (156.80 MHz) when within range to request instructions. The language of the Terminal is English and Indonesian.

MOORING/UNMOORING: This description is only intended as a guide and may be varied as to the order in which lines are taken up etc. according to the circumstances prevailing at the time of mooring.

Moorings Required From Tanker: The ship must provide and have ready the following: Two mooring ropes and one rope messenger line on the forecastle.

The Approach: The ship approaches the buoy from down tide and wind, taking care to keep the wind right ahead. Adequate ballast must be retained on board to ensure that the vessel retains full manoeuvrability throughout the approach to the buoy and the actual mooring.

Bringing Aboard the Mooring Lines: The vessel will be brought to a position close to the buoy with the vessel stopped in the water and with the buoy fine on the port bow. During the approach to the buoy and while mooring, a terminal work boat will keep the hoses pulled well clear to port. Under normal conditions the port rope will be the first taken on board. The Mooring Master will advise as to which rope is to be taken first and as to which fairlead this will be taken. The actual work of mooring will be done by a terminal work crew. The ship will lower a strong messenger line to the mooring boat who will in turn make this fast to the approach rope. The approach rope of 10 in. circumference will be hove aboard and will in turn be hove in until the chafing chain and triangular plate is centred in the fairlead.

Securing the Mooring Lines: While the approach rope is being hove aboard, a strong wire strop will be made fast to a set of forecastle bitts. To the end of this strop will be fitted a 50 ton shackle and the strop will be so made fast at the end and the shackle will be about 5 ft. inboard of the fairlead. The approach rope will be hove on until the large link of the chafing chain is sufficiently far inboard for it to be connected to the strop by the 50 ton shackle. When this is done the approach rope will be slacked off until the full weight comes on the strop/chafing chain/buoy rope. The buoy rope is 150 ft. long and is 12 in. circumference double nylon of plaited construction.

The approach rope can now be taken to the bitts to act as a preventer. The second rope is now taken aboard and made fast in the same way. When both the ropes are fast, good ropes or strops, provided by ship, can be made fast to the spare links on the chafing chains to back up the main moorings.

Fire Wires: A fire wire must be rigged on the starboard side for'd and on the stern. These must be tended throughout vessels stay at the SBM to ensure that they are kept within 2 ft. to 3 ft. of water. In case of fire the tugs would connect to these wires to pull vessel clear of the SBM.

Connecting Hoses: When the mooring is completed, the work boat holding the hoses clear will bring these alongside the ship in way of the port side manifold.

Unmooring: To unmoor from the buoy any extra back up lines that have been made fast to the chafing chains are slipped first. The approach ropes are then taken to the ship's windlass/capstan and the weight taken on them until the shackle between the strop and chafing chain is undone. With the vessel moving slowly astern the approach ropes are slacked off and finally slipped and allowed to float free. While the ship is unmooring, a terminal work boat will keep the floating hoses towed clear and will keep them clear until the ship has slipped the moorings and is clear of the buoy.

Strops and shackles will be provided by the Terminal and put on board as the vessel approaches the buoy. The ship must provide 2 mooring ropes at least 8 in. circumference and 100 fathoms long, a 4 in. circumference messenger line, and two rope lashings 4 in. circumference and 15 ft. in length. These lashings should be of manilla or polypropylene, nylon is not acceptable.

BERTHING FACILITIES: The Sea Terminal consists of a "single point mooring" loading berth also known as a "mono-buoy" or "single buoy mooring". The berth is located at Lat. 00° 06′ 18.6″ S., Long. 117° 32′ 18.8″ E.

The "single buoy mooring" is approximately 4.33 miles offshore in 28 m. of water. The submarine line to the "single buoy mooring" is 30 in. in diameter. A single string of 20 in. submarine hose connects the submarine line header to the "single buoy mooring". Two strings of 16 in. floating hose connect the "single point mooring" to the tanker rail hoses which are 12 in. in diameter. The hoses are always taken up on the port side.

Hose lifting Derrick Capacity: Tankers must be equipped with a hose lifting derrick with a lifting capacity in conformance with the table shown on page C2 of Appendix C to the International Oil Tanker and Terminal Safety Guide.

Manifold Connection Sizes: The minimum size manifold connection will be 8 in. The Terminal is equipped with flanged spools to also connect to 10 in., 12 in., and 16 in. manifolds. Tanker manifolds should terminate in ASA Series 150, flat face flanges. Unless the Terminal is given adequate notice, tankers equipped with manifold flanges of other sizes or ratings will be rejected.

BALLAST/POLLUTION:

Adequate Ballast: Due to the exposed location of the crude oil loading berth, vessels are required to carry sufficient ballast for safe handling, having due regard to existing weather and sea conditions. A vessel found by the Mooring Master to be not adequately ballasted will be rejected.

Pollution: Owners and Masters are responsible to observe International Convention Laws and Indonesian government regulations concerning pollution of the sea, having particular regard for this area of the Makassar Strait.

Clean Ballast: As there are no ballast discharging facilities, vessels must arrive at the Terminal with clean ballast, ensuring that all pipe-lines, pumps and strainers have been flushed out prior to arriving.

The Mooring Master will inspect ship's ballast on boarding and has the power to reject any vessel that he deems would cause pollution of the sea area, in which case vessel must proceed to sea and return only when ballast is completely free of oil. Any vessel rejected because of dirty ballast will automatically nullify its Notice of Readiness and will lose any priority of position for loading. Ballast discharge should not be commenced without the prior agreement of the Mooring Master.

Bilges: Bilges must not be discharged while at the SBM or in the anchorage.

Inspection During Loading: At night the sea area around the vessel shall be adequately lighted, as frequent inspection by the Mooring Master will be made during the discharge of ballast. Any pollution whatsoever will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection and the vessel will not be re-accepted unless satisfactory evidence of repairs has been certified by a qualified surveyor.

Cargo hose connections should be inspected during loading, drip-pans should be placed under the manifold, all unused cargo connections should be blanked off, sea-valves should be closed and lashed upon completion of deballasting and all scuppers must be securely plugged.

Fines and Claims: Any fines imposed by governmental authority for pollution shall be for the vessel's account.

OPERATIONS:

Mooring Master: A Mooring Master will board the vessel in the anchorage area and advise the Master on all manoeuvres relative to berthing and unberthing and connecting the hoses.

Vessels are requested to make a lee and have a pilot ladder long enough to reach the Mooring Master's launch. At night adequate lighting should be provided. Ships with more than 30 ft. freeboard should rig a pilot ladder to a position 3 ft. above the water and an accommodation ladder so rigged that the Pilot can transfer from the pilot ladder to the accommodation ladder once he is clear of the pilot boat.

Work Crew: Mooring and unmooring, lifting, lowering, connecting and disconnecting hoses will be done by a terminal work crew under the direction of the Mooring Master. Assistance from ship's personnel in operating windlasses, winches, etc. will be required. Ship's crew will assist in hose connection/disconnection/mooring/ unmooring and carrying equipment from deck to forecastle as required. Any vessel whose crew do not give such assistance may be rejected and returned to the anchorage. Costs of such a delay would be for the ship's account.

Tankers Engines and Hose Lifting Derrick: Being an open roadstead, vessels must keep engines on standby during their stay in the berth. No repairs to main engines may be undertaken while in berth. Power must be kept on deck winches in case adjustments to mooring lines are found necessary. Ship's booms and deck winch must be capable of operating with a SWL in conformance with the table shown on page C2 of Appendix C to the International Oil Tanker and Terminal Safety Guide. Vessels with inadequate hose lifting equipment will be rejected.

Only the automatic turning gear should be used. If it should become necessary to turn the propeller(s) at revolutions greater than the minimum obtained by the automatic turning gear, application must be made to the Mooring Master in order that arrangements can be made to ensure that hoses are kept clear. The Mooring Master's written permission *must* be obtained before any such increase in revolutions.

Hanging Off Hoses: Small bitts for hanging off loading hoses should be provided in line with the loading manifold.

Safety: Every vessel which berths at the buoy shall remain under the charge of the Master who will take all steps necessary to preserve the safety and security of such vessel, crew and terminal personnel who may board in the execution of their various duties.

The Master of every vessel at anchor in the designated anchorage or secured to the SBM shall ensure that all parts of the vessel, to which any person may be lawfully required to proceed, are properly illuminated. Efficient and easy means of access shall be provided to every vessel at anchor or at the SBM and such access shall be adequately illuminated between sunset and sunrise.

No person(s) shall be permitted to board or leave the vessel other than by the gangway or other proper means provided for the purpose.

The Mooring Master may require the vessel to unmoor at any time he deems it necessary for the safety of the vessel or the moorings or for infringement of Port Regulations.

Unsatisfactory conditions will be reported to the company's Marine Superintendent, who is empowered to reject a vessel for future calls unless the reported deficiencies have been remedied.

Sufficient Crew members must be immediately available at all times to assist with any or all operations on board the vessel at the Terminal.

LOADING: *Loading Rate:* Maximum loading rate will be about 30,000 bbls.p.h. It is recommended that vessels take maximum flow with due regard to safety in order to expedite turn around time as well as to provide ballast as quickly as possible. Care should be taken not to overload, as there is no possibility whatever of pumping back ashore. When vessels are equipped with permanent ballast tanks, the ballast in these tanks should be retained on board until the vessel has taken on board sufficient cargo to be manoeuvrable. Vessels not so equipped should examine the possibility of safely loading and discharging ballast simultaneously, as such practice improves turn around time as well as reducing the possibility of breaking out of the berth in bad weather in a completely light condition.

Closing Valves Against Oil Flow: Warning is given of the danger of closing valves against an incoming oil stream. This will create excessive pressures which may result in damage to the loading hoses, sea-line and Terminal facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

Radio Contact: During loading operations the vessel will contact the Terminal Despatcher ashore every half hour by the assigned VHF channel to ensure that radio contact is being maintained. Pumping will be stopped immediately if it is found that radio contact with the ship has been lost.

In addition to the ship's VHF the Mooring Master will carry a portable radio, of approved design, with which he will be able to contact the shore terminal and mooring launches.

Mooring Launch: Throughout the loading operation a terminal mooring launch will be in attendance at the ship to tend hoses etc.

Every vessel requiring a shore stop will be required to inform the Mooring Master at start of loading and sign the form carried by the Mooring Master, requesting shore stop. When requesting a "Shore Stop", Masters must understand that Union Oil Co. of Indonesia accept no responsibility for any errors in the quantity. Should the cargo asked for overload the vessel, it is not possible to pump oil back from the ship to the shore.

CUSTOMS: Cigarettes, cigars, tobacco, matches, spirits, wine, beers, perfume, arms, ammunition and possibly other items have to be locked up under customs seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed to bring in 200 cigarettes or the equivalent in grams of tobacco or cigars. Special allowances are made for the Master under special circumstances. The Customs officer will seal the stores.

FACILITIES: There are no facilities of any kind at Santan. There are no engineering repair shops; no fresh water; no bunkers available; no provisions or stores; no crane or barge service; no shore leave; no crew changes; no consulates available.

GENERAL: *Exact Arrival Time:* It is stressed that vessels must advise Port Control of their exact arrival time, as failure to do so may lead to loss of their berthing turn.

Lay Time: Lay time will be calculated as outlined in the Crude Off-Take Procedure, Attaka Unit.

Conditions of Use of Port: The Master of each tanker will be given a copy of the Conditions of Use of Port of Santan Marine Terminal, which he will be asked to sign.

Delay Due to Excessive Deballasting: Delays in commencement of loading due to deballasting in excess of 6 hours will be deducted from the laytime.

Floating Logs: Masters are advised to keep careful watch on the approaches for semi-submerged or floating logs which may become hazardous to safe navigation.

Charts: Charts for the area are as follows:

1. Republic of Indonesia, Chart 130, East coast of Kalimantan, Balikpapan to Muara Berau.
2. Republic of Indonesia, Chart 37, East coast of Kalimantan, Muara Berau Kutie River to Cape Mangkalihat.
3. U.S. Naval Oceanographic office, old Chart H.O. 3044, new Chart N.O. 72014 Borneo East coast. Sandakan Harbour to Sungai Mahakam.
4. U.S. Naval Oceanographic office, old Chart H.O. 6185, new Chart N.O. 72110 Borneo East coast, Tanjung Mangkalihat to Tanjung-Tamarong.
5. British Admiralty, Chart 2636, North part of Strait of Makassar.
6. British Admiralty, Chart 2660, China Sea – Southern Portion.
7. British Admiralty, Chart 941-B, Eastern Archipelago.

Sailing Directions: Sailing directions are in the following:
Eastern Archipelago Pilot, Vol II. 7th Edition, 1961.

Hydrographic Survey: A detailed hydrographic survey was carried out from November 1971 to January 1972, of an area between Lat. 0° 03′ S. and 01° 23′ S. and extended from the shore line to some 20 miles offshore. Charts are available on request from the Terminal showing the results of this survey for the approaches to the Terminal on a natural scale of: 1:25,000 and for the anchorage and loading area on a natural scale of 1:12,500.

SHIPMASTER'S REPORT: 1976

Situated about 80 miles North of Balikpapan on the East coast of Borneo, in 00.07 S. 117.28 E., the only chart available BA.2636 is of too small a scale to advise safe first time entry in darkness. So, after a number of unsuccessful attempts to contact Santan Terminal for instructions – only the latter portion of his transmissions were being received, and very underpowered, it was decided to await daylight, cruising on 118.00 Meridian.

At 0600 hrs. vessel was again in the vicinity of Attaka Buoy, Pilot contacted by VHF 16. He instructed us to proceed 270° T and he would meet us, East of SBM. The SBM is located about 4.5 miles offshore, marked by a QK.FL.W. light, vis. 6 miles, and is impossible to distinguish from Attaka Buoy.

The best approach is to reach a point 4 miles North of Attaka Buoy which has a Ra.Refl. and was identified at just under 12 miles. From thence, subject to the Master's assessment of the situation, and assuming possession of a copy of the Chartlet, to proceed inward on 257° T, which will take him along the Approach Channel. But he should be prepared for quite strong set to North or South – this being my experience, both inward and outward. Pilot states that up to 125,000 d.w.t. can be handled. Originally, the channel had 4 buoys, marking the South side of the channel, but the outer 2 have been withdrawn. Channel has been swept and min. depth shown is 50 m. Each buoy has a Ra.Refl. and with 3.5 mile spacing, are easy to track on radar and visually, once their existence is known, from the Chartlet.

An anchorage area exists between 0.5 and 2 miles East of the SBM, bounded by 3 buoys to West side and 1 to South. These mark Coral Shoals. The Pilot said it was acceptable to come straight in from Attaka Buoy, in ballast, but loaded vessels must stay in Swept Channel, as the possibility of isolated Coral Heads exists, and the area South of the channel has not been fully swept.

A mooring/hose party boards with the Pilot, and takes care of these duties, the vessel only being required to provide an officer and 2 winchmen on the foc'sle and an officer and winchman for connecting the hoses (2×16 in.). A ship's mooring line is lowered to the launch to pick up the port SBM polypropylene line, this finally brings up a chain (approx. 8 in. dia. link). A special very flexible wire, provided by shore, is secured round both Port and Starboard forward bitts on foc'sle head, with an eye at each end projecting forward. The mooring chain is then shackled to this. A stout messenger is acceptable for picking up the starboard mooring, but it is advisable to have a second mooring line available on deck in our opinion. The chain is then shackled to the South eye of the shore wire, which is around the bitts. There is no provision for quick release gear, so letting go in an emergency, e.g. wind, would not be easy.

Hoses are 16 in., but fitted with 12 in. flanges (not reducers) and are bolted to manifold, again no quick release provided. Pilots' estimate of weight of each hose is 7.5 tons. Hoses are hung off on chains passed round manifold supports, instead of cruciform bollards – apparently because of the length of chain used. Hose/mooring party work well and safely.

EDP is not available, and vessel had to lie awaiting papers after leaving SBM for about 40 minutes, after which passage outward along the channel was without problem, with adequate water depths all the way.

Radio messages are sent via Balikpapan PNK2 to Petroleum Balikpapan, but appears to be on only 2 hours a day. But Pilot said they had not received our ETA's, but said this was quite normal. Agents were Pertaminaship Jakarta. No relief facilities, stores, water or bunkers available, and mail both in and out not advised, due uncertain delivery.

SEMARANG: 06.56 S. 110.25 E. (See Plan Book)

DOCUMENTS:

Required for inward and outward:
Certificate of Registry.
Certificate of Nationality.
Loadline Certificate.
Radio Telegraphy Safety Certificate.
Derat Exemption Certificate.
Last Port of Clearance.
Safety Equipment Certificate.
Health Book (used Indonesian Port only)
Crew List (9 copies).
Stores List.
Personal Effects List.
Free Pratique Granted.
Light Dues Bill from last Port of Call.
Customs Cargo Clearance (PU) Import.
Customs 5 B Form from Last Port of Call.
Manifest (25 copies).
Customs Documents Export Cargo (if any).
Customs Documents Transhipment (Model H if any).

Authorities boarding the vessels on arrival:
Immigration Officer.
Customs Officer.
Quarantine Health Officer and Police Officer.

PILOTAGE: Ships with deadweight of more than 900 tons and with draft of more than 3.5 m. must anchor in roads. To enter the Harbour, Pilot required. Pilot can be applied for by raising "G" flag while ship is anchoring/arriving.

ANCHORAGE: Anchorage 3 nautical miles from coast, where depth 9 m. For smaller ships safe anchorages 1,900 m. from pier, where depth 5.0 m. – 7.0 m.

HEALTH: Vessels arriving must hoist "Q" flag. Work can only begin after inspection of security team boarding vessel upon arrival during working hours.

RADIO: Name, Semarang Radio. Call sign, PKR.

Wave Length	*Time GMT*	*Remarks*
500/456	0000 – 1600	A1A A2A
8461 KHz	0100 – 0200	A1A
	0500 – 0600	
	0900 – 1000	A3J
	1300 – 1400	
2182/3180 KHz	0000 – 0100	J3E
	0400 – 0500	
	0800 – 0900	
	1200 – 1300	
	1500 – 1600	
6215 KHz	0200 – 0300	J3E
	0600 – 0700	
	1000 – 1100	
	1400 – 1500	
VHF Channels		
16, 14, 20, 26	0000 – 1600	F3E

TUGS: Normally tugs join vessel in roads.

BERTHING: Ships anchoring in roads can anchor any time of day. For berthing alongside quays ships with a draft max. 3.6 m. require Pilot. Entering port guided by a pilot vessel.

There are 2,141 m. of wharves. Depth alongside 1.5 m. – 4.1 m.

STEVEDORES: Necessary to inform Agent exact time of arrival. Labour gangs to be arranged 1 day before. Also details of cargo to be discharged needed to arrange stevedoring materials, especially for ships anchoring in roads.

Gang Capacity:

In Semarang Port there are 1,409 stevedore workers registered at the Labour Pool (Y.U.K.A.) 1 gang labour = 15 stevedore workers.

Working Rates:

(a) From vessel to barges and vice versa:
 – Load/discharge general cargo – 12 tons gang hour.
 – Load/discharge bulk cargo – 20 tons gang hour.
(b) From barges to Godown and vice versa.
 – Load/discharge general cargo – 10 tons gang hour.
 – Load/discharge bulk cargo – 18 tons gang hour.
(c) From vessel to Godown and vice versa.
(if vessels at the quay).
 – Load/discharge general cargo – 15 tons gang hour.
 – Load/discharge bulk cargo – 18 tons gang hour.
(d) Discharge glass sheet from vessel to barges; same as general cargo.
(e) Discharge steel bars from vessel to barge – 20 tons gang hour.

Working Hours (normal working hours):
Monday – Thursday 0800 – 0400 hrs.
Friday – Saturday 0800 – 0200 hrs.

EQUIPMENT: One day's notice required for hiring.

Cranes/Forklifts:

P.L.T.U. Projects: 1 shore crane with max. capacity 90 tons. Can be used if not required by P.L.T.U.

Port Administration (Perum Pelabuhan): 3 mobile cranes with max. capacity 10 tons, 10 forklifts max. capacity 2.5 up to 10 tons.

Unit Terminal P.A: 2 mobile cranes with max. capacity 10 tons, 5 forklifts with max. capacity 3 up to 5 tons.

Samudera Indonesia: 2 mobile cranes with max. capacity 3 and 10 tons.

Gesuri Lloyd: 3 mobile cranes with max. capacity 4 tons. 1 forklift max. capacity 2 tons.

Djakarta Lloyd: 2 mobile cranes with max. capacity 3 and 4 tons. 3 forklifts max. capacity 2.5 tons each.

Bahari: 2 forklifts with max. capacity 3 tons.

Godowns:
Trikora Lloyd: 1,960 sq.m.
Djakarta Lloyd: 5,400 sq.m.
Samudera Indonesia: 3,480 sq.m.
Pelni: 3,510 sq.m.
Bahari: 3,000 sq.m.
PN.VTP/Tobacco: 1,780 sq.m.
Unit Terminal PA: 10,520 sq.m.
Dangerous cargo Warehouse: 800 sq.m. (one only)

Open Storage:
Trikora Lloyd: 4,000 sq.m.
Unit Terminal PA.I-II-III.: 15,470 sq.m.
Djakarta Lloyd II.: 1,200 sq. m.
Djakarta Lloyd III.: 1,200 sq. m.

Tugs:
Samudera Indonesia: 4 tugs.
Gesuri Lloyd: 4 tugs.
Pelni: 1 tug 300 h.p.
Trikora Lloyd: 1 tug 120 h.p.
Hesti Kencana Lloyd: 1 tug 120 h.p.
Atrind Marina Graha: 6 tugs.
Bahari: 1 tug.

Lighters:
Samudera Indonesia: 18 lighters (3,955 tons capacity).
Djakarta Lloyd: 12 lighters (1,850 tons capacity).
Pelni: 9 lighters (1,100 tons capacity).
Trikora Lloyd: 11 lighters (1,925 tons capacity).
Bahari: 5 lighters (500 tons capacity).

MEDICAL: Medical assistance can be given upon ship's arrival. First aid can be given by harbour doctor in harbour area. Serious cases taken to hospitals in town. 4 hospitals available. Port Health Officer can issue vaccination/fever Certificates if required.

TANKERS: Buoy mooring in position Lat. 06° 53.6′ S., Long. 110° 25.8′ E.

FRESH WATER: Can be supplied by 60 ton barge once a day. Also available alongside, rate 10 t.p.h.

FUEL: Fuel oil and diesel oil available in limited quantities, only to coasters.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Opening and closing hatches done by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes or equivalent in tobacco permitted for each crew member to hold out of bond. Wine and/or spirits, maximum value of U.S. $10.

IDENTIFICATION CARDS: Needed.

CONSULS: No local representation.

REPAIRS: Minor repairs only. Dock for repairing small vessels, tugs and barges.

SURVEYORS: Bulk and general cargo surveyors available.

REPATRIATION: Repatriation of crew members arranged by Agents by contacting Immigration Officer for permits concerned.

AIRPORT: Airport (A. Yani) 5 miles from harbour. Domestic flights only.

TIME: GMT plus 8 hours.

HOLIDAYS: New Year (1st January); Independence Day (17th August); Id el Fitr; Christmas Day (25th December), Waisak.

POLICE/AMBULANCE: Semarang 245 or 726.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members allowed ashore.

SERVICES: No facilities for underwater repairs, electrical repairs or tank cleaning.

DELAYS: Normally the speed of loading of bulk cargo is 20–25 tons per gang/hour. Delays by bad weather during December, January and February, where it is impossible to come out of the inner port to ships anchoring on the roads.

DEVELOPMENTS: New wharf length 605 m. Depth 9.0 m. under construction.

AUTHORITY: Perusahaan Umum Pelabuham Semarang, Jl. Sers. Marinir Usman Janatin No. 8, Semarang, Indonesia. *Tel:* 25721, 26179, 25725. *Telex:* 22305. *Cables:* Kacab Smg. *Contact:* R. Soedibjo, Branch Manager.

SENIPAH TERMINAL: 01.03 S. 117.13 E.

(See Plan Book)

OPERATOR: Total Indonesie.

LOCATION: The Sea Terminal consists of a SBM (Single Buoy Mooring), loading berth also known as "mono-buoy". Berth is located in position Lat. 1° 03′ 05″ S., Long. 117° 13′ 13″ E.

The Terminal is situated about 45 km. N.E. of Balikpapan on East Coast of Kalimantan, Indonesia, at position 0° 58′ 05″ S., 117° 08′ 27″ E.

DOCUMENTS: Indonesian Immigration, Customs, Harbour Master and Port Officials will board the vessel to grant clearance and will require the following for inspection:
2 Parcel Lists.
2 Currency Lists.
2 Arms & Ammunition Lists.
2 Inventory Lists.
2 Vaccination Lists.
2 Animals Lists
2 Narcotics Lists.
8 Crew Lists.
2 Crew Declaration of Personal Belongings.
2 Ship's Store List (inventory).
3 Passenger Lists (if any).
2 Cargo Manifest for Transit Cargo with a summary.
Clearance from the Last Port of Call.
Valid Passport and/or Seaman's Certificate for all crew members.
Certificate of Inoculation against any contagious diseases.

If arriving from a foreign port, the following documents may be required for granting pratique: Certificate of Registry; Ship's Construction Certificate; Load Line Certificate; Life Safety Equipment Certificate; Safety Radio/Telephone/Telegraph Certificate; Cargo Gear Certificate and Derat or Exemption Certificate.

Crude oil loading documents will be prepared at the Senipah Terminal and when the vessel has been loaded, the documents will be completed and final clearance formalities will be carried out on board.

Procedure for Appointing Agent:

Owner should cable/telex: Pertaminaship Jakarta.

The cable/telex should appoint Pertamina as Agent to attend the tanker at Senipah and should be sent 7 days prior to vessel's arrival.

The above procedure is applicable to vessels whose Operators do not have a long term agreement with Pertamina.

Flag Dispensation/Agency Permit:

Each foreign tanker entering Indonesia for lifting from Senipah Terminal must have been granted flag dispensation/security clearance prior to entering Indonesian waters.

At the same time application should be made for Provisional Pratique through the Directorate of Quarantine and, if granted, a cable advice is sent to the Harbour Authorities.

Port Health Clearance is issued prior to the tanker's arrival and is also valid for departure clearance. If Provisional Pratique is not granted a Port Health Officer will be provided. All of the foregoing is arranged through and by the General Agent.

It is vital that TOTAL INDONESIE, Jakarta receives the following information by telex 7 days before the vessel's arrival in order to apply for flag dispensation/security clearance through the General Agent.

1. Name and address of owners.
2. Name of Vessel and radio call sign.
3. Flag.
4. D.W.T., G.R.T. and N.R.T. of vessel.
5. Name of Master.
6. Number of Crew.
7. Last foreign port of call and ETD.
8. Consignee.
9. Destination(s) after Loading.
10. ETA at Senipah Terminal.
11. Quantity and grade to be loaded.

FLAGS: In accordance with practice in Indonesian ports, the vessel's national flag, the Indonesian courtesy ensign, quarantine, immigration, pilot and call sign flags must be displayed by all vessels approaching Senipah. These signals shall be displayed continuously until clearance is granted.

The signals are as follows: Sunrise to Sunset: Quarantine Flag "Q". Sunset to Sunrise: Signal lights (red over white).

The "N" flag should be flown until the Immigration Officer boards the ship. The "G" flag should be flown until the Mooring Master boards. The vessel should also fly its call sign (signal letters). This signal may, however, be hauled down after the vessel is secured to the SBM. It must be flown again when the vessel is sailing and kept flying until after the vessel is clear of the anchorage area and the Berthing Master has left. As soon as the Mooring Master boards, the "G" flag should be replaced by the "H" flag. The tanker may fly the "P" flag if it is going to sail within 24 hours.

PILOTAGE: *Procedure when berth is available on arrival.*

A vessel for which the berth is available on arrival will be boarded by a Mooring Master in the anchorage area and, providing that the vessel is in all respects ready to commence loading (except for the necessary deballasting) the notice of readiness will be acknowledged as soon as tendered to the terminal by the Master of the vessel.

The Mooring Master will advise the Master on all manoeuvres to berthing and unberthing and connecting the hoses.

Vessels are requested to make a lee and have an accommodation ladder long enough to reach the Mooring Master's launch.

At night, adequate lighting should be provided.

When Mooring Master boards all mooring and hose equipment will be lifted on board from the mooring launch.

NAVIGATION AIDS:

S.B.M.: The S.B.M. has a 360° yellow light, flashing every second, visible for 5 miles under an atmospheric transmissivity of 0.85. This operates from sunset to sunrise.

Oil Platforms: Oil platforms of Bekapai oil field which are situated approximately 17 miles East by North of Senipah SBM, show at night a white light flashing, 2 short and 1 long flash (letter U).

One S.B.M. installed at Bekapai field is used in case of emergency.

ANCHORAGE: If vessels are obliged, or instructed to anchor, they should do so in the recommended anchorage area which is centred at position: Lat. 1° 05′ 29″ S., Long. 117° 15′ 01″ E. and has a radius of 1 mile. Water depth is between 40 m. to 45 m. While at anchor they should exercise vigilance and keep in touch with the Terminal by VHF at all times.

Procedure when instructed to anchor on arrival: A vessel which has been instructed by Senipah Terminal to anchor on arrival should, after doing so, inform the Terminal of the precise anchoring time. According to the practice of the Terminal acknowledgement of the Notice of Readiness will coincide with this anchoring time, providing:

a) That it is within the hours of daylight – deemed to be from 0600 hrs. local time to 1800 hrs. local time.
b) That it is not a Public Holiday or Sunday, unless the vessel is actually handled on that day.
c) That the Terminal is open.
d) That cargo is available in accordance with accepted loading date.

In addition to clauses (a), (b) and (c), above, vessels will not be accepted when arriving at an unreasonable time ahead of their last advised ETA. It is not the practice of the Terminal to keep Pilots (Mooring Masters) on station in the anchorage area. Senipah Terminal maintains a continuous listening watch on VHF (Channel 6).

MAX. SIZE:

Minimum Size: Minimum size tanker acceptable at the Terminal is 50,000 d.w.t. However, on an exceptional basis, it will be possible to accommodate tankers of 33,000 d.w.t. minimum size but must be able to use SBM mooring system.

Maximum Size: Maximum size tanker acceptable lifting a full cargo will be 125,000 d.w.t. On exceptional basis, Terminal can consider handling a tanker up to 150,000 d.w.t.

Tankers of a larger size may be accommodated in the future, provided that Senipah is their first port of loading and that they load a part cargo only. These limits are at present under study.

Draft Requirement on Arrival: Vessels arriving at Senipah Marine Terminal should have the following draft:

d.w.t.	Fore	Aft
Under 60,000	19 ft.	27 ft.
Over 60,000	22 ft.	28 ft.

RADIO: *Advice of Arrival:* 72 hours prior to arrival at the Terminal, vessels should advise the Company of their ETA by cable sent via Pertamina's coastal radio stations at Jakarta/Merak/Balikpapan. They should also confirm or amend them when they are 48 hours, and again when 24 hours, distant from the Terminal.

Total Indonesie cable address: Totalindo Balikpapan. Attention: Senipah Marine Terminal and Totalindo Jakarta. Attention: Shipcoord.

Communication for Contacting Agent: PERTAMINA Jakarta radio/PKI2 (owned and operated by PERTAMINA).

Frequency kHz	Hours GMT	Keep Watch kHz
452*	H24	500
8628	0200–0300, 0400–0500, 0700–0800, 1030–1200 1400–1500, 1800–2000, 2200–2300.	8356–8374
12980	0000–0200, 0300–0400, 0500–0700, 0800–1030, 1200–1400, 1500–1800, 2000–2200, 2300–2400.	12534–12561
VHFCh. 9/16/19	0000–1500.	Ch.16

*Call/Reply

PERTAMINA Merak radio/PKQ (owned and operated by PERTAMINA).

Frequency kHz	Hours GMT	Keep Watch kHz
452*	0000–0400, 0800–1000, 1200–1400.	500
8626	0100–0200, 0900–1030, 1500–1600, 2300–2400.	8356–8374
4361.6	0000–0100, 0200–0300, 0800–0900.	2182, 4066 4063 A3J/A3H
6518.6	0300–0400, 1200–1400.	2182, 6204 A3JA3H
VHF Ch.16/19/24/26	H24	Ch.16

*Call/Reply

PERTAMINA Balikpapan radio/PKN2 (owned and operated by PERTAMINA).

Frequency kHz	Hours GMT	Keep Watch kHz
4415	H24	2182
6520	H24	8249 A3J/A3H
VHF Ch.16/19	H24	Ch.16

Note: 1. All messages destined to "PERTAMINASHIP" can be sent to either PKI2, PKQ or PKN2.

Details of Cable: The following information should be included in the cable;

(a) Name of vessel and radio call sign.
(b) ETA and date in local time (GMT plus 8 hours).
(c) Cargo requirements.
(d) Deballast time.
(e) Maximum loading rate.
(f) If there is any sickness aboard or clean bill of health.
(g) Last port of call.
(h) Any hull, bulkhead, valve or pipe-line leaks on vessel which could affect loading or cause pollution.
(i) Distance in metres from bow to vessel's loading manifold.
(j) Flange dimensions of vessel's manifold connection, if not to ASA series 150 or equivalent.

2. For tankers equipped with telex system, can make direct contact to: TI JKT attention Ship-Coord: Telex No. 44108. TI BPPN attention Snp-Term: Telex No. 37101 or 37181.

Failure to advise Terminal of ETA may lead to loss of berthing turn.

VHF: Vessels equipped with VHF Radio Telephone should contact terminal on international mobile service Channel 6 from 0000–2400 hrs. GMT.

Other Channel used is 16.

The language of the Terminal is English, French, and Indonesian.

BERTHING: The SBM is approximately 6 miles (11.1 km) offshore in approximately 28 m. of water.

The SBM is served by 2 submarine lines of 26 in. diameter. Two strings of 20 in. hose connect the SBM to submarine line header. Two 20 in. floating hose strings reduced to 12 in. are connected to Tanker for loading purposes. Hoses are lifted up and connected individually on port side.

Work Crew Service: Mooring, unmooring, lifting, lowering, connecting and disconnecting hoses will be done by ship's crew under the direction of the Mooring Master and assistance of Terminal crew.

Accommodation and meals: The company Mooring/Loading Master and his crew (2 persons) stay on board the tanker during the time of the operations. Free accommodation and meals of the same standards as those of the Tanker's officers (for the Mooring Master) and of the Tanker crew (for company crew) must be provided.

Tanker's Engines: Being on open roadstead, vessels must keep engines on standby during their stay in berth. No repairs to main engines may be undertaken while in berth.

Only the automatic turning gear should be used. If it should become necessary to turn the propellor(s) at revolutions greater than the minimum obtained by the automatic turning gear, application must be made to the Mooring Master in order to ensure that there is no inconvenience to do so.

The Mooring Master's written permission must be obtained before any such increase in revolutions.

MOORING/UNMOORING: *Method of Securing to Buoy:* This description is only intended as a guide and may be varied as to orders of lines etc. according to circumstances and weather prevailing at time of mooring.

When Mooring Master boards all mooring and hose equipment for the job on hand will be lifted from the mooring launch.

The Approach: The vessel will be brought to a position close to the buoy with vessel stopped in water with SBM fine on port bow. During approach to SBM, one mooring launch will keep hoses well clear of vessel. Under normal conditions the port side SBM rope will be the first rope taken on board. Mooring Master will advise which rope will be taken first. Actual work of mooring will be done by ship's crew with assistance from terminal work crew. Vessel will lower a mooring rope with good lashing on eye to the mooring launch which will make this fast to approach rope. The approach rope of 10 in. circumference polypropylene will be hove on board until the chafing chain is approximately centred in the fairlead.

Securing the Mooring Lines: While approach is being made, two 11 in. rope strops will be made fast one on each side to the forecastle bitts. The strop will be attached to a 50 ton shackle with pin removed. This shackle should be lying between 2 m. to 3 m. in board of fairlead.

When sufficient chafing chain has been heaved on board, the rope strops will be shackled on to the end links of the chain. The approach rope will then be slackened off and used as back up to the rope strops. The second rope is made fast in the same manner. When mooring is completed the mooring launch will be made fast by a mooring rope (200 m. long) through the centre lead aft so as to be in position to tow as long as the tanker is in the berth.

Connecting Hoses: When mooring is completed a work boat holding the hoses clear will bring the hoses alongside the port side manifold for connection.

Unmooring: To unmoor from the SBM all extra back up lines that have been secured are slipped first. The approach rope is then taken to ship's windlass/capstan and hove up, both of them together, until sufficient chain is in board to remove both shackles from the terminal strops. When the vessel is moving slowly astern the approach ropes are slackened off into the water slowly and finally slipped until allowed to float free.

LOADING:

Loading Rate: Maximum loading rate will be nearly 40,000 barrels (6,000 metric tons) per hour. It is recommended that vessels take maximum flow with due regard to safety in order to expedite turn around time as well as to provide ballast as quickly as possible.

Care should be taken not to overload, as there is no possibility whatever of pumping back to Terminal. When vessels are equipped with permanent ballast tanks, the ballast in these tanks should be retained on board until the vessel has taken on board sufficient cargo to be manoeuvrable. Vessels not so equipped should examine the possibility of safely loading and discharging ballast simultaneously, as such practice improves turn around time as well as reducing the possibility of breaking out of the berth in bad weather in completely light condition.

Hose Lifting Derricks – Deck Winches: Ship booms and deck winches must be capable of operating with a SWL of 5 tons for tankers to be secured to the SBM. Vessels with inadequate hose lifting equipment will be rejected. Power must be kept on deck winches in case adjustments to mooring lines are found to be necessary.

Manifold sizes: The hoses at the terminal are 12 in. in diameter. The minimum size manifold connection acceptable will be 8 in. Terminal is equipped with flanged reducers to connect 8 in. – 10 in. and 16 in. manifolds.

Tanker manifolds should terminate in ASA series 150. Unless terminal is given adequat notice, tankers equipped with other sizes or ratings will be rejected.

Grades of crude oil available: There are 2 grades of Crude Oil available at Senipah Marine Terminal, namely, Bekapai Crude Oil and Handil Crude Oil. Vessels lifting Bekapai Crude are not required to heat the oil during voyage to the discharge port.

Vessels lifting Handil Crude Oil are required to be equipped with heating coils.

It is recommended, as from commencement of loading of Handil Crude, the vessel should endeavour to maintain a temperature of 105°F or at least a temperature slightly above the pour point (±85°F) until the time the vessel discharges its cargo at the unloading port.

In case a vessel has to load 2 parcels of cargo (i.e. 1 Handil and 1 Bekapai), loading must be stopped between the two parcels for line flushing with the second grade of oil.

Outward Clearance: A tanker will be considered clear to depart Senipah Terminal when the crude oil loading documents have been delivered to the Master.

Any protests by the Master concerning the quantity of cargo should be made before departure and any resulting investigation should be made before the vessel sails.

BALLAST:

Adequate Ballast: Due to the exposed location of the crude oil SBM berth, vessels are required to carry sufficient ballast for safe handling, having due regard to existing weather and sea conditions. A vessel found by the Mooring Master to be not adequately ballasted will be rejected.

Pollution: Owners and Masters are responsible to observe International convention laws and Indonesian Government regulations concerning pollution of the sea, having particular regard for this area of the Macassar Strait.

Clean Ballast: As there are no ballast discharging facilities, vessels must arrive at the Terminal with clean ballast, ensuring that all pipelines, pumps and strainers have been flushed out prior to arriving.

The Mooring Master will inspect ship's ballast on boarding and has the power to reject any vessel that he deems would cause pollution of the sea area, in which case the vessel must proceed to sea and return only when ballast is completely free of oil. Any vessel rejected because of dirty ballast will automatically nullify its notice of readiness and will lose any priority of position for loading. Ballast discharge should not be commenced without the prior agreement of the Mooring Master.

Bilges: Bilges must not be discharged while at the Terminal.

Inspections During Loading: At night the sea area around the vessel shall be adequately lighted, as frequent inspection by the Mooring Master will be made during the discharge of ballast. Any pollution, whatsoever, will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection and the vessel will not be reaccepted unless satisfactory evidence of repairs has been certified by a qualified surveyor.

Cargo hose connections should be inspected during loading, drip-pans should be placed under the manifold, all unused cargo connections should be blanked off, sea-valves should be closed and lashed upon completion of deballasting and all scuppers must be securely plugged.

CUSTOMS ALLOWANCE: Cigarettes, cigars, tobacco, matches, spirits, wine, beers, perfume, arms, ammunition and possibly other items have to be locked up under customs seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed to bring in 200 cigarettes or the equivalent in grams of tobacco or cigars. Special allowances are made for the Master under special circumstances.

The Customs Officer will seal the stores.

SERVICES: There are no facilities of any kind at Senipah:

There are no engineering repair shops.
No fresh water.
No bunkers available.
No provisions or stores.
No crane or barge service.
No shore leave.
No crew changes.
No consulates available.
No clinic available.

GENERAL:

Floating Logs: Masters are advised to keep careful watch on the approaches for semi-submerged or floating logs which may become hazardous to safe navigation.

AGENCY: Pertamina Shipping Directorate, 32-34, Jalan Jos Sudarso, PO Box 327, Tanjung Priok, Jakarta, Indonesia. Tel: 491-185 (direct); 494-309, Extension 335-315-225. Telex: 49221-49285 Jakarta.

AUTHORITY: Total Indonesie, P.O.Box 6, Balikpapan, East Kalimantan, Indonesia. *Tel:* 22010-14. *Telex:* 37101 Bppia. *Contact:* Bernard Duchemin, Production Manager.

Head Office: Borobudur Offices, 3rd Floor, Jalan Lapangan Banteng Selatan, Jakarta, P.O.Box Tromolpos 10, Jakarta. *Tel:* 360009 (8 lines). *Telex:* 011-44108. *Cables:* Totalindo Jakarta.

SOURABAJA (Tandjong Perak): 07.12 S. 112.44 E.

(See Plan Book)

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Derat (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's List.
Ship's Articles.
2 Stores Lists.

PILOTAGE: Pilots are in Government service. Pilot signals according to International Code of Signals. Pilots have to be ordered by Agent 24 hours before arrival and 6 hours before departure.

Compulsory Pilotage, consisting of sea and harbour pilotage.

Western Channel: The Sea Pilot will board the vessel at the entrance of the Western Channel from pilot launch stationed at Karang Jamuang position Lat. 6° 55′ 43″ S., Long. 112° 43′ 46″ E. Upon arrival at the pilot station by day, ships should hoist the International Code Flag "G" and the Ship's International Call Sign. Pilot station on VHF Channel 12, from 0600 hrs. – 0000 hrs. Pilot boat on VHF 12, 14 and 16. The following local signals regarding Pilots should be observed if shown by the pilot vessel:

(a) By night: a flare-up light (white) or waving a white light above the railing means: Pilot will soon board your vessel.

(b) By day: the First Substitute over the Code Flag "S" means: no Pilot available, vessel allowed to proceed until she meets the Pilot. By night: a red light over a white light.

(c) By day: 2 black cones 1 vertical over the other points downwards or by night: 2 green lights 1 over the other means: no Pilots are available for ships of less than 10,000 cu.m. gross. If this signal is made by the Pilot, vessels do not have to show the pilot signals.

(d) By day: the International Signal GFM or by night: a green light over a white light means: Pilot will board your vessel by row-boat as no motor-boat is available.

Eastern Channel: No pilot vessels. Pilots will board the vessel at the entrance by means of a pilot barge dispatched from Tg. Perak Pilot Station at the Harbour Master's Office.

Sea Pilot will take the vessel up to the Inner Roads, where the Harbour Pilot takes over.

Request for Pilot: Request for Pilot is made by the ship's Agent 10 hours prior to the entry of vessel in port. At least, 6 hours prior to departure, request for Pilot must also be submitted.

This request is submitted to Pilot Division on telephone numbers 293157, 291354.

For information regarding the arrival of a vessel, the Master of the vessel can send a cable to Tanjung Perak Port Administration by way of VHF radio telephone on Channel 12, which is available round the clock.

The Master of the vessel can also send the cable through "PKD", see "Radio".

ANCHORAGE: Waiting anchorage for Pilot within:

Lat. 6° 51′ S., Long. 112° 45′ E.; Lat. 6° 51′ S., Long. 112° 47′ E.; Lat. 6° 52′ S., Long. 112° 47′ E.; Lat. 6° 52.5′ S., Long. 112° 45′ E. Depth 22 m. at LWS.

RESTRICTIONS: There are 2 entrances: Western and Eastern Channels.

Western Channel: Used for deep draft vessels with depth of 12 m. at LWS. Distance to Tg. Perak about 25 miles.

Eastern Channel: Least bar depth through this channel is 2.5 m. – 5 m. at LWS. Distance to Tg. Perak is about 22.5 miles.

Boarding Area: Harbour Pilots, Quarantine Officer and Immigration will board the vessel at the Inner Roads (anchorage).

MAX. SIZE: The max. draft for vessels entering the access channel to the port is 31 ft. 03 in. with a max. LOA of 210 m.

IMMIGRATION: (Department of Defence and National Security). Vessels arriving from abroad with passengers must hoist the "N" Flag. Masters have to supply the boarding Immigration Officer with Passenger's List of: *(a)* disembarking. *(b)* transhipping. *(c)* through passengers.

No persons are allowed on board until the vessel has been examined and the "N" Flag taken down. Passengers must be in possession of a valid visa: visitor's, entry or a transit visa. Those not having a visa may at the discretion of the Immigration Officer, obtain a landing permit. Members of the crew including the Master must appear in the Articles, in order to get shore permits.

RADIO: Coastal Radio Station call sign PKD.

500/430 kHz, A1/A2 CP. Time: 24 hours. 500 kHz.

2182/2690 kHz, A3H/A3JCP. Time: 0330 – 0430 hrs., 1200 – 1300 hrs. GMT. 2182 kHz.

8461 kHz, A1 CP. Time: 0200 – 0330 hrs., 0730 – 0900 hrs. GMT. 8 MHz band.

879.4 kHz, A3JCP. Time: 0100 – 0200 hrs., 0900 – 1000 hrs. GMT. 8272.5 kHz.

12704.5 kHz, A1 CP. Time: 0000 – 0100 hrs., 1100 – 1200 hrs. GMT. 12 MHz band.

Channel 16, F3CP. Channel 20, F3CP. Channel 22 F3CP. All Channel 16.

Channel 26, F3CP.
Channel 20, F3CP.
Time: 0000 – 1400 hrs. GMT.

Pilot Station Karang Djamuang is also reachable through radio call sign PKW: frequency 500 kHz. This station can also be contacted by VHF Channels 12, 16.

VHF: Pilot boats: Channels 16, 14, 12, 8 and 6.

Tugs: Channels 16, 14, 12, 8 and 6.

TUGS: For poor steering vessels and those with deep drafts, tugs assistance is indispensable from light buoy No. 5 till light buoy No. 4 is passed.

The tug service is provided by the Port Administration for which the Port Administration has 6 tugs. Two tugs – 1,700 h.p., 2 tugs 1,500 h.p. and 2 tugs – 800 h.p. 5 mooring boats also available.

PORT EQUIPMENT:

Capacity	Port Administration	Private	Total
Forklifts:			
2 tons	—	5 units	5 units
2.5 tons	70 units	5 units	75 units
3 tons	—	19 units	19 units
3.5 tons	—	20 units	20 units
4 tons	—	6 units	6 units
5 tons	10 units	14 units	24 units
7.5 tons	3 units	3 units	6 units
10 tons	1 unit	1 unit	2 units
12.5 tons	—	1 unit	1 unit
15 tons	2 units	—	2 units
25 tons	2 units	1 unit	3 units
Mobile Cranes:			
7 tons	—	1 unit	1 unit
15 tons	10 units	—	10 units
25 tons	2 units	2 units	4 units
30 tons	—	1 unit	1 unit
Floating Crane:			
50 tons	1 unit	—	1 unit
Trailers:			
3.5 tons	1 unit	—	1 unit
20 tons	3 units	—	3 units
30 tons	—	1 unit	1 unit
40 tons	—	2 units	2 units

BERTHING: The total length of effective quay in Tanjung Perak Port is 5,205 m.

Quay	*Length*	*Depth at LWS*
Jamrud Utara	950 m.	9.5 m.
Jamrud Selatan	800 m.	9.5 m.
Jamrud Barat	160 m.	9.5 m.
Berlian Barat	735 m.	9.5 m.
Berlian Timur	780 m.	9.5 m.
Berlian Utara	140 m.	9.5 m.
Nilam Timur	860 m.	9.5 m.
Perak	140 m.	9.5 m.
Mirah	640 m.	7.0 m.

Tanker Terminal:

Government Petroleum Pier	Depth alongside at LWS is	90 dm.
Semampir East	,,	120 dm.
Semampir West	,,	100 dm.

Coal Wharf: Situated at the Southern end of Tambatan Nilam, equipped with 1 transporter and 2 bunker barges with steam operated grippers, owned by P.N. Tunda Bara.

STEVEDORES: Working hours: Monday-Thursday 0700 – 1200, 1300 – 1500 hrs. Friday 0700 – 1100, 1300 – 1500 hrs. Saturday 0700 – 1200 hrs. Overtime: Monday-Friday 1500 – 1700 hrs. Sundays, holidays 0700 – 1200, 1300 – 1500 hrs. Night work allowed after permission from the Port Authority.

Average for bulk cargo 20 t.p.h. per gang
Average for bagged cargo 27 t.p.h. per gang
Average for general cargo 20 t.p.h. per gang
Average for machinery/iron 8 t.p.h. per gang

MEDICAL: Hospital and Port Health Centre.

TANKERS: See "Berthing".

FRESH WATER: Supply is handled by the Harbour Board to the berths and by 5 water barges. Present capacity about 1,100 tons per day for the whole harbour. Priority is for passenger vessels and application required 48 hours prior to ship's arrival.

FUEL: Fuel can be obtained via pipe-lines to all berths.

REPAIRS: Dry-docking and all sorts of repairs are carried out by the State-owned P.N. Dock. There are floating docks, capable of lifting 15,500, 3,500 and 4,000 tons. There are several slipways for coasters.

Electronic Repair Shop: All sorts of electronic repairs such as radar, echo-sounder, etc., can be repaired by private contractors.

CONSULS: U.S.A., U.S.S.R., Japan, Great Britain, Belgium, Australia, India, Pakistan, Philippines, France and Netherlands.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agents about local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

BANKS: Bank Negara 1946, Bank Bumi Daya and Bank Rakyat Indonesia.

DEVELOPMENTS: *Developments of the Short Term (1981-85):*

Supply of facilities for inter-state vessels: 8 quays length 640 m., 4 Godowns (area 13,700 sq.m.), 7 stacking areas (area 15,573 sq.m.).

Supply of facilities for container ships by changing part of the berths which are available, so that there is a facility for loading and unloading the containers: 4 quays length 1,200 m., stacking area 66,800 sq.m.

Build CFS (Container Freight Station) at the former Perak Airfield of an area 42,695 sq.m. To have available loading and unloading equipment: 2 multi-purpose mobile cranes, 12 head trucks, 27×40 ft./20 ft. chassis, 12×25 ton top loaders. 2×40 ton transtainers.

Developments of the Medium Term (1986-90):

Supply of facilities for inter-state vessels: 16 quays length 1,280 m., 8 Godowns (area 25,600 sq.m.), 8 stacking areas (area 30,000 sq.m.).

Supply of the facilities for container ships: 2 quays length 500 m., CFS near the quay 20,000 sq.m.

At the former Perak Airfield 200,000 sq.m. To have available loading and unloading equipment: 4 container gantry cranes, 18 head trucks, 32×40 ft./20 ft. chassis, 12×25 ton top loaders and 6×40 ton transtainers.

Developments Long Term (1991-2000):

At this stage a new basin at the West side of the Naval Academy is planned.

In this stage will be prepared: Facilities for inter-state vessels: 40 quays. Facilities for ocean-going vessels: 14 non-container quays, 2 container quays.

AUTHORITY: Port Administration Tanjung Perak, Jalan Kalimas Baru No. 194, Tanjung Perak. *Tel:* 291194, 291364. *Contact:* The Harbour Master.

TANDJUNG UBAN: 01.03 N. 104.13 E.

OPERATOR: P.T. Stanvac Indonesia Oil Terminal.

DOCUMENTS:

11 Crew Lists.
Harbour Report (form to be supplied by the Agent).
Maritime Declaration.
Vaccination List.
2 Stores Lists.
2 Bonded Stores Lists.
2 Personal Effects Lists.

PILOTAGE: Agent requests Pilot upon arrival of vessel, 72 hours advance notice of ETA required. Pilot boards vessel in harbour area.

ANCHORAGES: 0.5 – 0.75 miles opposite oil jetties.

MAX. SIZE:

	Dock No. 2	No. 4	No. 5
Length	800 ft.	650 ft.	650 ft.
Breadth	any	any	any
Draft	34 ft.	33 ft.	32 ft.

HEALTH: Health Officer will board vessel after berthing. No pratique granted, even for vessel after calling at another port in same country.

RADIO: Tandjung Uban Radio – call sign PKJ.

TUGS: No tugs available.

BERTHING: Agent arranges berthing vessel. Dimension of oil hoses used: 6 in. and 8 in. Very limited slop facilities, depending on available ullage.

MEDICAL: Very limited facilities. Only a clinic with experienced wound dresser available. Valid cholera certificates for crew members required.

DENSITY: 1025.

FRESH WATER: Available ex-pipe-line – 5 t.p.h.

FUEL: Medium fuel oil, viscosity Redwood 1, 600 – 900 seconds; heavy fuel oil, viscosity SSF, 30 – 40. Prior approval from PT Stanvac Indonesia, Jakarta, required for obtaining bunker fuels.

GANGWAY/DECK WATCHMEN: Port Authority provides 1 safety guard during vessel's stay in port.

CUSTOMS ALLOWANCES: Reasonable quantity allowed to be used during vessel's stay in port.

IDENTIFICATION CARDS: Possession of a valid Seaman's Book sufficient.

REPATRIATION: No facilities available.

AIRPORT: Distance to airport, 60 miles. Served by Garuda Indonesian Airline 3 times a week (Mondays, Thursdays and Saturdays) to Jakarta only.

TIME: GMT plus 7 hours.

POLICE/AMBULANCE/FIRE: Police, Tel: 55; Clinic, 37 and 58; Fire, 44 and 13.

TELEPHONES: Agents place telephone on board at no cost.

AUTHORITY: Penguasa Pelabuhan (Port Authority).

TARAKAN: 03.20 N. 117.45 E.

DOCUMENTS: See "Djakarta".

PILOTAGE: Compulsory pilotage consisting of Sea and Harbour Pilots. Ships requiring pilot service should notify the Harbour Master at least 24 hours before arriving at outer buoy. Tide: semi diurnal.

Pilots do not normally work at night. The approach buoys and leading lights are frequently extinguished and vessels arriving at night are recommended to anchor at No. 1. Buoy and await a Pilot in daylight.

HEALTH: Vessels arriving from abroad direct in one of the 2nd Class Ports have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad from the 2nd Class Port concerned.

RADIO: Call sign: PKO Class A1. This station also has VHF Maritime Bands working on the same hours as the Short Wave Transmissions.

TUGS: Nil.

BERTHING: The anchorage will hold many ships but very little cargo is worked from the anchorage as most vessels calling are timber ships waiting to load. The very occasional ocean cargo ship usually unloads on to a barge but very occasionally goes alongside the Commercial Jetty.

The Commercial Jetty has a least depth of 4 m. and a length of about 150 m. There is a crane capable of lifting 2 tons on the inside berth. This jetty is very old and dilapidated and normally handles only small craft of local inter-island character.

STEVEDORES: Working hours: 7 hours on normal working days. Overtime can be arranged.

TANKERS: The Pertamina Jetty has a least depth of 8 m. and is about 180 m. in length. This pier is solely for the export of petroleum products in small tankers.

Off the Pertamina Pier is a 6-buoy sea berth to which tankers of 35,000 tons d.w.t. are secured to load oil for export. The loading rate is about 1,000 t.p.h., through two 10 in. hoses. The berth requires a tanker with a derrick capable of lifting 3 tons.

GENERAL: Port doctor available.

Carrying a camera ashore or even on deck of a ship for photography is strictly prohibited.

There is a small hospital. No stores, water, or fuel oil are available. There are no repair facilities at all. Pertamina operates a small hospital and a clinic. There is air communication to other parts of Indonesia through Balikpapan.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

TEGAL, Java: 06.55 S. 109.10 E.

DOCUMENTS: Upon arrival, vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificates.
Seaworthiness Certificate.
Tonnage Certificate.
Derat (Exemption) Certificate.
International Loadline.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio-telegraphy Certificate.
Vaccination List.
5 Crew Lists.
2 Stores Lists.
2 Crew Baggage's Declaration.
Last Port Clearance.
Health Book.
Custom Clearance and Custom Documents.
Cargo Manifest and Bills of Lading.

When vessels arrive direct from foreign port, Customs and Harbour Police Officials board for search.

PILOTAGE: None.

ANCHORAGES: Tegal Roads. Safe anchorages: Lat. 6° 49′ 00″ S., Long. 109° 08′ 07″ E. Lighthouse 210°. Distance 2.5 miles off.

RESTRICTIONS: No restriction on night entry, but work is done next day (after 0800 hrs.).

MAX. SIZE: Length and breadth no restriction. If draft above 25 ft. will be 2.5 or 3 miles off shore (anchorage on roads).

HEALTH: Maritime Declaration of Health needed from Master, if vessels coming direct from abroad. If vessel comes from other Indonesian ports, automatic free pratique.

RADIO:

I. Fixed Station:
Call sign 8AC on freq. 5315 kHz at 0100 – 0130 GMT
0230 – 0300
freq. 5165 kHz at 0430 – 0500 GMT
1000 – 1015

II. Coast Station:
Call sign PKD 21 on freq. 2182/2690 kHz at 0030 – 0100 GMT
0400 – 0430
Channel 16 – VHF 156.80 MHz 0100 – 0500 GMT

III. Open every day except on holidays.

TUGS: Only used for towing lighters to vessels on the roads.

BERTHING: None. Anchorage only.

STEVEDORES: Ordered by Agent. If possible before arrival of vessel, some information mainly concerned with requirements of the Shipmaster advises Agents to arrange gangs and available space for Tegal cargo.

MEDICAL: Normally medical attention for crew to be arranged by Agent at order of Master.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Services of watchmen if necessary to be ordered by Master.

OPENING/CLOSING HATCHES: Carried out by crew – sometimes by stevedores.

CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits not allowed to be taken ashore.

IDENTIFICATION CARDS: Necessary.

CONSULS: None available locally.

REPAIRS: None.

REPATRIATION: Agents arrange necessary repatriation of crew.

TIME: Indonesian Western Time, GMT plus 7 hours.

HOLIDAYS: Only Moslem holidays: Id el Fitr. For 2 days no cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Accident, Police, Tel: 10; First Aid for Ambulance (Texin Hospital), Tel: 387; Fire Departments (Texin), Tel: 17.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members allowed ashore from 0800 up to 2100 hrs. every day. Not allowed to spend night on shore.

REGULATIONS: Crew members not allowed to bring cameras, foreign money, on shore leave.

AUTHORITY: Sjahbander, Djl.

TELOK AYER: 00.44 S. 109.05 E.

SHIPMASTER'S REPORT: March 1982.

PILOTAGE: Pilot Station in position: Lat. 00° 39′ S., Long. 109° 05′ E. Pilot comes from inner anchorage by small boat, journey time 5 hours.

ANCHORAGE: Vessels approaching Telok Ayer (Telok Airport) drop anchor 5 cables West of Fairway Buoy in position: Lat. 00° 39.5′ S., Long. 109° 05.5′ E.

RADIO: 24 hours notice to Agent to arrange Pilot.

VHF: Call "Padang Tikar Pilot" on VHF Channel 16.

CARGO HANDLING: Depth at loading point is 6 fathoms. Maximum depth in entrance to Padang Tikar River is 7.2 m. at HW. Vessels load plywood and sawn timber.

GENERAL: There are no alongside facilities for ships.

Stevedores, Shippers, Immigration and Customs Officers take full meals and accommodation onboard, during the loading operation, as the nearest town (Pontianak) is 12 hours away by speedboat.

TELUK BAYUR (Padang): 00.58 S. 100.20 E.

FLAGS: *Flags to be Shown by Incoming Vessels:*

Nationality of vessel and Indonesian flag.
Call sign.
"Q" when the vessel comes from an infected port or when calling for a Port Health Officer.
"G" when Pilot is required.
"N" when vessel from abroad carrying Passengers. (Request for Immigration).
"H" when Pilot is on board.
"Y" when mail on board.
"B" when carrying dangerous cargo.

Flag to be shown when vessel leaving Port:

Nationality of vessel and Indonesian flag.
Call Sign.
"H" Flag when Pilot is on board.

DOCUMENTS:

a) The Master must have in readiness for the Harbour Master officials:
Certificate of Registry.
Certificate of Nationality.
Loadline Certificate.
Radio Safety Certificate.
Derat Certificate.
Safety Equipment Certificate.
Last Port Clearance.
Health Book (Indonesian Health Book) to be used in Indonesian waters only.
Crew List.
Stores List.
Personal Effects List.
Free Pratique.
Light Dues Bill from Port of Call (last Port).

b) Cargo Documents required by the Agent to clear the Vessel through Customs:
Customs Cargo Clearance.
Manifest.
Customs Document (outward cargo AVI and model E3).
Customs Document (inward cargo – AA).
Customs Document of transhipment cargo (model HH).

Authorities boarding the vessel on arrival:

Port Health Doctor (Quarantine Officer):

1. All vessels entering Port of Teluk Bayur from abroad should obtain free Pratique. Vessel must wait until the Quarantine Officers board the ship before entering.
2. Documents to be shown to the Port Health Doctor:
   Indonesian Health Book.
   Crew List.
   Passenger List.
   Vaccination List.
   International Vaccination Certificate.
   Derat Exemption Certificate.

Customs:

1. It is prohibited during vessel's stay to sell any goods belonging to crew.
2. Foreign vessel, if carrying local cargo must have coasting permit.
3. Documents to be shown to Customs:
   Cargo Manifest.
   Provisions/Stores List.
   Crew List.
   Crew Personal Effects Declaration.
   Last Port Clearance/Custom clearances.

Immigration:

1. All vessels coming from abroad (Indonesian vessels as well as foreign vessels) are to use crew passes.
2. Foreign crew to be repatriated must be accompanied by an Immigration Officer, except if their pass is a visa.
   All expenses (ticket and travelling expenses) are for owner's account.
3. All foreign transit passengers have to fill in an embarkation/-debarkation card.
4. Vessels arriving from abroad carrying passengers; The Master is also obliged to provide the Immigration Officers with a List of the Passengers on board.
5. Documents to be shown to the Immigration Officers:
   Crew List.
   Passenger List.
   Crew Passports/Passengers' Passports.
   Last Port Clearance/Immigration Clearances.
6. Foreign passengers landing at Teluk Bayur Port without visa, *must pay for Immigration Fee.*

Harbour Master:

1. If vessel intends to use their own life/motorboat for rowing exercise, permission should first be obtained from Harbour Master and Coast Guard.
2. Documents to be shown to the Harbour Master:
   Certificate of Registry.
   Certificate of Nationality.
   Loadline Certificate.
   Vessel and Passenger Safety Certificate.
   Radio Safety Certificate.
   Master Roll.
   Crew List.
   Passenger List.

Cargo Documents:

Cargo Manifest covering Teluk Bayur cargo – 7 copies.
Cargo Manifest covering cargo for other Port – 7 copies.
Stores List – 7 copies.
Crew Personal Effects List – 7 copies.
Crew List – 10 copies.

BERTHING: The total length of effective quay in Tanjung Perak Port is 5,205 m.

Quay	*Length*	*Depth at LWS*
Jamrud Utara	950 m.	9.5 m.
Jamrud Selatan	800 m.	9.5 m.
Jamrud Barat	160 m.	9.5 m.
Berlian Barat	735 m.	9.5 m.
Berlian Timur	780 m.	9.5 m.
Berlian Utara	140 m.	9.5 m.
Nilam Timur	860 m.	9.5 m.
Perak	140 m.	9.5 m.
Mirah	640 m.	7.0 m.

Tanker Terminal:

Government Petroleum Pier	Depth alongside at LWS is	90 dm.
Semampir East	,,	120 dm.
Semampir West	,,	100 dm.

Coal Wharf: Situated at the Southern end of Tambatan Nilam, equipped with 1 transporter and 2 bunker barges with steam operated grippers, owned by P.N. Tunda Bara.

STEVEDORES: Working hours: Monday-Thursday 0700 – 1200, 1300 – 1500 hrs. Friday 0700 – 1100, 1300 – 1500 hrs. Saturday 0700 – 1200 hrs. Overtime: Monday-Friday 1500 – 1700 hrs. Sundays, holidays 0700 – 1200, 1300 – 1500 hrs. Night work allowed after permission from the Port Authority.

Average for bulk cargo 20 t.p.h. per gang
Average for bagged cargo 27 t.p.h. per gang
Average for general cargo 20 t.p.h. per gang
Average for machinery/iron 8 t.p.h. per gang

MEDICAL: Hospital and Port Health Centre.

TANKERS: See "Berthing".

FRESH WATER: Supply is handled by the Harbour Board to the berths and by 5 water barges. Present capacity about 1,100 tons per day for the whole harbour. Priority is for passenger vessels and application required 48 hours prior to ship's arrival.

FUEL: Fuel can be obtained via pipe-lines to all berths.

REPAIRS: Dry-docking and all sorts of repairs are carried out by the State-owned P.N. Dock. There are floating docks, capable of lifting 15,500, 3,500 and 4,000 tons. There are several slipways for coasters.

Electronic Repair Shop: All sorts of electronic repairs such as radar, echo-sounder, etc., can be repaired by private contractors.

CONSULS: U.S.A., U.S.S.R., Japan, Great Britain, Belgium, Australia, India, Pakistan, Philippines, France and Netherlands.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agents about local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

BANKS: Bank Negara 1946, Bank Bumi Daya and Bank Rakyat Indonesia.

DEVELOPMENTS: *Developments of the Short Term (1981-85):*

Supply of facilities for inter-state vessels: 8 quays length 640 m., 4 Godowns (area 13,700 sq.m.), 7 stacking areas (area 15,573 sq.m.).

Supply of facilities for container ships by changing part of the berths which are available, so that there is a facility for loading and unloading the containers: 4 quays length 1,200 m., stacking area 66,800 sq.m.

Build CFS (Container Freight Station) at the former Perak Airfield of an area 42,695 sq.m. To have available loading and unloading equipment: 2 multi-purpose mobile cranes, 12 head trucks, 27×40 ft./20 ft. chassis, 12×25 ton top loaders. 2×40 ton transtainers.

Developments of the Medium Term (1986-90):

Supply of facilities for inter-state vessels: 16 quays length 1,280 m., 8 Godowns (area 25,600 sq.m.), 8 stacking areas (area 30,000 sq.m.).

Supply of the facilities for container ships: 2 quays length 500 m., CFS near the quay 20,000 sq.m.

At the former Perak Airfield 200,000 sq.m. To have available loading and unloading equipment: 4 container gantry cranes, 18 head trucks, 32×40 ft./20 ft. chassis, 12×25 ton top loaders and 6×40 ton transtainers.

Developments Long Term (1991-2000):

At this stage a new basin at the West side of the Naval Academy is planned.

In this stage will be prepared: Facilities for inter-state vessels: 40 quays. Facilities for ocean-going vessels: 14 non-container quays, 2 container quays.

AUTHORITY: Port Administration Tanjung Perak, Jalan Kalimas Baru No. 194, Tanjung Perak. *Tel:* 291194, 291364. *Contact:* The Harbour Master.

TANDJUNG UBAN: 01.03 N. 104.13 E.

OPERATOR: P.T. Stanvac Indonesia Oil Terminal.

DOCUMENTS:

11 Crew Lists.
Harbour Report (form to be supplied by the Agent).
Maritime Declaration.
Vaccination List.
2 Stores Lists.
2 Bonded Stores Lists.
2 Personal Effects Lists.

PILOTAGE: Agent requests Pilot upon arrival of vessel, 72 hours advance notice of ETA required. Pilot boards vessel in harbour area.

ANCHORAGES: 0.5 – 0.75 miles opposite oil jetties.

MAX. SIZE:

	Dock No. 2	No. 4	No. 5
Length	800 ft.	650 ft.	650 ft.
Breadth	any	any	any
Draft	34 ft.	33 ft.	32 ft.

HEALTH: Health Officer will board vessel after berthing. No pratique granted, even for vessel after calling at another port in same country.

RADIO: Tandjung Uban Radio – call sign PKJ.

TUGS: No tugs available.

BERTHING: Agent arranges berthing vessel. Dimension of oil hoses used: 6 in. and 8 in. Very limited slop facilities, depending on available ullage.

MEDICAL: Very limited facilities. Only a clinic with experienced wound dresser available. Valid cholera certificates for crew members required.

DENSITY: 1025.

FRESH WATER: Available ex-pipe-line – 5 t.p.h.

FUEL: Medium fuel oil, viscosity Redwood 1, 600 – 900 seconds; heavy fuel oil, viscosity SSF, 30 – 40. Prior approval from PT Stanvac Indonesia, Jakarta, required for obtaining bunker fuels.

GANGWAY/DECK WATCHMEN: Port Authority provides 1 safety guard during vessel's stay in port.

CUSTOMS ALLOWANCES: Reasonable quantity allowed to be used during vessel's stay in port.

IDENTIFICATION CARDS: Possession of a valid Seaman's Book sufficient.

REPATRIATION: No facilities available.

AIRPORT: Distance to airport, 60 miles. Served by Garuda Indonesian Airline 3 times a week (Mondays, Thursdays and Saturdays) to Jakarta only.

TIME: GMT plus 7 hours.

POLICE/AMBULANCE/FIRE: Police, Tel: 55; Clinic, 37 and 58; Fire, 44 and 13.

TELEPHONES: Agents place telephone on board at no cost.

AUTHORITY: Penguasa Pelabuhan (Port Authority).

TARAKAN: 03.20 N. 117.45 E.

DOCUMENTS: See "Djakarta".

PILOTAGE: Compulsory pilotage consisting of Sea and Harbour Pilots. Ships requiring pilot service should notify the Harbour Master at least 24 hours before arriving at outer buoy. Tide: semi diurnal.

Pilots do not normally work at night. The approach buoys and leading lights are frequently extinguished and vessels arriving at night are recommended to anchor at No. 1. Buoy and await a Pilot in daylight.

HEALTH: Vessels arriving from abroad direct in one of the 2nd Class Ports have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad from the 2nd Class Port concerned.

RADIO: Call sign: PKO Class A1. This station also has VHF Maritime Bands working on the same hours as the Short Wave Transmissions.

TUGS: Nil.

BERTHING: The anchorage will hold many ships but very little cargo is worked from the anchorage as most vessels calling are timber ships waiting to load. The very occasional ocean cargo ship usually unloads on to a barge but very occasionally goes alongside the Commercial Jetty.

The Commercial Jetty has a least depth of 4 m. and a length of about 150 m. There is a crane capable of lifting 2 tons on the inside berth. This jetty is very old and dilapidated and normally handles only small craft of local inter-island character.

STEVEDORES: Working hours: 7 hours on normal working days. Overtime can be arranged.

TANKERS: The Pertamina Jetty has a least depth of 8 m. and is about 180 m. in length. This pier is solely for the export of petroleum products in small tankers.

Off the Pertamina Pier is a 6-buoy sea berth to which tankers of 35,000 tons d.w.t. are secured to load oil for export. The loading rate is about 1,000 t.p.h., through two 10 in. hoses. The berth requires a tanker with a derrick capable of lifting 3 tons.

GENERAL: Port doctor available.

Carrying a camera ashore or even on deck of a ship for photography is strictly prohibited.

There is a small hospital. No stores, water, or fuel oil are available. There are no repair facilities at all. Pertamina operates a small hospital and a clinic. There is air communication to other parts of Indonesia through Balikpapan.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

TEGAL, Java: 06.55 S. 109.10 E.

DOCUMENTS: Upon arrival, vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificates.
Seaworthiness Certificate.
Tonnage Certificate.
Derat (Exemption) Certificate.
International Loadline.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio-telegraphy Certificate.
Vaccination List.
5 Crew Lists.
2 Stores Lists.
2 Crew Baggage's Declaration.
Last Port Clearance.
Health Book.
Custom Clearance and Custom Documents.
Cargo Manifest and Bills of Lading.

When vessels arrive direct from foreign port, Customs and Harbour Police Officials board for search.

PILOTAGE: None.

ANCHORAGES: Tegal Roads. Safe anchorages: Lat. 6° 49′ 00″ S., Long. 109° 08′ 07″ E. Lighthouse 210°. Distance 2.5 miles off.

RESTRICTIONS: No restriction on night entry, but work is done next day (after 0800 hrs.).

MAX. SIZE: Length and breadth no restriction. If draft above 25 ft. will be 2.5 or 3 miles off shore (anchorage on roads).

HEALTH: Maritime Declaration of Health needed from Master, if vessels coming direct from abroad. If vessel comes from other Indonesian ports, automatic free pratique.

RADIO:

I. Fixed Station:
Call sign 8AC on freq. 5315 kHz at 0100 – 0130 GMT
0230 – 0300
freq. 5165 kHz at 0430 – 0500 GMT
1000 – 1015

II. Coast Station:
Call sign PKD 21 on freq. 2182/2690 kHz at 0030 – 0100 GMT
0400 – 0430
Channel 16 – VHF 156.80 MHz 0100 – 0500 GMT

III. Open every day except on holidays.

TUGS: Only used for towing lighters to vessels on the roads.

BERTHING: None. Anchorage only.

STEVEDORES: Ordered by Agent. If possible before arrival of vessel, some information mainly concerned with requirements of the Shipmaster advises Agents to arrange gangs and available space for Tegal cargo.

MEDICAL: Normally medical attention for crew to be arranged by Agent at order of Master.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Services of watchmen if necessary to be ordered by Master.

OPENING/CLOSING HATCHES: Carried out by crew – sometimes by stevedores.

CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits not allowed to be taken ashore.

IDENTIFICATION CARDS: Necessary.

CONSULS: None available locally.

REPAIRS: None.

REPATRIATION: Agents arrange necessary repatriation of crew.

TIME: Indonesian Western Time, GMT plus 7 hours.

HOLIDAYS: Only Moslem holidays: Id el Fitr. For 2 days no cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Accident, Police, Tel: 10; First Aid for Ambulance (Texin Hospital), Tel: 387; Fire Departments (Texin), Tel: 17.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members allowed ashore from 0800 up to 2100 hrs. every day. Not allowed to spend night on shore.

REGULATIONS: Crew members not allowed to bring cameras, foreign money, on shore leave.

AUTHORITY: Sjahbander, Djl.

TELOK AYER: 00.44 S. 109.05 E.

SHIPMASTER'S REPORT: March 1982.

PILOTAGE: Pilot Station in position: Lat. 00° 39′ S., Long. 109° 05′ E. Pilot comes from inner anchorage by small boat, journey time 5 hours.

ANCHORAGE: Vessels approaching Telok Ayer (Telok Airport) drop anchor 5 cables West of Fairway Buoy in position: Lat. 00° 39.5′ S., Long. 109° 05.5′ E.

RADIO: 24 hours notice to Agent to arrange Pilot.

VHF: Call "Padang Tikar Pilot" on VHF Channel 16.

CARGO HANDLING: Depth at loading point is 6 fathoms. Maximum depth in entrance to Padang Tikar River is 7.2 m. at HW. Vessels load plywood and sawn timber.

GENERAL: There are no alongside facilities for ships.

Stevedores, Shippers, Immigration and Customs Officers take full meals and accommodation onboard, during the loading operation, as the nearest town (Pontianak) is 12 hours away by speedboat.

TELUK BAYUR (Padang): 00.58 S. 100.20 E.

FLAGS: *Flags to be Shown by Incoming Vessels:*

Nationality of vessel and Indonesian flag.
Call sign.
"Q" when the vessel comes from an infected port or when calling for a Port Health Officer.
"G" when Pilot is required.
"N" when vessel from abroad carrying Passengers. (Request for Immigration).
"H" when Pilot is on board.
"Y" when mail on board.
"B" when carrying dangerous cargo.

Flag to be shown when vessel leaving Port:

Nationality of vessel and Indonesian flag.
Call Sign.
"H" Flag when Pilot is on board.

DOCUMENTS:

a) The Master must have in readiness for the Harbour Master officials:

Certificate of Registry.
Certificate of Nationality.
Loadline Certificate.
Radio Safety Certificate.
Derat Certificate.
Safety Equipment Certificate.
Last Port Clearance.
Health Book (Indonesian Health Book) to be used in Indonesian waters only.
Crew List.
Stores List.
Personal Effects List.
Free Pratique.
Light Dues Bill from Port of Call (last Port).

b) Cargo Documents required by the Agent to clear the Vessel through Customs:

Customs Cargo Clearance.
Manifest.
Customs Document (outward cargo AVI and model E3).
Customs Document (inward cargo – AA).
Customs Document of transhipment cargo (model HH).

Authorities boarding the vessel on arrival:

Port Health Doctor (Quarantine Officer):

1. All vessels entering Port of Teluk Bayur from abroad should obtain free Pratique. Vessel must wait until the Quarantine Officers board the ship before entering.
2. Documents to be shown to the Port Health Doctor:
   Indonesian Health Book.
   Crew List.
   Passenger List.
   Vaccination List.
   International Vaccination Certificate.
   Derat Exemption Certificate.

Customs:

1. It is prohibited during vessel's stay to sell any goods belonging to crew.
2. Foreign vessel, if carrying local cargo must have coasting permit.
3. Documents to be shown to Customs:
   Cargo Manifest.
   Provisions/Stores List.
   Crew List.
   Crew Personal Effects Declaration.
   Last Port Clearance/Custom clearances.

Immigration:

1. All vessels coming from abroad (Indonesian vessels as well as foreign vessels) are to use crew passes.
2. Foreign crew to be repatriated must be accompanied by an Immigration Officer, except if their pass is a visa.
   All expenses (ticket and travelling expenses) are for owner's account.
3. All foreign transit passengers have to fill in an embarkation/-debarkation card.
4. Vessels arriving from abroad carrying passengers; The Master is also obliged to provide the Immigration Officers with a List of the Passengers on board.
5. Documents to be shown to the Immigration Officers:
   Crew List.
   Passenger List.
   Crew Passports/Passengers' Passports.
   Last Port Clearance/Immigration Clearances.
6. Foreign passengers landing at Teluk Bayur Port without visa, *must pay for Immigration Fee.*

Harbour Master:

1. If vessel intends to use their own life/motorboat for rowing exercise, permission should first be obtained from Harbour Master and Coast Guard.
2. Documents to be shown to the Harbour Master:
   Certificate of Registry.
   Certificate of Nationality.
   Loadline Certificate.
   Vessel and Passenger Safety Certificate.
   Radio Safety Certificate.
   Master Roll.
   Crew List.
   Passenger List.

Cargo Documents:

Cargo Manifest covering Teluk Bayur cargo – 7 copies.
Cargo Manifest covering cargo for other Port – 7 copies.
Stores List – 7 copies.
Crew Personal Effects List – 7 copies.
Crew List – 10 copies.

BERTHING: The total length of effective quay in Tanjung Perak Port is 5,205 m.

Quay	*Length*	*Depth at LWS*
Jamrud Utara	950 m.	9.5 m.
Jamrud Selatan	800 m.	9.5 m.
Jamrud Barat	160 m.	9.5 m.
Berlian Barat	735 m.	9.5 m.
Berlian Timur	780 m.	9.5 m.
Berlian Utara	140 m.	9.5 m.
Nilam Timur	860 m.	9.5 m.
Perak	140 m.	9.5 m.
Mirah	640 m.	7.0 m.

Tanker Terminal:

Government Petroleum Pier	Depth alongside at LWS is	90 dm.
Semampir East	,,	120 dm.
Semampir West	,,	100 dm.

Coal Wharf: Situated at the Southern end of Tambatan Nilam, equipped with 1 transporter and 2 bunker barges with steam operated grippers, owned by P.N. Tunda Bara.

STEVEDORES: Working hours: Monday-Thursday 0700 – 1200, 1300 – 1500 hrs. Friday 0700 – 1100, 1300 – 1500 hrs. Saturday 0700 – 1200 hrs. Overtime: Monday-Friday 1500 – 1700 hrs. Sundays, holidays 0700 – 1200, 1300 – 1500 hrs. Night work allowed after permission from the Port Authority.

Average for bulk cargo 20 t.p.h. per gang
Average for bagged cargo 27 t.p.h. per gang
Average for general cargo 20 t.p.h. per gang
Average for machinery/iron 8 t.p.h. per gang

MEDICAL: Hospital and Port Health Centre.

TANKERS: See "Berthing".

FRESH WATER: Supply is handled by the Harbour Board to the berths and by 5 water barges. Present capacity about 1,100 tons per day for the whole harbour. Priority is for passenger vessels and application required 48 hours prior to ship's arrival.

FUEL: Fuel can be obtained via pipe-lines to all berths.

REPAIRS: Dry-docking and all sorts of repairs are carried out by the State-owned P.N. Dock. There are floating docks, capable of lifting 15,500, 3,500 and 4,000 tons. There are several slipways for coasters.

Electronic Repair Shop: All sorts of electronic repairs such as radar, echo-sounder, etc., can be repaired by private contractors.

CONSULS: U.S.A., U.S.S.R., Japan, Great Britain, Belgium, Australia, India, Pakistan, Philippines, France and Netherlands.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agents about local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

BANKS: Bank Negara 1946, Bank Bumi Daya and Bank Rakyat Indonesia.

DEVELOPMENTS: *Developments of the Short Term (1981-85):*

Supply of facilities for inter-state vessels: 8 quays length 640 m., 4 Godowns (area 13,700 sq.m.), 7 stacking areas (area 15,573 sq.m.).

Supply of facilities for container ships by changing part of the berths which are available, so that there is a facility for loading and unloading the containers: 4 quays length 1,200 m., stacking area 66,800 sq.m.

Build CFS (Container Freight Station) at the former Perak Airfield of an area 42,695 sq.m. To have available loading and unloading equipment: 2 multi-purpose mobile cranes, 12 head trucks, 27×40 ft./20 ft. chassis, 12×25 ton top loaders. 2×40 ton transtainers.

Developments of the Medium Term (1986-90):

Supply of facilities for inter-state vessels: 16 quays length 1,280 m., 8 Godowns (area 25,600 sq.m.), 8 stacking areas (area 30,000 sq.m.).

Supply of the facilities for container ships: 2 quays length 500 m., CFS near the quay 20,000 sq.m.

At the former Perak Airfield 200,000 sq.m. To have available loading and unloading equipment: 4 container gantry cranes, 18 head trucks, 32×40 ft./20 ft. chassis, 12×25 ton top loaders and 6×40 ton transtainers.

Developments Long Term (1991-2000):

At this stage a new basin at the West side of the Naval Academy is planned.

In this stage will be prepared: Facilities for inter-state vessels: 40 quays. Facilities for ocean-going vessels: 14 non-container quays, 2 container quays.

AUTHORITY: Port Administration Tanjung Perak, Jalan Kalimas Baru No. 194, Tanjung Perak. *Tel:* 291194, 291364. *Contact:* The Harbour Master.

TANDJUNG UBAN: 01.03 N. 104.13 E.

OPERATOR: P.T. Stanvac Indonesia Oil Terminal.

DOCUMENTS:

11 Crew Lists.
Harbour Report (form to be supplied by the Agent).
Maritime Declaration.
Vaccination List.
2 Stores Lists.
2 Bonded Stores Lists.
2 Personal Effects Lists.

PILOTAGE: Agent requests Pilot upon arrival of vessel, 72 hours advance notice of ETA required. Pilot boards vessel in harbour area.

ANCHORAGES: 0.5 – 0.75 miles opposite oil jetties.

MAX. SIZE:

	Dock No. 2	No. 4	No. 5
Length	800 ft.	650 ft.	650 ft.
Breadth	any	any	any
Draft	34 ft.	33 ft.	32 ft.

HEALTH: Health Officer will board vessel after berthing. No pratique granted, even for vessel after calling at another port in same country.

RADIO: Tandjung Uban Radio – call sign PKJ.

TUGS: No tugs available.

BERTHING: Agent arranges berthing vessel. Dimension of oil hoses used: 6 in. and 8 in. Very limited slop facilities, depending on available ullage.

MEDICAL: Very limited facilities. Only a clinic with experienced wound dresser available. Valid cholera certificates for crew members required.

DENSITY: 1025.

FRESH WATER: Available ex-pipe-line – 5 t.p.h.

FUEL: Medium fuel oil, viscosity Redwood 1, 600 – 900 seconds; heavy fuel oil, viscosity SSF, 30 – 40. Prior approval from PT Stanvac Indonesia, Jakarta, required for obtaining bunker fuels.

GANGWAY/DECK WATCHMEN: Port Authority provides 1 safety guard during vessel's stay in port.

CUSTOMS ALLOWANCES: Reasonable quantity allowed to be used during vessel's stay in port.

IDENTIFICATION CARDS: Possession of a valid Seaman's Book sufficient.

REPATRIATION: No facilities available.

AIRPORT: Distance to airport, 60 miles. Served by Garuda Indonesian Airline 3 times a week (Mondays, Thursdays and Saturdays) to Jakarta only.

TIME: GMT plus 7 hours.

POLICE/AMBULANCE/FIRE: Police, Tel: 55; Clinic, 37 and 58; Fire, 44 and 13.

TELEPHONES: Agents place telephone on board at no cost.

AUTHORITY: Penguasa Pelabuhan (Port Authority).

TARAKAN: 03.20 N. 117.45 E.

DOCUMENTS: See "Djakarta".

PILOTAGE: Compulsory pilotage consisting of Sea and Harbour Pilots. Ships requiring pilot service should notify the Harbour Master at least 24 hours before arriving at outer buoy. Tide: semi diurnal.

Pilots do not normally work at night. The approach buoys and leading lights are frequently extinguished and vessels arriving at night are recommended to anchor at No. 1. Buoy and await a Pilot in daylight.

HEALTH: Vessels arriving from abroad direct in one of the 2nd Class Ports have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad from the 2nd Class Port concerned.

RADIO: Call sign: PKO Class A1. This station also has VHF Maritime Bands working on the same hours as the Short Wave Transmissions.

TUGS: Nil.

BERTHING: The anchorage will hold many ships but very little cargo is worked from the anchorage as most vessels calling are timber ships waiting to load. The very occasional ocean cargo ship usually unloads on to a barge but very occasionally goes alongside the Commercial Jetty.

The Commercial Jetty has a least depth of 4 m. and a length of about 150 m. There is a crane capable of lifting 2 tons on the inside berth. This jetty is very old and dilapidated and normally handles only small craft of local inter-island character.

STEVEDORES: Working hours: 7 hours on normal working days. Overtime can be arranged.

TANKERS: The Pertamina Jetty has a least depth of 8 m. and is about 180 m. in length. This pier is solely for the export of petroleum products in small tankers.

Off the Pertamina Pier is a 6-buoy sea berth to which tankers of 35,000 tons d.w.t. are secured to load oil for export. The loading rate is about 1,000 t.p.h., through two 10 in. hoses. The berth requires a tanker with a derrick capable of lifting 3 tons.

GENERAL: Port doctor available.

Carrying a camera ashore or even on deck of a ship for photography is strictly prohibited.

There is a small hospital. No stores, water, or fuel oil are available. There are no repair facilities at all. Pertamina operates a small hospital and a clinic. There is air communication to other parts of Indonesia through Balikpapan.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

TEGAL, Java: 06.55 S. 109.10 E.

DOCUMENTS: Upon arrival, vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificates.
Seaworthiness Certificate.
Tonnage Certificate.
Derat (Exemption) Certificate.
International Loadline.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio-telegraphy Certificate.
Vaccination List.
5 Crew Lists.
2 Stores Lists.
2 Crew Baggage's Declaration.
Last Port Clearance.
Health Book.
Custom Clearance and Custom Documents.
Cargo Manifest and Bills of Lading.

When vessels arrive direct from foreign port, Customs and Harbour Police Officials board for search.

PILOTAGE: None.

ANCHORAGES: Tegal Roads. Safe anchorages: Lat. 6° 49′ 00″ S., Long. 109° 08′ 07″ E. Lighthouse 210°. Distance 2.5 miles off.

RESTRICTIONS: No restriction on night entry, but work is done next day (after 0800 hrs.).

MAX. SIZE: Length and breadth no restriction. If draft above 25 ft. will be 2.5 or 3 miles off shore (anchorage on roads).

HEALTH: Maritime Declaration of Health needed from Master, if vessels coming direct from abroad. If vessel comes from other Indonesian ports, automatic free pratique.

RADIO:

I. Fixed Station:
Call sign 8AC on freq. 5315 kHz at 0100 – 0130 GMT
0230 – 0300
freq. 5165 kHz at 0430 – 0500 GMT
1000 – 1015

II. Coast Station:
Call sign PKD 21 on freq. 2182/2690 kHz at 0030 – 0100 GMT
0400 – 0430
Channel 16 – VHF 156.80 MHz 0100 – 0500 GMT

III. Open every day except on holidays.

TUGS: Only used for towing lighters to vessels on the roads.

BERTHING: None. Anchorage only.

STEVEDORES: Ordered by Agent. If possible before arrival of vessel, some information mainly concerned with requirements of the Shipmaster advises Agents to arrange gangs and available space for Tegal cargo.

MEDICAL: Normally medical attention for crew to be arranged by Agent at order of Master.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Services of watchmen if necessary to be ordered by Master.

OPENING/CLOSING HATCHES: Carried out by crew – sometimes by stevedores.

CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits not allowed to be taken ashore.

IDENTIFICATION CARDS: Necessary.

CONSULS: None available locally.

REPAIRS: None.

REPATRIATION: Agents arrange necessary repatriation of crew.

TIME: Indonesian Western Time, GMT plus 7 hours.

HOLIDAYS: Only Moslem holidays: Id el Fitr. For 2 days no cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Accident, Police, Tel: 10; First Aid for Ambulance (Texin Hospital), Tel: 387; Fire Departments (Texin), Tel: 17.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members allowed ashore from 0800 up to 2100 hrs. every day. Not allowed to spend night on shore.

REGULATIONS: Crew members not allowed to bring cameras, foreign money, on shore leave.

AUTHORITY: Sjahbander, Djl.

TELOK AYER: 00.44 S. 109.05 E.

SHIPMASTER'S REPORT: March 1982.

PILOTAGE: Pilot Station in position: Lat. 00° 39′ S., Long. 109° 05′ E. Pilot comes from inner anchorage by small boat, journey time 5 hours.

ANCHORAGE: Vessels approaching Telok Ayer (Telok Airport) drop anchor 5 cables West of Fairway Buoy in position: Lat. 00° 39.5′ S., Long. 109° 05.5′ E.

RADIO: 24 hours notice to Agent to arrange Pilot.

VHF: Call "Padang Tikar Pilot" on VHF Channel 16.

CARGO HANDLING: Depth at loading point is 6 fathoms. Maximum depth in entrance to Padang Tikar River is 7.2 m. at HW. Vessels load plywood and sawn timber.

GENERAL: There are no alongside facilities for ships.

Stevedores, Shippers, Immigration and Customs Officers take full meals and accommodation onboard, during the loading operation, as the nearest town (Pontianak) is 12 hours away by speedboat.

TELUK BAYUR (Padang): 00.58 S. 100.20 E.

FLAGS: *Flags to be Shown by Incoming Vessels:*

Nationality of vessel and Indonesian flag.
Call sign.
"Q" when the vessel comes from an infected port or when calling for a Port Health Officer.
"G" when Pilot is required.
"N" when vessel from abroad carrying Passengers. (Request for Immigration).
"H" when Pilot is on board.
"Y" when mail on board.
"B" when carrying dangerous cargo.

Flag to be shown when vessel leaving Port:

Nationality of vessel and Indonesian flag.
Call Sign.
"H" Flag when Pilot is on board.

DOCUMENTS:

a) The Master must have in readiness for the Harbour Master officials:

Certificate of Registry.
Certificate of Nationality.
Loadline Certificate.
Radio Safety Certificate.
Derat Certificate.
Safety Equipment Certificate.
Last Port Clearance.
Health Book (Indonesian Health Book) to be used in Indonesian waters only.
Crew List.
Stores List.
Personal Effects List.
Free Pratique.
Light Dues Bill from Port of Call (last Port).

b) Cargo Documents required by the Agent to clear the Vessel through Customs:

Customs Cargo Clearance.
Manifest.
Customs Document (outward cargo AVI and model E3).
Customs Document (inward cargo – AA).
Customs Document of transhipment cargo (model HH).

Authorities boarding the vessel on arrival:

Port Health Doctor (Quarantine Officer):

1. All vessels entering Port of Teluk Bayur from abroad should obtain free Pratique. Vessel must wait until the Quarantine Officers board the ship before entering.
2. Documents to be shown to the Port Health Doctor:
   Indonesian Health Book.
   Crew List.
   Passenger List.
   Vaccination List.
   International Vaccination Certificate.
   Derat Exemption Certificate.

Customs:

1. It is prohibited during vessel's stay to sell any goods belonging to crew.
2. Foreign vessel, if carrying local cargo must have coasting permit.
3. Documents to be shown to Customs:
   Cargo Manifest.
   Provisions/Stores List.
   Crew List.
   Crew Personal Effects Declaration.
   Last Port Clearance/Custom clearances.

Immigration:

1. All vessels coming from abroad (Indonesian vessels as well as foreign vessels) are to use crew passes.
2. Foreign crew to be repatriated must be accompanied by an Immigration Officer, except if their pass is a visa.
   All expenses (ticket and travelling expenses) are for owner's account.
3. All foreign transit passengers have to fill in an embarkation/-debarkation card.
4. Vessels arriving from abroad carrying passengers; The Master is also obliged to provide the Immigration Officers with a List of the Passengers on board.
5. Documents to be shown to the Immigration Officers:
   Crew List.
   Passenger List.
   Crew Passports/Passengers' Passports.
   Last Port Clearance/Immigration Clearances.
6. Foreign passengers landing at Teluk Bayur Port without visa, *must pay for Immigration Fee.*

Harbour Master:

1. If vessel intends to use their own life/motorboat for rowing exercise, permission should first be obtained from Harbour Master and Coast Guard.
2. Documents to be shown to the Harbour Master:
   Certificate of Registry.
   Certificate of Nationality.
   Loadline Certificate.
   Vessel and Passenger Safety Certificate.
   Radio Safety Certificate.
   Master Roll.
   Crew List.
   Passenger List.

Cargo Documents:

Cargo Manifest covering Teluk Bayur cargo – 7 copies.
Cargo Manifest covering cargo for other Port – 7 copies.
Stores List – 7 copies.
Crew Personal Effects List – 7 copies.
Crew List – 10 copies.

BERTHING: The total length of effective quay in Tanjung Perak Port is 5,205 m.

Quay	*Length*	*Depth at LWS*
Jamrud Utara	950 m.	9.5 m.
Jamrud Selatan	800 m.	9.5 m.
Jamrud Barat	160 m.	9.5 m.
Berlian Barat	735 m.	9.5 m.
Berlian Timur	780 m.	9.5 m.
Berlian Utara	140 m.	9.5 m.
Nilam Timur	860 m.	9.5 m.
Perak	140 m.	9.5 m.
Mirah	640 m.	7.0 m.

Tanker Terminal:

Government Petroleum Pier	Depth alongside at LWS is	90 dm.
Semampir East	,,	120 dm.
Semampir West	,,	100 dm.

Coal Wharf: Situated at the Southern end of Tambatan Nilam, equipped with 1 transporter and 2 bunker barges with steam operated grippers, owned by P.N. Tunda Bara.

STEVEDORES: Working hours: Monday-Thursday 0700 – 1200, 1300 – 1500 hrs. Friday 0700 – 1100, 1300 – 1500 hrs. Saturday 0700 – 1200 hrs. Overtime: Monday-Friday 1500 – 1700 hrs. Sundays, holidays 0700 – 1200, 1300 – 1500 hrs. Night work allowed after permission from the Port Authority.

Average for bulk cargo 20 t.p.h. per gang
Average for bagged cargo 27 t.p.h. per gang
Average for general cargo 20 t.p.h. per gang
Average for machinery/iron 8 t.p.h. per gang

MEDICAL: Hospital and Port Health Centre.

TANKERS: See "Berthing".

FRESH WATER: Supply is handled by the Harbour Board to the berths and by 5 water barges. Present capacity about 1,100 tons per day for the whole harbour. Priority is for passenger vessels and application required 48 hours prior to ship's arrival.

FUEL: Fuel can be obtained via pipe-lines to all berths.

REPAIRS: Dry-docking and all sorts of repairs are carried out by the State-owned P.N. Dock. There are floating docks, capable of lifting 15,500, 3,500 and 4,000 tons. There are several slipways for coasters.

Electronic Repair Shop: All sorts of electronic repairs such as radar, echo-sounder, etc., can be repaired by private contractors.

CONSULS: U.S.A., U.S.S.R., Japan, Great Britain, Belgium, Australia, India, Pakistan, Philippines, France and Netherlands.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agents about local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

BANKS: Bank Negara 1946, Bank Bumi Daya and Bank Rakyat Indonesia.

DEVELOPMENTS: *Developments of the Short Term (1981-85):*

Supply of facilities for inter-state vessels: 8 quays length 640 m., 4 Godowns (area 13,700 sq.m.), 7 stacking areas (area 15,573 sq.m.).

Supply of facilities for container ships by changing part of the berths which are available, so that there is a facility for loading and unloading the containers: 4 quays length 1,200 m., stacking area 66,800 sq.m.

Build CFS (Container Freight Station) at the former Perak Airfield of an area 42,695 sq.m. To have available loading and unloading equipment: 2 multi-purpose mobile cranes, 12 head trucks, 27×40 ft./20 ft. chassis, 12×25 ton top loaders. 2×40 ton transtainers.

Developments of the Medium Term (1986-90):

Supply of facilities for inter-state vessels: 16 quays length 1,280 m., 8 Godowns (area 25,600 sq.m.), 8 stacking areas (area 30,000 sq.m.).

Supply of the facilities for container ships: 2 quays length 500 m., CFS near the quay 20,000 sq.m.

At the former Perak Airfield 200,000 sq.m. To have available loading and unloading equipment: 4 container gantry cranes, 18 head trucks, 32×40 ft./20 ft. chassis, 12×25 ton top loaders and 6×40 ton transtainers.

Developments Long Term (1991-2000):

At this stage a new basin at the West side of the Naval Academy is planned.

In this stage will be prepared: Facilities for inter-state vessels: 40 quays. Facilities for ocean-going vessels: 14 non-container quays, 2 container quays.

AUTHORITY: Port Administration Tanjung Perak, Jalan Kalimas Baru No. 194, Tanjung Perak. *Tel:* 291194, 291364. *Contact:* The Harbour Master.

TANDJUNG UBAN: 01.03 N. 104.13 E.

OPERATOR: P.T. Stanvac Indonesia Oil Terminal.

DOCUMENTS:

11 Crew Lists.
Harbour Report (form to be supplied by the Agent).
Maritime Declaration.
Vaccination List.
2 Stores Lists.
2 Bonded Stores Lists.
2 Personal Effects Lists.

PILOTAGE: Agent requests Pilot upon arrival of vessel, 72 hours advance notice of ETA required. Pilot boards vessel in harbour area.

ANCHORAGES: 0.5 – 0.75 miles opposite oil jetties.

MAX. SIZE:

	Dock No. 2	No. 4	No. 5
Length	800 ft.	650 ft.	650 ft.
Breadth	any	any	any
Draft	34 ft.	33 ft.	32 ft.

HEALTH: Health Officer will board vessel after berthing. No pratique granted, even for vessel after calling at another port in same country.

RADIO: Tandjung Uban Radio – call sign PKJ.

TUGS: No tugs available.

BERTHING: Agent arranges berthing vessel. Dimension of oil hoses used: 6 in. and 8 in. Very limited slop facilities, depending on available ullage.

MEDICAL: Very limited facilities. Only a clinic with experienced wound dresser available. Valid cholera certificates for crew members required.

DENSITY: 1025.

FRESH WATER: Available ex-pipe-line – 5 t.p.h.

FUEL: Medium fuel oil, viscosity Redwood 1, 600 – 900 seconds; heavy fuel oil, viscosity SSF, 30 – 40. Prior approval from PT Stanvac Indonesia, Jakarta, required for obtaining bunker fuels.

GANGWAY/DECK WATCHMEN: Port Authority provides 1 safety guard during vessel's stay in port.

CUSTOMS ALLOWANCES: Reasonable quantity allowed to be used during vessel's stay in port.

IDENTIFICATION CARDS: Possession of a valid Seaman's Book sufficient.

REPATRIATION: No facilities available.

AIRPORT: Distance to airport, 60 miles. Served by Garuda Indonesian Airline 3 times a week (Mondays, Thursdays and Saturdays) to Jakarta only.

TIME: GMT plus 7 hours.

POLICE/AMBULANCE/FIRE: Police, Tel: 55; Clinic, 37 and 58; Fire, 44 and 13.

TELEPHONES: Agents place telephone on board at no cost.

AUTHORITY: Penguasa Pelabuhan (Port Authority).

TARAKAN: 03.20 N. 117.45 E.

DOCUMENTS: See "Djakarta".

PILOTAGE: Compulsory pilotage consisting of Sea and Harbour Pilots. Ships requiring pilot service should notify the Harbour Master at least 24 hours before arriving at outer buoy. Tide: semi diurnal.

Pilots do not normally work at night. The approach buoys and leading lights are frequently extinguished and vessels arriving at night are recommended to anchor at No. 1. Buoy and await a Pilot in daylight.

HEALTH: Vessels arriving from abroad direct in one of the 2nd Class Ports have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad from the 2nd Class Port concerned.

RADIO: Call sign: PKO Class A1. This station also has VHF Maritime Bands working on the same hours as the Short Wave Transmissions.

TUGS: Nil.

BERTHING: The anchorage will hold many ships but very little cargo is worked from the anchorage as most vessels calling are timber ships waiting to load. The very occasional ocean cargo ship usually unloads on to a barge but very occasionally goes alongside the Commercial Jetty.

The Commercial Jetty has a least depth of 4 m. and a length of about 150 m. There is a crane capable of lifting 2 tons on the inside berth. This jetty is very old and dilapidated and normally handles only small craft of local inter-island character.

STEVEDORES: Working hours: 7 hours on normal working days. Overtime can be arranged.

TANKERS: The Pertamina Jetty has a least depth of 8 m. and is about 180 m. in length. This pier is solely for the export of petroleum products in small tankers.

Off the Pertamina Pier is a 6-buoy sea berth to which tankers of 35,000 tons d.w.t. are secured to load oil for export. The loading rate is about 1,000 t.p.h., through two 10 in. hoses. The berth requires a tanker with a derrick capable of lifting 3 tons.

GENERAL: Port doctor available.

Carrying a camera ashore or even on deck of a ship for photography is strictly prohibited.

There is a small hospital. No stores, water, or fuel oil are available. There are no repair facilities at all. Pertamina operates a small hospital and a clinic. There is air communication to other parts of Indonesia through Balikpapan.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

TEGAL, Java: 06.55 S. 109.10 E.

DOCUMENTS: Upon arrival, vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificates.
Seaworthiness Certificate.
Tonnage Certificate.
Derat (Exemption) Certificate.
International Loadline.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio-telegraphy Certificate.
Vaccination List.
5 Crew Lists.
2 Stores Lists.
2 Crew Baggage's Declaration.
Last Port Clearance.
Health Book.
Custom Clearance and Custom Documents.
Cargo Manifest and Bills of Lading.

When vessels arrive direct from foreign port, Customs and Harbour Police Officials board for search.

PILOTAGE: None.

ANCHORAGES: Tegal Roads. Safe anchorages: Lat. 6° 49′ 00″ S., Long. 109° 08′ 07″ E. Lighthouse 210°. Distance 2.5 miles off.

RESTRICTIONS: No restriction on night entry, but work is done next day (after 0800 hrs.).

MAX. SIZE: Length and breadth no restriction. If draft above 25 ft. will be 2.5 or 3 miles off shore (anchorage on roads).

HEALTH: Maritime Declaration of Health needed from Master, if vessels coming direct from abroad. If vessel comes from other Indonesian ports, automatic free pratique.

RADIO:
I. Fixed Station:
Call sign 8AC on freq. 5315 kHz at 0100 – 0130 GMT
0230 – 0300
freq. 5165 kHz at 0430 – 0500 GMT
1000 – 1015
II. Coast Station:
Call sign PKD 21 on freq. 2182/2690 kHz at 0030 – 0100 GMT
0400 – 0430
Channel 16 – VHF 156.80 MHz 0100 – 0500 GMT
III. Open every day except on holidays.

TUGS: Only used for towing lighters to vessels on the roads.

BERTHING: None. Anchorage only.

STEVEDORES: Ordered by Agent. If possible before arrival of vessel, some information mainly concerned with requirements of the Shipmaster advises Agents to arrange gangs and available space for Tegal cargo.

MEDICAL: Normally medical attention for crew to be arranged by Agent at order of Master.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Services of watchmen if necessary to be ordered by Master.

OPENING/CLOSING HATCHES: Carried out by crew – sometimes by stevedores.

CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits not allowed to be taken ashore.

IDENTIFICATION CARDS: Necessary.

CONSULS: None available locally.

REPAIRS: None.

REPATRIATION: Agents arrange necessary repatriation of crew.

TIME: Indonesian Western Time, GMT plus 7 hours.

HOLIDAYS: Only Moslem holidays: Id el Fitr. For 2 days no cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Accident, Police, Tel: 10; First Aid for Ambulance (Texin Hospital), Tel: 387; Fire Departments (Texin), Tel: 17.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members allowed ashore from 0800 up to 2100 hrs. every day. Not allowed to spend night on shore.

REGULATIONS: Crew members not allowed to bring cameras, foreign money, on shore leave.

AUTHORITY: Sjahbander, Djl.

TELOK AYER: 00.44 S. 109.05 E.

SHIPMASTER'S REPORT: March 1982.

PILOTAGE: Pilot Station in position: Lat. 00° 39′ S., Long. 109° 05′ E. Pilot comes from inner anchorage by small boat, journey time 5 hours.

ANCHORAGE: Vessels approaching Telok Ayer (Telok Airport) drop anchor 5 cables West of Fairway Buoy in position: Lat. 00° 39.5′ S., Long. 109° 05.5′ E.

RADIO: 24 hours notice to Agent to arrange Pilot.

VHF: Call "Padang Tikar Pilot" on VHF Channel 16.

CARGO HANDLING: Depth at loading point is 6 fathoms. Maximum depth in entrance to Padang Tikar River is 7.2 m. at HW. Vessels load plywood and sawn timber.

GENERAL: There are no alongside facilities for ships.

Stevedores, Shippers, Immigration and Customs Officers take full meals and accommodation onboard, during the loading operation, as the nearest town (Pontianak) is 12 hours away by speedboat.

TELUK BAYUR (Padang): 00.58 S. 100.20 E.

FLAGS: *Flags to be Shown by Incoming Vessels:*

Nationality of vessel and Indonesian flag.
Call sign.
"Q" when the vessel comes from an infected port or when calling for a Port Health Officer.
"G" when Pilot is required.
"N" when vessel from abroad carrying Passengers. (Request for Immigration).
"H" when Pilot is on board.
"Y" when mail on board.
"B" when carrying dangerous cargo.

Flag to be shown when vessel leaving Port:

Nationality of vessel and Indonesian flag.
Call Sign.
"H" Flag when Pilot is on board.

DOCUMENTS:

a) The Master must have in readiness for the Harbour Master officials:

Certificate of Registry.
Certificate of Nationality.
Loadline Certificate.
Radio Safety Certificate.
Derat Certificate.
Safety Equipment Certificate.
Last Port Clearance.
Health Book (Indonesian Health Book) to be used in Indonesian waters only.
Crew List.
Stores List.
Personal Effects List.
Free Pratique.
Light Dues Bill from Port of Call (last Port).

b) Cargo Documents required by the Agent to clear the Vessel through Customs:

Customs Cargo Clearance.
Manifest.
Customs Document (outward cargo AVI and model E3).
Customs Document (inward cargo – AA).
Customs Document of transhipment cargo (model HH).

Authorities boarding the vessel on arrival:

Port Health Doctor (Quarantine Officer):

1. All vessels entering Port of Teluk Bayur from abroad should obtain free Pratique. Vessel must wait until the Quarantine Officers board the ship before entering.
2. Documents to be shown to the Port Health Doctor:
   Indonesian Health Book.
   Crew List.
   Passenger List.
   Vaccination List.
   International Vaccination Certificate.
   Derat Exemption Certificate.

Customs:

1. It is prohibited during vessel's stay to sell any goods belonging to crew.
2. Foreign vessel, if carrying local cargo must have coasting permit.
3. Documents to be shown to Customs:
   Cargo Manifest.
   Provisions/Stores List.
   Crew List.
   Crew Personal Effects Declaration.
   Last Port Clearance/Custom clearances.

Immigration:

1. All vessels coming from abroad (Indonesian vessels as well as foreign vessels) are to use crew passes.
2. Foreign crew to be repatriated must be accompanied by an Immigration Officer, except if their pass is a visa.
   All expenses (ticket and travelling expenses) are for owner's account.
3. All foreign transit passengers have to fill in an embarkation/-debarkation card.
4. Vessels arriving from abroad carrying passengers; The Master is also obliged to provide the Immigration Officers with a List of the Passengers on board.
5. Documents to be shown to the Immigration Officers:
   Crew List.
   Passenger List.
   Crew Passports/Passengers' Passports.
   Last Port Clearance/Immigration Clearances.
6. Foreign passengers landing at Teluk Bayur Port without visa, *must pay for Immigration Fee.*

Harbour Master:

1. If vessel intends to use their own life/motorboat for rowing exercise, permission should first be obtained from Harbour Master and Coast Guard.
2. Documents to be shown to the Harbour Master:
   Certificate of Registry.
   Certificate of Nationality.
   Loadline Certificate.
   Vessel and Passenger Safety Certificate.
   Radio Safety Certificate.
   Master Roll.
   Crew List.
   Passenger List.

Cargo Documents:

Cargo Manifest covering Teluk Bayur cargo – 7 copies.
Cargo Manifest covering cargo for other Port – 7 copies.
Stores List – 7 copies.
Crew Personal Effects List – 7 copies.
Crew List – 10 copies.

BERTHING: The total length of effective quay in Tanjung Perak Port is 5,205 m.

Quay	*Length*	*Depth at LWS*
Jamrud Utara	950 m.	9.5 m.
Jamrud Selatan	800 m.	9.5 m.
Jamrud Barat	160 m.	9.5 m.
Berlian Barat	735 m.	9.5 m.
Berlian Timur	780 m.	9.5 m.
Berlian Utara	140 m.	9.5 m.
Nilam Timur	860 m.	9.5 m.
Perak	140 m.	9.5 m.
Mirah	640 m.	7.0 m.

Tanker Terminal:

Government Petroleum Pier	Depth alongside at LWS is	90 dm.
Semampir East	,,	120 dm.
Semampir West	,,	100 dm.

Coal Wharf: Situated at the Southern end of Tambatan Nilam, equipped with 1 transporter and 2 bunker barges with steam operated grippers, owned by P.N. Tunda Bara.

STEVEDORES: Working hours: Monday-Thursday 0700 – 1200, 1300 – 1500 hrs. Friday 0700 – 1100, 1300 – 1500 hrs. Saturday 0700 – 1200 hrs. Overtime: Monday-Friday 1500 – 1700 hrs. Sundays, holidays 0700 – 1200, 1300 – 1500 hrs. Night work allowed after permission from the Port Authority.

Average for bulk cargo 20 t.p.h. per gang
Average for bagged cargo 27 t.p.h. per gang
Average for general cargo 20 t.p.h. per gang
Average for machinery/iron 8 t.p.h. per gang

MEDICAL: Hospital and Port Health Centre.

TANKERS: See "Berthing".

FRESH WATER: Supply is handled by the Harbour Board to the berths and by 5 water barges. Present capacity about 1,100 tons per day for the whole harbour. Priority is for passenger vessels and application required 48 hours prior to ship's arrival.

FUEL: Fuel can be obtained via pipe-lines to all berths.

REPAIRS: Dry-docking and all sorts of repairs are carried out by the State-owned P.N. Dock. There are floating docks, capable of lifting 15,500, 3,500 and 4,000 tons. There are several slipways for coasters.

Electronic Repair Shop: All sorts of electronic repairs such as radar, echo-sounder, etc., can be repaired by private contractors.

CONSULS: U.S.A., U.S.S.R., Japan, Great Britain, Belgium, Australia, India, Pakistan, Philippines, France and Netherlands.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agents about local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

BANKS: Bank Negara 1946, Bank Bumi Daya and Bank Rakyat Indonesia.

DEVELOPMENTS: *Developments of the Short Term (1981-85):*

Supply of facilities for inter-state vessels: 8 quays length 640 m., 4 Godowns (area 13,700 sq.m.), 7 stacking areas (area 15,573 sq.m.).

Supply of facilities for container ships by changing part of the berths which are available, so that there is a facility for loading and unloading the containers: 4 quays length 1,200 m., stacking area 66,800 sq.m.

Build CFS (Container Freight Station) at the former Perak Airfield of an area 42,695 sq.m. To have available loading and unloading equipment: 2 multi-purpose mobile cranes, 12 head trucks, 27×40 ft./20 ft. chassis, 12×25 ton top loaders. 2×40 ton transtainers.

Developments of the Medium Term (1986-90):

Supply of facilities for inter-state vessels: 16 quays length 1,280 m., 8 Godowns (area 25,600 sq.m.), 8 stacking areas (area 30,000 sq.m.).

Supply of the facilities for container ships: 2 quays length 500 m., CFS near the quay 20,000 sq.m.

At the former Perak Airfield 200,000 sq.m. To have available loading and unloading equipment: 4 container gantry cranes, 18 head trucks, 32×40 ft./20 ft. chassis, 12×25 ton top loaders and 6×40 ton transtainers.

Developments Long Term (1991-2000):

At this stage a new basin at the West side of the Naval Academy is planned.

In this stage will be prepared: Facilities for inter-state vessels: 40 quays. Facilities for ocean-going vessels: 14 non-container quays, 2 container quays.

AUTHORITY: Port Administration Tanjung Perak, Jalan Kalimas Baru No. 194, Tanjung Perak. *Tel:* 291194, 291364. *Contact:* The Harbour Master.

TANDJUNG UBAN: 01.03 N. 104.13 E.

OPERATOR: P.T. Stanvac Indonesia Oil Terminal.

DOCUMENTS:

11 Crew Lists.
Harbour Report (form to be supplied by the Agent).
Maritime Declaration.
Vaccination List.
2 Stores Lists.
2 Bonded Stores Lists.
2 Personal Effects Lists.

PILOTAGE: Agent requests Pilot upon arrival of vessel, 72 hours advance notice of ETA required. Pilot boards vessel in harbour area.

ANCHORAGES: 0.5 – 0.75 miles opposite oil jetties.

MAX. SIZE:

	Dock No. 2	No. 4	No. 5
Length	800 ft.	650 ft.	650 ft.
Breadth	any	any	any
Draft	34 ft.	33 ft.	32 ft.

HEALTH: Health Officer will board vessel after berthing. No pratique granted, even for vessel after calling at another port in same country.

RADIO: Tandjung Uban Radio – call sign PKJ.

TUGS: No tugs available.

BERTHING: Agent arranges berthing vessel. Dimension of oil hoses used: 6 in. and 8 in. Very limited slop facilities, depending on available ullage.

MEDICAL: Very limited facilities. Only a clinic with experienced wound dresser available. Valid cholera certificates for crew members required.

DENSITY: 1025.

FRESH WATER: Available ex-pipe-line – 5 t.p.h.

FUEL: Medium fuel oil, viscosity Redwood 1, 600 – 900 seconds; heavy fuel oil, viscosity SSF, 30 – 40. Prior approval from PT Stanvac Indonesia, Jakarta, required for obtaining bunker fuels.

GANGWAY/DECK WATCHMEN: Port Authority provides 1 safety guard during vessel's stay in port.

CUSTOMS ALLOWANCES: Reasonable quantity allowed to be used during vessel's stay in port.

IDENTIFICATION CARDS: Possession of a valid Seaman's Book sufficient.

REPATRIATION: No facilities available.

AIRPORT: Distance to airport, 60 miles. Served by Garuda Indonesian Airline 3 times a week (Mondays, Thursdays and Saturdays) to Jakarta only.

TIME: GMT plus 7 hours.

POLICE/AMBULANCE/FIRE: Police, Tel: 55; Clinic, 37 and 58; Fire, 44 and 13.

TELEPHONES: Agents place telephone on board at no cost.

AUTHORITY: Penguasa Pelabuhan (Port Authority).

TARAKAN: 03.20 N. 117.45 E.

DOCUMENTS: See "Djakarta".

PILOTAGE: Compulsory pilotage consisting of Sea and Harbour Pilots. Ships requiring pilot service should notify the Harbour Master at least 24 hours before arriving at outer buoy. Tide: semi diurnal.

Pilots do not normally work at night. The approach buoys and leading lights are frequently extinguished and vessels arriving at night are recommended to anchor at No. 1. Buoy and await a Pilot in daylight.

HEALTH: Vessels arriving from abroad direct in one of the 2nd Class Ports have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port concerned. The provisional free pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad from the 2nd Class Port concerned.

RADIO: Call sign: PKO Class A1. This station also has VHF Maritime Bands working on the same hours as the Short Wave Transmissions.

TUGS: Nil.

BERTHING: The anchorage will hold many ships but very little cargo is worked from the anchorage as most vessels calling are timber ships waiting to load. The very occasional ocean cargo ship usually unloads on to a barge but very occasionally goes alongside the Commercial Jetty.

The Commercial Jetty has a least depth of 4 m. and a length of about 150 m. There is a crane capable of lifting 2 tons on the inside berth. This jetty is very old and dilapidated and normally handles only small craft of local inter-island character.

STEVEDORES: Working hours: 7 hours on normal working days. Overtime can be arranged.

TANKERS: The Pertamina Jetty has a least depth of 8 m. and is about 180 m. in length. This pier is solely for the export of petroleum products in small tankers.

Off the Pertamina Pier is a 6-buoy sea berth to which tankers of 35,000 tons d.w.t. are secured to load oil for export. The loading rate is about 1,000 t.p.h., through two 10 in. hoses. The berth requires a tanker with a derrick capable of lifting 3 tons.

GENERAL: Port doctor available.

Carrying a camera ashore or even on deck of a ship for photography is strictly prohibited.

There is a small hospital. No stores, water, or fuel oil are available. There are no repair facilities at all. Pertamina operates a small hospital and a clinic. There is air communication to other parts of Indonesia through Balikpapan.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

TEGAL, Java: 06.55 S. 109.10 E.

DOCUMENTS: Upon arrival, vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificates.
Seaworthiness Certificate.
Tonnage Certificate.
Derat (Exemption) Certificate.
International Loadline.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio-telegraphy Certificate.
Vaccination List.
5 Crew Lists.
2 Stores Lists.
2 Crew Baggage's Declaration.
Last Port Clearance.
Health Book.
Custom Clearance and Custom Documents.
Cargo Manifest and Bills of Lading.

When vessels arrive direct from foreign port, Customs and Harbour Police Officials board for search.

PILOTAGE: None.

ANCHORAGES: Tegal Roads. Safe anchorages: Lat. 6° 49′ 00″ S., Long. 109° 08′ 07″ E. Lighthouse 210°. Distance 2.5 miles off.

RESTRICTIONS: No restriction on night entry, but work is done next day (after 0800 hrs.).

MAX. SIZE: Length and breadth no restriction. If draft above 25 ft. will be 2.5 or 3 miles off shore (anchorage on roads).

HEALTH: Maritime Declaration of Health needed from Master, if vessels coming direct from abroad. If vessel comes from other Indonesian ports, automatic free pratique.

RADIO:

I. Fixed Station:
Call sign 8AC on freq. 5315 kHz at 0100 – 0130 GMT
0230 – 0300
freq. 5165 kHz at 0430 – 0500 GMT
1000 – 1015
II. Coast Station:
Call sign PKD 21 on freq. 2182/2690 kHz at 0030 – 0100 GMT
0400 – 0430
Channel 16 – VHF 156.80 MHz 0100 – 0500 GMT
III. Open every day except on holidays.

TUGS: Only used for towing lighters to vessels on the roads.

BERTHING: None. Anchorage only.

STEVEDORES: Ordered by Agent. If possible before arrival of vessel, some information mainly concerned with requirements of the Shipmaster advises Agents to arrange gangs and available space for Tegal cargo.

MEDICAL: Normally medical attention for crew to be arranged by Agent at order of Master.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Services of watchmen if necessary to be ordered by Master.

OPENING/CLOSING HATCHES: Carried out by crew – sometimes by stevedores.

CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits not allowed to be taken ashore.

IDENTIFICATION CARDS: Necessary.

CONSULS: None available locally.

REPAIRS: None.

REPATRIATION: Agents arrange necessary repatriation of crew.

TIME: Indonesian Western Time, GMT plus 7 hours.

HOLIDAYS: Only Moslem holidays: Id el Fitr. For 2 days no cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Accident, Police, Tel: 10; First Aid for Ambulance (Texin Hospital), Tel: 387; Fire Departments (Texin), Tel: 17.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members allowed ashore from 0800 up to 2100 hrs. every day. Not allowed to spend night on shore.

REGULATIONS: Crew members not allowed to bring cameras, foreign money, on shore leave.

AUTHORITY: Sjahbander, Djl.

TELOK AYER: 00.44 S. 109.05 E.

SHIPMASTER'S REPORT: March 1982.

PILOTAGE: Pilot Station in position: Lat. 00° 39′ S., Long. 109° 05′ E. Pilot comes from inner anchorage by small boat, journey time 5 hours.

ANCHORAGE: Vessels approaching Telok Ayer (Telok Airport) drop anchor 5 cables West of Fairway Buoy in position: Lat. 00° 39.5′ S., Long. 109° 05.5′ E.

RADIO: 24 hours notice to Agent to arrange Pilot.

VHF: Call "Padang Tikar Pilot" on VHF Channel 16.

CARGO HANDLING: Depth at loading point is 6 fathoms. Maximum depth in entrance to Padang Tikar River is 7.2 m. at HW. Vessels load plywood and sawn timber.

GENERAL: There are no alongside facilities for ships.

Stevedores, Shippers, Immigration and Customs Officers take full meals and accommodation onboard, during the loading operation, as the nearest town (Pontianak) is 12 hours away by speedboat.

TELUK BAYUR (Padang): 00.58 S. 100.20 E.

FLAGS: *Flags to be Shown by Incoming Vessels:*

Nationality of vessel and Indonesian flag.
Call sign.
"Q" when the vessel comes from an infected port or when calling for a Port Health Officer.
"G" when Pilot is required.
"N" when vessel from abroad carrying Passengers. (Request for Immigration).
"H" when Pilot is on board.
"Y" when mail on board.
"B" when carrying dangerous cargo.

Flag to be shown when vessel leaving Port:

Nationality of vessel and Indonesian flag.
Call Sign.
"H" Flag when Pilot is on board.

DOCUMENTS:

a) The Master must have in readiness for the Harbour Master officials:

Certificate of Registry.
Certificate of Nationality.
Loadline Certificate.
Radio Safety Certificate.
Derat Certificate.
Safety Equipment Certificate.
Last Port Clearance.
Health Book (Indonesian Health Book) to be used in Indonesian waters only.
Crew List.
Stores List.
Personal Effects List.
Free Pratique.
Light Dues Bill from Port of Call (last Port).

b) Cargo Documents required by the Agent to clear the Vessel through Customs:

Customs Cargo Clearance.
Manifest.
Customs Document (outward cargo AVI and model E3).
Customs Document (inward cargo – AA).
Customs Document of transhipment cargo (model HH).

Authorities boarding the vessel on arrival:

Port Health Doctor (Quarantine Officer):

1. All vessels entering Port of Teluk Bayur from abroad should obtain free Pratique. Vessel must wait until the Quarantine Officers board the ship before entering.
2. Documents to be shown to the Port Health Doctor:
   Indonesian Health Book.
   Crew List.
   Passenger List.
   Vaccination List.
   International Vaccination Certificate.
   Derat Exemption Certificate.

Customs:

1. It is prohibited during vessel's stay to sell any goods belonging to crew.
2. Foreign vessel, if carrying local cargo must have coasting permit.
3. Documents to be shown to Customs:
   Cargo Manifest.
   Provisions/Stores List.
   Crew List.
   Crew Personal Effects Declaration.
   Last Port Clearance/Custom clearances.

Immigration:

1. All vessels coming from abroad (Indonesian vessels as well as foreign vessels) are to use crew passes.
2. Foreign crew to be repatriated must be accompanied by an Immigration Officer, except if their pass is a visa.
   All expenses (ticket and travelling expenses) are for owner's account.
3. All foreign transit passengers have to fill in an embarkation/-debarkation card.
4. Vessels arriving from abroad carrying passengers; The Master is also obliged to provide the Immigration Officers with a List of the Passengers on board.
5. Documents to be shown to the Immigration Officers:
   Crew List.
   Passenger List.
   Crew Passports/Passengers' Passports.
   Last Port Clearance/Immigration Clearances.
6. Foreign passengers landing at Teluk Bayur Port without visa, *must pay for Immigration Fee.*

Harbour Master:

1. If vessel intends to use their own life/motorboat for rowing exercise, permission should first be obtained from Harbour Master and Coast Guard.
2. Documents to be shown to the Harbour Master:
   Certificate of Registry.
   Certificate of Nationality.
   Loadline Certificate.
   Vessel and Passenger Safety Certificate.
   Radio Safety Certificate.
   Master Roll.
   Crew List.
   Passenger List.

Cargo Documents:

Cargo Manifest covering Teluk Bayur cargo – 7 copies.
Cargo Manifest covering cargo for other Port – 7 copies.
Stores List – 7 copies.
Crew Personal Effects List – 7 copies.
Crew List – 10 copies.

The above apply for a single call. In the event of a vessel arriving from a out-port for re-checking at Teluk Bayur, another set of copies of the Stores List and Personal Effects List must be re-submitted.

PILOTAGE: Compulsory harbour pilotage. Ships have to wait for Pilot inside the roads limits.(See "Anchorage").

Pilot is available each day from 0000 – 2400 hrs. ETA required 6 hours before arrival. ETD required 3 hours before departure.

ANCHORAGE: Vessels should anchor outside the breakwater until the Pilot comes on board at Position: Lat. 1° 01′ 10″ S., Long. 100° 22′ 10″ E. Distance from the anchorage to the quay/jetty is about 2 miles.

HEALTH: Vessels arriving from abroad direct have to apply well in advance to the Department of Health (Quarantine Section) for a provisional free pratique, as said pratique has to be cabled to the port. The provisional free pratique is only valid for the port and the next port of call must be a First Class Port as no further provisional free pratique will be issued, unless the vessel sails directly abroad.

RADIO: Coastal station: Call sign PKP2.

Frequency	*Power*	*Keeps watch*	*Time (GMT)*
500 kHz	1 kw	430 kHz	0000 – 0100
			0400 – 0500
			0800 – 0900
6518.8 kHz	300 watts	Ch. 605	0100 – 0130
			0930 – 1000
6355 kHz	1 kw	6 MHz	0130 – 0200
			0530 – 0600
2182 kHz	300 watts	3180	0200 – 0230
			0900 – 0930

Arrival Advice: Required before Ship's arrival (to be telegraphed 48 hours prior to Ship's arrival, however not less than 24 hours via Radio Station).

a. Name of vessel.
b. ETA at the Roads.
c. Draft.
d. Quantity of cargo to be discharged (in tons).
e. Number of passengers disembarking, also dangerous cargo (if any).
f. Ship's requirement (quantity required).
g. Any other information.

TUGS: 1 Tug-boat *Selat Siberut* of 1,700 h.p. is stationed at Teluk Bayur, the use of which is compulsory for incoming and outgoing ocean-going ships. Mooring boat available.

BERTHING:

Berth	*Length* (m.)	*Depth* (m.)
1st wharf	120	9.0 (under repair)
2nd wharf	108	8.5
3rd wharf	108	6.5
4th wharf	96	6.0
Demaga Beton	150	8.0
Demaga Khusus	98.5	8.0

Mooring Buoys: There are 4 mooring buoys inside the breakwater and one outside.

CRANES: 1 electric crane, capacity 6 tons and 1 mobile crane, capacity 13 tons, both operated by the Port Administration.

Forklifts: Port Administration: capacity 10 tons (one), capacity 7 tons (two), capacity 5 tons (two), capacity 2.5 tons (two).

P.T. Trikors Lloyd: capacity 3 tons (two).
P.T. Samudera Indonesia: capacity 2.5 tons (one)
P.T. Djakarta Lloyd: capacity 2.5 tons (four)
P.T. Gesuri Lloyd: capacity 2.5 tons (two)
P.T. Pelni: capacity 2.5 tons (two)

Lighters: None available.

STEVEDORES: *Working Hours:*

Monday-Thursday: 0800 – 1200; 1300 – 1600 hrs.
Friday: 0800 – 1100; 1330 – 1600 hrs.
Saturday: 0800 – 1300 hrs.

Overtime can be worked at request of the ship on normal days and Sunday/Holidays, are counted as overtime from 0800 – 2400 hrs. and from 0000 – 0600 hrs.

Rest hours (meal time): Monday till Thursday: 1200 – 1300 hrs.
Friday: 1100 – 1330 hrs.
Saturday: 1300 – 1800 hrs.
Day overtime: 1700 – 1800 hrs.
Night overtime: 2300 – 2400 hrs.

Discharging/Loading Rate:

Average speed for:

Discharging: General cargo 10 – 12 tons per gang hour. Bagged cargo 18 – 20 tons per gang hour.

Loading: General cargo 10 – 15 tons per gang hour. Bagged cargo 18 – 22 tons per gang hour.

Number of Men per Gang: Ships gang 15 men. Wharf gang 20 men.

FRESH WATER: Available at wharf, officially at a rate of 8 cu.m. per hour, unlimited quantity during the wet season (September-April). During the dry season with a maximum of 150 cu.m. and a capacity of 4–6 cu.m. per hour. Water should be boiled or chemically treated before consumption.

FUEL: Not available.

REPAIRS: Dry dock available for ships up to 500 dwt. Machine-workshops for minor repairs available.

SURVEYORS: Available.

MEDICAL: Teluk Bayur has harbour clinic for emergency cases. Hospitals at Padang.

AIRPORT: At Tabing, distance 15 km.

DEVELOPMENTS: Padang Cement have a new bagging terminal in operation.

AUTHORITY: Department of Sea Communications.

TELUK SEMANGKA (Semangka Bay):
05.35 S. 104.37 E.

DOCUMENTS:

7 Crew Lists.
7 Stores Lists.
7 Slop Chest Lists.
3 Customs Declaration Forms.
1 Health Declaration.
1 Master's Declaration provided by Agent on arrival.

PILOTAGE: Pilot and Mooring Master board at the anchorage.

ANCHORAGE: In same area as floating storage vessels in about 30 fathoms of water. There is a gap in the fish traps with Tg. Balang Besi bearing 093° × 6.9 miles. This is about 9 cables from storage vessels.

RESTRICTIONS: No night berthing/unberthing.

HEALTH: "Q" flag must be flown until Officials have been on board. Port Officials come from Panjang.

RADIO/VHF: ETA etc. to be sent to Pertamina Jakarta.

Agung Radio, which is situated at Kota Agung at the head of the bay, may be contacted on VHF Channels 16 or 9 during office hours.

TUGS: 2 tugs used for berthing/unberthing.

BERTHING: Vessels berth alongside Floating Storage Tankers with Yokohama fenders on starboard side. They are anchored in positions between 2 miles and 4 miles from the head of the bay.

Vessels berth port side alongside. Access is provided by floating storage vessel.

Hose connection amidships. Storage tankers mooring gang connect hose. Ship's crane/derrick required for hose support. 12 in. hoses used, 1 per grade.

FRESH WATER: Not available.

FUEL: Not available.

GENERAL: It must be ensured that the STS operation is carried out in accordance with the ICS/OCIMF STS transfer guide and ISGOTT recommendations.

There are approximately 100 moored floating fish traps in the area. They are met with from about 7 miles from the head of the bay. At night, they are well lit with powerful fishing lights and they tend to lie in lines which, with care, allows access to the Anchorage Area.

Accommodation may be needed for Pilot and Mooring Master.

Numerous jellyfish may cause problems with intakes.

SHIPMASTER'S REPORT: January 1983.

Documents: Advisable to have at least 12 copies of Crew List. Harbour Master takes all certificates ashore and returns same prior to sailing.

Pilotage: No Pilots available for anchoring. Mooring Master berths/unberths vessel alongside storage tanker.

Anchorage: Good anchorage in depths of 15 fathoms – 50 fathoms of water in the Northern part of the bay.

Restrictions: Berthing/unberthing carried out during the daytime only.

Radio: PKI 1 and PKI 2 (Jakarta).

VHF: "Kota Agung Radio" keeps continuous watch on Channel 9.

Pertamina, local Agent, Mooring Master and storage tankers can be contacted on Channel 9.

Tugs: Two harbour tugs available for berthing/unberthing.

Tankers: No berths. 2 storage tankers of about 235,000 d.w.t. handling gas oil and kerosene. 4 Yokohama fenders on the starboard side of storage tankers. 12 in. hoses used for cargo transfer.

Fuel: Gas oil available.

Consuls: British Consul stationed in Jakarta (Tel: 330904).

Repairs: Minor repairs possible.

Surveyors: Lloyd's and Indonesian Government Radio Surveyors had to come from Jakarta to carry out vessels Safety Equipment and Safety Radio Telegraphy Surveys.

Airport: Nearest airport at Tanjung Karang, 100 km. away. Several flights to Jakarta daily.

Time: GMT plus 7 hours throughout the year.

Services: Limited stocks of fresh fruits, vegetables and meat available locally.

Shore Leave: Pertamina operates 3 service boats daily for crew to go ashore.

Identification Cards: Not necessary.

Delays: About 7 days – 10 days for discharging gas oil.

AGENCY: Main Agent in Jakarta.

Pertamina Shipping Department, 6th Floor, Jalanmerdeka, Timur 1 A, Jakarta, Indonesia. Tel: 343806. Telex: 44450/45348/49285 Perta Jkt. Cables: Pertaminaship, Jakarta.

TJILATJAP (CILACAP): 07.44 S. 109.00 E.

(See Plan Book)

(a) CILACAP PORT.
(b) CILACAP – IRON SAND PORT.

(a) CILACAP PORT.

DOCUMENTS: Upon arrival vessels have to produce the following Certificates and Documents, which will remain in the Harbour Master's custody until cleared:

Nationality (Registry) Certificate.
Seaworthiness Certificate.
Measurement (Tonnage) Certificate.
Derat (Exemption) Certificate.
International Load Line Certificate.
Safety Certificate (passenger ships).
Safety Equipment Certificate (cargo ships).
Safety Radio and Radiotelephony Certificate (cargo ships).
Certificate of Approval (ship's radio station).
Health Book or Bill of Health.
Last Port Clearance.
Subscription of Light and Harbour Dues and wharfage if any.
Crew Lists and Passenger's Lists.
Ship's Articles.
Other certificates and documents as required.
Ship's Stores List.

PILOTAGE: Compulsory. 8 Harbour Pilots available. 6 hours notice required for berthing and 3 hours notice required for unberthing. Pilot available 24 hours for vessels up to 150 m. LOA and daytime only up to 1800 hrs. for vessels over 150 m. LOA.

Pilot station on VHF Channels 12, 14 and 16.

Pilot station position: Lat. 07° 44′ 30″ S., Long. 108° 59′ 46″ E.

APPROACHES: Minimum breadth of new channel 198 m. from Outer Bar to CIB* Jetty. Inner Channel width is 80 m.

Depths: Outer Bar to CIB Jetty . . . 14.5 m. LWS.
CIB Jetty to Area 70 (including Iron Sand Jetty) . . . 12.1 m. LWS.
Area 70 to Cargo Wharf . . . 8.0 m. LWS.
Cargo Wharf to Area 60 . . . 5.7 m. LWS.

*Crude Island Berth.

ANCHORAGES:

Cargo Ships:	07° 45′ 25.0″ S. 109° 02′ 50.0″ E.	and	07° 46′ 26.8″ S. 109° 03′ 07.0″ E.
	To		
	07° 45′ 34.0″ S. 109° 03′ 12.2″ E.	and	07° 46′ 22.5″ S. 109° 03′ 37.0″ E.
Tankers:	07° 45′ 38.0″ S. 109° 03′ 12.2″ E.	and	07° 46′ 22.5″ S. 109° 04′ 28.5″ E.
	To		
	07° 45′ 38.0″ S. 109° 03′ 48.5″ E.	and	07° 46′ 10.0″ S. 109° 04′ 28.5″ E.

RESTRICTIONS: Least depths at the bar and in the channel are 70 dm. at LWS.

Current: Semi-diurnal. By the influence of the Donan River, especially during the rainy season, the duration of the outgoing current is longer than that of the ingoing. In the rainy season the outgoing current can reach 5 knots.

MAX. SIZE:
Cargo Vessels: Max. LOA 186 m. Max. draft at HW 9.5 m.
Tankers: Max. d.w.t. 85,000. Max. LOA 250 m. Max draft 12.0 m.

HEALTH: Vessels arriving from abroad direct have to apply well in advance to the Department of Health (Quarantine Section) for a Provisional Free Pratique, as said pratique has to be cabled to the port concerned. The Provisional Free Pratique is only valid for the port concerned, the next port of call must be a First Class Port as no further Provisional Free Pratique will be issued, unless the vessel sails directly abroad.

TUGS: 1×870 h.p., 1×1,700 h.p. (twin-screw).

Pertamina: 4 tugs. 2×3,200 h.p. ("Z" peller), 1×4,060 h.p. (twin-screw) and 1×1,740 h.p. (twin-screw).

VHF: Pilot on Channels 16 and 20.

BERTHING: Outer Roads while waiting for the Pilot during the West monsoon a safe anchorage in 12 m. water. During the S.E. monsoon not a safe anchorage. Inner Roads, under all circumstances a safe anchorage in 9 m. water in the vicinity of Nusa Kambangan opposite the quays for small crafts and East of Tg. Sodong. Vessels over 80 m. length have to moor due to limited swinging space, current and winds.

Name	*Length* (m.)	*Depth at LWS* (m.)	*Remarks*
Wharf No. 1	120	9.0 m.	—
Wharf No. 2	149	9.0 m.	—
Wharf No. 3	50	—	Under redevelopment
Wharf No. 4	71.5	6.0	—
Pusri Jetty	Under Construction		Fertiliser
Aneka Tambang Jetty	—	11.0	See "Section B"
Semen Nusantara Jetty	—	5.0	Cement

TANKERS: *Pertamina Tanker Terminal:*

CIB (Crude Island Berth) designed for 135,000 d.w.t. tankers.
Jetty No. 1: 16.5 m. depth.
Jetty No. 2: 16.5 m. depth.

Area 70:

Jetty Nos. 1 and 2 designed for 35,000 d.w.t. tankers. Depth alongside 13 m. at LWS.

Jetty No. 3 is designed for 17,000 d.w.t. tankers.

Area 60:

Jetty No. 1 specially for lub oil with depth 6 m. at LWS.
Jetty No. 2 specially for bitumen with depth 7 m. at LWS.
Jetty No. 3 specially for LPG with depth 6.5 m. at LWS.
Jetty Nos. 1, 2 and 3 designed for 5,000 d.w.t. vessels.

STEVEDORES: Working hours Monday–Thursday 0730 – 1200 hrs. and 1300 – 1530 hrs. and Saturday. Overtime Friday 0730 – 1130 hrs. and 1300 – 1530 hrs.; Sunday-holidays 0730 – 1200 hrs. and 1300 – 1530 hrs.; Night shift 1700 – 2300 hrs. Gang's capacity: Loading general cargo 12 t.p.h.; bagged cargo 20 t.p.h.; iron sand by conveyor 400 t.p.h. – 500 t.p.h.; bulk cargo 17 t.p.h.

MEDICAL: Pertamina Hospital Service and Public Health Service.

PORT EQUIPMENT:
Cranes: 1 mobile crane with lifting capacity of 15 tons.
Forklifts: 1×10 ton, 1×7.5 ton, 2×5 ton, 2×3.5 ton, 4×3 ton and 3×2 ton.

FRESH WATER: Water is supplied through pipe-lines to the wharves, capacity 10 t.p.h. – 15 t.p.h.

FUEL: Bunkers (M.D.F., M.F.O., H.S.D.) available alongside by pipeline. Supplier is State Corporation Pertamina. Rate 60 t.p.h.

AIRPORT: Tunggul Wulung Airport. Distance from port 15 km. Served by Merpati Nusantara Airline with daily flights to and from Jakarta.

PORT SECURITY: Maintained by members of the Indonesian Armed Services, usually, Police, Navy or Marine and Army. Crew members should be in possession of a shore pass issued by the Port Authority, accompanied by an identification card when leaving or entering the guarded gates of the Port Area. Shore passes can be obtained via the Agencies.

CUSTOMS: It is strictly prohibited to take undeclared foreign currency ashore. It is recommended that Masters consult the Agents about the local prevailing Customs Regulations with regard to currency, cigarettes, spirits, etc., to prevent unnecessary difficulties and eventually fines.

Ship's Inspection Team: Consisting of members of the Port Authority. This team will search the vessel, after the ship is cleared by the Port Medical Officer. Prior to mentioned search no Cargo handling is allowed. This Team will search the Store Rooms and Cargo hatches, and subsequently seals the Bonded Stores and Radio Transmitter. Careful attention should be given in making up the Store Lists, as any difference found in the items declared and discovered during the search may lead to difficulties.

SHORE LEAVE: Leaving and entering the Custom's Area the crew is checked on the basis of the Crew's List and Identification cards and searched.

DEVELOPMENTS: Wharf No. 3: 50 m. under re-development.

Dockyard for ship repairs under construction.

Pusri Jetty for fertiliser under construction.

AUTHORITY: Departemen Perhubungan, Perusahaan Umum Pelabuhan 111, Cabang Cilacap, Jalan Laut Jawa, Pelabuhan Cilacap. *Tel:* (0282) 21334, 22651, 22652, 22653. *Contact:* Soeroso Prawirosiswojo, Branch Manager. Sojoto Prawirodirjo, Harbour Master.

(b) CILACAP – IRON SAND PORT.

LOCATION: Iron Sand Jetty (loading installation) is situated at the Port of Cilacap, South coast of Central Java, in position: Lat. 07° 45′ 03″ S., Long. 109° 00′ 51″ E.

FLAGS: To be flown by incoming vessels: Vessel's National Flag; Indonesian Flag; Vessel's Number; Quarantine & Immigration Flag.

DOCUMENTS: To be produced upon vessel's arrival:

15 Crew Lists.
10 Passenger Lists.
5 Parcel Lists.
8 Stores Lists.
8 Cargo Manifests.
3 Narcotic Lists.
5 General Information (if any).
5 Personal Effects Lists.
5 Vaccination Lists.
Last Port Clearance.
10 Firearms & Ammunition Certificates.
10 Harbour Reports.
5 Crew's Radio & Camera Lists.
International Loadline Certificate.
Maritime Declaration of Health Certificate.
Safety Radio Certificate.
Health Book or Bill of Health.
Derat Certificate.
Safety Equipment Certificate.
Certificate of Registry and Tonnage.
Certificate of Vessel's Nationality.

Inspection Team: This team consists of the Port Health Officer, Custom Officer, Harbour Master, Immigration Officer and Police.

After the vessel is granted free pratique, the Immigration Officer will check passports, seamen's book and crew list and issue shore passes.

PILOTAGE: Pilotage is compulsory. Two Government Pilots are available.

There is one pilot station in position Lat. 07° 44′ 08″ S., Long. 108° 59′ 34″ E. If vessel wishes to be piloted to Iron Sand Jetty on day of arrival vessel must arrive at the pilot station before 1500 hrs. local time at the latest provided the Pilot is available (information of which will be confirmed by Sub-Agent).

RESTRICTIONS: Vessels served on first come, first served basis. Vessels berth between 0600 hrs. and 1500 hrs. and leave during daylight hours on high water. The depths at LWS are: Alongside wharf, 13.0 m.; Channel Bar 11.30 m.

Vessel's Conditions: The height of vessel from water line to top of hatchcoaming or railing must not exceed 15 m. Each side deck breadth from bulwark to hatchcoaming must be preferably 7 m. minimum and 9 m. maximum.

MAX. SIZE: LOA 186 m. Max. draft 10.40 m. Deeper possible but it depends on depth at the time of passing bar and after consultation with the Harbour Master.
RADIO: Messages to Pasirbesi Cilacap can be sent through Cilacap Coastal Radio Station, call sign PKR 3.
Arrival Notice – Information Required:
Owners Advice: Owner to advise by cable to Adhiguna and Anekatambang Jakarta and Pasirbesi Cilacap at least 10 working days before vessel's expected arrival at the loading port.
Master's Advice: At least 48 hours before vessel's arrival at Cilacap Pilot Station, the ship's Master shall give the following information to Anekatambang Jakarta and Pasirbesi Cilacap: Last port of call, draft on arrival, quantity of iron sand to be loaded, stowage plan (hatch division for iron sand cargo) and other necessary messages.
Final amended arrival time must be sent at the latest 24 hours before arrival.
Previous experience showed that one cannot rely on telegrams regarding ETA sent by Agents at last port of call arriving in due time, therefore Pasirbesi Cilacap waits for the Master's telegram in order to make necessary preparation such as ordering Pilot etc.
Ship's radio transmitter is not to be used while lying in port.

TUGS: Available.
BERTHING:
Mooring: Vessels are moored alongside 1 jetty and 6 dolphins with 4 bollards with good nylon ropes, 4 fore, 4 aft, 1 fore breastline and 1 after breastline. Distance between the two extreme dolphins is 160 m.
Loading Facilities: Loading installation consists of one boom (stacker), iron sand is loaded into the hold of the vessel by means of conveyor belt. Boom can be hoisted vertically from 00° to 60° but the maximum position for proper operation is only up to 15° inclination angle and can swing 26.85 m. (60°) to each side. The length of boom is 33.33 m. The maximum outreach is about 16.33 m. from jetty to seaward.
Loading Capacity: About 400 – 500 t.p.h., however, it depends on the type of vessel, cargo space and size of hatches available.
Weighing: The iron sand is automatically weighed during loading by means of weightometer. The specific gravity of iron sand is around 2.60.
Unloading: Cargo for Aneka Tambang only.
Labourers: Labourers will be supplied by shipper. Making the vessel ready for loading to be done by vessel's Crew members.

STEVEDORES: Loading is performed by shipper's personnel. Loading equipment to be furnished by the vessel.
Working Hours: Loading to be effected on weather working days of 24 consecutive hours, Sundays and Holidays included (WWD SHINC), but the following National Holidays are excepted:
New Year (January 1st); Independence Day (August 17th); Christmas Day (December 25th). Lebaran, Maulid Day and Idul Adha determined by Moslem calendar and differ from year to year by international calendar, For definite dates consult Port Administrator.

CUSTOMS: Vessel's bonded store will be sealed by Customs Officer on arrival and will remain sealed until the vessel leaves Cilacap Port.
Note: It is recommended that ship's Master consult the Agents about the local prevailing Customs regulations with regard to currency, cigarettes, spirits, narcotics, etc. to prevent unnecessary difficulties and eventually fines.
MEDICAL: Doctor, hospital and inoculation service available.
FRESH WATER: Not available.
FUEL: Not available.
TIME: GMT plus 7 hours.

REPATRIATION: Can be arranged. Repatriant to be guarded by Immigration Officer from Cilacap to Jakarta until his departure from Jakarta to the destined country.
CONSULS: None.
SHORE LEAVE:
General: Crew members are permitted only to go to Cilacap. Shore pass must be carried by crew during shore visit.
Going beyond Cilacap is prohibited without special landing permit, which can be issued by the local Immigration Officer through Agents.
Visitors: Crew members are not allowed to invite friends, hawkers from shore aboard the vessel. It is also prohibited to lower lifeboats or rafts for purpose of fishing, sailing, visits to nearby islands, etc.
At Anchorage: While lying at anchor awaiting berth, no one is allowed to go ashore until vessel cleared.
Shore Leave Hours: From 0600 hrs. to 2300 hrs. local time.

GENERAL:
Cash Advance: Cash advance in Rupiah can be supplied by Agents at Master's request.
Fumigation: No facilities.
Nature of Bottom: Sand and hard materials.
Currents: Direction: at high tide, from East to West; at ebb tide, from West to East. Velocity: around 3-5 knots.
Chart: Indonesian Sea Chart No. 108.
Ship Chandlers: None.
MPS Tax: So called MPS Tax has to be paid in advance to the Indonesian Tax Office at Jakarta, therefore Principals are requested to remit the said MPS Tax's funds at the same time with the remittance of advance payment of ship's disbursements. The amount of MPS Tax (about 2% of concerned freight earned) will be advised by General Agents, Jakarta to the Principal, if possible a few days before Principal remits advance payment in paragraph below. The final calculation of the tax will be made later.
Disbursement: Advance Payment: At least 14 days before vessel's arrival at Cilacap vessel's Principal has to remit US$4,000 to the account of General Agents Jakarta, as advance payment of the related ship's disbursement.
Vessel's Disbursement Accounts: All vessel's expenses will be charged to the related Principals through the General Agents.

AGENCY:
General Agents: P.T. Pelayaran Bahtera Adhiguna 10-12 Jalan Kalibesar Timur, P.O. Box 1313 Jakarata, Indonesia. Tel: 276547, Cable Address: Adhiguna Jakarta, Telex: Adhiguna Jkt 42854.
Sub-Agents: P.T. Aneka Tambang, Unit Pertambangan Pasir Besi, Cilacap. Jalan Pandanarang, Cilacap Central Java. Cable Address: Pasirbesi Cilacap. Tel: 22142, 22143. Telex: 22457.
Sub-Agent's Head Office: P.T. Aneka Tambang 24-26 Jalan Bungur Besar, Jakarta, Indonesia. Tel: 410108, Telex: Antam Jkt 49147, Cable Address: Anekatambang Jakarta.

TJIREBON: 06.41 S. 108.33 E.

DOCUMENTS:
Crew List.
Passenger List.
Customs Documents.
Manifest.
Bills of Lading.
Ship's Papers/Certificates.
Health Documents.
PILOTAGE: Not compulsory. Applications made through Agent or to Port Administrator via coast station Tjirebon radio.
ANCHORAGE: Boundaries of port area are coast line, meridian 108° 35′ 30″ E. and the parallels of 06° 42′ 15″ S. and 06° 43′ 40″ S.
A light buoy on the position of Lat. 06° 42′ 10″ S., Long. 108° 36′ 20″ E. is placed on the guidance line to the entrance of the harbour.
RESTRICTIONS: Tjirebon Roads only accessible for ships of 8 m. max. draft, by taking the Tandkung Sanggarong light buoy at port hand. Only ships with 4 m. max. draft can enter Inner Harbour and moor alongside wharves.
All other ships anchor at outer roads. The harbour is open for 24 hours. For vessels entering the harbour, a signal is given from signal station.
HEALTH: Usual international procedures.
TUGS: Tug services available. Order through Agents.
RADIO: Call sign PKZ2. Working freq. 6491.5 kHz and 8799.5 kHz, watching freq. 6265 – 6285 kHz and 8204 – 8249 kHz. Working time 0030 – 0130 hrs. and 0600 – 0700 hrs. GMT.
STEVEDORES: Arranged by Agent.
MEDICAL: Normal hospital facilities available. Agent will arrange for medical attention. Advance notice required.
TANKERS: Berthing for only 300 d.w.t. tankers at special oil jetty.
DENSITY: 1025.
FRESH WATER: Delivered by water lighter. One delivery 75 tons, discharged within 6 hours. For quick delivery 2 days advance notice to Agents required.
FUEL: None available.
GANGWAY/DECK WATCHMEN: Recommended. Arrange with Agent.
OPENING/CLOSING HATCHES: Usually done by stevedores. Appreciated if done by crew.
CERTIFICATES: Port clearance last port of call. Certificates as required by vessel's country of registry and by SOLAS 1960.
CUSTOMS ALLOWANCES: 200 cigarettes per person. Wine/spirits: 1 bottle per person. Bottle opened.
IDENTIFICATION CARDS: Preferably passports, seamen's ID cards (issued by maritime authorities; vessel's country).
CONSULS: At Djakarta, 280 km. from Tjirebon.
REPAIRS: Light repairs only by local dockyard.
DRY DOCK: Graving dock of 600 d.w.t. capacity.
REPATRIATION: Can be arranged by Agents.
AIRPORT: Kemajoran International Airport 257 km. from Tjirebon. Domestic Airport 40 km. from Tjirebon.
TIME: Local time (Western Indonesia Time) is GMT plus 8 hours.
HOLIDAYS: New Year (1st January); Ascension of Christ (15th May); Santa Maria (15th August); Independence Day (17th August); Maulud, Mir'adj and Idul Fitri determined by Moslem calendar and differ from year to year by International calendar. For definite dates consult Port Administrator. Cargo work on Idul Fitri (2 days) not guaranteed due to labour shortage.
POLICE/AMBULANCE/FIRE: Harbour Police 3897; City Police 4466; Ambulance 118; Fire brigade 113.
SHORE LEAVE: Allowed after satisfactory fulfilment of immigration requirements and in possession of crew's Harbour Card.
DELAYS: Bad weather (mostly rain).
DEVELOPMENTS: Surveys being made for extension and development of port with 10 m. deep basins, container facilities and a 10 m. deep channel for accommodation of 10,000 d.w.t. ships and future shipping.
AUTHORITY: Port Administrator.

WAMSASI: 03.33 S. 126.09 E.

Log loading port on the West coast of Buru Island in position: Lat. 03° 33.5′ S., Long 126° 09.5′ E.
Vessels anchor 600 m. (approximately) off-shore in depth of 15 m.

Iran

GENERAL

Money/Liquor: Ship's personnel travelling to and from Iran should be warned of the inadvisability of carrying liquor and/or large sums of money, both of which are liable to be confiscated.

Flag: Vessels to fly the new flag of the Islamic Republic of Iran (new flag is green, white and red with a red emblem in the centre).

Bandar Abbas nominated as "Mother Port":
The following information has been received from the Director, Ports and Shipping Organisation, Tehran:–
Quote:
We hereby nominate Bandar Abbas as "Mother Port", and it is required that all ships carrying cargoes for Iranian ports, on passing Ras al Kuh, contact Bandar Abbas in order that they may be allocated an anchorage position within Bandar Abbas port limits.

The diversion thereafter of any vessel to Bushire and/or Bandar Imam Khomeini will take place according to Port and Shipping Organisation planning and programming schedules.
Signed:
Managing Director
Ports and Shipping Organisation
and Assistant Ministry of Roads and Transportation.
Unquote.
Principals should note that in this connection, all Masters are requested to give their arrival notices through Bandar Abbas Port Radio Station (EQI) to the Port Director and Harbour Master.

NOTICES:
B.A. Notice to Mariners No. 34/83:
The Government of Iran has made the following announcements:

1. Vessels proceeding into the Gulf after passing through the Strait of Hormuz should pass at least 12 miles South of the following; Jazirat Bu Musa (Lat. 25° 52′ N., Long. 55° 02′ E.), Jazirat Sirri (Lat. 25° 54′ N., Long. 54° 32′ E.), Cable Bank (Lat. 26° 46′ N., Long. 52° 32′ E.) and thence 12 miles S.W. of Jazirat Farsi (Lat. 27° 59′ N., Long. 50° 11′ E.).
2. After passing Jazirat Farsi vessels should keep West and South of lines joining the following positions:
   - (a) Lat. 27° 55′ N., Long. 49° 53′ E.
   - (b) Lat. 29° 10′ N., Long. 49° 12′ E.
   - (c) Lat. 29° 10′ N., Long. 48° 40′ E.

After passing position (c) vessels may proceed North to Kuwait Harbour.

3. All vessels heading for Iranian ports should report to Bandar Abbas Port Control on passing Ras al Kuh (Lat. 25° 48′ N., Long. 57° 17′ E.) stating their ETA at the Strait of Hormuz and destination. If clearance is not received before passing Bandar Abbas (Lat. 27° 11′ N., Long. 56° 17′ E.) vessels should proceed to the anchorage off that port.
4. Deep draft tankers, loaded and not inward bound for Iranian ports, intending to enter the restricted zone North of a line joining the positions in (1) should request clearance from the Iranian Ports and Shipping Organisation (Telex 212271 BNDR IR) 48 hours before departure giving the following information:
   - (a) Last loading port
   - (b) Destination
   - (c) Route
   - (d) Speed
   - (e) Time of departure
   - (f) Visual identification

The Government of Iraq has made the following announcements:

1. An exclusion zone has been established North of a line joining the following positions:
   Lat. 29° 30′ N., Long. 48° 30′ E.
   Lat. 29° 25′ N., Long. 49° 09′ E.
   Lat. 28° 23′ N., Long. 49° 47′ E.
   Lat. 28° 23′ N., Long. 51° 00′ E.
2. The area North of Lat. 29° 30′ N. has been declared a war zone.
3. Vessels entering waters at the head of the Gulf risk hitting mines or being attacked by the Iraqi Navy.
4. Tankers berthing at Jazireh-ye Khark oil port regardless of nationality may be attacked by the Iraqi Air Force.

Procedures for vessels approaching Iranian Ports: The following information on procedures are necessary.
Masters should:
Contact Bandar Abbas Port Radio on the following frequencies:
HF 8469 kHz
MF 500 kHz
MF 464 kHz
and state:

1. Ship's name.
2. Flag.
3. Kind of vessel.
4. Loading or discharging port(s).
5. ETA Sirri Island (for tankers).
6. Expected time and date of passing Hormuz.
7. Ship's speed.
8. Reason for call/cargo for Discharge or to load prior to arrival, and take instructions.

As per latest instructions issued by Iranian Port Authorities, the words "Persian Gulf" should follow the name of Iranian ports in the Persian Gulf in all messages, example: "Kharg Island Persian Gulf".

Tankers should anchor at Sirri Island after passing Bandar Abbas for proper turn when loading at Kharg Island, unless instructed to proceed towards Kharg Island directly.

Upon anchoring Sirri Island vessels should communicate with Sirri Marine on VHF for further instructions.

Masters should send all messages and ETA notices for NIOC Kharg Island, Lavan Island, Sirri Island and other oil loading ports, also for NIOC head office at Tehran, should be sent via Bandar Abbas Port Radio, with copy to Agents.

Arrival Notice – Tankers:
Please instruct all tankers to advise NIOC 72 hours prior to arrival to Kharg Island (P.G.) otherwise Marketing and Export Operation Department has no responsibility, so kindly advise urgently the following information:

1. Ship's deadweight.
2. Arrival loaded displacement.
3. Cargo bunker requirement.
4. Deballasting time.
5. Height of manifold when vessel ready to load.
6. Maximum arrival and sailing draft.
7. Vessel's dimensions.

Please furnish the Harbour Master at Kharg Terminal with above information from now on. Meanwhile it would be much appreciated if you follow the same procedure for other terminals (i.e. Sirri and Lavan) if the vessels are intended to load there.

THE FOLLOWING FACILITIES AND OPERATING PROCEDURES WERE AVAILABLE ON 1st SEPTEMBER, 1980. HOWEVER, NO FURTHER INFORMATION RECEIVED SINCE THAT DATE.

ABADAN: 30.20 N. 48.16 E.

Port of Abadan situated on right bank of the Shatt-al-Arab, about 47 miles up river from Rooka Buoy.

DOCUMENTS/PILOTAGE: See "Khorramshahr".

ANCHORAGES: On arrival of pilot boat vessel can anchor with no depth restriction. On entering the Shatt-al-Arab the following are the recognized anchorages: Kasba Anchorage position about 2 miles above Fao with a max. depth of 35 ft. in fresh water. Bawarda Anchorage position about 2 miles above Abadan with a max. depth of 31 ft. in fresh water. Vessels which are too deep to pass out of the river on one tide will be required to anchor at Kasba.

RESTRICTIONS: The Port is open for day and night navigation with arrival and sailing being controlled by the tide. Vessels normally enter the Bar at 4 hours before high water at the Bar or at 2 hours after high water at the Bar. Those entering 4 hours before, arrive at Bawarda anchorage generally during flood tide, so must anchor for 6 hours awaiting ebb. Those entering 2 hours after high water, arrive Bawarda during ebb tide and berth on arrival, providing berth available, weather conditions permit and outward movements do not delay. Vessels always berth starboard side to stem the ebb tide and without using tugs and leaving Abadan 4 to 6 hours before high water at Bar.

MAX. SIZE: Max. length 600 ft. Max. draft in the Shatt-al-Arab, Abadan and other river ports is 28 ft. 06 in.

HEALTH: Inward clearance is affected on board after receiving free pratique. Also see "Khorramshahr" – "Documents".

RADIO: The National Iranian Oil Company Coastal Radio Station call sign EQZ. The station listens for various calls on the normal International Marine Calling frequencies. When close to may be contacted on 500 kHz transferring to 428 kHz for exchange of traffic. Traffic list sent at 5 minutes past odd hours.

TUGS: Not available.

BERTHING: While no changes have actually occurred in the production capacity of the Abadan Refinery, the number of jetties on the Abadan riverside have been reduced to eight. Nos. 3, 4, 7, 9, 11, 16, 22 and 26 have been maintained and are used for bunkering purposes and dry cargo operations.

Ships pass day and night so it is necessary that mooring lines be kept taut at all times to prevent surging on the jetties thereby breaking lines and causing damage to Company property.

Bunkering jetties for those vessels coming only for purpose of taking bunkers are:

Jetty No. 3	Draft alongside	31 ft.
Jetty No. 9	„ „	28 ft.
Jetty No. 22	„ „	25 ft.
Jetty No. 16	„ „	28 ft.

Bunkering jetties for those vessels bringing Oil Company's cargo are:

Jetty No. 7A Jetty No. 7B Jetty No. 7C Jetty No. 7D	Draft alongside between 28 ft.–31 ft.

MEDICAL: Emergency cases: an ambulance will be dispatched on demand by calling telephone number 5555.

In ordinary cases of sickness or dental treatment: Agents will arrange transportation of patients, and advise Masters regarding necessary medical attention forms. If patient does not speak English he should be accompanied by an interpreter. Only in exceptional cases will a medical officer visit a patient on board.

TANKERS: Deliveries of the refined oil products of Abadan Refinery are effected to ocean-going tankers at Bandar Mahshahr since the inauguration of the products terminal of the National Iranian Oil Company at that port, therefore such shipments are not taking place from Abadan any more.

DENSITY: Fresh water.

FRESH WATER: Available at all jetties and at the anchorage by barge.

MAX. SIZE: LOA 186 m. Max. draft 10.40 m. Deeper possible but it depends on depth at the time of passing bar and after consultation with the Harbour Master.

RADIO: Messages to Pasirbesi Cilacap can be sent through Cilacap Coastal Radio Station, call sign PKR 3.

Arrival Notice – Information Required:

Owners Advice: Owner to advise by cable to Adhiguna and Anekatambang Jakarta and Pasirbesi Cilacap at least 10 working days before vessel's expected arrival at the loading port.

Master's Advice: At least 48 hours before vessel's arrival at Cilacap Pilot Station, the ship's Master shall give the following information to Anekatambang Jakarta and Pasirbesi Cilacap: Last port of call, draft on arrival, quantity of iron sand to be loaded, stowage plan (hatch division for iron sand cargo) and other necessary messages.

Final amended arrival time must be sent at the latest 24 hours before arrival.

Previous experience showed that one cannot rely on telegrams regarding ETA sent by Agents at last port of call arriving in due time, therefore Pasirbesi Cilacap waits for the Master's telegram in order to make necessary preparation such as ordering Pilot etc.

Ship's radio transmitter is not to be used while lying in port.

TUGS: Available.

BERTHING:

Mooring: Vessels are moored alongside 1 jetty and 6 dolphins with 4 bollards with good nylon ropes, 4 fore, 4 aft, 1 fore breastline and 1 after breastline. Distance between the two extreme dolphins is 160 m.

Loading Facilities: Loading installation consists of one boom (stacker), iron sand is loaded into the hold of the vessel by means of conveyor belt. Boom can be hoisted vertically from 00° to 60° but the maximum position for proper operation is only up to 15° inclination angle and can swing 26.85 m. (60°) to each side. The length of boom is 33.33 m. The maximum outreach is about 16.33 m. from jetty to seaward.

Loading Capacity: About 400 – 500 t.p.h., however, it depends on the type of vessel, cargo space and size of hatches available.

Weighing: The iron sand is automatically weighed during loading by means of weightometer. The specific gravity of iron sand is around 2.60.

Unloading: Cargo for Aneka Tambang only.

Labourers: Labourers will be supplied by shipper. Making the vessel ready for loading to be done by vessel's Crew members.

STEVEDORES: Loading is performed by shipper's personnel. Loading equipment to be furnished by the vessel.

Working Hours: Loading to be effected on weather working days of 24 consecutive hours, Sundays and Holidays included (WWD SHINC), but the following National Holidays are excepted:

New Year (January 1st); Independence Day (August 17th); Christmas Day (December 25th). Lebaran, Maulid Day and Idul Adha determined by Moslem calendar and differ from year to year by international calendar, For definite dates consult Port Administrator.

CUSTOMS: Vessel's bonded store will be sealed by Customs Officer on arrival and will remain sealed until the vessel leaves Cilacap Port.

Note: It is recommended that ship's Master consult the Agents about the local prevailing Customs regulations with regard to currency, cigarettes, spirits, narcotics, etc. to prevent unnecessary difficulties and eventually fines.

MEDICAL: Doctor, hospital and inoculation service available.

FRESH WATER: Not available.

FUEL: Not available.

TIME: GMT plus 7 hours.

REPATRIATION: Can be arranged. Repatriant to be guarded by Immigration Officer from Cilacap to Jakarta until his departure from Jakarta to the destined country.

CONSULS: None.

SHORE LEAVE:

General: Crew members are permitted only to go to Cilacap. Shore pass must be carried by crew during shore visit.

Going beyond Cilacap is prohibited without special landing permit, which can be issued by the local Immigration Officer through Agents.

Visitors: Crew members are not allowed to invite friends, hawkers from shore aboard the vessel. It is also prohibited to lower lifeboats or rafts for purpose of fishing, sailing, visits to nearby islands, etc.

At Anchorage: While lying at anchor awaiting berth, no one is allowed to go ashore until vessel cleared.

Shore Leave Hours: From 0600 hrs. to 2300 hrs. local time.

GENERAL:

Cash Advance: Cash advance in Rupiah can be supplied by Agents at Master's request.

Fumigation: No facilities.

Nature of Bottom: Sand and hard materials.

Currents: Direction: at high tide, from East to West; at ebb tide, from West to East. Velocity: around 3-5 knots.

Chart: Indonesian Sea Chart No. 108.

Ship Chandlers: None.

MPS Tax: So called MPS Tax has to be paid in advance to the Indonesian Tax Office at Jakarta, therefore Principals are requested to remit the said MPS Tax's funds at the same time with the remittance of advance payment of ship's disbursements. The amount of MPS Tax (about 2% of concerned freight earned) will be advised by General Agents, Jakarta to the Principal, if possible a few days before Principal remits advance payment in paragraph below. The final calculation of the tax will be made later.

Disbursement: Advance Payment: At least 14 days before vessel's arrival at Cilacap vessel's Principal has to remit US$4,000 to the account of General Agents Jakarta, as advance payment of the related ship's disbursement.

Vessel's Disbursement Accounts: All vessel's expenses will be charged to the related Principals through the General Agents.

AGENCY:

General Agents: P.T. Pelayaran Bahtera Adhiguna 10-12 Jalan Kalibesar Timur, P.O. Box 1313 Jakarata, Indonesia. Tel: 276547, Cable Address: Adhiguna Jakarta, Telex: Adhiguna Jkt 42854.

Sub-Agents: P.T. Aneka Tambang, Unit Pertambangan Pasir Besi, Cilacap. Jalan Pandanarang, Cilacap Central Java. Cable Address: Pasirbesi Cilacap. Tel: 22142, 22143. Telex: 22457.

Sub-Agent's Head Office: P.T. Aneka Tambang 24-26 Jalan Bungur Besar, Jakarta, Indonesia. Tel: 410108, Telex: Antam Jkt 49147, Cable Address: Anekatambang Jakarta.

TJIREBON: 06.41 S. 108.33 E.

DOCUMENTS:

Crew List.
Passenger List.
Customs Documents.
Manifest.
Bills of Lading.
Ship's Papers/Certificates.
Health Documents.

PILOTAGE: Not compulsory. Applications made through Agent or to Port Administrator via coast station Tjirebon radio.

ANCHORAGE: Boundaries of port area are coast line, meridian 108° 35′ 30″ E. and the parallels of 06° 42′ 15″ S. and 06° 43′ 40″ S.

A light buoy on the position of Lat. 06° 42′ 10″ S., Long. 108° 36′ 20″ E. is placed on the guidance line to the entrance of the harbour.

RESTRICTIONS: Tjirebon Roads only accessible for ships of 8 m. max. draft, by taking the Tandkung Sanggarong light buoy at port hand. Only ships with 4 m. max. draft can enter Inner Harbour and moor alongside wharves.

All other ships anchor at outer roads. The harbour is open for 24 hours. For vessels entering the harbour, a signal is given from signal station.

HEALTH: Usual international procedures.

TUGS: Tug services available. Order through Agents.

RADIO: Call sign PKZ2. Working freq. 6491.5 kHz and 8799.5 kHz, watching freq. 6265 – 6285 kHz and 8204 – 8249 kHz. Working time 0030 – 0130 hrs. and 0600 – 0700 hrs. GMT.

STEVEDORES: Arranged by Agent.

MEDICAL: Normal hospital facilities available. Agent will arrange for medical attention. Advance notice required.

TANKERS: Berthing for only 300 d.w.t. tankers at special oil jetty.

DENSITY: 1025.

FRESH WATER: Delivered by water lighter. One delivery 75 tons, discharged within 6 hours. For quick delivery 2 days advance notice to Agents required.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Recommended. Arrange with Agent.

OPENING/CLOSING HATCHES: Usually done by stevedores. Appreciated if done by crew.

CERTIFICATES: Port clearance last port of call. Certificates as required by vessel's country of registry and by SOLAS 1960.

CUSTOMS ALLOWANCES: 200 cigarettes per person. Wine/spirits: 1 bottle per person. Bottle opened.

IDENTIFICATION CARDS: Preferably passports, seamen's ID cards (issued by maritime authorities; vessel's country).

CONSULS: At Djakarta, 280 km. from Tjirebon.

REPAIRS: Light repairs only by local dockyard.

DRY DOCK: Graving dock of 600 d.w.t. capacity.

REPATRIATION: Can be arranged by Agents.

AIRPORT: Kemajoran International Airport 257 km. from Tjirebon. Domestic Airport 40 km. from Tjirebon.

TIME: Local time (Western Indonesia Time) is GMT plus 8 hours.

HOLIDAYS: New Year (1st January); Ascension of Christ (15th May); Santa Maria (15th August); Independence Day (17th August); Maulud, Mir'adj and Idul Fitri determined by Moslem calendar and differ from year to year by International calendar. For definite dates consult Port Administrator. Cargo work on Idul Fitri (2 days) not guaranteed due to labour shortage.

POLICE/AMBULANCE/FIRE: Harbour Police 3897; City Police 4466; Ambulance 118; Fire brigade 113.

SHORE LEAVE: Allowed after satisfactory fulfilment of immigration requirements and in possession of crew's Harbour Card.

DELAYS: Bad weather (mostly rain).

DEVELOPMENTS: Surveys being made for extension and development of port with 10 m. deep basins, container facilities and a 10 m. deep channel for accommodation of 10,000 d.w.t. ships and future shipping.

AUTHORITY: Port Administrator.

WAMSASI: 03.33 S. 126.09 E.

Log loading port on the West coast of Buru Island in position: Lat. 03° 33.5′ S., Long 126° 09.5′ E.

Vessels anchor 600 m. (approximately) off-shore in depth of 15 m.

Iran

GENERAL

Money/Liquor: Ship's personnel travelling to and from Iran should be warned of the inadvisability of carrying liquor and/or large sums of money, both of which are liable to be confiscated.

Flag: Vessels to fly the new flag of the Islamic Republic of Iran (new flag is green, white and red with a red emblem in the centre).

Bandar Abbas nominated as "Mother Port":
The following information has been received from the Director, Ports and Shipping Organisation, Tehran:–
Quote:
We hereby nominate Bandar Abbas as "Mother Port", and it is required that all ships carrying cargoes for Iranian ports, on passing Ras al Kuh, contact Bandar Abbas in order that they may be allocated an anchorage position within Bandar Abbas port limits.

The diversion thereafter of any vessel to Bushire and/or Bandar Imam Khomeini will take place according to Port and Shipping Organisation planning and programming schedules.
Signed:
Managing Director
Ports and Shipping Organisation
and Assistant Ministry of Roads and Transportation.
Unquote.
Principals should note that in this connection, all Masters are requested to give their arrival notices through Bandar Abbas Port Radio Station (EQI) to the Port Director and Harbour Master.

NOTICES:
B.A. Notice to Mariners No. 34/83:
The Government of Iran has made the following announcements:

1. Vessels proceeding into the Gulf after passing through the Strait of Hormuz should pass at least 12 miles South of the following; Jazirat Bu Musa (Lat. 25° 52′ N., Long. 55° 02′ E.), Jazirat Sirri (Lat. 25° 54′ N., Long. 54° 32′ E.), Cable Bank (Lat. 26° 46′ N., Long. 52° 32′ E.) and thence 12 miles S.W. of Jazirat Farsi (Lat. 27° 59′ N., Long. 50° 11′ E.).
2. After passing Jazirat Farsi vessels should keep West and South of lines joining the following positions:
   (a) Lat. 27° 55′ N., Long. 49° 53′ E.
   (b) Lat. 29° 10′ N., Long. 49° 12′ E.
   (c) Lat. 29° 10′ N., Long. 48° 40′ E.

After passing position (c) vessels may proceed North to Kuwait Harbour.

3. All vessels heading for Iranian ports should report to Bandar Abbas Port Control on passing Ras al Kuh (Lat. 25° 48′ N., Long. 57° 17′ E.) stating their ETA at the Strait of Hormuz and destination. If clearance is not received before passing Bandar Abbas (Lat. 27° 11′ N., Long. 56° 17′ E.) vessels should proceed to the anchorage off that port.
4. Deep draft tankers, loaded and not inward bound for Iranian ports, intending to enter the restricted zone North of a line joining the positions in (1) should request clearance from the Iranian Ports and Shipping Organisation (Telex 212271 BNDR IR) 48 hours before departure giving the following information:
   (a) Last loading port
   (b) Destination
   (c) Route
   (d) Speed
   (e) Time of departure
   (f) Visual identification

The Government of Iraq has made the following announcements:

1. An exclusion zone has been established North of a line joining the following positions:
   Lat. 29° 30′ N., Long. 48° 30′ E.
   Lat. 29° 25′ N., Long. 49° 09′ E.
   Lat. 28° 23′ N., Long. 49° 47′ E.
   Lat. 28° 23′ N., Long. 51° 00′ E.
2. The area North of Lat. 29° 30′ N. has been declared a war zone.
3. Vessels entering waters at the head of the Gulf risk hitting mines or being attacked by the Iraqi Navy.
4. Tankers berthing at Jazireh-ye Khark oil port regardless of nationality may be attacked by the Iraqi Air Force.

Procedures for vessels approaching Iranian Ports: The following information on procedures are necessary.
Masters should:
Contact Bandar Abbas Port Radio on the following frequencies:
HF 8469 kHz
MF 500 kHz
MF 464 kHz
and state:

1. Ship's name.
2. Flag.
3. Kind of vessel.
4. Loading or discharging port(s).
5. ETA Sirri Island (for tankers).
6. Expected time and date of passing Hormuz.
7. Ship's speed.
8. Reason for call/cargo for Discharge or to load prior to arrival, and take instructions.

As per latest instructions issued by Iranian Port Authorities, the words "Persian Gulf" should follow the name of Iranian ports in the Persian Gulf in all messages, example: "Kharg Island Persian Gulf".

Tankers should anchor at Sirri Island after passing Bandar Abbas for proper turn when loading at Kharg Island, unless instructed to proceed towards Kharg Island directly.

Upon anchoring Sirri Island vessels should communicate with Sirri Marine on VHF for further instructions.

Masters should send all messages and ETA notices for NIOC Kharg Island, Lavan Island, Sirri Island and other oil loading ports, also for NIOC head office at Tehran, should be sent via Bandar Abbas Port Radio, with copy to Agents.

Arrival Notice – Tankers:
Please instruct all tankers to advise NIOC 72 hours prior to arrival to Kharg Island (P.G.) otherwise Marketing and Export Operation Department has no responsibility, so kindly advise urgently the following information:

1. Ship's deadweight.
2. Arrival loaded displacement.
3. Cargo bunker requirement.
4. Deballasting time.
5. Height of manifold when vessel ready to load.
6. Maximum arrival and sailing draft.
7. Vessel's dimensions.

Please furnish the Harbour Master at Kharg Terminal with above information from now on. Meanwhile it would be much appreciated if you follow the same procedure for other terminals (i.e. Sirri and Lavan) if the vessels are intended to load there.

THE FOLLOWING FACILITIES AND OPERATING PROCEDURES WERE AVAILABLE ON 1st SEPTEMBER, 1980. HOWEVER, NO FURTHER INFORMATION RECEIVED SINCE THAT DATE.

ABADAN: 30.20 N. 48.16 E.

Port of Abadan situated on right bank of the Shatt-al-Arab, about 47 miles up river from Rooka Buoy.
DOCUMENTS/PILOTAGE: See "Khorramshahr".
ANCHORAGES: On arrival of pilot boat vessel can anchor with no depth restriction. On entering the Shatt-al-Arab the following are the recognized anchorages: Kasba Anchorage position about 2 miles above Fao with a max. depth of 35 ft. in fresh water. Bawarda Anchorage position about 2 miles above Abadan with a max. depth of 31 ft. in fresh water. Vessels which are too deep to pass out of the river on one tide will be required to anchor at Kasba.
RESTRICTIONS: The Port is open for day and night navigation with arrival and sailing being controlled by the tide. Vessels normally enter the Bar at 4 hours before high water at the Bar or at 2 hours after high water at the Bar. Those entering 4 hours before, arrive at Bawarda anchorage generally during flood tide, so must anchor for 6 hours awaiting ebb. Those entering 2 hours after high water, arrive Bawarda during ebb tide and berth on arrival, providing berth available, weather conditions permit and outward movements do not delay. Vessels always berth starboard side to stem the ebb tide and without using tugs and leaving Abadan 4 to 6 hours before high water at Bar.
MAX. SIZE: Max. length 600 ft. Max. draft in the Shatt-al-Arab, Abadan and other river ports is 28 ft. 06 in.
HEALTH: Inward clearance is affected on board after receiving free pratique. Also see "Khorramshahr" – "Documents".
RADIO: The National Iranian Oil Company Coastal Radio Station call sign EQZ. The station listens for various calls on the normal International Marine Calling frequencies. When close to may be contacted on 500 kHz transferring to 428 kHz for exchange of traffic. Traffic list sent at 5 minutes past odd hours.
TUGS: Not available.
BERTHING: While no changes have actually occurred in the production capacity of the Abadan Refinery, the number of jetties on the Abadan riverside have been reduced to eight. Nos. 3, 4, 7, 9, 11, 16, 22 and 26 have been maintained and are used for bunkering purposes and dry cargo operations.

Ships pass day and night so it is necessary that mooring lines be kept taut at all times to prevent surging on the jetties thereby breaking lines and causing damage to Company property.

Bunkering jetties for those vessels coming only for purpose of taking bunkers are:

Jetty No. 3	Draft alongside	31 ft.
Jetty No. 9	„ „	28 ft.
Jetty No. 22	„ „	25 ft.
Jetty No. 16	„ „	28 ft.

Bunkering jetties for those vessels bringing Oil Company's cargo are:

Jetty No. 7A	Draft alongside between 28 ft.–31 ft.
Jetty No. 7B	
Jetty No. 7C	
Jetty No. 7D	

MEDICAL: Emergency cases: an ambulance will be dispatched on demand by calling telephone number 5555.

In ordinary cases of sickness or dental treatment: Agents will arrange transportation of patients, and advise Masters regarding necessary medical attention forms. If patient does not speak English he should be accompanied by an interpreter. Only in exceptional cases will a medical officer visit a patient on board.
TANKERS: Deliveries of the refined oil products of Abadan Refinery are effected to ocean-going tankers at Bandar Mahshahr since the inauguration of the products terminal of the National Iranian Oil Company at that port, therefore such shipments are not taking place from Abadan any more.
DENSITY: Fresh water.
FRESH WATER: Available at all jetties and at the anchorage by barge.

FUEL: Ships' bunkers are available; however not all types are available at all jetties, therefore, ship's Master should advise by radio the exact quantity and kind of bunkers required. Bunkers are delivered concurrent with loading unless otherwise requested by Master. Due to heavy bunkering commitments it is mandatory that vessels take their bunkers when convenient for the terminal, any delay incurred by a vessel taking bunkers after loading is the responsibility of the Master.
GENERAL: All other items, see "Khorramshahr".
AUTHORITY: National Iranian Oil Co. Abadan Refinery.
AGENT: Gulf Agency Co. (Iran) Ltd.*
Contact and Sales Offices:

Sweden: G.A.C. Shipping Ltd. AB., Skeppsbron 30, 111 30 Stockholm, Sweden. Cables: "GACSHIP", Stockholm. Telex: 10137, 17631 ("GACSHIP S"). Tel. 234830, 248250 (10 lines).

Norway: Gulf Agency Co. (Norway) Ltd., Fridtjof Nansens Plass 8, P.O. Box.1701, Vika, 0121 OSLO 1, Norway. Cables: "GACSHIP", Oslo. Telex: 18809, ("GAC N"). Tel. 427331, 424224.

United Kingdom: G.A.C. Shipping (U.K.) Ltd., 75 Bell Street, Reigate, Surrey, England. Cables: "GACSHIP", Reigate. Telex: 944422 and 8950181 (5 lines). ("GAC UK G"). Tel. Reigate 42255/6/7 and 22111/12/13.

Greece: Gulf Agency Company Ltd., 32 Kifissias Avenue (Paradisos), P.O.Box 61087, 15110 Amarousion, Athens, Greece. Cables: "CONFIDENCE" Athens. Telex: 218407, 218695 ("GAC GR"). Tel. 683-0612 (7 lines).

United States of America: G.A.C. Shipping (North America) Ltd., One South Finley Avenue, Basking Ridge, New Jersey 07920, U.S.A. Telex: WUI – 666226 ("GAC SUMT"), RCA – 219273 ("GAC UR"). Tel. (201) 766-7900.

*All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian Ports should be directed to G.A.C. Shipping (U.K.) Ltd.

BANDAR ABBAS: 27.08 N. 56.12 E. (See Plan Book)

DOCUMENTS:
Quarantine Officer
Crew List (1 copy, also all crew vaccination cards for inspection).
Customs Officer
Crew List (2 copies).
Stores List (2 copies).
Port Authority
Crew List (1 copy).
Agents
Crew List (2 copies).
In order to avoid any delay in entering and discharging, the following documents must be sent by all loading port Agents to Bandar Abbas Agents as far in advance of vessel's arrival as possible:
Cargo Manifest (6 copies).
Freight Manifest (2 copies).
B/L Copies (2 copies each).

All cargo shown on Manifest must be landed at the port, and it is therefore essential that short-shipments, cancellations, diversions, etc. (if any) be reported as early as possible and manifest should be corrected before submission to Port Authorities to avoid payment of fines. Stowage plans and hatch lists should also be sent ahead, giving ample time to be studied by Cargo Supervisor for unloading arrangements.
PILOTAGE: Application for Pilot to be made well in advance through Bandar Abbas Port Radio EQI. Agents may also arrange pilotage but should be advised of ETA well in advance.
ANCHORAGE: Approx. position Lat. 27° 04′ N., Long. 56° 04′ E. Depth 36 ft. The distance from the Outer Anchorage at Buoy No. 1 to the port entrance is about 2 miles.
RESTRICTIONS: Entry or departure day or night. Depth of water alongside jetty, minimum 34 ft. and depth in channel approx. 32 ft. at LW. Height of tide at HW about 3 m.

Width of entrance channel is about 150 m. at surface, and 100 m. at seabed.
MAX. SIZE: Port can accommodate vessels up to 600 ft. length with a max. draft of 33 ft.

Max. draft alongside: Jetty Nos. 1, 2 and 3 – 33 ft.; Nos. 4 & 5 – 31 ft.; No. 6 – 30 ft.
RADIO: Bandar Abbas Port Radio EQI – 500 kHz. 24 hour service. Port Telex No. 0362815 BDBA IR.
VHF: Channels 13, 16, 18 and 25. HF call-sign EQI available. Also see "Radio". Tugs on Channels 13 and 16.
TUGS: 2 tugs 1,200 h.p. each, for harbour services, as well as for towage, in case of necessity.
BERTHING: Also see "Developments". Berthing and unberthing possible throughout 24 hours.

Quay is 1,050 m. in length, 35 m. width and capable of accommodating 6 vessels each of 175 m. LOA.

The Barge Jetty with a depth of 24 ft. can accommodate one vessel for alongside discharge.

There are 2 closed sheds, each having a capacity of 7,500 tons, 1 closed shed with a capacity of 15,000 tons and 6 open sheds having capacity of 100,000 tons.

Ore handling installation. The ore is loaded by conveyor belt and the average daily loading rate is 1,500 tons per day running from 0630 hrs. to 2200 hrs. daily.

Chrome ore loading is carried out at one hatch at a time only, and therefore the vessel has to be shifted by the crew in order to load the other hatches.

Grain discharged at rate of 2,500 – 3,000 tons per day using vacuators. Rate is dependent on receivers ability to arrange transport for direct delivery. No silos. Work continues throughout 24 hours in 2 shifts of 12 hours each.
STEVEDORES: Bagged cargo can be discharged at the rate of 800/900 tons per day, working 5 hooks.

Working hours at the New Port are, 0730 – 1200 hrs., 1300 – 1800 hrs., and 1900 – 2300 hrs., making a total of 3 shifts.
CARGO GEAR: All vessels calling at this port must be capable of loading/discharging with their own gear, including rope, canvas and wire slings as necessary and/or wire or rope nets, etc.
Equipment: Equipment available ashore is as follows:
1 mobile crane of 60 tons; 1 mobile crane of 25 tons; 6 mobile cranes of 10 tons; 7 mobile cranes of 6 tons; 10 forklifts of 2 tons; 10 forklifts of 3 tons; 2 forklifts of 5 tons; 15 tractors, 15 trailers of 30 tons; 19 trailers of 20 tons; 11 trailers of 10 tons.
FREIGHT TAX: Freight tax is payable on any freight earned in Iran for any export cargo loaded at any Iranian port. Per article 90 of Tax Law, freight tax is payable at the rate of 5 per cent of gross freight, regardless of whether freight is collected in Iran or elsewhere. There is no tax on import cargo freight regardless of where the freight is paid. In other words, for cargo discharged in Iranian ports, even if freight is payable at destination to be collected in Iran, there is no tax applicable.
MEDICAL: There is a General Hospital with about 100 beds. A number of physicians and dentists are available. Facilities available for vaccinations and inoculations.
FRESH WATER: Fresh water is available at all berths ex-pipe-line excepting the chrome ore berth which is at a separate jetty. Vessels loading chrome ore must take fresh water (and bunkers) before or after loading as there is no connection at the ore loading berth. Fresh water also available ex-barge at the anchorage. There may be a shortage during Summer months.
FUEL: Fuel is available at all berths ex-pipe-line excepting the chrome ore berth which is at a separate jetty. Vessels loading chrome ore must take fuel (and fresh water) before or after loading as there is no connection at the ore loading berth.
CUSTOMS: Customs Officer will seal the store-room. All liquor and cigarette stocks will be placed under bond and reasonable ship's requirements should be taken from store before sealing.
IDENTIFICATION CARDS: According to regulations in force seamen should hold shore pass issued by respective Agents and signed by the Port Health, Port Police and local town Police Authorities. All shore passes should bear a photo of the holder, in order to facilitate checking at exit of port area. It is therefore necessary for Officers and crew to have a photo ready on arrival at the port to facilitate obtaining shore passes.
CONSULS: None.
REPAIRS: Minor repairs available at private workshops.
WEATHER: With the exception of about 2 months during the Winter, the air is generally wet and humid, but with little rainfall. Temperature seldom falls below 10 degrees centigrade in Winter, and seldom exceeds 40 degrees centigrade in Summer.
AIRPORT: About 15 km. distance from the port. Jet flights to international destinations on virtually a daily basis.
TIME: GMT plus 3.5 hours in Winter and GMT plus 4.5 hours in Summer.
TELEPHONES: May be placed on board.
SERVICES: Survey, repairs, crew changes at sea or launch service to vessels off the port can be arranged. Contact through Agent.
SHORE LEAVE: Provided Security Dept. approves, crew allowed to go ashore by surrendering their seamen's books to port police guard.
NOTICES:

ISLAMIC REPUBLIC OF IRAN
MINISTRY OF ROADS AND TRANSPORTATION
PORTS AND SHIPPING ORGANIZATION
Notice to Mariners No. 4/61
Subject: INSTALLATION OF A NEW LIGHT BUOY

A safe water light buoy (IALA System "A") has been installed in position Lat. 27° 04′ 27″ N., Long. 56° 09′ 15″ E. Entrance to channel of Shahid Rejaie Port (New port complex of Bandar Abbas), Fl.Iso(2+2) 7 nautical miles.
Charts Affected: B.A. 2888 – 2837.
U.S.H.O. 62390.
Signed: Deputy Managing Director for Operations
Telex: BNDR 212271 Iran

Further to our N.T.M. No. 4/61 (see "Notice" above) the following light buoys have been installed in the channel of Shahid Rejaie Port (new port complex of Bandar Abbas (P.G.))

Station Name Number	*Position*	*Body Shape Colour*	*Light Rhythm Colour*	*Type of Buoy*
Entrance	27° 04′ 21″ N.	Pillar	FL W	
To Channel	56° 09′ 15″ E.	R.W.VS	ISO (2+2)	Safe
No. 1 Buoy	27° 04′ 52″ N.	Pillar	FL	Star
	56° 06′ 56″ E.	G	G 3S	
No. 2 Buoy	27° 04′ 36″ N.	Pillar	FL	Port
	56° 07′ 35″ E.	R	R 3 S	
No. 3 Buoy	27° 05′ 07″ N.	Pillar	FL(2)	Star
	56° 05′ 39″ E.	G	G 6 S	
No. 4 Buoy	27° 04′ 51″ N.	Pillar	RL(2)	Port
	56° 05′ 18″ E.	R	R 6 S	
No. 6 Buoy	27° 05′ 03″ N.	Pillar	FL	Port
	56° 05′ 00″ E.	R	R 3 S	

Charts Affected: B.A. 2888, 2837
U.S.H.O. 62390.
Signed: Deputy Managing Director for Operations.

Notice to Mariners No. 9/61

THE LIGHTS OF APPROACH TO BANDAR ABBAS (P.G.)

The lights of approach to Bandar Abbas have been changed to I.A.L.A. System 'A' and certain displacements were made at the following positions:

Type of Buoy	*Position* *Latitude* *North*	*Longitude* *East*	*Light Rhythm* *Colour*	*Body Shape* *Colour*
Safe Water	27° 04′ 21″	56° 19′ 48″	Fl.W ISO (2+2)	Pillar R.W.VS
Star	27° 06′ 22″	56° 16′ 00″	Fl. (2) G5S	Pillar G.
Port	27° 06′ 08″	56° 14′ 51″	Fl. (2) R7S	Pillar R.
ISD	27° 06′ 08″	56° 12′ 19″	Fl. (2) W6S	Pillar BRB

Charts Affected: B.A. 2888, 3599
U.S.H.O. 62393, 62394.

GENERAL: *Hotels:* The Gameron is a modern hotel equipped with air-conditioning, swimming pool and having 120 beds. A wooden swimming pier has been constructed on the sea-beach opposite the hotel for the use of residents. The Welcome Inn, a 3-star motel equipped with air-conditioning is used by seafarers.

There is another modern hotel, the Shah Abbas. Second-class hotels, about four in number are also available.

Provisions: There are no ship chandlers at Bandar Abbas, but fresh and canned provisions are available through the ship's Agent.

Transport: Distance between port and the town of Bandar Abbas is about 10 km. and there are private mini-buses and taxis available. Motor-boats are available for attendance upon vessels at anchorage and also at the chrome ore berth which is not approachable by land transport.

Laundry: Subject to time available, can be arranged by ship's Agent.

DEVELOPMENTS: A new Bandar Abbas port (Shahid Rejaie Port) is under construction 15 km. West of Bandar Abbas and is expected to be completed in March 1985:

4 wharves to be used for special cargoes. Length of wharves to be 720 m. with an open area of 60,000 sq.m. and suitable for vessels of up to 30,000 d.w.t. but with future allowance for 60,000 d.w.t. A Bunkering Jetty, length 30 m. and to accommodate vessels of up to 40,000 d.w.t.

A shipbuilding and ship repair yard to be built 20 km. West of Bandar Abbas. Facilities to include dry dock for vessels up to 500,000 d.w.t. and floating dock for vessels up to 40,000 tons.

AUTHORITY: Port Director.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan"). All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian Ports should be directed to G.A.C. Shipping (U.K.) Ltd.

BANDAR IMAM KHOMEINI: 30.25 N. 49.05 E.

(See Plan Book)

DOCUMENTS:

Quarantine Officer
Crew List (1 copy, also all crew vaccination cards for inspection).
Customs Officer
Crew List (2 copies).
Stores List (2 copies).
Port Authority
Crew List (1 copy).
Agents
Crew List (2 copies).

In order to avoid any delay in entering and discharging, the following documents must be sent by all loading port Agents to Bandar Imam Khomeini Agents as far in advance of vessel's arrival as possible:
Cargo Manifest (6 copies).
Freight Manifest (2 copies).
B/L Copies (2 copies).

All cargo shown on manifest must be landed at the port, and it is therefore essential that short-shipments, cancellations, diversions, etc. (if any) be reported as early as possible and manifest should be corrected before submission to Port Authorities to avoid payment of fines. Stowage plans and hatch lists should also be sent ahead, giving ample time to be studied by Cargo Supervisor for unloading arrangements.

The names of consignees must be inserted on the manifest at the port of origin. This is due to the fact that names have not been inserted as per Iranian Customs authorities requirements.

In view of the above, Owners are kindly requested to make sure that manifests for Bandar Imam Khomeini are properly made out at loading port with correct names of consignees.

PILOTAGE: Application for Pilot to be made well in advance through Bandar Imam Khomeini Port Radio – EQN – 500 kHz. If Agents required to arrange Pilot they should be informed well in advance.

Pilotage operated by Bandar Imam Khomeini Authorities up to Bandar Imam Khomeini. Pilot vessel approximately 1 mile, 135° from Khor Musa Approaches Buoy No. 12. Approach within 2.5 cables of pilot vessel. During adverse weather pilot vessel may proceed above Bar, in such cases, do not attempt proceed inward without Pilot.

APPROACHES: Shipping channels well marked with lightbeacons and buoys and present no navigational difficulties in clear weather.

Small unlit tide gauge platform located on edge of the shoal West of shipping channel in Lat. 29° 42′ 30″ N., Long. 49° 03′ 48″ E., approximately 1.75 miles West of Khor Musa Approaches Buoy No. 4, and shown on Admiralty Chart.

Approaching vessels should steer for Khor Musa Light Float, in position Lat. 29° 36′ 32″ N., Long. 49° 34′ 47″ E., and from there a course should be set along marked channel for Buoy No. 12 in position Lat. 29° 56′ 03″ N., Long. 49° 06′ 47″ E., bearing 308° 45′ from Khor Musa Light Float.

MAX. SIZE: Vessels of 34 ft. draft may enter port at any time. Higher drafts depending on state of tide. Normal rise of tide about 11 ft. Entry permitted day or night.

HEALTH: Medical Officer boards at Bandar Imam Khomeini. Subject no infectious diseases reported on board during voyage, Medical Officer will grant pratique.

RADIO: Bandar Imam Khomeini Port Radio EQN 500 kHz. Telex: 0612051 Bdho Ir.

Continuous watch on 500 kHz is to be maintained at all times while navigating in Khor Musa Waterway.

VHF: Channels 13, 16, 18 and 25. 24 hours service.

TUGS: Normally not required, but available if necessary due to bad weather. 9 tugs – 900/1,200 h.p. 1 tug – 3,200 h.p.

BERTHING: Eastern Jetty, Berths 1 to 5 – 34 ft.
Western Jetty, Berths 6 to 8 – 34 ft.
Berths 9 to 10 – 34 ft.
Berths 11 to 20 – 34 ft.

1 berth is allocated for grain discharge only. This is done by grain vacuvators.

1 barge harbour with 884 m. length and draft of 21 ft.

Also see "Developments".

BULK HANDLING FACILITIES: Iron Ore Installation, loading capacity about 2,000 tons per day. The loading installation consists of 2 powerful moving cranes with a capacity of 100 t.p.h. on each unit, 2 funnel-shaped containers with a capacity of 30 tons each and a 600 m. long conveyor belt with a capacity of 175 t.p.h.

Sulphur: The shiploader travels the length of the vessel and has a loading rate of 400 t.p.h.

All derricks to be swung away from the shore giving the loader maximum clearance. Radio aerials, and fore and back stays to be removed.

Due to high temperatures, every precaution must be taken to combat risk of fire.

Grain: All berths are available for grain discharge. Grain is bagged in holds and discharged in slings using ship's gear. At only one berth is discharge possible by vacuvators. All discharges into railway wagons and/or trucks supplied by receivers.

All vessels discharging general cargo or grain should be prepared to handle discharge with own gear.

EQUIPMENT: 1 crane of 90 tons; 1 crane of 50 tons; 3 cranes of 35 tons; 6 cranes of 15 tons; 10 cranes of 10 tons; 4 cranes of 8 tons; 2 cranes of 6 tons; 7 forklifts of 5 tons; 14 forklifts of 3 tons; 5 forklifts of 10 tons.

MEDICAL: 24 hours advance notice of requirements to be sent to Agent.

FRESH WATER: There is water supply at Jetty Nos. 1 – 8, and Masters are requested to inform their Agents 24 hours in advance of their requirements, allowing Agents to pay for the water and take turn for supplying water to the vessel.

Fresh water can also be arranged at the Inner Anchorage by barge, and Agents will need 48 hours advance notice in order to obtain barge. Agents will have the barge loaded with water from jetty and deliver to anchorage.

As there is only 1 barge available, when this is out of commission, Agents cannot provide water at the anchorage, and vessels have to wait until they are docked alongside. Therefore it is advisable to arrive with ample water on board.

IDENTIFICATION CARDS: According to regulations in force seamen should hold shore pass issued by respective Agents and signed by the Port Health, Port Police and local town Police Authorities. All shore passes should bear a photo of the holder, in order to facilitate checking at exit of port area. It is therefore necessary for officers and crew to have a photo ready on arrival at the port to facilitate obtaining shore passes.

CONSULS: See "Khorramshahr".

REPAIRS: Radio and radar repairs can be arranged from Khorramshahr. At Bandar Imam Khomeini minor technical and mechanical repairs possible by private workshops. Repair shop and slip of 1,500 tons capacity in process of construction.

AIRPORT: Distant 110 km. Regular flights.

TIME: GMT plus 3.5 hours in Winter. GMT plus 4.5 hours in Summer.

DEVELOPMENTS: Depths alongside new jetties when completed will be 13.0 m. – 15.8 m.

Description	*No. of Berths*	*Wharf Length (m.)*	*Completion Date*
Extension of the 4-berth jetty (Container terminal)	4	771	2 cranes in use
Extension of the 10-berth jetty	5	1,051.5	Completed
Extension of the 10-berth general cargo jetty	5	911.2	Completed
Construction of the 14-berth jetty	14	2,552	
Construction of the Lighter harbour	20	880	Completed
Construction of the grain terminal	2	480	
Construction of the ore-loading facilities	1	220	Completed
Ro/Ro berth	1	—	

The container stacking area is about 200,000 sq.m. and equipment ready for use is as follows:

2 gantry cranes, for discharge of containers ex-vessels and 5 transtainers in container area, can accommodate about 12,800 TEU's as well as 630 TEU's of refrigerated containers.

FUEL: Diesel oil and gas oil available by barge at 2–3 days notice.
HATCHES: Opening and closing by ship's crew.
WATCHMEN: Compulsory.
CUSTOMS ALLOWANCES: Reasonable quantity spirits and tobacco for consumption in port may be issued prior sealing store rooms. Strict supervision imposed by Customs and prohibited items, particularly tobacco and cigarettes, should not be taken ashore in excess of 50 cigarettes, or cigars, or 1 oz. tobacco.

SHIPMASTER'S REPORT:
Congestion: In the event of the port being congested vessels anchor initially in the vicinity of Buoy No. 12. Masters should then cable "Harbourmaster Bandar Imam Khomeini" to register the vessels turn giving: Date and time of anchoring; Gross and Net tonnage; length and draft. Pilot vessel "Azadeh" keeps watch on 2182 kHz and occasional watch on VHF Channels 16 and 13, Call sign "Khormusa Pilots". Vessels subsequently anchor in river to seaward of Bandar Imam Khomeini Jetties to await turn.

No water or stores can be obtained at Outer Anchorage.

At Inner Anchorage water and stores can be obtained by launch but with some difficulty.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan"). All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian Ports should be directed to G.A.C. Shipping (U.K.) Ltd.

BANDAR MAHSHAHR: 30.27 N. 49.20 E.

(See Plan Book)

Refined Products Loading Terminal of the National Iranian Oil Company.
FLAG: All vessels required to fly Iranian flag from foremast during daylight hours, while in port.
DOCUMENTS:
8 Crew Lists.
2 Bonded Store Lists.
International Health Form.
If cargo aboard, Manifest certified by Iranian Consulate.
Clearance from Last Port.
GENERAL: Khor Musa is deep tidal inlet at head of the Gulf. Consists of triangular-shaped entrance 35 miles wide and 22 miles long followed by a channel, approximately 14 miles long with average width about 800 ft., ending at Port of Bandar Mahshahr. Khor Musa is entered by deep water approach channel 25 miles long and 0.8 miles wide, commencing at Khor Musa light float, located in position Lat. 29° 36′ 32″ N., Long. 49° 34′ 47″ E. At end of approaches channel, near Buoy No. 12, restricted depths and channel widths extend for distance of 8 miles, in vicinity of Khor Musa Bar. A deep water channel then exists up to commercial port of Bandar Imam Khomeini, and to oil port of Bandar Mahshahr, a total distance of 37 miles from end of Bar Channel. Refined products delivered to Bandar Mahshahr Terminal from National Iranian Oil Company's Refinery at Abadan.
TERRITORIAL WATERS: The 12 mile limit of Iranian territorial waters crosses approaches channel in vicinity of Khor Musa Approaches Buoy No. 8, which is approximately 20 miles from Khor Musa light float.
KHOR MUSA APPROACHES:
Navigational Dangers: Numerous shoals and sand banks in Khor Musa with low-lying shore lines and few conspicuous marks. However, shipping channels well marked with light beacons and buoys and present no navigational difficulties in clear weather. A small unlit tide gauge platform located on edge of shoal West of shipping channel in Lat. 29° 42′ 30″ N., Long. 49° 03′ 48″ E., approximately 1.75 miles West of Khor Musa Approaches Buoy No. 4, and shown on Admiralty Chart.

Outer Khor Musa Channel: Approaching vessels should steer for Khor Musa light float, in position Lat. 29° 36′ 32″ N., Long. 49° 34′ 47″ E., and from there a course should be set along marked channel for Buoy No. 12 in position Lat. 29° 56′ 03″ N., Long. 49° 06′ 47″ E., bearing 308° 45′ from Khor Musa light float.

New Khor Musa Channel: Depth of channel is 40 ft. below L.A.T.

Note: Buoys South of and including Buoy No. 12 above are referred to as Khor Musa Approaches Buoys. Buoys North of No. 12 above are referred to as Inner Khor Musa Buoys.
PILOTAGE: Compulsory. Service operated by Bandar Imam Khomeini Port Authorities up to Bandar Imam Khomeini, and by Oil Company between Bandar Imam Khomeini and Bandar Mahshahr. Pilot vessel maintains station approximately 1 mile, 135° from Khor Musa Approaches Buoy No. 12. Vessels requiring Pilot should approach within 2.5 cables of pilot vessel. During adverse weather conditions Pilot may proceed above bar for shelter; in such cases vessels should not attempt to proceed inward without Pilot. Essential that ETA Bandar Imam Khomeini is transmitted to Coastal Radio Station EQZ as soon as possible after Pilot has embarked at Pilot Station. If for any reason a vessel is required to wait at any time at Bandar Imam Khomeini, it will be advised through EQZ. Marine Operation Section, Bandar Mahshahr Terminal, on receipt of ETA Bandar Imam Khomeini, will arrange for Berthing Master to board vessel at Bandar Imam Khomeini anchorage and allocate jetty berth at Bandar Mahshahr.

BANDAR MAHSHAHR APPROACHES:
Navigational Dangers: Khor Musa Channel well marked with buoys and beacons, but attention is drawn to following:

(a) Outer Khor Musa Bar: Lat. 29° 59′ N., Long. 49° 04′ E. and Inner Khor Musa Bar Lat. 30° 02′ N., Long. 49° 01′ E., where restricted channel widths and depths exist and min. depth 40 ft. Buoyed channel over bar is 800 ft. wide, but declared min. depth of 40 ft. only applicable to central half of channel. Towards edges of channel, shallower depths exist.

(b) Qassar bin Siswan: A rocky shoal, in Lat. 30° 12′ N., Long. 48° 58′ E. approximately 10 miles North of Inner Khor Musa Bar, marked by Buoy No. 9 with min. depth 6 ft.

(c) Khor Wastah to Beacon 18: Near sharp bend to East in channel, where tidal streams reach rate of over 4 knots at ebb.

Khor Musa Bar: Reached approximately 5 miles N.W. from pilot vessel, and normally does not restrict passage of inward vessels.

Khor Musa Channel: After leaving bar, channel is followed up Khor Musa for about 32 miles to anchorage at Bandar Imam Khomeini.

Bandar Imam Khomeini: All inward bound ships required to anchor on arrival off Bandar Imam Khomeini, where Pilot disembarks and a Government Medical Officer comes on board to grant pratique. For this purpose an accommodation ladder should be rigged and ready before arrival.

Bandar Mahshahr Roadstead: Shortly after leaving Bandar Imam Khomeini, the channel to Bandar Mahshahr is entered between the starboard hand Beacon No. 1 (flashing white) and the port hand Beacon No. 2 (temporarily removed). Channel well marked by light beacons to entrance of Bandar Mahshahr, at Beacon No. 4. All port hand lights flash red and all starboard hand lights flash white. Distance from Bandar Imam Khomeini Anchorage to Bandar Mahshahr about 7 miles. Before arriving at Bandar Mahshahr, the accommodation ladder must be taken in and the ship's side cleared for tugs and berthing.

ANCHORAGE: No anchorages in Bandar Mahshahr or Bandar Mahshahr roadstead. Inward bound vessels must anchor on Northern side of Khor Musa Channel, West of Bandar Imam Khomeini, and await arrival of Oil Company Berthing Master.
WIND AND TIDE:
Khor Musa Bar: Classified as Standard Port in Admiralty Tide Tables, Volume II. Tidal predictions considerably affected by strong winds. Variations up to 3 hours in time, and 3.5 ft. in height have been recorded. North-Westerly winds tend to lower level and retard predicted times of high and low waters; South-Easterly winds have opposite effect. At Khor Musa Bar, MHHW has rise of 11.6 ft. and MLHW has rise of 9.6 ft. above chart datum. Rise of tide at bar is also given by automatic tide indicator established near inner Khor Musa Buoy No. 8. Masters may obtain expected depth of water on Khor Musa Bar at any time by telephone to Marine Operations Office, Mahshahr, 4264.

Khor Musa: Tidal range increases between bar and Mahshahr. Maximum tidal velocities in Khor Musa about 3.5 knots on flood and 4.5 knots on ebb, at bend near Inner Khor Musa Beacon No. 18.

At Ports of Imam Khomeini and Mahshahr: Average time high water is 1 hour 35 minutes later, and low water 16 minutes later than on Bar. MHHW has rise of 17.0 ft., and MLHW rise of 14.6 ft. above Mahshahr chart datum.

Mahshahr Terminal: N.W. prevailing winds blow across jetties, from shore. On average, 60% of prevailing winds from N.W., 30% from S.E., and 10% variable. N.W. and S.E. winds frequently reach Force 8, but winds from other directions normally do not exceed Force 4. Maximum tidal range 18.9 ft. At springs, flood tide has velocity of 2 knots and ebb tide velocity 3 knots.

MAX. SIZE: Max. LOA 780 ft. Max. permissible draft at Khor Musa Bar is 40 ft. Depths in tanker berths vary from 37 ft. at Berth No. 4 up to 43.5 ft. at Berth No. 6.

Vessel up to 740 ft. LOA can be berthed day or night at any stage of the tide. Vessels lengths 741 ft. – 780 ft. can only be berthed during daylight hours flood tide and unberthed on flood tide day or night.

HEALTH: Owners should check with Agent respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for crew members. Medical Officer boards at Imam Khomeini Anchorage. Subject no infectious diseases reported on board during voyage, Medical Officer will grant pratique.

RADIO: Oil company has coastal radio station at Abadan, call sign EQZ. Station handles messages to and from oil ports of Mahshahr, Abadan, Kharg Island and Cyrus Terminal.

Nomination and Loading Orders: Signalled by Iranmash on receipt of vessel's first ETA. Vessels should signal tentative ETA Khor Musa Bar, 72 hours in advance, confirming ETA not less than 48 hours before arrival Khor Musa Pilot Vessel Station.

Radio Watches: Continuous watch on 500 kHz to be maintained at all times while navigating Khor Musa waterway, and ordinary listening watches maintained when at anchor.

VHF: Mahshahr Terminal equipped with International Maritime VHF/FM Radio Telephone Service, using standard international frequencies. Masters recommended use this facility when within range of Mahshahr Terminal. Channels available on continuous watch basis:

No. 16 Safety and Calling.
No. 12 Port use, tankers and tugs.
No. 20 Port use, telephone extension.
No. 26 Port use, telephone extension.

Initial contact should be made on Channel 16 and then transfer to Channel 12 for port operations, or Channel 20 or 26 for telephone extension.

TUGS: 3 tugs at terminal, all of 1,500 b.h.p., all fully equipped for fire fighting. Incoming ships are met by tugs in channel about 1 mile below port limits. 2 tugs always used berthing, and 1 or 2 unberthing, according to state of tide and direction of ship's head. Vessels take tug's ropes.

BERTHING: Vessels arriving on flood tide berthed starboard side to jetty, vessels arriving on ebb tide berth port side to jetty. 6 bulk loading jetties, each fitted with Woodfield loading unit. 10 in. loading arms, 6 in. bunker arms. Minimum number mooring ropes or wires required is 14, as follows: (Forward) – 4 head ropes, 2 breast ropes, 1 back spring. (Aft) – 4 stern ropes, 2 breast ropes, 1 back spring. For additional security 1 extra breast line forward and aft should be used. Unless breasts of adequate strength line are used, there is every possibility of vessel when in light condition being blown off jetty by N.W. wind and damaging loading equipment.

Maximum loading rates are:

Liquid propane/butane	1,500 t.p.h.
Aviation gasolines	700 t.p.h.
White spirits (solvent)	400 t.p.h.
Motor gasolines	2,200 t.p.h.
Motor gasoline (over the rail blending)	400 t.p.h.
Naphtha	2,100 t.p.h.
Turbine fuels	1,600 t.p.h.
Kerosines	1,500 t.p.h.
Gas oils	2,500 t.p.h.
Marine diesels	700 t.p.h.
Fuel oils	5,000 t.p.h.

LPG LOADING: Propane and butane gas is loaded at No. 6 Jetty at a rate of 1,500 t.p.h. Propane and butane cannot be loaded simultaneously.

As 16 in. fixed Chicksan liquid and vapour return arms are used for loading, certain ships are limited to one-side berthing only. To avoid delay of vessels, it is advisable to have vapour return connections on both sides of liquid connection on board.

Terminal has available a series of ASA Standard reducers and adapters.

Loading temperature of propane is about minus 48°F., and butane is about minus 23°F.

BALLAST: Tankers may discharge ballast ashore at Jetty Nos. 1, 2, 5 and 6. Ballast received at rate of 2,000 t.p.h. Slops and residues at rate of 200 t.p.h.

MEDICAL: No medical facilities at terminal. Agents may arrange medical attention through Oil Company clinic in Abadan. In event hospital treatment required, patient would be taken to Abadan.

FRESH WATER: Limited supply potable water available all jetties, but supply very limited during months June to October.

FUEL: Fuel and diesel oil available each jetty. 10 in. loading arms connected to 6 in. flexible hoses. Loading rates, fuel max. 500 t.p.h., diesel max. 400 t.p.h. 48 hours notice required.

FIRE PRECAUTIONS: On arrival Imam Khomeini Anchorage, Master is given 6 copies of Fire and Safety Regulations. Fire Station and Emergency tel. 4111.

CUSTOMS ALLOWANCES: Reasonable quantity spirits and tobacco for consumption in port may be issued prior sealing store rooms. Strict supervision imposed by Customs and prohibited items, particularly tobacco and cigarettes, should not be taken ashore in excess of 50 cigarettes, or cigars, or 1 oz. tobacco.

CONSULS: Consulates situated in Khorramshahr.

REPAIRS: No repair facilities at Mahshahr or Imam Khomeini. In emergency, the Oil Company may be able to undertake minor repairs. No main engine repairs whilst alongside loading jetties without permission from Terminal Superintendent.

TIME: GMT plus 3.5 hours. GMT plus 4.5 hours in Summer.

TELEPHONES: Available at each jetty. If requested, telephone may be placed aboard.

SHORE LEAVE: Restricted to foreshore area only. Recreation centre opposite No. 2 Jetty.

CURRENCY: The unit of currency is the Iranian Rial. It is ilegal to use any other than Iranian currency ashore and heavy fines have been imposed for infringement of this regulation. Masters are requested to bring this matter to the individual notice of their officers and crew. Currency denominations are:

Notes: 10,000, 5,000, 1,000, 500, 200, 100, 50 rials.
Coins: 20, 10, 5, 2 and 1 rial.

AUTHORITY: National Iranian Oil Co. Bandar Mahshahr.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan"). All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian Ports should be directed to G.A.C. Shipping (U.K.) Ltd.

BUSHIRE: 28.59 N. 50.50 E. (See Plan Book)

DOCUMENTS:

Quarantine Officer
Crew List (1 copy, also all crew vaccination cards for inspection).
Customs Officer
Crew List (2 copies).
Stores List (2 copies).
Port Authority
Crew List (1 copy).
Agents
Crew List (2 copies).

In order to avoid any delay in entering and discharging, the following documents must be sent by all loading port Agents to Bushire Agents (via Khorramshahr) as far in advance of vessel's arrival as possible:

Cargo Manifest (6 copies).
Freight Manifest (2 copies).
B/L Copies (2 copies each).

All cargo shown on manifest must be landed at the port, and it is therefore essential that short-shipments, cancellations, diversions, etc. (if any) be reported as early as possible and manifest should be corrected before submission to Port Authorities to avoid payment of fines. Stowage plans and hatch lists should also be sent ahead, giving ample time to be studied by Cargo Supervisor for unloading arrangements.

PILOTAGE: Compulsory. Application for Pilot to be made well in advance through Bushire Port Radio EQM, 500 kHz. Agents may also arrange pilotage but should be advised of ETA well in advance.

ANCHORAGE: In outer port in (approx.) position Lat. 28° 58′ 30″ N., Long. 50° 44′ 50″ E.

RESTRICTIONS: Entry and departure day or night. Depth in outer channel 10.5 m. at LW. Depth of inner channel, 30 ft. at LW and 35 ft. at HW.

The depth alongside the berth is 30 ft. at LW and 37 ft. at HW.

MAX. SIZE: LOA 600 ft. Max. draft in channel is 28 ft.

RADIO: Bushire Port Radio EQM, 500 kHz. Telex number of port 0332108 BDBU IR.

VHF: VHF radio, operating on International VHF Marine Channels 13, 16 and 25. MF call sign EQM available at following zone times: 0500 to 0800 hrs. and 1200 to 1500 hrs.

TUGS: Normally not used. In event of bad weather tug will assist berthing. 2 tugs up to 250 hp, 2 tugs of 1,200 hp.

BERTHING: Jetty 360 m. long.
Max. draft No. 1 Jetty – 29 ft.
No. 2 Jetty – 25 ft.
Dolphins – 29 ft.
Navy Jetty – 21 ft.

MEDICAL: 24 hours advance notice of medical requirements to be passed to Agents. Doctor available for vaccinations and inoculations.

FRESH WATER: Available at berths ex-pipe-line.

FUEL: Not available.

HATCHES: To be opened and closed by shore labour.

CUSTOMS: Customs Officer will seal the store room. All liquor and cigarette stocks will be placed under bond and reasonable ship's requirements should be taken from store before sealing.

CARGO GEAR: *Equipment*
2 cranes up to 5 tons
6 cranes up to 5/10 tons
3 cranes up to 10/15 tons
1 crane up to 20/30 tons
1 crane over 50 tons (max. 60 tons).
5 forklifts 2/3 tons
7 forklifts 3/4 tons

IDENTIFICATION CARDS: According to regulations in force seamen should hold shore pass issued by respective Agents and signed by the Port Health, Port Police and local town Police authorities. All shore passes should bear a photograph of the holder, in order to facilitate checking at exit of port area. It is therefore necessary for officers and crew to have a photograph ready on arrival at the port to facilitate obtaining shore passes.

CONSULS: None.

REPAIRS: Minor repairs possible by local workshops.

AIRPORT: 7 km. from port. Regular flights.

TIME: GMT plus 3.5 hours in Winter and 4.5 hours in Summer.

TELEPHONES: May be connected on board.

SHORE LEAVE: Permitted.

DELAYS: Occasional delays awaiting berth turn.

SHIPMASTER'S REPORT: 1976.

Fresh Water: Available at wharf ex-pipe-line but mains pressure is insufficient to pump water up to deck level of vessels and is therefore only generally available to small craft, e.g. fishing vessels.

Fresh water is also available ex-road tankers (10 tons and 20 tons capacity). Tankers are not equipped with pumps and a portable pump belonging to the Fire Brigade is used.

Identification Cards: Crew members proceeding ashore leave their Seamen's Book or identification card at the wharf check point and collect same on return.

Fuel: Bunker fuels and lubricating oils not available.

Watchmen: Posting of gangway and/or deck watchmen most advisable but recommend these should be provided from crew members.

SHIPMASTER'S REPORT: 1977.

Vessel discharged 726 metric tonnes of crane parts in 2 days (4 hatches).

ETA: To be given at least 7 days in advance through Bahrain Radio as telegrams take 2 days. From the outer anchorage the following Telegram must be sent to "Port Director Bushire" via Bushire Radio EQM 500 kHz: Anchor time, Draft, Length, Breadth, Cargo, Last Port.

Outer anchorage: Buoy No. 2 of fairway bearing 130° and 250° to the prohibited area in 10 m. to 20 m. water. The anchorage is not protected, but the holding ground is good, even in bad weather.

Pilots: The Pilot comes by a fast blue boat to the outer anchorage. There is 1 Pilot, also assistant and 1 docking master with 1 assistant, they only come out in daytime and good weather.

Tugs: There are 2 small and 1 large tugboat, which are used for turning the ship.

Pier: The 360 m. long pier has good wooden and rubber fenders and sufficient bollards. Ships always berth port side alongside. The starboard anchor is used for turning.

Clearance: The following documents are necessary:
5 crew lists.
1 health clearance.
1 vaccination list (cholera/smallpox).
1 store list.
1 crew effects list.

The stores and the radio-room are sealed, beer is not sealed.

Immigration: The immigration officials do not come aboard, the Agent takes all seamen's books ashore and exchanges them for shore passes which are valid from 0600 hrs. until 2200 hrs. while the ship is in port. Before leaving the seamen's books will be returned in exchange for the shore-passes.
Provisions: Fruit and fish can be obtained, good quality and low prices at the local market.
Water: Water from the pier in any quantity and good quality. The pipeline – pressure is only enough for heights of about 3 m. to 4 m., so that some "tricks" must be used for larger ships.
Doctor: 24 hour's advance notice required.
Sea Protest: Notary public available, no consulates.
Bunkers: Not available.
Repairs: Were urgently required by the vessel and confirmed by Agent's, but nobody came on board.
Photographs: Taking of pictures not allowed, as Bushire is Military Base.
Crew-change: Very easy and can be done even on the outer anchorage when the ship has no clearance. The crew coming without delay directly from the airport to the ship in a launch which costs, for 1 trip (4 hours) only, US $71.00.

AUTHORITY: Port Director.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan"). All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian Ports should be directed to G.A.C. Shipping (U.K.) Ltd.

CHAR-BAHAR: 25.17 N. 60.37 E. (See Plan Book)

ANCHORAGE:

Latitude: 25° 22′ N.	Longitude: 60° 30′ E.
Latitude: 25° 22′ N.	Longitude: 60° 33′ E.
Latitude: 25° 18′ N.	Longitude: 60° 30′ E.
Latitude: 25° 18′ N.	Longitude: 60° 33′ E.

MAX. SIZE: Max. size 10,000 d.w.t. – 28,000 d.w.t. Max. draft 28 ft. at HHW.
VHF: All ships destinated to the Chah-Bahar Port are requested to call Chah-Bahar on VHF Channel 16 between 0700 to 1900 hrs. local time.
DEVELOPMENTS: Considerable development is taking place, and the port is expected to become of considerable importance in the future. No date for expected completion of various development work being undertaken has been received, but we understand that the following plans have been made:—

A Container Terminal with length of 270 m., a warehouse of 9,000 sq. m. and an open area of 60,000 sq. m., suitable for vessels of up to 30,000 d.w.t.

Two Jetties for general cargoes. Length of jetties to be 360 m. with warehouses of 54,000 sq. m., and an open area of 60,000 sq. m., suitable for vessels of up to 20,000 d.w.t.

One Bunkering Jetty. Length of jetty 300 m. and suitable to accommodate vessels of up to 30,000 d.w.t.

SHIP'S OFFICER'S REPORT: May 1983.
Approaches: The approaches to Char-Bahar from the East, West and South are straightforward, as far as the Outer Anchorage Areas, where a Pilot will embark. There is a buoy in position Lat. 25° 14.8′ N., Long. 60° 29.6′ E., and marks a 16 m. obstruction to the North of it.

There is a Fl. 10s. 16M. light on Damagheh ye Chah-Bahar Point, this is at the present time unlit, and the racon on the point has not been observed either.

The light on Damagheh ye Puzim is Fl. (1) 15s. 30m. 10M., and working at present.

The coastline also offers a good radar target, on both sides of the bay.
Pilotage: Pilotage is compulsory (to the best of my knowledge), the Pilot boards the vessel at anchor to the South of Damagheh ye Chah-Bahar Point, and takes the vessels to the anchorage within the bay (see Admiralty Chart No. 145).

The pilot boat is merely an open boat. International code flag "G" has to be flown by vessels requiring a Pilot.
Anchorages: The anchorage where vessels have been discharging, is bounded by the following positions: Lat. 25° 22′ N., Long. 60° 30′ E.; Lat. 25° 22′ N., Long. 60° 33′ E.; Lat. 25° 18′ N., Long. 60° 30′ E.; Lat. 25° 18′ N., Long. 60° 33′ E.

The bottom is soft mud, and the minimum charted depth is 10.3 m.
VHF: There is a Port Control Office situated in Konarak, the details are:
Frequency: VHF Channel 16, Channel 14.
Hours: 0600-1330 hrs., 1430-1830 hrs. local time.
Call: Konarak Port Control.
Tugs: There are 2 tugs at the port, however, they appear to be involved in the port construction. No further information is known about size, horsepower, etc.
Berthing: There is extensive work being carried out at Char-Bahar, however at present there are no berths open to vessels, 4 berths are due to be completed within the space of 4 months approximately. When these berths are open the main cargoes to be handled are bagged grain and fertiliser, for distribution within this Southern area of Iran. Vessels are however being discharged at anchor into barges and their contents being taken to Konarak.
Medical: There is a hospital, with limited facilities, at Char-Bahar.
Fresh Water: Not available.
Fuel: Not available.
Repairs: Not available.
Cargo Gear: Ship's gear used at anchorage.
Repatriation: Possible from Char-Bahar and Konarak, however, trouble can be experienced as personnel have to fly to Tehran.

It is, at present, due to the unrest within the country, very difficult for ship's personnel to join a vessel in Iran in general.
Airport: The airport is at Konarak, and has 5 flights to Tehran per week, but not on Sundays and Tuesdays. Flights from Tehran are still daily.
Time: GMT plus 3.5 hours (Summertime may be kept).
Holidays: No work is carried out on Fridays.
Shore Leave: Shore leave is not permitted, any person visiting the vessel, e.g. doctor, has to accompanied by the vessel's Agent.
Regulations: Vessels are not permitted to leave Char-Bahar without clearance papers from the Harbour Master.
Delays: With most Iranian ports now at a standstill, delays of varying lengths can be expected.
General: From approximately mid June all facilities are closed down at Char-Bahar due to the S.W. Monsoon, as the working anchorage is affected by the S'ly swell that develops. Ships waiting here to proceed to Bandar Abbas, will also be despatched as the Agents, etc. also close down, and the whole port set-up is then non-operational.

Ship's stores are not available at Char-Bahar.
Authority: The main Port Administration takes place at Konarak, where there is a Harbour Master's Office and radio station.
Agent: The main Agents at Char-Bahar appear to be Shipping Co., Tehran. There are no telex facilities ashore, however there are no restrictions placed on vessels who wish to use their own radio equipment.

SHIPMASTER'S REPORT: January 1984.
Anchoring: 3 nautical miles East of the buoy at about Lat. 25° 15.5′ N., Long. 60° 29.5′ E. off Ras Pusim.
Port: Unsheltered Port (Port Facilities under development). No bad weather docking. Max. draft 31 ft. Max. length 200 m. Density 1026.0.
Pilot: Pilotage compulsory, will be advised by Port Control and meets vessel at the anchorage. Pilot comes out by tug.
VHF: Char-Bahar Port Control on Channels 16 and 12.
Tugs: 1 tug of 2,500 hp ("Ramassan"). Tug lines available, no line charges.
Documents: 7 Crew lists, 7 Passenger lists, 7 Store lists, 7 Vaccination lists (Cards for inspection, Cholera obligatory), 7 Cargo manifests, last draft survey from loading port for bulk carrier, Ship's safety certificates for inspection (Rats, Cargo, etc.).
Health: From other Iranian ports no clearance formalities necessary. From sea clearance is effected before coming alongside and arrival.
Radio: Via Radio Bandar Abbas EQI.
Discharging: Only by ship's gear. Port Authorities have to be informed about cargo gear type (Cranes or derricks). No shore facilities. In case of emergency 1 crane of 75 tons lifting capacity available. Bulk cargo discharging rate about 2,000 tons per day, will be carried away by lorry. Stevedore chief has to be accommodated and fed.
Jetty: Consists of two pontoons on legs, connected by a bridge. Size of pontoons 150 m. by 30 m., bridge length 90 m. 8 bollards on pontoon ship's side.
Fresh water: Will be delivered by truck, rate about 30 tons max. per day. (Line under construction).
Fuel: Diesel oil by truck. Prices above international rate to keep supply low until Line and Stores are ready (now under construction).
Consul: None.
Repairs: Not possible.
Gangway/Deck watchmen: Supplied by Shore. Rate about 4,000 Rials per day.
Hatches: Opening and closing carried out by crew.
Customs Allowances: Customs Officer will seal all store rooms. Reasonable ships requirements (Cigarettes) should be taken out before sealing. 200 Cigarettes Allowance per week per crew member.
Repatriation: Can be arranged by agent.
Airport: Konarak Airbase. Daily flight from Bandar Abbas and Tehran and back. Konarak lies about 70 km. from Char-Bahar.
Time: Iranian Time 3.5 hours minus UTC.
Medical: Facilities available (Doctor, Ambulance). Emergency cases are sent to Tehran (Inform Port Authorities).
Telephone: Under construction.
Services: Provisions from local market at reasonable prices. Garbage removal available.
Shore Leave: By shore passes (photograph to be included).
Authorities: Port and Shipping Organisation. J. Khalaj (Port Director).

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan"). All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian Ports should be directed to G.A.C. Shipping (U.K.) Ltd.

CYRUS TERMINAL: 29.01 N. 49.28 E. (See Plan Book)

LOCATION: Open, unsheltered submarine export mooring, Lat. 29° 01′ 27″ N., Long. 49° 28′ 51″ E. Storage barge *(Pazargad)*. Lat. 29° 01′ 57″ N., Long. 49° 29′ 30″ E.

APPROACHES:
Obstructions: In addition to submarine export mooring and storage vessel *Pazargad*, various oil wells and production structures located in immediate vicinity, which constitute hazard to navigation, as follows:

	Lat.	*Long.*
Well C–2A and the Production Stations	29° 03′ 07″ N.	49° 29′ 57″ E.
C–3	29° 02′ 38.7″ N.	49° 27′ 23.1″ E.
C–4	29° 00′ 15″ N.	49° 32′ 00″ E.
C–5	29° 02′ 52″ N.	49° 31′ 34″ E.
C–6	29° 03′ 57″ N.	49° 29′ 57″ E.
C–7	29° 03′ 31.2″ N.	49° 29′ 05.6″ E.
C–8	29° 03′ 31.2″ N.	49° 30′ 48″ E.
C–9	29° 02′ 15″ N.	49° 29′ 57″ E.
C–10	29° 03′ 33″ N.	49° 27′ 22.5″ E.
C–11	29° 04′ 51″ N.	49° 26′ 31″ E.
C–12	29° 03′ 33″ N.	49° 23′ 56.5″ E.
C–13	29° 02′ 41″ N.	49° 25′ 39.5″ E.

Safest and most desirable direction of approach to Cyrus Terminal is from S.E. Due to numerous obstructions noted above any approach should be made with extreme caution.

Navigational Aids. All structures located within Cyrus Terminal area display interrupted quick flashing white lights and sound a fog horn. The storage barge *Pazargad* displays, as required, those day and night signals as prescribed by articles 27 (b) and 30 (a) of International Rules. The 6 mooring buoys for the Cyrus Terminal are not lighted.

DOCUMENTS:
Bill of Health.
Health Declaration (International Health Form to be filled out by Master on arrival).
Manifest (if with cargo certified by Iranian Consulate. If vessel is in ballast, no legalisation dues).
Clearance (from last port).
Register.
5 Crew Lists.
Passenger Manifest (if any passengers are on board).
5 Store Lists.
Bonded Store List.

PILOTAGE: Vessels will be boarded by Mooring Master of IPAC within 2 miles, approximately 180° true from *Pazargad*. Mooring Master will advise Master on approaches to berth, mooring and unmooring, connecting and disconnecting submarine hose and all other operations within berthing area. All manoeuvring within loading berth area shall be done only in accordance with advice of an IPAC Mooring Master, subject to understanding that Master shall remain solely responsible for safety and proper manoeuvring. Master or qualified deck officer must be on bridge at all times while ship manoeuvring.

Vessels requested to have pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach Mooring Master's launch. If at night, adequate lighting must be rigged overside for Mooring Master to approach side of ship and climb ladder safely. Adequate searchlights should also be rigged on both wings of bridge when mooring at night, to assist in running lines to buoys.

ANCHORAGE: Area bound by: 28° 59′ 00″ N. to 29° 01′ 00″ N. between meridians 49° 28′ 00″ E. to 49° 31′ 00″ E. Depth of water 24 fathoms.

Masters cautioned not to anchor North of Lat. 29° 01′ 00″ and East of Long. 49° 31′ 00″ as there are numerous flow lines on sea bed connecting various structures, storage tanker and submarine terminal. During Winter months, November through March, severe South-easterly storms often encountered with little or no indication of impending storm. Vessels at anchor, and loading in submarine terminal, must have engines ready with full power for immediate use. Masters cautioned to use adequate scope of chain while anchored awaiting berth.

RESTRICTIONS: None. Terminal operates 24 hours per day, 7 days a week. Ships moored, loaded and unmoored at any hour, weather and other circumstances permitting. Terminal will never be closed due to religious holidays.

MAX. SIZE: Ship loaded by means of submarine pipe-line and 1 hose at 1 loading berth, located in approximately 140 ft. of water. Mooring buoys numbered 1, 2, 3, 4, 5 and 6. Starting with No. 1 East of mooring and numbered consecutively in clockwise direction. Max. capacity 70,000 d.w.t., max. length 950 ft.

HEALTH: The rules governing quarantine are the same as found in other ports of the world. Owners should check with Agent respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for crew members.

RADIO: *Advice of Arrival:* Incoming tankers must send incoming ETA at least 3 days before arrival. The radio station at Abadan will handle IPAC's radio traffic, pre-arrival messages, etc., for vessels calling Cyrus Terminal. The station call sign is EQZ. Messages for IPAC should be to NIOC Kharg, prefixed "for IPAC" with copy to Agent. Further ETA messages should be sent when vessel 24 and 12 hours distant from Cyrus Terminal and at any other time any appreciable change occurs in original ETA or those subsequent thereto. The 12 hours ETA should include a positive statement regarding "ship's readiness to load" on arrival and the number of hours that will be required to discharge clean ballast after ship is berthed in mooring.

Radio Watches: While at the anchorage off Cyrus Terminal, vessels should maintain normal listening watches on both HF and WT.

VHF: Cyrus Terminal base *(Pazargad)* is equipped with VHF radio telephone and maintains a radio watch. Vessels arriving at Cyrus Terminal may communicate with the *Pazargad* on Channel 6.

TUGS: A charge for each tug movement will be made in accordance with rates established by IPAC. When tug/tugs are standing-by vessel mooring/unmooring, for use if required, the full fee will be charged. IPAC maintains launches to assist in mooring and unmooring.

BERTHING: (Also see "Max. Size"). Tankers to have ready: *(a)* Windlass and deck winches fore and aft. *(b)* 12 good manila or synthetic mooring lines, each not less than 120 fathoms in length, with efficient stoppers for each line. *(c)* On port or starboard side as directed, opposite ship's manifold, equipment capable of lifting submarine hose safely and expeditiously. Weight of lift 5.5 tons. *(d)* 1 bower anchor ready for immediate use, with minimum of 120 fathoms of chain. Anchors, chains and anchor windlass must be in good condition. *(e)* Equipped to fit flanges on submarine hoses, which are of ASA standards.

Permanent moorings in the berth consist of 6 steel cylindrical buoys each fitted with a quick release hook to which ship's mooring lines attached by mooring launches. The berth is laid out on a 2 heading basis, using 12 mooring ropes (4 bow, 4 beam, and 4 quarter).

LOADING: Maximum crude oil loading rates for a tanker using one 12 in. deck hose and 20 p.s.i. at ship's rail is approximately 12,000 b.p.h. Requested that ships receive oil as fast as it can be delivered, with due regard for safety, also that any fittings on manifold such as "Y's", strainers, or mud boxes, which tend to restrict flow of crude oil into the ships, be removed before arrival at terminal. Preferable that connections be provided so that a 12 in. deck hose can be used.

MEDICAL: Neither medical nor hospital facilities provided by IPAC. Private doctors and hospital facilities available at Tehran or Abadan. Emergency hospital cases only can be handled on Kharg Island, approximately 53 miles from Cyrus Terminal.

DENSITY: Salinity approximately 20% more than normal sea water.

TIDE/CURRENT: Tidal range between 6 and 8 ft. Currents generally on axis of ship berthed in mooring; however, rotary currents can be expected.

FRESH WATER: No fresh water available.

FUEL: No bunkers or lubricants available.

FIRE PRECAUTIONS: A continuous and efficient fire watch must be kept on deck and in engine room. In event of fire breaking out in any part of a vessel, however minor it may be, fire alarm must be given immediately. This will consist of a succession of long blasts on ship's whistle, together with a rapid continuous ringing of ship's bell.

CUSTOMS ALLOWANCES: Present regulations allow each seaman to retain a maximum of 50 cigarettes or 1 oz. of tobacco or 5 cigars. The balance of all smoking items must be collected and carefully listed prior to arrival. This list will be checked by Customs before sealing locker. If any discrepancies, vessel is subject to a fine.

CONSULS: No consulates at Cyrus Terminal; consular or diplomatic representatives for most nations maintain offices in Tehran and some in Khorramshahr.

REPAIRS/STORES: Port is considered an "open roadstead", and under no circumstances may engines be shut down for repairs while ships are moored in submarine berth. No facilities for making vessel repairs. No spare parts, stores or supplies should be sent to Cyrus Terminal for delivery to a ship.

REPATRIATION: No facilities.

TIME: GMT plus 3.5 hours. GMT plus 4.5 hours in Summer.

SHORE LEAVE: There is no shore leave permitted due to lack of facilities. No visitors permitted on tankers loading.

INSPECTION SERVICE AND MARINE SURVEYS:
Petroleum inspection services available at Cyrus Terminal from Saybolt. IPAC also inspects cargoes on specific request of off-taker companies.

Classification agencies: Lloyd's Register of Shipping (maintain office with Surveyor in Khorramshahr). American Bureau of Shipping (to be arranged from Bahrain where nearest ABS office available, with at least 5 days advance notice. A Surveyor available in Tehran and Khorramshahr). Bureau Veritas (Agents and Surveyor in Khorramshahr). Norske Veritas (Agents in Khorramshahr). German Lloyd (Agents and Surveyor in Khorramshahr).

GOVERNMENT OFFICIALS: Iranian officials, such as the Customs Officers, Immigration Officer and Quarantine Officer, are available on the barge *Pazargad*. Should Customs Guards be stationed on board vessels while in the moorings, it is expected that ships will provide food for these guards and other officials. All vessels calling at Cyrus Terminal must provide an accommodation ladder, rigged for Iranian Officials.

AUTHORITY: Iran Pan American Oil Co.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan"). All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian Ports should be directed to G.A.C. Shipping (U.K.) Ltd.

KHARG ISLAND: 29.14 N. 50.19 E. (See Plan Book)

A. DARIUS TERMINAL. Oil-loading terminal of the Iran Pan American Oil Company.
B. KHARG TERMINAL. Oil-loading terminal of the National Iranian Oil Company. Including Sea Island Terminal.
C. KHEMCO TERMINAL. Loading terminal of Kharg Chemical Co.

GENERAL: (Items common to all Terminals): There are no ballast disposal facilities at Kharg and it is of the utmost importance that all vessels arriving at the anchorage should ensure that all water ballast and pipe-lines are completely clean.

FLAG: All vessels required to fly Iranian Ensign on foremast during daylight hours in Iranian waters. Iranian territorial waters extend 12 miles seaward from mainland and adjacent islands. Iranian flags may be obtained from Agent.

DOCUMENTS:

Bill of Health (certified by Iranian Consulate at port of origin or port of call. If no Iranian Consul available, the legalisation fees are payable at Kharg Island).
Health Declaration (International Health Form to be filled out by Master on arrival).
Manifest (if with cargo certified by Iranian Consul (see "Bill of Health" above). If vessel is in ballast, no legalisation fees due).
Clearance (from last port).
Register.
Crew List.
Passenger Manifest (if any passengers are on board).
Store List.
Bonded Store List.

APPROACHES: Vessels approaching Kharg from South, should keep at least 2 miles to East of Island. Vessels approaching Kharg from North should keep to West of Island, as Khargu Island to the North is very low lying and difficult to see at night until dangerously close-to.

Landfall. 3 high gas flare towers, 2 in the South and 1 to the North of the Island, make a most conspicuous landfall. At night, from a distance, the light from these flares tends to obliterate the various navigation lights. At night the glow from the 3 gas flares is visible from great distance, far beyond the range of any navigation lights. However on occasions, 1 or more or all of the flares may not be burning, making the main navigation lights more readily visible.

Navigational Dangers. Eastern coast is open and free from navigational dangers, except for coral reef, which extends for about 0.25 mile seawards along whole coast line. To S.W. of Island, numerous oil platforms in positions up to 5 miles offshore.

Kharg South Beacon. 29° 12′ 46″ N., 50° 19′ 15″ E. At Southern end of Island, rotating white light, on steel tower, 295 ft. above MHHW, 2 flashes every 12 seconds, visibility 24 miles. Obscured by high ground and oil tanks between 151° and 215° from seaward. Light beam partly diverged upwards for aircraft. This is the main navigation light for Kharg area.

Kharg North Beacon. 20° 15′ 02″ N., 50° 18′ 18″ E. At Northern end of Island, white light on steel tower, 261 ft. above MHHW, 2 flashes every 6 seconds, visibility 12 miles. Obscured by high ground and oil installations between 330° and 352° from seaward.

Khargu Beacon. 29° 20′ 20″ N., 50° 21′ 18″ E. At Northern end of Khargu Island, on a steel tower 59 ft. above MHHW, a white light with 10° red sectors towards Ganaveh and Kharg Island to indicate general directions of submarine pipe-lines, 3 flashes every 8 seconds, visibility, 10 miles red sector, 15 miles white sector. Obscured between 011° and 041° from seaward by Kharg Island. Radar reflectors fitted to North and East sides of tower top.

Ganaveh Beacon. 29° 35′ 20″ N., 50° 29′ 50″ E. On mainland, at start of submarine pipe-lines to Island, 2 miles N.W. of Ganaveh village, on steel tower, white light with 10° red sector along general direction of submarine pipe-lines, 1 flash every 5 seconds, visibility 10 miles red sector, 15 miles white sector. Light beam partly diverged upwards for aircraft.

South-east Buoy. 29° 11′ 29″ N., 50° 19′ 51″ E. Red can buoy, white light, 1 flash every 2 seconds. Near edge of reef, S.E. Kharg Island in 54 ft. of water.

North-east Buoy. 29° 14′ 51″ N., 50° 20′ 10″ E. Red conical buoy, white light, 1 flash every 6 seconds. On Northern boundary of port limits.

Channel Buoy. 29° 16′ 12″ N., 50° 20′ 27″ E. Red conical buoy, white light, 1 flash every 3 seconds. In Eastern end of channel between Kharg and Khargu Island.

Radio Masts. At South end of Kharg Island a high radio mast painted red and white positioned at 29° 12′ 47″ N., 50° 19′ 15″ E., approximate elevation 510 ft. Fitted with fixed red lights. Another radio mast, also painted red and white, positioned at 29° 14′ 10″ N., 50° 18′ 26″ E., approximate elevation 367 ft., fitted with fixed red light.

Dideban Tomb. On highest point of Kharg Island, 29° 14′ 57″ N., 50° 18′ 29″ E., a small domed building located, elevation 290 ft.

Mir Muhammad Tomb. On N.E. part of Kharg Island at 29° 15′ 10″ N., 50° 18′ 46″ E., conical shaped tower surmounted by small dome, elevation 165 ft.

Khargu Trees. On Khargu Island, at 29° 18′ 45″ N., 50° 20′ 30″ E., a small group of trees, only ones on island, visible from long distances.

Notice Boards. On North, S.E. coast and S.W. of Kharg Island and along coasts of Khargu Island, large white notice boards indicating prohibited anchorages surrounding submarine pipe-lines.

Port Area. The area within:

29° 12′ 23″ N.	29° 14′ 53″ N.
50° 18′ 36″ E.	50° 21′ 17″ E.
29° 12′ 21″ N.	29° 14′ 53″ N.
50° 21′ 40″ E.	50° 20′ 20″ E.

offshore from Kharg Island has been proclaimed a port area. Port area used by vessels manoeuvring to and from oil-loading terminals. The whole of area within port limits declared a Prohibited Anchorage, and, a Restricted Manoeuvring Area. Vessels must not enter within port limits unless Berthing Master is on Board.

PILOTAGE: Vessels should proceed to Eastern Anchorage, outside port limits (Prohibited Anchorage and Manoeuvring Area) approximately 1.5 miles East of oil loading jetty, and await arrival of Berthing Master.

ANCHORAGE: The approved Anchorage Area is to East of Eastern boundary of Port Limits, where holding ground is good. All vessels on arrival at Kharg must proceed to anchorage area and await instructions.

Prohibited Anchorages. 3 Prohibited Anchorages in the Kharg Area:

(a) Submarine Pipe-lines. Anchorage prohibited in vicinity of submarine oil pipe-lines laid between North coast of Kharg Island and mainland near Ganaveh.

(b) Offshore Oil Platforms. Anchorage prohibited to S.W. of Kharg Island in vicinity of numerous oil wells and drilling platforms extending 5 miles or more out to sea.

(c) Harbour Area (East): The area surrounding the "T" jetty and extending approximately 2.5 km. offshore from the East coast has been declared as a Harbour Area.

(d) Harbour Area (West): The area surrounding the sea island and extending to a distance of approximately 4 km. offshore has been declared as a Harbour Area. The Harbour Area is used by vessels manoeuvring to and from the oil loading jetty. No vessel is allowed to enter or anchor within these areas unless a Berthing Master is on board.

Cautions. (a) Unlit mooring buoys at S.E. of Kharg Island (see Darius Terminal). *(b)* Oil Platforms to S.W. of Kharg Island. *(c)* Aircraft approach lane S.E. of a point mid-way between Naval Boat Harbour and Kharg North Buoy, in N.W. corner of Port Area.

HEALTH: Tankers calling at Kharg Island and requiring radio pratique should cable Agents 48 hours prior to arrival advising the following details:

(a) Number of persons on board, including Master and passengers.
(b) Last port of call.
(c) Ports of call during the voyage.
(d) Duration of voyage.
(e) If any person on board requires vaccination against cholera.
(f) If there has been any case of illness of contagious nature.

If approved, the Master will be notified and the vessel will be allowed to enter port without yellow flag or night quarantine signal.

RADIO: OSCO main radio station at Abadan will handle radio traffic. Call sign EQZ. Vessels bound for Kharg Terminal should prefix messages with "NIOC Kharg", and vessels bound Darius terminal should prefix with "NIOC for IPAC Kharg", in both cases with copy to Agents. Terminal on Telex No. 212770.

Radio Watches: While at anchor off Kharg Island, vessels should maintain normal listening watches on station EQZ on WT, and Kharg Terminal on VHF. Use of the ship's radio station and/or battery-charging equipment prohibited during cargo transfer operations.

Schedule of watch (GMT) (Hours)	*Listening watch frequencies* kHz	*Transmitting frequencies* kHz	*Receiving frequencies* kHz	*Remarks*
Continuous	500	500	500	Distress: Station is equipped with international Auto-Alarm receiver on 500 kHz.
Continuous	500	428	405–535	Traffic list every 2 hours from 0105 to 2305 hrs. GMT.
0400–0700	8356–8374	8471	8374–8460	*Traffic lists every 2 hours from 0405 hrs. GMT.
0700–0900	12534–12561	13069.5	12561–12689	
1000–1300	12534–12561	13069.5	12561–12689	
1400–1700	8356–8374	8471	8374–8460	
1700–1830	4178–4187	4294	4187–4231	

*During scheduled watches on HF while station/EQZ is not actually working with ships, traffic lists are transmitted automatically and continuously on frequencies 4294, 8471 and 13069.5 kHz according their schedules of watch.

VHF: Kharg Terminal equipped with VHF radio telephone, using international frequencies. Continuous watch kept on international calling and emergency Channel 16, frequency 156.80 MHz. Other channels, available after contact has been established are: No. 4, 12, 14 and 20. Masters recommended use this facility when within range, particularly when approaching port. In poor visibility, when vessel's approach may not be observed from shore, VHF communication may be the means of avoiding delay in mooring/berthing.

MEDICAL: Small hospital with clinic on Kharg operated by National Iranian Oil Company for minor medical treatment. More serious cases may have to be sent by air to Abadan Hospital. Any medical services required should be brought to attention of Medical Officer when he boards vessel to grant pratique.

DENSITY/TIDE/WINDS: Salinity of sea approximately 20% more than normal sea water. Surface temperature of sea ranges from 63° to 97° F depending on season. The extreme tidal range between 7 and 8 ft. with maximum rate of about 1.5 knots. Wind directions and velocity subject rapid change without warning and precautions necessary to avoid difficulties. Heaviest seas and swells while in port are from N.E. through S.E.

Tidal heights		*Tidal streams*			
L.A.T.	=+0.4 ft.	Slack water	10.75 hrs.	before	HHW
MLLW	=+1.8 ft.	Ebb (full)	7.75 hrs.	before	HHW
MHLW	=+3.6 ft.	Slack water	4.50 hrs.	before	HHW
MSL	=+4.1 ft.	Flood (full)	1.50 hrs.	before	HHW
LLHW	=+4.7 ft.	Slack water	1.00 hr.	after	HHW
MHHW	=+6.5 ft.	Ebb (max.)	3.75 hrs.	after	HHW
H.A.T.	=+8.2 ft.	Slack water	6.50 hrs.	after	HHW
		Flood (max.)	9.50 hrs.	after	HHW

Heights in feet above Chart Datum

Times are approximate only

FRESH WATER: Not available.

STORES: Commissary supplies, as well as steward's stores, in limited quantities, can be arranged through Agent with at least 5 days advance notice.

Not allowed to be placed on board while vessel is berthed, can be taken at anchor or boat comes alongside immediately after leaving jetty. Transfer of bonded stores is permitted, with Customs in attendance, while alongside.

LAUNDRY: No laundry services available.

REPAIRS: Masters of vessels loading or discharging at Darius Terminal are advised that this port is considered an "open roadstead" and, under no circumstances may engines be shut down for repairs while ships are moored in submarine berth. No facilities at Darius Terminal for making vessels repairs, and it is emphasised that all vessels in submarine moorings must be in condition to clear immediately on instructions to do so. No repairs allowed alongside the Oil Loading Jetty at Kharg Terminal. Ship's main engines must be available at all times while alongside jetty.

IDENTIFICATION CARDS: Each seaman will be issued with a pass which will be punched when crossing the jetty limits going out and in, and may be used once only. In addition to this pass, seamen should carry an Identification Card or Vaccination Certificate, bearing the owner's photograph.

CUSTOMS ALLOWANCES: Present regulations allow each seaman to retain maximum 50 cigarettes or 1 ounce of tobacco or 5 cigars. The balance of all smoking items must be collected and carefully listed prior to arrival. This list will be checked by Customs before sealing locker. If any discrepancies, vessel subject to fine.

CONSULS: No consulates at Kharg Island; however, consular or diplomatic representatives, for most nations, maintain offices in Teheran, and some in Khorramshahr.

AIRPORT: Small airport used by Oil Company aircraft and Iranair flights to and from Abadan. Due security arrangements movement of crew must be programmed through Agent.

TIME: GMT plus 3.5 hours in Winter and plus 4.5 hours in Summer.

A. DARIUS TERMINAL (Additional requirements and details).

Terminal operates 24 hours per day, 7 days a week. Ships moored, loaded and unmoored at any hour, weather and other circumstances permitting. Terminal will never be closed due to religious holidays.

LOCATION: A submarine terminal at S.E. corner off Kharg Island 29° 12′ 40″ N., 50° 20′ 40″ E.

LANDMARKS: *Jetty:* Approximately half a mile North of the mooring is a "T" shaped wharf for the berthing of Supertankers.

Khemco Jetty: Approximately quarter mile West of the terminal is a dolphin type jetty for berthing LPG and sulphur ships.

South Gas Flares: At the South end of Kharg Island, 2 very conspicuous gas flares bearing 277°, 1,900 ft. and 271°, 2,150 ft. from Kharg South Beacon. Approximate elevations: 400 ft.

North Gas Flares: In the centre of Kharg Island 2 very conspicuous gas flares bearing 191°, 3,050 ft. from Kharg North Beacon, elevation 435 ft.

Khemco Gas Flares: On the S.E. of Kharg Island 2 small gas flares burning in the Kharg Chemical Plant.

Note: At night, the glow from the 4 gas flares is visible at great distances. However, on occasions, 1 or more or all of the flares may not be burning.

Also see "Approaches" at beginning of Kharg Island.

RADIO: *Arrival Advice:* It is important that ships establish radio contact with IPAC when 3 days distant from Kharg Island and maintain this contact until just prior to arrival at the Terminal. All ships should send a 72 hour ETA message to IPAC, giving the best estimate of ship's arrival time at the Terminal. This first ETA message should also include a definite statement of the details of any equipment required from shore for connecting submarine hoses to ship's manifold. Further ETA messages should be sent to IPAC when the vessel is 24 hours and 12 hours distant from Kharg Island and at any other time when an appreciable change occurs in the original ETA or those subsequent thereto. The 12 hour ETA should include a positive statement regarding "ship's readiness to load" on arrival, and the number of hours that will be required to discharge clean ballast after ship is berthed in mooring.

Ship-to-shore communication: Kharg Terminal is equipped with VHF radio-telephone, using international frequencies. A continuous watch is kept on the international calling and emergency Channel No. 16, frequency 156.80 MHz. Other channels which are available after contact has been established are:

Channel	*Frequency in MHz*	*Call sign*
IPAC 14	156.700	IPAC Marine
IPAC 6	156.300	IPAC Marine
OSCO 12	156.600	Kharg Pilot
OSCO 20	157.000	Kharg Pilot

Masters are recommended to use this facility when within range, particularly when approaching the port. In poor visibility, when a vessel's approach may not be observed from the shore, VHF communication may be the means of avoiding delay in mooring. While a ship is in mooring, communication will be by portable VHF radiotelephone units. The Mooring Master will advise Masters and Officers regarding the emergency whistle signals set up for use in event VHF radiotelephone units becoming inoperative. The use of the ship's radio station and/or battery charging equipment is prohibited during cargo transfer operations.

Radio Watches: While at anchor off Kharg Island, vessels should maintain normal listening watches with station EQZ on W/T and Kharg Terminal on VHF.

MOORING: Vessel requested to have pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach Mooring Master's launch. Mooring Master will board 2 miles seaward of the Terminal sea-buoy. Adequate searchlights should be rigged on both wings of bridge, when mooring at night, to assist in running lines to buoys.

Raising, connecting, disconnecting and lowering of submarine hoses will be performed by IPAC line handling crew as advised by Mooring Master, who will remain on board while ship in moorings. A capable winchman to be provided by ship.

Mooring buoys for Darius Terminal not lighted. Permanent moorings in berth consist of 5 steel cylindrical buoys each fitted with quick release hook, to which ship's mooring lines are attached by IPAC's mooring launches. The berth is laid out on the one heading basis, using both ship's bower anchors with 9 mooring ropes (4 beam, 4 quarter and 1 stern). Mooring buoys numbered 1, 2, 3, 4 and 5. Starting with No. 1. East of the mooring and numbers running consecutively in a clockwise direction.

Tankers to have ready: *(a)* Windlass and both bower anchors, each with not less than 120 fathoms of chain. *(b)* 9 good manila or synthetic mooring lines, each not less than 120 fathoms in length, with efficient stoppers for each line. *(c)* On port side opposite ship's manifold, equipment capable of lifting submarine hose safely and expeditiously. Weight of lift 5 tons.

LOADING: Ship loaded by means of submarine pipe-line and 2 hoses at 1 loading berth, located approximately 1 mile offshore in over 65 ft. of water. Crude oil loading hoses lifted on port side. Maximum crude oil loading rate for tanker using two 12 in. deck hoses and 20 p.s.i. at ship's rail is approximately 5,000 t.p.h.

In order to save ship time as well as to make berth available for others, requested that ships receive oil as fast as it can be delivered, with due regard for safety. Also requested that any fittings on ship's manifold such as "Y's", strainers, or mud boxes, which tend to restrict flow of crude oil into ship, be removed before arrival at terminal. It is preferable that connections be provided so that a 12 in. deck hose can be used. Vessels must be equipped to fit flanges on submarine hoses, which are of ASA standards.

FIRE PRECAUTIONS AND SAFETY: Full instructions will be given by Mooring Master, but vessel's personnel responsible for safety of vessel and must take all necessary precautions, whether or not so advised by Mooring Master.

During time vessel moored in Darius Terminal, a continuous and efficient fire watch must be kept on deck and in the engine room. In the event of fire breaking out in any part of vessel, however minor it may be, fire alarm must be given immediately. This will consist of a succession of long blasts on ship's whistle, together with a rapid and continuous ringing of ship's bell.

EMERGENCY MEDICAL ASSISTANCE: Vessels requiring emergency medical assistance should hoist international code flag "W" in daylight, and at night send "W" (· – –) on blinker light. To attract immediate attention, the same signal "W" (· – –) should be given on ship's whistle in either day or night hours. The signal should be repeated until acknowledged visually by either another ship in the moorings, or from IPAC launch. As soon as signal is received. Terminal officials will advise Agent as soon as possible of the emergency medical aid required.

FUEL: No bunkers available at submarine mooring. Bunkers may be loaded at main jetty having obtained nomination through NIOC Tehran (Export and Marketing). Tankers loading crude oil at "T"-head jetties have at all times priority for berth, over the vessels lifting bunkers only. Marine lubricants not available, except through marketing representatives by arrangement through Agent.

CURRENTS: Generally on the axis of the ship berthed in the mooring; however, rotary currents can be expected.

SHORE LEAVE: For personnel of vessels loading or unloading at the Terminal is arranged between Agent and Iranian Security Officer aboard vessel. Ship's personnel (other than medical or emergency cases) not allowed to disembark or embark at Terminal. Sufficient personnel must be aboard at all times for letting go lines and clearing moorings immediately.

B. KHARG TERMINAL (Additional requirements and details).

RESTRICTIONS: If arriving with a part cargo vessels will be refused loading by N.I.O.C. if the maximum displacement exceeds 250,000 tons.

OIL LOADING JETTY: "Tee" head with overall length of 6,038 ft. between fender faces. The fender to fender width is 138 ft., for the section South of trestle approach, and 124 ft. for North section. Jetty face is aligned in direction 172° 35′ – 352° 35′. Deck level 22.0 ft. above chart datum. The jetty, being on Eastern side of Island, is sheltered from prevailing N.W. winds, but exposed to S.E., when during Winter storms, waves of 8 ft. to 10 ft. often occur. A maximum wave height of 15 ft. has been recorded at Southern end of jetty, under such conditions.

Berth	*Depth of water (m.)*	*Maximum capacity D.W.T.**	*Loading and bunker arms†*	*Height limits ship's manifold in metres above chart datum*
1	21.3	250,000	3×16 in. 2×12 in.	4.3 to 23.8
2	19.8	38,000	4×12 in.	3.4 to 18.9
3	21.3	250,000	3×16 in. 2×12 in.	4.3 to 23.8
4	20.1	65,000	5×12 in.	3.4 to 18.9
5	21.3	250,000	3×16 in. 2×12 in.	5.8 to 25.3
6	20.4	120,000	3×16 in. 2×12 in.	4.3 to 23.8
7	18.3	175,000	3×16 in. 2×12 in.	4.3 to 23.8
8	19.2	45,000	5×12 in.	3.4 to 18.7
9	17.4	140,000	3×16 in. 2×12 in.	4.3 to 23.8
10	17.7	90,000	5×12 in.	3.4 to 18.7

* Subject to weather, tidal conditions and lengths of vessels adjacent berths.

† 12 in. Bunker arms at all berths. All Chicksan arm flanges are series 150 API.

Outer Berths: 9, 7, 1, 3, 5. Inner Berths: 10, 8, 2, 4, 6. Berth Nos. 7, 8, 9 and 10 located North of trestle approach.

SEA ISLAND TERMINAL: A 4 berth Sea Island Loading Terminal is in operation on the West side of Kharg Island.

The structure, 1,800 ft. long, is centred in Lat. 29° 13′ 29″ N., Long. 50° 17′ 10″ E., and is aligned in a direction 154°/334°. It is designed to accommodate vessels of approximately 150,000/500,000 tons at No. 11 Berth on the West side, and vessels of approximately 150,000/300,000 tons at No. 12 Berth on the East side.

Unless advised to the contrary, all vessels should proceed to the anchorage East of the Main Jetty.

DOCUMENTS:

Bill of Health (certified by Iranian Consulate at port of origin or port of call. If no Iranian Consul available, the legalisation fees are payable at Kharg Island).
Health Declaration (International Health Form to be filled out by Master on arrival).
Manifest (if with cargo certified by Iranian Consul (see "Bill of Health" above). If vessel is in ballast, no legalisation fees due).
Clearance (from last port).
Register.
Crew List.
Passenger Manifest (if any passengers are on board).
Store List.
Bonded Store List.

APPROACHES: Vessels approaching Kharg from South, should keep at least 2 miles to East of Island. Vessels approaching Kharg from North should keep to West of Island, as Khargu Island to the North is very low lying and difficult to see at night until dangerously close-to.

Landfall. 3 high gas flare towers, 2 in the South and 1 to the North of the Island, make a most conspicuous landfall. At night, from a distance, the light from these flares tends to obliterate the various navigation lights. At night the glow from the 3 gas flares is visible from great distance, far beyond the range of any navigation lights. However on occasions, 1 or more or all of the flares may not be burning, making the main navigation lights more readily visible.

Navigational Dangers. Eastern coast is open and free from navigational dangers, except for coral reef, which extends for about 0.25 mile seawards along whole coast line. To S.W. of Island, numerous oil platforms in positions up to 5 miles offshore.

Kharg South Beacon. 29° 12′ 46″ N., 50° 19′ 15″ E. At Southern end of Island, rotating white light, on steel tower, 295 ft. above MHHW, 2 flashes every 12 seconds, visibility 24 miles. Obscured by high ground and oil tanks between 151° and 215° from seaward. Light beam partly diverged upwards for aircraft. This is the main navigation light for Kharg area.

Kharg North Beacon. 20° 15′ 02″ N., 50° 18′ 18″ E. At Northern end of Island, white light on steel tower, 261 ft. above MHHW, 2 flashes every 6 seconds, visibility 12 miles. Obscured by high ground and oil installations between 330° and 352° from seaward.

Khargu Beacon. 29° 20′ 20″ N., 50° 21′ 18″ E. At Northern end of Khargu Island, on a steel tower 59 ft. above MHHW, a white light with 10° red sectors towards Ganaveh and Kharg Island to indicate general directions of submarine pipe-lines, 3 flashes every 8 seconds, visibility, 10 miles red sector, 15 miles white sector. Obscured between 011° and 041° from seaward by Kharg Island. Radar reflectors fitted to North and East sides of tower top.

Ganaveh Beacon. 29° 35′ 20″ N., 50° 29′ 50″ E. On mainland, at start of submarine pipe-lines to Island, 2 miles N.W. of Ganaveh village, on steel tower, white light with 10° red sector along general direction of submarine pipe-lines, 1 flash every 5 seconds, visibility 10 miles red sector, 15 miles white sector. Light beam partly diverged upwards for aircraft.

South-east Buoy. 29° 11′ 29″ N., 50° 19′ 51″ E. Red can buoy, white light, 1 flash every 2 seconds. Near edge of reef, S.E. Kharg Island in 54 ft. of water.

North-east Buoy. 29° 14′ 51″ N., 50° 20′ 10″ E. Red conical buoy, white light, 1 flash every 6 seconds. On Northern boundary of port limits.

Channel Buoy. 29° 16′ 12″ N., 50° 20′ 27″ E. Red conical buoy, white light, 1 flash every 3 seconds. In Eastern end of channel between Kharg and Khargu Island.

Radio Masts. At South end of Kharg Island a high radio mast painted red and white positioned at 29° 12′ 47″ N., 50° 19′ 15″ E., approximate elevation 510 ft. Fitted with fixed red lights. Another radio mast, also painted red and white, positioned at 29° 14′ 10″ N., 50° 18′ 26″ E., approximate elevation 367 ft., fitted with fixed red light.

Dideban Tomb. On highest point of Kharg Island, 29° 14′ 57″ N., 50° 18′ 29″ E., a small domed building located, elevation 290 ft.

Mir Muhammad Tomb. On N.E. part of Kharg Island at 29° 15′ 10″ N., 50° 18′ 46″ E., conical shaped tower surmounted by small dome, elevation 165 ft.

Khargu Trees. On Khargu Island, at 29° 18′ 45″ N., 50° 20′ 30″ E., a small group of trees, only ones on island, visible from long distances.

Notice Boards. On North, S.E. coast and S.W. of Kharg Island and along coasts of Khargu Island, large white notice boards indicating prohibited anchorages surrounding submarine pipe-lines.

Port Area. The area within:

29° 12′ 23″ N.	29° 14′ 53″ N.
50° 18′ 36″ E.	50° 21′ 17″ E.
29° 12′ 21″ N.	29° 14′ 53″ N.
50° 21′ 40″ E.	50° 20′ 20″ E.

offshore from Kharg Island has been proclaimed a port area. Port area used by vessels manoeuvring to and from oil-loading terminals. The whole of area within port limits declared a Prohibited Anchorage, and, a Restricted Manoeuvring Area. Vessels must not enter within port limits unless Berthing Master is on Board.

PILOTAGE: Vessels should proceed to Eastern Anchorage, outside port limits (Prohibited Anchorage and Manoeuvring Area) approximately 1.5 miles East of oil loading jetty, and await arrival of Berthing Master.

ANCHORAGE: The approved Anchorage Area is to East of Eastern boundary of Port Limits, where holding ground is good. All vessels on arrival at Kharg must proceed to anchorage area and await instructions.

Prohibited Anchorages. 3 Prohibited Anchorages in the Kharg Area:

(a) Submarine Pipe-lines. Anchorage prohibited in vicinity of submarine oil pipe-lines laid between North coast of Kharg Island and mainland near Ganaveh.

(b) Offshore Oil Platforms. Anchorage prohibited to S.W. of Kharg Island in vicinity of numerous oil wells and drilling platforms extending 5 miles or more out to sea.

(c) Harbour Area (East): The area surrounding the "T" jetty and extending approximately 2.5 km. offshore from the East coast has been declared as a Harbour Area.

(d) Harbour Area (West): The area surrounding the sea island and extending to a distance of approximately 4 km. offshore has been declared as a Harbour Area. The Harbour Area is used by vessels manoeuvring to and from the oil loading jetty. No vessel is allowed to enter or anchor within these areas unless a Berthing Master is on board.

Cautions. (a) Unlit mooring buoys at S.E. of Kharg Island (see Darius Terminal). *(b)* Oil Platforms to S.W. of Kharg Island. *(c)* Aircraft approach lane S.E. of a point mid-way between Naval Boat Harbour and Kharg North Buoy, in N.W. corner of Port Area.

HEALTH: Tankers calling at Kharg Island and requiring radio pratique should cable Agents 48 hours prior to arrival advising the following details:

(a) Number of persons on board, including Master and passengers.
(b) Last port of call.
(c) Ports of call during the voyage.
(d) Duration of voyage.
(e) If any person on board requires vaccination against cholera.
(f) If there has been any case of illness of contagious nature.

If approved, the Master will be notified and the vessel will be allowed to enter port without yellow flag or night quarantine signal.

RADIO: OSCO main radio station at Abadan will handle radio traffic. Call sign EQZ. Vessels bound for Kharg Terminal should prefix messages with "NIOC Kharg", and vessels bound Darius terminal should prefix with "NIOC for IPAC Kharg", in both cases with copy to Agents. Terminal on Telex No. 212770.

Radio Watches: While at anchor off Kharg Island, vessels should maintain normal listening watches on station EQZ on WT, and Kharg Terminal on VHF. Use of the ship's radio station and/or battery-charging equipment prohibited during cargo transfer operations.

Schedule of watch (GMT) (Hours)	*Listening watch frequencies* kHz	*Transmitting frequencies* kHz	*Receiving frequencies* kHz	*Remarks*
Continuous	500	500	500	Distress: Station is equipped with international Auto-Alarm receiver on 500 kHz.
Continuous	500	428	405–535	Traffic list every 2 hours from 0105 to 2305 hrs. GMT.
0400–0700	8356–8374	8471	8374–8460	
0700–0900	12534–12561	13069.5	12561–12689	*Traffic lists every 2 hours from 0405 hrs. GMT.
1000–1300	12534–12561	13069.5	12561–12689	
1400–1700	8356–8374	8471	8374–8460	
1700–1830	4178–4187	4294	4187–4231	

*During scheduled watches on HF while station/EQZ is not actually working with ships, traffic lists are transmitted automatically and continuously on frequencies 4294, 8471 and 13069.5 kHz according their schedules of watch.

VHF: Kharg Terminal equipped with VHF radio telephone, using international frequencies. Continuous watch kept on international calling and emergency Channel 16, frequency 156.80 MHz. Other channels, available after contact has been established are: No. 4, 12, 14 and 20. Masters recommended use this facility when within range, particularly when approaching port. In poor visibility, when vessel's approach may not be observed from shore, VHF communication may be the means of avoiding delay in mooring/berthing.

MEDICAL: Small hospital with clinic on Kharg operated by National Iranian Oil Company for minor medical treatment. More serious cases may have to be sent by air to Abadan Hospital. Any medical services required should be brought to attention of Medical Officer when he boards vessel to grant pratique.

DENSITY/TIDE/WINDS: Salinity of sea approximately 20% more than normal sea water. Surface temperature of sea ranges from 63° to 97° F depending on season. The extreme tidal range between 7 and 8 ft. with maximum rate of about 1.5 knots. Wind directions and velocity subject rapid change without warning and precautions necessary to avoid difficulties. Heaviest seas and swells while in port are from N.E. through S.E.

Tidal heights		*Tidal streams*			
L.A.T.	= +0.4 ft.	Slack water	10.75 hrs.	before	HHW
MLLW	= +1.8 ft.	Ebb (full)	7.75 hrs.	before	HHW
MHLW	= +3.6 ft.	Slack water	4.50 hrs.	before	HHW
MSL	= +4.1 ft.	Flood (full)	1.50 hrs.	before	HHW
LLHW	= +4.7 ft.	Slack water	1.00 hr.	after	HHW
MHHW	= +6.5 ft.	Ebb (max.)	3.75 hrs.	after	HHW
H.A.T.	= +8.2 ft.	Slack water	6.50 hrs.	after	HHW
		Flood (max.)	9.50 hrs.	after	HHW

Heights in feet above Chart Datum

Times are approximate only

FRESH WATER: Not available.

STORES: Commissary supplies, as well as steward's stores, in limited quantities, can be arranged through Agent with at least 5 days advance notice.

Not allowed to be placed on board while vessel is berthed, can be taken at anchor or boat comes alongside immediately after leaving jetty. Transfer of bonded stores is permitted, with Customs in attendance, while alongside.

LAUNDRY: No laundry services available.

REPAIRS: Masters of vessels loading or discharging at Darius Terminal are advised that this port is considered an "open roadstead" and, under no circumstances may engines be shut down for repairs while ships are moored in submarine berth. No facilities at Darius Terminal for making vessels repairs, and it is emphasised that all vessels in submarine moorings must be in condition to clear immediately on instructions to do so. No repairs allowed alongside the Oil Loading Jetty at Kharg Terminal. Ship's main engines must be available at all times while alongside jetty.

IDENTIFICATION CARDS: Each seaman will be issued with a pass which will be punched when crossing the jetty limits going out and in, and may be used once only. In addition to this pass, seamen should carry an Identification Card or Vaccination Certificate, bearing the owner's photograph.

CUSTOMS ALLOWANCES: Present regulations allow each seaman to retain maximum 50 cigarettes or 1 ounce of tobacco or 5 cigars. The balance of all smoking items must be collected and carefully listed prior to arrival. This list will be checked by Customs before sealing locker. If any discrepancies, vessel subject to fine.

CONSULS: No consulates at Kharg Island; however, consular or diplomatic representatives, for most nations, maintain offices in Teheran, and some in Khorramshahr.

AIRPORT: Small airport used by Oil Company aircraft and Iranair flights to and from Abadan. Due security arrangements movement of crew must be programmed through Agent.

TIME: GMT plus 3.5 hours in Winter and plus 4.5 hours in Summer.

A. DARIUS TERMINAL (Additional requirements and details).

Terminal operates 24 hours per day, 7 days a week. Ships moored, loaded and unmoored at any hour, weather and other circumstances permitting. Terminal will never be closed due to religious holidays.

LOCATION: A submarine terminal at S.E. corner off Kharg Island 29° 12′ 40″ N., 50° 20′ 40″ E.

LANDMARKS: *Jetty:* Approximately half a mile North of the mooring is a "T" shaped wharf for the berthing of Supertankers.

Khemco Jetty: Approximately quarter mile West of the terminal is a dolphin type jetty for berthing LPG and sulphur ships.

South Gas Flares: At the South end of Kharg Island, 2 very conspicuous gas flares bearing 277°, 1,900 ft. and 271°, 2,150 ft. from Kharg South Beacon. Approximate elevations: 400 ft.

North Gas Flares: In the centre of Kharg Island 2 very conspicuous gas flares bearing 191°, 3,050 ft. from Kharg North Beacon, elevation 435 ft.

Khemco Gas Flares: On the S.E. of Kharg Island 2 small gas flares burning in the Kharg Chemical Plant.

Note: At night, the glow from the 4 gas flares is visible at great distances. However, on occasions, 1 or more or all of the flares may not be burning.

Also see "Approaches" at beginning of Kharg Island.

RADIO: *Arrival Advice:* It is important that ships establish radio contact with IPAC when 3 days distant from Kharg Island and maintain this contact until just prior to arrival at the Terminal. All ships should send a 72 hour ETA message to IPAC, giving the best estimate of ship's arrival time at the Terminal. This first ETA message should also include a definite statement of the details of any equipment required from shore for connecting submarine hoses to ship's manifold. Further ETA messages should be sent to IPAC when the vessel is 24 hours and 12 hours distant from Kharg Island and at any other time when an appreciable change occurs in the original ETA or those subsequent thereto. The 12 hour ETA should include a positive statement regarding "ship's readiness to load" on arrival, and the number of hours that will be required to discharge clean ballast after ship is berthed in mooring.

Ship-to-shore communication: Kharg Terminal is equipped with VHF radio-telephone, using international frequencies. A continuous watch is kept on the international calling and emergency Channel No. 16, frequency 156.80 MHz. Other channels which are available after contact has been established are:

Channel	*Frequency in MHz*	*Call sign*
IPAC 14	156.700	IPAC Marine
IPAC 6	156.300	IPAC Marine
OSCO 12	156.600	Kharg Pilot
OSCO 20	157.000	Kharg Pilot

Masters are recommended to use this facility when within range, particularly when approaching the port. In poor visibility, when a vessel's approach may not be observed from the shore, VHF communication may be the means of avoiding delay in mooring. While a ship is in mooring, communication will be by portable VHF radiotelephone units. The Mooring Master will advise Masters and Officers regarding the emergency whistle signals set up for use in event VHF radiotelephone units becoming inoperative. The use of the ship's radio station and/or battery charging equipment is prohibited during cargo transfer operations.

Radio Watches: While at anchor off Kharg Island, vessels should maintain normal listening watches with station EQZ on W/T and Kharg Terminal on VHF.

MOORING: Vessel requested to have pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach Mooring Master's launch. Mooring Master will board 2 miles seaward of the Terminal sea-buoy. Adequate searchlights should be rigged on both wings of bridge, when mooring at night, to assist in running lines to buoys.

Raising, connecting, disconnecting and lowering of submarine hoses will be performed by IPAC line handling crew as advised by Mooring Master, who will remain on board while ship in moorings. A capable winchman to be provided by ship.

Mooring buoys for Darius Terminal not lighted. Permanent moorings in berth consist of 5 steel cylindrical buoys each fitted with quick release hook, to which ship's mooring lines are attached by IPAC's mooring launches. The berth is laid out on the one heading basis, using both ship's bower anchors with 9 mooring ropes (4 beam, 4 quarter and 1 stern). Mooring buoys numbered 1, 2, 3, 4 and 5. Starting with No. 1. East of the mooring and numbers running consecutively in a clockwise direction.

Tankers to have ready: *(a)* Windlass and both bower anchors, each with not less than 120 fathoms of chain. *(b)* 9 good manila or synthetic mooring lines, each not less than 120 fathoms in length, with efficient stoppers for each line. *(c)* On port side opposite ship's manifold, equipment capable of lifting submarine hose safely and expeditiously. Weight of lift 5 tons.

LOADING: Ship loaded by means of submarine pipe-line and 2 hoses at 1 loading berth, located approximately 1 mile offshore in over 65 ft. of water. Crude oil loading hoses lifted on port side. Maximum crude oil loading rate for tanker using two 12 in. deck hoses and 20 p.s.i. at ship's rail is approximately 5,000 t.p.h.

In order to save ship time as well as to make berth available for others, requested that ships receive oil as fast as it can be delivered, with due regard for safety. Also requested that any fittings on ship's manifold such as "Y's", strainers, or mud boxes, which tend to restrict flow of crude oil into ship, be removed before arrival at terminal. It is preferable that connections be provided so that a 12 in. deck hose can be used. Vessels must be equipped to fit flanges on submarine hoses, which are of ASA standards.

FIRE PRECAUTIONS AND SAFETY: Full instructions will be given by Mooring Master, but vessel's personnel responsible for safety of vessel and must take all necessary precautions, whether or not so advised by Mooring Master.

During time vessel moored in Darius Terminal, a continuous and efficient fire watch must be kept on deck and in the engine room. In the event of fire breaking out in any part of vessel, however minor it may be, fire alarm must be given immediately. This will consist of a succession of long blasts on ship's whistle, together with a rapid and continuous ringing of ship's bell.

EMERGENCY MEDICAL ASSISTANCE: Vessels requiring emergency medical assistance should hoist international code flag "W" in daylight, and at night send "W" (· – –) on blinker light. To attract immediate attention, the same signal "W" (· – –) should be given on ship's whistle in either day or night hours. The signal should be repeated until acknowledged visually by either another ship in the moorings, or from IPAC launch. As soon as signal is received. Terminal officials will advise Agent as soon as possible of the emergency medical aid required.

FUEL: No bunkers available at submarine mooring. Bunkers may be loaded at main jetty having obtained nomination through NIOC Tehran (Export and Marketing). Tankers loading crude oil at "T"-head jetties have at all times priority for berth, over the vessels lifting bunkers only. Marine lubricants not available, except through marketing representatives by arrangement through Agent.

CURRENTS: Generally on the axis of the ship berthed in the mooring; however, rotary currents can be expected.

SHORE LEAVE: For personnel of vessels loading or unloading at the Terminal is arranged between Agent and Iranian Security Officer aboard vessel. Ship's personnel (other than medical or emergency cases) not allowed to disembark or embark at Terminal. Sufficient personnel must be aboard at all times for letting go lines and clearing moorings immediately.

B. KHARG TERMINAL (Additional requirements and details).

RESTRICTIONS: If arriving with a part cargo vessels will be refused loading by N.I.O.C. if the maximum displacement exceeds 250,000 tons.

OIL LOADING JETTY: "Tee" head with overall length of 6,038 ft. between fender faces. The fender to fender width is 138 ft., for the section South of trestle approach, and 124 ft. for North section. Jetty face is aligned in direction 172° 35′ – 352° 35′. Deck level 22.0 ft. above chart datum. The jetty, being on Eastern side of Island, is sheltered from prevailing N.W. winds, but exposed to S.E., when during Winter storms, waves of 8 ft. to 10 ft. often occur. A maximum wave height of 15 ft. has been recorded at Southern end of jetty, under such conditions.

Berth	*Depth of water (m.)*	*Maximum capacity D.W.T.**	*Loading and bunker arms†*	*Height limits ship's manifold in metres above chart datum*
1	21.3	250,000	3×16 in. 2×12 in.	4.3 to 23.8
2	19.8	38,000	4×12 in.	3.4 to 18.9
3	21.3	250,000	3×16 in. 2×12 in.	4.3 to 23.8
4	20.1	65,000	5×12 in.	3.4 to 18.9
5	21.3	250,000	3×16 in. 2×12 in.	5.8 to 25.3
6	20.4	120,000	3×16 in. 2×12 in.	4.3 to 23.8
7	18.3	175,000	3×16 in. 2×12 in.	4.3 to 23.8
8	19.2	45,000	5×12 in.	3.4 to 18.7
9	17.4	140,000	3×16 in. 2×12 in.	4.3 to 23.8
10	17.7	90,000	5×12 in.	3.4 to 18.7

* Subject to weather, tidal conditions and lengths of vessels adjacent berths.

† 12 in. Bunker arms at all berths. All Chicksan arm flanges are series 150 API.

Outer Berths: 9, 7, 1, 3, 5. Inner Berths: 10, 8, 2, 4, 6. Berth Nos. 7, 8, 9 and 10 located North of trestle approach.

SEA ISLAND TERMINAL: A 4 berth Sea Island Loading Terminal is in operation on the West side of Kharg Island.

The structure, 1,800 ft. long, is centred in Lat. 29° 13′ 29″ N., Long. 50° 17′ 10″ E., and is aligned in a direction 154°/334°. It is designed to accommodate vessels of approximately 150,000/500,000 tons at No. 11 Berth on the West side, and vessels of approximately 150,000/300,000 tons at No. 12 Berth on the East side.

Unless advised to the contrary, all vessels should proceed to the anchorage East of the Main Jetty.

Vessels instructed to load at the Sea Island are required to rig an accommodation ladder to facilitate the boarding of Customs, Health, and Port Authorities. Agency work and crew changes must also be effected at the anchorage. There is no shore leave from the Sea Island.

The comparatively exposed position of the Sea Island makes additional moorings advisable and vessels should be prepared to use their maximum number of mooring lines. Quick-release hooks are provided for all mooring lines.

Minimum size vessel, about 150,000 d.w.t.

Loading rates of up to 30,000 t.p.h. to one berth can be achieved at the Sea Island.

Only fuel-oil bunkers are available.

Vessels may, if considered necessary, be required to retain on board sufficient ballast while loading cargo to ensure that the loading arms do not exceed their maximum designed elevation.

Berth	*Depth of water* (m.)	*Maximum capacity* D.W.T.	*Loading and bunker arms*	*Height limits ship's manifold in metres above chart datum*
11	32.0	500,000	4×24 in. 2×16 in.	6.1 to 33.5
12	29.5	300,000	4×16 in. 2×12 in.	6.1 to 28.3

The Sea Island has been extended to the Northward to create two new berths, 14 and 15.

Berth	*Depth of water* (m.)	*Maximum capacity* D.W.T.	*Loading and bunker arms*	*Height limits ship's manifold in metres above chart datum*
14	25.9	300,000	2×16 in. 4×16 in.	6.1 to 28.3
15	27.4	500,000	2×16 in. 4×24 in.	6.1 to 33.5

Loading Arms: Luceat – quick coupling.

Effective Loading Rate: Berth No. 14 – 16,000 t.p.h. Berth No. 15 – 30,000 t.p.h.

TUGS: Vessel normally berthed with assistance of tugs which, together with Berthing Master, meet vessel at port limits. The tugs will come alongside, normally 1 to the bow and 1 to the stern, as far forward and aft as is safe and practical. Tugs' towing equipment will be used on all occasions.

BERTHING: Approaching berth, 2 fibre-rope headlines should be lowered to mooring launch, for transfer to jetty. 2 stern lines are then handled, preferably one at a time, to avoid possible fouling of vessel's propeller. Positioning of vessel's loading manifold in relation to Chicksan loading arms on jetty has to be carried out to a close tolerance, as directed by Berthing Master, to requirements of jetty operator. On inner berths, particularly Nos. 2, 4 and 8, vessels are berthed head outwards, i.e. stern to trestle. In these cases, vessels are towed stern first by after tug's hook wire, with forward tug either alongside or on towing hook, depending on tidal and weather conditions.

Mooring System. Under normal conditions, 12 lines are used to moor a vessel as follows: Forward: 3 headlines, 2 breast lines and 1 spring. Aft.: 3 stern lines, 2 breast lines and 1 spring.

During Winter S.E. storm period, it is usual to use 1 each additional headline and breast line, at each end making a total of 16 mooring lines. Breast lines and springs of wire rope are acceptable.

Berthing Limitations. Various combinations of wind, sea and tidal conditions, also size, length, ballasted trim and handling qualities of a vessel and available berth space, can effect decision to berth a vessel at Kharg. All these factors have to be evaluated before a final berthing decision is made.

Manifold Position. No berthing where manifold of vessel cannot be positioned, within horizontal limits of Chicksan loading unit arms, due to adjacent occupied berths.

Note: On outside berths, very large vessels of light free board in excess of 70 ft., may be required to retain sufficient ballast, to ensure that their manifolds remain within the vertical range of the Chicksan loading arms, until sufficient cargo is loaded.

LOADING: Both Iranian light and heavy crude oils available at all jetty berths. Crude oil is delivered to jetty from Tank Farm, situated on central plateau of sand, by gravity flow through 4×48 in. diameter pipe-lines and to the Sea Island by 2×78 in. shorelines and 2×56 in. sealines. Loading rates of up to 15,000 t.p.h. to one berth can be achieved at Kharg Terminal. Up to 60,000 t.p.h. can be delivered to all 10 berths simultaneously.

FUEL: Bunkering facilities at each berth. 2 grades available, marine fuel oil and marine diesel oil. Bunkers may be loaded up to a maximum rate of 1,000 t.p.h., and bunkering will normally commence before loading cargo. Only fuel oil available at Sea Island berths.

FIRE PRECAUTIONS: A copy of the "Fire and Safety Regulations" notice is given to Master of every vessel by Berthing Master, at Anchorage. 5 additional copies are passed aboard vessel when it arrives alongside jetty. These extra copies must be posted in conspicuous places throughout the vessel. While a vessel is within Port Area a continuous and efficient Fire Watch shall be maintained on deck and in the engine room. In event of fire, however minor it may be, the Fire Alarm shall be given immediately as follows:

On Board Vessel: Rapid and continuous ringing of ship's bell, together with a succession of long blasts on the ship's whistle or siren.

On Jetty or Elsewhere in Port Area: Rapid and continuous ringing of the gongs on the jetty. A push-button alarm system is provided at each berth.

SAFETY:

Amendment to Safety Regulations and Safety Inspections.

To keep Safety Regulations and Safety Inspections in line with current world-wide practice, the following new Rules will be put in force immediately.

1. At least 50% of the crew including sufficient senior officers shall be available on board at all times to deal with emergencies.
2. Two dry powder extinguishers plus one fire hose to be available at the manifold at all times.
   Note: This is especially important before connecting lines.
3. Present funnel deck hoses, now only required at inside berths, are now required on all berths including Sea Island.

SHIPMASTER'S REPORT: 1977.

There are 4 loading berths on the Sea Island. There are also maximum displacement limits for coming alongside these berths ballasted or with part cargo. On the inside berths the top limit is 175,000 tons and the outside berths it is 250,000 tons displacement.

Also the outside (seaward) berths can supply 16 in. reducers for loading cargo. Both seaward berths have a maximum depth of 106 ft.

For berthing at No. 15, vessel used 10 lines each end – 2 head/stern lines, 4 breasts and 2 springs. The ship is 330,000 d.w.t. We used 4 tugs, 1 each end on the hook and 2 pushing at the side. I feel Mariners could be warned that these tugs have very heavy wires which takes time and plenty of men to handle.

We also found that we needed 3 Crew Lists.

Ships cannot be berthed if the wind is N.W'ly over 20 knots.

C. KHEMCO TERMINAL: (Additional requirements and details)

OPERATOR: Kharg Chemical Company, Ltd. (Khemco), Tehran, Iran. Cable Address: "Chemkharg" Tehran. Telex: 2402 Khemco Tn.

LOCATION: Khemco Terminal dolphin jetty is located at the S.E. corner of Kharg Island 29° 12′ 45″ N. 50° 20′ 05″ E.

APPROACHES: Vessels entering Kharg Island Roads must not approach or anchor West of Long. 50° 21′ 30″ E. (being approximately 1 mile East of Khemco Terminal), unless a company's Berthing Master is on board.

PILOTAGE: Company has own Berthing Masters, who will board vessels outside the port area and will pilot and berth the vessel alongside Khemco jetty. Berthing Masters will also carry out the duties of safety officer.

Vessels with the Berthing Master on board shall display the international flag "H" in a prominent position while manoeuvring under his advice. This flag will be in addition to the "Q" flag, being already hoisted for quarantine purposes.

Vessels are requested to have a clean pilot ladder safely secured on the leeside of the ship for the Berthing Master. The pilot ladder should be long enough to reach the pilot tug or launch. At night adequate lighting for the pilot ladder shall be installed.

Pilotage, berthing, mooring and sailing of vessels will be carried out in accordance with instructions of the Mooring Masters, subject to the understanding that in all circumstances the Master of the vessel being manoeuvred shall remain solely responsible for the safety, proper navigation and manoeuvring of his vessel. The Master or a qualified ship's deck officer must be on the bridge at all times while the vessel is underway or unmoored.

NOTICE OF READINESS: Notice of Readiness will not be accepted at the time of arrival unless the vessel is in all respects ready to load. Arrival time will be considered as the time the berthing Master boards the vessel or the time that the vessel anchors, whichever occurs first.

RESTRICTIONS: Vessels can be berthed day or night in 2 directions using ship's moorings. Occasionally bow anchor will be used during berthing operation.

MAX. SIZE: Length of pier is 1180 ft. with maximum of 42 ft. water alongside at MLLW.

RADIO: The main radio station at Abadan will handle Khemco's radio traffic. The station call sign is EQZ. Messages for Khemco should be prefixed with "NIOC for Khemco Kharg", with copy to Agent.

Advice of Arrival: It is important that ships establish radio contact with Khemco, when 3 days distance from Kharg Island, and maintain this contact until just prior to arrival at the terminal. All ships should send a 72 hours ETA message to Khemco, giving the best estimate of the ship's arrival time at Kharg anchorage. The first ETA message should also include a definite statement of the details of manifold dimensions, cargo requirement, Agent and any other necessary information. Further ETA messages should be sent to Khemco when the vessel is 24 hours and 12 hours distant from Kharg Island and at any other time if any appreciable change occurs in the original ETA or those subsequent thereto. The 12 hour ETA should include a positive statement regarding ship's readiness to load on arrival, and the number of hours required to discharge clean ballast after ship has berthed.

TUGS: Two 2,000 h.p. and one 1,000 h.p. diesel tugs are provided by the Company. Normally 2 tugs are used for berthing and 1 for unberthing, depending on the Berthing Master's discretion. Tugs moorings are provided by the company and vessels are requested to have good heaving lines handy on the deck for picking up the tug lines. All tugs are equipped with fire-fighting equipment, including a foam system, which can be used when required.

MOORING: If, in the opinion of the Berthing Master, the vessel is not equipped with adequate mooring facilities, lines or gear, he will so inform vessel's Master, and in such event shall not be brought into berth until such facilities, lines or gear are deemed satisfactory.

Mooring Launches. 4 powerful mooring launches are provided by the Company and normally 1 is used during berthing and unberthing operations.

Mooring Lines. Under normal weather conditions the following mooring lines are required: forward: 3 head lines, 2 breast lines, 1 spring; aft.: 3 stern lines, 2 breast lines, 1 spring.

All lines to be of 120 fathoms, with the exception of the breast lines, being of shorter length. No wire lines are to be used at Khemco jetty.

During abnormal conditions, especially during Winter periods, some additional 4 lines are required for extra moorings.

In most cases it might be necessary to pass all forward lines from the bow and all stern lines from the poop.

Dolphins. The jetty consists of 1 main and 8 smaller dolphins. 4 on either side of the main dolphin are for ships mooring. The main dolphin is connected to the shore via a trestle and causeway. Head and stern lines are passed to the dolphins by means of line handling launches and others by heaving lines. All mooring dolphins are fitted with quick-release hooks.

BERTHING: A. Berthing Masters. Vessels to be berthed at Khemco jetty will be boarded by a company's Berthing Master at Kharg anchorage and after advising the ship's Master of all port formalities, will normally take 2 tugs (1 to the bow and 1 to the stern), alongside while proceeding to the jetty.

B. Berth Turn. Vessels to load at Khemco jetty will normally be accepted and the berth will be assigned to the vessel in order of arrival and nomination. In the event the berthing is delayed by weather or other reasons, vessels will keep their positions in line. Vessels leaving the port area on account of weather or other reasons should keep in contact with the terminal in order that they will be available when weather moderates. Khemco reserves the right to load vessels out of turn following the return of good weather, to the extent that such loading out of turn does not materially delay the loading of other vessels in line. For example, in the event that weather or other reasons make it necessary for vessels awaiting berth to leave the terminal and put to sea, Khemco may load another vessel after the port opens, but before the return of the vessels waiting in line ahead of it. And further, Khemco reserves the right to decline to berth a specific vessel if its condition or facilities are unsafe for berthing or loading, but berths other vessels "out of turn".

C. Gangway. When alongside the jetty, vessels shall provide an efficient gangway with a net rigged underneath. During the hours of darkness, they shall install adequate safe lighting for the gangway. These lights are in addition to those used for the deck illumination.

D. Sailing. All lines are dropped by means of quick-release hooks, fitted on all dolphins and under normal conditions 1 tug is used on the hook at the bow of the vessel in order to clear her off the berth. Usually the documents are signed before departure, unless the berth is needed for another ship.

BALLAST: A. Rules and Regulations. Vessels arriving at Kharg should maintain a reasonable draft fore and aft for safe manoeuvring and berthing. When conditions permit, the Berthing Master will advise the Master to commence discharging ballast. It is the Master's responsibility to see that dirty ballast, whatsoever, is not pumped or spilled overboard. Only clean ballast or bilge water may be discharged within 50 miles of the coast-line. In the event of contaminated ballast or bilge water, the vessel will be required to divert this material to a ship's slop tank. Otherwise, the vessel may be unberthed and returned to a point not less than 50 miles from the coast line to discharge contaminated ballast.

There are no ballast disposal facilities at Kharg Island.

Masters are requested to arrive at Kharg with clean tanks, pipe-lines, sea suctions, strainers and pumps. Ships will not be accepted for loading if evidence of any dirty ballast is observed.

Any vessel returned to a position at least 50 miles off-shore to discharge dirty ballast, or for any similar reason, automatically nullifies any "Notice of Readiness" already tendered and loses any priority held for loading. The vessel will be entered for loading at the time of second arrival when a new "Notice of Readiness" will be tendered.

B. Loading and Deballasting Simultaneously. Vessels are permitted to load cargo and discharge clean ballast at the same time provided all safety and other aspects are observed.

C. Tank Cleaning. Ship-tank cleaning will not be allowed at the pier. Ships will be allowed to draw sea water ballast while alongside.

LOADING: A. Ship's Gear. Although the jetty is equipped with a boom to handle loading hoses, ships are requested to rig jetty side boom in a proper and safe manner for possible use. Masters will be responsible for ensuring that the ships gear or fittings are in good working order and will not in any way interfere with or hamper the working of the facilities.

B. Inspection. After the vessel has been berthed and all formalities carried out the vessel will be boarded by the loading Master. A joint inspection will be made by an authorised ship's officer and the loading Master after the exchange of information and documents. If the ship's tanks, piping or equipment are in such condition that a potential hazard exists, the ships will be refused permission to load until such hazards are corrected. In any case, the owners or charterers of the ship will be notified of any delay or refusal to load because of hazardous conditions and any expense due to such delay or refusal to load will be borne by owners.

If the ship does not arrive with tanks and/or piping sufficiently cooled to permit loading, the time required to cool down shall not be counted as lay time. Any expenses, including LPG furnished by company, demurrage, etc., involved with the cool-down period and operation shall be borne by the owners or charterers of the vessel.

Should the vessel arrive at the loading terminal with inert gas in its tanks, after purging from a previous cargo of ammonia or other gas to prevent contamination of shore lines and facilities, the inert gas should be vented if possible before ship is moored. If the ship's tanks to be loaded previously contained a product different from what is to be loaded, the Master shall verify that the tanks are clean and ready to receive Kharg Chemical cargo.

C. Loading Propane and/or Butane. 1. General Information. No loading will begin until the ship is safely moored with fibre mooring lines, gangway lowered and secured, the ship grounded and ground tested, ship's and shore emergency fire hose pressurised and ready for use, fire wire in place, and ship/shore communications tested and in good working order.

All loading personnel will wear fibreglass hard hats, leather-palmed gloves, cotton long-sleeved shirts, long cotton trousers, cotton socks, and sandals or shoes that do not have spark-generating material, such as steel nails, cleats, toe or heel plates. Non-sparking tools will be used in making hose and ground connections. Silk clothing or headgear will not be permitted due to its affinity for collecting static electricity. Ship's grounds will be tested for continuity to shore before product or vapours pass through hoses.

Since the LPG may not contain an odorant, particular care shall be taken that the atmosphere does not become explosive. If there is no air movement, explosimeter readings will be taken hourly, and if an explosive atmosphere exists, loading shall stop until conditions change. Prior to loading the main cargo a small quantity of propane and/or butane will be loaded or circulated initially for cooling down purposes. The amount set aside for cooling down will depend on whether the cool down is for the ship's lines or ship's tanks. Generally, the ship's lines will be cooled down before loading each parcel.

Although a small amount of refrigerated LPG is normally retained in the bottoms of the ship's cargo tank during the trip to Kharg Island, the tank vapour space and tank walls are warmer. For a period of about an hour while low temperature circulation of the shore lines continues, a small amount of propane may be taken by the ship from cargo holds and sprayed into ship's tanks. This method cools the upper parts of the ship's tanks and vapour spaces. If propane is taken from shore lines, this is replaced from shore tankage as the circulating pump suction is "floating" on the shore tank outlet line.

The enclosed spaces around ship cargo tanks and double bulkheads should be frequently monitored by ship's personnel for cargo leakage. The measures for dealing with any leakage to prevent the temperature of the hull structure from falling below a safe level depends upon the ship's design. The Master shall have standing orders for dealing with any leakage observed on the ship and shall so inform the Loading Master.

2. Loading Master and Jetty Operator. Once the vessel has been berthed, berth will be manned at all times by an operator, who will be stationed in the immediate vicinity of the berth loading bay. All information and forms will be passed by the Loading Master prior to commencement of loading.

3. Alarms. All alarm systems on vessel and communications between the jetty and control room shall be checked before loading is begun. Masters are requested to make the Loading Master fully familiar with the vessel's alarm systems. Otherwise, confusion may occur between loading alarms and fire alarms.

4. Connecting Loading Hoses. The loading and vapour-return hoses will be well supported and laid along the pier. Each hose and hose valve will be supported by jacks on ship's deck. Hoses will be protected by rope mesh. Once the loading hoses are connected they will be adjusted during loading operations. The shore and ship personnel shall be careful not to kink, stretch or damage hoses. Hoses not used will be blanked. Hose flanges will be completely bolted and shrouded.

Size of Hoses; propane 8 in. (with 8 in. ASA 150 flanges); butane 8 in. (with 8 in. ASA 150 flanges); vapour 6 in. (6 in. ASA flanges).

5. Air. It is most important that no air is allowed to enter either the ship or shore loading lines. All hoses and spools must be purged free of air after being connected.

Provision is made on shore for purging air from LPG and vent hoses on completion of hose connection to ship and for purging LPG vapour from hoses before disconnecting when loading is finished. Provision is made to supply inert gas for this purpose. Provision is also made for disposal of remaining liquid in hoses safely and effectively from shore connection of hoses before disconnecting and gas purging of hoses when loading is finished. Valves and connections are provided for this purpose on the shore end. All ice must be removed from around hose insulating gasket prior to hose disconnection. Cargo hoses shall be blanked and be removed from ship. Ground wires will remain connected until ship's gangway is removed and ship is ready to depart.

6. Loading Pressure. Loading pressure should not exceed 50 p.s.i. at any time.

7. Ship's Compressor. During loading, the ship may pump vapours ashore via the ship's compressor. The Loading Master should be advised before the compressor is started or stopped.

8. Loading Rates. Maximum loading rates for LPG products are as follows:

Propane (2 lines)	10,900 barrels per hour
Butane (2 lines)	7,800 ,, ,, ,,
Propane (1 line, pumping)	7,000 ,, ,, ,,
Butane (1 line gravitating)	3,900 ,, ,, ,,

It is more important that the Loading Master be informed before any changes are made by the ship in the vapour compression operation. He then will inform the shore loading area. Starting and stopping compressors on the ship affect the shore tank pressures and can result in damage to tanks and pumps. Ship's valves should under no circumstances be partially or completely closed against LPG flow without first informing the Loading Master. Pumping rates will normally be adjusted from the shore loading area.

The ship's Master is responsible for his ship at all times. The company Loading Master will advise the Master in respect to loading pressures and hazards, but will not direct the loading except as may be necessary to protect their terminal's facilities or to prevent any hazards. Manipulation of ship's valves is the direct responsibility of ship's personnel.

LPG loading will be done on a 24 hours basis; hence the Master of the vessel, while alongside the LPG loading pier, will be responsible for the provision of adequate explosion proof lights, fittings and switches in all parts of the vessel where work is being carried out in any way connected with loading of LPG.

The ship's pipe-lines/vent system and/or liquification system shall be manifolded so that only those pipe-lines connected to the ship's tank being loaded will be open. All other pipe-lines' lines shall be closed and outlets blinded.

All doorways, vents, ports, air-conditioner intakes and other openings into which gaseous vapours could enter shall be closed.

During loading, there shall be no smoking, no open lights and no galley fire on the ship or in the vicinity of the pier.

Packaged goods, bunkers, water, freight and ship stores shall not be loaded or discharged during loading. Visitors will not be permitted on the ship during loading.

Loading of LPG shall be stopped whenever weather or sea conditions are hazardous to the ship, dolphins, LPG hose and manifold, adjacent vessels or personnel. The Senior Terminal Representative and authorised Ship's Officer shall jointly judge if such conditions exist. In case of dispute, the Senior Terminal Representative's judgement shall be followed.

During severe thunder storms, sand storms and electrical storms in the vicinity of the ship, loading shall cease until the storm subsides.

9. Strainer Boxes. It is important that no ice, pipe scale, etc., be allowed into the vessels' tanks. The ship should have strainers placed immediately upstream of the manifold valves. A careful watch must be kept on the pressure to prevent the strainers being blocked and periodically the strainers should be cleaned by using the built-in wiper, which should be turned clockwise only. In case of an absolute blockage loading will have to be suspended and the strainer cleaned, if necessary by removal. If one of the vessel's strainers is blocked, it may be possible to continue on the other hose.

10. Completion of Loading. A reduction in loading rate before topping of the final tank or tanks may be arranged through the Loading Master by the ship's officer in charge. When the vessel asks for a slow rate, the loading pump will be shut-down and valves re-aligned for circulation. The vessel should then complete loading at its own controlled rate off the circulation flow. The terminal might ask for a suspension of loading while re-aligning the circulation pump. When required to stop completely, the Loading Master should be advised.

11. Hose Disconnection. When disconnecting hoses in order to change or clean a strainer at the time of completion of loading, the following points must be remembered:

(a) All ice must be removed from around the hose insulating gaskets prior to disconnecting.

(b) The hoses and hose valves must be secured to the vessel to avoid slipping or twisting. This is best done with rope and/or pulleys.

(c) The hose valves and ship's manifold valves must be shut.

(d) The vessel's vent valves must be open either to the atmosphere or to the vapour return hoses.

(e) The ship's strainer and all pipes and flanges between the hose and manifold valves must be de-iced.

(f) The hose can then be disconnected, but the ship's manifold valves, vapour return valves and hose valves must be shut.

D. Loading of Bulk Sulphur. All rules and regulations concerning LPG loading also apply to sulphur.

1. Inspection. The joint inspection of the ship and the ship's holds to be loaded with sulphur will be made by the Loading Master and authorised ship's officer. If the condition of the ship's holds presents a potential hazard to personnel, sea or shore facilities, the ship will be refused permission to load until conditions are corrected. The Master shall bear the responsibility for notifying the owners or charterers of the ship of any delay or refusal to load because of hazardous conditions and any expenses due to such delay or refusal to load shall be borne by them. The company reserves the right to refuse loading and their decision is final.

If the ship's cargo holds are not clean or are so hot and/or contain residue (such as excessive rust, sand-scrap iron, minerals, or mineral dust) that alone or in combination with sulphur or sulphur dust would contaminate sulphur being loaded, oxidise with sulphur, or cause a fire or explosion of the sulphur cargo, permission to load sulphur will be withheld until this condition is corrected.

2. General Information. Bulk Sulphur is loaded at 500 t.p.h. via a conveyor. The conveyor extends from the shore storage area along the causeway, trestle and finally to the main dolphin close to the ship's holds.

No loading will begin until the ship is safely grounded, moored with fibre lines, fire hoses pressurised, ship-to-shore communications operable and the chute grounded.

In order to minimise movement of fine sulphur dust, cowl ventilators serving hold into which sulphur is being loaded shall be blanked off to prevent circulation of air. Package goods, bunkers, water, freight, ship stores shall not be loaded or discharged during or after sulphur loading.

When sulphur is loaded in a deep hold with general cargo in the tween deck hold above the sulphur, the ship's Master will be responsible for installing a dust proof wooden bulk head enclosure in the hatchways from the over deck of the lower hold to the weather deck forming a tight enclosure to prevent sulphur dust from entering the tween decks during loading. Ceilings shall be tight to prevent sulphur dust from entering bilges. Any chinking at tank tops or bilge will be of non-combustible material.

Masters to maintain sufficient personnel to adjust and maintain chute position, gangways and keep mooring lines taut as ship is loaded.

If sulphur is loaded into a hatch already containing sulphur, representative samples may be requested by the terminal to determine quality.

Since the sulphur loading facility at the pier is fixed the ship will be warped and moored so that various ships holds that will receive sulphur can be loaded.

After each warping the ship will be moored and grounded and chute grounded. The hold to be loaded will be checked with an explosimeter to be certain that the hold is not in the explosive range. Personnel entering cargo holds for inspection must be equipped with life-lines and belts with non-sparking hardware, goggles with green tinted lenses, and self-contained breathing apparatus with a mask covering eyes and nose. The life-lines shall be of sufficient length and strength that 1 line could be used to pull a man out of a hatch. For each man working in the hold 1 man on deck must attend his life-lines. Personnel in the hold must wear gauntlet gloves, high-top shoes, long cotton socks, a fibre glass hard hat with a cotton cap ear flaps covering the head and ears, pants fastened at the cuff and long-sleeve shirts buttoned at the neck and wrists. Silk clothing or headgear will not be permitted due to its affinity for collecting static. Cotton clothing material is preferred.

Only the hatch being loaded with sulphur will be open. All other ship hold hatches must be closed. All doorways, vents, ports, air scoops, air conditioner intakes and other openings into which sulphur dust could enter should be closed during loading. After loading and trimming a hold, the hold hatch cover shall be closed and the next hatch to receive sulphur will be opened. The pier sulphur loading tower can be raised and lowered as well as rotated in order that the cargo hold being loaded can be evenly trimmed with little or no manual trimming. Each time the tower is moved the chute shall be grounded. No hand cargo load trimming will be allowed while the pier loading sulphur tower is in operation. The tower down-spout drop distance will be adjusted to minimise sulphur dusting.

The loading-tower operator will be advised by authorised ship's personnel on the deck by use of agreed hand signals of any hazards such as deck cargo, life boats, aerial guy wires, etc., that can do damage to loading tower. Personnel will work upwind as much as possible to minimise sulphur dust inhalation or sulphur on skin. Eye baths and showers are located at the dock and will be ready for use if needed.

No loading will be done until all personnel are out of ship's cargo holds. The ship's authorised officer shall assign personnel to sweep sulphur dust into cargo holds to minimise pollution of the adjacent sea water. If shovels or scoops are used the shovels must be of a non-sparking material such as monel. Personnel working cargo holds or on deck shall not be permitted to wear shoes with steel nails, or metal heels or toe plates that could cause sparking.

Loading of sulphur will be stopped whenever weather or sea conditions are hazardous to the ship, pier, dolphins, sulphur loading tower, pier equipment, adjacent vessels or personnel.

Sulphur dust, like most poor electrical conductors rapidly acquires a static charge under dry atmospheric conditions. To minimise this hazard the loading tower is equipped with water spray nozzles to humidify the sulphur and reduce dusting. Conveyor hoppers are also equipped with sprays.

During severe weather conditions loading will cease and cargo hold hatches shall be closed until the storm or seas subside.

Sulphur loading will be done on a 24 hour basis. The Master of the vessel while alongside the sulphur loading pier will be responsible for the provision of adequate explosion proof lights, fittings and switches in all parts of the vessel where work is being carried out in any way connected with loading. The Master of the vessel will assign authorised ship's officers and men as deemed necessary for the safe loading of the ship and to adjust mooring lines and keep sulphur dusting to a minimum.

FUEL: Presently no bunker facilities are available at Khemco jetty.

WEATHER: A. Climate. The climate along the coast of Kharg Island is generally mild. The days in mid-Summer are extremely warm and humid with the temperature reaching 117°F. (47°C.) and a relative humidity ranging from 10% to 98%. The Winter months, from November to March, are pleasant with a minimum temperature of about 39°F. (4°C.). Freezing weather is uncommon.

B. Weather Data and Summary.

Average annual rainfall	8 in.
Mean maximum temperature	87°F.
Mean minimum temperature	66°F.
Extreme maximum temperature	117°F.
Extreme minimum temperature	39°F.
Average relative humidity	59%

C. Winds. Wind directions and velocity are subject to rapid change without warning and precautions are necessary to avoid difficulties. The heaviest seas and swells are from the N.E. through S.E. The prevailing wind for most of the year is from the N.W., but during the Winter period strong S.E. storms occur with very little warning. The Khemco jetty is sheltered from the N.W. winds.

D. Tides. The tidal range is between 7 ft. and 8 ft., with a maximum rate of about 1.5 knots. The tidal streams run approximately parallel to the line of the jetty, with occasional cross currents.

E. Sea Temperatures. The surface temperature of the sea ranges from 63°F. to 97°F., depending on the season.

SAFETY: Masters of vessels are responsible for the safety of their vessels including, but not limited to compliance with official precautions, and must take all necessary precautions while the vessels are alongside the Khemco jetty. While the vessels are alongside the jetty, all personnel must comply with all port's safety rules and regulations.

GENERAL: *(a)* Shore Leave. Shore leave at the terminal must be arranged between Master and ship's Agent. Sufficient personnel must be on board at all times for emergencies.

(b) Visitors. Due to hazards involved, no visitors are allowed while the vessel is alongside the Khemco jetty.

(c) Light Dues. A charge of half a Rial per g.r.t. is levied on each vessel for light dues by the Iranian Government. This is in addition to light dues for Middle East Navigation Service. The company shall have no responsibility in respect of any taxes, dues, or other charges levied by the Iranian Government or any of its departments or agencies.

(d) Painting and Scaling. Painting, chipping, scaling and any repairs on deck or overside is strictly prohibited while vessel is alongside the Khemco jetty.

(e) Garbage. Dumping of garbage and refuse strictly prohibited in port area.

(f) Repairs. No workshops or other facilities for repairs at Kharg Island.

(g) Customs. There are customs and other official offices on the Island. Vessel will normally be boarded by a Custom Director, Immigration Officer and Director of Ports and Shipping.

(h) Consulates. No consulates on Kharg Island. Nearest consulates or diplomatic representatives are at Khorramshahr.

(i) Marine Surveyor. No marine surveyor on the Island, but can be available at 48 hours notice through ship's Agent.

(j) Recreation Centre closed.

(k) Supplies. Provisions can be supplied if sufficient notice given. No fresh water is available for delivery to the ships. No laundry services are available at Kharg Island.

(l) Mail. Regular plane services between Kharg Island and the mainland and mail receiving and dispatching can be arranged through ship's Agent.

SHIPMASTER'S REPORT: June 1979 (with further updates in March 1980).

Approaches: Generally not a great deal of traffic. The D/F at the airport is operational and useful. Decca Navigator Chain 5C. Ships anchor at S.E. and S.W. of island.

2 buoys at Southern end of island:

Red Pillar Buoy Gp. Fl. (2) 6 sec. (29° 11′ N., 50° 20′ 24″ E.);

Green Wreck Buoy, conical (29° 12′ 06″ N., 50° 19′ 39″ E.), marks position of tug.

Anchorage: The Eastern anchorage is very exposed to Southerly winds (use Western anchorage if waiting for a long time in Winter). At the present time there are many tankers waiting which means small tankers and LPG vessels either have to anchor themselves in amongst VLCC's or anchor well out – generally about 4 miles East of the "T" jetty (less shipping waiting in March 1980). This seems to be quite acceptable to the Authorities and is more satisfactory as far as engine maintenance and winds are concerned.

Berth: South of "T" jetty owned by Khemco – Kharg Chemical Co. Approximate max. size of vessel 250 m. long; water depth LW 13.6 m. and about 60,000 d.w.t.

Consists of jetty stretching over about 150 m. connected to shore by pier. On the jetty there is a manifold for flexible LPG lines, line derrick with powered winch, sulphur gantry and chute connected by conveyor belt to stockpile ashore.

On either side of jetty there are 2 dolphins with quick release mooring hooks. The jetty and near set of dolphins are faced by shock absorbing fenders.

March 1980: With strong Southerly winds the berth is a hazard. We experienced a force 6 S.E. wind one night which fetched the swell up and caused the vessel to work heavily on the jetty, one release hook gave way (the securing pin snapped), luckily it was on a dolphin that had a catwalk so we were able to change the moorings. As we were port side too facing North into the "T" jetty we had to sit tight and put out extra moorings.

Fenders were very good (about the best that I have seen with large timber faces)

Depth by lead line. After (Southerly dolphin with catwalk) 12 m. at LW, forward dolphin 13 m. at LW.

VHF: Call 'Ipac Marine' on Channel 16, works on Channel 6, only operates office hours and when berthing.

Vessel can call 'Kharg Pilots' 24 hours on Channel 16, working Channel 12, who will try to pass message for you. 'Kharg Pilots' have nothing to do with 'Khemco' jetty.

Pilots: 2 Iranian 'Ipac' Marine Pilots solely for 'Khemco' jetty. They board 2 to 3 miles East of "T" jetty from tug (will use hoist).

Berthing: Generally only in daylight. Will unberth at night. Max. berthing winds Northerly 45 knots, Southerly 10 knots. Visibility 0.5 miles.

We actually ended up with visibility at about 2 cables in a sand storm when approaching the berth. But as all the preparations had been made and little wind, continued on Radar with no problems.

Vessels berth either side alongside (head into tide).

Current: From readings taken off ships log which accurate, current speed corresponds to position "B" on "T" jetty, BA Chart 11.

Tugs: 2 used for berthing and 1 on departure. Tugs lines.

At present 2 hired from Bahrain, one of 3,000 h.p. and 1 of 1,000 h.p. The small one is very manoeuvrable but inadequate pushing, especially in a wind.

Lines: 3 headlines, 2 breast lines and 2 springs each end. 3 headlines to outer dolphins, 2 as breasts to inner dolphins, 2 as springs to jetty ends.

There are quick release hooks but they are jammed up. 1 line boat only who goes backwards and forwards both ends, try to send 3 lines together (Tie up is slow, about 2 to 3 hours).

An exact line up with ends of flexible pipes on jetty with ships manifold is required because the flexible pipes are not very flexible.

Gangway: Cannot be turned out and landed and must be brought in until before and after connection/disconnection.

It has to be turned through 130° if it is aft facing, or use fixed length. If vessel port side to, it is much easier to use in the conventional fashion.

Manifold: Most particular that manifold is lined up with hoses on quay. Liquid: 2×8 in. 150 ASA. Vapour return: 2×6 in. 150 ASA. Ships reducers, shore derrick, ships chain blocks supporting hoses from manifold gantry. Shore personnel connect.

Cargo: Propane and butane only by gravity feed. Max. rate each product 300 t.p.h., generally around 150 t.p.h. when shore tank near the bottom there is insufficient pressure to even gravitate. Vapour return lines available for both.

Cargo Temperatures:

At manifold, Butane – 6°C (B.P. 0.2 bars)

At manifold, Propane – 42°C (B.P. 0.7 bars)

The shore have no thermometers on their lines. Pockets jammed with old probes, all measurement is on pressure.

On my visit to the plant I ascertained the propane to be −43°C and butane −5°C.

Vapour Return Line: 1 flare for each product about half way up jetty on spur jetty, which normally just alight, so when you open up they can immediately see. If used in moderation no difficulties encountered.

No charge directly, but it is the practice to measure shore and ship tanks and check the difference. On our visit this did not happen as shore tanks had not been taken on departure due to being virtually empty.

At the start the vapour return lines were closed so the valve had to be sought.

Loading Master: There is always one on the jetty, tries to be helpful and speaks reasonable English. Best to telephone 441, 442, Mr. Shafiee or Mr. Ayzak who are the managers – very helpful, or telephone Control Room 412 for shift supervisor who will give you tank tonnages in barrels.

Stopping Propane: 1 hours notice required to ready the pump for stopping and 5 minutes before completion. When you tell them to stop a little more liquid will run down the line by gravity. It was not possible to top off by gravity alone as by this time the shore tanks were very low.

Stopping butane was no problem as they ran out and we were at the end taking it as they were making it until that process came to a halt.

Specific Gravity: Propane: 0.505 60/60.

Butane: 0.574 60/60.

Surveyor: No outside surveyors. Plant chemist does the survey, agrees with Chief Officer. Ship figure on Bill of Lading.

Draft Reading: Difficult to read after draft, best to use binoculars and Aldis Lamp at night.

Tanks on Arrival: Up to Master whether the ship is capable of loading. If loading propane into butane atmosphere or I.G. or vice versa, Khemco require statement to this effect from Master.

The line is normally circulated for 8 to 12 hours before arrival by a small quantity of liquid being bled through to the VRL. Nevertheless, the first "Slug" is warm due to exposed quay section of line.

The lines (flexible) to ship are purged with Nitrogen after connection by a bleed in at the manifold connection. Nitrogen bottles on jetty.

Documentation:

8 Copies Crew Lists.

2 Copies Vaccination List.

1 Copy Stores List.

2 Copies Crew Declaration.

2 Copies Maritime Declaration of Health.

The Agent, Port Authority Representative, Port Health and Customs board arrival berth. Numerous forms have to be completed. Arrival formalities take 45 minutes Clearance is given to Master on arrival.

On departure the 'Khemco' shift manager comes down with all the cargo papers – Manifest, Bill of Lading, Spec., etc., and signed onboard.

We finished cargo at 0900 hrs., and papers came aboard at 1145 hrs. This is normal.

The Agent is always on about E.D.P., it is not the practice on this berth and in any case for the sake of a few hours its best to have all the papers correct and note protest if necessary.

Pratique: Granted at berth.

Notice of Readiness: Generally will only be accepted when first line ashore (not at anchorage).

Note of Protest to be given with all force and Khemco may back down and accept on anchoring if port is not closed due to wind.

Communications: Cable "Chem Kharg" Tehran. Telex 2402 Kemco TN.

All telexes have to be routed via Tehran for international acceptance.

Telephone poor, can hardly get through to mainland.

It became necessary for me to telephone UK so managed at night to get through to 'Kuwait Maritime' about 120 miles away. 24 hour watch not restricted as ALRS. Call Channel 16, generally works Channel 26. After contact vessel can wait about 30 minutes on Channel 16 before operator calls back. Channel 26 very clear.

March 1980. Not possible to contact 'Kuwait Maritime' in Winter months. It is possible to telephone UK from Kharg and from the jetty. A long wait is usual from the jetty and the line very weak, but it can be done with perseverance.

A better method is to get the Plant Manager to take you to the Central Exchange in the township and UK can be contacted via STD, it took about 40 minutes of constantly ringing to get connected and then you run the risk of disconnection, but again communication is possible and reasonably clear.

Telex via the Agent takes about 26 hours to get a reply due having to be telephoned through to Khorramshahr and then telexed to London via Tehran and vice versa.

Alcohol: We arrived with everything sealed. The Customs allowed us to have 6 cans of beer per man per day, no spirits (it depends on the Customs and Master).

Do not drink outside or give Iranians alcohol, the punishment is severe.

Radio Room: The Port Authority wanted to seal this but persuaded them to seal the antenna switchboard only (with chart paper and glue).

Fresh Water: Fresh water main runs to ships side with meter. We obtained about 40 tonnes. Water is distilled and slightly brown.

Plant: At present about 300 tonnes per day of butane and 500 tonnes per day of propane are being produced which is about 60% of capacity.

Sulphur production is just resuming and is normally about 200 tonnes per day.

Feedstock is taken from IPAC (Iran Pan American Oil Co.) which is, or used to be, 50% AMOCO owned.

Feedstock is in the form of third stage refined well gas taken from 3 local wells, 2 on the island and the Darius field on the S.W. coast. Most of the 'Sour Crude Gas' is extracted before acceptance, what's left is used for making sulphur.

The plant is completely self contained apart from initial feedstock and covers about 1 sq. mile. It is fully automated and staffed by six operators on a shift system.

The gas which comes in H.P. and L.P. form depending on the wells, is fed through in 2 streams which are crossed to accept different Hydrocarbons thereby achieving a no waste system.

The gas is fed through Glycol towers for water absorbtion then heat exchangers to separate the different molecules.

After basic separation vertical separators are employed to further refine the product. This is then led to 3 stage compressors for re-liquefaction then to chillers.

After processing the liquid is fed to receiving tanks for settling purposes then to 2 large atmospheric holding tanks.

The tanks are heavily lagged with bitumen glass wool compound and any boil off being re-liquefied.

The approximate amounts capable of being stored are 120,000 bbls. butane (11,000 tonnes), and 250,000 bbls. propane (20,000 tonnes) which under the original Japanese shipment meant about one 30,000 tonne shipment per month.

Power requirements for the electric motor drives are provided by two 4 megawatt Mitsubishi compound turbo generators, 1 being on auto stand by at any one time, supplied with steam from the 2 boilers that also produce sulphur.

Cooling water for the various systems is provided by salt and fresh depending on the plant. Salt by two 3,000 M3 electric pumps situated about two thirds the way down the jetty, these are backed up by a diesel driven auto start pump.

Fresh water is distilled at the rate of 700 tonnes per day by a steam separator and stored in two 1,000 tonne tanks.

A new Glycol plant was commissioned in March 1978 and a new distillation plant supplied last year but not erected. At present it is in polythene sheeting awaiting engineers.

Generally the plant is in a good state of repair and all instruments seemed to be working in the very comprehensive control room. The staff were most helpful but a camera was not allowed.

A product specification can be obtained. One is always given on completion, but with a lot of pressing can be obtained about 12 hours after commencement of loading.

Sulphur loading is slow and by a conveyor belt to a directional chute. The ship has to shift to load individual holds.

Kharg Crew Facilities:

Films: No Walport exchange.

Travel: The Agent said in emergency it could be possible for repatriation to be arranged.

Iran Air have restarted their 737 flights Abadan, Kharg, Bushire to once a day in each direction. Leaves for Abadan about 1000 hrs.

Khemco/IPAC have a flight from Tehran twice a week for their own personnel by Fokker Friendship. I was told it would be possible to get a seat or two on this on a one off basis, arrangements would have to be made direct to these 2 companies in Tehran.

General (March 1980): Approximately 2 million barrels crude oil per day being exported. About 2 to 3, at maximum, tankers using the "T" jetty at any one time. About 2 tankers per week using the Western Sea Island.

The airport is functioning with regular 737 flights to Abadan, Bushire and Tehran.

The Cyrus field about 40 miles W.S.W. of Kharg has ceased production and the Darius terminal has about 1 ship per month.

The Khemco berth handles 1 sulphur ship per month mainly for African countries and 1 LPG ship every 6 weeks for Japan.

AGENT: Gulf Agency Co. (Iran) Ltd. (see "Abadan"). All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian Ports should be directed to G.A.C. Shipping (U.K.) Ltd.

KHORRAMSHAHR: 30.26 N. 48.10 E.

Khorramshahr lies at confluence of Karoon and Shatt-al-Arab Rivers and is principal commercial port of Iran. Khorramshahr is terminus for Iranian Railway system and regular train service to rest of country is available. Good asphalt road connecting Khorramshahr to other major cities in country.

DOCUMENTS:

(a) Iraqi Quarantine Officer. Vessels arriving Outer Bar (Shatt-al-Arab Pilot station) will be boarded by Iraqi Quarantine Officer who will check all crew vaccination cards. Masters requested notify Fao Quarantine Office at least 18 hours prior vessel's arrival Outer Bar giving exact arrival time Outer Bar enabling Quarantine personnel board vessel immediately. Upon arrival Outer Bar, Master should have ready a copy of Crew List and crew vaccination certificates for presentation to Quarantine Officer.

(b) Iranian Quarantine Officer. Upon arrival Khorramshahr anchorage and prior berthing, the Iranian Quarantine Officer will board vessel. He requires 1 copy Crew List, and all vaccination cards should be available for inspection.

(c) Customs Officer. Customs officer boards ship at anchorage or alongside Khorramshahr jetty (in case of immediate berthing) and requires following documents:

Crew List (2 copies).

Stores List (2 copies).

(d) Port Authorities.

Crew List plus (1 copy).

Arrival information form of the port Administration will be supplied to the Master in duplicate upon arrival, by a port representative. This form should be filled in and returned to the port Berthing Master.

(e) Agents.

Crew List (2 copies, for arranging shore passes).

Order avoid any delay in entering and discharging, the following documents must be sent by all loading port Agents to Khorramshahr Agents as far in advance of vessel's arrival as possible:

Cargo Manifest (6 copies).

Freight Manifest (2 copies).

B/L Copies (2 copies each).

All cargo shown on manifest must be landed at the port, and it is therefore essential that short-shipments, cancellations, diversions etc. (if any) be reported early as possible and manifest should be corrected before submission to Port Authorities to avoid payment of fines. Stowage plans and hatch Lists should also be sent ahead, giving ample time to be studied by Cargo Supervisor for unloading arrangements.

PILOTAGE: With exception of ships of Government of Iran or Iraq and sailing craft, pilotage compulsory for all vessels entering, leaving or navigating in the Shatt-al-Arab. Pilotage in river outside harbour limits of Khorramshahr conducted by River pilot; within limits of Port by Harbour Master.

Vessels entering Shatt-al-Arab boarded by river Pilot from Pilot vessel situated in proximity of Rooka Buoy (29° 49′ N. and 48° 47′ E.), showing a white flash every 6 seconds and equipped with Radar Reflector.

Vessels bound for Khorramshahr are conducted by River Pilot as far as Khorramshahr Anchorage, from where a Harbour Master (Iranian) will board vessel and berth her as necessary.

Pilotage, dredging and other navigational dues are collected by Basrah Port Authorities and must be settled directly with Iraqi Maritime Transport Co. Ltd., Basrah, Iraq.

N.B. Owners having vessels bound for Khorramshahr or Abadan should contact Iraqi Maritime Transport Co. Ltd., Basrah, cables "Bawakhir", Basrah, about arranging of Shatt-al-Arab pilotage. Owners should also put Messrs. Iraqi Maritime Transport Co. Ltd. in funds by remittance well in time before vessel reaches the Outer Bar of Shatt-al-Arab in order to cover port tonnage dues, pilotage and dredging dues for sailing from Outer Bar to Abadan or Khorramshahr and return.

ANCHORAGES: On arrival off the pilot boat vessel can anchor with no depth restriction. On entering the Shatt-al-Arab River the following are the recognised anchorages:

Kasba Anchorage, position about 2 miles above Fao with a max. depth of 35 ft. in fresh water.

Bawarda Anchorage, position about 2 miles above Abadan with a max. depth of 31 ft. in fresh water.

Hartha Point, position about 20 miles above Abadan and 15 miles below Khorramshahr with a max. depth of 35 ft. in fresh water. Hartha Point is the anchorage to enable vessels to lighten to 29 ft. in fresh water to enable them to cross the Karun Bar.

Abu Flus, position about 16 miles above Hartha Point and about 14 miles below Basrah (Khora Anchorage) with a max. depth of 29 ft. in fresh water.

MAX. SIZE: Maximum permissible length for vessels calling Khorramshahr is 525 ft. Max. draft for crossing Karun Bar and also at Khorramshahr (Failieth) anchorage is 28 ft. 6 in., fresh water. Max. draft at Karun Bar in December 1976 was 26 ft. so it is advisable to check before vessel proceeds to the port. The depth alongside Berth Nos. 1 to 3 is 27 ft., Berth Nos. 4 to 7 is 26 ft., and Berth Nos. 8 and 9 is 29 ft.

SPEED RESTRICTIONS: Engine speed must be reduced well in advance so that the vessel's speed when passing jetties at Khorramshahr and Abadan will not exceed 3.5 knots for vessels with more than 20 ft. draft, and 5 knots for all other vessels of over 100 g.r.t.

The same speed restrictions will apply in the Shatt-al-Arab when passing ships at anchor with barges or other vessels moored alongside, tugs with barges or other vessels in tow, and vessels engaged in dredging or other salvage work.

SHIP'S REGISTRATION: Ships have to register upon arrival at outer bar by sending telegram to Port Director Khorramshahr via EQK Khorramshahr Port Radio. At present the vessel, after registering her turn should wait at outer bar. If vessel proceeds to another port for discharging, her registration will not be valid. Vessel after registration of berthing turn for Khorramshahr can however call at Abadan Port during waiting period without losing her turn subject to permission from Harbour Master.

For registration Masters must answer a 14 point registration cable and also advise anchoring time (GMT).

HEALTH: See "Documents". Inward clearance is effected on board after receiving free pratique.

RADIO: Khorramshahr Port Radio, call sign EQK, 500 kHz, 2182 MHz.

Khorramshahr Harbour Master can be contacted on VHF Channels 13 and 16, 18 and 25.

Vessels destined for Khorramshahr should send a radio message to the Port Director Khorramshahr and to the ship's Agent 24 hours prior arrival at the Shatt-al-Arab Pilot Station (Outer Bar). Times should be quoted in GMT. Also see "Ship's Registration".

TUGS: The Port Organisation of Khorramshahr owns 2 tug-boats which are used for assisting berthing and unberthing whenever necessary. No tug boats which could be used for long-distance towage. Employment of tug-boats is not compulsory.

BERTHING: See "Ship's Registration". Berthing and unberthing performed by Iranian Harbour Masters supplied by Iranian Port Administration, Khorramshahr. Berthing turn, allocation of berth and anchorage space is under the control of Iranian Port Administration, Khorramshahr.

The Port consists of 3,199 ft. long jetty constructed with wooden piles (Berths 1 to 7) plus the new extension covering 1,000 ft., built by steel/concrete piles (Berths 8 and 9) running parallel with river bank. Jetty can receive 9 ocean-going vessels at a time.

CARGO HANDLING: *(a) Jetty.* All cargo handling/operations on shore, under control of Khorramshahr Port Administration. General cargo discharged from ships alongside jetty is received on domestic railway wagons and trailers controlled by Port Administration, and transported to Port Warehouses or open yards. Port Warehouse/Store keepers will later deliver cargo to consignees against clearance papers issued by Customs. There are shore cranes and floating cranes available for the purpose of discharging cargo as follows: 2 floating cranes (50 ton and 100 ton); 2 mobile cranes (80 ton); 3 mobile cranes (50 ton); also additional mobile cranes of 25 tons capacity or less.

The port yard is equipped with 3 cranes (90 ton, 50 ton and 40 ton). All cargo must be discharged by ship's own gear, and vessels calling at Khorramshahr should not accept cargo beyond their gear capacity to discharge.

(b) Barges. (i) General Cargo: Vessels carrying less than 500 tons cargo are permitted to discharge their cargo into barges, in which case all extra expenses and costs of barging, discharging ex barges, etc., are to be borne by the carriers and such operation is entirely at the risk and responsibility of the respective carrier.

(ii) Structural Iron/Steel: Structural iron/steel is always to be discharged in barges for unloading at Failieh Creek. Barges must be arranged by vessel's Agents, who also have to arrange labour for discharging the cargo ex barge at Failieh, sorting of the iron, and delivery to consignees. Agents should also employ watchmen for protecting the cargo while awaiting delivery to consignees, also tally clerk for supervising sorting and delivery of iron to the respective consignees.

(c) Cranes. For use in loading/unloading cargo *in the storage areas*, cranes are all used in the port yard *for unloading cargo ex rail wagons* and loading on to merchants' trucks.

There is 1 electric crane permanently installed at Failieh Creek with lifting capacity said to be 100/120 tons. This crane can be used for discharging cargo from barges at Failieh barge jetty.

(d) Storage. 19 warehouses (goods sheds), plus an open yard between the warehouses used for storing iron goods, as well as cargoes which can be stored in the open.

(e) Wagons/Trailers. For receiving cargo ex-vessels alongside jetty the Authorities have 160 rail wagons and 77 trailers with average capacity of 10 tons, but number of wagons/trailers provided to each vessel not sufficient to last 24 hours work at jetty. Although 24 hours working alongside jetty is compulsory, due to shortage of wagons hardly 12/18 hours work can be accomplished efficiently. A stand-by of 6/7 hours in Summer and of 9/11 hours in Winter is unavoidable.

(f) Delivery of cargo discharged at jetty. Port Authorities considered as direct receivers of the cargo discharged, who in turn deliver same to ultimate consignees against presentation of the carrier's Agents' Delivery Order.

Carrier's responsibility for cargoes discharged in good condition cease under tackle; slings are opened by labourers provided on wagons alongside each vessel. Broken packages are not permitted (by Customs) to be discharged on the wagons, and are therefore collected on board. Once daily, under full control of ship's officer, port supervisor and carrier's supervisor, the broken packages are delivered to Port Authorities and an official Process-verbal will be drawn by respective warehouse-keeper corresponding to remarks noted at the time. This arrangement is to prevent any delay to operations of the vessel.

(g) Overtime Costs. Wages of port staff on board for official hours are borne by port Authorities but overtime and food allowance are paid by carriers.

(h) Port Working Hours. Dayshift: 0700 – 1300 hrs. and 1500 – 2100 hrs. There is no night shift.

24 hour discharging at jetty is compulsory. The only stoppages are for lunch and dinner, 1 hour each. In Summer season, however, due to heat, discharging at jetty is stopped from 1400 hrs. to 1700 hrs.

(i) Liquid Cargo. Due to non availability of tank barges as well as storage area at Bandar Imam Khomeini, vessels carrying liquid cargo are bound to call at Khorramshahr, where consignees have their own tank-barges and storage tanks. This being the case, the Port Authorities do not divert vessels carrying liquid cargo, to Bandar Imam Khomeini.

In the port of Khorramshahr, importers of vegetable oil and other liquid commodities, have arranged their own storage area outside Customs yard, and liquid consignments will be received directly ex-vessel into consignees' barges without any expenses to carrier. (Discharging performed at anchorage.)

Vessels carrying part-liquid cargo can discharge their cargo while awaiting a berth or alongside jetty, whilst unloading other cargo on the pier.

Further to above, whenever Port Authorities divert any vessel to Bandar Imam Khomeini, in the diversion order they indicate "Subject no liquid cargo on board", as vessels with liquid cargo will have to be accepted in the port of Khorramshahr.

Notice of Readiness for vessels carrying liquid cargo, has to be tendered after vessel has anchored at Khorramshahr anchorage (within Khorramshahr port limits). If, due to congestion, there is no space at Khorramshahr anchorage, vessels may have to remain at Shatt-al-Arab Pilot station for 1 or 2 days before entering the river.

(j) *Dangerous Cargo.* Dangerous cargoes are divided in two categories:

1. Acid and flammable cargoes.
2. Explosives such as dynamite, etc.

Vessels carrying acid and flammable cargoes are accepted alongside Khorramshahr berths to unload their general cargo plus dangerous cargo, and Port Authorities unload the dangerous cargo in a yard at Failieh, which yard is mainly used for storing iron joists, but a part is allocated for dangerous cargo.

Vessels carrying explosives are not allowed to berth at Khorramshahr. Recently the Port Authorities have stopped accepting any vessel with explosive cargo on board into the port of Khorramshahr, and those vessels have to proceed directly to Bandar Imam Khomeini before calling Khorramshahr for discharging general cargo, if any. The main port for discharging explosive and special cargoes consigned to Iranian Army is Bandar Imam Khomeini, where the Army have an agreement with the Port Authorities for 1 berth out of the 6 berths. Berth No. 3 is allocated for vessels carrying cargo consigned to Iranian Army, and whenever such vessel arrives at Bandar Imam Khomeini it will be berthed immediately, even if the port is congested; in other words, vessels with Army cargo have priority for berthing.

FREIGHT TAX: Freight tax is payable on any freight earned in Iran for any export cargo loaded at any Iranian port. Per article 90 of Tax Law, freight tax is payable at the rate of 5 per cent on gross freight, regardless of whether freight is collected in Iran or elsewhere. There is no tax on import cargo freight regardless of where the freight is paid. In other words, for cargo discharged in Iranian ports, even if freight is payable at destination to be collected in Iran, there is no tax applicable.

MEDICAL: Private doctors and hospitals located in the town for medical and dental treatment and hospitalisation. Arrangements for patients' visits to the doctors, dentists and hospital will be made by Agents upon request. In case of emergency special medical attendance on board can also be arranged. X-Rays, radiographies, blood and urine tests can also be conducted by equipped hospitals existing in Khorramshahr and Abadan.

DENSITY: Fresh.

FRESH WATER: Fresh water supply alongside berth available by pipelines and at anchorage by barges, capacity 100 tons.

FUEL: Bunkers are not available at Khorramshahr Jetty, however, bunkers (diesel oil and gas oil) can be supplied by barge. All classes of bunkers are supplied at Abadan jetties only. Bunkers could be obtained from Abadan provided arrangement for supply has been made beforehand with NIOC.

CUSTOMS ALLOWANCES: After receipt of documents, the Customs Officer will seal the store room. All liquor and cigarette stocks will be sealed and reasonable ship's requirements while in port should be taken from store before sealing. This amount recommended to be assessed and be ready for removal from the stores prior to the vessel's arrival in port. During the stay at the port, and upon request and giving prior notice to the Agents' supervisor on board, arrangements may be made to have the Customs officials open the stores to issue further quantities of stores for crew consumption.

IDENTIFICATION CARDS: According to regulations in force seamen should hold shore pass issued by respective Agents and signed by the Port Health, Port Police and local town Police Authorities. All shore passes should bear a photo of the holder, in order to facilitate checking at exit of port area. It is therefore necessary for officers and crew to have a photograph ready on arrival at the port to facilitate obtaining shore passes.

All officers and crew of ships lying at jetties or anchorage of the Port of Khorramshahr to carry their Seamen's Books with them when going ashore. At the gate, the Seamen's Books will be checked by the Police against the shore pass of each crew member, the Seamen's Book will then be kept by the Police and will be returned to the holder when returning through the gate.

CONSULS:

Denmark	Tel. 2203	Norway	Tel. 2616
France	Tel. 3656	Sweden	Tel. 2280
India	Tel. 3056	Japan	Tel. 2275/5055
Netherlands	Tel. 3628		

REPAIRS: Minor repairs can be carried out to a limited extent by private workshops existing at Khorramshahr. However due to lack of skilled workers the workshops in question do not undertake any responsibility or guarantee for the jobs performed, and charges are high.

For radar, wireless, echo-sounders, etc. as well as refrigerator and air condition service there are a few engineering groups at Khorramshahr as well as Abadan, and technicians of these groups will attend to the repairs on board both at Khorramshahr and Abadan jetties or at anchorage, upon request.

Ships moored to the jetty are not permitted to disable main power-plants for repairs without prior approval of Marine Department. A port tug will be assigned to stand by alongside ship with tow line attached during entire period while plant is disabled.

DRY DOCKS: None.

SURVEYORS: Lloyd's Register; Det Norske Veritas; Bureau Veritas American Bureau of Shipping; Surveyors for ordinary damage to cargo and/or ship as well as for on-hire/off-hire survey can be arranged by Agents.

AIRPORT: Abadan International Airport about 10 minutes by car.

TIME: GMT plus 3.5 hours. GMT plus 4.5 hours in Summer.

TELEPHONES: May be placed on board.

SHORE LEAVE: See "Identification Cards".

DELAYS: The port of Khorramshahr is generally congested, with a waiting time of about 2/5 days. Port Administration sometimes orders vessels to discharge their Khorramshahr manifested cargo in Bandar Imam Khomeini to ease the congestion at Khorramshahr.

PROVISIONS: Fresh provisions in limited quantity can be obtained but large quantities of provisions sometimes may not be possible to arrange due to the fact that the Municipality is controlling the market and sometimes may prohibit the supply of the items which are in short supply. Due to certain formalities involved in supplying provisions to vessels, it is requested that 24 hour notice be given to the shipchandler.

STORES: Local commodities only available. Bonded stores not available.

LAUNDRY: Laundryman can be arranged upon request.

DEVELOPMENTS: As additions to the old 9 jetties, 4 new jetties are in operation with drafts of 26 ft. – 28 ft. suitable for vessels of up to 10,000 d.w.t. Length of jetties will be 720 m., and construction will include sheds of 20,000 sq.m. and an open area of 31,500 sq.m.

In the Failieh Canal, where steel cargo is discharged from barges, the existing jetty has been extended 500 m. This jetty can accommodate 15 barges, and has an open area of 15,000 sq.m. Construction of the extension has been completed, and dredging is taking place to increase the depth available to the barges.

AUTHORITY: Ports and Shipping Organisation. Tehran.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan").

All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian ports should be directed to G.A.C. Shipping (U.K.) Ltd.

LAVAN ISLAND: 26.47 N. 53.20 E. (See Plan Book)

LOCATION: Lavan Island Loading Terminal. 26° 47′ 10″ N. 53° 20′ 30″ E.

Lavan Island (shown on some charts and pilot publications as Sheikh Shuaib) lies on the North side of the Gulf about 6 miles from the mainland with Lavan Island Loading Terminal in Lat. 26° 47′ 06″ N., Long. 53° 20′ 30″ E., which is on the S.E. end of Lavan Island.

The island, roughly eliptical in shape, is about 13 miles in length, with a maximum width about 2 miles. It is light brown in colour and its Eastern and Western extremities are low but thence it rises to a number of hummocks having a maximum elevation of 180° on the West part. Crude oil is delivered from Sassan Oil Field to the terminal by a 22 in. diameter submarine pipe-line which runs seaward from the island on a bearing 188° from a position in Lat. 26° 47′ 32″ N., Long. 53° 20′ 05″ E. for a distance of 76 miles where it joins the Sassan Oil Field. The Company Flow Station and Pumping Station are located in position Lat. 25° 32′ 16″ N., Long. 53° 09′ 01″ E. in the close vicinity of which is a gas flare.

PORT LIMITS: Limits of port extend approximately 1 mile Westward from East coast of Lavan Island, from Terminal Sea Buoy to half a mile Westward from Sassan Submarine Pipe-line Buoy.

Lat. 26° 47.5′ N.,	Long. 53° 22.0′ E.
Lat. 26° 46.4′ N.,	Long. 53° 22.0′ E.
Lat. 26° 47.5′ N.,	Long. 53° 19.4′ E.
Lat. 26° 46.8′ N.,	Long. 53° 19.4′ E.

Vessels must not enter the Port Limits unless a LAPCO Mooring Master is on board.

DOCUMENTS:

5 Crew and Passenger Lists.
2 Stores Lists.
2 Bonded Stores Lists.
Clear Bill of Health from last port.
4 Bills of Lading.
6 Manifests.

In Iran, an additional copy of the Bill of Lading is required for all exports from the country. This must be signed by the Master and forwarded to the Customs Authorities, Lavan Island by the ship's Agent.

EARLY SAILING PROCEDURE:

Notice to Masters – Early Sailing Procedure:

In order to minimize delays to tankers awaiting official documentation after loading at Lavan Island, an Early Sailing System is now in force.

The following documents are prepared in advance, **except for cargo figures,** and presented by the ship's Agent to the Master for his signature upon the ship's arrival at the loading dock.

(A) Nos...... Originals & Nos...... Copies LAPCO/IMINOCO Bill of Lading.

(B) Nos...... Originals & Nos...... Copies LAPCO/IMINOCO Certificate of Origin and Cargo Manifest.

(C) Nos...... Originals & Nos...... Copies LAPCO/IMINOCO Tanker Time and Loading Report.

(D) Nos...... Originals & Nos...... Copies LAPCO/IMINOCO Report of Cargo and Ship's Ullages.

(E) Masters Receipt for Documents covering both pre-signed and onsite prepared forms.

Documents for Master's use, and for the consignee care of the Master will be retained on board. All other pre-signed documents to be returned by the Agent to the LAPCO Terminal Office.

Official cargo figures will be passed to the Master by radio **within 1 hour** of his departure. Advice of quantities loaded should be inserted by the Master on the 'Bill of Lading' and 'Certificate of Origin' forms as prior indicated.

Hand written copies of items (C) and (D) will be passed to the Master for his reference.

In cases of disagreement on cargo figures, the Master may,

(1) 'Note Protest' by cable or telex.
(2) Authorise the ship's Agent to 'Note Protest' on his behalf.
(3) Pass a written 'Note of Protest' to the Berthing Master who will acknowledge receipt on behalf of the Terminal.

LAPCO appreciates the co-operation of Masters, Owners, Shippers and Consignees in agreeing to implement this system.

APPROACHES: Vessels approaching Lavan Island from due South will have a clear approach.

(a) Landfall. There are 5 gas flare towers and 1 ground flare. The most conspicuous flare is in position Lat. 26° 47′ 34″ N., Long. 53° 20′ 39″ E. situated in the vicinity of Port Area. This flare onshore, when burning, makes a conspicuous landfall for Lavan Island, but at night from a distance tends to obliterate the various navigational lights.

The other flares are in position,

Lat. 26° 47′ 41″ N.,	Long. 53° 20′ 19″ E.
Lat. 26° 48′ 25″ N.,	Long. 53° 20′ 03″ E.

(group of 3 flares).

All tanks in the LAPCO Terminal Tank Farm are painted white. The two front tanks have the word LAPCO painted in black on the South side. Tank No. 2 is in position Lat. 26° 47′ 57″ N., Long. 53° 20′ 24″ E. A 1,000,000 bbls. tank has recently been constructed and added to the Tank Farm capacity. It is sited at the rear of the former 6×500,000 bbls. tanks.

(b) Navigational Dangers. South side of Island is open and free from dangers, but care should be exercised approaching from seaward as soundings shallow rapidly near coast with depths of 200 ft. only 4,500 ft. off shore.

PILOTAGE: Pilotage compulsory for vessels berthing on, or departing from Oil Jetty, and when manoeuvring in restricted area. Men-of-war do not require Pilots as they are accommodated in cargo anchorage. Vessels with LAPCO cargo will be moored at a buoy berth for which operation a LAPCO Berthing Master and tug are provided, without charge. Pilots provided automatically on arrival for tankers if berth available. If no berth available due to bad weather or other causes, vessels will be instructed accordingly. The normal international pilot signals are to be used.

Channel 16 VHF is to be used to call Radio Room. Pilots will normally board vessels 2 miles S.E. of Oil Loading Jetty. ETA is to be signalled 96 hours before arrival and confirmed, confirming ETA 48 hours before arrival.

Ships requested to have pilot ladder safely and securely rigged, and ready for immediate use, and long enough to reach Berthing Master's launch. A combination of pilot ladder and ship's accommodation ladder, so arranged that personnel can first use pilot ladder, until part way up the vessel's side, and then transfer to the accommodation ladder is recommended, especially on very large ships. A light line should be ready to take aboard Berthing Master's equipment. There should be adequate lighting at night. Vessels will provide a lee for Berthing Master both when boarding and leaving.

NAVIGATIONAL AIDS: *Note:* Masters are cautioned to consult their latest Notices to Mariners and Light Lists for most recent information regarding navigation aids.

Lavan Island Terminal Beacon. Lat. 26° 48′ 04″ N., Long., 53° 21′ 20″ E. Located behind the Main LAPCO Administration Building on the S.E. end of the Island, a rotating white light on a steel lattice tower, painted maroon, 182 ft. above MLWIS exhibiting 3 flashes every 12 seconds, with a visibility of 15 miles.

Pipe-line Lavan Island Rear Beacon. 26° 48′ 04″ N., 53° 20′ 12″ E. is located to West of Tank Farm on a steel lattice tower. This light displays a fixed red range light over a 10 degree sector beamed to seawards and centred along submarine pipe-line coming to Island from Sassan Oil Field. The light is 192 ft. above MLWIS, range 12 miles in clear weather.

Pipe-line Lavan Island Front Beacon. Lat. 26° 47′ 34″ N., Long. 53° 20′ 08″ E. and is located in a position 2,800 ft. bearing 176° from the rear beacon fixed on a steel lattice tower. This light displays a fixed red range light over a 10 degree sector beamed to seaward and centred along submarine pipe-line coming to Lavan Island from the Sassan Oil Field.

The light is 115 ft. above MLWIS and has a range of 12 miles in clear weather. The beacons when in transit from seaward, will indicate that the observer is over the submarine pipe-line and therefore should not anchor in the proximity of this line of bearing.

Sassan Oil Field Radio Beacon. Located in position 25° 32′ 12″ N., 53° 09′ E. Station identification signal is LA transmitting on 397 kHz sec., primarily meant as an aircraft beacon but can be received clearly by ships.

Terminal Radio Beacon. Located in position Lat. 26° 47′ 40″ N., Long. 53° 23′ 04″ E. Station identification signal is LD, transmitting 310 kHz (kHz/sec) from a tower on the above location. This is primarily meant as an aircraft beacon, but can be received clearly by ships.

Light Float. This light float is on station with colour and characteristics as described.

Lat. 26° 47′ 00″ N., Long. 53° 23′ 14″ E. Located approximately 1.1 miles Southward of the Eastern extremity of Lavan Island. Painted red exhibiting a white group flashing light showing 2 flashes every 10 seconds.

Leading Lights – Oil Dock: Located in Lat. 26° 47′ 34.8″ N., Long. 53° 19′ 27.9″ E. Lat. 26° 47′ 30.8″ N., Long. 53° 19′ 35.0″ E. on a bearing of 303.5° T.

Characteristics, Front, Qk., Fl. R. 5 miles. Rear, Qk., Fl. R. 5 miles.

Two sets of Leading Lights have been erected in the following positions:

1. Front. Lat. 26° 47′ 33″ N., Long. 53° 19′ 17″ E. Qk. Fl. White.
   Rear. Lat. 26° 47′ 38″ N., Long. 53° 19′ 05″ E. Qk. Fl. White.
2. Front. Lat. 26° 47′ 36″ N., Long. 53° 20′ 49″ E. Qk. Fl. White.
   Rear. Lat. 26° 47′ 40″ N., Long. 53° 20′ 58″ E. Qk. Fl. White.

Leading Lights – Cargo mooring: Lat. 26° 47′ 39.0″ N., Long. 53° 22′ 32.3″ E. Lat. 26° 47′ 33.0″ N., Long. 53° 22′ 34.1″ E. on a bearing of 344° T.

Characteristics, Front, Qk., Fl. R. 5 miles. Rear, Qk., Fl. W. 5 miles.

Oil Loading Dock Lights. The N.W. and S.E. ends of the dock are marked by single fixed red navigation lights placed on Mooring dolphins Nos. 1 and 4, respectively.

Small Craft Harbour. There is a small craft harbour located in position Lat. 26° 47′ 33″ N., Long. 53° 23′ 13″ E. There is a flashing red light at the end of the breakwater.

Terminal Sea Buoy. Located in position Lat. 26° 46′ 30″ N., Long. 53° 22′ 07″ E. White can buoy with lattice tower, radar reflecting, characteristic 1 flash every 5 seconds (0.5 seconds on 4.6 seconds eclipse).

Sassan Submarine Trunk Pipe-line Buoy. Located in position Lat. 26° 46′ 48″ N., Long. 53° 20′ 00″ E. Red can buoy with lattice tower, radar reflecting characteristic 1 flash red every second (0.4 seconds on 0.6 seconds eclipse).

Iminoco Radio Tower. Immediately in front of the main Iminoco Administration Building there is a steel tower painted red, elevation above MLWIS is 408 ft. Location is Lat. 26° 48′ 15″ N., Long. 53° 19′ 10″ E. A red light occulting every second is exhibited from the top of the tower.

Decca Navigator Station Tower. A lattice work tower painted in red and white bands 336 ft. high above MLWIS is located Eastward of the Terminal in position Lat. 26° 47′ 39″ N., Long. 53° 22′ 25″ E.

ANCHORAGES: Vessels must not enter port limits (which enclose a Prohibited Anchorage Area and Manoeuvring Area). They should proceed to vicinity of suggested Anchorage Area East of Oil Loading Dock and East of Long. 53° 22′ 00″ E., and in suitable depths of water wait for LAPCO Berthing Master. The sea bottom is good holding ground. Depth about 40 m.

Prohibited Anchorages. Anchorage is prohibited in the vicinity of the Sassan and Rostam submarine pipe-lines and for a distance of 2,000 ft., on both East and West sides of pipe-lines and parallel to same. The Sassan 22 in. pipe-line runs 188° seawards from a position Lat. 26° 47′ 32″ N., Long. 53° 20′ 05″ E., and the Rostam 18 in. pipe-line runs 205° seawards from a position Lat. 26° 47′ 32″ N., Long. 53° 19′ 58″ E.

In addition to the above, a 14 in. submarine pipe-line has been laid from the Bahram Oil Field (undeveloped) to Lavan Island.

The pipe-line runs approximately 056° T from an offshore location in
Lat. 26° 18.8′ N.
Long. 52° 32.8′ E.
to a shore location on Lavan Island at
Lat. 26° 47.6′ N.
Long. 53° 19.6′ E.

Vessels are requested not to anchor or carry out any under sea/seabed operations in the vicinity of these pipe-lines.

Terminal Port Area. Area bounded by a line joining positions:
Lat. 26° 47′ 31″ N., Long. 53° 22′ 00″ E.
Lat. 26° 46′ 21″ N., Long. 53° 22′ 00″ E.
Lat. 26° 47′ 26″ N., Long. 53° 19′ 22″ E.
Lat. 26° 46′ 49″ N., Long. 53° 19′ 22″ E.

Anchorage within Port Area prohibited. Port Area used by vessels manoeuvring to and from oil loading jetty, and no vessel permitted enter Port Area until Company Berthing Master on board.

Offshore Oil Platform. Anchorage prohibited in area of Sassan Oil Field, some 76 miles South of Lavan Island Marine Terminal, due to existence of numerous submarine oil pipe-lines connecting oil wells and production platform.

RESTRICTIONS: 24-hour service. No restrictions for vessels up to 200,000 d.w.t. Tankers in ballast required to have on board at least 33% of their d.w.t. in ballast (including permanent ballast) and not more than 10 ft. by the stern. The state of the tide does not affect entry.

The max. draft allowed for tankers using Berth No. 2 is 43 ft. 6 in. (13.26 m.).

Keel clearance of 3 ft. required by the terminal at all times.

MAX. SIZE: Berth No. 1 Max. LOA: 1,100 ft., Berth No. 2 Max. LOA 850 ft.

Vessels of 200,000–225,000 tons d.w.t. may be accepted with prior approval from LAPCO, which is based on standard 14 point questionnaire, detailing dimensions, loaded and ballasted draft and ability to segregate or load concurrent with deballasting. Determining factor is maximum elevation of the loading arms above the water line. Cargo vessels bound for the LAPCO cargo buoy mooring are limited to 26 ft. (7.92 m.). No restriction on vessels using the anchorages.

Max. Load on arrival: Following is a table of maximum loads that different size tankers can have on board on arrival, and remain acceptable for berthing:

(a) The maximum size vessel that is acceptable for berthing in a fully loaded condition is 100,000 d.w.t. This refers to vessels nominated for bunkers only.
(b) The maximum acceptable arrival load for tankers in the range 101,000–120,000 d.w.t. is 90,000 tons (675MB±).
(c) The maximum acceptable arrival load for tankers in the range 121,000–170,000 d.w.t. is 85,000 tons (638MB±).
(d) The maximum acceptable arrival load for tankers in the range 171,000–225,000 d.w.t. is 70,000 tons (525MB±).

This schedule to be used in conjunction with the standard 14 point questionnaire for VLCCs.

CLEARANCE: *(Arrival)*: After Berthing Master has boarded vessel at Port Limits, and before vessel allowed proceed, Master will be required to sign following forms. *(a)* Condition of use of Port of Lavan Island, *(b)* Tug Requisition.

Master will also be provided with copies of Fire and Safety Regulations and a Safety Inspection form. After pratique granted, Customs inspection carried out. Master will be required to furnish particulars of vessel including bonded stores, cargo, bunkers, and other information. 5 copies of the crew list and stores remaining on board will be required before clearance is granted. *Customs surveillance is strict.*

The Terminal operates an Early Sailing System covering all cargo documentation. The following documents will be prepared in advance, *except for cargo figures,* and presented by the ship's Agent to the Master for his signature, upon the ship's arrival at the loading dock.

(a) B/L. (b) Certificate of Origin and Cargo Manifest. (c) Tanker Time and Loading Report. (d) Report of Cargo and Ships Ullages. (e) Master's receipt for documents.

Official cargo figures will be passed to the Master within 1 hour of his departure for insertion by the Master on the Bill of Lading and Certificate of Origin and Cargo Manifest.

In cases of disagreement over cargo figures the Terminal will accept the Masters "Note of protest" by telex, by the authorised ships Agent, or by written note handed to the Berthing Master.

HEALTH: Owners should check with Agent respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for crew members. In the case of tankers, doctor will board when ship berthed at Loading Dock and for cargo vessels after ship has anchored. Should vessel, in either case, arrive from another Iranian port and carry a Clear Bill of Health, doctor will not normally board, and pratique automatically granted.

Signals to be exhibited for vessels entering from foreign port: by day: "Q" Flag flown at masthead; by night: red all-round light, over white all-round light. If suspected that ship has disease or fever on board, ship will report details by VHF Channel 12 to Lavan Island.

There are occasional outbreaks of cholera. International Certificates of Inoculation/Vaccination are essential.

See Radio, "Free Pratique".

RADIO: Vessels nominated to load at Lavan Island should transmit arrival information 96 hours and confirm 48 hours prior to arrival.

Arrival messages should be transmitted to the following address through either Bahrain Radio (A9M) or Khorramshahr Radio (EQK) or Lavan Radio (EQV).

"LAPCO Tehran Tlx 21–2420 IOOC IR ATTN MARSUPT LAVAN".

Arrival messages to be in the following format:

AA Name of ship.
BB ETA Lavan in GMT and last port.
CC Cargo(s) required and bunker(s) required.
DD Deballast time.
EE Size and number of connections for cargo/bunker.

If bunker connection only one side of manifold, state location.

Lavan Radio Station, is operating on 500 kHz, call sign EQV, from 05.30z–13.30z.

Lavan Terminal maintains a listening watch 24 hours on VHF Channels 16 and 12, working on Channels 4 and 14.

Vessels should commence calling "Lavan Island" 4 hours prior to arrival, on Channel 16. When contact has been made, switch to working frequency Channel 12.

LAPCO tugs maintain a listening watch on 2182 kHz. Vessels should commence calling "Pourandokht I" when passing the Quoin Island. When contact has been made, switch to working frequency 2638 kHz.

Radio Free Pratique: Vessels requesting Free Pratique by radio are required to transmit the following message through the same Channels as their ETA advice.

AA Name of vessel and ETA Lavan Island (in GMT).
BB Number of crew and state of health.
CC Number of vaccinations required for Smallpox and Cholera.
DD Number of deaths or cases of serious illness in the last 30 days.
EE Name all ports called at during the last 30 days.
FF Master's Name.

Masters should use item letters and digits to minimise cable length.

VHF: Tugs on Channel 12. Also see "Radio".

TUGS: 2 diesel powered tugs. Both tugs are twin screw, 3,120 b.h.p. Kort Nozzle types with a static bollard pull of 42 long tons. 2 tugs are used on every movement.

For each tug employed berthing, 3 copies of Towage Certificate to be signed by Master and delivered to LAPCO Berthing Master. For each tug employed unberthing, 3 copies of Towage Certificate to be signed by Master and delivered to LAPCO Berthing Master.

The LAPCO tugs and launch assist in berthing and unberthing. These are under the direct supervision and control of the LAPCO Berthing Master. Service and facilities provided by the company including the services of the LAPCO Berthing Masters, tugs, mooring launch, or berthing equipment, are at the vessel's risk.

Note: On occasions when tugs are employed standing by vessels whilst in the berth for use, if required, the full tug charge will be charged.

BERTHING: The Oil Loading Dock is located on the South Coast approximately 2.5 miles from the East end of the Island. The loading platform is 2,030 ft. from the shore, located in position Lat. 26° 47′ 06″ N., Long. 53° 20′ 30″ E.

Deck level is 31 ft. 4 in. above sea level Mean Low Water Indian Springs. Under normal conditions, 12 lines used to moor a vessel as follows: Forward: 3 headlines, 2 breast lines and 1 spring. Aft: 3 stern lines, 2 breast lines and 1 spring.

During Winter S.E. storm periods, usual to use one each additional headline and breast line at each end, making a total of 16 mooring lines. Breast lines and springs of wire rope acceptable, and normally secured to jetty patent quick-release hooks. 3 in. circumference messenger lines, 240 ft. in length, available each berth for hauling lines from mooring launches up vertical face of jetty fendering and along jetty deck, with assistance of electrically operated capstans sited at intervals along jetty.

Berth No.	*Least depth water (in ft.) above chart datum MLWIS‡*	*Maximum capacity d.w.t.*
1	68.33	200,000*
2	65	75,000**

‡Chart Datum is MLW Indian Springs and highest tide is 7 ft. 3 in.

*Vessels in the range 200,000–225,000 d.w.t. may be accepted subject to prior approval from LAPCO Management which is based on answers to a 14 point questionnaire.

**Vessels are accepted for berth 2 based on tonnage, overall length (maximum 850 ft.=259 m.), position of the manifold in relation to the bow, and always subject to a max. loaded draft of 43 ft. 6 in. (13.26 m.). Vessels over 65,000 d.w.t. should always be cleared by LAPCO prior to firming-up a nomination.

Distance from ship side to manifold flange	*Maximum elevation of manifold above chart datum*
10 ft.	76 ft. 6 in.
12 ft.	75 ft. 9 in.
14 ft.	75 ft. 0 in.
16 ft.	74 ft. 0 in.
18 ft.	72 ft. 9 in.

Loading Arms: Rigid "Chicksan" hydraulic operated loading arms are situated on both sides of the loading platform.

On Berth No. 1 4×16 in. for crude oil loading.
1×12 in. for product loading (fuel & gas oil).
On Berth No. 2 2×16 in. for crude oil loading.
*1×16 in. for naphtha loading.
1×8 in. for product loading (fuel & gas oil)

*Gas oil can also be loaded through this arm.

All loading arms are fitted with a series 150 ASA American Standard outer flange with quick connection coupler.

The Terminal carries a full range of aluminium reducing spool pieces and flexible hoses (15 ft. × 8 in.) for crude and product/bunker connections.

Tankers to have ready: Fore and aft winches ready for use, and minimum of 16 good mooring lines, 120 fathoms each.

The Terminal accepts tension wires or ropes, only with proper supervision on the brake. Derricks, winches and gear must be rigged on port and starboard sides, topped over the manifold.

Ship's crews perform all operations of mooring, and unmooring, on board ships.

Shore gangways provided at both berths.

LOADING: Tankers should arrive with 16 in. series 150 ASA flanges on all manifold connections to be used for loading.

Sassan Crude Oil of approximately 34° API gravity is available from the LAPCO 4,000,000 barrel Tank Farm. Delivery of oil to the loading dock is by gravity flow, through two 36-in. diameter pipe-lines.

Rostam Crude Oil of approximately 35° API gravity is available from the IMINOCO 1,500,000 barrel Tank Farm, immediately West of the LAPCO tanks. Delivery of oil to the loading dock is by gravity flow through two 36-in. diameter pipe-lines.

The temperature of Sassan crude oil varies between 91°F and 78°F (Summer/Winter), and the temperature of Rostam crude oil varies between 85°F and 66°F (Summer/Winter).

After the vessel has berthed, the Berthing Master, who acts as a Loading Master, will discuss arrangements, inspect tanks, sign the tanker dry certificate, and finally check cargo figures with ship's personnel. Before loading commences, all items on the "LAPCO Safety Check List" will be complied with, and an inspection made by the Chief Officer and the Berthing Master.

Loading rates of up to 52,000 bbls/hr. to Berth No. 1, and 32,000 bbls/hr. to Berth No. 2 can be achieved at Lavan Island when only 1 vessel loading.

Up to 40,000 bbls/hr. to Berth No. 1 and 24,000 bbls/hr. to Berth No. 2 can be achieved when loading 2 ships simultaneously.

The minimum flow rate is 15,000 bbls./hr. All vessels accepting nominations to load at Lavan Island must be capable of loading crude at rates above this figure.

Do not close valves against crude oil flow.

Emergency Flow Stop Signal if all communications fail will be a continuous sounding of the ship's whistle.

GENERAL CARGO: Vessels with general cargo for LAPCO should wait for instructions from Port Control in the general anchorage area, approximately 2 miles S.E. of the loading dock.

A sea berth has been laid adjacent to the small craft harbour at the East end of the Island to enable cargo vessels to discharge in most weather conditions.

The vessel is secured by port and starboard anchors on a running moor spread together with three stern ropes secured to a stern mooring buoy. The vessel lies in a heading of 225° in such a manner as to provide a lee side against either the N.W. or S.E. prevailing winds.

To assist the vessel to moor, LAPCO Berthing Master, tug, and mooring launch are provided without charge.

All cargo vessels shall comply with the Port Rules and Regulations as far as it affects them. Upon arrival, Masters will be issued with and sign for a copy of the official Port Book.

Cargo vessels should use the same procedure of arrival notification as laid down for tankers.

LAPCO operates a 300 ton flat top barge which is permanently stationed at Lavan Island to off-load general cargo. As soon as the vessel is moored, the barge will be available alongside and will operate on a 24 hour basis.

Stevedoring is carried out on board by an independent Agent and at the dock side by LAPCO.

DENSITY: The temperature of sea water alongside the Loading Dock varies from 71°F. in January to 93°F. in August. The density of sea water alongside the Loading Dock varies between 1023 and 1026.

TIDE: The tide is mainly diurnal with a mean range of 3 ft. 0 in., and extreme range of 5 ft. 6 in., and an extreme height of 7 ft. 0 in. above chart datum, which is MLWIS.

The current runs 1 to 2 hours behind the tide, both on ebb and flood, mainly setting the vessel onto the dock.

There are only very short periods when there is no current running.

An automatic chart recording tide gauge is fitted on berth No. 2.

WEATHER: In Summer time from May to September temperature reaching 110°F. (43°C.) and humidity ranging from 10% to 100%. The Winter (November to March) mild and pleasant with minimum temperature approximately 48°F. (9°C.). The wind for most of year from N.W., but sometimes particularly during Winter strong S.E. storms likely to occur lasting for several days. Oil Loading Pier partly sheltered from N.W. winds, but exposed to winds from South.

During Winter storms, waves of 8 ft. to 10 ft. often occur. A max. wave height of 15 ft. has been recorded at the Southern end of the Island.

STEVEDORES: For cargo vessels the Agent requires 4 days Notice of Arrival in order to transport labour from Bandar Abbas. Agent provides labour for working cargo "to the rail" and receiver provides lighterage and labour thereon.

MEDICAL: LAPCO and IMINOCO operate small clinics on the Island with resident doctors. This facility will be made available for emergency cases only.

FRESH WATER: None available.

CARGO GEAR: Ship's discharging dry cargo to barges in the cargo ship anchorage use ship's gear.

FIRE PRECAUTIONS: Vessel receives full detailed instructions from Berthing Master. Vessels must have fire-wires and engines not to be immobilised.

CONSULS: No consular representation on Lavan Island. Nearest consulates at Khorramshahr near Abadan.

FUEL: Bunkers are now available at Lavan Island and can be loaded at both berths of the tanker loading dock through rigid hydraulic operated Chiksan loading arms.

These bunker products are provided by the Lavan Distillation Complex (LDC) which is operated by the National Iranian Oil Company (NIOC). Available bunker products are fuel oil and gas oil.

The plant also produces naphtha.

Bunker Requests:

Requests for information on bunkering should not be directed to LAPCO or IMINOCO. All questions relating to the bunker facility at Lavan Island will be handled by NIOC Marketing & Exports Division.

The address is:

Marketing & Exports,
National Iranian Oil Company,
P.O. Box 1863,
Tehran, Iran.
Cable Address: Naftmelli Tehran
Telex: 21-2514, 21-2613 and 21-2182
Telephone: 6151 – ask for Marketing.

LDC Tank Capacity is:
Naphtha 53,000 cu.m. (333,360 bbls.)
Fuel Oil 38,400 cu.m. (241,530 bbls.)
Gas Oil 30,800 cu.m. (193,730 bbls.)

LDC loading rates, by pump are:
Naphtha 1,500 t.p.h.
Fuel Oil 500 t.p.h.
Gas Oil 500 t.p.h.

LDC loading arms at the tanker dock are:
Berth No. 1: 1×12 in. supplying both fuel and gas oil.
Berth No. 2: 1×8 in. supplying both fuel and gas oil.
Berth No. 2: 1×16 in. supplying both naphtha and gas oil.

LDC product specifications are:
Naphtha SG at 60°=0.7205 (API at 60° 64.9)
Fuel Oil SG at 60°=0.9560 (API at 60° 16.5)
Viscosity Redwood at 100°=1,440 seconds.
Gas Oil SG at 60°=0.8450 (API at 60° 35.9)

REPAIRS: No repairs allowed alongside oil loading jetty. No workshop or repair facilities available. Ship's main engines must be available at all times while alongside jetty.

MARINE SURVEYS: Lloyd's Surveyor based at Khorramshahr and can usually be called through vessel's Agent at 72 hours notice. A.B.S. Surveyor also based at Khorramshahr.

AIRPORT: No scheduled or regular air flights to Lavan Island. All aircraft required for transportation of goods or passengers must be made by charter. Airport is used by Oil Company Charter planes only and no other passengers are carried except in an emergency situation.

TIME: Standard zone time for Iran is GMT plus 3.5 hours. Daylight saving time, which was adopted in 1977, advances clocks 1 hour from March through October.

POLICE/AMBULANCE/FIRE: There is a Government Gendarmerie Station on the Island. There are no telephones established for these services. Emergencies will be handled by LAPCO staff in case of tankers.

SHORE LEAVE: Ships' crew not allowed to go ashore.

CREW CHANGES: Not permitted.

REGULATIONS: (Miscellaneous): *Painting and scaling.* Painting, chipping, scaling or spray painting on deck or overside *strictly prohibited* while vessel at any jetty berth.

GENERAL: *Flag:* All vessels are required to fly the Iranian Flag in Iranian territorial waters which extend 12 miles offshore.

Garbage: Dumping overside of garbage and refuse prohibited in Port Area.

Sanitation: Government Health Regulations require suitable covers to be fitted over all lavatory discharge outlets, etc., to prevent fouling of jetty or craft alongside.

Damage to Port Facilities: If a Master has reason to suppose that any damage has been caused by his vessel to any Port Facilities, he must agree, in writing, with LAPCO Berthing Master as to nature and extent of such damage, and this must be confirmed by LAPCO Marine Superintendent. LAPCO has standard liability forms which cover both ship and shore, and are issued on every occasion.

Rat-guards: All ships berthed alongside must provide Rat-guards for Ship's Moorings.

No visitors: No visitors allowed on terminal dock, or on board vessels alongside dock, unless by written permission of Marine Superintendent. Only persons having authorised work will be given access to port limits, dock or vessels.

DEVELOPMENTS: Oil storage tank capacity to be doubled to 3.5 million barrels. Construction to commence in 1985.

AUTHORITY: LAPCO Tehran. Terminal Office: Lavan Island.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan").

All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian ports should be directed to G.A.C. Shipping (U.K.) Ltd.

RAS BAHREGAN (Norwuz Loading Terminal):
29.43 N. 50.10 E. **(See Plan Book)**

DOCUMENTS:
5 Crew and Passenger Lists.
4 Stores Lists.
4 Bonded Stores List.
Clear Bill of Health from last port.
4 Bills of Lading.
6 Manifests.

PILOTAGE: Vessels to be moored at Bahregan Terminal will be boarded by a Mooring Master of the Company within 2 miles of the SBM. The Mooring Master will advise the ship's Master on approaches to the berth, mooring and unmooring, connecting and disconnecting the floating hose, and in all other operations within the berthing area.

Vessels are requested to have a pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach the Mooring Master's launch. If at night, adequate lighting must be rigged overside for the Mooring Master to approach the side of the ship and climb the ladder safely. Adequate searchlights should also be rigged when mooring at night.

The Mooring Master will be in direct charge of the portable VHF ship-to-shore radio-telephone communications.

ANCHORAGE: The SBM is in the open sea with no surface obstructions in the vicinity. However, anchorage is prohibited in the following areas:

(a) Immediate vicinity of the SBM – within a 1.2 mile radius of the SBM.

(b) One mile on either side of 36 in. submarine pipe-line from SBM to Bahregan Oil Centre.

Suggested anchorage area is 2 miles S.W. of the SBM.

RESTRICTIONS: The Bahregan SBM Terminal operates 24 hours per day, 7 days a week. However, mooring or unmooring is only carried out if fair or moderate weather conditions are prevailing.

In the event that berthing is delayed on account of weather, vessels will keep their position in line. Vessels required to leave the terminal area on account of weather (terminal closed) should keep in contact with the terminal via radio in order to be available when weather moderates.

FLAG: All vessels are required to fly the Iranian flag on the foremast during daylight hours. Iranian territorial waters extend 12 miles seaward from the mainland and adjacent islands.

ADVICE OF ARRIVAL: It is important that ships establish radio contact with SIRIP when 3 days distant from Bahregan Terminal and maintain this contact until just previous to arrival at the Terminal. All ships should send a 72 hour ETA message to SIRIP giving the best estimate of ship's arrival time at the Terminal.

Further ETA messages should be sent to SIRIP when the vessel is 24 and 12 hours distant from Bahregan Terminal and at any other time any appreciable change occurs in the original ETA or those subsequent thereto. The 12 hour ETA should include a positive statement regarding "ship's readiness to load" on arrival and the number of hours that will be required to discharge clean ballast after ship is berthed in mooring, as well as details of the flange size of the manifold.

MAX. SIZE: SBM terminal designed for tankers up to 250,000 d.w.t. Minimum depth at the SBM is 24 m.

HEALTH: Masters should obtain free pratique before arrival at Ras Bahregan by cabling "NIOC Kharg Port Health" via EQZ Oilco Station or "Porthealth NIOC" Kharg.

RADIO: Bahregan Oil Centre Radio Telephone Station maintains a daily watch on the following frequencies at the times stated.

GMT: 0530–0630 on 2477 kHz, 1130–1230 on 8230 kHz.

In addition, once a tanker has advised its 72 hours ETA the Bahregan Oil Centre maintains a watch on VHF Channel 16. The call sign for Bahregan Oil Centre is "BOC". Contact can be made on other frequencies if requested. Also on Telex No. 212707.

Telegrams of ETA may be sent to Khorramshahr Port Radio Station addressed to SIRIP Liaison Office, Khorramshahr.

Communications during mooring and loading: Portable VHF radio-telephone units are brought on board by the Mooring Master.

VHF: Pilots and Terminal on Channels 16, 4, 12 and 14.

NOTICE OF READINESS: Tenders to load crude oil cargo will normally be accepted and the berth will be assigned to vessels in order of arrival, provided vessels have nominations for cargo valid at time, carry clean ballast and are in all respects equipped and ready to moor.

Tankers to have ready:

(a) Windlass and deck winches forward, maindeck and aft.

(b) Ten good nylon or synthetic mooring lines, each not less than 120 fathoms in length, with efficient stoppers for each line.

(c) On port side, opposite ship's manifold, equipment capable of lifting floating hose safely and expeditiously. Weight lift of 5.5 tons.

Ship's crew performs all operations on ship.

SBM: The single buoy mooring is 13.5 m. in diameter and 3.65 m. high at its highest point. It is equipped with the following navigational aids.

Signal light:	White colour, flashing morse code "U" every 15 seconds. Range 5 miles.
Fog horn:	Morse code "U" every 45 seconds.

Radar reflector fitted. The whole SBM is painted a bright orange colour.

The Monobuoy is situated about 15 km. from the shore in position Lat. 29° 43′ 02″ N., Long. 50° 09′ 46″ E. Depth of water in vicinity of buoy mooring is 30 m. to 31 m. Buoy is served by a 36 in. loading line with a capacity of 700 cu. m. per hour.

TUGS: Available and required.

MOORING: The optimum approach to the single buoy mooring is into the wind and sea. Sometimes, however, this will not be possible because of tides at variance with strong wind conditions. Accordingly, it is incumbent upon the Master to exercise careful judgement when approaching the Terminal, particularly during the hours of darkness and in poor visibility. It should be noted that the incoming tides flow towards the N.W. (approx. 310°) and outgoing tides towards the S.E. (approx. 130°). The company Mooring Master will give all necessary advice to the ship's Master.

Particular attention must be paid to the location of two strings of floating loading hose. Normally the position of the floating hoses will be controlled by the tidal currents rather than by wind effect. During daylight hours the hose string is highly visible by virtue of their covering of orange plastic floats.

When approaching the SBM at night or during poor visibility the radar is an excellent means of ascertaining the exact distance to the Terminal. The floating hose strings normally stand out very clearly on the lower radar range scales.

Once the optimum approach route has been selected, the tanker should proceed towards the SBM at a suitable speed dependent upon conditions at that time. At approximately 3,000 ft. from the SBM the tanker should have only sufficient way on for steerage. The floating hoses should be on the port side, and it is recommended that the tanker make the final approach with the SBM on the port bow, rather than dead ahead. This permits the Master on the bridge to observe the SBM at all times and in the event of any misjudgement of the approach speed there is no danger of over-running the Terminal. (The tanker should adjust her engines such that all way is off the vessel between 150 ft.–50 ft. from the SBM).

At a suitable distance from the SBM the service launch which will have maintained station during the approach, will take two lines from the ship and secure them to the mooring bitts on the SBM. The launch will then bring the 2 large SBM float ropes to the ship, which should have a messenger line ready to raise them. Once these float ropes (each of which has a breaking strain in excess of 305 tons) are secured the ship may, if so desired, recover its own lines which are used only to provide a safeguard during pick up of the SBM float lines.

In the event that the floatrope mooring lines provided by the Company are not used or not available, the ship is secured using 6 lines from the tanker all on port side.

HOSES: 2 flexible floating hoses connect the ship's manifold with the Terminal's cargo manifold, and separate hoses connect the underside of the SBM to the submarine pipe-line end manifold (PLEM) on the seabed. A submerged peripheral fender extending outward from the hull is provided to prevent damage to the floating hoses and SBM, should the tanker ride up against it.

After the vessel is securely moored the service launch will tow the end of the floating hoses to a point on the port side of the tanker immediately below the tanker's cargo manifolds. The tanker's derrick runner should be ready to lift the hoses which will be secured by the attached chains in such a manner as to allow the ends of the hoses to reach the ship's manifold. The weight of the hose to be lifted is approximately 5.5 tons.

The hoses are fitted with 16 in. flanges, and the Company will provide reduction pieces to 14 in. or 12 in.; other sizes (as well as gaskets) as required to make connections to ship's manifold. The hose connection is normally performed by SIRIP's loading crew under the supervision of the Mooring Master. However, a ship's deck officer must be present, and must direct the ship's crew as required.

LOADING: The ship's officer responsible for loading should give SIRIP's Mooring Master at least half an hour's notice of readiness to commence loading. In any event, the ship should advise SIRIP during its last radio contact prior to arrival of the estimated time required to discharge ballast, so that an approximate time for commencement of loading can be established. It is also helpful if the ship advises the size and type of flange and also the distance of the manifold from the ship's side during radio connection.

The initial loading rate is normally about 1,500 long t.p.h. while the recently coupled flanges are inspected for leakage and the Mooring Master and ship's officer satisfy themselves that all is in order with the SBM and the ship's facilities. As soon as this is done, the loading rate is increased to the max. of 6,000 long t.p.h.

Caution: The incoming oil stream is controlled from the shore and it is extremely dangerous to close a ship's valve against the pressure, which may damage hose, ship's piping, or shore facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

The ship's officer in charge of loading should advise the Mooring Master half an hour before he estimates loading will be completed.

On advice from the ship a min. of 3 minutes is required to stop the flow of crude oil, however, a reduction in loading rate before topping up the final tanks may be arranged on request to Mooring Master.

During loading or unloading the International Code Flag "B" shall be displayed from a topmast signal halyard during daylight hours. During hours of darkness a red light shall be displayed. This light should be of a character such as to be visible at a distance of at least 1 mile, and show an unbroken light all round the horizon.

CARGO: Bahregan Sar Crude, API from 20 to 32, Temperature 85° F.

PETROLEUM INSPECTORS: Services of the Saybolt Agency available subject to at least 3 days advance notice.

MEDICAL: Depending on the availability of the Company doctor, medical assistance can be provided, although there is no hospital available. In cases of extreme emergency, SIRIP will arrange transport to Abadan at the ship's expense and responsibility.

CUSTOMS: A Customs Officer boards each vessel calling at the terminal.

DENSITY: Salinity is approximately 20% more than normal sea water.

FUEL: Not available.

FRESH WATER: Not available.

STORES: Not available.

SERVICES: No facilities for crew change, etc., or any other vessel's requirements, as the terminal is situated off-shore in the Gulf and there are no transportation facilities other than Oil Company's flights from Abadan which are meant for their own personnel.

REPAIRS: Masters of vessels loading at Bahregan Terminal are advised that this port is considered an "open roadstead" and under no circumstances may engines be shut down for repairs while their ships are moored. There are no facilities at Bahregan Terminal for making vessel repairs.

CONSULS: There are no consulates at the Bahregan Terminal; however, consular or diplomatic representatives for most nations maintain offices in Tehran and some in Khorramshahr.

SHORE LEAVE: There is no shore leave permitted due to lack of facilities.

TERMINAL OPERATORS: Societe Irano Italiene des Petroles (SIRIP).

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan").

All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian ports should be directed to G.A.C. Shipping (U.K.) Ltd.

SIRRI ISLAND: 25.54 N., 54.33 E.

(See Plan Book)

FLAG: By day, within territorial waters, all vessels must fly the Iranian flag at the foremast.

LOCATION: Sirri Island is in the Southern part of the Gulf and lies about 70 km. from the Iranian mainland between Latitudes 25° 53′ N. and 25° 56′ N. and Longitudes 54° 29′ E. to 59° 34′ E. (approximately). The island, roughly triangular in shape, is about 6 km. in length with an average width of 3 km. The S.E. part of the island is flat but rises to over 30 m. high in the North and West. Sirri Island is surrounded by deep water of sufficient depth for the largest tankers now in service. Crude oil is delivered to Sirri Island by submarine pipe-lines from off-shore oil fields.

The loading station is located in the S.E. part of the island, at 25° 54′ N., 54° 33′ 30″ E.

Landfall on the island presents no difficulty, by day or by night, for vessels coming in from the Strait of Hormuz or from one of the Gulf ports. The island gives a good radar echo at 17 miles.

At the loading station, vessels are generally moored port side to the dock, with a heading of 017°, bow-on to the prevailing winds.

The loading station is sheltered from the swell created by the West and N.W. winds, which are the most frequent.

NAVIGATION AIDS: The Sirri light, at 25° 54′ N., 54° 33′ E., shows a white flash at 7 second intervals, and is visible 10 miles. A lighted buoy, showing 3 white flashes every 12 seconds is visible 6 miles, and is located to the West of the S.E. part of the island.

PILOTAGE: Every tanker mooring and unmooring at the Sirri loading installations must take on a I.O.O.C. Pilot.

The Pilot awaits the arrival of vessels at the following point:

1.5 miles S.E. of the oil dock area, in a pilot boat carrying international code symbols for a Pilot on station. Ordinarily, vessels will be docked by day or by night.

However, I.O.O.C. reserves the right to dock certain vessels only by day, because of their tonnage, or for any other reason.

Should a Master refuse to dock by night, the resulting loss of time will be for account of the vessel.

For taking on and dropping Pilots, Masters are reminded that their vessels' boarding ladders must be fully in conformity with international regulations. The Pilot shall be fully entitled to refuse to come aboard any vessel not adhering to safety regulations. Any delay from this cause will be for account of the vessel.

ANCHORAGE: Vessels arriving to load at Sirri may anchor in 60 m. depth of water, 1.5 miles East of the lighthouse of Sirri Island, and take up a holding anchorage at their own initiative, providing they have not received instructions for docking upon arrival.

Prohibited Anchorage: Under no circumstances may vessels anchor in the zone surrounding the dock area, within a one-mile radius.

It is strictly forbidden to anchor in the vicinity of the S.E. end of the island (undersea pipe-lines); anchorage to the North and West of the island is considered unsafe and of poor holding qualities.

RESTRICTIONS: The loading station is designed for docking and handling of vessels having a minimum length of 240 m. and a maximum length of 365 m.; this normally restricts utilisation to vessels in the approximate size range of 80,000 to 330,000 d.w.t. The maximum authorised draft for these vessels is 24.00 m. (78 ft. 9 in.).

HEALTH: Following mooring and positioning of the vessel's access ladder, Iranian medical authorities or their representative will grant Pratique. Masters are advised to notify by radio any cases of infectious disease which may have broken out aboard.

RADIO: *ETA:* Tankers must have their consignees announce their arrival at Sirri 72, 48 and 24 hours in advance. Thereafter, they must notify any significant change in this ETA. Send ETA's through Abadan or Khorramshahr to "NIOC" or "NAFTMELLI" stating "for Sirri".

The Oil Company has offices in Tehran and Sirri Island.

Head Office: Tehran, Cables I.O.O.C. Telex: 2779 Tehran. Telephone: 890290, 890291.

Terminal Office: Sirri Island, Telephone: 615261.

Sirri Terminal Radio Station: Vessels must send their ETA and messages addressed to the Terminal through their Consignees, using the Iranian coastal stations.

Beginning 24 hours before the ETA of a vessel, the Terminal provides continuous listening on 2182 kHz and Channel 16 VHF at the following times: from 0400 to 0800 hrs. GMT and from 1100 to 1400 hrs. GMT.

Masters are asked to provide continuous listening on Channel 16 VHF when approaching the island of Sirri, and particularly when coming into the harbour. Working on Channels 4, 12, 14 and 20.

VHF: See "Radio".

TUGS: All vessels manoeuvring in the port are required to use the tugs supplied by I.O.O.C. The tugs provide their own tow cable.

Docking: Docking is performed by two escort boats and personnel assigned by I.O.O.C. Docking operations aboard the vessel are handled by its own crew, who must be sufficiently numerous and skilled to perform rapidly, and, in safe conditions.

BERTHING: Vessels are ordinarily docked port side to the dock on a heading of 017°, at mooring pilings equipped with "Yokohama" type fenders.

Mooring lines are attached to 6 mooring pilings, equipped with quick-release hooks.

The dock comprises a loading platform linked to land by a catwalk. Crude is loaded by 4×20 in. loading arms, two of which are also used for unloading dirty ballast water from the tanker.

Water depth at the dock is 28 m., referenced to chart zero.

Mooring: Vessels must have mooring lines port and starboard with capstans fore and aft, ready for use, with a minimum of 12 mooring lines of 200 m. length, to be able to provide proper mooring in accordance with the Pilot's instructions.

Access Ladder: The dock is fitted with a gangway for access to vessels; however, vessels must be able to use their accommodation ladder, should the gangway not be available for use. This gangway is set in position by Terminal personnel.

LOADING: *Notice of Readiness:* To be sent to I.O.O.C.

Connection: Connection and disconnection of the loading arms is performed by I.O.O.C. personnel, with the assistance of the vessel's crew.

The vessel's cranes are not used unless absolutely necessary, as in the event of failure of the platform hoisting equipment.

The loading arms are of 20 in. size, with hydraulic couplers for 16 in., 14 in. and 12 in. flanges.

Vessels are advised to have their adaptor sleeves (reducers) attached to the loading manifold, ready for connection. Before connection is begun, the vessel will be connected to the arm system, voltage equalising cable.

Loading: After the vessel is moored and pratique granted, a I.O.O.C. representative responsible for loading and safety will reach agreement with the vessel as to loading conditions, possible flow rate, and quantities to be handled. The I.O.O.C. representative is on watch on the dock at all times.

The Master of the vessel must provide him with all information necessary to ensure proper completion of the loading process. The Master shall designate an officer to be responsible for loading and safety on board, in liaison with this representative, and a crew member who shall be permanently stationed near the loading manifold for direct communication with the dock. The Master shall be fully responsible for valve operations and safe loading on board.

If necessary, the vessel may at any time request a reduction in the pumping rate.

When loading is complete, tank ullages shall be taken by an officer of the vessel, in the presence of the I.O.O.C. representative.

The Terminal shall furnish to the vessel representative samples of the crude loaded, taken by continuous sampling on the loading line.

Such samples shall be numbered and sealed, and shall state the origin of the crude.

Loading Rate: The maximum loading rate is 15,000 cu.m. per hour.

Pump Shut-Off: At the end of the loading process, the vessel shall notify the Terminal one half hour, and again ten minutes, before the planned loading stop.

Pump Back to Shore: Because of the crude oil measurement system in use, it is not possible to pump oil back to the shore.

Transfer of Documents: In general, documents are transferred on the dock; however, I.O.O.C. may request that a vessel leave the berth immediately after loading, and await its documents in the roadstead.

BALLAST: *Ballast Upon Arrival:* Vessels must come in with adequate ballast and proper trim to be able to manoeuvre in satisfactory conditions of safety.

Ballast must not be less that 30% of d.w.t., or 50% of loaded draft; FW, bunkers and stores are not considered ballast. I.O.O.C. reserves the right to leave at anchor vessels not meeting these conditions; the resulting delay will be for account of the vessel.

The Terminal is equipped with a dirty ballast holding tank; ballast unloading is performed by two 20 in. arms. Any discharge of dirty water overboard is forbidden.

Ballast Discharge: A 90,000 cu.m. storage reservoir enables vessels to discharge the dirty water ballast from their tanks into I.O.O.C. land installations, by means of two of the 20 in. handling arms in the dock installation.

Disposal of Ballast: International Law: Ship's Masters are held responsible to observe International Convention Laws concerning pollution of the sea, having particular regard to the Gulf Area.

Disposal of Ballast at Sea: Ship's Masters are warned that no dirty ballast, or bilge water should be disposed of in the sea within 50 miles of the coast of Iran.

When so disposing of ballast, all pipe-lines, sea suctions, strainers, and pumps that are later to be used to discharge clean ballast, must be flushed clean, so that there will be no chance of even a small amount of sea pollution when the clean ballast is pumped out.

Master's Responsibility: It is the ship's Master's responsibility to see that no oil of any kind is pumped or spilled overboard from his ship.

Categories of Pollution: This includes oil water from bilges, crude residue from previous voyages, or any other matter that may result in pollution of the sea. Any fines imposed shall be to ship's account.

Tank Inspection: As soon as practical after arrival, all vessels' tanks will be inspected for oil in ballast. During discharge of ballast similar inspections will continue.

Ship Rejections: If evidence of oil appears at any of these inspections the ship will be rejected, and will not be accepted until satisfactory evidence is produced that such ballast was disposed of in a proper manner. If during inspection, or during progress of loading, it is revealed that ship's tanks are not tight, or that oil is leaking from the ship, she may be rejected or refused further loading.

Ship Survey: Should the ship's tanks be found leaking it will not be later accepted for loading, unless satisfactory evidence duly certified by Lloyd's or A.B.S. Surveyors, or other recognised Surveyors of repair, is submitted.

Notice of Readiness Rejection: Any vessel rejected because of dirty ballast or sea pollution will automatically nullify his "Notice of Readiness" and lose any priority of position for loading.

On return from sea, ships' Masters should tender a new Notice of Readiness to I.O.O.C. If this is accepted by I.O.O.C. vessels will then be entered for loading at the new time of acceptance. Vessels will be rejected for dirty ballast at all times.

Ballast Quantity: A vessel must have sufficient ballast for safe handling, with due regard to existing weather and sea conditions. Through a careful watch of the weather and sea conditions, frequent exchange of information between ship and Terminal, and by a knowledge of the behaviour of his own vessel a ship's Master may come to the Terminal with a minimum of ballast and thus lessen any possibility of infringement of sea pollution regulations.

Additional Lighting: In addition to the lights usually displayed, vessels in the berth discharging ballast or loading cargo during darkness will themselves illuminate the sea around the ship, so that any pollution will be readily noticeable.

Special Provision: Vessels equipped with a separate system of ballast tanks will be allowed to discharge ballast and load oil simultaneously, providing approval is first obtained from the Sirri Terminal Superintendent.

Load on Top Method: Most responsible ship owners have adopted a system of tank cleaning using circulatory methods of transfer of tank washing on board ship and treatment with chemicals.

The result is that no oil is discharged into the sea and the oil separated is collected in a slop tank. With the written permission of Off-Taking Companies, the Terminal will "Load on Top" of such slops. To avoid pollution of the Gulf, this system is highly recommended.

MEDICAL: There is an infirmary for emergency treatment, with a doctor and medical attendant on call at all times. Emergency medical evacuation can be arranged at the vessel's expense.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: The island has no repair shop. Repairs may be made at anchorage after loading, subject to approval by I.O.O.C.

REPATRIATION: I.O.O.C.'s air transport to Tehran is not available for the transport of relief crews.

AIRPORT: I.O.O.C. has an air transport service to Tehran.

SHORE LEAVE: Crew are prohibited from going ashore, except by special authorisation issued by I.O.O.C., by agreement with the consignees and the local authorities.

Swimming alongside the vessel and the dock is prohibited.

GENERAL: *Weather:* From May to September, very hot and humid conditions prevail with temperatures reaching 47°C (117°F) and relative humidity ranging from 10% and 100%.

The Winter months, from November to March, are mild and pleasant with minimum temperatures of about 4°C (39°F). The average rainfall is approximately 200 mm. (8 in.) per annum, all of which falls during the Winter months.

Throughout the year, the dominant winds are from the W.N.W., with winds of a force greater than 20 knots from November to March. This orientation is approximately 290° at Sirri. This wind, known as the "Shomal", blows particularly in the Summer during a period of forty days (beginning of June to mid-July); in the Winter, the wind comes on abruptly and can reach 30 to 40 knots.

Note: Violent winds from the N.E. reaching 60 knots have been observed in the Winter season.

Tides: In the waters around the island of Sirri, the tides are semidiurnal with diurnal assymetry. High tide occurs approximately 9 hours after the moon passes the meridian of Greenwich. The average water level is 0.90 m. above chart datum and the average tidal range 1.50 m.

The seasonal S.W. wind from April to September causes the water level in the Gulf to rise by 0.30 m.

Sea Conditions: The swell is short and rapidly becomes steep, and it is often out of proportion to the wind force. With the Shomal, it can reach 3.50 to 4.50 m., but the maximum wave height at Sirri is in the range of 1.80 to 3.00 m. The swell subsides rapidly after the wind dies down.

Currents: Tidal currents are of the order of one knot, with N.N.E. and S.S.W. major components; thus currents are roughly parallel with the dock alignment.

Sanitary Report: This formality is normally performed after the vessel docks; however, vessels remaining at anchor may, through their Agents, complete customs and health examinations in the roadstead.

Publications and Charts: Masters may find it useful to refer to the following:

a. French hydrographic and oceanographic department charts No. 2172 and 6051.
b. French nautical instructions, Series L, volume IV.
c. Lights and fog signals book, Series L.
d. British Hydrographic Office chart Nos. 2837, 2887 and 2832.
e. Gulf Pilot (63).

Rat Guards: All ships berthed alongside must provide Rat Guards for the ship's moorings.

Territorial Waters: Iranian territorial waters extend 12 nautical miles from the coast and adjacent islands.

SAFETY: *Safety Watch:* A safety watch is provided on the loading platform by I.O.O.C. personnel, under the orders of the Loading Supervisor.

Throughout the time the vessel is alongside, I.O.O.C. makes the following seagoing facilities available to the vessel:

a. Two 300 h.p. docking escort boats.
b. Two safety tugs with monitor water nozzles, foam generators and anit-pollution spray equipment.
c. Fixed dock equipment (water screens, nozzles).

The Master remains solely responsible for safety aboard his vessel. He shall maintain sufficient crew on board to be able to handle his vessel without hazard, and ensure rapid response with fire fighting equipment:

a. Keep the engines ready for use.
b. Make sure the vessel keeps its station with the dock, so that the loading arms always operate within their designed work-zone.
c. Make sure that the mooring lines provide firm mooring without abnormal strain.

A I.O.O.C. representative shall make sure that these safety provisions are in force throughout the time the vessel is alongside the loading station.

If need be, the standby tug may be called upon for correction of docking position. Loading may be halted, and the arms disconnected.

Preventative Measures: The vessel must show a red flag by day, and by night a red light visible through 360°.

The Master must post a notice at the gangway, absolutely prohibiting smoking, the use of open lights, and access to visitors.

All hull valves shall be closed, except for those handling water circulation.

All main deck scuppers shall be plugged.

Two wire rope emergency tow lines, of adequate length and strength shall be placed on the starboard side, one forward and one aft; the eyes of the tow lines shall be maintained a suitable distance above the water, so that the tugs can couple to them easily.

The access gangway shall be properly positioned on deck.

Fire Protection: Smoking, the use of open lights, and the use of tools liable to produce sparks are prohibited outside the zones where such are normally authorised on a tanker.

In zones classified as dangerous, the use of equipment other than types approved for this use by an official body is prohibited.

Further, in general, the Master is obliged to adhere to international safety regulations.

TIME: Sirri Island is on Iranian Standard Time which is GMT plus 3 hours 30 minutes in Winter and GMT plus 4 hours 30 minutes in Summer.

AUTHORITY: Iranian Offshore Oil Company, 339 Abbassabad Avenue, Tehran – Iran. P.O. Box 1434. *Tel:* 624102-5 *Cable:* Falatghareh, Tehran. *Telex:* 212598-212346-212707. *Contact:* Captain M. H. Salimzadeh, Head of Marine Operations.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan").

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NOTES

Please also advise Shipping Guides Ltd.

The loading station is located in the S.E. part of the island, at 25° 54′ N., 54° 33′ 30″ E.

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At the loading station, vessels are generally moored port side to the dock, with a heading of 017°, bow-on to the prevailing winds.

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NAVIGATION AIDS: The Sirri light, at 25° 54′ N., 54° 33′ E., shows a white flash at 7 second intervals, and is visible 10 miles. A lighted buoy, showing 3 white flashes every 12 seconds is visible 6 miles, and is located to the West of the S.E. part of the island.

PILOTAGE: Every tanker mooring and unmooring at the Sirri loading installations must take on a I.O.O.C. Pilot.

The Pilot awaits the arrival of vessels at the following point:

1.5 miles S.E. of the oil dock area, in a pilot boat carrying international code symbols for a Pilot on station. Ordinarily, vessels will be docked by day or by night.

However, I.O.O.C. reserves the right to dock certain vessels only by day, because of their tonnage, or for any other reason.

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ANCHORAGE: Vessels arriving to load at Sirri may anchor in 60 m. depth of water, 1.5 miles East of the lighthouse of Sirri Island, and take up a holding anchorage at their own initiative, providing they have not received instructions for docking upon arrival.

Prohibited Anchorage: Under no circumstances may vessels anchor in the zone surrounding the dock area, within a one-mile radius.

It is strictly forbidden to anchor in the vicinity of the S.E. end of the island (undersea pipe-lines); anchorage to the North and West of the island is considered unsafe and of poor holding qualities.

RESTRICTIONS: The loading station is designed for docking and handling of vessels having a minimum length of 240 m. and a maximum length of 365 m.; this normally restricts utilisation to vessels in the approximate size range of 80,000 to 330,000 d.w.t. The maximum authorised draft for these vessels is 24.00 m. (78 ft. 9 in.).

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RADIO: *ETA:* Tankers must have their consignees announce their arrival at Sirri 72, 48 and 24 hours in advance. Thereafter, they must notify any significant change in this ETA. Send ETA's through Abadan or Khorramshahr to "NIOC" or "NAFTMELLI" stating "for Sirri".

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Masters are asked to provide continuous listening on Channel 16 VHF when approaching the island of Sirri, and particularly when coming into the harbour. Working on Channels 4, 12, 14 and 20.

VHF: See "Radio".

TUGS: All vessels manoeuvring in the port are required to use the tugs supplied by I.O.O.C. The tugs provide their own tow cable.

Docking: Docking is performed by two escort boats and personnel assigned by I.O.O.C. Docking operations aboard the vessel are handled by its own crew, who must be sufficiently numerous and skilled to perform rapidly, and, in safe conditions.

BERTHING: Vessels are ordinarily docked port side to the dock on a heading of 017°, at mooring pilings equipped with "Yokohama" type fenders.

Mooring lines are attached to 6 mooring pilings, equipped with quick-release hooks.

The dock comprises a loading platform linked to land by a catwalk. Crude is loaded by 4×20 in. loading arms, two of which are also used for unloading dirty ballast water from the tanker.

Water depth at the dock is 28 m., referenced to chart zero.

Mooring: Vessels must have mooring lines port and starboard with capstans fore and aft, ready for use, with a minimum of 12 mooring lines of 200 m. length, to be able to provide proper mooring in accordance with the Pilot's instructions.

Access Ladder: The dock is fitted with a gangway for access to vessels; however, vessels must be able to use their accommodation ladder, should the gangway not be available for use. This gangway is set in position by Terminal personnel.

LOADING: *Notice of Readiness:* To be sent to I.O.O.C.

Connection: Connection and disconnection of the loading arms is performed by I.O.O.C. personnel, with the assistance of the vessel's crew.

The vessel's cranes are not used unless absolutely necessary, as in the event of failure of the platform hoisting equipment.

The loading arms are of 20 in. size, with hydraulic couplers for 16 in., 14 in. and 12 in. flanges.

Vessels are advised to have their adaptor sleeves (reducers) attached to the loading manifold, ready for connection. Before connection is begun, the vessel will be connected to the arm system, voltage equalising cable.

Loading: After the vessel is moored and pratique granted, a I.O.O.C. representative responsible for loading and safety will reach agreement with the vessel as to loading conditions, possible flow rate, and quantities to be handled. The I.O.O.C. representative is on watch on the dock at all times.

The Master of the vessel must provide him with all information necessary to ensure proper completion of the loading process. The Master shall designate an officer to be responsible for loading and safety on board, in liaison with this representative, and a crew member who shall be permanently stationed near the loading manifold for direct communication with the dock. The Master shall be fully responsible for valve operations and safe loading on board.

If necessary, the vessel may at any time request a reduction in the pumping rate.

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The Terminal shall furnish to the vessel representative samples of the crude loaded, taken by continuous sampling on the loading line.

Such samples shall be numbered and sealed, and shall state the origin of the crude.

Loading Rate: The maximum loading rate is 15,000 cu.m. per hour.

Pump Shut-Off: At the end of the loading process, the vessel shall notify the Terminal one half hour, and again ten minutes, before the planned loading stop.

Pump Back to Shore: Because of the crude oil measurement system in use, it is not possible to pump oil back to the shore.

Transfer of Documents: In general, documents are transferred on the dock; however, I.O.O.C. may request that a vessel leave the berth immediately after loading, and await its documents in the roadstead.

BALLAST: *Ballast Upon Arrival:* Vessels must come in with adequate ballast and proper trim to be able to manoeuvre in satisfactory conditions of safety.

Ballast must not be less that 30% of d.w.t., or 50% of loaded draft; FW, bunkers and stores are not considered ballast. I.O.O.C. reserves the right to leave at anchor vessels not meeting these conditions; the resulting delay will be for account of the vessel.

The Terminal is equipped with a dirty ballast holding tank; ballast unloading is performed by two 20 in. arms. Any discharge of dirty water overboard is forbidden.

Ballast Discharge: A 90,000 cu.m. storage reservoir enables vessels to discharge the dirty water ballast from their tanks into I.O.O.C. land installations, by means of two of the 20 in. handling arms in the dock installation.

Disposal of Ballast: International Law: Ship's Masters are held responsible to observe International Convention Laws concerning pollution of the sea, having particular regard to the Gulf Area.

Disposal of Ballast at Sea: Ship's Masters are warned that no dirty ballast, or bilge water should be disposed of in the sea within 50 miles of the coast of Iran.

When so disposing of ballast, all pipe-lines, sea suctions, strainers, and pumps that are later to be used to discharge clean ballast, must be flushed clean, so that there will be no chance of even a small amount of sea pollution when the clean ballast is pumped out.

Master's Responsibility: It is the ship's Master's responsibility to see that no oil of any kind is pumped or spilled overboard from his ship.

Categories of Pollution: This includes oil water from bilges, crude residue from previous voyages, or any other matter that may result in pollution of the sea. Any fines imposed shall be to ship's account.

Tank Inspection: As soon as practical after arrival, all vessels' tanks will be inspected for oil in ballast. During discharge of ballast similar inspections will continue.

Ship Rejections: If evidence of oil appears at any of these inspections the ship will be rejected, and will not be accepted until satisfactory evidence is produced that such ballast was disposed of in a proper manner. If during inspection, or during progress of loading, it is revealed that ship's tanks are not tight, or that oil is leaking from the ship, she may be rejected or refused further loading.

Ship Survey: Should the ship's tanks be found leaking it will not be later accepted for loading, unless satisfactory evidence duly certified by Lloyd's or A.B.S. Surveyors, or other recognised Surveyors of repair, is submitted.

Notice of Readiness Rejection: Any vessel rejected because of dirty ballast or sea pollution will automatically nullify his "Notice of Readiness" and lose any priority of position for loading.

On return from sea, ships' Masters should tender a new Notice of Readiness to I.O.O.C. If this is accepted by I.O.O.C. vessels will then be entered for loading at the new time of acceptance. Vessels will be rejected for dirty ballast at all times.

Ballast Quantity: A vessel must have sufficient ballast for safe handling, with due regard to existing weather and sea conditions. Through a careful watch of the weather and sea conditions, frequent exchange of information between ship and Terminal, and by a knowledge of the behaviour of his own vessel a ship's Master may come to the Terminal with a minimum of ballast and thus lessen any possibility of infringement of sea pollution regulations.

Additional Lighting: In addition to the lights usually displayed, vessels in the berth discharging ballast or loading cargo during darkness will themselves illuminate the sea around the ship, so that any pollution will be readily noticeable.

Special Provision: Vessels equipped with a separate system of ballast tanks will be allowed to discharge ballast and load oil simultaneously, providing approval is first obtained from the Sirri Terminal Superintendent.

Load on Top Method: Most responsible ship owners have adopted a system of tank cleaning using circulatory methods of transfer of tank washing on board ship and treatment with chemicals.

The result is that no oil is discharged into the sea and the oil separated is collected in a slop tank. With the written permission of Off-Taking Companies, the Terminal will "Load on Top" of such slops. To avoid pollution of the Gulf, this system is highly recommended.

MEDICAL: There is an infirmary for emergency treatment, with a doctor and medical attendant on call at all times. Emergency medical evacuation can be arranged at the vessel's expense.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: The island has no repair shop. Repairs may be made at anchorage after loading, subject to approval by I.O.O.C.

REPATRIATION: I.O.O.C.'s air transport to Tehran is not available for the transport of relief crews.

AIRPORT: I.O.O.C. has an air transport service to Tehran.

SHORE LEAVE: Crew are prohibited from going ashore, except by special authorisation issued by I.O.O.C., by agreement with the consignees and the local authorities.

Swimming alongside the vessel and the dock is prohibited.

GENERAL: *Weather:* From May to September, very hot and humid conditions prevail with temperatures reaching 47°C (117°F) and relative humidity ranging from 10% and 100%.

The Winter months, from November to March, are mild and pleasant with minimum temperatures of about 4°C (39°F). The average rainfall is approximately 200 mm. (8 in.) per annum, all of which falls during the Winter months.

Throughout the year, the dominant winds are from the W.N.W., with winds of a force greater than 20 knots from November to March. This orientation is approximately 290° at Sirri. This wind, known as the "Shomal", blows particularly in the Summer during a period of forty days (beginning of June to mid-July); in the Winter, the wind comes on abruptly and can reach 30 to 40 knots.

Note: Violent winds from the N.E. reaching 60 knots have been observed in the Winter season.

Tides: In the waters around the island of Sirri, the tides are semidiurnal with diurnal assymetry. High tide occurs approximately 9 hours after the moon passes the meridian of Greenwich. The average water level is 0.90 m. above chart datum and the average tidal range 1.50 m.

The seasonal S.W. wind from April to September causes the water level in the Gulf to rise by 0.30 m.

Sea Conditions: The swell is short and rapidly becomes steep, and it is often out of proportion to the wind force. With the Shomal, it can reach 3.50 to 4.50 m., but the maximum wave height at Sirri is in the range of 1.80 to 3.00 m. The swell subsides rapidly after the wind dies down.

Currents: Tidal currents are of the order of one knot, with N.N.E. and S.S.W. major components; thus currents are roughly parallel with the dock alignment.

Sanitary Report: This formality is normally performed after the vessel docks; however, vessels remaining at anchor may, through their Agents, complete customs and health examinations in the roadstead.

Publications and Charts: Masters may find it useful to refer to the following:

a. French hydrographic and oceanographic department charts No. 2172 and 6051.
b. French nautical instructions, Series L, volume IV.
c. Lights and fog signals book, Series L.
d. British Hydrographic Office chart Nos. 2837, 2887 and 2832.
e. Gulf Pilot (63).

Rat Guards: All ships berthed alongside must provide Rat Guards for the ship's moorings.

Territorial Waters: Iranian territorial waters extend 12 nautical miles from the coast and adjacent islands.

SAFETY: *Safety Watch:* A safety watch is provided on the loading platform by I.O.O.C. personnel, under the orders of the Loading Supervisor.

Throughout the time the vessel is alongside, I.O.O.C. makes the following seagoing facilities available to the vessel:

a. Two 300 h.p. docking escort boats.
b. Two safety tugs with monitor water nozzles, foam generators and anit-pollution spray equipment.
c. Fixed dock equipment (water screens, nozzles).

The Master remains solely responsible for safety aboard his vessel. He shall maintain sufficient crew on board to be able to handle his vessel without hazard, and ensure rapid response with fire fighting equipment:

a. Keep the engines ready for use.
b. Make sure the vessel keeps its station with the dock, so that the loading arms always operate within their designed work-zone.
c. Make sure that the mooring lines provide firm mooring without abnormal strain.

A I.O.O.C. representative shall make sure that these safety provisions are in force throughout the time the vessel is alongside the loading station.

If need be, the standby tug may be called upon for correction of docking position. Loading may be halted, and the arms disconnected.

Preventative Measures: The vessel must show a red flag by day, and by night a red light visible through 360°.

The Master must post a notice at the gangway, absolutely prohibiting smoking, the use of open lights, and access to visitors.

All hull valves shall be closed, except for those handling water circulation.

All main deck scuppers shall be plugged.

Two wire rope emergency tow lines, of adequate length and strength shall be placed on the starboard side, one forward and one aft; the eyes of the tow lines shall be maintained a suitable distance above the water, so that the tugs can couple to them easily.

The access gangway shall be properly positioned on deck.

Fire Protection: Smoking, the use of open lights, and the use of tools liable to produce sparks are prohibited outside the zones where such are normally authorised on a tanker.

In zones classified as dangerous, the use of equipment other than types approved for this use by an official body is prohibited.

Further, in general, the Master is obliged to adhere to international safety regulations.

TIME: Sirri Island is on Iranian Standard Time which is GMT plus 3 hours 30 minutes in Winter and GMT plus 4 hours 30 minutes in Summer.

AUTHORITY: Iranian Offshore Oil Company, 339 Abbassabad Avenue, Tehran – Iran. P.O. Box 1434. *Tel:* 624102-5 *Cable:* Falatghareh, Tehran. *Telex:* 212598-212346-212707. *Contact:* Captain M. H. Salimzadeh, Head of Marine Operations.

AGENT: Gulf Agency Co. (Iran) Ltd. (See "Abadan").

All enquiries, telexes, cables, letters concerning Ship's Agency at Iranian ports should be directed to G.A.C. Shipping (U.K.) Ltd.

NOTES

Please also advise Shipping Guides Ltd.

Iraq

GENERAL

TANKERS: Please note that all correspondence, cables, and telexes concerning tankers calling at Iraqi terminals are to be directed to following addresses.

Postal address: State Enterprise for Maritime Agencies. P.O. Box 3, Basrah.
Cable address: Tankers Basrah. Tankers Fao.
Telex No.: 7009.

Cables for arrival should be addressed to both "Tankers" Basrah and "Tankers" Fao.

NOTICE: The Government of Iraq has made the following announcements:

Quote:

1. An Exclusion Zone has been established North of a line joining the following positions:

Lat. 29° 30′ N.,	Long. 48° 30′ E.
Lat. 29° 25′ N.,	Long. 49° 09′ E.
Lat. 28° 23′ N.,	Long. 49° 47′ E.
Lat. 28° 23′ N.,	Long. 51° 00′ E.

2. The area North of Lat. 29° 30′ N. has been declared a war zone.
3. Vessels entering waters at the head of the Gulf risk hitting mines or being attacked by vessels of the Iraqi Navy.
4. Tankers berthing at Jazireh-ye Khark Oil Port regardless of nationality may be attacked by the Iraqi Air Force.

Unquote.

THE FOLLOWING FACILITIES AND OPERATING PROCEDURES WERE AVAILABLE ON 1st SEPTEMBER 1980. HOWEVER, NO FURTHER INFORMATION RECEIVED SINCE THAT DATE.

ALBAKR TERMINAL: 29.41 N. 48.49 E.

(See Plan Book)

LOCATION: The terminal is 31 miles S.E. of Fao in position Lat. 29° 40′ 36″ N., Long. 48° 48′ 38″ E. Depth of water 29.30 m. at MLWOST.

PILOTAGE: Pilotage is compulsory for all inward and outward tankers using the Khor al Khafja buoyed channel when the draft is over 15.85 m.

NAVIGATIONAL AIDS: 8 lighted buoys define the deep water channel at the 69 ft. (21m.) depth contours in the immediate vicinity of Albakr Terminal. The buoys are battery powered with quick flash characteristics with visibility range of 1 mile. The perimeter of Albakr Terminal is outlined with flashing marine lanterns to define a hazard to marine navigation. The lanterns are battery powered, some are white lens flash with 5 mile range and others are red lens flash with 2 mile range.

The radio tower is equipped with an aviation hazard light (red). It is also equipped with a long range marine beacon (white) located below the red hazard light.

MAX. SIZE: Max. length, 366 m. Max. draft 21 m. Night berthing possible.

RADIO: Tankers are requested to contact Albakr Terminal through Basrah Control Radio (YIR) at least 72 hours, 48 hours and 24 hours prior to arrival giving ETA. Prior to docking the tanker must also provide the terminal operator with information required to prepare the "loading order" format, this information should include the type of crude to be loaded, loading rate in barrels, the Registry No. of vessel, nationality, name of Master. The Master will be informed of approach instructions such as location of berth, weather and sea conditions, and the communication channel to be used for vessel docking assistance.

Vessels bound for Iraqi territorial waters should also contact Fao Radio (YIS) at least 24 hours before entering territorial waters requesting free pratique from Medical Officer Fao. The request should indicate the state of health of the crew on board together with relevent information.

Name of Station: Khor al Khafja FC(10) Albakr Terminal FP
Call Sign : Albakr Radio
Service : 24 Hours

The following table shows the details for contacting the Iraqi port coast stations. The number between brackets corresponds to the notes explained below.

Frequency	Emission Channel	Class	Power	Service Nature
156.375 MHz	67	F^3	0.02	OT (2) (3) (6) (8)
156.550 MHz	12	F^3	0.02	OT (2) (3) (3) (5)
156.80 MHz	16	F^3	0.02	(1) (3) (4) (7) (8) (11)
161.80 MHz	24	F^3	0.02	

FC	Coast Station
FP	Port Station
OT	Station open exclusively to operational traffic of the service concerned

(1) Transmits urgent Notices to Mariners
(2) Transmits meteorological bulletins (North Arabian Gulf Weather Forecast)
(3) For Navigation and harbour control services
(4) Calling and Safety frequency
(5) First priority working frequency
(6) Second priority working frequency
(7) Weather bulletins at 0630, 1430 hrs. and on request
(8) Used for marine traffic control
(10) Station under the direction of Iraq Administration
(11) Permanent watch

While in Iraqi Territorial waters, ships under way shall maintain watch on Channel 16 (156.80 MHz) and/or (461.5 kHz) to ensure immediate reception of the instructions issued by the controlling authorities.

(a) Khor Al-Khafja, Albakr Terminal Radio, maintains listening watch on Channel 16 (156.80 MHz).
(b) Pilot station (Al-Rasheed Radio YIBE maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(c) Fao Radio (YIS) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(d) Basrah control Radio (YIR) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.

Instructions:

(a) Navigation warnings are transmitted on 500 kHz by Basrah Control Radio (YIR).

(b) North Arabian Gulf weather forecast is transmitted by:

1. Basrah Control Radio on:
   440 kHz at 0530, 1330 GMT and on request.
   6493.25 kHz at 0530 GMT and on request.
   8668 kHz at 1330 GMT and on request.
2. Khor Al Khafja, Albakr Terminal Radio, on Channel 16 (156.80 MHz) at 0530 GMT and on request.

(c) Traffic control signal on Channel 16 (156.80 MHz) and on 500 kHz by Basrah Control Radio (YIR).

(d) Traffic control signal on Channel 16 (156.80 MHz) and 500 kHz by Fao Radio (YIS).

(e) Traffic control signal on Channel 16 (156.80 MHz) by Albakr Terminal Radio.

Commercial and Public Correspondence: Call Basrah Radio (YIR) on Channel 16 (156.80 MHz) 500 kHz. 4, 6, 12 and 16 MHz. bands, and after initial contact has been established change to one of the working frequencies as instructed to pass messages.

BERTHING: The terminal consists of 2 loading platforms (A) and (B) each loading platform has 2 loading berths. Berth Nos. 1 and 2 of Platform "A" and Berth No. 4 of Platform "B" can accommodate tankers ranging in size from 35,000 d.w.t. to 350,000 d.w.t., Berth No. 3 of Platform "B" can accommodate tankers ranging in size between 85,000 d.w.t. and 350,000 d.w.t., Total length of structure is 975.4 m. and 106.7 m. wide at centre.

LOADING: Storage and pumping facilities on shore are connected to Albakr Terminal by 2×48 in. pipe-lines. The Terminal is capable of loading through either one of the pipe-lines at a time or both.

Capacity of each line varies between 77,000 to 89,000 b.p.h. depending on type of crude (Basrah heavy or Basrah light type). With both lines in operation at the same time loading rate can be increased to max. 141,500 b.p.h. (19,000 M.T.H.). 2 tankers can load with different types of crude at the same time. Loading facilities can be remotely controlled from the Control Room.

Loading will be stopped if any regulations are not observed and in the case of oil spillage.

Loading may be stopped in still air conditions, during severe electrical storms and/or high wind and sea conditions.

Loading Arms: For each loading berth, 3 identical 24 in.×80 ft. long Luceat DCMA loading arms, with hydraulically operated coupling fitted with adaptors to allow automatic and fast coupling to tanker manifold flanges ranging from 16 in. to 24 in. (spools for 10 in., 12 in. or 14 in. to 16 in. are available at the terminal if required).

Gangway: A power operated telescopic personnel gangway is provided at each berth. These gangways can withstand 500 lb. load at mid-span in the extended position.

Meters: 16 in. A. O. Smith positive displacement meters, 16 meters for each platform, capacity of each meter 12,500 b.p.h.

Meter Prover: One 24 in. triple "U" bi-directional mechanical displacement meter prover for each platform. The occurence of each prover is decided bi-yearly utilizing certified volume tanks.

Continuous Crude Oil Gravity Analyzer: There is a number of ARCCO Anulus Model 1-F10 50X liquid gravity analyzers on each loading platform capable of detecting API gravity from 45° to 15°, the output from these analyzers are displayed on the appropriate loading formats and is recorded on charts in the Control Room.

These gravity analysers are to be checked constantly and re-calibrated bi-yearly according to the manufacturer's recommendations.

A responsible member of the crew must be in contact with the terminal officials at all times.

READINESS: Notice of Readiness will be received by INOC representative provided the vessel is ready to load. Lay time will commence 6 hours after receipt of Notice of Readiness berth or no berth.

SAFETY PRECAUTIONS: On arrival at the terminal, INOC Representative will discuss with the Master the "Safety Requirements" letter addressed to him also the Safety Check List.

Attention is also drawn to the Tanker Safety Guide published by the International Chamber of Shipping and to the International Oil Tanker Terminal Safety Guide.

SHIP DOCKING ASSISTANCE SYSTEM: 1 unit for each berth, consisting of speed of approach measuring instrument with fixed wide and narrow beam R.F. heads, a data processor and visual display units when the vessel is within 2 miles of Albakr Terminal. The rotatable R.F. head which is nearest to the vessel shall be aimed at it, during the docking the system will display approaching vessel's velocity.

TUGS: 3 available, 2 of 4,000 h.p. and 1 of 2,200 h.p.

FRESH WATER: Can be made available by Ports Administration after 24 hours notice from tankers. Water supply is from barges or small water tankers. Notice to be through Agent.

FUEL: May be made available after 72 hours notice through Agent. Supply is direct from small bunker tanker or barges. Bunkering however, not allowed while tanker is on berth and it is allowed only when tanker is waiting for berth or after completion of loading and unberthing.

SHORE LEAVE: Not allowed.

LIGHT DUES: The Iraqi Ports Administration will collect any light dues payable including those due to the Middle East Navigation Aid Service.

REGULATIONS:

(a) Mooring.
"All vessels after arrival, having been moored to the satisfaction of the Harbour Master, shall tend their own anchor cables, ropes, lines and hawsers. It is important for tankers to tend their mooring frequently".

(b) Ship must be ready to move under its own power.
While in berth, ships must be ready to move under their own power in the event of their breaking adrift, catching fire or any other emergency. No repairs are to be carried out while in the berth, which would immobilise the ship or impair her firefighting efficiency.

(c) Cleaning of Boiler Tubes.
Cleaning of boiler tubes alongside the Island Terminal is forbidden.

POLLUTION: No dirty ballast. No oily water or other refuse to be discharged overboard.

When a vessel enters port waters in ballast, the ballast water for overside discharge must be clean and a declaration signed by the Master delivered to the representative of the terminal to this effect.

Ashes, oil, oily water or other refuse must not be discharged overboard in port waters. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard whilst in port waters.

Vessels are subject to heavy fines and liabilities for claims arising.

AUTHORITY: All approaches to Albakr Terminal and Khor al Khafja are controlled by the Iraqi Ports Administration.

Cable MAWANI - BASRAH　　Telex 7008 Ports

Attention is drawn to port rules and bye laws 1942, Quarantine Regulation No. 28 of 1963 and schedules of dues and charges.

The terminal is the property of Iraq National Oil Company (INOC) and is administered and controlled by the said company to facilitate the loading of tankers with Crude Oil.

Cable Address	INOC (Basrah)	- PETROLNA BASRAH
	INOC (Baghdad)	- PETROLNA BAGHDAD
Telex No.	INOC (Basrah)	- 7003
	INOC (Baghdad)	- 2204/2295

The sole Agent for all vessels visiting Iraqi ports is The State Enterprise for Maritime Agencies. All requests for services to tankers should be directed to the Agent.

See "General" before first port.

BASRAH (Maqal and Umm Qasr): 30.31 N. 47.50 E.

DOCUMENTS: On arrival at Pilot station vessel requires following: Ship's Register, letter from Owner confirming that vessel has not called at an Israeli port, all Health Certificates of Crew must be valid against cholera, 2 copies Crew List, 2 copies Provision List, 2 copies Manifest, Freight manifest for Baghdad Rail cargo, Breakdown list and Stowage Plan, Dangerous cargo and heavy lift list (if any).

PILOTAGE: Compulsory. Owners having vessels bound for Basrah should contact Iraqi Maritime Transport Co. Ltd., Basrah, cables "Bawakhir Basrah" to arrange Shatt-al-Arab Pilotage. Owners should also put Iraqi Maritime Transport in funds by remittance well in advance of vessel reaching Outer Bar of Shatt-al-Arab in order to cover port tonnage dues, pilotage and dredging dues, for sailing from Outer Bar to Basrah and return.

The pilot boat is located usually in position Lat. 29° 45′ 15″ N., Long. 48° 50′ 45″ E. and on arrival vessel should contact pilot boat immediately for instructions. Pilots are available for vessels proceeding to Abadan and Khorramshahr (in Iran) and Basrah (Maqal and Umm Qasr). Providing Master has given Agent 48 hours notice of vessel's ETA Pilot will board immediately providing tide is suitable to allow vessel to continue to destination. Master should use call sign YIR on 500 kHz for Basrah Radio in order to pass messages to Agent. Vessel should listen for messages on 440 kHz from YIR or use VHF on Channels 14 and 12. On boarding the river Pilot will hand Master various forms for completion in respect of Light Dues and River Pilotage. Master to hoist the Iraqi National Flag.

The pilot boat is called *Al Rasheed* and on both sides amidships the word "Pilot" is painted in white.

The Navigation of the Shatt-al-Arab River is under the jurisdiction of the Iraqi Ports Administration which takes in the approaches to Abadan and Khorramshahr in Iran.

MAX. SIZE: For vessels proceeding to Basrah the max. LOA allowed by the Iraqi Ports Administration is 560 ft. There is no restriction on the breadth. The max. draft in fresh water for vessels to and from Basrah is 29 ft. (In April 1980 we received a report stating that the maximum draft was 22 ft. 4 in.). The max. LOA for Umm Qasr is 580 ft.

ANCHORAGES: On arrival off the pilot boat vessel can anchor with no depth restriction. On entering the Shatt-al-Arab River the following are the recognised anchorages:

Kasba Anchorage, position about 2 miles above Fao with a max. depth of 35 ft. fresh water.

Bawarda Anchorage, position about 2 miles below Abadan with a max. depth of 31 ft. in fresh water.

Hartha Point, position about 6 miles above Abadan with a max. depth of 35 ft. in fresh water. Hartha Point is the anchorage to enable vessels to lighten to 29 ft. in fresh water to enable them to cross the Karun Bar.

Abu Flus, position about 12 miles above Hartha Point with a max. depth of 29 ft. in fresh water.

Khora Anchorage, position about 3 miles from Basrah Wharves (Maqal) with a max. depth of 29 ft. in fresh water.

Jubailah Anchorage, position at Basrah Silo about 0.5 below Basrah Wharves (Maqal) with a max. depth of 29 ft. in fresh water.

The maximum length between perpendiculars permitted by the Iraqi Ports Administration for vessels in the Shatt-al-Arab River is 560 ft.

RESTRICTIONS: The Iraqi Ports Administration issue a booklet of Tide Tables each year and the movements of vessels in and out of the Shatt-al-Arab River are restricted to the high water tables for vessels using Basrah and Khorramshahr. Movements to and from these ports are only permitted in the hours of daylight. The max. draft for a vessel proceeding to Basrah is 29 ft. in fresh water. If vessel's draft exceeds this lightening takes place at Umm Qasr. Although the draft obtainable alongside the wharves is 31 ft. the max. draft for moving in the river is 29 ft. on account of the restriction at the Karun Bar.

HEALTH: Masters are requested to call the Chief Medical Officer at Fao on 500 kHz, call sign "YIS", requesting free pratique 24 hours before vessel's arrival at pilot station. All crew Vaccination Certificates should be valid and available for Medical Officer's arrival on board. He will also expect to find a valid Derat Certificate on board. Anyone boarding the vessel ahead of the Medical Officer whilst the "Q" Flag is still hoisted is liable to a fine. Special precautions are taken in case of a vessel arriving direct from an epidemic area and even if the crew are holding valid inoculation certificates the vessel may be delayed at the pilot station. The Iraq Government is very sensitive about the spread of cholera. Derat Certificate renewable at Basrah.

RADIO: When a vessel is 3 days away from Basrah, radio contact can be established with Basrah Radio, call sign YIR on HF 4, 6, 8, 12 and 16 kHz bands. When the vessel is within 3 days of arrival, Basrah Control Radio (YIR) can be used (transmitting on 500 kHz and receiving on 461.5 or 440 kHz).

List of Coast Stations (Iraq): Summary of Procedures:

1. Whilst inside Iraq territorial waters, ships under way will maintain watch on Channel 16 (156.80 MHz) and/or 461.5 kHz to ensure immediate reception of instructions issued by the controlling authorities.

(a) Khor Al-Amaya Radio maintains listening watch on Channel 16 (156.80 MHz).

(b) Pilot Station (Al-Rasheed Radio YIBE) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.

(c) Fao Radio (YIS) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.

(d) Al-Wasiliyah Radio (YIT) maintains listening watch on Channel 16 (156.80 MHz) and 461.5 kHz.

(e) Basrah Control Radio (YIR) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.

(f) Umm Qasr Radio (YIU) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.

II. Special Instructions:

(a) Navigational Warnings are transmitted on 500 kHz by Basrah Control Radio (YIR).

(b) North Gulf Weather Forecast is transmitted by:

1. Basrah Control Radio on:
440 kHz at 0530, 1330 hrs. GMT and on request. 6493.25 kHz at 0530 hrs. GMT and on request. 8668 kHz at 1330 hrs. GMT and on request.
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III. Commercial and public correspondence: Call Basrah Radio (YIR) on Channel 16 (156.80 MHz), 500 kHz, 4, 6, 8, 12 and 16 MHz bands and after initial contact has been established change to one of the working frequencies as instructed to pass messages.

Basrah Radio follows the following time-table:

Hours	*Listen on*	*Answers on*	*Traffic Lists*
H24	500	440, 461.5	–
0400–0600	6265.5–6280.5	6493.25	0505
0600–0800	16708–16748	16968	0705
0800–1000	8354– 8374	8668	0905
1000–1200	16708–16748	16968	1105
1200–1400	8554– 8374	8668	1305
1400–1600	12531–12561	12986.5	1505
1600–1800	4177– 4187	4356.5	1705

VHF: Port radar service. VHF can be used to call the Iraqi Port Administration at Basrah on Channel 16.

TUGS: River and sea-going tugs are available. Tug-boat services are offered as and when deemed necessary by port Pilot or Harbour Master, and are available at all times during day and night.

Iraq

GENERAL

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PILOTAGE: Pilotage is compulsory for all inward and outward tankers using the Khor al Khafja buoyed channel when the draft is over 15.85 m.

NAVIGATIONAL AIDS: 8 lighted buoys define the deep water channel at the 69 ft. (21m.) depth contours in the immediate vicinity of Albakr Terminal. The buoys are battery powered with quick flash characteristics with visibility range of 1 mile. The perimeter of Albakr Terminal is outlined with flashing marine lanterns to define a hazard to marine navigation. The lanterns are battery powered, some are white lens flash with 5 mile range and others are red lens flash with 2 mile range.

The radio tower is equipped with an aviation hazard light (red). It is also equipped with a long range marine beacon (white) located below the red hazard light.

MAX. SIZE: Max. length, 366 m. Max. draft 21 m. Night berthing possible.

RADIO: Tankers are requested to contact Albakr Terminal through Basrah Control Radio (YIR) at least 72 hours, 48 hours and 24 hours prior to arrival giving ETA. Prior to docking the tanker must also provide the terminal operator with information required to prepare the "loading order" format, this information should include the type of crude to be loaded, loading rate in barrels, the Registry No. of vessel, nationality, name of Master. The Master will be informed of approach instructions such as location of berth, weather and sea conditions, and the communication channel to be used for vessel docking assistance.

Vessels bound for Iraqi territorial waters should also contact Fao Radio (YIS) at least 24 hours before entering territorial waters requesting free pratique from Medical Officer Fao. The request should indicate the state of health of the crew on board together with relevent information.

Name of Station: Khor al Khafja FC(10) Albakr Terminal FP
Call Sign : Albakr Radio
Service : 24 Hours

The following table shows the details for contacting the Iraqi port coast stations. The number between brackets corresponds to the notes explained below.

Frequency	*Emission Channel*	*Class*	*Power*	*Service Nature*
156.375 MHz	67	F^3	0.02	OT (2) (3) (6) (8)
156.550 MHz	12	F^3	0.02	OT (2) (3) (3) (5)
156.80 MHz	16	F^3	0.02	(1) (3) (4) (7) (8) (11)
161.80 MHz	24	F^3	0.02	

FC	Coast Station
FP	Port Station
OT	Station open exclusively to operational traffic of the service concerned

(1) Transmits urgent Notices to Mariners
(2) Transmits meteorological bulletins (North Arabian Gulf Weather Forecast)
(3) For Navigation and harbour control services
(4) Calling and Safety frequency
(5) First priority working frequency
(6) Second priority working frequency
(7) Weather bulletins at 0630, 1430 hrs. and on request
(8) Used for marine traffic control
(10) Station under the direction of Iraq Administration
(11) Permanent watch

While in Iraqi Territorial waters, ships under way shall maintain watch on Channel 16 (156.80 MHz) and/or (461.5 kHz) to ensure immediate reception of the instructions issued by the controlling authorities.

(a) Khor Al-Khafja, Albakr Terminal Radio, maintains listening watch on Channel 16 (156.80 MHz).
(b) Pilot station (Al-Rasheed Radio YIBE maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(c) Fao Radio (YIS) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(d) Basrah control Radio (YIR) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.

Instructions:

(a) Navigation warnings are transmitted on 500 kHz by Basrah Control Radio (YIR).

(b) North Arabian Gulf weather forecast is transmitted by:

1. Basrah Control Radio on:
   440 kHz at 0530, 1330 GMT and on request.
   6493.25 kHz at 0530 GMT and on request.
   8668 kHz at 1330 GMT and on request.
2. Khor Al Khafja, Albakr Terminal Radio, on Channel 16 (156.80 MHz) at 0530 GMT and on request.

(c) Traffic control signal on Channel 16 (156.80 MHz) and on 500 kHz by Basrah Control Radio (YIR).

(d) Traffic control signal on Channel 16 (156.80 MHz) and 500 kHz by Fao Radio (YIS).

(e) Traffic control signal on Channel 16 (156.80 MHz) by Albakr Terminal Radio.

Commercial and Public Correspondence: Call Basrah Radio (YIR) on Channel 16 (156.80 MHz) 500 kHz. 4, 6, 12 and 16 MHz. bands, and after initial contact has been established change to one of the working frequencies as instructed to pass messages.

BERTHING: The terminal consists of 2 loading platforms (A) and (B) each loading platform has 2 loading berths. Berth Nos. 1 and 2 of Platform "A" and Berth No. 4 of Platform "B" can accommodate tankers ranging in size from 35,000 d.w.t. to 350,000 d.w.t., Berth No. 3 of Platform "B" can accommodate tankers ranging in size between 85,000 d.w.t. and 350,000 d.w.t., Total length of structure is 975.4 m. and 106.7 m. wide at centre.

LOADING: Storage and pumping facilities on shore are connected to Albakr Terminal by 2×48 in. pipe-lines. The Terminal is capable of loading through either one of the pipe-lines at a time or both.

Capacity of each line varies between 77,000 to 89,000 b.p.h. depending on type of crude (Basrah heavy or Basrah light type). With both lines in operation at the same time loading rate can be increased to max. 141,500 b.p.h. (19,000 M.T.H.). 2 tankers can load with different types of crude at the same time. Loading facilities can be remotely controlled from the Control Room.

Loading will be stopped if any regulations are not observed and in the case of oil spillage.

Loading may be stopped in still air conditions, during severe electrical storms and/or high wind and sea conditions.

Loading Arms: For each loading berth, 3 identical 24 in.×80 ft. long Luceat DCMA loading arms, with hydraulically operated coupling fitted with adaptors to allow automatic and fast coupling to tanker manifold flanges ranging from 16 in. to 24 in. (spools for 10 in., 12 in. or 14 in. to 16 in. are available at the terminal if required).

Gangway: A power operated telescopic personnel gangway is provided at each berth. These gangways can withstand 500 lb. load at mid-span in the extended position.

Meters: 16 in. A. O. Smith positive displacement meters, 16 meters for each platform, capacity of each meter 12,500 b.p.h.

Meter Prover: One 24 in. triple "U" bi-directional mechanical displacement meter prover for each platform. The occurence of each prover is decided bi-yearly utilizing certified volume tanks.

Continuous Crude Oil Gravity Analyzer: There is a number of ARCCO Anulus Model 1-F10 50X liquid gravity analyzers on each loading platform capable of detecting API gravity from 45° to 15°, the output from these analyzers are displayed on the appropriate loading formats and is recorded on charts in the Control Room.

These gravity analysers are to be checked constantly and re-calibrated bi-yearly according to the manufacturer's recommendations.

A responsible member of the crew must be in contact with the terminal officials at all times.

READINESS: Notice of Readiness will be received by INOC representative provided the vessel is ready to load. Lay time will commence 6 hours after receipt of Notice of Readiness berth or no berth.

SAFETY PRECAUTIONS: On arrival at the terminal, INOC Representative will discuss with the Master the "Safety Requirements" letter addressed to him also the Safety Check List.

Attention is also drawn to the Tanker Safety Guide published by the International Chamber of Shipping and to the International Oil Tanker Terminal Safety Guide.

SHIP DOCKING ASSISTANCE SYSTEM: 1 unit for each berth, consisting of speed of approach measuring instrument with fixed wide and narrow beam R.F. heads, a data processor and visual display units when the vessel is within 2 miles of Albakr Terminal. The rotatable R.F. head which is nearest to the vessel shall be aimed at it, during the docking the system will display approaching vessel's velocity.

TUGS: 3 available, 2 of 4,000 h.p. and 1 of 2,200 h.p.

FRESH WATER: Can be made available by Ports Administration after 24 hours notice from tankers. Water supply is from barges or small water tankers. Notice to be through Agent.

FUEL: May be made available after 72 hours notice through Agent. Supply is direct from small bunker tanker or barges. Bunkering however, not allowed while tanker is on berth and it is allowed only when tanker is waiting for berth or after completion of loading and unberthing.

SHORE LEAVE: Not allowed.

LIGHT DUES: The Iraqi Ports Administration will collect any light dues payable including those due to the Middle East Navigation Aid Service.

REGULATIONS:

(a) Mooring.
"All vessels after arrival, having been moored to the satisfaction of the Harbour Master, shall tend their own anchor cables, ropes, lines and hawsers. It is important for tankers to tend their mooring frequently".

(b) Ship must be ready to move under its own power.
While in berth, ships must be ready to move under their own power in the event of their breaking adrift, catching fire or any other emergency. No repairs are to be carried out while in the berth, which would immobilise the ship or impair her firefighting efficiency.

(c) Cleaning of Boiler Tubes.
Cleaning of boiler tubes alongside the Island Terminal is forbidden.

POLLUTION: No dirty ballast. No oily water or other refuse to be discharged overboard.

When a vessel enters port waters in ballast, the ballast water for overside discharge must be clean and a declaration signed by the Master delivered to the representative of the terminal to this effect.

Ashes, oil, oily water or other refuse must not be discharged overboard in port waters. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard whilst in port waters.

Vessels are subject to heavy fines and liabilities for claims arising.

AUTHORITY: All approaches to Albakr Terminal and Khor al Khafja are controlled by the Iraqi Ports Administration.

Cable MAWANI - BASRAH Telex 7008 Ports

Attention is drawn to port rules and bye laws 1942, Quarantine Regulation No. 28 of 1963 and schedules of dues and charges.

The terminal is the property of Iraq National Oil Company (INOC) and is administered and controlled by the said company to facilitate the loading of tankers with Crude Oil.

Cable Address INOC (Basrah) - PETROLNA BASRAH
INOC (Baghdad) - PETROLNA BAGHDAD

Telex No. INOC (Basrah) - 7003
INOC (Baghdad) - 2204/2295

The sole Agent for all vessels visiting Iraqi ports is The State Enterprise for Maritime Agencies. All requests for services to tankers should be directed to the Agent.

See "General" before first port.

BASRAH (Maqal and Umm Qasr): 30.31 N. 47.50 E.

DOCUMENTS: On arrival at Pilot station vessel requires following: Ship's Register, letter from Owner confirming that vessel has not called at an Israeli port, all Health Certificates of Crew must be valid against cholera, 2 copies Crew List, 2 copies Provision List, 2 copies Manifest, Freight manifest for Baghdad Rail cargo, Breakdown list and Stowage Plan, Dangerous cargo and heavy lift list (if any).

PILOTAGE: Compulsory. Owners having vessels bound for Basrah should contact Iraqi Maritime Transport Co. Ltd., Basrah, cables "Bawakhir Basrah" to arrange Shatt-al-Arab Pilotage. Owners should also put Iraqi Maritime Transport in funds by remittance well in advance of vessel reaching Outer Bar of Shatt-al-Arab in order to cover port tonnage dues, pilotage and dredging dues, for sailing from Outer Bar to Basrah and return.

The pilot boat is located usually in position Lat. 29° 45′ 15″ N., Long. 48° 50′ 45″ E. and on arrival vessel should contact pilot boat immediately for instructions. Pilots are available for vessels proceeding to Abadan and Khorramshahr (in Iran) and Basrah (Maqal and Umm Qasr). Providing Master has given Agent 48 hours notice of vessel's ETA Pilot will board immediately providing tide is suitable to allow vessel to continue to destination. Master should use call sign YIR on 500 kHz for Basrah Radio in order to pass messages to Agent. Vessel should listen for messages on 440 kHz from YIR or use VHF on Channels 14 and 12. On boarding the river Pilot will hand Master various forms for completion in respect of Light Dues and River Pilotage. Master to hoist the Iraqi National Flag.

The pilot boat is called *Al Rasheed* and on both sides amidships the word "Pilot" is painted in white.

The Navigation of the Shatt-al-Arab River is under the jurisdiction of the Iraqi Ports Administration which takes in the approaches to Abadan and Khorramshahr in Iran.

MAX. SIZE: For vessels proceeding to Basrah the max. LOA allowed by the Iraqi Ports Administration is 560 ft. There is no restriction on the breadth. The max. draft in fresh water for vessels to and from Basrah is 29 ft. (In April 1980 we received a report stating that the maximum draft was 22 ft. 4 in.). The max. LOA for Umm Qasr is 580 ft.

ANCHORAGES: On arrival off the pilot boat vessel can anchor with no depth restriction. On entering the Shatt-al-Arab River the following are the recognised anchorages:

Kasba Anchorage, position about 2 miles above Fao with a max. depth of 35 ft. fresh water.

Bawarda Anchorage, position about 2 miles below Abadan with a max. depth of 31 ft. in fresh water.

Hartha Point, position about 6 miles above Abadan with a max. depth of 35 ft. in fresh water. Hartha Point is the anchorage to enable vessels to lighten to 29 ft. in fresh water to enable them to cross the Karun Bar.

Abu Flus, position about 12 miles above Hartha Point with a max. depth of 29 ft. in fresh water.

Khora Anchorage, position about 3 miles from Basrah Wharves (Maqal) with a max. depth of 29 ft. in fresh water.

Jubailah Anchorage, position at Basrah Silo about 0.5 below Basrah Wharves (Maqal) with a max. depth of 29 ft. in fresh water.

The maximum length between perpendiculars permitted by the Iraqi Ports Administration for vessels in the Shatt-al-Arab River is 560 ft.

RESTRICTIONS: The Iraqi Ports Administration issue a booklet of Tide Tables each year and the movements of vessels in and out of the Shatt-al-Arab River are restricted to the high water tables for vessels using Basrah and Khorramshahr. Movements to and from these ports are only permitted in the hours of daylight. The max. draft for a vessel proceeding to Basrah is 29 ft. in fresh water. If vessel's draft exceeds this lightening takes place at Umm Qasr. Although the draft obtainable alongside the wharves is 31 ft. the max. draft for moving in the river is 29 ft. on account of the restriction at the Karun Bar.

HEALTH: Masters are requested to call the Chief Medical Officer at Fao on 500 kHz, call sign "YIS", requesting free pratique 24 hours before vessel's arrival at pilot station. All crew Vaccination Certificates should be valid and available for Medical Officer's arrival on board. He will also expect to find a valid Derat Certificate on board. Anyone boarding the vessel ahead of the Medical Officer whilst the "Q" Flag is still hoisted is liable to a fine. Special precautions are taken in case of a vessel arriving direct from an epidemic area and even if the crew are holding valid inoculation certificates the vessel may be delayed at the pilot station. The Iraq Government is very sensitive about the spread of cholera. Derat Certificate renewable at Basrah.

RADIO: When a vessel is 3 days away from Basrah, radio contact can be established with Basrah Radio, call sign YIR on HF 4, 6, 8, 12 and 16 kHz bands. When the vessel is within 3 days of arrival, Basrah Control Radio (YIR) can be used (transmitting on 500 kHz and receiving on 461.5 or 440 kHz).

List of Coast Stations (Iraq): Summary of Procedures:

1. Whilst inside Iraq territorial waters, ships under way will maintain watch on Channel 16 (156.80 MHz) and/or 461.5 kHz to ensure immediate reception of instructions issued by the controlling authorities.

(a) Khor Al-Amaya Radio maintains listening watch on Channel 16 (156.80 MHz).
(b) Pilot Station (Al-Rasheed Radio YIBE) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(c) Fao Radio (YIS) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(d) Al-Wasiliyah Radio (YIT) maintains listening watch on Channel 16 (156.80 MHz) and 461.5 kHz.
(e) Basrah Control Radio (YIR) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(f) Umm Qasr Radio (YIU) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.

II. Special Instructions:

(a) Navigational Warnings are transmitted on 500 kHz by Basrah Control Radio (YIR).
(b) North Gulf Weather Forecast is transmitted by:
  1. Basrah Control Radio on:
  440 kHz at 0530, 1330 hrs. GMT and on request. 6493.25 kHz at 0530 hrs. GMT and on request. 8668 kHz at 1330 hrs. GMT and on request.
  2. Khor Al-Amaya Radio on Channel 16 (156.80 MHz) at 0530, 1330 hrs. GMT and on request.
(c) Traffic Control Signals on Channel 16 (156.80 MHz) and 500 kHz by Basrah Control Radio (YIR).
(d) Traffic Control Signals on Channel 16 (156.80 MHz) and 461.5 kHz by Al-Wasiliyah Radio (YIT).
(e) Traffic Control Signals on Channel 16 (156.80 MHz) and 500 kHz by Fao Radio (YIS).
(f) Traffic Control Signals on Channel 16 (156.80 MHz) and 500 kHz by Umm-Qasr Radio (YIU).
(g) Traffic Control Signals on Channel 16 (156.80 MHz) by Khor Al-Amaya Radio.

III. Commercial and public correspondence: Call Basrah Radio (YIR) on Channel 16 (156.80 MHz), 500 kHz, 4, 6, 8, 12 and 16 MHz bands and after initial contact has been established change to one of the working frequencies as instructed to pass messages.

Basrah Radio follows the following time-table:

Hours	*Listen on*	*Answers on*	*Traffic Lists*
H24	500	440, 461.5	–
0400–0600	6265.5–6280.5	6493.25	0505
0600–0800	16708–16748	16968	0705
0800–1000	8354– 8374	8668	0905
1000–1200	16708–16748	16968	1105
1200–1400	8554– 8374	8668	1305
1400–1600	12531–12561	12986.5	1505
1600–1800	4177– 4187	4356.5	1705

VHF: Port radar service. VHF can be used to call the Iraqi Port Administration at Basrah on Channel 16.

TUGS: River and sea-going tugs are available. Tug-boat services are offered as and when deemed necessary by port Pilot or Harbour Master, and are available at all times during day and night.

BERTHING: See "Restrictions". All berthing of vessels at Basrah is done during daylight hours only and according to suitable tide. The Harbour Master joins vessel on her arrival at Khora Anchorage which lies about 2 miles from the Maqal Wharves. In the case of Umm Qasr the Harbour Master joins vessel on arrival off the wharves.

Height of pier (quay) at berthing places above mean low water:

(a) Maqal – Plus 12.5 ft. above zero port datum. Port datum is 3.96 ft. above mean zero level at Fao.

(b) Umm Qasr – 24.65 ft. above lowest water of spring tide which is referred to as Umm Qasr Port datum.

Difference between high and low water:

(a) Maqal: A daily variation of 5 ft. between tides and max. of 8 ft.

(b) Umm Qasr: An average of 12 ft. between tides, and max. of 17 ft.

Maqal (Ma'gal): Wharves have continuous frontage of 2,000 m. depth alongside 9.15 m. Max. length of vessel, 171 m., berthing for 12 vessels.

Umm Qasr: The port is situated at the South end of the Khor Zubair, where it joins the Khor Abdullah. The sea approach to Umm Qasr is some 103 km. in length along the Khor Abdullah, commencing in deep waters of the Gulf near the mouth of the Shatt-al-Arab.

A navigation channel the lowest part of which is 9 m. at LLW and of ample width is well marked with beacons and light buoys from the Shatt-el-Arab entrance pilot vessel to Umm Qasr. Loaded vessels with a draft of 9.75 m. will be able to sail on 2 tides each day to and from Umm Qasr. Pilot and Harbour Master services are compulsory.

The wharves are of reinforced concrete with a continuous frontage of 640 m. and depth of 9.75 m. at LLW. They are able to accommodate 3 cargo ships at one time. Each berth is 183 m. long. The wharves are provided with a total of 10 electric shore cranes from 3-15 tons capacity. In addition there is a 100 ton floating crane, 2 sea-going tugs and an ample number of mobile cranes, forklifts, eel trucks, tractors, trailers, etc. The Umm Qasr wharves are directly connected with roads and railway lines of the Iraqi Republican Railways.

There are also 2 mooring buoys 247 m. apart.

Fresh water available directly from mains on wharves.

A new project for building more berths is in hand. 5 of these berths are under construction.

3 new steel jetties at Abu Flus directly North of the Fertilizer jetty have been completed. These jetties are served by 6 electric shore cranes of 5 tons capacity. Vessels up to 171 m. long and 8.84 m. draft can lie alongside.

Grain Silo: Capacity 65,000 tons, loading capacity into ship's holds, 1,050 t.p.h. jetty 213 m. long, available for berthing ships up to 183 m. long with a draft of 8.84 m. for loading and unloading of grain.

Muftiyah Jetties: One wooden jetty with limited length owned by Port Authority for distribution of oil products and for the purpose of handling crude and refined oil for local consumption, also for exporting oil products outside Iraq. Also a further new concrete jetty available for berthing vessels 175 m.

Fertilizer Wharf: A modern concrete wharf situated on the banks of Shatt-al-Arab river at Abu Flus with a total length of 100 m., width 10 m., can accept vessels with length 182 m. and draft 8.84 m. It is allocated for the exportation of fertilizers by the State Co. for Fertilizers.

Mooring Buoys: There are also 13 mooring buoys, 7 at Ashar, 4 at Sunger and 2 at Abu Al Khasib, 220 m. apart.

CRANES: The wharves are served with 60 electric shore cranes from 1.5 tons to 15 tons capacity and 1 electric shore crane of 60 tons capacity, in addition there are 2 floating cranes one of which is 100 tons capacity capable of lifting direct from ships to railway trucks on the wharves, and the other of 20 tons capacity capable of lifting cargo at a distance of 30 m. from the centre of the jib. Also about 200 pieces of various type of mechanical and electrical handling equipment.

BRIDGES: There are no bridges across the river from the entrance to Basrah Wharves (a distance of about 80 miles).

STEVEDORING: Information of the numbers of gangs required on board on vessel's arrival should be passed to the Agent together with vessel's ETA through Basrah Radio. The average rate of discharge of general cargo at Basrah (Maqal and Umm Qasr) is 6 tons per ganghour per 16 hour day. Contractors will place labour on board to discharge or load cargo but at the risk of the vessel as a Contractor will not accept any responsibility for damage done by labour.

Unloading of vessels basically carried out from vessels to wharves by Port cranes or ships' derricks. Heavy lifts and some dangerous cargoes are discharged overside into barges. Loading from jetty is by crane directly into ships. Loading at midstream is by lighters.

Bulk Cargoes: Discharged by grab direct to the Dock at Umm Qasr and by suction to the silo at Basrah. The equipment at Basrah is rated at 2,500 L/tons per day discharge and 5,000 L/tons per day loading, but under favourable conditions discharge rate may exceed 3,000 L/tons per day.

MEDICAL: For a vessel in to Basrah (Maqal and Umm Qasr) no advance notice is required, in order to obtain medical attention. Hospital facilities available at the new port hospital and other local hospitals.

For arrival at Basrah it is necessary to hold valid cholera certificate.

TANKERS: See "Khor-al-Amaya".

FRESH WATER: Fresh water is available at the wharves at Maqal and Umm Qasr but where a vessel is moored in midstream and requests water there is the additional charge for the hire of the water tanker.

FUEL: Only 1 grade of fuel oil available from the Basrah Refinery, a fuel oil viscosity 200 to 210 Red. No. 1, SG 0.920. Diesel oil also available.

Fuelling is direct if taken alongside Muftiyah Refinery jetties, otherwise by barge. No coal bunkers available.

GANGWAY/DECK WATCHMEN: It is recommended that vessels moored or anchored in the river employ Gangway/Deck Watchmen.

OPENING/CLOSING HATCHES: This work is normally done by crew, but if the labour on board are asked to do it they should be supervised by an Officer.

CUSTOMS ALLOWANCES: (Tobacco) The Ship's Bond is sealed on arrival but prior to the sealing each member of the crew can have 200 cigarettes. The Bond will be opened by the Customs on the request of the Master at any time during vessel's stay in Basrah. (Wine and/or Spirit). Each crew member is permitted to have 1 litre out of Bond. On sailing from Basrah the Master is required to wait till vessel has cleared the Shatt-al-Arab River before opening the Bond. This does not apply when vessel calls at Khorramshahr or Abadan on the way down river.

IDENTIFICATION CARDS: All crew members are required to carry with them some form of identification when going on shore.

CONSULS:

Belgium	Tel: 3666	Portugal	Tel: 4469
Denmark	" 3205	Saudi Arabia	" 3219
Greece	" 3601	Sweden	" 3511
India	" 4824	United Kingdom	" 4251
Kuwait	" 2235	U.S.A.	" 4231
Norway	" 3511	U.S.S.R.	" 5410
Pakistan	" 3598		

REPAIRS: All types of repairs except major engine repairs can be carried out.

DRY DOCKS: Floating dock available, capacity 4,000 tons. Also slipway, capacity 700 tons.

REPATRIATION: No difficulties in arranging the repatriation of crews from Basrah. Emergency visas are easily obtained for joining and departing crews.

AIRPORT: The Basrah Airport formerly an International Airport is now used only as a domestic airport and is situated about 2 miles from the Maqal Wharves but 50 miles from Umm Qasr. There is a daily flight to Baghdad to connect with International flights, also 3 flights per week to Kuwait to connect with International flights.

TIME: Iraq time is 3 hours ahead of GMT and there are no alterations made to clocks during the year.

HOLIDAYS: The official holiday of the week in Iraq is Friday. The other holidays are: 3 days Id-el-Fitr; 4 days Id-el-Adha; Al Hijaa; Ashura; Birth of the Prophet Mohammad; New Year 1st January; Army Day, 6th January; 8th February; 21st March; 1st May Labour Day; 14th July; 17th July.

POLICE/AMBULANCE/FIRE: A call to 7601 or 7606 will connect to the department required.

TELEPHONES: Telephone is placed on board a vessel as soon as secured alongside wharf.

GENERAL: The rain season in Basrah is between November and April and during the Summer months from May to October the temperature can be as high as 55° C. It is important that crew members keep the backs of their necks covered whilst working on deck during the heat of the Summer. The use of salt tablets are recommended during the heat of the Summer.

SPECIAL SERVICES: There is a laundry service available.

SHORE LEAVE: There is no restriction on crew members going on shore but it is important that they carry a form of identification.

REGULATIONS: The Port Authority have requested that no photography takes place from the ship whilst passing naval or military installations.

DELAYS: As the port of Basrah is considered very well equipped, cargo vessels usually receive a very quick despatch and it is very seldom that a vessel experiences waiting time for a berth for discharging, loading or bunkering. All discharge takes place at the wharves and all loading takes place in midstream at mooring buoys. Where a vessel can load whilst discharging, this is permitted.

AUTHORITY: President, State Organisation of Iraqi Ports, Basrah.

AGENT: The business of Shipping Agencies relating to all ships calling at Iraqi Ports is entrusted solely and exclusively to State Enterprise for Maritime Agencies, P.O. Box 3, Basrah.

General Cargo: Cable address: Maragent. Telex No. 7009.

Tankers: Cable address: Tankers. Telex No.: 7009.

FAO: 29.58 N. 48.29 E.

DOCUMENTS: On arrival at pilot station, vessel requires the following:

Ship's Register.

Letter from Owner confirming that vessel has not called at Israeli Port.

Health Certificates of Crew must be valid against cholera.

2 copies Crew List.

2 copies Provision List.

2 copies Manifest.

Dangerous Cargo List, if any.

PILOTAGE: The pilot boat is located in position Lat. 29° 46′ 45″ N., Long. 49° 48′ 37″ E., and on arrival vessel should contact Pilot boat immediately for instruction. VHF Channels 14 and 12. Provided Master has given Agent 48 hours' notice of vessel's ETA, Pilot will board immediately. The pilot boat is called *Al Rasheed* and on both sides amidships the word "Pilot" is painted in white.

ANCHORAGE: On arrival of the pilot boat vessel can anchor with no depth restriction.

MAX. SIZE: *Tankers:* 675 ft. LOA. Vessels may load to a max. draft of 35 ft. (10.65 m.) depending on the tidal conditions at the time, otherwise to a draft suitable to cross the bar with safety.

HEALTH: Masters are requested to call the Port Medical Officer at Fao on 500 kHz, call sign "YIS4", requesting free pratique between 8 and 12 hours before vessel's arrival. All crew vaccination certificates should be valid and available for the medical officer's arrival on board. He will also expect to find a valid Derat Exemption Certificate on board. Anyone boarding the vessel ahead of the Medical Officer whilst the "Q" Flag is still hoisted is liable to a fine.

Special precautions are taken in the case of a vessel arriving from an epidemic area and even if the crew are holding valid vaccination certificates the vessel may be delayed at the Pilot station. The Republic of Iraq is very sensitive about the spread of cholera.

RADIO: Basrah Radio, call sign "YIR" on high frequencies 4, 6, 8, 12 and 16 bands. Fao Radio, call sign "YIS", traffic control signals on Channel 16, and 500 kHz. Also see Khor-al-Amaya.

Tankers should establish contact with Iraqi National Oil Co. 48 hours before arrival. Call sign RNT. Frequency 6493 kHz.

TUGS: Available on request.

BERTHING: There are 4 loading jetties with a depth of 10.95 m. alongside at LWST. Each jetty has one 60 cm. crude oil delivery line with four 25 cm. flexible hoses. Jetties are floodlit and fitted with fire monitors and four 3 ton SWL cranes. Lengths of berth, 205.75 m. each. Max. draft 10.65 m. Night berthing possible. Loading rates Nos. 2 and 4 jetties average 4,000 t.p.h.

FRESH WATER: Available, rate approximately 10 t.p.h.

REPAIRS: Minor repairs possible.

MEDICAL: No advance notice is required in order to obtain medical attention. Medical units are present at Fao, Umm Qasr and Maqal. A modern hospital containing all the essential units is found at Maqal. Crew in need of special attention or admission may be referred to it by the medical units.

TIME: 3 hours ahead of GMT.

AUTHORITY: President, State Organisation of Iraqi Ports, Basrah.

KHOR-AL-AMAYA: 29.47 N. 48.49 E.

OPERATORS: Basrah Petroleum Company Limited.

LOCATION: Island Terminal about 17 miles out in the Gulf from the mouth of the Shatt-al-Arab River.

ADMINISTRATION: All waters of the Shatt-al-Arab and of the approaches to Khor-al-Amaya are controlled by the Iraqi Ports Administration.

APPROACHES: *(a) Lights.* One white all-round navigation light has been fitted to the top of the radio mast on the centre piled structure at a height of 153 ft. above MHWS. Character: flashing every 5 seconds, visible for 18 miles: candlepower 7,400.

Red lights are fitted at the 4 extreme corners of the structure which is 1,300 ft. long. Character: fixed red visible 2 miles.

Additionally there are several aircraft warning lights (red) on various parts of the structure marking the upper extremities of towers and other erections including the central radio tower.

The channel between the entrance to the Shatt-al-Arab and the Khor-al-Amaya Sea Island Oil Terminal is marked by buoys and the Shatt-al-Arab Light Vessel (refer to relevant notices issued by the Iraqi Ports Administration, M.E.N.A.S., and Admiralty Notices to Mariners).

(b) Tides. High water at the Terminal may be expected to occur about 20 minutes before high water at the Shatt-al-Arab, Outer Bar. This may vary due to local meteorological and spate conditions. Tidal streams in the vicinity are rotatory and are not likely to exceed 2 knots. The maximum streams are generally along the berthing faces of the Terminal, but at certain states of the tide, cross sets, at right angles to the berthing faces, may be experienced. These are unlikely to exceed 0.75 knots.

DOCUMENTS:

Crew List (5 copies).
Store List (2 copies).

PILOTAGE: Compulsory. Masters of vessels bound for Khor-al-Amaya Terminal should contact the Pilot vessel which cruises in an area about 2 miles S.E. of the Terminal. They will receive instructions as to whether to lie off, anchor or proceed towards the Harbour Master's launch.

(a) All vessels using Khor-al-Amaya buoyed channel are reminded that loaded tankers outward bound from Khor-al-Amaya Terminal have top priority in navigating the buoyed channel and all other vessels are to keep clear in all cases.

(b) All inward-bound vessels are to contact Khor-al-Amaya Harbour Master on VHF Channels 16 and 14 before entering Khor-al-Amaya channel for information regarding deeply laden tankers using the restricted channel, and for berthing and anchoring instructions.

(c) Pilotage is compulsory for all inward and outward bound tankers using the Khor-al-Amaya buoyed channel when the draft of the tanker is 15.85 m. (52 ft.) or over.

(d) Tankers arriving to load at Khor-al-Amaya with draft in excess of 15.85 m. (52 ft.) must give their ETA at Shatt-al-Arab Light-vessel at least 12 hours in advance by contacting the Pilot station or Khor-al-Amaya Terminal.

ANCHORAGES: Anchorage areas have been established bounded by lines joining the following positions:

(a) *Anchorage "A"*
(i) Lat. 29° 32′ 08″ N., Long. 48° 58′ 59″ E.
(ii) Lat. 29° 31′ 24″ N., Long. 48° 58′ 06″ E.
(iii) Lat. 29° 32′ 53″ N., Long. 48° 56′ 56″ E.
(iv) Lat. 29° 33′ 14″ N., Long. 48° 57′ 20″ E.

(b) *Anchorage "B"*
(i) Lat. 29° 44′ 03″ N., Long. 48° 49′ 34″ E.
(ii) Lat. 29° 43′ 52″ N., Long. 48° 49′ 12″ E.
(iii) Lat. 29° 42′ 08″ N., Long. 48° 50′ 18″ E.
(iv) Lat. 29° 42′ 21″ N., Long. 48° 50′ 45″ E.

(c) *Anchorage "C"*
(i) Lat. 29° 45′ 39″ N., Long. 48° 48′ 41″ E.
(ii) Lat. 29° 44′ 28″ N., Long. 48° 47′ 38″ E.
(iii) Lat. 29° 44′ 06″ N., Long. 48° 49′ 31″ E.
(iv) Lat. 29° 43′ 35″ N., Long. 48° 48′ 28″ E.

(d) *Temporary Lightering Anchorage*
(i) Lat. 29° 46′ 00″ N., Long. 48° 48′ 28″ E.
(ii) Lat. 29° 45′ 40″ N., Long. 48° 48′ 39″ E.
(iii) Lat. 29° 45′ 34″ N., Long. 48° 46′ 35″ E.
(iv) Lat. 29° 44′ 06″ N., Long. 48° 47′ 18″ E.

Note:
(i) Anchorages "A" and "B" are for deep-draft vessels of 12.19 m. (40 ft.) and upwards.
(ii) Anchorage "C" is to be used by tankers (laden or in ballast) whose draft does not exceed 12.19 m. (40 ft.).
(iii) The temporary lightering anchorage is for the exclusive use of lighters. No other ships or vessels are to anchor within this area.

MAX. SIZE: 330,000 d.w.t. loading part cargo. Max. LOA: 1,200 ft. Max. draft 69 ft.

HEALTH: Quarantine Officer boards after berthing. Vaccination Certificates required.

RADIO: Procedure for contacting Basrah Petroleum Company. Vessels are requested to establish contact with Basrah Petroleum Company Limited, Basrah, 48 hours prior to arrival, and to re-establish contact 48 hours after departure. Telegraphic Address: (Baspetco Basrah), (Baspetco Fao). Position: Lat. 30° 35′ 36″ N., Long. 47° 48′ 32″ E. Call sign "HNT" (FC). (a) Transmission 8,582 kHz. (b) Reception, tankers call on 8,356 – 8,374 and work on 8,374 – 8,457.5 kHz. Periods 0400 – 0430 hrs., 0800 – 0830 hrs., 1200 – 1230 hrs., 1600 – 1630 hrs. All times GMT. Services: C.V. Class of Operation: C.W. Class of Emission: A1.

Vessels should indicate their date and time of arrival, quantity of cargo required and whether in a state to receive cargo. In the event of vessels being unable to establish direct wireless contact with Basrah Petroleum Company Radio Station, messages should be passed through the Iraqi Ports Administration.

Procedure for Contacting Iraqi Ports Coast Stations

1. Summary of Procedure. Whilst inside Iraqi territorial waters, ships under way will maintain watch on Channel 16 (156.80 MHz) and/or 461.5 kHz to ensure immediate reception of instructions issued by the controlling authorities.

(a) Khor Al-Amaya Radio maintains listening watch on Channel 16 (156.80 MHz).
(b) Pilot station (Al-Rasheed Radio YIBE) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(c) Fao Radio (YIS) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(d) Al-Wasiliyah Radio (YIT) maintains listening watch on Channel 16 (156.80 MHz) and 461.5 kHz.
(e) Basrah Control Radio (YIR) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.
(f) Umm-Qasr Radio (YIU) maintains listening watch on Channel 16 (156.80 MHz) and 500 kHz.

II. Special Instructions.

(a) Navigational warnings are transmitted on 500 kHz by Basrah Control Radio (YIR).
(b) North Gulf weather forecast is transmitted by: 1. Basrah Control Radio on: 440 kHz at 0530, 1330 hrs. GMT and on request. 6493.25 kHz at 0530 hrs., GMT and on request. 8668 kHz at 1330 hrs., GMT and on request. 2. Khor-al-Amaya Radio on Channel 16 (156.80 MHz) at 0530, 1330 hrs. GMT and on request.
(c) Traffic Control Signals on Channel 16 (156.80 MHz) and on 500 kHz by Basrah Control Radio (YIR).
(d) Traffic Control Signals on Channel 16 (156.80 MHz) and 461.5 kHz by Al-Wasiliyah Radio (YIT).
(e) Traffic Control Signals on Channel 16 (156.80 MHz) and 500 kHz by Fao radio (YIS).
(f) Traffic Control Signals on Channel 16 (156.80 MHz) and 500 kHz by Umm-Qasr Radio (YIU).
(g) Traffic Control Signals on Channel 16 (156.80 MHz) by Khor-al-Amaya Radio.

III. Commercial and Public Correspondence. Call Basrah Radio (YIR) on Channel 16 (156.80 MHz), 500 kHz, 4, 6, 8, 12 and 16 MHz bands, and after initial contact has been established change to one of the working frequencies as instructed to pass messages.

Frequencies instruction to pass messages time table 1200 – 1400 hrs. listen on 8354 – 8374 answer on 8668 traffic lists 1305.

Note: All messages are changeable except those concerning navigational aids, distress, pratique and medical advice messages.

TUGS: 3 tugs of 4,000 b.h.p. are available to assist in berthing and unberthing.

BERTHING: The Terminal consists of a piled structure, in 22 m. of water, having 1 tanker berth on one side and 2 berths on the other side with suitable mooring dolphins and platforms ahead and astern which are connected by cat-walks. The orientation is 320°/140°. The max. loading rate, with only 1 berth in use, is 9,000 t.p.h.; with 2 berths in use the max. loading rate at each is 4,500 t.p.h. Fire-fighting towers are provided, also a helicopter platform. Loading by "Woodfield" flow booms offering 4×16 in. and 2 or 4, 12 in. hoses. Vessels of the order of 120,000 d.w.t. can be accepted at berths 5 and 6 and 330,000 d.w.t. max. draft 21 m. at berth No. 7.

The S.G. and A.P.I. and temperature of the crude oil will be supplied to the Master on radio request.

Berthing of tankers: MENAS NOTICE No. 114/74.

No tanker of draft exceeding 17.68 m. (58 ft.) shall be permitted to berth or unberth at the existing Wharf No. 7 in the N.W. Direction.

No tanker of draft exceeding 17.00 m. (56 ft.) shall be permitted to berth at Wharf No. 7 and in the S.E. Direction.

No tanker of draft exceeding 17.68 m. (58 ft.) shall be permitted to berth at the proposed Wharf No. 8 and in the N.W. Direction.

No tanker of draft exceeding 17.00 m. (56 ft.) shall be permitted to berth at the proposed wharf No. 8 and in the S.E. Direction.

MEDICAL: An Iraqi Ports Administration Medical Dresser will always be available to attend to quarantine matters, derat certificates, etc. A doctor can be made available, through vessel's Agent, upon prior request, but necessary to give 24 hours notice to arrange.

FRESH WATER: Available with 24 hours notice.

FUEL: Not available ex-wharf.

CUSTOMS ALLOWANCES: During vessel's stay at Terminal, 1 carton of cigarettes only allowed to each crew member.

SAFETY REGULATIONS: Safety regulations and fire fighting procedures will be discussed with the Master on arrival.

GANGWAYS: Ships must supply their own gangways when alongside. Accommodation ladders and other ship side ladders are not suitable.

REPAIRS: Basrah Petroleum Company has no facilities to undertake ship repair work of any description.

AUTHORITY: President, State Organisation of Iraqi Ports, Basrah.

AGENCY: Masters of tankers should contact the Agent through Basrah Radio Station prior to arrival. Agent's representatives are not housed on the island. Ship's documents for port clearance purposes are passed by them to the Agent for action. Stores and provisions will be sent out by the Agent, given sufficient prior notice.

See "General" before first port.

NOTES

Please also advise Shipping Guides Ltd.

Republic of Ireland

BANTRY BAY: 51.41 N. 09.27 W. (See Plan Book)

DOCUMENTS:

1 Crew List.
1 Stores List.
1 Crew Declaration.
1 Maritime Health Declaration.
Ship's Register (tonnage).
British Light Dues (receipts).
Clearance from Last Port.

APPROACHES: The approaches to the Bay are marked by the Sheep Head Light, visible 18 miles, Roancarrig More Light, visible 12 miles, and Whiddy Island Light, visible 3 miles.

The inner channel to the Gulf Oil Terminal is marked by radar reflecting buoys, numbered West Ground, No. 7 and No. 9. The No. 7 and No. 9 Buoys are starboard hand buoys while the West Ground is a mid-channel buoy and Pilot Station.

The buoys marking the channel to the Inner Harbour do not have radar reflectors, but can easily be picked up on radar screens.

PILOTAGE: Pilot can be requested through Land's End Radio or Valentia Radio to "Harbour Master Bantry", giving 6 hours notice. Also through VHF Channels 11, 14 and 16 to Gulf Control when within 10 miles. Pilot boat blue and white fast motor launch (28 ft.) flying Pilot flag from stern.

For vessels calling to the Gulf Terminal, Pilot will board at the West Ground Buoy, for vessels calling to the inner harbour Pilot will board at the East end of Whiddy Island.

ANCHORAGE: For tankers up to 120,000 d.w.t., 1 mile West of the West Ground Buoy.

South of No. 5 buoy at mouth of Glengarriff Harbour.

For smaller vessels, the East end of Whiddy Island (10 fathoms) and Bantry Harbour (25 ft. depth).

MAX. SIZE:

(a) Bantry Harbour – draft not more than 25 ft.
(b) Bantry Pier – 150 ft. length with draft 12 ft.
(c) Oil Terminal – Operations suspended pending repairs.

HEALTH: All vessels must exhibit quarantine signals until quarantine formalities completed or free pratique granted. By day, International Code Flag "Q"; by night, red light over white light.

No person other than Pilot is allowed to board any vessel either alongside jetty or at anchorage until pratique has been granted. Pilot to be informed when any suspected disease or fever on board.

RADIO: Messages and ETAs through Valentia Radio, Land's End or any UK station. Port Operation (Gulf) Service, call sign "Gulf Control" (24 hours) VHF Channels 11, 14 and 16.

BERTHING: Berthing at Bantry Pier depends on size of vessel and state of tide.

Ascon Jetty: Located on South side of Oil Terminal, this berth can accommodate small vessels up to 200 ft. in length and a max. draft of 17 ft.

A 6 in. manifold loading/discharge is situated midway along this jetty for small diesel tankers and mobile cranes can be provided for small vessels discharging cargo for the Terminal.

GULF OIL TERMINAL: (The Terminal was damaged by a disaster in January 1979 – it is non-operational at the moment, the only navigational buoys still on station are, the West Ground, No. 7 and No. 9). The sea island is still standing and is 1,600 ft. in length and situated approx. 1,300 ft. offshore. The island jetty is comprised of a centre platform and mooring dolphins.

STEVEDORES: Available; 24 hour advance notice to Agent required.

MEDICAL: Medical attention is available on arrival and in an emergency on a 24 hour basis. Vessels should give instructions regarding medical attention through Agents who will make the necessary arrangements for emergency medical attention either on board or at Bantry Pier.

FRESH WATER: Available at Bantry Pier.

FUEL: Gas oil and fuel available at Bantry Pier in road tenders of 20 tons.

REPAIRS: Local repair firms can undertake limited repairs, but nearest dockyard available for major repairs is at Cork.

SURVEYORS: Ship's surveyors available subject to 24 hours notice through Agent.

DENSITY: 1025.

CUSTOMS ALLOWANCES: Tobacco: Depending on stay in port. Approximately 80 to 100 cigarettes per man for 2 to 3 days. Wine and/or Spirits: half litre per man.

IDENTIFICATION CARDS: Required.

REPATRIATION: There are facilities for crew repatriation.

CONSULS: No local representatives.

AIRPORT: Situated 48 miles away at Cork. Frequent International flights.

TIME: GMT plus 1 hour during Summer months. GMT from October to March.

HOLIDAYS: Cargo work can be carried out on most holidays, except Christmas.

POLICE/AMBULANCE/FIRE: Dial 999.

EMERGENCY CO-ORDINATION CENTRE: Marine Co-Ordination Service Shannon Airport – Tel: 061-61969 and 61219.

TELEPHONES: No arrangements for placing telephones on board.

SHORE LEAVE: Permitted.

SERVICES: Vessels requiring any of the following services should advise Agent prior to arrival, giving fullest possible details:

Divers: Services of divers available to vessels for inspection and freeing fouled propellers.

Provisions: Normal supplies of most categories available. Ample time should be given to ship chandler.

Laundry: Large amounts sent to Cork (24 hrs. return service), but rather expensive.

Banks: 3 Irish Banks in town.

Storing: Vessels can be stored by truck at Bantry Bay.

GENERAL: All vessels required to fly Irish Ensign on foremast during daylight hours. Irish territorial waters extend 12 miles seaward from mainland.

AUTHORITY: Bantry Bay Harbour Commissioners, Gurteenroe, Bantry, Co. Cork. *Tel:* 027-50599. *Contact:* Captain P. V. Lane, Harbour Master.

Cork County Council, Wolfe Tone Square, Bantry, Co. Cork. *Tel:* 027-50058. *Contact:* Council Engineer.

CASTLETOWNBERE: 51.41 N. 09.54 W. (See Plan Book)

LOCATION: See Admiralty Chart No. 1840 (plan insert) "Bantry Bay Blackballhead/Shot Head".

Castletownbere is a Fishery Harbour Centre. Owned and controlled by the Department of Fisheries & Forestry, Fisheries section, major harbours.

DOCUMENTS: Health Certificate, Crew List, List of Bonded Stores, Vessel's Register, Logbook, Crew Passports.

Also valid Load Line Certificate. Safety Equipment Certificate, Radio Safety Certificate, Safety Construction Certificate, Cargo Gear Book.

PILOTAGE: Not compulsory. If Pilot required, contact Harbour Master for local Pilot.

ANCHORAGES: Bearhaven Sound. (See Admiralty Chart No. 1840), a large well sheltered anchorage adjacent to port.

MAX. SIZE: Always afloat. Dinish Island Wharf. 17 ft. MLWS. Length 305 ft.

Mainland Wharf East. 12 ft. MLWS. Length 426 ft.
Mainland Wharf West. 12 ft. MLWS. Length 557 ft.
All berths are accessible for wagons/containers, etc.

HEALTH: Customs grant pratique if vessel is clear, if not Doctor will be notified.

VHF: Harbour Master's Office on Channel 16.

TUGS: None.

BERTHING: In accordance with Harbour Master's instructions. Berthing day or night.

STEVEDORES: None. Local labour available if required.

MEDICAL: No advance notice necessary. Hospital facilities available.

FRESH WATER: Available at all berths.

FUEL: Available at mainland berth, no notice required (diesel only) and all berths accessible to tanker wagons.

REPAIRS: Syncrolift for vessels with max. weight 320 tons and 100 ft. LOA. Carriages and bays for 3 vessels.

Local machine shops/engineers for repair work available. Electronics engineer available.

GANGWAY/DECK WATCHMAN: Not required.

OPENING/CLOSING HATCHES: By crew.

CUSTOMS ALLOWANCES: As per current regulations.

IDENTIFICATION CARDS: Not required.

AIRPORT: Cork airport 80 miles, served by regular airlines.

TIME: GMT plus 1 hour, reverting to GMT from October to March.

HOLIDAYS: Cargo work can be arranged on holidays.

POLICE/AMBULANCE/FIRE: Tel: Police 70002. Ambulance 70004. Fire station 70049.

TELEPHONES: Not available for placing onboard.

SHORE LEAVE: Allowed.

BANKS: Allied Irish Bank Ltd., Castletownbere. Tel: 027-70025.

GENERAL: Castletownbere is designated as a fishery harbour centre, for the import/export of fish, fish products and processed fish, from local plants. Also for landing of fish from local fishing fleets. The mainland wharf has an ice making plant, for supply of ice to fishing vessels.

Stores/Provisions: Available locally.

Bonded Stores: Available from Cork.

Customs and Excise: Office in harbour office building. Tel: 027-70102.

AUTHORITY: Department of Fisheries and Forestry, Harbour Office, Castletownbere, Co. Cork. *Tel:* 027-70220. *Contact:* Captain W. H. Jones, Harbour Master. *Tel:* (after hours) 027-70128.

CORK (including Cobh, Whitegate): 51.50 N. 08.17 W. (See Plan Book)

PORT LIMITS: Line joining Cork Head and Power Head.

DOCUMENTS:

3 Crew Lists.
2 Passenger Lists.
1 Health Declaration.
3 Customs Manifests.

For Shore Formalities

Ship's Register.
Safety Equipment Certificate.
Safety Radio Certificate.
Load Line Certificate.
Light Dues Certificates.
Derat Certificate.

PILOTAGE. Minimum 24 hours notice of ETA and draft to Agent. Accurate ETA's are vital as Pilots only go afloat on this basis. When within VHF range, contact should be established through "Cork Harbour Radio" (see "Radio"). This station combines Port Operations and Information service and co-ordinates the pilotage service. The pilot launches are also fitted with VHF. Channels 6, 12 and 16.

For large deep-drafted vessels, Pilot usually boards up to 2 or 3 miles South of Roches Point. Compulsory river pilotage area extends upstream from Spit Bank Light.

ANCHORAGES: Safe deep-water anchorages as arranged with Pilots.

RESTRICTIONS: Navigation by night and day. Ships of 5.0 m. draft can make passage of river to Cork at any stage of tide.

Bridges: Near Albert Quay and Andersons Quay.

MAX. SIZE: *Cork:* Max. length 152 m. Draft fresh water on Spring tides 8.7 m. on Neap tides 7.8 m.

Whitegate: Tankers up to 275 m. length. 11.6 m. draft. Max. draft 12 m. at highest tides.

HEALTH: Health Declaration form is presented to Customs Officer or Port Health Inspector and pratique issued without delay. In cases of disease on board notify Agents who inform Health Authorities.

RADIO: Coast Station – Valentia Radio. W/T and R/T. R/T link call facilities available. Telex fitted. In U.K., Coast Stations also relay messages direct to Agents.

VHF: Harbour Radio: VHF Channels 12, 14 and 16, 24 hour watch maintained. Call sign "Cork Harbour Radio". A Port Operations and Information Service is provided and it is through this organisation that the requirements of the Harbour Master will be made known.

Vessels underway are required to maintain a VHF watch on Channel 12 or 14 as instructed.

RADAR: No Port Control Radar. Pilot boats equipped with radar.

TUGS: Deep draft vessels take tug assistance from Horse Head to Cork and vice versa. Tug's lines are used. Tankers use two to three tugs for berthing at Whitegate Terminal.

BERTHING: The quays at Cork afford good accommodation for vessels up to 152 m. LOA, on fresh water drafts of 7.8 m. on Mean Neap tides and 8.7 m. on Mean Spring tides with 8.8 m. alongside quay. The Deep Water Quay at Cobh is 189 m. long and vessels of 6.0 m. draft can berth with safety.

Berth	*Length (m.)*	*Depth (m.)*
City Quay:		
Albert Quay	135.0	4.9
South Jetties	411.5	8.8
South Deepwater Quay	201.2	6.1
Ford's Wharf (Private)	347.5	2.7 – 4.0
E.S.B. (Private)	152.4	4.0
Penrose Quay	146.0	3.3
Fishguard Berth	97.5	4.9
Horgan Wharf	205.7	8.8
North Swinging Basin	146.6	8.8
North Deepwater Quay	335.5	5.2
Custom House Quay (North)	176.9	7.3
Custom House Quay (South)	167.6	4.6
Tivoli:		
Ro-Ro Terminal	125.0	5.2
Container Berth	122.0	7.3
General Purpose Berth	152.0	8.8
Bulk Ore Berth	152.0	8.8
Bulk Liquid/Livestock	115.8	5.2
Oil Jetty	24.4	4.0
Lower Harbour Quays:		
Deepwater Quay	189.0	5.0
Ballast Quay	67.0	3.7
Kennedy Wharf	45.7	3.2
Whitegate Oil Jetty No. 1	365.0	11.4
Whitegate Oil Jetty No. 2	106.7	10.2
Spencer Jetty (Private)	131.0	7.2
Basin (Private)	152.0	5.2
Bunkering Berth (Private)	76.4	7.1
Pfizer Jetty (Private)	259.0	9.6
Haulbowline Industries (Private)	53.3	2.6
Ringaskiddy Ro-Ro/Ferry Terminal	–	9.5

SPECIAL CARGO FACILITIES:

Grain: 2 mobile suction discharge plants at South Jetties, combined discharge rate up to 240 t.p.h. Max. ship size 152 m. LOA, 8.7 m. draft on spring tide. Storage capacity 80,000 tons.

1 suction unit × 150 tonnes per hour, Silo capacity 7,000 tons at South Deepwater Quay.

Coal/Fertiliser/Sulphur: 3×6 ton level luffing grab cranes combined discharge rate up to 270 t.p.h. Max. ship size 152 m. LOA, 8.7 m. draft.

Containers: 1×30 ton travelling transporter container crane backed up by 2×30 tonne straddle carriers. Length of berth 122 m. Max. depth at 7.3 m. L.A.T.

Roll-on/Roll-off Berth "Tivoli": Max. height of link span 8.6 m. above LWOST. Min. height of link span 2.7 m. above LWOST. Max. loading 65 tons. Distance from side of berth to centre line of link span 11.4 m. Max. ship size 137 m. LOA. Berth dredged to 5.2 m. L.A.T.

Livestock loading Ramp and Lairage: Max. ship size 106.7 m. LOA. Berth dredged to 5.2 m. L.A.T.

Pfizer Jetty: Length between dolphins 259.2 m. Max. draft 10.8 m. on all tides.

Molasses discharge rate, 1,000 t.p.h.
Fuel Oil discharge rate, 600 t.p.h.
Sulphuric Acid discharge rate, 200 t.p.h.

Bananas: Automatic banana discharge equipment at Horgan Wharf.

CRANES:

Location	*No.*	*Capacity Tonnes*
South Jetties	3	6
Ford's Wharf	2	5

STEVEDORES: Labour hiring times. Week-days 0800, 1000 and 1130 hrs. Gangs for week-end working must be hired at 1700 hours on Fridays. ETA advice could include number of gangs workable.

MEDICAL: All medical and hospital services available at short notice.

TANKERS: Irish Refining Co. Terminal at Whitegate is situated on East side of Lower Harbour. Two deep water berths for tankers. Max. size, 55,000 d.w.t. or 90,000 d.w.t. partly laden. Slop reception facilities available.

Length between dolphins, 366 m.
Crude discharge rate up to 4,000 t.p.h.
HFO loading rate up to 1,700 t.p.h.
Gas Oil loading rate up to 700 t.p.h.
Petrol loading rate up to 600 t.p.h.
LPG loading rate up to 20 t.p.h.

Diameter of Hoses:

Berth No. 1: Crude and Black Oils 10 in. ASA.
Clean Products 8 in. ASA.
Berth No. 2: All Products 6 in. ASA.

N.E.T. (Nitrigen Eireann Teo.). At Marino Point. Overall length dolphin to dolphin 375 m. Dredged to 10.2 m. at L.A.T. to accommodate Ammonia tankers of up to 15,000 d.w.t. and bulk or general cargo vessels of up to 25,000 d.w.t. (Partly loaded). Vessels of up to 186 m. OAL and 9.5 m. draft will be acceptable.

DENSITY: Average density of water in river 1008.

FRESH WATER: Available at all quays ex-hydrants – delivery rate 25 t.p.h.

FUEL: Major grades of bunker fuel and diesel as well as marine lubricants can be obtained through suppliers. Delivery by road or river tanker.

WATCHMEN: Recommended but not compulsory.

OPENING/CLOSING HATCHES: Crew must perform this work as dockers decline to do it.

CUSTOMS ALLOWANCES: 200 cigarettes per man, and 1 bottle spirits per man.

CARGO GEAR: No special local requirements. Regulations similar to British Board of Trade safe working requirements. 1×30 ton container crane and 3×6 tonne level luffing portal cranes are provided by Cork Harbour Commissioners. A number of mobile cranes up to 100 tonnes capacity are available from local plant hire firms and stevedoring firms.

IDENTIFICATION CARDS: Not required.

CONSULS: *Finland, Denmark, Netherlands and Sweden:* J. C. Hannigan, Hannigan Shipping Ltd., 6 St. Patrick's Quay, Cork. Tel. 500588. *Norway:* B. J. Foley, c/o Marine Transport Services, Atlantic Quay, Cobh. Tel: 811485. *Belgium:* G. Jones, c/o Celtic Coasters, 33 St. Patricks Quay, Cork. Tel. 504018. *Italy:* P. Cali, University College, Cork. Tel. 26871. *Germany:* M. Corkery, Solicitor, Camden House, Camden Quay, Cork. Tel: 509367. *France:* F. Zatellier, c/o Eurotranslations, 6 Sullivans Quay, Cork. Tel. 26093. *Spain:* F. Ronayne, c/o Ronayne Shipping Ltd., Monaghan Road, Cork. Tel: 964444.

REPAIRS: All types of deck and engine repair facilities available.

DRY DOCK: Verolme Cork dockyard main dry dock can take vessels up to 158.5 m. in length. Floating docks of 2,000 and 10,800 tonnes lifting capacity, also 4×40 tonne cranes. Able to carry out repairs to ships afloat of any tonnage using the port.

SURVEYORS: Lloyd's Surveyor at Cobh.

REPATRIATION: Can be carried out without difficulty.

AIRPORT: 5 miles from city. Regular flights to London. Onward connections to all destinations.

TIME: GMT from 0200 hrs. on Sunday following 3rd Saturday in October to 0200 hrs. on Sunday following 3rd Saturday in March (unless latter is Easter Saturday, in which case to 0200 hrs. on Sunday following 2nd Saturday in March).

One hour ahead of GMT (i.e. Standard European time) for remainder of year.

HOLIDAYS: New Years Day, St. Patrick's Day (March 17th); Good Friday; Easter Monday; First Monday in June; First Monday in August; Last Monday in October; Christmas Day (December 25th); St. Stephen's Day (December 26th).

POLICE/AMBULANCE/FIRE: 999 is emergency number for all services. Actual: Police 23161; Fire 966333; Ambulance 966333.

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Allied Irish Banks Ltd., 66 South Mall, Cork. Tel: 26811.
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STORING: See "Prelims" page viii.

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SERVICES: All tanker services available at Whitegate. Otherwise, various general services required by ships available at Cork.

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A major harbour development scheme is at present in progress aimed at providing certain infrastructural facilities in advance of demand as a means of attracting port related industry to the harbour. By mid 1978 work had been completed on the deepening of the harbour's entrance to 13.4 m. L.A.T. thereby providing accommodation for vessels of 90,000/100,000 d.w.t. in the Whitegate/Aghada area and an inner bar had been deepened to 11.1 m. LAT to permit vessels of up to 50,000 d.w.t. to proceed to the Commissioners prime development area at Ringaskiddy. Work on the digging out of a deepwater berth and on the reclamation of approximately 150 acres of land commenced in 1978 and construction of a roll-on/roll-off ferry terminal was commenced in 1980. A deep water berth for vessels of 50,000 d.w.t. length 215 m. and depth 13.5 m. is under construction and is due to be operational in 1986.

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ENTRANCE: Approach well lighted and easy of access. Inner Channel of Harbour, formed by almost straight channel of River Liffey from entrance at Poolbeg Lighthouse to Alexandra Basin, is 215 m. wide for greater part of length and maintained at depth of 8 m. LW. From Alexandra Basin entrance, River is quayed for a distance of nearly 3.2 km. to Butt Bridge in centre of City.

MAX. SIZE: State of tide governing max. draft, no breadth restriction, overall length restriction of approx. 200 m.

HEALTH: Pratique automatic for movements Ireland/U.K. area. Maritime Declaration of Health indicates requirements. This declaration must be submitted on arrival by Master of ship coming from foreign port. This requirement does not now normally apply to vessels trading *solely* between the Republic and ports in West Germany, Belgium and Netherlands, Atlantic and Mediterranean coast of France, Italy and Greece. Other requirements mentioned on Maritime Declaration of Health form still apply to such ships.

"Foreign Port" is port situated elsewhere than Ireland and UK.

Master of foreign-going ship may be asked to produce valid Derat Certificate or Derat Exemption Certificate in respect of vessel. Travellers (passengers and crew) may be requested to produce valid certificates of vaccination against smallpox if from an infected local area, or if from countries in Africa, Asia, North and South America. This requirement does not apply to arrivals from Azores, Bermuda, Canada, Canary Islands, Madeira, Guyane, Guadeloupe, Martinique, Greenland, Suriname, Netherlands Antilles, United States of America. Ships may be subjected to sanitary inspection by inspectors of Port Health Service.

Swill must not be landed from vessels which trade outside Ireland.

Granting of pratique by radio not practised at Dublin, But is under consideration at present.

RADIO: Valentia Radio, Ireland. Portishead Radio, U.K. Anglesea Radio, U.K.

BERTHING: The following berthage is available to shipping using the port.

North Side of the River, from Talbot Memorial Bridge to North Wall Light, available as berthage, 2,244 m., depth 4.8 m. – 6.7 m. LAT. Cranes: 1×100 tonnes (fixed), 1×6 tonnes and 9×4 tonnes.

Alexandra Basin, South and West sides: Length of berthage 820 m., depth 7.3 m. – 7.9 m. LAT. Cranes: 1×6 tonnes, 6×4 tonnes.

Alexandra Quay West (North side of Alexandra Basin): Length of berthage 375 m. depth 9.7 m. LAT. Cranes 1×6 tonnes, 7×4 tonnes.

Alexandra Quay East: Length of berthage 360 m., depth 10.4 m. LAT. Cranes: 5×4 tonnes.

Ocean Pier West (East end of Alexandra Basin): Length of berthage 418 m., depth 9.7 m. LAT. Cranes: 1×10 tonnes, 7×4 tonnes.

Ocean Pier South: Length of berthage 142 m. depth 10.3 m. LAT.

Ocean Pier East: Length of berthage 244 m., depth 9.7 m. LAT. Cranes: 4×4 tonnes.

South side of the River, from Talbot Memorial Bridge to Ringsend Gut, available as berthage 1,598 m., depth 4.88 m. – 6.7 m. LAT. Cranes: 10×4 tonnes.

South Bank Quay: Length of berthage 205 m., depth 8.5 m. LAT.

Container Handling Berths:

B+I Terminal: Length of berth 229 m., depth 6 m. LAT (incorporates No. 4 Ro/Ro). 1×30 tonne transporter crane. 2×20 tonne derrick cranes.

Sealink Terminal: Length of berth 145 m. depth 6 m. LAT. 2×30 tonne transporter cranes and 2×30 tonne Goliath cranes.

Southside Terminal: Length of berth 520 m., depth 7.6 m. LAT (incorporates No. 3 Ro/Ro). 2×30 tonne transporter cranes, 1×32 tonne derrick crane and 1×10 tonne portal crane.

Ocean Pier West: Length of berth 183 m., depth 9.7 m. LAT. 1×35 tonne derrick crane.

North Wall Extension: Length of berth 122 m., depth 6.7 m. LAT.

Roll-On/Roll-Off Facilities:

North Side:	No. 1 Ramp – Length of berth 140 m., depth 6 m LAT.
	No. 2 Ramp – Length of berth 242 m., depth 10.3 m. LAT.
	No. 4 Ramp – Length of berth 200 m., depth 6 m. LAT.
	No. 5 Ramp – Length of berth 215 m., depth 11 m. LAT.
South Side:	No. 3 Ramp – Length of berth up to 520 m., depth 7.6 m. LAT.

BULK HANDLING FACILITIES:

Dry Bulk Jetty in Alexandra Basin: Length of jetty 247 m. depth 9.45 m. (North side) and 10.5 m. (South side). This jetty is equipped with a bulk ore conveyor and ship loading system for export of ore concentrates. 2×10 tonne grabbing cranes. It is also equipped with pipe-lines for liquid sulphur, ammonia and molasses. The jetty is also used for coal imports with a separate conveyor system linking the jetty with a back area coal storage site. A 9.15 m. approach section leading to the jetty has special facilities for small acid tankers.

Coal/Dry Bulk Quay, South Side: Length of quay 358 m., depth 11.4 m. LAT. This quay, with storage areas, hoppers, conveyor belts and 2×10 tonne grabbing cranes is one of the most sophisticated bulk handling berths in Western Europe.

STEVEDORES: ETA required by Stevedores before 1500 hrs. Monday to Thursday for work the following day, and by 1500 hrs. Friday for work Saturday, Sunday or Monday.

Average discharge rates: *Grain:* 3,000 tons per day. *Timber:* 30 standards loose per gang/day. 120 standards packaged per gang/day. *General:* Bagged cargo and fast general, including paper, 250 tons per gang/day. *Other Generals:* 90 tons per gang/day.

TANKERS: No slop residue discharge facilities.

Tanker Berths	*Max. Draft*
No. 1, West Oil Jetty, West Side	9.9 m.*
No. 2, West Oil Jetty, East Side	9.9 m.*
No. 3, East Oil Jetty, West Side	9.9 m.*
No. 5, East Oil Jetty, East Side	5.8 m.
South Bank Quay (E.S.B.)	8.4 m.*
South Bank Quay (Poolbeg)	10.3 m.*

*Time suitable for navigation in approaches – 1 hour before High Water for deepest draft.

Common User Oil Pipe-line System: This system provides 5 pipe-lines to Eastern Oil Jetty and 7 pipe-lines to Western Oil Jetty. Cargoes of tankers berthed at these jetties can be discharged to storage installations of any of the oil companies.

E.S.B. (Electricity Supply Board): At Poolbeg Jetty (formerly known as "Pigeon House 'B' Jetty"). Max. size 35,000 d.w.t. with the aid of tugs. Present depth sufficient for vessels of this size.

PILOTAGE. Minimum 24 hours notice of ETA and draft to Agent. Accurate ETA's are vital as Pilots only go afloat on this basis. When within VHF range, contact should be established through "Cork Harbour Radio" (see "Radio"). This station combines Port Operations and Information service and co-ordinates the pilotage service. The pilot launches are also fitted with VHF. Channels 6, 12 and 16.

For large deep-drafted vessels, Pilot usually boards up to 2 or 3 miles South of Roches Point. Compulsory river pilotage area extends upstream from Spit Bank Light.

ANCHORAGES: Safe deep-water anchorages as arranged with Pilots.

RESTRICTIONS: Navigation by night and day. Ships of 5.0 m. draft can make passage of river to Cork at any stage of tide.

Bridges: Near Albert Quay and Andersons Quay.

MAX. SIZE: *Cork:* Max. length 152 m. Draft fresh water on Spring tides 8.7 m. on Neap tides 7.8 m.

Whitegate: Tankers up to 275 m. length. 11.6 m. draft. Max. draft 12 m. at highest tides.

HEALTH: Health Declaration form is presented to Customs Officer or Port Health Inspector and pratique issued without delay. In cases of disease on board notify Agents who inform Health Authorities.

RADIO: Coast Station – Valentia Radio. W/T and R/T. R/T link call facilities available. Telex fitted. In U.K., Coast Stations also relay messages direct to Agents.

VHF: Harbour Radio: VHF Channels 12, 14 and 16, 24 hour watch maintained. Call sign "Cork Harbour Radio". A Port Operations and Information Service is provided and it is through this organisation that the requirements of the Harbour Master will be made known.

Vessels underway are required to maintain a VHF watch on Channel 12 or 14 as instructed.

RADAR: No Port Control Radar. Pilot boats equipped with radar.

TUGS: Deep draft vessels take tug assistance from Horse Head to Cork and vice versa. Tug's lines are used. Tankers use two to three tugs for berthing at Whitegate Terminal.

BERTHING: The quays at Cork afford good accommodation for vessels up to 152 m. LOA, on fresh water drafts of 7.8 m. on Mean Neap tides and 8.7 m. on Mean Spring tides with 8.8 m. alongside quay. The Deep Water Quay at Cobh is 189 m. long and vessels of 6.0 m. draft can berth with safety.

Berth	*Length (m.)*	*Depth (m.)*
City Quay:		
Albert Quay	135.0	4.9
South Jetties	411.5	8.8
South Deepwater Quay	201.2	6.1
Ford's Wharf (Private)	347.5	2.7 – 4.0
E.S.B. (Private)	152.4	4.0
Penrose Quay	146.0	3.3
Fishguard Berth	97.5	4.9
Horgan Wharf	205.7	8.8
North Swinging Basin	146.6	8.8
North Deepwater Quay	335.5	5.2
Custom House Quay (North)	176.9	7.3
Custom House Quay (South)	167.6	4.6
Tivoli:		
Ro-Ro Terminal	125.0	5.2
Container Berth	122.0	7.3
General Purpose Berth	152.0	8.8
Bulk Ore Berth	152.0	8.8
Bulk Liquid/Livestock	115.8	5.2
Oil Jetty	24.4	4.0
Lower Harbour Quays:		
Deepwater Quay	189.0	5.0
Ballast Quay	67.0	3.7
Kennedy Wharf	45.7	3.2
Whitegate Oil Jetty No. 1	365.0	11.4
Whitegate Oil Jetty No. 2	106.7	10.2
Spencer Jetty (Private)	131.0	7.2
Basin (Private)	152.0	5.2
Bunkering Berth (Private)	76.4	7.1
Pfizer Jetty (Private)	259.0	9.6
Haulbowline Industries (Private)	53.3	2.6
Ringaskiddy Ro-Ro/Ferry Terminal	–	9.5

SPECIAL CARGO FACILITIES:

Grain: 2 mobile suction discharge plants at South Jetties, combined discharge rate up to 240 t.p.h. Max. ship size 152 m. LOA, 8.7 m. draft on spring tide. Storage capacity 80,000 tons.

1 suction unit × 150 tonnes per hour, Silo capacity 7,000 tons at South Deepwater Quay.

Coal/Fertiliser/Sulphur: 3×6 ton level luffing grab cranes combined discharge rate up to 270 t.p.h. Max. ship size 152 m. LOA, 8.7 m. draft.

Containers: 1×30 ton travelling transporter container crane backed up by 2×30 tonne straddle carriers. Length of berth 122 m. Max. depth at 7.3 m. L.A.T.

Roll-on/Roll-off Berth "Tivoli": Max. height of link span 8.6 m. above LWOST. Min. height of link span 2.7 m. above LWOST. Max. loading 65 tons. Distance from side of berth to centre line of link span 11.4 m. Max. ship size 137 m. LOA. Berth dredged to 5.2 m. L.A.T.

Livestock loading Ramp and Lairage: Max. ship size 106.7 m. LOA. Berth dredged to 5.2 m. L.A.T.

Pfizer Jetty: Length between dolphins 259.2 m. Max. draft 10.8 m. on all tides.

Molasses discharge rate, 1,000 t.p.h.
Fuel Oil discharge rate, 600 t.p.h.
Sulphuric Acid discharge rate, 200 t.p.h.

Bananas: Automatic banana discharge equipment at Horgan Wharf.

CRANES:

Location	*No.*	*Capacity Tonnes*
South Jetties	3	6
Ford's Wharf	2	5

STEVEDORES: Labour hiring times. Week-days 0800, 1000 and 1130 hrs. Gangs for week-end working must be hired at 1700 hours on Fridays. ETA advice could include number of gangs workable.

MEDICAL: All medical and hospital services available at short notice.

TANKERS: Irish Refining Co. Terminal at Whitegate is situated on East side of Lower Harbour. Two deep water berths for tankers. Max. size, 55,000 d.w.t. or 90,000 d.w.t. partly laden. Slop reception facilities available.

Length between dolphins, 366 m.
Crude discharge rate up to 4,000 t.p.h.
HFO loading rate up to 1,700 t.p.h.
Gas Oil loading rate up to 700 t.p.h.
Petrol loading rate up to 600 t.p.h.
LPG loading rate up to 20 t.p.h.

Diameter of Hoses:

Berth No. 1: Crude and Black Oils 10 in. ASA.
Clean Products 8 in. ASA.
Berth No. 2: All Products 6 in. ASA.

N.E.T. (Nitrigen Eireann Teo.). At Marino Point. Overall length dolphin to dolphin 375 m. Dredged to 10.2 m. at L.A.T. to accommodate Ammonia tankers of up to 15,000 d.w.t. and bulk or general cargo vessels of up to 25,000 d.w.t. (Partly loaded). Vessels of up to 186 m. OAL and 9.5 m. draft will be acceptable.

DENSITY: Average density of water in river 1008.

FRESH WATER: Available at all quays ex-hydrants – delivery rate 25 t.p.h.

FUEL: Major grades of bunker fuel and diesel as well as marine lubricants can be obtained through suppliers. Delivery by road or river tanker.

WATCHMEN: Recommended but not compulsory.

OPENING/CLOSING HATCHES: Crew must perform this work as dockers decline to do it.

CUSTOMS ALLOWANCES: 200 cigarettes per man, and 1 bottle spirits per man.

CARGO GEAR: No special local requirements. Regulations similar to British Board of Trade safe working requirements. 1×30 ton container crane and 3×6 tonne level luffing portal cranes are provided by Cork Harbour Commissioners. A number of mobile cranes up to 100 tonnes capacity are available from local plant hire firms and stevedoring firms.

IDENTIFICATION CARDS: Not required.

CONSULS: *Finland, Denmark, Netherlands and Sweden:* J. C. Hannigan, Hannigan Shipping Ltd., 6 St. Patrick's Quay, Cork. Tel. 500588. *Norway:* B. J. Foley, c/o Marine Transport Services, Atlantic Quay, Cobh. Tel: 811485. *Belgium:* G. Jones, c/o Celtic Coasters, 33 St. Patricks Quay, Cork. Tel. 504018. *Italy:* P Cali, University College, Cork. Tel. 26871. *Germany:* M. Corkery, Solicitor, Camden House, Camden Quay, Cork. Tel: 509367. *France:* F. Zatellier, c/o Eurotranslations, 6 Sullivans Quay, Cork. Tel. 26093. *Spain:* F. Ronayne, c/o Ronayne Shipping Ltd., Monaghan Road, Cork. Tel: 964444.

REPAIRS: All types of deck and engine repair facilities available.

DRY DOCK: Verolme Cork dockyard main dry dock can take vessels up to 158.5 m. in length. Floating docks of 2,000 and 10,800 tonnes lifting capacity, also 4×40 tonne cranes. Able to carry out repairs to ships afloat of any tonnage using the port.

SURVEYORS: Lloyd's Surveyor at Cobh.

REPATRIATION: Can be carried out without difficulty.

AIRPORT: 5 miles from city. Regular flights to London. Onward connections to all destinations.

TIME: GMT from 0200 hrs. on Sunday following 3rd Saturday in October to 0200 hrs. on Sunday following 3rd Saturday in March (unless latter is Easter Saturday, in which case to 0200 hrs. on Sunday following 2nd Saturday in March).

One hour ahead of GMT (i.e. Standard European time) for remainder of year.

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HEALTH: Pratique automatic for movements Ireland/U.K. area. Maritime Declaration of Health indicates requirements. This declaration must be submitted on arrival by Master of ship coming from foreign port. This requirement does not now normally apply to vessels trading *solely* between the Republic and ports in West Germany, Belgium and Netherlands, Atlantic and Mediterranean coast of France, Italy and Greece. Other requirements mentioned on Maritime Declaration of Health form still apply to such ships.

"Foreign Port" is port situated elsewhere than Ireland and UK.

Master of foreign-going ship may be asked to produce valid Derat Certificate or Derat Exemption Certificate in respect of vessel. Travellers (passengers and crew) may be requested to produce valid certificates of vaccination against smallpox if from an infected local area, or if from countries in Africa, Asia, North and South America. This requirement does not apply to arrivals from Azores, Bermuda, Canada, Canary Islands, Madeira, Guyane, Guadeloupe, Martinique, Greenland, Suriname, Netherlands Antilles, United States of America. Ships may be subjected to sanitary inspection by inspectors of Port Health Service.

Swill must not be landed from vessels which trade outside Ireland.

Granting of pratique by radio not practised at Dublin, But is under consideration at present.

RADIO: Valentia Radio, Ireland. Portishead Radio, U.K. Anglesea Radio, U.K.

BERTHING: The following berthage is available to shipping using the port.

North Side of the River, from Talbot Memorial Bridge to North Wall Light, available as berthage, 2,244 m., depth 4.8 m. – 6.7 m. LAT. Cranes: 1×100 tonnes (fixed), 1×6 tonnes and 9×4 tonnes.

Alexandra Basin, South and West sides: Length of berthage 820 m., depth 7.3 m. – 7.9 m. LAT. Cranes: 1×6 tonnes, 6×4 tonnes.

Alexandra Quay West (North side of Alexandra Basin): Length of berthage 375 m. depth 9.7 m. LAT. Cranes 1×6 tonnes, 7×4 tonnes.

Alexandra Quay East: Length of berthage 360 m., depth 10.4 m. LAT. Cranes: 5×4 tonnes.

Ocean Pier West (East end of Alexandra Basin): Length of berthage 418 m., depth 9.7 m. LAT. Cranes: 1×10 tonnes, 7×4 tonnes.

Ocean Pier South: Length of berthage 142 m. depth 10.3 m. LAT.

Ocean Pier East: Length of berthage 244 m., depth 9.7 m. LAT. Cranes: 4×4 tonnes.

South side of the River, from Talbot Memorial Bridge to Ringsend Gut, available as berthage 1,598 m., depth 4.88 m. – 6.7 m. LAT. Cranes: 10×4 tonnes.

South Bank Quay: Length of berthage 205 m., depth 8.5 m. LAT.

Container Handling Berths:

B+I Terminal: Length of berth 229 m., depth 6 m. LAT (incorporates No. 4 Ro/Ro). 1×30 tonne transporter crane. 2×20 tonne derrick cranes.

Sealink Terminal: Length of berth 145 m. depth 6 m. LAT. 2×30 tonne transporter cranes and 2×30 tonne Goliath cranes.

Southside Terminal: Length of berth 520 m., depth 7.6 m. LAT (incorporates No. 3 Ro/Ro). 2×30 tonne transporter cranes, 1×32 tonne derrick crane and 1×10 tonne portal crane.

Ocean Pier West: Length of berth 183 m., depth 9.7 m. LAT. 1×35 tonne derrick crane.

North Wall Extension: Length of berth 122 m., depth 6.7 m. LAT.

Roll-On/Roll-Off Facilities:

North Side:	No. 1 Ramp – Length of berth 140 m., depth 6 m LAT.
	No. 2 Ramp – Length of berth 242 m., depth 10.3 m. LAT.
	No. 4 Ramp – Length of berth 200 m., depth 6 m. LAT.
	No. 5 Ramp – Length of berth 215 m., depth 11 m. LAT.
South Side:	No. 3 Ramp – Length of berth up to 520 m., depth 7.6 m. LAT.

BULK HANDLING FACILITIES:

Dry Bulk Jetty in Alexandra Basin: Length of jetty 247 m. depth 9.45 m. (North side) and 10.5 m. (South side). This jetty is equipped with a bulk ore conveyor and ship loading system for export of ore concentrates. 2×10 tonne grabbing cranes. It is also equipped with pipe-lines for liquid sulphur, ammonia and molasses. The jetty is also used for coal imports with a separate conveyor system linking the jetty with a back area coal storage site. A 9.15 m. approach section leading to the jetty has special facilities for small acid tankers.

Coal/Dry Bulk Quay, South Side: Length of quay 358 m., depth 11.4 m. LAT. This quay, with storage areas, hoppers, conveyor belts and 2×10 tonne grabbing cranes is one of the most sophisticated bulk handling berths in Western Europe.

STEVEDORES: ETA required by Stevedores before 1500 hrs. Monday to Thursday for work the following day, and by 1500 hrs. Friday for work Saturday, Sunday or Monday.

Average discharge rates: *Grain:* 3,000 tons per day. *Timber:* 30 standards loose per gang/day. 120 standards packaged per gang/day. *General:* Bagged cargo and fast general, including paper, 250 tons per gang/day. *Other Generals:* 90 tons per gang/day.

TANKERS: No slop residue discharge facilities.

Tanker Berths	*Max. Draft*
No. 1, West Oil Jetty, West Side	9.9 m.*
No. 2, West Oil Jetty, East Side	9.9 m.*
No. 3, East Oil Jetty, West Side	9.9 m.*
No. 5, East Oil Jetty, East Side	5.8 m.
South Bank Quay (E.S.B.)	8.4 m.*
South Bank Quay (Poolbeg)	10.3 m.*

*Time suitable for navigation in approaches – 1 hour before High Water for deepest draft.

Common User Oil Pipe-line System: This system provides 5 pipe-lines to Eastern Oil Jetty and 7 pipe-lines to Western Oil Jetty. Cargoes of tankers berthed at these jetties can be discharged to storage installations of any of the oil companies.

E.S.B. (Electricity Supply Board): At Poolbeg Jetty (formerly known as "Pigeon House 'B' Jetty"). Max. size 35,000 d.w.t. with the aid of tugs. Present depth sufficient for vessels of this size.

DENSITY: 1025 at all stages of tide.
FRESH WATER: Available at all berths by 2.5 in. hose line – 8/10,000 g.p.h. per hydrant.
FUEL:

Grades of Fuel Oil	*Viscosities*
Heavy Fuel Oil	3,500 sec. max.
Inter. Fuel Oil	1,500 sec. max.
Medium Fuel Oil	950 sec. max.
Light Fuel Oil	200 sec max.

Advance Notice required. Bunkering by pipe-line depends on availability of Oil Berth. Bunkering by Oil Barge normally a.m. notice on day required. Bunkering by Road Tanker – 24 hours notice.
FIRE PRECAUTIONS: Port By-Laws; Harbour Master's orders/Letters to Masters. Ref.: International Maritime Dangerous Goods Code.
Packed Petroleum: IMO recommendations on the safe transport, handling and storage of dangerous substances in port areas.
Fibrous Cargoes: See Directives No. 2 and 3 to Masters. Jute, hemp and sisal must be removed ex-ship from port area.

Cotton, cocoa fibre, kapok, etc., must be removed ex-ship to Hazardous Goods Shed.
General: Harbour Police-Watch obligatory during handling of all hazardous or inflamable cargoes, and on tankers during vessels' stay in port. No smoking permitted in Oil Zone, sheds, etc.
GANGWAY/DECK WATCHMEN: If no watchmen from crew, then shore watchman is recommended.
OPENING/CLOSING HATCHES: Patent hatches by crew; other hatches with some assistance from dockers.
CERTIFICATES:

Certificate of Registry.
Radio Safety Certificate.
Load Line Certificate.
Current Trinity House light bills.
Safety Equipment Certificate.

CUSTOMS ALLOWANCES: Tobacco per 8 days: 200 cigarettes – Master; 150 cigarettes – Officers; 100 cigarettes – Crew. Wine and/or Spirits: quarter pint per day per man.
CONSULS: *Embassies:*

	Telephone		*Telephone*
American Embassy	68 87 77	Greek Embassy	76 72 54
Argentine Embassy	69 15 46	Indian Embassy	97 08 43
Australian Embassy	76 15 17	Italian Embassy	76 24 01
Austrian Embassy	69 45 77	Japanese Embassy	69 42 44
Belgian Embassy	69 20 82	Netherlands Embassy	69 34 44
	69 15 88	Nigerian Embassy	60 43 66
British Embassy	69 52 11	Portuguese Embassy	69 51 54
Canadian Embassy	78 19 88	Spanish Embassy	69 16 40
Chinese Embassy	69 17 07	Swedish Embassy	71 58 22
Danish Embassy	76 01 22	Swiss Embassy	69 25 15
Egyptian Embassy	60 65 66	Turkish Embassy	68 52 40
French Embassy	69 47 77	USSR Embassy	97 75 25
German Embassy	69 30 11		

Consular Offices:

Brazilian	85 19 71	Monaco Consulate General	68 25 30
Cyprus	69 13 97	Norway Honorary Consul	77 87 82
Ecuador	69 54 48	Pakistan Honorary Consul of	69 82 34
Finland Honorary Consul General of	76 51 53	Panama	74 78 67
Iceland Honorary Consul General of	80 81 03	Peru	80 02 56
Luxembourg Honorary Consul General of	68 17 56	Philippines Honorary Consul of	76 01 50
Malta Honorary Consul of	76 03 33	Portugal Honorary Consul of	69 51 54

REPAIRS: All classes of repairs carried out by Independent Companies located in the Port area.
DRY DOCKS: Graving Dock No. 1: Length overall 125 m.; width at entrance 21.3 m.; depth over sill at HWOST 5.25 m., depth over blocks at HWOST 4.57 m. Equipment – one 6 ton EP crane.

Graving Dock No. 2: Inside length with caisson gate in: Extreme outer position 202 m.; normal outer position 194 m. Centre position 112 m.; inner position 78 m. Width at entrance 24.4 m.; depth over sill at HWOST 7.62 m. Depth over blocks at HWOST 6.8 m.

The intermediate positions for the caisson gates make it possible to operate inner section so as to accommodate a small or medium-size vessel independently of remainder of dock.

Equipment: One E.P. crane, 25 tons at 22 m. radius to 5 tons at 30 m. radius. Seven power capstans of 5, 10 and 15 tons pull. Fresh and salt water hydrants at dock sides.

Patent slips: No. 1 – Length of cradle 23 m. for vessels up to 200 tons displacement. No. 2 – Length of cradle 51 m. for vessels up to 350 tons displacement.
REPATRIATION: May be arranged by ship's Agent through Department of Justice.
AIRPORT: Dublin Airport, 6 miles North of city centre, served by regular services direct to U.K., Europe, U.S.A. and Canada.
TIME: GMT plus 1 hour. Reverting to GMT between October and March.
HOLIDAYS: New Year's Day (1st January); St. Patrick's Day (National Holiday) (17th March); Good Friday*; Easter Monday†; Spring Bank Hoiiday† (1st Monday in June); August Bank Holiday† (1st Monday in August); Last Monday in October; Christmas Eve; half holiday (24th December); Christmas Day (25th December); St. Stephen's Day (26th December).

*Not a port holiday, but all other offices closed.

†These days can be worked at Sunday rates and conditions.
POLICE/AMBULANCE/FIRE: Contact Harbour Police patrol or at Dock Gates, or dial 999 on public telephone for all emergency services.

Port fire alarm system is linked via fire panel at Alexandra Road to local fire station.

TELEPHONES: Coin-box telephones available near Oil Berths. No rental charges; normal coin-box rates.
SERVICES: No facilities for tank cleaning; discharge of tank washings in small quantities to road tankers.
SHORE LEAVE: No port restriction on crew's shore leave.
GENERAL: Masters' cash requirements for week-end must be notified to Agent by noon on Friday.
DEVELOPMENTS: New Quay and Ro/Ro Ramp under construction.
AUTHORITY: Dublin Port and Docks Board, Port Centre, Alexandra Road, Dublin 1. *Tel:* 722777 – 748771. *Telex:* 25476. *Cables:* Harbour Dublin. *Contact:* Mr. R. N. Hayes, General Manager. Captain C. J. Lawless, Harbour Master.

DUN LAOGHAIRE: 53.18 N. 06.08 W. (See Plan Book)

PORT LIMITS: As defined by Dublin port and docks Board, as ships have to pass through their pilotage area. The limits of Dun Laoghaire Harbour are defined in its bye-laws as per its fairway extending beyond its pierheads.
DOCUMENTS: See "Dublin".
PILOTAGE: See "Dublin".
ANCHORAGES: See "Irish Coast Pilot".
RESTRICTIONS: See "Irish Coast Pilot".
MAX. SIZE: Fairway dredged to 5.0 m.
HEALTH: See "Dublin".
RADIO: See "Dublin".
VHF: The Harbour Office operates on Channels 16, 14, 12, 9 and "M", Call sign "Dun Laoghaire Harbour Office". Call sign for "Sealink", is "Dun Laoghaire Pier".
TUGS: None.
BERTHING: Harbour formed by 2 breakwaters, East breakwater length 1,290 m. West breakwater, length 1,548 m. Width at entrance between breakwaters, 232 m. Depth at entrance 6.2 m. – 7.9 m.

	Length (m.)	*Depth* (m.)
Mail Boat Pier, E. side	139+24*	5.2
Mail Boat Pier, W. side	130+24*	5.2
Car Ferry Pier, E. and W. side	142+11*	5.2
Traders Wharf, outside	149	3.5
Traders Wharf, inner side	131	2.5

Ice Plant: Traders Wharf supplies ice to fishermen.
**Note:* These piers are rounded at the seaward end.

The lengths given for the berths are the straight edge of the pier, the extra length given is the additional length continued along the straight line that meets the tangent to the pier.
CRANES: One 2 ton and one 5 ton crane, available for fitting out yachts near Traders Wharf.
SPECIALISED CARGO HANDLING FACILITIES: Three Ro/Ro ramps. Ramps are to M.O.T. loading requirements, width of ramps – 3 m.
BRIDGES: None.
STEVEDORES: None. Sealink arrange gangs.
MEDICAL: See "Dublin".
DENSITY: 1025.
FRESH WATER: Available at all berths.
FUEL: Arranged by Agent.
FIRE PRECAUTIONS: Only usual non-smoking precautions.
CONSULS: See "Dublin".
REPAIRS: See "Dublin".
DRY DOCKS: See "Dublin".
SURVEYORS: As per Lloyd's Shipping Agents, Dublin.
GANGWAY/DECK WATCHMEN: The ship's watch.
CUSTOMS ALLOWANCES: As per E.E.C. regulations.
REPATRIATION: See "Dublin".
AIRPORT: Dublin Airport (Collinstown) 20 km.
TIME: As United Kingdom.
HOLIDAYS: Nine (9) Bank Holidays each year.
POLICE/AMBULANCE/FIRE: Available locally. Police, Tel. 801285 Fire Brigade and Ambulance, Tel. 801903.
TELEPHONES: None on board visiting ships.
SERVICES: None.
SHORE LEAVE: Possible, Seamen's I.D. card sufficient, shore passes are not issued.
REGULATIONS: Nothing unusual.
DELAYS: There are no delays.
SHIP SUPPLY SERVICE: No service. However, there is a helicopter landing pad in the Western section of the Harbour.
AUTHORITY: Office of Public Works, 51 St. Stephen's Green, Dublin 2. *Tel:* 767541. *Cables:* OIBRE.

Harbour Office Dun Laoghaire. *Tel:* 801130. *Contact:* Captain J. P. Carter, Harbour Master.

DUNMORE EAST: 52.09 N. 06.59 W.

LOCATION: Dunmore East is situated on the West side of the Waterford Estuary, 14.5 miles from the Port of Waterford. It is a major fishing harbour centre.
APPROACHES: Width at entrance 280 ft.
PILOTAGE: See "VHF".
VHF: Not used in the harbour. However, Waterford Harbour Commissioners operate a pilot station on the high ground East of the Harbour and can be contacted on Channel 16.
BERTHING: The Harbour is formed by 3 piers as follows:

East Pier 480 ft., West Wharf 510 ft., South Jetty 300 ft.

CRANES: None. However, cranes can be hired locally.
FRESH WATER: Available on all 3 piers.
FUEL: Fuelling facilities for diesel operated engines are laid on to 3 points on the East Pier.
REPAIRS/DRY DOCKS: Syncrolift at the South West corner of the harbour capable of lifting a vessel 100 ft. in length; 230 tonnes SWL.

Grid on the West side of the Syncrolift, can take an MFV up to 75 ft. long. Vessels drawing in excess of 12 ft. can only use both the Grid and the Syncrolift during Spring tides.
SERVICES: There is an ice plant in the harbour operated by Bord Iascaigh Mhara.
AUTHORITY: Office of Public Works, 51 St. Stephen's Green, Dublin, 2. *Tel:* (01) 767541; (01) 764071. *Contact:* Lt. Cmdr. J. J. Grannell, Harbour Master. *Tel:* 051-83166. Mr. S. J. Sheil, Chief Engineer. *Tel:* (01) 764071.

FENIT: 52.17 N. 09.53 W.

PORT LIMITS: All waters East of a line from Kerry Head to the Westernmost point of the Magharee Islands.
DOCUMENTS: See "Dublin".
PILOTAGE: Pilotage is not compulsory, but is recommended. ETA at least 24 hours before Pilot required. VHF to Pilots and Harbour Master is available.
ANCHORAGE: Included in Pilotage duty. The area recommended is W.N.W. of Samphire Lighthouse.
RESTRICTIONS: Deep draft vessels berth some 2 hours either side of high tide.
MAX. SIZE: Vessels of 400 ft. have no difficulty in berthing. Maximum draft 20 ft. to be afloat.
HEALTH: Pratique procedure as in other Irish Ports.
RADIO: Valentia Radio Station will accept and forward W/T messages.
VHF: Harbour Master and Pilots listen on Channel 16 and switch to Channel 12 for passing messages.
RADAR: No service available.
TUGS: Not necessary.
BERTHING: 328 ft. of berthing space.
CRANES: There are two cranes available on the pier, 20 ton electric gantry and 15 ton diesel jib crane. Extra cranes may be hired.
STEVEDORES: There are three stevedores for the Port:

R. McCowens & Son, Edward St., Tralee – 066-21033
I. T. I. Ltd., Dock Rd., Limerick – 061-313088
Tralee Seabase Ltd., 10 Nth. Richmond St., Dublin 01-786377

MEDICAL: Regional Hospital in Tralee (8 miles).
TANKERS: Not to exceed max. draft 18 ft.
FRESH WATER: Supplied from hydrants on quay side at 20 t.p.h. Cost £1.25 per ton.
FUEL: Bunkers available from oil terminal on the pier.

Contact: Kerry Petroleum Clash, Tralee. 066-21155
or Estuary Fuels, 23 O'Curry St., Limerick. 061-313362

REPAIRS: May be arranged on a limited scale.
AIRPORT: Local airport at Farranfore (15 miles) and International Airports at Shannon and Cork. (80 miles)
DEVELOPMENTS: None in the immediate future.
AUTHORITY: Tralee & Fenit Pier & Harbour Commissioners, Fenit, Tralee, Co. Kerry. *Tel:* 066-36103. *Contact:* Lt. Commander J. Barrett, Harbour Master.

GALWAY: 53.16 N. 09.03 W. (See Plan Book)

DOCUMENTS:

1 Crew List (official form).
1 Passenger List (official form).
1 List of Articles (dutiable) in Possession of Crew (official form).
1 Stores List (to include bonded surplus stores for seal, firearms, ammunition, animals, radio transmitting and receiving sets) (unofficial form).
Maritime Declaration of Health (official form).

Documents, etc., required by Agent for Customs Purposes:

Ship's Register.
Load Line and Safety Certificates, etc.
Receipt for previous payments of light dues if any.

PILOTAGE: Pilots board incoming vessels only at "tide times" (approx. 2.5 hours before HW until HW); vessels arriving at times outside this period should anchor and await Pilot. Safe anchorages at Inner Roadstead or near Margaretta Buoy according to tonnage and draft, Pilot will board at either. Application for Pilot should be to Agent with notice of ETA. International light and sound signals may be used.
ANCHORAGES: During S.W. gales safest anchorage is at Black Head.
RESTRICTIONS: Entry from 2 hours before HW until HW only.
MAX. SIZE: Governed by depth on sill of 28 ft. at springs and 24 ft. at neaps: width of dock gates, 65 ft. and length of turning area 480 ft.
HEALTH: Master of ship arriving from foreign port must deliver Maritime Declaration of Health in order to obtain pratique. An oral declaration will suffice for ships trading solely between Republic of Ireland and Belgium, Holland and European France. Pratique will be granted or withheld depending on answers given to questions put in Health Declaration.

In event of a suspected disease or fever on board, vessel is detained pending arrival of Medical Officers of Health. No unauthorised person is allowed to leave ship without authority of Chief Medical Officer.

Pratique is automatic when vessel arrives from ports in Great Britain, Isle of Man, Northern Ireland and Channel Islands or another port within Eire.

RADIO: ETA cables to Agents, etc., through Valentia Radio if approaching from South or Malin Head if from North. Valentia has telephone link service. Port VHF on Channel 16.
TUGS: No tugs available.
BERTHING:

Berth	*Length* (m.)
Mulvoy Quay	209
Breatnach Quay	176
Dun Aengus Dock – North	164
Dun Aengus Dock – South	161
New Pier	134

CARGO HANDLING FACILITIES: One 30 ton cantilever crane in operation at Dun Aengus South Quay. Grain, coal, bulk fertilisers, etc. are all handled by grabs, discharge rates 1,500 t.p.d. per crane.

5×10 tonne mobile cranes, 4×25 tonne cranes for grab discharge. 1×35 tonne gantry crane (private).
STEVEDORES: Agents arrange after receipt of ETA.
MEDICAL: No special port medical requirements. Ships medical requirements should be included in ETA signal.
TANKERS: 2 berths. No special requirements.
DENSITY: 1012 (average).
FRESH WATER: Available by hose in unlimited quantities. Rate up to 50 t.p.h.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: (Open quays) watchmen recommended.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: Wine, Spirits and Tobacco: Members of a crew who remain out on a vessel during her stay in port are allowed to retain in their own possession, under certain conditions, the following quantities of the undermentioned goods:

Tobacco in any form (to cover 8 days)	*Spirits in any form* (to cover 4 days)	*Wine* (to cover 4 days)
The Master 8 oz.		
Officers (i.e., Mates, Engineers, Wireless Operators, Ship's Surgeons, Pursers, Chief Stewards or Serangs) 6 oz.	1 pint	1 gallon
Other Crew members 4 oz.	1 pint	

IDENTIFICATION CARDS: Not needed.
CONSULS: T. McDonogh & Sons Ltd., Merchant's Road, Consul for France and Belgium only. No others in Galway.
REPAIRS: Deck and engine repairs carried out afloat.
DRY DOCKS: No dry dock.
REPATRIATION: Crew changes and repatriation can be effected.
AIRPORT: Dublin (140 miles) and Shannon (55 miles). Airports served by regular flights.
TIME: GMT plus 1 hour. Reverting to GMT from October to March.
HOLIDAYS: Christmas Day; St. Stephen's Day (26th December); St. Patrick's Day (17 March); Easter Monday; Whit Monday; First Monday in August.
POLICE/AMBULANCE/FIRE: Police Tel: 62121. Ambulance Tel: 64141. Fire Tel: 999.
TELEPHONES: No arrangements exist for placing telephones on board.
SERVICES: Compass adjusters available in Dublin. 24 hours notice to Agent.
SHORE LEAVE: Allowed.
DELAYS: Apart from tidal, none.
SHIP SUPPLY SERVICE: Arranged by ships Agents: City of Galway Shipping Co. Ltd. and Kelly Shipping Ltd.

The occasional call for landing sick/injured seamen could be affected by the Lifeboat Service (R.N.L.I.) or on occasion by the Harbour Authorities' Pilot Launch.
AUTHORITY: Galway Harbour Commissioners, 49 Dock Street, Galway. *Tel:* 091-62329 and 61874. *Telex:* 28895. *Contact:* Captain F. W. Sheridan, Harbour Master & Pilotage Superintendent (Home Tel: 091-63920).

KILLYBEGS: 54.38 N. 08.26 W. (See Plan Book)

DOCUMENTS: See "Dublin".
PILOTAGE: No permanent Pilot but one can be acquired on request.
ANCHORAGE: Very safe anchorage.
RADIO: Malin Head Station.
VHF: Link calls through Malin Head VHF Channel 16.
BERTHING: Large fishing fleet has to be accommodated.
MEDICAL: Necessary to send advance warning re illness or injury to a Crew member.
FRESH WATER: Available.
FUEL: Fuel oil available.
IDENTIFICATION CARDS: Not needed.
SHORE LEAVE: Crew members allowed ashore.
DEVELOPMENTS: Major harbour scheme has commenced – dredging and additional wharves, and piers.
AUTHORITY: Department of Fisheries and Forestry, 6E, Agriculture House, Kildare Street, Dublin 2. *Tel:* 789011. *Contact:* Captain P. J. Hodgman, Harbour Master (Tel: Killybegs 32).

KINSALE: 51.36 N. 08.36 W.

PORT LIMITS: Straight line drawn due West of Hangman's Point ("Arrived Ship Line").

DOCUMENTS: See "Dublin".

PILOTAGE: 12 hours notice of ETA required. Pilot operates on VHF Channels 16 and 14. Pilot boards at Bulman Buoy (WP). Pilot station tel: 021-72300 and 72303, telex: 28491.

ANCHORAGE: 4 cables South of Bulman Buoy or off Lower Cove in line with Charles Fort. Depth 6.7 m. LW.

RESTRICTIONS: Berthing at HW only. Bar, depth 3 m., 2 to 3 cables South of Charles Fort. All vessels lie aground at LW. Tides 1.5 knots. Also see "Berthing".

MAX. SIZE: Vessels up to 80 m. LOA, draft 4.5 m. and 1,500 d.w.t.

VHF: Vessels approaching the port call pilot station on Channel 16 and then switch to Channel 14.

BERTHING: Berthing starboard side to at HW on Southern side of Pier Head (Customs Quay); length 60 m. Depth MHWST 6.10 m., MLWNT 2.74 m. All vessels lie aground at LW.

CRANES: Mobile grab cranes of 25 tons – 35 tons capacity available.

STEVEDORES: Working hours 0800 – 2000 hrs., Monday to Friday.

FRESH WATER: Available ex-hydrant on berth.

TIME: GMT; Summertime GMT plus 1 hour (March to October).

AUTHORITY: Kinsale Harbour Commissioners, The Pier, Kinsale, Co. Cork. *Tel:* 021-72503. *Telex:* 28491. *Contact:* E. Hurley, Harbour Master.

LIMERICK: 52.40 N. 08.38 W. (See Plan Book)

PORT LIMITS: The Port of Limerick extends from Sarsfields Bridge in Limerick City to a line joining Loop Head and Kerry Head. It includes Limerick City Dock and Quays, Dernish Island Jetty (Shannon Airport), Aughinish Marine Terminal, Foynes Island Jetty, Tarbert Island Jetty and Money Point Jetty but *not* Foynes harbour and Cappa Pier Kilrush.

According to custom and practice, smaller vessels "arrive" as they pass Scattery Island Lighthouse and larger vessels at the outer anchorage.

DOCUMENTS:

EEC Arrival Form for tankers over 1,600 tons gross (to be presented to boarding Pilot).
2 Crew Lists.
2 Passenger Lists.
3 Custom's Manifest (Tobacco List).
Deck Cargo Declaration.
Health Declaration.
Ship's Register (Tonnage Certificate).
Safety Equipment Certificate.
Safety Radio Certificate.
Load Line Certificate.
Receipt for last previous Trinity House Light Dues payment (if any).
Derat Certificate.

PILOTAGE: Compulsory from Scattery Island (52.35 N., 09.31 W.) to Limerick. Pilot may be taken off Kilcredane Head about 9 miles further West as an optional extra (this is advised by Harbour Master for vessels over 5,000 d.w.t.) or even further West. ETA for Pilots passed in advance by Agents. Masters may call Pilots (Scattery Pilot Station – Channel 16 VHF) or by normal International Code sight or sound signals. ETA to be sent 24 hours in advance and amended as necessary. Pilots watch only when vessels are expected inwards or outwards.

ANCHORAGE: Vessels normally wait tide to Limerick at Scattery Roads; Beighcastle Anchorage depth over 60 ft. (52.40 N. 08.57 W.) about 18 miles downstream off Limerick is nearest deep-water anchorage; now disused as lightening place for bulk grain cargoes. Larger vessels (over 10,000 d.w.t.) anchor 2.5 to 3.0 miles West of Scattery Lighthouse.

RESTRICTIONS: Entrance to Limerick Dock is limited to 2 hours preceding HW; for vessels over 3,000 d.w.t. (laden) daylight HW only.

MAX. SIZE: Dependent on tide. Up to 20 ft. draft on Spring tides (neap tides about 16 ft.) Vessels of 500 ft. × 65 ft. beam have berthed Limerick Dock on suitable draft. Such vessels are subject to weather delays.

HEALTH: If no infectious diseases on board, pratique granted by Customs Preventive Officer on arrival on presentation of Health Declaration of Master. Landing of dogs and cats from outside British Isles strictly forbidden.

RADIO: Irish Stations; Valentia Radio VHF or R/T (link-calls available) or Malin Head Radio, or any U.K. Radio Station. Agents have special arrangements with Valentia Radio and Malin Head Radio, cables passed by direct telex to Agent's office.

Telex in Harbour Master's Office No. 70248 HABR EI.

VHF: Masters can call Scattery Pilot Station on Channel 16, or Limerick Harbour Radio – same, working on Channels 12 and 13.

TUGS: 2 tugs each of 22 tons bollard pull are available in the estuary in addition to one small tug of 5 tons pull and a dredger fitted with towhook.

BERTHING: In Limerick Dock there are 10 berths of which only 1 (Shell berth) is reserved exclusively for tankers. The cement berth is also used for tankers when required. Drafts on all berths approx. tidal gauge plus 1 ft. Extensive berthage on tidal quays now used by fertilizer vessels up to about 1,000 d.w.t. lying safe ground on mud berths.

TANKERS: Apart from Limerick Dock tanker berths Dernish Oil Jetty situated approximately 1 mile South of Shannon Airport. Jetty head 150 ft. long. Distance between head and stern buoys 430 ft. Depth alongside LW 26 ft. Jetty designed for vessels of up to 5,000 d.w.t. Aviation fuel pumped direct to airport.

STEVEDORES: Sole stevedores Limerick Cargo Handling Ltd. (as a result of rationalisation scheme). ETA per Agent before 1600 hrs. each day Monday to Thursday for labour next day. Master to state number of gangs/workable hatches. Crew open and close hatches. Normal work 0800/1700 hrs. but overtime can be worked 24 hours per day, Saturday and Sunday included. Requisition for labour for weekend work and 0800 hrs. Mondays by 1600 hrs. Friday.

Discharge rates: Bulk cargoes 1,000 tons per day.
D.B.B. 60 standards per day.
Packaged timber 150 stand. per gang day.
Bagged cargoes (palletised in hold) 400 tons per gang day.
Generals 130 tons per gang day.
All cargoes by crane discharge.

Grain consigned to Ranks is discharged directly to mill by floating grain elevator "Garryowen" in Wet Dock. Rate 150 t.p.h.

CONTAINER HANDLING FACILITIES: A 32 ton Gantry Container Crane at Limerick Docks.

MEDICAL: All medical facilities available at short notice.

DENSITY: 1000 in Limerick Dock, except in certain late Summer conditions.

FRESH WATER: Available at all berths in Limerick ex-hydrant. Average rate 7.5 t.p.h.

FUEL: All grades available in reasonable quantities per road truck on 24 hours notice. (Non-bunker port prices).

WATCHMEN: Watchmen from crew, or if none available shore watchmen available.

HATCHES: Opening and closing of hatches, setting up derricks, shifting of hatches, beams, patent hatches, etc., all to be done by ship's crew with no assistance from shore gangs.

CONSULS: Belgium, Denmark, Finland, France, Germany (Fed. Rep.), Netherlands, Spain, Sweden.

CUSTOMS ALLOWANCES: (Tobacco per 8 days). Master 200 cigarettes; Officers 150 cigarettes; Crew 100 cigarettes. Wine/Spirits: quarter pint per man per day.

REPAIRS: Limited facilities. Dry dock available for vessels up to 40 ft. beam and not exceeding 15 ft. draft.

SURVEYORS: Nearest Marine Surveyors are K. P. O'Mahony, Cork, Tel: 021 – 43682, Telex: 6053 E1, or Captain P. Tyrrell, Cork, Tel: 021 – 821231.

Also Cabet Brett, Belfast; Cargo Superintendents, Dublin; P. B. Harrison, Dublin; Casebourne & Turner, Dublin.

Lloyd's Register Offices are at Rushbrook, Cork, Tel: 021 – 811831. A.B. and B.V. are represented by P. B. Harrison (Dublin) Tel: 01 – 895878.

Salvage Association are represented by Mullock & Sons (Limerick Foynes) Lloyd's Agents, Tel: 061 – 54044, Telex: 26911.

REPATRIATION: No difficulties. Shannon International Airport 15 miles from Limerick. Daily flights world-wide destinations.

TIME: As U.K. GMT or GMT plus 1 hour (Summer Time).

HOLIDAYS: (For dock working), New Year's Day (1st January); St. Patrick's Day (17th March); Easter Monday; First Monday in June; First Monday in August; half-day 24th December, 25th December, 26th December (Christmas Day and St. Stephen's Day).

POLICE/AMBULANCE/FIRE: Dial 999 for all emergency services.

BANKS: Bank of Ireland (Limerick) Telex: 26840 with overseas agencies and branches throughout area.

Allied Irish Bank (Limerick) Telex: 26864 with overseas agencies and branches throughout area.

EMERGENCY CO-ORDINATION CENTRE: Marine Rescue Co-ordination Centre, Shannon Airport Tel: 061 – 61969 also 061 – 61219, Telex: 26262. (Oil pollution co-ordination is through Harbour Master, Limerick).

STORING: Alongside from trucks. No restriction on fork lifts or riggers. In the case of Petroleum vessels with Class I or Class II cargoes, storing is not allowed during cargo working or ballasting, except where small items are hand carried onboard from vehicles parked at least 30 m. from ship.

Storing at Dernish Oil Jetty restricted to very light vehicles when cargo work permits.

SHORE LEAVE: No restrictions.

AUTHORITY: Limerick Harbour Commissioners, Harbour Office, The Docks, Limerick. *Tel:* 061 – 315109. *Telex:* 70248 Habr Ei. *Contact:* Captain E. K. Donnelly, Harbour Master.

NEW ROSS: 52.23 N. 06.56 W.

PORT LIMITS: Drumdowney Point to Kilmokey adjacent Barrow Bridge Lat. 52° 21.4′ N., Long. 7° 00′ W. The vessel is considered to be an arrived ship at the time of first HW after arrival off Barrow Bridge.

DOCUMENTS:

2 Cargo Manifests.
1 Bill of Lading.
1 Crew List.
1 Ship's Store List.
1 Passenger List.
1 Clearance.
Register.
Light Dues Certificate.
Derat Certificate.

PILOTAGE: For Estuary Pilot (See "Waterford").

New Ross Pilots Tel. 051-82206. Pilotage messages received and transmitted by Barrow Bridge VHF Channels 16 and 11. Early ETA advisable. Pilotage compulsory.

ANCHORAGE: To Pilot's advice.

RESTRICTIONS: Max. draft 19 ft. at Neap tides, 22 ft. at Spring tides, max. length 360 ft. (may be increased under certain conditions), max. beam 60 ft.

Navigation of the River Barrow for max. size vessels usually restricted to 2 hours before, to 2 hours after HW.

HEALTH: Declaration on arrival, international signals for pratique.
RADIO: Malin Head, Land's End or Ilfracombe Radio Station.
TUGS: Available on request.
BERTHING: 2,000 ft. new jetty, depth 25 ft. below LW Spring tide.

Roll-on/Roll-off facilities available.

STEVEDORES: 24 hours notice required to Staffords, New Ross. Tel: (051) 21400. Telex: 80711.

Bulk discharge rate:	200 t.p.h.
Bag rate	100 t.p.h.
Liquid discharge	300 t.p.h.

FRESH WATER: Available at all berths.
FUEL: Obtainable by road tankers.
CONTAINER FACILITIES: 45 ton crane. Five acre storage space.
MEDICAL: Services available locally.
DENSITY: 1000.
WATCHMAN: Available if required.
HATCHES: Ship's crew normally open and close hatches; shore-crane may assist.
CUSTOMS ALLOWANCES: Members of a crew who remain on a vessel during stay in port, are allowed to retain under certain conditions the following quantities of the undermentioned goods:

Tobacco (in any form): Master 8 oz., cigarettes 200; Officers: tobacco 6 oz., cigarettes 150; Crew members: tobacco 4 oz., cigarettes 100.

Spirits (in any form) to cover 4 days 1 pint (1 bottle each). Wine of any strength allowed in place of spirits at rate of 1 pint wine to half pint spirits. In addition, an allowance of 1 quart of beer or 1 pint of wine 30 proof per man per day. Members of crew whatever rank finally leaving vessel allowed to take ashore free of duty for their own personal consumption, following quantities of undermentioned goods, when they form whole of their unconsumed stores:

(a) If from ports in Great Britain, Northern Ireland, or the Isle of Man, or continental ports between the Elbe and Brest (except vessels crossing at regular and frequent intervals): tobacco in any form 4 oz.; spirits (ordinary drinkable) quarter pint; spirits (cordials or perfumed) quarter pint.

(b) If from any other port, double the quantities specified at *(a)*.

(c) Irrespective of the port from which arriving.

IDENTIFICATION CARDS: Not required.
REPAIRS: Dry Dock 240 ft.×36 ft.×14 ft.
REPATRIATION: Facilities exist.
AIRPORT: Dublin 95 miles; Cork 90 miles.
TIME: GMT plus 1 hour. Reverting to GMT between October and March.
HOLIDAYS: St. Patrick's Day (17th March); Easter Monday; Whit Monday (1st Monday in August); 25th and 26th December.
POLICE/AMBULANCE/FIRE: Telephone 999.
SHORE LEAVE: Allowed.
AUTHORITY: New Ross Harbour Commissioners, The Quay, New Ross, Co. Wexford, Ireland. *Tel:* (051) 21303. *Telex:* 80711. *Contact:* Captain D. M. Carroll, General Manager.

RATHMULLEN: 55.05 N. 07.31 W.

DOCUMENTS: Papers supplied by Agent in Rathmullen or by Customs.
PILOTAGE: Pilot obtained through Agent in Rathmullen 24 hours notice of ETA required.
ANCHORAGE: Anywhere in Lough.
MAX. SIZE: Any size of vessel can anchor. Max. draft for berthing, 30 ft.
HEALTH: See "Dublin".
RADIO: Malin Head.
TUGS: None required.
BERTHING: No specific requirements.
CRANES: Mobile cranes available. 24 hours notice required.
STEVEDORES: 24 hours ETA required.
MEDICAL: Assistance can be arranged at short notice. Hospital facilities are available at Letterkenny.
FRESH WATER: Available on berth.
FUEL: Different grades available at short notice.
GANGWAY/DECK WATCHMEN: Recommended
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: Tobacco, Wine: See "Dublin".
IDENTIFICATION CARDS: Not needed.
CONSULS: None at port.
REPAIRS: Only small repair jobs carried out.
REPATRIATION: Facilities exist.
AIRPORT: 80 miles away, serviced by regular flights.
TIME: GMT plus 1 hour. Reverting to GMT in Winter months.
HOLIDAYS: Work can be arranged on all church and bank holidays.
POLICE/AMBULANCE/FIRE: Police, Rathmullen 2; Fire, Letterkenny 112; Ambulance, Letterkenny 230.
TELEPHONES: No arrangement for placing telephones aboard.
SERVICES: No special services.
AUTHORITY: Harbour Master – Rathmullen.
Donegal County Council, County House, Lifford, Co. Donegal, Ireland. *Tel:* (074) 41066. *Contact:* E. Sweeney, Senior Staff Officer.

ROSSLARE: 52.16 N. 06.20 W.

PORT LIMITS: The limit lines start from a point on shore 4,000 ft. South-east of viaduct and extend due North for a distance of 6,000 ft. and thence due West for a distance of 7,000 ft., thence due South for a distance of 3,430 ft., terminating on shore at a point 3,650 ft. West of existing viaduct.
DOCUMENTS:

Customs Documents.
Ships Manifests.
Crew List.

PILOTAGE: Not compulsory.
ANCHORAGES:

Prohibited Anchorage:	304° – 4.5	cables from	Lighthouse
Thence	214° – 2	,,	,,
,,	124° – 4.5	,,	,,
,,	034° – 2	,,	,,

No anchorage inside breakwater. Sheltered from Southerly round to North Westerly winds.

Dangers: Shoals with depths of less than 18 ft. extend about 4 cables E.S.E. from head of breakwater. Shoal 18 ft., Southern end of which lies about 0.75 cables Northward of end of breakwater. Southern end of an extensive stony flat, having depths of 13 ft. to 18 ft. lies about 3.5 cables further to N.W. Between these shoals lies several outcrops of 18 ft.-19 ft.

MAX. SIZE: Harbour dredged to depth 6 m. LWOST. Ro/Ro Berth No. 2: Length overall 152 m. Ro/Ro Berth No. 3: Length overall 171 m. Max. beam 22.86 m.
HEALTH: If no infectious diseases on board, pratique given by customs on arrival. If from a port within E.E.C. this may be given verbally, otherwise required in writing.
RADIO: Ilfracombe, Lands End Radio and Celtic Radio stations.
VHF: Call sign "Rosslare Harbour Radio" Channel 16. Channels 14, 12 and 6 for further communication when within radio range.
RADAR: Not available.
TUGS: None available.
BERTHING: Berth No. 2 and 3 adjustable. Ro/Ro ramp SWL 50 tonnes. Also see "General".
CRANES: None. Roll-on/Roll-off only.
STEVEDORES: Ordered by Agents. ETA necessary.
MEDICAL: Advance notice required at least one hour. Hospital facilities 12 miles away.
DENSITY: Average 1025.
FRESH WATER: Laid on, delivery by hose. Cost £1.00 per 1,000 gals, or part thereof. Rate 15 – 30 t.p.h.
FUEL: No facilities.
GANGWAY/DECK WATCHMEN: Not compulsory.
OPENING/CLOSING HATCHES: Crew assisted by stevedores.
CUSTOMS ALLOWANCES: Tobacco: 50 grammes per day or (40 cigarettes or 10 cigars). Spirits, 0.25 litres per day. Wine, 0.50 litres per day.
CONSULS: None.
REPAIRS: Rosslare Harbour Ships Repairs. Telephone (053) 33194. Telex: 80675.
REPATRIATION: No facilities.
AIRPORTS: Dublin 110 miles. Cork 134 miles. Small private airfield Castlebridge, 18 miles.
TIME: GMT plus 1 hour. Reverting to GMT in Winter months.
HOLIDAYS: New Year's Day; St. Patrick's Day (17th March); Easter Monday; June Bank Holiday; August Monday; Christmas Day (25th and 26th December). No work Christmas Days – 25th and 26th December.
POLICE/AMBULANCE/FIRE: Police: Rosslare Harbour 33204; Ambulance: County Hospital, Wexford 22233; Fire: Fire Brigade, Wexford 22618.
TELEPHONES: Operators to arrange with Department of Posts and Telegraphs.
SHORE LEAVE: Crew allowed ashore.
IDENTIFICATION CARDS: Seaman's Book sufficient.
GENERAL: Leading lights for No. 3 berth are fixed red, 120° visible over and arc of 90° from 079° to 169° surmounting yellow diamond shaped daymarks.

Lighthouse on main pier end, 50 ft. flashing W.R.G. every 5 seconds.

New pier built 1980. Overall length 152 m. Berth No. 1 is reserved for future developments. Berth No. 2 in operation, Mardev Linkspan (Ro/Ro). Depth 6 m. LOWST. Light pier end. QK Fl. white. Leading lights occ. white 3 secs. 146°.

DEVELOPMENTS: No major developments proposed. On shore minor developments proceeding.
AUTHORITY: Coras Iompair Eireann, Heuston Station, Dublin.

Rosslare Harbour, Co. Wrexford, Ireland. *Tel:* (053) 33114. *Telex:* 80730. *Contact:* W. Walsh, Port Manager. Captain M. C. Holden, Harbour Master.

SHANNON ESTUARY: (See Plan Book)

(a) Foynes Harbour: 52.36 N. 09.06 W.
(b) Foynes Island: 52.37 N. 09.07 W.
(c) Tarbert Island Oil Terminal: 52.35 N. 09.21 W.
(d) Money Point Generating Station: 52.36 N. 09.25 W.
(e) Aughinish Island Alumina Plant: 52.38 N. 09.03 W.

(a) FOYNES HARBOUR

DOCUMENTS: See "Limerick".

PILOTAGE: Compulsory from Scattery Island to Foynes Buoys. Pilot may be taken off Kilcredane Head about 9 miles farther West as an optional extra (usually by vessels over 5,000 d.w.t.). ETA for Pilots passed in advance by Agent. Masters may call Pilots (Scattery Pilot Station, Channel 16 VHF) or by normal International Code sight or sound signals. Foynes Harbour Pilot boards at Foynes Buoys. Call Foynes Harbour Radio VHF Channel 16.

ANCHORAGE: Vessels waiting to enter Foynes normally anchor Foynes Roads (West of Foynes Buoys).
RESTRICTIONS: No restrictions by day or night on vessels under 4,000 d.w.t. Vessels over 4,000 tons, up to 620 ft. (BP), limit on beam 90 ft. and up to 33 ft. 6 in. draft. Berth all sizes of vessels suitable to tidal conditions.

MAX. SIZE: Vessels up to 620 ft. length and 33 ft. 6 in. draft with restriction on beam of 90 ft. Ore cargoes of up to 22,000 tons have been loaded and tankers up to 32,000 tons have discharged.
HEALTH: See "Limerick".
RADIO: See "Limerick".
VHF: As for Limerick except for "Limerick Harbour Radio" substitute "Foynes Harbour Radio".
TUGS: 1 tug (1,250 h.p.) at Foynes Harbour.

BERTHING:
West Pier: 34 ft. LWOST. 350 ft. quay with mooring buoys ahead and astern. For tankers, crude ore (loading by conveyor system) and other cargoes. See "Stevedores".
East Pier: 37 ft. LWOST. 460 ft. quay with mooring buoys ahead and astern. Also see "Developments".
Inner Berth, East Jetty: 20 ft. LWOST. Length 400 ft.
Two other berths where vessels up to 2,000 d.w.t. lie safe aground on soft mud during low water.

CRANES: Four 40 ton mobile cranes are available and controlled by the harbour, other cranes can be hired from local firms if and when required. A local firm based in Foynes has a fleet of 80 forklifts, and 5 Bob-Cats which are also available at the Port.
STEVEDORES: ETA per Agent before 1600 hrs. Monday/Thursday for labour next day 0800 hrs., before 1600 hrs. Friday for labour Saturday or 0800 hrs. Monday. For cargoes other than bulk ore or concentrates in bulk Masters should state number of gangs/workable hatches.
Crude Ore: West Pier Conveyor: 500 t.p.h. loaded normally on continuous basis, day and night, commencing on berthing (16,000 tons in 28 running hours).
Packaged D.B.B.: 120 stds. per gang day (pre-slung).
Packaged D.B.B.: 70 stds. per gang day (shore slings).
Bulk Fertilizers: 1,000 tons per day (mobile grab crane).
Bag Fertilizers 400 tons per gang day (shore mobile cranes).
Bagged Barytes, bagged cement and other bagged commodity: 400 tons per gang day (ship's gear/mobile crane).
Storage Facilities: 15 acres of open landing ground and 45,000 sq. ft. of covered storage.
Weighbridge: There are 6 modern weighbridges (max. 50 tons) located throughout the Harbour Lands, and further weighing facilities will be installed as required.

MEDICAL: Emergency facilities available at short notice locally. Full general hospital facilities at Limerick, 25 miles distant.
DENSITY: Variable on season and tidal conditions between 1008/1020.
FRESH WATER: Available at all berths. Industrial water also available.
FUEL: Available East Pier from adjacent installation.
WATCHMEN: Normally crew watchmen.
HATCHES: See "Limerick".

CUSTOMS ALLOWANCES: See "Limerick".
REPAIRS: Limerick facilities – no dry dock.
REPATRIATION: No difficulties – Shannon Airport 34 miles.
TIME: See "Limerick".
HOLIDAYS: See "Limerick".
POLICE/AMBULANCE/FIRE: Dial 999.
SHORE LEAVE: No restrictions.

SHIP SUPPLY SERVICE: Contact: Ocean Inchape (Ireland) Limited, Aras Ide, Foynes, Co. Limerick.
Offshore Supply Services, Aras Ide, Foynes, Co. Limerick.
Irish Tugs Limited, Yacht Club Building, Cobh, Co. Cork.
Messrs. James Scott & Co. (Shannon) Limited Hartstonge House, Hartstonge Street, Limerick.

DEVELOPMENTS: The Port has over 500 m. of quays and work is progressing on the construction of a further 510 ft.×60 ft. wide of deep water quayage at the East Pier, and will be completed in late 1984.
AUTHORITY: Foynes Harbour Trustees, Harbour Office, Foynes, Co. Limerick. *Tel:* Foynes (069) 65111 and 061-92380. *Contact:* J. F. O'Malley, Secretary.
Harbour Master's Office, *Tel:* (069) 65244.

(b) FOYNES ISLAND

LOCATION: Cement Limited Oil Jetty is located on N.W. side of island, which is not connected to mainland. Buoyed moorings for tankers up to 60,000 tons (length 950 ft.). Vessels lie alongside breasting dolphins off pipe trestle in 50 ft. min. LWOST.
DOCUMENTS: See "Limerick".
PILOTAGE: Compulsory from Scattery Island to Foynes Island (otherwise as Limerick). Harbour Master advises vessels over 5,000 d.w.t. to take Pilot at or near Kilcredane.
ANCHORAGE: Vessels normally wait in Outer Anchorage 2.5 miles – 3.0 miles West of Scattery or at anchor in Cahircon Anchorage N.E. of Foynes Island Jetty waiting daylight early flood tide for berthing.
RESTRICTIONS: None for vessels up to 60,000 d.w.t. subject daylight movements berthing flood tide and departures during flood tide.
Mooring lines required: at least 4×120 fathoms and 6×90 fathoms polypropylene or similar.
MAX. SIZE: A min. depth alongside 50 ft.
RADIO:
VHF: See "Limerick".
HEALTH:
TUGS: 2 tugs available (each 22 tons bollard pull).
MEDICAL: No facilities on island. See "Foynes" and "Limerick".
TANKERS: Flexible hoses 2×8 in. passed by derrick from pipe trestle to ship. Connections – PCD 11.75 in., 8 holes.
DENSITY: 1013 (average).
FRESH WATER: None available.
FUEL: None available.
CUSTOMS ALLOWANCES: See "Limerick".
REPAIRS: None except via Foynes or Limerick.
SURVEYORS: See "Limerick".
REPATRIATION: See "Limerick".
TIME: See "Limerick".
HOLIDAYS: As Limerick. Vessels normally discharge without regard to holidays.
TELEPHONES: Shore telephone placed on board for ship's use with cargo hoses. Tel.: 069-65226.
EMERGENCY CO-ORDINATION CENTRE: See "Limerick".
BANKS: See "Limerick".
STORING: Island location. All stores must be conveyed by launch.
SHORE LEAVE: Restricted to daylight hours as launch service only then available. No access to mainland except by launch.
AUTHORITY: Limerick Harbour Commissioners. (See "Limerick").

(c) TARBERT ISLAND OIL TERMINAL

LOCATION: Electricity Supply Board power station and Jetty located on N.W. shore of Tarbert Island (with road access from the mainland) 52.35 N. 09.21 W. Berth 48 ft. draft LWOST overall length including outer mooring dolphins 1,050 ft. with berthing face of 300 ft.
DOCUMENTS: See "Limerick".
PILOTAGE: Compulsory from Scattery Island to Tarbert (otherwise as Limerick). Harbour Master advises vessels over 5,000 d.w.t. to take Pilot at or near Kilcredane.
ANCHORAGE: Vessels normally wait 2.5 miles West of Scattery for daylight flood tide for berthing.
RESTRICTIONS: None for vessels up to 70,000-80,000 d.w.t. on suitable draft, berthing daylight flood tide, departure on flood tide in daylight or darkness (subject good weather).
MAX. SIZE: The berth has 48 ft. alongside at low water.
RADIO:
VHF: See "Limerick".
HEALTH:
TUGS: Not required, however 2 tugs available (each 22 tons bollard pull).
MEDICAL: No facilities. Nearest doctor at Glin, Co. Limerick (6 miles), See "Limerick".
TANKERS: 2, Marine Arms – 10 in. PCD 14.15/16 in. Outer diam. 16 in., inner diam. 11 in. Holes, 12 of 0.75 in. diam.
DENSITY: 1025, except in very exceptional conditions.
FRESH WATER: Available.
FUEL: None available. Jetty head approached from shore by footway (4.5 ft. wide×650 ft. long), therefore no direct access to berth from shore for road transport.
WATCHMEN: Watchmen from crew.
CUSTOMS ALLOWANCES: See "Limerick".
REPAIRS: None locally. Nearest Limerick 40 miles distant or Foynes, 7 miles distant. Difficulty of access should be noted.
SURVEYORS: See "Limerick".
REPATRIATION: See "Limerick".
TIME: See "Limerick".
EMERGENCY CO-ORDINATION CENTRE: See "Limerick".
STORING: A narrow viaduct 900 ft. long makes storing impossible from trucks alongside. Small four wheeled hand trolleys are available.
SHORE LEAVE: No restrictions.
TELEPHONES: At jetty head.
AUTHORITY: Limerick Harbour Commissioners. (See "Limerick").

(d) MONEY POINT GENERATING STATION: (Coming on stream 1985).

LOCATION: On North shore, 3 miles East of Scattery Island. 52° 36′ N. 9° 25′ W.
Jetty Berth 17 m. draft, LWOST. Max. length 320 m.
DOCUMENTS: See "Limerick".
ANCHORAGE: Vessels normally anchor 2.5 miles – 3.0 miles West of Scattery.
RESTRICTIONS: Contact Port Control.
PILOTAGE: Compulsory from Scattery. Harbour Master advises vessels over 5,000 tons d.w.t. to take Pilot at or near Kilcredane.
MAX. SIZE: 180,000 d.w.t.

RADIO/VHF/HEALTH: See "Limerick".
TUGS: Available. Number as directed by Harbour Master.
CARGO GEAR: 2×40 tonne ship unloaders will give a coal discharge rate of 1,500 t.p.h. 1 H.F.O. Marine Arm.
DENSITY: 1025.
FRESH WATER: Available.
FUEL: Available from road tanker.
CUSTOMS ALLOWANCES: See "Limerick".
REPAIRS: Limited repair facilities.
REPATRIATION: See "Limerick".
TIME: See "Limerick".
SHORE LEAVE: No restriction.
TELEPHONE: At jetty.
EMERGENCY CO-ORDINATION: See "Limerick".
STORING: No restrictions provided adequate notice is given to E.S.B. Money Point.
SURVEYORS: See "Limerick".
BANKS: See "Limerick".
AUTHORITY: Limerick Harbour Commissioners (See "Limerick").

(e) **AUGHINISH ISLAND ALUMINA PLANT:**
LOCATION: On South side of estuary, 2 miles N.E. of Foynes Island. 52° 38′ N. 9° 03′ W.

"L" Shaped Jetty with outer and inner berths. Outer berth: 12 m. draft LWOST, length of jetty head 275 m., plus 68 m. to dolphin.

Inner berth: 11 m. draft LWOST. Berth 230 m. long. Inner berth worked only on flood tide.
DOCUMENTS: See "Limerick".
ANCHORAGE: Vessels normally anchor 2.5–3 miles West of Scattery.

Anchorage also at Cahircon opposite Foynes Island if awaiting tide.
PILOTAGE: Compulsory from Scattery. Harbour Master advises vessels over 5,000 d.w.t. to take Pilot at or near Kilcredane.
RESTRICTIONS: Contact Port Control.
MAX. SIZE: Outer berth 70,000 d.w.t. Inner berth 30,000 d.w.t.
RADIO/VHF/HEALTH: See "Limerick".
TUGS: Available. Number as directed by Harbour Master.
CARGO GEAR: 1 Bauxite Unloader (Krupp) 18,000 tons per 24 hr. day. 1 Alumina Loader (Claudius Peters) 24,000 tons per 24hr. day.
Inner Berth: 1 HFO Marine Arm 12 in. connection to 18 in. shore line and 1 Caustic Marine Arm 10 in. to 12 in. shore line.
DENSITY: Average 1013 – varies with tidal and seasonal conditions.
FRESH WATER: Available.
FUEL: Not available in bulk.
CUSTOMS ALLOWANCES: See "Limerick".
REPAIRS: Limited repair facilities.
REPATRIATION: See "Limerick".
TIME: See "Limerick".
SHORE LEAVE: No restriction other than company security controls.
TELEPHONE: At jetty.
EMERGENCY CO-ORDINATION CENTRE: See "Limerick".
STORING: No restrictions provided adequate notice is given by Chandler to Aughinish Alumina (Tel: 061-49488).
SURVEYORS: See "Limerick".
BANKS: See "Limerick".
AUTHORITY: Limerick Harbour Commissioners (See "Limerick").

SLIGO: 54.16 N. 08.28 W.

DOCUMENTS:
Crew List.
Aliens List for other than Irish and British Ships.
Customs Clearance from previous port.
Health Declaration.
Manifest.
Surveys 109 Deck Cargo and 107 for Grain.
PILOTAGE: Tel: 071-73157 for Outside Pilot, Sligo 071-77128 or 071-77111 for Inside Pilot who can be contacted on VHF Channels 12 and 16. Pilot boat has white square stern with small wheelhouse aft. Pilot boards off Raghley Head.
ANCHORAGE: East of Wheat Rock Buoy depth 40 ft.
RESTRICTIONS: Small vessels from half tide to 2 hours after high tide, large vessels near high tide and daylight.
MAX. SIZE: 320 ft. long, breadth not restricted, draft 16 ft. Spring tides, 13 ft. neap tides. Also see "Developments".
HEALTH: Home trade areas, verbal declaration, all others written declaration. Vessels from Great Britain automatic procedure. Suspected diseases inform Customs Officer or County Medical Officer of Health. Appropriate signals day and night.
RADIO: Malin Head, Wick or Port Patrick Radio.
TUGS: None.
BERTHING: 5 berths available. Length 30 m. – 75 m. Depth alongside 3.0 m. MHWN – 3.5 m. MHWS. 2×14 tonne mobile cranes.
STEVEDORES: 24 hours notice required. Average discharge rate: Coal and timber 150 t.p.h. Fertilisers in bags 2 gangs, 500 tons per 8 hour day.
MEDICAL: Large regional hospital.
DENSITY: 1004, high tide.
FRESH WATER: Available by hose, at 12.5p ton.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES:
Register.
Articles.
Light Dues Certificate.
Derat Certificate.
CUSTOMS ALLOWANCES: (May be changed to metric in near future). Members of crew who remain on a vessel during stay in port allowed to retain, under certain conditions, the following quantities of the undermentioned goods:

Tobacco in any form (to cover 8 days): Master 8 oz. 200; Officers 6 oz. 150; crew members 4 oz. 100.

Spirits in any form (to cover 4 days) 1 pint (1 bottle each). Wine of any strength, allowed in place of spirits at rate of one pint wine to 0.5 pt. spirits. In addition, an allowance of 1 quart of beer or 1 pint of wine per man per day.

Members of a crew of whatever rank finally leaving vessel allowed take ashore, free of duty, for own personal consumption, following quantities of undermentioned goods, when they form whole of their unconsumed stores:
(a) If from ports in Great Britain, Northern Ireland or the Isle of Man, or continental ports between the Elbe and Brest (except vessels crossing at regular and frequent intervals): Tobacco in any form 4 oz. Spirits (ordinary drinkable) 0.25 pint. Spirits (Cordials or perfumed) 0.25 pint.
(b) If from any other port, double the quantities specified at *(a)*.
(c) Irrespective of the port from which arriving.
IDENTIFICATION CARDS: Required.
CONSULS: Netherlands Vice-Consul, Sligo 2622.
REPAIRS: Welding and light repairs.
REPATRIATION: Facilities exist.
AIRPORT: Strandhill, Sligo.
TIME: GMT plus 1 hour. Reverting to GMT between October and March.
HOLIDAYS: St. Patrick's Day (17th March); Easter Monday; Whit Monday (1st Monday in August); Last Monday in October; 25th and 26th December. Not usual to work on any of these days.
POLICE/AMBULANCE/FIRE: Tel: 999.
TELEPHONES: None available for placing on board.
GENERAL: In N.W. gales, shelter available at Killybegs, Donegal Bay. In Southerly gales shelter in Killala Bay.
SHORE LEAVE: Allowed.
DEVELOPMENTS: Major dredging operations due to start in the very near future which when completed will give 21 ft. at Springs and 18 ft. at Neaps.
AUTHORITY: Sligo Harbour Commissioners, Harbour Office, Custom House Quay, Sligo, Co. Sligo. *Tel:* 071-61197. *Contact:* Captain S. V. Devaney, Harbour Master and Secretary.

WATERFORD: 52.15 N. 07.07 W. (See Plan Book)

DOCUMENTS:
3 Manifests.
1 set Bills of Lading.
1 Crew List (aliens).
1 Ship Stores List.
1 Passenger List.
PILOTAGE: Compulsory. Tel. Address "Waterford Pilots" 24 hours ETA if possible. Tel. Dunmore East 83119. VHF call sign "Waterford Pilots". Channel 16 calling up, Channel 14 working.

Pilot boat black hull with words "Pilots" in white on sides. Location off Dunmore East Pier.

In event bad weather a vessel is directed to Passage East by VHF where a Pilot will board in smooth water.
ANCHORAGE: Good anchorage on Eastern Shore at entrance to Harbour in Easterly winds. 30 ft. LWOST.
RESTRICTIONS: Draft restricted by 2 bars. At Duncannon, a sand bar with a low water depth of 14.5 ft. The other at Cheekpoint with low water depth 11.5 ft.

Vessels of deeper draft await tide at Dunmore East Anchorage.
MAX. SIZE: 450 ft. LOA normally; 475 ft. LOA by arrangement. Draft 22 ft. neap tides; 24 ft. spring tides. 5,000/7,000 d.w.t. or 10,000 d.w.t. partly laden.
HEALTH: Vessels fly "Q" flag, pratique given by Customs. Infectious diseases to be notified to Agent before arrival.
RADIO: Messages through Land's End or Valentia Radio Stations.
VHF: Harbour Commissioners have VHF station at Dunmore East, Channel 14 for calling, Channel 16 working. A 24 hour watch is maintained at the station, call sign "Waterford Pilots".
TUGS: No tugs available.
BRIDGES: Times of passing through Redmond and Suir Bridge for National Board and Paper Mills Berth and for vessels proceeding upriver to Fiddown, to be arranged by Ship's Agent.
STEVEDORES: Agent arranges discharge upon receipt of ETA.
Grain discharge: 2,400 tonnes per day (300 t.p.h.).
Coal discharge: 400 tons per gang per day.
Sugar discharge: 800 tons per gang per shift of 8 hours.
Fertiliser discharge: 400 tons per gang per day.
Timber discharge: 30 standards per gang per day.

BERTHING:

Jetties	*Length*		*Approx. Depth LWOST*		*Cargo Handling facilities*	*Remarks*
	(m.)	(ft.)	(m.)	(ft.)		
North Side						
National Board & Paper Mills	45.7	150	6.09	20	Bulk oil discharge	Private
Nos. 1, 2 and 3 Berths	300	984	6.91	22′ 8″	2 at 6-ton 4 at 3-ton elec. portal cranes	Public W.H.C.
No. 1	106.7	350				
No. 2	71.3	234				
No. 3	121.9	400				
Hall's	79.2	260	7.62	25	Grain elevators. Storage capacity of 25,000 tons	Private 200 t.p.h.
North Side (New Wharves):						
Frank Cassin Wharf (Container Wharf)	222.5	730	6.85	22′ 6″	2 at 35-ton gantry container cranes	W.H.C. Private backed by Container Compound
New Container Berth	100.5	330	7.82	25′ 8″	1 at 35-ton derrick crane	W.H.C. Public backed by Container Compound
No. 4 Berth	146.3	480	7.82	25′ 8″	*Proposed:* 2 at 7.5 ton grabbing cranes	W.H.C. General
South Side:						
Forde Wharf	91.4	300	6.91	22′ 8″	1 at 20-ton 1 at 6-ton elec. portal cranes	W.H.C. Public
Clyde	243.3	800	5.18	17	1 at 25-ton electric derrick	W.H.C. Public backed by Container Compound
Adelphi Quay	85.3	280	5.48	15	1 at 24-ton electric derrick	W.H.C. Public backed by Container Compound
Graves & Co.	82.3	270	5.48	18		Private timber wharf

Also various Pontoons, etc., for Livestock loading.

There are various other cranes – 10 ton mobiles, forklifts, travel-lifts up to 28 tons, etc., available.

MEDICAL: Hospital and ambulance available. Arrangements made by ship's Agent.

TANKERS: Great Island Jetty, used by Electricity Supply Board. Max. design size 20,000 d.w.t. However approach channel of river and Duncannon Bar not yet dredged for this size.

DENSITY: 1008 at LWOST.

FRESH WATER: Available by hose 15 t.p.h.

FUEL: Supplies available by road tanker.

GANGWAY/DECK WATCHMEN: Day watchmen not necessary. Night watchmen at Master's wish.

OPENING/CLOSING HATCHES: Done by crew.

CERTIFICATES:
Register.
Freeboard Certificate.
Tonnage Certificate.
Derat Certificate.
Radio Certificate.
Life-saving Appliance Certificate, etc.

CUSTOMS ALLOWANCES: Tobacco: Master 8 oz. Officers 6 oz. Crew 4 oz. Wine and/or Spirit: 1 pint spirits.

CARGO GEAR: Not beyond ordinary Factory Act requirements.

IDENTIFICATION CARDS: Not needed.

CONSULS: Belgium, France and Netherlands: Mr. D. Hannigan, Bell Lines Ltd., Tel. 051-77021.

Spanish – Mr. I. Farrell, c/o Nolan, Farrell & Goff, Newtown, Waterford, Tel. 72934.

REPAIRS: Minor repairs.

DRY DOCKS: No dry docks available.

REPATRIATION: Facilities exist.

AIRPORT: Dublin 100 miles, Cork 75 miles, Shannon 75 miles. Served by regular airlines.

TIME: GMT plus 1 hour. Reverting to GMT in Winter months.

HOLIDAYS: St. Patrick's Day; Easter Monday; August Bank Holiday; Christmas Day; Boxing Day.

POLICE/AMBULANCE/FIRE: Police 74888; Ambulance 73321; Brigade 75555.

TELEPHONES: None available for placing on board.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Consideration being given to deepening the approach channel. The extension of the deep-water berths will have 25 ft. 8 in. alongside at LWST.

A new container crane under construction for Bell Lines.

AUTHORITY: Waterford Harbour Commissioners, Harbour Office, George's Street, Waterford, Ireland. *Tel:* 051-74907/8. *Contact:* M. F. McQuillan, General Manager. Captain J. A. O'Connor, Harbour Master.

WICKLOW: 52.59 N. 06.02 W.

PORT LIMITS: The seaward limits of the harbour are defined by a line drawn across the harbour entrance.

DOCUMENTS: Usual documents for Irish ports.

PILOTAGE: Pilotage is not compulsory. Should a Pilot be required, arrangements can be made through the Agent or the Harbour Office.

ANCHORAGES: A safe anchorage can be found anywhere in Wicklow Bay, except in N.E. or Easterly gales. A good anchorage can be found about 1 mile off the harbour entrance.

RESTRICTIONS: Deep draft vessels must dock at HW (see "Berthing"). Deep draft vessels lie safely aground at LW, the bottom consisting of soft mud.

MAX. SIZE: Max. length 91 m., max. draft 5 m.

HEALTH: See "Dublin".

RADIO: Anglesey Radio.

VHF: Calling – Channel 16, Working – Channel 14. Channels 2, 6, 7, 8, 26, 27 and 28 are also available.

Reception of port VHF only extends to about 10 miles offshore in a Northerly and Easterly direction and to about 4 miles offshore in a Southerly direction due to the signals being blocked by Wicklow Head. It is hoped to overcome these restrictions in the near future by raising the height of the aerial.

RADAR: No Port Radar.

TUGS: None.

BERTHING:

East Pier: 91 m. long, depths HW 5.2 m., LW 3.1 m. Not often used as the pier is exposed to North-Easterly winds and is only 7.3 m. wide.

Packet Pier: 91 m. long, depths HW 5.2 m., LW 3.1 m. Most used berth. Timber, bulk cement and bulk cargoes generally worked here.

North Quay: 130.1 m. long, depths HW 4.7 m., LW 2.8 m. Paper is worked at Northern end and the Southern end is in general use.

South Quay: 126.22 m. long, depths HW 4.9 m., LW 3.0 m. This quay is used for the export of woodchips in bulk.

CRANES: Mobile cranes are hired from local firms by stevedores or Agents. Max. lifting capacity is about 8 to 10 tonnes. For heavier lifts Agents or stevedores should be consulted.

BULK CARGO: Usually worked at East Pier or Packet Pier.

SPECIALISED CARGO-HANDLING FACILITIES: For bulk cement only.

BRIDGES: None.

STEVEDORES: Working hours 0800 – 1700 hrs. Overtime worked when required.

TANKERS: There are no tanker berths.

DENSITY: Varies between 1012 at LW to 1025 at HW.

FRESH WATER: Available at all quays.

CONSULS: Nearest at Dublin.

REPAIRS: Only small repairs can be carried out.

DRYDOCKS: None.

HATCHES: Operated by vessel's crew.

CUSTOMS ALLOWANCES: As per European Economic Community (E.E.C.) Regulations.

CARGO GEAR: Shore cranes or vessel's gear may be used.

REPATRIATION: Arranged by Agents.

AIRPORT: Dublin, 40 miles away.

TIME: GMT, Summertime GMT plus 1 hour (March – October).

HOLIDAYS: See "Dublin".

POLICE/AMBULANCE/FIRE: Dial 999 or Police Tel: 2107/2287, Ambulance Tel: 2108, Fire Tel: 2371, Harbour Office Tel: 2455.

TELEPHONES: No facilities for placing telephones on board ship.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Seaman's book is sufficient.

DELAYS: Tide restrictions only.

SHIP SUPPLY SERVICE: Contact: R. F. Conway & Co. Ltd., North Quay, Wicklow: Tel: (0404) 2210/2019. Telex: 25719. Telegram: Conway, Wicklow.

DEVELOPMENTS: The Commissioners have a long term plan to extend the area of the port, which will include new breakwaters and berths.

AUTHORITY: Wicklow Harbour Commissioners, North Quay, Wicklow. *Tel:* 0404-2455. *Contact:* Captain R. F. Flood, Harbour Master and Secretary.

Israel

GENERAL:

All vessels bound for the ports of Haifa, Ashdod and Ashkelon have to send a position report when they arrive at a distance of 50 miles from the Israeli coast. Such position reports shall be sent to "SVC IMOT" and shall contain the following information: (a) Date and time; (b) Ship's name; (c) Position; (d) Course; (e) Speed; (f) Destination.

ASHDOD (Inc. Ashkelon): 31.49 N. 34.39 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists, and Crew Passports or Seamen's Books.
1 Provisions List.
1 List of Articles in possession each Crew member – cameras, binoculars, radios, cigarettes, tobacco, etc.
Master to declare firearms and rounds of ammunition.
4 Passenger Lists.
Stowage Plan and Manifest to be mailed in advance, preferable Master to cable 72 and 48 hours before arrival holds workable and gangs required also draft forward and aft on arrival.

PILOTAGE: ETA through Haifa Radio 4XO addressed to Agent at least 12 hours before arrival. Pilot station and boat equipped VHF Channel 14 and 16 contact station for instructions. Pilot boards about 0.5 miles off port entrance between W. to N.W. from breakwater head (green light).

In bad weather, when boarding impossible, vessel is guided into harbour by VHF or tugboat waiting at entrance, at Master's consent.

Pilot ladder as per Safety of Life at Sea. Vessel should head about 4 points into weather. Recommended 2 life-lines running along ladder, 1 each side, ropes 2.5 in. – 3 in. circumference.

ANCHORAGE: All area open sea, no recommended safe anchorage, but vessel should avoid anchorage near fairway and too close to oil installation buoys.

Masters are advised to keep the decks well lit in view of the strong lights ashore which may cause the anchor lights to be seen with difficulty by approaching vessels.

Vessels moored to the breakwaters shall have their anchor lights burning.

RESTRICTIONS: Pilotage available 24 hours. Enter according arrival time or berths available. Vessels at anchorage awaiting berth keep watch Channels 14 and 16.

MAX. SIZE: Draft limitations at Bulk Pier: Summer, 11 m. Winter, 10.5 m. Draft limitations at other piers: 9.8 m. No. limits length or breadth. Also see "Tankers".

HEALTH: Free pratique is requested via Haifa, address, "Quarantine Haifa".

RADIO: Haifa Radio 4XO, also see "Haifa".

TUGS: 1 of 1,500 h.p., 1 of 1,000 h.p. and 1 of 2,800 h.p. Each charge included in pilotage charge for normal berthing attendance. Tugs wait at port entrance and act on Pilot's instructions. Vessel's lines are requested.

BERTHING: Container terminal in operation.

TANKERS: Terminal situated at Ashkelon where tankers load crude oil by under-water pipe-lines. Size of vessel is unlimited due to the depth of water. The loading rate is about 30,000 tons in 12 hours. All services such as supply of bunkers, provisions, water, crew changes, must be carried out at Ashdod roadstead where health and immigration officials board. Vessels not requiring any services at Ashdod may call directly at Ashkelon, only paying light dues and anchorage dues.

FRESH WATER: Fresh water supplied by hydrants at 220 t.p.h.

FUEL: Supplied by trucks, or supplied by special barges. 24 hours advance notice required.

CONSULS: All Consulates in Tel-Aviv approx. 40 km. Available by telephone.

REPAIRS: No dock, but minor repairs effected.

GANGWAY/DECK WATCHMEN: Private companies supply gangway watchmen, obtainable through Agent.

OPENING/CLOSING HATCHES: Performed by stevedores. Mechanical hatch covers operated by crew.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 open bottle of spirits per person.

IDENTITY CARDS: Issued by port police on arrival.

TIME: Local standard time is 2 hours ahead of GMT.

AIRPORT: Lod Airport, served by regular airlines, distance 35 km.

HOLIDAYS: Port business is suspended on the following holidays: Saturdays; The 2 days of the Jewish New Year (Rosh Hashana); The Day of Atonement (Yom Kippur); The first and the last day of the Feast of Tabernacles (Sucot); The first and the last day of Passover (Pesah); Pentecost (Shvuot); Independence Day. The first of May is observed by the port workers as Labour Holiday and therefore no work is done in the port on that day.

POLICE/AMBULANCE/FIRE: Police, Ambulance, Fire Services, telephone 22222.

REGULATIONS:

Stand-by for Moving Vessels: The Master or person for the time being having charge of a vessel shall ensure that adequate officers and crew are available and that the main propelling machinery of the vessel is maintained for moving the vessel at 1 hour's notice.

No vessel may drop steam, dismantle engine or otherwise interfere with the propelling power of the vessel, nor may the vessel be left unattended by responsible officers and crew unless permission to do so is first obtained in writing from the Harbour Master.

Photographing: Photographing in the Port Area is strictly forbidden without a written permit issued by the Security Officer of the Port.

Swimming: Swimming in Ashdod Harbour is strictly forbidden and Masters should instruct their crews accordingly.

Use of Ship's Boats: The use of ship's boats is forbidden in Ashdod Port. Launch service is available for the convenience of ship's personnel.

Shore Leave: Shore leave passes are obtainable at the Frontier Control Section of the Port Police Station. Applications for the passes shall be filed with the Boarding Officer, Port Police.

All breakwaters are out of bounds to crews of merchant vessels.

SHIPMASTER'S REPORT: 1978.

Pilotage: Compulsory. Pilot boards off the breakwater. Pilot requires 1 hours notice of vessels arrival.

Anchorage: Outside breakwater.

Restrictions: Vessels able to berth and unberth at any stage of the tide day or night.

Health: Radio pratique possible. Quarantine officials require 12 hours and 24 hours notice of vessel's arrival.

Radio: Haifa Radio.

VHF: Channels 16, 12 and 14. Pilot and Port Authority both use Channel 14.

Tugs: Tugs available and are used depending on berth.

Berthing: Vessel berthed at berth No. 4/190. Exact location is No. 1 North pier. Conditions at the berth poor due to swell and undercurrent. Nature of the bottom sand/mud. Bulk handling facilities for handling phosphate available in the port. There are 30 quay cranes available. Ro/Ro facilities available. There is ample mechanical equipment for handling of palletised cargoes. There is also adequate storage space for breakbulk and palletised cargoes. There are 3 gantry cranes available for handling containers, also ample storage space for containers. Accommodation ladder required.

Density: 1025.

Identification Cards: Crew members to have passport photograph for landing pass (this is best carried out at previous port).

Services Available: Fresh water, fresh provisions, repair facilities, machine shop, Lloyd's Surveyor, Salvage Surveyor, laundry services, bunker fuel oil, diesel oil, lubricating oil, doctor and hospital, groceries and meats.

SHIPMASTER'S REPORT: 1979.

Documents:

1 Police Condition Slip
1 Customs Condition Slip
3 Crew Lists
1 List Ship's Stores and Bond

Pilotage: Compulsory. Pilot boards 0.5 miles from breakwater.

Restrictions: Vessels may berth and unberth at any stage of the tide day or night.

Health: 24 hours before arrival request radio pratique from "Quarantine Haifa".

Radio: Haifa 4X0.

VHF: Pilot and Port Authority on Channels 16 and 14.

Tugs: 3 tugs available 1×3,000 h.p., 1×1,500 h.p., 1×1,000 h.p. The use of tugs depends on which berth used and also which direction the vessel will be heading.

Berthing: North Quay: Berths 101, 102, 103: berths located just inside the breakwater, max. draft permitted 10 m., density alongside 1029. Accommodation ladder required.

Bulk Handling Facilities: Phosphate loading facilities available.

Cranes: 9×30 tons at 15 m. (15 tons at 25 m.).
9× 8 tons at 15 m. (4 tons at 25 m.).
Ample mobile cranes available.

Special Cargo Handling Facilities: Ro/Ro facilities available. 3 container gantries available. Ample storage space for breakbulk cargoes, palletised cargoes and containers.

Stevedores: Labour normally refuses to rig derricks or handle hatches.

Working Hours: Sunday to Thursday (inclusive):
First Shift 0630 and 1400 hrs.
Second Shift 1500 and 2145 hrs.
Friday: First Shift 0630 to 1300 hrs.
Second Shift 1300 to 1530 hrs.
Saturday — No work.

Services Available: Fresh water, fresh provisions, repair facilities, machine shop, Lloyd's Surveyor (from Haifa), Salvage Surveyor (from Haifa), laundry services, bunker fuel oil, diesel oil, lubricating oil, doctor and hospital, groceries and meats. Nearest airport is at Tel-Aviv.

AUTHORITY: Israel Ports Authority, Port of Ashdod, P.O.Box 9001, Ashdod, 77191 Israel. *Tel:* 55 – 28280, 55 – 21106. *Telex:* 31818. *Cables:* Ashnam – Ashdod. *Contact:* Harbour Master.

EILAT (Elath): 29.32 N. 34.57 E. (See Plan Book)

DOCUMENTS:

For Customs:

Customs Questionnaire, Crew Customs Declaration, Stores List, Crew List, Passengers List, Foreign Currency List, Narcotics List, Arms List, Import Cargo Manifest, Transit Cargo Manifest.

For Quarantine:

International Quarantine message may be sent, addressed "Quarantine Eilat" via Haifa Radio (4XO), to obtain free pratique.

Maritime Declaration of Health, Valid Vaccination Certificate for smallpox all crew and passengers, Derat Exemption Certificate.

For Border Control (Immigration):

1 Police Questionnaire, 2 Crew Lists, 2 Passenger Lists, Seamen's Books and travelling documents of passengers.

BERTHING:

Jetties	*Length* (m.)	(ft.)	*Approx. Depth LWOST* (m.)	(ft.)	*Cargo Handling facilities*	*Remarks*
North Side						
National Board & Paper Mills	45.7	150	6.09	20	Bulk oil discharge	Private
Nos. 1, 2 and 3 Berths	300	984	6.91	22′ 8″	2 at 6-ton 4 at 3-ton elec. portal cranes	Public W.H.C.
No. 1	106.7	350				
No. 2	71.3	234				
No. 3	121.9	400				
Hall's	79.2	260	7.62	25	Grain elevators. Storage capacity of 25,000 tons	Private 200 t.p.h.
North Side (New Wharves):						
Frank Cassin Wharf (Container Wharf)	222.5	730	6.85	22′ 6″	2 at 35-ton gantry container cranes	W.H.C. Private backed by Container Compound
New Container Berth	100.5	330	7.82	25′ 8″	1 at 35-ton derrick crane	W.H.C. Public backed by Container Compound
No. 4 Berth	146.3	480	7.82	25′ 8″	*Proposed:* 2 at 7.5 ton grabbing cranes	W.H.C. General
South Side:						
Forde Wharf	91.4	300	6.91	22′ 8″	1 at 20-ton 1 at 6-ton elec. portal cranes	W.H.C. Public
Clyde	243.3	800	5.18	17	1 at 25-ton electric derrick	W.H.C. Public backed by Container Compound
Adelphi Quay	85.3	280	5.48	15	1 at 24-ton electric derrick	W.H.C. Public backed by Container Compound
Graves & Co.	82.3	270	5.48	18		Private timber wharf

Also various Pontoons, etc., for Livestock loading.

There are various other cranes – 10 ton mobiles, forklifts, travel-lifts up to 28 tons, etc., available.

MEDICAL: Hospital and ambulance available. Arrangements made by ship's Agent.

TANKERS: Great Island Jetty, used by Electricity Supply Board. Max. design size 20,000 d.w.t. However approach channel of river and Duncannon Bar not yet dredged for this size.

DENSITY: 1008 at LWOST.

FRESH WATER: Available by hose 15 t.p.h.

FUEL: Supplies available by road tanker.

GANGWAY/DECK WATCHMEN: Day watchmen not necessary. Night watchmen at Master's wish.

OPENING/CLOSING HATCHES: Done by crew.

CERTIFICATES:

Register.
Freeboard Certificate.
Tonnage Certificate.
Derat Certificate.
Radio Certificate.
Life-saving Appliance Certificate, etc.

CUSTOMS ALLOWANCES: Tobacco: Master 8 oz. Officers 6 oz. Crew 4 oz. Wine and/or Spirit: 1 pint spirits.

CARGO GEAR: Not beyond ordinary Factory Act requirements.

IDENTIFICATION CARDS: Not needed.

CONSULS: Belgium, France and Netherlands: Mr. D. Hannigan, Bell Lines Ltd., Tel. 051-77021.

Spanish – Mr. I. Farrell, c/o Nolan, Farrell & Goff, Newtown, Waterford, Tel. 72934.

REPAIRS: Minor repairs.

DRY DOCKS: No dry docks available.

REPATRIATION: Facilities exist.

AIRPORT: Dublin 100 miles, Cork 75 miles, Shannon 75 miles. Served by regular airlines.

TIME: GMT plus 1 hour. Reverting to GMT in Winter months.

HOLIDAYS: St. Patrick's Day; Easter Monday; August Bank Holiday; Christmas Day; Boxing Day.

POLICE/AMBULANCE/FIRE: Police 74888; Ambulance 73321; Brigade 75555.

TELEPHONES: None available for placing on board.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Consideration being given to deepening the approach channel. The extension of the deep-water berths will have 25 ft. 8 in. alongside at LWST.

A new container crane under construction for Bell Lines.

AUTHORITY: Waterford Harbour Commissioners, Harbour Office, George's Street, Waterford, Ireland. *Tel:* 051-74907/8. *Contact:* M. F. McQuillan, General Manager. Captain J. A. O'Connor, Harbour Master.

WICKLOW: 52.59 N. 06.02 W.

PORT LIMITS: The seaward limits of the harbour are defined by a line drawn across the harbour entrance.

DOCUMENTS: Usual documents for Irish ports.

PILOTAGE: Pilotage is not compulsory. Should a Pilot be required, arrangements can be made through the Agent or the Harbour Office.

ANCHORAGES: A safe anchorage can be found anywhere in Wicklow Bay, except in N.E. or Easterly gales. A good anchorage can be found about 1 mile off the harbour entrance.

RESTRICTIONS: Deep draft vessels must dock at HW (see "Berthing"). Deep draft vessels lie safely aground at LW, the bottom consisting of soft mud.

MAX. SIZE: Max. length 91 m., max. draft 5 m.

HEALTH: See "Dublin".

RADIO: Anglesey Radio.

VHF: Calling – Channel 16, Working – Channel 14. Channels 2, 6, 7, 8, 26, 27 and 28 are also available.

Reception of port VHF only extends to about 10 miles offshore in a Northerly and Easterly direction and to about 4 miles offshore in a Southerly direction due to the signals being blocked by Wicklow Head. It is hoped to overcome these restrictions in the near future by raising the height of the aerial.

RADAR: No Port Radar.

TUGS: None.

BERTHING:

East Pier: 91 m. long, depths HW 5.2 m., LW 3.1 m. Not often used as the pier is exposed to North-Easterly winds and is only 7.3 m. wide.

Packet Pier: 91 m. long, depths HW 5.2 m., LW 3.1 m. Most used berth. Timber, bulk cement and bulk cargoes generally worked here.

North Quay: 130.1 m. long, depths HW 4.7 m., LW 2.8 m. Paper is worked at Northern end and the Southern end is in general use.

South Quay: 126.22 m. long, depths HW 4.9 m., LW 3.0 m. This quay is used for the export of woodchips in bulk.

CRANES: Mobile cranes are hired from local firms by stevedores or Agents. Max. lifting capacity is about 8 to 10 tonnes. For heavier lifts Agents or stevedores should be consulted.

BULK CARGO: Usually worked at East Pier or Packet Pier.

SPECIALISED CARGO-HANDLING FACILITIES: For bulk cement only.

BRIDGES: None.

STEVEDORES: Working hours 0800 – 1700 hrs. Overtime worked when required.

TANKERS: There are no tanker berths.

DENSITY: Varies between 1012 at LW to 1025 at HW.

FRESH WATER: Available at all quays.

CONSULS: Nearest at Dublin.

REPAIRS: Only small repairs can be carried out.

DRYDOCKS: None.

HATCHES: Operated by vessel's crew.

CUSTOMS ALLOWANCES: As per European Economic Community (E.E.C.) Regulations.

CARGO GEAR: Shore cranes or vessel's gear may be used.

REPATRIATION: Arranged by Agents.

AIRPORT: Dublin, 40 miles away.

TIME: GMT, Summertime GMT plus 1 hour (March – October).

HOLIDAYS: See "Dublin".

POLICE/AMBULANCE/FIRE: Dial 999 or Police Tel: 2107/2287, Ambulance Tel: 2108, Fire Tel: 2371, Harbour Office Tel: 2455.

TELEPHONES: No facilities for placing telephones on board ship.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Seaman's book is sufficient.

DELAYS: Tide restrictions only.

SHIP SUPPLY SERVICE: Contact: R. F. Conway & Co. Ltd., North Quay, Wicklow: Tel: (0404) 2210/2019. Telex: 25719. Telegram: Conway, Wicklow.

DEVELOPMENTS: The Commissioners have a long term plan to extend the area of the port, which will include new breakwaters and berths.

AUTHORITY: Wicklow Harbour Commissioners, North Quay, Wicklow. *Tel:* 0404-2455. *Contact:* Captain R. F. Flood, Harbour Master and Secretary.

Israel

GENERAL:

All vessels bound for the ports of Haifa, Ashdod and Ashkelon have to send a position report when they arrive at a distance of 50 miles from the Israeli coast. Such position reports shall be sent to "SVC IMOT" and shall contain the following information: (a) Date and time; (b) Ship's name; (c) Position; (d) Course; (e) Speed; (f) Destination.

ASHDOD (Inc. Ashkelon): 31.49 N. 34.39 E.

(See Plan Book)

DOCUMENTS:

3 Crew Lists, and Crew Passports or Seamen's Books.
1 Provisions List.
1 List of Articles in possession each Crew member – cameras, binoculars, radios, cigarettes, tobacco, etc.
Master to declare firearms and rounds of ammunition.
4 Passenger Lists.
Stowage Plan and Manifest to be mailed in advance, preferable Master to cable 72 and 48 hours before arrival holds workable and gangs required also draft forward and aft on arrival.

PILOTAGE: ETA through Haifa Radio 4XO addressed to Agent at least 12 hours before arrival. Pilot station and boat equipped VHF Channel 14 and 16 contact station for instructions. Pilot boards about 0.5 miles off port entrance between W. to N.W. from breakwater head (green light).

In bad weather, when boarding impossible, vessel is guided into harbour by VHF or tugboat waiting at entrance, at Master's consent.

Pilot ladder as per Safety of Life at Sea. Vessel should head about 4 points into weather. Recommended 2 life-lines running along ladder, 1 each side, ropes 2.5 in. – 3 in. circumference.

ANCHORAGE: All area open sea, no recommended safe anchorage, but vessel should avoid anchorage near fairway and too close to oil installation buoys.

Masters are advised to keep the decks well lit in view of the strong lights ashore which may cause the anchor lights to be seen with difficulty by approaching vessels.

Vessels moored to the breakwaters shall have their anchor lights burning.

RESTRICTIONS: Pilotage available 24 hours. Enter according arrival time or berths available. Vessels at anchorage awaiting berth keep watch Channels 14 and 16.

MAX. SIZE: Draft limitations at Bulk Pier: Summer, 11 m. Winter, 10.5 m. Draft limitations at other piers: 9.8 m. No. limits length or breadth. Also see "Tankers".

HEALTH: Free pratique is requested via Haifa, address, "Quarantine Haifa".

RADIO: Haifa Radio 4XO, also see "Haifa".

TUGS: 1 of 1,500 h.p., 1 of 1,000 h.p. and 1 of 2,800 h.p. Each charge included in pilotage charge for normal berthing attendance. Tugs wait at port entrance and act on Pilot's instructions. Vessel's lines are requested.

BERTHING: Container terminal in operation.

TANKERS: Terminal situated at Ashkelon where tankers load crude oil by under-water pipe-lines. Size of vessel is unlimited due to the depth of water. The loading rate is about 30,000 tons in 12 hours. All services such as supply of bunkers, provisions, water, crew changes, must be carried out at Ashdod roadstead where health and immigration officials board. Vessels not requiring any services at Ashdod may call directly at Ashkelon, only paying light dues and anchorage dues.

FRESH WATER: Fresh water supplied by hydrants at 220 t.p.h.

FUEL: Supplied by trucks, or supplied by special barges. 24 hours advance notice required.

CONSULS: All Consulates in Tel-Aviv approx. 40 km. Available by telephone.

REPAIRS: No dock, but minor repairs effected.

GANGWAY/DECK WATCHMEN: Private companies supply gangway watchmen, obtainable through Agent.

OPENING/CLOSING HATCHES: Performed by stevedores. Mechanical hatch covers operated by crew.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 open bottle of spirits per person.

IDENTITY CARDS: Issued by port police on arrival.

TIME: Local standard time is 2 hours ahead of GMT.

AIRPORT: Lod Airport, served by regular airlines, distance 35 km.

HOLIDAYS: Port business is suspended on the following holidays: Saturdays; The 2 days of the Jewish New Year (Rosh Hashana); The Day of Atonement (Yom Kippur); The first and the last day of the Feast of Tabernacles (Sucot); The first and the last day of Passover (Pesah); Pentecost (Shvuot); Independence Day. The first of May is observed by the port workers as Labour Holiday and therefore no work is done in the port on that day.

POLICE/AMBULANCE/FIRE: Police, Ambulance, Fire Services, telephone 22222.

REGULATIONS:

Stand-by for Moving Vessels: The Master or person for the time being having charge of a vessel shall ensure that adequate officers and crew are available and that the main propelling machinery of the vessel is maintained for moving the vessel at 1 hour's notice.

No vessel may drop steam, dismantle engine or otherwise interfere with the propelling power of the vessel, nor may the vessel be left unattended by responsible officers and crew unless permission to do so is first obtained in writing from the Harbour Master.

Photographing: Photographing in the Port Area is strictly forbidden without a written permit issued by the Security Officer of the Port.

Swimming: Swimming in Ashdod Harbour is strictly forbidden and Masters should instruct their crews accordingly.

Use of Ship's Boats: The use of ship's boats is forbidden in Ashdod Port. Launch service is available for the convenience of ship's personnel.

Shore Leave: Shore leave passes are obtainable at the Frontier Control Section of the Port Police Station. Applications for the passes shall be filed with the Boarding Officer, Port Police.

All breakwaters are out of bounds to crews of merchant vessels.

SHIPMASTER'S REPORT: 1978.

Pilotage: Compulsory. Pilot boards off the breakwater. Pilot requires 1 hours notice of vessels arrival.

Anchorage: Outside breakwater.

Restrictions: Vessels able to berth and unberth at any stage of the tide day or night.

Health: Radio pratique possible. Quarantine officials require 12 hours and 24 hours notice of vessel's arrival.

Radio: Haifa Radio.

VHF: Channels 16, 12 and 14. Pilot and Port Authority both use Channel 14.

Tugs: Tugs available and are used depending on berth.

Berthing: Vessel berthed at berth No. 4/190. Exact location is No. 1 North pier. Conditions at the berth poor due to swell and undercurrent. Nature of the bottom sand/mud. Bulk handling facilities for handling phosphate available in the port. There are 30 quay cranes available. Ro/Ro facilities available. There is ample mechanical equipment for handling of palletised cargoes. There is also adequate storage space for breakbulk and palletised cargoes. There are 3 gantry cranes available for handling containers, also ample storage space for containers. Accommodation ladder required.

Density: 1025.

Identification Cards: Crew members to have passport photograph for landing pass (this is best carried out at previous port).

Services Available: Fresh water, fresh provisions, repair facilities, machine shop, Lloyd's Surveyor, Salvage Surveyor, laundry services, bunker fuel oil, diesel oil, lubricating oil, doctor and hospital, groceries and meats.

SHIPMASTER'S REPORT: 1979.

Documents:

1 Police Condition Slip
1 Customs Condition Slip
3 Crew Lists
1 List Ship's Stores and Bond

Pilotage: Compulsory. Pilot boards 0.5 miles from breakwater.

Restrictions: Vessels may berth and unberth at any stage of the tide day or night.

Health: 24 hours before arrival request radio pratique from "Quarantine Haifa".

Radio: Haifa 4X0.

VHF: Pilot and Port Authority on Channels 16 and 14.

Tugs: 3 tugs available 1×3,000 h.p., 1×1,500 h.p., 1×1,000 h.p. The use of tugs depends on which berth used and also which direction the vessel will be heading.

Berthing: North Quay: Berths 101, 102, 103: berths located just inside the breakwater, max. draft permitted 10 m., density alongside 1029. Accommodation ladder required.

Bulk Handling Facilities: Phosphate loading facilities available.

Cranes: 9×30 tons at 15 m. (15 tons at 25 m.).
9× 8 tons at 15 m. (4 tons at 25 m.).
Ample mobile cranes available.

Special Cargo Handling Facilities: Ro/Ro facilities available. 3 container gantries available. Ample storage space for breakbulk cargoes, palletised cargoes and containers.

Stevedores: Labour normally refuses to rig derricks or handle hatches.

Working Hours: Sunday to Thursday (inclusive):
First Shift 0630 and 1400 hrs.
Second Shift 1500 and 2145 hrs.
Friday: First Shift 0630 to 1300 hrs.
Second Shift 1300 to 1530 hrs.
Saturday — No work.

Services Available: Fresh water, fresh provisions, repair facilities, machine shop, Lloyd's Surveyor (from Haifa), Salvage Surveyor (from Haifa), laundry services, bunker fuel oil, diesel oil, lubricating oil, doctor and hospital, groceries and meats. Nearest airport is at Tel-Aviv.

AUTHORITY: Israel Ports Authority, Port of Ashdod, P.O.Box 9001, Ashdod, 77191 Israel. *Tel:* 55 – 28280, 55 – 21106. *Telex:* 31818. *Cables:* Ashnam – Ashdod. *Contact:* Harbour Master.

EILAT (Elath): 29.32 N. 34.57 E.

(See Plan Book)

DOCUMENTS:

For Customs:

Customs Questionnaire, Crew Customs Declaration, Stores List, Crew List, Passengers List, Foreign Currency List, Narcotics List, Arms List, Import Cargo Manifest, Transit Cargo Manifest.

For Quarantine:

International Quarantine message may be sent, addressed "Quarantine Eilat" via Haifa Radio (4XO), to obtain free pratique. Maritime Declaration of Health, Valid Vaccination Certificate for smallpox all crew and passengers, Derat Exemption Certificate.

For Border Control (Immigration):

1 Police Questionnaire, 2 Crew Lists, 2 Passenger Lists, Seamen's Books and travelling documents of passengers.

BERTHING:

Jetties	*Length*		*Approx. Depth LWOST*		*Cargo Handling facilities*	*Remarks*
	(m.)	(ft.)	(m.)	(ft.)		
North Side						
National Board & Paper Mills	45.7	150	6.09	20	Bulk oil discharge	Private
Nos. 1, 2 and 3 Berths	300	984	6.91	22′ 8″	2 at 6-ton 4 at 3-ton elec. portal cranes	Public W.H.C.
No. 1	106.7	350				
No. 2	71.3	234				
No. 3	121.9	400				
Hall's	79.2	260	7.62	25	Grain elevators. Storage capacity of 25,000 tons	Private 200 t.p.h.
North Side (New Wharves):						
Frank Cassin Wharf (Container Wharf)	222.5	730	6.85	22′ 6″	2 at 35-ton gantry container cranes	W.H.C. Private backed by Container Compound
New Container Berth	100.5	330	7.82	25′ 8″	1 at 35-ton derrick crane	W.H.C. Public backed by Container Compound
No. 4 Berth	146.3	480	7.82	25′ 8″	*Proposed:* 2 at 7.5 ton grabbing cranes	W.H.C. General
South Side:						
Forde Wharf	91.4	300	6.91	22′ 8″	1 at 20-ton 1 at 6-ton elec. portal cranes	W.H.C. Public
Clyde	243.3	800	5.18	17	1 at 25-ton electric derrick	W.H.C. Public backed by Container Compound
Adelphi Quay	85.3	280	5.48	15	1 at 24-ton electric derrick	W.H.C. Public backed by Container Compound
Graves & Co.	82.3	270	5.48	18		Private timber wharf

Also various Pontoons, etc., for Livestock loading.

There are various other cranes – 10 ton mobiles, forklifts, travel-lifts up to 28 tons, etc., available.

MEDICAL: Hospital and ambulance available. Arrangements made by ship's Agent.

TANKERS: Great Island Jetty, used by Electricity Supply Board. Max. design size 20,000 d.w.t. However approach channel of river and Duncannon Bar not yet dredged for this size.

DENSITY: 1008 at LWOST.

FRESH WATER: Available by hose 15 t.p.h.

FUEL: Supplies available by road tanker.

GANGWAY/DECK WATCHMEN: Day watchmen not necessary. Night watchmen at Master's wish.

OPENING/CLOSING HATCHES: Done by crew.

CERTIFICATES:

Register.
Freeboard Certificate.
Tonnage Certificate.
Derat Certificate.
Radio Certificate.
Life-saving Appliance Certificate, etc.

CUSTOMS ALLOWANCES: Tobacco: Master 8 oz. Officers 6 oz. Crew 4 oz. Wine and/or Spirit: 1 pint spirits.

CARGO GEAR: Not beyond ordinary Factory Act requirements.

IDENTIFICATION CARDS: Not needed.

CONSULS: Belgium, France and Netherlands: Mr. D. Hannigan, Bell Lines Ltd., Tel. 051-77021.

Spanish – Mr. I. Farrell, c/o Nolan, Farrell & Goff, Newtown, Waterford, Tel. 72934.

REPAIRS: Minor repairs.

DRY DOCKS: No dry docks available.

REPATRIATION: Facilities exist.

AIRPORT: Dublin 100 miles, Cork 75 miles, Shannon 75 miles. Served by regular airlines.

TIME: GMT plus 1 hour. Reverting to GMT in Winter months.

HOLIDAYS: St. Patrick's Day; Easter Monday; August Bank Holiday; Christmas Day; Boxing Day.

POLICE/AMBULANCE/FIRE: Police 74888; Ambulance 73321; Brigade 75555.

TELEPHONES: None available for placing on board.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Consideration being given to deepening the approach channel. The extension of the deep-water berths will have 25 ft. 8 in. alongside at LWST.

A new container crane under construction for Bell Lines.

AUTHORITY: Waterford Harbour Commissioners, Harbour Office, George's Street, Waterford, Ireland. *Tel:* 051-74907/8. *Contact:* M. F. McQuillan, General Manager. Captain J. A. O'Connor, Harbour Master.

WICKLOW: 52.59 N. 06.02 W.

PORT LIMITS: The seaward limits of the harbour are defined by a line drawn across the harbour entrance.

DOCUMENTS: Usual documents for Irish ports.

PILOTAGE: Pilotage is not compulsory. Should a Pilot be required, arrangements can be made through the Agent or the Harbour Office.

ANCHORAGES: A safe anchorage can be found anywhere in Wicklow Bay, except in N.E. or Easterly gales. A good anchorage can be found about 1 mile off the harbour entrance.

RESTRICTIONS: Deep draft vessels must dock at HW (see "Berthing"). Deep draft vessels lie safely aground at LW, the bottom consisting of soft mud.

MAX. SIZE: Max. length 91 m., max. draft 5 m.

HEALTH: See "Dublin".

RADIO: Anglesey Radio.

VHF: Calling – Channel 16, Working – Channel 14. Channels 2, 6, 7, 8, 26, 27 and 28 are also available.

Reception of port VHF only extends to about 10 miles offshore in a Northerly and Easterly direction and to about 4 miles offshore in a Southerly direction due to the signals being blocked by Wicklow Head. It is hoped to overcome these restrictions in the near future by raising the height of the aerial.

RADAR: No Port Radar.

TUGS: None.

BERTHING:

East Pier: 91 m. long, depths HW 5.2 m., LW 3.1 m. Not often used as the pier is exposed to North-Easterly winds and is only 7.3 m. wide.

Packet Pier: 91 m. long, depths HW 5.2 m., LW 3.1 m. Most used berth. Timber, bulk cement and bulk cargoes generally worked here.

North Quay: 130.1 m. long, depths HW 4.7 m., LW 2.8 m. Paper is worked at Northern end and the Southern end is in general use.

South Quay: 126.22 m. long, depths HW 4.9 m., LW 3.0 m. This quay is used for the export of woodchips in bulk.

CRANES: Mobile cranes are hired from local firms by stevedores or Agents. Max. lifting capacity is about 8 to 10 tonnes. For heavier lifts Agents or stevedores should be consulted.

BULK CARGO: Usually worked at East Pier or Packet Pier.

SPECIALISED CARGO-HANDLING FACILITIES: For bulk cement only.

BRIDGES: None.

STEVEDORES: Working hours 0800 – 1700 hrs. Overtime worked when required.

TANKERS: There are no tanker berths.

DENSITY: Varies between 1012 at LW to 1025 at HW.

FRESH WATER: Available at all quays.

CONSULS: Nearest at Dublin.

REPAIRS: Only small repairs can be carried out.

DRYDOCKS: None.

HATCHES: Operated by vessel's crew.

CUSTOMS ALLOWANCES: As per European Economic Community (E.E.C.) Regulations.

CARGO GEAR: Shore cranes or vessel's gear may be used.

REPATRIATION: Arranged by Agents.

AIRPORT: Dublin, 40 miles away.

TIME: GMT, Summertime GMT plus 1 hour (March – October).

HOLIDAYS: See "Dublin".

POLICE/AMBULANCE/FIRE: Dial 999 or Police Tel: 2107/2287, Ambulance Tel: 2108, Fire Tel: 2371, Harbour Office Tel: 2455.

TELEPHONES: No facilities for placing telephones on board ship.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Seaman's book is sufficient.

DELAYS: Tide restrictions only.

SHIP SUPPLY SERVICE: Contact: R. F. Conway & Co. Ltd., North Quay, Wicklow: Tel: (0404) 2210/2019. Telex: 25719. Telegram: Conway, Wicklow.

DEVELOPMENTS: The Commissioners have a long term plan to extend the area of the port, which will include new breakwaters and berths.

AUTHORITY: Wicklow Harbour Commissioners, North Quay, Wicklow. *Tel:* 0404-2455. *Contact:* Captain R. F. Flood, Harbour Master and Secretary.

Israel

GENERAL:

All vessels bound for the ports of Haifa, Ashdod and Ashkelon have to send a position report when they arrive at a distance of 50 miles from the Israeli coast. Such position reports shall be sent to "SVC IMOT" and shall contain the following information: (a) Date and time; (b) Ship's name; (c) Position; (d) Course; (e) Speed; (f) Destination.

ASHDOD (Inc. Ashkelon): 31.49 N. 34.39 E.
(See Plan Book)

DOCUMENTS:

3 Crew Lists, and Crew Passports or Seamen's Books.
1 Provisions List.
1 List of Articles in possession each Crew member – cameras, binoculars, radios, cigarettes, tobacco, etc.
Master to declare firearms and rounds of ammunition.
4 Passenger Lists.
Stowage Plan and Manifest to be mailed in advance, preferable Master to cable 72 and 48 hours before arrival holds workable and gangs required also draft forward and aft on arrival.

PILOTAGE: ETA through Haifa Radio 4XO addressed to Agent at least 12 hours before arrival. Pilot station and boat equipped VHF Channel 14 and 16 contact station for instructions. Pilot boards about 0.5 miles off port entrance between W. to N.W. from breakwater head (green light).

In bad weather, when boarding impossible, vessel is guided into harbour by VHF or tugboat waiting at entrance, at Master's consent.

Pilot ladder as per Safety of Life at Sea. Vessel should head about 4 points into weather. Recommended 2 life-lines running along ladder, 1 each side, ropes 2.5 in. – 3 in. circumference.

ANCHORAGE: All area open sea, no recommended safe anchorage, but vessel should avoid anchorage near fairway and too close to oil installation buoys.

Masters are advised to keep the decks well lit in view of the strong lights ashore which may cause the anchor lights to be seen with difficulty by approaching vessels.

Vessels moored to the breakwaters shall have their anchor lights burning.

RESTRICTIONS: Pilotage available 24 hours. Enter according arrival time or berths available. Vessels at anchorage awaiting berth keep watch Channels 14 and 16.

MAX. SIZE: Draft limitations at Bulk Pier: Summer, 11 m. Winter, 10.5 m. Draft limitations at other piers: 9.8 m. No. limits length or breadth. Also see "Tankers".

HEALTH: Free pratique is requested via Haifa, address, "Quarantine Haifa".

RADIO: Haifa Radio 4XO, also see "Haifa".

TUGS: 1 of 1,500 h.p., 1 of 1,000 h.p. and 1 of 2,800 h.p. Each charge included in pilotage charge for normal berthing attendance. Tugs wait at port entrance and act on Pilot's instructions. Vessel's lines are requested.

BERTHING: Container terminal in operation.

TANKERS: Terminal situated at Ashkelon where tankers load crude oil by under-water pipe-lines. Size of vessel is unlimited due to the depth of water. The loading rate is about 30,000 tons in 12 hours. All services such as supply of bunkers, provisions, water, crew changes, must be carried out at Ashdod roadstead where health and immigration officials board. Vessels not requiring any services at Ashdod may call directly at Ashkelon, only paying light dues and anchorage dues.

FRESH WATER: Fresh water supplied by hydrants at 220 t.p.h.

FUEL: Supplied by trucks, or supplied by special barges. 24 hours advance notice required.

CONSULS: All Consulates in Tel-Aviv approx. 40 km. Available by telephone.

REPAIRS: No dock, but minor repairs effected.

GANGWAY/DECK WATCHMEN: Private companies supply gangway watchmen, obtainable through Agent.

OPENING/CLOSING HATCHES: Performed by stevedores. Mechanical hatch covers operated by crew.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 open bottle of spirits per person.

IDENTITY CARDS: Issued by port police on arrival.

TIME: Local standard time is 2 hours ahead of GMT.

AIRPORT: Lod Airport, served by regular airlines, distance 35 km.

HOLIDAYS: Port business is suspended on the following holidays: Saturdays; The 2 days of the Jewish New Year (Rosh Hashana); The Day of Atonement (Yom Kippur); The first and the last day of the Feast of Tabernacles (Sucot); The first and the last day of Passover (Pesah); Pentecost (Shvuot); Independence Day. The first of May is observed by the port workers as Labour Holiday and therefore no work is done in the port on that day.

POLICE/AMBULANCE/FIRE: Police, Ambulance, Fire Services, telephone 22222.

REGULATIONS:

Stand-by for Moving Vessels: The Master or person for the time being having charge of a vessel shall ensure that adequate officers and crew are available and that the main propelling machinery of the vessel is maintained for moving the vessel at 1 hour's notice.

No vessel may drop steam, dismantle engine or otherwise interfere with the propelling power of the vessel, nor may the vessel be left unattended by responsible officers and crew unless permission to do so is first obtained in writing from the Harbour Master.

Photographing: Photographing in the Port Area is strictly forbidden without a written permit issued by the Security Officer of the Port.

Swimming: Swimming in Ashdod Harbour is strictly forbidden and Masters should instruct their crews accordingly.

Use of Ship's Boats: The use of ship's boats is forbidden in Ashdod Port. Launch service is available for the convenience of ship's personnel.

Shore Leave: Shore leave passes are obtainable at the Frontier Control Section of the Port Police Station. Applications for the passes shall be filed with the Boarding Officer, Port Police.

All breakwaters are out of bounds to crews of merchant vessels.

SHIPMASTER'S REPORT: 1978.

Pilotage: Compulsory. Pilot boards off the breakwater. Pilot requires 1 hours notice of vessels arrival.

Anchorage: Outside breakwater.

Restrictions: Vessels able to berth and unberth at any stage of the tide day or night.

Health: Radio pratique possible. Quarantine officials require 12 hours and 24 hours notice of vessel's arrival.

Radio: Haifa Radio.

VHF: Channels 16, 12 and 14. Pilot and Port Authority both use Channel 14.

Tugs: Tugs available and are used depending on berth.

Berthing: Vessel berthed at berth No. 4/190. Exact location is No. 1 North pier. Conditions at the berth poor due to swell and undercurrent. Nature of the bottom sand/mud. Bulk handling facilities for handling phosphate available in the port. There are 30 quay cranes available. Ro/Ro facilities available. There is ample mechanical equipment for handling of palletised cargoes. There is also adequate storage space for breakbulk and palletised cargoes. There are 3 gantry cranes available for handling containers, also ample storage space for containers. Accommodation ladder required.

Density: 1025.

Identification Cards: Crew members to have passport photograph for landing pass (this is best carried out at previous port).

Services Available: Fresh water, fresh provisions, repair facilities, machine shop, Lloyd's Surveyor, Salvage Surveyor, laundry services, bunker fuel oil, diesel oil, lubricating oil, doctor and hospital, groceries and meats.

SHIPMASTER'S REPORT: 1979.

Documents:

1 Police Condition Slip
1 Customs Condition Slip
3 Crew Lists
1 List Ship's Stores and Bond

Pilotage: Compulsory. Pilot boards 0.5 miles from breakwater.

Restrictions: Vessels may berth and unberth at any stage of the tide day or night.

Health: 24 hours before arrival request radio pratique from "Quarantine Haifa".

Radio: Haifa 4X0.

VHF: Pilot and Port Authority on Channels 16 and 14.

Tugs: 3 tugs available 1×3,000 h.p., 1×1,500 h.p., 1×1,000 h.p. The use of tugs depends on which berth used and also which direction the vessel will be heading.

Berthing: North Quay: Berths 101, 102, 103: berths located just inside the breakwater, max. draft permitted 10 m., density alongside 1029. Accommodation ladder required.

Bulk Handling Facilities: Phosphate loading facilities available.

Cranes: 9×30 tons at 15 m. (15 tons at 25 m.).
9× 8 tons at 15 m. (4 tons at 25 m.).
Ample mobile cranes available.

Special Cargo Handling Facilities: Ro/Ro facilities available. 3 container gantries available. Ample storage space for breakbulk cargoes, palletised cargoes and containers.

Stevedores: Labour normally refuses to rig derricks or handle hatches.

Working Hours: Sunday to Thursday (inclusive):
First Shift 0630 and 1400 hrs.
Second Shift 1500 and 2145 hrs.
Friday: First Shift 0630 to 1300 hrs.
Second Shift 1300 to 1530 hrs.
Saturday — No work.

Services Available: Fresh water, fresh provisions, repair facilities, machine shop, Lloyd's Surveyor (from Haifa), Salvage Surveyor (from Haifa), laundry services, bunker fuel oil, diesel oil, lubricating oil, doctor and hospital, groceries and meats. Nearest airport is at Tel-Aviv.

AUTHORITY: Israel Ports Authority, Port of Ashdod, P.O.Box 9001, Ashdod, 77191 Israel. *Tel:* 55 – 28280, 55 – 21106. *Telex:* 31818. *Cables:* Ashnam – Ashdod. *Contact:* Harbour Master.

EILAT (Elath): 29.32 N. 34.57 E. **(See Plan Book)**

DOCUMENTS:

For Customs:

Customs Questionnaire, Crew Customs Declaration, Stores List, Crew List, Passengers List, Foreign Currency List, Narcotics List, Arms List, Import Cargo Manifest, Transit Cargo Manifest.

For Quarantine:

International Quarantine message may be sent, addressed "Quarantine Eilat" via Haifa Radio (4XO), to obtain free pratique.

Maritime Declaration of Health, Valid Vaccination Certificate for smallpox all crew and passengers, Derat Exemption Certificate.

For Border Control (Immigration):

1 Police Questionnaire, 2 Crew Lists, 2 Passenger Lists, Seamen's Books and travelling documents of passengers.

PILOTAGE: Compulsory, ordered through Agent. When unable to contact Agent, Pilot can be ordered by contacting Harbour Master by Haifa Radio, or by VHF Channel 14. Vessel due to berth awaits opposite oil installations located approximately 2.5 cables South of the main jetty. Vessels requesting Pilot for anchoring stop opposite the North end of the main jetty. Tankers waiting Pilot for oil installations to stop 0.5 mile South of oil installations. Pilot motor launch, red hull, green superstructure amidships stationed at North end of main jetty. Pilot ladder complying with all safety regulations and properly lighted during dark hours is necessary. Vessels awaiting Pilot should anchor only in designated area.

ANCHORAGES: Boundaries of area marked by lines connecting following positions;

(A)	29° 32′ 51″ N.	34° 57′ 19″ E.
(B)	29° 32′ 26″ N.	34° 58′ 34″ E.
(C)	29° 31′ 40″ N.	34° 58′ 27″ E.
(D)	29° 32′ 31″ N.	34° 57′ 06″ E.

Average depth 25 fathoms. If arriving at port for first time, do not try anchoring anywhere outside anchoring area.

Anchorage positions will be alloted by Port Control – call sign "Yamit" on VHF Channel 14.

Anchorage Positions:

(1)	29° 32.62′ N.	34° 57.37′ E.
(2)	29° 32.49′ N.	34° 57.64′ E.
(3)	29° 32.37′ N.	34° 57.97′ E.
(4)	29° 32.25′ N.	34° 58.31′ E.
(5)	29° 32.37′ N.	34° 57.34′ E.
(6)	29° 32.17′ N.	34° 57.70′ E.
(7)	29° 32.06′ N.	34° 58.04′ E.
(8)	29° 31.96′ N.	34° 58.37′ E.
(9)	29° 32.22′ N.	34° 57.02′ E.
(10)	29° 32.02′ N.	34° 57.29′ E.
(11)	29° 31.82′ N.	34° 57.65′ E.
(12)	29° 31.69′ N.	34° 58.06′ E.

MAX. SIZE: For berthing alongside main cargo jetty, length 528 m., max. draft up to 39 ft.

Additional cargo jetty length 170 m., max. draft up to 19 ft.

North Oil Jetty accommodates tankers up to 125,000 d.w.t. with draft of 56 ft.

South Oil Jetty can accommodate tankers up to 500,000 d.w.t. Depth of water alongside 94 ft.

HEALTH: Free Pratique may be requested by cable via Haifa or via Eilat Radio from Quarantine Authorities. If suspected disease or fever on board immediately advise Quarantine Eilat with all details.

RADIO: Communication via Haifa Radio 4XO. Full details working hours and frequencies found in Admiralty List Radio Signals and similar publications. Good radio connection with Eilat can be obtained also via Haifa Radio, call sign 4XO, operating continuously.

TUGS: Tugs meet vessel off quay. Lines not usually used as tugs usually push. When needed, ship's lines used. 1 tug 2,750 h.p., 1 tug 960 h.p., 1 fire-fighting tug 280 h.p. and 5 tugs 100 – 180 h.p.

BERTHING: No difficulty except at times of strong Southerly winds when small vessels may have to leave quay and proceed to anchorage or sea, due to strong swell.

Additional cargo quay 662 ft. in length with max. draft alongside of 22 ft. completed and brought into operation.

BULK HANDLING FACILITIES: Bulk elevator for bulk loading (Phosphate & Potash) capacity 800 m.t.p.h.

Storage Area:

Sheds – 17,000 sq. m.
Open storage – 55,000 sq. m.
Cold storage warehouse – 500 tons.
Bulk potash shed – 80,000 tons.
Phosphate bulk shed – 35,000 tons (3,300 sq. m.)

CRANES: 1 electric driven crane S.W.L. 50 tonnes. 1 electric driven crane S.W.L. 35 tonnes. 4 electric driven cranes S.W.L. 25 tonnes, when coupled S.W.L. 48 tonnes per couple. 1 diesel/electric driven crane S.W.L. 15 tonnes. 1 diesel driven crane S.W.L. 60 – 80 tonnes. 6 diesel driven cranes S.W.L. 7 – 13 tonnes.

Port is fully equipped for container handling. Container traffic exceeds 39,500 TEU's.

STEVEDORES: Booked by ship's Agent. All details of cargo distribution and storage to be cabled in advance to Agent.

Port Working Hours:

Summer: (May 16th – October 15th)
  Sunday – Thursday 0530 – 1330 and 1600 – 2300 hrs.
  Friday 0530 – 1230 and 1400 – 2000 hrs.
Winter: (October 16th – May 15th)
  Sunday – Thursday 0600 – 1400 and 1530 – 2230 hrs.
  Friday 0630 – 1300 and 1400 – 2000 hrs.

MEDICAL: Hospital facilities available.

DENSITY: 1028 (Winter), 1030 (Summer).

FRESH WATER: Available in unlimited quantities and supplied at all jetties. No facilities for supplying fresh water at anchorage.

FUEL: All grades supplied in any quantity by barge.

OPENING/CLOSING HATCHES: Normally by stevedores.

CUSTOMS ALLOWANCES: Every Crew member is permitted to keep 200 cigarettes or equivalent amount of other tobacco, out of bond. Every crew member is permitted to keep 1 bottle of spirits and 1 bottle of wine, out of bond.

IDENTIFICATION CARDS: Every crew member going ashore should have a shore leave pass. Shore leave passes will be received from the border control officer after the vessel is cleared.

CONSULS: There are no consulates in Eilat. All consulates are in Jerusalem or in Tel-Aviv.

REPAIRS: All afloat deck and engine repairs can be performed by local workshops.

DRY DOCKS: Syncrolift with lifting capacity of 1,200 tons.

REPATRIATION: There are all facilities for arranging repatriations or crew changes.

AIRPORT: Eilat Airport is used at present for internal traffic only. There are 8 flights daily from Eilat to Tel-Aviv except on Saturdays. From Tel-Aviv there is good transportation to Lod International Airport.

TIME: Local time is GMT plus 2 hours; no Summer time is kept.

HOLIDAYS: No cargo work is usually performed during official holidays or Saturdays. The official holidays are: Passover (2 days during April); Independence Day (1 day end April/beginning May); First Harvest Day (1 day end May/beginning June); Jewish New Year (2 days, September); Day of Atonement (1 day end September); Feast of Tabernacles (2 days, October). No cargo work is usually performed during 1st of May although it is not an official holiday.

TELEPHONES: At present there are no facilities to arrange telephones on board ships.

TELEPHONE NUMBERS:

Eilat Port Management	059-72191/8
Harbour Master	059-71319 (office) 059-76868 (after office)
Oil Pipe-line	059-76171
Immigration	059-72590
Hospital	059-73151

SHORE LEAVE: Crew members are granted shore leave.

DELAYS: Normally vessels arriving after midnight are berthed only at daybreak, before the beginning of the morning shift.

GENERAL: Meteorological: Weather warnings if any are issued and delivered to vessels upon receipt.

AUTHORITY: Israel Port Authority, Port of Eilat, P.O.Box 37, Eilat, Israel. *Telex:* 07721. *Cables:* Namsuf Eilat. *Contact:* D. Segal, Port Manager – Tel: (office) 059-72916, (home) 059-72387. Captain P. Earon, Acting Harbour Master.

HADERA: 32.28 N. 34.53 E.

LOCATION: About half-way between Haifa and Tel-Aviv. The terminal is used for the importation of coal for the adjacent power station.

PILOTAGE: Compulsory.

APPROACHES: *Lights and Shore Features:* The 2 Power Station Buildings which are about 80 m. high, the twin chimneys which are 254 m. high and the pier with its 2 gantry cranes are very outstanding features on the otherwise rather flat coast. The pier is a very conspicuous radar target.

A vessel approaching in darkness will be able to distinguish the port by the set of red and white lights on the chimneys, and a fixed red light at the Western extremity of the pier. The Mount Carmel Light and Mikhomoret Light will also be in sight.

There are red and green flashing lights at the entrance to the cooling-water basin, and a flashing white light on the North-Westerly buoy of the multi-buoy installation.

VHF: VHF radio installed to communicate with ships, tugs and other craft on matters relating to the port's operation.

TUGS: 2 tugs, about 40 tons pull each, with fire-fighting equipment 2 boats function as mooring, passenger and pilot boats.

BERTHING: The port's installations consist of:

1. An off-shore coal unloading terminal consisting of a pier (300 m.×24 m.) which is constructed 1.8 km. from the Shore Line. It is connected to the shore by an approach jetty on piles.

Minimum water depth at the pier – 20 m. It is designed for ships of up to 180,000 d.w.t.

The height of the pier above MSL is 14 m. There are 11 breasting and mooring dolphins along its North side, their height above the sea is 4.5 m. Quick-release hooks installed where applicable.

Ships are moored to the North side of the pier with their bow to seaward.

Discharging the ship's cargo is done by 2×35 ton gantry cranes.

2. A cooling water basin for the supply of sea water to the station condensers is also used by the port's craft. The water's depth in the navigable area is 5 m.

MEDICAL: First aid is given at the Regional Hospital at Hadera.

TANKERS: There is a fuel oil unloading terminal, about 1.5 km. North of the coal pier, where tankers are made fast to a multi-buoy system and fuel is pumped ashore through a 32 in. submarine pipe-line. Water depth is 18 m. and ships of 70,000 d.w.t. can be accommodated.

FRESH WATER: Available to the pier.

FUEL: Arranged by Agent.

REPAIRS: Arranged by Agent.

STORES: Arranged by Agent.

GENERAL: *Instructions to Ships' Masters:*

1. Please keep the port informed of your ETA, any changes in your original notice should be communicated to your Agent.

2. Your VHF Channels 16 and 10 should be used for radio contact with the port when approaching and when your ship is anchored.

3. The Pilot will prefer to board your vessel when in a position 1 mile North of the jetty, and bow Southward; the same position is also the best for anchoring if your ship does not berth on arrival.

4. Your pilot ladder should be as directed by IMO Regulations, properly cleaned and secured.

5. Due to the exposed position of the berth, constant and thorough attention to the mooring lines should be carried out. Generally the moorings will consist of:

A. Forward:
  4 Head Lines.
  2 Breast Lines.
  2 Springs.
B. Aft:
  4 Stern Lines.
  2 Breast Lines.
  2 Springs.

All head and stern lines must be fibre ropes-polypropylene or others. Breast lines and springs, if not made of fibre must have fibre tails, 15 m.-20 m. long.

6. When the ship is moored to the jetty.
(a) Main engines, steering, windlasses etc., should be in working order. Any fault or damage to be repaired immediately and the port to be informed.
(b) The ship shall always have sufficient officers and crew onboard so as to be able to leave the jetty in an emergency.
(c) Mooring lines should be continuously checked for wear, load distribution, etc., and any irregularity tended to.
(d) All ballast tanks, including holds designed for water ballast, to be filled as soon as possible.
Cargo holds into which water ballast will be pumped should be the first to be emptied of cargo.
(e) The vessel to keep herself informed on expected weather conditions.
(f) Constant – tension winches should not be in operation for head and stern leading lines simultaneously.
(g) Do not change your mooring lines nor re-arrange them, unless the Duty Pilot is consulted.

7. Oily water should not be pumped, nor garbage be thrown overboard.

For ships that have to pump out oily water of any source, there is a reception tank and a separator on the jetty.

Ship's garbage should be put in plastic bags and loaded into a supplied container.

8. You have to get permission before doing:
(a) Welding work, anywhere on the ship.
(b) Diving work at the ship's hull.
(c) Lifeboat exercises.

9. The ship has to inform the Port immediately about any accident, fire, explosion, leakage etc. on or near the ship.

10. the above instruction to Masters are based on the Ports' Ordinance and Regulations, issued by the Israeli Ministry of Transport.

SHIPMASTER'S REPORT: December 1982 (Updated 1984).
Documents: See "Haifa".
Pilotage: Compulsory. Pilot joins vessel approximately 1 mile off jetty.
Anchorage: Recommended approximately 1 mile 345° of end of jetty.
Max. Size: 200,000 d.w.t. Least depth of water alongside 20.0 m.
Radio: See "Haifa".
VHF: Continuous watch on Channels 16 and 10, working on Channel 10.
Health: See "Haifa".
Tugs: Two available, 4,000 h.p. (approx.).
Berthing: Ships moor port side alongside, head out to sea.
Bulk Handling: Coal: 2 large overhead gantry cranes with grabs of approximately 20 tonnes capacity having an outreach of approximately 40 m. and at present discharge coal by endless conveyor belt system, rate approximately 20,000 tons per day. During 1983 2.2 million tons were discharged from 22 vessels.
Tankers: There is a tanker mooring consisting of six buoys and an underwater pick up/discharge point close North of the jetty.
Density: 1030.
Medical: Facilities available, via Tel Aviv or Haifa.
Fresh Water: Laid onto jetty. Ship to supply own connections and hoses.
Fuel: Available via lighter from Haifa. Small quantities can be delivered by truck.
Repairs: Limited, via Haifa.
Surveyors: Cargo inspectors and surveyors of most associations available, arrangements via Agent.
Stevedores: 24 hours per day except Saturdays and holidays.
Gangway Watchmen: Not required. Very strict watch kept at installation gates.
Opening/Closing Hatches: Mechanical hatches by crew.
Customs: See "Haifa".
Identity Cards: See "Haifa".
Airport: Tel Aviv Airport approximately 50 km.
Holidays: Same as "Haifa".
Shore Leave: See "Haifa".
General: All ships proceeding to Israeli ports report as per Admiralty List of Radio Signals Vol. 6, Part 11, Page 320 and "Guide to Port Entry".

Documents, etc. as for Haifa, from which Port Immigration/Customs/Police etc. cover Hadera. Vessel will be cleared at anchor on arrival if berth is already occupied.

Hadera is a new port constructed to serve a new power station being built in position Lat. 32° 28′ 08″ N., Long. 34° 53′ 10″ E. Two conspicuous grey cement chimneys, with red lights at night together with the power station and a jetty extending a mile out to sea make the place easy to identify. No difficulties in the approaches. The port has been in operation since April 1982. First vessels being discharged at anchor by derrick barge, but since September has been accepting vessels alongside the new jetty extending 1 mile out to sea into deep water. There is a new small boat harbour on the North side at the root of the jetty, equipped with quay and cranes.

Berthing, approach jetty from the North, letting go starboard anchor when approximately 1 cable off to assist in swinging and for heaving off when sailing. There is a mooring buoy approximately 100 m. off the North side of the jetty to assist in heaving off when sailing if required. Two tugs used for berthing, they are based in the small boat harbour, only one used when sailing. Use ship's ropes.

Working part of jetty is 300 m. long and is 14 m. above sea level, is on two levels. Lower level (Skeleton) is for moorings, which are adequate and fitted with remote control quick release gears in case of bad weather in Winter as jetty is very exposed. (Vessel before this vessel had to vacate berth for 40 hours, due to swell.) Good fendering.

No pedestrians allowed along jetty. Transport is arranged with Agents/Power Station Authorities.

Shore gangway provided.

Stores/Laundry can be taken/delivered by a truck via jetty.

Hatch "cleaning" is by contract labour. If started early enough they make a reasonable job to re-deliver 'shovel clean'. Notice of Readiness accepted as of the time vessel anchored awaiting berth.

Crew change facilities exist via Tel Aviv Airport. Incoming report to Haifa Immigration Control and deposit passports for passes. Home-going members have to be in possession of air tickets before leaving vessel.

AUTHORITY: Port of Hadera, P.O.Box 314, Hadera, Israel. *Tel:* (063) 32976, 32250. *Telex:* 46272 Nph II. *Contact:* Port Manager or Captain Y. Braker, Harbour Master.

HAIFA: 32.49 N. 35.00 E. (See Plan Book)

DOCUMENTS:
1 Photograph of each member of the crew.
3 Crew Lists, and Crew Passports or Seamen's Books.
1 Provisions List.
1 List of Articles in possession each Crew member – cameras, binoculars, radios, cigarettes, tobacco, etc.
Master to declare firearms and rounds of ammunition.
4 Passenger Lists.

Stowage Plan and Manifest to be mailed in advance, preferable Master to cable 72 and 48 hours before arrival holds workable and gangs required, also draft forward and aft on arrival.

PILOTAGE: Compulsory for all merchant and foreign naval vessels. Pilotage service is rendered round the clock. Vessels are boarded by Pilot seaward of the main breakwater.

ANCHORAGE: Vessels shall not anchor within the prohibited areas and must keep clear of the fairways of the main harbour and Kishon Zone.

MAX. SIZE: The width of the entrance channel to the main port, between the main and lee breakwaters, is 183 m. The depth of the entrance is 12 m. The width of the entrance to the Kishon Harbour is 70 m., with a min. depth of 8.50 m. Vessels of max. draft 35 ft. can be safely accommodated in the main port: in the Kishon Harbour accommodation is limited to vessels of 27 ft. draft. Depth in both harbours are maintained by dredging at regular intervals.

Tankers: Up to 50 ft. draft at buoy moorings.

RADIO: Radio-telephone service from ship-to-shore and vice versa via Haifa Radio, call sign 4XO. Ships in port may also be connected to the Israeli telephone system.

The port has a signal station equipped with a modern 60 kw VHF installation, working on Channels 12, 14 and 16. The station is licensed for port operation only and is in continuous service. For all other ship-to-shore communication contact Haifa Radio, call sign 4XO.

The Israeli Meteorological Service broadcasts twice daily the weather forecast in English for East Mediterranean area over Haifa Radio.

Vessels approaching the coast of Israel shall report their position to the Israeli Authorities in accordance with the following procedure:

(a) Every foreign vessel bound for the ports of Haifa, Ashdod or Ashkelon shall send a position report to the Israeli Ministry of Transport (IMOT) via Haifa Radio (4XO). Such position report should be sent in the form of a free of charge service cable when the vessel arrives at a distance of 50 miles from the coast and it shall contain vessel's name, position, course, speed and destination.

(b) In addition to the report, in *(a)* above and according to the Ports' Regulations, every vessel (foreign or Israeli) entering the Israeli territorial waters shall send a position report which shall contain vessel's name, position, course, speed and destination and which shall be sent at the time the vessel enters territorial waters (6 miles) to:
(1) The nearest Port Operation Services, by means of VHF;
or
(2) The IMOT via Haifa Radio (free of charge service cable) in cases where VHF communication with the nearest port cannot be established.

HEALTH: Free pratique by radio is granted on request by the International Quarantine Message to the Quarantine Station round the clock (including holidays) via Haifa Radio, call sign 4XO on 500 kHz.

Medical advice by radio for all ships may be obtained through Haifa Radio 4XO free of charge. Call "Medico Haifa".

There is no special quarantine anchorage.

Vaccination against smallpox is required from arrivals, except those who were resident in a European country, in Canada or in the U.S.A. for more than 14 days before disembarkation in Israel, provided those countries are free from smallpox.

TUGS: Vessels obtain tug assistance, if required, for entering or leaving the harbour and for shifting. 2 tugs of 1,500 h.p. and of 1,000 h.p.

BERTHING: Ships moor normally to wharves and jetties, and to a lesser extent stern to the main breakwater and alongside dolphins.

Main Harbour

The main harbour is situated on the Southern shore of Haifa Bay at Lat. 32° 48′ N., Long. 35° 01′ E. It is protected by 2 breakwaters: the main breakwater, 2,826 m. long, in the North, and the lee breakwater, 745 m. long, in the East.

The harbour basin covers an area of 1,038,000 sq.m. (about 255 acres). The main port's land area amounts to 642,000 sq.m. (about 158 acres).

Kishon Auxiliary Harbour

To the East of the main port, around the lower reaches of the Kishon rivulet, lies the Kishon Auxiliary Harbour. It consists of an outer harbour basin that is protected by 2 breakwaters of 600 m. and 350 m. length respectively, and a main channel of 1,045 m. length, of which the first stretch of 700 m., measured from the entrance to the outer harbour basin, has a depth of 8 m. while the second stretch of 345 m. has a depth of 6.50 m. A side channel, 213 m. long and 4 m. deep, which branches off the main channel toward the East, serves as a fishing dock. Another side channel 350 m. long and 8 m. deep serves as holding basin of the shipyard and the Chemicals Terminal.

Wharves	*Length*	*Depth*
Main Port	*(m.)*	*(m.)*
Main Wharf	110	5.00
	120	5.40
	110	7.30
	500	8.60
	180	10.00
	290	10.70
	210	11.00
Cargo Jetty A	205	6.80
C	107	6.80
Oil Jetty	350	10.00
East Lighter Wharf	110	4.20
Kishon Zone		
Cargo Wharf	355	8.50
	285	8.50
Fishing Dock	213	4.00
Chemicals Wharf	325	8.50

BULK HANDLING FACILITIES: *Coal:* Coal imports are usually handled by grabs fixed to shore cranes.

Grain: 2 mobile elevators on main wharf with combined unloading capacity of 590 t.p.h. A third elevator has a nominal capacity of 600 t.p.h.

Chemicals: Chemicals in liquid bulk unloaded and loaded at chemical tank farm in Kishon Zone. Terminal jetty suitable for tankers up to 20,000 d.w.t. with draft 22 ft. 6 in. Storage capacity 45,000 cu.m.

Containers: Presently containers are discharged and loaded in the Western area of the port and Kishon Harbour, having all facilities to handle 20 ft. and 40 ft. containers. A container terminal is in the process of being established in the Eastern part annexed to the Oil Dock Breakwater. All container handling equipment available.

CRANES:

	No.	*Capacity (Tons)*	*Radius (m.)*
Floating Derrick	1	100	—
Portal Cranes	2 (Koks)	35	—
	12	5	25
	3	15	30
	6	25	30
Mobile Cranes	5	5–6.5	
	9	8–13	
	7	7	—
	7	15–16	—
	2	30	—
	4	42	—
Fork Lift Trucks	95	—	—

CONTAINER HANDLING EQUIPMENT:

	No.	*Capacity under spreader (tons) (20′ – 40′ containers)*	*Reach from quay (m.)*	*Height of lift (m.)*
Container Quay	1	35	32	22
Gantry Cranes	1	35	32	26.5

	No.	*Capacity (tons)*
Rubber-tyred	2	30.5
Portal Cranes	3	40

STEVEDORES: Enable Agent order gangs, important obtain 48 hours advance accurate ETA from vessel. Failure give precise ETA may result in ship losing 12/24 hours, also cost gang waiting time. No work on official holidays.

Working Hours: Work is usually carried on in 2 shifts: the first shift is from 0630 to 1430 hrs., on ordinary working days, or from 0630 to 1330 hrs. on the eve of Saturdays and holidays. The second shift is from 1530 to 2230 hrs. on ordinary working days and from 1330 to 2030 hrs. on the eve of Saturdays and holidays. Occasionally, in order to complete work on a ship or for special cargoes, a third shift is worked.

TANKERS: Up to 4 oil tankers can be accommodated at one time at the Oil Jetty, one on each side (draft 28 ft.–33 ft.).

In the Roadstead.

There are 3 submarine oil loading and unloading berths, connected to a submerged pipe-line.

Berth No.	*Situation in relation to harb. entrance*	*Diameter*	*Extension from shore*	*Direction*	*Depth under water*
1	1.75 m.	12 in.	4,200 ft.	307°	52 ft.
2	1.75 m.	12 in.	4,500 ft.	290°	52 ft.
3	0.50 m. N.E.	32 in.	10,000 ft.	319°	58 ft.

The signal station ashore opposite berth No. 3 has 2 signal masts. Vessels moor with their own 2 anchors ahead and mooring lines to 2 buoys astern. The Oil Company's Mooring Master supervises the connecting and loading or discharging, remaining aboard until sailing time.

Throughput Rates

Vessels load or unload up to 1,000 t.p.h. through 10 in./12 in. pipelines on the Oil Jetty. The 32 in. pipe-line berth is destined for loading or unloading supertankers at the rate of up to 2,000 t.p.h.

FRESH WATER: Drinking water is plentiful and of satisfactory quality; no treatment is needed as water is frequently examined and chlorinated when required. The water is supplied by hydrants from shore or by water-barge at a delivery rate of 30–50 t.p.h. Boiler water not available.

MEDICAL: Hospital facilities available. Agent will board vessel with company doctor if so required by the Master.

FUEL: The following grades of oil are available for supplying as bunkers:

Heavy Fuel Oil	1,500 secs. Red. 1 at 100° F.
Light Fuel Oil	450 secs. Red. 1 at 100° F.
Marine Diesel Oil	Standard Grade

The oil is supplied direct from Oil Dock or from barges. Bunkers are normally supplied between 0700 and 1515 hrs. on working days; at any other time by special arrangement. Delivery rate from Oil Dock is up to 500 t.p.h. (3,500 bbls.) and from barges up to 150 t.p.h. (1,000 bbls.)

REPAIRS: Israel Shipyards Ltd. run a modern shipyard, situated in the Kishon Zone, capable of building ships of up to 20,000 d.w.t. and to handle hull repairs, conversions, engine repairs and repairs of electric equipment.

The yard operates 2 floating docks with a lifting capacity of 7,500 tons and 1,100 tons respectively.

Vessels which need no dry docking can be repaired at the shipyard's quay, totalling 400 m. length with 7m. – 8 m. depth.

Ogen Ltd. also undertake ship repairs.

Floating Dock with lifting capacity of 24,000 tons.

GANGWAY/DECK WATCHMEN: Not compulsory. Port guard keeps gangway watch.

OPENING/CLOSING HATCHES: Performed by Stevedores. Mechanical hatch covers operated by crew.

CUSTOMS ALLOWANCES: 200 cigarettes, and 1 open bottle of spirits per person.

IDENTITY CARDS: Issued by port police on arrival.

TIME: Local standard time is 2 hours ahead of G.M.T.

AIRPORT: International air connection from Lod Airport, 105 km. from Haifa.

CONSULS:

Austrian
Belgian
Ivory Coast
Guatemala
Danish
Holland
Yugoslavian
Greek
Liberian
Norwegian
Spanish
Finnish
Panamanian
French
Swedish

HOLIDAYS: Port business is suspended on the following holidays: Saturdays; the 2 days of the Jewish New Year (Rosh Hashana); the Day of Atonement (Yom Kippur); the first and the last day of the Feast of Tabernacles (Succot); the first and the last day of Passover (Pesach); Pentecost (Shevuot); Independence Day. The first of May is observed by the port workers as Labour Holiday and therefore no work is done in the port on that day.

SHORE LEAVE: Shore leave passes are obtainable at the Frontier Control Section of the Port Police Station. Applications for the passes shall be filed with the Boarding Officer, Port Police. All shore leave passes must be surrendered to the Boarding Officer before departure of the vessel.

GENERAL:

Persons Boarding Vessels

No person shall be allowed on board any vessel unless he is in possession of a boarding pass which must be shown on demand to the police officer at the gangway.

Passes for boarding cargo vessels on business are issued by the Port Management; passes for boarding cargo vessels for any other purpose and passes for boarding passenger vessels are issued by the Frontier Control Section of the Port Police.

Swimming

Swimming in Haifa Harbour is strictly forbidden and Masters should instruct their crews accordingly.

Use of Ship's Boats

The use of ship's boats is forbidden in Haifa Port. A public motor-launch service is available for the convenience of ship's personnel. Call the motor-launch by day and night on VHF Channels 18 and 16.

Photographing

Photographing in the port area is strictly forbidden without a written permit issued by the Commander of the Port Guard.

DEVELOPMENTS: *Developments in progress:* Two projects, running concurrently, form the first stage of the development. One of the projects refers to the construction of a new Container Terminal within a specially designed containerships basin outside the existing breakwaters. The second project deals with the deepening and extension of the Kishon Basin.

The Container Terminal will consist of 620 m. (completion expected 1985) of quay front, with water depth reaching 14 m. below M.S.L. and a land area covering over 30 hectares.

AUTHORITY: Israel Ports Authority, Haifa Port Management, P.O.Box 33539, Haifa. *Tel:* 04-518111. *Cables:* Malhof. *Contact:* Port Manager or Captain I. Ben-Menachem, Harbour Master.

Italy

GENERAL:

HEALTH: *Shipmaster's Report:* March 1983: Radio Pratique granted 12 hours prior to arrival.

If vessel applies 24 hours prior to arrival she will be requested to re-apply 12 hours prior to arrival.

TANKERS: All tankers of more than 1,600 g.r.t. carrying crude oil and petroleum products as well as gas carriers, chemical carriers, full or partly loaded, empty but not in gas-free condition, and which, prior to entrance to territorial waters of any Italian port, shall advise the port authorities of the following details:

a) Vessel's name and international call sign,
b) Vessel's nationality,
c) Vessel's LOA and draft,
d) Port of destination and accurate ETA,
e) Quality/quantity of cargo and
f) IMO certificate if carrying dangerous chemical cargo in bulk.

Furthermore, the Master should hand over to the Pilot a detailed list concerning all vessel's data, safety equipment, safety class and other certificates, together with crew list, etc.

Also see "Augusta" – "Agent's Report".

Tankers over 1,600 gross tons, entering or leaving Italian ports or carrying, or with uncleaned tanks which last carried petroleum, gas or chemical products, are required to make a comprehensive report to the appropriate Port Captain. See *Admiralty List of Radio Signals, Vol. 6.*

Such tankers must establish and maintain radio contact, preferably by VHF R/T, with the Port Captain, advising him immediately of any incidents or defects which may affect the safety of navigation or cause pollution. Pilots should be employed outside the areas of compulsory pilotage whenever the nature of the cargo or navigational conditions, including reduced visibility, require.

CREW CHANGES: In Italian ports, signing on of crew on to ships whose flag is not the flag of the citizenship of said crew (for instance of a Norwegian crew member signing on a Liberian vessel, a Danish crew member signing on a Swedish vessel, etc.) should be aware that from now on Italian Port Authorities will strictly require copy of the contract showing that the crew member was engaged out of Italy. It is also required that the contract be signed and stamped by the Consul (of the flag of the ship) of the place where the crew member is engaged. If Consulate is not available, by the National Authorities of the place. In no instance will the signature of the engaging company be accepted as substitute of the signature and stamp of Consul or Authorities.

ANCONA: 43.37 N. 13.32 E. (See Plan Book)

PORT LIMITS: A vessel is considered to have "arrived" when she anchors in the Roads 1 mile from the red light located at the end of Mole and also when, in the case of a vessel of large tonnage she anchors a further mile out and communicates her time of arrival.

DOCUMENTS: Immediately after arrival and shortly prior to departure, the Master must complete the arrival and departure forms supplied and send them to the Maritime Authority.

When the Pilot is on board, the Master must submit to the other authorities, Customs, Police and Health the following further documents:

4 Copies Crew List.
1 Copy Provisions List.
1 Copy B/L for every set.
1 General Cargo Manifest.
3 Copies of Crew Dutiable Articles.
5 Copies Passenger List (in transit or otherwise).

PILOTAGE: The Ancona Port Pilots listen 24 hours a day on VHF Channel 12. Telegraphic address: Piloti – Ancona. Telephone: 071/54297. Pilotage, compulsory for all tankers and all vessels over 500 g.r.t. Pilotage starts within a radius of 1 mile from the port entrance.

There are 4 pilot cutters operated by the Pilots' Association. Vessels waiting for a Pilot must hoist the "G" flag of the International Code of Signals and await him in the roads.

The pilots' station is in a building located near the angle between Berths 1 and 2. There are 4 Pilots available.

ANCHORAGE: In the Roads at the Master's discretion. The advice of the Pilots may be sought via VHF. Anchorage in the roads is safe with winds coming from the 2nd and 3rd quadrants.

RESTRICTIONS: Vessels may enter and leave port day or night. The entry and departure of vessels of large tonnage and draft is governed by the tide which has an approximate range of 2 ft.

Normally, tankers carrying petrol or vessels carrying hazardous goods in category "A" are not allowed to enter port.

MAX. SIZE: In the port of Ancona, the entry of vessels up to 250 m. length is permitted. At the oil installations located outside the port, tankers over 300,000 d.w.t. can berth in water depth 33 m. At the oil installations located closer to the coast, tankers of 27 ft. to 40 ft. draft can berth. (See "Tankers").

HEALTH: There is a maritime health station in the port. Free Pratique may be granted to an anchored vessel by radio (by calling up "Sanimare Ancona" 12 to 6 hours prior to arrival) for vessels coming from countries not affected by health strictures. If fever is suspected aboard a vessel, she must anchor in the roads, hoisting the appropriate International Code of Signals flag, and waiting for the port doctor to come on board.

RADIO: Ancona Radio "ICA" uses calling frequency 500 kHz and a working frequency of 489 kHz. Radio telephone: Ancona Radio P.T. "ICA" on 2182 kHz. VHF: calling up Channel 16 and working Channels 25, 26 and 27. Station maintains 24 hours watch.

RADAR: There is no radar station in the port.

VHF: Port Authority on VHF Channel 16 from 0800–2200 hrs.

TUGS: Use of tugs in port is not compulsory but may be requested by Pilot or ordered by the Port Authority if necessary. From 0700 to 1700 hrs., there are always 3 tugs available, and from 1700 hrs. there is 1 tug available.

Requests for additional tugs can be made via the ship's Agent a few hours prior to the vessel's entry in port, this order to be made to Sadar S.p.A. Telegraphic address: Sadar S.p.A. Telephone: 071/24696/7/8. Tugs wait for vessel 1 mile from the port entrance and work on VHF Channel 12.

SPECIAL CARGO HANDLING FACILITIES: Berth No. 15 has a multi-purpose electro-hydraulic crane particularly suited for containers up to 40 ft. and for lifting conventional cargo up to 42 tons. The quay space behind is currently used as a container terminal.

A new handling area at Berths Nos. 23, 24 and 25 will come into operation with an area of 15 hectares and whose berths will have cranes particularly suited to container handling.

Adjacent to the port, in the Ancona Port Industrial Zone there is a private area with Customs sheds for retention and movement of containers. This area covers 16,000 sq.m.

For Ro–Ro traffic there is no special equipment, but this type of traffic can be handled at almost all the berths.

CARGO HANDLING FACILITIES: Normal working times for mechanical equipment is from 0800 to 1200 hrs. and from 1330 to 1730 hrs.

Mechanical handling equipment on the quays consists of:

1 multi-purpose Paceco crane, of 42 tons capacity for containers and various goods.
4 De Bartolomeis 20 ton electric cranes with retractable jib.
6 electrical cranes of 6 tons capacity, with retractable jib.
2 electrical unloading platforms of 8 tons capacity.
1 electrical unloading platform of 10/12 tons capacity.
3 automatic De Bartolomeis of 20 tons capacity.
1×5 ton automatic.

It is possible to attach electro-hydraulic grabs to the quay cranes for the discharge of scrap iron.

BRIDGES: None have to be negotiated when entering the port.

STEVEDORES: The Compagnia Lavoratori Portuali operates in the port. Telephone: 071/28095. Telegraphic address: Compagnia Lavoratori Portuali Ancona. Requests for labour are made via the ship's Agent at least 24 hours prior to commencement of operations.

MEDICAL: There is an Italian Naval hospital in the port area close Berth No. 10. It is reserved for personnel of the Italian Navy. Telephone number (M.M. exchange) 201392. There is a permanent service available.

Apart from this, there are in the town a main hospital "Umberto 1°" with 1,000 beds, a 400-bed pediatric hospital, a cardio-rheumatological hospital, 2 geriatric hospitals, a neuropsychiatric provincial hospital, and a hospital specialising in tumours. There are also two private clinics with medical and surgical facilities.

TANKERS: *SFIR Mooring:* Mooring dolphins for tankers up to 10,000 g.r.t. Products handled: Refined products.

API – Island Terminal: Berth: It is a single berth for tankers up to 90,000 d.w.t. with draft not exceeding 40 ft. Ship moored with her port side alongside the berth. Mooring manoeuvres permitted in daylight only. Unmooring manoeuvre permitted anytime.

Fittings for Loading/Unloading: Three loading arms. 10 in. quick connections. 7 sea-lines (1×8 in., 1×12 in., 2×14 in., 2×16 in., 1×24 in.) for loading/unloading various grades of oil products and crude oil. The 24 in. sea-line is electrically heated (skin effect) for fuel oil and high viscosity crude oil.

Water Ballast: Water ballast to be discharged ashore by sea-line. Vessels on arrival for loading, when notifying their first ETA to Falconara, must communicate to the refinery the quantity of ballast to be pumped ashore.

Bunker and Water Supply: All grades of bunkers and undrinkable fresh water are available by pipes.

API Buoy Field: The buoy field that was positioned about 600 m. Westward of the Island Terminal for unloading crude oil, has been dismantled.

API Jetty: It is a pier of 1,308 m. in length with 4 berths: 3 for loading/unloading tankers and the other, closer to shore, for service boats.

Berths:

Head Jetty: For tankers with draft not exceeding 27.5 ft.
Berth No. 1: For tankers with draft not exceeding 18 ft.
Berth No. 2: For tankers with draft not exceeding 16 ft.
Landing Stage: For service boats – water depth 10 ft.

Tankers are moored with the stern to the jetty and two anchors. Therefore ships must be fitted with cargo stern-line.

Fittings for Loading/Unloading: One derrick for each berth for connecting flexible hoses (4 in., 6 in., 8 in., 10 in.). Seven pipe-lines (3×8 in., 2×10 in., 2×12 in.) for loading/unloading various grades of oil products and crude oil.

Water Ballast: Water ballast to be discharged ashore by pipe-line. Vessel on arrival for loading, when notifying their first ETA to Falconara, must communicate to the refinery the quantity of ballast to be pumped ashore.

Bunker and Water Supply: All grades of bunker and undrinkable fresh water are available by pipes.

API Sea Terminal

The API Sea Terminal consisting of a single steel platform mooring for vessels up to 300,000 d.w.t. and is located off Ancona Harbour in position:

Latitude: 43° 44′ 37″ North
Longitude: 13° 31′ 15″ East

It has a minimum depth of water of 98 ft. at LWS. The platform, fixed on 6 steel piles sunk into the sea bottom is connected to the shore tanks by an underwater sea line 40 in. diameter.

On the platform there is a cardan joint from which 2 floating hoses 24 in. diameter depart and converge into a single line 24 in. diameter (average discharging rate 7,000 c.m.p.h.) at the top of which are connected 2 lines of 16 in. diameter that end with 2 conic hoses 16 in./12 in. diameter (Tanker MS-GI) for connection to the ship.

Each tail hose is fitted with a quick closing valve to prevent risk of pollution.

The platform has a diameter of 82 ft. and is fitted with special rubber fenders.

Platform Light:

Light: White – Code Letter: "U" – Height a.s.l.: 39 ft. Period: 15 sec.

Light Characteristics:

1) Light:	0.5 sec.	4) Eclipse:	1 sec.
2) Eclipse:	1 sec.	5) Light:	2 sec.
3) Light:	0.5 sec.	6) Eclipse:	10 sec.

Range: 6 miles

Foghorn: Code Letter "U" – Range: 3 miles.

Characteristics:

1) Blast:	1 sec.	4) Silence:	2 sec.
2) Silence:	2 sec.	5) Blast:	2 sec.
3) Blast:	1 sec.	6) Silence:	22 sec.

The platform is equipped with radar reflector.

Weather and Currents:

Weather is generally good from May to the end of September. During the Winter time bad weather prevails from N.E.

The N.E. wind commonly named "Bora" is the strongest and the most frequent. The Easterly sea, which does not occur often, is generally strong. The Westerly winds generally cause fog or mists which, particularly in Winter, is very thick.

For approximately 8 to 9 months of the year the current sets in a S.E. direction whilst for the rest of the year, it is running in opposite direction.

The strength of the S.E. current is variable from 2 to 3 knots, therefore, in consideration of these facts neither engine repairs nor engine maintenance are permitted during the time the vessel is secured to the API platform and the main engine must be on permanent standby and ready for manoeuvring.

Radio/VHF:

Vessels bound for Falconara must send their ETA to Apioil – Falconara 72, 48 and 24 hours before their arrival.

In the last message the following information must be reported:

1) Maximum lifting capacity (s.w.l.) of derricks
2) Distance between bow and manifolds.
3) Diameter and type of manifolds flanges.
4) Whether the cargo tanks are equipped with inert gas system.

5/6 hours before arrival VHF contact can be established with the refinery maritime office on Channel 12.

Anchoring:

Vessels waiting for berth may anchor in a position approximately 1.5 miles Eastward off the platform. Ideal position for anchorage is:

Latitude: 43° 45′ 00″ North
Longitude: 13° 33′ 00″ East

or as otherwise instructed. Vessels are warned to anchor only in the recommended position because of the existence of submarine pipelines in other areas.

On Arrival:

The refinery operator, together with a gang of 4 skilled workers, will board the vessel before berthing to coordinate the discharging operations and they leave after completion of unmooring. Masters are therefore kindly requested to arrange for food and accommodation for the whole period of their stay aboard.

Mooring Operations:

Mooring operations will be undertaken with favourable weather conditions. The vessel shall proceed at a reasonable speed to the platform and generally shall start mooring by heading into the sea current or wind or swell.

As soon as the vessel is a proper distance from the platform she will run out 2 mooring ropes (1 on each side) which will be secured to the platform ropes by mooring crew. These ropes will then be heaved on board in order to pull up the platform ropes which will be secured on the bitts of the forecastle. The platform mooring ropes comprised of nylon rope, chain and polypropylene rope and pelican hooks will be used as stoppers for the chains.

4 mooring lines (2 for each side) must be ready on the forecastle for joining before manoeuvring to the platform.

The refinery operator shall not fail to give to the deck officer on duty on the forecastle all requested information concerning mooring operations as well as API's installation. All winches and windlass must be in perfect working condition with sufficient power and ready to work during the whole of the vessel's stay at the API platform. A good mooring rope of sufficient length must be ready aft and passed to the supply vessel enabling her to assist the tanker from the end of mooring up to few seconds before unmooring. Mooring operations will be carried out by the crew, under the Master's responsibility and according to the Pilot's suggestions.

During the ship's stay at the platform, the crew and API personnel will keep a constant watch on the mooring ropes and the platform. During the night the forecastle and mooring ropes must be brightly lit.

Unmooring:

The unmooring operations, except during unfavourable weather conditions, are quite simple. As soon as the 2 hoses have been disconnected, it will be sufficient to let go the supply vessel, heave up, as quickly as possible, the stern rope, then let go the 2 platform ropes, and put the main engine astern (if necessary). Masters are warned that as soon as the hoses are disconnected the service of the supply vessel will no longer be required.

Hose Handling:

On arrival both derricks must be rigged and ready to lift up the maximum permissible weight.

Throughout the period of time when the hoses are hoisted up, connected, disconnected or lowered overboard, 1 deck officer and 1 Crew member are required to coordinate and operate the winches. Lifting, connecting, lowering and other handling of hoses will be performed by API's gang under the Receiver's representative control.

Discharging Operations:

The Receivers' representative will advise the Master on all matters concerning the discharging speed, manifold pressure, or eventual hazards, but will not direct the discharging operations except if it may be necessary to protect the facilities or any Receivers' properties or apparatus.

Pollution:

The Master is fully responsible and must ensure that no petroleum or other contaminated products are discharged, or spilled overboard.

During the vessel's stay at the API installation, all deck scuppers and all overside deck openings shall be securely closed and oiltight. All pipelines not in use, must be blanked off.

Drip-pans must be in place at all times under manifold connections. An adequate supply of sandbags, or other anti-pollution chemical products, must be available at all times for immediate use.

Under no circumstances shall bilge water, oil, waste, or contaminated products be discharged overboard.

The Receivers will take any action or steps necessary to clean up or remove the contamination of the sea and the terminal structures if any. The vessel and/or her Owner, will be responsible for all expenses and all damage in connection with the contamination.

Italian Authorities are very strict and severe about pollution. It is worthwhile to remind Masters of the eventual penal implications against them for pollution.

Safety:

During the vessel's stay at the API terminal a sufficient number of crew members must remain on board to be ready for any kind of emergency. Crew members going ashore are warned that in case of bad weather it might not be possible to return on board until weather conditions have improved.

All fire equipment and hoses must be, at all times in perfect working condition and ready for use. A number of portable fire extinguishers must always be ready by the discharging manifolds and the breathing apparatus must be ready by the pump rooms for immediate use.

Main Engine and Auxiliaries:

Should the main engine and/or auxiliaries be temporarily out of use, the discharging operations will immediately be stopped, and vessel unmoored, until everything is once again in order. In such a case all expenses, delays and/or all arising damages will be to the account of vessel and/or her Owner.

Tending Mooring:

A crew member must be stationed at the bow of the ship while the vessel is at the platform to keep a constant watch on the moorings.

During the hours of darkness moorings must be illuminated.

Winches:

During the stay of the vessel at the terminal all deck winches must be ready to operate.

Supervising Discharging Operations:

The receivers' personnel will remain on board for the whole time. A qualified deck officer must always be available. It is recommended that the duty officer always carries with him a portable VHF in order to keep close and constant contact with Receivers' representative.

Supervising Floating Hoses:

Whilst the vessel is secured to the platform a sharp lookout on floating hoses must be ordered by the Master. Every abnormal situation in this respect must be immediately notified to Receivers' representative.

Washing Floating Hoses:

When discharge is completed, if requested, the vessel will pump water for a few minutes before disconnecting hoses, in order to displace crude-oil from the floating-lines. The Receiver's representative will advise the Officer on duty about this manoeuvre as well as pumping time.

Communications Between Ship and Shore:

Normally communications between ship and shore are maintained by API's representative. Masters are kindly requested to authorise the use of vessel's VHF when requested.

Boilers:

Boiler tubes must not be blown whilst at anchor or secured to the API platform.

Garbage:

Garbage and refuse must not be thrown overboard while the vessel is at anchor or secured to the API platform.

Bunkers:

Weather permitting, bunkers can be supplied by barges. API can supply all grades of fuel oil, marine diesel, gasoil and all grades of API's marine lube oils.

For bunker requirements vessels must cable to Apioil – Falconara 72 hours before their arrival (holidays, Saturdays excepted) stating qualities and quantities required. (No limitations for supplying).

Fresh Water:

Available only by tugboats with favourable weather conditions, and to be requested through vessel's Agents.

IMPORTANT WARNING

All vessels with a draft up to 40 ft. scheduled for API platform but not duly equipped to operate thereat, will be moored, if possible, at API conventional berths. All expenses, time lost and/or damages arising from the above will be to account of and charged to vessel/owners.

Also see "Report" on pages 699 and 700.

BERTHING:

Berth No.	Location	Length (m.)	Depth alongside at distances from quay face		Max. size g.r.t.	Utilisation	Cranes
			Distance	Depth			
1	Clementino Mole	250	1 m. – 5 m. – 10 m. –	9.14 m. 9.44 m. 9.90 m.	75,000	Load/discharge Dry goods, lumber, coils, palletised cement.	2×6 tons 2×10–20 tons
2	Luigi Rizzo Mole	189	1 m. – 5 m. – 10 m. –	9.14 m. 9.30 m. 9.75 m.	35,000	Load/discharge Dry goods (phosphate, china clay, carbon etc.)	2 discharging platforms ×8 tons on rails and 1×12 tons (being renovated)
3	Luigi Rizzo Mole	116	1 m. –	9.14 m.	25,000	Loading/discharging General and containers	Mobile cranes of 6.3–20 tons 2×5 cu.m. grabs available.
4	Luigi Rizzo Mole	200	5 m. – 10 m. –	10.30 m. 10.36 m.	35,000	Loading/discharging Bulk commodities and general	2×6 tons
8	Near Shipyard	122	1 m. – 5 m. – 10 m. –	7.62 m. 8.70 m. 8.70 m.	10,000	Bulk goods	Mobile cranes of 6.3–20 tons
Head	At head of No. 8 Berth	47	1 m. –	7.62 m.	8,000	Containers, Passengers Lorries	—
9	South of No. 8	124	1 m. – 5 m. – 10 m. –	7.62 m. 9.14 m. 9.14 m.	10,000	Passenger vessels and Naval vessels	—
11	S. Maria Mole	147	1 m. – 5 m. – 10 m. –	7.92 m. 9.40 m. 9.14 m.	15,000	Passenger vessels	—
12	S. Maria Mole	75	1 m. – 5 m. – 10 m. –	7.92 m. 7.40 m. 7.31 m.	4,000	Passenger vessels	—
13	S. Maria Mole	155	1 m. – 5 m. – 10 m. –	9.00 m. 9.75 m. 10.70 m.	20,000	Passenger vessels and Customs warehouse	—
14	Calata della Republica	194	1 m. – 5 m. – 10 m. –	9.00 m. 9.00 m. 10.50 m.	25,000	Passenger vessels, General and timber	Mobile cranes 6.3–20 tons
15 Mole XXIX Sept.	New Eastern container area (North side)	214	1 m. – 5 m. – 10 m. –	9.14 m. 9.80 m. 10.20 m.	35,000	Containers, heavy lifts, Timber	1 multi-purpose gantry crane 42 tons capacity. 2×20 ton capacity
16	New Eastern container area (South side)	120	1 m. – 5 m. – 10 m. –	7.92 m. 10.00 m. 11.40 m.	12,000	Containers	—
17	Giovanni Berth	60 (Usable)	1 m. –	7.00 m.	5,000	General	—
18	—	113	1 m. –	8.22 m.	10,000	Coastal and small vessels	—
19–20	South Breakwater	295	1 m. – 5 m. – 10 m. –	8.22 m. 10.10 m. 12.50 m.	75,000	Bulk discharge	2 suction plants each 2,000 t.p.h. Silos: 38 cells for cement and 4 cells for iron.
21	South Breakwater	141	1 m. – 5 m. – 10 m. –	8.54 m. 9.90 m. 12.50 m.	75,000	Loading/discharging of cereals	2 suction plants each with capacity of 125 t.p.h. on rails. Storage capacity 21,600 cu.m.
22	South Breakwater	195	1 m. – 5 m. – 10 m. –	9.30 m. 10.50 m. 12.00 m.	35,000	Loading/discharging cereals, loading/discharging goods by hook	2×6 ton cranes 2 suction plants capacity 140 t.p.h. each.
—	Maraldi Landing Stage	220		6.5 m.	3,000	Discharging of cargo for company's plant	1×25 ton crane 1×15 ton crane
23	Nuova Darsena	263		10.8 m.	75,000	Containers, Timber, General	—
24	Nuova Darsena	150		10.8 m.	10,000	Containers, Timber, General	—
25	Nuova Darsena	258.5		10.8 m.	75,000	Containers, Timber, General	—

TANKERS: (continued)

Report: *Crude Oil Washing:*

To carry out crude oil washing operations (COW) the vessel must be fitted with the following equipment:

(a) An inert gas system capable of supplying gas containing not more than 5% oxygen to all cargo tanks during all discharging and washing operations. Such systems must be fitted with an automatic alarm signal which will operate if the oxygen content of the gas rises above 5%.

(b) A tank cleaning machine permanently installed in the cargo tanks and connected to the cargo/wash system by permanent steel piping.

(c) A remote reading tank gauging system to ensure that the liquid levels in the cargo tanks can be monitored at any time, without having to open any ullage ports.

(d) The tank cleaning lines must be completely separate and isolated from the fire fighting system.

The procedures to be followed are listed below:

1. Prior to vessel arrival at the discharge port, the following test will be carried out:

   All cargo discharge lines and wash system lines must prove to be tight and free of leaks. The test will be effected with crude oil, to a pressure ranging between 150 p.s.i. and 175 p.s.i.

   The main cargo pumps safety devices, i.e.: pump casing and bearing temperature gauges and high temperature alarms, pump overspeed trips, remote emergency stops, pump reverse rotation alarms, cargo pump trip for low inert gas pressure, must be tested and found fully operational.
2. All openings to all cargo tanks must be securely closed and the pressure/vacuum valves set in the operational position.
3. All in and out valves of sea water heater must be closed.

It has a minimum depth of water of 98 ft. at LWS. The platform, fixed on 6 steel piles sunk into the sea bottom is connected to the shore tanks by an underwater sea line 40 in. diameter.

On the platform there is a cardan joint from which 2 floating hoses 24 in. diameter depart and converge into a single line 24 in. diameter (average discharging rate 7,000 c.m.p.h.) at the top of which are connected 2 lines of 16 in. diameter that end with 2 conic hoses 16 in./12 in. diameter (Tanker MS-GI) for connection to the ship.

Each tail hose is fitted with a quick closing valve to prevent risk of pollution.

The platform has a diameter of 82 ft. and is fitted with special rubber fenders.

Platform Light:

Light: White – Code Letter: "U" – Height a.s.l.: 39 ft. Period: 15 sec.

Light Characteristics:

1) Light:	0.5 sec.	4) Eclipse:	1 sec.
2) Eclipse:	1 sec.	5) Light:	2 sec.
3) Light:	0.5 sec.	6) Eclipse:	10 sec.

Range: 6 miles

Foghorn: Code Letter "U" – Range: 3 miles.

Characteristics:

1) Blast:	1 sec.	4) Silence:	2 sec.
2) Silence:	2 sec.	5) Blast:	2 sec.
3) Blast:	1 sec.	6) Silence:	22 sec.

The platform is equipped with radar reflector.

Weather and Currents:

Weather is generally good from May to the end of September. During the Winter time bad weather prevails from N.E.

The N.E. wind commonly named "Bora" is the strongest and the most frequent. The Easterly sea, which does not occur often, is generally strong. The Westerly winds generally cause fog or mists which, particularly in Winter, is very thick.

For approximately 8 to 9 months of the year the current sets in a S.E. direction whilst for the rest of the year, it is running in opposite direction.

The strength of the S.E. current is variable from 2 to 3 knots, therefore, in consideration of these facts neither engine repairs nor engine maintenance are permitted during the time the vessel is secured to the API platform and the main engine must be on permanent standby and ready for manoeuvring.

Radio/VHF:

Vessels bound for Falconara must send their ETA to Apioil – Falconara 72, 48 and 24 hours before their arrival.

In the last message the following information must be reported:

1) Maximum lifting capacity (s.w.l.) of derricks
2) Distance between bow and manifolds.
3) Diameter and type of manifolds flanges.
4) Whether the cargo tanks are equipped with inert gas system.

5/6 hours before arrival VHF contact can be established with the refinery maritime office on Channel 12.

Anchoring:

Vessels waiting for berth may anchor in a position approximately 1.5 miles Eastward off the platform. Ideal position for anchorage is:

Latitude: 43° 45′ 00″ North
Longitude: 13° 33′ 00″ East

or as otherwise instructed. Vessels are warned to anchor only in the recommended position because of the existence of submarine pipelines in other areas.

On Arrival:

The refinery operator, together with a gang of 4 skilled workers, will board the vessel before berthing to coordinate the discharging operations and they leave after completion of unmooring. Masters are therefore kindly requested to arrange for food and accommodation for the whole period of their stay aboard.

Mooring Operations:

Mooring operations will be undertaken with favourable weather conditions. The vessel shall proceed at a reasonable speed to the platform and generally shall start mooring by heading into the sea current or wind or swell.

As soon as the vessel is a proper distance from the platform she will run out 2 mooring ropes (1 on each side) which will be secured to the platform ropes by mooring crew. These ropes will then be heaved on board in order to pull up the platform ropes which will be secured on the bitts of the forecastle. The platform mooring ropes comprised of nylon rope, chain and polypropylene rope and pelican hooks will be used as stoppers for the chains.

4 mooring lines (2 for each side) must be ready on the forecastle for joining before manoeuvring to the platform.

The refinery operator shall not fail to give to the deck officer on duty on the forecastle all requested information concerning mooring operations as well as API's installation. All winches and windlass must be in perfect working condition with sufficient power and ready to work during the whole of the vessel's stay at the API platform. A good mooring rope of sufficient length must be ready aft and passed to the supply vessel enabling her to assist the tanker from the end of mooring up to few seconds before unmooring. Mooring operations will be carried out by the crew, under the Master's responsibility and according to the Pilot's suggestions.

During the ship's stay at the platform, the crew and API personnel will keep a constant watch on the mooring ropes and the platform. During the night the forecastle and mooring ropes must be brightly lit.

Unmooring:

The unmooring operations, except during unfavourable weather conditions, are quite simple. As soon as the 2 hoses have been disconnected, it will be sufficient to let go the supply vessel, heave up, as quickly as possible, the stern rope, then let go the 2 platform ropes, and put the main engine astern (if necessary). Masters are warned that as soon as the hoses are disconnected the service of the supply vessel will no longer be required.

Hose Handling:

On arrival both derricks must be rigged and ready to lift up the maximum permissible weight.

Throughout the period of time when the hoses are hoisted up, connected, disconnected or lowered overboard, 1 deck officer and 1 Crew member are required to coordinate and operate the winches. Lifting, connecting, lowering and other handling of hoses will be performed by API's gang under the Receiver's representative control.

Discharging Operations:

The Receivers' representative will advise the Master on all matters concerning the discharging speed, manifold pressure, or eventual hazards, but will not direct the discharging operations except if it may be necessary to protect the facilities or any Receivers' properties or apparatus.

Pollution:

The Master is fully responsible and must ensure that no petroleum or other contaminated products are discharged, or spilled overboard.

During the vessel's stay at the API installation, all deck scuppers and all overside deck openings shall be securely closed and oiltight. All pipelines not in use, must be blanked off.

Drip-pans must be in place at all times under manifold connections. An adequate supply of sandbags, or other anti-pollution chemical products, must be available at all times for immediate use.

Under no circumstances shall bilge water, oil, waste, or contaminated products be discharged overboard.

The Receivers will take any action or steps necessary to clean up or remove the contamination of the sea and the terminal structures if any. The vessel and/or her Owner, will be responsible for all expenses and all damage in connection with the contamination.

Italian Authorities are very strict and severe about pollution. It is worthwhile to remind Masters of the eventual penal implications against them for pollution.

Safety:

During the vessel's stay at the API terminal a sufficient number of crew members must remain on board to be ready for any kind of emergency. Crew members going ashore are warned that in case of bad weather it might not be possible to return on board until weather conditions have improved.

All fire equipment and hoses must be, at all times in perfect working condition and ready for use. A number of portable fire extinguishers must always be ready by the discharging manifolds and the breathing apparatus must be ready by the pump rooms for immediate use.

Main Engine and Auxiliaries:

Should the main engine and/or auxiliaries be temporarily out of use, the discharging operations will immediately be stopped, and vessel unmoored, until everything is once again in order. In such a case all expenses, delays and/or all arising damages will be to the account of vessel and/or her Owner.

Tending Mooring:

A crew member must be stationed at the bow of the ship while the vessel is at the platform to keep a constant watch on the moorings.

During the hours of darkness moorings must be illuminated.

Winches:

During the stay of the vessel at the terminal all deck winches must be ready to operate.

Supervising Discharging Operations:

The receivers' personnel will remain on board for the whole time. A qualified deck officer must always be available. It is recommended that the duty officer always carries with him a portable VHF in order to keep close and constant contact with Receivers' representative.

Supervising Floating Hoses:

Whilst the vessel is secured to the platform a sharp lookout on floating hoses must be ordered by the Master. Every abnormal situation in this respect must be immediately notified to Receivers' representative.

Washing Floating Hoses:

When discharge is completed, if requested, the vessel will pump water for a few minutes before disconnecting hoses, in order to displace crude-oil from the floating-lines. The Receiver's representative will advise the Officer on duty about this manoeuvre as well as pumping time.

Communications Between Ship and Shore:

Normally communications between ship and shore are maintained by API's representative. Masters are kindly requested to authorise the use of vessel's VHF when requested.

Boilers:

Boiler tubes must not be blown whilst at anchor or secured to the API platform.

Garbage:

Garbage and refuse must not be thrown overboard while the vessel is at anchor or secured to the API platform.

Bunkers:

Weather permitting, bunkers can be supplied by barges. API can supply all grades of fuel oil, marine diesel, gasoil and all grades of API's marine lube oils.

For bunker requirements vessels must cable to Apioil – Falconara 72 hours before their arrival (holidays, Saturdays excepted) stating qualities and quantities required. (No limitations for supplying).

Fresh Water:

Available only by tugboats with favourable weather conditions, and to be requested through vessel's Agents.

IMPORTANT WARNING

All vessels with a draft up to 40 ft. scheduled for API platform but not duly equipped to operate thereat, will be moored, if possible, at API conventional berths. All expenses, time lost and/or damages arising from the above will be to account of and charged to vessel/owners.

Also see "Report" on pages 699 and 700.

BERTHING:

Berth No.	Location	Length (m.)	Depth alongside at distances from quay face		Max. size g.r.t.	Utilisation	Cranes
			Distance	Depth			
1	Clementino Mole	250	1 m. – 5 m. – 10 m. –	9.14 m. 9.44 m. 9.90 m.	75,000	Load/discharge Dry goods, lumber, coils, palletised cement.	2×6 tons 2×10–20 tons
2	Luigi Rizzo Mole	189	1 m. – 5 m. – 10 m. –	9.14 m. 9.30 m. 9.75 m.	35,000	Load/discharge Dry goods (phosphate, china clay, carbon etc.)	2 discharging platforms ×8 tons on rails and 1×12 tons (being renovated)
3	Luigi Rizzo Mole	116	1 m. –	9.14 m.	25,000	Loading/discharging General and containers	Mobile cranes of 6.3–20 tons 2×5 cu.m. grabs available.
4	Luigi Rizzo Mole	200	5 m. – 10 m. –	10.30 m. 10.36 m.	35,000	Loading/discharging Bulk commodities and general	2×6 tons
8	Near Shipyard	122	1 m. – 5 m. – 10 m. –	7.62 m. 8.70 m. 8.70 m.	10,000	Bulk goods	Mobile cranes of 6.3–20 tons
Head	At head of No. 8 Berth	47	1 m. –	7.62 m.	8,000	Containers, Passengers Lorries	—
9	South of No. 8	124	1 m. – 5 m. – 10 m. –	7.62 m. 9.14 m. 9.14 m.	10,000	Passenger vessels and Naval vessels	—
11	S. Maria Mole	147	1 m. – 5 m. – 10 m. –	7.92 m. 9.40 m. 9.14 m.	15,000	Passenger vessels	—
12	S. Maria Mole	75	1 m. – 5 m. – 10 m. –	7.92 m. 7.40 m. 7.31 m.	4,000	Passenger vessels	—
13	S. Maria Mole	155	1 m. – 5 m. – 10 m. –	9.00 m. 9.75 m. 10.70 m.	20,000	Passenger vessels and Customs warehouse	—
14	Calata della Republica	194	1 m. – 5 m. – 10 m. –	9.00 m. 9.00 m. 10.50 m.	25,000	Passenger vessels, General and timber	Mobile cranes 6.3–20 tons
15	Mole XXIX Sept. New Eastern container area (North side)	214	1 m. – 5 m. – 10 m. –	9.14 m. 9.80 m. 10.20 m.	35,000	Containers, heavy lifts, Timber	1 multi-purpose gantry crane 42 tons capacity. 2×20 ton capacity
16	Mole XXIX Sept. New Eastern container area (South side)	120	1 m. – 5 m. – 10 m. –	7.92 m. 10.00 m. 11.40 m.	12,000	Containers	—
17	Giovanni Berth	60 (Usable)	1 m. –	7.00 m.	5,000	General	—
18	—	113	1 m. –	8.22 m.	10,000	Coastal and small vessels	—
19–20	South Breakwater	295	1 m. – 5 m. – 10 m. –	8.22 m. 10.10 m. 12.50 m.	75,000	Bulk discharge	2 suction plants each 2,000 t.p.h. Silos: 38 cells for cement and 4 cells for iron.
21	South Breakwater	141	1 m. – 5 m. – 10 m. –	8.54 m. 9.90 m. 12.50 m.	75,000	Loading/discharging of cereals	2 suction plants each with capacity of 125 t.p.h. on rails. Storage capacity 21,600 cu.m.
22	South Breakwater	195	1 m. – 5 m. – 10 m. –	9.30 m. 10.50 m. 12.00 m.	35,000	Loading/discharging cereals, loading/discharging goods by hook	2×6 ton cranes 2 suction plants capacity 140 t.p.h. each.
—	Maraldi Landing Stage	220		6.5 m.	3,000	Discharging of cargo for company's plant	1×25 ton crane 1×15 ton crane
23	Nuova Darsena	263		10.8 m.	75,000	Containers, Timber, General	—
24	Nuova Darsena	150		10.8 m.	10,000	Containers, Timber, General	—
25	Nuova Darsena	258.5		10.8 m.	75,000	Containers, Timber, General	—

TANKERS: (continued)

Report: *Crude Oil Washing:*

To carry out crude oil washing operations (COW) the vessel must be fitted with the following equipment:

(a) An inert gas system capable of supplying gas containing not more than 5% oxygen to all cargo tanks during all discharging and washing operations. Such systems must be fitted with an automatic alarm signal which will operate if the oxygen content of the gas rises above 5%.

(b) A tank cleaning machine permanently installed in the cargo tanks and connected to the cargo/wash system by permanent steel piping.

(c) A remote reading tank gauging system to ensure that the liquid levels in the cargo tanks can be monitored at any time, without having to open any ullage ports.

(d) The tank cleaning lines must be completely separate and isolated from the fire fighting system.

The procedures to be followed are listed below:

1. Prior to vessel arrival at the discharge port, the following test will be carried out:

   All cargo discharge lines and wash system lines must prove to be tight and free of leaks. The test will be effected with crude oil, to a pressure ranging between 150 p.s.i. and 175 p.s.i.

   The main cargo pumps safety devices, i.e.: pump casing and bearing temperature gauges and high temperature alarms, pump overspeed trips, remote emergency stops, pump reverse rotation alarms, cargo pump trip for low inert gas pressure, must be tested and found fully operational.
2. All openings to all cargo tanks must be securely closed and the pressure/vacuum valves set in the operational position.
3. All in and out valves of sea water heater must be closed.

It has a minimum depth of water of 98 ft. at LWS. The platform, fixed on 6 steel piles sunk into the sea bottom is connected to the shore tanks by an underwater sea line 40 in. diameter.

On the platform there is a cardan joint from which 2 floating hoses 24 in. diameter depart and converge into a single line 24 in. diameter (average discharging rate 7,000 c.m.p.h.) at the top of which are connected 2 lines of 16 in. diameter that end with 2 conic hoses 16 in./12 in. diameter (Tanker MS-GI) for connection to the ship.

Each tail hose is fitted with a quick closing valve to prevent risk of pollution.

The platform has a diameter of 82 ft. and is fitted with special rubber fenders.

Platform Light:

Light: White – Code Letter: "U" – Height a.s.l.: 39 ft. Period: 15 sec.

Light Characteristics:

1) Light:	0.5 sec.	4) Eclipse:	1 sec.
2) Eclipse:	1 sec.	5) Light:	2 sec.
3) Light:	0.5 sec.	6) Eclipse:	10 sec.

Range: 6 miles

Foghorn: Code Letter "U" – Range: 3 miles.

Characteristics:

1) Blast:	1 sec.	4) Silence:	2 sec.
2) Silence:	2 sec.	5) Blast:	2 sec.
3) Blast:	1 sec.	6) Silence:	22 sec.

The platform is equipped with radar reflector.

Weather and Currents:

Weather is generally good from May to the end of September. During the Winter time bad weather prevails from N.E.

The N.E. wind commonly named "Bora" is the strongest and the most frequent. The Easterly sea, which does not occur often, is generally strong. The Westerly winds generally cause fog or mists which, particularly in Winter, is very thick.

For approximately 8 to 9 months of the year the current sets in a S.E. direction whilst for the rest of the year, it is running in opposite direction.

The strength of the S.E. current is variable from 2 to 3 knots, therefore, in consideration of these facts neither engine repairs nor engine maintenance are permitted during the time the vessel is secured to the API platform and the main engine must be on permanent standby and ready for manoeuvring.

Radio/VHF:

Vessels bound for Falconara must send their ETA to Apioil Falconara 72, 48 and 24 hours before their arrival.

In the last message the following information must be reported:

1) Maximum lifting capacity (s.w.l.) of derricks
2) Distance between bow and manifolds.
3) Diameter and type of manifolds flanges.
4) Whether the cargo tanks are equipped with inert gas system.

5/6 hours before arrival VHF contact can be established with the refinery maritime office on Channel 12.

Anchoring:

Vessels waiting for berth may anchor in a position approximately 1.5 miles Eastward off the platform. Ideal position for anchorage is:

Latitude: 43° 45′ 00″ North
Longitude: 13° 33′ 00″ East

or as otherwise instructed. Vessels are warned to anchor only in the recommended position because of the existence of submarine pipelines in other areas.

On Arrival:

The refinery operator, together with a gang of 4 skilled workers, will board the vessel before berthing to coordinate the discharging operations and they leave after completion of unmooring. Masters are therefore kindly requested to arrange for food and accommodation for the whole period of their stay aboard.

Mooring Operations:

Mooring operations will be undertaken with favourable weather conditions. The vessel shall proceed at a reasonable speed to the platform and generally shall start mooring by heading into the sea current or wind or swell.

As soon as the vessel is a proper distance from the platform she will run out 2 mooring ropes (1 on each side) which will be secured to the platform ropes by mooring crew. These ropes will then be heaved on board in order to pull up the platform ropes which will be secured on the bitts of the forecastle. The platform mooring ropes comprised of nylon rope, chain and polypropylene rope and pelican hooks will be used as stoppers for the chains.

4 mooring lines (2 for each side) must be ready on the forecastle for joining before manoeuvring to the platform.

The refinery operator shall not fail to give to the deck officer on duty on the forecastle all requested information concerning mooring operations as well as API's installation. All winches and windlass must be in perfect working condition with sufficient power and ready to work during the whole of the vessel's stay at the API platform. A good mooring rope of sufficient length must be ready aft and passed to the supply vessel enabling her to assist the tanker from the end of mooring up to few seconds before unmooring. Mooring operations will be carried out by the crew, under the Master's responsibility and according to the Pilot's suggestions.

During the ship's stay at the platform, the crew and API personnel will keep a constant watch on the mooring ropes and the platform. During the night the forecastle and mooring ropes must be brightly lit.

Unmooring:

The unmooring operations, except during unfavourable weather conditions, are quite simple. As soon as the 2 hoses have been disconnected, it will be sufficient to let go the supply vessel, heave up, as quickly as possible, the stern rope, then let go the 2 platform ropes, and put the main engine astern (if necessary). Masters are warned that as soon as the hoses are disconnected the service of the supply vessel will no longer be required.

Hose Handling:

On arrival both derricks must be rigged and ready to lift up the maximum permissible weight.

Throughout the period of time when the hoses are hoisted up, connected, disconnected or lowered overboard, 1 deck officer and 1 Crew member are required to coordinate and operate the winches. Lifting, connecting, lowering and other handling of hoses will be performed by API's gang under the Receiver's representative control.

Discharging Operations:

The Receivers' representative will advise the Master on all matters concerning the discharging speed, manifold pressure, or eventual hazards, but will not direct the discharging operations except if it may be necessary to protect the facilities or any Receivers' properties or apparatus.

Pollution:

The Master is fully responsible and must ensure that no petroleum or other contaminated products are discharged, or spilled overboard.

During the vessel's stay at the API installation, all deck scuppers and all overside deck openings shall be securely closed and oiltight. All pipelines not in use, must be blanked off.

Drip-pans must be in place at all times under manifold connections. An adequate supply of sandbags, or other anti-pollution chemical products, must be available at all times for immediate use.

Under no circumstances shall bilge water, oil, waste, or contaminated products be discharged overboard.

The Receivers will take any action or steps necessary to clean up or remove the contamination of the sea and the terminal structures if any. The vessel and/or her Owner, will be responsible for all expenses and all damage in connection with the contamination.

Italian Authorities are very strict and severe about pollution. It is worthwhile to remind Masters of the eventual penal implications against them for pollution.

Safety:

During the vessel's stay at the API terminal a sufficient number of crew members must remain on board to be ready for any kind of emergency. Crew members going ashore are warned that in case of bad weather it might not be possible to return on board until weather conditions have improved.

All fire equipment and hoses must be, at all times in perfect working condition and ready for use. A number of portable fire extinguishers must always be ready by the discharging manifolds and the breathing apparatus must be ready by the pump rooms for immediate use.

Main Engine and Auxiliaries:

Should the main engine and/or auxiliaries be temporarily out of use, the discharging operations will immediately be stopped, and vessel unmoored, until everything is once again in order. In such a case all expenses, delays and/or all arising damages will be to the account of vessel and/or her Owner.

Tending Mooring:

A crew member must be stationed at the bow of the ship while the vessel is at the platform to keep a constant watch on the moorings.

During the hours of darkness moorings must be illuminated.

Winches:

During the stay of the vessel at the terminal all deck winches must be ready to operate.

Supervising Discharging Operations:

The receivers' personnel will remain on board for the whole time. A qualified deck officer must always be available. It is recommended that the duty officer always carries with him a portable VHF in order to keep close and constant contact with Receivers' representative.

Supervising Floating Hoses:

Whilst the vessel is secured to the platform a sharp lookout on floating hoses must be ordered by the Master. Every abnormal situation in this respect must be immediately notified to Receivers' representative.

Washing Floating Hoses:

When discharge is completed, if requested, the vessel will pump water for a few minutes before disconnecting hoses, in order to displace crude-oil from the floating-lines. The Receiver's representative will advise the Officer on duty about this manoeuvre as well as pumping time.

Communications Between Ship and Shore:

Normally communications between ship and shore are maintained by API's representative. Masters are kindly requested to authorise the use of vessel's VHF when requested.

Boilers:

Boiler tubes must not be blown whilst at anchor or secured to the API platform.

Garbage:

Garbage and refuse must not be thrown overboard while the vessel is at anchor or secured to the API platform.

Bunkers:

Weather permitting, bunkers can be supplied by barges. API can supply all grades of fuel oil, marine diesel, gasoil and all grades of API's marine lube oils.

For bunker requirements vessels must cable to Apioil – Falconara 72 hours before their arrival (holidays, Saturdays excepted) stating qualities and quantities required. (No limitations for supplying).

Fresh Water:

Available only by tugboats with favourable weather conditions, and to be requested through vessel's Agents.

IMPORTANT WARNING

All vessels with a draft up to 40 ft. scheduled for API platform but not duly equipped to operate thereat, will be moored, if possible, at API conventional berths. All expenses, time lost and/or damages arising from the above will be to account of and charged to vessel/owners.

Also see "Report" on pages 699 and 700.

BERTHING:

Berth No.	Location	Length (m.)	Depth alongside at distances from quay face		Max. size g.r.t.	Utilisation	Cranes
			Distance	Depth			
1	Clementino Mole	250	1 m. 5 m. 10 m.	9.14 m. 9.44 m. 9.90 m.	75,000	Load/discharge Dry goods, lumber, coils, palletised cement.	2×6 tons 2×10–20 tons
2	Luigi Rizzo Mole	189	1 m. 5 m. 10 m.	9.14 m. 9.30 m. 9.75 m.	35,000	Load/discharge Dry goods (phosphate, china clay, carbon etc.)	2 discharging platforms ×8 tons on rails and 1×12 tons (being renovated)
3	Luigi Rizzo Mole	116	1 m.	9.14 m.	25,000	Loading/discharging General and containers	Mobile cranes of 6.3–20 tons 2×5 cu.m. grabs available.
4	Luigi Rizzo Mole	200	5 m. 10 m.	10.30 m. 10.36 m.	35,000	Loading/discharging Bulk commodities and general	2×6 tons
8	Near Shipyard	122	1 m. 5 m. 10 m.	7.62 m. 8.70 m. 8.70 m.	10,000	Bulk goods	Mobile cranes of 6.3–20 tons
Head	At head of No. 8 Berth	47	1 m.	7.62 m.	8,000	Containers, Passengers Lorries	—
9	South of No. 8	124	1 m. 5 m. 10 m.	7.62 m. 9.14 m. 9.14 m.	10,000	Passenger vessels and Naval vessels	—
11	S. Maria Mole	147	1 m. 5 m. 10 m.	7.92 m. 9.40 m. 9.14 m.	15,000	Passenger vessels	—
12	S. Maria Mole	75	1 m. 5 m. 10 m.	7.92 m. 7.40 m. 7.31 m.	4,000	Passenger vessels	—
13	S. Maria Mole	155	1 m. 5 m. 10 m.	9.00 m. 9.75 m. 10.70 m.	20,000	Passenger vessels and Customs warehouse	—
14	Calata della Republica	194	1 m. 5 m. 10 m.	9.00 m. 9.00 m. 10.50 m.	25,000	Passenger vessels, General and timber	Mobile cranes 6.3–20 tons
15	Mole XXIX Sept. New Eastern container area (North side)	214	1 m. 5 m. 10 m.	9.14 m. 9.80 m. 10.20 m.	35,000	Containers, heavy lifts, Timber	1 multi-purpose gantry crane 42 tons capacity. 2×20 ton capacity
16	Mole XXIX Sept. New Eastern container area (South side)	120	1 m. 5 m. 10 m.	7.92 m. 10.00 m. 11.40 m.	12,000	Containers	—
17	Giovanni Berth	60 (Usable)	1 m.	7.00 m.	5,000	General	—
18	—	113	1 m.	8.22 m.	10,000	Coastal and small vessels	—
19–20	South Breakwater	295	1 m. 5 m. 10 m.	8.22 m. 10.10 m. 12.50 m.	75,000	Bulk discharge	2 suction plants each 2,000 t.p.h. Silos: 38 cells for cement and 4 cells for iron.
21	South Breakwater	141	1 m. 5 m. 10 m.	8.54 m. 9.90 m. 12.50 m.	75,000	Loading/discharging of cereals	2 suction plants each with capacity of 125 t.p.h. on rails. Storage capacity 21,600 cu.m.
22	South Breakwater	195	1 m. 5 m. 10 m.	9.30 m. 10.50 m. 12.00 m.	35,000	Loading/discharging cereals, loading/discharging goods by hook	2×6 ton cranes 2 suction plants capacity 140 t.p.h. each.
—	Maraldi Landing Stage	220		6.5 m.	3,000	Discharging of cargo for company's plant	1×25 ton crane 1×15 ton crane
23	Nuova Darsena	263		10.8 m.	75,000	Containers, Timber, General	—
24	Nuova Darsena	150		10.8 m.	10,000	Containers, Timber, General	—
25	Nuova Darsena	258.5		10.8 m.	75,000	Containers, Timber, General	—

TANKERS: (continued)

Report: *Crude Oil Washing:*

To carry out crude oil washing operations (COW) the vessel must be fitted with the following equipment:

(a) An inert gas system capable of supplying gas containing not more than 5% oxygen to all cargo tanks during all discharging and washing operations. Such systems must be fitted with an automatic alarm signal which will operate if the oxygen content of the gas rises above 5%.

(b) A tank cleaning machine permanently installed in the cargo tanks and connected to the cargo/wash system by permanent steel piping.

(c) A remote reading tank gauging system to ensure that the liquid levels in the cargo tanks can be monitored at any time, without having to open any ullage ports.

(d) The tank cleaning lines must be completely separate and isolated from the fire fighting system.

The procedures to be followed are listed below:

1. Prior to vessel arrival at the discharge port, the following test will be carried out:

   All cargo discharge lines and wash system lines must prove to be tight and free of leaks. The test will be effected with crude oil, to a pressure ranging between 150 p.s.i. and 175 p.s.i.

   The main cargo pumps safety devices, i.e.: pump casing and bearing temperature gauges and high temperature alarms, pump overspeed trips, remote emergency stops, pump reverse rotation alarms, cargo pump trip for low inert gas pressure, must be tested and found fully operational.
2. All openings to all cargo tanks must be securely closed and the pressure/vacuum valves set in the operational position.
3. All in and out valves of sea water heater must be closed.

It has a minimum depth of water of 98 ft. at LWS. The platform, fixed on 6 steel piles sunk into the sea bottom is connected to the shore tanks by an underwater sea line 40 in. diameter.

On the platform there is a cardan joint from which 2 floating hoses 24 in. diameter depart and converge into a single line 24 in. diameter (average discharging rate 7,000 c.m.p.h.) at the top of which are connected 2 lines of 16 in. diameter that end with 2 conic hoses 16 in./12 in. diameter (Tanker MS-GI) for connection to the ship.

Each tail hose is fitted with a quick closing valve to prevent risk of pollution.

The platform has a diameter of 82 ft. and is fitted with special rubber fenders.

Platform Light:

Light: White – Code Letter: "U" – Height a.s.l.: 39 ft. Period: 15 sec.

Light Characteristics:

1) Light:	0.5 sec.	4) Eclipse:	1 sec.
2) Eclipse:	1 sec.	5) Light:	2 sec.
3) Light:	0.5 sec.	6) Eclipse:	10 sec.

Range: 6 miles

Foghorn: Code Letter "U" – Range: 3 miles.

Characteristics:

1) Blast:	1 sec.	4) Silence:	2 sec.
2) Silence:	2 sec.	5) Blast:	2 sec.
3) Blast:	1 sec.	6) Silence:	22 sec.

The platform is equipped with radar reflector.

Weather and Currents:

Weather is generally good from May to the end of September. During the Winter time bad weather prevails from N.E.

The N.E. wind commonly named "Bora" is the strongest and the most frequent. The Easterly sea, which does not occur often, is generally strong. The Westerly winds generally cause fog or mists which, particularly in Winter, is very thick.

For approximately 8 to 9 months of the year the current sets in a S.E. direction whilst for the rest of the year, it is running in opposite direction.

The strength of the S.E. current is variable from 2 to 3 knots, therefore, in consideration of these facts neither engine repairs nor engine maintenance are permitted during the time the vessel is secured to the API platform and the main engine must be on permanent standby and ready for manoeuvring.

Radio/VHF:

Vessels bound for Falconara must send their ETA to Apioil – Falconara 72, 48 and 24 hours before their arrival.

In the last message the following information must be reported:

1) Maximum lifting capacity (s.w.l.) of derricks
2) Distance between bow and manifolds.
3) Diameter and type of manifolds flanges.
4) Whether the cargo tanks are equipped with inert gas system.

5/6 hours before arrival VHF contact can be established with the refinery maritime office on Channel 12.

Anchoring:

Vessels waiting for berth may anchor in a position approximately 1.5 miles Eastward off the platform. Ideal position for anchorage is:

Latitude: 43° 45′ 00″ North
Longitude: 13° 33′ 00″ East

or as otherwise instructed. Vessels are warned to anchor only in the recommended position because of the existence of submarine pipelines in other areas.

On Arrival:

The refinery operator, together with a gang of 4 skilled workers, will board the vessel before berthing to coordinate the discharging operations and they leave after completion of unmooring. Masters are therefore kindly requested to arrange for food and accommodation for the whole period of their stay aboard.

Mooring Operations:

Mooring operations will be undertaken with favourable weather conditions. The vessel shall proceed at a reasonable speed to the platform and generally shall start mooring by heading into the sea current or wind or swell.

As soon as the vessel is a proper distance from the platform she will run out 2 mooring ropes (1 on each side) which will be secured to the platform ropes by mooring crew. These ropes will then be heaved on board in order to pull up the platform ropes which will be secured on the bitts of the forecastle. The platform mooring ropes comprised of nylon rope, chain and polypropylene rope and pelican hooks will be used as stoppers for the chains.

4 mooring lines (2 for each side) must be ready on the forecastle for joining before manoeuvring to the platform.

The refinery operator shall not fail to give to the deck officer on duty on the forecastle all requested information concerning mooring operations as well as API's installation. All winches and windlass must be in perfect working condition with sufficient power and ready to work during the whole of the vessel's stay at the API platform. A good mooring rope of sufficient length must be ready aft and passed to the supply vessel enabling her to assist the tanker from the end of mooring up to few seconds before unmooring. Mooring operations will be carried out by the crew, under the Master's responsibility and according to the Pilot's suggestions.

During the ship's stay at the platform, the crew and API personnel will keep a constant watch on the mooring ropes and the platform. During the night the forecastle and mooring ropes must be brightly lit.

Unmooring:

The unmooring operations, except during unfavourable weather conditions, are quite simple. As soon as the 2 hoses have been disconnected, it will be sufficient to let go the supply vessel, heave up, as quickly as possible, the stern rope, then let go the 2 platform ropes, and put the main engine astern (if necessary). Masters are warned that as soon as the hoses are disconnected the service of the supply vessel will no longer be required.

Hose Handling:

On arrival both derricks must be rigged and ready to lift up the maximum permissible weight.

Throughout the period of time when the hoses are hoisted up, connected, disconnected or lowered overboard, 1 deck officer and 1 Crew member are required to coordinate and operate the winches. Lifting, connecting, lowering and other handling of hoses will be performed by API's gang under the Receiver's representative control.

Discharging Operations:

The Receivers' representative will advise the Master on all matters concerning the discharging speed, manifold pressure, or eventual hazards, but will not direct the discharging operations except if it may be necessary to protect the facilities or any Receivers' properties or apparatus.

Pollution:

The Master is fully responsible and must ensure that no petroleum or other contaminated products are discharged, or spilled overboard.

During the vessel's stay at the API installation, all deck scuppers and all overside deck openings shall be securely closed and oiltight. All pipelines not in use, must be blanked off.

Drip-pans must be in place at all times under manifold connections. An adequate supply of sandbags, or other anti-pollution chemical products, must be available at all times for immediate use.

Under no circumstances shall bilge water, oil, waste, or contaminated products be discharged overboard.

The Receivers will take any action or steps necessary to clean up or remove the contamination of the sea and the terminal structures if any. The vessel and/or her Owner, will be responsible for all expenses and all damage in connection with the contamination.

Italian Authorities are very strict and severe about pollution. It is worthwhile to remind Masters of the eventual penal implications against them for pollution.

Safety:

During the vessel's stay at the API terminal a sufficient number of crew members must remain on board to be ready for any kind of emergency. Crew members going ashore are warned that in case of bad weather it might not be possible to return on board until weather conditions have improved.

All fire equipment and hoses must be, at all times in perfect working condition and ready for use. A number of portable fire extinguishers must always be ready by the discharging manifolds and the breathing apparatus must be ready by the pump rooms for immediate use.

Main Engine and Auxiliaries:

Should the main engine and/or auxiliaries be temporarily out of use, the discharging operations will immediately be stopped, and vessel unmoored, until everything is once again in order. In such a case all expenses, delays and/or all arising damages will be to the account of vessel and/or her Owner.

Tending Mooring:

A crew member must be stationed at the bow of the ship while the vessel is at the platform to keep a constant watch on the moorings.

During the hours of darkness moorings must be illuminated.

Winches:

During the stay of the vessel at the terminal all deck winches must be ready to operate.

Supervising Discharging Operations:

The receivers' personnel will remain on board for the whole time. A qualified deck officer must always be available. It is recommended that the duty officer always carries with him a portable VHF in order to keep close and constant contact with Receivers' representative.

Supervising Floating Hoses:

Whilst the vessel is secured to the platform a sharp lookout on floating hoses must be ordered by the Master. Every abnormal situation in this respect must be immediately notified to Receivers' representative.

Washing Floating Hoses:

When discharge is completed, if requested, the vessel will pump water for a few minutes before disconnecting hoses, in order to displace crude-oil from the floating-lines. The Receiver's representative will advise the Officer on duty about this manoeuvre as well as pumping time.

Communications Between Ship and Shore:

Normally communications between ship and shore are maintained by API's representative. Masters are kindly requested to authorise the use of vessel's VHF when requested.

Boilers:

Boiler tubes must not be blown whilst at anchor or secured to the API platform.

Garbage:

Garbage and refuse must not be thrown overboard while the vessel is at anchor or secured to the API platform.

Bunkers:

Weather permitting, bunkers can be supplied by barges. API can supply all grades of fuel oil, marine diesel, gasoil and all grades of API's marine lube oils.

For bunker requirements vessels must cable to Apioil – Falconara 72 hours before their arrival (holidays, Saturdays excepted) stating qualities and quantities required. (No limitations for supplying).

Fresh Water:

Available only by tugboats with favourable weather conditions, and to be requested through vessel's Agents.

IMPORTANT WARNING

All vessels with a draft up to 40 ft. scheduled for API platform but not duly equipped to operate thereat, will be moored, if possible, at API conventional berths. All expenses, time lost and/or damages arising from the above will be to account of and charged to vessel/owners.

Also see "Report" on pages 699 and 700.

BERTHING:

Berth No.	Location	Length (m.)	Depth alongside at distances from quay face		Max. size g.r.t.	Utilisation	Cranes
			Distance	Depth			
1	Clementino Mole	250	1 m. – 5 m. – 10 m. –	9.14 m. 9.44 m. 9.90 m.	75,000	Load/discharge Dry goods, lumber, coils, palletised cement.	2×6 tons 2×10–20 tons
2	Luigi Rizzo Mole	189	1 m. – 5 m. – 10 m. –	9.14 m. 9.30 m. 9.75 m.	35,000	Load/discharge Dry goods (phosphate, china clay, carbon etc.)	2 discharging platforms ×8 tons on rails and 1×12 tons (being renovated)
3	Luigi Rizzo Mole	116	1 m. –	9.14 m.	25,000	Loading/discharging General and containers	Mobile cranes of 6.3–20 tons 2×5 cu.m. grabs available.
4	Luigi Rizzo Mole	200	5 m. – 10 m. –	10.30 m. 10.36 m.	35,000	Loading/discharging Bulk commodities and general	2×6 tons
8	Near Shipyard	122	1 m. – 5 m. – 10 m. –	7.62 m. 8.70 m. 8.70 m.	10,000	Bulk goods	Mobile cranes of 6.3–20 tons
Head	At head of No. 8 Berth	47	1 m. –	7.62 m.	8,000	Containers, Passengers Lorries	—
9	South of No. 8	124	1 m. – 5 m. – 10 m. –	7.62 m. 9.14 m. 9.14 m.	10,000	Passenger vessels and Naval vessels	—
11	S. Maria Mole	147	1 m. – 5 m. – 10 m. –	7.92 m. 9.40 m. 9.14 m.	15,000	Passenger vessels	—
12	S. Maria Mole	75	1 m. – 5 m. – 10 m. –	7.92 m. 7.40 m. 7.31 m.	4,000	Passenger vessels	—
13	S. Maria Mole	155	1 m. – 5 m. – 10 m. –	9.00 m. 9.75 m. 10.70 m.	20,000	Passenger vessels and Customs warehouse	—
14	Calata della Republica	194	1 m. – 5 m. – 10 m. –	9.00 m. 9.00 m. 10.50 m.	25,000	Passenger vessels, General and timber	Mobile cranes 6.3–20 tons
15	Mole XXIX Sept. New Eastern container area (North side)	214	1 m. – 5 m. – 10 m. –	9.14 m. 9.80 m. 10.20 m.	35,000	Containers, heavy lifts, Timber	1 multi-purpose gantry crane 42 tons capacity. 2×20 ton capacity
16	New Eastern container area (South side)	120	1 m. – 5 m. – 10 m. –	7.92 m. 10.00 m. 11.40 m.	12,000	Containers	—
17	Giovanni Berth	60 (Usable)	1 m. –	7.00 m.	5,000	General	—
18	—	113	1 m. –	8.22 m.	10,000	Coastal and small vessels	—
19–20	South Breakwater	295	1 m. – 5 m. – 10 m. –	8.22 m. 10.10 m. 12.50 m.	75,000	Bulk discharge	2 suction plants each 2,000 t.p.h. Silos: 38 cells for cement and 4 cells for iron.
21	South Breakwater	141	1 m. – 5 m. – 10 m. –	8.54 m. 9.90 m. 12.50 m.	75,000	Loading/discharging of cereals	2 suction plants each with capacity of 125 t.p.h. on rails. Storage capacity 21,600 cu.m.
22	South Breakwater	195	1 m. – 5 m. – 10 m. –	9.30 m. 10.50 m. 12.00 m.	35,000	Loading/discharging cereals, loading/discharging goods by hook	2×6 ton cranes 2 suction plants capacity 140 t.p.h. each.
—	Maraldi Landing Stage	220		6.5 m.	3,000	Discharging of cargo for company's plant	1×25 ton crane 1×15 ton crane
23	Nuova Darsena	263		10.8 m.	75,000	Containers, Timber, General	—
24	Nuova Darsena	150		10.8 m.	10,000	Containers, Timber, General	—
25	Nuova Darsena	258.5		10.8 m.	75,000	Containers, Timber, General	—

TANKERS: (continued)

Report: *Crude Oil Washing:*

To carry out crude oil washing operations (COW) the vessel must be fitted with the following equipment:

(a) An inert gas system capable of supplying gas containing not more than 5% oxygen to all cargo tanks during all discharging and washing operations. Such systems must be fitted with an automatic alarm signal which will operate if the oxygen content of the gas rises above 5%.

(b) A tank cleaning machine permanently installed in the cargo tanks and connected to the cargo/wash system by permanent steel piping.

(c) A remote reading tank gauging system to ensure that the liquid levels in the cargo tanks can be monitored at any time, without having to open any ullage ports.

(d) The tank cleaning lines must be completely separate and isolated from the fire fighting system.

The procedures to be followed are listed below:

1. Prior to vessel arrival at the discharge port, the following test will be carried out:

   All cargo discharge lines and wash system lines must prove to be tight and free of leaks. The test will be effected with crude oil, to a pressure ranging between 150 p.s.i. and 175 p.s.i.

   The main cargo pumps safety devices, i.e.: pump casing and bearing temperature gauges and high temperature alarms, pump overspeed trips, remote emergency stops, pump reverse rotation alarms, cargo pump trip for low inert gas pressure, must be tested and found fully operational.
2. All openings to all cargo tanks must be securely closed and the pressure/vacuum valves set in the operational position.
3. All in and out valves of sea water heater must be closed.

It has a minimum depth of water of 98 ft. at LWS. The platform, fixed on 6 steel piles sunk into the sea bottom is connected to the shore tanks by an underwater sea line 40 in. diameter.

On the platform there is a cardan joint from which 2 floating hoses 24 in. diameter depart and converge into a single line 24 in. diameter (average discharging rate 7,000 c.m.p.h.) at the top of which are connected 2 lines of 16 in. diameter that end with 2 conic hoses 16 in./12 in. diameter (Tanker MS-GI) for connection to the ship.

Each tail hose is fitted with a quick closing valve to prevent risk of pollution.

The platform has a diameter of 82 ft. and is fitted with special rubber fenders.

Platform Light:

Light: White – Code Letter: "U" – Height a.s.l.: 39 ft. Period: 15 sec.

Light Characteristics:

1) Light: 0.5 sec.
2) Eclipse: 1 sec.
3) Light: 0.5 sec.
4) Eclipse: 1 sec.
5) Light: 2 sec.
6) Eclipse: 10 sec.

Range: 6 miles

Foghorn: Code Letter "U" – Range: 3 miles.

Characteristics:

1) Blast: 1 sec.
2) Silence: 2 sec.
3) Blast: 1 sec.
4) Silence: 2 sec.
5) Blast: 2 sec.
6) Silence: 22 sec.

The platform is equipped with radar reflector.

Weather and Currents:

Weather is generally good from May to the end of September. During the Winter time bad weather prevails from N.E.

The N.E. wind commonly named "Bora" is the strongest and the most frequent. The Easterly sea, which does not occur often, is generally strong. The Westerly winds generally cause fog or mists which, particularly in Winter, is very thick.

For approximately 8 to 9 months of the year the current sets in a S.E. direction whilst for the rest of the year, it is running in opposite direction.

The strength of the S.E. current is variable from 2 to 3 knots, therefore, in consideration of these facts neither engine repairs nor engine maintenance are permitted during the time the vessel is secured to the API platform and the main engine must be on permanent standby and ready for manoeuvring.

Radio/VHF:

Vessels bound for Falconara must send their ETA to Apioil Falconara 72, 48 and 24 hours before their arrival.

In the last message the following information must be reported:

1) Maximum lifting capacity (s.w.l.) of derricks
2) Distance between bow and manifolds.
3) Diameter and type of manifolds flanges.
4) Whether the cargo tanks are equipped with inert gas system.

5/6 hours before arrival VHF contact can be established with the refinery maritime office on Channel 12.

Anchoring:

Vessels waiting for berth may anchor in a position approximately 1.5 miles Eastward off the platform. Ideal position for anchorage is:

Latitude: 43° 45′ 00″ North
Longitude: 13° 33′ 00″ East

or as otherwise instructed. Vessels are warned to anchor only in the recommended position because of the existence of submarine pipelines in other areas.

On Arrival:

The refinery operator, together with a gang of 4 skilled workers, will board the vessel before berthing to coordinate the discharging operations and they leave after completion of unmooring. Masters are therefore kindly requested to arrange for food and accommodation for the whole period of their stay aboard.

Mooring Operations:

Mooring operations will be undertaken with favourable weather conditions. The vessel shall proceed at a reasonable speed to the platform and generally shall start mooring by heading into the sea current or wind or swell.

As soon as the vessel is a proper distance from the platform she will run out 2 mooring ropes (1 on each side) which will be secured to the platform ropes by mooring crew. These ropes will then be heaved on board in order to pull up the platform ropes which will be secured on the bitts of the forecastle. The platform mooring ropes comprised of nylon rope, chain and polypropylene rope and pelican hooks will be used as stoppers for the chains.

4 mooring lines (2 for each side) must be ready on the forecastle for joining before manoeuvring to the platform.

The refinery operator shall not fail to give to the deck officer on duty on the forecastle all requested information concerning mooring operations as well as API's installation. All winches and windlass must be in perfect working condition with sufficient power and ready to work during the whole of the vessel's stay at the API platform. A good mooring rope of sufficient length must be ready aft and passed to the supply vessel enabling her to assist the tanker from the end of mooring up to few seconds before unmooring. Mooring operations will be carried out by the crew, under the Master's responsibility and according to the Pilot's suggestions.

During the ship's stay at the platform, the crew and API personnel will keep a constant watch on the mooring ropes and the platform. During the night the forecastle and mooring ropes must be brightly lit.

Unmooring:

The unmooring operations, except during unfavourable weather conditions, are quite simple. As soon as the 2 hoses have been disconnected, it will be sufficient to let go the supply vessel, heave up, as quickly as possible, the stern rope, then let go the 2 platform ropes, and put the main engine astern (if necessary). Masters are warned that as soon as the hoses are disconnected the service of the supply vessel will no longer be required.

Hose Handling:

On arrival both derricks must be rigged and ready to lift up the maximum permissible weight.

Throughout the period of time when the hoses are hoisted up, connected, disconnected or lowered overboard, 1 deck officer and 1 Crew member are required to coordinate and operate the winches. Lifting, connecting, lowering and other handling of hoses will be performed by API's gang under the Receiver's representative control.

Discharging Operations:

The Receivers' representative will advise the Master on all matters concerning the discharging speed, manifold pressure, or eventual hazards, but will not direct the discharging operations except if it may be necessary to protect the facilities or any Receivers' properties or apparatus.

Pollution:

The Master is fully responsible and must ensure that no petroleum or other contaminated products are discharged, or spilled overboard.

During the vessel's stay at the API installation, all deck scuppers and all overside deck openings shall be securely closed and oiltight. All pipelines not in use, must be blanked off.

Drip-pans must be in place at all times under manifold connections. An adequate supply of sandbags, or other anti-pollution chemical products, must be available at all times for immediate use.

Under no circumstances shall bilge water, oil, waste, or contaminated products be discharged overboard.

The Receivers will take any action or steps necessary to clean up or remove the contamination of the sea and the terminal structures if any. The vessel and/or her Owner, will be responsible for all expenses and all damage in connection with the contamination.

Italian Authorities are very strict and severe about pollution. It is worthwhile to remind Masters of the eventual penal implications against them for pollution.

Safety:

During the vessel's stay at the API terminal a sufficient number of crew members must remain on board to be ready for any kind of emergency. Crew members going ashore are warned that in case of bad weather it might not be possible to return on board until weather conditions have improved.

All fire equipment and hoses must be, at all times in perfect working condition and ready for use. A number of portable fire extinguishers must always be ready by the discharging manifolds and the breathing apparatus must be ready by the pump rooms for immediate use.

Main Engine and Auxiliaries:

Should the main engine and/or auxiliaries be temporarily out of use, the discharging operations will immediately be stopped, and vessel unmoored, until everything is once again in order. In such a case all expenses, delays and/or all arising damages will be to the account of vessel and/or her Owner.

Tending Mooring:

A crew member must be stationed at the bow of the ship while the vessel is at the platform to keep a constant watch on the moorings.

During the hours of darkness moorings must be illuminated.

Winches:

During the stay of the vessel at the terminal all deck winches must be ready to operate.

Supervising Discharging Operations:

The receivers' personnel will remain on board for the whole time. A qualified deck officer must always be available. It is recommended that the duty officer always carries with him a portable VHF in order to keep close and constant contact with Receivers' representative.

Supervising Floating Hoses:

Whilst the vessel is secured to the platform a sharp lookout on floating hoses must be ordered by the Master. Every abnormal situation in this respect must be immediately notified to Receivers' representative.

Washing Floating Hoses:

When discharge is completed, if requested, the vessel will pump water for a few minutes before disconnecting hoses, in order to displace crude-oil from the floating-lines. The Receiver's representative will advise the Officer on duty about this manoeuvre as well as pumping time.

Communications Between Ship and Shore:

Normally communications between ship and shore are maintained by API's representative. Masters are kindly requested to authorise the use of vessel's VHF when requested.

Boilers:

Boiler tubes must not be blown whilst at anchor or secured to the API platform.

Garbage:

Garbage and refuse must not be thrown overboard while the vessel is at anchor or secured to the API platform.

Bunkers:

Weather permitting, bunkers can be supplied by barges. API can supply all grades of fuel oil, marine diesel, gasoil and all grades of API's marine lube oils.

For bunker requirements vessels must cable to Apioil – Falconara 72 hours before their arrival (holidays, Saturdays excepted) stating qualities and quantities required. (No limitations for supplying).

Fresh Water:

Available only by tugboats with favourable weather conditions, and to be requested through vessel's Agents.

IMPORTANT WARNING

All vessels with a draft up to 40 ft. scheduled for API platform but not duly equipped to operate thereat, will be moored, if possible, at API conventional berths. All expenses, time lost and/or damages arising from the above will be to account of and charged to vessel/owners.

Also see "Report" on pages 699 and 700.

BERTHING:

Berth No.	Location	Length (m.)	Depth alongside at distances from quay face		Max. size g.r.t.	Utilisation	Cranes
			Distance	Depth			
1	Clementino Mole	250	1 m. – 5 m. – 10 m. –	9.14 m. 9.44 m. 9.90 m.	75,000	Load/discharge Dry goods, lumber, coils, palletised cement.	2×6 tons 2×10–20 tons
2	Luigi Rizzo Mole	189	1 m. – 5 m. – 10 m. –	9.14 m. 9.30 m. 9.75 m.	35,000	Load/discharge Dry goods (phosphate, china clay, carbon etc.)	2 discharging platforms ×8 tons on rails and 1×12 tons (being renovated)
3	Luigi Rizzo Mole	116	1 m. –	9.14 m.	25,000	Loading/discharging General and containers	Mobile cranes of 6.3–20 tons 2×5 cu.m. grabs available.
4	Luigi Rizzo Mole	200	5 m. – 10 m. –	10.30 m. 10.36 m.	35,000	Loading/discharging Bulk commodities and general	2×6 tons
8	Near Shipyard	122	1 m. – 5 m. – 10 m. –	7.62 m. 8.70 m. 8.70 m.	10,000	Bulk goods	Mobile cranes of 6.3–20 tons
Head	At head of No. 8 Berth	47	1 m. –	7.62 m.	8,000	Containers, Passengers Lorries	—
9	South of No. 8	124	1 m. – 5 m. – 10 m. –	7.62 m. 9.14 m. 9.14 m.	10,000	Passenger vessels and Naval vessels	—
11	S. Maria Mole	147	1 m. – 5 m. – 10 m. –	7.92 m. 9.40 m. 9.14 m.	15,000	Passenger vessels	—
12	S. Maria Mole	75	1 m. – 5 m. – 10 m. –	7.92 m. 7.40 m. 7.31 m.	4,000	Passenger vessels	—
13	S. Maria Mole	155	1 m. – 5 m. – 10 m. –	9.00 m. 9.75 m. 10.70 m.	20,000	Passenger vessels and Customs warehouse	—
14	Calata della Republica	194	1 m. – 5 m. – 10 m. –	9.00 m. 9.00 m. 10.50 m.	25,000	Passenger vessels, General and timber	Mobile cranes 6.3–20 tons
15	Mole XXIX Sept. New Eastern container area (North side)	214	1 m. – 5 m. – 10 m. –	9.14 m. 9.80 m. 10.20 m.	35,000	Containers, heavy lifts, Timber	1 multi-purpose gantry crane 42 tons capacity. 2×20 ton capacity
16	New Eastern container area (South side)	120	1 m. – 5 m. – 10 m. –	7.92 m. 10.00 m. 11.40 m.	12,000	Containers	—
17	Giovanni Berth	60 (Usable)	1 m. –	7.00 m.	5,000	General	—
18	—	113	1 m. –	8.22 m.	10,000	Coastal and small vessels	—
19–20	South Breakwater	295	1 m. – 5 m. – 10 m. –	8.22 m. 10.10 m. 12.50 m.	75,000	Bulk discharge	2 suction plants each 2,000 t.p.h. Silos: 38 cells for cement and 4 cells for iron.
21	South Breakwater	141	1 m. – 5 m. – 10 m. –	8.54 m. 9.90 m. 12.50 m.	75,000	Loading/discharging of cereals	2 suction plants each with capacity of 125 t.p.h. on rails. Storage capacity 21,600 cu.m.
22	South Breakwater	195	1 m. – 5 m. – 10 m. –	9.30 m. 10.50 m. 12.00 m.	35,000	Loading/discharging cereals, loading/ discharging goods by hook	2×6 ton cranes 2 suction plants capacity 140 t.p.h. each.
—	Maraldi Landing Stage	220		6.5 m.	3,000	Discharging of cargo for company's plant	1×25 ton crane 1×15 ton crane
23	Nuova Darsena	263		10.8 m.	75,000	Containers, Timber, General	—
24	Nuova Darsena	150		10.8 m.	10,000	Containers, Timber, General	—
25	Nuova Darsena	258.5		10.8 m.	75,000	Containers, Timber, General	—

TANKERS: (continued)

Report: *Crude Oil Washing:*

To carry out crude oil washing operations (COW) the vessel must be fitted with the following equipment:

(a) An inert gas system capable of supplying gas containing not more than 5% oxygen to all cargo tanks during all discharging and washing operations. Such systems must be fitted with an automatic alarm signal which will operate if the oxygen content of the gas rises above 5%.

(b) A tank cleaning machine permanently installed in the cargo tanks and connected to the cargo/wash system by permanent steel piping.

(c) A remote reading tank gauging system to ensure that the liquid levels in the cargo tanks can be monitored at any time, without having to open any ullage ports.

(d) The tank cleaning lines must be completely separate and isolated from the fire fighting system.

The procedures to be followed are listed below:

1. Prior to vessel arrival at the discharge port, the following test will be carried out:

   All cargo discharge lines and wash system lines must prove to be tight and free of leaks. The test will be effected with crude oil, to a pressure ranging between 150 p.s.i. and 175 p.s.i.

   The main cargo pumps safety devices, i.e.: pump casing and bearing temperature gauges and high temperature alarms, pump overspeed trips, remote emergency stops, pump reverse rotation alarms, cargo pump trip for low inert gas pressure, must be tested and found fully operational.
2. All openings to all cargo tanks must be securely closed and the pressure/vacuum valves set in the operational position.
3. All in and out valves of sea water heater must be closed.

It has a minimum depth of water of 98 ft. at LWS. The platform, fixed on 6 steel piles sunk into the sea bottom is connected to the shore tanks by an underwater sea line 40 in. diameter.

On the platform there is a cardan joint from which 2 floating hoses 24 in. diameter depart and converge into a single line 24 in. diameter (average discharging rate 7,000 c.m.p.h.) at the top of which are connected 2 lines of 16 in. diameter that end with 2 conic hoses 16 in./12 in. diameter (Tanker MS-GI) for connection to the ship.

Each tail hose is fitted with a quick closing valve to prevent risk of pollution.

The platform has a diameter of 82 ft. and is fitted with special rubber fenders.

Platform Light:

Light: White – Code Letter: "U" – Height a.s.l.: 39 ft. Period: 15 sec.

Light Characteristics:

1) Light:	0.5 sec.	4) Eclipse:	1 sec.
2) Eclipse:	1 sec.	5) Light:	2 sec.
3) Light:	0.5 sec.	6) Eclipse:	10 sec.

Range: 6 miles

Foghorn: Code Letter "U" – Range: 3 miles.

Characteristics:

1) Blast:	1 sec.	4) Silence:	2 sec.
2) Silence:	2 sec.	5) Blast:	2 sec.
3) Blast:	1 sec.	6) Silence:	22 sec.

The platform is equipped with radar reflector.

Weather and Currents:

Weather is generally good from May to the end of September. During the Winter time bad weather prevails from N.E.

The N.E. wind commonly named "Bora" is the strongest and the most frequent. The Easterly sea, which does not occur often, is generally strong. The Westerly winds generally cause fog or mists which, particularly in Winter, is very thick.

For approximately 8 to 9 months of the year the current sets in a S.E. direction whilst for the rest of the year, it is running in opposite direction.

The strength of the S.E. current is variable from 2 to 3 knots, therefore, in consideration of these facts neither engine repairs nor engine maintenance are permitted during the time the vessel is secured to the API platform and the main engine must be on permanent standby and ready for manoeuvring.

Radio/VHF:

Vessels bound for Falconara must send their ETA to Apioil Falconara 72, 48 and 24 hours before their arrival.

In the last message the following information must be reported:

1) Maximum lifting capacity (s.w.l.) of derricks
2) Distance between bow and manifolds.
3) Diameter and type of manifolds flanges.
4) Whether the cargo tanks are equipped with inert gas system.

5/6 hours before arrival VHF contact can be established with the refinery maritime office on Channel 12.

Anchoring:

Vessels waiting for berth may anchor in a position approximately 1.5 miles Eastward off the platform. Ideal position for anchorage is:

Latitude: 43° 45′ 00″ North
Longitude: 13° 33′ 00″ East

or as otherwise instructed. Vessels are warned to anchor only in the recommended position because of the existence of submarine pipelines in other areas.

On Arrival:

The refinery operator, together with a gang of 4 skilled workers, will board the vessel before berthing to coordinate the discharging operations and they leave after completion of unmooring. Masters are therefore kindly requested to arrange for food and accommodation for the whole period of their stay aboard.

Mooring Operations:

Mooring operations will be undertaken with favourable weather conditions. The vessel shall proceed at a reasonable speed to the platform and generally shall start mooring by heading into the sea current or wind or swell.

As soon as the vessel is a proper distance from the platform she will run out 2 mooring ropes (1 on each side) which will be secured to the platform ropes by mooring crew. These ropes will then be heaved on board in order to pull up the platform ropes which will be secured on the bitts of the forecastle. The platform mooring ropes comprised of nylon rope, chain and polypropylene rope and pelican hooks will be used as stoppers for the chains.

4 mooring lines (2 for each side) must be ready on the forecastle for joining before manoeuvring to the platform.

The refinery operator shall not fail to give to the deck officer on duty on the forecastle all requested information concerning mooring operations as well as API's installation. All winches and windlass must be in perfect working condition with sufficient power and ready to work during the whole of the vessel's stay at the API platform. A good mooring rope of sufficient length must be ready aft and passed to the supply vessel enabling her to assist the tanker from the end of mooring up to few seconds before unmooring. Mooring operations will be carried out by the crew, under the Master's responsibility and according to the Pilot's suggestions.

During the ship's stay at the platform, the crew and API personnel will keep a constant watch on the mooring ropes and the platform. During the night the forecastle and mooring ropes must be brightly lit.

Unmooring:

The unmooring operations, except during unfavourable weather conditions, are quite simple. As soon as the 2 hoses have been disconnected, it will be sufficient to let go the supply vessel, heave up, as quickly as possible, the stern rope, then let go the 2 platform ropes, and put the main engine astern (if necessary). Masters are warned that as soon as the hoses are disconnected the service of the supply vessel will no longer be required.

Hose Handling:

On arrival both derricks must be rigged and ready to lift up the maximum permissible weight.

Throughout the period of time when the hoses are hoisted up, connected, disconnected or lowered overboard, 1 deck officer and 1 Crew member are required to coordinate and operate the winches. Lifting, connecting, lowering and other handling of hoses will be performed by API's gang under the Receiver's representative control.

Discharging Operations:

The Receivers' representative will advise the Master on all matters concerning the discharging speed, manifold pressure, or eventual hazards, but will not direct the discharging operations except if it may be necessary to protect the facilities or any Receivers' properties or apparatus.

Pollution:

The Master is fully responsible and must ensure that no petroleum or other contaminated products are discharged, or spilled overboard.

During the vessel's stay at the API installation, all deck scuppers and all overside deck openings shall be securely closed and oiltight. All pipelines not in use, must be blanked off.

Drip-pans must be in place at all times under manifold connections. An adequate supply of sandbags, or other anti-pollution chemical products, must be available at all times for immediate use.

Under no circumstances shall bilge water, oil, waste, or contaminated products be discharged overboard.

The Receivers will take any action or steps necessary to clean up or remove the contamination of the sea and the terminal structures if any. The vessel and/or her Owner, will be responsible for all expenses and all damage in connection with the contamination.

Italian Authorities are very strict and severe about pollution. It is worthwhile to remind Masters of the eventual penal implications against them for pollution.

Safety:

During the vessel's stay at the API terminal a sufficient number of crew members must remain on board to be ready for any kind of emergency. Crew members going ashore are warned that in case of bad weather it might not be possible to return on board until weather conditions have improved.

All fire equipment and hoses must be, at all times in perfect working condition and ready for use. A number of portable fire extinguishers must always be ready by the discharging manifolds and the breathing apparatus must be ready by the pump rooms for immediate use.

Main Engine and Auxiliaries:

Should the main engine and/or auxiliaries be temporarily out of use, the discharging operations will immediately be stopped, and vessel unmoored, until everything is once again in order. In such a case all expenses, delays and/or all arising damages will be to the account of vessel and/or her Owner.

Tending Mooring:

A crew member must be stationed at the bow of the ship while the vessel is at the platform to keep a constant watch on the moorings.

During the hours of darkness moorings must be illuminated.

Winches:

During the stay of the vessel at the terminal all deck winches must be ready to operate.

Supervising Discharging Operations:

The receivers' personnel will remain on board for the whole time. A qualified deck officer must always be available. It is recommended that the duty officer always carries with him a portable VHF in order to keep close and constant contact with Receivers' representative.

Supervising Floating Hoses:

Whilst the vessel is secured to the platform a sharp lookout on floating hoses must be ordered by the Master. Every abnormal situation in this respect must be immediately notified to Receivers' representative.

Washing Floating Hoses:

When discharge is completed, if requested, the vessel will pump water for a few minutes before disconnecting hoses, in order to displace crude-oil from the floating-lines. The Receiver's representative will advise the Officer on duty about this manoeuvre as well as pumping time.

Communications Between Ship and Shore:

Normally communications between ship and shore are maintained by API's representative. Masters are kindly requested to authorise the use of vessel's VHF when requested.

Boilers:

Boiler tubes must not be blown whilst at anchor or secured to the API platform.

Garbage:

Garbage and refuse must not be thrown overboard while the vessel is at anchor or secured to the API platform.

Bunkers:

Weather permitting, bunkers can be supplied by barges. API can supply all grades of fuel oil, marine diesel, gasoil and all grades of API's marine lube oils.

For bunker requirements vessels must cable to Apioil – Falconara 72 hours before their arrival (holidays, Saturdays excepted) stating qualities and quantities required. (No limitations for supplying).

Fresh Water:

Available only by tugboats with favourable weather conditions, and to be requested through vessel's Agents.

IMPORTANT WARNING

All vessels with a draft up to 40 ft. scheduled for API platform but not duly equipped to operate thereat, will be moored, if possible, at API conventional berths. All expenses, time lost and/or damages arising from the above will be to account of and charged to vessel/owners.

Also see "Report" on pages 699 and 700.

BERTHING:

Berth No.	Location	Length (m.)	Depth alongside at distances from quay face		Max. size g.r.t.	Utilisation	Cranes
			Distance	Depth			
1	Clementino Mole	250	1 m. – 5 m. – 10 m. –	9.14 m. 9.44 m. 9.90 m.	75,000	Load/discharge Dry goods, lumber, coils, palletised cement.	2×6 tons 2×10–20 tons
2	Luigi Rizzo Mole	189	1 m. – 5 m. – 10 m. –	9.14 m. 9.30 m. 9.75 m.	35,000	Load/discharge Dry goods (phosphate, china clay, carbon etc.)	2 discharging platforms ×8 tons on rails and 1×12 tons (being renovated)
3	Luigi Rizzo Mole	116	1 m. –	9.14 m.	25,000	Loading/discharging General and containers	Mobile cranes of 6.3–20 tons 2×5 cu.m. grabs available.
4	Luigi Rizzo Mole	200	5 m. – 10 m. –	10.30 m. 10.36 m.	35,000	Loading/discharging Bulk commodities and general	2×6 tons
8	Near Shipyard	122	1 m. – 5 m. – 10 m. –	7.62 m. 8.70 m. 8.70 m.	10,000	Bulk goods	Mobile cranes of 6.3–20 tons
Head	At head of No. 8 Berth	47	1 m. –	7.62 m.	8,000	Containers, Passengers Lorries	—
9	South of No. 8	124	1 m. – 5 m. – 10 m. –	7.62 m. 9.14 m. 9.14 m.	10,000	Passenger vessels and Naval vessels	—
11	S. Maria Mole	147	1 m. – 5 m. – 10 m. –	7.92 m. 9.40 m. 9.14 m.	15,000	Passenger vessels	—
12	S. Maria Mole	75	1 m. – 5 m. – 10 m. –	7.92 m. 7.40 m. 7.31 m.	4,000	Passenger vessels	—
13	S. Maria Mole	155	1 m. – 5 m. – 10 m. –	9.00 m. 9.75 m. 10.70 m.	20,000	Passenger vessels and Customs warehouse	—
14	Calata della Republica	194	1 m. – 5 m. – 10 m. –	9.00 m. 9.00 m. 10.50 m.	25,000	Passenger vessels, General and timber	Mobile cranes 6.3–20 tons
15	Mole XXIX Sept. New Eastern container area (North side)	214	1 m. – 5 m. – 10 m. –	9.14 m. 9.80 m. 10.20 m.	35,000	Containers, heavy lifts, Timber	1 multi-purpose gantry crane 42 tons capacity. 2×20 ton capacity
16	New Eastern container area (South side)	120	1 m. – 5 m. – 10 m. –	7.92 m. 10.00 m. 11.40 m.	12,000	Containers	—
17	Giovanni Berth	60 (Usable)	1 m. –	7.00 m.	5,000	General	—
18	—	113	1 m. –	8.22 m.	10,000	Coastal and small vessels	—
19–20	South Breakwater	295	1 m. – 5 m. – 10 m. –	8.22 m. 10.10 m. 12.50 m.	75,000	Bulk discharge	2 suction plants each 2,000 t.p.h. Silos: 38 cells for cement and 4 cells for iron.
21	South Breakwater	141	1 m. – 5 m. – 10 m. –	8.54 m. 9.90 m. 12.50 m.	75,000	Loading/discharging of cereals	2 suction plants each with capacity of 125 t.p.h. on rails. Storage capacity 21,600 cu.m.
22	South Breakwater	195	1 m. – 5 m. – 10 m. –	9.30 m. 10.50 m. 12.00 m.	35,000	Loading/discharging cereals, loading/discharging goods by hook	2×6 ton cranes 2 suction plants capacity 140 t.p.h. each.
—	Maraldi Landing Stage	220		6.5 m.	3,000	Discharging of cargo for company's plant	1×25 ton crane 1×15 ton crane
23	Nuova Darsena	263		10.8 m.	75,000	Containers, Timber, General	—
24	Nuova Darsena	150		10.8 m.	10,000	Containers, Timber, General	—
25	Nuova Darsena	258.5		10.8 m.	75,000	Containers, Timber, General	—

TANKERS: (continued)

Report: *Crude Oil Washing:*

To carry out crude oil washing operations (COW) the vessel must be fitted with the following equipment:

(a) An inert gas system capable of supplying gas containing not more than 5% oxygen to all cargo tanks during all discharging and washing operations. Such systems must be fitted with an automatic alarm signal which will operate if the oxygen content of the gas rises above 5%.

(b) A tank cleaning machine permanently installed in the cargo tanks and connected to the cargo/wash system by permanent steel piping.

(c) A remote reading tank gauging system to ensure that the liquid levels in the cargo tanks can be monitored at any time, without having to open any ullage ports.

(d) The tank cleaning lines must be completely separate and isolated from the fire fighting system.

The procedures to be followed are listed below:

1. Prior to vessel arrival at the discharge port, the following test will be carried out:

   All cargo discharge lines and wash system lines must prove to be tight and free of leaks. The test will be effected with crude oil, to a pressure ranging between 150 p.s.i. and 175 p.s.i.

   The main cargo pumps safety devices, i.e.: pump casing and bearing temperature gauges and high temperature alarms, pump overspeed trips, remote emergency stops, pump reverse rotation alarms, cargo pump trip for low inert gas pressure, must be tested and found fully operational.
2. All openings to all cargo tanks must be securely closed and the pressure/vacuum valves set in the operational position.
3. All in and out valves of sea water heater must be closed.

It has a minimum depth of water of 98 ft. at LWS. The platform, fixed on 6 steel piles sunk into the sea bottom is connected to the shore tanks by an underwater sea line 40 in. diameter.

On the platform there is a cardan joint from which 2 floating hoses 24 in. diameter depart and converge into a single line 24 in. diameter (average discharging rate 7,000 c.m.p.h.) at the top of which are connected 2 lines of 16 in. diameter that end with 2 conic hoses 16 in./12 in. diameter (Tanker MS-GI) for connection to the ship.

Each tail hose is fitted with a quick closing valve to prevent risk of pollution.

The platform has a diameter of 82 ft. and is fitted with special rubber fenders.

Platform Light:

Light: White – Code Letter: "U" – Height a.s.l.: 39 ft. Period: 15 sec.

Light Characteristics:

1) Light: 0.5 sec.
2) Eclipse: 1 sec.
3) Light: 0.5 sec.
4) Eclipse: 1 sec.
5) Light: 2 sec.
6) Eclipse: 10 sec.

Range: 6 miles

Foghorn: Code Letter "U" – Range: 3 miles.

Characteristics:

1) Blast: 1 sec.
2) Silence: 2 sec.
3) Blast: 1 sec.
4) Silence: 2 sec.
5) Blast: 2 sec.
6) Silence: 22 sec.

The platform is equipped with radar reflector.

Weather and Currents:

Weather is generally good from May to the end of September. During the Winter time bad weather prevails from N.E.

The N.E. wind commonly named "Bora" is the strongest and the most frequent. The Easterly sea, which does not occur often, is generally strong. The Westerly winds generally cause fog or mists which, particularly in Winter, is very thick.

For approximately 8 to 9 months of the year the current sets in a S.E. direction whilst for the rest of the year, it is running in opposite direction.

The strength of the S.E. current is variable from 2 to 3 knots, therefore, in consideration of these facts neither engine repairs nor engine maintenance are permitted during the time the vessel is secured to the API platform and the main engine must be on permanent standby and ready for manoeuvring.

Radio/VHF:

Vessels bound for Falconara must send their ETA to Apioil – Falconara 72, 48 and 24 hours before their arrival.

In the last message the following information must be reported:

1) Maximum lifting capacity (s.w.l.) of derricks
2) Distance between bow and manifolds.
3) Diameter and type of manifolds flanges.
4) Whether the cargo tanks are equipped with inert gas system.

5/6 hours before arrival VHF contact can be established with the refinery maritime office on Channel 12.

Anchoring:

Vessels waiting for berth may anchor in a position approximately 1.5 miles Eastward off the platform. Ideal position for anchorage is:

Latitude: 43° 45′ 00″ North
Longitude: 13° 33′ 00″ East

or as otherwise instructed. Vessels are warned to anchor only in the recommended position because of the existence of submarine pipelines in other areas.

On Arrival:

The refinery operator, together with a gang of 4 skilled workers, will board the vessel before berthing to coordinate the discharging operations and they leave after completion of unmooring. Masters are therefore kindly requested to arrange for food and accommodation for the whole period of their stay aboard.

Mooring Operations:

Mooring operations will be undertaken with favourable weather conditions. The vessel shall proceed at a reasonable speed to the platform and generally shall start mooring by heading into the sea current or wind or swell.

As soon as the vessel is a proper distance from the platform she will run out 2 mooring ropes (1 on each side) which will be secured to the platform ropes by mooring crew. These ropes will then be heaved on board in order to pull up the platform ropes which will be secured on the bitts of the forecastle. The platform mooring ropes comprised of nylon rope, chain and polypropylene rope and pelican hooks will be used as stoppers for the chains.

4 mooring lines (2 for each side) must be ready on the forecastle for joining before manoeuvring to the platform.

The refinery operator shall not fail to give to the deck officer on duty on the forecastle all requested information concerning mooring operations as well as API's installation. All winches and windlass must be in perfect working condition with sufficient power and ready to work during the whole of the vessel's stay at the API platform. A good mooring rope of sufficient length must be ready aft and passed to the supply vessel enabling her to assist the tanker from the end of mooring up to few seconds before unmooring. Mooring operations will be carried out by the crew, under the Master's responsibility and according to the Pilot's suggestions.

During the ship's stay at the platform, the crew and API personnel will keep a constant watch on the mooring ropes and the platform. During the night the forecastle and mooring ropes must be brightly lit.

Unmooring:

The unmooring operations, except during unfavourable weather conditions, are quite simple. As soon as the 2 hoses have been disconnected, it will be sufficient to let go the supply vessel, heave up, as quickly as possible, the stern rope, then let go the 2 platform ropes, and put the main engine astern (if necessary). Masters are warned that as soon as the hoses are disconnected the service of the supply vessel will no longer be required.

Hose Handling:

On arrival both derricks must be rigged and ready to lift up the maximum permissible weight.

Throughout the period of time when the hoses are hoisted up, connected, disconnected or lowered overboard, 1 deck officer and 1 Crew member are required to coordinate and operate the winches. Lifting, connecting, lowering and other handling of hoses will be performed by API's gang under the Receiver's representative control.

Discharging Operations:

The Receivers' representative will advise the Master on all matters concerning the discharging speed, manifold pressure, or eventual hazards, but will not direct the discharging operations except if it may be necessary to protect the facilities or any Receivers' properties or apparatus.

Pollution:

The Master is fully responsible and must ensure that no petroleum or other contaminated products are discharged, or spilled overboard.

During the vessel's stay at the API installation, all deck scuppers and all overside deck openings shall be securely closed and oiltight. All pipelines not in use, must be blanked off.

Drip-pans must be in place at all times under manifold connections. An adequate supply of sandbags, or other anti-pollution chemical products, must be available at all times for immediate use.

Under no circumstances shall bilge water, oil, waste, or contaminated products be discharged overboard.

The Receivers will take any action or steps necessary to clean up or remove the contamination of the sea and the terminal structures if any. The vessel and/or her Owner, will be responsible for all expenses and all damage in connection with the contamination.

Italian Authorities are very strict and severe about pollution. It is worthwhile to remind Masters of the eventual penal implications against them for pollution.

Safety:

During the vessel's stay at the API terminal a sufficient number of crew members must remain on board to be ready for any kind of emergency. Crew members going ashore are warned that in case of bad weather it might not be possible to return on board until weather conditions have improved.

All fire equipment and hoses must be, at all times in perfect working condition and ready for use. A number of portable fire extinguishers must always be ready by the discharging manifolds and the breathing apparatus must be ready by the pump rooms for immediate use.

Main Engine and Auxiliaries:

Should the main engine and/or auxiliaries be temporarily out of use, the discharging operations will immediately be stopped, and vessel unmoored, until everything is once again in order. In such a case all expenses, delays and/or all arising damages will be to the account of vessel and/or her Owner.

Tending Mooring:

A crew member must be stationed at the bow of the ship while the vessel is at the platform to keep a constant watch on the moorings.

During the hours of darkness moorings must be illuminated.

Winches:

During the stay of the vessel at the terminal all deck winches must be ready to operate.

Supervising Discharging Operations:

The receivers' personnel will remain on board for the whole time. A qualified deck officer must always be available. It is recommended that the duty officer always carries with him a portable VHF in order to keep close and constant contact with Receivers' representative.

Supervising Floating Hoses:

Whilst the vessel is secured to the platform a sharp lookout on floating hoses must be ordered by the Master. Every abnormal situation in this respect must be immediately notified to Receivers' representative.

Washing Floating Hoses:

When discharge is completed, if requested, the vessel will pump water for a few minutes before disconnecting hoses, in order to displace crude-oil from the floating-lines. The Receiver's representative will advise the Officer on duty about this manoeuvre as well as pumping time.

Communications Between Ship and Shore:

Normally communications between ship and shore are maintained by API's representative. Masters are kindly requested to authorise the use of vessel's VHF when requested.

Boilers:

Boiler tubes must not be blown whilst at anchor or secured to the API platform.

Garbage:

Garbage and refuse must not be thrown overboard while the vessel is at anchor or secured to the API platform.

Bunkers:

Weather permitting, bunkers can be supplied by barges. API can supply all grades of fuel oil, marine diesel, gasoil and all grades of API's marine lube oils.

For bunker requirements vessels must cable to Apioil – Falconara 72 hours before their arrival (holidays, Saturdays excepted) stating qualities and quantities required. (No limitations for supplying).

Fresh Water:

Available only by tugboats with favourable weather conditions, and to be requested through vessel's Agents.

IMPORTANT WARNING

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BERTHING:

Berth No.	Location	Length (m.)	Depth alongside at distances from quay face: Distance	Depth	Max. size g.r.t.	Utilisation	Cranes
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2	Luigi Rizzo Mole	189	1 m. 5 m. 10 m.	9.14 m. 9.30 m. 9.75 m.	35,000	Load/discharge Dry goods (phosphate, china clay, carbon etc.)	2 discharging platforms ×8 tons on rails and 1×12 tons (being renovated)
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Head	At head of No. 8 Berth	47	1 m.	7.62 m.	8,000	Containers, Passengers Lorries	—
9	South of No. 8	124	1 m. 5 m. 10 m.	7.62 m. 9.14 m. 9.14 m.	10,000	Passenger vessels and Naval vessels	—
11	S. Maria Mole	147	1 m. 5 m. 10 m.	7.92 m. 9.40 m. 9.14 m.	15,000	Passenger vessels	—
12	S. Maria Mole	75	1 m. 5 m. 10 m.	7.92 m. 7.40 m. 7.31 m.	4,000	Passenger vessels	—
13	S. Maria Mole	155	1 m. 5 m. 10 m.	9.00 m. 9.75 m. 10.70 m.	20,000	Passenger vessels and Customs warehouse	—
14	Calata della Repubblica	194	1 m. 5 m. 10 m.	9.00 m. 9.00 m. 10.50 m.	25,000	Passenger vessels, General and timber	Mobile cranes 6.3–20 tons
15	Mole XXIX Sept. New Eastern container area (North side)	214	1 m. 5 m. 10 m.	9.14 m. 9.80 m. 10.20 m.	35,000	Containers, heavy lifts, Timber	1 multi-purpose gantry crane 42 tons capacity. 2×20 ton capacity
16	New Eastern container area (South side)	120	1 m. 5 m. 10 m.	7.92 m. 10.00 m. 11.40 m.	12,000	Containers	—
17	Giovanni Berth	60 (Usable)	1 m.	7.00 m.	5,000	General	
18	—	113	1 m.	8.22 m.	10,000	Coastal and small vessels	
19–20	South Breakwater	295	1 m. 5 m. 10 m.	8.22 m. 10.10 m. 12.50 m.	75,000	Bulk discharge	2 suction plants each 2,000 t.p.h. Silos: 38 cells for cement and 4 cells for iron.
21	South Breakwater	141	1 m. 5 m. 10 m.	8.54 m. 9.90 m. 12.50 m.	75,000	Loading/discharging of cereals	2 suction plants each with capacity of 125 t.p.h. on rails. Storage capacity 21,600 cu.m.
22	South Breakwater	195	1 m. 5 m. 10 m.	9.30 m. 10.50 m. 12.00 m.	35,000	Loading/discharging cereals, loading/discharging goods by hook	2×6 ton cranes 2 suction plants capacity 140 t.p.h. each.
—	Maraldi Landing Stage	220		6.5 m.	3,000	Discharging of cargo for company's plant	1×25 ton crane 1×15 ton crane
23	Nuova Darsena	263		10.8 m.	75,000	Containers, Timber, General	—
24	Nuova Darsena	150		10.8 m.	10,000	Containers, Timber, General	—
25	Nuova Darsena	258.5		10.8 m.	75,000	Containers, Timber, General	—

TANKERS: (continued)

Report: *Crude Oil Washing:*

To carry out crude oil washing operations (COW) the vessel must be fitted with the following equipment:

(a) An inert gas system capable of supplying gas containing not more than 5% oxygen to all cargo tanks during all discharging and washing operations. Such systems must be fitted with an automatic alarm signal which will operate if the oxygen content of the gas rises above 5%.

(b) A tank cleaning machine permanently installed in the cargo tanks and connected to the cargo/wash system by permanent steel piping.

(c) A remote reading tank gauging system to ensure that the liquid levels in the cargo tanks can be monitored at any time, without having to open any ullage ports.

(d) The tank cleaning lines must be completely separate and isolated from the fire fighting system.

The procedures to be followed are listed below:

1. Prior to vessel arrival at the discharge port, the following test will be carried out:

   All cargo discharge lines and wash system lines must prove to be tight and free of leaks. The test will be effected with crude oil, to a pressure ranging between 150 p.s.i. and 175 p.s.i.

   The main cargo pumps safety devices, i.e.: pump casing and bearing temperature gauges and high temperature alarms, pump overspeed trips, remote emergency stops, pump reverse rotation alarms, cargo pump trip for low inert gas pressure, must be tested and found fully operational.
2. All openings to all cargo tanks must be securely closed and the pressure/vacuum valves set in the operational position.
3. All in and out valves of sea water heater must be closed.

Report: (continued)

4. The crude supply for the washing system will be secured directly from the main discharge lines or from separate tank cleaning lines connected directly to the main cargo pumps.

   The pressure used for "COW" will be 140 p.s.i. maximum. In the case of vessels equipped with washing system supply coming direct from the main discharge lines, such back pressure of 140 p.s.i. will be achieved by closing down completely on manifold valve or two manifold valves, if necessary.

   In the case of vessels equipped with a separate tank cleaning line, the 140 p.s.i. back pressure will be achieved by controlling the main cargo pump revolutions and it will not be necessary to close any manifold valves.

   Whichever manifold is used the shore hoses, or hard arms, will not be pressurised for crude washing purposes.

5. Before commencing crude washing any tank, the oxygen content of the inert gas supply must be checked and must not be more than 5%. In addition the atmosphere in the tank to be washed must be checked and must not be more than 5%.

   The inert gas system must be capable of supplying positive pressure to all cargo tanks during all discharging and crude washing operations. In the event that pressure in the cargo tanks falls to 4 in. W.G. the system will automatically stop all cargo pumps. Before crude washing each tank, its pressure must be checked and must not be lower than 20 in. W.G.

6. The tanks will be washed in two stages:

   Top Wash: When the level in the tank is down to 15 ft. innage the top two/thirds of the tank will be washed, using all machines in the tank simultaneously, on a pressure of max. 140 p.s.i. The washing pattern will be from 40° to 120° elevations. During top washing the tank will continue to be pumped out on the main cargo pumps.

   Bottom Wash: The top wash cycle will normally be completed when the tank is draining out on the main cargo pumps. The washing machines will be stopped and reset to the bottom wash pattern (from 0° to 40° elevation). The tank main suction will be closed and the stripping suction opened.

   When the tank is dry, bottom washing will commence using a maximum of four machines in the tank to ensure good drainage throughout the bottom wash cycles.

   On completion of the bottom wash cycles, the machines will be stopped and the cargo system will revert to normal discharge operations.

7. The whole "COW" operation will be carried out under the direct supervision of a responsible Officer well acquainted with "COW" and tank cleaning, who will be assigned to this supervision task by the Master.

   The necessary personnel will be put at the disposal of the responsible Officer by the Master, to carry out "COW" operations and, in particular, one man equipped with VHF radio will be stationed at the manifold throughout discharge operations.

   Before commencing "COW", the responsible Officer supervising the operation will discuss, in detail, the whole operation with Receivers' Representative and will carefully observe any provisions issued by Port Authorities and by Receivers in relation to "COW".

   If during "COW" operations the Master and/or the responsible Officer judge, at any time, that the operational conditions do not ensure total safety, all "COW" operations will be stopped at once.

DENSITY: The average salinity of the water in the port of Ancona is 17.5 gr. per litre of chloride.

FRESH WATER: Along all the quays are numerous supply points with rates varying from 15 to 25 t.p.h. Vessels in the roads can be supplied with drinking water via the port tugs.

FUEL: Vessels moored at berths can be supplied by tanker barge. The supplier is S.P.A. API from their marine refinery at Falconara.

Requests for bunkers must be submitted to that company, via the ship's Agent at least 24 hours in advance, Saturdays and holidays excepted. The company's telephone number is 910901. Any type of product can be supplied.

FIRE FIGHTING FACILITIES: Apart from the water hydrants along the quays, which, if need be, can be used for coupling to hoses for fire fighting purposes, the port of Ancona has a fire brigade equipped with fire engine, together with other means on land and water.

The fire brigade is near the marine station at Berth No. 13. Apart from facilities on land, there are 2 craft available, one of which is highly sophisticated. Telephone: 201715.

If necessary, at very short notice, the town fire brigade can be called to the scene, their equipment consists of a fire engine with pumps and ladders and other modern means of efficient fire fighting. Telephone: 22222.

In port, there are the following maritime means for combating fires:

a) A motor launch of the port captaincy with fire fighting hoses and also the ability to spray foam.

b) 2 motor barges with pumping facility operated by the port fire brigade, having the following characteristics:

Vessel "VV.F.207" – speed 11 knots, equipped with 2 fire fighting pumps each capable of delivering 6,000 litres per min. at a pressure of 10 atmospheres and driven by 2 Fiat Aifo 260 h.p. engines each; 2 liquid foam pumps; 2 foam projectors; 2 foam tanks with a total capacity of 5,800 litres; 20 delivery pipes with 70 UNI unions, 400 m. overall; 16 delivery pipes with 45 UNI unions, 220 m. overall; 1 comet portable projector, 2 fixed foam projectors; 16 UNI 70 hose attachment points; 2 UNI 150 ditto; 2 double tube cannons for mixed usage (water and foam); 1 electrical compressor giving 5 atm. pressure; 2×500 watt projectors of which 1 is portable with 100 m. of cable; 1 retransmitter apparatus attached exclusively to the apparatus operated by the fire brigade.

6 port tugs having the following characteristics:

Tugs "Luisella and Tiziana" – TSL 485 – speed 14 knots – equipped with 2 exhaust pumps in the deck on starboard and port sides; regulation fire fighting equipment; 2 motor driven pumps; for internal use 2 pumps connectable to those on deck; international attachments and points; equipped with radar, radio and echo sounder.

Tug "Katria Prima" – TSL 140 – speed 12.5 knots – equipped with 1 monitor; 4×45 mm. swivel guns; thermo-mechanical electric pump of 60 t.p.h. capacity; foam tank – fitted with radar; radio; echo sounder.

Tug "Luisa Davanzali" – TSL 238 – speed 12.5 knots; equipped with 1×30 t.p.h. fire fighting pump; 2 exhauster pumps of 50 t.p.h. and 1 of 200 t.p.h. capacity; radar, radio, echo sounder, gyroscopic compass.

Tug "Cesare Davanzali" – TSL 364 – speed 14 knots – equipped with 2 electrical pumps of 200 cbm/hr. capacity for delivery purposes and capable of attachment to Minimax equipment for fire fighting purposes using foam with 2 cannon type projectors; in the deck are 14 points for attachment of hoses; 2×1000 kW. adjustable projectors; 1 motor compressor of the low pressure type working at a pressure of 8 atm.; equipped with radar, radio, echo sounder.

Tug "Nuovo Ancona" – TSL 148 – engine power 1,014 h.p. equipped with 2 fixed exhauster pumps of total capacity of 500 t.p.h. driven by 2×40 h.p. electric motors; 2 fixed fire fighting pumps, of capacity of 250 t.p.h. total, driven by 2×40 h.p. electric motors; equipped with foam plant and projector; fire fighting pipes have 4 points with 70 mm. unions; 1 portable exhauster pump of about 150 t.p.h. capacity – speed 12 knots – equipped with diving equipment – radio.

CONSULS:

Swedish Consul: Tel. 202223.
French Consular Agency: Tel. 22879.
Dutch Consul: Tel. 22614.
Danish Consulate: Tel. 202223.

REPAIRS: It is possible to effect repairs of all types at yards within the port, and at the large electrical and mechanical repair undertakings in the town.

Cantieri Navali Riuniti (for large construction). Tel: 5951.
Cantiere Morini (also has available a floating dock for vessels up to 1,000 g.r.t. and slipways). Tel: 202224.
Cantiere Castracani (slipway). Tel: 55663.
Cantiere Riparazioni Navali (pleasure craft). Tel: 204323.
Cantiere Tecno-Matic (fibreglass units). Tel: 53643.
Cooperativa Metallurgica G. Tomassi (only for steel vessels). Tel: 204303.
Ditta EL.ME.A. (marine electrical equipment). Tel: 29409.
Ditta Schiavoni (marine electrical equipment). Tel: 55731.

DRY DOCKS: There is only one small floating dock in which it is possible to carry out repairs to vessels up to 1,000 g.r.t. The dock is owned by Cantieri Navali Morini. Tel: 204303.

SURVEYORS: In Ancona the Registro Italiano Navale has a town office at via Marsala No. 8. Tel: 202204. R.I.N. acts for the following foreign classification bodies. Germanischer Lloyd. Nippon Kaiji Kyokai. Jugoslavinski Registar Brodova. Register of Shipping of the U.S.S.R.

GANGWAY/DECK WATCHMEN: This service is advisable but not compulsory. In Ancona is a security firm "Istituto di Vigilanza Urbana e Campestre" di Dattilo Salvatore. Tel: 201784.

HATCHES: Hatches are opened by the crew where they are of the automatic type, and by the port labour force where they are of the conventional type. Hatches are re-closed in the event of rain.

CUSTOMS ALLOWANCES: On arrival in port, all goods under Customs exemption must be placed under seal. At the completion of Customs inspection, the Master may request the Customs officers permission to supply the following goods:

50 cigarettes for each Crew member.
1 kg. of salt for every 50 persons.
50 grams of sugar per person per day.
15 grams of coffee per person per day.

Liquor – small quantities to be agreed with the Customs officials according to the time of year.

REPATRIATION: It is possible to effect exchange of foreign Crew members on board foreign vessels since there is in the port an office of the Frontier Police.

For repatriation purposes, the following travel connections are available:

Train: Via the Ancona/Bologna/Rome line; via the Ancona to Rome direct line and via the Ancona/Pescara/Bari line.

Air: Departures from the Falconara Marittima Airport which is 10 km. from the port and reached by bus. There is a daily departure to Milan and 1 to Pescara.

Sea: the following lines are available:

From 1st January – 31st December, Wednesdays (1330 hrs.) and Saturdays (2200 hrs.) to Patras by Greek vessel "Mediterranean Sea". From 1st October – 30th May, Mondays (0900 hrs.) Tuesdays (0030 hrs.) and Fridays (1700 hrs.) to Zara and Spalato by Italian vessel "Tintoretto". From 1st June – 30th September daily departure to Zara by Jugoslav vessel "Illirija". From 1st June – 30th September every Thursday (1300 hrs.) and Sundays (2200 hrs.) to Patras by vessel "Mediterranean Sky". From 1st June – 30th September every Saturday (2200 hrs.) per Panamanian vessel "Neptunia" to Patras, Corfu and Haifa. From 1st June – 30th September every Tuesday (2200 hrs.) to Patras per Greek vessel "Patris". From 1st June – 30th September every Wednesday (1300 hrs.) and Saturday (2200 hrs.) departures to Patras and Higoumenitza by Greek vessel "Ionian Star". From 1st June – 30th September every Tuesday (1700 hrs.) departures to Dubrovnik by Italian vessel "Tintoretto".

TIME: GMT plus 1 hour. From 29th March to 26th September, GMT plus 2 hours.

HOLIDAYS: Every Sunday, 1st January (New Year); the Monday after Easter; 25th April (Liberation); 1st May (Labour Day); 4th May (Town's Patron Saint's Day); 15th August (Assumption); 1st November (All Saints); 8th December (Immaculate Conception); 25th December (Christmas); 26th December (St. Stephen's).

Work is possible on all these days, but at an increased rate.

POLICE/AMBULANCE/FIRE: Port Police 201030. Town Police 202860. Yellow Cross Ambulance 55622. Red Cross Ambulance 22680. Port Fire Brigade 201715. Town Fire Brigade 22222.
TELEPHONES: It is not possible to connect telephone lines on board vessels. In the port there are numerous telephone boxes for national and local communications and where it is possible to telephone to any part of the world.
SERVICES: The following special services are available in Ancona:
Tank washing at Falconara Marittima by the "crude oil washing" system, compass adjusting, repairs to radar or other electronic instruments on board and underwater work.
SHORE LEAVE: Foreign Crew members may go ashore from 0800 until 0200 hrs. the next morning provided they have a pass stamped by the Port Police. Beyond 0200 hrs. a special permit from the police is necessary to allow an overnight stay outside the port area.
SPECIAL REGULATIONS: Vessels of draft greater than 30 ft. mooring at berths on the South mole are secured a short distance off the quay by means of dolphins.
DELAYS: No delays.
DEVELOPMENTS: There is in hand the development of new zones for Cantieri Navali Riuniti in the stretch of sea behind the North breakwater. In that area will be built a construction basin for supertankers.
AUTHORITY: Capitaneria di Porto Ancona, Banchina N. Sauro 12, 60100 Ancona, Italy. *Tel:* 071-51697. *Cables:* Compamare Ancona. *Contact:* Mario Depalo, Il Commandante.

ARBATAX, Sardinia: 39.57 N. 09.42 E. (See Plan Book)

SHIPMASTER'S REPORT: September 1980.

PORT LIMITS: A vessel is considered to have "arrived" when she anchors in the roads 5 – 7 cables Northwards of the light of East Breakwater. Pilot leads vessel to the place for anchoring and also delivers on board all local documents and forms for completing for arrival clearance.
PILOTAGE: Not compulsory, but only available in daytime for entering. On leaving port the Pilot is available day and night. VHF Channel 16. Pilot boat black hull, about 6 m. in length, white house, on which is painted "Pilotti"; vessel awaits the Pilot 5 – 7 cables Northward of the light of East Breakwater between breakwaters and Isola D'Oliastra Islet, depth on roadstead from 10 to 30 m., good holding ground.
MAX. SIZE: Vessels of 200 m. length and max. draft 25 ft. 00 in. have entered.
HEALTH: Free Pratique may be requested by radio to "Sanimare Arbatax" between 12 to 6 hours prior to arrival, advising vessel's name, nationality, last port, number of crew and passengers and state of health on board. If from another Italian port Free Pratique is granted automatically.
TUGS: One tug with sufficient power for assisting in manoeuvres is available, ship's lines used. Tug takes lines in the roads and accompanies vessel to the port. Prior to mooring vessel drops anchor with about 3 shackles, tug turns the stern of the ship towards the pier, after which the ropes from fore and aft are transported and secured on the pier, tug pushes vessel alongside the pier on the port-side. The chain is slackened until 5-6 shackles out.
BERTHING:
Banchina Ovest – length 450 m. – depth 25 ft.
Banchina Postal – length 100 m. – depth 15 ft.
Banchina Centrale – length 100 m. – depth 15 ft.
Banchina Sud – length 80 m. – depth 15 ft. (for Roll-on/Roll-off ships only).
CRANES: One private mobile crane, 6 tons capacity, for discharging pulpwood at Banchina Ovest.
MEDICAL: Advise Agent of any requirements.
DENSITY: 1025.
FRESH WATER: Only from water barges.
FUEL: Pipe-line 250 mm. in diameter from store tanks on shore to the terminal at the head of the West pier.
HATCHES: Opening/closing is normally carried out by ship's crew. Winchmen from stevedoring company or ship's crew.
CUSTOMS ALLOWANCES: Depends on flag of vessel.
REPATRIATION: Regular line of ferry boats, train to Cagliari close to which there is an airport.
TIME: GMT plus 1 hour from 29th March to 26th September, GMT plus 2 hours European time.
HOLIDAYS: 1st January (New Year's Day), 25th April (Liberation Day), 1st May (Labour Day), 15th August (Assumption), 1st November (All Saint's Day), 8th December (Local Religious Holiday), 25th December (Christmas Day), 26th December (Boxing Day).
IDENTIFICATION CARDS: Special shore passes issued by local police, against passports.
DEVELOPMENTS: Present basin will be dredged to 9 m., new basin close to present one will be constructed with depth of up to 10 m.
AUTHORITY: Ufficio Circondariale Marittimo, 08041 Arbatax, Sardinia, Italy. *Contact:* Antonio Camboni, Port Commandant.

AUGUSTA (including Priolo and Melilli): 37.13 N. 15.14 E. (See Plan Book)

LOCATION: *Augusta:* Position refers to Torre Avolos Old Lighthouse in position Lat. 37° 12′ 37″ N., Long. 15° 13′ 34″ E.
PORT LIMITS: A line drawn between Santa Croce Lighthouse and Magnisi Lighthouse defines the seaward limits of the Port.
DOCUMENTS:
Crew Lists (at least 4 copies).
Custom Manifest.
Passenger Lists (4 copies).
Maritime Declaration of Health.
Bills of Lading.
Vaccination Certificates.
Civil Liability Certificate (for tankers only).
Information Note of Arrival (Italian form).
Additional Declaration of Departure (Italian form).
In case of particular events and, by request, the following documents must be sent to Harbour Master's Office:
Certificate of Registry.
Cargo and Gear Safety Certificates.
Safety Construction Certificate.
Extra Information Note (Italian form).
PILOTAGE: Compulsory for vessels over 500 g.r.t. – 24 hours service – Weather permitting, Pilot boards about 1 mile East of port main entrance – In case of bad weather, the pilot boat will station itself just inside the entrance and instructions to proceed will be given to vessels by VHF. Upon request, to facilitate vessels, or for other special reasons, Pilot can board up to 3 miles off the normal embarkation point.

Pilot must be requested by a Ship Agency's application to the Harbour Master. ETA to be confirmed 1 hour before arrival, calling "Augusta Pilot Station" on VHF Channel 12. In case of no radio contact, vessels must stop about 2 miles Eastward of the breakwater and hoist or flash the Internatioal Code Signals.

The pilot boat has a black painted hull with a white band and white superstructure with the word "Piloti" painted on both sides.
APPROACHES: There are two entrances: the main one is situated between the central and northern breakwaters, with leading lights in a line approx. 274° – Entrance is about 400 m. wide, with a depth over 36 m. in the middle, and may be used day and night – The other S.E. entrance is situated between central and southern breakwaters and it is used only for small vessels, it is about 300 m. in width, with a depth of 11 m.
ANCHORAGES: Inside and outside the breakwaters. The inner anchorage has a central zone with a depth of water not less than 22.4 m., where it is possible to anchor, even VLCCs. Outside it is recommended to anchor South of the range leading to the main entrance, because North of it there are many limitations.
MAX. SIZE: VLCCs can enter the harbour with tug assistance, with the following limitations: 69 ft. draft for operations in the road (bunkers – provisions – crew changes) and 66 ft. 10 in. with a max. displacement of 450,000 tons to moor alongside Montedison supertanker jetty.
HEALTH: Vessels arriving from countries not suspect of epidemical diseases can ask and receive Free Pratique by radio, sending a telegram not more than 24 hours before arrival to "Sanimare Augusta". Arrivals from Italian or EEC Ports are considered clear.

In all other cases vessels will receive Free Pratique at anchorage on arrival but only in daylight, for this reason it is always advisable to request free pratique by radio.
RADIO: Augusta Radio P.T. Listening on 2182 kHz. Working on 1643 and 2260 (24 hour service). Also see "Agent's Report".
VHF: Augusta Radio P. T. Call Channel 16, working Channels 26 and 27 (24 hour service).
Harbour Master (Channel 16) Working 24 hours a day.
Pilots (Channel 12) Working 24 hours a day.
Tugs and Line Handlers (Channel 8) Working 24 hours a day.
Taxi-boats (Channel 10) From 0600 to 2400 hours.
Agents Connection (Channel 9) Office hours.
TUGS: A large fleet of tugs is based in Augusta with power ranging from 600 h.p. to 4,000 h.p. But normal harbour service is, at the moment, so articulated: 6 tugs on duty from 0700 – 1200 hrs., and from 1300 – 1800 hrs. 3 tugs available from 1800 – 2000 hrs., and from 2100 – 0600 hrs.
BERTHING: *Shell Pier:* Berth Nos. 1, 2 and 3 at a finger jetty with depths of 12, 28 and 12 ft. respectively and used by coasters and bunkering barges.
Punta Cugno: Northern Jetty: Berth No. 3 Chimica Augusta, used for discharging and loading chemical products by Chimica Augusta factory. Accepts vessels up to 3,000 g.r.t. with depth 17ft. 09 in. Mooring alongside. Southern jetty: Berth No. 4, used by Esso Bunker barges. Berth No. 5, used by Chimica Augusta factory, for vessels up to 15,000 g.r.t., which are moored by the stern with bow anchors. Depth 30 ft. Berth No. 5b is at Steel Island used for chemical products discharging and loading. Ships moored by the stern with 2 anchors. Depth 22 ft.
Esso: Pier No. 1: Length of pier about 1,050 m. Heading 110°.

Berth No. 6: Depth 16 ft., used by small tankers loading gasoline (regular, premium, Jet A 1), gasoil, bitumen, fuel oil, LPG, 4 pipe-lines at berth. Connection of 4 in. for LPG, loading rate about 300 t.p.h.; 6 in. for white products, loading rate 150 t.p.h.; 6 in. for black products, loading rate 150 t.p.h. Gangway ashore.

Berth No. 7: Depth 36 ft., for vessels up to 10,000 g.r.t. 3 pipe-lines with connection of 6 in. Loading rate 150 t.p.h. Loading of gasoline, gasoil, bitumen, fuel oil. Gangway ashore.

Berth No. 8: Depth 36 ft., for ships about 20,000 g.r.t. 4 pipe-lines at berth with connections 8 in. (2 for white products and 2 for black products). Loading of same products as No. 7. Gangway ashore. Deballasting pipe-line available for all berths. Diameter 14 in., rates from 700 to 2,000 t.p.h.
Pier No. 2: Length of pier about 1,150 m. Heading: 110° ending in a steel platform. Large tankers discharge crude oil on either side of the platform at rates of up to 6,000 t.p.h.

North side, No. 10, depth 52 ft., receiving tankers up to 50,000 g.r.t. Loading of gasoline, gasoil, fuel oil, lube oil. Connections: 6 in. for bunker, 10 in. for black and white products, 10 in. for lube oil. Gangway ashore.

South side, No. 11, depth 54 ft., receiving tankers up to 75,000 g.r.t. Loading of all products as No. 10 except lube oil. Connections 10 in.

At about 400 m. from end platform there are 2 smaller platforms (Berth No. 9 and 12).

Berth No. 9: Depth 28 ft., receiving tankers up to 7,000 g.r.t. Loading of gasoline, gasoil, fuel oil, lube oil. 4 pipe-lines with connections of 8 in.

Berth No. 12: Depth 28 ft. for tankers up to 10,000 g.r.t. Connections of 6 in. Loading of same products as No. 9. Alongside the pier pipe-lines are of diameter of 18 in. to 24 in. for crude oil, 16 in. to 20 in. for fuel oil, 14 in. for diesel and gasoil, 10 in. for kerosene, 8 in. for gasoline, 10 in. for naphtha and JP4. There is also a 14 in. pipe-line for deballasting and 8 in. lines for lube oil. All berths are provided with gangway. At Nos. 10 and 11 vessels may use wire ropes only if the eyes are made of either manila or nylon.

Cement: A finger jetty. Berth Nos. 13 and 14 with depths of 23 ft. used by small vessels carrying cement in bulk. Operations are through a conveyor-belt system, with a handling rate of about 300 tons per day.

N.A.T.O. Pier: Berths No. 15 and 16 in depths of 35 ft. and 36 ft. respectively. Used for loading and discharging petroleum products, but being a Navy jetty, berthing is subject to priority being given to Navy requirements.

Montedison: Montedison Supertanker Jetty: For vessels up to 220,000 g.r.t. Depths vary from 13 ft. to 70 ft. Berths Nos. 17 to 24. Montedison Jetty: Berth No. 25, depth 43 ft. and Berth No. 26, depth 38 ft. Steel Island: Berth No. 27, depth 33 ft., for vessels up to 20,000 g.r.t. which are moored by the stern, and secured to 4 buoys with bow anchors down. Berth used for chemical and petroleum products. All the berths have a deballasting pipe-line.

Montedison concrete jetty: Both dry and liquid chemicals are handled at this jetty. Berth No. 28, depth 18 ft., for small vessels whose length is not more than 80 m. moored by the stern. Berth No. 29, depth 30 ft., for vessels up to 15,000 g.r.t. Berth No. 31, depth 31 ft. 06 in., for vessels up to 20,000 g.r.t. Bagged cargo at a rate of 2,000 tons per day, and bulk cargo up to 4,000 tons per day, load or discharge. Berth No. 30 used by bunker barges. Berth No. 32, depth 13 ft., for small tankers only.

New Montedison jetty (Carichi liquidi): Is situated in Priolo's cove. Chemical products are handled. Berth No. 33, depth 17 ft. for vessels up to 1,700 g.r.t. Berth No. 34, depth 25 ft., for vessels up to 5,000 g.r.t. Berth No. 35, depth 25 ft. and No. 36 with a depth of 12 ft.

Melilli: *Operator:* Industria Siciliana Asfalti and Bitumi.

The terminal is situated 6 miles South of Augusta, 5 miles North of Syracuse, Sicily. The Marine Terminal is connected to the Refinery storage through 5 lines for LPG and 18 large diameter pipe-lines for Crude and Products which allow for high unloading and loading rates.

All berths are equipped to ensure rapid and safe operations.

Clean and dirty ballast discharge facilities, including ballast reception tanks of 100,000 cu.m. (0.6 million barrels) are available.

A sheltered harbour accommodates service boats and 3 modern 2,000 h.p. tugs are permanently available.

When more tugs are required, additional units are supplied from nearby Augusta.

Bunkering facilities are available on all berths and sea-going barges are operating from the Terminal and from a sheltered harbour equipped for bunkering purposes.

Crude oil transhipment: The marine facilities are also suited for transhipment form ULCC–VLCC to smaller tankers better fitted to serve various refinery and/or pipe terminal locations in the Mediterranean and Adriatic.

Crude and product storage: Eight tanks are available for incoming crude with a total capacity of 800,000 cu.m. (5 million barrels).

Semi-finished (intermediate) product storage enables the operation of plant units when upstream sections are not available for short periods and contributes to Refinery flexibility.

In particular there is large storage of fuel oil and gas oil fractions and 12 motor fuel component storage tanks.

Total intermediate storage in 27 tanks, amounting to 431,000 cu.m. (2.7 million barrels).

Finished product storage is in 38 tanks of various grades with a capacity of 825,000 cu.m. (5.2 million barrels).

A further 42,000 cu.m. (0.25 million barrels) are held in Refinery service tanks.

Jetty: Deep water is available close to the shore at the jetty side. The marine facilities consist of a finger with 5 berths having the following capabilities and restrictions:

Berth No. 6: Vessels of minimum 18,000/max. 600,000 d.w.t. Max. LOA 1,200 ft. max. draft 78 ft. For unloading crude and loading fuel oil.

Berth No. 5: Vessels of minimum 18,000/max. 250,000 d.w.t. Max. LOA 1,200 ft. Max. draft 78 ft. For unloading crude and loading fuel oil, gasoil and gasoline.

Berth No. 1: Vessels of minimum 5,000/max. 55,000 d.w.t. Max. LOA 790 ft. Max. draft 42 ft. 6 in. For unloading crude and loading all products.

Berth No. 2: Vessels of minimum 10,000/max. 30,000 d.w.t. Max. LOA 650 ft. Max. draft 36 ft. For unloading crude and loading all products except LPG.

Berth No. 7: Vessels of minimum 500/max. 3,000 d.w.t. and LPG carriers of minimum 500/max. 1,500 d.w.t. Max. LOA 320 ft. Max. draft 18 ft. For loading all products.

STEVEDORES: Available from Compagnia Lavoratori Portuali.

CRANES: *Heavy Lifts:* Floating cranes with lifting capacity of 20 – 94 tons at a distance of 27 m. – 12 m. are available.

MEDICAL: Medical and hospital facilities available. Vaccinations done on board. Advance notice preferred for assistance required on arrival.

TANKERS: See "Agents Report" for accomplishments required before entering the Harbour and "Berthing" for facilities.

DENSITY: 1025, however it may be reduced by heavy rain.

FRESH WATER: Good quality potable water available by barges.

FUEL: All grades available by pipe-line or barge at anchorage, max. draft 65 ft.; suppliers Esso, Shell, B.P., Agip, Gulf. 48 hours notice required.

GANGWAY/DECK WATCHMEN: Employment of shore watchmen advisable.

OPENING/CLOSING HATCHES: Normally by ship's crew.

CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened bottle wine/spirits per man.

IDENTIFICATION CARDS: Shore passes given by local police.

CONSULS:

Denmark Tel. 974319.
Liberia. Tel. 975341.
Norway. Tel. 977470.

REPAIRS: Not permitted to tankers while alongside refineries jetties, may be carried out, while at anchorage, subject to Harbour Master's authorisation. If repairs to engine or it will affect the proper use of engine or in any way restrict the capability of manoeuvring the ship, continuous tugboat assistance may be imposed. Light steel, carpentry and routine maintenance is available from small local shipyards. Also electronic and electrical services.

DRY DOCKS: There is one floating dock, length 105 m., breadth 17.10 m., lifting capacity 3,000 tons. Ships up to 5,000 g.r.t. can be moored alongside the dry dock for light repair operations.

REPATRIATION: No difficulties.

AIRPORT: Nearest at Catania, can be reached in 40 minutes by car. Daily flights to Rome and Milan for international connections.

TIME: GMT plus 1 hour. Summer time, March to September, GMT plus 2 hours.

HOLIDAYS: Tankers not affected. 1st January; Easter Monday; 25th April; 15th August; 8th December; 25th December.

POLICE/FIRE/AMBULANCE: Boundary and Immigration Police, Tel. 975333; Police (Carabinieri), Tel. 975555; Ambulance, 971122; Fire, 974777.

TELEPHONES: Situated at all berths. No direct connection to vessels.

SHORE LEAVE: Immigration Police issues shore passes to permit the landing of the crew and passengers.

DEVELOPMENTS: A new pier for larger tankers is under construction and located South of Punta Cugno.

SHIPMASTER'S REPORT: June 1982.

If landing a sick crew member Pilot will board and vessel anchors inside the breakwaters. Harbourmaster and assistant boarded to check that ship's certificates all valid. All usual entry papers required except Crew Declaration and Stores list, but total quantity of cigarettes required. Crew lists on IMO Fal Form 5. Cables sent to Agents on Sundays and holidays should include Telex number in address otherwise they are not delivered until the next day.

We were anchored about 1.5 hours and the Pilot stayed on board. It was necessary to send ashore some crew members to assist with the stretcher, but they brought it back with them.

EEC Tanker Check list required.

AGENT'S REPORT:

The following is a copy of a telex received from a ship's Agent in February 1980.

From: Seafox – Shipping Agents and Bunker Brokers. Head Office: Via Garibaldi, 3/5. Phones : (0931) 977470-978544. Telex: 970072 BONMAR I. Cable: Seafox Augusta Tlx. 970072. 96011 Augusta, Sicily.

We are acting as Shipping Agents in Augusta-Siracuse-Melilli (ISAB) ports and in this connection we take the liberty to advise you of new ordinance issued by Ports Authority in Augusta and Siracuse Ports in order to be able to inform through your good publication well known over the world.

Port Information:

According to instructions issued by European Economic Community No. 79/116, please be advised that Augusta Port Authority introduced a new Ordinance, to apply immediately, as follows:

Quote:

All Masters of petroleum-gas-chemical tankers, having d.w.t. 1,600 and over, with full or partial cargo or in ballast and not gas-free. Before entering or leaving Italian ports must comply with following regulations:

1. In due time, before entering territorial waters adjacent to the port, cable via Romaradio to their Agents:
   (a) Ship's name and call letters.
   (b) Ship's flag.
   (c) Length and draft.
   (d) Destination port and ETA.
   (e) Quantity and quality on board.
   (f) If ship carrying chemical products in bulk, Master's declaration to be in possession of safety equipment and construction certificate to carry chemical products in bulk, according IMO Code.
   (g) If ship carrying chemical products in bags or liquid gas in containers, Master's declaration to be in possession of the appropriate certificate, according IMO Code.
2. On Pilot boarding vessel, Master must submit following Check List, duly filled, to the Pilot:

(a) Vessel's details:

1. Ship's name.
2. Flag.
3. Owners.
4. Port of Registry.
5. Year built.
6. Gross tonnage.
7. Length.
8. Classification.
9. Call letters.
10. Kind of propulsion.

11. Agents.
12. Propulsion apparatus-horsepower.
13. Draft forward.
14. Draft aft.
15. Draft amidships.
16. Cargo (according to cargo plan).
17. Quality.
18. Quantity.

(b) Safety Equipment

		Good Working Order (Yes)	*Deficiencies* (No)
(i)	Construction and technical equipment	(Yes)	(No)
	Main engine and auxiliaries	"	"
	Main rudder apparatus	"	"
	Auxiliary rudder apparatus	"	"
	Anchor apparatus	"	"
	Fire fighting equipment	"	"
(ii)	Navigation equipment	"	"
	Characteristic of available manoeuvrings	"	"
	First radar apparatus	"	"
	Second radar apparatus	"	"
	Gyro compass	"	"
	Magnetic compass	"	"
	Radio direction-finder	"	"
	Echo-sounder	"	"
	Other electronic equipment to determine vessel's position	"	"
(iii)	Radio equipment	"	"
	Radiotelegraphy apparatus	"	"
	Radio-telephone apparatus	"	"
	VHF apparatus	"	"

(c) Safety Certificates and other documents:

Safety construction	(Valid)	(Not valid)
Safety equipment certificate	"	"
Safety radio-telegraph certificate	"	"
Safety radio-telephone certificate	"	"
Cargo certificate	"	"
Registry certificate	"	"
International oil pollution liability certificate	Valid From – Till	
Oil record book up to date	"	"
Fitness certificate to carry chemical products in bulk according to IMO Code	"	"
Fitness certificate to carry LPG in bulk, according to IMO Code	"	"

(d) Master and Crew on board

Description of Title and Number – issued certificates of ....
Date issued...
Place issued/country..
Master
Chief Mate
Second Mate
Third Mate
Chief Engineer
First Engineer
Second Engineer
Third Engineer
Radio Officer
Pilot on board
Remaining other crew members, deck and engine
Date ....
Master's signature or Master's Representative
(if applicable)

Unquote

Please kindly instruct all Masters to comply accordingly in order to avoid delay in entering the port.

These same regulations apply for Melilli Port (ISAB Terminal) except for first part of information which all Masters have to cable directly to "Compamare Siracusa" via Romaradio in due time before arrival.

AUTHORITY: Capitaneria di Porto, Augusta 96011. *Contact:* Captain Giuseppe Lo Iacono.

BAGNOLI: 40.48 N. 14.10 E. (See Plan Book)

DOCUMENTS: An arrival report containing vessel's main particulars and data of certificates has to be filled in by Port Officer upon arrival.

5 Crew Lists.
5 Passenger Lists.
Store List in duplicate.
International Health Declaration.
Cargo Manifest.

PILOTAGE: Bagnoli Pilot is permanently on watch as from 0600 to 0600 hrs. Usual Pilot position is Lat. 40° 47′ 30″ N., Long. 14° 08′ 10″ E. Pilotage is compulsory for vessels over 500 g.r.t. for anchoring or entering the port. Permanent watch is maintained by pilot station on VHF Channel 9 and/or 12. Vessel requiring Pilot may also use other international signals, such as flag, morse/sound letter "G". When in port vessels to give pilot station 1 hour's notice for any service required. In the event of bad weather (Bagnoli area is mainly exposed to S.W. winds) vessels to shift out of piers or to change anchorage to Baia Roads (sheltered natural bay 3 miles from Bagnoli in a Westerly direction).

ANCHORAGE: Depth of safe anchorages in Bagnoli area and in Baia Roads ranging from 20 m. to 45 m. – sandy bottom. Anchorage is allowed in the line from the lighthouse of Nisida Island to the lighthouse of Capo Miseno.

RESTRICTIONS: Vessels can enter port at any time of day. No restriction for night departures.

MAX. SIZE: See "Berthing".

HEALTH: Free Pratique can be requested via radio cabling to Health Officer of Naples. Cable address: Sanimare, Naples.

RADIO: Naples Radio.

TUGS: Presently no tug available, if required they come from Naples. Time taken approximately 2 hours.

BERTHING: *Italsider Ore/Coal Discharging Pier:* Two berths available. Pier length 357 m. Berth accommodation length 200 m. – max. draft allowed when berthing in Westerly direction is 41 ft. 6 in. – max. draft allowed when berthing in an Easterly direction is 36 ft. with H.T. This pier is equipped with two turntable gantry cranes and conveyor belts. Ore discharging rate: 1,100 t.p.h. Coal discharging rate: 900 t.p.h. All necessary stevedoring services are performed by Italsider with their own personnel. Cranes capacity: 32 tons. Fresh water available.

Italsider Loading Pier: Equipped with 6 turntable cranes and rails – max. draft allowed on both berths is 10.5 m. Fresh water available.

Federconsorzi Discharging Pier: Equipped with a fixed gantry crane and aerial ropeway for discharging of phosphates and pyrites. Discharging rate per shift of 8 hours – 450 tons. Max. draft allowed is 5.40 m. Fresh water available.

Tide Range: Approximately 30 cm.

STEVEDORES: Available. Rate of discharge 1,500/1,700 t.p.h.

FRESH WATER: Available from pier. Rate of delivery 20 t.p.h., or by barge. Vessels at anchor supplied with fresh water by barge from Naples.

FUEL: All types available, always delivered by barge, normally oil companies require 48 hours notice.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCES: (For entire duration of stay). Tobacco, 50 cigarettes per crew member. Spirits: 1 bottle (opened) per crew member.

IDENTIFICATION CARDS: Required.

CONSULS: At Naples.

REPAIRS: Small repairs undertaken.

TIME: GMT plus 1 hour Winter. GMT plus 2 hours Summer.

HOLIDAYS: See "Naples".

POLICE/AMBULANCE/FIRE: Police 7602553; Ambulance 7520696, 258044 (Ospedale S. Paolo); Fire 7330210 and 7605353.

SHORE LEAVE: Allowed.

GENERAL: *Launch Hire:* Vessels waiting at anchor for their turn may hire launch for crew shore leave and relevant service performed from 0700 to 2400 hrs.

The port of Bagnoli is mainly used for the discharge of ores, minerals, coal and for the loading of steel products for account of the Italsider S.p.A., metallurgic industrial group of national interest, operating with its own shore appliances. Manufacturers of chemical products, the Federconsorzi of Naples, operate in the port of Bagnoli also with their own shore appliances.

AUTHORITY: Capitaneria di Porto di Napoli, Sezione Staccata di Bagnoli, Via Coroglio 10 Bis, Napoli. *Tel:* 7232272. *Cables:* Seziomare Bagnoli. *Contact:* Sandro Musto, Captain of the Port.

BARI: 41.08 N. 16.52 E.

DOCUMENTS: On arrival:

5 Crew Lists.
3 Provision Lists.
3 Lists of Articles in possession each Crew member.
Customs Documents.
Cargo Manifests.
Bills of Lading.
Ship's Papers.
Health Documents.
On departure:
Additional declaration of departure.

PILOTAGE: Pilot boards vessels on arrival by motor-boat near harbour entry, outer buoy. Pilotage compulsory for vessel over 500 g.r.t. inward or outward, shifting vessels from one point to another in or out of port. Pilot works on VHF Channel 12.

Pilot call: Letter "G" of International Code, Pilot attending day and night. For services from 1700 hrs. to sunset, or from sunrise to 0800 hrs. the dues are increased.

ANCHORAGE: Good anchorage in all weathers, but precautions should be taken against winds from North. Rocky bottom covered by mud. Bad holding ground. Strong range in the port when bad weather. Not allowed to anchor in fairway except in case of emergency. Anchorage usually allowed East side of Nuovo Molo Foraneo at a distance of about 1 mile from shore.

RESTRICTIONS: Max. depth at harbour entrance 40ft., width 793 ft. Depth of water at berths from 33 ft. to 40 ft.

MAX. SIZE: Maximum permissible length 800 ft. for oil carriers proceeding to oil pier. Max. draft 39 ft.

HEALTH: Masters can request Free Pratique by radio by applying to "Sanimare Bari". Free Pratique automatic for vessels coming direct from other Italian port, and "Q" flag not to be flown on entering. In event of any suspected disease or fever on board, Master should inform Sanimare Bari, not permitting anybody to board the vessel before doctor's inspection.

RADIO: Radio Roma, call sign "IAR." Bari Radio P.T. call sign "IPB"

TUGS: Tugs normally join vessel outside harbour entrance. Towage service is carried out by following tug-boats belonging to "Rimorchiatori Napoletani": *Serapo* of 1,000 h.p., *Sole II* of 1,170 h.p. and *Dritto* of 950 h.p. Basic tariff is increased by 20% when the towage rope is given by tug-boat.

BERTHING: When specific side alongside berth is required by stevedores, Agents radio Master prior arrival and advise Pilot. Otherwise side alongside at Master's option after conferring with Pilot. Depth at piers 20/38 ft. dependent location. No shore fenders alongside quays.

BULK HANDLING FACILITIES: Grain discharge by 2 suction pipes at rate of 90 to 100 metric t.p.h. each.

STEVEDORES: Important to give ETA in good time. Normal working hours: Winter time (weekdays), 0800 – 1200 hrs., 1300 – 1700 hrs. Saturdays, 0800 – 1300 hrs. Summer time (weekdays), 0800 – 1200 hrs., 1400 – 1800 hrs. Saturdays 0630–1300 hrs.

Overtime: From 0600 – 0800 hrs. the tariff to be increased 25%; 1200 – 1300 hrs., 50%; 1700 – 2000 hrs., 25%; 2000 – 0600 hrs., 70%.

For handling pieces over 1,000 kilos, increase of 50% on the tariff. For unhealthy work, increase of 30% on the tariff.

Sunday. From 2400 – 0800 hrs. the tariff to be increased 100%; 0800 – 1200 hrs., 50%; 1400 – 1800 hrs., 50%; 1200 – 1400 hrs., 100%; 1800 – 2400 hrs., 100%.

MEDICAL: Not necessary for Agents to receive advance notice of required medical attention. Hospital facilities available.

TANKERS: Not allowed to do any degassing of tanks or any kind of repairs to vessel without Harbour Office permission.

Cleaning and degassing of tanks not allowed in port. Inspection of tankers and gas-free certificate can be obtained. Only clean ballast can be discharged in port.

Diameter of load-discharge pipe-lines at oil berth are:

20 in., 16 in. and 12 in. pipe-line for crude oil; 12 in and 18 in. pipe-line for fuel oil; 8 in. pipe-line for gasoil; 8 in. pipe-line for gasoline.

Crude oil discharged to Stanic refinery from Berths No. 31 and No. 4 (Molo Foraneo) suitable for tankers up to 39 ft. draft.

Fuel and other refined products discharged at Berth Nos. 31, 32, 33 and 34.

DENSITY: Salinity 36%.

FRESH WATER: Available at all berths served with hydrants. Good drinking water supplied by Ente Acquedotto Pugliese. No barge available to carry water in the harbour and in the roads. Tugs may be used for this purpose.

FUEL: Available, 3 days advance notice required.

GANGWAY/DECK WATCHMEN: Service of watchmen is recommended: shift of 10 hours.

OPENING/CLOSING HATCHES: Normally carried out by stevedores. Opening or closing of hatches charged for work carried out during usual working hours.

CUSTOMS ALLOWANCES: 50 cigarettes only are given to each crew member out of bond on vessel's arrival. Wine is permited to be held out of bond but no spirits allowance permitted.

IDENTIFICATION CARDS: Shore leave pass is compulsory.

CONSULS:

Austria
Belgium
Bolivia
Denmark
Ethiopia
France
Germany F.R.
Great Britain
Greece
Liberia
Monaco
Netherlands
Norway
Portugal
Spain
Sweden
Switzerland
Turkey

REPAIRS: Workshops and shipyards are capable to carry out repairs to hull and engines.

SURVEYORS: 1.There are cargo inspectors available; these can be obtained from S.G.S. Tel: 080/410333.

2. The representative of Lloyd's Register in the port is Lorusso.

DRY DOCKS: No dry docks are available at Bari. Nearest dry docks are at Taranto.

REPATRIATION: Many facilities for effecting crew changes and possibilities for arranging any necessary repatriations.

AIRPORT: Airport is located about 10 km. North of city. Served by regular airlines with flights for all countries daily.

TIME: Local time 1 hour ahead of GMT. Alterations to clocks are made from Spring to beginning of Autumn, giving 2 hours advance on GMT.

HOLIDAYS: New Year's Day (1st January); Liberation Day (25th April); Labour Day (1st May); Easter Monday; St. Nicholas, Patron of the Town (10th May); Proclamation Day (2nd June); Assumption B. V. Maria (15th August); All Saints' Day (1st November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).

Cargo work can be arranged on above days, and the stevedoring tariff increased as follows:

From 2400 to 0800 hrs., increase 100%; 0800 to 1200 hrs., 50%; 1400 to 1800 hrs., 50%; 1200 to 1400 hrs., 100%; 1800 to 2400 hrs., 100%.

STORING: See "Prelims" page viii.

1. Vessels in port can be supplied by lorries.
2. Lorries with stores for vessels at quays, apart from normal Customs requirements, (if necessary), have to be authorised to enter the port.
3. Lorries with trailers can line up on the berths alongside the vessels. The process is subjected to the commercial operations on hand and /or the position of the vessel at the berth.
4. Fork lift trucks are never used for supplying stores to ships in this port.
5. For the supply of provisions there is the company S.p.A. Cianciola – Tel: 080/235260, 235261, 235262. Telex: 810021. Cianci I P.O.B. 240 70100 Bari who may be approached for any specific requirement. The same Company also has a large area in the port, as a free zone, for storage of goods.
6. Local unloaders can be employed to help in placing goods in store on board if required and available.

POLICE/AMBULANCE/FIRE: Police, 214116; Ambulance (First Aid) 444848; Fire, 212518.

EMERGENCY COORDINATION CENTRE:
Bari Port Captaincy – Tel: 216860
VHF (listens out throughout 24 hours) on Channel 16.

BANKS: 1. Banca Commerciale Italiana, Via Abate Gimma No. 87, 70100 Bari Tel: 080 – 216680.

2. Credito Italiano, Via Putignani No. 98, 70100 Bari. Tel: 080-216771.

3. Banco di Roma, Via Calefati No. 82, 70100 Bari. Tel: 080-235300.

TELEPHONES: No arrangements exist for placing telephone on board.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Expected draft increases in the near future for berthing tankers up to 80,000 tons.

AUTHORITY: Capitaneria di Porto, Bari, Corso de Tullio, 70100 Bari, Italy. *Tel:* 080-216860. Also VHF Channel 16. *Contact:* Mauro Blasio, Port Captain.

BRINDISI: 40.39 N. 17.56 E.

DOCUMENTS:

3 Crew Lists.
3 Lists of Passengers Disembarking.
3 Lists of Passengers in Transit.
Manifests of Cargo carried, with specification of port of origin and whether for local discharge or in transit. If stowed on deck or below deck.
List of Articles in possession of each Crew member, such as cameras, binoculars, portable radios, cigarettes, tobacco or any kind of cheap-priced goods.

Other Certificates required to be on board:

Certificate of Ship's tonnage.
Load Line Certificate.
Derat Certificate.
R/T Certificate.
Safety Certificate.
Anchorage Dues Receipt (if previously paid).

PILOTAGE: Vessel approaching port should apply for Pilot by hoisting the "G" flag, if by daytime. By night-time, letter "G" will have to be signalled by Morse, to port semaphore (Signal Station) which is located under shore lighthouse showing white flashes.

Telegraphic address of Pilot station is "Piloti Porto, Brindisi". No ETA required for Pilots as station not equipped with wireless apparatus. Characteristics of pilot boat: gross tonnage, 9.4; power, 65 h.p.; speed, 8 knots.

Area where Pilot boards vessel:

In good weather: 1 mile from harbour entrance.

In bad weather: (a) If vessel is heading for inner harbour and is of small tonnage (up to 3,000 tons) Pilot boat will steer in a direct line, bows pointing towards vessel, up to entrance to "outer" harbour, where Pilot will board vessel. If vessel is of higher tonnage, she will have to take a "crosswise" position so as to form a sheltered area for Pilot, about 1 mile from harbour entrance. *(b)* If vessel (tanker) is bound for outer off-shore terminal (Montedison Installation) for discharge of crude-oil, Pilot boat will endeavour to approach vessel to communicate impossibility of immediate mooring. Anchorage roads, pending possibility for Pilot to board vessel, are 0.8 miles E.N.E. of "Punta Penne" (Capo Gallo).

ANCHORAGES: Besides anchorage point described above, there exists safe anchorages in bay for vessels having draft of 9 m. (29 ft. 6 in.) and in external harbour for vessels of less than 3,000 tons (gross).

RESTRICTIONS: Tankers of over 1,500 tons gross may berth only from sunrise till sunset. Port berths are inaccessible in unfavourable winds. Passenger or cargo vessels no restrictions.

MAX. SIZE: *Inner Harbour:* Draft not to exceed 9.4 m. (30 ft. 10 in). *Outside Main Port area:* For discharging crude oil at offshore terminal, max. draft allowed 11,50 m. (37 ft. 8 in.). For discharging or loading of other refined products of Montedison Installations, depth of berths varies from 4 to 9 m. (from 13 ft. 1 in. to 29 ft. 6 in.).

HEALTH: Apply to "Sanimare, Brindisi" by radio, 12 hours before arrival, and not later than 4 hours before arrival, according to provisions of Health Regulations, notifying in message state of health of crew and port of origin of vessel. Procedure not required if vessel entering after calling at another port in same country.

RADIO: Vessel can communicate ETA messages to Agents through Bari Radio (nearest station) or through Rome Radio which can pick up messages from vessels at sea almost in any part of the world.

TUGS: Tug service is generally effected from Punta Riso-Faro Della Pedagne junction, up to inner harbour. It is customary to use tugs' lines for mooring and unmooring of tankers at terminals outside main port area, in view of the peculiarity of mooring operations and the area where tugs are to operate (subject to surf, choppy seas, winds). Charge for use of tugs' lines is 20% extra on normal towing rates.

TANKERS: Crude oil discharged at offshore buoy mooring for vessels up to 37 ft. 8 in. draft.

Other tanker berths at Inner Harbour for refined products, suitable for tankers up to 28 ft. draft.

STEVEDORES: Always advisable to notify in ETA messages to Agents number of hatches vessel intends working simultaneously to arrange gangs. Normal working hours: From 0700 to 1200 hrs. and 1400 to 1700 hrs. Overtime: Weekdays, 70% increase on normal tariffs. Sundays and holidays: Work performed during normal hours, 50% increase. On overtime, 100% increase.

MEDICAL: Hospital facilities available. For any kind of medical attendance or hospitalisation, if needed, it will be helpful to have port Agents advised by radio in advance.

FRESH WATER: Almost all mooring points alongside wharves are fitted with fresh water distributing hydrants. At off-shore terminals, supply is effected by tugs.

FUEL: Types of fuel available: Bunker "C", viscosity Engler at 50° (Centrigrade), 16/20; specific weight, 0.950/0.960. Gasoil, viscosity Engler at 20° (Centrigrade), 1.4; specific weight, 0.830. 48 hours advance notice for any supplies required.
FIRE PRECAUTIONS: Firemen always in attendance during loading/unloading operations by oil carriers.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CERTIFICATES: For vessels over 500 tons effecting international voyages:

(a) Passenger vessels:
- Safety Certificate.
- Radio and Radiophone Certificates (latter if included in vessel's equipment).

(b) Freighters:
- Safety Construction Certificate.
- Safety Equipment Certificate.
- Radio and Radiophone Certificates.

CUSTOMS ALLOWANCES: 50 cigarettes a day for each crew member, if vessel's stay in port exceeds 24 hours. No allowance if stay is shorter than 24 hours. Third of a bottle of spirits only.
IDENTIFICATION CARDS: Not particularly needed besides regular seaman's books.
CONSULS: Vice-Consulate of Denmark, Portugal and Netherlands, all having the same telephone number: 21123. Vice-Consulate of Spain: telephone: 21039.
REPAIRS: Only minor deck and engine repairs can be carried out locally.
REPATRIATION: Adequate facilities exist for effecting crew changes and repatriations as necessary.
AIRPORT: Distance from local airport 5 km. (3 miles). Airport regularly served by Alitalia Airline, ensuring 2 daily flights to Rome and 1 daily flight to other Italian cities, including, among others; Naples, Catania, Palermo, Cagliari, and other destinations via Rome. Direct international flights not scheduled from Brindisi.
TIME: Local time 1 hour ahead of GMT; from 29th March to 26th September, 2 hours ahead of GMT (Summer time).
HOLIDAYS: Officially recognised. Both national and religious holidays include: Sundays; New Year's Day; Epiphany (6th Jan.); St. Joseph's Name Day (19th March); Easter (Easter Monday); Anniversary of Liberation (25th April); Labour Day (1st May); Ascension, Corpus Domini (movable dates); Proclamation of the Italian Republic (2nd June); the Saints Peter and Paul Name Day (29th June); Assumption (15th August); All Saints' Day (1st Nov.); National Unity (4th Nov.); the Virgin Immaculate Conception (8th Dec.); Christmas, Boxing Day.
POLICE/AMBULANCE/FIRE: Police, 25555; Ambulance, 21310; Fire, 21222.
TELEPHONES: No current arrangements existing for placing telephones on board.
SHORE LEAVE: Allowed.
DEVELOPMENTS: Under construction: 1 pier in outer harbour, which is scheduled to be 200 m. in length (219 yards) with a depth of 12 m. (39 ft. 4 in.).
AUTHORITY: Capitaneria di Porto – Brindisi, Via Regina Margherita, No. 1, 72100 Brindisi, Italy. *Tel:* 21022, 21023. *Cables:* Compamare Brindisi.

CAGLIARI (including Sarroch), Sardinia: 39.05 N. 09.01 E. (See Plan Book)

DOCUMENTS:
- 6 Crew Lists.
- 6 Passenger Lists.
- 2 Provisions Manifests.
- 2 Manifests of Crew Personal Effects.
- Cargo Manifest.
- Bills of Lading.
- 2 Arrival Reports, completed on arrival.
- Maritime Declaration of Health, completed on arrival.
- Ship's Certificates including Italian Anchorage Dues.
- Vaccination Certificates for sighting.

PILOTAGE: Compulsory for vessels over 500 tons. Requested by ship's Agents. Vessels should wait in the roads for Pilot to board. International Code signals used for calling Pilot. Pilot station telephone number: 652929. Pilot boards tankers about 2 miles East of oil terminal.
Sarroch: Compulsory for all tankers. Vessels should wait in roads as follows:

G1 – (for tankers of more than 42 ft. draft) Lat. 39° 05′ 00″ N., Long. 09° 05′ 00″ E.

G2 – (for tankers of less than 42 ft. draft) Lat. 39° 04′ 27″ N., Long. 09° 03′ 15″ E.

G3 – (for tankers of less than 5000 g.r.t.) Lat. 39° 05′ 48″ N., Long. 09° 02′ 00″ E.

Pilot station telephone number 929006–929057. VHF Channel 16.
ANCHORAGE: All of the Roads are available for anchorage except where prohibited zones indicated on charts.
MAX. SIZE: Cagliari Port: Max. draft 26 ft. Sarroch, SARAS Terminal, tankers up to 170,000 d.w.t. Max. draft 58 ft.
HEALTH: Free Pratique may be requested by radio to Sanimare Cagliari between 12 to 6 hours prior to arrival advising vessel's name, nationality, last port, number of passengers and crew and state of health on board. Pratique is automatic for vessels coming from ports in Italy, U.K. France, Belgium, Netherlands, W. Germany and Greece.
TUGS: 6 available, of up to 2,000 h.p.
Cagliari: Normally join vessels at the port entrance.
Sarroch: Normally join tankers at anchorage points and assist berthing at Saras Jetties Terminal.
RADIO: Cagliari Radio operating continuously on 2182 kHz, and on 156.8 MHz.
Tankers: 48 hours' radio notice must be given, also advice of readiness on arrival.

See Standard Sheet "International Insurance Against Oil Pollution". Following information to be sent with first ETA message:
1. Quantity of clean and/or dirty ballast.
2. Quantity of slops to be discharged/kept on board.
3. Previous cargo.
4. Condition of cargo tanks i.e. inerted, gas free, etc.
5. Arrival draft.
6. Sailing draft.
7. Distances bow manifold and stern manifold.
8. Manifold size and number of loading arms required.
9. Maximum acceptable loading rate.

VHF: *Cagliari:* Harbour Master's Office, Channel 16.
Sarroch: Harbour Master's Office, Channel 16. Pilot station, Channel 16. Mooring station, Channel 6. Boat service station, Channel 8.
Also see "Shipmasters Report".

BERTHING: *Cagliari*

Berth No. 1:	Length 68.0 m.;	draft 14 ft.
Berth No. 2:	Length 128.0 m.;	draft 24 ft.
Berth No. 3:	Length 227.0 m.;	draft 21 ft.
Berth No. 4:	Length 123.7 m.;	draft 18 ft. 03 in.
Berth No. 5:	Length 60.3 m.;	draft 18 ft. 03 in.
Berth No. 6:	Length 116.8 m.;	draft 8 ft.
Berth No. 7:	Length 92.6 m.;	draft 16 ft. 06 in.
Berth No. 8:	Length 278.6 m.;	draft 23 ft.
Berth No. 9:	Length 325.8 m.;	draft 24 ft.
Berth No. 10:	Length 328.0 m.;	draft 26 ft. 06 in.
Berth No. 11:	Length 203.2 m.;	draft 26 ft. 06 in.

Berth Numbers 2, 3 and 4 reserved daily for passenger ships.

TANKERS: *Sarroch Saras Jetties*

P.1: draft 42 ft.	P.6: draft 26 ft.
P.2: draft 39 ft.	P.7: draft 35 ft.
P.3: draft 39 ft.	P.8: not yet workable
P.4: draft 36 ft.	P.9: not yet workable
P.5: draft 36 ft.	P.10: draft 23 ft.

Platform Island No. 1 (for crude oil discharging only) draft 58 ft.
Platform Island No. 2 (for crude oil discharging only) draft 47 ft.

Loading Rates:

Berth Nos. 1 – 4	Crude oil	5,000 t.p.h.
	Fuel oil	2,000 t.p.h.
	Gas oil	1,600 t.p.h.
	Gasoline	500 t.p.h.
Berth No. 5	Fuel oil	1,000 t.p.h.
	Gas oil	800 t.p.h.
	Gasoline	500 t.p.h.
	LPG	200 t.p.h.

Berth No. 6 For Bunkering Barges and small tankers up to 3,000 d.w.t. Fuel oil, gas oil, kerosene and gasoline at slow pumping rates.

Berth No. 7	LPG	200 t.p.h.
	Fuel oil	1,000 t.p.h.
	Gas oil	800 t.p.h.

Platform island for crude oil only at 5,000 t.p.h.

MEDICAL: All facilities available at Cagliari.
DENSITY: 1025.
FRESH WATER: Available by pipe-line at all berths. No water barges, although bunker barges may be able supply small quantity fresh water in emergency only.

At times fresh water is in short supply and may not be available.

Cost of delivery of fresh water by tug is 3,000 lire per tonne.
FUEL: All grades available ex-wharf at tanker berths. Barges supply vessels at anchor and vessels calling for bunkers only.

Vessels calling at Sarroch for bunkers by barge are required to keep Agents closely advised of their ETA and bunker requirements. Messages confirming the vessel's ETA should be sent to Agents 72, 48 and 24 hours before vessel's arrival. Masters should note that Customs Regulations do not permit the return of bunkers to the refinery after the barge is loaded, therefore an accurate figure of bunkers required must be given in the first ETA message to Agents.
BALLAST: The discharge of ballast by tankers can be effected at all berths at a pumping rate between 1,000 and 2,500 t.p.h. Reception of ballast ashore is into 3 tanks with total capacity of 20,000 cu.m. and 6 API separator vessels.
CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened bottle wine/spirits per man, usually allowed for consumption on board while vessel in port.
IDENTIFICATION CARDS: Shore passes issued by local police.
CONSULS:

Belgium
Denmark
France
Great Britain
Netherlands
Norway
Sweden

REPAIRS: Minor repairs can be handled at Cagliari. Slipway for vessels up to 400 tons.
REPATRIATION: No difficulties.
AIRPORT: Elmas Airport situated 12 km. from Cagliari.
TIME: GMT plus 1 hour. Summertime March to September: GMT plus 2 hours.
HOLIDAYS: Not applicable to tankers. New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter and Day after Easter; Ascension Day; Corpus Domini; Proclamation Day (2nd June); St. Peter & St. Paul (29th June); Assumption B.V.Maria (15th August); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).

POLICE/FIRE/AMBULANCE: *Cagliari:* Police Tel: 658956. Fire Tel: 652222. Ambulance Tel: 656979.
Sarroch: Police Tel: 929063. Fire Tel: 652222. Ambulance Tel: 929024.
TELEPHONE: No telephone connection on board.
SHORE LEAVE: Allowed.
DEVELOPMENTS: The new industrial port S.W. of Cagliari is still under construction. Both Meridionale and Settentrionale Moles have now been completed.

SHIPMASTER'S REPORT: October 1979.
Anchorage Restrictions: The following port regulation in force since April 30th, 1979:

Vessels calling at Sarroch for orders only, may not get permission to anchor at Golfo di Cagliari Anchorage.

Such a vessel must remain in position South of the line Cape Spartivento – Cape Carbonara.

Offence against this regulation will cause the vessel to be fully charged for harbour and light dues in connection with clearing by Immigration, Port Health, Customs and Agents.
VHF: Pilot operates on Channels 16 and 9. Agencies operate on Channel 8. Loading Master Sarroch/Saras Jetties operate on Channels 16 and 14. Call sign: "Maria – Sol".

SHIPMASTER'S REPORT: May 1981.
At the oil berths it is usual to have 4 tugs and tugs are paid by the hour, i.e. the use of a tug for 61 minutes costs 2 hours hire.

Moorings are usually 3,2,2, with head and stern lines sent first followed by springs. Require plenty of turns on the bitts for tugs.

Apparently the boatmen will not come out to the vessel if she is anchored outside the designated anchorage areas as shown on the chart unless, of course, the draft prohibits a close approach. It is frequently used for bunkering and crew changes.

To obtain fresh water from the jetty it is necessary to obtain, in duplicate, an official form from the Agent.

According to Pilot the max. size is now 250,000 d.w.t. and draft 23 m.

Harbour Master boards for, usually, at least one inspection and collects EEC check list. Vessels documents usually taken ashore for perusal by Harbour Master.

Anchorage dues are valid for one month.

AUTHORITY: Capitaneria di Porto di Cagliari, 09100 Cagliari, Italy.
Contact: Captain Sergio Albanese, Port Commandant.

CATANIA, Sicily: 37.29 N. 15.06 E. (See Plan Book)

DOCUMENTS: Arrival report requested by Harbour Authorities. Also see "Augusta".
PILOTAGE: Master can communicate with Pilot on VHF Channel 16. Pilot boards at sight on harbour entry. International Code signals used to call Pilot.
ANCHORAGE: Vessel must remain on roads awaiting Pilot.
RESTRICTIONS: No restrictions on entry at night, except for tankers (either loaded or empty, as per harbour regulation). The tide at Catania is no more than 30 cm. Bar at entrance 30 ft.
MAX. SIZE: No limitation on the length and breadth but only on draft of vessel, provided same can be contained within the size of piers of Catania Harbour. See "Berthing".
HEALTH: The usual Sanitary Pratique as per all Italian ports is requested. Free Pratique obtainable by radio prior arrival sending cable to "Sanimare Catania".
RADIO: The quickest way is to address messages to "Romaradio", better if adding to the telegraphic address the telex number of Agency, so that after very short time from reception at Romaradio the message is in Agent's hands.

It is important that 72 *working* hours notice of ETA be passed to Agent.
TUGS: When Pilots are on board, they can call tugs by small radio-calling station. Very frequently the tug's Company, when seeing a large ship, join vessel at same time as Pilot. Tugs using ship's lines.
BERTHING:

Berth Nos.		*Length*	*Depth*
1 and 2	Molo Mezzogiorno, Oil berths	361 m.	30 ft. 6 in.
6	Molo Crispi, Silo berth	154 m.	30 ft.
7	„ „	130 m.	29 ft.
8	„ „	140 m.	29 ft.
9	„ „	130 m.	20 to 28 ft.
10 and 11	Sporgente Centrale	307 m.	30 ft.
12	Molo Centrale	120 m.	30 ft.
13	Sporgente Centrale	182 m.	30 ft. 6 in.
14	„ „	169 m.	29 ft.
17	„ „	142 m.	22 ft.
18	„ „	142 m.	22 ft.
19	„ „	156 m.	18 to 21 ft.
20	„ „	170 m.	16 ft. 6 in.
21	„ „	111 m.	19 ft. 6 in.
22	„ „	60 m.	16 to 20 ft.

STEVEDORES: As per actual Port Labour Regulations, in order to book gangs, stowage details must reach Agency not later than 1100 hrs. of the day before ship's arrival, except for work to be done on Saturdays, Sundays and Mondays when application for gangs must be made on Friday.

The official load/discharge rate for general cargo is 50 tons per hatch per day (8 hours), but real output is higher. Increase for overtime, continuous shifts (0700–1330 hrs.; 1330–2000 hrs.; 2000–0230 hrs.). Night work, Sundays, national holidays, etc.

MEDICAL: Hospital facilities easily available. No advance notice required unless for emergency cases and for cases to be urgently treated during night and holidays.
TANKERS: 2 tanker berths are situated in line at Southern Breakwater, called "Molo Mezzogiorno". There are 3 pipe-lines, diameters of 8 in., 6 in., 4 in. No discharge facilities for tank washing.

Tankers are not allowed to berth or unberth at night.
SALINITY: Average salinity of water inside the port is the same as the average salinity of Mediterranean.
FRESH WATER: Available at nearly all quays including bunker piers.
FUEL: Bunkers available and supplied only by pipe connection at bunker pier (Molo Mezzogiorno). Max. rate 400 t.p.h.
CUSTOMS ALLOWANCES: Tobacco, for foreign ships not in coastal service in Italian Ports: 50 cigarettes per each crew member, for the first 24 hours of the ship's stay in port. Other cigarettes can be obtained for which an application to the Customs House is required. Spirits: 2 or 3 bottles per day (provided minimum 20 crew members).
CONSULS:

Austria
Belgium
Denmark
Finland
France
Germany
Greece
Netherlands
Nicaragua
Norway
Portugal
Spain
Sweden

REPAIRS/DRY DOCK: Small repairs can be carried out at Catania. No dry docks available.
AIRPORT: Very near important airport with regular international flights.
TIME: GMT plus 1 hour. In Summer time GMT plus 2 hours.
HOLIDAYS: Normally, during all holidays it is possible to work with extra payment.
TELEPHONES: Numbers of emergency services: Police 531905; Emergency Police 113; Fire Brigade 327702; Sanitary Office 532123; Harbour Master 531667, 531134; Pilot 531906; Mooring 531150.
DEVELOPMENTS: Ferry berth under construction. 40 ton multi-purpose container crane to be installed. With spreader it will be able to handle 20 ft., 35 ft. and 40 ft. containers and general cargo up to 45 tons by hook.
AUTHORITY: Capitaneira di Porto. *Tel:* 531667, 531134.

CHIOGGIA: 45.14 N., 12.19 E. (See Plan Book)

PORT LIMITS: Bacino Marittima and Banchina Lombardo Esterno.
DOCUMENTS:
6 Crew Lists (IMO Form).
6 Passenger Lists.
2 Stores Lists.
2 Cargo Manifests.
2 Crew Personal Effects Lists.
PILOTAGE: Not compulsory. ETA at least 24 hours prior to arrival. Pilot will board 1.5 miles E.N.E. of channel entrance. Vessels on arrival may contact Pilots by VHF (Channel 14).
ANCHORAGE: Recommended anchorage 1.5 miles North East of the entrance. All vessels must keep radio watch, specially in Winter time owing to very strong E.N.E. winds.

Anchorage in inner road available, with Harbour Master authorisation.
HEALTH: Clearance on arrival.
VHF: Harbour Master on Channel 16 from 0800 – 2000 hrs. Venice radio (PT) on Channel 16, continuously.
TUGS: Available.
BERTHING: For general cargo there are the following berths: Banchina Lombarde Esterno: Length 650 m., max. draft 21 ft. Bacino Marittima, with 3 berths available, total length 480 m., draft from 14 ft. to 16 ft. Banchina Lombardo Interno: Length 100 m., draft 14 ft. For bulk carriers (grain etc.) there are 2 mooring buoys.

Campo Boe San Felice: For ships LOA 220 m., max. draft 28 ft.
Campo Boe Perognola: For ships LOA 150 m., max. draft 21 ft.
Ro/Ro berth: Bacino Marittima South – max. draft 15 ft.
CRANES: 16 mobile cargo cranes – max. capacity 130 tons. 3 floating elevators for bulk carriers. 1 cargo crane on rails – capacity 5 tons alongside Banchina Lombardo Interno.
STEVEDORES: Working hours normally 0800 – 1200 hrs, 1400 – 1800 hrs.
MEDICAL: Hospital facilities available.
FRESH WATER: Available on the berth by hose connection. For ships on road by tug or barge, is necessary.
FUEL: Available by lighter.
CONSULS:

Argentina
Belgium
Brazil
Denmark
Finland
France
Germany
Great Britain
Greece
Lebanon
Liberia
Netherlands
Norway
Panama
Peru
Portugal
Spain
Sweden

REPAIRS: Routine maintenance possible.
CUSTOMS ALLOWANCES: Italian Regulations apply.

SHIPMASTER'S REPORT: August 1980.
Vessel discharged yellow corn.

Chioggia is a famous fishing port in the Southern region of the Venice lagoon. In the past few years more and more vessels with grain cargo have been directed to this port because the facilities of Venice, Ravenna, etc., are not sufficient to handle the increasing quantities of imported grain, corn, soyabean meal, etc.

Vessels with an arrival draft deeper than 28 ft. have to anchor outside the breakwater about one mile N.E. of the entrance. The depth there is 12.0 m. – 14.0 m., the bottom is muddy. The lightering operations are done by floating elevator and modern barges. It is understood that the season is good and the sea calm. The daily discharge rate with one elevator is between 3,000 and 4,000 metric tons. The elevator is not self propelled, the barges are handled by a modern pushing tug. From the vessel the barges move alongside to the inner harbour basin named "Bacino della Stazione Marittima" where they are discharged by mobile cranes into lorries.

A shipchandler is available, the quality of fresh provisions is good. The shipchandler also co-operates with "Unitor" gas and oxygen change.

Fresh water is only available by tug at outer roads and in small quantities, tug charges about U.S.$300.00 per hour.

Transportation of crew and small amounts of stores is done by the pilot boat, which charges U.S.$75.00 per trip from 0800 hrs. until 1700 hrs. Monday-Saturday, outside that time 50% more.

The pilot boat listens on Channel 14 VHF during daytime, otherwise only when there is work for the Pilot.

When vessel's draft is not more than 28 ft., shifting into the inner roads is possible, there is a place close S.W. of the castle "Forte S. Felice" with two mooring buoys for the stern and one for the bow, distance between stern buoys and bow buoy is 250 m., the depth is 10.0 m.–11.0 m.

There is one tug available, further tugs have to come from Venice.

At the inner roads fresh water is available by waterboat from Venice-Marghera, minimum of two days notice required, the quality is good. A crewboat is available and has to be arranged by the Agent, VHF is not available, the charge rate is about 30,000 (thirty thousand) Italian Lira per trip.

The nearest airport is Venice/Marco Polo Airport, taxi charges from Chioggia to Airport between 30,000 and 40,000 Italian Lira.

From the ship's documents only the certificate of measurement was required by the authorities, other forms like those required at Venice.

Doctor and hospital with X-ray facility available, giving medical reports in Italian language only.

Repair facilities are not available, have to be ordered from Venice.

AUTHORITY: Capitaneria di Porto – Chioggia, Piazza Vigo, 30015 Chioggia, Italy. *Tel:* (041) 400242, 404761. *Cables:* Compamare Chioggia. *Contact:* T. Santapaola, Port Commandant.

CIRO MARINA (Pta. Alice): 39.24 N., 17.09 E. (See Plan Book)

SHIPMASTER'S REPORT: November 1979.

The vessel was instructed to go to Ciro Marina to load a cargo of salt, at the time the vessel was berthed at Marina de Carrara. We realised that we did not have a chart of Ciro Marina and ordered one from Genoa. After four days still no chart was forthcoming, I do not think such a chart exists.

We approached Ciro Marina from the South, as close in as was considered prudent, but no sign of any harbour could be seen at the village of Ciro Marina.

Looking further North towards Pta. Alice (Al-lee-chi) a large hangar type building and loader could be seen, (this coincides with the statement in the Pilot supplement, page 78). We rounded the point and proceeded towards the loader, where dolphins could be seen. (See "Plan Book").

Torre Vecchia is not so noticeable when approaching from the East. (Mediterranean Pilot Vol. 2, Page 475, lines 18-22).

It was established that a Pilot should have been ordered through Crotone pilot station, 20 miles South of Pta. Alice. As the weather was excellent, and ascertaining that there was ample water I decided to berth the vessel, this was accomplished without any diffficulty.

It is best to drop the anchor well out, as it is used to haul small ships off the dolphins to load, as the loader cannot traverse right in close. We were told there is usually a buoy moored offshore to take an offshore headline, but this had been washed ashore in the Winter. An offshore dolphin for a similar stern line is in position. (See Plan).

The loader, I was told can load up to 2,000 tonnes per hour, and is fairly manoeuvrable. With the loader placed amidships it was necessary to shift ship twice, to load right forward, and right aft.

No fresh water is available. It might be possible to get a small quantity of stores, although getting them on board would be quite a carry, the loading chute/pipe is about 300 m. long with a narrow catwalk alongside the loading belt, it is not the best way to get stores aboard.

Sailing presents no difficulties, just let go and steam away. The Pilot does not appear.

As this is an open to the sea berth it is dangerous with winds from W.S.W. through North to E.S.E., or any Northerly swell. Vessels of 14,000 tons use this "port" and large quantities of salt are exported.

References:

B.A. Chart 198.

Mediterranean Pilot Volume 2. 9th Edition 1965. Pages 474 and 475, along with supplement No. 7 – 1975.

Position: Gulf of Taranto. 39° 24.2′ N., 17° 08.7′ E. (approx.).
Type of Port: Open to the sea.
Pilot: Ordered through Crotone Pilot, VHF Channels 16 and 14.
Radio Station: Crotone Radio is the nearest.
Cargo Loaded: Mineral salt.
Rate of Load: Up to 2,000 tonnes per hour.
Fresh Water: Not available.
Boatmen: Available. They stand by from arrival to departure.

AUTHORITY: Capitaneria di Porto, 88074 Crotone, Italy. *Tel:* 0962-20721, 0962-20722. *Contact:* Antonio Valentini, Commandant.

CIVITAVECCHIA: 42.05 N. 11.47 E. (See Plan Book)

DOCUMENTS: On arrival:

4 Crew Lists.
4 Lists Passengers in Transit.
4 Lists Passengers Disembarking.
2 Provisions Lists.
2 Lists of Crew Articles, including Tobacco, Cigarettes, Spirits, Radio, etc.
Manifest(s) and Bill(s) of Lading (non-negotiable) covering all cargo on board.

It is recommended that particular care be exercised in giving the exact weight and number of tobacco, cigarettes, spirits, paper for cigarettes, cigars, cigarillos, coffee, sugar, salt, pepper, spices, cocoa and chocolate, etc., on board, as well as bunker quantities and lube oil, thus avoiding fines in case the Customs guards in searching vessel subsequently should find any concealed.

PILOTAGE: Pilots are advised of vessel's arrival by Port Authorities and by Agents. Therefore accurate advance notice of ETA should be addressed by Master to Agents. Pilot usually boards vessel within 2 miles of port. Pilot station in port area. Pilots work on VHF Channel 14.

ANCHORAGES: Any vacant place assigned by Port Authorities, taking into account vessel's draft. If port is congested vessels anchor at roads. Pilot assistance is recommended.

RESTRICTIONS: No restrictions are imposed upon entry. With the exceptions of particular individual cases to be submitted for perusal to Harbour Authorities, vessels may berth and sail at any time, weather permitting. Only 1 tug available between 0000 – 0500 hrs.

MAX. SIZE: Max. draft 34 ft. 6 in.

HEALTH: Clearance is granted by radio; Master to cable Sanimare Civitavecchia 24 hours prior to vessel's arrival. Quarantine requirements are those prevailing in all other Italian ports.

RADIO: Communications to and from vessels are sent and received from Civitavecchia Radio.

TUGS: Tugs wait for vessel at port entrance. Tug assistance is necessary although not compulsory. Ship's lines have to be used.

BERTHING: Shore fenders keep vessel off the quay.

Berths: No. 2 for vessels up to 180 m. length, 28 ft. 6 in. draft.
No. 7 for vessels up to 160 m. length, 25 ft. draft.
No. 8 for vessels up to 240 m. length, 33 ft. draft.
No. 9 for vessels up to 130 m. length, 25 ft. draft.
No. 10 for vessels up to 220 m. length, 28 ft. 6 in. draft.
No. 11 for vessels up to 220 m. length, 28 ft. 6 in. draft.
No. 14 for vessels up to 190 m. length, 33 ft. draft.
No. 18 for vessels up to 220 m. length, 34 ft. 6 in. draft.
No. 20 for vessels up to 220 m. length, 34 ft. 6 in. draft.

SPECIALISED CARGO HANDLING FACILITIES: Berth No. 8: Grain silo of 35/40,000 tons capacity is available; this berth is equipped with 2 rail-suckers, 4 movable suckers and 1 elevator. Ore, coal, fertilisers, sulphur, etc. can be handled at Quay Nos. 2, 7, 9, 10, 11 and 14. Structures for containers not available here, nevertheless small traffic might be practicable. Ro/Ro traffic practicable. Liquid chemicals practicable. No facilities exist for LPG carriers.

STEVEDORES: To enable Agent to order gangs it is very important to obtain accurate ETA in good time.

From 0800 – 1200 hrs. and from 1300 – 1700 hrs., or from 0600 – 1230 hrs., from 1230 – 1900 hrs. and from 1900 – 0030 hrs. against payment of 32.50% extra.

Saturday: From 0600 – 1230 hrs. against payment of 32.50% extra; from 1230 – 1900 hrs. and from 1900 – 0030 hrs. against payment of a further increase of 25%.

Sunday: Work can be performed at overtime rates plus 50% extra from 0600 – 1230 hrs., from 1230 – 1900 hrs. and from 1900 – 0030 hrs.

Holidays: Work can be performed at overtime rates plus 150% extra from 0600 – 1230 hrs., from 1230 – 1900 hrs. and from 1900 – 0030 hrs.

MEDICAL: Not necessary to receive advance note of required medical attention. Hospital and clinical surgery available. Master to advise in advance of particular inoculations required.

TANKERS: Max. draft allowed 34 ft. 6 in. Max. length 220 m. Tankers are not permitted to enter port before sunrise and after sunset. Diameter of discharge lines 8 – 14 in.

FRESH WATER: Drinking water and water for boilers is supplied from pier by hoses. Average pumping rate 8 – 10 t.p.h. Fresh water also available by barge, capacity 120 tons.

Shipmaster's Report: April 1980: Freshwater is always in short supply and only limited quantities supplied to vessels.

FUEL: Bunkering can be effectd by means of barges and/or tank-lorries at all quays. Grades available: fuel oil and gas oil.

GANGWAY/DECK WATCHMEN: Watchmen services recommended.

OPENING/CLOSING HATCHES: First opening and last closing normally carried out by crew.

CERTIFICATES: Requirements are those prevailing in all other Italian ports, e.g. Tonnage Certificate, Safety Equipment, Load Line, Deratting Certificate, etc.

CUSTOMS ALLOWANCES: Tobacco. Quantity permitted to each crew member: 50 grams to be smoked within first 48 hours. Wine and/or Spirits. 1 open bottle of spirits.

IDENTIFICATION CARDS: Required. Passes issued by local police.

CONSULS: There are no Consulates, but only Consular Agencies or Honorary Representatives for the following countries:

Finland	Tel. 23134	Portugal	Tel. 23048
France	Tel. 23048	Spain	Tel. 24304
Norway	Tel. 25207	Sweden	Tel. 23109

Nearest British Consulate is in Rome.

REPAIRS: Repairs of limited extent and importance may be carried out by 2 local workshops.

REPATRIATION: Facilities exist to effect crew changes and to arrange repatriations.

AIRPORT: Distance from Airport Leonardo da Vinci (Rome) 70 km.

TIME: 1 hour in advance in relation to GMT. Clock will be advanced 1 hour in Summertime, giving 2 hours advance of GMT.
HOLIDAYS: All Sundays, 1st and 6th January, 19th March, 25th and 28th April, 1st May, 2nd and 29th June, 15th August, 1st and 4th November, 8th, 25th and 26th December, Easter Monday, Ascension Day, Corpus Domini. Holiday work is subject to the authorisation of port authorities.
POLICE/AMBULANCE/FIRE: Police, 23729; Ambulance, 23382; Fire, 23333.
TELEPHONES: Can be connected on board vessels at Quay No. 7.
AUTHORITY: Capitaneria di Porto di Civitavecchia, 00053 Civitavecchia, Italy. *Tel:* 0766-20250/23015/22338. *Cables:* Compamare Civitavecchia. *Contact:* Technical Department.

FIUMICINO: 41.46 N. 12.13 E. (See Plan Book)

DOCUMENTS:
Before entering territorial waters in the vicinity of the port, tankers' Masters must, directly or by ship's Agent advise authority of the following:
Ship's name and call sign;
Length and draft;
Destination and ETA;
General nature and quantity of cargo.
Documents required:
3 Copies Crew List.
Stores manifest.
List of personal effects.
Manifest of cargo.
PILOTAGE: Vessel should await Pilot about 1.0 miles off the tanker loading platforms which are situated in the following positions:
Platform R1: Lat. 41° 45′ 06.64″ N., Long. 12° 09′ 15.73″ E.
Platform R2: Lat. 41° 44′ 37.44″ N., Long. 12° 10′ 04.79″ E.
ANCHORAGE: Vessels waiting to berth should anchor to the South of Platform R2, not less than 1 mile from the platform. The anchorage is not recommended during strong South or South-westerly winds, and in unfavourable weather conditions it is advisable for vessels to remain underway.

It is forbidden to use anchors in the near vicinity of the tanker berths, due to the presence of underwater pipe-lines. When approaching the moorings, anchors must be firmly secured in the hawse.
RESTRICTIONS: Pilotage and mooring is not carried out during hours of darkness. Unmooring possible day and nigght.
MAX. SIZE: Ships up to 220,000 d.w.t. can be moored.
0234 At R1 platform, water depth 23 m., max. draft 51 ft.
At R2 platform, water depth 19.550 m., max. draft 42 ft.
HEALTH: Agent will advise "Sanimare Fiumicino", and doctor will come on board in theRoads, usually at 0900 hours.
RADIO: Advise Refinery of vessel's ETA 72 hours before arrival via Roma Radio. Confirm ETA 24 hours before arrival.

Vessels arriving for the first time at Fiumicino should also advise dimensions of vessel's manifold flange connections, as follows: distance from bow, distance from ship's side, height above deck, outside diameter, inside diameter, number of holes, distance between centre of opposite holes and diameter of holes.

Vessels should also communicate draft, cargo temperature, lifting power of derrick, voltage and type of current on board (AC/DC) and vessels loading should also advise quantity of ballast on board.

During cargo operations, the tanker will communicate by radiotelephone with the pumping station and the refinery.
VHF: Pilot station on VHF Channel 16. Listens during daylight hours only. Port Authority available 24 hours on VHF.
TUGS: 1 × 2,330 h.p. Tug required by crude oil tankers.
MEDICAL: Local doctor and hospitals aavailable in Rome.
TANKERS: 2 offshore mooring platforms, R1 and R2, connected to sealines of 16 in. (2), 20 in., 28 in. and 36 in. diameters. Loading rates 600 to 1,200 cu.m. per hour. Rate of discharge 2,500 to 4,000 cu.m./p.h.
Platform R1 for crude oil tankers.
Platform R2 for product tankers and small crude oil tankers.

Mooring: Vessel to have ready on arrival: port derrick rigged for hose handling; boat-rope, pilot ladder, heaving lines and lifebuoys on both sides; and bow stopper.

Vessel is moored by the bow about 30 to 50 m. distant from the mooring platform.

Hoses: Connecting and disconnecting hoses performed by refinery personnel, vessel to supply winchman and man the derrick. Derrick capacity to be at least 3 tons for ships loading and discharging products and 8 tons for crude oil tankers. Each platform is equipped with 2 floating hoses, about 200 m. long, which drift fully extended when berth is not occupied.
BALLAST: Raffineria di Roma can accept dirty ballast or tank washings up to a maximum of 15,000 tons. Recommended advise before arrival the quantity of ballast to be discharged. Ballast should be reduced to a safe minimum to save time at the mooring berth.
SALINITY: 25-28 grams per litre.
FRESH WATER: Supply by barge 100 tons per trip.
FUEL: Bunkers not available, only lube oil in drums can be supplied.
CUSTOMS ALLOWANCES: 40 cigarettes per day for 3 days for each Crew member.
CONSULS: All Consulates and Embassies in Rome.
REPAIRS: Small repairs can be effected but no dry dock.
AIRPORT: International airport "Leonardo da Vinci" at Fiumicino.
TIME: GMT plus 1 hour. From March 29th to September 26th, GMT plus 2 hours.
REGULATIONS: Raffineria di Roma will hold vessel responsible for consequences of any pollution caused by oil leaking or discharged from the ship. Strictest precautions to be observed.

Engine to be kept ready to leave the berth in the shortest possible time.

Propeller movements are forbidden while vessel in berth, due to presence of floating pipe-lines.
WINDS: In the Fiumicino Roads the strongest winds come from S.W., but all winds coming from S.E. to N.W. can cause such storms that can be dangerous both for moored ships and anchored ships.

Northern winds, being partially weakened by the coast, are dangerous only when exceptionally strong.

Usually storms begin with S.E. winds, which then turn South-westerly reaching their maximum force; then they usually turn Northerly or North-westerly, finally weakening; this cycle can endure from 3 days up to more than a week. However the above cycle does not always develop in this way, since the peculiar characteristic of this zone is the rapidity by which wind can change both in force and direction, as well as the sea possibility of becoming rough in a very short time. The stream almost always goes from S.E. towards N.W. at the speed of 0.5 to 1 knot. Owing to the Tiber's mouth, the stream can exceptionally increase in intensity, but due to the distance between terminals and shore, we have never had up to now any example of intensity increased to such a point as to be dangerous for mooring and anchoring ships. Tides are practically negligible; in fact the maximum difference between high and low tide is about 0.40 m.
GENERAL: The refinery personnel will set up floodlights on deck but power is to be provided by the vessel as is assistance in the setting up.

A refinery representative will remain on the vessel to supervise cargo inspection, loading/unloading and surveillance. He is to be provided with accommodation and meals.

A room is to be provided for the radio connecting vessel with the refinery.

A Raffineria di Roma S.p.A. representative will, upon boarding the vessel, require a letter, stating:
(a) the minimum discharge rate of crude oil, products or ballast or the maximum loading rate;
(b) the maximum back pressure to be maintained at ship's manifold;
(c) amount of cargo requested for loading vessel.
TERMINAL OPERATOR: Raffineria di Roma S.p.A.
AUTHORITY: Ufficio Locale Marittimo Fiumicino, U. Le Traiano 37, Fiumicino, C.A.P. 00054 Roma, Italy. *Tel:* (06) 6451933, 6451911. *Contact:* Mario Macera, Il Comandante.

GAETA: 41.13 N. 13.35 E. (See Plan Book)

PORT LIMITS: Although not reported on nautical charts, port limits may be considered as the seaward boundaries of the compulsory pilotage area.
DOCUMENTS:
6 copies Crew List.
6 copies Passenger List.
6 copies Cargo Manifest.
3 copies Provisions Manifest (Stores List).
3 copies List of Crew Personal Effects.
2 copies Arrival Report (on form submitted by Agents).
2 copies Maritime Health Declaration.
Vaccination Certificates for sighting.
Ship's Certificates including Italian Authority dues.
PILOTAGE: Compulsory for entering Roads, docking and undocking. Seaward boundaries of compulsory pilotage area within 2 miles from Punta Stendardo, up to a line joining Punta Stendardo with Torre Scauri (line bearing about 65° from Punta Stendardo). Pilots meet vessel about 2 miles from Punta Stendardo and can be contacted by VHF (calling Channel 16, working Channel 12) 1 hour before vessel's arrival.

Advance notice to Pilots given by vessel's Agent.
ANCHORAGES: Safe anchorage can be found outside the compulsory pilotage area or, according to Pilot's instructions, inside above said area.
RESTRICTIONS: No restrictions outside the compulsory pilotage area. Inside above area vessels to keep clear from prohibited anchorage areas, sea berth facilities and mooring buoys, mooring buoys for military vessels, oil jetty facilities and mussel beds.

Also see "Berthing".
MAX. SIZE: Inside compulsory pilotage area, max. permissible length, breadth, draft, within values of 200,000 d.w.t. class VLCC.

Also see "Berthing".
HEALTH: Pratique automatic for vessels coming from ports in Italy, U.K., France, Belgium, Netherlands, W. Germany, Greece and Spain.

Otherwise Free Pratique granted by local Health Officer who boards ships on arrival together with Harbour Officers, between 0700 hrs. and sunset. In order to facilitate boarding by officers at anchorage or berths, it is requested that vessels have a convenient accommodation ladder/gangway ready.
RADIO: 72, 48 and 24 hours' definite notice to Agent through Roma Radio (IAR).
VHF: Port Authority, Pilots, Tugs, Oil Sea Berth, Oil Jetty and Agency Offices equipped with VHF; calling Channel 16.
TUGS: Tugs standing just inside Punta Stendardo, being called for service by the boarding Pilot. Ship's lines used.

Tug-boat assistance compulsory, for vessel over 1,600 g.r.t., for docking and undocking; stand-by tug compulsory, for vessel loading or discharging at oil jetty (but not at oil sea berth), from connection to disconnection of cargo hoses.
BERTHING: Oil sea berth for VLCC's discharging crude oil, Oil jetty for tankers discharging/loading crude oil and oil products, Dry cargo main quay "Caboto", Dry cargo pier "Genepesca". Docking/undocking normally performed in daytime only with possible exceptions.

VLCC Sea Berth: Owned by Messrs. S.I.O.G. (Societa' Italiana Oleodotti Gaeta) for class VLCC 200,000 d.w.t. discharging crude oil. Restrictions for vessels within above d.w.t. class not yet officially issued. Max. values of d.w.t., length, draft of vessels already called:

- Max. d.w.t.: 260,000 (VLCC Athene)
- Max. length: 349 m. (VLCC Agip Lazio)
- Max. draft: 20.30 m. (VLCC Agip Lazio)

S.I.O.G. sea berth consisting of 2 submerged mooring blocks and 5 mooring buoys fitted with mooring wires 44 mm. diameter and messenger wires 20 mm. diameter.

The S.I.O.G. sea berth submerged manifold (approximate position Lat. 41° 13′ 27″ N., Long. 13° 36′ 23″ E.) is marked by a beacon-buoy with flashing red light. Two buoys are located to the W.S.W. of the mooring berth to indicate the berthing line (about 077°).

The pipe-line to the shore is 42 in. diameter, and about 3,150 m. length. Two partially floating cargo hoses 16 in. diameter having steel flanges 16 in. diameter, ASA 150, connected to the submerged cargo manifold, to be lifted on vessel's portside by ship's hose derrick required to have S.W.L. 10 tons.

One or 2 extra tugs (in addition to the 3 existing in the port of Gaeta) may be needed for berthing larger size vessels at the sea berth, said extra tugs to come from Naples with adequate advance notice.

G.I.P. Oil Jetty: Owned by Messrs G.I.P. (Gaeta Industrie Petroli) for tankers discharging/loading crude oil and oil products.

Restrictions:

Maximum permissible draft	48 ft.
Maximum permissible distance between cargo manifolds and vessel's stern	450 ft.
Maximum permissible height of above vessel's cargo manifold from sea level	49 ft.

Tankers up to 60,000 d.w.t. normally berth and operate at G.I.P. Oil Jetty; tankers over 60,000 d.w.t. and up to 90,000 d.w.t. may be berthed at Oil Jetty or at Sea Berth according G.I.P. advice; tankers over 90,000 d.w.t. will find berth at Sea Berth.

G.I.P. Oil Jetty is a finger jetty with 3 berths: North Berth with restrictions as above; South Berth for vessels up to 39 ft. draft; stern berth for small coastwise vessels.

North and South Berths equipped with 4 articulated 8 in. steel pipe connections.

Dry Cargo Quay "Caboto": 106 m. long quay with max. official draft limitation of 20 ft.; vessels up to 130 m. length, drafts up to 20 ft. fwd and 22 ft. aft, are normally accommodated.

Dry Cargo Pier "Genepesca": 50 m. long pier with 1 berth each side for vessels up to 15 ft. draft.

New Dry Cargo Quay "Salvo D'Acquisto": Length 223 m., width 80.0 m., dredged depth 9.0 m.

Dry Cargo Handling: Cargo normally handled – general cargo, clay, kaolin, fertilisers, animal-feed, frozen commodities, clinker, cement, steel rounds, steel coils, aluminium ingots, etc.

CRANES: 4 mobile dock cranes available, each having max. lifting capacity 30 tons (normal working capacity 15 tons).

STEVEDORES: Compagnia Lavoratori Portuali 'G. Caboto'. Gangs ordered by Agents dealing with cargo.

MEDICAL: Physician, Dentist, Eye and other Specialists available. Hospital and Nursing Home in Formia (7 km. from Gaeta); new Gaeta Hospital operative. Inoculation service available. Vaccination Certificates issued. Extension of Derat Certificates granted.

TANKERS: See "Berthing".

BALLAST: At all berths only clean ballast can be pumped out. G.I.P. Oil Jetty equipped with system for discharging ballast ashore through 8 in. connections and a 1600 m. long 10 in. pipe-line at a rate of about 400 – 450 t.p.h.

FRESH WATER: Of excellent quality supplied to ships at all berths but not at sea berth. At sea berth or at road, fresh water can be supplied by tug-boat but expensive.

FUEL: Supplies of Bunker "C" and Gasoil can be arranged ex-installation at G.I.P. Oil Jetty; a minimum quantity of 200 tons is required for fuel and 100 tons for Gasoil. At dry cargo berths bunkers can only be arranged by road tanker. Bunkers not available for vessels accommodated at sea berth.

REPAIRS: Minor steel and machinery repairs currently performed by local machine shops; major repairs may be effected by personnel and equipment from Naples.

DRY DOCKS: 2 dry docks for vessels up to about 70 m. length.

SURVEYORS: Lloyd's, A.B.S. and other Classification Societies' Surveyors obtainable from Naples.

CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened wine/spirit bottle per man.

IDENTIFICATION CARDS: Shore passes issued by local police.

REPATRIATION: Facilities available for effecting crew changes and arranging repatriation.

AIRPORT: Nearest airports Naples (96 km.) and Rome (International airport 135 km.).

TIME: GMT plus 1 hour September to March; GMT plus 2 hours March to September.

POLICE/AMBULANCE/FIRE: Police station telephone numbers: 113 (emergency); 460031; 460474. Ambulances telephone numbers: 24361; 24461. Fire department telephone number: 460270; 460931.

TELEPHONES: Arrangements for placing telephone aboard vessels not available.

EMERGENCY CO-ORDINATION CENTRE: Contact Harbour Master's Office.

STORING: At dry cargo berths vessels may be stored by truck. At oil jetty or sea berth by motor launch or barge.

AUTHORITY: Capitaneria di Porto – Gaeta, Piazzale Cabato, 04024 – Gaeta. *Tel:* 460088. *Contact:* Rocco De Berardinis, Port Commandant.

AGENT: Italnoli, Lungomare Caboto, Palazzo Albani 3, 04024 – Gaeta, Italy. Cable Address: "Italnoli – Gaeta". Telex: 68050 Italgaet. Tel. 460572, 460915. *After Hours:* 460087, 460859.

GELA: 37.04 N. 14.15 E.

DOCUMENTS:

For Maritime Authority:
Arrival Report.
Crew List.
Ship's Certificates, for sighting.

For Port Health:
Maritime Declaration of Health (1 copy).
Vaccination Certificates, for sighting.

For Customs:
List of supplies, deck and engine stores.
Cargo Manifest and Bills of Lading.

For Commissariat of Public Safety:
Passenger List (2 copies).
Crew List (1 copy).
Shore Passes for all Passengers and Crew.

PILOTAGE: Pilotage is compulsory for vessels of 500 g.r.t. and over. The Gela Pilots' Corporation, based at Corso Vittorio Emanuele No. 1, Tel. 0933/917051, has VHF equipment (Channel 16 for calling-up; Channels 6 or 12 for working).

Requests for pilotage must be made two hours prior to ETA, and in office hours (0600 to 2000 hrs.).

The Corporation has 2 service vessels with a black hull and with the letter "P" painted in white on both sides. To call the pilot, the signals laid down in the international signalling code must be employed.

The pilotage service is rendered up to 1 mile from the Port Island.

Vessels awaiting the Pilot must anchor 1 mile to the West of the breakwater on a bearing of 250° from the green light on the breakwater or 1 mile to the East of the same breakwater on a bearing of 160° from the red light on the breakwater.

Berthing may be effected daylight hours. Unberthing can be effected day and night.

ANCHORAGE: See "Pilotage".

RESTRICTIONS: See "Pilotage".

MAX. SIZE: See "Berthing".

HEALTH: Free Pratique is not granted by radio but is given onboard after an accurate inspection.

RADIO: Roma Radio or Augusta Radio. Messages are forwarded quicker through Roma Radio. There is a coastal radio station at Gela.

VHF: The District Maritime Office listens on VHF Channel 16 during office hours (0800 to 2000 hrs.).

TUGS: Tug service is effected by 3 tugs stationed at the Port Island.

Use of tugs is compulsory for tankers and dry cargo vessels (dependent on g.r.t. and n.r.t.).

BERTHING: On the Port Island of Gela, the following berths are available:-

6 berths on the breakwater suitable for taking tankers with a gross registered tonnage up to 30,000 tonnes and with a draft of 31 ft. 6 in. All berths are equipped to take bilge water and dirty ballast.

2 berths at the head of the pier suitable for taking vessels with dry cargo loading facilities and up to 25,000/30,000 g.r.t. with a draft of 31 ft. 6 in.

The Eastern berth is equipped with two platform trucks for handling bulk cargo, capacity 8 tons.

The Western berth does not have stationary quay equipment; mobile cranes can be made available for handling manufactured products, capacity 2.5 tons.

2 berths on the small head of the pier capable of taking tankers up to 3,000 g.r.t. with a draft of 20 ft.

1 sea berth in the buoyed area capable of taking tankers up to 80,000 g.r.t. with a draft of 42 ft.

Also see "Tankers".

TANKERS: Anic Sea Line Terminal: Situated about 1 mile off the breakwater, a crude oil discharge berth in depth of 42 ft. served by 34 in. sea-line terminating in two 12 in. flflexible hoses. No slop discharge facilities. At the breakwater, Berth Nos. 1 to 6 for loading refined products and LPG can accommodate vessels up to 30,000 g.r.t. with max. draft 31 ft. 6 in. Berths No. 1 and 2 are used for crude oil and heavy products. Berths No. 3 and 4 are used for light products and gasoil.

Berths No. 5 & 6 are used for LPG and petrochemical products.

Storage tanks situated up to about 15 m. above sea level.

STEVEDORES: Stevedoring carried out by local company. Labour must be ordered by Agent 3-12 hours in advance, depending on the shift requested.

MEDICAL: All assistance can be arranged by Agents. Hospital and private clinic available. Vaccinations and inoculations together with relative certificates can be carried out by the Office of Marine Health.

DENSITY: 1024.

FRESH WATER: Available at all berths against payment. Rate 10 t.p.h. Not available at Sea-Line Terminal.

FUEL: Available to vessels moored at the jetty head by means of road tanker, for small quantities only.

OPENING/CLOSING HATCHES: Optional to employ shore personnel.

CUSTOMS ALLOWANCES: As for other Italian Ports.

IDENTIFICATION CARDS: Required.

CONSULS: No local representation.

REPAIRS: Only minor repairs possible (Wood and metal work).

DRY DOCKS: None.

CLASSIFICATION SOCIETIES: None.

FIRE PRECAUTIONS: General standards of safety applicable to oil ports must be observed.

AIRPORT: No airport at Gela. Nearest airports at Catania and Palermo.

TIME: GMT plus 1 hour. Summertime: GMT plus 2 hours.

HOLIDAYS: 1st January, Easter, Lunedi dell' Angelo (Angel's Monday), April 25th, May 1st, August 15th, November 1st, December 8th, December 25th and 26th.

TELEPHONE NUMBERS: (Prefix 0933).

Maritime Authority	917755	Fire Brigade	911922
Customs	917716	Civil Hospital	930522
Maritime Health	930067	Pilots	917051
Finance Guard	930170	Tugs	911008
Public Safety Authority	930091	Boatmen	918009
Carabinieri	912868	Port Company	917775

SHORE LEAVE: Allowed.

TELEPHONES: It is not possible to have telephones placed onboard.

AUTHORITY: Ufficia Circondariale Maritimo.

GENOA: 44.24 N. 08.54 E. (See Plan Book)

DOCUMENTS:

6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
3 Cargo Manifests.
Arrival Report, completed on arrival.
Maritime Declaration of Health Certificate, completed on arrival.
Ship's Certificates including Italian Authority Dues.
Vaccination Certificates for sighting.

Tankers: All the ships whose building contract dates 1975 or whose building started after June, 1976, must have a certificate I.O.P.P. (International Oil Pollution Prevention). If not, sailing will not be granted.

All other ships built before must have onboard all anti-pollution equipment and must hold the I.O.P.P. Certificate as from October 2nd, 1984.

Also the ships whose country has not taken part in MARPOL will be inspected by Port Authorities and R.I.N.A. for obtaining sailing permit.

PILOTAGE: Pilots advised of vessel's arrival by port authority and the latter by vessel's Agent. Therefore accurate ETA recommended. Pilotage compulsory for vessels over 500 g.r.t. To contact Pilots and pilot boats, VHF Channel 12. Time of working 24 hours. Pilots board vessel at about 1 mile off port entrance.

ANCHORAGES: Anchorage beyond the meridian passing through the port light at the end of Duca di Galliera Pier is forbidden from 1st June to 15th September.

RESTRICTIONS: Tankers not usually berthed during night.

During discharging at SPM vessel should keep at all times at least 30% of her SDWT (cargo and/or ballast) on board and trim should not exceed 5 m.

MAX. SIZE: Tankers: Up to 46 ft. draft within port. No limit for tankers mooring at Single mooring platform outside the port. Other vessels: 31 ft. to 40 ft. draft. Also see "Tankers" and "Berthing".

HEALTH: Free Pratique may be requested by radio to "Sanimare, Genoa", between 12 to 6 hours before arrival, advising vessel's name, nationality, last port, number of passengers and crew and state of health on board. Pratique is automatic for vessels coming from all ports where there is no sanitary order.

RADIO: Genoa Radio, call sign ICB. Agent uses same station when cabling to vessels.

TUGS: Tugs join vessel at port entrance. Ship's line used. 33 tugs available. Use of tugs optional except for vessels mooring to the platform or the buoy (oil discharge).

BERTHING: Pilot advises Master which side to berth. Shore fenders keep vessel off quay.

Molo Vecchio: 452 m. berthing length; 29–31 ft. permitted draft.

Silos Ponte Parodi: 200 m. berthing length; 36 ft. permitted draft.

Silos S. Limbania: 150 m. berthing length on both sides of the pier; permitted draft: 33 ft. East side, 36 ft. West side.

Ponte dei Mille: East side: 292 m. berthing length; 27–28 ft. permitted draft West side: 265 m. berthing length; 26–27 ft. permitted draft.

Ponte Andrea Doria: East side: 238 m. berthing length; 36 ft. permitted draft. West side: 233 m. berthing length; 36 ft. permitted draft.

Calata Oli Minerali: 474 m. berthing length (bow mooring); 24–36 ft. permitted draft.

Calata Stefano Canzio: 422 m. berthing length (bow mooring); 31–33 ft. permitted draft.

Calata Bettolo: 434 m. berthing length; 30 ft. permitted draft.

Ponte Rubattino: East side: 328 m. berthing length; 34 ft. 6 in. permitted draft. West side: 340 m. berthing length; 27–29 ft. permitted draft.

Ponte S. Giorgio: East side: 390 m. (will soon be in operation); 32 ft. permitted draft (will be 37 ft. 6 in.). West side: 264 m. berthing length; 30 ft. 6 in. permitted draft.

Ponte Ex Idroscalo: East side: 190 m. berthing length; 29 ft. permitted draft. Head: 190 m. berthing length; 35 ft. permitted draft. West side: 260 m. berthing length; 28–32 ft. permitted draft.

Ponte Ethiopia: East side: 255 m. berthing length; 32–33 ft. permitted draft. Head: 146 m. berthing length; 32 ft. permitted draft. West side: 399 m. berthing length; 29–31 ft. permitted draft.

Ponte Eritrea: East side: 388 m. berthing length; 29–31 ft. permitted draft. Head: 145 m. berthing length; 31 ft. permitted draft. West side: 398 m. berthing length; 29–31 ft. permitted draft.

Banchina Italsider: 500 m. berthing length; 40–44 ft. permitted draft.

Also see "Container Handling Facilities" and "Specialised Cargo Handling Facilities".

CRANES: Over 300 cranes and elevators with lifting capacities ranging from 1 to 45 tons. Over 72 self-propelling cranes with lifting capacities ranging from 10 to 45 tons. 26 floating cranes with lifting capacities of up to 350 tons.

CONTAINER HANDLING FACILITIES: Ponte N. Ronco/Ponte Canepa/Ponte Libia: The Container Terminal covers a total surface of about 250,000 sq.m., of which 230,000 sq.m. are uncovered areas for positioning containers and about 17,000 sq.m. consist of covered areas for deposit of packed goods coming from stripping and intended for stuffing of containers. Quays with a depth of 11 m. – 11.5 m. (36 ft. – 38 ft.) make it possible to berth 5 ships and modern lifting facilities enable to effect loading and unloading operations at a rate of 1 container every 3 minutes. About 5 km. of railway lines are at the disposal of the terminal for the containers marshalling.

The terminal has a stacking capacity of about 10,000 containers and handles 200,000 containers a year for 30 companies.

The Port of Genoa Authority (C.A.P.) runs the Container Terminal and sees to the integral management of the operations for unloading/loading containers.

The Port Authority renders all the services in connection with containers and cargo, and in particular:

Total planning of ship operations, included calculations of stability, draft, torsion, etc.

Checking of the conditions of containers on receiving and on delivering them, on stuffing and on stripping, and issuing of the relevant "interchanges".

Drawing up of damage reports.

Cleaning and disinfestation (when necessary) of containers.

Assistance on stowing, unstowing and on lashing, unlashing cargo inside containers.

Assistance in repairing packing.

Container sealing, labelling and weighing.

Assistance to reefer containers (plugging and unplugging to electric outlets, checking of temperatures, drawing up of "pre trip inspection certificates").

Terminal equipment:

4 "Paceco" portainers with spreaders for 20 ft./40 ft. containers and lifting capacity of 40/50 tons.

2 gantry cranes for 20 ft./40 ft. containers with lifting capacity of 45 tons.

1 "Gottwald" mobile crane for 20 ft./40 ft. containers with lifting capacity of 36/40 tons.

11 straddle-carriers for 20 ft. containers.

13 straddle-carriers for 20 ft./40 ft. containers.

2 "Delmach" lift-trucks with spreaders for full 20 ft./40 ft. containers, lifting capacity 30 tons (plus 3 more in the near future).

11 lift-trucks (of which 2 with spreader) for empty 20 ft./40 ft. containers (plus 4 more in the near future).

32 fifth wheel tractors (plus 13 more in the near future).

33 trailers for 20 ft./40 ft. containers of which 8 tipping trailers (plus 15 more in the near future).

238 electric outlets for supplying power to reefer containers.

A 6 VHF frequencies radio system.

A large park of vehicles consisting of tractors, flatcars, fork trucks, self propelling trucks for stuffing and stripping containers.

SPECIALISED CARGO HANDLING FACILITIES: See "Berthing" for max. draft.

Ro/Ro Terminals: 25 special berths at Ponte Spinola, Ponte Calvi, Ponte dei Mille, Ponte A. Doria, Calata S. Lazzarino, Ponte Colombo, Ponte Assereto, Calata San Benigno, Calata Bettolo, Calata Bengasi, Calata Tripoli and Calata Derna, 45,000 sq.m. parking areas.

Cotton: 2 warehouses at Molo Vecchio, totalling 42,000 sq.m. in area and a 85,000 bale capacity.

Grain Silos: There are 2: One at Santa Limbania (65,000 ton storage capacity – 600 t.p.h. unloading capacity). One at Ponte Parodi (45,000 ton storage capacity – 450 t.p.h. unloading capacity).

Maritime Passenger Stations: One at Ponte dei Mille and another one at Ponte Andrea Doria, capable of dealing with 5,000 passengers a day.

Three stations for Ro/Ro passengers at Ponte Calvi, Ponte Colombo and Calata Chiappella.

Animal Fats and Oils Depots: Plants at Ponte Assereto, Calata Sanita and Ponte Etiopia.

144 tanks having a total capacity of up to 53,000 tons.

14 barges with a total capacity of up to 12,000 tons.

Timber Terminal: 2 berths at Ponte ex Idroscalo, 50,000 sq.m. area yard.

Coffee: A special warehouse is available at Ponte Etiopia, covering 8,800 sq.m. 50,000 sacks can be stored there.

Cellulose Terminals: 2 special berths at Ponte Eritrea and Ponte Somalia. 12,000 sq.m. of covered area.

Export-cargo Clearing Centre: Warehouse of 15,000 sq.m. equipped for the handling of 1,000 tons a day of parcels.

Wool: A special warehouse at Ponte Libia covering a 17,000 sq.m. area. 40,000 bale capacity.

Other Special Plants: Warehouses, depots, and special facilities for wine, salt, skins, bananas, coal.

TANKERS: Berths in Genoa Harbour suitable for tankers up to 750 ft. length, 34 ft. draft. Tankers discharging at Calata Sanita and Calata Olii Minerali are berthed stern to quay.

Multedo Harbour situated West of main harbour has the following jetties:

Multedo Pier – for vessels up to 588 ft. length, 31 ft. draft.
Pier "A" – for vessels up to 580 ft. length, 36 ft. draft.
Pier "B" – for vessels up to 850 ft. length, 43 ft. draft.
Pier "C" – for vessels up to 850 ft. length, 46 ft. draft.
Pier "D" – Presently accommodating tankers up to 46 ft. draft.

Discharge Rate: Maximum discharge rate for crude products:

Pier "A"	2,500/3,500 t.p.h.
Pier "B"	3,500/6,000 t.p.h.
Pier "C"	6,000/10,000 t.p.h.
Pier "D"	6,000/10,000 t.p.h.

Masters may speak direct to Pilots or Harbour Masters at Multedo Oil Berth in order to obtain latest information about berthing, etc., by calling on VHF Channel 6.

Single Buoy Mooring: The new mooring facility is located at 1,740 m. from the airport breakwater in a water depth of about 65 m., at distance of 2,250 m. from the platform and just in front of Italsider steel factory; it is linked with shore plants by a submarine pipe-line.

The new buoy can accommodate tankers up to 270,000 d.w.t., 350 m. length, 53 m. beam, 20 m. draft. This size was chosen on account of the fact that 80% of vessels coming up to the platform are under 270,000 d.w.t., whereas it can accommodate vessels up to 500,000 d.w.t.

The terminal operations are expected to take the following time:

Mooring: (from tanker arrival to pump beginning) 2 – 3 hours.

Discharge: (tankers up to 270,000 d.w.t. and discharge rate 9,000 cu.m./p.h.) 20 hours.

Unmooring: 30 minutes.

Single Mooring Platform: A steel tower, set up about 2,800 m. off the Genoa Multedo Oil Dock in water 50 m. in depth is provided for the discharge of crude oil from supertankers up to 500,000 d.w.t. Unloading capacity 14,000 cu.m./h.

A 48 in. (120 cm.) submarine pipe-line connects the tower with the terminals of all the oil companies operating at the Multedo Oil Dock.

Technical Characteristics: The tower consists of a steel structure having the form of a truncated pyramid set into the sea-bed at a depth of 50 m. and supporting the following parts above the level of the sea:

A lower platform having quarters for the accommodation of personnel or the housing of the various services, the deck being at a height of 6.335 m. a.s.l. This platform is protected by a steel structure mounted on elastic supports, with wooden fenders topped with rubber buffers. The toroidal structure, externally to the rubber buffers, is 34.20 m. in diameter. Under the impact of a vessel, the ring will shift axially for a distance of 2 m. as a result of the system of shock absorbers which support the lower platform.

An upper platform 10.335 m. a.s.l. which carries the rotating arm for berthing tankers and the connection of the floating discharge hoses. The rotating arm reaches a height of 13.882 m. a.s.l. and is fitted with:

(a) a bollard capable of withstanding a horizontal pull of 360 tons;

(b) 2 pipes 24 in. in diameter running to a double universal joint at sea level for connecting the riser of the submarine line to the floating hoses linking tower and tanker; on the rotating part of the tower, the two 24 in. pipes are fitted with cut-off valves and may be connected one to the other by means of a by-pass with a gate valve;

(c) a 5-ton service crane;

(d) a lighted beacon and radar reflector at a height of 23 m.

Floating hoses for crude oil discharge: The two 24 in. pipes with which the riser connects on the tower are coupled by universal joints to 2 floating hoses of 24 in. diameter, with 16 in. terminals, each hose being about 310 m. in length and consisting of 29 sections of 10.67 m., of which the last 3 are of 16 in. diameter for connecting to the ship's manifold. They are fitted with a blank flange, a Camlock rapid-closing joint and a Keystone rapid cut-off valve that will ensure perfect tightness and rapid disconnection in an emergency.

The hose connections are exactly 90° left of the bollard with respect to the mooring vessel.

Signal lights and fog horn: The tower is equipped with a regulation flashing white light 23 m. a.s.l. and a fog horn.

The 2 floating hoses are marked at night by 5 red lights visible at a distance of 2 miles.

Request for berth: Mooring at the tower is generally reserved for tankers which, owing to their size and draft, are unable to use the Multedo Oil Dock and have applied for permission to the Port of Genoa Authority Oil Dock Management.

Order of berthing: Arriving tankers that are to work cargo at the tower and are awaiting authorisation to berth thereat must anchor in the roads.

The order of berthing is that of anchorage in the roads and, for vessels authorised to berth, according to the moment when arrival in the roads is signalled to the Port Authority's lookout station at the foot of the main lighthouse in Genoa harbour.

Should it be impossible to communicate with the lookout station, the time when communication is established with the Genoa-Multedo Oil Dock Operations Office over VHF radio, on the frequency that will be notified as soon as possible (normally Channel 6 – 156.3 MHz), indicating the point of anchorage or the ship's position, will serve for establishing the order of berthing.

Berthing at the tower will be authorised by the Oil Dock Management upon receipt of the Master's written or radioed assurance that the ship is fully efficient and ready to proceed to berth and commence discharge. The Oil Companies that are receivers of cargoes or in anyway interested as users of the Oil Dock should begin discharge within 4 hours of completion of mooring and continue without interruption, day and night.

Saving cases of proven *force majeure*, vessels moored at the tower must restrict berth occupancy to the time strictly needed for discharge operations and for ballasting.

Berthing at tower: Berthing at the tower will be authorised only weather permitting and must be carried out with the assistance of a Pilot. The Master may ask for the help of tugs, in the number needed to ensure the manoeuvre being executed safely.

Ships should moor using two 15 in. nylon hawsers 65 m. in length, supplied by the tower, each able to withstand a 300 ton pull. The end of each hawser is fitted with a 4.5 m. length of chain of which the last link, devoid of stud, will be made fast to the ship's bow structures for securing mooring ropes.

The section of chain outside the fairleads contains a safety element calculated for a breaking load of 200 tons.

The vessel's mooring structures: anchor plates with aperture for pin, quick release hooks, bollards, steel ropes, warping winches, etc., must be in fully efficient condition and able to withstand the stresses to which they will be subject once the mooring ropes have been made fast to them; they must furthermore allow for the ship being unmoored at any moment by the crew.

As the mooring hawsers can break for accidental or other unpredictable causes before the limit of 200 tons is reached, despite the inspection normally made before the arrival of each ship, all tankers moored at the tower must at all times have their engines ready to move at full speed.

Safety distance around tower and pipe-line: No ship or other craft may station itself, anchor, fish, or carry out underwater or other activities in the area around the tower and pipe-line, boundaries of which are:

South: parallel 44° 23′ 30″ N.
North: the coast.
West: meridian 8° 49′ 40″ E.
East: meridian 8° 49′ 20″ E.

Excepting for tankers proceeding to the tower and the craft providing harbour services and assistance, or other craft which have been duly authorised, no vessel or whatsoever craft may sail within a radius of 800 m. of the tower.

Mooring and warping ropes: The 2 mooring hawsers will be secured to a bollard which is part of the rotating structure of the tower and about 14 m. a.s.l. When no vessel is at berth, the 2 hawsers float on the surface, supported by red and yellow luminescent sleeves.

The ends of the hawsers are secured to 2 luminescent red buoys which support the lengths of chain that are to be made fast aboard.

Before a tanker arrives, the Port Authority's personnel will make the ends of the chain of each mooring line fast to a big, floating polypropylene rope about 80 m. in length which the vessel must pick up so that she may be slowly warped in to the tower.

Vessel will be moored with the aid of a craft suitable for operations in the open sea.

Watches, emergency services and Master's contacts with personnel engaged in discharge: As though at anchor in the roads, vessels moored at the tower must continue to keep sea watches and retain on board the crew required to cope with any emergency manoeuvre, either for vacating the berth or to meet any other serious event involving the safety of the ship, persons and cargo.

Before commencing discharge, Masters should take steps to see that liaison ensuring rapid and reliable communication between the Oil Dock Management's representatives aboard, the Company interested with the discharge and the Master has been arranged.

Safety measures to keep vessel clear of tower: Vessels at berth must keep sufficiently clear of the outer ring of the tower to ensure that the bow bulb will not collide with the tower structures.

To this end, the Master must adopt all necessary measures and precautions and take such other steps as may be ordered by the Port Authority, including the use of a tug in order to keep the vessel at a safe distance from the tower.

Vessels needing to activate propellers in order to heat turbines must keep revolution to the minimum and run engines astern.

Hose handling: While vessels are approaching and mooring at the tower, one of the craft will take the floating hoses in tow, arranging and keeping them in a position where they will not hinder manoeuvring.

On completion of mooring, the hoses will be brought alongside the vessel on the port side, so that the ends are level with the ship's manifold, and will be secured to the tackle of the cargo derrick in such a manner that the cargo receivers' personnel and the ship's crew may jointly hoist, connect and get the hoses ready and then begin discharge. Hoses must not be subjected to a pressure of more than 14 kg./sq. cm.

The ship's derrick should be able to lift at least 10 tons.

Stand-by tenders during discharge: During mooring and discharge and until sailing, the Port Authority will keep alongside or in proximity to the tower a stand-by tender of suitable size and power provided with the personnel, material and equipment that will ensure the proper functioning of the tower's facilities and provide any assistance that may be needed in the event of a spillage or other emergency.

Another smaller craft, duly equipped for the purpose, will be provided by the Port Authority for liaison between the Oil Dock, tower, tanker and tender and for transporting personnel or light materials.

The 2 craft will be equipped with continuous listening VHF radio and with anti-pollution and fire-fighting equipment.

Platform services: The services relating to the operation of the tower's fixed and mobile facilities are under the control of the Genoa-Multedo Oil Dock Management, which exercises them through its personnel on the spot.

The employee in charge of services on the tower will be in touch, by VHF radio, with the Oil Dock Management, informing the latter how discharge is proceeding and of any abnormality and receiving from the latter such instructions as may be necessary. Locally, he will keep in touch with the ship's Master and the representative of the Company interested with the discharge in order to facilitate operations in so far as he is responsible and comply with all requests that may result in advantages and in improving safety in general.

Personnel attending to ship's discharge: The Oil Company who is cargo receiver or anyway interested with the discharge and the Master, each within his own field of competence, will jointly supervise and be responsible for discharge and for connecting and disconnecting hoses.

A representative of the cargo receivers appointed for the purpose, will keep in constant touch with the company's booster station and the Oil Dock by means of VHF radio. He will act also in collaboration with the Master and the Port Authority's representative. For connecting and disconnecting hoses, the latter will make available the material and equipment provided on the tender.

Filling of hoses with water when not in use: For reasons of safety and to prevent pollution, the floating hoses must be kept full of water when not in use.

To this end, the 2 hoses are connected in the tower by means of the by-pass before the gate and non-return valves.

In agreement with the Master, the cargo receivers must drain the hoses of water before commencing discharge.

On completion of discharge, the cargo receivers must likewise flush out the hoses to remove all traces of oil, fill then with water, disconnect them, apply the blank flanges, close the Keystone cut-off valves and lower the hoses into the sea.

It is strictly forbidden:

(a) to introduce compressed air or any kind of gas into the hoses or the submarine pipe-line;

(b) to discharge the water from the hoses into the sea at the beginning of operations or that used for flushing the hoses on completion of operations.

During flushing, the cargo receivers must take all precautions against leakage or spillage of the water employed for the purpose.

Interruption of discharge operations for safety reasons: In the event of a deterioration of sea conditions, violent thunderstorms, trouble with the facilities that jeopardises safety, large scale pollution or other dangerous circumstances, the Management of the Oil Dock may, at its own unchallengeable discretion, order:

- immediate interruption of discharge;
- that the hoses be got ready for lowering into the sea;
- the adoption of all such measures as will enable the vessel rapidly to vacate the berth.

In agreement with the cargo receivers, vessels must therefore maintain a trim during discharge that will enable them to take to sea safely at any moment.

Prohibition to pollute. Cleaning up: Ships moored at the tower must not pollute the water with hydrocarbons, solid residues, or oil mixtures of any kind, nor effect gas-freeing or tank cleaning or transfer oil from one tank to another by means of temporary hoses or pipes slung over manholes or other tank apertures.

In the event of oil spills, the Oil Dock Management, without prejudice to the application of the penalties provided by law, will order the anti-pollution equipment of the craft standing by to come into operation at once, at the expense of whomsoever may be concerned, and the despatch of other equipment for cleaning up should it deem this necessary.

Bunkering and victualling: Bunkers, victuals, drinking water and stores must in general be taken aboard while awaiting berth in the roads. Such operations may also be effected with the vessel moored at the tower before or during discharge (but not during ballasting) according to the procedure prescribed by the Oil Dock Management and with observance of the precautions that are ordered.

Ships and any other craft coming alongside tankers must be provided with a sufficient number of strong fenders to prevent hull to hull contact and be fitted with spark arresters on all main and auxiliary engine exhausts.

Authorisation to go aboard: Persons needing to go aboard to do work or for other justified reasons must be provided with an authorisation issued by the Oil Dock Management.

Work on engines: It is forbidden to vessels moored at the tower to carry out works which put the engines out of action or reduce its efficiency.

Other work which cannot be delayed may be authorised exceptionally by the Oil Dock Management at its own discretion provided certain instructions and safety measures are observed.

Transhipments: Vessels moored at the tower may carry out transhipment of their cargoes only to vessels moored in the Oil Dock, for such purposes making use of the pipe-line.

Other regulations: Without prejudice to the regulations currently in force in the waters of the Maritime Department of Genoa, for all such matters as are not expressly provided for in the present regulations there shall be applied, to the extent to which they are applicable, the provisions of the Harbour Police and Safety Regulations for the Genoa-Multedo Oil dock, approved by order No. 10 of the President of the Port of Genoa Authority on the 30th September, 1968, the regulations for bunkering tankers in the Genoa-Multedo Oil dock, approved by decree No. 1384 of the President of the Port of Genoa Authority on the 1st September, 1966, of the Marine Services and Harbour Police Regulations approved by order No. 2 of the President of the Port of Genoa Authority on the 1st March, 1972, and the other laws and regulations in force in the Port of Genoa.

Penalties: Infringements of these regulations will be punished by application of the penalties provided in the Code of Navigation.

Safety rules to complied with during stay of tankers at sea terminal of Genoa-Multedo: The following are the principal safety rules that the Master is bound to strictly comply with and enforce during the stay of the ship under his command of Genoa-Multedo.

1. The main propelling machinery must be kept ready to move (standby) and there must always be available on board a sufficient number of crewmen to enable the ship to leave the berth immediately whenever ordered to by the Port of Genoa Authority (Consorzio Autonomo del Porto);
2. Vessel must have ready the accommodation ladder on starboard side and – on port side – the pilot ladder rigged forward of the poophouse;
3. Decks and surrounding waters must be properly lighted;
4. When mooring to platform anchors must never be dropped;
5. Vessel's firefighting equipment and the men in charge of its operation must always be ready for immediate action (in case of emergency). Men in drunken state must be watched and kept under supervision;
6. The ends provided with eyes of 2 strong 3.5 in./4 in. wire cables, length of which must be of 80 m./100 m. (260 ft./330 ft.) at least, must be placed hanging one fore and one aft to enable the ship to be towed out (to sea) in case of fire.
7. Unless authorised to the contrary and which will only be allowed in exceptional cases by the Oil Harbour Master, it is forbidden:
   (a) to carry out repair works, cleaning or gasfreeing of tanks or bunkers, etc.;
   (b) to carry out loading of cargo, water or other liquid products using hoses introduced through the cargo tanks lids.
8. It is strictly prohibited:
   (a) to keep fires of any kind on board, with the only exception of those for the service of ship's boilers and galleys if located in special rooms thoroughly protected against gas exhalations and far from the cargo lines;
   (b) to throw or pump overboard water ballast, bilge-water or water from any other source, that might pollute the port waters;
   (c) to cause escape of oil from the sea valves due to delay in starting the ballast pumps or any other reasons; to cause escape of oil due to leakage of pipes or valves on board; to provoke overflow of oil from cargo tanks. Accidental leakages on deck on deck must be collected into suitable receptacles and – with all precautions – poured again into the cargo tanks or carried ashore; all scuppers on the main deck and particularly those near the cargo manifolds must be plugged during the loading/unloading and ballasting operations;
   (d) the use of devices, tools and wrenches not made of non-sparking material, to connect or disconnect hoses, pipes or pipe fittings and to carry out work to any ship's equipment placed on deck or inside those spaces where the generation and/or presence of gas is possible;
   (e) to smoke on board except in those rooms approved by the Master and to throw overboard lighted matches or cigarettes;
   (f) the use of rocket signals, flares, etc.;
   (g) the use of electric hot plates, fans and other equipment which might produce sparks on deck or into those rooms having openings towards the cargo tanks;
   (h) the use of electric portable lamps and cables and of telephones not being explosion proof;
   (i) to keep open skylights, doors and hatches of spaces located in way of or near the cargo tanks;
   (l) to keep open the cargo tanks lids; to keep open Butterworth openings.
   The ship's personnel should take care that all ullage openings and gas vents are provided with spark arresters and that the latter are sound. They also should take care that the spark arresters placed on the funnels and combustion gases exhausts are sound;
   (m) shifting of steel tools, winch manoeuvring, loading and unloading of materials, connecting and disconnecting of cargo hoses during the whole period in which sampling and gauging of cargo tanks is carried out;
   (n) to carry out loading and unloading operations during storms with lightning;
   (o) the idling of pumps. Ship's personnel should immediately stop pumps that – for any reason – should idle;
   (p) the blowing of boiler's tubes;
   (q) the coming onboard of unauthorised people.
9. All engine propelled boats approaching the vessel must be provided with spark arresters on the combustion gas exhausts.
10. During shifting operations into tanks:
    (a) radio apparatus must be switched off and all aerials set to ground;
    (b) cargo lines not in use must have all valves closed and manifolds are to be blank flanged.
11. Loading of ship's stores and equipment should be carried out from the extreme poop. In case the aforesaid operations have to be carried out on deck, near the cargo tanks and should it involve the handling of heavy or metallic materials anyway, all precautions relating to the case or those each time specified by the Oil Harbour Master, should be taken.
    As a general rule the above mentioned operations are not allowed during the loading or ballasting of the ship. The crafts used for the transportation of the materials must approach the ship, stay alongside and move out without making use of the engine.
12. Tankers having on board inflammable or dangerous products, or – being empty or in ballast – having their tanks not certified gasfree, must hoist steadily and well in view, a red flag (letter "B" of the international code of signals) and by night a red light, which can be sighted from round the horizon.

Products/Chemicals:

Pier Alfa: Diameter of the connecting flange 10 in. ASA 150 with vertical face, the radius of 750 mm. from the axis of the connecting pipe at manifold is to be free from any hindrance. The distance between two centres of the 2 neighbouring pipes to manifold must be minimum 1,250 mm. A space of 1,200 mm. from the flange towards ship's rail horizontal axis is to be free of any hindrance.

West Pier: Diameter of the connecting flange 6 in. ASA 150 with vertical face. Radius from axis at least 500 mm. free from any hindrance. Minimum distance between 2 neighbouring centres at manifold 1,000 mm. Free space from flange towards ship's rail along horizontal axis at least 1,200 mm. It is understood that ships not equipped for above discharge will not be allowed to operate.

BALLAST: Facilities exist for the collection and clearance of slops by means of special barges.

STEVEDORES: *Working Hours:* General cargo: 3 shifts from Monday to Saturday: 0630 – 1300 hrs., 1300 – 1930 hrs., 1930 – 0100 hrs.

A fourth working shift is available from Monday to Friday in the period 15th March/15th November.

Coal, ore, grain: only the first 2 shifts. Italsider Pier: 24 hours' daily in 3 shifts.

MEDICAL: All medical assistance available. Advance notice required for urgent cases only.

DENSITY: Varying from 1025 to 1026.

FRESH WATER: Available direct from quay at almost all berths. Supply by lighter, minimum 20 cu.m.

FUEL: All grades available. Delivered by barge. 48 hours' notice desirable.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: First opening and last closing normally carried out by crew.

CUSTOMS ALLOWANCES: Tobacco. Customs allow a maximum of 50 cigarettes or 10 cigars, or 50 grams tobacco per person, as long as vessel stays in port. All cigarettes, cigars, etc. must be ready on arrival in a locker in order to be checked and sealed by Customs guards. Wine and/or spirits. Wine allowed any reasonable amounts. Spirits allowed 1 bottle for every 2 Crew members.

Report: May 1983: Customs Regulations – Supply of Cigarettes and Tobacco: "Please inform members of a new rule at Genoa concerning forwarding of cigarettes, which provides that they may only be sent from the Port of Registry with invoices visaed by the Italian Consul there.

At Genoa, the Master must declare cigarettes and tobacco on board, number of crew and duration of next employment, thereafter the Customs will allow 40 cigarettes each day to each crew member for the duration of the voyage.

In case there is sufficient stock on board, the Customs will not allow supply, which might cause other troubles as well, due to the fact that the truck normally carrying other provisions and stores will remain stopped at Customs until the situation with cigarettes is clear".

CARGO GEAR: Certificates must be in order, otherwise authorities may prevent vessel performing commercial operations, especially if using derricks.

IDENTIFICATION CARDS: Required. Shore passes issued by local police.

CONSULS:

Argentina
Austria
Belgium
Bolivia
Brazil
Chile
Colombia
Congo Brazzaville
Costa Rica
Cuba
Cyprus
Denmark
Dominica
Ecuador
El Salvador
Finland
France
Germany
Greece
Guatemala
Haiti
Honduras
Iceland
India
Indonesia
Ivory Coast
Lebanon
Liberia
Madagascar
Malta
Mexico
Monaco
Netherlands
Nicaragua
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Portugal
Senegal
Spain
Sweden
Switzerland
Thailand
Tunisia
Turkey
U.S.S.R
U.K.
U.S.A.
Uruguay
Venezuela

REPAIRS: All types of repairs available. Preferable have advance notice of requirements.

DRY DOCKS: 1 floating dry dock, lifting capacity up to 15,000 tons; 7 dry docks (largest dimensions 280 m. × 40 m. × 12.50 m.). Max. size 100,000 d.w.t.

REPATRIATION: All facilities available.

AIRPORT: Located at about 5 km. from town. Served by regular lines, international services.

Alitalia to Rome, Bari, Parigi, Naples; British Caledonian to London; Alisarda to Olbia; A.T.I. to Rome, Turin, Palermo, Alghero, Cagliara; Swissair to Zurich; Lufthansa to Frankfurt; Golden West Airlines to Turin, Venice and Trieste.

TIME: Local time in relation to GMT 1 hour ahead. Summer time further 1 hour ahead from March to September.

HOLIDAYS: New Year's Day (1st January); Liberation Day (25th April); Labour Day (1st May); Easter and day after Easter; Patron Saint's Day (24th June); Assumption B.V. Maria (15th August); All Saints' Day (1st November); Immaculate Conception (8th December); Christmas Day (25th December); Holiday (26th December).

Holiday work is available at overtime rates. Generally workers not available on 1st January, 1st May and 25th December. Saturday: Work performed after 1200 hrs. is at overtime rates.

POLICE/AMBULANCE/FIRE: Police: tel. 113; 25.69.75; 26.13.95; Ambulance: tel. 59.59.51; Fire: tel. 25.25.25 – 25.80.21.

TELEPHONES: Telephones can be placed on board at cost fixed by Italian State Telephone System.

DEVELOPMENTS:

Genoa Port Docks:

Works in progress:

Within the port of Genoa area, the more outstanding works are:

New industrial zone including the construction of a giant floating-dock in pre-stressed-reinforced concrete for vessels of up to 350,000 d.w.t. A deep water (−22 m.) 350 m. long, service pier will also be built, together with 400 m. of new quays with 11–20 m. depth alongside and 80,000 sq.m. of connected areas (completion late 1984);

A third container terminal at Calata Sanita will have 669 m. of new berths, 525 m. of which will have 14 m. depth alongside and the remainder 9 m. Junction roads with Piazzale San Benigno and the existing motorway system will also be built along with an open area of 130,000 sq.m. and an 8,000 sq.m. area warehouse:

Besides the above listed works, there are others worthy of mention as follows:

Medium term works:

Rectification of the Calata Gadda and Calata Boccardo quays thus allowing a more efficient use for ship repair purposes;

Long term works:

Completion of the San Benigno area arrangement works.

Voltri Dock:

Works in progress:

Seaward filling in works will be continued;

The protection breakwater will be extended 500 m. Eastward;

End-stretch of the seaward road connecting the material excavation area with the sea zone to be filled in.

Medium term works:

Voltri will consist of quays 1,400 m. long in the first stage, and 2,050 m. on completion.

5 container berths 300 m. long, 15 m. draft are planned, each terminal composed of 135,000 sq.m. of yards. They will be of the closed type – which means no outside vehicles allowed to circulate within the terminal – and will be capable of handling 100,000 TEU per year, that is 500,000 TEU total capacity per year.

The yard will be divided in zones as follows:

Operative zone, for container unloading/loading operations, adjacent to the quay;
Areas for container handling and marshalling;
Areas for reefer containers;
Parking areas for service vehicles.

The Ro/Ro terminal is planned to be 500 m. long, with adjacent yards 250,000 sq.m. in area, which will allow the parking of 2,000 trucks at the same time.

The 8 berths above mentioned will absorb 3,000,000 tons traffic of general cargo per year.

Two check-points for Customs controls are provided, each having a 60,000 sq.m. surface. One will be sited at the Eastern way out and the other at the Western way, thus allowing the service of containers and Ro/Ro traffic at minimum distance and maximum efficiency. The check-point will have space enough to park 300 trucks and straight connections with the City and National roads.

An area of 50,000 sq.m. is already used for stacking empty containers and storing trucks and trailers.

AUTHORITY: Consorzio Autonomo del Porto di Genova, Palazzo San Giorgio, Via Della Mercanzia 2, 16123 Genova, GE, Italy.
Tel: 010/2090. *Telex:* 216579 Port GE I. *Contact:* Dott. Roberto D'Allessandro, Chairman.

LA SPEZIA: 44.01 N. 09.51 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
1 Provisions List.
1 List of Parcels.
1 Cargo Manifest.
1 Bill of Lading.
All Ship's Certificates including Italian Anchorage Dues.

PILOTAGE: Compulsory for vessels over 500 g.r.t. Pilot station situated on breakwater at entrance to Gulf. 1 hour's notice to Pilots required for shifting, sailing vessel, Pilot boards incoming vessels at Torre Scuola.

Pilot on VHF Channel 14 from 2000 hrs. – 0600 hrs. Listens 1 hour before vessel expected.

ANCHORAGE: Safe areas available in depths 25 ft. to 34 ft. Mud bottom, no tide. Tankers: if waiting berth required to anchor in Safety Zone immediately behind the breakwater. If this anchorage is occupied by 2 vessels later arrivals must anchor outside the Gulf.

RESTRICTIONS: Western entrance to Gulf is 400 m. wide with depth of 42 ft. 6 in. The dredged channel to the port is 42 ft. deep. Eastern entrance is 200 m. wide used by smaller vessels only.

MAX. SIZE: Limited only by draft; 33 ft. for the Mercantile Port and grain silos. For vessels proceeding to coal berth max. draft 30 ft. 4 in. For vessels proceeding to Enel Pier max. draft 35 ft.

Tankers up to 40 ft. draft accommodated.

HEALTH: Radio Pratique may be requested to Sanimare-Laspezia before arrival. Pratique is automatic for vessels from Ports in U.K., France, Belgium, Netherlands, W. Germany, Greece and Italy.

RADIO: Genoa Radio – ICB or Marina Militare ICS. Radio telephone station at Leghorn, transmitting 2591 kHz, receiving 2182 kHz.

VHF: Pilot Service Channel 14, Port Control Channel 9, Harbour Master Channel 16 (0800 – 2000 hrs.), and boat service Channel 12.

TUGS: 19 tugs available up to 1,359 h.p. For large tankers, 4 tugs usually used.

BERTHING: Primo Bacino:

Garibaldi Mole: The port basin is limited to the East by Garibaldi mole, running North – South, to the coast and for a length of 509 m. It has depths of 8 m. – 10 m. and is used for discharging cereals, paper, containers, metal products. It has open storage areas and warehouses, together with a pipe-line connecting the Industria Italiana Petroli Refinery with the oil terminal located at the head of the mole itself. The mole is used on both sides, which are equipped with fenders.

Malaspina Wharf: 200 m. long and 106 m. wide, with depth of water of 6.5 m. – 7 m. It has fenders.

Paita Wharf: 535 m. long. On its Eastern extension is a moden coal silo. On the shoulders of the wharf are areas for open storage of goods, and in the West Area there is the Ferruzzi cereals warehouse and the Carapelli edible oil store. The wharf has fenders, and on its Western extremity has an 80 m. section suitable for discharge using ship's gear. A 155 m. wharf is used for the offices of Customs and the Port Captaincy.

Italia Mole: 368 m. long, 10 m. wide, depth of water 5.5 m. – 7 m. Constructed to protect the port basin, and therefore not equipped with port equipment, it is used for berthing tugs and at its end also for commercial operations.

Currently, it is to be used for berthing the passenger ferries between La Spezia and Bastia (Corsica).

IIP Landing Stage: 200 m. long, with 13 m. depth of water. It is equipped with bollards, fire-fighting equipment and hydrants. It allows berthing, loading and discharge of 2 tankers simultaneously, having equipment operating with a suction-depression system.

Minor Berths: These are constituted by 2 small piers where medium sized tankers can moor bow-on.

Secondo Bacino:

In 1980, the Artom Wharf came into operation, being 300 m. long, with depths of water 11 m. – 13 m., used for berthing ferry boats. Furthermore, in a state of advanced construction is the Fornelli Mole, West side, (520 m. long) which will be used for container discharge. On the mole head will be constructed a specialised Ro/Ro berth.

Also, halfway along the Fornelli Mole it is planned to construct a general warehouse, to be operated by the Azienda Mezzi Meccanici (Mechanical Handling Enterprise) with a covered area of 5,000 sq.m.

Outer Terminals:

The port of La Spezia incorporates the terminals of four companies involved in maritime traffic. Apart from Contship, whose installation is on the Garibaldi Mole, there are, to the East of the port, the Messina, Tarros and Merzario Terminals, all with their own berths and private operational land areas.

ENEL Landing Stage: 225 m. long, it is used for berthing vessels carrying fuel for the electricity power station.

SNAM Terminal: 480 m. long, situated in the bay of Panigaglia, it is employed in the discharge of methane carriers.

SPI Terminal: This is a terminal situated in the Eastern Area of the Gulf, provided with 5 buoys, permitting the discharge of tankers. The discharged products are shipped by underwater pipe-line to the coastal storage installation and from there to the Arcola refinery.

TANKERS: Shell Pier, length 177 m., with 4 berths up to 39 ft. 6 in. depth.

SPI Buoy Terminal, situated 650 m. from San Bartolomeo shore. Vessels moor stern towards the shore. A crude oil discharge berth in depth of 11.50 m., suitable for tankers up to 30,000 d.w.t. Other oil berths at ENEL Quay, depth 35 ft. SNAM Terminal for loading situated in Panigaglia Bay. Length 498 m., depth alongside 39 ft. Berths for 2 vessels.

Safety Regulations are handed to Master on arrival and must be strictly observed. No shore steam or electricity available. At Shell Pier, no goods may be loaded from shore.

Slop discharge facilities available only at the Shell pier.

BULK HANDLING FACILITIES: Ferruzzi Grain Silos, 39,450 tons capacity, at Paita Dock. Discharge by 2 cereal suction towers with 4 pumps, overall loading/discharging capacity 400 t.p.h.

Sosimage at Garibaldi Quay grain discharged by 4 vacuum-operated intake pipes, capacity 400 t.p.h. Capacity of silos, 30,000 tons. Length of quay 220 m., depth 35 ft. Will accept vessels of 30,000 d.w.t.

Vetrocoke Cokapuania: Coal conveyor system at Paita Dock, capacity 450 t.p.h. from colliers and 330 t.p.h. from other vessels. Capacity of silos 12,000 cu.m.

Carapelli Edible Oil Store: A temporary custody customs warehouse, with a covered area of 1,200 sq.m. Tank capacity 3,500 cu.m.

Speter Paper and Cellulose Store: Situated on the Garibaldi Mole, it has a covered area of 2,480 sq.m., and a 5,000 tons stocking capacity.

ENEL: Coal handling facility with 2 grab cranes, rate 10,000 tons per day. Max. LOA 255 m. Max. beam 32 m. Max. draft 13.0 m.

CRANES:

Garibaldi Mole, West Side:

Berth No. 1: 4 bridge cranes, capacity 6 tons (hook or bucket operation).

Berth No. 2: 2 bridge cranes, capacity 6 tons (hook or bucket operation).
1 bridge crane, capacity 8 tons (hook or bucket operation).

Berth No. 3: 3 bridge cranes, capacity 6 tons (hook or bucket operation).

East Quay:

Berth No. 9: 1 crane, capacity 3-6 tons (hook or bucket operation).
2 cranes, capacity 6-12 tons (hook or bucket operation).

Berth No. 10: 1 crane, capacity 28 tons, for handling containers (Contship).

Malaspina Dock:

Berth No. 4: 2 gantry cranes, capacity 3 tons (hook only).
2 gantry cranes, capacity 3-6 tons (hook or bucket operation).

Paita Dock:

Berth No. 5: 2 overhead travelling cranes, 10 ton capacity, travel 120 m.

Berth Nos. 6 & 7: 4 jib cranes, capacity 3–6 tons (hook or bucket operation). 1 travelling bridge Goliath crane, for marble – hook only, capacity 30 tons.

Additional Cranes: 2 self-propelled cranes, (hook operation) 20 tons lifting power. 1 self-propelled crane for loading and unloading (hook or bucket operation) 40 tons lifting power. 1 self-propelled crane, 60 tons lifting power, for loading and unloading of various goods and containers.

Floating crane, capacity 110 tons, available in the Industrial Zone.

Artom Wharf in the second basin is equipped with 3 jib cranes with capacity of 20 tonnes.

STEVEDORES: Gangs to be ordered by 0700 hrs. for morning shift, and by 1300 hrs. for afternoon shift every normal day from Monday to Friday. For mechanised work the same routine is to be followed. Saturdays, morning is considered as overtime work (tariff plus 27.50%). On the afternoon of Saturday, time is considered as holidays and so are Sundays. Saturdays and Sundays shift to be ordered on Friday afternoon within 1530 hrs.

MEDICAL: All facilities available. Vaccination/inoculation can be arranged. Prior notice should be given if urgent attention required on arrival.

FRESH WATER: Available at most berths, or by barge.

FUEL: Can be taken concurrent discharge at Shell Pier and S.P.I. terminal. Supplied by barge and road tankers at other berths.

IDENTIFICATION CARDS: Shore passes issued to crew.

CONSULS: Following countries represented at Spezia: Denmark, France, Finland, Netherlands, Norway, Portugal, Sweden.

REPAIRS: Naval and civil repair yards can undertake all types of work. Divers available through Port Captain.

DRY DOCKS: Available only when not used for naval vessels: No. 5, 209.65 m. by 27.60 m.; No. 6, 210.20 m. by 23.10 m. Floating dock for 110,000 d.w.t.

TIME: GMT plus 1 hour. GMT plus 2 hours from March 29th to September 26th.

POLICE/AMBULANCE/FIRE: Police tel: 0187-35041. Hospital tel: 0187/511045.

HOLIDAYS: New Year's Day (1st January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Easter and Day after Easter; Ascension Day; Assumption B.V. Maria (15th August); All Saints' Day (1st November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).

SHORE LEAVE: Allowed.

DEVELOPMENTS: 2 new berths for container vessel and Ro/Ro vessels under construction, depth 13 m.

AUTHORITY: Capitaneria di Porto, Viale Italia 4, La Spezia, Italy. *Tel:* 0187-28580.

Camera di Commercio Industria Artigianato ed Agricoltura La Spezia, 19100 La Spezia. *Tel:* 32.133/34/35. *Contact:* The President.

LIVORNO (Leghorn): 43.33 N. 10.20 E. (See Plan Book)

DOCUMENTS: Complete set of Manifests and B/Ls relative to cargo destined for this port. Complete set of Manifests of all cargo in transit. 3 Crew Lists. 3 Passenger Lists.

ANCHORAGE: Anywhere between 1 – 1.5 miles from breakwater.

PILOTAGE: Sound signals for calling Pilot, 3 long blasts, or international signal "G". Pilot boards vessels 1 mile from breakwater.

RESTRICTIONS: No night berthing for tankers; no restrictions for tankers on sailing, when empty and up to 15,000 gross tonnage according to weather conditions.

MAX. SIZE: See "Berthing".

HEALTH: To obtain Free Pratique by radio cable to "Sanimare", Livorno, advising all health particulars at least 12 hours before arrival.

RADIO: Livorno Radio generally used for communications.

RADAR: None.

VHF: 24 hour service on Channel 16 and 9.

TUGS: Tugs normally join vessel at entrance of the port. Ship's lines used.

BERTHING: Depths and Lengths of Various Berths

Berth	*Berth No.*	*Length and Depth*
Bacino Santo Stefano - North West Side:		
1. Nuova Darsena Petroli	10	Length 344 ft.
	11	Length 295 ft., Depth 37 ft. 00 in. for tankers with a max. length of 984 ft. Tankers longer than 984 ft. with a draft of 37 ft. 6 in. can be moored in good weather on full tide
2. Radice Nuova Darsena Petroli	11/A	Length 229 ft., Depth 14 ft. 0 in.
3. Piccolo Fondale Only for vessel of a max. length of 360 ft.	11/B	Length 360 ft., Depth 17 ft. 6 in.
4. Vecchia Darsena Petroli	12	Length 20 ft.
	13	Length 98 ft., Depth 30 ft. 6 in. for tankers with a length between 593 ft. and 748 ft.
5. Darsena Toscana West Side	14	Length 984 ft., Depth 39 ft. 4 in.
Bacino di Evoluzione:		
1. Calata Tripoli	16	Length 690 ft., Depth 26 ft. 0 in.
Darsena N. 1:		
1. Calata Assab		Total Length 1312 ft.
	17	Depth 28 ft. 0 in.
	18	Depth 29 ft. 0 in.
2. Calata Gondar	19	Length 690 ft., Depth 27 ft. 0 in.
3. Calata Addis Abeba	20	Length 875 ft., Depth 26 ft. 6 in.
4. Calata Neghelli	21	Length 787 ft. Depth 26 ft. 6 in.
4. Calata Neghelli	0	Length 197 ft,. Depth 20 ft. 0 in.
Canale Industriale:		
1. Calata Bengasi	22	Length 885 ft., Depth 28 ft. 0 in.
2. Pontile Giopescal	23	Length 328 ft., Depth 20 ft. 0 in.
3. Terminal C. Colombo	24	Length 1,350 ft. Depth 28 ft. 0 in. } For vessels of max. length of 610 ft. only.
4. Pontile Cledca	25	Length 262 ft., Depth 18 ft. 0 in.
5. Pontile Valchisone	26	Length 230 ft., Depth 18 ft. 0 in.
6. Costiero Italso	27	Length 220 ft., Depth 28 ft. 0 in. with distance barge
7. Costiero D.O.C.	28	Length 656 ft., Depth 28 ft. 0 in. with distance barge
8. Costiero D'Alesio	29	Length 460 ft., Depth 28 ft. 0 in. with distance barge
9. Costiero Liquigas	30	Length 656 ft., Depth 28 ft. 0 in.
10. Silos Ardenza	34	Length 690 ft., Depth 28 ft. 0 in.
11. Terminal Leonardo Da Vinci	35	Length 545 ft., Depth 32 ft. 0 in.
12. Darsena Ugione	36	For tankers of max. length 230 ft., Depth 20 ft. 0 in.
	36/A	For tankers with max. length of 430 ft. and draft of 25 ft. 6 in.
	37	For tankers with a max. length of 367 ft. and draft of 21 ft. 0 in.
13. Officine Meccaniche Botteghi	38	Length 490 ft., Depth 18 ft. 0 in.

Calata del Magnale:		
1. Magnale Non Operativo	39	Length 4,265 ft., Depth 14 ft. 0 in.
2. Magnale Operativo Nord	40	Length 490 ft., Depth 14 ft. 0 in.
3. Magnale Operativo Centro	40	Length 490 ft., Depth 18 ft. 0 in.
4. Magnale Operativo Sud	40	Length 490 ft., Depth 14 ft. 0 in.
Darsena Pisa:		
1. Calata Darsena Pisa	41	Length 820 ft., Depth 39 ft. 3 in.
Bacino Santo Stefano - South East Side:		
1. Calata Alto Fondale	43-44-45 -46-47	Length 2,505 ft., Depth 35 ft. 0 in.
	48	Length 195 ft., Depth 18 ft. 0 in.
Bacino Cappellini		
1. Calata Orlando	49	Length 495 ft., Depth 25 ft. 6 in.
	50	Length 495 ft., Depth 27 ft. 0 in.
	51	Length 495 ft., Depth 27 ft. 0 in.
2. Calata Siena	58	Length 165 ft., Depth 20 ft. 0 in.
3. Calata Punto Franco		Total length 885 ft.
	59	Depth 28 ft. 6 in.
	60	Depth 29 ft. 0 in. with distance barge Draft 34 ft. 0 in.
Bacino Firenze:		
1. Calata Pisa	52/53-54	Total length 1,475 ft. Depth 25 ft. 0 in.
2. Calata Carrara	55/56-57	Total length 1,475 ft. Depth 25 ft. 0 in.
Porto Mediceo:		
1. Calata Sgarallino	61-62	Total length 785 ft. Depth 28 ft. 6 in.
2. Andana Degli Anelli	64	Length 490 ft., Depth 23 ft. 0 in.
3. Pontile Elba	66 North	Length 190 ft., Depth 18 ft. 0 in.
	66 South	Length 190 ft., Depth 17 ft. 0 in.
4. Andana Delle Ancore	67	Length 525 ft., Depth 13 ft. 0 in.
5. Banchina Allestimento Cantiere Orlando	74	Length 590 ft.
6. Molo Mediceo	75	Length 1,540 ft., Depth 19 ft. 0 in.
Darsena Nuova:		
1. Banchina South	70	Length 328 ft., Depth 19 ft. 6 in.
2. Banchina West	71	Length 328 ft., Depth 19 ft. 6 in.
Nuovo Bacino di Carenaggio:		
1. Banchina East	76	Length 1,050 ft., Depth 26 ft. 6 in.
	78	Length 835 ft., Depth 29 ft. 6 in.

CRANES: (owned by Azienda Dei Mezzi Meccanici)

Pier	*Type*	*Berth*	*Capacity* (Tons)	*Use*
Alto Fondale	crane	47	3.75	General cargo
Alto Fondale	crane	47	8/16	General cargo
Alto Fondale	crane	47	3.75	General cargo
Alto Fondale	crane	47	3.75	General cargo
Alto Fondale	crane	46	8/16	General cargo
Alto Fondale	crane	46	3.75	General cargo
Alto Fondale	crane	46	3.75	General cargo
Alto Fondale	crane	45	3.75	General cargo
Alto Fondale	crane	45	3.75	General cargo
Alto Fondale	crane	45	3.75	General cargo
Alto Fondale	portainer	44	50	Containers
Alto Fondale	portainer	43	50	Containers
Orlando	Container Gantry Crane	49	22	Containers
Orlando	portainer	49	32	Containers
Orlando	Container Gantry Crane	50	22	Containers
Orlando	Container Gantry Crane	50	5.50	Bulk
Orlando	crane	51	12	Bulk
Pisa	crane	52	3	General Cargo
Pisa	crane	52	3	General Cargo
Pisa	Bulk Gantry Crane	53	6	Bulk
Pisa	Bulk Gantry Crane	53	6	Bulk
Pisa	crane	54	5	General Cargo
Pisa	crane	54	5	General Cargo
Carrara	crane	57	6	General Cargo
Carrara	crane	57	6	General Cargo
Carrara	crane	56	8/16	General Cargo
Carrara	crane	56	8/16	General Cargo
Carrara	crane	55	8/16	General Cargo
Carrara	crane	55	6	General Cargo
Carrara	Gantry Crane	55	25	Marble
Sgarallino	crane	61	3	General Cargo
Sgarallino	crane	61	6	General Cargo
Sgarallino	crane	61	3	General Cargo
Sgarallino	crane	62	3	General Cargo
Sgarallino	crane	62	3	General Cargo
Bengasi	Bulk Gantry Crane	22	6	Bulk
Bengasi	Bulk Gantry Crane	22	10	Bulk
Addis Ababa	crane	20	8/16	General Cargo
Addis Ababa	crane	20	8/16	General Cargo
Darsena Toscana	portainer	14	50	Containers
Darsena Toscana	portainer	14	50	Containers
Owned by Sintermar:				
Canale industriale	portainer		50	Containers
Canale industriale	portainer		40	Containers

Mobile Cranes and Equipment. *Owned by A.M.M.:*
1 crane capacity 60 tons.
1 crane capacity 40 tons.
1 crane capacity 25 tons.
5 fork-lifts up to 6 tons.
Owned by Dockers' Organization
3 Van Carrier capacity 30 tons.
18 Portainers up to 40 tons.
220 Travelling cranes of various type (fork-lifts lifting capacity up to 25 tons, bulldozers, tractors etc.)
Owned by private enterprises
2 Rubber tyred transtainers capacity 40 tons.
210 fork-lifts and travelling cranes
125 flatcars
40 tractors, towings etc.
7 semiportal suckers for cereals discharge.

BULK HANDLING FACILITIES: Grain: discharging rate 1,000 to 1,500 m. tons per day.

Ore and coal bulk: discharged by shore elevators at Calata Orlando, discharging rate 1,500 to 2,000 tons per day.

Cereals Silos: Silos Livornesi 28,000 tons. Silos and Tirrenian Warehouses 31,500 tons. Ardenza of Liquifarm G.I.A. 52,000 tons. Italso 32,000 ton.

TANKERS: See "Berthing".

BRIDGES: None that interfere with port traffic.

STEVEDORES: ETA required by Agent in order to arrange matters with stevedores at least 48 hours before arrival.

MEDICAL: It is advisable to give details of assistance required together with ETA cable. Hospital facilities available.

FRESH WATER: Fresh water available at all berths except Bacino Alto Fondale. Water barge available.

FUEL: All grades available from berth. Advance notice required 48 hours; supply subject to Owners' stem.

FIRE PRECAUTIONS: Berths at which tankers operate are equipped with monitors.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

GANGWAY/DECK WATCHMEN: Recommended, 8 hour shifts, 0600 - 1400, 1400 - 2200, 2200 - 0600 hrs.

CERTIFICATES: All ship's certificates required.

CUSTOMS ALLOWANCES: Tobacco: 50 cigarettes, or 50 grams tobacco per man for the first 24 hours. Wine and/or Spirits: only in consignment of the Master.

IDENTIFICATION CARDS: Issued by local police authorities.

CONSULS:

Colombia	Greece	Peru
Denmark	Liberia	Portugal
Finland	Monaco	Spain
France	Netherlands	Sweden
West Germany	Norway	Switzerland

REPAIRS: All types of deck and engine repairs are possible.

DRY DOCKS: Dry docks suitable to accommodate a Liberty type ship. A small floating dry dock for vessels up to maximum of 1,500 tons.

New Graving dock 350 m. × 56 m., depth on sill 10.0 m. (For 300,000 d.w.t. vessels).

REPATRIATION: All necessary repatriations possible.

AIRPORT: Nearest at Pisa, distance about 20 km.; served by Alitalia, British Airways, Lufthansa and Air France.

TIME: Local time is 1 hour ahead of GMT, and Summer time 2 hours ahead.

HOLIDAYS: 1st January, Easter Monday, 1st May, 15th August, 1st November, 8th December, 25th December, 26th December.

POLICE/AMBULANCE/FIRE: Police Tel: 23413, Carabinieri Tel: 808002, Dept. of Customs Guards Tel: 24066, Ambulances Tel: 33333/22111, Fire Brigade Tel: 22222.

TELEPHONES: Only at some quays is it possible to place telephones on board.

SERVICES: Tank cleaning and slop facilities available. Compass adjuster available.

SHORE LEAVE: Possible.

IDENTIFICATION CARDS: Shore passes required.

DELAYS: No considerable delays.

AUTHORITY: Capitaneria Di Porto Di Livorno, 57 100 Livorno, Italy. *Tel:* 21-362. *Contact:* Aldo Savelli, Captain of the Port.

Azienda Dei Mezzi Meccanici E Dei Magazzini Del Porto, Largo Strozzi 1, Livorno. *Tel:* 24-504. *Telex:* 500486. *Contact:* Direttore: Dr. Francesco Ruffini.

Camera Di Commercio Industria Artigianato E Agricoltura, Piazza Municipio 48, Livorno. *Tel:* 37-831 *Telex:* 500486.

AGENT: G. Fanfani & Co., via Fiume 15, Livorno. Tel: 28151 (5 lines) after hours 804347 and 801931. Telex: 500006 Cables: FANFANICO.

MANFREDONIA: 41.37 N. 15.55 E. (See Plan Book)

PORT LIMITS: Seaward boundaries do not exist. A vessel is considered an "arrived ship" and (subject to Charter-Party terms) laytime will commence when boarding the Pilot or dropping the anchor in the Roads.

DOCUMENTS:
5 Crew Lists.
3 Provision Lists.
1 Arrival Report.
3 Curios Lists.
Cargo Manifest (Italian Form).
Bills of Lading and ship's documents not expired.

PILOTAGE: Compulsory for vessels over 500 g.r.t. The ship's ETA is furnished to the Pilots by the Agent. VHF service around the clock on Channel 12; Pilot station to be contacted 1 or 2 hours prior the ship's arrival in the Roads. International signals are used for calling Pilot; Pilot has to be taken on board within 1 mile range from the harbour entrance but, upon ship's request, Pilot may board the vessel wherever required. The pilot boat has a black hull with a white stripe all around and the letter "P" printed on both sides of the bow. White superstructure and mast. Max. speed 8 knots.

ANCHORAGE: Boundaries according to the draft; the bottom (mud and sand) has good holding. No anchorage is suggested with heavy S.E'ly weather. See "Plan Book".

RESTRICTIONS: Ships carrying dangerous cargoes will only berth in daytime (from sunrise to sunset); departure is allowed at any time for all vessels.

MAX. SIZE: No restrictions on LOA or beam. The only limitation is given by the draft which is 32 ft. 6 in. for ships operating to the New Industrial Port and 21 ft. 6 in. for those operating to the old harbour. The above drafts are referred to the Mean tide condition. One more foot can be added if docking with high tide.

HEALTH: Free Pratique is granted by the Port Authorities at anchorage or at the dock. Radio Pratique may be requested, by cable via Bari Radio, to "Sanimare Manfredonia".

RADIO: For ETA and other communications with Agents, receivers etc., Roma Radio is suggested; call sign IAR.

VHF: Port Authorities: Channel 16 from 0800 to 2000 hrs local time from October to May and 24 hour watch from June to September.

Pilots: Watch and working Channel 12; service continuous.

Local Agents provided with VHF equipment listen from 0800 to 1700 hrs. on Channel 9.

RADAR: The new pilot station (ready June 1985) will be equipped with radar and Pilots should be able to provide a suitable radar service and port control.

TUGS: 2 tug boats of 1,300 h.p. Usually join the vessels in the Roads, together with the Pilot. Either ship's or tug's lines are used. Towage is compulsory for ships carrying dangerous cargoes.

BERTHING: New Industrial Port: A/1 300 m., A/2 250 m., A/3 265 m., A/4 265 m., A/5 315 m. Draft at MHWS 32 ft. 6 in.

Old Commercial Port: Nos. 1, 2 and 3 together 480 m., Nos. 4 and 5 together 220 m. Draft at MHWS 21 ft. 6 in.

CRANES: Old Commercial Port: Pier No. 2 equipped with 2 cranes with a safe working load of 6 tons each.

New Industrial Port: 2 cranes Reggiane type, multi-purpose, are located on piers A/3 and A/4. Safe working load 25 tons at 40 m. spread.

BULK CARGO FACILITIES: In addition to the cranes, the new port is equipped with 2 escalators for loading fertiliser in bulk (Berth A/2) and 2 self-moving suction pumps for cereals (Berths A/1 and A/2).

The rates are: Fertiliser in bulk 2,000 tons per working day. Grain, wheat and other cereals 5,000 tons per working day. Sulphur in bulk 2,000 tons per working day. Silver sand 2,500 tons per working day (working day 0700 – 1900 hrs.).

BRIDGES: None.

STEVEDORES: Gangs arrangements made by the Agent in due time. The load or discharge rates vary depending on the type of cargo, the vessel, the type of the ship's gear, etc.

MEDICAL: Crew members must be in possession of a valid vaccination card against cholera and yellow fever when coming from countries declared infected by the international health laws.

DENSITY: The average salinity of water in the port is 1026.

FRESH WATER: Available on the quays of both ports. Watering operations carried out by hoses which are connected to the pier connections.

FUEL: Any kind, grades and viscosity delivered by trucks.

FIRE PRECAUTIONS: Towing wires hanging from the sea side forward and aft.

CONSULS: None.

REPAIRS: Small deck and engine repairs are possible.

DRY DOCK: None.

SURVEYORS: All Classification Societies are represented in Bari, 2 hours away from Manfredonia.

GANGWAY/DECK WATCHMEN: Available, but not compulsory or necessary.

OPENING/CLOSING HATCHES: Opening and closing carried out by ship's crew.

CUSTOMS ALLOWANCES: 40 cigarettes per man. 1 bottle spirits.

REPATRIATION: All facilities exist for effecting Crew changes and arranging all the necessary pratiques for repatriation.

AIRPORT: The nearest airport is Bari, 130 km. away, but the re-opening of Foggia airport, 36 km away is expected.

TIME: From the last Sunday of March till the last Sunday of September "daylight saving time" is in force. GMT plus 2 hours. For the rest of the year the standard time is used, GMT plus 1 hour.

HOLIDAYS: Cargo operations are not carried out on the following days: All Sundays, April 25th, August 15th and 31st, December 8th, 25th and 26th, and January 1st.

POLICE/AMBULANCE/FIRE: For all services dial 113.

TELEPHONE: No arrangements exist for placing telephone on board. 1 telephone booth exists on "Molo di Ponente", Old Commercial Port, for local and long distance calls. A few telephone booths on Berths A/1 and A/3 of the New Industrial Port are to be connected in the near future.

SERVICES: Compass adjusting, radar and gyro repairs. Divers available on request.

SHORE LEAVE: Crew members of all nationalities are allowed ashore.

IDENTIFICATION CARDS: Seaman's book is sufficient.

DELAYS: Delays for port congestion are very unusual, however, delays no longer than 24/48 hours are expected.

GENERAL: 2 shipchandlers are available for stores, provisions, cigarettes and spirits.

AUTHORITY: Capitaneria di Porto, Piazza Marconi, Manfredonia. *Tel:* 23871-2-3 area code 0884. *Contact:* Comm. Giancarlo Olimbo, Executive Port Captain.

MESSINA: 38.11 N. 15.34 E. (See Plan Book)

DOCUMENTS: If vessel comes from foreign port, whenever possible, at least 1 copy of Crew List and Passenger List to be sent some days before her arrival, so that they can be delivered to police in advance. Required on arrival:

3 Crew Lists.
1 Provisions List.
3 Lists Passengers in Transit.
3 Lists Passengers Disembarking.
1 List of Articles – new and Customs-barred in possession each crew member – cameras, binoculars, radios, cigarettes, tobacco, new articles, etc. If on inspection articles or quantities not in conformity or in excess, Master responsible; articles removed and heavy fine imposed.

Copies of Cargo Manifest also to be prepared on arrival.

If Anchorage Dues already paid and still in force, the relative receipt to be shown to the harbour Authorities, together with other ship's papers and report of arrival to be delivered to them.

PILOTAGE: Pilotage through Messina Straits is available but not compulsory.

Vessels in transit who intend to avail themselves of optional pilotage may request a Pilot via:

a) Radio PT – Messina (IDF) on frequency 2182 kHz by radiotelephony at least 4 hours in advance.

b) The Messina and Reggio Calabria Port Captaincy telegraphically at least 12 hours in advance.

c) Through the ship's Agent.

d) By contacting the local pilot station directly by telephone 090/44483 or VHF Channel 12 at any time.

Ships requesting a pilotage service shall embark the Pilot in the following positions (which are also the boarding positions for the Port Pilots):

a) If Southbound: 3 nautical miles North of Cape Peloro.
b) If Northbound: 1.5 nautical miles S.E. of San Ranieri Light.

We wish to point out the great advantages that such a pilotage service may render to the ship, both in terms of fuel saving because it avoids the longer passage to the South of Sicily, and in terms of safety to navigation.

ANCHORAGES: Allowed outside harbour; at Paradiso's Bay, sufficient depths for safe anchorage existing. Advisable to request Pilot's assistance for indication of best anchorages.

Prohibited Anchorage: Between the parallels of 38° 12′ 58″ N. and 38° 10′ 48″ N.

RESTRICTIONS: For entering harbour during night-time ETA to be given in advance.

MAX. SIZE: Max. draft allowed: 33 ft. at passenger quay: Other berths 27 ft.

Max. length 200 – 300 m.

Tankers: Length 100 m., draft 27 ft.

HEALTH: Free Pratique automatic for vessels coming from other Italian ports and quarantine flag not to be flown on entering. From other countries usual procedure applies.

RADIO/VHF: Contact through Rome Radio, Naples Radio, Augusta Radio, or Messina Radio VHF Channel 16 or R/T 2182 kHz.

TUGS: Not compulsory. Tugs join vessels at about 0.5 miles from entrance of harbour. If tug's lines used increase of 10% on tariff.

STEVEDORES: To enable Agent order gangs important obtain accurate ETA. Latest time to order gangs: normal shift 0730 hrs. for work in the morning; 1200 hrs. for work in afternoon; night shift 1600 hrs. same day – Saturday noon or Sunday at 1200 hrs. on Saturday.

Failure to give ETA results in cost of waiting gangs, charged to vessel.

Tonnage: Per gang in 8 hours: General cargo 50 ton – cereals 80 ton.

MEDICAL: Doctor can attend sick crew members or for vaccinations. Hospitals available.

TANKERS: There is a Eurobunker station only. Small tankers from time to time discharge fuel oil, gasoline, etc. Gas freeing, tank cleaning, slops and dirty ballast reception facilities available.

FRESH WATER: Only quays have water pipe-line connections and water may be supplied day and night directly from ashore by hoses; during Summer time water may be supplied from 0600 to 1100 hrs. only. Water available at night time by boat (max. 250 tons).

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: May be carried out by the crew or stevedores.

CERTIFICATES:

Safety Certificate.
Wireless Safety Certificate.
Freeboard Certificate.
Derat Certificate.
Anchorage Duties Voucher.
Crew List.
Passenger List.
Construction Certificate.

CUSTOMS ALLOWANCES: 50 gm. tobacco for each seaman. Spirits: 0.75 bottle for all crew.

IDENTIFICATION CARDS: Required.

CONSULS:

Argentina
Australia
Colombia
Denmark
Finland
Germany
Guatemala
Netherlands
Norway
Panama
Peru
Sweden

REPAIRS: Almost all types of deck and engine repairs can be carried out.

DRY DOCK: One dry dock belonging to SMEB (Societa' Messinese Esercizio Bacini) can be hired. Dimensions are as follows: Length 853 ft. (260 m), breadth 118 ft. (36 m.). One dry dock belonging to Italian Navy, therefore application must be granted by the Marina Militare. Dimensions are as follows: 492 ft. × 52 ft. 7 in. (bottom), 81 ft. 6 in. × 24 ft. 8 in. (top).

REPATRIATION: No particular facilities existing; but necessary repatriation can normally be arranged.

AIRPORT: Reggio Calabria Airport – distance about 10 km. From Messina, Reggio Calabria can be reached in 15 minutes by hydrofoil boats, which run every half hour (about). Flights from Reggio Airport in Winter, 1 per day; in Summer, 2 per day.

TIME: In relation to GMT local time is an hour ahead. During Summer, from March to September, clocks are put 1 hour forward.

HOLIDAYS: Work can be arranged, provided timely notice is given, in following official holidays, paying the respective increase on normal tariff:

New Year's Day (January 1st); Easter Monday; 25th April; 1st May; June 3rd; local religious holiday; 15th August; 25th December; 26th December.

POLICE/AMBULANCE/FIRE: Police, 46830; Ambulance, 2935592; Fire, 2930222.

TELEPHONES: No arrangements exist.

SHORE LEAVE: Allowed.

AUTHORITY: Capitaneria di Porto – Messina, Via V. Emanuele, Messina, Italy. *Tel:* 41896. *Contact:* Port Commandant.

MILAZZO (Sicily): 38.13 N. 15.16 E. (See Plan Book)

DOCUMENTS:

6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report – completed on arrival.
Maritime Declaration of Health Certificate – completed on arrival.
Ship's Certificates, including Italian Authority dues.
Vaccination Certificates for sighting.

ARRIVAL ADVICE: At least 24 hours' notice of arrival to be passed to Agent in order to obtain allocation of berth from Port Authority. Consignees-Receivers as for Charter Party.

PILOTAGE: Pilot boards 1.5 miles off the berths. International Code signals used. Pilot can be contacted on VHF Channel 12. Compulsory for vessels over 500 g.r.t. (Berthing/Unberthing).

ANCHORAGE: There are 6 anchorages for tankers over 3,000 g.r.t.

No. 1 up to 600 m. off the harbour green light – Bearing 034°
No. 2 up to 920 m. off the harbour green light – Bearing 091°
No. 3 up to 3,870 m. off the harbour green light – Bearing 097°
No. 4 up to 3,050 m. off the harbour green light – Bearing 101°
No. 5 up to 1,200 m. off the harbour green light – Bearing 036°
No. 6 up to 1,600 m. off the harbour green light – Bearing 065°

Anchoring prohibited within 1 mile of Refinery Wharves. Pilot can be used for anchoring but not compulsory.

RESTRICTIONS: Large tankers are berthed in daylight hours only, medium and small tankers all hours. Unberthing all hours.

MAX. SIZE: Tankers up to 420,000 d.w.t.

HEALTH: Free Pratique on board may be requested on arrival by way of ship's Agents. It is perfecting the procedure to obtain Free Pratique by radio. Pratique is automatic for vessels coming from ports in Italy, U.K., France, Belgium, Netherlands, W. Germany and Greece.

RADIO/VHF: Harbour Master Authority, Mediterranea Refinery, Pilot and Tugs may be contacted on VHF Channel 12. Harbour Master Authority may be contacted also on VHF Channel 16.

TUGS: 4 tugs available, 2×2,500 h.p., and 2×1,800 h.p. Meet vessel 0.75 miles off berths. Obligatory, at least one for mooring/unmooring tankers over 3,000 g.r.t. Ship's lines used.

DRY CARGO FACILITIES: Ludovico Mazzullo Jetty, length 340 m., depth 22 ft.; Pennello Eolie Jetty, length 65 m., depth 23 ft.

TANKERS: AGIP Petroli Co.: 10 berths for Tankers, distributed in 3 Jetties as follows:

No. 1 Jetty: (West Jetty) 500 m. long, for loading/unloading, with the following berths:

Berth No. 1 (West side – Outer end) – depth 48 ft. LPG arms and lines available.

Berth No. 2 (East side – Outer end) – depth 48 ft.

Berth No. 3 (West side – Inner end) – depth 21 ft. LPG arms and lines available.

Berth No. 4 (East side – Inner end) – depth 20 ft. LPG arms and lines available. Arms: 12 in. and 8 in. – Ballast lines 2×10 in. – Cargo lines 20, 16, 12 and 10 in.

No. 2 Jetty: (Middle Jetty.) 650 m. long, for loading/unloading, with the following berths:

Berth No. 5 (West side – Middle) – depth 55 ft.

Berth No. 6 (East side – Middle) – depth 55 ft. Arms:12 in. – Ballast line 1×20 in. – Cargo lines 2×40 in. (Crude oil) – 20, 16, 12 in. (Fuel oil) – 20 in. (Gasoil) – 12 in. (Virgin Naphtha) – 10 in. (Super Gasoline) – 10 in. (Normal Gasoline) – 10 in. (Kerosine).

Berth No. 5 bis (West side – Outer end) – depth 83 ft.

Berth No. 6 bis (East side – Outer end) – depth 75 ft. Arms: 16 in. – Crude oil lines 2×40 in.

Berth No. 7 (West side – Inner end) – depth 25 ft., loading arms 6 in.

Berth No. 8 (East side – Inner end) – depth 24 ft., loading arms 6 in.

Berth No. 7 available for vessels up to 6,500 d.w.t. LPG arms and lines available.

Berth No. 8 available for vessels up to 5,000 d.w.t. LPG arms and lines available.

No. 3 Jetty: (East Jetty) 558 m. long, for loading/unloading under construction, with following berths:

Berth No. 9 (West side) – depth 45 ft.

Berth No. 10 (East side) – depth 45 ft.

Vessels berth head out. Lines run to mooring dolphin ahead and astern. Anchor is compulsory only for small tonnage tankers. Tankers may use wire ropes only on the jetty mooring hook. On the bitts may use wire ropes only if the eyes are made of manila or nylon. For tankers alongside the jetty it is compulsory to have ahead and astern, outside, wire ropes with eye.

Crude oil washing permitted.

Oilboom: Compulsory for vessels alongside the refinery jetties.

MEDICAL: All facilities available.

FIRE WATCHMEN: Compulsory for tankers alongside the Refinery Mediterranea jetties. Number of watchmen onboard is variable, according to the cargo Class ("A", "B" or "C") loading/discharging and to the tanker's g.r.t.

GANGWAY/DECK WATCHMEN: Watchmen service available. It is, however, recommended but not compulsory.

FRESH WATER: Boiler and drinking water supplied from the jetty. At anchorage by barge. Max. pumping rate 50 t.p.h.

FUEL: All grades available at Mediterranea Refinery berths, subject to prior notice. Also available at Milazzo Dry cargo harbour berths all grades available by tank or truck.

BALLAST: Ballast facilities available at Mediterranea's berths. Reception 1,000 t.p.h. No restrictions on capacity.

IDENTIFICATION CARDS: Shore passes given by local police.

TIME: GMT plus 1 hour. Summer-time: March to September GMT plus 2 hours.

HOLIDAYS: Cargo work can be arranged on every day.

REPAIRS: All types of deck/engine repairs possible. Experienced and established marine workshops available.

SURVEYORS: Cargo Surveyors and Superintendents available. Ships Surveyors and Salvage Association also available.

CUSTOMS ALLOWANCES: 50 cigarettes are allowed per man per day for the first 2 days.

CONSULS: No Consuls in Milazzo. The nearest are in Messina for the following countries: Peru, Great Britain, Argentine, Norway, Uruguay, Chile, Denmark, Germany F.R., Australia.

AIRPORT: The nearest is at Reggio Calabria where there are 3 regular flights per day. Reggio Calabria can be reached by car and by hydrofoil in about 2 hours. Catania Airport also nearby, and may be reached by car or train in about 2 hours.

TELEPHONE: Connections possible at Refinery Wharves.

GARBAGE: Boats are available, and compulsory for vessels 24 hours after arrival.

BANKS: Italian banks only.

STORING: Vessels can be stored by barge during loading and unloading.

Fork lift trucks can only be used in the commercial port.

Local riggers can be employed to assist with storing in the commercial (dry-cargo) port only.

SHORE LEAVE: Allowed but transit through the refinery area not permitted except in emergency. Boats are available for hire from wharves and anchorage to the landing pier in the Port of Milazzo. Shore passes given by local police.

AUTHORITY: Ufficio Circondariale Marittimo – Milazzo.

Mediterranea-Raffineria Siciliana Petroli S.P.A., Box 154, Milazzo, Italy. *Tel:* 090-922101. *Telex:* 980025. *Cables:* Raffimed-Milazzo. *Contact:* Dott. Edeoardo Macri, Refinery Marine Superintendent.

MONFALCONE: 45.48 N. 13.32 E. (See Plan Book)

PORT LIMITS: A vessel is considered to be an "arrived ship" when it arrives within the anchorage zone, S.W. of Duino.

DOCUMENTS:

Arrival Report.
Crew List.
Passenger List.
Customs Documents.

Health Documents (only for vessels that are not arriving from the United States, and are not members of the West European Union).

PILOTAGE: Pilotage service is the responsibility of the Harbour Office, and is carried out by local Pilots. Pilots are not supplied with radio equipment. Pilotage service has to be requested by radio via Trieste radio station, to the Harbour Office or via VHF Channel 16. Pilotage is compulsory for vessels over 500 g.r.t. Pilot boat is equipped with VHF. Pilot boards about one mile from the entrance buoy.

ANCHORAGE: Vessels awaiting entry to the port are required to anchor between Duino and Sistiana, about 3 miles from the entrance. The anchorage provides good shelter from winds from the first and fourth quarters. The depth is approx. 12.0 m. and the bottom is mud.

RESTRICTIONS: Pilotage is currently effected from sunrise to sunset. It is not available during thick fog or when strong winds are blowing from the first quadrant. Maximum draft at high water is 24.6 ft. When current dredging operations are completed vessels up to 10 m. draft will be able to enter.

MAX. SIZE: At the ENEL Berth (berth for the discharge of coal destined for the electrical power station), vessels longer than 180 m. may not berth.

HEALTH: Pratique requested by radio via the Maritime Health Office at Trieste.

RADIO: Nearest coast station is Trieste Radio, through which all radio messages should be routed.

TUGS: Tug service is optional except for vessels proceeding to ENEL Berth, but the Maritime Authority can make service temporarily compulsory.

BERTHING: 910 m. of berthing space (6 berths) for loading and discharging various types of cargo, with a maximum depth of water of 24.5 ft., but after dredging this will be increased to 10.5 m. One berth 120 m. long for discharging cereals with maximum depth of 24 ft. There are two cranes on tracks of 10/20 ton capacity and another 7 mobile engine driven cranes with capacity from 8 to 60 tons, one crane on tracks is being installed with 45 tons capacity. The berths are served by railway branch lines.

BULK HANDLING FACILITIES: Silo berth is well equipped for discharging cereals.

BRIDGES: There are no bridges that hinder maritime traffic.

STEVEDORES: Ordered via Agent.

MEDICAL: Hospital, doctor and vaccination facilities available.

TANKERS: The port only receives tankers with cargoes for ENEL.

DENSITY: Average 1027.

FRESH WATER: Available at all berths.

FUEL: Bunkering is by barge only.

FIRE PRECAUTIONS: Only for hazardous goods, during bunkering operations and the effecting of any work on board vessels involving flames.

CONSULS: None at Monfalcone, but available at Trieste.

REPAIRS: Minor repairs only.

DRY DOCKS: Max. size 300,000 d.w.t.

SURVEYORS: None at Monfalcone, but these may be easily contacted at Trieste.

GANGWAY/DECK WATCHMEN: Not compulsory, but available through Agent.

OPENING/CLOSING HATCHES: Opened and closed by ship's crew.

CUSTOMS ALLOWANCES: 50 cigarettes or 50 grams of tobacco available per man per day for the first two days.

AIRPORT: 5 km. from Monfalcone with connections to Milan and Rome.

TIME: GMT plus 1 hour; from 29th March to 26th September GMT plus 2 hours.

HOLIDAYS: Every Sunday, 1st January, 1st May, Easter, first day after Easter, 15th August, 1st November, 25th and 26th December. It is, however, possible to load and discharge vessels on these days by paying premium rates.

POLICE/AMBULANCE/FIRE: Police 113 or 72332; Ambulance 72249; Fire 74444.

TELEPHONES: Not available on board, numerous public telephones in the port.

SHORE LEAVE: Completely unlimited for crews of Western countries, but for crews of USSR block ships, crews must return on board by 0200 hrs., and for those of Chinese vessels by 2200 hrs.

IDENTIFICATION CARDS: Issued without any formality by the local police.

REGULATIONS: There are no special regulations.

DELAYS: Caused only by weather conditions.

BANKS: Banca Antoniana, Via F. Rosselli No. 37. Tel: 45301
Banca Cattolica, Via Marconi No. 1. Tel: 470337.
Credito Italiano, Via Oberdan No. 5. Tel: 40061.
Banca del Friuli, Piazza Cavour No. 22. Tel: 73230.
Banco di Roma, Piazza Cavour No. 34. Tel: 45191

STORING: See "Prelims", page viii.

1. There are no coastal fuel stores, and vessels arriving at Monfalcone are either supplied by road tanker or by fuel barges. The usage of the one or the other means is the responsibility of the Owners or Agents.

2. Supplies by barge can be effected at any time, whilst by road tanker only during non-working hours.

3. For loading and discharge, vehicles may come right alongside the berthed vessels.

4. There are no forklift trucks in use in the port of Monfalcone for unloading goods.

5. For discharge or shipment of goods, there is an accident prevention ordnance No. 07/1981 issued by the Port Captaincy of Monfalcone.

GENERAL: During the Winter, there are days of very strong winds gusting up to 110 km/h. coming from the first quadrant which sweep the port's quays. The wind tends to become strong during the night, and it is necessary to strengthen moorings.

DEVELOPMENTS: At the moment, widening and deepening works in the access channel to the port of Monfalcone are under way, and the channel will be better lit, permitting entry also during the night.

AUTHORITY: Capitaneria di Porto – Monfalcone, 34074 Monfalcone, Italy.

NAPLES: 40.50 N. 14.17 E. (See Plan Book)

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report – completed on arrival.
Maritime Declaration of Health Certificate – completed on arrival.
Ship's Certificates, including Italian Authority Dues.
Vaccination Certificates for sighting.

PILOTAGE: 13 Pilots and 3 motor launches. Pilot station Tel. 322.832 and 312.604.

ANCHORAGES: Approximately 70 anchorages, having depths ranging from 11 m. to 15 m.

RESTRICTIONS: 2 port entrances of which the Western is 280 m. wide, the Eastern is 250 m. wide.

Use of propellers and thruster within 20 m. of piers not allowed.

MAX. SIZE: Tankers up to 45 ft. draft.

HEALTH: Free Pratique may be requested by radio to "Sanimare Naples" between 12 to 6 hours before arrival advising vessel's name, nationality, last port, number of passengers and crew, and state of health on board, Pratique is automatic for vessels coming from ports in Italy, U.K., France, Belgium, Netherlands, W. Germany and Greece.

TUGS: 11 tugs available as required to assist berthing.

BERTHING:

	Berth No.	*Depth*
Molo Angioino Ponente	5	30 ft.
	6	32 ft.
	7	32 ft.
Molo Angioino Testata	8	35 ft.
Molo Angioino Levante	9	35 ft.
	10	35 ft.
	11	32 ft.
Calata Piliero	12	28 ft.
	13	28 ft.
	14	26 ft.
Pontile Immacolatella Vecchia	15	20 ft.
Calata Porta di Massa	16/17	28 ft.
	18	27 ft.
	19	27 ft.
	20	27 ft. 6 in.
Pontile Pisacane Ponente	21	32 ft.
	22	32 ft.
Pontile Pisacane Testata	23	31 ft.
Pontile Pisacane Levante	24	27 ft.
	25	28 ft.
Villa Popolo Ponente	26	24 ft.
Pontile Silos Ponente	27	37 ft.
Pontile Silos Levante	27	30 ft.
Villa Popolo Levante	28	28 ft.
Molo Carmine Ponente	29	29 ft.
	29	28 ft.
	30	29 ft.
Molo Martello	—	30 ft.
Molo Carmine Levante	31	25 ft.
	32	—
Testate Bacini	32	30 ft.
Cesario Console Ponente	33	26 ft.
Cesario Console Levante	34	26 ft.
	35	26 ft.
Calata Marinella	36	—
	37	27 ft.
	38	—
Vittorio Emanuele Ponente	39	—
	40	21 ft.
Vittorio Emanuele Levante	42	30 ft.
	43	29 ft.
Vittorio Veneto Calata	44	26 ft.
Flavio Gioia Ponente	45	33 ft.
	46	33 ft.
Flavio Gioia Testata	47	28 ft.
Flavio Gioia Levante	48	32 ft.
	49	32 ft.
Calata Granili	50	30 ft.
Bausan Ponente	51	32 ft.
	52	32 ft.
Bausan Testata	53	31 ft.
Bausan Levante	54	32 ft.
	55	32 ft.
Calata Pollena	56	35 ft.
Calata Vigliena Ponente	57	27 ft.
Darsena Pellegrino	57	18 ft.
	57	18 ft.
Calata Vigliena Levante	58	28 ft.
Vigliena Ponente	59	31 ft.
	60	31 ft.
Vigliena Testata	61	25 ft.
Vigliena Pennello	62	25 ft.
	63	33 ft.
Vigliena Levante	64	38 ft.
	65	38 ft.
	66	38 ft.
Calata Progresso	67	25 ft.
Calata Progresso	68	25 ft.
Molo Progresso Ponente	69	47 ft.
Diga Curvilinea	—	17 ft. depth at 5 m. from quay
Molo San Vincenzo	—	

CRANES:

Electric: 10×6 tons, 8×12 tons, 10×15 tons, 1×40 tons, 1×20 tons, 2×50 tons (Portainers), 1×45 tons (Portainer).

Floating: 1 of 100 ton (Italian Navy) and 1 of 60 ton (SEBN).

CONTAINER FACILITIES: The port is equipped with a container terminal. The facility includes: Quay of 650 m. Depth of water 12 m. – 15 m. (Bausan Quay). 2 anchorages West of Flavio Gioia Quay with a depth of water of 12 m. Container park of 110,000 sq.m. A link with the National Railway Network. 2 cranes for 20 ft. and 40 ft. containers at Bausan Quay East. In the near future 2 additional cranes will be available at Bausan Pier-West. A trans-European railway terminal operated by International Containers S.A. fitted with a Paceco-Vickers transtainer of 35 tons, lateral cranes of 35 tons and 7 tons, and fork-lift trucks.

There is an additional 50,000 sq.m. of container storage near the city.

BULK HANDLING FACILITIES:

Coal: Four 6 ton units with hourly payload of 400 tons.

Cereals: Five units with hourly payload of 520 tons.

Containers: One 40 ton container bridge crane at Flavio Gioia Pier, capable of a lift every 2 minutes and 2×45 ton container bridge cranes at Bausan Pier.

TANKERS: The petroleum port is located at the far East area of the port of Naples and consists of the Vigliena Pier, Calata Progresso and Progresso Pier. The petroleum port is exclusively used for handling crude oil and petroleum products at its 11 berths, and several pipe-lines connect these berths with the Naples Refinery of Mobil Oil Italiana, the plant of Mobil Chimica Italiana and the bulk plants of Agip, Esso Standard Italiana and IIP (ex-Shell Italiana) which are all located in industrial area of Naples adjoining the petroleum port at a distance not exceeding 4 miles. The maximum size of crude tankers, fully loaded, which can be accommodated at Progresso Pier is 90,000 d.w.t.

FRESH WATER: Water pipe-lines are connected to all wharves and piers in Port. Water barges available.

FUEL: All grades available. Delivered by barge subject to advance notice given.

REPAIRS: All types of ship repairs can be carried out by the shipyards of Soc. Esercizio Bacini Napoletani and Cantiere Navale Ferbex S.p.a.

DRY DOCKS: 3 graving docks with dimensions as follows:
Length 206 m., width 21 m.
Length 335 m., width 40 m.
In addition 2 floating docks:
Length 223 m., width 37 m.
Length 228 m., width 35 m., lifting capacity 28,000 tons

CONSULS:

	Tel:		Tel:
Argentina	20 90 34/32 32 34	Lebanon	31 37 41
Austria	28 77 24	Liberia (Consulate General)	26 58 86
Belgium	41 27 33	Malta (Consul General)	32 15 73
Bolivia	28 76 07/26 79 07	Mexico (Chancery)	66 47 31
Brazil	40 19 04	Monaco	68 13 68
Chile	31 18 00	Netherlands	31 30 03
Colombia	64 04 43	Nicaragua	41 89 43
Costa Rica	780 32 75	Norway	32 14 61
Cyprus	32 06 32	Peru	32 56 19
Denmark	31 50 49	Philippines (Consulate General)	32 04 89
Ecuador	42 51 10	Portugal	41 79 11
El Salvador	64 34 40	San Marino	32 33 67
France	42 15 89	Sierra Leone (Consul)	20 92 47
Germany F.R. (Consulate General)	66 46 47/68 33 93	South Africa (Chancery)	20 69 31
Great Britain (Consulate General), Commercial and Consular	66 35 11/20 92 27	Spain,	41 11 57
Greece	68 43 88	Residence of Consul General	769 08 40
Guatemala	41 81 28	Sweden (1000 – 1230 hrs.)	31 50 49
Haiti	64 96 62	Switzerland	66 71 07/66 75 32
Honduras (Consulate General)	780 32 76	Thailand	769 09 59
Iceland	26 06 04	Turkey (Consulate General)	68 46 15
Indonesia	40 01 43	U.S.A.	66 09 66
Ivory Coast (0900 – 1100 hrs.)	41 52 75	U.S.I.S., Cultural Relations Office	66 09 66
Japan (Honorary Consulate)	32 11 83	Uruguay	40 31 78
Korea	20 94 30	Venezuela	41 85 50

CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened bottle wine/spirits per man.

IDENTIFICATION CARDS: Shore passes given by local police.

AIRPORT: Capodichino Airport, situated 8 km. from city.
Full international services.

POLICE/FIRE/AMBULANCE: Police Tel. 315032; Fire 330210; Ambulance 351450.

TELEPHONES: Telephone system permits the connecting up of the ships in all berths with the city network.

TIME: GMT plus 1 hour. Summer-time: March to September GMT plus 2 hours.

HOLIDAYS: Local and national holidays: New Year's Day (1st January); Liberation Day (25th April); Labour Day (1st May); Easter and day after Easter; Assumption B.V. Maria (15th August); Local Saints' Day (19th September); All Saints' Day (1st November); Immaculate Conception (8th December); Christmas Day (25th December); and 26th December.

AUTHORITY: Consorzio Autonomo del Porto di Napoli, Piazzale Pisacane, 80133 – Napoli, Italy. *Tel:* (081) 26 65 66 PBX. *Telex:* 72 12 71 Capna I. *Contact:* Dr. Luigi Marini, General Manager. Dr. Angelo Miranda, Port Director. Captain Sergio Piantanida, Harbour Master.

OLBIA, Sardinia: 40.45 N. 09.31 E. (See Plan Book)

DOCUMENTS:

For Maritime Authority:
Arrival Report.
Crew List.
Passenger List.
Ship's Certificates, for sighting.

For Port Health:
Maritime Declaration of Health (2 copies).
Vaccination Certificates, for sighting.

For Customs:
List of Supplies and Engine Stores.
Cargo Manifest, enclosing Bills of Lading.

For Police:
Passenger List (2 copies).
Crew List (2 copies).
Shore Passes for all passengers and crew.

PILOTAGE: Pilots are requested by international code signals – Telegraphic address: Pilot – Olbia, at least 2 hours notice of arrival required. VHF of 15 Watts on pilot boat (Watch on Channel 16 – Working on Channels 6, 9, 12, 14) with service from 0500 hrs. till 0100 hrs. Pilot launch is wooden motor boat of 145 h.p. – speed 12 knots. Pilot boards 1 mile from lighthouse Isola Bocca. Vessels may anchor temporarily to await Pilot.

ANCHORAGE: In the Roads of Golfo Aranci.

RESTRICTIONS: Entrance kept clear for liners.

MAX. SIZE: Max. draft 20 ft.

HEALTH: Before arrival vessel to advise Agents if free pratique required, indicating state of health on board.

RADIO: The Port Authority listen on Channel 16 (VHF, range about 30 miles).

TUGS: 1 available, 1,910 h.p. service is optional, tug normally meets vessel in vicinity of Isola Bianca.

CRANES: 1 of 6 tons on rails in the inner port (at the Benedetto Brin Quay). 3 mobiles of 15 tons, 11.75 tons and 5.7 tons.

STEVEDORES: Agents require ETA 24 hours before arrival in order to arrange gangs.

MEDICAL: Hospital facilities available. Vaccinations and inoculations can be done, except for yellow fever which must be done in Cagliari.

FRESH WATER: Available in inner port and Isola Bianca.

FUEL: Available only by tank truck, subject 2 to 3 days notice.

GANGWAY/DECK WATCHMEN: Service is optional.

OPENING/CLOSING HATCHES: Work is exclusively done by stevedores.

CUSTOMS ALLOWANCES: 40 grammes tobacco per person per day. Not permitted to take tobacco out of the docks. Reasonable amount wine/spirits allowed for normal consumption on board.

IDENTIFICATION CARDS: Shore passes required.

CONSULS: No local representatives.

AIRPORT: Olbia Airport is Olbia – Costa Esmeralda, 3 km. away. Regular services with Rome, Milan, Pisa, Bologna, Cagliari and Nice (this last one in Summertime).

TIME: GMT plus 1 hour. Summertime GMT plus 2 hours from March to September.

HOLIDAYS: New Year's Day (1st January); Liberation Day (25th April); Labour Day (1st May); Easter Monday; Assumption B. V. Maria (15th August); All Saints' Day (1st November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Police, 22380; Ambulance, 22394; Fire, 22222.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Planned to dredge entrance to 10 m. depth.

AUTHORITY: Capitaneria di Porto, V. Le Isola Bianca, 07026 Olbia, Italy. *Tel:* (0789) 21243, 21637.

ORISTANO, Sardinia: 39.45 N. 08.30. E. (See Plan Book)

LOCATION: Oristano is situated on the West coast of Sardinia in the Gulf of Oristano. Oristano is the chief town of the province of Oristano and the population is in the region of 29,000.

RESTRICTIONS: Entry/Departure, berthing and unberthing carried out in daylight hours only as the port is not equipped with leading lights or buoys.

MAX. SIZE: Martini Silo Quay – Max. draft 8.5 m.
MI.CHI.SA – Max. draft. 5.0 m.

VHF: Oristano Pilots on Channels 16 and 12.

TUGS: One tug available. Larger vessels require additional tugs which must come from Porto Torres (at high cost).

BERTHING: The port consists of 2 harbours. The outer basin being located between the 2 breakwaters and used for general cargo purposes and the inner basin being the industrial harbour. The manoeuvring area between the outer and inner basin has a diameter of 450 m. and depth of 12 m. The depth of both outer and inner basins is 12 m. The outer basin when completed will have berthing space of 1,240 m. and the inner basin (for industrial traffic) will have 2,500 m.

Soc. Chimica del Tirso: Length of berth 48 m. Berth for discharge of liquid chemicals to industries in Ottana.

Banchina di servizio: Service berth, length 70 m., for berthing of small vessels.

Banchina Industriale – Canale W-E Silos Mangimi Martini: Length 370 m. Berth for discharging cereals. 2 suction pipes and 2 arms available.

In the near future a plant will be built to produce fodder and animal feed.

Banchina Industriale – Canale W-E – MI. CHI. SA.: Length of berth 69 m. Vessels berth to load bentonite by means of conveyor.

MEDICAL: 2 hospitals with 280 beds.

AIRPORT: Civil airport at Cagliari, Alghera and Olbia (daily connections to Rome, Milan, Naples, Bergamo, Pisa, Turin, Venice and Nice) are only 1 hour's drive from Oristano by car.

SHIPMASTER'S REPORT:
Oristano Bay has many shallows, none marked with buoys however there is an approach buoy which is presently unlit. A good anchorage was obtained 2.5 miles from the port. The Bay is completely open to the West and with a S.W. to West wind the swell builds up. The Perlite Co. loading berth is a pier and a ship berths across the 'T' end of it, the ship being parallel to the beach. The berthing part itself is 120 ft. long and the loading chute can be raised to a height of 6.5 m. – 6.8 m., depending on tide. A vessel has to move on the pier for loading in different hatches, as the chute has a fixed base. I understand that although at the time there was hardly any swell in Bay, alongside there was considerable movement. The loading rate as quoted by the Agent is 500 t.p.h. Good communications were obtained with link calls on VHF through Cagliari Radio to the Agents. The local Pilot lives in Porto Torres and boards at Torregrande. No VHF communication possible.

A new harbour is being built in the Bay as observed on the ship's radar. This consists of 2 breakwaters and a third breakwater extending at right angles across the entrance, with opening at both ends. In the Southern part of the Bay, there is a no anchoring and fishing area.

In the opinion of the Master the berth is not practical during the Winter months, as delays are caused by swell coming into the port. One vessel was at anchor for 3 days and sailed finally without loading.

SHIPMASTER'S REPORT: January 1979.
Port under construction.

This vessel (LOA 299 ft. Extreme breadth 43 ft. 9 in. draft 16 ft. 10 in.) was the fifth vessel to call at the port. We were unable to obtain Chart 3917 however, Chart 161A together with information given in sailing directions proved sufficient for the vessel to be brought to the anchorage.

Pilotage: The Pilot advises that he wishes to be embarked close to a buoy in position 39° 53′ N., 08° 31′ E. which is indicated on Chart 3917. The pilot boat is a small open boat and does not have any distinctive marks. This boat would not be suitable for taking out to the 'Gulf' especially with a strong Westerly wind.

The Pilot brings the buoy astern and then proceeds on the course of approximately S.E. directly towards the harbour entrance.

Anchorage: Agent requested vessel to anchor about 2 miles off "Grande Torres".

VHF: Not available.

Radio: The Agent requested an accurate ETA as he makes arrangements for the Pilot and on seeing the vessel at the anchorage notifies the receivers by telex. This is then followed by a written Notice of Readiness of berthing.

Berthing: The grain silo berth is at the North side of "Canale Industriale" at its mid-length. This vessel swung with the aid of the port anchor and berthed starboard side alongside.

The quay is constructed of solid concrete and rises to a height of about 8 ft. above the water level. At the water line there is a ridge of about 9 in. extending along the whole length of the quay. Rubber fenders about 2 ft. in diameter are chained to the face of the quay at approximately 120 ft. intervals.

Once the vessel is alongside and against the fenders, it is protected from the concrete ridge but during berthing it would be possible to land on the projection because of the spacing of the fenders.

Bollards are also approximately 120 ft. apart except for one situated ahead of the vessel which is approximately 150 ft. from the next one aft. They coincide with the fenders.

The breakwater protects the harbour but difficulty may be experienced alongside due to swell following strong winds from a Westerly direction.

Port Facilities: Access to the vessel by road vehicle and fresh water facilities are still to be provided.

Harbour does not appear to provide any fire fighting facilities and when the grain silo is closed there is no telephone available.

It is about 10 miles by car to Oristano and the Agent's office. Half of the journey is by unmade road. There are no ship chandlers or repair facilities available in Oristano. Taxi drivers are reluctant to drive their vehicles over the rough ground and made additional high charges for the journey. The ship's agency was very helpful and went to great lengths to arrange for ship's laundry and to have water delivered to the vessel by truck. They also made some purchase of small items for the vessel.

The port of Oristano is likely to become a large complex and it must be assumed that provision of services to ships will be developed.

SHIPMASTER'S REPORT: March 1984 (Update on January 1979 report).

Our vessel LOA 191 m. arrived with laden draft of 35 ft. 5 in. to discharge a part cargo of 12,000 tonnes of grain.

Pilot station is under construction, but Pilot has (at home) VHF listening on Channel 12. So there is VHF communication with "pilot station".

Anchoring position according to Agent's cable is Lat. 39° 51.2′ N., Long. 08° 28.0′ E. and Pilot informed us by VHF when we were approaching the anchorage not to anchor further East than 1.5 miles from a line joining Cape San Marcos and Cape Frasca lights (due to our deep draft). Finally we anchored in position Lat. 39° 50.2′ N., Long. 08° 28.5′ E.

Pilot boat is still a small open boat with outboard engine, but they were expecting a new fast pilot boat in March 1984.

There is a white and red fairway buoy at approximate position, bearing from Cape S. Marcos light 063° distance 3.5 miles. The following 3 pairs of buoys green and red (red to port entering) and finally 1 red buoy. None of the buoys had lights at the beginning of March 1984.

Therefore entering and leaving the port is permitted only in daylight.

There is a tug stationed at Oristano of about 500 b.h.p., but when large vessels are expected a tug of about 5,000 b.h.p. comes from either Porto Torres or Cagliari. We were told that "large" vessels means more than 5,000 tons gross, but we could not confirm the size information. Naturally we had the assistance of both tugs in mooring and unmooring. The 5,000 b.h.p. tug made fast forward well outside the buoyed channel.

The buoyed channel has minimum depth 13 m. and the depth alongside "Martini" grain pier is 11.5 m., but in charter party draft limitation was 36 ft. SW.

Grain vessels berth port side alongside and when leaving they are swung by tugs and engine just in front of the pier as Canal Maritime is dredged to 11.5 m.

Grain Pier has good fenders but while the head of the vessel is somewhat protected by the silo, the stern is exposed to the strong Northwesterly and Westerly winds and at least 6 stern ropes, 1 breast and 2 springs aft must be passed ashore.

There is a local Shipchandler, but large orders must come from Cagliari.

Fresh water is available but very expensive and only by truck, minimum order 20 tonnes at 25,000 lire per tonne.

A new road of 6 km. connects the port with the town of Oristano.

SHIPMASTER'S REPORT: January 1985.

Vessel, LOA 148 m. Beam 22 m., visited Oristano (Lat. 39° 45′ N., Long. 08° 30′ E.), to unload maize with deepest draft 9.00 m.

Approaching: We reached pilot boarding ground/anchorage safely by steering to sea buoy at the entrance of Oristano Gulf. Sea buoy was recently installed at Lat. 39° 45′ N., Long. 08° 29′ E. (position approx.) but unlit, at night it can easily be detected by radar.

Anchorage: North: Close to sea buoy in 6 m. – 7 m. for light draft vessel. South: Close to sea buoy in 15 m. – 16 m. for deep draft vessel.

Pilotage: Pilotage is compulsory, only one Pilot at this port. ETA notice can be given 2 hours prior to arrival through VHF Channel 12 and Pilot keeps in touch with incoming vessel with his own radio. Pilot usually boards the vessel near the sea buoy and takes ship to harbour along a buoyed channel, which was also recently installed and reached both entrance breakwaters. It was installed according to IALA buoyage system (red to port) but unlit. Entry, departure and (un)berthing was restricted at night time.

Tugs: One tug only available and meets the vessel near the breakwater, ship's line was used. If Master insists on extra tug for berthing/unberthing in heavy weather, 48 hours prior notice is necessary, high cost is imposed as extra tug will come from Port of Cagliari. Master should pay special attention to (un)berthing with one tug, which is too low-powered to control a large vessel.

Manoeuvring:
(a) Depth: Buoyed channel was dredged to 13 m. and depth of both inner and outer port is 12 m.
(b) Buoyed channel and entrance breakwater about 200 m. wide and the inner basin entrance is 200 m. wide. Both inner and outer basins have plenty of room for turning around, diameter about 800 m.

General:
(a) Fresh water can be supplied by truck only.
(b) Fuel available by truck.
(c) Provisions and bonded stores can be purchased, ship suppliers provided assorted items, price is very reasonable.
(d) Cash advance in US currency is restricted to small amounts as bank could not collect too much foreign currency.
(e) Density 1025.

PALERMO, Sicily: 38.07 N. 13.20 E. (See Plan Book)

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report, completed on arrival.
Maritime Declaration of Health Certificate, completed on arrival.
Ship's Certificates including Italian Authority Dues.
Vaccination Certificates for sighting.

PILOTAGE: Compulsory for vessels over 499 gross tons. Pilot station keeps listening watch on VHF Channel 12. Pilot joins vessel 1 mile off port entrance. Pilot can be requested by International Code Signals. Pilot station and every Pilot equipped with walkie-talkie VHF set. In case of rough weather pilot boat will be in the bay and will lead ships through port entrance where Pilot will be able to board.

ANCHORAGE: It is advisable to use Pilot for anchoring in Palermo Bay.

RESTRICTIONS: No entry restriction, but there is a daily ferry service from Naples arriving at about 0645 hrs. and sailing at 2030 hrs. and another ferry service four times a week (Monday, Wednesday, Friday and Sunday) arriving at about 1330 hrs. and sailing 1400 hrs. No vessel is allowed to leave or enter the port half an hour before arrival or sailing of these vessels.

MAX. SIZE: Max. draft is up to 44 ft. (13.40 m.) according to the quay. Tankers up to 15 m. draft.

HEALTH: Free pratique may be requested by radio to "Sanimare", Palermo, between 12 to 6 hours before arrival advising vessel's name, nationality, last port, number of passengers and crew, and state of health on board. Pratique is automatic for vessels coming from ports in Italy, U.K., France, Belgium, Netherlands, W. Germany and Greece.
RADIO: Naples Radio, call sign IQH, Roma Radio, call sign IAI, Cagliari Radio, call sign IDC. Palermo Radio, call sign IPP.
VHF: Port Captain listens on Channel 16 from 0800 – 2000 hrs.
TUGS: Four tugs are available with up to 2,400 h.p. Tugs normally join vessel in the bay. Ship's lines are used.

BERTHING:

Pier	*Length*	*Maximum draft*	
	(m.)	*(ft.)*	*(m.)*
Puntone	400	44.0	13.4
S. Lucia – South side	150	37.5	11.4
Crispi 1	115	37.5	11.4
Piave – North side	325	37.5	11.4
Piave – East side	85	37.5	11.4
Piave – South side	325	37.5	11.4
Crispi 2	110	37.5	11.4
V. Veneto – North side	325	37.5	11.4
V. Veneto – South side	325	27.5	8.4
Crispi 3	115	24.5	7.4
Sammuzzo	350	26.0	7.9
Molo South/North end	380	21.0	6.4

There are 6 Ro/Ro terminals and others are projected.
CONTAINER HANDLING FACILITIES: One 30 ton container crane (gantry crane) with outreach of 21 m., height of spreader from quay 15 m.

One 42 ton container crane (gantry crane) with outreach of 31 m., height of spreader from quay 26 m.

One 35 ton mobile container crane with outreach of 26 m., height of spreader from quay 27 m.

One self-propelled heavy lift 40 ton crane fitted with spreader.

Three self-propelled heavy lift 31 ton cranes fitted with spreader.

Ten tractors; twenty trailer-trucks 40 ft. in length.
BULK HANDLING FACILITIES: Silos at Piave Pier with a total capacity of 30,000 metric tons; discharge rate 150 t.p.h.

Warehouses (either bonded or not) and sheds with a total area of 10,000 sq.m. and a total capacity of 72,000 cu.m.

Refrigerated warehouses with a total capacity of 9,000 cu.m.

Tanks for oils and wines (which can also be used for stockage of any other type of liquid products) with a total capacity of 5,000 cu.m., linked to docks by pipe-lines.

Open air areas for over 12,000 sq.m.
CRANES: 8 electric cranes with capacity of 15 tons, max. outreach 25 m. and min. 7 m.

3 mobile cranes with capacities of 13–14 metric tons.
STEVEDORES: Gangs arranged through Agent for all goods except containers; engagement of gangs can be done in two ways (option left to Agent):

For "labour by day" (0800 – 1200 hrs. and 1300 – 1700 hrs.), to be ordered at 0730 hrs., 0830 hrs., 0930 hrs., 1030 hrs. to start work respectively at 0800 hrs., 0900 hrs., 1000 hrs., 1100 hrs., and 1230 hrs. to start work at 1300 hrs.

For "shifts labour" (first shift 0800 – 1430 hrs., second shift 1430 – 2100 hrs.), to start work at 0800 hrs. or 1430 hrs. to be ordered respectively at 0730 hrs. and 1230 hrs.

Container handling, (every service, including stevedores) is provided by Ente Autonomo Del Porto (Port Authority) Palermo for two daily shifts (first shift 0700–1400 hrs.; second shift 1400–2100 hrs.).

Port labour capacity (quantity of goods, except containers, loaded in 8 hours daily work employing all stevedores available:
Fully loaded trucks and vans carried by Ro/Ro ships – 240
Bulk cargo 1,700 metric tons
General cargo 700 metric tons.
Port labour capacity for container handling 140 TEU per shift.
MEDICAL: Assistance will be given upon request.
TANKERS:

Oil Products and Crude Oil: Agip. Max. length 185 m., draft 32 ft., 25,000 d.w.t. Tankers drop anchors and are tied up at 2 buoys astern. Discharge rate 200–400 t.p.h.

Esso. Max. draft 15 m., no limitation for length. Vessel drops anchor and ties up at 2 buoys by stern. Discharging rate 600–700 t.p.h.
DENSITY: 1025.
FRESH WATER: Available at any quay and in the bay (by hoses or barges) by hose at 70 t.p.h., by barge at 80 t.p.h.
FUEL: Fuel oil, gas oil and marine diesel available at the quays and by barge.
GANGWAY/DECK WATCHMEN: Not compulsory; usually number of watchmen required depends upon the Master.
OPENING/CLOSING HATCHES: Crew usually carry out this operation.
CUSTOMS ALLOWANCES: 40 cigarettes and one opened bottle wine/spirits per man.
IDENTIFICATION CARDS: Shore passes given by local police.
TIME: GMT plus one hour. Summertime: March to September, GMT plus 2 hours.
CONSULS: Belgium, Netherlands, France, Germany F.R., Libya, Norway, Panama, Portugal, Spain, U.K., United States.
REPAIRS: Any type of repair undertaken. Facilities are provided by Cantieri Navali Riuniti employing over 2,500 workmen. There is a building slip which can take vessels of 250 m. length. The slipway is served by cranes up to 80 tons capacity and which allows handling of prefabricated units up to 140 tons weight.

There is a plate shop capable of machining 150 tons a day and which is equipped with all the latest machinery, drilling and welding units.

The engineering workshops are also equipped with the latest types of machinery enabling total dismantling and re-assembly of engines.

DRY DOCKS: Floating dock, length 285 m., breadth 46 m., suitable for vessels up to 150,000 d.w.t.

Floating dock, length 194 m., breadth 30 m., suitable for vessels up to 31,000 d.w.t.

Graving dock, length 172 m. breadth 28 m., suitable for vessels up to 25,000 d.w.t.

Graving dock, length 370 m. breadth 68 m., suitable for vessels up to 400,000 d.w.t.

Also see "Developments".
AIRPORT: Distance from Punta Raisi Airport is about 20 km. Airport served by regular services.
REPATRIATION: Good facilities exist.
HOLIDAYS: New Year's Day (1st January); Liberation Day (25th April), Easter Monday, Labour Day (1st May), Patron Saint's Day (15th July), Assumption B.V. Maria (15th August), All Saints' Day (1st November), Immaculate Conception Day (8th December), Christmas Day (25th December), Saint Stephen's Day (26th December).

Cargo work can be arranged on 25th April, Easter Monday, 1st November, 8th December, 26th December.
POLICE/AMBULANCE/FIRE: Police, 233333; Ambulance, 231166; Fire, 212222.
TELEPHONES: Available if required.
SHORE LEAVE: Allowed.
DEVELOPMENTS: One drydock under construction for vessels up to 160,000 tons.
AUTHORITY:

Ente Autonomo del Porto di Palermo, via Pr. Belmonte i/c, 90139 Palermo. *Tel:* 091-586133. *Telex:* 910377 Eporto. *Contact:* Doctor Paolo Cimino, General Manager.

PIOMBINO: 42.56 N. 10.33 E. (See Plan Book)

PORT LIMITS: Within 1 mile of Breakwater Light.
DOCUMENTS:
3 copies of Crew List.
3 copies List of Passengers in Transit or Disembarking.
1 Customs List, including ship and crew articles.
1 copy of Manifest and B/L of Cargo Discharging.
1 copy of Manifest for Cargo in Transit.
PILOTAGE: ETA to Agent in local time (GMT plus 1 hour). Summertime March to September (GMT plus 2 hours).

Pilots embark E.S.E. from breakwater light, distance 1 mile or less according to weather conditions. Pilotage usually available at greater distance on request of ship or Agent. Being an open road, care should be taken to provide shelter to Pilot embarking/disembarking facilities, especially in Southerly winds or a swell.

Pilot ladder according to Convention Safety of Life at Sea, and EMPA recommendations.

Southerly gales may prevent Pilot from embarking or even from approaching the ship; in this case pilot boat may guide limited size vessels to sheltered water and then embark Pilot (signals by lamp or by VHF on Channel 12). Pilotage compulsory over 500 b.r.t.

Pilot station has 2 Pilot boats fitted with VHF, keeping watch on Channel 12.

Pilots: Corporazione Piloti del Porto di Piombino e Tor del Sale, Piazzale Premuda, 30 – 57025 Piombino (LI). Tel: 30.535 (Office); 40.580, 30.175, 40.740, 41.345 (Residences).
ANCHORAGE: Outside the harbour East or S.E. of the Breakwater Light (according to size and draft of vessel). Leave ample sea room for intense traffic of Ro-Ro and ferries to and from Island of Elba and Sardinia.

Pilot in roads compulsory within 1 mile of the harbour and within 1 mile of Torre del Sale Enel Harbour. Pilot available at greater distance on request of vessel or Agent.
RESTRICTIONS: Berthing of large vessels (50,000 d.w.t. or more) is unadvisable in darkness or bad weather. Southerly gales prevent berthing, also for smaller vessels. Severe Southerly gales may force all ships in harbour to leave berths on account of swell and proceed to sea.

No restrictions on sailing but sometimes necessary to disembark Pilot at Portoferraio (Elba Island, 12 miles). Considerable swell in harbour during gales.
MAX. SIZE: Max. draft 39 ft., length 260 m., no breadth restriction. Can accommodate vessels up to 80,000 d.w.t.
HEALTH: Free Pratique automatic for vessels coming from Continent, "Q" flag not to be flown on entering. From other countries, including Spain and Portugal, usual procedure applies. Not coming from Continent it is possible to request Free Pratique by radio to "Sanimare", Piombino, between 12 to 6 hours before arrival.
RADIO: Civitavecchia or Livorno Radio.
BERTHING: "Acciaierie di Piombino" (ex-Italsider) Pier equipped for quick discharging of ore 1,000 tonnes per hour, coal 800 tonnes per hour, scrap, etc. – Berth No. 4 depth 39 ft. Berth No. 3 depth 35 ft. 6 in. Other commercial berths, max. depth 29 ft., equipped with mobile crane 10 tons.

4 berths for Ro-Ro vessels, max. draft 22 ft., max. length 140 m. (priority to vessels of Sardinia Lines). 2 additional Ro-Ro Berths for limited size ferries, reserved for Elba Island traffic (mostly tourists).
STEVEDORES: To enable Agent to order gangs, it is important to radio accurate ETA. Latest time to order gangs: shift 0600 – 1400 hrs., 1700 hrs. day before, shift 2200 – 0600 hrs., 1700 hrs. same day, shift 1400 – 2200 hrs., 1100 hrs. same day. Failure to give precise ETA may result in ship losing 12 – 24 hours, and the cost of the gang not employed.
MEDICAL: Doctor and dentist can attend sick crew. Hospital facilities available.

TANKERS: Oil terminal at Torre del Sale. In the vicinity of Torre del Sale (2.7 miles East of Piombino), a small shelter-harbour has been adapted for supplying the ENEL (National Electricity Board) electric plant with combustible oil. Torre del Sale shelter harbour can accommodate small tankers (up to 2,000 d.w.t.) with draft not exceeding 14 ft. Daylight traffic only with several restrictions for manoeuvring (use of tugs compulsory, wind not exceeding 14 knots, swell no higher than 1.5 m.). Pilotage compulsory and performed by Piombino Pilots with same charges and rules as in Piombino Harbour. VHF Channel 12.

FRESH WATER: Available at any pier, by pipe-line.

FUEL: Available by barge from Livorno.

OPENING/CLOSING HATCHES: Normally carried out by crew (if stevedores, extra charge).

CERTIFICATES:
Certificate of Registry.
Load Line.
Safety Equipment.
Radio Certificate.
Derat Certificate.

CONSULS: No Consuls.

REPAIRS: Small repairs only undertaken.

SURVEYORS: Cargo Inspectors available locally or from Leghorn. Surveyors available.

REPATRIATION: It is posible to arrange repatriation.

HOLIDAYS: Cargo work can be arranged on all official holidays.

BANKS: Monte dei Paschi di Siena, Filiale di Piombino, Corso Italia 77 – 57025 Piombino. Tel: 33021, 35125. Telex: 590195 Paspio I.

Banca Toscana, Filiale di Piombino, Via Lombroso, 9/13 – 57025 Piombino. Tel: 33321. Telex: 590057.

Banca Popolare di Novara, Filiale di Piombino. Via della Repubblica, 7 – 57025 Piombino. Tel: 31345. Telex: 590320 Novbca I. P.O.Box 165.

Cassa di Risparmio di Livorno, Filiale di Piombino, Corso Italia 111 – 57025 Piombino. Tel: 34290

EMERGENCY CO-ORDINATION CENTRE: Capitaneria di Porto – Livorno. Tel: 21362. Telegraphic address: Compamare, Livorno.

STORING: See "Prelims", page viii.
1. By truck.
2. Storing while discharging possible by barge or trucks.
3. Trucks are allowed to proceed to some berths, not all berths.
4. Forklift can be used.
5. Customs Regulations as for all Italian ports.
6. Usually not.

POLICE/AMBULANCE/FIRE: Police 31111 or 32222; Ambulance 36022; Fire 33333; Emergency call (all services) 113.

SHORE LEAVE: Allowed.

AUTHORITY: Ufficio Circondariale Marittimo, Piazzale Premuda 21, Piombino. *Tel:* (0565) 32506. *Contact:* Comandante del Porto.

PORTO EMPEDOCLE: 37.17 N. 13.32 E.

(See Plan Book)

PORT LIMITS: The seaward boundaries of the port at which a vessel is considered to be an "arrived ship" and laytime to commence are regulated by contract.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Maritime Health Declaration.
1 Cargo Manifest.
1 Crew Declaration.
2 Arrival Reports.
1 Store List.

PILOTAGE: Pilotage is compulsory for ships with a gross tonnage of more than 500 tons.

International Code Signals and VHF Channel 16 are used to call Pilot. Pilot station telegraphic address "Corporazione Piloti – Porto Empedocle", telephone: 66035 – The Pilot boat displays international Pilot signals. The Pilot normally boards about 0.25 miles from the port entrance.

ANCHORAGE: About 1 mile from the red light at the head of the western mole between bearings 90° and 315° in depths of about 10 m.

RESTRICTIONS: No restrictions.

MAX. SIZE: North and East pier (1st arm): Max. draft 21 ft.

East pier (2nd arm): Max. draft 28 ft.

HEALTH: Pratique is given by the Port Medical Officer who boards all vessels coming from foreign ports. No radio pratique at present.

RADIO: No radio station, however it is possible to call "Capitaneria di Porto" (Harbour Master) operating on frequency of 2182 kHz from 0800 hrs. to 2000 hrs. local time.

VHF: Pilot station on Channel 16 (calling) and 12 (working) continuous. Harbour Master on Channel 16.

RADAR: No radar available.

TUGS: One tug available.

BERTHING: 2 quays with max. draft 21 ft. and 1 pier with max. draft 28 ft. Berths are used for loading salt, fertilisers and general cargo and discharging bulk phosphate.

Salt is loaded at a rate of 300 t.p.h (approx.) at North pier and 800 t.p.h. (approx.) at East pier second arm.

CRANES: 1 crane for discharging phosphates. On request it is possible to obtain cranes from outside the port for heavy goods.

SPECIALISED CARGO-HANDLING FACILITIES: The berths are not equipped for handling containers or Ro/Ro traffic. Only small quantities of chemical liquid for local industries are handled.

BRIDGES: No bridges.

STEVEDORES: There are 2 ordering times each day. The first at 0730 hrs. and the second at 1230 hrs. It is possible to order gangs outside normal working hours through ship's Agent.

MEDICAL: All facilities available. Nearest Hospital is located at Agrigento, 5 km. away.

TANKERS: No tanker facilities.

DENSITY: Salt water.

FRESH WATER: Only small quantities supplied by tank truck.

FUEL: Small quantities supplied by tank truck.

CONSULS: None.

REPAIRS: Small repairs only undertaken.

DRY DOCKS: None.

SURVEYORS: Registro Italiano Navale (R. I. Na. Agent).

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally carried out by crew, can be done by stevedores on request.

CUSTOMS ALLOWANCES: 40 grammes of tobacco per man. Normal daily consumption wine/spirits allowed.

CARGO GEAR: Shore gear normally used for discharging. Ship's gear used for loading phosphates.

REPATRIATION: Can be arranged through Agents.

AIRPORT: Palermo approx. 170 km., Catania approx. 200 km. Daily flights to main Italian airports.

TIME: GMT plus 1 hour. Summer time (between 29th March to 26th September) clocks advanced 1 hour.

HOLIDAYS: All Sundays, 1st January, 25th April, Easter Monday, 1st May, 15th August, 25th December (Christmas Day), 26th December, All Saints Day (1st November), Victory Day (4th November), Patron Saints (25th or 26th February).

POLICE/FIRE/AMBULANCE: Police: Tel: 66044-66124.

Fire Brigade: Agrigento Tel: 26102-20222.

Ambulance: Tel: by day 66600; by night 66858.

TELEPHONES: No telephones available for placing on board.

SERVICES: No tank-cleaning equipment, no facilities for discharge of tank-washings, no compass adjusting etc.

SHORE LEAVE: Allowed. Shore passes are issued by Immigration.

AUTHORITY: Capitaneria di Porto – Porto Empedocle, Via Gioieni 55, Porto Empedocle, Italy. *Tel:* (0923) 66640 – 68420. *Cables:* Compamare Porto Empedocle. *Contact:* Harbour Master.

PORTO TORRES (Sassari): 40.51 N. 08.24 E.

DOCUMENTS:
4 Crew Lists.
1 Passenger List.
1 Maritime Health Declaration.
1 Arrival Report.
1 Crew Declaration.

PILOTAGE: International Code Signals are used to call Pilot. Pilot station telegraphic address, Corpo Piloti Porto Torres, tel. P. Torres 514936. The pilot boats carry international pilot signals. The Pilot normally boards about 1 mile from port entrance. On request, vessel can be boarded 3 miles off port entrance. Also see "VHF".

ANCHORAGE: About 1 mile from the green light on head of West Mole in depths of 25 m.

RESTRICTIONS: The oil terminal is exposed to winds and swell from N.W. to N.E. Heavy N.E. swell may delay berthing of larger vessels. Vessels should be ready to leave the berth if necessary due to adverse weather conditions.

MAX. SIZE: Inner Port: Length 120 m., draft 7 m. Outer Port: Length 150 m., draft 8 m. West Mole: Length 150 m., draft 8 – 10 m.

S.I.R. Terminal: Pier A, length no limit, draft 9 m. Pier B, length no limit, draft 12 m. Pier C, length no limit, draft 15 m. Pier E, length no limit, draft 8 m.

S.B.M. mooring: up to 300,000 tons.

HEALTH: Pratique is given by the Port Medical Officer who boards all vessels coming from foreign ports. No Radio Pratique at present. Pratique not required for vessels arriving from Common Market countries.

RADIO: Coastal radio station, Porto Torres Radio P.T., call sign "IZN", operating on 2182 kHz. A continuous service.

VHF: Pilots work on Channels 12 and 16. Launch service from anchorage to Oil berths work on Channel 6. It is also possible to call Porto Torres Radio on VHF Channel 16 (Calling and Safety), with continuous service on Channels 25, 26 and 27.

Captain of the Port on VHF Channels 16, 12, and 9 and 14 from 0800 – 2000 hrs.

TUGS: Join vessel about 0.5 mile from port or from S.I.R. Piers. Ship's lines normally used. 4 tugs available.

BERTHING: Tankers are only permitted to berth between sunrise and sunset, but may unberth at any time.

Dry-cargo vessels may enter at any time.

There are two ports, viz. New Port and Old Port. The New Port is comprised of the S.I.R. Jetty, and the Old Port is that area bounded by the East and West Breakwater Moles, within which are the Inner and Outer Harbours. The Inner Harbour is composed of the general cargo wharves which have in service electrical cranes up to 9 tons capacity, and a heavy lift gantry crane of 30 tons capacity. The Outer Harbour has oil berths at the West Mole, and general cargo berths at the East Mole in depths of up to 8.23 m.

STEVEDORES: There are two ordering times each day. The first at 0800 hrs. and the second at 1330 hrs. It is possible to order gangs outside normal working hours through ship's Agents.

TANKERS: S.B.M. located about 1.7 miles N.N.W. of S.I.R. Terminal in approx. position Lat. 40° 52′ 30″ N., Long. 08° 21′ 30″ E. Suitable for up to 300,000 d.w.t.

New Port, consisting of the S.I.R. Jetty with Berths A, B, C and E and depths of water varying to allow ship drafts of between 9 m. and 15 m. There are two lines of 20 in. and 10 in. diameter for deballasting ashore.

Old Port, the West Mole which forms the seaward limit of the (Outer) port has tanker berths in a depth of 7 m.

MEDICAL: All facilities available. Nearest hospital located at Sassari, 18 km. away.

DENSITY: Salt water.

FRESH WATER: Can be supplied in limited quantities to vessels in port and in the roads. All berths are fitted with fresh-water connections, but supply is unreliable due scarcity. Advance notice is required for deliveries by barge or from tugs.

FUEL: All grades available by pipe-line at S.I.R. piers. Elsewhere, can be supplied by barge, subject advance notice of 12 hours.

GANGWAY/DECK WATCHMEN: Authorised shore service available.

OPENING/CLOSING HATCHES: Normally done by crew, can be done by stevedores on request.

CUSTOMS ALLOWANCES: 40 grammes tobacco per man. Normal daily consumption wine/spirits allowed.

IDENTIFICATION CARDS: Not required.

CONSULS: No local consular representation.

REPAIRS: Only minor repairs can be effected locally.

REPATRIATION: Can be arranged through Agents.

AIRPORT: Nearest at Alghero-Fertilia, 34 km. away. Daily flights to main Italian cities.

TIME: GMT plus 1 hour. Summer-time, clocks advanced 1 hour between 29th March and 26th September.

HOLIDAYS: New Year's Day (1st January); Epiphany (6th January); St. Joseph (19th March); Liberation Day (25th April); Labour Day (1st May); Patron Saint (22nd May); Easter Day, Ascension Day, Corpus Domini (variable date); Proclamation Day (2nd June); St. Peter and St. Paul (29th June); Assumption B. V. Maria (15th August); All Saints' Day (1st November); Victory Day (4th November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December).

POLICE/FIRE/AMBULANCE: Police tel. 514888; Fire, 31421; Ambulance, 54973. Sassari Fire Brigade, tel. 270521; Sassari Ambulance, tel. 242124.

SHORE LEAVE: Allowed. Shore passes are issued by Immigration.

AUTHORITY: Capitaneria di Porto Torres.

PORTO VESME (Sardinia): 39.11 N. 08.23 E.

(See Plan Book)

LOCATION: Porto Vesme Harbour is located on the S.W. coast of Sardinia (Lat. 39° 11′ 5″ N., Long. 08° 23′ 5″ E.) in the district of Portoscuso. The harbour was built exclusively to serve the Porto Vesme Industrial Complex.

Porto Vesme is an artificial harbour sheltered by two breakwaters, the one to the North giving protection against N.W. sea and the other to the South giving protection against South and S.W. seas (see "Plan Book"). The harbour is managed by the Sant'Antioco Maritime District Office which maintains a local branch office at Porto Vesme for this purpose.

DOCUMENTS: See "Genoa".

PILOTAGE: Pilotage is compulsory for vessels over 500 g.r.t.; mooring party services are compulsory for vessels over 400 g.r.t.

The Pilotage Authority for the area is at Sant'Antioco and is equipped with a VHF radio station. A pilot motor boat, equipped with VHF radio, is stationed at Porto Vesme and is utilised for ferrying Pilots to and from ships. As a rule, Pilot services should be requested by ship's Agents, through the local branch of the Maritime District Office. Urgent requests can be made, however, directly by telephone or by VHF to the S. Antioco Pilotage Authority.

APPROACHES: The entrance channel to the harbour mouth is marked by 2 pairs of light beacons and 1 pair of light buoys and has been dredged to a depth of 14 m. (45 ft. 11 in.) along its entire length. The manoeuvring area within the harbour and the sea area alongside the Eurallumina Wharf have been dredged to a depth of 13 m. (42 ft. 8 in.).

ANCHORAGE: Small and medium-size vessels generally anchor in the area off Ghinghetta Rock (Lat. 39° 11′ N., Long. 08° 22′ E.) just outside the harbour approach channel, where depths vary from 12 m. to 20 m. (Area "A", see "Plan Book").

Deep-draft vessels usually prefer to await the pilot or to anchor 2.5 miles North of Isola Piana (Lat. 39° 14′ N., Long 08° 19′ E.) (Area "B"). During settled weather periods, large-size vessels also tend to anchor off Ghinghetta Rock (Area "A"); should S.W. or N.W. gales rise while large size ships are riding at anchor in this area waiting to berth, Masters usually weigh anchor and lie either in the Gulf of Palmas (Area "C") or on the Southern side of the Island of San Pietro (Area "D"). From these anchorages, ships can subsequently either pick up the Pilot and proceed directly to port or return to ride at anchor off Ghinghetta Rock or Isola Piana.

MAX. SIZE: Max. Draft 12.0 m.

TUGS: A 1,000 h.p. tug, equipped with VHF radio, is stationed permanently at Porto Vesme Harbour; if necessary additional tugs can be brought in from Cagliari Port, provided that sufficient warning is given to the ship's Agent.

RADIO/VHF:

Station	*Mode*	*Remarks*
Cagliari PPTT	Radiotelegraphy Radiotelephony VHF	Italian Post and Telegraph, available to the general public
Sant'Antioco & Carloforte Maritime District Offices	Radiotelephony 2182 kHz VHF: Channels 16 and 14	For Safety at Sea only
Sant'Antioco Pilot Office	VHF: Channel 12	
Pilot Boat, Porto Vesme	VHF: Channel 12	
Harbour tug, Porto Vesme	Radiotelephony 2182 kHz VHF: Channel 6	

BERTHING: *Mooring Operations:* A mooring service equipped with a motor boat, is available at Porto Vesme Harbour to assist ships to berth and unberth; this service can be requested either (i) through local ship Agents or the Pilotage Authority, or (ii) directly. All ships at anchor in the roadstead can contact their Agents by radio or by radio-telephone through the Italian Post Office radio-telephone network. At the same time, the Sant'Antioco Pilotage Authority, the pilot boat and the tug stationed at Porto Vesme Harbour can also be contacted directly by VHF radio or by radio-telephone for any details concerning anchorage points, estimated time of berthing or departure, and any other information relevant to ship's manoeuvre or safety while in the roadstead or at berth.

Eurallumina Wharf: The Eurallumina Wharf is provided with 2 berths.

Northern Berth: It is intended for unloading bauxite and caustic soda bulk cargoes. This berth can accommodate ships up to 92,000 d.w.t., drawing up to 12 m. (39 ft. 4 in.)

Depth alongside berth	:	13.0 m. (42 ft. 8 in.)
Length of berth	:	250 m.
Bauxite unloader	:	One "Kocks" unloader with liftable jib
Maximum free digging rate	:	Up to 1,200 tonnes/p.h.
Travel range of unloader along the wharf	:	19.5 m.
Maximum travel range of grab	:	24.50 m. from edge of wharf fenders
Maximum height of grab, in "open" position	:	17.70 m. above sea level
Operative height	:	15 m.
Minimum height of grab, in "open" position	:	10 m. below sea level

Note: It is necessary that the maximum height of the hatches coamings above sea level is kept below 14 m. during unloading operations.

Southern Berth: It is intended for loading of alumina bulk cargoes and for unloading of caustic soda bulk cargoes. This berth can accommodate ships up to 32,000 d.w.t. drawing up to 12 m. (39 ft. 4 in.).

Depth alongside berth	:	13 m. (42 ft. 8 in.)
Length of berth	:	200 m.
Alumina loader	:	One "Claudius Peters" loader with liftable and swivelling arm.
Maximum loading rate	:	Up to 1,000 tonnes/p.h.
Travelling range of loader along the wharf	:	143.5 m.
Maximum height of the loading cone	:	9.50 m. above sea level
Minimum height of loading cone	:	10 m. below sea level
Maximum extension of the loading cone from the outer side of the fenders	:	23 m.
Stowage factor of alumina in bulk	:	1 cu.m.p.tonne (36 cu.ft./long ton)

Note: It is necessary that the maximum height of the hatches coamings above sea level is kept below 9.50 m. during loading operations.

Both berths are equipped with a flexible pipe – 6 in. in diameter with ASA 150 flanges – for connection to the tanker manifolds to unload caustic soda. All ships must be equipped in order to allow the connection of the above pipe.

A dock booster station is equipped with:

1 booster pump of 275 cu.m.p.h

1 booster pump of 125 cu.m.p.h.

Any of these pumps can be switched on as an aid to the ship's pumps.

Departure: Ships are requested to leave their berths immediately after completion of unloading/loading operations. The Eurallumina Wharf Superintendent may allow extra time at berth, provided that the delay is compatible with the wharf schedule.

Operating Hours: The wharf is operated on a continuous basis, day, night, 7 days a week (holidays included).

Damage: Should damage be caused to the ship by Eurallumina loading/unloading equipment, during unloading of bauxite and caustic soda or loading of alumina, the ship's crew is requested to deliver immediately a "damage report" to Eurallumina's shift foreman on duty to debate the claim as necessary.

TANKERS: See "Berthing".

FUEL: Not available.

FRESH WATER: Available, but in short supply. Preferably vessels should arrive with sufficient water on board in order to avoid the heavy charges incurred in deliveries by tank lorries.

AIRPORT: Elmas, the airport of Cagliari, is only 1 hour by car from Porto Vesme Harbour and is connected to the major international airports on the mainland by several regular daily flights.

TIME: Local time at Porto Vesme harbour is GMT plus 1 hour, i.e. Central European Time. Summertime (GMT plus 2 hours) starts and ends, according to relevant EEC schedules.

WEATHER: *Tides:* Here, as elsewhere in the Mediterranean, the tidal range is very small; the highest tide is only 0.3 m. above the MLWS.

Currents: Since tidal currents are non-existent along the coast, the currents are exclusively wind and/or wave induced.

Wind: Prevailing wind directions are (in order of frequency): N.W. ("Maestrale", 4th quadrant) S.S.E. and E. ("Scirocco" and "Levante", 2nd quadrant) and S.W. ("Libecco", 3rd quadrant); maximum recorded wind speed: 55 knots from the N.W. direction ("Maelstrale").

Visibility: Normally excellent; during the hot Summer months, visibility may occasionally be reduced by early morning mists.

Weather-Temperature: The ambient temperature practically never drops to 0°C during the winter months and rarely exceeds 32°C during the Summer; permanent breezes in the San Pietro Channel mitigate the heat of the Summer. Relative humidity is normally 60-70%; peak values of 100% high and 20% low have been recorded, but are extremely infrequent.

The yearly rainfall varies from a minimum of 350 mm. to a maximum of 500 mm.; rainy periods are more prevalent in Autumn and Winter and at the beginning of Spring.

More detailed information can found either in Italian Sailing Directions or in those issued by other maritime countries.

GENERAL: The town of Portoscuso, situated 1 km. to the North of harbour, has both telegraph and public telephone facilities linked to the national and international telegraph and telephone networks. Excellent roads connect Portoscuso to the nearby mining town of Iglesias and Carbonia; both Iglesias and Carbonia are within easy driving distance of Porto Vesme Harbour and have hospital facilities and local branches of central government departments.

Safety Provisions: The Pilot assisting a ship for berthing at the Eurallumina wharf will give the ship's Master any local navigational information which may be required for bringing the vessel safely into port and for docking it securely alongside the wharf; the wharf is provided with numerous bollards and is protected with rugged fenders.

The ship must be well secured to the wharf according to standard nautical practice and made fast with ropes of adequate strength and in good order.

Since the local Maritime District Office is not in a position to issue regular gale/storm warnings, Masters are advised to rely on their ship's radio for weather forecasts so that, in the event of a gale warning, sufficient time will be available for them to take the necessary steps to avoid damage to the ship, to the wharf, or to port installations.

Derricks, cranes, and any other hoisting equipment on board must be stowed so as not to interfere with unloading or loading operations; derricks shall not be lowered on the side facing the wharf. On request, the ship's hoisting equipment will be placed (fully manned) at the disposal of Eurallumina.

The ship's deck and holds must be adequately illuminated after dark, so that loading and unloading of ship's equipment (grab bucket, power shovel, hose connections) can be operated correctly and so that personnel shovelling away and sweeping up bauxite in the hold and on deck may work safely and efficiently.

All access to the wharf by truck or by any other means of transport for the loading and unloading of ship's store or equipment is subject to clearance beforehand by the Wharf Superintendent and will only be permitted if the presence of vehicles on the wharf does not in any way interfere with cargo operations.

Access to and from the ship and/or wharf will normally be restricted to the ship's gangway. The gangway, which should be run out immediately after berthing, must be easily accessible at all times, safe for public use, and adequately illuminated at night. If the ship's gangway is not hinged at the root, it must be equipped with an auxiliary footbridge of about 4 m. at the lower end to reach the wharf over the fenders.

It is remembered that spills, splashes or puddles of caustic soda could be found on the wharf during the unloading operations of the product, and be a danger to people.

All persons entering the wharf area are requested to follow the marked pedestrian throughways and to keep away from any equipment which may be operating at the time, or from caustic manifolds. If, for any reason, it should prove necessary to board the ship by passing through the cordoned-off area, all possible precautions must be taken to avoid accidents and/or damage and also to avoid treading on bauxite or alumina or caustic spillages.

The Eurallumina Wharf is equipped with a built-in fire extinguishing system which, if necessary, can also be used by ships lying at berth.

On the wharf, 2 safety anti-caustic showers and 2 eye-washing devices are available; they are easily identified by green ever-lighted lamps and red painting

SHIPMASTER'S REPORT: 1975 (Updated 1984).

Harbour: The harbour is protected by two moles between which there is a wharf. A channel marked by buoys leads to the entrance.

Documents: On arrival the following documents are required.

Declaration of Health.
2 Crew Lists.
1 Copy of last Port Clearance.
1 Copy Vaccination List.
2 Store Lists.
2 Personal Effects Lists.
1 Valid Derat Certificate.
All other ship's documents.

Radio Pratique: Unavailable.

Pilotage: For ships arriving the Pilot boards at 39° 14′ N., 08° 19′ E., but in severe North-Easterly gales the Pilot will board in Palmas Bay, position 39° 00′ N., 08° 30′ E. When leaving Port the Pilot leaves the ship abeam of Ghingetta Is., 3 cables off, position 39° 11′ 05″ N., 08° 22′ 25″ E. There is no pilot vessel, the Pilot boards from a tug.

Radio: Cagliari (IDC). No VHF service for pilotage.

Tugs: Two permanent tugs of 1,750 h.p. are operating and other tugs are available from Cagliari when necessary, and advising 4 days before ship's ETA.

Mooring Boat: Available.

Depths of Water:

In the Channel	14 m.
Eurallumina Quay	13 m.
Alsar Pier	8.5 m.
Trade Quay	8.25 m.

Berthing: Eurallumina Quay (unloading point of bauxite vessels). Length 442 m. Height on surface of water 3.6 m. Large rubber sprung fenders 150 ft. apart are fixed to the quay. Double bollards 150 ft. apart.

Vessels using this quay usually berth starboard side to using the port anchor which is let go well off the berth.

Bauxite Discharging Rate: 15,000 tonnes/day. Discharging by grab.

Fresh Water: Available at the Trade Quay by tank cars. At Eurallumina Quay available at 15 cu.m./hr. (Boiler water only). No fresh water available at Alsar Pier.

Bunkers: Available by barge from Sarroch, about 70 miles from Porto Vesme.

Repairs: Limited minor repairs only and giving notice by radio. For Radio and Radar available at Cagliari.

Ship Chandler: Available advising Agent.

Consuls: No foreign representation.

Laundry: Available advising Agent.

Provisions: Fresh foods available but notice must be given immediately on arrival.

Airport: Cagliari about 90 km. from Porto Vesme. International schedule flights and domestic flights over the Italy Area.

Medical: Qualified doctors available ashore and also equipped hospitals. In emergency doctor will board ship.

Repatriation: Arrangements must be made with Agent in advance by cable or immediately on arrival.

AUTHORITY: Officio Locale Marittimo, Molo Centrale, Porto Vesme (Portoscuso-Cagliari), Sardinia, Italy. *Tel:* 0781-509114. *Cables:* Locamare Portoscuso. *Contact:* Harbour Master.

QUILIANO TERMINAL: 44.17 N. 08.28 E.

(See Plan Book)

LOCATION: Terminal is located in Vado Ligure Bay in approx. Lat. 44° 16′ 48″ N., Long. 08° 27′ 42″ E. between Savona Harbour and Capo Vado.

DOCUMENTS:

2 copies Store List.
2 copies Curios List.
8 copies Crew List.
4 copies Passenger List.
Clearance, not required.
1 copy Cargo Manifest.
Health Declaration. International Health Form to be filled out by Master on arrival.

Consignee Papers:

Bills of Lading (original and copy).
Certificate of Origin (original and copy).
Ullages report at the loading port.

PILOTAGE: Also see "Mooring".

Pilotage is compulsory. Vessels proceeding to the terminal must call off Savona Harbour to pick up Pilot.

Pilot station is located 2 miles off Savona Harbour breakwater in position approx. Lat. 44° 17′ 00″ N., Long. 08° 30′ 30″ E. and maintains VHF radio-telephone service (Channel 13).

Vessels are requested to have a proper pilot ladder securely rigged and long enough to reach the pilot launch; during night-time, adequate light must be rigged overboard for the Pilot to approach the side of the vessel and safely climb the ladder.

Vessels partially loaded must have the pilot ladder rigged in conjunction with the accommodation ladder.

When the vessel is berthed, the Port Authorities require the accommodation ladder on the starboard side.

ANCHORAGE: For vessels awaiting berth, the anchorage area is delimited by the following coordinates:

A – Lat. 44° 17.2′ N., Long. 08° 28.6′ E.
B – Lat. 44° 17.5′ N., Long. 08° 30.0′ E.
C – Lat. 44° 16.8′ N., Long. 08° 28.6′ E.
D – Lat. 44° 17.1′ N., Long. 08° 30.0′ E.

MAX. SIZE: The berth is established for a 70 ft. draft vessel, with min. keel clearance of 15 ft., making the safe manoeuvring depth 85 ft. (26 m.).

HEALTH: In addition to 36 hours notice of ETA prior to arrival, following messages are to be sent to:

(a) "Sanimare Savona" requesting free pratique.
(b) "Compamare Savona" (Harbour Master's Office) giving the following information:

Ship's Name
Flag
Call Sign
Length
Drafts
Cargo grade and quantity
ETA anchorage or pilot station.

RADIO/VHF:

Master to Radio "Sarpom Quiliano"

AAA	B/Lading quantity in long tons.
BBB	Slops, quantity water percentage, tank number.
CCC	ETA Quiliano upon departure last port.
DDD	Any ETA change exceeding 12 hours.
EEE	ETA Quiliano 72 – 24 hours prior arrival.
FFF	Draft of arrival at berth.

Ship-to-Shore Communications: Ship-to-shore communications, while the ship is berthed will be by portable VHF radio units used by Sarpom Marine Terminal Supervisor only. The use of the ship's radio station (except VHF set) and/or battery charging equipment is prohibited for safety reasons during cargo-ballast transfer operations. In event of normal ship-to-shore communications failure, an emergency system will be operated.

Free pratique. See "Health".

Radio Message: Local Agent will transmit the following standard message to all inbound vessels:

Standard Message No. 1

Master S/T ....

Please advise ETA draft other requirements stop please urgently inform Agent and Sarpom Quiliano:

AAA	Have 2×16 in. ASA connections ready on starboard manifold stop All other flanges to be blanked and fully bolted stop If 16 in. not available advise size manifold connection.
BBB	Have boom hoisted on starboard side able to work abreast of main cargo manifold stop Boom must have a certified lifting capacity of not less than 10 tons.
CCC	Vessel will be moored at a 7 buoys CBB using bow anchors stop Anchors must have at least 13 shackles of chain each side.
DDD	Vessel must have at least 6 wires of 150 fathoms length mounted on mooring winches on poop deck and main deck aft stop Winches must be fitted with warping drum in order to heave up and make fast to bitts terminal preventer wires of each buoy stop Synthetic tails are not accepted stop Have ready 2 synthetic lines on forecastle and three on poop deck for tugs.
EEE	Accommodation ladder to be ready on starboard side on arrival at berth for Port Authorities.
FFF	During entire stay at berth engine to be always on readiness and steam on deck kept open.
GGG	Cargo ullages temperatures and water must be taken on arrival by ship personnel in conjunction with terminal stop Have tanks depressurised in order to carry out above measurements stop Besides depressuring of individual tanks during or at the end of discharge is required to provide access for tanks inspection.
HHH	Advise maximum discharging capacity available and estimated total discharge time considering terminal maximum receiving rate of 11,000 t.p.h. stop Cargo and slop quantities with water percentage and total volume cargo grade and slop commingled stop Ballasting time.
III	VHF contact on Channel 13 must be established with pilot station as soon as possible stop.

Failing to answer above details may result in operational delays accountable to vessel.

Agent ....

Standard Message No. 2
Sarpom Quiliano Terminal
Master ....

Your attention is drawn to the serious view taken by Terminal and Port Authorities for pollution of harbour waters by oil stop Please ensure all Crew members conversant and comply with pollution regulations stop Principle causes pollution due leaking sea valves comma overboard discharge valves and cargo/bunkering overflows stop Therefore we recommend you check sea valves and overboard discharges before arrival and review cargo/bunkering operations with Chief Officer/Chief Engineer stop Scuppers must be plugged on main and poop decks stop On arrival Sarpom Marine Terminal Supervisor will give all assistance necessary but empowered take drastic action in event contravention pollution prevention requirements.

Agent ....

TUGS: Tugs are generally stationed in Savona Harbour. In view of required time to reach the Terminal Area (about 20 minutes time in good weather conditions) sufficient notice should be given.

The principal characteristics of tugs are:

Luigi Noli: Motor, 3000 h.p. – 50 tons bollard pull (Kort nozzle). *Fire equipment:* Equipped with "Sourbel" fire-fighting articulated arms. 1 monitor fore mast, 23 m. above sea level; 2 monitors main mast, 16 m. above sea level, water/foam range 120/90 m.

Carmelo Noli: Motor, 1,700 h.p. – 20 tons bollard pull. 1 monitor fore mast – 12 m. above sea level. 2 monitors main mast – 9 m. above sea level. Water/foam range 90/70 m.

Giuseppe Piaggio: Motor, 1,600 h.p. – 17 tons bollard pull. 2 monitors main mast – 9 m. above sea level. Water/foam range 90/70 m.

Capo Vado: Motor, 1,250 h.p. – 15 tons bollard pull. 2 monitors main mast – 9 m. above sea level. Water/foam.

Leon Pancaldo: Motor, 808 h.p. – 10 tons bollard pull. No monitors – fire hoses only.

Riviera: Motor, no monitors – fire hoses only.

Piemonte: Motor 2,500 h.p. – 36.5 tons bollard pull (Kort nozzle) – Variable pitch propeller – Bow thrust. Fire equipment: "Sourbel" fire-fighting articulated arms – 1 monitor on foremast 16 m. above sea level – 1 monitor on main mast 12 m. above sea level – Water/foam range 120/90 m.

Lombardia: Same characteristics as *Piemonte.*

MOORING: The vessel will be boarded before mooring operations by a Sarpom Marine Terminal Supervisor (S.M.T.S.) who is an experienced captain. He will remain on board up to the time the harbour Pilot boards the vessel for unmooring operations and he will also act as co-ordinator of all ship/shore operations, providing local advice to the Master in any emergency that may arise.

Responsibility for the safe conduct of operations on board while in berth or in the area of Terminal rests with the Master, as solely responsible on behalf of the Owners of the vessel.

Vessels will be boarded by the harbour Pilot off Savona Harbour breakwater or at anchorage. All manoeuvring of ships proceeding to the Terminal and within the Terminal area will be done in accordance with the harbour Pilot advices. Vessels will proceed subsequently to Vado Bay with a course parallel to the coast, about 1.2 miles from shore, up to the terminal area.

A starboard turn will be taken, steering on the "approaching range line", leading to the buoys field. Another range line, crossing with above line, marks the position where the starboard anchor should be dropped. With the assistance of 4 to 5 tugs the vessel then backs into the berth.

The position of anchors is assumed for vessels of 980 ft. LOA and 13 shackles in the water. The Pilot according to current information can also do anticlockwise manoeuvring instead of above clockwise, in this case the first anchor to be dropped will be the port anchor.

It is recommended that at least the following number of shackles in the water should be used according to size of vessel:

(1)	VLCC's above 140,000 d.w.t.	13
(2)	Vessels 80 to 140,000 d.w.t.	11
(3)	Vessels 50 to 80,000 d.w.t.	9

According to existing local weather conditions the first line to be sent out is generally on buoy N.7 or 6 (port side of vessel). The sequence of mooring operations will take place as suggested by harbour Pilot.

Vessels must be moored to the entire satisfaction of the Pilot and Sarpom Marine Terminal Supervisor and must be ready at all times to put out more lines, to take in preventer wires using messenger lines, or to adjust lines or leave the berth as required by S.M.T.S. due to any change in the weather.

The Master of the vessel shall notify the Pilot of any special conditions, difficulties or peculiarities, such as defective equipment, lines or gear, which might impose special hazards in connection with handling, mooring or discharging the vessel.

It is required that vessels test steering gear, engine room telegraph, whistle and all navigational equipment before any manoeuvre to or from the berth. The Pilot will decline to moor vessels if they are not equipped with satisfactory mooring equipment, lines, gear, etc.

The mooring boat has the following characteristics: LOA 12 m. – beam 4.20 m. – displacement 17 tons. Motor Diesel *Deutz* 150 h.p., can be overpowered up to 200 h.p.

A successful test of the boat power was carried out by towing 250 m. of two 38 mm. dia. wires at the same time.

N.B. Being an open roadstead, vessels must keep engines on stand-by during their stay in the moorings. No repairs to main engine may be undertaken in berth. Steam must be kept on deck in case an adjustment to anchor cables or mooring lines is found necessary.

The vessel's personnel are responsible for the safety of the vessel and must take all necessary precautions, whether or not so advised by the Pilot or S.M.T.S., having in mind the hazards of the operations because of the product being discharged, weather conditions and any other circumstances requiring special care or caution.

While a vessel is moored, all the vessel's personnel and vessel's operations must comply or be in accord with the Safety Rules as per form 1–49 Mar–A–B and others handed to Master on arrival, to ensure as far as possible the safety of the ship as well as the properties of Terminal. Unsatisfactory conditions will be reported to Sarpom Marine Terminal Supervisor who is empowered to reject the ship for future calls unless the reported deficiencies have been remedied.

Note: If in the opinion of the harbour Pilot and/or Sarpom Marine Terminal Supervisor the vessel is not equipped with adequate mooring facilities, lines or gear he will so inform the ship's Master and in such event the ship shall not be brought into the mooring until facilities, lines or gear, are deemed satisfactory.

BERTH: The sea bed at the berth is firm sand overlain by 1 m. to 2 m. of mud.

The berth is a conventional buoy mooring consisting of 7 Langmar Buoys designed for a 125 short ton load. Each buoy is equipped with a 40 mm. diameter preventer wire. Vessel is berthed with 2 anchors ahead and 7 mooring lines to buoys round the stern. Moored vessels have their bow seaward heading S.E., 155° true.

Mooring wires on ship's winches are requested at this terminal but it is recommended that the wire be not less than 1.625 in. diameter and at least 150 fathoms long, preferably 200 fathoms. Such winches must be solidly locked when in moorings; the tension feature is not acceptable. It is also recommended that the wire be secured on the drum in such a manner that it can be slipped without endangering personnel. In addition to ship wires, preventer wires are picked up from buoys and made fast to bitts; carpenter stopper is supplied by terminal.

When slipping wire has been found necessary, the mooring company launch will make every effort to recover and return it to the vessel.

DISCHARGING: Ships will discharge through 2 strings of hoses, i.e.:

String No. 1	7 lengths 35 ft.×20 in. dia.
	2 lengths 25 ft.×16 in. dia.
	1 length 30 ft.×16 in. dia.
String No. 2	8 lengths 35 ft.×20 in. dia.
	2 lengths 25 ft.×16 in. dia.
	1 length 30 ft.×16 in. dia.

The weight to be lifted on each string is about 9 tons: they are invariably taken up on the starboard side. Both headers are equipped with fast uncoupling devices.

The submarine line connected by manifold to the above strings consists of 2 lines (1×32 in. dia. 1×36 in. dia.) of about 3,470 m. length reaching the shore installations (Sarpom Depot) which has, at present, the capacity of 387,500 cu.m.

The max. discharging rate allowed is 13,000 cu.m./hr.= 81,600 bbls./p.h. with a max. pressure at ship's rail of 150 p.s.i.=10.6 kg./sq.cm.

Raising, connecting, disconnecting and lowering of the hoses will be performed by shore personnel (7 men), who will remain on board throughout discharging operations, using a special motor-boat chartered by Sarpom.

The boat is fitted with anti-oil-pollution equipment. Vessel's crew are required to assist shore personnel handling the boom winch and to carefully inspect their hose boom equipment before arrival.

It is recommended that vessels send maximum flow possible with due regard to safety, in order to expedite turn-around time, as well as to provide ballasting as quickly as possible.

N.B. The Sarpom Terminal maintains a vigorous tanker discharging safety programme. S.M.T.S. is authorised to suspend discharging operations in the event of any of the safety rules not being observed, or if any other danger is believed to exist. Tankers are expected to follow all safety regulations generally accepted and practised in the marine transport industry (IOTTSG Safety Guide).

The S.M.T.S. will advise the Cargo Officer or a responsible officer in due time when the switching of shore tanks, changes in discharging rates, etc. are required by the shore installation operations and for any emergency stop.

BALLAST: Vessels provided with segregated ballast will start ballasting as soon as possible during discharge operations. All vessels that are able to handle cargo and ballast simultaneously will be authorised to do so, after S.M.T.S. is satisfied that no sea pollution or cargo contamination might occur.

All efforts must be made to avoid the vessel remaining in completely light condition. Should a vessel neither be fitted with segregated ballast nor be able to simultaneously handle cargo ballast, S.M.T.S. in agreement with the Master may ask the vessel to stop discharge operations and start ballasting, after having inspected the tanks involved.

Ballast operations after completion of discharge must be reduced to the minimum required for safe handling of the vessel out of berth, which in fair weather conditions can be: propeller submerged and vessel trimmed 10 ft. by the stern. Ballast operation can continue at reduced speed during unmooring.

While the vessel is ballasting the S.M.T.S. in agreement with the Master will start singling-up by letting go all preventer wires and any other additional mooring lines not strictly required for a safe mooring. This, of course, taking in due consideration all weather and current conditions.

FRESH WATER: Fresh water is supplied at the berth, with no limitation, through a 3 in. flexible hose (international flange) at rate of about 60 t.p.h.

FUEL: Bunkers are supplied by barge which moors portside alongside the vessel. Bunker requirement must be radioed to local Agent at least 48 hours in advance. For vessels expecting to arrive on Saturday or Sunday, the requirement must be forwarded not later than Thursday afternoon.

CUSTOMS ALLOWANCES: Present regulations allow each seaman to retain in his possession a max. of 40 cigarettes or the equivalent of tobacco or cigars, and 1 open bottle of spirits. The balance of all smoking items and spirits must be collected, listed and locked, and included in the Stores List.

WEATHER: The bay, although sheltered from the strongest winds blowing from the fourth quadrant by high mountains coming down close to the coast, is subject to strong wind gusts from this quadrant, and the relative wind direction varies considerably in different parts of the bay at one time due to irregularities of the coastal heights.

The bay is open to Southerly winds and seas, and it is from this direction that seas and swells caused by strong wind between S.E. and South may interrupt marine operations. Delays in this area are mainly due to the impossibility of mooring a vessel under certain weather conditions than to withstand elements once she is moored. The berth current is part of the general offshore current stream and is not wind blown or tidal; its predominant direction is toward the S.W. and the maximum speed is 0.8 – 1 knots; generally currents do not exceed 0.5 – 0.6 knots. The faster currents are likely to occur more frequently during the Winter period; occasionally they reverse and set N.W. with a reduced velocity.

Tide is negligible and fog is rare.

In general, weather in the bay is seasonal. From May to October it is very good. The worst period is from October to December when winds and seas from South cause the maximum number of port closures.

From December to May the strongest winds are experienced from third and fourth quadrants but sea is usually smooth.

12 and 24 hour weather forecast data is available on request on a round-the-clock basis at the Terminal Office. In addition the Office is provided with "Murfax" type continuous long-range weather recording data, waverider receiver, and anemometer.

Broadcast weather reports for Mar Ligure, North Tirreno and Corsica are prepared by Navy Department of La Spezia and Air Force Weather Bureau. For Mar Ligure, they refer to Capo Mele (West of Vado Bay). Radiotelephone information concerning weather is also given on 2182 kHz (Genova Radio Station). Weather reports transmitted on 1722 kHz at 0135 – 0735 – 1935 hrs. GMT.

Weather forecast covering the following 12 hours is transmitted at 0135 hrs. and 1335 hrs. GMT.

VHF-weather information can be received through Genova Radio Station on Channel 25 at same periods as for radiotelephone.

Special Gale Reports:

Wireless: After 15/18 minutes and 45/48 minutes every hour on 500/487 kHz.

VHF: On Channels 16 and 25 at same times as above.

SIP (Telephone) – Genoa Weather Report, prepared by Air Force Department at Genoa Airport, is based on the Genoa Radio information plus local information received by planes or vessels along the coast from Capo Mele to La Spezia. The report is inserted on a tape recorder and it is amended according to latest information received.

This report can be received by telephone by simply dialling 010-5605 at the following times:

from 31/5 to 26/9 at 0600 – 0900 – 1200 hrs. (forecast validity up to 2400 hrs. same day)
at 1800 – 2000 – 2400 hrs. (forecast validity up to 0600 hrs. following day):
from 27/9 to 30/5 at 0600 – 0800 – 1400 hrs. (forecast validity up to 2400 hrs. same day)
at 2000 – 2400 hrs. (forecast validity up to 0600 hrs. following day).

This report will be obtained by the S.M.T.S. through the terminal.

In case of necessity the Air Force Weather Bureau can be called by telephone (010-420341 ext. 275) at any time of the day or night, to obtain additional information about developments of the existing situation and forecasts.

This information can also be obtained by dialling Milano Linate Airport. Tel: 02-720341.

MEDICAL: Doctors and hospital facilities are available at Savona.

CONSULS: Consulates for most nations maintain offices in Genoa (about 50 km. from Savona).

REPAIRS: Repair shops for minor repairs are available. For electronic equipment repairs, notice should be sent to the local Agent in due time.

SHORE LEAVE: Launches are sailing from Chevron Pier (located about 1 mile North of berth) and keep regular connection with tankers berthed at Sarpom's Berth.

During bad weather the service is performed from Porto Vado.

Sufficient personnel must be aboard at all times for letting go lines so that the vessel can clear the berth whenever required.

AGENCY: Sarpom does not perform any vessel agency functions. Owners of vessels calling at Sarpom Terminal must arrange their own ship's Agent.

AUTHORITY: Esso Italiana S.p.a, V. le Castello della Magliana 25, 00148 Roma, Italy. *Tel:* 59952913. *Telex:* 620830 Esso I. *Contact:* Maritime Service Dept.

RAVENNA: 44.25 N. 12.12 E. (See Plan Book)

DOCUMENTS:

For Maritime Authority:
- Ship Safety Certificates.
- 3 Crew Lists.
- 3 Passenger Lists.

For Customs:
- 1 Crew List.
- 1 Passenger List.
- Cargo Manifest.
- Bills of Lading.
- 1 Provisions List.
- 1 Customs Declaration of each Crew member.

For Maritime Health:
- 1 Crew List.
- 1 Passenger List.
- Derat Certificate or Exemption.
- Maritime Health Declaration.

For Police:
- 1 Crew List.
- 1 Passenger List.

PILOTAGE: Ordered by Agent in advance. Contact by radio telephone: Nos. 430453 and 430204 during office hours. Cables to Piloti del Porto, Marina di Ravenna. Pilot station and both pilot boats equipped with VHF, Channels 16, 9, 6 and 12. Pilot is embarked not less than 1 mile from head of breakwater. Vessel awaiting Pilot may anchor 1.5 miles from breakwater head. This anchorage is not secure in bad weather. Vessel bound for SAROM installation, embark Pilot at least 0.5 mile from the berths. Pilot launches have black hull with white band, white superstructure, 10 m. to 14 m. in length.

ANCHORAGE: Anchorage prohibited in vicinity of submarine pipe-lines and cables. Vessels waiting for a berth may anchor at a distance more than 1.5 miles from the outer breakwater head according to their draft and subject to weather conditions.

RESTRICTIONS: Berthing day and night from entrance to San Vitale Basin. Inner port daylight berthing only. The channel to the inner port is navigable one way only. Traffic signals are displayed to indicate when channel closed to incoming vessels.

MAX. SIZE: *Inner Port:* Draft limited from 17 ft. to 17 ft. 6 in. depending on vessel's beam.

San Vitale: Max. draft 28 ft. allowed from port entrance to San Vitale Basin.

Sarom (Oil Platform): Length not limited, max. draft 36 ft.

Sarom (Oil Berth): Length not limited, max. draft 36 ft.

SBM Terminal: Length not limited, max. draft 44 ft.

Sarom (Oil Platform No. 4): Length no limit, max. draft 70 ft.

HEALTH: Pratique given by radio, on request to Sanimare Ravenna. Pratique is automatic for vessels coming from ports in Italy, United Kingdom, France, Belgium, Netherlands, Germany F.R. and Greece.

RADIO: Messages via Ancona Radio, Venezia Radio, or Trieste Radio.

VHF: Ravenna VHF Radio Station operates on Channels 16, 25, 26, and 27.

The Ravenna Port Informer is in contact with Ships Agents and operates on Channel 9 from 0600 hrs. – 2200 hrs. every day including holidays.

TUGS: Available, join vessel in outer port. Ship's lines are used.
BERTHING: *Shipmaster's Report:* 1982.
It is advisable to keep vessel well secured when alongside as passing vessels have little consideration.
CRANES: Heavy lift floating crane to be located in the Candiano Canal.
STEVEDORES: To be ordered before 1030 hrs. for afternoon work, and before 1630 hrs. for following morning.
MEDICAL: All facilities available.
TANKERS: No slop discharge facilities available. Dirty ballast may not be discharged within 50 miles of the port or within Italian waters.
S.B.M. Terminal:

No. 3 Terminal (Ocean Berth) lies in position Lat. 44° 29′ N., Long. 12° 25′ E. It can accommodate vessels of any length but there is a max. draft of 44 ft. Discharging by 10 in. flexible hoses connected to ship's port manifold.

Vessel lies stern to buoy heading Northward, using both anchors. These are backed up with a shore wire on each bow. At the stern shore wires are used and there are two breast lines on either side.

If the vessel has to anchor, this should be to the North of the buoy and not less than 3.5 miles from the coast. This gives good holding in mud and clay if plenty of cable is used, as there is occasionally a 2.5 knot to 3.0 knot Southerly current. Vessels should not anchor South of the buoy due to the presence of telegraphic cables and pipe-lines.

DENSITY: 1024.
FRESH WATER: Only available ex-wharf at San Vitale and at inner port piers. Barge available for deliveries to the Silos Piers and tanker terminals.
Shipmaster's Report: 1982.
Delivered by road tanker only at silo pier (Setramar) in lots of 8 tons. Cost Lire 10,000 per ton.
FUEL: Available by barge.
FIRE PRECAUTIONS: Tankers are given copy of port fire regulations on arrival. No repairs or gasfreeing to be carried out without permission of Port Authorities.
GANGWAY/DECK WATCHMEN: Optional, can be employed from shore if required.
OPENING/CLOSING HATCHES: Can be performed by ship's crew or by stevedores.
CUSTOMS ALLOWANCES: 50 cigarettes per man for first day in port. Wine/spirits, allowance is made for normal daily consumption on board.
IDENTIFICATION CARDS: Shore passes given by police.
CONSULS:
Norway tel. 24.5.47 Spain tel. 24.0.14 Sweden tel. 22.6.39
REPAIRS: Minor engine repairs can be effected. Floating dry-dock available for up to 1,000 tons displacement.
REPATRIATION: Can be arranged.
AIRPORT: Forli Airport situated 25 km. away, with daily flights to Rome and Milan.
TIME: GMT plus 1 hour. From May to September, GMT plus 2 hours.
POLICE/FIRE/AMBULANCE: Police, tel. 22.4.66; Ambulance, 22.3.11; Fire, 22.2.22.
TELEPHONES: Can be installed on board at San Vitale berths.
SHORE LEAVE: Allowed. Launch service available for vessels in the roads.
SHIP SUPPLY SERVICE: Contact: I.S.A.P. s.r.l. Impresa Servizi Ausilliari Portuali via Circonvillazione Piazza d'Armi, 74 48100 Ravenna. Service is rendered to the ships waiting at anchor in Ravenna Roads or to the Tankers discharging at the refinery terminals located in Ravenna Roads.

Vessels: "Elisabetta Seconda", 17.15 m. LOA and 4.60 m. breadth. 2 engines 130 h.p. each able to transport 22 passengers.
"Francesca Romana", 17 m. LOA and 4.65 m. breadth 1 engine 240 h.p. able to transport 12 passengers.
AUTHORITY: Capitaneria di Porto Ravenna, Via Antico Squero 9, Ravenna, Italy. *Tel:* (0544) 22100, 32506, 32154. *Cables:* Compamare Ravenna. *Contact:* P. Gallerano, Port Captain.

SALERNO: 40.40 N. 14.45 E. (See Plan Book)

DOCUMENTS: As for all Italian ports, i.e. all ship's documents in valid condition and Arrival Reports, to be filled upon arrival with the Port Authority's representative.
PILOTAGE: Pilot station keeps watch on Channel 16 VHF from 0600 – 2000 hrs., working Channel 12.
ANCHORAGE: Position of anchorage, about 1 mile W.S.W. of green flashing light.
RESTRICTIONS: Vessel cannot enter or sail from the harbour between 2100 hrs. and 0500 hrs.
MAX. SIZE: Vessel allowed to enter port should not exceed 200 m. in length or 27 ft. draft.
HEALTH: Free Pratique not obtainable by radio. Usual formalities on berthing.
RADIO: All cables should be sent via "Napoli Radio" call sign "IQH".
TUGS: Lines must be supplied by the ship. Tug's position is near the intermittent light (green).
BERTHING: Five berths with depths from 21 ft. to 28 ft.
CRANES: 7 mobile cranes available. 4×5 tons, 2×10 tons and 1×50 tons.
STEVEDORES: Stevedores are to be informed 24 hours prior to vessel's arrival.
MEDICAL: Medical Service should be requested in advance. Hospital facilities are obtainable.
DENSITY: Average salinity inside port is 1025.
FRESH WATER: Fresh water available at all berths.
FUEL: Bunkers may be supplied from Naples by truck or barge. If large quantities are requested supply will be effected by barge from Naples.
CUSTOMS ALLOWANCES: Only 40 cigarettes on vessel's arrival. This applies to officers and crew. The remaining stock will be sealed in vessel's bonded store.
CONSULS: No consular representatives exist in Salerno. Nearest at Naples.
REPAIRS/DRY DOCKS: No dry dock exists. Only small workshops attending minor repairs.
AIRPORT: The nearest airport is at Naples. Distance 70 km.
TIME: One hour ahead of GMT in Winter. Summertime (March – September) GMT plus 2 hours.
HOLIDAYS: Other than the national festivities, September 21st, a local holiday, being the Name Day of the town's Patron Saint.
TELEPHONES: Emergency phone number is: 113.
DEVELOPMENTS: Presently some works are in progress in order to obtain a further berth with deeper draft.
AUTHORITY: Capitaneria di Porto Salerno, Molo Manfredi, 84100 Salerno. *Tel:* 224544, 224765. *Cables:* Compamare Salerno. *Contact:* Harbour Master.

SAVONA (including Vado Ligure): 44.18 N. 08.29 E. (See Plan Book)

PORT LIMITS: One mile from Savona Port Breakwater.
DOCUMENTS:
Arrival Report for Port Authority.
Cargo Manifest.
Provisions and Crew Personal Effects Manifest.
8 Crew Lists.
Class Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Safety Radio Certificate.
Ship's Register – Load line Certificate.
Derat Exemption Certificate.
PILOTAGE: Pilotage is compulsory for vessels over 500 g.r.t. Pilot ordered through Agent. Telegraphic address: Piloti Porto di Savona. Pilot launch is black with white band. To call Pilot, use flag or light signals according to International Code. For vessels bound for Savona or Vado Ligure, Pilot boards about 0.5 to 1 mile S.E. of the red light at Savona port entrance. Pilot station on VHF Channel 13 day and night.
ANCHORAGE: The Roads of Savona offer a safe and spacious anchorage. Depths of 25 m.

Important limits: it is forbidden to anchor North of bearing 270° from red light. It is forbidden to anchor East of bearing 360° from the white light between 15th May and 30th September.
Shipmaster's Report: April 1983.
In any season the limits are:
North Border – bearing 305° from red light "Frandgiflutti".
South Border – bearing 340° from Point Lat. 44° 18′ 30″ N., Long. 08° 29′ 27.5″ E.
RESTRICTIONS: Night entrance is considered for each case depending on type of mooring and vessel's draft. At Savona berths, vessels on maximum draft berth in daylight at high tide. No restrictions on unberthing.
MAX. SIZE: Savona inner port, max. draft 9 m.; Savona Silos, max. draft 10.50 m.; Vado Ligure Roads, depending on berth depth.
HEALTH: Free Pratique may be requested by radio from "Sanimare Savona" prior to vessel's arrival except for vessels coming from countries subject to sanitary control, for which the Harbour Doctor must go on board in order to expedite Free Pratique. Free Pratique is automatic for vessels entering after calling at another Italian port or any other port belonging to E.E.C. – In the event of any disease or fever contact Agents.
RADIO: Genova Radio or Roma Radio.
VHF: Pilot Station on Channel 13, day and night. Harbour Master's office on Channel 16, day and night. Port Authority on Channel 13 (Tel. 80.20.21).
TUGS: Tugs join vessel in vicinity of Savona port entrance or at Vado Ligure just off the berth. Ship's line usually used. If tug line used, tariff plus 20% is charged.
BERTHING:
Inner Harbour; depth 17 ft., quay length 480 m.

Quay Nos. 1, 2, 3, 4, 5, 6, and 7, draft alongside quays min. 23 ft., max. 32 ft., quay length 790 m.

Quay Nos. 8, 9, 10 and 11, draft alongside quays min. 29 ft., max. 32 ft., quay length 417 m.

Quay Nos. 12, 13, 14, 15, 16, 16A, draft alongside quays min. 23 ft., max. 36 ft., quay length 670 m.

Funivie Plant (Pier No. 22), draft 32 ft., quay length 130 m.
Vado Ligure:
Porto Vado North, depth 34 ft., quay length 210 m.
Porto Vado South, depth 20 to 23 ft., quay length 400 m.
Pier Fornicoke S.p.A., depth 39 ft.
CRANES: The port is equipped with modern mobile cranes with the following capacities:
10 bridge cranes, capacity from 4.5 to 6 tons;
22 electric cranes, capacity from 1.5 to 20 tons;
18 mobile cranes, capacity from 15 to 150 tons;
2 mobile cranes, equipped with spreaders for handling containers.

SPECIALISED CARGO-HANDLING FACILITIES: Funivie Plant is equipped for quick discharging of cargoes in bulk (coals and ores) by means of 4 electric transporters capable of handling 1,100 t.p.h. It is directly connected to overhead wire railway, capable of carrying 400 t.p.h. to its storage, the capacity of which is 400,000 tons.

Cereal Silo belonging to "Savona Silo S.p.A." has a capacity of 60,000 cu. m., it is fitted with 3 pneumatic towers having an intake of 500 t.p.h.

A 14 storey parking house capable of containing 2,800 cars. Ro/Ro terminal available.

Container terminals include an area of almost 50,000 sq.m., for the storage and the shifting of the containers.

Terminal for cellulose and wood goods includes 550 m. of loading quays for ocean-going vessels; roofed warehouse of over 8,000 sq.m.; 60,000 cu.m. capacity for 25,000 tons of goods; it is served by 1,600 m. of railways, 300 m. out of which are roofed; over 200 trucks available for forwarding goods by road.

Single storey warehouse for general cargoes having a capacity of 12,000 cu.m.

Vado Ligure: Pier San Raffaele is fitted for discharging and loading large vessels with cargoes in bulk (coal for the Fornicoke S.p.A., and cereal for Messrs. Ferruzzi and Co.). Its facilities consists of 2 travelling cranes (rate 10,000 tonnes per day), a belt tower and a double conveyor belt line.

Cereal Silo belonging to Messrs. Ferruzzi and Co. Storage capacity 52,000 tons; discharging rate 850 t.p.h.; re-forwarding rate 200 t.p.h.

Reefer Terminal: Unloading/loading plant for foodstuffs and other refrigerated cargoes at Porto Vado North. The plant consists of conveyor belts which from the holds load goods directly onto trucks, railway-cars and vice-versa. The rate is about 14,400 packages per hour. Packages weight: up to 35 kg. Packages size: up to 60 mm.× 500 mm.×350 mm.

STEVEDORES: Ordered by ship's Agent, no separate ETA required.

MEDICAL: All facilities available.

TANKERS: *Esso Pier:* length 345 m., depth 30 ft.

Vadoil Pier: length 700 m., depth 39 ft.

I.I.P. Pier (ex-Shell): length 420 m., depth 31 ft.

Chevron Pier: length 435 m., depth 31 ft.

At Vadoil, I.I.P. and Chevron piers, tankers are moored stern to the pier.

Sarpom Buoyage: Approximately 1,340 m. from the Quiliano mouth there are the pipe-lines Quiliano-Trecate's buoys at a draft of 115 ft. for mooring tankers up to 260,000 d.w.t.

By means of its submarine piping they get a pumping rate of over 10,000 t.p.h. Its plant ashore contains a coastal storage from which goes a pipe-line 146 km. in length reaching the Sarpom refining mill (See "Quiliano Terminal").

DENSITY: 1025.

FRESH WATER: Can be supplied alongside the quay by hoses, rate of delivery 10 t.p.h. The cost amounts to 1,008 Lire per ton plus 6,112 Lire for the use of hose up to 50 m. long; plus 12,224 Lire for the use of hose up to 150 m. long; plus 18,336 Lire for the use of hose over 150 m. long. Possible to supply fresh water in roads, weather permitting.

FUEL: All grades available from major oil companies and supplied by barge only.

FIRE PRECAUTIONS: Tankers or vessels handling dangerous cargoes, are requested to use vigilance prevention fire service carried out by 2 men, one on board and the other ashore, supplied by the "Cooperativa S.Barbara III°" (fire brigade). No repairs or gasfreeing to be carried out without permission of Port Authority.

GANGWAY/DECK WATCHMEN: Optional, can be employed from shore if required.

HATCHES: Opening/closing hatches normally carried out by crew, on request stevedores can be arranged.

CUSTOMS ALLOWANCES: Bond sealed. 50 cigarettes or the equivalent in tobacco per person for the first day in port, wine and spirit allowance is made for normal daily consumption on board.

CONSULS:

Denmark	Tel. 28.813	Netherlands	Tel. 38.62.55
France	„ 38.451	Spain	„ 26.106
Malta	„ 26.828	Sweden	„ 20.286
Norway	„ 27.333		

REPAIRS: All types of repairs possible except drydocking.

In Savona the Classification Society is represented by the R.I.N.A. (Lloyd's Register of Shipping). The A.B.S., N.V., etc., are represented in Genoa (40 km. from Savona).

SURVEYORS: General cargo and bulk cargo Inspectors available at Savona or in case of need from Genoa. Petroleum Inspectors such as Saybolt-Van Duyn available at Siracusa with office in charge also for Savona.

Locally available only Italian Register of Shipping (R.I.N.A.) all other Classification Societies available from Genoa. The representative of Salvage Association available from Genoa.

REPATRIATION: All facilities available for crew changes, good railway connections.

AIRPORT: Genoa (Cristoforo Colombo) distance 40 km.; Milano (Malpensa and Linate) distance 210 km.; Torino (Caselle) distance 149 km.

TIME: GMT plus 1 hour. From April to September, GMT plus 2 hours.

HOLIDAYS: New Year's Day, (1st January); Town's Patron Saint, (18th March); Liberation Day, (25th April); Easter Monday; Labour Day, (1st May); Assumption Day, (15th August); All Saints Day, (1st November); Immaculate Conception Day, (8th December); Christmas Day, (25th December); Boxing Day, (26th December).

POLICE/FIRE/AMBULANCE: Police, Tel. 28.868; Ambulance, Tel. 20.104 (White Cross), Tel. 80.68.68 (Red Cross); Fire, Tel. 33.333 and 80.24.41.

EMERGENCY CO-ORDINATION CENTRE: Harbour Master, Station of Savona. Tel: (019) 386656 (Officer on duty 24 hours a day).

TELEPHONE: Can be connected on board.

SERVICES: Cleaning of holds can be carried out by "Coop. Lavoro Marina"; Tank-washing is possible only if the washing water is kept on board. Compass adjusting performed by Prof. G. Manella c/o Nautical Institute.

BANKS:

Banca D'America e D'Italia, Via Garibaldi, 5, 16100 Genova. Tel: 284141 (with automatic selection). Telex: Baigen 270023.

The above bank is a branch of Bank of America, San Francisco.

Banca Commerciale Italiana, Via Paleocapa, 121 r. Tel: 386407. Telex: 270059.

Banca Nazionale del Lavoro, Piazza Marconi, 3. Tel: 802061. Telex: 270313.

Banca Popolare di Novara, Piazza Diaz, 41. Tel: 28881. Telex: 331037.

Banco di Napoli, Via Vegerio, 27. Tel: 37285. Telex: 271092.

Banco di Roma, Piazza Diaz, 48. Tel: 21902. Telex: 270590.

Cassa di Risparmio di Savona, Corso Italia, 10. Tel: 20525. Telex: Carisa 28075.

Istituto Bancario S. Paolo di Torino, Corso Italia, 90 r. Tel: 802051. Telex: 270514.

STORING: See "Prelims" page viii.

1. Vessel can be stored both by barge or truck.
2. Vessel can store from barge during loading or discharging.
3. Trucks can proceed along side at the berth only in the commercial port and not at the private piers.
4. Fork lift trucks can be used on the jetty to handle stores.
5. Goods which make up stores loaded or transhipped on vessels sailing from Savona, are considered goods in-transit or re-exportation when foreign and considered final exportation when national or nationalised goods.
6. Local riggers and on request stevedores can be employed to assist with storing.

SHORE LEAVE: Allowed. Launch service available for vessels on the roads.

IDENTIFICATION CARDS: Shore passes issued by the Immigration Office.

DELAYS: Normally no delays expected.

SHIP SUPPLY SERVICE: Provisions are supplied by the local Shipchandlers who by their own motorboats can join off-shore ships (about 20 miles from the harbour).

Names and addresses are as follows:

La Naval Provveditoria, via Quarda Superiore 3-2, 17100 Savona (Italy). Tel: 30.334. Cables: Navalprovis.

Naval – Provisions – Savona & Vado Bay. General Shipchandlers, Provisions-Deck-Engine and Cabin Stores, Bonded Stores.

Francesco Baglietto & Figlio, via Quarda Inferiore 40-42-44 r., 17100 Savona (Italy). Tel: (019) 21.587. After hours (019) 803987.

General Shipstores and Provision Merchants. Warehouses and Bonded Stores.

Montanari s.r.l., via del Molo 3 r., 17100 Savona. Tel: (019) 25.047 – 26.749.

For vessels not alongside a quay, crew and passengers are landed by the motorboats of the following firms:

I.M.A.R.T. s.n.c. di Spezialetti – Saccone & C. Impresa Marittima Artigiana Rimorchi Trasporti, Corso Vittorio Veneto 50/10, 17100 Savona (Italy). Tel: (019) 802.537 – 28.917.

NASTASI s.a.s. Trasporti Marittimi Locali di Merce – Servizio rada persone, Calata P. Sbarbaro – Zona 21, 17100 Savona (Italy). Tel: (019) 26.339.

Boschi Italo & Matini Giuseppe, Trasporti con motobarca, via Brilla 6/2, 17100 Savona (Italy). Tel: (019) 881.523.

Canneva Umberto, Calata P. Sbarbaro, 17100 Savona (Italy). Tel: 25.263.

Polimone Carlo, piazza D'Alaggio, 17100 Savona (Italy). Tel: (019) 20.652.

Any extra or emergency services can be carried out by the tugs owned by:

Soc. Carmelo Noli fu Giovanni, Sbarchi Imbarchi Spedizioni Rimorchi, Piazza Rebagliati 3, 17100 Savona (Italy). Tel: (019) 27.333 – 22.278.

Name	*g.r.t.*	*LOA (m.)*	*h.p.*	*Class*
Luigi Noli	398.00	37.90	3,000	Ocean going
Lombardia	197.52	31.11	2,500	Ocean going
Piemonte	197.52	31.11	2,500	Ocean going
Carmelo Noli	274.30	33.36	1,700	Ocean going
Giuseppe Piaggio	177.45	27.74	1,600	—
Capo Vado	176.20	27.74	1,250	—

AUTHORITY: Ente Autonomo del Porto di Savona, Via Gramsci, 14, 17100 Savona. *Tel:* 802021 (with automatic selection). *Telex:* 271462 EAP SV. *Cables:* Portautonomo, Savona. *Contact:* Dr. Giovanni Bono, Managing Director.

TARANTO: 40.29 N. 17.13 E. (See Plan Book)

DOCUMENTS:

6 Crew Lists.
6 Passenger Lists.
Provisions Manifest.
Manifest of Crew Personal Effects.
Cargo Manifest.
Arrival Report, completed on arrival.
Maritime Declaration of Health Certificate, completed on arrival.
Ship's Certificates including Italian Anchorage Dues.
Vaccination Certificates for sighting.

PILOTAGE: Pilotage is obligatory for vessels over 500 g.r.t., both for entry and leaving from Mar Grande. The Pilot boards arriving vessels at a distance of not less than 1 mile from the lighthouse of Capo S. Vito, and leaves on sailing when the line between the S. Vito and S. Paolo lights has been passed.

RESTRICTIONS: Entry allowed day and night.

In Mar Grande, the bottom slopes gradually upwards from the mouth (more than 30 m. at the centre) to the facing coastline (about 14 m.). In Mar Piccolo, the maximum depth of 12.5 m. in the first inlet and of 9.5 m. in the second inlet which slopes upwards towards the coast.

Vessels drawing more than 16 m. must pass to the West of the light buoy with radar reflector located about 1 mile to the South of the mouth of Mar Grande and which indicates the Western limit of two areas of 17 m. and 18 m. depth.

Passage through the navigable channel: Merchant vessels whose passage necessitates the opening of the swing bridge and all foreign flag vessels must obtain authorisation to pass through the channel from the Port Captaincy. Methods of passage are indicated in the Mediterranean Sailing Directions.

Prohibited Areas: To the South of the Islands of S. Pietro and S. Paolo is an area in which transit is prohibited.

MAX. SIZE: Tankers up to 72 ft. draft may berth at buoy mooring.

Also see "Berthing".

HEALTH: Free Pratique is automatic for vessels coming from Italy, France, Great Britain, Ireland, Germany, Belgium, Netherlands and Greece. From other countries it may be obtained via radio, by applying to "Sanimare Taranto" between 12 and 6 hours before arrival.

Yellow fever vaccinations could be arranged by calling Bari port doctor to Taranto with two days' notice.

RADIO: Vessels at sea may communicate with Taranto by the following means:

By R/T via Crotone Radio, listening continuously on 2182 kHz.

By VHF via Bari Radio, listening on Channel 16 from 0600 – 2400 hrs.

By VHF via the Port Captaincy, listening continuously on Channel 16 and the Pilot Station listening continuously on Channel 12 (Pilot service and safety only).

Tankers: Tankers carrying/or to load over 2,000 tons of petroleum products have to send a cable 36 hours in advance to "Compamare Taranto" containing the following details:

Ship	Type/call sign/name/flag/g.r.t./n.r.t./d.w.t.
Age	Age of the ship/LOA/draft fore-amidship-aft.
Arr	ETA to pilot station.
Cargo	Type/quantity of cargo on board/or to be loaded.
Fire	If vessel equipped with inert gas system and its efficiency.
Solas	Whether Safety Certificates issued according to Solas 1960 or Solas 74/Protocol 78 or Solas 74.
I.O.P.P.	Date/place/validity I.O.P.P. Certificate.
Paris	Date and place where carried out last 6 monthly inspection in European ports in accordance with Paris 1982 memorandum.
Poll	Date and place of issuance/validity of Certificate of Insurance or other financial security in respect of civil liability or oil pollution damage – not Tovalop.
Remarks	Any news concerning deficiencies to hull/engine/steering gear/safety equipment.

Tankers belonging to countries who are not signatories to the Solas 74/Protocol 78, will have to anchor in Mar Grande Roads and are subject to a visit by the authorities as per Memorandum of Understanding on Port State Control.

TUGS: 6 tugs (1,000–1,920 h.p.), available. Compulsory for vessels over 20,000 g.r.t., 2,000 g.r.t. carrying hazardous cargo and vessels which have to pass through the navigable channel.

BERTHING: *Outer Harbour:* Quays No. 1/2, combined length, 1,050 ft. (32 m.); max. draft, 26 ft. 3 in. (8 m.); Quay No. 3, length, 820 ft. (250 m.); max. 27 ft. 10 in. (8.50 m.).

Italsider Pier: *Eastern side* (for discharge of ore, coal, steel scrap): length, 4,456 ft. (444 m.); depth alongside 52 ft. 6 in.; max. draft allowed 50 ft. Vessels up to 200,000 d.w.t. have berthed at Italsider Jetty No. 4. Length 1,353 ft. Depth alongside 80 ft. Discharge rate for iron ore (2 Dravo unloaders) 1600–2400 m.t.p.h. Discharge throughout 24 hours.

Western side (for discharge and loading of finished goods): length, 1,566 ft. (477 m.); depth alongside 33 ft.

Safety: During Winter time, berths are subjected to heavy swell which may force vessels to leave same, as the breakwater effectively protects only the Eastern side. However, work is now in progress to lay new breakwater, which should also render safe the Western side.

Head of the Pier: Width, 448 ft. (136.55 m.); max. length of vessel, 459 ft. (140 m.) or up to 525 ft. (160 m.), subject to vessels laying at Western and Eastern sides being berthed at not less than 164 ft. (50 m.) from head of pier; depth alongside, 32 ft. 8 in., (10 m.).

Cement Pier: Max. depth is 8.50 m.; suggested max. draft 8.20 m. (26 ft. 10 in.); max. vessel length acceptable, 120 m.; rate of loading (in bulk): up to 280 mt.p.h.; (in bag): up to 35 mt.p.h.

TANKERS: *Aviation Gasoline Oil Jetty.* Tankers moor with 2 anchors and with stern made fast to 4 buoys. Connection by stern. Vessel lifting up hoses (9 in.) from the jetty (breadth 9 ft., length 1,476 ft.). Length of pipe-line from 0.5 to 1.5 miles.

Access to vessel by boat. No water or bunkers available. Max. draft 25 ft. Night crossing of Mar Piccolo up to and from jetty is not allowed.

Navy Oil Jetty: Pier, terminating in 2 quays, which may accommodate 2 vessels each. Max. draft 33 ft., hoses 300 mm. Night movements allowed.

Petroleum Pier: Exclusively used for handling petroleum products at its 4 berths and is connected by several pipe-lines with Shell Italiana Refinery, as well as with the bulk plants belonging to Agip, and Industrie Chimiche De Gaeta, which are all located in the industrial area of Taranto adjoining the petroleum port. Access to the pier is through a dock 350 m. long and 33 m. wide. The pier itself is 560 m. long.

Berth No. 1 and 2 (after berths), max. length of vessel, 175 m. (557 ft. 3 in.); max. draft, 9.50 m. (31 ft. 2 in.). Max. depth, 10 m. (32 ft. 9 in.). Bunkers from line, (8 in. hose, 10 in. pipe-line). Water, by barge. Loading arms, 2 of 10 in., 3 of 8 in.

Berth No. 3 and 4 (fore berths), max. length of vessel, 208 m. (682 ft. 5 in.); max. draft, 10.50 m. (34 ft. 5 in.); max. depth, 11.00 m. (36 ft. 1 in.). Bunkers and water, as per berths 1 and 2. Loading arms, 6 of 10 in.

Pier is fitted with 1 line for each product to be loaded (14 lines) and a 20 ft. line for ballast discharge. Any quantity of ballast may be received by the pier. Access to the pier for provisions only via boats.

Shell CBM. Shell terminal for discharge of crude oil is situated in Mar Grande North-east of St. Paul's Island. Distance 3,000 m., and bearing 048° from light at the head of St. Paul Breakwater. Vessels moor at Q buoys with port anchor down. Buoys are equipped with intermittent red lights and quick-release hooks.

The hoses (2×12 in.) are signalled by marker floats and have to be lifted by vessel with derrick capacity at least 8 tons. The terminal is connected with the refinery by a 34 in. pipe-line, 5 km long. Max. length acceptable 330 m., max. draft 72 ft., max. d.w.t. 200,000 tons.

2 tugs recommended for berthing with good weather and without North-westerly winds. Night mooring and unmooring allowed.

Agip/Anic Terminal: Vessels moor with 2 anchors and with stern made fast to 4 mooring buoys.

Maximum draft 26 ft. 3 in. (8 m.). Under rough weather conditions vessels may have to leave the terminal, position being exposed. No mooring at night allowed, while unmooring is permitted. Supplies, bunkers, water, and connections with vessel by barge.

For methanol, tank inspection is usually carried out in the roads, before berthing.

Pozzi Ferrandina SPA Terminal: 3 sea lines, the hoses of which must be lifted from the sea bottom by ship's gear. 1 sea line (6 in.) is used to load methanol and 1 (6 in.) to load soda. Third (3 in.) sea line is for water. Port side hose connection. Pipe-line length 0.25 mile.

Vessels moor with starboard anchor and made fast to 3 buoys astern and 1 port. Night movements are not allowed. Max. draft 22 ft. Max. length 85 m.

Industrie Chimiche Di Gaeta, G.I.D. Terminal: Situated further West of Pozzi Terminal, it has 3 sea lines with hoses of 6 in. and 10 in., which have to be lifted from sea bottom.

Vessels moor with port anchor and make fast to 3 buoys astern and 1 buoy forward starboard. Max. draft 22 ft. Night movements not allowed.

BRIDGES: 1 bridge in inner harbour. Opening times: 0020–0420 hrs., 0830, 1510, 2110 hrs. Opening on Agent's request to Harbour Master (24 hours' notice requested for day opening time). Max. speed in the canal, 6 knots.

MEDICAL: Civil hospital and private clinics, also military hospital and ambulance service of Italian Red Cross.

STEVEDORES: Available. Normal working hours are from 0700 to 1500 hrs. For work performed in overtime/and/or holiday, the "Tariffs to the Workers" are increased as follows:

Day	*Shift*	*Increase*
Weekdays	1500–2300 hrs.	40%
	2300–0700 hrs.	80%
Saturday	1100–1500 hrs.	40%
	1500–2300 hrs.	40%
	2300–0700 hrs.	80%
Sunday	0700–1500 hrs.	50%
	1500–2300 hrs.	80%
	2300–0700 hrs.	100%

DENSITY: 1029 – 1031. Tides negligible. Maximum variation 1 ft.

FRESH WATER: Available at all quays from 0700 to 1700 hrs. Also available by barge of up to 190 tons capacity.

FUEL: Available by barges from Agip; Shell and Sincat. 48 hours' notice requested, aside from usual stemming. Also available at the tanker berths by pipe-line.

Lubricating Oil. Available from Shell, Mobil and Esso.

FIRE PRECAUTIONS: Performed by fire brigade and compulsory to all tankers undergoing repairs/dry docking. It is requested and paid for by the shipyard, which afterwards charge same directly to the Owners.

GANGWAY/DECK WATCHMEN: Available. Hourly cost, lire 450 per watchman used (lire 500 on Sunday and holiday).

OPENING/CLOSING HATCHES: Usually carried out by crew, but stevedores also carry out this operation at 1,202 lire per hatch.

REPAIRS: All major repairs undertaken.

DRY DOCKS: 2 floating docks owned by Stabilimenti Navali Societa per Azioni Taranto (Telex No. 860020) with dimensions as follows:

	Dock No. 1	*Dock No. 2*
Length at support level	699 ft. 8 in.	808 ft. 4 in.
Length overall	765 ft. 4 in.	869 ft. 4 in.
Breadth at support level	121 ft. 3 in.	137 ft. 1 in.
Depth	29 ft. 8 in.	27 ft. 9 in.
Lifting capacities	28,000 tons	40,000 tons

Max. draft acceptable in channel leading to the shipyard is 33 ft.

CUSTOMS ALLOWANCES: 40 cigarettes and 1 opened bottle wine/spirits per man.
IDENTIFICATION CARDS: Required. Shore passes issued by local police.
CONSULS: Spain, France, Panama and Norway.
REPATRIATION: Good facilities exist.
AIRPORT: Located at Grottaglio, 20 minutes by car from the city. It is served by 4 daily connections with Rome, and 1 to Naples.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day (1st January); Epiphany Day (6th January); Saint Joseph's Day (19th March); Liberation Anniversary (25th April); Easter Monday; Ascension Day (19th May); Corpus Domini Day (9th June); Labour Day (1st May); Republic Foundation's Day (2nd June); Saint Peter and Paul's Day (29th June); Assumption Day (15th August); All Saints' Day (1st November; National Unity Day (4th November); Immaculate Conception Day (8th December); Christmas Day (25th December); Saint Stephen's Day (26th December); Town Saint Patron's Day (10th May), at Taranto.
TELEPHONES: No facilities for placing telephones onboard. Vessels in the roads may make connection via VHF radio.
SERVICES: Compass adjusting, divers, frogmen, daily refuse collection, etc. available.
SHORE LEAVE: Allowed.
GENERAL: The port area of Taranto comprises of areas:
Mar Grande:

(a) The commercial port defined to the East by the S. Eligio mole and to the West by the first projection (S. Cataldo mole).

(b) The industrial port defined to the East by the second projection and to the West by the fourth projection of the industrial sector, and also to the West by Punta Rondinella, beyond Mar Grande.

(c) The oil port constituted by the I.P. pier (this also includes Agip and Montedison), by the pipeline terminals of Agip and Anic-Liquichimica, together with the I.P. buoyed area.

(d) The military pier of Chiapparo as far as operations of merchant vessels are concerned.

Mar Piccolo:

(a) The Cariati and Garibaldi berths.

(b) The berths and basins of the Taranto Shipyards.

(c) The military aeronautical forces pier as far as operations of merchant vessels are concerned.

The usages of the berths in the port of Taranto, apart from various contingent arrangements made by the Port Captaincy Command, are as follows:

Commercial Port: S. Eligio Mole: For bunkering from land to vessel, for restocking bunker deposits, for embarkation of port services: Pilots, mooring gangs, fire watchmen, for the launches of Customs and Police. In relation to the requirements of the port services at S. Eligio Mole, vessels carrying various cargoes may also berth.

S. Eligio Berth: For pontoons and tugs.

Wharf No. 1 (commercial berth): Intended for commercial traffic.

1st projection (S. Cataldo mole): Intended for commercial traffic.

Wharf No. 2 (between the 1st projection of S. Cataldo mole and the 2nd Italsider projection): Intended for commercial traffic.

Industrial Port: (Partly under concession to Soc. Italsider of Genoa for the Fourth Taranto Ironworks and partly to Soc. Cementir).

2nd Italsider projection: East Side: For discharging ore and coal. Head: For discharging category C oil products; West side. For loading and discharge of metal products.

Wharf No. 3 (between 2nd and 3rd Italsider projections): For loading and discharging metal products.

3rd Italsider projection: East and West Sides: For loading and discharge of metal products. Head: For discharging category C oil products.

Wharf No. 4 (between 3rd and 4th Italsider projections): For loading bagged cement.

4th Italsider projection: East Side: For discharge of iron ore and coal, and for loading bulk cement.

Italsider Mole (new port basin to the West of Punta Rondinella): West Side: For loading and discharging metal products.

Oil Port: (Under concession to the companies I.P., Agip, Montedison and Anic-Liquichimica). For loading and discharge of oil products of all hazardous categories and chemical products.

Cariati Berth: For motorised fishing vessels and small fishing craft.

Garibaldi Berth: For fishing vessels and laid-up craft.

AUTHORITY: Il Comandante Colonello di Porto. Ministero della Marina Mercantile.

TORRE ANNUNZIATA: 40.45 N. 14.27 E.

(See Plan Book)

DOCUMENTS and all General Information – refer to "Naples".
Arrival: An inspection is made on board by the Finance Guard (Customs Department) to check cargo documents in respect of goods and the composition of provisions on board. Then the Master of the vessel or his Representative (Ship's Agent) presents to Customs the manifest for arrived goods together with relative commercial documents. At the request of the Ship's Agent, the landing of goods is authorised on the "Discharge Copy" of the manifest which sets out each individual item to be landed.

Goods can be discharged into the Customs Warehouse or Private Warehouse to await Customs Clearance.

Departure: Prior to departure of vessel, the Customs releases a departure manifest, setting out a list of any goods in transit or destined for other Italian or foreign ports.

PILOTAGE: Pilotage is obligatory for vessels over 500 g.r.t., and is effected by 2 Pilots of the Castellammare di Stabia Corps of Pilots. Tel: 8717196. Pilots use a wooden pilot cutter 10 m. long and with a speed of 10 knots.
RESTRICTIONS: Entry permitted during daytime only for vessels in excess of 80 m. LOA.

Mainly a fishing port with few facilities for larger vessels. Reported not to be suitable for larger vessels during winter months due to frequent high winds and heavy swell within the harbour.
MAX. SIZE: Length 472 ft., draft 30 ft.
VHF: Radio station of the Port Captaincy, with VHF unit operating between 0800 hrs. and 2000 hrs., listening out on Channel 16, and working on Channel 15.
TUGS: The port has no resident tugs available; if required, they can be requested from Naples.

3 line boats available to assist with mooring.
BERTHING: *Calata Crocelle:* 1 berth only. Length 315 m. of which 200 m. is in use. Depth alongside 6 m. – 7 m. Used for commercial operations and by fishing vessels.

Molo di Levante: 1 berth only. Length 250 m. Depth 8.5 m. – 9 m. Used for commercial operations; general cargo, cereals, iron pipes, etc. 2 towers each with 2 suction pipes, rate of each tower 600 t.p.h. The silo is owned and operated by Societa Lavorazione Cereali del Mezzogiorno (Tel: (081) 865591).
CRANES: 1×20 ton quay crane, 1×40 ton mobile crane.
CARGO HANDLING FACILITIES: 1 grain silo, capacity 60,000 tons, loading rate 1,200 t.p.h. Loading onto rail trucks or lorries by gravity using hoppers with overall delivery rate 250 t.p.h.
STEVEDORES: Working Hours: 0800 – 1200 hrs. and 1300 – 1700 hrs.
MEDICAL: Port doctor available. Hospital with 100 beds.
FRESH WATER: Available.
FUEL: Available. By tanker or barges owned by Messrs. Garolla of Naples.
WATCHMEN: Not available.
AIRPORT: Naples Airport (Capodichino) is 23 km. away, and has domestic services to Rome, Milan, Bologna, Brindisi, Catania, Genoa, Palermo, Turin, with 2 international flights per week to London.
BANKS: Banca Commerciale Italiana, Corso Umberto I 153. Tel: 8615100.

Credito Italiano, Corso Vittorio Emanuele IIIº 307. Tel: 8615240.
Banca Nazionale del Lavoro, Via dei Mille. Tel: 8612003.
Banco di Roma, Piazza Nicotera 1. Tel: 8611029.

EMERGENCY CO-ORDINATION CENTRE: Comando in Capo del Dipartimento Militare Marittimo del Basso Tireno (Military Naval High Command for Lower Tyrenia), Via Santa Lucia, Naples. Tel: (081) 406244.
STORING: See "Prelims", page viii.

1. Yes, using own means of handling.
2. Yes.
3. Yes.
4. Yes.
5. See above.
6. Yes.

SURVEYORS: None.
GENERAL: The port has no Ship's Agents, Forwarding Agents, or Naval Suppliers.

Two road vehicle weighing bridges on the East Mole, one operated by Customs with a capacity of 40 tons, and one by SO.LA.CE.M. with a capacity of 80 tons.

There are ample electric train services to the rest of Italy from the town station. Torre Annunziata is connected by motorways (A3) with Naples and Salerno, and by main roads to Naples, S. Giovanni Teduccio, Salerno and Sorrento.

Post, telegraph and telephone offices are a short distance from the port in the town.

One lifeboat, 2 engined with a speed of 24 knots, 5.3 m. long, owned by the State and operated by Circomare.

There is no Fire Brigade.

The port is subject to a slow siltation process due to the River Sarno which comes into the sea 1 mile to the South.

The cross wind is from the West. The Scirocco and the Libeccio cause a strong dangerous surf for vessels berthed at the quays.

The tide brought up by the Libeccio sometimes comes right over the West Mole.

When works currently in hand are terminated, involving the construction of a small elbowed quay about 130 m. long in the West area of the port, this will supply a safe berth for fishing vessels, which will also be advantageous for the nearby Calata Crocelle, which will thus remain available for commercial operations only. There are good areas for future development.
DEVELOPMENTS: Calata Crocelle being extended by 35 m. West Breakwater being extended.
AUTHORITY: Ufficio Circondariale Marittimo di Torre Annunziata, Porto di Torre Annunziata, 80058 Torre Annunziata. *Tel:* (081) 8611855, 8622978. *Contact:* Lieut. Michele Catalano, Port Captain.

TRIESTE: 45.39 N. 13.45 E. (See Plan Book)

PORT LIMITS: From Barcola (4 km. East of Capo Miramare) to Zaule, in the Muggia Bay. The roadstead is 18/24 m. deep. If Readiness is declared before 1200 hrs. laytime commences at 1300 hrs. If readiness is declared between 1200 hrs. and 1700 hrs. laytime commences at 0800 hrs. the following day. The declaration of "Readiness" is made when the ship docks at the operative pier or when the ship anchors in the roadstead.

DOCUMENTS:
For Customs:
2 Cargo Manifests.
1 Stores List.
1 Provisions List.
For Port Authorities:
Arrival Report.
2 Crew Lists.
3 Passenger Lists.
For police:
1 Crew List.
1 Passenger List.
Shore Passes, provided by Agents.
For Port Health:
Maritime Declaration of Health.
Also see "Shipmasters Report".

PILOTAGE: Compulsory for vessels over 499 g.r.t. Location of pilot station for large tankers is in approximate position: Lat. 45° 37′ N., Long. 13° 43′ E.

For smaller vessels Pilot boards in approximate position: Lat. 45° 39′ N., Long. 13° 44′ E.

ANCHORAGE: No Pilot required to anchor in roads. Normal anchorage for vessels awaiting entry is to the West of Luigi Rizzo Breakwater where the holding ground has been reported to be poor.

MAX. SIZE: Tankers up to 1,000 ft. LOA, draft 54 ft. 3 in. and 160,000 S.D.W.T. at Siot Terminal Berth Nos. 3 and 4.

HEALTH: Free Pratique is granted by the Local Health Officers who board the vessels on arrival together with Port Authorities. The pratique can also be requested by cable, addressed to "Sanimare – Trieste" and stating the port of origin, the number of crew and general health condition on board.

RADIO: Trieste Radio call sign IQX, operating continuously. Radio Telephony and/or telegraphy can be used. RTF Channels 8, 12, 16, and 500. ETA to be sent 48 hours in advance to Agent. Any change of ETA of more than 1 hour should be reported.

TUGS: 10 tugs available up to 3,000 h.p. Tugs normally join vessel at pilot boarding station. Ship's lines used. Tug assistance is compulsory for tankers. Tugs equipped with VHF and foam fire fighting equipment.

BERTHING: Max. draft allowed at berths as follows:

Punta Franco, Vecchio, ore pier, 28 ft.; Other berths, 21 ft. Punto Franco, Nuovo, ore pier, 30 ft. silos, 31 ft. 5 in.; general cargo, 31 ft. Punto Franco, Scalo Legnami, 24 ft. Molo Martello, 30 ft., max. length of ship, 171 m. Italsider, berths, 45 ft.

Pontile Aquila, oil pier, 38 ft. Italcementi, berths, 30 ft. Vetrobel, berth, 30 ft. A.F.A., berth, 21 ft.

Mole No. 7 (Container Terminal), max. draft 52 ft.

SPECIALISED CARGO HANDLING FACILITIES: Wheat storage-bin for cereals and oil-seeds, capacity 30,000 tons, with 4 pneumatic unloaders. Auxiliary set, capacity 16,000 tons, with 3 pneumatic dockers.

Coal and ore discharge at Pier 5: 3×6 ton bridge cranes and 6×6 ton jib cranes. Discharge rate 200 tons per shift. Max. draft 9.5 m.

Coals and minerals plant, Molo VI North, with 7 cranes and 2 bridge cranes.

Coals and minerals plant Italsider pier with two 25-ton unloaders. Rate 400 tonnes/hr. for coal and 500 tonnes/hr. for iron ore.

Unloading, loading, alcohol and other liquid stowage plant, capacity 5,340 cu.m.

Maturity, conservation and disinfestation fruits and vegetables plant. Refrigerant, capacity 3,700 tons.

Container Terminal: Quay length 650 m., total area 20 ha. 3 rail-mounted 42 ton gantry cranes (portainer) and other modern and special installations for unloading/loading, moving and parking containers.

Roll-on/Roll-off: 3 ramps at Mole No. 7.

STEVEDORES: The working hours for the harbour operations are: 1st turn from 0730 to 1400 hrs. 2nd turn from 1400 to 2030 hrs. On Sundays and holidays the 2nd turn is limited to ferry boats, container ships, unloading/loading of live animals, and to perishable goods operations. Customers can take advantage of a possible 3rd turn in the labour days, Monday to Friday, from 2100 to 0330 hrs.

Night work, Sundays and holiday work, the 2nd turn of Saturday and the continuation of the turn is considered as overtime work.

TANKERS: No slop discharge facilities; no repairs allowed to tankers at loading/discharge berths; no trucks or lorries allowed at Aquila Oil Pier which can only be approached by motor boats.

Transalpine Pipe-line Terminal (SIOT).

The following are some of the regulations for vessels calling at SIOT.

REGULATIONS

Arrival of Vessels: No vessels may enter the SIOT port area except in strict compliance with instructions issued by SIOT.

Extraordinary Docking Conditions: Damaged vessels must report to SIOT well in advance of their date of arrival at the port area. Should SIOT consider a vessel to be unsuitable for discharge at the terminal, said vessel may be refused admission, or ordered to lay off, even after discharge operations have been started, or be admitted for discharge only on specially defined terms.

Docking and Sailing Manoeuvres: SIOT does not assume any responsibility for the docking or sailing manoeuvres of any vessel, including towage and mooring and for any pollution caused by the vessel. Pilotage and sufficient number of tug-boats with efficient power are compulsory.

Mooring Operations:

1. The right to assign a berth to incoming vessels for the discharge of cargo rests with SIOT.

2. All vessels must securely and tautly be moored at all times when at jetty. Masters' attention is drawn to the peculiar conditions of Bora wind which can blow with little warning and with extreme violence. Hawsers and mooring lines must be secured on quick release hooks and pulleys provided for the purpose.

3. Access to and from a vessel will be established by way of a SIOT gangway. The gangway will not be placed on board before the following conditions are met:

a) The vessel must be securely moored.
b) The vessel must be earthed to the jetty.

4. Access from the ship's deck to the gangway, if required, is to be provided by the vessel.

Traffic Within the Port Area:

1. Access to or from a vessel is not permitted until the vessel has been properly cleared by the appropriate Authorities.

2. Employees and Representatives of SIOT on duty must be granted access to the vessel to perform their tasks, the Master or his representatives shall furnish them with all pertinent data that SIOT may require and must give them permission to personally inspect all facilities necessary for handling cargo.

3. Passes provided by the Police must be issued by the Master to crew members and other for shore leave purposes.

4. Any person wishing to enter the SIOT port area must have in his possession a pass as prescribed by SIOT and the Authorities. Once in the port area he must report to the Pier Master for the necessary instructions regarding behaviour in the port area.

5. All traffic between the ship and shore as far as it must pass through the premises of SIOT is restricted exclusively to the tanker jetties and their access roads. Unless specially authorised no motor vehicles are allowed on the piers. All transportation will be performed by a special bus-service provided by SIOT.

Cargo Operations:

1. Before receipt of a cargo, SIOT, on behalf of the consignees will measure the contents of the tankers' cargo tanks at Trieste or may accept a measurement made prior to the arrival at Trieste and will take an average sample.

The binding determination of the quantity received by SIOT will be made by means of manual gauging in the storage tanks of Trieste Tank Farm or with the aid of automatic measuring device and according to the legal, Customs and fiscal requirements.

If the measurements in the storage tanks at Trieste Tank Farm show a difference exceeding 0.5% of the quantity in metric tons stated in the loading documents, SIOT will notify in writing the Master, if possible, advising at the same time the consignee.

2. All sea valves, overboard or other appropriate valves, isolating the cargo system from the sea, must be closed prior to the start of discharge operations and must be checked and where possible sealed. Where tankers are fitted with normal ballast system such sealed valves may only be opened with the consent of SIOT and providing alternative cargo isolating valves can be closed and sealed.

In all other cases valves must remain sealed and closed throughout discharge. Authorisation to open these valves must be obtained from SIOT prior to ballasting.

3. Discharge operations should be carried out as far as possible, without interruption and within the shortest possible time. The maximum pressure permissible on the shore gauge is 10 bar.

4. The completion of discharge shall be agreed by both, SIOT and the Master and if required by the Master or the consignee, both shall sign a "Qualified Certificate on the Petroleum Remaining On Board".

5. Should any complaint arise which may have a bearing on the quantity or the quality of the cargo, or on the discharge operations, SIOT will lodge a protest in writing, the receipt of which must be confirmed by the Master.

6. Inert cargo tanks and tank washing with petroleum:

a) Discharge of inerted ship tanks and tank washing with petroleum when agreed to by the Port Authorities will only be permitted when it is carried out in full accordance with the "Guidelines for Tank Washing with Crude Oil", latest edition, published jointly by: International Chamber of Shipping and Oil Companies International Marine Forum London.

b) In particular, inerted cargo tanks of vessels shall remain sealed and kept under positive inert gas pressure throughout the stay alongside except as required for cargo measurement and sampling.

Vessel Berth Occupancy:

1. The estimated discharge time and time for normal ballast operation shall be mutually agreed between SIOT and the Master or his authorised representative.

2. The pumping program shall be determined in agreement between SIOT and the Master. SIOT is entitled to interrupt discharging and have the berth cleared in case of emergency.

3. Upon completion of the discharge and ballast loading the vessel shall clear the berth subject to consideration of safety. Bunkering and fresh water loading, if required, shall, if possible, take place during discharge.

4. As berth occupancy time, tankers shall be allowed the running hours tabled below appropriate to the cargo quantity, Sundays and holidays included:

Cargo Quantity (1,000 Metric Tons)	*Max. Allowed Running Hours*
Over 140	36
130/140	35
120/130	34
110/120	33
100/110	32
90/100	31
up to 90	30

It is expected that the unloading rate per hour will exceed 5% of the total cargo capacity of the respective vessel.

Running hours shall commence when the vessel has her first rope ashore and shall end when the unloading arms are disconnected on completion of discharge and the last rope ashore is off. If the unloading is prohibited and/or interrupted at the request of SIOT or by request of the Authorities, the running hours shall be extended by the same number of hours that the unloading was prohibited and/or interrupted unless the reason for prohibition and/or interruption is due to circumstances for which the Shipper and/or Master are responsible. Any period exceeding the above mentioned running hours requires special approval from SIOT. In exceptional circumstances SIOT has the right to request a vessel to vacate the berth.

5. SIOT will set up a list of vessels which have failed by their own fault to meet the berth occupancy time referred to above and reserve the right to refuse these vessels for future deliveries. SIOT can also refuse vessels which to SIOT's reasonable judgement may endanger its installations and/or increase SIOT's risk of liabilities towards third parties.

Special Services:

1. SIOT will provide a bus service between the berth and the entrance gate of SIOT port area, the costs of which will be charged to the ships via their Agents.

2. Connections for telephone service to ships will be provided by SIOT. This service and phone invoices will be charged through the ship's Agent.

3. Fees for any other special service rendered by SIOT to a ship, will be charged through the ship's Agent.

Safety Regulations:

1. All safety measures in the SIOT port area shall comply with the ISGOTT and the local safety regulations. In case of different requirements the most stringent ones have to be applied.

2. It is strictly forbidden within the SIOT port area to smoke, to carry any open fire or any equipment with glowing parts, or to use any fire-kindling devices or lighters other than those expressly admitted in special cases by the competent authorities or by SIOT.

3. No hot repair work is allowed whilst a vessel is alongside the SIOT jetties, unless, under exceptional circumstances permission has been granted by SIOT and the Port Authorities.

4. All other repairs whilst at the jetties, will only be permitted after consultation with SIOT and sanction obtained.

5. It is the responsibility of the vessel's Master to report a fire on his vessel to the SIOT Pier Master. The latter will inform immediately the Fire Brigade and the Harbour Master.

Every vessel is required to have a fire wire constantly adjusted to the water line forward and aft while on the berth. The ISGOTT Safety Check List shall be used on all vessels visiting the SIOT Marine Receiving Facilities. Failure to comply with this list may well cause cargo operations to be delayed.

6. Portable Walkie-Talkie sets should only be used for mooring and unmooring. It is strictly prohibited to use them during discharging and ballasting operations unless they are approved and intrinsically safe in compliance with the ISGOTT.

7. Vessels must not be immobilised without permission being obtained from SIOT and the Port Authorities.

Special Incidents:

1. Any incident affecting the safety of the vessel or jetty, any fire and serious accidents on board or caused by the vessel must be reported at once to SIOT.

2. Masters must ensure that as soon as any oil is spilt from their vessel all cargo operations will be stopped and may only resume operations if authorized by SIOT.

3. In case of imminent danger, and if the circumstances warrant, SIOT shall have the right to discontinue cargo operations and take any action considered necessary for the safety of the vessel and/or the terminal. As far as the safety of the vessel is concerned any such action shall be taken in consultation with the Master. If the danger results from the vessel the measures shall be taken at the vessel's expense. No claim will lie against SIOT for any damage resulting from any such measure taken reasonably.

GENERAL: SIOT Marine Receiving Facilities are owned and operated by SIOT (Societa Italiana per l'Oleodotto Transalpino). They are situated in Muggia Bay in postion Lat: 44° 36′ 36″ N., Long: 13° 46′ 36″ E. and fall under the administration of the Trieste Port Authority.

The Marine Receiving Facilities consist of 2 finger piers each with 2 berths, for oceangoing vessels, discharging crude oil and petrol products to the Trieste Tank Farm.

Approaches: The Marine Receiving Facilities are approached from the North Adriatic sea. A dredged channel joins the Gulf of Trieste to the piers. The channel is 1 mile (1,852 m.) long and 200 m. wide.

It is marked by 3 buoys flashing green, 2 buoys flashing red, and one buoy flashing white.

Pilotage: Pilotage is compulsory.

Arriving vessels take a Pilot about 0.5 mile West of the Northern end of Luigi Rizzo breakwater.

Anchorage: The anchorage place is indicated by the Pilots.

Normal anchorage for vessels awaiting entry is to the West of Luigi Rizzo breakwater where the holding ground has been reported to be poor.

Communications: When within range vessels should maintain constant communications with the Agent via Radio Trieste.

Radio Trieste will provide vessels with up to date information in regard to movements and other matters possibly affecting their passage to the port area.

ETA shall be given 48 hours in advance. Any change in ETA of more than 1 hour should be reported.

Minimum Manoeuvring Draft: Pilots require sufficient ballast for safe manoeuvring. The propellors should be covered. The trim of the vessel should not exceed 10 ft. by the stern.

Water Depth: The dredged depth in the harbour approaches to the piers and the depth alongside Berths Nos. 2, 3 and 4 are not less than 17.4 m. at Mean Sea Level (MSL), at berth No. 1, 16.9 m.

Tides: Water levels may be raised or lowered as much as 0.6 m. due to the tide in respect to Mean Sea Level. Higher tide excursions are exceptional. Additionally a deviation of 0.6 m. can be expected from predicted heights due to meteorological conditions.

Tugs: There are sufficient tugs available on prior request, to assist in berthing any size of vessels.

The tugs vary in power, from 750 kW (1,000 h.p.) to 2,000 kW (2,600 h.p.)

All are equipped with VHF multi-channel communication and are provided with foam fire fighting equipment.

The tugs, tow ropes should normally be used for berthing. The number of tugs employed will vary according to the size of vessel and the prevailing weather conditions.

Berths and Max. Size of Tankers: The finger piers are orientated 067.5° – 247.5° (T) in the direction of the prevailing Bora wind. Currents do not affect the berths appreciably.

(a) Berth Nos. 1 and 2 (No. 1 finger pier 1,561 ft. = 476 m. overall length).
Min. Size of vessel acceptable: Length overall 525 ft. = 160 m.
Min. Summer deadweight 16,500 d.w.t.
Max. Size of vessel acceptable: Length overall 950 ft. = 290 m.
Max. allowable draft at Berth No. 1 at MSL 52 ft. 6 in. = 16 m.
Max. allowable draft at Berth No. 2 at MSL 54 ft. 3 in. = 16.5 m.
Max. Summer deadweight 100,000 d.w.t.

(b) Berth Nos. 3 and 4 (No. 2 finger pier 1,610 ft. = 491 m. overall length)
Max. Size of vessel acceptable: Length overall 1,000 ft. = 305 m.
Max. allowable draft at MSL 54 ft. 3 in. = 16.5 m.
Max. Summer deadweight 160,000 d.w.t.
Min. size: As per pier No. 1.

The breasting dolphins at each berth are designed to withstand the impact forces of the maximum size tankers acceptable when fully laden and approaching at a maximum angle of 2° – 3° to the berthing line at a maximum velocity of 15 cm./s. (approx. 0.25 knot).

On dolphins "A1" and "A2" of both piers there are installed red (above) and green (below) warning lights each having a visibility of 2 miles.

Crude and Product handling facilities: Discharge of Crude and Products is via 3 × 16 in. diameter articulated unloading arms at Berths Nos. 1, 2 and 3 and via 4 × 16 in. diameter arms at Berth No. 4.

The shore lines are 36 in. diameter up to the root of the pier: they enlarge into 42 in. diameter pipe-lines for a further 6 km. to the Trieste Tank Farm.

Discharge rates of up to about 9,000 cu.m.p/h. are possible.

Maximum permitted pressure at the shore gauge is 150 p.s.i. = 10 bar. Each pair of lines is provided with a valved cross-over near the unloading platform and all the lines are provided at shore with another valved cross-over manifold which permits the use of any idle line to unload a tanker through more than one line.

Bunkers and Fresh Water: Fuel oil and marine diesel bunkers are available at all berths through 10 in. diameter loading arms situated on each side of the discharge rack. Fresh water supplies are available at all berths and should be ordered through the Agent or the Master.

Bunker fuel is not supplied directly by SIOT and must be ordered well in advance via Agent. Bunker fuel by barges is not permitted alongside the jetties, unless under special exceptional circumstances with permission of Port Authority and SIOT. In no case bunkering by barges is permitted during ballast or ullaging of tanks.

Mooring Arrangements: See "Plan Book".

It is ship's responsibility to provide safe and proper mooring in order to prevent tankers drifting off the berth and exceeding the operating envelope of the unloading arms.

Mooring lines must be carefully tended to hold the vessel in position and close to the pier at all times.

2 shore breast wires are provided at berth Nos. 1 and 2 each and 3 shore breast wires at berth Nos. 3 and 4 each, and it is recommended that vessel should make use of them.

The mooring dolphins F and G, at each side of pier No. 2, are combined to an arch-type mooring point, located at 10.55 m. above Mean Sea Level.

A similar arch-type structure exists in axis F at pier No. 1.

Mooring patterns and characteristics are dependent on ships' architecture and weather conditions as well as lines material.

Mooring patterns shown in the "Plan Section" have been designed as examples for standard vessels under worst experienced wind conditions.

Assuming that tankers are securely moored with mooring lines and equipment in good condition, and that moorings are properly tended, it should not normally be required to restrict the freeboard of tankers to reduce the exposed windage area when alongside the berths. However, should any limitation be considered necessary it will be arrived at by consultation between the Master and the SIOT Pier Master.

Masters' attention is drawn to the peculiar conditions of Trieste where winds can blow with little warning and with extreme violence. Attention is also directed to the "Mooring Guidelines".

Fire Protection: The fire fighting system of the Marine Receiving Facilities consists of elevated and tele controlled monitors. On the piers there are 4 monitors at each jetty. 2 monitors are located on the platform of each pier, other 2 monitors facing seawards are located each at the catwalks and two monitors facing shorewards are located each above the access road.

Each monitor has capacity of 3,000 litres per minute of water-foam compound mixture with a throw of 60 m.

The foam compound used is light water. The monitors located in the platforms are independently fed with sea water by means of an electric motor driven pump, located below each platform.

The other monitors are supplied with fresh or salt water by means of 2 diesel engines and 1 electric motor driven pump.

All monitors are telecontrolled either from each platform or from the root of each pier.

Each elevated monitor is water cooled.

A 6 in. water line and 8 in. foam line are provided on each pier.

Besides the sea and shoreward located monitors, these lines supply 4 foam-water hydrants and 4 water hydrants along each pier. 4 water and 2 foam-water hydrants are on each platform.

Portable fire extinguishers, dry powder extinguishers of 10 kg. and 50 kg. capacity each are available.

Further, all tugs are fitted with fire fighting monitors for water and foam. During loading and discharging operations firemen certified by local Fire Brigade are present on the pier.

Medical: Any medical requirements should be made through the vessel's Agent before or on arrival.

Only first aid facilities are available 24 hours per day at the Marine Receiving Facilities.

Internal Communications: Internal telephones are located at each pier's platform as well as external telephones on board each vessel moored alongside.

To use the ship's telephones do the following:

1. To call Terminal
   dial 30 for Pier Master
   dial 25 for Pier Master Assistant
   dial 0-82 70 03 Pier Master
2. To call Outside
   dial 0 and then the required outside number
   (also international calls are possible)
3. Ships are connected with following phones
   Berth No. 1 – Internal 21 – outside 82 84 55
   Berth No. 2 – Internal 22 – outside 82 84 56
   Berth No. 3 – Internal 23 – outside 82 84 57
   Berth No. 4 – Internal 24 – outside 82 33 70
   incoming and outgoing calls possible.
4. Telephone Operator No. 20.

Pollution: A combined system of floating and pneumatic barrier is installed. Whilst floating barriers are laid underneath the longitudinal axis of each finger pier and the main trestle, a plastic pipe with nozzles anchored with concrete weights on the sea bottom, connects dolphin B1 with dolphin A2, thus protecting Berth Nos. 2 and 3. A similar plastic pipe nozzle surrounds the sea bottom area occupied by vessels moored at Berth Nos. 1 and 4. Along each berth spot lights are installed in order to allow detection of oil spill, at night time. In the case of oil spillage, air compressors, supplying, via a 6 in./4 in. air supply system, the respective air bubble oil barrier, are started by remote control.

Air bubbles emerging from the pipes on the sea bottom form a water dam able to contain oil within the encircled area.

All expenses in connection with antipollution measures, skimming barges and bubble barriers included, will be totally charged to the responsible ship.

Agents: Most shipping Agents visit all vessels on arrival and several times during the duration of the vessel's stay.

The Agent's offices are all situated in the town of Trieste and Master would be well advised to ensure they have the office and the home telephone numbers of the Agent's clerk dealing with their vessels.

Transportation: SIOT provides transport from the platform to the entrance gate. Ship's personnel are recommended, to order a taxi either using the ship-shore telephone or from the watchman's office

Walking through the SIOT port area is not permitted.

Taxis and private cars are not allowed within SIOT port area.

Trieste centre is about 5 km. by road.

Crude Washing: Crude washing is allowed under the prescriptions and following the procedures contained in "Ordinance No. 928/82 – 1st June 1982", issued by the Port Captaincy of Trieste.

Copy of the above Ordinance 928/82 can be obtained through the Ship's Agents.

MOORING GUIDELINES: See "Plan Book".

In order to prevent damage to the loading arms, and possible pollution of the harbour, it is of the utmost importance to ensure that a vessel is not permitted to move off the berth and exceed the operating envelope of the unloading arms.

The advice contained in these Mooring Guidelines has the objective of ensuring that any tendency for the vessel to "drift off" and cause damage to the loading arms and pollution is avoided.

Mooring Examples: The following, as well as the mooring plans, are based on the theoretical calculations according to OCIMF standard and on worst wind conditions.

Wind loads corresponding to gusts of 92 knots or maximum winds *of 78 knots from E.N.E. (BORA) and to gusts of 65 knots or maximum winds* of 55 knots from all other directions.

*Winds of a duration of minimum 30 seconds.

All the lines considered to be wires (steel lines) with MBL (minimum breaking load) of: 83 tons (36 mm. dia.) for ships with more than 100,000 d.w.t. MBL 66 tons (32 mm. dia.) for ships with less or equal to 100,000 d.w.t.

The windage area and the tankers' architecture as used in this example, especially as far as hawse-holes positions are concerned, have to be regarded as typical for the various classes of vessels calling at Trieste, but cannot be considered always applicable.

The Masters' attention is called on the fact that these guidelines have to be regarded as examples only and must be implemented accordingly depending on quality of lines used, MBL of the same, vessel windage area as well as forecast of weather conditions.

In particular we recall the Master's attention on:

a) If lesser breaking load mooring lines are used vessels should endeavour to provide additional lines (together with any shore wires which are available), as nearly equivalent restraint capability as possible. Mixed mooring of wires and synthetic should be avoided.

b) If mixed moorings of wire and synthetic or natural fibre are used, it is important that, due to the differing elasticity of these materials, their use in the same direction of restraint shall be avoided. If possible, wires shall be used as breast lines. In addition, 2 shore breast wires are provided at Berth Nos. 1 and 2, and 3 breast wires at Berth Nos. 3 and 4, and it is recommended that vessels should make use of them.

c) The discharging arms are vulnerable to damage should vessels range or move off the berth. It is essential that a vessel is held securely alongside throughout the discharge.

Special care has to be taken in providing lines which must not have excessive elasticity to ensure sufficient transverse restraint.

d) Full steam pressure must be maintained and be available to all mooring winches throughout the period vessel is alongside.

e) As soon as a vessel is secured, brakes on all mooring winches must be secured. Winches shall not be left on automatic tensioning.

f) Masters shall ensure that mooring lines are in good condition and free of visible defects. Winch brakes or securing devices should be in efficient operating order. In case of vessels in excess of 100,000 d.w.t. winch brakes should be capable of withstanding a load of 60% of the MBL and this should be supplemented in strong wind conditions by ensuring winches are put in gear with power applied in the heave position.

g) An efficient watch must be maintained throughout the vessel's stay alongside.

h) SIOT is entitled to stop operations and/or summon tugs if it appears that vessel's movement will endanger the discharging arms, or in the absence of an alert and efficient deck watch. All pertinent expenses will be charged totally to the vessel.

Action Guidelines for Adverse Weather Conditions: The following guidelines are drawn up in order to assist SIOT's and vessel's personnel in determining the course of action to be taken during stages of weather deterioration, when wind threatens to blow the vessel off the berth.

Masters are cautioned to use them only as a guide, as the physical characteristics of individual vessels may vary according to the type of vessel and the nature of the mooring used. Any limitation considered necessary will be arrived at by consultation between the Master and the SIOT Pier Master.

Valid for All Berths and All Wind Directions:

Discharge can continue regularly in wind forces up to 7 (30 knots or 15 m./sec.).

Discharge to be stopped* if the wind is in the ranges from force 7 (30 knots or 15 m./sec.) to force 8 (37 knots or 19 m./sec.) and the cargo on board is less than 30% of the summer d.w.t.

Discharge to be stopped* independently from the quantity of cargo on board if winds over force 8 (37 knots or 19 m./sec.).

*When stopping discharge for wind conditions loading arms should be drained and disconnected, the crews and engines kept on standby and tugs alerted if necessary.

Weather Forecast: Weather forecasts are not available at the piers, but the local Meteorological Institute may provide them on a phone call. The accuracy of this service cannot be guaranteed and Masters should be alerted for conditions which may differ from those provided in the general forecast and ensure the safety of the vessel and the Marine Receiving Facilities. Masters will be aware of the fact that the prevailing wind blowing at Trieste has an E.N.E. direction, can blow with little warning and gusts can reach 100 km./h. or more in an extremely short time.

SIOT MARINE RECEIVING FACILITIES:

	Berth No. 1	*Berth No. 2*	*Berth No. 3*	*Berth No. 4*
Water depth at Mean Sea Level	55 ft. 4 in. (16.9 m.)	57 ft. (17.4 m.)	57 ft. (17.4 m.)	57 ft. (17.4 m.)
Raising or lowering of water level on predicted heights due to meteorological conditions 0.6 m.				
Maximum allowable draft (dependent on water level)	52 ft. 6 in. (16.0 m.)	54 ft. 3 in. (16.5 m.)	54 ft. 3 in. (16.5 m.)	54 ft. 3 in. (16.5 m.)
Min. size of vessel (d.w.t.)	16,500	16,500	16,500	16,500
Max. size of vessel (d.w.t.)	100,000	100,000	160,000	160,000
Min. length of vessel (m.)	160	160	160	160
Max. length of vessel (m.)	290	290	305	305
Max. discharge rate (cu.m./h.)	9,000	9,000	9,000	9,000
Unloading arms (with flanges ASA 150)	3×16 in.	3×16 in.	3×16 in.	4×16 in.
Bunkering arms (with flanges ASA 150)	2×10 in.	2×10 in.	2×10 in.	2×10 in.
Max. pressure permitted at shore gauge	10 bar	10 bar	10 bar	10 bar

Operator: Societa Italiana per l'Oleodotto Transalpino S.p.A., Piazza Unita d'Italia, 7, Casella Postale 544 I-34121 Trieste/Italy. Tel: 040-69 121, 040-827003. Telex: 460126. Code: Talin.

MEDICAL: All facilities available. Preferable order in advance if required on holidays.

CONSULS:

Austria	tel. 90891	Honduras	tel. 95225
Belgium	tel. 37073	Lebanon	tel. 37370
Brazil	tel. 35317	Netherlands	tel. 61690
Chile	tel. 28960	Sweden	tel. 29182
El Salvador	tel. 36556	Turkey	tel. 24393
Germany	tel. 37141	U.S.A.	tel. 30221
Great Britain	tel. 35760	Uruguay	tel. 31664
Greece	tel. 28278	Yugoslavia	tel. 24969
Guatemala	tel. 29551		

DENSITY: 1025.

FRESH WATER: Available by pipe-line at all berths. No barges available.

FUEL: All grades available, loading rate about 250 t.p.h. 48 hours notice required. Also see "Shipmaster's Report".

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Optional, but stevedores usually perform this operation for convenience.

CUSTOMS ALLOWANCES: 50 cigarettes for each man and one bottle wine/spirits between 5 men. Only one allowance given while vessel in port.
IDENTIFICATION CARDS: Shore passes are issued by local police.
REPAIRS: All kinds of hull, deck and engine repairs can be carried out by Arsenale San Marco and other yards.
DRY DOCKS: 4 dry docks available, the largest of which is 206.96 m. long; 30.0 m. wide, 27.60 m. depth and 8.25 m. sill depth.
REPATRIATION: No facilities.
AIRPORT: 15 miles distant. Two flights daily to Venice/Milan and Rome for international connections.
TIME: GMT plus 1 hour. Summertime: GMT plus 2 hours.
HOLIDAYS: New Year's Day (1st January); Liberation Day (25th April); Labour Day (1st May); Good Friday, Easter Monday, Assumption B.V. Maria (15th August); All Saints' Day (1st November); St. Giusto (3rd November); Immaculate Conception (8th December); Christmas Day (25th December); Boxing Day (26th December); Cargo work can be arranged on the above days.
POLICE/FIRE/AMBULANCE: Police, tel. 113; Fire, 2222; Ambulance, 68888.
TELEPHONES: Can be installed on board.
SHORE LEAVE: Allowed.
DEVELOPMENTS: New dry dock 350 m. length under construction.

SHIPMASTER'S REPORT: May 1981.
Documents/Fuel: If anchoring off Trieste for bunkers only the following are required: 5 Crew Lists, 2 Stores Lists, 2 Crew Declarations. No Pratique required if coming from Koper, Yugoslavia. Vessel does not have to pay anchorage dues.

AUTHORITY: Ente Autonomo del Porto di Trieste, Punto Franco Vecchio, Cas. Post 569, 34100 Trieste, Italy. *Tel:* 6731 (Operator). *Telex:* 460257 Eapt D; 460365 Eapt C and 460282 Eapt C (Container Terminal at Mole VII). *Contact:* Dott. Ing. Arrigo Borella, General Manager.

VENICE: 45.26 N. 12.20 E. (See Plan Book)

DOCUMENTS: Minimum number of ship's papers required upon arrival:
By Port Health:
2 copies Passenger List.
2 copies Crew List.
By Police:
2 copies Passenger List.
2 copies Crew List.
By Ship's Agents:
2 copies Passenger List
2 copies Crew List.
2 copies Cargo Manifest.
By Customs:
2 copies Cargo Manifest.
2 copies Provisions and Stores List.
PILOTAGE: Pilot boards 2 miles from breakwater. Master can contact Pilot by VHF Channel 13.
ANCHORAGE: Anchorage for large tankers will depend upon Master's discretion. However there is a good anchorage in position: Lat. 45° 23′ 30″ N., Long. 12° 34′ 00″ E.
RESTRICTIONS: Advisable to enter during daytime and with favourable tide. Vessel up to 29 ft. to 30 ft. draft can enter at high water. Vessel of this size can berth alongside with use of a pontoon. Tankers; normally restricted to 31 ft. draft.
Also see "Tankers".
HEALTH: Health Officer boards as soon as vessel is berthed. Pratique can be obtained by radio prior arrival. Radio request to "Sanimare Venice" through Trieste Radio.
BERTHING: Banchina Piave have a total quayage of 2,760 ft. long with a depth of water varying from 25 ft. to 27 ft. MLWS.

Banchina Tagliamento have a total quayage of 2,500 ft. long with a depth of water 25 ft. MLWS.

Testata Marmi have a total quayage of 720 ft. long and 25 ft. depth of water MLWS.

Banchina Palazzo have a total quayage of 525 ft. long and a depth of water of 26 ft.

Banchina Isonzo have a total quayage of 2,360 ft. long with depth of 28 ft. MLWS.

Testata Silos have a total quayage of 330 ft. long with a depth of water 19 ft. 6 in. MLWS.

Banchina S. Marta e Magazzini Generali Punto Franco (Free Port) have a total quayage of 2,950 ft. long with a depth of water varying from 24 ft. to 29 ft. MLWS.

Porto Marghera: Also see "Shipmaster's Report".
Leghe Leggere with a depth of water 28 ft. MLWS.
Molo "A" with a depth of water 29 ft. MLWS.
Banchina Veneto with a depth of water varying from 25 ft. to 27 ft. MLWS.
Banchina Lombardia with a depth of water 31 ft. 6 in. MLWS.
Banchina Piemonte with a depth of 31 ft. 6 in. MLWS.
Banchina Bolzano with a depth of water 31 ft. 6 in. MLWS.
Banchina Emilia with a depth of water 31 ft. 6 in. MLWS.
Canale Industriale Brentella with a depth of water varying from 22 ft. MLWS.
Canale Industriale Nord with a depth of water varying from 18 ft. to 30 ft. MLWS.
Canale Industriale Ovest with depth of water varying from 12 ft. to 31 ft. 6 in. MLWS.
Canale Industriale Sud with depth of water 31 ft. 6 in. MLWS.
TUGS: Tugs are available and will join vessel at breakwater and/or off Lido when proceeding to S. Nicolo. Ship's lines have to be used.
BULK HANDLING FACILITIES: Bauxite discharging at Montecatini and Molo Commerciale in Porto Marghera.

Discharge by crane grabs at rate of 2,000 tons per day at Montecatini, and 1,500 tons per day at Molo Commerciale. Vessels up to 28 ft. draft can be accommodated.

Coal discharged at ENEL jetty and Mole "A". Discharge rates 6,000 tonnes per day and 6,500 tonnes per day respectively.
STEVEDORES: The Provveditorato al Porto Venice are exclusively entitled to manage all the commercial work in the harbour including stevedores. Vessel should en route ETA cable to Agent at least 48 hours prior vessels arrival to arrange gangs.
MEDICAL: Hospital facilities always available. No notice required in advance.
TANKERS: Tank washings cannot be disposed of inside port. Diameter of loading/discharge lines 8 in. to 12 in.

One berth for tankers at San Leonardo can accommodate vessels up to 85,000 d.w.t. Max. draft is 45 ft. 3 in. Good discharging and no back-pressure. Speedboats up to Venice take about 40 minutes.
Discharging Berths for Tankers at Porto Marghera:
Darsena IROM, length 570 m., depth 30 ft.
Esso Pier: depth alongside 26 ft.
Shell Pier: depth alongside 26 ft.

Port entrance of Malamocco, at point of the Island of Lido, has been reopened where a canal 12 m. deep leads to Port of Marghera. This canal allows large tankers to proceed to coastal storage tanks without passing through urban centre of Venice.
DENSITY: Average salinity of water inside port 1020.
FRESH WATER: Available.
FUEL: All grades available and delivered by barge.
CUSTOMS ALLOWANCES: The Customs require from the ship a complete list in duplicate of Provisions and Stores. It is particularly important that the quantities of items such as tobacco, cigarettes, spirits, coffee, matches, pepper, salt, spices, cars, chocolate, should be given accurately. Customs Officers will supervise the issue while ship is in port. Amount of tobacco allowed out of Bond: 50 cigarettes per man for all foreign vessels except British and U.S.A. flags. 20 cigarettes per day per man on British and American flag vessels.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CONSULS: Following are Consulates maintaining their offices at Venice.

Argentine
Austria
Belgium
Bolivia
Brazil
Colombia
Denmark
Finland
France
Germany
Great Britain
Greece
Ivory Coast
Lebanon
Liberia
Luxembourg
Mexico
Monaco
Netherlands
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland

REPAIRS/DRY DOCKS: There are ample facilities for repairs. Following are particulars of Venice dry docks:

Minore	*Maggiore*	*Principe*	
298.8 ft.	526.3 ft.	820.3 ft.	extreme length
58.4 ft.	79.8 ft.	117.8 ft.	breadth of entrance
1.0 ft.	1.0 ft.	3.1 ft.	height of sill above bottom dock
19.7 ft.	29.6 ft.	36.0 ft.	depth on sill at high water.

AIRPORT: International Airport Marco Polo about 10 km. from Porto Marghera. Served by regular airlines.
TIME: GMT plus 1 hour. Summer Time from March to September, GMT plus 2 hours.
HOLIDAYS: The public and port holidays are the following: 1st January; 6th January; 19th March; 25th April; Monday after Easter Day; 1st May; Ascension Day; Corpus Christi Day; 2nd June; 29th June; 15th August; 1st November; 4th November; 21st November; 8th December; 25th December; 26th December.
TELEPHONES: Telephones will be placed aboard the ship.

SHIPMASTER'S REPORT: Porto Marghera. November 1979.
Pilotage: Pilot station works on Channel 13 VHF. Speaks very good English. Pilot launches are built to the same specification as the new Trinity House high speed launches, there are five in number. Black hull with white superstructure. Pilot ladder to be 3 ft. feet above the water line. Pilot boards from the rigging. In favourable weather pilot station about 0.5 miles East of the Fairway Buoy, in adverse weather conditions vessel proceeds in on leads and Pilot embarks inside the moles.
Anchorage: Good anchorage for small vessels especially during the Bora from the N.E. in 6 fathoms of water with Porto di Lido Northern Mole Light bearing 280° × 1.5 miles.
Stevedores: Port works 5 days a week in 3 shifts Monday to Friday: 1st shift 0800 to 1430 hrs.; 2nd shift 1430 to 2100 hrs.; 3rd shift 2100 to 0200 hrs.

2 shifts worked on Saturdays 0800 to 1430 and 1430 to 2100 hrs.
Possible to work Sundays 0800 to 1430 hrs.
Container Berth: Berth relatively new with good fenders – room for two vessels. Two container cranes. Ample straddle loaders. Upper berth suitable for Ro/Ro if berthed port side to.
Tugs: For vessels over 100 m. in length it is necessary to engage a tug for turning.
Speed in Canal: Maximum speed through Venice and up the canal to Porto Marghera 6 knots. heavy fines can be imposed for excessive speeds.
Cash Drawn: Customs have to approve any cash drawn and it is essential that any excess must be paid back to Agent before departure. Unable to land at any other port.
Customs: When proceeding from one Italian port to another the Clearance is placed on board together with one copy of 'Manifesto di Partenza'. Most important that Master has this copy on demand at subsequent port.

AUTHORITY: Il Comandante di Porto.

Ivory Coast

ABIDJAN: 05.18 N. 04.00 W. **(See Plan Book)**

PORT LIMITS: The pilotage zone is limited by a circle with a 3.5 mile radius centred on the pier lighthouse of the West jetty of the entry canal.

DOCUMENTS: "All ships calling at Abidjan to discharge cargo will have to supply on arrival altogether 13 sets of cargo manifests and 4 sets of freighted manifests for each port of loading (IMO class code for all hazardous cargoes), as the administration no longer accepts reproductions of documents supplied by the Agents. Furthermore, Masters are reminded to hand to Agents on arrival, 6 crew lists, 4 stores lists, 4 bonded stores lists, 4 crew declarations, 6 passenger lists (even if nil), 5 animal lists (even if nil), 5 narcotics lists (even if nil), Arms and Ammunition List, (even if nil), 5 lists of ports of call and 1 vaccination list. Furthermore, the attention of Masters is drawn to the fact that the Customs Services are strictly enforcing the control regulations on incoming vessels and very heavy fines are imposed in cases of omission or mistakes in declarations of slop chests, stores lists etc".

All Manifests and Bills of Lading should refer to the IMO class code for hazardous cargoes.

It should also be noted that hazardous cargo found and not mentioned in above documents will have to remain on board.

PILOTAGE: About 1 hour before arrival ships equipped with VHF shall confirm to the Pilot station, on Channel 12 or 16, their correct hour of arrival off the Roads; then the boarding time for Pilot shall be communicated. It is essential that these times are clearly understood both by ship and Pilot station.

Ships shall stay in a position so they keep across the swell and the wind which both generally come from the South and they shall put the pilot ladder on the lee side, i.e. Port if steering Eastward, Starboard if steering Westward.

Pilotage is compulsory, except for shifting alongside quays. For ships leaving harbour or shifting within harbour limits, request for a Pilot should be made at the Harbour Master's Office at least 3 hours before sailing or shifting. For a night sailing or shifting, request must be made before 1700 hrs.

Warning: when embarking Pilot, keep well clear of sandbank extending from entrance to Vridi Canal.

ANCHORAGE: Vessels may anchor on the outer road in 20 m. to 30 m. of water, firm sandy bottom, also to the South and to the West of the West jetty of the Vridi Canal.

RESTRICTIONS: Ships may enter or leave Abidjan only between certain time limits. These limits can be obtained from the pilot station on Channel 12 or from the local Agent no more than 3 or 4 days ahead of time.

MAX. SIZE: Until now the largest vessel admitted was 243 m. in length. Vessels with a length of 250/260 m. may be able to be admitted ultimately. At the present time, the maximum permissible draft is 31 ft. It will soon be increased to 33 ft.

HEALTH: Request for Free Pratique is given by the Agent to Port Health Authority, who will board vessel on arrival.

RADIO: Masters must radio through Abidjan – Radio their ETA and draft, 24 hours and again 6 hours before their arrival, to the Port Commandant (COMPORT) or in his absence, to the consignee. For a night arrival, the telegram must arrive at the station before 1700 hrs.

When at anchorage off Vridi canal, vessels should watch for signals from Vridi signal station, which keeps continuous watch, and advise them regarding the time the Pilot will board their ship. Port Captain's office and Vridi signal station keep a permanent watch on 156.6 MHz. and 156.8 MHz. Agents may be obtained through Abidjan-Radio on 2182 kHz. Abidjan-Radio answers on 1813 kHz.

VHF: Channels 16 and 12 are used: 16 for security and 12 for general traffic. It is strongly advised to use Channel 12. This Channel is strictly reserved for the harbour traffic and ships wishing to talk to each other should do so on a ship to ship Channel 8.

RADAR: Is installed in the Harbour Master's office. Vessels can contact port radar by calling "Comport Abidjan" on VHF Channels 16, 12 and 11, or through Abidjan Radio, which keeps watch on Channel 16.

TUGS: Tugs join vessel at the port entrance. Towing lines are provided by the tug. Tugs work on VHF Channel 8.

BERTHING:

Bananier Quay: (Banana Carrier Quay): Length 350 m., 2 berths, depth 7 m.

North Quay: Length 775 m., 5 berths (Nos. 1–5) from East to West, depth 10 m.

West Quay: 1,525 m., 10 berths Nos. 6 to 15 from North to South, depth 10 m.

South Quay: 1,145 m., 6 berths Nos. 16 to 21 from North to South, depth 11.5 m.

Roll-on/Roll-off Berth: Length 200 m. Depth 12.5 m.

A temporary Roll-on/Roll-off berth is located at the North Quay of the fishing harbour, length of the quay 350 m., depth 7 m.

A quay 90 m. long, situated on the South bank of the lagoon between the access canal and the discharge canal (Bietri Canal) extended by a system of piles, permits the mooring of vessels 140 m. long and with 26 ft. draft. This Quay is called 'Siveng Quay' and is reserved for the Company of the same name.

2 oil wharfs situated on the East bank of the access canal accommodate large vessels of more than 200 m. with a max. draft of 31 ft.

A "sea line" buoy situated off Port-Bouet can accommodate vessels having a length of 270 m., and a draft of 46 ft. and not exceeding 75,000 d.w.t. (See "Tankers" and "Notice").

Mooring buoys lined up in the North part of the port (Banco Bay) are used by vessels taking on timber.

The Quays of the port are not equipped with cranes, so loading and unloading operations are undertaken by vessels own gear.

SPECIALISED CARGO HANDLING FACILITIES:

Container Terminal: 4 Berths (No's 22, 23, 24 and 25) each 200 m. length are in service. A study with regard to equipping these quays with gantry cranes is being undertaken. The area of the container park is 60,000 sq.m. Loading and unloading of the containers is by ship's gear. Transport on the quays is made by trailers.

Roll-on/Roll-off berth: This berth was completed in 1981; it has a park of approximately 40,000 sq.m.

Details of the ramp of the temporary berth, situated on the North quay of the fishing harbour are as follows: Width 17 m., height above chart datum 1.5 m., permissible loading 20 tons by pulley. The height of the quay above datum is 1.8 m.

Vessels arriving with cereals destined for "Grand Moulins D'Abidjan" are received at Berth No. 1, or they are given a berthing priority. Handling is by means of suckers and conveyor, average rate of discharge 150 t.p.h. The capacity of the silos is 30,000 tons. The "Grand Moulins" are also equipped to load pellets in bulk at this berth. They can also receive cereals for third parties; in this case the transporting vessel still benefits from the mooring priority.

The handling companies Transafric and Socopao are also equipped with suckers (Vigan pumps) for discharge of cereals. Evacuation is then made either by tipper lorries (Transafric) or by direct discharge under hangar (Socopao). The vessels are then directed to the ordinary berths and do not benefit from any mooring priority. The rates of discharge are in the order of 50 to 70 t.p.h.

Palm oil is usually taken on board at Berth No. 16 where 2 pipe-lines come from the oil depots. The diameter of these pipe-lines are 4 in., and the flow rate is 250/280 t.p.h. Vessels mooring at this berth do not have priority. These oils may be taken on board at any other berth by tankers.

Wine in bulk is also received at the ordinary berths and also discharged by tankers.

The timber yard is situated in the North part of the port. It is bordered by a quay of 380 m. from which the timber is put in the water or loaded on barges before being towed to the vessel on which it is to be loaded. The equipment of this park (yard) is as follows: 1 gantry crane of 20 tons and 1 of 10 tons, 1 derrick of 20 tons, 3 fork lifts of 16 tons, 1 fork lift of 7 tons.

The park for discharged timber is situated between the West quays and the fishing port; it is bordered by a quay of 350 m. called "Quai de Chalandge" (Lighterage Quay), depth 2.5 m. The equipment for this park comprises: 5 fork lifts of 10 tons and 1 of 12 tons.

The port has 2 floating cranes: one with 150 tons capacity and one of 25 tons capacity.

Mooring of tankers at the wharves of the Vridi Canal is made at slack water and departure at the end of high tide. It is also to be noted that, in spite of reinforced moorings, the mooring to these wharves is sometimes rendered impossible because of the heavy swell which builds up in the canal.

Prime materials for manufacture of fertilizers are received in bulk at the "Siveng Quay" where discharge is by derricks and suckers.

The banana carrier quays are provided with air conditioned and stocking hangers as well as necessary equipment for loading.

SOGIP Shipping: Private quay for fishing vessels. Cold room with capacity of 2,200 tonnes at −20°C.

TANKERS: (Also see "Berthing".)

Shipmaster's Report: The Sea Line Berth at Port Bouet near Abidjan.

(a) Introduction: Vessel ordered to part discharge 21,000 tons of crude. With a max. draft of 48 ft. 6 in., this was the largest vessel to use these facilities; the previous largest being about 60,000 d.w.t. (1973).

(b) Approach from sea: Coast line is low with few distinguishing marks. Outline picked up at about 18 miles range (using Marconi Raymark), at about the same time as 100 fathom line was crossed. Coast is very steep-to with a pronounced rift in sea bed leading to canal entrance in Abidjan.

(c) Anchorage: Vessel anchored about 2 miles from sea line terminal at Port Bouet. The usual anchorage is to West of canal, which would permit a more suitable approach to the berth.

(d) Berth: The sea berth is situated about 1 mile S.S.E. of Port Bouet light. According to chart prepared by terminal authorities Societe Ivoirienne de Raffinage (SIR), the depths of water in the berth are 16 m. aft and 19 m. for'd, at chart datum. Members of the diving team and terminal representatives are of the opinion that there is greater than 1 m. more water than indicated; this is backed up by observed soundings of for'd depth of 21 m., with a rise of tide of 0.5 m.

Moorings consist of four 6 in. shore wires from buoys aft; 4 similar wires for'd, 2 from buoys, 2 from the sea bed; both anchors are used with about 8 or 9 shackles of cable on each.

Hoses are connected on port side, 2×12 in. leading to a 1×24 in.×5 km. sea line. Back pressure is limited to 7 kg./sq.cm. (about 100 lb./sq.in.). Berth is aligned to head into the prevailing Southwesterly wind. Unfortunately this places the vessel beam on to the current which is unpredictable in both magnitude and direction. After 9 years' experience at the berth, the diving team are unable to predict for a particular time if the current will run at all, or in what direction or at what strength. Current velocities of up to 2.5 knots are normal. If the current starts to run at this strength at an early stage of a berthing operation it is probable that the operation will have to be abandoned.

(e) Berthing: Approach to the berth is made on a heading of 145° in line with buoys A and B on SIR chart. During much of the approach the vessel is within 5 cables of the shore, but, with one exception, the depth of water is adequate.

When the vessel was between 1 and 2 ship's lengths from buoy A, in Grid reference position 579.030 393.280 on SIR chart, the under keel clearance was 15 ft., for several minutes. There was a very low, barely discernable, swell running, but the approach to the berth runs with this swell directly abeam, causing the vessel to roll an estimated 5°; the effect of this was to give a min. bilge clearance of 10 ft.

Berthing operation is routine, with some shore labour assisting with wires. No carpenters' stoppers are provided for wires, but two each end can be made fast on to the storage drums of the winches.

(f) Discharging: Limiting back pressure maintained by two cargo pumps running at 1,200 r.p.m. Discharge rate achieved was 2,237 t.p.h., which is usual for this berth.

(g) Bunkering: Bunkers are available in the berth in amounts greater than 500 tons. As bunkers are taken via the same sea line as cargo is discharged, the operation is somewhat clumsy and time consuming: crude in the sea line is displaced by fuel oil; the hose is shifted to bunker connection; bunkers are taken; the hose is re-connected to cargo manifold; the fuel oil in the sea line is displaced by crude oil. This sequence of operations took a total of eight hours. If a total discharge was planned, it might be advisable to take bunkers in the middle of the discharge, in order to obviate the need to use stripping pumps to displace the fuel oil in the sea line, amounting to some 1,200 tons.

Notice: *Information for the attention of the Masters of tankers mooring at the S.I.R. sea-line of Port-Bouet:*

The conditions at this sea-line necessitate the presence on board of the following personnel during operations of mooring and connection of the hoses.

1 Superintendent who combines the duties of: Mooring Master, Loading Master and chief diver.
2 Divers who also assist in the mooring and the connecting operations.
2 Seamen for the refinery's launch.
2 Assistants for the mooring and connecting operations.

These personnel will be present until pumping starts. We would be glad if you would provide meals for them during this period (from 8 to 12 hours normally).

Usually the Superintendent and the refinery's representative eat in the officers' mess and the rest in the crew's mess.

Once pumping has started the following personnel stay on board. The Superintendent; the refinery's representative; 2 seamen; 1 assistant.

We would be grateful if you can provide cabins and meals in the officers' mess for the Superintendent and refinery's representative and sleeping quarters and meals for the 3 other persons until the tanker's departure.

The refinery's launch the "Sirius" helps during the mooring and connecting operations and serves as a liaison launch between the tanker and the refinery. Would you reserve a mooring berth on the starboard side of the tanker with pilot's ladder for access aboard? The mooring ropes are provided by the refinery and should be reserved for the launch "Sirius". The Agent's launch or any launch other than the "Sirius" should moor forward of this berth and should be provided with its own pilot's ladder.

We thank you in advance for your kind cooperation in this matter and wish you a satisfactory stay on the sea-line.

Signed: General Manager, Societe Ivoirienne de Raffinage.

STEVEDORES: Gangs must be ordered before 1700 hrs. on the previous day.

MEDICAL: All medical services and hospitalisation can be arranged without difficulty. Crew members are obliged to have valid certificates against yellow fever.

DENSITY: Varies from 1025 in January to 1000 in November.

FRESH WATER: Supplied from the quay at the rate of 40 t.p.h. per hydrant. Can be supplied by barge.

FUEL: 1500 secs. fuel available from Abidjan Refinery. Advance notice required.

WATCHMEN: Services of shore watchmen are recommended.

HATCHES: Normally opened and closed by stevedores.

CUSTOMS ALLOWANCES: Each man allowed to retain 200 cigarettes and 1 bottle of alcohol.

IDENTIFICATION CARDS: Should be carried by crew going ashore.

CONSULS: The following countries are represented locally:

Algeria
Argentina
Austria
Belgium
Benin
Brazil
Canada
Central African Rep.
Chile
Colombia
Congo
Denmark
Egypt
Ethiopia
Finland
France
Gabon
Germany F.R.
Ghana
Great Britain
Guinea
Guinea Bissau
India
Israel
Italy
Japan
Korea
Lebanon
Liberia
Mali
Mauretania
Morocco
Netherlands
Nigeria
Norway
Poland
Romania
Senegal
Spain
Sudan
Sweden
Taiwan
Tunisia
U.S.S.R.
U.S.A.
Upper Volta
Vietnam
Yugoslavia
Zaire
Zambia

REPAIRS: All types of repairs can be effected. There is a floating dock with lifting capacity 2,000 tons.

REPATRIATION: Can be arranged.

AIRPORT: Local international airport with connections to all parts of the world.

TIME: GMT. No alterations during the year.

HOLIDAYS: 1st May and 7th December no work can be carried out. Other holidays which may be worked at overtime rates are: 1st January, Easter Monday, Whit Monday, Ascension Day, 1st November, Christmas.

POLICE/FIRE/AMBULANCE: Police, tel. 35.57.57; Fire, tel. 238/82; Ambulance, tel. 238/82.

TELEPHONES: Can be connected on board if requested for vessels moored at quays No. 1, 2, 4 and 5.

SHORE LEAVE: Allowed without restriction.

DEVELOPMENTS: The port extension project of the LOCODJRO site (West bank of the Bay of Banco) to be constructed. Facilities to include container terminal, mineral terminal, additional fishing port, clinker berth and additional general cargo berths.

SHIPMASTER'S REPORT: October, 1983.

Documents: Customs are very strict on Crew Declaration and Crew Lists. Fines in case of differences are very high.

In case you are notified of a fine you should contact your P and I Club through your Agent.

Yellow Fever/Smallpox Certificates not compulsory.

Anchorages: Many ships that have had to anchor inside the harbour have been boarded by armed thieves – it is preferable to wait 30 miles off coast drifting rather than anchoring inside harbour waiting for berth.

Radio: "Comport" must be advised 24 hours prior to arrival. Arrival/departure is governed by "Vridi" Channel. Navigational opening times advised by Agent. Inward bound ships are advised to arrive 30 minutes after advertised opening times as outward ships have Pilot Priority.

Berthing: Max. draft at Banana Loading Pier is 7.5 m. We always berth port side to using starboard anchor. 140,000 boxes fruit usually loaded in a 40 hour working period. Labour works as cargo is available. For bananas/pineapples, holds are pre-cooled to +8°C for survey.

Average rate of general/frozen cargo discharge at General Cargo Piers is max. 15 t.p.h. depending on transport available.

Fresh Water: No difficulties at General Cargo Quays, but only available at Banana Quay by barges (whose services are unreliable). Always preferable to give as much notice as possible.

Watchmen: 2 ships' watchmen on duty at night plus 2 shore watchmen. The latter are regulars appointed by Ship's Master.

Regulations: Please note that security net under gangway is compulsory. The lack of it would result in a heavy fine from the Port Authority.

If unauthorised persons are allowed on board this may result in heavy fines by the Port Authority.

Crew Safety: It is always more advisable to take a taxi when proceeding ashore.

It cannot be too stongly emphasised that NO person should venture ashore on his own either by day or night.

AUTHORITY: Port Autonome D'Abidjan, BP. V85, Abidjan, Ivory Coast. *Tel:* 32-01-66. *Telex:* Comport 674. *Contact:* Director General.

AGENT: Socopao Cote D'Ivoire, B.P. 1297. Abidjan. Tel: 32-02-11. Telex: 23745, 23755, 23413. Telex (Shipping): 23562. Cables: "Freight Abidjan".

ESPOIR (Floating Storage Unit): 05.04 N. 04.26 W.

(See Plan Book)

PORT LIMITS: See "Plan Book".

Lay time will commence upon vessel being all fast.

DOCUMENTS: See "Abidjan".

PILOTAGE: The services of a Berthing Master are arranged by Agent and provided by Phillips Petroleum Co. (PPC).

Berthing Master boards approx. 3 miles from FSU.

ANCHORAGES:

Tanker Anchorage:

A. Lat. 5° 09′ 30″ N., Long. 4° 22′ 00″ W.
B. Lat. 5° 10′ 00″ N., Long. 4° 17′ 00″ W.
C. Lat. 5° 08′ 00″ N., Long. 4° 17′ 00″ W.
D. Lat. 5° 07′ 30″ N., Long. 4° 22′ 00″ W.

Anchoring Prohibited:

E. Lat. 5° 05′ 00″ N., Long. 4° 31′ 30″ W.
F. Lat. 5° 05′ 00″ N., Long. 4° 24′ 30″ W.
G. Lat. 5° 00′ 30″ N., Long. 4° 24′ 30″ W.
H. Lat. 5° 00′ 30″ N., Long. 4° 31′ 30″ W.

RESTRICTIONS: Mooring of a ship will not take place during dark hours – mooring will not take place if conditions are judged unfavourable by ship's Pilot, "Phillips Enterprise" Master or Terminal Superintendent. Mooring will not take place until after satisfactory completion of ship's safety inspection by Terminal Representative.

Also see "Berthing".

MAX. SIZE: Max. LOA 925 ft. Depth 280 ft.

HEALTH: See "Abidjan".

RADIO: All vessels destined to load crude oil at the Espoir Terminal are required to advise the Terminal Operator of their ETA (Estimated Time of Arrival) at the Terminal designated anchorage area 5 days, then 72, 48, 24 and 12 hours prior to their arrival. The 5 day's notification need only be given if the current sea passage of the vessel is in excess of 2 weeks' duration.

The 72 hour notification must include the following:

1. Exact ETA (local time and date).
2. Quantity of cargo required – in barrels.
3. Number and size of manifolds and reducers ASA 150.
4. Distance from bow to manifold and stern to manifold.
5. Length of flat side.
6. Minimum speed and equivalent RPM.
7. Confirm 5 mooring lines forward and 5 mooring lines aft (mooring lines should be minimum 11 in. with adequate chafing protection).
8. Advise arrival and departure draft and trim.
9. Any requirements needing early attention.
10. Confirm inert gas system operating correctly and that vessel will maintain a maximum oxygen content of 8% in the tanks throughout berthing, deballasting, loading and unberthing operations.

The 48, 24 and 12 hour notification need only specify the latest ETA, plus any amendment to the details already advised under the 72 hour notification. After the initial notification has been made, any change in ETA of more than 12 hours must be immediately advised to the Terminal Operator.

ETA messages can be routed as follows:

1. Phillips Base/Abidjan – VHF Channels 19, 20 and 24.
2. Phillips Base/Abidjan – Landline Telex: 22681 and 22682.
3. Phillips Base/Abidjan – HF SSB (voice)
   Ship transmits 4139.5 kHz
   Ship listens 2008.0 kHz
   Sel code 20947.
4. "Phillips Enterprise"/Espoir Terminal – VHF Channel 6.
5. "Phillips Enterprise"/Espoir Terminal – Telex via Inmarsat 00-581-1242511. Answerback 1242511 DTSI X.
6. "Phillips Enterprise"/Espoir Terminal – Telephone via Inmarsat 00-871-1242511.
7. Abidjan Radio (TUA).

VHF: FSU is equipped with VHF radio. Normally uses Channels 16 – 11.
VHF Channel 11 will normally be used between the storage vessel and the offtaking vessel during operations. The Berthing Master may designate another Channel if necessary. The Berthing Master will supply portable sets equipped with this Channel for inter-vessel use.

Communication During Loading Operations: As a general rule, medium and high frequency radio-telegraph and radio-telephone systems are to be shut-down during cargo transfer and deballasting. For more information, consult the OCIMF/ICS Ship-to-Ship Transfer Guide (Petroleum).

Inter-vessel Communications Failure: If inter-vessel communications fail during any part of the operation (mooring, deballasting, cargo transfer, unmooring), the vessel affected shall sound the International Signal "K" on her whistle and cargo operations, if in progress will be stopped until normal communications are re-established.

Aircraft Frequencies: Those vessels fitted with aircraft VHF frequencies when expecting helicopters, will make radio contact prior to their approach on 126.40 kHz. At this time operational advice will be exchanged such as permission to land and or information on hoists etc.

TUGS: 1 supply vessel and 1 twin screw/bow thruster tug of 30 ton bollard pull will assist during mooring. Tug normally joins the vessel 3 miles N.E. of Terminal.

BERTHING: The "Phillips Enterprise" (230,000 d.w.t. VLCC) located in position Lat. 05° 04′ 03″ N., Long. 04° 25′ 32″ W. is a permanently moored tanker used as a floating loading, storage and off-loading facility. Vessel is moored stern first to a buoy via a rigid arm, free to weathervane 360°. Off-loading ships are moored alongside port side to port side. Fenders are provided by "Phillips Enterprise".

Depending on ship size, offtake tankers will moor with minimum 6 head/stern lines and double wire springs with nylon tails. FSU provides 2 polyprop lines fore and aft.

The following sets forth guidelines on weather conditions under which berthing or unberthing operations may take place during PPCoIC loading operations. On many occasions, there may be circumstances or a combination of circumstances which may or may not preclude berthing or unberthing operations. In these circumstances, good judgment should be used by the Master, under the Berthing Master's advice to decide the action to be taken.

For Berthing: The berthing manoeuvre normally should NOT be attempted when any of the following parameters are reached:

1. Winds, Waves and Swell from the Same Direction
   (a) Wind velocity 30 knots or more.
   (b) Wave height 10/12 ft. or more.
   (c) Swell of short or average length, height 10 ft. or more.
2. Winds, Waves in Different Direction to Swell
   (a) Wind velocity 15 knots or more.
   (b) Wave height 5/6 ft. or more.
   (c) Swell of short or average length, height of 5 ft. or more.

For Unberthing: Whenever either of the following parameters is reached or exceeded, then vessels should normally be unmoored.

(a) Wind 35 knots or more.
(b) Wave height 10 ft. or more, or when cross-wind or swell is causing undue working of the mooring lines.

Immobilisation of engines not permitted.

LOADING: The "Phillips Enterprise" is equipped with 1×16 in. hose string. Manifold connection from ship should be 16 in. ASA 150 lbs.

Transfer operations are to be made in strict accordance with ICS/OCIMF Ship-to-Ship Transfer Guide and Espoir Terminal Regulations and Information Handbook.

Crane: One hose handling hydraulic crane on the "Enterprise". Ship's port manifold boom required to complete rubber hose connection for discharging.

Ballast: No dirty ballast facilities. Only clean ballast from segregated ballast tanks to be discharged.

BALLAST/POLLUTION: No dirty ballast facilities. Only clean ballast from segregated ballast tanks is to be discharged. The offtaking vessel's Master and the Loading Supervisor of the Espoir Terminal vessel should assure themselves that such ballast is clean. Vessels calling at the Espoir Terminal must be members of the TOVALOP agreement. Valid certificate of membership must be on board the vessel.

MEDICAL: In case of emergency medical attention, the following information should be sent to the Agents:

1. Name, rank, nationality and passport number.
2. Method of travel and port of disembarkation.
3. Specify general symptoms and any particular requirements.

DENSITY: Salt.

FRESH WATER: Not available.

FUEL: Not available.

FIRE PRECAUTIONS: Transfer operations are to be made in strict compliance with the ICS/OCIMF Ship-to-Ship Transfer Guide and Espoir Terminal Regulations and Information Handbook, a copy of which is given to the off-loading tanker prior to the mooring operation.

EMERGENCY CO-ORDINATION CENTRE: Phillips Base/Abidjan for any emergency situation arising from the conduct of lifting operations at the Espoir Terminal.

REPAIRS/SPARES: Whenever it is necessary to send ashore ship's equipment, deck/engine machinery, spare parts, etc., for repairs or transhipment, the Agents must be advised 24 hours in advance in order to file with the Customs in sufficient time before the parts arrive. In addition, a letter from the Master, addressed TO WHOM IT MAY CONCERN, giving all details on the parts, etc. should be attached to the respective cases.

SHORE LEAVE/REPATRIATION: Shore leave is not allowed for crews while in the cargo transfer area; however, crews are allowed to be repatriated or to go ashore for medical attention. In case of repatriation, the Master must send a message to his Agent at least 24 hours prior to the crew member's arrival ashore indicating:

1. Name, rank, nationality and passport number.
2. Way of travel from the loading area to shore, i.e., loading vessel's name, helicopter, supply boat, etc., and port of disembarkation.
3. Final destination and the reason for disembarkation e.g., repatriation, to doctor or hospital.

SAFETY: *Emergencies:* The Emergency Signal will consist of a series of short rapid blasts on either ship's whistle or siren. This signal will apply through any part of the operation. All pumping must stop and the full resources of the ship directed to deal with the emergency.

Special Signals: Both vessels engaged in the oil transfer operations will display the lights and shapes required by the International Regulations for Preventing Collision at Sea, 1972 or any subsequent amendments.

Weather: Available local weather forecasts, supplemented by shipboard facsimile weather records and area weather reports from the Abidjan Office should be checked before and throughout the operation.

Gangway Safety Net: If a gangway between vessels is used, a safety net must be rigged underneath the gangway between both vessels at all times.

Emergency Towing Wires: Emergency towing wires shall be properly rigged on the starboard side of the off-taking vessel, forward and aft. These wires are to be kept near the water surface at all times.

Deck Watch: A Deck Watch on mooring must be maintained by both vessels and the bow of the off-taking vessel should not be allowed to fall off.

GENERAL: *Helicopters:* Helicopters will not be used for the transfer of personnel or materials to and from the terminal area during the period vessels are mooring or unmooring.

The landing of helicopters on vessels engaged in the ship-to-ship transfer is expressly forbidden unless previously authorised by PPCoIC. If permission is granted, arrangements and advice to the interested parties will be co-ordinated by the PPCoIC Office in Abidjan.

Whenever a helicopter is sent to the loading area, the Master of the vessel to which it is dispatched will, before its departure, be advised by PPCoIC Abidjan, of the helicopter's ETA at the vessel along with any relevant information necessary. Any oil transfer operation will cease 30 minutes before its arrival.

Vessels fitted with radios, on frequency 126.40 kHz should attempt to make radio contact with the helicopter before its arrival.

Notice of Readiness: The off-taking vessel should on arrival at the "Designated Anchorage Area", tender Notice of Readiness (N.O.R.) through the Loading Supervisor on duty who will acknowledge receipt as per terms and conditions of the Charter Party. If no Loading Supervisor is on duty at the time, then consideration may be given to tendering N.O.R. by radio through vessels Agent.

Bills of Lading: After the cargo transfer operation has been completed and the cargo quantity determined, Bills of Lading will be prepared by the designated shipping Agent or in his absence by the Terminal Operator, in accordance with Appendix A or the Crude Oil Lifting Procedures.

AUTHORITY: Phillips Petroleum Company – Ivory Coast, 01 B.P. 3857, Abidjan 01, Ivory Coast. *Tel:* 32.16.14 (Ext. 505). *Telex:* 22681, 22682. *Cables:* Philivco, Abidjan. *Contact:* D. C. Garval, Marine Superintendent.

SAN PEDRO: 04.44 N. 06.38 W. (See Plan Book)

LOCATION: The Port of San Pedro is located at the old mouth of the river bearing the same name. The river has been diverted and now comes into the sea to the East of the hill on which a light is located.

DOCUMENTS:

3 copies Crew List.
3 copies List of Ports of Call.
1 copy Passenger List.
1 copy Declaration of Arms and Ammunition.
3 copies Kroo List.
1 copy Health Declaration.
6 copies of Manifest.
2 copies Bills of Lading.
3 copies List of Hazardous Cargo, disembarking or in transit.

APPROACHES: *In Clear Weather:* The first recognisable Port characteristics are:

1. The lighthouse to the N.E. of the Port on a hill (Lat. 4° 44′ 55″ N., Long. 6° 36′ 00″ W.) – which is a four-sided pylon 26.8 m. high on the top of which is a square metal shelter with horizontal red and white stripes and on its middle part on the Southern side is a white sphere. The height of the light is 160.3 m.

2. Hertzien Relays: Cylindrical telecommunications tower, grey in colour and 59.3 m. high. It is located 1,100 m. – 268° from the light of the Eastern Jetty on a hill dominating the Port. Its height in relation to sea level, is 127 m. At the top of it is a metal aerial mast.

In Misty Weather: There is an aeronautical radio beacon (Lat. 4° 46′ 12″ N., Long. 6° 38′ 58″ W.) operating during the day from 0730 hrs. to 1830 hrs. and at night on request (frequency 330 A1 call sign "SAP".). The request for night operation must be made to ASECNA at Abidjan.

PILOTAGE: Pilotage is compulsory for entering and leaving and for moving within the pilotage limits, defined by a circle of 4 miles radius centred on the base of the Western Jetty (Pointe Quiquerez).

All vessels wishing to enter the pilotage area of the Port must send at least 24 hours prior to arrival, a telegram or a telex stating ETA, overall length, draft, nature and tonnage of goods to be loaded or unloaded.

The telegram or telex should be sent for the attention of the Port Commandant, or otherwise to the Consignee.

The pilot boat is a cutter which has a black hull and white superstructures marked "Pilote San Pedro". The usual summoning signals for the Pilot are also supported by 2 long and 1 short (G) audible signals on the siren.

Pilotage is available day and night for leaving the port and for movements at the quay. Berthing at the buoys only possible during daylight hours. Departures are announced at the daily port conference.

Pilot service not available 24th & 31st December (1800 – 0800 hrs.).

Three hours before sailing, the ship's Agent must confirm or modify the time for sailing as is expected.

The vessel must confirm again its departure 1 hour before sailing (by VHF or by any other means if the vessel does not have VHF).

ANCHORAGE: Whilst waiting for the Pilot, vessels can anchor in the Outer Roads inside the recommended anchoring area, defined as follows:

A mooring buoy with vertical red and white stripes and a red "X" sphere on a radar reflector (in foggy weather there is a bell), a white light flashing twice every 6 seconds is located 1 mile – 135° from the light on the Western Jetty. This buoy marks the mooring area which is recommended and limited: to the West by the meridian of the light on the Western Jetty: to the N.W. by a line running S.W./N.E. passing 0.4 miles to the S.E. of the light on the Western Jetty: to the North by the parallel of the Eastern Jetty.

This zone is crossed by the access channel and its extension in which mooring is forbidden. In the recommended area, anchoring is good on a sandy bottom.

RESTRICTIONS: Tides impose no restriction. However vessels drawing 34 ft. (the authorised maximum) operate during HW to facilitate their movements.

MAX. SIZE:

Berth	*Max. LOA* (m.)	*Max. Draft* (m.)
Oil Berth	90	5.5
Berth No. 1	155	10.5
Berth No. 2	200	10.5
Berth No. 3	190	10.2
Berth No. 4	195	10.5
Berth No. 5	140	10.5
Berth No. 6	150	8.5
South Quay	150	8.5
West Quay	558	10.5

RADIO: Vessels anchored can communicate with the Port Captaincy on VHF (Channel 16 and 12 with permanent watch). There is permanent radiotelephone watch on 2182 kHz, as well as communication by light signals.

TUGS: One tug of 1,300 h.p.

BERTHING: The port protection structures comprise of a Western breakwater 265 m. long and a breakwater to the East of 145 m. length. Access is by means of a 120 m. wide channel dredged to 12.50 m. The entrance passage is 200 m. wide. A heading of 291.5° leads to the port.

The channel gives access to a manoeuvring basin of 400 m. diameter dredged to 11.8 m. depth.

South Quay: Length 155 m., depth 9 m.
West Quay: Length 181 m., depth 11 m. and 405 m., depth 12 m.
Service Quay: Length 109 m., depth 4 m.

There are 5 loading points at buoys for loading timber: 2 to the North of the Western Quay, and 3 to the North of the Eastern Breakwater, which can take vessels with a maximum length up to 140 m. at 3 buoys and 200 m. at 2 buoys. Depth 11 m.

Cement Handling Berth: Length 200 m. Vessels berth against dolphins and secure to buoys fore and aft. Depth of water 11 m.

There is also inside the Port a small tanker berth for vessels not exceeding 100 m. on the Eastern Breakwater. The areas located to the North and East of these berths are used for storing timber.

Also see "Max. Size".

STEVEDORES: Work around the clock.

MEDICAL: There is a hospital with limited facilities at San Pedro. For serious cases, patients are taken by medical plane to Abidjan (which is 1 hour's flight away).

EQUIPMENT: No quay cranes, cargo handled by ships gear.

One mobile crane, capacity 60 tons. One 30 ton "Challenger" for handling containers. Lighters of 200 ton and 300 ton capacity.

FRESH WATER: Available at the quays, rate 30 t.p.h. Also available at the buoys by barge, capacity 300 tons, rate 25 t.p.h.

FUEL: Available alongside at the quays by road tanker.

CONSULS: France.

REPAIRS: There are several workshops for effecting small repairs.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits.

AIRPORT: Daily air link with Abidjan

TIME: GMT.

HOLIDAYS: *Public:* December 7th, (Independence Day); May 1st, (May Day).

Legal Holidays: The following legal holidays are considered public holidays with pay unless they fall on a Sunday:

January 1st; End of Muslim's Lent (Ramadan); November 1st, All Saints' Day; Ascension Day; Assumption; Easter Monday; Whit Monday; December 25th.

It should also be noted that when December 7th and May 1st fall on a Sunday the following day is considered a public holiday. The same when December 7th falls on a Tuesday or Friday, the preceeding or following day is considered holiday.

POLICE/AMBULANCE/FIRE: Police Tel: 71-13-43; Ambulance Tel: 71-10-25; Hospital Tel: 71-11-21.

GENERAL: *Tides & Currents:* The maximum tidal range is 1.5 m. (about half an hour ahead of the tidal times at Abidjan).

The slight S.W'ly current at the Port entrance of 0.5 to 1 knot is negligible inside the Port.

There is a slight tidal rip at the South Quay. But in the whole port and particularly at the South Quay, there is a considerable undertow between the months of June and September.

Weather: The tropical climate with tradewinds is rather mild (maximum 30°C, minimum 20°C, the absolute minimum being registered in January 15°C).

The rain seasons go from May to August; the region is irrigated by tornadoes from April to May and September to October. The average rate of rainfall reaches 1,600 mm./year.

Fresh Food: Only available in small quantities.

Roads: A tarmacadam road connects with Abidjan, distance 450 km.

Port Officials: The Port Captaincy, the pilotage and tug control are all in the Captaincy building which is a two storey structure, raised on a circular dias located at Pointe Quiquerez. The Customs are within the Port to the South of the Western Quay.

DEVELOPMENTS: By 1990 in order to cater for increased exports and imports, the Port will have 4 anchorage points and 7 quay berths, one of which will be multi-purpose. This will involve extending the Port to the North and enlarging the Northern Dock, creating an Inner Port, extension of dredging, creation of open storage areas and construction of quays. In all, the plan, from a long term aspect, is to have 10 km. of quay, 500 hectares of port industrial area and 200 hectares of commercial areas.

AUTHORITY: Port Autonome de San Pedro, B.P.340, San Pedro, Ivory Coast. *Tel:* 71.20.80. *Telex:* 99102 Comport-CI. *Contact:* Harbour Master (VHF Channel 16 or 2182 kHz).

AGENT: See "Abidjan".

NOTES

Please also advise Shipping Guides Ltd.

Jamaica

KINGSTON: 17.59 N. 76.50 W. (See Plan Book)

PORT LIMITS: The area of the sea to the Northward of the Palisadoes extending from Harbour Head to Port Royal and a straight line from Port Royal to the jetty at Small Point.

Charts: General Chart of Jamaica No. 446. Kingston Harbour No. 454.

DOCUMENTS:

For Customs:
2 Crew Declaration
Clearance from the Last Port of Call.
1 Ship's Register, i.e. Ship's Information.
2 Stores Lists.
2 Dangerous Cargo Lists.
International Certificates of Vaccination for each Crew Member.

For Immigration
2 Passenger Lists.

For Agent
Bills of Lading covering all cargo on board.
2 Crew Lists.
2 Stores Lists.
5 Manifests.
Ship's Register, Safety Certificate and Load Line Certificate.

For Quarantine
1 Crew List.
Maritime Declaration of Health signed by Master.
1 Derat Certificate.
International Certificates of Vaccination for Crew Members.

PILOTAGE: Pilotage is compulsory. A minimum of six (6) hours advance notice from the Master or Agent for the services of a Pilot. Pilots usually board the vessel two (2) miles S.E. of Plumb Point Lighthouse or East Middle Ground Buoy.

VHF contact with the pilot office is made through Channel 11.

ANCHORAGES: There are 5 Anchorages namely A, B, C, D and E which are reserved. Reservation for the use of these anchorages should be made through the Harbour Master.

The 5 reserved Anchorages are:

A. 210° Distant from R.C. Cathedral Dome 12.2 cables.
Position: Lat. 17° 57′ 17″ N. – Long. 76° 57′ 12″ W.
B. 186.5° Distant from R.C. Cathedral Dome 10.9 cables.
Position: Lat. 17° 57′ 14″ N. – Long. 76° 47′ 12″ W.
C. 162.5° Distant from R.C. Cathedral Dome 12.1 cables.
Position: Lat. 17° 57′ 14″ N. – Long. 76° 46′ 40″ W.
D. 118.5° Distant from R.C. Cathedral Dome 28.4 cables.
Position: Lat. 17° 57′ 00″ N. – Long. 76° 44′ 30″ W.
E. 124° Distant from R.C. Cathedral Dome 24.4 cables.
Position: Lat. 17° 57′ 07″ N. – Long. 76° 45′ 00″ W.

In addition there is unlimited anchorage space available toward the Eastern end of the Harbour.

Entry – Day or Night.

RESTRICTIONS: Entry – day or night. Rise and fall of tide, average range 10 in., occasionally 16 in. Strength of current in harbour 1.5 knots (in some places). Main direction and average speed of prevailing winds E.S.E. 20 m.p.h. Months of max. rainfall (i) April/May, (ii) Sept., Oct. and Nov. Hurricane period June 15th –November 15th.

MAX. SIZE: Recommended max. draft into Port Royal 40 ft. for vessels of unlimited size. Main ship channel max. recommended draft of 36 ft. 6 in. and is 800 ft. wide at its narrowest point. Depth 39 ft. at MLW. Newport West has recommended draft of 32 ft. 6 in. with a turning basin of 1,500 ft. Esso Terminals has recommended max. draft of 34 ft. 6 in. Max. recommended draft of 32 ft. 6 in. to proceed Eastwards, from Esso Terminals, in harbour to anchorage or berths. Newport East has max. recommended draft of 27 ft. 6 in.

HEALTH: See "Documents".
Radio Pratique may be granted.

Crew not allowed to take fruit ashore.

Pratique Procedure: The Customs Officer who boards the vessel to check all documents will after he has placed excess tobacco and liquor under bond indicate to the Master when pratique has been granted.

If a vessel obtains pratique at Kingston, automatic pratique granted to proceed to any other port in Jamaica.

RADIO: Cable Agents giving ETA, Draft, Passengers (if any), cash required. Call sign "KNRDO 6YI".

Tankers: ETA messages to state arrival time at Pilot Station, maximum draft on arrival, last port(s) of call, number of crew, date derat certificate expires, confirm crew possess valid vaccination certificates, cash, stores and laundry requirements, details of diseases if any and request Radio Pratique.

VHF: VHF Channel 16 – Kingston Radio. VHF Channel 11 – Pilotage.

TUGS: Available and compulsory for berthing and unberthing. Two tugs of 2,800 h.p. Tugs join incoming vessel near berth. In case of emergency tug joins vessel wherever requested by Master. Tugs on VHF Channel 16 (24 hours). Usually ship's lines used, but if tug's lines used there is no extra cost.

BERTHING: At the Public Wharves there are 11 existing berths and their specifications are as follows:

Berth No.	Length	Depth	Max. Draft
No. 1	525 ft.	25 ft.	22 ft. 6 in.
No. 2	600 ft.	30 ft.	27 ft. 6 in.
No. 3	600 ft.	33 ft.	30 ft. 6 in.
No. 4	600 ft.	34 ft.	31 ft. 6 in.
No. 5	600 ft.	33 ft.	30 ft. 6 in.
No. 6	600 ft.	32 ft.	29 ft. 6 in.
No. 7	600 ft.	33 ft.	30 ft. 6 in.
No. 8	600 ft.	31 ft.	28 ft. 6 in.
No. 9	600 ft.	34 ft.	31 ft. 6 in.
No. 10	600 ft.	39 ft.	36 ft. 6 in.
No. 11	600 ft.	39 ft.	36 ft. 6 in.

In the immediate vicinity of these berths the clear turning is 1,500 ft.; elsewhere there is adequate swinging room for the largest vessel. At Berths 1 – 8 there are the following:

4,725 ft.	of berth frontage
467,000 sq. ft.	transit shed
3,247,000 sq. ft.	of open storage
67,000 sq. ft.	of cold storage

Tractors, cranes and forklifts are used to move cargo from ship's side.

Ro/Ro facilities are located at Berth No. 1, where there is an 80 ft. concrete ramp. There is a floating barge/ramp at Berth No. 8. Full container facilities are available at Berths 9, 10 and 11; and in addition there are approx. 50 acres of terminal area with storage space for 5,000 containers and a Container Freight Station of 45,000 sq. ft.

There are no specialised berths on the public wharves for handling bulk cargo. However, when necessary, consignees make their own discharging and storage arrangements.

Dangerous Cargo: 1. Vessels wishing to transit any Jamaican Port with dangerous cargo/goods on board are required through the Master or Agent to apply to the Harbour Master for permission to make such a transit.

The application should be made not less than 48 hours before the vessel's ETA and must include:

(a) The I.M.O. number assigned to the cargo as per I.M.O. Dangerous Goods Code;
(b) The volume of the cargo;
(c) The port for which the cargo is destined.

2. Vessels loading dangerous cargo for intended discharge in a Jamaican port must before loading such cargo apply to the Harbour Master for permission to go alongside for the purpose of discharging same. The application must include:

(a) The I.M.O. number assigned to the cargo as per I.M.O. Dangerous Goods Code;
(b) The volume of the cargo;
(c) The nature of the cargo and storage;
(d) The name of the intended port of discharge.

Equipment: Four Portainer Cranes (40 ton), 9 Karrilifts, Heavy Forklifts (max. 32 ton), for handling empty containers and several Tractors and Chassis.

The 4 Portainer Gantry Cranes are capable of moving 20, 35 and 40 ft. containers at a rate of 30 an hour; the 9 Karrilifts can handle similar size containers.

Developments: Rails on Berth 11 have been extended by 200 ft. Adjacent to this extension it is proposed to erect a 100 ft. berthing platform for handling Ro/Ro vessels.

STEVEDORES: To enable Agent order gangs important to obtain accurate ETA from vessels. Time: 1200 hrs. the working day before vessel arrives. Shifts: 0700 – 1400 hrs., 1400 – 2100 hrs., 2100 – 0500 hrs. Saturdays, Sundays and public holidays attract premium rates.

Stevedores normally rig and open, but crew open McGregor hatches. All necessary gear supplied by stevedores except rain tents and special lifts requiring special gear, which vessel must supply. Average unloading rate 10/15 tons per gang hour for general cargo.

BULK HANDLING FACILITIES: *National Gypsum & Quarries Limited:* National Gypsum and Quarries Limited operates a wharf at Harbour Head for the export of gypsum rock only.

There are 3 steel and concrete dolphins and 1 wooden dolphin. The concrete and steel dolphins are the principal docking structures. They are 161 ft. apart. The min. draft currently available is 26 ft., but this could be increased at short notice to 29 ft. Vessels of 440 ft. length and 64 ft. beam are normally loaded. Bulk rock loading facilities capable of loading crushed gypsum at an average rate of 700-1000 t.p.h. are available.

Wherry Wharf Limited: Wherry Wharf Limited maintains a pier at Newport East for loading and unloading lumber, corn and animal feed ingredients.

The wharf is 200 ft. long with a depth of 29 ft. It has a free-flow access road and a 200 ft.×60 ft. apron.

Shell Company (W.I.) Limited: Shell Company (W.I.) Limited has bulk cargo facilities at Harbour Head used primarily by Jamaica Flour Mills.

MEDICAL: Agents to be advised before arrival of vessel if emergency medical attention required. Hospital facilities available. If inoculation required Master to advise Agents prior arrival of vessel.

TANKERS: No specific requirements applicable to oil carriers. Reducers available to fit 12 in.–4 in. load/discharge lines. Slop (residue) discharge facilities available taking maximum 500 gallons. Gas free certificate required for tankers laying alongside Public Wharves in Kingston.

Texaco Caribbean Inc.: Texaco Caribbean Incorporated operates 1 wharf which is situated at Harbour Head and is known as the Eastern Terminal. The jetty is 325 ft. long and will accommodate vessels up to 18,000 tons (gross). Max. draft at low tide is 28 ft. Berth is used for receival of bulk petroleum products and for bunkering vessels with Gas Oil, Marine Diesel and Fuel Oil. No packaged goods are handled at this berth. Fresh water supplies are available.

Esso Marketing Terminal: Max. length of vessels 600 ft. Max. safe draft –31 ft. Draft forward restricted to 28 ft. only with vessel moored portside alongside. Both day and night berthing possible. Fresh water is available. Bunkers available here are Heavy Fuel Oil (Bunker C), Marine Diesel, Marine Gas Oil and a wide range of intermediate bunkers.

Esso Refinery Marine Dock: Max. length of vessels 743 ft. Max. safe draft 36 ft. 6 in. Fresh water is available and day and night berthing possible. The Esso Refinery Pier is used for receiving crude petroleum from tankers as feed stock for the Refinery through a 20 in. under sea pipe-line. A wide range of finished products is also delivered into tankers for export as well as for discharge at other ports on the island.

Esso Refinery Dry Cargo Dock: Max. length of vessels – 400 ft. (Freighters) and 475 ft. (Tankers). Draft alongside vary from 25-27 ft. Draft forward restricted to 17 ft. 6 in. with vessel moored portside alongside only. Fresh water is available. This dock is used for loading and unloading packaged and drummed lubricating oil on freighters for export to various countries throughout Central America and the Caribbean.

Other materials exported here are lubricating oil in bulk and various grades of asphalt in drums.

DENSITY: Average density 1026.

FRESH WATER: Fresh water available at berth. Average rate of delivery 20 t.p.h.

FUEL: All grades (viscosities) available. At least 2 days' advance notice required.

Bunkering Depot – Newport West: The Shell Company (W.I.) operates bunkering facilities at Newport West.

A hydrant system with outlets at each berth provides a complete range of bunkers.

Esso bunkering facilities are available at Newport West. Pipe-lines run from the nearby Esso Kingston Terminal to the berth at Newport West providing Heavy Fuel Oil and intermediate ranges of bunkers. Marine Gas Oil is also available Monday through Friday by tank truck.

Texaco Caribbean Incorporated also has facilities for bunkering vessels with Gas Oil, Marine Diesel and Fuel Oil.

FIRE PRECAUTIONS: Fire boat available equipped for fighting harbour fires 24 hours per day. Also equipped fire engines situated within easy reach of docks available 24 hours a day.

GANGWAY/DECK WATCHMEN: Services of watchmen are recommended.

OPENING/CLOSING HATCHES: Hatches covered by Pontoon and Hatch Boards opened and closed by stevedores. McGregor hatches handled by crew.

CERTIFICATES:

Safety Certificate.
Ship's Register.
Load Line Certificate.
Test Certificates for derricks and cargo handling gear.

CUSTOMS ALLOWANCES: Tobacco, 2 oz. tobacco in any form (2 oz. pipe tobacco or 40 cigarettes) per day. Wine and/or spirits, 6 oz. or 0.5 reputed pint of spirit per day. 1 pint wine allowed Master and Officers only or as stated in the Articles under flag they fly.

CARGO GEAR: The usual certificates covering testing and inspection of all gear and equipment as required under Docks Regulation 1934 of Great Britain or by International Labour Organisation, will be acceptable.

IDENTIFICATION CARDS: No Identification Cards required.

CONSULS: Consuls not available on Saturdays and Sundays, except by special request.

	Kingston Tel. No.
High Commissions	
British Information Service	69050
Canadian High Commissioner	61500
Trinidad and Tobago High Commissioner	65739, 65730
Embassies	
American Embassy	63645
Argentine Embassy	65588
Chinese Embassy	70860
Cuban Embassy	74362–3
Dominican Embassy	66676
French Chancery Embassy	79811
German Embassy	66728
Israeli Embassy	68768
Mexican Embassy	66891
Netherlands Embassy	69026–8
Panamanian Embassy	70042
Soviet Embassy	41048
Venezuelan Embassy	65519–0
Consular Offices	
Argentine Consulate	77616
Austrian Consulate General	25623
Belgium and Luxembourg Consulate	64295
Colombian Consulate General	42004
Costa Rican Consulate General	67285
Danish Consulate	36737
Finnish Consul	23006, 22519
German Embassy–Consular Section	66728
Greek Consul	23685
Guatemalan Consul	42966
Haitian Consulate General	77595
Hondurian Consul Ad Honorem	67285
Italian Consul	66981
Jordanian Consulate	82661
Lebanon Consulate	76465
Liberian Consul	27169
Mexican Consulate	66891
Nicaraguan Consul	22856
Norwegian Consul	39811–4
Peruvian Consul	76565
Salvadorian Consul	25780
Spanish Consul	22856
Swedish Consulate	36737
Swiss Consulate General	23347

REPAIRS: Minor deck and engine repairs possible by 2 firms. Pre-advice of 3 days recommended.

DRY DOCKS: Dry dock facilities available.

SURVEYORS: Lloyd's Register, A.B.S., B.V., G.L., Det Norske Veritas.

REPATRIATION: Facilities available for effecting crew changes.

AIRPORT: Norman Manley International Airport – approximately 10 miles – served by many airlines.

TIME: Local time is GMT minus 5 hours.

HOLIDAYS: Days when work is performed only on overtime rate: New Year's Day; Ash Wednesday; Easter Monday; National Heroes Day (third Monday in October); Boxing Day. Days when ports closed, no work performed: Good Friday; National Labour Day (May 23rd); Independence (first Monday in August); Christmas Day.

POLICE/AMBULANCE/FIRE: Emergency tel. numbers: Police 116; Ambulance 110; Fire 110. Commissioner of Police 79858–0. Radio Control Room 81261–2. Fire Brigade 22121. Fire Boat Station 27018.

TELEPHONES: Arrangements exist for placing telephones on board. The Jamaica Telephone Company to be advised by Agents 2/3 days before vessel arrives.

SERVICES: Compass adjusting services available. Although routine repairs to radar, radios and other electrical equipment are possible, technical services generally limited.

SHORE LEAVE: Crew members allowed on shore after vessel cleared by Immigration. Vessels arriving from some countries require special Government approval before shore leave permitted, but no restrictions are normally placed on vessels arriving from Western European, American or African countries.

REGULATIONS: Dogs are not permitted to land unless they have undergone quarantine or are imported from United Kingdom.

DELAYS: Normally there are no delays to vessels calling at the port.

GENERAL: *Ship's Chandlers:* 3 ship's chandlers available.

Communications: Regular air services daily to London, New York and other European and American cities, and is therefore in excellent position to offer emergency facilities to vessels requiring urgent spares, crew replacements, etc. Vessels can anchor at Port Royal close by airport.

Customs: Vessels are searched thoroughly by Customs for *firearms* and contraband. Masters are held responsible by Customs for security of bonded stores, etc. Masters are therefore alerted to check security arrangements and to keep watch on bond whilst in port.

AUTHORITY: Port Authority of Jamaica, 15-17 Duke Street, P.O.Box 474, Kingston, Jamaica. *Tel:* 922-0290/8. *Telex:* 2386 Portops Jamaica.

MONTEGO BAY: 18.30 N. 77.56 W. (See Plan Book)

DOCUMENTS, PILOTAGE and all general information: refer to "Kingston".

ANCHORAGE: There is one anchorage in Montego Bay which must be booked through the Harbour Master in Kingston. Depth 5 to 6 fathoms.

RESTRICTIONS: Entry – day and night. Rise and fall of tide, average range 10 in. No current in harbour. Main direction and speed of prevailing wind, N.E., 10 m.p.h. Subject in January–February to occasional 2–3 day spells of squalls with driving rain known as Northers which makes lying at the anchorage uncomfortable, but there is virtually no swell alongside the berths.

MAX. SIZE: Unlimited water at anchorage. The 1,500-ft.-long 400-ft.-wide straight channel has a min. depth of 34 ft. MSL, as does the 1,600 ft. diameter turning basin.

CLEARANCE: Customs, Health, Immigration offices are maintained at the port.

BERTHING:

Montego Freeport is a new port developed with 3 berths operated by Montego Wharves Limited.

Berth No. 2 – 600 ft. long, 34 ft. min. depth alongside, 7.5 ft above water line.

Berth No. 3 – 588 ft. long, 25 ft. min. depth alongside, 6.5 ft. above water line.

Berth No. 4 – 387 ft. long, 25 ft. min. depth alongside, 6.5 ft. above water line.

These berths are reached through a 1,500 ft. long straight channel 400 ft. wide dredged to a min. depth of 34 ft. There is 23,000 sq. ft. warehouse and an 87,000 cu. ft. cold storage facility adjacent to berth 2 with a wharf apron of 75 ft. Berths 3 and 4 are designed for Roll-on/Roll-off with 13 acres of bonded storage space adjacent. Berth 4 is used principally by cruise ships and is connected to a 5 acre duty free shopping complex by a 200 ft. long tree-lined walkway.

Montego Freeport Limited intends to build berth No. 1 in the next few years which will be a continuation of berth No. 2, creating 1,300 ft. of continuous berth face with ample space behind for expansion. The cold storage is planning on doubling its capacity.

STEVEDORES: The Port is open 24 hours of the day. To enable Agents to order gangs, it is important to obtain accurate ETA from vessels. Time: 1200 hrs. the day before the vessel arrives. Shifts: 0700 – 1400 hrs., 1400 – 2100 hrs. Mondays to Fridays with option to extend the first shift to 1700 hrs. at single time; 0700 – 1200 hrs. Saturdays, thereafter at overtime. Details can be obtained from Montego Stevedoring Limited, P.O. Box 303, Montego Bay.

TANKERS: No specific requirements applicable to oil carriers. Reducers available to fit 12 in.–4 in. load/discharge lines. Slop (residue) discharge facilities available taking maximum 500 gallons. One tanker berth, berth No. 2 minimum depth alongside 34 ft. MSL. Gas-free certificate required for tankers laying alongside.

DENSITY: Average density 1026.

FUEL: All grades (viscosities) available. At least four days notice required.

FRESH WATER: Can be supplied from the dock. 30 t.p.h.

MEDICAL: All facilities at St. James's Hospital. Advise Agent in advance.

SECURITY: Under the jurisdiction of the Montego Bay Police and also 24-hour patrols in the port area by private security guards.

CONSULS: No consular offices in Montego Bay. See "Kingston".

FIRE PRECAUTIONS: Equipped fire engines situated within easy reach of docks 24 hours per day.

IDENTIFICATION CARDS: Recommended for crew.
REPAIRS: There are no dry dock facilities, but minor repairs can be effected alongside.
AIRPORT: 5 miles from port. Donald Sangster International Airport served by regular airlines.
POLICE/AMBULANCE/FIRE: Police, Tel: 119; Ambulance, Tel: 110; Fire, Tel: 110.
AUTHORITY: Montego Freeport Limited, P.O.Box 303, Montego Bay, Jamaica. *Telex:* 5329 Moport.

OCHO RIOS: 18.25 N. 77.07 W.

REYNOLDS PIER
GENERAL: Reynolds Jamaica Mines act as Agents for all cargo vessels using the pier at Ocho Rios. *(a)* Tel. Ocho Rios 603. *(b)* Cable address is "Mines" Ocho Rios, Jamaica. *(c)* 72 hour and 24 hour ETA requested. *(d)* Radio telephone 2738 kHz open when calls expected at 0700, 1100, and 1500 hrs. local zone time.
PILOTAGE: Compulsory. Pilot meets vessel 1 mile N.E. of sea-buoy. On rare occasions when a local Pilot is not available expenses and detention must be paid for an outside Pilot.
MAX. SIZE: Max. LOA 850 ft. depth alongside pier 38 ft. Recommended draft 35 ft.
FRESH WATER: 50 c. per ton supplied from pipe-lines on the pier.
FUEL: Bunker "C" Fuel Oil – daily prevailing rate Kingston Harbour. Diesel Fuel Oil – per oil company suppliers Kingston.
REGULATIONS: (1) If any Master of any vessel or any other person shall throw or deposit, or permit to be thrown or deposited *(a)* any rubbish, earth, mud, stone, sand, ballast or other similar matter; or *(b)* any oil or mixture containing oil or oil residues, in any channel leading into or out of any harbour, or in any place within the limits of any harbour other than such place therein as shall be set apart for such purpose he shall be liable to a penalty not exceeding one thousand dollars.

(2) No siren or steam whistle shall be sounded on any vessel in any harbour except for the purpose of making signals as laid down in the regulations for preventing collisions at sea, provided that any vessel may sound one warning blast of not more than five seconds duration before sailing. Any person committing a breach of the rules is liable for a penalty not exceeding 1,000 Dollars.
CARGOES: The Reynolds Jamaica Mines Pier is occupied about twice each week by ore carriers for 8 to 12 hours and about twice a month by sugar ships for indefinite periods.

CRUISE SHIP PIER
LOCATION: 18° 24′ 26.4″ N., 77° 06′ 44.3″ W.
PILOTAGE: Compulsory.
ANCHORAGE: Anchorage can be arranged depending on length and draft of vessel.
MAX. SIZE: Max. LOA 650 ft., depth alongside pier is 35 ft. (MLW). Recommended draft for vessel 35 ft.
TUGS: Not available.
CLEARANCE: Customs, Health and Immigration Offices are maintained at Port.
BERTHING: Used principally by cruise ships.
FRESH WATER: Fresh water available.
SECURITY: 24-hour patrols in Port area by private security guards. There is also a Police Post in the Terminal Building.
IDENTIFICATION CARDS: Recommended for crew.
AUTHORITY: Port Authority of Jamaica, 15-17 Duke Street, Kingston, Jamaica. *Tel:* 92-20290/8. *Telex:* 2386 Portops Jamaica.

AGENT: Lannaman & Morris (Shipping) Ltd., P.O. Box 2, Kingston 15. Tel. 92–37653. Cable Address: "Seahost Jamaica". Telex: 2242 Seahost Jam.

PORT ANTONIO: 18.11 N. 76.27 W. (See Plan Book)

SHIPMASTER'S REPORT: June 1983.
DOCUMENTS: See "Kingston".
PILOTAGE: Compulsory. 24 hours' notice to be given via Agent.

The Pilot boarded from a small outboard motorboat about 2 miles N.E. of Folly Point. There is a VHF but on this occasion it was not working. The Pilot identified himself by flashing the word 'Pilot' by light.

Ladder normally required on the starboard side on arrival and port side on departure.

The Pilot is extremely competent and experienced.
ANCHORAGES: No anchorage outside harbour due to depth of water.
MAX. SIZE: Banana Pier (Boundbrook Wharf): LOA 511 ft. 2 in., beam 70 ft., draft 25 ft.
HEALTH: Quarantine examination when alongside.
RADIO: Kingston Radio.
VHF: Pilot uses Channel 16 (not operational June 1983).
TUGS: None available or required.
BERTHING: *Boundbrook Wharf:* The entrance channel (0.65 miles long) is very narrow, all navigational lights were lit. Least depth 29.5 ft. Rise of tide, 1 ft. 4 in. When clear of the channel the ship is headed towards the South end of the wharf and the port anchor let go in such a position that, when the ship is alongside, 7 shackles of cable will have been veered. When approaching the wharf the cable is used to swing the ship.

A boat takes the headrope to a bollard on the South face of the wharf. When the ship has swung sufficiently the boat then takes the sternrope to a bollard on the North face.

The pier is only 300 ft. long, it may be necessary to use a pilot ladder for access to the vessel should the stern overhang the pier. Vessels can berth and unberth 24 hours a day.

In the summer months the winds are generally light and from the South but in the winter they are Northerly and strong with a consequent swell in the harbour and, in those conditions it is considered that berthing at Boundbrook wharf would be difficult.

When unberthing, moorings are singled in to one stern rope to the North face of the wharf. The ship is then moved, whilst still alongside, so that the North knuckle of the wharf is abreast the lower gangway platform, it is necessary to have a fender handy in this position. The anchor cable is then hove in swinging the ship's head off the wharf. At the same time a steady strain is maintained on the stern rope so that the ship pivots about the knuckle and the stern swings into the cut on the North side of the wharf. When nearly at right angles to the wharf the engine is moved ahead with the rudder to starboard thus swinging the stern clear of the knuckle, the stern rope is cast off and the anchor weighed so that the ship moves clear of the wharf and continues to swing to port so as to be heading more or less for the channel.

The Pilot disembarks in a position abeam of Folly Point with the ship's head North.
CRANES: None. The pier is fitted with portable conveyors for loading bananas through side doors. Ship's gear is not required for rigging conveyors.
SPECIALISED CARGO HANDLING FACILITIES: Boundbrook Wharf used solely for loading bananas. No facilities for Ro/Ro vessels. Forklifts available for handling of pallets of bananas. However, there is inadequate storage space for palletised cargo.
STEVEDORES: Adequate numbers for loading bananas.
MEDICAL: Doctor and hospital available.
DENSITY: 1025.
FRESH WATER: Available.
FUEL: Not available.
CONSULS: Nearest Consuls at Kingston.
REPAIRS: Small repairs can be undertaken.
DRY DOCKS: None.
SURVEYORS: Nearest Lloyd's Surveyor at Kingston.
AIRPORT: At Kingston.
GENERAL: *Provisions:* Small amounts of fresh provisions available. No groceries or meat available.

Laundry: No service available.

PORT ESQUIVEL: 17.53 N. 77.08 W. (See Plan Book)

GENERAL: Vessels proceed through a dredged channel approximately 1.5 miles long with a minimum depth of 39 ft. The wharf is situated in a basin at the inner end of the channel and can take vessels up to 650 ft. long with a maximum draft of 36 ft.
DOCUMENTS:
6 Crew Lists.
6 Passenger Lists.
Customs Documents:
4 Stores Lists.
Crew's Manifest of Declaration outside of Personal Effects.
4 Load Line Certificates.
4 Small Parcels Lists.
4 Customs Clearance from last port of call.
Fire Arms List.
Narcotics List.
List of live animals and meats on board vessel.
Health Documents:
International Certificate of Vaccination of all Crew members.
Maritime Declaration of Health.
Crew's Declaration of Health.
6 Manifests.
4 Bills of Lading.
Ship's Documents:
3 Stowage Plans of Cargo.
2 Deadweight Surveys (Bulk carriers only).
Charter Party and any other specific documents of instructions relating to the loading or discharging of cargo.
PILOTAGE: Pilotage compulsory. Compulsory pilotage limit 2 miles to seaward of line drawn from Polink Point to Bare Bush Cay to Portland Cay to Portland Point. Cable advice 48 and 24 hours ahead of vessels ETA at pilot station must be sent to vessel's Agent at Kingston, Jamaica.

One pilot boat *Silver Spray,* launch equipped with ship-to-shore radio communication: *(a)* One Marconi VHF – FM 30-watt output multi-channel set. *(b)* One Marlin HF – AM 75 output multi-channel set.

VHF shore set manned 24 hours per day. Contact with Port or launch can be made on three international Channels – 16, 2 and 6.
ANCHORAGES: *(a)* Seaward to East of pilot station, depth in excess of 38 ft. *(b)* Leeward of Pigeon Island – depth 38 ft. min. *(c)* Eastward of entrance of main channel – depth 38 ft.
RESTRICTIONS: Restriction of permissible draft to max. of 36 ft MSL.
MAX. SIZE: Max. permissible length 650 ft. and draft 36 ft.
HEALTH: Pratique procedure requires presentation of undermentioned health documents: *(a)* International Certificate of Vaccination of all crew members. *(b)* Maritime Declaration of Health. *(c)* Crew's Declaration of Health. In event any suspected communicable disease or fever on board, Master required to advise Agents in advance.
RADIO: JAMINTEL "KNRDO 6YI".
TUGS: Pilot boat will be on standby during berthing operations of all vessels to assist in placing ship's lines on to pier if requested by the Pilot.

BERTHING: *Western Berth:* Bulk loading alumina – vessels max. length 630 ft., breadth of 92 ft., max. draft 36 ft. Length of Bulk Wharf 630 ft. Depth of water 39 ft. MSL. Average tide 12 in.

Minimum depth of water in Channel and/or approaches 39 ft. MSL. Bulk alumina vessels still given priority on Western Berth.

Eastern Berth: General Cargo – max. length of vessel 650 ft., breadth 60 ft., max. draft 36 ft. Length of General Cargo wharf 950 ft. Depth of water 39 ft. MSL. Average tide 12 in.

Equipment available:

(a) Shiploader – Travelling Gantry Type – part of conveyor system for loading bulk alumina.

Max. travel 415 ft. – maximum outreach for loading purposes 48 ft. Clearance height from wharf level 28 ft. from water level 35 ft. Rate of loading per hour = 1,000 long tons.

(b) One Galion crane J$70 per hour. One 660 P & H crane J$233 per hour. Forklift trucks J$110 per hour. Launch service J$264 per hour.

There is no extra charge for the use of shore equipment during overtime hours and will remain at a flat rate for all hours worked.

SPECIALISED CARGO HANDLING FACILITIES: Eastern and Western berths equipped to handle receival of bulk cargoes, e.g. grain, soya meal, soya beans, salt, sulphur, etc. by using shore crane with grabs, vessel discharging by grabs. Bulk liquid chemicals handled as shown under "Tankers". Additional berth on South-Western shoreline now being used to handle small bulk grain, soya meal and soya bean carriers, and can be utilised for handling of Roll-on/Roll-off traffic and containerised cargo.

STEVEDORES: Cable advice to Agents in Kingston, Jamaica, 48 and 24 hours ahead of vessel's ETA at pilot station for arrangements to provide stevedore and dock labour.

MEDICAL: Agents to be advised 48 hours ahead of vessel's ETA pilot station of medical attention required, details of inoculations, vaccination/fever certificates, etc. Free ambulance service provided. Nearest hospital approximately 15 miles.

TANKERS: Both sides of pier equipped to handle receival and delivery of Bunker "C" oil, caustic liquor, sulphuric acid and molasses. Diameters of the load/discharge lines are:

Bunker C Oil	8 in.
Caustic liquor	10 in.
Sulphuric acid	4 in.
Molasses	12 in.
Water	4 in.

Max. permissible draft 36 ft. below MSL.

Note: For vessels loading and discharging fuel oil and caustic/liquor max. length 650 ft., breadth 92 ft., max. draft 36 ft.

DENSITY: 1025 subject to slight variation during heavy rainfall.

FRESH WATER: Max. of 300 metric tons available. Delivery made from storage tank at a rate of 40 to 50 metric t.p.h.

FUEL: Bunker "C" fuel oil is available from dock. Application to be made to Shell Company (W.I.) Ltd., through ship's Agent for supply of bunkers. Pumping rate approx. 130 metric t.p.h.

Specification:

(i)	API 9.0 min – 10.0 max.
(ii)	Ash percent wt. 0.12 max.
(iii)	Flash point pmcc 150°F min.
(iv)	Viscosity SSF at 122°F. 120 min. – 200 max.
(v)	Pour point 60°F max.
(vi)	Vanadium ppm 475 max.

FIRE PRECAUTIONS: Strategically located fire hydrants throughout port and on pier. No special precautions apart from "No smoking" rule.

GANGWAY/DECK WATCHMEN: Service of watchman optional but not necessary. During time vessel is in port there is Customs guard on pier and strict security measures are carried out by port Security Force on personnel entering or leaving port compound which is surrounded by a chain-link security fence.

OPENING/CLOSING HATCHES: For bulk alumina vessels, opening and closing of hatches is done by crew members. For general cargo vessels, opening and closing of hatches may be done by crew members or on request to Agents, by stevedores.

SHIP CERTIFICATES:

Load Line Certificate.

Registration Certificate.

CUSTOMS ALLOWANCES: Tobacco: Each crew member including ship's officers, normally allowed by local customs authority 2 oz. of tobacco or 2 pk. of 20 or 25 cigarettes per day released from bond. Wine and/or Spirit: No limitations to use of wine on board. For spirits each crew member is allowed a part bottle per man.

IDENTIFICATION CARDS: Not necessary as the Passport will serve this purpose.

CONSULS: No consuls are available. Consular Offices are located in Kingston approximately 30 miles away.

REPAIRS: Limited repairs may be undertaken.

DRY DOCKS: None.

REPATRIATION: Upon request, local Agents arrange crew changes and any necessary repatriation.

AIRPORT: Norman Manley International Airport approximately 40 miles away.

TIME: GMT minus 5 hours.

HOLIDAYS: New Year's Day (1st January); Ash Wednesday (in accordance with calendar); Good Friday (in accordance with calendar); Easter Monday (in accordance with calendar); Labour Day (23rd May); Independence Day (first Monday in August); National Heroes Day (third Monday in October); Christmas Day (25th December); Boxing Day (26th December). These holidays are sometimes subjected to change in accordance with Government Proclamations.

1. No work is carried out on Good Friday and Christmas Day.
2. Work on vessels loading bulk alumina and discharging Bunker C oil and caustic liquor is usually carried out on other public holidays.
3. For general cargo vessels work is optional on public holidays except Good Friday and Christmas Day, and only carried out on Master's request or in accordance with Terms of Charter Party.

CARGO GEAR: Local Agents provide necessary cargo gear. These are tested every 6 months in accordance with Factory Law and certificates issued for respective maximum lifting capacities.

POLICE/AMBULANCE/FIRE: Old Harbour Constabulary Tel: 983-2255; Old Harbour Fire Brigade Tel: 983-2276. Port Esquivel also has its own fire brigade. An ambulance service is available for any crew member requiring medical attention. Several qualified doctors within a 6-mile radius of port. There is also a fire station.

TELEPHONES: Facilities do not exist for placing of telephones on board ship other than Magneto telephones. Telephones mounted on both sides of pier for easy access. International telephone services available and scale of rates is as per schedule listed in Jamaica Telephone Company's Directory.

GENERAL: Port normal working days Monday-Friday 0800 – 1630 hrs. Overtime in excess of 8 hours per day or 40 hours per week, Monday-Friday at time and a half normal rate; Saturday between midnight and midnight time and a half normal rate, double time for hours worked on Sundays and two and one half times for hours worked on public holidays, between midnight and midnight. Rail facilities exist on Western side of the pier. Distance from fender to centre of rail line 17 ft. 9 in. Ship chandlering or any other requirements may be acquired through local Agents.

SERVICES: Special services are limited. Arrangements can be made through vessel's Agents for the port or local contractors to undertake these jobs.

SHORE LEAVE: Crew members usually granted shore leave by Immigration Authority for period vessel remains in port. Immigration Authority can, however, withdraw permission of shore leave to any individual crew member who, in their opinion, may be a security risk.

REGULATIONS: No unusual regulations.

DELAYS: The normal delays in berthing, loading or discharging or bunkering can be expected when the two berths are occupied.

AUTHORITY: *(a)* Alcan Jamaica Company, Port Esquivel. A division of Aluminium Company of Canada Limited (Inc. in Canada), Old Harbour, Jamaica, West Indies. *Tel:* 983-2289. *Cables:* Esquivel, Kingston, Jamaica. *Contact:* E. N. Harding, Operations Manager.

(b) Port Authority of Jamaica, 15-17 Duke Street, Kingston, Jamaica. *Tel:* 92-20290/8. Telex: 2386 Portops Jamaica.

PORT KAISER: 17.52 N. 77.37 W.

DOCUMENTS:

6 Crew Lists.

4 Stores Lists.

Declaration of Crew Personal Effects.

Customs Clearance from Last Port.

Maritime Declaration of Health.

Vaccination Certificates for all crew members.

Cargo Documents.

PILOTAGE: Compulsory. Pilot boards about 1 mile seaward of the jetty. International Code Pilot signals used.

ANCHORAGE: Recommended 1.5 to 2 miles off end of finger pier from South to S.W.

MAX. SIZE: Tankers up to 40 ft. draft.

HEALTH: Pratique granted by Customs Officers who board on arrival, after Master has completed Maritime Declaration of Health, and Crew's Declaration of Health. All crew members require valid Vaccination Certificates. In event of suspected disease or fever on board Agent should be advised full particulars by radio before arrival.

RADIO: "KNRDO 6Y1."

TUGS: None available.

BERTHING: Tanker berth at the end of a finger pier. Pier head is adequately fendered and a holding off buoy is utilised if necessary because of swell. Vessels berth portside to the jetty. Both anchors used.

Finger pier is 610 ft. long. The berth is being dredged to 50 ft. depth.

TANKERS: Fuel and gas oil discharged, 8 in. hoses. No slop facilities.

DENSITY: 1025.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: 25 cigarettes and part bottle spirits per day per man.

CONSULS: Nearest at Kingston.

SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT: October 1978.

Documents:

6 Crew Lists.

3 Store Lists.

2 Curio Lists.

1 Vaccination List.

1 Maritime Declaration of Health.

Load Line Certificate.

Derat Certificate.

Clearance from Last Port.

4 Notices of Readiness.

Pilotage: Pilot available and compulsory. Pilot station 1 mile S.W. of Pier.

Restrictions: Day and night berthing possible.

Max. Size: LOA, 650 ft. Beam 90 ft. Max. draft 36 ft.

Tugs: No tugs available. In an emergency nearest tugs at Kingston.

Berthing: Length of pier 700 ft. 1 shiploader, max. outreach 90 ft. and max. clearance under loader 46 ft. 2 shoots load 1 hatch (port and starboard). Loader movable along dock for 600 ft. Max. loading rate 1,100 short t.p.h. or 25,000 tons daily for bulk carriers. Loading carried out 24 hours a day.

Berth not very satisfactory in heavy swell and ship's side rails are very prone to damage when loaded as large fenders (tractor tyres doubled up) hang over main deck and damage rails. Stevedores refuse to accept this damage.

Vessel only broke 1 mooring rope. Shore gangway used, of light aluminium construction which must be tended throughout. A hazard to get ashore or onboard.

When strong Westerly current running and Easterly winds blowing, Pilot informed me that it sometimes takes up to 7 hours to berth ships. When very heavy seas running, it is best to leave berth and return when weather improves.

Medical: 2 hospitals at Mandeville but seamen usually sent to Nursing Home.

Tankers: Fuel oil, diesel oil, sodium sulphate, caustic soda and sulphuric acid handled at the tanker berth.

Density: 1025 – 1026.

Fresh Water: Not available.

Fuel: Not available.

Time: GMT minus 5 hours. Except during Daylight Saving Time GMT minus 4 hours.

Repatriation: Reliefs and repatriation can be arranged through Kingston which is about 87 miles away by road. Reliefs flying out through Miami all lost their luggage for a while as it was booked right through to Jamaica. Advisable to book luggage to Miami, collect and clear through Customs and then re-check it in. U.S. visa also required even for transit through U.S.A.

Current: Usually Westerly at 2.5 to 3 knots.

Tidal Range: 1.5 ft.

Publications/Charts:

BA 260 Pedro Bank to the South Coast of Jamaica.
BA 258 Ports and Anchorages on the South Coast of Jamaica.
BA 446 Jamaica.
USA 26124 Portland Bight to Great Pedro Bluff (with plan of Port Kaiser).
NP 70 West Indies Pilot (N.W. Part) Vol. 1 with Supp. No. 4.

Tugs: The current runs at right angles to the steel girder type berth on stilts and makes it difficult to get the stern alongside so a powerful tug would have been of great assistance.

Working Hours: Office hours 0800 – 1600 but 24 hours when vessel in port.

Officials: Customs, Quarantine and Immigration Officials boarded on arrival. The Quarantine Official lives on board whilst vessel in port to ensure nothing is thrown into the sea.

Survey: Holds surveyed before loading for cleaniness and Certificate of Cleanliness issued. Draft survey taken before and after loading (6 ft. swell and rough seas at the time).

Laundry: Can be arranged but takes 2 – 3 days.

Provisions: Fresh provisions available from nearest country market at Mandaville. Market days – Wednesday, Friday and Saturday. Main stores can be ordered from Kingston but very expensive and trucking charge $150.

VHF: Channel 16 said to be monitored in Agents office at Port Kaiser, pilot boat and Dock Office Port Kaiser but not able to make contact when inward bound.

AUTHORITY: Port Authority of Jamaica.

PORT RHOADES, Discovery Bay: 18.29 N. 77.24 W.

(See Plan Book)

DOCUMENTS:

5 Crew Lists.
2 Stores Lists.
1 Customs Clearance from last port.
2 Declaration of Crew Personal Effects.
1 Maritime Declaration of Health (available on arrival).
Vaccination Certificates for all crew members.
1 Copy of each cargo document.

PILOTAGE: Compulsory. ETA's should be cabled to "Kaisbaux Discovery Bay", 48, 24, and 12 hours before arrival.

Pilot will board vessel on arrival 2 miles outside channel, if berth is available.

ANCHORAGES: No designated anchorage. If berth is occupied, vessels will remain within a 3-mile area of the channel until berth is available. Docking instructions are given by VHF.

The area around the harbour to a depth of 60 m. is a marine reserve for study. Positively no anchoring on surrounding reefs.

RESTRICTIONS: Entry may be at any time of day or night throughout the year.

MAX. SIZE: Max. permissible length, 700 ft.
Max. permissible breadth, 92 ft.
Max. permissible draft, 37 ft. 6 in.

PRATIQUE: Pratique inspection and clearance given on berthing. Notify "Kaisbaux, Discovery Bay" as soon as possible before arrival full details of any suspected disease or fever on board.

There is no Radio Pratique.

RADIO: Route all ETA's and cables via Kingston Radio or nearest radio station.

VHF: Channel 16, 24 hours a day. Channels 12, 13, 26 and 28 also available. Range 30 miles.

TUGS: None available. Pilot launch will assist in taking ship's lines during docking if required.

BERTHING: One finger pier, (Position 18° 28′ 45″ N., 77° 24′ 20″ W.) adequate fenders, used by bauxite ships and tankers alike.

Ships loading bauxite must dock with the top of the hatch covering of the first hold to be loaded not more than 35 ft. above sea level.

Bauxite loading rate 4,000 t.p.h.

All loading hatches to be opened for inspection if weather permits.

Gangway to be rigged ready for lowering immediately on berthing. safety net must be attached to the gangway.

Hawsepipes to be securely sealed as soon as berthing is completed. Draft reading and other ladders are to be kept hauled up at all times while the ship is berthed.

Rat guards to be installed on lines at all times when at berth. Washboards are to be installed over starboard wing tank outlets, so as not to discharge on pier.

STEVEDORES: All arrangements are made by Kaiser Bauxite Company for unloading/loading any general cargo.

MEDICAL: Medical facilities and hospital available in the vicinity.

TANKERS: Two fuel lines, hose 8 in. (pipe-line 12 in.) diameter. Back pressure 150 lb. One gas oil line, hose 8 in. (pipe-lines 6 in.) diameter. Back pressure 150 lb.

Tankers use same berth as bauxite vessels. It may be necessary at times for tankers to wait on bauxite vessels loading, or arriving, and tankers may have to vacate the berth before completion of discharging to make way for bauxite vessels which have absolute priority.

DENSITY: 1025.

FRESH WATER: Available.

FUEL: Not available.

FIRE PRECAUTIONS: Usual non-smoking precautions with respect to tankers. Portable fire extinguisher available on pier.

GANGWAY/DECK WATCHMEN: To be provided by vessel.

OPENING/CLOSING HATCHES: To be done by ship's crew.

CERTIFICATES:

Load Line Certificate.
Registration Certificate.
Derat Exemption Certificate.

CUSTOMS ALLOWANCES: Tobacco: Each crew member, including officers, normal allowance 2 oz. tobacco or 2 packets of 20 cigarettes per day released from bond. Wine: no limitations on use of wine on board. Spirits: Officers only are allowed part bottle.

IDENTIFICATION CARDS: Not required.

CONSULS: Nearest Consuls are in Kingston, 80 miles distant.

DRY DOCKS: No facilities in Jamaica for other than the smaller types of vessel (e.g. tug).

REPATRIATION: Can be arranged through ship's Agent.

AIRPORT: Montego Bay, 40 miles away; Kingston, 90 miles away.

Both are international airports, with several scheduled flights per day to U.S.A. and Europe.

TIME: GMT minus 5 hours.

TELEPHONES: No arrangements for ship-board connections.

GENERAL: *Buoyage:* IALA system "B".

SHIPMASTER'S REPORT: March 1984.

SatCom has been used successfully in giving the 48, 24 and 12 hour ETAs.

Call on Channel 16 VHF when 20 miles off.

Pilot will board about 1.5 miles to the N.E. of the entrance. Some Pilots do not like to dock vessel at night and delays may be encountered.

If awaiting berth drifting 8–12 miles off to the N.N.E. seems to be the most satisfactory. There is about a 0.5 knot West drift depending on weather conditions.

This vessel has a 93.2 ft. beam and is loaded without difficulty but a close eye must be kept so as not to get a starboard list that will be very hard to correct.

When docking, the approach will be at right angles to the dock. At about 200 yards away the port anchor will be let go and 2 lines sent to the farthest inshore bollard at the head of the dock. The vessel will then be worked alongside using small kicks ahead until it is fast alongside, starboard side too. All vessels dock starboard side in a very sheltered berth. When fast alongside there will be 6–7 shots out on the anchor. When making the approach have the 2 headlines married with a gantline and the pilot boat will have an easier time. Docking with strong offshore winds can be very difficult.

When departing the vessel heaves up on her anchor pulling herself in to the channel. Care must be taken not to speed so as to squat the vessel when going out loaded, especially in swells. There have been reports from other Masters of touching bottom in the channel and the divers in the local marine laboratory have confirmed anti-fouling paint on the reefs on the channel bottom.

Limited diving work can be arranged through Kaiser from the Marine Laboratory located in Discovery Bay.

Port officials are very friendly and helpful. Vessels bound for the States must keep a sharp watch for stowaways and smugglers.

AUTHORITY: Kaiser Bauxite Company, Discovery Bay, P.O., St. Ann, Jamaica, W.I. *Tel:* 973-2221/5. *Telex:* 7404. *Cables:* Kaisbaux. *Contact:* I. K. Pengelly, Shipping Superintendent.

SALT RIVER: 17.50 N. 77.10 W.

DOCUMENTS: Health Certificate. Crew List. Manifest. Bills of Lading and other ship's papers for cargo shipped, prepared by Wisco Wharves Limited, a subsidiary of The West Indies Sugar Company Limited.
PILOTAGE: Latest 12 hours prior arrival off Pilot station. Cable "Monymusk Lioneltown" giving name of vessel, ETA, date of arrival. Pilotage – optional, Barebush Cay; Compulsory, Pigeon Island; pilot boat at Salt River.
ANCHORAGE: 17° 49.58′ N.; 77° 08.40′ W.
RESTRICTIONS: No restrictions.
MAX. SIZE: Draft 30 ft.
HEALTH: Customs grant pratique.
RADIO: Cable Agents via Kingston Radio/6YI.
TUGS: Not applicable.
BERTHING: No berthing facilities.
STEVEDORES: 48 hours notice prior arrival of vessel. Commodity bulk sugar. Loading rate approximately 1,800 tons per day.
MEDICAL: No advance notice required.
FRESH WATER: Can be arranged if given sufficient notice.
FUEL: None available at port but can be arranged.
GANGWAY/DECK WATCHMEN: Customs guards.
OPENING/CLOSING HATCHES: Normally done by crew.
SHIP CERTIFICATES: Registered tonnage certificate on first call. Master's and Chief Engineer's Certificates of Competency, also Load Line Certificate.
CUSTOMS ALLOWANCES: Tobacco, determined by Customs. Wine and/or Spirit, determined by Customs.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Not possible.
REPATRIATION: Can be arranged.
AIRPORT: Palisadoes International approximately 50 miles away and served by regular airlines.
TIME: GMT minus 5 hours.
HOLIDAYS: New Year's Day; Ash Wednesday; Good Friday; Easter Monday; Labour Day (23rd May); National Heroes Day; Independence Day; Christmas Day (25th December); Boxing Day. Work can be arranged on all public holidays except Good Friday and Christmas Day.
POLICE/AMBULANCE/FIRE: Police Vere 233; Ambulance Vere 337; No port fire brigade.
TELEPHONES: Radio communication ship to wharf can be arranged.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Delays can be expected.
AUTHORITY: The West Indies Sugar Co. Ltd.
AGENT: The West Indies Sugar Company Limited, 5 Trevennion Park Road, PO Box 174, Kingston 5, Jamaica, W.I. Tel. 65927–8. Telex 13. Cable address: Head Office: "Wisco Kingstonja". Home Office: "Monymusk Lioneltown".

SAVANNA LA MAR: 18.12 N. 78.09 W.

DOCUMENTS: Declaration of Health Certificate forms obtainable from Supercargo. 4 copies Crew List, Stores List. Manifest, Bills of Lading and other ship's papers for cargo shipped prepared by Sugar Shipping Limited, a subsidiary of The West Indies Sugar Company Limited.
PILOTAGE: Latest 12 hours prior arrival off Pilot station. Cable "Wicaroo Frome" giving name of vessel, ETA, date of arrival, cash required. Diesel powered 88 h.p. launch painted black hull, red deck, white wheelhouse. District – Compulsory and Optional.
ANCHORAGE: 18° 11.27′ North; 78° 08.20′ West.
RESTRICTIONS: No night entry or sailing.
MAX. SIZE: Draft 19 ft.
HEALTH: Maritime Declaration of Health prepared by Master and lodged with Customs. MOH is notified of any suspected illness and action taken. Pratique automatic.
RADIO: Cable Agents via Kingston Radio 6YI.
TUGS: Not applicable.
STEVEDORES: No particular ETA advice required. Commodity, bulk sugar. Average loading rate 1,500 tons per day.
MEDICAL: No advance notice required. Hospital facilities available.
FRESH WATER: No facilities.
FUEL: No port facilities, but can be arranged.
GANGWAY/DECK WATCHMEN: Customs guards.
OPENING/CLOSING HATCHES: Normally done by crew.
SHIP CERTIFICATES: Registered tonnage certificate on first call. Master's and Chief Engineer's Certificates of Competency, also Load Line Certificate.
CUSTOMS ALLOWANCES: Tobacco, determined by Customs. Wine and/or Spirit, determined by Customs.
CARGO GEAR: No additional requirements. In use, grabs operated by ship's winches.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Not possible.
REPATRIATION: Can be arranged.
AIRPORT: Montego Bay International approximately 32 miles away and served by regular airlines.
TIME: GMT minus 5 hours.
HOLIDAYS: See "Kingston".
POLICE/AMBULANCE/FIRE: Police Savanna la Mar 621; Ambulance 533; Fire 666 and 540.
TELEPHONES: Radio communication ship to wharf can be arranged during day only.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Delays can be expected.
AUTHORITY: The West Indies Sugar Co. Ltd.
AGENT: The West Indies Sugar Company Limited, 5 Trevennion Park Road, PO Box 174, Kingston 5, Jamaica, W.I. Tel. 65927–8. Telex 13. Cable address: Head Office: "Wisco Kingstonja". Home Office: "Wicaroo Frome".

NOTES

Please also advise Shipping Guides Ltd.

Japan

GENERAL:

RADIO PRATIQUE: Procedures to obtain Radio Pratique:

A. Sanitary Certificates:

a. A vessel intending to obtain Radio Pratique should apply for issuance of Sanitary Certificate to Quarantine Office through Agents.

b. Accepting the application, Quarantine Officers will attend the vessel for Sanitary Inspection while the vessel is in the port in exactly the same manner as the inspection of deratisation.

c. When the vessel has passed the Sanitary Inspection, the Quarantine Officer will issue the Sanitary Certificate and give the Issuance Number to the Master. But in general respects, the inspection is rather severe.

d. The Sanitary Certificate is valid in all ports of Japan, and its term of validity is only for one year.

B. Application for Radio Pratique:

a. When the Master requires Radio Pratique, he should cable the Head of the Quarantine Station via Agents in accordance with the quarantine rule which stipulates that it must be done within 36 ours to 12 hours prior to the respected arrival port.

b. The items to be reported by cable are enumerated in clause (f) hereunder.

c. When Agents receive the telegram from the Master, the Agents submit the Radio Pratique Application Form together with a copy of the cable sent by the Master.

d. After checking and inspecting all telegrams and papers submitted by the Agents, the quarantine authorities will grant the Radio Pratique if everything is in order and issue the free pratique certificate and term of validity.

e. The Master who has received the cable advising issuance of the Free Pratique from the Authorities should submit the necessary documents, Crew List and Passenger List to the Authorities on his arrival.

f. ★Items to be reported by cable to the Authorities are as follows:

(1) Notification that this cable is the information provided by Item-2, Clause-17 of the Law concerned. This identification should be noted on the top of the body as abbreviation of "RPM".

(2) Name and nationality of the vessel (the item is unnecessary in this cable).

(3) Full number of Sanitary Certificate indicated with a number of seven (7) figures.

(4) Name of port of departure and its date.

(5) Name of ports of call and sailing date during 15 days before arrival.

(6) Name of port and ETA at destination of the vessel.

(7) Deratisation Certificate – name of the authorities issued, date of issue and kind of derat.

(8) Number of crew and passengers.

(9) Whether or not the vessel had transferred any passengers and/or goods from another vessel or aircraft on her voyage during 15 days before arrival. In case this is affirmative, details of which should be described.

(10) Whether there are any patients onboard or not, taken ill during 15 days before the arrival. In case this is affirmative, detailed conditions of illness must be given.

(11) Whether there has been any death of persons (with the exception of deaths caused by accident) during 15 days before arrival, and if this is affirmative, details of it, i.e. name and age of the person and/or present condition of the person.

(12) Whether rats were caught and whether there was any danger of the outbreak of black plague, and whether or not rats died abnormally.

(13) Whether there is or not goods on board tainted by any virus of quarantine epidemics.

(14) Whether or not there is a doctor on board.

(15) Name of Master of the vessel.

★*An example for Cable:*

RPM	084005	New York 1st Dec	Honolulu 16th Dec
(1)	(3)	(4)	(5)

Tokyo 25th Dec. 1000	Yokohama 1st Nov 81 Derat	Crew 35 Pax 3
(6)	(7)	(8)

9 to 13 None	AI	Taro Yamada
(9 – 13)	(14)	(15)

CREW JOINING:

Requirements of Travelling Documents to Japan for Crew/Superintendent:

Crew Joining vessel

Max. Stay ashore	Travelling Document	Visa	Remarks
(1) Ordinary Case			
within 5 days	Seaman's Book or Passport	No	Special Landing Permit issued but valid for crew travelling direct to port where crew join ship.
over 5 days	Passport	Req'd	See names of Countries for which visa exempted
(2) New building			
within 30 days	Seaman's Book or Passport	No	See (1) Remarks
over 30 days	Passport	Req'd	See names of Countries for which visa exempted
(3) Purchase/Delivery			
Crew arrival before ownership changed within 10 days	Seaman's Book or Passport	No	Max. 10 days stay ashore permitted subject to Agents' submission of Sale of Contract and Export Licence. See (1) Remarks
Crew arrival before ownership changed over 10 days	Passport	Req'd	See names of Countries for which visa exempted
Crew joining ship before ownership changed	Passport	Req'd	See names of Countries for which visa exempted
Crew arrival after ownership changed		Same as (1)	Ordinary case
Superintendent			
(4) All cases	Passport	Req'd	See names of Countries for which visa exempted

Names of countries for which visa not required:

Within 30 days New Zealand.

Within 90 days Argentina, Bangladesh, Belgium, Canada, Chile, Colombia, Costa Rica, Cyprus, Denmark, Dominican Republic, El Salvador, Finland, France, Greece, Honduras, Iceland, Iran, Israel, Italy, Luxembourg, Malta, Netherlands, Norway, Pakistan, Peru, Portugal, San Marino, Singapore, Spain, Sweden, Tunisia, Turkey, Uruguay, Yugoslavia.

Within 180 days Austria, Federal Republic of Germany, Ireland, Mexico, Switzerland, United Kingdom.

Remarks: The above schedule is made out by Dodwell Tramp Agencies on general understanding with Immigration Authorities. However, the above details are not expressly stated in the text of the law but based on Immigration Control Order Article 16 which reads:

Article 16. Permission for landing for Re-shipping.

1. The Immigration Inspector may, in case an alien crewman desires to pass through Japan in order to re-ship on board another vessel in another port of entry in Japan, upon application of the carrier operating the vessel on which the alien crewman has arrived, and in case the alien crewman desires in order to become a crewman of a vessel in Japan, to land from another vessel, etc. and pass through Japan, upon application of the carrier operating the vessel in Japan, permit the landing for re-shipping respectively.

2. In case the permission provided for in the preceding paragraph is given, the Immigration Inspector shall issue a permit for landing for re-shipping to the crewman concerned.

3. In case the permission provided for in paragraph 1, is given, the Immigration Inspector may impose upon the crewman such restrictions regarding period of stay in Japan, route to be followed in transit, and any others which he may deem necessary in accordance with Ministry of Justice Ordinance.

In view of the foregoing, the contents of the schedule is not absolute and may be altered. In order to ensure that crew members are permitted to land Japan to join ships, please send Agent information well in advance on personal data of crew member such as Full Name, Rating, Date of Birth, Passport or Seaman's Book Number together with Flight No. and Ship's ETA/calling port.

POLLUTION: Effective 1975, the Marine Pollution Prevention Law requires any tanker of 150 tons gross and above which is loaded with an oil cargo to have materials for oil removal either on board, or aboard escort boats, or at a depot base. Depot bases are understood to have been established, and in this connection Owners, Time Charterers, or Masters are strongly recommended to contact their Agents at least 10 days prior to vessels' arrival Japan.

PILOTAGE: *Compulsory Pilot waters surrounding Japan:* Pilot compulsory ports, channels and straits:

I-A. Harbour: Vessels over 300 G/T. Hibikinada, Kawasaki, Kobe, Kokura, Moji, Naha, Sasebo, Shimonoseki, Tobata, Wakamatsu, Yawata, Yokohama, Yokosuka.

I-B. Harbour and Bay: Vessels over 10,000 G/T. Chiba, Funabashi, Kisarazu (Kimitsu), Tokyo and Tokyo Bay, Mizushima.

II. Channels and Straits: Vessels over 10,000 G/T. Kanmon Kaikyo (Strait), Uraga Suido (Channel), Akashi Kaikyo (Strait), Bisan Seto, Kurushima Kaikyo (Strait). (Large vessels, oil tankers, liquefied gas tankers and vessels carrying dangerous cargo should arrange for watching-boats to guard their course until their safe navigation is confirmed even after they leave the traffic route.)

The Maritime Safety Agency has requested that all foreign flag vessels and vessels carrying dangerous cargo employ Pilots in order to maintain the safety of shipping traffic in the above-mentioned waters surrounding Japan.

The Agency has also requested that vessels take Pilots on board when they navigate the Irago Suido and Yura Seto (Tomogashima Suido).

SAFETY: The following telex was received from Japan regarding safety regulations for LPG carriers at Japanese ports.

Quote:

The Receiving Terminal Clause (LPG Tankers).

In order to prevent marine pollution by oil and ensure safety in cargo operations, Owner, Master and Crew shall abide by international and/or national laws and regulations.

Especially at discharging port(s) in Japan, Owner, Master and Crew shall observe "Marine Pollution and Marine Disaster Prevention Law" and other relevant law(s).

Moreover, Owner, Master and Crew are strongly requested to observe and/or take actions in accordance with the clauses stipulated hereunder.

(a) Before arrival at the first discharging port, the vessel shall complete undermentioned operations:

1. The following pumps and lines shall be flushed and kept clean:
   Vessel's pumps: fire pump and G.S. pump
   The lines: bilge lines in engine room
   fire lines and G.S. lines.
2. Reliquefaction units shall be checked to see whether they are in good working condition.
3. Cargo handling equipment on board shall be tested in accordance with the instructions given by Charterer; especially, the pressure test of cargo and vapour lines shall be done with a pressure of more than 5 kg./sq.cm. Lubricating lines for cargo pumps (if equipped) and other lines connected with above mentioned lines shall be tested at working pressure prior to the vessel's arrival at the discharging port.
   Safety valves of cargo tanks and cargo lines shall be checked to see whether they are in good condition.
4. Upper deck shall be kept clean and free from oil.
5. The faces of manifolds for connecting with shore lines shall be kept clean.
6. Mooring winches, derricks, cargo control equipment and engine (main engine, generator, boiler, etc.) shall be checked to see whether they are in good working condition.
7. Vessel shall send the Charterer the result of the operations stipulated in this clause (from item (a)-1 to (a)-6) by radio in accordance with Charterer's instructions 3 days or more prior to ETA at the first discharging port.

(b) During berthing operation and while the vessel is alongside the pier, the vessel shall comply with the terminal safety regulations hereunder:

1. While the vessel is alongside the pier, the following work shall be prohibited:
   i. Transferring of bunkers.
   In a case of emergency, however, such work shall be done after obtaining permission from the terminal representatives by checking the work to be done.
   ii. The operations for which fire is used and those which are likely to cause fire.
   iii. The work which will make the vessel unable to move under its own power.
2. During cargo operation, necessary numbers of watchmen for ensuring safety shall be on deck, besides Officers on duty, so that they may watch the vessel and the adjacent areas to eliminate any type of accident.
3. While the vessel is in port, the boil off gas shall not be exhausted.
4. The pressure of the lubricant oil at the stern tube after seal shall be kept lower than that of sea water outside the vessel.
5. While the vessel is alongside the pier, gas detection shall be made at regular intervals in the following places:
   i. Around the valves of each tank dome.
   ii. Around the manifolds.
   iii. Around the compressor room.
   The Crew of the vessel shall be prepared for cargo leakage and/or gas leakage which might happen aboard the vessel.

(c) If there is any indication of cargo leakage and/or gas leakage during cargo operation, the vessel shall stop all pumping operations and notify the Terminal Representatives and/or Charterer's Supervisor(s) to that effect.
The vessel shall not resume cargo operation unless a thorough investigation is made, appropriate remedies are taken, and permission from the Terminal Representatives is obtained.

(d) When Charterer sends their Supervisor(s) to the vessel to check the vessel or to assist cargo handling operation in the case of necessity, Owner, Master and Crew shall agree to cooperate with him or them.
At all times, however, the full responsibility for cargo operation shall still lie with the vessel.

(e) Owner shall send the Safety Marine Supervisor(s) to the vessel to attend the vessel's cargo operation at all times and he or they shall also be requested to attend the meeting for securing safety which is held prior to commencement of cargo operation.

Unquote.

REPORT: 1984.

Providing information of an anchored vessel at time of the approach of a typhoon in Tokyo Bay.

The Regional Maritime Safety Headquarters and the relative authorities have issued a notice, the contents of which is summarised as follows:

In Tokyo Bay, there are 2 congested areas with anchoring vessels at the time of the approach of a typhoon and cases of dragging anchor and collisions will occur. We, therefore, will try to provide the following information concerning the situation of anchoring vessels when a typhoon approaches these areas of Tokyo Bay for the time being, make effective use of the anchorage and prevent accidents to anchoring vessels.

1. Office to provide information . . . Tokyo Wan Traffic Advisory Service Centre (Tokyo MARTIS or VTS Tokyo)

2. Time of commencing/ending information provision . . . The time when the recommendation of refuge is established/withdrawn by Captains of the Ports in Tokyo Bay.

3. Individual information . . . The number of anchoring vessels at 10 minutes to every hour will be informed in English and Japanese by VHF (Call by Channel 16, communicate with Channel 14 or 22) or telephone (Telephone Number: 0468-43-8622-8624) upon request of vessels.

Anchoring vessels in Tokyo Bay are requested to pay careful attention to the following subjects when stormy weather such as a typhoon is expected.

– Anchoring vessels are requested to keep watch continuously on VHF Channel 16.

– Vessels should keep the main engine on standby-by at all times.

SHIPMASTER'S REPORT: August 1978.
It is possible to have the latest changes in ETA relayed by VHF to Inland Sea Pilot stations, for:

1. Wadamisaki via Kobe Port Radio on Channel 16, call "Kobe-Port", or Osaka Port Radio on Channel 16, call "Osaka-Port".
2. Sekisaki via Oita Port Radio on Channel 16, call "Oita-Port".
3. Hesaki, via Shimonoseki Port Radio on Channel 16, call "Shimonoseki Port".

These stations are very co-operative and they immediately give the latest information concerning boarding-time and place, as well as requirements concerning the pilot ladder.

AIOI: 34.46 N. 134.28 E. (See Plan Book)

PORT LIMITS: A line drawn between Kama-Saki and Kane-Ga-Saki defines the seaward limit of the port.

DOCUMENTS:
Ship's Register.
2 Voyage Memorandum (List of ports of call).
Last Port Clearance.
3 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist watch, radio, firearms/swords, etc., (only at first port of call in Japan).

Ship's Agents will prepare: Inward/Outward Declaration. 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all inland sea ports. Pilotage compulsory for vessels of 10,000 g.r.t. and over, and recommended for smaller vessels in view of number of islands and difficult channels causing navigational hazards. Pilots obtained from one of three Pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position 34° 34.09′ N.; 135° 11′ E. Telegraphic address: "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse. (Vessels transitting Bungo Channel.) Position 33° 13′ N.; 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position 33° 56′ 24″ N.; 131° 03′ 12″ E.

Aioi Dock Master not licensed to pilot vessels from outer harbour and boards at anchorages outside Aioi Bay.

ANCHORAGES: 9 anchorages outside Aioi Bay and 2 anchorages inside the Bay as follows:
North: True bearing 342° from Kasamatsu Iwa, distance 1,340 m.
South: True bearing 335° from Kasamatsu Iwa, distance 860 m.

MAX. SIZE: See "Berthing".

HEALTH: Pratique to be obtained at another Port prior arrival Aioi.

At first port of call in Japan, vessel must obtain Free Pratique. Quarantine officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards and Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agents prior to arrival and close all soil pipes before entering port.

TUGS: Normally join vessel at anchorage inside Aioi Bay. Tug's lines always used without charge.

BERTHING:

Wharf No.	*LOA (m.)*	*Max. Draft at LW (m.)*
1	266	7.0
2	175	5.5
3	Usually not used	
4	284	5.5
5	100	5.5
6	Usually not used	
7	340	7.0
8	340	5.5
9	290	6.5
10	340	5.5
11	230	5.5
12	350	7.5

RADIO: Recommended Master communicates with Agents through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi and Northbound to contact Nagasaki Radio respectively.
MEDICAL: Full hospital facilities available without prior notice.
TANKERS: Must be fully gas-freed before entering the port. No facilities for tank cleaning or gas freeing in the port. Barge for slop disposal can be arranged by Agents.
DENSITY: Average 1025/1026 Winter, and 1018/1020 Summer.
FRESH WATER: Available from jetty/dock.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days prior notice.
CUSTOMS ALLOWANCES: Only allowed cigarettes for personal use, but no spirits.
CONSULS: None.
DRY DOCKS:

Restrictions: Vessels may anchor any time day or night. Draft and trim to be adjusted to enter drydock per dockyard recommendation as follows:

Name of Dock	*Max. Draft at L.W.*	*Max. Trim*	*Min. Trim*
No. 1 D.	5.50 m.	$\frac{L(m)}{200}+1.50$ m.	$\frac{L(m)}{200}+0.10$ m.
No. 2 D.	4.50 m.	$\frac{L(m)}{200}+1.50$ m.	$\frac{L(m)}{200}+0.10$ m.
No. 3 D.	5.50 m.	$\frac{L(m)}{300}+1.50$ m.	$\frac{L(m)}{300}+0.10$ m.

Deeper draft available at HW.

Max. Size: Max. size of ships to be accommodated as follows:

	LOA	LBP	Breadth	d.w.t. (LT)
No. 1	238 m.	230 m.	33 m.	73,000
	780 ft. 9 in.	754 ft. 7 in.	108 ft. 3 in.	
No. 2	156.1 m.	145 m.	19.8 m.	14,000
	512 ft. 1 in.	475 ft. 8 in.	63 ft. 11 in.	
No. 3	341 m.	328 m.	54.5 m.	300,000
	1120 ft.	1076 ft. 1 in.	178 ft. 10 in.	

REPAIRS: Dockyard port. All repairs available. Specialist technicians obtainable from Kobe/Osaka area.
SURVEYORS: Lloyd's Register, N.K.K. and A.B.S. have offices in the I.H.I. Shipyard. Other surveyors available from Kobe.
AIRPORT: Osaka (Itami).
TIME: GMT plus 9 hours. Permanent.
POLICE/AMBULANCE/FIRE: Police 110 or Aioi 2–0740; Ambulance/Fire 119 or Aioi 2–7128.
EMERGENCY CO-ORDINATION CENTRE:
Marine Safety Agency, Himeji Branch office: Tel: 0792 - 34 - 1016.
Marine Safety Agency, Kobe Office: Tel: 078 - 331 - 0111. Call sign: JGD/Kobe Hoan.
TELEPHONES: Placed aboard at IHI shipyard.
SERVICES: No special services at Aioi, but available from Kobe/Osaka.
SHORE LEAVE: There is no restriction on crew's shore leave if they carry shore pass issued by local immigration office.
AUTHORITY: Kamigori Doboku (Public works) Office, 500 - 5, Aza Maruogami, Kamigori, Kamigori-Cho, Ako-Gun, Hyogo Pref. *Tel:* (07915) 2 - 0083.
AGENT: See "Himeji"

AKITA: 39.45 N. 140.03 E.

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 5 Crew Lists including Passport Numbers.
- 5 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist watch, radio, firearms/swords (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration. 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Ships Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory but recommended, available daylight only. Boards at 39° 46′ N., 140° 00′ E. (1 mile 270° from Akita lighthouse) or off Funakawa 1 mile 140° from breakwater end light if required. 2 Pilots board if ship's gross tonnage exceeds 18,000. Cost 180% of pilotage.
ANCHORAGE: Off Akita, 2 miles 270°-280° from Akita Lighthouse. Depth exceeds 20 m. Bottom – soft clay with mud. No buoys.
RESTRICTIONS: Pilot available daylight only.
MAX. SIZE: See "Berthing". Min. depth at extreme low water – In fairway – 10.0 m. At Anchorage – 20.0 m.
HEALTH: Officers stationed at Funakawa. Quarantine anchorage 39° 51′ N. 139° 53′ E. When impossible to inspect at Funakawa, i.e. during bad weather, attends off Akita.
RADIO: Niigata Radio when ship coming from South. Sapporo Radio when ship coming from East/North. Choshi Radio if long distance.
VHF: VHF Channel 16–156.8 MHz. VHF Channel 12–121.5 MHz. Operated by Regional Maritime Safety Headquarters (Harbour Master).
TUGS: 1 tug 2,000 h.p. available owned by local government. 5 tugs (250-1,200 h.p.) available, privately owned.

BERTHING:

Wharf	*Length (m.)*	*Depth (m.)*	*Berthing Capacity (g.t.)*	*Discharging*
Gaiko No. 1	270	13.0	50,000	Zinc Concentrates, Phosphate Rock
Ohama No. 1	185	10.0	15,000	Logs
Ohama No. 2	185	10.0	15,000	Cement, G.C.
Ohama No. 3	185	10.0	15,000	Bagged Cargoes.
Nakajima No. 1	161	9.0	10,000	Phosphate Rock, Grain, Logs
Nakajima No. 2	185	10.0	15,000	Zinc Concentrate, Cement
Nakajima No. 3	185	10.0	15,000	Zinc Concentrate, Cement
North Pier A	122	7.5	5,000	Logs
North Pier B	227	7.5	5,000	Logs, Coal
South Pier C	227	5.5	2,000	Bagged Cargoes
South Pier D	122	5.5	2,000	Bagged Cargoes
Terauchi Pier	200	7.5	5,000	Grain, Plaster, Cement
Mukaihama No. 1	130	7.5	5,000	Logs
Mukaihama No. 2	130	7.5	5,000	Logs
Mukaihama No. 3	185	10.0	15,000	Logs
Mukaihama No. 4	185	10.0	15,000	Logs
Akita Power Stat. No. 3 Dolphin	313	13.0	50,000	Crude Oil
Tohoku Seishi Wood Chip Berth	210	10.0	35,000	Wood Chips

STEVEDORES: Working time 0830–1630 hrs. every day.

Phosphate rock in bulk: 200–270 t.p.h. by shore crane, 50–70 t.p.h. by ship's gear.

Grain in bulk: 150–170 t.p.h. by shore crane, 40–60 t.p.h. by ship's gear.

Logs/lumbers: 200,000 BM per gang per day (Nanyozai), 80,000–100,000 per gang per day (Beizai).

Potash in bulk: 150–180 t.p.h. by shore crane, 50–60 t.p.h. by ship's gear.

Fertiliser in bag: 250–300 tons per day per gang.

Zinc concentrate in bulk: 140–160 t.p.h. by shore crane. 40–60 t.p.h. by Ship's gear.
MEDICAL: Hospital and treatment available.
TANKERS: See "Berthing".
DENSITY: 1020–1021. Tidal range 20/30 cm.
FRESH WATER: Available at every wharf. Rate 30 t.p.h.
FUEL: Domestic bunkers available. If bonded bunkers required, brought from Hakodate, Niigata.
GANGWAY/DECK WATCHMEN: Not compulsory, but available if required.
OPENING/CLOSING HATCHES: Stevedores open and close hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting charges.
CERTIFICATES: Ship's register to show Customs Inspector to check ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance seems poor.
CUSTOMS ALLOWANCES: Only 50 cigarettes to take ashore. No spirits.
CONSULS: No Consuls, but 2 notary public offices.
REPAIRS: Minor repairs only.
REPATRIATION: Possible.
AIRPORT: Flights to Tokyo/Osaka/Sapparo 1–4 times per day. 20 km. from port.
TIME: GMT plus 9 hours. No alterations during year.
HOLIDAYS: Local holidays: January 2nd, 3rd, August 13th, 14th, December 30th, 31st. 1st, 3rd and 5th Sunday of each month also non-working.
POLICE/AMBULANCE/FIRE: Contact through Agents.
SERVICES: Provisions – Available. Hold Cleaning – Available. Surveyor – Available from Niigata.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days.
AUTHORITY: Akita Port Administration Office, 7-1 Nishi 1-Chome, Tsuchizaki Minato, Akita City. *Tel:* (0188) 45-2021/0042/0652.
AGENT: Sub-Agents of Dodwell & Co. Tokyo. Akita Kairiku Unso Co. Ltd. 5–9 Nishi 2-chome, Tsuchizaki-Minato, Akita-shi, Akita-ken. Japan, O11. Tel. Akita (0188) 45–0185/9. Telegraphic: "Kairiku Akita". Telex: 8422–24.

AMAGASAKI: 34.42 N. 135.24 E. (See Plan Book)

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 3 Crew Lists including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Usual for Pilot to embark at Kobe (Wada Point); however, if Master does not require a Pilot between Wada Point and Amagasaki, Pilot embarks off Amagasaki.

Cables: "Hanshinpilot Osaka" and "Hanshinpilot Kobe". One day's notice ETA required. Telephone through VHF. 3 Pilot boats at Osaka and 6 boats at Kobe with wireless communication with Pilot station. Pilot boards Kobe, Wada Point (Kobe quarantine anchorage). Amagasaki, 2.5–3 miles off Amagasaki. In case bad weather unable to take Pilot. Safe Pilot ladder required. Vessel waits for Pilot at anchorage as above.

ANCHORAGE: No quarantine anchorage; quarantine inspection only available at Kobe (Wada Point). Safe anchorage (approx.) position 34° 39′ 30″ N., 135° 20′ 18″ E. Draft 12.8 m.
RESTRICTIONS: Pilot not available after sunset.
MAX. SIZE:

	Kobe Steel Works (Ohgimachi Wharf)	*Kobe Steel Works (Ohama Wharf)*
Max. LOA	230.0 m.	176 m.
Max. breadth	No Limitation	No Limitation
Max. draft	11.70 m.	10.4 m.
	Public Wharf	
Max. LOA	176.21 m.	
Max. breadth	No Limitation	
Max. draft	10.0 m.	

Daikyo Oil Jetty. Max. LOA 198 m., beam no restrictions, max. draft 10.6 m.
HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to contact Choshi and North bound to contact Nagasaki Radio respectively.
TUGS: 1 tug × 2,200 h.p. Additional tugs available from Kobe. Tug usually joins vessel at anchorage off Amagasaki. Tug's line used for operation free of charge.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
Public Berths:

No. 1	Length 165 m.	Depth 9.0 m.
No. 2	Length 150 m.	Depth 9.7 m.
No. 3	Length 180 m.	Depth 10 m.

Kobe Steel (Ohama): Max. d.w.t. 25,000. Berth length 364 m. Depth 10.4 m. Products handled, ore and coal. 3 cranes × 200 t.p.h.
Kobe Steel (Ohgimachi): Max. d.w.t. 35,000 or 55,000 with part load. Berth length 220 m. Depth 11.7 m. Product handled, coal. 3 cranes × 300 t.p.h.
CRANES: 3×10 ton cranes at the public wharves.
TANKERS: Daikyo Oil Jetty suitable for up to 33,000 d.w.t. Discharge rate 1,500 t.p.h. through one 10 in. pipe.
STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY:

	Ohgimachi Wharf	*Ohama Wharf*	*Public Wharf*
Winter	1023.5–1025.0	1020–1025	1025–1119
Summer	1022.0–1025.0	1013–1025	1017–1025

FRESH WATER: Available at any time.

	Kobe Steel Works Wharfs	*Public Wharf*
Methods	Shore line	Shore line
Sunday, Holiday	Daytime 40% up	40% up
	Before midnight 50% up	50% up
	After midnight 100% up	50% up

Daikyo Oil Jetty. Only available by barge from Kobe.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
Bunkering at Oil Jetty prohibited.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
Compulsory for tankers working cargo at oil jetty.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: No consulate in Amagasaki area.
REPAIRS: No dockyard. Minor repairs can be carried out on vessel alongside wharf.
REPATRIATION: Possible.
AIRPORT: International airport Osaka, 15 miles from Amagasaki.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
HOLIDAYS: Kobe Steel (Ore/Coal) Nil. Public Wharf (Scrap) 20th July.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONE: No telephone installation service on board.
SERVICES: Compass adjustment can be carried out at anchorage.
SHORE LEAVE: Local Immigration Officers issue shore pass valid for only 3 days, but 3 days extensions possible if ship stays longer.
AUTHORITY: Amagasaki Port Administration Office, 21, Doi-cho 7-chome, Amagasaki City, Hyogo Pref. *Tel:* (06) 412-1361/5.
AGENT: Dodwell Tramp Agencies, Osaka. (see "Osaka".)

ANAN (Tachibana): 33.52 N. 134.40 E.

DOCUMENTS: and all general information, refer to "Shimotsu".
PILOTAGE: Not compulsory. Pilot can be arranged through Agent if required.
MAX. SIZE: Max. draft 10.50 m., limited by channel depth.
HEALTH: Closed port. If arriving directly from abroad, vessel should proceed to Shimotsu for health clearance. Immigration authorities attend from Komatsushima if required.
TUGS: One tug of 2,000 h.p. available.
BERTHING: Nippon Denko Wharf, length 200 m., depth alongside 11 m. Unloading capacity 500 t.p.h.
FRESH WATER: Available from shore hydrants only.
FUEL: By barge from Hanshin area only.
AUTHORITY: Anan Doboku (Public Works) Office, Aotani, Tomioka-cho, Anan City, Tokushima Pref. *Tel:* (08842) 2-3111.
AGENT: See "Niihama".

AOMORI: 40.52 N. 140.45 E.

DOCUMENTS: Documents and all general information, refer to "Hachinohe".
PILOTAGE: Not compulsory. Harbour Pilot available at Quarantine Anchorage.
RESTRICTIONS: Day and night entry possible.
HEALTH: Free Pratique granted at the anchorage.
TUGS: 1×1,680 h.p. and 1×70 h.p.
BERTHING:

Berth	*Length (m.)*	*Depth (m.)*	*Max. draft (m.)*	*Max. Size (g.r.t.)*
No.2 Wharf (2)	178	9.0	8.5	10,000
(3)	155	7.5	7.0	5,000
(4)	193	9.0	8.5	10,000
3,000 ton Pier	115	7.5	7.0	3,000
3,000 ton Pier	260	5.5	5.0	3,000
Tsutsumi Wharf	260	7.5	7.0	5,000
Aburakawa Lumber Port	200	4.5	4.0	5,000

CRANES: 2×35 tons, 2×18 tons and 1×13 tons.
TANKERS: *Bridgestone Pier:* Max. LOA 260 m., max. draft 12.0 m. Product handled: LPG, 1×12 in. line, discharge rate 1,200 t.p.h.
FUEL: Can be supplied by barge from nearest stock port (Hakodate).
FRESH WATER: Available ex-wharf.
REPAIRS: Small repairs possible.
AUTHORITY: Aomori Port Administration Office, 5-5, Hon-cho 4-chome, Aomori City. *Tel:* (0177) 34-4101.
AGENT: See "Hachinohe".

ATSUMI: 34.40 N. 137.04 E.

DOCUMENTS, and all general information: refer to "Yokkaichi".
PILOTAGE: Compulsory; Pilot boards at the point 300° – 7 miles from Kamishima Lighthouse.
Also see "Nagoya" – "Pilotage: Shipmaster's Report".
RESTRICTIONS: No possibility of passage through Nakayama Suido after sunset. However, vessels under 9 m. draft able to enter from Nojima South Passage.
MAX. SIZE: *Dolphin Pier:* 70,000 d.w.t., LOA 240 m., Max. draft 12.50 m.
SBM: 210,000 d.w.t., Max. draft 13.00 m.
CLEARANCE: *Quarantine:* Quarantine Office opened at Atsumi.
Immigration: Immigration Officials attending from Toyohashi.
TUGS: Minimum 2 tugs required for mooring/unmooring due to strong current.
BERTHING: *Dolphin Pier:* Lat. 34° 39′ 36″ N., Lat. 137° 04′ 54″ E. 2.5 km. from installation.
SBM: Lat. 34° 39′ 47″ N. Long. 137° 03′ 56″ E. 2 km. from installation.
Shoreline: Dolphin Pier: 2×12 in, discharge rate 3,000 t.p.h.
SBM: 2×16 in, discharge rate 7,500 t.p.h.
FRESH WATER: At Dolphin Pier: ex pipe-line (boiler water only). At SBM: by barge.
FUEL: Bunkering permissible only at anchorage by barge.
DENSITY: 1025 at both berths.
AUTHORITY: Chubu Electric Power Co. Inc., No. 1 Toshin-Cho, Higashi-Ku, Nagoya, 461 Japan. *Tel:* (052) 951-8211. *Tel:* 444-4405 Chuden J.
AGENT: Chubu Port Service Co. Ltd. (Subsidiary company of Port Authority).

CHIBA (including Yahata): 35.36 N. 140.07 E.

(See Plan Book)

DOCUMENTS:

Ship's Register. Last Port Clearance. 3 Crew Lists including Passport Numbers, 3 Passenger Lists. 1 Stores List. 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Harbour Pilots are available at the anchorage.

Pilot not available after sunset.

Also see "Pilotage" in "Japan – General".

ANCHORAGES: Quarantine anchorage on Northern part of Tokyo Wan. Chart No. 1061, published by Maritime Safety Agency.

SIGNALS: Following signals exhibited at Chiba Lt. and Chiba Signal Station.

	By Night	*Remarks*
Chiba Route	W. flash 2 secs.	Over 500 GT outwards — STOP.
	R. flash 2 secs.	Over 500 GT entering — STOP
	R. and W. flash 3 secs.	Over 10,000 GT entering or outwards — STOP.
	3R. and 3W. flash 6 secs.	Entering or outwards — STOP.
Ichihara Route	O G. O G.	Over 500 GT outwards — STOP.
	O R. O R.	Over 500 GT entering — STOP.
	O G. O G. O R.	Over 10,000 GT entering or outwards — STOP.
	O G. O G. O R. O R.	Entering or outwards — STOP.

RESTRICTIONS:

	Length (m.)	*Width* (m.)	*Depth* (m.)
Funabashi Route	9,000	300	−12
Chiba Route	14,720	350	−18
Ichihara Route	2,350	250	−12
Anegasaki Route	1,450	350	−16
Shiizu Route	2,200	300	−16
Kitasode Route	1,500	300	−10.5

MAX. SIZE: See "Berthing".

HEALTH: Radio Pratique available, requested through Agent. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Chosi Radio or Nagasaki Radio which covers all ports in Japan. If specifically West bound vessel to contact Chosi and North bound to contact Nagasaki Radio respectively.

RADAR/VHF: No radar service. VHF call sign "Chiba Port Radio" Channel No. 12 156.6 MHz (Simplex), Channel 14 156.7 MHz (Simplex), Channel 16 156.8 MHz (Simplex), Channel 20 161.6 MHz (Duplex), Channel 22 161.7 MHz (Duplex).

TUGS: 14 tugs, 1,400 h.p. – 3,900 h.p. Tugs join vessel at entrance of each waterway. Tug's line used.

CRANES: Floating cranes, 50 ton – 600 ton, available from Yokohama.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep her Agents advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. (50% additional of basic stevedorage) 2100 – 0500 hrs. next morning (130% additional) Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

FRESH WATER: Available by barge and shore line.

FUEL: Most grades available.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Carried out by stevedores.

SHIP'S CERTIFICATES: See "Tokyo".

CUSTOMS ALLOWANCES: Tobacco – 200 cigarettes. Wine and/or spirits – 1 bottle.

CONSULS: None.

REPAIRS: All major repairs possible.

DRY DOCK: Mitsui Ship Building Yard 500,000 d.w.t. and 300,000 d.w.t. dry docks.

REPATRIATION: Possible.

AIRPORT: About 40 km. to New Tokyo Airport (Narita).

BERTHING: Contact Agent for berthing arrangements on entry. No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Name of Berth	*Length* (m.)	*Depth* (m.)	*Capacity* (d.w.t.)	*Shore Cranes & Pipe-lines*
(Katsunom Area)				
(Public)				
Higashi Futo A,B	260	− 7.5	5,000	
Chuo Futo Kita B,C,D	390	− 7.5	5,000	
E,F,G	390	− 7.5	5,000	
H,I	130	− 7.5	5,000	
No. 1 – 3	555	−10	15,000	
(Private)				
Kami Futo	350	−12	30,000	Belt conveyor
(Chiba Area)				
(Public)				
Dezu Futo A,B,C	430	− 7.5	5,000	
Chuo Futo A,B,C,D,E	1,000	−10	15,000	
Ichihara Ganpeki A,B	240	− 7.5	5,000	
(Private)				
Mitsubishi Pier	50	− 9.5	8,800	100 t.×1
Nippon Silo Pier	160	−12	50,000	200 t.×2
Sin Tozai Reizosoko Pier	120	−12	30,000	
Chiba Kyodo Silo Pier	150	−12	50,000	300 t.×1
Hisosirt Nippon Seito Pier	150	−12	20,000	330 t.×1
Newport Sangyo Pier	150	−12	40,000	
Keiyo Mokuzai Futo	120	−12	30,000	12 t.×2
Kozai Yard Wharf	200	− 7.5	2,000	20 t.×1
Oioda Cement Pier	55	−12	20,000	400 t.×1
Chiba Mokuzai Futo	180	−12	30,000	15 t.×4
Tosei Itochu Pier	160	−12	50,000	400 t.×1
Marubeni Abeni Oil	320	−14	50,000	500–2,400 kl./h.
Kawatetsu Wharf (A)	200	− 9.5	12,000	10 t.×1
(B)	150	−10.5	25,000	20 t.×3
(C)	138.7	−11	30,000	22 t.×3
(E)	160	−10.5	10,000	Nil
(F)	270	−12	45,000	16 t.×2
(G.H)	167	− 9.5	11,000	9 t.×2, 10 t.×4
(J)	405.5	−18	150,000	60 t.×2
(L.M)	530	−12	45,000	15 t.×2, 16 t.×2
(E.B)	352	−18	200,000	60 t.×2
(E.A)	197	−11.5	30,000	
(OD)	130	−11	20,000	22 t.×1
(OC)	245	−10.5	33,000	15 t.×2
Toden Chiba (S)	35.2	− 9.5	6,000	800 kl./h.
(B)	305	− 9	10,000	1,200 kl./h.
(Q)	22.5	− 7.5	6,000	250 kl./h.
(Ichihara Area)				
Furukina Dolphin	63	− 8	7,000	Nil
Showa Denko No. 2	250	−10	16,000	50 t.×1
Mitsui Zosen No. 5	385	− 9	150,000	40 t.×1
No. 1	200	− 9.5	213,000	20 t.×1
No. 2	227	− 8	213,000	
No. 4	400	− 9	213,000	
	398	− 9	33,000	
Showa Hatsuden Pier	36	− 9.5	3,000	500 kl./h.
Fuji Denki Pier	80	− 9.5	10,000	350 t.×1
Fuji Sash Wharf	76	− 9	10,000	Nil
Asahi Glass Pier	195	−12	50,000	500 t.×2
Maruzen No. 2 Pier	100	−11.8	50,000	500 kl./h.
Sea Buoy (Imodco)		−16	100,000	500 kl./h.
Maruzen No. 10 Pier	100	−13	100,000	1,000 kl./h.
No. 15 Pier	151.4	− 8.5	8,000	1,000 kl./h.
No. 14 Pier	151.4	− 8.5	8,000	1,000 kl./h.
Kyodo Pier	150	−12	20,000	360 kl./h.
Ube Dolphin	250	−10	15,000	
Kyokuto Oil Pier	415	−16	80,000	3,000 kl./h.
	147	− 7.5	6,000	2,500 kl./h.
Idemitsu No. 1 Oil Pier	201	−16	100,000	14,800 kl./h.
No. 2	167	−15.5	80,000	10,200 kl./h.
No. 3	97	−10.5	20,000	2,100 kl./h.
Toden L.P.G. Berth	102	−14	50,000	
(Sodegawra Area)				
Fuji Oil Pier	420	−16	120,000	7,700 kl./h.
Sumitomo O Pier	210	−10.5	30,000	350 t.×1
N Pier	162	−10.5	15,000	60 t.×1
Nichirin A Pier	260	−10.5	30,000	375 t.×1
Itochu Berth	180	−12	20,000	Nil
To Gas L.P.G. Berth	533	−16	50,000	7,100 kl./h.
Keiyo Sea Berth	470	−20.5	258,000	12,500 kl./h.

TANKERS:

Berth	*Product*	*Shorelines*	*Discharge Rate* (t.p.h.)
Kyokuto	Naphtha	12 in.×1	1,500
	Crude Oil	12 in.×3	5,000
	Fuel Oil	12 in.×3	2,000
Maruzen No. 2	Fuel Oil	10 in.×1	800
	Crude Oil	10 in.×1	1,500
	Naphtha	10 in.×1	800
Maruzen No. 10	Fuel Oil	12 in.×1	1,300
	Naphtha	12 in.×1	900
Maruzen No. 14	Butadeine (Loading)	10 in.×1	400
Keiyo Sea Berth (W)	Crude Oil	16 in.×3	10,000
Keiyo Sea Berth (E)	Crude Oil	16 in.×3	10,000
Fuji Oil	Crude Oil	12 in.×3	4,000
	Fuel Oil	12 in.×3	1,500
	Propane	12 in.×1	300
	Butane	12 in.×1	300
Idemitsu Oil No. 1	Crude Oil	12 in.×2	5,000
	Minus Oil	12 in.×2	3,000
	Fuel Oil	12 in.×2	3,000
Idemitsu Oil No. 2	Crude Oil	12 in.×2	4,000
	Fuel Oil	12 in.×2	1,500
	Propane	12 in.×1	1,000
	Butane	12 in.×1	1,000
Idemitsu Oil No. 3	Fuel	8 in.×1	800
	Naphtha	6 in.×1	500
	Lub. Oil	6 in.×1	500

LPG:

Name	Chiba No. 2	Fuji Berth	Anegasaki	KPI Pier	Marubeni
Owner	Idemitsu	Fuji Sekiyu	Tokyo EP Co.	Kyokuto Sekiyu	Marubeni
Type	Dolphin	Dolphin	Dolphin	Dolphin	Dolphin
Max. Deadweight Berthed	80,000	120,000	60,000	100,000	57,000
Max. LOA Berthed (m.)	260	—	250	260	230
Max. Draft Berthed (m.)	13.9	15	12.5	13.5	12.5
Side Alongside	Port	Starboard	Port	Starboard	Port
Water Depth in Channel (m.)	16	15.7	16	15	18
Bore, Manifold (m.s.)	12/12	12/8	12/8	12/12	12/10
Storage Tanks, LPG (Thousand Kilolitres)	3×25.5	2×20	2×60 2×45	2×77.6	1×30 1×20
Storage Tanks, LBG (Thousand Kilolitres)	1×25.5	1×40 1×20	4×40	2×77.6	1×30
Derrick Necessary	No	Yes	No	No	Yes
Accommodation Ladder Necessary	Yes	Yes	No	No	No
Bunker from Shore	6 in.	8 in.	8 in.	10 in.	—
Bunker from Barge	No	No	Yes	No	—
FW from Shore	Yes	Yes	Yes	No	Yes
Ship-Side Return Gas Blower Needed	Yes	Yes	No	Yes	Yes

Operator's Report: 1983.

Keiyo Sea Berth (Discharging Terminal): Operated by Keiyo Sea Berth Co. Ltd.

Terminal operates 24 hours per day, 7 days a week. Ships moored and unmoored daytime, weather or other circumstances permitting. Terminal will not be closed due to any holidays.

Location: Lat. 35° 30′ 30″ N., Long. 139° 56′ 25″ E.

Pilotage: Compulsory.

Anchorage: 236°, 5,000 m. and 305°, 3,200 m. off from centre of Keiyo Sea Berth.

Restrictions: Max. draft 19.2 m. but vessels whose draft exceeds 18 m. are tide controlled (full flood required when ships made fast).

Berthing: West Berth, starboard side alongside. East Berth, port side alongside.

Cargo Rates: Maximum rate 12,000 kl./hr. Maximum pressure 9 kg./sq.cm. at manifold.

TIME: Japan Standard Time (135° E.) = GMT plus 9 hours. Permanent.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extensions possible if ship stays longer.

HOLIDAYS: New Year's Day (January 1st); Attaining the Age of Maturity Day (January 15th); State Foundation Day (February 11th); Vernal Equinox Day (March 21st); Birthday of Emperor (April 29th); Constitution (May 3rd); Children's Day (May 5th); Respect Day for the Aged (September 15th); Autumnal Equinox Day (September 24th); Gymnastic Day (October 10th); Civilisation Day (November 3rd); Labour Thanksgiving Day (November 23rd). Cargo work can be arranged at 50 – 100% extra on basic cost.

POLICE/AMBULANCE/FIRE: Police Tel: 110, Fire and Ambulance 119.

TELEPHONE: Facilities for placing telephones on board only at Chuo Pier.

DEVELOPMENTS: New coal terminal under construction for vessels of 60,000 d.w.t. Depth alongside 14 m.

AUTHORITY: Chiba Port Administration Office, 6-1, Chuoko 1-chome, Chiba City. *Tel:* (0472) 46-6201.

AGENT: Sub-Agent of Dodwell & Co. Tokyo. Chiba Kaiun Sangyo Co. Ltd., 1-20, 3-Chome, Suehiro, Chiba. Cable: Chibamarine, Chiba. Tel: Chiba (0472) 61-3361. Telex: 03722-230.

ETAJIMA: 34.11 N. 132.29 E. (See Plan Book)

OPERATORS: C.I. Oil Terminal.

LOCATION: Name of berth, C.I. Oil Terminal. Position: Lat. 34° 11′ 30″ N., Long. 132° 29′ 00″ E.

DOCUMENTS:

Certificate of Registry.
Safety Equipment Certificate.
Derat Exemption.
Clearance from Last Port.
10 Crew Lists.
2 Crew Customs Declaration (Japanese Form).
4 Stores Lists.
5 Slop Chest Lists.
1 Quarantine Declaration.

PILOTAGE: Compulsory. Pilot boards in Bungo Channel 3 miles South Seki Saki Lighthouse. Pilot station (Lat. 33° 13′ N., Long. 131° 54′ E.) equipped with light signal – no VHF. Pilot remains on board during pratique operations – also see "Tankers".

ANCHORAGE: See "Restrictions".

RESTRICTIONS: Controlling depths (MLW) are as follows: entrance 20 m.; channel 17 m.; anchorage 17 m.; berth 15 m.; The mean tidal range is 3 m. Nature of bottom is mud. Velocity of current: entrance 1 knot; channel 1.5 knots; anchorage 0.5 knots; berth 0.5 knots. Vessels may berth at any stage of the tide during the day.

MAX. SIZE: 120,000 d.w.t. Length 278 m. Beam 40 m. Draft 14 m. according to tidal conditions.

HEALTH: Available during daytime only in Kure or Iwakuni Quarantine Anchorage. Quarantine Officers inspect galley, pantry and food stores. Pilot ladder used for boarding.

RADIO: Shimonoseki – Kobe.

TUGS: Five available and advised for berthing and unberthing. One forward and one aft, 3,000 h.p.

MEDICAL: Doctor available.

TANKERS: Pilot berths/unberths vessel.
It is dangerous to navigate at night.

Moorings: Forward	3 headlines	Aft 3 sternlines
	2 breast lines	2 breast lines
	2 spring lines	2 spring lines

Connections: 2×12 in. connected and disconnected by shore gang booms not necessary. Max. pressure required by shore is 7 kg./sq.cm.

Pumping Rate: 5,000 k/l per hour expected.

Pollution: Berth is closed by floating pollution retain. Dimension 320 m.× 56 m.

Gangway: Pilot ladder used as not sufficient room for gangway.

Ballast: During ballast operations shore personnel remain on board to check for dirty ballast and a motor-boat watches for same purpose. There are no slop tanks or facilities for dirty ballast ashore.

Storage Capacity: Crude oil, 22,000 k/l × 5 tanks; 21,300 k/l × 3 tanks; (total crude oil 173,900 k/l).

DENSITY: Summer 1020, Winter 1025 average.

FRESH WATER: Available, any quantity, by water barge from Kure, 4 days' notice required.

FUEL: Available.

FIRE PRECAUTIONS: Standard regulations.

REPAIRS: Facilities available – shore steam and electricity available.

DRY DOCKS: Available, lifting capacity 500,000 tons.

STORES: Laundry and provisions available.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 open bottle of spirits and some beer.

Customs Officers inspect crew cabins.

AUTHORITY: C.I. Oil Terminal Ltd., 5-1, Kita-Aoyama, 2-Chome, Minato-Ku, Tokyo, Japan.

FUKUYAMA: 34.29 N. 133.26 E. (See Plan Book)

Located on central Northern coast of Setonaikai (Inland Sea) and on border of Hiroshima Prefecture and Okayama Prefecture.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio and/or Choshi Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of two pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position Lat. 34° 34.09′ N., Long. 135° 07.54′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse. (Vessels transitting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Moji". In event bad weather, recommended vessels proceed shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

APPROACHES: Main approach channel (leading to raw material discharging berths and pipe loading berth). Depth 16 m. (52 ft. 6 in). Width 350 m. (1,148 ft.). Distance from quarantine anchorage to "A" berth, 9,500 m.

Pilot undertakes berthing vessels at "A", "B", "M" or "L" berths, with draft up to 16 m. Vessels drawing over 15.5 m. may berth at high tide.

Branch channel (leading to loading berths except pipe berth). Depth 11 m. (36 ft.). Width 300 m. (984 ft.). Distance from quarantine anchorage to Export berth No. 1: 11,500 m.

ANCHORAGES: Quarantine anchorage position: Lat. 34° 22.5′ N. and Long. 133° 26.3′ E., an area of 750 m. radius.

RESTRICTIONS: Inland Sea (Setonaikai):

1. *Akashi Strait and Bisan Seto:* All vessels, over 200 m. LOA shall navigate on Bisan Seto in daytime only and also vessels over 250 m. LOA have to have an escort boat when navigating on Akashi Strait and Bisan Seto respectively in accordance with the Maritime Regulations. Permissible draft on arrival 16 m., but 12 m. on departure.

2. *Kurushima Strait:* The vessels, over LOA 200 m. shall navigate on Kurushima Strait at slack water in daylight and vessels over LOA 250 m. and up to 300 m. have to have an escort boat when navigating on Kurushima Strait.

The draft restrictions are as follows: The permissible draft for LOA from 200 m. up to 250 m. shall be less than 13 m. and LOA from 250 m. up to 300 m. shall be less than 11 m.

Escort Boat: 2 escort boats with VHF available. Max. speed 24 knots, cruising speed 18 knots.

MAX. SIZE:

Berth	*Max. LOA (m.)*	*Max. draft (m.)*
"A"	305	16.0
"B"	285	16.0
"F"	180	11.0
"E"	210	13.0
"L"	350	16.0

Also see "Berthing".

HEALTH: Radio Pratique available. At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards and Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound, to contact Nagasaki Radio respectively.

VHF: "Fukuyama Port Radio" on Channel 16 (0600 – 2000 hrs.).

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio. Berthing/unberthing not carried out during hours of darkness.

Nippon Kokan K.K. – Fukuyama Works. Private Berths.

Raw Material Berths (Discharging Berths).

Berth	*Length and depth in metres*	*Max. size of vessels acceptable in d.w.t.*	*Cargoes discharged*	*Remarks*
"L"	315 17.3	200,000	Coal and Ore	2 gantry cranes each with 1,500 t.p.h. discharging capacity. Average discharging rate per hour:
"M"	250 17.0	200,000	Coal and Ore	Iron Ore 1,200 tons with 1 crane. Coal 800 tons with 1 crane.
"A"	300 17	150,000	Coal and Ore	4 gantry cranes (available for both "A" and "B" berths) each with 1,500 t.p.h. discharging capacity. Average discharging rate per hour:
"B"	280 16	100,000	Coal and Ore	Iron Ore 950 tons with 1 crane. Coal 700 tons with 1 crane. Normally 2 cranes are used for a vessel
"E"	210 14	75,000	Mainly Coal	2 gantry cranes each with 750 t.p.h. discharging capacity. Average discharging rate: Coal 600 t.p.h. with 1 crane.
"F"	180 11	20,000	Mainly Coal for coastal vessels	2 level-luffing cranes each with 300 t.p.h. discharging capacity. Average discharging rate: Coal 500 t.p.h. with 2 cranes.
"S"	249.5 12(max.draft)	35,000	Pig Iron and Scrap for discharging and loading	3 level-luffing cranes each with 15 tons lift capacity. Average discharging rate per hour: Pig Iron 350 tons with 3 cranes. Scrap 300 tons with 3 cranes.

Steel Product Loading Berths:

Name	*Berth No.*	*Length (m.)*	*Depth (m.)*	*Capacity (d.w.t.)*	*Cranes (tonnes)*	*Remarks*
Domestic	1 – 2	200	5	2,000	1×40, 1×250 (Derrick)	Construction Cargo
	3 – 8	600	5	2,000	1×20, 3×30 (LLC)	
	9 – 13	550	6 – 7	1,500 – 3,000	3×20, 1×30 (Gantry)	
	22 – 24	300	7	3,000	1×28 (Gantry)	
Export	1	234	11	20,000	5×30 (LLC)	
	2	230	13	35,000	1×20 (Gantry)	
	3	146	13	35,000		
	4	250	13	35,000	1×20, 1×30 (Gantry)	
	5	130	13	35,000	2×40 (LLC)	
Pipe	P	399	11.5	35,000	1×20, 1×50 (Gantry)	Pipe
Slag	1	181	7	5,000	1×600 tonnes/p.h. (Ship Loader)	Slag

STEVEDORES: Stevedores available at all times for loading steel products and discharging raw materials.

For a berth term contract on loading, at least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA.

If stevedores cannot commence loading at time notified by the Agents, the orderers must pay for waiting time. Discharging for all raw materials is on "Free In/Out" basis. Therefore, stevedorage is to receivers account. Loading/unloading is carried out by shore cranes. Ship's gear is not used.

TUGS: 5 tugs (3,200 h.p.) available in the Fukuyama Harbour. Additional tugs are available from other Inland Sea terminals. 3 escort boats available 16 knots – 18 knots.

MEDICAL: No advance notice required except on Sundays, holidays and in an emergency.

DENSITY: Summer 1016 – 1022. Winter 1025. The density not much affected by tide, which is maximum 3.84 m.

FRESH WATER: Available at any berth. Supply capacity about 11 t.p.h. Water barge also available, capacity 150 tons.

FUEL: Bunkers by lighter from Kobe, Mizushima, Tokuyama or Moji area. Advance notice required.

GANGWAY/DECK WATCHMEN: Not specially required unless valuable cargo on board. Steel Mill's guard are on watch at all gates.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches for loading steel products. Charge is assessed according to tariff. Recommend request stevedores for this work unless crew can complete it before berthing. For discharging raw materials opening/closing hatches must be carried out by ship's crew before berthing.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 60 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Only minor repairs.

DRY DOCK: None. Available at Innoshima or Mukayima and Tsuneishi.

REPATRIATION: Possible.

AIRPORT: Nearest airport is Okayama (70 km.), but Tokyo and/or Osaka are preferable due to convenience of traffic.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Report to Guardmen's office located at Middle Gate of Nippon Kokan.

TELEPHONES: No arrangements for placing telephone on board. Private telephones connecting with offices in the compound of the Fukuyama Works are placed at each of the raw material berths.

For vessels alongside export berths, private telephone available at foremen's office located on berth.

GENERAL: Fukuyama is a local and new port, developed along with the expansion of Nippon Kokan, Fukuyama Steel Works.

Ship repairs (except small ones) for machinery, radio, radar, etc., are all arranged by firms located in Tokyo, Osaka and Kobe.

SERVICES: Hold cleaning.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for 15 days.

AUTHORITY: Fukuyama Public Works Office, 286-2 Miyoshi-Cho, Fukuyama City, Hiroshima Pref. *Tel:* (0849) 21-1311.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo, Nissan Senpaku Ltd., Port Bldg., 1, Kokan-cho, Fukuyama-shi, Hiroshima-ken. Cable address: Nissan Fukuyama. Domestic Telex: 6436-11; 6436-12 Nissan J. Tel: Fukuyama (0849) 41-0535.

FUSHIKI: 36.49 N. 137.03 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
6 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 2 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Pilot available any time during daylight. Not compulsory. No telegraphic address of Pilot station, therefore, direct advice to local Agent always required. Pilot meets vessels 029°, 2 miles off leading light, thence takes vessel to Quarantine Anchorage ground. Due to many fish-nets on both sides of fairway if requiring to come into Quarantine Anchorage without taking Pilot, necessary to advise Agent in advance. In case of bad weather and need to await outside port, recommend cruising in Toyama Bay until sea abates. Bay area too deep to anchor and also danger of fish-nets. When approaching position for Pilot, give exact ETA to Agent by using Niigataradio and/or VHF to Fushiki Harbour Master. Small wooden pilot boat painted yellow. No particular light or sound signals required.

ANCHORAGE: Safe at all seasons with depth from 8 m. to 11 m. Sand and clay bottom. Room at anchorage for at least 6 vessels over 5,000 gross tons.

RESTRICTIONS: Pilot not available during darkness. No restrictions on tide, because small tide in all seasons. If draft over port limitation, vessel enters port after making adjustment by lightening in Outer Harbour.

MAX. SIZE: Length 180 m., draft 31 ft. in Summer and 30 ft. in Winter. However, depth of port not always definite, being a river port and dredging operations always carried out to keep depth all year round. Tidal range is maximum 0.45 m. Dredging to 10.0 m. depth underway.

RADIO: (Also see "Pilotage".) Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Tugs normally join vessel at port entrance, but sometimes in Outer Harbour for large vessels. Narita-Maru (2,060 h.p.) and Nihonkai-Maru (1,800 h.p.) provide lines, free of charge and Raicho-Maru (760 h.p.) uses ship's line. Used only when Pilot on board.

HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When Free Pratique is granted by radio, vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area or suspected infected area within 15 days of arrival

If a vessel has on board any case, or any suspected case, of infectious disease within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

Berth	*Length (m)*	*Depth*	*Permissible Draft*	*Capacity (g.t.)*	*Shore Cranes & Pipe-lines*
Left No. 1 Wharf	160	(see note below)		10,000	2×5 T
Left No. 2 Wharf	150			10,000	
Left No. 3 Wharf	185			10,000	
Left No. 4 Wharf	185			10,000	
Left No. 5 Wharf	90			1,000	
Right No. 1 Wharf	220			2×3,500	1×5 T
Right No. 2 Wharf	220			2×3,500	
Right No. 3 Wharf	185			15,000	1×8 T
Right No. 4 Wharf	185			10,000	
Right No. 5 Wharf	130			5,000	

Note: Depth becomes shallow with every rainfall. Therefore, recommended to contact the Port Authorities prior to vessel's call. See "Max. Size".

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agents, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

DENSITY: Average density between 1015 and 1019 in all seasons.

FRESH WATER: Available, from left Wharf No. 1, 2 and 3, average 45 t.p.h. In other berths, to be supplied by barge, average 50 t.p.h.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. Bunkers will be lightered from the nearest bunker port at maximum 7 days' prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor repairs only.

DRY DOCKS: No dry docks. Nearest available in Toyama.

REPATRIATION: Possible.

AIRPORT: Toyama Airport about 35 km. distance. 2 regular services a day. ANA only.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: 1st May and New Year's Day.

POLICE/AMBULANCE/FIRE: Police, Fushiki Police Station, Takaoka (0766) 44-1500; Ambulance, Fushiki Fire Station, Takaoka (0766) 44-1122; or 119; Fire, Fushiki Fire Station, Takaoka (0766) 44-1122.

TELEPHONES: No facilities for placing telephones on board.

SERVICES: Hold cleaning available.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

DEVELOPMENTS: Right No. 4 Wharf reconstructed, now 175 m. long, 10 m. deep, also Right No. 5 Wharf, 130 m. long, 7 m. deep. Left No. 1 Pier under reconstruction, when completed will be 185 m. length, 10 m. depth. Left No. 2 Pier to be reconstructed and completed to same size as Left No. 1.

AUTHORITY: Fushiki Port Administration Office, 5-15, Fushiki Minato-machi, Takaoka City, Toyama Pref. *Tel:* (0766) 44-0277.

AGENT: Sub-agents of Dodwell & Co. Ltd., Toyko. Fushiki Kairiku Unso Co. Ltd., 6-6, Fushiki-Minato-machi, Takaoka-shi, Toyama-Ken. Tel: Takaoka (0766) 44-130019. Telegraphic address "Fushikikairiku Fushiki". Telex: 05155-571/572.

HACHINOHE: 40.33 N. 141.33 E. (See Plan Book)

DOCUMENTS:

5 Crew Lists including Passport Numbers.
4 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage (only first port of call in Japan).
1 Maritime Declaration of Health (for Quarantine on specific form).
1 Vaccination List of Crew (for Quarantine).

Ship's Register and Port Clearance from previous port (Presentation only). Ship's Agent will prepare Inward/Outward Declaration, Cargo Manifest for discharge and Cargo Manifest in transit using specific forms.

PILOTAGE: Not compulsory but arrangeable at Master's request. Pilot is generally arranged by Agent if Master requires, and vessel has to inform Agent ETA at latest 24 hours before arrival. Pilot comes on board from tug which flies flag "H". Tug has no facility to communicate with vessel, therefore vessel must constantly keep in close communication with Agent in order to advise Pilot.

When vessel approaches Hachinohe, VHF (Channel 16) belonging to Harbour Master is available for communication with Agent and Pilot.

Pilot boards at vicinity of quarantine anchorage (Lat. 40° 33′ N. Long. 141° 33′ E.). Pilot operates from 0630 hours till sunset.

ANCHORAGES: Open sea anchorage with a sandy bottom. Depth of water 12 m. – 16 m.

RESTRICTIONS: Pilot arrangeable only in daytime for entry.

MAX. SIZE: See "Berthing".

HEALTH: At first port of call in Japan, vessel should obtain Free Pratique, thus unnecessary further pratique procedure at another port in Japan.

Quarantine Inspector boards vessel on arrival at quarantine anchorage (005.5°, 2,790 m. from northern breakwater light) but occasionally boards upon berthing unless berth congested.

Master should submit to the Inspector the Maritime Declaration of crew, Vaccination List of crew, Vaccination Cards and Derat Exemption Certificate.

In case of vessel coming from an infected area, Master to report health condition of crew and passengers, number of crew and whether supplied with any provisions or water, also names of crew or passenger landed there.

If there is sick person on board, Master to report to quarantine office the illness condition in detail through ship's Agent thereafter Master should obey instructions of quarantine office.

RADIO: Masters' telegrams from Westbound vessel via Choshi Radio and Northbound vessel via Nagasaki Radio are passed on to Agents.

Call sign: Choshi Radio JCS, JCT, JCU and JDC
Nagasaki Radio JOS, JOT, JOU and JDB.

VHF: VHF available but it belongs to Harbour Master (Channel 16). If no emergency in effect, Harbour Master will pass simple messages to Pilot, Quarantine or tugs.

RADAR: No shore radar service however harbour tug-boat is equipped. Consequently tug-boat has been used by Quarantine and Pilot in foggy season.

TUGS: Pilot boards from tug-boat in vicinity of quarantine anchorage and escorts the vessel to inner harbour. Tug-boats always supply tug line free of charge.

BERTHING: In addition to berths mentioned below there are facilities with lesser depths for small vessels.

Public Wharves: Controlled by Aomori Pref.

Name Wharf/Pier	*Capacity G/T*	*Depth of water (m.)*	*Length (m.)*	*Cargo handled*
Hachitaro No. 1	1,000	−5.0	75.8	Building materials
Hachitaro No. 2	1,000	−5.0	70.0	Building materials
Hachitaro A	5,000	−7.5	130.0	Steel
Hachitaro B	5,000	−7.5	130.0	Steel
Hachitaro C	15,000	−10.0	185.0	Ore, scrap
Hachitaro E	50,000	−13.0	298.0	Ore
Hachitaro F	15,000	−10.0	185.0	Ore, pulp timber
Hachitaro G	15,000	−10.0	185.0	Ore, pulp timber
Hachitaro No. 3	700	−4.5	60.0	Building materials
Hachitaro No. 4	700	−4.5	70.0	Building materials
Hachitaro No. 5	700	−4.5	60.0	Building materials
Hachitaro No. 6	700	−4.5	60.0	Building materials
Hachitaro No. 7	(6)	−4.5	60.0	Building material
Hachitaro No. 8	2,000	−5.5	100.0	General cargo
Hachitaro No. 9	2,000	−5.5	90.0	General cargo
Hachitaro No.10	700	−4.5	60.0	General cargo
Hachitaro N	5,000	−7.5	130.0	General cargo
Hachitaro O	5,000	−7.5	130.0	Steel, general cargo
Kawaragi No. 1	3,000	−6.5	116.5	Feed, steel
Kawaragi No. 2	3,000	−6.5	115.4	Steel, general cargo
Kawaragi No. 2 Pier	5,000	−7.5	44.75	Petroleum products, fuel oil
Kawaragi No. 3 Pier	5,000	−7.5	44.75	Petroleum products, fuel oil
Kawaragi No. 4 Pier	5,000	−7.5	37.0	Petroleum products, fuel oil
Kawaragi No. 5 Pier	5,000	−7.5	37.0	Petroleum products, fuel oil
Kawaragi No. 6 Pier	5,000	−7.5	26.0	Propane, butane gas
Shirogane A	10,000	−9.0	165.7	Feed, cement
Shirogane B	15,000	−10.0	180.0	Pulp timber, ore
Shirogane C	5,000	−7.5	115.7	Cement, fish oil
Shirogane No. 1	2,000	−6.0	92.9	
Shirogane No. 2	3,000	−6.5	132.5	Building stone
Shirogane No. 3	1,000	−5.0	140.0	Coal, ore
Shirogane No. 4	1,000	−5.0	140.2	Coal, ore
L.S.T. Dolphin	2,000	−5.0	8.0	

Private Wharves:

Name	*Capacity G/T*	*Depth (m.)*	*Length (m.)*	*Cargo handled*	*Operator*
Mitsubishi Paper Mills Wharf	15,000	−10.0	190.0	Chipboard, paper	Mitsubishi Paper Mills Co.
Mitsubishi Paper Mills Pier	15,000	−10.0	202.0	Chipboard, paper	Mitsubishi Paper Mills Co.
Maritime Self-Defence Force	1,000	−5.0	67.3	(Rescue ship)	Defence Facilities Administration Agency
Hachinohe Refinery Wharf	1,000	−5.0	64.5	Sulphuric acid	Hachinohe Refinery Co.
Ferries	5,000	−7.5	165.0	Ferries only	Aomori Prefecture Ferry Quay Corporation
Taiheiyo Kinzoku (Pacific Metals) Wharf	3,000	−6.5	355.0	Coal, ore	Taiheyo Kinzoku Co.
Taiheiyo Kinzoku (Pacific Metals) Wharf	3,000	−6.5	100.0	Coal, ore	Taiheyo Kinzoku Co.
Hachinohe Thermo-electric Power Station Wharf	3,000	−6.5	200.6	Crude petroleum, coal	Tohoku Electric Power Co.
Nippon Sekiyu (Nippon Oil) Wharf	3,000	−6.5	150.0	Petroleum products	Nippon Sekiyu Co.
Tozai (East-West) Oil Wharf (C zone)	3,000	−6.5	70.0	Petroleum products	Tozai Oil Terminal Co.
Esso Wharf	3,000	−6.5	74.0	Petroleum products	Esso Standard Oil Co.
Maritime Self-Defence Force Wharf	1,000	−6.5	50.0	Petroleum products	Defence Facilities Administration Agency
U.S. Military Fuel only	1,000	−6.5	70.0	Petroleum products	U.S. Navy in Japan
Shell Wharf	3,000	−6.5	74.0	Petroleum products	Shell Oil Co.
Idemitsu Dolphin	3,000	−6.5	20.0	Petroleum products	Idemitsu Kosan Co.
Kyodo Oil/Mobil Oil Wharf	2,000	−6.5	23.0	Petroleum products	Kyodo Oil Co. Mobil Oil Co.
Tozai Oil (B zone) Wharf	2,000	−6.5	20.0	Petroleum products	Tozai Oil Terminal Co.
All-Japan Federation of Fishing Cooperatives Wharf	500	−4.0	7.5	Petroleum products	All-Japan Federation of Fishing Cooperatives
Tohoku Port Service Wharf	5,000	−7.5	40.75	Petroleum products	Tohoku Port Service Co.
Koshuha (High Frequency) Wharf	3,000	−6.5	100.0	Coal, coke	Koshuha Chuzo (High Frequency Casting) Co.
Cooperative Feed Wharf	700	−4.5	60.5	Feed	Aomori Prefecture Cooperative Feed Co.
Nitto Kagaku (Nitto Chemical) Wharf	2,000	−6.5	137.0	Fertilizer	Nitto Kagaku Kogyo (Nitto Chemical Industry) Co.
Sumitomo Metal Mining Wharf	20,000	−11.0	285.0	Limestone, cement	Sumitomo Metal Mining Co.

CRANES:

Name of berth	*Crane*	*Nos.*	*Capacity (in case of Zinc concentrates)*	*Max. height*
Hattaro B-berth Hattaro C-berth	Unloader	2	Each 315 K/T per hr.	14 m.
Hattaro E-berth	Unloader	1	630 K/T per hr.	19 m.
Hattaro F-berth Hattaro G-berth	Mobile tower crane	2	Each 100 K/T per hr.	6 m.

No heavy-lift facilities.

STEVEDORES: Stevedores arranged upon receiving Master's ETA information.

Main Cargo	*Rate of works (average)*	
Nickel Ore	6,000 K/T per day	Discharging
Zinc Lead — Concentrates	3,000 K/T	"
Logs	2,100 CM	"
Woodchips	10,000 K/T	(24 hrs. work)
Canned goods	230 K/T	Loading

MEDICAL: 3 General Hospitals and Medical Specialists available. No advance notice required unless urgent.

TANKERS: See "Berthing".

DENSITY: About 1025.

FRESH WATER: Available from wharf and water barge. 50 t.p.h. by barge and 40 t.p.h. from wharf. Basic cost water barge ¥370.– per k/t. at wharf (Hydrant) ¥195.– per k/t.

FUEL: All grades of domestic oil obtainable by oil barge. Bonded oil being brought from Yokohama, Chiba, Kashima, Sendai and Tomakomai with sufficient notice beforehand.

CONSULS: None.

REPAIRS: Minor repairs possible.

DRY DOCKS: Only for small vessels in 1,000/2,000 tons G.T. class, 2 dry-docks and other floating dock.

SURVEYORS: No Classification Society at this port except Marine Surveyor "Nippon Kaiji Kentei Kyokai" licensed by the Japanese Government. Surveyors of NK, Lloyd's, ABS and NV come from Hakodate, Tokyo and Yokohama mainly.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Ship's option.

CUSTOMS ALLOWANCES: Customs allow 200 cigarettes and 1 bottle of spirits.

CARGO GEAR: See "Cranes".

REPATRIATION: All facilities available for crew changes.

AIRPORT: Misawa Airport, distance Hachinohe/Misawa abt. 50 km.

TIME: GMT plus 9 hours.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance and Fire 119.

TELEPHONES: It is not possible to place telephones on board.

SERVICES: Marine Survey, Tally, Hold Cleaning (Cargo vessels), Notary Public.

HOLIDAYS: Official holidays; New Year's Day (1st Jan.), Adults' Day (15th Jan.), Foundation Day (11th Feb.), Vernal Equinox Day (21st Mar.), Emperor's Birthday (29th Apr.), Constitution Memorial Day (3rd May), Children Day (5th May), Respect-for-the-Aged Day (15th Sept.), Autumnal Equinox Day (23rd Sept.), Health & Sports Day (10th Oct.), Culture Day (3rd Nov.) and Thanksgiving Day (23rd Nov.).

Work can be arranged on above days except New Years' Day but can not arrange 2nd & 3rd Jan., May Day (1st May), Hachinohe Festival (21st Aug.), Stevedores Year End Holiday (31st Dec.) and 1st, 3rd and 4th Sunday of every month.

SHORE LEAVE: Immigration issue shore-passes for ship's stay if crew have valid Passport or Seaman's Book (Valid 3 days, with possible extension).

IDENTIFICATION CARDS: Not required.

REGULATIONS: Vessel may sail anytime.

DELAYS: No delay normally but sometimes due to congestion of a specific berth.

DEVELOPMENTS: Fairway in Hattaro Area including Hattaro E-berth will be dredged to −13 m. in future and Hattaro D-berth to be constructed together with big shore-crane, also Hattaro Pier No. 2 is being planned and will be constructed in the vicinity of Hattaro F&G-berth. Moreover, two big breakwaters will be constructed outside the harbour, however, this is presently under negotiation with Fishermen's union in respect of fishery. (Length of Breakwater 3,700 m.)

SHIPMASTER'S REPORT: 1975

Pilotage: Compulsory. The Quarantine Anchorage is position Lat. 40° 32.9′ N., Long. 131° 32.7′ E., bounded by a circle radius 2.5 cables. In view of the considerable new development vessels should obtain Japanese chart No. 65 if possible. Vessels navigating on B.A. charts can be met by Pilot at a position 2 miles North of Same Kaku lighthouse, by prior arrangement.

Restrictions: Vessels may sail any time.

Max. Size: Draft 9.5 m. LOA 170 m. breadth no restriction (June 1975).

Health: Radio Pratique can be obtained by all vessels holding valid Japanese Sanitary Inspection Certificate. (This rule applies to all Japanese Ports).

Tugs: A number of tugs are available.

Berthing: A number of new berths are now available. Dredging is in progress and available drafts can be expected to increase.

Airport: Two flights per day.

Developments: Reclamation, expansion, dredging etc., in progress.

AUTHORITY: Hachinohe Port Administration Office, 1 – 131 Kitanuma, Kawaragi, Hachinhoe City, Aomori Pref., Japan.

AGENT: Narasaki Sangyo Co., Ltd., Hachinohe Branch, 10-4, Aza Kaigan, Oaza Kawaragi, Hachinohe-shi, Aomori-ken. Cable Address: Narasaki Hachinohe. Telex: 0822960 Nara J. Tel.: (0178) 20-1651.

HAKATA: 33.36 N. 130.24 E. (See Plan Book)

DOCUMENTS:

Customs: When vessel arrives direct from foreign port, Customs officials will board vessel for search. The following documents are to be submitted.

Crew list, Passenger list, Store list, Manifest of crew personal effects (must be signed by individual crew member), Arms and ammunition list, Narcotics list, List of ports of call on current voyage, Discharging cargo manifest, Through cargo manifest, Declaration inward/outward (Form No. C2000).

The following will be checked on board:

Ship's registry, Last port clearance.

When vessel comes from Japanese port, Customs officials will not attend on board, except special case. The Master or Agents are to attend at Customs House for entry formalities with the following documents:

Discharging cargo manifest, Through cargo manifest, Declaration inward/outward, Ship's Registry, Last port clearance, Documents entrusted with the Master at previous port.

On vessel's departure, a clearance is issued by Customs, after confirming payment of tonnage dues.

Immigration: Immigration officials board vessel on her arrival in port to examine passports, discharge books and/or other equivalent travel documents and provide a 72-hour landing pass for crew members and passengers. One copy each of crew list and passenger list are required by them. Providing vessel's Agents with a Crew List beforehand will be a great help in expediting immigration business on vessel's arrival. When vessel stays in port more than 72 hours, the landing passes will be extended every 72 hours on application.

In the event that crew members, without entry visas, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hours) of these men have been booked, or unless the vessels to which they are to be transferred, arrive in Japan within 5 days.

PILOTAGE: Not compulsory, but necessary unless Master well acquainted with locality. Pilot embarks at quarantine anchorage; position Lat. 33° 38′ N., Long. 130° 19′ 30″ E. Request for Pilot made through ship's Agent, Master reporting ship's ETA by radio giving accurate time of arrival at least 24 hours prior arrival, also any subsequent change. Pilot on VHF Channel 16, 11 and 12. In the event of rough sea, harbour tug-boat will be used.

Shipmaster's Report: 1982

The Hakata Pilot is available on request off Genkai Island (Lat. 33° 42′ N., Long. 130° 15.5′ E.).

ANCHORAGE: No anchorage in port.
RESTRICTIONS: No restrictions if vessel in Free Pratique and draft less than 10 m. No tide.
MAX. SIZE: No restrictions of length, breadth. Draft 11.10 m.
HEALTH: (a) Quarantine station: Sea area surrounded by the following lines.

1. The line connecting between the top of the Nokono-Shima and point "A" which is located on the sea in the direction of 90° and at the distance of 2,540 m. from the top of the Nokono-Shima. (The parallel of 33° 38′ 00″ N.)
2. The line connecting between point "A" and point "B" which is located on the sea in the direction of 000° and at the distance of 1,750 m. from point "A". (The Longitudinal line of 130° 20′ 00″ E.).
3. The line drawn towards the Nokono-Shima in the direction of 270° from point "B". (The parallel of 33° 37′ 06″ N.).
4. The coast line of the Nokono-Shima.

The centre of the quarantine anchorage: 33° 37′ 30″ N., 130° 19′ 30″ E.

(b) Quarantine service is rendered from sunrise to 1 hour before sunset.
(c) 'Q' flag should be hoisted until Free Pratique is granted.
(d) When vessel arrives from plague infected or suspected area within 10 days after she left such place, a 24-hour special quarantine is required. All sanitary scuppers must be closed and garbage not thrown overboard after vessel reaches 60 miles off inland sea areas.
(e) Radio Pratique is applicable.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi and Northbound to contact Nagasaki Radio respectively.
VHF: Hakata Port Radio on Channels 11, 12, and 16. Power 50 watt. 24 hour operation.
TUGS: 2×2,400 h.p. and 1×2,600 h.p.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Wharf	*Length* (m.)	*Depth* (m.)
Central Pier	556	−10
	166	− 9
	390	− 7.5
Suzaki Pier	553	−11
	390	− 7.5
Hakozaki Pier	480	−12
	370	−10
	910	− 7.5

CARGO HANDLING FACILITIES:
Pneumatic Unloader:

No.	*Capacity*	*Location*
4	400 t.p.h. each	Suzaki Pier
1	400 t.p.h.	Hakozaki Pier

Gantry Crane:

No.	*Capacity*	*Location*
1	3 tons	Hakozaki Pier

Average performance of loading/unloading:

Discharging:	Grain in Bulk	400 t.p.h.	by conveyor
		50 t.p.h.	by winch
	Crude rubber	30 t.p.h.	
	Sugar in bulk	50 t.p.h.	
	Lumber	30/35 t.p.h.	
	Frozen Horse Meat	20/25 t.p.h.	
	Containers	25/30 Containers per hour	
Loading:	Fertilizers in bulk	60 t.p.h.	
	Tyres & tubes	60/65 Ms/tons	

Grain silos:

Capacity tons	*Location*	*Owners*
53,000	Suzaki Pier	Genkai Silo
69,000	Suzaki Pier	Hakata-ko Silo
20,000	Suzaki Pier	Hatsumura Silo
35,000	Suzaki Pier	Kamigumi Silo
25,000	Suzaki Pier	Ishibashi Silo
13,000	Suzaki Pier	Fuso Silo
10,000	Suzaki Pier	Taiyo Seifun
40,000	Hakozaki Pier	Kamigumi Silo

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Normal working hours: 0800 to 1700 hrs.

Overtime work is possible by applying to Customs at the following fees:

0000–0500 hrs.	350 Yen per hour
0500–0830 hrs. 1700–2200 hrs. and Sundays and Holidays	300 Yen per hour
2200–2400 hrs.	350 Yen per hour

No work can be arranged for on 31st December to 3rd January.
MEDICAL: No advance notice required unless urgent.
DENSITY: About 1024.
FRESH WATER: No water barge available. Hydrants: at Central, Hakozaki and Suzaki Pier. Rate of delivery: 30 t.p.h.
FIRE PRECAUTIONS: Modern chemical fire service boat "Hiryu Maru" (30 tons).
CONSULS:
Hon. British Consulate, Kitakyushu Tel. 093-331-1311
American Consulate General, Fukuoka Tel. 092-751-9331
Republic of China Consular Agency, Fukuoka Tel. 092-761-3458
Republic of Korea Consulate General, Fukuoka Tel. 092-771-0461

FUEL: Bonded bunker oil is not available at this port, but is to be lightered from other port. An adequate notice should be given to the suppliers in order to avoid delay in replenishment. The rate of delivery from oil barge is 80/100 t.p.h.

Suppliers	*Installation*	*Required notice*
Shell Sekiyu K.K.	Shimonoseki	2 days
Esso Oil co.	Shimonoseki	2 „
	Sakai	5 „
Mobil Oil Co.	Kokura/Moji	2 „
	Oita	3 „
Caltex Oil Co.	Shimonoseki	2 „
	Kudamatsu	3 „
Mitsubishi Shoji	Shimonoseki	2 „
	Iwakuni	3 „
	Kanokawa	3 „
C. Itoh & Co., Ltd.	Matsuyama	4 „
	Mizushima	4 „
Nissho Co.	Shimonoseki	2 „
	Matsuyama	4 „
Mitsui & Co., Ltd.	Oita	3 „
Nippon Mining Co.	Mizushima	4 „
Kanematsu Gosho	Kokura	2 „
	Tokuyama	3 „
Idemitsu & Co., Marubeni Iida Co. Sumitomo Shoji	Tokuyama	3 „

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
REPAIRS: Local workshop (fishing-boat repairs) available only for small repairs, so Agent for ocean-going vessel in Hakata arranges repairs from Moji or Tobata.
REPATRIATION: Possible.
AIRPORT: Fukuoka airport: Distance: about 20 minutes from Hakata port by car. JAL Domestic regular airline for Tokyo and Osaka. ANA Domestic regular airline for Tokyo, Osaka. Also, CATHAY and JAL airlines for Taipei, Hong Kong 4 times a week. Korean and JAL airlines for Seoul and Pusan daily except Sunday.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police/Ambulance tel. 110; Fire 119.
TELEPHONES: May be placed on board if 7 days notice given.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for 15 days, but 7 days extension possible if ship stays longer, good for any Japanese port.
AUTHORITY: Hakata Port and Harbour Bureau – Fukuoka, 13-13, Sekijo-Machi, Hakata-ku, Fukuoka-city, Japan. *Tel:* (092) 291-0561.
AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Holme Ringer & Co. Ltd., Hamachi Building, 2nd Floor, 10-17 Kamiya-cho Hakata-ku, Fukuoka-shi Fukuoka-ken. Cable Address: "Ringer Fukuoka". Telex: 0726496 Ringer J. Tel: (092) 271-1292/1260.

HAKODATE: 41.47 N. 140.42 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory, but in practice is necessary. Pilots available 24 hours a day and vessels able enter and leave port day and night. Pilots board about 1.5 miles S.W. of Breakwater Lt. Ho. Pilot boat is small boat carrying flag "H".

The limit of Hakodate piloting district is the sea area surrounded by a line drawn from Obana Misaki to Kattoshi Misaki and the coastline.
ANCHORAGES: Quarantine Anchorage outside breakwater and care should be taken not to foul fishing nets. Good anchorage inside breakwater at East side of section 3 – depth 11 m. to 13 m.
RESTRICTIONS: Quarantine and Customs business between 0800 and 1700 hrs. only.
MAX. SIZE: Tankers up to 75,000 d.w.t. at SBM Max. draft 14.5 m. Max. LOA 260 m.

Also see "Berthing".
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.
TUGS: 1×500 h.p., 2×800 h.p., 1×1,100 h.p., 1×2,000 h.p. and 1×3,200 h.p. Tug line generally used.

HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When Free Pratique is granted by radio, vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Capacity* (g.t.)
North Wharf (North Side)	130	7.0	6.5	3,500
Central Wharf				
(North Side No. 1)	171	9.0	8.5	8,000
(North Side No. 2)	165	9.0	8.5	8,000
(South Side)	133	8.0	7.0	6,000
Bandai Wharf (Front Side)	185	9.0	8.5	8,000
(South Side)	130	7.5	7.0	6,000
No. 1 Buoy		9.0	8.0	8,000
No. 2 Buoy		10.0	9.5	10,000
No. 3 Buoy		10.0	9.5	10,000

CRANES: Hakodate Dock own 1×200 ton and 1×50 ton floating crane.

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. (50% additional of basic stevedorage) 2100 – 0500 hrs. next morning (130% additional) Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

TANKERS: *Single-Buoy Mooring:* Asia Oil Company, sea berth suitable for up to 75,000 d.w.t. and max. draft 14.5 m. at Imoco Buoy.

Position: Lat. 41° 48′ 08″ N., Long. 140° 40′ 57″ E.

Soundings: At site 15.5 m. In approaches to site, more than 15.5 m. The approach to terminal is free from obstructions.

There is one 20 in. crude line running 2,000 m. from shore to the buoy, and about 500 m. from shore line to the storage tanks.

Mooring: There is no night mooring. Unmooring is carried out from 0600 till 2400 hrs., and may be done by the Master of the ship without a Pilot.

A mooring/unmooring gang is provided for by Agent. Two launches and one tug are in attendance at the mooring. One launch will keep the hose clear while the other handles the lines. The tug is standing by and only pushes against bow or near the stern to keep the head of the vessel in position whilst mooring.

At least six good mooring lines are required, preferably each line to its own bollard. The lines are run single to the buoy. The position of the ship's bow from the buoy is about 40 m., when the distance from the buoy to ship's manifold is about 360 ft.

When mooring, it is requested that the propeller is completely stopped or otherwise turned astern.

Both bow anchors are to be hove well up in the hawse pipe and properly secured before reaching the buoy. Anchors are never to be used while on the buoy. They may foul the buoy's mooring cables and pipe-line on the bottom if released.

Floating Hose: There is one set of 12 in. floating hose for the discharge of crude only. The floating hose is about 600 ft. long from the buoy's manifold. The last two lengths are floating in doughnut-shaped plastic floats. The end is marked with an unlit marker buoy.

The hose connections are always made to the port manifold and are lifted with ship's gear. The hose when full of cargo and equipment weighs over one and a half tons. Information is required of the distance from ship's bow to ship's manifold, and the distance from ship's side to ship's manifold prior to arrival.

Standard flanges are used on the hose. OD 19 in. diameter of bolt-circle 17 in. with 12 bolt-holes size 0.875 in.

Discharging: The discharging should be arranged in such a way as to be able to take sufficient ballast into ship's tanks, when about half way during discharge; to be able to get the ship's head down to prevent the vessel from veering too widely, and run over the hose near the buoy, in case of unfavourable conditions.

Maximum allowed back pressure by shore is about 10 kg./sq.cm. During the discharge the main engine must not be immobilised as it may be used to keep the vessel clear of the buoy.

Stand-by Men: While on the buoy, the vessel will be required to provide sleeping quarters for four men, this includes the foreman who will remain on board throughout the entire operation. It is requested that the discharge officer be provided with meals. The other men are supplied with food from shore.

Discharge Rate: 1,800 k/l per hour.

DENSITY: Average 1025.

FRESH WATER: Available at piers ex-hydrants and by barge at anchorage. Supplier, Hakodate Municipal Office.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

Fuel supplies for Hakodate are generally lightered from Tokyo Bay area and delays can be caused by weather conditions.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommended request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Custom Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Hakodate Dockyard Co., undertakes hull and engine repairs.

DRY DOCKS: No. 1. Capacity 15,000 g.t., length 180 m., breadth 22.45 m. depth 6 m. No. 2. Capacity 9,000 g.t., length 140 m., breadth 8 m., depth 6 m.

AIRPORT: Distant 20 minutes by car.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.

TELEPHONES: Arrangeable on board.

SHORE LEAVE: Local Immigration Officers issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Port and Harbour Bureau, Hakodate City, 4-19 Suehiro-cho, Hakodate City, Hokkaido. *Tel:* (0138) 22-3101.

AGENT: Sub-Agents of Dodwell & Co., Tokyo. Narasaki Sangyo Co., Ltd. c/o Kyoei Unyu Co., Ltd., No. 5-22, Kaigan-cho, Hakodate, Hokkaido. Cable address: "Funekyoei Hakodate". Domestic Telex: 09925-64. Tel. Hakodate (0138) 42-4121.

HIBIKINADA: 33.57 N. 130.50 E. (See Plan Book)

LOCATION: The port of Hibikinada is located in position Lat. 33° 56.7′ N., Long. 130° 49.9′ E. and is only protected by a breakwater. It has no other shelter and is exposed to strong winds from the North. The strongest winds are from the NW and if accompanied by swell, causes a dangerous surge in the port.

PILOTAGE: Kanmon Strait and Harbour Pilotage Association.

Pilotage compulsory. Pilot boards inbound vessel at Mutsure: Lat. 33° 58′ 30″ N., Long. 130° 52′ 48″ E. or at He Saki: Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGE: *Coming from West:* Mutsure Anchorage: Lat. 33° 59.5′ N., Long. 130° 51.7′ E. Depth 23 m.

Coming from East: He Saki Anchorage: Lat. 33° 56′ N., Long. 131° 03′ E. Depth 12.5 m.

If gale force winds blowing, it is possible with Coast Guard permission to shift to Mutsure Anchorage.

RESTRICTIONS: Berthing and unberthing only during daylight hours. Berthing undertaken at slack water only. Unberthing at any stage of the tide.

Vessels are permitted to transit Shimonoseki with a max. draft 30 ft. 6 in. at anytime and with a max. draft of 32 ft. 10 in. at HW.

Controlling Factors:

	Controlling Depth (MLW) (m.)	*Mean Tidal Range* (m.)	*Velocity Current* (knots)	*Nature of Bottom*
Entrance	20	1.0	3 max.	Mud
Channel	13.5	1.0	3 max.	Mud
Anchorage	21	1.0	3 max.	Mud
Berth	13.5	1.0	nil	Mud

MAX. SIZE: *Wharf A-1:* Max. LOA – 350 m. Max. draft 13.0 m. Max. 150,000 d.w.t. Beam of vessel determined by hatch width.

HEALTH: Radio Pratique available if vessel in possession of valid sanitary certificate.

RADIO: Nagasaki Radio "JOS" and Choshi Radio "JCS".

VHF: "Shimonoseki Port Radio" and "Kitakyushu Port Radio" on Channel 16. Working frequency for berthing information is Channel 14.

TUGS: There are 3 tugs available each 3,500 h.p. Use of all 3 tugs is advisable when docking and undocking.

BERTHING: Vessels always dock port-side-to. Ships gangway used.

Vessel berthed at A-1 Wharf. Heading 247° true. Max. LOA 350 m. Max. draft 13 m. Depth at LW 13 m. Beam of vessel determined by hatch width. Cargo handled coal.

Moorings: FORWARD: 3 headlines, 1 breast line, 2 springs.

AFT: 3 stern lines, 1 breast line, 2 springs. Vessel berths against spring roller fenders.

Cranes: 3 unloaders available, 2×34 ton capacity and 1×45 ton capacity.

MEDICAL: Doctor available.

FRESH WATER: Available.

FUEL: Available (No oil barges available).

REPAIRS: Possible.

DRY DOCK: Available.

SERVICES: Laundry and provisions available.

CHARTS: BA 1578, BA 532, BA 127.

AUTHORITY: Kitakyushu Port and Harbour Bureau, Nishi-Kaigan 1 Chome, Moji-Ku, Kitakyushu City, 801 Japan. *Tel:* (093) 331-1331.

HIMEJI: (including Hirohata, Shikama, Mega and Aboshi): 34.47 N. 134.41 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: See "Kobe". Vessels take Inland sea Pilot off Wada, Hesaki or Sekisaki; or from ports of Inland sea. No exact Pilot station and no checking point at port of Himeji (Mega, Shikama, Hirohata and Aboshi) but Agents arrange Pilot when vessel approaches upon receiving cable giving 24 hours advance notice. Pilot boarding positions as follows: Mega Lat. 34° 44′ N., Long. 134° 42′ 15″ E. Shikama Lat. 34° 45′ N., Long. 134° 39′ E. Hirohata Lat. 34° 44′ N., Long. 134° 37′ E. Aboshi Lat. 34° 44′ N., Long. 134° 34′ 10″ E.

No strict location of anchorage for vessel awaiting a Pilot in Himeji area, but should be as close as possible to port according to draft and communication.

ANCHORAGE: No strict boundary areas for anchorages. Anchor as close as possible to the port according to draft.

RESTRICTIONS: At ports of Mega, Shikama and Aboshi, no Pilot boarding between sunset to sunrise. Hirohata Pilot will board from sunrise to 2200 hours for vessels less than 10,000 d.w.t. for entry, and less than 15,000 for departure, for Pier Nos. 4, 5, 6, 7, 9 and 10 but other berths only from sunrise to sunset.

MAX. SIZE: Draft restrictions as follows:

Mega 11.80 m., Shikama 8.80 m., Hirohata 13.0 m. (80,000 d.w.t. or 110,000 d.w.t. part load) for Central Pier, 7.50 m. for Kamota Pier (Pier No. 1–7), 9.45 m. for Tsuruta Pier (Pier No. 10–14). 17 m. (160,000 d.w.t. or 270,000 d.w.t. part load) for No. 18 Pier. Aboshi 9.0 m.

Sea buoy mooring, max. draft 19.2 m. Max d.w.t. 254,000 tons.

HEALTH: No Quarantine Office at Himeji. At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards. Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.

TUGS: Tug(s) normally join vessel when approaching, or at anchorage. Always use tug's lines without charges.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Wharf length*	*Max. LOA*	*Max. Draft*
Shikama			
Public Pier No. 2	135 m.		7.00 m.
Public Pier No. 3	170 m.		8.80 m.
Public Pier No. 4	170 m.		8.80 m.
Public Pier No. 5	170 m.		8.80 m.
Public Wharf No. 6	170 m.		8.80 m.
Public Wharf No. 7	230 m.		10.00 m.
Nakajima Wharf	390 m.		5.00 m.
Sembagawa Wharf	360 m.		4.00 m.
Buoy No. 2	220 m.	160 m.	7.70 m.
Aboshi			
Aboshi Pier	185 m.	150 m.	9.00 m.
Buoy No. 1 – 2	250 m.	175 m.	9.00 m.
Buoy No. 2 – 3	270 m.	180 m.	9.00 m.
Hirohata			
Yumesaki Wharf (Pier No. 1 – 2)	280 m.		7.50 m.
Kamoda Wharf (Pier No. 3 – 7)	722 m.		7.50 m.
Central Wharf (Pier No. 8 – 9)	315 m.	265 m.	13.20 m.
Tsuruta Wharf (Pier No. 10 – 12)	463 m.		9.50 m.
Shioiri Wharf (Pier No. 13 – 14)	320 m.		9.45 m.
Pier No. 18	300 m.	320 m.	16.00 m.
Oil Berth	140 m.		7.50 m.
Buoys			9.50 m.

CRANES:

Hirohata:
Central Quay No. 8 – 9: 2×25 ton, 1×38 ton.
Kamoda Quay No. 3 – 7: 2×9 ton, 2×5 ton.
Yumesaki Quay: 1×20 ton, 2×10 ton, 1×20 ton.
Tsuruta Quay No. 10 – 12: 4×9 ton.
Higashimaha Quay: 1×20 ton, 2×30 ton.
Genkyo Quay No. 18: 2×45.5 ton.

Shikama:
2×5 ton and 1×10 ton at Public Wharves (Nos. 1 – 7).

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630 – 2130 hrs. 60% additional of basic stevedorage; 2130 – 0830 hrs. next morning 130% additional; Sundays/holidays 100% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: Idemitsu Kosan Co. Ltd., Himeji Oil Jetty where 1 berth only and max. draft 11.8 m. allowed. Shore discharging facilities 3×12 in. diameter hose connections which connect to 18 in. diameter line for tank hoses. Acceptable max. 5 kg/sq.cm. on hose gauge, discharge rate abt. 2,000 l/t per hour.

Note: Idemitsu Kosan Co. Ltd., Himeji, require following information prior to arrival for smooth berthing and connecting hoses: Height from sea to deck; Length from vessel's side to underneath of hose connections; Height from deck to connection of line; Diameter of connection.

Operator's Report: 1983.

Idemitsu Kosan Hyogo Sea Berth (Discharging terminal) is operated by Idemitsu Kosan Co. Ltd.

SBM Berth. Berthing equipment to OCIMF standard.

SBM operates 24 hours per day, 7 days a week. Ships moored and unmoored at daytime, weather and other circumstances permitting. SBM will not be closed due to any holidays.

Area around the SBM with radius of 410 m. is an open port for Customs' Regulations. Therefore supplies, disembarkation, etc. should be handled by related regulations.

Location: Lat. 34° 42′ 37″ N., Long. 134° 39′ 54″ E.

Pilotage: Not compulsory.

Anchorage: Himeji port is not an open port. Ships can anchor at the following points.

Point "A" Lat. 34° 42′ 58″ N., Long. 134° 39′ 02″ E., depth 21 m.
Point "B" Lat. 34° 42′ 10″ N., Long. 134° 40′ 48″ E., depth 21 m.
Point "C" Lat. 34° 41′ 30″ N., Long. 134° 41′ 00″ E., depth 23 m.

Anchorage "A" and "B" are for tankers of less than 18.5 m. draft.

Restrictions:

(a) Berthing Master comes on board 3 miles South from the line joining Kurakake Id. and Kami Id.
(b) Ship's Master has to arrange tug boats both sides and aft' (total of 3 tugs).
(c) Ship's Master proceeds at moderate speed taking into consideration tide and wind and any other circumstances. When approximately 1,000 m. from SBM vessel reduces her speed to avoid risk of touching SBM.
(d) Ship has to stop completely 200 m. from the SBM.

Max. size:

Maximum draft 19.20 m.
Maximum d.w.t. 254,000 tons

Berthing:

From bow to manifold 145 m.-186 m.
Derrick capacity SWL in excess of 10 tons.

Mega:

Berth	*Depth* (m.)	*Pipe-Lines*
Idemitsu Jetty No. 1 – Berth No. 1 – No. 4	5.0 – 7.0	4×8 in.
Idemitsu Jetty No. 2 – Berth No. 5	7.0	8 in.
Idemitsu Jetty No. 3 – Berth No. 6	12.2	12 in. and 8 in.
Idemitsu Jetty No. 4 – Berth Nos. 7 – 8	7.0	2×8 in.
idemitsu Jetty No. 5 – Berth No. 9 – No. 12	5.0 – 7.0	4×8 in.
LPG Jetty – Berth No. 22	6.0	4 in. and 2 in.
Monoageba	6.0	—
Sea Berth	19.0	—
Kanden LNG Jetty	14.0	—

DENSITY: Average density between 1025 and 1026 in Winter season and 1018 and 1020 in Summer season.

FRESH WATER: Idemitsu Oil Jetty, Shikama Public Pier and Hirohata Pier able to supply fresh water from shore, but *No Water Barge available at Port of Himeji* therefore not able to supply fresh water at Satetsu Pier (Shikama), Shikama Buoy, Aboshi Buoy or outside anchorage.

Port	*Average rate of delivery*
Mega	20–30 tonnes p.h.
Shikama	25–30 tonnes p.h.
Hirohata	15–20 tonnes p.h.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passenger or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CARGO GEAR: See "Certificates" but no special requirements.

CONSULS: No consuls at Himeji, Shikama or Hirohata.

REPAIRS: Most minor deck and engine repairs available at port of Himeji; in case special technician required, should be called from Kobe.

DRY DOCKS: No dry dock available at port of Himeji. Nearest dry dock Ishikawajima-Harima Heavy Industries Co. Ltd., Aioi, who have following dry docks. Also see "Aioi".

	LOA	*LBP*	*Breadth*	*Depth*	*Capacity*
Dock No. 1	238 m. (780′9″)	230 m. (754′7″)	33 m. (108′3″)	5.5 m. (18′)	73,000 d.w.t. (LT)
Dock No. 2	156.1 m. (512′1″)	145 m. (475′8″)	19.5 m. (63′11″)	4.5 m. (14′9″)	14,000 d.w.t. (LT)
Dock No. 3	341 m. (1,118′9″)	328 m. (1,076′1″)	54 m. (177′1″)	6 m. (19′8″)	300,000 d.w.t. (LT)

REPATRIATION: Possible.

AIRPORT: About 60 km. to Itami Airport. Regular services.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police (Shikama) Tel: 35-1441; Ambulance (Shikama) 119 or 35-0119; Fire (Shikama) 119 or 35-0119.

HOLIDAYS: At Aboshi, no work on 1st and 3rd Sunday. At Shikama, shore crane, no work on 1st and 3rd Sunday but gangs available for discharging and loading.
TELEPHONE: No facilities for placing telephones on board.
GENERAL: No quarantine available at port of Himeji, therefore pratique to be obtained at other ports.
SERVICES: Tally, laundry, daily provisions by ship chandler available locally. All other service from Kobe or Osaka.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for 9 days, but 3 days extension possible if ship stays longer.
AUTHORITY: Himeji Port Administration Office, 294, Suka, Shikama-ku, Himeji City, Hyogo Pref. *Tel:* (0792) 35-0176.

AGENT: Sub-agents of Dodwell & Co., Tokyo. Shikama Kaiun Co. Ltd., Minato-machi, Shikama-Ku, Himeji-shi. Tel. Himeji (0792) 35-0912. Telegraphic address "Shikamakaiun Himeji". Telex: 05772211 Sikama J.

HIROSHIMA: 34.20 N. 132.25 E.

DOCUMENTS: See "Yokohama".
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki Lighthouse (vessels transitting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.
3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGES:

Anchorage	*From Ujina Lighthouse Radius*	*m.*	*Conditions*	*Note*
"A"	56°	2,510 180	Draft – below 6 m. Length – below 120 m. Necessary P & S Anchor	
"B"	52°	2,200 180	Draft – below 7 m. Length – below 120 m. Same as "A"	
"C"	67°	2,467 180	Draft – below 8 m. Length – below 150 m. Same as "A"	
"D"	58°	1,070 200	Draft – below 10 m. Length – below 150 m. Same as "A"	Load & unload. Logs.
"E"	89°	900 200	Draft – below 12 m. Length – below 150 m. Same as "A"	Load & unload. Logs.
"F"	116°	1,160 200	Draft – below 12 m. Length – below 150 m. Same as "A"	Load & unload. Logs.
"G"	127°	1,640 200	Draft – below 12 m. Length – below 150 m. Same as "A"	Load & unload. Logs.
"H"	133°	2,160 200		Discharging
"I"	158°	900 300		Discharging
"J"	162°	1,500 300		Discharging
"K"	122°	3,280 300		Waiting
"L"	132°	3,430 300		Waiting
"M"	261°	4,770 300		Waiting
"N"	262°	3,840 300		Waiting

Ujina Lighthouse is at South of Ujina-islet Lat. 34° 20′ 14″ N., Long. 132° 27′ 55″ E.
RESTRICTIONS: Depth of approach to berth about 10 m. Pilots not available after sunset.
MAX. SIZE: Wharf (Hiroshima Prefecture Public Berth) No. 1 length 166 m., draft 9.7 m. (10,000 g/t vessel). No. 2, length 166 m.

Gaibo-Ganpeki (wharf for ocean-going vessel) length 337 m., depth alongside about 10 m., max. draft acceptable 9.70 m.
BERTHING:

Berth	*Length (m.)*	*Depth (m.)*
Gaibo Wharf No. 1	170	9.2
Gaibo Wharf No. 2	170	9.2
Gaibo Wharf No. 3	170	9.7
Gaibo Wharf No. 4	170	9.7
Lumber Port Wharf	370	10.0
Hatsukaichi Dolphin No. 1	240	12.0
Hatsukaichi Dolphin No. 2	185	10.0
Hatsukaichi Dolphin No. 3	200	9.0
Hatsukaichi Dolphin No. 4	200	9.0

HEALTH: Usually vessels anchor at the quarantine anchorage, where the authorities board and grant Free Pratique.
TUGS: 15 Tugs, 800 h.p. – 5,000 h.p. Join vessel at quarantine anchorages. Tug's lines used.
CRANES: 6 floating cranes, 40 ton – 450 ton.
STEVEDORES: Working hours: 0830 – 2100 hrs.
TIDES: Max. (spring tide) 3.9 m. Min. (neaps) 0.57 m.

Rate of current at flood tide generally 0.25 knot to N.E.; 0.5 knot at ebb tide to S.W. South area of Togeshima and Kannonsaki 0.25 knot at flood to S.S.E., and 0.5 knot at ebb tide to N.N.W.
FRESH WATER: By water barge (capacity: 330 m/t available). Additional charges made for overtime i.e. after 5 p.m., and Sunday, holidays and Saturday afternoon.
FUEL: Most grades of domestic and bonded oil available, delivered by barge.
CONSULS: No consuls in Hiroshima. Nearest Osaka or Kobe. Marine note of protest can be attested by local notary public.
REPAIRS: All types of deck, electrical and engine repairs.
DRY DOCKS: Largest dry dock Taibi Dry Dock, Mitsubishi-Hiroshima Works, length 154 m., breadth 22.00 m., 10,300 g.t. Kanawa Dry Dock and Ujina Dry Dock available for 3,500 g.t. and 1,500 g.t. respectively.
AIRPORT: Hiroshima Airport. Only domestic airlines every hour to Osaka and Tokyo.
POLICE/AMBULANCE/FIRE: Police (for emergency) 110; Ambulance 119; Fire 119.
TELEPHONE: No arrangements for placing telephones on board.
SERVICES: Any navigational apparatus can be serviced on request, Cargo holds cleaning services can also be carried out, but tank-cleaning and other services are to be arranged from Kobe.
REGULATIONS: Many seaweed and oyster beds near anchorages, therefore oil pollution precautions strictly observed.
AUTHORITY: Hiroshima Port Administration Office, 1308-2, Ujina Kaigan 2-chome, Minami-ku, Hiroshima City. *Tel:* (082) 251-7117.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Naigai Unyu Co. Ltd., 23-36, 2-chome, Kaigan-dori, Ujina Hiroshima-shi, Hiroshima-ken. Cable address: Naigai Hiroshima. Domestic Telex: 0652-963 Naigai Hir. Tel.: Hiroshima (0822) 54-2421.

HITACHI: 36.30 N. 140.37 E.

DOCUMENTS: and all general information, refer to "Onahama".
PILOTAGE: Not compulsory. Pilot boards in approximate position Lat. 36° 28′ 13″ N., Long. 140° 38′ 40″ E. (Quarantine Station). Pilot not available after sunset.
MAX. SIZE: Draft, 8.50 m. limited by channel depth.
PRATIQUE: Radio Pratique not available. Formalities carried out at Quarantine Station. (See "Pilotage").
TUGS: 1 × 1,200 h.p. available. A 2,000 h.p. tug will be brought from Kashima if required.
BERTHING:

Berth	*Length (m.)*	*Depth (m.)*	*Permissible Draft (m.)*	*Capacity (g.r.t.)*	*Shore Cranes and Pipe-lines*
A	192	4.0	3.5	500	Nil
B	121	7.5	7.0	3,000	Nil
C	130	7.5	7.0	3,000	Nil
D	185	10.0	9.5	15,000	Unloader 2×150 t.p.h.
E	121	7.5	7.0	3,000	1×250 tons
F	97	4.0	3.5	400	Nil
G	50	5.0	4.5	500	Nil
H	50	5.0	4.5	500	Nil
I	130	7.5	7.0	3,000	Nil
J	165	9.0	8.5	10,000	Nil

STEVEDORES: Working hours: 0800 – 1630 hrs. except 1st., 3rd and 5th Sunday of each month.
FRESH WATER: Available.
FUEL: Domestic oil is available; bonded oil will be brought from Yokohama, when required.
REPAIRS: Minor repairs can be undertaken.
AUTHORITY: Hitachi Port Administration Office, 3-21 Kuji-cho 1-chome, Hitachi City, Ibaraki Pref. *Tel:* (0294) 52-4000.

AGENT: Sub-Agent of Dodwell & Co., Tokyo. Hitachi Port Service Co., Ltd. 10-3, 1-chome Kujimachi, Hitachi-shi, Ibaragi-ken. Cable Address: Hitachips, Hitachikujihama. Domestic Telex: 03645-543. Tel.: (0294) 53-0313.

HOSOSHIMA: 32.25 N. 131.41 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Telegraphic address of pilot station "Pilot Hososhima". 48 and 24 hours' advance notice of ETA required, and any change in ETA. Pilot boards at Hososhima Quarantine Anchorage location, Hosohima Lighthouse N.E. 1 mile off, position 32° 25′ 50″ N., 131° 41′ 53″ E.

ANCHORAGE: Refer Japanese chart No. 1223 (Ozue-wan and Hososhima-Ko).

RESTRICTIONS: Strictly no entry after sunset or departure after 2200 hrs.

MAX. SIZE: Max. permissible LOA 170 m., draft 31 ft. 10 in. (9.7 m.)

HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.

TUGS: Join vessel in position Lat. 32° 26.5′ N., Long. 131° 39.5′ E. Tug's lines to be used. 2 tugs, 1×1,100 h.p. and 1×760 h.p.

BERTHING:

Wharf	*Berth Length* (m.)	*Max. Draft* (m.)	*Cranes*
Industrial Port			
No. 1	175	9.50	1×8 ton
No. 2	196	9.30	
No. 3	100	5.00	
No. 4	180	5.00	
No. 5	130	7.00	
No. 6	180	9.70	
Hyuga Refinery's Wharf	260	9.90	2×18 ton
Sugar Plant Wharf (Dolphin)	150	8.60	
Commercial Port			
No. 1	230	5.80	
No. 2	250	6.80	

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630 – 2130 hrs. (60%) additional of basic stevedorage; 2130 – 0500 hrs. next morning 130% additional; Sundays/holidays 100% additional.

MEDICAL: No advance notice required unless urgent.

DENSITY: Average 1025 in Winter, 1020 in Summer, subject to weather and tide current.

FRESH WATER: Available from dock, 20/30 t.p.h.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest stock ports at maximum 7 days' prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and net tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: No local representatives.

REPAIRS: None.

REPATRIATION: Possible.

AIRPORT: Nearest, Miyazaki Airport about 2 hours drive from Hososhima. JAL and ANA lines.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119. Public telephone booth available near by the berth.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Local Immigration Officers issue shore pass valid for 15 days when Hososhima is first port of call in Japan.

AUTHORITY: Hososhima Port Administration Office, No. 17371-2 Shinkai, Hichiya, Hyuga City, Miyazaki Pref., Kyushu, Japan. *Tel:* 09825-2-5366. *Cables:* Port Authority Hyuga. *Contact:* Mr. Ogata.

AGENT: Sub-Agents of Dodwell & Co. Ltd., Tokyo. Hakko Unyu Co. Ltd., No. 731, Kaigan-dori, Hososhima, Hyuga-shi, Miyazaki-ken (883). Cable Address: "Ringer Hyuga". Domestic Telex: 0776677 HakkoHJ. Tel.: Hyuga (09825)2-2185.

IHO: 34.45 N. 134.46 E.

NO VESSELS CALLING AT THE PRESENT TIME – FACILITIES NOT IN USE SINCE 1973.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from 1 of 3 pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki Lighthouse. (Vessels transiting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki Pilot Station.
3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat. 33° 56′ 14″ N., Long. 131° 03′ 12″ E.

ANCHORAGE: Closed Port. Agent will arrange anchorage position for discharging, with Authorities, but usual position Iho Signal Station, bearing 215° distant 3,000 m. (Signal Station Lat. 34° 44′ 58″ N., Long. 134° 46′ 12″ E.).

HEALTH: Pratique must be obtained at another port before calling Iho.

At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Not required. Discharging at Outer Anchorage.

TANKERS: Port is operated for oil discharging only. Discharge is into barges through 6 in. hoses at either side of vessel.

DENSITY: Average density is between 1025 and 1026 in Winter season and between 1018 and 1020 in Summer season.

FRESH WATER: Not available.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunker will be lightered from the nearest stock ports at maximum 7 days prior notice.

REPAIRS: Not available.

DRY DOCK: Nearest dockyard at Aioi.

AIRPORT: Nearest airport at Osaka.

TIME: GMT plus 9 hours, no alterations.

POLICE/AMBULANCE/FIRE: Police tel. 07944/2-3377; Ambulance, 119 or 2-2101; Fire 119 or 2-2101.

SERVICES: None. Nearest services available at Kobe/Osaka area.

AGENT: See "Himeji".

IMABARI (Imahuru): 34.04 N. 133.00 E. (incl. Mategata). (See Plan Book)

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports.

Pilotage compulsory for vessel over 10,000 g.r.t. Pilots obtained from 1 of 3 pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits) Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki Lighthouse. (Vessels transiting Bungo Channel), Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.
3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGE: Anchorage outside breakwater, sufficient water, but on account fast current deemed not safe anchorage. Anchorage inside breakwater generally shallow, and sea area narrow for large vessels. To discharge logs only Temposan Wharf available for vessels alongside berth where holding ground is good and depth of water is 7.50 m.

Vessels drawing over 7 m.: vessel can enter Mategata (open road) deemed to be most fitted place for vessels entry to discharge logs. Port of Mategata faces Aki-Nada and located near West entrance of Kurushima Channel; Lat. 34° 06′ N., Long. 132° 55′ E., where holding ground good and depth of water 12 m. – 20 m. is kept.

RESTRICTIONS: No entry after dark.

MAX. SIZE: Temposan Wharf length 110 m., breadth no limit, draft 7 m. Mategata (open road) length no limit, breadth no limit, draft 10 m.

HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards and Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: 6 tugs available, 1,050 h.p. – 4,000 h.p. Temposan Wharf: join vessel at sea anchorage, using tug's line with charge. Mategata (open road): no tug required in normal conditions.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio. Also see "Max. Size".

Section	Length (m.)	Depth (m.)
Kurashiki Wharf:		
1	165	9.0
2	140	7.5
3	180	5.5
4	270	5.5
Toryu Wharf:		
1	180	5.5

CRANES: Floating crane available from Kure.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

DENSITY: Temposan Wharf 1015. Mategata 1015.

FRESH WATER: Fresh water available by barge from Onomichi.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: See "Kobe".

REPAIRS: Only minor repairs.

DRY DOCKS: Not available at this port, the nearest ones are Kawasaki Heavy Industries Ltd., Sakaide; Hitachi Shipbuilding & Engineering Co. Ltd., Innoshima; and Mukaishima; dimensions of these docks as follows:

Kawasaki Heavy Industries Ltd., Sakaide. Dock No. 2 for 500,000 d.w.t. vessel. 450 m.×72 m.×12.3 m. It is not in action yet for ships to repair. Only used presently for shipbuilding and after services.

Hitachi Shipbuilding & Engineering Co. Ltd., Innoshima Dock, Dock No. 1 for 20,000 d.w.t. vessel. 175 m.×25.62 m.×9.10 m. Dock No. 3 for 130,000 d.w.t. vessel. 282.50 m.×47 m.×11.33 m.

Hitachi Shipbuilding & Engineering Co. Ltd., Mukaishima Dockyard, Dock No. 1 for 3,000 d.w.t. vessel. 86.18 m.×13.60 m. ×6.80 m. Dock No. 2 for 8,500 d.w.t. vessel. 125 m.×18 m.×7.40 m. Dock No. 3 for 25,000 d.w.t. vessel. 175 m.×29 m.×9 m.

REPATRIATION: Possible.

AIRPORT: No airport. Nearest airports are Matsuyama and Takamatsu where are All Nippon Airways.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police Tel. 110; Ambulance 119; Fire 119.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: Mategata is a closed port. To conform with regulations, vessel obtains permission from Shikoku Maritime Bureau to enter.

Customs request vessels calling Mategata to obtain permission to enter at preceding port of call by paying charge at same rate of tonnage dues prior to arrival of vessel. Application undertaken by Agent.

No quarantine available. Nearest station Matsuyama. No Immigration. Officer comes from Niihama.

SERVICES: None.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

AUTHORITY: Imabari Port Administration Office, 2 Katahara-cho 1-chome, Imabari City, Ehime, Pref. *Tel:* (0898) 22-4120.

AGENT: See "Matsuyama".

IMARI: 33.18 N. 129.49 E.

PILOTAGE: Pilots are available. Boarding stations at 33° 26.4′ N., 129° 42.7′ E. and quarantine anchorage, see "Health".

RESTRICTIONS: Entry/departure possible day and night.

HEALTH: Formalities will be carried out at anchorage. Quarantine Station is 096° 1,300 m. (200 m. circle) from Uranosaki Lighthouse in position 33° 20′ 06″ N., 129° 48′ 32″ E.

TUGS: 1×2,000 h.p. Additional tugs available from Sasebo and Nagasaki.

BERTHING:

Name	Depth (m.)	Permissible Draft (m.)	Capacity (d.w.t.)
Buoy No. 1	10.0	8.0	15,000
Buoy No. 2	12.0	10.0	30,000
Buoy No. 3	14.0	12.0	60,000
Kubara Wharf	10.0	8.0	10,000

STEVEDORES: 12 gangs available for logs.

TANKERS: LPG tankers – see "Shipmaster's Report".

FRESH WATER: Available from barge only (capacity 180 tons).

FUEL: Domestic oil is available; bonded oil will be brought from Moji or Nagasaki with sufficient notice, when required.

REPAIRS: The shipyard is capable of carrying out all kinds of fitting-out and repair work.

SHIPMASTER'S REPORT: November 1984.

Location: The terminal is a fairly new facility situated deep within Imari Bay on the N.W. coast of Kyushu – some 12 miles or so North of Sasebo. It is owned by Kyushu L.P.G. Fukushima Terminal Company Limited and was built in August 1982.

It is used solely for LPG discharge and there is a coastal tanker loading berth immediately adjacent.

Approaches: BA. 1527 is the only British chart to cover the area from the South and is barely adequate. Japanese charts 166 and 1256 will give a better indication of the geography of the bay and immediate approaches.

On this occasion we arrived from the Arabian Gulf and chose to approach to the East of the Goto Retto, through Aizaki Seto and thence North to pass between Azuchi O Shima and Taku Shima, i.e. through Oshima Seto.

Navigation presents no problem with the high land providing excellent radar returns. Because of the strong tidal streams it will be necessary to time the passage of Aizaki Seto on the flood; if this cannot be managed then passage through to the East of Eno Shima is recommended.

There are the usual huge concentrations of fishing vessels in the area and, on arrival, the Pilot advised strongly against attempting another passage of Oshima Seto. (We had transited on a Sunday morning and the passage was entirely clear. On departure, however, it was thick with fishing vessels). A passage to the North of Azuchi O Shima is therefore recommended.

From Safety Regulations:

(i) Master should proceed carefully in Imari Bay to prevent grounding in shallow water (from Aoshima S.E. 1.3 miles, depth 12.4 m. – 13.8 m., Nohtori Asase depth 15.5 m.).
(ii) Under keel clearance shall be kept to more than 10% of maximum ship's draft.
(iii) Entering bay is prohibited under the following conditions:
    1. Wind force is forecasted to increase to more than 10 m./sec.
    2. Wave height is forecasted to be more than 1.0 m.
    3. Visibility is forecasted to decrease to less than 1.0 mile.
(iv) Boil-off gas blowing is prohibited in Imari Bay.
(v) Master shall be requested to proceed through Imari Bay during period from sunrise to sunset.
(vi) Master will be requested to keep ship's speed less than 8 knots while proceeding in Imari Bay.
(vii) The vessel should keep a good lookout by radar and sight.

Restrictions: See "Approaches" and "Berthing".

Max. Size: 70,000 d.w.t., max. draft 15.5 m.

Health: If the vessel has a valid Sanitary Certificate the quarantine anchorage may be dispensed with and the vessel will be cleared alongside.

VHF: See "Pilotage".

Tugs: See "Pilotage".

Pilotage: Pilot compulsory for LPG tankers over 10,000 gross tons. The pilot boarding position is 33° 29′ N., 129° 40′ E., although this is not marked on the BA charts. The Pilot boarded from a tug and required the pilot ladder 2.0 m. from the water. Boarding daytime only. The vessel is then escorted to her berth by 2 or 3 tugs, one of which stations itself over a shoal (12.0 m.) patch within the bay as a marker. There is a 4 knot speed restriction in this area. Pilot guarded Channel 16 and worked Channel 6 VHF.

Length of pilotage about 1.5 hours to quarantine anchorage and thence to berth.

Berthing: Vessels may berth either side alongside although they prefer to berth port side to, presumably to save time on arrival. Local regulations prohibit the connection of cargo lines after sunset.

Normal mooring configuration of 3, 3, 2, with lines on quick release hooks. Mooring boats in attendance.

A shore gangway is provided, length 15 m., extension ability 5 m. – 9 m., can operate to 33° above horizontal and to 17° below horizontal.

The following restrictions apply to berthing:

1. Max. wind force allowed: less than 10 m./sec.
2. Max. wave height allowed: less than 1.0 m.
3. Visibility allowed: over 1.0 sea mile.
4. Max. docking speed allowed: less than 10 cm./sec.
5. Max. docking angle allowed: less than 6°.

From Safety Regulations:

1. Should be portside alongside in principle.
2. Should use tugboat for berthing and unberthing.
3. Should keep berthing speed less than 10 cm./sec., berthing angle less than 6°.
4. Should use line boat for berthing.
5. When coming alongside berth, the ship's manifold to be used shall be clearly marked with "Flag N" so as to be easily distinguished by the Terminal Berth Master on the jetty.
6. Should be careful not to damage the berth facilities.

Discharging: Normal cargo survey procedure. However, the shore carry out their own determination of cargo S.G. and will use this figure for their own calculations.

Normal Japanese Safety Inspections and procedures. There is supposed to be a 4 hourly safety check throughout discharge.

The discharge presented no problems with a rate of 1,200 t.p.h. being achieved with 4 pumps.

A back pressure of 3.0 bar was stipulated but we worked constantly at about 3.2 bar without any complaint, tonnage rate apparently being their main consideration at the time.

Chiksans are purged with Nitrogen on completion.

Cargo Operation Specifications:

	Propane (Liq.)	*Propane (Vap.)*	*Butane (Liq.)*	*Butane (Vap.)*
Receiving capacity (cu.m./hr.)	2,000	2,700	2,000	2,300
Allowable max. pressure kg./sq.m.	10	10	10	10
Allowable temperature (°C)	−45	−45	−10	−10
Hose flange size from shoreside (inches)	All 150 ASA 12	10	12	10

Remarks: Unloading cargo operation of Propane and Butane shall be carried out at the same time.

Chiksan Arm Arrangements: From left to right looking shoreward: Propane vapour, Propane liquid, Butane liquid and Butane vapour.

This being the usual Japanese configuration of V.L.L.V. with dedicated lines.

Shore Vapour Blower Capacity:

Propane:	Max. pressure 2,400 mm. Aq.
	Max. quantity 5 t.p.h.
Butane:	Max. pressure 2,400 mm. Aq.
	Max. quantity 5.8 t.p.h.

Shore Tank details:

for Propane:	Tank capacity 40,000 tons×2
	Tank pressure 0.15 kg./sq.cm.
	Tank temperature −45°C
for Butane:	Tank capacity 40,000 tons×2
	Tank pressure 0.15 kg./sq.cm.
	Tank temperature −10°C

Nitrogen Supply:

Tank capacity:	27 cu.m. (in liquid)
Supply rate:	3,000 cu.m./hr.
Flange size:	1.0 in.

Flare capacity:	3,500 cu.m./hr.×1

Communications: Communication is by means of a telephone placed on board in the CCR. Level of English rather poor and an Agent is invariably in attendance to assist.

Ship's Tel. No.: 380.

Shore Cargo Control Room Tel. Nos.: 350, 351, 352.

Fresh Water: Available from the berth but a minimum of 7 days' notice was quoted for this service.

Tank capacity 350 cu.m, supply rate 17.5 cu.m./hr., Hose flange size 2.5 in.

Water may also be taken by barge (prohibited during cargo operations).

Fuel: Available by barge and must be taken at anchor.

Repairs: The main engines and other equipment for ship's manoeuvring shall be in an operable condition and in a state of immediate readiness while alongside the berth.

There are a number of contractors available for minor repairs, with the usual restrictions on hot work and the movement of large metal objects. There is a large shipyard within the area which could presumably handle emergency repairs.

Surveyors: Nearest Lloyd's Surveyors are at Nagasaki and Moji.

Gangway/Deck Watchmen: Whilst alongside at the terminal berth, responsible member of crew shall be stationed at the ship's gangway to advise visitors of safety regulations and to check visitors and crew members.

Storing: Stores may be loaded from the quay but not whilst working cargo.

Shore Leave: Ship's crew and visitors shall take the route through the terminal shown on the map in the terminal information booklet.

Ship's crew should carry Landing Permit which is issued by Japanese Immigration Officer.

No smoking shall be allowed in the terminal.

When taking photographs of the terminal, permission should be obtained from the Terminal Representative.

Regulations: Following are extracts from the Terminal Safety Regulations.

Cargo handling operation shall be stopped and the vessel shall be shifted to a safe anchorage under such conditions as follows:

1. When Harbour Master or Maritime Safety Agencies order ship's Master to shift vessel.
2. Wind force is forecasted to increase to more than 15 m./sec.
3. Wave height is forecasted to be more than 1.0 m.
4. Visibility is poor (less than 200 m.).
5. Thunderstorm is forecasted to be approaching.
6. When LPG vapour accumulation is present on the deck.
7. When a fire occurs either on the vessel or in the vicinity.
8. When warning of approaching tidal wave is received.

Smoking shall be prohibited onboard when Chiksan arms are being connected or disconnected.

Fire wires shall always be lowered to sea level over the off-side bow and quarter to enable tugs to connect up rapidly in an emergency.

Lubricant pressure of stern tube shall be maintained lower than sea water pressure.

AUTHORITY: Imari Doboku (Public Works) Office, 122-4 Shinten-Cho, Imari City, Saga Pref., Japan. *Tel:* (09552) 34151.

INNOSHIMA: 34.17 N. 133.11 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in Transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication with Inland Sea pilot stations. Also see "Shipmaster's Report" before first port.

Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits) Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

Sekisaki, 3 miles South of Sekisaki Lighthouse (vessels transiting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki Pilot Station.

Kanmon Pilot boards at Mutsure (Lat. 33° 58′ 15″ N., Long. 130° 53′ 43″ E.) for passing Shimonoseki Strait to Hesaki where Pilot will be changed to Inland Sea Pilot.

Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGE: No. 1. 14 m. deep, 1.4 miles off Hyakkan Island 180°. No. 2, 9 m. deep, 1.5 miles off Hyakkan Island 290°.

RESTRICTIONS: In general, mooring/unmooring and/or dry-docking in-and-out carried out in daytime only.

MAX. SIZE:

	Length	*Breadth*	*Draft*
(1) For mooring only	320 m.	× 50 m.	× 7 m.

(2) Max. draft for entering port: 9 m.
(3) Max. draft for mooring: 5 m. – 7 m. according to quay.

Current is N.E. at high tide, and S.W. at low tide at max. 2.5 knots.

HEALTH: In event vessel proceeding Innoshima direct from foreign port, vessel to receive pratique at Quarantine Anchorage Kobe or Saganoseki (Lat. 33° 15′ N., Long. 131° 52′ E.) or Mutsure (Lat. 33° 59′ N., Long. 130° 53′ E.).

At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: 6 tugs available, 320 h.p. – 3,500 h.p. Ship taken into port by Dock Master who joins ship at anchorage with tug-boat. Usually tug's lines used.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Depth (m.)*	*Length (m.)*	*Capacity d.w.t.*	*g.r.t.*
Hitachi Innoshima Yard)				
Repair Berth				
No. 1	7.0	160	12,000	9,500
No. 2	4.0	120	8,000	5,000
No. 3	7.0	220	55,000	35,000
No. 4	7.5	240	130,000	80,000
No. 5	7.0	300	130,000	80,000
No. 6	7.0	380	10,000	7,000
No. 7	10.0		220,000	140,000
No. 8 (West)	10.0	435	220,000	140,000
(East)	7.0		55,000	35,000
No. 9	9.0	300	80,000	50,000

TANKERS: Tank cleaning station operated by Setonaijai Tank Cleaning Company, can receive slops up to rate of 250 t.p.h.

MEDICAL: No advance notice required unless urgent. Hospital facilities available.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

FRESH WATER: Available by barge or pipe-lines at shipyard.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: All facilities for major repairs.

DRY DOCKS: Hitachi Zosen:

	Length (m.)	*Width (m.)*	*Depth (m.)*	*Capacity (d.w.t.)*
Dock No. 1	175.00	25.60	9.10	21,000
Dock No. 2	282.50	47.00	11.30	130,000
Dock No. 3	260.00	57.00	11.10	100,000

AIRPORT: Hiroshima Airport or Okayama Airport (domestic only). About 2 hours by car from both airports.

TIME: GMT plus 9 hours. Permanent.

TELEPHONES: Telephone is available: Shipyard installs one telephone in accommodation and another one in engine room.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

SERVICES: The following services are available: Tank cleaning, discharge of tank washings, compass adjustment, ship's chandler.

AUTHORITY: Mihara Doboku (Public Works) Office, 1834-65, Enichi-cho, Mihara City, Hiroshima Pref. *Tel:* (08486) 4-2322.

AGENT: Sub-Agent of Dodwell & Co., Tokyo. Hamaoka Kaiun Co., Ltd., 2207, Habu-cho, Innoshima-shi, Hiroshima-ken. Cable address: Hamaoka Innoshima; Tel: Innoshima (08452) 2-1340/2. Telex: 06499-94.

ISHINOMAKI: 38.23 N. 141.19 E.

DOCUMENTS and all general information, refer to "Ofunato".

PILOTAGE: Not compulsory. Pilots board at Lat. 38° 23′ 42″ N., Long. 141° 16′ 06″ E.

RESTRICTIONS: Channel depth 10 m. LW.

HEALTH: Radio Pratique available. Formalities carried out at the Quarantine Anchorage (Lat. 38° 23′ 15″ N., Long. 141° 17′ 05″ E.).

TUGS: 7 tugs, 450 h.p. – 3,200 h.p.

BERTHING:

Berth	*Length (m.)*	*Permissible Depth (m.)*	*Draft (m.)*	*Capacity d.w.t.*	*Shore Cranes & Pipe-lines*
Minami Hama Wharf (1) (For chip carriers)	165	10.0	9.5	15,000	
Minami Hama Wharf (2)	165	9.0	9.0	10,000	
Minami Hama Wharf (3)	130	7.5	7.5	5,000	
Hiyori Wharf (6)	165	9.0	9.0	10,000	2× Pneumatic Unloaders
Hiyori Wharf (7)	185	10.0	10.0	15,000	
Ohte Wharf (3, 4, 5)	320	5.5	5.5	2,000	(3 berths)
Ohte Wharf (1, 2)	260	7.5	7.5	5,000	(2 berths)
Nakajima Wharf (1)	130	5.5	5.5	2,000	
Nakajima Wharf (2, 3)	370	10.0	10.0	15,000	(2 berths)
Jyujyo Wharf (Dolphin)	92	6.0	6.0	3,000	1×Pipe-line

FUEL: Domestic oil is available; bonded oil will be brought from Shiogama, when required.

FRESH WATER: Available from shore and by barge.

REPAIRS: Minor repairs possible.

AUTHORITY: Ishinomaki Port Administration Office, 17-2 Nakajima, Ishinomaki City, Miyagi Pref. *Tel:* (0225) 95-6271.

AGENT: Sub-agent of Dodwell & Co., Tokyo. Nanko Unyu Co. Ltd., 13-banchi, Shiomi-cho Ishinomaki-shi, Miyagi-ken. Cable Address: Nanko Ishinomaki. Domestic Telex: 08628-60. Tel: (0225) 96-3815. Postal No.: 986.

IWAKUNI, Yamaguche Bay: 34.10 N. 132.14 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory. Pilots available at Quarantine Anchorage, when required.

Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Cable address "Ansin Moji". Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000, g.r.t. Pilots obtained from 1 of 3 pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position Lat.. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, miles South of Sekisaki Lighthouse (vessels transitting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGES: 2 anchorages, 1 for "Quarantine" and repairing, etc., other for discharging logs.

(a) Quarantine, Lat. 34° 10′ 28″ N., Long. 132° 16′ 43″ E. minimum depth 27 m.

(b) Discharging area, Lat. 34° 11′ 12″ N., Long. 132° 14′ 21″ E. minimum depth 10 m.

Nature of bottom mud. Minimum bottom width no limit.

RESTRICTIONS: Day and night entry possible.

HEALTH: Radio Pratique available. At first port of call in Japan vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Tugs normally join vessel at Quarantine area. Tug's lines to be used free of charge. 6 tugs available, 4×3,000 h.p. and 2×2,500 h.p.

BERTHING: No berthing from sunset to sunrise. At least 2 hours notice arrival necessary to reach berth, in event of direct arrival from foreign country.

Berth	*Length (m.)*	*Depth (m.)*	*Draft & (m.)*	*Length (m.)*	*Capacity (d.w.t.)*
Public, Iwakuni North No. 3 Wharf*	100	9.0	9.0	150	20,000
Sanyo-Kokusaku Pulp Logs Pier	160	7.5	7.5	150	25,000
Sanyo-Kokusaku Pulp Chip Pier		11.5	11.5	200	40,000
Public, Iwakuni -10M Bussen-Futo	185	10.0	10.0	180	20,000
Public, Iwakuni -5.5M Bussen-Futo	150	5.5	5.5	150	3,500

*1×10 ton crane.

MEDICAL: No advance notice required unless urgent.

TANKERS: Max. 150,000 d.w.t.; slop discharge pipe-lines.

	Max. d.w.t.	*Max. LOA*	*Max. safe draft*	*No. and diameter hoses*
Koa Oil Crude Pier	150,000	No limit	16.50 m.	12″×3
Koa Oil No. 3 Pier	25,000	200 m.	10.00 m.	8″×1
Kenei North No. 3 Pier	35,000	230 m.	9.00 m.	12″×2

Discharge rates:

Koa Oil Crude Pier	(Crude Oil)	6,000 t.p.h.
Koa Oil No. 3 Pier	(Low sulphur Fuel Oil)	600 t.p.h.
Kenei North No. 3 Pier	(Crude Oil)	500 t.p.h.

DENSITY: 1020.

FRESH WATER: Available at:

Koa Oil Private Crude Oil Pier.
Koa Oil Private Products Pier No. 3.
Public, Iwakuni North No. 3 Wharf.
Sanyo-Kokusaku Pulp Private Logs Pier.
Sanyo-Kokusaku Pulp Private Chip Pier.

Water barge arrangeable from Onomichi.

FUEL: Available ex-wharf, but not ex-barge. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CARGO GEAR: See "Certificates" but no special requirements.
CONSULS: No consul but marine note of protest can be attended by local notary public.
REPAIRS: Minor repairs possible.
REPATRIATION: Possible.
AIRPORT: Hiroshima airport 45 km. (about 2 hours).
For Osaka (TOA Airline) 0900 hrs., 1415 hrs., 1725 hrs., 2000 hrs.
For Tokyo 0750 hrs., 1100 hrs., 1355 hrs., 1510 hrs., 1755 hrs., 1905 hrs.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 110 (just dial); Ambulance 119 (just dial); Fire 119 (just dial).
TELEPHONES: No arrangements available except Koa Oil.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
DEVELOPMENTS: New berth named "Muronoki Pier" under construction.
AUTHORITY: Iwakuni Port Administration Office, 557-15 Shozoku, 6-Chome, Iwakuni City, Yamaguchi, Pref., Japan. *Tel:* 0827-22-2271. *Contact:* Hirohiko Sugitani, General Manager.
AGENT: Sub-agents of Dodwell & Co., Tokyo. Naigai Unyu Co. Ltd., Iwakuni Office, 7-35, 4-chome, Shinminato-cho, Iwakuni-shi, Yamaguchi-ken. Cable address: Naigai Iwakuni; Domestic Telex: 06672-39, Naigai J. Tel: Iwakuni (0827) 21-7115/6.

KAGOSHIMA: 31.35 N. 130.33 E.

DESCRIPTION: Port situated in Kagoshima Bay, the Southern part of Kyushu and consists of 6 sections as follows:

Old Harbour (Honko): divided into Inner Harbour sheltered by breakwaters which can accommodate up to 3,000 tonners, and Outer Harbour, (open roads) where large size vessels lie at anchor.

New Harbour: adjacent to Main Harbour on the South. This section also sheltered by breakwaters and a 10,000 tonner can be accommodated.

South Harbour: located about 6 km. away from old harbour on South side and used for small coasters.

Lumber Harbour: located about 7 km. away from old harbour on South side and used for log carriers, a 15,000 tonner can be accommodated.

DOCUMENTS:
Customs: When vessel arrives direct from foreign port, Customs Officials board for search. Following documents to be submitted:

Crew List.
Passenger List.
Manifest of crew personal effects (must be signed by individual crew member).
Store List.
Arms and Ammunition List.
Narcotics List.
List of ports of Call on current voyage.
Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration inward/outward.

Following will be checked on board: Ship's Registry; Last Port Clearance.

When vessel comes from Japanese port, Customs Officials will not attend on board, except in special case. Master or Agents to attend Custom House for entry formalities with following documents:

Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration inward/outward.
Ship's Registry.
Last Port Clearance.

Documents entrusted with the Master by Customs at previous port.

On vessel's departure, a clearance is issued by Customs, after confirming payment of tonnage dues.

HEALTH: Radio Agent for Free Pratique not less than 5 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When Free Pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get Radio Pratique:

1. A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.
2. If a vessel does not possess a valid Derat or Derat Exemption Certificate.

Quarantine:
(a) Quarantine Station: Sea area within radius of 1,000 m. from centre, position Lat. 31° 33′ N., Long. 130° 35.5′ E.
(b) Quarantine service rendered from sunrise to 1 hour before sunset.
(c) "Q" flag should be hoisted until Free Pratique granted.
(d) When vessel arrives from plague-infected or suspected area within 10 days after she left such place, 24-hour special quarantine required.

All sanitary scuppers must be closed and garbage not thrown overboard after reaching 60 miles off Japanese coast.

PILOTAGE: Not compulsory, but necessary unless Master well acquainted with locality. Pilot embarks at quarantine anchorage (see "Health"). Request for Pilot made through Agent. Master to report by radio accurate ETA at least 24 hours prior to arrival.
ANCHORAGE: Ample good holding anchorage available in Outer Harbour. Depth: Over 9 m.
RESTRICTIONS:

Wharf	*Location*	*Length* (m.)	*Depth* (m.)
7.9 m. Wharf	Old Harbour	110	7.9
7.5 m. Wharf	Old Harbour	220	7.5
North No. 1	New Harbour	125	7.5
North No. 2	New Harbour	160	5.5
South No. 5	New Harbour	165	9.0
South No. 6	New Harbour	260	7.5
Lumber Wharf	Lumber Port	180	10.0
(15,000 tonners can be accommodated)			
Taniyama Wharf No. 1 (District No. 1)	Taniyama Port	250	12.0
(50,000 tonners can be accommodated)			
Taniyama Wharf No. 2 (District No. 2)	Taniyama Port	260	7.5
(5,000 tonners can be accommodated)			
Taniyama Wharf No. 6	Taniyama Port	260	7.5
(5,000 tonners can be accommodated)			
Taniyama Wharf No. 7	Taniyama Port	390	7.5
(5,000 tonners can be accommodated)			
Grain Dolphin in Taniyama District No. 1 for private quay. (65,000 tonners can be accommodated)		171	12.0

RADIO: Recommended Master contacts Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If Westbound via Chosi and Northbound to Nagasaki respectively.
TUGS:

"Wakashio Maru No. 2"	twin diesel vessel 3,200 h.p.
"Kinko Maru"	twin diesel vessel 3,000 h.p.
"Sanko Maru"	twin diesel vessel 3,000 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by Agent mainly by radio.

New Port (Kagoshima-Shinko). Sheltered harbour with main entrance 150 m. wide between S. breakwater (350 m.) and N. breakwater (150 m.). Sheltered anchorage in depth of 5.5 m. – 9.0 m. No mooring buoy. Berthing outside breakwater in depth of 9.0 m. and inside breakwater in depth of 5.5 m. – 9.0 m.

Piers: South Pier (in foreign trade zone):
165 m. long with 9.0 m. alongside, will take one vessel of about 10,000 g.r.t.
260 m. long with 7.5 m. alongside, two vessels less than 5,000 g.r.t.
120 m. long with 4.5 m. alongside, two vessels less than 500 g.r.t.
North Pier (for inbound vessels):
125 m. long with 7.5 m. alongside will take one vessel of about 3,000 g.r.t.
160 m. long with 5.5 m. alongside two vessels less than 1,000 g.r.t.
Taniyama Pier No. 1 (Taniyama-ko 1-ku 1-go wharf)
250 m. long with 12.0 m. alongside, 2 vessels less than 50,000 g.r.t.
Taniyama Pier No. 2 (Taniyama-ko 1-ku 2-go wharf)
260 m. long with 7.5 m. alongside, 2 vessels less than 5,000 g.r.t.
Taniyama Pier No. 6 (Taniyama-ko 2-ku 6-go wharf)
260 m. long with 7.5 m. alongside, 2 vessels less than 5,000 g.r.t.
Taniyama Pier No. 7 (Taniyama-ko 2-ku 7-go wharf)
390 m. long with 7.5 m. alongside, 3 vessels less than 5,000 g.r.t.

Note: Taniyama Harbour: Located 11 km. from Old Harbour on South and used for large vessels.

STEVEDORES: Maximum 10 gangs available. Working hours: 1 labour shift.

Normal working hours: 0800 to 1700 hrs. Overtime work possible, until about 2000 hrs. by applying to Customs at following hours: 1700 – 2200 hrs., 0500 – 0830 hrs. Also Sundays and holidays 2200 – 0500 hrs. All night work is impracticable. No work can be arranged for 30th December and during New Year holidays (1st to 3rd January).

MEDICAL: Imakyurei Hospital, Chou Hospital, Fukusaki Hospital, Yotsumoto Dental Plant. Igo Oculist. No advance notice required unless urgent.
TANKERS: No tanker berths at Kagoshima, but Central Terminal Station (C.T.S.) in Kagoshima Bay. See "Kiire".
FRESH WATER: One 200 ton water barge available. Hydrants at wharves in main harbour. Rate of delivery: 50 t.p.h. from barge; 20 – 30 t.p.h. from hydrants.
FUEL: None available. Lightered from anotherport. Ample notice so that necessary lighterage can be arranged.
GANGWAY/DECK WATCHMEN: Not specifically required unless passengers or valuable cargo on board.

2 sets of shoree gangways (10 m. log) with platforms (3 m. high) also English speaking watchmen are available but advance notice is required.

OPENING/CLOSING HATCHES: Stevedores open/close hatches. Cost per hour depending on type of cargo. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears poor.
CUSTOMS ALLOWANCES: Only 50 cigarettes to take ashore but no spirits.
REPAIRS: Hull/engine repairs are available at Kagoshima Dockyard and Iron Works and Kikukawa Iron Works.
REPATRIATION: Possible.
AIRPORT: Kagoshima International Airport. Located to the North, 50 minutes drive from centre of Kagoshima city.

TIME: GMT plus 9 hours. No alterations to clocks during year.
HOLIDAYS: See "Tokyo" (Also see "Stevedores").
SERVICES: Cargo Survey. Provisions and Stores. Fumigation – Toyo Fumigation attend from Moji on request.
WIND/TIDE: N.W. wind prevails in Winter season and Easterly wind in Summer. Wet seasons in April and July. Average tidal range 2.74 m. In the outer harbour, flood tide sets to North and ebb to South. Maximum speed of current 2 knots. Current in inner harbour is less than 0.25 knots.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 day extension possible if vessel stays longer. Also see "Regulations".
REGULATIONS: Immigration Officials board vessel on arrival to examine passports, discharge-books and/or other equivalent travel documents and provide 72 hour landing passes for crew members and passengers. 1 copy each of crew list and passenger list required by them. Providing ship's Agent with a crew list beforehand will be a great help in expediting immigration business on vessel's arrival. When vessel stays in port more than 72 hours, the landing passes may be extended 72 hours on application. In the event that crew members, without entry visas, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hours) of these men has been booked, or unless vessels to which they are to be transferred, arrive in Japan within 5 days.
AUTHORITY: Kagoshima Port Administration Office, 18-16 Izumi-Cho, Kagoshima City. *Tel:* (0992) 23-3277.

AGENT: Sub-agents of Dodwell & Co. Tokyo. Kyoshingumi Co. Ltd., Agency Department, Zisaki, Zyonan-cho, Kagoshima-shi, Kagoshima-ken. Cable address: Kyoshingumico Kagoshima; Domestic Telex: 07822-46. Tel: (0992) 26-7124, 26-7115.

KAKOGAWA: 34.42 N. 134.50 E. (See Plan Book)

Port is for sole use of the Kobe Steel Co. Ltd. Declared open port as of 1st May 1970, but vessels should first call off Kobe to obtain Free Pratique, Customs clearance and Pilot.
DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot will board off Kobe when calling for Free Pratique and Customs clearance. Pilot will be arranged by Agent subject advance request and usual ETA advices.
RESTRICTIONS: Mooring/unmooring conducted daylight hours only.
MAX. SIZE: Kobe Steel, Berth No. 4: 165,000 d.w.t. (or 250,000 d.w.t. with part load).
HEALTH: Vessel must call off Kobe for Free Pratique. At first port call in Japan, vessel must obtain free pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to contact Chosi, and Northbound to contact Nagasaki Radio respectively.
BERTHING:

	Length	*Depth*	*Max. Size*
Pier W-5	240 m.	11.90 m.	35,000 d.w.t.
Pier W-6	275 m.	11.90 m.	35,000 d.w.t.
LPG Dolphin	77 m.	16.00 m.	70,000 d.w.t.
Scrap Pier	250 m.	11.10 m.	25,000 d.w.t.
South Pier	450 m.	6.80 m.	—

Depth at low water is 17 m. in the fairway which is 400 m. wide.
Kobe Steel:

Berth	*Length* (m.)	*Depth* (m.)	*Max. LOA* (m.)	*Max. Draft* (m.)
No. E-4	400	17.0	300	16.0
No. E-2	200	14.5	190	12.5
No. E-3	300	14.0	239	14.5

Products Handled Coal and ore.
Cranes: 4 × 1,500 t.p.h. at E.4; 1×700 t.p.h. at E.3; 2×35 ton at West Wharf (No. 5) and 2×35 ton at West Wharf (No. 6).
MEDICAL: Treatment has to be arranged from Kobe.
FRESH WATER: Available from quay. Rate 50 – 80 t.p.h.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay, and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
REPAIRS: Arranged from Kobe.
REPATRIATION: Possible, through Kobe.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

SHIPMASTER'S REPORT: When the vessel anchors off Kobe in the Roads, "Kobe Harbour Control" will call on VHF Channel 16 and ask for anchoring time and position from Kobe Headlight.

The maximum draft at Higashi Harima is 15.5 m.

Vessels always berth port side alongside. The gangway should be lowered as soon as possible to let the officials aboard.

The vessel loaded 112,000 metric tons in 60 hours, previously the same amount had been loaded a little quicker.

Bilge water, oil or garbage should never be thrown overboard because owners have to pay compensation to the Fishermen's Union.

Berthing takes place 2 hours before high water.

AUTHORITY: Kakogawa Doboku (Public Works) Office, 97-1, Tenjingi, Jike-machi, Kakogawa City, Hyogo Pref. *Tel:* (0794) 21-1101.
AGENT: See "Himeji".

KAMAISHI: 39.16 N. 141.55 E. (See Plan Book)

DOCUMENTS:
Ship's Register. Last Port Clearance. 6 Crew Lists including Passport Numbers. 4 Passenger Lists. 1 Store List and 2 Lists of Ports of Call.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot not compulsory, but arrangeable at Master's request. Pilot arranged by Agent and vessel required to radio Agent ETA 24 hours before ship's arrival. Pilot boat has no facility to communicate, nor particular light or sound signals, but flies Pilot flag "H". Pilot boards at Lat. 39° 16′ N., Long. 141° 59′ E. About 1 mile N.N.E. of Osaki Point. No alternative area in event bad weather.
ANCHORAGE: Up to 4×30,000 d.w.t. vessels can safely anchor. Max. size at anchorage 120,000 d.w.t. Depth of water: 31 m. – 43 m. at Quarantine Anchorage.
RESTRICTIONS: Vessel free in and out anytime.
MAX. SIZE: Draft 14 m. and LOA 300 m. (915 ft.) Breadth no restriction.
HEALTH: *Quarantine Anchorage:* Located in Western semi-circle of 500 m. radius with centre at Lat. 39° 15′ N., Long. 141° 55′ E. This area is also used for urgent anchorage.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Chosi, and Northbound to contact Nagasaki Radio respectively.
TUGS: Tugs (2) join vessel at anchorage and tugs' lines used free of charge.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth		*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Capacity* (d.w.t)	*Shore Cranes*
South Pier						
NSC No. 3	Old	230	8.4	8.4	13,000	1×7 T, 1×15 T
	New	288	13.5	13.0	25,000	Unloader 700 t.p.h.
NSC No. 4	Old	230	8.7	8.7	20,000	2×7 T, 1×17 T
	New	288	14.0	13.0	160,000	Unloader 700 and 900 t.p.h.
North Pier						

NSC Nos. 1 & 2 Not suitable for the vessel more than 5,000 G/T.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1630 – 2130 hrs. 60% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 100% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: Winter 1026-1027. Summer 1023-1024.
FRESH WATER: Available from wharf by hose. Rate of delivery: about 10 t.p.h. – 15 t.p.h. No water barge.
FUEL: Domestic diesel oil (Bunker A) is available. Bonded oil will be brought from Sendai, Yokohama and Kashima with sufficient advance notice.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Minor repairs such as welding, piping, lathing works etc. only.
DRY DOCKS: None.
REPATRIATION: Possible.
AIRPORT: Hanamaki, distance 100 km. (2 hours by car). Toa Domestic Airlines (TDA); 3 flights between Hanamaki/Tokyo everyday, 2 flights between Hanamaki/Osaka everyday and 1 flight between Hanamaki/Sapparo every day.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 2-4536 (Headquarters) and 2-3828 (Water Police Station); Ambulance 119; Fire 119.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: Surveyor, Tally, Hold cleaning, Tank cleaning.
GENERAL: Discharging ex-gearless vessel not possible at anchorage.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
AUTHORITY : Port and Harbour Dept, Iwate Prefecture Government, 10-1 Uchimaru, Morioka City, Iwate Pref., 020 Japan. *Tel:* (0196) 51-3111. *Contact:* Masanao Takeda, Director, Port & Harbour Department.
AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Narasaki Sangyo Co., Ltd., Kamaishi Branch, Kamaishi Building, No. 1-1, Hama-cho Kamaishi-shi, Iwate-ken. Cable Address: Narasaki Kamaishi. Domestic Telex: 8355-56. Tel: (0193) 22-2731/2. Postal No.: 026.

KANDA: 33.47 N. 131.00 E. (See Plan Book)

PILOTAGE: Not compulsory; Inland Sea Pilots are available from Sekisaki, Hesaki or Mutsure if required. Harbour Pilots are available at the anchorage (Lat. 33° 48′ 03″ N., Long. 131° 03′ 02″ E).
RESTRICTIONS: Pilots are only available from sunrise to 1 hour before sunset.
PRATIQUE: Available at the Hesaki or Mutsure Anchorages. (In case of vessels from East, formalities will be carried out at the Hesaki Anchorage. If vessels from West, formalities will be carried out at the Mutsure Quarantine Anchorage. But after Free Pratique granted, vessels have to pass the Kanmon Channel enroute to off Kanda).
TUGS: 1 × 3,000 h.p. and 1 × 1,300 h.p. (Tugs from Moji also available when required).
BERTHING:
Public Wharves:

Berth No.	*Length* (m.)	*Depth* (m.)	*Remarks*
No. 1	370	10.0	2×15,000 d.w.t.
No. 2	130	7.5	1×5,000 d.w.t.
No. 3	110	6.5	1×3,000 d.w.t.
No. 4	150	5.5	2×2,000 d.w.t.
No. 5	386	4.5	6×700 d.w.t.
No. 6	7	4.5	1×700 d.w.t.
No. 7	130	7.5	1×5,000 d.w.t.
No. 8	260	7.5	2×5,000 d.w.t.
No. 9	440	4.5	7×700 d.w.t.
No. 10	20	10.0	1×15,000 d.w.t.
No. 11	185	10.0	1×15,000 d.w.t.
No. 12	10	3.0	—
No. 13	351	3.0	—
No. 14	100	2.0	

Private Facilities:

Berth No.		*Length* (m.)	*Depth* (m.)
No. 15	Kyusyudenryoku Wharf	18	3.0
No. 16	Kyusyudenryoku Wharf	104	7.5
No. 17	Aso Cement Wharf	35.4	7.5
No. 18	Aso Cement Wharf	28	7.5
No. 19	Aso Cement Wharf	74	6.0
No. 20	Ube Kosan Wharf	86	7.5
No. 21	Ube Kosan Wharf	46	6.0
No. 22	Ube Kosan Wharf	33.5	4.5
No. 23	No. 1 Mitsubishi Kogyo Cement Wharf	55.4	4.5
No. 24	No. 2 Mitsubishi Kogyo Cement Wharf	19	6.0
No. 25	No. 3 Mitsubishi Kogyo Cement Wharf	48	7.5
No. 26	No. 4 Mitsubishi Kogyo Cement Wharf	185.4	10.0
No. 27	Yutaka Kozai Wharf	215	4.5
No. 28	Ube Kosan Wharf	55	6.0
No. 29	Nihon Cement Wharf	49	7.5

Remarks: In case of vessel's draft exceeds 9 m., entry/departure only practicable at HW.
FRESH WATER: Available from shore, except Matsuyama Wharf & Dolphin and Mitsubishi Kogyo Cement Wharf where a barge is available.
FUEL: All kinds of bunkers will be brought from Moji or Shimonoseki, when required.
REPAIRS: All kinds of repairs can be undertaken by Moji repairers.
AUTHORITY: Kanda Port Administration Office (Fukuokaken Kandakomusho), 1, Minato-machi, Kanda-machi, Miyako-gun, Fukuoka Pref. *Tel:* (093) 434-0585.
Contact: Jyoji Suzuki, General Manager.

KANMON-KO (Kanmon Harbour).

According to Japanese Harbour Area Regulations, Moji, Shimonoseki, Kokura, Tobata, Wakamatsu and Yawata are respective sections included in one port namely Kanmon Harbour. The expression of the port as "Kanmon" has been used in charter parties, where these 6 ports are considered to be one port. Vessel's movements within these ports is treated as shifting berth in the same port. Therefore, if vessels calls at more than 2 ports within this area, such calls are covered by one payment of tonnage dues. However, at Tobata, Wakamatsu and Yawata, port dues are levied in addition to tonnage dues.

Entry/departure procedures to Customs, Immigration and/or Harbour Master should be effected at each port, as those officials stationed individually at each port.

Pilotage is compulsory for vessels over 10,000 g.r.t. passing through Kanmon Channel.

KANOKAWA: 34.11 N. 132.26 E. (See Plan Book)

(PORT STATUS: CLOSED PORT)
DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 10 Crew Lists including Passport Numbers. (For Iwakuni and Kanokawa.)
- 10 Passenger Lists. (For Iwakuni and Kanokawa.)
- 2 Stores Lists. (For Iwakuni and Kanokawa.)
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from 1 of 3 pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.
Note: VHF Communication available with Inland Sea Pilot stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits). Position 34° 09′ N., 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse. (Vessels transiting Bungo Channel.) Position 33° 13′ N., 131° 54′ E. Telegraphic address "Anjin Moji". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position 33° 56′ 24″ N., 131° 03′ 12″ E.

Inland Sea Pilots also attend Harbour Pilotage but if specifically required Harbour Pilot boards at Port entrance South side of Ohkurokamishima, Position 34° 10′ N., 132° 26′ E.
ANCHORAGES: Good holding ground. Entrance Channel and Harbour Channels. Depths 18 m. min. Bottom mud and sand. Difference between quoted datum and chart datum about 2 m. (to be added). Harbour anchorage about 2 miles South of "T" head berth where vessel remains if waiting berth. (34° 08′ N., 132° 24′ 3″ E.).
RESTRICTIONS: No berthing or unberthing between sunset and sunrise.
MAX. SIZE: Length 270 m., beam 40 m., draft 14 m., deadweight 125,000. See 'Tankers".
HEALTH: Closed port. Vessel must call at another port (such as, Matsuyama or Iwakuni) for Customs and Health clearance before entering Kanokawa. At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

N.B. Vessels destined for Kanokawa call at Iwakuni for quarantine and Customs formalities for entering Kanokawa (Closed Port) before proceeding to Kanokawa.
TANKERS:

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft & LOA* (m.)	*Capacity*	*Pipe-lines*
Mitsubishi Shoji Kanokawa No. 1	73.6	12.2	11.2×240	Less than 30,000 d.w.t.	See below
No. 3	159.00	15.4	14×270	Less than 125,000 d.w.t.	
Nos. 2 & 4		7.0		For Coastal Tanker use only, 5,000 d.w.t.	

Pipe-lines:	*No. 1*	*No. 3*
Size and number of manifold	1×12 in.	5×12 in.
Size and number of shore line	1×16 in.	2×24 in.
Max. back pressure on shore gauge	5.0 kg/sq.cm.	5.0 kg/sq.cm.
Average speed for discharging	2,000 kl/hr.	3,000 kl/hr.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.
TUGS: Arranged from Kure. Normally join at Kanokawa Port Entrance. Usually tug's lines used without extra charge.
DENSITY: 1023 – 1025 alongside berth. Rise of tide: Springs 3.4 m. Neaps 2.6 m.
FRESH WATER: Available at berth, ex-pipe-line. Average delivery rate – 20 t.p.h.
FUEL: Most grades of domestic and bonded oil obtainable by barge only at anchorage after completion of discharge, with 3 days' advance notice.
CONSULS: None.
REPAIRS: See "Kure".
AIRPORT: See "Kure".
TIME: GMT plus 9 hours. Permanent.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONES: No arrangements available for placing telephones on board.
AUTHORITY: Ohgaki Doboku (Public Works) Office, 25 – 3 Oaza Ohara, Ohgaki-Cho, Saiki-Gun, Hiroshima Pref., Japan. *Tel:* 0823 – 57 – 3434. (*Note:* This is a closed port, therefore there is no Port Authority.)
AGENT: See "Kure".

KASHIMA: 35.54 N. 140.42 E. (See Plan Book)

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 5 Crew Lists including Passport Numbers.
- 5 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot called through Agent. Pilot boards about 2 miles to N.E. from the end of South Breakwater, in vicinity of Lat. 35° 58.5′ N., Long. 140° 44′ E.
ANCHORAGE: No suitable anchorage at present. Quarantine Anchorage is within a rectangular section commencing at point "A" (089° 45″, 5,200 m. from Kashima lighthouse) thence 151° for 1,500 m., thence 241° for 1,000 m. thence 331° for 1,500 m. thence to point "A". Depth 18.3 m.
Shipmaster's Report: July, 1981.

Quarantine Anchorage only for small ships (under 3,000 d.w.t).

Pilots advised and requested vessel to anchor (on next visit) 2 to 3 miles, 45° off North end of pier, pilot station also located in this position.

Reasons: Anchorage close to outgoing traffic, especially for very large vessels. Also anchor holding ground not good in case of sudden wind gusts.

Anchorage as mentioned (also on B.A. Charts) is not used any more and Quarantine Officer boards after passing second breakwater.
RESTRICTIONS: Pilot does not board vessel after dark.
Passages:

Name	*Width* (m.)	*Depth* (m.)
Central Passage	400 – 600	19 – 13
South Passage	300 – 430	12 – 10
North Passage	300	13 – 10
Outport Passage	480 – 540	24 – 22

MAX. SIZE: *Tankers:*

Berth	*Max. d.w.t.*	*Max. L.O.A.*	*Max. Safe Draft*
200,000 ton Sea Berth	200,000	336.34 m.	19.00 m.
100,000 ton Berth	100,000	258.16 m.	14.00 m.
70,000 ton Berth	70,000	238.50 m.	11.91 m.

Bulk carriers have entered with draft up to 44 ft.
HEALTH: Radio Pratique is available if application in accordance with Japanese Regulations. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.
VHF: 50 Watt powered base station operates at Oh-aza Igiri, Kamisu-cho, using call sign "Ibaraki Port Radio", continuous watch is maintained 24 hours on Channel 16, all calling should be on Channel 16, and working Channels 14 and 12. Tugs (including Pilots) work on 400 mHz.
Shipmaster's Report: July 1981.
VHF station (call: "Ibaraki Port Radio") on Channel 16, traffic on Channel 14.

Handles all traffic about pilotage, etc. Station not yet mentioned in List of VHF stations (Radio Holland). Agents pay 3,500 Yen per ship per port call for using the station.
TUGS: Usually joins vessel at anchorage where Pilot boards; Tug's lines used.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Name	*Depth* (m.)	*Length* (m.)	*Number of Berths*	*For Ships* (d.w.t.)	*Major Cargo Handled*
*Fuka-Shiba Public Wharf Berths	– 5.5	300	3	2,000	Sundries
*South Public Wharf Berths	–10.0	370	2	15,000	Sundries
*South Public Wharf Berth	– 7.5	130	1	5,000	Sundries
(a) Heavy Oil & Sundries Berth	– 6.0	130	1	5,000	Heavy oil, Sundries
Raw Materials Berths	–16.0	451	3	5,000×2 80,000×1	Coal, iron ore
Raw Materials Berths	–19.0	749	2	150,000	Iron ore, coal
Slab Berth	–14.0	300	1	50,000	Sand, gravel, iron and steel
Manufactured Goods Berths	–12.0	1,184	6	50,000	Iron and steel
Manufactured Goods Berths	– 7.5	782	6	3,000×1 5,000×5	Iron and steel
Sundries Berth	– 6.0	175	1	3,000	Sundries
All-Weather Berths	– 7.5	200	2	5,000	Sundries
West Spiral Berth	– 6.0	127	1	3,000	Sundries
(b) 200,000-ton Dolphin	–22.0	129	1	200,000	Crude oil
100,000-ton Dolphin	–16.0	76.8	1	100,000	Crude oil, heavy oil, LPG
70,000-ton Dolphin	–14.0	39.6	1	70,000	Crude oil, heavy oil
Shipping Piers	– 6.0	92	2	3,000	LPG
Shipping Piers	– 6.0	585	12	3,000	Petroleum products
Shipping Piers	– 6.0 – 9.0	764.5	7	3,000	Petroleum products
(c) Heavy Goods Berth	– 5.5	120	1	1,000	Sundries
50,000-ton Dolphin	– 7.5	50	1	5,000	Heavy oil
(d) 100,000-ton Pier	–16.0	231	1	100,000	Raw salt
(e) 65,000-ton Pier	–13.0	280	1	65,000	Cereals
Shipping Berths (Pier)	– 6.3	505	5	500×1 2,000×1 3,000×3	Cereals
(f) 65,000-ton Pier	–13.0	281	1	65,000	Cereals
Shipping Berths (Pier)	– 6.3	370	3	2,000×1 3,000×2	Cereals
(g) Manufactured Goods Berths	–10.0 –12.0	350	1	25,000	Machinery
(h) High-Pressure Gas Dolphin	– 7.5	29	1	3,000	Chemicals
(i) Manufactured Goods Berth	–10.0	195	1	15,000	Chemical Fertilizer
Liquid Ammonia Dolphin	– 6.0	28	1	3,000	Chemicals
(j) Dangerous Cargo & High-Pressure Gas Berths	– 6.0	336	4	3,000	Chemicals
(k) Manufactured Goods Berth	– 7.0	145	1	3,000	Chemicals
(l) Raw Materials Berths	– 6.0	150	2	1,000	Chemicals
Joint Berth for Two Companies (A)	– 7.0	140	1	3,000	Chemicals
(m) Raw Materials-Manufactured Goods Berths (A)	–10.0	400	2	15,000	Chemicals
Raw Materials-Manufactured Goods Berths (B)	– 7.5	240	2	5,000	Chemicals
Joint Berths for Four Companies (B)	– 7.0	230	2	3,000	Chemicals
*Landing Stages at the Central Vessel Basin	– 4.0	458	—	—	—
*Waste Oil Dolphin	– 5.5	27.2	2	3,000	—
*Landing Stages at the Basin for Small Vessels	– 2.0 – 3.5	351	—	—	—
*Igiri Berths	– 4.5 – 5.0	939	—	—	—
*Ikemuko Berths	– 5.0	113	—	—	—

(a) Sumitomo Metal Industries Ltd.
(b) Kashima Oil Co. Ltd.
(c) The Tokyo Electric Power Co. Inc.
(d) Kashima Chlorine & Alkali Co. Ltd.
(e) Showa Sangyo Co. Ltd.
(f) Zen-No Silo Co. Ltd.
(g) The Japan Steel Works Ltd.
(h) The Shin-etsu Chemical Industry Co. Ltd
(i) Kashima Ammonia Co. Ltd.
(j) Mitsubishi Petrochemical Co. Ltd.
(k) Japan Synthetic Rubber Co. Ltd.
(l) Takeda Chemical Industries Ltd.
(m) Asahi Glass Co. Ltd.
(A) Asahi Glass Co. Ltd.,
Mitsubishi Gas-Chemical Co. Inc.
(B) Asahi Denka Kogyo K.K.,
Kuraray Co. Ltd.,
Mitsubishi Gas-Chemical Co. Inc.,
Kanegafuchi Chemical Industry Co. Ltd.

*Public Berth.
MEDICAL: No advance notice required unless urgent.

TANKERS: Requirements prior to arrival: Manifold: position, number and external and internal diameters. Reducer: type (ASA or JIS, etc.) and external and internal diameters. Bolt: diameter and number, also diameter of pitch circle. Pumping capacity. Ship's draft and ETA, to be received by 0900 hrs. every morning continued 3 days prior to day of arrival. Water requirement (because of necessity of pumping-up tank for preparation).

Discharge Rates:

Berth	*Product*	*Discharge Rate (t.p.h.)*	*Shoreline*
200,000 Ton Berth	Crude Oil	10/12,000	38 in.×1 42 in.×1
	Bunker	5/600 (Connection)	12 in.×1
100,000 Ton Berth	Crude Oil	4/6,000 4/6,000	24 in.×1 26 in.×1
	LPG	2/3,000 (Propane) (Butane)	22 in.×1 22 in.×1
	Bunker	5/600 (Connection)	8 in.×1
70,000 Ton Berth	Naphtha White Kerosene	1,800	14 in.×1
	Minus Crude Oil	3/3,500	16 in.×1
	Fuel Oil	1,800/2,000	20 in.×1
	Crude Oil	3/3,500	24 in.×1
	Bunker	5/600 (Connection)	8 in.×1

DENSITY: 1025.

FRESH WATER: 50 metric t.p.h. from shore pipe, 50% additional for service between 0600–0800 hrs. 1700–2200 hrs. and during rainy and rough weather, also on Sundays and holiday. 100% additional for service between 2200–0600 hrs.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days' prior notice. Bunkers are also available from Kashima Oil Co. with prior notice.

FIRE PRECAUTIONS: No special precautions, but water curtain made alongside dolphin in case of fire, and there is a fire boat (15 gross tons, and airfoam system).

GANGWAY/DECK WATCHMEN: Not specially required unless at Kashima Oil Refinery Berth.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 40 cigarettes to take ashore but no spirits.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Hull and engine repairs possible.

AIRPORT: Narita Airport (New Tokyo International Airport).

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police Tel. 110; Ambulance/Fire Tel. 119.

TELEPHONES: Not available for placing on board.

SERVICES: No equipment nor facilities, but compass adjusting and others arrangeable from Yokohama.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for 9 days, extension possible for longer stay.

DEVELOPMENTS: Port under construction. When completed, total length of wharf will be about 17 km. for about 30 big industries such as iron and steel works, oil refinery and chemical works, foodstuff and foodstuff industries, etc.

AUTHORITY: Kashima Port Administration Office, 13 Higashi Fukashiba, Kamisu-City, Kashima-Gun, Ibarak-Ken, Japan. *Tel:* (02999) 2-2111.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Keiyo Shipping Agency Ltd., Kashima Office, 65-86 Kamisu, Kamisu-Machi, Kashima-Gun, Ibaraki-Ken. Cable Address: Keiyoshipkashima Itako Domestic Telex: 3658-926 Tel: Kashima 02999 2-2193.

KAWASAKI: 35.32 N. 139.46 E. (See Plan Book)

PORT LIMITS: The boundary of the Kawasaki port consists of: The position of the central outfall of the border canal (Sakai Canal) of Ohkawa-cho, Kawasaki-ku, Kawasaki City and Anzen-cho, Tsurumi-ku, Yokohama City. From this position to a point of 151° 30′, 3,460 m. and from this latter position to a point of 126°, 2,310 m. The position of 136°, 5,150 m. from the Tamagawa river Haneda light beacon, the line drawn from the end point of the Tamagawa river administrative boundary border line and the sea surface which covers the shore. The water surface of the following canals: Sakai Canal (beyond the East of the administrative boundary border line), Siraishi Canal, Tanabe Canal, Minami Watarida Canal, Asano Canal, Ikegami Canal, Sakurabori Canal, Iriezaki Canal, Mizue Canal, Shiohama Canal, Yako Canal, Chidori Canal, Daishi Canal, Suehiro Canal and Tama Canal. The water surface of the area of Siraishi-cho No. 2, Asano-cho No. 1, Yako No. 3-1, Yako No. 1-1 and Ukishima-cho No. 100 of Kawasaki-ku, Kawasaki City and the downstream water surface of Kannongawa Iriebashi. The water surface area of Tamagawa river (beyond the West of the administrative boundary border line), downstream of the line drawn 43° 30′ from the S.E. side of Tono machi Kawasaki-ku, Kawasaki City.

DOCUMENTS: *Quarantine Station*
Quarantine Declaration.
Crew List.
Passenger List.
Fumigation Certificate.
Cargo Manifest.
Derat Exemption Certificate and Vaccination List.

Immigration Office
All Seamen's Books and Passports.
Declaration Inward Outward of Vessel.
Crew List.
Passenger List.
Application for shore pass.

Custom House
Last Port Clearance.
Ship's Register.
List of Tobacco.
Narcotics List.
Revolver List.
Declaration Inward Outward of Vessel.
Crew List.
List of Ship's Stores.
Cargo Manifest.
Passenger List.
List of Crew's Baggages or List of Personal Effects.
Through Cargo Manifest.

PILOTAGE: See "Yokohama".

RESTRICTIONS: Tsurumi passage 11.70 m. (high water); Kawasaki passage 12 m. (high water). At night except in an emergency, vessels over 500 g.t. shall not enter port between hours of sunset and sunrise unless permission previously obtained from Captain of the Port. Vessels over 500 g.t. may enter without prior notice in order avert sea disaster or other unavoidable circumstance.

Note: No vessel of more than 1,000 g.t. permitted enter through Kawasaki Passage from 0630 hrs. to 0900 hrs. No vessel of more than 1,000 g.t. permitted depart through Tsurumi Passage from 0630 hrs. to 0900 hrs.

MAX. SIZE:

Passage	*G.R.T.*	*LOA*	*Draft*	*Remark*
Kawasaki	—	up to 250 m.	12 m.	high water
	up to 50,000	—	11.7 m.	,,
Tsurumi	—	up to 225 m.	11.7 m.	,,
	over 50,000	up to 260 m.	11 m.	,,

Tankers:

Berth	*Max. d.w.t.*	*Max. LOA*	*Max. Safe Draft*
Keihin Kawasaki Sea Berth	250,000	300 m.	30.00 m.
Toa Nenryo Ohgishima Sea Berth	250,000	300 m.	26.00 m.
Toa Nenryo Ukishima Sea Berth	150,000	250 m.	17.00 m.
Toa Nenryo No. 1 Pier	68,000	250 m.	13.00 m.
Mitsui Liquefied Gas	78,900	250 m.	10.70 m.
General Sekiyu A-1 Pier	44,000	250 m.	12.00 m.
Mitsubishi Oil No. 1 Pier	73,000	260 m.	12.00 m.
Mitsubishi Shoji	60,000	250 m.	12.00 m.
Nishoiwai No. 1 Pier	60,000	250 m.	12.00 m.
Nippon Petroleum Gas	58,300	250 m.	12.00 m.
Toa Oil No. 1 Pier	46,000	225 m.	12.00 m.
Toa Oil Main Pier	45,700	260 m.	12.00 m.

HEALTH: Available at Kawasaki (same procedure as Yokohama).

RADIO: Available at Kawasaki (same procedure as Yokohama).

VHF: VHF radio telephone station under joint control of Tokyo, Kawasaki, Yokohama and Chiba Port and Harbour Bureau. Call Sign. "Kawasaki Port Radio." This station covers all Tokyo Bay with radius 50 km. from location of transmitting antenna (Yokohama). Station keeps in touch with ships crossing in vicinity of Nojimasaki Point and is able to communicate with a ship that is a fairly long distance South of Jyogashima Island.

Channels, Class, Frequencies.

	Channel	*Class*	*Frequencies used by ship*	*Frequencies used by coast*
Calling	16	F3	156.80 MHz.	156.80 MHz.
Working	11	F3	156.55 MHz.	156.55 MHz.
	12	F3	156.60 MHz.	156.60 MHz.
	14	F3	156.70 MHz.	156.70 MHz.
	18	F3	sending 156.90 MHz. receiving 161.50 MHz.	sending 161.50 MHz. receiving 156.90 MHz.
	20	F3	sending 157.00 MHz. receiving 161.60 MHz.	sending 161.60 MHz. receiving 157.00 MHz.
	22	F3	sending 157.10 MHz. receiving 161.70 MHz.	sending 161.70 MHz. receiving 157.10 MHz.

Port official in charge of Marine Operation Section, Port and Harbour Bureau, City of Yokohama or Kawasaki or Tokyo Metropolis or Chiba Prefecture will give ships necessary instruction relating to Port Operations Services. No charge for communication in regard to Port Operations Services. (Not commercial service.)

If commercial service required, call "JBK" Tokyo on Channel 26.

BERTHING: Vessels of more than 1,000 g.r.t. desiring to enter First Section of Kawasaki, and Fourth Section, Yokohama Quarter, shall report expected time of arrival off Tsurumi Passage in advance to Captain of Port. When intending shift berths within First Section of Kawasaki and Fourth Section, Yokohama or to depart, the estimated time of getting under way shall also be reported in advance to Captain of Port. Report shall be made by noon of day before estimated date of entry or getting under way.

Name	Length (m.)	Depth (m.)	Capacity	No. of Ships	Cargo Handled	Remarks
Public						
Public wharf (No. 1 wharf)	120	7.3	3,000	1	General cargo	
Public wharf (No. 2 pier)	171	9.0	10,000	1	General cargo	
Public wharf (No. 3 pier)	190	10.0	15,000	1	General cargo	
Public wharf (No. 4 wharf)	220	10.0	15,000	1	General cargo	
Public wharf (No. 5 pier)	211	10.0	15,000	1	General cargo	
Public wharf (No. 6 pier)	209	10.0	15,000	1	General cargo	
Public wharf (No. 7 pier)	180	10.0	15,000	1	General cargo	
Higashi Ohgishima Wharf (No. 1 wharf)	200	10.0	15,000	1	General cargo	
Kawasaki port, waste oil disposal	272	6.0	2,000	2	Waste oil	Jetty
facilities (pier)	74	3.0	500	4	Waste oil	Jetty
Commercial						
Mitsui wharf (Coal wharf)	390	10.0	22,000	3	Steel	
Mitsui wharf (General cargo wharf)	330	9.0	16,000	2	Cement, steel	
Mitsui wharf (General cargo South wharf)	118	7.0	6,000	1	Manure	
Mitsui wharf (Coal South wharf)	128	7.0	6,000	1	Steel	
Toyo wharf (K-1)	138	12.0	20,000	1	Grain, ore	Dolphin
Toyo wharf (K-2)	222	12.0	50,000	1	Grain, ore	
Toyo wharf (K-3)	134	9.5	10,000	1	General cargo	
Toyo wharf (K-4)	134	9.5	10,000	1	General cargo	
Toyo wharf (K-6)	110	5.0	1,000	1	Ore	
Private						
Asahi Chemical Industry (No. 1 pier)	33	5.1	1,980	1	Petroleum products	Dolphin
Asahi Chemical Industry (No. 2 pier)	32	5.5	2,000	1	Petroleum products	Dolphin
Asahi-Daw (pier)	30	5.0	1,200	1	Oil	Dolphin
Idemitsu Kosan (No. 1 pier)	43	10.0	20,000	1	Oil	Dolphin
Idemitsu Kosan (No. 2 pier)	16	5.0	1,000	1	Oil	Dolphin
Idemitsu Kosan (No. 3 pier)	13	5.0	1,000	1	Oil	Dolphin
Kawaichi Industries (pier)	20	6.0	1,500	1	Oil	Dolphin
Kawasaki Kasei (Chidori pier)	54	9.0	10,000	1	Oil	Dolphin
Nippon National Railway (Kawasaki wharf)	115	7.0	3,000	1	Oil	Jetty
Showa GATX (pier)	70	11.0	19,000	1	Chemical products	Dolphin
Showa Oil Ohgimachi Terminal Showa (No. 1 – 3 pier)	31	5.5	4,500	1	Oil	Island
Showa Oil (Ohgishima East No. 1 pier)	80	7.5	5,000	1	Oil	Island
Showa Oil (Ohgishima East No. 2 pier)	70	7.5	3,000	1	Oil	Island
Showa Oil (Ohgishima East No. 3 pier)	50	7.5	1,000	1	Oil	Island
Showa Oil Ohgimachi Refinery (No. 1 – 4 pier)	91	9.0	20,000	1	Oil	Dolphin
Showa Oil Ohgimachi Refinery (No. 5 pier)	37	7.0	4,000	1	Oil	Dolphin
Showa Oil Ohgimachi Refinery (No. 6 pier)	58	7.0	4,000	1	Oil	Dolphin
Keihin Kawasaki Sea Berth (Showa Oil, Mitsubishi Oil)	11	30.0	250,000	1	Crude Oil	Single point mooring
Showa Denko Kawasaki Plant	100	7.3	3,000	1	Chemical products	
Showa Denko Kawasaki Plant	45	5.0	1,000	1	Chemical products	
Showa Denko Kawasaki Plant	40	5.0	1,000	1	Chemical products	Island
Showa Denko Kawasaki Plant	40	5.0	800	1	Petroleum products	Island
Showa Chidori Plant (North pier)	33	8.0	3,200	1	Chemical products	Dolphin
Showa Butsuryu (Pier)	85	5.5	2,000	1	Chemical products	Dolphin
Sumitomo Shoji (Kawasaki warehouse wharf)	124	6.5	1,500	1	Steel	
General Oil Refinery (A-1 pier)	86	12.0	44,000	1	Crude oil	Dolphin
General Oil Refinery (A-2 pier)	36	6.5		1	Oil	Dolphin
General Oil Refinery (A-3 pier)	29	6.5	1,350	1	Oil	Dolphin
General Oil Refinery (A-4 pier)	37	6.5	2,000	1	Oil	Dolphin
General Oil Refinery (B-1 pier)	29	6.5	1,350	1	Oil	Dolphin
General Oil Refinery (B-2 pier)	24	6.7	670	1	Oil	Dolphin
Central Chemistry (Kawasaki base wharf)	79	5.5	750	1	Chemical products	
Daiichi Cement (Dolphin pier)	4	10.0	5,000	1	Cement	Dolphin
Taio Paper (Wharf)	113	5.0	1,000	1	Paper	
Daikyo Oil (Pier)	38	5.5	2,000	1	Oil	Dolphin
Tao Oil (No. 1 factory pier)	118	12.0	46,000	1	Oil	Dolphin
Toa Oil (No. 2 factory No. 4 pier)	32	6.0	2,000	1	Oil	Dolphin
Toa Oil (No. 2 factory No. 5 pier)	37	6.0	2,000	1	Oil	Island
Toa Oil (No. 3 factory No. 1 pier)	79	6.0	1,500	1	Oil	Island
Toa Oil (No. 3 factory No. 2 pier)	91	6.0	1,250	1	LPG	Island
Toa Oil (No. 3 factory No. 3 pier)	85	6.0	2,800	1	Oil	Island
Toa Oil (Main pier)	70	12.0	45,700	1	Oil, LPG	Dolphin
Toa Nenryo Kogyo (No. 41 pier)	35	7.5	2,000	1	Oil	Dolphin
Toa Nenryo Kogyo (No. 42 pier)	47	7.3	5,000	1	Oil	Dolphin
Toa Nenryo Kogyo (No. 43 pier)	35	6.0	2,000	1	Oil	Dolphin
Toa Nenryo Kogyo (No. 44 pier)	47	7.3	5,000	1	Oil	Dolphin
Toa Nenryo Kogyo (No. 45 pier)	30	5.0	1,000	1	Oil	Island
Toa Nenryo Kogyo (No. 1 pier)	80	13.0	68,000	1	Oil	Dolphin
Toa Nenryo Kogyo (No. 2 pier)	32	7.0	2,000	1	Oil	Dolphin
Toa Nenryo Kogyo (No. 3 pier)	36	7.0	2,000	1	Oil	Dolphin
Toa Nenryo Kogyo (No. 4 pier)	35	6.0	1,500	1	Oil	Dolphin
Toa Nenryo Kogyo (No. 5 pier)	32	5.0	1,000	1	Oil	Dolphin
Tonen Ukishima Sea Berth	115	17.0	150,000	1	Crude oil	Dolphin
Tonen Ohgishima Sea Berth	112	26.0	250,000	1	Crude oil	Dolphin
Toa Nenryo Kogyo (Ohgishima oil bunkering)	23	26.0	2,000	1	Oil	Island
Toa Nenryo Kogyo (Ohgishima water bunkering)	23	26.0	1,000	1	Water	Island
Toden Kawasaki heating power (pier)	299	8.0	5,000	1	Oil	Island
Toden Tsurumi heating power (No. 1 coal pier)	78	8.0	3,000	1	Coal	Island
Toden Tsurumi heating power (No. 2 coal pier)	108	9.0	10,000	1	Coal	Island
Toden Tsurumi heating power (Heavy oil A pier)	3	7.0	1,000	1	Heavy oil	Dolphin
Toden Tsurumi heating power (Heavy oil B pier)	37	7.0	3,000	1	Heavy oil	Island
Tokyo Shibaura Electric (pier)	31	6.0	2,000	1	Machinery	Island
Tokyo Shibaura Electric (pier)	36	6.0	2,000	1	Machinery	Dolphin
Tonen Sekiyu Kagaku Chidori Chemical Plant (Chidori pier)	34	6.0	3,200	1	Chemical products	Dolphin
Toray Industries (Ukishima pier)	29	6.0	2,000	1	Chemical products	Dolphin
Nissho-Iwai (No. 1 pier)	90	12.0	60,000	1	Heavy oil	Dolphin
Nissho-Iwai (No. 2 pier)	38	6.0	2,000	1	Heavy oil	Dolphin
Nissin Transportation & Warehousing Co., Ltd.	30	5.0	1,000	1	Oil	Island
Nissin Flour Milling (Nissin wharf)	37	12.0	50,000	1	Grain	Dolphin

Private: (continued)

Name	*Length (m.)*	*Depth (m.)*	*Capacity*	*No. of Ships*	*Cargo Handled*	*Remarks*
Nichimo Sekiyu Seisei (No. 1 pier)	208	12.0	5,000	1	Oil	Island
Nippon Car Ferry (A pier)	208	7.5	10,000	1	Car ferry	Jetty
Nippon Car Ferry (B pier)	208	7.0	6,000	1	Car ferry	Jetty
Nippon Kokan (Ohgishima East A wharf)	360	22.0	200,000	1	Ore, Coal	Jetty
Nippon Kokan (Ohgishima East B wharf)	240	18.0	100,000	1	Ore, Coal	Jetty
Nippon Kokan (Ohgishima East C wharf)	170	7.5	5,000	1	Coke, Coal	Jetty
Nippon Kokan (Ohgishima North wharf)	172	5.5	1,000	1	Coal	
Nippon Kokan (Ohgishima wharf)	320	12.5	68,000	1	Coal, Ore	
Nippon Kokan (Ohgishima bunkering A wharf)	42	6.0	3,000	1	Heavy oil, LPG	Dolphin
Nippon Kokan (Ohgishima bunkering B wharf)	17	9.0	500	1	Sulphuric acid	Dolphin
Nippon Kokan (North A pier)	60	7.5	5,500	1	Aggregate	Jetty
Nippon Kokan (North B pier)	60	7.5	5,500	1	Aggregate	Jetty
Nippon Kokan (Mizue West wharf)	82	4.5	1,300	1	Steel	
Nippon Kokan (Ohshima East wharf)	293	10.0	16,000	2	Steel	
Nippon Kokan (Ogimachi East wharf)	448	10.0	16,000	3	Steel	
Nippon Kokan (Shiraishi goods wharf)	194	5.5	2,000	2	Steel	
Japan Oxygen (No. 3 Factory wharf)	189	5.0	1,050	2	Machines	
Nihon Seiyu (pier)	29	5.0	1,000	1	Oil	Island
Nippon Petrochemicals Ukishima Plant (No. 1 pier)	22	4.0	500	1	Oil	Dolphin
Nippon Petrochemicals Ukishima Plant (No. 2 pier)	27	5.0	1,150	1	Oil, LPG	Dolphin
Nippon Petrochemicals Ukishima Plant (No. 4 pier)	29	5.0	1,150	1	Oil, LPG	Dolphin
Nippon Petrochemicals Ukishima Plant (No. 5 pier)	28	5.0	1,500	1	LPG	Dolphin
Nippon Petrochemicals Ukishima Plant (No. 7 pier)	23	6.0	1,845	1	Oil	Dolphin
Nippon Petrochemicals Ukishima Plant (No. 10 pier)	29	6.0	2,000	1	Oil	Dolphin
Nippon Petrochemicals Kawasaki Plant (Chidori pier)	44	7.0	6,000	1	Heavy oil	Dolphin
Nippon Petrochemicals Kawasaki Plant (Shiohama No. 2 pier)	22	4.5	800	1	Petroleum products	Dolphin
Nippon Petrochemicals Kawasaki Plant (No. 3 pier)	22	4.5	800	1	Petroleum products	Dolphin
Nippon Petroleum Gas (pier)	92	12.0	58,300	1	LPG	Dolphin
Nippon Petroleum Gas (No. 3 pier)	28	6.0	500	1	Petroleum products	Dolphin
Nippon Cement (wharf)	54	8.0	7,000	1	Cement	Dolphin
Hitachi Shipbuilding (wharf)	388	7.0	26,000	4	Ship repair	
Fujie Sangyo (pier)	28	5.5	1,000	1	Ore	Dolphin
Mitsui Liquefied Gas (No. 1 pier)	87	10.7	78,900	1	LPG	Dolphin
Mitsui Sugar Refinery (wharf)	80	5.0	1,500	1	Sugar	
Mitsubishi Shoji (pier)	116	12.0			Oil	Dolphin
Mitsubishi Oil (No. 1 pier)	67	12.0	73,000	1	Oil	Dolphin
Mitsubishi Oil (No. 2 pier)	88	6.0	3,000	1	Oil	Island
Mitsubishi Oil (No. 5 pier)	100	11.0	5,000	1	Oil	Island
Mitsubishi Oil (No. 6 pier)	100	11.0	5,000	1	Oil	Island
Ryoka Unyu (pier)	30	5.6	2,000	1	Chemical products	Dolphin

TUGS: Normally join vessel at anchoring position. Ship's lines used. 35 tugs up to over 3,000 h.p. available.

STEVEDORES: Ordering of labour gangs is by 1600 hrs. on the previous day.

MEDICAL: Contact Agent to arrange medical attention. Agent must present Arrival Notice to Quarantine Station in advance of vessels arrival. Hospital facilities available.

TANKERS:

Berth	*Product*	*Shorelines*	*Discharge Rate t.p.h.*
Keihin Kawasaki Sea Berth	Crude Oil	20 in.×2	10,000 (max.) or manifold pressure 7 OK
Toa Nenryo Ohgishima Sea Berth	Crude Oil	16 in.×4	13,500
Toa Nenryo Pier	Fuel Oil	12 in.×2	5,000
Toa Nenryo Ukishima Sea Berth	Crude Oil	12 in.×3	5,000
Toa Oil No. 3 Factory	Crude Oil	12 in.×3	1,400
Toa Oil No. 1 Pier	Crude Oil	10 in.×2	1,670
General Sekiyu Seisei	Crude/Fuel	12 in.×2	3,000
Mitsubishi Oil	Crude Oil	12 in.×2	4,000
	Fuel Oil	8 in.×1	1,500
Mitsubishi Shoji	Fuel Oil	8 in.×2	800
Nissho Iwai	Fuel Oil (C)	12 in.×1	1,000
	Fuel Oil (A)	10 in.×1	800

TIDAL CURRENT: The littoral current running Westward along reclaimed industrial area of city is very slow and has rate of about 0.3 m. around the head of municipal wharf when tide is on the ebb.

GANGWAY/DECK WATCHMEN: Watchmen not necessary and not recommended.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

FUEL: All grades available.

CERTIFICATES: See "Yokohama".

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes, Wines/spirits, 1 bottle per person.

IDENTITY CARDS: Needed to get shore-pass.

CONSULS: See "Yokoharna".

REPAIRS: All repairs possible.

FRESH WATER: Supplied at piers. Water supplied by water barge, overtime, Sundays and legal holidays.

Item	*Available at*	*Number of Hydrants*	*Capacity t.p.h.*
Pier	Mitsui Liquefied Gas Co. Ltd.	1	36
	Mitsui Wharf Co. Ltd.	16	252
	Nippon Kokan K.K. Ohgishima	4	60
	Nippon Kokan K.K. Ohshima	3	24
	Nippon Petroleum Gas Co. Ltd.	2	22
	Nissin Flour Milling Co. Ltd.	3	10
	Toyo Wharf & Warehouse Co. Ltd.	9	40
	Public Wharf	46	2,300

	Barge	*Loading Capacity (ton)*	*Remarks*
Water Barge	Hoei Maru No. 12	350	Operated by Water Bureau of Kawasaki City
	Koshie Maru	300	

DRY DOCKS: Hitachi Dockyard.

Dock Number	*Length*	*Breadth*	*Depth*	*Capacity*
No. 1	155.5m.	25.4 m.	8.5 m.	14,200 g.t.
No. 2	210.0 m.	30.0 m.	11.0 m.	25,000 g.t.

AIRPORT: Distance from airport (Narita International Airport) 230 km. Airport served by regular airlines.

TIME: Akashi standard time 135° GMT plus 9 hours. Permanent.

HOLIDAYS: National holidays, Sundays. National holidays January 1, 2, 3, 15; February 11; March 21; April 29; May 3, 5; September 15, 23; October 10; November 3, 23; December 28, 29, 30, 31. Cargo work cannot be arranged on following days: December 31; January 1, 2, 3.

POLICE/FIRE/AMBULANCE: Police Kawasaki 266–9161; Ambulance and Fire Kawasaki 288–0963.

TELEPHONES: Connection to ship. Charge for use.

SERVICES: Tank-cleaning. Compass adjusting. Direction Finder calibration.

SHORE LEAVE: Crew members allowed ashore after being issued with shore passes.

DELAYS: Awaiting favourable tide. Delay of Quarantine inspection.

DEVELOPMENTS: Plans for commercial wharf at Ohgishima. Ohgishima East Island will be reclaimed and wharf constructed with 15 berths for foreign trade and 19 berths for domestic trade.

SHIPMASTER'S REPORT: *The Tonen Ohgishima Sea Berth:*

1. Suggest Mikimoto Lighthouse used for end of passage as from there inwards to Uraga Channel (58 miles) heavy concentrations of traffic frequently experienced.

2. Entry to Uraga Channel for VLCC's permitted only during daylight (i.e. sunrise to sunset).

3. Pilot boards in vicinity Uraga No. 1 buoy from 1 of the 2 tugs which escort the vessel to Yokohama/Kawasaki and requires fire fighting tug standing by at Uraga Buoys Nos. 1–6.

4. Deep draft signal to be displayed including the red flashing light and Code "First Substitute over Flag 'B'" and 2 black cylindrical shapes (0.6 m. × 1.2 m.) placed vertically (refer Maritime Traffic Safety Law).

5. ETAs (No. 1 Buoy Uraga) should be updated as promptly as possible. Considerable importance attached to the vessel's arrival/sailing time by Tokyo Wan Traffic Advisory Service Centre (TWTASC).

6. Vessel must anchor at Kawasaki Anchorage where Port Health boards (pilot hoist used).

7. Berthing/Unberthing Ohgishima Sea – berth during daylight only (sunrise to sunset).

8. Berthing pilots (2) embark at Quarantine Anchorage, 6 tugs all using nylon tow ropes with eye on bitts. Always port side alongside. Refer mooring diagram for details. No additional mooring ropes available on loan or hire from berth. Shore gangway, Chiksan arms 4×16 in. connections.

9. A spill boom completely surrounds the vessel on the berth. A comprehensive book (in English) of the Terminal Regulations placed on board on arrival. Tonen Company require a tape recording concerning oil pollution to be broadcast throughout the vessel's p/a system before cargo discharge commences.

10. Ullaging is witnessed by Oil Co. representative. Samples taken from all tanks necessitating the opening of tank hatches. All tanks dipped after discharging completed.

11. The loading of stores, provisions, etc. (either by crane or derrick) is not permitted on this berth. No restrictions on items being *carried* on board via the gangway, e.g. laundry. Necessary to anchor after discharging/ballasting to take on stores.

12. During severe weather conditions tug assistance was requested to stand by the vessel on the berth. Tugs cannot approach unless the spill boom is removed and this will only be removed if cargo discharge ceases and Chiksan arms disconnected.

13. A shore liberty boat was arranged through Agent. This service is to Yokohama, approx. 1 hour journey. A boat service to nearby Kawasaki is permitted and take 40 minutes. All boat services suspended when weather deteriorates. Shore passes issued by Immigration Authorities on board and must be collected in before vessel leaves berth.

AUTHORITY: Port & Harbour Bureau of Kawasaki City, 1 Miyamoto-cho, Kawasaki-ku, Kawasaki City, Japan. *Tel:* 044 (200) 2111. *Contact:* Choshun Kikuchi, Director.

AGENT: See "Yokohama".

KIIRE: 31.23 N. 130.32 E. (See Plan Book)

DOCUMENTS:

- Ship's Register.
- Last Port Clearance.
- 5 Crew Lists including Passport Numbers.
- 5 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in Transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: No particular regulations for navigating in Kagoshima Bay. Suggest enter Bay on course close to Osumi Peninsula. 3 Light Beacons South of oil piers for ships approaching and manoeuvring. Bay Pilots not provided but Mooring Master provided for assistance to Master for berthing without charge. No VHF available for ship-shore communication.

ANCHORAGES: Anchorage area ranges in depth from 30 m. to 60 m. Holding ground in these areas only fair; recommended vessels lie to long scope of chain. Locally tide rise approximately 3 m. in springs and 1.5 m. neaps. Maximum tide currents Northerly 0.32 knots, Southerly 0.47 knots. Ample anchorage and manoeuvring area N.E. of terminal.

RESTRICTIONS: Night entry and departure permitted subject to weather conditions. However, Harbour Master will not permit vessels loaded with oil cargoes to berth between sunset and sunrise.

MAX. SIZE: Max. draft at Berth Nos. 1 and 2 – 17 m. acceptable 30,000 – 150,000 d.w.t. vessels. Max. draft at Berth No. 3 – 27 m. acceptable 30,000 – 500,000 d.w.t. vessels. Max. safe draft at Berth No. 4 – 33 m. suitable for up to 700,000 d.w.t. Also see "Tankers".

HEALTH: Radio Pratique available. Quarantine Officers board the vessel either at the Quarantine Anchorage or at the pier, depending on availability of berth.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.

TUGS: Mooring and unmooring assistance provided by 2×4,200 h.p. CPP tugs and 2×3,200 h.p. VSP tugs regularly stationed.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

MEDICAL: Advance notice required if arriving at weekend.

TANKERS: (Crude oil only).

Berth No.	*Max. LOA*	*Connections*	*Discharge Rate*
1	370 m.	5×12 in.	10,000 k/l (loading only)
2	370 m.	5×12 in.	10,000 k/l (loading only)
3	450 m.	6×16 in.	23,000 k/l (loading/unloading)
4	500 m.	2×16 in. 3×24 in. 1×12 in.	9,000 k/l (loading/unloading) 39,000 k/l

DENSITY: 1025.

FRESH WATER: Water obtainable at berth on oil piers at rate of 40 t.p.h.

FUEL: Domestic oil is available from Kagoshima and bonded oil will be lightered from Moji area, when required.

FIRE PRECAUTIONS: Very strict Safety Regulations.

Disregard of regulations will result in stopping all loading or unloading operations and the vessel being ordered off berth for appropriate action to be taken.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Available Moji, Sasebo and Nagasaki.

DRY DOCKS: None.

REPATRIATION: Possible.

AIRPORT: Distance from airport about 2 hours by car. ANA and Towa airlines serve daily.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police station Tel: 110; Fire brigade station is located at terminal and Ambulance available at that station.

TELEPHONE: Telephone placed on board at Terminal free of charge for inter-office communication.

SERVICES: All services available.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

AUTHORITY: Ibusuki Doboku (Public Works) Office, 301, 12-cho, Takanohara, Ibusuki City, Kagoshima Pref. *Tel:* (09932) 2-2171.

Nippon Oil Staging Terminal Co., Ltd.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Tokyo Tanker Marine Service Co. Ltd. 2856-5, Uenohama Aza Nakamyo, Kiire-cho, Ibusuki-gun, Kagoshima-ken. Cable Address: Tokmarine Kiire. Domestic Telex: 07867-22 Tel: (09934) 5-0171

KIKUMA: 34.03 N. 132.51 E. (See Plan Book)

LOCATION: Sea Berth: Lat. 34° 03′ 34.2″ N., Long. 132° 51′ 52″ E. Dolphin Berth: Lat. 34° 03′ 0.8″ N., Long. 132° 51′ 21″ E.

DOCUMENTS:

- Ship's Register.
- Last Port Clearance.
- 3 Crew Lists including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from 1 of 3 pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours' and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea pilot stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position: Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse. (Vessels transitting Bungo Channel). Position: Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

3. Mesaki, at East side of Kanmon (Shimonoseki) Straits. Position: Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGE: Lat. 34° 03′ N. Long. 132° 51′ E. Water depth: 15 – 30 m. Anchorage located about 350 m. off beach. Holding ground good and Port faces Iyo-Nada and located Bungo Channel. Current at berth and off shore very strong. During Winter months strong N.W. wind prevails.

RESTRICTIONS: Mooring and unmooring daytime only and to be carried out on flood tide.

MAX. SIZE: See "Tankers".

HEALTH: Closed port. Vessels should obtain pratique at Matsuyama and Sekisaki, also Radio Pratique available in this port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to contact Choshi and North bound to contact Nagasaki Radio respectively.
TUGS: Join vessel at sea anchorage, always using tugs line without charge. 2 to 4 tugs are required for berthing, depending on size of vessel. 3 tugs are normally used for unberthing.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
MEDICAL: No advance notice required unless urgent.
TANKERS: *Taiyo Oil Co. Terminal.* 2 tanker berths available.

Berth	*Max. d.w.t.*	*Max. LOA (m.)*	*Max. Safe Draft (m.)*	*Type Cargo & diameter/Number of shore pipes*	*Discharge rate t.p.h.*
Sea-Berth	130,000	280	25	Fuel oil 28 in.×1(12×2)	4,500
				Crude oil and Fuel 28 in.×1(12×2)	4,500
Dolphin Berth	88,450	237	16	Fuel oil 24 in.×1(12×2)	4,500
				Crude oil 24 in.×1(12×2)	4,500
				Naphtha 12 in.×1	1,000

DENSITY: Anchorage 1015. Berth 1015.
FRESH WATER: Fresh water not available but usually brought by barge from Onomichi (about 6 hours run to Kikuma). Rate of delivery 80 tons to 200 t.p.h. dependent on barge.
FUEL: Can only be supplied by barge from Hanshin and Kanmon area, provided 5 days notice is given. All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: No consuls. The nearest Consulates in Kobe.
REPAIRS: Only minor repairs.
REPATRIATION: Possible. Nearest Immigration Office situated at Matsuyama.
AIRPORT: Nearest Matsuyama, distance 50 km.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: See "Kobe".
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.
GENERAL: As this port is a closed port, the undermentioned procedures required: In conformity with regulations vessel required to obtain special permission to enter from Shikoku Maritime Bureau.

Customs request vessel call at Kikuma to obtain special permission for entering at preceding port, by paying the charge at the same rate of tonnage dues.

Prior to arrival of a vessel, the above procedures will be undertaken by Agent.

No quarantine available, the nearest quarantine station is located at Matsuyama.

No Immigration Office at this port (coming from Matsuyama).
AUTHORITY: Kikuma-Cho Yakuba (Town Office). 1622-1, Oaza Hamako, Kikuma-Cho, Ochi-Gun, Ehime Prefecture, Japan.
Tel: (089854) 3450.
AGENT: See "Niihama".

KINUURA: 34.50 N. 136.56 E. (See Plan Book)

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 3 Crew Lists including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: When Pilot required, cable Agent at least 1 day before arrival with ETA. Pilot station located Lat. 34° 40′ N., Long. 136° 58′ E. If ETA changes, cable "Handakoun Handa Aichi" who pass messages to Pilot. Vessels anchor to await Pilot at above position. No VHF communication available. Pilot boats have no communication system.

Also see "Nagoya" – Pilotage: "Shipmaster's Report".
HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

ANCHORAGE: Kinuura Anchorage located in position Lat. 34° 49′ N., Long. 136° 57′ E. Depth of anchorage: Outside high tide bank about 38 ft. – 39 ft., inside high tide bank about 32 ft. – 33 ft.
RESTRICTIONS: Entry restricted only by draft; no other restrictions.
Channel Depths:

Channel	*Depth (m.)*
Entrance Channel	9.0 – 12.0
Taketoyo Channel	4.5
Sekitan Channel	7.5 (Access to Wharf 10.0 m.)
Nishifuto Channel	5.5
Handa Channel	3.5
Shinkawa Channel	4.5
Takahawa Channel	7.5
Minami Channel	4.0

MAX. SIZE: Depth at Central Wharf (West) 12.0 m. (Public Berths) Chubu Nihon Grain Centre 12.0 m., Shell Oil 12.0 m., all other berths 10.0 m.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi and Northbound to contact Nagasaki Radio respectively.
TUGS: No tug required when vessels enter anchorage, only alongside wharves.

Tugs – "Yahagi Maru" 1,600 h.p., "Shiomi Maru" 1,300 h.p. Tugs standby near wharves.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Name	*Type*	*Length (m.)*	*Depth (m.)*	*Capacity (d.w.t.)*	*No*
Taketoyo Area					
Chuden Quay	Private	350	12.0	30,000	1
Chuden Quay	„	184	7.5	5,000	1
Asahi Glass Quay	„	218	5.5	2,000	4
Nippon Kagaku Quay	„	116	11.5	15,000	1
Nanayama Jetty	„	50	5.5	1,000	1
Nanayama No.1 Quay	„	108	4.5	700	1
Nanayama No.2 Quay	„	250	6.0	3,000	2
Tokai Carbon Jetty	„	5.4	4.5	700	1
Nippon Lubrizoil Jetty	„	21	4.5	700	1
Sentetsu No.1 Quay	„	500	6.0	3,000	4
Sentetsu No.2 Quay	„	550	12.0	40,000	2
Taketoyo Quay	Public	180	4.5	700	3
Ishizumi Quay	„	255	7.5	5,000	2
Handa Area					
Chuo Wharf W. No.1 Quay	Public	360	5.5	2,000	4
Chuo Wharf W. No.2 Quay	„	520	7.5	5,000	4
Chuo Wharf W. No.3 Quay	„	185	10.0	15,000	1
Chuo Wharf W. No.4 Quay	„	185	10.0	15,000	1
Chuo Wharf W. No.5 Quay	„	240	12.0	30,000	1
Chuo Wharf W. No.6 Quay	„	240	12.0	30,000	1
Chuo Wharf W. No.11 Quay	„	300	4.0	500	6
Kamesaki Pier Quay	„	555	10.0	15,000	3
Chuo Wharf W. Mooring Buoys (2)	„	—	10.0	10,000	1
Do Jetty	Private	210	9.0	10,000	1
Takahama Area					
Takama No.1 Quay	Public	180	4.5	700	3
Takama No.2 Quay	„	130	7.5	5,000	1
Nichisen Kinuura Quay	Private	150	10.0	15,000	1
Asai Jetty	„	21	5.0	1,000	1
Hekinan Area					
Chuo Wharf E. No. 1 Quay	Public	630	5.5	2,000	7
Chuo Wharf E. No. 2 Quay	„	130	7.5	5,000	1
Chuo Wharf E. No. 3 Quay	„	185	10.0	15,000	1
Chuo Wharf E. No. 4 Quay	„	240	12.0	30,000	1
Toyota Quay	Private	300	6.5	3,000	3
Ito Tadashi Quay	„	195	12.0	40,000	1
Chunippon Grain Quay	„	162	12.0	40,000	1
Nichikinko Quay	„	12	5.5	2,000	2
Keizairen Quay	„	100	10.0	500	2
Ishibashi Quay	„	50	10.0	500	1
Toyo Quay	„	70	5.5	2,000	1
Onoda Quay	„	52	8.0	6,000	1
Shell Quay	„	224	12.0	45,000	1
Shell Quay	„	72	5.5	1,500	1
Shell Quay	„	65	5.5	1,000	1
Shinkawa No.1 Quay	Public	100	4.5	700	2
Shinkawa No.2 Quay	„	150	4.0	500	3

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
DENSITY: About 1023–1027.
FRESH WATER: Available, but only 1 water barge – capacity 50 tons. When vessels alongside Public Wharves, water can be taken from shore. Delivery rate: 50 t.p.h. but if more than 50 tons required barge returns to shore to load, therefore 1 trip takes about 3 hours.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: None.

AIRPORT: None.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: 20th July.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 109.

TELEPHONES: No telephones available to place on board.

SERVICES: None.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days extension possible if ship stays longer.

DEVELOPMENTS:

(1) Public wharves plan:

Area name	*Plan*	*Remarks*
Chuo Wharf West	15,000 D/W class. Depth 10 m. 2 berths 370 m. long.	
	5,000 D/W class. Depth 7.5 m. 4 berths 520 m. long.	Land for quays 150 ha.
	2,000 D/W class. Depth 5.5 m. 2 berths 180 m. long.	89 ha. completed.
Taketoyo North Quay	30,000 D/W class. Depth 12 m. 1 berth 240 m. long.	
	15,000 D/W class. Depth 10 m. 1 berth 185 m. long.	Land for quays 10 ha. in progress.
	5,000 D/W class. Depth 7.5 m. 1 berth 130 m. long.	4 ha. completed.
Taketoyo Quay	700 D/W class. Depth 4.5 m. 6 berths 360 m. long.	Land for quays 8 ha. 6 ha. completed.
Plot 14	5,000 D/W class. Depth 7.5 m. 2 berths 260 m. long.	Land for quays 6 ha.
Plot 18	(as for Plot 14).	

(2) Timber handling facilities plan:

Place Name	*Plan*	*Remarks*
Kamesaki Quay	30,000 D/W class. Depth 12 m. 1 berth 240 m. long.	Land for quays 26 ha.
	15,000 D/W class. Depth 10 m. 3 berths 555 m. long.	25 ha. under construction.

(3) Basin facilities plan:

Area	*Place Name*	*Plan*	*Remarks*
Channels	Chuo Channel	Depth 12 m. width 400 m. – 600 m. for 30,000 D/W class ships.	
	Nishio Isshiki Channel	Depth 7.5 m. width 200 m. for 5,000 D/W class ships	
	Chuo Quay N. Port	Depth 12 m. area 214 ha.	54 ha. completed.
	Chuo Quay	Depth 12 m. area 184 ha.	133 ha. completed.
	Chuo Quay W.	Depth 5.5 m. – 10 m. area 46 ha.	
Anchorages	Taketoyo N. Quay	Depth 6 m.-12 m. area 100 ha.	
	Taketoyo Quay	Depth 4.5 m. area 4 ha.	
	No. 1 & 3 plots	Depth 12 m. area 258 ha.	35 ha. completed.
	No. 2 plot	Depth 12 m. area 141 ha.	55 ha. completed.
	No. 14 & 18 plots	Depth 7.5 m. area 34 ha.	

(4) Outer wall facilities plan:

Place Name	*Plan*
No. 14 plot	Nishio Breakwater, length 200 m.
No. 18 plot	Isshiki Breakwater, length 200 m.

AUTHORITY: Kinuura Port Office, 1-1, 11-Gochi, Handa-shi, Japan. *Tel:* (0569) 21-2451.

AGENT: Dodwell & Co., (Dry Cargo): Handa Koun Kabushiki Kaisha, 1-4, 11 Go-chi, Handa-shi, Aichi-ken. Cable Address: Handakoun Handa, Telex: 04563626 H Koun J, Tel.: (0569) 23-2301.

(LPG): K. K. Uyeno Unyu Shokai, Hekinan Sub-Branch Office, c/o Shell Oil Co. Ltd., 1-banchi, Konan 2-chome, Hekinan-shi, Aichi-ken. Cable address: Uyenoshell Hekinan, Telex: 04545819 Uynhk J, Tel.: (0566) 42-8400.

KIN WAN (Okinawa): 26.22 N. 127.58 E.

DOCUMENTS: **(See Plan Book)**

Customs:

Required upon vessel's arrival by:

Customs Officer: Okinawa Customs Branch, Henza Sub-Branch Office. Location: 2972 Aza Heianza Yonashiro-Son, Okinawa (Tel: 09897-7-8558).

1. When ship arrives direct from foreign port, Customs Officer will board vessel for search. Following documents to be submitted.

Crew List and Passenger List.
Store List (Please prepare Stores List stating ship's stores).
Manifest of crew personal effects.
(Please prepare manifest of crew personal effects list duly signed by each).
Parcel List.
Arms and Ammunition List.
Narcotics List.
Seal List.
List of ports of call on current voyage.
Ship's Registry.
Last Port Clearance.
Bill of Lading.

Ship's Agent will prepare Inward Declaration, one Cargo Manifest, Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

2. When ship comes from Japanese port, Customs Officer will not attend on board except special case. Agent to attend Customs House for entry formalities with following documents.

Crew List and Passenger List.
Store List.
List of ports of call on current voyage.
(Last Port Clearance and Documents entrusted with the Master by Customs at previous port).

Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

Immigration:

Required upon vessel's arrival by:

Immigration: Naha Immigration Kinwan Sub-Branch Office. Location: 2628-2 Ishikawa City, Okinawa (Tel: 0989-64-2858).

1. When ship arrives direct from foreign port, Immigration Officer will board vessel for check. Following documents to be submitted.

Crew List	2 copies
Passenger List	2 copies

Please collect the crew seamens' book in order such as No. 1, No. 2 . . . till the end as per crew list stated.

Please collect the passports in order such as No. 1, No. 2 . . . till the end as per passenger list stated.

Ship's Agent will prepare Inward Vessel Declaration, one application for shore pass, one application for extension of the area of movement using specific forms.

2. When ship comes from Japanese port, Immigration Officer will not attend on board, except special cases. Agent to attend Immigration Office for entry formalities with following documents.

Crew List	2 copies
Passenger List	2 copies
Seamens' Books	
Passports	

Documents (Shore Passes) entrusted with the Master by Immigration at previous port. Ship's Agent will prepare Inward Declaration, one application for Shore Pass, one application for Extension of the Area of Movement using specific forms.

APPROACHES: See "Tankers" – Report dated 1983.

PILOTAGE: Also see "Approaches".

Berthing Masters will normally board from a tug having a blue hull and cream upperworks, with a tall lattice mast bearing a number (1, 2, 3 or 4). Since the tugs have a fairly high freeboard, pilot ladders should be rigged with the bottom step about 6 ft. (2 m.) above the water-level, otherwise the lower steps may be crushed or damaged. Vessels with a freeboard exceeding 30 ft. are requested to rig the pilot ladder in conjunction with an accommodation ladder in the approved manner.

Masters of calling vessels are reminded of their obligation to comply with statutory rules and are requested to comply with International recommendations concerning pilot ladders. If the ladder is not safe, the Berthing Master may refuse to board and thus cause unnecessary delay to the ship.

ANCHORAGES: Recommended anchorages: Also see "Tankers" – Report dated 1983.

For mammoths in order of arrival:

K1: Lat. 26° 24′ 00″ N., Long. 127° 57′ 48″ E.
K2: Lat. 26° 23′ 30″ N., Long. 127° 57′ 12″ E.
KE: Lat. 26° 25′ 00″ N., Long. 127° 58′ 10″ E.

(Subject Japanese Coastguard M.S.A. approval is obtained by Agent.)

For vessels 50,000 d.w.t. – 150,000 d.w.t.

KS: Lat. 26° 23′ 06″ N., Long. 127° 56′ 43″ E.
S1: Lat. 26° 22′ 30″ N., Long. 127° 56′ 48″ E.
S2: Lat. 26° 22′ 00″ N., Long. 127° 56′ 48″ E.

Products anchorage: The area bounded by a line joining the following positions:

1. Lat. 26° 22′ 00″ N., Long. 127° 56′ 29″ E.
2. Lat. 26° 22′ 13″ N., Long. 127° 56′ 33″ E.
3. Lat. 26° 22′ 00″ N., Long. 127° 57′ 19″ E.
4. Lat. 26° 21′ 51″ N., Long. 127° 57′ 05″ E.

The holding ground is good in anchorages, but depths in the first groups between 22 and 25 fathoms; it is therefore recommended that at least 1 shackle of chain be walked back on the windlass before letting go the anchor.

Depths in the product anchorage vary between 10 and 14 fathoms.

Prohibited Anchorage: Owing to the existence of underwater pipelines, telephone cables and obstructions, anchoring is prohibited anywhere S.E. of a line joining the following 2 positions:

1. Lat. 26° 22′ 31″ N., Long. 127° 58′ 08″ E. (i.e. the N.E. dolphin of the Sea Island)
2. Lat. 26° 21′ 37″ N., Long. 127° 56′ 44″ E. (i.e. the N.E. dolphin of No. 3 Berth on the Products Pier)

For berthing, Masters of vessels are requested to have the propeller submerged and vessel in a reasonable trim for ship-handling purposes (not exceeding 3.5 m.).

RESTRICTIONS: Berthing and unberthing operations take place throughout 24 hours.

There are no specific restrictions on draft, but in order to ensure safe handling characteristics it is recommended that vessels arriving in ballast arrange that the propeller is fully submerged, with a stern trim not exceeding about 10 ft. Vessels which do not meet this requirement may be delayed in berthing until additional ballast has been run in.

MAX. SIZE: 5 berths are available for calling tankers. No. 1 Berth can accommodate vessels up to 500,000 d.w.t., and No. 2 Berth vessels up to 150,000 d.w.t. These 2 berths are situated at the offshore platform. Berths No. 3, No. 4, No. 5 are situated at the Product Dock. (Also see "Berthing").

Berth No.	*Max. d.w.t.*	*Least depth of water below datum*	*Remarks*
Sea Berth 1	500,000	102 ft.	
„ „ 2	150,000	90 ft.	
Prod. Pier 3	60,000	50 ft.	Max. dist. stern to manifold 320 ft.
„ „ 4	20,000	36 ft.	
„ „ 5	10,000	30 ft.	

In addition to the above tanker berths a dry-cargo berth is also available. This berth is 110 m. in length and has a least depth of 22 ft. below Okinawa Datum.

HEALTH: Quarantine Office: Naha Quarantine Office.
Location: Naha Godo Chosha Bldg., 11–1, 2-chome, Minato-Machi, Naha, Okinawa (Tel: 0988-68-1674).

At first port of call in Japan, vessel may obtain Free Pratique.

Quarantine Officer will attend vessel only from daylight to sunset, and Master to show all vaccination cards and Derat Exemption Certificate. If vessel arrives from infected area crew and passengers' health condition to be cabled to Quarantine Officer through ship's Agent prior to arrival, and close all soil pipes before entering port.

(1). *Radio Pratique:* Free Radio Pratique Telegrams to Quarantine Station not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health condition on board. When Free Pratique is granted by radio, vessel will be required to submit the following documents to Quarantine Officer on arrival.

Maritime Declaration of Health	1 copy
Crew List and Passenger List	1 copy
Vaccination List	1 copy

(2) The following vessels will not be able to obtain Radio Pratique.

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has onboard any case, or any suspected case, of infectious disease within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

RADIO: When on route to the Kin Wan Port at Okinawa a vessel's ETA must be communicated to his Agent, 72, 48 and 24 hours prior to arrival. If VHF is not available arrival information can also be passed to your Agent by "Ship Telephone Service". Naha: 098854-5155.

It is important that ETAs are confirmed 12 hours before expected arrivals and amendments communicated when known.

VHF station "Kin Wan Tug" located on Heianza Island keeps a 24 hour listening watch on Channel 16 (156.800 MHz) and Channel 13 (156.650 MHz). Tel. 09897-7 or 8341 is also manned 24 hours per day.

RADAR: The port is not equipped with radar. Poor visibility may occur in heavy rain, but fog is rare. Coastlines and buoys within the bay give good echo returns on ship's radar. All tugs are fitted with radar, and on occasions vessels have been guided into the port by them in heavy rainstorms, the tug keeping close alongside within sight of the bridge, and communicating by VHF.

TUGS: 4 tugboats are stationed at the Terminal. The Berthing Master in consultation with the Master will decide the number of tugs required for each berthing operation and as stand-by tugs during the vessel's stay in port.

Vessels are berthed with the assistance of up to 4 tugs according to the vessel's size and weather conditions. Such tugs will either secure alongside, "American style", or will secure forward or aft by their towing hooks. Tugs' lines are always used. The tugs are 2×3,200 h.p. Z-peller, 2×2,600 h.p. Z-peller and 2 small twin-screw tugs 400 h.p., and are manned by highly skilled crews. It should be noted that the port charges for vessels are a fixed amount based on deadweight tonnage, and this charge is not affected by the number of tugs used or not used. Masters may thus follow the Berthing Master's recommendations regarding tug requirements without having to consider what may well be dangerous economies.

READINESS: A vessel is "arrived" for Notice of Readiness purposes, when the Berthing Master boards or, if vessel proceeds to anchorage without a Berthing Master, when she drops her anchor.

BERTHING: In normal circumstances no lines are run out until the vessel is alongside the berth and in position. Tugs will hold her there whilst the mooring takes place, springs usually being run first, followed by breastlines, then head- and stern-lines. On the larger berths all lines except springs are lowered to the water and taken to the dolphins by line-handling boats, where they are secured to quick-release hooks. Nothing is required in the way of pennants, tails or shackles. Springs are passed direct to the dolphins by heaving-lines.

Owing to the depth of water, anchors are not normally used when berthing at the sea-berth. However, the outboard anchor should in all cases be ready for emergency use.

Weather permitting, vessels secure starboard side alongside at No. 3 Berth. At Nos. 4 and 5 vessels can only berth starboard side to the pier, owing to the construction of the berths. Therefore if wind conditions do not permit of berthing in this way, the berthing will be delayed until the wind is suitable. At the sea-berth, mammoth vessels normally berth port side to the pier, but this is only to reduce the time taken for the operation, and they can be berthed starboard side to if conditions require it. Smaller vessels are berthed either way according to requirements and conditions.

The Marine Office is equipped with a Weather Facsimile Recorder and Masters can obtain the latest information regarding possible storm conditions by contacting the Harbour Master on VHF Channel 13 or by calling 213 on the internal telephone system from the berths. When typhoons are imminent all cargo operations cease and vessels are required to vacate the berths and are recommended to proceed to sea.

Berth No. 1: Also see "Report" dated 1983 (below).
Owners: Okinawa Terminal Company Ltd.
Position: Lat. 26° 22′ 25″ N., Long. 127° 58′ 01″ E.
Depth: 30 m. (MLWS).
Max. Size: 385 m. LOA, 55 m. beam, 26 m. draft. 500,000 d.w.t.
Services: Fuel oil (bunkers), loading rate 2,800 kl/h, chicksan used. Fresh water not available.
Loading Rates: Bunkers/HFO 3,000 kl/h, product 2,000 kl/h. Crude 12,000 kl/h., Ballast 4,000 kl/h. Max. pressure 250 p.s.i.

Berth No. 2: Also see "Report" dated 1983 (below).
Owners: Okinawa Terminal Company Ltd.
Position: Lat. 26° 22′ 25″ N., Long. 127° 58′ 01″ E.
Depth: 30 m. (MLWS).
Max. Size: 315 m. LOA, 45 m. beam, 20 m. draft. 150,000 d.w.t.
Services: See Berth No. 1.
Loading Rates: See Berth No. 1.

Berth No. 3
Owners: Okinawa Sekiyu Seisei K.K.
Position: Lat. 26° 21′ 34″ N., Long. 127° 56′ 40″ E.
Depth: 15.5 m. (MLWS).
Max. Size: 240 m. LOA, 35 m. beam, 13.5 m. draft.
Services: Fuel oil (bunkers) available, 70 kl/h. 6 in. hoses used. Fresh water available, but not fit for drinking.
Loading Rates: Aviation, JP4 and Naphtha, 500 kl/h × 2 low sulphur FO 1,000 kl/h × 3. Fuel oil and diesel 1,000 kl/h. Max. pressure 15 kg./sq.cm.
Vessels normally berth starboard side to.

Berth No. 4
Owners: Okinawa Sekiyu Seisei K.K.
Position: Lat. 26° 21′ 29″ N., Long. 127° 56′ 48″ E.
Depth: 11.5 m. (MLWS).
Max. Size: 175 m. LOA, 22 m. beam, 10 m. draft limiting condition 90 m. stern to manifold.
Services: Fuel oil available, rate 70 kl/h. Chicksan used. Fresh water available, but not fit for drinking.
Loading Rates: Aviation, JP4, JP1, kerosene 500 kl/h × 2. Low sulphur F.O. 600 kl/h. diesel 1,000 kl/h, fuel oil "A" 1,000 kl/h. Maximum pressure 15 kg./sq.cm.
Vessels berth starboard side to.

Berth No. 5
Owners: Okinawa Sekiyu Seisei K.K.
Position: Lat. 26° 21′ 28″ N., Long. 127° 56′ 58″ E.
Depth: 10 m. (MLWS).
Max. Size: 110 m. LOA, 17 m. beam, 8.5 m. draft limiting condition 10,000 d.w.t.
Services: Fuel oil, 6 in. hose, 70 kl/h diesel, 6 in. hose, 700 kl/h. Fresh water available, but not fit for drinking.
Loading Rates: JP4, JP1, kerosene, diesel and fuel oil "A" 700 kl/h Max. pressure 20 kg./sq.cm. sulphur, 120 kl/h, max. pressure 15 kg./sq.cm. low sulphur fuel, 600 kl/h max. pressure 20 kg./sq.cm LPG 200 kl/h max. pressure 27 kg./sq.cm.
Vessels berth port side to.

Operator's Report: 1983.
Okinawa Terminal Co. Ltd. (OTC) Sea Berth (Discharging and loading terminal): Operated by OTC.

Terminal operates 24 hours per day, 7 days a week. Ships moored and unmoored at anytime, weather or other circumstances permitting. Terminal will not be closed on any holidays.
Location: Lat. 26° 22′ 25″ N., Long. 127° 58′ 01″ E.
Pilotage: Compulsory.
Anchorage: (See "Plan Book") Anchorages are in the following positions. Approval of The Captain of the Port of Kim-Nakagusuku must be obtained through Agent prior to arrival

K1: Within a radius 700 m. Lat. 26° 24′ 00″ N., Long. 127° 57′ 48″ E. For vessels of 100,000 g.r.t. or over.

K2: Within a radius 700 m. Lat. 26° 23′ 30″ N., Long. 127° 57′ 12″ E. For vessels of 100,000 g.r.t. or over.

KE: Within a radius 700 m. Lat. 26° 25′ 00″ N., Long. 127° 58′ 10″ E. For vessels of 100,000 g.r.t. or over.

KW: Within a radius 700 m. Lat. 26° 25′ 12″ N., Long. 127° 55′ 24″ E. For vessels of 100,000 g.r.t. or over.

KS: Within a radius 600 m. Lat. 26° 23′ 06″ N., Long. 127° 56′ 43″ E. For vessels of maximum 100,000 g.r.t.

S1: Within a radius 400 m. Lat. 26° 22′ 30″ N., Long. 127° 56′ 48″ E. For vessels of maximum 10,000 g.r.t.

S2: Within a radius 400 m. Lat. 26° 22′ 00″ N., Long. 127° 56′ 48″ E. For vessels of maximum 10,000 g.r.t.

Approaches: For the purpose of Traffic Separation and Control, the approach to Kin Bay is divided by a channel centre line joining the following positions. Lat. 26° 24′ 47″ N., Long. 127° 58′ 01″ E.

Vessel should make for position Lat. 26° 26′ 00″ N., Long. 128° 02′ 00″ E. off the East coast of Okinawa and from there steer to the West, passing Menguisho light beacon abeam to port at a distant of about 1.25 miles. The Berthing Master will board VLCC's (150,000 d.w.t. or over) or any ship which is on a first visit to the port.

When vessels are abeam of the beacon (but if circumstances should prevent this, the ship should continue on the Western course for one mile past the beacon) alter course to 242°, after about 1.4 miles on this new course the ship will be at the inner pilot boarding area.

Berthing:

Maximum rate 4,000 KL/H

West side of sea beth (No. 1 berth)
  Max. size 500,000 d.w.t.
  Max. draft 26.0 m.

East side of sea berth (No. 2 berth)
  Max. size 150,000 d.w.t.
  Max. draft 20.0 m.

Ballast: Disposal of dirty ballast water over the side is strictly prohibited by the Authorities and any pollution of the sea will result in heavy claims and fines.

No ballast is to be taken from the bay unless required for the ship's segregated clean ballast system. Ballast for cargo tanks will be supplied by the terminal.

LOADING: Loading lines at the berths are as follows: *(Note:* Hoses are listed from N.E. to S.W.)

Berth No.	*Dia. (in.)*	*To handle*	*Type*
1	16	Products	Chicksan arm with Q/C
	16	Crude/HFO	,, ,,
	16	Crude/ballast	,, ,,
	16	Crude/ballast	,, ,,
	16	Crude	,, ,,
	16	Ballast	,, ,,
2	16	Product	,, ,,
	16	Crude/HFO	,, ,,
	16	Crude/ballast	,, ,,
	16	Crude/ballast	,, ,,
	16	Crude	,, ,,
3	4	Bunkers (DO, FO)	Flexible hose
	10	Ballast	Mechanical arm
	10	Naphtha/JP4/kero.	,, ,,
	10	Naphtha/JP4/kero.	,, ,,
	12	Ballast/LSFO	,, ,,
	12	Low sulphur fuel	,, ,,
	12	Low sulphur fuel	,, ,,
	6	Bunkers (DO, FO)	Flexible hose
4	10	Ballast	Mechanical arm
	10	JP4, Jet A1, kero., naph.	,, ,,
	10	JP4, Jet A1, kero., naph.	,, ,,
	10	Automotive or marine diesel	,, ,,
	10	Low Sulphur (FO)	
	6	Bunkers (DO, FO)	Flexible hose
5	6	Auto/marine diesel, kero.	,, ,,
	4	LPG vapour return	,, ,,
	6	LPG/propane/butane	,, ,,
	6	Liquid sulphur	Mechanical arm
	6	Bunkers (FO, DO)	Flexible hose

During cargo transfer or ballast operation all vessels shall show signal flag "B" during the day, and a red light during the night.

Transfer operation shall not be started, or if started shall be discontinued by either the duty officer of the vessel or the Terminal supervisor, when any of the following conditions come to his attention:

(*a*) During severe electrical storms.
(*b*) If a fire occurs on the pier or on the vessel.
(*c*) If there is not sufficient competent personnel aboard the vessel or on the pier to safely handle cargo operation in progress.
(*d*) Should any condition develop which represents a hazard to the vessel or Terminal installation.

MEDICAL: Agents should be given advance notice of medical or dental attention required. Clinic and hospital facilities are available, and in emergencies helicopter evacuation is possible. There is also a Company ambulance on Heianza Island, for emergencies only. Telephone 319. If no answer, or at night, telephone 318. Or contact C.C.D. (Central Control Desk) on VHF Channel 16 or 13 or telephone 211.

DENSITY: The bay is open to the sea, and normal density is 1025.

FRESH WATER: Available at Berth Nos. 3, 4 & 5, but not fit for drinking.

FUEL: Heavy fuel is available at Nos. 1 and 2 Berths. All grades of bunkers are available at Nos. 3, 4 and 5.

CONSULS: At present the only Consulates on Okinawa are those of U.S.A., Korea and Philippines.

REPAIRS: Only minor repair facilities are available in Kin Wan, for such small components as can be sent ashore, e.g. repairing of valves or piping, re-winding of electric motors.

DRY DOCKS: None.

GANGWAY/DECK WATCHMEN: Shore gangways are fitted at Nos. 1, 2 and 3, and are supplied free of charge. Ship's gangways must be provided at Nos. 4 and 5. Watchmen are not required since access to the berths is controlled by the Company's security guards at the installation gates.

REPATRIATION: Crew changes and/or repatriation can be arranged by the Agent.

AIRPORT: Kin Wan Port is about 2 hours by car from Naha Airport (depending on traffic conditions) from where there are frequent services by several major airlines to all parts of the world via Tokyo, Honolulu, Taipeh or Hong Kong.

TIME: Local time is 9 hours ahead of GMT, unchanged throughout the year.

HOLIDAYS: Local holidays do not normally affect operations in the port. Bank Holidays are now basically the same as those in other Japanese ports.

POLICE/AMBULANCE/FIRE: Ambulance 319 or 318 after hours or 280 (C.C.D.) or VHF 16; Fire 319 or 318 after hours or 280 (C.C.D.) or VHF 16; Police inform C.C.D. by VHF Ch. 16 or tel. 280, or Harbour Master tel. 278.

TELEPHONES: Telephones are not placed on board, but for urgent ship's business arrangements can be made for calls to be placed through the Company switchboard.

SERVICES: Tank-cleaning alongside is prohibited, but facilities for discharge of tank washings are available. See "Pollution Control".

SHORE LEAVE: For reason of safety the Terminal and the Off-Shore Platform are restricted areas. However, ship's personnel and visitors to ships are permitted to disembark and embark via the dolphins, which are also the personnel landing areas. Loitering at the loading platform will not be permitted.

Unauthorized or apparently intoxicated or disorderly persons shall be prohibited from entering the pier and the Terminal.

Shore passes will be issued by the Agent. These passes must be surrendered to the Agent prior to the ship's departure, unless the vessel is bound for another port in Japan when they can, after stamping, be used in the second port. The pass is sufficient, and no other means of identification need be carried when ashore.

POLLUTION CONTROL: Gas-freeing is not allowed on tankships alongside the pier.

To minimise the chances of pollution *all* ballast, whether clean or dirty, *must* be discharged ashore, except that which is contained in independent "permanent" ballast tanks. Also all ballast loaded into cargo tanks must be taken from ashore, and not from the Bay. The shore ballast tank has a capacity of 550,000 barrels and is connected to all tanker berths.

Caution: The sea berth is surrounded by a new type of sink/float oil fence to contain any oil that may be spilled on the sea. This fence is moored in place by 36 anchors and ropes. Vessels are therefore warned against approaching this fence or using any anchors in the vicinity of the sea berth. Nor should they throw overboard any old wires, ropes or other rubbish which may foul or damage the fence or its moorings.

The Terminal will, in case of an oil spill, take such steps as may be deemed necessary to fight the pollution before it spreads. If the spill is due to faulty equipment or materials on the vessel or to negligency on the part of ship's personnel, the Terminal shall be indemnified for any expenses incurred in connection with the preventive action taken.

No ballast is to be taken from the Bay unless required for the ship's clean permanent ballast system. Ballast for cargo tanks will be supplied by the Terminal.

FIRE PRECAUTIONS: Smoking and use of naked lights is strictly prohibited on board vessels alongside the berths, except in those enclosed spaces aboard ship specifically designated by the Master as "Smoking Areas".

Fire wires of steel must be hanging over the side of the offside bow and quarter whilst alongside to enable tugs to connect readily in an emergency situation. The towing eyes should be maintained at water level.

Boiler tubes must not be blown whilst vessel is alongside and every precaution must be taken to prevent sparks and soot particles escaping from the funnel.

Mooring of boats or craft with mechanical propulsion alongside a vessel loading/discharging crude oil or in the process of ballasting, is not allowed, unless special permission has been given by the Terminal.

In case of a fire aboard a vessel alongside the pier the following sequence of procedure should be adhered to:

(*a*) "Kin Wan Tug" to be informed immediately.
(*b*) All cargo operations to cease forthwith.
(*c*) MOV's and gate valves on loading arms, nitrogen and battery limit valves to be closed as soon as possible.
(*d*) Dock personnel to stand-by for disconnecting loading arms, unberthing or fire-fighting in accordance with instructions issued by the Berthing Master or "Kin Wan Tug".

During an emergency situation on board a vessel alongside, the Berthing Master will be in charge of organising the preliminary fire-fighting assisted by "Kin Wan Tug". He is to make use of all available means at his disposal, such as tugboats, launches, personnel, terminal equipment and other facilities to assist the vessel and protect lives and Terminal installations. Should the Berthing Master be unavailable or unable to communicate, "Kin Wan Tug" will direct the preliminary fire-fighting.

Kin Bay area comes under the jurisdiction of the 11th District of the Japanese Coastguard and lies in Kin Nakagusuku Port. The telephone number of the Captain of the Port-Coastguard Offices, 11th District is 098895-4874 or 5439.

AUTHORITY: Maritime Safety Agency, 11th Maritime District.

AGENT: Kin Wan Port Service Co. Ltd., 6483 Aza-Heianza Yonashiro-Son, Okinawa, Japan. Tel: 09897-7-8226, 8341. Cable: Kinwan Port Koza, Okinawa.

KISARAZU (Kimitsu): 35.22 N. 139.52 E.

(See Plan Book)

PORT LIMITS: Refer to Marine Chart No. 1067. Published by Surveys of the Hydrographic Department M.S.A., Japan.

DOCUMENTS: Arrival

Quarantine Service:
Maritime Declaration of Health – WHO form, 1 copy.
Crew List – free form, 1 copy.
Passenger List (if any) – free form, 1 copy.
Vaccination Certificate (cholera), presentation.
Derat (Exemption) Certificate, presentation.
List of valid terms of Crew's Vaccination Certificate, presentation.

Immigration Service:
Crew List – free form, 1 copy.
Passenger List (if any), – free form, 1 copy.
Seamen's Ledger, presentation.
Passport or Seamen's Book (all of them), presentation.

Customs Inspection:
Ship's Register, presentation.
Last Port Clearance, presentation.
Crew List – free form, 1 or 2 copies.
Passenger List (if any) – free form, 1 copy.
Store List (Japanese Customs form required).
Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan.)
List of ports of call including last foreign port.

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: *Berthing Pilot:* Compulsory for foreign trade vessels over 10,000 g.w.t. Application to be made to Yokohama Pilot Office, via local Agent. Pilot boards on Kisarazu Quarantine Station or entrance of approaching passage. Available during daytime only.

Bay Pilot . . . Uraga & Nakanose on entering: Bay Pilot became compulsory in January 1977 for foreign trade vessels over 10,000 g.w.t. Application required 24 hours prior to entering by Cable to Anjin Yokosuku through Agent or direct. Pilot boarding position located on point 5.0 miles and 161° from Kannon Zaki L.H. Available any time, if any delay, change must be cabled to Anjin Yokosuka.

On leaving: Application same as on Entering. Pilot boarding on pier or off harbour.

ANCHORAGE: Refer to Japanese Chart No. 1062 (middle part of Tokyo Bay). Kisarazu Quarantine Anchorage boundary.

RESTRICTIONS: See "General".

HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port. A vessel may be berthed without a stay at the anchorage if Radio Pratique system used and permission of Chief of Quarantine Office.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

VHF: Port Radio Station at Yokohama works 24 hours. Channel 16. Call sign "Yokohama Port Radio".

RADAR: Radar station at Kannonzaki which controls all vessels in Uraga Channel.

TUGS:

6 tug boats belonging to Kimitsu tug boat station.

3,500 h.p. – 4,000 h.p.	2 tugs
3,000 h.p. – 3,500 h.p.	3 tugs
2,200 h.p.	1 tug

Another 16 tug boats listed belonging to Yokohama tug boat station.

3,500 h.p. – 4,000 h.p.	2 tugs
3,000 h.p. – 3,500 h.p.	4 tugs
2,500 h.p. – 3,000 h.p.	2 tugs
2,000 h.p. – 2,500 h.p.	8 tugs

Tug boat's lines used free of charge.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by VHF.

Public: Kisarazu Quay E. Max. draft 7.5 m. at high tide. Length 120 m. Capacity 5,000 d.w.t.

Private: Kisarazu Lumber Association dolphin pier. Max. draft 10.0 m. Length 250 m. Capacity 15,000 d.w.t.

Kimitsu Works of Nippon Steel Corporation.

Centre Pier:

No. 1–4	Coastal chemical tanker, tug boat basin.
No. 5	Coastal Raw material discharging berth.
No. 6	Discharging berth of iron ore and coal. Max. draft 16.3 m. at high tide. Length of berth 304 m. Capacity 150,000 d.w.t. or 270,000 d.w.t. (Part load). Dischage rate for coal 25,000 tonnes per day.
No. 7	Discharging berth of iron ore and coal. Max. draft 18 m. at high tide. Length of berth 350 m. Capacity 200,000 d.w.t. Discharge rate for ore 30,000 tonnes per day.
No. 8	Discharging berth of iron ore and coal. Max. draft 18 m. at high tide. Length of berth 422 m. Capacity 270,000 d.w.t. Discharge rate for ore 30,000 tonnes per day.
No. 10	Coastal Limestone carrier berth.
No. 11, 12	Coastal tanker berth.

Centre Pier unloader at No. 6 & 7 – 4 units each capacity 1500 t.p.h.
Centre Pier unloader at No. 8 – 1 unit capacity 2,500 t.p.h.

West Pier:

No. 1–6	Coastal small ships only.
No. 7	Loading berth of steel products. Max. draft 11 m. Length of berth 250 m. Capacity 30,000 d.w.t. Shore crane 1 unit 20 tons 1 unit 30 tons.
No. 8	Loading berth of steel products. Max. draft 11 m. Length of berth 250 m. Capacity 30,000 d.w.t. Shore crane 1 unit 30 tons 1 unit 20 tons.
No. 9	Loading berth of steel products. Max. draft 11 m. Length of berth 285 m. Capacity 30,000 d.w.t. Shore crane 1 unit 30 tons 1 unit 35 tons.
No. 10	Loading berth of steel products. Length of berth 230 m. Max. draft 11 m. Capacity 40,000 d.w.t. Shore crane 2 units each 30 tons.

East Pier:

No. 2	Loading berth of steel pipes. Max. draft 11 m. Length of berth 240 m. Capacity 30,000 d.w.t. Shore crane 3 units on No. 2 & No. 3 berth 30 ton.
No. 3	Loading berth of steel pipes. Max. draft 11 m. Length of berth 240 m. Capacity 30,000 d.w.t. (See No. 2 Berth).
No. 4–13	Coastal ships only used for loading wire rod, angle bar, etc. and discharging materials.

CRANES: See "Berthing".

BULK CARGO FACILITIES: See "Berthing".

SPECIALISED CARGO-HANDLING FACILITIES: See "Berthing".

BRIDGES: None.

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost.

Average loading rates:	Coils 75 t.p.h.
	Plates 50–60 t.p.h.
	Pipes 40 t.p.h.
	Angle 40 t.p.h.
	Wire rods 15–25 t.p.h.
Average discharging rates:	Coal 700 t.p.h.
	Iron ore 750–800 t.p.h. 1,500–1,600 t.p.h. (2,500 ton unloader)
	Manganese ore 600 t.p.h.
	Iron sand 900 t.p.h.
	Coke 700 t.p.h.

MEDICAL: No advance notice required unless urgent.

TANKERS: Only coastal tankers.

DENSITY: 1021-1025.

FRESH WATER: Available from shore line. Rate of delivery 40-50 t.p.h.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay. Bunkers will be lightered from the nearest bunker stock ports at max. 7 days' prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches except steel hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CARGO GEAR: Usually load/unload by shore cranes.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 60 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor repairs only.

DRYDOCKS: 500,000 d.w.t. drydock at Chiba.

SURVEYORS: Nippon K.K.K., Kimitsu Branch.

REPATRIATION: Possible.

AIRPORT: Narita (Tokyo) International Airport is about 2 hours by car or railway.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: No cargo loaded on January 1st. Cargo discharged on all holidays.

POLICE/AMBULANCE/FIRE: Kisarazu Police Station tel. 0438-23-4011; Kisarazu Fire Brigade and Fire Station tel. 0438-23-7121.

TELEPHONES: No telephones installation direct to vessels alongside wharf.

SERVICES: Provisions, laundry, ship's stores, garbage, hold cleaning, navigation aids. Special service are called from Chiba, Yokohama and Tokyo.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

IDENTIFICATION CARDS: Shore Pass and Seaman's Book required.

REGULATIONS: See "General".

GENERAL: Notification to Maritime Safety Agency:

According to Maritime Traffic Safety Law, The Master of large vessel (over 200 m. in LOA and 10,000 g.w.t.) is required to give to Regional Maritime Safety Agency an advance report of estimated time passing the traffic route and other matters and also required to obey the instruction given by the Agencies.

Notification cable definitely to be given by 1200 hrs. (JST) on the day prior to entering, directly from Master or through local Agent. Any change in reported matters, to be reported 3 hours before the time of entering by radio communication or telephone.

Seaweed cultivation to be carried out in the vicinity of Nippon Steel Corporation Kimitsu Works so Master's co-operation with regards to the following items would be appreciated.

1. The discharge of oil or oily waste into the water is strictly prohibited by Marine Pollution Law and other related ordinance.

2. Proceeding to the cultivation area is prohibited.

3. Numerous buoys each exhibiting flashing yellow lights have been established to mark the outer side-line of the seaweed cultivation area.

4. Bunkering possible daytime only (sunrise to 1 hour before sunset) in the port of Kimitsu.

AUTHORITY: Kisarazu Port Administration Office, 13-34, Kaifuchi 3-chome, Kisarazu City, Chiba Pref. *Tel:* (0438) 36-4455.

AGENT: Sub-agents of Dodwell & Co. Ltd. Toyko. Chiba Kaiun Sangyo Co. Ltd., Kimitsu Office, c/o Kaiun Centre Kimitsu Works of Nippon Steel Corporation, No. 1, Kimitsu, Kimitsu-shi, Chiba-ken. Tel: Kimitsu (04395) 2-0800. Cable Address: Chibamarine Kisarazu.

KOBE: 34.40 N. 135.12 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
1 Store List.
1 Declaration of Crew's Baggage.
4 Crew Lists.
4 Passenger Lists (if any).

Ship's Agents will prepare other documents such as Inward/Outward Declaration, Cargo Manifest, etc., using Japanese Custom's Forms.

PILOTAGE: *Tomogashima Channel Pilot (not compulsory but recommended):* Pilot boards 5–7 miles South of Tomogashima (approximately 34° 10′ N., 135° 00′ E.). Cable address: "Baypilot Kobe". If Bay Pilot is required, please inform them 24 hours prior to vessel's arrival at Tomogashima Pilot Station.

Harbour Pilot: Pilot boards at quarantine anchorage at Wada-Misaki Point. Cable address: "Pilot Kobe". 24 hours' prior notice is required. When vessel moors to buoy, chain cable should be prepared.

ANCHORAGES: Quarantine anchorage: Latitude 34° 38′ N; 34° 38.6′ N. Longitude 135° 10′ E; 135° 11′ E.

All vessels requiring anchorage for awaiting berth, repairs, bunkering, etc., must obtain anchoring position from Harbour Master.

RESTRICTIONS: Quarantine officials are available during daylight hours. Berthing is not permitted after 2130 hrs.

MAX. SIZE:

Name of Berth	*Max. LOA* (m.)	*Max. Safe Draft* (m.)	*Depth at Berth* (m.)
Showa Sangyo	213	10.35	12.60
Tomen Silo	223	10.35	12.40
Zenno Silo	223	10.35	12.20
Kohnan Silo	245	10.71	12.20
Hanshin Silo	210	10.26	11.60

Also see "Tankers".

HEALTH: Quarantine Officials board vessel from daylight to sunset at Quarantine Anchorage.

Radio Pratique is available. Vessels must be in possession of a valid Japanese Sanitary Inspection Certificate.

Documents Required: Derat Exemption Certificate, Crew List, Passenger List, Maritime Declaration of Health and Vaccination Cards.

RADIO: Recommend Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi, and Northbound to contact Nagasaki Radios respectively.

Kobe-Radio details:

	Security and Port message	*Port message*	*Public message*
Call sign	JGD	Kobe Port Radio	JCK
Name of Station	Coast Station or Special Service Station	Kobe Port Radio	Kobe Radio
Station Owner	5th Regional Maritime Safety Headquarters	Kobe Municipality (its Port & Telegraph Harbour Bureau)	Kobe Central Office
Frequency	444 kHz. 500 kHz. 500 kHz. 512 kHz. International VHF Channels 12, 16	International VHF Channels 16, 12, 11, 18, 20. 24-hour service.	134.9 kHz. 143 kHz. 416.5 kHz. 487.5 kHz. 500 kHz. 512 kHz. 425 kHz.

TUGS: Join vessel at entrance of fairway. Tug's lines used without extra charge. 40 tugs available.

BERTHING: Chains must be used in mooring to a buoy. Ship must not drop anchor near a buoy when it is moored to one. Ship brought head in alongside pier except in special cases. Some berths impossible to reach after sunset. Example: dolphin berths. This is why ships need to arrive outside breakwater before sunset.

See tables on pages 776 and 777.

BULK HANDLING FACILITIES: Hanshin Silo Company Berth, 11.60 m. depth alongside available for vessels up to 50,000 tons d.w.t. Discharge effected by 2 pneumatic unloaders with capacity 400 t.p.h. per unit.

Kobe Silo Berth, length 752 ft., depth alongside 41 ft. 2 mobile discharging units each with capacity of 500 t.p.h.

Kohan Silo Berth, length 214 m., depth alongside 12.2 m. equipped with 2 discharging units which can be used for grain, sugar, or general cargo, also 1 pnuematic unloader, with capacity 1,500 t.p.h. per unit.

Kobe Steel, Berth No. 3: Length 334 m., depth 13.0 m., max. LOA 300 m., beam 40.0 m., draft 12.5 m. 2 cranes available for coal and ore. Discharge rate 1,400 tonnes/p.h.

In the current development programme a total of 7 container berths are to be provided at Kobe.

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores.

MEDICAL: No advance notice required unless urgent. Hospital facilities available.

TANKERS:

The Port Island receives bunker oil from tankers into the terminal and delivers Intermediate 15 and MDO by pipe-line to vessels moored at Kobe Port Island. This berth is equipped with loading arms and utilises a boom completely surrounding the discharging tanker to prevent the spread of any oil spill.

Storage facilities consist of 3 tanks of 36,000 kl (226 mb) for Intermediate 15 and 2 tanks of 5,000 kl (31 mb) for MDO.

Pumping facilities consist of 3 pumps of 700 kl/hour (4,400 b.p.h.) capacity for Intermediate 15 and 2 pumps of 200 kl/hour (1,258 b.p.h.) capacity for MDO.

Special features include an automatic control system from a central control board, remote valve operation, remote tank gauges, communication equipment at each bunkering berth, flow meters for all deliveries, a chemical fire engine, a crane and a lorry for recovery of waste oil.

The terminal is open between 0900 and 1700 hrs. and availability at other times involves overtime.

Name of Berth	*Max. d.w.t. (approx.)*	*Max. LOA (m.)*	*Max. safe Draft (m.)*	*Mooring–Pipeline–discharging rate*
Shell. Bunkers ex-barge only. No slop discharge facilities.	70,000	250	12.6	To 4 buoys. 1×24″, 1×12″ for F.O., D.O. Minas/Seria Waxy Residue. Average discharge rate (1 Pipe) 1,000 t.p.h. Max. (2 Pipe) 3,000 t.p.h. (mooring possible when tide runs towards West)
MKS. Bunkers ex-barge only.	40,000	234 (breadth 33)	11.20	To 3 buoys. 2×16″ for F.O. and D.O. Average discharge rate 1,000 t.p.h. Max. 1,300 t.p.h. mooring possible when tide runs towards West)
Mitsubishi Shoji (for L.P.G. tankers). Bunkers available ex-wharf; ex-barge at anchorage. No slop discharge facilities. Also see "Shipmasters Report".	45,000	240 m.	10.35 m.	Alongside Pier. 2×12″ for F.O. and 1×12″ for D.O. Average discharge 800 t.p.h. per pipe. Max. 2,000 t.p.h.
Port Island Oil Berth	70,000	240 m.	10.98 m.	2×16″ for Fuel oil. Average discharge rate 2,000 t.p.h. Max. 3,500 t.p.h.

TIDE: Mean height of tide 1.030 m. Some of tanker berths in West part of port affected by tide. Currents less than 1 knot inside harbour.

DENSITY: Winter: 1023 – 1026. Summer: 1018 – 1022.

FRESH WATER: Supplied from the quays at rates of 40 to 50 cu.m./hr. Three water barges available, largest with capacity 325 cu.m., can supply vessels at rates up to 300 cu.m./hr.

Possible to supply fresh water at anchorage weather permitting. 24 hours' prior notice is required.

FUEL: All grades are obtainable from major oil companies and supplied by barge.

FIRE PRECAUTIONS: LPG tankers instructed by Maritime Safety Headquarters to strictly observe safety rules. Example: checking on what is carried by those who go aboard; banning ship's stores to be loaded on to ship which is working.

WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: By Stevedores or crew, ship's option.

CERTIFICATES: Ship's Register to show Customs Inspector for registered gross and nett tonnage. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Tobacco (per passenger or crew member). Temporary shore-leave up to 50 cigarettes (duty free); Disembarkation up to 200 cigarettes (duty free). Maximum allowable (only in case of disembarkation) up to 800 cigarettes duty free (however, 600 cigarettes – taxable).

Wines and/or Spirits: Crew member: When the ship at sea for more than 1 month, up to 6 bottles (1 bottle – duty free); less than 1 month up to 6 bottles (no duty free). Passengers: When a passenger travels for less than a fortnight up to 12 bottles (1 bottle – duty free); more than a fortnight up to 12 bottles (up to 3 bottles – duty free).

BERTHING: (continued)

Wharves and Mooring Dolphins for Large Vessels (Public)
E=East Side; W=West side; S=South side

Name			Length (m.)	Width of Apron (m.)	Fixed Depth of Water (m.)	Fixed Number of Vessels Coming alongside	
						Gross Tonnage	No. of Berths
Shinko Pier	1	W.	364	12	9.1	10,000	2
		E.	364	7.2 – 12	9.1	10,000	2
		S.	102	—	9.1	2,000	1
	2	W.	364	6.7 – 12	9.1	10,000	2
		E.	364	12	9.1	10,000	2
		S.	102		9.1	2,000	1
	3	W.	365	6.7 – 12	9.1	10,000	2
		E.	378	6.7 – 12	10.0 – 11.0	10,000	2
		S.	102		9.1	2,000	1
	4	W.	591	7.0 – 9.0	10.0 – 12.0	20,000 15,000 10,000	1 1 1
		E.	644	9.0	10.0 – 12.0	50,000 10,000	2 1
	5	W.	457	11.0	10.0 – 12.0	30,000 15,000	1 1
		E.	444	11.0	10.0	15,000	2
		S.	148	—	10.0	5,000	1
	6	W.	445	11.0	10.0	15,000	2
		E.	441	11.0	10.0	15,000	2
	7	W.	200	6.2	10.0	15,000	1
		E.	200	6.2	10.0	30,000	1
	8	W.	387	6.5	10.0	15,000	2
		E.	400	15.0	10.0	15,000	2
Maya Pier	1	W.	588	20	10.0 – 12.0	30,000 15,000	1 2
		E.	400	20	10.0 – 12.0	30,000 15,000	1 1
	2	W.	400	20	10.0 – 12.0	30,000 15,000	1 1
		E.	400	20	10.0 – 12.0	30,000 15,000	1 1
		S.	192	10	12.0	15,000	1
	3	W.	400	20	10.0 – 12.0	30,000 15,000	1 1
		E.	400	20	10.0 – 12.0	30,000 15,000	1 1
		S.	192	10	12.0	15,000	1
	4	W.	400	20	10.0 – 12.0	30,000 15,000	1 1
		E.	600	20	10.0 – 12.0	30,000 15,000	1 2
		S.	192	10	12.0	15,000	1
Hyogo Pier	1	W.	436	5.4	7.2 – 9.0	10,000 5,000	1 2
		E.	623	5.4	7.2	5,000	4
		S.	127	—	7.2 – 9.0	3,000	1
	2	W.	436	5.4	7.2 – 9.0	10,000 4,000	1 1
		E.	436	5.4	7.2 – 9.0	10,000 8,000 4,000	1 1 1
		S.	127	—	9.0	3,000	1
	3	W.	265	13	7.5	6,000	2
		S.	178	15	9.0	5,000	1
Hyogo-Ko	Shijo Mae		323	10	4.5	700	5
Naka Pier		W.	637	8	5.5 – 9.0	8,000 2,000	1 4
		E.	215	8	9.0	8,000	1
Tohbu Home Trade Wharf		W.	455	15	5.5	2,000	5
		E.	527	15	6.0	3,000	5
		NE.	629	15	5.5	2,000	7
		N.	361	15	5.5	2,000	4
Higashi-Kobe Ferry Terminal		No. 1	130	6	5.5	1,000	1
		No. 2	170	6	7.5	3,000	1
		No. 3	205	6	7.5	6,000	1
		No. 4	170	6	6.0	3,000	1

Name		Length (m.)	Width of Apron (m.)	Fixed Depth of Water (m.)	Fixed Number of Vessels Coming alongside	
					Gross Tonnage	No. of Berths
Nada Wharf	South Side (W.)	135	5.4	6.3	2,000	1
	(E.)	510	5.4	4.5	700	8
Pier of Waste Oil Separation Facilities of Vessels		76	—	7.7	3,000	1
Suma Harbour	S.	180	15	5.5	2,000	2
	E.	110	15	5.5	2,000	1
Port Island	C. 1 – 9	2,650	40	12.0	25,000	9
	L. 1 – 15	3,000	30	10.0	15,000	15
Port Island Dolphins for bunkering facilities		99	—	13.0	50,000	1
					3,000	1
Kobe Fukae Ferry Terminal		170	10	7.5	8,000	1
Mooring Dolphins		1,800	—	10.0 – 12.0	(total) 84,000	9
Rokko Island	G.H.I.	1015	20	10.0	15,000	5
	K.L.M.	755	20	10.0	15,000	4
	Ferry Berth	199	6	7.5	6,000	1

Wharves for Large Vessels (Private)

E=East side W=West side S=South side

Name		Length (m.)	Width of Apron (m.)	Fixed Depth of Water (m.)	Fixed Number of Vessels Coming alongside	
					Gross Tonnage	No. of Berths
Mitsui Pier	W.	177	11	10.0	10,000	1
	E.	185	11	10.0	10,000	1
Takahama Wharf	W.	193	11	8.2	8,000	1
	E.	325	13	8.2	8,000	2
K.S. Nos. 1 – 5		1,527	1.5	9.5 – 13.0	10,000	5
Unclassified		6,549		4.5 – 13.0	500 – 150,000	54

(The column includes most of the private piers of the fitting-out quays belonging to Kobe Shipyard & Engine Works of Mitsubishi Heavy Industries, Ltd. and Kawasaki Heavy Industries, Ltd.)

Mooring Buoys

The whole sea surface within the Port Limits is divided into 6 sections.

Section	Owner of Buoys	No. of of Buoys	Buoy Number or Designations	Fixed No. of Vessels Coming Alongside	
				No. of Vessels Moored	Gross tonnage
No. 2	Kobe City Government	9	Nos. 1, 2, 4-8, 11, 12	9	2,000 – 20,000
	Kawasaki Heavy Industries Ltd.	2	A, B	2	3,000 – 8,000
	Mitsubishi Heavy Industries Ltd.	2	C, D	2	4,000 – 18,000
No. 3	Shell Sekiyu Kaisha, Ltd.	4	Shell Buoy	1	70,000
	Maruzen Kanematsu and Esso Companies	4	MKS Buoy	1	60,000
No. 5	Kobe City Government	2	Nos. 21(A,B)	1	10,000

CONTAINER HANDLING FACILITIES:

	Terminal	Berths	Length (m.)	Water Depth (m.)	Terminal Area (sq.m.)	C.F.S. Floor (sq.m.)	Handling System	Container Cranes (tons)
Port Island	PC. 1	1	300	–12	103,500	6,663	Chassis	2 – 30.5
	PC. 2	1	300	–12	105,000	4,226	Transtainer	2 – 30.5
	PC. 3	1	300	–12	105,000	(7,755)	Straddle Carrier	4 – 30.5
	PC. 4	1	300	–12	105,000	(5,303)		
	PC. 5	1	250	–12	91,000	3,564	Transtainer	2 – 30.5
	PC. 6	1	300	–12	91,707	5,048	Chassis	2 – 30.5
	PC. 7	1	300	–12	97,984	(9,900)	Straddle Carrier	6 – 30.5
	PC. 8	1	300	–12	97,650			
	PC. 9	1	300	–12	105,000			
	PC. 10	1	300	–12	78,700	–	–	–
	PC. 11	1	350	–12	85,000	–	–	–
	PC. 12	1	350	–12	80,500	–	–	–
Maya	Q	2	580	–10/ –12	46,000	5,732	Straddle Carrier	1 – 25.4
	R							
	S							2 – 30.5

CONSULS: The following countries are represented by Consuls in Kobe and Osaka area:

Argentina
Australia
Austria
Belgium
Bolivia
Brazil
Central African Rep.
Chad
Chile
China
Costa Rica
Denmark
El Salvador
Finland
France
Germany (F.R.)
Great Britain
Greece
Guatemala
India
Indonesia
Italy
Ivory Coast
Jordan
Korea
Malagasy Republic
Malta
Mexico
Netherlands
Norway
Pakistan
Panama
Paraguay
Philippines
Portugal
Singapore
Spain
Sri Lanka
Sweden
Switzerland
Thailand
Turkey
U.S.A.
U.S.S.R.

REPAIRS: All repairs possible.
DRY DOCKS:

Owner	*Name*	*Overall length* m.	*Width* m.	*Depth* m.	*Remarks*
Mitsubishi Heavy Industry Ltd.	Dock No. 4	290.0	41.2	13.0	Capacity 150,000 d.w.t.
Kawasaki Heavy Industry Ltd.	Dock No. 1	160.0	22.0	8.83	The largest ship docked: 215 m.× 30.5m.×6.8 m. Capacity for No. 4 – 50,000 d.w.t.
	Dock No. 2	94.0	15.4	14.8	
	Dock No. 3	172.8	26.0	13.0	
	Dock No. 4	215.0	33.5	11.0	

(Number of docks in Kobe)

Kobe Dockyard Engine Works Co. Ltd.	3 floating docks
Ishihara Shipyard Co. Ltd.	1 floating dock
Arata Dockyard & Engine Works Co. Ltd.	1 floating dock
Shikase Dockyard Ltd	1 floating dock
Mitsubishi Heavy Industries Ltd.	3 floating docks 1 dry dock
Kawasaki Heavy Industries Ltd.	2 floating docks 2 dry docks

SURVEYORS: Lloyd's Register, Germanischer Lloyd, American Bureau of Shipping, Bureau Veritas, Norske Veritas, Nippon Kaiji Kyokai.
REPATRIATION: Possible.
AIRPORT: Osaka International Airport. Distance from Airport about 1 hour by car.

Domestic: Following regular airlines, Japan Air Lines, All Nippon Air Lines, Nihon Kokunai Koku, Toa Koku.

International: For Far East: Japan Air Lines 31 flights per a week, Thai International Air Lines 10 flights per a week, Cathay Pacific Air Lines 8 flights per a week, China Air Lines 11 flights per a week, Korean Air Lines 12 flights per a week, North-West Air Lines 7 flights per a week.

For Europe: Lufthansa 1 flight per week, British Airways 3 flights per week, Air France 2 flights per week.

For United States: Japan Air Lines 12 flights per week, Pan American 3 flights per week.

TIME: GMT plus 9 hours. No alteration to clocks throughout year.
HOLIDAYS: 1st January (New Year's Day); 15th January (Coming-of-Age Day); 11th February (National Founding Day); 21st March (Spring Equinox Day); 29th April (The Emperor's Birthday); 3rd May (The Constitution Day); 5th May (Children's Day); 15th September (Respect for the Aged Day); 23rd September (Autumn Equinox Day); 10th October (Health Sports Day); 3rd November (Culture Day); 23rd November (Labour Thanksgiving Day).
POLICE/AMBULANCE/FIRE: *Police:* 110; Water Police Station tel. 331–2351, 331–2354, Ikuta Police Station 331–0044, Fukiai Police Station 231–4441, Hyogo Police Station 551–0051.

Ambulance: 119.

Fire: 119; Water Fire Department 331–9951, Fukiai Fire Department 291–0401.

TELEPHONES: Possible to place telephone on board.
SERVICES: Compass adjusting, radio/radar services, etc.
GENERAL: When typhoon approaching, Port Captain requires ships to proceed outside breakwater.
SHORE LEAVE: Crew members free to go ashore with landing passes issued by Immigration Authorities.
DELAYS: 1. Weather condition (where strong wind prevents ships entering port). 2. Tide (berths in West part of port). 3. Berths where no ships permitted berth alongside at night. 4. Where a quarantine officer or Pilot being awaited. 5. Shortage of gangs, weather.
DEVELOPMENTS: Rokko Island is now under construction to the East of Port Island and expected to complete in 1985.

4×55 tonnes container cranes under construction for Sealand.

SHIPMASTER'S REPORT: February 1980.
Sakai to Kobe:
Transit: For LPG ships this can only be accomplished in daylight.
Pilots: In normal conditions Sakai Pilot will depart at about No.5 buoys Hamadera Passage and vessel proceed to Kobe No.6 breakwater embarking Pilot at No.3 buoy. In weather with poor visibility take 'Bay' Pilot, no movements with visibility less than 1 mile.
Kobe:
Pilot: For vessels proceeding to Mitsubishi Storage Terminal, Pilot is embarked at No.3 buoy and leaves at same.
VHF: Kobe Port Radio.
N.O.R.: 1st Line ashore.
Tugs: Two powerful tugs join vessel just inside No.7 breakwater. Cost of one tug Yen 48,000 per hour.
Surveyor: NKKK in attendance.
Microbus: We hire microbus for 20 persons on contract hire for 9 hours at Yen 70,000 – about £125. Easy to arrange through Agent.
Doctor: Obtainable, about £40 per visit.
Terminal:
Moorings: 3,2,2, each end, Line boat available.
Tanker type jetty with mooring dolphins each end connected by catwalks.
Berth situated West end of No.2 Industrial area.
Port side to.
Gangway can be difficult to land on narrow catwalk.
No transport near ship, about 5 minutes walk to gate.
Depth: 12.50 m.
Connections: Chicksans: 12 in. liquid, 8 in. vapour return. The forward vapour return line has a right angle elbow in it. Connection and disconnection by shore personnel, can take 1.5 to 2 hours.

Quite often a vapour mixture is returned to the vessel if discharging two grades, generally acceptable if propane and butane.
Max. Rate: About 700 tonnes/p.h. both grades.
Fresh Water: From the pier through Mitsubishi – will only give what Master has ordered. At 20 t.p.h. Difficult to connect American couplings. Yen 500 per tonne.
Stores: Nil on berth.
Facilities: All repairs off berth.

Walport Film and Video exchange through Agent.
Safety: Normal requirements plus fire axes each end at moorings.
Anchorage: Outside Kobe Breakwaters in areas marked on Japanese Chart. We anchored in Lima 3 area, very congested.

Best to obtain up to date Japanese Hydrographic Office Charts of Kobe and Osaka Bay as frequent changes, also BA. charts do not have incidentals like anchorage areas, Tomogashima traffic routes, lava beds, etc.
General: As usual the shore line is continually changing and care is required in taking positions.

BA. 2265: Kobe Ko. New breakwater marked by temporary light buoys from Breakwater No. 6 in position 34° 39.99′ N., 135° 14.86′ E. to 34° 39.63′ N., 135° 15.19′ E. in direction 324° – 144° for 830 m.

BA. 3614: Osaka Bay. New Osaka International Airport Buoy 34° 26.9′ N., 135° 16.15′ E. in a Southerly direction for 3.5 miles and Westerly direction for 2.5 miles with causeway to shore in approx. position 34° 24.5′ N., 135° 18.2′ E. Many barges crossing from Awaji Shima.

Also see "SAKAI" – "Shipmaster's Report" – Kobe was 2nd Port of Call.

AUTHORITY: Port and Harbour Bureau, Kobe City Government, 5-1 Kano-Cho, 6 Chome, Chuo-Ku, Kobe, 650 Japan. *Tel:* 078-331-8181. *Telex:* 78548 Kobeport. *Cables:* Japangate. *Contact:* Promotion Division.
AGENT: Dodwell Tramp Agencies, P.O.Box 557 Kobe Port, Kobe Meiji Seimei Building 3–7, Isogami-dori 8-chome Fukiai-ku, Kobe. Tel. (078) 251-0021. Cable Address: Dodtramp Kobe. International Telex J 78826.

KOKURA: 33.54 N. 130.53 E. (See "Kanmon-Ko")
(See Plan Book)

Kokura situated between Moji and Tobata. On the East is contiguous to Moji Port, on the West to Tobata Port and on the North it opens to the Kanmon Straits.
DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea pilot stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address: "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse (vessels transitting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGE: Anchorage not in use as the area is being dredged for the purpose of navigation fairway.
RESTRICTIONS: Vessel enters port only within 1 hour before and after slack tide in daytime. No night departure.

MAX. SIZE: See "Berthing".
HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards and Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi and Northbound to contact Nagasaki Radio respectively.
TUGS: See "Moji".
BERTHING:

Name of berth	*Length* (m.)	*Depth* (m.)	*Permissible draft* (m.)	*Capacity*
Murasaki				
Kawajiri Wharf	225	10.0	10.0	20,000
Sunatsu				
West Wharf	366	8.2	8.2	13,000
Sumitomo Metal*				
West No. 1 Wharf	270	12.0	11.0	140,000 d.w.t. with part load
Hiagari Wharf				
No. 3	OA180	10	10	25,000
No. 4	OA180	10	10	25,000
No. 5	OA180	10	10	25,000
Ferry	270	5.5	5.5	5,000
No. 6	OA200	10	10	20,000
No. 7	OA200	10	10	20,000
Kanematsu				
Oil Pier	OA170	6.5	6.5	DW 18,000

*2 cranes – capacity 1,000 t.p.h. each.

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

(a) Max. 6 gangs are available.
Stevedores, regular employees 116, temporary labourers 109. Longshoremen 459.

(b) Lighters: Kokura Marine Transportation Co., lighters 25, tonnage 8,900 tons.

(c) Shore crane:

No.	*Capacity*		*Location*	*Owners*
2	10 tons		Sunatsu Wharf	Sumitomo Metal
1	6 tons		,,	Kokura Marine
3	12 tons	outreach 18 m.	Sumitomo Metal Wharf	Sumitomo Metal
3	35 tons		Hiagari Wharves Nos. 6 and 7	Shin Nihon Steel Corp.

(d) Floating crane: arrangeable from Moji.

(e) Average performance of loading/discharging:
Discharging: Iron ore 40/50 t.p.h./gang/hatch (by ship's gear). 200 t.p.h./gang/hatch (by shore crane). Coal 40/50 t.p.h./gang/hatch (by ship's gear). 100/150 t.p.h./gang/hatch (by shore cranes). Scrap steel, pressed 20 t.p.h./gang/hatch (by ship's gear). Ordinary 10 t.p.h./gang/hatch (by ship's gear). Bulky 5 t.p.h./gang/hatch (by ship's gear). Loading: Steel under 20 ft. long 25–30 t.p.h./gang/hatch, over 20 ft. long 15–20 t.p.h./gang/hatch.

(f) 2 shifts: 0800 to 1700 hrs. and 1700 to 0700 hrs. Normal working hours: 0800 to 1700 hrs. Refer to Moji for further information.
TANKERS: Also see "Berthing". At Kanematsu-Goshi Oil Refinery 1×6 in. line, rate 900 t.p.h. (Fuel/diesel oil). No slop facilities available.
DENSITY: 1025.
FRESH WATER: From hydrants at Sunatsu and Sumitomo Metal wharves, the rate of delivery per hour: 30 tons per hydrant. Also delivered by barge.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at max. 7 days' prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: See "Moji".
REPAIRS: See "Moji".
AIRPORT: All Nippon Airways, Kitakyushu, about 30 minutes by taxi from Kokura Station to airport. Japan Air Lines, Fukuoka, and Cathay Pacific Air Lines, Fukuoka, about 1.5 hours by train and taxi from Kokura station to airport.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 56-7171; Ambulance 119; Fire 92-4831.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
SHIPMASTER'S REPORT: 1975, Vessel discharged iron ore at Sumitomo Metal Industries.
Pilotage: Arriving from East. He Saki: Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.
Arriving from West. Mutsure: Lat. 33° 58′ 30″ N., Long. 130° 53′ 00″ E.
Anchorage:
He Saki: Lat. 33° 56.2′ N., Long. 131° 02.9′ E. Depth 11.4 m.
Mutsure: Lat. 34° 00.0′ N., Long. 130° 52.5′ E. Depth 19.0 m.
Departing from He Saki anchorage to arrive to port of destination in Kanmon Straits in Slack Water and only in daylight.
Normally Pilot boarding 1 hour before tide change. Allowable drafts to transit Kanmon Straits max. 30 ft. anytime. Max. 32 ft. 10 in. at HW.
Radio Pratique: Obtained if in possession of valid Sanitary Certificate and all Smallpox Certificates valid. Send cable to Agent with prefix RPM following the standard text.
Docking: Always starboard side.
Anchor: Port anchor ready for emergency.
Fenders: Prismatic rubber.
Gangway: Ship's accomodation ladder.
Discharging Facilities: 3 cranes – capacity 180 t.p.h. each.
Departure from Dock: Undocking only in daylight and about 1 hour before slack water. 3 tugs are necessary for turning the vessel in the narrow basin to head out.
Under construction 2 unloaders, cantilever bridge type, with capacity of 1200 t.p.h. each.

AUTHORITY: Kita Kyushu Port Authority, 2-7, Nishi Kaigan 1-chome, Moji-ku, Kita-Kyushu City, Fukuoka Pref. *Tel:* (093) 331-1331.
AGENT: See "Moji".

KOMATSUSHIMA: 34.00 N. 134.36 E. (See Plan Book)

DOCUMENTS:
Ship's Register.
Last Port Clearance.
6 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).
Ship's Agent will prepare Inward/Outward Declaration, 5 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory. 3 authorised licensed Pilots available.
ANCHORAGES: Situated at Western corner of Komatsushima Bay and port protected by three breakwaters, North, East and South covering 396,700 sq. m. Depths of water at anchorages as follows:
(a) Inside Breakwater 8 m. – 10 m.
(b) Outside Breakwater 8 m. – 13 m.
(c) Wharf 8.50 m.
RESTRICTIONS: Vessels must get permission and instructions where to anchor from Port Captain before arrival. Wharf and Inner Harbour: Entering and sailing usually only during day-time regardless tide and current. Outer Harbour: Entry and sailing anytime.
MAX. SIZE: Anchorage inside breakwater: length no limit, breadth no limit, draft 8.60 m.
Anchorage outside breakwater: length no limit, breadth no limit, draft 8.60 m.
Wharf. (Suitable 10,000 d.w.t.). length 175 m., breadth no limit, depth 9 m.
Shinko Wharf: (Suitable 10,000 d.w.t.) Length 175 m. Draft 8.5 m.
Kanaiso Wharf. (Suitable 10,000 d.w.t.) Length 175 m. Draft 8.5 m.
Kanaiso Wharf. (Suitable 15,000 d.w.t.) Length no limit. Draft 10 m. after dredging.
HEALTH: Pratique to be obtained at Shimotsu prior arrival Komatsushima. At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.
TUGS: Wharf and Inner Harbour: Join vessel at Sea Anchorage, always using tug's line without charge. Outer Harbour: no tug required in normal conditions.
STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630 – 2130 hrs. 60% additional of basic stevedorage; 2130 – 0500 hrs. next morning special additional; Sundays/holidays 100% additional.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by telegram.

(a) *Quays*

Port Area	*Name of Facility*	*Depth of Water (m.)*	*Length (m.)*	*No. of Berths*
Public				
Komatsushima	Shinko Wharf	9.0	150	1
	Shinko Quay	9.0	170	1
	Kaneiso Quay	9.0	200	1
	Shinko South Quay	6.4	221	2
	Shinko North Quay	6.4	218	2
	Honko Ferry Jetty	6.5	142	1
	Shinko West Quay	4.5	91	1
	Nakanosu Quay	5.5	108	1
Tokushima	Asada Quay	5.5	270	3
	Asada Quay	10.0	185	1
	Mandai Chuo Quay	5.0	207	3
	Suehiro Quay	5.0	300	4
Private				
Komastsushima	Sanyo Kokusaku Pump Jetty	7.5	100	1
	Nankai Kisen Jetty	5.0 – 5.5	127	2
Tokushima	Ocean Ferry Quay	7.5	130	1
	Tokushima Hanshin Ferry	6.0	112	1
	Tokushima Ferry	5.0	88	1

(b) *Mooring Buoys, Dolphins:*

Harbour Area	*Name of Facility*	*Depth of Water (m.)*	*No. of Berths*
Public			
Komatsushima	Honko Buoy	9.0	1
Private			
	Tokuyama Cement Dolphin	6.4	1
	Sumitomo Cement Jetty	5.5	1
	Nokyo Shiryo Jetty	5.5 – 7.5	1

MEDICAL: No advance notice required unless urgent.

DENSITY: 1015.

FRESH WATER: Alongside berth: Can be supplied by shore line with capacity of 25 t.p.h.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock at maximum 7 days' prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None. Nearest consulates in Osaka.

REPAIRS: Only minor repairs up to 3,000 d.w.t..

DRY DOCKS: No dry dock. Nearest at Hitachi Shipbuilding & Engineering Co. Ltd., Chikko Works, Osaka; Kawasaki Heavy Industries Ltd., Kobe and Mitsubishi Heavy-Industries Reorganised Ltd., Kobe Shipyard & Engine Works.

AIRPORT: Nearest airport Tokushima (10 miles North) where TOA Domestic Airlines, 9 flights to Osaka, 1 to Tokyo.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police Tel: 110; Ambulance 119; Fire 119.

TELEPHONES: No facilities for placing telephones on board.

SERVICES: None.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

AUTHORITY: Komatsujima Port Administration Office, 37, Shinko, Komatsujima-cho, Komatsujima City, Tokushima Pref. *Tel:* (08853) 2-3422.

AGENT: See "Niihama".

KUDAMATSU: 34.00 N. 131.52 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from 1 of 3 Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse (vessels transitting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGE: Kudamatsu loading anchorage Lat. 33° 59′ 40″ N., Long. 131° 51′ 20″ E.

RESTRICTIONS: No restriction for entry into and/or departure from anchorage during night and daytime. But berthing/unberthing effected during daytime only.

MAX. SIZE: No restriction on length, breadth, and draft for any vessel entering port, but maximum safe draft for Nippon Oil Jetty 19 m., 178,000 d.w.t, Hitachi Seisakusho 9.5 m. and Toyo Kohan Wharf 11 m.

HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health condition on board. When Free Pratique is granted by radio, vessel will be required to submit the following documents to Quarantine Officer on arrival at Quarantine Anchorage (Lat. 33° 56′ N., Long. 131° 51′ 30″ W.):

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or suspected case, of infectious disease within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.

TUGS: Tugs normally join vessel proceeding to Nippon Oil Refinery Wharf at Lat. 33° 58′ 20″ N., Long 131° 53′ 30″ E. and proceeding to Toyo Kohan Wharf at Lat. 33° 59′ 40″ N., Long. 131° 51′ 20″ E. Tug's line used and charges for line's use is included in tug-boat operation charge. 8 tugs available, 2,000 h.p. – 4,000 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

	LOA (m.)	*Depth (m.)*	*Capacity (g.r.t.)*	*Cargo*
Hitachi Wharf	175	9.5	12,000	Plant/Carrier
Toyo Kohan Wharf	200	11.0	20,000	Steel Plate
Kudamatsu Public Wharf	130	7.5	5,000	General Cargo
Kudamatsu Public Wharf	185	10.0	15,000	General Cargo

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630–2130 hrs. 60% additional of basic stevedorage; 2130–0830 hrs. next morning 120% additional; Sundays/holidays 100% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: Nippon Oil Refinery:

Berth	*Max. d.w.t.*	*Max. LOA (m.)*	*Max. draft (m.)*
Nippon Petroleum East	178,000	420	19.0
Nippon Petroleum West	50,000	400 (6 buoy)	12.0

Berth	*Products*	*Shoreline*	*Discharge rate (t.p.h.)*	*Hoses*
Nippon Oil (East)	Crude Oil	34×1 16×1	5,000	Pipe line Chiksan Joint
Nippon Oil (West)	Crude Oil	10×1 (on floating) 12×1 (on shore)	600/800	

DENSITY: 1025.

FRESH WATER: At anchorage, Kudamatsu section II: water barges available from Tokuyama. Rate of delivery 50 t.p.h. At Nippon Oil Refinery and Toyo Kohan Wharf, hydrants are available. Rate of delivery 20 t.p.h.

FUEL: Major oil companies are represented and all grades of marine oil can be delivered, usually by barge.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Small repairs possible.
DRY DOCKS: Kasado Dockyard Co. Ltd.

Dry dock	*Length* (m.)	*Breadth* (m.)	*Depth* (m.)	*Docking capacity* (d.w.t.)
Building dock	255.0	50.0	11.0	90,000
Repair dock No. 1	153.6	22.2	8.0	16,000
Repair dock No. 3	227.0	37.0	11.0	70,000

REPATRIATION: Possible.
AIRPORT: Ube and Hiroshima airports: 20 minutes by Shinkansen and taxi 20 minutes, total 40 minutes to Ube Airport.

Shinkansen 40 minutes, taxi 10 minutes, total 50 minutes to Hiroshima Airport.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police: 110. Ambulance and Fire: 119.
TELEPHONES: No arrangements exist for placing telephones on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
AUTHORITY: Shunan Port Administration Office, 111, Chikko-cho, Tokuyama City, Yamaguchi Pref. *Tel:* (0834) 21-1787.

AGENT: Sub-agents of Dodwell & Co. Ltd., Sankyu Unyo Kiko K.K., 1379-14 Aza Yamzakiya, Oaza-Nishitoyoi, Kudamatsu-shi. Yamaguchi-Ken. Tel. Kudamatsu (0833) 43-0390. Cable Address: Sankyuunyu Kudamatsu. Telex: 6754-67.

KURE: 34.14 N. 132.32 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
5 Crew Lists including Passport Numbers.
5 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc., (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki/Choshi Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea Ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits) Position 34° 34.09′ N., 135° 11′ E. Telegraphic Address: Anjin Kobe.

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transiting Bungo Channel). Position 33° 13′ N., 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki pilot station.

3. Mutsure, at West Entrance of Kanmon (Shimonoseki) Strait, Position: 33° 59′ N., 130° 53′ E. Telegraphic address "Anjin Moji".

Note: VHF communication with pilot stations available as follows:

Name of Station	*Call/Answer Channel:*	*Communication Channel:*	*Working:*
KOBE Port Radio (For Wadamsaki)	Channel 16	Channel 12	24 hours
SHIMONOSEKI Port Radio (For Mutsure)	Channel 16	Channel 14	24 hours
OITA Port Radio (For Sekisaki)	Channel 16	Channel 14	24 hours

Also see "Shipmaster's Report" before first port.

ANCHORAGES:	*Minimum Depth*	*Minimum bottom width*	*Density of water*	*Nature of bottom*
Entrance Channel	20 m.	No limit	Summer Av. 1020	Sand, mud and rock
Harbour Channel(s)	20 m.	No limit	Winter Av. 1025	Mud and sand

Depths refer to M.W.L. Difference between datum quoted and chart datum: about 2 m. (to be added) Rise of tide: springs 3.4 m. neaps 2.6 m.
Also see "Berthing".
HEALTH: Radio Pratique available. Vessels usually anchor at the quarantine anchorage where the authorities board and grant Free Pratique. Quarantine anchorage (approx. 34° 13′ 45″ N., 132° 31′ 00″ E.)
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound/Eastbound to contact Nagasaki Radio respectively.
TUGS: Tugs normally join vessel at quarantine anchorage. Tug's lines free of charge.
BERTHING: Harbour/Berthing Pilot available from Quarantine anchorage. Pilots do not agree to berth or unberth outside period from sunrise to sunset, according to their regulations. For berthing, at least 2 hours' advance arrival necessary to reach berth before sunset.

Harbour Anchorage: Following 2 anchorages with good ground (mud & sand) suitable vessels up to 80,000 d.w.t. LOA 300 m.

Name of Anchorage:	*Position:*	*Depth:*
Anchorage "C"	34° 13′ 51″ N., 132° 31′ 29″ E.	20 m.
Anchorage "D"	34° 13′ 29″ N., 132° 31′ 45″ E.	20 m.

Name of Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Capacity* (d.w.t.)
Showa Municipal Pier	170	9.0	7.0	10,000
Nisshin Steel Works Pier No. 3	270	18.0	18.0 (with Tide)	150,000
Kawaraishi Minami Municipal Pier	370	10.0	9.5	15,000

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep Agent advised of ETA. If stevedores cannot commence loading/unloading at time notifed by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630–2130 hrs. approx. 60% additional of basic stevedorage; 2130–0430 hrs. next morning 130% additional; Sundays/holidays approx. 100% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: No facilities.
FRESH WATER: Fresh water by barge:

(a) Hiro Kisen's water barge (on behalf of Kure City, 1 barge only, capacity 330 m/t).
  1. Basic volume of water, per ship per supply:
     50 cu.m. or less ¥35,000
  2. For more than basic volume:
     per 1 cu.m. or less ¥700
  3. No overtime additional required.

(b) Onomichi Water Supply Co's water barge (used in case above barge is unavailable), capacity 400 m.t.
  1. Basic volume of water, per ship per supply:
     200 cu.m or less ¥190,000
  2. For more than basic volume:
     per 1 cu.m or less ¥760
  3. Extra charge for overtime and holiday services:
     at ¥5,000 per hour for supply from 1600 to 0600 hrs.
  4. For Dec. 31 & Jan. 1,2,3,4 & 5: 50% additional.

FUEL: Most grades of domestic oil are available, bonded bunkers will be brought by barges from Iwakuni, Tokuyama, Moji or Kobe with 72 hours' advance notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Hatches usually opened by crew before berthing, however, hatches can be opened by stevedores if arrangements made.
CERTIFICATES: Ship's Register to show Customs Inspector for confirmation of ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 60 cigarettes to take ashore but no spirits.
CONSULS: No consul available at Kure, but marine note of protest can be attested by the local notary public.
REPAIRS: All types of deck and engine repairs are possible.
DRY DOCKS: Following dry docks are available at I.H.I. Kure Shipyard

No.	*Length*	*Width*	*Depth*	*Capacity*
2	343 m.	65 m.	11.0 m.	up to 400,000 tons
3	510 m.	80 m.	13.5 m.	up to 800,000 tons
4	334 m.	47 m.	17.0 m.	up to 160,000 tons

AIRPORT: Hiroshima airport, distance from Kure approximately 35 km. – 40 km. and about 90 – 120 minutes by car. Only domestic regular airlines available. 6 flights to Tokyo and 2 flights to Kagoshima daily.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police (for emergency) 110; Ambulance 119.
TELEPHONES: No arrangements available for placing telephones aboard except special cases.
SERVICES: All navigational apparatus can be serviced as required with minimum 24 hours' advance notice. Cargo hold/Tank cleaning services can be arranged from Kobe area.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for 72 hours only, but 72 hours' extension possible if ship stays longer.
GENERAL: Kure is a local port which makes it difficult to arrange all requirements. At least 72 hours' notice helpful.
AUTHORITY: Port and Harbour Dept. – Kure City, 1-6 Chuo 4-chome, Kure City, Hiroshima Pref. *Tel:* (0823) 25-3336.

AGENT: Sub-agents of Dodwell & Co. Tokyo. Naigai Unyu Co. Ltd., 1-7, 1-chome, Naka-dori, Kure-shi, Hiroshima-Pref. Tel. Kure (0823) 21-5181/7. Cable Address: Naigai Kure or Kurekanyu Naigaiunyu. Telex: 6623-40.

KUSHIRO: 42.58 N. 144.21 E.

DOCUMENTS: Ship's Register. Last Port Clearance. 4 Crew Lists including Passport Numbers. 4 Passenger Lists. 1 Store List. 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wristwatch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: No telegraphic address. Previous advance notice, minimum 8 hours' advance notice ETA and any alterations. Contact pilot boat through Harbour Office/tug boats with wireless telephones. Pilot boat has no radio telephone. Pilot boat waits at Quarantine Anchorage (1,000 m. off and 280° from North Breakwater white light), and entrance of breakwater during winter period (December–March).

ANCHORAGE: Bottom sand and mud. Minimum depth 9 m. in passage and 7.5 m. in anchorage. Depth over 29.5 ft. 162,075 sq.m., Section 2; Depth over 24.5 ft. 690,000 sq.m., Section 2 and 3; Depth under 24.5 ft. 393,600 sq.m., Section 3. Tidal range, average high-tide plus 1.533 m., average low-tide plus 0.154 m., average tidal difference plus 0.953 m.

RESTRICTIONS: Vessel allowed to enter and sail day and night. Pilot assistance officially not compulsory but in practice necessary, and Pilot service available sunrise to sunset for entry and up to 2100 hrs. for sailing.

MAX. SIZE: See "Berthing".

HEALTH: Radio Pratique available. Formalities will be carried out at the anchorage. Quarantine Station 1,200 m. – 293° off Kushiro Breakwater Red Lighthouse.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Usually join vessel at entrance of breakwater and ship's lines to be used.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio. All berths limited by depth in entrance channel.

Berth	*Length (m.)*	*Depth (m.)*	*Capacity d.w.t.*
Central Pier No. 1 & 2	340	9.0	10,000×2
No. 3	180	10.0	15,000×1
No. 4	130	7.5	5,000×1
No. 5	130	7.5	5,000×1
No. 6	130	7.5	5,000×1
North Pier No. 1 & 2	383	8.0	10,000×2
North Pier No. 3	148	8.0	5,000×1
New South Pier	130	7.5	5,000×1
South Pier	91	5.4	2,000×1
South Pier	218	7.5	5,000×1
Tanker Berth No. 1	130	7.5	6,000×1
West Pier No. 1 – 1	90	5.5	6,000×1
West Pier No. 1 – 2 & 3	330	9.0	10,000×2
West Pier No. 1 – 4	240	12.0	40,000×1
West Pier No. 1 – 5	185	10.0	15,000×1
West Pier No. 1 – 6	165	9.0	10,000×1
West Pier No. 1 – 7	165	9.0	10,000×1 (use with car ferry)
West Dolphin	260	7.5	6,000×4 (tanker only)
West Pier No. 2 – 8	90	5.5	2,000×1
West Pier No. 2 – 9	180	7.5	5,000×1
West Pier No. 2 – 10	185	10.0	15,000×1
West Pier No. 2 – 11 & 12	480	12.0	40,000×2

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630 – 2130 hrs. 60% additional of basic stevedorage; Sundays/holidays 100% additional; Saturdays 10% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: West Dolphin: 4 berths for 6,000 d.w.t. Hose diameter 10 in., 12 in. and 6 in.

South New Pier – 1 berth for 6,000 d.w.t. Hose-diameter 10 in.×1.

DENSITY: Average 1025 inner breakwater high-tide, and average 1022 low-tide.

FRESH WATER: Direct supply from the wharves or by barge.

FUEL: Domestic oil is available; bonded oil will be brought from Hakodate or Muroran with sufficient advance notice.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear's maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None. U.S. Consul located in Sapporo city.

REPAIRS: Ordinary deck, engine and electrical repairs arrangable by the local factory.

DRY DOCKS: None; nearest located in Hakodate and Muroran ports.

REPATRIATION: Possible.

AIRPORT: Kushiro airport about 40 minutes taxi or direct connection bus from port area. Flight service daily, 6 flights for Tokyo and 4 flights for Sapporo.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: 1st May.

POLICE/AMBULANCE/FIRE: Police HQ 23–7111 or emergency 110; Hospitals Kushiro Grand Hospital 41–6121, Kushiro Red-Cross Hospital 22–7171; Fire HQ 22–2156 or emergency 119.

TELEPHONES: No systems for arranging on board.

SERVICES: Arrangable from Muroran.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for 7 days or 15 days, but 5 days' extension possible if ship stays longer.

DEVELOPMENTS: Total of 9 berths including one for up to 40,000 d.w.t. Industrial raw materials carriers will be built and port breakwater will be lengthened by 3,940 m.

AUTHORITY: Port & Harbour Dept. – Kushiro City, 5, Kurogane-cho 7-chome, Kushiro City, Hokkaido. *Tel:* (0154) 23-5151.

AGENT: Sub-agents Dodwell & Co. Ltd., Tokyo, Narasaki Sangyo Co. Ltd., c/o Mitsuwa Transport Co. Ltd., Attn. Shipping Agency Dept., Shinfuji-cho, Kushiro-shi, Hokkaido. Tel: (0154) 31-3030. Cable address: Funemitsuwa Kushiro. Telex: 0962971 F MTW J. Attn: Agency Dept.

MAIZURU: 35.27 N. 135.19 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory. Pilots are available at the anchorage near Kanegasaki for vessels requiring Pilot services.

Pilot station: Lat. 35° 32′ 00″ N., Long. 135° 18′ 30″ E.

ANCHORAGE: Section 2, Depth 9 m., Section 3, 17 m.

RESTRICTIONS: Channel depth 12.0 m.

MAX. SIZE: See "Berthing".

HEALTH: Radio Pratique available. Vessels usually anchor at the outer harbour where the authorities board and grant Free Pratique.

No. 1 Quarantine Anchorage (Outer) Lat. 35° 30′ 15″ N., Long. 135° 20′ 42″ E.

No. 2 Quarantine Anchorage (Inner) Lat. 35° 29′ 15″ N., Long. 135° 20′ 32″ E.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Both ship's and tug's lines used. 3 tugs available, 1×1,600 h.p. and 2×100 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth		*Length (m.)*	*Depth (m.)*	*Permissible draft (m.)*	*Capacity (g.r.t.)*
No. 1 Pier		86	4.0	4.0	—
No. 2 Pier	No. 1 Wharf	110	7.3	6.5	3,000
	No. 2 Wharf	120	7.3	6.5	5,000
	No. 3 Wharf	185	9.0	8.1	8,000
	No. 4 Wharf	105	7.3	6.5	—
No. 3 Pier	No. 1 Wharf	185	10.0	9.0	—
	No. 2 Wharf	150	10.0	9.0	—
	No. 3 Wharf	185	10.0	9.0	—
No. 4 Pier		185	10.0	9.2	15,000

Buoy	*Location*	(m.)	*Capacity (g.r.t.)*
Kita Buoy No. 1	Lat. 35° 27′ 22″ N., Long. 135° 19′ 13″ E.	14	15,000
Ohgimi Buoy No. 1	Lat. 35° 30′ 28″ N., Long. 135° 23′ 34″ E.	14	15,000
Katsura Buoy No. 1	Lat. 35° 28′ 38″ N., Long. 135° 20′ 27″ E.	6	5,000
Taira Buoy No. 1	Lat. 35° 30′ 34″ N., Long. 135° 23′ 34″ E.	6	5,000
No. 2	Lat. 35° 30′ 01″ N., Long. 135° 23′ 27″ E.	8	12,000
No. 3	Lat. 35° 30′ 17″ N., Long. 135° 23′ 31″ E.	14	15,000

Remarks: No. 1 Pier is exclusively used by fishing boat. No. 2 Pier, No. 4 Wharf is exclusively used by domestic ferry boat. No. 2 Pier, No. 3 Wharf is only accessible for 130 m. when ferry boat is alongside at No. 4 Wharf. Taira Buoys (No. 1 – No. 3) are for discharging of logs/lumber only.

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.
DENSITY: 1025.
FRESH WATER: Available from wharf and by barge.
FUEL: Domestic oil is available; bonded oil will be brought from Moji, with sufficient advance notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Possible.
DRY DOCKS: 246 m.×33.5 m.×12.5 m. Two others.
REPATRIATION: Possible.
AIRPORT: None.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 07736-5-0810; Ambulance 07736-5-2174; Fire 07736-5-2174.
TELEPHONES: Not possible to place telephones on board.
SERVICES: None.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
AUTHORITY: Maizuru Port Administration Office, 19-5, Koaza Shimazaki, Aza Matsukage, Maizuru City, Kyoto Pref. *Tel:* (0773) 75-1174.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Iino Kaiun Kaisha Ltd., Maizuru Office, 18-5, Koaza Shimasaki, Oaza Matsukage, Maizuru-shi, Kyoto-fu. Cable Address: Iino Maizuru. Domestic Telex: 05734-426 Iino J. Tel.: Maizuru (0773) 75-21112/7.

MATSUYAMA: 33.52 N. 132.42 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from 1 of 3 pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.
Note: VHF communication available with Inland Sea Pilot stations. Also see "Shipmaster's Reports" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits) Position Lat: 34° 34.09′ N., Long: 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transitting Bungo Channel). Position Lat: 33° 13′ N., Long: 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki pilot station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position Lat: 33° 56′ 24′ N., Long: 131° 03′ 12″ E.
ANCHORAGE: The port faces Iyo-Nada and located near Bungo Straits. Entrance open to Iyo-Nada towards West, but port protected by West breakwater and small island off Northern part of approaches where holding ground good. During Winter months strong N.W. wind prevails causing heavy swell at anchorage. Depth of water 17 m. – 25 m.
RESTRICTIONS: *Oil tanker berth:* Vessel drawing less than 12 m. can moor and unmoor at half-flood during daytime but vessels drawing 12 m. or more advised to await high water.

Dry cargo is logs only and cargo working carried out at anchorage of Umaiso and Yura Bay.

Yura Bay: Vessels no longer than 110 m. can berth. Daytime entry only regardless of tide and current.
MAX. SIZE: *Maruzen Oil Co. Ltd., Matsuyama Refinery, Genyu Sambashi:* Max. 50,000 d.w.t. Max. LOA, 240 m. Max. safe draft 12.00 m.

Umaiso Bay: Length of vessel 160 m.; breadth no limit; draft 15 m.
Yura Bay: Length 110 m.; breadth no limit; draft 10 m.
Also see "Berthing".

HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.
TUGS: For tankers: Join vessel at Quarantine anchorage, using tug's lines without charge. For dry cargo vessel, no tug required for berthing and unberthing in normal conditions.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

General cargo to be loaded/discharged at the following wharves in Matsuyama.

Berth section	*Length*	*Depth*	*Max. size d.w.t.*
Wharf No. 1			
Sect. 1	380 m.	9.5 m.	15,000
Sect. 2	230 m.	5.5 m.	5,000

Imazu Port Wharf: New Wharf for log discharging only in position Lat: 33° 48′ 46.79″ N., Long: 132° 41′ 49.06″ E. Length 320 m. Depth 9.5 m.

Restrictions: Due to tidal condition (strong current) Pilot requires 2 tugs for mooring and unmooring, even if vessel is less than 5,000 g.r.t.
STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: No advance notice of diameter of load/discharge lines required. See "Max. Size".

Manifold: 1×12 in. (Fuel Oil) 600 t.p.h.; 1×12 in. (Crude Oil); 2,000 t.p.h. 1×12 in. (Diesel Oil) 800 t.p.h.
DENSITY: Anchorage 1015. Berth 1015.
FRESH WATER: *Maruzen Oil Co. Ltd., Matsuyama Refinery, Genyu Sambashi:* Can be supplied by shore line with capacity 25 t.p.h.

Anchorage: Can be supplied by 60 ton barge with capacity 60 t.p.h. Strong winds prevail during Winter months, when no water can be supplied.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days' prior notice. Also see "Moji, Fuel".
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless ship's crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: Consulates in Kobe.
REPAIRS: Only minor repairs.
DRY DOCKS: None. Nearest at Kawasaki Heavy Industries Ltd., Sakaide; Hitachi Shipbuilding & Engineering Co. Ltd., Innoshima and Mukaishima, dimensions of those docks as follows:

Kawasaki Heavy Industries Ltd., Sakaide. Dock No. 2 for 500,000 d.w.t. vessel 450 m.×72 m.×12.3 m. Only used presently for shipbuilding and after services.

Hitachi Shipbuilding & Engineering Co. Ltd., Innoshima Dockyard. Dock No. 1 for 20,000 d.w.t. vessel 175 m.×25 m.×25.62 m.×9.10 m. Dock No. 3 for 130,000 d.w.t. vessel 282.50 m.×47 m.×11.33 m.

Hitachi Shipbuilding & Engineering Co. Ltd., Mukaishima Dockyard. Dock No. 1 for 3,000 d.w.t. vessel 86.18 m.×13.60 m.×6.80 m. Dock No. 2 for 8,500 d.w.t. vessel 125 m.×18 m.×7.40 m. Dock No. 3 for 25,000 d.w.t. vessel 175 m.×29 m.×9 m.
REPATRIATION: Possible.
AIRPORT: Domestic airport situated South of harbour. All Nippon Airways flights to Osaka and Tokyo.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: Only at Kobe.
SHORE LEAVE: Immigration issue shore passes valid for 7 days if vessel only calling at one port in Japan or 15 days if vessel calling at more than 2 ports in Japan, further extension possible.
AUTHORITY: Matsuyama Marine Safety Agency, Kaikan-Dori, Matsuyama, Japan. *Tel:* (0899) 51-1197. *Contact:* Port Captain.
AGENT: See "Niihama".

MIIKE: 33.00 N. 130.23 E.

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 5 Crew Lists including Passport Numbers.
- 2 Passenger Lists.
- 3 Ports of Call Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Compulsory; Pilots board at the point Lat. 32° 59′ N., Long. 130° 23′ E.

Shimabara Bay Pilot (Kuchinotsu Pilot) not compulsory. Pilots board one mile South of Huchinotsu Lighthouse, Lat. 32° 35′ N., Long. 130° 12′ E. (Advise ETA Kuchinotsu 48 hrs. prior to arrival.)

Vessel should proceed to Miike anchorage by itself in case of Pilot not being arranged.

ANCHORAGES: Lat. 32° 59′ N., Long. 130° 23′ E. Harbour limit within circle of 2,700 m. radius centring on lighthouse at West end of Northern breakwater. Roadstead affords safe anchorage, mud and sand.

RESTRICTIONS: Vessel shall dock or depart on high water. Ebb stream begins about half an hour before high water and runs to South for 6 hours. Max. current 3 knots at entrance of channel. Flood stream begins at about lowwater time and runs to North for 6 hours max. 3 knots at lighthouse. Channel 1800 m. long, 137 m. broad from jetty to jetty, 45.7 m. width at bottom. 7.3 m. depth at LWOST.

MAX. SIZE: No limitation for breadth and length, but max. drafts are as follows: 29 ft. 6 in. up to 20,000 d.w.t.; 26 ft. 4 in. up to 25,000 d.w.t.; 24 ft. 6 in. up to 30,000 d.w.t.

HEALTH: Formalities will be carried out 2 miles off the lighthouse (Lat. 33° 0′ 8″ N., Long. 130° 23′ 50″ E.). Radio Pratique available.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: 3 tugs available. 2×1,100 h.p.; 1×800 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Draft* (m.)	*Capacity*	*Shore cranes & pipe-lines*
North Quay (No. 6, 7, 8)	520	10.7	8.5	30,000	2×6 tons, 1×10 tons
Dock Pier	114	8.5	8.2	1 × 8,000	
Dock Quay	421	8.5	8.2	2 × 8,000	2 coal loaders
Quay No. 5	91	10.7	10.0	1 × 8,000	1 coal loader
New Quay No. 5	68	10.7	10.0	1 × 6,000	1 coal loader

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 100% additional.

MEDICAL: No advance notice required unless urgent.

DENSITY: 1025.

FRESH WATER: Available at wharf only. Delivery 20 t.p.h. – 25 t.p.h.

FUEL: Domestic oil is available; Bonded oil will be brought from Moji or Tokuyama, when required.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches (according to charter party). Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears' maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: Consuls at Osaka or Tokyo.

REPAIRS: Minor repairs only.

DRY DOCKS: See "Moji".

SURVEYORS: (1) No cargo inspectors available. (2) Lloyd's Register, American Bureau and Bureau Veritas in Miike.

REPATRIATION: Possible.

AIRPORT: See "Moji".

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: 15th August, 1st January.

POLICE/AMBULANCE/FIRE: Tel. 110 and 119.

TELEPHONES: Available at agent's office.

STORING: See "Prelims", page viii.
1. By truck.
2. Barge storing only when loading steel products.
3. Trucks can proceed alongside at berth.
4. Fork lift trucks available.
5. If any regulations in force agent will arrange documents.
6. Only a few riggers available. Additional riggers come from Moji or Kobe.

SHORE LEAVE: Local Immigration Offices issue crew permit valid for only 3 days, but 3 days' extension possible if ship stays longer.

AUTHORITY: Mitsui Mining Co., Ltd., Miike Port Office, Shinkomachi, Omuta, Fukuoka 836, Japan. *Tel:* (0944) 57-3131. *Contact:* General Manager.

Maritime Safety Agency, No.7 District Agency, Miike Office. *Contact:* Harbour Master or Captain of the Port.

AGENT: Sub-agent of Dodwell & Co. Ltd., Tokyo. Miike-ko Service Center K.K., 1, Shinko-cho, Omuta-shi, Fukuoka-ken. Cable Address: MSC Omuta; Domestic Telex: 7444-12; Tel: Omuta (0944) 53-3061.

MINAMATA: 32.11 N. 130.21 E. (See Plan Book)

PORT LIMITS: The sea surrounded by the circular arc with a radius of 1,700 m. centred upon Myojin-zaki (Lat: 32° 11′ 59″ N., Long: 130° 22′ 30″ E.), and the line from the point of Myojin-zaki to Tsutsuwa-zaki (32° 10′ 50″ N., 130° 22′ 27″ E.) and the coast.

DOCUMENTS:
- 3 Crew Lists.
- 3 Passenger Lists.
- 1 Manifest.
- 1 Customs.
- 1 Stores List.
- 1 Health Document.
- 1 Bill of Lading.

PILOTAGE: Pilot station Lat: 32° 11′ N., Long: 130° 04′ E. (1 mile South of Toshima-Lighthouse of Ushibuka) (acting also as an Agent for foreign vessels). Senko Co. Ltd., Minamata Branch, located at 2-34 Umedo-Cho 1-chome, Minamata-shi, Kumamoto-ken. Tel: 09666-3-4117. Telex: 764941 Senko J.

ANCHORAGE: Within port limits.

RESTRICTIONS: A Pilot is not available after dark for an outgoing vessel but around-the-clock for incoming vessels. Availability of Pilot is dependent on the tidal conditions.

MAX. SIZE: Max. d.w.t. 40,000 tons at anchorage – Length 190 m., depth 10.5 m. Max. d.w.t.10,000 tons at Hyakken Wharf – Length 130 m., depth 6.5 m. The tidal difference between high and low water (spring tides) is 4.1 m.

HEALTH: All the necessary procedures must be undertaken at the Minamata-Yatsushiro Branch Office of the Nagasaki Quarantine Station.

Radio Pratique available. Quarantine inspection will be carried out in position Lat: 32° 12′ 30″ N., Long: 130° 20′ 40″ E. This position is about 20 minutes by boat from the port.

Quarantine Office Tel: 2-4016.

RADIO: Not available.

VHF: Not available.

TUGS: 3 tugs (200 h.p.) owned by Senko Co. Ltd, Minamata Branch.

BERTHING: Hyakken Wharf: length 210 m., depth 5.5 m. at low tide.

Hyakken New Wharf: length 210 m. depth 6.5 m. Completion March 1985.

CRANES: Not available. A vessel is required to use her own gear alongside the quay.

STEVEDORES: Senko Co. Ltd., Minamata Branch.

MEDICAL: Advise Agent.

FRESH WATER: Available from Hydrant of Hyakken Wharf, rate approx. 150 – 200 t.p.h.

CONSULS: None.

REPAIRS: Only minor repairs possible.

DRY DOCKS: Not available.

SURVEYORS: Will attend from Miike (N.K.K.K.).

GANGWAY/DECK WATCHMEN: Service of watchmen is not necessary.

HATCHES: Opening and closing is done by the stevedores if required.

CUSTOMS: Tel: 2-2347.

REPATRIATION: Minamata Branch Office of the Fukuoka Immigration Office arranges necessary repatriation.

AIRPORT: Kumamoto Airport (about 100 km. distance), by car. Kagoshima Airport about 60 km. by car.

POLICE/AMBULANCE/FIRE: The Minamata Police Station located at 2-4 Tenjin, Minamata-shi, Kumamoto-ken. Tel: 09666-3-2171.

The Minamata Head Station of the Minamata Fire Department located at 523, Jinnai-Kitazono, Minamata-shi, Kumamoto-ken. Tel: 09666-3-1191.

TELEPHONES: There are no arrangements for placing telephones on board.

SHORE LEAVE: Shore passes are issued at the Minamata Branch Office of the Fukuoka Immigration Office.

DELAYS: An incoming foreign vessel is to be given priority, but delays will be expected when the quay is occupied by vessels.

DEVELOPMENTS: Hyakken New Wharf (6.5 m.) to be completed March 1985.

Hyakken New Wharves (7.5 m. and 10 m. depth) to be completed late 1989.

AUTHORITY: Minamata Port Office, 2–21 Minatomachi, 3–Chome, Minamata Shi, Kumamoto–Ken, Japan. *Tel:* 3-2449.

AGENT: Senko Co. Ltd., Minamata Branch, located at 2–34, Umedo-Cho 1-chome, Minamata-Shi, Kumamoto-Ken. Tel: 09666-3-4117. Telex: 7649-41 Senko J. Cable Address: "Senkomarine Minamata".

MISUMI: 32.38 N. 130.27 E. (See Plan Book)

PORT LIMITS: The sea surrounded by the line from Seto-no-hana to the lighthouse on Oyano Island, the line from Togasaki on the same island to Daishiro-bana on Chizoku Iland, the line from Daishiro-bana to Usagi-bana on Tobase Island, the line West to Tobase Bridge, and the coast.
DOCUMENTS: 3 Crew Lists, 3 Passenger Lists, 1 Manifest, 1 Customs, 1 Store List, 1 Health Document, 1 Bill of Lading.
PILOTAGE: Pilot station (acting also as an Agent for foreign vessels).

Misumi Branch Office of the Nippon Tsuun K.K. located at Higashiko 1, Misumi-machi, Uto-gun, Kumamoto-ken. Tel: 09645-2-3121 or 2-3125.

Misumi Kaiun K.K. located at Higashiko 1, Misumi-machi, Uto-gun, Kumamoto-ken. Tel: 09645-2-3562 or 2-3278.
ANCHORAGES: Within port limits.
RESTRICTIONS: A Pilot is not available after dark, also his availability depends on the tidal conditions.
MAX. SIZE: Maximum d.w.t. 15,000 tons from North entrance (Lat. 32° 38′ N., Long. 130° 27′ E.). 27,000 tons from South entrance (Lat. 32° 33′ 18″ N., Long. 130° 29′ 39″ E.). The tidal difference between high and low water is great (4 m).
HEALTH: All the necessary procedures must be undertaken at the Misumi Branch Office of the Nagasaki Quarantine Station.
RADIO: Not available.
VHF: Not available.
TUGS: 3 tugs owned by the Misumi Kaiun K.K., 2 tugs owned by the Misumi Branch Office of the Nippon Tsuun K.K.
BERTHING:

Quay	A	Length	137 m.	Depth	8 m.
,,	B	,,	160 m.	,,	9 m.
,,	C	,,	165 m.	,,	9 m.

CRANES: 1 zip crane (fixed) owned by the Kumamoto Prefecture. 3 zip cranes (fixed), 2 mobile cranes, 2 shovel loaders (movable) and 5 fork-lifts (movable) owned by the Misumi Kaiun K.K.

1 zip crane (fixed), 1 mobile crane, 4 truck cranes (fixed) and 2 pay loaders (movable) owned by the Nippon Tsuun K.K.

A vessel is not required to use her own gear along the quays A, B, and C, but is sometimes required to do so at the time of loading and discharging.
STEVEDORES: Advise Agent.
MEDICAL: Advise Agent.
FRESH WATER: Available from the water supply facilities operated by the Kumamoto Prefecture.
CONSULS: None.
REPAIRS: Only light repairs possible.
DRY DOCKS: Small docks for less than 1,000 tons.
SURVEYORS: Available.
GANGWAY/DECK WATCHMEN: Service of watchmen is not necessary.
HATCHES: Opening and closing is done by the stevedores.
REPATRIATION: Misumi Branch Office of the Fukuoka Immigration Office arranges necessary repatriation.
AIRPORT: Kumamoto Airport (about 60 km. distance).
POLICE/AMBULANCE/FIRE: The Oyano Police Station Misumi Police Box located at Higashiko, Misumi-machi, Uto-gun, Kumamoto-ken. Tel: 09645-2-3110. Nishi Branch Station of UKI Fire Department located at Nakamura, Misumi-machi, Uto-gun, Kumamoto-Ken, Tel: 09645 (2) 2222.
EMERGENCY CO-ORDINATION CENTRE: Misumi Kaijo Haonbu (Misumi Maritime Safety Office) Tel: 09645 (2) 3103.
TELEPHONES: There are no arrangements for placing telephone on board.
SHORE LEAVE: Shore passes are to be issued at the Misumi Branch Office of the Fukuoka Immigration Office.
STORING: Trucks may proceed alongside. Fork lift trucks not available. Contact Agent if riggers required.
DELAYS: Delays will be expected when quays are occupied by vessels or a Pilot cannot go on board because of the tidal conditions.
AUTHORITY: Misumi Port Office of the Kumamoto Prefecture, 1160 – 39, Oaza Misumiura, Misumi-machi, Uto-gun, Kumamoto-ken. *Tel:* 09645 (2) 2079. *Contact:* Port Director.

AGENT: Holme Ringer & Co., Ltd. c/o Misumi Kaiun K.K. 3-1159, Oaza Misumiura Misumi-machi, Uto-gun, Kumamoto-ken. Cable Address: Ringer Misumi. Tel: Misumi 09645 (2) 3563 or (2) 3278.

MIYAKO: 39.39 N. 141.58 E. (See Plan Book)

DOCUMENTS:
For Quarantine
- 1 Statement by Ship's Master.
- 1 Crew List.
- 1 Passenger List (if any).
  Yellow cards for all.
- 1 Derat Certificate.

For Immigration
- 1 Declaration of Inward Vessel.
  Passport or Seamen's Book for all.
- 1 Crew List.
- 1 Application for shore pass.

For Customs
- 1 Last Port Clearance.
- 1 Declaration of Inward Vessel.
- 1 Crew List.
- 1 List of Crew's Baggage.
- 1 List of Ship's Store.
- 2 Cargo Manifest (Discharging).
- 1 Cargo Manifest (Through).
- 1 Certificate of Ship's Registry.

For Port Management Office
- 1 Declaration of Inward Vessel.

For Maritime Safety Base
- 1 Declaration of Inward Vessel.
- 1 Crew List.
- 1 Cargo Manifest (Discharging).
- 1 Cargo Manifest (Through).

Above documents to be prepared by Master before arrival.

Master to telegraph ETA and crew's health condition directly to Quarantine Miyako before arrival.
PILOTAGE: Not compulsory, but arrangeable at the Master's request. Pilot ordinarily boards at/around Quarantine anchorage, also available boarding at the Master's request at outer harbour which position is HeisaKi light Northward 1.5 miles (Lat. 39° 40.5′ N., Long. 142° 1.2′ E.).
ANCHORAGES: Quarantine anchorage located at Lat. 39° 37.82′ N., Long. 141° 59.3′ E. Depth 16 m. – 22 m. Bottom mud and sand. Outside breakwater, care should be taken not to foul fishing nets.

Depth in inner anchorage 12 m. – 15 m.
RESTRICTIONS: Night entry and departure permitted subject to weather conditions.
MAX. SIZE: Draft 12 m. and LOA 240 m., breadth no restrictions.
HEALTH: Radio Pratique available. Formalities carried out at anchorage.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. Westbound vessel, via Choshi Radio, and Northbound via Nagasaki Radio.
TUGS: Normally join vessel on passage from anchorage. Tug's line used. One tug available 2,400 h.p. Additional tugs available from Kamaishi.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Max. LOA* m.	*Depth at LW* m.	*No. of wharf*	*Max. d.w.t.*
Desaki wharf No. 1 & 2	218	7.3	2	3,000
,, ,, No. 3	175	9.0	1	10,000
Lumber port buoy		8.0	1	8,000 (G/T)
Fujiwara wharf No. 1 & 2	260	7.5	2	5,000
,, ,, No. 3	240	12.0	1	40,000
,, ,, No. 4	180	4.5	–	–
,, ,, No. 5 & 6	260	7.5	–	–

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: No facilities.
DENSITY: Average 1019.
FRESH WATER: Available from wharf about 50 t.p.h. but no water barge. In case vessel urgently requires water at anchorage, tug-boat arrangeable for this purpose.
FUEL: Domestic oil is available; Bonded oil will be brought from Tokyo or Sendai, when required.
GANGWAY/DECK WATCHMEN: Not especially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depends on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommended request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register, Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: 60 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Minor deck and engine repairs available.
DRY DOCKS: None.
REPATRIATION: Possible.
AIRPORT: Hanamaki Airport distant 150 km. from Miyako (2.5 hours by car). 1 flight between Hanamaki/Tokyo Monday/Thursday/ Friday and Saturday and 2 flights Tuesday/Wednesday and Sunday by Toa Domestic Air Lines (TDA).
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 2-5011 (Headquarters) and 2-6037 (Water Police Station); Ambulance 119; Fire 119.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: Surveyor, Tally, Hold cleaning, Tank cleaning.
SHORE LEAVE: Local Immigration Office issues shore pass valid for only 3 days; 3 days' extension possible if ship stays longer. If vessel advises longer stay in port on arrival, Immigration can issue shore pass for 9 days.
GENERAL: Discharging ex-gearless vessel at wharf unavailable, because no shore crane for discharge.
AUTHORITY: Miyako Port Administration Office, 114, Fujiwara 3-chome, Miyako City, Iwate Pref. *Tel:* (01936) 2-1471.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Miyako Kowan Unso Kaisha, Ltd. No. 1-12, Rinkodori Miyako-shi, Iwate-ken. Cable address: Koun Miyako. Domestic Telex: 8344-08. Tel: (01936) 2-3501/5. Postal No.: 027.

MIZUSHIMA: 34.31 N. 133.45 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: *(a)* Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from 1 of 3 pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transitting Kii Straits). Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse (vessels transitting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

(b) Vessels over 50,000 d.w.t. or of draft of more than 12.5 m. are unable to pass through Kurushima Strait and required to transit Wadamisaki.

There are very narrow and crooked channels, such as the Kurushima Strait, maximum tidal current amounting to 10 knots; the Bisan Strait maximum tidal current amounting to 4 knots, and the Akashi Strait, maximum tidal current amounting to 6 knots.

(c) Harbour Pilot: Pilots of the Inland Sea Pilots Association are also employed for this pilotage if required, and Pilot boards at Mizushima Quarantine Anchorage (Lat. 34° 26′ 30″ N., Long. 133° 34′ 30″ E. approximate centre position of quarantine area). However, if an Inland Sea Pilot is employed at the above-mentioned pilot stations, the same Pilot acts for harbour pilotage.

ANCHORAGES: Anchorages available for small size vessels only, and not for large vessels. In case of large vessels waiting for berthing, these vessels shall wait at Quarantine Anchorage, at around Nabeshima, at nearby Sakatewan or off Kobe.

Around "Q" Anchorage Depth	15 m. – 18 m.
Around Nabeshima Depth	32 m. – 40 m. (temporarily suspended)
Nearby Sakatewan Depth	32 m. – 41 m.
Off Kobe Depth	43 m. – 47 m.

RESTRICTIONS: *(a)* Entering and departing from port shall be in accordance with instructions to be given by Signal Station.

(b) No restriction imposed upon entering or leaving port during night-time, nevertheless such movements are next to impossible in consideration of the nature of the structures of the port. In addition Pilots refuse to board during night-time.

(c) Super-sized vessels, unable to enter except at high tide.

Pilots should be consulted in advance for draft exceeding 14.80 m.

MAX. SIZE: See "Berthing".

HEALTH: Radio Pratique available. Formalities will be carried out at Quarantine Anchorage Lat. 34° 26′ N., Long. 133° 44′ E.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.

TUGS: Tugs normally join the vessel at the Quarantine Anchorage area. Usually tug's lines used free of charge.

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 2100 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: See "Berthing".

DENSITY: Entrance channel Summer average 1020, Winter average 1023. Harbour channel Summer average 1019, Winter average 1025.

FRESH WATER: Available at berth, ex-pipe-line. Average delivery rate 20 k/t/hour. Water barges available, sent from Onomichi. Delivery rate approximately 50 k/tons per hour.

FUEL: Most grades available.

FIRE PRECAUTIONS: *(a)* Whenever necessary to repair vessel, the rule of "Strictly and Completely No Fire" is to be observed. *(b)* To keep sufficiently powered tugboat alongside vessel at all times when engine is under repair. *(c)* A written pledge to be submitted to Oil Company, promising to take full responsibility and to pay full indemnity by ship's Owners (in case of repairing vessel) if any accident has occurred by fault of the vessel.

BERTHING:

Max. d.w.t.	*Max. LOA*	*Max. safe draft*	*Discharging facilities*	*Discharge rate per hour/gang or unit*
Coal, Iron Ore and Scrap				
(A) *Tokyo Seitetsu*				
(i) A Berth – 215 m.				
54,000	164 m.	at high tide 12.0 m.	Ship's gear only	Scrap 20 tons Pig Iron 30 tons
(ii) B and C Berths – 300 m.				
20,000	150 m.× 2	9.0 m.	Crane 6 tons×2 Ship's gear	Scrap 30 tons Pig Iron 40 tons
(B) *Kawasaki Steel Corp., Mitzushima Works*				
C Berth				
30,000	485 m.	11.0 m.	28 Tns. Crane×2 22 Tns. Crane×1	
Takahashi-gawa Berth – 770 m.				
30,000	250 m.	11.0 m.	30 Tns. Crane×2	
D Berth – 400 m.				
35,000	No limit	11.0 m.	Ship's gear Shore crane 16 tons×1 17 tons×1	Scrap 15 tons Pig Iron 25 tons
E Berth				
0 m. – 656 m. 110,000	No limit	14.80 m.	Unloader	
F Berth				
320 m. 200,000	No limit	14.80 m. – at high tide	1,500 tons×3	Coal 30,000 tons Iron ore 40,000 tons
Grain				
(A) *Nishi Nihon Grain Centre Mizushima Works*				
Nishinihon Wharf (Dolphin)				
60,000	162 m.	12.0 m.	Pneumatic unloader×2	400 tons per unit
(B) *Nishi-Futo*				
(i) 1 berth				
15,000	180 m.	10.0 m.	Ship's gear	Wheat 80 tons Soybean 70 tons
(ii) 2 berth				
10,000	130 m.	9.0 m.	Ship's gear	Wheat 80 tons Soybean 70 tons
(C) *Seto Futo Co. Ltd.*				
Seto Futo				
76,000	No limit	14.0 m.	Pneumatic unloader×1 Level luffing crane×2 Silo capacity 21,000 tons	400 tons per unit 500 tons per unit
Oil				
(A) *Mitsubishi Oil Co Ltd., Mizushima Refinery*				
(i) No 5 Pier (Dolphin)				
70,000	No limit	12.3 m.	Crude oil 12 in.×2 Fuel oil 12 in.×2 Diesel oil 6 in.×1	5,000 tons 1,000 tons 800 tons
(ii) No. 6 Pier (Dolphin)				
230,000	No limit	14.80 m.*	Crude oil 12 in.×3 Fuel oil 8 in.×1	7,000 tons 400 tons
(B) *Nippon Mining Co. Ltd., Mizushima Refinery*				
(i) No. 1 Pier (Dolphin)				
60,000	No limit	12.5 m.	Crude oil 12 in.×2 Fuel oil Diesel oil	4/5,000 tons 7/1,200 tons 600 tons
(ii) No. 2 Pier (Dolphin)				
230,000	No limit	14.80 m.*	Crude oil 12 in.×5 LPG 12 in.×2 Fuel oil 8 in.×1	8,000/12,000 tons 900 tons 400 tons
(C) *Asahi Kasei K.K. Mizushima Works*				
C-8 Pier (Dolphin)				
10,000 (g/t)	No limit	8.3 m.	Chemical (vapour line 4 in.×1) (cargo line 6 in.×1)	100/200 tons

*N.B.—Some allowance may be granted by Pilot depending on tidal condition. Depth of water (14.80 m.)+tide=ship's draft+keel allowance (ship's draft×0.1+0.5 m.).

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gears maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: No consul available, but marine note of protest can be attested by the local notary public.

REPAIRS: All types of deck and engine repairs possible by Mitsui Shipbuilding and Engineering Co. Ltd., Tamano Works. Minor repairs possible by Nojima Senpaku Co. Ltd., Mizushima Works, Sonkyo Nainenki Seisakusho Co.

DRY DOCKS: *Sanoyasu Dockyard Co. Ltd., Mizushima Shipyard:* Dimensions of longest drydock. Length 675 m., width 63 m., depth 13 m. *Mitsui Shipbuilding and Engineering Co. Ltd., Tamano Dock:*

(a) Dimensions of largest dry dock No. 3 D. Dock (length 672 ft. × width 103 ft. 3 in. × depth 32 ft.). *(b)* Number of small docks: 2.

AIRPORT: Okayama Airport is the nearest from Mizushima, distance approximately 40 km. and takes about 40 minutes by car. Only domestic regular airlines available. 3 flights to Tokyo, daily.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.

TELEPHONES: No telephone installation service on board.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

SERVICES: All navigational apparatus can be served, as requested, but technicians are to be sent from Kobe.

REGULATIONS: Quarantine Anchorage is outside harbour limits therefore (i) no persons allowed ashore from this anchorage, (ii) No supplies permitted to vessels and, (iii) No Agency services available.

REPORT: (Ship's Agent) 1984.

As you are aware, a vessel over 200 m. in length or 50,000 d.w.t. is not allowed to anchor off Mizushima whilst waiting for a berth or other purposes as the space in the Roads is narrow. Therefore, if a berth is not available at the expected time of ship's arrival, the ship has to anchor off Kobe, which is the nearest available place to wait for berthing turn. During vessel's stay in Kobe Roads, quarantine service from Kobe Quarantine Station is not available except in an emergency as this service is available at Mizushima. The Customs entry which requires payment of tonnage dues is not made at Kobe.

In the above circumstances, we, in order to protect the Owners interests, have been instructing the Masters of the vessels to tender Notice of Readiness when they arrived off Kobe for waiting berth although most Receivers or Charterers only accept the NOR when Free Pratique is granted at Mizushima if the vessel is not qualified to obtain Radio Pratique.

It is apparent that when calculation of laytime is made controversy arises between Shipowners and Charterers as to who is to bear the risk of waiting off Kobe for a discharging berth. The Charterers may contend that the Master is not allowed to tender NOR without Free Pratique and Customs clearance whilst the Owners rebut that the ship was lying at a place for waiting berth solely for Receivers/Charterers convenience, being her voyage ended.

In order to avoid a dispute of this kind, we would respectfully suggest modifying the charterparty clause for a vessel of the above category calling at Mizushima as follows:

Quote:

If berth is not available on arrival at discharging port, vessel shall be allowed to tender Notice of Readiness from place of anchorage ordered by Port Authorities whether in berth or not, whether in port or not, whether Customs cleared or not, whether in Free Pratique or not.

Laytime at second/third discharging port, if used, to commence on arrival, whether in berth or not, whether in port or not, whether Customs cleared or not. Time for shifting from a waiting anchorage to discharging berth not to count.

Unquote.

AUTHORITY: Mizushima Port & Urban Development Bureau, Okayama Pref. 1-12, Mizushima Fukuzaki-cho, Kurashiki City, Okayama Pref. *Tel:* (0864) 44-7141.

AGENT: Sub-agent of Dodwell & Co. Ltd., Tokyo. Naigai Unyu Co. Ltd., 1, 2 – chome, Kaigan-Dori Mizushima, Kurashiki-Shi Okayama-Ken. Cables: Naigai Kurashikimizushima. Tel: Kurashiki (0864) 44-5211.

MOJI (Kitakyushu): 33.54 N. 130.55 E. **(See Plan Book)** (See "Kanmon-Ko").

LOCATION: Moji port is located in the Kanmon Straits between Shimonoseki on Honshu Island and Moji at the Northeast tip of Kyushu and is well sheltered from the open sea by steep hills on all sides. According to the Harbour Regulations, the port is one of the sections in Kanmon Harbour which consists of Moji, Shimonoseki, Kokura and Dokai (Tobata, Wakamatsu and Yawata). In 1963, five cities, Moji, Kokura, Tobata, Wakamatsu and Yawata situated in North-Eastern part of Kyushu were combined in one city, as Kitakyushu.

Moji is now known as Moji-ku of Kitakyushu City.

DOCUMENTS: When ship arrives direct from foreign port, Customs Officials will board to search vessel. Following documents to be submitted:

Crew List.
Passenger List.
Store List.
Manifest of crew personal effects (must be signed by individual crew member).
Arms and ammunition list.
Narcotics List.
List of ports of call on current voyage.
Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration inward/outward (Form No. C2000).

The following will be checked on board:

Ship's Registry.
Last Port Clearance.

When ship comes from Japanese port, Customs Officials will not attend on board, except special case. Master or Agent to attend Custom House for entry formalities with following documents:

Discharging Cargo Manifest.
Through Cargo manifest.
Declaration inward/outward.
Ship's Registry.
Last Port Clearance.

Documents entrusted with the Master by Customs at previous port. On ship's departure, clearance issued by Customs, after confirming payment of tonnage dues.

PILOTAGE: (1) *Harbour Pilotage:* Compulsory for entry, departure and when vessel passing through Straits if g.r.t. exceeds 10,000 tons. Pilots embark Eastbound vessels at Mutsure Quarantine Anchorage position half mile East Mutsure L.H. Lat. 33° 58′ 15″ N., Long. 130° 53′ 43″ E. and Westbound vessels at Hesaki Quarantine Anchorage position 125°, 1,500 m. from Hesaki L.H. Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E. Two Pilots embark vessels exceeding 30,000 gross tons for entry and departure charging double pilotage.

(2) *Sea Pilotage:* Vessels approaching from East can obtain Pilots by radio request made at least 24 hours in advance. Pilot embarks at position 3 miles South from Sekisaki L.H. Lat. 33° 13′ 00″ N., Long. 131° 54′ 00″ E.

(3) Pilots should be kept closely advised of vessel's accurate ETA at pilot station. If any change in vessel's movements, Master requested to immediately communicate by radio or VHF to pilot offices directly or through Agent reporting revised ETA. Cable addresses of pilot offices are: Harbour Pilot "Kanmonpilot Moji", Inland Sea Pilot "Anjin Moji".

(4) *VHF:* Vessels keep in direct contact with port authorities with regard to arrival, berthing instructions and Pilot's requirements through VHF as follows:

(a) Call sign: Kitakyushu Port Radio (or Shimonoseki Port Radio).
(b) Location of Radio facilities: Transmitting and receiving station located at the top of Mt. Hinoyama, Shimonoseki.
(c) Type of wave: Channel: Simplex 16 (calling, responding); Simplex 12 (communicating); Simplex 14 (communicating); Duplex 20 and 22 (communicating). Output 50 W.
(d) Operating hours: 0000 – 2400 hrs.
(e) Communicating range: within a radius of 50 miles from the Hinoyama Station.
(f) Communicating language: Japanese/English.

ANCHORAGE:

Tanoura No. 1 anchorage (83° from Moji Saki Light Buoy, 1,340 m.). Draft 9.1 m.

Tanoura No. 2 anchorage (83° from Moji Saki Light Buoy, 1,770 m.). Draft 9.1 m.

Tanoura No. 3 anchorage (80° from Moji Saki Light Buoy, 2,300 m.). Draft 9.1 m.

WIND, TIDE: Easterly winds prevail in warm seasons. N.W. winds prevail in Winter season. Dense fog frequently prevails in Spring and Autumn.

Tidal range 3.07 m. Current near entrance of port runs Westward at flood and Eastward at ebb. Speed of current in vicinity of narrowest section of Straits sometimes reaches 7-8 knots. In stream of port, it is about 3-5 knots.

RESTRICTIONS: *(a)* Berthing: During daytime only. Swift tidal current prevails at buoy berths necessitating strong moorings, and in accordance with harbour rules, ships moor with anchor chains to buoy. Requisite chain preparations should be completed before ship leaving pilot station. Occasionally large vessels drawing deep draft made to await high water and/or suitable current to berth alongside wharves.

(b) Departure: with adequate notice, no restrictions from anchorage and/or buoys. Night departure from wharves generally practicable, except No. 7 wharf and Nos. 8, 9, 10 wharves, the latter 3 berths however only permitting vessel to sail against tide.

(c) Tug assistance may be required at Pilot's discretion for large vessel mooring to and/or unmooring from buoy, depending upon efficiency of engine and conditions of weather, tidal current, etc.

(d) Vessels with draft over 9.14 m. (30 ft.) but not exceeding 10 m. can pass through Kanmon Straits with favourable tide.

MAX. SIZE: *Tankers:* 1 tanker berth, Mitsui & Co. Berth "B". Max. d.w.t. 33,000 tons. Max. LOA, 200 m. Max. safe draft 9.10 m.

Also see "Berthing" and "Tankers".

HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When Free Pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

(a) Quarantine Station at Western entrance: half mile East from Mutsure Lighthouse Lat. 33° 58′ 15″ N., Long. 130° 53′ 43″ E.

(b) Quarantine Station at Eastern entrance: 125°, 1,500 m. from Hesaki Lighthouse Lat. 33° 56′ 24″ N., Long. 131° 30′ 12″ E.

(c) Quarantine inspection not allowed inside port except when weather or other special reasons prevent quarantine boat from approaching ship at anchorage.

(d) "Q" flag should be hoisted until ship is in Free Pratique.

(e) Vessels exceeding 20,000 gross tonnage may undergo quarantine on application when they berth inside port.

(f) Quarantine service is rendered from sunrise to 1 hour before sunset.

(g) When ship arrives from plague infected or suspected area within 10 days after she left such place, a 24 hour special quarantine is required. All sanitary scuppers must be closed and garbage must not be thrown overboard after ship reaches 60 miles off Japanese coast.

(h) Radio Pratique is obtainable according to the Radio Pratique Regulations.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.

VHF: See "Pilotage".

TUGS: Normally join vessel at suitable position for mooring in judgment of Pilot and tug. In operation, tug's line to be used for mooring and unmooring without any charge. 10 tugs, 1,500 h.p. – 3,520 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Name of berth	*Length* m.	*Depth* m.	*Permissible draft* m.	*Capacity* g.t.	
Gaibo Wharf (public)					
No. 1 (No. 1–2)	450	8.7	8.5	No Limit	Subject to draft and length
2		9.0	9.0	No Limit	
3 (No. 3–7)	877	9.3	9.3	No Limit	
4		9.3	9.3	No Limit	
5		9.1	9.0	No Limit	1×crane for grain cargo
6		9.3	9.3	No Limit	
7		9.1	9.0	No Limit	
8 (No. 8–9)	390	9.7	9.2	No Limit	
9		9.7	9.2	No Limit	
10	220	10.0	9.0	No Limit	
11	195 (180)	9.0	9.0		
12 (No. 12–13)	345	8.5	8.5	No Limit	2×pneumatic suckers
13		9.4	9.3	No Limit	2×pneumatic suckers

Larger size vessel (maximum 25,000 g.r.t. and 220 m. LOA) can be accommodated at Nos. 2-3, 3-4 and 12-13 wharves, using 2 berths.

Name of berth	*Length* m.	*Depth* m.	*Permissible draft* m.	*Capacity* g.t.	
Moji Buoy					
No. 1		9.8	9.2	15,000	
2		9.8	9.2	15,000	
3		9.6	9.3	No Limit	Subject to draft and length
5		—	—	—	
6	(160)	10.0	10.0	No Limit	
7	(160)	10.0	10.0	No Limit	
8		9.0	9.0	No Limit	
9		9.3	9.3	No Limit	Only usable when tidal current is under 5 knots
Tanoura Wharf					
No. 1	105	7.2	7.2		Banana centre
2	105	7.2	7.2		
5	170.4	9.0	9.0	No Limit	Subject to draft and length
6	170.3	9.0	9.0	No Limit	Subject to draft and length
7	181.1	9.0	9.0	No Limit	Subject to draft and length
8	185	9.4	9.4	No Limit	Subject to draft and length
Tanoura Anchorage					
No. 1, 2 and 3		9.1	9.1	20,000	
Tanoura Oil Berth (dolphin) (Mitsui Bussan and M-Iida Wharf)		10.0	9.1	33,000	d.w.t.
Tachinoura Wharf					
No. 1	120	9.6			
2	185	9.6	9.6		
3	185	9.6	9.6		
4	185	9.6	9.6		
5	185	9.6	9.6		
6	185	9.6	9.6		
7					
8	480	12.0	10.0		Container berth

CONTAINER HANDLING FACILITIES:

Tanoura Container Terminal

Total area:	63,100 sq.m.
Area per berth:	One berth only Sea depth: 10 m. under low water level (LWL) Length of wharf: 300 m. Marshalling yard: 44,856 sq.m. CFS: 2,400 sq.m. Office, control tower: 836 sq.m.
Gantry crane:	Single/twin: Single Height of span above quay: 9.2 m. Max. outreach: 36 m. Max. backreach: 7.5 m. Lifting capacity: 37.5 tons Spreader sizes: capable of handling containers of ISO-IS & IC also Matson type Width of rail: 30 m.
Reefer plug:	40 (440 V×20, 220 V×20)
Illumination:	3 (25 Lux) 1 kW×28
Track scale:	Scaling maximum 50 tons
Straddle carrier:	1

BRIDGE: Kanmon Bridge – Clearance 61 m.

TANKERS: No slop discharge facilities. Mobil Oil berth situated at Okubo, near Tanoura. In the vicinity of the berth, the current runs towards West nearly all the time. Maximum rate of current 3 knots. Vessels berthed during period that tide sets to West, in daytime only. Mooring berth consists of 1 oil pier (length 80 m. width 5 m.) and 2 dolphins. Two 10 in. pipes connected to vessel; discharge rate 1,000 t.p.h. (Fuel and diesel oil).

Also see "Max. Size".

FRESH WATER: Good fresh water supplied from water barges to vessels lying at buoys and/or anchorage; from hydrants to those alongside wharves. The rate of delivery per hour is 20 – 40 tons from hydrant and 50 tons from barge.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommended request stevedores for this work unless crew can complete it before berthing.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Average loading/discharging:

Bulk cargo:	Coal	50	t.p.h./gang/hatch	(dis)
	Iron ore	45–50	t.p.h./gang/hatch	(dis)
	Grain	50	t.p.h./gang/hatch	(dis)
Baled cargo:	Cement	50	t.p.h./gang/hatch	(load)
	Fertilisers	40	t.p.h./gang/hatch	(load)
	Grain	30–50	t.p.h./gang/hatch	(dis)
	General	40	t.p.h./gang/hatch	(load)
Steel cargo:	Under 20 ft. long	25–30	t.p.h./gang/hatch	(load)
	Over 20 ft.	15–20	t.p.h./gang/hatch	(load)
Scrap steel:	Pressed	20	t.p.h./gang/hatch	(dis)
	Ordinary	10	t.p.h./gang/hatch	(dis)
	Bulky and awkward	5	t.p.h./gang/hatch	(dis)
Lumber/logs:	Lumber	15–20	t.p.h./gang/hatch	(dis)
	Logs	30	t.p.h. gang/hatch	(dis)

2 shifts; 0800 to 1700 hrs. and 1800 to 0500 hrs. Normal working hours 0800 to 1700 hrs. Overtime work is possible by applying to Customs. No work can be arranged on 31st December and during New Year holidays (1st to 3rd Jan.). No work on 1st and 3rd Sunday of each month.

MEDICAL: No advance notice required unless urgent.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

Bonded bunker oil is supplied by oil barges. The rate of delivery: 80 t.p.h. – 100 t.p.h.

Suppliers	*Delivery agents*	*Installation*	*Required notice* days
Shell Sekiyu K.K.	Uyeno Unyu	Shimonoseki	1
Esso Oil Co.	General Bussan	Mutsure	1
		Sakai	4
Mobil Oil Co.	Nisshin Tanker	Kokura/Moji	1
		Oita	2–3
Caltex Oil Co.	Shimazu Kaiun	Shimonoseki	1
		Kudamatsu	2
Mitsubishi Shoji Kaisha	Nisshin Tanker	Mutsure	1
	Asahi Tanker	Iwakuni	3
	Tsurumi Yuso	Kanokawa	3
C. Itoh & Co.	Asahi Tanker	Matsuyama	3
	Chikko Kogyo	Mizushima	3
Nissho Co.	Nisshin Tanker	Mutsure	1
	Tsurumi Yuso	Matsuyama	3
Mitsui & Co.	Chikko Kogyo	Oita	2–3
Nippon Mining Co.	Nippon Tanker	Mizushima	3
Idemitsu & Co.	Nagai Kaiun	Tokuyama	2
Sumitomo Shoji Kaisha	Asahi Tanker		
Marubeni-Iida Co.			
Kanemusu-Gosho Co.	Nagai Kaiun	Kokura	1
	Asahi Tanker	Tokuyama	2

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: Honorary British Consulate concurrent with Honorary Swedish Consulate.

REPAIRS: Mitsubishi Heavy Industries, Ltd. Shimonoseki; Daiki Industries Co., Ltd. Moji; Kitakyushu Iron Works, Tobata.

DRY DOCKS: Refer "Shimonoseki".

REPATRIATION: Possible.

AIRPORT: Distance to Kitakyushu airport: 30 minutes by taxi and to Fukuoka airport; 2 hours by train and taxi.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police station (tel. 110) and Fire/Ambulance (tel. 119).

TELEPHONE: Telephone placed on board.

SERVICES: All services available, including hold cleaning and grain fitting.

SHORE LEAVE: Immigration Officials board vessel on her arrival in port to examine passports, discharge books and/or other equivalent travel documents and provide 72-hour landing passes for crew members and passengers. One copy each of crew list and passenger list are required by them. Providing ship's Agent with a crew list beforehand will be a great help in expediting Immigration business on ship's arrival. When ship stays in port more than 72 hours, the landing passes may be extended every 72 hours on application. In the event that crew members, without entry visas, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hours) of these men, has been booked, or unless the ships to which they are to be transferred, arrive in Japan within 5 days.

DEVELOPMENTS: Dredging work is being carried out for deepening the draft to 13 m. and extending the Pier Aprons. This construction, dredging and reclaiming is expected to be completed by 1989.

AUTHORITY: Kita-Kyushu Port Authority, 2-7, Nishi Kaigan 1-chome, Moji-ku, Kita-Kyushu City, Fukuoka Pref. *Tel:* (093) 331-1331.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Holme Ringer & Co. Ltd., PO Box 72, 9-9, Minato-machi, Moji-Ku, Kitakyushu-shi, Fukuoka-ken. Tel: Moji (093) 331-1311. Cable Address: Ringer Moji. Telex: 0713403 Ringer J.

MURORAN: 42.20 N. 140.58 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare 2 Inward/Outward Declarations, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Arranged by Agent subject receipt of ETA advice at least 24 hours prior arrival. Pilot boards vessel about 1 mile outside breakwater. Not compulsory.

ANCHORAGES: Outside harbour limits: Subject to notice having been given to Authorities prior arrival.

Inside harbour limits: Permitted in any part.

MAX. SIZE: *Nissei Pier (Nippon Petroleum):*

Max. d.w.t.	*Max. LOA*	*Max. Safe Draft*
*50,000	230 m.	11.00 m.
*30,000 (g.t.)		
100,000 Sea Berth	250 m.	15.00 m.

*For vessels of deadweight tons, gross tons and LOA in excess of above limits it is necessary to obtain entry permission from the Harbour Master, Pilot and the Refinery in advance.

Ore Carriers: Max. LOA, 300 m., max. draft, 16.0 m.

HEALTH: Vessels usually anchor at the sea area within a circle of radius 1,000 m. – directed 290° 4,200 m. from Daikokujima Lighthouse, where the authorities board and grant Free Pratique. Radio Pratique also available.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: 10 tugs, up to 3,200 h.p. Usually meet vessel near Inner Harbour breakwater. 10% additional charge if tug's lines used.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length (m.)*	*Depth (m.)*	*Permissible Draft (m.)*	*Capacity (d.w.t.)*	*Shore Cranes*
Motowanishi Wharf	176	10.2	9.7	12,000	1× 5 tons
Nippon Steel					
Wharf (A)	742	9.0	8.5	12,000	3× 3 tons
Wharf (B)	400	9.0	8.5	15,000	4× 8 tons
Nippon Steel (iron ore)	250	14.0	14.0	35,000	2×15 tons
Nippon Steel (iron ore)	300	16.5	16.0	160,000	2×21 tons
Nittsu Pier	150	9.0	8.5	10,000	2× 5 tons
Centre Pier	310	8.5	8.0	10,000	—
West Pier (No. 2)	360	9.0	8.5	10,000	—
Nikko Pier	185	8.0	7.5	7,000	—
Sakimori Wharf	185	10.0	9.2		1×10 tons

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. 50% additional of basic stevedorage; 2100–0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent. Hospital facilities available.

TANKERS: See "Max. Size". N.P.R.C. Muroran Refinery. Discharge berth. About 25% of deadweight required in ballast.

Berth	*Product*	*Pipe-line*	*Discharge Rate*
50,000 d.w.t.	Crude Oil	2×12 in.	2,400 k/l
100,000 d.w.t.	Crude Oil	4×12 in.	8,000 k/l

DENSITY/TIDE: Density 1025. Rise and fall of tide about 4 ft.

FRESH WATER: Delivery at piers: Average rate about 40 t.p.h. Delivery by barge: Rate about 60 t.p.h.

FUEL: Available.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Only minor repairs available, but Hakodate dockyard able undertake all grades repairs.

AIRPORT: Domestic flights only from Chitose Airport – 100 km. from Muroran.

TIME: GMT plus 9 hours. Permanent.

POLICE/FIRE: Police Muroran 2-5191; Fire Muroran 2-2111.

TELEPHONES: May only be connected on board at No. 2–2 West Pier.

SHORE LEAVE: Local Immigration offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

AUTHORITY: Port & Harbour Bureau, Muroran City, Mubanchi, Kaigan-cho 1-chome, Muroran City, Hokkaido *Tel:* (0143) 22-3191.

AGENT: Sub-agent of Dodwell & Co., Tokyo. Narasaki Sangyo Co. Ltd. 3–2, 3-chome, Kaigan-Dori, Muroran-shi, Hokkaido. Tel. Muroran (0143) 24-1314/6. Cable Address: Narasaki Muroran. Telex: 0987781/2 Nsmur J.

NAGASAKI: 32.45 N. 129.52 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
5 Crew Lists including Passport/Seaman's Book Numbers.
5 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory, but necessary unless Master well acquainted with locality. Pilot embarks in vicinity of Ioshima Lighthouse, Lat. 32° 43′ 20″ N., 129° 46′ 43″ E. Pilot available any time, subject to adequate notice (no VHF system). All communication with Pilot through Agent. Pilot boat carries International signals. "G" flag in daytime and "Morse" signals at night to call Pilot. In event bad weather Pilot boards at anchorage off Megami.

ANCHORAGES: Megami anchorage located in Harbour Division No. 3 (within line between Kagenoo Lighthouse and West end of Shirogashima) 60 ft. depth and capacity of 3 vessels of 20,000 d.w.t. Safe anchorage.

RESTRICTIONS: Berthing: During daytime only, except for emergency purposes. Entering into anchorage at Megami is generally permitted anytime with Harbour Master's permit. Departure: No restriction from buoy or wharf with adequate notice, but no night departure from Oil Terminals, except Hayashikane Oil Terminals of Dinokubi and Kozaki.

MAX. SIZE: Max. permissible length 1,200 ft., breadth 120 ft., draft 15.0 m.

Tankers:

Berth	*Max. d.w.t.*	*Max. LOA*	*Max. Safe Draft*
Hayashikane Oil Co. (Kozaki Depot)	60,000	230 m.	13.00 m.
Hayashikane Oil Co. (Dinokubi Depot)	60,000	230 m.	13.00 m.
Mobil Oil Co. (Kibachi Depot)	22,000	200 m.	11.00 m.
Idemitsu Kosan (Kibachi Depot)	22,000	200 m.	11.00 m.
General Sekiyu (Otao Depot)	20,000	230 m.	15.00 m.

HEALTH:

(a) Quarantine Station: Sea area surrounded by the following lines:

1. From Senbonyama Beacon to Megami Beacon.
2. From Megami Beacon to Naginata Lighthouse.
3. From Senbonyama Beacon to Takaboko Island.

(b) Quarantine service is rendered from sunrise to one hour before sunset.

(c) Radio Pratique is effective.

RADIO: Recommended Master communicates with Agent through Chosi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.

TUGS: Tugs normally join vessel at anchorage for swinging and/or at berth for assisting vessel. Tugs available: 3,200 h.p. owned by Dokai Tug Co.; 3,300 h.p., 2,880 h.p. and 2,400 h.p. (2) owned by Kowa Kogyo Co.; 2,200 h.p. owned by Nagasaki Port Tugboats Management Association.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Wharf	*Length*	*Depth*	*Capacity*	*Crane*
Dejima	413 m.	9 m.	10,000 g.r.t. × 2 vessels	3 tons × 2 2 tons × 1
Yanagi	270 m.	12 m.	46,000 g.r.t. × 1 vessel	
Yanagi	185 m.	10 m.	7,000 g.r.t. × 1 vessel	

Buoy	*Ship's Length (O.A.)*	*Permissible draft*	*Capacity g.r.t.*
Nos. 1 – 2	270 m.	14 m.	105,000 × 1
Nos. 2 – 3	250 m.	14 m.	50,000 × 1
Nos. 3 – 4	200 m.	14 m.	20,000 × 1
Nos. 4 – 5	175 m.	14 m.	6,000 × 1
Otao Nos. 1 – 2	347 m.	21 m.	150,000 × 1
MHI MC–MD	256 m.	10 m.	25,000 × 1

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630–2130 hrs. 60% additional of basic stevedorage; 2130–0500 hrs. next morning 150% additional; Sundays/holidays 100% additional.

CRANES: *Floating Cranes:* 120 tons owned by Kowa Kogyo Co.; 330 ton floating crane available with adequate prior notice which originally located in Moji area.

MEDICAL: No advance notice required unless urgent.

TANKERS:

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Hayashikane Oil Co. (Kozaki Depot)	Diesel/ Gas Oil	8″×1	700
Hayashikane Oil (Dinokubi Depot)	Diesel/Gas/ Lub Oil	8″×1	700
Mobil Oil Co. (Kibachi Depot)	Fuel Oil	8″×1	400 (Berthed alongside)
Idemitsu Kosan (Kibachi Depot)	Fuel Oil	8″×1 6″×1	400 400
General Sekiyu (Otao Depot)	Fuel Oil	8″×1	700 (Sea Buoy)

A slop discharge station operated by Nishi Nippon Tanker Service located at Ioshima with facilities for tankers up to 500,000 d.w.t. mooring to three 20-ton bollards. Receiving capacity 1,500 cu.m. per hour. The tank cleaning facilities can accept 10 vessels of 200,000 d.w.t. per month.

DENSITY: 1025.

FRESH WATER: Capacity of water barges: 500 tons and 300 tons. 2 barges in total. Rate of delivery: 100 t.p.h. Wharf hydrants at Yanagi and Dejima.

FUEL: Available ex-barge only. 3–5 days' prior notice required by oil company.

FIRE PRECAUTIONS: No specific precautions.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 60 cigarettes to take ashore, but no spirits.

CONSULS:

French Consul Agency, tel. 23-1221

Portuguese Honorary Consul Agency, tel. 26-2311

REPAIRS: All types of repair can be carried out.

DRY DOCKS:

	Length	*Width*	*Depth*	*Capacity (g.r.t.)*
Koyagi Dock (MHI)	400 m.	100.0 m.	14.5 m.	250,000
No. 2 Dock (MHI)	335 m.	54.0 m.	9.5 m.	165,000
No. 3 Dock (MHI)	268 m.	37.2 m.	8.8 m.	65,000

SURVEYORS: Cargo surveyors able to attend from Moji or other areas if prior notice given. LR, ABS & BV are available in Nagasaki. Salvage Association or U.S. Salvage are able to attend from Moji to Nagasaki.

REPATRIATION: Possible.

AIRPORT: Distance 54 km. (centre of town to air terminal). Time 1.5 hours by car. All Nippon Airway have regular daily service with 7 flights for Tokyo and Osaka, and Towa Domestic Airlines have regular daily service with 2 flights for Tokyo.

Overseas services: Japan Air Lines (JAL) and General Administration of Civil Aviation of China (CAAC) have regular service with 2 flights a week to Shanghai, China.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 22-2141; Ambulance/Fire 22-3211 (Fire station).

EMERGENCY CO-ORDINATION CENTRE: Contact Harbour Master.

TELEPHONE: Shore telephone can be installed on board vessel at both wharves of Yanagi and Dejima. Vessels at Mitsubishi Yards can communicate via shipyards' switchboard with town.

STORING: See "Prelims" page viii.

1. Yes.
2. No restrictions, vessel can store at anytime if adequate notice given.
3. Trucks can proceed alongside at the berth.
4. Yes.
5. No special regulations, but a simple style application must be made to Customs before storing.
6. Yes.

SHORE LEAVE: Local Immigration Officers issue shore pass valid for only 15 days, but 15 days' extension possible if ship stays longer.

AUTHORITY: Nagasaki Port Authority, 2-11 Dejima, Nagasaki City. *Tel:* (0958) 22-1257.

Harbour Master (Maritime Safety Agency): 7-29 Matsugae, Nagasaki. *Tel:* (0958) 27-5133.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo, Nagasaki Warehouse Co. Ltd., 2–13, Dejima-Machi, PO Box 6, Nagasaki. Tel. Nagasaki (0958) 24–1261. Cable Address: Ringer Nagasaki. Telex: 0752322 Nasoko J.

NAGOYA: 35.05 N. 136.53 E. (See Plan Book)

LOCATION: Situated at Northern head of Ise Bay. Harbour protected by breakwater 8,250 m. in length stretching from Chita Peninsula to bank of Kiso River at opposite side of harbour.

DOCUMENTS:

(a) Quarantine (only when arriving from a foreign port); 1 Maritime Declaration of Health, 1 Crew List, 1 Cargo Manifest, 1 List of Passengers (if any on board), Log Book and Registry should be readily available.

(b) Customs: 1 Declaration Inward/Outward with ports of Call, 1 Ship's Registry, 1 Last Port Clearance, 1 Store List including arms and narcotics, 2 Manifests of Cargo for Discharge (prepared by Agents), 1 Manifest of Through Cargo, 1 Crew List, 1 List of Passengers, 1 List of Crew's Baggage (only necessary if crew-members have to land personal effects ashore).

(c) Immigration: 1 Crew List, 1 Notification of Arrival, 1 Application for Shore-passes, 1 List of Passengers, 1 Notification of Departure (to be returned through Agents after sailing).

(d) Harbour Master: 1 Crew List, 1 Declaration Inward/Outward with ports of Call.

(e) Port Authority: 1 Declaration Inward/Outward with ports of Call.

PILOTAGE: Request Pilot and other services to JHY (Nagoya Port Radio Station) at least 5 or 6 hours prior arrival on frequency 500 kHz. JHY keeps watch also on 480 kHz. Pilot station near No. 1 and No. 2 channel buoys at entrance of harbour channel. When wind over 15 m./sec. Pilot boards inside High Tide Breakwater. When very rough, Pilot taken on board East side of Kinjo Signal Station. Pilot not compulsory but advisable. Pilot boat white painted with white and red funnel and letters "Pilot" on hull.

Pilotage is compulsory for all vessels in Irago Suido Traffic Route and for all vessels of 10,000 g.r.t. or over operating N.W. of a line bearing 050° from Hansu Hana Lighthouse (Lat. 34° 26.5′ N., Long. 136° 55.6′ E.) to the coast of Atsumi Hanto.

Shipmaster's Report: January 1985.

Pilotage for "Irago Suido", entrance for Yokkaichi-Nagoya Bay, has become compulsory since beginning of 1984.

Pilot to be arranged through the Agents and boards at Lat. 34° 31′ N., Long. 137° 04′ E.

ETA to be confirmed 3 hours before arrival at No. 1 Buoy by VHF, and also to Nagoyahoan, which is the controlling body for the traffic in the Irago Strait.

ANCHORAGES: The port boundary indicated by line connecting Oono Lighthouse (Lat: 34° 55′ 49″ N., Long: 136° 49′ 28″ E.), Ise Bay Light Buoy (Lat: 34° 56′ 05″ N., Long: 136° 47′ 44″ E.), S.W. corner of Nagoya High Tide Breakwater (Lat: 35° 1′ 54″ N., Long: 136° 47′ 04″ E.) and the base point at N.W. of the same Breakwater (Lat: 35° 00′ 54″ N., Long: 136° 46′ 09″ E.).

Quarantine Anchorage, located outside High Tide Breakwater offers safe anchorage for vessels awaiting Pilot or quarantine service. Depth of this anchorage area ranges from 10 m. to 20 m. Sea bed silty clay.

MAX. SIZE:

Tankers:

Berth	*Max. d.w.t.*	*Max. LOA*	*Max. Safe Draft*
Nisseki Terminal	34,000	195 m.	9.80 m.
Esso Standard	34,000	195 m.	8.80 m.
Maruzen Standard	20,000	80 m.	9.50 m.
Kanematsu-Gosho	34,000	200 m.*	9.50 m.
Mitsui	34,000	195 m.	9.50 m.
Mitsubishi Shoji	34,000	190 m.*	9.50 m.
Chita Futo	50,000	210 m.	11.70 m.
Idemitsu Chita Pier	100,000	—	14.00 m.
Nishi Nagoya Yusosho	30,000	200 m.	11.70 m.
Ise Bay Sea Berth	250,000	—	25.00 m. (Depth)
Toa Kyoseki	100,000	220 m.	14.00 m.

*Note: Limitation 30,000 d.w.t. These lengths available when no vessel secured to neighbouring (RYNORU) berth.

Other Vessels: 160,000 d.w.t., draft 14.0 m.

HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When Free Pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.

Crew List.

Passenger List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case, of infectious disease within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

RADIO:

JHY (Nagoya Port Radio Station). Service area: 100 miles. Frequency: 500 kHz (also 486 kHz). Working frequency: 486 kHz.

International VHF (Nagoya Port Radio). Service area: 40 miles. Frequency: Simplex working frequencies Channels 12 and 16. Duplex working frequencies Channels 18 and 20.

To be given prior arrival: Name; Capacity; Draft and length; Port of departure; Last port; Time arrival outer port; Time passing Kamishima Signal Station; Grade of cargo; Grade of dangerous cargo (if any); Health of crew.

TUGS: Usually join at point where vessel directs course toward allocated berth. Tug's lines normally used without charge.

BERTHING:
Public Wharves

	Berth No.	Length (m.)	Depth (m.)	Capacity (G/T)
Garden Pier	1	245	4.5 – 10.0	10,000×1
	2	185	10.0	10,000×1
	3	210	10.0	20,000×1
West Pier	8	185	10.0	10,000×1
	9	120	4.5	500×2
	10	185	10.0	10,000×1
Inae Pier	16	170	9.0	10,000×1
	17	226	9.0	10,000×1
	18	176	9.0	10,000×1
	19	180	10.0	10,000×1
Inae Pier No. 2	20 – 21	380	10.0	10,000×2
	22 – 24	540	10.0	10,000×3
	25	208	10.0	10,000×1
	26	265	4.5	500×2
No. 10 Coal Wharf	27 – 29	413	9.0	2,000×1 8,000×2
	31 – 33	378	7.3	4,000×3
No. 4 Wharf	11 – 12	260	7.5	3,500×2
No. 5 Wharf	36	183	5.5	1,500×2
No. 6 Wharf	38	185	10.0	10,000×1
	39	213	9.0	10,000×1
No. 7 Wharf	40 – 41	240	7.3	3,000×2
No. 8 Wharf	43 – 45	420	5.5	1,500×4, 450×1
	46 – 48	420	5.5	1,500×4, 450×1
Scrap Wharf	50	180	10.0	10,000×1
	51	120	4.5	500×2
Kinjo Wharf	52 – 53	497	12.0	25,000×2
	54	200	10.0	10,000×1
	71	450	5.5	1,500×5
	72 – 73	260	7.5	3,500×2
	74 – 75	260	7.5	3,500×2
	*76 – 77	400	10.5	10,000×2
	78	200	10.0–10.5	10,000×1
	79 – 81	600	10.0	10,000×3
	82 – 84	600	10.0	10,000×3
	85	280	12.0	25,000×1
	63 – 64	400	10.0	10,000×2
	65 – 67	600	10.0	10,000×3
Sorami Wharf	95 – 96	440	5.5	1,500×3 1,000×1 500×1
West 4 Section (Logs)	98 – 99	370	10.0	10,000×2
(G.C.)	91	185	10.0	10,000×1
West 3 Section (Logs)	88 – 89	260	7.5	3,500×2

Public Buoys

Buoy No.	Capacity
No. 2, 3, 4	20,000×2
No. 5, 8, 9, 10, 11, 12, 14, 15, 16, 17, 19, 20, 21	15,000×11
No. 22, 23, 50, 51, 52, 57	10,000×4
No. 53, 54, 58	5,000×3
**No. 35, 55, 56, 59, 60, 61	3,000×5

Remarks: *Wharf No. 76 – 77 Full Container Berth
**Buoy No. 12 and No. 35 Used as Single Buoy

Private Berths

		Depth (m.)	Capacity (G/T)
Nippon Cement Co. Pier		7.0	3,200×1 (Dolphin)
Mitsubishi Cement Co. Pier		8.5	8,000×1 (Dolphin)
Mitsubishi Cement Co. Pier		5.0	1,000×1
Osaka Cement Co. Pier		8.0	8,000×1
Rinoru Yushi Co. Pier		10.0	34,000×1 (Dolphin)
Toyo Rayon Co. Wharf		10.0	15,000×1
Mitsubishi Corp. Wharf		10.0	34,000×1
Mitsubishi Corp. Wharf		6.0	34,000×1
Chubu Electric Power Co. Wharf		7.5	5,000×2
Chubu Electric Power Co. Wharf		12.0	5,000×2 (Dolphin)
Nippon Kokan Futo Co. Pier		6.5	3,000×2
Mitsubishi Oil Co. Pier		5.0	800×1
Mitsubishi Oil Co. Pier		9.0	5,000×1
Mitsubishi Oil Co. Pier		9.5	5,000×1
Nippon Oil Co. Pier		7.0	2,000×1
Nippon Oil Co. Pier		10.0	30,000×1
Nippon Oil Co. Pier		10.0	2,000×1
Idemitsu Kosan Co. Pier		8.5	3,000×2
Idemitsu Kosan Co. Pier		6.0	3,000×3
Idemitsu Kosan Co. Pier		6.0	1,000×2
Idemitsu Kokan Co. Pier		7.5	5,000×4
Idemitsu Kokan Co. Pier		7.5	1,000×4
Idemitsu Kokan Co. Pier LPG	(K-5)	14.0	68,000×1 (Dolphin)
Idemitsu Kosan Co. Pier		14.0	1,500×2
Idemitsu Kosan Co. Pier		14.0	750×2
Chita LNG	(L-1)	14.0	100,000×1 (Dolphin)
Showa Oil Co. Pier		6.0	1,500×1
Showa Oil Co. Pier		6.0	3,000×1
Showa Oil, Marubeni, Nippon Oil Co-operation	(U-5)	12.0	30,000×1 (Dolphin)
Standard Oil Pier		10.0	20,000×1
Maruzen Oil Co. Pier		9.0	3,000×1
Maruzen Oil Co. Pier		10.0	3,000×1
Mitsui Bussan Pier		7.5	3,000×1
Mitsui Bussan Pier		7.5	500×1
Kanematsu Pier		10.0	20,000×1
Nippon Steel Corp. Pier (Products)		4.5–12.0	1,000–50,000×13
Nippon Steel Corp. Pier (Material)		6.0–14.0	1,000–100,000×5
C. Itoh & Co. Pier		10.0	15,000×1 (Dolphin)
Sanko Kogyo Co. Pier		5.3	2,000×1
Okaya Koki Co. Wharf		5.0–7.5	5,000×1 1,000×1
Aichi Steel Co. Wharf		5.0	1,000×2
Daido Steel Co. Pier		7.0	1,000×1
Daido Steel Co. Pier		5.5	1,000×1
Nagoya Port Tekko Futo Co. Wharf		7.5	5,000×1
Toyota Pier		10.5	3,200×2
Toyota Pier		11.0	50,000×2
Toyota Pier		11.0	34,000×1
Chita Futo Co. Pier	(J-5)	12.0	35,000×1 (Dolphin)
Nisshin Seifun Pier	(G-1)	12.0	50,000×1 (Dolphin)
Nisshin Seifun Pier		4.5	1,500×1 (Dolphin)
Toyo Grain Terminal	(J-T)	13.0	50,000×1 (Dolphin)
Zenno Silo	(J-S)	13.0	65,000×1 (Dolphin)
Oji Seishi Pier		12.0	50,000×1
Oji Seishi Pier		12.0	50,000×1 (Dolphin)
I.S.B. (Ise Bay Sea Berth)		—	250,000×2 (Tankers)
Ube Kosan Co. Pier		7.3	3,900×1 (Dolphin)
Ube Kosan Co. Pier		10.0	14,000×1 (Dolphin)

CONTAINER HANDLING FACILITIES: Nagoya Container Berth Co. Berths No. R-1/R-2. Length 622.0 m. Depth alongside 12.0 m. Capacity 2×50,000 G/T. 4 container cranes available.

BULK HANDLING FACILITIES: Coal pier can accommodate ships up to 10,000 tons. Depth of water 9 m.

Nippon Steel Corp., has 1 berth for handling of iron ore with 350 m. long wharf and a depth of water 14 m., 2 berths for ore and/or coal with a 500 m. long wharf and a depth of 13 m., 1 berth for scrap iron with 140 m. wharf and a depth of water 13 m.

Grain handling facilities include Wharf No. 8, 173 m. long and 10 m. deep. Tohama Wharf 135 m. long and 10 m. deep. Nisshin Wharf 150 m. long and 12 m. deep. Tokai Silo Wharf 190 m. long and 14 m. deep. Toyo Grain Wharf 170 m. long and 13 m. deep. Chita Futo Wharf 160 m. long and 12 m. deep.

Also see "Berthing".

MEDICAL: Hospitals conveniently located near port.

TANKERS: 53 oil tanker berths over 1,000 tons including 2 off-shore berths (Sea Berth) of depth: 25 m. for 200,000 ton tankers.

Berth	*Product*	*Shoreline*	*Pumping rate (t.p.h.)*
Nisseki Terminal	Diesel Oil	8″×1	600
	Fuel Oil	12″×2	1,000
Esso Standard	Diesel Oil	6″×1	700
	Fuel Oil	6″×2	700
Maruzen Standard	Diesel Oil	4″×1	150
	Fuel Oil	8″×1	500
Kanematsu-Cosho	Diesel, Fuel	8″×1	1,000
Mitsui	Diesel Oil	6″×1	700
	Fuel Oil	6″×1	700
Mitsubishi Shoji	Fuel Oil	8″×1	1,000
Chita Futo	Diesel, Fuel	8″×1	1,000
Idemitsu Chita Pier	LPG/Crude	20″×4	2,000
Nishi Nagoya Yusosho	Fuel Oil	12″×1	1,000
Ise Bay Sea Berth			18,000 k/l
Toa Kyoseki	Crude	Free size×4	2,000

Operator's Report: 1983.

Ise Bay Sea Berth (Discharging Terminal) is operated by Isewan Sea Berth Co., Ltd.

Terminal operates 24 hours per day, 7 days a week. Ships moored and unmoored daytime, weather or other circumstances permitting. Terminal will not be closed due to any holidays.

Depth around the Sea Berth is 25.0 m. Berth direction alignment is North (360°) – South (180°).

Location: Lat. 33° 55′ 26″ N., Long. 136° 44′ 36″ E.

Pilotage: Sea Berth requires Pilot for berthing and unberthing.

Anchorage: South 1, 2, 3, miles off from South end of Ise Bay Sea Berth.

Berthing: East berth port side alongside. West berth starboard side alongside.

Cargo Handling: Maximum rate 18,000 Kl/hr. Minimum pressure 10.0 kg./sq.cm. at manifold.

DENSITY: 1020.

FRESH WATER: Water supplied direct from pier.

FUEL: All grades fuel available. Delivered by barge only.

CONSULS: The following countries are represented in Nagoya: Ecuador, France, Netherlands, Korea, Mexico, Portugal, Sweden, Thailand.

GANGWAY/DECK WATCHMEN: Not compulsory but recommended.

OPENING/CLOSING HATCHES: Normally carried out by crew. When stevedores do this work charges are made.

CUSTOMS ALLOWANCES: For crew (per landing): 60 cigarettes, 1 bottle of spirit when sailing period exceeds one month, 2 bottles over 3 months.

For passengers: 3 bottles of spirit; 200 cigarettes or 50 cigars; 2 ounces of perfume; 1 watch of which price is not over ¥30,000; other items of which total price is under ¥100,000.

CREW IDENTIFICATION CARDS: Required.

REPAIRS: All types of repairs possible. Repairs by Ishikawajima-Harima Heavy Industries Co. Ltd., Nagoya Shipyard.

DRYDOCKS: Ishikawajima-Harima Heavy Industries Co. Ltd., Nagoya Shipyard: Length 150 m., width 24.2 m., capacity 13,000 g.r.t.

Chita Shipyard of Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI), length 810 m., width 92 m., capacity 250,000 g.r.t.

AIRPORT: Nagoya Airport, 20 km. from Port. 3 JAL (Japan Air Lines) flights for Hong Kong, 2 flights for Manila (weekly), 3 JAL flights to Seoul and 3 KAL flights to Seoul.
HOLIDAYS: National Holidays: New Year's Day (Jan. 1st), Adults Day (Jan. 15th), Foundation Day (Feb. 11th), Vernal Equinox Day (Mar. 21st), Emperor's Birthday (Apr. 29th), Constitution Day (May 3rd), Children's Day (May 5th), Respect for The Aged Day (Sept. 15th), Autumnal Equinox Day (Sept. 23rd), Health Promotion Day (Oct. 10th), Culture Day (Nov. 3rd), Labour Thanksgiving Day (Nov. 23rd). Cargo handling not arranged on December 31st, January 1st, 2nd and 3rd, and July 20th (Maritime Day).
TIME: JST (Japan Standard Time), 9 hours ahead of GMT.
POLICE/AMBULANCE/FIRE: Police 110, Ambulance 119, Fire 119.
TELEPHONES: Telephone can be arranged on board ships berthed at most wharves. For application call 652-7581. Telegram 971–4222, Time 117, Weather 177.
DEVELOPMENTS: Main Channel 14 m. deep and 350 m. wide will be enlarged to 17.5 m. deep. Secondary Channel 10 m. deep and 300 m. wide will be dredged to 12 m. deep and 400 m. wide.

Anchorage area 9 m. deep at present will be deepened to 10 m.

Kinjo Pier Development: 26 berths with 10 m. will be constructed.

AUTHORITY: Nagoya Port Authority, 8-21, 1-Chome, Irifune, Minato-Ku, Nagoya, 455 Japan. *Tel:* (052) 661-4111/4.

AGENT: Sub-agent of Dodwell & Co.. Goyo Kaiun Kaisha Ltd. 3-4, Irifune 2-chome Minato-ku, Nagoya-shi Aichi-ken. Cable Address: "Shipgoyoh Nagoya". Domestic Telex: 446-3113 Spgoyo J. Tel: (052) 651-5171.

NAHA, Okinawa: 26.12 N. 127.40 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wines/spirits, camera, wrist-watch, radio, firearms/swords, etc. (Only at first port of call in Japan.)

Ship's Agent will prepare Inward/Outward Declaration, Cargo Manifest, Cargo Manifest in transit using specific forms. Therefore Ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot services compulsory. Pilot boards in position Lat. 26° 13′ 49″ N., Long. 127° 38′ 20″ E. International Pilot Signals used.
RESTRICTIONS: Vessels entering Naha Port are controlled by the limiting depth in the entrance channel of 11 m. Entry possible 24 hours.
MAX. SIZE: Length and beam not limited. Max. draft 11 m.
HEALTH: Radio Pratique possible. Formalities will be carried out at the Quarantine Anchorage.
RADIO: Recommended communicate with Agent through Choshi Radio or Nagasaki Radio, which cover all ports in Japan. If specifically Westbound vessel to contact Choshi, and Northbound to contact Nagasaki Radio, respectively.
TUGS: 3 tugs available, 2,000 h.p. – 2,400 h.p.
BERTHING:

Berth	*Length* (m.)	*Depth* (m.)	*Number of Berths*
Naha Wharf			
No. 1	200	7.5	1
No. 2	195	9.5	1
No. 3	178	9.5	1
No. 4	56	7.5	0
No. 5	76	5.0	0
No. 6	147.7	7.5	1
Shinko Wharf			
No. 1	474	7.5	3
No. 2	70	5.0	1
No. 3	420	7.5	3
No. 4	420	7.5	3
No. 5	420	11.0	2
No. 6	450	11.0	2

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores.
MEDICAL: All medical and hospital facilities available.
TANKERS: Two berths for tankers at North side of commercial port.
Berth F – 7.5 m. depth alongside.
Berth G – 8.5 m. depth alongside.
FRESH WATER: Available at the berths at a rate of 20 t.p.h. – 50 t.p.h.
FUEL: All grades of fuel available.
OPENING/CLOSING HATCHES: Stevedores will carry out this work. Cost per gang according to type of cargo. Recommend stevedores for this work unless crew can complete it before berthing.
CUSTOMS ALLOWANCES: Each man allowed take 60 cigarettes ashore, but no spirits.
REPAIRS: Facilities available for minor repairs.
TIME: GMT plus 9 hours all year round.
SHORE LEAVE: Local Immigration Office issues shore pass valid for 3 days, but extension possible if ship stays longer.
DEVELOPMENTS: Large scale developments underway with completion expected between 1985 and 1990.
AUTHORITY: Port & Harbour Bureau, Naha City, 95, Tondo-cho, Naha City, Okinawa Pref. *Tel:* (0988) 68-1843.

AGENT: Sub-agent of Dodwell & Co., Connell Bros. Company, Ltd., P.O.Box 57, Naha, Okinawa. Cable Address: Seabsea Naha. Tel: J 79822. Tel: (0988) 63-3991.

NAMIKATA: 34.07 N. 132.55 E. (See Plan Book)

Port Status – Closed Port.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station.

Inland Sea Pilot Association covers all Inland Sea ports. Pilotage not compulsory but recommended in view of great number of islands causing navigational hazards. Pilot obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth.

1. Wadamisaki. (In this case Pilots compulsory if over 10,000 g.r.t.). Position: Lat 34° 38′ N., Long. 135° 11′ E. Cable Address: "Anjin Kobe".
2. Sekisaki. Position: Lat. 33° 13′ N., Long. 131° 54′ E. Cable Address: "Anjin Saganoseki".
3. Hesaki. Position: Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E. Cable Address: "Anjin Moji".

ANCHORAGE: No anchorage at Namikata.
RESTRICTIONS: Mooring and unmooring daytime only.
MAX. SIZE: Oil tankers: 125,000 d.w.t. Gas tankers: 67,000 d.w.t.
HEALTH: Closed port. Vessels should obtain Pratique at Matsuyama.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio.
TUGS: Join vessel off Namikata, always using tug's line without charge. Two to four tugs are required for berthing, depending on size of vessel.
BERTHING: Berthing time will be notified by ship's Agent by radio.
MEDICAL: No advance notice required unless urgent.
TANKERS: *Namikata Terminal Co. Ltd.* only. Located approximate position Lat. 34° 07′ 07″ N., Long. 132° 54′ 32″ E. See "Max. Size".
FRESH WATER: Available by shore line. Rate of delivery: 20 t.p.h.
FUEL: Not available.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
REPAIRS: Not possible.
REPATRIATION: Possible. Nearest Immigration Office situated at Niihama.
AIRPORT: Nearest at Matsuyama and Takamatsu.
TIME: GMT plus 9 hours.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONE: No facilities for placing telephones on board.
GENERAL: As this port is a closed port, the undermentioned procedures required to obtain special permission to enter from Shikoku Maritime Bureau:

Usually vessels call at Matsuyama to obtain special permission for entering closed port at Namikata, by paying the charge at the same rate as tonnage dues; the above procedures will be undertaken by Agent. No quarantine available, the nearest Quarantine Station at Matsuyama. No Immigration Office at this port (Officials come from Niihama).

The above procedures of Quarantine/Customs will be undertaken by Namikata Agent.
SHORE LEAVE: Local Immigration Officer issues shore pass.
AGENT: Kaiko Tanker Co. Ltd., Namikata Office. Address: Miyazaki-600, Namikata-cho, Ochigun, Ehime, Japan. Tel: 0898-52-2009. Telex: 5845554. Fax 0898-52-2367. Cable Address: Kaiko Imabari.

Kaiko Tanker Co. Ltd., Matsuyama Office. Address: 6-12, 1-chome, Nakasuka, Matsuyama, Japan. Tel: 0899-51-0733. Telex: 5842011. Fax 0899-51-0359. Cable Address: Kaiko Matsuyama.

NAOETSU: 37.11 N. 138.14 E.

DOCUMENTS:

1 Inward Declaration of Vessel.
1 Cargo Manifest.
1 Through Cargo Manifest.
1 List of Provisions and Stores.
1 List of Tobacco and Personal Effects.
7 Crew Lists (preferably airmailed in advance).
2 Passenger Lists.

PILOTAGE: Pilot embarks at quarantine anchorage to take vessel directly to berth during daytime. All transmitting and receiving through Niigata Radio Station (call sign JCF, Type of Wave: 438454) or Choshi Radio Station and/or Nagasaki Radio Station. Cable Agent one week's notice of ETA and accurate ETA 24 hours before arrival, thereafter advising any change in arrival time. No Pilot boat. Pilot uses tug-boat.
ANCHORAGES: Half-circle drawn at a point of Lat. 37° 11′ 31″ N., Long. 138° 13′ 59″ E. (lighthouse) with radius 1,600 m.
RESTRICTIONS: Berthing and unberthing daytime only.
MAX. SIZE: LOA 160 m. draft 9.50 m. in Summer, and 9.00 m. in Winter.
HEALTH: Radio Pratique available. Formalities will be carried out at the anchorage. Quarantine Station 321° – 2,200 m. (Lat. 37° 11′ 45″ N., Long. 130° 14′ E. 700 m. radius) from Naoetsu Lighthouse.
RADIO: Niigata Radio Station: JCF. Nagasaki Radio Station: JOS. Choshi Radio Station: JCS.
VHF: Channel 16.

TUG: Normally joins vessel at entrance of port. Ship's lines used. One tug 750 h.p. One tug 1,800 h.p. will be brought from Niigata when required.

BERTHING:

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Capacity* (d.w.t.)	*Remarks*
West Wharf No. 1	185	10.0	9.0	25,000	1 Unloader
West Wharf No. 2	185	10.0	9.0	25,000	2 Tower Cranes
South Pier No. 1	105	6.0	5.5	3,000	
South Pier No. 2	105	6.0		Passenger Boat Station	
South Pier No. 3	128	6.0		1,500	
South Pier No. 4	120	4.5		Fishing Boat Station	
Centre Pier No. 1	130	6.3		3,000	
Centre Pier No. 2	185	7.8		15,000	
Lumber Pier	185	10.0	8.9	15,000	
East Pier No. 1	185	10.0	9.0	25,000	
East Pier No. 2	185	10.0	9.0	15,000	
East Pier No. 3	185	10.0	9.0	15,000	
Kosanhin			11.5	40,000	2 cranes
Tanker Berth N	105	6.0		3,000	
Tanker Berth L	150	6.0		2,000	

STEVEDORES: ETA, draft and hatch cargo quantities to be advised before arrival. Main bulk commodities: unloader crane (1) 150 t.p.h.; tower cranes (3) 120–130 t.p.h. and equipment.

MEDICAL: No notice required except in emergency, and attendance on Sundays/holidays.

DENSITY: 1023 – 1025.

FRESH WATER: Available from shore. 30 t.p.h.

FUEL: Domestic oil is available. Bonded oil will be brought from Moji or Hakodate, with sufficient advance notice.

GANGWAY/DECK WATCHMEN: No professional watchmen available.

OPENING/CLOSING HATCHES: Stevedores if Owner guarantees payment of operation charges.

CUSTOMS ALLOWANCES: Tobacco: Each crew member allowed to retain for his private use 200 cigarettes, 50 cigars, 250 grams of tobacco, etc. Wine/and/or Spirits: 1 bottle of liquor, to last one week.

IDENTIFICATION CARDS: Passport and/or seaman book required.

CONSULS: None.

REPAIRS: Minor repairs only.

REPATRIATION: Necessary documents to be submitted to Immigration and Customs Authorities in Naoetsu.

AIRPORT: Niigata. 2.5 hours by train. One flight per day to Tokyo.

TIME: GMT plus 9 hours. Permanent.

HOLIDAYS: No work 31st December and 1st, 2nd and 3rd January. Subject to gangs on other holidays.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 119.

TELEPHONE: No facilities for placing telephones on board.

SERVICES: Technicians for repair and/or adjustment of radar or wireless despatched from Niigata or Tokyo. Hold and/or tank cleaning operations by shorehands available, however gangs are from Niigata.

SHORE LEAVE: Crews allowed ashore within limit of Joetsu City.

DELAYS: Due to port congestion.

GENERAL: During Winter and bad weather, hire of nylon rope (100 mm.) desirable in order to avoid hull damage. Rope owned by Naoetsu Agency Association. Charge made for use.

AUTHORITY: Naoetsu Port Administration Office, 6-8, Minato-machi 1-chome, Johetsu City, Niigata Pref. *Tel:* (0255) 43-4167.

AGENT: Sub-Agents of Dodwell & Co. Ltd., Tokyo. Niigata Rinko Kairiku Unso K.K. 9-11, 2-Chome, Minato-cho, Johetsu-shi, Niigata-ken. Tel: Naoetsu (0255) 43-4207. Cable address: "Rinko Naoetsu". Telex: 03252-468 Naoetsu Kaiun Unso.

NAOSHIMA: 34.28 N. 133.58 E.

PILOTAGE: Not compulsory. Inland-sea Pilots are available at Wada-Misaki or Hesaki (off Moji).

RESTRICTIONS: Daylight berthing and unberthing only.

HEALTH: Radio Pratique not available. Vessels usually anchor at Wada-Misaki (off Kobe) or nearest quarantine port, where the authorities board and grant Free Pratique.

TUGS: None. Tugs from Mizushima are available.

BERTHING: Mitsubishi Metal Wharf: Length 180 m. Depth 10.0 m. Max. draft 10.0 m. Max. size 20,000 g.r.t.

FUEL: Domestic oil is available. Bonded oil will be brought from Kobe, when required.

FRESH WATER: Water barge will be brought from Okayama, when required (1×50 tons).

REPAIRS: Small repairs can be undertaken.

AUTHORITY: Port & Harbour Dept., Kagawa Pref., 1-10, Bancho 4-chome, Takamatsu City, Kagawa Pref. *Tel:* (0878) 31-1111.

AGENT: See "Uno".

NIIGATA: 37.54 N. 139.04 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in Transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory. Pilot embarks at Quarantine Anchorage (Lat. 37° 58′ N., Long. 139° 03′ E.) to take vessel directly to berth during daytime. All transmitting and receiving normally effected through Niigata Radio Station (call sign: JCF, Wave: 438454), or Choshi Radio Station and/or Nagasaki Radio Station. Radio ETA one week's notice and accurate ETA at least 24 hours before arrival. Notify any changes to ETA.

ANCHORAGES: Anchorage is a rectangle located N.W. of lighthouse at West breakwater at a distance of 1,600 m. covering an area of about 160,000 sq.m. Lat. 37° 57′ 37″ N., Long. 139° 04′ 00″ E. Depth: 18-24 m. Bottom: fine sand.

Safe Anchoring: Warning and instructions have been given by Niigata Harbour Master to secure safety of vessels anchoring off Niigata Port especially in Winter season, when the port is greatly affected by N.W. gale.

1. Vessels anchoring outside the breakwater within the Harbour limit must maintain their position West side of N.W. line drawn from Niigata Lighthouse (Fl. R. sec. 13 m. 12 miles) and must avoid the vicinity of the mouth of the Shinano River or Showa Oil Co.'s Sea-berth (which is connected with shore facilities by submerged pipe-lines).

2. Vessels anchoring outside the breakwater must maintain their positions in the sea area where the depth of water is 25 m. or more. This rule does not apply to vessels waiting for quarantine inspection and/or Pilot. Vessels under 10,000 gross tons should also keep a sufficient distance from shore.

3. Vessels over 10,000 gross tons with dangerous cargoes or oil anchoring outside the breakwater must advise their positions to the Harbour Master by radio.

4. Vessels anchoring outside the breakwater must keep a bridge watch unless they are equipped with radio. (According to the governing law, any vessel staying outside the breakwater is treated as a navigating vessel even if she is within the harbour limit).

5. Vessels waiting at anchorage must keep watching weather forecast. In case bad weather is reported, the following necessary actions should be taken; namely, officers on duty, confirmation of ship's position, engines on standby, the use of extra anchors, sheltering, etc.

6. In case a vessel requires shelter from N.W. wind in Winter, it is suggested that such vessel proceed to Sado Island and anchor off Morotsu Port, Akadomari Port, Sado Island South Coast or Sado Channel.

7. When approaching the entrance of the port, a vessel can be drawn too close to the East Breakwater or the shallows existing East of the port entrance by force of N.W. gale, N.E. current and river flow. Therefore, vessel must enter from N.W. of Niigata Lighthouse, approaching from Quarantine Anchorage and alter course as West Breakwater Lighthouse and Niigata Port Light Beacon are seen in a line. It is dangerous for vessel to anchor at any areas East of Shinano River.

8. Prior to arrival, Japanese Charts No. 1155A, 122 and 1197 or substitutes should be provided on board. Charts 1181, 1198 may also be needed.

RESTRICTIONS: Berthing and unberthing daytime only. Entry and/or departure at time authorised by Port Authority. Shinano fairway from port entrance to Rinko wharves, depth 11 m. to 12 m.

MAX. SIZE: *Tankers:*

Berth	*Max. d.w.t.*	*Max. LOA*	*Max. Safe Draft*
Nisseki Dolphin	36,000	207 m.	10.60 m.
SBM (Sealine Buoy)	130,000	—	17.00 m.
Rinko "B" Pier	60,000	210 m.	10.60 m.
Rinko "C" Pier	60,000	210 m.	10.60 m.
Rinko "E" Pier	25,000	165 m.	10.00 m.
East 1 Wharf	45,000	220 m.	11.80 m.
East 3 Jetty	100,000	260 m.	11.80 m.

HEALTH: Radio Pratique available. Vessels usually anchor at the point 37° 58′ N., 139° 03′ E., where the authorities board and grant Free Pratique.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Niigata:

Berth	*Max. d.w.t.*	*Max. LOA (m.)*	*Max. Draft (m.)*	*Remarks*
Rinko "A"	60,000	230	*10.40 (Winter)	1 unloader
Rinko "B"	60,000	210	10.60 (Summer)	3 cranes (coal)**
Rinko "D-1"	15,000	140	*10.40 (Winter)	3 cranes (coal) grain
Rinko "D-2"	50,000	210	10.50 (Summer)	handled at "D-2"
East Port	55,000	250	12.50	1 unloader (coal and nickel)

*Winter, 15th November – 31st March; Summer 1st April – 14th November.

**Concentrates (copper, zinc and lead) also handled.

Wharf "H"	24,000	180	9.50	Fertilisers
Wharf "F"	25,000	180	9.50	Fertiliser & grain
Wharf "G"	10,000	180	7.50	Fertilisers

Higashi: West Pier, depth alongside 12 m.

TUGS: Tugs normally join vessel at position of fairway. Towing operations are done by ship's lines. 7 tugs, 150 h.p. – 1,800 h.p.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. Westbound vessel to contact Choshi, and Northbound to contact Nagasaki Radio respectively. (Also see "Pilotage".)
CRANES: 1 × 40 ton container crane.
STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: No advance notice required unless urgent.
TANKERS: Slop (residues): No discharge facilities.
LNG Berth recently completed.

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Nisseki Dolphin	Crude Oil	1×8″, 1×10″	700/1,500
	Fuel Oil	1×8″, 1×10″	600/1,000
SBM (Showa)	Crude Oil	1×24″	3,000
Rinko "B"	Crude, Fuel	2×10″	600/1,500
Rinko "C"	Crude, Fuel	2×10″	800/1,000
Rinko "E"	Crude, Fuel	1×8″	600
East 1 Wharf	Crude	3×12″	2,000
	Fuel	3×12″	1,800
East 3 Jetty	Crude	1×28″	5,000
	Fuel	1×28″	2,000

DENSITY: Average in Rinko wharves (approx.) 1006. Average in Municipal wharves (approx.) 1005.
FRESH WATER: Available from all wharves. Cannot be supplied at anchorage during the Winter season.
FUEL: Domestic oil is available. Bonded oil will be brought from Hakodate or Moji with 7 days' advance notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.
CONSULS: None.
DRY DOCKS: No facilities for ocean going vessel.
REPATRIATION: Possible.
AIRPORT: 5 km. Round service Japan Domestic Air Line.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
HOLIDAY: 22nd August.
POLICE/AMBULANCE/FIRE: Water Police 44–2269; Ambulance Station 119; Fire Station 119; Main Police Station 110.
TELEPHONES: No facilities for telephones on board available.
SERVICES: Hold cleaning by longshoremen available.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
REGULATIONS: Oil carriers can receive bunker by oil barge and/or shoreline except when discharging cargo.
AUTHORITY: Niigata Port Administration Office, 6-3, Ryugashima 1-chome, Niigata City. *Tel:* (0252) 47-9131.
AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Niigata Rinko Kairiku Unso K.K., 2-Chome, Rinko-cho, Niigata-shi, Niigata-ken. Cable Address: Rinkokairiku Niigata. Telex: 03122501 Rinkon J., 03122502 Nrinko J. Tel.: (0252) 74-5181 & 8932, 73-2289.

NIIHAMA: 33.58 N. 133.16 E. (See Plan Book)

DOCUMENTS:	*No. of copies*
For Quarantine	
*1. Statement by Ship's Master	1
*2. Crew List	1
*3. Passenger List (if any)	1
*4. Yellow Cards for All	
*5. Derat Certificate	
For Immigration	
1. Declaration of Inward Vessel	1
*2. Passport or Seamen's Book for All	1
3. Crew List	1
4. Application for Shore Pass	
For Customs	
1. Declaration of Inward Vessel	1
*2. Crew List	1
*3. List of Tobacco	1
*4. List of Crew's Baggages	1
*5. List of Ship's Stores	1
6. Cargo Manifest (Discharging)	1
*7. Cargo Manifest (Through)	1
*8. Certificate of Ship's Registry	1
For Harbour Master	
1. Declaration of Inward Vessel	1
*2. Crew List	1
For Harbour Office	
1. Declaration of Inward Vessel	1

1. Master to telegraph ETA and Crew's Health Condition directly to Quarantine Niihama before arrival.
2.*To be prepared by Master before arrival. Others to be made up by Agent with assistance of Master on arrival.

PILOTAGE: Inland Sea Pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours' advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.
Note: VHF communication available with Inland Sea pilot stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits) Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".
2. Sekisaki, 3 miles South of Sekisaki Lighthouse (vessels transiting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot station.
3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

Inland Sea Pilotage: Pilotage at Kurushima Channel/Bisan-Seto/Akashi Channel is compulsory for ships over 10,000 g.r.t. Pilot boarding position unchanged, namely, Sekisaki/Hesaki/Wada, even if ship requires only foregoing area's service.
ANCHORAGES: Approved anchorage area just inside harbour limit. A circle drawn at a point Lat. 33° 59′ 18″ N., Long. 133° 16′ 31″ E. with radius of 430 m. where holding ground good and depth of water 12 m. – 15 m. No buoy moorings. Harbour protected by breakwater.
TIDE: (Springs) Max. 263 cm.; min. –9 cm. (Neaps) max. 182 cm.; min. 136 cm.
RESTRICTIONS: Pilot does not take vessel in during darkness. Vessel has to wait if depth during LW 8.50 m. is insufficient to pass channel.
MAX. SIZE: See "Berthing".
HEALTH: Quarantine Inspectors go aboard during day. Master to keep waste until Quarantine inspected in event of any suspected disease or fever on board after entered Japan.
RADIO: Choshi Radio, Nagasaki Radio.
TUG: Joins vessel at Quarantine Anchorage or Section II, always using tug's lines without charge. "Niihama Maru" 700 h.p. If more powerful tugs required, can be obtained from Matsuyama or Mizushima.
BERTHING: Harbour Pilot operates during day.

Berth	*Length*	*Depth*	*Berthing Restrictions*
"A"	Anchorage	8.0 m.	Draft 8.0 m. LOA 120 m.
"B"	Anchorage	9.3 m.	Draft 9.0 m. LOA 165 m.
"B-3" Wharf	103 m.	10.0 m.	Draft 9.5 m. LOA 170 m.
"K-4" Wharf	120 m.	9.1 m.	Draft 9.0 m. LOA 160 m.
"K-6" Wharf	200 m.	14.0 m.	Draft 13.0 m. LOA 250 m.
Kuroshima Buoy	Anchorage	11.0 m.	10,000 d.w.t. or less
"N-4" Wharf	80 m.	7.0 m.	Draft 7.5 m. LOA 110 m.
"N-8" Wharf	110 m.	9.3 m.	Draft 9.0 m. LOA 150 m.
Juki	85 m.	5.0 m.	Draft 5.0 m. LOA 100 m.

Berth A: Public berth for general purposes, no buoy, just anchorage. However, vessel anchoring at this berth sometimes ordered by port authority to shift in order vessel approaching or leaving berth No. 4 may pass.

Berth B: Vessel moors stern to wharf with 2 anchors about 4 shackles each.

CRANES:

Berth "B3"	2× 5 tons
Berth "K4"	3× 5 tons
Berth "K6"	2×25 tons

One 250-ton and one 50-ton floating crane.

LOADING/DISCHARGE RATES:
Average rate of Discharging Cargo:

Alumina	150 – 170 t.p.h. by pneumatic apparatus
Anthracite coal	50 – 70 t.p.h. by ship's gear
Bauxite	700 – 800 t.p.h. by 2 shore cranes
Chemical Oil	200 – 250 t.p.h. by ship's pump
Copper Concentrates	70 – 100 t.p.h. by ship's gear 130 – 150 t.p.h. by shore crane
Logs	600,000 – 800,000 BFM/day by ship's gear
Nickel Concentrates	70 – 90 t.p.h. by ship's gear 130 – 150 t.p.h. by shore crane
Phosphate	70 – 90 t.p.h. by ship's gear
Potash	40 – 60 t.p.h. by ship's gear
Salt in bulk	50 – 70 t.p.h. by ship's gear 80 – 100 t.p.h. by shore crane

Average Rate of Loading Cargo:

Alumina in bag	50 – 60 t.p.h.	by ship's gear
Alumina in bulk	170 – 180 t.p.h.	by pneumatic apparatus
Ammonium Nitrate	50 – 60 t.p.h.	by ship's gear
Anode Paste	100 – 120 t.p.h.	by shore crane
Fertiliser in bag	50 – 60 t.p.h.	by ship's gear
Fertiliser in bulk	80 – 100 t.p.h.	by ship's gear

MEDICAL: Hospitals and medical facilities available weekdays only.

TANKERS: No facilities for oil carriers.

DENSITY: Entrance 1023 (rate of tide, 1 knot); channel 1022; anchorage 1021.

FUEL: Bunkers in bond available from main ports or oil stations in tranship. 2 days' notice.

FRESH WATER: Water is available from the berths "K-4" and "K-6" only after normal working hours – 10 t.p.h. Water is not available from any other berths. A 70 ton barge is available, it can supply 300 tons per day.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Stevedores.

CUSTOMS ALLOWANCES: Only 50 cigarettes to take ashore. No spirits.

CARGO GEAR: Valid Cargo Gear Certificate sometimes required by stevedores when cargo gear maintenance appears to be poor.

CONSULS: None. Nearest in Kobe.

REPAIRS: Minor repairs only. Main engine piston overhauling possible.

DRY DOCKS: None. For nearest see "Matsuyama".

REPATRIATION: Arranged by Agent.

AIRPORT: None. Nearest at Matsuyama and Takamatsu. All Nippon Airways – 11 flights per day to Osaka and one to Tokyo.

TIME: GMT plus 9 hours. Permanent.

HOLIDAYS: National Holidays: New Year's Day, January 1st; Adult's Day, January 15th; Foundation Day, February 11th; Vernal Equinox Day, March 21st; Emperor's Birthday, April 29th; Constitution Memorial Day, May 3rd; Children's Day, May 5th; Respect-for-age Day, September 15th; Autumnal Equinox Day, September 24th; Physical Culture Day, October 10th; Culture Day, November 3rd; Labour Thanksgiving Day, November 23rd.

Local holidays: New Year's Day (Lunar Calendar), January 30th; May Day, May 1st; Memorial Day of the Sea, July 20th; Bon Festival (Lunar Calendar), August 8th; Autumnal Festival, October 16th-18th.

Vessels may enter/leave *except* January 1st, and cargo work can be done as usual at overtime rates on above national/local holidays *except* for *Niihama* December 31, January 1, 2, 3, and October 17, 18.

Vessels may enter/leave port at overtime rates and cargo work will be done up to 1700 hrs. (daytime) against surcharges.

No cargo will be handled: *Niihama* December 31, January 1, 2, 3, and October 17, 18. No ship's movement (as well as cargo handling) can be done on January 1st.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 119.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: *Quarantine:* Hiroshima Quarantine Office, Niihama Detached Office, Nishibara-cho, Niihama, tel. Niihama 32-3966.

Customs: Kobe Customs, Niihama Branch Customs, Nishibara-cho, Niihama, tel. Niihama 32-3405.

Immigration: Niihama Port Station, Takamatsu Immigration Office, Nishibara-cho, Niihama, tel. Niihama 32-2672.

Maritime Bureau: Sanbashi-dori, Niihama, tel. Niihama 32-2855.

Maritime Safety Agency: Nishibara-cho, Niihama, tel. Niihama 33-0055.

Emergency Procedure: No Harbour Master radio available, therefore cable Agent. Telephone sub-agent since one person will be in attendance even during night, who in turn will contact person in charge.

Salvage: No salvage tug stationed, nearest from Kure.

SHORE LEAVE: Crew allowed ashore with pass.

DEVELOPMENTS: Sumitomo Chemical Co. Ltd., Kikumoto Works, intend to make another Bauxite berth available for large size vessel (suitable for vessels up to 50,000 d.w.t.).

Sumitomo Metal Mining Co. Ltd., Niihama reclaiming land adjacent to Western harbour limit of port of Niihama to construct additional refinery for producing copper with a berth for 25,000 ton vessel to discharge copper concentrate. Final date of completion unknown.

AUTHORITY: Niihama Marine Safety Agency, Nishibara-Cho, Niihama. *Tel:* (0897) 32-3405. *Contact:* Port Captain.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Sumitomo Warehouse Co. Ltd., 2-5, Sobiraki-cho, Niihama-shi, Ehime-ken. Cable Address: Sumitomosoko Niihama. Domestic Telex: 0584-4432. Tel: Niihama (0897) 37-1101.

NISHIHARA (Buckner Bay), Okinawa: 26.14 N. 127.50 E. (See Plan Book)

LOCATION: The Nansei Sekiyu Ltd. Refinery is located in Nishihara village on the East coast of Okinawa, towards the Southern end of Nakagusuku Bay (Buckner Bay). Also see "Max. Size". There is also a Nihon Sekiyu Terminal SBM about 2 miles NNW of the NSS SALM. (Withdrawn 1980, area safe for navigation).

DOCUMENTS:

3 Manifests
6 Crew Lists
1 Passenger List
1 Store List
1 Personal Effects List
} For Customs, Quarantine and Agents' Use.
Ship's Register
International Loadline Certificate
Safety Equipment Certificate
Derat Examination Certificate
Last Port Clearance.

Each Crew member will be issued with an Official Pass, which must be returned prior to vessel sailing.

PILOTAGE: Normally vessels will be expected to enter Nakagusuku Bay through entrance marked Tatsu Kuchi, and pick up Berthing Master inside bay – South of Tsuken Jima. Inside bay Berthing Master requests that vessel keeps South of buoy marking Chikunigaa Shoal. Berthing shall be carried out at day time only.

A safe convenient pilot ladder is to be provided for the Berthing Master. Berthing Master stays aboard vessel throughout discharge, except vessel berthed at the pier.

ANCHORAGES: Navigation and anchorage in the waters near the NSS product pier and crude berth will in so far as possible be restricted to those ships directed into these waters by Berthing Master. In the interests of safety, ships will not enter the restricted area unless so directed by Berthing Master. The restricted area is within the following boundaries:

Beginning at a point described as 26° 13′ 33.88″ N. 127° 47′ 30.24″ E.; thence running S. 60° 00′ 00″ E., a distance of 200 m. to an angle point described as 26° 13′ 30.62″ N., 127° 47′ 36.48″ E.; thence running S. 35° 40′ 45″ E., a distance of 1,170 m. to an angle point described as 26° 12′ 59.69″ N. 127° 48′ 00.98″ E.; thence running N. 45° E., a distance of 3,350 m. to a point on the circumference of a circle described as 26° 14′ 20″ N., 127° 49′ 30″ E.; thence running to the right a distance of 3,170 m. along said circumference, which is described by a radius of 1,060 m. with its centre located at 26° 13′ 56.18″ N., 127° 50′ 00.00″ E. to a point on the circumference described as 26° 13′ 30″ N., 127° 50′ 22″ E., thence running S. 48° W. a distance of 1,780 m. to the Nakasone buoy located at 26° 12′ 54.2″ N., 127° 49′ 37.5″ E., thence running S. 53° W. a distance of 1,940 m. to the Wara reef located at 26° 12′ 17.7″ N., 127° 48′ 45.0″ E., thence running W. 18° N. a distance of 2,810 m. to a buoy located at 26° 12′ 44″ N., 127° 47′ 07″ E., thence running N. 17° W. a distance of 710 m. to a point at 26° 12′ 46.42″ N., 127° 47′ 56.61″ E.

MAX. SIZE: For crude vessels a single point mooring (SALM – Single Anchor Leg Type Mooring), capable of handling vessels from 90,000 d.w.t. to 270,000 d.w.t. is established in approximate position Lat. 26° 14′ N. Long. 127° 50′ E., about 2.5 miles offshore.

Products are shipped from a pier connected to the shore – the pier has 2 berths, one for vessels up to 65,000 d.w.t. and one for small vessels up to 4,000 d.w.t.

PRATIQUE: Port Officials will board the vessel after berthing.

TUGS: 2 tugs and a launch are available for assisting with mooring and unmooring. The Berthing Master in consultation with the Master will decide the number of tugs required for the berthing operation and for standby during the time at berth.

CRUDE BERTH: Single buoy mooring with vessel secured by 2 heavy polypropylene lines from buoy. Lines connected to chains through bow mooring lead and secured inboard. Chains secured direct to Brega Pin or by double mooring wire or mooring rope (polypropylene 8 in. or over) to bollards, port and starboard side of forecastle head. There is 72 ft. of water at buoy position. Vessels may remain in berth in winds of up to 50 m.p.h.

Floating hoses: 2×24 in. into 2×20 in. connected to 2×16 in. are connected on vessel's port side. There is a 42 in. line from buoy to shore. The maximum pumping rate is 75,000 b.p.h.

PRODUCT PIER: A 110° – 290° orientated pier allows tankers to approach the berth in a ballasted condition in either of 2 opposite directions. Vessels of 4,000 d.w.t. size and above will be handled at Berth No. 1 and smaller vessels at Berth No. 2

The water depth at the pier is approximately 47 ft. The extreme tidal variation is +7.9 ft. to −1.0 ft. and maximum storm tide will add approximately 3 ft. The maximum current is less than 1 knot.

Berth No. 1 is equipped with 1×16 in. loading arm for clean products and 2×16 in. loading arms for dark products. Each of these all-metal hydraulically controlled loading arms is fitted with a remotely operated coupling device to connect to a nominal 10 in. ASA, DIN or BS flanged connection without bolting.

Berth No. 2 is equipped with 2×6 in. loading arm for dark and clean products. These arms are part metal, part hose and are fitted with flanges to be bolted to a nominal 6 in. ASA, DIN or BS flanged connection.

Bunker fuel is available at both berths through meters and 4 in. hose connections. Each berth is provided with a gangway.

Vessels will deballast through the loading arms into a 24 in. ballast water line leading to refinery tankage. Under no circumstances should vessel discharge any ballast water directly into the bay.

Fire protection at the pier consists of a foam concentrate tank and proportioning pump, a fire water pump and distribution system, fixed combination water-foam monitors and air-foam play-pipes.

RADIO: Crude vessels discharging at Nishihara should report ETA at pilot station (Lat. 26° 13′ N., Long. 127° 52′ E.) 72, 48, 24 and 12 hours prior arrival. Berthing instructions and time of Pilot boarding will be relayed by a telegraph appointed Agent. Refinery has no VHF radio.

Weather reports essential – particularly during typhoon season. Naha Radio – JCX medium wave 500 kHz. Traffic lists broadcast at odd hours GMT. Short wave 6470 kHz, traffic lists broadcast at even hours GMT.

OIL POLLUTION WARNING: We wish to alert all vessels entering this port of the extreme sensitivity on the part of the community and governmental authorities regarding any incident involving oil pollution of the seas. Any oil spill, regardless of size, is considered a criminal act, and offenders are dealt with accordingly. We urge all vessels to make complete pre-arrival checks for cargo and ballast system tightness, and to strictly adhere to all pollution prevention practices, procedures and policies while discharging or deballasting at this port. Officers and crews should be extremely alert during all phases of vessel operation for potential oil spill risks and seek assistance from shore representatives should any unusual risk arise.

TIME: GMT plus 9 hours. Summertime is not used. All ETAs and other messages should be made in local time.

SHORE LEAVE: Shore leave is permitted – launch service may be arranged but is at vessel's expense.

No person will be given permission to enter the refinery unless they are in the microbus which will be provided by ship's Agent.

AUTHORITY: Nansei Sekiyu K.K., 858 Aza Onaha, Nishihara-Cho, Okinawa, 903-01 Japan. Postal Address: P.O.Box 525, Naha, Okinawa, 900-91 Japan. *Tel:* 098995 – 2831 – 8.

Captain of the Port: Kin-Nakagusuku, 46 Soeishi, Nakagusuku-Son, Okinawa, Japan. *Tel:* 098895 – 4874.

OFUNATO: 39.03 N. 141.44 E. (See Plan Book)

DOCUMENTS:

- Ship's Register.
- Last Port Clearance.
- 3 Crew Lists including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory but recommended as many fishing obstructions in the harbour. Pilot boards about two miles from entrance of Ofunato Bay, Lat. 39° 00.2′ N., Long. 141° 45.5′ E. but for vessels less than 10,000 g.r.t. Pilot boards in Quarantine Anchorage where depth 35 m. (but not after dark). Master must radio vessel's Agent of ETA 24 hours in advance, because neither telegraphic address of pilot station nor VHF available.

ANCHORAGES: Not suitable in stormy weather. Depth of water at anchorage 30 m. to 40 m. Quarantine Anchorage located between radius 500 m. of Lat. 38° 59′ N., Long. 141° 48′ E.

RESTRICTIONS: Depth of water at entrance of passage 14 m., oil tanker's draft restricted to 9.0 m. and draft of log and coke carriers restricted to 8 m. Depth of water alongside wharf 9 m. at mean level.

MAX. SIZE: *Tankers:* Kamei Oil Piers Max. d.w.t. 35,000. Max. LOA, 210 m. Max. Safe draft 9.0 m.

Log and Coke Carriers: Max. LOA 180 m., max. draft 8.0 m. Tidal range 1 m. – 1.4 m.

HEALTH: Radio Pratique available. Formalities carried out at the anchorage.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically West bound vessel to contact Choshi and North bound to contact Nagasaki Radio respectively.

TUGS: Small tugs 800 h.p. and 600 h.p. available. Large tugs (2,400 h.p.) can be arranged from Kamaishi with advance notice, they usually join vessel about 400 m. in front of jetty and discharging wharf. Ship's lines used if necessary.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gears not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 –0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: One tanker berth. Product handled, Diesel Oil. Shoreline, 8″×2. Discharge rate, 800 t.p.h.

DENSITY: Average density 1020.

FRESH WATER: Available from shore. Supply 10 t.p.h. – 15 t.p.h.

FUEL: Domestic oil is available. Bonded oil will be brought from Yokohama or Hakodate, with sufficient advance notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: None.

REPAIRS: Minor deck and engine repairs available.

DRY DOCKS: None.

REPATRIATION: Possible.

AIRPORT: Hanamaki Airport about 97 km. from Ofunato. TOA Domestic Air Lines (TDA); 2 flights between Hanamaki/Tokyo every day, 2 flights between Hanamaki/Osaka every day and 1 flight between Hanamaki/Sapparo every day.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: Discharging ex-gearless vessel at wharf not available, because no shore crane for discharge.

SERVICES: Surveyor: NKKK and Kentei Shin Nihonsha. Hold and tank cleaning. Provisions/laundry/water. Bunker: Domestic diesel available.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days; 3 days' extension possible if ship stays longer.

AUTHORITY: Port & Harbour Department, Iwate Prefecture Government, 10-1, Uchimari, Morioka City, Iwate Pref., 020 Japan. *Tel:* 0196-51-3111. *Contact:* Masanao Takeda, Director, Port & Harbour Department.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Morita & Co. Ltd., No. 108 Chayamae, Ofunato-cho, Ofunato-shi, Iwate-ken. Cable Address: Morita Ofunato. Domestic Telex: 8382-32. Tel.: (01922) 6-5131. Postal No. 022.

OITA: 33.17 N. 131.40 E. (See Plan Book)

DOCUMENTS: When ship arrives direct from foreign port, Customs Officials will board the vessel to search. The following documents are to be submitted:–

- Crew List.
- Passenger List.
- Store List
- Declaration of Crew's baggage. (Must be signed by individual Crew member).
- Arms and Ammunition List.
- Narcotics List.
- List of Ports of Call on Current Voyage.
- Discharging Cargo Manifest.
- Through Cargo Manifest.
- Declaration Inward/Outward (Form No. C2000).

The following will be checked on board:–

- Ship's Registry.
- Last Port Clearance.

When ship comes from Japanese port, Customs Officials will not attend on board, except special case. The Master or Agents are to attend at Customs House for entry formalities with the following documents:–

- Discharging cargo Manifest.
- Through cargo manifest.
- Declaration Inward/Outward.
- Ship's Registry.
- Last Port Clearance.
- Documents entrusted with the Master by Customs at previous Port.
- Store List.

On ship's departure, a clearance is issued by Customs, after confirming payment of tonnage dues.

No Customs house open outside office hours except when advance notice given.

Immigration: Immigration Officials board vessel on her arrival in port to examine passports, discharge books and or other equivalent travel documents and provide 72-hour landing passes for Crew members and passengers. 2 copies each of crew list and passenger list are required by them. Providing ship's Agents with a crew list beforehand will be a great help in expediting Immigration business on ship's arrival. When ship stays in port more than 72 hours, the landing passes may be extended every 72 hours on application.

In the event that Crew members, without entry visas, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hours) of these men have been booked, or unless the ships to which they are to be transferred, arrive in Japan within 5 days.

PILOTAGE: Harbour pilotage not compulsory. It is compulsory for vessels over 10,000 g.r.t. to take a Pilot in the Inland Sea.

Request must be made at least 24 hours in advance and Pilot should be kept closely advised of vessel's accurate ETA at pilot station. If there is any change in vessel's movements, the Master is requested to immediately radio to the pilot office directly or through Agents reporting the revised ETA. The cable address of the pilot office is "Anjin Moji".

ANCHORAGES:

No.	Depth (m.)	Capacity (g.r.t.)	Position	Remarks
No. 1	37–38	Under 20,000	33° 16′ 26″ N. 131° 38′ 44″ E.	Within radius of 100 m.
(265°, 3,400 m. from Tsurusaki Hakuchi Breakwater East Lighthouse "A" point).				
No. 2	52–53	Over 100,000	33° 17′ 09″ N. 131° 42′ 00″ E.	680 m. to No. 3 Buoy
(59°, 1,960 m. from "A" point).				
No. 3	48–50	50,000/100,000	33° 17′ 04″ N. 131° 42′ 26″ E.	590 m. to No. 4 Buoy
(70°, 2,490 m. from "A" point).				
No. 4	45–46	20,000/50,000	33° 16′ 52″ N. 131° 42′ 44″ E.	630 m. to No. 5 Buoy Draft up to 15 m.
(80°, 2,870 m. from "A" point).				
No. 5	35–40	Under 30,000	33° 16′ 40″ N. 131° 43′ 03″ E.	580 m. to No. 6 Buoy Draft up to 13 m.
(88°, 3,300 m. from "A" point).				
No. 6	35	Under 30,000	33° 16′ 29″ N. 131° 43′ 22″ E.	Draft up to 10 m.
(93°, 3,800 m. from "A" point).				
Shin Nittetsu Anchorage		5,000×3 3,000×3	The sea area circumscribed by the lines connecting the following points end to end: 1. The point "A", 278°, 1,310 m. from the Otozu Breakwater West lighthouse in Oita Harbour. 2. The point, 249°, 1,200 m. from "A". 3. The point, 219°, 170 m. from "A". 4. The point, 330°, 550 m. from "A".	Draft 6 m. – 40 m.
Quarantine Anchorage	25–43 m.		The sea area circumscribed by the following lines: The line that connects the point "A", 227°, 11,550 m. from the Sekisaki lighthouse with the point, 180°, 1,500 m. from "A"; a second line that connects the same with the point 260° 2,100 m. from it; a third that connects the same with the point, 0°, 1,300 m. from it and a fourth that connects the same with "A".	

*It is necessary to obtain permission from Harbour before vessel's arrival.

RESTRICTIONS:

Berthing: During daytime only.

Departure: Night departure from wharves in generally impracticable, except vessels at Sea-berth and Seihin berth can depart up to 2000 hrs. However, this will depend upon condition of weather, etc.

MAX. SIZE: See "Berthing" and "Tankers".

HEALTH:

(a) Quarantine Station: Lat: 33° 16′ 00″ N., Long: 131° 46′ 00″ E.

(b) Quarantine inspection is not allowed inside port except when weather or other special reasons prevent the quarantine boat from approaching ship at anchorage.

Quarantine is effected in berth for a vessel more than 3,000 g.r.t., provided the vessel possesses valid (i) derat exemption/fumigation certificate. (ii) all crew/passengers are healthy. (Radio message from ship's Master for these items are required 2 days in advance).

(c) Quarantine service is rendered from sunrise to 1 hour before sunset.

(d) "Q" flag should be hoisted until ship has free pratique.

(e) When ship arrives from plague infected or suspected area within 10 days after she left such place, a 24 hour special quarantine is required.

All sanitary outlets must be closed and garbage must not be thrown overboard after ship reaches 60 miles off Japanese Coast.

(f) Radio Free Pratique possible.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

VHF: Vessel can keep in direct contact with port authorities in regard to their arrival, berthing instructions also Pilot's requirements, etc., through VHF, the details of which are as follows:–

(a) Call sign: Oita Port Radio.

(b) Location of radio facilities: The transmitting and receiving station is located at the top of Mount Tohmiyama, Saganoseki (Sekisaki)

(c) Channel: Simplex 16 (Calling)
12 (Communicating)
14 (Communicating)
Antenna power: 50 W.

(d) Operating Hours: 0000–2400 hrs.

(e) Communicating range: Within a radius of 100 km. from the station at sea.

MEDICAL: Hospitals available. No advance notice required unless urgent.

TUGS: Operator: Oita Rinkai Kogyo.

Tug	g.r.t.	H.P.
*Yuhi Maru	276	3,200 Schneider
*Kakuho Maru	199	3,500 C.P.P. Kort Nozzle
*Ryusei Maru	199	2,400 Z-Peller.
Udo Maru	141	2,000
Morita Maru	177	2,000
*Hikita Maru	274	3,200 Z-Peller
*Daiho Maru	293	3,200 Z-Peller
Nagata Maru		3,000

It is a practice to use tug's line for berthing/unberthing.

*Fire extinguishing apparatus equipped.

Kyushu Oil Co. own a special boat equipped with an extinguisher system and station same when a tanker berthing/unberthing at their expense.

BERTHING:

Wharf	*Length berth (m.)*	*Max. LOA (m.)*	*Max. Safe Draft (m.)*	*Capacity (d.w.t.)*	*Public or Private*
Sumiyoshi					
No. 1	185	160	9.10	15,000×1	Public
No. 2	185	160	9.20	15,000×1	Public
(Larger size vessels can be accommodated at Nos. 1–2 wharves, using 2 berths)					
Otozu:					
E–3	240	200	11	Under 30,000	Private (Nippon Steel Corp.)
E–4	200	170	11	Under 30,000	
E–5	200	170	12	Under 35,000	,, ,,
E–6	200	170	12	Under 35,000	,, ,,
E–7	200	170	12	Under 35,000	,, ,,

(Larger size vessels (max. 50,000 d.w.t. and 250 m. LOA) can be accommodated at the wharves, using 2 berths).

Control tower for vessel's entry/departure to and from Otozu Hakuchi is located at the end of Otozu Hakuchi, close by lighthouse.

Sea Berths:

Wharf	*Length berth (m.)*	*Max. LOA (m.)*	*Max. Safe Draft (m.)*	*Capacity (d.w.t.)*	*Public or Private*
N–1	310 (plus 125 m. dolphin)	350	22	50,000/200,000	Private (N.S.C.)
N–2	310 (plus 140 m. dolphin)	350	25	5,000/300,000	Private (N.S.C.)
N–3	350 (plus 140 m. dolphin)	350	22	50,000/100,000	Private (N.S.C.)
N–4	210	180	20	5,000/30,000	Private (N.S.C.)

STEVEDORES: *Stevedoring Companies:*

Nippon Express Co. – maximum 4 gangs are available.
(at Sumiyoshi public wharves – Tsurusaki Kairiku Unyu – maximum 4 gangs are available)

Hirohata Kaiun Kaisha – maximum 2 gangs are available for loading steel products (for export) at Nippon Steel Corp.

Tsurusaki Kairiku Unyu – maximum 2 gangs are available for loading steel products (for export).

Nippon Express Co. – maximum 2 gangs are available for discharge steel scrap and pig iron.

Kamigumi Co. – 3 gangs are available for discharging iron ore/coal.

Working Hours:

(a) At Sumiyoshi public wharves: 0800 to 1700 hrs. (No work on Sundays and holidays. No work can be arranged New Year's holidays).

(b) At Nippon Steel Works (coal/iron ore) 3 shifts, 0600 – 1400, 1400 – 2200, 2200 – 0600 hrs.

At Nippon Steel Works (loading steel products) 3 shifts/actual nett working:

1. 0700 – 1100 hrs. meal 1100 – 1145 hrs.
   1145 – 1500 hrs. oiling crane: 0700 – 0715 hrs. 7.00 hrs.
2. 1500 – 1800 hrs. meal 1800 – 1845 hrs.
   1845 – 2215 hrs. oiling crane: 1500 – 1515 hrs. 6.15 hrs.
   2215 – 0200 hrs. meal 0200 – 0245 hrs
3. 0245 – 0700 hrs. oiling crane: 2215 – 2230 hrs. 7.45 hrs.

21.00 hrs.

Average loading/discharging rates:

Bulk cargo:

Iron Ore (sinter)	1600 t.p.h./crane/hatch (dis.)
Coal	1300 t.p.h./crane/hatch (dis.)
Steel Scrap:	1000 tons per day per crane (dis.)
Pig Iron:	2700 tons per day per crane (dis.)
Logs:	30 t.p.h./gang/hatch (dis.)
Steel Cargo: HR. Coil	200 t.p.h./gang/hatch (load)

CRANES:

Shore cranes:

1. Sumiyoshi public wharves — no crane available.
2. N.S.C. loading wharves — 50 t×1, 30 t×3, 20 t×3: (for HR. Coil)
   — 50 t×1, 35 t×1: (for M.S. Plate)
3. N.S.C. Sea-Berth — 81 t×3

Floating Crane: 40 tons capacity available.

FRESH WATER: Good fresh water is supplied from hydrants to vessel alongside wharves. The rate of delivery:

At Sea-Berth 30/50 t.p.h. hydrants every 103 m. (12 hydrants).

At Otozu Wharf: 35/45 t.p.h. hydrants are every 50 m. (21 hydrants).

At Sumiyoshi Public Wharf: 25/30 t.p.h. hydrants every 100 m. (3 hydrants).

At Kyushu Oil Jetty: 25/30 t.p.h. only 1 hydrant is available. 1 day's advance notice required.

At Showa Yuka 70,000 d.w.t. Naphtha Berth: 25/30 t.p.h. 1 hydrant available. 1 day's advance notice required.

Oil barge (tank separated for fresh water) of 40 tons capacity available for emergency case.

TANKERS: Private berths: 24 hours operations.

Kyushu Oil Jetty (Dolphin Style):
Length of berth 480 m, max. LOA 350 m., Max. draft 19.50 m. Capacity 60,000/270,000 d.w.t.

A submarine type rubber oil fence is stretched around the berth.

5 unloading arms are installed on the unloading platform and can be connected directly to ship's manifold. 4 of these unloading arms are 12 in. diameter and used for discharging crude oil.

The other arm is 12 in. in diameter and used for fuel/diesel oil. Nominal capacity for discharging crude oil is 10,000 Kl/hr. and for fuel/diesel oil, 1,000 Kl/hr.

Following information required 3 days before arrival: Manifolds, type, size, number and distance between, also pump capacity.

Showa Denko Naphtha Berth: (Dolphin) Length of berth 400 m. max. LOA 300 m. Max. draft 15 m. Capacity 5,000/70,000 d.w.t.. Product handled – Naphtha. Rubber oil fence provided at berth. 2×12 in. lines, rate 3,000 Kl/hr. LPG also handled.

DENSITY: (Average):
1023 in Summer season at Sumiyoshi.
1023 in Summer season at Sea-Berth.
1021/1023 in Summer season at Otozu Hakuchi.
1024 in Winter season at Sumiyoshi.
1025 in Winter season at Sea-Berth.
1021/1025 in Winter season at Otozu.

FUEL: Bonded bunkers supplied by oil barges (except vessel at Kyushu Oil Jetty where rate of delivery is 450 Kl/hr).

The rate of delivery: 200/500 t.p.h.

Suppliers	*Delivery agents*	*Installation*
Shell Sekiyu K.K.	Ueno Unyu	Shimonoseki
Esso Oil Co.	Nisshin Tanker	Shimonoseki
Mobil Oil Co.	Nisshin Tanker	Shimonoseki/Oita
Caltex Oil Co.	Shimazu Kaiun	Shimonoseki/Oita
Mitsubishi Shoji	Sanem Shoji	Mutsure/Iwakuni Kanokawa
Mitsui & Co.	Chikko Kogyo	Oita
C. Itoh & Co.	Asahi Tanker	Matsuyama
	Chikko Kogyo	Oita
Nissho-Iwai Co.	Nisshin Tanker	Mutsure Matsuyama
Nippon Mining Co.	Nippon Tanker	Mizushima
Idemitsu & Co. Sumitomo Shoji Marubeni Corp.	Asahi Tanker	Tokuyama
Kanematsu-Gosho Co.	Nagai Kaiun	Kokura
	Asahi Tanker	Tokuyama

Fuelling is permitted only during the hours of daytime, observing as always the strict precautions against oil spills into the harbour.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board. Available from Moji.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: None.

REPAIRS: 2 companies available.

DRY DOCKS: None.

SURVEYORS:

(a) Classification survey association:

Nippon Kaiji Kyokai	(Moji)
Lloyd's Register of Shipping	(Nagasaki or Shimonoseki)
American Bureau of Shipping	(Shimonoseki)
Bureau Veritas	(Fukuoka)
Norske Veritas	(Kobe)

(b) Cargo survey association:

Lloyd's Agents	093–331–1311
Nippon Kaiji Kentei Kyokai NKKK	58–3951
Shin Nippon Kentei Kyokai	27–4111
Far East Superintendence Co., Ltd.	58–9225
Japan Inspection Co.	58–7020

REPATRIATION: See "Documents – Immigration".

TIME: GMT plus 9 hours. No alteration made to clocks during year.

POLICE/AMBULANCE/FIRE: Police tel. 110; Ambulance and Fire 119.

TELEPHONES: No telephones can be placed on board.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

According to new Customs regulation, ship's crew members are requested to land ashore by designated Micro bus or launch from ship at Sea-berth and by launch from ship at Seihin wharves via Customs house.

AIRPORT: Oita Airport: approx. 56 km. to the airport via land. Approx. 16 miles to the airport via sea (hovercraft). Hovercrafts run between Oita City and the New Oita airport. Domestic line only, Toa Domestic Airlines and All Nippon Airways.

GENERAL: *Japan Maritime Disaster Prevention Centre:*
Tsurusaki Kairiku Unyiu K.K. are appointed by the Japan Maritime Disaster Prevention Centre as base for stock piling and use of the materials for removal of discharged oil.

Restrictions: It is prohibited to pump out bilges, to throw overboard sweepings, waste or garbage of any kind and cleaning dust out of holds, whilst the vessel is in port or in pilotage waters according to regulations. Also, not permitted to wash ship's deck and painting ship's outside shell platings.

Services: The following are available: Laundry, hold cleaning, fumigation, deck and engine stores, provisions, dunnage, Japanese charts (HO and BA charts available from Yokohama and Kobe respectively with adequate notice.).

DEVELOPMENTS: Land reclamation continues in 3 areas. Public wharves as well as private wharves will be constructed.

AUTHORITY: Shin Sangyotoshi Kaihatsu-Kyoku, Ohita Pref., 3-33, Mukaibaru Nishi 1-chome, Ohita City *Tel:* (0975) 58-5111.

AGENT: Sub-Agents of Dodwell & Co. Ltd., Tokyo. Tsurusaki Kairiku Unyu K.K., 1000, Oaza Misa, Oita City, Japan. Postal Code 870-01. Tel. 0975–21–6111/9. Cables: Tsurukai Oita. Telex: 07723-89.

OMISHIMA (Ohmishima), Inokuchi Port:

34.16 N. 133.00 E.

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.

1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea pilots also act as harbour pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits). Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse (vessels transiting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki Pilot Station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat. 33° 56′ 24′ N. Long. 131° 03′ 12″ E.

ANCHORAGES: Omishima Island located at centre of the Inland Sea and lies between Ehime and Hiroshima prefectures. Eastern part of island, Inokuchi surrounded by deep water where holding ground good. Oil company located at Inokuchi. No strong winds.

RESTRICTIONS: No restriction on entry; however mooring and unmooring to be carried out during daytime, regardless of tide and current.

MAX. SIZE: *Tankers:* Maruzen Ohmishima Oil Jetty: Length 140 m. Depth 9.0 m. Coastal tankers of 3,000 g.r.t. allowed to berth. Berth designed to accept max. 7,000 d.w.t.

HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from day-light to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Join vessel at sea anchorage, always using tug's line without charge.

TANKERS: No advance information of loading/discharge lines required. No loading facility. Only one berth available for discharge. Product handled, fuel oil. Shoreline, 1×10 in. Discharge rate, 400 t.p.h.

DENSITY: Anchorage 1025. Berth 1025.

FRESH WATER: Not available but usually brought by barge from Onomichi (about 3 hours run to Omishima). Rate of delivery 80 tons to 200 tons per hour which depends on barge.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CONSULS: No consuls. Nearest Consulates are in Kobe.

REPAIRS: Minor repairs only.

REPATRIATION: Possible.

AIRPORT: Nearest at Matsuyama and Takamatsu.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119.
TELEPHONES: Not available.
GENERAL: Closed port. To conform with regulations vessel obtains special permission from Maritime Bureau and Customs at Takamatsu to enter.

Customs request vessels calling Omishima to obtain permission to enter at preceding port of call by paying charge at same rate of tonnage dues prior to arrival. This procedure undertaken by Agent. No Quarantine Station, nearest at Matsuyama. Immigration Officer comes from Niihama.
SHORE LEAVE: Immigration issue shore passes valid for 7 days if vessel only calling at one port in Japan or 15 days if vessel calling at more than 2 ports in Japan, further extension possible.
AUTHORITY: Imabari Marine Safety Agency. *Tel:* (0898) 32-0708.

AGENT: See "Niihama".

ONAHAMA (Iwaki City): 36.56 N. 140.55 E.

The port is protected by breakwater, 7,910 m. long and is open to the South.
DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 4 Crew Lists including Passport Numbers.
- 4 Passenger Lists including Passport Numbers.
- 1 Stores List.
- 1 Declaration of Crew's baggage, i.e. tobacco wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in Transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: No means of communication with Pilots and vessels should arrange pilotage by advising Agent of ETA. Not compulsory; Pilots are available at the anchorage (Lat. 36° 53′ 05″ N., Long. 140° 54′ E.) for vessels requiring Pilot services.

For Tankers at Lat. 36° 52′ 05″ N., Long. 140° 54′ 00″ E.
ANCHORAGES: Just outside No. 1 West Breakwater. Depth of water 14 m. – 22 m.
RESTRICTIONS: Restriction only by ship's draft. Depths of water alongside wharves 9 m. and 10 m. at low tide, and rise of tide is about 1.40 m. highest. Berthing daylight only. Unberthing at Pilot's option.
MAX. SIZE: *Tankers:* Sea Berth: Max. 80,000 d.w.t. Depth 15.0 m. Max. safe draft, 13.50 m. (Also see "Berthing").
HEALTH: Radio Pratique available. Formalities will be carried out at anchorage.
RADIO: Recommended Master communicates with Agent through Chosi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel to contact Chosi and Northbound to contact Nagasaki Radio respectively.
MEDICAL: No advance notice required unless urgent.
TUGS: Normally join vessel on passage from anchorage. Vessel's lines used. 4 tugs available, 1×2,400 h.p., 1×2,100 h.p, 1×1,800 h.p. and 1×800 h.p.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Name of Pier		*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Capacity* (d.w.t.)	*Shore Cranes*
No. 1 Pier	No. 5	130	7.5	7.0	5,000	
	No. 6	100	5.0	4.5	1,000	
	No. 7	100	5.0	4.5	1,000	
No. 2 Pier	No. 1	165	9.0	9.0	15,000	8t×1
	No. 2	185	10.0	9.75	30,000	8t×1
No. 3 Pier	No. 1	175	10.0	9.7	30,000	8t×1
	No. 2	175	10.0	9.7	15,000	8t×1
	No. 3	175	10.0	9.75	30,000	8t×1
	No. 4	175	10.0	9.75	30,000	8t×1
No. 4 Pier	No. 1	90	4.5	4.0	1,000	
	No. 2	200	10.0	9.7	15,000	
	No. 3	200	10.0	9.5	15,000	
	No. 4	80	6.0	5.5	3,000	
	No. 5	80	6.0	5.5	3,000	
	No. 6	80	6.0	5.5	3,000	
Fujiwara Pier (Logs Discharge)						
	No. 1	185	10.0	9.7	15,000	
	No. 2	225	10.0	9.7	15,000	
	No. 3	225	10.0	9.7	15,000	
	No. 4	130	7.5	7.0	5,000	
Ohtsurugi Pier						
	No. 1	130	7.5	7.0	5,000	5t×1
	No. 2	130	7.5	7.0	5,000	
	No. 3	185	10.0	9.75	15,000	
	No. 4	185	10.0	9.75	15,000	
	No. 5	130	7.5	7.0	5,000	
	No. 6	130	7.5	7.0	5,000	
	No. 7	130	7.5	7.0	5,000	
	No. 8	130	7.5	7.0	5,000	

TANKERS: Sea Berth: Product handled, Naphtha and Crude Oil. Shoreline 16 in.×2. Discharge rate 9,000 k/l per hour. Bunkers not available ex-pipe-line.
STEVEDORES: At least 24 hours prior notice excluding 2nd and 5th Sundays and holidays required in order for Agent to arrange stevedores. 1st, 3rd and 4th Sundays shall be non-working days. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630–2130 hrs. 60% additional of basic stevedorage; 2130–0800 hrs. next morning 120% additional; Sundays/holidays 100% additional.
DENSITY: 1025.
FRESH WATER: Available from shore lines, at about 30 t.p.h.
FUEL: Domestic oil is available. Bonded oil will be brought from Yokohama with sufficent advance notice, when required.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnage. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Minor repairs only.
DRY DOCKS: None.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Iwaki (0246); Police 54-1111; Ambulance and Fire, 119.
TELEPHONES: No facilities for connecting on board.

SHIPMASTER'S REPORT: 1975.
The port is protected by breakwaters, 1 running North and N.E. 11,170 ft. long and 1 running Westerly and W.S.W'ly 5,520 ft. long, the latter which affords some protection from Southerly swell.
Pilotage: The Pilot boards at the main breakwater entrance. If possible, obtain Japanese Port Chart No. 63 and approach Chart No. 68.
Anchorage: If awaiting Pilot anchor approximately 1 mile E.S.E. of the Southern extremity of the East breakwater.
Max. Size: Several new berths have recently opened, including No. 5 and No. 6.
Health: The centre of the Quarantine Anchorage is located 6 cables S.E. from the Southern extremity of the East breakwater. Radio pratique is accepted if a Japanese Sanitary Inspection Certificate is held.

AUTHORITY: Onahama Port Construction Office, 38-1, Onahama Tatsumi-cho, Iwaki City, Fukushima Pref. *Tel:* (0246) 54-2411.

AGENT: Sub-agent of Dodwell & Co. Ltd., Tokyo. Onahama Kairiku Unso Kaisha, Ltd., 36 Tatsumi-cho, Onahama, Iwaki-shi, Fukushima-ken. Cable Address: Kaiun Iwaki. Domestic Telex: 08922-80 Onakai J. Tel: (0246) 53-3221/6. Postal No.: 971.

ONOMICHI-ITOZAKI (incl. Mihara, Matsunaga): 34.20 N. 133.16 E.

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 3 Crew Lists including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declarations, 1 Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea Ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea pilot stations. Also see 'Shipmaster's Report' before first port.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits). Position Lat: 34° 34.09′ N., Long: 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki lighthouse (vessels transiting Bungo Channel). Position Lat: 33° 13′ N., Long: 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki pilot station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat: 33° 56′ 24″ N., Long: 131° 03′ 12″ E.

Inland Sea Pilot also berths vessels at anchorage berth (if Matsunaga Bay – logs), or pier in Itozaki district (Mihara section).

ANCHORAGES: Draft limitations: Itozaki-Mihara 7.5 m. Matsunaga Bay 8.5 m. Tidal range: Maximum (+) 3.91 m. Minimum (−) 0.09 m. Capacity for 3×20,000 ton vessels.

RESTRICTIONS: Entry 24 hours, sailing possible up to 2000 hrs.

HEALTH: Radio Pratique not available. Vessels usually anchor at Wada-Misaki (off Kobe), or Hesaki (off Moji), where the authorities board and grant Free Pratique.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Brought from Fukuyama, Mizushima or Kure, when required.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length (m.)*	*Depth (m.)*	*Permissible Draft and Length overall (m.)*	*Capacity (G/T)*
Municipal Nishigosho Pier	404	6.5	5.0×130	2,000
Municipal Shinhama Pier	250	5.5	4.5×100	2,000
Matsunaga Bay (Anchorage)		5.0–10.0		1×10,000 1× 6,000 1× 3,000

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: No facilities.

FRESH WATER: Available. Method of delivery (1) Barge. (2) Pier. Additional charge for overtime work and in event of bad weather.

FUEL: Domestic oil is available, Bonded oil will be brought from Kobe, Kanokawa, Hirohata or Moji.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 40 cigarettes to take ashore but no spirits.

REPAIRS: Minor repairs possible.

CONSULS: None.

REPATRIATION: Possible.

AIRPORT: Nearest, Tokyo International Airport.

TIME: GMT plus nine hours. Permanent.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 119.

TELEPHONES: No arrangements for placing telephones on board.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

AUTHORITY: Port and Harbour Dept., Onomichi City, 8-1, Higashi Gosho-cho, Onomichi City, Hiroshima Pref. *Tel:* (0848) 22-8158.

AGENT: Sub-agent of Dodwell and Co. Chugoku Kaiun Kaisha Ltd., Onomichi Chuo-Sanbashi Bldg., No. 10–3, Tsuchido 2-chome, Onomichi-shi, Hiroshima-ken. Cable Address: Chugokukaiun Onomichi. Domestic Telex: 06422–15. Tel.: Onomichi (0848) 22–3141/4.

OSAKA: 34.39 N. 135.26 E. (See Plan Book)

DOCUMENTS:

- Ship's Register.
- Last Port Clearance.
- 3 Crew Lists including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: 24 hours' notice required. Telegraphic address: "Hanshinpilot Osaka". VHF contact on Channels 12, 16, 19, 20. Agents operate Channel 26. Three 15 ton Pilot boats with radio equipment to pilot office. Pilot boards anywhere within harbour limits. In event bad weather Pilot boards just inside breakwater when acknowledgement obtainable from Master. If awaiting Pilot, anchor inside harbour limits as near as possible to breakwater.

Pilotage not compulsory. Pilotage available to container vessels 24 hours a day.

ANCHORAGES: Section Nos. 7 and 8. Section 7 is Quarantine Anchorage. Section 8 for other vessels. Harbour Master allocates anchorage position prior vessel's arrival which radioed to Master by Agent. Max. draft about 42 ft.

RESTRICTIONS: Vessels only permitted to enter from sunrise to 2000 hrs. However, in order to avoid danger, some wharves (oil wharf, Nakayama wharf and various shipyards where there is not enough space to conduct berthing operation), accept vessel only until sunset. Max. depth 39 ft. 4 in., Wharf No. 49.

Depth restrictions at other berths depend upon berth allocated.

MAX. SIZE: Max. permissible length, 750 ft., draft 34 ft. 6 in. Also see "Tankers".

HEALTH: Vessel requiring Free Pratique requested cable directly to "Quarantine Station", Osaka informing ETA, date of departure from last port, name of last port, number of crew and health condition. At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera-infected area within 10 days Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

Radio Pratique is available only for a vessel which possesses Valid Sanitary Inspection Certificate issued by the Japanese Government.

RADIO: Osaka Port Radio, 24-hour VHF service on Channels 16, 12, 19 and 20. Osaka Harbour Radar has 24-hour navigation aid and weather information service. Contact by VHF Channels 16, 14 and 22.

RADAR: Harbour radar station supplies information on ship movements, etc.

TUGS: 10 Port Authority tugs. Tugs join vessel just before harbour entrance. Tug's lines used, no extra charge.

BERTHING: No specific requirements. Pilot boarding time will be notified by VHF or radio.

Wharf	*Wharf Length (m.)*	*Water Depth (m.)*	*Mooring Capacity*		*Main Cargoes Handled*
			Gross tons	*No. of Ships*	
North Port Wharf 1	250	10.0	10,000 500	1 1	Bulk
North West Wharf 2	120	5.5	1,000	1	Bulk
Umemachi West Wharf	673	12.0 9.0	30,000 20,000 7,000	1 1 1	Coal, General Cargoes Oil, LPG
Umemachi Pier	395	10.0	10,000	2	Bulk, Oil
Sakurajima Wharf	335	10.0	7,000 10,000	1 2	General Cargoes
Ajikawa Pier North Wharf	482	5.5	1,700	5	Passengers, General Cargoes
Ajikawa Pier West Wharf	120	5.5	1,000 500	1 1	General Cargoes
Ajikawa Pier South Wharf	312	6.5	2,000 1,000	2 1	General Cargoes
Ajikawa Wharf 2	360	10.0	10,000 8,000	1 1	General Cargoes
Ajikawa Wharf 3	178	10.0	10,000	1	General Cargoes
Osaka Port Silo Wharf	92	11.0	13,000	1	Bulk Grains
Ajikawa Wharf 1	320	10.0	10,000 3,000	1 1	General Cargoes, Bananas
Tempozan Wharf	130	7.5	3,000	1	Passengers, General Cargoes
Ajikawaguchi Wharf	185	10.0	10,000	1	General Cargoes
Central Pier North Wharf	210	11.0	13,000	1	General Cargoes
Central Pier South Wharf	210	10.0	10,000	1	
Wharf 1	500	10.0 5.5	10,000 700 500	2 1 1	General Cargoes
Wharf 2	341	10.0	10,000 5,000	1 1	General Cargoes
Wharf 5	382	9.0	6,000 500	2 1	General Cargoes, Salt, Bulk, Cement
Wharf 6	359	10.0	10,000	2	General Cargoes
Wharf 7	361	10.0	10,000	2	General Cargoes
Wharf 8	336	7.5	3,000 1,000	2 1	General Cargoes, Bulk Cement
Wharf 10	617	5.5–9.0	7,000 3,000 1,000	1 2 2	Steel
Taisho Pier 1 North Wharf	471	5.5	1,000	5	General Cargoes
Wharf A	1,040	7.5	3,000	8	General Cargoes
Wharf B	550	7.5	3,000	4	Paper, Pulp, General Cargoes
Wharf D	580	7.5 5.5	3,000 1,000	2 3	General Cargoes, Cars
Wharf E	821	7.5 5.5	3,000 1,000	2 5	Passengers, Cars, General Cargoes
Wharf G	720	5.5	1,000	8	Steel, General Cargo
Wharf I	720	5.5	1,000	8	General Cargoes
Wharf J	720	12.0	20,000	3	Food

Wharf		Wharf Length (m.)	Water Depth (m.)	Mooring Capacity		Main Cargoes Handled
				Gross tons	No. of Ships	
Containership Wharf No. 1	(C 1)	250	12.0	25,000 D/W	1	General Cargoes
Containership Wharf No. 2	(C 2)	250	12.0	25,000 D/W	1	General Cargoes
Containership Wharf No. 3	(C 3)	300	12.0	35,000 D/W	1	General Cargoes
Containership Wharf No. 4	(C 4)	250	12.0	25,000 D/W	1	General Cargoes
Containership Wharf No. 5 ·	(C 5)	300	12.0	35,000 D/W	1	General Cargoes
Liner Wharves	L 1	200	10.0	10,000	1	General Cargo
	L 2	200	10.0	10,000	1	General Cargo
	L 3	200	10.0	10,000	1	General Cargo
	L 4	250	10.0	10,000	1	General Cargo
	L 5	250	10.0	10,000	1	General Cargo
	L 6	230	10.0	10,000	1	General Cargo
	L 7	230	10.0	10,000	1	General Cargo
Ferry Wharf	F 1	165	7.5	8,000	1	Passengers, Cars, General Cargoes
	F 2	130	6.0	3,000	1	
	F 3	148	6.0	3,000	1	
	F 4	165	7.5	8,000	1	
	F 5	165	7.5	8,000	1	
	F 6	130	6.0	3,000	1	
	F 7	230	10.0	10,000	1	
Omni Terminal	R 1	185	10.0	10,000		Containers; Plant; Steel; Timber, etc.
	R 2	240	12.0	20,000		
	R 3	240	12.0	20,000		
	R 4	185	10.0	10,000		
	R 5	185	10.0	10,000		

CONTAINER FACILITIES: Berths C1, C2, C3, C4, C5, R2 and R3 each equipped with container handling gantry cranes. Berth C1 equipped to handle Roll-on/Roll-off.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent. General and Seaman's hospitals available.

TANKERS: No slop discharge facilities. Wharf No. 49, Sakurajima Oil Wharf, max. LOA 210 m., max. safe draft 11.60 m. Product handled, fuel oil, diesel oil. Minas Waxy. Shoreline 1×12 in. Discharge rate 1,000 t.p.h.

Wharf No. 25. Max. LOA 210 m. Max. safe draft 10.30 m. Product handled, fuel oil. Shoreline 1×14 in. Discharge rate, 850 t.p.h.

DENSITY: Outside anchorage: 1023 – 1025. Near breakwater: 1020 – 1022. Average density inside breakwater 1020. Wharves near estuaries (Aji River, Shirinashi River, Kizu River and etc.): 1016 – 1020.

FRESH WATER: Methods of delivery: by barges or pipe-line. Rate of delivery: 200 ton barges – 4; 160 ton barges – 1; 60 ton barges – 1; Total – 6.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CARGO GEAR: See "Certificates", but no special requirements.

CONSULS: The following consulates available in Osaka:

Denmark	Korea	Spain
Great Britain	Mexico	

REPAIRS: All grades repairs possible.

DRY DOCKS: Mitsui Shipbuilding & Engineering Co. Ltd., Fujinagata Works, No. 1 dock size 446 ft. 2 in.×55 ft. 2 in., depth 17 ft. No. 2 dock size 541 ft. 2 in.×66 ft. 2 in., depth 23 ft. 5 in.

Hitachi Shipbuilding & Engineering Co. Ltd., No. 1 dock size 653 ft. 5 in.×88 ft., depth 34 ft. 3 in. No. 2 dock size 547 ft. 6 in.×75 ft. 3 in., depth 28 ft. 3 in.

Namura Shipyard Co. Ltd., No. 1 dock size 590 ft. 3 in.×90 ft. 1 in., depth 29 ft. 4 in. No. 2 dock size 478 ft. 7 in.×72 ft. 1 in., depth 29 ft. 1 in.

Sanoyasu Dockyard Co. Ltd., No. 1 dock size 508 ft. 3 in.×71 ft. 1 in., depth 24 ft. 2 in. No. 2 dock size 367 ft. 3 in.×55 ft. 6 in., depth 22 ft. 8 in.

AIRPORT: One hour required from Osaka Port to Osaka International Airport by car (about 25 km. distance). Regular airlines:

Overseas Lines: Japan Airlines, Cathay Pacific Airlines, China Airlines, Thai International Airlines, North West Airlines, Pan American Airlines, British Airways, Korean Airlines, Lufthansa Airlines, Scandinavian Airlines.

Domestic Lines: Japan Airlines, All Nippon Airways, Toa Airways.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: Public 20 July; Sakurajima Nil; Silo Wharf 20 July; Nakayama Steel Nil.

POLICE/AMBULANCE/FIRE: Police tel. 110; Ambulance tel. 119; Fire tel. 119.

TELEPHONE: Wharf connections available.

SERVICES: All services available.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

AUTHORITY: Port and Harbour Bureau, Osaka City, 8-24, Chikko 2-chome, Minato-ku, Osaka. *Tel:* (06) 572-5121.

AGENT: Dodwell Tramp Agencies, Osaka Kagaku-Seni Kaikan, 39, 5-chome, Kawara-machi, Higashi-ku, Osaka. International Telex: J63250. Cable Address: Dodtramp Osaka. Domestic Telex: 522-3948. Telephone: (06) 203-5151.

OTARU: 43.12 N. 141.01 E. **(See Plan Book)**

DOCUMENTS:

Ship's Register.

Last Port Clearance.

3 Crew Lists including Passport Numbers.

3 Passenger Lists.

1 Store List.

1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Limit of Otaru piloting district is sea area surrounded by line drawn from Kayashiba-misaki to Horaiso-misaki and coast line. Licensed Pilots stationed in office from 0900 to 1700 hrs. Boarding place about one mile from North B.W. Lt. H. 70°. Pilot boat painted white and carries International Code flag "H" at forecastle deck.

ANCHORAGES: Depth of water inside breakwater is 3.6 m. to 17.0 m. and nearly everywhere is good anchorage. Sea area outside breakwater also good for anchorage, but be careful not to foul fishing nets. Around quarantine anchorage is best outside breakwater.

RESTRICTIONS: Quarantine and Customs business between 0900 hrs. and 1700 hrs. Pilot assistance not compulsory but in practice necessary.

MAX. SIZE:

Piers and Quays

		Length *(m.)*	*Depth of water* *(m.)*	*Capacity* *(g/t)*	*Main usage*
Pier No. 1:					
Berth	No. 1–2	339	9.0–10.0	10,000×1 6,000×1	General cargo
	3	127	10.0	3,000×1	General cargo
	4–5	293	9.0	6,000×2	Corn
Pier No. 2:					
Berth	No. 7–8	293	9.0	6,000×2	Bananas
	9	126	9.0	3,000×1	GC
	10–11	293	9.0	6,000×2	Corn
Pier No. 3:					
Berth	No. 13–14	343	9.0	6,000×2	GC
	15	127	9.0	3,000×1	GC
				10,000×1	Lumber
	16–17	361	9.0–10.0	6,000×1	Mutton
Chudo Pier:					
Berth	No. 1–2	315	7.5–10.0	3,000×1	GC
				10,000×1	Cement
	3	260	10	10,000×1	Ore
	4–5	380	7.5–12.0	20,000×1 3,000×1	Corn
Katsunai Pier:					
Berth	No. 1	240	12.0	20,000×1	Corn, Log
	2–4	555	10.0	10,000×3	G.C.
	5	251	9.0	16,000×1	Ferry Boat
Wharf A:					
Berth	No. 6	128	7.0	1,000×1	GC
	12	128	7.0	1,000×1	GC
Sakai-machi Wharf		352	7.0	2,000×3	GC
Umaya-machi Wharf		392	7.5	3,000×2	Oil, cement

HEALTH: See "Hakodate".

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Two tugs available. Tugs M/S "Sakura Maru" 147 g/t 1,000 h.p. M/S "Tatwiea Maru" 199 g/t 2,600 h.p. Both belong to the Port Authority.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

STEVEDORES: At least 24 hours prior notice required in order to arrange stevedores by Agent, excluding Sundays and holidays. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1630 – 2130 hrs. 60% additional of basic stevedorage; Sundays/holidays 100% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: Available berthing for small vessels only, 1,000 g/t and usual berthing 300 – 500 g/t. Japanese tankers only. Draft: max. permitted 7.2 m. discharging: about 100 tonnes p.h.

DENSITY: Average 1025.

FRESH WATER: Good drinking water at all piers and wharves. Water barge available when off shore in harbour.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
FIRE PRECAUTIONS: No smoking at tanker berth, Umaya-machi wharf.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 20 cigarettes to take ashore, but no spirits.
CONSULS:

American Consulate, Sapporo in Sapporo City only.
Tel. 011–221–5121.
U.S.S.R. Consulate, Sapporo in Sapporo City only.
Tel. 011–561–3171.
Korean Consulate, Sapporo in Sapporo City only.
Tel. 011–621–0288.

REPAIRS: All type of deck and engine repairs are possible.
DRY DOCKS: None.
REPATRIATION: Possible.
AIRPORT: Distance from airport about 80 km. 21 flights per day from Chitose airport to Tokyo airport.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
HOLIDAYS: Stevedores do not work on 1st May.
POLICE/AMBULANCE/FIRE: Tel. Police 110; Ambulance and Fire 119.
TELEPHONES: Arrangeable on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
AUTHORITY: Otaru Port Administration Office, 8-2, Minato-machi, Otaru City, Hokkaido *Tel:* (0134) 23-1264.
AGENT: Sub-agents of Dodwell & Co., Tokyo. Narasaki Sangyo Co. Ltd., Otaru Branch, Mitsui Bldg., 1–9 1-chome, Ironai-cho, Otaru-shi. Tel. Otaru (0134) 23–3281. Cable Address: Narasaki Otaru. Telex: 9526–40.

OWASE: 34.04 N. 136.15 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
5 Crew Lists including Passport Numbers.
5 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan). Each person's signature is necessary in it.

Ship's Agent will prepare 2 Inward/Outward Declarations. 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot station is 2 miles East from Togashira Island. Pilotage is not compulsory at this port but recommended to take pilotage by Toho Oil Co. Ltd.
ANCHORAGES: Quarantine Anchorage position is Lat. 34° 03′ 55″ N., Long. 136° 13′ 20″ E. Depth of water 60 m. – 80 m. Radius 500 m. However, it is not advisable for vessels to stay there for a long time as there are many fishing boats nearby.
RESTRICTIONS: According to Agreement between Fishery Association and Oil Refinery, ship's movement is prohibited at night. See "Berthing".
MAX. SIZE: See "Tankers".
HEALTH: Radio Pratique available. Formalities carried out after entering the port.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel to contact Choshi, and Northbound to contact Nagasaki Radio respectively.
TUGS: Tugs usually join vessel at Outer Harbour (near Quarantine Anchorage) and tug's line is used. Tugs come from Nagoya. VHF Channel 16, 6, and 12.
BERTHING: Time limit of Pilot boarding for berthing to Toho Oil Terminal is 3 hours before sunset due to the agreement between Fisheries and Toho Oil Co. Ltd.
MEDICAL: No advance notice required unless urgent. Hospital facilities available.
TANKERS: Toho Oil Owase Pier: Depth of water, 17.3 m., Max. d.w.t. 150,000, Max. LOA, 275 m. Max. safe draft 16.00 m. Product handled crude oil. Shoreline 2×12″. Discharge rate, 4,500 k/l.p.h.

Toho Oil Sea Berth: Depth of water, 21.0 m. Max. d.w.t. 250,000. Max. LOA 350 m. Max. safe draft 19.00 m. Product handled, crude oil. Shoreline 2×20″. Discharge rate 7,000 k/l.p.h.
FRESH WATER: Fresh water can be supplied to the vessel from pipe at quay. Supply capacity 30 t.p.h.
FUEL: Domestic oils available. Bonded oil will be brought from Nagoya, Yokohama, Chiba or Kobe.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and net tonnages.
CUSTOMS ALLOWANCES: Only allowed 60 cigarettes to take ashore but no spirits.
CONSULS/REPAIRS/AIRPORT: None.
TIME: GMT plus 9 hours. Permanent.
TELEPHONES: Emergency numbers, Owase Police Office (05972) 2-0004; Owase Fire Station (05972) 2-2020; Owase Hospital (05972) 2-2118. No facilities for placing telephones on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but extension possible if ship stays longer.
AUTHORITY: Owase Doboku (Public Works) Office, 2-11, Hayashi-machi, Owase City, Mie Pref. *Tel:* (05972) 2-2017.
AGENT: Nippon Express Co., Ltd., Owase Branch. Tel: (05972) 2-2217. Cable: "Nexco Owase". Uyeno Unyu Shokai, Yokkaich Branch.Tel: (0593) 45-2271. Cable: "Uyeno Shell Yokkaichi".

SAKAI (Including Senboku and Hannan Port): 34.34 N. 135.27 E. **(See Plan Book)**

DOCUMENTS:

Ship's Register.
Last Port Clearance.
7 Crew Lists including Passport Numbers.
2 Passenger Lists.
1 Store List
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (if first port of call in Japan).

Ship's Agent will prepare inwards/outward Declaration, 1 Cargo Manifest in transit using specific form. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Cable address "Hanshinpilot Osaka". 24 hours' notice required. VHF (Osaka Port Radio), Channel 16, JBD Osaka Radio, Channels 25, 26 and 27. Three boats capacity 15 tons, 147 h.p. Pilot boards anywhere within harbour area, but preferably at quarantine anchorage – sector No. 7. Bad weather: unable to take Pilot. Boarding measures: Safe Pilot ladder. Anchorage for vessel waiting Pilot: as Pilot boarding area.

Inland sea Pilot cable address: "Anjin Kobe" can also be used for following wharves: Kansai Oil Co. Ltd., Sakai Wharf; Koa Oil Co. Ltd., Sakai Wharf.
ANCHORAGES: Quarantine inspection carried out at quarantine anchorage Sect. No. 7 where max. draft 12.5 m. Vessels with draft over 12.5 m. have to obtain free pratique at other ports.
RESTRICTIONS: Entry not possible after sunset. Sailing possible anytime but Pilots not available after sunset.

(a) Arrival notice for ships over 500 tons gross must be given to Harbour Master 48 hours prior to arrival.

(b) Entrance passage draft limitation: 11.20 m.
MAX. SIZE:

Name of Wharf (Jetty)	*Max. draft* (m.)	*Max. LOA* (m.)
Nippon Steel Wharf 3-A/3-B	14.0	255
,, ,, ,, 2-H	10.2	181
Ube Kosan Wharf (Export)	9.0	130
,, ,, ,, (Import)	10.2	174
Public Wharf 3 & 6	9.0	160
,, ,, 1, 2, 4, 5 only for vessel less than 500 tons		
Osaka Seiyosho Wharf	9.0	144

Tankers:

Name of Berth	*Max. d.w.t.*	*Max. LOA (m.)*	*Max. Safe draft (m.)*
General Wharf	130,000	290	15.50
Kansai Oil Jetty	130,000	320	15.50
Koa Sekiyu Crude Oil	150,000	320	15.50
Ube Kosan, Sakai "D" Wharf	20,000	170	9.20
Marubeni Sakai	50,000	250	12.50
Kansai Oil Jetty (LPG)	160,000	320	15.50
Mitsui Toatsu (LPG)*	50,000	200	14.00
Osaka Gas Semboku Jetty (LNG)	37,000	230	10.00

*See "Shipmasters Report".
HEALTH: Radio Pratique available. Vessels usually anchor at the quarantine anchorage in Osaka, where the authorities board and grant Free Pratique.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.
TUGS: Join vessel at anchorage under instruction or attending Pilot. Tug lines used, cost in tug hire.
BERTHING: (Berths with less depth or capacity not shown).
Sakai:

Berth	*No.*	*Water Depth (m.)*	*Total length (m.)*	*No. of berths*	*Ship tonnage (d.w.t.)*
Shiohama wharf	1	7.0	120	1	5,000
Ohama wharf	1	4.5	60	1	1,000
,, ,,	2	5.5	270	3	3,000
,, ,,	3	7.0	240	2	5,000
,, ,,	4	9.0	165	1	12,000
,, ,,	5	10.0	370	2	18,000
,, ,,	6	7.5	130	1	6,000

Senboku:					
Matsunohama wharf	1	5.5	540	6	2,000
Komatsu wharf	1	5.5	360	4	3,000
,, ,,	2	7.5	390	3	6,000
Shiomi wharf	1	4.5	480	7	1,000
,, ,,	3	10.0	555	3	18,000
,, ,,	4	7.5	260	2	6,000
Sukematsu	2	7.5	390	3	6,000
Hannan:					
Kishiwada wharf	1	10.0	185	1	15,000
Mooring buoys		12.0	260	1	20,000
,, ,,		12.0	230	1	15,000
,, ,,		12.0	190	1	10,000
,, ,,		12.0	160	1	5,000
Kaizuka wharf	1	6.5	202	2	2,000
,, ,,	2	6.5	400	3	3,000

There are many additional berths with depth of 2m. – 4m.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep her Agents advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agents, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew at additional cost. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS:

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
General Wharf	Fuel Oil	12 in.×3	7/8,000
	Crude Oil	12 in.×3	9,000
Kansai Oil	Fuel Oil	10 in.×1	600
Jetty	Crude Oil	36 in.×1	7/8,000
Koa Sekiyu			
Crude Oil	Fuel/Crude	32 in.×1	5,000
Ube Kosan, Sakai			
"D" Wharf	Naphtha	12 in.×1	700
Marubeni Sakai	Fuel Oil	16 in.×1	2,500
Oil Terminal	Minas Oil	18 in.×1	2,500
Kansai Oil	Propane	12 in.×1	1,000
Jetty (LPG)	Butane	10 in.×1	1,000
Mitsui Toatsu	Propane	12 in.×1	1,000
(LPG)	Butane	12 in.×1	1,000
Osaka Gas			
Senboku Jetty (LNG)	LNG	8 in.×5	2,000

DENSITY: Osaka Gas Wharf and Nippon Steel Corporation Wharves 1020 to 1025.

All other wharves, 1010 to 1025.

FRESH WATER: Minami Hakuchi anchorage by barges. All other wharves by shore line.

FUEL: Most domestic and bonded fuels available.

GANGWAY/DECK WATCHMEN: Recommended and compulsory for tankers working cargo.

OPENING/CLOSING HATCHES: Stevedores open and close hatches with terms subject to charter party.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Each man allowed 200 cigarettes to take ashore but no spirits.

CARGO GEAR: See "Certificates" but no special requirements.

CONSULS: None.

REPAIRS: See "Osaka".

DRY DOCK: Hitachi Shipbuilding & Engineering Co. Ltd., Sakai Shipyard, Dock No. 2, length 455 m., width 63 m., depth 11 m., capacity 400,000 d.w.t.

REPATRIATION: Possible.

AIRPORT: International Airport Osaka, 45 km. distant.

TIME: GMT plus 9 hours No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: See "Osaka".

TELEPHONES: Available except Nippon Steel Wharf and Public Wharf.

SHORE LEAVE: Local Immigration Officers issue shore leave pass valid for 3 days, but a 9 day pass is obtainable in case where a vessel stays in port for longer period.

DEVELOPMENTS: 29 berths under construction at Sakai-Senboku. Max. depth 12 m. 53 berths under construction at Hannan, depths from 4 m. – 12 m.

SHIPMASTER'S REPORT: February 1980. (L.P.G. Carrier).

Osaka Bay: Also see "Kobe" – "Shipmaster's Report".

Entry: No transit of Tomogashima Strait at night from Sunset to Sunrise. This is not a regulation but a Japanese Government request which for all intents and purposes is a requirement.

Pilotage: Bay Pilot is a recommendation for LPG carriers which again means a requirement. About 97% of overseas shipping and 60% of Japanese foreign going shipping use this service.

Lights: Flashing red over Green to be permanently on day and night in Japanese waters if vessel over 200 m. length. Red is for dangerous cargo and flashes at 120 to 140 flashes per minute and green for vessels over 200 m. flashes at 180 to 200 flashes per minute.

Two black cylinders by day for over 200 m. length plus 1st substitute over 'B' for dangerous cargo.

Fire Wires/Mooring Line: To be rigged starboard side fore and aft, plus 1 mooring line at each end. In actual fact we kept the fire wires in during transit of Osaka Bay in case of slippage and getting caught in propellor. The Pilot approved.

Navigation: Sumoto – Oki Light Buoy Lat: 34° 21.1′ N., Long: 135° 00′ E. must be left to port (North or South bound). This is not indicated on BA.3614 as a traffic separation buoy. The Pilot advised me that some foreign ships without Pilot leave this buoy on the wrong side, if JMSA catch any vessel doing this they are liable to prosecution. No navigation in visibility less than 1 mile and no berthing when wind speed exceeds 12 m./sec.

Pilot: Boards about 7 miles South of Tomogashima. Cable: 'Bay Pilot Kobe' 12 hours ETA, if any alteration cable 'Urgent Bay Pilot Kobe'.

Then by VHF through Kobe Port Radio – range 80 miles. Pilot nearly always starboard side. Boards from 3 fairly fast purpose built red hulled cutters based at Sumoto on Awaji Shima Island.

Pilot disembarks about 1 mile South of Tomogashima Strait.

Entry: For LPG carriers and certain other dangerous classification ships there is no night passage of Tomogashima Straits or Osaka Bay which means from about 1600 hrs. to 0600 hrs. there is no transit. Further complications are:

(1) At the berths themselves at Sakai and Kobe, LPG movements and berthing during darkness prohibited.

(2) If vessel has no Sanitary Certificate Free Pratique cannot be given which means anchoring at Osaka Quarantine anchorage for Pratique.

(3) The cost of an escort tug whilst vessel is at anchor is fairly costly about £100 per hour.

Therefore if Pratique is required (No Sanitary Certificate) and berthing that day is undertaken, arrival at Tomogashima pilot station can only be between 0600 to 0930 hrs. as the Quarantine service finishes for lunch time and if pratique is not granted before lunch, entry is unlikely to take place that day.

If Sanitary Certificate is held, Pilot boarding at Tomogashima can be between 0600 to 1200 hrs.

Pratique: Free Pratique can only be given on proper notification by Radio 24 hours before arrival to Quarantine Service, prefixed by RPM through Agent. Current Sanitary Certificate must be held.

Pratique is granted whether or not Sanitary Certificate held but as above delay will be entailed. Granted at Osaka Anchorage between 0830 to 1200 hrs. and 1300 to 1700 hrs. Sanitary Certificate costs about £100 and is valid for 1 year. Application is made through Agent who arranges prior inspection by 'Rentokil' agency (£100) for any debugging and water testing and then followed by Government inspection which takes about 1.5 hours. Storerooms, fridges, galley, toilets, garbage bins, drinking water, etc., etc., all checked. This certificate entitles vessel to Free Pratique.

If the ship is not calling at Japan again within the 12 month period it is of little value, otherwise if likely to call, for an LPG ship with restricted entry the £200 could be well spent.

For pratique, vessel anchors in Osaka Quarantine anchorage position Lat: 34° 37′ N., Long: 135° 21.5′ E. (approx.).

Escort Boat: A fire-fighting escort tug is required for Loaded LPG ships in port limits. An escort boat of smaller capabilities is required for LPG ships in Vapour taking on bunkers or Lub oil in port limits.

Approximate cost of firefighting tug is £100 per hour.

Therefore to anchor overnight to await berthing in loaded condition will require escort tug costing in region of £1,500. During cargo operations instant communication must be maintained with escort tug by VHF or Walkie Talkie.

Sakai:

Notice of Readiness: On anchoring at Quarantine anchorage or when Harbour Pilot boarding, whichever first.

Agent suggests tendering Tomogashima Pilot and seeing if receiver accepts.

Pilot: Harbour Pilot boards at Quarantine anchorage or at No. 1 and 2 buoys Hamadera Passage channel as indicated on BA.3614.

Depth: Minimum depth in channel found to be 18 m.

V.H.F.: Kobe Port Radio, very powerful station – 80 miles range. Osaka Radio used for public correspondence.

Tugs: Two tugs join about half way down buoyed channel. Usual powerful Japanese type, tug's lines.

Berth: Mitsui Toatsu – Fertiliser berth: Position Lat: 34° 32.45′ N., Long: 135° 25.6′ E.

Port Side to.

Depth: 14.5 m.

Stern overhangs end of quay.

Gangway can be easily landed.

No stores on quay.

If wind speed exceeds 15 m./sec. no berthing and instant disconnection.

Vessel must be connected and have commenced pumping by sunset.

Solid concrete pile quay wall with ample fenders.

Lines: 3, 2, 2, each end. Line boat available, about 1.5 hours to tie up.

Connections: Rubber hoses for liquid and Vapour Return.

Propane line 12 in., Butane line 12 in. connection ASA 150.

Vapour 8 in. for both.

Shore labour with shore reducers.

Takes about 1.5 hours to connect.

Rate: Maximum able to accept: Propane: 800 m.t.p.h.
Butane: 1,300 m.t.p.h.

We were pumping at very close to this figure all the time with 3 pumps on each grade – shore restriction.

Cargo General: Little back pressure.

We had no surveyor, all tonnages on shore figures.

Plant capacity: Propane: 1 tank of 20,000 metric tons.
Butane: 3 tanks 12,000 metric tons.
1 tank 24,000 metric tons.

Approximately 15 m. of hose is used from shore manifold.

Fire axe required for moorings each end.

Watchman: English speaking watchman with telephone on board throughout 24 hours.

Departure/Arrival: Latest 1700 hrs.

Arrival: Hoses must be connected and discharge commenced before sunset.

Facilities: No stores alongside.

Water available, about Yen 700 per tonne.

Doctor will board vessel at minimum charge of Yen 20,000.

STD telephone to U.K. very expensive.

Crew changes: Via Osaka International Airport – no difficulties.

Repairs – Diawa (Company accredited Japan repair company).

Kobe H. Kajita (Konishi now in general office). 078–681–6001 Telex 5622–849 Daiwindus.

Documents: 1st Port:

1 Health Declaration
1 Vaccination List.
1 Application for Shore Pass.
3 Crew Manifests (Crew Declaration) – Japanese Form.
7 Crew List – Ship.
1 Declaration (Ship Information) Japanese Form.
3 Ship Stores.

If any crew changes new personnel must be added onto original crew list (Manifest).

Seal Bond only, leave Beer Room open.

Usual procedure with shore passes – all handed in on departure, bottom torn off if calling at 2nd port and re-application made.

For 2nd Port:
7 Crew Lists.
1 List Ship's Stores.
1 Application Shore Passes.

AUTHORITY: Sakai Port Administration Office, 1, Shiohama-cho, Sakai City, Osaka. *Tel:* (0722) 38-5241.

AGENT: See "Osaka".

SAKAIDE: 34.19 N. 133.51 E. (See Plan Book)

DOCUMENTS:

1 Voyage Memorandum (List of Ports of Call).
Ship's Register.
Last Port Clearance.
5 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio or Choshi Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage is compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits) Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse (vessels transiting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible, having due regard to safety, to Sekisaki pilot station.

3. Hesaki, at East side of Kanmon (Shimonoseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGES: Port located on North coast at East part of Shikoku Island in Inland Sea.

Boundaries and Areas. Area bounded by line joined with three points, East corner of Sosha river mouth, Mamako-Hana of Semi Jima and Tako-Saki of Shotsuji-Yama.

Depth of water inside harbour limit: 9 m. Outside harbour limit: 13 m.

RESTRICTIONS: Vessels entering and/or leaving during daytime only at wharves; but no restrictions day and night at sea anchorage provided favourable weather conditions prevail.

MAX. SIZE: East section of Centre pier, length 160 m., breadth no limit, depth 9 m.

West section of Centre pier, length 110 m., breadth no limit, depth 7.50 m.

Anchorage inner harbour, length no limit, breadth no limit, depth 7 m. – 9 m.

Anchorage inner harbour, length no limit, breadth no limit, depth 13 m.

HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from Cholera infected area within 10 days, Master must advise crew and passengers health condition prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

VHF: Sakaide Port Radio is located on top of Seijima (Lat. 34° 21′ N., Long. 133° 51′ E.). Watch is kept from 0600 to 2000 hrs. each day on Channel 16.

TUGS: Wharves: Join vessel at Sea Anchorage, using tug's line without charge. Sea Anchorage: No tug required in normal conditions.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

Berth	*Max. Size* (d.w.t.)	*Max. LOA* (m.)	*Max. draft* (m.)	*Remarks*
Mitsubishi "A"	70,000	275	13.00	Coal
Mitsubishi "B"	20,000	200	13.00	Coal
Mitsubishi "C"	55,000	220	11.50	Coke loading
Centre Pier	20,000	175	9.00	Fertiliser, grain

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.

MEDICAL: No advance notice required unless urgent.

TANKERS: Asia Kyoseki Refinery No. 2 Pier. Max. size 50,000 d.w.t. Max. LOA 230 m. Max. draft 12.40 m. 2×24 in. for crude (4,000 k/l.p.h.); 1×16 in. for fuel (1,000 k/l.p.h.); 2×14 in. for chemical products (10,000 k/l.p.h.).

Asia Kyoseki Pier No. 1 (Sea Berth) max. size 100,000 d.w.t., depth alongside 19.6 m.; 2×16 in. connections for crude. Max. unloading rate 10,000 k/l.p.h.

DENSITY: Inside harbour limit 1025. Outside harbour limit 1025.

FRESH WATER: Sea anchorage. No water barge available but usually brought from Onomichi (about 4 hours run to Sakaide). Rate of delivery 80 to 200 t.p.h. dependent on barge.

Centre Pier: Can be supplied by shore line with capacity 25 t.p.h.

Mitsubishi Chemical Industries Wharf: Can be supplied by shore line with capacity 60 t.p.h.

FUEL: All grades of bonded bunkers are stocked in Tokyo, Ise Bay, Osaka and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

FIRE PRECAUTIONS: No specific precaution.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per gang per hour depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificate sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

CARGO GEAR: See "Certificates", but no special requirements.

CONSULS: None. See "Kobe".

REPAIRS: Only minor repairs.

SURVEYORS:

1. Nippon Kaiji Kentei Kyokai is stationed at Sakaide.

2. Nippon Kaiji Kyokai (NK Class) and Lloyd's Register are stationed at Sakaide.

DRY DOCKS: Kawasaki Heavy Industries Ltd., Sakaide, which is suitable to dry dock. Dock No. 2 for 500,000 d.w.t. vessel. 450 m.×72 m.×12.3 m. Not yet in action for ship repairs. Only used at present for ship building and after services.

REPATRIATION: Possible.

AIRPORT: No airport. Nearest Takamatsu, All Nippon Airways 11 flights to Osaka and one to Tokyo and TOA domestic airlines to Tokyo/Fukuoka.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: National Holidays – see "Niihama". Local Holidays: New Year's Day (Lunar Calendar) January 30th; May Day May 1st; Memorial Day of the Sea July 20th; Bon Festival August 8th.

No ship's movement can be effected on January 1st, 2nd and 3rd, August 8th and October 15th.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119. Sakaide Maritime Safety Base, 6-2858.

TELEPHONES: No facilities for placing telephones on board.

GENERAL: Mitsubishi Chemical Industries Co. Ltd., Sakaide Works. As wharf of above works located outer harbour limit of Sakaide port, the undermentioned procedures required: In conformity with regulations, vessel required to get special permission for entering into closed port, which will be given from Shikoku Maritime Bureau.

Customs request vessel calls Mitsubishi Chemicals Wharf to obtain special permission for entering. If tonnage dues paid prior arrival, this procedure will be attended to by Agent.

Waiting anchorage: Avoid Bisan Seto Boundary according to special water zone navigation order. Imperative to exclude water surfaces with established Fishery Privilege.

Vessels waiting to berth at centre pier are lightened at anchor.

STORING: See "Prelims", page viii.

1. Available by both, however, for Asia Kyoseki by barge.
2. Available during cargo operations.
3. Available, however at Mitsubishi "A" or "B" berth – by barge for heavyweight goods.
4. No, however, at Centre Pier East/West they are available.
5. No special regulations.
6. Yes.

BANKS: No American/European banks. But it is possible to collect foreign currency, especially U.S. Dollars, at The 114th Bank, Ltd., Takamatsu.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 7 days, but extension for next 7 days possible if ship stays longer.

AUTHORITY: Sakaide Port Administration Office, 5-32 Irifune-cho, Sakaide, Pref. of Kagawa, Japan. *Tel:* 08774-6-2858. *Contact:* Port Captain.

AGENT: Asia Marine Agency Ltd., 1-3-2, Irifune-cho, Sakaide-shi, Kagawa-ken. Cable Address: Asiamarine Sakaide. Telex: 05825689 Asimar J. Tel.: (08774) 6-6209/6215.

SAKATA: 38.55 N. 139.48 E. (See Plan Book)

Located at mouth of Mogami River. Strong wind blows from Japan Sea November to March.

In Winter season, wave height between 3 m. to 5 m., length 70 m. to 80 m. and period 7 to 10 seconds. Current South to North along coastline.

TIDAL RANGE:

Higher high water	+61 cm.
Spring tide high water	+45 cm.
Neap tide high water	+41 cm.
Mean sea level	+39 cm.
Neap tide low water	+35 cm.
Spring tide low water	+31 cm.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc., (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Order Pilot through Agent. In bad weather, wait instructions from Agent.

ANCHORAGES: All sea areas (except waterway) available for anchorage. No prohibited anchorage areas. Pilot station and quarantine anchorage position is the area in the 500 m. radius circle centre of which is 260° – 3,100 m. from Sakata Light Station.

RESTRICTIONS: Ship movements in daytime only.

MAX. SIZE:

Name	*No. of Berths*	*Length (m.)*	*Depth (m.)*
Kominato Wharf	1	270	−13.0
Sumikei Wharf (Private)	1	270	−13.0

HEALTH: At first port of call Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera infected area within 10 days, Master must advise crew and passengers' health condition to respective Quarantine Office through ship's Agent prior to arrival and close all soil pipes before entering port.

RADIO: Niigata. Call sign JCF. Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan.

If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: One of 800 h.p. and one 2,000 h.p.

BERTHING: No particular requirements.

Agent communicates by means of ship's radio with respect to the exact time when the Pilot has to be taken on board.

Name	*No. of Berths*	*Depth (m.)*	*Length (m.)*
East Pier (Funaba-cho)	9	− 4.5	555
East Pier (Sin-machi)	2	− 7.5	260
West Pier	1	−10.0	185
West Pier	1	− 4.5	53
Sodeoka Pier	3	− 7.5	390
Ohama Pier (No. 1)	2	− 9.0	330
Ohama Pier (No. 2)	1	− 5.5	90
Suisan Pier	–	− 4.5	140
Kominato Wharf (No. 1)	1	−13.0	270
Kominato Wharf (No. 2)	1	−10.0	185
Kominato Wharf (No. 3)	1	−10.0	185
Buoy (Logs only)	1	−10.0	220
Kominato Pier	1	−10.0	180
Sumikei Wharf (Private)	1	−13.0	270
Kyohatsu Wharf (Private)	2	− 5.0	160
Kyohatsu Pier (Private)	2	− 7.5	—
Sekiyukichi Pier (Private)	2	− 7.0	92

STEVEDORES: In order to arrange stevedores, advance notice required by Agent at least 24 hours before, except Sundays and National Holidays,

When berthing at Ohama Pier (No.1), industrial salt and any ore in bulk handled at a rate of 150 t.p.h by bridge transporter.

Logs, 1,400 cu.m. per day are handled by ship's winches.

MEDICAL: No advance notice required unless urgent. Medical facilities available at Sakata City Hospital.

TANKERS: Berthing facilities are available. Draft not to exceed 8.5 m.

FRESH WATER: Wharf feedwater only. No water boat.

FUEL: All kinds of bonded oil available at Bay of Tokyo, Bay of Ise and port of Kanmon. Bunkers lightered from Hakodate provided at least 7 days' notice given.

GANGWAY/DECK WATCHMEN: Not specially required, unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages.

Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: If voyage over 30 days – 200 cigarettes and one bottle of spirits per man.

CONSULS: Korean Consulate Tel: 0222-21-2751. Consul: Mr. Cho Kian.

REPAIRS: Minor repairs only.

REPATRIATION: Crew replacement conducted basis "landing for transfer to another vessel".

AIRPORT: Yamagata Airport, situated 105 km. from Sakata. Two flights per day.

TIME: GMT plus 9 hours. No alterations.

HOLIDAYS: Public offices closed on Sundays and National holidays. Cargo work every day except 1st and 3rd Sunday of each month and 1st, 2nd and 3rd January.

POLICE/AMBULANCE/FIRE: Police (urgent) Tel: 110; (usual) Tel: 22-6611. Ambulance (urgent) Tel: 119; (usual) Tel: 22-3214. Fire (urgent) Tel: 119; (usual) Tel: 22-3214.

TELEPHONES: No facilities for placing on board.

SERVICES: Compass adjustment.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 day extensions possible if ship stays longer.

AUTHORITY: Sakata Port Office, 5-15 Funaba-Cho, 2-Chome, Sakata-Shi, Yamagata Pref. *Tel:* 0234-23-5444.

AGENT: Sub-agent of Dodwell & Co., Tokyo. Sakata Kairiku Unso Co., Ltd., 6-19, 2-chome, Funaba-cho, Sakata-shi, Yamagata-ken. Cable Address: Kairikusakata Sakata. Domestic Telex: 08733-08, Tel: Sakata (0234) 22-1801.

SASEBO: 33.10 N. 129.43 E. (See Plan Book)

DOCUMENTS: See "General – Customs and Immigration".

PILOTAGE: Compulsory. Vessel should keep Pilot closely advised through Agent, of ETA pilot station at least 24 hours prior arrival and any subsequent change. Pilot boards vessel 1 mile N.W. Kogosaki lighthouse. (Lat: 33° 06′ N., Long: 129° 38′ E.). In bad weather, Pilot will board at Lat: 33° 05′ 48″ N., Long: 129° 40′ 24″ E.

Telegraphic address of Port Captain "JNK" 500 kHz (Sasebo Maritime Safety Office).

ANCHORAGE: Ample good holding ground in inner harbour, but is controlled by U.S. Navy and only following anchorage available for commercial vessels: No. 3 Section, Depth 10 m. – 37 m. Capacity 20,000 g.r.t. and over × 10.

RESTRICTIONS: Entry and departure from sunset to sunrise only allowed under extenuating circumstances subject to Port Captain's special permission (U.S. Naval vessels excepted). No particular restrictions upon draft or tide conditions. Berthing during day only. Controlling depth of water – in the passage 23 m. – 54 m., at anchorage 10 m. – 37 m.

WEATHER: South-westerly winds prevail in Summer, while Northerly blows frequently in other seasons. Max. wind velocity recorded 26.1 m./sec. In early Spring dense fog prevails, but renders navigation impossible only for 7 days or so.

Tidal range 2.6 m. Current rate max. 1.5 knots in vicinity of harbour entrance at rising tide. At ebb tide, it flows in opposite direction and is faster than during flood, but not so strong as to hinder navigation.

MAX. SIZE: See "Berthing". No particular limitation for entering port. For berthing however, acceptable length, draft and breadth will be decided case by case in accordance with conditions of each berth consulting with Pilots, U.S. Navy and Port Captain. No tanker installations outside port.

HEALTH: See "Moji". Quarantine station: Lat: 33° 05′ 30″ N., Long: 129° 42′ 00″ E. 1.5 miles East of Kogosaki Lighthouse. Vessels chartered by USN (GAA, T/C, CVC, V/C) shall be cleared by U.S. Navy Quarantine and service available after sunset also.

RADIO: See "Yokohama".

TUGS: Normally join vessel about 0.5 – 1 hour prior berthing and tug's lines used. Charge for use of lines included in tug hire.

No. of Tugs	*Horse Power*	*Owner*
2	3,200	Nishi-Nippon Harbor Services Co.
3	2,900	Nishi-Nippon Harbor Services Co.
1	2,250	Nishi-Nippon Harbor Services Co.
1	2,000	Nishi-Nippon Harbor Services Co.
1	1,500	Nishi-Nippon Harbor Services Co.
6	Small Boats	Nishi-Nippon Harbor Services Co.
1	2,400	Sasebo City

BERTHING:

Wharf	*Length* m.	*Depth* ft.	*Capacity* (g.t.)	*Cargo*	*Remarks*
Iorizaki	80.5	32	20,000×1	Oil	Under U.S. Navy's control
Motofune No. 1	79.5	32	20,000×1	,,	,, ,, ,,
Motofune No. 2	79.5	32	20,000×1	,,	,, ,, ,,
Akasaki No. 1 & 2	298.0	40	20,000×2	,,	,, ,, ,,
Akasaki No. 3	219.0	40	20,000×1	,,	,, ,, ,,
Yokose	88.0	45	20,000×1	,,	,, ,, ,,
India Berth No. 1	254.4	31	20,000×1		For repairs
,, ,, No. 2–3	363.5	31	20,000×2		Repairs
,, ,, No. 4–6	575.5	31	20,000×3		Repairs and general cargo
,, ,, No. 7–8	363.5	31	20,000×2		General cargo
,, ,, No. 9	151.5	31	20,000×1		General cargo

No. 1 is under control of U.S. Navy
No. 2–5: Exclusive use of SSK (Shipyard)
No. 6–9: Under control of the U.S. Navy. No. 6 and 7 berths can be used for commercial vessels, subject to the U.S. Navy's permission.

Wharf	*Length* m.	*Depth* ft.	*Capacity* (g.t.)	*Remarks*
Maehata Gaibo No. 1	185.0	33	20,000×1	Grain and general cargo
Ekiura Wharf	150.0	16	1,000×2	General cargo
Hizukushi Wharf	103.0	15	500×2	,, ,,
Maehata Wharf	143.0	15	500×3	,, ,,
Maehata Gaibo No. 2	190.0	36	25,000×1	Grain and general cargo

No. of Buoy	*Depth*	*Capacity (g/t)*
10		Over 10,000
23	9 m. – 23 m.	5,000 to 10,000
7		Under 5,000

These buoys also controlled by U.S. Navy and their use for commercial purposes subject to U.S. Navy's permission, except following buoy which is free for commercial vessels:

	Depth	*Capacity (g/t)*
No. 9	27 ft.	5,000×1

STEVEDORES: Maximum 10 gangs available.

Classification	*Regular employees*	*Temporary labourers*
Stevedores	100	150
Longshoremen/Warehousemen	100	200

2 shifts: 0830 – 1630 and 1630 – 2130 hrs. Normal working hours: 0830 – 1630 hrs. Overtime work possible by applying to Customs. No work can be arranged during New Year holidays (1st to 4th January), 31st December and 1st May.

MEDICAL: Hospital: U.S. Station Hospital (for U.S. military personnel only). Sasebo Dojinkai Hospital. Tanaka Hospital. Bussaka Dental Hospital.

TANKERS: Diameter of lines: 8 in. No slop (Residue) discharge facilities. Number of tanker berths as follows:

Berth	*Length* m.	*Depth* ft.	*Remarks*
Akasaki No. 1, 2, 3.	517	40	under U.S. Navy's control
Motofune No. 1 & 2.	159	32	under U.S. Navy's control
Iorizaki	80.5	32	under U.S. Navy's control
Yokose	88	45	under U.S. Navy's control

DENSITY: 1025.

FRESH WATER: Available by barge 1 each of 200 and 100 tons. Rate of delivery 50-100 t.p.h./barge. Water from hydrant at India Berth Nos. 6, 7, 8 & 9. Rate of delivery 25 t.p.h./hydrant.

FUEL: No stock of bonded oil, but lightered from other ports. Adequate notice required order avoid delay. Rate of delivery from barges 100/200 t.p.h.

Suppliers	*Installation*	*Notice required* days
Shell Sekiyu K.K.	Nagasaki Shimonoseki	3 4
Esso Oil Co.	Shimonoseki Sakai	4 6
Mobil Oil Co.	Kokura/Moji Oita	4 5
Caltex Oil Co.	Shimonoseki Kudamatsu	4 5
Mitsubishi Shoji Kaisha	Shimonoseki Kanokawa	4 5
C. Itoh & Co.	Matsuyama Mizushima	5 5
Nissho-Iwai Co.	Shimonoseki Matsuyama	4 5
Mitsui Bussan Kaisha	Oita	5
Kanematsu-Gosho Co	Kokura	4
Idemitsu Kosan Kaisha	Tokuyama	5
Marubeni-Iida Co.		
Sumitomo Shoji Kaisha	Tokuyama	5

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CARGO GEAR: Shore cranes:

No.	*Capacity*	*Location*	*Owners*
1	250 tons	India Berth No. 5	S.S.K.
1	15 tons	India Berth No. 2 & 3	S.S.K.
2	15 tons	India Berth No. 4 & 5	S.S.K.
1	15 tons	India Berth No. 7 & 8	U.S. Navy

Floating cranes:

No.	*Capacity*	*Owners*
1	120 tons	Nishi-Nippon Harbor Services Co.
1	12 tons	Nishi-Nippon Harbor Services Co.
1	10 tons	Nishi-Nippon Harbor Services Co.

IDENTIFICATION CARDS: See "General – Immigration".

CONSULS: None.

REPAIRS: All deck and engine repairs possible.

DRY DOCKS: Sasebo Heavy Industries Co. Ltd. No. 3, dry dock: Length 370 m. Width 70 m. Depth 15 m. Max. ship (d.w.t.) 300,000. Another 5 dry docks available.

AIRPORT: Itazuke Airport, Fukuoka, about 120 km. (about 180 minutes by taxi). Served by regular airlines. Nagasaki Airport, Nagasaki, about 50 km. (about 70 minutes by taxi). 10 flights daily (All Nippon Airways).

TIME: GMT plus 9 hours. No alterations to clocks throughout year.

POLICE/AMBULANCE/FIRE: Police Station: Sasebo 23-7161 (if emergency: 110). Ambulance Sasebo 23-5121 (Sasebo Fire Station). Fire Sasebo 119 (Sasebo Fire Station).

TELEPHONES: No facilities exist for placing telephones on board.

GENERAL: *Customs:* When vessel arrives direct from foreign port, Customs Officials board for search. Following documents to be submitted. Crew List, Passenger List, Store List, Manifest of Crew Personal Effects (must be signed by individual crew member). Arms and Ammunition List, Narcotics List, List of Port of Call on current voyage, Discharging Cargo Manifest, Through Cargo Manifest, Declaration inward/outward (Form No. C2000). Following will be checked on board. Ship's Registry, Last Port Clearance.

When vessel comes from Japanese port, Customs Officals will not attend on board, except special case. Master or Agents to attend at Customs House for entry formalities with following documents. Discharging Cargo Manifest, Through Cargo Manifest, Declaration inward/outward, Ship's Registry, Last Port Clearance, documents entrusted with the Master by Customs at previous port.

On vessel's departure, clearance issued by Customs after confirming payment of tonnage dues.

Immigration: Immigration Officials board vessel on arrival to examine passports, discharge books and/or other equivalent travel documents and provide a 72 hour landing pass for crew members and passengers. Two copies each of Crew List and Passenger List are required by them. Providing vessel's Agent with these documents beforehand will help in expediting Immigration business on arrival. When vessel in port more than 72 hours, landing passes will be extended every 72 hours on application.

In event that crew members, without entry visas, to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring prompt departure from Japan (within 72 hours) of these men has been booked, or unless vessels to which they are to be transferred, arrive in Japan within 5 days. Services are rendered from 0900 hrs. to 1700 hrs.

SERVICES: Hold cleaning. Compass adjusting. Fumigation.

AUTHORITY: Port & Harbour Bureau, Sasebo City, 3-5, Yorozu-cho, Sasebo City, Nagasaki Pref. *Tel:* (0956) 22-6128.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Nishikyushu Warehouse Co. Ltd., Tategami-cho, Sasebo-shi, Nagasaki-ken. Tel: Sasebo (0956) 24-6161. Cable Address: Soko Sasebo. Telex: 748227 Soko J.

SHIMIZU: 35.01 N. 138.31 E. (See Plan Book)

DOCUMENTS: *Quarantine* (only when arriving from a foreign port):
1 Maritime Declaration of Health.
1 Crew List.
1 List of Passengers (if any on board).
Log Book and Registry, Certificate of Vaccination and Derat Certificate (or Derat Exemption Certificate) should be readily available.

Customs:
1 Declaration Inward/Outward of vessel.
1 Ship's Registry.
1 Last Port Clearance.
1 Store List including arms and narcotics.
2 Manifests of Cargo for discharge (prepared by Agents).
1 Manifest of Through Cargo.
1 Crew List.
1 List of Passengers.
1 Declaration of Crew's Baggage (only necessary if crew members have to land personal effects ashore).
1 Parcel List.

Immigration:
2 Crew Lists.
1 Application for Shore-passes.
2 Lists of Passengers.
1 Declaration Inward/Outward of vessel.

Harbour Master:
1 Declaration Inward/Outward of vessel.

Port Authority:
1 Declaration Inward/Outward of vessel.

PILOTAGE: Pilotage should be arranged through Agent by VHF (Shimizu Port Radio, Channel 16, 12, 14, 20), or vessels requiring Pilot should hoist signal flag "G". Pilot Station: on the point 043° – 1500 m. from Shimizu Lighthouse (the lighthouse: Lat. 35° 00′ 24″ N., Long. 138° 32′ 00″ E.)

ANCHORAGES: See Section 3 on Chart of Shimizu.

MAX. SIZE: Dry-cargo max. draft 12 m. Length and breadth no restriction.

HEALTH: Free Pratique automatic calling at another Japanese port. Radio Pratique available.

TUGS: Normally join in-coming vessels near Pilot station. Tug's lines usually used no extra charge.

BERTHING: *Public:*

Wharf	*Berth*	*Depth* (m.)	*Length* (m.)	*Max. Size* (d.w.t.)	*Main Usage*
Okitsu No. 1 Wharf	No. 2 – No. 3	10.0	370	15,000	General Cargo
Okitsu No. 2 Wharf	No. 4 – No. 5	5.5	181	2,000	General Cargo
	No. 6 – No. 9	10.0	740	15,000	General Cargo
	No. 10	7.5	168	5,000	General Cargo
	No. 11 – No. 12	12.0	440	30,000	Containers
	No. 13 – No. 14	10.0	370	15,000	Cars
Sodeshi No. 1 Wharf	No. 1 – No. 4	4.5	240	700	Ballast, Steel materials
	No. 5	7.5	135	5,000	Logs
	No. 6 – No. 8	12.0	720	30,000	Containers
	No. 9 – No. 10	9.0	350	10,000	
	No. 11	12.0	240	30,000	Logs
	No. 12 – No. 15	7.5	520	5,000	General Cargo
Sodeshi No. 2 Wharf	No. 16	10 – 12	330	30,000	Wood-chips
	No. 17	9.0	165	10,000	Petroleum
	No. 18	7.5	72	1,000	Petroleum
Ejiri Wharf	No. 1 – No. 5	6.5	472	3,000	Fish & Shell
	No. 6 – No. 7	4.5	149	700	Fish & Shell
	No. 8 – No. 12	4.5	340	700	Fish & Shell
	No. 13 – No. 16	4.5	262	700	Fish & Shell
	No. 17 – No. 18	6.5	185	3,000	Fish & Shell
Shimizu Wharf	No. 1 – No. 5	4.5	323	700	Steel materials
					Soybean Meal, Waste Oil
Hinode Wharf	No. 1 – No. 2	7.3	226	5,000	General Cargo
	No. 3	9.0	183	10,000	General Cargo
	No. 4 – No. 5	10.6	411	20,000	General Cargo
Fujimi Wharf	No. 1 – No. 2	4.5	120	700	Ballast, Sand
	No. 3 – No. 4	9.0	330	10,000	Wood–chips
	No. 5	11.0	185	20,000	Grain, Cement
	No. 6 – No. 7	9.0	329	10,000	Sugar, Raw Cotton
Anchorage Mooring Basin – Buoy	Orido	5.0–10.5	344, 100 m.^{2} 3 Buoys	10,000 – 20,000	
Private:					
National Railway Wharf		7.3	266	5,000	Cement
Toa Nenryo Sea-Berth		22.0	120	250,000	Crude Oil,
Toa Nenryo Sea-Berth		6.0–8.2	485	5,000	Petroleum
Honen Oil Dolphin		11.0		40,000	Grain, Molasses
Suzuyo Warehouse Wharf		4.5	48	700	Grain
Suzuyo No. 1 Pier		5.0	27	1,000	Petroleum
Nihon Light Metal Wharf		9.0–11.0	410	32,000	Bauxite Ore, Alumina, Heavy Oil
Nakayama Steel-Works Wharf		5.0	41	1,000	Steel Materials
Nippon Kokan Wharf		4.5–6.5	885	34,000 G/T	
Kanazashi Shipyard Wharf		4.5–5.5	490	20,000 G/T	
Miho Shipyard Pier		5.5–6.0	277	8,000 GT	
Seiko Dock Pier		7.0	20	500 GT	

CARGO HANDLING FACILITIES:

Wharf	*Type*	*Capacity*	*Number*
Okitsu No. 2 Wharf	Gantry (travelling)	37.5 tons	1
	Transtainer (travelling)	30.5 tons	1
Sodeshi No. 1 Wharf	Gantry (travelling)	45 tons	2
	Transtainer (travelling)	30.5 tons	4
Sodeshi No. 2 Wharf	Unloader	400 t.p.h.	2
Hinode Wharf	Jib Crane (portable)	5.3 tons	1
	Jib Crane (fixed)	51 tons	1
Fujimi Wharf	Unloader (fixed)	180 t.p.h.	3
	Pneumatic unloader (travelling)	300 t.p.h.	2
	Belt-conveyor	450 t.p.h.	1
	Cement Unloader	470 t.p.h.	1
Suzuyo Warehouse Wharf	Pneumatic Unloader (fixed)	80 t.p.h.	1
	Pneumatic Unloader (fixed)	50 t.p.h.	1
Honen Oil Dolphin	Pneumatic Unloader	156 t.p.h.	2
	Pneumatic Unloader	300 t.p.h.	1
Nihon Light Metal Wharf	Unloader	540 t.p.h.	2
	Air Slide	150 t.p.h.	1
	Loading Arm	1,400 t.p.h.	1
	Loading Arm	500 t.p.h.	2

SPECIAL CARGO HANDLING FACILITIES:
Container Berth: Okitsu No. 2 wharf No. 11 – No. 12, depth 12 m. length 440 m. (2 berths), 1 gantry crane (capacity 37.5 tons), 1 transtainer (capacity 30.5 tons).
Sodeshi No. 1 Wharf: Berth No. 6 – 7: Length 480 m., depth 12.0 m. 2 gantry cranes, capacity 45.0 tons each. 3 transtainers, capacity 30.5 tons each.

TANKERS: Toa-Nenryo Sea-Berth (7 berths); max. permitted draft 22 m., max. capacity 250,000 d.w.t. Diameter of discharge lines; 16 in. and 32 in.

STEVEDORES: Normally latest time to order gangs 1500 hrs. previous day.

MEDICAL: No advance notice required unless urgent.

DENSITY: 1023 – 1024.

FRESH WATER: Most berths supply by shore installations, otherwise barge.

FUEL: All grades of oil delivered by barge only.

FIRE PRECAUTIONS: Harbour fire-fighting corps with a fire-fighting boat.

GANGWAY/DECK WATCHMEN: Service of watchmen optional but not necessary.

OPENING/CLOSING HATCHES: Opening and closing of hatches may be done by Crew members or on request to Agent by stevedores.

RADIO:

Mode	*Name of Station Call sign*	*Transmitting Frequency (kHz)*	*Class & Power (W)*	*Working Hour*	*Receiving Frequency*	*Use*
MF	Shimizu Radio	500	A1 250 A2 550	H24	Public Telegram 468 kHz	Call & Reply
		486	A1 250 A2 550		Harbour Service 480 kHz	Communication
	JGQ	512	A1 250 A2 550			Call & Reply

VHF:

Name of Station	*Frequency (Channel No.)*	*Class & Power (W)*	*Type of Operation*	*Use*
Shimizu Port Radio	16	F3 50	Simplex	Call & Reply
	12		Simplex	Communication (priority for urgency)
	14		Simplex	Communication
	20		Duplex	Communication

CERTIFICATES: Ship Register, Radio and Safety Equipment Certificate, Derat Exemption Certificate, etc.

CUSTOMS ALLOWANCES: Tobacco: 60 cigarettes permitted. Wine or spirits, according to the length of voyage: none within 1 month voyage, 1 bottle over 1 month, 2 bottles over 3 months.

IDENTIFICATION CARDS: Passport or Seaman's Book.

CONSULS: None.

REPAIRS: Most repairs and overhauls possible.

DRY DOCKS: Kanazashi Shipyard (largest dry dock 120 m. × 18.6 m., 5,000 tons).
Miho Shipyard (90.5 m. × 16 m. × 7.5 m.).
Floating Dock: 125 m. × 22 m. 9.5 m. (internal dimensions).

SURVEYORS: Japan Marine Surveyors & Sworn Measurers' Association, Shimizu Branch, 7-5, Irifune-cho, Shimizu, Japan. Tel: 52-0177.

Japan Oil Stuff Inspectors Corporation, Shimizu Branch, 1-28, Irifune-cho, Shimizu, Japan. Tel: 52-8549.

New Japan Surveyors & Sworn Measurers' Association, Shimizu Branch, 7-17, 1-chome, Minato-cho, Shimizu, Japan. Tel: 53-1290.

TIME: GMT plus 9 hours. Permanent.

HOLIDAYS: No work from December 31st to January 3rd and Shimizu Port Festival Day (First Sunday in August). Also the 1st and 3rd Sunday of every month, except containers.

AIRPORT: 263 km. from Narita International Airport, 180 km. from Haneda.
POLICE/AMBULANCE/FIRE: Police 110; Ambulance 119; Fire 119; Water Police 52-0200.
TELEPHONE: Telephones can be arranged onboard at most berths by calling 64-2002.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 7 days but 7 days' extension possible if ship stays longer.
SHIP SUPPLY SERVICE: Operated by Shimizu Port Service Ltd., 10-78 Hinode-Cho, Shimizu City, Shizuoka Pref., Japan.
AUTHORITY: Shimizu Port Administration Bureau, 5-19 Hinode-Cho, Shimizu City, Shizuoka Pref., Japan. *Tel:* Shimizu (0543) 53-2201. *Contact:* Katsumi Saito, Chief of Planning and Development Division.

AGENT: Sub-Agent of Dodwell & Co. Ltd. Suzuyo & Co., Ltd. 11 – 1 Irifune-cho, Shimizu-shi, Shizuoka-ken. Cable Address: Suzuyo Shimizu. Domestic Telex: 3965-671, 672, 677 Suzuyo Smz. Tel: Shimizu (0543) 53-3111/3914 and 52-1398.

SHIMONOSEKI (including Mutsure): (See Plan Book)
33.57 N. 130.58 E.
(See "Kanmon-Ko")

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 3 Crew Lists including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: See "Moji".
ANCHORAGES: Mutsure anchorage: Undermentioned area is open port. The sea area surrounded by:
- *(a)* Line connecting Daibahana on Takenoko Island and top of Wagora Island.
- *(b)* Line connecting top of Wagora Island and Udonohama on Mutsure Island.
- *(c)* Coastline between Udonohama and Unoishibana on Mutsure Island.
- *(d)* Line connecting Unoishibana and Anse-no-Shiri in Shimonoseki.
- *(e)* Line connecting Anse-no-Shiri and point at 370 m. from Daibahana on the line connecting Daibahana and top of Wagora Island.
- *(f)* Line Long. 130° 54′ E.

Anchorage includes a part of quarantine anchorage and Mutsure oil berth; depth 10 m. – 25 m.
RESTRICTIONS: See "Moji".
MAX. SIZE:

Wharf	*Numbers*	*Length (m.)*	*Depth (m.)*	*Capacity (g/t)*
Daiichi Pier	9–10	330 m.	8.5	10,000×2
	12	165	8.0	10,000×1
	13	165	8.5	10,000×1
Daini Pier	15	150	8.5	10,000×1
	16	165	8.5	15,000×1
	17	210	9.1	15,000×1
Hosoe Wharf	18	130	7.2	(Exclusively used by Kampu-Ferry)
	19	130	7.0	5,000×1
	20	185	9.0	15,000×1
	21	185	9.4	15,000×1
Hananocho Pier	24	185	9.5	15,000×1
	25	185	10.0	15,000×1

Note: If both Nos. 12 and 13 piers are used, LOA up to 160 m.
If both Nos. 15 and 16 piers are used, LOA up to 160 m.
If both Nos. 20 and 21 wharves are used, LOA up to 230 m.
If both Nos. 24 and 25 piers are used, LOA up to 230 m.

Fukuura Berth (for lumber discharge only)		120	7.2	5,500 d.w.t

Also see "Tankers".
HEALTH: See "Moji".
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.
VHF: See "Yawata".
TUGS: See "Moji".
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
Mitsui Kinzoku Dolphin Pier: Max. d.w.t. 60,000. Max. LOA 230 m. Max. draft 11.90 m. 1 shore crane. Bauxite and phosphate handled.
BRIDGES: Kanmon Suspension Bridge was built in 1973 across Hayatomo Channel (narrowest place in Kanmon Strait, width of fairway 530 m.) between Shimonoseki and Moji. The height of the bridge from sea level is 61 m.

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agents to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
MEDICAL: It is recommended that advance notice be given if treatment required.
TANKERS: Shell Oil berth situated at Hikoshima, on Southwestern end of Honshu, facing Moji across Kanmon Strait. In vicinity of berth, flood tide sets to East, ebb tide to West, current about 5-6 knots. Mooring berth consists of 4 buoys, approximately 140 m. offshore, space between buoys being approximately 270 m.

Max. dimensions of vessel which can be safely accommodated are 18,000 d.w.t., LOA 170 m., breadth unlimited, draft 9 m. Product handled, fuel oil. Shoreline 1×8 in. Discharge rate 500 t.p.h.

Vessels only berthed or unberthed when tide sets to West during daytime only. In approaching berth, as vessel comes against tide, full engine power and tug assistance required. One 10 in. pipe connected to vessel; discharge efficiency per hour 500-600 kl.

Nissin Tanker Pier located about 610 m. South of Mutsure lighthouse. At this berth, West-going current stronger than East-going and ship taken to berth only on Westerly current, with stern towards South. Most suitable berthing time is 2-3 hours after commencement of West-going current. Max. dimension of vessel which can be accommodated at this berth is 95,000 d.w.t., LOA 246 m., draft 15 m. Product handled, fuel oil. Shoreline 3×12 in. Discharge rate 2,000 t.p.h.
DENSITY: 1025.
FRESH WATER: Good fresh water supplied either from water barge or from hydrants alongside wharves. Rate of delivery from water barge 50 t.p.h. and from hydrants 40-50 tons.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice. Also see "Moji, Fuel".
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.
CARGO GEAR: See "Certificates", but no special requirements.
CONSULS: Korean Consul, Tel. (66) 5341.
REPAIRS: All types of repairs possible.
DRY DOCKS: Mitsubishi Heavy Industries Ltd. 4 dockyards (Nos. 3 & 4 for smaller vessels).
Hayashikane Shipbuilding K.K. 3 dockyards (Max. 1,100 g.t.).
Towa Shipbuilding K.K. 1 dockyard (Max. 1,000 g.t.).
Mitsubishi Heavy Industries Ltd.
Dimensions of docks:

	Length (m.)	*Breadth (m.)*	*Draft (m.)*
No. 1 Dock	164.13	25.0	7.04
No. 2 Dock	150.10	20.0	6.88

Max. size of vessel for docking:

	Length (m.)	*Breadth (m.)*	*Draft (m.)*
No. 1 Dock	160.00	22.50	5.50
No. 2 Dock	143.00	19.30	5.00

REPATRIATION: Possible.
AIRPORT: Approx. 80 km. to Fukuoka airport; about 1.5 hours by train. Approx. 18 km. to Kitakyushu airport; 40 minutes by taxi.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police station 110; Ambulance/Fire Station 119.
TELEPHONE: Possible to place telephone on board.
SERVICES: All services available.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
DEVELOPMENTS: Nishiyama lumber discharge wharves (depth of water 12 m.) and a lumber pool for larger vessels are under construction at Western centre of Hikoshima Island, facing Kanmon Straits, for completion in 1985.
AUTHORITY: Shimonoseki Port Authority, (750) 1–1 Nabecho, Shimonoseki City, Japan. *Tel:* (0832) 31-1111. *Contact:* S. Takaoka, General Manager.
AGENT: See "Moji".

SHIMOTSU (including Kainan): 34.06 N. 135.08 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Pilot request to be given to pilot station through Agent. Advance notice of ETA: 72 hours and 24 hours before arrival. No VHF available. Pilot usually attends by tug boat. No special pilot boat. Pilot boards Lat: 34° 07′ 25″ N., Long: 135° 06′ 45″ E. No alternative area in event of bad weather. Location of anchorage for awaiting pilot – Lat: 34° 07′ 25″ N., Long: 135° 06′ 45″ E., as pilot station.

ANCHORAGES: Quarantine anchorage, 20 m. depth.

RESTRICTIONS: Entry daytime only.

Yura Bay: Vessels no longer than 110 m. berth. Daytime entrance only regardless of tide and current.

MAX. SIZE:

	Max. d.w.t.	*Length*	*Draft*
Tonen O-1	236,000	480 m.	18.50 m.
Tonen E-1	70,000	400 m.	12.50 m.
Maruzen Buoy Berth	35,000	230 m.	9.50 m.
Maruzen Jetty 5	50,000	392 m.	11.60 m.
Fuji Kosan Jetty 9 (Kainan)	70,000	250 m.	12.50 m.
Fuji Kosan Ohsaki Sea Berth	245,000	—	24.00 m.

Also see "Tankers".

HEALTH: Radio Pratique available.

Formalities will be carried out at the undermentioned positions which will be specified by Harbour Master.

1. Lat: 34° 07′ 09″ N., Long: 135° 06′ 20″ E.
2. Lat: 34° 08′ 09″ N., Long: 135° 06′ 28″ E.
3. Lat: 34° 08′ 25″ N., Long: 135° 05′ 47″ E.
4. Lat: 34° 08′ 33″ N., Long: 135° 06′ 49″ E.
5. Lat: 34° 09′ 00″ N., Long: 135° 06′ 29″ E.
6. Lat: 34° 08′ 48″ N., Long: 135° 07′ 30″ E.
7. Lat: 34° 09′ 14″ N., Long: 135° 07′ 27″ E.

RADIO: Recommended Masters communicate with Agents through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound, to contact Choshi, and Northbound, to contact Nagasaki Radio respectively.

TUGS: Tugs join at Quarantine anchorage, tug lines used.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

MEDICAL: No advance notice required unless urgent.

TANKERS: There are no slop facilities.

Berth	*Product*	*Shorelines*	*Discharge Rate t.p.h.*
Tonen O–1 Jetty	Crude Oil	2×12 in.	4,500
		3×16 in.	12,000
Tonen E–1 Jetty	Crude Oil	2×12 in.	2,500
	Fuel Oil	1×10 in.	2,000
Maruzen No. 5 Jetty	Crude Oil	2× 8 in.	1,500
Maruzen Buoy Berth	Fuel Oil	1× 8 in.	500
	Lube Oil	2× 6 in.	500
Fuji Kosan Jetty 9 (Kainan)	Crude Oil	3×16 in.	13,000

DENSITY: Average density 1012.

FRESH WATER: Available at every berth except Fuji Kosan Sea Berth, by shore lines, rate about 25 metric tons per hour. Also available by barge.

FUEL: Most grades of domestic and bonded oil are available. If bunkering is carried out at anchorage, guard boat and oil fence will be required by harbour regulations.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Only minor deck and engine repairs.

DRY DOCKS:

Yura Dockyard: Mitsui Shipping & Engineering Co. Ltd. have constructed a 350,000 d.w.t. new dockyard in Yura, 50 nautical miles South of Kobe Lat: 33° 57′ 30″ N., Long: 135° 07′ 00″ E. Vessels calling at Yura port are requested to note the following information:

Tonnage dues should be paid at Wakayama since Yura is closed port.

Dock Master boards at position 280° – 2,000 m. from Arijima lighthouse for entering Yura and Pilot is not required.

Vessel is requested to wait at Wakayama Anchorage if dry dock or wet basin is not available.

Vessel is requested to call at Shimotsu for free pratique if necessary.

REPATRIATION: Possible.

AIRPORT: Osaka International Airport.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police 110 and Ambulance/Fire 119 (in case of emergency).

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

AUTHORITY: Wakayama Shimotsu Port Administration Office, 22, Chikko 6-chome, Wakayama City. *Tel:* (0734) 31-7266.

AGENT: Sub-Agents of Dodwell & Co., Tokyo: Shimamoto Kaiun K.K., Kowan Kaikan, 3066, Shimotsu, Shimotsu-cho, Kaiso-gun, Wakayama-ken. Cable address: Shimamoto Wakayama Shimotsu. Domestic Telex: 05542-749 Shimast. J. Tel: (07349) 2-0141.

SHIOGAMA (Including Sendai): 38.20 N. 141.03 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Personal Effects.

Agent should be provided with necessary information to prepare Inward/Outward Declarations and Cargo Manifests.

PILOTAGE: Not compulsory but can be arranged at request of Master. Pilot not available after dark. Pilot boards at Fairway Buoy "A", position Lat. 38° 13′ 15″ N., Long. 141° 08′ 15″ E.

ANCHORAGES: Depth: 28 m. Bottom: Rock and sand. Anchorage not suitable in rough weather and as no sheltered anchorage nearby it is advisable for vessels to proceed offshore.

RESTRICTIONS: *For vessels entry into and sailing from Sendai:* Priority of entry and sailing from the port is given to ferries. Entry and sailing of other vessels is restricted to times outside ferry schedules. Entry of tankers controlled by Tohoku Oil Refinery Co. Ltd. under supervision of Harbour Master.

MAX. SIZE: See "Berthing".

HEALTH: Radio Pratique available.

Sendai: Formalities will be carried out at the Quarantine Anchorage (Lat. 38° 13′ 03″ N., Long. 141° 06′ 42″ E.)

Shiogama: Formalities will be carried out at the Quarantine Anchorage.

RADIO: Choshi Radio or Nagasaki Radio.

BERTHING:

Sendai:

Berth	*Length (m.)*	*Depth (m.)*	*Permissible Draft (m.)*	*Capacity (g/t)*	*Cranes (tons)*
Tohoku Oil Pier		18.0	17.0	150,000	
12 m. Public Berth	240	12.0	11.5	20,000	
10 m. Public Berth	185	10.0	9.5	18,000	
Azuma Seiko (Private)	300	12.0	11.5	20,000	2×30 1×10
Fujisawa Seiko (Private)	300	8.0	7.5	10,000	1×30

Shiogama:

Berth	*Length (m.)*	*Depth (m.)*	*Permissible Draft (m.)*	*& Length Overall (m.)*	*Capacity (g/t)*	*Shore Cranes*
Teizen No. 1 (T.1)	160	9.0	8.5	160	18,000	
No. 2 (T.2)	160	9.0	8.5	160	15,000	
No. 3 (T.3)	130	7.5	7.0	120	10,000	
No. 4 (T.4)	130	7.5	7.0	120	10,000	
Higashi Wharf (E.1,2,3)	330	7.0	7.0	—	10,000	1×3 t.
Naka Wharf (E. side)(M. 4,5,6)	270	7.5 4.6	7.0 4.0	130	5,000 1,000	1×2 t.
Naka (W. side)(M. 7,8)	170	4.5	4.0	—	1,000	
Naka (N. side)(MN)	169	5.5	5.0	—	2,000	
Nishi Wharf (W)	326.6	4.5	4.0	—	1,000	

TANKERS: *Tohoku Oil LPG Pier:* Vapour Line: 1×8 in., Liquid line connection (Propane) 2×12 in., Butane 1×12 in., Depth alongside 17 m. Length between dolphins, 125 m.

Vessel discharges through two 16 in. Chiksan loading arms each capable of receiving 4,000 t.p.h. Also 1×8 in. Chiksan loading arm for bunker.

There are no facilities for dirty ballast.

Storage capacity:

Crude Oil:	102,000 K/L×5
	55,000 K/L×1
Fuel Oil:	31,000×5

New Sendai Oil Pier: Report received August 1978. Position: Lat. 38° 16′ N., Long. 141° 02′ E.

Pilot available at Quarantine Anchorage, position Lat. 38° 13′ N., Long. 141° 06′ E. Fresh water available. Depth alongside 18 m. Permissible draft 17.0 m. Max. size 150,000 g.r.t.

FRESH WATER: Supplied by shore line at 40 t.p.h.

FUEL: *Sendai:* Domestic oil is available; bonded oil also available from Tohoku Oil K.K.

Shiogama: Domestic oil is available; bonded oil will be brought from Yokohama or Sendai, when required.

TIME: GMT plus 9 hours. No alterations during the year.

DEVELOPMENTS: 15 public wharves under construction to accommodate vessels of 15,000 – 40,000 d.w.t. for discharging and loading of general and bulk cargoes. Depth alongside 10 m. – 12 m.

AUTHORITY: Shiogama Port Administration Office, 7-13, Teizan-dori 1-chome, Shiogama City, Miyagi Pref. *Tel:* (02236) 2-3391.

Sendai Port Administration Office, 1-2, Sakae 2-chome, Tagajo City, Miyagi Pref. *Tel:* (02236) 5-9111.

AGENT: Okimiya Transport Inc. 13-24, 2-chome Minatomachi, Shiogama-shi, Miyagi-ken. Cable address: Oki Shiogama. Domestic Telex: 08592-49 Okiinc. Tel: (02236) 4-1161. Postal No. 985.

TAGONOURA: 35.06 N. 138.42 E. (See Plan Book)

PORT LIMITS: Commences 5 cables from the harbour entrance. A vessel is considered an "arrived ship" at this point.
DOCUMENTS: Same as "Shimizu".
PILOTAGE: Ordered 24 hours in advance through Agents. If possible vessels should obtain Japanese Chart 1075 for the approaches and Japanese Harbour Plan No. (P) 98. Two fixed green leading lights visible 13 miles lead the ship through the entrance on a bearing of 323.5° True. Vessels should approach on this transit until 1 mile off the breakwater entrance which is marked by an occ. G. 6 second 14.4 mile light on the West breakwater and a occ. R. 6 second 15 mile light on the East breakwater. The Pilot will board from a tug 1.25 miles from the entrance. 2 tugs will attend for the entrance transit.
ANCHORAGES: Due to the steep nature of the coast no roadstead anchorages are available. In the event of having to wait for Pilot or weather to moderate it is necessary to steam outside the entrance or anchor and wait near Shimizu Quarantine Station.
RESTRICTIONS: The allowable draft should be verified with the Agents before arrival as this does vary, the average being 6.5 m. alongside the berth. The entrance channel has a minimum depth of 9 m. at all times.
MAX. SIZE: LOA 600 ft., beam 100 ft. These extremes are likely to be increased as the port develops.
HEALTH: Radio Pratique is unavailable even if vessel holds a valid Japanese Sanitary Inspection Certificate; if not, then quarantine will be cleared at Shimizu.
RADIO: Chosi Radio. When nearing Shimizu a call can be made via Shimizu Radio VHF requesting them to telephone ETA to Tagonoura Pilot.
TUGS: 2 tugs normally required. These are ordered from Shimizu in advance by Tagonoura Agents. The same applies on departure.
BERTHING:

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Capacity* (d.w.t)
Yoshiwara Wharf No. 1	167	9.0	9.0	1×10,000
2	125	7.5	7.5	1× 5,000
Chuo Wharf 1 & 2	410	9.0	9.0	2×10,000
3 & 4	250	7.5	7.5	2× 5,000
Asahi Kasei Wharf	170	9.0	9.0	1×10,000
(Private)	80	7.5	7.0	1× 5,000
Fuji Wharf No. 1, 2 & 3	375	7.5	7.5	3× 5,000
4	115	6.5	6.5	1× 3,000
Suzukawa Wharf	485	5.5	5.5	6× 2,000

SPECIALISED CARGO FACILITIES: Tagonoura handles bulk phosphates, etc. Also liquid chemical carriers and tankers.
BRIDGES: None.
STEVEDORES: Private arrangements. Working hours: Weekdays 0830 – 2130 hrs. Labour not available 1st and 3rd Sundays of each month or January 1st-4th or August 16th.
MEDICAL: Hospital and immediate services available.
TANKERS: One oil wharf. Max. permissible draft 5.5 m. Capacity 2×5,000 dwt. vessels.
DENSITY: 1021.
FRESH WATER: Unlimited. Available on the berth, rate less than 15 t.p.h. Cost Yen 250 per ton.
FUEL: All grades and lubricants available from Chiba, Toyko, Yokohama and Shimizu.
REPAIRS: Minor repairs only available.
DRY DOCK: None.
SURVEYORS: Cargo Inspectors and Surveyors of all societies are available through the Agents.
GANGWAY/DECK WATCHMEN: Available but not necessary.
HATCHES: Opened and closed by crew.
CUSTOMS ALLOWANCES: Same as "Shimizu".
CARGO GEAR: Ship's gear.
REPATRIATION: Possible. Frequent train services to Toyko.
AIRPORT: Narita Chiba Prefecture near Tokyo.
TIME: GMT plus 9 hours throughout.
TELEPHONES: None available.
SERVICES: All services available at short notice from Shimizu or Toyko.
SHORE LEAVE: Possible.
IDENTIFICATION CARDS: 7 day passes issued, extended if needed.
EMERGENCY CO-ORDINATION CENTRE: Maritime Safety Agency Tagonoura Branch Tel: (0545) 32-0154.
STORING: Vessels can be stored by trucks proceeding alongside the berth and can use fork lift trucks on the wharf to handle stores.
DEVELOPMENTS: There will be no developments of further berths and no increase of water depth until 1985.
AUTHORITY: Tagonoura Port Administration Office of Shizuoka Prefecture, 315 Suzukawa, Fuji City, Shizuoka Prefecture, Japan. *Tel:* 0545.33.0495. *Contact:* Kyuji Murofushi, Manager.

AGENT: Sub-Agent of Dodwell & Co., Tokyo. Suzuyo & Co., Ltd. Tagonoura Office, 1-179, Suzukawa, Fuji-shi, Shizuoka-ken. Cable address: Suzuyotago Fuji. Domestic Telex: 3925-446. Suzuyo Tagonoura Fuji. Tel: (0545) 33-0310.

TANABE: 33.44 N. 135.21 E. (See Plan Book)

DOCUMENTS:
Harbour Master: Report of arrival and departure.
Shimotsu Customs Office (Tanabe Branch): 1 copy each of the following.

Ship's Register
Last Port Clearance
Crew List
Passenger List
Store List
Declaration of Crew's Baggage (First port only)
Cargo Manifest (Discharge & Through Cargo)
Declaration Inward of vessel
Parcel List.

Osaka Immigration Office (Shimotsu Branch):
1. Before ship's arrival: "Notice of Ship's arrival" is to be submitted 24 hours before ship's arrival with Crew List (Name, Nationality, Date of Birth, Number of Passport or Seaman's Book, Rank).
2. On ship's arrival: "Report of Ship's Arrival" is to be submitted with Crew and Passenger Lists (if already submitted before ship's arrival, not required).
3. On Ship's Departure: "Report of Ship's Departure" to be submitted with Crew List if any changes.

Note: It is required that ship's Agent is able to guarantee the identification of crew.
PILOTAGE: Not compulsory, but if required Agent to be advised 72 hours prior arrival. No pilotage sunset to sunrise. Anchorage waiting for Pilot Lat: 33° 42′ N., Long: 135° 19′ E. Pilot station 2,200 m. 315° from Banshono-hana lighthouse. Depth 38 m.
ANCHORAGES: Waiting anchorage, 1,900 m. 40° from Banshono-hana lighthouse. Depth 19 m. Bottom, sand and mud.
In Tanabe port, there are many rocks, and therefore it is required to investigate the port passage sufficiently, according to the Chart of Tanabe port which is issued by Maritime Agencies (Chart No. 74).
RESTRICTIONS: Max. draft 9.5 m. (31ft.), high tide. Usual draft, under 8.5 m. (28 ft.).
When a vessel loaded with explosives or dangerous cargo is entering the port, she must obey the instructions issued by Port Master when outside the port.
There is no restriction for night arrival.
HEALTH: Vessels usually anchor in the port of Owase or Shimotsu, where the authorities board and grant Free Pratique.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.
Tanabe Maritime Safety Office, call sign: JNH.
The contents of communications must be concerned with ship's arrival and departure, and maritime safety.
VHF: Call: "Tanabe Hoan".
Communication to be concerned with ship's arrival and departure arrangements and port safety affairs.
Telephone number of Maritime Agencies: 0739-22-2000.
TUGS: None available.
BERTHING: 2 buoy berths, depth 10 m. and 7.5 m.
STEVEDORES: Available through Kinan Port Transport Union.
MEDICAL: No advance notice required unless urgent. In an emergency contact Maritime Agencies.
TANKERS: Proceed to Shimotsu.
DENSITY: About 1030.
TIDE: Tidal range: Maximum plus 2.13 m. Minimum minus 0.21 m.
FRESH WATER: Available by water barge, capacity 30 tons. Daytime delivery only to buoy berths. 48 hours' notice required.
FUEL: Bonded oil will be brought from Shimotsu or Kobe, when required.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 60 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: No facilities available.
AIRPORT: Nanki Shirahama Airport about 25 km. distant. 2 Domestic flights daily to Tokyo.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Tanabe police office, tel. 0739-22-1226; Ambulance, tel. 0739-22-0931; Fire department, tel. 0739-22-0931.
SERVICES: None available locally but obtainable from Osaka.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
AUTHORITY: Tanabe Doboku (Public Works) Office, 23-1, Asahigaoka, Tanabe City, Wakayama Pref. *Tel:* (0739) 22-1200.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Shimamoto Kaiun K.K., 193 Kamiyashiki, Tanabe-shi, Wakayama-ken. Tel: Tanabe (0739) 24-2424. Cable Address, Shimamoto Tanabe. Telex: 05562-103.

TOBATA: 33.55 N. 130.51 E. (See "Kanmon-Ko")

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Compulsory. Harbour Pilots and Inland Sea Pilots are available at the pilot station or quarantine anchorage. Mutsure pilot station. Lat. 33° 59′ 30″ N., Long. 130° 53′ 00″ E.

ANCHORAGES: No. 5 Section, Wakamatsu. Depth: 9 m.– 11 m. Capacity (g/t) 15,000×2. Quarantine Anchorages also used when necessary.

WIND/TIDE: South-easterly winds prevail in the warm seasons and North-westerly winds in the Winter season. The maximum velocity recorded in the past being 18 m./sec. The tidal range is 2.145 m. The current at the channel leading to new port runs Southward at the flood and Northward at the ebb. The maximum speed of the current is about 3 knots. There is no current in the dock.

RESTRICTIONS:

(a) Vessels exceeding 20,000 tons gross may berth only within 1 hour before and/or after slack tide. Vessels under 20,000 tons gross may berth regardless of current, if it does not exceed 5 knots.

(b) Night entry: Vessels under 10,000 gross tons may berth at Nos. 1, 2, 3 and 8 wharves until 2200 hrs. in Summer season and 2100 hrs. in Winter season, subject to Harbour Master's permission and Pilot's agreement.

(c) Night departure: Vessels under 20,000 gross tons allowed to sail from Nos. 1, 2, 3, 8 wharves and Nos. "A", "B", "C" buoys until 2200 hrs., regardless of current, provided they are moored with bow outward.

(d) Least depth in channel, 17.0 m.

MAX. SIZE: No. 4 Ore Pier: 160,000 d.w.t. or 250,000 d.w.t. with part load.

HEALTH: Formalities will be carried out at the anchorage. Quarantine station 105° – 2,800 m., (800 m. square) from Mutsure Lighthouse.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Two tugs join vessel at entrance of harbour (in front of harbour signal station). Vessels exceeding 20,000 tons gross require 3 tugs. One of them will join vessel at Mutsure leading into main harbour and 2 join vessel at entrance of port (in front of harbour signal station).

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*LOA* (m.)	*Shore Cranes*
(Ore Pier)					
Wharf No. 1	200	10.5	10.5	200	4×30 t.
2	200	11.0	11.0	200	
3	250	13.0	13.0	270	
4	405	17.5	16.0	327	
(Coal Pier)					
Wharf No. 8	267	11.5	11.5	250	2×10 t.
9	267	9.5	9.5	170	
Buoy No. A		12.0	9.5	180	Floating Crane
(Loading Pier)					
Uchiura No. 5 Wharf	190	9.5	9.5	221.5	1×25 t. 1×10 t.
Shoko Wharf Tobata	150	8.5	8.5	150	
Shin Nittetsu Kagaku (RI)	105	7.5	7.0	110	
Sakaigawa Public Wharf (RS)	299	7.5	7.0	120	
Hibikinada Mitsui Kozan Coking Ind.		13.0	12.2	250	

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. (50% additional of basic stevedorage), 2100 – 0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: Kinjyo Hospital, Yawata; Shimada Surgical Hospital, Yawata. No advance notice required unless urgent.

TANKERS: *Kitakyushu LNG. Co.:* Max. size 125,000 d.w.t. Max. LOA 286 m. Max. draft 12.0 m. 3×16 in. (LNG) discharge rate 12,000 k/l.; 1×16 in. (boil off oil) discharge rate 12,000 k/l.

FRESH WATER: Available in connecting lines from shore side at Wharf Nos. 1, 2, 3, 8 and 9. No. of hydrants 5, 4, 5, 5, 5. At buoys: from barges, arranged from Wakamatsu. Rate of delivery: 55 – 70 t.p.h., ex-hydrant, 60 t.p.h., barge. Overtime (0500 – 0800 hrs.) (1700 – 2200 hrs.), 50% add.; (2200 – 0500 hrs.), 100% add.; bad weather, 50% add.; Sundays and holidays, 50% add.; minimum quantity at Tobata, 30 tons; minimum quantity at Mutsure, 50 tons.

DENSITY: Average density in the port is about 1019 – 1021 in Summer season, 1025 – 1026 in Winter season.

FUEL: Domestic oil is available. Bonded oil will be brought from Moji, Ube or Oita with sufficient advance notice, when required.

FIRE PRECAUTIONS: No tanker berth. Each tugboat equipped with fire extinguishing system for attending emergencies on request.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo aboard.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: See "Yawata".

REPAIRS: All types of deck and engine repairs possible afloat.

DRY DOCK: No dry dock.

REPATRIATION: Possible.

AIRPORT: See "Yawata".

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Tobata Police Office, Tel: 093-871-4321; Wakamatsu Water Police, Tobata Branch, Tel: 093-861-0284; Ambulance/Fire: Tobata Fire Department, Tel: 093-871-2621.

TELEPHONES: See "Yawata".

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

AUTHORITY: Kitakyushu Port and Harbor Bureau, Nishi-Kaigan 1-Chome, Moji-Ku, Kitakyushu-City, 801 Japan. *Tel:* (093) 331-1331.

AGENT: Sub-agents of Dodwell & Co. Tokyo. Holme Ringer & Co. Ltd., 2nd Floor, Service Center Bldg., Outside West Gate, Tobata Works, Nippon Steel Corp., Kawashiro-cho, Tobata-ku, Kitakyushu-shi, Fukuoka-Ken. Cable Address: Ringer Tobata. Domestic Telex: 7145-75. Tel: (093) 861-0221, 871-1561 (Ext. 5678).

TOKUYAMA (including Tonda): 34.02 N. 131.48 E.

Port situated in Yamaguchi Prefecture on Western part of mainland, facing Seto Inland Sea. Surrounded by Oshima Peninsula on the East, by Otsu-Shima and Uma-Shima (islands) on the S.W. and by the land on the North forms a large bay with deep water suitable for shelter. Sen-Shima and Kurokami-Shima (islands) lying in harbour, divide it into Tokuyama Section and Tonda Section.

DOCUMENTS:

(a) Customs. When vessel arrives direct from foreign port, Customs officials will board to search. The following documents are to be submitted:

Crew List.
Passenger List.
Store List.
Manifest of Crew Personal Effects (must be signed by individual crew member).
Arms and Ammunition List.
Narcotics List.
List of Ports of Call on current voyage.
Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration Inward/Outward (Form No. 02000).

The following will be checked on board: Ship's Registry, Last Port Clearance. When vessel comes from Japanese port, Customs Officials will not attend on board, except special case. Master or Agent are to attend at Custom House for entry formalities with the following documents:

Discharging Cargo Manifest.
Through Cargo Manifest.
Declaration Inward/Outward.
Ship's Registry.
Last Port Clearance.
Documents entrusted with Master by Customs at previous port.

On vessel's departure a clearance is issued by Customs, after confirming payment of tonnage dues. Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

(b) Immigration. Immigration Officials attend from Tokuyama. They board vessel on arrival to examine passports, discharge books and/or other equivalent travel documents, and provide 72 hour landing passes for crew members and passengers. One copy each of Crew List and Passenger List are required by them. Providing ship's Agent with a Crew List beforehand will be a great help in expediting Immigration business on vessel's arrival. When vessel stays in port more than 72 hours, the landing passes will be extended every 72 hours on application. In event that crew members, without entry visas, are to be landed for repatriation or transfer, Immigration will not permit their landing unless passage, by either sea or air, ensuring the prompt departure from Japan (within 72 hours) of these men has been booked, or unless vessels to which they are to be transferred, arrive in Japan within 5 days. Also see "Shipmaster's Report".

PILOTAGE:
Inland Sea Pilot (Sekisaki/Tokuyama): Not compulsory. Agent gives 24 hours' notice to Pilot Association Moji, and advise if ETA changed. (Master to cable "Anjin Moji" in case ETA changed and believes that his advice, if relayed by Agent, will not reach in good time; for example, at night before date of arrival at Sekisaki). Location: 3 miles South of Sekisaki Lighthouse (Lat. 33° 13′ N., Long. 131° 54′ E.). Pilot boards on vessel's arrival at pilot station day and night. No alternative area in event of bad weather. No VHF.

Harbour Pilot (Tokuyama Harbour or Tokuyama-wan): Not compulsory. Pilot boards in Tokuyama-wan at Quarantine Anchorage, or other anchorage to pilot to berth. Master who has not taken Pilot at Sekisaki should enter harbour without Pilot (no pilot station at entrance). Master to inquire position for anchoring from Agent prior arrival. Agent will advise Master in consideration of vessel's size, draft or number of other vessels, especially supertankers in port.

ANCHORAGES: Quarantine Anchorage, 34° 01′ N., 131° 46′ E., depth water 36 ft. Deeper water of more than 60 ft. about 2 miles S.W. of Quarantine Anchorage where Quarantine board supertankers. If harbour congested, vessels, especially supertankers, anchor Outer Harbour. In this case Quarantine go to Outer Harbour if advised by Master or Agent. In emergency or unable contact Agent, vessel can talk with Harbour Master by VHF, Channel 16, calling "Tokuyama Hoan". No restriction for entry into and/or departure from the anchorages after nightfall.

MAX. SIZE: Largest recorded vessel to enter 275,000 d.w.t., 19.5 m. draft.

Tankers: *Berth*	*Max.* *d.w.t.*	*Max.* *LOA (m.)*	*Max.* *Safe Draft (m.)*
Idemitsu Sea Berth	275,000	340	19.50
Idemitsu Ohura No. 3	50,000	250	12.00
Idemitsu Ohura No. 5	70,000	300	12.00
Idemitsu Ohura No. 7 (L.P.G. Terminal)	50,000	250	12.00
Idemitsu Center	35,000	220	11.00
Nippon Seiro Jetty	30,000	200	11.00

HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When Free Pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Join inside harbour. For supertankers outer harbour if requested. Tugs' lines used. 8 tugs available, up to 4000 h.p.

BERTHING: Also see "Tankers". No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

(a) Wharf	*Length* (m.)	*Depth* (m.)	*Capacity* (g/t)	*Cargo*
Tokuyama Soda Salt Pier	117	10.0	15,000×1	Salt/Cement Clinker
Tokuyama Soda Cement pier	145	11.0	20,000×1	Cement in bulk
*Toyo Soda Fertiliser Pier	110	9.0	10,000×1	Fertiliser
*Toyo Soda Salt Pier	140	12.0	20,000×1	Salt/Coal
*Toyo Soda Cement I	125	9.0	10,000×1	Cement in bag
*Toyo Soda Cement II	68	10.0	20,000×1	Cement in bulk
Nisshin Seiko pier	66	6.0	1,200×1	Steel products
Harumi Public pier	260	7.5	5,000×2	General cargo
Harumi Public pier	370	10.0	15,000×2	General cargo
Minatomachi Public pier	210	6.0	2,500×2	General cargo

*Located at Tonda, Lat. 34° 03′ N., Long. 131° 44′ E.

(b) Buoy	*Depth* (m.)	*Capacity* (d.w.t.)	*Cargo*
Idemitsu Sea Berth	20	275,000×1	Crude oil

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1630–2130 hrs. (60% additional on basic stevedorage), 2130–0830 hrs. next morning (120% additional on basic stevedorage), Sundays/holidays (100% additional on basic stevedorage).

Loading/Unloading facilities

(a) Gangs: Maximum 40 gangs are available.

Classification	*Regular Employees*	*Temporary labourers*
Stevedores	200	230
Longshoremen	110	80

Stevedoring Companies: Tokuyama Kairiku Unso Kabushiki Kaisha; Kamigumi & Co. Ltd.; Toyo Koun Co. Ltd.; Sankyu Unyo Kiko Co. and Nippon Express Co. Ltd.

(b) Lighters: No lighter is available, but coastal boat available for use as substitute for lighters. 8,000 d.w.t. arrangeable with notice of 2 weeks in advance.

(c) Shore Crane:

Wharf	*Capacity grab (tons)*	*Max. discharge rate (t.p.h.)*
Tokuyama Soda Salt Pier	10	500
Toyo Soda Salt Pier	12	550

(d) Floating crane: Capacity, 100 tons available from Kudamatsu.

(e) Average performance of loading/unloading: Loading: Cement in bags, 55–65 t.p.h./gang; Soda ash in bags, 40–50 t.p.h./gang; Fertiliser in bags, 55–65 t.p.h./gang. Salt in bulk, 500/550 t.p.h./ship. Clinker in bulk, 180/200 t.p.h./ship. Chrome Ore in bulk, 65/75 t.p.h./gang.

Working Hours: 1 labour shift. Normal working hours: 0800–1700 hrs. Overtime is possible by applying to Customs. No work can be arranged for during New Year Holiday (1st to 3rd January) and Bon Holiday (14th to 16th August).

MEDICAL: No advance notice required unless urgent.

Hospitals: Asanoumi Hospital, Asami Hospital, Ishikai Hospital, Chuo Hospital, Ono Dental, Ishida Dental.

TANKERS: No slop facilities.

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*	*Hoses*
Idemitsu Sea Berth	Crude Oil	36″×1 30″×1	10,000	16″×2 Flexible, 8 ton derrick for each hose.
Idemitsu Ohura No. 3	Crude Oil	18″×1	5,000	12″×2 Chiksan joint
Idemitsu Ohura No. 5	Crude Oil	24″×2	5,000	12″×2
	Fuel Oil	30″×1	4,000	Chiksan
	Naphtha	24″×1	3,000	
Idemitsu Ohura No. 7	LPG	12″×2	1,200	Chiksan joint 12″×2 (liquid)
	Butane	8″×2		8″×2 (vapour gas)
	Naphtha	24″×1	3,000	
Idemitsu Centre	Fuel Oil	18″×1	2,000	8″×2 Chiksan Joint.
Nippon Seiro Jetty	Raw Oil	12″×1	700	8″×1 Flexible
	Fuel Oil	10″×1	500	8″×1 Flexible

Idemitsu Sea Berth: Located in Tokuyama Bay at the position of Lat. 33° 59.5′ N., Long. 131° 46.1′ E., consisting of 7 mooring buoys. 275,000 d.w.t. tanker can be accommodated at this berth, being moored to buoys fore and aft. 4 powerful tug boats and 2 line boats are engaged in berthing/unberthing. Depth of water 20 m. Also see "Report" below.

Nippon Seiro Refinery: The mooring berth consists of 1 oil pier and 2 mooring buoys, to which vessel is moored fore and aft, port side alongside pier, there are also dolphins fore and aft.

Nippon Zeon Wharf (25 ft.) for LPG only.

Operator's Report: 1983.

Idemitsu Kosan Tokuyama Sea Berth (Discharging terminal):

Multiple buoy mooring system berth with 1 or 2 anchors.

Berth operates 24 hours per day, 7 days a week. Ships moored and unmoored at daytime, weather or other circumstances permitting. Berth will not be closed due to any holidays.

Location: Lat. 33° 59′ 12″ N., Long. 131° 46′ 00″ E.

Pilotage: Not compulsory.

Approaches: In order to make use of slack water berthing operations should be commenced 2 hours before slack water.

Berth is to be approached on a course of 075° after passing N.W. of Iwa Island, anchorage position visible from ship's bridge just after passing Sukumo Island abeam to starboard.

After letting go anchor (port), turn anti-clockwise with tug's assistance and let out 3 shackles and approach berthing position and take in slack anchor chain.

In Winter (from November-March) monsoons prevail, let go starboard anchor when heading about 320° and port anchor is out to 5 shackles then let out both chains, and move astern into berth.

1st line out should be taken to either No. 1 or No. 2 mooring buoy, whichever is the nearest.

Berthing:

(a) Vessel must not proceed to starboard of yellow buoy, because North of transit line No. 2 and 3 buoys area becomes shallow with depths 17 m. – 19 m.

(b) If port anchor let out too fast or too much, ship cannot return to manifold position, as anchor position designed for 8 – 9 shackles on port anchor when ship made fast.

(c) When Berthing Master comes on board, please advise him of number of shackles on each anchor and length from bow to manifold.

(d) Wire mooring lines are better than hawsers especially in case of No. 1, 2, 3, 4, 5, 7 buoys where wire should be used (each using 2 wires) as these wires are used to adjust the manifold position.

(e) Mooring arrangement:
Port anchor 8 – 9 shackles
Starboard anchor 2 – 3 shackles
No. 1 – 7 buoys 2 lines to each

DENSITY: 1025.

FRESH WATER: Water barges available, 1 each of 450 tons, 350 tons and 160 tons. Hydrants at Harumi Public Pier, Idemitsu Central pier, Toyo Soda wharf. The rate of delivery: 50 t.p.h. from barge, 20 t.p.h. from hydrant. (Public hydrant 30 t.p.h.).

FUEL: Major oil companies are represented and all grades of marine oil can be delivered usually by barge.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor repairs only.

DRY DOCKS: Kasado Dockyard in Kudamatsu-wan, entrance 3 miles East of Tokuyama-wan entrance. Largest dry dock for 90,000 tonners and two other dry docks/building docks.

AIRPORT: Hiroshima (about 40 minutes by Shinkansen), Ube (about 40 minutes by Shinkansen and taxi).

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police, tel. 110; Ambulance and Fire, tel. 119.

TELEPHONES: No facilities for placing on board.

SERVICES: From Moji, Kobe or Osaka.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

SHIPMASTER'S REPORT: June, 1983.

Toya Soda Salt Pier at Tonda.

Documents/Immigration: Landing Passes are now valid for 1 week but restricted to the immediate Port Area (Tokuyama) only. This restriction is enforced and the Agent must make written, individual application for any crew member required or desiring to leave the Tokuyama area. There are severe penalties (Y100,000) for being found ashore by the Authorities without a Landing Pass.

Pilotage: The Inland Sea Pilot who boarded at Seki Saki also acted as Harbour Pilot, boarding from a fast launch with the vessel making about 4 knots. Oita Port Radio, in the first Western bay of the Inland Sea after passing through the Hayasui Seto entrance, called on VHF Channel 16 to confirm the vessel's nationality and ETA.

For a vessel of our size (see "Berthing"), pilotage is at daylight High Water only, using 3 tugs and the Eastern dredged channel into Tonda Port. Departure is during daylight hours only (pilot available apparently 0630 – 1830 hrs. during June, although ours wasn't ordered by the Charterers' Agents until 0800 hrs.). Vessel was swung off the berth by 2 tugs and proceeded to sea, again by the Eastern Channel, there being a substantial 'corner' to negotiate in the dredged channel on the Tokuyama section of the port.

Health: Valid Smallpox Vaccination Certificates were *not* required but we could not get Radio Pratique as the Authorities required the number of the vessel's Sanitary Certificate. However, after berthing, we were unable to ascertain just what this Certificate was. The number of our Derat Exemption and type and make of the sewage system did not satisfy this question either.

Berthing: We were probably one of the larger vessels to berth at the Toyo Soda Salt Pier, discharging 31,536 metric tons of coal on dimensions – length 177 m., beam 27.8 m., draft 10.5 m. and of 20,096 gross tons. With large, engines-aft, bulk carriers there are problems with landing the gangway on the end of the jetty. A shore gangway cannot be used because of the travel of the Portainer-type discharging crane. Stevedores use a vertical steel ladder clipped over the sheer strake for access.

Access ashore through the Toyo Soda Cement Factory is prohibited to ship's crew and a Launch Service (Sampan) must be engaged, with the requisite timetable, for transport to Tokuyama, 15 minutes distant, the launch berthing at the Customs Pier.

This launch is also used for the Agent, watchmen, etc. and it may well be preferable to lower the off-side gangway to near the water as a means of access. The only permitted access to and from the launch via the vessel's gangway onto the wharf is by a badly bent vertical steel ladder at the end of the jetty.

Fresh Water: Not available from Toyo Soda Salt Pier, delivery can only be made by lighter, June 1983 price Y770 per ton.

Storing: Mobile cranes are not allowed onto the wharf to work ship's stores, E/R spares, etc. and if these cannot be coped with by the vessel's own gear or stores crane, floating plant would have to be hired.

AUTHORITY: Shunan Port Administration Office, 111, Chikko-cho, Tokuyama City, Yamaguchi Pref. *Tel:* (0834) 21-1787.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo. Holme Ringer & Co. Ltd., c/o Sankyu Transportation & Engineering Co. Ltd., Shunan Branch, 12-7 Chikko-cho, Tokuyama-shi, Yamaguchi-ken. Cable address: Ringer Tokuyama. Domestic Telex: 6765-93 Sankyu J. Tel.: Tokuyama (0834) 22-0039.

TOKYO: 35.43 N. 139.46 E. (See Plan Book)

DOCUMENTS:

4 copies Inward/Outward Declaration – (Form C.2000 prepared by Agent).

1 copy Berth Application (normally prepared by Agent).
3 Cargo Manifest (Form C.2030 prepared by Agent).
1 List Ship's Stores (Form C.2040).
2 Parcel List.
5 Passenger Manifest (Form C.2070).
5 Crew Manifest (Form C.2060).
1 Statement by Master (Form C.2020).
1 Declaration for Payment Tonnage Dues (prepared by Agent).
1 Maritime Declaration of Health.
1 Application for Shore Passes (prepared by Agent).
2 Baggage Lists (Form 5370).

PILOTAGE: 12 hours advance notice of ETA required. Pilot boats named Musashi, Takao, Tsukuba and Ayase. No light or sound signals, use ship's radio in case necessity arises. Address: Tokyo Pilot Association, 3-26-82 Kaigan, Minato-ku, Tokyo (at the Southern tip of the Shibaura Wharf). Tel: 453-1691.

Pilot boards vessel outside harbour. Vessel awaits Pilot around "Quarantine Anchorage".

Vessels requiring a Pilot for the Uraga Channel should radio request to Anjin Yokosuka advising ship's details and arriving time at No. 1 Uraga Channel light buoy. Uraga Channel Pilot embarks three/five miles S.S.E. of Kannonsaki lighthouse, and will disembark on arrival at destination port limits. Applications for Uraga Channel Pilot should reach pilot office 24 hours before vessels arrival at No. 1 Uraga Channel light buoy.

Vessels of 10,000 gross tons or more should give "Notification of Traffic" to ensure safety of their navigation in or near Uraga Suido and Nakanose traffic routes (normally by Agent).

ADVANCE APPLICATIONS: Passenger ships and large vessels using mooring facilities must submit applications for use of facilities to port managers (the Port and Harbour Bureau of Tokyo Metropolitan Government) through shipping firms or Agents 3 days before entry into port so that they may have berths designated.

When they want to use anchorage facilities, they must submit applications for use of anchorage areas to Tokyo-Yokohama Port Director (the Port and Harbour Section of the Tokyo Maritime Safety Agency) to have anchorage sites designated. Small vessels of less than 300 gross tons do not need to submit anchorage application.

When ships of over 500 gross tons want to enter port at night (from sunset to sunrise), must submit applications in advance to Port Director and receive permission. Copy of written permission given to captain of ship when ship has entered port.

A ship carrying explosives or any other dangerous cargo must submit 2 copies of application in advance for permission to use port to Port Director. Such ships required to stay outside port in No. 3 Area. However, they will be allowed to enter port when Port Director considers it allowable.

RESTRICTIONS: No. 1 fairway is long and narrow (4,200 m. × 300 m.) and carries considerable traffic. Vessels under 500 tons not permitted to use fairway when vessel over 5,000 tons is in transit. Depth 12 m.

Container Vessels: May enter from sunrise till 2400 hrs. and may leave at any time.

ANCHORAGES: See "Advance Applications".

Quarantine anchorage on starboard hand of No. 1 fairway.

Sector A triangular sea area formed by line passing through point 180° and 400 m. from light buoy No. 16 and point 105° and 240 m. from same light buoy. Accommodates one 1,000 ton class ship or 2 ships of 500 ton class or smaller.

Sector C (263,330 sq.m.) is a space between Harumi Wharf and Toyosu Wharf. Accommodates five 2,000 ton class vessels.

Sector D (141,350 sq.m.) sea area enclosed by line drawn from point 217° and 400 m. from Northwestern tip of Tsukishima Fishery Base through No. 8 mooring buoy. No. 15 buoy and Southern tip of Tsukishima Fishery Base. Accommodates 5 vessels smaller than 1,000 tons, but 2 if vessels larger than 700 tons.

MAX. SIZE: (Draft) General/Bulk: 7.0 m. for Toyosu; 10.0 m. for Shinagawa, Harumi and buoys; 10.0 m. for Land-lot No. 13 and 15; 12.0 m. for Oi.

(Tide). These drafts are at low water. The difference between high and low water level is about 2 m.

Tankers: Tokyo Gas Wharf (Toyosu) Max. d.w.t. 23,000. Max. draft 11.0 m.

HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health condition on board. When Free Pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or suspected case, of infectious disease within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

Medical inspection of plants: When a report is received in advance from a ship by telegraph or other means of communication, Tokyo Office of the Yokohama Plant Disease Prevention Station must be notified by telephone or verbally in request for an on-the-spot inspection of plant in question.

Medical inspection of animals: When a report is received from a ship in advance by telegraph or other means of communication, the Tokyo Branch or the Haneda Branch of Animal Disease Prevention Station must be notified by telephone or verbally in request for an on-the-spot inspection of the animals.

RADIO: Vessels entering are watched at all times at Torigasaki, the entrance gate to Tokyo Bay, and record of passing the point is taken. As each ship passes point, this is immediately communicated by VHF radio telephone to head office of Tokyo Signal Communications Company. From here news communicated on normal telephone or on exclusive direct call telephone to interested parties (also see "VHF").

Recommended Master communicates with Agents through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

VHF:

A. Transmitting antenna:	Located 39° 26′ N. 139° 39′ E.
B. Type:	Single communication – Yagi type. Plural communication – corner reflector type.
C. Direction:	Southern part of entrance to Tokyo Bay and Port of Tokyo.
D. Frequency class:	F3.
E. Frequency:	Single communication – 156.6 MHz, CH 12 156.7 MHz, CH 14 156.8 MHz, CH 16 (for calling, answering and safety) Plural communications – 161.6 MHz, CH 20 161.7 MHz, CH 22
F. Antenna power:	50 W.
G. Call sign:	Tokyo Port Radio.
H. Range:	Approx. 100 km. (straight range) S.E. side – About 20 nautical miles South of Nojimazaki. S.W. side – About 5 nautical miles North of Oshima Island. North side – Tokyo Port and Chiba port.
I. Operating time:	All times.

Ship telephone: Uses VHF and is a service between navigating or anchored ships and subscriber telephones on land, and between ships connected via base station on land. Communicating sphere approximately 50 km. to 100 km. from base station. Base stations located so as to allow communication with any ship sailing along Japanese coasts.

Charges for device: Y1,000 for 1 telephone set and actual cost for use by ship.

Service charges: (in case Japan Telegraph and Telephone Public Corporation installed the unit) Y40,000 a month for long term, Y4,000 a day for short term.

Call charges: Within specified call area for ship telephone in general – Y180 up to 3 minutes and additional Y60 per minute after the 3 minutes.

TUGS: The port has 2 tug companies: (i) Toko Service Co. Ltd., 3-25-8, Kaigan, Minato-ku, Tokyo. Tel. (452) 4781. (ii) Shibaura Tsusen Kaisha Ltd., 3-1-3, Kaigan, Minato-ku, Tokyo. Tel. (455) 1461. Upon notification to either, tugs will be waiting in neighbourhood of scheduled berth. Ship's lines to be used.

BERTHING: Any vessel entering port required to:

(1) Submit 1 each of "Declarations Inward/Outward of Vessels" to TMG and TMSA. See "Documents". (2) Submit "Application for Berth" to TMG. See "Documents". (3) Submit "Application for Designation of Anchoring Site" to TMSA (Form No. 13) regarding anchoring area. Berthing will be in order of arrival, passenger and special cargo vessels excepted.

Name of Wharf	*Length (m.)*	*Depth (m.)*	*No. of Berths*
Shinagawa (Foreign Trade)	585	10.0	3
Shinagawa (Domestic Trade)	476	8.0	3
Shinagawa Container Terminal	558	10.0	3
Shibaura	910	7.8	7
Hinode	564	6.7	6
Takeshiba	309	6.7	3
Tsukishima	260	7.5	2
Harumi	1,444	9 – 10.0	8
Toyosu	800	7 – 10.0	8
Ariake Terminal	750	5.0	10
Oh-i Marine Products Wharf	450	12.0	2
No. 15 Lumber Wharf	720	10.0–12.0	3
Oh-i Container Terminal	2,300	12.0	8
Odaiba Terminal	1,800	10.0	9

There are many private wharves and other smaller public wharves in use and under construction.

TANKERS: No slop discharge facilities (see "Services"). One tanker berth only. Products handled, Naphtha and Crude oil. Shorelines, one 12 in. for each product. Discharge rates 1,000 t.p.h. (Naphtha) 900 – 1,000 t.p.h. (Crude).

STEVEDORES: Advance advices should be made 24 hours at latest before vessel's arrival order arrange necessary gangs.

Discharge rates (approx.):

(a) Iron, steel and scrap, using crane or magnet, about 1,000 tons/day.

(b) Coal, crane and bucket, 1,500/2,000 tons/day.

(c) Ores, grabs and bulldozers, 1,000 tons/day.

(d) Timber, 1,000 tons/day.

(e) Grain, crane with bucket or suction, 1,000 tons/day.

MEDICAL: Hospitals, clinics and all specified facilities. Advance notice not necessary.

FIRE PRECAUTIONS: (Tankers).

1. Must enter port at dead slow speed preceded by patrol boat of TMSA, 1 tug boat each side of vessel and followed by fire patrol boat.
2. Engine to be kept ready for immediate use in case of emergency.
3. Tow lines to be placed over bow and stern with eyes close to water surface.

Note: No vessels allowed alongside a tanker during loading or discharging.

FRESH WATER: Water supply from hydrant by Tokyo Metropolis, and waterboat by private management.

(a) Water supply on wharves	
Application	Bureau of Port and Harbour Offices in charge of each wharf.
Work of water supply	Tokyo Port Service Association.
(b) Water supply by water boat	
Extra charge	Overtime from 0600 to 0800 50% from 1700 to 2200 50% from 2200 to 0600 100% Special district 50% Festival day 50%

In the case of less than 20 tons per time, it will be considered 15 tons supply.

FUEL: All grades available. 24 hours' notice required.

GANGWAY/DECK WATCHMEN: Necessary only in the case of valuable cargo.

OPENING/CLOSING HATCHES: Normally by crew.

DEPARTURE PROCEDURE: Ship over 300 tons departing must hoist signal in daytime and 2 white lamps at night and make two prolonged blasts of whistles or siren 30 minutes before starts to move and then act according to signals given by signal station on Shibaura Quay. Departure notice must be submitted to Maritime Safety Agency and port managers (Operations Section of Port and Harbour Bureau). Foreign ships must submit required documents in addition to above notice to Tokyo Custom House, Immigration Control Office.

CUSTOMS ALLOWANCES: (Tobacco) 200 cigarettes a week. (Wine and/or spirits) 760 cc's per crew member per week.

IDENTIFICATION CARDS: Not required.

CONSULS: Most countries have embassies and consuls in Tokyo.

REPAIRS: *Shiprepairer:* Ishikawajima-Harima-Juko Co. Ltd. Tel: 03(244) 5670, Telex: J22232 (Ichico), has two dry docks for vessels of 11,000 and 23,000 d.w.t. and slipways from 8,000 to 60,000 d.w.t. capacity.

DRY DOCKS: Largest dry dock: length 180 m.; width 24 m.; depth 7.27 m. Capable of accommodating vessel of 16,750 gross tons.

Also 1 other dry dock for ocean-going vessels.

SURVEYORS:

American Bureau of Shipping, Nihon Bldg., 6-2 Ootemachi 2, Chiyoda-ku, Tokyo 100. Tel: 279-7992/6.

Lloyd's Register of Shipping, No. 32 Mori Bldg., 4-30 Shibakoen 3, Minato-ku, Tokyo 105. Tel: 438-0481.

Nippon Kaiji Kyokai, 28-2, Hamamatsu-cho, Minato-ku, Tokyo 108. Tel: 434-2341.

AIRPORT: Distance to new Tokyo International Airport (Narita Airport), approx. 60 km.

TIME: GMT plus 9 hours. Permanent.

CARGO HANDLING FACILITIES:

Wharf/Terminal	*Equipment*	*Capacity*	*Cargo Handled*	*Remarks*
Oh-i Terminal	16 container gantries	30.5 tons	Containers	Straddle carriers and transtainers available.
Shinagawa Container Terminal	1 container gantry 2 container gantries	24.5 tons 30.5 tons	Containers	Ro-ro facilities, Straddle carriers available.
Shinagawa (Foreign Trade)	2 unloaders 1 belt conveyor	6.4 tons 600 t.p.h.	Machinery, sugar, fruit.	3 transit sheds (18,118 sq.m.) Open storage 14,451 sq.m.
Shibaura (Foreign Trade)			Paper, cement, fertiliser, feed grain	2 transit sheds (4,665 sq.m.) Open storage 2,104 sq.m.
Hinode Terminal			Salt, paper, soda ash.	9 transit sheds (19,583 sq.m.) Open storage 6,806 sq.m.
Tsukishima Terminal			Marine products	
Harumi Terminal	4 portal jib cranes	5 tons	Sugar, wheat, fruit, marine products.	Passenger ship terminal at Berth "HL"
Toyosu Energy Terminal			Gas, steel, coal, general cargo.	
Ariake Terminal			Gravel, sand, lumber, construction materials.	Open storage 92,163 sq.m.
Odaiba Terminal	2 gantry cranes at Berth "AB"	10 tons	General cargo, steel, timber, fruit.	9 warehouses (64,766 sq.m.)
Terminal 15			Timber.	Storage capacity 400,000 tons. Open storage yard 254,246 sq.m.

HOLIDAYS: National Holidays: New Year's Day (Jan. 1st); Adult Day (Jan. 15th); Foundation Day (Feb. 11th); Vernal Equinox Day (around March 21st); Emperor's Birthday (April 29th); Constitution Commemoration Day (May 3rd); Children's Day (May 5th); Respect-for-Age Day (Sept. 15th); Autumnal Equinox Day (around Sept. 23rd); Physical Education Day (Oct. 10th); Culture Day (Nov. 3rd); Labour Thanksgiving Day (Nov. 23rd).

No cargo work on 1st or 3rd Sundays of each month, and no work from 31st December to 3rd January inclusive. Cargo work can be arranged on all other days including National Holidays.

POLICE/AMBULANCE/FIRE: Tokyo Water Police, 5-8-36, Konan, Minato-ku, Tokyo. Tel. (433) 2411. Call Fire Stations for ambulances. Tokyo Water Fire Station, 5-1-23, Kachidoki, Chuo-ku, Tokyo. Tel. (534) 0119.

TELEPHONES: (also see "VHF").

Installed on ships moored at piers or jetties to allow telephone communications between ships and subscriber telephones on land and between ships.

BANKS: Sumitomo Trust & Banking Co., Ltd. Tel: 278-3131. Telex: J28631, 02226049.

Yasuda Trust & Banking Co. Ltd. Tel: 278-8111. Telex: J2223828 Ysdtbt.

Dai-Ichi Kangyo Bank, Ltd. Tel: 596-1111. Telex: J22379, J22315.
The Kyowa Bank Ltd. Tel: 287-2111. Telex: J24275.
Mitsui Bank, Ltd. Tel: 501-1111. Telex: J22378, J22559, J22643, J22644.
Sanwa Bank Ltd. Tel: 216-3111. Telex: J22384.
Mitsubishi Trust & Banking Corp. Tel. 212-1211. Telex: J24259.
The Nippon Trust & Banking Co. Ltd. Tel: 272-1261. Telex: J24197.
Toyo Trust & Banking Co. Ltd. Tel: 271-7881. Telex: J22717. Tytbki.
Industrial Bank of Japan, Ltd. Tel: 214-1111. Telex: J22325.
Long-Term Credit Bank of Japan, Ltd. Tel: 211-5111. Telex: J24308.
Nippon Credit Bank, Ltd. Tel: 263-1111. Telex: J26921.

Branch Offices of Foreign Banks:

North America:
Irving Trust Company (Tokyo Branch). Tel: 595-1131.
Bank of America National Trust and Savings Association. Tel: 214-0241.
American Express International Banking Corporation. Tel: 504-3341.
Wells Fargo Bank, N.A. Tel: 214-1771.
Crocker National Bank. Tel: 211-7241.
Chemical Bank. Tel: 214-1351/9.
Continental Illinois National Bank and Trust Company of Chicago. Tel: 216-1661.
Seattle First National Bank. Tel: 212-6481.
Security Pacific National Bank. Tel: 214-2721.
Chase Manhattan Bank: Tel: 214-3361.
Rainier National Bank: Tel: 214-5781.
National Bank of Detroit. Tel: Tel: 214-7301.
Bankers Trust Company. Tel: 214-7171.
The First National Bank of Chicago. Tel: 245-1021.
Citibank, N.A. Tel: 279-5411.
The First National Bank of Boston. Tel: 211-2611.
Manufacturers' Hanover Trust Company. Tel: 242-6511.
Marine Midland Bank, N.A. Tel: 216-0531.
Mellon Bank, N.A. Tel: 216-5861/4.
Morgan Guaranty Trust Company of New York. Tel: 214-2761/8.
First Interstate Bank of California. Tel: 211-0751/9.

Europe:
The Chartered Bank. Tel: 213-6541.
Grindlays Bank, P.L.C. Tel: 271-1151.
National Westminster Bank, Ltd.
Barclays Bank International, Ltd. Tel: 214-3611.
The Hongkong and Shanghai Banking Corporation. Tel: 211-6461.
Midland Bank, Ltd.Tel: 284-1861.
Lloyds Bank International Limited. Tel: 214-6771.
Banca Commerciale Italiana. Tel: 242-3521.
Algemene Bank Nederland, N.V. Tel: 211-1760/9.
Amsterdam Rotterdam Bank. Tel: 284-0701/2.
Credit Suisse. Tel: 215-1681.
Swiss Bank Corporation. Tel: 214-1731.
Union Bank of Switzerland.Tel: 214-7471.
Westdeutsche Landsbank Girozentrale.Tel: 216-0581.
Commerzbank, A.G. Tel: 502-4371.
Banque de Paris et des Pays-Bas S.A. Tel: 214-5881.
Societe Generale de Banque. Tel: 287-0481.
Deutsche Bank, A.G. Tel: 214-1971/6.
Dresdner Bank, A.G. Tel: 214-5961.
Bayerische Vereinsbank Aktengesellschaft. Tel: 284-1341.
Credit Lyonnais. Tel: 214-4561.
Societe Generale. Tel: 503-9781.
Banque Nationale de Paris. Tel: 214-2881.
Banque de L'Indochine et de Suez. Tel: 582-0271.
Union de Banques Arabes et Francaises–U.B.A.F. Tel: 241-5945.

Asia:
Bank of India.Tel: 212-0911/3.
State Bank of India.
Bank Negara Indonesia.Tel: 214-5621/5.
Oversea-Chinese Banking Corp., Ltd. Tel: 214-2841.

SERVICES: Two tank cleaning companies available with barges of capacity 100 tons for disposal of residues. All other usual services available.

SHORE LEAVE: Crew members allowed ashore upon ship Master's request to Tokyo Immigration Office if have valid passports or seaman's pocket ledgers. In case a crew member has a criminal record or has been expelled from Japan, he will not be allowed ashore.

PORT REGULATIONS: Maintenance of order in Port of Tokyo is under the responsibility of TMSA in accordance Port Regulation Law. In case of an occurrence of disaster, TMSA and the Tokyo Water Fire Station will take charge of refuge, rescue and fire fighting.

DELAYS: Congestion in the port. Bad weather.

DEVELOPMENTS: 48 public wharves, 2 container berths (Obaiba Container Terminal: length 600 m. depth 12.0 m.), 2 car ferry berths, 5 passenger boat berths, 7 timber berths, 12 berths for dangerous cargo and 20 specialised berths to be constructed.

AUTHORITY: Bureau of Port and Harbor of the Tokyo Metropolitan Government, 8-1 Marunouchi 3-Chome, Chiyoda-ku, Tokyo. *Tel:* 03-211-7949. *Cable:* Tochiji Tokyo. *Contact:* Port Promotion Section.

AGENT: Dodwell Tramp Agencies, CPO Box 297, Togin Building, 4–2, 1-chome, Marunouchi, Chiyoda-ku, Tokyo. Tel. (03) 211-2141. Cable Address: Dodtramp Tokyo. International Telex: J22274, J22602 and J24469.

TOMAKOMAI: 42.35 N. 141.35 E. (See Plan Book)

PILOTAGE: Not compulsory. Pilots board at the point of 500 m. off from breakwater.

RESTRICTIONS: Berthing and unberthing possible day and night.

MAX. SIZE: See "Berthing".

HEALTH: Radio Pratique available. Vessels usually anchor at Tomakomai, where the Authorities board and grant Free Pratique.

TUGS:

Name	Gross Tonnage	Engine Type	Nom. Shaft horsepower	Owner
Tomakomai Maru	115.58	Diesel	1,100	Tomako Service Co., Ltd.
Azuma Maru	197.74	„	3,200	„
Eidai Maru	176.40	„	2,200	„
Hokuto Maru	290.85	„	4,000	Tomakomai Kaiun Co., Ltd.
Iburi Maru	190.22	„	3,200	„
Mashu Maru	194.30	„	3,200	„
Hokuyo Maru	195.38	„	2,600	„
Atago Maru	187.67	„	2,900	Kitanihon Eisen Co., Ltd.
Hercules	272.19	„	4,000	„

BERTHING: Public Facilities:

Name of Berth	No. berths	Length (m.)	Depth (m.)	Berthing Capacity (d.w.t.)	Principal goods handled
Wharves:					
East Wharf No. 1-4	4	660	−9.0	10,000	Coal (Capacity 400 t.p.h.)
East Wharf No. 5-6	2	260	−9.0	10,000	Cement, iron & steel products
West Wharf No. 1-4	4	660	−9.0	10,000	Paper pulp, iron & steel products
North Wharf No. 1-2	2	260	−7.5	5,000	Paper pulp, motor vehicles
North Wharf No. 3-4	2	180	−5.5	2,000	Paper pulp, iron & steel products
South Wharf No. 1-2	2	370	−10.0	15,000	Paper pulp, iron & steel products
South Wharf No. 3	1	195	−11.0	20,000	Wood chips
Central-South Wharf No. 1	1	240	−12.0	30,000	Fertilisers & feeding stuffs
Central-South Wharf No. 2	1	185	−10.0	15,000	Limestone, iron & steel products
Central-South Wharf West	1	165	−9.0	10,000	Cement
Central-North Wharf No. 2-3	1	260	−7.5	5,000	Iron & steel products, gypsum
Central-North Wharf No. 4	1	90	−7.5	5,000	Iron & steel products
Yufutsu Wharf No. 1	1	280	−12.0	30,000	Wood chips
Yufutsu Wharf No. 2	1	185	−10.0	15,000	Paper pulp
Yufutsu Wharf No. 3	1	130	−7.5	5,000	Paper pulp
Central-North Wharf No. 1	1	185	−10.0	15,000	Wood material
Fishing Port District No. 1	1	55	−5.0	500	Marine Products
Dolphin Berth					
Timber Port District Dolphin	2		−10.0	15,000	Wood Material

Private Facilities:

Name of Berth	No. berths	Length (m.)	Depth (m.)	Berthing Capacity (d.w.t.)	Principal goods handled
Wharves:					
Tomakomai Industrial Port Development Co., Ltd.	2	476	−8.5	8,000 G.R.T.	Ferry vessels
Dai Nippon Ink & Chemical's Ink Co., Ltd.	1	185	−7.5	5,000	Chemical Industrial Products
Nikkei Tomakomai Co., Ltd.	1	123	−12.0	15,000	Alumina, aluminium, coke, metal
Nikkei Tomakomai Co., Ltd. Central Wharf	1	200	−14.0	65,000	Bauxite
Tomakomai Kyodo Power Co., Ltd.	1	60	−10.0	5,000	Machinery, heavy oil
Soda Group	2	490	−10.0	15,000	Sea salt, etc.
Tomakomai Chemical Co.	2	330	−10.0	15,000	Sulphuric acid, ore
Hinode Chemical Industrial Co., Ltd.	2	500	−10.0	15,000	Caustic soda, Petroleum, products
Sumitomo Metal	1	165	−7.5	5,000	Iron & steel products
Maruichi Steel Tube Ltd.	1	185	−7.5	5,000	Iron & steel products
Nippon Steel Corporation	2	374	−7.5	5,000	Iron & steel products
Nippon Kokan K.K.	1	185	−7.5	5,000	Iron & steel products

TANKERS:

Name of Berth	No. of berths	Length (m.)	Depth (m.)	Berthing Capacity (d.w.t.)	Product handled
Joint Oil Terminal Wharf	3	390	−7.5	6,000	Petroleum products, heavy oil
Nikkei Tomakomai Co., Ltd. Pier	1		−14.0	65,000	
Oji Paper Co., Ltd. Pier	1		−7.5	6,000	Heavy oil
Tomakomai Kyodo Thermal Power Co., Ltd. Pier	1		−7.5	6,000	Petroleum products
Idemitsu Kosan Pier					
Idemitsu Kosan Pier (Partly completed)	13		−7.5	6,000	Petroleum products
Petroleum Distribution Base Pier	4		−7.0	4,000	Petroleum products
*Idemitsu Hokkaido Sea Berth	1		−24.0	250,000	Crude oil

*See "Report" on page 816.

Report: 1983.
Idemitsu Hokkaido Sea Berth (Discharging Terminal):
Location: Lat. 42° 36′ 10″ N., Long. 141° 38′ 50″ E.
Operator: Idemitsu Kosan Co. Ltd.

Terminal operates 24 hours per day, 7 days a week. Ships moored and unmoored daytime weather or other circumstances permitting. Terminal will not be closed on any holidays.

Approaches: Clear and unimpeded from South. White and red striped high chimney (approx. position: Lat. 42° 38.1′ N., Long. 141° 35.6′ E.) makes a most conspicuous landfall. In poor visibility, in heavy fog or rain, radar reflector fitted at centre of Sea Berth can be located first by ship's radar and after that Sea Berth will be seen in direction from N.W. to S.E.

Westward of Sea Berth, there are many cargo vessels anchored.

Ships berthing starboard side alongside at the Sea Berth, proceed on course 314° observing transit of chimney and East Breakwater Lighthouse.

Anchorage: No strict boundary areas for anchorage but Master recommended to anchor 1 mile to 2 miles S.E. from Sea Berth.

Holding ground is good and depth about 27 m. – 30 m.

Pilotage: Sea Berth requires Pilot for berthing, no strict location of anchorage for ships awaiting Pilot in Tomakomai area, but should be as close as possible to port in accordance with harbour draft and communications.

2 Pilots will board ships over 30,000 g.r.t. Pilot uses tug boat for boarding.

Important Features: Ships arriving in Winter season (November-March) should pay special attention to the cold, as average temperature in that season ranges from −3°C to 5°C.

FUEL: Domestic oil is available. Bonded oil will be brought from Hakodate with sufficient advance notice, when required.

FRESH WATER:

Wharf	*Owner*	*No. of water Hydrants*	*Max. capacity t.p.h.*
Coal Wharf	Tomakomai Port Authority (Tomako Services Co., Ltd.)	16	60
West Wharf	„	16	40
East Wharf	„	6	60
South Wharf	„	11	40
North Wharf	„	8	40
Central-South Wharf	„	9	40
Central-North Wharf	„	11	40
Yufutsu Wharf		12	40

DEVELOPMENTS:

1. The Projected Outer Block Facilities:

Area	*Name*	*Plan(~ 1983)*	*Completed*
Outer Harbour	East Breakwater	5,350 m.	4,000 m.
	Central Breakwater	2,750 m.	—
	Inside Breakwater	950 m.	—
East Fairway	A – Breakwater	345 m.	345 m.
	B – Breakwater	360 m.	304 m.
	East Breakwater	40 m.	40 m.
	West Breakwater	20 m.	20 m.
Central Waterway	Breakwater	200 m.	—

2. The Projected Harbour Facilities (Fairway, anchorage and waterway)

Area	*Name of Harbour Facilities*	*Max. Vessels (d.w.t.)*	*Depth (m.)*	*Width (m.)*
Outer Harbour	East Fairway	250,000	−24	540 ~ 740
	Central Fairway	15,000	−10	350 ~ 500
	Anchorage	250,000	−22	—
	Anchorage	150,000	−20	—
	Anchorage (Refuge wait)	—	—	—
East Waterway	Anchorage	60,000	−7.5 ~ −14	550 ~ 700
	Water area for dangerous cargoes	5,000	−7.5	
Central Waterway	Anchorage	15,000	−7.5 ~ −10	500

3. The Projected Berthing Facilities
(a) (Public):

District	*Name of facilities*	*Depth (m.)*	*Max. Vessels (d.w.t.)*	*No.*	*Extension (m.)*
East Waterway	East Wharf	−12	30,000	1	240
		−7.5	5,000	6	780
Central Waterway	Central Wharf	−7.5 ~ −10	5,000~15,000		1,130

(b) (Exclusive):

District	*Name of facilities*	*Depth (m.)*	*Max. Vessels (d.w.t.)*	*No.*	*Extension (m.)*	Remarks
Outer Harbour	250,000 D/W Class Dolphin	−22	250,000	1	—	Comp'd June '82 (10,000 D/W Class)
	150,000 D/W Class Dolphin	−10	150,000		—	
East Waterway	Terminal facilities for bulk cargoes	− 14	60,000	1	280	Under construction
	Berthing facilities for dangerous cargoes	−7.5	5,000	15	1,300	
	Hokuden Pier	−7.5	5,000	1	143	Comp'd Oct. '80 (2,000 D/W Class)

Tomako Coal Centre: Terminal under construction, completion late 1984. Berth length 280 m., depth 14 m.

REPAIRS: Minor repairs possible.

SHIP SUPPLY SERVICE:

Tomako Service Co., Ltd., 9 Shiomi-cho, Tomakomai, Hokkaido, 053 Japan. 5 service boats.

Tomakomai Kaiun Co., Ltd., 7-1 Motonakano-cho 4-chome, Tomakomai, Hokkaido, 053 Japan. 1 service boat.

Also see "Tugs".

AUTHORITY: Tomakomai Port Authority, 6-38, Minato-machi 1-chome, Tomakomai City, Hokkaido 053 – Japan. *Tel:* (0144) 34-5551.

AGENT: Sub-Agents of Dodwell & Co., Tokyo. Narasaki Sangyo Co., Ltd. Tomakomai Marine Branch, 13-24, 2-chome Motonakano-machi, Tomakomai-shi, Hokkaido. Cable Address: Narasaki Tomakomai. Domestic Telex: 09842-10 Nstoma J. Tel: (0144) 36-3636.

TOYAMA: 36.46 N. 137.13 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
6 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory. No telegraphic address for pilot station, but Pilot arranged through Agent whom keep advised ETA which may be sent through Niigata Radio. Pilot boards 1 mile off East breakwater from small tug. In event bad weather recommend remain outside port until weather clears. Pilot available daytime only.

ANCHORAGES: The harbour at the Jintsu river mouth is always calm. Covers about 125 acres, with depths of from 16.5 ft. to 33 ft. over mud and sand. Room at anchorage for at least 4 vessels over 5,000 gross tons. Anchoring position for ocean tankers is 36° 48′ N.; 137° 14′ E.

MAX. SIZE: See "Berthing" and "Tankers".

HEALTH: Radio Pratique available. Formalities carried out at Quarantine anchorage.

RADIO: (Also see "Pilotage"): Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Usually join vessel at port entrance but can join outside harbour for large vessels. Used only when Pilot aboard.

"Narita Maru" – 2,060 h.p. uses own lines free of charge.
"Nihonkai Maru" – 1,800 h.p. uses own lines free of charge.
"Raicho Maru" – uses ship's lines.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length (m.)*	*Depth (m.)*	*Permissible Draft (m.)*	*Capacity (g.r.t.)*	*Shore Cranes (tons)*
Public:					
Wharf No. 1	185	10.0	9.0	10,000	1×5
2	185	10.0	9.3	10,000	1×3
3	185	6.5	6.5	3,000	
4	160	8.5	8.0	10,000	
5	180	5.5	5.0	1,000	
6	90	6.0	5.5	2,000	
7	130	7.5	7.4	5,000	
8	130	7.5	7.4	5,000	
9	50	4.5	4.5	500	
No. 1 Dolphin	21	5.0		1,000	
No. 2 ,,	17	6.0		1,500	
No. 3 ,,	12	5.0		1,000	
Private:					
Onoda Cement Silo	100	7.0			
Hokuden Dolphin	17	6.0		1,500	

MEDICAL: No advance notice required unless urgent.

TANKERS: Max. size: 200,000 d.w.t., max. LOA, no limit, and max. safe draft 19 m. for Sea Berth of Nihonkai Sekiyu K.K., Toyama. Two lines, diameter 16 in. Reducing pieces supplied as necessary. Discharge rate 7,500 t.p.h.

DENSITY: 1015–1019 min./max.

FRESH WATER: Available ex-wharf at Nos. 1, 2, 3, 4 and 5 wharves; average 40 t.p.h. Other berthing positions supplied by barge which ordered from Fushiki and is filled up at Toyama.

FUEL: Domestic oil is available. Bonded oil will be brought from Moji with sufficient advance notice when required.

FIRE PRECAUTIONS: Nihonkai Oil Co., Toyama, issue Safety Regulations to Master on arrival tanker sea berth.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: None.
REPAIRS: Minor repairs only.
DRY DOCKS: Nihonkai Juko Co. Ltd., Toyama. No. 1 dock, used for construction. No. 2 dock, ship-building capacity: length, 104 m.; width 15 m.; depth, 1.8 m. Size of dock: length, 112 m.; width, 14.6 m.; depth, 4 m. Maximum building capacity, 4,000 g.r.t. No. 3 dock, ship-building capacity: length, 150 m.; width, 20.8 m.; depth, 5 m. Size of dock: length 168.2 m.; width, 21.88 m.; depth, 9.2 m. Maximum building capacity, 10,750 g.r.t.
AIRPORT: Toyama airport, distance about 10 km. Two daily flights.
TIME: GMT plus 9 hours. Permanent.
POLICE/AMBULANCE/FIRE: Police, Toyama North Police Station, Toyama (0764) 37–7171; Ambulance, Toyama Iwase Fire Station, Toyama (0764) 37–7141 or 119; Fire, Toyama Fire Station, Toyama (0764) 37–7141.
TELEPHONES: No facilities for placing on board.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
AUTHORITY: Toyama Port Administration Office, 5, Kaigan-dori, Higashi Iwase, Toyama City. *Tel:* (0764) 37-7131.

AGENT: Sub-Agents of Dodwell & Co. Ltd., Tokyo. Fushiki Kairiku Unso Co., Ltd., Toyama Port Office, 82, Higashiiwase-Irifune-cho, Toyama-shi, Toyama-ken. Cable Address: Fushikikairiku Fushiki. Tel.: (0764) 38–1100.

TOYAMA SHINKO: 36.47 N. 137.10 E.

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 6 Crew Lists including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agents will prepare Inward/Outward Declaration, 2 Cargo Manifests and 1 Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Pilot available any time during daylight. Not compulsory. No telegraphic address of pilot station, therefore, direct advice to local Agent always required. Pilot meets vessels 209° 2 miles off leading light of Fushiki Port, thence takes vessel to Fushiki Quarantine Anchorage ground, due to many fishing-nets on both sides of fairway. No Quarantine Anchorage ground established presently at Toyama-Shinko, therefore, every vessel obtains free pratique at Fushiki. If requiring to come into Quarantine Anchorage without taking Pilot, necessary to advise Agent in advance. In case of bad weather and need to await outside port, recommend cruising in Toyama Bay until sea abates. Bay area too deep to anchor and also danger of fishing-nets. When approaching position for Pilot, give exact ETA to Agent by using Niigata Radio and/or VHF to Fushiki Harbour Master. Small wooden pilot-boat painted yellow. No particular light or sound signals required. Even if the vessel already obtained Free Pratique in other port, need to approach the aforesaid position for Pilot, because of no Pilot position located in Toyama-Shinko.
ANCHORAGES: No anchorage at Toyama-Shinko, therefore, if vessel required to await for berth or some other reason, use Fushiki Outer Anchorage ground where safe at all seasons with depth from 8 m. to 11 m. Sand and clay bottom. Room at anchorage for at least 6 vessels over 5,000 gross tons.
RESTRICTIONS: Pilot not available during darkness. No restrictions on tide, because small tide in all seasons. If draft over port limitation, vessel enters port after making adjustment by lightening in Outer Harbour in Fushiki.
MAX. SIZE: Length 200 m., draft 34 ft. Tidal range is max. 0.45 m.
HEALTH: Formalities will be carried out at Fushiki quarantine anchorage.
RADIO: (also see "Pilotage"). Recommend Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.
TUGS: Tugs normally join vessel at port entrance, but sometimes in Fushiki Outer Harbour for larger vessels. Maritia-Maru (2,060 h.p.) and Nihonkai-Maru (1,800 h.p.) provide lines, free of charge and Raicho-Maru (760 h.p.) uses ship's line. In case public tug, i.e. Nihonkai-Maru and Raicho-Maru used, always require Pilot on board.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. 50% additional of basic stevedorage; 2100 – 0500 hrs. next morning 130% additional; Sundays/holidays 60% additional.
BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Draft* (m.)	*Capacity* (d.w.t.)
Public				
No. 1 Wharf	280	12.0	11.0	50,000
		(14.0 m. in near future)		
No. 2 Wharf	185	10.0	9.5	15,000
No. 3 Wharf	185	10.0	9.5	15,000
No. 4 Wharf	185	10.0	9.5	15,000
No. 5 Wharf	130	7.5	6.5	5,000
No. 6 Wharf	130	7.5	6.3	5,000
East Wharf	185	10.0	9.5	15,000
Private (Log carrier only)				
Toyama Sangyo	373	10.0	9.0	15,000
Toyama Chuo Mokuzai No. 1	200	10.0	9.0	15,000
Toyama Chuo Mokuzai No. 2	155	7.5	7.0	5,000
Toyama Chuo Mokuzai No. 3	210	8.0	7.5	8,000
Toyama Futo West	70	6.0	5.5	3,000
Toyama Futo Centre	170	8.0	7.0	5,000
Toyama Futo East	140	8.0	7.0	5,000
Koike Mokuzai	171	10.0	9.0	15,000

MEDICAL: No advance notice required unless urgent.
DENSITY: Average density between 1015 and 1019 in all seasons.
FRESH WATER: Available, from wharves No. 1, 2, 3, 4, 5 and 6 average 10 t.p.h. In other berths, to be supplied by barge, average 50 t.p.h.
FUEL: Domestic oil is available. Bonded oil will be brought from Kanmon area, with 1 week advance notice, when required.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore, but no spirits.
CONSULS: None.
REPAIRS: Minor repairs only.
DRY DOCKS: No dry docks. Nearest available in Toyama.
REPATRIATION: Possible.
AIRPORT: Toyama Airport about 25 km. distance. Two regular services a day. ANA only.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
HOLIDAYS: 1st May and New Year's Day, most probably from 31st December to 3rd January.
POLICE/AMBULANCE/FIRE: Police, Shinminato Police Station, Shinminato (07668) 2-3141; Ambulance, Shinminato Fire Station, Shinminato (07668) 2-3175; Fire, Shinminato Fire Station, Shinminato (07668) 2-3175.
TELEPHONES: No facilities for placing telephones on board.
SERVICES: Hold cleaning available.
SHORE LEAVE: Local Immigration Officers issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer. Attending from Fushiki Immigration Office, Fushiki, due to no office in Toyama-Shinko.
AUTHORITY: Toyama Prefecture, 1-7 Shinsogawa, Toyama City, Toyama Pref., Japan. *Tel:* (0764) 31-4111.

AGENT: Sub-agents of Dodwell & Co. Ltd. Tokyo, Fushiki Kairiku Unso Co. Ltd., 6-6 Fushiki-Minato-machi, Takaoka-Shi, Toyama-ken. Head Office in Fushiki; Takaoka (0766) 44-1300/9 and Toyama-Shinko Branch; Shinminato (07668) 4-3330. Cable address: Fushikikairiku Fushiki, only to Fushiki Head Office.Telex: 05155571/2 Kairik J.

TSUKUMI: 33.05 N. 131.52 E.

DOCUMENTS:
- Ship's Register.
- Last Port Clearance.
- 3 Crew Lists, including Passport Numbers.
- 3 Passenger Lists.
- 1 Store List.
- 1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Not compulsory, but recommended unless Master well acquainted with locality. Pilot embarks vessel at anchorage, position Lat. 33° 05′ 30″ N., Long. 131° 54′ 00″ E. Request for Pilot made through Agent; Master to report ETA 24 hours prior arrival.
ANCHORAGES: Good holding anchorage available; depth of water about 25 m. Loading and/or unloading of cargo usually effected alongside wharves and in event of loading/unloading at anchorage, when rough weather prevails, difficulty sometimes experienced on account of swell from open sea. Therefore suggested that vessel anchor as close to shore as possible consistent with safety.

RESTRICTIONS:

(a) Berthing: Night entry or berthing after nightfall, though not impractical (depending on weather) is not recommended unless special arrangements (stevedores, etc.) necessitate vessel's immediate berthing.

(b) Departure: Night departure allowed, weather permitting, and subject Pilot's agreement.

MAX. SIZE: See "Berthing".

HEALTH: Vessels usually anchor in the bay of Saganoseki or Saiki, where the authorities board and grant Free Pratique.

RADIO: Recommended Master communicates with Agents through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: 2 tugs, each 1,800 h.p.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Capacity* (g./t.)
Todaka Pier No. 1	125	10.0	10.0	6,000
No. 2	125	9.0	9.0	6,000
Nittetsu Pier	160	10.5	10.5	23,000
Noshima Wharf	164	9.5	9.0	18,000 (d.w.t.)
No. 2 Wharf	121	8.5	8.0	10,000 (d.w.t.)
No. 1 Wharf	82	8.0	8.0	3,500
Noshima Pier	168	16.0	16.0	100,000 (d.w.t.)

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. (50% additional of basic stevedorage), 2100 – 0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

DENSITY: Average density about 1024.

FRESH WATER: Available from shore; water barge will be brought from Saiki, when required.

FUEL: Bonded oil will be brought from Moji or Matsuyama, when required at anchorage.

FIRE PRECAUTIONS: By Marine Security Guards.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo aboard.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Local workshop available only for minor repairs.

REPATRIATION: Possible.

AIRPORT: Oita Airport; 1 hour from Tsukumi by train. Regular airlines: ANA, JDA, TAW.

TIME: GMT plus 9 hours. No alterations to clocks during year.

HOLIDAYS: 14th – 16th August.

POLICE/AMBULANCE/FIRE: Police, 110; Ambulance/Fire, 119.

TELEPHONES: No facilities for placing telephones on board.

SERVICES: No special services available, but if required will be arranged by Agent who calls from another port.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extensions possible if ship stays longer.

AUTHORITY: Usuki Doboku (Public Works) Office, 72-1, Aza Susaki, Oaza Usuki, Usuki City, Ohita Pref. *Tel:* (09726) 3-4136.

AGENT: Sub-agents of Dodwell & Co. Tokyo. Azuma Shipping Co. Ltd., Nakatsuru Bldg., 2nd Floor, 15-5, Semento-machi, Tsukumi-shi, Oitaken. Cable Address: Ringer Tsukumi. Domestic Telex: 07755-77. Tel.: Tsukumi (09728) 2-2144.

TSURUGA: 35.40 N. 136.03 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Daylight hours only. Pilot arranged through Agent. Await Pilot at quarantine anchorage (see "Anchorages").

ANCHORAGES: Quarantine Anchorage is best area for anchoring to avoid heavy weather (being protected from the North by mountains). Position Lat. 35° 40′ 08″ N., Long. 136° 02′ 55″ E.

HEALTH: Radio Pratique available. Formalities carried out at Quarantine anchorage.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which covers all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Join ship inside breakwater and use tug's line.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*LOA* (m.)	*Capacity* (g.r.t.)	*Shore Cranes* (tons)
Tsuruga Cement Wharf (T.C.W.)	150.0	7.5	—	150.0	6,000	1×18.5
Kanegasaki W. (K.W.) (Public)	205.0	9.5	8.6	180.0	18,000	1× 6.4
Railway W. (R.W.) (JNR)	163.6	8.5	7.8	120.0	6,000	1×30.0 1× 5.0
Horai Wharf (H.W.) (Public)	390.0	7.3	6.8	180.0	2×4,000	—
Kawasaki-Matsue Wharf (K-M.W.)	370.0	10.0	9.2	300.0	20,000	1× 8.5

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700–1900 hrs. (50% additional of basic stevedorage), 2100–0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

TANKERS: No facilities for large tankers.

DENSITY: Average density through year 1023.

FRESH WATER: Available from wharf, and by barge.

FUEL: Bonded oil will be brought from Moji with sufficient advance notice, when required.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspectors ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Minor repairs only.

AIRPORT: Distance 1 hour by train. 2 flights daily to Tokyo.

TIME: GMT plus 9 hours. Permanent.

POLICE/AMBULANCE/FIRE: Police, 2–4000; Ambulance and Fire, 119.

TELEPHONES: Not available for placing on board.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

SERVICES: Hold cleaning.

AUTHORITY: Tsuruga Port Administration Office, 2-1, Sakura-Machi, Tsuruga City, Fukui Pref. *Tel:* (07702) 2-0369.

AGENT: Sub-Agents of Dodwell & Co., Tokyo. Tsuruga Kairiku Unyo Kaisha Ltd., P.O. Box 11, 10-2, Sakura-machi, Tsuruga-shi, Fukui-ken; Cable Address: Kairiku Tsuruga, Domestic Telex: 05176-693, Tel.: Tsuruga (07702) 2-3111.

UBE: 33.56 N. 131.15 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, fiarms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agents should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Not compulsory but recommended unless Master well acquainted with area. No Harbour Pilot stationed at Ube but Inland Sea Pilot will attend.

Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to Pilot station. Inland Sea Pilot Association covers all inland sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three Pilot stations dependent upon vessel's last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea Pilot Stations.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits). Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse. (Vessels transiting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGE: Sea bottom is mud.

Depth	4 m. – 7.5 m.	7.5 m. – 10 m.
Sheltered	73,000 sq.m.	233,100 sq.m.
Unsheltered	12,175,500 sq.m.	680,000 sq.m.

RESTRICTIONS:

(a) Outer harbour: No restriction.

(b) Inner harbour: Berthing/unberthing is practicable only during daytime.

(c) Deep draft vessels may berth at high water only.

MAX. SIZE: See "Berthing" and "Tankers".

HEALTH: At first port of call in Japan, vessel must obtain Free Pratique. Quarantine Officers will attend vessel only from daylight to sunset and Master to show all Vaccination Cards, Derat Exemption Certificate. In case vessel arrives from cholera infected area within 10 days, Master must advise crew and passengers health condition to respective Quarantine Office through ship's Agents prior to arrival and close all soil pipes before entering port.

RADIO: Recommended Master communicates with Agents through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel to contact Choshi and Northbound to contact Nagasaki Radio respectively.

TUGS: "Naruto Maru" 2,800 h.p., "Nachi Maru" 2,800 h.p. and "Iris" 2,400 h.p. stationed at Ube. Other tugs available from Moji or Tokuyama. Tug's lines used at no extra charge.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agents mainly by radio.

Wharf	*Length*	*Depth*
Public Okinoyama Wharf	370 m.	10 m.
Public Shibanaka Wharf	185 m.	10 m.
Public Shibanaka East Wharf	152 m.	9 m.
Public Shibanaka New Wharf	260 m.	7.5 m.
Ube Cement Wharf	247 m.	9 m.
Ube Kosan Chisso Wharf	188 m.	9 m.
Ube Kosan Urea Wharf	223 m.	9 m.
Ube Kosan No. 2 Pier	131 m.	9 m.
Central Glass Wharf	162 m.	9 m.
Public Shinmachi Wharf	260 m.	7.5 m.

Wharf for Limestone:

Name of wharf: Okinoyama Limestone Wharf (Ube Kosan No. 5 Wharf). Length of wharf 165 m. Maximum safe draft 11.00 m. Maximum 30,000 d.w.t. Fairway 300 m. wide, 2.25 miles long, 8.80 m. deep, with shallow spot 8.40 m. at low water. Accessible max. draft 10.50 m. Facilities: Loaders × 2; 1,500 tons per unit/hour. Entry and Departure: Berthing/unberthing is practicable only during daytime. Deep draft vessel may unberth at high tide only.

STEVEDORES: At least 24 hours' prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agents advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agents, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. (50% additional of basic stevedorage), 2100 – 0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

TANKERS: Seibu Sekiyu Co. Refinery.

(a) Geographical Location: Lat. 33° 49′ 48″ N., Long. 131° 13′ E. 163°, 11,400 m. from Motoyama Misaki.

(b) Entry Permission: Sea berth located outside harbour limit of Ube port and treated as a closed port. Vessels therefore required to obtain special permission for entry from Customs at any open port prior to arrival.

(c) Restrictions: Max. 230,000 d.w.t. Max. LOA, 325 m. Max. safe draft 19.5 m.

(d) Diameter/No. of shore pipes: Float-sink hose: 16 in.×2 lines connecting to manifold; sub-marine hose: 20 in.×2 lines; submarine pipe-line: 48 in.×1 line.

(e) Discharging Rate: 7,800 t.p.h. (Crude oil).

DENSITY: 1025.

FRESH WATER: *(a)* Water barges available from Moji and supply about 50 t.p.h. *(b)* Water from wharf supply at Central Glass Ube Cement and Ube Chisso wharves.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: None.

REPAIRS: Sasebo Heavy Industries Co., Ltd., Moji; Kitakyushu Iron Works, Tobata; Ube Dockyard Co., Ltd.

DRY DOCKS: None.

AIRPORT: 30 minutes by road.

TIME: GMT plus 9 hours. Permanent.

POLICE/AMBULANCE/FIRE: Police 110; Ambulance/Fire 119.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 day extension possible if ship stays longer.

SERVICES: All services available.

DEVELOPMENTS: 1×2,000 t.p.h. coal unloader under construction for Ube Industries, delivery expected late 1985.

AUTHORITY: Ube Port Administration Office, 5-7, Minato-machi 1-chome, Ube City, Yamaguchi Pref. *Tel:* (0836) 31-3311.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo.

Dry Cargo: See "Moji".

Tankers: Uyeno Unyu Shokai, Yamaguchi Branch Office, Oaza Nishioki, Onoda-shi, Yamaguchi-ken; Cable address: Uyenoshell Ube, Domestic Telex: 6845-42, Tel. Ube (0836) 88-1171.

UNO: 34.29 N. 133.57 E.

DOCUMENTS:

Ship's Register.
Last Port Clearance.
6 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Stores List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Inland Sea pilotage should preferably be arranged through Agent by cable via Choshi (Nagasaki) Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all inland sea ports. Pilotage is compulsory for vessels over 10,000 g.r.t. Pilots obtained from one of three pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as harbour Pilots up to berth or anchorage at destination. Harbour pilots available sunrise to sunset.

Note: VHF communication available with Inland Sea Pilot Stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits). Position Lat. 34° 34′ N., Long. 135° 08′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse. (Vessels transiting Bungo Channel.) Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat. 33° 57′ N., Long. 131° 03′ E.

ANCHORAGE:

Harbour anchorage	*Bottom*	*Depth*	*Position from Tobisu Beacon*
No. 1 Anchorage (off shipyard)	Sand and/ or Sand/Shell	13.0 m.	323°–700 m.
No. 3 Anchorage (Max. LOA 180.0 m.)		23.0 m.	043°–1,300 m.
No. 4 (closed port)		21.0 m.	150°–500 m. (May-Sept.)
No. 4 (closed port)		21.0 m.	162°–820 m. (Oct.-April)
No. 5 Anchorage (Max. LOA 180.0 m.)		29.0 m.	023°–850 m.
No. 6 Anchorage (Max d.w.t. 6,000)		21.0 m.	025°–1,300 m.

RESTRICTIONS: Vessel is only able to berth at time of slack water in Bisan Central Passage from daybreak to before sunset. Vessel's bottom clearance must be 10% of depth in passing through the passage and whilst in berth.

Mitsui Hibi Wharf and Hibi Public Wharf are closed-ports. Ship's crew members (including Master) must get hired launch (ferryboat) for going ashore, this being a Japanese Customs Law.

MAX. SIZE: See "Berthing".

HEALTH: Vessels usually anchor at Wada-Misaki (off Kobe), where the Authorities board and grant Free Pratique.

Quarantine Officials not stationed in the port, therefore, vessel has to pass a quarantine inspection at Kobe (Quarantine) Anchorage (Lat. 34° 38′ N., Long. 135° 11′ E.) when vessel coming through the Kii Channel, Matsuyama, Mizushima, Sakaide or any other "Q" port when coming through the Bungo Channel, or Mutsure "Q" Anchorage (Lat. 33° 58′ N., Long. 130° 52′ E.) when vessel coming through the Japan Sea.

Vaccination is available at local hospital. If vessel requires sanitary inspection, Officials come from Mizushima.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: Tugs join vessel at Outer Harbour area. Tug's lines used.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Length Overall* (m.)	*Capacity* (g./t.)
No. 1 Pier	270	5.8–8.0	7.1	180	10,000
No. 3 Pier	185	10	9.6	170	10,000
Hibi Public (Closed Port)	180	10	9.1	170	10,000
Mitsui Hibi (Closed Port)	176	13	12.0	176	30,000

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew.

MEDICAL: No advance notice required unless urgent.

TANKERS: None.

DENSITY: Winter 22.7; Summer 23.98.

FRESH WATER: Available ex-shore pipe. Available by water barge, 100 tons capacity from Mizushima.

FUEL: Available but not bonded. Bonded fuel is available from main ports or oil station.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered, gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 60 cigarettes to take ashore but no spirits.

CONSULS: No consuls available, but Marine Note of Protest can be attested by local notary public at Okayama.

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: *Mitsui Engineering Shipbuilding Co. Ltd.:*

Dry dock	*Length*	*Width*	*Depth*	*d.w.t.*
No. 1	545 ft. 6 in.	76 ft. 1 in.	26 ft. 9 in.	20,500
No. 2	560 ft.	74 ft. 1 in.	26 ft. 9 in.	19,000
No. 3	670 ft.	103 ft. 3 in.	32 ft.	46,000

Mitsui floating dock, max. size 150,000 d.w.t.

REPATRIATION: Possible. Convenient route for crew joining is by train from Tokyo/Osaka to Uno via Okayama.

AIRPORT: Okayama Airport 25 km. Only domestic airlines; 3 flights to Osaka, via Tokyo, daily.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Police (for emergency) Tel: 110; Ambulance Tel: 119; Fire Tel:119.

TELEPHONES: No arrangements for placing telephones on board.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 72 hours, but 72 hours' extension possible if ship stays longer. Pass may be used in Uno (Tamano City) area only.

AUTHORITY: Tamano Port Administration Office, 8-9, Uno 1-chome, Tamano City, Okayama Pref. *Tel:* (0863) 31-3211.

AGENT: Sub-Agents of Dodwell & Co. Ltd., Tokyo. Naigai Unyu Co. Ltd., Shokokaikan Bldg. 7350, Chikko Kaigan-dori Tamano-shi, Okayama-ken (706). Cable Address: Naigai Tamano. Domestic Telex: 5946-869. Tel: (0863) 31-2211.

WAKAMATSU: 33.54 N. 130.48 E. (See "Kanmon-Ko").

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: Compulsory. Harbour Pilots and Inland Sea Pilots are available at the pilot station or quarantine anchorage. Mutsure Pilots Station: Lat. 33° 59′ 30″ N., Long. 130° 53′ 00″ E. Inland Sea pilotage should preferably be arranged through Agent by cable via Nagasaki Radio giving 72 hours' notice. Urgent correction of ETA outside business hours should be cabled direct to pilot station. Inland Sea Pilot Association covers all Inland Sea ports. Pilotage compulsory for vessels over 10,000 g.r.t. Pilots obtained from 1 of 3 pilot stations dependent upon vessels last port of departure and at Master's discretion. Pilotage available throughout 24 hours and 72 hours advance notice preferred, thereafter advising any alterations. Most Inland Sea Pilots also act as Harbour Pilots up to berth or anchorage at destination.

Note: VHF communication available with Inland Sea pilot stations. Also see "Shipmaster's Report" before first port.

1. Wadamisaki, at entrance to Kobe (vessels transiting Kii Straits). Position Lat. 34° 34.09′ N., Long. 135° 11′ E. Telegraphic address "Anjin Kobe".

2. Sekisaki, 3 miles South of Sekisaki Lighthouse. (Vessels transiting Bungo Channel). Position Lat. 33° 13′ N., Long. 131° 54′ E. Telegraphic address "Anjin Saganoseki". In event bad weather, recommended vessels proceed for shelter as near as possible having due regard to safety, to Sekisaki Pilot Station.

3. Hesaki, at East side of Kanmon (Shimoneseki) Straits. Position Lat. 33° 56′ 24″ N., Long. 131° 03′ 12″ E.

ANCHORAGES: No. 5 section, Wakamatsu. Depth 9 m. – 11 m. Capacity (g/t), 15,000×2. Also quarantine anchorage.

RESTRICTIONS: Pilots not available after sunset. Entry and Sailing are controlled by the one-way signals as follows: *Entry:* 0800 to 1100 hrs.; 1300 to 1500 hrs. 1 hour before sunset to sunset. *Sailing:* 1100 to 1300 hrs.; 1500 hrs. to 1 hour before sunset. Sunset to 0800 hrs. Easterly winds prevail in warm season, dense fog prevails sometimes in Spring and Winter, but generally clears in a few hours in the morning. Tidal range about 1.5 m. and current in leading channel about 1.5 – 2.5 knots, but no current in port. Due to narrow channel leading to main harbour and shallow water at entrance of channel, length and draft of vessels are generally limited as follows:

Buoy: Ship's length overall, 165 m.; draft, 8.5 m.; 11,000 g.r.t

Fairway leading into main harbour about 200 m. wide and 2 miles long, running parallel to a breakwater and reclaimed land. In this channel, as in main harbour and fairway, vessels observe only one-way traffic and on an outgoing signal from the shore, wait outside for outgoing vessel until channel is cleared. Vessels with draft of more than 7 m. can enter/depart only at high tide. Entry permitted only from sunrise and vessel to be berthed before sunset. Night departure prohibited.

MAX. SIZE: See "Berthing".

HEALTH: Radio Pratique available. Formalities will be carried out at the anchorage. Quarantine station 105° – 2,800 m. (800 m. square) from Mutsure Lighthouse.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specially Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

TUGS: 2 tugs join vessel under Wakato Bridge at corner of fairway leading to main harbour.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth and Wharves	*Length (m.)*	*Depth (m.)*	*Permissible Draft (m.)*	*Length Overall (m.)*	*Capacity (g.r.t.)*	*Shore Cranes (tons)*
Buoy B	210	8.5	7.6	165	15,000	—
Buoy C	220	8.5	8.4	160	10,000	—
Buoy E	160	8.1	8.1	160	10,000	—
Buoy H	150	6.4	6.4	110	2,500	—
Buoy I	150	6.4	7.0	110	3,000	—
Buoy J	150	6.5	6.5	120	3,000	—
Buoy K		6.0		120	1,000	—
Buoy L	220	8.6	8.5	165	10,000	—
Buoy M	150	6.7	6.0	110	2,000	—
Buoy N	200	6.7	6.7	160	7,000	—
Buoy O	160	7.4	7.3	120	5,000	—
Buoy P					1,000	—
Makiyama	140	7.0	6.8	140	*No limit	1×3, 2×2.3
Asahi Glass	150	8.5	8.5	150	,,	1×3, 1×2
Tobata Shoko (TW)	150	8.5	8.5	150	,,	—
Mitsubishi (Coal) OKG	160	8.4	8.4	160	,,	2×4
Chemical Ind. OKJ	180	8.3	8.3	160	,,	1 ship loader
Kurosaki OD1	140	8.0	8.0	140	,,	—
Kokyo Wharf OD2	120	7.0	7.0	120	,,	—
Dolphin Wharf						
HD 1 (Logs) HD 2 (Logs)		10.0	8.4	429	,,	—
HD 3 (Logs)		10.0	9.0	185	,,	—

*Subject to draft.

BRIDGES: Wakato Bridge. Height of mast limited to 38 m. for passing under bridge.

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. (50% additional of basic stevedorage), 2100 – 0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

TANKERS: No tanker berths.

DENSITY: Average density in port about 1019 – 1021 in Summer season; 1025/1026 in Winter season.

FRESH WATER: Available. Rate of delivery: 50 t.p.h. – 60 t.p.h. ex-barge. Minimum quantity at buoy, 10 tons; minimum quantity at No. 5 section, 30 tons.

FUEL: Domestic oil is available. Bonded oil will be brought from Moji, Ube or Oita with sufficient advance notice, when required.

FIRE PRECAUTIONS: No tanker berth. Each tugboat is equipped with fire extinguisher system for attending emergency case at request.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.
CONSULS: See "Yawata".
REPAIRS: All grades deck and engine repairs afloat.
DRY DOCKS: None.
AIRPORT: See "Yawata".
TIME: GMT plus 9 hours. Permanent.
POLICE/AMBULANCE/FIRE: Wakamatsu Water Police, tel. 093-761-2731; Wakamatsu Police Office, tel. 093-761-2731; Ambulance/Fire: Wakamatsu Fire department, tel. 093-761-4031; Defence/rescue department, tel. 093-761-4353.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.
DEVELOPMENTS: Land reclamation N.E. Wakamatsu for discharge wharves (coal/iron ore). Depth to be 12 m.
AUTHORITY: Kitakyushu Port & Harbour Bureau, Nishi-Kaigan 1-Chome, Moji-Ku, Kitakyushu-City, 801 Japan. *Tel:* (093) 331-1331.

AGENT: See "Tobata".

WAKAYAMA: 34.13 N. 135.08 E. (See Plan Book)

DOCUMENTS:
Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Numbers
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.
PILOTAGE: Wakayama-Shimotsu licensed Pilots. ETA advices to Agent. Pilot boards 1,500 m. – 2,500 m. off Wakayama Breakwater. Chart Nos. 1150 and 1143 (Japanese Maritime Safety Board). No pilot boat. Pilot boards from tug.
ANCHORAGES: For waiting Pilot and/or berth (nature of bottom, sand mixed with mud.) Four anchorage points for large vessels (ore carriers for Sumitomo Metal) over 30,000 tons gross are provided by the Port Authority. Agents must apply for one when required. The position of each from the lighthouse (flashing white) in the Southern sector of the port is as follows:

"A" – 3,000 m. – 255°
"B" – 3,500 m. – 272°
"C" – 4,100 m. – 283°
"D" – 4,800 m. – 292°

Other vessels are required to anchor in position (approx.) Lat. 34° 13′ 30″ N., Long. 135° 06′ 30″ E. or nearer the shore if possible. (Wakayama Log Carrier): 2,000 m. 245° and 230° from Red lighthouse; depth about 22 m.
RESTRICTIONS: Pilot available daytime only. Channel depth, (Southern Section) 9.0 m; (Northern Section) 14.0 m.
MAX. SIZE: (Wakayama Log Carrier): South Section, LOA 160 m., 20,000 d.w.t. draft 9.0 m.; LOA 200 m., 35,000 d.w.t., draft 10 m. (Sumitomo Metal Pier, South Section): LOA 300 m., 100,000 d.w.t. or 150,000 d.w.t. with part load, draft 14.0 m.
HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health condition on board. When Free Pratique is granted by radio vessel will be required to submit the following documents to Quarantine Officer on arrival:
Maritime Declaration of Health.
Crew List.
Passenger List.
Vaccination List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area, or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or suspected cases, of infectious disease within 15 days of arrival.
RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio or Kobe Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio or Kobe Radio respectively.
TUGS: Tug assistance normally commences from outer harbour. Tug lines used and charge included in towage. 8 tugs available, up to 3,000 h.p.
BULK HANDLING FACILITIES:

Berth	*Max.* *d.w.t.*	*Length* *(m.)*	*Depth* *(m.)*	*Cranes*
Sumitomo Metal A	18,000	172	9.5	7×700 t.p.h. 1×1,000 t.p.h.
Sumitomo Metal B	160,000	365	14.0	
Sumitomo Metal C	160,000	274	14.0	
Sumitomo Metal D	40,000	215	12.0	
Sumitomo Metal E	26,000	218 (LOA)	11.00 (Max. draft)	2×20 tons
Sumitomo Metal F	18,000	180 (LOA)	9.30 (Max. draft)	

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.
STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1630 – 2130 hrs. (60% additional of basic stevedorage), 2130 – 0400 hrs. next morning (130% additional), 0400 – 0830 hrs. (60% additional), Sundays/holidays (100% additional).
MEDICAL: No advance notice required unless urgent.
TANKERS: *Wakayama Northport (LPG Dolphin):* Sumitomo Metal: Max. 48,000 d.w.t., Max. LOA 230 m., Max. draft 12.0 m., 1×12 in. (butane), rate 2,700 k/l.
DENSITY: 1025 – 1030.
FRESH WATER: Available alongside and Water boat, capacity 90 tons.
FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.
GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo on board.
OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. Cost per hour per gang depending on type of cargoes. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.
CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.
CUSTOMS ALLOWANCES: Only allowed 200 cigarettes to take ashore for one week but no spirits.
CONSULS: None.
REPAIRS: Minor repairs only. Suwa Shipyard Co., Ltd. Tel. 0734-31-1694.
DRY DOCK: None.
REPATRIATION: Possible.
AIRPORT: Itami, Osaka, about 3 hours by car.
TIME: GMT plus 9 hours. No alterations made to clocks during year.
POLICE/AMBULANCE/FIRE: Police, 110; Ambulance/Fire, 119.
SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 9 days, but 9 days' extension possible if ship stays longer.
DEVELOPMENTS: Breakwater under construction in the vicinity of the entrance to Wakayama No. 1 Area.
AUTHORITY: Wakayama Shimotsu Port Administration Office, 22, Chikko 6-chome, Wakayama City. *Tel:* (0734) 31-7266.

AGENT: *Wakayama North Port* (Sumitomo Steel Mills), Sumikin Kaiun Co. Ltd., c/o Sumitomo Kinzoku K.K., 1850, Minato, Wakayama City. Tel. Wakayama (0734) 55-5151. Cable Address: Shipsumikin Wakayama. Telex: 05542161 Smikai J, 05542162, 05542193.

Wakayama South Port (Lumber/log discharge), Shimamato Kaiun Co., Ltd., 7, 5-Chome, Chikko, Wakayama City. Tel: Wakayama (0734) 22-5111. Cable Address: Shimamoto Wakayama. Telex: 05542151 Simawk J.

YATSUSHIRO: 32.30 N. 130.05 E. (See Plan Book)

PORT LIMITS: The sea surrounded by the circle with a radius of 5,000 m. centred upon the triangulation point on Kagashima Island (28.7 m. high), the lines West to the respective bridges on the lowest Mae-kawa and Kuma-gawa, and the coast.
DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Manifest.
1 Customs.
1 Store List.
1 Health Document.
1 Bill of Lading.

PILOTAGE: Pilot station (acting also as an Agent for foreign vessels):

Yatsushiro Branch Office of the Nippon Tsuun K.K. located at 262-15 Minato-machi, Yatsushiro-shi, Kumamoto-ken. Tel: 09653-7-0011 or 7-0012.

Kokoku Unyu K.K. located at 262 Minato-machi, Yatsushiro-shi, Kumamoto-Ken. Tel: 09653-7-1101. Telex: 767503 Kounkij.

Yatsushiro Branch office of Kitakyushu Unyu K.K. located at 3-2 Tatema, Yatsushiro-shi, Kumamoto-ken. Tel: 09653-2-7136. Telex: 767592 Yatsushiro Kitakyuunma.

Yatsushiro Koun K.K. located at 9-4 Asahichuodori, Yatsushiro-shi, Kumamoto-ken. Tel: 09653-5-2233. Telex: 767506.
ANCHORAGES: Within port limits.
RESTRICTIONS: A Pilot is not available after dark, also his availability depends on the tidal conditions.
MAX. SIZE: Max. d.w.t. 35,000 tons. The tidal difference between high and low water is 4.3 m.
HEALTH: All the necessary procedures must be undertaken at the Yatsushiro-Minamata Branch Office of the Nagasaki Quarantine Station.
RADIO: Not available.
VHF: Not available.
TUGS: 1 tug owned by the Jonan Unyu K.K., tugs also available from Miike Port in Fukuoka Prefecture.

BERTHING:

Quay	A	Length	130 m.	Depth	7.5 m.
„	B	„	130 m.	„	7.5 m.
„	C	„	165 m.	„	9.0 m.
„	D	„	185 m.	„	10.0 m.
„	E	„	185 m.	„	10.0 m.

CRANES: 7 mobile cranes and 20 shovel loaders.

As a rule, when a vessel is secured alongside quays A, B, C, D and E there is no need to use the ship's own gear. However, it may sometimes be necessary to use the ship's gear during loading and unloading.

STEVEDORES: Arranged by ship's Agent.

MEDICAL: Arranged by ship's Agent.

FRESH WATER: Available from the water supply facilities operated by the Kumamoto Prefecture.

CONSULS: None.

REPAIRS: Not possible.

DRY DOCKS: Not available.

SURVEYORS: Not available.

GANGWAY/DECK WATCHMEN: Watchman is not necessary.

HATCHES: Opening and closing is done by the stevedores.

REPATRIATION: Yatsushiro Branch Office of the Fukuoka Immigration office arranges necessary repatriation.

AIRPORT: Kumamoto Airport (about 70 km. distance).

POLICE/AMBULANCE/FIRE: The Yatsushiro Police station located at Nishimatsuejo-machi, Yatsushiro-shi, Kumamoto-ken. Tel: 09653-5-2110.

The Yatsushiro Head Station of the Yatsushiro Fire Department located at 1-10 Matsuejo-machi, Yatsushiro-shi, Kumamoto-ken. Tel: 09653-2-6181.

EMERGENCY CO-ORDINATION CENTRE: Yatsushiro Branch Office of the Misumi Maritime Safety Department. Tel: 09653-7-1477.

TELEPHONES: There is no arrangements for placing telephone on board.

STORING: See "Prelims" page viii.

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. Yes.
6. Yes.

SHORE LEAVE: Shore passes are to be issued at the Yatsushiro Branch Office of the Fukuoka Immigration Office.

DELAYS: Delays will be expected when quays are occupied by vessels or a Pilot cannot go on board because of the tidal conditions.

AUTHORITY: Yatsushiro Port Office of the Kumamoto Prefecture, 249 Minato-Machi, Yatsushiro City, Japan. *Tel:* 09653-7-0632. *Contact:* Port Office Superintendent.

AGENT: Yatsushiro Branch Office of the Nippon Tsuun K.K., 262-15 Minato-machi, Yatsushiro-shi, Kumamoto-ken. Cable Address: Nexco Yatsushiro. Tel: 09653-7-0011.

YAWATA: 33.52 N. 130.49 E. (See "Kanmon-Ko")

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: *Harbour Pilotage:* Compulsory for entry, departure and when passing through Straits if vessel exceeds 10,000 g.r.t. departure. Pilots embark Eastbound vessels at Mutsure Quarantine Anchorage (see "Moji"), Westbound vessels at Hesaki Quarantine Anchorage (see "Moji"). Two Pilots embark vessels exceeding 20,000 gross tons, charging 180% pilotage.

Sea Pilotage: Vessel approaching from East obtain Pilot by radio request made at least 24 hours in advance. Pilot embarks 3 miles South from Sekisaki Lighthouse; Lat. 33° 13′ N. Long. 131° 54′ E.

Pilots should be kept closely advised of accurate ETA pilot station. If any changes, Masters requested radio immediately to pilot offices direct or through Agent reporting revised ETA. Cable addresses of pilot offices: Harbour Pilot, "Kanmonpilot Moji". Inland Sea Pilot, "Anjin Moji". Require 24 hours' notice of ETA, but can attend with 2 – 3 hours' notice in emergency cases.

ANCHORAGES: No anchorage at Yawata, but quarantine anchorage used in essential cases. See "Health".

RESTRICTIONS:

(a) Because of narrow channel leading to Yawata and shallow water at entrance of channel, length and draft of vessel limited, except for berthing at Nishi-Yawata Wharf, where 20,000 gross tonnage with 200 m. length overall and 8.3 m. draft may be accommodated. Limits:

	Wharf	*Buoy*
Length (overall)	166 m.	155 m.
Draft	8.5 m.	8.5 m.
Gross tonnage	10,000 tons	10,000 tons

Vessel slightly exceeding above may be berthed at the Pilot's discretion, subject weather conditions and efficiency of engine, steering, etc.

(b) Fairway leading into main harbour about 200 m. wide and 2 miles long, running parallel to breakwater and reclaimed land. In this channel, as in main harbour and fairway to Yawata, vessels observe one-way traffic and, on a "not-clear" signal from shore, wait outside for outgoing vessels to clear channel. Vessels with draft of more than 7 m. can enter/depart only at high tide.

(c) Entry permitted only from sunrise and vessels to be berthed before sunset. Night departure prohibited.

(d) Wakato suspension bridge crosses channel between Tobata and Wakamatsu. Height of bridge from water line at fairway 42.675 m. at spring high tide; height of mast of vessels passing under bridge limited to 38 m.

(e) Easterly winds prevail in warm season. N.W. winds in Winter. Dense fog sometimes in Spring and Winter, but generally clear in morning. Tidal range about 1.2 m. Tidal current in channel about 1.5 to 2.5 knots, but no current in port.

(f) Port privately owned and controlled by Nippon Steel Corp.

MAX. SIZE: See "Berthing".

HEALTH: See "Moji".

(a) Quarantine station at Western entrance: 0.5 mile East of Mutsure Lighthouse Lat. 33° 58′ 15″ N., Long. 130° 53′ 43″ E.

(b) Quarantine station at Eastern entrance: 125°, 1,500 m. from Hesaki Lighthouse Lat. 33° 56′ 24″ N., Long. 131° 30′ 12″ E.

(c) Quarantine inspection not allowed inside port except when weather or other special reasons prevent quarantine boat from approaching ship at anchorage.

(d) Quarantine service is rendered from sunrise to 1 hour before sunset.

(e) "Q" flag should be hoisted until ship in Free Pratique.

(f) Vessels exceeding 20,000 gross tonnage may undergo quarantine on application when they berth inside port.

(g) When ship arrives from plague-infected or suspected area within 10 days after she left such place, 24 hours special quarantine required. All sanitary scuppers must be closed and garbage must not be thrown overboard after ship reaches 60 miles off Japanese coast.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

VHF: Vessel can keep in direct contact with port authorities in regard to arrival, berthing instruction, etc, through VHF, details as follows:

	Kitakyushu (Moji)	*Shimonoseki*
(a) Call sign:	"Kitakyushu Port Radio"	"Shimonoseki Port Radio"

(b) Location of radio facilities: The transmitting and receiving station located at top of Mt. Hinoyama, Shimonoseki, for both the above radio stations.

(c) Type of wave:

		Kitakyushu (Moji)	*Shimonoseki*
Channel:	Simplex 16	(Calling, responding)	16 (Calling, responding)
	Simplex 12	(Communication)	12 (Communication)
	Simplex 14	(Communication)	14 (Communication)
	Duplex 20	(Communication)	20 (Communication)
	Duplex 22	(Communication)	22 (Communication)
Outport:		50 W.	50 W.

(d) Operating hours: 0000 – 2400.

(e) Communicating range: Within a radius of 50 miles from the station.

(f) Communicating language: English and Japanese.

TUGS: 2 tugs join vessel at corner of fairway leading into main harbour. Ship's lines used when vessel berths.

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Berth	*Length* (m.)	*Depth* (m.)	*Permissible Draft* (m.)	*Permissible Length Overall* (m.)	*Shore Cranes* (tons)
(Ore Wharf)					
Wharf No. 14	150	9.0	8.0	100	—
15	150	9.0	8.0	120	—
16	150	9.0	8.5	147	2×12
17	150	9.0	8.5	147	—
18	179	9.0	8.5	166	2×12
(Coal Wharf)					
Wharf No. 19	180	9.0	8.5	160	1× 5
20	180	9.0	8.5	160	1× 5
(Scrap or Pig Iron Wharf)					
Nishiyawata					
Wharf No. 2	120	9.0	8.5	100	2×40
No. O.B.2	220	9.0	8.5	200	—
Buoy No. 4	220	9.0	8.5	147	—
5	—	9.0	8.5	147	—
6	—	9.0	8.0	123	—
10	—	9.0	8.5	147	—
12	—	9.0	8.5	147	—
14	—	9.0	8.0	100	—

Note: Capacity for the above, no limit subject to draft and length.

BRIDGE: See "Restrictions".

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by the Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1700 – 1900 hrs. (50% additional of basic stevedorage), 2100 – 0500 hrs. next morning (130% additional), Sundays/holidays (60% additional).

MEDICAL: No advance notice required unless urgent.

TANKERS: No tanker berth.

DENSITY: Average density in port about 1020 – 1022 in Summer season, 1024 – 1025 in Winter season.

FRESH WATER: At buoys: Water barges available from Wakamatsu, rate of delivery about 50 t.p.h. At wharves: (No. 16, 17, 18, 19, 20 and Nishi-Yawata Wharf.) From hydrants: 25 t.p.h. – 40 t.p.h. For supply at Nishi-Yawata Wharf, 1 day prior notice required. Overtime charge: (0500 – 0800 hrs.) (1700 – 2200 hrs.), 50% add.; (2200 – 0500 hrs.), 100% add.; bad weather 50% add.; Sundays and holidays, 50% add. Minimum quantity at Yawata, 10 tons. Minimum quantity at Mutsure Anchorage, 50 tons.

FUEL: Domestic oil is available. Bonded oil will be brought from Moji, Ube or Oita with sufficient advance notice, when required.

FIRE PRECAUTIONS: No tanker berth. Each tugboat is equipped with fire extinguisher system for attending emergency cases.

GANGWAY/DECK WATCHMEN: Not specially required unless passengers or valuable cargo aboard.

OPENING/CLOSING HATCHES: Stevedores carry out opening and closing hatches. If any time lost by ship's crew doing this work, stevedores charge ship for waiting. Recommend request stevedores for this work unless crew can complete it before berthing.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

CONSULS: British Consul, who is also acting Swedish Consul, is stationed with Holme Ringer, Moji (tel. 093-331-1311). American Consul stationed at Fukuoka (tel. 092-751-9331). Korean Consul stationed at Fukuoka (tel. 092-771-0461).

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: No dry dock available.

REPATRIATION: Possible.

AIRPORT: Fukuoka Airport; approx. 70 km.

(a) International line:
JAL, for Pusan (Tuesday and Thursday);
for Taipei-Hongkong (Monday and Thursday);
CPA, for Taipei-Hongkong (Wednesday and Saturday);
KAL, for Pusan-Seoul (Mon., Tues., Wed., Fri., and Sat.).
(b) Domestic line:
JAL and ANA, regular service.

Kitakyushu airport; approx. 20 km. Flights often suspended by heavy rain and fog. Domestic line: ANA, regular service.

TIME: GMT plus 9 hours. No alterations made to clocks during year.

POLICE/AMBULANCE/FIRE: Yawata Police Station, tel. 093-671-6631; Wakamatsu Water Police, Yawata Port branch, tel. 093-681-3475; Ambulance/Fire, Yawata Fire Department, tel. 093-671-4831.

TELEPHONES: Nippon Senpaku Tsushin K.K. available at Moji (tel. 093-331-1089). In case of Mutsure anchorage, extra boat charge and personnel expenses will be incurred. Due to insufficient number of telephones require adequate advance notice for installation. Suitable ship's electrical voltage; DC – 22/28 v. AC – 100 v. 110 v. 120 v. (to keep at least within 10 v.).

GENERAL: Whenever vessel takes bunkers in port, advisable to close deck scuppers' holes before pumping in order to avoid overflow oil into sea.

SERVICES: Tank cleaning, sand blasting (Fuji Co., Tobata), chemical cleaning (Fuji Co., Tobata). Hold cleaning (Tsuyama Kosan K.K., Yawata; Fuji Co., Tobata). Compass adjusting (Kajiwara Koki, Shimonoseki). DF calibration (Nippon Radio Co., Tobata). Life-raft servicing and inspection (Kikutani Sengu, Shimonoseki; Marinair International, Kobe; International Marine, Kobe; Marine International; Yokohama and Tokyo); this service requires name of maker in advance. Radio and radar repairs available, but requires name of makers/type of the machine in advance. Laundry (Sunrise Cleaning, Tobata; Moji Dry Cleaning, Moji). Watchmen service available. Charts: only Japanese charts available locally; BA and HO charts can be obtained from Kobe and Yokohama respectively, with adequate notice. Grain fitting (Ushio Co., Moji; Fuji Sobi, Moji); this work is usually carried out at Moji (public port). Fumigation (Toyo Fumigation Co., Moji), this work is not permitted at Yawata but at Moji. Floating crane, capacity 200 tons (Kondo Kaiji, Wakamatsu; Nichibei Kosan). Diver (Nippon Salvage Co., Moji; Tsuyama Kosan, Wakamatsu). Salvage service (Nippon Salvage, Moji) Painting service (Fuji Co.).

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days, but 3 days' extension possible if ship stays longer.

DEVELOPMENTS: All the present discharging berths (wharves) for coal, ore (including Nishi-Yawata Scrap Wharf) converted to loading berths.

AUTHORITY: Kitakyushu Port and Harbor Bureau, Nishi-Kaigan 1-Chome, Moji-Ku, Kitakyushu City, 801 Japan. *Tel:* (093) 331-1331.

AGENT: See "Tobata".

YOKKAICHI: 34.57 N. 136.38 E. (See Plan Book)

DOCUMENTS: See "Yokohama".

PILOTAGE: Not compulsory; Pilot available at Lat. 34° 56′ 15″ N., Long. 136° 40′ 40″ E. Vessels requiring Pilot cable Agent at least a day ahead advising exact ETA pilot station.

Wireless station for communicating with entering ships and for other port business, call signal JCZ. Radio wave in use is A1.A2 500 kHz and A1.A2 486 kHz, output A1 50 W. and A2 110 W. Zone of communication about 100 km.

Yokkaichi Signal Station also equipped for assigning berths to entering ships and for other port business. VHF communication available, call signal Yokkaichi Port Radio, Channel 16. Working Channel 14, 0600 to 2000 hrs. any day.

Also see "Nagoya" – "Pilotage: Shipmaster's Report".

ANCHORAGES: Vessels anchor in position Lat. 34° 56′ 15″ N., Long. 136° 40′ 40″ E. where Authorities board and grant Free Pratique; max. depth 13 m.

RESTRICTIONS: Entry restricted by vessel's draft and Pratique. Max. draft inside port 12 m. Quarantine Authority attend vessel usually from dawn to sundown on any day. Berthing daytime only. Unberthing any time except tankers daytime only.

MAX. SIZE: Max. permissible draft inside port 12 m.

Tankers:

Berth	*Max. d.w.t.*	*Max. LOA* (m.)	*Max. Safe Draft* (m.)
Showa Outer SBM	275,000	335	19.30
Showa Inner SBM	170,000	300	15.80
Showa Wharf "E"	32,000	232	10.50
Daikyo SBM	230,000	330	19.50
Daiyo Umaokoshi Pier	60,000	240	9.80

HEALTH: Request for Radio Pratique to be addressed to Agents not less than 12 hours before arrival.

TIDE: Tidal current of Ese Bay runs Northward along East side of Mie Prefecture and turns round at mouth of Kiso River and runs Southward for Chita Peninsula.

Tidal level:	High tide	Tidal level (average)	+7.74 ft.
	Mean tide		+4.30 ft.
	Low tide		+0.00 ft.

TUGS: Normally stand-by to assist vessel inside breakwater of entrance to fairway; tug's lines used.

BERTHING:

Berth No.	*Depth (m.)*	*Length (m.)*
1	8.0	161.0
2–3	8.5	245.0
4–5	9.0	215.0
6	3.0	179.0
8	10.0	190.0
9	10.0	200.0
10	5.5	200.0
11	10.0	200.0
12	5.0	140.0
13	11.0	245.0
14	10.0	220.0
15	10.0	220.0
16	7.5	114.0
17–18	5.5	163.0
19–21	5.0	210.0

SPECIALISED CARGO HANDLING FACILITIES:

Bulk Cargoes: No. 2 Wharf has a cereal silo which can store 56,840 tons of imported grain. 2 pneumatic unloaders with unloading capacity of 300 t.p.h. per machine at the Northern berth of the pier to connect the silo with conveyors.

Containers: One deep-sea container berth of 280 m., quay length and minimum water depth of 12 m., incorporating a Ro-Ro ramp. Two 37.5 ton and 44.5 ton Hitachi container cranes. Container yard and marshalling yard area of 58,750 sq.m. Three TCM straddle carriers, 3 forklift trucks (10 tons – 25 tons), 15 tractors, 35 trailers. Container freight stations at Asake 5,940 sq.m. Wool centre 46,768 sq.m.

Facilities of Container Terminal:

1. Total area 58,750 m.
2. Container berth: Length 280 m., depth 12 m., mooring capacity 25,000 d.w.t.×1 berth.
3. Cargo handling equipment: Ramp-way 1 unit, container cranes 2 sets, one 44.5 tons, one 37.5 tons.
4. Transport machine: Straddle carrier, 3 units, one 40 ft., two 20 ft.; fork lift 3, one 25 tons, one 20 tons, one 10 tons.
5. Container yard: Container yard 6 yards, 29,730 m. refrigerated container yard, one yard 1,275 m.
6. Other relevant facilities: Chassis yard 5,740 m.; wool centre 46,768 m.; cold store 4,664 m.; meat centre 3,335 m.

Liquid Chemicals/LPG Carriers:

Operator: Yokkaichi LPG Terminal Co. Ltd.
Location: Lat. 34° 50′ 05″ N., Long. 136° 40′ 00″ E.
Max. Mooring Capacity: 67,000 d.w.t.
Depth of Water: Passage: 12 m.
Berth: 12 m.
Max. Acceptable Length: 255.46 m.
Max. Acceptable Draft: 10.50 m.
Tidal Range: Zero to plus 2.36 m.
Side Berthing: Starboard
Type of Unloader: Chiksan Arms.
No. of Receiving Lines: 2 liquid and 2 vapour.
Size of Manifold Flange: Liquid 12 in., vapour 8 in. ASA-150.
Manifold Configuration: From fwd to aft – bv-bl-pl-pv.
Max. Airdraft Manifold: 19.00 m.
Remarks: Safety Pledge letter has to be filed with Port Authority.

TANKERS:

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Showa Outer SBM	Crude Oil	16 in.×2	8,350
Showa Inner SBM	Crude Oil	12 in.×2	5,000
Showa Wharf "E"	Naphtha	12 in.×1	1,000
	Fuel Oil	12 in.×1	1,000
	Kerosene (Load)	10 in.×1	300/500
	Lub Oil (Load)	3 in.×1	200/300
Daikyo SBM	Crude Oil	16 in.×2	5,000
Daikyo Umaokoshi Pier 1	Crude Oil	12 in.×2 (Chiksan)	3,000
	Fuel Oil	12 in.×1	3,000
	Naphtha	6 in.×2	350/400
	Kerosene (Load)	6 in.×2	380/400
Daikyo Umaokoshi Pier 9	Crude Oil	12 in.×1 (Chiksan arms)	3,000
	Fuel Oil	12 in.×1 (Chiksan arms)	3,000
	Naphtha	6 in.×2	350/450

Attention is drawn to the manual "Safety Standards on Discharge Operations for Crude Oil Tankers", which will be handed to the Master on arrival by the Berthing Master and which are to be strictly adhered to. Apart from request for the normal international safety precautions for tankers, it contains several regulations which could cause considerable delays to vessels if not taken into account when planning discharge/ballasting operations.

Such regulations are:

1. Ballasting operations shall commence between sunrise and 90 minutes before sunset.

2. Berthing operations shall be performed so that discharge operations can be commenced between sunrise and 90 minutes before sunset.

3. Unberthing shall be conducted only between sunrise and sunset.

4. Discharge operations shall be suspended when malfunctions occur to the vessel or discharge facilities or at other times when in the judgement of the Master and the Berthing Master, it is necessary to suspend operations.

It is therefore of utmost importance that the planning/timing of port operations are carefully drawn up and fully discussed with the Berthing Master prior to commencement in order to reduce delays to a minimum. The good operational conditions of ship's equipment (pumps, etc.) and awareness of personnel are of equal importance.

DENSITY: Average 1025.

FRESH WATER: Available, rate of delivery 50 t.p.h. from shore pipes at Government wharves; 100 tons from barge; before 2200 hrs. additional cost 50%; after 2200 hrs. additional cost 100%.

FUEL: Most domestic and bonded oil available, ex-barge. Minimum 5 days' notice required.

CONSULS: None.

REPAIRS: Minor repairs only.

AIRPORT: No airport.

POLICE/AMBULANCE/FIRE: Police, Tel: 110; Ambulance/Fire, Tel: 119.

TELEPHONES: Telephone can be arranged from shore connection at Government wharves. No connections at tanker berths.

GENERAL: Lightening: Not allowed, except a cargo of oil or chemicals.

SERVICES: Technicians for vessel's instruments can be arranged from other ports.

REGULATIONS: Under adverse weather conditions:

1. If a typhoon is reported approaching, and upon advice from refinery representative, loading or unloading operation will be suspended and vessel will leave berth to a designated area for refuge.
2. During a violent thunderstorm, cargo work will be stopped upon receiving order from refinery, and vent-line valves securely closed.
3. During stormy weather, with gusty winds condition, Master shall follow weather reports closely and shall endeavour to prevent any accidents by taking all possible precautions, such as reinforcing mooring ropes and arranging adequate emergency personnel to stand-by for any emergency.

Liability for Accidents: If accident is judged by Maritime Safety Office and Port Captain to be ship's fault, either through negligence of these Safety Regulations or otherwise, Master shall immediately cease operations, if necessary, and simultaneously follow in good faith the instructions of refinery and Port Captain, and take all necessary actions. Master shall inspect and verify cause of accident in the presence of refinery representative and ship's Agent, and shall be held responsible for reporting the accident, in writing, to the parties concerned. Until this is completed and full agreement reached with refinery representatives, the vessel shall not leave the jetty, unless otherwise requested. For actual confirmation of the accident, and damage liability, Public Surveyor (Messrs. Japan Marine Inspections Co. Ltd.) is fully entitled to inspect the accident.

AUTHORITY: Yokkaichi Port Authority, 9-1, Chitose-cho, Yokkaichi City, Mie Pref. *Tel:* (0593) 53-5541/6.

AGENT: Sub-agents of Dodwell & Co. Ltd., Tokyo.

Dry Cargo Vessels: Yokkaichi Warehouse Co. Ltd., 6, Chitose-cho, Yokkaichi Mie-ken. Cable address: Soko Yokkaichi. Domestic Telex: 04948-179 Yonso J. Tel. Yokkaichi (0593) 53-5211.

Tankers: Uyeno Unyu Shokai Yokkaichi Office c/o Showa Yokkaichi Sekiyu K.K. 1, Shiohama-cho, Yokkaichi-shi Mie-ken. Cable address: Uyenoshell Yokkaichi. Domestic Telex 0494-8276. Tel: Yokkaichi (0593) 45-2271/8.

YOKOHAMA (incl. Negishi and Tsurumi): 35.27 N. 139.38 E. (See Plan Book)

DOCUMENTS:

Ship's Register.
Last Port Clearance.
3 Crew Lists, including Passport Numbers.
3 Passenger Lists.
1 Store List.
1 Declaration of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, firearms/swords, etc. (only at first port of call in Japan).

Ship's Agent will prepare Inward/Outward Declaration, 1 Cargo Manifest and Cargo Manifest in Transit using specific forms. Therefore ship's Agent should be provided with necessary information about details of cargoes in advance.

PILOTAGE: As Yokohama/Kawasaki is a busy port, all movements – entering, leaving port and shifting within port – are regulated by Harbour Authorities, and Agent has to make application for movement one day before, also tugboat(s) arranged through Agent. If any change necessary to arrangement already made, 2 hours' notice sufficient to make rearrangement with Pilot. No station pilot boat; Pilots use small launches and often make use of tugboat when it is employed at same time, for embarking and disembarking especially when sea rough. In either case, launch or tugboat with Pilot on board displays "H" flag or lights prescribed in International Regulations. Pilot for Yokohama/Kawasaki port picked-up off Yokohama Fairway Entrance Buoys No. 1 and No. 2, but in case ship has to wait for berth, usually does not take Pilot and proceeds to anchorage shown on chart as "Quarantine Anchorage" or as near as safety permits, and anchors. In this case Pilot boards at anchorage. If anchor or picks-up Pilot inside harbour limit, pilotage cheaper because assessed on two stages; "From Bay to Sea" and "From Sea to Berth", but Master requested to anchor outside fairway. Vessel to provide properly approved pilot ladder.

Uraga Channel:

Vessels requiring a Pilot for the Uraga Channel should radio request to Anjin Yokosuka, advising ship's details and arriving time at No. 1 Uraga Channel Light Buoy. Uraga Channel Pilot embarks 3 to 5 miles S.S.E. of Kannonsaki Lighthouse, and will disembark on arrival at destination port limits. Applications for Uraga Channel Pilot should reach pilot office 24 hours before vessels arrival at No. 1 Uraga Channel Light Buoy.

Recommendations: To be followed by tankers of 100,000 d.w.t. or more when they navigate through the Uraga Channel with cargo loaded:

1. 12 hours and 3 hours, respectively, before such a vessel expects to pass the Uraga Channel No. 1 Light Buoy, it should report the following items to the Yokohama Maritime Safety Division. Also, after the three-hours-in-advance report, it should keep its radio station open. This, however, is not required if the vessel is Southbound:

(*a*) Name of vessel.
(*b*) Signal letters, d.w.t. tonnage, type and quantity of cargo, name of port intended to enter (not required in a three-hours-in-advance report).
(*c*) Availability of international VHF transmitter-receiver equipment aboard.
(*d*) Time at which the vessel expects to pass the Uraga Channel No. 1 Light Buoy.

2. Refrain from sailing through the Channel when visibility is poor (less than about 1 nautical mile).

3. Avoid sailing through the Channel at night unless it is essential to do so. Follow any instruction that may be issued from the Director of the Yokohama Maritime Safety Division as to the time for sailing through the Channel.

4. Maintain look-out at stem.

5. Between the neighbourhood of the Uraga Channel No. 2 Light Buoy and that of the Uraga Channel No. 5 Light Buoy, avoid overtaking other vessels (weighing about 500 g.r.t. or more) unless it is essential to do so.

ANCHORAGES: 12 m. – 26 m. in Quarantine Anchorage, and 26 m. – 34 m. in other areas. For details refer to chart published by Hydrographic Division of Japan MSA.

RESTRICTIONS: Entry or departure or movement inside port not allowed from sunset to sunrise, but ships without dangerous cargo can be given special permission to enter, leave port and move inside the port (only in Yokohama). In Kawasaki, which is very narrow and long, no special permission given. Depths of shallows in Yokohama, Tsurumi and Kawasaki Fairways 11.6 m., 11.2 m. and 12.0 m., and Pilot Association make these the maximum drafts accessible to the berths inside the respective fairways. Ship with max. draft of 11.6 m., when entering Yokohama through Yokohama Fairway, has to wait for tide.

MAX. SIZE: *Tankers:*

Name of Berth	*Max. d.w.t.*	*Max. LOA*	*Max. safe draft*
Keihin Yokohama (Sea berth)	No limit	No limit	19.50 m.
Shell Oil (Main Jetty)	No limit	180 m.	10.00 m.
General Sekiyu	No limit	182 m.	9.30 m.
Mobil Oil	No limit	176 m.	9.20 m.
Asia Oil No. 5	No limit	No limit	12.00 m.
Nisseki Koyasu	No limit	250 m.	12.00 m.
Nisseki Negishi A (E.)	No limit	310 m.	16.70 m.
Nisseki Negishi B	No limit	250 m.	13.60 m.
Shell Sekiyu Super Berth	No limit	260 m.	11.70 m.
Tokyo Gas	50,000	300 m.	12.00 m.

RADIO: Recommended Master communicates with Agent through Choshi Radio or Nagasaki Radio which cover all ports in Japan. If specifically Westbound vessel, to contact Choshi, and Northbound to contact Nagasaki Radio respectively.

HEALTH: Radio Agent for Free Pratique not less than 12 hours and not more than 36 hours before arrival, advising full details of vessel and health conditions on board. When Free Pratique is granted by radio, vessel will be required to submit the following documents to Quarantine Officer on arrival:

Maritime Declaration of Health.
Crew List.
Passenger List.

The following vessels will not be able to get Radio Pratique:

A vessel that has been in contact with an infected area or a suspected infected area within 15 days of arrival.

If a vessel has on board any case, or any suspected case of infectious disease, within 15 days of arrival.

If a vessel does not possess a valid Derat or Derat Exemption Certificate.

TUGS: Under control of Yokohama Kawasaki Tug Company in Yokohama/Kawasaki for foreign ships, and normally join ships in fairway between outer breakwater and Lt. Hos. and Entrance Lt. Buoys. If ship is at anchor in quarantine area or near to it, tug(s) joins ship at anchor. Usually two tugs used for mooring and/or unmooring, but depends largely upon special conditions of berth and weather conditions. Tug's lines used and charge included in towage. 35 tugs available.

VHF: Call sign Yokohama Port Radio. (See details under "Kawasaki/VHF").

BERTHING: No specific requirements. Pilot boarding time will be notified by ship's Agent mainly by radio.

Mooring Buoys:

District	*Mooring Capacity*	*No. of Berths*	*Buoys*	*Depth (m.)*
1st District	1,500	2	H1.H2	5.5–12.0
	2,000	1	H3	
	12,000	1	No.11	
	15,000	7	No.1.2.3.4.5.6.7.8.9.10	
2nd District	12,000	1	No.20.21	9.7–10.0
	15,000	1	No.22.23	
3rd District	1,000	3	N1.N2.N3.N4	6.5–12.0
	15,000	2	No.30.31.32.33.36.37.38	
	5,000	2		
5th District	10,000	2	KM1.KM2.KM3	10.0

Private Piers: (Deeper than 4.5 m.)

District	*Piers and Wharves*	*Length (m)*	*Depth (m)*	*Mooring Capacity (D/T)*	*Number of Berths*	*Kind of Cargo*
TSURUMI-WARD	Asia Sekiyu Wharf No. 3	120	8.7	4,000	1	Oil Products
	No. 4	30	6	2,000 (G/T)	1	L.P.G.
	No. 5	95.7	12	65,000	1	Crude Petroleum
	No. 6	140	6	5,000	1	Oil Products
	Asahi Glass Co. Ltd. Pier	83	5	1,300	1	Glass, Silica
	Ajinomoto Co. Ltd. Pier	113	9	10,000	1	Grain
	Azuma Kaiun Pier	67	9.5	3,000	1	Steel Materials
	Ensuiko Berth	100	9.5	3,000	1	Sugar Cane
	Osaka Cement Co. Ltd. Pier	95	8	5,000	1	Cement
	Kobe Seikojo Co. Ltd. Yokohama Pier	72	4.5	1,200	1	Steel Materials
	Showa Sangyo Co. Yokohama Pier	65	10	5,000	1	Grain
	Showa Sekiyu Pier	70	8	5,000 (G/T)	1	Petroleum
	Shell Sekiyu Co. Sea Berth	280	12	80,000	1	Petroleum
	No. 1 Pier	106	12	20,000	1	Petroleum
	No. 2 Pier	63	5.5	1,000	1	Petroleum
	General Sekiyu Co. Tsurumi Pier	108	9	20,000	1	Petroleum
	Daito Yugyo Yokohama Pier	90	6	3,000	1	Petroleum
	Daikoku Warehouse Co. Pier	87	6	1,100	1	Steel Materials
	Tokyo Electric Power Co. Ltd.					
	Yokohama Power Plant Pier No. 1	49	9	10,000	1	Heavy Oil
	No. 2	49	9	10,000	1	Naphtha
	Tokyo Gas Co. Ltd. Tsurumi Wharf	228	5.5	1,000 (G/T)	1	Coal
	Tokyo Gas Co. Ltd. Tsurumi Wharf	223	6	2,000	2	Coal
	Suehiro Wharf	152	7.5	6,000	1	Coal
	Tokyo Shibaura Electric Co. Ltd. Pier No. 1	31	5	3,000 (G/T)	1	Electrical Machinery
	No. 2	38	6	1,500 (G/T)	1	Electrical Machinery
	Naigai Yuso Pier	41	4.5	2,000	1	Oil Products
	Nippon Futo Warehouse Co. Ltd. Pier	24	6	1,500	1	Oil
	Nitto Kagaku Ltd. Yokohama Pier No. 1	29	5	1,600	1	Crude Petroleum
	No. 2	38	6	2,000	1	L.P.G.
	No. 3	26	5	1,000	1	Sulphur
	No. 4	26	5	1,000	1	Chemical
	Nippon Kokan Co. Ltd. Keihin Iron Works Wharf	68	5.5	1,500	1	Gravel
	Nippon Kokan Co. Ltd. Keihin Iron Works Wharf	118	4.5	1,200	2	Steel Materials
	Ogishima Product Wharf A	250	7.5	3,000	2	Steel Materials
	B	266	11.5	20,000	1	Steel Materials
	C	267	12.5	30,000	1	Steel Materials
	D	250	12	30,000	1	Steel Materials
	Nippon Kokan Co. Ltd. Tsurumi Dock Yard					
	East Pier	213	7.5	190,000	1	For Ship Equipment
	West Pier	250	6	120,000	1	For Ship Equipment
	South Pier	160	4.5	6,000 (G/T)	1	For Ship Equipment
	Mitsubishi Kogyo Co. Cement Pier	122	7.5	6,700	1	Cement
	Mobil Sekiyu Co. Ltd. Pier	102	9.5	24,000	1	Petroleum
	Ogishima Sekiyu Kiechi Co. Sea Berth	Buoy	23	200,000	1	Crude Petroleum
KANAGAWA-WARD	Sangyo Shinko Co. Pier	32	6	2,000	1	Steel Materials
	Showa Denko Co. Ltd. Yokohama Work Pier	267	9	21,000	1	Ore
	Dolphin	72	9	5,200	1	Ore
	Nippon Seifun Co. Ltd. Pier	213	9	20,000	1	Grain
	Nisshin Transportation & Warehousing Co. Pier	244	9	19,000	1	Grain
	Nippon Kokan Co. Ltd. Asano Dock Yard A	110	5	4,200	1	For Ship Equipment
	B	93	9	8,300	1	For Ship Equipment
	D	85	8	8,300	1	For Ship Equipment
	E	200	8	113,000	1	For Ship Equipment
	H	80	7.5	20,000 (G/T)	1	For Ship Equipment
	Nippon Kokan Co. Ltd.	30	6	3,000	1	Sulphuric Acid
	Nippon Petroleum Refining Co. Ltd.					
	Yokohama Refinery Pier A	65	12	80,000	1	Crude Petroleum
	B	35	7	2,000	1	Oil Products
	C	109	9	15,000	1	Oil Products
	E	43	6	2,400	1	Oil Products
	F	75	7	1,500	1	Oil Products
	D	35	7.7	3,000	1	Oil Products
	Yokohama Warehouse Co. Ltd.					
	Suzushige Wharf No. 1	398	12	30,000 (G/T)	1	General Cargoes
	No. 2	148	10	15,000 (G/T)	2	General Cargoes
	No. 3	159	8	7,000 (G/T)	3	General Cargoes
	National Government Silo Pier	193	9	18,000	1	Grain
	Nippon Telephone Telegraph Pier	130	7	3,000 (G/T)	1	For Marine Cable Ship

Private Piers: (Deeper than 4.5 m.)

District	*Piers and Wharves*	*Length (m)*	*Depth (m)*	*Mooring Capacity (D/T)*	*Number of Berths*	*Kind of Cargo*
NAKA-WARD	Kokusai Futo Co. A, B Berth	358	17.5	150,000	1	
	C	190	7.5	3,000	1	Salt, Silica, Grain
	F, G	185	6.5	500 (G/T)	3	
	H Pier	84.5	6.5	2,000		Ore
	Kokusai Cable Ship Pier	35	7.5	2,000	1	For Marine Cable Ship
	Sumitomo Kinzoku Kogyo Co. Pier	189	5.5–10	3,000	2	Steel Materials
	Nippon Express Co. Honmoko Pier	208	11	3,000	1	Steel Materials
	Nissan Honmoku Wharf No. 1–2	180	10	18,000	2	Cars
	No. 3	110	4.5	3,000	1	Cars
	Mitsui & Co. Ltd. Honmoku Wharf	208	11	35,000	1	Cars, Timber
	Mitsubishi Heavy Industries, Ltd.					
	Honmoku Works No. 1	335	9	120,000	1	For Ship Equipment
	No. 3	416	9	200,000	1	For Ship Equipment
	No. 4	463	7	200,000	1	For Patrol Vessel
	No. 6	250	10	50,000	1	For Ship Equipment
	No. 7	270	10	50,000	1	For Ship Equipment
	Yokohama Maritime Safety Agency Pier	85	10	2,000	1	For Patrol Vessel
ISOGO-WARD	Ishikawajima-Harima Heavy Industries Co. Ltd.					
	Yokohama 2nd Works No. 1 Jetty (South)	223	9	200,000	1	For Ship Equipment
	(North)	181	9	30,000	1	For Ship Equipment
	No. 3 Jetty (South)	250	8	200,000	1	For Ship Equipment
	(North)	256	9	300,000	1	For Ship Equipment
	No. 4 Jetty (South)	205	17	100,000 (G/T)	1	For Ship Equipment
	(North)	255	17	100,000 (G/T)	1	For Ship Equipment
	Ube Kosan Co. Pier	180	8.5	15,000	1	Cement
	Kanto Ryoko Concrete Kogyo Co. Pier	12.5	5	1,000	1	Cement
	Kokan Kenzai Co. Pier	65	6	2,000	1	Steel Materials
	Electric Power Development Co. Isogo Wharf	140	7.5	6,000	1	Coal
	Tokyo Gas Co. Ltd. Negishi Wharf	100	12.5	50,000	1	L.N.G. Heavy Oil
	Nippon Petroleum Refining Co. Ltd.					
	Negishi Refinery Pier A	532×2	17	150,000	2	Crude Petroleum
	B	112	13.6	50,000	1	Oil Products
	C2	110×2	7	3,000	6	Oil Products
	C3-4	98.4	7	3,000	4	Oil Products
	D1–4	52×7	5.0-9.5	1,500	7	Oil Products
	H1–3	104×6	7.5	3,500	6	Oil Products
	H4	142×2	8-11.8	5,000	2	Oil Products
	H5	142×2	9	5,000	2	Oil Products
	Lubricating Oil Pier	65×2	12	700	2	Lubricating Oil
	L.P.G. Pier	20	5	500	1	L.P.G.
	Sulphur Pier	30	6	1,000	1	Sulphur
	Asphalt Pier	23	6	1,500	1	Asphalt
	Nisshin Oil Mills Ltd. Isogo Pier	304	12.5	55,000	1	Grain
	Domestic Pier	80	12	1,700	1	Heavy Oil
	Chichibu Cement Pier	76	5	1,000 (G/T)	1	Cement
	Chiyoda Refrigerator Co. Ltd. Pier	45×2	6	800	2	Fishery Products
KANAZAWA-WARD	Asahi Kigyo Co. Suzuegumi Warehouse Co. Pier	188	11	20,000	1	Alcohol, Cement
	Asahi Kigyo Co. Suzuegumi Warehouse Co. Pier	45	7	700	1	Alcohol, Cement
	Keihin Wharf Co. Ltd. Yokohama A	259	12.5	50,000	1	Cars
	B	146	9.5	12,000	1	Cars
	Daikoku Soko Co. Pier	80	7	2,000	1	Steel Materials
	Toyota Car Pier	173	6.5	1,300	1	Cars
	Maruzen Sekiyu Co. Pier	110	7.2	1,000	1	Oil Products
	Maruzen Sekiyu Co. Pier	126	7.2	5,000	1	Oil Products
	River Steel Co. Ltd. Pier	75	6	1,000	1	Steel Materials
	River Steel Co. Ltd. Pier	145	6	3,000	1	Steel Materials

Public Piers

Piers	*Length (m.)*	*Depth (m.)*	*Mooring capacity (g/t)*	*Number of berths*	*Remarks*
Yamashita Pier	1,860	10.0–12.0	20,000	1	
			15,000	9	
Osanbashi Pier	966	10.0–12.0	10,000	6	Alternative mooring
					45,000 ton class one berth
					25,000 ton class two berths
					10,000 ton class one berth
Shinko Pier	1,783	7.2–14.0	20,000	1	Berth No. 7 is used by U.S. Army
			15,000	1	
			10,000	6	
			4,000	2	
			3,000	1	
Takashima Pier	888	7.3–10.0	15,000	2	
			6,000	2	
			3,000	2	
Yamanouchi Pier	402	8.0	6,000	3	
Detamachi Pier	520	7.5	5,000	4	
Mizuho Pier	1,259	9.0–10.0	15,000	5	This pier is used by U.S. Army
			8,000	2	This pier is used by U.S. Army
Honmoku Pier	235	5.5	2,000	1	
	5,385	10.0–12.0	15,000	27	Includes 3 Container Berths
Kanazawa Timber Pier	185	12.0	15,000	1	For Timber Ships
Honmoku Container Terminal	1,100	12.0	25,000	2	Container Berths (Yokohama Port Terminal Co.)
			35,000	2	
Daikoku Pier	760	7.5–12.0	5,000	4	
			30,000	1	
Daikoku Pier	2,200	10.0–12.0	15,000	8	General Liner Berths
			35,000	2	(Yokohama Port Terminal Co.)

STEVEDORES: At least 24 hours prior notice excluding Sundays and holidays required in order for Agent to arrange stevedores. Vessel must constantly keep her Agent advised of ETA. If stevedores cannot commence loading/unloading at time notified by Agent, the orderers must pay for waiting time. If cargo gear not rigged on berthing, stevedores will do same for ship's crew. Overtime surcharges 1630–2130 hrs. (60% additional of basic stevedorage), 2130–0400 hrs. next morning (130% additional). Sundays/holidays (100% additional).

CRANES: *Floating Cranes:*

Lift	*No.*
Under 50 tons	3
51–100 tons	4
101–150 tons	2
151 tons and over	3
Total	12

Cargo Handling Machines:

Machines	*No.*	*Capacity*
Large Sized Machines	44	19,265 t.p.h.
Jib Cranes and Bridge Cranes	186	12,395 t.p.h.
Mobile Cranes	137	14,741 t.p.h.
Fork Lifts	1,602	5,601 t.p.h.
Shovel Loaders	94	197 t.p.h.
Transtainers	10	333 t.p.h.
Straddle Carriers	46	1,322 t.p.h.

Cranes of Port and Harbour Bureau: 1 Hammer Head crane, 4 Gantry cranes, 1 Level Luffing crane.

Future Plans: Two Gantry cranes in 1984, one Gantry crane in 1985, and three Gantry cranes will be completed in 1986.

MEDICAL: No advance notice required unless urgent.

TANKERS: Masters of tankers seldom requested to fit reducing pieces before arrival for connection of shore lines since oil installation have own appliances. Two slop disposal facilities, one in district No. 5 in Yokohama which is private enterprise and can dispose of dense residues, and one in District No. 1 in Kawasaki which is run by Kawasaki city and can dispose of diluted slop or oily ballast. (Also see "Max. Size").

Berth	*Product*	*Shoreline*	*Discharge Rate (t.p.h.)*
Keihin Yokohama Sea Berth	Crude	20 in.×2	8,000
Shell Oil Main Jetty	Lub. Oil	8 in.×2	1,200 (Kl.p.h.)
		6 in.×2	1,200 (Kl.p.h.)
		4 in.×2	1,200 (Kl.p.h.)
	Fuel	8 in.×6	1,200 (Kl.p.h.)
	(Black Oil)	6 in.×1	1,200 (Kl.p.h.)
	Fuel	8 in.×8	1,200 (Kl.p.h.)
	(White Oil)	6 in.×1	1,200 (Kl.p.h.)
General Sekiyu (Tsurumi Terminal)	Fuel	10 in.×1	600
	Fuel	8 in.×1	600
	Fuel	6 in.×1	300
Mobil Oil (Tsurumi Terminal)	Lub. Oil	6 in.×2	300
Esso Sekiyu (Tsurumi Terminal)	Fuel	12 in.×1	600
	Lub. Oil	10 in.×1	200
	Lub. Oil	6 in.×2	150/100
	Kerosene	10 in.×1	500
	Soluent	6 in.×1	150
Asia Oil No. 5	Crude	8 in.×2	2,000
	Fuel	8 in.×1	1,700
	Minas/Crude	8 in.×1	800/2,000
Nisseki Koyasu	Crude	12 in.×2	2,500 (Total)
Nisseki Negoshi A(E.)	Crude	12 in.×3	7,500
A(W.)	Crude	12 in.×3	7,500
B	Fuel/Crude	12 in.×2	5,000
Shell Sekiyu	Fuel	12 in.×3	1,800 (Kl.p.h.)
Tokyo Gas	LNG	12 in.×2	5,000 (Kl.p.h.)
	LNG (Gas)	12 in.×1	9,000 (cu.m.p.h.)
	LPG	12 in.×1	2,400 (Kl.p.h.)
	LPG (Gas)	12 in.×1	3,000 (cu.m.p.h.)
	Naphtha	10 in.×1	2,000 (Kl.p.h.)
	Naphtha	6 in.×1	700 (Kl.p.h.)

DENSITY: Average approx. 1023.

FRESH WATER: Available (rate 50 t.p.h.) at Honmoku Pier, Yamashita Pier, Osambashi Pier, Shinko Pier, Takashima Pier, Yamanouchi Pier, Mizuho Pier, Detamachi Pier, Daikoku Pier and 4 Automatic Vending Machines. 3 Water barges with 280 tons capacity also available.

FUEL: All grades of bonded bunkers are stocked in Tokyo Bay, Ise Bay, Osaka Bay and Kanmon Port. At all other ports bunkers will be lightered from the nearest bunker stock ports at maximum 7 days prior notice.

FIRE PRECAUTIONS: Oil installations in Yokohama/Kawasaki generally do not allow bunker barge to come alongside ships moored to their berths.

CERTIFICATES: Ship's Register to show Customs Inspector ship's registered gross and nett tonnages. Valid Cargo Gear Certificates sometimes required by stevedores when cargo gear maintenance appears to be poor.

CUSTOMS ALLOWANCES: Only allowed 50 cigarettes to take ashore but no spirits.

REPAIRS: Any kind of repairs can be effected at this port.

DRY DOCKS: The largest dry dock, owned by Ishikawajima-Harima Heavy Industries Ltd. (and another six smaller dry docks owned by Mitsubishi Heavy Industries Ltd., Nippon Kokan K.K.). Max. length, 1,161 ft. 5 in.; breadth at entrance, 183 ft. 8 in.; height of sill above bottom dock,, 5 ft. 3 in.; depth on sill at high water, ordinary spring tides, 20 ft. 3 in.

REPATRIATION: Possible.

AIRPORT: Haneda International Airport 25 km., Narita International Airport 100 km. and served by many regular airlines.

CONSULS:

Consulate-General of Argentine Republic	,,	641–4194
Consulate-General of the Republic of Korea	,,	621–4531/2
Honorary Consulate of Paraguay	,,	401–3431
Honorary Consulate of the Netherlands	,,	651–1661/9
Honorary-Consulate-General of El Salvador	,,	211–1371
Royal Swedish Honorary Consulate	,,	201–4171
Royal Thai Honorary Consulate	,,	651–1361
Royal Norwegian Honorary Consulate	,,	641–0141/7
Royal Danish Honorary Consulate	,,	651–1381
Consular Agency of Mexico	,,	671–7277
Honorary Consulate of Colombia	,,	312–8461
Vice-Consulate of Brazil	..	641–0097

TIME: GMT plus 9 hours. No alterations made to clocks during year.

HOLIDAYS: Only observed at Public terminals.

POLICE/AMBULANCE/FIRE: Police, 110; Ambulance, 119; Fire, 119.

TELEPHONES: Telephones can be placed on board.

SERVICES: Almost all requirements by ships could be met, if time permits.

SHORE LEAVE: Local Immigration Offices issue shore pass valid for only 3 days; but 3 days' extension possible if ship stays longer.

DEVELOPMENTS:

Daikoku Pier Construction Project:

The following construction works are now under way just off Daikoku-cho of Tsurumi Ward:

1. 2-berth pier of 600 m. long, with the depth of water of 12 m., to accommodate container vessels of 35,000 ton class.
2. 8-berth pier of 1,600 m. long, with the depth of water of 10 m., for liners of 15,000 ton class.
3. 8-berth pier of 1,590 m. long with the depth of water of 10–12 m. for tramps of 15–30,000 ton class.
4. 4-berth pier of 520 m. long with the depth of water of 7.5 m. for coastwise vessels of 5,000 ton class.
5. An island-like pier with loading and unloading places.

As for the 25-berth pier as mentioned above, 15 berths (7 berths for tramp vessels) are already in use.

It may be noted that a project to make on this pier a green zone that will provide a recreation place and an athletic field for the benefit of port workers and citizens is now being undertaken. The athletic field is already open for public use.

Land Reclamation Project (near the Honmoku Pier):

For the purpose of expansion of container terminal and creating a green zone and, at the same time, acquiring the ground where to dispose of the city refuse, this project aims at reclaiming land in front of D jetty of the Honmoku Pier by burying dredged soil and sand, unwanted mud and soil and general wastes that do not pollute the environment. It will reclaim land for further expansion of container terminal and make a park and a green zone for the benefit of citizens. Two container berths with depths of 13 m., will be completed in 1984 and 1986.

Kanazawa Reclamation Project:

Reclamation work will be carried out in the sea in front of Kanazawa Ward, in accordance with the city redevelopment plans. A modern industrial zone will be formed on this reclaimed land and many factories that are now scattered in the city, whose locations are undesirable from an environmental view point, will be urged to be relocated to this zone. Thus, while improving the conditions in the city area and various city facilities, the project aims at realising an ideal industrial complex where new and relocated factories will be given sufficient guidance and assistance to have highly modernised facilities that will be free from any pollution problem.

In addition, a marine park will be made, where the people can enjoy the beauty of nature and take quiet repose.

Minato Mirai 21 New Port City Plan for 21st Century: A plan for constructing a new city is underway in an area of 110 ha. extending from the East entrance of Yokohama Station to New Port Pier via Takashima Pier by reclaiming 76 ha. of land in addition, for the functions of this area as a harbour are poor as its facilities have been overworked.

This area has good conditions of location. Therefore, by integrating here the city functions such as business, culture, commerce and recreation, etc., with international features as its axis and by improving the harbour according to the liking of citizens, it is planned to form a new and attractive city by uniting the entire city that has been split up into two parts. At the same time, it is planned to strengthen the harbour functions by way of integrating the control functions of Harbour Centre.

Its construction work started in November 1983 with the year 2,000 as the target for its completion.

AUTHORITY: Port and Harbour Bureau, City of Yokohama, 2 Yamashita-cho, Naka-ku, Yokohama, 231 Japan. *Tel:* 045-671-2874/2888. *Contact:* H. Shimizu, Chief of Port Promotion Division.

AGENTS: Dodwell Tramp Agencies, P.O.Box 271, Yokohama Port, 5th Floor, Minato Building, 33, 3-chome, Hon-ho, Naka-ku, Yokohama. Tel: (045) 201-6991. Cable Address: Dodtramp Yokohama. International Telex: J47721.

YOKOSUKA: 35.17 N. 139.40 E. (See Plan Book)

DOCUMENTS:

Customs:
- Port Call Notification.
- Cargo List.
- List of Crew's dutiable possessions.
- Passenger List.
- Crew List.
- Ship's Nationality Certificate.
- Port Departure permission paper.

Immigration:
- Crew List.
- Port Call Notification.
- Passport or Crew Pocket Book.

Quarantine:
- Declaration of Health.
- Crew List.
- Passenger List.

Plant Protection Station:
- Plant Importation Inspection Application.

Maritime Safety Agency:
- Port Call Notification.
- Application for Loading, Transfer and Unloading of Explosives and Combustibles.
- Application for Transport of Explosives and Combustibles.

Port Authority:
- Port Call Notification.
- Application for use of Facility.

PILOTAGE: In applying for Pilot at time of entry and departure, pilot station should be contacted 24 hours in advance of beginning of Pilotage through Agent. 44 Pilots available.
Uraga Channel Pilots: Tel: 0468-35-6211. Telex: 3852-451.
VHF Call sign: "Uraga Channel Pilot", on Channel 16.

ANCHORAGES: At 4th District of Yokosuka Port. Depths 10 m. – 30 m.

RESTRICTIONS: The 1st, 2nd and 3rd District of Yokosuka Port under compulsory pilotage districts.
Possibilities of Entry or Sailing after Sunset:
Nagaura Pier:
Entry – 0600 to 1800 hrs.; Sailing – 0600 to 2200 hrs.
Yokosuka Shin-ko:
Entry – 0600 to 1700 hrs.; Sailing – 0600 to 1700 hrs.

MAX. SIZE: See "Berthing".

HEALTH: Radio Pratique available. Authorities board at anchorage. Quarantine Station to be informed in advance name of last port, ship's name, tonnage, number of crew, number of passengers, ship's nationality, etc. In event any suspected disease, Agent should be advised. When isolation of ship needed, it will be transferred to Nagahama Quarantine Station in Yokohama.

RADIO: Local radio station.

BERTHING: Agent submits application for berth to Port Authority (Nagaura and Kurihama Port Offices and Yokosuka New Port Wharf Company).

Berth	*Depth (m.)*	*Length (m.)*	*Max. Size Draft (m.)*	*Max. Size Length or g.r.t.*	*Remarks*
Nagaura Pier					
No. 1	9.0	150	8.7	15,000 g.r.t.	At high tide
No. 2	10.0	200	9.7	210 m. 21,000 g.r.t.	In good weather
North Dock	10.7	85 dolphin	10.9 Plus Tide	about 200 m.	
South Dock	4.9	about 80 dolphin	5.0	2,000 g.r.t.	
East Dock	7.8	about 90 dolphin	8.0		
Yokosuka Berth					
No. 6	9.4	118	8.0		
No. 7	9.7	118	8.2		
No. 8	10.6	225	9.0		
South	8.2	64	7.2		
No. 9	4.2	160	3.7		
No. 10	10.0	150	8.5		
No. 11	11.5	150	9.5		
No. 12	7.3	280	6.7		
No. 6 Dock	12.6	317	9.1		Across sill 51.5 m.
Berth No. 14	12.6	150	9.1		
Berth No. 15	12.6	167	9.1		
Berth No. 16	12.6	167	9.1		
Berth No. 17	12.6	150	9.1		
No.5 Dock	10.0	307	9.1		Across sill 32.1 m.
No. 4 Dock	7.82	227	6.8		Across sill 25.3 m.
New Port					
Pier No. 1	5.5	90	5.0	2,000 d.w.t.	
Pier No. 2	5.5	90	5.0	2,000 d.w.t.	
Pier No. 3	7.5	130	6.5	5,000 d.w.t	
Wharf No. 1	10.0	200	9.0	15,000 d.w.t.	
Wharf No. 2	10.0	200	9.0	15,000 d.w.t.	
Nagaura Buoys					
C1	12.7	190	11.7	20,000 g.r.t.	
C3	13.3	160	12.3	20,000 g.r.t.	
C4	13.2	250	12.2	20,000 g.r.t.	
C5	12.1	270	11.1	20,000 g.r.t.	
C6	11.3	170	8.9	10,000 g.r.t.	
C8	8.5	130	7.5	3,000 g.r.t.	
N2 – N6	7.2	110	6.2	3,000 g.r.t.	
N5	7.0	100	6.0	3,000 g.r.t.	
N14	6.1	100	5.5	3,000 g.r.t.	
N16	6.1	100	5.5	3,000 g.r.t.	
Kurihama					
No. 1 Pier (Nichiro)	6.5	220	6.0	8,000 g.r.t.	
No. 2 Pier (Shingan)	6.6	130	6.1	8,000 g.r.t.	

TUGS: Can be arranged through Agent. Tugs normally join vessel in 3rd District when vessel enters Nagaura and New Port, and in 7th District when it enters Kurihama. Tug's lines to be used. Charge for tug's lines included in charge for tug.

STEVEDORES: Agent will arrange stevedores.

MEDICAL: Agent can arrange doctor who understands foreign languages.

TANKERS: No berthing facility for commercial tankers. Only U.S. Naval Base, Yokosuka, has berthing facilities.

FRESH WATER: Available by barge or ex-wharf. 50% additional charge in case of bad weather or out of office hours.

FUEL: Most grades of domestic and bonded oil are available from Yokohama or Kawasaki.

GANGWAY/DECK WATCHMEN: Agent arranges watchmen.

OPENING/CLOSING HATCHES: Stevedores or crew.

CUSTOMS ALLOWANCES: Tobacco: 2 packets per day. Spirits: 1 bottle when more than 1 month voyage; 2 bottles when more than 6 months voyage.

CONSULS: None.

REPAIRS: Dockyards available for all repairs.

DRY DOCKS: 1 – 475×19.5 ft.; 1 – 352×15.75 ft. 5 large-size slips; 1 rigging wharf.

REPATRIATION: No facilities exist. If necessity occurs, Yokohama Immigration Office will attend.

AIRPORT: 40 km. to Tokyo International Airport.

TIME: GMT plus 9 hours. No alterations during year.

HOLIDAYS: Cargo work usually daytime. On Saturday afternoon and Sunday, National holidays, Municipal Inauguration Anniversary, and December 31, January 1, 2 and 3 no cargo work.

POLICE/AMBULANCE/FIRE: Police, 110; Ambulance/Fire, 119.

TELEPHONES: Facilities now underway.

GENERAL: Port situated in city confines, a portion of port is used by JMSDF and also by the U.S. Navy according to Japan-U.S. Security Treaty.

AUTHORITY: Nagaura Port Office, Mubanchi, Minato-machi, Taura, Yokosuka City. *Tel:* (0468) 61-3419.

Port & Harbour Dept., Yokosuka City, 11, Ogawa-cho, Yokosuka City. *Tel:* (0468) 22-4000.

AGENT: Sub-Agent of Dodwell & Co., Tokyo. Sagami Unyu Kabushiki Kaisha, Taura Minato-Machi, Yokosuka-shi, Kanagawa-ken.
Cables: Sagami Yokosuka Taura. Tel. Yokosuka (0468) 61-5361.
Telex 03852-528.

NOTES

Please also advise Shipping Guides Ltd.

Jordan

AQABA: 29.31 N. 35.01 E. (See Plan Book)

LOCATION: The commercial sea port of Aqaba is the only outlet to the Hashemite Kingdom of Jordan, and is situated at the top of the Gulf of Aqaba at Lat. 29° 31′ N., Long. 35° 01′ E.

The Container and Cement Terminals lie approximately 3 miles to the South of the main port.

The Fertiliser Industry Terminal lies approximately 12 miles to the South of the main port.

PORT LIMITS: The Southern limit of the port is an imaginary line 270° from Al Derrah Point (Saudi Border).

DOCUMENTS: *Documents required by the authorities for cargoes:*

1 Copy of all dangerous goods on board showing IMO & UN numbers.

6 copies unfreighted Manifest, showing IMO & UN numbers for dangerous goods.

2 copies of unfreighted Manifest for Free Zone if vessel has Free Zone cargo.

1 set of non-negotiable Bills of Lading.

All Manifests should bear the following clause: "This is to certify that the above vessel has not called and is also not scheduled to call at any Israeli ports nor is owned by any Israeli Company, also it is not included in the Black List".

All the above documents are to be airmailed to the Agent's Head Office in Amman and not Aqaba.

Documents Required by the Authorities for Free Pratique:

7 copies Crew List.
7 copies Passenger List.
1 copy Stores List.
1 copy Crew Declaration List.
1 copy Vaccination List.

The Following Forms to be Filled:

2 copies of Maritime Declaration of Health.
1 Customs Declaration Form.
2 copies Vessel's Specification Form.
1 copy Pilotage Form.

The Following Documents to be Produced for Checking:

(*a*) Log Book.
(*b*) Ship's Registry Certificate. (Kept by the Port Authorities until departure).
(*c*) Derat Certificate.

PILOTAGE: Pilotage is compulsory in that area of Aqaba Bay North of an imaginary line 270° from Al Derrah Point. Notice of ETA must be made to the Harbour Master not less than 24 hours before arrival through the ship's Agent. ETA is confirmed by radio before entering Tieran Straits. ETA confirmation by VHF is required not less than 2 hours before arrival. Ships in harbour requiring a Pilot should call the Pilot through Aqaba Port Control Radio (VHF Channel 16, working Channel 12) 1 hour before ship is ready to move. Advance notice of the ship's requirement of pilot service should be given to the Agent who should advise the Harbour Master or his representative.

It should be noted that vessels may proceed to sea from the anchorage without taking a Pilot, but for ships leaving the berths alongside, pilotage is compulsory. Sound signals are prohibited.

Ships intending to go to anchorage, cargo berths or bulk export berths should wait for Pilot in a position 1 mile to the West of Al Derrah Point.

Ships intending to berth alongside the Yarmouk Floating Berth should wait for Pilot 1 mile to the S.W. of the berth.

Ships intending to berth alongside the fertiliser berth should wait for Pilot 1 mile to the S.W. of this berth.

The vessel has to supply the following information to the pilot station when requesting a Pilot:

(a) Name of vessel;
(b) Nationality;
(c) Agent's name;
(d) Overall length;
(e) Maximum draft;
(f) Gross and net tonnages;
(g) Cargo for Aqaba;
(h) Any special characteristics of the vessel.

ANCHORAGES: About 0.5 miles from shore in depths of 15 to 30 fathoms. Ships awaiting discharge can easily anchor in deep water anchorage which can accommodate 11 large vessels.

Anchorages 1-5 are called inner anchorage and are used for ships discharging cargo into barges. The remainder (6-11) are used for ships waiting. The anchorage may take a larger number of ships during congestion periods. All anchorages lie in the compulsory pilotage areas.

When anchored all ships must keep 6 cables distance from the Royal Jetty.

RESTRICTIONS: Recent regulations prohibit the entry of ships to anchorage after 2000 hrs. until daybreak.

Berthing on phosphate berths and floating berth is prohibited during the hours of darkness.

It is prohibited to throw overboard or pump into waters any refuse, spills, ballast waters or oil of any kind. Failure to abide will make ship liable to pay a fine up to 10,000 J.D.

MAX. SIZE: Up to 20,000 d.w.t. max. draft 32 ft. for the cargo berths and 100,000 d.w.t. and 50 ft. draft for the phosphate loading berth. Also see "Berthing".

TUGS: Compulsory. One 1,300 h.p. and two 1,500 h.p. tugs – twin screw with schuttle drive, and several small tugs of 250 h.p. for towing barges, handling ships' lines etc.

HEALTH: Pratique Officials board after vessel drops anchor or after vessel is secure alongside.

The Port Medical Officer is in charge of granting Free Pratique to all vessels on arrival.

The Port Medical Officer is also in charge of all medical matters concerning ships and seamen.

RADIO: Aqaba Radio Station call sign JYO. Watchkeeping hours GMT 0500 to 1700. Station has transmitting frequencies presently on 500 and 477, however 2182, 2612.5, 6390 and 4326.5 are reserved for future use.

The station can receive on all M/F and H/F frequencies and listens continuously on 500 kHz at present.

Weather Forecast: During watchkeeping hours the weather forecast is broadcast for the Aqaba Gulf area twice daily – at 0730 and 1530 GMT.

Traffic List: The traffic list is broadcast every 2 *odd* hours on the half hour.

Station maintains watch during schedule hours on VHF Channel 16, working Channel 12 for service messages.

Radio Free Pratique may also be granted to vessels prior to their arrival, by radio.

Station Telex No. 62 235 Aq Radio Jo. Station Tel. No. 5544.

RADAR: There is no Port Control Radar, but tug boat "Ramm" is equipped with radar and sounding apparatus.

VHF: Aqaba Port Control at Harbour Master's Office listen from 0700 to 2400 hrs. local time on VHF Channel 16, working Channels 10 and 12 for service messages. Pilots listen VHF Channel 16.

BERTHING:

General Cargo Berths: The port has 6 deep water berths 1,060 m. long which can receive ships of up to 20,000 d.w.t., and with a draft of 32 ft. at LW. The height of these berths is 6 ft. to 10 ft. (2 m. to 3 m.) above sea level. Each berth has an apron 35 m. wide and also a transit shed, a semi-covered shed and open storage areas of about 20,000 sq.ft.

The port also has 3 berths 450 m. long for shallow drafted and coastal vessels.

Further the port has a lighter quay 280 m. long for lighters carrying cargoes discharged in the Roads.

The total storage areas in the Main Port are as follows:

Transit Sheds	45,200 sq.m.
Semi-covered Sheds	25,000 sq.m.
Open Storage Areas	436,000 sq.m.

Cargo Berth No. 1 is equipped with 2 grain elevators capable of discharging 400 t.p.h. each into grain silos of capacity 150,000 tons.

The main cargo port also has cold storage facilities for 500 tons.

New container stacking area of 140,000 sq.m. at main port area fully equipped with 2 straddle carriers and fork lift trucks of various capacities ranging from 2 tons to 10 tons.

Bulk Export Berth A: The berth is 210 m. long and the draft alongside is 33 ft. It is situated South of the general cargo berth and is specially built to load phosphate rock in bulk via a loader which can handle 500 t.p.h., (this loader has been damaged since June 1979). The berth is designed to accommodate ships of up to 20,000 d.w.t.

Pipes have been laid to supply petroleum to a nearby tank farm for the occasional import of some petrol products, other pipes for use in importing edible oil in bulk and for supplying bunkers to vessels have also been laid.

There are 2 main berthing dolphins with a loading tower in between and mooring dolphins at each end. The loading tower is connected with a conveyor belt feeding the tower from 2 silos with a 20,000 ton capacity each.

Bulk Export Berth B: This berth is 180 m. long with 15 m. depth of water at LWS tides and is designed for berthing and loading 100,000 d.w.t. bulk carriers.

The berth has 2 mooring dolphins 45 m. North and 45 m. South of the berth ends and is connected to the shore by 2 causeways about 4 m. wide which are able to take large trucks.

The berth is equipped with 2 travelling shiploaders with a loading capacity of 2,200 tons of rock phosphate per hour each, and the phosphate is loaded through a telescopic pivoting feed chute which is fed from 4 phosphate silos with a capacity of 370,000 tons. Rock phosphate being loaded into ships is weighed on a continuous recording belt weigher. The accuracy is 100% between 40% and 115% of rated capacity. The clearance of the chute above high water level is 18 m. Loading may be carried out 24 hours per day.

Yarmouk Floating Berth: Depth alongside is only 33 ft. The berth is presently used for handling cement in bulk.

Container Terminal: Mota Floating Berth has been removed and replaced by a permanent container berth, stage II now under construction.

The Container Terminal has a container freight service. Container Freight Station (CFS) and a container and Ro/Ro storage area of 180,000 sq.m.

The capacity of the container storage area is 2,560 full containers and 960 empty containers (in TEUs).

The Terminal also has 24 power points for the supply of power to refrigerated containers.

Jordan Fertiliser Berth (JFI): The Jordan Fertiliser Industry Co., Ltd., has recently completed their berth, commonly known as JFI Berth. Close to the Saudi Arabian border about 20 km. South of the general cargo berths, the berth was built specifically to enable them to discharge their equipment. It is 80 m. long by 24 m. wide, has a depth of 8.25 m. at the West side and 3 m. above Admiralty chart datum. Vessels of 5,000 d.w.t. and between 100 m. and 120 m. in length can berth alongside. The rise and fall of the tide is about 1 m.

Mooring buoys are installed to enable Ro/Ro ships to use the berth. These vessels berth from the South side by placing their ramp on a 24 m. wide by 21 m. long section consisting of a concrete slab supported by bearing piles. The depth here is 7.5 m. and the slab can support a single piece of equipment of 180 tons.

A larger fertiliser berth is being constructed close to the temporary berth. This will be exclusively used by the owner, JFI, for the import of their bulk raw materials and export of their bulk and bagged finished products.

The Industrial Port consists of 1 jetty with 2 berths.

	Sea Side	*Shore Side*
Max. draft permissible	16 m.	11.4 m.
Length	219 m.	190 m.
Max. vessel width	27 m.	
Max. vessel d.w.t.	50,000 tonnes	30,000 tonnes

Cargoes handled: Anhydrous Ammonia, Sulphur, Phosphoric Acid, Diammonium Phosphate Fertiliser and MOP.

Potash Berth: Another berth of identical specification to JFI Berths will soon be constructed about 15 km. South of the general cargo berth and about 5 km. to the North of JFI.

This is to serve a project being developed to extract potash brine from the Dead Sea 180 km. North of Aqaba. An excellent highway connects the berth with the Dead Sea which is expected to provide potash and other chemical exports.

Also see "Developments".

CARGO EQUIPMENT: *Forklifts:* 54×2 tons; 24×3 tons; 7×3.5 tons; 6×5 tons; 21×7 tons; 1×15 tons; 1×22 tons and 1×30 tons.

Mobile Cranes: 26×3 tons; 2×5 tons; 31×10 tons; 9×15 tons; 1×17 tons; 3×20 tons; 3×45 tons; 1×70 tons and 1×120 tons.

Tug Masters: 14.

Shore Cranes: 2×5 tons on floating berth. 2×40 ton gantry cranes.

Tractors (towing): 43.

Head Trucks: 6.

Chassis of 40 ft.: 19.

Straddle Carriers: 6.

Trailers: 120.

Barges: 7 Flat Top Barges of 250 tons, 14 Flat Top Barges of 300 tons, 6 Flat Top Barges of 500 tons, 4 Barges of 250 tons, 1 Water Barge of 300 tons, 1 Waste Collection Barge of 100 tons, 1 Oil Pollution Combatting Barge of 200 tons.

STEVEDORES: Stevedoring is carried out by The Ports Corporation and their working hours are from 0800 – 1400, work must start at 0700 and end at 1400, therefore there is 1 hour overtime in the morning from 0700 – 0800. The second shift's working hours are 1700 – 0100 next morning and are counted as overtime hours.

Ships with homogenous cargoes of bags or steel may work four shifts per day – first shift 0700 to 1200, second 1200 to 1700, third 1700 to 2300 and fourth 2300 to 0500 next morning.

During the month of Ramadan the timing is 0730 – 1400 for the first shift and 2000 – 0300 next morning for the second shift, the four shift system is suspended during this month.

Cargo work is continuous throughout the year with the exception of 1 day at Eid-El-Fitr (the first day of the holiday) and 1 day at Eid-El-Adha (the first day of the holiday).

Friday is the official weekly holiday therefore the working hours during this day are treated as overtime hours at an extra cost of JD 37.5 per gang per day.

Ships' Working Hours: Ships can work around the clock depending on the Master's option and the number of ships in port. Opening of ships' hatches is allowed up to 2100 hrs. if Agent arranges for gangs beforehand.

The port meeting is held daily at 1000 hrs.

TANKERS: Tankers may berth alongside the phosphate loading berth "A" during daylight hours only.

A new jetty was originally built to handle bulk cement in 1983 and is now used by tankers for oil loading from land transport. A new project to erect an oil export jetty to receive oil from pipes is now under consideration.

DENSITY: Average density in the port is 1031.

MEDICAL: A modern, well equipped and well staffed hospital has recently been commissioned. Also see "Health".

FRESH WATER: A quantity of 50 tons of fresh water may be supplied to ships as a maximum due to water shortage and water may be supplied alongside any of the berths with the exception of the floating berth which has no water available.

FUEL: Fuel oil of 1297 – 1433 sec. and diesel oil are available provided ample notice is given to Agent. Bunkering is carried out on Bulk Export Berth "A" by lines from a tank farm 0.5 km. away from the berth.

REPAIRS: Only minor repairs may be carried out above the waterline, (see "Developments"). Divers may be obtained and a private firm carries out repairs to Navigational Aids including radar, gyro compass, echo sounder, wireless equipment, etc.

DRY DOCKS: No dry dock is available in Aqaba.

SURVEYORS: Germanischer Lloyd, NKK, Bureau Veritas and Lloyd's Register are available.

OPENING/CLOSING HATCHES: Normally handled by stevedores, while alongside or by ships' crew before arrival.

CUSTOMS ALLOWANCES: 20 packets of cigarettes and 1 bottle of liquor for each crew member. Ship's store is locked and sealed by Customs while in port.

GANGWAY/DECK WATCHMEN: Customs provide a guard who has to be given full board and lodging. Ships are also supplied by local watchmen through Agents.

HOLIDAYS: King Faisal's Crowning (March 8th); May Day (May 1st); Independence and Army Day (May 25th); Arab Reconaissance Day (July 4th); Crowning of King Hussein (August 11th); King Hussein's Birthday (November 14th).

The following dates change from year to year as they are reckoned in accordance with the lunar calendar consisting of 354 days.

1985: Eid El Maraj (April 17th); Eid El Fitr (June 18th); Eid El Adha (August 26th); New Year Hijriya (September 15th); Prophet's Birthday (November 25th).

1986: Eid El Maraj (April 7th); Eid El Fitr (June 8th); Eid El Adha (August 16th); New Year Hijriya (September 5th); Prophet's Birthday (November 15th).

CONSULS: All Consulates are in Amman, the capital, except for Hon. Danish Consulate, (Vice-Consul), at Kawar Building.

TIME: GMT plus 2 hours.

AIRPORT: Aqaba Airport links Aqaba with Amman International Airport 355 km. away. One flight daily except for Thursday and Saturday when 2 flights are scheduled for each.

GENERAL: *Weather:* Masters are warned that during the Winter months strong Southerly gales can develop within 2 hours followed by swell. In such a case it may be necessary for small vessels to unberth and proceed to sea, and also for vessels in the anchorage to weigh anchor and proceed to sea and remain at sea until the weather moderates.

Range of Tide: The range of tide is 4 ft. at Spring tides.

Firefighting: The port has its own fire brigade, which includes 3 water and foam engines; 1 dry powder engine; 1 ladder engine; 1 water and rescue engine and 2 manual high capacity pumps, plus a variety of equipment such as breathing apparatus etc.

The town of Aqaba has a highly efficient and well equipped fire brigade and it is 1 km. away from the port.

Aqaba Airport 11 km. away also has a fire brigade and assistance may be called for from any of these whenever needed.

Waste Matter and Pollution: No rubbish may be thrown overboard either at the anchorage or alongside the quays. A barge calls regularly at all anchorages to collect garbage. No vessel which has carried livestock may clean its holds while in port. No vessel may pump overboard any silage or water ballast liable to contaminate the port. This regulation refers particularly to substances mixed with oil. Any discharge of oil or oily ballast into the water is strictly prohibited. Ships' Masters are warned that contravention of this rule renders them liable to penalties of up to JD. 10,000 per ship.

DEVELOPMENTS: The 5 year development plan is now almost completed:

1. Two tug boats were purchased.
2. One pilot boat was purchased.
3. Computerisation: Still under consideration.
4. Two straddle carriers were purchased.
5. Slipway was completed in April 1983.
6. Stage I of the permanent container terminal was completed where a berth of 280 m. was erected and equipped with 2 gantry cranes for 40 ton containers.

Stage II is now under construction replacing Mota Floating Berth, which was removed, this stage consists of 1 berth of 260 m. A Ro/Ro berth was erected in the same area with a length of 40 m. and can take a ship of 220 m. long with 12 m. draft.

7. General cargo berths still under consideration.
8. Grain Silos: Capacity of which was increased to 150,000 tons.

AUTHORITY: The Ports Corporation – Aqaba, P.O.Box 115, Aqaba, Jordan. *Tel:* 2471/2, 4031/8. *Telex:* 262 Port Jo, 235 Radio Jo. *Cables:* Port, Aqaba. *Contact:* M. Katamin, Director General.

NOTES

Please also advise Shipping Guides Ltd.

Kampuchea

KOMPONGSOM: 10.38 N. 103.29 E.

PORT LIMITS: The seaward boundaries are fixed by the buoys "KS" to the South and "A" to the East (for cargo ships) and 2 miles N.W. of Rocher Carre (for tankers).

DOCUMENTS:
Entry form to be completed on arrival.
23 Manifests of Cargo for Discharge.
2 Manifests of Cargo in Transit.
10 Crew Lists.
7 Passenger Lists.
7 Lists of Provisions.
7 Lists of Crew Personal Effects.
7 Lists of Arms and Ammunition.
7 Lists of Drugs and Narcotics.
Ship's Register.
Passenger Safety Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Safety Construction Certificate.
Load Line Certificate.
Derat Exemption Certificate.

PILOTAGE: Contact "Pilot Kompongsom" giving ETA 24 hours before arrival. Pilotage is compulsory for all vessels of more than 150 nrt. Pilot launch is a white motor boat carrying international pilot signals. Cargo Vessels: Pilot boards at buoy KS. Tankers: Pilot boards 2 miles N.W. of Rocher Carre. Pilot station equipped with VHF simplex channel only, Channel 16.

ANCHORAGES: Southern Anchorage: Centred on buoy KS at the entrance of the deep-water channel in depths of 10 m. to 12 m.

Northern Anchorage: to the West of buoy A, in depths of 10 m. to 11 m.

Tanker Anchorage: 2 miles N.W. of Rocher Carre in depths of 15 m. to 18 m.

RESTRICTIONS: Entrance prohibited to Portuguese and South African vessels. Berthing daylight only, and unberthing day and night but delays may occur in bad weather during S.W. monsoon.

MAX. SIZE: Cargo vessels: draft 7.60 m. plus height of tide. Limited by entrance channel. Tankers: length 220 m., and draft 11.50 m.

HEALTH: Authorities board all vessels on arrival at the quay or in the outer harbour. Quarantine flag to be flown by all vessels even if coming from a Kampuchean port. In case of suspected disease on board, contact "Sante Kompongsom" by radio before arrival.

RADIO: Kompongsom Radio; call sign XUK, operating 24 hours daily. Medium wave: receiving on 500 kHz, transmitting on 500 and 458 kHz. Short wave: receiving on 8364 and 4185 kHz. Transmitting on 8480, 8680, and 4342 kHz.

TUGS: Available to assist berthing and unberthing. Join vessel in immediate vicinity of the berth. Vessel's lines used. Three tugs available, largest 1,500 h.p.

BERTHING: Commercial Dock: West side, 2 berths for vessels up to 9.50 m. draft. East side, 2 berths for vessels up to 7.50 m. draft.

New basin, for vessels up to 6.50 m. draft.

Tankers: Oil Refinery Terminal situated at Pointe du Depart. Two sea-line buoy berths in depths of 13 m. No slop disposal facilities. Hoses are lifted and connected by ship's crew.

STEVEDORES: Working times from 0700–1130 hrs., from 1400–1700 hrs., from 1900–2200 hrs. according to authorisation of Military.

MEDICAL: Advance notice required of serious cases to arrange transportation to Phnom Penh. Local doctors and hospital available for non-surgical cases. Crew require cholera and yellow fever certificates.

DENSITY: 1022 in February; 1012 in July.

FRESH WATER: Available at Commercial Dock at rate of 10 cu.m. per hour. Very small quantities may be supplied by tug.

FUEL: Only available supply by tanker-lorries in case of emergency.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: Each crew member allowed one carton cigarettes and one bottle alcohol for five days. Master not included in this restriction.

IDENTIFICATION CARDS: Seamen's passports or seamen's books are taken by Immigration in exchange for a shore pass to be surrendered when vessel departs.

CONSULS: France, tel. 2742. All other consuls at Phnom Penh.

REPAIRS: Small repairs can be undertaken on board.

REPATRIATION: Can be arranged.

AIRPORT: Ream Airport, 18 km. from Kompongsom, domestic flights only. Pochentong Airport at Phnom Penh 226 km. from Kompongsom, with full international services.

TIME: GMT plus 7 hours all the year round.

HOLIDAYS: Work can usually be arranged on all days except at Kampuchean New Year, 13th, 14th and 15th April, and for two days near the end of September which is the Buddhist Festival of the Dead.

POLICE/AMBULANCE/FIRE: National Police tel. 2630; Police Aid 17; Fire 18; Ambulance 19.

SHORE LEAVE: Allowed. Permission of Immigration Dept. is required to travel outside Kompongsom port area.

Curfew: In force from 2200–0600 hrs.

DEVELOPMENTS: New wharves being built and access channels deepened.

AUTHORITY: Direction du Port Autonome de Kompongsom.

NOTES

Please also advise Shipping Guides Ltd.

Kenya

MOMBASA: 04.04 S. 39.40 E. (See Plan Book)

DOCUMENTS:
Health Certificates: Forms obtainable from Pilot.
6 Crew Lists.
10 Passenger Lists.
Dangerous Cargo Lists.
Ship's Register.

Shipmaster's Report: 1981.
Declaration of Health (Form Med-284).
Port Health Clearance of Ships (Form GPK-160).
Set Vaccination Lists.
4 Crew Lists.
4 Intransit Passenger Lists.
4 Landing Passenger Lists.
Arrival Declaration for Passengers (Landing Only) (Form F1).
Store List (Form C7).
Crew Declarations (Form C8).
Parcel Lists (Form C3).
Ship's Register (Copy).
Ship's Record & Master's Report (Form EAH-6007) (to Pilot).
Shore Passes (Company Forms).
Arrival & Sailing Reports (Agency Forms).

Shipmaster's Report: April 1984.

Please note that the "East African Countries" (Kenya, Tanzania, etc.) Customs Union does not exist any more and separate Customs Declarations are needed for each country. Consequently Bonded Stores seal can be broken after Mombasa or Dar Es Salaam.

PILOTAGE: ETA through ships' Agents, 48 hours' notice. VHF Channel 12 (Mombasa Radio VHF Channel 16). Pilot boat 72 ft. launch, blue hull, white superstructure. No signals for Pilot – call on VHF Channel 12 (Mombasa Pilots) or by signal lamp to lighthouse. Pilot boat position 1 mile outside "Turning Buoy" on Ras Serani leads (301°) except for deep-load tankers (over 35 ft.) when pilot boat position 1 mile from "Turning Buoy" on Mackenzie leads (327°). No special bad weather regulations. Pilot ladder 6 ft. from water – must have manropes – lit at night.

Tankers: For deep laden tankers Pilot boards 1 hour before HW. Because of strong currents, deeply laden tankers must not attempt to "close" in before sighting pilot launch. Good lee and some headway recommended.

Special attention is drawn to the fact that ships bound for Kipevu must be in the agreed pilot embarkation position at the agreed time. The time agreed is chosen, such that, ships may transit the dredged channel with maximum advantage of the rising tide and arrive off the berth just before the ebb sets in. At that moment only little time is left to position the vessel and tie up sufficient moorings to hold vessel on to the jetty face, before the force of the ebb, diverted to an abeam direction by the jetty causeway, comes to bear on the ship's side.

Distance to Shimanzi Jetty, about 6 miles.
Distance to Kipevu Jetty, about 7 miles.

ANCHORAGES: No safe outer anchorage.

RESTRICTIONS:
Tankers:
1. By day: Max. length 820 ft.
By night: Max. length 680 ft.
Trim to be between 4 ft. to 6 ft.

2. No restrictions for night movements for Crude Oil or Black Oil ballasted vessels up to 820 ft. LOA provided: (Rigid requirements.)
(a) movement takes place on last 3 hours of flood tide;
(b) all anchorages between berth and sea are vacant;
(c) the Duty Pilot holds a Master's Certificate;
(d) ballast draft to be 18 ft. forward, 22 ft. aft.

No night movements are permitted for Low Flash White Oil product vessels. Masters of vessels ready to sail at night are strongly advised to notify the Authorities of the time of sailing; the vessel is to be ready to sail before 1600 hrs. and preferably before 1500 hrs. of the day in question.

This should be done by Radio direct to the Assistant Harbour Master and through Agent. The Agent must also make the request in writing to the Harbour Authorities so that proof of requirements exists.

This is a standing regulation.

MAX. SIZE: Length 820 ft. Draft 44 ft. Also see "Restrictions", "Berthing" and "Tankers".

RADIO/VHF: Mombasa Radio Coast Station M/F, H/F, W/T & R/T and VHF R/T Services:

Station 5ZF (W/T) 500 – 524 kHz; traffic list 0100, 0500, 0900, 1300, 1700, 2100; Continuous watch; listening freq. 500 kHz.

Station 5ZF2 (W/T) 8710.4 kHz; traffic list 2018; schedules 2018 – 2030, OBS only 0080 – 0030, 0600 – 0630, 1200 – 1230, 1800 – 1830; listening freq. 8354 – 8374 kHz.

Station 5ZF3 (W/T) 13065 kHz; traffic list 0448, 0830, 1518; schedules 0448 – 0530, 0830 – 0900, 1518 – 1545; listening freq. 12531 – 12561 kHz.

Station 5ZF4 (W/T) 17175.2 kHz; traffic list 1248; 1248 – 1315; listening freq. 16708 – 16748 kHz.

Station (R/T) 2595, 2181 kHz; traffic list 0603, 1203; schedules 0600 – 0630, 1200 – 1230; continuous listening watch outside schedules 2182 kHz; listening freq. 2182 kHz.

Station (R/T) 4409.4 kHz; traffic list 0533, 1303; schedules 0530 – 0600, 1300 – 1330; listening freq. 4104.4 kHz.

Station (R/T) 8805.6 kHz; traffic list 0633, 1233; schedules 0630 – 0700, 1230 – 1300; listening watch on 8255.6 kHz; 0330 – 1530 listening freq. 8255.6 kHz.

Mombasa Radio also provides continuous R/T service on VHF for the benefit of ships in and around Mombasa within radius of 30 miles. Channel 16 for calling and Channels 26 and 27 for working. All times in GMT.

HEALTH: Radio Port Health Officer, Mombasa, giving last port of departure, ETA Mombasa, condition of crew, any sickness on board, passengers. Must have "Q" Flag until doctor visits vessel.

TUGS: Tugs join vessel inside harbour between Ferry and Kilindini Reef. Tug lines no additional charge.

BERTHING: All berths fendered. Nos. 8, 9 and 10 and Shimanzi Oil Terminal berths, no berthing on ebb tide, with range of 6 ft. or more. Kipevu Oil Terminal berthing on first of ebb with tankers over 650 ft.

Draft alongside Nos.	1 to 5	32 ft. at datum
„ „	7 to 10	31 „ „ „
„ „	SOT	32 „ „ „
„ „	11 to 14	33 „ „ „
„ „	16 to 18	36 „ „ „
„ „	Mbaraki	36 „ „ „
„ „	KOT	44 „ „ „

Draft in Buoys varies from 24 ft. to over 60 ft. at datum

Channel depth 40 ft. at datum, plus tide, minus 6 ft. N.E. or 8 ft. S.E. Monsoon gives max. draft for entry. Therefore, max. draft given as 44 ft. as this is the controlling factor for KOT.

CARGO HANDLING: No. 9 berth has been arranged for bulk export of soda ash. Berth for Roll-on/Roll-off traffic has been operated on experimental basis since March 1980. Container berths at No. 16, 17 and 18. One 40 tonne container crane at No. 18. 3 ship-to-shore gantry cranes, 4 rubber mounted yard gantry cranes and 2 rail mounted gantry cranes available. Also see "Developments".

Mbaraki cement berth for bulk export of cement clinker and automated loading of cement in bags, also used for bulk import of coal.

Shimanzi oil terminal now handles all imports of bulk vegetable oil as well as all other oil products except crude oil.

Bulk Molasses exports handled at berth No. 9 and Mbaraki.

Bulk cargoes are at present handled by grabs, railway wagons and lorries.

STEVEDORES: ETA preferably 48 hours in advance in order to arrange gangs. Advisable notify Harbour Master ETA and also give quantity of cargo to be loaded and/or discharged and other matters of importance.

Working Hours: Weekdays: 3 shifts, 0700 – 1500, 1500 – 2300 and 2300 – 0600. Saturday and Sundays: One shift, 0700 – 1500.

Stevedoring Company: Kenya Cargo Handling Services Ltd., P.O.Box 95187, Mombasa.

MEDICAL: In emergencies necessary to receive advance notice. Hospital facilities available. Inoculations required – yellow fever (endemic zones in Africa and South America), cholera (all ships from Asia).

TANKERS: Discharge and load white oils at Shimanzi. Discharge and load Heavy oils at Kipevu.

Shimanzi Oil Terminal: T-head jetty with 200 ft. long berthing head. Depth alongside 32 ft. LWOST. Bunkers and fresh water available.

Kipevu Oil Terminal: T-head jetty with 225 ft. long berthing head. Tankers up to 65,000 d.w.t. berth at dolphins alongside jetty head; depth alongside 44 ft. LWOST. Max. length 820 ft. Max. draft 44 ft. (over 42 ft. by arrangement). Slop reception facilities for 3,000 tons.

At Kipevu, tankers normally berth starboard side to at slack tide, on the beginning of the ebb. Masters should assist Pilots to moor as quickly as possible, in view of the abeam current in a direction off the jetty, which is created by the jetty causeway configuration. This current will increase with the ebb tide and ships with all wire moorings are advised to use their first-ropes-ashore with priority. Mooring launches are low powered and can only handle 1 wire at a time, and mooring dolphins are not fitted with winches and require manual handling of wires. In view of the above, and in view of the accurate positioning required to connect to chiksan arms, it is vital that the ship be brought against the breasting dolphins as soon as possible.

In cases where vessel's mooring is delayed by whatever reasons, Pilots may require extra tugs to assist in keeping the ship alongside.

DENSITY: 1025.

FRESH WATER: Available at all berths; in stream ex-tug at Harbour Master's discretion or barge of 300 tons capacity. 30 t.p.h. on quay.

FUEL: *Main Quay Berths:* Marine fuel oil, viscosity 1500 secs. Marine diesel fuel. Gas oil cannot be delivered by pipe-line at these berths but delivery can be made by bulk lorries up to only 10 tons at extra delivery cost. Minimum 48 hours' notice required. Quantities of 10 to 30 tons can be made by rail tank wagon if 48 hours' advance notice given. Thin fuel oil viscosity below 1500 secs. can be delivered at all berths through Fisher blender. Only 1 Fisher blender available and can deliver fuel to only 1 vessel at a time.

Shimanzi Oil Terminal: All grades, i.e. fuel oil, marine diesel, gas oil and thin fuel oil (through Fisher blender).

Cased Oil Jetty: Only marine diesel and gas oil can be delivered at this jetty.

Kipevu Oil Terminal: Only fuel oil of viscosity between 1500 secs. and 3500 secs. available. Fuel oil viscosity below 1500 secs. not available. At least three days' clear notice required by EA Oil Refineries for arranging bunker delivery. Not possible to deliver any marine diesel or gas oil either ex pipe-line or rail tank-wagons/bulk lorries at this berth.

GANGWAY/DECK WATCHMEN: Watchmen available for gangway and deck and recommended.

OPENING/CLOSING HATCHES: Normally done by stevedores except MacGregor type hatches.

CERTIFICATES: Normal port requirements for safety cargo equipment.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes for each crew member for 8 days. Wine and/or Spirit, 8 small bottles of beer for each crew member for 4 days.

CARGO GEAR: All cargo gear supplied by stevedores.

IDENTIFICATION CARDS: Port passes issued by the Port Authority.

CONSULS: The following countries are represented in Mombasa: Germany, India, Belgium, Denmark, France, Italy, Norway, Sweden, Netherlands, Greece, USA.

REPAIRS: Normal running repairs.

DRY DOCKS:
African Marine Drydock:
Principal Dimensions:

Length	590 ft. 00 in.	180.00 m.
Entrance width	80 ft. 10 in.	24.75 m.
Dock width	86 ft. 00 in.	26.40 m.
Minimum water depth LWS	13 ft. 00 in.	4.00 m.
Maximum water depth HWS	26 ft. 00 in.	7.90 m.

Cranage: 1×30 ton fixed, adjacent to the dock gate.

1×7 ton mobile on rails which can traverse the full length of the West side of the dock.

1×5 ton mobile on rails which can traverse the full length of the East side of the dock.

1×5 ton fixed at the jetty.
1×7 ton mobile.
1×12 ton mobile.

Berths: One piled jetty capable of mooring ships of up to 280 ft. length overall, with certain draft restrictions. A second berth capable of taking ships of up to 300 ft. length overall situated at the dock gate entrance for all but very deep drafted vessels.

Slipways: Two slipways capable of slipping barges, lighters and other small craft.

Tugs and Harbour Craft: For towing and transport. Paint pontoons, barges and catamarans, welding generators and air compressors (either self-propelled or 'dumb') which can be berthed alongside a 'gash' barge and a barge containing workshop facilities.

Electrical Shop: A fully equipped workshop (A/C and D/C).

Carpenter's Shop: Fully equipped to carry out all types of work.

Foundry: All types of castings in cast iron and non-ferrous metal. Maximum single pour in cast iron normally 15 c.w.t. with larger pours by special arrangement.

Paint Shop: All types of ship's paintwork.

Design Office: Chief Draftsman and Design Draftsmen undertake all types of work.

Air Conditioning and Refrigeration Workshop: Specialises in the installation, repair and servicing of General Electric air conditioning units and ship's refrigeration equipment.

General Labour: Gangs of men for cleaning, storing ship available at short notice.

Power Supplies: A/C and D/C power supplies are available at the alongside berths. Two power barges are available which contain: 1×400 KVA, 440 volt, 600/S 3-phase diesel generator; 1×210 KVA, 440 volt, 60 C/S 3-phase diesel generator; 3×60 kW, 220 amp 220 volt D/C diesel generators.

Machine Shops: Comprehensively equipped to handle all types of engineering work.

Plate Yard: For all types of ship repairs, ship construction and steel prefabrication work. A blacksmith's shop for forging and smithying work and a shop for sheet metal work.

Welding Shop: Electric arc welding, both in shop and in the port area. Approved to Lloyd's Register of Shipping standards.

REPATRIATION: Possible. Facilities available.

AIRPORT: About 7 miles from port. Served by regular airlines.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Labour Day (1st May); Madaraka Day (1st June); First Monday in August; Kenyatta Day (20th October); Independence Day (12th December); Christmas Day; Boxing Day (26th December).

Also for persons belonging to Islamic Faith: Idd ul Azha and Idd ul Fitr. Christmas Day is normally only holiday on which port closed except for necessary pilotage of ships in and out and for dealing with mails, passengers and their baggage, livestock and perishables. On other public holidays restricted working at Mombasa may be carried out at overtime rates. Overtime rates also apply on Saturdays after 1500 hrs. and on Sundays, and to third shift between 2300–0600 hrs.

POLICE/AMBULANCE/FIRE: In Port Area – Police 567 444 and 374; Ambulance 33; Fire 333.

TELEPHONES: Telephones supplied on board. Charges include cost of local calls. Telephone essential per port regulations.

SERVICES: All solvents for tank cleaning available. Repairs to Gyro compass, radar and most other electronic aids to navigation. Compass adjusting by arrangement with port.

SHORE LEAVE: All crew members allowed ashore and to travel except those from Socialist countries who must stay on Mombasa Island.

PORT REGULATIONS: White tankers and vessels carrying explosives enter port daylight only. No vessels carrying explosives or dangerous cargo allowed to berth at Main Quay.

DELAYS: Usually no waiting days.

SHIP SUPPLY SERVICE: Kenya Ports Authority, P.O.Box 95009, Mombasa – Kenya. Tel: 312211. Telex: 21243 Bandari. Cables: Kenports.

Private Organisations:

Comarco Ltd., P.O.Box 99111, Mombasa – Kenya. Tel: 316776/7, 315319. Telex: 21245 Comarco.

Murri International Salvage Company, P.O.Box 82345, Mombasa – Kenya. Tel: 20822/3 – 24 hours. Tel: 24912 – Office hours. Telex: 21215 Kboat.

Southern Oil Supply Co. Ltd., P.O.Box 84145, Mombasa – Kenya. Tel: 315738, 23889, 313204. Res: 471737. Telex: 20049, 21223, Sosco. Cables: Sosco.

NOTICE: *From the General Manager, East African Oil Refineries Ltd. To Ships' Masters.*

Spillage of Oil and Air Pollution:

I would like to draw your attention to the serious consequences which will arise from any spillage or discharge of oil into the waters of Kilindini Harbour. This part of the Kenya shoreline, with its famous coral reef, is an extremely beautiful and popular tourist attraction as well as providing a means of livelihood for many local people.

Any spillage of oil can harm the environment and raises a great deal of criticisms from the residents of the area. The same applies to excessive funnel smoke.

In the event of any spillage or leak from ship or jetty facilities, ship's officers should immediately warn refinery personnel, who will instigate emergency measures. If there is any delay in notifying the refinery, then any oil spillage or pollution into the sea must be reported to:

(1) Ras Sarani Lighthouse (Mombasa Port Control) manned 24 hours. Telephone Mombasa 312895 (21211 ext. 357 office hours only). VHF Radio Channel 12.

(2) Senior Harbour Master Kipevu, Office hours telephone Mombasa 24864 or 312211 ext. 259. Other times telephone Mombasa 471550 or through signal station in (1).

I am sure you will agree that both you and your staff as well as ourselves should do all that we can to protect this part of the environment against pollution. Moreover, it is a firm belief that we should try our utmost to avoid adverse publicity for the oil industry of which we are both part.

NOTICE: *Notice from ship's Agent to Masters:*

Stowaways from Mombasa:

We wish to inform you that stowaways from the Port of Mombasa are a serious problem and we have had a number of vessels leaving Mombasa with half a dozen stowaways on board causing the Owners considerable expense and inconvenience.

Please, therefore, take every precaution to ensure your vessel is not boarded by stowaways whilst in Mombasa. We would suggest you employ shore watchmen to guard the vessel and also perhaps to have members of your crew on duty at all times to protect the ship. Please, just before sailing, carry out a thorough search of the whole ship with your crew and the watchmen. We also suggest that once you have sailed and you are outside the port limits, you steam around the area for a few hours to give any stowaways the impression that the vessel is fully underway, and again during this period have your crew thoroughly search the ship.

If stowaways are found on board of non-Kenyan nationality then the authorities do not permit them to be landed in Mombasa. Most of the stowaways from Mombasa tend to be Tanzanians.

We would stress again that stowaways are a serious problem in Mombasa and it is up to you to ensure your vessel does not sail with stowaways on board. Please inform your crew about stowaways and that they should be on the look out at all times for any suspicious persons on board.

DEVELOPMENTS: New equipment installed includes additional gantry cranes (5×15 tons capacity) for container handling at Mombasa and inland container depot, now open at Embakasi, Nairobi.

Four tugs to be delivered in 1984. 3 tugs are 4,000 h.p. (bollard pull 40 tonnes) and the salvage tug is 6,000 h.p. (60 tonnes bollard pull).

Berth Nos. 16, 17 and 18 (total length 600 m.) have been modified to take the above mentioned cranes.

AUTHORITY: Kenya Ports Authority, P.O.Box 95009, Mombasa, Kenya. *Tel:* 312211. *Telex:* 21243 Bandari. *Cables:* Kenports. *Contact:* Managing Director. Captain A. J. Ketoyo, Senior Harbour Master.

AGENT: East African Commercial and Shipping Company, Mamujee Building, Mogadishu Road, P.O.Box 95103. Tel. 26251/2. Telex 21151. Cables "Kenship, Mombasa".

NOTES

Please also advise Shipping Guides Ltd.

Kiribati, Republic of

BANABA (Ocean Island): 00.52 S. 169.35 E.

PHOSPHATE MINING HAS CEASED. ALL INSTALLATIONS HAVE BEEN DISMANTLED.

TARAWA: 01.25 N. 172.54 E. (See Plan Book)

DOCUMENTS:

Customs:

Boards vessel after Radio Pratique granted.
Clearance from Last Port.
4 Crew Lists.
3 Passenger Lists.
1 Stores List.
1 Ship's Report Inward.
1 List of Unmanifested Cargo.
1 Crew's Stores List.
1 Marine Form.

Health:

Radio Pratique to be requested to "Medical or Port Health Betio Tarawa" within 48 hours before arrival.
Vaccinations against Cholera (if required can be carried out).
Vaccinations against Smallpox (if required can be carried out).
Name of ports visited and date of arrival at respective ports.

Immigration:

2 Crew Lists.
2 Passenger Lists.
Last Port of Call.
Next Port of Call.
Passports.
Final Destination.

Agent:

3 Bills of Lading.
5 Manifests.
Last Port.
Next Port.
1 Crew List.
1 Passenger List.

Agriculture:

Plants Certificates.
Animal Certificates.

PILOTAGE: Pilot available and must be informed of vessel's ETA 24 hours in advance through the Agent. Entering vessels are strongly advised to await Pilot one mile West of Fairway buoy. Pilot can be contacted by VHF on Channel 16.

ANCHORAGES: See Chart BA. 3269. Betio anchorage main anchorage. Inside the lagoon, safe in all weather although in rare strong winds it may not be possible to work vessel in the lagoon.

RESTRICTIONS: Vessels arriving after 1800 hrs. are advised not to enter the passage and should drift 5 miles away from the entry point.

MAX. SIZE: Any vessel drawing up to 26 ft. may enter at LWOST and 30 ft. HW. Length and breadth are not critical, however vessels over 600 ft. to navigate with extreme care.

HEALTH: Hospital available where suspected disease could be medically examined.

RADIO: Tarawa Radio (T3K) keep a continuous watch on 500 kHz.

TUGS: 3 tugs (available for towing barges).

BERTHING: None (lighterage port).

CRANES: 1 × 20 ton container crane on wharf (stationary). 2 × 5 ton mobile cranes.

STEVEDORES: Available 24 hours. Discharging rate 12 t.p.h. Labour available weekends and holidays if required.

MEDICAL: Medical attendance could be obtained through the Agent during working hours.

TANKERS: Vessels drawing up to 14 ft. can anchor close to the jetty where lines are connected to shore pipes. Maximum working pressure 50 lbs. No tanker berth and vessels must provide lines. Floats can be provided by Mobil Oil Agency with labourers if required.

DENSITY: Sea Water.

FRESH WATER: Available in limited quantities in an emergency only and delivered by water barge. Cost of water A$5.00 per 500 gallons. Delivery charge A$3.90 per 200 gallons.

FUEL: Diesel only, in restricted quantities and delivered by barge in tanks. Refuelling cost A$11.20 per 500 gallons.

FIRE PRECAUTIONS: No special precautions other than normal precautions for tankers.

CONSULS: British High Commissioner stationed at Bairiki (also see "General").

REPAIRS: Small but well equipped and capable workshop for light repairs.

DRY DOCK: Small, capable to slip ships of 250 tons displacement.

CUSTOMS ALLOWANCES: 25 cigarettes per day and 6 cans (310 ml.) beer per day.

SURVEYORS: Marine Superintendent of the Ministry of Communications and Works will also act as Lloyd's Sub-Agent and cargo surveyor.

HATCHES: Opened and closed by Stevedores.

WATCHMEN: Not required.

REPATRIATION: All facilities available for crew changes.

AIRPORT: 13 miles from anchorage point. Air service to Nauru twice a week and to Fiji once a week by Air Nauru; and to Honolulu once a week by Air Tungaru (the national airline).

TIME: GMT plus 12 hours.

HOLIDAYS: New Year's Day (January 1st); Good Friday (April 11th); Easter Saturday (April 12th); Easter Monday (April 14th); Public Holiday (July 14th); Youth Day (August 4th); Christmas Day (December 25th) and Boxing Day (December 26th). No cargo work can be arranged.

POLICE/AMBULANCE: Police 646; Ambulance 718.

SERVICES: Ship's laundries.

SHORE LEAVE: All crew are allowed to go ashore after inward clearance is granted.

IDENTIFICATION CARDS: No shore passes issued. Passport or Seamen's Book are not required when on shore leave.

REGULATIONS: No food waste, ballast, engine oil to be discharged in the lagoon.

BANK: Bank of New South Wales, P.O.Box 66, Bairiki, Tarawa, Republic of Kiribati. Tel: 341 and 301. Cable: Wales Tarawa.

DELAYS: Expected delays can be caused by heavy rain and port congestion.

DEVELOPMENTS: Plan is being made to develop container yard. Work will begin when aid from overseas is received.

GENERAL: Tarawa is the main port of entry for Kiribati. Other entry port is Christmas Island.

Tarawa Atoll is roughly triangular in shape. A number of islets, separated by shallow passages, dry at low water, form the Southern and Eastern sides of the Atoll. The Eastern side is approximately 19 miles North and South and the Southern side is 16 miles in an East-West direction.

Causeways link up the islets along the Southern side and part of the Eastern side. On the Western side there is a barrier reef, most of which is sunken, enclosing a large lagoon navigable by vessels drawing 26ft. at LWOST and 30 ft. at HW.

The President's and Main Government Offices are at Bairiki Islet which is connected by causeways to the Tungaru Central Hospital, Government Schools at Bikenibeu and the international airport at Bonriki.

AUTHORITY: Ministry of Communications & Works, P.O.Box 506, Betio, Tarawa, Republic of Kiribati. *Tel:* 628. *Cables:* Harbour Master Tarawa. *Contact:* Captain W. Schutz, Marine Superintendent.

AGENT: Shipping Corporation of Kiribati, P.O. Box 495, Betio, Tarawa, Republic of Kiribati. Tel: 621. Cable Address: Portco Tarawa. Contact: Captain T. D. Murdoch, General Manager.

NOTES

Please also advise Shipping Guides Ltd.

Korea, Democratic Peoples' Republic of

GENERAL

ETA PROCEDURE: The Notice of ETA is applicable to the Owners (operators and charterers) and the Master of foreign vessels calling at ports of the D.P.R.K.

1. The Owners who fix vessels every month, provide the monthly fixture of ships to the Ocean Shipping Agency of the D.P.R.K. (Head Office) and Branches (herein after called the Agent) before 25th of the previous month and advise immediately if any change.
   (1) Vessel's name, flag and call sign.
   (2) ETA and port of call.
   (3) Description and quantity of discharging and loading cargo.
2. The Owners send the Agent the following documents before arrival in the port: 1) Bill of Lading 3 copies, 2) Manifest 3 copies, 3) Stowage Plan 3 copies, 4) Charter party or handling terms, 5) Others if any.
3. The Owner or Master advise the Agent of the Notice of ETA at the Pilot Station 10 days and 3 days, 24 hours, 12 hours and 4 hours prior to arrival.
   1) 10 days' Notice:
      (1) Vessel's name, flag and call sign.
      (2) ETA and port of call.
      (3) Vessel's particulars (g.r.t., n.r.t., d.w.t., number and size of hatches, derricks and their capacity, LOA, breadth, draft.)
      (4) Numbers of crew, passengers and nationality.
      (5) Description and quantities of discharging/loading, details of heavy lift if any.
      (6) Copies of charter party or handling terms.
      (7) Provisions, ship's stores, repair.
      (8) Flag of the D.P.R.K.
      (9) Last port and ship's position.
      (10) Full address of Owner or Operator, payer of disbursements and banker.
      (11) Others if any.
   2) 24 hours', 12 hours' and 4 hours' Notice of ETA at the Pilot Station; Ship's position and speed only.
   3) The Master should advise the Agent of the ship's position and the time when she passes the following line.

	Lat.	Long.
(1) Korea East Sea.		
	Lat. 42° 24′ N.,	Long. 131° 10′ E.
	Lat. 41° 43′ N.,	Long. 132° 20′ E.
	Lat. 38° 00′ N.,	Long. 130° 00′ E.
	Lat. 38° 00′ N.,	Long. 128° 45′ E.
(2) Korea West Sea.		
	Lat. 39° 50′ N.,	Long. 123° 20′ E.
	Lat. 37° 00′ N.,	Long. 123° 20′ E.
	Lat. 37° 00′ N.,	Long. 126° 30′ E.

4. The Master should navigate to the pilot station at least 15 miles from the coast after passing the above lines mentioned in item 3-3.
5. On arriving at the pilot station the Master should give the Agent the Notice and enter the port under pilotage.
6. The Owner should deposit disbursement funds before ship's arrival at the port and inform the Agent of the following;
   (1) Name, amount, date, No. and other details of T.T.
   (2) Ship's name and port of call.

List of Agencies:

1. Head Office

Pyongyang		
	Name	The Ocean Shipping Agency of The D.P.R.K.
	Address	Pipa Street, Moranbong District, Pyongyang, The D.P.R.K.
	Telex No.	5470 kosa kp
	Cable Address	Kosa Pyongyang
	Telephone No.	5-2472 Pyongyang

2. Branch Offices

Nampo	Name	The Ocean Shipping Agency of The D.P.R.K., Nampo Branch,
	Address	Hoopodong, Nampo District, Nampo City, The D.P.R.K.
	Telex No.	7305 np kosa kp
	Cable Address	Kosa Nampo
	Telephone No.	138 Nampo
	Coast Radio	HML
Haeju	Name	The Ocean Shipping Agency of The D.P.R.K., Haeju Branch,
	Address	Sohaedong, Haeju City, South Hwanghae Province, The D.P.R.K.
	Telex No.	7306 hj kosa kp
	Cable Address	Kosa Haeju
	Telephone No.	383 Haeju
	Coast Radio	HMJ
Songlim	Name	The Ocean Shipping Agency of The D.P.R.K., Songlim Branch,
	Address	Shingyangri, Songlim City, North Hwanghae Province, The D.P.R.K.
	Telex No.	7307 sl kosa kp
	Cable Address	Kosa Songlim
	Telephone No.	—
	Coast Radio	HMQ
Chongjin	Name	The Ocean Shipping Agency of The D.P.R.K., Chongjin Branch,
	Address	Suhang 2 Dong, Songpyong District, Chongjin City, The D.P.R.K.
	Telex No.	6201 ch kosa kp
	Cable Address	Kosa Chongjin
	Telephone No.	1303 Chongjin
	Coast Radio	HMC
Hungnam	Name	The Ocean Shipping Agency of The D.P.R.K., Hungnam Branch,
	Address	Kumbikdong, Ryongsong District, Hamhung City, South Hamgyong Province, The D.P.R.K.
	Telex No.	6202 hn kosa kp
	Cable Address	Kosa Hungnam
	Telephone No.	2656 Hamhung
	Coast Radio	HMH
Wonsan	Name	The Ocean Shipping Agency of The D.P.R.K., Wonsan Branch,
	Address	Zangchondong, Wonsan City, Kangwon Province, The D.P.R.K.
	Telex No.	6203 ws kosa kp
	Cable Address	Kosa Wonsan
	Telephone No.	3008 Wonsan
	Coast Radio	HMU
Rajin	Name	The Ocean Shipping Agency of The D.P.R.K., Rajin Branch,
	Address	Changpyongdong, Rajin City, North Hangyong Province, The D.P.R.K.
	Telex No.	6204 rj kosa kp
	Cable Address	Kosa Rajin
	Telephone No.	289 Rajin
	Coast Radio	HMR

CHUNGJIN: 41.43 N. 129.42 E. (See Plan Book)

DOCUMENTS:
8 Crew Lists.
2 Vaccination Certificates.
2 Lists showing currency, gold and valuables in possession of crew members.

The following information should be radioed to Port Authorities before arrival:
Number and nationality of crew.
Name of last port.
Ports called at during last month.

PILOTAGE: On reaching North Korean waters, vessels required to give a position report every 3 hours to KCSA Chungjin. Pilot and Port Authorities board in position 41° 30′ N. 130° 05′ E. where vessels should await Pilot. Water depth too deep to permit anchoring.

ANCHORAGES: No possibility of anchoring outside harbour limits.

CLEARANCE: On arrival in port, the radar, echo sounder, main and emergency transmitters and all optical equipment is sealed. An inspection team board the vessel to verify currency and valuables declarations. Seamen's Books required to be stamped with landing pass.

BERTHING: Berth No. 1 max. draft 24 ft. Berths 2 and 3 max. draft 27 ft. Berths No. 4 and 5 max. draft 28 ft.

CARGO GEAR: Vessels loaded and unloaded by ship's gear. At Berths 4 and 5 there is a conveyor belt facility for coal loading.

SHORE LEAVE: Seamen not allowed to visit other vessels, or leave the harbour area.

Unauthorised money changing forbidden, and it is prohibited to take Korean currency out of the country.

No bathing in harbour area.

SHIPMASTER'S REPORT: December 1980.
There are 2 harbours in Chungjin, the Western harbour and the Eastern harbour which are about 2.5 miles apart. Western harbour is mostly for export of coal and iron and Eastern harbour for import of general and bulk cargo.

The following port information is for the Eastern harbour:

Documents: Immigration, Customs and Quarantine Officials board the vessel at the pilot station. The Korean Authorities bring on board their own forms for ship's stores, currency, valuables, binoculars, cameras, etc., and fill these in by using the information contained in the ship's forms. However they also take the original of the ship's paper.

Papers required for entry:
5 copies Crew List (IMO Form).
1 copy Vaccination List (Cholera).
1 copy Crew's Effect Declaration (IMO Form).
1 copy List of Currency and Valuables (Free Form).
1 copy Ship's Stores Declaration (IMO Form).
1 copy Ports of Call List.
1 copy Maritime Declaration of Health.

A "General Information" sheet, containing such particulars as vessel's name, call sign, Port of Registry, official number and all the normal data contained in the ship's register, including cargo on board, amount and where loaded etc., was found to be of great help in filling out their forms and speeded-up the entry and clearance process. 5 copies of above should be made for distribution to Agent, Customs, Immigration, Harbour Master and Quarantine.

Master's Advice: It is important that all crew members strictly comply with the Rules and Regulations in Korea, especially concerning cameras and binoculars as photography and the use of binoculars is strictly prohibited in the harbour area as well as in the City and the surrounding area. If the Customs, during their second cabin check, find a camera or binoculars the matter will be treated very seriously.

For landing permit, Immigration will stamp the passports or the seaman's books. However I managed to persuade the Immigration Officer not to stamp the passports because of the trouble in certain countries when they see a D.P.R. Korean stamp but it took 2 days and higher Immigration Authorities to get this permission.

When filling out the Customs and Immigration Forms, the name North in North Korea should not be written on any of above mentioned forms or any other documents as well as on private letters. The Authorities don't accept a divided Korea and will cross out the name North, in any place it is written.

It is not necessary to take cash advance in Korean Won. American Dollars and Yen are most welcome.

Pilotage: Method of contact: VHF or radio contact not possible. Agent will inform the pilot station of vessel's ETA.

Boarding Position: Lat. 41° 42.8′ N., Long. 129° 50.5′ E. (4 miles S.S.E. of breakwater). Pilot is compulsory. Service Time: Daytime only.

Anchorage: From 0.5 miles – 4 miles S.S.W. of Chungjin Harbour in 8 – 30 fathoms. Good anchorage in mud/sand and protected from Northerly wind. However during strong South-westerly wind there is a heavy sea and swell.

Approaches: Simple and straightforward. Practically due North along Korea's East coast until abeam of Cape Kozakof, then straight for the Pilot boarding position or anchorage.

Restrictions: Entry: 30 ft. even keel on entry to the harbour.

Special Regulations: Vessel received orders by cable to navigate 15 miles off the Korean D.P.R. coast and pass through position 41° 38.9′ N., 129° 52′ E. en route to the pilot boarding position.

Max. Size: Max. draft alongside at the grain and general pier was 28 ft. and in the harbour 30 ft.

Health: Radio Pratique not available.

Radio: Contact through Congjin Coast Radio Station, call sign "HMC" frequency; Call on 500, work on 428 kHz., ships work 425 kHz. Traffic list every hour plus 20 minutes. After initial call on 500 kHz., usually followed by QRU. MF only.

After arrival, radio station on board is sealed and there is no VHF in the port. However after arrival in the port, Agent will bring on board a small transmitter/receiver for daily communication between Master and Agent's office. The set working on 24 volts. Very few people speak English. I found only the Pilot and Agent had a fair command of English.

Arrival Notice: Five days then 72, 48 and 24 hours to Agent. Also 5 days and 3 days to receivers.

Tugs: Two tugs available, about 500 h.p. maximum. Tugs always take ship's line.

Berthing: Mooring Method: Vessels drawing more than 28 ft. must first lighten her draft at anchor in the inner harbour. Vessel is brought up in a North/South direction in the harbour and moored aft to the bollards on the breakwater with 4 lines and port and starboard anchor forward, 6 shackles in the water (Mediterranean Mooring).

Along the grain pier, which is only 150 m. long, a strong mooring is recommended partly because the after part of the vessel overhangs the end of the pier and partly because of the occasionally heavy swell along the pier.

Grain Wharves: Vessels only allowed alongside with draft of 28 ft., but a sounding with a line showed about 32 ft. It was not possible to get exact information of water depth alongside the general pier. I found the total wharves length to be about 1,500 m. The grain pier is 150 m. long. Certain wharves in the Eastern part of the harbour, which are shown on BA. Chart No. 1271, do not exist anymore as usable wharves.

Facilities for Bulk Carriers: There are a total of 8 cranes in the harbour, each of about 10 tons capacity. Two of the cranes are serving the grain pier and connected with a conveyor belt system. No difficulty with height of vessel.

Cargo Operations: At the harbour anchorage (Mediterranean mooring) the cargo is discharged by ship's gear. Stevedores operating the cranes. Operation is slow and there is often damage to the vessel with grabs due to inexperienced stevedores.

Two cranes serve the vessel alongside the grain pier. They are able to discharge about 3,000 tonnes per day but actual quantity discharged per day (taken over a 7 days period) was only 1,600 tonnes, mostly due to lack of stowage space, transportation problems and crane break-downs.

Stevedores work 24 hours a day, 7 days a week.

The cranes bring the grain to a conveyor belt system which again brings the cargo to the store house. The store house has a maximum capacity of 12,000 tonnes.

There is a railroad system serving the grain and general pier. Stevedore damage must be reported to the foreman immediately. All damages are repaired before departure by shore repair workers.

Medical: Services available.

Density: 1026.

Fresh Water: Good quality fresh water available at the pier. Charge Won 2.75 per ton (US$ 1.75). Fresh water can also be delivered by barge to the anchorage.

Fuel: Available but expensive.

Repairs: According to the Agent, all deck and machinery repairs can be carried out. I expect that to be correct as there is a big shipyard in Chungjin.

Surveyors: Local Surveyor only.

Customs: The Bonded Stores are not sealed but all cameras and binoculars are collected before entering the harbour and sealed in a locker. Radio room and echo sounder also sealed.

When the vessel has berthed alongside the pier, Customs will once more come on board and this time check thoroughly for binoculars and cameras throughout the ship. It is possible they will confiscate all cameras and binoculars found during the second check.

Time: GMT plus 9 hours.

Shore Leave: Crew members are not allowed outside the harbour area. Permission is only given for a visit to the Seaman's Club, just outside the gate, but only a walk, straight from the gate to the club. There is an armed guard at the gangway to whom crew members must present their passport or seaman's book and also once more at the harbour gate. Shore leave is from 0800 hrs. to 2300 hrs. There is a new Seaman's Club near Western harbour (about 8 km. from Eastern harbour – by car about 10 minutes). Transportation to and from this club costs US$ 7.00 per bus.

General: Current: Experienced a slight South-westerly set towards the shore in Kyongusogu Bay when approaching from the South.

Tide: Port not effected.

Charts: BA. 1271, 1316. J.A. 162.

Swell: A heavy swell can cause problems for vessels alongside the wharves, especially in July/August. At times the swell may cause vessels to leave the wharf and shift to the anchorage.

Distress: In case of distress a long blast followed by a short blast with the whistle and repeated 3 times, this will warn the Harbour Master who will take action.

Derat: Derat exemption certificate can be issued.

Laundry: Available and requires about 3 days. Laundry service is satisfactory.

Provisions: Available in limited quantities.

HAEJU (Haijuube): 37.59 N. 125.42 E.

SHIPMASTER'S REPORT: August 1978.

DOCUMENTS: Same as Nampo, but Korean Forms must also be filled in on arrival.

PILOT STATION: B.A. Chart 1258. Situated between following points:

37° 40′ 30″ N.	125° 35′ 00″ E.
37° 42′ 00″ N.	125° 35′ 00″ E.
37° 42′ 00″ N.	125° 32′ 24″ E.
37° 40′ 30″ N.	125° 32′ 24″ E.

The ship should anchor and wait. It is imperative to anchor within Pilot Station Area, which is used by North and South Korea, otherwise the Authority will not board the vessel. Approaches to Haeju are not covered by B.A. Charts, Korean (Nos. 15–1354, 1328, 1329) not obtainable. Pilot boards together with Quarantine and Immigration officer. The inspection starts immediately, all crew must have Seaman Book for identification. Food stores and pantries also inspected. Pilotage is carried out depending on tide and ship's draft, daytime only. Berthing at slack tide. After berthing arrival inspection continues (Harbour Master, Customs, Coast Guard).

ANCHORAGE: Ships sometimes complete loading at the Anchorage in position 37° 55.5′ N., 125° 46′ E., depth 11.4 m., but probably swinging space for one ship only. Ships waiting for berth anchor in the vicinity of the wharf. With no chart it makes the situation difficult, as there are no lights or light buoys. Position only obtained by radar. One anchor used due to strong tide which sometimes reaches 4 knots.

ARRIVAL ADVICE: The arrival notice to be sent to KZSA Haeju giving all particulars same as Nampo, first contact via Haeju Coast Radio Station, call sign HMJ, to be made 48 hours before arrival. Earlier contacts via Shanghai Radio.

RADIO: Haeju Radio, call sign HMJ.

BERTH: Old berth described in China Sea Pilot, Vol. III, page 540. Extension works in progress. Shore cranes. Depth at low water about 6.8 m.

EXPORTS: Zinc concentrates, cement from the new factory connected with Port by conveyor belt.

FRESH WATER: From hydrant alongside, at anchor by barge (dredger).

FUEL: In restricted quantities, price unknown.

SERVICES: Provisions and Laundry, available through Seamen's Club.

AUTHORITY: Port Master and Harbour Master.

HEUNGNAM: 39.50 N. 127.45 E. (See Plan Book)

SHIPMASTER'S REPORT: November 1983.

PILOTAGE: The pilot station is at Lat. 39° 44.8′ N. and Long. 127° 41.0′ E. When arriving at this position and no Pilot is available, vessels are ordered to anchor. Ships are also ordered to navigate at least 12 miles off the coast.

ANCHORAGE: The anchorage is secure and safe with a depth of water of at least 36 ft., however soundings were unobtainable because of the sealing of all equipment.

If vessels arrive with a draft of over 25 ft., cargo is discharged into barges at anchor approximately 1 mile South of the breakwater.

The white light at the end of the breakwater can be seen at a distance of approximately 5 miles.

MAX. SIZE: The minimum depth in the harbour is 28 ft. and ships of up to 25 ft. draft are allowed alongside.

BERTHING: The length and direction of the quays etc. in the harbour are reasonably accurate as they were obtained using radar (See Plan).

The berths are used as explained on the plan. Also the two cranes at the Southern end of the Pier "D" are used for the export of bulk cement.

NAMPO (Chinnampo): 38.43 N. 125.25 E. (See Plan Book)

SHIPMASTER'S REPORT No. 1.

DOCUMENTS:

8 Crew Lists.
2 Vaccination Lists.
2 Lists showing currency, gold and valuables in possession of crew.

Bonded stores must be declared but not sealed.

ARRIVAL ADVICE: The following information should be radioed to KNSA Nampo before arrival:

(1) ETA Nampo Station, Lat. 38° 37′ 30″ N., Long. 124° 49′ 30″ E.
(2) Nationality.
(3) Gross Registered Tonnage.
(4) Net Registered Tonnage.
(5) Deadweight.
(6) Length overall.
(7) Height of Freeboard.
(8) Speed.
(9) Last Port of Call.
(10) Colour of ship's hull.
(11) Number of crew and passengers.
(12) Hatch Loading/Discharging cargo Plan.
(13) Draft.
(14) Ship's position together with ETA 24 hours before arrival within area connected positions Lat. 37° 00′ N., Long. 124° 30′ E., Lat. 38° 08′ N., Long. 123° 35′ E., and Lat. 39° 50′ N., Long. 124° 07′ E. Also vessel should advise position and time passing above connected lines.

PILOTAGE/ANCHORAGE: Pilot and Port Authorities (Quarantine Officer and Immigration Officers) board at position Lat. 38° 37′ 30″ N., Long. 124° 49′ 30″ E. where vessels should anchor awaiting Pilot.

Night pilotage prohibited, according to port regulations.

CLEARANCE: After embarkation of Port Authorities at Nampo Station the Radar, Echo sounder, VHF, DF, Radio Room and all optical equipment is sealed. On arrival in Port, Customs Officers board the vessel and together with Immigration Officers search the whole ship.

Seamen's books required to be stamped with landing pass, also seamen's books are taken ashore by Immigration Authorities for formalities.

BERTHING: Coal berth can accommodate vessels up to 20,000 d.w.t. There are 2 conveyor belts for coal loading but 1 only can work at a time. Conveyor belts are not movable, the vessel has to shift. Vessels loaded and unloaded mostly in the roads by ship's gear. There are 3 other berths but have no information.

RADIO: Nampo Radio. Call sign HML.

FRESH WATER: Only available by barge.

TIME: GMT plus 9 hours.

SHORE LEAVE: Seamen allowed to go ashore by boat or bus only. Seamen are not allowed to leave harbour area. In order to visit other vessels in port, application should be made to Immigration Authorities.

GENERAL: *Currency:* It is prohibited to take Korean currency out of the country.

Bathing: Prohibited.

Fishing: Prohibited.

Provisions: Limited quantities available at the Seamen's Club.

SHIPMASTER'S REPORT No. 2.

Information covering Nampo, Democratic People's Republic of Korea, previously known as Chinnampo. See in connection with this B.A. Chart 1257 and 1656, China Sea Pilot III.

The following general information was produced by the navigating officers of a vessel in 1974.

NAVIGATIONAL INFORMATION: Pilot boarding point Lat. 38° 37′ 5″ N., Long. 124° 49′ 5″ E. Wreck at Lat. 37° 38′ 2″ N., Long. 124° 48′ 2″ E., 3 masts above water at all states of tide. Radar echo good at 6 miles. Buoy – old position Lat. 37° 37′ 4″ N., Long. 124° 51′ 4″ E., moved to Lat. 37° 37′ 2″ N., Long. 124° 50′ 7″ E.

Light Sei To – flash every 23 sec. Visible for 8 miles
Light buoy at Lat. 37° 37′ 4″ N., Long.124° 53′ 6″ E., flashes 18 sec.
Light Shimai To flashes 18 sec.
Light San extinguished
Light Chiri extinguished
Light Hi To extinguished
Light at 38° 41′ 7″ N., 125° 18′ 1″ E., (Bachishin) flashes 30 sec.
Light at Nanryoki extinguished
Light at Lat. 38° 43′ 3″ N., Long. 125° 24′ 6″ E., extinguished.

PILOTAGE, ANCHORAGES, INSPECTION AND CLEARANCE: The Pilot boarding point is at the same time the outer limit of Nampo Harbour and the clearing inwards point. To await Pilot and further instructions before proceeding into Nampo, vessels must wait here. Information can be obtained via coastal radio Nampo (details in Nautical Wireless Service Standing Instructions), VHF is not available.

The anchorage at the pilotage waiting point is good, and the bottom is a thin layer of grey mud with clay underneath it. With wind from the S.W., there is a slight swell. Depth of water between 25 m. and 26 m., vessels should anchor with a chain length of at least 100 m. on the capstan and calculate adequate room for swinging, since there is a very strong tidal flow at all states of the wind and weather, running up to 4 knots according to our observations.

The Pilot comes on board with clearance authorities. As pilot cutter (also no VHF) a normal tug is used, which in Winter is also used as an ice-breaker. The tug does not display a Pilot's flag, only the national flag. The hull of the tug is black, superstructure white with large Korean characters on the front of the bridge. Pilotage only available during daylight hours.

At clearance inwards point (pilotage boarding point) all binoculars, including bridge binoculars, and photographic equipment is gathered together and sealed for the total time in port. It is only released after the Pilot leaves the vessel on departure from the port. Likewise all echo-sounding, radar, direction finding equipment is sealed. The use of such equipment and filming and photography in Democratic People's Republic of Korea is completely forbidden.

From the clearance inwards point the journey to the anchorage in front of the town is usually at full speed for most of the way. The anchorage is selected by the Pilot. The Pilot gives a good impression and from our observations knows his job well. However, one can only expect very rudimentary English from him. The same applies to the clearance authorities who have only a very few words of English. Clearance proceeds slowly but is carried out very correctly.

GENERAL INFORMATION: When at anchor in front of the town, further official authorities come on board. These check the whole ship, and go through the deck and engine room areas accompanied by one chosen member of the crew. Whilst the ship is being examined, all other crew members must remain in their cabins. The crew member accompanying the authorities must have his seaman's book with him as identification. When the authorities leave the ship finally they take the log away, and bring it back after a few days. Going ashore is permitted, but normally only in the port area. There is a seaman's hostel there. Travel further inland is possible, but only by giving 24 hours prior notice to Immigration via the ship's Agent. Also from time to time it is possible for crew members to fly out, but this must be arranged via the state shipping Agent. Visits to other ships is also possible, but only by giving 24 hours prior notice to Immigration. Radios and cassette recorders may not be taken on land or even on deck. Their use is only permitted within the ship and cabins. Fresh water and fresh food are available. In the roads, water is delivered by water boats. Removal of rubbish is also possible by due notice through the Agent, and is even possible at the anchorage. Boat manoeuvring can likewise take place, but it must be reported, and may only take place in the vicinity of one's own ship.

For clearance inwards, the following documents are required:

7 Crew Lists.
1 List of Items in Possession of Crew divided into gold, valuables, money, signature.
1 Vaccination List.
1 Maritime Declaration of Health.
1 Passenger List, even if none on board.
1 Narcotics List.
1 List of Tobacco and Personal Goods.

The authorities bring a list of provisions with them and fill it out after declaration on board. Stores, such as alcohol and cigarettes are not sealed.

The Health Authorities place greatest score by cleanliness of toilets, refrigerators, food stores, kitchens, pantries, hospital and first-aid station.

Generally, it may be stated that the ship's broker and Agent speak and understand good English, but from the authorities normally one can expect no knowledge of Western languages.

The port roads offer anchorages for at least 15 sea-going vessels and enough room for swinging. However, in each case at least 170 m. chain should be allowed so that the vessel lies securely. The tidal current, in accordance with our observations, runs at a good 4 knots. The anchorage bottom is good and comprises grey mud. The depths of water shown in the charts are, in accordance with our observations, roughly correct.

To the West of the port on the town shore there is a large shipyard with a mobile gantry crane over a slipway under construction. The slipway is about 150 m. long. Normally, the crane is at night directly on the bank (high water mark) and is illuminated and thus constitutes a good bearing, particularly at night, since otherwise no long-range port lights are available.

Position of the crane is about Lat. 34° 43′ 2″ N., Long. 125° 24′ 1″ E. This area where the shipyard is located is designated as "Iron works" in chart 1656 map of Chinnampo Ko. The waterside there no longer has an inlet, but has been straightened out, and building work is still in process. See plan section of "Guide".

Likewise building works are in progress along the whole shore line between the shipyard and Nampo Ki. The shore line is also straightened here, and to all appearances has been developed as anchorage and repair yard for the Korean Navy. The 2 red/black buoys to the South of the iron works in the chart are no longer there. In this area there is only a small fixed buoy for guard boats and fishing craft.

In the middle of Shienshin Island there is a 9-storey white hotel, which is a good landmark by day.

The tidal pole in front of Nampo Ki is no longer available. On the Southern end Nampo Ki is a bunker with a small house on top. The lower part of the house is pink and the upper part white. The West pier of Hibatsu To has 5 mobile port cranes, with lifting capacity up to 5 tons. At the Southern end of the pier are 2 new large warehouses. A floating crane is available with a capacity of about 160 tons. On the Western pier is likewise a small warehouse and 2 mobile port cranes (up to 5 tons). At the Southern end of the Western pier, are two berths for deep sea freighters with a good 9 m. water depth N.W. alongside. At the Southern part of the Western pier there is a good 8 m. of water along a length of some 210 m. At berth 1 (West pier, Southern berth), vessels up to 32 ft. draft can go alongside in normal water conditions. The depth of water in the inner part of the port could not be exactly determined, but judging by the vessels there must be about 5 m.

The old coal pier has a berth with at least 10 m. depth of water. East of this pier is also a further coal pier, equipped also with conveyor belts and about 10 m. depth of water alongside.

For berthing and unberthing there are one large and three small tugs available. The large tug acts as pilot craft and for the authorities to visit for clearance. It has been previously described.

From our observations, in the inner roads loading and unloading rarely takes place. There are only a few lighters available. As the port is overloaded, a long waiting time must always be allowed for (at least 14 days).

Medical care for crew members here is somewhat difficult, since one tries with all means to avoid having to have the crew member transferred beyond the confines of the port. In this connection, the doctor comes only once on board and a decision is taken as to whether or not a visit to hospital is necessary. For such a hospital visit one has further to go through the Agent to the authorities to obtain permission to go beyond the port area.

Below are some soundings of the roads. The vessel's draft = 8.35 m. First bearing is Nampo Ki, second bearing is the pier light, fixed red, in front of the East pier:

Weather (Wind)	*Bearing*	*Time* (GMT)	*Measured depth, taking into consideration vessel's draft* (m.)
15° 8 kn.	344°, 38°	2330	21.15
100° 8 kn.	355°, 42°	0130	19.93
360° 5 kn.	355°, 39°	0715	15.97
340° 5 kn.	343°, 37°	0900	18.41
070° 9 kn.	340.5°, 38.5°	2330	21.15
060° 5 kn.	343°, 39.5°	0100	21.46
Circulating 5 kn.	324°, 41°	0430	16.88
270° 13 kn.	339°, 37°	0000	21.46
300° 20 kn.	357°, 40.5°	0300	19.93
290° 10 kn.	345°, 40°	0840	18.43
Circulating 5 kn.	360°, 45°	0640	16.58

The pier structures have shuttering walls at the bottom, and the upper part is composed of equal-shaped stone blocks. At the mooring points fenders are composed of car tyres strung together on wires. The pier itself is in a satisfactory condition. Rail connection is available, and lorries may run along it. Water connections are also available. As the two cranes on pier berth No. 1 have very large beams, they are often positioned between two hatches and then work the two hatches alternately.

Loading and unloading is made difficult since it is not possible to obtain precise information as to the number of gangs, the time they will turn up for work, whether they will work with their own equipment or with cranes or with the mobile cranes available. It continually happens that suddenly port workers will appear or disappear, although shortly beforehand the Agent will inform to the contrary.

Telephone connections with Europe are possible. Connections can be obtained at the Seaman's Club in the port after 1600 hrs. On average it takes an hour to get through. It is advisable always to try to get a line to Moscow, and then ask for the required connection oneself in English from the Moscow operator. This noticeably hastens the connection. Comprehension is at times very bad, calculation of charges is dreadful, and one must be prepared to pay three or four times the price as would appertain for a similar call in Europe.

The local currency is the Won. 1 US dollar = approx. 2.15 Won. In the Seaman's Club all customary Western currencies can be changed into Wons.

Loading rigging can be positioned from the ship. If for example this has to be done at night, it must be discussed in advance with the Agent as to whether this has to be done by the ship or the port personnel. If the rigging is done by the port personnel, it must be checked carefully.

Clearance outwards occurs in the harbour roads and not at the pier. It takes a good 3 to 4 hours. Here also, all crew members must be in their cabins for checking purposes, and if the authorities require it, personnel must be available to guide them around the ship. On leaving the port, yet another list must be presented of currency which each crew member has spent in Korea.

They are only interested in foreign currency which has been exchanged for Wons in the Seaman's Club, since Wons may not be exported.

On the journey out from the port, the Pilot is accompanied by an assistant and member of the coastguard. The latter, shortly after coming on board, removes all seals from apparatus sealed when coming into port. The Pilot leaves the vessel at a position Lat. 38° 35′ 5″ N. and Long. 124° 55′ 5″ E.

Herewith some soundings, taking into consideration draft of vesse First bearing – pier light East side Hibatsu To – fixed red. Secon bearing chimney at Lat. 38° 44′ 1″ N. and Long. 125° 25′ 9″ E. (shown o the chart as Chy.)

GMT	*Weather*	*Bearing*	*Line sounding* (m.)
0030	Calm	338°	21.78
	1022 mb	43°	
0130	Calm	338°	
	1022	42°	24.79
0430	Changeable	335.5°	21.03
	1022	40°	
0530	250° 14 kn.	312°	
	1022	38°	24.18

SHIPMASTER'S REPORT: No. 3

VHF: Agent "KOSA" can be contacted on Channel 16. Generally por (Pilot, etc.) do not communicate with the ship directly. A communications (VHF) to be done through "KOSA". General watc keeping time (VHF) – 0900 hrs. to 1030 hrs.; 1200 hrs. to 1300 hrs 1400 hrs. to 1630 hrs.; 1900 hrs to 2100 hrs. and 2330 hrs. to 0030 hrs

FRESH WATER: Also available from shore connections alongside No. and 2 berths.

SURVEYORS: State surveyors of D.P.R.K. (Democratic People' Republic of Korea) available. Survey fees about US$1900.00 per visi

REPAIRS: Facilities available.

New Dry Dock: is in operation which can handle ships over 180 m. i length. *Shipyard* builds ships (2 – 3 ships at a time) of moderate siz (about 10,000 d.w.t.).

Dry Dock/Shipyard Workshop undertake ships repair. They have boa fully equipped with diving equipment and diver.

Factory Engineer/Technician (Electronic) undertake Radar/Echo sounder/VHF repairs.

GENERAL:

Marine Note of Protest: No Notary Public or Court of Law. Master wishing to lodge a "Note of Protest" can write to the Harbour Master wh will endorse his (Master's) letter.

People strongly object calling their country "North Korea", it is to b called Democratic People's Republic of Korea.

Fresh Provisions: Fresh provisions also available through the shi chandlers (owned/controlled by the Government). It is advisable to tak stores through the seaman's club, where quality can be checked befor the provisions supplied on board.

NOTES

Please also advise Shipping Guides Ltd.

Korea, Republic of South

GENERAL:

FOREIGN FLAGS: Ministry of Transportation issued following instructions regarding entry and exit of foreign flag vessels in South Korea waters.

Item 1: Director, local Marine Bureau shall not grant permission on entry of foreign flag vessels under ownership of North Korea, Vietnam and China.

Item 2: Director, local Marine Bureau shall not grant permission on entry of foreign flag vessel bound for North Korea or falling short of 90 days of departure from ports of North Korea.

Item 3: No restriction shall be applied on entry of foreign flag vessels unless same appertained to above clauses in accordance with internationally accepted practices.

BUKPYUNG: 37.29 N. 129.08 E. (See Plan Book)

SHIPMASTER'S REPORT: June 1982

LOCATION: Bukpyung (Lat. 37° 29.5′ N., Long. 129° 08.5′ E.) lies some 5 miles to the South of Mukho, it has been under construction for the past 4 years and now ranks as the third largest port (by tonnage) in Korea. The port consists of 2 breakwaters extending from the shore and has been constructed primarily for the export of cement in bulk, clinker and bagged forms.

The port is linked to the Donghai Cement Plant which in itself is the largest unit cement factory in the world with an annual production capacity of 8.7 million tons.

This report is mainly directed to the facilities associated with the export of cement, however where possible relevant information has been included which could prove useful to other vessels trading in the area.

PORT LIMITS: Approximately 1 mile radius off the port but mainly to the North of the E./W. Line, passing through the South Breakwater Light. Port limits are indicated on Korean Chart No. 141.

DOCUMENTS:

6 Crew Lists (on blank paper).
3 Vaccination Lists.
2 Port Itineraries for past 6 months.
2 Passenger Lists.
2 Arms Lists.
2 Drugs Lists.
3 Personal Manifests.
3 Cargo Manifests.
3 Store Lists (including fuel on arrival).
3 Bonded Stores Lists.
Korean Maritime Declaration of Health.
Various Korean entry forms.

PILOTAGE: Generally operate from 0600 hrs. to 2100 hrs. 3 Pilots available and appear quite competent. As an exception they will sail vessels up to 2200 hrs. from the berth. Pilot launch painted white and small. No VHF (1982). Pilot ladder required almost to the water, no manropes.

In heavy swell the Pilot refuses to come out to the vessel and no dispensation is given for the vessel to come under the lee of the North Breakwater to pick the Pilot up, even though there is ample room. Pilotage is relatively simple with a wide deep water entrance to the port and a large swinging basin.

APPROACHES: BA. Chart 882, also Korean Chart 141. Best to run up 5 miles off the coast to keep clear of 3.5 fathom patch reported in position Lat. 37° 28.5′ N., Long. 129° 13.0′ E., then alter course to 270° for approaches to anchor area off the port.

ANCHORAGE: Recommended anchorage about 1 mile to 1.5 miles off the breakwater in about 12 fathoms to 14 fathoms of water. We anchored with South Breakwater Lt. Ho. bearing 180° (T)×1.27 miles, with 7 shackles down on the port anchor and happily rode out a day of winds in excess of 40 knots, though engines were kept on immediate notice. A confused back swell is sometimes thrown off the breakwater during strong onshore winds. Bottom mainly sandy with some rocks. Ample visual and radar targets available to check anchorage position.

MAX. SIZE: No limitations to length or beam. Max. draft 11.8 m. (SW).

HEALTH: Quarantine Officials generally attend at the anchorage and inspect store rooms, galley, etc. Derat sighted and Vaccination List required. Korean Maritime Declaration of Health made out. Pratique granted. Various vaccinations can be obtained at the Port Health Office at Bukpyung. The doctor/nurse will not attend onboard to do injections. No specific vaccinations required for Bukpyung unless vessel from infected area.

RADAR: No port radar at present.

VHF: Bukpyung Port Radio operates on Channels 16 and 12. Daylight operations only. Initial contact is made via this station and arrival time and ships' particulars noted. Berthing instructions are generally relayed through Mukho Radio, VHF Channels 16 and 26 from Agents. Local and overseas calls are also possible through Mukho, with a 24 hour watch kept.

TUGS: Three available: 2×2,000 b.h.p. and 1×1,000 b.h.p. Make fast with tugs' lines with the tugs joining vessel just inside the breakwater. There are an additional 2 tugs at Mukho (5 miles to the North) and these will work at Bukpyung if required. Communication with tugs is by walkie talkie.

BERTHING: Vessels generally berth port side alongside the South Pier (Ssangyong) and starboard side alongside the North Pier. Tugs join just inside the breakwater, the offshore anchor is used when off the berth. Boat takes the headlines only. The North Pier is more exposed than the South and a substantial tie up is recommended. The bollards are 25 m. apart and the jetties very well protected with modern horizontal rubber type fenders. The gangway can be swung out prior to berthing with no obstructions to cause damage. South Pier length 735 m., North Pier length 540 m.

Present Capacity: 4×30,000 d.w.t., 1×10,000 d.w.t. and 4×5,000 d.w.t.

Additional Future Capacity (1986): 6×50,000 d.w.t., 1×20,000 d.w.t. and 1×10,000 d.w.t.

BULK HANDLING FACILITIES:

Coal: One coal berth lies at the seaward end of the South Pier, whilst the other berth is at the inner end of the North Pier. Vessels use their own cranes and grabs for discharging the coal onto the quayside, whereupon it is handled by payloaders and loaded into road trucks. Discharge rate is in the region of 5,000 tonnes per day but could improve if more payloaders were brought in to handle the quayside operation. Generally speaking, only two payloaders are used at any one time. Road trucks carry the coal to a stockpile 3 miles away and there appears to be ample supply of trucks available. The final few hundred tonnes in each hatch is shovelled by stevedores into savealls and rubber mats. No bulldozers are available for hatch work.

If a vessel is not equipped with her own grabs then the complete discharge is handled using savealls and manpower. Using this method a discharge rate of about 3,000 tonnes per day could be expected. The crane drivers are quite competent and stevedores helpful. Any damage to ship can be repaired on the spot and stevedores accept full liability.

Bagged Cement: Two companies export cement from Bukpyung. Ssangyong Corporation, the largest, operate from the South Pier whilst Tongyan M&G work off the North Pier. Ssangyong have the facility for loading clinker/bulk and bagged cement by conveyors and loaders. Tongyan can only handle clinker and bulk cement by loader, any bagged cargo being handled by ship's gear.

The Ssangyong export terminal serves the largest unit cement plant in the world with an annual production capacity of 8.7 million tons. This main plant, situated a few miles away at Donghai, is linked to the port of Bukpyung by an extensive conveyor system. Further conveyors link the storage facilities to 2 ship loaders (for bagged cargoes) and 2 spout loaders for clinker and bulk cargoes.

The bagged ship loaders were each rated at 150 tonnes per hour, though actual loading rate worked out at nearer 75 tonnes per hour, with both loaders suffering occasional breakdowns. In addition to the loaders, ship's cranes were also used to lift bagged cement directly from lorries. In all, 5 gangs were used (2 loader and 3 crane) and a daily load rate of about 4,000 tonnes experienced. The cement was bagged in triple skinned paper/polythene and very little breakage was observed, the loader however throws off some cement dust and the ship receives a liberal covering.

The bagged cement was initially ordered, by Charterers, in nett weight i.e. bags each weighing 50 kg. (gross 50.17 kg.), however as loading progressed it became obvious that the actual weight loaded was considerably more than that tallied aboard. On checking the actual weight of a number of bags, all were found to be in excess of 50.50 kg. (gross). Initial instructions from Charterers required the vessel to load a cargo geared to a limiting draft of 32 ft. at the discharge port, but when realising the full shore tally weight could not be lifted then authorisation was received to load the shore figure. By shore tally and Bills of Lading we loaded 490,000 bags cement at 50 kg. nett per bag equalling 24,500 tonnes.

Actual deadweight on board by draft survey showed some 24,886 tonnes of cargo. One per cent. of spare bags were also loaded with the cargo.

The bagged cement was pre-slung wherever possible in the hatch to facilitate a quick discharge, the discharge port, was not nominated however, this depending upon the number of cement ships discharging on the Indian coast. Ahjin intend sending a supercargo to India to assist in the discharge.

No problem exists with the loaders regarding height clearance over the coamings, however conversely if the vessel is too deeply ballasted then the base of the shoot cannot reach the tank top and it is then necessary to de-ballast to bring the ship up to the loader.

Cargo manifests, etc., were prepared, by the Agents, prior to sailing. Normal procedure is to authorise Agents to sign Bills of Lading on Master's behalf.

Stevedore companies: Ssangyong Cement Co. Ltd., Tongyan M&G Co. Ltd., Korea Express Co. Ltd.

MEDICAL: Doctor and hospitals situated at Mukho some 5 miles away. Agents will arrange car to transport crew members to and from doctors. Medical attention is quite expensive. Medical reports issued on request. An ambulance service is available if required.

FRESH WATER: Available by barge in 100 tonne quantities.

FUEL: Supplied only by barge either alongside or whilst the vessel in the anchorage. The bunker barges are not equipped with heaters and consequently the pumping rate very slow (about 90 tonnes per hour for heavy oil and 120 tonnes per hour for diesel oil). Each barge has a capacity of about 400 tonnes; No blending on the barge, this being performed at the refinery. The barges generally sail up from Pohang and have to clear customs formalities at Bukpyung. Fenders on the barges are virtually non-existent and if taking bunkers at the anchorage in any kind of weather extra tyres etc., should be used. We were supplied by Korean Marine Bunkering: Seoul 776-8531.

REPAIRS: Engine and general dock repairs possible from Donghai Marine Engineering Co. Ltd. The company has a staff of about 12 and are capable of handling most repairs. Welders are Korean registered. Various Customs formalities have to be completed before spare parts are removed from the port area. Prices appear reasonable though slightly higher than Ulsan and Inchon. Radar repairs can be arranged with ample notice. Chemical cleaning of heaters, etc., can be arranged.

SURVEYORS: Local Korean inspectors/surveyors are available at Mukho for draft surveys, on/off hire surveys, etc.

Lloyd's and Bureau Veritas are available from Seoul and will attend vessels at Bukpyung if necessary, with ample notice.

WATCHMEN: Available from Sanghyup Kongsa (again) recommended mainly for their ability to use telephone especially with the Agency 5 miles away. Cost about £12 per day.

CUSTOMS: Attend on berthing. Quite casual and friendly. Spirits and cigarettes sealed though beer and wine left unsealed. Normal allowances per person and an issue available after vessel has been in port for 5 days. One Customs Officer remains on the vessel during the stay in port, he requires a cabin and meals. Drugs are also sighted and sealed.

REPATRIATION: No difficulties in this area. Seoul some 300 km. away is served by an express bus service. Sub-Agents liaise with main Agents and all repatriations seem to run smoothly. An overnight stay is normally arranged at Seoul for incoming and outgoing crew members though this depends on flight times. The journey between Bukpyung and Seoul takes about 4.5 hours. It is necessary for joining crew members to fill out a personal manifest once aboard the vessel, this is collected prior to sailing.

TIME: GMT plus 9 hours throughout the year.

HOLIDAYS: See "Mukho".

Arbor Day (April 5th) is also an official holiday at Bukpyung. Work is possible during all holidays.

TELEPHONES: Available at all berths. Only local calls taken.

SHORE LEAVE: No restrictions, no curfew.

GENERAL:

Weather: Refer to Pilot Book.

During the latter part of March and April long periods of relatively calm weather were disturbed by severe Lows and Fronts causing strong on shore winds and high seas. During these periods the port remains closed for berthing vessels, though sailing is possible. Smaller ships in the anchorage generally steam offshore during these periods.

Stores: Fresh supplies and all chandlery items supplied by Sanghyup Kongsa Co. Ltd., Bukpyung (the only chandler in the area). Fresh vegetables, fruit, fish, etc., are in plentiful supply locally. Deck and engine stores also available in the area, though more selective items can be obtained from Seoul. Local supplies are reasonably priced, though meat expensive. Bonded stores are also available. Medical supplies can be obtained from Seoul as well as current BA. Charts and Admiralty publications. These again are quite expensive.

Immobilisation: Possible with Port Authority approval.

Port Regulations: Bukpyung also serves as a naval port and consequently no photography allowed. No written port regulations. Painting over the side not allowed for fear of pollution, similarly no painting allowed from the quayside.

Launch Service: A launch service is available from the anchorage and is useful for crew repatriation. It can also be used for shore leave, once vessel has been cleared, though price is unknown.

Garbage: Arranged by Agents, taken away from ship by road truck. Rubbish should be retained on board, even at the anchorage, various naval craft regularly patrol around the port area and anchorage.

Consuls/Notary: No Consular offices at Bukpyung or Mukho, it being necessary to travel to Seoul for these purposes. It is also impossible to Note Protest at Bukpyung or Mukho.

Laundry: Adequate laundry facilities exist at Mukho, again arranged by Sanghyup Kongsa Co. Ltd., a 24 hour service is available.

Cleaning Gangs: These are available and will clean hatches between cargoes. It is not possible to pump out hold residue whilst alongside. Cleaning gangs do not generally work at night so some pre-planning required if vessel to discharge and load at the same port. Work requires constant supervision. Labour for the gangs picked up off the street.

Immigration: All passports inspected: Shore passes issued for all crew members and these renewable every four or five days. No Curfew exists at Bukpyung or Mukho. It is necessary to pass through Customs Office and Immigration Office before leaving the port area. Again all Immigration Officials most helpful and friendly and eager to practise their English. Shore passes collected prior to sailing before obtaining clearance.

Air Freight: Little difficulty in obtaining spare parts, air freight etc., from other countries. Main Agents at Seoul arrange necessary customs clearance and transport.

Agency: Main Agents at Bukpyung: Chokwang Shipping Co. Ltd. They are sub-Agents for most of the main Korean Agencies. Their office is situated at Mukho. With the number of vessels entering and using Mukho and Bukpyung they are kept extremely busy, however all Agency work is eventually attended to and their services are quite satisfactory. Telex and telephone facilities exist at their office, most telexes are directed through the main Agents in Seoul, however a direct line can be obtained if necessary.

Other Agents: Shiwyang Shipping Co. Ltd., Mukho.

AUTHORITY: Donghai Port Authority (Mukho Branch Office).

AGENT: See "Busan" or "Inchon".

BUSAN (Pusan): 35.07 N. 129.02 E.

DOCUMENTS:

9 Cargo Manifests.
3 Transit Cargo Manifests.
8 Crew Lists.
8 Passenger Lists.
4 Passenger Baggage Lists.
4 Mail Lists (forms supplied by Agent).
5 Parcels Lists (forms supplied by Agent).
2 Arms-Narcotics Lists.
2 Tobacco Lists.
4 Currency Lists.
4 Stores Lists.
4 Crew Personal Effects Lists.

Immigration: All Seamen's Books examined and shore passes made out. These passes to be carried at all times when ashore. Strict curfew from midnight to 0400 hrs.

Certificates:

Derat Certificate or Exemption.

Inoculation and Vaccination Certificates for all crew members.

PILOTAGE: Professional Pilot service is available at Busan and contac can be made by telephone No. 44-1651. Necessary for arriving vessel t notify Pilots of arrival 24 hours in advance. VHF unavailable. Forma address is: 15 4-Ka, Jung Yang-Dong, Jung-Ku, Busan, Korea. Blas signal from vessel used to call Pilots. Pilot station positio Lat. 35° 05′ 58″ N., Long. 129° 02′ 37″ E.

Pilotage is compulsory and available day and night. Pilot boards of the entrance to the outer harbour. Pilot boat is white launch with pilo signals. Tugs cannot be employed unless Pilot is on board.

ANCHORAGES:

Designation	*Depth*	*Capacity*
S-anchorage	8-9 m.	4 vessels of 300-2,000 tons
E-anchorage	11-12 m.	6 vessels of 8,000-12,000 tons

RESTRICTIONS: Vessel having called at Communist ports withi 3 months of contemplated entry of Busan needs to obtain permission o authorities.

MAX. SIZE: No restrictions on length or breadth of a vessel. Draf should be less than 10 m. when vessel is alongside a pier, or 12 m when anchored at an anchorage.

HEALTH: Pratique granted to vessels anchored in a circular quarantine anchorage located in Outer Harbour. Quarantine Inspection can be arranged by day or night if sufficient advance notice given althoug regular hours are sunrise to sunset. Valid Cholera Certificates required Inoculations against typhoid and typhus may be required depending o prevalent conditions.

Quarantine Anchorages:
(a) Lat. 35° 05.14′ N., Long. 129° 07.34′ E.
(b) Lat. 35° 04.78′ N., Long. 129° 07.12′ E.

BERTHING: Normally in daylight only.

Pier	*Length of Quay* (m.)	*Depth of Water* (m.)	*Max. Size* (d.w.t.)
No. 1	407	8 – 9	8,000
			7,000
			500
No. 2	925	9 – 11	20,000
			10,000
			7,000
			5,000
			500
No. 3	1,145	9 – 10	10,000
			8,000
			5,000
			3,000
No. 4	1,308	9 – 10	10,000
			8,000
			7,000
			5,000
			3,000
			500
Central	646	9	8,000
No. 5			
(Container)	659	12.5	50,000
(Grain)	371	12.5	50,000
No. 6			
(Container)	1,262	12.5	50,000
No. 7			
(Coal)	127	10.5	6,000
(Scrap)	193	10.5	15,000
(Ore)	336	7.5 – 10.5	5,000
No. 8	535	10	15,000
	165	9	10,000
	130	7.5	5,000
	170	5	1,000
International	200	8.5	10,000
Passenger Terminal	120	7	3,000
			3,000
Coastal Terminal	575	6.5	1,000

STEVEDORES: On basis using full gangs per day, the capacity is 1,000 L/tons on general cargo; 1,200 L/tons on grains (Silo capacity, 6,000 – 12,000 tons); 1,500 L/tons on anthracite or coal (Pier No. 7, 3,000 – 8,000 tons).

CRANES: 6×30.5 ton capacity gantry cranes at the container terminal (No. 6).

TUGS: Tugs join an arriving vessel immediately inside the breakwater of Busan Harbour. Ship's own lines are used. Tugs can join large vessels outside the breakwater.

RADIO: Busan Harbour Radio Station: call sign, "6MF".

Vessels to submit ETA to Busan Port and Maritime Authority 1 day – 3 days before vessel's arrival, message also to include name of Owner and Agent. 3 hours before arrival vessel must communicate with Busan Port Control.

Radio-Telegraphy: Calling 500 kHz (operating throughout 24 hours), working 520 kHz, 512 kHz.

Radio-Telephony: Calling 2183.4 (operating throughout 24 hours), working 1881.4 kHz, 2320 kHz.

VHF: Busan Harbour Control, calling on Channel 16, working Channel 12, 14, 20 and 22.

RADAR: A radar station is sited in the Harbour Office to assist vessels approaching the port in poor visibility.

TANKERS: A T-head oil pier extends about 700 ft. on the S.E. side of the North Harbour. Least depth at pier head is 32 ft. Used by tankers servicing Korea Oil Corporation.

MEDICAL: Service is available at short notice.

FRESH WATER: Available. Rate of water supply, 80 L/t.p.h. Supplied at pier, or by barge.

FUEL: Availability on Bunker "A", Bunker "C", LRFO, LO and diesel oil.

FIRE PRECAUTIONS: Port has separate anchorage for tankers. Port requests for compliance with regulation not to contaminate waters with inflammable substances, e.g. petroleum products. Tankers are prohibited to clean tanks in port.

GANGWAY/DECK WATCHMEN: This service is available.

OPENING/CLOSING HATCHES: Usually carried out by stevedores.

CUSTOMS ALLOWANCES: One carton cigarettes or 1 lb. of tobacco, and 1 bottle wine or spirits allowed, each man.

IDENTIFICATION CARDS: Crew required to carry valid identification cards at all times.

CONSULS:

Consul, Republic of China	Tel: 23-3617
Consul, Japan	Tel: 43-9221

REPAIRS: All repairs can be effected.

DRY DOCKS:

Name of facility	*Capacity* *g.r.t*	*d.w.t.*	*Location*
Korea Ship Building Eng. Corp. No.1	3,000	4,000	Busan
Korea Ship Building Eng. Corp. No.2	20,000	30,000	Busan
Korea Ship Building Eng. Corp. No.3	80,000	150,000	Busan
Dae Sun Ship Building Corp.	2,000	4,000	Busan

REPATRIATION: World wide connections are available from Busan via Seoul or Tokyo.

AIRPORT: Airport is at Kim Hey about 28 km. from Busan. Japan-bound plane takes off every 3rd day.

TIME: Korean Standard Time. 9 hours ahead of GMT. No alterations during year.

HOLIDAYS: 1st-3rd January; 1st March; 10th March; 5th April; 6th June; 17th July; 15th August; 3rd October; 9th October; 24th October; 24th December; Buddhist Birthday 8th April (by the Lunar Calender), Choo Sug (Thanksgiving Day), 15th August (by Lunar Calender).

POLICE/AMBULANCE/FIRE: Police, 22-0863/2497; Ambulance, Busan Quarantine Station, 44-0119/0619.

TELEPHONES: "Port Telephone Service" operates for purpose of serving communication on board-shore.

SERVICES: Adjustment of compass available.

SHORE LEAVE: Allowed.

DELAYS: Port congestion is experienced occasionally.

AUTHORITY: Busan District Marine and Port Authority.

AGENT:

Busan: Tong Jin Shipping Service Co. Ltd., Room 301, Dongil Building, 84-10, 4-ka, Chungang-dong, Chung-ku, Busan, Korea. Tel: (051) 44-8001/3, 44-6794/5. Telex: K53443. Cables: "Eastship". Mailing Address: P.O.Box 39.

Seoul: Tong Jin Shipping Service Co. Ltd., 19th Floor, New Kal Building, 51, Sokong-dong, Choong-ku, Seoul, Korea. Tel: (02) 753-3352, 4994, 755-4023/5, 3043/4. Telex: K28222, K26561 "Tongjin". Cables: "Eastship". Mailing Address: C.P.O.Box 236.

CHINHAI (Jinhae): 35.07 N. 128.42 E.

SHIPMASTER'S REPORT: 1977.

LOCATION: Lat. 35° 09′ N., Long. 128° 40′ E. (Town); Lat. 35° 07′ N., Long. 128° 42′ E. (Pier).

DOCUMENTS:

8 Cargo Manifests.
8 Crew Lists.
4 Stores Lists.
3 Lists of Crew's Personal Effects. Tobacco/Spirits.
1 Vaccination List.
1 Health Declaration.
2 Currency Lists.

All documents are Standard Form. Although currency lists are required, there are no restrictions on importing or exporting either Korean or other currencies.

PILOTAGE: Pilotage not compulsory but recommended. Pilots are ordered through Agents and board vessel about 10 cables West of Kadok Do Island. VHF not available. No pilotage during night hours. Pilot boat is a wooden launch exhibiting International pilotage signals.

ANCHORAGE: Recommended 7 cables in Northwesterly direction off Tongdu Mal Lt. Ho. (Kadok Do.). Depth 25 m. Good anchorage in sand and mud. Quarantine anchorage is located about 1 mile N.N.W. from Chori Som Island.

RESTRICTIONS: Curfew effective from Midnight to 0400 hrs. daily.

HEALTH: Radio Pratique not available. Pratique granted after inspection.

RADIO: Busan Radio, call-sign "HLP".

TUGS: Required for mooring and unmooring. 2 tugs available of 600 h.p. and 1,000 h.p.

BERTHING: Chinhai is a principal naval base. Vessels drawing up to 17 ft. can be accommodated alongside inner harbour.

A buoyed channel with a depth of 36 ft. MHW leads from East of Madang So, to the only berth available for deep-sea vessels about 1.5 miles N.E. The berth, about 660 ft. in length, belongs to the Chinhai Chemical Co. and can accommodate vessels with a maximum draft of 34 ft.

Depth-sounding alongside showed at least 43 ft. 3 in. at HW. (officially 34 ft.). Distance from HW level to deck of pier 2.10 m. Bottom thick mud, and density 1025.

Vessels not exceeding 34 ft. saltwater draft berth 2 hours prior HW., and discharging commences immediately.

The berth is equipped with 1 grab only, and with conveyor-belt to nearby factory. The berth is used for discharging phosphate and potash, and very few general cargoes are handled. Discharge rate for phosphate is a maximum of 8,000 tons per 24 hours, with average of 6,200 tons.

Also see "Masan" – Bulk cargo facilities.

STEVEDORES: Work is continuous throughout 24 hours including Sundays, and without mealbreaks.

MEDICAL: Attention available.

FRESH WATER: Available ex-barge from Masan, minimum 200 tons at US $3.00 per ton.

FUEL: Available ex-barge from Masan.

CONSULS: Nearest at Busan.

REPAIRS: Minor repairs only.

GANGWAY/DECK WATCHMEN: Available and recommended.

REPATRIATION: Possible from Busan.

CUSTOMS ALLOWANCES: No restrictions. Stores remain unsealed.

TIME: GMT plus 9 hours. No alterations.

SHIPMASTER'S REPORT: February 1979.

PILOTAGE: Pilotage for the Port of Chinhae is compulsory, Pilots only available during daytime.

Pilots board in position Lat. 35° 02′ N., Long. 128° 47.5′ E. Ships waiting for a Pilot should anchor in the recommended anchorage situated North-east of the recommended track 306°/126° and extending from about 1 mile West to about 2 miles S.E. of Yon Do Island.

PROHIBITED ANCHORAGE AREA: A "Prohibited Anchorage Area" is situated between the existing prohibited area (approx. position 35° 00′ N., 128° 45′ E.) and the Western shore of the Kadok To Island.

The Northern limit of the "prohibited anchorage" area consists of a line running from position Lat. 35° 01.4′ N., Long. 128° 47.2′ E. in a 070° direction to the Western shore of Kadok To Island.

The Southern limit consists of a line running from Lat. 34° 58′ N., Long. 128° 47.3′ E. in a 061° direction to the Southernmost point of Kadok To Island.

According to the naval authorities, anchoring within the above mentioned area is prohibited because of existing submarine cables.

BUOYS: The red conical Buoy "No. 14" in position Lat. 35° 04.9′ N., Long. 128° 42.1′ E. is reported non-existent.

The red conical lightbuoy in position bearing 135° and 8.5 cables from the above mentioned Buoy No. 14 is also reported non-existent.

The black conical lightbuoy Gp. Fl(2) 6 sec. in position Lat. 35° 04′ N., Long. 128° 42.8′ E. is to be moved 4 cables in a 043° direction.

AUTHORITY: Masan District Marine Bureau.

AGENT: See "Busan" or "Inchon".

DAIPORI (Daepo): 38.10 N. 128.36 E.

Vessels bound for Daipori to load iron ore must first call at Mukho for quarantine and customs clearance.

Pilotage from Mukho to Daipori, distance of 50 miles, is not compulsory, but recommended.

INCHON: 37.28 N. 126.37 E. **(See Plan Book)**

DOCUMENTS:

Arrival:

8 Crew Lists.
4 Cargo Manifests.
4 Stores Lists (Bond and shop).
4 Crew Customs Declaration.
4 Narcotics List.
4 Arms and Ammunitions List.
4 Ports of Call Lists (last 90 days).
1 Vaccination List.
2 Money Lists.
4 Passenger Lists (Marked Nil).
Derat Certificate or exemption.

All the above lists are typed on ship's plain paper.

Coasting on Korean Coast: At each port after the first, one requires the same papers but only 2 copies of each, with the exception of the Crew List, of which 5 copies are required.

Vessels with hazardous cargo must complete application to carry hazardous cargo and an application for anchorage of hazardous cargo vessel.

PILOTAGE: There are 2 Pilot stations for entering Inchon:

Ando: At the Ando Light 38 miles off Inchon, position Lat. 36° 58′ N., Long. 126° 10′ E. located in entrance to Channel approaching Inchon from the Yellow Sea. 48 hours advance notice to Agent required for vessels requesting to meet Pilot at Ando, customary boarding point for deep-draft vessels.

Palmido: Pilotage from Palmido to Inchon or Inchon to Palmido is compulsory. This pilot station is at Palmido Island and Light, 8 miles off Inchon, position Lat. 37° 21′ N., Long. 126° 31′ E.

ANCHORAGE: Anchorage is divided into 5 large areas according to cargoes of the vessels.

A 1 – 5 (Logs, pulp)
B 1 – 6 (Ships waiting for entry to the inner harbour)
B 7 – 10 (Oil tankers and ships unloading scrap. Coal)
C 1 – 8 (Small tankers, LPG ships)
D 1 – 3 (Logs)
E 1 – 5 (Ships waiting for entry to the inner harbour)

RESTRICTIONS: A peculiarity of Inchon Port is the wide tidal range, i.e. max. 30 ft. difference between the low and high tides. Because of the extreme tidal range in Inchon Harbour and the strong tidal currents which result, the importance of maintaining strict surveillance of the vessel's mooring lines is emphasised. In this regard, the ship's officers and crew must be diligent in the performance of their duties. All vessels to discharge or load commercial cargoes should invariably obtain prior permission for berthing/anchoring from the Inchon District Maritime and Port Authority at least 24 hours before arrival, then proceed to a nominated anchorage in the stream under direction of a compulsory Pilot.

Lock Particulars:

	For 50,000 d.w.t. Vessels	*For 10,000 d.w.t. Vessels*
Lock Chamber	1 base	1 base
Total length	381.0 m.	288.25 m.
Usable length to		
Inner gate	280.0 m.	183.00 m.
Outer gate	310.0 m.	208.00 m.
Width	36.0 m.	22.50 m.
Height from sill	18.5 m. from sill	18.50 m. from sill
Height	19.0 m. from bottom	19.00 m. from bottom
Number of gates	3 sets	3 sets
Length of gates	38.0 m.	24.50 m.
Width of gates	8.3 m.	6.40 m.
Height of gate	18.5 m.	18.50 m.
Weight per gate	1,050 tons	590 tons
Time required for opening-closing	5 minutes	3 minutes

HEALTH: The Quarantine Anchorage is located outside the harbour in position Lat. 37° 22′ 37″ N., Long. 126° 32′ 06″ E. A vessel which sailed from an "Affected Zone" and not passed 10 days thereafter is compelled to receive 24 hours quarantine before entering the discharging anchorage. Quarantine is available only for the period from sunrise to sunset.

RADIO: Inchon Radio.

	Frequency	
Call Sign	*Calling*	*Working*
6 MF3	MF 500 kHz	MF 512 kHz 520 kHz
or		
Inchon Harbour Control	VHF Channel 16	VHF Channel 12 Channel 14 Channel 20 Channel 22

TUGS: There are 17 tugs (1,000 h.p. – 3,200 h.p.). 2 – 3 tugs are required for each vessel.

All tugs are operated by private companies.

BERTHING: 32 berths in Inner Harbour.

Pier	*Length of Quay* (m.)	*Depth* (m.)	*Capacity* (d.w.t.)
No. 1	1,185	7.5 – 8.0	2,000 4,500 8,000
No. 2	1,442	9.5 – 12.0	8,000 20,000 30,000
No. 3	1,250	9.5 – 12.0	8,000 10,000 20,000
No. 4	1,160	10.0 – 13.0	10,000 50,000
No. 7	905	10.0 – 12.0	50,000

CRANES: 3 Gantry Cranes (30 ton class), 4 Transtainers (30 ton class), 3 Floating cranes (20 ton – 100 ton class), 101 land-based cranes (10 ton – 100 ton class).

BULK CARGO FACILITIES: No. 7 Pier is exclusively used for grain by 2 silo operators. Handling capacity is 4 million tons per year and storage capacity is 326,000 tons.

SPECIALISED CARGO HANDLING FACILITIES: No. 4 Pier is used exclusively for containers. It has 2 container yards which are capable of storing 15,457 TEU.

TANKERS: There are six private companies handling oil, LPG and liquids. Maximum quantity of LPG loaded in a single operation is 1,500 tons.

Kyung In Energy Co. Terminal:

Designed for 50,000 d.w.t. over 50 ft. depth at LW. The marine terminal is situated at Lat. 37° 30′ 12″ N., Long. 126° 36′ 19″ E. The face of the dolphin fendering system is on a bearing of approximately 347° true.

The vessel will be berthed alongside the main and secondary berthing dolphins with the vessel's hull against the fenders, which are an integral part of the dolphins. All the dolphins are equipped with electric capstans and quick-release mooring hooks. A navigation light and fog horn is located on the Southern Exterior Mooring Dolphin (Exterior Mooring Dolphin No. 1). A navigation light is also located on Exterior Mooring Dolphin No. 2 on the N. side of the terminal facilities. When a vessel of the 50,000 d.w.t. class is moored to the terminal, the bow and stern lines will perform the function of the breast lines. Therefore, the spring lines must be led out through the chocks on board which will provide sufficient leads ahead and astern to restrict the movement of the vessel along the face of the dolphins. In this regard, due consideration must be given to the rise and fall of the tide.

Loading Arms: There are 3 "Continental-Emsco" loading arms situated on the loading platform. The one to the extreme North and the middle one of the three are for the discharge of crude oil. Both are fitted with 16 in. swivel connections having 150 pound flanges. The loading arm to the extreme South is for the loading of naphtha and is fitted with a 12 in. 150 pound flange. The loading arms are designed for a working pressure of 100 p.s.i.

During the connecting and disconnecting of the loading arms to the vessel, the loading arms will be manipulated and positioned by shore personnel. During the period of time when the loading arms are connected to the vessel's manifold, they will be in the "float" position and will be self-adjusting.

General Information:

Under no circumstances should any member of the ship's crew activate or operate the controls for the loading arms. Authorised shore personnel will perform this function.

The "Continental-Emsco" loading arms will tolerate only a minimum amount of transverse movement by the vessel in either direction. In other words, the movement of the vessel along the face of the dolphins is restricted. For this reason, it is mandatory that the vessel be kept in position, and that the mooring lines be properly tended. It is the responsibility of the vessel to maintain sufficient deck crew on duty to properly tend the mooring lines, and to ensure that the vessel maintains proper position relative to the loading arms.

Discharging Crude Oil:

The distance from the loading platform to the tanks is approximately 2.2 km. (1.4 miles). A 30 in. block valve is situated near the location where the trestle joins the island causeway. Block valves are also installed in the pipe-line system near the inlet to each of the crude oil storage tanks.

There are three crude oil storage tanks on Yul Do Island. Each has a capacity of 200,000 barrels. The tanks are 48 ft. in height with an overflow at 46 ft. There are no check valves in the crude oil pipe-line system. Thus, the vessel must take precautions against back-filling due to head pressure on the system.

It may be necessary to discontinue the discharge of crude oil when changing from one tank to another ashore. The vessel will be given adequate notice for the stoppage of the ship's cargo pumps.

Ballast:

It is unlawful to discharge dirty or oily ballast water into the waters of Inchon Harbour. Severe penalties may be invoked against the vessel by the Republic of Korea in the event of pollution of harbour waters.

The centre loading arm provides a dual function. It is used for discharging ballast from the vessel as well as for the discharge of crude. The ballast flows through a 12 in. pipe-line to the ballast storage tank on Yul Do Island. This tank has a capacity of 30,000 barrels, and is situated about 1.1 km. (0.68 miles) from the loading platform.

Loading Naphtha:

Naphtha is stored in two mainland storage tanks each of which has a capacity of 125,000 barrels. Three pumps provide the flow for shipping naphtha. Each pump has a capacity of 1,600 g.p.m. The pumps are on independent circuits. Thus, the loading rate of the naphtha can be governed by the number of pumps used.

The pipe-line from the pumps to the loading platform is 18 in. and is reduced to 12 in. on the loading platform. A block valve is located in the 18 in. pipe-line near the point where the island causeway joins the trestle. Another block valve is provided in the 12 in. pipe-line on the loading platform.

The pumps which are used for shipping naphtha can be stopped from the Marine Terminal Loading Platform, but they must be started from the mainland. Under normal conditions the vessel's deck officer on watch should give the terminal personnel 10 minutes notice prior to requesting that the loading rate be reduced, and the same notification prior to the completion of loading. As previously stated, the pumps can be stopped from the loading platform in case of an emergency.

The approximate distance from the mainland naphtha storage tanks to the loading platform is 5.4 km. (3.35 miles).

Regulations:

1. Sufficient number of crew members are to be on duty at all times to properly tend the mooring lines and ensure that the position of the vessel is maintained alongside of the dolphins.
2. Except in the case of an emergency, the deck officer on duty shall give the terminal personnel at least 10 minutes notice prior to changing the loading rate of the naphtha, and at least 10 minutes notice prior to the completion of loading cargo.
3. Under no circumstances is the vessel's main propulsion engine to be disabled, or are any repairs to be undertaken while the vessel is moored to the marine terminal.
4. The vessel's fire-fighting equipment is to be kept ready for immediate use. A sufficient number of hoses shall be led out forward and aft to provide full deck coverage.
5. Lights must be provided by the vessel to illuminate the water area in the vicinity of the bow, stern and off-shore side.

6. Smoking will be permitted in such *Interior* spaces as may be designated by the vessel's Master. However, smoking will not be permitted on any open deck areas.
7. The loading of ship's stores and supplies will not be permitted during the time ballast is being discharged, or naphtha is being received by the vessel.
8. Ullage hole screens are to be used at all times while bulk oil transfer operations are in progress.
9. Galley ranges, unless electric, are not to be used while the vessel is loading naphtha.
10. Except for the period of time actually required for passengers to embark or disembark from a launch, no boats, launches or vessels will be permitted to moor alongside a vessel which is berthed at the marine terminal.
11. Safety practices which are common to marine terminals on a world-wide basis will apply.

Honam Buoys: Lat. 37° 29′ 00″ N., Long. 126° 36′ 03″ E., draft acceptable 30 ft., at East side of A–3 anchorage. This berth is the private facility of the Honam Oil Refinery Co. (joint company with Caltex) for discharge of their own petroleum products. Consisting of 4 mooring Buoys and sub-marine pipe-lines.

Union Oil Terminal, 42 ft. depth alongside. Berthing/unberthing in daytime slack water only.

MEDICAL: Launch is provided in emergency call to evacuate sick men. Modernised hospital is available.

STEVEDORES: There are 16 stevedoring companies with 105 fork-lifts and 17 cranes. Annual cargo handling capacity is 11,625,000 tonnes.

DENSITY: Varies between 1022 and 1024.

FRESH WATER: Can be supplied by lighter, max. quantity 500 tons.

FUEL: Available by barge only.

CUSTOMS ALLOWANCES: One carton cigarettes or 1 lb. of tobacco, and 1 bottle wine allowed, each man.

IDENTIFICATION CARDS: Crew required to carry valid identification cards at all times.

REPATRIATION: Facilities for crew changes or repatriation.

GANGWAY/DECK WATCHMEN: Ship security guard service is supplied by 2 companies.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CONSULS: None locally. Many Consuls and Embassies in Seoul, 50 minutes by train from Inchon.

REPAIRS: Deck and engine repairs possible by Inchon Shipbuilding Company.

AIRPORT: Regular flights worldwide from new international airport.

POLICE/FIRE/AMBULANCE: Police (883) 0011, Fire (882) 4069, Ambulance (73) 9000 (Inchon City Hospital).

TELEPHONES: Portable communication facility is available.

TIME: Korean Standard Time. 9 hours ahead of GMT.

HOLIDAYS: 1st – 3rd January, 1st March, 5th April, 6th June, 17th July, 15th August, 1st October, 3rd October, 9th October, 25th December.

GENERAL: Tide condition is critical, swift currents (high tide: 9 m. to 10 m.) special attention is required.

ACCOMMODATION LADDER: Essential for Port Officials on entry. Also for tanker berth no access allowed through plant. Rig on port side.

SHORE LEAVE: Launch service provided by 3 private companies.

DELAYS: Can be caused by bad weather.

DEVELOPMENTS: New bulk terminal (No. 8 Pier) to handle scrap and various bulk cargoes such as salt and sugar, to be built by the end of 1986.

Coal Terminal to be built by the end of 1985 to accommodate vessels up to 60,000 d.w.t. Length of berth 240 m., depth 16 m.

SHIPMASTER'S REPORT: 1974.

Approaches: Inchon, the port for Seoul, the capital of South Korea, is situated in Lat. 37° 28′ 20″ N., Long. 126° 37′ 09″ E., and is approached from the South through the Yellow Sea. From Kyoknyolbi Do (Clifford Is.) LH. a course should be set to pass 1 mile North of An Do LH., in the vicinity of which the pilot boat will be waiting. Pilotage is not compulsory from this point but is recommended and the Pilot should be ordered at least 48 hours before arrival through the Agent, in Inchon.

From An Do, vessels proceed via the Dong Soodo (East Channel) which is very winding and narrow in places. All lighthouses now show lights in accordance with B.A. Charts and Publications (1984).

Pilotage is about 38 miles to the Inchon Anchorage for deep-sea vessels, about 3 hours steaming. The Pilot was good even in thick fog, and all Pilots seem to speak reasonable English. The pilot launch is fitted with VHF.

The anchorage is extensive, with room for about 30 ocean-going vessels, holding ground is good and no trouble was experienced in currents of 5 knots, although even stronger currents are experienced at Spring tides.

The Port: Can be divided into three sections according to location and function; the Inner Dock, Outer Harbour and Northern shoreline.

The Inner Harbour basin is presently operated for the accommodation of cargo ships up to 50,000 d.w.t. The Outer Harbour, of new construction, is largely for coastal and fishing vessels of less than 500 tons, and is located just outside and to the S.W. of the Inner Basin.

The Northern shoreline, North of the closed basin has unloading facilities at many private plants. These are lighter berths.

With the completion, in May 1974, of the new lock system and second tidal basin, the berthing facilities in the port have changed the cargo handling capacity from 1,420,000 tons to 6,270,000 tons per year by providing 3,820 m. length of quay and container berths.

Within the Inner Harbour is the first tidal basin (the older lock system dating from 1923). This basin is accessible through the new lock system.

Equipment in Use (August 1974): Tugs, 2 of 2,000 h.p.; 3 of 3,600 h.p.; Floating cranes, 1 of 75 tons capacity; 1 of 30 tons capacity; Container crane, 1 of 30 tons capacity.

Bulk Grain (1984): Pier No. 7: Jetty berths Nos. 71 – 72: 2 discharge towers, 1 conveyor belt, 1 ship at a time can be handled, capacity 800 t.p.h.

Pier No. 7: Jetty berths Nos. 73 – 74: 2 discharge towers (simporters), 1 conveyor belt, 1 ship at a time, capacity 22,000 tons per day.

However, due to congestion of cargo in the elevators the maximum capacity on both jetties is reduced to 6,000 – 8,000 tons per day each.

Additional Equipment Planned: Tug boats, 4 of 7,000 h.p. Floating cranes, 1 of 100 tons capacity; 1 of 70 tons capacity. Container cranes, 4 of 35 tons capacity.

Further expansion is planned for the Northern side of the inner harbour. When completed there will be an additional 800 m. of quay at Pier 6 and 780 m. at Pier 8. This will add a total of 10 new berths for vessels from 5,000 to 50,000 d.w.t.

The Port of Inchon is administrated, managed and operated by the Government, represented by the Inchon District Marine Bureau (IDMB) in the Ministry of Transportation.

Decisions on administration and operation of the port, particularly to daily activities, are made by the Director, District Marine Bureau of the above Ministry.

Port activities, such as cargo in transit sheds, or in storage and port facilities of Government property, are in the custody of the Association of Port Management. This Association is formed from members of the various port users associations and was formed in 1972, under the control of the Minister in charge of Port Operations.

Port service companies and Stevedoring companies are still privately owned.

Repatriation and relief of crew members was made without any apparent difficulty. Flights to and from the U.K. being routed through Tokyo.

SHIPMASTER'S REPORT: 1975.

The Ando pilot vessel is equipped with VHF Channel 16. If berthing in the tidal basin it is necessary to use vessel's sewage tank or sanitary tanks provided from ashore. Immigration require 2 copies of crew list forwarded before arrival to Agents, also require ports of call list for previous 3 months. If any crew member is caught smuggling in South Korean ports the vessel is liable to be detained indefinitely.

AUTHORITY: Inchon District Maritime and Port Authority, 1, 7Ga, Hang-Dong, Jung-Gu, Inchon, 160 Korea. *Tel:* (132) 882-0044-7. *Telex:* Impa 23380. *Contact:* Kyu Jin Whang, Director General.

AGENT: Tong Jin Shipping Service Co. Ltd., 6th Floor, Kongseong Building, 4, 3-ka, Chungang-dong, Chung-ku, Inchon, Korea. Tel: (032) 72-3210, 72-3028/9. Telex: K23209 Tongjin. Cables: "Eastship". Mailing Address: P.O.Box 48.

KUNSAN (including Changhang): 35.55 N. 126.45 E.

The Port of Kunsan is situated on the Southern mouth of the Kum River which flows into the Yellow Sea, and North Changhang.

DOCUMENTS:
6 copies Report (Entry/Departure).
6 copies Crew List.
6 copies Passenger List.
2 copies Crew Personal Effects List.
3 copies Passenger Luggage List.
2 copies Store List.
9 copies Manifest (Dis./Loading) only.

NOTICES: All vessels bound for Korean ports should give an ETA to the local Agents 27 hours prior arrival. This is essential to enable the Agents to notify the Port Authorities and arrange Pilot if necessary.

RESTRICTIONS: Vessels should enter during daylight hours only. Many small Korean fishing and cargo boats in this area display dim navigation lights or none at all at night. Pilot is not compulsory but all vessels calling at this port recommended employ a Pilot in view of the hazardous channel and tidal difficulties. Controlling depth 8 ft. at Bar. Keel clearance of 2 ft. required.

PILOTAGE: The pilot station is situated at the Southern side of Piun Do (Hiyo To) Island the correct position of which is at Lat. 35° 56′ N. and Long. 126° 27′ E.

The boarding point near Piun Do is about 14 miles from Kunsan. Pilot to be ordered at least 24 hours in advance. Pilots cannot board in rough weather. Due to constantly changing bottom conditions, vessel should not attempt to enter without Pilot.

ANCHORAGE: Outer anchorage about 5.5 miles West of Kunsan for vessels drawing up to 28 ft.

Inner anchorage off Kunsan suitable for vessels of 21 ft. draft.

RADIO: Kunsan Radio, call sign HLN operating on 500 and 484 kHz.

MAX. SIZE: Draft 18 ft. to 27 ft. dependent on height of tide.

TUGS: 5 tugs with respective capacity of 300 h.p. (1) 150 h.p. (2) and 80 h.p. (2) are available. 1 floating crane with capacity of 30 tons owned and managed by the Korea Dredging Corp. is available.

BERTHING: The port is controlled by Kunsan District Marine Bureau and all vessels come under jurisdiction of Kunsan Custom House. The anchorages in stream inner harbour can accommodate 1 or 2 vessels less than 1,000 gross tons, and outer anchorage (Yubudo Anchorage) accommodates 1 ocean-going vessel drawing about 28 ft. There are 5 pontoon piers (3 for Kunsan and 2 for Changhang) each of which can accommodate an ocean-going vessel with maximum draft of 27 ft.

STEVEDORES: There is 1 stevedoring company with 14 wooden barges, 3 steel barges and 3 tug boats. Discharging capacities: average records per day of 24 hours: coal 1,500 tons; grain and wheat 1,600 tons; fertilizer 1,300 – 1,400 tons; cement 1,000 – 1,100 tons; lauan log 500,000 B/F. Daytime only.

MEDICAL: Crew members should be in possession of health certificate showing vaccinations for typhoid. In case health certificate has expired, the person(s) will be vaccinated/inoculated by a quarantine doctor.

CURFEW: In Korea the curfew is still effective from midnight to 0400 hrs. every day.

TIME: Korean Standard Time, GMT plus 9 hours.
HOLIDAYS: Public Holidays – New Year (January 1-3); Independence Movement Day (March 1); Labour Day (March 10); Arbor Day (April 5); Memorial Day (June 6); Constitution Day (July 17); Liberation Day (August 15); Nation's Foundation Day (October 3); National Alphabet Day (October 9); United Nations Day (October 24); Christmas Day (December 25). (Can be worked if requested.)

Local Holidays. Work cannot be carried out on Lunar New Year's Day and the Moon Festival, about 15th August.
SHORE LEAVE: Crew shore passes will be issued by Port Immigration Office.
AUTHORITY: Kunsan Maritime Bureau.
AGENT: See "Busan" or "Inchon".

MASAN: 35.11 N. 128.35 E.

PORT LIMITS: *Port Boundary:* 35° 09′ North.

Arrived ship: A vessel is considered as "arrived" when in the Quarantine Anchorage.

Laytime: (Subject to Charter Party). Generally commences at 0800 hrs. if Notice of Readiness tended p.m. day before and 1300 hrs. if tended a.m. day of arrival.
DOCUMENTS:
11 copies of Crew Lists (inward and outward).
3 copies of Personal Effects.
3 copies of Store Lists
3 copies of Bonded Stores Lists.
11 copies of Passenger Lists.
3 copies of Narcotics Lists.
3 copies of Arms and Ammunition Lists.
4 copies of Manifests (entry clearance only, excluding manifest for consignee, stevedore, checkers firm and other related firms)
2 copies of Bill of Lading.
5 copies of Entry Report (only entry clearance).
Ship's Certificates and Seamen's books or passports.
PILOTAGE: Kaduk Pilot Station: Lat. 35° 02′ N., Long. 128° 47′ E. ETA required 24 hours prior to arrival.

Two pilot boats "An Se" and "Be Yun". VHF to be installed in pilot boats.

At the present time contact with Pilot made through Agent or Masan Harbour Control on VHF. Vessels to display usual pilot signals.

In case of bad weather vessels wait for Pilot at the pilot station.
ANCHORAGE: Mooring capacity at anchorages: A-1, A-2, A-3 Depth 30 ft.; A-4, A-5, A-6 Depth 24 ft.; A-7, A-8 Depth 23 ft. Quarantine Station Depth 36 ft.
RESTRICTIONS: Should take Pilot's guidance as a Korean Navy base is located very close to Masan port.
MAX. SIZE: 30,000 g.r.t. with 33 ft. draft.
HEALTH: Crew members should be in possession of health certificate showing vaccination for typhoid. If the health certificate has expired, the person(s) will be vaccinated/inoculated by a Masan National Quarantine Doctor.
RADIO: Seoul Radio.
VHF: VHF at Masan District Maritime and Port Authority (Call "Masan Harbour Control").
RADAR: None.
TUGS: Two tugs, "Chung Ryong" (Government owned) 1,000 h.p. and "Yong Ma" (Private) 2,000 h.p. Generally, ship's lines used and tugs join vessel at Quarantine anchorage.

BERTHING:	*Depth (m.)*	*Length (m.)*	*Max. Size*	*No. of Berths*
Pier No. 1	8.0	445	8,000	2
Pier No. 2	5.0	385	500	2
Pier No. 3	11.0	210	20,000	1
	11.0	210	20,000	1
Chang Won Pier	11.0	210	20,000	1
Electric Power Plant Pier	6.5	115	3,000	1
Central Lighters Wharf	1.2	1,022	—	—

CRANES: Cranes with capacity 40 – 60 tons expected to be installed at Chang Won Pier. Cargo operation is generally by ship's own gear.
BULK CARGO FACILITIES: There are two bulk cargo piers (No. 1 and 3), average discharge rate is 1,500 – 1,800 tons (0800 – 2100 hrs.) a day, and sulphur is generally discharged at port of Chinhae, where there is a chemical firm.

Length of pier: 210 m. Depth (low tide) 11 m. and one gantry crane (capacity 6 tons bucket) discharging rate is approximately 5,000 tonnes a day (24 hours).
SPECIAL CARGO HANDLING FACILITIES: None.
BRIDGES: None.
STEVEDORES: Advise stevedores number of hatches, number of derricks and capacity, and supply stowage plan on arrival.

Average discharging rate by commodities: (0800 – 2100 hrs.)

Coal	1,500 tonnes
Grain	1,500 tonnes
Wire Rods	700 tonnes
General Cargo	700 tonnes
Others	600 tonnes

MEDICAL: Masan National Quarantine Office is responsible for any matters relating to vaccinations. Master should prepare a medical report form for patients visiting Masan hospital.
TANKERS: No facilities (Transhipment if any, carried out by lighters).
FRESH WATER: Available at Masan.
FUEL: Available by grades.
FIRE PRECAUTIONS: One fire boat stands by 24 hours a day at Central Pier.
CONSULS: None.
REPAIRS: Available anytime (two companies).
DRY DOCKS: 3 minor dry docks.
SURVEYORS: Various survey firms located at Masan, but not Lloyd's or ABS.
HATCHES: Generally, first opening and last closing is by ship's crew and others by stevedores.
GANGWAY/DECK WATCHMAN: Available at Masan.
CUSTOMS ALLOWANCES: Daily consumption quantity only.
CARGO GEAR: Using of cargo gear (utilization) depends on negotiation.
REPATRIATION: Possible. Application for transferring and reason required. Agent's guarantee letter (for Crew) also required.
AIRPORT: Kimhae Airport: 70 km. from Masan. Kimpo Airport: 436 km. from Masan. Regular services.
TIME: Korean Standard time GMT plus 9 hours, no alteration made to clock during the year.
TELEPHONE: Not available on board vessels.
SERVICES: Security guard, garbage disposal, line handling, shoring, launch, laundry and provision supply available at Masan.
POLICE/AMBULANCE/FIRE: Telephone Numbers:

Police (Foreign Section) 2-1206; Fire 2-1334; Ambulance 2-1151.
HOLIDAYS: New Year's Day (January 1st); New Year's Day (by Lunar calendar) (January 1st), Independence Movement Day (March 1st); Labour Day (March 10th); Arbor Day (April 5th); Buddha's Birthday (Lunar calendar) (April 8th); Children's Day (May 5th); Memorial Day (June 6th); Constitution Day (July 17th); Indpendence Day (August 15th); Armed Forces Day (October 1st); National Foundation Day (October 3rd); National Alphabet Day (October 9th); Christmas Day (December 25th).

Cargo operations on the above days depend on negotiations.
IDENTIFICATION CARDS: Shore pass available from Immigration.
DELAYS: There are no delays for berthing or bunkering.
GENERAL: ETA to authorities concerned no later than 24 hours before arrival.
SHORE LEAVE: Crew shore pass issued by Immigration and has to be extended every 120 hours.
DEVELOPMENTS: A large container yard to be built.
AUTHORITY: Masan District Maritime & Port Authority.
AGENT: See "Busan" or "Inchon".

MOKPO: 34.37 N. 126.23 E.

DOCUMENTS:
6 copies Report (Entry/Departure).
6 copies Crew List.
6 copies Passenger List.
2 copies Crew Personal Effects List.
3 copies Passenger Luggage List.
2 copies Stores List.
9 copies Manifest (Dis./Loading only).
PILOTAGE: Pilots stationed at Kasado Island, 34° 27′ N. 125° 02′ E. 30 miles from Mokpo. 24 hours notice to Agent required to arrange Pilot. Although not compulsory, vessels strongly recommended not to enter without Pilot.
NOTICES: All vessels bound for Korean ports should give an ETA to the local Agents 27 hours prior to arrival. This is essential to enable the Agents to notify the Port Authorities and arrange a Pilot if necessary.
RESTRICTIONS: Mokpo is located at the South-Western end of the Korean peninsula. The port is at the mouth of the Yungsan River which flows through the Yungsan Peninsula. Kasako Island protects this port from heavy winds and swell. The Yungsan River provides 5 anchorages where 5 vessels of Liberty type can berth at a time.

Tide Information: max. tide level at high water 4.5 m.; min. tide level at high water 2.8 m.; average tide level at high water 3.5; Max. tide level at low water 0.5 m.; Min. tide level at low water 1.3 m.; Average tide level at low water 0.7 m.
ANCHORAGE: Five anchorages in depths from 11 m. to 20 m. Anchorage Nos. 2, 3, and 4 are better than No. 1 and 5 for discharging cargo because No. 1 is sometimes very dangerous due to strong tidal currents.
RADIO: Mokpo Radio. Call sign HLM operating on 500 and 484 kHz.
VHF: Pilots on Channels 12 and 16.
TUGS: Three tugs available, up to 150 h.p.
BERTHING: Sam Hak Do Pier, length 168 m. and width 18 m., where only one 8,000 ton ocean-going vessel can operate in 13 m. depth.
STEVEDORES: There are 3 stevedoring companies with 28 wooden barges (1,680 tons), 7 steel barges (1,200 tons) and 3 tug-boats.
MEDICAL: Crew members should be in possession of Health Certificate showing vaccinations for typhoid. In case the Health Certificate has expired, the person(s) will be vaccinated/inoculated by a quarantine doctor.
FRESH WATER: Available at rate of 150 tons per day. 24 hours notice required.
CURFEW: In Korea, the curfew is still effective from midnight to 0400 hrs. every day.
TIME: Korean Standard Time, GMT plus 9 hours.
HOLIDAYS: Public Holidays; New Year (January 1st-3rd); Independence Movement Day (March 1st); Labour Day (March 10th); Arbor Day (April 5th); Memorial Day (June 6th); Constitution Day (July 17th); Liberation Day (August 15th); Nation's Foundation Day (October 3rd); National Alphabet Day (October 9th); United Nations Day (October 24th); Christmas (December 25th). Work can be arranged on all above holidays. Local Holidays; No work can be done on Lunar New Year or on the Moon Festival about August 15th.
SHORE LEAVE: Crew shore passes will be issued by Port Immigration Office. Extension of shore passes should be made every 72 hours.
DEVELOPMENTS: Berth under construction, completion 1984. Max. LOA 200 m., max. draft 10.5 m.
AUTHORITY: Mokpo District Marine Bureau.

MUKHO: 37.33 N. 129.07 E. (See Plan Book)

PORT LIMITS: The port limit is established by lines joining the following points:

A.	Lat: 37° 33′ 12″ N.	Long: 129° 07′ 25″ E.
B.	Lat: 37° 33′ 12″ N.	Long: 129° 08′ 12″ E.
C.	Lat: 37° 32′ 00″ N.	Long: 129° 08′ 23″ E.
D.	Lat: 37° 32′ 00″ N.	Long: 129° 07′ 02″ E.

DOCUMENTS:
6 Crew Lists.
6 Passenger Lists (In case of any passenger aboard)
3 Store Lists
3 Personal Effect Lists
3 Cargo Manifests (In case of any cargo on board)
2 Port Itinerary Reports (For the last 6 months)

PILOTAGE: Compulsory and 3 licensed Pilots are available from 0500 hrs. to 2200 hrs., and usually join ship in position Lat. 37° 32′ 30″ N., Long. 129° 08′ 25″ E.

VHF Radio is available for contacting pilot station.

ANCHORAGE: Outer Harbour offers anchorages for the vessel awaiting docking order with a rocky and sandy bottom.

Vessels lying anchored in this anchorage which is open roads, are recommended to pay attention to weather conditions. The depths vary from 9 m. to 26 m.

RESTRICTIONS: Pilot for entering inner harbour is available from 0500 hrs. to 2200 hrs. due to close of port and curfew.

The max. available depth of inner harbour is 8.5 m. or 28 ft. The max. tidal range is 0.4 m.

MAX. SIZE: The max. permissible length, breadth and draft for entering inner harbour is as follows:

Length – 180 m. Breadth – 25 m. Draft – 8.5 m.

HEALTH: Pratique is automatic. For Pratique it is necessary to prepare the following documents: Yellow cards. Derat Certificate and/or Derat Exemption Certificate. In the event of any suspected disease or fever on board it should be reported without delay to Quarantine Station and/or Agent in Mukho.

RADIO: Shore Radio Stations: Seoul Radio, Kangreung Radio, Busan Radio and Mokpo Radio.

Mukho harbour Network 6MF2.

VHF: Call sign "Mukhoradio" Channel 16 for calling station. Channel 26 for communication.

RADAR: None.

TUGS: 2 tugs of 1,000 h.p. each equipped with their own towline are available.

BERTHING: *No. 1 Pier.* (Exclusively for loading Coal/Graphite in bulk).

Berth A: Exclusively for loading Coal/Graphite in bulk. Length 100 m. Available draft at LW 7.5 m. 2 lines of belt conveyor and 2 loaders, height above HWL. 7 m. Loading rate per hour per loader 300 tonnes.

Berth B: Exclusively for loading Coal/Graphite in bulk. Length 110 m. Permissible draft at LW 8 m. 2 lines of belt conveyor and 2 loaders, height above HWL. 7 m. Loading rate per hour per loader 400 tonnes.

No. 2 Pier: Exclusively utilized for Naval and Coast Guard ships. Length 140 m. Depth available 4 m.

No. 3 Pier: For loading bulk cement, bagged cement and cement clinker in bulk, and loading/unloading general cargoes. Length 330 m. Available draft at LW 8.5 m. or 28 ft. 1 line of conveyor and 1 loader (air slider) for loading bulk cement. 2 lines of belt conveyor and 2 loaders for loading bagged cement. 1 line of belt conveyor and 1 loader for loading cement clinker in bulk. Available height above HWL 8 m. Loading Rate: Bulk cement 400 tonnes/p.h. Bagged cement 1,500 tonnes per day per loader. Cement clinker 350 tonnes/p.h.

Loading rate for General Cargo as follows:

Average discharging rate per hour/gang:

Steel material	Various	30 tonnes
Machinery	Case	30 tons
Grain	Bulk	25 tonnes
Gypsum	Bulk	25 tonnes
Coke	Bulk	15 tonnes
Fertilizer	Bag	20 tonnes

Average Loading Rate per hour/gang:

Iron Ore	Bulk	20 tonnes

No. 4 Pier: For loading bulk cement and loading/unloading general cargoes. Length 150 m. Permissible draft at LW 7.5 m. 1 line of belt conveyor and 1 loader (air sliding chute) for loading bulk cement. Height above HWL 8 m. Loading Rate: Bulk Cement 400 tonnes/p.h. Loading rate of general cargoes same as at No. 3 Pier. Discharging rate of general cargoes same as at No. 3 Pier.

Central Pier: For loading/unloading general cargoes. Length 120 m. Permissible depth at LW 6.5 m. No shore facilities. Loading/unloading general cargoes same as at No. 3 Pier.

CRANES: Mobile Cranes 1×20 ton and 1×30 ton.

BULK CARGO FACILITIES: No discharging facilities. Loading facilities see "Berthing".

STEVEDORES: Vessels bound for this port are to radio Agent Shipper/Consignee and Harbour Master, at least 24 hours prior to arrival, draft on arrival, description/quantity of cargo.

Average Discharge Rate per gang/hour:

Steel materials	Various Types	30 tons
Machinery	Case	30 tons
Grain	Bulk	25 tons
Ores	Bulk	25 tons
Fertilizer	Bag	20 tons

Average Loading Rate per gang/hour:
(Only with labourer hands – manually)

Ores	Bulk	20 tons

Average Loading Rate per gang/hour:
(By shore loading facilities)

Coal/Graphite	Bulk	350 tons
Cement	Bulk	350 tons
Cement	Bag	60 tons
Cement Clinker	Bulk	350 tons

MEDICAL: Several hospitals available.

TANKERS: No facilities.

DENSITY: Average salinity of water in the port is 1.025.

FRESH WATER: Supply of fresh water available by water barge and from shore water works.

Supply at pier	50 t.p.h.
Supply by barge	100 tons per day

FUEL: Most grades of domestic and bonded oil available with 4 days prior notice.

FIRE PRECAUTIONS: None.

CONSULS: None.

REPAIRS: None.

DRY DOCKS: None.

SURVEYORS: Classification Surveyors are in Seoul and/or Busan.

GANGWAY/DECK WATCHMAN: Owners/Master's option.

HATCHES: First Opening/Final Closing by crew and intermediate handling by stevedores.

CUSTOMS ALLOWANCES: Cigarettes: 1 carton. Wine /Spirit: 2 bottles.

CARGO GEAR: Shore loading facilities see "Berthing". No heavy lift cranes.

REPATRIATION: Possible.

AIRPORT: No airport locally, however there is an express bus service between Mukho and Seoul.

TIME: GMT plus 9 hours.

HOLIDAYS: *Official Holidays are as follows:*

The New Year Day	1st January	Work cannot be arranged
Independence Movement Day	1st March	Can be arranged
Memorial Day	6th June	Can be arranged
Constitution Day	17th July	Can be arranged
Independence Day	15th August	Can be arranged
National Foundation Day	3rd October	Can be arranged
Hangul (Korean Alphabet) Day	9th October	Can be arranged
Armed Forces Day	1st October	Can be arranged
Festival Days:		
Lunar Calendar New Year	1st January (Lunar)	Work not possible
Labour Day	10th March	Work possible
Children's Day	5th May	Work possible
Buddha's Birthday	8th April (Lunar)	Work possible
Moon Festival Day	15th August (Lunar)	Work not possible
Christmas Day	25th December	Work possible

POLICE/AMBULANCE/FIRE: Police – 3112. Ambulance – 3900. Fire – 119, 3005.

TELEPHONES: None.

SERVICES: None. Should be arranged from Busan/Inchon.

SHORE LEAVE: Possible, curfew in effect from 2400 hrs. until 0400 hrs.

IDENTIFICATION CARDS: Shore passes are issued for every Crew member who wishes to go ashore.

REGULATIONS: No particular regulations.

DELAYS: Normal delays.

GENERAL: None.

AUTHORITY: Mukho District Maritime & Port Authority.

POHANG: 36.01 N. 129.24 E. (See Plan Book)

PORT LIMITS: The sea within the line joining the position of Yeonam Southern Cape Long. 129° 25′ E. to that of Lat. 35° 59′ 50″ N., Long. 129° 27′ 30″ E.

DOCUMENTS: See "Busan".

PILOTAGE: Compulsory, 4 licensed pilots available.

ANCHORAGE: 4 anchorages in depth 12 m. – 22 m. With muddy and sandy bottom.

MAX. SIZE: The first pier depth 16 m. Length 930 m. Max. d.w.t. 100,000.

The second pier depth 5.5 m. – 12 m. Length 840 m. Max. d.w.t. 50,000.

The third pier depth 5.5 m. – 9.5 m. Length 440 m. Max. d.w.t. 5,000.

The fourth pier depth 11 m. – 12 m. Length 420 m. Max. d.w.t. 30,000.

The fifth pier depth 7.5 m. – 11 m. Length 695 m. Max. d.w.t. 50,000.

The sixth pier depth 5.5 m. Length 220 m. Max. d.w.t. 2,000.

Ship Operator's Report: Posco Mineral Quay:

July 1979: Vessel of 142,767 d.w.t., with 112,012 tons of cargo on board docked at No. 1 B-2 with a draft aft of 49 ft. 6 in. (15.08 m.). The officially accepted draft is 14.50 m.

HEALTH: Certificates required.

TUGS: 3 tugs available of 3,000 h.p. The tugs are stationed at the third pier.

BERTHING: Quay height above sea level: 3 m. at high tide and 2.8 m. at low tide. Total quay length 3,575 m.

REPATRIATION: All facilities available for crew changes.

CRANES: 12 Shore cranes. (Lifting capacities 3,138 t.p.h.)

CUSTOMS ALLOWANCES: Tobacco: 400 cigarettes. Wine: 1,500 cc.

HOLIDAYS: New Year's Day – 3rd January, 1st March, 5th April, 5th May, Buddha's Birthday, 6th June, 17th July, 15th August, 3rd October, 9th October, Christmas Day.

POLICE/AMBULANCE/FIRE: Police 2-3419. Fire 119. Ambulance 2-5269.

FRESH WATER: Can be supplied alongside the quay or by water barge.

SHORE LEAVE: Crew members allowed ashore.

IDENTIFICATION: Seaman's book is sufficient.
AIRPORT: Kimpo 200 km., Kimhae 150 km.
FUEL: All grades obtainable from oil companies.
SERVICES: Sub-Agents. Ship's laundries, etc.
MEDICAL: 2 hospitals available.
DEVELOPMENTS: Central breakwater under construction.

Works in progress to increase capacity at first pier to 150,000 d.w.t. and draft to 16.5 m.

SHIPMASTER'S REPORT: 1975.
Pilot: Usually boards the vessel after anchoring in position Lat. 36.03 N., Long. 129.26 E.
Anchorage Position for Quarantine Clearance: Same as for Pilot.
Berthing: Entry and departure are only permissible during daylight hours, vessels are not allowed to berth at night.
Fresh Water: Available at all times ex-wharf without limit on quantity taken.

SHIPMASTER'S REPORT: 1975.
Approaches: There are no British Admiralty Charts covering this port. The coastal approach to Yongil Man can be made on Chart BA. 3666, thereafter an American Chart No. 95166 (formerly HO. 3257) is suitable for making the approach to the quarantine anchorage.

There are no offlying dangers, and depths shelve gradually from the entrance to the head of the bay.

A good lookout should be maintained for fishing nets which are very profuse.
Quarantine: Port Health Officials board at the Quarantine Anchorage – Position Lat. 36° 02′ N., Long. 129° 26′ E., in a depth of 19 m. No Radio Pratique available.

If vessel arrives at night, officials board at daybreak next morning. No port movements during the hours of darkness.
Notice of Readiness: Accepted at time of Free Pratique granted.
Pilotage: Pilot boards with Port Health at anchorage. Pilot stated that our vessel 72,072 d.w.t. was too big for the port, which was designed for max. size 50,000 d.w.t. However, no difficulties experienced, berthing in calm weather conditions. Berthing and sailing in daylight hours only.
Entrance Channel: Entrance to harbour is made via dredged channel, commencing between two buoys, (No. 1 & 2), about 200 ft. apart, situated about 1 mile off Southern breakwater head.

Axis of approach channel, from midway between the buoys to midway between the breakwater heads, is a straight line 259° True.

Dredged depth in the channel is stated to be not less than 13 m. However, according to the echo sounder, depth beneath keel was never less than 11 ft. until vessel entered the harbour basin, when further depth recording was impossible due to 'noise' from propeller wash caused by astern movements, obscuring echo sounder signal propagation. As the vessel's draft was 36 ft. 08 in. min. depth of water was therefore 47 ft. 08 in. = 14.5 m. approx. This was verified on the outward passage. The 13 m. minimum probably refers to the basin within the harbour entrance.
Tide: The rise and fall of tide is only about 1 ft.
Tugs: There are only 2 tugs available, both very weak. Pilot kept complaining that the tugs were inadequate for a vessel of this size, which was a fair assessment.
Berth: See sketch (Plan) for depth alongside POSCO mineral quay. Min. depth at berth stated to be 12 m. (39 ft. 04.5 in.) Max. permissible draft 11.2 m. (36 ft. 09 in.) Density was 1026.

Loaded vessels berth head in, starboard side alongside. Can prepare accommodation ladder starboard side before arrival.

The face of the quay is protected by permanent heavy-duty rubber fendering.
Moorings: A minimum of 3 headlines, 1 breastline, and 2 backsprings, each end, is recommended. Although the port is well sheltered from the prevailing W. – N.W. winds, it is wide open to the N.E. from which strong gales can suddenly develop.
Discharge: 2 modern transporter grabs discharge into a conveyor belt system. Discharge rate overall about 1,100 t.p.h., on a 24 hour basis. Holds were well swept clean on completion.

A meticulous draft survey was held upon arrival and after completion, to verify Bill of Lading.
Fresh Water: Plentiful supply from pipe line on the quay. Apply to Agent for services of waterman.
Customs: The bond is not sealed, but a Custom's Officer is stationed on board at the gangway throughout.
Curfew: A curfew is in operation in South Korea, from midnight to 0400 hrs.
Shore Leave: The crew are not allowed to pass through the steelworks, going ashore. A liberty boat must be hired, which plies between the end of the quay and Pohang town pier, about a half hour run.

Last boat returning to ship at night leaves the town at 2200 hrs. First boat in the morning leaves at 0600 hrs. Shore passes issued on arrival.
Documents: The following arrival papers are required:—
Quarantine Declaration and Vaccination List.
14 Crew Lists.
3 Stores Lists.
3 Crew's Effects Declarations.
10 Cargo Manifests in Metric Tons.
N.B. The cargo manifests can be made up on board by typing on plain paper, but quantities must be stated in *metric tons.*
Agent: Pohang Shipping Agency Co. (Teladdress "Pohangship Pohang"), are sub-agents for Young Jin Shipping Co. Ltd; Seoul, (Teladdress "Three Young Seoul"). The Agent was very helpful and attentive.
Repatriation: Possible. A complete Chinese crew change (25 men) was carried out during vessel's stay, plus one officer to the U.K.
Communications: There is no Telex system in Pohang. Cables are passed by telephone to General Agents in Seoul, for onward transmission. There is no problem arranging telephone communication with the U.K., but it is not possible to reverse the charges (call collect). Average waiting time about 1 hour.
Repair Facilities: Most engine and hull repairs can be carried out. There are 4 repair firms available, but it is advisable to take the Agent's advice as 3 of these firms are very small, with limited manpower. Materials not immediately available, can be brought by road from Busan, about 3 hour's journey. Lloyd's Hull & Engine Surveyors based in Busan.
Future Port Developments: Work is at present in progress on the construction of a new bulk-handling facility, seaward of the present installation. The approach channel to the new facility will have a minimum depth of 16 m., and the berths will be capable of taking vessels of up to 100,000 d.w.t., at drafts of up to 14 m. Scheduled for completion in 1977.

SHIPMASTER'S REPORT: July 1975.
Port Limits: By a line drawn from Lat. 36° 04′ 10″ N., Long. 129° 25′ E., to Lat. 35° 59′ 50″ N., Long. 129° 27′ 30″ E., Korean Chart No. 135 Pohang Harbour and Approaches refers.
Documents: See "Busan".
Pilotage: Pilots board either at the Quarantine Anchorage or off the channel entrance as required. Pilotage within the harbour breakwaters is compulsory. No VHF available but Pilots are equipped with transceivers for port operations.
Anchorages: In roadstead, open to the N.E. in depths of 15 m. to 20 m. – Numerous mooring buoys and marker buoys for reclamation are in the vicinity. Vessels should anchor to seaward until a Pilot boards.
Restrictions: Vessels may arrive and sail from the roadstead at any time, but in daylight only if using the inner harbour.
Max. Size: No restriction in the roadstead, 12 m. in the inner harbour.
Pratique: It is advisable to give advance notice of Pratique. Pratique is granted to vessels anchored in a circular quarantine anchorage, radius 500 m., the centre of which is located in Lat. 36° 03′ 20″ N., Long. 129° 25′ 25″ E.
Radio: All messages to Pohang should be routed through Busan Radio HLP.
Tugs: A number of tugs are available, the 2 largest being 2,500 h.p. each. Tugs join the vessel at the breakwater entrance.
Approaches: Vessels using B.A. Chart 3666 should find flashing seabuoy in the entrance to Yon Iru Bay located in position Lat. 36° 05′ 50″ N., Long. 129° 30′ 35″ E., and from there steer a course 227° True (6.8 miles) to the inner harbour fairway entrance, which is marked by two buoys marked 1 and 2 and Qk. Fl. G. and Fl. R. 3 seconds, respectively each visible 5 miles. An anchorage should be found close seaward of the entrance buoys whilst awaiting a Pilot.
Berthing: A number of inner harbour berths are available at depths ranging between 8 and 12 m. datum.

The entrance fairway has a minimum depth of 12.4 m. Harbour developments are still in progress.
Stevedores: Arranged through Agents. Advance notice desirable.
Medical: Available.
Fresh Water: Limited quantities available by barge, if advance notice given.
Fuel: None.
Consuls: None.
Repairs: Only repairs of a minor nature can be undertaken.
Drydock: None.
Surveyors: Lloyd's available from Busan.
Gangway/Deck Watchmen: Not required.
Opening/Closing Hatches: By Crew.
Customs Allowance: See "Busan".
Repatriation: Not available.
Airport: Busan (Suyeng).
Shore Leave: Permitted, but even if vessel berthed alongside, launch service must be used.
Identification: Shore Passes.
Curfew: 2400–0400 hrs.
Developments: Considerable reclamation and harbour developments in progress.
General: Last call of vessel was July 1975. B.A. Chart No. 3666 does not show the new port of Pohang at all but can be used for approach work. Korean Chart No. 135 should be obtained if possible.

SHIPMASTER'S REPORT: June 1980.

The port is situated in the S.E. part of the country at the head of a bay and fully exposed to any weather from between North and East. Approaching the port there are very few navigational hazards except numerous small fishing craft. The B.A. Chart No. 3666 covering the area is out of date and the inset showing Pohang gives insufficient detail. I would recommend that with only B.A. Chart No. 3666 entry to the port should be attempted in daylight only. Korean Chart Nos. 132 and 135 cover the port and approaches and appear to be more up to date.

The Korean Pilot Book supplement No. 9 1978 on page 71 gives information on minefields and swept channels for approaching the port but the Harbour Pilots have no knowledge of these swept routes. However, there is a large area within the bay that is dangerous to navigation and anchoring but not marked on the chart. Vessels should not pass between the shoreline and a line drawn through the positions of the following lighthouse and buoys:

Fl. G. Lt. – Lat. 36° 05′ 18″ N., Long. 129° 33′ 35″ E.
Buoy RW – Lat. 36° 05′ 30″ N., Long. 129° 30′ 30″ E.
Buoy RW – Lat. 36° 03′ 12″ N., Long. 129° 28′ 20″ E.
Buoy – Lat. 36° 01′ 25″ N., Long. 129° 27′ 50″ E.

Also it is advisable to pass at least 2 miles North of the lighthouse so as to avoid the numerous fishing vessels and fishing stakes off the port, enter the bay passing the buoys on the port hand.

The indicated Quarantine Anchorage has only a limited depth of water and larger vessels are permitted to anchor in the vicinity of the second buoy where the vessel will be cleared by Quarantine Officers before the Pilot boards.

The ore/coal berth is situated in the new harbour where there is still a vast amount of new building and reconstruction taking place. The maximum draft is 14.5 m. and the approach through a short buoyed channel which offers no problems. The berth lies in an 035° – 215° direction with a depth alongside of 16.0 m. for 950 m. and vessels berth starboard side alongside. Standard moorings of 4–2–2 at each end and the port anchor with about three shackles, the latter being used for heaving off when unberthing.

Cargo discharge facilities are three units, with two more under construction, which should be completed by 1981, all suitable for the discharge of ore or coal. Discharge rate was about 30,000 tonnes per day using 2–3 units continuously.

Four tugs are used for berthing and unberthing operations, two of which are modern tugs. The two older tugs are due to be replaced soon with more powerful modern units.

Bulldozers are used for clearing hold bottoms and some shore labour is engaged sweeping up excess fallout off hatches etc. Food and some form of accommodation has to be provided for the shift foremen on a continuous basis.

Fresh stores and provisions of good quality and reasonable price were obtainable but no frozen foods of any description available. Laundry service available and fair results.

Fuel oil bunkers were available by previous arrangements with Owners.

Shore leave is by launch only. Launch lands personnel in the old harbour about 5 miles away outside the breakwaters of the new harbour. No shore gangways available. Accommodation ladders required on each side as Port Officials and Agents board via the quay and ship's personnel are not allowed to walk on quay.

Repatriation for 26 Officers and Crew was done with very little effort and minimum paperwork. Personnel travel by coach to Busan thence by air to Osaka and Tokyo for London.

Arrival papers were as those required for Pusan and some company forms readily accepted.

The present maximum draft for the port is 14.5 m. but this is expected to increase to 14.75 m. next year.

Port limits have been extended and now join the following positions: Lat. 36° 04′ 30″ N., Long. 129° 25′ 20″ E.; Lat. 36° 03′ 00″ N., Long. 129° 28′ 00″ E.; Lat. 36° 01′ 12″ N., Long. 129° 29′ 54″ E.

SHIPMASTER'S REPORT: September, 1982.

Health: Radio pratique not possible.

VHF: 16 then 6 with Pilot boats; 16 with Pohang Port Authorities; 16, 25, 26 and 27 with Pohang Radio.

Tugs: Four modern tugs.

Berthing: Depth alongside Berth No. 1 is 17 m. Vessels berth either side alongside. Berthing in daylight only for large vessels.

Fuel: All grades of bunkers and lubricants available from Korea Marine Bunkering Co., Ltd. Cable address: K Bunker Seoul. Telex: K28412.

Repairs: Sae Won Marine Engineering Co., Ltd., Cable address: Sae Marine Pohang. Telex: K4395. Tel: (72) 5400-1 (riding crew are available for ship repairs on passage).

Sam Yang Marine Engineering Co., Ltd., Telex: Symeco K4415. Tel: (3) 2251-2, (3) 4451., Agent for Unitor Service.

AUTHORITY: Pohang District Maritime and Port Authority.

AGENT: See "Busan" or "Inchon".

SAMCHEOG HAN (SAM CHUCK): 37.30 N. 129.10 E. (See Plan Book)

SHIPMASTER'S REPORT: June 1981

DOCUMENTS:

Ship's Register (1 copy required to be kept ashore)
Last Port Clearance.
10 Crew Lists.
3 Lists of Private Tobacco and Liquors.
4 Personal Effects Lists.
4 List of Foreign Money.
4 Stores Lists.
4 Ship's Property Declarations.

PILOTAGE: Pilot will board at Quarantine Anchorage.

After departure Sam Chuck vessel has to return Pilot to Buk Pyong. During night time no pilotage.

HEALTH: On arrival Sam Chuck the vessel has to proceed to Buk Pyong, about 5 nautical miles North of Sam Chuck, and has to anchor at the Quarantine Anchorage in position: 37° 29′ 36″ N., 129° 10′ 30″ E.

The Port Health Officers will board the vessel and arrange Free Pratique.

Documents Required:

1 Crew List.
1 Maritime Declaration of Health.
1 Vaccination List.

VHF: "Mukho Radio" calling Channel 16, communication Channel 26 (slight interference).

TUGS: One tug available, equipped with own tow line.

BERTHING: Conveyor pier, left side of port entrance, exclusively for loading cement clinker in bulk.

Draft allowed according to Pilot is 6.8 m. Other berths, draft allowed is 6.7 m.

One belt conveyor with a loading rate about 300 tonnes per hour.

DENSITY: 1027.

TIME: GMT plus 9 hours.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits. Bonded store will not be sealed, as long as the Master only has the key.

One Customs Officer will stay on board for the whole time at berth.

SHORE LEAVE: Possible, shore passes issued for every crew member, have to be returned before departure.

GENERAL:

Ship Chandler: Available from Mukho.

Currency: 680 W (Won) = 1 US $.

SAMCHEON PO: 34.52 N. 128.05 E. (See Plan Book)

SHIPMASTER'S REPORT: June 1983.

DOCUMENTS: Formalities similar to other Korean Ports, but local Authorities are not used to Foreign going ships yet and Port Clearance is very slow. All crew members issued with shore passes by Immigration Authorities, these passes are collected in again before sailing, to hand back to Immigration.

PILOTAGE: Although the Port Information Sheet states that pilotage is not compulsory, I feel that it would be unwise to attempt both berthing and sailing without the benefit of local knowledge. The streams can be very strong, we estimated up to about 4 knots whilst we were there.

Pilot boards at the Quarantine Anchorage. Pilot boarding regulations similar to those at other Korean ports.

Requests for a Pilot should be made through the vessel's local Agents.

ANCHORAGES: Quarantine Anchorage 34° 51′ 56″N. 128° 05′ 23″ E. (600 m. radius). Good holding ground – yellow mud. Depth 17.2 m. Anchorage is open to South. Channel to quay dredged to 18 m. and is well buoyed.

RESTRICTIONS: Berthing/unberthing carried out at slack water, during daylight hours only.

MAX. SIZE: 100,000 tonnes deadweight. Max. depth alongside 18.1 m. Rise of tide 1.6 m.

TUGS: Two tugs are required. They come from Masan, 3 hours' notice required.

BERTHING: Wharf is 540 m. long and is divided into 2 berths. Principal commodity is coal for the power station.

	Length	*Depth*	*Max. Size*
Northwest end	270 m.	15.10 m.	50,000 d.w.t.
Southeast end	270 m.	18.10 m.	100,000 d.w.t.

Wharf is very well fendered, and has lrage rubber, 'Buffer', type fenders at regular intervals. There is a 2 m. high wall, which runs along the entire wharf frontage, the mooring bollards are set in breaks in this wall; but the set up is dangerous; very awkward for the linesmen, and virtually impossible to get a gangway out, ship to shore.

BULK CARGO FACILITIES: Two ship unloaders with 35 tonne grabs available for coal discharge. Capacity 1,500 t.p.h. each.

STEVEDORES: Working hours per day – 16 hours.

FRESH WATER: Not available.

FUEL: Not available.

CONSULS: Nearest Consuls at Busan.

REPAIRS: Limited repairs may be undertaken by local boat yard.

GANGWAY/DECK WATCHMEN: Three Watchmen and two Customs Officers on board at all times, and have to be fed and accommodated. The Watchmen will use one room, but the Customs want to be accommodated separately.

AIRPORT: Nearest at Pusan.

SHORE LEAVE: Shore leave by Liberty Boat only, takes crew to the small fishing port of Sam Cheon Po, itself about 1 mile further West. There is a curfew in force at the power station, no boats may approach from 2000 hrs. to 0400 hrs. Crew members are not allowed to walk ashore through the power station, so only the Liberty Boat can be used.

IDENTIFICATION CARDS: See "Documents".

GENERAL: Fairly good quality fresh provisions may be obtained, Agent handles chandler's work as well. Agents very willing to be of assistance, but there are very grave language problems, hardly anyone speaks English, and those that do are usually very limited in what they understand.

SHIPMASTER'S REPORT: May 1984.

CHARTS: B.A. No. 127; American 95142; Korean 452.

DOCUMENTS:

9 copies Crew List.
1 Declaration of Health.
1 Vaccination List.
3 Passenger Lists (Nil return required).
2 Crew Declaration of Personal Effects.
2 Currency Lists.
2 Ship's Currency Lists.
2 Bonded Stores Lists.
2 Ship's Stores Lists (all foodstuffs on board to be declared).
1 List of Ports of Call (previous 9 months ports and countries).
2 Ammunition and Firearms List.
2 Narcotics Lists (sealed once checked).
7 Reports of Entrance/Departure (Agent supplies and completes).

ARRIVAL: 2 Customs and 2 Immigration officials and 1 army official board when vessel alongside, Agents assist.

PILOT: Boards in position Lat. 34° 50′ N., Long. 128° 6.5′ E., from small blue coloured boat. Advance notice of arrival important as Pilot comes from Massan (3 hours by bus) and there are no telex facilities in Samcheon Po. All messages in and out by telephone from/to respective radio stations. Best to use Seoul Radio. At least 24 hours notice after which it is too late to change. Pilot boards and takes vessel to Quarantine anchorage, waits onboard until vessel cleared, then berths vessel alongside, with the aid of 2 tugs.

BERTH: The berth is 1,550 m. long with depths of 14 m. at West end and 16 m. at East end. Very well fendered for whole length, but high due to very heavy swell during S.W. Monsoon, sufficient bollards along whole length.

There are 2 gantries for 2 berths with 20 ton grabs, onto conveyor belts to large storage yard. Air draft at least 25 m. from quay. Outreach about 30 m.

Only import at this berth is coal for power station (Korean Electric Company).

SHORE LEAVE: Possible by launch from ship, nobody allowed through installation except Master. No boat/launch allowed to move from sunset to sunrise.

FRESH WATER/FUEL: Available by barge only. Bunkers by barge from Yusan or Busan. Fresh water obtained locally but costs US$4.0 per ton.

PROVISIONS: Available locally, usual Korean standard.

AGENT: Only one Agent in Samcheon Po. (Boo Young Shipping Co. Telephone No. 8111) No telex available.

ULSAN: 35.27 N.129.23 E. (See Plan Book)

DOCUMENTS:

3 copies of Manifested Parcels on board.
3 copies of the Store List.
3 copies of List of Narcotics on board.
3 copies of List of Arms and Ammunition on board.
3 copies of List of Vessel's Foreign Currency.
3 copies of List of Crew's Foreign Currency.
3 copies of List of Vessel's Tobacco, Cigarettes, Spirits, etc.
13 copies of the Crew List.
3 copies of List of Crew's Personal Effects, Tobacco, Cigarettes, Spirits, etc.
Crew's Vaccination Certificates.
Derat Exemption Certificates.
Clearance from Last Port.
10 copies of List of Landing Passengers, if any.
10 copies of List of Passengers in Transit, if any.
3 copies of List of Passengers Baggage.

PILOTAGE: The seaward approaches to the Imodco Terminal mooring site are free of underwater obstructions, and existing landmarks and navigation aids are adequate. Depth of water not less than 65 ft. in approaches. The Imodco Terminal can be approached with the summit of Pongdae San bearing 333° true. When in position the following navigation fix will obtain at the mooring site:

Pongdae San (summit) bearing 333° true distance 2,915 yd.
Pongjin Hang Light „ 053° true „ 4,770 yd.
(end of breakwater)
Chuck To (centre cut) „ 255° true „ 3,800 yd.

A good radar echo will be obtained from the tanks ashore at approximately 20 miles, the Imodco buoys at a distance of 8 miles, and the small buoys, marking the floating hose heading off the Imodco Buoy, at 1.5 miles.

Lights ashore, lights on the Imodco Buoys and on the small buoys appear to be unreliable.

After clearing Customs a Harbour Pilot will board the vessel to direct it to the buoy and conduct the mooring operations if required. There is no night mooring. However, unmooring is carried out during darkness as well as in daylight.

ANCHORAGE: Anchor the vessel about 1 mile S.E. of the buoy, if the weather permits. In this location it is less difficult to find vessel, when in fog. Do not anchor less than 1 mile from buoy, and under no circumstances can the anchors ever be used on approaching the buoy terminal, chain cables and pipe-lines are located at this site and anchoring is strictly prohibited.

RESTRICTIONS: No night mooring at any time at SBM. Unmooring possible at any time.

MAX. SIZE: Max. mooring capacity 260,000 d.w.t. Max. draft 64.5 ft.

HEALTH: Entry prediction to be supplied to Quarantine Authorities by vessel's Agent 24 hours before arrival. Master required to complete Health Declaration when officer boards on arrival. Free Pratique is automatic when coming from another Korean port.

VHF: Communication available in Ulsan Port 24 hours a day.

"Ulsan Harbour Control" on Channels 14 and 16 for reporting vessel's arrival and departure.

"Ulsan Pilot" on Channels 13 and 16 and "Ulsan Radio" on Channel 16 for calling and working channels are Channels 25, 26 and 27 for public messages.

BERTH DESCRIPTION: 2 berths at single buoy moorings.

Yukong Terminal No. 1 SBM:

Position: Lat. 35° 27′ 14″ N., Long. 129° 23′ 31″ E.

Description: A 3 m. diameter yellow cylindrical pillar type marker buoy installed at No. 1 SBM position in May 1984, and has top mark yellow "X" shape in accordance with IALA Regulations. The original SBM, 12.5 m. diameter red and white vertically striped buoy and 2×12 in floating hoses (730 ft.) removed to shore for repairs.

Light: Fl. Y. 3 secs. visibility over 5 miles, activated by storage battery, automatic sun switch.

Radar Reflector and Fog Horn: No radar reflector and no fog horn on marker buoy.

Yukong Terminal No. 2 SBM:

Position: Lat. 35° 26′ 44″ N., Long. 129° 23′ 20″ E.

Description: A 11.4 m. diameter yellow coloured buoy.

Lights: On buoy: Fl. Y. 6 secs. visibility over 5 miles. On hoses: 4 red winking marker lights equally spaced along the 980 ft. floating hoses, visible for 2 miles.

Fog Horn: A battery powered fog horn with a range in excess of 0.5 miles.

DRY CARGO BERTHS: Commercial harbour mainly serves export of chemicals, fertilisers and by-products of the refineries. The harbour lies about 4 miles in from the sea and there are 4 berths available with depths up to 33 ft.

Quarantine/pilot station situated in position Lat. 35° 27′ 26″ N., Long. 129° 24′ 30″ E.

Entrance at night is not permitted. Only 1 tug is available. Water is available. No VHF. Max. tide in harbour is 1 ft. Also see "Shipmaster's Reports".

TUGS: 2 or 3 tugs assist in mooring operations and 1 tug assists with unmooring operation.

Tugs will join vessel about 1.5 miles East of No. 2 SBM.

BERTHING: 2 workboats (16 tons and 10 tons) are in attendance during mooring operations.

1 workboat will keep the hoses clear and the other handles the mooring ropes.

Both bow anchors are to be hove well up in the hawse pipes and properly secured before reaching the buoy.

Anchors are never to be used while at the buoy. They can foul buoy cables and pipe-line on the bottom if released.

No. 1 Buoy: Not in use.

No. 2 Buoy: The vessel will be moored with 2×18 in. nylon polypropylene ropes, 300 ft. in length, floating off the buoy.

Two ship's mooring ropes will be run to the buoy to pick up the buoy mooring ropes one by one when about 200 m. distance from the buoy.

Before approaching the buoy, 8 pieces of rope lashing (3 in. diameter and 10 m. length) and stoppers should be provided for mooring operations at forecastle.

HOSES:

No. 1 Buoy: Not in use.

No. 2 Buoy: There are 2×16 in. hoses, 980 ft. and 945 ft. respectively in length. The hose connections are made to the port manifold of the vessel only and lifted one at a time to the ship's manifold. Each hose, when full of cargo is over 10.5 tons in weight.

Hose Mooring and Connection: Mooring and hose connection, disconnection will be carried out by Harbour Master and shore gangs, and while the vessel is at the buoy, 1 Harbour Master and 7 crew will remain on board during entire operations on the buoy. The vessel will be required to provide sleeping quarters and meals for them. They are mainly kept on board for emergency.

BUNKERS AND WATER: Available by barge at the anchorage.

BALLASTING: After the vessel has discharged about half of her laden cargo, the vessel should be ballasted to a safe margin, to draw not less than 18 ft. forward.

This will avoid the vessel yawing widely on the buoy with strong winds and assist in avoiding contact with the buoy and hoses. Vessel will be moored at all times about 120 ft. from buoy.

REPAIRS/DRY DOCKS: All types of repairs possible at Hyundai Mipo Dockyard. Seven docks available, largest being 380 m.×65 m.×12.7 m.

ENGINES: The ship's engines must remain ready with full power for immediate use and to keep the vessel a safe distance from the buoy. Any repair work or hot work prohibited without the Harbour Master's permission.

CUSTOMS ALLOWANCES: One carton cigarettes or 1 lb. of tobacco, and one bottle wine or spirits allowed, each man.

IDENTIFICATION CARDS: Crew required to carry valid identification cards at all times.

REPATRIATION: Nearest facilities for crew repatriation are at Busan.

TIME: Korean Standard Time, GMT plus 9 hours. No alterations during year.

HOLIDAYS: 1st, 2nd, 3rd January; 1st March; 10th March; 5th April; 5th May; 6th June; 17th July; 15th August; 1st October; 3rd October; 9th October; 25th December and New Year's Day, (Lunar Calendar Day 1st January); Buddha's Day (Lunar Calendar Day, 8th April); Moon Festival Day (Lunar Calendar Day, 15th August).

SHORE LEAVE: Allowed up to midnight.

CHIEF OFFICER'S REPORT: 1975

Vessel's Particulars:

Length Overall – 162.18 m. Breadth – 22.8 m.
Summer Draft – 10.382 m. Summer d.w.t. 21,705 m./tons.

Dry Cargo Berths

Anchorage: Local Agents generally wireless the Quarantine Anchorage position which is approx. 1.5 miles W.N.W. from the position shown on BA Chart No. 898. Care should be taken while anchoring as there are innumerable fishing floats, nets, etc. North of 35° 28′ N., and West of 129° 23.7′ E.

Restrictions: No pilotage between sunset and sunrise. Curfew from 0000 – 0400 hrs.

Pilotage & Berthing: The standard of pilotage was generally good. Pilot arranged by Agents and embarks at Quarantine Anchorage after vessel is cleared by Authorities. 1 anchor is used while going alongside. 1 tug of unknown h.p. and 2 mooring boats assist while berthing. 4 berths are available:

No. 1 Pier – Length 300 m. Depth variable (see "Plan Book")
No. 2 Pier – Length unknown. Depth supposed to be 36 ft.
No. 3 Pier – Length 165 m. Depth 29 ft.
No. 4 Pier – No details known.

Local Authorities themselves do not have any idea as to the actual depths alongside. It is advisable to sound the bottom twice daily especially at No. 1 Pier as the depths were found to vary almost every 10 ft. Cargo is loaded/discharged by vessel's cargo gear. Rate of loading bagged urea is approx. 400 m/tons per gang per day. Working hours are normally between 0700 hrs. and 1900 hrs. every day, Saturdays and Sundays included. Only on National Holidays no cargo is worked. Discharge of bulk sulphur and gas/product carriers is around the clock. A vessel carrying 28,000 tons of bulk sulphur was discharged in 5 days. There is 1 crane and conveyor belt on No. 1 Pier only for handling sulphur. It was observed that sometimes small coasters were loaded/discharged by mobile cranes.

Stevedores: Ulsan Port has a rule that a gang engaged for one particular hatch will only work that hatch from start to finish and will not work any other hatch, not even the other end of the hatch if the hatch has more than 1 set of derricks. Gangs have to be ordered before noon for the next day.

Medical: Local hospital used, patients normally taken there by watchmen.

Density: Apparently varies. Once 1016 was obtained while 10 days earlier 1020 was obtained.

Fresh Water: Available from barge whose capacity appears to be 150 tons. At least 24 hours notice necessary.
Fuel: Not available.
Repairs: Facility available but rates high.
Dry Docks: Hyundai Shipyard located at Ulsan builds VLCC's.
Watchmen: Essential on foreign vessels. Arranged by Agents.
Hatches: As per charter party but suggest use own crew as labour are only experienced with wooden hatchboards.
Repatriation: Usually done through Seoul which is about 5 hours away by bus. We changed Radio Officers and experienced no difficulty.
Telephones: Placed on board, but only for local calls via exchange.
Services: Only 1 shipchandler who handles everything including providing watchmen, laundrymen, etc.
Identity Cards: Shore pass issued for Ulsan valid for 3 days. To be renewed every fourth day. Usually done by watchmen who collect all passes and go to Immigration Office.
Surveyors: Lloyd's can be arranged from Busan.
General: Ulsan is a very busy port with a large amount of local and Japanese coastal traffic. Local Agents keep trying to shift bigger vessels ahead and astern to try and squeeze in small coasters. It is advisable to strictly adhere to the charter party rules at all times in this port to prevent delays and expense on vessel's account.

SHIPMASTER'S REPORT: May 1979.

Vessel: Summer d.w.t., 37,300; LOA, 194 m.; breadth, 28 m.; Summer draft, 36 ft.

Vessel loaded 30,000 tonnes of bagged fertiliser at No. 2 Berth using ship's cranes. The loaded departure draft was 33 ft.

Port Limits: As shown on Korean chart 119, arc passing through:

Lat. 35° 28′ 29″ N.,	Long. 129° 24′ 25″ E.
Lat. 35° 26′ 00″ N.,	Long. 129° 24′ 23″ E.
Lat. 35° 24′ 13″ N.,	Long. 129° 22′ 00″ E.

Documents: As per "Guide to Port Entry", the 3 copies of crew's foreign currency were found not to be required.
Pilotage: The Pilot was ordered through the Agent. The Pilot joins the ship in the anchorage from a white coloured pilot boat which has no VHF. A portable VHF is carried by the Pilot for communication with tugs and pilot station. Only 2 Pilots are on duty each day and there are no movements in port between 1900 hrs. and 0600 hrs. The standard of pilotage was good.
Anchorage: The Quarantine Anchorage as shown on Korean chart 119 is centred on Lat. 35° 27′ 25″ N., Long. 129° 25′ 34″ E. (Radius 400 m.)

Depth in this anchorage is 33 m. to 47 m. This anchorage is outside the harbour limits. A good anchorage was found 1 mile N.E. of No. 2 Imodco Buoy in 24 m. A boat service is available from the anchorage.
Restrictions: No night movements.
Max. Size: Not known.
Health: As per "Guide".
VHF: "Ulsan Radio" maintains a listening watch on Channel 16, contact is made on this Channel then switched to a working Channel. This station is used for local calls only.
Radar: No port radar.
Tugs: There are 2 tugs available of unknown horsepower. The tugs join the vessel off the berth and use their own lines.
Berthing: No. 2 Berth: Length approximately 250 m. The depth alongside was 11 m. with 13 m. offshore, the density varied but averaged 1006. There are no fixed shore facilities at this berth and it appears that it is often used by car carriers.
Cranes: Stevedores have 100, 60, 30 and 10 tonne mobile cranes available.
Bulk Cargo: 30,000 tonnes of bagged fertiliser was loaded using 4 ships cranes. Cargo was delivered to the berth in trucks and made up into slings on the jetty. The loading rate was 700 tonnes per hatch/day.
Stevedores: Gangs should be ordered before 1400 hrs. the previous day. There are a limited number of gangs available. Normal working hours are from 0700 – 1900 hrs. with 1 hour break. It is possible to shift gangs to different hatches under certain circumstances and night working is possible but not advised as same men work through to next day. The standard of cargo handling equipment supplied by stevedores is good.
Medical: Medical treatment and hospital facilities are available.
Hatches: Hatches should be opened before stevedores arrive on board or waiting time is incured.
Fresh Water: Fresh water is available and is delivered by barge.
Repatriation: Repatriation was carried out via Busan about 2 hours drive away without any problems.
Airport: Nearest airport Busan, regular daily flights to Seoul.
Telephones: A telephone is placed on board which is for local calls only via exchange. Overseas calls can be made from shore, these calls are collect, person to person, only with a waiting time of 2 hours (approximately).
Shore Leave: Shore leave is allowed but a strict curfew is enforced from 0000 – 0400 hrs.
Identity Cards: A shore pass is issued for Ulsan which is renewed every fifth day, usually done by watchmen who collect all passes and take them to the Immigration Office.
Stores: There is only 1 ship chandler and all stores are ordered through him. The quality is poor and the prices high.
Port Authority: Ulsan District Maritime and Port Authority.

AUTHORITY: Korea Oil Corporation, Ulsan.
AGENT: See "Busan" or "Inchon".

YOSU: 34.44 N. 127.45 E. (See Plan Book)

(A) SINGLE BUOY MOORING, HONAM OIL REFINERY
(B) CRUDE WHARF, HONAM OIL REFINERY
(C) PRODUCT WHARF, HONAM OIL REFINERY
(D) NAKPO WHARF, NAMHAE CHEMICAL CORPORATION
(E) PIER, DAE SUNG METHANOL PLANT
(F) DRY CARGO, YOSU HARBOUR

DOCUMENTS:

- Last Port Clearance.
- Register.
- 13 copies of Crew List.
- 12 copies of Passenger Manifest.
- 3 copies of Store List.
- 3 copies of Bonded Store List.
- 3 copies of Arms and Ammunition List.
- 3 copies of Livestock List.
- 5 copies of Cargo Manifest.
- 1 copy of Vaccination List showing dates of last yellow fever vaccination, etc.

PILOTAGE: There are 2 pilot stations. Pilot station for vessels of less than 30,000 g.r.t. is located at Lat. 34° 44′ N., Long. 127° 49′ E., and for more than 30,000 g.r.t., such as crude tankers, is located at Lat. 34° 39′ N., Long. 127° 58′ E.

Vessels calling at Yosu must cable the exact time of arrival at the pilot station to ship's Agent and Harbour Pilot's office. VHF Radio for calling Agent is Channel 16, name Agent and switch to Channel 26 to talk.
RESTRICTIONS: Two overhead power cables with clearance of 27 m. and 39 m. respectively in approximate position: Lat. 34° 44′ N., Long. 127° 45′ E.
HEALTH: Before proceeding to SBM vessels must anchor at the Quarantine Station to obtain Free Pratique.
RADIO: Yosu Port Radio station calling sign 6MY operates on 500 kHz on 24 hour service.

The station's range is about 100/150 nautical miles and it is recommended that tanker Masters should contact the station giving their ETA at the pilot station.

Also see "Radio" in Section "A".
TUGS: Available, up to 2,000 h.p.
MEDICAL: ETA to be supplied to quarantine authorities by vessel's Agent 24 hours before arrival. Master required to complete Health Declaration when officer boards on arrival. Free Pratique is automatic when coming from another Korean port.

There are medical facilities in Yosu town. Inoculations and vaccinations can be arranged by the quarantine doctor.

The Quarantine Stations are located at Lat. 34° 42.5′ N., Long. 127° 52.7′ E., for deep drafted vessel and Lat. 34° 45.2′ N., Long. 127° 46.3′ E., for less drafted vessel. The Quarantine inspection can be made at other than the above location depending on the situations. The inspection takes place during daylight.
DENSITY: 1025.
FRESH WATER: Fresh water is available for delivery to ships.
FUEL: Bunkers available by barge subject to advance notice being given.
REPAIRS: There are repair facilities in Yosu.
CUSTOMS ALLOWANCES: One carton cigarettes or 1 lb. of tobacco, and one bottle wine or spirits allowed, each man.
REPATRIATION: Crew changes or repatriation can be arranged.
TIME: Korean Standard Time, GMT plus 9 hours. No alterations during year.
HOLIDAYS: 1st, 2nd and 3rd January, 1st March, 10th March, 5th April, 5th May, 6th June, 17th July, 15th August, 1st October, 3rd October, 9th October, 25th December. 1st January (Lunar Calendar), 8th April (Lunar Calendar), 15th August (Lunar Calendar).
IDENTIFICATION CARDS: Crew required to carry valid identification cards at all times.
SHORE LEAVE: Shore leave for ship's personnel is arranged by ship's Agent and the local authorities.

(A) SINGLE BUOY MOORING, HONAM OIL REFINERY

GENERAL DESCRIPTION: The 10 m. diameter IMODCO Single Buoy Mooring Terminal is located at the approximate position of Lat. 34° 51′ N., Long. 127° 47.3′ E. The terminal is modified to provide a safe mooring for tankers up to 200,000 d.w.t. under the environmental condition of about 40 knots maximum wind speed.
PILOTAGE: Pilot boards at Sea anchorage position 1.5 miles to 2 miles S.E. of Tae Do. (VLCCs only).

The approach to Yosu Gulf from the South is open and clear of dangers until vessel approaches "Tae Do", near which the pilot station is located.

Vessels up to 30,000 g.r.t. must use the pilot station approx. 1.5 miles East of Odong Do and use the inner Quarantine anchorage.
ANCHORAGE: About 1.5 miles to 2 miles S.E. of Tae Do. The depth at the anchorage is approximately 90 ft. and good holding ground (Mud) is reported.
APPROACHES: Although the approach of Yosu Gulf is open and free of dangers, great care must be taken navigating these waters due to dense concentrations of fishermen and fishing nets/stakes.
RESTRICTIONS: Daylight berthing on slack water ebb tide.

Unberthing prohibited between 2200 hrs. and 0400 hrs.
MAX. SIZE: The safe depth of Samg i Channel which is located 4 miles South of the Terminal is 19 m. at about LLW.

The tidal rise in this area is 2 m. to 3.5 m. at high tide. Therefore, the terminal accepts tankers having draft up to 19 m.
NAVIGATIONAL AIDS: Vessels calling Honam Oil Terminal should have charts No. 242 and 209 published by the Republic of Korea Hydrographic Office. Within the area, there is no port radar service.

NOTICE OF READINESS: Notice of Readiness will be tendered and accepted at the time when the vessel is in all respects ready for cargo operations and in accordance with charter party agreed.

TUGS: 2 diesel tugs.

BERTHING: Mooring operations are done jointly by ship's crew on the forecastle and mooring gang from Yosu on mooring boat.

The vessel shall prepare 2 strong messenger lines of more than 50 m. each and pass them to the mooring boat. The mooring gang will tie the vessel's messenger lines to 18 in. buoy ropes' messenger lines. Upon signal from mooring gang, vessel will heave in both mooring ropes up to chafing gear of the ropes on deck and make fast to the vessel's bollards by the 8 turn method.

Normally starboard rope is heaved in first and or both port and starboard ropes are heaved in simultaneously.

It is compulsory to moor with 18 in. buoy ropes. For the use of these ropes Honam Oil charges a nominal fee for each call at the SBM.

CONNECTING HOSES: The vessel must install 2 × 16 in. ASA type flanges to her starboard manifolds, rig starboard derrick doubled and capable of lifting up to 10 tons of weight prior to berthing and have standing by a derrick operator and responsible ship's officer at her manifolds upon berthing.

Connecting/disconnecting cargo hoses will be done by shore team. The team leader will co-ordinate with ship's cargo officer for cargo hose handlings.

DISCHARGING: Discharging should be commenced by the signal of Terminal representative. The Terminal receiving facilities have a working pressure of 225 p.s.i. with safety factor of 7:1, but the pumping pressure must be raised gradually and then the pressure should be raised up to 225 p.s.i. at ship's manifolds. The vessels are required to find out discharging rate at least every 4 hours.

SHIP'S READINESS: During discharging the international code flag "B" shall be displayed from a topmast signal halyard during daylight hours. During hours of darkness, a red light shall be displayed, visible at a distance of at least 1 mile and show an unbroken light all around the horizon. The vessel's engines must be ready while discharging at a moment's notice and the Master is responsible for having sufficient officers on duty both on bridge and in engine room to take action immediately upon instructions from Honam Oil representative.

In order to avoid riding up on the buoy and the cargo hoses, astern movements of the vessel are required. For turbine vessels when for various reasons, the Chief Engineer officer is unable to completely stop his engines, the r.p.m. must be kept at a minimum by using the turning gear. The propeller must also propel the vessel astern only. Vessels which are not able to conform with these regulations should advise Honam Oil representative in writing. In addition to the lights usually displayed, vessels discharging cargo during darkness, will illuminate the area around the ship and especially the IMODCO Buoy to the satisfaction of the terminal representative in order that any oil on the surface of the sea may be readily detected and appropriate action taken. Vessels should provide suitable floodlights for working on deck during night operation.

BALLAST: There are no facilities for reception of dirty ballast. It is the ship Master's responsibility to see that no oil or oily ballast is spilled or pumped overboard from his ship. Drip-pans must be used at all times and all scuppers must be plugged. The waters in or adjacent to the terminal must not be polluted and only oil-free bilge water may be discharged at the terminal. If, during inspection or during progress of discharging, it is revealed that the vessel's tanks are not oil-tight, she will be refused further discharging facilities.

SAFETY: Sufficient officers and crew personnel must always be on board to attend to the vessel and to cargo. Power must be available at all times on deck winches and windlass while the vessel is in the moorings.

The presence of unauthorised craft alongside is extremely hazardous, and Masters are requested to require all unauthorised craft to clear the vessel's side prior to commencement of cargo discharging. Master should shut down all cargo operations during severe electrical storms and under any circumstances which imperil the cargo operation.

While bunkering barge is alongside the crude tanker, it is required that ship's Master shall check mooring lines, fenders or engines of bunkering barge or other safety items.

RADIO: In Korea there are 4 coastal radio stations, Busan, Inchon, Mokpo and Yosu as listed in International communication publications. Vessels calling Yosu would call Busan, Mokpo, and Yosu.

For the vessels visiting Honam Oil Refinery, it is recommended to call Mokpo coastal station, call sign HLM and address to: Honam Oil Yosu Refinery Telex number K762 or K764, via: Mokpo Radio. The Mokpo Radio keeps telex operation network with telex room of Honam Oil Yosu Refinery and messages can be handled within half an hour during the service hours of Honam Oil Yosu Refinery Telex room (weekdays: 0830–1930, Saturday: 0830–1500, Sunday/Holiday: off-service). Also vessels within VHF voice radio range of about 100 km to Yosu, call Channel 16 (Simplex), Switch to Channel 26 (Duplex) and then ask for vessel Agent, Harbour Pilot or Honam Oil Yosu Refinery. Honam Oil Yosu Refinery provides the telephone service every day from 0830 to 2300 hrs. local time with telephone number 3141-9. (Terminal representative located on extension 279 for office hours, 370 for out of office hours).

The communications from tanker to shore when moored at the IMODCO Buoy will be made by ferry boat and refinery matters are made by transceiver handled by refinery personnel on board.

GENERAL: Vessels properly equipped will be permitted to discharge crude oil and load clean ballast simultaneously.

The vessel is required to provide accommodation and meals for Loading Master, his assistant and Customs Officer. Meals also required for four shore watchmen. COW is permitted provided terminal is notified in advance and given details of COW schedule.

AUTHORITY: Honam Oil, Yosu Refinery.

(B) CRUDE WHARF, HONAM OIL REFINERY

GENERAL DESCRIPTION: The crude wharf is located at Lat. 34° 51′ N., Long. 127° 46′ 55″ E. running in a 336°/156° direction.

PILOTAGE: Pilot station for crude tankers is located at outer harbour in positon: Lat. 34° 39′ N., Long. 127° 58′ E. in the vicinity of Tae Do Island, where the Harbour Pilot boards to lead the vessel to Quarantine Anchorage.

APPROACHES: En route to the wharf, at approximately Lat. 34° 47.3′ N., Long. 127° 48.8′ E. vessels pass narrowest part of channel, Sam Gi, which has about 19 m. depth of water at MLLW, and marked by 5 light-buoys and one lighthouse. The course is laid midway between the 5 buoys. At about 1 mile from the wharf, there is a patch with 13 m. depth which is marked by a light buoy.

RESTRICTIONS: Berthing and operating restrictions are as follows:

1. Maximum approach angle: 10°
2. Maximum approach velocity: 0.15 m./sec. normal to fender line
3. Maximum current speed: 2.1 m./sec.
4. Winds

(a) Non-operating conditions
Maximum design velocity 38 m./sec.
(b) Operating Conditions (Moored at berth)
Maximum sustained velocity 18m./sec.
Maximum instant gust 27 m./sec.
(c) Maximum berthing wind velocity
13 m./sec. of Southerly wind
15 m./sec. of Northerly wind

MAX. SIZE:

Maximum crude carrier:	255,000 d.w.t.
Maximum products carrier:	80,000 d.w.t.
Maximum draft:	19 m.
Minimum crude carrier:	30,000 d.w.t.
Minimum products carrier:	30,000 d.w.t.

HEALTH: Normally vessels who could not be granted Radio Pratique anchor at the Quarantine Station which is located at around Lat. 34° 42.5′ N., Long. 127° 52.6′ E. At this anchorage, Quarantine doctors come on board. After quarantine inspection, the vessel should have port clearance of Customs, Immigration and so on.

BERTHING: *Approaching the Wharf:* It will be normal tanker practice that all tankers be berthed bow seaward to ensure a quick and uncomplicated departure in the event of an emergency. Main conditions for following this practice are as below:

1. Natural environment's conditions to be favourable.
2. Early passage of Sam Gi channel prior to high tide to meet slack tide while berthing.
3. Vessel should swing to the North of crude wharf with the assistance of tug-boats and approaching course will be about 160°.

When the above is impracticable due to the limited effective manoeuvring space in the vicinity of the wharf, vessels will approach almost parallel to the wharf whose direction is about 336°.

While passing 13 m. patch, 1 mile off the wharf, loaded vessel should reduce speed to about 3 knots and all tugs will come alongside to the vessel's bow, mid-ship and quarter. At about half mile off the wharf, the vessel's speed should be 2 knots and when abreast of the wharf, the vessel should be stopped. When stopped, the abreast distance between vessel and wharf should be about 100 m. – 200 m.

Abreast distance will be reduced with the assistance of tug-boats. Closing speed must be 10 cm./sec. or less at a distance of 20 m. and less than 5 cm./sec. at a distance of 3 m. between the vessel and wharf. Distance and speed for both bow and stern will be displayed on the gangway tower of wharf upon vessel reaching about 160 m. from wharf.

Mooring: The wharf has 8 dolphins for mooring VLCCs as shown in the "Plan Book". Nos. 1 and 4 dolphins are to be used for head and stern lines, Nos. 2 and 3 for breast lines, and Nos. 5, 6, 7 and 8 dolphins for fore and aft spring lines. Each dolphin has quick release hooks with a capstan and about 100 m. of 3 in. messenger lines to pick up mooring wires/ropes.

To monitor tanker approach, the wharf is equipped with docking sonars which detect distance and approaching speed, which are also displayed on top of the gangway tower with visibility of about 200 m.

Line handling service agency will render services to handle lines on the wharf. The agency will provide 2 launches relaying mooring lines from berthing vessel to the wharf and 9 men including a chief in charge of the team hooking mooring lines to the dolphins.

About 20 mooring lines for 200,000 d.w.t. tanker are required. Type and quality of mooring lines are in accordance with ISGOTT paragraph 3.3.3 i.e. "Preferably the mooring lines used to secure the tanker should all be of the same materials and construction. Wire ropes are recommended especially for larger tankers as they limit the tanker movement at the berth. Moorings composed entirely of fibres, especially synthetics, are not recommended as their high elasticity can allow excessive movement due to strong wind or current forces or passing ships. Wire ropes and fibre ropes should never be used together in the same direction because of the difference in their elastic properties".

Vessel puts out springs first, then breast lines and finally head or stern lines or vice versa. Normally breast and long lines will be relayed by launches to the wharf. While making fast spring lines, vessel should adjust centre of her manifolds to wharf loading arms at the request of shore operator. Vessels should be held tightly to breasting dolphins with the assistance of tug-boats, mainly by tug-boat stationed midship, until mooring has been completed.

Anchoring in the vicinity of the wharf is not allowed except in an emergency.

Unberthing: Tug-boats will be stationed on seaward side of the vessel's bow, midship and quarter as necessary and will push the vessel so as to hold the vessel tightly to the breast dolphins while letting-go all mooring lines. Sequences of letting-go lines is the reverse of mooring. Therefore, long head and stern lines let go first, breast next and springs last.

DISCHARGING: *Prior to arrival:* Prior to arrival at the wharf, vessels should designate 3 manifolds which are convenient for unloading cargo. The designated manifolds should be marked by rags or other materials so as to be able to identify them easily from the wharf and adjust the vessel's position correctly to loading arms of the wharf. All the vessel's manifolds should be kept blinded until vessel is moored. Also, all crude oil tankers must be equipped with 16 in. ASA type flanges on her manifolds.

Connection of hoses: Discharging arms are as follows:

3 × 16 in. flanged for crude oils.
2 × 12 in. flanged for products (naphtha).

After completion of berthing, terminal representative and wharf operators will come on board and check readiness to connect discharging arms, fire fighting equipment, drip pans and oil removing materials. The 3 × 16 in. discharging arms for crude oil are rotary counter-weighted marine arms with hydraulic quick connect couplings. Remote controlled hydraulic positioners are provided and wharf operators will position and connect the outboard flanges of the arms to the tanker manifold. The vessel's crew, consisting of one responsible officer and 4 other crew, standby at the manifolds, prepare manifolds to be used, and co-ordinate with wharf operators in adjusting, connecting and securing discharging arms.

Operating Envelope: The unloading arms have been designed for an operating-height envelope that accounts for the elevation changes due to tide and varying freeboard of the largest and smallest tankers for which the wharf is designed. The 16 in. unloading arms will accommodate a maximum 255,000 d.w.t. tanker and a minimum 80,000 d.w.t. tanker, or heights of 26.3 m. to 5.2 m. above the lowest water level. The 12 in. unloading arms will accommodate a maximum 80,000 d.w.t. tanker and a minimum 30,000 d.w.t. tanker, or heights of 19.6 m. to 4.6 m.

A longitudinal drift of ±5.0 m. and a lateral drift of ±4.57 m. have been allowed for both sizes of unloading arms.

Rates and Pressure: After hoses have been connected, all shore valves will be opened and vessel's Chief Officer informed of shore readiness. Vessel will open all valves necessary to discharge except manifolds' valves which will be opened just prior to start of discharge.

After confirming that the cargo is flowing into designated shore tank, tanker rail pressure for all vessel sizes shall be 140 p.s.i.g., and maximum discharging rates are:

Arab Medium Crude Oil	70,000 b.p.h.
High Pour Low Sulphur } Crude Oil	40,000 b.p.h.
Naphtha	30,000 b.p.h.

Crude Oil Washing (COW): Crude oil washing of cargo tanks using fixed tank washing machines in conjunction with fully inerted gas tanks is permitted on Master's acceptance of Honam Oil's conditions to carry out COW at the crude wharf which will be delivered to the vessel. The vessel requiring COW should notify it to Honam Oil in advance together with the information of previous COWs conducted and COW schedules to be carried out.

BALLAST: The ballasting operation should be discussed and agreed with the terminal representative regarding the approximate time of commencement and duration of ballasting both into permanent ballast tanks and cargo tanks.

To obtain quick turn around, the terminal encourages simultaneous handling of cargo and ballast, other than permanent ballast, if the vessel is so equipped. Ballasting should be minimum after discharging cargo.

FRESH WATER: Not available.

FUEL: Not available.

SERVICES: Honam Oil provide the following services: Telex service every day from 0845 to 2130 hrs., except Saturdays when service is available from 0845 to 1500 hrs., and no service on Sundays and holidays.

Telephone service every day from 0845 to 2300 hours.

A list of emergency telephone numbers will be available at the wharf.

AUTHORITY: Honam Oil, Yosu Refinery. *Tel:* 90101 to 90109. *Telex:* 762 and 764 (domestic).

Head office: Seoul. *Tel:* 77155. *Telex:* Honam K-27234 or K-23261.

(C) PRODUCTS WHARF, HONAM OIL REFINERY

BERTHING: The 4 products berths are located in approximate position Lat. 34° 51′ 38″ N., Long. 127° 44′ E., in East-West direction and designed to accommodate 4 tankers simultaneously viz. No. 1 and No. 4 Berths for about 5,000 d.w.t. tankers, No. 2 for 3,000 d.w.t., and No. 3 for 20,000 ton tankers. No. 3 Berth is under modification and installation of Chicksan loading arm. The Honam Oil Product Wharf is designed to moor and unmoor tankers on a 24-hour basis, depending on the condition prevailing at the time and the Master's judgement. The wharf is well and sufficiently illuminated for night work.

Minimum mooring line requirements are:

Forward: 3 headlines	Aft: 3 stern lines
1 spring line	1 spring line
1 breast line	1 breast line

In strong wind 1 more head and 1 more stern line are required.

The direction of the tidal stream in the vicinity of the products wharf is nearly rectilinear and parallel to the berths, the flood running in a 272° direction and the ebb in an 084° direction. The maximum velocity is 2.5 knots or more. The duration of the ebb stream is about 6.75 hours, and the flood stream 5.5 hours.

The tidal range is about 4 m. Therefore, ship's crew must adjust vessel's ropes with tidal height so as to avoid damage to the ropes.

MAX. SIZE: There is shallow water of about 10 m. depth at LLW en route approaching the channel to the wharf. With this depth of water, the Terminal limits vessel's draft to less than 32 ft.

CONNECTING HOSES: It is the policy of the Honam Oil Refinery Co., Ltd. that the ship's crew shall be responsible for the connecting and disconnecting of the cargo hoses at the ship's manifold. The wharf crew will operate the cargo hose winches.

LOADING: The refinery can furnish loading at 5,000 b.p.h. or more. The Chief Officer should, however, state the loading rate he requires which should be maximum consistent with safety at all times. A qualified deck officer should, however, be on deck during the entire loading operation. The international code flag "B" shall be displayed from the signal yard-arm during daylight hours. A red light shown during hours of darkness. Lines for loading and deballasting are as follows:

Product	*Lines Dia., inches*
LPG	6
Regular gasoline	10
Military and Premium gasoline	12
Kerosene/JA–1	10
Naphtha	10
JP–4	12
Solvent	6
Diesel	12
LRFO/NSFO	10
Bunker–C	14
Bunker–C	12
Asphalt to Cosmos Wharf	3
Bunker–A	10
Ballast water	10
LPG Vapour return	3

FRESH WATER: Vessels requiring fresh water request required amount of water to ship's agent in advance.

REPAIRS: There are no repair facilities and also repairs are not allowed on the product wharf. In the event of emergency cases, Honam Oil will assist in carrying out repairs under the supervision of refinery's safety personnel to expedite vessels from the wharf and a quick turn around.

RADIO: See "Radio" in section "A".

AUTHORITY: Honam Oil Refinery.

(D) NAKPO WHARF, NAMHAE CHEMICAL CORPORATION

A straight berth which could accommodate one 50,000, one 30,000 and two 20,000 d.w.t. vessels is located at about Lat. 34° 51′ 40″ N., Long. 127° 44′ 40″ E. The wharf is handling raw material by 800 tons crane and product of fertilizer by 300 tons crane.

(E) PIER, DAE SUNG METHANOL PLANT

Located close to the product wharf of Honam Oil Refinery at about Lat. 34° 51′ 30″ N., Long. 127° 44′ 05″ E. Maximum vessel size and draft are about 4,400 d.w.t. and 5.5 m. respectively.

(F) DRY CARGO PORT

PIERS: 3 piers are located in Yosu town at about Lat. 34° 44.3′ N., Long. 127° 45.3′ East and consist of No. 1, No. 2 and No. 3 Piers.

RESTRICTIONS: No. 1 Pier is used for only small vessels. No. 2 Pier for vessels of less than 20 ft. draft and max. draft at No. 3 Pier is 26 ft. At anchor draft up to 35 ft.

CARGO-HANDLING FACILITIES: Crane barge of 30 tons capacity is available.

RADIO: See "Radio" in section "A".

AUTHORITY: Local Port Authority, Yosu.

AGENT: See "Busan" or "Inchon".

Kuwait

GENERAL

VISA REGULATIONS: *Crew Changes:* Crew members joining ships at Kuwaiti ports can enter Kuwait with a valid Seaman's book, against a "Seaman's Guarantee Letter" from Agent, allowing 24 hour transit only to join a vessel in port.

For the preparation of a Seaman's Guarantee Letter (S.G.L.) and to arrange an "Airline's OK Board Telex" from Kuwait (to allow crew to board a flight to Kuwait without Kuwaiti visa), please telex the following particulars to vessel's Agent:

Full Name
Nationality
Seaman's Book Number/Date and Place of Issue
Age/Date of Birth
Profession
Flight Details

Once a seaman enters/joins vessel on S.G.L. as above, it is not permitted for him to sign off/leave the vessel in Kuwait due to Immigration restrictions applicable to seamen entering on S.G.L.

Visitors to ships, repairmen and business visitors should obtain a visa before travelling to Kuwait. It is also possible for the Agent to obtain a visitor's visa (N.O.C.) locally in Kuwait. However, visitors must send, well in advance, a photo-copy of the passport pages containing full passport particulars (imperative) to the Agent in order to apply for such a visa.

SPARES/MAIL: *Air Freight of Ship's Spares, Mail etc.:* Air-freighted spare parts and ship's mail should be addressed to the Master c/o the Agent, and marked: "Ship's Spares (Stores) in Transit" and be accompanied by packing list and commercial invoice and Certificate of Origin both in original, with name and address of manufacturer (imperative) and certified by Chamber of Commerce and legalised by any Arab Embassy/Consulate (except Egypt).

Contents and weight of consignment should be correctly stated in all documents and air way-bill.

Customs clearance formalities and delivery of air freight consignments in Kuwait will take 10-14 days. It is, therefore, advisable to despatch air freight parcels sufficiently well in advance of ship's arrival. The flight details and air way-bill number should be telexed to the Agent enabling the Agent to collect delivery order from the airline and commence clearance formalities immediately.

N.B.: No documents are needed for ship's mail. It is advisable to send ship's mail/printed matter/documents by air courier, due to faster handling at airport, and to avoid the lengthy procedures applicable to air freight consignments.

PACKING REGULATIONS: *Chemicals in Bags:* The following is from the Director General, Ports Public Authority.

"You will appreciate that chemical materials arriving in bags require careful and special handling to prevent tearing and contamination, and we would, therefore, request you to ask all Steamship Agents and Owners of vessels to give their best attention to shipments of this type of cargo, in an effort to ease its handling by the stevedoring labourers without obstacles.

The bags should properly be bundled and placed on pallets, covered by thick plastic and/or canvas covers for safety and security of the cargo and fast discharging.

It should be noted that unless this type of cargo is shipped on vessels under the condition mentioned above, the Ports Public Authority shall not permit discharging and the cargo will remain on board the on-carrying vessel".

In Transit and Kuwait Cargo Mixed Together in Ships' Holds: The Kuwait Ports Public Authority have reported a recent incident which occurred during discharge of cargo from a vessel.

The berthing of the vessel as usual was arranged according to the cable from the Master that Kuwait cargo was clear for discharge in all respects, but when the discharging operation was carried out, they observed that the in transit and Kuwait cargo in all hatches were mixed together. Such being the case the Ports Public Authority were compelled to move one truck out to receive Kuwait cargo, and then bring back the truck of receivers of the in transit cargo, and so on until the discharging was completed. This situation naturally entangled the work altogether and caused considerable delay in discharging the cargo from the vessel.

Therefore, the Ports Public Authority have requested that we draw Principals' attention to this and ask you to take good care in stowing cargo properly in ships' holds and that it not be mixed together.

NOTICE: From The Under-Secretary – Ministry of Communications (dated 8th November, 1982).

We wish to inform you that we have received a cable from our Embassy in Baghdad on 6.11.82, stating that the Ministry of Foreign Affairs in Baghdad, notified the Embassy of a declaration made by a Military spokesman on 1.11.82 relating to limitation of the Naval operational area in the Northern part of Arabian Gulf, the text of which is as follows:

1. Zone starting Area – Lat: 29° 30′ N., Long: 48° 30′ E.
2. Lat: 29° 25′ N., Long: 49° 09′ E.
3. Lat: 28° 23′ N., Long: 49° 47′ E.
4. Zone of ending Area – Lat: 28° 23′ N., Long: 51° 00′ E.

We therefore request all maritime companies and oil tankers not to approach or sail from this prohibited area which is considered a Military Operational Area. The Iraqi Authorities shall not undertake any material or moral responsibility towards ships and tanker owners.

MINA ABDULLA: 29.02 N. 48.11E. **(See Plan Book)**

LOCATION: Mina Abdulla bounded on South by parallel of Lat. 28° 55′ N. on the East by Long. 48° 18′ E. and on North by a line joining following points:

(1)	29° 01′ 45″ N.	48° 09′ 25″ E.
(2)	29° 01′ 45″ N.	48° 10′ 06″ E.
(3)	29° 02′ N.	48° 10′ 18″ E.
(4)	29° 02′ N.	48° 18′ 00″ E.

FLAG: Every merchant ship when entering or leaving port between sunrise and sunset shall fly her national flag and national flag of Kuwait and, when entering port, shall fly her signal letters. All vessels required to fly Kuwait flag on foremast during daylight hours. Flags may be obtained from Agent.

APPROACHES: 2 oil-loading berths supplied by 3 pipe-lines are situated here. A number of large tanks define tank farm area. A refinery stands to S.W. of tank farm. The flare is conspicuous. Other conspicuous objects in area are the radio tower, Mosque Minaret and the 4 leading beacons for 2 berths. These are lit for night berthing by 3 white lights on each beacon in the form of triangles, the beacon lights for Berth No. 1 are occulting every 5 seconds, the lights of No. 2 Berth are fixed.

When a vessel is ready to enter at the same time as another vessel is ready to leave the port, the outgoing vessel shall have priority over the incoming vessel, subject always to the provisions of the International Regulations for Preventing Collisions at Sea and to the requirements of safe navigation.

DOCUMENTS: Before leaving Kuwait the Master shall be responsible for obtaining a Port Clearance Certificate. The documents necessary for vessels to enter and leave Mina Abdulla are:

Enter	*Clear*
Ship's Manifest.	Register.
Bill of Health.	Load Line Certificate.
Crew List.	Radio Certificate.
Clearance from Last Port.	Safety Certificate.
Light Dues Certificate.	Last Port Clearance.

Masters and Agents of vessels shall, when called upon by a Customs Officer or Marine Officer, produce any documents relative to the landing or shipment of their vessel's cargo in the port. The Master or his representative is required to hand to the Company a written Notice of Readiness to load.

Discharging certificates of oil cargo loaded from Kuwait and Partitioned Zone ports are to be sent to vessels' local Agents immediately duly attested by the Customs Authorities and Arab Consulate covering full quantity as per Bill of Lading.

If a vessel, which has not submitted the certificate for the previous voyage, calls for the second time, she will be allowed to load and sail only after paying a cash deposit of KD 2,000.

In order to avoid delay in berthing, loading and outward clearance for vessels, all owners must give instructions to Agents at discharging ports to forward relevant cargo discharge certificates to Agents at loading ports without delay.

PILOTAGE: Mooring Master normally meets vessels within 1.5 miles of terminal sea berths and will act as Pilot and as Company's Representative and remain on board during vessel's stay in port. Vessels requested to have Pilot ladder of an approved pattern, safely and securely rigged, ready for immediate use, and long enough to reach Mooring Master's launch. When it is necessary for a vessel to anchor before being berthed she should do so in the recommended anchorage area. Two 45 ft. tugs painted black with white superstructure assist berthing by running mooring lines to stern buoys. Two pilot boats painted black with white superstructure and are radar equipped. The name of the first boat is "Independent" and the second one is "Sahara".

Vessel with a Mooring Master on board shall display International Code Flag "H" in a prominent position whilst manoeuvring under his advice, and shall, if so instructed by Mooring Master, display a flag indicating berth to which vessel is proceeding.

ANCHORAGES: Vessels requiring to anchor for any reason in port limits should do so within area enclosed between positions:

29° 02′ N.	48° 14.3′ E.
29° 02′ N.	48° 15.1′ E.
29° 01.2′ N.	48° 15.1′ E.
29° 01.2′ N.	48° 14.1′ E.

or within reasonable proximity to the East if congestion arises in anchorage area.

All vessels and craft within the port shall be navigated with care and caution, at a speed, and in a manner which shall not endanger the safety of other vessels or craft. In particular, special care and caution is to be observed in passing vessels or craft of the following category: weight-lifting or deeply-laden craft, vessels which are mooring or moored at terminal buoys, vessels or craft in tow and vessels or craft engaged on diving, dredging, grabbing, pile-driving or construction work, survey operations or the removal of obstructions.

All vessels within the port shall anchor, or moor and unmoor, when and where required by the Marine Officer, and shall be moved from place to place as required and by such means or appliances as may be ordered by the Marine Officer.

Vessels or craft shall not anchor near any submarine lines within the port limits, unless engaged on work which, in the opinion of the Marine Officer, necessitates their doing so.

MAX. SIZE: Vessels of unlimited length can be accommodated in Berth No. 2 only. Approximately 90,000 d.w.t. tankers fully loaded up to a maximum draft of 46 ft. on arrival, calling for bunkers only, can be accommodated. Vessels up to a maximum of 200,000 d.w.t. can be accommodated arriving in ballast condition for loading part cargoes up to a max. sailing draft of 51 ft. or for normal bunkering requirements when remaining in ballast.

HEALTH: Quarantine regulations administered by Kuwait Government's Quarantine Medical Officer. Pratique granted at anchorage or berth.

Vessels calling at Mina Abdulla are requested to send following information to "Health Shuaiba Port":

(1) Name of vessel.
(2) Last port of call.
(3) Health condition of crew.
(4) Validity of Cholera Certificates.
(5) Request for Free Pratique.

No craft, other than one having on board the Mooring Master or Port Health Officer, may approach any vessel entering the port and no other person may board any such vessel until Free Pratique has been granted.

Adequate covers shall be placed over all overside discharges.

Masters shall be responsible for ensuring that no unhealthy or offensive matter is deposited from their vessels on port premises. Any such matter so deposited that is, or becomes offensive, or, in the opinion of the Port Health Officer, injurious to health, may be removed, confiscated or destroyed and the place of deposit cleaned or disinfected on the direction of the Marine Officer at the expense of the Master responsible.

Any vessel, having on board offensive goods, or goods which, in the opinion of the Port Health Officer, are injurious to health, may be ordered to leave the port by the Marine Officer.

No ashes, refuse or other objectionable matter shall be thrown overboard from any vessel either on to any premises or into any waters of the port.

RADIO/VHF: Master shall inform "Mina Abdulla Marine" at least 72, 48 and 24 hour's notice of time of arrival via Kuwait Government Coastal Radio Station, call sign "9KK".

Mina Abdulla Marine is provided also with VHF radio. All Channels are available.

MOORING: Mooring Masters may decline to moor any vessel if in his opinion it is not equipped with satisfactory mooring facilities, lines and gear, etc.

Vessels shall provide such tackle as may be required for loading or discharging cargo.

Vessels berthed at sea terminals shall provide not less than 6 good quality mooring ropes and/or wire hawsers aft, each not less than 120 fathoms in length. An eye shall be spliced in ends of ropes to secure lines to pelican hooks on buoys. Ships must have both anchors ready for immediate use each with minimum of chain as follows Below: d.w.t. 10,000, 8 shackles. Between d.w.t. 10,000 – 20,000, 9 shackles; 20,000 – 30,000, 10 shackles. Above d.w.t. 30,000, 11 shackles; 40,000, 12 shackles. Above 60,000, 13 shackles; and above 80,000, 16 shackles. The term shackles is to be interpreted as a length of 15 fathoms. Masters shall be responsible for seeing that a strict watch is kept on their vessel's moorings to prevent ranging.

BERTHING: Master shall, before berthing, advise Marine Officer of any special damage or disability to the vessel. No.1 Berth Lat. 29° 01′ 16″ N., Long. 48° 11′ 52″ E. approximately, situated about 2 miles offshore in 43 ft. water LWOST over sand and coral with fair holding ground. A spar-buoy painted white marks end of submerged steel pipe-lines. A common bunker line to the berths, off-branches approximately 1,000 ft. South of Berth No. 1 and runs in to meet the direct line from shore to this berth. Ends of attached loading hoses marked by can-buoys on either side of the spar. 4 mooring buoys in Berth No. 1 and 5 in Berth No. 2 painted white located in an arc, 1 – 2 cables approximately E.S.E. through South to S.S.W. spar-buoys for vessel's stern moorings. Ship's anchors only are used forward in No. 2 Berth (situated approximately half a cable South and 9 cables East of Berth No. 1); Lat. 29° 01′ 0″ N., Long. 48° 12′ 51″ E. approximately. Depth of water in Berth No. 2 is 56 ft. LWOST over mud and clay which is excellent holding ground.

LOADING: Terminal has facilities to load at max. rate of 800 t.p.h. in Berth No. 1 and 2,800 t.p.h. in Berth No. 2, but this loading rate can be achieved only when vessel is furnished with appropriate equipment.

Caution: The incoming oil stream is pumped from shore and it is extremely dangerous to close a ship's valve against the incoming oil stream. Such a procedure creates an excessive pressure, which may damage submarine lines, ship's pipe-lines or the terminal facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

Raising, connecting, disconnecting and lowering of submarine hoses will be performed by shore crew as advised by Mooring Master who will remain on board while ship is mooring, loading or discharging and unmooring. Vessels will provide winch drivers and remove such manifold blanking flanges and fit reducing pieces as required.

Deck hose connections from submarine lines as follows:

Cargo: 10 in. ID, working pressure 150 p.s.i., fitted with 150# ASA steel flanges. Bunker flanges 8 in. ID, working pressure 150 p.s.i., fitted with 150# ASA steel flanges.

Loading and discharging of petroleum vessels shall not be undertaken without permission of Marine Officer.

Loading and discharging of petroleum vessels shall not commence until:

(1) Master or Chief Officer has certified to Marine Officer that all necessary valves are open and that vessel is in proper condition to receive or discharge cargo.

(2) Master or Chief Officer has certified to Marine Officer that all ship's sea valves are closed or blank flanged except those required for water circulation purposes, and that these regulations are being and will be observed.

(3) Ship's tanks have been inspected by an authorised inspector and passed as suitable for loading.

Throughout period of loading and discharging operations, following conditions shall be observed:

(1) A responsible Ship's Officer shall be on watch on board at a point near tanks which are receiving oil during process of loading. The company's staff have received instructions to stop loading immediately whenever this rule is disregarded.

(2) A capable member of ship's crew shall be stationed by ship's tank valves which are receiving oil during loading.

(3) All pipe-lines and hoses shall, while rigged for loading or discharging petroleum, be directly and continuously earthed and kept constantly under supervision.

(4) No petroleum shall be allowed to escape or overflow.

(5) The following signals will be observed, as well as the radio communications, between ship and shore:

Signal Flag by Day	*Starting*	*Light Signal by Night*
1 Red Flag	Slow Speed	1 Red Light
2 Red Flags	Full Speed	2 Red Lights
	Stopping	
1 Red Flag	Slow Speed	1 Red Light
All Flags Down	Stop	No Lights

(6) When normal ship-to-shore communication fails, the emergency signal to stop the oil flow will be a continuous blast on the ship's whistle until the oil ceases to flow. Steam or air should never be shut off from whistle during loading. When practical, means should be provided for blowing the whistle from the after section of the cat walk. Whenever an Emergency Whistle Signal is used, all loading operations in the berths will be shut down until normal communication is restored. For this reason it is requested that ships in the area refrain from using ship's whistle for other than essential purposes.

Load Lines: Masters are warned that their load lines are subject to scrutiny by the Port Officer from Mina-Al-Ahmadi on completion of loading or bunkering. It is in their own interest therefore, to observe the regulations, as vessels are liable to be delayed and have to pump ashore or be fined if overloaded, and Port Clearance withheld.

BALLAST: As soon as practicable after arrival, all vessel's tanks will be inspected for evidence of oil in ballast. During discharge of ballast, similar inspections will continue. If evidence of oil appears at any of these inspections, the ship must return at once to a point not less than 100 miles from the coastline and there clean tanks and segregate slops.

Masters will be required to sign a declaration certifying that any water ballast intended for discharge from vessel is clean and free from oil.

POLLUTION: Cases of discharging dirty ballast or oil spillages will be investigated and vessels are liable to fines and/or detention. Vessels shall not discharge into the water of the port any part of the content of their cargo, slop, or ballast tanks or bilges which is liable to pollute these waters. Masters shall ensure that pipe-line and equipment are clean before using them for discharging anything into the water of the port. Scuppers shall be plugged effectively and no leakage or spillage of petroleum on board shall be allowed to leak or be swept overboard.

The State of Kuwait has stringent laws in force concerning the pollution of the sea by oil. The following are 2 amended paragraphs of this law:

Paragraph 1, Art. 4. "A person responsible for any pollution as described in Articles 1 and 2 shall be punished by a fine of not less than 1,500 Dinars and not more then 40,000 Dinars. In the event of his committing a similar crime within a period of 1 year from the date of his conviction, such a person shall be punished by a fine of not less than 3,000 Dinars and not more than 40,000 Dinars, and in the event of his committing yet another crime within a year from this last conviction he shall be punished by a fine of not less than 6,000 Dinars and not more than 40,000 Dinars".

For each offence a bond of 40,000 Kuwaiti Dinars must be deposited prior to release of vessel.

Paragraph 3, Art. 6.. "The person responsible for pollution may suspend the detention order against the ship on payment, as a cash guarantee, of 40,000 Kuwaiti Dinars to the official entrusted with the execution of such order".

TIDE: The maximum tidal range is 10 ft. 6 in. and velocity of tide is from 0.5 to 2 knots.

DENSITY: 1025.

MEDICAL: Patients will in normal course of events be treated by Quarantine Medical Officer on board. Neither medical nor hospital facilities are provided by the Company. However, in cases of emergency those requiring urgent hospitalisation may be taken by vessel's Agent.

FUEL: Fuel oil bunkers can be loaded in either berth at a max. rate of 500 t.p.h, thus raising the max. loading rate of either berth by 500 t.p.h. for fuel oil cargoes only.

FRESH WATER: Cannot be supplied at Mina Abdulla. In case of utmost need Agent may hire a barge with a capacity of 100 tons of fresh water from Kuwait, and send to Mina Abdulla.

CUSTOMS: Import of firearms and ammunition is forbidden. Under Kuwait Law No. 46, it is an offence to sell or trade liquor within the State of Kuwait. Any person convicted for selling, purchasing, giving away, accepting or acquiring in any manner, liquor or any intoxicating drinks for the purpose of trading and marketing shall be punished by a maximum 3 year's imprisonment and a maximum fine of KD 300 or by only 1 of the 2 aforesaid penalties. Alcoholic beverage is strictly prohibited to be held out of bond. Master allowed to keep limited quantity in his cabin.

CONSULS: See "Shuwaikh". Consuls are situated just outside Kuwait town, some 30 miles from the terminal.

REPAIRS: No facilities.

REPATRIATION: See "Visa Regulations" under General before first port

AIRPORT: Kuwait.

TIME: GMT plus 3 hours.

PROVISIONS: K.N.P.C. does not provide any chandlering facilities. Masters of vessels calling at Mina Abdulla must arrange for supplies through ship's Agent. Foodstuffs, beverages, tobaccos, etc., are available from ship chandlers in Kuwait in limited kinds and quantities. Prices a little more expensive than in Kuwait due to long transportation. Ship's Agent should be advised by cable well in advance.

CERTIFICATES: See "Documents". There is no organisation for dealing with Derat Certificate at Mina Abdulla. Agents are responsible for presentation of Oil-discharging Certificate to Customs Authorities as guaranteed by them. All Cargo Discharge Certificates duly attested by the Arab Consulate are to be sent to Agents directly.

SHORE LEAVE: At present, crews not allowed ashore at Mina Abdulla, and this rule will be strictly adhered to.

REGULATIONS: Main engines shall always be kept ready for use. Steam pressure shall be maintained at minimum necessary to operate auxiliaries and to manoeuvre in case of need. Deck steam is to be maintained at all times.

Engine repairs which may prevent working of main engines may only be undertaken with written permission of Marine Officer.

Master shall at all times retain on board sufficient crew to work vessels.

Vessels shall have both anchors ready for immediate use on arrival and departure.

Vessels berthed at sea terminals shall not carry out engine trials without permission of Marine Officer.

Vessels berthing during hours of darkness must if available provide a portable light of an approved gas-tight pattern capable of being placed on either quarter of vessel to illuminate vessel's mooring ropes sufficiently for mooring boat.

Vessels shall provide an efficient accommodation ladder and boat rope for port authorities and, during hours of darkness, shall install adequate approved lighting for same. Failure to comply with this may lead to inward clearance being delayed by authorities, thus incurring delays to vessel.

No swimming in vicinity of vessels or from vessels in berth is allowed.

SHIPMASTER'S REPORT: December 1978.

Berth No. 1: This berth is now reserved for loading of naphtha only. Loading rate 800 t.p.h. Cargo line is 10 in.

This berth is also fitted with a line of 8 in. for fuel oil bunkers. Rate for bunkering: 500 t.p.h.

Berth No. 2: This berth is operated for loading either crude oil or fuel oil. The cargo line is 10 in. Loading rate: 2,800 t.p.h.

This berth is also fitted with a line of 8 in. for fuel oil bunkers. Rate for bunkering: 500 t.p.h.

For loading of crude oil cargoes, only the cargo line is used and the actual loading rate is 2,800 t.p.h.

For loading of fuel oil cargoes, both cargo and bunker lines are used simultaneously, and the loading rate is increased to 3,300 t.p.h.

At the end of loading operations, the cargo line is flushed when a different grade of cargo is to be loaded on the following vessel.

AUTHORITY: Kuwait National Petroleum Co., Mina Abdulla Refinery, P.O.Box Safat 69, Kuwait. *Tel:* 960233 ext. 3028/3029. *Telex:* Kunpema 44204 Kt. *Cables:* Kunpema Kt–Marine Mina Abdulla. *Contact:* Captain Hani S. Omar, Senior Mooring Master.

MINA AL-AHMADI: 29.04 N. 48.09 E. (See Plan Book)

OPERATORS: Kuwait Oil Company.

LOCATION: Port of Mina Al-Ahmadi is open roadstead situated on Western shores of the Gulf.

PORT LIMITS: From the shore at Lat: 29° 02′ 50″ N. Eastward to Long: 48° 09′ 42″ E. Thence in a S.E. direction to position Lat: 29° 02′ 45″ N., Long. 48° 09′ 47″ E. then in an Easterly direction towards Long: 48° 11′ 30″ E. and the Northerly limit Lat: 29° 10′ 00″ N. from the shore to Long: 48° 11′ 30″ E.

Note: Southern limits liable to slight modification due to Shuaiba Port expansion. Changes of no consequence to visiting vessels.

FLAG: National flag of Kuwait is to be flown at foremast head during vessel's stay in port.

NAVIGATIONAL AIDS:

Current hydrographic information may be obtained by radio from the "Middle East Navigation Aids Service, Bahrain".

Lights and Fog Signals

A fog signal on the extreme South end of South Pier with characteristics of one 3-second blast every minute. Approx. position Lat. 29° 04′ 05″ N., Long. 48° 10′ 00″ E.

A fog signal situated on the North Pier with a characteristic of 2.5-second blast, 3-second silence, 2.5-second blast, 3-second silence, 2.5-second blast, 46.5-second silence, Approximate position Lat: 29° 07′ 24″ N., Long: 48° 09′ 00″ E.

A fog signal situated on the Sea Island with a characteristic of 2×3 second blasts every 90 seconds. Approximate position Lat: 29° 06′ 48″ N., Long: 48° 17′ 29″ E.

A fog signal situated on the Single Point Mooring with a characteristic of a 10-second blast every 60 seconds. Approximate position Lat: 29° 06.9′ N., Long: 48° 19.2′ E.

DOCUMENTS:

1. To obtain clearance inwards, following documents required by Agents:

(i) Ship's Register.
(ii) Safety Equipment Certificate.
(iii) Safety Radio Certificate.
(iv) Load Line Certificate.
(v) Last Port Clearance.
(vi) Two copies of Crew List showing names, nationalities and passport/seamen's book numbers.

Items (i) to (v) are returned to Master together with Port Clearance (valid 24 hours only) prior to sailing.

2. Customs boarding officers require following:

(a) One copy of Crew List.
(b) Log Books covering period from last visit.
(c) Completed Customs Declaration Form (supplied by boarding officer).
(d) List of Ports visited with arrival and departure dates since last visit (form also supplied by boarding officer).
(e) Completed Ballast Form (form also supplied by boarding officer).

3. Immigration officials require the following:

(a) Valid Passport or Seamen's Book – the latter is preferable for landing.
(b) Letter of Guarantee from Agents.
(c) Two copies of Crew Lists.

4. Early Departure Procedure. KOC Documents Section are now operating an Early Departure Procedure to cut down delays in documentation. Masters may opt to use this scheme, full details of which can be obtained from KOTC. Those vessels not accepting this system of documentation are unberthed to anchorage to await documentation and therefore subject to delay in sailing until documents are ready and delivered onboard by launch. Weather conditions may prolong such delays on occasions.

5. Discharge Certificates: Discharging certificates of oil cargo loaded from Kuwait and neutral zone ports are to be sent to vessels' local Agent immediately, duly attested by Customs authorities and Arab Consulate covering full quantity as per Bill of Lading.

If a vessel, which has not submitted the certificate for the previous voyage, calls for the second time, she will be allowed to load and sail only after paying a cash deposit of KD 2,000.

In order to avoid delay in berthing, loading and outward clearance for vessels, all owners must give instructions to Agent at discharging ports to forward relevant cargo discharge certificates to Agent at loading ports without delay.

PILOTAGE: Vessels should arrive with sufficient clean ballast for safe manoeuvring under prevailing weather conditions. Under certain conditions the Pilot, after consulting the Harbour Master, may require additional ballast to be run in before berthing.

All berthing, unberthing and manoeuvring of vessels within the port limits, restricted area and prohibited anchorage must be done under the supervision of a KOC Pilot.

It is the duty of the Master to inform the Pilot of any special conditions, difficulties, or peculiarities whatsoever pertaining to his vessel which might impose hazards in connections with the handling, mooring, unmooring, loading or discharging of the vessel.

ANCHORAGES: The suggested anchorages in the port of Mina Al-Ahmadi have been laid out to facilitate shipping in general. These anchorage areas are outside of the port limits and clear of the prohibited anchorage and restricted areas. Depths in the anchorages range from 10 to 15 fathoms, the seabed is of sand and soft coral with mud patches and affords good holding ground.

Incoming vessels are assigned berths by the Harbour Master in accordance with time of arrival, type of cargo required, size of vessel and loaded draft. Endeavour is made to berth vessels on arrival and Masters will be advised, prior to arrival, of the pier at which they will berth. If a berth is not available, vessels will be requested to anchor in one of the three anchorages as follows:

1. To the North-West or South-East of the Sea Island and inside of the restricted area.
2. To the East of the North Pier, outside of the port limits and to the North of the prohibited anchorage.
3. To the East of the South Pier, outside of the port limits and between the Southern limit of the prohibited anchorage and the Northern port limit of Shuaiba Port.

To the East of the port limits exists a prohibited anchorage and a restricted area which embraces the Sea Island and submarine-feeder pipe-lines.

Positions of these areas are:

Prohibited anchorage	29° 05′ 00″ N.		29° 05′ 00″ N.
	48° 11′ 30″ E.	to	48° 15′ 00″ E.
	29° 07′ 00″ N.		29° 07′ 00″ N.
	48° 11′ 30″ E.		48° 15′ 00″ E.
Restricted area	29° 05′ 00″ N.	to	29° 05′ 00″ N.
	48° 15′ 00″ E.		48° 20′ 00″ E.
	29° 09′ 00″ N.		29° 09′ 00″ N.
	48° 15′ 00″ E.		48° 20′ 00″ E.

HEALTH:

Vessels calling at Mina Al-Ahmadi are requested to radio the following information to "Health Minahmadi Port":

(1) Name of vessel
(2) Last port of call
(3) Health condition of crew
(4) Validity of Cholera Certificates
(5) Request for Free Pratique

Free Pratique will be considered at the discretion of the Quarantine Officer, and vessels must hoist the yellow flag unless they are informed by Agent or Harbour Control that Free Pratique has been granted.

Regulations.

(i) All vessels must exhibit quarantine signals until quarantine formalities are completed or Free Pratique granted. By day, International Code Flag "Q"; by night, red light over white light. No person other than the Pilot is allowed to board any vessel either alongside pier or at anchorage until pratique has been granted.

(ii) Valid Cholera Certificates will be required from travellers coming from infected areas with the exception of children under one year.

(iii) Ratguards must be fitted to all moorings – this is being rigidly enforced.

(iv) Maritime Declaration of Health Form (supplied by boarding quarantine officer) to be completed.

(v) One copy of Crew List containing dates of vaccination and inoculation is required.

(vi) International Certificates of Vaccination and Inoculation to be available for inspection if required.

(vii) Details of air-conditioning available in vessel (form supplied by boarding officer).

(viii) A valid Derat Certificate must be produced. Facilities are available locally for renewal.

RADIO:

1. *Station:* All radio communications to the Company should be quoted in Greenwich Mean Time and should be routed through Kuwait Coast Station 9KK, details of which are given below:

412G Al Kuwait (9KK) 29° 10′ 09″ N., 47° 45′ 42″ E.

Frequency			*Hours*
(9KK) 430*, 450, 500	A1, A2	2 kW.	0300–2100
(9KK2) 4,287	A1	0.75 kW.	On request
(9KK3) 6,370	A1	0.75 kW.	On request
(9KK4) 8,525	A1	0.75 kW.	0300–2100
(9KK5) 12,895	A1	0.75 kW.	0300–2100
2,182, 2,200, 2,750	A3	0.1 kW.	0300–2100

*On request.

Procedure: Transmits traffic lists on 450 kHz. each even hour; 8,525 and 12,895 kHz. each odd hour plus 35, listens for 30 mins. thereafter: 2,750 kHz. each odd hour plus 05.

2. *ETA:* 72 hours before arrival Masters should transmit to KUOCO through Al Kuwait Radio (9KK) the following information required by Kuwait Oil Company.

1. ETA.
2. Cargo and Bunkers required.
3. Notice of any repairs which may immobilise vessel.
4. Any special requirements regarding cargo documents.
5. Max. loading rate and ballast discharge time, special loading instructions if any.

The ETA should be confirmed 24 hours before arrival. The Master should also provide Agent with following information prior to arrival:

1. ETA.
2. Last port of call.
3. Any sickness on board.
4. Number of crew to see doctor or dentist.
5. All requirements – provisions, supplies, lubricating oils, repairs, stores, machinery for landing, crew repatriation, etc.

VHF: A short range VHF Radio Telephone. Port control system is in operation and continuous watch is maintained on International Channel 16. Port working Channels are:

11 12 14	General Port Working.
15 17	Sea Island Operations and General Port Working.
73 74	Pilot/Tugs Pier Controller North Pier/South Pier.

Vessels bound for Mina Al-Ahmadi should make contact, as soon as they are within range, calling "Mina Al-Ahmadi Port Control" on Channel 16.

Note: As Channel 16 is reserved for calling, safety and emergency, stations should refrain from using this Channel unnecessarily.

RADAR: A Decca harbour radar system is operated from the Harbour Master's office at the South Pier.

NOTICE OF READINESS: Vessel are accepted for loading either by being given a range date or "As convenient". If a Crude Oil Loading Tanker arrives within her nominated range date (a three day period) her N.O.R. will be taken as the time of her arrival whether or not she is berthed on arrival. An L.P.G. vessel is nominated an "Acceptance Date" plus 1 day and her N.O.R. will likewise be taken as the time of her arrival, whether or not she berths so long as her arrival time is within her range. If a vessel arrives "As convenient" or for lifting bunkers only then her notice of readiness will be taken as the time that the Pilot boards. Time of anchoring, together with position relative to South Pier Control should be advised to the Harbour Master by VHF or through 9KK as soon as possible. All vessels at anchor are required to be ready on receipt of one hour's notice from Port Control, this notice will be given by VHF or Lamp and vessels should ensure an efficient watch is maintained to receive notice.

Cancellation of N.O.R.: In all cases, including vessels having Range Dates, if after having received 1 hour's notice a vessel is not ready to berth when Pilot boards, at the expiry of that notice the original N.O.R. will be cancelled and the Pilot withdrawn. The new N.O.R. will be the time the Pilot re-boards the vessel concerned. As vessels are normally berthed in strict N.O.R. sequence, a vessel could lose considerable time through not being ready and Master should ensure that delays of this nature do not occur.

TUGS: K.O.C. maintain 3 diesel tugs for port use. They are 5,200 h.p. with a designated bollard pull of 70 tons. 2 tugs are normally on duty at all times. Hire charges for the services of Pilots, tugs and rope launches are covered by comprehensive port charges. Under normal operating conditions no tugs or other craft will come alongside the vessel before the Pilot boards. Ship's personnel must not signal for tugs or other boats to come alongside.

MOORINGS: When at berth, vessels must be moored to entire satisfaction of Pilot. Vessels must be ready at all times to put out extra moorings as requested by pier personnel or dictated by weather changes.

Mina Al-Ahmadi is subject to sudden fierce squalls; winds of 70 knots have been recorded, therefore vessel's mooring lines must be checked frequently to prevent excessive movement of vessel in berth. Experience has shown that wholly synthetic moorings have too much elasticity and allow vessel to range or drift away from the berth during periods of adverse weather. Whilst these moorings are acceptable as head/stern ropes, it is felt that the ideal breast moorings should be of wire or a wire rope combination with the end being sent ashore fitted with a synthetic pennant or tail. This type of mooring provides the necessary elasticity while still being able to hold the vessel in position. All vessels moored with automatic tension winches must set the manual brakes on these winches.

BERTHING: Vessels can berth at any time of the day and night. Berths are allocated by the Harbour Master depending on various factors and the berthing position is advised by VHF. All vessels must establish contact with Mina Al-Ahmadi Port Control before anchoring to ascertain position. Vessels should remain at 1 hour notice for berthing at all times and maintain a continuous listening watch on VHF Channel 16.

The Port facilities consists of 3 Piers, 1 Buoy Mooring (Sea Berth), Sea Island and Single Point Mooring.

South Pier: The South Pier is connected to the shore by an approach trestle, which leaves the shore in position 29° 03.6′ N., 48° 09′ E., and runs seaward in an 071° 26′ direction for a distance of 4,200 ft. (1,280 m.). The "T" head is formed by the oil pier running Northwards in a 341° direction for 2,805 ft. (855 m.) and the South arm running in a 174° direction for 1,076 ft. (328 m.). The pier is a steel piled structure with a wooden deck, 24 ft. above zero tide. The South Pier has 5 oil-loading berths, plus 2 L.P.G. berths, and 1 for K.O.C. cargo discharge and local bunkering.

Bitumen Pier: A Bitumen Pier, for the export of Bitumen is located in an approximate position 29° 03.9′ N, 48° 09′ E. The Pier approach projects out from the shore opposite the Bitumen plant in an 071° direction for approximately 600 m. The Pier head is 100 m. long and runs in a 341° – 161° direction. Water depth approximately 20 ft. 6 in. (zero tide). Largest vessel to be accommodated 5,000 ton S.D.W.

North Pier: The North Pier is situated 3.5 nautical miles North of the South Pier and is connected to the shore by an approach trestle which runs seaward from 29° 07.1′ N., 48° 08.2′ E. in a direction of 071° for a distance of 4,754 ft. (1,449 m.). The head is formed by the Oil Pier which runs Northward in a direction of 341° for a distance of 2,304 ft. (702 m.). The pier is a steel piled structure with a wooden deck, 20 ft. above zero tide. The North Pier has 4 oil-loading berths.

Sea Island: The loading platform of this Terminal is located in position 29° 06.8′ N., 48° 17.5′ E. approximately 7.4 miles East of the North and South Piers. It is a steel piled structure in 94 ft. of water (zero tide). It consists primarily of a central loading platform with control tower, 6 mooring and 8 breasting dolphins all interconnected by catwalks. The Terminal which lies in a 330° – 150° direction, is some 1,620 ft. in length (494 m.). The height of the loading platform above zero tide is 44 ft. The Sea Island has 2 loading berths. Crude oil is fed to the Terminal by a 48 in. submarine line and heavy fuel oil by a 20 in. submarine line. The submarine lines are marked by 3 light buoys letttered "A", "B" and "C". Details are given in the navigational aids. L.F.O. and D.O. bunkers are not available at the Sea Island.

Multi-pile Single Point Mooring: A Single Point Mooring established in 1979, is located in position 29° 06.9′ N., 48° 19.2′ E. approximately 1.5 nautical miles East of the Sea Island. This fixed, multi-piled structure is connected by a 48 in. submarine crude line and a 20 in. submarine bunker line. Both are extensions of the lines serving the Sea Island and connected to them on the Sea Island loading platform.

The S.P.M. has a distinguishing light, the characteristic of which is Fl. 3 ev. 10 seconds, visible 10 miles. The strings of hoses are marked by fixed orange lights. The S.P.M. lines are within the present restricted area and all vessels approaching the Port shall only anchor as and where directed by the Harbour Master. L.F.O. and D.O. bunkers are not available at the S.P.M.

Sea Berth: There is 1 sea berth located South of South Pier. Berth "A" is maintained only for the import of refined products.

Limiting Depths and Berth lengths:

Berth	*Depth at Zero Tide (ft.)*	*Nominal Length (ft.)*
South Pier		
1.	47	800
2.	46	535
3.	48	705
4.	49	765
5.	41.5	765
6.	43	705
9.	44.5	615
10.	49	1,050
North Pier		
11.	59	1,008
12.	59	1,296
15.	57	792
16.	57	740
Sea Island		
20.	94	1,620
21.	94	1,620
Single Point Mooring		
22.	100	Accommodates any type of vessel

Loading Manifold, Loading Connection Sizes:

South Pier: Berths 2–6 are equipped with 10 in. cargo hoses and 8 in. bunker hoses – standard 150/ASA.

Berth 1 is equipped with	5×16 in. Cargo Arms.
	2×12 in. Bunker Arms.
Berth 10 is equipped with	4×16 in. Cargo Arms.
	2×12 in. Bunker Arms.
Berth 9 is equipped with	6 in. bunker hose only.
	All Standard 150/ASA.
North Pier:	
Berths 11 and 12	3×16 in. Cargo Arms.
Loading Arms	2×12 in. Bunker Arms.
	1×12 in. Chiksan for KLD/KNG.
Berths 15 and 16	4×12 in. Cargo Flanges.
Chiksan Units	2×8 in. Bunker Flanges.
	Standard 150/ASA.
Sea Island:	
Berths 20 and 21	4×16 in. Cargo Flanges.
Loading Arms	2×12 in. Bunker Flanges.
	Standard 150/ASA.
SPM:	
Berth 22	2×16 Cargo Flanges.
Floating Hoses	1×12 in. Bunker Flanges.
	Standard 150/ASA.

Reducers: All vessels using the port of Mina Al-Ahmadi should be equipped with reducing spools to fit these loading connections. These fittings should be in place, prior to berthing to help expedite the vessel's turn around.

Slops: A 6 in. slop-line is available on all berths on North and South Piers for reception of slops. For first 3 hours use of this facility is free, for each additional hour or part thereof, a charge is made. Reception of slops is necessarily slow and a vessel may be considerably delayed in having to pump slops ashore. Vessels are therefore expected to arrive with clean ballast and Masters are asked to certify that all tanks and lines have been thoroughly washed unless "load on top" techniques are being operated.

Crude/Product Loading Rates: The following table shows the crude and products available at each berth and the nominal loading rates.

Grade	Location	Nominal Rate (t.p.h.)	Maximum
Crude Oil	Sea Island	15,000	19,600
Crude Oil	S.P.M.	11,500	—
Crude Oil	North Pier	7,200	12,000
Crude Oil	South Pier	2,100	4,500
HFO Bunkers	S.P.M.	750	—
HFO Bunkers	Sea Island	750	—
HFO Bunkers	North Pier	500	—
HFO Bunkers	South Pier	500	—
HFO Cargo	North Pier	2,000	2,500
HFO Cargo	South Pier	2,000	—
LFO Bunkers	North Pier	500	—
LFO Bunkers	South Pier	500	—
LFO Cargo	South Pier	1,100	1,500
D.O. Bunkers	North Pier	500	—
D.O. Bunkers	South Pier	500	—
Line Blend Fuel Oil	South Pier	1,200	—
Gas Oil	South Pier	1,500	2,500
K.L.D.	N. & S. Piers	2,000	—
K.N.G.	N. & S. Piers	2,000	—
Bulk L.P.G.	South Pier	2,000	2,000

Note: All blended cargoes containing crude oil as one of the components can be loaded at any crude berth.

K.O.C. are in the process of installing a new metering system for Exports.

FUEL: Heavy, light and diesel fuel can be supplied on all berths except the Sea Island and S.P.M., where only heavy fuel is available. There are no bunkering facilities on the Bitumen Pier.

	API	Viscosity	Sulphur content
Heavy Fuel	15.2–15.8	2,900–3,400	4.0 or less
Light Fuel	19.0–20.0	600	3.5 or less
Diesel Fuel	35.5–36.5	36	1.5 or less

LUBRICATING OILS: The stock of marine products of BP, Shell and Gulf Oil are maintained at Mina Al-Ahmadi and requests indicating the quantities are to be made in advance. All drums are to be handled during deballasting or before loading. Vessels will not be allowed to load more than 9 drums after loading unless under special circumstances and depending on shipping congestion. No bulk luboil delivery service available in Kuwait.

MEDICAL: Patients will normally be treated at State Quarantine Clinic, where doctors are on duty between 0800 – 1200 hrs. and 1500 – 2000 hrs. daily. In emergencies doctors are available any time. Patients requiring hospital treatment will be transported by Agents to either KOC hospital in Ahmadi or to State hospital in Kuwait. Dental treatment can be arranged by Agents.

FRESH WATER: Fresh water is not available at Mina Al-Ahmadi. Vessels should contact their Agents for supply from alternative sources, such as Shuwaikh Anchorage, Shuaiba Port, etc.

STORING: Vessels can only be stored by barge at the anchorage. When storing alongside at the berth, trucks can only proceed to the head of the jetty. From this point hand carts are used to the berth. No fork lifts can be used on the jetty. The labour force is supplied by the Ship Chandler who also deals with the Customs Regulations.

DEEP WATER DEPARTURE CHANNEL: A comprehensive survey was carried out to determine the route of the departure channel for the larger and deep draft vessels leaving the port of Mina Al-Ahmadi in a loaded condition. This channel is some 28 miles in length; it extends from the Sea Island Terminal to Madira Reef and is marked by 21 light buoys and 2 light beacons, one established on Taylor Rock and the other on Madira Reef. In addition to the above aids, Madira Reef Light Vessel has been re-positioned further to the East and renamed Ahmadi to act as a fairway mark. Water depth in the departure channel is from 91 ft. to 100 ft. and above. Two shallow patches, one is about 9 miles from Sea Island with a minimum 91 ft. and the second is 14 miles from Sea Island with 92 ft. minimum water. Vessels which by reason of their draft are confined to this deep water channel and consequently hampered in their freedom to manoeuvre, will exhibit the following signals:

(i) *By day.* A black cylinder 4 ft. long by 2 ft. in diameter exhibited where it can best be seen.

(ii) *By night.* Four red lights vertically disposed spaced 3 ft. apart with an all round visibility of 4 miles exhibited where they can best be seen.

The exhibition of these signals in no way absolves any vessel from taking all appropriate action to avoid collision as required by the International Rules and Regulations for Preventing Collisions at Sea, but if a deep draft vessel is in doubt that an approaching vessel is not giving her sufficient room to manoeuvre she should indicate such doubt by giving at least 5 short and rapid blasts on her whistle.

Vessels having less draft should, when able to do so, give way to vessels exhibiting and sounding these signals and indicate this intention by giving one short blast followed immediately by 1 long blast on the whistle. Normal sound signals for vessels in sight of another should then follow.

Anchoring and fishing are forbidden within the deep water departure channel.

The departure channel is marked by the following buoys and beacons conforming to the I.A.L.A. "A" system:

Number/ Letter	*Shape & Colour*	*Position N. Lat.*	*E. Long*	*Character*	*Port/Starboard/ Special/Cardinal*
1	Conical G.	28° 57′ 33″	48° 46′ 18″	Qk. Fl. G	Starboard
2	Can R.	28° 56′ 23″	48° 46′ 04″	Int. Qk. Fl. R	Port
3	Pillar Y.B.	28° 57′ 23″	48° 41′ 52″	V. Qk. Fl.(6)+ L. Fl. W. 10 secs.	S. Cardinal
4	Can R.	28° 56′ 41″	48° 41′ 12″	Fl. R. 10 secs.	Port
5	Conical G.	28° 58′ 23″	48° 39′ 00″	Fl. G. 5 secs.	Starboard
6	Can R.	28° 57′ 38″	48° 37′ 49″	Fl. R. 5 secs.	Port
7	Conical G.	29° 00′ 54″	48° 32′ 59″	Fl. G. 10 secs.	Starboard
8	Can R.	29° 00′ 09″	48° 32′ 31″	Fl. R. 10 secs.	Port
9	Conical G.	29° 00′ 38″	48° 31′ 07″	Fl. G. 5 secs.	Starboard
10	Pillar B.Y.	29° 00′ 27″	48° 31′ 53″	V. Qk. Fl. W	N. Cardinal
11	Conical G.	29° 01′ 20″	48° 28′ 52″	Fl. G. 10 secs.	Starboard
12	Can R.	29° 00′ 22″	48° 31′ 27″	Fl. R. 5 secs.	Port
13	Pillar Y.B.	29° 02′ 18″	48° 25′ 34″	V. Qk. Fl. (6)+ L. Fl. W. 10 secs.	S. Cardinal
14	Can R.	29° 00′ 13″	48° 30′ 51″	Gp. Fl. (3) R. 10 secs.	Port
15	Pillar Y.B.Y	29° 05′ 27″	48° 21′ 25″	V. Qk. Fl. (9) W. 10 secs.	W. Cardinal
16	Can R.	29° 01′ 40″	48° 26′ 38″	Int. Qk. Fl. R.	Port
18	Can R.	29° 01′ 46″	48° 25′ 44″	Fl. R. 5 secs.	Port
20	Can R.	29° 01′ 53″	48° 24′ 50″	Gp. Fl. (3) R. 10 secs.	Port
22	Can R.	29° 03′ 18″	48° 22′ 53″	Fl. R. 5 secs.	Port
24	Can R.	29° 05′ 05″	48° 20′ 26″	Fl. R. 15 secs.	Port
A	Spherical Y.	29° 05′ 38″	48° 11′ 30″	Qk. Fl. Y.	Special
B	Spherical Y.	29° 05′ 59″	48° 13′ 15″	Qk. Fl. Y.	Special
C	Spherical Y.	29° 06′ 21″	48° 15′ 00″	Qk. Fl. Y.	Special
Taylor Rock	Beacon	29° 01′ 20″	48° 34′ 33″	Int. Qk. Fl. W.	—
Madira Reef	Beacon	28° 56′ 03″	48° 46′ 22″	Fl. R. 5 secs.	—
Ahmadi	Light Vessel	28° 56′ 00″	48° 53′ 00″	Fl. W. 12 secs.	—

CUSTOMS: Customs Officials will board vessels to inspect log books to ascertain violation of Israeli Boycott Rules and seal the liquor bond during stay in berth. An accurate list of alcoholic drinks in *Bonded Store* only is to be presented to the officials sealing the bond and the seal is not to be broken until vessel leaves the port.

(i) Personal effects mainly required for personal use and not for re-sale or purpose of commercial gain are allowed free of duty. However, all other goods are subject to a 4% ad valorem duty (CIF value). Suppliers' invoices and Certificate of Origin are required for clearance.

(ii) Importation and the sale of alcoholic beverages is strictly prohibited.

(iii) All goods for landing from tankers must be declared to boarding Customs Officer and necessary documentation completed.

(iv) Israeli goods, goods made by companies having interest or branches in Israel, Israeli vessels and vessels trading with Israel are boycotted and not allowed entry into Kuwait.

IMMIGRATION:

(i) Nationals of all friendly countries normally allowed to land. Israelis forbidden entry into Kuwait.

(ii) Transit visas should be obtained from Kuwait Embassies and Consulates abroad. However, in emergencies entry visas can be arranged at airport.

(iii) Transit passengers having valid connecting airline ticket to next port are allowed to land without visas up to 24 hours, extendable to 48 hours if required.

(iv) Seamen of all friendly countries normally allowed to land in transit to join vessels, without visas but on Agents guarantee. Advance information regarding names, nationalities, age, sex, etc. is required by Agents in order to facilitate reception and immigration clearance.

N.B. Thursdays and Fridays are Company holidays.

(v) Seamen allowed to land for hospitalisation, repatriation, transfer, etc., on a written undertaking that all expenses are met by Agents on behalf of Owners.

(vi) Passports must be valid for Kuwait for citizens of all countries. Stateless persons are required to have a visa before arrival in Kuwait.

Also see "Visa Regulations" in "General" before first port.

CONSULS: Most friendly countries maintain Embassies or Consulates in Kuwait Town.

TIME: Kuwait State bases local time on the 45th meridian (GMT plus 3 hours). This time is in force the whole year.

SERVICES: To avoid delay all vessels advised to cable Agent of all their requirements in advance, giving full details.

Repairs.

(a) *Ship Repair.* All running repairs are undertaken through local contractors.

(b) *Radar/Radio and Electronic Equipment.* Maintenance service of this equipment is available through KOTC whose engineers/technicians are available for service on request.

Supplies. Supply of chemicals, paints, spare parts and provisions are available through local Agents.

Laundry. Laundry service is available on advance notice.

Oil Inspection. An independent oil inspection service is maintained at Mina Al-Ahmadi by the following: E. W. Saybolt & Co., B. & R. Redwood Ltd., and Chas. Martin.

Seamens' Services Centre. Situated at South Pier. Provides recreational facilities for all visiting seamen. Personnel mail service, beverages, snooker, toiletries, souvenirs and Walport Film Exchange service available. Open 0800 hrs– 2000 hrs. daily.

Classification Societies. Lloyd's Register of Shipping has a Resident Surveyor in Kuwait and maintains an office with Kuwait Maritime & Mercantile Co., who attend marine and non-marine work. Other societies have non-exclusive surveyors and their services can be obtained through KOTC.

Divers. Divers' services are available, including underwater hull cleaning service, through KOTC.

SHORE LEAVE: Ship's personnel and passengers not permitted ashore for any purpose whatsoever until pratique granted. All shore leave is contingent upon compliance with quarantine regulations and, under limited conditions and hours, shore leave may be granted. Masters should consult Agents to obtain the necessary passes.

REGULATIONS:

(a) *Local laws.* The laws of Kuwait are in force at the port of Mina Al-Ahmadi. Masters and crew members are advised for their own protection to abide by them. Comprehensive regulations governing the use of the port are promulgated in Law No. 21 of 1961. Masters of visiting vessels should acquaint themselves with this law.

(b) *Pollution.* The State of Kuwait has stringent laws in force concerning the pollution of the sea by oil. For information, the following are two paragraphs of this law:

Para 1, Art. 4: "A person responsible for any pollution as described in Articles 1 and 2 shall be punished by a fine of not less than 1,500 and not more than 40,000 Kuwaiti Dinars. In the event of his committing a similar crime within a period of one year from the date of his conviction such a person shall be fined not less than 3,000 and not more than 40,000 Kuwaiti Dinars, and in the event of his committing yet another crime within a year from the date of this last conviction he shall be punished by a fine of not less than 6,000 but not exceeding 40,000 Kuwaiti Dinars.

Para 3, Art. 6: The person responsible for pollution may suspend detention order against the ship on payment, as a cash guarantee, of 40,000 Kuwaiti Dinars to the official entrusted with the execution of such order".

(c) *Certificates.* All vessels must comply with International Safety Regulations and ensure that ship's certificates, i.e. Safety Radio, Safety Equipment and Load Line are valid. Facilities are available for renewal or extension providing proper notice is given. At least 48 hours should be allowed *excluding* Thursdays, Fridays or other local holidays.

(d) Load Line Regulations are strictly enforced, vessels overloaded will not be allowed to sail and subject to lengthy delay awaiting suitable facilities for pumping ashore. No facilities for pumping cargo ashore from Sea Island and S.P.M. are available.

(e) A Cargo Discharge Certificate for cargo loaded from Kuwait each voyage is to be presented to the Customs and Ports in Kuwait through the Agents within 4 months from sailing and these certificates are to be signed and stamped by local Customs officials and authenticated by an Arab Embassy or Consulate in the country of discharge.

PORT TAX: Introduced by the State of Kuwait at the rate of 45.25 fils (KD. 0.4525) calculated on ship's g.r.t. and outward clearance is subject to payment of their dues before departure.

Declaration of g.r.t. and n.r.t. details essential to avoid overcharge.

AUTHORITY: Kuwait Oil Company (K.S.C.), P.O.Box 20007, Ahmadi-22, Kuwait. *Tel:* Kuwait 989111. *Telex:* Kuoco 44211 KT. *Cables:* Kuoco Kuwait. *Contact:* I. Barrak, General Superintendent, Marine Services.

AGENT: For all tankers loading/discharging or sundry errands on a sole agency basis. Address: Kuwait Oil Tanker S.A.K. (Agency Branch), P.O. Box Fahaheel No. 7055, Kuwait. Telex: 4201, 4202. A/B Minatank Kwt. Tel. 911753/5; 911758/9; 911811. Cables: "Minatank Kuwait".

KOTC Agency is also connected with direct short range telephone VHF system and continuous watch is maintained on Channel 16. Working channels are and can be reached by calling "Minatank". Channel 16, calling only. Channel 26, Agency Working. Channel 27, Agency Working.

MINA SAUD: 28.45 N. 48.24 E. (See Plan Book)

OPERATORS: Mina Saud Marine Terminal operated by Getty Oil Company (hereinafter referred to as the Company) 7 days a week. Weather and other circumstances permitting, ships will be loaded, moored and unmoored at all hours of the day. Company representatives available at all times to discuss with Master any problems affecting vessel turnaround.

LOCATION: Mina Saud located just South of Ras Az Zaur approximately 23 miles 244° from Madira Light Vessel. Terminal connected to field and production centre at Wafra, 31 miles to N.W., by 16 in., and 10 in. oil pipe-lines, and 8 in. gas line.

The most conspicuous object at the terminal is the refinery flare, in position Lat. 28° 44′ 13″ N., Long. 48° 23′ 19″ E. Other objects conspicuous to the navigator are: Northern Radio Mast, Lat. 28° 44′ 32″ N., Long. 48° 23′ 38″ E. surmounted by a fixed red light at night; Ras Al Zour Beacon: Lat. 28° 44′ 48″ N., Long. 48° 24′ 16″ E. A 35 ft. high frame exhibiting 3 flashes every 10 secs.

FLAG: All vessels required to fly Kuwait flag at foremast during daylight hours. Flags may be obtained from Agents.

APPROACHES: Vessels on passage direct to Mina Saud up Gulf should pass about 1 mile South of Madira Reef Light Vessel, thence make good a course of 242° to an anchorage off Mina Saud in 9 fathoms.

DOCUMENTS:

Ship's Manifest.	Passengers Manifest, if any.
Bill of Health.	Store List.
Crew List.	Bonded Store List.
Clearance from Last Port.	

Agents are responsible for presentation of Oil Discharging Certificate to Customs Authorities as guaranteed by them. All cargo discharge certificates duly attested by Arab Consulate to be sent to the Agents directly.

Cargo documentation carried out by Terminal. Masters will greatly assist Terminal Staff by prompt provision of ship's tank ullages on completion of loading.

PILOTAGE: Vessels boarded by Mooring Master either on approach or at anchorage. Mooring Masters are Licensed Masters Foreign Going. They act in an advisory capacity to Master and have expert knowledge of local conditions.

Mooring Master will pilot the vessel into the berth, supervise the mooring and unmooring, and advise Master with respect to the connecting and disconnecting submarine hose. A ship's deck officer must be on the bridge at all times while ship is manoeuvring, and deck officer must direct ship's crew in all hose handling. During loading operations Mooring Master will act as Company's representative.

ANCHORAGES: Centre of anchorage area recommended is in position 090° from Flare 4.3 miles, which has good holding ground with mud and sand bottom.

Prohibited anchorage area defined as follows: beginning at refinery flare 060° 3.5 miles thence 180° 1.75 miles thence 270° 3.0 miles to refinery flare.

MAX. SIZE:

Guidance for Maximum Dimensions:

	Berth No. 1	*Berth No. 2*
LOA	800 ft.	1200 ft.
Beam	No limit	No limit
Max Sailing Draft	41 ft.	52 ft. (56 ft.*)
Max. d.w.t. (for full cargo) approx.	50,000†	approx. 140,000†
Min. depth in berth	43.6 ft.	55.8 ft. (48.5 ft. on inshore bar)
Min. depth on exit route	43.6 ft.	53.8 ft.

*Tidal loading to 56 ft. allowed in suitable conditions.

†Larger vessels (300,000 d.w.t.) are allowed for part cargo or bunkers providing other parameters are satisfied.

HEALTH: Vessels calling at Mina Saud are requested to include the following information.

(1) Name of vessel
(2) Last port of call
(3) Health condition of crew
(4) Validity of Cholera Certificates.
(5) Request for Free Pratique or details or any cases or suspected cases of infectious diseases during the last four weeks.

Free Pratique will be considered at the discretion of the Quarantine Officer and vessel must hoist the yellow flag unless informed by Agent or Harbour Control that Free Pratique has been granted.

TUGS: None.

READINESS: Notice of Readiness will be received by Company within terms of Charter Party or Contract when known, otherwise during ordinary business hours, which shall be between 0700 hrs. and 1800 hrs. local time except on Fridays and Public Holidays.

Laytime to commence 6 hours after time of acceptance or upon commencement of loading, whichever occurs first, except that when Notice of Readiness received before 1600 hrs. local time the 6 hours shall be continuous, but if received after 1600 hrs. then such 6 hours shall be daylight hours, daylight hours for such purpose being between 0600 and 1800 hrs. local time.

If after giving Notice of Readiness, vessel is delayed in getting into berth or in loading, such delay shall not count as used laytime unless delay shall be due to default of Company. On completion of loading, laytime shall cease upon disconnecting cargo hoses.

Should Company Mooring Master be handed a Notice of Readiness out of business hours and before commencement of loading he will note it as "Received" at that time, for acceptance by the Company at earliest recommencement of business hours, or at time of commencement of loading, whichever shall be first.

If Notice of Readiness given after latest accepted nominated lifting date, laytime shall not commence before commencement of loading.

BALLAST: Vessels must have enough clean ballast to permit safe manoeuvring under any conditions. VLCCs must retain ballast during early stages of loading and discharge ballast as necessary during latter stages of loading.

Mooring Master will advise when ballast discharge may commence. Inspection of ship's tanks for suitability to receive cargo carried out by Mooring Master or by qualified petroleum inspectors if required.

GEAR: For handling 2×10 in. strings of hoses ship's derrick should have a minimum safe working load of at least 5 tons. Outreach overside should be at least 5 ft.

2 lengths of 1 in. diameter good quality rope each of 20 fathoms in length should be available for use as slip ropes for flexible hoses.

Reducers should be available for connection of hoses to ship's manifold and to ship's bunker line connection.

Company provides snub lines of manila and wire rope for hanging off hoses.

In the event that ship's derrick gear is inadequate for loads required, a work barge can be made available. Charge for this barge, including positioning and personnel, is equivalent of 150 U.S. Dollars per hour (approx.).

BERTHING: There are 2 loading berths, each conventional multi-buoy moorings which are connected by a 20 in. submarine line for cargo and a 12 in. submarine line for bunker fuel. Each berth has 2×10 in. cargo hoses (tanker rail hose is 10 in. diameter in all cases), and a 10 in. hose for bunkers. Hose connections should be prepared for one 10 in.×150 ASA standard hose on forward side of manifold and one 10 in.×150 ASA standard hose on after side of manifold (10 in. hose is normally utilised for loading cargo after completion of bunkers).

The outer berth, 073° – 2.6 miles from refinery flare, is equipped to take vessels of up to approx. 140,000 d.w.t. for full cargo. Larger vessels can be accommodated for bunkering only or part cargo. Max. draft allowed is 52 ft. In exceptional circumstances tidal loading to 56 ft. is allowed. See Appendix below.

Appendix A. Mina Saud Tidal Loading Procedure December, 1975: Assuming 1000 ft. ship has berthed. Starboard anchor between 150 ft. and 300 ft. South of starboard anchor marker and one ship's length (1000 ft.) inside, (Course made good 270°T). Starboard anchor ranged along bottom and port anchor let go when 11 – 12 shackles out on starboard. i.e. 1000 ft. West of starboard (allowing for slack). Vessel would be in berth with between 8 – 10 shackles on each anchor.

When letting go at HW with ebb tide and heaving port anchor. Vessel should manage to remain in at least 16.4 m. charted depth, heading about 340°T with stern in line with, or to seaward, of manifold marker buoy.

Every effort should be made to pick up port anchor without slacking too much on starboard anchor. Ideally, last shot of port cable is dragged home whilst starboard cable is fairly tight, so that when port anchor is aweigh vessel swings to starboard and presents her port side to the ebb, thus regaining a mid berth position. (Sometimes necessary to put engines ahead in order to clear manifold marker hose buoys).

Pilot should endeavour to have vessel heading North when starboard anchor is aweigh. Vessel should then steam North or slightly West of North in order to maintain a distance of approx. 1000 ft. from starboard anchor marker buoy. Vessel should start turn to starboard (bearing in mind ebb tide) when abeam of starboard anchor marker buoy, and endeavour to turn on radius of about 1000 ft. with starboard anchor marker buoy at centre. A course of 066°T should be made good until deep water is reached. If this procedure is followed, the minimum depth should be not less than 16.4 m. (chart datum).

Note: 16.4 m. exists in berth and on exit channel. Close attention must be paid to vessel's position, as depths of less than 16 m. are in close proximity to exit channel.

Vessel should finish loading cargo or bunkers at least 3 hours before HW thus ensuring maximum height of tide for bottom clearance plus ebbing tide for easier control. (Ebb tide usually commences 2 hours before HW).

Divers should be utilised to check clearance at LW or some convenient time before ship is committed to a tidal loading. (In case of tidal anomaly).

16.4 m. must be reckoned governing depth. (53.8 ft.) and "Alaska Getty" must never be loaded to max. draft unless it is certain that she will sail with at least 1.8 m. of tide above chart datum.

For other vessels calculate thus: 16.4 + height of tide then subtract 1 m. Result will be max. allowable draft (only if weather conditions are ideal).

eg. Alaska Getty
16.4
+ 1.8 ht of tide
18.2
– 1.0 clearance
17.2 allowable draft (56 ft. 5 in.)

It must be borne in mind that mentioned clearances are the absolute minimum that can be tolerated in ideal conditions.

Seismic survey indicates feasibility of dredging or burying pipe-lines should it ever be necessary and also indicates good anchor holding power potential throughout area. *End of appendix.*

The inner berth, 073° – 2.0 miles from refinery flare, has a minimum depth of 44 ft. at LLW and can accommodate vessels up to 800 ft. in length. Max. draft allowed is 41 ft.

MOORING: *(a)* Port is an open roadstead and ships must be prepared to use main engines, unmoor and leave at any time.

(b) Mooring and unmooring carried out during day or night, as required. Except mooring at Berth 1, during daylight only.

(c) Vessels moored to ebb tide stream at both inner and outer berths. Resilience in mooring achieved by weight of clump anchor and catenary of chain cable. A quick release hook connects ship's ropes to the buoy.

(d) Both port and starboard anchors should be lowered clear of hawse pipes and ready for instant letting-go from brakes.

Spar buoys established to mark starboard and port anchor dropping positions.

(e) 9 good quality synthetic ropes should be flaked ready for running from the stern. After anchoring, as vessel proceeds astern in berth, quarter lines are run by Company launch and secured to quick release hooks on quarter buoys.

(f) When securely moored in correct position for handling hoses, each anchor should have about 8 shackles out and it is advisable that tankers using these submarine berths be provided with not less than ten 15 fathom lengths of cable on each anchor.

(g) Masters are requested to ensure that power to deck machinery and sufficient seamen to operate it are immediately available at all times when in berth.

RADIO/VHF: *Communications:* Messages should either be telexed direct (Telex: 23074 Kt) or by cable via Kuwait Radio (call sign 9KK on 500 kHz) for onward transmission to Getty Mar Mina al-Zour (Mina Saud).

Kuwait Radio transmits traffic lists on 450 kHz at 25 minutes past every even hour and on 8525 kHz and 12895 kHz at 35 minutes past every odd hour.

VHF Service maintained by Mina Saud Marine. Listening on Channel 16 (156.8 MHz). Operating hours: 0700 to 1200 hrs. and 1300 to 1600 hrs. local time.

Masters are requested to advise ETA 72 hours before arrival Mina Saud, and to confirm this when 24 hours distant from the Port.

It will assist if the following information is passed to "Gettymar Mina Saud" before vessel's arrival.

Bunker fuel requirements in metric tons or U.S. bbls. at 60° F.

Cargo requirements in long tons or U.S. bbls. at 60° F.

Confirmation that only clean ballast is to be discharged and expected deballasting time.

Confirmation that ballast and pipe-lines are clean, both anchors forward and 9 synthetic ropes available aft.

Arrival draft fore and aft, expected sailing draft fore and aft.

ETA should be confirmed 24 hours before arrival.

When berthed at Mina Saud Contact with the shore is maintained by VHF R/T portable units supplied by the Company.

LOADING: Submarine line marked by permanent buoy at each berth, and marker buoys fitted to all hoses.

Recovery of flexible hoses is by fleeting with ship's tackle making use of beckets fitted to recovery chain.

"Ship's Stop" is invariable rule except in an emergency. Ship must give reasonable stand-by time to Mooring Master, 15 to 20 minutes, to alert Terminal staff on shore for closing gauges.

Loading rate at present averages 1,500 t.p.h. Max. 2,000 t.p.h.

MEDICAL: In emergency only. For normal cases, Agent arranges visit to Port Health Doctor.

FRESH WATER: Not available.

FUEL: Bunker fuel (Max. 1500 secs Redwood No. 1 equivalent to 80 Cst.) at loading berths through 12 in. submarine line with single 10 in. flexible hose, at Berth 1, and 10 in. hose at Berth 2.

FIRE PRECAUTIONS: Masters are responsible for enforcing "No Smoking" regulations for their vessels and Mooring Master will stop loading if he considers them to be inadequate or if they are not being obeyed. Smoking in Company craft in the berths is forbidden.

CONSULS: See "Kuwait."

REPAIRS: No regular repair facilities available. However, fully qualified divers are available from Terminal. Underwater cutting gear and welding equipment available.

Services of divers and equipment are available at rates to be arranged for the job and agreed by Superintendent of Marine and Terminal Operations, Mina Saud.

Repairs to main engines must not be carried out in the berth without permission of Superintendent of Marine and Terminal Operations. Normally vessels requiring to immobilise engines will be anchored well clear of other ships.

REPATRIATION: Crew changes normally effected through Kuwait.

Also see "Visa Regulations" in "General" before first port.

TIME: GMT plus 3 hours. Permanent.

WEATHER: In Summer months of June, July and August light to moderate Northerly and North-westerly winds are general rule at Mina Saud. Occasional strong N.W. winds of Gale force. Strength and duration governed by strength of S.W. monsoon blowing outside the Gulf.

During Autumn and early Winter months fine weather is generally experienced associated with moderate N.E. monsoon prevailing outside the Gulf. Occasional 'Shamals' (N.W. winds) occur.

In late Winter period and Spring, strong S.E. winds with moderately heavy seas frequently experienced at Mina Saud. These are due to approach of low pressure systems from Atlantic and Mediterranean Sea spreading Eastwards across Levant and Iraq.

TIDES: Tide cycle is combination of diurnal and semi-diurnal tides giving a Higher High, Lower High, Higher Low and Lower Low Waters during a 24 hour period. Range of tide is average 7.5 ft. at Springs and 5 ft. at Neaps.

Commencement of ebb stream (direction 190°) after HW may be taken as 2 hours before predicted time of HW at Mina Saud published in Admiralty Tide Tables.

Main direction of flood and ebb streams are 010° and 190° respectively. Direction is extremely variable between LHW and HLW period. Average direction during this period about 045°.

Tides subject to meteorological conditions and may be affected in height by more than 3 ft. in extreme circumstances. Times of High and Low Water may also be considerably affected.

The Mooring Masters have access to information from the Marine Meteorological Station at Mina Saud.

CUSTOMS: Alcoholic beverages strictly prohibited to be held out of bond. Master allowed to keep limited quantity in his cabin.

It is important to remind Owners and Masters that all goods, either landed or embarked, must be cleared by Agent through local Kuwait Government Customs.

Import of firearms and ammunition forbidden.

STORES: Provisions and stores are available from Kuwait. Requirements should be arranged with Agents through Kuwait Radio prior to arrival at Mina Saud.

SHORE LEAVE: Can be arranged through Agent.

AUTHORITY: Getty Oil Company, P.O.Box 1, Mina Al Zour (Mina Saud), Kuwait. *Tel:* 950444 (ext. 339) or 950221. *Telex:* 23074 Kt. *Cables:* Gettymar. *Contact:* Captain P. W. Hodges, Marine Superintendent.

AGENT: See "Shuwaikh".

Communication is by road by personal visit of agency staff. Distance about 50 miles.

SHUAIBA: 29.02 N. 48.09 E. (See Plan Book)

PORT LIMITS: Shuaiba port limits defined as follows:

North: This separates port of Shuaiba and Mina Al-Ahmadi and is defined by the point of intersection of coast line with Lat. 29° 02′ 50″ N. in an Easterly direction until it intersects Long. 48° 09′ 42″ E. Thence in a South-easterly direction to the intersection of Lat. 29° 02′ 45″ N. and Long. 48° 09′ 47″ E. Thence in an Easterly direction along Lat. 29° 02′ 45″ N. seawards to Long. 48° 15′ 07″ E.

East: Long. 48° 15′ 07″ E.

West: Coast line.

South: This separates port of Shuaiba and Mina-al-Abdullah and is defined by the point of intersection of coast line with Lat. 29° 01′ 45″ N. Extends due East till Long. 48° 09′ 59″ E. and runs on 45° direction to Lat. 29° 02′ 00″ N. then due East on that line until Long. 48° 15′ 07″ E.

Note: The above limits will be extended in the near future.

Ships whilst in port limits during daylight hours shall fly their National Flag at the after part of the ship and where a ship is of foreign registry also the Kuwait National Flag at the fore.

DOCUMENTS:

Manifest: 15 copies which should clearly indicate weights in metric tons and measurements in cubic metres and each copy should be duly signed and stamped by the loading port Agent.

The copies of the manifest may be photostat copies or carbon copies but it is imperative that the stamp and signature made by the loading port Agent is appearing in original on each copy.

If cargo is carried in transit a separate transit cargo manifest (15 copies) is also required in same fashion as above.

Bills of Lading: 5 sets of non-negotiable copy Bills of Lading, i.e. ordinary carbon copy Bills of Lading. Photostat copies will not be accepted.

In addition the following documents are to be provided:

4 copies of Final Stowage Plan, duly signed and stamped on each copy by the loading port Agent. Photostat copies are accepted as long as same are signed and stamped.

4 copies of Hatch List as above.

If dangerous cargo is being carried 2 copies of a separate Dangerous Cargo List are also required and again each copy to be duly signed and stamped by the loading port Agent.

Also 2 copies of Crew List to be presented to Customs Office.

N.B. Since all cargo for discharging at Port of Shuaiba has to go on direct delivery, and Customs clearance has to be completed prior to berthing of a vessel, it is therefore imperative that all documents, as above, are in Agent's hands for submission to relative authorities at least 7 working days prior to vessel's ETA, otherwise berthing of vessel is likely to be delayed.

PILOTAGE: Pilotage is compulsory and requests for Pilots may be made to Shuaiba Port Communications Centre (call sign "Shuaiba Port"). The Port Communications Centre is equipped with VHF Channels 16, 9 and 13.

ANCHORAGES: Lat. 29° 02′ 24″ N., Long. 48° 12′ 18″ E. Depth is 18.5 m. with good holding ground.

Notice No. 11/84:
SHUAIBA PORT ANCHORAGE

Ships bound for Shuaiba Port for loading/unloading/bunkering will be permitted to use Shuaiba Port Anchorage between Lat. 29° 02.75′ N. and Lat. 29° 02.00′ N. and between Long. 48° 15.11′ E. and Long. 48° 12.72′ E. Ships are not permitted to anchor to the West of Long. 48° 12.72′ E.

In the event of the anchorage becoming congested, ships may be directed to anchor in one of the following positions situated within the co-ordinates of the Shuaiba Port Anchorage as stated above:

A1	89° 30′	2.62 miles	D1	89° 30′	3.86 miles
A2	97° 30′	2.65 miles	D2	95° 30′	3.89 miles
B1	89° 30′	3.05 miles	E1	89° 30′	4.25 miles
B2	96° 45′	3.08 miles	E2	95° 00′	4.28 miles
C1	89° 30′	3.49 miles			
C2	96° 00′	3.45 miles			

The above bearings and distances are from Port Communication Tower (Shuaiba Signal Station) in position:

Lat. 29° 02.44′ N., Long. 48° 09.91′ E.

All other ships not falling in the categories listed in the first paragraph, such as vessels waiting for orders or which have not been nominated for bunkers, are not permitted to anchor in the Shuaiba Port Anchorage and must anchor well to the East of Long. 48° 15.11′ E.

Charts affected: B.A. 1223, U.S.H.O. 62430, 62432.

Authority originating above information: Director General, Shuaiba Area Port Authority, Kuwait.

RESTRICTIONS: Vessels over 650 ft. berth/unberth during daylight hours only.

MAX. SIZE:

Dry Cargo Berth	*Max. Draft Permitted (m.)*	*Max. Ship LOA (m.)*
1	8.53	120
2	9.75	120
3	10.67	180
4	6.71	170
5	6.71	170
6	10.00	180
7	10.00	180
8	10.00	180
9	13.00	180
10	13.00	180
11	13.00	180
12	13.00	180
13	13.00	180
14	13.00	170
15	13.00	As these berths will be utilised by container and Ro/Ro vessels, no limitations and subject only to berth occupancy.
16	13.00	
17	13.00	
18	13.00	
19	13.00	190
20	13.00	190

Usage of Berth Nos. 4, 5, 6, 7 and 8 is restricted to good weather conditions only.

Agents of vessels with dimensions in excess of the above must make due representation to the Port Department for permission for these vessels to be accepted and ample notice is necessary when submitting such requests.

Also see "Berthing".

HEALTH: Vessels calling at Shuaiba are requested to send the following information to "Health Shuaiba Port".

(1) Name of vessel
(2) Last port of call
(3) Health condition of crew
(4) Validity of Cholera Certificate
(5) Request for Free Pratique

Free Pratique will be considered at the discretion of the Quarantine Officer, and vessels must hoist the yellow flag unless they are informed by Shuaiba Port Communications Centre that Free Pratique has been granted.

TUGS: 4 tugs of 2,100 h.p. are available. The use of tugs is mandatory whenever directed by the Pilot or Harbour Master.

BERTHING:

Southern Quay Mole: Berth Nos. 1 to 5.

The Western side of the mole consists of three berths, Nos. 1, 2 and 3, with a total berthage of 500 m., whilst the Eastern side consists of two berths, Nos. 4 and 5 with total berthage of 350 m.

Berth No. 1	present maximum allowable draft	8.84 m.
Berth No. 2	„ „ „ „	9.75 m.
Berth No. 3	„ „ „ „	10.67 m.
Berth No. 4	„ „ „ „	6.70 m.
Berth No. 5	„ „ „ „	6.70 m.

There are two storage sheds but all cargo is direct delivery. The present cranage of three 5 ton and two 3 ton electric cranes on the Western side will be phased out in the near future.

An overhead conveyor belt system, with two ship loaders, is presently under construction at Berths 1 and 2.

Northern Quay Mole: Berth Nos. 6 to 14.

Berths 9 to 14 have at present a max. allowable draft of 13 m. which will increase to 14 m. upon completion of final dredging programme. Berths 6, 7 and 8, which are on the seaward side of the breakwater, have a max. allowable draft of 10 m. and are restricted to good weather. Berths 12 to 14, equipped with 4 quayside cranes with max. capacity of 15 tons.

Total berthage of the Northern quay mole is 1,833 m.

A marginal berth (No. 15) extends 300 m. to the South from the foot of No. 6 berth. This marginal berth has at present a max. allowable draft of 12.50 m. which will increase to 14 m. upon completion of final dredging programme.

Petroleum Products Pier: Located to the East of the Southern Quay Mole and consisting of four berths for the accommodation of tankers. Berths 1 and 3 comprise the Eastern Berths whilst Berths 2 and 4 are located on the Western side.

Berth No. 1	Length 350 m., draft 13.71 m.
Berth No. 2	Length 369 m., draft 12.19 m.
Berth No. 3	Length 369 m., draft 13.71 m.
Berth No. 4	Length 331 m., draft 12.12 m.

The above lengths are inclusive of mooring dolphins positioned Northward and Southward of the pier. Because of draft restrictions at Berths 2 and 4, tankers in excess of 230 m. in length will be subjected to the Port Authority's acceptance. Each berth is supplied with 2×20 in. fuel lines and 5×16 in. supply lines for naptha, avtur and gas oil. All lines reduce to 12 in. at the loading arms. Additionally at No. 2 Berth there are lines for discharging lubricating oil and for loading liquid ammonia. An 8 in. line for slops is available. Each berth at the Petroleum Products Pier is equipped to provide bunkers by means of 2×20 in. lines for fuel oil and marine diesel oil whilst light fuel oil is supplied by an 8 in. line.

Small Craft Harbour: Situated S.W. of the Southern Quay Mole and comprising 3 berths accommodating vessels of less than 4 m. draft.

Berth No. 1	Length 100 m.
Berth No. 2	„ 200 m.
Berth No. 3	„ 175 m.

Berth No. 3 is reserved for loading sulphur.

The allocation of berths is at the sole discretion of the Port Manager.

The Harbour Master's Office, Port Communications Centre, Customs, Immigration and Port Health are all situated at the Southern Quay Mole.

CONTAINER FACILITIES: *Shuaiba Area Container Terminal (S.A.C.T.):* The S.A.C.T. is the Terminal Division of the Shuaiba Area Authority and the first fully integrated purpose built container terminal in Kuwait.

S.A.C.T. is fitted with 4×41 ton Marubeni/Sumitomo gantry cranes for discharging/loading of containers, plus a fleet of forklift trucks with top lifting devices for handling containers ashore, capable of stacking three units high. In addition the container terminal is equipped with usual tugmaster/container trailers.

There is an intermediate stacking area for loaded containers, of approximately 80,000 sq.m. adjacent to the container berth Nos. 15 and 16, which is approximately some 400/600 m. away, where the ships are berthed.

There is a separate storage area for empty containers in the hinterland of the port, East of the container berths, approximately some 600/800 m. away from the water front.

Due to the present non existing terminal facilities for LCL/Reefer containers (to be available in the near future) it has for the time being until further notice been decided that ship's documents such as Manifest and Copy Bills of Lading have to be lodged at Shuwaikh Customs where Customs Clearance has to be completed. In addition same documents also have to be submitted at Mena Al Ahmadi and Shuaiba Customs.

SHORE FACILITIES: Berths 1, 2, 3, 4 and 5 are equipped to supply fuel and fresh water.

STEVEDORES: Stevedores shall be nominated by Owners or Agents from a list of stevedores registered by the port for cargo handling operations. A common tariff published by the port applies.

Vessels will be required to maintain a minimum daily tonnage dependent on the type of cargo they are carrying.

Permission for the landing of heavy lifts on the quays must be obtained from the Port Manager each time in advance.

RADIO: Vessels calling at Shuaiba Port are required to submit an initial ETA 48 hours prior to arrival followed by a firm ETA 24 hours before arrival. ETAs should be passed through Kuwait Radio (9KK) either to the ship's Agents or to the Harbour Master, Shuaiba. In the case of tankers, cable advice of ETAs via Kuwait Radio (9KK) must be submitted to Kuwait Oil Tanker Company (KOTC) giving 72, 48 and 24 hours' notice of arrival.

Vessels equipped with VHF should contact Shuaiba Port Communications Centre when within range.

ETAs should contain details of arrival draft.

MEDICAL: Advance notice required if medical attendance needed on board.

TANKERS: See "Berthing" and "Shipmaster's Report".

DENSITY: 1025.

FRESH WATER: See "Shore Facilities".

FUEL: The Kuwait National Petroleum Co. KSC, Kuwait, supply marine fuel and diesel oil at cargo wharves and Petroleum Products Pier at Shuaiba.

Specifications as under:

	FO 1500	*FO 600*	*MDO*
Ash % wt. max.	0.5	0.5	0.01
Pour point °C (°F.) max.	10 (50)	2 (50)	2 (35)
Specific Gravity 60/60 °F max.	0.99	–	–
Sulphur % wt. max.	3.8	3.5	1.8

Bunker nominations may be arranged through Kuwait National Petroleum Co. (U.K.) Ltd., 25 St. James Street, London S.W.1. Cables: "Kunpetco", London S.W.1. Telex: 261998 or KNPC, PO Box 70 Safat, Kuwait. Telex: KNPC 2006 KT, KNPC 2689 KT and KNPC 2457 KT. Tel: Kuwait 449400, 443486, 437427. At least 3 days' notice required.

Bunker fuel, gas oil and marine diesel oil is available at the Petroleum Products Pier and at the dry cargo berths as outlined under "Shore Facilities". Fuelling from barges is not carried out.

GANGWAY/DECK WATCHMEN: Watch to be maintained by ship's crew.

CERTIFICATES: All usual documents such as:

Ship's Manifest.
Crew List.
Clearance from Last Port.
Passenger Manifest.
Store List.
Bonded Store List.
SOLAS Certificates.
Bill of Measurements, etc.

CUSTOMS ALLOWANCES: Tobacco. No restrictions. Wine and/or Spirit. Alcoholic beverage strictly prohibited to be held out of bond. Master allowed to keep limited quantity in his cabin.

IDENTIFICATION CARDS: Passport or seamen's book necessary.

CONSULS: See "Shuwaikh".

REPAIRS: Small repairs can be arranged if sufficient notice is given.

DRY DOCK: No dry dock available.

REPATRIATION: Can be arranged.

Also see "Visa Regulations" in "General" before first port.

TIME: GMT plus 3 hours.

HOLIDAYS: Every Friday, New Year's Day (1st January), Kuwait National Day (25th February). The following Islamic holidays are celebrated but dates are subject to alteration: Prophet's Birthday, Prophet's Ascension, Eid Al Fitr, Eid Al Haj and 1st Muharram.

TELEPHONES: There are presently no facilities for shipboard telephones but it is programmed to provide telephones for the use of ships in the future.

SPECIAL SERVICES: The services of Classification Society Surveyors, Tank Cleaning Operators, Compass Adjusters, Divers and Underwater Cleaning and D/F Calibration Adjusters are available in the area.

SHORE LEAVE: Permitted.

PORT REGULATIONS: .The following are excerpts of some of the more important port regulations:

Fire fighting appliances to be kept in readiness for immediate use.

Pumping or discharging in any way into the sea oil fuel tanks, bilges, dirty ballasts, etc., is prohibited.

Disposal of garbage over the side of the ship into the harbour is prohibited.

The presence of a Pilot on board a vessel shall not relieve the Master of his responsibility regarding the safety of the vessel. The Port Authority shall have the right to claim against a vessel for any damage caused by that vessel to berths, shore installations, tugs, buoys, etc.

The Harbour Master or his deputy may order a vessel to leave the berth at short notice in the case of emergency, bad weather, etc.

Vessels carrying explosives or dangerous cargoes must declare quantities and categories of same when they report their ETA.

Crew members are prohibited from swimming within the harbour.

Lowering into the water of ship's life-boats, launches or life-rafts is prohibited without the written approval of the Harbour Master or his deputy.

Mooring of ship's life-boats, launches or life-rafts to navigational marks and buoys is prohibited.

Due regard shall be given to the safety of divers when they are working within the Port Limits. Engines should be stopped when approaching their working area at a circle of 150 m. The launch attending divers displays the International flag letter "Alfa" during diving operations.

NOTICE: Dated 8th March, 1984.

Nomination of Vessels to Shuaiba Port:

In an effort to carry out the procedure of vessel's nomination to Shuaiba Port in the most satisfactory manner to all concerned parties and at the same time protect the interest of your Principals, Member-Agents are kindly requested to adhere to the following:

1. Even though the Director Marine Operations Department, Ports Public Authority is aware of a vessel nomination to Shuaiba Port, the Master should still cable the Director Marine Operations Department, Ports Public Authority when approaching Kuwait Territorial Waters and ask for orders, instead of proceeding direct to Shuaiba Port.

2. When a vessel completes discharge of a part cargo in Shuaiba and thereafter has to call at Shuwaikh Port to discharge the remaining cargo, the Master should still send the usual ETA cable to the Director of Marine Operations Department, Ports Public Authority containing all the information required.

It will therefore be greatly appreciated if you kindly notify your Principals to instruct Masters of their vessels to comply accordingly in order to avoid any confusion that would lead to unnecessary delay to a vessel which is proceeding to Shuaiba Port direct without prior knowledge of the Director Marine Operations Department, and then call at Shuwaikh Port.

Signed: General Manager.

DEVELOPMENTS: Quayside cranes of 15 tons lifting capacity each will be installed at Jetties Nos. 11, 12, 13 and 14, for discharge of general cargo.

Although there will be no quayside cranes available at Jetties Nos. 6, 7, 8, 9, 10, 17, 18, 19 and 20, where vessels have to use their own gear for discharging, the Port of Shuaiba are contemplating laying crane lines at these jetties in case they decide to install cranes on any of them in future.

SHIPMASTER'S REPORT: May 1980. Vessel loading Ammonia.

Approaches: Charts BA.3773 and BAP1223. The complex lies about 1.5 miles South of the port of Mina Al-Ahmadi.

At the time of call the Decca chain was not operating. Approach is fairly straightforward with good positions being obtained by radar and from the various light floats and buoys that abound.

Currents appear to follow the trend of the coastline.

Anchorage: There is no night berthing allowed on the ammonia berth. Vessels arriving during the hours of darkness are asked to anchor about 2 miles due East of the berth.

Pilotage: Pilots will board the vessel about 1.5 miles due East of the berth, usually from a tug.

Call Port and Pilots on Channel 16 VHF, usually work 13 or 14 thereafter. Communication was good, fluent English. Vessel has the option of berthing either side alongside and, if not heavily loaded, would suggest starboard side to with the head out.

Two powerful tugs available for berthing, usually only one required for sailing. Tug's lines, lying alongside.

Length of pilotage about one and a half hours to being secured.

Berth: Consists of a "T" jetty, the head of which lies about 340°/160°. The stem of the "T" is 1,000 m. long and the head about 800 m. long.

The ammonia berth lies on the Northern side of the "T" and inside.

Quoted depth is 40 ft. which was borne out by soundings. The Pilots however quoted a max. sailing draft of 36 ft.

The ammonia berth itself is about 350 m. long. The concrete sections of the jetty are currently undergoing repair and this affected the mooring arrangements. Besides this there are lamp standards which may interfere with lines in the future. Usual mooring arrangements, 3 headlines, 2 breastlines and 2 springs.

Gangway: It is only possible to use ship's gangway when lying starboard side to as it fouls the chicksan area when head in. Careful positioning and tending is required.

There is a group of chicksans which handle oil products about halfway along the jetty and the ammonia chicksans lie just South of these.

No VRL. No venting.

Shore personnel connected the chicksan (bolted) and no reducer was necessary.

Cooldown: Charterers asked us to limit the amount of coolant taken to 300 tonnes.

Petrochemical Industries Company (who operate the berth) would have allowed us to take this coolant into more than one tank had it been possible or necessary. They were very conscious of us having to vent excess pressure (using 'cascade' system for atmospheres) and went to great lengths to ensure no ammonia vapour was discharged to atmosphere.

Control of cargo rate was very good.

Vessel has to anchor at least three miles off berth to complete cooling.

Notice of Readiness: Was tendered on arrival and again on completion of purging/cooling operations. Cable "Ammoniaship". This was not accepted until secured in the loading berth and ready to load.

Loading: Despite the length of pipe-line from the refinery the product was reasonably cold and they have a recirculating system which enables stopping cargo at very little notice.

Berth operators were quite happy with bottom temperatures only at −32°. Loading rate is quoted at 1,000 t.p.h. but our overall average was only 605 t.p.h. at which the operators expressed themselves as satisfied.

Throughout the whole cooling and loading programme the vessel was under continual close scrutiny from shore personnel. The technical ability of these people was very high indeed (although very fair and practical minded). Pressure graphs and temperatures were checked and noted hourly together with hourly rates.

Redwoods attended as surveyors throughout. Bills of Lading are presented before sailing and are usually claused "Freight Prepaid".

Output of the plant is quoted as about 700 tonnes of liquid per day, but the fertiliser division apparently has first call on product which may result in short loading.

Note: The port office, which is situated at the junction of the "T", is very sensitive to ammonia smells and the personnel there test the atmosphere using Draeger tubes.

Bunkers: Diesel oil taken at this call and vessel has to position under the oil chicksans. This requires shifting ship to or from the loading chicksans.

Bunker suppliers, KNPC, will NOT accept bills signed over Time Charterer's stamp. Ask Owner for permission to sign the bills 'clean' prior to arrival.

General: Shore passes required, available at Immigration office on shore.

Transport is necessary to get from jetty to shore. This is provided on a continual basis.

Alcohol: Customs will allow alcohol to be issued to bars. It is better to arrive with these emptied and ask for an allowance. As usual, it is a very grave offence to offer alcohol to shore personnel.

Fresh Water: Available but none taken.

Medical: There is a medical centre ashore which provides a very efficient service for vaccinations.

General: Service is available for radars and Decca Navigator.

No stores taken.

Items may be landed for despatch to UK after informing the Customs and providing a description of the packages, etc.

Personnel may be repatriated (no alcohol in baggage) and there is a frequent service to UK.

Agents: Kuwait Oil Tanker Company, cables 'Minatank Kuwait'.

In case of emergencies they have an office on the shore which is manned 24 hours. If necessary to telephone UK one has to go to the head office at Ahmadi. Agents usually work Channel 26 VHF.

Departure: About four hours should be allowed for completion of paperwork before sailing. Vessel may leave the berth at night.

AUTHORITY: Director, Shuaiba Area Authority.

AGENT: For dry cargo vessels: International Shipping Agency Limited, POB Safat No. 20637, Old KIC Building, 1st Floor, Safat Square, Kuwait, State of Kuwait. Tel. 2441860 to 2441867. Facsimile No. (965) 2415732. Telex: 22208 (Answerback "Isaship Kwt") and 22396 (Answerback "Isatug Kt"). Cables: "Shipagent, Kuwait".

In the case of tankers agency services are provided by the Kuwait Oil Tanker Company.

SHUWAIKH (Kuwait Harbour): 29.21 N. 47.56 E.

(See Plan Book)

PORT LIMITS: According to the General Port Rules (1959) the Seaward Limits comprise all waters in the area confined by line drawn in direction 000° from Ras Al Ajuza, (Lat. 29° 23′ 27″ N., Long. 48° 00′ 24″ E.) to the parallel of Lat. 29° 30′ 00″ N. Hence in direction 230° to Ras Al Ashairij Lat. 29° 23′ 15″ N., Long. 47° 51′ 00″ E. For the seaward boundaries of the Port within which a vessel is considered to be on "arrived ship", refer to "Anchorage".

DOCUMENTS:

Manifest: 15 copies which should clearly indicate weights in metric tons and measurements in cubic metres and each copy should be duly signed and stamped by the loading port Agent.

The copies of the manifest may be photostat copies or carbon copies but it is imperative that the stamp and signature made by the loading port Agent is appearing in original on each copy.

If cargo is carried in transit a separate transit cargo manifest (15 copies) is also required in same fashion as above.

Bills of Lading: 5 sets of non-negotiable copy Bills of Lading i.e. ordinary carbon copy Bills of Lading. Photostat copies will not be accepted.

In addition the following documents are to be provided:

4 copies of Final Cargo Stowage Plan, duly signed and stamped on each copy by the loading port Agent. Photostat copies are accepted as long as same are signed and stamped.

4 copies of Hatch List as above.

If dangerous cargo is being carried 2 copies of a separate Dangerous Cargo List is also required and again each copy to be duly signed and stamped by the loading port Agent.

Also 2 copies of Crew List to be presented to Customs Office.

1 copy of Crew List, 2 copies of Passenger List, all seamen's books or passports, 1 photograph of each crew member for the Immigration Office.

1 copy of Crew List, 1 copy of Vaccination List, all vaccination books for Quarantine Office. Immediately on berthing place the rat guards on mooring lines.

Ship's Registry, Loadline, Cargo Safety Equipment Certificate, Safety Radio Certificate and Last Port Clearance to be presented for port clearance.

PILOTAGE: Pilotage service available and request for Pilot should be made to Port Signals Station, or to look-out Signal Station when in use. Ships proceeding through the dredged channel to Shuwaikh are boarded by the Pilot in the anchorage. Pilotage not compulsory in the Outer Anchorage.

ANCHORAGES: Ships may take up anchor berth in the Outer Anchorage, without the Pilot.

Because of congested anchorage, and for the benefit of all concerned, the Outer Anchorage (BA Chart 1214) was divided into areas, and the approach waterway of 0.75 miles in width from Ras Al Ardh to anchorage and vice versa, is left free for navigation.

Ships bound for Kuwait, in order to *discharge their cargo* should anchor in the area marked by the following co-ordinates, and in the depth of water, according to their drafts.

Lat. 29° 25.0′ N.	Long. 47° 58.7′ E.
Lat. 29° 27.0′ N.	Long. 47° 58.7′ E.
Lat. 29° 27.0′ N.	Long. 48° 02.5′ E.
Lat. 29° 25.0′ N.	Long. 48° 02.5′ E.

Ships which have *no cargo* for Kuwait, and calling only for fresh water, provisions, crew changing, transhipments or any other reason, but not discharging cargo, should anchor: North of Parallel 29° 25.0′ N. and East of meridian 48° 03.0′ E. If mentioned anchorage area described is congested the ship could take temporary anchorage: North of Parallel 29° 24.0′ N. and East of Meridian 48° 05.5′ E. but change their position to the area described, immediately as opportunity occurs. The ship should leave the anchorage immediately after they have received the facilities, and proceed to the anchorage of the Port they are bound for.

Ships which have received instructions of possibility of berthing in the morning, should change their position to the area reserved, marked by the following co-ordinates:

Lat. 29° 25.0′ N.	Long. 47° 57.6′ E.
Lat. 29° 27.0′ N.	Long. 47° 57.6′ E.
Lat. 29° 27.0′ N.	Long. 47° 58.7′ E.
Lat. 29° 25.0′ N.	Long. 47° 58.7′ E.

When the movement is confirmed the vessel should hoist:

By Day: "G" Flag over a Black Ball or Shape.

By Night: A White Light over a Red Light, visible all round.

Note: (1) The Master shall advise the Director of Marine Operations (D.M.O.) and/or the Pilot of any damage or disability to the ship under his command, *before berthing*.

Ship unable to comply with the berthing instructions, should notify the D.M.O. in ample time of their inability to do so, by VHF, Visual Signals or via Kuwait Radio:

500 kHz 9 KK 4 – 6381 kHz
450 kHz 9 KK 6 – 8525 kHz

Any ship sailing from the outer anchorage for any reason, should notify the Kuwait Harbour Control that she is sailing and give the reason.

The Area North of Parallel 29° 25.0′ N. and West of Meridian 47° 57.6′ E., is reserved for ships of *National Fleet*, who require repairs, waiting for orders, changing crews, etc.

(2) The D.M.O. may direct any vessel to move from one berth to another, or vacate a berth as circumstances demand.

(3) (a). A ship whose turn is defined in the Morning Meeting, and whose Agent is notified, and upon calling her no reply is received shall be prohibited from her turn for *3 days*, and after its elapse will be given another turn.

(b). A ship which is defined as a temporary one on the record in the Morning Meeting, and upon calling, is not ready shall be prohibited from taking her turn for *2 days*, after which it will be given a normal turn.

(c). A ship which is registered and then sails, if she delays her return for her specified turn for berthing will be prohibited for *15 days*, as delay penalty.

MAX. SIZE: Max. draft at Berth Nos. 1 to 14, 31 ft. 6 in., and Berth Nos. 15 to 18, and dolphin berths, 26 ft. 6 in. Max. draft at Fishing Harbour Berth Nos. 1 to 3, 19 ft. 6 in. These drafts allow 2 ft. of water under the keel. Tidal range is about 2.8 m. (9 ft.). Berthing draft dependent upon tidal conditions at time of arrival, and vessels exceeding 26 ft. have to wait for tide.

HEALTH: Vessels calling at Shuwaikh Port must send the following information to "Health Port Shuwaikh" by cable:

(1) Name of vessel
(2) Last port of call
(3) Health condition Crew members
(4) Validity of Cholera Certificates
(5) Request for Free Pratique

Vessels arriving at Outer Anchorage must hoist "Q" flag, and keep it hoisted until Free Pratique is granted.

Free Pratique will be granted usually at anchorage, and in some cases alongside, at the discretion of the Quarantine Officer.

No person, except the Pilot, shall board the vessel, before Pratique is granted.

TUGS: Join vessel entering dredged channel, Tug's lines used. The use of tugs by ships manoeuvring within Shuwaikh port limits under direction of D.M.O. or Pilots. Number of tugs used for each movement: *(a)* 2 tugs for ships exceeding 400 ft. in length. *(b)* 1 tug for ships between 250 ft. and 400 ft. in length.

16 tugs available, 8 of 1,000-2,400 h.p. and 8 of 300-600 h.p. Use of tugs is compulsory.

REGISTRATION PROCEDURE: Notification of vessel's arrival. According to port regulations a questionnaire issued by the D.M.O., duly filled in and signed by the Master of the vessel, is to be submitted to the port prior to berthing. In many cases vessels arrive and obtain berth immediately and thus there is no possibility of presenting the questionnaire to Authorities in time. In order avoid berthing delays Masters should cable following information to the D.M.O. directly, 48 hours before arrival:

(a) ETA.
(b) Total cargo for discharging Kuwait.
(c) Distribution quantity each hatch.
(d) Declaration hazardous, flammable and explosives cargo, and guns and ammunition.
(e) Declaration all vessel's winches in good working condition and cargo clear for discharging at Kuwait.
(f) Draft fore and aft.

We quote below specimen cable covering the above:

"Vessel XXX ETA Kuwait 21/8 0600 local quantity discharging 1,400 tons general hatch one 300 hatch two 300 hatch three 250 hatch four 300 hatch five 250 no hazardous, flammable explosives guns ammunition stop All winches derricks good working condition draft fore 24 ft. Aft 27 ft.".

The above cable sent to the D.M.O. will facilitate berthing vessel on time. ETA to be reconfirmed before 24 hours, if any change.

Also see "Shuaiba – Notice".

Also cable Health, Port of Shuwaikh: ETA, last port, crew health, validity of certificates, and request Free Pratique.

Apart from above, on dropping anchor contact Port Health, Tel: 811344, through Kuwait Maritime Channel 16 and request Free Pratique, and on receiving same inform Agent by VHF or by cable.

When approaching the anchorage vessel should hoist her "Call Sign" and "Quarantine" flag.

On arrival at anchorage contact Harbour Control and standby VHF Channel 16 when at anchorage.

Also send acknowledgement to ship's Agent stating time cable sent to Director Marine Operations Department.

RADIO/VHF: *Signal Station:* (Call Kuwait Harbour Control)
There is Lookout Signal Station at Ras Al Ajuza (Lat. 29° 23.3′ N., Long. 47° 59.8′ E.) and a Port Operation VHF/RT Service at the same position. The VHF/RT is a Single Frequency Simplex Service, operating on Channel 13 (156.650 MHz), 12 (156.600 MHz) and 11 (156.550 MHz). Working restricted to messages relating to the Movements and Safety of Ships.

All vessels arriving should establish contact with either one of these Stations as soon as possible by VHF or Visual Signals:

Tel: 443785, 443788, 443796 and 435873 Telex: 22733, 22740

Kuwait Coastal Station (9 KK) operates from 0600 hrs. up to 2400 hrs.

Radio Station:

2182 kHz	8802.4 kHz
2765 kHz	13182.5 kHz
2750 kHz	17328.5 kHz
4434.9 kHz	22699.0 kHz
6518.6 kHz	

Radio Telegraphy – 9 KK:

9 KK	9 KK 2 — 4299 kHz
500 kHz	9 KK 4 — 6381 kHz
450 kHz	9 KK 6 — 8525 kHz
	9 KK 8 — 12895 kHz
	9 KK20 — 12925 kHz
	9 KK22 — 16995 kHz
	9 KK23 — 22304 kHz

For Kuwait: Only English and French languages are accepted, for the other countries all languages are accepted.

Charges per word for Kuwait
QSJ CC 50 ctm.
LL nil

Telex: 22230, 23286 and 23771. Tel: 449151, 449154 and 449157

Marine Communications

This Service links the ship directly with their Agent or Principal in Kuwait and the Call for this Branch is "Kuwait Maritime".

The "Kuwait Maritime" Service covers all the ship's calls with Kuwait and abroad. The procedure is as follows:

Agent to Ship

Call by telephone No. 108 Kuwait Maritime, asking for connection, giving the Name of the Ship, and her Call Sign. The Kuwait Maritime operator will contact the ship for you on Channel 16 (156.800 MHz) and then transfer to vessel's frequency for communication.

Ship to Agent or Abroad

Call "Kuwait Maritime" on VHF Channel 16 (156.800 MHz) and ask to be connected to Agent or abroad.

BERTHING: The present Port consists of 18 deep water wharfs each 190 – 200 m. long.

14 of these berths have −10 m. depth (B.A. Chart Datum), and remaining 3.35 −8.53 m.

2 dolphin berths with depth alongside of −8.50 m. below B.A. Chart Datum, and capable to take ships up to 185.0 m. in length.

3 shallow berths with depth alongside of 6.71 m. below B.A. Chart Datum, and capable of taking ships up to (1 × 182 m., 1 × 156 m. and 1 × 200 m.).

Ships may under certain circumstances and at the Port Authority discretion, divert to Shuaiba Port, during the congestion periods.

There are 3 basins known as:—

Small Craft Harbour:	431.58 m. × 91.43 m.
Yacht Basin:	76.19 m. × 76.19 m.
Maintenance Basin:	118.86 m. × 82.90 m.

The entrance to Small Craft Harbour and Yacht Basin is 60.95 m., and to Maintenance Basin is 41.45 m.

These Basins are dredged to a depth of −3.35 m., and are used at present mainly by Barges, Tugs, Launches, Yachts, Security Boats and Navigational Aids Craft.

Berth turn is decided at a port meeting, held in the morning on all port-working days. With the exception of the dolphin berths, berthing takes place any hour, day or night.

Vessels carrying less than 400 tonnes of cargo, or vessels carrying cargo in one hatch only and/or when one hatch only remaining operational, alongside berth will not be granted.

A vessel that intends to stay in the anchorage in Kuwait until her turn will be allowed to shift over-stowed cargo while waiting, provided that the vessel asks for permission from the Port Authority through her Agent.

CRANES:

Berth		*3 Tons*	*6 Tons*	*Grain Elevator*
No.1	Bulk Grain	2	1	1×150 t.p.h. 1×500 t.p.h.
No.2	General Cargo and Grain	3	1	Discharging Rate 150 t.p.h.
No.3	General Cargo	3	1	—
No.4	General Cargo	3	1	—
No.5	General Cargo	3	1	—
No.6	General Cargo, Bagged Cement	3	1	—
No.7	General Cargo, Bagged Cement	3	1	—
No.8	Bulk Cement	3	1	—

Floating Crane: A self propelled Floating Crane 100/25 tons capacity is available, and could be hired on request.

At 10.5 m.	100 tons
At 12.5 m.	80 tons
At 16.5 m.	60 tons
At 20.5 m.	40 tons
At 23.5 m.	35 tons
At 25.0 m.	25 tons

Total Jib's length is 47 m., less 3.3 m. base.

Maximum weight to be loaded on the crane platform is 200 tons at one time but this depending on availability of space.

Draft at full equipped condition is 1.8 m.

Berth		*3 tons*	*6 tons*	*30 tons*
No. 9	General Cargo	2	1	—
No. 10	General Cargo	2	1	—
No. 11	General Cargo	3	1	—
No. 12	General Cargo, Ro/Ro and Containers	2	1	2×36 ton Container Cranes
No. 13	General Cargo, Ro/Ro and Containers	2	1	
No. 14	General Cargo	3	1	—
No. 15	General Cargo	2	—	—
No. 16	General and Refrigerated Cargo	2	—	—
No. 17	General Cargo	2	—	—
No. 18	General Cargo and Cattle	2	—	—

Maximum Loads on Wharves:

Berth No. 1	3 tons per sq.m.
Berth No. 2-8	600 lbs. per sq.ft.
Berth No. 9-18	3 tons per sq.m.
Fishing Piers	1.5 tons per sq.m.

STEVEDORES: All stevedoring and transport inside the port is performed by an authorised contractor.

Container work is handled by Shuwaikh Container Terminal (SCT). There is at present a total area of 400,000 sq.m. allocated to container storage. Plans are under consideration for specialised container berth facilities.

There are four Cement Silos of capacity 14,000 tons each adjacent to Berth No. 8. Discharging rate is 350 tons per hour.

Working Hours: 0600 – 1300, 1500 – 2230 hrs.; Overtime 1300 – 1500, 2200 – 2400 hrs. Overtime is compulsory for all vessels. On Fridays, only work on vessels which are to be completed during the day.

MEDICAL: Masters to radio prior arrival if medical attendance required on board. Hospital facilities available.

A rescue vessel, 90 ft. and 20 knots speed, equipped with surgery, operating theatre and all medical appliances is maintained by the Ministry of Health.

DENSITY: 1028 (Winter); 1036 (Summer).

FRESH WATER: All berths except Berth Nos. 1 to 7, have fresh water connection, and water can be supplied by pipe-line. Rate 20 to 25 t.p.h.

In addition to water available alongside the berths by pipe-line and hose, water may be supplied by barge to ships alongside dolphin berths. There are 2 private companies supplying fresh water alongside and at anchorage by barge.

FUEL: At all berths except Berth Nos. 15 to 18 and fishing harbours, fuel oil can be arranged through pipe-line. At other berths gas oil can be arranged by road tankers. For quality and prices please enquire from the Agents.

FIRE PRECAUTIONS: Shuwaikh Fire Brigade is responsible for all fire fighting in port areas and storage areas. There is also a fire station situated near the Small Boat Harbour, where the 3 fire fighting tenders are berthed. A salt water main for the fighting services is laid at all berths. There are two 90 ft. fire fighting tenders capable of pumping 5,000 gallons of water per minute from 4 nozzles. In addition they can pump 900 gallons of foam per minute. The 98 ft. fire fighting tender is capable of pumping 9,000 litres of water per minute and 650 litres of foam, and the capacity of her pump is 4,500 litres of water or 143.5 litres of oil. The tender has 8 nozzles for water and 2 nozzles for foam. These modern fire-fighting units are equipped with radio, radio-telephone, radar etc.

GANGWAY/DECK WATCHMEN: Gangway Watchman compulsory (see "Regulations").

OPENING/CLOSING HATCHES: Opening and closing of hatches is normally carried out by the stevedores on liners, and by ship's crew on charter vessels.

CUSTOMS ALLOWANCES: Tobacco: No restrictions. Wine and/or spirit allowance: Alcoholic beverage is strictly prohibited to be held out of bond. Master allowed to keep limited quantity in his cabin.

CERTIFICATES: A survey of life rafts may be carried out unless vessel's safety certificates indicate that life rafts were surveyed less than 12 months previously.

CARGO GEAR: Ship's gear and cranes used for discharging.

IDENTIFICATION CARDS: Passport or seaman's book necessary.

CONSULS:

Embassies:

Afghanistan	533030	Libya	644397
Algeria	519987	Malaysia	546022
Australia	2415880	Mauritania	512392
Austria	552532	Morocco	813700
Bahrain	513691	Netherlands	312650
Bangladesh	542688	Norway	551566
Belgium	512440	Oman	514380
Brazil	549600	Pakistan	532101
Bulgaria	531181	Philippines	546840
Canada	511451	Poland	510355
China	423871	Qatar	513599
Costa Rica	426770	Romania	548363
Cuba	2416727	Saudi Arabia	531155
Czechoslovakia	514451	Senegal	542044
Denmark	543166	Somalia	815578/79
Ecuador	562076	Spain	512722
Egypt	519955	Sudan	519299
France	516144	Sweden	2415539
Fed. Rep. of Germany	814182	Switzerland	551876
Finland	463291	Syria	531164
German Democratic Rep.	817055	Tunisia	542144
Greece	814169	Turkey	531466
Hungary	814080	UAE	518381
India	530600	UK	432047/46
Indonesia	514588	USA	424151
Iran	533220	USSR	642711
Iraq	533467	Venezuela	542376
Italy	445120	Yemen Arab Rep.	518827
Japan	518155	People's Democratic Rep. of Yemen	517898
Jordan	533151	Yugoslavia	813140
Korea	554206	Zaire	543688
Lebanon	519765		

Consulates:

Cyprus	433075	Sweden	426908
Paraguay	814462		

REPAIRS: All deck, hull and machinery repairs can be carried out by local shipyard. Repair facilities available for Gyro, Radar and electronics.

DRY DOCK: Floating dock lifting capacity 35,000 tonnes, dimensions 190 m. × 32 m. Syncrolift rated lifting capacity 2,000, tonnes.

SURVEYORS: Lloyd's Register of Shipping (Kuwait); American Bureau of Shipping (Kuwait); Bureau Veritas (Kuwait); Norske Veritas (Bahrain).

REPATRIATION: Can be arranged.

Also see "Visa Regulations" in "General" before first port.

AIRPORT: Served by regular airlines. Airport 17 km. from town.

HOLIDAYS: New Year's Day, Id Al Fitr, National Day (February 25th), Mount Arafat Day (Wakfa), Id Al Adha, New Hijra Year, Birthday of Prophet Mohammad, Isra walma'raj. The above days are subject to alteration.

No overtime work allowed on holidays and Fridays.

EMERGENCY CALLS:

	Tel. No.
Director, Marine Operations Dept.	810754 Office 819772 Office 832526 Office 833600 Residence 833433 Residence
Pilotage and Movement Affairs Superintendent	818498, 814079 Office 610535 Residence
Pilotage and Movement Affairs Superintendent	816025 Office 874084 Residence
Berthing Master	834931, 834946
Signal Stations:	
Shuwaikh	810446, 818472, 818478
Ras Al Ajuza	443788, 435873, 443785, 443796
Fire Station Shuwaikh	813500, 817573, 813692
Fire Boats	816777
Quarantine Doctor	813535, 811344, 820432
Hospital "SABAH" Exchange	815000
Hospital "SABAH" Emergency Ward	815000, 275, 500
Police Station, Shuwaikh	813934
Coast Guard	813711, 816409
Immigration Shuwaikh	813676
Customs Shuwaikh	810319

TELEPHONES: Cannot be arranged on board.

PROVISIONS: All kinds of food available at reasonable prices.

SERVICES: Swedish Welfare for Seamen. Lloyd's Surveyor. Butterworth Tank Cleaning Machines and Equipment and also underwater cleaning.

SHORE LEAVE: Permitted. Shore passes are issued and must be returned to Immigration prior to departure, if not returned a heavy fine will be imposed. Crew members require a photograph but this is not returned.

GENERAL: The following is required from all vessels calling at Kuwaiti ports for the first time:

Quote:

> The Harbour Master Department of the Ports Public Authority, with immediate effect, request that Masters of vessels calling for the first time at Shuwaikh Port should give in their ETA cables, details of cargo on board, the length, width, number and condition of hatches, discharging facilities, and any other information which they may consider necessary in assisting the Ports Authority to allocate the vessels the best berth possible.
>
> Such information will considerably help all concerned and at the same time prevent unnecessary delay and unjustified extra charges to owners, since in the event that the allocated berth is not suitable, the Harbour Master shall have no alternative but to shift that particular vessel to another suitable berth, or take it out to anchorage.
>
> Futhermore, it has been observed some Masters of vessels are not indicating in their ETA cables to the Harbour Master the word "Kuwait" when indicating the tonnage figures of cargo onboard, clear and ready for discharging. It is imperative that the Master should say in his cable 'ETA . . . hours. Cargo for Kuwait . . . tons clear and ready for discharging draft . . . ft.
>
> *Unquote.*

REGULATIONS: The State of Kuwait has stringent laws in force concerning the pollution of the sea by oil. The following are two amended paragraphs of this law:

Paragraph 1, Art. 4. "A person responsible for any pollution as described in Articles 1 and 2 shall be punished by a fine of not less than one thousand and five hundred and not more than forty thousand Dinars. In the event of his committing a similar crime within a period of one year from the date of his conviction, such a person shall be punished by a fine of not less than three thousand and not more than forty thousand Kuwaiti Dinars, and in the event of his committing yet another crime within a year from this last conviction he shall be punished by a fine of forty thousand Kuwaiti Dinars".

Paragraph 3, Art. 6. "The person responsible for pollution may suspend the detention order against the ship on payment, as a cash guarantee, of forty thousand Kuwaiti Dinars to the official entrusted with the execution of such order".

The Master shall advise the Harbour Master and/or Pilot of any special damage or disability to the ship under his command before berthing or unberthing.

A vessel in outer anchorage receiving a Movement Order in writing, by signal or VHF, and awaiting the Pilot, shall carry:

By day: "G" Flag, over a black ball or shape.

By night: A white light over a red light.

Ships that receive instructions to berth at specified hours and not adhering to these instructions could lose their turn and be liable to pay charges for the time lost at the berth, and facilities arranged for and not used due to such delay.

Ships that receive instructions to unberth at specified hours and not adhering to these instructions, i.e. retarding the movement of incoming ship, will be liable to pay charges for time lost at the berth and the facilities for the incoming ship, and not used, due to such delay.

Ships unable to comply with the berthing or unberthing instructions should notify the Harbour Master in ample time of their inability to so do by VHF, visual signals, personally or through Agent.

A ship entering or navigating within the dredged channel or inner basin shall have at least 1 anchor ready for immediate use.

The Master of a ship alongside Shuwaikh Wharf or dolphin berth, shall ensure that:

(a) Vessel not allowed to use VHF to any vessel except to call Kuwait Harbour Control or Kuwait Maritime.

(b) A safe and proper accommodation ladder to the quay is provided, adequately lit during the hours of darkness.

(c) A Quartermaster or watchman is stationed on deck, in charge of the ship's gangway, who shall inform the Master or the Duty Officer whenever required by the Port Authority Officials, and shall check that no authorised persons will enter the officer's or crew's accommodations. Gangway must be lifted up whenever vessel is not working, and at 2200 hrs. daily.

(d) The crew or watchman to attend the mooring ropes and lines, and shall cause their adjustment from time to time, as necessary on the rise and fall of the water.

(e) That no substance, matter or material is thrown overboard, either into the water or on to the wharf.

(f) That no engine repairs are undertaken which would prevent the movement of the vessel under her own power, without first obtaining the permission of the Harbour Master.

(g) That all pipe discharges on that side of the ship nearest to the wharf are either adequately and properly covered to prevent their effluent falling on to the wharf, or their use discontinued while the ship remains alongside.

(h) It is forbidden to jettison or ballast other than clean water or pump out the bilges or oil of any description within the port limits.

(i) All ships loaded with petroleum or crude oil at the wharf shall have the end of a steel hawser of sufficient strength, paid out to the water edge, at the offshore bow and quarter, to enable tugs to take the vessel to place of safety with the least possible delay.

(j) The Master shall at all times retain on board sufficient crew to work his ship.

(k) Ratguards to be fixed to all ship's mooring ropes.

(l) The Master shall not shift his vessel while alongside the wharf, prior to receiving permission from the Harbour Master or Berthing Master.

(m) The Master shall not connect water hoses to the water supply points and take water on board before receiving permission from the person in charge of water distribution.

(n) The Master shall report to the Harbour Master or Berthing Master any incident, accident or unusual happening on board his ship.

The Master not complying with the above-stated Port Rules, shall be liable to suffer the penalties prescribed for contravention.

Warning: Port tugs are supplied with nylon and polypropylene hawsers, which require particular attention when securing to ship's bollards, in order that they do not slip. Extra turns than normal on the bollards are recommended.

Ship's Life Boats:

In the Harbour: It is prohibited to use the ship's boats for transportation or boat-drill.

In the Outer Anchorage: It is permitted to use the ship's boats for transportation, but the crews land *only at Niga's Dhow Harbour* situated in Lat. 29° 22.7′ N., Long. 47° 58.2′ E., and every crew member must have in his possession a valid passport or seaman book.

NOTICE:

Supplied to Ship's Master, on arrival, by Agent (October 1984).

1. One watchman to be kept regularly on gangway.
2. Immediately the labourers leave the vessel after each night shift the gangway should be taken up and not to be lowered before 0600 hrs. next working day.
3. Strictly forbidden to sell any alcoholic drinks onboard or to bring on to jetty.
4. Rat guards to be fixed properly on the ropes.
5. No cleaning of decks, painting of hull or welding on deck is allowed when vessel is alongside jetty.
6. Neither fresh nor dirty water should be pumped out alongside jetty for any reason and under any circumstances.
7. No garbage should be thrown either on jetty or in to sea at any time and under any circumstances.
8. Any pollution either during supply of bunkers or at any other time and for any reason is entirely your responsibility.
9. No repairs or dismantling of engines are allowed unless prior written approval from the Harbour Master is granted.
10. Vessel's draft should not exceed that draft on which she was allocated a berth.

Maximum drafts of/on various berths are:

Jetty Nos. 1 – 14 inclusive	31 ft. 6 in.
Jetty Nos. 15 – 18 inclusive	26 ft. 6 in.
Dolphins	26 ft. 6 in.
Fishing Harbour	19 ft. 6 in.

TIME: GMT plus 3 hours.

DEVELOPMENTS: The North Basin extension plan will add 20 berths to the existing berths, 5 of which will be container berths, 2 for Ro-Ro ships, 2 for steel and timber, 2 for cattle vessels, 2 for car carriers, 2 for free trade zone, 1 for grain, 1 for refrigerated and general cargo and 3 tanker berths.

The outer curvature of the navigation channel is being widened.

AUTHORITY: Ports Public Authority, State of Kuwait, P.O. Box 3874 Safat, Kuwait. *Tel:* 812636. *Telex:* Hmshp-KT 22740 and Tcra-KT 22733. *Contact:* Captain Mohammed Essa Al-Hashash, Director Marine Operations Department.

AGENT: International Shipping Agency Limited, P.O.B. Safat No. 20637, Old KIC Building, 1st Floor, Safat Square, Kuwait, State of Kuwait. Tel: 2441860-67. Facsimile No.: (965) 2415732. Telex: 22208 (Answerback "Isaship Kwt") and 22396 (Answerback "Isatug KT"). Cables: "Shipagent" Kuwait.

NOTES

Please also advise Shipping Guides Ltd.

Lebanon

GENERAL:

NOTICE: November 1984.
The Lebanese Armed Forces Command has announced that it will close the illegal ports effective from 3rd November. Ships arriving in Lebanese waters will be prevented from heading towards the illegal ports and forced to go to one of the 3 legal ports which are Beirut, Juniyah and Tripoli. According to the announcement, ships disregarding the new regulations will be confiscated or destroyed. Information from another source indicates that the "Fifth Dock" at Beirut port is considered to be illegal.

BEIRUT (Beyrouth): 33.54 N. 35.30 E.

DOCUMENTS:
Manifests should be visaed by Lebanese Consul at ports of shipment, or at any port *en route* where there is a Lebanese Consul. If on account of non-existence of Lebanese Consul at ports of shipment or at any of these *en route* the manifests are not visaed, then such consular visa dues are collected at Beirut.

5 Copies of Cargo Manifests.
2 Store Lists.
5 Passenger Lists.
2 Lists of Cigarettes and Tobacco (see "Customs Allowances").

For cargoes loaded for Lebanon, there are new regulations concerning documentation as follows:

Original Cargo Manifest to be presented to the Authorities should be rubber stamped and signed by the Customs Authorities at the port of loading.

Copy of each Bill of Lading should be attached to the above Manifest.

A letter from Owners/Charterers indicating the Agents at the respective port.

PILOTAGE: Agent arranges Pilot via Harbour Master. Agent therefore to be kept well informed of ETA, 48 hours and 24 hours prior arrival. Pilot boat white with red funnel. Sound signals, 2 long and 1 short or contact can be made via VHF to Harbour Master. Pilot boards outside main breakwater. Assistance of Pilot outside daily normal hours, Sundays and official holidays, will be cost calculated at 100% more. Official normal working hours for pilotage station as follows: from 1st October up to 30th April, 0700 till 1700 hrs.; from 1st May up to 30th September, 0700 till 1800 hrs., For tankers outside harbour, the pilotage dues will be 100% extra.

Also see "Shipmaster's Report – January 1982".

ANCHORAGE: In Roads outside breakwater. Also see "Shipmaster's Report – January, 1982".

RESTRICTIONS: No particular restrictions. Pilot normally available between sunrise and sunset otherwise by special agreement.

MAX. SIZE: Max. draft in port 13 m. No limitation to breadth or length.

HEALTH: Health Authorities board in Roads. Health Form obtainable from Agent or doctor. Yellow fever certificates required for ships coming from Far East and Red Sea. Owners should check with Agents respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for Crew members.

RADIO: Cables via Beirut Radio to and from Agent.

VHF: VHF Channels 13 and 16, Frequency 156.6 and 156.7.

TUGS: Tugs of 1,000 h.p. join vessel inside port when necessary. Ship's lines to be used.

BERTHING: If port congested priority given to vessel already registered. Passenger-tourist vessel and cargo for Army have priority. Harbour capable of berthing 24 ships simultaneously and 3 moored on buoys, discharging into barges. All discharging is by ship's gear.

Dock No. 1: Surrounded by Quay Nos. 1, 2, 3. Depth of water varies between 3 m. and 8 m. Parts of Quay No. 1 and Quay No. 2 with 3 m. depth of water are reserved for floating units of port company and for launches of Harbour Master and pilotage service. Slipway of 1,000 tons capacity and workshops.

Dock No. 2: Surrounded by Quay Nos. 4, 5, 6, 7, with water depths varying between 8 m. and 10.5 m. On Quay No. 5 berthing priority is given to passenger ships, while the other quays are for cargo vessels.

Dock No. 3: Surrounded by Quay Nos. 8, 9, 10, 11, with depths varying between 10.5 m. and 13 m. All these quays can berth ships bringing general cargo. At Quay No. 8 of 13 m. depth, priority of berthing is given to grain ships.

Grain Silo: At the present time bulk grain ships are unloaded by means of removable suction machines, which can be installed on the ships and deliver the grain to lorries for direct transport. There are 105,000 tonnes capacity silos. Ships will be unloaded by means of 2 gantry type suction machines, mobile on rails with a capacity of 6×100 t.p.h.

Containers: A ship's Master advises that containers should be loaded on one side of the vessel and vessel berth that side to the berth as crane unable to reach outboard side.

Ro-Ro: There is a ramp between Quay Nos. 13 and 14.

STEVEDORES: Ordered by Agent. No ETA to Stevedores necessary. Working hours, 0800 – 1200, 1300 – 1600. Otherwise overtime on Sundays and on official holidays.

MEDICAL: Master to advise Agent by cable prior to arrival if medical attendance required.

TANKERS: Notice: The Coral Oil Co. Ltd.: Dated November 1984. To the Master.

TANKER MOORING AND DISCHARGING PROCEDURE AT CORAL OIL TERMINAL, BEIRUT.

We should be grateful if you would kindly note the following:

1. Berthing: The following is for your guidance:

Our moorings have been laid so as to give you a stern mooring for the old lines and amidships mooring for the new line (see item 2 below) using ship's anchors at the head. It is recommended that both anchors should be dropped when the vessel is discharging.

The ideal position for your ship is such that she would be heading N.N.W., in which position you will be clear of all obstructions in the event of an emergency. As you are aware, there is a wreck lying on the sea-bed to the East of the moorings and a half-submerged rock to the West.

When the significant wind speed is 10 knots, it is recommended that you stop cargo operations and advise our representative on board (see item 4 below) accordingly. Our hoses will be disconnected immediately after that. Please ensure close co-ordination with him.

When the significant wind speed rises to 15 knots you are recommended to unmoor and leave the berth. It is your responsibility to ensure that arrangements are made for the Pilot's mooring boat to unmoor the ship's lines.

Please keep in touch with the Meteorological Office in periods of unstable weather, and keep your engines in a state of readiness.

N.B. For amidships discharge (see item 2 below) you are advised to have enough mooring ropes available to cover extra distance to our mooring buoys (roughly 4 × 200 m.).

Please do not "Hang On" in wind speed beyond the above limits.

2. Cargo Discharging System:
There are two systems:

(a) The "Old Lines": The so called "Old Lines" system is to be connected through our submarine hoses to your stern discharge point. At that point the following products may be discharged: Lubricating base oil through one line and Jet A-1 and a limited number of chemicals, Gasoline or Gasoil through another line. In this particular case, you are requested to pump sweet or sea-water plugs, as the case may be, to clear our submarine and shore line between products.

(b) The "New Line": The so called "New Line" is for amidships discharge and is exclusively used for chemicals through a 'pigging' arrangement. Ideally, you should have Nitrogen aboard as well as compressed air for use in conjunction with this system, bearing in mind that Nitrogen must be used (not compressed air) with low flash point products.

3. Quality of Cargo: Please hand our representative the Certificate of Quality, issued by the Refinery, corresponding to the cargo destined to us.

The cargo may not be discharged unless the Certificate of Quality is handed to us beforehand and found to be fully conforming to the latest issue of the relevant specifications.

Furthermore, we shall carry out a few tests on representative samples drawn from your tanks before discharge.

If the results of the analyses are unsatisfactory, the cargo may not be discharged.

4. Personnel on Duty: A member of our staff with a few assistants will be on duty day and night on your ship and we trust they will be allowed to use your mess-room from time to time. Installation personnel are also on constant watch checking the shore tanks, inspecting the pipe-lines and manipulating the signals.

We would ask you to ensure that a responsible member of your crew remain on duty at the stern or amidships to answer shore signals promptly and react accordingly.

A member of our staff is always present at the Installation while the ship is discharging and you are requested to contact him if anything should be required.

5. Security and Safety:

(i) No engine repairs should be carried out at this berth.

(ii) The Port Authority forbids gas freeing while the tanker is berthed. Besides, fishermen's practices in the immediate vicinity of the berth may endanger your ship in case of gas-freeing.

(iii) You will appreciate that we cannot be held responsible for the security of your ship or prevent unauthorised persons from going on board.

Peddlers might attempt to board tankers, in which case the safety of your operations might be affected. It is strongly recommended that you post watchmen to prevent their access to the ship.

6. Communications: (a) Pumping Signals: Shore signals are made with White and Red discs by day and coloured lights by night from the Yard Arm of the signalling mast at the shore end of our jetty.

Ship signals are a series of short blasts of 5 seconds' duration.

(i) Amidships Discharge:

	Shore Signals		Ship Answering Signals
	Day	Night	
Launch pig or sphere	One disc	One white light	One blast
Pump product	Two discs	One green light	Two blasts
Pump air or Nitrogen	Three discs	Two green lights	Three blasts
Stop pumping product, air or Nitrogen	Four discs	One red light	Four blasts
Disconnect	No disc	Two red lights	Several short and long blasts

(ii) Stern Discharge

	Shore Signals		Ship Answering Signals
	Day	Night	
Pump water	One disc	One white light	One blast
Pump product slowly	Two discs	One green light	Two blasts
Pump product full speed	Three discs	Two green lights	Three blasts
Stop pumping product or water	Four discs	One red light	Four blasts
Disconnect	No disc	Two red lights	Several short and long blasts

In the event of the ship having to stop pumping, please sound 4 short blasts before closing the valve, whereupon pumping should not be resumed until the appropriate signal has been run up again on our signal mast.

(b) "Walkie-Talkie": Walkie-Talkie communication is established between ship and the shore, but the equipment may fail and the above signals are essential.

(c) Motor-boat: Motor-boat is on Company service while the ship is at mooring.

7. Pumping and pumping speed: Delivery of all products may proceed day and night.

(i) "Old Lines" Jet A-1, some Chemicals, Gasoline or Gas Oil:

When delivering the above products through the "Old Line" (i.e. using water plugs), the following pumping speeds must be observed:

During the first half hour, pump slowly to clear the water plug in the pipe-line and avoid development of unrelaxed static electricity. The pumping rates must be limited as follows: Kerosene/Jet A-1 90 t.p.h., Water 115 t.p.h.

After the first half hour, the rate of pumping should be commensurate with a pressure at the stern connection to the submarine hoses not exceeding 100 p.s.i. It should not be less than 300 product t.p.h.

At the end of the cargo pumping operation, sea-water is to be pumped to clear the product contained in the pipe-line into the shore tanks. Pumping speed must not exceed 115 t.p.h.

(ii) "Old Lines" – Lubricating Base Oils: No restrictions except to pressure at the stern which is not to exceed 100 p.s.i.

(iii) "New Line" – Chemicals: No restrictions except to pressure at the amidships discharge point which is not to exceed 150 p.s.i.

The detailed procedure concerning the use of the sphere or pig and Nitrogen, Compressed Air, or Chemical products to push the sphere or pig will be discussed and agreed with you beforehand.

8. Quantities to be discharged: Will you please ensure that the quantities discharged agree with the B/L figures. Any difference in these figures should be confirmed in writing to the member of our staff on board your ship. In any case, the shore tanks' dips are those that will serve as a final basis for acknowledgment of the cargo received. They are witnessed and certified by the shore Customs Authorities, as well as the Insurance Surveyor.

9. Ship's Agent: The ship's Agent is expected to deal with all questions of port and harbour regulations, currency, health, etc.

Reminder: Hose-lifting derrick, air compressors and nitrogen; the tanker must be fitted with derricks of 3 to 4 tons lifting capacity (depending on the height of the connection above sea-level) to lift part of the submarine 8 in. hoses required for connection to its stern discharge or amidships discharge, as the case may be.

In the case of lubricating base oils, the tanker must be provided with an air compressor to clear the line before pumping the next grade of base oils.

In the case of chemicals, except for those to be discharged at the "Old Lines", the tanker must have Nitrogen and compressed air available in adequate quantity.

Signed: Manager Operations.

Also see "Shipmaster's Report" dated February 1983.

DENSITY: 1025.

FRESH WATER: The port company has equipped all quays with hydrants. Ships moored on buoys can also be supplied with water from cistern barge. By shore installation or by barge. Delivery rate 20/25 t.p.h. Outside harbour double price per barge.

FUEL: Fuel, gas oil, diesel obtainable. 48 hours. notice required.

FIRE PRECAUTIONS: Special berths for tankers.

GANGWAY/DECK WATCHMEN: Available and recommended.

OPENING/CLOSING HATCHES: For liners, by stevedores, otherwise per agreement.

CUSTOMS ALLOWANCES: (Tobacco) 40 cigarettes per Crew member (Master 2-3 cartons). Customs very strict, and will search crew cabins. Regulations are as follows:

1. That the quantity of tobacco to be allowed on board vessels upon their arrival at a Lebanese port, will be fixed on the basis of 2 packets per crew member, passenger per day and to be calculated on a maximum period of 4 months, if the vessel emanates from an American, Asian or African port - not central Africa; and for 2 months if the vessel last port of call is in Europe, Central Africa or Mediterranean, which will be deducted port of call, until arrival at a Lebanese port. That the number of passengers to be taken into account on a tourist vessel, will be the number of berths the vessel can accommodate and not the number of passengers actually on board. As to cargo vessels, the actual number to be accounted for will only be the crew members and the Master of the vessel.

2. In the event that it is the first call of the vessel at a Lebanese port and not aware of such regulations, and it was found onboard her an excess quantity to the actual one allowed, as indicated above, a Process Verbal will be established for the excess quantity found and the cigarettes placed under seal. An undertaking is also to be obtained from either the Owners and/or her Agents to the effect that they will submit a certificate, within 1 month, to be issued by the relevant Customs Authorities of the next port of call of the vessel after a Lebanese port. While the seizure on the vessel will be lifted when a Bank Guarantee equalling the amount of fine and dues is placed, or a personal guarantee from the Agent – if solvable – and in the event that the undertaking is not fulfilled the usual penalties will be inflicted according to the Law.

3. In the event the vessel is aware of such restriction, and for one reason or another, she is carrying an excess quantity, this excess must be, as per official regulations, shown on the manifest legalised and issued at the last port of call touched by the vessel prior to Beirut. Any excess found over and above such declaration will be considered as smuggling and the law will be applied.

Wine and/or Spirits: 1 bottle per crew member. Master allowed 3 or 4 bottles.

CARGO GEAR: Ship's gear to be used but mobile cranes can be hired. Shore cranes except mobile cranes only available at Quays 9 and 11. Floating crane of 120 tons available.

IDENTIFICATION CARDS: Shore pass given to each crew member. Passport and seaman's book to remain in Master's care.

CONSULS: Most countries have consulates.

REPAIRS: Most types of repairs carried out.

DRY DOCKS: None except for 500/1,000 tonner.

REPATRIATION: Very good facilities for repatriation.

AIRPORT: About 10 km. distant, served by regular airlines.

TIME: GMT plus 2 hours. Summertime, GMT plus 3 hours.

HOLIDAYS:

Holidays	*Date*	*Days*
New Year's Day	January 1st	1
St. Maron	February 9th	1
Good Friday (Catholic)	Varies	1
Labour Day	May 1st	1
Good Friday (Orthodox)	Varies	1
Al Fiter (Ramadan)	Varies	1
Assumption Day	August 15th	1
Al-Adha	Varies	2
Moslem New Year's Day	Varies	1
Achoura	Varies	1
Independence Day	November 22nd	1
Prophet's Birthday	Varies	1
Christmas Day	December 25th	1

Port closes completely: New Year's Day, Al-Adha, Easter Monday, Labour Day, Independence Day, 1st day of Ramadan and Christmas Day. On other holidays, day work in port carried out against overtime payment.

POLICE/AMBULANCE/FIRE: Telephone numbers: Police 16, Ambulance 18, Fire 17.

TELEPHONES: On request by shipping agency, berthed ships can be connected to telephonic network of city.

SERVICES: Tank-cleaning equipment. Facilities for discharge of tank-washings, compass adjusting, laundry, etc., available.

SHORE LEAVE: Crew allowed onshore.

DELAYS: 1. Unavailability of berth or barges due congestion mainly during Winter months (December to April). 2. Vessel already registered will lose turn if not returned to port in time. 3. Barge ordered for bunkering might be occupied if vessel's arrival delayed.

DEVELOPMENTS: There are plans for a new container berth with crane and container park at the fifth basin.

SHIPMASTER'S REPORT: 1978.

Navigation Buoy: The buoy off the end of the breakwater has been replaced in approximately the same position as the original buoy. The present buoy is painted green with a 'cone top mark'. Although the buoy is a light buoy the flash was not observed. On no account should the vessel pass between the end of the breakwater and the buoy as rubble is being dumped to extend the breakwater. The actual dumping position is marked.

The local Pilots are now working VHF Channel 16 from the Harbour Office.

SHIPMASTER'S REPORT: January, 1982.

Vessels approaching Beirut Harbour from a Southerly direction are advised to make Ras Beirut Light on a bearing of 132°. When the light is approximately 3 miles away alter course to 090° until the Eastern end of breakwater is abeam and alter course to 150° to pass Green Buoy (near end of breakwater) to starboard. The Pilot will board vessel near the green buoy or at anchorage.

Good anchorages may be obtained East of breakwater with good holding ground. In view of the prevailing tension it is advisable to approach Beirut during daylight hours as incidents of sniper fire and shelling have been reported.

Shore leave for seamen/ship's personnel may be granted during daylight hours from 0900 to 1500 only in the Christian (Eastern) Sector. It is not advisable to visit the Muslim sector of the Western Beirut.

Provisions, bonded stores and good shopping available despite tension.

SHIPMASTER'S REPORT: February 1983.

Tankers: The following are the requirements for product delivery vessels calling at tanker berths operated by Dora-Terminals.

Medco Terminal:

I – TECHNICAL CONDITIONS

1. Tanker mooring should take place during daylight at the berth specially provided for discharging opposite our installations at Dora i.e. "Baie Saint Georges".
2. Tanker's d.w.t. (dead weight tonnage) must not exceed 25,000 - 30,000 metric tons.
3. Only stern discharge is permissible.
4. Submerged portion of the tanker's stern must not exceed 28 ft. - 29 ft.
5. Discharge hose facilities provided are of 6 in., 8 in. and 10 in. diameter. Working pressure must not exceed 5 – 6 kg./sq.cm.
6. Upon arrival, the Shipmaster shall abide by the instructions given to him by Beirut Pilot and Harbour Master and by employees of this company, it being understood that putting the ship at anchor immediately upon arrival is subject to weather conditions. In other words mooring, anchorage and discharge of load are not possible when sea is rough.
7. Ship must be equipped with all necessary international documents in accordance with universally accepted rules and regulations because discharging takes place under supervision of Lebanese Customs Authorities and other Government Officials.
8. Swivelling tanker's crane boom to extend outside tanker minimum 3 m. in order to lift vertically flexible hoses. Also suitably located hang-off bitts for submarine hose.
9. Discharge line to be fitted with ASA 150 8 in. flange connected (or ASA 150 6 in. connection) and pressure gauge, conveniently located.
10. Pumps to be preferably centrifuge with by-pass (or relief valve) set at 9 kg./sq.cm.

11. Tanker shall be responsible for any and all damages which may occur to our installations whether it be due to weather, natural or technical reasons. Tanker shall likewise be responsible for damages caused by negligence or faulty manoeuvres on the part of the Master or the crew.
12. The company's Superintendent at his own discretion may refuse admission to a tanker or discharge of a cargo when he notices that the tanker is not adequately equipped technically for the discharging process as is usually required. Shipowners shall then carry out all necessary repairs, wherefore demurrage, if any, shall be exclusively at the tanker's expense.
13. When the discharge process has been completed and all formalities done, hose disconnected and mooring ropes released, the tanker, using its anchor to move forward, shall leave the mooring place immediately and clear a suitable distance off marine installations without using the propeller.
14. Should weather conditions worsen during discharge operations, the Superintendent shall have the right to disconnect the hose and request Shipmaster to leave discharge berth immediately for protection of human lives, installations and ship.
15. All harm befalling divers and/or company workmen during discharge activities shall be at the tanker's expense as long as these men are on board the tanker.
16. Both tanker and company shall be prepared to tie-in the discharge hose within 6 hours period effective from the time mooring at company's berth has been performed by Beirut Pilot.
17. Master is requested to give 72/48/24 hours pre-notice of arrival through "Radio Orient" to our cable address "Geochammas Beirut".

II – GENERAL CONDITIONS

1. Details of tanker arrival and discharge must be arranged beforehand. Should two tankers arrive at the terminal preference shall be accorded the tanker that has arrived first.
   In those cases where a Government-bound tanker comes in for unloading at the same time as another tanker is discharging at our installations, no demurrage shall be due by the company.
2. Quantities received are those measured in our tanks. The company shall not be responsible for any shortage due to leakage or otherwise, notwithstanding the fact that the company shall spare no effort to avoid any such loss.
3. It is clearly understood that all discharge activities such as anchorage, discharge, material receiving, storage, etc. are for the responsibility and expense of the Government. It is likewise agreed that all damage which may befall our marine installations, tanks and the company's other installations at Dora, irrespective of cause, even if it be a force-majeure, are the responsibility of the Government as the company shall then be working in accordance with the Government's request and for its account.
4. All port dues and other charges connected with the tanker or the cargo are for the Government expense.
5. All expense for products delivered by tank trucks are for the account of the receiver.
6. Under all circumstances the company shall be held free of any responsibility whether for reasons mentioned above or omitted. It is likewise not responsible in all instances where the terms "cas fortuit, force majeure" and applicable.
7. The company may be contacted through the following means:
   (a) Radio Orient Ogero.
   (b) Telex: 22259 Menira/20816 Mecham/20112 Ctctco.
   (c) Telegram: Geochammas-Beirut.
   (d) Tel: 894.077 (working hours: 0800 – 1400 hrs.)
   (e) Marine Band: Channel 16 when 30 miles away.

Wardieh Terminal:
Max. draft at our Beirut Terminal 30 ft.
Max. quantity which can be received through our sealine is 200 metric tons per hour.
Type of flange – 8 in. flange.
Pumping can be effected through a 10 in. submarine pipe-line.

AGENT: Gulf Agency Co. (Lebanon) Ltd., PO Box 4392, El Arz Street, Modern Building, Beirut, Lebanon. Cable address: "Gacship" Beirut. Telex 20906 (Answerback "GAC 20906 LE") or Athens 216344, 218687, 214548 ("GAC GR"). Telephones, 296733, 256516. AO 324445.

CHEKAA: 34.20 N. 35.43 E.

See "General" before first port.

Port is used for cement loading and discharge of sulphates.
ANCHORAGE: Safe anchorage in Chekaa Bay.
MAX. SIZE: Draft up to 26 ft. 6 ins. (in calm weather) alongside quay. In event of swell, vessel required to leave quay and anchor in bay.
LOAD/DISCHARGE: 800/1,000 metric tons per 24 hours.

REPORT: Dated November 1982.
Slag is from time-to-time discharged at this port.

1. Max. draft permissible: 27 ft.
2. Length of berthing quay: about 40 m. – 45 m. Therefore vessels must do several shifts ahead and astern in order to discharge all holds.
3. Discharging by 2 shore cranes (1 fixed at quay and 1 mobile) using grabs.
4. Daily quantity discharged: about 2500 – 3000 tons per weather working day of 24 hours (receivers and stevedores working 24 hours round the clock, subject weather permitting).
5. The quay is at an open road, not sheltered and well exposed to South Westerly winds.
6. Agency attendance was monopolised in Chekka since 1975 (when war started in Lebanon) and the only agents attending are:
   (a) Messrs. Kfoury, the Pilots of Chekka for:
   The Societe des Ciments Libanais Sal Chekka.
   (b) Mr. Paul Adem, for:
   The Societe Nationale de Cements Sal Chekka, the company who owns the above mentioned quay.

AGENT: See "Beirut".

RAS SELAATA: 34.17 N. 35.40 E.

See "General" before first port.

Port is used for discharge of sulphates, sulphuric acid, grain and soya beans. When facilities are completed vessels of 70,000 tonnes will be accommodated.
MAX. SIZE: Up to 21 ft. draft (in calm weather) alongside pier which has 2 cranes.
AGENT: See "Beirut".

SIDON: 33.30 N. 35.21 E. (See Plan Book)

BERTHS NO'S. 1, 3 AND 4 HAVE BEEN TAKEN OUT OF SERVICE AND ALL MOORING BUOYS HAVE BEEN REMOVED. THE SUBMARINE LINE IS STILL THERE.
BOTH THE WHITE AND THE RED SEABUOYS ARE MISSING.

OPERATORS: Trans-Arabian Pipe-line Company, Sidon Terminal. The Company transports crude oil from Saudi Arabia via pipe-lines and exports from terminal South of Sidon (Saida). Terminal operates 24 hrs. a day, 7 days a week.
Advance Information: Prior to acceptance of nomination of vessels, Tapline requires advance information regarding maximum draft, vessel's equipment and location of manifold in reference to distance from the stern of the vessel, permanent ballast, simultaneous loading of cargo and discharging of ballast, etc. Acceptance or rejection will be made after evaluation of above data by Sidon Marine personnel.
FLAG: All vessels required to fly Lebanese Ensign on foremast during daylight hours. Lebanese flags may be obtained from ship's Agent.
LOCATION: Sidon Terminal is open, unsheltered roadstead, situated immediately North of Zahrani River, about 5 miles South of city of Sidon (Saida), Lebanon. It is approximately 35 miles South of Beirut, and 17 miles North of Tyre.
DESCRIPTION: Terminal's Tank Farm consists of 23 storage tanks situated East of terminal at 360 ft. (average) above sea level. Marine and administrative offices, a laboratory for testing stocks, 2 large and 2 small storage tanks all located within area just above sea level. An "L"-shaped pier for harbouring Company's marine craft extends approximately 1,000 ft. from shore near Southern end of berthing area.
NAVIGATIONAL AIDS: Radio beacon tower located 1,200 ft. back from beach, S.E of moorings. Occulting red light (about 30 flashes per minute) mounted on top, elevation 184 ft. above sea level; position Lat. 33° 30′ 04″ N., Long. 35° 20′ 31″ E. Tower also marked with 2 sets fixed red lights located respectively 45 ft. and 90 ft. below occulting red light. Radio beacon is automatic and operates on 24 hr. basis on frequency of 296.5 kHz, with "SAD" as the identifying call sign. It will signal 2 times over a 10-second period and then give a constant 1,000 cycle tone for 72 seconds. Tower is of cage-type construction, painted red and white. About 2.5 miles S.W. of terminal sea buoy and approximately 2 miles offshore is rocky shoal with approximately 32 ft. of water over it. Vessels approaching from Southward should keep offshore until radio beacon tower bears 100° true before hauling-in.

"Sailing Directions for the Mediterranean" (U.S. Navy Hydrographic Office Publication No. 154A Vol. IV) reads in part:

> *"Caution:* As the coast between Saida and Tyre, 20 miles South-South-westward, is bordered in places by rocks and shoal water extending as far as 1 mile offshore, it should not be approached closer than 1.5 miles, nor within depths of less than 16 fathoms."

During darkness terminal range lights and mooring buoy marker lights may be visible. These lights are located inside the restricted area.

A conspicuous water tank (painted aluminium) on a tower located Lat. 33° 29′ 27″ N., Long. 35° 21′ 10″ E., the top of which has elevation of 460 ft. above sea level. Location is seaward of centre oil storage tanks.

There are a number of smaller radio towers to N.W. and S.W. of beacon tower. South of terminal, at Medreco Refinery, is a conspicuous black stack located Lat. 33° 29′ 31″ N., Long. 35° 20′ 08″ E. A little further N.W. from this stack is a tall pipe painted aluminium with a flare on top at Lat. 33° 29′ 35″ N., Long. 35° 20′ 03″ E.

Berth Locations:

Berth No. 1 (7 buoys) Lat. 33° 30.8′ N., Long. 35° 19.9′ E.
Berth No. 3 (6 buoys) Lat. 33° 32.0′ N., Long. 35° 20.4′ E.
Berth No. 4 (5 buoys) Lat. 33° 32.4′ N., Long. 35° 20.8′ E.

DOCUMENTS:

Health Declaration: International Health Form to be filled out by Master on arrival.
Cargo Manifest: No cargo arrival manifest required, as same usually prepared by local Agent.
Clearance: No clearance required.
Crew List: 4 copies required on arrival.
Passenger Manifest: If any passengers on board.
Store List: 2 copies.
Bonded Store List: 2 copies. Present regulations at Sidon Terminal allow each seaman to retain in his possession a maximum of 40 cigarettes or the equivalent weight of tobacco or cigars. The balance of all smoking items must be collected and carefully listed prior arrival. This list will be checked by Customs before sealing lockers. If any discrepancies, vessel subject to a fine.

PILOTAGE: Vessels to be moored at Sidon will be boarded by Mooring Master of Company within 2 miles to seaward of terminal sea buoy. Mooring Master will advise Ship's Master on approaches to berth, mooring, unmooring, connecting and disconnecting submarine hoses and in all other operations within berthing area. All manoeuvring of ships within berthing area shall be done only in accordance with advice of a Tapline Mooring Master, subject to the understanding that in all cases and circumstances Master of the vessel being manoeuvred shall remain solely responsible, on behalf of vessel's owner, for safety and proper manoeuvring of vessel. Ship's Master or qualified deck officer must be on bridge at all times while ship is manoeuvring.

Vessels must have a pilot ladder safely and securely rigged, and all vessels over 45,000 d.w.t. should have an accommodation ladder rigged in combination with pilot ladder for safe boarding of Mooring Master and Government officials. Pilot ladder should be abaft and close to accommodation ladder so that Mooring Master, after climbing a few steps, can use accommodation ladder for remaining climb. Since hoses handled on port side at Sidon, it is advisable to rig ladders on starboard side. If at night, adequate lighting must be rigged over-side for Mooring Master to approach side of ship and climb ladder safely.

Note: Vessels having special rigs, such as hoisting equipment on short sections of pilot ladder, are not required to rig pilot/accommodation ladders per the above.

ANCHORAGE: For vessels awaiting berth, good anchorage just W.S.W. of terminal sea buoy in 16 to 20 fathoms, sandy bottom. Vessels should under no circumstances anchor North of terminal sea buoy as depths are excessive for safe anchoring.

RESTRICTIONS: Berthing and unberthing during daylight hours only.

Vessels must not arrive with more than 50,000 tons cargo on board.

MAX. SIZE: Berth No. 2 depth approx. 67 ft. Tankers up to 80,000 d.w.t. or approx. 55 ft. draft are considered max. size which should be handled during Winter months at Sidon, and then only if vessel meets all of below recommended requirements. Otherwise, vessels of over 80,000 d.w.t. should not be nominated for liftings at Sidon during period November-April. In Summertime max. 100,000 d.w.t.

Based on previous experience, sudden and severe storms of long duration are not expected from April through October. Vessels over 80,000 d.w.t. may, therefore be accommodated during this period. However, prior to acceptance of nomination of vessels over 80,000 d.w.t. Tapline requires advance information regarding max. draft, vessel's equipment and location of manifold in reference to distance from stern of vessel which should not exceed 450 ft. Acceptance or rejection will be made after evaluation of above data by Sidon Marine personnel.

Summary of Recommendations for Vessels over 40,000 d.w.t.:

1. Capable, efficient and reliable anchor windlass(es).
2. 15 shots on starboard chain – 13 shots on port chain are satisfactory.
3. Mooring wire winches, 1 on aft well deck, 3 on poop deck, 200 fathoms wire on each, with adequate number of manila or synthetic ropes to double up as needed.
4. Capability of lifting 16 in. hose string – 6.5 tons static weight.
5. Suitably located hang-off bits.
6. Capability of keeping vessel in a reasonable safe ballast condition (November-March) by permanent ballast or loading while deballasting, or a combination of both.
7. Ship's manifold located not more than 400 ft. from stern.

BERTHING: 7 buoys at berth No. 2. Berths numbered 1 to 4 from South to North. Vessels moored on 1 heading (West) basis using both bow anchors with max. possible spread of anchors to increase ship's anchor beam holding components. Ship's stern moored to cylindrical buoys fitted with release hooks, using 7 ropes (or wires) to respective mooring buoys. Permanent moorings consist of 7 steel cylindrical buoys in each berth.

Certain mooring buoys in all berths fitted with 1.5 in. diameter preventer wires, one end of which is secured to mooring buoys. When required, other end is brought on board vessel by a messenger line after ship moored in position. Preventer wires supplemental to ship's regular moorings during adverse conditions. Ships should have chain stoppers for handling these wires.

BALLAST: Masters are warned that no dirty ballast or bilge water may be discharged within an area extending 100 nautical miles seaward of the Lebanese coastline. All pipe-lines, sea suctions, strainers and pumps that are to be used for the discharge of clean ballast must be flushed clean prior to entering the 100 mile zone. Except for oil retrieved under "load-on-top" procedures, Masters must assure themselves that all oil tanks, pipe-lines and pumps are free of all traces of oil.

The terminal has no facilities for receiving oily ballast. A vessel must have sufficient ballast for safe manoeuvring. However, by carefully watching the weather, especially in the Summer months, by frequent interchange of weather information and berthing instructions, and, by a knowledge of the behaviour of his own vessel, a Master may desire to arrive at the terminal with minimum ballast thereby lessening any possibility of infringement of the pollution restrictions of this section, and also reducing time in berth.

As soon as practicable after arrival and prior to acceptance, all the vessel's tanks will be inspected for evidence of oil in ballast tanks. Inspection will continue during discharge of ballast. If evidence of oil appears at either of these inspections, the ship must return at once to a point not less than 100 miles from the coastline and there accomplish the necessary tank cleaning. Any vessel required to return to a position at least 100 miles offshore for the purpose of discharging dirty ballast, cleaning tanks or for any similar reason, automatically nullifies any Notice of Readiness already tendered, and at the same time loses any priority held for loading. On return from sea, vessel will be entered for loading at the time of the second arrival, when a new Notice of Readiness will be tendered.

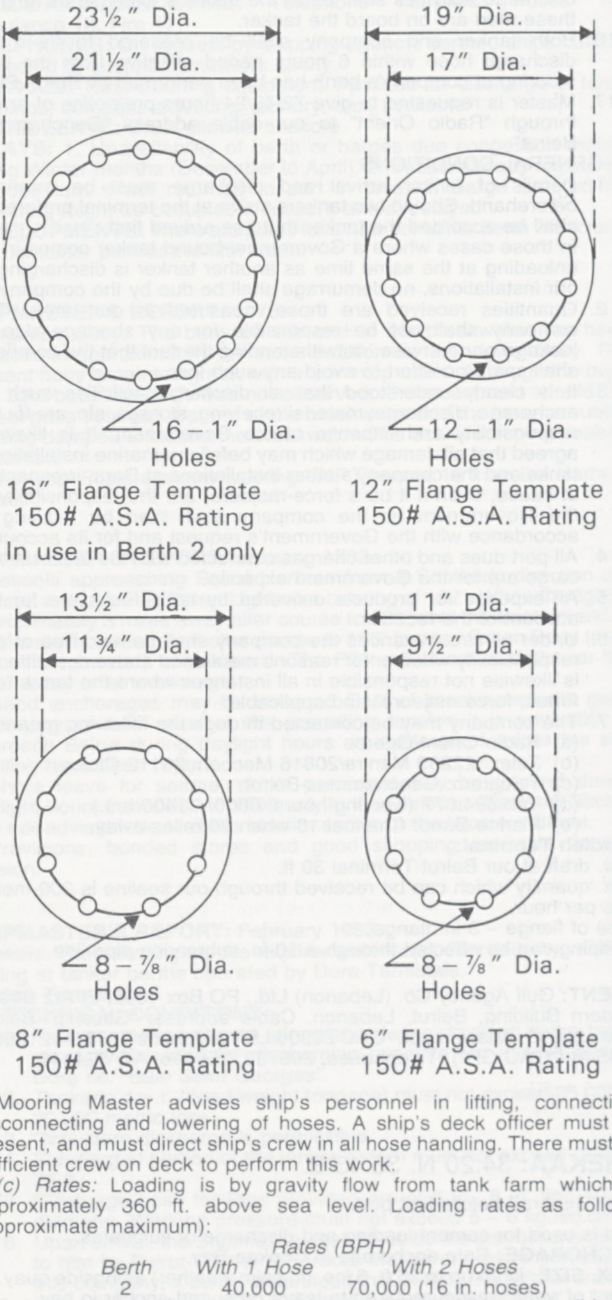
Vessels discharging dirty ballast within the prohibited 100 mile zone may be subjected to action by the Lebanese Government. In addition, ship's owners and charterers will be promptly notified of any violation.

Masters are also warned that ship's garbage or trash should not be dumped within 50 miles from the Lebanese coast.

LOADING: *(a) Readiness:* Tenders to load will normally be accepted and berths assigned to vessels in order of arrival, provided vessels have nominations for cargo valid at the time, carry clean ballast and are in all respects equipped and ready to moor. In event berthing delayed on account weather, vessels will ordinarily keep their loading priority in order of arrival. Vessels required to leave port area on account of weather (port closed), should keep in contact with terminal via VHF in order that they will be available when weather moderates. Company will make every effort to load vessels on arrival, or as promptly as berth is available, weather permitting. Notice of readiness will not be accepted unless vessel ready to load. Arrival time will be considered as time Mooring Master boards vessel underway or time vessel anchors, whichever occurs first.

(b) Connecting-up. Ships loaded by means of submarine pipe-lines. Weight of the 16 in. hose in No. 2 berth about 6.5 tons. Hoses lifted by ship's gear on port side. Detail of flange templates shown in drawings below. Ships should provide manifold fittings to allow connection of flanges shown.

DETAIL OF 16", 12", 8" & 6" HOSE CONNECTIONS
FROM SUBMARINE HOSE TO SHIP



16" Flange Template
150# A.S.A. Rating
In use in Berth 2 only

12" Flange Template
150# A.S.A. Rating

8" Flange Template
150# A.S.A. Rating

6" Flange Template
150# A.S.A. Rating

Mooring Master advises ship's personnel in lifting, connecting, disconnecting and lowering of hoses. A ship's deck officer must be present, and must direct ship's crew in all hose handling. There must be sufficient crew on deck to perform this work.

(c) Rates: Loading is by gravity flow from tank farm which is approximately 360 ft. above sea level. Loading rates as follows (approximate maximum):

	Rates (BPH)	
Berth	*With 1 Hose*	*With 2 Hoses*
2	40,000	70,000 (16 in. hoses)

Order save ship's time and to ballast vessel as quickly as possible, as well as to make berth available for others, it is requested that ships receive oil as fast as it can be delivered, with due regard for safety. The removal of any restrictions, such as strainers, etc., is recommended.

DISCHARGING: Ships unloading crude or refined products in Tapline seaberth must:

1. Be able to discharge at least 1,000 t.p.h.
2. Be equipped with centrifugal cargo pumps only. Piston pumps will NOT be accepted due to the damaging effect they have on the submarine hoses.
3. Ships without permanent ballast tanks must be able to discharge cargo and load ballast simultaneously.
4. Vessels must NOT strip (drain) their cargo tanks into the sealine. Air injected by this operation may cause the line to float and buckle.

Report: 1983.

Cargo discharged through 8 in. line (old bunker line).

HEALTH: Rules governing quarantine of vessels are same as found in other ports.

RADIO:

(a) Facilities. Tapline has own ship-to-shore radio telegraph, and VHF radio telephone station at terminal. This station is not open to commercial traffic. Services limited to traffic between Tapline and tankers within 3 days' sailing time from terminal. Messages to or from tanker agents classed as "Commercial" and must be routed via Radio Orient, a commercial radio station. Its call sign is ODR.

Radio Orient Beirut, call sign ODR, transmits (CW) on 8702 kHz and 13101 kHz simultaneously half-past each hour beginning at 0630 until 2130 hrs. GMT, the traffic list; 524 kHz each hour beginning at 0600 hrs. until 2100 hrs. GMT, the traffic list. Listens on 8534–8374 kHz and 12531–12561 kHz for replies and calls each hour from half-past the hour until the hour; 500 kHz 0600 to 2200 hrs. GMT and 425, 454, 468 and 480 kHz from the hour until half-past the hour for replies and calls. Keeps watch only between 0600–2200 hrs. GMT on 500 kHz.

(b) Advice of Arrival. It is important that ships establish radio contact with "ODR" when 3 days distant from Sidon and maintain this contact at regular intervals until just prior to arrival at the terminal. All ships should send a 72-hour ETA message to Tapline, giving the best estimate of ship's arrival time, a statement of bunker requirements and other relevant information. Shorter notice may result in berthing delay. Further ETA messages should be sent when vessel is 24 hours and 12 hours distant and to cover any other time changes occurring in the original ETA or those subsequent thereto. The 12-hour ETA should include a statement regarding "ship's readiness to load" on arrival, and time required to discharge clean ballast after ship is moored. A further contact when 4 hours away is desirable for exchange of weather data and mooring schedule. Vessels failing to give minimum of 12 hours arrival notice may be subject to delays in acceptance.

(c) Ship-to-Shore Communications. Ship-to-shore communications, while ships are in moorings, will be by portable VHF radio units used by the Mooring Master only. The use of the ship's radio station (except Channels 16-14) and/or battery charging equipment is prohibited for safety reasons during cargo transfer operations.

In the event of normal ship-to-shore communications failure, the (ship's) emergency whistle signal should be used.

VHF: Tapline VHF radio telephone system operates on international Channels 14 and 16, 156.7 MHz and 156.8 MHz respectively. Channel 16 used to establish contact while all traffic handled on Channel 14. Tapline guards these channels on a 24 hour basis, and contact can generally be made at distances up to 100 miles from terminal. Conversations on these channels will be carried out in English language only.

Mooring Master only will be in direct charge of portable VHF ship-to-shore radio communications.

MEDICAL: Neither medical nor hospital facilities provided by Tapline. Private doctors and hospital facilities available at Sidon and Beirut. Agents acquainted with situation and can make necessary arrangements.

If unable make radio contact, then vessels requiring emergency medical assistance should hoist International Code Flag "W" in daylight, and at night, send "W" (· – –) on blinker light to attract immediate attention, the same signal "W" (· – –) should be given on ship's whistle in either day or night hours. Signal should be repeated until acknowledged visually by either another ship in berth; from shore station or from Company launch. As soon as signal is received, terminal officials will advise ship's Agent as soon as possible of the emergency medical aid required.

DENSITY: Salinity of the sea is same as open Atlantic Ocean. Temperature ranges from 60°F. to 85°F. (15.6°C to 29.4°C.) depending on season.

FRESH WATER: Not available.

FUEL: Bunker fuel loaded at rate of 3,000–5,000 b.p.h. through 8 in. deck hose. Bunker connection should be located near ship's cargo manifold. Ships calling at Sidon to load crude oil should arrange for bunker fuel nominations through one of the offtaker companies well in advance of arrival. Bunker fuel will not be delivered until Tapline has received a firm nomination. Bunker fuel will be loaded as promptly as circumstances permit, but Tapline assumes no liability for any delays incurred by a vessel in berthing or loading bunker fuel. Maritime lubricants available, through marketing representatives in Beirut by arrangement through Agents.

PRECAUTIONS: *(a) Valve Control.* Ship's valves must not be closed against the oil stream.

(b) Emergency Signal. When, and if normal ship-to-shore communications fail, the emergency signal to stop oil flow will be a continuous blast on ship's whistle, until oil ceases to flow. Steam or air should never be shut off from the whistle during loading. Whenever emergency whistle is used, all loading operations in all berths will be shut down until communications can be established with vessel giving the signal. For this reason, it is requested that ships in the area refrain from using their whistles for other purposes.

(c) Readiness to Leave Berth. Port is considered an "open roadstead", and under no circumstances may engine be shut down for repairs while ships moored in submarine berths. Vessels in submarine berths must be able to clear, and shall clear immediately upon advice of Mooring Master. Ship's engine and gear must therefore be ready at all times with full power for immediate use.

(d) Loading and Deballasting Simultaneously. Properly equipped vessels will be encouraged to discharge clean ballast and load oil simultaneously. This capability is especially necessary during unsettled weather order keep vessel reasonably ballasted.

REPAIRS: No facilities.

SURVEYORS: Available from Beirut. Saybolt also available.

OFFICIALS: Lebanese officials, such as Customs Director, Quarantine Officer, Immigration Officer, Captain of the Port and Police, stationed at Sidon. Should Customs guards be stationed on board while in berth, it is expected that ship will provide food for these guards and other officials.

CONSULS: Italy and Norway. Consular or diplomatic representatives for most nations maintain offices in Beirut.

SHORE LEAVE: Arranged between Agent and Lebanese Security Officer aboard vessel. Ship's personnel (other than emergency or medical cases) not allowed to disembark at terminal. All personnel going ashore must land at Sidon where small boats must cross a shallow and sometimes impassable bar. Delays have been caused to vessels whose personnel have been unable to rejoin their ship. Sufficient personnel must be aboard at all times for letting go lines so that vessel can clear berth whenever required.

STORING: See "Prelims", page viii.

1. Barge only.
2. No storing during loading or discharging.
3. Open sea-berth.
4. Open sea-berth.
6. No.

GENERAL: *(a) Mooring Wires and Winches.* Use of mooring wires to powered drums for all vessels calling at Sidon is strongly recommended. Because there are no mooring tugs available, a ship's ability to moor during marginal weather conditions is dependent upon its ability to warp itself into position. Vessels with capable wire winches and deck mooring equipment that are able to place 1 or 2 mooring ropes on a windward mooring buoy, usually able to moor without difficulty. Vessels over 40,000 d.w.t. should have mooring wires to powered drums, 1 on aft well deck and 3 on poop deck. The wires should be 200 fathoms in length and so secured as to be easily let go from ship if necessary.

(b) Ropes. Vessels should have 2 suitable, best quality mooring ropes of 200 fathoms each located on aft part of after well deck for use on either port or starboard side, 3 (min.) suitable, best quality mooring ropes of 200 fathoms each and 3 additional ropes of 150 fathoms each on poop deck plus properly located warping winches and bitts. Vessels equipped with mooring wire winches on poop deck may reduce required "additional" ropes accordingly. Wires are not used on port side of aft well deck due to possible fouling of wire with hose or pipe-line underwater facilities. In this position a suitable, best quality mooring rope must be used. 2 ropes of 200 fathoms each recommended, to be used on either side while mooring, and used on port side only for securing ship in berth.

SHIPMASTER'S REPORT: February 1983.

Tankers: The following notices are presented to the Master on arrival at the terminal.

TRANS-ARABIAN PIPE-LINE COMPANY
SIDON, Lebanon
Tanker Loading Advice

....19............

Master..

Your vessel is scheduled to moor in Berth No.............at.....................
hours..............................19.........

A Mooring Master will board your vessel prior to this hour. Engines, deck machinery, mooring lines and crew should be in readiness to proceed to berth.

The cargo (a 5 ton lift) and fuel hose will be picked up on the PORT SIDE.

The Mooring Master advises ship's personnel regarding the lifting and connecting of the submarine hoses, and after loading is completed, regarding the disconnecting and lowering. In this connection, he acts in an advisory capacity and assumes no liability on behalf of the Company. A ship's deck officer must be present, and he must approve the hose connection on board. The ship's crew will do the actual connecting and disconnecting of the hose.

The Mooring Master will be in charge of all ship to shore communications.

One prolonged blast of ship's whistle is the emergency signal to shore to stop the flow of oil to the ship and apply vacuum on the submarine lines.

SHIPS MUST NOT CLOSE VALVES AGAINST INCOMING OIL. Ships will be held liable for damage resulting from such closures.

Vessels in submarine berths must be able to clear immediately upon instructions from the Mooring Master.

CAUTION: It is the ship Master's responsibility to see that no oil (crude, bunker C, diesel or bilges) is pumped or spilled overboard from his ship either in the vicinity of the Company's Terminal area or within the area of 100 miles from the Lebanese coast. In the event of any oil spillage or loss from your vessel as the result of any act or omission of the vessel, such as but not limited to, pumping of oily water over side from ballast or bilge, or oil spill during loading, the vessel shall be responsible for all costs and expenses of clean up, or for any damages to property or injury to persons resulting from such spillage or oil loss. Tapline reserves the right to take all reasonable measures to clean up any resulting pollution or contamination on land or sea and will charge to vessel for all costs and expenses incurred thereby. In addition, since Tapline, as operator of the Terminal, is responsible (as a guarantor of the ship) for any damages to property of or injury to third persons, resulting from such spillages or oil losses, in the event Tapline pays or settles valid claims of third parties for such damages or injury, Tapline shall have the right to recover from the vessel all costs and expenses arising from its handling, payment and settlement of such third party claims.

The Port Authorities are very strict in this matter and a written report is submitted to ship's owners. WELL DECK SCUPPERS MUST BE PLUGGED DURING LOADING.

Please sign the attached duplicate of this notice, acknowledging receipt of same.

TRANS-ARABIAN PIPE LINE COMPANY.

TRANS-ARABIAN PIPE LINE COMPANY
SIDON, Lebanon
OIL POLLUTION ADVICE

..............................19.......

Captain...
Master...
Sidon, Lebanon

Dear Sir,

It is the ship Master's responsibility to assure that no oil including without limitation crude, bunker C, diesel or bilges is pumped or spilled overboard from his *vessel* in the vicinity of the Company's Terminal area or within the Prohibited Zone offshore Lebanon as defined in the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended in 1962. In the event of any oil spillage or loss from your vessel including but not limited to spillage due to pumping of oily water over the side from ballast or bilge or oil spill during loading, the vessel and her owners, operators, *Agents, and Master* shall be responsible for all costs and expenses of cleanup and for any injury to persons or damage to property, *including Tapline employees and property,* resulting from such oil spillage or loss. Tapline reserves the right to take all reasonable measures to clean up any resulting pollution or contamination on land or sea, but only as a contractor on behalf of your vessel and/or her owners, operators, *Agents or Master* and will charge the vessel and/or her owners, operators, *Agents or Master* for all costs and expenses incurred thereby.

Tapline, as operator of the terminal, is responsible as a guarantor of the ship for any injury to third persons or damage to property resulting from such oil spillage or losses. The Port Authorities are very strict in this matter and a written report is submitted to *the vessel's owners, operators, Agents or Master* for any such incidents. In the event Tapline settles or is required to pay valid claims of third parties for such injury or damage, Tapline shall have the right to recover from the vessel and/or from her owners, operators, *Agents or Master* all costs and expenses arising from its handling, settlement and payment of such third party claims.

Please sign and return the attached duplicate of this notice acknowledging receipt of same.

TRANS-ARABIAN PIPE LINE COMPANY.

AUTHORITY: 1. Zahrani Terminal, Lebanon, P.O.Box 28, Sidon, Lebanon.

2. Trans-Arabian Pipeline Company, P.O.Box 11-1348, Beirut, Lebanon. *Tel:* Beirut 341270-5. *Telex:* 20769 Le Taplin. *Cables:* Tapline Beirut. *Contact:* Captain K. E. Hopen, Asst. Terminal Superintendent.

AGENT: See "Beirut".

TRIPOLI: 34.28 N. 35.49 E. (See Plan Book)

(a) DRY-CARGO PORT (b) OIL TERMINAL

(a) DRY-CARGO PORT.

Manifests should be visaed by Lebanese Consul at ports of shipment or at any port *en route* where there is a Lebanese Consul. If on account of non-existence Lebanese Consul at ports of shipment or at any ports *en route* the manifests are not visaed, then such consular visa dues are collected at Beirut.

Non-Liner vessels calling at Tripoli, are to present on arrival to the local customs' authorities, one copy of each manifest of cargo on board (even "IN BALLAST" manifests), DULY STAMPED AND SIGNED by the Customs' Authorities at the Loading Ports.

Otherwise, the vessel is subjected to a Customs' FINE.

DOCUMENTS:

1 Legalised copy of Cargo Manifests.
5 copies of Cargo Manifests.
2 Store Lists.
5 Passenger Lists.
2 Lists of Cigarettes and Tobacco (see "Customs Allowances").

In addition to documents listed, 2 copies of each Bill of Lading are to be handed over on arrival to the Agents, for Local Customs' Authorities control and check.

PILOTAGE: Agent arranges with Harbour Master, therefore keep Agent closely advised ETA. Harbour Master may also be contacted on VHF Channel 13 (frequency 156.6) and 16 (frequency 156.7).

Pilot boarding position: Lat. 34° 29.6′ N., Long. 35° 49.5′ E.

ANCHORAGE: Good anchorage.

MAX. SIZE: Depth at entrance 22.5 ft. Max. draft alongside berth 22 ft. 6 in.

HEALTH: Health Authorities board in roads. Health form obtainable from Agent or doctor. Yellow Fever Certificates required for ships coming from Far East and Red Sea. Owners should check with Agents respecting any recent imposition of anti-epidemic regulations and requirements for additional injections for crew members.

RADIO: Cables via Beirut Radio to and from Agent.

BERTHING: New pier about 600 m. length. 2 berths. 4 shore cranes suitable for vessels up to about 7,000 tons only. 2 heavy-lift cranes, capacities 25 tons and 50 tons. Lighters available for discharging alongside vessel. Ship's gear often used for discharging. There is a grain silo with capacity of 4,000 tonnes.

STEVEDORES: Ordered by Agent. No ETA to stevedores necessary. Working hours, 0800 – 1200, 1300 – 1600, otherwise overtime included on Sundays and on official holidays.

MEDICAL: Master to advise Agent by cable prior to arrival if medical attendance required.

DENSITY: 1025.

GANGWAY/DECK WATCHMEN: Available and recommended.

OPENING/CLOSING HATCHES: For liners by stevedores, otherwise per agreement.

CUSTOMS ALLOWANCES: Tobacco. 40 cigarettes per crew member. Customs very strict, checking crew cabins. Regulations are as follows:

1. That the quantity of tobacco to be allowed on board vessels upon their arrival at a Lebanese port will be fixed on the basis of 2 packets per crew member, passenger per day, and to be calculated on a maximum period of 4 months, if the vessel emanates from an American, Asian or African port – not Central Africa; and for 2 months if the vessel's last port of call is in Europe, Central Africa or Mediterranean, which will be deducted from the quantity, and on the same basis the consumption by the crew members and passengers during their trip, and this to start from the last port of call until arrival at a Lebanese port.

That the number of passengers to be taken into account on a tourist vessel will be the number of berths the vessel can accommodate and not the number of passengers on board. As to cargo vessels, the actual number to be accounted for will only be the crew members and the Master of the vessel.

2. In the event that it is the first call of the vessel, at a Lebanese port and not aware of such regulations, and it was found on board her an excess quantity to the actual one allowed, as indicated above, a Process Verbal will be established for the excess quantity found and the cigarettes placed under seal. An undertaking is also to be obtained from either the Owners and/or her Agents to the effect that they will submit a certificate, within one month, to be issued by the relevant Customs Authorities of the next port of call of the vessel after a Lebanese port. While the seizure of the vessel will be lifted when the Bank guarantee equalling the amount of fine and dues is placed, or a Personal Guarantee from the Agent – if solvable – and in the event that the undertaking is not fulfilled, the usual penalties will be inflicted according to the law.

3. In the event the vessel is aware of such restriction, and for one reason or another she is carrying an excess quantity, this excess must be, as per official regulations, be shown on the manifest legalised and issued at the last port of call touched by the vessel prior to Beirut.

Any excess found over and above such declaration will be considered as smuggling and the law will be applied.

Wine and/or spirits: 1 bottle per crew member; Master allowed 3/4 bottles.

CARGO GEAR: Ship's gear to be used. A floating crane maximum lift 50 tons is available.

IDENTIFICATION CARDS: Shore pass given to each crew member. Passport and seaman's book to remain in Master's care.

CONSULS: Most countries have consulates in Beirut.

AIRPORT: Beirut.

TIME: GMT plus 2 hours. Summertime, GMT plus 3 hours.

HOLIDAYS:

Holidays	*Date*	*Days*
New Year's Day	January 1st	1
St. Maron	February 9th	1
Good Friday (Catholic)	Varies	1
Labour Day	May 1st	1
Good Friday (Orthodox)	Varies	1
Al Fitr (Ramadan)	Varies	1
Assumption Day	August 15th	1
Al-Adha	Varies	2
Moslem New Year's Day	Varies	1
Achoura	Varies	1
Independence Day	November 22nd	1
Prophet's Birthday	Varies	1
Christmas Day	December 25th	1

BANKS:

The British Bank of the Middle East, Mina Street, Tripoli, Lebanon. Telex: 21850 Bbme.

Banco di Roma, Tell Street, Tripoli, Lebanon. Telex: 21818 Romtri.

STORING: See "Prelims" page viii.

1. Cargo ships can be stored by barge and truck and tankers by supply launches.
2. Cargo ships Yes. Tankers can be stored only at anchorage.
3. Yes.
4. Yes.
5. Storing can be done around the clock.
6. Storing is done by ship chandlers or their Agents.

SURVEYORS:

1. Cargo inspectors are available in Tripoli.
2. Surveyor's (Lloyd's, American Bureau . . Independent) are also available in Tripoli.

AUTHORITY: Mr. Victor Ghazi, Port Captain, Tripoli.

AGENT: Gulf Agency Co. (Lebanon) Ltd., P.O.Box 2575, Zeilaa Building, 1st Floor, Tripoli El Mina (3100), Lebanon. Cables: "Gacship", Tripoli/Lebanon. Telephone: 600101, 600102, 600146, After hours 601515. Telex: 40730 Hidaya or Athens 216344, 218687, 214548. Head Office: Beirut (which see).

(b) OIL TERMINAL.

Note: Terminal storage tanks were partly destroyed in late 1983. Sea berths were re-commissioned in March 1984.

DOCUMENTS: See "Section A – Dry-cargo Port".

PORT LIMITS: There are three spar-buoys to indicate the limits of the Company's Sea Terminal boundaries.

The location of these buoys is as follows:

1st.	Lat. 34° 30′ 03″ N.	Long. 35° 52′ 30″ E.
2nd.	Lat. 34° 29′ 42″ N.	Long. 35° 52′ 26″ E.
3rd.	Lat. 34° 29′ 03″ N.	Long. 35° 51′ 04″ E.

ANCHORAGE: Good anchorage immediately W.N.W. of No. 4 sea berth buoys.

MAX. SIZE: Least depth of water available in berth, and swinging circle, after deducting 6 ft. for the height above sea bed of the sea line and cradle is as follows: No. 1 Berth, 62 ft.; No. 2 Berth, 66 ft.; No. 3 Berth, 53 ft.; No. 4 Berth, 38 ft. The swinging circle is defined as 1.5 ship's lengths from dropping position of ship's inshore anchor. The approximate draft limits quoted are based on an under-keel clearance, in the berths, of 6 ft.

VLCC's will be handled in Berth No. 2 and loaded to a draft of 60 ft. During the period April to October, and subject to the Master and Mooring Master being satisfied that weather conditions permit loading to a reduced under-keel clearance of 4 ft., then the loaded draft may be increased to 62 ft.

PILOTAGE: The company's Mooring Masters will meet tankers 2 miles N.E. of Tripoli Breakwater Head. Tankers of 40,000 d.w.t. and over should have rigged, when in light condition, an accommodation ladder lowered to about 12 ft. above water. This can be adjusted to suit conditions. A pilot ladder should be rigged immediately abaft the accommodation ladder, to within 2 ft. above the water. This will enable Pilot to ascend pilot ladder clear of launch and then step on to the lower platform of the accommodation ladder. United Kingdom Merchant Shipping (Pilot Ladders) Rules are relevant.

HEALTH: See "Section A – Dry-cargo Port".

RADIO: The Lebanese Oil Installations Limited, Tripoli, must be informed 48 hours prior to arrival of a vessel's ETA, quantity of cargo required, maximum loading rate, SWL of derrick for lifting hoses and confirming that the ballast for discharge in port waters is clean. Communication with Iraq Petroleum Company, Limited, should be by cable addressed to "Petriraq, Tripoli, Lebanon", or direct to Tripoli Terminal Radio Station.

Tripoli Terminal Radio Station. Call Sign – ODC 8.

Waveband	*Hours (GMT)*	*Watch Details*
High Frequency	0800–0830	ODC 8 Broadcast Traffic List and calls ships on 8514 kHz. Listens on 8354–8374.
	1200–1230	Will transmit on 12831 kHz on request.
	1600–1630	
	2230–2300	
Medium Frequency	0000–2400	Monitor 500 kHz for calls and answers only.
	0730	Broadcast on 500 kHz QSW 442 kHz.
	0730–0800	Transmit Traffic List on 442 kHz, receives ship frequencies – 425, 454, 468, 480 and 512 kHz.
	1130	Broadcast call on 500 kHz, QSW 442 kHz.
	1132–1200	Transmit Traffic List on 442 kHz, receives on normal ship frequencies – 425, 454, 468, 480 and 512 kHz.
	1530	Broadcast call on 500 kHz QSW 442 kHz.
	1532–1600	Transmit Traffic List on 442 kHz, receive on normal ship frequencies – 425, 454, 468, 480 and 512 kHz.
	2200	Broadcast call on 500 kHz, QSW 442 kHz.
	2202–2230	Transmit Traffic List on 442 kHz, receive on normal ship frequencies – 425, 454, 468, 480 and 512 kHz.
	2232	Broadcast call QSY QSX 500 kHz.

Cables to Agents may be routed through Beirut Radio.

VHF: Tripoli:

Equipment:	Fixed Station sited in Terminal Building and used by Control Room.
Call sign:	Tripoli Control
Range:	Approximately 15 miles.
Frequency:	Transmitting on 163.6 MHz. Receiving on 159.1 MHz.
Watches:	Continuous.

Mobile Station

Equipment:	Portable, battery operated, carried aboard vessel with Mooring Master.
Call sign:	Ship's name (before mooring), or Berth No. (after mooring).
Range:	Approximately 8 miles.
Frequency:	Transmitting on 159.1 MHz. Receiving on 163.6 MHz.
Watches:	Continuous, whilst Mooring Master on board.

Notes

1. Tripoli also keeps a continuous watch on the international calling frequency of 158.8 MHz. This has a range of approximately 15 miles and its call sign is "Tripoli Control".
2. The VHF System is not connected to the main telephone switchboard and only selected shore stations have access to it.

TUGS: There is no tug at Tripoli.

BERTHING: *Sea Line Berths.* 4 berths numbered from N.E. to S.W. specifications as follows:

Berth No.	*Max. t.p.h.*	*Fixed Sea Line*	*Strings of Flexible Hoses*	*Approximate Limits Draft*	*Approximate Limits Deadweight*
1	5,000	2×24 in.	2×16 in.	56 ft.	140,000
2	6,000	1×32 in.	2×16 in.	60 ft.	250,000
3	5,000	1×32 in.	2×16 in.	47 ft.	87,000
4	Products	2×16 in.	2×12 in.	32 ft.	25,000

As loading is by gravitation, the maximum rates are dependent upon availability of suitable shore tanks and loading lines.

LOADING:

1. *Readiness to Load,* will be received by the Mooring Master, who is the Company Representative on board. The advice from the vessel which states she is ready to receive cargo is considered as final, and as indicating that every operation necessary aboard the vessel has been completed. As soon as possible after such a signal has been received, and without further advice, loading will commence. Damage to hoses can occur if ship's valves are not open at the start of loading.

2. *Derricks*

(a) Two hoses are connected on the port side amidship.

(b) Derricks or cranes reaching over the hose connection should be capable of lifting the flexible hose from the sea-bed to a height of up to 30 ft. above the deck.

(c) A minimum SWL of 5 tons is required for 12 in. hoses.

(d) The faster loading berths equipped with 16 in. hoses are available only to vessels with derricks and tackle with a minimum "Safe Working Load of 7 tons". Such vessels will be given berthing priority when queuing occurs and these berths are free but other vessels have not the capacity to handle the larger hoses.

3. *Hose Hang-off Bitts* are required at about 10 ft. from the ship's rail at the loading manifold to secure the submarine hoses on the port side.

4. *Hose Connection/Disconnection.* Ship's crew with a responsible officer in charge to perform all operations as advised by the Mooring Master, to lift, connect, disconnect and lower hoses.

5. *Ship's manifold* – to be prepared for the connection of 12 in. or 16 in. hoses with flanges of 150 series, dependent on berth allocation.

6. *Loading – Supervision and Commencement*

(a) All operations in connection with starting of loading, discharging, switching of tanks on board and topping-off must be directly and personally supervised by a responsible ship's officer.

(b) The advice from the vessel that she is ready to receive cargo is considered as final, and as indicating that every operation necessary aboard the vessel has been completed. As soon as such a signal has been received, and without further advice, loading will commence. Damage to hoses can occur if ship's valves are not open at the start of loading.

Caution: The oil loading stream to the ship is controlled on shore and it is extremely dangerous if a ship's valve is closed against the flow of oil.

To prevent excessive pressure from surge in ship and shore lines, ship's valves must not be shut-off against the stream, and when switching tanks, ship's valves must be closed slowly. Vessels will be held liable for damages resulting from any mal-operation of valves on board.

7. *Tank Dips.* During loading frequent checks should be made by the responsible ship's officer to ensure that cargo is entering the designated cargo tanks only and that there is no escape of oil into pump-rooms or through sea and overboard discharge valves. Particular care must be exercised by ship's personnel in "Topping-off" tanks and towards completion of loading to ensure that the terminal is given timely advice of any decrease in loading rate required. Adequate "standby" notice must be given before the final "stop".

8. *Loading Operations*

(a) The Mooring Master will not transmit any loading instructions to the shore until the responsible ship's officer is satisfied that the hoses are connected correctly and that all valves have been set for receiving cargo.

(b) Loading rates requested by the vessel or quoted by the terminal will be the peak or maximum rate at any time during the loading period.

(c) While in berth, ships should be ready to move under their own power in the event of their breaking adrift, catching fire, fire in adjacent berths or other emergency. No repair should be carried out while in berth which would immobilize the ship or impair her fire-fighting efficiency.

Failure to vacate the berth on completion of loading may result in delays to other vessels, demurrage, and loss of throughput which shall be accountable to the vessel.

(d) The Mooring Master will advise the Master of the ship as to any signals needed for local requirements.

(e) The Mooring Master brings a portable radio on board for ship to shore communication.

Products: *Requirements for a Product Delivery Vessel:*

1. The discharge berth is an open sea berth.
2. Tripoli Terminal Call Sign is ODC 8 and Master's ETA should be sent at least 48 hours prior to vessel's arrival on 500 kHz.
3. Vessel to be equipped with centrifugal pumps capable of maintaining a ship's rail pressure of 120 p.s.i. (reciprocating pumps are totally unacceptable).
4. Max. draft loaded 32 ft. in Berth No. 4 and 62 ft. in Berth No. 2.
5. 5 ton derrick SWL.
6. 6 mooring ropes 120 fathoms each.
7. Port and starboard anchors to have a minimum of 8 working shackles each.
8. Midship connection (Portside 1×12 in. 150 ASA).
9. Pumping is against a head of 270 ft.
10. Laytime to be calculated at an average discharge rate of 250 t.p.h.

DENSITY: 1025.

FRESH WATER: May be available at anchorage before berthing, but it is expensive.

FUEL: Fuel oil is available at Berths 2 and 3. The 12 in. bunker hose is raised on the port side of the vessel. Bunkering rates are 100 t.p.h. to 350 t.p.h.

CUSTOMS ALLOWANCES: See "Section A – Dry-cargo Port".

GENERAL:

1. *Ballast*

(a) Vessels should arrive with sufficent clean ballast for safe handling of vessel under prevailing weather conditions.

(b) Ballast water must be clean and a declaration signed by the Master and delivered to the terminal to this effect. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard.

(c) *Pollution of the sea – warning.* It is an offence to discharge dirty ballast or pump out bilges. The authorities are very strict and your attention is drawn to the Lebanese Notice to Mariners No. 23/1 of 29th July 1965, and to the volume entitled "International Conference on Prevention of Pollution of the Sea by Oil", issued by IMO London.

In the event of your vessel discharging dirty ballast or spilling oil, cost for cleaning the pollution, third party claims and port fines shall be borne by the vessel.

It is recommended that vessels carry an adequate amount of dispersants with means of application in case of oil spills.

2. *Gear to be provided by the ship*

(a) Anchor to be fitted with marker buoys and 20 fathoms line.

(b) 4 good mooring lines of not less than 150 fathoms each and of suitable size for the vessel. 2 additional 150 fathoms lines securely tailed to the first lines for cases where 150 fathoms may not reach to the stern buoys initially.

(c) For vessels of 50,000 d.w.t. and larger, powered mooring winches with 200 fathoms of wire rope.

(d) 4 suitable rope stoppers to be available aft.

(e) 2 good chain stoppers for use on 5.5 in. circumference wires (preferably carpenter's patent stoppers).

(f) 2 good 4.5 in. circumference boat ropes 200 ft. long placed one on each side of the vessel.

(g) 2 good ropes, 15 fathoms × 3.5 in. circumference and 2 heaving lines for lowering hoses.

3. *Lighting.* Manifold and poop mooring areas should be adequately lit to enable night mooring and loading operations to be carried out with safety. Sea area around the ship to be illuminated.

4. *Deck Watch.* A deck watch must be maintained at all times the vessel is in berth. In addition to its normal duties, the watch must inspect the hose connections and area around the ship against oil spillage, pollution, and prevent unauthorised persons from boarding your vessel.

5. *Boarding of vessel.* The control of persons boarding your vessel is the ship's responsibility. Boarding should be restricted to Company employees on duty and to persons authorised by the Port Authorities as advised by your Agents.

6. *Stores/Provisions* or other items should not be received or discharged whilst loading is in progress. Launches other than the Company's mooring launch, should not lie alongside the vessel.

7. *Tanker Safety.* Masters are at all times responsible for the application of all safety precautions as prescribed in the International Oil Tanker and Terminal Safety Guide.

8. *IOTTSG Safety Check List.* The Tanker Safety check list must be completed after inspection of each item prior to commencement of and during loading. The Mooring Master is authorised to stop all loading operations should he consider that the safety of lives and property is endangered by the infringement of safety rules.

9. *Action in case of Emergency.* In the event of a fire, oil spillage or other emergency on the vessel,

The Emergency Signal is:—

3 or more blasts of not less than 10 seconds duration each on whistle or siren supplemented by a continuous ringing of the general alarm bells.

SHIPMASTER'S REPORT: February, 1983.

Documents:

1 Copy Cargo Manifest.
3 Copies Crew Lists.
1 Copy Personal Effects Declaration.
1 Copy Bonded Stores List.

Approaches: Admiralty Chart No. 2903 – Tripoli Roadstead.

Ramkin Isle Light visible on approaches to the port but cannot be relied upon for full power.

Fairway Light Buoy (flashing green every 4 seconds):
Position: Lat. 34° 30′ 00″ N.
Long. 35° 52′ 28″ E.

N.B. – The fairway buoy has been removed.

All buoys should be treated with caution as some removed and all unlit. Breakwater and mooring buoys give good radar targets.

Pilotage: Pilotage is compulsory. In an emergency, vessel could dock/undock without Pilot. Area on chart marked 'Pilots' should be avoided due to a wreck with only 21 ft. clearance. Most suitable position for boarding is 1 mile East of this area.

It is requested that tankers of 40,000 d.w.t. and over should have rigged, when in light condition, an accommodation ladder lowered to about 12 ft. above the water. A pilot ladder should be rigged immediately abaft the accommodation ladder, to within 2 ft. above the water (U.K. Merchant Shipping – Pilot ladders – Rules 1965 is relevant).

Pilot ladder used for boarding. Accommodation ladder unsuitable due to swell.

Anchorage: Area for boarding Pilot is also suitable for anchoring, if awaiting berth due to adverse weather, and for approaches to the sealine berths. Good holding with 7 shackles of cable.

Restrictions: No night navigation.

Max. Size: Draft restricted to 62 ft. No restrictions on length or beam.

Health: Pratique granted on arrival.

Radio: Initial ETA sent to Beirut via Portishead Radio.

(a) Advice of ETA, is required 48 hours prior to vessel's ETA stating quantity of cargo required, max. loading rate, SWL of derrick for lifting hoses, and confirming that the ballast for discharge in port waters is clean.

(b) Lines of Communication:

i. Tripoli Terminal Radio Station. Call sign ODC8.
ii. By cable to "Petriraq Tripoli – Lebanon".
iii. International VHF 156.8 MHz – range approx. 15 miles. Call sign "Petriraq Tripoli".

Tripoli Oil Installations – Lebanon.

Station: Tripoli Oil Installations – Lebanon, Tripoli Lebanon, private station for communication with tankers bound Tripoli, Lebanon.

Call sign: ODC8. Address: Toil, Tripoli Lebanon.

Periods open for traffic: ODC8 keeps a continuous 24 hours watch on 500 kHz for calls and answers only.

Medium Frequency Schedules: ODC8 transmits traffic list on 442 kHz and listens in the band 425-512 kHz.

0750 – 0800 hrs. GMT. 1530 – 1600 hrs. GMT.
1130 – 1200 hrs. GMT. 2200 – 2230 hrs. GMT.

High Frequency Schedules: ODC8 transmits traffic list on 8514 and 12831 MHz simultaneously and listens in the band 8554 – 8374 MHz:

0800 – 0830 hrs. GMT. 1600 – 1630 hrs. GMT.
1200 – 1230 hrs. GMT. 2230 – 2300 hrs. GMT.

Note: In addition to above, Tripoli Terminal keeps a continuous watch on the international calling frequency of 156.8 MHz. This has a range of approximately 15 miles and its call sign is "Toil, Tripoli Lebanon".

It is essential that tankers bound Tripoli Lebanon, communicate with station ODC8 at least 48 hours before arrival, and thereafter maintain contact (It may, at any time, be necessary to change orders regarding port of loading).

Radio station reported to be operating at reduced power but no contact made at all to date. Reasons given: No operators, no technicians, no maintenance, to name but a few. Contact made by VHF to 'Tripoli Oil Terminal', range varies from 15 miles down to 3 miles.

VHF: See "Radio". Pilots Channel 16, Port Channel 16, Agents' Channels 16 and 14.

Tugs: Not available. Vessels can dock/undock without tugs under favourable weather conditions.

Berthing: There are 4 berths numbered from North East to South West.

Berth No.	*Max. Ldg. Rate*	*Sealine*	Hoses	*Draft*
1	5,500 t.p.h.	2×24 in.	2×16 in./12 in.	56 ft.
2	6,000 t.p.h.	1×32 in.	2×16 in.	60 ft.
3	5,000 t.p.h.	1×32 in.	2×16 in./12 in.	47 ft. (49 ft. Summer)
4	(Products)	2×16 in.	2×16 in.	32 ft.

Max. loading rates are dependent upon the availability of shore tanks and loading lines.

Least depth of water available in berth, and swinging circle, after deducting 6 ft. for the height above the seabed of the sea line header, is as follows:

Berth 1	Berth 2	Berth 3	Berth 4
62 ft.	66 ft.	53 ft.	36 ft.

No. 2 berth also used for the discharge of products using the fuel oil line. A slightly better rate achieved on this berth but only one ship can discharge products at any one time.

As No. 2 berth normally for larger vessels all ropes aft to be joined and maximum amount of cable (10 shackles) utilised until vessel in position alongside sealine marker buoys. A total of 10 ropes aft required but with mooring ropes of only 90 fathoms in length, 12 ropes will be required.

Gear to be provided by the ship:

(a) Anchor to be fitted with marker buoys and 20 fathoms line.

(b) Four good mooring lines of not less than 150 fathoms each and of a suitable size for the vessel. Two additional 150 fathoms lines securely tailed to the first lines for cases where 150 fathoms may not reach to the stern buoys initially.

(c) For vessels of 50,000 d.w.t. and larger, powered mooring winches with 200 fathoms of wire rope.

(d) Four suitable rope stoppers to be available aft.

(e) Two good chain stoppers for use on 5.5 in. circumference wires (preferably carpenter's patent stoppers).

(f) Two good 4.5 in. circumference boat ropes, 200 ft. long placed 1 on each side of the vessel.

(g) Two good ropes, 15 fathoms × 3.5 in. circumference and 2 heaving lines for lowering hoses.

Conditions of Use:

Notice: The facilities and assistance provided by TOIL to ships visiting the port for any purpose whatsoever are subject to the following conditions whether or not any charge is made therefor:

1. Assistance, Advice or Instructions.

Neither the TOIL (which expression shall hereafter include any other owner of property used in conjunction with the property of TOIL) nor its servants or agents (in whatever capacity may be acting) shall be responsible for any loss, damage, injury or delay from whatsoever cause arising out of any assistance, advice or instruction whatsoever given or tendered in respect of any vessel. In all circumstances the Master of the vessel shall remain solely responsible on behalf of his Owners for the safety and proper navigation of his vessel, and the vessel and her Owners shall indemnify TOIL or its agent against all loss or damage sustained by TOIL or its servants or its agents, or for which TOIL shall be legally liable by reason of negligent navigation of the vessel.

2. Use of Sea Berths, Sea Loading Lines, Harbours, Jetties and Gear.

(a) While TOIL has taken all reasonable care to ensure that the berths, facilities and other premises of TOIL and the gear and equipment used in connection therewith are safe, TOIL does not represent or warrant that the sea berths, sea loading or bunkering lines, harbours and jetties of TOIL or the gear and equipment (including gangways where provided) used in connection therewith are safe or suitable for any vessel, and any vessel using them or any of them shall be and remain at the sole risk of the Owners or Master thereof and in particular (but without prejudice to the generality of the foregoing) the safety or suitability of the gangway is the sole responsibility of the Master.

TOIL does not warrant the seaworthiness of any craft hired or used by any vessel nor its fitness for any particular purpose.

(b) TOIL will not be responsible for the acts or defaults of any of its servants or agents or of any Port Authority or its servants or agents nor for any loss, damage, injury or delay from whatsoever cause arising that may occur to the vessel or her cargo or equipment or to the Master or any member of her crew whether on board or otherwise, or in the course of mooring or unmooring or raising or lowering of the loading or bunkering lines or loading or discharging or otherwise howsoever, or to any third party, and the vessel and her Owners shall hold TOIL or its servants or agents harmless and indemnified against all claims, damages, costs and expenses arising therefrom.

(c) TOIL will not be responsible for any loss, damage, injury or delay directly or indirectly caused by or arising from strikes, lock-outs or labour disputes or disturbances whether TOIL or its servants or agents are parties thereto or not.

(d) If during or by reason of the use of the vessel of the sea line terminals, harbours or jetties or other premises of TOIL or its agents or the gear or equipment used in connection therewith or any craft of TOIL, any of them shall be damaged or become dangerous or unusable and irrespective of whether or not such damage has been caused or contributed to by the negligence of TOIL or its servants or agents or of any Port Authority or its servants or agents, the vessel and her Owners shall hold TOIL or its servants or agents harmless and indemnified against all loss arising therefrom.

3. These conditions shall be construed according to the law of Lebanon and if so required by TOIL the vessel and her Owners shall submit to the jurisdiction of the Lebanese Courts.

Notice of Readiness: Notice of Readiness accepted by Mooring Master at his time of boarding.

Ballast: Our vessel required a minimum of 6,000 tons of ballast on sailing light.

No facilities for dirty ballast or slops.

Loading: Mooring Master remains aboard at all times. Mooring boat and crew also stand-by throughout. Meals to be provided for the extra personnel.

Loading/Discharge Operations: Ship's pumping pressure not to exceed 120 p.s.i.

Discharging: Reducers supplied by refinery. No problems for 10 in. manifold.

Programme of operations:

During Mooring Operations:	*Action*
1. Ullage, Water Dip and Sample Ship's Tanks.	Terminal for Refinery
2. Labelled Samples ex ship and any forwarded from loading port to Refinery for checking prior to commencement of discharge.	Terminal for Refinery
3. Authority to discharge cargo after testing of ship's samples.	Refinery
General Sequence of Operations:	
1. Ship to pump sea water to clear into shore tanks the amount of gas oil contained in the sea and shore lines.	All concerned
2. When advised follow up with ship's cargo, warning of any stoppages in the ship's pumps is essential.	All concerned
3. On completion of discharge, ship to pump sea water, as required, to clear sea/shore lines.	All concerned
4. Sea/Shore Pipe-line systems to be left with sea water.	All concerned
Prior to commencement of Discharge:	
1. Pressure gauge to be fitted at hose on ship's manifold connection.	Marine Supervisor
2. Discharge pressure at ship's manifold not to exceed 120 p.s.i. (9 kgs.).	Mooring Master
3. Refinery to gauge tanks and prepare lines for the reception of gasoline (estimated at 180 Long Tons) and to confirm to Terminal Shift Supervisor when ready to receive the stream (time to be logged).	Refinery
4. Terminal Supervisor to ensure shift attendants are on duty to operate and supervise the booster pump at the transfer manifold.	M.M.S. and Terminal Supervisor
5. A Fireman will be required to be in attendance at the Booster Pump Manifold throughout discharge operations.	Refinery
Commencement of Discharge:	
1. Vessel to commence pumping sea water, gradually increasing pressure to maximum when all the system to the shore tank is checked and shore tank is receiving stream.	Mooring Master on board, also Ref. and Terminal Shift Supervisor
2. The booster Pump will pick up the stream at the Transfer Manifold, Pump attendants must be instructed to maintain a minimum positive suction pressure of 5 p.s.i. and operate within permissible amperage readings.	M.M.S. and Terminal Supervisor
It is VERY IMPORTANT that ship/shore operations be co-ordinated to ensure that the Booster Pump is never on stream when the ship's pumps are stopped, as this would cause DANGEROUS overheating conditions, especially dangerous in low flash point refined products.	Mooring Master, (Terminal Shift Supervisor for immediate instructions to Pump Attendant).
3. Pressure readings at ship's manifold and at Foreshore Manifold to be recorded hourly by Foreman.	Mooring Master and Terminal Foreman
During Ship's Pumping/Discharge:	
1. Refinery to sample at manifold of Tank 39 or any other points and advise when the line content of gas oil has been displaced and pumping of sea water by the ship should stop.	Refinery to Terminal Shift Supervisor
2. Refinery to advise when vessel may commence pumping its cargo.	Refinery to Terminal Shift Supervisor
3. Refinery to sample stream at Manifold of Tank 39 etc., where sea water would be drained out and switch stream into appropriate storage tanks when the required product appears in the sampling.	Refinery
4. IMPORTANT: Comply with Safety Code precautions when gauging receiving tank, especially when the oil level is below roof supports, to avoid the discharge of static electricity by the introduction of any "Conductors", such as a metal gauge tape and weight, into the space between the roof and level of the oil being received.	Refinery
Completion of Cargo:	
a) Mooring Master to advise when cargo discharge is completed and ship's tanks are dry.	Mooring Master
b) When advised, vessel to resume operations by pumping sea water to displace the line content of Blend Stock.	Mooring Master, Terminal Shift Supervisor
c) Refinery to advise when pumping of sea water may be stopped.	Refinery to Terminal Shift Supervisor
d) Refinery to gauge tanks and prepare certificate of quantity for cargo received in accordance with general procedure.	Refinery/ Terminal
e) Shore line to be re-set to "CLOSED" and to be left with sea water up to Tank 39.	Refinery to Terminal Shift Supervisor

Also see "Loading".

Density: 1025.

Fresh Water: Available by barge. Arranged through ship's Agent.

Fuel: Fuel oil is available in berths 2 and 3 through a 12 in. hose lifted on the port side. Rates may vary between 100 and 350 t.p.h.

Diesel and lubrication oils not available.

Consuls: Nearest British Consul at Beirut.

Repairs/Dry Dock: Not available.

Surveyors: Lloyd's.

Gangway/Deck Watchmen: Due to attempted theft of paint stores by armed men, security guards recommended at the anchorage and on the berth.

Shore Leave: Not permitted.

Customs Allowances: Bond checked by Customs but not sealed.

Airport: Nearest at Beirut.

Services: Available. Laundry service, telex (unreliable), doctor, hospital, provisions, recovery of anchors, etc.

Not available: No facilities for discharge of slops or dirty ballast.

NOTICE: Responsibility for the safe conduct of operations on board your ship while at our terminal rests with you as Master. Nevertheless since our personnel, property and other may suffer serious damage in the event of accident aboard your ship, we wish before operations start, to seek your full operations and understanding on the safety requirements set out on the Ship/Shore Safety Check List.

The Safety requirements have been drawn up by ourselves in conjunction with other Terminal Operators in Middle East and representative section of the International Tanker Industry.

They are based upon the provision of the codes of safe Practice currently accepted by the Oil and Tanker Industries. We therefore expect you and all under your command to adhere strictly to them, throughout your stay in this Terminal. We, for our part, will ensure that our personnel do likewise and co-operate fully with you in the mutual interest of safe and efficient operation.

In order to assure ourselves of your compliance with these Safety requirements we have instructed our Mooring Master to report to you or your deputy and join one of your officers in a routine inspection of Cargo Decks and accommodation spaces.

If you observe any infringement of these requirements by Terminal or any other personnel on board your ships; please bring this immediately to the notice of our representative. Should you consider any immediate threat to the safety of your ships arises out of any action on our part or equipment under our control, you are fully entitled to demand an immediate cessation of operations.

Our Mooring Master is the Company Representative on board. WE RESERVE THE RIGHT IN THE EVENT OF CONTINUED OR BLATANT DISREGARD OF THESE SAFETY REQUIREMENTS IN YOUR SHIP, TO STOP ALL OPERATIONS AND ORDER YOUR SHIP OFF THE BERTH FOR APPROPRIATE ACTION TO BE TAKEN BY THE CHARTERERS AND THE OWNERS CONCERNED.

For TRIPOLI OIL INSTALLATIONS – LEBANON

AUTHORITY: *Operator:* Tripoli Oil Installations Lebanon, P.O.Box 150, Tripoli (via Beirut), Lebanon. *Tel:* 620501-6. *Telex:* 21813. *Cables:* Toil – Tripoli. *Contact:* Captain George Abed, Terminal and Marine Operations Superintendent. *Telex:* 40713. *Tel:* 620501, 601845, 627133.

AGENT: Gulf Agency Co. (Lebanon) Ltd., P.O. Box 2575, Zeilaa Building, 1st Floor, Tripoli El Mina (3100), Lebanon. Cables: "Gacship", Tripoli/Lebanon. Telephone: 600101, 600102, 600146 after hours 601515. Telex: 40730 Hidaya or Athens 216344, 218687, 214548. Head Office: Beirut (which see).

NOTES

Please also advise Shipping Guides Ltd.

Liberia

COURTESY FLAG: Masters of vessels should check with the Pilot the correct times for raising and lowering (0600 – 1800 hrs.) the courtesy flag as heavy fines are imposed if raising and lowering is carried out at the wrong time. It is also advisable to carry a spare courtesy flag aboard the vessel.

BUCHANAN: 05.54 N. 10.04 W. (See Plan Book)

DOCUMENTS:

1 copy Clearance from last Port of Call.
1 copy Health Declaration.
6 copies Number of Passengers.
6 copies Cargo Manifest (even in ballast).
6 copies Crew List.
3 copies Store List (ship).
3 copies Personal Effects List.
1 copy Vaccination List.

PILOTAGE: The ship shall be considered to have arrived at Port of Buchanan when she cuts a circle with a 3 nautical miles radius from the beacon on the main breakwater head (Fl. G 3-sec.). Lamco provides pilotage. Pilot boarding approximately 1.5 miles off the main breakwater, bearing 095°/110°. Pilot to be provided with a clean and safe ladder on the lee side.

ANCHORAGE: If waiting for Pilot, anchor 2 miles off main breakwater on bearing 090° – 110°, 1.5 miles – 2.5 miles off main breakwater (South).

RESTRICTIONS: Harbour traffic hours – towage and pilotage (ore ships), 0000 – 2400 hrs. General cargo ships (tankers), 0700 – 2300 hrs.

MAX. SIZE: See "Bulk Handling Facilities".

RADIO: Dakar Radio, and on ship's telephone working frequency if stated in sailing telegram from last port of call. Buchanan Harbour will call on 6520 kHz 4 days before ETA at 0830 hrs. GMT, or when within 200 miles call Buchanan Harbour on 2182 kHz at 0800 hrs. GMT. Communications with ore ships per HF, call 2182 kHz. Traffic, 2638 kHz, 2738 kHz. VHF, call Channel 16. Traffic, Channel 9, 12 and 14.

HEALTH: Customs, health and passport inspection normally takes place at the berths. Quarantine signal must not be hauled down before "Free Pratique" is received. If diseases are suspected on board contact the Port Authorities or Agents by radio for instructions. After call at other Liberian ports where Free Pratique has been granted, Port Health will also board here.

TUGS: Lamco provides towage with two tugboats 1,640 h.p. and one tugboat 3,300 h.p. Tugs join vessel about 0.5 mile North of red buoy.

BERTHING: Number of berths for sea going vessels, 4. Length of quays, 2,800 ft. with 50-100 ton bollards and properly fendered. Depth of 33 ft. at commercial quay (at MLWS).

BULK HANDLING FACILITIES: *Deep Water Basin at Buchanan Ore Loading Quay.* With the completion of the deep water basin at the Ore Loading Quay the water depth alongside the quay is increased from 12.95 m. to 14.00 m. below the zero level of the General Elevation System.

The required keel clearance is still 3 ft. for ships up to 125 ft. beam. The max. permissible draft alongside the quay is thus:

$$14.00\text{ m.} - \frac{(\text{Beam in feet } 0.3)}{123}\text{ feet} + \text{tide}$$

Tidal range:
MHWS = +1.18 m. above zero level of the General Elevation System.
MLW = +0.05 m. above zero level of the General Elevation System.
MLWS = +0.15 m. below zero level of the General Elevation System.

Because of the necessity to save a rock shelf to support the sheetpiling of the cells when blasting and dredging the deep water basin, new fenders have been installed at the quay in order to keep the bilges of the vessels well clear of those rocks. The new fenders have a diameter of 1.20 m. against 0.55 m. of the old fenders. A ship loaded to maximum permissible draft can have a list of 5° without touching the rock slope but since she would touch the bottom with a list of about 3° such lists will not be tolerated.

Height of Shiploader: 16.5 m. above the water level at MHWS. A 2.0 m. safety margin is normally sufficient. Maximum shiploader outreach (including throw) from the new fender line is 22.8 m. whereby a max. 43 m. wide vessel can be loaded. Loading rate 6,000 t.p.h.

It must be clearly understood that the sailing drafts are unchanged. The width of the deep water basin is only 60 m. It gives however, the great advantage of being able to continue loading without stopping for low water, whereby loading can often be completed 12 hours earlier than without the deep basin.

An even greater advantage is probably the increased safety, should a large ship develop engine trouble after she has exceeded the former maximum permissible low water draft, in which case operators have no alternative but to pull vessel out at HW as "dead ship" which could very easily result in a major accident with enormous economic consequences. Now operators can let vessel remain alongside over the next low tide without any risk.

STEVEDORES: As early as possible advance notice of ETA required latest by 1500 hrs. on day preceding arrival if a weekday. Or Saturday before noon if arrival on Sunday. Shore working hours: Ore handling: Monday 0700 hrs. through Sunday 0700 hrs.: general cargo handling, 0700 – 1200 hrs., 1230 – 1500 hrs., overtime 1500 – 2300 hrs., and 2300 – 0700 hrs.

MEDICAL: Hospital and medical care is provided; advance notice should be given in serious cases. Yellow fever and cholera vaccinations are compulsory to enter the Republic. Vaccination book is required.

TANKERS: One tanker berth for discharging only. Hose connections are: 6 in. and 10 in. Max. draft 30 ft.

DENSITY: Varying but around 1020/25.

FRESH WATER: Fresh water is available, ex-quay only, rate is 20 t.p.h. Subject to availability.

FUEL: No bunker facilities available.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Performed by stevedores.

REPAIRS: No commercial facilities available. In cases of emergency Lamco might assist with minor repairs.

CUSTOMS ALLOWANCES: Direct sales from ships are strictly forbidden.

IDENTIFICATION CARDS: Not required.

CONSULS: Swedish Vice-Consul only; however, most countries are represented either by Embassy or Consul at Monrovia.

REPATRIATION: Can be arranged.

AIRPORT: Roberts International Airport about 1 hour ride by car; several connections to the rest of the world.

TIME: GMT; no alterations during the year.

HOLIDAYS: January 1st; January 7th; February 11th; Second Wednesday in March; March 15th; Second Friday in April; May 14th; July 26th; August 24th; First Thursday in November; November 29th; December 1st; December 25th. Special holidays as proclaimed from time to time by the Liberian Government. No work will be performed on January 1st, July 26th and December 25th.

POLICE/FIRE/AMBULANCE: No phone available; however the Lamco Plant Protection Force should be contacted; one Officer is normally assigned to each quay/gate.

SHORE LEAVE: Apart from South African and Rhodesian citizens, who are not allowed ashore, no restrictions.

DELAYS: Generally, no major delays have occurred. For ore carriers and tankers the tide may occasionally involve 24/36 hours waiting time depending on the size of ships expected to load: general cargo ships; no delay.

GENERAL: Two Customs Officers stay on board the ship during ship's entire stay and they should be given meals in the Officers' Mess and if necessary night quarters.

AUTHORITY: Port Operators: Lamco J. V. Operating Company.

AGENT: All ore carriers must employ LJVOC as their Agent.
Other vessels:
Scanship (Liberia) Inc., PO Box 19 Lower Buchanan, Tel: 32.32.36. Telex via Monrovia 4281 and 4344.

GREENVILLE: 04.59 N. 09.03 W.

PORT LIMITS: Within 2 miles of the Breakwater.

DOCUMENTS:

6 Crew Lists.
6 Passenger Lists.
4 Customs and Crew Declaration.
2 Vaccination Lists and valid Cholera/Yellow Fever Certificates.
2 Copies Manifests.
2 Copies, Bills of Lading.
Load Line and Safety Construction Certificates.
Licences of Officers (for Coast Guard).
Cargo Gear Certificate.

PILOTAGE: Compulsory. Pilot embarks in position 059° by 1.5 miles from the Breakwater or at the authorised anchorage. Boarding is done from a launch painted black and white with the word "Pilot" inscribed. Contact can be established on a normal working day between 0730 – 1700 hrs., on Saturdays 0730 – 1200 hrs., holidays and Sundays – Office not open, but should a vessel be expected the Pilot can be contacted during the expected time of arrival on VHF Channel 16.

ANCHORAGES: Indicated on the Chart by a dotted line commencing in position Lat: 4° 58.8′ N., Long: 9° 03.4′ W. running in a direction 309° for 11 cables thence 092° for 10 cables then 188° for 7 cables with a minimum depth of 6.5 fathoms. Care should be exercised as there exists a 4 fathom patch at the edge of the anchorage area. Vessels proceeding to the anchorage area should proceed with the edge of the breakwater (at night indicated by a fixed green light) and the North Point Lighthouse, bearing 059° to within a distance of one mile from the breakwater, thereafter altering course for the anchorage.

RESTRICTIONS: Pilotage at present is restricted to daytime only, but sailing if necessary can be done at night. It is anticipated, with the renewal of the buoyage system in early 1983, night pilotage will be resumed.

MAX. SIZE: Length 155 m., beam no restriction, draft 8 m.

HEALTH: Pratique granted by Port Health Officer on arrival at berth, no Radio Pratique granted.

RADIO: None, ETA's should be routed to Agents via telex or cables.

VHF: Contact can be established with the Marine Office or the various Agencies during normal working hours Monday – Friday 0730 – 1700 hrs., and on Saturdays 0730 – 1200 hrs. on Channel 16 VHF.

RADAR: No Port Control radar.

TUGS: One twin screw tug of 1,450 b.h.p. available for assisting vessels. This tug is equipped with modern fire fighting appliances, and can also execute coastal towage of vessels if required. Ship's lines are preferable for towing, but if not available then tug's line can be used.

BERTHING: One jetty 585 ft. in length with a depth of 8.1 m. Smaller jetty for vessels not exceeding 180 ft. in length with a depth of 4.9 m. alongside. In addition vessels loading floating logs can be berthed safely in the middle of the basin parallel to the main jetty with a depth of 8.1 m. Under favourable weather conditions (November – April) a third vessel can be accommodated at right angles to the jetty in a similar depth to the inner basin. All loading and discharging must be done by ship's gear.

CRANES: None presently available, but plans are underway to purchase a 70 ton mobile crane.

BULK CARGO FACILITIES: Cargo handled-forestry products only i.e. logs, boules, sawn timber and plywood.

SPECIALISED CARGO HANDLING FACILITIES: None.
BRIDGES: None.
STEVEDORES: Arrangements can only be made on vessel's arrival as this depends on the availability of the logs and sawn timber to be loaded. The required loading rate for vessels alongside the jetty is 800 cu.m. per 24 hours and vessels in the basin 500 cu.m. per 24 hours.
MEDICAL: One Government owned hospital with 50 beds, and one private clinic, both with limited facilities available.
TANKERS: Small coastal tankers only.
DENSITY: November-April 1025; May-October 1010.
FRESH WATER: Available.
FUEL: Small amounts of diesel can be delivered by truck.
FIRE PRECAUTIONS: Usual precautions.
CONSULS: Nearest at Monrovia.
REPAIRS: No facilities.
DRY DOCKS: None.
SURVEYORS: All classification societies are represented at Monrovia. Surveyors will travel to Greenville if arrangements made by Agents.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
HATCHES: Opening/closing carried out by crew but alternative arrangements can be made for shore labour.
CUSTOMS ALLOWANCES: 200 cigarettes/1 bottle spirits per crew member, but depending on duration of stay.
CARGO GEAR: Ship's gear only.
REPATRIATION: Carried out via Monrovia.
AIRPORT: Small domestic airport 5 miles from the port with two flights daily to Monrovia approx. 45 minutes flying time.
TIME: GMT is observed throughout the year.
HOLIDAYS: There are 16 National Holidays. No work is permitted whatsoever on January 1st, New Year's Day; April 12th, Redemption Day: July 26th, Independence Day and December 25th, Christmas Day.
POLICE/AMBULANCE/FIRE: Within reach. Not available by telephone.
TELEPHONES: Not available.
SERVICES: No facilities exist for tank cleaning or compass adjusting.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not required.
REGULATIONS: No unusual regulations.
DELAYS: Can be expected during the rainy season (April-November) when adverse weather conditions (heavy swell) exist causing vessels to part their moorings. This usually lasts not more than 2 days in any given period. At such times, vessels are moved to the inner basin or to the roadstead until the conditions improve.
GENERAL: The port designed for the handling of logs and related wood products has just completed a re-habilitation project which included the dredging of the basin and approaches, new rafting and lighting facilities, also the placing of both fresh and salt water mains to the quay. Feasibility studies are now underway with a view to increasing the length of the Main Quay by 33 m. Despite the fact that the present facilities are for vessels of 155 m., vessels of 160 m. were safely berthed in the past year.
AUTHORITY: National Port Authority, P.O.Box 165, Greenville, Sinoe County, Liberia. *Tel:* 9538/9. *Cables:* "Sinoe Port". *Contact:* Captain S. L. Wynter, Chief Pilot.

AGENT: See "Monrovia".

MONROVIA: 06.20 N. 10.50 W. (See Plan Book)

DOCUMENTS:
4 Crew Lists.
4 Passenger Lists or Statements "Nil" if none aboard.
2 Manifests for Customs. This should state ballast if no cargo aboard.
4 List of Ports of call from commencement of voyage with date of calls.
1 International Health Declaration.
1 List of dates of yellow fever and cholera vaccination.
4 Store Lists.
2 Crew Custom Declarations.
Immigration now stamp all seamen's discharge books or passports.
2 Livestock Lists.
Report: 1983.

All ships calling at the port of Monrovia, must submit the following documentation to the operations department not less than 24 hours prior to vessel berthing at the port.

(a) Complete manifest for Monrovia discharge with tonnage recap – 1 copy.
(b) Dangerous cargo list – 1 copy.
(c) Hatch list or its equivalent showing cargo, consignee and stow location – 1 copy, and
(d) Cargo stowage plan – 1 copy.

Failure on part of the ship's Agent to provide this necessary planning data may result in the following:

(a) Ship arriving later than ship not having the proper documentation will be given priority berthing consideration.
(b) Late manifest charge in accordance with N.P.A. Tariff.

This documentation is considered a vital part of the Freeport's ability to plan for the reception of import cargo, therefore, it is considered mandatory that the ship's Agent comply with this requirement at all times in order that ship discharge and dock operations are most effective and efficient. In addition, the ship's Agent will provide Freeport with a copy of the stevedore's hatch lists and tonnage discharged.

Some Agents/stevedores are in the habit of not declaring the figure to be discharged or loaded. Hereafter, no ship will be given berth without specification of cargo to be discharged or loaded.

PILOTAGE: Pilot is compulsory. Pilot ordered through local Agent. 24 hours or minimum 12 hours notice of ETA by Radio Telephone on 2182 kHz. Pilot instructs ship through signal tower or direct on VHF Channel 16.

Pilot comes out from inside breakwaters by pilot launch, displaying "H" flag and "Pilot" in large black letters on side of the launch. Pilot will inform ship by VHF which direction to proceed to meet the pilot launch. Vessels should always keep clear of the Fairway Channel, as very large bulk carriers sail on deep draft.
ANCHORAGE: Good unlimited anchorage space available on roadstead S.W. of Leading Line, from 7 to 10 cables from Southern breakwater end, depth 7 to 10 fathoms. Anchorage safe but subject to moderate South-westerly swell during rainy season, April to October.
RESTRICTIONS: Pilot service is day and night. Loaded oil tankers berth in daylight hours only. Deep loaded vessels i.e. 40 ft. draft and over are restricted to tide for berthing and sailing. Maximum draft for main ore piers is 45 ft. Vessels up to 860 ft. length can be accommodated at these piers. No restriction on beam except that carriers with beam in excess of 126 ft. may experience difficulty in loading with present loading gantries. Bulk carriers of 90,000 tons d.w.t. and over will berth only in daylight hours.
MAX. SIZE: See "Restrictions" and "Berthing".
HEALTH: Vessels entering must fly International Code flag "Q". Port Health Officials board upon berthing. Pratique automatic for vessels having cleared at other Liberian ports, but vessel must still clear Customs.
RADIO: The Freeport of Monrovia maintains a continuous listening watch on HF 2182 kHz, and VHF Channel 16. Vessels are to call Freeport 24 hours or minimum 12 hours, giving ETA before arrival. Cables should be routed to Agents through Government radio station, ELC or via French Cables through Dakar or Abidjan.
TUGS: 3 tugs of 1700 h.p. available. Join vessels just inside breakwater entrance. For berthing, tug lines used; for sailing, ships lines often used. One additional tug, 3,000 h.p. is available.
BERTHING: Ships are discharged by their own gear. Mobile cranes of up to 40 tons are available.

Vessels loading at the Iron Ore Piers are limited to a maximum draft of 45 ft. and sail from 2 hours before high water up to HW. However, ships over 90,000 tons will sail from 2 hours before HW up to 30 minutes before HW. Vessels proceeding to the Bunker Pier are limited to a maximum draft of 32 ft. Tankers discharging at the Crude Oil Berth are limited to 38 ft. draft and a maximum length of 700 ft. Tankers at this berth moor by means of two anchors and starboard side to the breasting dolphin with the stern fast to the mooring dolphin. Discharge is by means of submarine and floating pipe-line connected to the starboard side midships. Fishing Pier has a 90 ft. wide channel and maximum draft of ships berthing there is limited to 16 ft. and maximum length of 240 ft. The main General Cargo Pier is 2,000 ft. long, and vessels up to 625 ft. in length can be berthed. The maximum permissible draft at this pier is 30 ft., at which draft vessels will berth on the tide, that is 2 hours before HW till HW.
STEVEDORES: Several stevedoring companies. Port Authority handles all cargo on shore and accepts cargo ex-ship's hook only.

Stevedores gangs have to be ordered the day before required, therefore essential for Agents to receive ETA messages in sufficient time.
MEDICAL: Whenever possible Masters should cable Agents if require medical attention especially when arriving week-ends or during night. Hospital facilities available. Port Health require yellow fever vaccinations for crew members.
TANKERS: See "Restrictions" and "Berthing".
DENSITY: Density varies with the tide. Also varies during rainy season as river flow increases. Varies from 1009 to 1024 oz. per cu. ft. with average of approx. 1019 oz. per cu. ft.
FRESH WATER: Available only on marginal wharf and two Iron-ore Piers by means of hoses from shore. Average rate of delivery approx. 20 t.p.h. Water also available at the LRC Pier.
FUEL: Light diesel oil and heavy fuel oil available and these can be blended to specification by supplying oil company. Fuel and diesel only available on bunkering pier.
GANGWAY/DECK WATCHMEN: Private security men are engaged by the Agent. Port security also maintain regular patrol.
OPENING/CLOSING HATCHES: Normally done by stevedores.
CUSTOMS ALLOWANCES: Tobacco, reasonable quantities for consumption while in port. Wine and/or Spirit, as tobacco.
IDENTIFICATION CARDS: Not required, but seamen's books are endorsed aboard by Immigration.
CONSULS: Majority of foreign countries have Consuls.
REPAIRS: Limited deck and engine repairs can be carried out by private companies.
DRY DOCKS: One very small floating dock capable of lifting 300 tons with max. draft of 8 ft. This dock is used for small coastal craft and only accepts very limited outside work. There is also a synchrolift of about 250 tons, owned by private fishing company.
REPATRIATION: Repatriation of crews is possible.
AIRPORT: Roberts Field International Airport 45 miles distant. Served with daily international flights to Europe and America.
TIME: GMT.
HOLIDAYS: Many official holidays during year but cargo work carried out those days on overtime rates. Port closes 3 times a year: 26th July (Independence Day), Christmas Day and New Year's Day.
POLICE/AMBULANCE/FIRE: Port Authority have own Security Force and Fire Service, situated in port area. There is also an ambulance service.
TELEPHONES: There are no facilities for telephones on board.
SERVICES: Hull, deck and engine surveys can be obtained through Lloyd's, German Lloyd, B.V., Norske Veritas, America Bureau Agents and most of the other classification societies.
SHORE LEAVE: No restriction on shore leave.

SHIPMASTER'S REPORT: February 1983.

Pilotage: Pilot launch has black hull, white housing and green housing top. The word "Pilot" is painted in large white letters.

Pilot boards near the Sea Buoy, 7.3 cables from Southern Breakwater.

Health: 2 Coastguard Officials and 1 Immigration Official board with the Pilot to complete formalities. We do not think that this is the case for all vessels.

Radio: The Freeport of Monrovia no longer maintains a watch on HF 2182 kc/s.

Tugs: 3 tugs available; 1×3,900 h.p., 1×2,300 h.p. and 1×1,900 h.p. Pilot advises that the 1,900 h.p. tug suffers frequent engine problems.

When sailing, vessel takes 1 tug at stern, using 2 ship's lines.

Gangway/Deck Watchmen: Port security personnel maintain continuous watch while vessel is berthed.

Opening/Closing Hatches: Normally done by ship's crew.

AUTHORITY: National Port Authority.

AGENT: Scanship (Liberia) Inc., PO Box 209, Bushrod Island, Monrovia. Tel. 22.28.32. Telex 4281 and 4344. Cables: "Scanship Monrovia".

NOTES

Please also advise Shipping Guides Ltd.

Socialist People's Libyan Arab Jamahiriya

GENERAL: All ports:

CLEARANCE: ETA to be advised to Port Authority 24 hours before arrival, including the following information: Ship's Name, type, Nationality and port of Registry; Owner, Master and Agent names; Gross and Net tonnage; Ship's length and draft forward and aft; Expected duration of stay in the port; Last port of call, tonnage, quantity and kind of cargo for discharging and loading; Full details of any dangerous liquids or cargo; Number of passengers and crew; Health situation.

Before arrival at the outer limits of the port, vessel requested to hoist the following signals: Flags of her call-sign; Flag of Quarantine; Flag of ship's Nationality; The Libyan Flag on the foremast; Red Flag during daylight and Red light during night-time, if carrying explosives or any inflammable cargo; Pilot Flag and the international flag code signals must be respected.

DOCUMENTS: *On arrival:* Last Port clearance; Full sets of cargo documents; Copies covering consignment; Certificate of origin; Bills of Lading, etc. 8 copies of Crew List; 8 copies of Passenger List; 7 copies of Cargo Manifest; 3 copies of Cargo Plan; 1 copy of Crew Declaration; 1 copy of Currency Declaration; 1 copy of Store List.

During the first 24 hours of arrival: Valid certificates to comply with all the International conventions in force for the State whose flag the ship is flying. Certificate of Registry. For the National ships, moreover, the official log book, engine log book and ship's articles.

Agency Requirements: The following agency requirements in respect of pre-arrival notices and documentation in addition to official documents and certificates needed for ordinary port clearance should be complied with. Pre-arrival notice to be communicated by telex to Agents containing following information:

(a) vessel's name and flag;
(b) g.r.t./n.r.t./s.d.w. and nature of cargo;
(c) ETA and quantity of cargo to be handled;
(d) exact address to whom disbursements accounts should be sent.

For dry cargo vessels further information should be submitted:

(e) conditions of stevedoring, whether basis liner terms or F.I.O.S.;
(f) net freight earned along with all cargo details specifically each Bill of Lading.

Upon arrival the following documents are to be handed over:

1. Masters of tankers should produce and hand over to Port Authorities 'Certificate of Discharge' pertaining to previous calls (non-compliance will cause delay in berthing);

Following only applying to dry cargo vessels:

2. 14 copies of cargo manifest (clearly stating measurements and weights);
3. 2 copies of freight manifest;
4. 2 copies each Bill of Lading;
5. 2 copies cargo plan.

Report: May 1984. From State Agent.

Agent to submit all ship's documents/certificates, cargo documents and crew documents and/or any other declarations connected thereto, in the Arabic language. This is effective from 1.6.84, noting until this date, we shall arrange for the required translation as a transitional period, after which and effective from the above mentioned date, all ships shall arrive with all above said documents/certificates/ declarations, etc., in the Arabic language.

Your full and strict adherence to the above is required avoiding unnecessary inconveniences to all parties concerned as any failure on your part shall never be tolerated by the concerned authorities.

Report: June 1984. From State Agent.

Please note: Temporarily vessels should arrive with the following ship certificates already translated into Arabic, otherwise vessels shall be delayed in sailing. The other documents we shall arrange for translation of same at our end on a temporary basis:

Certificate of Registry.
Safety Construction Certificate.
Safety Equipment Certificate.
Radio Telegraphy Certificate.
Load Line Certificate.

Report: September 1984. From State Agent.

Following documents imperative to be translated at your end, and not by Agent:

1. Ship's documents:
    Registry Certificate.
    Load Line Certificate.
    Safety Construction Certificate.
    Safety Equipment Certificate.
    Safety Radio – Telegraphy Certificate.
2. All Cargo Manifests.
3. All other lists and declarations such as Crew List, Officers' List, Stores, etc.

Note that the competent authorities at our end (namely the Ports and Lights Department of Tripoli) are presently insisting on collecting from ship direct all the documents in question in Arabic translation upon vessel's arrival thus leaving no possibility whatsoever for any assistance previously rendered by the Agent.

PILOTAGE: Pilotage is compulsory for all vessels. Pilot boat will meet ships outside the harbour. Ships should wait for Pilot at anchor outside the harbour if weather is good. In case of bad weather, after getting permission from Harbour Master ships may enter the harbour at their own risk and anchor inside.

TUGS: Tugs are available at all Libyan Ports.

HEALTH: The following documents to be provided for the doctor: A valid Fumigation Certificate; International Vaccination Certificate for every person on board; Health Certificate for any animal or bird on board. No automatic Free Pratique between the Libyan Ports.

CUSTOMS ALLOWANCES: 200 cigarettes for each crew member or passenger. All kinds of alcoholic drinks are forbidden, even wine and beer, and to be kept in the store under the Customs seal. Also arms, perfume, saccharine and all kinds of anaesthetic. The sum of 10 Libyan dinars allowed for each crew member. All Libyan and Foreign currency to be declared in the currency declaration. All personnel effects and electronics to be declared in the Crew Declaration.

BLACK LIST: Libyan law prohibits vessels from having on board any goods or containers of Israeli origin. Any vessel having such goods or containers on board on arrival in the harbour will be liable to heavy fine and confiscation of the goods or containers. The Libyan Authorities may, moreover, refuse to clear the vessel.

REGULATIONS: Foreign currency not to be taken ashore. Crew members' visits between ships are not allowed without the prior permission of Customs and Immigration. Ship's lifeboats are not to be used within harbours limits without the prior permission of the authorities. No engine repairs to be carried out in port whilst alongside or at anchor in the port without prior permission of authorities. Movements of ships in the port are not allowed without instructions. Using ship's propellers whilst in port is not allowed without permission. Ship's whistles not to be used without good reason. Cleaning funnels or making smoke whilst in port is strictly forbidden. Ship's gangway to be in position at all times whilst alongside. Rat guards to be fixed all times on every rope. Painting or scraping the outer hull of the ship not to be carried out without prior permission of authorities. Duty officer to be on board all the time accompanied by sufficient crew.

For tankers or vessels laden with dangerous cargo; moreover, the mentioned hereabove: Red flag to be hoisted in daylight and red light to be on in the night-time. No movements allowed between sunset and sunrise for such ships. Electricity to be off from ship's holds whilst loading or discharging. Towing wires with suitable shackle to be ready fore and aft. Smoking and any kind of fire are strictly forbidden on deck. All steps for safety to be carried out.

POLLUTION: Pollution of any kind is strictly forbidden. Any ship causing any kind of pollution will be liable to heavy fine.

BERTHING PRIORITY: The berthing priority scheme, according to law, as follows: 1) Passenger ships. 2) Animal ships. 3) Liner and mail ships. 4) Cargo ships. 5) Tankers and dangerous cargo ships. Ships with cargo of less than 300 tons, may not have to comply with the scheme; subject to Harbour Master's decision.

OPENING/CLOSING HATCHES: To be done by crew.

IDENTIFICATION CARDS: Seaman's book or Discharge book, Passports, Identity Cards — all should be valid.

HOLIDAYS: Friday is the weekly day off. Revolution day (1st Sept. yearly); Evacuation days (28th March, 11th June, 7th October; yearly), Syrian Revolution day (8th March, yearly); Sudanese Revolution day (25th May, yearly); Egyptian Revolution day (23rd July, yearly); Hijra New Year (1st Moharam, Muslim year); Ashoura (half day, 10th Moharam, Muslim Year); Mohammadan birthday (12th Rabih Awel, Muslim Year); Israa Wa Merag (half day, 26th, Rajeb, Muslim Year); Eid El-Fitr (1st, 2nd & 3rd Shawal, Muslim Year); Eid El-Adha (9th, 10th. 11th, & 12th Zi Al-Heja, Muslim Year).

TIME: Local time at all the seasons is GMT plus 2 hours.

SURVEYORS: The following addresses are Agents for the mentioned Classification Societies and may be contacted for the necessary surveys on request:–

Lloyd's Register of Shipping: P.O.Box 111115 Tripoli. Telephone: 74383. Telegraphic Address: Lloydsreg Tripoli Libya.

Bureau Veritas: Tripoli: Orfelli Agencies, 109 – 1st September Street, P.O.B. 2283, Telephone: 35338 and 37398, Telegraphic address: Shetaf Tripolilibia.

American Bureau of Shipping: Tripoli: Libyan Arab Shipping, Baghdad Street, Andalus Building, P.O.B. 882, Telephone: 41712 and 39358, Telegraphic Address: Arabship Tripolilibia, Telex 20033 Arabship.

Germanischer Lloyd: Tripoli: Johs Rieckermann, Baghdad Street, Andalus Building, P.O.B. 2121, Telephone: 37021 and 31069, Telegraphic address: Rieckermann Tripolilibia.

Registro Italiano Navale (RINA): Tripoli: Mr. Mahmoud Gamar, c/o Libyan Arab Shipping Co., Baghdad Street, Andalus Building, P.O.B. 2325, Telephone: 41712 and 39358, Telegraphic address: Gamarin Tripolilibia.

MINE FIELDS: The following areas are prohibited area and dangerous for navigation due to mines:

1)	Lat. 32° 52.78′ N.	& Long. 13° 24.6′ E.
	Lat. 32° 57.67′ N.	& Long. 13° 24.46′ E.
	Lat. 32° 57.67′ N.	& Long. 13° 18.00′ E.
	Lat. 32° 53.82′ N.	& Long. 13° 22.30′ E.
2)	Lat. 32° 53.70′ N.	& Long. 13° 20.61′ E.
	Lat. 32° 55.93′ N.	& Long. 13° 18.00′ E.
	Lat. 32° 55.93′ N.	& Long. 13° 15.00′ E.
	Lat. 32° 54.45′ N.	& Long. 13° 15.00′ E.
3)	Lat. 32° 37.00′ N.	& Long. 23° 13.00′ E.
	Lat. 32° 14.50′ N.	& Long. 23° 31.00′ E.
	Lat. 32° 10.50′ N.	& Long. 23° 28.50′ E.
	Lat. 32° 37.50′ N.	& Long. 23° 7.50′ E.

ATTENTION: It is imperative that vessels contact the wireless stations on the Libyan coast at a distance of 30 miles from the proceeding port, giving the ship's position. Ship's winches and cargo gear should be in good order otherwise they will be liable to heavy fine if any delay occurs.

FLOATING DOCK: See "Tripoli".

AUTHORITY: Port Affairs and Maritime Transport Bureau (Marine Department), P.O.Box 648, Tripoli, S.P.L.A.J. *Telex:* 20400, 20533 Minscon Ly. *Contact:* Head of Marine Department.

AGENCY: IMPORTANT.

Shahat Shipping & Stevedoring Co. will attend to all agency matters at Benghazi, Derna, Marsa el Brega, Marsa al Hariga, Tobruk and Zuetina.

Shahat Shipping and Stevedoring Co.,
P.O.Box 2973 and 1496,
Benghazi,
Cable Address: "Shahat Ship" Benghazi.
Telex: 40076/40105/40231 and 40019.

Germa Shipping and Stevedoring Co. will attend to all agency matters at Misurata, Es Sider, Ras Lanuf, Tripoli and Zawia.

Germa Shipping and Stevedoring Co.,
P.O.Box 985,
Tripoli.
Cable Address: "Germa Ship".
Telex: 20058.

AZZAWIYA: 32.48 N. 12.42 E.

Also see "General" before first port.

LOCATION: Azzawiya Oil Terminal is situated about 50 km. West of Tripoli.

PORT LIMITS: Vessels are considered to be "Arrived Ships" and (subject to charter party terms) lay time will commence, when the ship is approximately 2 miles off the S.A.L.M. berths.

DOCUMENTS: Masters are advised to have the following documents prepared before arrival in order to expedite ship's clearance:

(a) Crew List.
(b) Customs documents.
(c) Health documents.
(d) Bills of Lading.
(e) Ship's papers and certificates.

PILOTAGE/APPROACHES: Vessels are advised to anchor in a position 1.5 miles N.W. of S.A.L.M. Berth No. 1 to await Pilot and Agent/Customs clearance. Vessels must keep clear of the area deemed to be the pilotage area and not approach the berth closer than 1 mile without receiving Harbour Master's permission. Admiralty charts indicate an anchorage symbol in position:

Lat. 38° 49′ 00″ N., Long. 12° 42′ 00″ E.
and Flare symbol in position:
Lat. 32° 47′ 25″ N., Long. 12° 42′ 00″ E.

Azzawiya Oil Terminal is adjacent to the flare. Tankers are warned that it is unsafe to remain at anchor during adverse weather conditions and to keep to Northward of Lat. 32° 50′ N.

While at berths, tankers must have main engines ready for immediate use at all time. Sudden, and violent changes of weather may occur at any time, and vessels may be required to leave berths at very short notice. Pilot and service craft are available during day hours only until further notice.

RESTRICTIONS: Vessels must have sufficient ballast for safe manoeuvring and must not be trimmed more than 3 ft. by the stern.

If in opinion of the Marine Superintendent or the Mooring Master, the ship has insufficient ballast, she may not be allowed to berth.

The discharge of dirty ballast is strictly prohibited.

RADIO/VHF: Call sign: "Azzawiya Control".

Azzawiya Control keeps 24 hours watch on Channels 16 and 22.

Vessels approaching the anchorage area must give the following information when possible:

(a) Ship's name and flag.
(b) Cargo nomination (if available).
(c) Distance between ship's rails and manifold.
(d) Manifold sizes and derrick capacities (S.W.L.).

Cargo transfer is carried out through VHF Channel 12 and/or Storno Walkie Talkie radios as the situation may require under the Mooring Master's Supervision.

Tankers should have the port derrick rigged before berthing and capable of lifting 10 tons if nominated for S.A.L.M. berths and 7 tons for C.B.M.2.

BERTHING: There are 3 off-shore berths with the following descriptions:

1 *Conventional Buoy Mooring Berth:* Named C.B.M. No. 2 (Clean product berth). Lat. 32° 48′ 07″ N., Long. 12° 42′ 52″ E.

Vessels will lie in this berth on a heading of 318° (T) approximately. Using 2 anchors, each with about 7 shackles in water. Depth of water 21 m. approximately. Size of vessels allowable for this berth is 5,000 – 20,000 d.w.t. The berth is 1,200 m. offshore.

2 *S.A.L.M. Berths:* (Single Anchor Leg Mooring) for crude imports/fuel exports.

S.A.L.M. No. 1: Buoy is moored approximately 1,900 m. offshore with an average depth of 26 m. in position:

Lat. 32° 48′ 29″ N., Long. 12° 41′ 55″ E.

The berth is designed for vessels of 10,000 to 100,000 d.w.t. but not limited on size.

S.A.L.M. No. 3: Buoy is moored approximately 1,500 m. offshore with an average depth of 30 m. in position:

Lat. 32° 48′ 23.8″ N., Long. 12° 41′ 08.7″ E.

The berth is designed for vessels of 15,000 to 140,000 d.w.t. but not limited to the above mentioned sizes.

No lights have been installed as yet to mark C.B.M. No. 2.

S.A.L.M. Berths No. 1 and No. 3 are each equipped with a radar reflector and navigation light installed on the buoy deck with the following characteristics:

Colour: 1 white, 1 amber.
Code: Each transmitting morse letter "U" every 12 secs.

On all these berths, hose connection is carried out by ship's crew under Mooring Master's supervision.

HEALTH: Local Authorities will board vessels to grant pratique. Vessel must report any suspected disease or fever to local Health Authorities. There are shore facilities to treat serious injuries or major accidents.

GENERAL: No shore leave. No crew changes for non Libyan flag vessels. Fire and Safety regulations will be strictly enforced at all times. No fuel, diesel, fresh water or supplies available. Lifeboat not to be lowered in water.

AGENCY: See "General" before first port.

BENGHAZI: 32.06 N. 20.03 E.

Also see "General" before first port.

PORT LIMITS: (a) The water area existing within the actual breakwater and that which may fall within any new breakwater eventually constructed up to the bridge across the shallow water basin at the Eastern side.

b) The water area known as the navigational channel outside the harbour commencing as from the harbour entrance along the distinguishing marks of the channel for a distance of 1 mile (2 km.).

RESTRICTIONS: Vessels are not permitted to enter harbour between sunset and sunrise.

MAX. SIZE: All types of ships with 27 ft. draft and less in Wintertime and 28 ft. and less in Summertime are safe to enter the harbour.

RADIO: Benghazi Port Radio, from 0800 to 1800 hrs., call sign 5AV, R/T 2182, V.H.F. Channel 16.

BERTHING:

Quay No.	*Length m.*	*Depth m.*
1	310	9
2	280	9
3	170	9
Libya No. 1	40	5.5
Libya No. 2	130	5.5
Libya No. 3	115	5.5
F.J. No. 1	135	5.5
F.J. No. 2	135	5.5
F.J. No. 3	135	8

Note: F.J. No. 3 not in use at the present time.

STEVEDORES: All stevedoring operations and formalities to be done by Agent, 2 stevedoring companies will be formed in the near future.

CRANES: Electric floating crane available up to 100 tons.

MEDICAL: All facilities available.

FRESH WATER: Available by barge and alongside. Should be obtained from Port Authority through ship's Agent.

FUEL: Available through Agents. A notice of 48 hours needed, advisable for Chief Engineer to check what grades are available.

REPATRIATION: Facilities exist without difficulty.

AIRPORT: Benina airport situated 29 km. away.

WATCHMEN: Compulsory, provided by Port Authority.

CONSULS: France, Germany, Greece, Italy, Saudi Arabia, Tunisia, Syria, U.K., U.S.S.R.

REPAIRS: Minor repairs are possible. Also see "Tripoli".

POLICE/AMBULANCE/FIRE: Police 99, Ambulance: 2131, 2132, 2281, Fire: 5555, 5599.

SHORE LEAVE: Allowed after Free Pratique, Customs and Immigration formalities completed.

DEVELOPMENTS: Port extension project underway.

AUTHORITY: Port Manager and Harbour Master.

AGENCY: See "General" before first port.

DERNA: 32.45 N. 22.40 E.

Also see "General" before first port.

PORT LIMITS: (a) The water area existing within the actual breakwater and an imaginary line connecting the end of the breakwater and the damaged breakwater existing at the Southern side.

(b) The water area known as the navigational channel outside the harbour commencing as from harbour entrance for a distance of 1 km.

RESTRICTIONS: Vessels are not permitted to enter harbour between 2100 hrs. and 0600 hrs.

MAX. SIZE: Depth of Inner Bay – 8 m., Entrance – 9 m. and Outer Channel 10 m.

RADIO: Recommended that radio messages for Agents be sent via Malta Radio or any other near coast station.

BERTHING: Old Quay, Length 120 m., depth 6 m. New Quay, length 240 m., depth 9 m.

STEVEDORES: All stevedoring operations and formalities to be done by Agent. Two new companies will be formed in the near future.

TANKERS: Max. size 18,000 d.w.t. Max. draft 11.5 m. if weather conditions permit.

MEDICAL: Available.

FRESH WATER: Available alongside, to be supplied by Port Authority through ship's Agents.

FUEL: Available through Agents, a notice of 24 hours needed. Advisable for Chief Engineer to check what grades are available.
REPATRIATION: Available via Benghazi.
WATCHMEN: Compulsory, provided by Port Authority.
CONSULS: Nearest consuls situated at Benghazi.
REPAIRS: Not available. See "Tripoli".
POLICE/AMBULANCE/FIRE: Call Port Manager, 2063 and 2074.
SHORE LEAVE: Allowed after Free Pratique, Customs and Immigration formalities completed.
DEVELOPMENTS: New port facilities to include 1 quay, length 280 m. for general cargo and container vessels, depth alongside 9 m. – 10 m. One quay, length 500 m., depth alongside 9 m. – 10 m. This quay will have 4 berths, one for grain cargoes, one for the Port Police, one for vessels loading and for mooring of a drydock.
AUTHORITY: Port Manager and Harbour Master.
AGENCY: See "General" before first port.

ES SIDER: 30.38 N. 18.22 E. (See Plan Book)

Also see "General" before first port.

DOCUMENTS: Oasis acts on behalf of tankers loading at Es Sider and shall prepare all crude oil loading documents. Germa Shipping and Stevedoring Co. is contracted by Oasis for all normal agency duties. This agency is currently the only agency used by the four Owner Companies.

After a tanker arrives at the anchorage or is moored in a berth, an agency representative will come aboard, accompanied by Jamahiriya Customs Officials and Immigration Police. The agency representative will present certain clearance forms to the Master, which should be completed as soon as possible. After these forms have been signed by the Master, they shall be returned to the agency representative, who shall make the necessary distribution.

Crude oil loading documents shall be prepared by the Oasis documentation group prior to and during loading operations, to expedite their final completion. When the tanker has been loaded, the documents shall be completed and endorsed by the Customs Officer and by the representative of the Secretariat of Petroleum. The documents shall then be distributed aboard the tanker and elsewhere, in accordance with previously arranged standard documentation schedules.

The tanker shall be considered clear to depart Es Sider when the crude oil loading documents have been delivered to the Master.

Jamahiriya Customs Authorities:

(a) List of the crew with a declaration of their personal belongings (Form supplied by the Customs Authorities).
(b) List of tanker's stores.
(c) List of passengers.
(d) Six copies of Cargo Manifest for cargo to be discharged at Es Sider.
(e) One copy of Cargo Manifest for cargo in transit.

Blank copies of "Certificate of Discharge" are placed on board every vessel at Es Sider. These certificates must be endorsed by the Customs, or other recognised authority, on completion of discharge. One completed certificate must then be forwarded to the Libyan Customs Authorities according to the instructions contained in the "Certificate of Discharge". At least one further copy should be retained on board, to be produced to the Customs on any subsequent voyage to a Libyan port. Failure to produce the certificate may result in delays to loading, or even rejection of the vessel by the Libyan authorities.

PILOTAGE: Vessels to be moored, anchored or manoeuvred will only be boarded within the recommended anchorage area (Pilot boarding area centred at Lat. 30° 41′ 54″ N., Long. 18° 23′ 30″ E.). A vessel is not considered arrived until it is in the recommended anchorage area. The Mooring Master will advise the Master on approaches to berths, mooring, unmooring, connecting and disconnecting the hoses and in all operations within the anchorage or berthing area. All manoeuvring of ships shall be done only in accordance with the advice of an Oasis Mooring Master, subject to the understanding that in all cases and circumstances the Master shall remain solely responsible for the safety and proper manoeuvring of the tanker. The Master or one of his qualified deck officers must be on the bridge at all times while the tanker is being manoeuvred.

Tankers not equipped with pilot hoists shall provide a pilot ladder, or ladders, constructed and placed in accordance with latest Safety of Life at Sea Convention. Tankers having a large freeboard are requested to use a combination of pilot ladder and accommodation ladder, which is also in accordance with the above Convention. A ship's officer, plus the necessary crew members, shall be present at the ladder or hoist to ensure the safe embarkation and disembarkation of Mooring Masters and Port Authorities. All such ladders and hoists shall be thoroughly tested and inspected before the vessel arrives in the recommended anchorage.

The Mooring Master shall be in direct control of all tanker communications while in the Terminal area. Any unauthorized communications will result in the immediate cessation of all operations excepting clearing of the berth. Such tanker immediately nullifies its Notice of Readiness.

ANCHORAGE: The recommended anchorage area is within an area centred on Lat. 30° 41′ 54″ N., Long. 18° 23′ 30″ E. with a radius of 1,000 m. The anchorage area has a sandy bottom with a depth of approximately 110 ft.

Great care should be taken approaching anchorage from the North or N.W. to give mono-moorings a wide berth.

APPROACHES: Coastal landmarks in the area are as follows:

(a) The most prominent landmark is a water tower in the terminal area which is painted white and is 180 ft. above sea level. This water tower is located at Lat. 30° 38′ 00″ N., Long. 18° 21′ 01″ E. and displays a fixed red light at night.
(b) A communications tower in the Terminal area is a most conspicuous landmark. It is located at Lat. 30° 37′ 59.5″ N., Long. 18° 20′ 54.5″ E. Approximate height above chart datum of this tower is 246 ft. It is lighted at night with 2 vertical red lights, and has a height above ground of 200 ft.
(c) A radio antenna tower which is 395 ft. above sea level is located at Lat. 30° 36′ 56″ N., Long. 18° 16′ 55″ E. At night this tower is lighted by an occulting red light, flash two seconds, eclipse one second, and there is a fixed red light halfway up the mast. It is flanked by two dish shaped aerials.
(d) There is a water tower at Ras Lanuf Terminal with a highest elevation of 179.5 ft. above sea level located at Lat. 30° 30′ 42″ N., Long. 18° 32′ 22″ E. It is white in colour. A white light, characteristics:– flash two every 5 seconds, height above sea level 163 ft., is mounted on the seaward side. There is also a fixed red air warning light on the top of the structure.
(e) An omnidirectional aircraft radio beacon is situated at Lat. 30° 37′ 29.8″ N., Long. 18° 21′ 07.7″ E. transmitting "OJ" 5 times every 60 seconds on 300 kHz.

Range lights and mooring buoy marker lights will appear and disappear with unscheduled frequency. These lights are for the use of the Mooring Masters at the Terminal and should be disregarded by any tankers using the Terminal.

MAX. SIZE: The following are the approximate berth limitations:–

		Length	Draft
No. 1 Berth		920 ft.	51 ft.
No. 2 Berth		890 ft.	51 ft.
No. 3 Berth		950 ft.	51 ft.
No. 4 Mono-Mooring		1150 ft.	62 ft. 6 in.
	Max. beam 158 ft.		Max. d.w.t. 250,000
No. 5 Mono Mooring		1,165 ft.	73 ft.
	Max. beam 184 ft.		Max. d.w.t. 300,000

Note: No. 4 Mono-Mooring: The max. length overall is 1150 ft. The max. draft to which vessel can load in good weather is 62 ft. 6 in., and when vessel lies within 30° of loading line. During adverse weather causing vessel to roll and pitch, draft may be restricted to 58 ft. The max. draft limitation in good weather is due to depth to top of loading line being 63 ft. at distance of 1,900 ft. from buoy.

Length, beam and d.w.t. could all be extended provided draft does not exceed 62 ft. 6 in.

All the above limitations are based upon standard tankers in normal weather conditions.

Oasis reserve the right to vary the above limitations, depending on vessel's freeboard, (OBO's – ore/oil vessels, etc.) and also the prevailing weather conditions.

RADIO/VHF: Oasis maintains direct communication with Tripoli Radio, details of which are shown in publication 205 of the U.S. Hydrographic Office and are included in the Berne Lists. Oasis also maintains a VHF station at Es Sider Terminal.

Cables should be addressed to: Oasisoil Pipeline Tripolilibya. Cables addressed in this manner will be received directly by the Oasis communications centre in Tripoli and relayed immediately by voice radio or teletypewriter to the terminal at Es Sider. Vessels with a telex facility on board should telex directly to 20158 Oasislibya, Attention Marine Superintendent.

Within 6 hours of clearing its last port for its voyage to Es Sider, each tanker shall provide the Terminal with the following information by cable addressed to Oasisoil Pipeline Tripolilibya:

(a) The name of the tanker.
(b) The name of the port from which the tanker last cleared.
(c) The date and hour of the ETA at Es Sider Terminal.

When the Master of the tanker en route to Es Sider is of the opinion that his tanker is within 72 hours of arrival at Es Sider, he shall notify the Terminal by cable addressed to Oasisoil Pipeline Tripolilibya, or telex as above, providing the following information:

(a) The name of the tanker.
(b) ETA at Es Sider.

When the Master of the tanker en route to Es Sider is of the opinion that his tanker is within 24 hours of arrival at Es Sider, he shall notify the Terminal by cable addressed to Oasisoil Pipeline Tripolilibya, providing the following information:

(a) The name of the tanker.
(b) ETA at Es Sider.
(c) Quantity of cargo required, maximum draft on departure Es Sider, and deballasting time required before vessel can commence loading.

When the Master of the tanker en route to Es Sider is of the opinion that his tanker is within 12 hours of arrival at Es Sider, he shall notify the Terminal by cable addressed to Oasisoil Pipeline Tripolilibya, or telex as above, providing the following information:

(a) The name of the tanker.
(b) ETA at Es Sider.

4 hours before the Master expects to arrive at Es Sider to receive a Mooring Master on board, he shall notify the Terminal by cable addressed to Oasisoil Pipeline Tripolilibya, or telex as above, and also pass the same by VHF radio, providing the following information:

(a) The name of the tanker.
(b) Precise ETA at Es Sider.

If the tanker is equipped with a FM radio-telephone in the 156–162 MHz band, communications may be established with the Es Sider Terminal dispatcher by calling on Channel 16, 156.8 MHz. This frequency is monitored continuously. The range of the Terminal station is approximately 100 miles.

VHF Channel 12 is also available for use as a marine working frequency, although it is not monitored.

When the Master submits his first estimated time of arrival to the Terminal he shall indicate if the vessel is to load a part cargo, in which case it should be stated clearly whether it is first or second part of loading.

Jamahiriya Local Time is GMT plus 2 hours (GMT plus 1 hour in Winter).

N.B. Vessels are requested to refrain from using VHF Channel 8, as this is used as a tanker loading frequency, until such time as other frequencies are available and equipment is installed.

ARRIVAL PROCEDURE: Tenders to load crude oil cargo will normally be accepted and berths will be assigned to tankers in order of arrival, provided they have valid nominations for cargo and carry clean ballast, if any, and are in all respects equipped and ready to berth. In the event that berthing is delayed on account of weather, tankers will normally keep their position in line. Tankers required to leave Terminal area on account of weather (port closed) shall maintain contact with the Terminal via Tripoli Radio or VHF so they will be available when the weather moderates. Oasis reserves the right to decline to berth a specific tanker if its condition or facilities are unsafe for berthing or loading, even though the Terminal may be open to other tankers. Oasis Marine Superintendent's decision shall be final.

As soon as practical after arrival, all tanks will be inspected for evidence of oil in ballast. Similar inspections will continue during discharge of ballast. If evidence of oil appears at any time, the tanker shall be rejected forthwith and shall not again be accepted until it is shown the ballast can be properly discharged.

If during inspection or during progress of loading it is revealed that tanks are not tight or that oil is leaking from the tanker, it shall be rejected from further loading. Tanker shall not be later accepted for loading unless satisfactory evidence of repair is submitted, duly certified by Lloyd's or ABS Surveyors, or other recognised surveyors.

Upon arrival at the Terminal of Es Sider, the Master shall give Notice of Readiness to load by wireless or VHF but not before one or other of the following events shall have transpired:

(*a*) The Master shall have received the Mooring Master on board; or
(*b*) The Master shall have dropped anchor in the anchorage.

However, the Notice of Readiness shall not be accepted unless the tanker is in every respect ready to load.

In reporting readiness to load, the Master of any vessel arriving at Es Sider for the first time shall state whether the flanges on the manifold of his vessel are such as to permit hose connections without modification.

A tanker shall have sufficient ballast for safe handling. Careful watch of the weather, frequent interchange of information between the tanker and the Terminal and the knowledge of the behaviour of his tanker may permit the Master to bring his tanker with minimum of ballast and thereby reduce the possibility of violating sea pollution requirements.

HEALTH: Tankers shall fly "Q" on arrival by day and display a red light over a white light at night to indicate quarantine conditions.

VHF: Tankers shall keep continuous watch on VHF Channel 16 when at anchor in the anchorage. Failure to keep watch on Channel 16 may lose them their berthing turn.

TUGS: Not required. Oasis maintains launches to assist in berthing tankers. These are under the direct supervision and control of the Mooring Master.

BERTHING: The 3 (7-Buoy) conventional berths are approximately 1 mile from shore and in approximately 65 ft. of water. Central Spar Buoys of these 3 berths are:

Berth No. 1 (Easternmost)
  Lat. 30° 38′ 58″ N.
  Long. 18° 22′ 43″ E.
Berth No. 2 (Middle)
  Lat. 30° 39′ 06″ N.
  Long. 18° 22′ 06″ E.
Berth No. 3 (Westernmost)
  Lat. 30° 39′ 35″ N.
  Long. 18° 21′ 53″ E.

To the West of the 3 conventional berths is a mono-mooring berth. It is about 2 miles from shore in approximately 80 ft. of water.

Berth No. 4
  Lat. 30° 40′ 31.5″ N.
  Long. 18° 21′ 43.7″ E.

To the East of the 3 conventional berths is a second mono-mooring berth. It is about 3.5 miles from shore in approximately 100 ft. of water.

Berth No. 5
  Lat. 30° 39′ 55.95″ N.
  Long. 18° 25′ 19.13″ E.

Three lightbuoys have been placed on the North, East and West Cardinal points of the manoeuvring circle for Berth No. 5. The manoeuvring circle circumscribes an area 4,000 ft. from the berth centre.

Conventional Berths:

The Mooring Master may reject a tanker if he deems that the tanker is not properly equipped; or that the tanker fails to have a full complement of trained personnel capable of carrying out all the berthing procedures and in particular the hose connecting as directed by him; or that the tanker has dirty ballast; or that the tanks are not suitable for carrying crude oil. Tankers having a separate system of ballast tanks shall be permitted to discharge ballast and load oil simultaneously; however, approval shall first be obtained from the Oasis Marine Superintendent.

Tankers shall be equipped with an adequate propulsion unit as certified by an appropriate Survey Society. Tankers with inoperative or partially inoperative propulsion units shall be rejected. No repairs shall be made while the tanker is in or near a berth.

Tankers shall have 2 bower anchors and ground tackle in good working condition and in sizes and class to qualify under either Lloyd's or ABS ratings, even though they may have been classified by other Societies, Vessels should be capable of running out a minimum of 165 fathoms (11 shackles) of chain on each anchor in order that they may be berthed at one of the sea loading berths.

Tankers shall have at least one winch, in good working order, on the poop deck capable of heaving on two ropes simultaneously. The winch drums must be of such a size to be able to take at least 5 turns of mooring rope.

Tankers shall have one winch on the after end of the main deck, so sited that ropes led through the fairleads at the after end of the main deck, port and starboard, can be hove on. The winch drum must be of such a size to be able to take 5 turns of mooring rope.

All tankers shall have suitable stoppers for all lines and stoppers for wire ropes. Wire ropes are a part of the permanent berths and all tankers shall pick up the wire ropes unless an exception is approved by the Marine Superintendent. The exception may be based upon tanker having suitable wires with nylon or synthetic rope tails for ease of handling by launch and launch crews. These tails should be of appropriate strength and of a suitable length to enable them to be manhandled on to the mooring buoy hooks. Constant tension winches may not be used except where they can be solidly locked and the constant tension feature not used. The making fast of berth mooring wires on ship's reels will be treated as a last resort to be used only in the absence of sufficient bitts.

Tankers shall have at least 9 good synthetic fibre lines of not less than 9 in. circumference and at least 120 fathoms in length, with an eye spliced in each end. These lines shall be placed out free for running; 3 on the after end of the main deck, and 6 on the poop deck. The 3 lines on the after end of the main deck shall be married together so that if the need arises the double length can be run on either side of the tanker. The Mooring Master may require the use of additional ropes or wires to effect a safer mooring, and these are to be supplied on his advice.

Tankers shall be equipped with blocks, tackle, booms, runners, and sundry equipment to efficiently hoist the submarine hoses (5 tons at conventional berths and 10 tons at monobuoys) from the sea bottom. Other necessary equipment includes wrenches, gaskets, nuts, bolts, strops, drip pans, sawdust, drift pins, etc. The derrick should be rigged with a single wire runner of sufficient strength to be able to lift 10 tons.

After the tanker is securely berthed, the submarine hoses shall be lifted amidships on the port side. The base lift may weigh up to 10 tons. Hoses shall be lifted and connected by the tanker crew. The Mooring Master shall advise the tanker's officer-in-charge concerning lifting techniques; however, the responsibility for all operations shall remain with the officer.

It is believed that the facilities at Es Sider are similar to those of other Mediterranean Terminals, and that, generally speaking, no unusual or unique equipment shall be required by the tankers.

Shore Stops: If it is requested by the Master of the tanker that the cargo flow should be stopped from the shore at a predetermined tonnage, it must be clearly understood that Oasis Oil Company of Libya, Inc. will not be held responsible for any error, and that in the case of overloading, the excess cargo cannot be pumped back ashore.

Vessels are encouraged to load and deballast at the same time providing that segregated ballast tanks or double valve separation exists.

Mono Moorings: Nos. 4 and 5 Berths are single point buoy moorings. The body of the buoy is secured in a fixed position by means of 8 moorings, whilst the top of the buoy is in the form of a turn-table, allowing the ship's moorings and hoses to rotate and take up the position the vessel naturally lies due to wind, sea and current conditions.

Vessels are normally moored by 2 bow lines only, these being provided by Oasis. A selection of wire strops and shackles will also be placed on board for mooring purposes. The 2 mooring lines are hove in until the length of chafing chain to O.C.I.M.F. standards is brought inboard. According to the mooring arrangements, the Mooring Master will advise on the method of securing the vessel. Ship's wires or ropes may be required to back up mooring equipment supplied by Oasis. Smits towing brackets will be utilised when fitted in suitable position and if they are of adequate strength and size. Other O.C.I.M.F. standards chain compressors and fittings are acceptable. However, it should be noted that 2 ropes are provided and therefore 2 chafe chains must be hove inboard and properly secured. Under no circumstances shall the ship be moored with the lead-in ropes.

On advice from Oasis that a vessel is to load at the mono moorings, she will have the following ready before the Mooring Master boards:

(*a*) Port side derrick to be rigged ready to lift various wire strops, shackles, and hose securing equipment. This equipment will be placed on board at the same time as the Mooring Master boards, or as soon as possible thereafter, who will advise on its disposition.
(*b*) Forward, the vessel should have ready 2 good synthetic fibre mooring lines, at least 9 in. circumference, 2 good 4 in. circumference rope messengers at least 400 ft. long, or two 3 in. wire messengers of the same length, each fitted with a suitable screw shackle. Also a crowbar, spikes and hammers.
(*c*) No moorings will be required aft.
(*d*) The vessel shall make a good lee on the port side, taking due care that ladders and accommodation ladders are clear of the tanker's manifold area and overboard discharges.

It is essential on this berth that the hoses be picked up immediately mooring operations are complete. On advice from the Mooring Master, part of the ship's crew must be standing by at the port manifold for this operation.

Hose lifting and connecting operations are basically the same as in conventional berths, except that hose strings are floating and therefore may require bowsing in rough weather.

Vessel's engines must be ready at all times, and under no circumstances is the propeller to be turned ahead without prior consent of the Mooring Master. Failure to comply with this may result in cessation of operations, and possible rejection as being unsuitable for a single point mooring. Any damage caused to the berth or hoses as a result of turning the propeller ahead without consent will be charged against the vessel.

In adverse weather, a continuous lookout will be required on the forecastle head, by responsible persons, to keep watch on the moorings, manifold and hoses.

In adverse weather the Mooring Master may require cargo to be loaded, in the initial stages, into the forward compartments and this should be complied with when requested.

Vessels are encouraged to load and deballast at the same time, where this is possible. In the case of vessels with permanent ballast tanks, this ballast should not be started without first consulting the Mooring Master.

LOADING: Raising, lowering, connecting and disconnecting of submarine hoses, as well as all other labours and duties on shipboard, shall be performed entirely by the ship's crew. Lack of co-operation by the crew in this operation will result in the rejection of the tanker, her return to the anchorage and any consequent loss of loading turn until crew are prepared to perform this work.

Mooring Masters shall report unsatisfactory conditions to the Oasis Marine Superintendent, who may reject the tanker until corrections are made. All costs accruing from these conditions shall be for the tanker's account.

Loading Rates:

Conventional Berth Nos. 1, 2 and 3	40,000 b.p.h.
No. 4 Mono-Mooring	30,000 b.p.h.
No. 5 Mono-Mooring	50,000 b.p.h.

BALLAST: 4 hours deballast time (before commencing loading) is the maximum time allowable in consideration of the open and exposed nature of the berths. Vessels which take longer to deballast put the berth at unacceptable risk if the weather deteriorates. Should a tanker be unable to comply with this stipulation, Oasis Marine Superintendent may berth more suitable vessels ahead of her if poor weather conditions dictate. Vessels with an unduly long deballast time may be rejected.

There are no facilities at Es Sider for the discharge of dirty ballast, and vessels arriving with dirty ballast will not be authorised to deballast in the vicinity of the Terminal. Any tanker rejected because of dirty ballast or sea pollution will automatically nullify its Notice of Readiness to load and thereby relinquish any right to priority of loading position.

It is the Master's responsibility to see that no oil of any kind is pumped or spilled overboard from his tanker. This includes oily water from bilges, residuals from previous voyages or any other matter that may result in pollution of the sea. Owners and Masters are invited to examine all laws concerning pollution of the sea, especially in regard to the Mediterranean Sea area. Inspections may be made by the Libyan Ports & Lights Authorities, whose opinion of the cleanliness of the ballast shall be final.

The waters in and adjacent to the Terminal of Es Sider must not be polluted, and only clean oil-free ballast may be discharged anywhere inside of a line 100 miles to seaward and roughly parallel to the Libyan Coastline.

Prior to acceptance all tanks will be inspected for evidence of oil in the ballast and during discharging similar inspections will continue.

Masters are warned that when disposing of dirty ballast outside Libyan waters, all pipe-lines, sea-suctions, strainers and pumps that are later to be used to discharge clean ballast, must be flushed clean so that there will be no chance of even a small amount of pollution when the clean ballast is pumped out.

Any vessel required to return to a position at least 100 miles offshore for cleaning tanks or for any similar reason, automatically nullifies any Notice of Readiness already tendered and at the same time loses any priority held for loading. On return from sea, vessel will be entered for loading at the time of the second arrival, when a new Notice of Readiness will be tendered.

Master's attention is directed to Es Sider Notices concerning oil pollution and to the serious consequences of discharging dirty ballast, besides having his tanker rejected.

MEDICAL: Medical assistance shall be on an emergency basis only. The Doctor will only board a vessel if it is physically impossible for the patient to attend the clinic ashore and there is no priority need for the Doctor's services on shore. Normally the Doctor will require the accommodation ladder rigged for boarding.

If it is necessary to land a patient at Es Sider, he must be accompanied by an officer able to speak English or Arabic. Patient and accompanying person must have their Passports and International Certificates of Vaccination and Immunisation, and the Authorities must be advised prior to their leaving the ship.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: When a tanker is in or near the berth, its engines shall remain ready with full power for immediate use. Engine repairs shall not be performed near any berth.

WATCHMEN: Not less than one capable deck officer and three able seamen shall be available on the deck at all times. No person under the influence of alcohol shall be allowed on deck. The Mooring Master's opinion on the sobriety of an individual shall be final.

CUSTOMS ALLOWANCES: Cigarettes, cigars, matches, tobacco, spirits, wines, beers, perfume, arms, ammunition, saccharine, and certain other items shall be placed under Customs seal from the time of arrival in port until such time as the tanker has left territorial waters.

Each officer and crewman is allowed the following ration for each day the tanker is in port: *(a)* 25 cigarettes per day, or 25 grammes of tobacco or 25 grammes of cigars. *(b)* One litre of beer or 0.5 litre of wine. *(c)* Special provisions are sometimes made for the Master.

CONSULS: Consulates are located in Tripoli, which is approximately 650 km. by road from Es Sider. Some countries having Consulates are: Algeria, Argentina, Belgium, Brazil, Chad, Czechoslovakia, Denmark, Finland, France, Ghana, Greece, India, Italy, Japan, Jordan (represented by Indian Embassy), Kuwait, Lebanon, Morocco, Nigeria, Nationalist Republic of China, Pakistan, Saudi Arabia, Spain, Sudan, Syria, Sweden, Switzerland, Tunisia, Turkey, United Kingdom, Union of Soviet Socialist Republics, Venezuela, West Germany and Yugoslavia.

REPATRIATION: No facilities exist for crew changes or repatriation.

TIME: GMT plus 2 hrs.

GENERAL: The Terminal of Es Sider operates 24 hours a day, 7 days a week, while weather permits.

Range lights and mooring buoy marker lights will appear and disappear with unscheduled frequency. These lights are for the use of Mooring Masters at the Terminal, and should be disregarded by any tankers using the Terminal.

Oasis maintains launches to assist in berthing tankers. These are under the direct supervision and control of the Mooring Master. Any service and facilities provided by Oasis, including the services of the Mooring Masters, launches, or berthing equipment, are at the vessel's risk. The furnishing of a Mooring Master, launches, or other services and facilities shall not be construed to be, or give rise to, a personal contract. Oasis shall have benefit of all exemptions from the limitations of liabilities to which an owner or a vessel is entitled under the laws of the United States of America.

When a Mooring Master and his assistants, possibly apprentice Mooring Masters, are assigned to a tanker, the tanker shall supply them with accommodation of the same standard and meals in the same manner as comparable personnel of the tanker. No special meals or special foods shall be required unless to comply with Moslem religious teachings. The intent is that the furnishing of meals to Oasis personnel be kept to the minimum, compatible with the ordinary working of the Terminal.

No boats may be lowered into the water, except in an emergency.

Adequate deck lighting must be available for night mooring and loading. A good floodlight will be required to illuminate the area around the submarine and cargo hose connections during hosing and loading operations. During the discharge of ballast at night, the sea area around the vessel must be adequately lighted. If vessel is berthed on mono-mooring buoy, in addition to the foregoing, lights MUST be provided on forecastle head and over bow to facilitate supervision of moorings.

Stores of any sort shall not be handled while tanker is under "Notice of Readiness". No stores shall be handled while the tanker is in or near a berth.

Use of anchor marker buoys recommended.

Should any tanker or craft become an obstruction in any part of the Terminal or approaches thereto, or in any area of the submarine pipe-line. Oasis shall be empowered and shall have the right to take any steps it may deem necessary to remove the obstruction without notice to the Owners. All expenses of such removal shall be borne by the tanker or craft or by those owning it at the time of the accident causing the obstruction, and Oasis shall be entitled to reimbursement by them for any such expenses incurred by it.

Power must be available at all times on all deck winches and on anchor windlass while the vessel is in the moorings.

If mooring wire winches are used, wires should be secured so as to enable them to be quickly let go from the vessel without damage.

Only in an emergency shall the tanker manifold valves be closed against crude flow, and then only with the Mooring Master's consent.

Should communications fail, the cessation of loading may be effected by a continuous sounding of the ship's whistle. This procedure will then stop the loading of all tankers in the area.

The bridge and/or control area shall not be locked nor otherwise arranged to prevent immediate entry at all times by the Mooring Master.

In adverse or marginal weather conditions Mooring Master may request that extra personnel be placed on duty on deck for tending moorings or hoses as required. Masters are advised to comply with this request.

The Mooring Master shall witness the plugging of all scuppers. Failure to plug scuppers shall result in the tanker's rejection.

The presence of unauthorized craft alongside a tanker will render it unacceptable. It shall be the duty of the tanker's personnel to clear all such craft away from the tanker.

When tankers are loading or discharging crude oil or ballast, and while tank tops are open or ullage plugs are open, boiler tubes shall not be blown. Every precaution shall be exercised to prevent sparks escaping through the funnel or stack or from the galley stack. The Mooring Master may demand all fires extinguished if he deems it necessary for safety.

Under the interpretation accorded to the Libyan "Boycott of Israel" Law, it is considered to be a violation thereof if a vessel calling at a Libyan terminal has on board any item of Israeli origin, irrespective of the nature thereof, including but not limited to manufactured products, fruit and vegetables, as well as empty crates, cartons, bottles and paper wrappings, regardless of the country where any of the foregoing was obtained. The law is strictly enforced, and the minimum penalty for violation thereof normally includes a fine and confiscation of all such items. Fines can exceed $1,000.

Charts: B.A. 3344 and Italian No. 431.

SHORE LEAVE: None of the officers and none of the crew of any tanker shall be permitted shore leave at Es Sider.

AUTHORITY: Operated by Oasis Oil Company of Libya, Inc. Owned by The National Oil Corporation of Libya, Amerada Petroleum Corporation of Libya, Continental Oil Company of Libya and Marathon Petroleum Libya Limited.

Oasis Oil Co., P.O.Box 395, Tripoli, S.P.L.A.J. *Tel:* 31116/29 (ext. 6-212). *Telex:* 20158 Oasislibya. *Cables:* Oasisoil. *Contact:* Marine Superintendent.

AGENCY: See "General" before first port.

MARSA AL HARIGA: 32.04 N. 24.00 E. (See Plan Book)

Also see "General" before first port.

LOCATION: Marsa al Hariga Oil Terminal is located on the South side of the harbour of Tobruk, approximately 1 mile Eastward of Marsa al Hariga.

APPROACHES: Vessels bound for the terminal should approach the harbour of Tobruk from the North-East with the lighthouse on Tobruk Point bearing 238° (true). In daylight this lighthouse should be kept in line with the conspicuous German War Memorial on the South side of the harbour.

When about 4 miles from Tobruk Point, course should be altered to 224.5° (true) to bring the leading lights on Marsa Umm esc-Sciausc in line. This course should be maintained until the vessel is close to the outer buoy, where one of the company's Berthing Masters will board.

Deep-draft vessels sailing from the terminal should avoid navigating North-Westward of the leading line from Marsa Umm esc-Sciausc, owing to the presence of shoal water off Tobruk Point.

DOCUMENTS:

A. Customs Requirements. On the arrival of a vessel, the Tobruk Customs Authorities will require from the Master of the vessel:

4 copies of a Crew List.
2 copies of a List of Ship's Stores.
2 copies of a Declaration of the Crew's Personal Belongings, including currency, cigarettes, gifts, etc.
4 copies of a Passenger List.
Last Libyan (cargo discharge certificate) to be checked for validity on boarding, if not correct vessel has to wait outside for ship's purposes.

B. Harbour Master's Requirements. On the arrival of a vessel, the Tobruk Harbour Master will require from the Master of the vessel:

1 copy of a Crew List.
1 copy of a Passenger List.
1 copy of the Ship's Manifest.
1 copy of a Port Declaration (form will be made available to each vessel on arrival).

PILOTAGE: Vessels coming to and departing from the Terminal will be berthed and unberthed by Berthing Masters provided by the company, subject to the understanding that in all circumstances the Master shall remain solely responsible on behalf of his Owners for the safety and proper navigation of his vessel.

Berthing Masters will board at the Outer Buoy.

ANCHORAGES: If a berth is not immediately available on a vessel's arrival off the harbour of Tobruk, the vessel will be advised by the company where she is to anchor.

Anchorage position for tankers waiting to be berthed is 1.5 miles N.E. of the Outer Buoy.

MAX. SIZE: Max. Summer deadweight 150,000 long tons. Two berths are located at the end of a T-head jetty which extends some 700 ft. from the shore. There is a minimum depth alongside of 60 ft. and approach to and departure from the berth can be made in not less than this depth of water. Max. draft 56 ft., freeboard at any time whilst deballasting must not exceed 55 ft.

A buoy berth is situated some 1,200 ft. from the shore approximately 1,800 ft. West of the Jetty Berth No. 2. There is a minimum depth in the buoy berth and its approaches of 49 ft. However, the buoy berth is not currently in use.

HEALTH: The Libyan Authorities will grant clearance by radio of a vessel coming to the terminal. Radio messages requesting clearance should be sent not earlier than 48 hours prior to vessel's arrival off the harbour of Tobruk and should give the details required in the Maritime Declaration of Health which must also be completed.

COURTESY FLAG: On entering the territorial waters of the Libyan Arab Republic which commence 6 miles off the coast of Libya, vessels should if possible, hoist the Libyan flag, and in any event the Libyan flag must be hoisted before entering the harbour of Tobruk. Should a vessel arrive without a Libyan flag on board, one may be obtained from the Company's Berthing Master when he boards at the Outer Buoy.

ARRIVAL MESSAGES: In addition to their arrival messages to Agent, vessels must pass an arrival message to the terminal via the company's radio station giving at least 72 hours notice of ETA and advising their estimates of:

(a) The quantity of cargo (in long tons) to be loaded at the terminal.
(b) The cargo loading rate (in long tons) per hour.
(c) The quantity of ballast (in long tons) to be discharged ashore at the terminal.
(d) The ballast discharge rate (in long tons).

If, subsequent to advice of their ETA there is any material change, a further ETA message must be passed via the company's radio station.

RADIO: Tobruk Radio 5 A1 (MF & HF). Position: 32° 02′ N. 24° 00′ E. Frequency: 420, 500 A1, A2, 0:5 kW. 4241 kHz at 2130 GMT, 8480 kHz at 1730 GMT, 16963 kHz at 0930 and 1330 GMT. All using A1 0:5 kW. *Note:* Station owned by Arabian Gulf Oil Company. Company telegraphic address: "Injaz Tobruk". Telex: No.: Agoco Ly 50023. All times given are GMT. Station keeps watch on 500 kHz during 24 hours.

TUGS: For berthing and unberthing at the terminal, vessels will be required to use the 2 diesel tugs which are available at the terminal. Each of these diesel tugs has a bollard pull of approximately 25 tons.

BERTHING: *Jetty:* Vessels will berth on the jetty starboard side alongside, depending on the prevailing weather conditions, though starboard side alongside is preferred. Each berthing head is "T" shaped and is protected by 4 breasting dolphins.

All moorings, except the backsprings to the outer breasting dolphins at Jetty Berth No. 1, attached to quick release hooks.

Buoy Berthing: (CURRENTLY NOT IN USE). Berthing/unberthing in daylight only.

Vessels will berth heading East or West depending on the prevailing weather conditions, though head East is preferred. The moorings consist of four buoys, 1 buoy being on each bow and 1 buoy on each quarter.

In addition to the vessel's mooring of 2 ropes to each buoy, the mooring wires provided by the company to each buoy must be utilised and vessels moored to the satisfaction of the company.

The company's Berthing Master will remain on board the vessel whilst the vessel is in the buoy, to supervise and co-ordinate the ballast discharging and loading operations.

HOSES: *Jetty:* Ship-shore connections, 4 flow booms with suspended rubber hoses, diameter of hoses 12 in. Flange size and rating 12 in. ASA 150. Full range of standard adapters available.

Buoy Berth: (CURRENTLY NOT IN USE). Ship-shore connections, 3 flexible hoses, 2 crude oil loading, 1 ballast discharging, diameter of hoses 12 in. Max. lift from ship's equipment 5 tons. Flange size and rating 12 in. ASA 150.

OIL BARRIER: "Gemlen" floating anti-pollution booms on reels at jetty heads. Boat with chemical dispersants standing-by.

BALLAST: Vessels should make every effort to arrive at the terminal with clean ballast and with the minimum quantity for safe handling under prevailing weather conditions.

All ballast must be discharged into shore tanks provided by the company, unless it is clean ballast, carried in tanks which are completely isolated from the vessel's cargo system. However, the discharge of such ballast into harbour waters must not be commenced until the ballast has been inspected by a company official, and he has certified that it is in order to commence discharge.

Ballast can be accepted into the company's store tanks at rates up to 4,500 t.p.h. from the jetty berths. Ballast is discharged ashore over the jetty by way of a loading boom. Ballast is discharged ashore from the buoy berth through a separate 24 in. ballast discharge line connected to a 12 in. flexible hose. Max. quantity 35,000 tons.

LOADING: Cargo loading at each jetty berth is by means of four 16 in. flow booms to which 12 in. flexible hoses are attached. Cargo loading at the buoy berth is by means of a 34 in. submarine line to which two 12 in. flexible hoses are attached.

This system permits a max. loading rate of approximately 8,000 t.p.h. over each jetty berth, and 4,000 t.p.h. through the buoy berth. The actual loading rate for a particular vessel will be determined prior to the commencement of loading by agreement between the Master and the Company.

Jetty: Method: gravity loading, max. head 360 ft. rate regulated to requirements. Loading rates: 2 lines each 4,000 t.p.h. Two 8,000 t.p.h. maximum.

SAFETY: A copy of the Regulations will be given to Master when Company's Berthing Master boards at outer buoy. Masters should make themselves thoroughly acquainted with these Regulations, strict observance of which is required by the Company.

In the event of any infringement of the Regulations, operations may be stopped and, if so, will not be recommenced until the Company is satisfied that appropriate action has been taken by the Master to comply with all the Regulations. The Company also reserves the right to unberth a vessel in the event of a continued or blatant disregard of any of the Regulations. Any loss or expense to the Company resulting from an infringement of the Regulations and, in particular, in the event of an infringement leading to an interruption of operations and/or unberthing of a vessel, will be for the account of the Owners.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: No shore facilities for carrying out repairs to vessels either at the terminal or at Tobruk.

CONSULS: No Consulates at Tobruk and the nearest locations of Consular officials are as follows:

Benghazi – 445 km. from Tobruk: France, Germany, Greece, Italy, Saudi Arabia, Tunisia, United Kingdom of Great Britain and Northern Ireland, U.S.S.R.

Derna – 175 km. from Tobruk: Turkey.

El Berda (Beida) – 260 km. from Tobruk: Belgium.

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wines, beer, perfume, arms, ammunition and saccharine have to be locked up under Customs' seal from time of vessel's arrival in harbour of Tobruk until time of departure.

Whilst in harbour, each member of crew allowed following: 200 cigarettes (the Master will be allowed 400); half bottle spirits (the Master will be allowed 1 bottle); 4 bottles of beer or wine per man per day.

No fixed allowances for cigars and tobacco.

Libyan law prohibits vessels from having on board any goods or containers of Israeli origin. Any vessel having such goods or containers on board on arrival in the harbour of Tobruk will be liable to a heavy fine and confiscation of the goods or containers. The Libyan Authorities may, moreover, refuse to clear the vessel.

REGULATIONS:

1. *Ship's Garbage.* Whilst within limits of harbour of Tobruk the throwing overside of ship's garbage is prohibited.
2. *Ship's Radio.* Once vessel berthed at Terminal the use of her radio will not be permitted.
3. *Ship's Boats.* Use of ship's boats not permitted within limits of harbour of Tobruk.

SHIPMASTER'S REPORT: April 1983.

Anchorage: Anchorage position for tankers is from 1.5 miles – 2 miles N.E. of the Outer Buoy. Holding ground is bad. As soon as wind increases up to force 7 and swell grows, it is best to heave up the anchor and to proceed to sea and wait, keeping watch on VHF Channel 16.

Many vessels have lost anchors.

Max. Size: Berth No. 1 – Max. draft 56 ft. Berth No. 2 – Max draft 52 ft.

AUTHORITY: General Ports and Lights Administration, P.O.Box 648, Tripoli, Libya.

Operator: Arabian Gulk Oil Co. *Telex:* Agoco Ly 50023. *Contact:* Marine Department or Terminal Manager.

AGENCY: See "General" before first port

MARSA EL BREGA: 30.25 N. 19.34 E. (See Plan Book)

Also see "General" before first port.

FLAG: All ships should fly the Libyan flag, which is plain green, when inside territorial limits. They should make sure that they have a Libyan flag on board before leaving the last port of call. Failure to fly the Libyan flag may result in a heavy fine.

Libyan Law does not permit ships using Libyan waters to retain Israeli flags, stores or literature pertaining to Israel on board, even though these may be normally part of the vessel's navigation equipment.

LOCATION: Marsa el Brega is located in the South-Eastern part of the Gulf of Sirte in Lat. 30° 25′ 0″ N., Long. 19° 34′ 3″ E. It is an open bay contained between Ras Magdar and an unnamed headland some 3 miles to the West.

The Brega sea buoy is located in Lat. 30° 27.55′ N., and Long. 19° 35.1′ E.

A bow mooring oil loading fixed structure is located in Lat. 30° 26.0′ N., and Long. 19° 33.9′ E., with a fixed red light exhibited at a height 93 ft. above mean sea level. In addition, the structure is lighted by floodlights.

Brega is radar controlled with the shore installation scanner in position 30° 25′ 02.5″ N., and 19° 34′ 55.6″ E. The height of the scanner tower is 112.2 ft.

The Radio Beacon is located in Lat. 30° 25′ 00″ N., and Long. 19° 34′ 14″ E. The call sign is "MB" and it operates continuously on a frequency of 403 kHz.

A single point mooring is located in position Lat. 30° 26′ 45.26″ N., and Long. 19° 34′ 01.40″ E.

A single flare is located in position 30° 24′ 31.9″ N., and 19° 35′ 49.7″ E. Three other flares are located approximately 700 ft. to the West and S.W. The flares when burning can be seen at extreme distances.

Numerous lighted and unlighted navigational and mooring buoys are located within the restricted area shown on BA Chart 3350. Vessels are cautioned that these buoys may change position due to weather. Vessels are not permitted to enter restricted area shown on Chart BA 3350 without a Brega Pilot on board.

DOCUMENTS: Customs and Immigration Officials will board the vessel, except in adverse weather. All relevant documents are supplied by the Agent. The Master will fill in, sign and stamp the papers. These will then be handed over to the Authorities before clearance for loading is granted.

Letters on ship's business should be addressed to Esso Standard Libya Inc., P.O. Box 385, Essofield, (Marine), Tripoli, Libya, SPLAJ, and should be marked "Marine Documentation Section" (For Esso ships).

Vessels calling at Marsa el Brega should have the following documents in addition to the ship's register.

Customs and Ports and Lights Authorities Forms:

A. Port Declaration – Form P.L. 7 (1 copy)
B. (Title in Arabic) Inward Report – Form C.L. 128 (3 copies)
C. Cargo Manifest Inward – Form C.L. 1 (3 copies)
D. Report Outwards – Form C.L. 4 (3 copies)
E. Crew Manifest Inwards – Form C.L. 31 (2 copies)
F. Export Manifest Form C.L. 155 (6 copies)

G. *Certificate of Discharge:* If vessel has not called at a Libyan port since October 18th, 1973, then a letter is required from the Master, addressed to the Secretariat of Petroleum, stating that he undertakes to mail the Certificate of Discharge, for the present petroleum cargo, from the port of discharge and retain one signed stamped copy on board. It is essential that the Certificate of Discharge for any petroleum cargo loaded after October 18th, 1973, be on board the vessel and it must be clearly signed and stamped by the Authorities at the port receiving the last Libyan cargo. Vessels may incur delays or be refused loading permission where this is not complied with.

Required when ships clear inwards, lists each member of the crew and all goods held (e.g. liquor, cigarettes, cameras, money, etc.) with crew member's signature opposite name or rank. This form is ordinarily supplied in advance so that it may be completed prior to arrival at Brega. Ships making their first call at Brega must necessarily complete after arrival, but will then receive advance forms for future calls.

Cargo ships also require ship's cargo manifest form (3) with same information as C. above.

Ship's Forms required by Customs:

A. Crew List – ship's form (3 copies)

Submitted for inward clearance and containing the following information: List of crew members, type of vessel, nationality, date of arrival, place from which arriving, destination, and estimated date of departure. Sign and stamp with ship's stamp.

B. Stores List – Ships form (2 copies)

A list of ship's stores required when ship clears inward. Sign and stamp with ship's stamp.

C. Clearance from Last Port – Port's form (1 copy)

Required for inward clearance to load at Brega. Must be properly signed and stamped by Officials of port of previous call. There are exceptions on requirement for this clearance dependent on ship, nationality and last port of call.

Other Forms: (Not required of cargo ships)

A. Report of Cargo and Ship's Ullages (original)
B. Tanker Time and Loading Report (original)

(A mimeograph original to be signed by the Master and returned to ship's Agent).

C. Certificate of Cargo Discharge (6 copies)

Master signs and stamps 1 copy at bottom of form, and returns it ashore.

The other 3 copies are completed by Master at port of discharge and stamped and signed by Customs Authorities. 1 copy should then be air-mailed to Ministry of Petroleum, Tripoli. The second copy air-mailed to Marine Superintendent, c/o Essofield. Marine Division, P.O. Box 385, Tripoli, and the third copy retained on board for presentation when the vessel next calls at Brega. It is essential that the copy retained on board be clearly stamped and signed and the cargo figure should correspond with the cargo figure loaded at Brega.

Notes on Ship's Documentation:

E.S.L.I. no longer supply an agency service. Vessels should nominate Shahat Shipping and Stevedoring Co., which is a government agency for all vessels calling at Libyan oil ports. In the event that Shahat Shipping and Stevedoring Co. has not been nominated, the Master will be required to sign a letter nominating them before permission to load can be given.

Information required by Esso Standard Libya Inc. on vessel's assignment prior to vessel's arrival.

The Owner, Charterer or Agent should airmail or cable following to Esso Standard Libya Inc., PO Box 385, Esso Field, (Marine), Tripoli, cable address Essoship Tripoli:

(1) Name and flag of vessel.
(2) Dimensional characteristics, e.g. overall length, beam and max. draft.
(3) Total tonnage, number and type of products or cargo on board.
(4) Number and size of cargo hose connections on either side and distance in feet of each from the bow.
(5) Safe working load of derricks in vicinity those connections.
(6) Number of shackles of chain (90 ft. shots) on each anchor.
(7) Whether or not VHF fitted.

Information concerning dimensional characteristics need not be included in letter or cable after first call.

PILOTAGE: The services of a Pilot/Mooring Master are provided. He will normally board the vessel in the vicinity of the Brega Buoy and will advise the Master on approaches to the berths, mooring and unmooring, connecting and disconnecting cargo hoses, and all other operations within the berthing area. Vessels are cautioned not to enter the restricted area without the services of a Brega Pilot/Mooring Master. Pilot ladder must conform to international safety standards.

The Master of the vessel shall notify the Mooring Master of any special conditions, difficulties or peculiarities, such as defective equipment, lines or gear, which might impose special hazards in connection with handling, mooring, or loading the vessel. It is required that vessels test steering gear, engine room telegraph, whistle and all navigational equipment before any manoeuvre to or from the berths.

The Mooring Master will decline to moor vessels if they are not equipped with satisfactory mooring equipment, lines, gear, etc.

Vessels must be moored to the entire satisfaction of the Mooring Master, and must be ready at all times to put out more lines or to adjust the lines as required by any change in the weather or as requested by the Mooring Master.

Pilot Ladders:

Several instances of the use of unsatisfactory, dirty and unsafe pilot ladders have been reported by Pilots.

Faulty ladders endanger the lives of Pilots.

Instructions have been issued to all Pilots to report immediately any pilot ladders which do not comply strictly with the following orders:

(1) The Officer responsible for the embarkation and disembarkation of the Pilot is a Watchkeeping Deck Officer.
(2) The Pilot ladder is secure, clean and free from oil.
(3) The Pilot ladder is adequately lit at night.
(4) Means are provided to enable the Pilot to pass safely and conveniently from the head of the ladder into the ship or onto the ship's deck.
(5) The ladder is in good condition and its tread remains *horizontal*.
(6) The length of the ladder does not exceed 30 ft. Whenever the distance from sea level to a point of access to the ship is more than 30 ft., access from the pilot ladder to the ship must be by means of an accommodation ladder or other equally safe and convenient means.
(7) The ladder is rigged so that each step rests firmly against the ship's side.
(8) Spreaders are provided not more than 10 ft. apart to prevent the ladder twisting.
(9) Two manropes (not made fast to the ladder but to some independent structure) and safety lines are provided, and a lifebuoy with self-igniting light is available.

Vessels not complying with these rules will not be boarded by a Pilot and will suffer the consequent delay in berthing.

ANCHORAGE: Anchorages located 0.5 mile N.E. to East of Brega Buoy in 12 to 18 fathoms. *Vessels should not remain at anchor in bad weather.* Vessels *are not permitted* to anchor within half a mile of the channels into the bay and inner harbour, and are to keep clear of the 143° 41′ leads (East of the harbour).

RESTRICTIONS: Shahat Shipping Co., Benghazi, advised in January 1984 that only tankers and self-equipped Ro/Ro vessels with forklift and drivers are acceptable at the port, due to non-availability of labour.

No conventional general cargo ships can be discharged until further notice.

In February 1984 Shahat further advised that receivers may discharge cargo by their own labour.

MAX. SIZE: *Cargo vessels:* Maximum draft for vessels entering or sailing from the inner harbour is 10.0 m. (33 ft.). By prior arrangement and in good weather, vessels with drafts up to 10.6 m. (35 ft.) may be accommodated.

Tankers: See "Berthing".

HEALTH: Quarantine signals must be displayed upon entering Brega port limits in accordance with international practice and shall be continuously displayed until pratique is granted.

RADIO: Vessels bound Marsa el Brega not required call Tripoli for inward or outward clearance. Radio messages should be sent through Tripoli (via Malta if beyond communication range of Tripoli) and ETAs should be sent at least 48 hours but preferably 72 hours in advance. Master should state whether ETA in GMT or local time.

Unless 24 hours notice of ETA is received by "Essoship, Tripoli", Notice of Readiness will not be accepted.

As cable office closed between midnight and 0800 hrs., allowance for delays in receipt of radio messages due to this and other causes should be made when sending ETAs and other urgent traffic.

VHF: *Port Control Short Range and Radio-Telephone Communications:* Esso Standard Libya Inc. Marine Terminal is equipped with a VHF radio port control system. It is intended that the following procedure should be adhered to:

Vessels approaching Brega and equipped with the appropriate VHF radio equipment, should call Brega Port Control on Channel 16.

Prior to Pilot boarding, the vessel will be allocated one of the four working Channels: 6, 9, 12, 13.

Esso Libya's craft are equipped to operate on these Channels.

Portable sets will be available for use of vessels not fitted with VHF radio equipment.

Note: Whilst in Libyan Territorial waters, it is prohibited for vessels to use Radio and Wireless Telegraphy. On arrival at a Libyan port such equipment shall be sealed by the Customs Authorities. However, VHF communications between such vessels and Libyan Ports Authorities are not affected by this prohibition.

BERTHING: Tankers: *Connecting of Cargo Hoses:* All cargo hoses used in the sea berth and at the bow mooring have 12 in. American Standard flanges. The hose used on No. 5 berth SPM has 16 in. American Standard flanges. Raising, connecting, disconnecting, and lowering of the hoses used in all berths will be performed by the ship's crew as advised by the Pilot/Mooring Master who will remain on board while the ship is in the mooring. Vessels should arrive with port derrick topped and ready for use.

Ballast: Esso Standard Libya Inc. has no facilities for the discharge of dirty ballast in Brega. Accordingly, all ships must arrive with clean ballast. International oil pollution regulations must be strictly observed by all ships while in Libyan waters.

Vessels should have sufficient ballast aboard for safe manoeuvring, but should not arrive excessively ballasted. The propellor should be submerged and the vessel trimmed not more than 8 ft. by the stern.

Vessels not properly ballasted will not be berthed in order of arrival and will not have their Notice of Readiness accepted.

Loading and Deballasting Simultaneously: Vessels properly equipped will be encouraged to discharge clean ballast and load oil simultaneously subject to the loading rate being reasonable, and that this procedure does not unduly delay the discharge of clean ballast.

Cargo Loading: In order to economise vessel's time and for the benefit of all concerned, it is requested that officers in charge of loading endeavour to receive oil as fast as is safely possible.

The vessel will be responsible to see that all vessel's filling lines are empty and clean prior to commencement of loading in order to prevent contamination of cargo being loaded.

The Master shall indicate on a form the maximum loading rate which is required, having regard to the safety considerations outlined above.

During loading operations at least one licensed Deck Officer and one licensed Engineer Officer shall be on watch and immediately available.

All operations in connection with the starting of loading, discharging, switching of tanks and topping-off of tanks should be directly and personally supervised by a ship's officer in the presence of the Mooring Master.

Mooring Ropes: Tankers calling at Brega to load at the crude/naphtha sea berth should be equipped with a minimum of eight 10 in. circ. fibre or synthetic mooring ropes in good condition, not less than 120 fathoms in length. Mooring wires of equivalent strength are acceptable. A fibre or synthetic mooring rope in good condition must be available for towing vessels into berths by tug. It is recommended that 4 ropes be ready for use on the main deck. One on each side and one amidships joined to the others.

Crude Tanker Sealine Berths Nos. 1 and 4:

Berths 1 and 4 are now out of service. Ground chains and clumps for the mooring buoys, and the *loading lines* are still in position.

Naphtha Crude Tanker Sealine Berth No. 2:

The least depth of water in this berth is 44 ft.

When berthed the tanker is heading 330° true with both anchors out forward, and 6–700 ft. of chain on each anchor. The stern is secured to 5 mooring buoys fitted with quick-release hooks. The submarine hoses are picked up amidships on the port side of the tanker and the vessel's derricks should have a safe working load of 5 tons.

A naphtha line with a single 12 in. connection is laid in this berth, the shore line being 24 in. A crude line with single 12 in. connection can be used if necessary. In good weather, Berth No. 2 can safely accommodate a 65,000 d.w.t. tanker with the following principal dimensions: 65,000 d.w.t.; length, 800 ft.; beam unrestricted, up to 42 ft. draft in good weather. Gravity of sea water about 1030.

Crude Tanker Sealine Berth No. 3 – bow mooring:

The bow mooring is located in approximately 95 ft. of water, and consists of a fixed pylon surmounted by a revolving boom from which hangs a submerged oil-loading pipe arm. The main structure has a diameter of 130 ft. and is 97 ft. above mean sea level at its highest point. The pylon is surrounded by a fender ring which is mounted on vertical steel piles. The revolving boom is 76 ft. in length from the centre of the pylon to the end. The loading arm hangs from a ball joint at the end of the boom and is approximately 560 ft. in length, terminating in a hose handling platform on the outer end. The hose platform is kept at the level of the ship's deck by means of a compressed air ballasting and deballasting system. Four 12 in. hoses hang from the platform. Vessels are normally berthed port side to the platform. Derricks should have a safe working load of 5 tons. A maximum loading rate of 65,000 b.p.h. may be realised with the loading pump in operation.

Vessels are moored in position using 2 head ropes to the bollards on the boom and with two 6 in. nylon back spring mooring lines to the hose-handling platform. In addition, a 6 in. nylon snubber line is used to keep the platform alongside the ship. In bad weather conditions two additional headlines consisting of 12 in. "Samson" nylon are available. Vessels with the following principal dimensions can be accepted: 100,000 d.w.t., overall 1,000 ft., beam unrestricted, draft 48 ft. – 49 ft., bow to manifold not to exceed 434 ft. Larger vessels may be accepted with prior approval.

Crude Tanker Sealine Berth No. 5 – Single Point Mooring:

No. 5 SPM is located in approx. 140 ft. of water and is in position Lat. 30° 26′ 47″ N., Long. 19° 34′ 01.4″ E. The mooring consists of a monobuoy to which are attached 2×15 in. synthetic lines. These are shackled to a single 3 in. chain partly around which is a flotation cover. On the end of the chain is a 9 in. polypropylene line. Vessels using this mooring should have a Panama lead of 12 in. minimum diameter or equivalent fairleads suitable for taking on board the 3 in. chain.

Mooring is effected by heaving the polypropylene through the bow as near the centre lead as possible until the chain is on board, and then shackling two 14 in. nylon strops to open links in the chain. The strops and shackles will be placed on board with the Pilot and vessels are advised to have the port derrick ready to hoist the gear on board at that time. The vessel is also required to have a good 3.5 in. to 4 in. messenger line of at least 75 fathoms in length, ready for use on the fo'c'sle head.

The 48 in. pipe-line is approx. 11,850 ft. long, terminating at the underbuoy structure on the seabed. Crude is loaded through one string of self-floating 24 in. hose with one 16 in. over-the-rail hose to the ship's manifold. Vessel's derricks should have SWL of 10 tons and if necessary be double rigged. The weight of a normal lift for connection to the ship's manifold amounts to less than 5 tons. This is for a hose free of oil, which is usually the case. Vessels with the following principal dimensions can be accepted in this berth: 300,000 d.w.t. Length, beam and draft unrestricted. Flow rate 48,000 b.p.h.

Berths Nos. 3 and 5:

Vessels entering the restricted area on the approach to, mooring and leaving, these two berths must at all times have their anchors firmly secured. No anchor work may be carried out at any time whilst a vessel is in this area.

Product Tanker Berth:

Tankers loading or discharging refined petroleum products at Marsa el Brega will be berthed at the Product Dock. Products will be loaded through a number of small pipe-lines approximately 2,000 ft. long. 4 in. or 8 in. hoses are provided according to the grades of oil being loaded or discharged. Vessels assigned to this berth must be suitably equipped with mooring ropes and have derricks capable of lifting 2 tons.

Vessels cannot be berthed or remain alongside the breakwater except in fine weather. The breakwater is equipped with resilient fendering and ample mooring points. Tankers will be berthed by an Esso Standard Libya Pilot/Mooring Master. Two tugs are available, and a launch will run the mooring lines. In good weather vessel with the following principal dimensions can be accepted: Overall length 500 ft., beam unrestricted, draft 26 ft. max.

Gas Docks: Two types of processed gas are loaded in Marsa el Brega: liquefied natural gas (LNG) and pressurized liquefied petroleum gas (Press. LPG).

These are loaded on 2 piled berths situated on the South-Eastern part of the harbour.

There are dolphins for head, stern and breast lines.

The springs are secured to the central pier and in addition springs from the pier are also made fast. Vessels alongside the gas jetties must be ready to leave at short notice.

On the North or "A" jetty the following products are loaded: Press. LPG and LNG. On "B" jetty: Press. LPG and LNG. There is also a caustic facility on "B" jetty. Minimum depth alongside gas jetties is 37 ft.

Acid Dock:

There is a small berth to deal with sulphuric acid.

Dry Cargo Dock:

To nominate vessels, carrying cargo for Esso Standard Libya, for direct call at Marsa el Brega, prior approval must be obtained from Esso Europe Inc., Traffic Coordination, 50 Stratton Street, London, W.1., England. Telex No: Euresspur, 21221/5. The approval of the Operations General Manager, Brega, is required for any other vessel.

Notice of ETA Port Brega must be given 72, 48 and 24 hours prior to the vessel's arrival. Master of vessel should also advise number of stevedore gangs required.

A Roll-on/Roll-off facility can be used by suitable vessels at times when the product jetty is not occupied. Vessel's dimensions should not exceed those described above for the product jetty.

Height of jetty above sea level is 1.5 m. (approx.).

Vessels assigned to discharge dry cargo at Marsa el Brega will be berthed alongside the dry cargo dock by an Esso Standard Libya Pilot/Mooring Master. The min. depth alongside and in the approach is 30 ft. Two tugs are available. A mooring launch will be available to run mooring lines. The dry cargo dock is fitted with resilient fendering and ample mooring points. During Winter it may be necessary to leave the berth during bad weather, and the Master is responsible for any damage sustained by the jetty and/or his vessel. A Pilot/Mooring Master will be standing by at all times.

All mooring ropes should be in good condition and none should have more than one short splice in the usable length. Crew shall keep the moorings tendered and properly lighted day and night. Shore ropes are also available when necessary.

Ships shall provide their own gangways and the crew shall keep them lighted and tendered, day and night.

Ships must be equipped with adequate unloading gear. All cargo will be off-loaded with the use of ship's gear. When weather permits, derricks should be topped at sea prior to arrival. Due to the increase in cargo vessels calling at Brega, considerable delay may be experienced. Vessels carrying Esso cargoes have priority over all other vessels.

The length of the dry cargo dock is 650 ft. The max. size ship which can be accommodated is 500 ft. overall, beam unrestricted, *max. draft 26 ft.*

TUGS: Esso Standard Libya Inc. maintains tugs and mooring launches to assist vessels to moor and unmoor.

INSPECTION/POLLUTION: *Arrival*: As soon as practicable after arrival and prior to acceptance, all of the vessel's tanks will be inspected for evidence of oil in ballast tanks. Inspection will continue during discharge of ballast. If evidence of oil appears at either of these inspections, the ship must return at once to sea and clean tanks, etc., in accordance with the procedures as laid down in the booklet entitled "Clean Seas Guide for Oil Tankers – The Operation of Load on Top" as issued by the International Chamber of Shipping – Oil Companies International Marine Forum.

Exxon owned vessels and Exxon chartered vessels should strictly adhere to all anti-pollution measures as published in the Vessel Instruction Manual and other publications and follow the Exxon worldwide oil pollution control program which prohibits the overboard discharge of persistant oils or oily water containing persistent oils (including bilge water) in any water of the world, except in extreme emergency affecting safety of life, vessel or cargo.

Any vessel required to return to sea for the purpose of cleaning tanks or for any similar reason automatically nullifies any Notice of Readiness already tendered, and at the same time loses priority held for loading. On return from sea, vessel will be entered for loading at the time of the second arrival when a new Notice of Readiness will be tendered.

In addition to the lights usually displayed, vessels discharging ballast or loading cargo during darkness, will illuminate the area round the ship to the satisfaction of the Mooring Master in order that any oil on the surface of the sea may be readily detected and appropriate action taken. Vessels not having sufficient illumination will not berth if discharge of ballast continues after dark. Vessels having sufficient illumination will take precedence in berthing order. Vessels should provide suitable floodlights for working on deck during night operations, and should designate a responsible person to keep a continuous watch on hoses and moorings at all times during sea berth occupancy.

Loading Precautions: Masters are responsible to see that no oil (crude, bunker, diesel or bilge) is pumped or spilled overboard from their ships. Cargo hose should be inspected to ensure proper connection; drip pans should be in place, especially when disconnecting hose; scuppers should be plugged tight to contain possible spills; loading valves should be checked and tested to ensure proper operation and tight shut off; unused cargo and bunker connections should be blanked off; stern discharge line, if any, should be closed and blanked off; all sea valves should be closed and lashed shut upon completion of deballasting; the ship should provide sufficient staff (a minimum of one officer and three other crew members are recommended) to ensure proper supervision of loading and topping off operations.

If, during first inspection or during progress of loading, it is revealed that ship's hull is not oil-tight, ship will be rejected and refused further loading. Ship will not later be accepted for loading unless satisfactory evidence, duly certified by Lloyd's or American Bureau of Shipping or other recognized survey agency, of effective repair is submitted.

Contamination of the Sea: In the event any vessel should discharge dirty ballast or spill oil in the vicinity of the Brega Terminal area, Esso Standard Libya Inc. retains the right to take any action that may be necessary to clean up the contaminated area whether the contamination is upon the sea or the shore, or upon any structures or properties located in or upon the sea or upon the shore. In addition, Esso shall have the right to settle any claims of third parties arising from such contamination. All costs and expenses incurred by Esso to carry out the cleaning up of such contamination, or the settlement of third party claims, shall be borne by the vessel or by those owning the vessel at the time of the said contamination, and Esso shall be entitled to reimbursement by said owners for any such cost and expenses.

SAFETY: The vessel's personnel are responsible for the safety of the vessel and must take all necessary precautions, whether or not so advised by the Mooring Master, having in mind the hazards of the operation because of the product being loaded, weather conditions and any other circumstances requiring special care or caution.

While a vessel is moored, all the vessel's personnel and vessel's operations must comply with or be in accordance with the following Safety Rules:

(a) *Smoking is prohibited on the open decks of vessels. Smoking is permitted on board vessels only in enclosed spaces specifically assigned by the Master as Smoking Areas.*

(b) Before any loading commences all scuppers on the loading deck through which oil might escape overside must be tightly plugged and must be so maintained throughout the period the vessel remains within the limits of the harbour.

(c) The Master is responsible to see that oil from the vessel is neither spilled nor pumped into the water. At all times while loading cargo, all openings to the loading deck from crew, engine, galley and other dangerous areas shall be tightly closed.

(d) Boiler tubes are not to be blown. Every precaution must be taken so that sparks do not at any time escape from the funnel or stack.

(e) Ship's wireless is not to be operated while vessel is in the berth.

(f) Two hoses with spray nozzles to be laid out near manifolds and pressure maintained on fire mains at all times. Two suitable portable fire extinguishers (foam or dry powder) should also be available and bags of sand kept near manifold to contain any small oil spillage.

(g) Please note carefully that the Mooring Master is authorised to suspend operations in case any of the foregoing Safety Rules are not observed and in all cases where dangerous conditions or practices are deemed to exist.

Shore Alarm Signals:

Category 2 (Serious Incident): Three 2 second blasts of the District siren.

Category 3 (Major Disaster): A series of three Category 2 alarms.

Ships:

Fire: Six (6) or more short blasts, followed by a long blast repeated until shore contact, and continuous ringing of vessel's fire alarm system.

VHF Radio: *All* vessels to stand by Channel 16.

Fire or Explosion on Board Crude Vessel Berthed Offshore:

A. Responsible officer to man bridge, engines to be put on standby and crew to disconnect hoses as soon as possible.

B. Loading to be stopped on other vessels berthed offshore. Hoses to be disconnected and hung off, engines put on standby and crew standing by to vacate berth if necessary.

C. Vessels at anchor in the vicinity of the Brega Buoy to have engines on standby, with crews ready to heave up and put to sea if need arises.

Fire or Explosion on Board Ships in Inner Harbour:

A. Master to call Port Control on VHF Channel 16 with details.

B. Loading arms or hoses to be disconnected as soon as possible.

C. Loading or discharging to cease immediately on other vessels in harbour and offshore berths. Vessels to standby to vacate berths if necessary.

Fire extinguishers and hoses with nozzles capable of projecting a fine spray (fog) should be rigged in the vicinity of the loading/discharging manifold with fire mains pressurised at all times. (See 13.2.2.3 of I.O.T. & T.S.G., 2nd Edition).

Crude Oil Health Hazards (Hydrogen Sulphide Content)

A sour crude can be defined as one containing Hydrogen Sulphide (H_2S) within the range of 0.05 cu.ft. to 8.8 cu.ft. per 100 gallons or capable of generating atmospheric Hydrogen Sulphide concentrations of 5 to 1,000 p.p.m. Hydrogen Sulphide vapours in air are extremely toxic and the Maximum Allowable Concentrations (MAC) for personnel exposure throughout an eight hour day is 10 p.p.m. The gas is highly odorous and a particular hazard is its special effect of causing paralysis of the olfactory nerve, thus destroying the sense of smell.

Escape of Hydrogen Sulphide vapours from crude oil is relatively facile and due to a heavier than air effect (S.G. 1.19) may justify additional precautions under some atmospheric conditions.

The following medical effects on personnel exposed to Hydrogen Sulphide represent an indication of the degree of vigilance necessary to prevent or minimise exposure:

	Atmospheric Concentration Range	*Personnel Reaction*
(i)	50–100 p.p.m.	Slight irritation after exposure for 1 hour.
(ii)	200–300 p.p.m.	Marked irritation after exposure for 1 hour.
(iii)	500–700 p.p.m.	Loss of consciousness after exposure of 30–60 minutes.
(iv)	700–900 p.p.m.	Rapidly produces unconsciousness and death occurs a few minutes later.

The particular hazards introduced by the carriage of crudes containing Hydrogen Sulphide may be restricted by observing the following practices:

(1) Every opportunity should be taken to utilise closed loading facilities to discharge displaced gas remote from deck areas.

(2) During loading operations, where large volumes of gas are discharged to atmosphere, regular observations should be made of gas concentrations about the decks.

(3) Any persons engaged in sampling, gauging, sighting open cargo tanks or disconnecting cargo hoses, should work windward of the vapour source and should be kept under surveillance from a safe area.

(4) In the event of a person being rendered unconscious by vapours with high Hydrogen Sulphide content, urgent removal to a safe area and application of artificial respiration is of prime importance, followed by the early attention of a qualified medical practitioner.

(5) In respect of loading crude with a high Hydrogen Sulphide content, it is not necessary to take water dips after loading and ullages as indicated by "Whessoe" or other automatic gauges are acceptable on vessels fitted with this type of equipment. Cargo samples taken from the shore meter battery are acceptable.

(6) In respect of transporting crudes with a high Hydrogen Sulphide content, one day prior to arrival at the discharge port, the pressure/vacuum valves should be jacked open to allow gas concentrations to escape to atmosphere at the masthead; then prior to berthing those valves should be reset in the operating position.

The degree of sourness is normally indicated by the Hydrogen Sulphide content in p(arts) p(er) m(illion) *liquid measure.* The Hydrogen Sulphide contents of various types of sour crudes so defined are as follows:

Crude	*Hydrogen Sulphide (p.p.m. Liquid Measure)*
Agha Jari	20
Jambur/Bai Hassan	40
Kirkuk	40–70
Gach Saran	70
Brega	260
Qatar	200–300
West Texas	Up to 1,000

The *Atmospheric* Hydrogen Sulphide concentration varies materially with atmospheric conditions. Particular caution should be exercised when petroleum vapours generally tend to concentrate about the decks. H_2S is readily detected with a MSA Toxic Gas Detector.

The precautions referrred to above should be carefully observed at all times.

MEDICAL: There are limited medical and no dental facilities at Marsa el Brega. Personnel requiring urgent medical treatment may obtain it, but this will only be undertaken in serious cases. The cost of transport and treatment will be charged to the vessel. A form entitled "Charges for Ship Account" must be completed in quadruplicate and sent ashore with the person requiring treatment. This form can be obtained from the Pilot/Mooring Master.

Masters of vessels arriving at Marsa el Brega who require medical treatment should give advance notice of their requirements by radio whenever possible.

FRESH WATER: No fresh water is available.
FUEL: No bunkers are available.
REPAIRS: No repairs are allowed to ship's engines while vessels are moored in the berths. Ship's engines should be ready for use on short notice in case the vessel has to vacate the berth suddenly because of bad weather. There are no repair facilities for ships available at Brega.
REPATRIATION: Crew members cannot pay off or leave the vessel at Marsa el Brega except in cases of emergency. Even in an emergency, it should be noted that seamen's Books are not valid under the Libyan law. A valid passport is required, and with adequate notice by radio it is possible to obtain an exit visa for a crew member leaving in an emergency.
SHORE LEAVE: Passengers and crew members are not permitted to land for reasons other than emergencies.

PORT REGULATIONS:
Cargo vessels: Also see "Max. Size".
The following restrictions, conditions, rules and priorities shall be observed by Masters, Consignees and Agents of Non-Esso cargo vessels calling at Marsa el Brega and berthing at the Esso cargo jetty.

1. The permission of the Operations General Manager must be obtained before a non-Esso cargo vessel can discharge. The Operations General Manager also designates certain priorities which may change from time to time. Agents of cargo ships must keep in touch with Marine Superintendent who will advise them of the priority assigned to their vessel.
2. Maximum vessel draft 26 ft.
3. Maximum length overall 500 ft.
4. No repairs may be carried out to the propulsion machinery during the unloading operation and the ship must remain mobile and be ready to manoeuvre at all times.
5. Vessels must be equipped with their own unloading Gear.
6. Unloading must be from ship to truck and no marshalling arrangements can be made available inside the reserved area. The unloading operations must be completed rapidly.
7. Unloading operations may not be performed except during daylight hours as determined by the Marine Superintendent.
8. Loading trucks will be required to adhere strictly to Esso's safety rules, particularly while operating within the limits of the Industrial area.
9. Arrangements for the entrance and movement of the stevedoring personnel must be coordinated with Esso's Industrial Security Division. No housing or victualling will be provided for stevedoring personnel. All expenses, costs, remunerations and compensations associated with this activity will be borne directly by the company concerned.
10. The stevedores will be held responsible for cleaning up after completion of unloading.
11. No victual, water supply or bunkering service is available for vessels calling at Brega.
12. Advance notification must be given to Esso's Marine Division at least 10 days prior to arrival of vessel at Marsa el Brega. ETA of vessel to be notified 72 hours prior to arrival and confirmation and reconfirmation 48 hours and 24 hours respectively prior to arrival.
13. A system of priorities for cargo vessels entering Brega is in operation as follows: 1st – Esso cargo, 2nd – N.O.C., 3rd – other vessels. This system will apply even though this requires interruption of operations of vessels already berthed.
14. Weather and sea conditions, particularly during the period December to April of each year, impose severe restrictions on the cargo pier usage. Among these restrictions are the discontinuation of unloading and the unberthing of the ships as a safeguard against ship and berth damage.

   One hour's notice will be given to Masters should it be deemed necessary to vacate the berth due to bad weather.
15. Esso shall not be held reponsible for any waiting period or delay (demurrage) related to the entry of cargo ships, nor be liable for any costs or compensation in that connection, regardless of the circumstances.
16. Esso shall not be held liable for any loss, damage or injury that may occur to any property or persons whatever the cause thereof as long as they are related to or resulting from the use of the port. Such loss, damage or injury shall be the liability of the Master, Consignee or Agent irrespective of whether they are real or alleged. The above named shall also undertake to indemnify Esso for any such losses and damages and to hold Esso harmless from any liability that may arise as a result thereof.
17. All vessel movements will be subject to the control and direction of Esso's Marine Division Superintendent.

GENERAL: *Charts:* Vessels calling at Brega should have on board B.A. charts 3350 and 3354, or H.D. chart H 203. No charts are available at Brega.
Provisions: There are no fresh or dry provisions available at Marsa el Brega, and Esso Standard Libya cannot undertake to obtain supplies from Benghazi.
Mail: The Ship's Agency will handle all official and crew ship's mail which should be passed to the Mooring Master before the vessel sails.
Harbour Work: Dredging is in continual progress in the vicinity of the inner harbour. Vessels are cautioned not to enter the restricted area (B.A. Chart 3350) without the services of a Brega Pilot/Mooring Master.

Master of cargo/product vessels calling at Marsa el Brega are cautioned that seaweed in suspension is present in the inner harbour area, and all precautions should be taken to avoid blockage of main engine room intakes.

All offshore loading is controlled by the VHF ship/shore radio. The Mooring Masters are equipped with portable VHF sets and the vessel will be assigned a frequency when the Mooring Master boards. In the event of total failure of ship/shore radio communication during loading, the ship should sound the emergency signal comprising a succession of short blasts on the ship's whistle. All loading operations will then cease until radio contact with the shore has been re-established.

All mooring lines to be fitted with adequate ratguards.

All berths in the inner harbour are adversely affected during periods of bad weather, particularly when the prevailing wind is from the North-West.

All vessels allocated berths in the inner harbour are therefore required to be ready to proceed to sea as directed by the Marine Superintendent or his representative when adverse weather prevails or is expected.

All tank lids to be closed and vented to the atmosphere via the agreed system.

Smoking is strictly prohibited on board all tankers except in locations approved by the Masters of the vessels. No smoking on deck even if gas free.

Full power must be available for all manoeuvring to and from all berths. During deballasting and loading, vessels must maintain engines and propulsive machinery in readiness at all times to leave the berth on short notice.

No repairs are permitted which will delay or interfere with this contingency. Contravention of this ruling constitutes a serious safety hazard and will entail towage from the berth and possible delay to the vessel for which Esso Standard Libya Inc. will accept no responsibility.

It is the responsibility of the vessel, before arriving, to see that ballast water is free of oil and to *discharge ballast water through ballast discharge lines* prior to arrival to ensure their cleanliness.

All tankers for sea berths must have port derrick ready for use.

Masters are warned that no contaminated ballast or bilge water may be discharged within Libyan territorial waters. It is the responsiblity of the vessel before arriving to ensure that ballast water is free of oil, and that all pipe-lines, sea suctions, strainers and pumps have been flushed clean of oil.

DEVELOPMENTS:
National Oil Company (NOC):
Governing body: G.P.L.A. East side of harbour opened 1978.
Tanker Berths:
Jetties 1 and 2: Facilities for loading of Ammonia and Methanol on both jetties. On Jetty 2 facilities for receiving Acid and Caustic.
Overall Moorings: 175 m.
Loading Section: 43 m. (141 ft.).
Dredged depth: 14m. (45 ft.).
Urea Jetty: Overall length: 216 m. (See "Shipmaster's Report).
Dredged depth: 9 m. (29 ft.).
Cargo Dock: Max. d.w.t.: 15,000 tons.
Overall length: 392 m.
Dredged depth: 11 m. (36 ft.).

Suitable Ro/Ro ships may berth alongside the Urea Jetty stern on to the Cargo Jetty, which has a height above sea level of approximately 2.7 m. (9 ft.).

SHIPMASTER'S REPORT: August 1984.
Charts: British Admiralty 3354, 3350. French 5792.
Approach: Refinery buildings are radar identifiable at over 20 miles and the fairway buoy (Lat. 30° 27.55′ N., Long. 19° 35.1′ E.) at over 6 miles, also at about this distance it is possible to make out the shape of the harbour breakwaters on radar. The line of soundings is very sharp on the echosounder, and the 50 m. line 7 miles out when coming from the North was raised very easily.
Pilotage: Pilot boarded at the fairway buoy from a large tug (Dutch company contracted to the port). Vessels are not allowed to proceed into the restricted area 0.5 miles South of the fairway buoy without a Pilot. The area inside the restricted zone having several tanker SPM's and other obstructions.

The Pilot was immediately concerned about the vessel's air draft for berthing at the Urea Berth. After berthing I made a rough calculation and would say a vessel with a main deck air draft of over 38 ft./40 ft. would have great difficulty accommodating them. Our main deck air draft at the time was 31 ft. When asked the Pilot stated that the maximum departure draft was 29 ft.

To approach the berth vessels enter with 2 tugs (2,000 h.p.) fast on the starboard shoulder and quarter, berthing being port side alongside. When the breakwater has been rounded vessel is headed East until clear of the Fl. 5 sec. elbow buoy when the swing to starboard with engines and tugs is started (starboard anchor ready in case of emergency). Once vessel is swung until heading about S.W., tugs then push her alongside as near into the corner with the general cargo berth as she she will go, in our case about 8 m. (this is also to facilitate the after elevator being used to work No. 1 Hatch, on this vessel LOA 169.1 m.).
Survey/Loading: Shippers are National Petroleum Co. and all cargo survey work is done by Societe Generale de Surveillances S.A. The surveyor was very helpful. Stowage factor for treated urea is approximately 48/49.5 cu. ft. per ton. The loading rate stated was 400 tonnes p.h. although in actual fact we never achieved an average of more than 300 tonnes p.h. Treated urea is very hydroscopic, with the climatic conditions in Libya, it is impossible to load if the relative humidity is over 75%. This usually involved stopping in the evenings around 1800/1830 hrs. and restarting in the morning 0800/0830 hrs., although on one occasion we did manage to work all night.

The elevator is self-trimming and does a reasonable job, however, with the high stowage factor some hatches were filled but because of the restricted height of the elevator, it proved impossible to get the loading chute high enough to fill the coamings as we would have liked, and thus our intake per hatch was reduced.
Clearance/Customs formalities: Libyan Government have issued a statement that from 7th June, 1984, all incoming ships must have all ship's papers and documents translated into Arabic. This we managed to have done but only because of the length of stay in the previous port. In actual fact the Agent took no notice of these translations, they wanted their own forms filled in by the Master. The Customs Officials were very courteous. No alcohol is allowed, also all cameras had to be locked in the bond as El Brega is a restricted port because of the oil installations, and hence no shore leave. The main transmitter was also sealed.
AUTHORITY: Esso Standard Libya Inc.
AGENCY: See "General" before first port.

MISURATA (Qasr Ahmed): 32.22 N. 15.13 E.

(See Plan Book)

Also see "General" before first port.

GENERAL: The harbour is enclosed by 2 rubble mound breakwaters armoured by tetrapods. The North Breakwater extends 1,400 m. due East from Ras Zarrugh Lighthouse and East Breakwater extends 1,800 m. due North from the shore near the prominent radio station about 2 km. South of the Ras Zarrugh Lighthouse. There are lights on the breakwater roundhead. On the North Breakwater a green flashing light (0.3 secs.) every 3 secs. and on the Eastern Breakwater a red flashing light (0.3 secs.) every 3 secs. The Ras Zarrugh Lighthouse at the foot of the North Breakwater is a square tower with black and white vertical stripes. The structure is 8 m. high and is on the top of a 16 m. hill. The light is flashing white (0.5 secs.) every 5 secs. with a range of 8 miles.

On the South side of harbour there is Steel Mill Harbour which is under construction.

There is a radio mast 7.6 miles W.N.W. of Ras Zarrugh with fixed red flashing lights.

For Harbour Entrance there are guides, 2 fixed red lights and 1 green flashing light, bearing 273° N.W. from breakwater roundheads. The Harbour Entrance Channel is 150 m. wide and 12 m. deep.

Inside the entrance there is a turning circle, diameter 470 m., depth 12 m. and the harbour dredged area 920 m. × 200 m. to a depth of 11 m. leads due South alongside the berth. A 500 m. × 300 m. dredged area to a depth of 8 m. leads to the West alongside the North Breakwater.

Directions: Keep 2–3 miles offshore before turning due West for entrance.

Currents: Predominantly N.W. at mean rate of 0.5 to 0.75 knots but in Winter winds can reverse the flow and induce S.E. set in excess of 1 knot.

DOCUMENTS:

Crew List.
Passenger List (if any).
Ship's Stock.
Stores List.
Animals Aboard List.
Ship's Log.
Last Port Clearance.
Safety Certificate Certificate.
Construction Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Radio Certificate.
International Oil Pollution Prevention Certificate.

Where possible Cargo Manifests and Stowage Plans should be forwarded by airmail to the local Agent, ahead of the vessel's arrival.

PILOTAGE: Compulsory, Pilot will board about 1 mile outside the port entrance.

ANCHORAGES: Bearing approximately 273° to lighthouse on Ras Zarrugh 13 m. depth 1 mile (2 km.) offshore but holding ground is poor and it is advisable to leave anchorage at signs of onset of bad weather.

RADIO: "Misurata Port Control" should be worked as early as possible.

VHF: A high powered base station operates at the top of a 16 m. hill at the foot of the lighthouse at Ras Zarrugh. A continuous watch is maintained round the clock on Channel 16. All other Authorities such as Harbour Master, Customs, etc., should be contacted through "Radio Misurata Port Control" on Channel 16. Channel 10 can be used inside the harbour.

TUGS: Join the vessel outside the Harbour Entrance. The tugs are m.t. "Sorman", m.t. Kiklah", each 565 b.h.p. and m.t. "Al-Keriat", 2,520 b.h.p.

BERTHING: There are 6 berths, totalling 1,120 m. of concrete quay dredged to 11 m. with timber and rubber fenders and bollards at 15 m. intervals, the quay deck is at an elevation of 2.25 m. The berths include a Ro/Ro facility.

CRANES: The following types of shore cranes are available and in the near future, a floating crane of 100 tons will be available. Capacity of cranes are 57, 45, 35 and 25 tons.

FRESH WATER: Available alongside and by barge "Ein-Tawourgah".

FUEL: Available.

MEDICAL: Full hospital facilities are available without prior notice.

STEVEDORES: *Working Hours:* 0630 to 2400 hrs., even on holidays.

REPATRIATION: Possible.

AIRPORT: Tripoli Airport situated about 220 km. from Misurata.

TIME: Local time GMT plus 1 hour from 1st day of October until 31st March, and GMT plus 2 hours from 1st day of April to 30th September.

HOLIDAYS: Fridays; 1st day of Lunar calander year; Idd-ul-Ahada, 4 days; Idd-ul-Zoha, 4 days; 2nd March; 8th March; 28th March; 11th June; 23rd July; 1st September; 7th October. Even on holidays cargo work continuously maintained.

CONSULS: Nearest consuls are at Tripoli.

SERVICES: All kinds of food and soft drinks are available except alcoholic drinks and pork.

SHORE LEAVE: Allowed after Free Pratique, Customs and Immigration formalities completed.

REPAIRS: See "Tripoli".

POLICE/AMBULANCE/FIRE: Call Port Manager Tel: 21101 & 21094.

DEVELOPMENTS: Grain silos are under construction.

Stage II has already been started for 4 general cargo berths, 4 container berths, 3 Ro/Ro berths and sheds, etc., and 1 oil terminal, which will be completed in 1984.

SHIPMASTER'S REPORT: December 1977.
Chart: British Admiralty Chart No. 3353 "Ras Ashdir to Sirte".

A mole has been constructed from Ras Zorog in an East direction, the length of which is approximately 1,100 m.

A second mole extends from the shore in a Northerly direction, approximately 1,800 m. in length. Entrance to the harbour is between the outer ends of both moles.

Wharves and sheds are being built along three quarters of the length of the Northerly direction mole, and around the South part of the inner harbour perimeter. At the time of the visit by this vessel about 350 m. of quay was completed, with depth alongside of 11 m.

All the construction work appears to be done by Yugoslavian labour. The "Overseer" acted as Pilot and was a very able and pleasant person. All questions regarding cargo and fresh water, provisions, etc., were dealt with by him. He supplied 10 tons of fresh water by road tanker, and organised a visit from a ships' chandler for a small quantity of fresh salad and potatoes.

There are 2 small tugs which were used in berthing under the Pilot's direction. These were very necessary owing to a number of obstacles in the harbour (divers boats, pipes, etc.). The Pilot's knowledge of English was limited and it is most necessary for the ship's Master to judge his intentions carefully.

Without a doubt the port of Misurata when open for commerce will be a very useful port, although a small port (inside harbour space was roughly estimated to be about 1,500 m. × 700 m.). The Pilot advised that it was expected to be opened about the middle of 1978.

The vessel anchored off the port entrance at 0800 hrs. and Pilot boarded at 1100 hrs., vessel berthed shortly afterwards. Discharge of 208 tons of construction material from No.1 hold commenced at 1330 hrs., and ceased at 2400 hrs. for the day. Work resumed at 0930 hrs. on the following day, and was completed at 1330 hrs. A mobile shore crane was used throughout for discharge into lorries.

All Agency work was attended to by our Tripoli Agent, who arrived onboard at 1700 on day of arrival. As Tripoli was our next port, he was most helpful in advising our berthing prospects at that port, and delivering ship's mail.

The entering and clearing formalities were attended to by 2 Customs Officers. They advised that there was strictly no shore leave for the crew. All accommodation was diligently searched including the Master's for alcohol, and none whatever was allowed to be in crew's possession. However when all was found to be in order, on request a small amount of bond stores was released for Christmas.

The vessel departed at 1600 hrs. for Tripoli where the Agent's estimate of 2 – 3 days waiting (although there were 50 ships at anchor) proved to be correct.

SHIPMASTER'S REPORT: March 1978.

Work is still in progress on the Southern Mole. More warehouses are to be erected there, also a grain silo. On the Western shore of the harbour more berths are to be constructed possibly for containers, but nothing finalised yet.

Misurata is to be principally a Ro/Ro port specialising in transit cargoes. A nearby motorway runs in a Southerly direction for 1,000 miles into Central Africa.

There will be facilities for conventional cargoes. Dredging is in progress in the Western part of the harbour in preparation for the new berths. The area is being marked by red marker buoys. The port is scheduled to open in June/July this year and to date there are no services excepting Customs who attend to all the Entering and Clearing formalities. All pilotage being performed by the Master, the contractors work boats will act as tugs if requested.

Documentation is similar to requirements for other Libyan ports also the same strictness regarding alcohol. All Officers and Ratings were allowed to retain a small quantity of beer, all other alcoholic drinks being placed under Seal.

AUTHORITY: Port of Misurata, P.O.Box 18218, Misurata, Libya. *Tel:* (051) 24457, 29428. *Telex:* 30221 Port Ms Ly. *Contact:* The General Manager.

RAS LANUF (Sirtica Terminal): 30.31 N. 18.35 E.

(See Plan Book)

Also see "General" before first port.

DOCUMENTS: Customs will require:

4 Crew Lists.
1 Crew Declaration of personal belongings (including cigarettes, etc.)
2 Stores Lists.
1 Passenger List.

Crew Lists and Crew Declaration of personal belongings must be on the approved Libyan Government Documents. Vessels are advised on their initial visit to the port to obtain sufficient forms for future visits. Also required are:

6 Copies of Cargo Manifest for Ras Lanuf Discharge.
1 Copy of Cargo Manifest for transit cargo with a summary.
1 Copy of Passenger Manifest.

A copy of a certificate of discharge of the last cargo loaded at a Libyan port is required. Said certificate to be duly signed and stamped by Custom Authorities at the discharge port. Blank forms will be delivered with the cargo documents.

Clearance from the last port of call will be required by the Government authorities. The police will require 4 copies of a Crew List and a Passenger Manifest if any passengers on board.

PILOTAGE: It is most important that ships establish communications with the terminal not less than 72 hours prior to arrival, giving estimated time of arrival. Further ETA signals should be sent when the vessel is 24 hours, 12 hours and 4 hours distant or any time a change of 1 hour in original ETA occurs. These messages should state specifically whether ETA is given in GMT or local time. The 72 hour signal should include the following: ETA, last port of call, if any sickness on board and if vessel has clean bill of health. Cargo quantity and grades expected to be lifted in net long tons at 60°F. The 12 hour signal should include definite indication as to whether the vessel is ready to load or not and should also include information on the time she will require to discharge ballast after arrival. Precise time of arrival should be given when the ship is 4 hours distant from the terminal.

Vessels to be moored at Ras Lanuf will be boarded by Mooring Master in the close vicinity of the suggested anchorage area mentioned below. The Mooring Master will advise the Ship's Master on approaches to berths, mooring, unmooring, connecting and disconnecting the hoses and in all operations within the mooring area.

NAVIGATION AIDS:

A Terminal Light Vessel, hull black, superstructures red and white name "Ras Lanuf" with white quickflash is located in approximately Lat. 30° 32′ 40″ N., Long. 18° 34′ 37″ E. Vessels in the vicinity should not navigate or anchor inshore of a bearing 120° – 270° running through this Light Vessel position.

A Fairway Channel Entrance Buoy flashing white every 2 secs. is located in a position approximately 30° 30′ 46″ N., 18° 37′ 44″ E.

A Channel Buoy flashing red every 5 secs. is located in a position approximately Lat. 30° 30′ 17″ N., Long. 18° 36′ 16″ E.

North Breakwater Light with occulting light green 2 every 10 secs. is located in a position approximately 30° 30′ 38″ N., 18° 35′ 43″ E.

East Breakwater Light with occulting light red 2 every 10 secs. is located in a position approximately 30° 30′ 29″ N., 18° 35′ 24″ E.

A Rear Range Light with a fixed white light is located in a position approximately Lat. 30° 30′ 56″ N., Long. 18° 34′ 09″ E.

A Front Range Light with a fixed white light is located in a position approximately Lat. 30° 30′ 54″ N., Long. 18° 34′ 17″ E.

An Unlit Spar Target Buoy, colour white is located in a position approximately Lat. 30° 31′ 20″ N., Long. 18° 35′ 21″ E.

An Unlit Spar Target Buoy, colour white is located in a position approximately Lat. 30° 31′ 12″ N., Long. 18° 35′ 35″ E.

The Mooring Area has been swept to a depth of 53 ft. in Berth Nos. 1, 2 and 3, at the SPM to a depth of 96 ft.

There are very few coastal landmarks in this area. The following should prove helpful to visiting mariners:

The Terminal Water Tower with highest elevation of 179 ft. 6 in. above sea level is located in Lat. 30° 30′ 42″ N., Long. 18° 32′ 22″ E. It is coloured white. A white light (characteristics: flash 0.2 secs., eclipse 1.05 secs., flash 0.2 secs., eclipse 3.55 secs.) is mounted on the seaward side of the structure at 163 ft. above sea level. There is also a fixed red warning light on top of the tower.

Large oil storage tanks with highest elevation 376 ft. above sea level are located in approximately Lat. 30° 27′ 24″ N., Long. 18° 29′ 58″ E. They are coloured white.

ANCHORAGE: Suggested anchorage area is within a 3,000 ft. radius of position Lat. 30° 33′ 00″ N., Long. 18° 37′ 40″ E. in approximately 90 ft. of water.

MAX. SIZE: Conventional berths: up to 60 ft. draft; up to 130,000 d.w.t.

Single Point Mooring: up to 75 ft. draft, up to 265,000 d.w.t.

HEALTH: By day – fly flag "Q" and by night display red light over white light for Quarantine Service.

Libyan Customs, Federal Police and Immigration Officials will board the vessel as soon as possible after arrival to give inward clearance and "Pratique" services. Libyan Government Regulations are strictly enforced. The vessel should have a clean Bill of Health or equivalent document from the last port of call.

RADIO: Direct communication by radio between ship and shore is by VHF International Maritime Mobile Radio-telephone Service to Ras Lanuf Oil Movements Control Centre. All communication between ship and terminal should be by way of this station. ETA messages to Mobilpro, Tripoli, Libya, via Tripoli Radio (call sign 5AT). Ras Lanuf Oil Movements Control Centre keeps continuous watch on VHF Radio-telephone Channel 16 (156.80 mHz), Channel 14 (156.70 mHz) and Channel 11 (156.55 mHz). Vessels approaching the port should make contact on Channel 16 when shore will request her to switch to Channel 14. This Channel will also be used by terminal Marine Section for internal use and tanker mooring control. Channel 11 is reserved for communications between ships in mooring and Terminal Oil Movements Control Centre and should only be used for general purposes after obtaining clearance from Oil Movements Control on Channel 16. This is a safety measure since oil flow to ships is controlled through Channel 11 and therefore it must be clear at all times in case of need to stop oil flow for any cause. Channel 16 is for calling and safety use only.

BERTHING: There are 4 submarine loading pipe-lines which terminate in the following approximate positions which are each marked by an unlit white spar buoy.

Berth No. 1: Lat. 30° 31′ 35″ N., Long. 18° 34′ 37″ E., from which a submarine pipe-line runs to shore on a bearing of approximately 224°. Depth of water at spar buoy 70 ft.

Berth No. 2: Lat. 30° 31′ 55″ N., Long. 18° 33′ 58″ E., from which a submarine pipe-line runs to shore on a bearing approximately 197°. Depth of water at spar buoy 70 ft.

Berth No. 3: Lat. 30° 32′ 18″ N., Long. 18° 33′ 19″ E., from which a submarine pipe-line runs to shore on a bearing of approximately 198°. Depth of water at spar buoy 73 ft.

Berth No. 4: Lat. 30° 31′ 50″ N., Long. 18° 36′ 06″ E. – a Single Point Mooring buoy in 96 ft. of water.

Raising, lowering, connecting and disconnecting of submarine hoses, as well as all other labours and duties on shipboard, will be performed by the ship's crew under direction of the Mooring Master.

TUGS: Not available. The company maintain launches to assist in mooring and unmooring vessels. These are under the direct supervision and control of the Mooring Master.

LIFTING HOSES: After the vessel is securely moored the submarine hose will be hoisted on the port side. Berths No. 1 and 2 are each equipped with 2×12 in. loading hoses, the weight of each hose lift being approximately 5 long tons. Berth No. 3 is equipped with 2×12 in. loading hoses the weight of each hose lift being approximately 5.75 long tons. Therefore, all lifting equipment and tackle should have a safe working load of at least 6 long tons. Hoses are lifted by ship's gear and crew, and all connecting of hoses will be done by them. The lifting derrick, equipment, tackle, etc., should be topped off and ready on arrival.

The SPM is equipped with two 16 in. loading hoses.

MEDICAL: No medical services (except in case of emergency and subject to a doctor being available) or other services are to be expected at Ras Lanuf.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: When a ship is in the moorings or vicinity, its engines must remain on standby with full power for immediate use. Deck machinery shall be kept in instant readiness. *Positively no repairs of any sort will be permitted in the moorings.*

CUSTOMS ALLOWANCES: Cigarettes, cigars, tobacco, matches, spirits, wines, beers, perfume, arms, ammunition, saccharine and possibly other items have to be locked up under Customs seal from time of arrival of ship in port until time of leaving territorial waters. Each person is allowed 25 cigarettes per day of stay or 25 grams of tobacco or cigars in lieu. Each man allowed 1 litre of beer or half litre of wine per day. Special allowances are made for Master under special circumstances.

CONSULS: The only consulates are located in Tripoli which is 670 km. by road from Ras Lanuf. These consist of British, Danish, Dutch, French, German, Greek, Indian, Italian, Norwegian, Spanish, Russian (U.S.S.R.), Turkish, Yugoslavian.

REPATRIATION: Crew members cannot pay off or leave the vessel at Ras Lanuf except in cases of extreme emergency. Even in an emergency it should be noted that Seamen's Books are not valid under the Libyan law. A valid passport is required.

BALLAST: Positively no provision is made for dirty ballast. Any ship arriving with dirty ballast will be rejected and all costs accruing therefrom will be to the ship's account. Notice of Readiness shall not be accepted until vessel returns with clean ballast and tanks fit to receive cargo. She will on second arrival tender a new Notice of Readiness to load.

TIME: Libyan local time is GMT plus 2 hours (1st April to 30th September) and GMT plus 1 hour (1st October to 31st March).

GENERAL: No stores, foodstuffs or goods whatsoever of Israeli origin may be on board any ship calling at Ras Lanuf.

Penalties: Fine, confiscation of goods and possibly more. The Libyan Government strictly enforces this law.

Whilst arriving fly the Libyan Ensign (plain green).

Due to the existence in these waters of the fish commonly called "Weaver" fish, ship's crew are urged to exercise extreme caution in fishing whilst lying off the port area. There have been several cases of poisoning by these fish, all of which were distressingly painful, caused by contact with the fins.

SHORE LEAVE: Not allowed.

DEVELOPMENTS: A new harbour has been established at Ras Lanuf oil terminal, to receive tankers and cargo ships.

The harbour is located in the area existing between:

(a) Lat. 30° 29′ North and Lat. 30° 34.5′ North.

(b) Long. 18° 32′ East and Long. 18° 38′ East.

The buoyed entrance channel to the port is dredged to a depth of 15.5 m. and berths are available with depths up to 14 m.

The new harbour is to accommodate tankers on 3 finger piers and cargo vessels on a cargo jetty. The tankers are to load products from the new refinery which is expected to go on stream in October 1984. The Owner and Operator of refinery and harbour is:

Ras Lanuf Oil and Gas Processing Co. Inc., P.O.Box 75071, Tripoli, S.P.L.A.J. Tel: 021 601310, 021 601311. Telex: 50617 Rasco Ly, 50618 Rasco Ly, 50650 Rasco Ly. Contact: Captain M. Khadrawi, Manager, Harbour Operations.

AUTHORITY: Mobil Oil Libya Limited – Ras Lanuf, P.O.Box 690, Tripoli, S.P.L.A.J. *Tel:* Tripoli 30081 (ext. 360). *Telex:* Mobproly 20260. *Cables:* Pegasus Tripolilibya. *Contact:* Captain Klaus Guenther, Marine Superintendent – Ras Lanuf.

AGENCY: See "General" before first port.

TOBRUK: 32.04 N. 24.00 E.

Also see "General" before first port.

PORT LIMITS: The complete water area existing within Tobruk Bay or that water area existing to the West of an imaginary line commencing as from Tobruk Peninsula up to the coast to the South.

It is formed of 3 areas inside the Bay, namely Marsa Tobruk, the proposed naval base and Marsa Al-Hariga Oil Terminal.

MAX. SIZE: Max. draft: 29 ft., max. length: 400 ft.

RADIO: Tobruk Radio (Station operated by Arab Gulf Oil, Operating times 0900/0930, 1300/1330, 1700/1730, 2100/2130 hrs.) 5AL: 420, 425 and 500, VHF (24 hours) Channels 12, 16 and 19.

BERTHING: Berths in Tobruk Harbour:

Quay No. 3: Length 82 ft., draft 11 ft.

Quay No. 4: Berth 1: Length 560 ft., draft 20 ft.
Berth 2: Length 395 ft., draft 28 ft.
Berth 3: Length 410 ft., draft 30 ft.

TANKERS: Refer to "Marsa Al Hariga".

STEVEDORES: All stevedoring operations and formalities to be done by Agents. 2 companies to be formed in the near future.

MEDICAL: Available.

FRESH WATER: Not available.

FUEL: Not available.

REPATRIATION: Available via Benghazi.

REPAIRS: Not available; see "Tripoli".

DEVELOPMENTS: Port extension project underway.

AUTHORITY: Port Manager and Harbour Master.

AGENCY: See "General" before first port.

TRIPOLI: 32.54 N. 13.13 E.

Also see "General" before first port.

PORT LIMITS: (a) The water area existing inside the actual breakwater and that which may fall within any new breakwaters eventually constructed in accordance with the Port Developments Project.

(b) The outer water area known as the navigational channel commencing as from the harbour entrance along the distinguishing marks of the channel for a distance of about 1 mile.

RESTRICTIONS: Any containers arriving on Ro/Ro ships should be on trailers.

MAX. SIZE: All types of ships with 27 ft. draft and less are safe in harbour.

RADIO: Tripoli Radio (coast station — 24 hours), 5AT, 476 and 500 kHz, R/T 2182 and 2197, VHF Channels 16 and 6.

Tripoli Port Radio (24 hours), 5AI, 500 kHz, R/T 2182, VHF Channels 10, 12 and 16.

BERTHING:

	Quay No.	*Length ft.*	*Depth ft.*
Main Port:	5.5	200	11
	6 East	200	13
	6 West	220	13
	7	400	18
	8	400	22
	9	400	23
	10	450	22/25
	11, 12 & 13	930	22
	Victory	550	22
	F.J. STB.S.	200	10
	F.J. PT.S.	200	9
	Japanese	4,823	19.7
Karamanly:	1 & 2 (oil)	450	27
	3	400	22
	4	400	18
	5	300	15
	F.J. STB.S.	250	14
	F.J. PT.S.	250	16.5

STEVEDORES: Two companies available.

CRANES: Electric floating crane available up to 100 tons.

MEDICAL: All facilities available.

FRESH WATER: Available by barge and alongside, should be obtained from Port Authority through ship's Agent.

FUEL: Available through Agent. A notice of 24 hours needed, advisable for Chief Engineer to check what grades are available.

REPATRIATION: Crew changes are possible.

AIRPORT: A number of major air lines operate to and from Tripoli airport which is about 27 km. from the city.

WATCHMEN: Available.

CONSULS: Algeria, 34631; Belgium, 37797; Bulgaria, 35733; China, 32300; Denmark, 39413; France, 33526 & 33527; Germany, 33827 & 30554; Pakistan, 40072; Poland, 31768; Saudi Arabia, 30486; Spain, 35463 and 33275; Sudan, 39181 and 39182; Sweden, 32343; Switzerland, 32416; Greece, 36978 and 36689; India, 41835; Iraq, 34235; Italy, 34131; Jordan, 32707; Kuwait, 40282 and 40281; Lebanon, 33733 and 32289; Malta, 38081 and 38082; Morocco, 34239 and 40188; Netherlands, 41549 and 41550; Syria, 31783; Tunisia, 31051/2; Turkey, 37728; U.S.S.R., 30554; U.K., 31191/5; Venezuela, 36838; Yugoslavia, 34114 & 33392.

POLICE/AMBULANCE/FIRE: Main port call; 39111, 35010, 31518. Karamanli wharf call: 30378, 35010, 31518.

SHORE LEAVE: Allowed after Free Pratique, Customs and Immigration formalities completed.

DRYDOCK: *Floating Dock:*

Length over platform	136.700 m.
Length over pontoon	121.200 m.
Moulded outer breadth	30.600 m.
Inner clear breadth	23.400 m.
Depth of pontoon at CL	3.100 m.
Height of keel blocks	1.200 m.
Depth of water above KB	6.400 m.
Lifting capacity	5,000 tons

Spare parts to be supplied by ship's owner. 3 kinds of marine paint are available.

DEVELOPMENTS: 2.6 km. of new quays under construction with depths of 10.0 m. – 12.0 m. The second phase of new construction will include berths for container vessels and Ro/Ro vessels.

AUTHORITY: Port Manager and Harbour Master.

AGENCY: See "General" before first Port.

ZUARA: 32. 55 N. 12.07 E.

Also see "General" before first port.

PORT LIMITS: a) The water area existing between the actual breakwater and that which may fall within any new breakwater eventually constructed.

b) The water area known as the navigational channel existing outside the harbour entrance for a distance of about 0.5 miles (1 km.).

RESTRICTIONS: Port for ships laden with direct delivery cargo only.

MAX. SIZE: Ships up to 13 ft. draft and 65 m. length are safe in the harbour.

RADIO: Tripoli Radio and Port Radio use VHF Channel 16.

BERTHING:

Quay No.	*Length*	*Depth*
Shore quay	2 ships	13 ft.
F.J. Stb.S.	165 ft.	13 ft.
F.J. Pt.S.	165 ft.	13 ft.

STEVEDORES: 2 companies available.

MEDICAL: Available.

REPATRIATION: Possible.

AIRPORT: Tripoli Airport situated about 127 km. from Zuara.

CONSULS: Nearest consuls are at Tripoli.

REPAIRS: Not available, see "Tripoli".

POLICE/AMBULANCE/FIRE: Call Port Manager, Tel: 025305.

SHORE LEAVE: Allowed after Free Pratique, Customs and Immigration formalities completed.

DEVELOPMENTS: 18 berths to be constructed in a new master plan.

AUTHORITY: Port Manager and Harbour Master.

AGENCY: See "General" before first Port.

ZUEITINA: 30.51 N. 20.00 E. (See Plan Book)

Also see "General" before first port.

LOCATION: The Terminal Fairway Buoy, moored in position Lat. 30° 55′ 00″ N., Long. 19° 59′ 48″ E., is painted red; it shows at night a white light flashing "Z" every 10 seconds. A prominent landmark is the radio mast (height 451.5 ft. above sea level) in position Lat. 30° 49′ 57.6″ N., Long. 20° 03′ 05.5″ E.; it displays at night 3 red lights in a vertical line – the top light flashing, the 2 lower fixed. The top light is on top of the mast (which is 400 ft. above the base), the middle light is 266 ft. above the base, and the lowest light is 133 ft. above the base. At night flares at the Liquid Petroleum Gas Plant, in position Lat. 30° 54.2′ N., Long. 20° 05.4′ E., can be seen from a considerable distance; by day a column of smoke emanating from this position is also conspicuous. 14 large oil tanks, painted white, near the foot of the Radio mast, are prominent landmarks.

Positions of Moorings:

"Alpha" berth	Lat. 30° 53′ 30″ N.	Long. 20° 01′ 05″ E.
"Bravo" berth	Lat. 30° 52′ 18″ N.	Long. 20° 01′ 24″ E.
"Charlie" berth	Lat. 30° 52′ 08″ N.	Long. 20° 00′ 11″ E.
"Delta" berth	Lat. 30° 50′ 56″ N.	Long. 20° 00′ 26″ E.
"Echo" berth	Lat. 30° 50′ 16.4″ N.	Long. 19° 59′ 16.1″ E.

FLAGS: When arriving at Zueitina by day, ships must display, in addition to their own national ensigns, the Libyan flag and the appropriate quarantine signal. Throughout the ships' stay, during daylight hours, they must display the Libyan flag, their own national ensigns and, when applicable, the International Code signals "B", "H" or "G", and the appropriate quarantine signal.

DOCUMENTS: Soon after vessel's arrival, a Custom's Officer will board, accompanied by a Shahat Agency representative, who will act on behalf of the ship and its Agent, as well as on behalf of the Company, in the execution of essential business. The following documents, signed by the Master and imprinted with the ship's official stamp, are required by the Customs Official for the Customs and Immigration Departments and for the Port and Lights Authority:

2 copies Entering and Leaving Territorial Waters Certificates.
2 copies Report Inwards Certificates.
2 copies Crew Declarations of Dutiable Goods.
2 copies Crew Declaration List.
2 copies Report Outwards Certificates.
3 copies Boycott Certificates.
2 copies Stores Lists.
5 copies Crew Lists.
1 copy Clearance from Last Port of Call.
2 copies Tanker Characteristics Certificates.
1 copy Certificate of Discharge, from the Discharge Port Authorities, of the last cargo loaded in Zueitina.

With the exception of the Crew Lists and the Stores Lists and the clearance from the Last Port, the above forms will be provided by the Company clerk.

It is important that the Master should be able to produce a properly authenticated certificate of discharge covering the last cargo loaded into the ship in Zueitina. If for some reason he is not in possession of such a certificate, he must write a letter of explanation which includes the pertinent extracts from the ship's logbook, append his own signature to it and stamp it with the ship's official seal, and address it to the Secretariat of Petroleum, Es Zueitina, SPLAJ. If the explanation for failure to produce the certificate is considered satisfactory the ship may be permitted to load. If there appears to be any suspicion that the last port was not as stated, the ship will be turned away.

If the vessel has not previously loaded in Zueitina, the Master is required to confirm this fact in an official letter, stating also the ship's last port of discharge and giving an undertaking that the cargo about to be loaded will not be discharged in any of the countries to which the Arab embargo extends.

The Mooring Master will, after boarding, lose no time in informing Zueitina Marine that he has received one or other of these foregoing documents from the Master, which he will, at the first opportunity, send ashore for delivery to the Secretariat of Petroleum representative. This will ensure that there is no unnecessary delay in the commencement of loading.

On completion of loading, the Shahat Agent will again board the ship with the cargo documents which are to be signed by the Master. The clerk has to deliver to the Master one copy of each document for his own use and one copy for consignee and bring the rest of documents ashore with him.

1. Bill of loading
2. Cargo manifest
3. Time sheet
4. Certificate of Origin
5. Master's receipt
6. Export manifest

all of which forms are provided by the Company or by the Agency. He will also take ashore any letters to be posted. On occasions, a Customs Official will visit the ship with the documentation clerk prior to sailing to ensure that the seals which were put on the bonded stores lockers have not been tampered with before the ship has left Libyan waters.

The documentation formalities prior to the ship's departure, are usually completed whilst the ship is unmooring from the berth, or just after it has left the berth, hove to with the Mooring Master still aboard. Sometimes, however (and particularly after the loading of "Agip" cargo), the processing of the papers ashore may take longer than usual, and the ship may have to anchor to await the clerk's eventual arrival, in which case the Mooring Master will direct it to a safe anchorage before disembarking. Zueitina Marine will then inform the Master when the launch bearing the clerk is about to leave the Small Craft Harbour, in order that the anchor may be weighed, and a lee side presented to the launch.

For information relating to ships' movements at Zueitina Terminal, such as arrival times, delays in berthing, quantities of cargo loaded in their vessels, tanker owners and agents, should contact Occidental International Oil, Inc. 16 Palace Street, London SW1E 5BQ. Telephone 01-828 5600.

ACCEPTANCE PROCEDURE: *Notice of Readiness, Laytime etc:*

Vessels Loading Crude Oils: A vessel for which a berth is available on arrival will be boarded by the Mooring Master at the Terminal Fairway Buoy and, providing that the vessel is in all respects ready to commence loading (except for the necessary de-ballasting time), the Notice of Readiness will be accepted at the time of the Mooring Master boarding, subject to the provisos – a, b, c and d, below.

If the vessel is not in all respects ready to proceed to the berth, with main engine and auxiliaries fully manoeuvrable, mooring ropes on deck, anchors, windlasses, winches, etc., in good working order and readiness, it will not be accepted until the Mooring Master is satisfied that all these conditions are met.

A vessel which has been instructed by Zueitina Marine to anchor in the roadstead on arrival should, after doing so, inform Zueitina Marine of the precise anchorage time, which time will, for the purposes of berthing order and the Port Log, be considered as the vessel's arrival time. According to the practice of the port, acceptance of the Notice of Readiness will coincide with this arrival time, providing:–

(a) that it is within the hours of daylight – deemed to be from 0600 hrs. (local time) to 1800 hrs. (local time),
(b) that it is not a Public Holiday, or a Friday (the Libyan Sabbath), unless the vessel is actually handled on that day,
(c) that the port is open, and
(d) that the vessel has been nominated to load.

An exception to clause (a) above, is when conditions allow night berthing, in which case the vessel will be accepted when the Mooring Master boards, or, should the vessel have been at anchor, when the anchor is aweigh, providing that the Mooring Master is then on board.

In the case of a vessel arriving without nomination, the Notice of Readiness will be accepted when notification of her nomination has been received at the Terminal, subject to provisos (a), (b) and (c) above, and instructions from the Company's Operations Department. On occasions when the Company deems it advisable to berth a vessel prior to the date of the nominations, acceptance of the Notice of Readiness will be at the time the Mooring Master boards, providing that the anchor is then aweigh.

In addition to clauses (a), (b) and (c) and (d), above, vessels will not necessarily be accepted when arriving at a time ahead of, or behind, their last scheduled Estimated Time of Arrival, especially if such acceptance would be at the expense of a vessel that has arrived within its nominated period.

Vessels Loading Liquid Petroleum Gas: A Liquid Petroleum Gas Tanker's Notice of Readiness will be accepted on arrival, provided that:

(a) the port is open ("port" meaning, in this case, the LPG berth),
(b) that it is not a Friday (the Moslem Sabbath) or an official holiday, unless the ship is actually handled on that day,
(c) that it is not during the night hours – deemed to be, at the LPG berth, between 1800 hrs. and 0600 hrs. (local time) – unless the ship is actually handled during that period,
(d) that the ship does not arrive on the same day, or clash with the loading of, another LPG tanker chartered under a LINOC contract,
(e) that the ship's tanks are in such a state of readiness, i.e., requiring no cooling, no purging, that loading can be commenced at *full rate* immediately the hoses are connected,
(f) that the arrival time does not differ appreciably, either before or after, from the last signalled ETA sent by the ship and received at the Terminal, and
(g) that the vessel has been nominated to load.

When a Liquid Petroleum Gas tanker does arrive whilst the port is closed, the Notice of Readiness will be accepted at the time of the opening of the port, subject to provisos (b), (c), (d), (e), (f), and (g).

The N.O.R. of an LPG loader arriving on a Friday or on an official holiday, or during the aforesaid night hours, will be accepted at 0600 hrs. (local time) on the first subsequent working day, subject to provisos (a), (d), (e), (f) and (g).

An LPG tanker arriving on the same day as an LPG tanker scheduled to load under a LINOC contract, or whose loading would clash with an LPG tanker scheduled to load under a LINOC contract, will have its N.O.R. accepted on the completion of hose connection, subject to provisos (e) and (f).

PILOTAGE: A Mooring Master will board the vessel in the close vicinity of Terminal Fairway Buoy and advise Master on all manoeuvres relative to berthing, connecting and disconnecting the hoses, and in all operations within the anchorage or berthing area.

Vessels of 40,000 d.w.t. and upwards should have a pilot ladder long enough to reach the Mooring Master's launch rigged just abaft the accommodation ladder, in such a manner that the Mooring Master can transfer to the accommodation ladder when about 10 ft. from sea level. Ladders must be strong, clean, and in good state of repair and conform to international requirements. In cases where the ladder(s) fails to conform with these requirements, the Mooring Master will decline to board until an adequate ladder has been provided. A good lee should be made, to allow the launch to come alongside and the Mooring Master to board safely. (Note: Ships which have been instructed to berth at the S.P.M's, and need to take the Company's gear aboard, should have the ladder(s) rigged on the port side, in order that they may take it aboard from the Mooring Master's launch with the working derrick as soon as the Mooring Master has boarded.)

The Mooring Master may require the vessel to unberth at any time he deems it necessary for the safety of the vessel, or the installations, or both, or because of infringements of the Port Rules by the vessel.

As soon as practicable after boarding, the Mooring Master will inspect the mooring and lifting equipment and the ballast, and not until he has assured himself that the equipment is adequate, and the ballast clean, will the ship be accepted. His opinion of the adequacy of the gear, and of the cleanliness of the ballast, shall be final.

ANCHORAGE: Vessels awaiting the Mooring Master, whether for berthing in the crude oil berths or alongside the LPG berth, should heave to in the close vicinity of the Terminal Fairway Buoy. If they are obliged, or instructed to anchor, they should do so in the recommended anchorage, which is within the radius of a circle centred in position Lat. 30° 55′ N., Long. 20° 01′ E. Under no circumstances should they anchor South of the 30° 54′ 00″ parallel. Whilst at anchor, they should exercise the utmost vigilance, and should keep in VHF radio-telephone with the Terminal at all times. If heavy weather necessitates them heaving up anchor and proceeding to sea, Zueitina Marine must be informed accordingly.

RADIO: Cable Address: OXYPORT OXYLIBYA TRIPOLILIBYA (via Tripoli Radio) OXYOIL LONDON (via Portishead Radio). 72 hours prior to arrival at Zueitina, Masters should advise the Company of their vessels' ETA, by cables sent both via Tripoli and via Portishead Radio to the addresses given above. They should subsequently confirm or amend them when they are 48 hours and again when they are 24 hours distant from the Port.

(Cables to Agents advising of ETAs should be sent in addition to, and *not* in place of, those sent to OXYPORT, TRIPOLI and OXYOIL, LONDON.)

Cables should include the quantity and grade of cargo to be loaded, the last port of call and destination, Bill of Health status and details of any sickness on board. Estimated times of arrival should be given in GMT. (Libyan Standard Time is GMT plus 2 hours.).

TOBRUK: 32.04 N. 24.00 E.

Also see "General" before first port.

PORT LIMITS: The complete water area existing within Tobruk Bay or that water area existing to the West of an imaginary line commencing as from Tobruk Peninsula up to the coast to the South.

It is formed of 3 areas inside the Bay, namely Marsa Tobruk, the proposed naval base and Marsa Al-Hariga Oil Terminal.

MAX. SIZE: Max. draft: 29 ft., max. length: 400 ft.

RADIO: Tobruk Radio (Station operated by Arab Gulf Oil, Operating times 0900/0930, 1300/1330, 1700/1730, 2100/2130 hrs.) 5AL: 420, 425 and 500, VHF (24 hours) Channels 12, 16 and 19.

BERTHING: Berths in Tobruk Harbour:

Quay No. 3: Length 82 ft., draft 11 ft.
Quay No. 4: Berth 1: Length 560 ft., draft 20 ft.
Berth 2: Length 395 ft., draft 28 ft.
Berth 3: Length 410 ft., draft 30 ft.

TANKERS: Refer to "Marsa Al Hariga".

STEVEDORES: All stevedoring operations and formalities to be done by Agents. 2 companies to be formed in the near future.

MEDICAL: Available.

FRESH WATER: Not available.

FUEL: Not available.

REPATRIATION: Available via Benghazi.

REPAIRS: Not available; see "Tripoli".

DEVELOPMENTS: Port extension project underway.

AUTHORITY: Port Manager and Harbour Master.

AGENCY: See "General" before first port.

TRIPOLI: 32.54 N. 13.13 E.

Also see "General" before first port.

PORT LIMITS: (a) The water area existing inside the actual breakwater and that which may fall within any new breakwaters eventually constructed in accordance with the Port Developments Project.

(b) The outer water area known as the navigational channel commencing as from the harbour entrance along the distinguishing marks of the channel for a distance of about 1 mile.

RESTRICTIONS: Any containers arriving on Ro/Ro ships should be on trailers.

MAX. SIZE: All types of ships with 27 ft. draft and less are safe in harbour.

RADIO: Tripoli Radio (coast station — 24 hours), 5AT, 476 and 500 kHz, R/T 2182 and 2197, VHF Channels 16 and 6.

Tripoli Port Radio (24 hours), 5AI, 500 kHz, R/T 2182, VHF Channels 10, 12 and 16.

BERTHING:

	Quay No.	*Length ft.*	*Depth ft.*
Main Port:	5.5	200	11
	6 East	200	13
	6 West	220	13
	7	400	18
	8	400	22
	9	400	23
	10	450	22/25
	11, 12 & 13	930	22
	Victory	550	22
	F.J. STB.S.	200	10
	F.J. PT.S.	200	9
	Japanese	4,823	19.7
Karamanly:	1 & 2 (oil)	450	27
	3	400	22
	4	400	18
	5	300	15
	F.J. STB.S.	250	14
	F.J. PT.S.	250	16.5

STEVEDORES: Two companies available.

CRANES: Electric floating crane available up to 100 tons.

MEDICAL: All facilities available.

FRESH WATER: Available by barge and alongside, should be obtained from Port Authority through ship's Agent.

FUEL: Available through Agent. A notice of 24 hours needed, advisable for Chief Engineer to check what grades are available.

REPATRIATION: Crew changes are possible.

AIRPORT: A number of major air lines operate to and from Tripoli airport which is about 27 km. from the city.

WATCHMEN: Available.

CONSULS: Algeria, 34631; Belgium, 37797; Bulgaria, 35733; China, 32300; Denmark, 39413; France, 33526 & 33527; Germany, 33827 & 30554; Pakistan, 40072; Poland, 31768; Saudi Arabia, 30486; Spain, 35463 and 33275: Sudan, 39181 and 39182; Sweden, 32343; Switzerland, 32416; Greece, 36978 and 36689; India, 41835; Iraq, 34235; Italy, 34131; Jordan, 32707; Kuwait, 40282 and 40281; Lebanon, 33733 and 32289; Malta, 38081 and 38082; Morocco, 34239 and 40188; Netherlands, 41549 and 41550; Syria, 31783; Tunisia, 31051/2; Turkey, 37728; U.S.S.R., 30554; U.K., 31191/5; Venezuela, 36838; Yugoslavia, 34114 & 33392.

POLICE/AMBULANCE/FIRE: Main port call; 39111, 35010, 31518. Karamanli wharf call: 30378, 35010, 31518.

SHORE LEAVE: Allowed after Free Pratique, Customs and Immigration formalities completed.

DRYDOCK: *Floating Dock:*

Length over platform	136.700 m.
Length over pontoon	121.200 m.
Moulded outer breadth	30.600 m.
Inner clear breadth	23.400 m.
Depth of pontoon at CL	3.100 m.
Height of keel blocks	1.200 m.
Depth of water above KB	6.400 m.
Lifting capacity	5,000 tons

Spare parts to be supplied by ship's owner. 3 kinds of marine paint are available.

DEVELOPMENTS: 2.6 km. of new quays under construction with depths of 10.0 m. – 12.0 m. The second phase of new construction will include berths for container vessels and Ro/Ro vessels.

AUTHORITY: Port Manager and Harbour Master.

AGENCY: See "General" before first Port.

ZUARA: 32. 55 N. 12.07 E.

Also see "General" before first port.

PORT LIMITS: a) The water area existing between the actual breakwater and that which may fall within any new breakwater eventually constructed.

b) The water area known as the navigational channel existing outside the harbour entrance for a distance of about 0.5 miles (1 km.).

RESTRICTIONS: Port for ships laden with direct delivery cargo only.

MAX. SIZE: Ships up to 13 ft. draft and 65 m. length are safe in the harbour.

RADIO: Tripoli Radio and Port Radio use VHF Channel 16.

BERTHING:

Quay No.	*Length*	*Depth*
Shore quay	2 ships	13 ft.
F.J. Stb.S.	165 ft.	13 ft.
F.J. Pt.S.	165 ft.	13 ft.

STEVEDORES: 2 companies available.

MEDICAL: Available.

REPATRIATION: Possible.

AIRPORT: Tripoli Airport situated about 127 km. from Zuara.

CONSULS: Nearest consuls are at Tripoli.

REPAIRS: Not available, see "Tripoli".

POLICE/AMBULANCE/FIRE: Call Port Manager, Tel: 025305.

SHORE LEAVE: Allowed after Free Pratique, Customs and Immigration formalities completed.

DEVELOPMENTS: 18 berths to be constructed in a new master plan.

AUTHORITY: Port Manager and Harbour Master.

AGENCY: See "General" before first Port.

ZUEITINA: 30.51 N. 20.00 E. (See Plan Book)

Also see "General" before first port.

LOCATION: The Terminal Fairway Buoy, moored in position Lat. 30° 55′ 00″ N., Long. 19° 59′ 48″ E., is painted red; it shows at night a white light flashing "Z" every 10 seconds. A prominent landmark is the radio mast (height 451.5 ft. above sea level) in position Lat. 30° 49′ 57.6″ N., Long. 20° 03′ 05.5″ E.; it displays at night 3 red lights in a vertical line – the top light flashing, the 2 lower fixed. The top light is on top of the mast (which is 400 ft. above the base), the middle light is 266 ft. above the base, and the lowest light is 133 ft. above the base. At night flares at the Liquid Petroleum Gas Plant, in position Lat. 30° 54.2′ N., Long. 20° 05.4′ E., can be seen from a considerable distance; by day a column of smoke emanating from this position is also conspicuous. 14 large oil tanks, painted white, near the foot of the Radio mast, are prominent landmarks.

Positions of Moorings:

"Alpha" berth	Lat. 30° 53′ 30″ N.	Long. 20° 01′ 05″ E.
"Bravo" berth	Lat. 30° 52′ 18″ N.	Long. 20° 01′ 24″ E.
"Charlie" berth	Lat. 30° 52′ 08″ N.	Long. 20° 00′ 11″ E.
"Delta" berth	Lat. 30° 50′ 56″ N.	Long. 20° 00′ 26″ E.
"Echo" berth	Lat. 30° 50′ 16.4″ N.	Long. 19° 59′ 16.1″ E.

FLAGS: When arriving at Zueitina by day, ships must display, in addition to their own national ensigns, the Libyan flag and the appropriate quarantine signal. Throughout the ships' stay, during daylight hours, they must display the Libyan flag, their own national ensigns and, when applicable, the International Code signals "B", "H" or "G", and the appropriate quarantine signal.

DOCUMENTS: Soon after vessel's arrival, a Custom's Officer will board, accompanied by a Shahat Agency representative, who will act on behalf of the ship and its Agent, as well as on behalf of the Company, in the execution of essential business. The following documents, signed by the Master and imprinted with the ship's official stamp, are required by the Customs Official for the Customs and Immigration Departments and for the Port and Lights Authority:

2 copies Entering and Leaving Territorial Waters Certificates.
2 copies Report Inwards Certificates.
2 copies Crew Declarations of Dutiable Goods.
2 copies Crew Declaration List.
2 copies Report Outwards Certificates.
3 copies Boycott Certificates.
2 copies Stores Lists.
5 copies Crew Lists.
1 copy Clearance from Last Port of Call.
2 copies Tanker Characteristics Certificates.
1 copy Certificate of Discharge, from the Discharge Port Authorities, of the last cargo loaded in Zueitina.

With the exception of the Crew Lists and the Stores Lists and the clearance from the Last Port, the above forms will be provided by the Company clerk.

It is important that the Master should be able to produce a properly authenticated certificate of discharge covering the last cargo loaded into the ship in Zueitina. If for some reason he is not in possession of such a certificate, he must write a letter of explanation which includes the pertinent extracts from the ship's logbook, append his own signature to it and stamp it with the ship's official seal, and address it to the Secretariat of Petroleum, Es Zueitina, SPLAJ. If the explanation for failure to produce the certificate is considered satisfactory the ship may be permitted to load. If there appears to be any suspicion that the last port was not as stated, the ship will be turned away.

If the vessel has not previously loaded in Zueitina, the Master is required to confirm this fact in an official letter, stating also the ship's last port of discharge and giving an undertaking that the cargo about to be loaded will not be discharged in any of the countries to which the Arab embargo extends.

The Mooring Master will, after boarding, lose no time in informing Zueitina Marine that he has received one or other of these foregoing documents from the Master, which he will, at the first opportunity, send ashore for delivery to the Secretariat of Petroleum representative. This will ensure that there is no unnecessary delay in the commencement of loading.

On completion of loading, the Shahat Agent will again board the ship with the cargo documents which are to be signed by the Master. The clerk has to deliver to the Master one copy of each document for his own use and one copy for consignee and bring the rest of documents ashore with him.

1. Bill of loading
2. Cargo manifest
3. Time sheet
4. Certificate of Origin
5. Master's receipt
6. Export manifest

all of which forms are provided by the Company or by the Agency. He will also take ashore any letters to be posted. On occasions, a Customs Official will visit the ship with the documentation clerk prior to sailing to ensure that the seals which were put on the bonded stores lockers have not been tampered with before the ship has left Libyan waters.

The documentation formalities prior to the ship's departure, are usually completed whilst the ship is unmooring from the berth, or just after it has left the berth, hove to with the Mooring Master still aboard. Sometimes, however (and particularly after the loading of "Agip" cargo), the processing of the papers ashore may take longer than usual, and the ship may have to anchor to await the clerk's eventual arrival, in which case the Mooring Master will direct it to a safe anchorage before disembarking. Zueitina Marine will then inform the Master when the launch bearing the clerk is about to leave the Small Craft Harbour, in order that the anchor may be weighed, and a lee side presented to the launch.

For information relating to ships' movements at Zueitina Terminal, such as arrival times, delays in berthing, quantities of cargo loaded in their vessels, tanker owners and agents, should contact Occidental International Oil, Inc. 16 Palace Street, London SW1E 5BQ. Telephone 01-828 5600.

ACCEPTANCE PROCEDURE: *Notice of Readiness, Laytime etc:*

Vessels Loading Crude Oils: A vessel for which a berth is available on arrival will be boarded by the Mooring Master at the Terminal Fairway Buoy and, providing that the vessel is in all respects ready to commence loading (except for the necessary de-ballasting time), the Notice of Readiness will be accepted at the time of the Mooring Master boarding, subject to the provisos – a, b, c and d, below.

If the vessel is not in all respects ready to proceed to the berth, with main engine and auxiliaries fully manoeuvrable, mooring ropes on deck, anchors, windlasses, winches, etc., in good working order and readiness, it will not be accepted until the Mooring Master is satisfied that all these conditions are met.

A vessel which has been instructed by Zueitina Marine to anchor in the roadstead on arrival should, after doing so, inform Zueitina Marine of the precise anchorage time, which time will, for the purposes of berthing order and the Port Log, be considered as the vessel's arrival time. According to the practice of the port, acceptance of the Notice of Readiness will coincide with this arrival time, providing:–

(a) that it is within the hours of daylight – deemed to be from 0600 hrs. (local time) to 1800 hrs. (local time),
(b) that it is not a Public Holiday, or a Friday (the Libyan Sabbath), unless the vessel is actually handled on that day,
(c) that the port is open, and
(d) that the vessel has been nominated to load.

An exception to clause (a) above, is when conditions allow night berthing, in which case the vessel will be accepted when the Mooring Master boards, or, should the vessel have been at anchor, when the anchor is aweigh, providing that the Mooring Master is then on board.

In the case of a vessel arriving without nomination, the Notice of Readiness will be accepted when notification of her nomination has been received at the Terminal, subject to provisos (a), (b) and (c) above, and instructions from the Company's Operations Department. On occasions when the Company deems it advisable to berth a vessel prior to the date of the nominations, acceptance of the Notice of Readiness will be at the time the Mooring Master boards, providing that the anchor is then aweigh.

In addition to clauses (a), (b) and (c) and (d), above, vessels will not necessarily be accepted when arriving at a time ahead of, or behind, their last scheduled Estimated Time of Arrival, especially if such acceptance would be at the expense of a vessel that has arrived within its nominated period.

Vessels Loading Liquid Petroleum Gas: A Liquid Petroleum Gas Tanker's Notice of Readiness will be accepted on arrival, provided that:

(a) the port is open ("port" meaning, in this case, the LPG berth),
(b) that it is not a Friday (the Moslem Sabbath) or an official holiday, unless the ship is actually handled on that day,
(c) that it is not during the night hours – deemed to be, at the LPG berth, between 1800 hrs. and 0600 hrs. (local time) – unless the ship is actually handled during that period,
(d) that the ship does not arrive on the same day, or clash with the loading of, another LPG tanker chartered under a LINOC contract,
(e) that the ship's tanks are in such a state of readiness, i.e., requiring no cooling, no purging, that loading can be commenced at *full rate* immediately the hoses are connected,
(f) that the arrival time does not differ appreciably, either before or after, from the last signalled ETA sent by the ship and received at the Terminal, and
(g) that the vessel has been nominated to load.

When a Liquid Petroleum Gas tanker does arrive whilst the port is closed, the Notice of Readiness will be accepted at the time of the opening of the port, subject to provisos (b), (c), (d), (e), (f), and (g).

The N.O.R. of an LPG loader arriving on a Friday or on an official holiday, or during the aforesaid night hours, will be accepted at 0600 hrs. (local time) on the first subsequent working day, subject to provisos (a), (d), (e), (f) and (g).

An LPG tanker arriving on the same day as an LPG tanker scheduled to load under a LINOC contract, or whose loading would clash with an LPG tanker scheduled to load under a LINOC contract, will have its N.O.R. accepted on the completion of hose connection, subject to provisos (e) and (f).

PILOTAGE: A Mooring Master will board the vessel in the close vicinity of Terminal Fairway Buoy and advise Master on all manoeuvres relative to berthing, connecting and disconnecting the hoses, and in all operations within the anchorage or berthing area.

Vessels of 40,000 d.w.t. and upwards should have a pilot ladder long enough to reach the Mooring Master's launch rigged just abaft the accommodation ladder, in such a manner that the Mooring Master can transfer to the accommodation ladder when about 10 ft. from sea level. Ladders must be strong, clean, and in good state of repair and conform to international requirements. In cases where the ladder(s) fails to conform with these requirements, the Mooring Master will decline to board until an adequate ladder has been provided. A good lee should be made, to allow the launch to come alongside and the Mooring Master to board safely. (Note: Ships which have been instructed to berth at the S.P.M's, and need to take the Company's gear aboard, should have the ladder(s) rigged on the port side, in order that they may take it aboard from the Mooring Master's launch with the working derrick as soon as the Mooring Master has boarded.)

The Mooring Master may require the vessel to unberth at any time he deems it necessary for the safety of the vessel, or the installations, or both, or because of infringements of the Port Rules by the vessel.

As soon as practicable after boarding, the Mooring Master will inspect the mooring and lifting equipment and the ballast, and not until he has assured himself that the equipment is adequate, and the ballast clean, will the ship be accepted. His opinion of the adequacy of the gear, and of the cleanliness of the ballast, shall be final.

ANCHORAGE: Vessels awaiting the Mooring Master, whether for berthing in the crude oil berths or alongside the LPG berth, should heave to in the close vicinity of the Terminal Fairway Buoy. If they are obliged, or instructed to anchor, they should do so in the recommended anchorage, which is within the radius of a circle centred in position Lat. 30° 55′ N., Long. 20° 01′ E. Under no circumstances should they anchor South of the 30° 54′ 00″ parallel. Whilst at anchor, they should exercise the utmost vigilance, and should keep in VHF radio-telephone with the Terminal at all times. If heavy weather necessitates them heaving up anchor and proceeding to sea, Zueitina Marine must be informed accordingly.

RADIO: Cable Address: OXYPORT OXYLIBYA TRIPOLILIBYA (via Tripoli Radio) OXYOIL LONDON (via Portishead Radio). 72 hours prior to arrival at Zueitina, Masters should advise the Company of their vessels' ETA, by cables sent both via Tripoli and via Portishead Radio to the addresses given above. They should subsequently confirm or amend them when they are 48 hours and again when they are 24 hours distant from the Port.

(Cables to Agents advising of ETAs should be sent in addition to, and *not* in place of, those sent to OXYPORT, TRIPOLI and OXYOIL, LONDON.)

Cables should include the quantity and grade of cargo to be loaded, the last port of call and destination, Bill of Health status and details of any sickness on board. Estimated times of arrival should be given in GMT. (Libyan Standard Time is GMT plus 2 hours.).

Masters of vessels equipped with VHF radio-telephones should contact Zueitina Marine on Channel 13 or Channel 16 when within range, and give a firm calculated time of arrival at the Zueitina Fairway Buoy. They should also again inform Zueitina Marine Duty Officer of the quantity and grade of cargo required, the last port, estimated deballasting time and the destination. They should confirm that they have in their possession a certificate of discharge for the last cargo loaded into their ships in Zueitina or, in cases of ships arriving in Zueitina for the first time, that they have ready for the Secretariat of Petroleum a letter which certifies that the cargo which they are about to load will not be discharged in any country against which the Arab Oil Embargo extends. In vessels paying their first visit to the Terminal, Masters should also inform the Duty Officer of the size and type of the manifold connections (i.e. 12 in. A.S.A., or 10 in. European, etc), and whether or not they have on board heavy wires and shackles for mooring at the mono-buoys.

(N.B. It is important that all ships arriving at Zueitina are fitted with VHF radio-telephones, capable of operating on the main working Channels. Without VHF communications, Zueitina Marine cannot always know with accuracy a vessel's arrival time, and as a result that vessel might well lose its loading turn and be subjected to an appreciable – and, with VHF, avoidable – delay in consequence.)

An aerial radio beacon is located on the North-Eastern arm of the Small Craft Harbour, in position Lat. 30° 54′ 05″ N., Long. 20° 04′ 12″ E., intended as an aid to navigation for aircraft flying to and from Zueitina airstrip. The beacon transmits continually the call sign ZUE, on 369 kHz: the signal, which is omni-directional, has a range in excess of 100 miles.

HEALTH: Pratique will be granted by the Custom's Official. He will examine the ship's logbook, and will inspect and seal the bonded storerooms.

All ships must display the appropriate quarantine signal until given pratique.

TUGS: One tug ("Saladin") of 4,600 h.p., bollard pull 55 tons now available to assist in berthing at CBM and LPG berths.

One to six mooring launches of 370 h.p. available, normally two launches assist berthing at SBM's.

BERTHING: The sea terminal consists of five berths for loading crude oil products, two of which – "Bravo" and "Delta" – are conventional buoy moorings, and the others – "Alpha" ("Alpha" buoy at present temporarily removed but position marked by Tower Buoy with same characteristic light) "Charlie" and "Echo" – are "single-point moorings", or "mono-buoys". Conventional buoy moorings "Bravo" and "Delta" are approximately 2.5 miles offshore, with an average depth of 70 ft. and 80 ft. respectively. 42 in. (ID) submarine lines connect the berths to the shore installations. To the header at the seaward end of each of these submarine lines are connected two strings of flexible reinforced rubber hoses, laid on the sea bed and buoyed when not in use. The forward of the two strings is made up of (from the header) three 30 ft. lengths of 24 in. i.d. hose, two 30 ft. lengths of 20 in. i.d. hose, and seven 30 ft. lengths of 16 in. i.d. hose. The after string is similar, but with one less length of 16 in. i.d. hose. To the seaward extremity of each hose string is fitted a 16 in. to 12 in. A.S.A. reduction flange. When the ship has berthed, each hose string is towed in to the ship's side below the manifold by the attendant launch, to be hove up by crane or derrick and bolted to the ship's connections, *invariably on the port side.* Where the ship's connections differ from the 12 in. A.S.A. flange on the hose, suitable reduction spools must be fitted. The weight to be lifted on each hose is approximately 7 tons.

Single-point moorings, "Alpha", "Charlie" and "Echo" are all approximately 3 miles offshore, in an average depth of 100 ft. of water. The submarine pipe-lines to "Alpha" and "Charlie" berths are of 48 in. i.d., that to "Echo" berth, 42 in. i.d. Particulars of the strings of hoses from the header to the ship's manifold are described in detail in the chapter on "Single-point Moorings". As in the conventional buoy berths, *the hoses are always taken up on the port side,* and the connecting flange on the hose is 12 in. A.S.A. pattern. The weight to be lifted is approximately 7 tons, but this is to some extent dependent on the ship's freeboard.

Mooring Equipment: As a guide to Masters who intend to save time and labour, especially in these days of reduced "general purpose" crews, by equipping their ship with the requisite mooring gear, the following standard requirements is suggested:

(a) Two (2) flexible steel slip wires, 1.75 in. dia., 5.5 in. circumference, 130 ft. in length, or longer if the distance from the fairlead to the bitts is such that 130 ft. would be insufficient to make fast safely. Such slip-wires will have an eye spliced in one end only.

(b) Two (2) screw-pin or threaded bolt and nut, bow shackles, bow size 2.5 in., pin diameter 2.75 in., minimum width, jaw to jaw, 4 in.: breaking strain 150 tons.

Single-point Moorings. The "Mono-buoy" is a large cylindrical buoy (weight 106 tons), divided by steel bulkheads into four water-tight compartments, through the centre of which emerges the loading hose. The perimeter of the buoy, to which the buoy-to-ship moorings are attached, is a turntable which revolves on bogies round the centre – hose-supporting – section, in such a manner that the vessel berthed on the buoy will always lie head to wind. The minimum depth of water within the swinging radius of the largest ship envisaged at the buoy is approximately 95 ft.

To the mono-buoy is attached a 240 ft. length of chain cable, made up of 2.375 in. U3 steel studded links, and supported in polyurathene buoyancy collars, at the seaward end of which is a "chafing chain". This "chafing chain" is 20 ft. long and of similar construction to the main chain, but with three open links at the end: it is detachable for periodic renewal. To the end of the chafing chain is attached the "approach rope" – a 200 ft. length of 10 in. circumference plaited polypropylene which, when not in use, is allowed to float out free from the buoy.

The ship approaches the buoy from downwind, taking care to keep the wind right ahead (adequate ballast should be retained aboard to provide manoeuvrability). When sufficiently close, the crew will lower to the attendant launch the end of a good mooring rope, to the eye of which has been attached a stout nylon lashing, about 2 fathoms long. This mooring rope should be passed out through a central panama lead, if a suitable one exists, or over a fairlead on the port bow (when the ship is fitted with a bulbous bow, a line put out through a central lead, should be brought back down the bow and then lowered to the water, to avoid the possibility of the launch, when coming in to collect the end of the rope, coming into contact with the bulb). Meanwhile, two heavy 5.5 in. circumference flexible steel slip wires have been made fast in readiness – one on each bow, if the line is being hove through a central panama lead, both on the port side (and preferably on different sets of bitts) if the port fairlead is being used – in such a manner that there is an adequate number of turns around the bitts and that the end of the eye reaches to approximately 10 ft. and 10 ft. 9 in. respectively from the fairlead. When the chain comes aboard, it is quickly secured to the wires by two 150 tons B.S. shackles, which are bolted through two of the open links in the chafing chain. The strain on the approach rope (which had followed the ship's rope round the drum-end of the windlass) is now released, and the weight allowed to come on to the wires, shackles chain, and buoy composite: the approach rope is then "turned-up" as an additional mooring and the ship is now all fast in the berth. Ship's tension wires, or other mooring lines, should also be shackled or lashed to the chain, for added security.

When leaving the berth, the ship's additional moorings are first detached from the chain, any slack which is in the approach rope is taken in and that rope made fast very securely. The slip wires are then slacked off slowly and carefully until the strain comes on to the approach rope (when strong winds have tightened the mooring, it will probably be necessary to put the engine slow ahead before attempting to do this). The shackles can then be taken adrift, freeing the wires, and the approach rope slacked off until the chain reaches the water – care being taken to ensure that it is not allowed to fall across the hoses. The engine is then put astern, and the rope allowed to pay out easily (with half a turn around the bitts to stretch it clear) as the ship leaves the buoy.

(Reminder – unlash the ship's rope from the approach rope before unmooring from the buoy!).

Loading. Rate of loading is between 32,000 and 50,000 b.p.h.

Conventional Buoy Moorings. In berths "Bravo" and "Delta" the ship is berthed with two anchors streamed out ahead and mooring lines to 5 buoys round the stern and quarters. In addition, to all buoys except No. 3 (right astern) there are attached 5.5 in. circumference steel wires, laid on the sea bed, buoyed, when not in use — in all but the most settled weather these are brought into the ship by the mooring launch, hove up and made fast on board. Vessels should have ready a good 3.5 in. rope messenger to take up these wires, and strong chain stoppers, or "carpenter's stoppers", for use when securing them.

Before the ship reaches the berth, there should be three good mooring lines ready on the after end of the main deck, two of which have been securely married in readiness to be sent away first, to warp the ship round. At least seven good ropes should be ready for running out from the poop, with lashings ready in case one rope has to be married to another. Plaited polypropylene ropes, at least 120 fathoms long and of a diameter and strength appropriate to the size of the vessel, are recommended: large manilla ropes, slow and cumbersome to handle, are definitely unsuitable for berthing under these conditions.

Synthetic ropes on automatic winches are favoured in this port, but it is recommended that they be at least 150, and preferably 200 fathoms long. The winches must be capable of being firmly locked when in the moorings — any tension feature is not permissible.

When it has been necessary to slip moorings in order to leave the berth quickly and without the assistance of the mooring launches, the Company will make every effort to recover them and to return them to the vessel as soon as possible. Normally the Company makes no charge for recovering anchors and moorings, but it reserves the right to do so under exceptional circumstances.

In the conventional buoy moorings, in order that ships may be securely moored against beam winds and with sufficient chain leading ahead to ride out heavy swells, it is recommended that they be equipped with ample chain on both bower anchors. Experience gained in sea berths suggests that the chain required on each anchor should be more than the length of the ship. In vessels of 100,000 d.w.t., for which the berths were designed, it is recommended that there should be 14 shackles (1,260 ft.) of chain on each anchor. A minimum acceptable amount of chain is 10 shackles (150 fathoms) for the safety of the ship and the company's installations. Anchor marker buoys should be used.

HOSES: The lifting, lowering, connecting and disconnecting of the cargo hoses will be done by the tanker's personnel in accordance with the advice and directions of the Mooring Master. Ship's derricks and deck winches should be capable of operating with a safe working load of 7.5 tons and preferably 10 tons. Vessels with inadequate hose-lifting equipment will be rejected. All derricks should be fitted with "preventer-guys" in addition to normal guy tackles. The port derrick must be rigged and ready for use on arrival. In addition ships leaving SPM should have the starboard derrick ready, too, in order to facilitate the discharge of the mooring gear on the lee side.

Sets of bitts, or strong staghorns, for hanging off the hoses, must be provided, suitably located near the manifold.

On the surface, extending from the buoy (to which it is connected by a Chiksan swivel (a universal joint)), is a hose string comprised of 24 (at "Echo") 26 (at "Alpha" and "Charlie") 30 ft. lengths of 24 in. i.d. floating hose, culminating in a floating junction box: from the other side of this junction box emerge two strings of four lengths of 16 in. i.d. hose. The end ones – the "over-rail" hoses – are fitted with 16 in. to 12 in. A.S.A. reduction flanges, which, after the hose has been hove aboard, are bolted or clamped to the ship's manifold.

For V.L.C.C.s, additional lengths of floating hose are inserted if necessary.

LOADING: *Occidental crude oils and debutanized condensate:* The principal cargo loaded at Es Zueitina Terminal is Occidental Field Blended Crude Oil, pumped in from the Company's wells, two hundred and twelve kilometres inland, but in addition certain other grades of Crude Oil are loaded, namely, Occidental Medium Crude, Occidental Premium Crude, and Occidental Debutanized (Stabilized) Condensate. Also loaded are Liquid Petroleum Gas products, Butane and Propane (LPG) see "LPG Loading Berth", and "Agip" Buattifel Crude Oil, from the wells of Agnezia Generale Italiana Petroli, in concession 100.

The following pertinent data will, we believe, be of interest to tanker owners and operators, Masters and Mates, and to refinery operatives in the discharging ports:-

Occidental Field Blend
Average A.P.I. 40.1
Average Specific Gravity 0.8246
Pourpoint +35
Reid Water Vapour Pressure +5.2 p.s.i. at 100° Fah.
H_2S less than 5 p p m.
Flash Point below 60° Fah.
Average loading temperature on board 108° Fah.
Barrels per long ton at 60° Fah. 7.741

Occidental Medium Blend
Average A.P.I. 36
Average Specific Gravity 0.8448
Pourpoint +85
Reid Water Vapour Pressure +5.0 p.s.i. at 100° Fah.
H_2S less than 5 p p m
Flash Point below 60° Fah.
Average loading temperature on board 98° Fah.
Barrels per long ton at 60° Fah. 7.582

Occidental Premium Crude
Average A.P.I. 43.5
Average Specific Gravity 0.8086
Pourpoint +30
Reid Water Vapour Pressure +5.6 p.s.i. at 100° Fah.
H_2S less than 5 p p m
Flash Point less than 60° Fah.
Average loading temperature on board 108° Fah.
Barrels per long ton at 60° Fah. 7.922

Occidental Debutanized (stabilized) Condensate and Debutanized Condensate:
Average A.P.I. 78.0
Average Specific Gravity 0.6706
Pourpoint −60° Fah.
Reid Water Vapour Pressure 11.0 p.s.i. at 100° Fah.
H_2S less than 1 p p m
Flash Point less than 0° Fah.
Average loading temperature on board 75° Fah.
Barrels per long ton at 60° Fah. 9.555

The grades of cargoes to be loaded will affect the berthing schedule, irrespective of the chronological sequence of vessels' arrival times.

It is recommended that vessels take the maximum flow with due regard to safety, in order to both expedite the turn-round time and to obtain the bottom-weight to counteract the possible effect of local winds which frequently spring up with little warning.

Care must be taken not to overload, as there is no provision whatsoever for cargo once loaded to be pumped back ashore.

Warning is given of the danger of closing hoses against an incoming oil flow. Such a procedure may create excessive pressures which result in damage to loading hoses, sea lines, and other Terminal equipment. Vessels which ignore this warning and do in consequence cause such damage will be held responsible for all costs incurred for the renewal or restoration of the damaged equipment.

The attention of Masters is drawn to Safety Precautions, wherein they are reminded of their responsibilities for ensuring that all persons aboard their ships are cognizant with the hazards involved in the loading operations, and with the need for strict observance at all times of the Fire and Safety Rules. Debutanized Condensate, in particular, is a highly volatile fluid which must be treated with the utmost prudence.

(N.B. particulars of cargoes included in the foregoing are for information only and do not constitute a guarantee of quality.).

Loading – A.G.I.P "Buattifel" Crude: Because of its high wax content – 37% – A.G.I.P. "Buattifel" Crude Oil, (hereafter referred to as "Agip") has to be maintained at a very high temperature throughout its entire transit from the wells to the Terminal system, and thence via the sea lines to the berth and the loading vessel: it will arrive on board at approximately 140° Fah., and the heating coils in the cargo compartments must be motivated in readiness and be capable of keeping the oil at above this temperature.

Two berths "Bravo" and "Charlie", have been modified for the loading of Agip cargoes – ships may be moored in either of these berths but because of the considerable heating problem involved only one of the berths at a time can be used for loading Agip cargo. Through the submarine lines to "Bravo" and "Charlie" central "gut" lines have been inserted – at "Charlie" berth where the sea line is 48 inches diameter, the gut line is of 18 inches diameter, and at "Bravo" – sea line 42 inches diameter – the diameter of the gut line is 16 inches. These two gut lines (which are, of course, tied in ashore with the Terminal tank and metering and pumping complex) terminate 20 ft. from the headers at the seaward ends of the sea lines. The area between the outside of the gut line and the interior wall of the sea line is called the "annulus". To the headers (from which emanate the strings of flexible hoses which are ultimately bolted to the ship's manifold connections) are fitted remote control hydraulic valves, operative from the loading station within the Terminal.

Immediately prior to the berthing of the prospective Agip loading ship, hot Occidental crude oil is circulated from its storage tank, through the gut line, and back through the annulus, heating the entire system. Once the ship is securely moored, preparations are made to replace the hot "Oxy" oil with hot Agip oil. (60,000 barrels is the full line content at "Charlie", 33,600 barrels at "Bravo"). This process will take about four hours, and ship and shore must work in conjunction to ensure that the deballasting and the recirculation of the line with hot Agip oil are completed at about the same time. This is of vital importance, for once the line system is filled with hot Agip cargo it cannot remain in circulation for more than one hour. If the ship is not then ready to receive it, the Agip oil must be replaced by Oxy oil, and only after this has been circulated round the line can the line be again replenished with another circulation of Agip oil. This entire process may take about twelve hours – a wastage of time which neither the Terminal nor the ship operators can afford to contemplate with unconcern.

When ship and shore are ready to begin loading, the remote control valves are opened and, at a very slow rate, the cold Oxy oil which has been in the flexible hoses is loaded – 1,500 barrels at "Charlie", 300 barrels at "Bravo".

At this point, the loading officer in the ship will transfer the cargo to other tanks to avoid intermingling of the two types of crude, for now hot Agip is entering the ship's system, from the gut line. Loading continues at a slow rate until the contents of the gut line – 6,000 barrels at "Charlie", 3,600 at "Bravo" – have been pumped into the ship, after which the loading of the Agip, at normal rate, is through the annulus only. (The gut line is, at this point, filled with Oxy oil, which will remain static throughout the loading of the Agip cargo).

With about 2,000 barrels of Agip cargo to go to completion, loading is stopped in order that the ship's loading officer may check his ullages and calculations. When, in "Bravo" there are 300 barrels to go, in "Charlie" 1,500 barrels, loading is again stopped briefly: this marks the completion ashore of Agip cargo being pumped into the circuit. Now the Oxy oil in the gut line is pumped into the flexible hose strings, so that when the required quantity of Agip oil has been loaded into the vessels, the hose strings – from the headers to the terminal flanges, disconnected from the manifold – are filled with Occidental crude oil, which will not solidify whilst the hoses lie dormant under the sea. Similarly, the Agip crude oil in the annulus of the sea line is pumped back into the tank ashore and replaced throughout the system by Occidental crude.

The foregoing explanation pertains to vessels loading Agip cargo only, taking the minimum essential Occidental oil solely as a line flush. If, however, a ship requires a part cargo of Occidental crude, it will load that after completing the Agip cargo, except for that small quantity used as the line flush at the commencement.

A.G.I.P. "Buattifel" Crude, particulars:-
Average A.P.I. 41.0 at 60° Fah.
Average Specific Gravity 0.806
Wax Content 37%
Pourpoint +95
H_2S Nil
Flash Point 68° Fah. (ABEL)
Average Loading Temperature on board 140° Fah. to 150° Fah.
Barrels per Long Ton 7.9 (approximate)

(N.B. The above data is for information only and does not constitute a guarantee of quality).

LPG LOADING BERTH: *Berth, location and nature:* The LPG loading berth is S.S.W. of the Small Craft Harbour, inside Tre Scogli Reef. It is designed for vessels of approximately 700 ft. in length, with a cargo capacity of 32,000 cu.m. The maximum permissible loaded draft (1977) is 28 ft.

The channel through the reef, between Trinity Buoy (painted yellow, quick flash green, Lat. 30° 53′ 30″ N., Long. 20° 02′ 48″ E.) and Wafeya Beacon – Scoglio Sud – (white skeleton tower, group flash, 6 every 10 seconds) runs in a 315° (T) – 135° (T) direction: it is marked by two leading marks, the front one in position Lat. 30° 53′ 16″ N., Long. 20° 03′ 42″ E., and the rear one 750 m. (2,460 ft.), 135° (T), from this position. Both marks are black steel pylons with black and red oblong grid topmarks: the front one shows at night an amber light flashing every 1.5 seconds, whilst the rear one shows an amber occulting light, the period of light being six seconds every ten seconds. A small white spar buoy, showing at night a quick flashing red light, marks the turning position for ships approaching or leaving the berth.

The loading platform is of structural steel, supported on concrete piles, and faced with heavy rubber fenders. Ships are berthed alongside four breasting dolphins (two of which are incorporated into the loading platform), with other mooring dolphins ahead and astern and on the inside bow and inside quarter. Ships approaching the berth swing round on the port anchor and about six shackles of chain – when moored, the chain is hove tight.

Only one loading line is used, with a connecting flange of 6 in. A.S.A. 1,300 lbs. It is hove on board the ship with the ship's derrick or crane, or radial davit. A 12 in. chicksan available for large vessels. Vapour line to "flare" only provided.

Such is the location of the berth – fully exposed to winds from most directions but sometimes protected partially by the reef from the worst effects of the swell – that on occasions LPG tankers cannot be berthed although the crude oil berths in the harbour are operational. And vice versa. Consequently, with regard to Port Closure Time, the LPG berth is regarded as a separate entity from the main harbour.

Arrival: On first contacting Zueitina Marine by VHF (Channel 13 or 16), the Master of an LPG tanker should, in addition to giving his ETA at the Terminal Light Float, inform Zueitina Marine of his last port, the intended port of discharge after leaving Zueitina, the quantity and grade of cargo required, the temperature at which he wishes the cargo to be loaded, the size of the ship's manifold connections, and whether or not he has aboard a certificate of discharge for the cargo loaded in Zueitina.

If the vessel is to berth on arrival, the Mooring Master will board in the close vicinity of the Terminal Fairway Buoy. If the ship is instructed to anchor, the Master should do so in the recommended anchorage.

Pratique, Customs Formalities: If the ship has been obliged to anchor, pratique and Customs formalities may be dealt with in the anchorage. Alternatively, they may be attended to on board after the ship has berthed.

For information regarding documents required on arrival, Customs and Immigration procedure see "Documents".

Loading: For a ship which needs tank purging and cooling prior to loading, the minimum rate will be approximately 100 b.p.h. Inert gas is not provided at Zueitina Terminal – the vessel must provide inert gas for purging after previous cargoes other than butane or propane. The ship will not be loaded until the air has been purged to a maximum oxygen content of 0.5%. When loading has commenced, the minimum rate permitted by the Libyan Secretariat of Petroleum is 1,500 b.p.h. The maximum rate available is between 6,000 and 7,000 b.p.h. For "topping off", the rate can, within these limits, be adjusted to the requirements of the loading officer. Arrangements can be made in advance for the LPG plant to stop loading when the desired quantity has been metered into the ship, or alternatively, the ship's loading officer can instruct the Terminal to stop loading when he sees that the correct amount has been received aboard.

Loading operations on board are the responsibility of the ship's personnel. The Master's attention is particularly drawn to the Terms of Acceptance as detailed in the "Tanker Loading Advice" letter which he has signed, and to the "Zueitina Marine Terminal, Fire and Safety Rules".

The loading platform – abreast of the ship's manifold and within easy hailing distance – is manned at all times during loading operations, and the ship *must* maintain a continuous verbal contact with the loading operative. In addition, VHF contact between ship and loading installations must be maintained on Channel 12. In the event of any emergency – fire, leakage, parting of moorings, etcetera – the operative on the platform can stop the loading by remote control.

Unberthing in bad weather: Should deteriorating weather conditions necessitate the vessel leaving the berth quickly, a Mooring Master will be speedily available at all hours.

Cargo Particulars: The following data will, we believe, be of interest to Masters and Mates and operators of vessels loading LPG products:-

Propane
Average A.P.I. 146
Average Specific Gravity 0.510 60/60° Fah.
Reid Vapour Pressure 175 p.s.i.g.
Free Water Nil
Copper Strip Corrosion 1a
Flash Point less than 0° Fah.
Average Loading Temperature −40° Fah. (−40° Cent.)
Barrels per Metric Ton at 60° Fah. 12.3 (approx).

Butane
Average A.P.I. 114.2
Average Specific Gravity 0.576 60/60° Fah.
Reid Vapour Pressure 48 p.s.i.g
Free Water Nil
Copper Strip Corrosion 1a
Flash Point less than 0° Fah.
Loading Temperature at Ship's Request, within Ranges +18° Fah. (−8° Cent.) to +35° Fah. (+2° Cent.)
Barrels per Metric ton at 60° Fah. 10.8 (approx.)

(N.B. The foregoing data is intended for information only, and does not constitute a guarantee of quality.)

Departure: Immediately after completion of loading, the manifold connections are unbolted and the loading arms retracted. Shortly afterwards the Mooring Master will board and, with the assistance of adequate mooring boats, unberth the ship and pilot it through the reef to a safe anchorage in the outer harbour before disembarking.

When the documents pertaining to the ship's loading have been completed ashore, a clerk will take them out to the ship. (On occasions he will be accompanied by a Customs Official, boarding the ship to ensure that the seals which were put on bonded storerooms on arrival have not been tampered with before the ship has left Libyan territorial water.) It is customary for Zueitina Marine to inform the ship's Master when the documents clerk leaves the Small Craft Harbour, so that the anchor may be hove up and a lee side presented to the launch.

After the documentation formalities have been completed on board, the Master is required to pass by VHF to Zueitina Marine the official sailing time of his ship.

MEDICAL: Medical facilities are limited to emergency cases only. Under certain circumstances, however, the Terminal medical practitioner will give advice to Masters by VHF in cases where Crew members appear to be suffering from undiagnosed ailments. If it is essential for a sick person to be landed, the ship's Agent must first obtain the approval of the Government authorities.

The sick person when coming ashore must be accompanied by an officer or other responsible person able to speak English, and both the patient and the person accompanying him must be in possession of passports. (Not seamen's discharge books, which are not recognised in Libya).

FRESH WATER: No fresh water available.

FUEL: No bunkers available.

REPAIRS: There are no engineering repair shops.

SURVEYORS: Various companies of cargo inspectors perform duties at Zueitina, but must be arranged prior to vessel's arrival through U.K. or Paris headquarters. No Classification Societies in Zueitina.

REPATRIATION: Only in an emergency can any crew member be paid off. Seamen's discharge books are not recognised in Libya. Crew members are advised to have a valid passport in their possession in case of emergency.

CUSTOMS ALLOWANCES: Each member of the crew is allowed 25 cigarettes, or 25 grammes of tobacco, one litre of beer, or half a litre of wine, for every day of the ship's stay in port. Other tobacco and cigarettes, wines, beers and spirits, as well as matches, arms and ammunition, and saccharine, will be retained under seal whilst the ship is in Libyan waters.

CONSULS: There are consulates in Benghazi for most of the maritime nations. Those nations not represented in Benghazi are represented in Tripoli.

BALLAST: Because of the exposed position of the sea berths, it is essential that vessels arrive with sufficient ballast for safe handling, having due regard to existing weather and sea conditions. Experience has shown that a fair estimate of the amount required is one third of the summer deadweight. A tanker found by the Mooring Master to be insufficiently ballasted will be rejected. However, it is imperative for the safety of the ship and of the installation that deballasting should be as speedy as possible, to reduce the period wherein the ship is most vulnerable to any sudden deterioration in the weather. It is, indeed, to the advantage of everyone concerned if the ship is able to commence loading as soon as the hoses are connected, deballasting simultaneous with the loading of the cargo. In cases when it is essential to complete the deballasting before loading can start, and deballasting time in excess of six hours will be deducted from the lay time.

As there are at Zueitina no facilities for discharging it ashore, vessels must arrive at the Terminal with clean ballast: all lines, pumps, and strainers must have been flushed out prior to arrival within one hundred miles of the Libyan coastline.

The Mooring Master will inspect ship's ballast on boarding, and he has the power to reject any vessel that he deems would cause pollution in the Terminal waters. A vessel so rejected must proceed to a position over one hundred miles from the coast, re-ballast, and return only when the ballast is completely clean. A new notice of readiness must then be tended, and the loading turn will be counted as from this second arrival.

The sea area round the ship shall be adequately lighted, as frequent inspection by the Mooring Master will be made during ballast discharge. Any pollution whatever, including bilge discharge, will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection – a vessel rejected on these grounds will not be re-accepted until satisfactory evidence of repairs has been certified by a qualified surveyor.

On completion of deballasting, all unused cargo connections must be blanked off, sea valves closed and lashed, deck scuppers securely plugged, and drip pans placed below the cargo hose connections. All the requirements listed on the Company's Safety and Fire Precautions Check Form must be seen to be complied with before loading is commenced.

In the event that the Company has to settle any third party claims as a result of damage to property caused by pollution attributable in any way to a vessel, the Company will have the right to reimbursement by those responsible for the vessel for all expenses incurred.

WEATHER: Weather conditions in Zueitina are generally clement. The temperature during the Winter seldom falls below 10° C. (50° Fah.), and in the Summer, even at midday, is rarely in excess of 35° C. (95° Fah.). The prevailing winds are North-Westerly. During the mid-Summer months, the land- and sea-breezes phenomenon is very apparent: a North-Westerly wind springs up at about 1100 hrs. sometimes to reach near-gale force by late afternoon, then gradually dying away during the evening. At about 2300 hrs. the wind begins to blow off the land – again sometimes to a fresh breeze or near-gale – before falling away completely around dawn.

During the Spring and Autumn, and in the early Winter months, there are frequent prolonged periods of calm, tranquil weather. However, in Spring especially, and again in the Autumn, such periods may be interrupted by the onset of the "gibli", an off-shore wind which, like the "khamsin" wind in Egypt, springs up with little warning to reach gale intensity, laden with sand and dust to such an extent that visibility is reduced to a few yards.

In the Winter months, prolonged periods of strong North-Westerly gales, with very heavy seas and high swells, accompanied by frequent rain squalls, are experienced. Even after the strong winds have subsided, long, high swells may continue for several hours to prevent mooring operations. Such North-Westerly gales are usually accompanied by a sharply rising barometer, and follow the passing of a cold front, with winds from the West.

Rainfall is confined to the Winter months only. Fog is rare, though it does occasionally occur in the Spring and Summer around dawn, generally dissipating after two or three hours.

GENERAL: Vessels are advised not to have on board any articles whatsoever of Israeli origin. If anything of such a nature is found it will be confiscated and the ship be liable to a fine and possibly to a delay for further investigation.

Goods – and, in particular, alcohol and tobacco – must not be taken from ship to shore, or from ship to ship.

Being an open roadstead, vessels must keep engines in a state of immediate readiness. No repairs to main engine may be undertaken in berth. Steam or electric power must be available on deck in case adjustments to anchor cables or mooring lines are found necessary. Power must be available on ship's whistles and sirens. Ship's boats must not be lowered into the sea and detached from the falls. Swimming is prohibited. The Mooring Master (and, when applicable, his assistant(s)) assigned to a tanker, will remain on board until after the vessel has loaded, unmoored, has completed documentation formalities and has cleared the Company's installations and is safely heading for she open sea. During the time he is aboard he is to be provided with accommodation suitable for one of Master Mariner status, and with palatable meals.

SHORE LEAVE: No shore leave is permitted.

NOTES

Please also advise Shipping Guides Ltd.

AUTHORITY: Zueitina Marine Terminal, Occidental of Libya, Inc., P.O.Box 2134, Tripoli, S.P.L.A.J. *Tel:* Tripoli 38011 (ext. 116-119 Zueitina). *Telex:* 20289 Oxy Ly. *Cables:* Oxyport, Oxylibya Tripoli. *Contact:* Captain J. Folkestad, Marine Superintendent.

AGENCY: All ships must have an approved Agent to look after their interests. As from 1st June, 1978, all shipping agencies in the Socialist People's Libyan Arab Jamaharaya have been superseded by one nationalised company, known as The Shahat Shipping Agency.

See "General" before first port.

Cables of estimated time of arrival sent to the Agent should be in addition to, and not in place of, those sent to Oxyport, Oxylibya, Tripolilibya. Total charges are 750 Libyan dinars for the first 30,000 tons summer deadweight, or part thereof, plus 2 dinars 500 Dirhams for every 100 tons or part thereof in excess of 30,000 tons, plus 2% of the total sum in revenue stamps.

Madeira

FUNCHAL: 32.38 N. 16.55 W. (See Plan Book)

DOCUMENTS:

Maritime Declaration of Health Form.
5 Crew Lists.
12 Lists of Passengers finally landing.
5 Lists of Passengers in transit.
1 List of Stores and Provisions, including Deck and Engine Stores.
1 List of Contents of shops on board.
6 Copies of Manifest of Cargo for discharge.
2 Copies of each B/Lading of Cargo for discharge.
1 Copy of Manifest of Cargo in Transit.
1 List of Passengers finally landing, visaed by Portuguese Consul at original port.

All other entry and clearance documents are arranged by the Agents.

PILOTAGE: Vessels should radio their ETA to Agents who order Pilot. 24 hours' notice requested. Pilot launch flies "H" flag during day. Exhibits bright white light over red at night. To request Pilot on approach by day fly international "G" flag, or give 2 long and 1 short blast on whistle. At night flash 2 long 1 short. For vessels berthing alongside Pilot boards in bay; for vessels anchoring Pilot does not board but pilot launch indicates where vessel should anchor. Pilot boat equipped with VHF, Channel 16 (calling) and Channel 6 (working).

ANCHORAGE: Permitted anchorage within 800 m./900 m. East from end of breakwater or 300/500 m. South of breakwater within a limit of 400 m. from shore.

RESTRICTIONS: None.

MAX. SIZE: No limit to size of vessels which can anchor, but all anchorage positions should be indicated by pilot launch. For vessels berthing alongside quay max. permissible length 990 ft. max. draft 36 ft. Oil carriers discharge at buoys at Praia Formosa 3 miles to West of Funchal. Max. length of oil tankers than can berth at oil discharge buoys 665 ft. max. draft 36 ft.

HEALTH: Free Pratique may be arranged by Master sending wireless message addressed "Port Doctor Funchal" – "Request Free Pratique arriving . . . from . . . sailing to . . . number passengers . . . landing . . . number passengers in transit . . . number of crew . . . all well. Master".

In event suspected disease or fever on board Master should wireless either Port Doctor direct or to ship's Agents, who will inform Port Doctor. The Master will then be instructed what further action he is to take.

When vessel other than of national flag arrives after calling at another port in same country usual procedure applies, i.e. Masters' radio for Free Pratique or pratique granted by Doctor visiting in bay.

RADIO: Maderia Radio Station call sign "CUB" 500 kHz. Same station normally used by Agent when communicating with vessel.

TUGS: Two tugs each of 1,000 h.p. – 1,100 h.p. (bollard pull 18 tons) are available.

N.B. Vessels up to 2,000 gross tons are not obliged to use tugs.

Vessels of between 2,000 and 15,000 gross tons are obliged to use one tug.

Vessels over 15,000 gross tons are obliged to use two tugs.

BERTHING:

Quay No. 1 Length 139 m., depth 6 m.
Length 41 m., depth 7 m.
Length 19 m., depth 8.5 m.
Quay No. 2 Length 425 m., depth 11 m.
Quay No. 3 Length 347 m., depth 11 m.

CONTAINER FACILITIES: Container Terminal: Length 190 m. Depth 7.0 m.

Equipment: 1 Crane, 25 tons at 20 m.
1 Crane, 30 tons at 30 m.
1 Mobile Crane, 22 tons at 20 m.
1 "Travelift" of 45 tons capacity.
4 Container Handling Cranes with extendable spreaders for 20 ft., 30 ft. and 40 ft. containers.

STEVEDORES: When ships require labour, Agents must be notified before 1600 hrs. on working days and on Sundays and holidays before 1100 hrs., after these hours labour not available for last minute engagement. On Christmas Eve work stops at noon even if ships loading or discharging. No labour available Christmas Day, New Year's Day or Easter Sunday.

Grain cargoes can only be worked from 0800 hrs. to 2000 hrs. daily including Sundays, and a maximum of 4 gangs only can be worked simultaneously.

Bulk cargoes such as potash and fertilizers need to be bagged on board. Receivers supplying the bags – and this generally applies to grain. Bulk cement, clinker and granulated plaster is discharged by grabs.

MEDICAL: Advance notice is required by Agents for any medical attention required. Hospital facilities available. No inoculations required.

TANKERS: Diameter of connection of discharge lines 8 in. into pipelines of 12 in. diameter for black fuel and 10 in. diameter for white fuel. 1 anchorage buoy berth with max. draft of 36 ft.

DENSITY: Salt water.

FRESH WATER: Available ex-quay.

FUEL: Fuel oil available from 3,500 seconds Redwood 1 to 200 seconds Redwood 1. Also marine diesel and gas oil. 12 hours' minimum notice required.

FIRE PRECAUTIONS: At discharging buoys usual non-smoking precautions.

GANGWAY/DECK WATCHMEN: Gangway watchmen recommended.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: Tobacco, Wine and Spirits: Moderate supplies allowed for personal use during ship's stay.

CARGO GEAR: No specific local safety regulations. Vessels discharging must provide strops, slings and nets. Lifts over five tons must be effected by ship's gear.

10 mobile cranes are available.
1 crane – 6 tons at 12 m., 3 tons at 24 m.
3 cranes – 5 tons at 20 m.
3 cranes – 3 tons at 12 m.
1 crane – 15 tons at 13 m.
1 crane – 45 tons at 3 m.
1 crane – 20 tons at 3 m.

A floating crane is available which can lift up to 27 tons from the water line up to 8 m. This same crane can lift up to 20 tons from the water line to 12 m.

IDENTIFICATION CARDS: Required.

CONSULS:

Austria	21057	Monaco	20041
Belgium	20255	Netherlands	20317
Brazil	20355	Norway	20541
Costa Rica	24888	Panama	20091
Denmark	22031	Peru	21375
Dominican Republic	21057	Spain	20535
Finland	20596	Sweden	20121
France	21445	Switzerland	22101
W. Germany	20338	United Kingdom	21221
Greece	20824	United States	23309
Guatemala	20824	Uruguay	20535
Italy	23890	Venezuela	24050

REPAIRS: Repair yard available which can carry out most engine repairs on board except removing or replacing main engines. Hull work limited to removing riveting or replacing hull plates above water line, electric and oxy-acetylene welding. Most electrical work can be effected but notice required in regard to materials necessary. Foundry where castings can be made up to one ton weight.

DRY DOCKS: None.

REPATRIATION: Limited facilities for crew changes. Necessary repatriations can be made.

AIRPORT: At Santa Cruz, 20 km. East of Funchal. Service between Funchal and Lisbon operated by national airline TAP, 19 flights weekly Funchal/Lisbon/Funchal.

TIME: GMT maintained throughout year.

HOLIDAYS: New Year's Day (totally unworkable); Easter Sunday (totally unworkable); Municipal Holiday (local) (workable, 50% overtime); Camoes Day (workable, 50% overtime); Corpus Christi (workable, 50% overtime); Assumption (workable, 50% overtime); Proclamation of the Republic (workable, 50% overtime); All Saints (workable, 50% overtime); Independence of Portugal (workable, 50% overtime); The Immaculate Conception (workable, 50% overtime); Christmas (totally unworkable).

Workers' Day, Portugal Day and Good Friday are also totally unworkable.

Saturday is an ordinary working day. December 24 (workable up to 1500 hrs. only).

POLICE/AMBULANCE/FIRE: Police 22022; Ambulance 22122; Fire 21163.

SHORE LEAVE: All crew visiting shore must be in possession of special Landing Card, plus Identity Cards, Discharge Books or Passports, which must be shown to Immigration Officer at gangway. Crew Landing Cards must be stamped by Immigration Officer before crew can proceed ashore.

GENERAL: There is a Marina for 200 craft with depths between 3 m. and 6 m.

AUTHORITY: Capitania do Porto do Funchal, 9000 Funchal, Madeira.

Direccao Regional dos Portos da Madeira, Av. Arriaga, 50. 9000 Funchal, Madeira. *Postal Address:* Apartado 246, 9003 Funchal. *Tel:* 21041/2. *Telex:* 72290 Dipmad P. *Contact:* Duarte Nuno da S.Gomes, Director.

Malagasy Republic

ANTSIRANANA (Diego Suarez): 12.14 S. 49.26 E.

DOCUMENTS:

Documentation on Arrival:

Customs:
- 2 Crew Lists.
- 2 Personal Effects Lists.
- 2 Stores Lists (Bonded).

Immigration/Police:
- 4 Crew Lists and inspection of vessel and Seamen's Book.

Port Health:
- 1 Vaccination List and inspection of Derat Certificate.

Agents:
- 3 Crew Lists.
- Ship's Register to be lodged ashore.
- Clearance from Last Port.

Documentation on Departure:

An Official from the Port together with the Agent visits and will wish to see:

For a Liner:
- Load Line Certificate.
- Safety Equipment Certificate.
- Derat Certificate.

For a Cargo Ship:
- Load Line Certificate.
- Safety Construction Certificate.
- Safety Equipment Certificate.
- Safety Radio Equipment.
- Derat Certificate.
- Ship's Register (held by the Agent).

After checking all these an Outward Clearance Certificate will be presented. One is then free to leave the Port, the Agent having given an undertaking that all Port dues have been paid.

APPROACHES/PILOTAGE: Tides run fast in the Orangea Pass, but seem to follow the pattern as per the Admiralty Pilot. Until experience is gained it should only be taken in the hours of daylight. There are numerous natural transit marks available to the navigator, all very clearly described in the 'Pilot'. For this reason it would be essential to take this in fine visibility. Pilot can be taken at Cape Mine but this can be difficult and dangerous in the S.E. Trade season and ships are advised that they can proceed on into the Bay right up to Port Antsiranana Point.

Harbour is large and commodious but subject to very strong N.E. winds from May to October, width of entrance 300 m. Tidal current in Roads, which may attain 3 knots. HWST 2.36 m., LWST 3.56 m., HWNT 1.63 m., LWNT 0.99 m. Pilotage compulsory for vessels of 150 n.r.t. and more. For obtaining Pilot, ETA must be sent 24 hours in advance including ship's characteristics. Course to steer: From Lat. 12° 13′ 09″ S., Long. 49° 26′ 00″ E. Entrance 275° thence beacons in line heading 230°.

ANCHORAGE: There are many splendid anchorages available in this vast Bay. Vessels can anchor 2 cables off the N.W. corner of the wharf at Antsiranana (Diego Suarez).

RESTRICTIONS: No entry for vessels or crews from: Formosa, South Africa and South Korea.

MAX. SIZE: No restriction except max. draft alongside 11 m.

HEALTH: Yellow fever/cholera certificates required for vessels coming from African/Indian countries. Pratique is automatic for vessels entering after calling at another port in the same country.

RADIO: Radio station is "Diego Radio".

VHF: Harbour Master's Office does not have VHF. Navy have VHF Channel 16.

TUGS: Three small tugs available (belonging to Navy and require 24 hours' notice).

BERTHING: Ocean Vessel Wharf: Length 300 m., max. depth 11 m. HW.

Coaster Quay Wharf: Length 60 m., max. depth 4.20 m.

With Pilot, vessel can come alongside day or night.

CRANES: Two port cranes, only used for small coasters. 1×5 tons and 1×2 tons.

STEVEDORES: Advise before 0700 hrs. in order to commence the same day and before 1700 hrs. in order to commence next day at 0600 hrs. with maximum gangs.

Working Hours: 0700 – 1100 hrs., 1300 – 1700 hrs. Overtime Working: 0600 – 0700 hrs., 1100 – 1300 hrs., 1700 – 0600 hrs. No half shifts.

MEDICAL: Difficult to find medicines. In case of serious illness hospital facilities available.

TANKERS: See "Berthing". Discharging rate 200 cu.m.p.h. with flexible hose. Loading rate 30 – 50 t.p.h., depending on ship.

FRESH WATER: Available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Trade Union on the spot can supply.

OPENING/CLOSING HATCHES: Usually by ship's crew.

SPECIAL PORT REGULATIONS: See "Restrictions".

CONSULS: French Consul.

REPAIRS: All types of deck and engine repairs can be carried out.

DRYDOCK: *Shipmaster's Report:* 1975.

Length overall	199.05 m.	653.00 ft.
Subdivided into sections	128.96 m. 70.09 m.	424.00 ft. 229.00 ft.
Breadth at Bottom	28.40 m.	93.00 ft.
Breadth at Coping	36.60 m.	120.00 ft.
Depth at sill and blocks at MHWS	10.42 m.	34.40 ft.

Yard Services: Nothing was too much trouble for any of their staff attending this ship. Power was a bit of a problem but they did everything to help. Fire mains, fresh water, cranes were all good. Toilets and shower-rooms were more than adequate especially after we were given our keys and had them cleaned.

Workshops: A modern well equipped yard with every conceivable service from an iron foundry to upholstery shops. A clean, well kept set of shops including the building of small craft. The Engineers of this ship were very favourably impressed with the shops and technical services.

From time to time, the yard meet with certain material supply difficulties to satisfy full needs for ship repairs. It is recommended that Owners interested in docking their vessels at this yard study this matter before contracting.

Firms Address: Societe d'Exploitation pour la Construction et la Raparation Navale, B.P. 135, Antsiranana, Madagascar. Tel: General Manager (Home) 221-70, (Office) 226-84, Central 212-65 and 222-98. Telex: 93 103. Cables: Secren, Diego Suarez.

SURVEYORS: There is no Lloyd's Surveyor in the country. Often when required Lloyd's Representative flies up from Durban. Sometimes it is agreed that the resident Bureau Veritas Surveyor will subsititute. M. Ralibera Henri in Tananarive is the principal B.V. Surveyor in Madagascar. M. Ralibera received agreement from his head office in Paris to act as non-exclusive surveyor of N.K., N.V. and local insurance company.

CUSTOMS ALLOWANCES: (Tobacco/wine, spirits) Quantity permitted to be held out of bond is only for the personal consummation of each crew member.

CARGO GEAR: Load/discharge effected by ship's gear, no heavy lift cranes available.

REPATRIATION: For crew changes Entry-Visa is required and repatriation can be carried out according to Harbour Master's Certificate and Immigration permission.

AIRPORT: AirMad Services are available each day to connect with the international Air France flights to Orly from the local airfield about 8 miles from the town.

TIME: Local time is GMT plus 3 hours.

HOLIDAYS: Sunday, but can be worked on overtime from 0600 hrs. to 1400 hrs.

New Year's Day, Commemoration of 29th March 1947, Easter Sunday and Monday, May 1st, Ascension Day, Whit Monday, Independence Day (June 26th), Assumption BV Mary (August 15th), All Saints' Day (November 1st), Christmas Day, Anniversary of the Democratic Republic of Madagascar (December 30th). No work possible on these holidays. Overtime rates for all other holidays.

TELEPHONES: No telephones placed on board.

SERVICES: Facilities for compass adjusting, radar and radio repair by Secren (see "Drydock").

BANKS:

Bankin'Ny Indostria (BNI), Angle Rue de France et Rue Colbert, B.P. 4., Antsiranana, Madagascar. Tel: 221-46, 221-52.

Banky Fampandrosoana Ny Varotra (BFV), (Banque Nationale Pour Le Commerce), Rue Richelieu, B.P. 18. Tel: 211-89.

Bankin'Ny Tantsaha Mpamokatra (BTM), (Banque Nationale Pour Le Developpement Rural), Rue Richelieu, Antsiranana, Madagascar.

STORING: Local stores can be delivered directly on board even during loading/discharging, by the ship chandler. Agent will arrange Customs formalities.

SHORE LEAVE: Crew members are allowed ashore.

IDENTIFICATION CARDS: Seamen's Book is sufficient.

REGULATIONS: Any repair work involving even small temporary repairs only with Harbour Master's permission. Using vessel's lifeboat subject to Harbour Master's and Customs permission. Landing of foreign currency is strictly prohibited. Possession of local currency must be justified.

DELAYS: None.

AUTHORITY: Service Provincial de la Marine Marchande, au Port, Antsiranana, Madagascar. *Tel:* 211-33.

AGENT: S.C.A.C. Transport International, Box Poste 384, Diego Suarez, Madagascar, Malagasy Republic. Tel: Diego Suarez 21327 and 21347. Telex: 93102. Cables: Freight Antsiranana.

FORT DAUPHIN: 25.02 S. 47.02 E.

DOCUMENTS:
- Manifest of Cargo for discharge.
- Manifest of Cargo in transit.
- Ship's Stores List.
- List of Passengers Landing.
- Crew List.
- Franchise Certificate (for mail-carrying vessels).

PILOTAGE: The port is an open roadstead and pilotage not required.

ANCHORAGE: In depths of 8 m. Vessels anchoring are charged with port dues.

RESTRICTIONS: Port is normally used by coastal trading vessels. In case of liners handling cargo exceeding 150 tons, special permission required which is obtained by Agent.

HEALTH: Pratique should be requested from the Health Department, Tel: 36.

RADIO: Fort Dauphin Radio, call sign 5RD, between 0400 and 1630 hrs. GMT on following frequencies: 458, 500, 2182 and 2712 kHz.

TUGS: None available.

BERTHING: There are no berths alongside. Vessels work cargo at anchorage.

STEVEDORES: Arranged by the Fort Dauphin Lighterage Company. Advance notice of ETA required to arrange gangs. Average loading/discharging rate is 10 tons per hold per hour.

MEDICAL: 2 hospitals available in the town.

TANKERS: 1 buoy berth for tankers.

FRESH WATER: No water barge. Only small quantities can be supplied in emergency.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Opening and closing hatches carried out by stevedores.
CUSTOMS ALLOWANCES: 1 carton of cigarettes per man. No alcohol.
CONSULS: No local representatives.
REPAIRS: Only facilities available for repairing lighters.
REPATRIATION: No facilities for effecting crew changes.
AIRPORT: Situated 5 km. from the port, 4 regular flights per week.
TIME: GMT plus 3 hours all year round.
HOLIDAYS: Days on which work is normally carried out with overtime payment: Easter; Ascension Day; Whitsun; Assumption; Christmas.

Official holidays on which work can be arranged by special permission: 1st January; 1st May; 26th June (Independence Day); 14th October; Festival of the Republic.

FIRE/POLICE/AMBULANCE: Police Tel: 49; Fire 19; Ambulance 36.
SHORE LEAVE: Not permitted.
AUTHORITY: Service des Ports' Phares et Balises, Tananarive.

AGENT: SCAC Transport International, BP 425, Tananarive. Tel. 228–64. Cables: "Freight Tananarive". Telex 22251.

MAHAJUNGA (Majunga): 15.44 S. 46.20 E.

DOCUMENTS:
List of Crew Members.
List of Passengers.
Customs Documents.
Health Documents.
Manifests.
Bills of Lading.
Ship's papers.

PILOTAGE: Vessels requiring Pilot must apply by cable to Mahajunga Harbour Master's office at least 24 hours before arrival. Pilot embarks at Narcissus buoy.
ANCHORAGES: Indicated to Ship's Master by cable from Mahajunga Harbour Master's office.
RESTRICTIONS: Ships can enter day and night. Max. draft allowed 10 m.
MAX. SIZE: No restriction except for max. 10 m. draft.
HEALTH: Pratique automatic when vessel comes from a Madagascar port. Pilot is health agent.
RADIO: Radio Mahajunga.
STEVEDORES: Vessel informs Agent by telegraph 24 hours in advance of number of gangs needed.
MEDICAL: Hospital available.
TANKERS: 1 berth, max. draft 10 m.
FRESH WATER: Unlimited drinking water.
CERTIFICATES: See "Toamasina".
CUSTOMS ALLOWANCES: See "Toamasina".
CONSULS: French and Greek Consulates.
REPAIRS: Minor repairs only.
REPATRIATION: All facilities available.
AIRPORT: Served by regular airlines; 7 km. from town.
TIME: GMT plus 3 hours.
HOLIDAYS: Catholic and official holidays. Commercial transactions possible on public holidays.
POLICE/FIRE/AMBULANCE: Police 24–85; Fireman 13; Hospital 29–15.
AUTHORITY: Harbour Master.

AGENT: S.C.A.C. Transport International, B.P. 256, Mahajunga. Tel. 23.87 and 20.08. Telex: 62710. Cables: Freight Mahajunga.

TOAMASINA (Tamatave): 18.08 S. 49.22 E.

(See Plan Book)

DOCUMENTS:
Merchant Marine Department:
Safety Certificates.
Crew List.
Passengers List.
1 Full Set Cargo Manifest.
Health:
International Maritime Certificate of Health.
List of Passengers Disembarking.
Transit Passengers List if any.
Derat Certificate.
Crew List.
Immigration:
List of Passengers Disembarking (required on arrival and before ship's departure).
Transit Passenger List if any.
4 Copies Crew Lists.
Customs:
Ship's Register.
3 Stores Lists.
3 Crew Effects Lists.
3 Crew Lists.
5 Full Sets Cargo Manifests.
3 Lists Passengers Disembarking and Transitting if any.
Port:
4 Full Sets Cargo Manifests.
4 Dangerous Cargo Lists.
Agents:
2 Full Sets Cargo Manifests.

PILOTAGE: Compulsory. Telegraphic address: Porttave Toamasina. Telex: 55619 Port Mg. Ships advise Agents hour of ETA. Pilots informed by Agents. Due to the extension of breakwater, the South Pass is closed to deep-sea ships, except small coastal vessels. For large vessels, the pilot boat waits on the East Pass on line 277° True or range approximately 3.3 miles S.S.E. of Prunes Island Lighthouse.

The pilot boat is fitted with a small portable VHF set (Channels 16, 12, 9 and 6) but its effective range is only about 5 miles.

ANCHORAGES: No special anchorage. If no berth available on ship's arrival, Pilots put ships at best anchorage, according to draft and length of ship, between Reef and shore.
RESTRICTIONS: Ships enter and sail day and night any time. Max. tide only 3 ft. However, tankers berth in daytime only between 0500 hrs. and 1500 hrs.
MAX. SIZE: For Roads, max. length about 200 m. (concerns only passenger ships). For cargo vessels max. length 180 m.; max. draft 31 ft. 2 in. (9.5 m.).

For tankers, max. LOA 230 m., max. beam 31 m., max. draft 12.20 m. in salt water. Distance from stern to manifold 110 m.

HEALTH: Quarantine message sent to Agents who inform Health Service. "Q" flag must be hoisted during daytime or red over white light at night time if health satisfactory. Master presents Maritime Declaration of Health. Health Officer and Immigration board at Quarantine Anchorage.
RADIO: Toamasina Radio, call sign 5RS.
VHF: Toamasina Radio – Channels 16, 26 and 27.
TUGS: 1 tug of 1,750 h.p. available to assist berthing. One tug 200 h.p. for towing fresh water barge.
BERTHING: 4 berths for deep-sea ships and 2 berths for coastal ships. Ships moored at berth in order of arrival and according length and draft. Mooring has to be very strong, due to swell that may sometimes enter harbour when S.E. trade winds are strong, or if cyclone in vicinity. Swell is so dangerous that ships have to go to anchorage or put to sea until weather improves.
CRANES: 3 ton and 6 ton cranes available for hire. Floating crane 80 ton capacity and mobile crane 45 tons also available.
TANKERS: 1 refinery imports crude oil and exports fuel and refined oils. Tankers moored using anchors forward, and moorings aft.

Diameter of lines 12 inches. No slop discharge facilities. If tanks are to be washed, slops must be discharged outside harbour.

Shipmaster's Report: A brief description of the berthing manoeuvre is as follows:

About 350 m. from the berth, let go starboard anchor and swing around to starboard with the assistance of a tug, slacking the cable all the time. As vessel completes swing, let go Port anchor, then slack down both anchors. Vessel usually finishes up with about 9 shackles on each anchor. Aft, vessel secures with 4 lines from the starboard quarter to the buoy and 4 lines from the port quarter to the quay. The mooring operation takes about 2.5 hours and unmooring about 1.5 hour.

Facilities:

1. One 12 in. rubber hose, connected always from the starboard side. You can expect 4-5 hours for connecting up the hose and about 2-3 hours for disconnecting.
2. The shore tanks are situated about 5 km. from the vessel, and have a total storage capacity of about 100,000 cu.m. The tanks are located about 4 m. above sea level, the heights of the tanks being approximately 13 m.
3. The main pipe-line is 20 in. diameter by 5 km. long.
4. Maximum back pressure permitted is 6-7 kg. However, in view of the length and size of the line it is very difficult to obtain such a pressure, even with all 3 pumps going all out. Understand from the refinery Superintendent that maximum back pressure so far attained was 4 kg. The back pressures are monitored by gauges fixed on the manifold and on the quay.
5. The maximum draft permitted at the Tanker mooring is 40 ft. Fully laden tankers arriving can berth only in daylight hours. However, 24 hour sailing is possible.
6. The cargo discharging operations are as follows: The main pipe-line is kept constantly filled with bunker fuel and has a capacity of approximately 1,000 cu.m. After connecting up vessels commence discharge of their crude. The bunker fuel in the line is thus pushed back and stored in a separate tank ashore. The vessel then continues to discharge her full cargo. After completing discharge, all tanks are inspected and a dry certificate obtained. The refinery then pushes back the pipe-line crude (1,000 cu.m.) and about 1,200 cu.m. of bunker fuel, which must be stored on the ship in separate tanks. Thereafter, the vessel must discharge all crude, and finally the bunker fuel.
   Thus the pipe-line is constantly kept filled with bunker fuel.
   The drawbacks to the vessel are obvious. 3 individual stripping operations are involved viz. stripping the crude during completion of discharge, stripping of pipe-line crude stored in the ship and stripping of the bunker fuel.
   Note: Capacity of shore pumps (when transferring oil back to ship) is 800 t.p.h.
7. Communications: A telephone is installed aboard for communication between ship and shore. This however, never seems to be at its best when you need it most. Other difficulties are the language barrier (French being spoken). Notwithstanding, the slow rate of discharge obtainable, helps to offset in part the lack of communications.
8. Out-turn quantities: It is understood that these are checked by sounding shore tanks.
9. Bunkers are available on 24 hours notice. Range Redwood 1,000–1,500 seconds.
10. Diesel oil is available, however, as the supply barge has been out of commission for sometime now, supply cannot be depended upon.
11. Fresh Water available.
12. Connection and disconnection of the cargo pipe-line is undertaken by the refinery personnel.

STEVEDORES: ETA to Agents must give hatches, tonnages, and all information about cargo.

Working hours: 1st shift 0700 – 1400 hrs., 2nd shift 1400 – 2100 hrs. On Sundays there is one shift 0700 – 1400 hrs. at overtime rates.

MEDICAL: Preferable to inform Agents in advance. All hospital facilities available.

DENSITY: 1023.5.

FRESH WATER: Delivered by water-boats at rate of about 100 t.p.h.

FUEL: Available alongside. Gas oil and diesel oil at 70 t.p.h. Fuel oil at 110 t.p.h.

FIRE PRECAUTIONS: 1 fire-boat stationed near tankers.

GANGWAY/DECK WATCHMEN: Recommended. Very low cost.

OPENING/CLOSING HATCHES: Booms always operated by crew. If hatches are Macgregor type, by crew; otherwise by stevedores.

CERTIFICATES: Safety Certificates (3), Derat or Exemption Certificate, Register, Load Line Certificate.

CUSTOMS ALLOWANCES: 200 cigarettes. Wine/Spirits, 1 opened bottle.

IDENTIFICATION CARDS: Only seaman's papers required.

CONSULS:

Denmark	2615	Great Britain	2680
Netherlands	2632	Norway	2549
France	2721	Sweden	2136

REPAIRS: Only small repairs possible.

REPATRIATION: Possible, arranged by Agents.

AIRPORT: Served by regular airlines. 1 flight a day by Air Madagascar to Tananarive and 4 to 6 flights a week from Tananarive to Africa and Europe.

TIME: Local time GMT plus 3 hours.

HOLIDAYS: 13 holidays per year. Cargo work cannot be arranged on holidays but can be on about every second Sunday.

TELEPHONES: 2 connections at 2 berths used for passenger ships, but may be requested by other ships.

SHORE LEAVE: Permitted.

DELAYS: Not fixed. When all berths occupied, ships wait at anchorage.

GENERAL: 2 cranes of 3 tons each. 1 floating crane for max. 80 tons weight. Small tugs and lighters for ships operating on roads. 1 port launch for crews of ships at anchor.

DEVELOPMENTS: New quay recently constructed.

AUTHORITY: Societe d'Exploitation du Port de Toamasina, B.P. 492, Republic of Malagasy. *Tel:* 321-55/56, 327-60/68/69/71. *Telex:* 55.619 Port Mg.

AGENT: SCAC Transport International, Rue du Capitaine-Shoel, BP 411, Telex: 55610. Tel. 320-48; 320-49; 326-80; 326-81. Cables: "Freight Toamasina".

NOTES

Please also advise Shipping Guides Ltd.

BINTULU: 03.16 N. 113.04 E.

LOCATION: The single buoy mooring is positioned at Lat. 3° 20′ N., Long. 113° 01′ E. and can accommodate tankers with max. SDWT of 320,000 tonnes.

DOCUMENTS:

Last Port Clearance.
9 Crew Lists
3 Malaysia Crew Lists (Provided on arrival).
2 Copies General Stores Lists.
1 Shipping Arrival Report (Provided on arrival).
1 Application for Clearance (Provided on arrival).
5 Passenger Lists.
3 Narcotics Lists.
3 Arms and Ammunitions Lists.
2 Crew Personal Declaration Lists.
2 Vaccination Lists.
3 Copies Inward Manifest ("Nil" Manifest required).
International Maritime Health Form, provided by Agent.

Note: If vessel from an infected port of which the state of health is suspect, the Medical Officer may board in order to inspect crew and relevant international medical certificates.

PILOTAGE: Bintulu Port Authority Pilot, Loading Master, assistant and surveyors board at pilot boarding and disembarking position Lat. 03° 22.0′ N., Long. 112° 58′ E. Derrick to be rigged on starboard side prior to arrival. The regulation pilot ladder should be rigged well aft on the lee side. Prior to moving to berth mooring equipment is loaded onto vessel's forecastle.

Loading Master and about 4 shore personnel including Agent remain on board during loading operations.

ANCHORAGES: A petroleum anchorage bounded by the following co-ordinates has been established:

Lat. 03° 24.4′ N., Long. 112° 57.3′ E. Thence to position
Lat. 03° 21.3′ N., Long. 112° 59.6′ E. Thence to position
Lat. 03° 22.0′ N., Long. 113° 02.4′ E. Thence to position
Lat. 03° 26.0′ N., Long. 113° 01.2′ E. Thence along the limits of the port to position Lat. 03° 24.4′ N., Long. 112° 57.3′ E.

Use of ship's anchors is strictly prohibited except in extreme emergency. The anchors must never be released or brought anywhere near the entire length of the submarine pipe-line nor closer than 350 m. radius from the SBM. Both anchors should be secured prior to berthing operations.

RESTRICTIONS: None. Berthing and unberthing is carried out night and day.

MAX. SIZE: The minimum water depth in the manoeuvring area is 62 ft. and the max. permissible draft 52 ft. Max. distance bow to centre manifold 590 ft.

TUGS: Tugs available. The Port Authorities make it compulsory for tankers to use a tug for berthing/unberthing.

BERTHING:

Floating Mooring Rope Assembly: The buoy to tanker mooring comprises 2×12 in. × 150 ft. nylon double braided ropes. At the buoy end, the hawsers are joined to the pad eyes of the Rotating Mooring Arm with heavy duty shackles. Each hawser of the dual floating mooring hawser is fitted with a 3 in. diameter chafing chain.

The pick-up assembly consists of:

(i) 10 in. circumference polypropylene messenger rope with spliced eyes on each side. Length 150 ft.

(ii) 10 in. circumference polypropylene pick-up rope with spliced eyes of 2 ft. on each side. Length 45 ft.

(iii) Pick-up support buoy.

Mooring Craft: A mooring launch will be in attendance. The launch is used to send the messenger end of the mooring ropes to the vessel. On completion of mooring the launch picks up the hoses for connection and remains at the vessel until the completion of loading.

Mooring Procedure: Before the arrival of the tanker, the Berthing Master has to go to the SBM at least 1 hour early to check and make sure that the hoses are not fouled. The mooring craft proceeds to the vessel to disembark the Berthing Master and offload the mooring gear.

During the approach the mooring boat tows the port mooring rope around the buoy so that it is out of the way when the starboard inner one is being worked on. The starboard inner rope is then run out to its full length.

When the end of the messenger is within range the vessel's bow is approximately 115 m. from the SBM i.e. 70 m. to go to the final secured position. The approach speed at this point should not exceed 0.5 knots.

As the vessel slowly closes in on the buoy the messenger pick-up rope and chafing chain are hove on board until the chafing chain is in position in the fairlead (marker buoy just outboard of the fairlead). The special shackle on the nylon snotter is then connected to the triangle plate or alternatively the chain is secured in the bow stopper and the inner mooring is then fast.

While the inner mooring rope is being tended to, the mooring boat clears the (port) outer mooring rope from the buoy. This rope is then hove on board and connected in the same way as the inner one.

The vessel should have 2 mooring ropes ready on the forecastle and mooring is carried out by ship's crew.

Unmooring: Weight on the mooring ropes may be taken off by using ship's engines. The polypropylene pick-up ropes, which remain connected to the triangle plates of the chafing chains, are lead to the winch, and the weight is taken off the bow stopper or nylon snotter as the case may be. The bow stoppers are released or special shackles disconnected, and the moorings and pick-up ropes lowered from the bow into the water.

When both moorings have been let go, the tanker is given sternway until the bow is well clear of the hose strings. The mooring and hose connection equipment is then transferred to the mooring launch.

LOADING:

Cargo Loading Operation: Throughout the vessel's stay at the SBM, the Berthing Master will remain on board to co-ordinate ship/shore operations and one launch will remain at location as a safety precaution.

Hoses: 2×16 in. diameter floating hose strings of 810 ft., in length are connected to the turntable. The strings terminate in a 16 in. diameter rail hose for direct connection to the tankers starboard manifold. The last 3 units of the 16 in. diameter tail hoses are electrically discontinuous, such that stray currents from the crude carriers are not carried on to the buoy.

Connecting Hoses: Hose connection is carried out by ship's crew. The hoses are lifted and connected one at a time. The forward or 'inner' hose is tended to first. The derrick runner is hooked into an enlarged link in the hose lifting chain and the hose end is then lifted out of the water until sufficient length is available for direct connection to the tanker' manifold. The weight of the hose in this position is transferred to the hose hang-off chain and the hose end is then lowered onto the deck. The blank flange is removed and the hose connected to the vessel's manifold. After connecting, the hoses are supported at the tanker side by flat webbing slings hung from the derrick runner in order to maintain a reasonable radius of bend. They are also suitably lashed to the hose bar of the side rail to reduce movement caused by sea conditions. In seas exceeding 5 ft., the floating hose strings become lively and require attention. Excessive movement of the hoses will result in chafe and strain on the flanges in way of the manifold. This can be reduced to a minimum by a suitable suspension of the hoses from the derrick runner backed up by rope lashings at the side rails or hose bars. Such preventive measures depend largely on the construction and layout of the tanker in the manifold area, also on the distance of the manifold from the vessels' side.

Loading Procedure: Bintulu Crude is loaded at Bintulu Terminal. The quantities loaded are checked by the terminal at frequent intervals and vessels are requested to verify the shore figures.

The terminal is capable of giving maximum loading rates of up to 7,000 cu.m./hr. and a maximum back presssure at 120 p.s.i. at the terminal end. The Berthing Master also acts as Loading Master and as the terminal's representative he will attend to all cargo formalities (SSB forms, safety check list, etc.).

Prior to and during loading operations the following procedure will apply:

(a) A joint inspection is carried out by ship and terminal representative to ensure all requirements on the safety check list have been complied with.
(b) The methods of communication between ship and shore are clearly established and understood. This includes procedures for normal and emergency stops of cargo loading operations. Test calls are made to ensure the system is operating satisfactory.
(c) Ship and shore to confirm readiness to start cargo loading operations.
(d) Commencement of loading to be at slow rate.
(e) Lines and hoses are checked and faults rectified. Launch to patrol around vessel to check for oil leakages into the sea.
(f) When the ship confirms receipt of cargo, test the emergency trip. After the test is completed start pumping and gradually increase to agreed loading rate.
(g) Lines, hoses and the water around the vessel are again checked.
(h) Ship and shore figures are to be compared every 3 hours and discrepancies investigated.
(i) At least 15 minutes notice should be given to the terminal before each stop or in regard to slowing down the loading rate for "topping off".

Suspension of Loading Operation: If loading operations are suspended for an excessive period (e.g. leakage), hoses should be disconnected, blank flanged and made ready for lowering into the sea.

Disconnecting Hoses: The "after" or outer hose is disconnected first. It must be assured that all the bolts are fitted and properly tightened. The gasket must be in good condition and changed regularly. As soon as the hoses have been disconnected from the tanker's manifold, the blank flanges are fitted and the hose support buoy as well as the free end of the "hose hang-off chain" are shackled to the lug on the spool piece. Each hose is lowered over the side and towed clear from the tanker's side or temporarily secured to the SBM in a bight to prevent possible entanglement with the tanker's propeller.

DEPARTURE ROUTE: For deep draft vessels the following departure routes (approaching – opposite course) are recommended:

North-West Route:

From SBM steer 304° to position: Lat. 3° 51′ N., Long. 112° 14′ E.

Along this route 2 navigational light buoys have been laid both SOUTH CARDINAL:

1. PARSONS SHOAL (Beting Tugau) position: Lat. 3° 52′ 22″ N., Long. 112° 16′ 06″ E.

2. SOUTH ACIS SHOAL (Beting Likau) position: Lat. 3° 35′ 50″ N., Long. 112° 39′ 36″ E.

North-East Route:

From SBM steer 015° to position: Lat. 3° 35′ 25″ N., Long. 113° 05′ 25″ E., which is marked by EAST CARDINAL light buoy (Beting Nabau).

Onward course 042° to position: Lat. 3° 52′ N., Long. 113° 20′ E.

The N.N.E.'ly tip of the COCHRANE BANK is marked by an EAST CARDINAL light buoy (Permating Payong) in position: Lat. 3° 51′ 38″ N., Long. 113° 18′ 06″ E.

A 36 in. gas trunk line has been laid to the North and East of the SBM.

HEALTH: See "Documents".

RADIO: Vessels are required to advise SSB/Respective Agents of their ETAs 72 hours and again 36 hours prior to arrival. Telexes or telegrams should be sent to MA74306 or Saroilco Miri, respectively.

6 hours and again 3 hours prior to arrival, vessels are required to confirm their ETA to Bintulu Terminal on VHF Channel 18.

W/T traffic should be passed through Singapore Radio, Kuching or Miri Radio.

Information required prior to arrival: Standard message to Masters of vessels calling at SBM. Please advise.

AAA ETA and draft at Bintulu SBM.
BBB Customs and Health requirements.
CCC Is vessel equipped with bow chain stopper, Smit Brackets and large central Panama Chock. (This information required from unknown vessels only.)
DDD Are manifold connections as per OCIMF specifications.
EEE Rig starboard derrick to maximum SWL (minimum acceptable 7 tons).
FFF Have 2×16 in. diameter manifold connections ready on starboard side.
GGG Be advised that vessel must maintain full readiness to manoeuvre during stay at SBM.

Berthing Instructions: After ETA advice one of the following messages will be transmitted to the Master.

AAA Based on your ETA . . . present intention is to berth you on arrival.
BBB Pilot will board at the boarding area of 2 miles diameter in the following position:
Lat. 03° 22′ N., Long. 112° 58′ E.
CCC Confirm ETA at least 48 hours in advance. When within range you are required to confirm your ETA 3 hours prior to arrival at Bintulu Terminal on VHF Channel 18 or 16.
DDD Please keep us advised of any changes in your ETA. Onus of ETA confirmation rests with vessel.
EEE After having established radio contact on VHF you will receive further instructions.

VHF: Bintulu Port Control operates on VHF Channels 12, 14 and 16 and Bintulu Terminal on Channel 18, ships should inform Bintulu Port Control on Channel 12 and Bintulu Terminal on Channel 18 of their ETA at least 3 hours before arrival at pilot boarding point or as soon as VHF contact can be established. Bintulu Port Authority requires every vessel whilst underway within port limits and in the approaches thereto to maintain continuous watch on Channel 12.

BALLAST: Vessels must arrive with sufficient ballast for safe manoeuvring into the berth.

There are no facilities for the shore reception of ship's ballast. Vessels are accepted for loading on the express understanding that only clean ballast will be discharged into the sea.

Deballasting prior to the ship being fully secured to the buoy is only allowed after consultation with the Berthing Master.

DENSITY: Varies between 1020 and 1025.
FRESH WATER: Can be supplied by water boat.
FUEL: Not available.
REPAIRS: No facilities available.
TIME: GMT plus 8 hours.
GENERAL:

Weather: All the SBM's concerned are positioned in the open sea. The weather in this region is basically good for tanker operations.

The seasonal weather patterns are broadly divided into 3 and the terminology used is consistant with that of South East Asia. These 3 types are:

(1) S.W. Monsoon (June-October).
(2) N.E. Monsoon (December-March).
(3) Transitions between the Monsoons.

Persistant bad weather occurs during the N.E. Monsoon. High swell conditions can persist for periods of 3 to 4 days and in extreme conditions for up to a week. During the S.W. Monsoon winds are generally light to moderate, but during brief surges (generally lasting less than 36 hours) winds are occasionally strong, and local gale force squalls are experienced. The most favourable time for tanker operations is during the transition periods. Winds are lighter and variable. Seas in this period are rarely more than very slight. The only troublesome periods are the occasional severe squalls that originate from inland, which are associated with cumulonimbus clouds and thunderstorms.

The basic patterns of these squalls are vigorous thunderstorms inland, increasing as the storm approaches. Just before the onset of torrential rain, the wind backs rapidly towards the land and increases violently to the peak gust.

Immobilisation: Immobilisation of engines is not permitted at any time during the vessel's stay at the SBM.

Transmission of Ship's Radio: Use of the ship's radio transmitter is prohibited during the vessel's stay at the SBM.

DUNGUN, Malaya: 04.47 N. 103.27 E.

DOCUMENTS:

Register.
Last Port Clearance.
10 copies Crew List.
6 copies Passenger List (if any).
6 copies Stowaway List (if any).
2 copies Stores List (including Firearms and ammunition).
2 copies Dutiable Liquor and Tobacco List.
2 copies Crew Declaration List (cameras, radios, etc.).
2 copies Cargo Manifests.

PILOTAGE: Extra charge for pilotage outside normal office hours and holidays. Ocean vessels should anchor about 0.8 miles S.E. of Tg. Dungun Lighthouse.

ANCHORAGE: On arrival vessels required anchor about one mile outside berthed ships to obtain Pratique. Accommodation ladder must be rigged on lee side to allow Port Authorities to board.

RESTRICTIONS: None.
RADIO: Only via Kuala Lumpur.
VHF: Not available.
RADAR: Not installed.
BERTHING: Open sea discharge at anchorage (Mringkit Anchorage $500.00) on to barges.
CRANES: Maximum capacity 10 tons.
STEVEDORES: 4 days' notice required.
MEDICAL: No facilities.
FRESH WATER: Not available.
FUEL: By barge, 7 days' notice required.
CONSULS: None.
REPAIRS: Minor repairs only.
DRY DOCKS: None.
GANGWAY/DECK WATCHMEN: Available, rate $30.00 per hour.
AIRPORT: 60 miles.
HOLIDAYS: Work can be arranged on Fridays and other public holidays.
DELAYS: None.
CUSTOMS: Customs Office hours 0830 to 1630 hrs. (Thursday afternoons, Fridays and holidays excepted).
IDENTIFICATION CARDS: Every member of crew must produce Identity Document or Shore Leave Pass at Customs House when landing and again when returning to vessel.
SHORE LEAVE: No seaman may proceed more than 3 miles from Dungun Customs House. The Immigration Officer has authority to limit or prohibit Shore Leave in all cases.
SURVEYORS: Cargo inspectors available at 24 hours notice. Surveyors available from Kuala Lumpur, provided sufficient notice given.
BANKS: United Malayan Banking Corp. and Bank Bumi Putra.
STORING: See "Prelims" page viii.

1. No.
2. —
3. No. 2 miles.
4. Yes, at private jetty.
5. Bonded cargo should be transported from the private jetty to the customs warehouse.
6. Yes.

AUTHORITY: The Port Officer, Dungun, Malaysia. *Tel:* 096-413689.

KERTEH TERMINAL: 04.34 N. 103.28 E.

(See Plan Book)

PORT LIMITS: The port area is enclosed between Latitudes 4° 30′ N. and 4° 37′ N. and between Longitudes 103° 26′ E. and 103° 34′ E.

LOCATION: The Kerteh Port Marine Terminal is situated in position Lat. 4° 34′ 1.22″ N., Long. 103° 28′ 1.75″ E. off the East Coast of Peninsular Malaysia in the South China Sea approximately 13 miles South of Kuala Dungun.

The 3 Single Point Moorings are positioned in a 20 sq. mile Restricted Area which extends approximately 5 miles from the coast.

DOCUMENTS: Masters are required to prepare documents prior to arrival in port such as:

Last Port Clearance.
Ship's Certificate.
Manifests (List of Cargo onboard).
12 Crew Lists.
2 Store Lists.
2 Personal Effects Lists.
2 Lists of Narcotics.
1 Vaccination List.
1 List of Arms/Ammunition.

PILOTAGE: A Mooring Master will board the vessel to assist with berthing.

Masters should ensure that the Malaysian Flag together with the appropriate International signals are displayed for a vessel approaching port.

NAVIGATION: *Charts:* Charts for the area are as follows:

1. U.S. Naval Oceanographic Office, New Chart No. 71024.
2. British Admiralty, Chart No. 4704.
3. British Admiralty, Chart No. 3543.
4. British Admiralty, Chart No. 1355.
5. British Admiralty, Chart No. 2414.
6. British Admiralty, Chart No. 2600.
7. British Admiralty, Chart No. 1374.
8. British Admiralty, Chart No. 770.

Sailing Directions: Sailing Directions are in the following: China Sea Pilot, Volume 1.

When approaching the Kerteh Port Marine Terminal from seaward, several conspicuous peaks are clearly visible. (Refer to Views A and B on British Admiralty, Chart No. 770). Good radar echoes are obtained from Tg. Labuhan, Tg. Pelor and Pulau Tenggol, an island approximately 14 miles East of Tg. Dungun.

NAVIGATION AIDS: In addition to the navigational aids noted on the Navigation Charts, the following Navigational Lights and buoys are placed:

1. Kerteh Port Marine Control Tower Light:

Position	Lat. 4° 34′ 1.22″ N., Long. 103° 28′ 1.78″ E.
Description of Structure	Steel lattice tower – Height 35 m.
Characteristic	Isophase 2 secs. White Red White
Visibility	12 nautical Miles
Sector	W – 360° to 045° vis. 12 miles R – 045° to 125° vis. 9 miles W – 125° to 360° vis. 12 miles

2. Kerteh Port Sea Buoy:

Position	Lat. 4° 32′ 41″ N., Long. 103° 31′ 27″ E.
Shape	Pillar
Colour	Red and white vertical stripe
Light Characteristic	Fl (W) every 10 secs.
Visibility	8 miles

3. Paton Bank Buoy:

Position	Lat. 4° 32.5′ N., Long. 103° 31.5″ E.
Shape	CAN
Colour	Red
Light Characteristic	Fl (R) 5 secs.
Visibility	8 miles

4. Flares:

Position	Lat. 4° 34.2′ N., Long. 103° 27.83′ E.
Flare stack ht	90 m.
Tank ht	15 m.

5. Tg. Labohan Light:

Position	Lat. 4° 31′ 18″ N., Long. 103° 28′ 18″ E.
Characteristic	Fl (W) 4 secs.
Visibility	15 nautical miles

6. Danger Line Buoys:
These buoys are 1,000 m. apart and indicate the 15 m. (50 ft.) Admiralty Chart Datum line.

Shape	Pillar
Colour	Yellow
Light Characteristic	N1 – Fl Y 4 sec.
	N2 – Gp. fl. y(3) – 5 secs.
	N3 – Gp. fl. y(4) – 10 secs.
	N4 – Gp. fl. y(5) – 15 secs.
Visibility	2 nautical miles

Positions as follows:

B-4 Danger Buoy N 1	Lat. 4° 33′ 33.7″ N., Long. 103° 28′ 46.7″ E.
B-3 Danger Buoy N 2	Lat. 4° 34′ 06.5″ N., Long. 103° 28′ 38.3″ E.
B-2 Danger Buoy N 3	Lat. 4° 34′ 35.9″ N., Long. 103° 28′ 29.1″ E.
B-1 Danger Buoy N 4	Lat. 4° 35′ 07.9″ N., Long. 103° 28′ 21.6″ E.

7. Refinery SBM:

Position	Lat. 4° 34′ 32.2″ N., Long. 103° 29′ 02.1″ E.
Colour	Orange
Light Characteristic	White, Flashing Letter U (· · –)
Visibility	2 nautical miles
Fog Horn	Nil
Hose Strings Lts	Flashing red in unison

8. SALM No. 1:

Position (proposed)	Lat. 4° 34′ 21.9″ N., Long. 103° 30′ 18.1″ E.
Colour	Yellow with black vertical stripes
Light Characteristic	White, Flashing Letter U (· · –)
Visibility	2 nautical miles
Fog Horn	Nil

9. SALM No. 2:

Position (proposed)	Lat. 4° 33′ 26.5″ N., Long. 103° 30′ 45.4″ E.
Colour	Yellow with black vertical stripes
Light Characteristic	White, Flashing Letter U (· · –)
Visibility	2 nautical miles
Fog Horn	Nil
Hose Strings Lts	Flashing white in unison

The above buoys with the exception of the SBM and SALM's are subject to shift position and should not be relied upon for navigational purposes.

When approaching the Terminal, Kerteh Port Marine Control will advise if the above buoys are in position.

ANCHORAGE: Vessels bound for Kerteh Port Marine Terminal should approach the anchorage area located S.E. of the Terminal (See "Plan Book"). In doing so they should avoid the Restricted Area.

The Anchorage area is 4 miles square bounded by Lat. 4° 30.0′ N. and Lat. 4° 32′ N., and Long. 103° 32.0′ E. and Long. 103° 34.0′ E.

Vessels are strictly prohibited to anchor in any position, whether inside or outside the Restricted Area other than in the area designated above for this purpose. Severe action will be taken against any such vessel that ignores this directive.

During severe weather conditions it is not advisable to anchor and vessel should slowly steam to seaward, maintaining a safe distance off the Restricted Zone and remain within VHF radio range during this procedure.

Rules for Vessels at Anchor: All vessels at anchor awaiting berth or for any other reason at Kerteh Port Marine Terminal must comply with the following requirments:

1. Engine to be kept on standby.
2. Officer of the watch to remain on the bridge.
3. Helmsman/Standby man to remain on the bridge.
4. Visual anchor bearings (checked by radar) to be taken at intervals not exceeding 15 minutes.
5. Listening watch to be maintained on VHF Channel 16.
6. Engineer Officer of the watch to be on standby in the engine room.
7. Gangway to be hoved clear of the water to reduce the incidence of unauthorised boarding.
8. No unauthorised personnel to be allowed on board.
9. No shore leave allowed.
10. As the holding ground is poor off the coast of Trengganu at least 5 shackles of anchor chain should be used, even in calm weather.
11. The second anchor should be ready for instant use, i.e. clear of the hawse pipe and secured by the brake only.
12. Wire/Nylon towing springs should be ready fore and aft to facilitate emergency towing if required. Wires should be flaked out on deck to allow a clear run of 350 ft.

Restricted Area: The restricted area is bounded by imaginary lines connecting the following points as shown on the Kerteh Port Chartlet.

1. Lat. 4° 34′ 27.5″ N., Long. 103° 27′ 53.3″ E.
2. Lat. 4° 37′ 00.0″ N., Long. 103° 31′ 00.0″ E.
3. Lat. 4° 32′ 00.0″ N., Long. 103° 33′ 00.0″ E.
4. Lat. 4° 33′ 00.0″ N., Long. 103° 31′ 00.0″ E.
5. Lat. 4° 33′ 00.0″ N., Long. 103° 28′ 25.0″ E.

Vessels should not enter the Restricted Area without the services of a Mooring Master.

HEALTH: Radio Pratique should be requested through a local shipping Agent.

MAX. SIZE: *SBM:* Depth 60 ft., max. draft 36 ft., max. size 85,000 d.w.t. with part load. At present product tanker only of 35,000 d.w.t. operating.

SALM No. 1: Depth 90 ft., max. draft 67 ft., max. size 250,000 d.w.t.
SALM No. 2: Depth 80 ft., max. draft 65 ft., max. size 250,000 d.w.t.

RADIO: All radio traffic to be channelled through Singapore Radio. Vessels to maintain radio watch on the same station.

Cables for EPMI to be addressed to OFPROD Kuala Lumpur, Telex: MA 30511 "Urgent for TCOT manager please get him". Cables for Petronas to be addressed to International Marketing, Petronas, Telex: Petron MA 30032, 30696.

Singapore Radio works on the following frequencies:–

Call Sign	*Transmit (kHz)*	*Receives (kHz)*	*Watch (GMT)*	*Remarks*
9VG4	2182	2182	0000–2400	Call, replay and safety
9VG87	4125	4125	0000–2400	
9VG88	6215.5	6215.5	0000–2400	
9VG89	8780	8257	0000–2400	Common calling frequencies
9VG90	13162.9	12392	0000–2400	
9VG91	17294.9	16522	0000–2400	
9VG5	2760	2527	0000–2400	Working frequencies for passing of radio telegrams
9VG60	4369.8	4075.4	0000–2400	
9VG63	8728.2	8204.3	0000–2400	
9VG67	13156.6	12385.8	0000–2400	
9VG52	2780	2685	On demand	Connection to telephone system
9VG61	4376	4081.6	On demand	
9VG62	6509.5	6203.1	On demand	
9VG64	8762.3	8238.1	On demand	
9VG65	8790.2	8266.3	On demand	
9VG66	13147.3	12376.5	On demand	
9VG68	17270.1	16497.2	On demand	
9VG69	17356.9	16584	On demand	
9VG70	22630.1	22934.1	On demand	

Traffic lists will be transmitted on the following listed frequencies, except during transmitter maintenance periods when the list will be broadcast on the two frequencies consecutively.

Transmit (kHz)	*Receives (kHz)*	*Time (GMT)*
2760	2527	0005, 0405, 0805 and 1205
8728.2	8204.3	
2760	2527	1605
4369.8	4075.4	

Approximate geographical location of Singapore Radio Station is Lat. 01° 20′ N., Long. 103° 40′ E.

Notice of Arrival:

Upon departure from last port of discharge or immediately after having received instructions to proceed to Kerteh Port Marine Terminal, Master is requested to cable to either EPMI (if scheduled to moor at SALM I or SALM 2) or to PPSB (if scheduled to moor at the Refinery SBM) the following:

AAA	Vessel name, previous name (if any), call sign and flag
BBB	ETA, date and local time (GMT + 8 hours)
CCC	Master's name
DDD	G.r.t., n.r.t., d.w.t., s.d.w.t. and Light Displacement Tonnages
EEE	Last discharge port and intermediate ports
FFF	Next discharge port and intermediate ports
GGG	Number of crew
HHH	Number of passengers
III	Grade and Quantity of cargo on arrival and cargo to be loaded at Kerteh Marine Terminal
JJJ	Malaysian light dues receipt number and date
KKK	Arms on board
LLL	Deballast time and if able to load and deballast simultaneously
MMM	Arrival drafts
NNN	Any leaks which could cause pollution or affect loading
OOO	Pratique Granted: Place/Date. If any sickness on board or of clean bill of health
PPP	Inert gas system

All vessels loading at Kerteh Port Marine Terminal for the first time are to include the following *additional* information:

QQQ	Length overall and bow to centre of manifold distance
RRR	Size of *Port* manifold *flange* and piping
	Size of various reducers on board and *confirm* that 2 × 12 in. ASA *are available* for Product Tankers on Port side manifold or *confirm* that 1 × 16 in. ASA flange *is available* for Crude Tankers on Port side.
TTT	Confirm that combination of gangway and pilot ladder ready on arrival. Only pilot ladder is required if freeboard is less than 15 ft.
UUU	If loading products, is vessel fitted with 2-valve seperation for parcels?
VVV	Is vessel fitted with segregated ballast tanks?
WWW	Is Product Tanker fitted with slop tanks?
XXX	Is vessel diesel or turbine powered?
YYY	Confirm that vessel can moor to an SPM or SALM and indicate what bow connection equipment is available. (See "Berthing".)
ZZZ	What is SWL of portside derricks for hose hoisting.

Updated ETA to be reconfirmed 72,48,24 and 12 hours prior arrival.

VHF: When within range, vessels equipped with VHF radio telephone should contact Kerteh Port Marine Control initially on Channel 16.

The language of the Terminal is *English*.

Arrival Procedures: Masters should endeavour to establish contact with Kerteh Marine Control as soon as they are within VHF radio range. Instructions thereafter will be given for further approach procedures. In the event VHF radio contact cannot be established Masters are advised not to anchor but keep to seaward of the Seaward Buoy and the Restricted Zone.

Contact will then be made by the Terminal's Support Craft.

RADAR: Marine control tower has radar.

TUGS: A tug and mooring launch will be in attendance during mooring operation.

SBM: One tug of 2,600 h.p. and 2 launches.

SALMs: Two tugs, 3,500 h.p. and 800 h.p.

Note: Tugs are time chartered to suit size of tankers.

BERTHING: Masters are advised to expect a Petronas ship Inspector to board at any time in order to inspect his vessel in all respects. He is also requested to complete the Inspector's proforma in any case when the vessel arrives and hand same duly completed prior to the vessel sailing to the Loading/Mooring Master for onward transmission to Petronas.

All vessels will be boarded by a Mooring Master and Loading Master for Product vessels as directed by Kerteh Marine Control and, providing that the vessel is in all respects ready to commence loading, except for the necessary deballasting, the Notice of Readiness will be accepted at the time after Pratique is granted and Mooring Master boarding for crude carriers and when the Loading Master is satisfied for product carriers.

Vessels are requested to have safely and securely rigged, a combination of pilot ladder and ship's accommodation gangway, so arranged that personnel can first use the pilot ladder until part way up the vessel's side, and then transfer to the accommodation ladder. Vessels with less than 15 ft. freeboard need only rig the pilot ladder.

Air operated pilot gangways are not acceptable. A light heaving line should be ready to take aboard the Mooring and Loading Masters' equipment. Vessel to provide a lee for the Pilot boat when boarding and leaving. In addition, a derrick should be rigged on the lee side to lift ancillary equipment used for mooring operations.

Prior to berthing, the Mooring Master will inspect and ascertain that the main engines are fully operational. He will also inspect the vessel's ballast to ensure that only clean ballast is carried.

After ensuring that the manoeuvring area is clear of other traffic and weather and sea conditions are suitable, the vessel will be manoeuvred for the approach to the mooring buoy. The heading of the vessel will normally be such that she will have the wind ahead but tidal effects may have to be taken into account. A tug of suitable power and a mooring launch will be in attendance. During the final approach, the mooring launch will pick up a messenger line from the vessel's bow and maintain station approximately 300 ft. ahead of the vessel. When the mooring launch reaches the end of the mooring system pick-up line, the vessel's messenger line will be made fast and the vessel's crew will heave in the slack as the vessel moves closer to the mooring buoy.

When the pick-up line is on board the crew will commence heaving on this line until the chaffing chain is on board and secured.

It should be noted that the Refinery *SBM is fitted with 2 × 2 in. diameter chaffing chains* which require *panama leads with a minimum diameter of 8.5 in.*. It is the vessel's responsibility to absolutely ensure that the 2 chaffing chains on the Refinery SBM are brought on board in equal lengths in order to share the load of the vessel equally between the 2 mooring hawsers which are seperate and not mated or secured together in any way. The crude oil *SALMs are fitted 1 × 3 in. diameter chaffing chain,* which requires a Panama Lead with a minimum diameter of 12 in. Vessels greater than 150,000 d.w.t. to a maximum of 250,000 d.w.t. will be berthed at SALM No. 2 and two mooring systems will be connected to the vessel's bow.

Chaffing chains will be connected to Smits Brackets or bow stoppers whenever possible. An alternative connecting system will be used when vessels are not fitted with the connection mentioned above. Bollard strops and bow shackles can be used as an alternative to secure the chaffing chain.

The refinery SPM is only a distance of 1 nautical mile from the beach in 60 ft. A.C.D. of water. The bottom shelves from the SPM for a distance of approxiately 900 m. to a Danger Line of 4 buoys in 50 ft. A.C.D. of water.

When SBM is at maximum excursion, i.e. 2 mooring chains tight on the weather side, no vessels, such as tugs or standby boats, can approach this SPM closer than 50 ft. Otherwise, they will foul the anchor chain. This rule of course does not apply to vessels with 1 m. draft or inflatables.

Therefore the Terminal insists that engines and crew are at all times on standby whilst moored to this SPM.

HOSES: *Connection Hoses:* Once the vessel is moored, the floating hose(s) will be towed alongside and connected to the vessel's port manifold ensuring that the inner most hose is connected first.

When disconnecting the hose(s) it should be noted that the outer most hose is disconnected first.

Connecting and disconnecting of hose(s) will be the responsibility of the vessel's crew.

While vessels are moored, it is imperative that a careful watch is maintained on the hose mooring systems.

Main engines should be kept on standby and should be ready for immediate use in the event the vessel starts to ride up on the mooring buoys.

Two floating hose strings on the Refinery SBM are 12 in. ASA on the rail and have a total length each of 230 m. Camlock couplings are fitted (also See "Radio" – RRR).

LOADING: *Loading Rate:* Prior to the commencement of loading operations, an agreed upon oil transfer plan must be established. This will include commencement, maximum and topping off loading rates. Overboard discharges will be closed and sealed before loading commences.

Maximum loading rate at the Refinery SBM will be approximately 18,000 U.S. bbls./p.h. and at the crude SALM, approximately 45,000 U.S. bbls./p.h. It is recommended that vessels take maximum flow, with due regard to safety, in order to expedite turn around time. Care should be taken not to overload. Topping up rate for products is 700 U.S. bbls./p.h. When vessels are equipped with permanent ballast tanks, the ballast in these tanks should be retained on board until the vessel has taken on board sufficient cargo to be manoeuvrable. Vessels not so equipped should examine the possibility of safely loading and discharging ballast simultaneously, as such practice improves turn around time and keeps the windage area down to acceptable levels.

Closing Valves Against Oil Flow: Warning is given of the danger of closing valves against an incoming oil stream. This will create excessive pressure which may result in damage to the loading hoses and Terminal facilities. Vessels will be held liable for damages resulting from failure to observe this precaution. Refinery will automatically stop pumping when back pressure reaches 220 p.s.i. TCOT will automatically stop pumping when back pressure reaches 220 p.s.i.

Electrical Storms: Loading will be suspended when severe Electrical Storms are in the near vicinity to prevent the possibility of cargo gases igniting.

Radio Contact: During loading operations the vessel will contact Terminal Control Room every half hour by portable VHF to ensure that radio contact is being maintained. Pumping will be stopped immediately if it is found that radio contact with the vessel has been lost.

It is stressed that, during loading operations, the Crude Terminal and Refinery Shift Supervisors will immediately slow down the loading rate on receipt of a request for same from the vessel. Pumping, in an emergency, can be stopped almost instantaneously. A radio watch must be kept on VHF Channel 16 or the appropriate prearranged UHF channel *at all times*.

All radio communications will be in English.

Weather Limitations: No hard and fast rules can be established to ascertain when a vessel should stop loading and vacate the berth. The directions of the wind, height of the swell and the freeboard of the tanker are factors which need to be taken into account. However, it is recommended that when the wind speed reaches 25 knots and for the swell height exceeds 10 ft., the Master should arrange for responsible crew members to standby on the bow and at the cargo manifold. Should conditions worsen it may be necessary to stop loading, disconnect the hoses and vacate the berth.

During periods of adverse weather the Master and Mooring Master should be in constant communication with each other and be ready to act quickly if an emergency occurs. Consideration should be given to utilise the standby tug.

BALLAST: *Adequate Ballast:* Due to the exposed location of the loading berth, vessels are required to carry sufficient ballast for safe handling, having due regard to existing weather and sea conditions. A vessel found by the Mooring or Loading Master to be not adequately ballasted, will be rejected. As a general guideline, vessels should arrive with a minimum draft which ensures that the propeller is completely submersed and the vessel is trimmed no more than 8 ft. by the stern.

Clean Ballast: As there are no ballast discharging facilities at the crude SALMs, crude vessels must arrive at the Terminal with clean ballast, ensuring that all pipe-lines, pumps and strainers have been flushed out prior to arrival.

It is expected that all vessels will comply with the MARPOL 1973 requirements regarding clean or segregated ballast tanks. Vessels which are unable to limit freeboard by loading and deballasting simultaneously, vessels which have inadequate segregated ballast or vessels which have excessive deballast time may incur long delays and their Owners/Charterers will be notified that the vessel cannot be safely accommodated during the N.E. monsoon season, November-March.

On crude carriers the Mooring Master or on product carriers Loading Master will inspect vessel's ballast on boarding and has the power to reject any vessel that he deems could cause pollution of the sea area. During discharge of ballast similar inspections will continue. Any vessel rejected because of dirty ballast will automatically *nullify its Notice of Readiness* and will lose its priority in position for loading. Ballast discharge should not be commenced without the prior agreement of the Mooring Master or Loading Master.

Bilges: Bilges must not be discharged while at the Terminal or in adjacent sea area.

Inspection While Moored: At night the sea area around the vessel shall be adequately lighted, as frequent inspections by the Mooring or Loading Master will be made during the discharge of ballast. Any pollution whatsoever will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection and the vessel will not be re-accepted unless satisfactory evidence of repairs has been certified by a qualified surveyor.

Cargo hose connections should be inspected during loading, drip pans should be placed under the manifold, all unused cargo connections should be blanked off, sea valves should be closed and sealed upon completion of deballasting and all scuppers must be securely plugged. In addition to the lights usually displayed, vessels discharging ballast or loading cargo during darkness will brilliantly illuminate the sea around the ship, so that any pollution will be noticeable.

Vessels equipped with a separate system of ballast tanks will be allowed to discharge ballast and load oil simultaneously, providing approval is first obtained from the Mooring or Loading Master respectively.

Crude carrier slops should be consolidated in slop tanks. Load-on-top procedure for crude carriers is only acceptable with the written permission of the consignee.

POLLUTION: Owners and Masters are responsible for observing International Conventions, Laws and Malaysian Government Regulations Environmental Quality Act 1974 concerning pollution of the sea, having particular regard for the area where the Kerteh Port Marine Terminal is located. It is the responsibility of the vessel's Master to see that no oil of any kind is pumped or spilled overboard from his ship and he is also fully responsible to ensure that no other rubbish, regardless of type, be dumped overboard in this area.

If oil pollution occurs during loading operations, loading should be immediately stopped and cleaned-up or oil recovery procedures should be put into effect. Loading will not recommence until clean-up is complete and an inquiry has been held into the cause of the spill.

Masters are warned that inspection of ballast is strict.

The categories of pollution include oil water from bilges, hydrocarbon residue from previous voyages, or any other matter that may result in pollution of the sea.

All spillages of oil must be reported immediately to the Mooring or Loading Master and, subsequently, a detailed report, in writing, submitted by the Master of the vessel concerned giving all relevant details.

Fines and Claims: Any fines imposed by Government Authorities for pollution caused by the vessel shall be for the account of the Owners of the vessel.

In the event that Petronas, PPSB or EPMI has to settle any third party claims as a result of damages to property caused by pollution attributable in any way to the vessel, they will have the right to reimbursement by those responsible for the vessel for all expenses incurred.

Likewise, all labour and equipment costs for cleaning operations will be for the vessel's account.

MEDICAL: No doctor or clinic, however in emergencies, exceptions to the foregoing may be permitted for humanitarian reasons.

DENSITY: 1025.

FRESH WATER: No available.

FUEL: Not available.

CONSULS: None.

REPAIRS: Not possible.

SURVEYORS: Trident Malaysia Sdn. Bhd., Straits Trading Building, Lebuh Pasar Besar, Kuala Lumpur. Tel: 03-926410. Telex: MA 39551.

Caleb Brett Malaysia Sdn. Bhd., Room 301, 3rd Floor, Bangunan Yayasan Selangor, Jln. Bukit Bintang, Kuala Lumpur. Telex: MA 30579.

CUSTOMS ALLOWANCES: Usual allowance for ports in Malaysia.

REPATRIATION: Not possible.

TIME: GMT plus 8 hours.

WEATHER: The seasonal weather patterns are broadly divided into three types and the terminology used is consistent with that of S.E. Asia. These three types are:

1. S.W. Monsoon (May to September): Winds are generally from the South or S.W. during this period and can reach gale force in local squalls. Occasionally, these squally conditions can last from 36 hours to 48 hours.

2. N.E. Monsoon (November to March): Persistent bad weather occurs during this monsoon and high sea and swell conditions can persist for periods of 3 to 4 days and, in extreme conditions, for up to a week.

3. Transition Periods (April and October): Winds are generally high and variable during the monsoon transition periods but may freshen in the late afternoon and early evening with the sea breeze effect. Occasionally, local gale force squalls may occur but these are generally of short duration.

Squalls: Severe squalls are generally associated with cumulonimbus clouds and thunderstorms. The basic pattern of these squalls are vigorous thunderstorm activity, increasing as the storm approaches. Just before the onset of torrential rain, the wind backs rapidly and increases violently to peak gusts.

Refer to China Sea Pilot – Volume 1 for further meteorological information.

TIDES AND CURRENTS: *Tides:* The maximum rise and fall of the tide is approximately 3 m.

Currents: It should be noted that currents in excess of 2 knots, usually running in a N.E./S.E. direction, can be experienced during the N.E. monsoon period and in a S.E./N.W. direction during the S.W. monsoon period.

EMERGENCY CO-ORDINATING CENTRE: Contact Marine Control Tower on VHF Channel 16. Tel: 09-871 277 Control Room. Telex: MA 51397.

SHORE LEAVE: No shore leave.

GENERAL: *Language:* The language of the Terminal is English.

Mail: For convenience, mail for personnel on incoming crude tankers loading an Esso cargo may be sent to EPMI's Kuala Lumpur Office marked for the attention of "The TCOT Manager" for transmission to the vessel when it arrives at Kerteh Marine Terminal.

Personnel: Only authorised personnel are permitted to board vessels while berthed.

Provisions: Not available.

Ballast: No dirty ballast or slop disposal.

Terminal: The Kerteh Port Marine Terminal is located off-shore and the only means of transportation available to the shore is by marine support craft to Kemaman Port situated 24 miles to the S.E. As such, the terminal can offer no logistical support to the vessels calling at the Kerteh Port.

AUTHORITY: *Operators:* Petronas Penapisan Sdn Bhd (PPSB) are operators of the refinery and one SBM for the export of products.

Esso Production Malaysia Inc. (EPMI) are operators of the Trengganu Crude Oil Terminal (TCOT) and 2 SALMS for the export of crude oil.

Refinery Headquarters: Petronas Penapisan Sdn Bhd (PPSB), 14th Floor, Plaza Pekeliling, P.O.Box 2444, Kuala Lumpur 02-15, Malaysia. Tel: 03-912033. Telex: Petron MA 30032, 30696. Cables: Petronas.

Site: Petronas Penapisan Sdn Bhd (PPSB), Kerteh, Kemaman, Trengganu, Malaysia. Tel: 096-71244 or 71234. Telex: Petref MA 51326.

Esso Headquarters: Esso Production Malaysia Incorporated (EPMI), Kompleks Antarabangsa, P.O.Box 857, Kuala Lumpur 04-03, Malaysia. Tel: 03-485022, 484077, 416066. Telex: MA 30293 A/B Ofprod MA 30511. Cable: Essoprod Kuala Lumpur.

Marketing: Petroliam Nasional Berhad (Petronas), International Marketing Department, 8th Floor, Plaza Pekeliling, P.O.Box 2444, Kuala Lumpur 02-15, Malaysia. Tel: 03-912033, 913468. Telex: Petron MA 30032, 30696.

KOTA KINABALU (Jesselton), Sabah:

05.59 N. 116.00 E. **(See Plan Book)**

PORT LIMITS: Gaya Bay and waters to the S.W. bounded by a line joining Tanjong Aru and the Northern point of Pulau Gaya thence a line to Gaya Head including rivers entering same for a distance of 600 ft. inland from the mouth of the river.

DOCUMENTS:

Documents to be produced on arrival:

Port Clearance from Last port.
6 copies Inward Cargo Manifests.
2 copies Hatch List, *or*
1 copy Stowage Plan.
9 copies Crew Lists.
9 copies Passenger Lists.
2 copies Bonded Store Lists (incl. Arms and Ammunition Lists).

In addition, the Master has to complete a Shipping Arrival Report Form and a Maritime Declaration of Health Form.

Notes: (a) If vessel arrives from any port outside those declared infected.

(b) These 2 copies (Inward Cargo Manifests) must be certified by the Master as follows: "I hereby certify that to the best of my knowledge and belief this manifest is complete and correct. . . . .Master".

To be Supplied to Ship before Departure:

1 set Agents Outward Manifests.
2 copies Passenger Lists for Immigration.*
1 copy Passenger Lists for Customs.*
1 set Manifests for Customs.*

*To be supplied by Agent.

If vessel departs to a port outside Sabah, 2 copies outward crew list are also required for Immigration.

Where possible, cargo manifests and stowage plans should be forwarded in advance to local Agents and Port Authority ahead of vessels.

PILOTAGE: Not compulsory. Pilot normally available between 0600 hrs. and 1800 hrs. only. Applications normally made by Shipping Agents with advance notice of 24 hours prior to actual time that Pilot Services are required. Pilot boats are between 30 ft. – 40 ft. length and equipped with VHF/AM sets – 80.4 MHz frequency. Pilot station at Port Office (Marine Department) and location for vessel awaiting Pilot is within port limit. Marine Department Tel. 52213.

ANCHORAGES (also see "Health"):

Special Anchorages and Prohibited Areas

(1) *Prohibited Anchorage:* No vessels shall anchor as to swing within 3,000 ft. of the F.R.G. Light on the N.N.E. end of the Authority Wharf in approx. position Lat. 05° 59′ 51″ N., Long. 116° 04′ 30″ E. Vessels under 150 ft. in length may anchor within this area, East of a line joining the F.R.G. Light and Gueritz Shoal Light Beacon.

(2) *Prohibited Area:* Except with the previous permission in writing of the Authority, no logs or timber shall be allowed to lie afloat within the area – Eastward of a line drawn in a 172° direction from Grieve Reef Beacon.

(3) *Explosives and Dangerous Goods Anchorage:* Vessels having explosives and Dangerous Goods on board shall anchor within a line drawn from a position in Lat. 06° 01′ 21″ N., Long. 116° 05′ 45″ E. thence in a 360° direction for 6.5 cables thence in a 270° direction for 10 cables thence in a 180° direction for 6.5 cables thence in a 090° direction for 10 cables to the starting point.

(4) *Dangerous Petroleum Anchorage:* A vessel having dangerous petroleum on board shall anchor within a line drawn from a position in Lat. 06° 00′ 42″ N., Long. 116° 05′ 45″ E. thence in a 270° direction for 10 cables thence in a 360° direction for 6.5 cables thence in a 090° direction for 10 cables thence in a 180° direction for 6.5 cables to the starting point.

(5) *Quarantine Anchorage:* A vessel which is required to proceed to a Quarantine Anchorage shall anchor within an area bounded by a radius of 3 cables from a position in Lat. 06° 01′ 34″ N., Long. 116° 03′ 46″ E.

RESTRICTIONS:

1. Entering. Vessels with dangerous cargo such as benzene are not allowed to stay alongside wharf or to berth after 1800 hrs. Vessels arriving from any port within hours of day-light not allowed to berth until they see the signals at the Customs House directing them. This applies equally to vessels arriving on schedule as well as unscheduled vessels and any infringement of these regulations can have very serious consequences.

Master of ship not sailing within 48 hours after port clearance to report to Harbour Master reason for not sailing, and, if so required obtain a fresh port clearance.

2. Shifting. The Authorities must be informed prior to shifting.

3. Immigration. No person may leave ship before clearance has been given by Customs/Immigration Officers.

4. Currency. No restriction on amount of currency which can be brought into this State but max. amount allowed to be taken out is MAL$100. Foreign exchange must be conducted through recognised banks.

HEALTH: (Also see "Regulations"). *(a)* Sabah Government are signatories to WHO convention on Quarantine regulations. Port Health Doctor will not board unless vessel comes from infected port. Instead, Maritime Declaration of Health to be filled out and handed to Boarding Officer of Health Department who will require 1 copy of crew list and 1 copy of passenger list. Vessels should cable Agent prior arrival advising last port of call and whether vessel is healthy. Pratique normally cabled to ship but if unreceived, vessel need not proceed to Quarantine anchorage unless coming from infected port.

(b) Vessels arriving from ports outside the State will anchor until boarded by Authorities unless previously instructed by telegram to come alongside.

RADIO: Singapore Radio recommended. (Also see "Health"). Local radio call sign "Control K.K.".

Berthing Application: Application for berthing has to be made 24 hours prior to actual time when berthing is required.

Details and Requirements: Name of vessel, gross and net tonnage, length overall, draft (fore and aft) ETA at berth, ETD from berth, nature and tonnage of cargo to be discharged/loaded, number of gangs required, amount of water, Pilot requirements. Vessels given berth on first come, first served basis.

Tankers: As much notice of arrival as possible is essential.

(a) If first port in Sabah and communication is difficult send message through Singapore Radio.

(b) If to be second or subsequent port in Sabah ensure that Agent/Installation Representative in the previous port gets an accurate ETA before vessel's departure so that this can be passed on by telephone.

VHF: Port Control on VHF Channels 12 and 16 (office hours only).

To reach the Agents directly during office hours contact 9WH26 on VHF Channel 26. The call charges will be reversed by 9WH26 which is an unofficial telecommunications VHF station.

TUGS: Tug 280 h.p. available to assist vessels berthing and unberthing without a Pilot at inner berth. Ship's lines used.

BERTHING: Wharf T-shaped; outer berth 647 ft. long with min. depth of 25 ft. Inner berth 475 ft. long with min. depth of 21 ft.; 2 Go-downs 28,000 and 30,000 sq. ft. floor area respectively. Sabah Ports Authority operates one 10 ton crane, 73 forklift trucks ranging from 2 tons to 6 tons capacity, 25 towing tractors, 75×5 ton trailers.

One 20 ton container forklift truck and 6×20 ton container trailers available. Heavy Lifts up to 6 tons received into Sabah Ports Authority trailers, up to 17 tons could be received into railway wagons, beyond 17 tons overside discharge into landing craft. Sabah Ports Authority landing ramp capable of accepting loads of up to 30 tons. Bulk handling limited to petroleum and bitumen into private installation by pipe-line.

New Wharf: Rectangular island wharf 700 ft.×400 ft.

The particulars of the berths are as follows:

Berth No.	*Length (ft.)*	*Depth (ft.)*
1	700	30
2	400	25
3	400	25
4	215	19

Covered storage: one transit shed 72,000 sq.ft.

New Jetty: Located to the East of the New Port. Berthing length 300 ft. on each side. Depth alongside 21 ft., width of jetty 15.20 m.

STEVEDORES: Stevedores provided by SPA; labour supplied for working in ships' holds and on ships' winches (if required). For cargo delivered direct ex-wharf consignee provides wharf labour; cargo for Sabah Ports Authority godown labour provided by Sabah Ports Authority.

Arrangement of stevedores should be made with 48 hours' notice to Shipping Agent. Average gang performance is 20 tons per gang hour for conventional traffic (excluding vehicles) and 40 tons per gang hour for pre-palletised cargo (excluding vehicles). Cargo work is carried out in 3×4 hour periods namely:

1st Period	0730 – 1130 hrs.
2nd Period	1300 – 1700 hrs.
3rd Period	1800 – 2200 hrs.

CARGO: (Also see "Berthing".)

1. Tally: The Agent can provide tally clerks at ship's expense.

2. Inward cargo: Ship's responsibility ceases as soon as consignees take delivery ex-sling.

3. Transhipment cargo: Transhipment cargo handles via Port Authority Godown.

4. Outward cargo: All cargo is brought to the ship alongside wharf either by tractors and trailers.

5. Special cargo regulations:

(a) Dangerous Cargo: Vessels carrying explosives as cargo: All vessels arriving at, or remaining within the limits of, any port with explosives on board shall fly the gunpowder flag at the foremast.

No vessel having explosives on board shall, without the permission in writing of the Harbour Master, come or remain within 500 yards of the shore or any other vessel:

Provided that such a vessel may, with the written permission of the Harbour Master, come and remain within such limit where:

(i) such explosives are wholly and exclusively of Class V (Fulminate) or Class VI (Ammunition) or both such classes in the second schedule; and

(ii) the total quantity of such explosives does not exceed two thousand pounds; and

(iii) such explosives are carried in a properly constructed magazine duly certified as such by a British Board of Trade Surveyor or by an officer fulfilling similar functions appointed by a Government of any British possession or the vessel has a certificate from one of Her Majesty's Inspectors of Explosives or from an Officer fulfilling similar functions appointed by the Governments of Singapore, the Federation of Malaysia or Hong Kong and approved by the Governor that all the explosives on board such vessel have been properly stored and the Master of such vessel further certifies in writing that no other dangerous cargo is carried by the vessel; or where:

(iv) such explosives are wholly and exclusively explosives of one or any of Class III (Nitro-compound), Class IV (Chlorate mixture) or Class VII (Firework); and

(v) the total quantity of such explosives does not exceed three thousand pounds.

No such explosive shall be landed, shipped or transhipped between sunset and sunrise without the previous permission in writing of the Harbour Master. Any Master of a vessel offending against the provisions of this section shall be liable to a fine of MAL$1,000.

(b) Livestock: Pigs or cattle may not be loaded or discharged on any wharf without permission of the S.P.A.

MEDICAL: Medical Officer of Health: Medical Services Department, Tel. 54303. Vaccination and inoculation (incl. Yellow Fever) can be arranged via Agent at any time during working days. In case of death on board, Agent and Harbour Master as well as the Police to be informed.

TANKERS: The port operates on a "first come-first served" basis in allocating the jetty but palletised vessels will get priority. Port Rules state that no other vessel allowed alongside when tanker discharging A-class products. As cargo vessels stop discharging at 2200 hrs., tankers are normally allowed to discharge A-class cargo until the following morning 0600 hrs.

Berth is timber piled with concrete deck jetty, continuous 650 ft. by 40 ft. wide. Maximum displacement allowed – 13,000 tons. Maximum draft allowed – 22 ft.

Vessels berth either port or starboard side alongside according to the weather and tidal conditions prevailing at the time of berthing. Tankers berth on the outer side of the jetty only.

Fresh water available from wharf only. Vessels to provide hoses. Advance notice of requirements advisable. Rate 25 t.p.h.

Shore Line System:

(a) For Mogas, 1440 ft.×8 in.

(b) For Jet A.1/Kerosene 1450 ft.×8 in.

(c) For Gasoil/Light Fuel Oil, 1380 ft.×8 in. hoses used to connect ship and shore.

(d) For Bitumen, 1260 ft.×8 in.

DENSITY: Average 1020.

FRESH WATER: Can be supplied from wharf. Supply rate is 20 tons per hose per hour.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Not necessary. Agents may exercise option.

OPENING/CLOSING HATCHES: Normally by stevedores.

CERTIFICATES: Registry, Load Line, Radio, Safety Equipment and Derat Exemption.

CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits: No control, up to discretion of Officer of Customs and Excise.

CARGO GEAR: Ship's gear used, also for containers ex. feeder ships and heavy lifts in major ports.

IDENTIFICATION CARDS: Not required.

CONSULS: Denmark, Indonesia, Japan and United Kingdom.

REPAIRS: Some private firms and workshops undertake small engine and deck repairs in Kota Kinabalu.

DRY DOCKS: See "Labuan" and "Sandakan".

REPATRIATION: Normally arranged by Agents.

AIRPORT: Some airports in State are between 4 km. to 10 km. from town centre.

TIME: Local time is 8 hours ahead of GMT. No alteration to clocks.

HOLIDAYS: Cargo work can be arranged if necessary during official holidays but not for Hari Raya Puasa, Chinese New Year and Christmas Day.

REGULATIONS: *(a)* Arrival and Departure:

1. The Owner or Agent of every vessel other than a small ship intending to call at a port shall, as soon as possible, and in any case not later than 36 hours prior to the estimated time of arrival of the vessel, give notice in writing to the Authority of such arrival and, if so desired, the requirement for a berth at a wharf.

2. The notice under this regulation shall be in a form prescribed by the Authority and shall contain full particulars regarding the cargo to be discharged and loaded, the embarkation and disembarkation of passengers, heavy lifts, special or perishable cargo, hazardous and dangerous goods (whether to be discharged at the port or not), and any other matters of importance relating to the working or safety of the vessel in the port.

3. The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted the national colours and the signal letters, if any, of the vessel. The national colours shall be exhibited from 0800 hrs. to sunset whilst the vessel remains in port.

4. The Master of every vessel arriving from outside the State of Sabah shall exhibit the Immigration and Quarantine signals contained in the First Schedule and shall also at the request of a Customs officer hoist the Customs signals. Such signals shall remain exhibited until the appropriate officer has given permission for them to be lowered.

5. No vessel shall approach within 600 ft. of any other vessel exhibiting the Immigration, Health or Customs signals.

6. No person other than a Pilot may board or disembark from any vessel until the vessel is cleared inwards and the Immigration, Quarantine and Customs signals have been lowered.

7. Every vessel entering a port shall be anchored or efficiently secured to a wharf or buoy before commencing the loading or discharging of cargo and/or the embarkation or disembarkation of passengers.

8. No vessel shall leave any port unless in possession of a valid Port Clearance issued by or on behalf of the Director of Marine.

(b) Special signals.

Significance	*By Day*	*By Night*
Immigration (for ships not carrying passengers)	International Code Signal"2 5"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Immigration (for ships carrying passengers)	International Code Signal "3 4"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Quarantine (vessel is Healthy request Pratique)	International Code Signal "Q"	Nil
Quarantine (vessel is suspect)	International Code Signal "Q Q"	A red light over a white light and a separate hoist of red light over a green light and hoisted vertically 6 ft. apart where best seen.
Quarantine (vessel is infected)	International Code Signal "Q L"	
Quarantine (not received Pratique)	Nil	A red light over a white light 6 ft. apart hoisted vertically where best seen.
Request Police Assistance	International Code Signal "S T"	A green over a white light, 6 ft. apart hoisted vertically where best seen.
Request Medical Assistance	International Code Signal "W"	A red light over a green light, 6 ft. apart, hoisted vertically where best seen.

(c) Priority. First come first served.

POLICE/AMBULANCE/FIRE: Police/Fire, Tel: 088-54111. Hospital, Tel: 088-54911.

SERVICES: Tank cleaning services can be arranged with Agents. Marine Department deals with compass adjustments.

DELAYS: Due to weather conditions only.

TELEPHONES: Available.

SHORE LEAVE: Crew members allowed ashore after inspection by Immigration Officer.

GENERAL: Ship Chandlers: All kinds of stores and provisions available.

Recreation facilities. Two cinemas in town which show English films frequently. Three tennis courts available and football matches may be arranged. Sports Club is next to town Padang, about half a mile from wharf and golf and yacht clubs situated on beach at Tanjong Aru, 4 miles from town.

Surveyor: Harrisons & Crosfield (S) Ltd. are Lloyd's Sub-Agents and can arrange a surveyor provided prior warning is given.

Fumigation: No facilities.

DEVELOPMENTS:

(a) Future Expansion Plans: Based on a 20-year development Master Plan drawn up during 1976, the Authority had identified several priority port developments programmes called for in answer to the need of the economic development in the State. One such programme calls for the re-siting of oil pumping activities currently being undertaken at the old port, utilising the same general cargo jetty. This project serves to establish a separate terminal facility for bulk oil and other bulk cargo in a site independent of the general cargo port, some 14 km. from Kota Kinabalu port known as Sapangar Bay Industrial Project. The M$60 million project is due for completion in 1985. The jetty to service the new terminal will be capable of receiving vessels of up to 30,000 d.w.t.

On completion jetty will handle minerals, bulk cement and palm oil.

In the areas of dry cargo facilities, plans have been drawn up for phased construction of new facilities up to the late nineties.

(b) Container Development for Kota Kinabalu: Sabah Ports Authority has just been servicing only feeder route container traffic relying on ship-based cranes. Container facilities are limited to forklift, tractor/trailer system. Plans for up-grading container capability will be determined by potentials of the trade.

(c) Kota Kinabalu Port Development Plan: Major expansion work is being planned to provide additional berthing and storage facilities. Programme intended for implementation during 1983-1986 and estimated to cost more than M$70 million. When fully completed, additional facilities will include 4 ocean berths and a sizeable godown.

AUTHORITY: Sabah Ports Authority, Head Office, P.O.Box 1430, SPA Headquarters Building, Kota Kinabalu, Sabah, Malaysia. *Tel:* Kota Kinabalu 56155, 55233, 52140. *Telex:* Saport MA 80074. *Contact:* General Manager.

KUANTAN: 03.50 N. 103.19 E. (See Plan Book)

PORT LIMITS: The seaward limits of Port of Kuantan are contained between Lat. 4° 03′ N. and Lat. 3° 45′ N. and Long. 103° 34′ E. Reporting station for Pilots is situated in position: Lat. 3° 56′ 18″ N., Long. 103° 28′ 39″ E. It is an open sea port (density 1025).

DOCUMENTS: Following documents should be kept ready for submission:

	Number of Copies					
Document	*Port*	*Customs*	*Immigration*	*SD Police*	*Harbour Master*	*Port Health*
Declaration of Health	–	–	–	–	–	1
Crew List	1	1	3	1	1	1
Passenger List	1	1	1	1	1	1
Vaccination Certificates	–	–	–	–	–	Orig.
Derat/Derat Exemption Certificates	–	0	–	–	Orig.	Orig.
Transit Order	–	–	–	–	–	Orig.
Crew Identification Documents	–	–	Orig.	R	–	–
Stowaway List	–	1	1	1	1	1
Bonded Stores/Personal Effects	–	1	–	–	–	–
Port Clearance	P.C.	Orig.	–	–	Orig.	–
Import Manifest	2	2	–	–	–	–
Transhipment Cargo Manifest	–	2	–	–	–	–
Arms/Ammo List	–	1	–	1	–	–
Drugs List	–	1	–	1	–	–
Certificate of Registry	–	–	–	–	Orig.	–
Safety Equipment Certificate	–	–	–	–	Orig.	–
Loadline Certificate	–	–	–	–	Orig.	–
Radio Safety Certificate	–	–	–	–	Orig.	–
Ship Construction Certificate	–	–	–	–	Orig.	–
Tonnage Certificate	–	–	–	–	Orig.	–
Ship's Articles	–	–	Orig.	–	Orig.	–

Note: Numerals indicate number of copies.
'Orig.' indicates original
'R' indicates on request
'P.C.' indicates photocopy

Identification documents should be arranged in the same sequence as Crew List.

APPROACH CHANNEL: A straight 220 m. wide channel aligned on 311°(T) leads from Pilot Boarding Station (Fairway Buoy) to Harbour Entrance. Length of this channel is 3 miles. The dredged length (6.5 cables) is marked by 3 pairs of light buoys. Leading lights mark the centre line of the channel with minimum depth of 12.6 m. During N.E. monsoons underkeel allowance of 3.5 m. is required.

ANCHORAGES: Reserved anchorages are available for ships carrying general cargo, explosives and petroleum products, suspect or unhealthy ships and men-of-war. Pilotage is compulsory except for men-of-war. Drafts of up to 13 m. can be accommodated safely.

RESTRICTIONS: The port is open 24 hours but is subject to occasional restrictions due to weather or other similar constraints. Passage of ships drawing more than 10 m. is subject to tide. Max. permissible draft 12 m.

MAX. SIZE:

		Restriction	
Berth	*LOA* (m.)	*Draft* (m.)	*Displacement* (tons)
Nos. 1 to 4	200	11.2	45,500
Palm Oil Berth (Outer)	200	11.2	28,000
Palm Oil Berth (Inner)	120	8	8,000
Mineral Oil Berth	120	8	8,000

PILOTAGE: Pilotage is compulsory. Ships should advise their ETA at least 24 hours in advance by telegram or telex (MA 50234) marked for the attention of Marine Manager. ETA Fairway Buoy to be reported to Port Control by VHF at least 2 hours in advance. Pilot on VHF Channel 12.

Pilot boats are painted international orange with white superstructure and the word "Pilot" written in black letters. Ships awaiting Pilot should display international code flag "G" and sound or flash "G", if specifically requested by the port. Adequate anchorage is available near the Fairway Buoy (Lat. 3° 56′ 18″ N., Long. 103° 28′ 39″ E.) painted red and white vertical stripes, flashing every 10 secs., and supporting a Racon Beacon (Letter "O").

Ships are expected to come up to the Fairway Buoy for Pilot, provide a good lee for the pilot boat and rig the pilot ladder, manrope and, at night, a light.

During very bad sea conditions small vessels may be requested to follow the pilot boat and to pick up the Pilot inside the enclosed harbour.

HEALTH: Healthy vessels are brought to berth. Suspect or infected vessels are taken to Quarantine Anchorage to await clearance from Port Health Authorities. Automatic health clearance is not granted.

RADIO: All communication must be routed through Radio Penang, which provides telegram, telex and telephone facilities.

VHF: 24 hour watch is maintained on VHF Channel 16 in the Port Control, other operational channels are 20 and 12.

At least 2 hours before arrival at Fairway Buoy, following particulars are to be conveyed by VHF: Name, official number, nationality, g.r.t., n.r.t., LOA, deepest arrival draft and arrival displacement, quantity and commodity of cargo onboard and dangerous cargo, if any. Last port of call, last port clearance number and date, ETA Fairway Buoy and special berthing requirements, if any.

Pilotage for next 24 hours is planned at 1100 hrs. and announced over VHF Channel 20 between 1130 hrs. and 1200 hrs. All vessels awaiting Pilot are expected to keep a listening watch.

Ships working at anchorage are required to convey following information to Port Control at 0900 hrs. every day by VHF: Total cargo to load/unload. Cargo loaded/unloaded (last 24 hours). Balance cargo to load/unload. Draft at 0800 hrs.

Sailing ships are required to confirm their readiness by displaying "Pilot Required" signals and VHF report to Port Control at least 2 hours in advance.

Tugs and pilot boats work on Channel 12 but can switch over to other channels, if requested.

TUGS: The port operates 3 tugs of 2,600 b.h.p. Ropes are used from the ship or the tug as demanded by situation. Tugs on VHF Channel 12.

BERTHING: Total quay wall length is 725 m. divided into 4 berths numbered from seaward. Berth Nos. 1, 2 and 3 handle general cargoes of all types and are provided with transit sheds and apron width of 28 m.

Cranes are not provided at the berths. See "Equipment".

EQUIPMENT: The port has adequate numbers of forklifts, tractor heads, trailers for handling general cargo and a limited number of containers. 5 mobile cranes, 1×35 tons, 1×20 tons and 3×5 tons are available.

BULK CARGO FACILITIES: Bulk cargoes can be handled for direct delivery at any of the berths and conveyor system is likely to be provided in future.

SPECIALISED CARGO HANDLING FACILITIES: Berth No. 4 is designed for container handling and other cargoes requiring open storage with priority berthing for container carriers. A container handling crane is proposed in future.

Ro-Ro cargo can be handled by vessels fitted with side ramps.

TANKERS: Palm Oil Berth and Mineral Oil Berths handle bulk edible oils (300 t.p.h.) and petroleum products (200 t.p.h.) respectively. Loading hose diameters are 10 in. for crude palm oil, 8 in. for refined palm oil and 6 in. for petroleum products.

DENSITY: 1025.

FRESH WATER: Available at all berths.

FUEL: Vessels up to 120 m. length can bunker at Mineral Oil Berth. A bunkering barge is proposed.

HATCHES: Mechanical hatch covers must be operated by ship's crew. Stevedores handle 'lift and place' type covers including beams, if any.

CUSTOMS ALLOWANCES: Cigarettes, tobacco, wine and liquor allowed by Customs per day as follows:

i) Spirits/Liquor – 0.125 qt. per person per day or;
Wine – 1 qt. per person per day or;
Beer/Stout – 1 qt. per person per day.
ii) 25 cigarettes per person per day or;
8 cigars per person per day or;
1 oz. tobacco per person per day or;
1 oz. snuff per person per day.

CARGO GEAR: Normal cargo handling gear is provided by stevedores but ships have to provide heavy lift and special cargo gear.

HOLIDAYS: Port is closed for Chinese New Year, Aid il Fitri, National Day (31st August), Deepavali and Christmas Day (25th December) – total 5 days. Overtime is payable for work on Sundays and public holidays.

REPATRIATION: Facilities are available.

AIRPORT: Airport handling domestic flights is 25 miles (41 km.) from the port and international connections are available at Subang Airport, Kuala Lumpur. It is also possible to drive to Subang Airport (5 hours) and Singapore Airport (7 hours). Taxis and buses operate at frequent intervals.

TIME: GMT plus 8 hours.

POLICE/AMBULANCE/FIRE: Fire and ambulance assistance is provided by the Port Fire Department, telephone 33201 ext. 333, or 33282. Nearest Police Station is at Beserah, telephone number 22222.

TELEPHONES: Not available.

SHORE LEAVE: Ship's crew are permitted to land and are required to carry their passports.

REGULATIONS: No special regulations.

DELAYS: Average time from Fairway Buoy to berth is 1.5 hours. Minimal delay may be experienced in commencement of cargo loading due to Customs and Immigration formalities.

STORING: Ships' stores can be taken over the wharf. Lorries can go alongside except at dolphin berths where they park about 100 m. away. Forklifts are available. Shore gangs may be used with prior arrangement.

BANKS: Bank Bumiputra Malaysia Sdn. Bhd. operates a branch in Kuantan Port providing full banking facilities.

SURVEYORS: Caleb Brett maintain an office in Kuantan. Other surveyors may be contacted in Kuala Lumpur, Port Kelang or Singapore.

GENERAL: *Signals:*

Significance	*By Day*	*By Night*
1. Immigration and Customs (for ships not carrying passengers)	International Code Signal "25"	Two all-round green lights, in vertical, 2 m. apart seen all round the horizon at a distance of at least 3 km.
2. Immigration and Customs (for ships carrying passengers)	International Code Signal "34"	Two all-round green lights, in vertical, 2 m. apart seen all round the horizon at a distance of at least 3 km.
3. Quarantine (vessel is healthy requests Pratique)	International Code Signal "Q"	Two all-round lights in a vertical line 2 m. apart, the top of which is red and the bottom white, seen all round the horizon at a distance of 3 km.
4. Quarantine (vessel requires health clearance)	International Code Signal "QQ"	Two all-round lights in a vertical line 2 m. apart, the top of which is red and the bottom white, seen all round the horizon at a distance of 3 km.
5. Quarantine (vessel is infected)	International Code Signal "QL"	Two all-round lights in a vertical line 2 m. apart, the top of which is red and the bottom white, seen all round the horizon at a distance of 3 km.
6. Request Police Assistance	CB 3	Three all-round lights in a vertical line, the centre light being red, and the higher and lower lights white, all 2 metres apart seen all round the horizon at a distance of at least 3 km.
7. Port is closed and vessel not allowed to enter the breakwater mouth	Answering Pennant	Two all-round lights in a vertical line 2 m. apart, the top of which is green and the bottom red, seen all round the horizon at a distance of 5 km.

Supplies: Small quantities of provisions are available in Kuantan Town. Bonded stores are not available.

DEVELOPMENTS: Construction of 4 additional berths under phase II development is expected to commence in 1985/86 with completion 1988. A bulk cargo handling berth is expected to be built in 1984/85.

AUTHORITY: Kuantan Port Authority, P.O. Box 161, Kuantan, Pahang, Malaysia. *Tel:* 433200/433209. *Telex:* 50234. *Contact:* General Manager: Haji Fadzil B. Mohd Yusof, Marine Manager: Kapt. Vinode K. Mohindra, Traffic Manager: Abdul Aziz Bin Yaakub.

KUCHING, Sarawak: 01.34 N. 110.21 E.

(See Plan Book)

DOCUMENTS:

Port Clearance to be surrendered to Customs when boarding.

Crew Lists and Passenger Lists, 2 copies for Immigration Department, 2 copies for Kuching Port Authority, 3 copies for Customs, 1 copy for Port Health Officer.

List of Ship's Stores (2 copies for Customs).

List of Ammunition (3 copies for Customs).

Health Documents (Vaccination Certificates and Cholera Inoculation Certificates to be examined by Health Inspector).

Manifests (3 sets for Customs, 5 sets for Kuching Port Authority, 1 set for Health Inspector).

Ship Stowage Plan (2 copies for port).

Customs: Permit to go alongside a legal landing place or an ocean-going vessel within the port limits is required by Customs 24 hours prior to berthing.

PILOTAGE: Pilot can be applied for through Agents or by direct cable to Marine Dept. giving at least 24 hours' notice of ship's arrival time at Tanjong Po. Telegraphic address, "Shipping Kuching". Pilots are embarked either at the position, marked on B.A. Chart 1822, off Tg. Po or at Sejingkat by vessels proceeding further up river to the wharves operated by Kuching Port Authority.

In rough weather it may be necessary for a ship to follow or meet the pilot launch at the junction of Embang and Senari leads. Pilots for the Batang Lupar, Triso or Lingga Anchorages are also normally embarked off Tanjong Po by arrangement.

APPROACHES: The seaward approach to Kuching port is restricted by the presence of 2 bars; Outer Bar at a depth of 16 ft. below datum, and the Inner Bar at 15 ft. below datum. The max. depth of HW over the Bar, which occurs at springs is about 31 ft., whilst at Neap HW this decreases to approximately 28 ft. The tidal range is 5 ft. to 17 ft. There are also numerous rocks and shoals in the river and, although these are well known and accurately charted, a vessel without local knowledge should arrange with the Director of Marine for pilotage.

ANCHORAGES: *(a)* Tanjong Po Anchorage: 045°, 1 mile from Tanjong Po. Area of safe anchorage is 0.25 mile radius. Depth 6 fathoms.

(b) Sejingkat Anchorage: For vessel up to 580 ft. long with max. draft 25 ft. 3 miles from Pending Point. Mainly used by vessels loading logs.

Examination Anchorage: The examination anchorage is re-established off Sejingkat in an area bounded by:

(a) A line, marking the outer limit, drawn 345° from the Channel Beacon in position Lat. 01° 34′ 51″ N., Long. 110° 26′ 41″ E.

(b) A line, marking the inner limit, drawn 343° 30′ from the Inner Measured Mile Beacon in position 01° 34′ 50″ N., 110° 26′ 13″ E.

Vessels are recommended to anchor in the Northern half of the area and shallow draft vessels should berth as close to the Northern bank of the river as is practicable.

Vessels should advise the Marine Signal Station of their arrival using VHF Channel 20. Movement of vessels up river will be controlled from the Marine Signal Station or Marine Office. In order to receive information, vessels should keep watch on VHF Channel 20.

Vessels carrying dangerous cargo will be examined in the existing explosives anchorage.

RESTRICTIONS: Tide restriction and max. draft 5.18 m. at high tide. Not advisable to enter port at Tanah Puteh at night.

MAX. SIZE: Max. permissible length overall for vessel entering port at Tanah Puteh is 131 m. and max. draft 5.18 m. Max. overall length for oil carriers proceeding to oil installation at Baiwak Wharf, Pending Point is 122 m., and max. draft 6.4 m. At Pelabuhan Datuk Sim Kheng Hong (Pending), the LOA of ship permissible is 177 m. with a max. draft of 7.62 m.

RADIO: ETA cable to ship's Agent can be sent to Department of Telecommunications, Kuching. Code words, Kuching Radio.

Channel No. 16 – Calling and Safety. A continuous loudspeaker listening watch is maintained on this channel by a telephone operator of the Telecommunications Department in Kuching.

Channel No. 26 – Public Correspondence. All conversations between ships and telephone subscribers take place on this channel, after contact has been established on Channel 16.

Channel No. 20 – Port Operations. Direct communication can be established by ships with:

1. The Kuching Port Authority, Kuching (Radio Room, Security Division).
2. The pilot launch "Alor".
3. The Marine Department, Kuching.

All ships equipped with the Hague Plan Radio Equipment and approaching Kuching Port within 25 miles to 30 miles will be able to communicate direct with the Authority and with the Marine Department Headquarters on Channel 20.

TUGS: 3 tugs, 2 of 1,000 h.p. and 1 of 164 h.p. 3 mooring boats also available.

BERTHING: Application for berth must be made by Agents at least 24 hours before berthing.

Tanah Puteh 244 m. wharf of the deck on piles with shore-bridge type with 13,600 sq.m. of covered storage space and 14,864 sq.m. of open storage space, depth at lowest water 5.18 m.; at *Pelabuhan Datuk Sim Kheng Hong (Pending)* 262 m. marginal wharves, depth at lowest water 8.53 m. with 13,816 sq.m. covered storage space and 17,000 sq.m. of open storage. Feeder Container Services are available but ship must provide lift-on/lift-off gear for ship/shore and vice versa operations.

Shore based container handling equipment: 1×42 tonne front loader with telescopic spreader. 2×35 tonne front loaders with 20 ft. and 40 ft. spreaders. 4 prime movers. 6×20 ft. trailers. 6×40 ft. semi-trailers.

STEVEDORES: Normal port operating hours are as follows:

(a) Discharging and loading of cargoes, First shift, weekdays including Saturdays and Sundays 0730 – 1200 hrs.; 1300 – 1530 hrs.; Second Shift, 1530 – 1700 hrs., 1730 – 2300 hrs., Fridays, First Shift, 0730 – 1130 hrs.; 1430 – 1530 hrs.

(b) Delivery of Cargoes/Receiving of export cargoes, Monday to Thursday 0730 – 1200 hrs., 1300 – 1645 hrs., Fridays 0730 – 1130 hrs. – 1430 – 1645 hrs. Saturdays 0730 – 1145 hrs.

Arrangements can be made for delivery of perishable cargo during the weekends and public holidays provided prior approval of the Customs Department is obtained.

Tractor/trailer trains are used for transfer of cargoes within the port area while forklift trucks are used for stacking palletised/unitised cargoes and storage pallets.

Cargo handlers who are stevedores as well as longshoremen working under a fully integrated gang system are employees of the Authority. The Authority receives gang orders daily between 1400 and 1500 hours on normal working days and between 1000 and 1030 hours on the days preceding Sundays and public holidays. Gang orders are placed on a shift basis.

CRANES: *Cargo Handling Equipment:* 21 units towing tractors; 58 units forklift trucks (4,000 – 18,000 lbs.); 135 units trailers (3 – 20 tons); 2 units 35 ton mobile cranes; 2 units 5 ton mobile cranes.

MEDICAL: Necessary for Agents to receive advance notice of required medical attention at least 24 hours before arrival. Hospital facilities available. Crew should possess Cholera inoculation and Vaccination Certificates.

TANKERS: Tankers berth at Biawak Wharf, Pending Point, for discharge of their oil. Diameter of pipe-line 6 in. Only one tanker can berth at a time and max. draft is 6.4 m.

Berthing carried out near to the time of High Water. Starboard side alongside using port anchor. No berthing during darkness. Unberthing on flood tide. Mooring boat required, supplied by Kuching Port Authority's tug boat MV "Rakawi".

Shorelines

Mogas and Avgas:	Single 8 in. discharging line.
Gasoil	Single 8 in. discharging line.
Jet A1	Single 8 in. discharging line.
Bitumen 80/100	Single 8 in. discharging line.
LPG	Single 4 in. discharging line. 3 in. vapour line.
Light F.O.	Single 6 in. discharging line.

DENSITY: 1008.

FRESH WATER: Available and can be supplied to vessel alongside Authority's Wharf by hose about 25 t.p.h.

FUEL: High-speed diesel fuel oil can be supplied to vessel by making arrangement with either Shell or Esso Oil Installation at Biawak.

GANGWAY/DECK WATCHMEN: Usually available. Ship should also provide own watchmen.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Ship's should possess all relevant certificates on board in case required for reference.

CUSTOMS ALLOWANCES: Tobacco: 1 oz. tobacco or 25 cigarettes or 8 cigars permitted for each crew member daily. Up to three days ration in port. Wines and/or Spirits, 0.125 qt. bottle of spirits or 0.25 qt. of beer or 1 qt. of wines is permitted for each crew member daily. Up to 3 days' ration in port.

CARGO GEAR: Ship provides own gear especially for handling heavy lifts, vehicles, etc. Rope slings, pallets and safety nets, etc., will be provided by the Authority.

IDENTIFICATION CARDS: Required.

CONSULS: Indonesia.

REPAIRS: Minor repairs to vessels only.

DRY DOCKS: Not suitable for sea-going vessels. Coastal vessels up to 220 ft. long.

REPATRIATION: Facilities available.

AIRPORT: Airport about 10 km. from port at Tanah Puteh. It is served by MAS which operate daily flights to Kuala Lumpur, Singapore and Kota Kinabalu.

TIME: Local time GMT plus 7.5 hours.

HOLIDAYS: Port work can be arranged on all official holidays on overtime rates except Chinese New Year Day, Hari Raya Puasa Day, International Labour Day (1st May), Dayak Festival Day (1st June), and Christmas Day, during which the port at Tanah Puteh and Pending will be closed.

POLICE/AMBULANCE/FIRE: For emergency call, Tel: 999 is applicable to all these three services. Individual call: Central Police Station Tel: (082) 22181; General Hospital Tel: (082) 57555; Fire Station Tel: (082) 21033.

SHORE LEAVE: Crew members are allowed ashore provided permission is granted by Immigration Department.

REGULATIONS: Refer to Sarawak Merchant Shipping Ordinance and Kuching Port Authority's Ordinance and Bye-laws.

DELAYS: At present ships can normally secure a berth within 24 hours of arrival if tide is right.

DEVELOPMENTS: Rural jetty under construction at Pending. Completion expected mid-1985.

AUTHORITY: Kuching Port Authority, P.O.Box 530, Kuching, Sarawak, Malaysia. *Tel:* Headquarters and Tanah Puteh – 082-33122 (5 lines). Pelabuhan Datuk Sim Kheng Hong – 082-32144 (4 lines). *Telex:* MA-70420 Kuport. *Cable:* Kuport, Kuching. *Contact:* The General Manager.

KUNAK, Sabah: 04.41 N. 118.15 E. (See Plan Book)

Sabah Government Requirements

(a) Customs will treat port as sufferance wharf as defined in Section 2 of Customs Ordinance (Cap. 33), with control from Lahad Datu. Agent will be required to make application to Customs for sufferance facilities in respect of each vessel, on appropriate form. Officer-in-Charge of Customs, Lahad Datu will arrange to send a supervising officer with ship; this officer will attend vessel's inward and outward Customs clearance. Transport, food and shelter of Customs Officer are for vessel's account, though it is envisaged that his transport can be concurrent with boarding and departure of the Pilot, i.e. per Marine Department launch.

(b) Immigration requires that vessel shall be cleared inwards and outwards in Lahad Datu. As Marine Department launch will be required to run mooring lines at Kunak, it will not be available to transport Immigration Officer who will *not* accompany vessel. His transport will therefore be a matter for Agent to arrange.

(c) Medical will grant Pratique by radio by Medical Officer, Lahad Datu: whose right to carry out full inspection is not affected thereby. This will only be exercised, it is anticipated, when vessel has called at an infected port within prescribed period. Radio messages should therefore give this information, e.g. "Malay Maru Hongkong Twentieth Tokyo Thirtieth Manila Second All Well Request Pratique Master".

(d) Marine Dept. In the case of a vessel arriving from foreign ports will ultimately place a Pilot on board in Lahad Datu, if requested.

(i) Pilot will receive vessel's arrival report and sight her last port clearance. Pilotage will commence at any such point on route as Master may request, at rates laid down in the Merchant Shipping (Fees) Regulations, 1961. The Pilot launch carrying berthing crew will arrive in advance of vessel at Kunak and assist in making fast.

(ii) As there is no accommodation available at Kunak, the Pilot it is hoped, can be accommodated on board ship during her stay.

(iii) Return to Lahad Datu will follow as in sub-para (i) with the Pilot issuing Port Clearance on completion of Immigration formalities.

(iv) Requests for Pilot should be made *at least* 24 hours in advance to Marine Sandakan via Sandakan Radio, 9WHZ1. Initially this service will be offered from Sandakan, and ships proceeding Kunak from there will retain the Pilot on board. Ships from foreign ports will be served by air; charges to their account. There is now a Pilot based at Tawau, who will berth vessels at Kunak.

For information the port limits of Lahad Datu are "a line drawn from Tanjong Melandong on the South-west point of Darvel Peninsula to the most Westerly point of Sakar Island and thence to the mainland, etc." From this it can be seen that large vessels need not enter the narrow waters of the inner bay.

BERTHING: 1. Wharf consists of,

(a) A raised cement platform 30 ft.×30 ft. on wooden piling.

(b) Three lazy piles with rubber fendering situated 20 ft. from the front edge of the platform and 125 ft. in each direction from the centre of the platform.

(c) Two cement mooring dolphins 20 ft.×20 ft. situated 350 ft. each side of the platform and 50 ft. from the rear edge of the platform.

(d) A metal jetty approach 10 ft. wide×350 ft. long.

(e) A coral bund 24 ft. wide at the base and approximately 16 ft. wide at the top.

(f) Mooring Buoy placed 600 ft. off head of jetty.

2. Depth of water alongside: Minimum depth of water outside the lazy piles is in excess of 35 ft. datum.

3. Bulk oil will be pumped from installation along a metal pipe via coral bund and metal jetty. At a point approximately 15 ft. before cement platform the pipe bifurcates and the two terminals are situated two-thirds the way along each side of platform. To these terminals will be attached a flexible steel hose for connection with ships. Hose will be provided by shippers, and is 400 ft. long if required.

4. Pumping capacity. Maximum overall rate of pumping palm oil will be 100 t.p.h. Palm oil pipe is of 6 in. diameter.

AUTHORITY: Port Manager, Tawau.

LABUAN, Sabah: 05.17 N. 115.15 E. (See Plan Book)

Island of Labuan is 12 miles long and 7 miles wide lying off N.W. coast of Borneo at entrance at Brunei Bay. It is part of State of Sabah and is only 4.5 miles from mainland and some 77 miles from the State Capital of Kota Kinabalu.

DOCUMENTS:

(a) On arrival, when vessel has arrived from ports outside Sabah, Health Officer, Boarding Officer, Customs and Immigration or their representatives will board vessel. Agent cannot board until ship has been cleared.

(b) Health Officer will require Maritime Declaration of Health duly completed together with 1 copy of Passenger List and 1 copy of Crew List whenever vessel's last port of call has been outside State of Sabah.

(c) Boarding Officer will require 1 copy of Shipping Arrival Report, 1 copy of passenger list and 1 copy of crew list. He will also inspect various Certificates such as Load Line, Life Saving Equipment etc.

(d) Following is summary of documents required:

	Customs	*Immigration*	*Boarding Officer*	*Agent*	*M.O.*
Passenger List	2	2	1	1	1
Crew List	2	2	1	1	1
Store List	2	—	—	1	—
Maritime Declaration of Health	2	—	—	—	1

(e) To be supplied before Departure:

Manifests as necessary.
Master's copies of Bills of Lading.
Port Clearance.
Customs Clearance.
Certificate of *(a)* Buoys and Lights Dues and *(b)* Port and Harbour Dues.

PILOTAGE: Pilot available if adequate notice given but pilotage not compulsory. Vessels normally berth between 0600 hrs. and 1800 hrs., unberthing at any hour, day or night, provided that notice of such movements received between 0800 hrs. and 1600 hrs.

ANCHORAGES: Good anchorage for large vessels in a least depth of 5.75 fathoms South and S.E. of No. 6 Beacon.

Quarantine: Vessels arriving from an unhealthy port should proceed to Quarantine Anchorage for Pratique. This anchorage is bounded on North by a line drawn 090° from Harbour Shoal Beacon to Eastern Harbour Limit; South by a line drawn between S.W. point of Papan Island and Enoe Beacon; on West by Eastern Boundary Limit of Explosives Anchorage (as under). If vessels arriving from healthy port and healthy themselves, they need not proceed to Quarantine Anchorage.

Explosives: No vessels having explosives on board may come or remain within 500 yards of shore or of any other vessel; such vessels shall fly Gunpowder Flag at foremast, and should anchor in Explosives Anchorage which is within a line drawn from Enoe Beacon to Harbour Shoal Beacon thence in 090° for 6 cables thence in 180° direction until it joins line between S.W. point of Papan Island and Enoe Beacon.

Dangerous Petroleum: A vessel having dangerous petroleum on board shall anchor within a line drawn from Harbour Shoal Light Beacon in a 360° direction for 2,500 ft., thence in a 090° direction for 3,600 ft., thence in a 180° direction to join Northern Boundary Limit of Explosives Anchorage.

Prohibited Anchorage: No vessel shall anchor within 2,000 ft. from the light of Southernmost dolphin of Liberty Pier.

RESTRICTIONS: Tides. Subject to diurnal inequalities but usually one HW and one LW a day. Average HW is 6.5 ft. and LW 3 ft. above datum of soundings.

Clearance: Port is open from 0600 hrs to 1800 hrs. although vessels can be cleared later than 1800 hrs. on application provided they are sighted from Papan Lighthouse at 1800 hrs.

HEALTH: See "Regulations" and "Anchorages".

RADIO: Information required before ship's arrival. ETA Labuan, with as much prior notice as possible. Number of gangs required. Quantity of fresh water required. Whether Pilot required for berthing.

Labuan has no radio facilities and messages are received via Kota Kinabalu, Miri, Singapore, etc.

Port VHF Service operates on Channels 16 and 12, between 0530 and 2400 hrs.

Also see "Tankers" – Communications.

TUGS: One tug, 750 b.h.p., twin screw, available to assist with berthing and unberthing.

BERTHING: 1. Wharves.

(*a*) Liberty Wharf: A permanent concrete wharf, measuring 800 ft. with dolphins 100 ft. off each end – least depth of water is 28.5 ft.

(*b*) Victoria or Small Ships' Wharf (marked on Chart as H. & C.'s Wharf): A wooden structure – length 270 ft. with min. depth of 12 ft. No longer useable except by kumpits. No vehicles allowed on wharf.

(*c*) New Shell Installation Wharf: Concrete jetty 170 ft. long with 2 dolphins at each end with a total length between of 700 ft., least depth of water 31 ft.

Shore Lines:

1. For Mogas 8 in. × 1,200 ft.
2. For D.P. Kero 8 in. × 1,250 ft.
3. For Gasoil 8 in. × 1,350 ft.
4. For Fuel Oil 8 in. × 1,350 ft.

8 in. hoses used to connect ship and shore.

(*d*) Brown & Root Jetty: A timber decked jetty with following dimensions:

Length of main jetty – 160 ft., width 40 ft.
Length of causeway – 476 ft., width 22 ft.
Least depth alongside approximate 28 ft.
Max. load (proven) – 800 lb./sq.ft.
Max. single approximate 100 short tons.

2. Buoys: No mooring buoys in Labuan.

3. Monsoons: N.E. monsoon prevails from December to April and S.W. monsoon from middle of May to middle of October. Harbour is well sheltered from both monsoons.

4. Flags and Berthing Signals:

(*a*) When entering port vessel should fly Signal Letters, Mail Flag if applicable, and "G" flag if requiring Pilot, and also Quarantine Flag.

(*b*) Berthing Signals: Following berthing signals will be used at Labuan and will be displayed from Flagstaff in Harbour Office in vicinity of Liberty Wharf, Victoria Harbour. A red and white chequered flag and International Code numbered pendant will indicate berth number allocated. Berth numbers have been allocated as follows:

(*c*) Berth and Pendant No.

1. Esso Wharf.
2. LCT. Landing Ramp.
3. Victoria Wharf (small ships) S.E. Section.
4. Old Liberty Wharf (inner section).
5. Old Liberty Wharf (outer section).
6. New Liberty Wharf (inner section).
7. New Liberty Wharf (outer section).
8. Brown & Root Jetty.
9. Shell Installation Jetty.
10. Anchor.

On receipt of berthing signal, vessel should acknowledge in the usual manner with the answering pendant and proceed to berth.

(*d*) Tidal Signal: A tidal signal consisting of a cone and ball is hoisted in conjunction with berthing signal showing state of tide at berth indicated. A cone point down signifies flood tide (West-going), a cone point up ebb tide (East-going), a ball slack water.

(*e*) Facilities: Max. single load without special precautions on Old Liberty Wharf is 25 tons and New Liberty Wharf is 650 lbs./sq.ft. i.e. 180 tons four axle vehicles. Any load over this figure will require to be distributed over two or more panels of 10 ft. by 10 ft. each according to weight. However, special arrangements must be made prior to discharge, and Agent should be consulted in advance.

BULK HANDLING FACILITIES: Rancha Rancha Industrial Estate: One jetty for iron ore carriers up to 150,000 d.w.t. nearing completion. Unloading rate 2,000 t.p.h.

STEVEDORES: Supplied by contractors as arranged by Agent. Working hours 0800 – 1200 hrs., 1300 – 1700 hrs. Working outside these hours on Sundays and Public holidays is overtime.

CARGO: 1. Inward: Inward cargo is tallied out of ship on to wharf or into lighter. Damaged cargo is surveyed on the spot, otherwise no liability of the vessel is acknowledged. Discharge is carried out after permission has been obtained from Customs after manifest of inward cargo has been deposited. Cargo is delivered to consignees against production of relative Bill of Lading. Ship's responsibility to consignees ceases at ship's side but, in the case of shortlanded cargo, reasonable proof must be given to Customs that the cargo has not been landed. A shortlanded Memo certified by the Chief Officer is usually accepted as proof.

2. Transhipment: After discharge of cargo from the 1st carrier, transhipment cargo is placed under supervision of Customs, unless it is possible to arrange direct transhipment into small coastal vessel. Customs do not accept responsibility for cargo in Customs Bond.

3. Refrigerated: Only small quantities of refrigerator cargo loaded or discharged.

4. Explosives: Explosives must be discharged into lighters under police escort and transported to an approved police store. A licence for their importation must be obtained from the police prior to arrival of cargo, and harbour and police authorities must be informed of arrival of explosives in port either for discharge or as through cargo.

MEDICAL: Hospitals. Not possible for Government Medical Officer to visit ships but patients can be sent to Cottage Hospital. Four 1st class beds, 10 2nd class beds, 46 3rd class beds. Two private clinics, Dr. Chan Clinic and Dr. Wong Clinic, are located in town.

Dentist. A Government Dental Clinic, located in Cottage Hospital area. In addition, a dentist is available in town.

TANKERS: *Labuan Terminal (Shell):* The single buoy mooring is positioned at Lat. 5° 15′ 59″ N., Long. 115° 07′ 08″ E. designed for tankers with max. s.d.w.t. 320,000, but presently fitted for a max. B/CM of 520 ft.

The minimum water depth in the manoeuvring area is 84 ft. and the max. permissible draft 74 ft.

Pipe-lines and Cargo Hoses: A 48 in. submarine/land pipe-line connects the SBM with the storage tanks on shore. Beneath the SBM, the pipeline terminates in a manifold (PLEM) for connecting the underwater hoses of the buoy. The PLEM is fitted with 2 non-return, non-slam "mockveld" valves to eliminate potential leakage and surge pressure being built up from shore to the SBM.

Two underwater hoses, each 120 ft. in length, connect the SBM to the PLEM with a lazy 'S' configuration. Each string consists of 4×30 ft. lengths of hose.

One 20 in. diameter floating hose string of 700 ft. length is connected to the turntable. The string terminates in 1×16 in. and 1×12 in. diameter rail hose for direct connection to the tanker's starboard manifold. The 12 in. hose is connected to the forward and the 16 in. hose to the aft manifold line. The last 3 units of the tail hoses are electrically discontinuous, in order that stray currents from the crude carriers are not carried on to the buoy. Max. B/CM 520 ft.

Information Required Prior to Arrival: Standard message to Masters of vessels calling at SBM. Please advise.

AAA	ETA and draft at Labuan SBM.
BBB	Customs and Health requirements.
CCC	Is vessel equipped with bow chain stopper, Smit brackets and a large central Panama Chock? (This information required from unknown vessels only.)
DDD	Are manifold connections per OCIMF specifications?
EEE	Rig starboard derrick to maximum SWL (minimum acceptable 7 tons).
FFF	Have 16 in. and 1×12 in. manifold connections ready on starboard side.
GGG	Be advised that vessel must maintain full readiness to manoeuvre during stay at SBM.

Berthing Instructions: After ETA advice one of the following messages will be transmitted to the Master.

AAA	Based on your ETA............present intention is to berth you on arrival.
BBB	Pilot will board at the boarding area 2 miles W.S.W. of SBM in the following position: Latitude: 05° 15′ 00″ N. Longitude: 115° 04′ 00″ E.
CCC	Confirm ETA at least 48 hours in advance. When within range you are required to confirm your ETA 3 hours prior to arrival to Labuan Terminal on VHF Channel 16 with Channel 14 as a working channel.
DDD	Please keep us advised of any changes in your ETA. Onus of ETA confirmation rests with vessel.
EEE	After having established radio contact on VHF you will receive further instructions.

Mooring Operation: Vessels are programmed for day and night berthing. Use of the ship's anchors is strictly prohibited except in extreme emergency. The anchors must never be released or brought anywhere near the entire length of the submarine pipe-line nor closer than 350 m. radius from the SBM. Both anchors should be secured prior to berthing operations.

Floating Mooring Rope Assembly: The buoy to tanker mooring comprises 2×12 in. circumference×150 ft. nylon double braided ropes. At the buoy end, the hawsers are joined to the pad eyes of the Rotation Mooring Arm with heavy duty shackles. Each hawser of the dual floating mooring hawser is fitted with a 3 in. diameter chafing chain.

The pick-up assembly consists of:

(i) 10 in. circumference polypropylene messenger rope with spliced eyes on each side. Length 450 ft.

(ii) 10 in. circumference polypropylene pick-up rope with spliced eyes 2 ft. on each side. Length 45 ft.

(iii) Pick-up support buoy.

Mooring Craft: A mooring launch will be in attendance. The launch is used to send the messenger end of the mooring ropes to the vessel. On completion of mooring the launch picks up the hoses for connecton and remains at the vessel until the completion of loading.

Pilotage: Pilotage is compulsory within port limits for the size of vessels calling at the SBM. The Pilot will board at the boarding area 2 miles W.S.W. of the SBM for both arriving vessels and the vessels which have be anchored there awaiting berth.

Mooring Procedure: Before the arrival of the tanker, the Berthing Master has to go to the SBM at least one hour early to check and make sure that the hoses and mooring ropes are not fouled. The mooring craft proceeds to the vessel to disembark the Berthing Master and offload the mooring gear.

During the approach the mooring boat tows the port mooring rope around the buoy so that it is out of the way when the starboard inner one is being worked on. The starboard inner rope is then run out to its full length.

When the end of the messenger is within range, the vessel's bow is approximately 115 m. from the SBM, i.e. 70 m. to go to the final secured position. The approach speed at this point should not exceed 0.5 knots.

As the vessel slowly closes in on the buoy the messenger pick-up rope and chafing chain are hove on board until the chafing chain is in position in the fairlead (marker buoy just outboard of the fairlead). The special shackle on the nylon snotter is then connected to the triangle plate or alternatively the chain is secured in the bow stopper and the inner mooring is then fast.

While the inner mooring rope is being tended to, the mooring boat clears the (port) outer mooring rope from the buoy. This rope is then hove on board and connected in the same way as the inner one.

The vessel should have 2 mooring ropes ready on the forecastle and mooring is carried out by ship's crew.

Cargo Loading Operations: Throughout the vessel's stay at the SBM, the Berthing Master will remain on board to co-ordinate ship/shore operations and one launch will remain at location as a safety precaution.

Connecting Hoses: Hose connection is carried out by ship's crew.

The hoses are lifted and connected one at a time. The forward or 'inner' hose is tended to first. The derrick runner is hooked into a enlarged link in the hose lifting chain and the hose end is then lifted out of the water until sufficient length is available for direct connection to the tanker's manifold. The weight of the hose in this position is transferred to the hose hang-off chain and the hose end is then lowered onto the deck. The blank flange is removed and the hose connected to the vessel's manifold. After connecting, the hoses are supported at the tanker's side by flat webbing slings hung from the derrick runner in order to maintain a reasonable radius of bend. They are also suitably lashed to the hose bar of the side rail to reduce movement caused by sea conditions. In seas exceeding 5 ft., the floating hose strings become lively and require attention. Excessive movement of the hoses will result in chafe and strain on the flanges in way of the manifold. This can be reduced to a minimum by a suitable suspension of the hoses from the derrick runner backed up by rope lashings at the side rails or hose bars. Such preventive measures depend largely on the construction and layout of the tanker in the manifold area, also on the distance of the manifold from the vessel's side.

Loading Procedure: Labuan Crude is loaded at Labuan Terminal. The quantities loaded are checked by the terminal at frequent intervals (3 hours) and vessels are requested to verify the shore figures.

The terminal is capable of giving maximum loading rates of up to 7,000 cu.m./hr. and a maximum back pressure of 120 p.s.i. at the terminal end. The Berthing Master also acts as Loading Master and as the Terminal's Representative he will attend to all cargo formalities (SSPC forms, safety checklist, etc.).

Prior to and during loading operations the following procedure will apply:

(a) A joint inspection is carried out by ship and Terminal Representative to ensure that all requirements on the safety check list have been complied with.

(b) The methods of communication between ship and shore are clearly established and understood. This includes procedures for normal and emergency stops of cargo loading operations. Test calls are made to ensure the system is operating satisfactorily.

(c) Ship and shore to confirm readiness to start cargo loading operations.

(d) Commencement of loading to be at a slow rate.

(e) Lines and hoses are checked and faults rectified. Launch to patrol around the vessel to check for oil leakages into the sea.

(f) When the ship confirms receipt of cargo, test the emergency trip. After the test is completed start pumping and gradually increase to agreed loading rate.

(g) Lines, hoses and the water around the vessels are again checked.

(h) Ship and shore figures are to be compared every 3 hours and discrepancies investigated.

(i) At least 15 minutes' notice should be given to the terminal before each stop or in regard to slowing down the loading rate for "topping off".

Ballast: Vessels must arrive with sufficient ballast for safe manoeuvring into the berth.

There are no facilities for the shore reception of ship's ballast. Vessels are accepted for loading on the express understanding that only clean ballast will be discharged into the sea.

Deballasting prior to the ship being fully secured to the buoy is only allowed after consultation with the Berthing Master.

Unmooring: Weight on the mooring ropes may be taken off by using ship's engines. The polypropylene pick-up ropes, which remain connected to the triangle plates of the chafing chains, are lead to the winch, and the weight is taken off the bow stopper or nylon snotter as the case may be. The bow stoppers are released or special shackles disconnected, and the moorings and pick-up ropes lowered from the bow into the water.

When both moorings have been let go, the tanker is given sternway until the bow is well clear of the hose strings. The mooring and hose connection equipment is then transferred to the mooring launch.

Suspension of Loading Operations: If loading operations are suspended for an excessive period (e.g. leakage), hoses should be disconnected, blank flanged and made ready for lowering into the sea.

Disconnecting Hoses: The "after" or outer hose is disconnected first. It must be assured that all the bolts are fitted and properly tightened. The gasket must be in good condition and changed regularly. As soon as the hoses have been disconnected from the tanker's manifold, the blank flanges are fitted and the hose support buoy as well as the free end of the "hose hang-off chain" are shackled to the lug on the spool piece. Each hose is lowered over the side and towed clear from the tanker's side or temporarily secured to the SBM in a bight to prevent possible entanglement with the tanker's propeller.

Communications: Vessels are required to advise SSPC/Respective Agents of their ETA's 72 hours and again 36 hours prior to arrival. Telexes or telegrams should be sent to MA74306 or Saroilco, Miri, respectively.

6 hours and again 3 hours prior to arrival, vessels are required to confirm their ETA to Labuan Terminal on VHF Channel 14.

Weather: All the SBM's concerned are positioned in the open sea. The weather in the region is basically good for tanker operations.

The seasonal weather patterns are broadly divided into three and the terminology used is consistent with that of S.E. Asia. These three types are:

(1) S.W. Monsoon (June-October)
(2) N.E. Monsoon (December-March)
(3) Transitions between the monsoons.

Persistent bad weather occurs during the N.E. monsoon. High swell conditions can persist for periods of 3 to 4 days and in extreme conditions for up to a week. During the S.W. monsoon winds are generally light to moderate, but during brief surges (generally lasting less than 36 hours) winds are occasionally strong, and local gale force squalls are experienced. The most favourable time for tanker operations is during the transition periods. Winds are lighter and variable. Seas in this period are rarely more than very slight. The only troublesome times of the periods are the occasional severe squalls that originate from inland, which are associated with cumulonimbus clouds and thunderstorms.

The basic patterns of these squalls are vigorous thunderstorms inland, increasing as the storm approaches. Just before the onset of torrential rain, the wind backs rapidly towards the land and increases violently to the peak gust.

Immobilisation: Immobilisation of engines is not permitted at any time during the vessel's stay at the SBM.

Transmission of Ship's Radio: Use of the ship's radio transmitter is prohibited during the vessel's stay at the SBM.

FRESH WATER: Only available in small quantities (usually 30 tons maximum) and at restricted hours.

FUEL: Bulk furnace oil and high speed diesel usually available but 48 hours' notice of requirements must be given.

FIRE PRECAUTIONS: In case of fire, the Harbour Master, OCPD, and Agent should be telephoned immediately. A mobile gas turbine fire pump is available.

CONSULS: None.

REPAIRS: Marine Department operates engineering workshops at Labuan.

DRY DOCKS: Marine Department has 3 Slipways in Labuan which are capable of slipping vessels of 60 tons, 200 tons and 500 tons displacements.

A Government-owned shipyard/dry dock known as Sabah Building, Repairing and Engineering Sdn. Bhd. exists in Labuan to undertake full repairs services has been established for ocean-going vessels.

POLICE/AMBULANCE/FIRE: Medical Officer 224; Asst. Commissioner of Customs 201; OCPD 400; Police Station 297; Hospital 222.

GENERAL: *Surveyors.* Harrisons & Crosfield are Lloyd's Sub-Agents in Labuan and may appoint a surveyor as necessary.

Ship Chandlers. Fresh fruits, vegetables and fish available and price list can be obtained from ship chandler through Agent. Cold storage with limited supplies.

Recreation Facilities. If owners pay a monthly subscription to the Labuan Recreation Club, ship's crew are automatically members. Football and cricket, etc., can usually be arranged on application to Agent. Two cinemas in town which show American, English, Chinese, Malayan and Indian films.

Good beaches all round island, however, it is strongly recommended that bathers should remain in shallow water. It is not considered safe to bathe from the ship.

Victoria Hotel situated in town. All rooms air-conditioned and have private bathrooms or showers attached. Lodging house accommodation available in town for Chinese Crew members.

REGULATIONS: *(a)* Arrival and departure.

1. The Owner or Agent of every vessel other than a small ship intending to call at a port shall, as soon as possible, and in any case not later than 36 hours prior to the estimated time of arrival of the vessel, give notice in writing to the Authority of such arrival and, if so desired, the requirement for a berth at a wharf.

2. The notice under this regulation shall be in a form prescribed by the Authority and shall contain full particulars regarding the cargo to be discharged and loaded, the embarkation and disembarkation of passengers, heavy lifts, special or perishable cargo, hazardous and dangerous goods (whether to be discharged at the port or not), and any other matters of importance relating to the working or safety of the vessel in the port.

3. The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted the national colours and the signal letters, if any, of the vessel. The national colours shall be exhibited from 0800 hrs. to sunset whilst the vessel remains in port.

4. The Master of every vessel arriving from outside the State of Sabah shall exhibit the Immigration and Quarantine signals contained in the First Schedule and shall also at the request of a customs officer hoist the Customs signals. Such signals shall remain exhibited until the appropriate officer has given permission for them to be lowered.

5. No vessel shall approach within 600 ft. of any other vessel exhibiting the Immigration, Health or Customs signals.

6. No person other than a Pilot may board or disembark from any vessel until the vessel is cleared inwards and the Immigration, Quarantine and Customs signals have been lowered.

7. Every vessel entering a port shall be anchored or efficiently secured to a wharf or buoy before commencing the loading or discharging of cargo and/or the embarkation or disembarkation of passengers.

8. No vessels shall leave any port unless in possession of a valid Port Clearance issued by or on behalf of the Director of Marine.

(b) Special signals.

Significance	*By Day*	*By Night*
Immigration (for ships not carrying passengers)	International Code Signal "2 5"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Immigration (for ships carrying passengers)	International Code Signal "3 4"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Quarantine (vessel is Healthy request Pratique)	International Code Signal "Q"	Nil
Quarantine (vessel is suspect)	International Code Signal "Q Q"	A red light over a white light and a separate hoist of red light over a green light and hoisted vertically 6 ft. apart where best seen.
Quarantine (vessel is infected)	International code Signal "Q L"	
Quarantine (not received Pratique)	Nil	A red light over a white light 6 ft. apart hoisted vertically where best seen.
Request Police Assistance	International Code Signal "S T"	A green over a white light, 6 ft. apart hoisted vertically where best seen.
Request Medical Assistance	International Code Signal "W"	A red light over a green light, 6 ft. apart, hoisted vertically where best seen.

GENERAL: *Recreational Facilities:*

(i) A newly constructed 12 storey Labuan Hotel is situated in the town. All rooms air-conditioned with bathroom attached.

(ii) A nine-hole golf course situated about 1 mile away from town.

DEVELOPMENTS: See "Bulk Handling Facilities".

AUTHORITY: Harbour Master.

LIMBANG, Sarawak: 04.48 N. 115.05 E.

Limbang is the principal town of the Fifth Division and is situated 8 miles above the entrance of the Limbang River. There is an anchorage for ocean-going steamers 5 miles below the Limbang Bar Buoy with a least depth of 26 ft.

Depth on Bar. The least depth reported on the bar is about 2 ft. with a highest rise of 12 ft. The channel is marked by stakes with red/white and black/white top markers and a flashing light buoy Fl.1 sec. at the entrance.

Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine Signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International Code Flag "P") to be hoisted, during daylight hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the Port Clearance.

(2) The Port Clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.

BANKS: Malayan Banking Berhad.

STORING: See "Prelims", page viii.

1. By truck.
2. —
3. Yes.
4. Yes.
5. —
6. Yes.

SURVEYORS: Cargo inspectors available. Local marine surveyor available.

AUTHORITY: Marine Department, Limbang, Sarawak, Malaysia. *Tel:* 21130, 21167. *Cables:* Shipping. *Contact:* Port Officer.

LUMUT, Malaya: 04.14 N. 100.38 E.

SHIPMASTER'S REPORT:

DOCUMENTS:

Customs:

3 Crew lists.
2 Report of arrival – Appendix "A".
1 Passenger list.
2 Dutiable stores statements.
5 Inward manifests (prepared by Agent)
2 Personal effects lists.
2 Lists cargo in transit.
1 Lists arms & ammunition ("NIL" certificate required).
Last port clearance.
3 Copies loading manifests.
3 Outward manifests (prepared by Agent).
1 List narcotics ("NIL" certificate required).

Immigration:

2 Crew lists.
2 Passenger lists.
All passports and seaman's books.

Boarding Office (Port Authority):

1 Report of arrival.
1 Crew list.
1 Passenger list ("NIL" return required).
1 Arms & ammunition list ("NIL" return required).
Register, load line, derat certificate.
Radio and Safety equipment certificates.
1 Narcotics list.

Port Health:

2 Vaccination lists (Cholera).
2 Health Forms.
Derat certificate

Police:

1 Crew list.
1 Passenger list.
1 Arms & ammunition list.
1 Narcotics list.

Clearance of vessel carried out on arrival at anchorage or berth before loading or discharging is allowed. Usually Customs', Immigration, Police, Health will come together on board and free pratique issued by Health Officer.

PILOTAGE: Pilot boarding position Lat: 4° 10′ 30″ N., Long. 100° 35′ E., which is one mile South of Pangkor Island S.E. Point light. Berthing and unberthing will only be carried out during daylight hours and at slack water or beginning of flood tide. Pilot comes from Penang for berthing and unberthing. Pilot leaves vessel at Hospital Rock on departure. Pilot launch painted blue with white superstructure and named "King Miller". Pilot rates: Launch fee M$400 in and out minimum M$750 – maximum M$3,000, depending on d.w.t. of vessel.

ANCHORAGE: Just inside harbour limits, 7 cables South of S.E. Point light in about 12 fathoms. Bottom said to be sand and shells and reputed good holding ground.

MAX. SIZE: Max. length on grain berth 575 ft.

Max. draft into port 30 ft. 6 in. salt water on Spring tides. This is due to a bar at the entrance of Dindings River and a rather sharp turn around buoy of 125° to miss rocks marked by unlit buoy. (Lloyd Rocks B. A. Chart 792 vicinity of River Passage).

HEALTH: See "Documents".

RADIO: *ETAs:* Sent through Penang or Singapore Radio to Flourmill Kuala Lumpur and ship's Agents. 72, 24 and 12 hours notice required. Agents will keep Flourmill Lumut and Pilots informed. Authorities like 5 days notice of a vessel's impending visit.

VHF: There are no VHF communications in the port or with pilot boat.

TUGS: There are no tugs at Lumut — nearest Penang (small) and Singapore (large).

BERTHING: Port side to at Malayan Flour Mill Private Wharf in position Lat: 4° 16′ N., Long: 100° 39.5′ E., ship's head in. Depth of water at wharf is 32 ft. 06 in. A modern wharf supporting one movable discharging elevator. Conveyor belt runs under wharf.

South side of dock is used by coastal tankers and has 20 ft. of water. Dock is of concrete construction with heavy wood and steel girder fendering which is rubber mounted. End of wharf has a separately fendered concrete construction which is fitted with rubber shock absorber.

STEVEDORES: Mill employs own stevedores and work continues throughout 24 hours. No cargo work on Sundays and Public Holidays unless requested by either party when the overtime charges will be borne by the said party. Discharge rate is about 118 m.t.p.h. with 2 suckers (wheat). Reported to be about 100 m.t.p.h. with corn.

MEDICAL: Doctor in Lumut and Sitiawan (7 miles from Lumut). Local hospital usually has large queue, therefore better to attend private doctor. Private doctor may be called onboard if necessary.

DENSITY: Water is brackish both at anchorage and berth. About 1022 ozs/cu. ft. at berth.

FRESH WATER: Available on berth, arranged through Flour Mill at $5.00 per ton during working hours and at $6.50 per ton after office hours.

FUEL: By arrangement and brought to ship in road tankers. Cargo cannot be discharged while bunkering as the trucks are not able to pass under or by the grain discharger (Agent informs that one weeks' notice required for bunkers). Fuel and diesel supplies come from Mobil Oil Depot. Batu Undan about 1.5 miles from mill.

REPAIRS: Minor repairs only at mills workshop, firms can be called in from Kuala Lumpur or Singapore or Ipoh.

SURVEYORS: Trident Malaysia Sdn. Bnd. in Penang.

GANGWAY/DECK WATCHMAN: Private wharf and protected area - no shore watchman required on board - only ship's watchman for ropes and safety. Shore mill patrol is armed with shotgun.

REPATRIATION: No problems but make sure travel documents i.e. passports, are valid.
AIRPORT: Nearest local airport is Ipoh and then fly or by road to Kuala Lumpur International Airport. Ipoh is about 1 hour's drive and Kuala Lumpur 4 hours drive.
TELEPHONE: On berth and in Flour Mill entrance hall.
SHORE LEAVE: Local leave only, except with special permission and pass. Boats to be laid on by ship for crew shore leave to Lumut and this is about a 20 minute boat ride to shore. Charges – $20 per trip. A boat from the anchorage may be laid on and this costs $75. Boat service is run by Mr. Loo Chong Lin/Mr. Loo Yean Lai – Titi Panjang Road, Lumut – They can usually be found on waterfront by Customs office. Also to Sitiawan about 7 miles from Lumut. To Ipoh 52 miles by taxi $6.00 per person one way. Special Immigration pass is required and can be arranged through Agent.
BANKS: The Chartered Bank, Jalan Lumut, Sitiawan, Perak; Malayan Banking Berhad, Lumut, Perak; Bank Bumiputra Malaysia, Lumut, Perak.
EMERGENCY CO-ORDINATION CENTRE: Harbour Master, Penang or Port Kelang.
STORING: See "Prelims", page viii.

1. Yes, both.
2. Yes.
3. Yes.
4. Yes.
5. Prior approval must be obtained.
6. No.

GENERAL: The Flourmill is situated on the N.E. side of Lumut about 40 miles by road and 20 minutes by launch from Lumut town. There is a good canteen at the Flourmill which serves European, Chinese and Muslim foods, soft drinks and beer. Ship's personnel are allowed and welcome to use these facilities.

There are only two reasonable hotels in Lumut, Dinding Hotel which has only three rooms air conditioned, and The Rest House which is not air-conditioned. If possible book in advance especially on Saturdays, Sundays and Holidays.

At Pangkor Island there are good hotels; Sea View Hotel, Beach Hut Hotel and Pangkor Bay Village. At Teluk Batik 10 chalets available, about 5 miles from Lumut town.

Football matches can be arranged and Customs, Flourmill etc. are all very keen to play ships visiting the port. Hire of the football pitch which is in the centre of town and very good is only $5.

A soya bean mill has been completed and is in production and using the same wharf for discharge of their cargoes.

Customs: Allowances very small – 75 cigarettes per man for 3 days and one bottle of spirits for 8 men every 3 days. Customs office is on shore near to ferry berth. One and sometimes two, Customs men remain on vessel throughout and accommodation is to be provided for them.
Immigration: No immigration if from Malaysian ports but clearance required when from foreign.
Tide: Ebbs for 5.25 hours on berth. Tides times are based on Port Kelang – difference is minus 1 hr. 40 min. Rise and fall about 2 m. – see Admiralty Tide Tables and Admiralty N.P. 214, Malacca Strait and Southern Approaches to Malacca Strait. Atlas of Tides and Tidal Streams.
Provisions/Stores: Fresh provisions available but advisable to give 24 hours notice as some of the items come from outside Lumut. Fruit and vegetables are available in season from local supply and are reputed to be reasonably priced. Some fruit and vegetables imported and may be expensive. Chandlers can be arranged by Agent.
Laundry; Arranged by Chandler (see above), takes about three days as is done by hand.
Charts: BA 1009 Perak River & Approaches when approaching from South and BA 792 Dinding River & Approaches with inset covering flour mill wharf.
AUTHORITY: Malayan Flour Mills Berhad, Jalan David Sung, Batu Undan, Lumut, Perak, Malaysia. *Contact:* Raja Toran Shahriman, Chief Administration Officer.

Mr. Yaacob Bin Abd. Rahman, Port Officer, Marine Department, Lumut, Perak. *Tel:* 05-935477.

MALACCA, Malaya: 02.15 N. 102.15 E.

DOCUMENTS:
1. *Malacca Port Authority*
(a) Ship's arrival advice on prescribed form.
(b) Ship's Manifests (2 copies).
(c) Dangerous Goods Declaration.
(d) Passenger List (if any).
2. *Harbour Master's Office*
(a) "Report of Arrival of Vessel" on prescribed form obtainable from Harbour Master's Office on arrival.
(b) One copy Passenger List, specifying names and nationalities and required to report any casualties, accidents, births or deaths that have occurred during the voyage to the passengers, crew, ship or cargo.
(c) Port Clearance from last port and copy of Manifest of Cargo to be discharged.
(d) List of all arms and explosives on board.
(e) In the case of a British or Malaysian vessel and vessels belonging to a nation not having a Consular Officer at the port produce to Port Officer the Certificate of Registry and ship's Articles.
(f) All ship's certificates such as Safety Equipment Certificate, Radio Certificate, Load Line Certificate, Safety Construction Certificate, Ship's Registry, Passengers' Certificate, Derat Certificate and all Certificates of Competency of all Officers on board.
(g) Crew List.
3. *Immigration Authorities*
(a) Crew List (3 copies).
(b) Passenger List (3 copies).
(c) Produce all passengers passports/visas.
(d) Produce all seamen's cards/books.
(e) Fill embarkation/disembarkation card obtainable from Immigration Department on arrival.
4. *Port Health*
(a) Crew List showing last date of vaccination.
(b) Passenger List, showing the last date of vaccination.
(c) Produce all seamen's and passengers' vaccination cards.
5. *Customs Department*
(a) Crew List (2 copies).
(b) Passenger List (2 copies).
(c) Personnel Effects List (2 copies).
(d) Cargo Manifests (4 copies).
(e) Last Port Clearance.
(f) Bonded Stores List (2 copies).
(g) Full and correct statement of dutiable goods carried as ship's stores (2 copies).
(h) Customs Form CD 15 obtainable from Customs Department on arrival.

APPROACHES: No difficulty from North or South. No sand bar at river mouth. Harbour open all year round.
PILOTAGE: Pilotage service is compulsory for vessels entering or leaving port limits. Vessels to give Malacca Port Authority 4 hours notice. Vessels from West take Pilot 2.75 miles W.S.W. of Tanjong Keling and vessels from East take Pilot 5 miles S.S.W. of Tanjong Keling.
ANCHORAGES: For ocean-going and coastal vessels anchorage between 1–1.5 miles off Malacca Harbour. Between 3–6 fathoms depth. No specific prohibited anchorage. Discharging into lighters at anchorage.
TUGS: None.
BERTHING: A deepwater berth – least depth alongside 36 ft. Jetty "T" head connected to shore at Tanjung Bruas (approximate position Lat. 02° 13′ N., Long. 102° 09′ E.) by approach bridge. Length of berth 368 ft.
Storage Areas: A modern covered godown of 2,005 sq.m. and open storage yard of 3,135 sq.m.
STEVEDORES: Discharging cargo capacity per day – 1,000 tons. Working on 2 shifts.
MEDICAL: Modern Government hospital and private clinics.
FRESH WATER: Available from elevated water tank of 50,000 gallons capacity.
FUEL: None.
CUSTOMS ALLOWANCES: Tobacco, cigarettes 25 in number per man per day, or cigars, 8 in number per man per day, or Tobacco, 1 oz. per man per day, or snuff, 1 oz. per man per day.

Wine and/or Spirit: Spirit, 0.125 quart per man per day, or wines, 1 quart per man per day, or beer or stout, 1 quart per man per day.
REPAIRS/DRY DOCKS: None.
HOLIDAYS: *Port Closed Days:* Chinese New Year, Aid il fitri (1 Syawal), Deepavali, National Day and Christmas Day.
AIRPORT: Batu Berendam, 6 miles from port.
AUTHORITY: Malacca Port Authority, Jeti Tanjung Bruas, Port Kelang, Melaka, Malaysia.

MIRI, Sarawak (incl. Lutong, Kl. Baram, Kl. Niah & Kl. Suai): 04.26 N. 113.55 E. (See Plan Book)

Miri Roads is an open roadstead in a shallow bay, bounded at North by Tanjong Baram and at South by Tanjong Lobang.
PORT LIMITS: All navigable waters up to the high water mark and all land from the high water mark to the land boundary within the following limits:
Inner Limit:
Batang Baram within the high water lines, from the line delineating the Coastal High Water Line at the river mouth, upstream to the geographical parallel across the river at Lat. 3° 45′ 00″ N.
Outer Limit:
(i) From a point on the Coastal High Water line on the Sarawak/Brunei International Boundary, Lat. 4° 00′ 18″ N., Long. 114° 36′ 27″ E. (approx.)
(ii) Thence along the Coastal High Water Line in a generally Southwesterly direction to a point on the Miri/Bintulu District Boundary, on the N.E. bank of Sungai Selungun, Lat. 3° 35′ 19″ N., Long. 113° 20′ 18″ E. (approx.)
(iii) Thence along a line drawn in a 324° direction to its intersection with the limit of the Sarawak Territorial Sea, Lat. 4° 48′ 30″ N., Long. 113° 20′ 18″ E. (approx.)
(iv) Thence Northeasterly along the boundary of Sarawak Territorial Sea to its intersection with the International Boundary between Sarawak and Brunei on the Continental Shelf, Lat. 4° 48′ 36″ N., Long. 113° 57′ 12″ E. (approx.)
(v) Thence along the same International Boundary to the initial point defined in Clause (i) above.
DOCUMENTS: (a) Health. Vessels exempted from inspection (see "Health") should deliver to Berthing Master on arrival, a Declaration of Health, Last Port Clearance and 2 Crew and Passenger Lists.

(b) Inward Clearance (also see "Anchorage"). All vessels calling Miri Roads for passengers or cargo must be cleared by Immigration and Customs and, if necessary, by Port Health.

Inward clearance effected only between 0600 and 1800 hrs. and following signals must be shown: if passengers carried, flags "3" and "4"; if no passengers carried, flags "2" and "5"; if free pratique requested, flag "Q".

Following papers will be required on arrival for inward clearance:

Port Health:

Declaration of Health.

1 Crew List.

1 Passenger List, inward and through.

Customs Boarding Officer:

As above, if not boarded by Health Officer, and 2 Inward Cargo Manifests.

(c) Outward Clearance. All vessels will be issued a Port Clearance by Customs Officer after the application has been verified by Port Officer at their respective office. Papers required are 2 Outward Manifests, 2 Crew Lists and, if any embarked, 2 Outward Passenger Lists.

APPROACHES: The loom of gas flares on Seria Oilfields 30 miles N.E. of Miri are a general guide at night but should not be used as a bearing because flares movable within area of oilfield and liable to be extinguished at any time. Following bearings exist. By night, three lighthouses:

(a) *Tanjong Baram* Lat. 04° 35′ 47″ N., Long. 113° 58′ 25″ E., white single light 680,000 candle power, visibility 17 miles, elevation 120 ft. in grey steel lattice tower, group flash 3 every 20 secs.

(b) *Lutong* Lat. 04° 28′ 30″ N., Long. 113° 59′ 46″ E., white single light, 13,500 candle power, visibility 10 miles, elevation 80 ft. in grey steel lattice tower, group flash 2 every 10 secs.

(c) *Tanjong Lobang* Lat. 04° 21′ 48″ N., Long. 113° 57′ 36″ E., white single light 20,150 candle power, visibility 18 miles, elevation 155 ft. in grey steel lattice tower, 60 ft., flash 1 every 10 secs.

By day, above lighthouses difficult to distinguish and following may be used for day-time bearings:

(a) Lutong radio mast F.R 210 ft., position Lat. 04° 26′ 25″ N., Long. 113° 59′ 54″ E.

(b) Tanjong Lobang radio masts as marked on chart.

PILOTAGE: No official Pilot stationed at Miri but Shell Company provide Berthing Masters to moor vessels at their Lutong Moorings (see "Tankers").

ANCHORAGE: For tankers, please refer to "Tankers". For cargo, passengers or clearance, the outer area within an area to Northward of Lat. 04° 25′ 42″ N., Eastward of Long. 113° 55′ E. and Southward of Lat. 04° 23′ 42″ N. It is recommended that vessels of less than 5 m. draft may anchor close inshore directly opposite Miri River Mouth, but caution must be exercised as sudden squalls and swell up to 1.5 m. can occur, for which allowance should be made. For logs at Kl. Baram it is recommended that vessels anchor close inshore S.W. of Baram River Mouth, but caution must be exercised as sudden squalls and swells up to 2 m. can occur, for which allowance should be made. Extra caution must be exercised not to intrude the prohibited anchorage area at the further end of S.W. of Baram River Mouth and the numerous submarine gas lines around the area. For logs at Kuala Niah and Kuala Suai it is recommended that vessels anchor close inshore directly opposite Niah River Mouth and Suai River Mouth, but caution must be exercised as sudden squalls and swell up to 1 m. can occur, for which allowance should be made.

Cargo usually worked into or from wooden lighters or steel dumb barges ranging from 30 tons – 300 tons capacity. Swell often restricts work to landward side only and swell or wind often make it difficult to work Hatch No. 1 in some vessels. Accommodation ladder should be lowered on landward side to enable shore personnel to board.

Prohibited Anchorage and Berthing Area. From *(a)* Lat. 4° 30′ 54″ N., Long. 113° 56′ 19″ E. in a 090° direction to the shore; and from *(a)* to *(b)* in Lat. 4° 27′ 30″ N., Long. 113° 47′ 01″ E., thence in a 090° direction to the shore.

HEALTH: Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine Signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

Free pratique granted without health inspection to vessels calling to lift bunkers only at Lutong Moorings, provided ship healthy. Vessels with unclean bill of health or vessels which have not declared themselves healthy in their arrival notice telegram are subject to normal Port Health inspection procedure. Therefore of utmost importance that arrival notice is sent not less than 24 hours before arrival and contains all information requested (see "Radio") in order to prevent unnecessary delay.

RADIO: Miri Radio call sign 9 WW21, frequency 500 kHz, operates at following hours local time: 0800 – 0830, 0900 – 0930, 1200 – 1230, 1600 – 1630. Present station has a limited range and if difficulty is experienced making contact or contact outside the above hours, vessels should pass messages through other stations, such as Kuching Radio or Singapore Radio, or through other ships in close vicinity of Miri.

Arrival notice must be telegraphed at least 24 hours before arrival and should contain following information:

All vessels

(a) expected time of arrival (local time GMT plus 8 hours);

(b) name of last port of call and next port of call, if not previously advised;

(c) whether or not ship is healthy.

For bunkers

(d) quantity of bunkers required, in long tons at least 48 hours notice is required;

(e) provisions or medical attention required, if any.

For cargo

(f) tonnage to discharge, if any;

(g) number of gangs required to load;

(h) number of winchmen required to load.

Passengers

(i) number of passengers to disembark.

Also see "Tankers" – Communications.

VHF: Vessels arrived at the anchorages and wishing to contact their local/abroad Agents should contact "Miri Control" by Channel 16 which will be subsequently transferred to either Channel 25 or 27 for through calls. "Miri Control" operates 24 hours daily.

BERTHING: Cargo vessels – see "Anchorage", oil carriers – see "Tankers".

MEDICAL: Treatment of urgent cases available on shore subject weather conditions. Early notice should be telegraphed of medical requirements.

TANKERS: There are 3 Single Buoy Moorings at Miri Terminal which are in the following positions:

SBM	Lat. 04° 28′ 21.9″ N.	Max. SDWT: 30,000 tonnes
No. 1 –	Long. 113° 56′ 20.8″ E.	Max. draft: 37 ft.
		Min. water depth in manoeuvring area 40 ft.
SBM	Lat. 04° 28′ 48.9″ N.	Max. SDWT: 75,000 tonnes
No. 2 –	Long. 113° 56′ 33.0″ E.	Max. draft: 37 ft.
		Min. water depth in manoeuvring area 40 ft.
SBM	Lat. 04° 30′ 15.5″ N.	Max. SDWT: 100,000 tonnes
No. 4 –	Long. 113° 56′ 26.3″ E.	Max. draft: 39 ft.
		Min. water depth in manoeuvring area 42 ft.

The riser platform acts as a distributing point where all the valves to the 3 SBMs are located and is positioned at Lat. 04° 29′ 33″ N., Long. 113° 56′ 37″ E.

Pipe-lines and Cargo Hoses:

SBM No. 1: Operational for the export of refined products only.

The connection between the distribution platform and the SBM consists of 3 × 12 in. and 1 × 6 in. diameter pipe-lines/underbuoy hoses.

2 × 12 in. and 1 × 6 in. diameter hose strings are connected to the turntable and joined together with buoyancy tanks, terminating in 2 × 8 in. and 1 × 6 in. diameter hose strings of 5 lengths each for direct connection to the tanker's starboard manifold. An additional 6 in. diameter self-floating hose string of 17 lengths is connected to the turntable.

The total length of the hose strings is 544 ft. allowing a maximum distance from ship's bow to manifold of 330 ft.

The maximum permissible draft is 37 ft.

SBM No. 2: Operational for the export of Crude Oil and Fuel Oil.

The connection between the distribution platform and the SBM consists of 3 × 12 in. and 1 × 6 in. diameter pipe-lines/underbuoy hoses.

2 × 12 in. and 1 × 6 in. diameter hose strings are connected to the turntable and joined together with buoyancy tanks, terminating in 8 lengths of hose for direct connection to the tanker's starboard manifold.

The total length of the hose strings is 634 ft. allowing a maximum distance from ship's bow to manifold of 400 ft.

The maximum permissible draft is 37 ft.

SBM No. 4: Operational for the export of Crude Oil and Fuel Oil.

The connection between the distribution platform and SBM consists of 3 × 12 in. and 1 × 6 in. diameter pipe-lines/underbuoy hoses.

2 × 12 in. and 1 × 6 in. diameter hose strings are connected to the turntable and joined together with buoyancy tanks, terminating in 5 lengths of hose for direct connection to the tanker's starboard manifold.

The total length of the hose strings is 648 ft. allowing a maximum distance from ship's bow to manifold of 450 ft.

The maximum permissible draft is 39 ft.

Information Required Prior to Arrival: Standard message to Masters of vessels calling at SBM.

Please advise.

AAA	ETA and draft at Miri SBM
BBB	Customs and Health requirements
CCC	Is vessel equipped with bow chain stopper, Smit brackets and a large central Panama Chock? (this information required from unknown vessels only)
DDD	Are manifold connections as per OCIMF specifications?
EEE	Rig starboard derrick to maximum (minimum acceptable 7 tons)
FFF	Have 2 × 12 in. manifolds ready on starboard side.
GGG	Be advised that vessel must maintain full readiness to manoeuvre during stay at SBM.

Berthing Instructions: After ETA advice one of the following messages will be transmitted to the Master.

AAA	Based on your ETA...........present intention is to berth you on arrival.
BBB	Pilot will board at Pilot anchorage area at the following coordinates: Lat. 04° 25′ N., Long. 113° 54′ E. Lat. 04° 27′ N., Long. 113° 56′ E.
CCC	Confirm ETA at least 48 hours in advance. When within range you are required to confirm your ETA 3 hours prior to arrival to Miri Terminal on VHF Channel 18 with Lutong Radio.
DDD	Please keep us advised of any changes in your ETA. Onus of ETA confirmation rests with vessel.
EEE	After having established radio contact on VHF you will receive further instructions.

Floating Mooring Rope Assembly: The buoy to tanker mooring comprises of 2×15 in. circumference×150 ft. single braided ropes. At the buoy end, the hawsers are joined to the pad eyes of the Rotating Mooring Arm with heavy duty shackles. Each hawser of the dual floating mooring hawser is fitted with 50 ft.×1.5 in. diameter chafing wires.

The pick-up assembly consists of:

(i) 8 in. circumference polypropylene messenger rope with spliced eyes on each side. Length 150 ft.

(ii) 8 in. circumference polypropylene pick-up rope with tail-end spliced directly to chafing wire.

(iii) Pick-up support buoy.

(iv) 50 ft.×1.5 in. diameter chafing wire.

Mooring Operation: Vessels are programmed for day and night berthing. Use of ship's anchors is strictly prohibited except in extreme emergency. The anchors must never be released or brought anywhere near the entire length of the submarine pipe-line nor closer than 350 m. radius from the SBM. Both anchors should be secured prior to berthing operations.

Mooring Craft: A mooring launch will be in attendance. The launch is used to send the messenger end of the mooring ropes to the vessel. On completion of mooring the launch picks up the hoses for connecton and remains at the vessel until the completion of loading.

Pilotage: Pilotage is compulsory within port limits for the size of vessels calling at the SBM. The Pilot will board at the Pilot anchorage area for both arriving vessels and the vessels which have been anchored there awaiting berth.

Mooring Procedure: Before the arrival of the tanker, the Berthing Master has to go to the SBM at least one hour early to check and make sure that the hoses and mooring ropes are not fouled. The mooring craft then proceeds to the vessel to disembark the Berthing Master.

During the vessel's approach the mooring boat tows the port mooring rope around the buoy so that it is out of the way when the starboard inner one is being worked on. The starboard inner rope is then run out to its full length.

When the end of the messenger is within range, the vessel's bow is approximately 115 m. from the SBM, i.e. 70 m. to go to final secured position. The approach speed at this point should not exceed 0.5 knots.

As the vessel slowly closes in on the buoy the messenger, pick-up rope and chafing wire are hove on board until the chafing wire is in position in the fairlead (marker buoy just outboard of fairlead). The chain stopper is secured to the chafing wire, while the eye is put on the ship's bollard to make fast.

While the inner mooring rope is being tended to, the mooring boat clears the (port) outer mooring rope from the buoy. This rope is then hove on board and connected in the same way as the inner one.

The vessel should have 2 mooring ropes ready on the forecastle, and mooring is carried out by ship's crew.

Cargo Loading Operation: Throughout the vessel's stay at the SBM, the Berthing Master will remain on board to co-ordinate ship/shore operations and one launch will remain at location as a safety precaution.

Connecting Hoses: Hose connection is carried out by ship's crew.

The hoses are lifted and connected one at a time. The forward or 'inner' hose is tended to first. The derrick runner is hooked into an enlarged link in the hose lifting chain and the hose end is then lifted out of the water until sufficient length is available for direct connection to the tanker's manifold. The weight of the hose in this position is transferred to the hose hang-off chain and the hose end is then lowered on to the deck. The blank flange is removed and the hose connected to the vessel's manifold. After connecting, the hoses are supported at the tanker side by flat webbing slings hung from the derrick runner in order to maintain a reasonable radius of bend. They are also suitably lashed to the hose bar of the side rail to reduce movement caused by sea conditions. In seas exceeding 5 ft., the floating hose strings become lively and require attention. Excessive movement of the hoses will result in chafing and strain on the flanges in way of the manifold. This can be reduced to a minimum by a suitable suspension of the hoses from the derrick runner backed up by rope lashings at the side rails or hose bars. Such preventive measures depend largely on the construction and layout of the tanker in the manifold area, also on the distance of the manifold from the vessels' side.

Loading Procedure: Miri Light Crude and refinery products are exported from the Miri Terminal. The quantities loaded are checked by the terminal at frequent intervals and vessels are requested to verify the shore figures.

The shore maximum back pressure is 180 p.s.i. The Berthing Master also acts as Loading Master and as the Terminal's Representative. He will attend to all cargo formalities (SSB forms, safety check list, etc.).

Prior to and during loading operations the following procedure will apply.

a. A joint inspection is carried out by ship and terminal representative to ensure all requirements on the safety check list have been compiled with.
b. The methods of communication between ship and shore is clearly established and understood. This includes procedures for normal and emergency stops of cargo loading operations. Test calls are made to ensure the system is operating satisfactorily.
c. Ship and shore to confirm readiness to start cargo loading operations.
d. Commencement of loading to be at slow rate.
e. Lines and hoses are checked and faults rectified. Launch to patrol around the vessel to check for oil leakages into the sea.
f. When the ship confirms receipt of cargo, test the emergency trip. After the test is completed start pumping and gradually increase to agreed loading rate.
g. Lines, hoses and the water around the vessel are again checked.
h. Ship and shore figures are to be compared every 2 hours and discrepancies investigated.
i. At least 15 minutes' notice should be given to the terminal before each stop or in regard to slowing down the loading rate for "topping off".

Ballast: Vessels must arrive with sufficient ballast for safe manoeuvring into the berth.

There are no facilities for the shore reception of ship's ballast. Vessels are accepted for loading on the express understanding that only clean ballast will be discharged into the sea.

Deballasting prior to the ship being fully secured to the buoy is only allowed after consultation with the Berthing Master.

Suspension of Loading Operation: If loading operations are suspended for an excessive period (e.g. leakage), hoses should be disconnected, blank flanged and made ready for lowering into the sea.

Disconnecting Hoses: The "after" or outer hose is disconnected first. It must be assured that all the bolts are fitted and properly tightened. The gasket must be in good condition and changed regularly. As soon as the hoses have been disconnected from the tanker's manifold, the blank flanges are fitted and the hose support buoy as well as the free end of the "hose hang-off chain" are shackled to the lug on the spool piece. Each hose is lowered over the side and towed clear from the tanker's side or temporarily secured to the SBM in a bight to prevent possible entanglement with the tanker's propeller.

Unmooring: Weight on the mooring ropes may be taken off by using ship's engines. The polypropylene pick-up ropes, which remain connected to the triangle plates of the chafing chains, are lead to the winch, and the weight is taken off the bow stopper or nylon snotter as the case may be. The bow stoppers are released or special shackles disconnected, and the moorings and pick-up ropes lowered from the bow into the water.

When both moorings have been let go, the tanker is given sternway until the bow is well clear of the hose strings.

Communications: Vessels are required to advise Sarawak Shell Berhad/Respective Agents of their ETA's 48 hours and again 24 hours prior to arrival. Telexes or telegrams should be sent to MA74306 or Saroilco Miri, respectively.

6 hours and again 3 hours prior to arrival, vessels are required to confirm their ETA to Miri Lutong Terminal on VHF Channel 18.

During office hours "Shell Marine" can be contacted on Channel 18, but this radio has a limited range.

Weather: The SBM's are positioned in the open sea. The weather in this region is basically good for tanker operations.

The seasonal weather patterns are broadly divided into three and the terminology used is consistent with that of South East Asia. These three types are:

(1) S.W. Monsoon (June–October)
(2) N.E. Monsoon (December–March)
(3) Transitions between the monsoons.

Persistent bad weather occurs during the N.E. monsoon. High swell conditions can persist for periods of 3 to 4 days and in extreme conditions for up to a week. During the S.W. monsoon winds are generally light to moderate, but during brief surges (generally lasting less than 36 hours) winds are occasionally strong, and local gale force squalls are experienced. The most favourable time for tanker operations is during the transition periods. Winds are lighter and variable. Seas in this period are rarely more than very slight. The only troublesome features of the periods are the occasional severe squalls that originate from inland, which are associated with cumulonimbus clouds and thunderstorms.

The basic patterns of these squalls are vigorous thunderstorms inland, increasing as the storm approaches. Just before the onset of torrential rain, the wind backs rapidly towards the land and increases violently to the peak gust.

Immobilisation: Immobilisation of engines is not permitted at any time during the vessel's stay at the SBM.

Transmission of Ship's Radio: Use of the ship's radio transmitter is prohibited during the vessel's stay at the SBM.

FRESH WATER: No fresh or boiler water available.

FUEL: No ex-barge facilities but bunkers obtained from Lutong Terminal.

Nos. 2 and 4 Sealines. Available for bunkering dry-cargo vessels. Ship's spring wire will be used to haul ends of mooring wires on board and mooring winches should be double gear and in all respects ready for use. All other gear for mooring and connecting pipes is brought on board with Berthing Master at Pilot Station. Bunkers will be supplied through 8 in. flexible hose brought up on starboard side amidships and appropriate flange on ship's connection should be removed in advance. Berthing Master will remain on board throughout bunkering operation and will leave after vessel has unberthed. Mooring and unmooring operations each require about 1.5 hours and bunkering rate usually 45 t.p.h. – 75 t.p.h.

CUSTOMS ALLOWANCES: Bonded Store on vessels other than those berthing at Lutong Moorings for bunkers only and exempted from formal clearance, sealed by Customs after allowing a daily ration for duration of stay in port.

1 Customs Officer will remain on board all vessels anchored in Miri Roads and accommodation, if necessary, should be arranged for them. The Agents' staff will remain on board throughout all cargo operations and it would be highly appreciated if meals could be supplied to them and to the Customs Officer in view of the long time occupied travelling by launch between ship and shore.

REPATRIATION: Crew changes and repatriation can be carried out at Marine Office, Kubu Road, Miri with little difficulty.

AIRPORT: Distant 10 km., daily, day and night flights.

TIME: GMT plus 8 hours. Permanent.

HOLIDAYS: New Year's Day; Chinese New Year; Good Friday; Labour Day; Wesak Day; Dayak Festival Day (Gawai); Yang Dipertuan Agong's Birthday; Hari Raya Puasa; T.Y.T. Yang Dipertua's Birthday; National Day; Hari Raya Haji; Awal Muharram; Prophet Mohammad's Birthday; Christmas Day.

Chinese New Year; Dayak Festival Day (Gawai); Hari Raya Puasa normally has 2 days holiday.

SHORE LEAVE: It is regretted that both passengers and crew must be dissuaded from coming ashore other than for medical attention, owing to weather and tidal restrictions.

IDENTIFICATION CARDS: Seaman's Record Book is sufficient.

REPAIRS: No facilities for repairs.

LUBRICANTS: Generally, lubricants not available but in emergency certain grades sometimes obtainable in very limited quantities.

PROVISIONS: Limited fresh provisions and ex-bond stores available for which vessels should give 72 hours notice of requirements so that arrangements can be made to secure the required supplies.

POLICE/AMBULANCE/FIRE: Tel: 999.

REGULATIONS: The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International Code Flag "P") to be hoisted, during daylight hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than east 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the port clearance.

(2) The Port Clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.

AUTHORITY: Marine Officer, Marine Department, Kubu Road, Miri, Sarawak, Malaysia. *Tel:* 085-34624; 085-32352; 085-33338, 085-33301. *Cables:* "Shipping Miri".

Deputy General Manager, Miri Port Authority, River Road, P.O.Box 1179, Miri, Sarawak, Malaysia. *Tel:* 085-38481; 085-38529. *Cables:* "Mirport".

PASIR GUDANG, Malaya: 01.26 N. 103.54 E.

(See Plan Book)

LOCATION: The port is situated on the Malaysian Coast of the Straits of Johore, 10 nautical miles East of Johore Bahru Town. The approximate position is Lat. 01° 26′ 06″ N., Long. 103° 54′ 25″ E.

DOCUMENTS:

Customs:

2 Personal Effects List,
2 Narcotics Lists,
2 Arms and Ammunition Lists,

2 Stores Lists made out on ships forms only, no special forms issued by the port. Customs Boarding Officer also requires a full and correct statement of all dutiable liquor and tobacco carried as ship's stores, the statement which is to be submitted in duplicate on forms provided by the Boarding Officer is to show in detail the quantities of dutiable goods held:–

(a) in the ship's stores, bars and shops;
(b) in the possession of Officer and Crew.

Immigration: 3 Crew Lists, all Crew Seaman's books for entry visa stamp.

Port Health: 1 Vaccination List, Maritime Declaration of Health.

Police: 1 Crew List.

PILOTAGE: Pilotage is compulsory for vessels exceeding 45 m. (150 ft.) entering or leaving the Port Water Limits. Pilotage is provided by the Authority. The pilot boarding point is within the vicinity of Johore Shoal Buoy in position Lat. 01° 18′ 51″ N. Long. 104° 06′ 30″ E.

APPROACHES: *Fairway:* There is no limitation imposed on size of vessels passing through the fairway except for the draft. The main channel in the East Johore Strait has a depth of water up to approximately 12.8 m. (42 ft.) ACD up to the Port Waterfront and 11.6 m. (38 ft.) ACD for areas beyond up to the Causeway.

ANCHORAGE: Anchorage areas have been designated within the port water limits and as indicated in all navigational charts for the following:

(a) General purposes.
(b) Dangerous goods and explosives.
(c) Quarantine.
(d) Petroleum.
(e) Lay-up.

RESTRICTIONS: A 24 hour Pilotage service for all vessels entering or leaving Johore Port is provided. However, the following restrictions are imposed.

1. *Recommended Speed:*

(a) The maximum recommended speed should not exceed 8 knots and when passing Fairy Point, the speed should not exceed 6 knots.

(b) Vessels are required to slow down when passing Johore Port area, Malaysia Shipyard Engineering (MSE) and Sembawang Shipyard areas.

2. *Reporting:*

When entering, transitting or leaving the East Johore Strait, all ships of 2,000 g.r.t. and above or whose masts or superstructures exceed 30 m. above the waterline or where the vessel is under tow and the combined length of the towing vessel and the tow exceed 30 m. are requested to comply to the contents of the Port of Singapore Circular No. 23 of 1981 (see "Traffic Information") in providing the following data:–

(a) Name and Call Sign of vessel;
(b) Type of vessel (stipulate floating crane, oil rig, etc.);
(c) Max. height above waterline in metres;
(d) Destination (Sembawang port, name of shipyard, etc.);
(e) Point of origin (Sembawang port, Johore Port, Johore Shoal Buoy, etc.);
(f) ETA at Johore Shoal Buoy or ETD.

on VHF Channels 11, 21 and 63.

3. *Tugs:*

Tug services are available for towage, berthing and unberthing operations within the port's water limits. This service is provided by the Authority's tugs and supplemented by privately operated tug companies. The tugs are mostly equipped with fire fighting and anti-pollution equipment.

(a) VLCCs or vessels of more than 280 m. in length are to be provided with at least 2 escort tugs when transitting the East Johore Strait.

(b) Vessels of more than 240 m. in length are required to be provided with 1 escort tug when transitting the East Johore Strait.

4. *General:*

(a) When a nuclear powered ship is underway in the East Johore Strait no vessel should be underway forward of her.

(b) Vessels above 180 m. in length will not be programmed to pass any vessel exceeding 280 m. in length transitting the East Johore Strait between Changi and Sembawang Shipyard.

(c) VLCCs or vessels of more than 280 m. in length will be programmed to transit the Fairy Point/Changi area during slack water or stemming the tidal current.

(d) Vessels of more than 240 m. in length will be permitted to transit the East Johore Strait only during daylight hours.

(e) Vessels of between 210 m. and 240 m. in length are permitted to transit East Johore Strait during non-daylight hours provided they have full use of engines and are programmed to transit during slack tide or stemming the tidal current.

(f) Anchoring is prohibited in the main channel. Any unauthorised anchoring must be reported immediately to Johore Port Authority and Sembawang Control.

(g) During the hours of darkness, tows are generally not permitted to transit East Johore Strait.

For the purposes of the above guidelines:–

(a) A VLCC (very large crude carrier) is deemed to be a tanker of 150,000 d.w.t. and above.
(b) Length of vessel refers to her overall length.
(c) Daylight hours means from 0700 hrs. to 1900 hrs.

VHF: Vessels can communicate direct with the pilot control station tower via ship to shore VHF on the following Channels:–

Channel	*Ship Stations*	*Shore Stations*
11	156.550 MHz	156.550 MHz
21 (Listening Frequency only)	157.050 MHz	161.650 MHz
63	156.175 MHz	160.775 MHz

VHF network links the tugs, launches and the Authority's personnel working on board vessels at the anchorages.

TUGS: See "Restrictions" and "Facilities".

FACILITIES: *Oil Jetty:* Depth of water 11 m. (36 ft.), L-shaped with 2 berths.

Ocean Wharves: Depth of water 11 m. (36 ft.), length 732 m. (1,200 ft.).

Coastal Wharf: Depth of water 5.5 m. (18 ft.), length 107 m. (350 ft.).

Transit Shed: 10,950 sq.m. (118,800 sq.ft.).

Godown: 5,400 sq.m. (59,400 sq.ft.).

Open Sided Shed: 10,950 sq.m. (118,800 sq.ft.).

Open Storage Yard: 3.24 hectares (8 acres).

Palm Oil Tank Installation: Present capacity for crude 38,600 tonnes. Refined 70,600 tonnes.

Liquid Chemical Installation: Present capacity 8,000 tonnes.

Petroleum and Petroleum Products: Storage capacity 47,000 tonnes.

Grain Silos: 50,000 tonnes.

Fertiliser Storage: 80,000 tonnes.

Timber Terminal: 6.87 hectares (15 acres).

Proposed Warehousing and Distribution Area: 3.24 hectares (8 acres).

Other facilities such as bauxite, ore and woodchip jetties as well as a shipyard (Malaysian Shipyard and Engineering) are available and operated by private companies. The shipyard undertakes repairs and docking to vessels up to 400,000 d.w.t.

Shore Equipment:

		Capacity	*Unit*
(a)	Sideloaders	25 tonnes	1
		4 tonnes	5
(b)	Mobile Cranes	28 tonnes	2
		10 tonnes	2
(c)	Forklift Trucks	8 tonnes	6
		6 tonnes	3
		2 tonnes	9
		3 tonnes	23
		6,000 lbs. LPG	3
		4,000 lbs. LPG	6
(d)	Towing Tractors	1,814 kg. Drawbar pull	1
		907 kg. Drawbar pull	5
(e)	Trailers	15 tonnes	5
		6 tonnes	12

Floating Equipment:

(a)	Tugs	2 – 1,800 b.h.p.
		2 – 350 b.h.p.
(b)	Launches	2 – pilot launches
		2 – security launches
(c)	Lighters	8 – 80 tonnes capacity steel barges
		2 – 200 tonnes capacity steel flat-top water barges

STEVEDORES: Stevedore and shore labour undertaken by the Port Authority and shift times are as follows:–

0700 – 1500 hrs.
1500 – 2300 hrs.
2300 – 0700 hrs.

Stevedores may undertake work of opening/closing of hatches but rigging of gear must be done by the crew.

FRESH WATER: Fresh water connections are on the berth. The rate of supply being 20 t.p.h.

FUEL: All grades of Bunkers are available at short notice.

SURVEYORS: Classification Surveyors are available from Singapore and Kuala Lumpur. Cargo Surveyors are represented locally by Caleb Brett, General Superintendents and Trident Malaysia.

GANGWAY/DECK WATCHMEN: The Port Authority has a Security Division responsible for the general security of the port area. The force consists of a detachment of trained armed guards. Their services are available if requested through the Agents.

REPAIRS/DRY DOCKS: Situated in Pasir Gudang Industrial area is Malaysia Shipyard & Engineering Sdn, Bhd. MSE is a fully equipped up-to-date engineering establishment. With facilities for ship repairing, newbuilding up to 12,000 d.w.t. and general engineering works.

(1) Drydock, length 395 m., width 80 m., depth 14 m., capable of handling ships of 400,000 d.w.t.

(2) No. 2 drydock, length 270 m., width 46 m., depth 12.5 m. capable of handling up to 140,000 d.w.t.

(3) Newbuilding dock, length (approx.) 130 m., width 24 m., depth 8.0 m., capacity approx. 12,000 d.w.t.

Berthage: No. 1 quay, 390 m. long × 7 m. draft. 1 × 15 ton luffing crane. No. 2 quay, 168 m. long × 7 m. draft. 1 × 15 ton luffing crane. No. 3 quay, 168 m. long × 7 m. draft. 1 × 15 ton luffing crane.

CUSTOMS ALLOWANCES: Spirits: 0.125 of a quart per man per day or wine 1 quart per man per day; beer 1 quart per man per day, cigarettes: 25 in number per man per day or cigars 8 in number per man per day or tobacco 1 oz. per man per day.

Customs will issue allowance for total of 3 days, and on request to a Proper Customs Officer the seal may be broken for further issues.

CARGO GEAR: When possible all loading and discharging are carried out with ship's gear. Shore equipment comprises – 1 side loader capacity 52,000 lbs., 5 side loaders of capacity 9,000 lbs., each 2×28 tonne mobile cranes, and 2×10 tonne mobile cranes. For bulk cargoes, grains, fertilisers, sulphurs, etc., shore grabs of 2 tonne capacity connected to ship's gear.

REPATRIATION: Ship's crew with valid or recognised International Passport are permitted to enter and sign-off through Malaysia/Singapore checkpoint at Causeway, provided they obtain a transit visa from the Malaysia Authorities through the ship's Agents. Ship's crew without International Passport, and only Seamen's Books must join/leave ships via Kuala Lumpur.

TIME: GMT plus 8 hours.

HOLIDAYS: *Port closed Holidays:* The port is operationally closed during the following festival days:–

1. Hari Raya Puasa (Muslim Aidil Fitri);
2. Chinese New Year;
3. Malaysia National Day;
4. Deepavali;
5. Hari Raya Haji (Muslim Aidil Adha).

SHORE LEAVE: Shore leave for crew members is permissible. The nearest town is Masai approx. 5 miles from the port. Johore Bahru is approx. 23.5 miles from the port by road. Crew members are allowed to cross the Causeway into Singapore, providing they obtain the necessary permit from the Immigration Authorities through the ship's Agent.

TRAFFIC INFORMATION:

Port of Singapore Authority – Port Circular No. 23, dated 20th March, 1981.

To: Shipping Community

Traffic Information System for Ships Transitting Serangoon Harbour: 1. In exercise of the powers conferred by section 65 of the Port of Singapore Authority Act (Cap 173) 1970, I hereby direct that Masters of vessels entering, transitting or leaving the traffic information area shall, in the case of vessels having a gross registered tonnage of 2,000 and above or whose masts or superstructures exceed 30 m. above the waterline or where the vessel is under tow and the combined length of the towing vessel and the tow exceeds 30 m., comply with the new VHF reporting system which is given in this circular with effect from 1st June, 1981.

2. *Method of Communication:*

2.1 The VHF traffic is conducted on VHF Channel 21 and Masters of vessels are required to listen to this Channel continuously while their vessels are entering, transitting or leaving the traffic information area.

2.2 In the event that Channel 21 is inoperative, Channel 13 will be used. Masters of vessels are required to contact Port Operations on Channel 12 for confirmation of breakdown of Channel 21 prior to using Channel 13 for communication with the PSA Control Station.

3. *Notification:*

3.1 Master of vessels mentioned in paragraph 1 intending to enter or transit the traffic information area shall give at least 24 hours notice to the PSA Control Station. The information required together with this notice are:

(a) Name and Call Sign of Vessel;
(b) Type of vessel (stipulate floating crane, oil rig, etc.);
(c) Max. height above waterline in metres;
(d) Destination (Sembawang Port, name of shipyard, etc.);
(e) Point of Origin (Sembawang Port, Johore Port, JSB, etc.);
(f) ETA at Johore Shoal Buoy or ETD.

3.2 This notification may be given to the PSA Control Station by telephone, VHF, telex, public telegram or W/T.

3.3 Between 2 and 3 hours before arrival at Johore Shoal Buoy (approx. positon Lat. 01° 18′ 53″ N., Long. 104° 05′ 00″ E.) or 3 hours before departure from a berth within East Johore Strait, Masters of vessels mentioned in paragraph 1 shall notify and seek permission from the PSA Control Station on Channel 21. In seeking permission from the Control Station, the following information is required.

(a) Eastbound:
    ETD from berth
    ETA at Perimbi Buoy (approx. position Lat. 01° 25′ 50″ N., Long. 103° 53′ 21″ E.).
    ETA at Malang Papan Beacon (approx. position Lat. 01° 24′ 07″ N., Long. 103° 59′ 27″ E.).
    ETA at Malang Tiga Buoy (approx. position Lat. 01° 23′ 09″ N., Long. 104° 01′ 33″ E.).
(b) Westbound:
    ETA at Johore Shoal Buoy (approx. position Lat. 01° 18′ 53″ N., Long. 104° 05′ 00″ E.).
    ETA at Malang Tiga Buoy.
    ETA at Malang Papan Beacon.
    ETA at Perimbi Buoy (if applicable).

Following approval from the PSA Control Station, Masters of Westbound vessels when passing Johore Shoal Buoy and Angler Buoy (approx. position Lat. 01° 21′ 06″ N., Long. 104° 03′ 07″ E) shall confirm or update their ETAs at Malang Tiga Buoy and Malang Papan Beacon.

3.4 Masters of Eastbound vessels shall confirm or update their vessels' ETAs at Malang Papan Beacon and Malang Tiga Buoy when passing Punggol Beacon (position Lat. 01° 25′ 19″ N., Long. 103° 54′ 48″ E.) and Squance Buoy (approx. position 01° 23′ 43″ N., 103° 58′ 00″ E.).

3.5 Masters of vessels should check their vessels declared ETAs at Malang Tiga Buoy and Malang Papan Beacon when their vessels are between Angler Buoy and Squance Buoy. Should the new ETAs at Malang Tiga Buoy and Malang Papan Beacon differ by 5 minutes or more from the last declared ETAs, they should update their vessels' ETAs with the PSA Control Station.

4. Masters of vessels failing to comply with these directions shall be guilty of an offence punishable under section 66 of the Port of Singapore Authority Act.

Signed: Port Master, Port of Singapore Authority.

TELEPHONES: Telephones may be placed on board at a connection charge of $/M25.00 per day.

SERVICES: *Provisions:* 2 licensed ship chandlers are able to provide and attend to all requirements.

DEVELOPMENTS: Johore Port has plans for the construction of 5 more wharves. The proposed berths are for dry bulk materials, general cargo and containers. The berths will serve the needs of specialised industries such as fertilizers, feedmeal, and grains. The construction of silos, storage area, and other processing plants is to be undertaken by the companies concerned.

SHIPMASTER'S REPORT: February 1979.

Port Limits: All the area of water enclosed on the West by a line drawn due South from Tanjung Bin (Lat. 01° 20′ 00″ N., Long. 103° 32′ 48″ E.) on the North by the Southern shores of the State of Johore, on the East by a line drawn 229° from Tanjung Stapa (Lat. 01° 20′ 36″ N., Long. 104° 08′ 12″ E.) and on the South by the limits of territorial waters of Johore, including the Johore River up to the bridge where the Johore Bahru to Kota Tinggi road crosses.

Documents: Agent: Last Port Clearance, Manifest, Bills of Lading, Ships Certificates, Crew Agreement (Articles).

Pilotage: Pilots board off Johore Shoal Buoy, request for Pilot to be made via Agents. Confirmation of Pilot boarding obtained from Johore Port Control, VHF Channels 11, 21 and 63.

Pilot launch is a fast motor cruiser.

Pilotage is compulsory for all vessels over 45 m. in length.

Anchorage: Ships proceeding to call at any of the docks within Johore Port Limits, may be requested to use the anchorage to the East of the pilot boarding ground. Vessels may also anchor approx. 0.6 miles E.S.E. off Pasir Gudang wharf, for large vessels there is a mooring buoy to restrict swinging into the channel.

Max. Size: The navigational conditions in the Straits are adequate for vessels of sizes expected to call at Johore Port as determined by depths at Ocean Wharf, Oil Jetty, and Coastal Wharf. No limitations on the size of vessel passing through the fairway except for controlling draft in the East Johore Channel of up to approx. 11.6 m. Large vessels up to 400,000 d.w.t. can navigate the Straits in ballast proceeding to Malaysia Shipyard also situated in Pasir Gudang.

Health: Vessels Agent to give advance notification to the Health Officer, if possible 48 hours prior to ETA of vessel, together with a list of ports visited within the preceding 14 days. Vessels from infected ports, or without valid Derat Exemption Certificates, or with cases of sickness or death on board, must fly the quarantine flag, and proceed to quarantine anchorage until boarded by the Port Health Officer.

Radio: Singapore Radio 9VG is the most reliable, and messages are telexed direct to local Agent in Johore Baru.

VHF: The base station is situated at Pasir Gudang, Channels presently in use are 11, 21 and 63.

Tugs: 2 tugboats of 1,800 h.p., 2 tugboats of 350 h.p. Tugs normally meet vessels off the wharf, or at anchorage when mooring to buoy. Tugs lines used.

Berthing: Oil Jetty: Depth alongside 11.0 m.; "L" shaped jetty, with 2 berths.

Ocean Wharves: Depth alongside 11.0 m.; length of wharf 732 m.

Coastal Wharf: Depth alongside 5.5 m.; length of wharf 107 m.

The Ocean berth is designed for general cargo vessels, and bulk carriers, of approx. 25,000 – 30,000 d.w.t.

All cargo work is carried out by ship's gear, shore equipment is available, e.g. mobile cranes, side loaders, vacuvators.

Specialised Cargo Handling Facilities: Oil Jetty capable of handling Palm oil shipment. Liquid chemical installation of 8,000 tonnes capacity. Grain silos, 50,000 tonnes capacity. Fertiliser storage 80,000 tonnes. Timber terminal 15 acres.

Medical: Medical service is available from the nearby town of Pasir Gudang, which is only a short distance from the port. There is a General Hospital situated in Johore Baru to attend to serious cases.

Fresh Water: Fresh water is available through hydrants installed at frequent intervals on the wharves and the breasting island of the oil jetty. Fire fighting hydrants are installed throughout the port area, using separate fresh water, and sea water systems. Fresh water may also be supplied to vessels in the anchorage if required by water barge.

Fuel: Bunkers are available by pipe-line installed along the quay, or alternatively by barges. Bunkering is undertaken by Petronas.

Fire Precautions: The Port Authority maintains a fire and rescue service, with trained firemen responsible for fire fighting on board, and on shore. The brigade is equipped with modern fire fighting appliances, and salvage equipment. Tugs are also equipped with fire fighting equipment, and anti-pollution equipment.

Consuls: Nearest Consuls are situated in Singapore, and arrangements can be made to obtain Visa to proceed to Singapore to carry out ships business.

Hatches: Preferably all opening/closing to be carried out by ship's crew, as the stevedoring labour is inexperienced.

Services: The Malaysia Shipyard & Engineering Co. has an agreement with the Port of Singapore Authority for the use of a slop barge which may be sent to the Johore Anchorage to receive slops from tankers which are proceeding to MSE for repairs. Numerous other services, and local representation for engineering and marine equipment available from Singapore.

SHIPMASTER'S REPORT: April 1979.

Position: The port is situated at the Southern tip of the Malaysian peninsula on the East of Johore Straits, about 10 miles East of Johore Bahru town. The straits separating Malaysia and Singapore provides good shelter and safe anchorage.

The exact position is Lat: 1° 26′ 06″ N., Long: 103° 54′ 25″ E.

Approaches: Pilot is picked up at Johore Shoal buoy. Pilots can be contacted on VHF Channels 11, 21 and 63. The access route for vessels proceeding to the port branches via the buoy off Johore Shoal, passes through Kuala Johore and the bend off Serargoon North of Pulare Ubin. From Serargoon the route leads straight N.W. of the port. The East Johore channel has a depth of 38 ft.

Berths: There are at present 5 berths in the port. They are as follows:

Berth	Length (ft.)	Water Depth (ft.)	Max. draft allowed (ft.)
1. Outer oil jetty	700	36	34
2. Inner oil jetty	450	32	29
3. Ocean berth 1	350	18	17
4. Ocean berth 2	600	33	31
5. Ocean berth 3	600	32	30

Boarding Officials: Since this vessel came from Singapore, all clearances were arranged by the Agent there. The Customs boarded to check the seal on the bond. The Immigration, Port Health, etc. also boarded for a cursory check.

Discharging: Discharging was carried out using grabs which were attached to the ship's cranes. There are no facilities ashore for any type of discharging, except a small conveyor which is used for grain only. The grabs had no weight marked on them, hence it was insisted that the grab along with one full lift of cargo be weighed. This was done and the average weight of the grab was found to be 2 tons and the maximum cargo possible that could be lifted was 2.5 tons.

This port apparently handles a lot of fertiliser, but never in large parcels. This parcel of 6,000 tons was the second largest discharged. 4 cranes were used throughout and the discharge rate worked out to nearly 2,000 tons/day. The stevedores were initially warned against mishandling the cranes, and it was found that the operators handled the cranes very slowly and carefully.

Provisions: Available, but slightly more expensive than Singapore. No bonded stores available at this port.

Density: Varied from 1018 to 1021.

Shore Leave: There is no restriction on shore leave. No special permits/passes are issued, but the Agents suggested that persons going ashore should preferably carry their passports/discharge books. The nearest city is Johore Bahru which is 20 miles away. Ample transport is available at moderate rates. About 4 miles away from the port there is also a village called Masai.

Medical: All types of normal medical attention available.

AUTHORITY: Johore Port Authority, Peti Surat 66, Pasir Gudang, Johore, Malaysia. *Tel:* 07-512601. *Telex:* MA 60717. *Cables:* Johan Pasirgudang. *Contact:* Captain Zainol Abidin Bin Mohamed, Marine Manager.

PENANG, Malaya: 05.25 N. 100.21 E. (See Plan Book)

DOCUMENTS:

The report of arrival (provided in Marine Shipping Ordinance, 1952).

A copy of Passenger Statistics on prescribed forms.

A List of Crew Members.

A List of Passengers.

Evidence of last Port Clearance.

All Ship's Documents (safety equipment, derat, radio, load line and register).

Maritime Declaration of Health.

International Health Certificate for passengers and crew.

Vaccination List, for Cholera, for passengers and crew.

Departures: Port Clearance Certificate signed by the Port Health Officer, to be shown to the Port Officer issuing clearance.

Clearance also required from Immigration.

For oil tankers, a copy of Ship's Manifest to be submitted. Ship carrying explosives, Master required to fill prescribed form "D" stating quantity of explosive cargo ship is carrying together with copy of Ship's Manifest.

ANCHORAGES: The Man of War, Petroleum, Quarantine, Explosive and local vessel anchorages are marked on Charts of the Penang Harbour (A.C. No. 3732).

There is no specific anchorage area in the harbour for foreign going vessels other than mentioned above. These vessels are normally anchored South of Lat. 5° 26′ N. and North of Lat. 5° 22.80′ N. between the mainland and the island, clear of the berths, fairways and shallow areas.

RESTRICTIONS: No entry restrictions imposed other than those dictated by state of tide and draft of vessel.

Also see "Pilotage".

MAX. SIZE: No limitations of size of vessel except for draft. North Channel chart datum 11.8 m. South Channel chart datum 5.79 m.

PILOTAGE: Vessel approaching port has to send telegram to Pilot Office direct (cable address "Pilots Penang") or to ship's Agent stating "ETA North Channel Light Float" or in case of South Channel "ETA Pulau Rimau". Draft of vessel to be given. Pilot Office may be contacted through Penang Telephone Exchange on VHF Channel 16 to local telephone No. 63313. At least 3 hours' advance notice should be given before arrival at Pilot point.

Pilot boats have a blue hull, white upperworks with "Pilot" written in bold letters on both sides of boat.

Pilot is usually taken on board, for North Channel, in vicinity of North Channel Light Float in position Lat. 5° 35′ 09″ N., Long. 100° 12′ 45″ E. and for South Channel, in vicinity of Rimau Wreck Buoy 1 mile South of Pulau Rimau Lighthouse.

Vessels awaiting Pilot can anchor, in case of North Channel, in the Pilot waiting area within the following co-ordinates:

1.	Lat. 05° 35.8′ N.	Long. 100° 10.9′ E.
2.	Lat. 05° 34.3′ N.	Long. 100° 10.9′ E.
3.	Lat. 05° 32.7′ N.	Long. 100° 13.0′ E.
4.	Lat. 05° 34.2′ N.	Long. 100° 13.0′ E.

An approach channel of 10 nautical miles × 183 m. wide for 1 line of traffic has been dredged at the North Channel and presently entry to the port is governed by a shallow patch of –10.2 m. A.C.D. This patch will be dredged to –11.9 m. A.C.D. sometime in the future in readiness to cater for large container vessels calling at the new Container Terminal currently being planned.

Approach through the South Channel is presently closed due to the construction of a bridge linking Penang Island to the Mainland. The bridge is scheduled to be completed in the middle of 1985. When completed the bridge will have an access channel of 156 m. wide and an overhead clearance of 30 m.

The pilot station and all pilot boats are equipped with VHF which operates on Channel 12. A minimum of 3 hours' advance notice is required to order Pilots.

Pilotage is compulsory for all vessels navigating in pilot district of Penang with the exception of fishing vessels and vessels of below 600 g.r.t.

Shipmaster's Report: The KRA lightvessel, on the Outer Kra Bank to the South of the South Channel, is non-existent.

The pilot station is now equipped with VHF but operates on Channel 12 only. The pilot launch is also equipped likewise, as is a car that transports the Pilots from their homes to Batu Maung Point where they board the launch. It takes them exactly 1 hour from their homes until they are aboard a vessel at Rimau Buoy, therefore a minimum 3 hour notice is adequate.

One Pilot advised me not to approach the South Channel at any time if the vessel's draft is over 7.3 m. He stated that the bar to the S.W. of Rimau Buoy has not been surveyed for many years and that possible silting may leave it on a lesser depth than the chart suggests. The approach to the North Channel is safe.

RADIO: Penang Radio, call sign 9–MG.

VHF: The Penang Port has various working Channels as follows:

Channel 16 – Watching Channel and Port Police.
Channel 7 – Port Police.
Channel 12 – Pilotage.
Channel 20 – Port Operations.
Channel 13 – Working Channel between tugs/Pilot.

TUGS: May be required to berth vessel at Butterworth Wharves in Port Penang. Tug joins vessel when at close proximity to wharves. Usual for tug's lines to be used.

3 tugs available, 2,000 b.h.p., 1,320 b.h.p. and 1,200 b.h.p. Also 2 tow-boats of 470 b.h.p. available to tow lighters to and from vessels.

BERTHING: There are 2 wharves, viz. Swettenham Pier on the island of Penang and Butterworth Wharves on the Mainland.

Swettenham Pier: 2 ocean berths of 365 m. length with 9.7 m. of water alongside. There is 4,366 sq.m. of covered storage accommodation.

Butterworth Wharves; 6 ocean berths of 1,051 m. length with 9.7 m. of water alongside.

There are 4 transit sheds of 10,823 sq.m. and 13,006 sq.m. of open storage area. 9 godowns of 35,674 sq.m. near the port area are leased to private companies. Berth Nos. 5 and 6 are container berths.

SPECIALISED CARGO HANDLING FACILITIES: A bulk cargo terminal has been constructed to service dry and liquid bulk carriers. Length of wharf is 140.2 m., but is aided by 2 side dolphins connected by a 1,219 m. access bridge, depth alongside is 10 m.

There is another vegetable oil tanker pier with depth alongside of 9.7 m. Pipe-lines connect the tanks to the berth providing speedy and efficient loading and discharge of vegetable oil direct to and from the vessels.

CONTAINER HANDLING FACILITIES: Th port is equipped with modern container handling facilities to handle both 20 ft. and 40 ft. containers. These container facilities are available at the Butterworth Wharves and they include a 6.7 hectare marshalling yard with storage space for 5,000 containers, 2 container freight station units (8,639 sq.m.), units of transfer cranes for stacking, receiving and delivery of containers, 60 units of power points for refrigerated containers and prime movers with 20 ft. and 40 ft. trailers. Additional container handling equipment includes 2 container gantry cranes, 14 prime movers with 12 units of 40 ft. trailers, 18 units of 20 ft. trailers and 4 units of 43 ft. trailers, forklifts and forklift trucks for container freight station operations.

Haulage of containers inland and between the Island and Butterworth Wharves is catered for by 2 private haulage companies i.e. Kontena Nasional, and Konsortium Perkapalan.

Container-Roll-on/Roll-off Berth:

The Port has 2 container berths with lengths of 161 m. and 160 m. respectively. The first container berth is equipped with a Ro/Ro ramp of 8 m. wide and 28 m. long to service container and Ro/Ro vessels.

The berths are serviced by 2 rail-mounted 35 ton container gantry cranes.

CARGO HANDLING EQUIPMENT: At Butterworth Wharves: 8 mobile cranes of 1.5 tons to 3 tons capacity, 55 forklift trucks, 8 units of prime movers and 12 units of trailers.

At Swettenham Pier 3 mobile cranes of 2 ton capacity, 6 electric cranes of 1.5 ton to 3 ton capacity.

In the event of a vessel working in the Roads, lighterage is available for the transport of goods to and from the vessel. There are about 169 operated by private companies and two 150 ton lighters by the Commission for essential lighterage work.

LIGHTERAGE: In the event of a vessel working in the Roads, lighterage is available for the transport of goods to and from the vessel. There are about 182 lighters operated by private companies and 5×150-ton lighters by the Commission for lightering of cargo in the Port. In the case of the Commission's lighters, lighterage is only undertaken for export cargo.

BRIDGES: *Shipmaster's Report:* November 1984.

A bridge is nearing completion across the Southern end of Penang Harbour. It consists of a low level pile structure and runs roughly E./W., North of Pulau Jerejak, an elevated section is being built into the structure but according to the Pilot the Southern entrance to the harbour will probably be limited to small coastal vessels.

Also see "Pilotage".

STEVEDORES: Stevedores can only be provided by stevedore contractors at short notices but normally a minimum of 12 hours will be required. Shipping Agents normally make these arrangements with stevedoring contractors.

Working Hours:

The Port operates round the clock. The working hours are as follows:
1st shift 0730 – 1530 hrs. (meal break 1130 – 1230 hrs.)
2nd shift 1530 – 2300 hrs. (meal break 1930 – 2030 hrs.)
3rd shift 2330 – 0730 hrs. (meal break 0330 – 0430 hrs.)

MEDICAL: Advance notice is necessary if medical attention is required so that arrangements can be made with Medical Department by Agents.

TANKERS: 2 tanker berths. Esso Wharf, 27 ft. at LW. Caltex Wharf, 35 ft. at low water. Mud bar approach to Caltex Wharf is 29 ft. at LW. Tankers also occasionally call at Swettenham Pier to deliver oil to L.L.N. Power Station.

FRESH WATER: Available at all times. Delivery can be by means of hydrants at berths or by water-boats (1×180 ton and 1×200 tons capacity) to vessels anchored in Roads. Rate of delivery is approximately 40 t.p.h.

FUEL: Fuel available from private oil companies at 24 hours' notice. Limited quantities of fuel can be supplied by barges to vessels in the Roads.

GANGWAY/DECK WATCHMEN: Services of a watchman recommended.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

IDENTIFICATION CARDS: Needed only when a crew member is discharged after hospitalisation or when he is repatriated.

REPAIRS: Minor repairs can be undertaken.

DRY DOCKS: Dry docks not available for ocean carriers. Slipways available for vessels of 700 n.r.t. with dimensions of 57.9 m.×12.2 m.

REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriation.

AIRPORT: Distance from port to airport approximately 18.3 km. Served by both international and local airlines.

TIME: 7.5 hours ahead of GMT. No alteration to clocks during year.

HOLIDAYS: 3 port holidays a year: Hari Raya Puasa, Hari Raya Haji and National Day.

POLICE/AMBULANCE/FIRE: Dial 999.

TELEPHONES: A telephone is placed on every ship that berths alongside. This is one of services provided under a common charge known as the wharf service charge.

SERVICES: All types of minor marine servicing is available. Provided by private firms. Some of the services are draft survey, general conditioning of ship, valuation of ship, accident survey, inspection of refrigeration, radar adjusting service, compass adjusting and tank-cleaning facilities.

SHORE LEAVE: Allowed.

REGULATIONS: When a vessel calls at port, Customs search party may go on board vessel to search for contraband goods.

DELAYS: Rain is only factor that may delay a ship's discharging or loading operations.

DEVELOPMENTS: Dredging of the North Channel to 11.8 m. depth has been completed and it can now cater for deep draft vessels.

A second berth, at the Bulk Cargo Terminal in Prai, is in the process of being constructed to cater for the anticipated increases in the volume of bulk cargo.

A new container terminal is to be built at North Butterworth in the port of Penang. The project will involve the reclamation of 41.6 ha. for a container marshalling yard, container freight stations and ancillary areas; construction of a 530 m. long × 60 m. wide container wharf, including a mooring dolphin and a 520 m. long × 19 m. wide access bridge to the wharf.

Other works will include paving of port areas; construction of buildings, container freight station, workshops and other ancillary facilities; provision of container handling equipment; acquisition of a 3,000 h.p. tugboat, including fire-fighting equipment.

Also see "Pilotage".

AUTHORITY: The Penang Port Commission, Peti Pos 143, Pulau Pinang, Malaysia. *Tel:* 372211. *Telex:* Pelpin Ma 40157. *Cables:* "Wharves Penang".

AGENT: Antah Jardine Shipping Agencies Sdn. Bhd., 91 Farquhar Street, Penang. Tel: 04-61543 and 04-61544. Telex: MA40073. Cables: "Jarship" Penang.

PORT DICKSON, Malaya: 02.31 N. 101.47 E.

DOCUMENTS:

1. *Harbour Master's Office or Marine Department*
   - *(a)* "Report of Arrival of Vessel" on prescribed Form (Marine 28) obtainable from Harbour Master's Office on arrival.
   - *(b)* One copy, Passenger List, specifying names and nationalities and required to report any casualties, accidents, births or deaths that have occurred during the voyage to the passengers, crew, ship or cargo.
   - *(c)* Port Clearance from last port and copy of Manifest of Cargo to be discharged.
   - *(d)* List of all arms and explosives on board.
   - *(e)* In the case of a British or Malaysian vessel and vessels belonging to a nation not having a Consular Officer at the port, produce to Port Officer the Certificate of Registry and ship's Articles.
   - *(f)* All ship's certificates such as Safety Equipment Certificate, Radio Certificate, Load-line Certificate, Safety Construction Certificate, Ship's Registry, Passengers' Certificate, Derat Certificate and all Certificates of Competency of all Officers on board.
   - *(g)* Crew List.
2. *Immigration Authorities*
   - *(a)* Crew List (3 copies).
   - *(b)* Passenger List (3 copies).
   - *(c)* Produce all passengers passports/visas.
   - *(d)* Produce all seamen's cards.
   - *(e)* Forms A and B – "Immigrant and Emigrant" obtainable from Immigration Department on arrival.
3. *Port Health*
   - *(a)* Crew List showing last date of vaccination.
   - *(b)* Passenger List showing the last date of vaccination.
   - *(c)* Produce all seamen and passengers' vaccination cards.
4. *Customs Department*
   - *(a)* Crew List (2 copies).
   - *(b)* Passenger List (2 copies).
   - *(c)* Personnel Effects List (2 copies).
   - *(d)* Cargo Manifests (2 copies).
   - *(e)* Last Port Clearance.
   - *(f)* Bonded Stores List (2 copies).
   - *(g)* Full and correct statement of dutiable goods carried as ship's stores (2 copies).
   - *(h)* Customs Form C.D.15 obtainable from Customs Department on arrival.

APPROACHES: Deep water approach channel from N.W., marked by 5 light buoys, presents no difficulties and is clear.

PILOTAGE: The Port Dickson area does not constitute a Compulsory Pilotage District under provisions of Merchant Shipping Ordinance, 1952. Private pilotage services are, however, operated by Shell and Esso for vessels making use of their respective marine installations. Mooring Master boards tankers at Banbeck Shoal Buoy. Pilots on VHF Channel 19.

Ship's Officer's Report: Pilot boards one mile off Fairway Buoy. However, vessels of less than 30,000 d.w.t. holding Admiralty Chart No. 1140 may be requested to proceed inwards, Pilot boarding at No. 1 Buoy. Coasters proceeding to Headlands Jetties may be required to do own pilotage.

ANCHORAGES: *(a)* Good anchorage may be obtained in depths from 15 to 20 fathoms, Westward and South-Westward of Tanjong Kamunin. Small vessels may obtain anchorage in depths from 4 to 5 fathoms North-Eastward of Pulau Arang Arang, but holding ground is poor.

(b) Prohibited Anchorage Area indicated by pecked lines on chart and described under Port (Negeri Sembilan) (Amendment) Rules, 1963. This area contains a tanker SBM, with extensive ground tackle and floating hose attachments, which is connected to the shore by a submarine pipe-line. Passage between the buoy and the shore is also prohibited.

RADIO: *Ship's Officer's Report:* Send ETA 96 hours and 24 hours in advance. Two hours before arrival keep listening watch on Channel 16. Shell Oil Terminal on VHF Channel 16 and 19. Cargo operations are carried out on Channel 9.

TUGS: No tug-boats available.

MAX. SIZE: Up to 49 ft. draft at S.B.M. terminal.

BERTHING: Port installations at Port Dickson comprise the following:

A small boat harbour contained in the curve of the stone approach to the Railway Jetty which affords little shelter against Southerly winds dries out at low water.

The Shell Jetty – property of the Shell Refining Co. (Malaysia) Ltd. (Private). Reinforced concrete jetty 700 ft. with "T" head 170 ft.×36 ft.

The Esso Jetty – property of the Esso Standard Malaya Ltd. (Private). Reinforced concrete island jetty 200 ft.×24 ft.

The Railway Jetty – property of the Malayan Railway Administration. Stone pier 600 ft. length terminating in a crosshead 150 ft. long with steel piling and wooden deck.

The Joint Shell/Esso single-buoy Tanker Mooring and Crude Oil Discharging Terminal.

Stone ramp on foreshore usable by lighters at high water.

MEDICAL: District hospital with 150 beds.

TANKERS: Shell/Esso Single Buoy Mooring for crude discharge into submarine pipe-line. Refineries produce petroleum products for export. Deballasting facilities up to 35,000 barrels capacity.

Esso Product Jetty: Berth is constructed of reinforced concrete. The island jetty is 200 ft.×24 ft. with 4 off-lying mooring buoys inshore for mooring purposes. Accommodation for one vessel on outer face only.

Max. LOA 575 ft.; max. draft 34 ft.; max. size 19,500 d.w.t.

Shore connections:
- 1×20 in. black oil/ballasting
- 1×16 in. white oil line
- 1×10 in. LPG line
- 1× 4 in. inert gas line

1 crane to handle hose

FRESH WATER: Available at Shell and Railway jetties.

FUEL: Bunker fuel oil available. No diesel.

CUSTOMS ALLOWANCES: Tobacco, cigarettes 25 in number per man per day, or cigars 8 in number per man per day, or tobacco 1 oz. per man per day, or snuff 1 oz. per man per day. Wine and/or spirits, spirit 0.175 qt. per man per day, or wines 1 qt. per man per day, or beer or stout 1 qt. per man per day.

REPAIRS/DRY DOCKS: None.

HOLIDAYS: Official holidays in the state as follows: New Year's Day, 1 day; Chinese New Year's Day, 2 days; Muslim New Year's Day, 2 days; Wesak's Day, 1 day; His Majesty's Birthday, 1 day; Prophet Mohammed's Birthday, 1 day; His Excellency Governor's Birthday, 1 day; Malaysia Day, 1 day; Deepavali, 1 day; Hari Raya Huji, 2 days; Christmas Day, 1 day. No cargo is worked on any of the above gazetted public holidays – port closed.

AIRPORT: None.

DEVELOPMENTS: Proposal to enlarge facilities and to provide deep-water berths.

AUTHORITY: See "Malacca".

PORT KELANG, Malaya: 03.00 N. 101.24 E.

(See Plan Book)

PORT LIMITS: *Northern Limits:* A line from Beacon B running N.W. towards Pulau Angsa Lighthouse until it intersects Lat. 3° 07′ 24″ N., thence extending due East along this latitude till it meets the mainland; *Southern Limits:* A line from Tanjung Ru running West along Lat. 2° 50′ 21″ N. till it intersects Long. 101° 14′ 00″ E., thence extending due North along this longitude till it meets Pulau Pintu Gedong;

There shall be included within the limits all waters in the Klang Straits, Selat Lumut, Sungai Puluh, Sungai Aur, Sungai Langat and other waterways contained within the Lat. 3° 07′ 24″ N. and 2° 50′ 21″ N., and Westwards towards the coast from Long. 101° 28′ 30″ E. (which passes through Connaught Bridge): including all piers, jetties, landing places, wharves, quays, docks and other similar works whether within or without the line of high-water mark and any position on the shore or bank within 45.72 m. of the high-water mark, subject to any rights of private property therein.

APPROACHES: Ships from and to Penang enter and leave the port by the North Klang Straits, and ships from and to Singapore enter and leave by the South Klang Straits. The entrance channel at the North Klang Straits is dredged to 11.3 m. below datum. A very large deep water anchorage for ships is available at the North Klang Straits. Ships can also navigate in and out of Port Kelang through a secondary channel at the South Kelang Straits. At all times the channel is dredged to 9.1 m. below datum.

DOCUMENTS: *(a) For Agent.* Vessels required to fill in arrival report which may be obtained from Agent at Singapore or Penang or Boarding Agent on arrival. This should be completed and handed to Boarding Agent together with last Port Clearance and one copy each of Crew List and Passenger Lists for submission to Marine Department.

Vessels should have ready and hand to Boarding Agent on arrival the following:

Arrival Report.
Last Port Clearance.
Two copies of Crew List.
Two copies each of Disembarking and Transit Passenger Lists (if any).
List of Explosives, dangerous cargo on board.

Following documents should also be handed to Boarding Agent on arrival and will be returned to vessel after perusal by Marine Department:

Malaysian Light Dues Receipt (if any).
Ship's Register.
Radio Safety Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Derat Certificate.

Port Health Officer now requires all vessels arriving from foreign ports to submit an "Entry Declaration" on form Health 43, on the International "Maritime Declaration of Health" form or on a similar copy, and this "Maritime Declaration of Health" form or on a similar copy, and this should be handed to Boarding Agent, together with copy of crew list, in cases where vessels are not in Quarantine, in which case doctor does not attend on board.

Note: Endorsement of Port Clearance must be obtained from Port Office at Marine Office before a fresh Port Clearance can be issued by local Customs Authorities and handed to vessel before sailing.

(b) Immigration
2 copies Crew List.
2 copies Passenger List (Disembarking and Transit).

(c) Customs
2 copies Customs List (CD.15).
1 Crew List.
1 Passenger List.

FLAGS: The Malaysian flag. Flag "Q" meaning Health Clearance required. *Flag 2/5 meaning no passengers on board, or *flag 3/4 meaning passengers on board. Pennant Zero is not required since Boarding Officers do not board the ship on arrival. Flag "H" meaning Pilot on board. (*Applies only to vessels arriving from foreign ports, which includes Singapore.)

Note: Except for vessels under way, no vessel in port may use its siren except in case of an emergency when no other means of communication is available. The Authorities strictly enforce this rule and vessels infringing it become liable to heavy fine.

Shipmaster's Report: June 1983: Flags 2/5 must be flown by day, or green/green lights shown by night until Immigration clearance has been obtained, otherwise the ship is liable to be fined.

PILOTAGE: Available 24 hours a day. Pilotage compulsory.

(a) Application. Piloting carried out by Kelang Port Authority. Masters to cable "Pilots Port Kelang" giving ETA and point of arrival, i.e. Pintu Gedong or Pulau Angsa and draft at least 4 hours before arrival, as Pilots will not leave shore until confirmation received from vessel or Agent. Both North and South Channels are well marked and Pilots consider it quite safe to arrive and depart at any hour.

Vessels approaching this port normally apply through Agent, giving ETA Pintu Gedong, Pulau Angsa or Deep Water Point, together with draft and port of departure.

(b) VHF. If vessels wish to communicate direct all pilot boats are fitted with VHF for use between pilot office, pilot boats, pilot boat to pilot boat and where necessary to vessels arriving at this port. Operated on Channel 12 of International Maritime VHF radio telephone bands, and of a range of 20–25 miles.

(c) Recognition. Pilot boats painted orange and have white superstructure.

(d) Boarding. Unless advised otherwise Pilots will be ordered to board vessels at Pulau Angsa (North Channel), or Pintu Gedong South of the Seaward Bar Buoy.

Pilot ladders should be of approved Standard pattern internationally used.

(e) Waiting for Pilot. Location for a vessel awaiting Pilot is at Pintu Gedong 5 cables South of Seaward Bar Buoy, at Pulau Angsa 1 mile East of Pulau Angsa Island, and at Deep Water Point where anchorage is available according to number of vessels already anchored.

ANCHORAGES: Per latest Admiralty charts. Vessels may load timber and ore from privately owned junks at Deep Water Point Anchorage. In exceptional cases and with permission of Port Authority it is also possible to work with Authority Lighters at Deep Water Point.
Special Anchorages: The Port Authority provides an explosives anchorage and a LASH anchorage situated North of Tanjong Bakau in the North Kelang Straits. The quarantine anchorage is located North-West of the North Port wharves.

RESTRICTIONS: (See "Max. Size"). At Pintu Gedong, the Southern Channel Pilot Station, there is a restriction which vessels will be advised of when giving their ETA.

MAX. SIZE: Maximum length of vessels using South Port is: dry cargo vessels, 600 ft. LOA and draft of 32 ft., tankers, up to 560 ft. LOA and draft 32 ft. Tidal conditions govern movements of all vessels over 300 ft. LOA in the South Port but not at the North Port. At the North extension wharves container ships of 950 ft. can be berthed.

HEALTH: Port Health Officer will board vessels arriving from infected ports, or carrying deck passengers at Deep Water Point at any time of the day.

All vessels should include in arrival cables confirmation that all well on board and also that all health papers in order. It should be understood that the health papers referred to include Derat, or Derat Exemption Certificate. Also it is necessary to furnish information on the last 5 ports called within 14 days and the expiry date of Derat Certificate.

RADIO: ETA cables normally routed via Singapore or Penang as no radio station in Port Kelang. Such messages when received are transmitted by telephone to Agents/and or Pilots at Port Kelang.

VHF: (See "Pilotage"). Ship to shore telephones available at all berths at North Klang Straits, and VHF sets available for ships in moorings. Klang Exchange keeps a 24-hour watch on Channel 16 and will connect the vessel to any telephone receiver ashore (Channels 24, 26 and 27). For local calls the cost is $1.92 for three minutes (approx.).

TUGS: Supplied by Port Authority and normally "stand by" vessels berthing at wharves as and when required. Tugs towing use ship's lines, tugs pushing use their own lines. 8 tugs available (400 h.p. – 2,700 h.p.) to assist in berthing and unberthing and are equipped with fire-fighting appliances and radio communications system. When vessels berth or unberth at wharf tugs ordered by Agent in consultation with Pilots and once in attendance are charged for whether used or not. Tugs are also used to swing vessels in stream which are stemming ebb tide on departure.

BERTHING: There are 2 ports viz: the South Port and the North Port. Vessels berthing in the South Port are governed by tidal conditions which vary considerably. Vessels over 525 ft. LOA are usually berthed port side to on the ebb and then only when tides are favourable. There is usually no objection to vessels unberthing from the wharf at night although generally speaking vessels will not be berthed at night.

(a) South Port. 4 ocean wharves of 2,190 ft. in length out of which 3 wharves are with 33 ft. of water alongside, and 1 wharf with 30 ft. of water alongside. 4 coastal shipping wharves of 1,320 ft. length. Of these, 1 wharf with 20 ft. of water alongside and 3 wharves with 18 ft. of water alongside and 2 anchorage. 3 to 4 vessels of not more than 250 ft. in length and with drafts of up to 18 ft. can be accommodated at the North shore anchorage.

Berth Nos. 1 – 4 are for ocean-going vessels while Berth Nos. 5, 6, 7 and 7A are used principally by coastal vessels with a maximum size of about 6,000 deadweight tonnes. The wharf apron is 15.2 m. (50 ft.) wide and carries 3 rail tracks.

(b) North Port Wharves: There are 17 ocean wharves with a total length of 12,120 ft. Of these, 2 are container berths with 44 ft. of water alongside, 1 Ro/Ro berth with a depth of 36 ft., 4 general cargo berths with 30 ft. of water alongside, 6 general cargo berths with 38 ft. of water alongside, 2 dry bulk berths with 36 ft. of water alongside for bulk carriers of 36,000 d.w.t., and 2 dolphins for tankers up to 60,000 displacement tonnes.

There are 5 container cranes on the container wharves.

Depth of water alongside is 44 ft. 62 acres of stacking area, capacity 10,800 TEU's (excluding 100 reefer points). Freight station measures 600 ft. × 120 ft.

Container Handling Equipment: 5 container cranes of 35 tons capacity each.

21 straddle carriers of which 11 have a lifting capacity of 30 tons and 10 with 35 tons capacity.

36 tractors.

40×20 ft. and 31×40 ft. trailers.

54 forklifts.

(c) General:

Facility		*Depth Below New A.D.C.* (ft.)
North Klang Straits Approach		36
Pintu Gedong Bar		19
Labohan Garap Bar		24
No. 1 Wharf	580 ft. length	33
No. 2 Wharf	580 ft. length	33
No. 3 Wharf	550 ft. length	33
No. 4 Wharf	480 ft. length	30
No. 5 Wharf	350 ft. length	20
No. 6 Wharf	300 ft. length	18
No. 7 Wharf	310 ft. length	18
No. 7A Wharf	310 ft. length	18
No. 8 Wharf (Ro/Ro Containers)	700 ft. length	36
No. 9 Wharf (Containers)	1,050 ft. length	44
No. 10 Wharf (Containers)	1,050 ft. length	44
No. 11 Wharf	580 ft. length	30
No. 12 Wharf	580 ft. length	30
No. 13 Wharf	580 ft. length	30
No. 14 Wharf	580 ft. length	30
No. 15 Wharf (Dolphin Berth)	550 ft. length	30
No. 16 Wharf	700 ft. length	38
No. 17 Wharf	700 ft. length	38
No. 18 Wharf	700 ft. length	38
No. 19 Wharf	700 ft. length	38
No. 20 Wharf	700 ft. length	38
No. 21 Wharf	700 ft. length	38
No. 22 Wharf } Dolphin Berth	700 ft. length	38
No. 23 Wharf } Dolphin Berth	700 ft. length	38
No. 24 Wharf	700 ft. length	36
No. 25 Wharf	700 ft. length	36

(d) Berth No. 8, is for Ro/Ro as well as container traffic. The Ro/Ro ramp at the Southern end of the berth is 45 m. (147 ft.) long and 8 m. (27 ft.) wide. The maximum gradient is 1:10 at tides between +0.3 m. (1 ft.) and +5 m. (17 ft.). There are 3 forklifts of 22.5 tonnes capacity specially for Ro/Ro operations, as well as 3 tractors and 3 trailers. The berth can cope with ships of up to 40,000 tonnes and is capable of accommodating vessels with 20 m.to 32 m. beams and 1.0 m. to 4.5 m. freeboards.

BULK HANDLING FACILITIES:

South Port: Berths Nos. 1 – 3 are equipped with pipe-lines to handle bulk liquid cargoes such as palm oil, latex, petroleum and other petroleum products, coconut oil and tallow.

Bulk liquid installations and pipe-lines are owned by the operators.

Other facilities for the discharge of liquid cargoes are provided at the coastal palm oil jetty and private Shell oil jetty. The coastal palm oil jetty in Sungei Aur is used by tankers of up to 76.2 m. (250 ft.) in length which load at plantation jetties and discharge their cargoes to the storage installations at the South Port. The Shell oil jetty is used for the discharge of petroleum products principally for the BP storage and distribution depot nearby.

Storage capacity for the various bulk liquid cargoes are as below:

Palm oil and kernel oil	159,512 tonnes
Latex	42,418 tonnes
Vegetable oil	3,048 tonnes
Coconut oil	2,062 tonnes
Tallow	2,032 tonnes
Alkane	1,282 tonnes

Berth No. 4 has special equipment for the discharge of wheat grains in bulk by means of suction units. The wheat is then delivered by an overhead conveyor to a flour mill situated to the rear of Berths 3 and 4. Estimated discharging rate is 1,016 tonnes per day.

North Port: Berth No. 12 is provided with portable hoppers and conveyors to handle sugar from bulk carriers using their own cranes. The sugar is transported by conveyors to a sugar storage godown onshore. The discharging rate for 24 working hours is about 1,000 tons.

Dry bulk cargoes are handled at Berth Nos. 24 and 25. Bulk handling system recently installed to handle fertilisers, wheat, sugar, maize and salt. 2 grab cranes each with a capacity of 420 t.p.h.; 2 feed hoppers and conveyor system of 840 t.p.h. capacity make up the system.

Bulk Facilities in the North Port: Several specialised facilities have been set up at the North Port Second Extension. They include specialised terminals for timber, liquid bulk cargo, dry bulk cargo and bunkering facilities.

The handling of liquid bulk cargo is now carried out only in South Port. However, the latter has no space for expansion and insufficient wharves to cater for the increasing size of tankers calling at the port. An area of 31.3 hectares (77 acres) in the North Port is being developed to handle liquid cargo such as chemicals and refined palm oil.

The dry bulk cargo terminal on a 13.2 hectare (34 acre) site to cater for the handling of dry cargo such as artificial fertilisers, salt and sugar has been developed.

Timber which is at present largely shipped through private jetties is another cargo being given attention to by the Authority. The Malaysian Timber Industries Board will operate the terminal through its subsidiary company. The terminal is on a 18.5 hectare (45.6 acre) site at the Second Extension.

Petronas, the national petroleum company, on the other hand, is considering the setting up of bunkering facilities at the Second Extension. The Authority has reserved 5 hectares (20 acres) for this purpose.

LIGHTERAGE: Wharf facilities are supplemented by lighterage. Two anchorage points are provided in the Anchorage Reach through which vessels pass on their way to and from the South Port.

Four vessels with length not exceeding 76 m. (250 ft.) and with draft not exceeding 5.5 m. (18 ft.) can anchor along the North Shore. As the size of the vessels which can use these moorings is limited, large bulk carriers have to anchor in the Deep Water Point opposite the North Port. Shore facilities for lightering cargoes at the North Port and South Port are provided by the Port Authority.

70 lighters, max. capacity 60.96 tonnes – 121.9 tonnes available.

Stream Berths for Lighterage Working:

	Swing	Permissible LOA	Depth Available
Anchorage	183 m.	167.6 m.	9.1 m. (30 ft.)
No. 6	152.4 m.	137 m.	12.2 m. (40 ft.)

CRANES: *South Port:* 2×10.6 tonne mobile cranes and 5×5 tonne mobile cranes.

North Port: Mobile cranes – 7×5.08 tonne, 3×7.1 tonne, 2×10.1 tonne, 3×17.2 tonne, 1×25.4 tonne and 1×30.4 tonne.

STEVEDORES: Almost all timber loaded from private junks for which no lighter gangs needed. Average working rate, subject to stow, for timber in loose pieces is 4 – 6 t.p.h., and in bundles 6 – 8 t.p.h. Not more than 2 lighters or "tongkangs" may lie alongside any vessel abreast of each other and not more than 2 lighters shall be moored astern of a vessel.

Rubber, latex in drums, etc., loaded by Port Authority and lighter/wharf gangs are required. Average working rate for these commodities is 14 t.p.h.

The average rate of discharge at North Port (North Klang Straits) wharves is 14 – 16 t.p.h.

On-board stevedores provided by the Port Authority. Requirements for the 1st shift should be made known by 1930 hrs. the previous day and for 2nd shift by 1130 hrs. same day and the 3rd shift not later than 1930 hrs. the same day.

Working hours throughout the port: 1st shift 0700 to 1500 hrs. (meal break 1100 – 1200 hrs.). 2nd shift 1500 to 2300 hrs. (meal break 1900 – 2000 hrs.). 3rd shift 2300 to 0700 hrs. (meal break 0300 – 0400 hrs.).

MEDICAL: A number of private doctors in Port Kelang and it is often not necessary to give any advance notice of medical attention being required. In event of vessel requiring urgent medical attention on arrival, advisable for Master to cable Agent in advance. At present 2nd class medical facilities available in Kelang and 1st class facilities only available in Kuala Lumpur. As vessels arriving at Port Kelang normally do so after calling at Penang or Singapore no inoculation, vaccination or fever certificates are required unless either Singapore or Penang is declared an infected port.

TANKERS: Tankers always berth port side to on ebb and near slack water. Vessels with bulk liquid cargoes to load or discharge will berth at wharves 1, 2, or 3. When a number of pumping vessels in port, vessels will usually occupy these wharves only for the time it takes to complete pumping and may then have to shift to stream or another wharf. Three of the ocean wharves are provided with facilities for handling liquid cargo. Liquid cargoes now being handled are: latex, palm, coconut oil, petroleum products, alkane, tallow and fuel oil.

Shell Company has a private jetty on which vessels up to 320 ft. in length with drafts not exceeding 20 ft. can be berthed.

Also see "Bulk Handling Facilities".

DENSITY: Varies considerably with state of tide and heavy monsoon rains.

FRESH WATER: 3 waterboats of total capacity 750 tons, available to supply vessels in South Port and at Deep Water Point with fresh water. As much notice as possible should be given if waterboat required. At North Port (North Klang Straits) water available from wharf. Pumping rate about 20 – 25 t.p.h.

FUEL: Bunkers are available.

FIRE PRECAUTIONS: In respect of tankers loading or discharging inflammable cargo, necessary to have wharf cordoned off and "No Smoking" signs exhibited prominently. Port Fire Brigade required to be on stand-by at wharf whilst operation in progress. Vessel may not disable engines whilst alongside wharf and shall have axes ready in event has to leave wharf urgently and necessary to cut ship's lines. Port Fire Service on duty 24 hours a day throughout year. Service is capable of fighting all types of fire whether on land or on sea. Fire service has following equipment: 3 fire engines, 1 Land Rover fire engine, 2 trailer pumps, 3 fire fighting tugs, 1 elevated tank in South Port (capacity 200,000 gallons), 2 elevated tanks in North Port (capacity 200,000 gallons), 3 vans at the fire brigade station, 4 ambulances, fresh water hydrants at various points in the Ports.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS/IMMIGRATION: Customs Officer will board vessel soon after arrival to seal the "Bonded stores". For vessels staying in port some time it is usual to issue 3 days supply – a further issue may be made on request after 3 days.

Immigration Officer will clear vessels arriving from foreign ports on a 24 hour basis. No one may board or leave or approach within one cable length of such vessel without special permission until vessel has been cleared by Immigration Officer and Immigration Signal is hauled down. No Immigration formalities required for vessels arriving from or leaving for other West Malaysian ports (Malacca and Penang).

IDENTIFICATION CARDS: Advisable that members of crew carry identification cards when leaving ship.

REPAIRS/DRY DOCKS: There are no major ship repair facilities at the port. The Authority operates 3 slipways for its own crafts.

Slipway No. 1 can accommodate vessels up to 27.4 m. long with a 3.10 m. draft and a displacement of 150 tonnes.

Slipway No. 2 designed for flat bottomed vessels, can cater only for craft up to 23.1 m. length, 2.1 m. draft and with a displacement of 100 tonnes.

Slipway No. 3 can accommodate vessels up to 45.7 m. in length, 4.4 m. draft and with a displacement of 450 tonnes.

CONSULS: Consulates/Embassies/High Commissions in Kuala Lumpur (28 miles from Port Kelang).

Australian High Commissioner's Office.
Austrian Embassy
High Commission of the People's Republic of Bangladesh
Belgian Embassy
Embassy of the Republic of Bolivia
Consulate of Brazil
British High Commission
Burmese Embassy
Canadian High Commission
Consulate of the Republic of China
Royal Danish Embassy
Embassy of the Arab Republic of Egypt
Consulate of Finland
Embassy of France
West German Embassy
Indian High Commission
Embassy of the Republic of Indonesia
Embassy of the Republic of Italy
Embassy of the Republic of Iraq
Embassy of Japan
Embassy of the Republic of Korea
Royal Embassy of Netherlands
New Zealand High Commission
Consulate of Norway (at Penang only)
Consulate of Panama (at Penang only)
Pakistan High Commission
Embassy of Philippines
Embassy of the Polish People's Republic
Honorary Consul of Portugal
Embassy of the Romania Socialist Republic
Singapore High Commission
Embassy of Royal Saudi Arabia
Royal Swedish Embassy
Sri Lanka High Commission
Embassy of Switzerland
Royal Thai Embassy
Turkish Embassy
Embassy of the United States of America.
Embassy of the U.S.S.R.
Embassy of the Republic of Vietnam
Yugoslavia Embassy

REPATRIATION: Crew changes and repatriation must be arranged by Agent. Harbour Master attends signing-on and signing-off of the crews on ship's articles.

AIRPORT: Subang International Airport approximately 20 miles from port on main trunk route to Malaysian capital of Kuala Lumpur and served by regular domestic flights and international flights.

HOLIDAYS: Port Closing Days. *Hari Raya Puasa; *Chinese New Year; Malaysia Day (31st August); *Deepavali; Christmas Day (25th December). *Dates subject to changes as festivals coincide with Mohammedan, Chinese and Hindu calendars.

TELEPHONES: At North Port (North Klang Straits) Wharves telephones installed on board if required. At wharves in South Port there is always a telephone within easy reach at Wharf Office.

VHF radio sets available to vessels at anchor or moored to buoys.

GENERAL: *(a)* Ship-Shore Communication. When vessels are berthed in stream or at Deep Water Point a 24 hour launch service can be supplied. Arranged by Agent in consultation with Master to suit requirements of ship.

Vessels permitted use own boats with proper navigation lights at night.

(b) Seamen's Club. "Mariner's Club" for officers and seamen outside No. 3 Gate of South Port. Club has swimming pool, bar, restaurant and accommodation.

(c) Diving. Diving services available for salvaging lost cargoes, examining underside of ships, etc. Divers capable of deep-sea diving down to 120 ft.

DEVELOPMENTS: Construction of 2,800 ft. of wharves at an island called Pulau Lumut, opposite the South Port is planned. 1st phase of the project scheduled for completion in 1987.

Bulk cement terminal under construction, completion expected mid-1985. Discharge rate 250 t.p.h. bagging facilities at the silo.

Also see "Berthing – North Port" and "Bulk Handling Facilities"

AUTHORITY: Kelang Port Authority, Jalan Pelabuhan, Port Kelang, Malaysia. *Tel:* 388211 (10 lines), 388221 (10 lines). *Telex:* MA 39524. *Contact:* Mohd. Hashir H. Abdullah, General Manager. Kwek Chee Wah, Chief Commercial Officer, Commercial Department.

AGENT: Antah Jardine Shipping Agencies Sdn. Bhd., Ground Floor, NTS Building, 2A, Persiaran Raja Muda, Musa, Port Kelang. Tel: 03-387200 and 03-388871. Telex: MA 39701, Cables: "Jarship" Port Kelang.

ROMPIN (Kuala Rompin) inc. Pahang, Malaya: 02.43 N. 103.30 E.

DOCUMENTS:

Register.
Last Port Clearance.
7 copies Crew List and 4 for Agent.
5 copies Passenger List (if any).
5 copies Stowaway List (if any).
2 copies Stores List (including firearms and ammunition).
2 copies Dutiable Liquor and Tobacco List.
2 copies Crews Declaration List (cameras, radios, etc.).
1 copy Vaccination List.

Masters of vessels to fly the necessary following flags on arrival as required under Section 448 of the Merchant Shipping Ordinance and Sub-Section (9) of the Federation Port Rules, 1953.

(1) The Federation of Malaysia Flag.
(2) The Pennant "O" Flag (Request Port Officer).
(3) The "Q" Flag (request Port Health Officer).
(4) The Pennant "2"; "5" Flags if no passengers and "3"; "4" Flags if there are passengers on board (Immigration).

PILOTAGE: Compulsory to the loading berths. Extra charge for pilotage outside normal office hours and holidays.

ANCHORAGE: On arrival, vessels required to anchor about 1 mile outside berthed ships to obtain pratique. An accommodation ladder must be rigged on lee side to allow Port Authorities to board.

READINESS: Notice of Readiness cannot be accepted until vessel is in Free Pratique, Customs Inward Examination completed, and in all respects ready to load.

LOADING. *(a)* Ladders. Masters particularly advised to see that a sound and adequate ladder provided at each lighter to allow labourers engaged in loading to pass to and from ship with no undue risk. Regulations are provided in the Merchant Shipping Ordinance, Section 445, Sub-Section (O) which takes care of this requirement and failure to take adequate precaution in seeing regulation is observed may result in serious consequence to those responsible.

Masters requested to ensure that in addition to ladders for labourers, an extra ladder, preferably a clean pilot ladder, be made available at all times for the Agent for boarding. This ladder should be made fast on lee side, just forward of any scuppers in vicinity, and a heaving line from ship's rail made fast to bottom rung. When ladder not in use, bottom of ladder can be pulled up a few feet with heaving line to prevent labourers from using it or damage from lighters.

(b) Winches. All winches must be in single gear at all times.

(c) Derricks. Practice to work 2 sets of derricks to 1 lighter where practicable.

(d) Trimming. No manual trimming undertaken.

(e) Damages. In the event of your vessel sustaining damage by stevedores during loading, you are requested to inform the clerk and foreman on board immediately and as soon as practicable confirm same in writing to the Eastern Stevedoring Co. Ltd., Kuala Rompin, with copies to Hong Kong & Eastern Shipping Co. Ltd., Hong Kong, and Malay States Shipping Ltd., Kuala Rompin. It is important that full details of damage are given, together with measurements whenever possible.

Minor damage has occurred on vessels due to hatch beams not being bolted or lashed. Masters therefore requested ensure all beams adjoining working parts of hatches either bolted or lashed, otherwise stevedores will repudiate liability for any damage incurred.

OPENING/CLOSING HATCHES: Removal and replacement of hatch beams and covers must be done by ship's crew. Ship's Officers should see that any tween-deck beam removed is replaced before ore reaches that height.

CUSTOMS: Customs office hours 0830 to 1630 Monday to Friday, 0830 to 1300 hrs. Saturday.

IDENTIFICATION CARDS: Every member of crew must produce Identity Document or Shore Leave Pass at Customs House when landing and again when returning to vessel.

HOLIDAYS: New Year's Day; Hari Raya Puasa, 2nd day; Chinese New Year, 2nd day; Hari Raya Haji, 2nd day; First Day of Muharram; Vesak Day; Birthday of Sultan of Pahang; Birthday of H.M. The Yang Di-Pertuan Agong; Birthday of Prophet Muhammad; Malaysia Day; Deepavali; Christmas Day.

Note: Where a holiday falls on a Sunday, the following day will be observed as a holiday, and if such latter day is already a holiday, then the day following shall be a public holiday.

GENERAL: *(a) Scrap Iron.* Steel mills in Japan complain from time to time of finding pieces of scrap iron in the iron ore cargoes. If this scrap is not found it will cause serious damage to the plant and occasion considerable delay to production: furthermore, should scrap iron enter the machinery there is always the possibility of it endangering life, and several fatal accidents have been attributed to this cause.

The assistance of officers and crew is requested in reporting any scrap iron they see being loaded, advising shippers into which hold it went and number of the lighter it came from to enable us to take appropriate action.

(b) Whistle, Radio. Wireless Transmitters, Whistles and Sirens etc., must not be used by vessels at anchor off Kuala Rompin.

(c) Stores. Bonded stores can be obtained from Kuala Lumpur and Kuantan at prices roughly same as Singapore. Essential, view Customs formalities, that Masters give Malay States Shipping Ltd., Kuala Rompin 6 days prior notice of requirements.

SHORE LEAVE: No seaman may proceed more than 3 miles from Kuala Rompin Customs House. The Officer in Charge Customs, as acting Immigration Officer, has authority to limit or prohibit shore leave in all cases.

SABAH (Minor Ports): (See Plan Book)

KUDAT: 06.53 N. 116.51 E.
LAHAD DATU: 05.02 N. 118.20 E.
SEMPORNA: 04.29 N. 118.37 E.

DOCUMENTS: 8 copies all usual documents, i.e. Crew List, Passenger List, Manifest. Others include Store List, Stowage Plan, Sea Worthiness Certificate and Last Port Clearance Certificate. Where possible, Cargo Manifests and Stowage Plans should be forwarded in advance to local Agents and Port Authority ahead of vessels.

PILOTAGE: Applications normally made by Shipping Agents with advance notice of 24 hours prior to actual time that Pilot services required. Pilot boats between 30 ft. – 40 ft. length and equipped with VHF/AM Sets – 80.4 MHz frequency. Pilot station at Port Office (Marine Department) and location for vessel awaiting Pilot is within port limit.

ANCHORAGE: All ports within bays and they provide good safe anchorages.

RESTRICTIONS: No restrictions for vessels entering port at night.

MAX. SIZE: There is no limit on cargo vessels worked at anchorage.

Also see "Berthing".

HEALTH: To obtain Pratique, arrange with Shipping Agent. Pratique for vessel entering, after calling at another port in same state, is not required. Anchor in quarantine anchorage if vessel is suspect and display following signals: *By Day:* International Code Signal "QQ". *By Night:* A Red light over a White light and a separate hoist of Red light over a Green light. Hoisted vertically 6 ft. apart where best seen.

RADIO: Singapore Radio recommended.

BERTHING: Application for berthing has to be made within 24 hours prior to actual time that berthing is required.

Details and Requirements: Name of vessel, gross and net tonnage, length overall, draft (fore and aft), ETA at berth, ETD from berth, nature and tonnage of cargo to be discharged/loaded. No priority for berthing ships and the turn is, first come first served.

Kudat: L-shaped wharf with 2 berths. Western berth – length 370 ft. min. depth 21 ft. Eastern berth – length 300 ft., min. depth 21 ft.

Lahad Datu: L-shaped wharf with 2 berths. Outer berth, length 200 ft. min. depth 32 ft. Inner berth, length 130 ft., min. depth 30 ft.

Semporna: T-shaped wooden wharf with 2 berths. Outer berth, length 150 ft. min. depth 26 ft. Inner berth, length 127 ft., min. depth 20 ft.

STEVEDORES: Arrangement of stevedores should be made with 48 hours' notice to Shipping Agent. Average gang performance is 20 ton-per-gang-hour for conventional traffic (excluding vehicles) and 40 ton-per-gang-hour for pre-palletised cargo (excluding vehicles). cargo work is carried out in 3 × 4-hour periods namely:–

1st period 0730 hrs. to 1130 hrs.
2nd period 1300 hrs. to 1700 hrs.
3rd period 1800 hrs. to 2200 hrs.

MEDICAL: Arranged on arrival by Shipping Agent.

DENSITY: Average density in the ports 1020.

FRESH WATER: Available at General Cargo Wharves at a rate of 20 t.p.h.

GANGWAY/DECK WATCHMEN: Not necessary. Agents may advise option.

OPENING/CLOSING HATCHES: Normally by stevedores.

CERTIFICATES: Registry, Load Line, Radio, Safety Equipment and Derat Exemption.

CUSTOMS ALLOWANCES: Tobacco, Wine and/or Spirits: No control and up to discretion of Officers of Customs and Excise.

CARGO GEAR: Ship's gear used also for containers ex-feeder ships and heavy lifts in major ports.

IDENTIFICATION CARDS: Not needed.

CONSULS: Consulates in Kota Kinabalu exist for the following countries:–

United Kingdom
Japan
Indonesia
Denmark

REPAIRS: Marine Department operates engineering workshops at Labuan and Sandakan. Some private firms and workshops also undertake small engine and deck repairs in Kota Kinabalu.

DRY DOCKS: Marine Department has 3 slipways in Labuan which are capable of shipping vessels of 60 tons, 200 tons and 500 tons displacements. One in Sandakan for vessel up to 120 tons.

REPATRIATION: Normally arranged by Agents.

AIRPORT: Most airports in State between 4 km. to 10 km. from the town.

TIME: Local time is 8 hours ahead of GMT. No alteration to clocks.

HOLIDAYS: Cargo work can be arranged if necessary during official holidays, but not for Hari Raya Puasa, Chinese New Year and Christmas Day.

POLICE/AMBULANCE/FIRE:

	Fire/Police	*Hospital*
Kudat	333	335
Lahad Datu	81999	81522
Semporna	SPA 599	SPA 522

SERVICES: Tank cleaning services can be arranged with Agents. Marine Department deals with compass adjustments.

SHORE LEAVE: Allowed.

DELAYS: Due to weather conditions only.

DEVELOPMENTS: Lahad Datu, having new port installation and wharves facilities.

AUTHORITY: Sabah Ports Authority, Kota Kinabalu, Sabah. *Tel:* 088-56155/088-52140. *Telex:* Saport MA80074. *Contact:* The General Manager.

SANDAKAN, Sabah: 05.50 N. 118.07 E.

(See Plan Book)

FLAGS: Signal letters, Mail flag (if any mail on board for discharge); "Q" flag is essential if Sandakan is the first Sabah port at which a vessel calls. If ship carrying passengers it should fly Immigration Signal Nos. 3 and 4; if no passengers Nos. 2 and 5.

PORT LIMITS: The limits of the port of Sandakan shall be Sandakan Bay bounded by a line drawn in a West-South-West direction from the Northern point of Pulau Berhala to the mainland, and by another from the same point on Pulau Berhala to the most Eastern extremity of Tanjong Aru and thence to the opposite bank at the entrance of Trusan Duyong, including all passages and rivers entering the same for a distance of 600 ft. inland from the mouth of the river.

DOCUMENTS: 5 sets of Inward Manifest in the prescribed form to be airmailed to Agent to arrive at least 48 hours before the vessel.

(a) To be Produced on Arrival:

1 Sabah Lights and Harbour Dues form
2 Manifest in the prescribed form
3 Crew List
1 Last Port Clearance
3 Stores List
3 Passenger List
2 Arms List
3 Narcotics List
2 Parcels List

(b) Required by Agent:

2 sets of Inward Manifests for all inward cargo
5 sets of Transhipment Manifests for all cargo to be transhipped at Sandakan.
2 copies of Hatch List.
1 copy of Passenger List.
1 copy of Crew List.
1 copy of List of Arms and Ammunitions.
1 copy Narcotics List.
1 copy Stores List.

(c) To be Supplied to Ship before Departure:

Manifests, as required by vessels.
Master's copy of Bills of Lading.
Port Clearance and Customs Clearance.
Sabah Lights and Harbour Dues form.

(d) Immigration: Immigration Officer will board vessel on arrival and clear her inward. No restrictions on crew and/or passengers going ashore. Immigration require 2 copies of crew list and 2 copies of passenger list. Vessels cleared inward until 1800 hrs. only. If there are special circumstances arrangements can be made to clear vessels inward after this time.

(e) Marine Department: Shipping Arrival Report to be signed by Master of Vessel.

PILOTAGE: Pilotage not compulsory but if required the Harbour Master acts as Pilot. At least 24 hours' notice should be given and position where Pilot is required to embark (i.e. the bar buoy or within harbour limits) should be included in the message. Marine Department, Tel. 213126 and 213120.

ANCHORAGES: For loading timber: A black and white conical buoy situated 1.2 miles S.W. from Government Wharf indicates the anchorage. It is important that vessels should anchor as close to this buoy as possible, when anchored further from shore it may take up to an hour longer for launches towing rafts of timber to reach ship and in addition there is less shelter from wind and weather and consequently raftsmen have to cease work earlier.

For discharging: Unless it is intended to come alongside the wharf, vessels discharging should anchor 4 cables due South of wharf. Wharf is 750 ft. long with dolphins placed 100 ft. from each end giving a total length of 950 ft. If discharging into lighters and loading log timber simultaneously vessels should proceed to Timber Anchorage.

RESTRICTIONS: *(a)* Shifting: Vessels may not berth alongside after dark without special permission but they may leave the wharf, having given prior notice.

(b) Special Cargo Regulations: No vessel with dangerous cargo may be alongside after sunset, except at discretion of Harbour Master. No dangerous cargo may be discharged simultaneously with general cargo except with permission of Harbour Master. Livestock: subject to approval of Veterinary Authority. Certain animals, including cattle, are prohibited imports and exports except under licence.

MAX. SIZE: Draft restriction is 24 ft. on the Bar plus the height of tide, mean high water being about 6 ft.

HEALTH: (Also see "Radio" and "Regulations"). If Sandakan is first port of entry into Sabah a vessel must proceed to quarantine anchorage until cleared by Health and Immigration Officials.

The Sabah Government are signatories to the WHO convention on quarantine regulations. If vessel comes from outside State of Sabah then Port Health Authority will require to board in quarantine anchorage before vessel can proceed to wharf or timber anchorage. If, however, vessel is not coming from an infected port Pratique may be granted providing vessel cables Agent prior arrival advising last port of call and whether vessel healthy. Pratique normally cabled to ship but if unreceived, vessel must proceed to quarantine anchorage.

Port Health Authority require completed copy of Maritime Declaration of Health, and copies of Crew, Passenger and Narcotics Lists.

RADIO: Singapore Radio recommended.

(Information required before ship's arrival.) ETA, number of passengers, health situation, Manifest, amount of water required. Vessels not allowed to use their radio in port.

VHF: Marine signal station keeps watch on VHF Channel 16, from 0530 to 2000 hrs.

TUGS: A tug of 636 h.p. stationed at Sandakan.

BERTHING: (Also see "Anchorages").

(a) Mooring: The numbers of a vessel which is berthing alongside will be shown from signal station on Eastern end of Customs House. In addition, a cone indicating tidal stream will be hoisted pointed end of cone down indicates flood tide and pointed end up indicates ebb tide. Linesmen are on hand to receive a vessel's lines, a mooring boat will be provided by Marine Department if it is necessary to send lines to dolphins. Old Government Wharf, least depth 19 ft.

(b) Buoys: No mooring buoys.

(c) Lighters: No lighter fleet. The timber companies have their own lighters and scows which can sometimes be hired if not being used by these companies.

Rectangular Island Wharf: The particulars of the berths are as follows:

Berth No.	*Length (ft.)*	*Depth (ft.)*
1	700	30
2	400	21-30
3	250	20
4	520	15-30

Covered Storage:

(a) One transit shed 90,000 sq.ft. at new port site.

(b) One 8,100 sq.ft. and two 20,000 sq.ft. godowns at the old port site in town.

Equipment: New equipment only listed below:

(a) 5 towing tractors.

(b) 32×6,000 lb. forklifts.

(c) 20×5-ton trailers.

(d) 1×7-ton forklift truck.

STEVEDORES: Stevedoring in hands of Port Authority who supply gangs as required.

(a) Working hours, 0730 – 1130, 1300 – 1700 and 1800 – 2200. Gangs ordered at least 12 hours before a vessel arrives.

(b) Overtime. When working in stream, overtime usually from 1100 to 1200 and 1800 to 2200 hrs. Application for permission to work overtime must be made to Customs not later than 1500 hrs. on the afternoon that overtime is to be worked or 1100 hrs. on Saturday for weekend overtime.

(c) Working Sundays and holidays. Work is normally carried out Sundays and it is sometimes possible to arrange for work on some public holidays, principal exception being Chinese New Year. Application must be made to Customs for permission to work Saturday afternoons, Sundays and public holidays.

(d) Rate. Log loading is good, comparing more than favourably with other Borneo ports. Rate of loading about 800 cu. ft. hoppus (20 B/L tons) per gang hour for logs, and 6 B/L tons per gang hour for sawn timber. Discharging general cargo about 20 tons per gang hour. Palletised cargoes about 40 tons per gang hour.

CARGO: (a) Tally: Tally clerks supplied by Agent if required. Sawn timber tallied on to scows by timber companies' clerks and tallied into ship by ship's tally clerks. Ship responsible for total number of pieces of timber shown on Mate's receipts. Letters of Credit do not allow the clause: "A quantity said to be" to be inserted on the B/Lading. Log timber tallied into ship by checking against specifications supplied by timber companies.

(b) Inward Cargo: Is tallied out of ship on to wharf or into lighter. Local watchmen can be supplied by Agent if necesary but it is generally found to be more satisfactory if these duties are carried out by crew. Damaged cargo is surveyed on the spot, otherwise no liability of vessel is acknowledged. Discharge carried out after permission has been obtained from Customs after manifest of inward cargo has been deposited. Cargo is delivered to consignees against production of relative Bill of Lading. Ship's responsibility to consignees ceases at ship's side but, in the case of short-landed cargo, reasonable proof must be given to Customs that cargo has not been landed. A short-handed Memo certified by Chief Officer is usually accepted as proof.

(c) Heavy Lifts: Usually landed overside on flat-top scows for delivery to private jetties, where they are man-handled to required site. Occasionally consignees provide low-loaders.

(d) Transhipment Cargo: After discharge of cargo from first carrier, transhipment cargo placed under supervision to Ports Authority, unless it is possible to arrange direct transhipment into small coastal vessels.

(e) Outward Cargo: Main export is log timber and is towed out to loading vessels in rafts, each one accompanied by 2 raftsmen. Loading is on a single swinging derrick with gun tackle; the other derrick being used for pulling the logs into position in the holds. Vessels should have, if possible, 2 snatch blocks available at each hatch where log timber is being loaded. Sawn timber loaded in normal manner from scows and lighters. Documents required are shipping order issued by Agent and list of specifications supplied by timber companies. Other exports are rubber, copra, coconuts, palm oil, jungle and sea produce.

(f) Refrigerated cargo: Only small quantities of refrigerated cargo loaded or discharged. No formalities or certificates being required other than compliance with Customs and Agriculture Department Regulations. Inward fridge cargo is confined to foodstuffs, meat, etc., and outward to frozen prawns.

(g) Explosives: Explosives must be discharged into lighters under police escort and transported to an approved police store. A licence for their importation must be obtained from police prior to arrival of cargo, and Harbour and Police authorities must be informed of arrival of explosives in port either for discharge or as through cargo.

(h) Damaged Cargo: Direct delivery/cargo surveyed at shipside. Cargo discharged into godowns surveyed jointly between Port Authority and ship's representative in damaged cargo lockers.

TANKERS: Two bulk oil installations at Karimunting (Pavitt Point). Esso, with storage capacity of 2,080 tons and Shell, with storage capacity 15,730 tons.

Jetty extends 550 ft. from shore, is 128 ft. long with mooring dolphins 125 ft. from each end. Min. depth alongside 24 ft.

New oil berth, 1,000 ft. length between dolphins, with central discharging pier. Least depth alongside 30 ft. This berth also used for loading palm oil in bulk.

MEDICAL: *(a)* Hospitals: Duchess of Kent Hospital will receive sick seamen or officers. Three classes of wards, also isolation wing. Hospital equipped to carry out normal surgery.

(b) Inoculation: PHO will vaccinate or inoculate crew members at Duchess of Kent Hospital.

(c) Death on Board: PHO and Police to be informed immediately. They will then make an investigation into cause of death. If satisfied that death was due to natural causes, a certificate will be issued, and arrangements may then be made for interning the body. Harbour Master must also be informed in the case of seamen.

FRESH WATER: Can normally be supplied from wharf at rate of 20 t.p.h. No water boat. Occasionally water is not available and, at such times, Agent warns Principals in advance.

FUEL: No facilities for supply of fuel oil bunkers. Limited quantities of lubricants can be obtained in drums and bulk diesoline available at Shell jetty.

FIRE PRECAUTIONS: No fire-floats and in case of a vessel alongside, fire brigade should be summoned by dialling 999. The OCPD should be informed also.

WATCHMEN: No regulations regarding use of watchmen, who, however, can be supplied if required. There have been only very isolated reports of pilferage in Sandakan.

OPENING/CLOSING HATCHES: Normally by stevedores.

GENERAL: *(a) Surveyors:* Harrisons & Crosfield (Sabah), Sdn. Bhd. are Lloyd's Agents, neither Bureau Veritas nor the American Bureau of Shipping are represented.

(b) Fumigation: No facilities.

(c) Ship Chandlers: All kinds of stores and provisions can be supplied at reasonable prices.

(d) Call Signals and Call Flags: (i) Continuous watch kept by signal station during day-light hours. In emergency such as serious injury or fire a ship should hoist appropriate International Code signal and blow whistle or siren to attract attention. Apart from these circumstances and for purposes of navigation vessels are prohibited from using sound signals for any other reason.

(ii) Signals for attracting Public Service Launch: By day: International Code Pendant No. 8. By night: three red lights vertical. Owing distance of anchorage from jetty these signals often indistinguishable by hire launches unless they are cruising in the harbour. Regular launch services can be arranged if required by Master. No restrictions against a vessel using its own launch or motor lifeboat but it must not land anywhere other than at Customs wharf.

(e) Recreation Facilities: Three cinemas in town which show English-language films. Cricket, football, and hockey matches can be arranged with local teams and several tennis courts available. Only suitable swimming beaches at Berhala Island at mouth of harbour. Yacht Club and Golf Club for members only, but several Shipping Companies pay Corporate Membership fee which enables all officers and first-class passengers to use club. Recreation Club offers facilities for large variety of sports and entertainment; visitors must be accompanied by a member. Churches in town for Anglican, Catholic and Lutheran worship.

REGULATIONS: 1. Arrival and Departure. The Owner or Agent of every vessel other than a small ship intending to call at a port shall, as soon as possible, and in any case not later than 36 hours prior to the estimated time of arrival of the vessel, give notice in writing to the Authority of such arrival and, if so desired, the requirement for a berth at a wharf.

2. The notice under this regulation shall be in a form prescribed by the Authority and shall contain full particulars regarding the cargo to be discharged and loaded, the embarkation and disembarkation of passengers, heavy lifts, special or perishable cargo, hazardous and dangerous goods (whether to be discharged at the port or not), and any other matters of importance relating to the working or safety of the vessel in the port.

3. The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted the national colours and the signal letters, if any, of the vessel. The national colours shall be exhibited from 0800 to sunset whilst the vessel remains in port.

4. The Master of every vessel arriving from outside the State of Sabah shall exhibit the Immigration and Quarantine signals contained in the First Schedule and shall also at the request of a customs officer hoist the Customs signals. Such signals shall remain exhibited until the appropriate officer has given permission for them to be lowered.

5. No vessel shall approach within 600ft. of any other vessel exhibiting the Immigration, Health or Customs signals.

6. No person other than a Pilot may board or disembark from any vessel until the vessel is cleared inwards and the Immigration, Quarantine and Customs signals have been lowered.

7. Every vessel entering a port shall be anchored or efficiently secured to a wharf or buoy before commencing the loading or discharging of cargo and/or the embarkation or disembarkation of passengers.

8. No vessel shall leave any port unless in possession of a valid Port Clearance issued by or on behalf of the Director of Marine.

9. Special signals.

Significance	*By Day*	*By Night*
Immigration (for ships not carrying passengers)	International Code Signal "2 5"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Immigration (for ships carrying passengers)	International Code Signal "3 4"	Two green lights, 6 ft. apart, hoisted vertically where best seen.
Quarantine (vessel is Healthy request Pratique)	International Code Signal "Q"	Nil
Quarantine (vessel is suspect)	International Code Signal "Q Q"	A red light over a white light and a separate hoist of red light over a green light and hoisted vertically 6 ft. apart where best seen.
Quarantine (vessel is infected)	International Code Signal "Q L"	
Quarantine (not received Pratique)	Nil	A red light over a white light 6 ft. apart hoisted vertically where best seen.
Request Pot ne bexss stenne	International Code Signal "S T"	A green over a white light, 6 ft. apart hoisted vertically where best seen.
Request Medical Assistance	International Code Signal "W"	A red light over a green light, 6 ft. apart, hoisted vertically where best seen.

CONSULS: At Kota Kinabalu. Contact using Kota Kinabalu numbers.
CERTIFICATES: Registry, Load Line, Radio, Safety Equipment and Derat Exemption.
CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits: No control, up to discretion of Officer of Customs and Excise.
CARGO GEAR: Ship's gear used, also for containers ex. feeder ships and heavy lifts in major ports.
IDENTIFICATION CARDS: Not required.
REPAIRS: Marine Department operates engineering workshops at Sandakan.
DRY DOCKS: One in Sandakan for vessels up to 120 tons.

A Government-owned shipyard/dry dock known as Sabah Building, Repairing and Engineering Sdn. Bhd. exists in Labuan to undertake full repairs services has been established for ocean-going vessels.
REPATRIATION: Normally arranged by Agents.
AIRPORT: Some airports in State are between 4 km. to 10 km. from town centre.
TIME: Local time is 8 hours ahead of GMT. No alterations to clocks.
POLICE/AMBULANCE/FIRE: Ambulance: Duchess of Kent Hospital, tel. 2111; Police/Fire: Police Station Emergency, tel. 999.
TELEPHONES: Available.
SERVICES: Tank cleaning services can be arranged with Agents. Marine Department deals with compass adjustments.
DELAYS: Due to weather conditions only.
DEVELOPMENTS:
(A) *Container Development for Sandakan:* Sabah Ports Authority has just been servicing only feeder route container traffic relying on ship-based crane. Container facilities are limited to forklift, tractor/trailer system. Plans for up-grading container capability will be determined by potentials of the trade.
(B) *Sandakan Port Development Plan:* Existing facilities were completed during 1977. Future extension work had been identified and will be undertaken in phases. The initial phase in the programme will include land reclamation and construction of additional berths and storage facilities.

AUTHORITY: Sabah Ports Authority, Pejabat Pengurus Pelabuhan, Peti Surat 1368, Sandakan, Sabah, Malaysia. *Tel:* Sandakan 64411-8, 64751. *Telex:* MA 82013. *Cables:* Saports. *Contact:* Lee Tain Chew, Port Manager.

SARAWAK COASTAL PORTS

Coastal anchorages at Sibuti, Niah and Suai, 28, 30 and 47 miles S.W. of Miri respectively are being used increasingly for the export of round logs, good holding ground is to be found approximately 3.5 miles offshore in 30 ft. of water. Caution should be observed in the event of sudden wind squalls from the West.

Vessels destined for coastal ports should report to Miri for Customs and Immigration Clearance.

Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International code Flag "P") to be hoisted, during day-light hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the port clearance.

(2) The Port Clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.
AUTHORITY: Kuching Port Authority, P.O.Box 530, Kuching, Sarawak. *Tel:* 33122. *Cables:* Kuport Kuching. *Contact:* General Manager.

SEJINGKAT (Sungei Sarawak), Sarawak:
01.35 N. 110.26 E.

Anchorage off Kampong Sejingkat approximately 14 miles from mouth of river and 3 miles below Pending Point. (See "Kuching".)

Main timber loading point for the First Division of Sarawak. Loading used to be seasonal due to log rafts having to be towed from felling areas along coast. Since this is not possible during North-east monsoon season shippers now stockpile during favourable weather and loading continues throughout monsoon period.

Vessels up to 580 ft. length and 25 ft. draft regularly use anchorage. No facilities for obtaining fuel. Fresh water obtainable through Marine Department.

Pilots may be picked up off Tanjong Po in the area marked "Pilots" on Admiralty Chart 1822 or at Sejingkat. In rough weather it may be necessary for a ship to follow or meet the pilot launch at the junction of Embang and Senari leads. Pilots for the Batang Lupar, Triso or Lingga Anchorages are also normally embarked off Tanjong Po by arrangement.

Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International Code Flag "P") to be hoisted, during daylight hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

(1) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the port clearance.

(2) The port clearance shall be in the form of an endorsement on the form of clearance prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.
AUTHORITY: Kuching Port Authority, P.O. Box 530, Kuching, Sarawak, Malaysia. *Tel:* 082-33122. *Telex:* MA-70420 Kuport. *Cables:* Kuport Kuching. *Contact:* General Manager.

SIBU, Sarawak (incl. Binatang and Sarikei):
02.24 N. 111.56 E. **(See Plan Book)**

Sibu is the capital of the Third Division of Sarawak. There are 2 navigable routes *(a)* via Paloh River and *(b)* via Rajang River and a third entrance from the North i.e. via Igan River, is uncharted. Sibu is 61 miles from the sea via Paloh, and 70 miles via Rajang.
APPROACHES:
(a) Paloh Channel: The bar was resurveyed in 1975 and shoaling was reported in 1981 to depths of 2.7 m. below chart datum at the middle of the Fairway and Inner buoys. Masters of ships are advised to consult their tide tables before entering. The buoys are fitted with radar reflectors and the Fairway Buoy is visible for a distance of 10 miles. A conspicious wreck in position Lat. 2° 28′ N., Long. 111° 14.6′ E. has 2 posts above chart datum, serves as a good approach to the Kuala Paloh entrance, and Tanjong Sedi which is on the North bank of the river is marked by a light beacon.

Vessels using this entrance are restricted to a maximum length of 130 m. and drafts of 5.5 m. during the S.W. Monsoon and 4.5 m. during the N.E. Monsoon. During the N.E. Monsoon periods, vessels of 5.5 m. have entered the Paloh Channel but entrance depends on the state of the sea.

When crossing the Kuala Paloh Channel, strong currents and swell (especially during the N.E. Monsoon period) are liable to be encountered thus necessitating caution.

An Inner Bar with at least depth of 3.7 m. exists where the Paloh joins the Seredang at Tanjong Gelang. This crossing is marked by unlit transits and is sheltered.

(b) Rajang Entrances: Vessels intending to use the Rajang River to Sibu are restricted to 60 m. in length and 4 m. in draft as after Tg. Mani deepwater anchorage, the river is winding, narrow and shallow. The depth of the bar is 5.8 m. below chart datum. 2 wrecks in position Lat. 2° 07.6′ N., Long. 111° 7.25′ E. and another in position Lat. 2° 8.7′ N., Long. 111° 14.2′ E. are marked by starboard hand buoys. There is a bar situated about 3 miles below Sarikei with at least depth of 3.9 m. below chart datum.

From Sarikei to Bintangor the river is winding with some shallow patches. Lebaan Corner which is 15 miles below Sibu has a charted depth of 2.2 m.

There is an obstruction off Tanjong Ensurai approximately 6.25 miles upriver from Lebaan with a depth of 4.6 m. Caution should also be exercised when rounding Tanjong Binjei due to 3 shoals across the river, one of which has at least depth of 3 m.

Vessels using this route to Sibu are advised to navigate with caution as tugs towing barges and logs of 100 m. or more are often encountered.
DOCUMENTS: Port Clearance to be surrendered to Customs when boarding.

Crew lists and passenger lists, 2 copies for Immigration Department, 2 copies for Rajang Port Authority, 2 copies for Customs, 1 copy for Port Health Officer and 1 copy for Port Officer.
List of ship's stores (2 copies for Customs).
List of ammunition (2 copies for Customs).
Health Documents (Vaccination certificates and Cholera Inoculation Certificates to be examined by Health Inspector).

PILOTAGE: Pilots are provided by the Marine Department for Sibu and Sarikei for the Paloh and Rajang entrances respectively. Movements of vessels are restricted to daylight hours only. The Pilots use 5 m. fibreglass speedboats which are fitted with VHF.
(a) Kuala Paloh. The Pilots embarked off Tanjong Sedi, at position Lat. 2° 25.5′ N., Long. 111° 18′ E. and application for Pilots should be made giving at least 24 hours notice of arrival to "Shipping" Sibu.
(b) Pilots for Sarikei, Bintangor and Sibu via this river normally embarked in buoyed channel West of Jerijeh Lighthouse but it may be necessary for a ship to follow the pilot speedboat to sheltered waters inside turning buoy. Application for Pilots should be made giving at least 24 hours notice of arrival to "Shipping" Sarikei.

ANCHORAGES: *(a)* Sibu Anchorage. Some foreign-going vessels load, with Customs permission, at the mid-stream anchorage.

(b) Restricted Anchorages.

(i) The Anchorage defined by a line running 045° 2.6 cables from position: Lat. 02° 16.89′ N., Long. 111° 49.28′ E. on Pulau Kerto, thence 135° 8 cables to position; Lat. 02° 16.5′ N., Long. 111° 50.4′ E. thence 225° 1.9 cables to shore on Pulau Kerto. For loading and discharging dangerous goods other than petroleum.

(ii) The berth alongside the Sungei Merah Wharf in position approximately 2 miles downstream from the junction of the Rajang/Igan River on the true right bank. For loading and discharging petroleum.

MAX. SIZE: Largest vessel to berth Sibu was 7,372 gross tons and overall length 137 m.

Deepest drafted vessel to berth Sibu was 7.1 m.

Also see "Approaches".

HEALTH: Every vessel arriving in quarantine shall fly or show the appropriate International Quarantine signal; and no person other than a Pilot, Port Officer, Port Health Officer, Immigration Officer or Officer of Customs shall board the vessel; and no person shall disembark therefrom until the vessel has been cleared by the Port Health Officer.

BERTHING:

(a) Principal wharves at Sibu.

1. Rajang Port Authority Wharf 450 m. long with minimum depth of 6.1 m.
2. Sungei Merah Oil Wharf is an old wooden wharf of 22.5 m. with at least depth of 4.9 m.

(b) Sarikei Wharf.

Rajang Port Authority Wharf 60.4 m. with at least depth of 7.6 m.

(c) Bintagor Wharf.

Rajang Port Authority Wharf 48.8 m. with at least depth of 4.6 m.

STEVEDORES: The Rajang Port Authority provide all labour necessary for loading and discharging at Sibu, Sarikei and Bintangor.

REPAIRS: Sibu is one of the major shipbuilding and repair ports in Sarawak and there are 8 shipyards with slipways of which one of them can accommodate vessels up to 2,000 gross tons.

GENERAL: Small quantities of diesel oil bunkers available, also provisions and fresh water. Principal exports rubber, pepper, timber and sago.

REGULATIONS: The Merchant Shipping (Ports and Rivers) Regulations, 1961:—

8. The Master of every vessel of over 15 tons about to depart from a port for any place outside Sarawak shall cause the "Blue Peter" (International Code Flag "P") to be hoisted, during day-light hours, for at least 12 hours before the vessel is due to sail, or if the vessel is in port for less than 12 hours, for the period of her stay in the port.

9. (i) The Master or the Agent of every vessel about to depart from a port shall, on demand by the Port Officer, produce for inspection the Port Clearance.

(ii) The Port Clearance shall be in the form as prescribed under the Customs Ordinance or in such other form as may be approved by the Director.

10. A vessel arriving in, leaving from or shifting berth within a port shall hoist her signal letters, if any, whilst under way.

50. No oil, oily bilge water or substance containing oil of any description shall be discharged or allowed to escape from any vessel or allowed to run off any wharf, into any river or port.

AUTHORITY: Rajang Port Authority, Sibu, Sarawak. *Tel:* 332088, 332685, 332014. *Cables:* Raport. *Contact:* General Manager.

Marine Department, Sibu, Sarawak. *Tel:* 332754, 332752. *Cables:* "Shipping" Sibu.

TANJONG MANI, Sarawak: 02.09 N. 111.21 E.

PILOTAGE: Pilots embarked, weather permitting in the buoyed channel West of Jerijeh Lighthouse but occasionally the Pilot will request ships to proceed into sheltered waters as they use 5 m. fibre-glass speedboats, fitted with VHF.

Application for Pilot should be made giving 24 hours notice of arrival to "Shipping Sarikei" and Masters can call "Rajang Pilot" before arrival.

APPROACHES: Rajang River entrance has at least depth of 5.8 m. below chart datum. The entrance is well lit by two lighthouses and one light beacon and the bar is marked by two light buoys.

There is a wreck situated at Lat. 2° 7.6′ N., Long. 111° 7.25′ E. which is approximately 8 cables S.E.×E. of the inner Fairway Buoy marked by a starboard hand buoy and about 7 miles further inwards South-West of Kampong Rajang another wreck at Lat. 2° 8.7′ N., Long. 111° 14.12′ E. which is also marked by a starboard hand buoy.

ANCHORAGE: *Tanjong Mani Anchorage:* This is a deepwater anchorage 20 miles from the Fairway Buoy, used by vessels loading timber. The anchorage can accommodate approximately 3 vessels of 183 m. and 12 vessels of 120 m. – 150 m. in length.

Restricted Anchorage: Abeam of Loba Selemit on the North bank of the Rajang river in position Lat. 2° 08′ N., Long. 111° 16′ 35″ E. is restricted to loading and discharging any dangerous goods.

MAX. SIZE: The maximum length of a vessel permitted is 183 m. and max. draft 8.4 m.

AUTHORITY: Rajang Port Authority, Sibu, Sarawak. *Tel:* 332088, 332685; 332014. *Cables:* Raport. *Contact:* General Manager.

Marine Department, Sibu, Sarawak. *Tel:* 332754/332752. *Cables:* "Shipping" Sibu.

TAWAU, Sabah: 04.14 N. 117.52 E. (See Plan Book)

PORT LIMITS: The Port of Tawau shall comprise the waters of Cowie Bay and Wallace Bay and rivers entering same contained within the following limits:

A line from Lat. 4° 13.3′ N., Long. 118° 00.0′ E. to the National boundary mark on the Eastern shore of Sebatik Island, thence to the National boundary mark on the Western shore of the said island, thence in a 270°(T) direction to the shores at Burs Point, thence in a 311°(T) direction to Lat. 4° 20.0′ N., Long. 117° 25.9′ E. thence in a 070°(T) direction to Lat. 4° 25.0′ N., Long. 117° 40.0′ E., thence in a 120°(T) direction to the point of commencement.

DOCUMENTS:

(a) To be Produced on Arrival:

Customs

2 Manifests in prescribed form.
2 Crew Lists.
1 Last Customs Clearance.
2 Stores Lists.
2 Passenger Lists.
2 Arms Lists.

Marine

1 Marine Dept. Boarding Report, required to be completed.
1 Last Port Clearance.
1 Crew List.
1 Passenger List.

Agent

4 (2 for SPA) Manifests in the prescribed form.
1 Crew List.
1 Passenger List.

Immigration

2 Crew Lists.
2 Passenger Lists.

Travel Control Office

2 each, Crew Lists and Passenger Lists.

(b) To be Supplied to Ship before Departure:

Manifests, as required by vessel.
1 Port Clearance and 1 Customs Clearance.
3 copies of Passenger List.

(c) To be supplied by ship prior to arrival:

Where possible, cargo manifests and stowage plans should be forwarded in advance to local Agents and Port Authority ahead of vessels.

PILOTAGE: Not compulsory. A Pilot is available from 0600 to 1800 hrs. for berthing vessels given reasonable notice (48 hours). Marine Department Tel: 73510.

Applications normally made by Shipping Agents with advance notice of 24 hours prior to actual time that Pilot Services are required. Pilot boats are between 30 ft. – 40 ft. length and equipped with VHF/AM sets – 80.4 Mc/s. frequency. Pilot station at Port Office (Marine Department) and location for vessel awaiting Pilot is within Port Limits.

ANCHORAGES: Good anchorage in 8 fathoms 1,000 yd. to 1,300 yd. W.N.W. of wharf; and 350 yd. South there is an anchorage in 8.5 fathoms.

Petroleum Anchorage. An area bounded by parallels of Lat. 04° 15′ N. and Lat. 04° 16′ N. and meridians of Long. 117° 51′ E. and Long. 117° 52′ E. This area is to be marked "Petroleum Anchorage".

Explosives Anchorage. An area bounded by parallels of Lat. 04° 12′ N. and Lat. 04° 13′ N. and meridians of Long. 117° 52′ E. and Long. 117° 53′ E. This area is to be marked "Explosives Anchorage".

Quarantine Anchorage. An area bounded by parallels of Lat. 04° 12.5′ N. and Lat. 04° 13.5′ N. and meridians of Long. 117° 54′ E. and Long. 117° 55′ E. This area is to be marked "Quarantine Anchorage".

RESTRICTIONS: *(a)* Communication ship/shore when lying on Roads: Regular launch services difficult to arrange if required by Master. No recognised signals for summoning a launch, as distance between small boat jetty and anchorage is too great for flag signals to be recognised. No restrictions against a vessel using its own launch or motor life-boat apart from fact that it must not land anywhere other than at Ports Authority Wharf.

(b) Explosives: No vessel carrying explosives shall come within 500 yards of shore or any other vessel except with written permission of Port Manager which will be given provided that:

(i) quantity does not exceed 2,000 lb. of explosives of Class V and VI and are carried in a certified magazine, and there is no other dangerous cargo on board as certified in writing by the Master.
(ii) quantity does not exceed 3,000 lb. and are exclusively of one of the following classes III, IV or VII.

Danger flag must be flown by day and a red light by night.

HEALTH: *(a)* Quarantine. The Sabah Government are signatories to WHO convention on Quarantine regulations. Port Health Doctor will not board, unless vessel comes from an infected port. Instead Maritime Declaration of Health is to be filled out and handed to Boarding Officer of Marine Department, who will require one copy of crew list and one copy of passenger list. Vessels should cable Agent prior arrival advising last port of call and whether vessel healthy.

(b) Immigration. Immigration officer will board vessel on arrival and clear her inwards. No restrictions on crew and/or passengers going ashore. Immigration will require 2 copies of crew list and 2 copies of passenger list. Vessels are cleared inward until 1800 hours only. If there are special circumstances arrangements can be made to clear vessels inward after this time.

RADIO: Singapore Radio recommended.

Application for berthing has to be made 24 hours prior to actual time when berthing is required.

Details and requirements:

Name of vessel, gross and nett tonnage, length overall, draft (fore and aft) ETA at berth, ETD from berth, nature and tonnage of cargo to be discharged/loaded, number of gangs required, quantity of fresh water required. Vessels given berth on first come, first served basis.

VHF: A Maritime VHF radio telephone service now operates in the Port of Tawau on Hague Plan Channels 16 and 12.

Continuous listening watch is kept on Channel 16 and the station is operative between the hours of 0600 and 2000 daily.

Vessels are requested to make use of the above facility for notifying ETA, pilotage requirements etc. Berth availability will be notified on vessel's call.

TUGS: No tugs available.

BERTHING: *(a)* Wharf Light at Tawau in position on N.W. end of wharf, Lat. 04° 14′ 32″ N., Long. 117° 52′ 56″ E.

(b) Tides/Linesmen. The numbers of a vessel which is berthing alongside will be flown from signal station. In addition a cone, indicating tidal stream will be hoisted, pointed end of cone down indicates flood tide and pointed end up indicates ebb tide. Linesmen are on hand to receive a vessel's lines; a motor boat can be hired to assist in berthing if prior advice is given.

(c) New Wharf. Consists of a 220 ft. long approach causeway extending from a reclamation area and a 650 ft. long wharf, 40 ft. wide with a dolphin in line +100 ft. off each end. Least depth 20 ft.

(d) Monsoon. During strong wind from S.E. and S.W. ships are liable to range alongside wharf, and during S.W. monsoon sea breeze may make it difficult for ships to leave wharf in the afternoon.

(e) Buoys: No mooring buoys in Tawau.

(f) Lighters: No lighters available except a few wooden and steel lighters owned by Bombay Burmah Trading Corpn. Ltd. and Borneo Abaca Limited. Hire of these lighters can be arranged when they are not being used by owners, which is seldom.

Also see "Developments".

CARGO HANDLING FACILITIES: 19 Fork-lift trucks of 6,000 lbs. each; 1 Fork-lift truck of 7 tons; 10 Towing tractors; 45 Trailers.

STEVEDORES: *(a)* Stevedoring in the hands of Sabah Ports Authority who will supply gangs as required.

(b) Working hours 0730 – 1130 hours, 1300 – 1700 hours, 1800 – 2200 hours.

(c) Overtime: Overtime working hours are from 1800 to 2200 hours. Application must be made to Customs one day in advance; double rate charged.

(d) Sundays and holidays: Work normally carried out on Sundays and holidays, the only exception being Chinese New Year. Application must be made to Customs for permission to work Saturday afternoons, Sundays and public holidays.

(e) Rates: General cargo about 17 t.p.h./gang (loading/ discharging). 28 t.p.h./gang for palletised cargoes.

CARGO: *(a)* Special Cargo Regulations: No vessel with dangerous cargo may be alongside after sunset except at discretion of Port Manager. No dangerous cargo may be discharged simultaneously with general cargo except with permission of Port Manager.

Heavy lifts usually landed overside on to flat-top scows. Customs bonded store is available with about 4,000 sq. ft. of space including Customs Liquor and tobacco store. There are no private bonded warehouses to date. There are no facilities for handling or storing bulk cargoes in any quantity.

Livestock: Subject to approval of Veterinary Authority, certain animals including cattle are prohibited imports and exports except under licence.

(b) Damage. Ship's survey should be carried out on all cargo discharged in a damaged condition and Chief Officer should note extent of damage, and sign, certifying same. Cargo coming alongside in a damaged condition should be noted and M/R claused accordingly. Chief Officers are reminded that it is most unwise to load any copra which is rain or salt water damaged.

(c) Tally: Tally clerks can be supplied by Agent if required, on receiving advance notice.

(d) Inward. Inward cargo is tallied out of ship onto wharf or into lighter. Damaged cargo surveyed on the spot, otherwise no liability of the vessel is acknowledged. Discharge carried out after permission has been obtained from Customs after manifest of inward cargo has been deposited. Cargo delivered to consignees against production of relative Bill of Lading. Ship's responsibility to consignees ceases at ship's side, but, in the case of short-landed cargo, reasonable proof must be given to Customs that cargo has not been landed. A short-landed Memo certified by Chief Officer is usually accepted as proof.

(e) Transhipment. After discharge of cargo from first carrier, transhipment cargo is placed under the supervision of the Customs, unless it is possible to arrange direct transhipment into small coastal vessel.

(f) Outward. When vessels berth alongside, packages are brought by motor transport and lighters; when in roads, by lighters.

(g) Refrigerator. Only small quantities of refrigerated cargo loaded or discharged. No formalities or certificates being required other than compliance with normal Customs Regulations. Inward refrigerated cargo is confined to foodstuffs, meat, etc., and outward to frozen fish.

(h) Explosives. Explosives must be discharged into lighters or immediately on arrival onto wharf under police escort and transported to an approved police store. A licence for their importation must be obtained from police prior arrival of cargo, and Harbour and Police authorities must be informed of arrival of explosives in port either for discharge, or as through cargo.

TANKERS: Shell jetty, least depth 14 ft.

S.P.A. Oil Jetty: Length 240 ft. Depth alongside 32 ft.

Also see "Shipmaster's Report".

MEDICAL: *(a)* Hospitals. Government General Hospital is only hospital in town, and will receive any sick seamen or officers. 3 classes of wards, but first class ward can only accommodate 2 persons. Hospital is equipped to carry out normal surgery.

(b) Inoculation. Port Health Officer will vaccinate or inoculate Crew members at General hospital.

(c) Port Health Officer. General Hospital, General Office 73533, 72191. Medical Officer-in-Charge 71206. M.O.'s Residence 72239.

DENSITY: 1020 (approx.).

FRESH WATER: Can only be supplied at wharf. 24 hours' notice should be given of a vessel's water requirements. Usual rate of supply is about 15 t.p.h. A water barge is available but no guarantee of availability.

FUEL: Not available except diesoline in drums.

FIRE PRECAUTIONS: No fire floats and in the case of a vessel alongside catching fire, the fire brigade should be summoned by dialling 2999. The OCPD should also be informed.

CONSULS: At Kota Kinabalu.

REPAIRS: No facilities.

GANGWAY/DECK WATCHMEN: Not necessary. Agents may exercise option.

OPENING/CLOSING HATCHES: Normally by Stevedores.

CERTIFICATES: Registry, Load Line, Radio, Safety Equipment and Derat Exemption.

CUSTOMS ALLOWANCES: Tobacco, wine and/or spirits: No control, up to discretion of Officer of Customs and Excise.

CARGO GEAR: Ships gear used, also for containers ex-feeder ships and heavy lifts in major ports.

IDENTIFICATION CARDS: Not required.

REPATRIATION: Normally arranged by Agents.

AIRPORT: Some airports in State are between 4 km. to 10 km. from town centre.

TIME: Local time is 8 hours ahead of GMT. No alteration to clocks.

SERVICES: Tank cleaning services can be arranged with Agents. Marine Department deals with compass adjustments.

DELAYS: Due to weather conditions only.

POLICE/AMBULANCE/FIRE: *(a)* Police/Fire, Tel. 089-73111; Ambulance/Hospital, Tel. 089-73533.

(b) Accidents: Hoist a two-flag signal and give a blast of the whistle to call attention of signal station. Police and the hospital should be informed immediately of any untoward incident.

TELEPHONES: Available.

GENERAL: *(a) Surveyors:* Harrisons & Crosfield (Sabah) Ltd., as Lloyd's sub-Agents, may appoint a Surveyor if a survey is requested.

(b) Fumigation: No facilities.

(c) Ship Chandlers: Fresh vegetables obtainable in limited quantities early every morning from vegetable market.

(d) Priority: Vessels are berthed on a "First come first served" basis. Vessels with palletised cargo get priority.

(e) Watchmen: These can be supplied if required.

REGULATIONS: *(a)* Arrival and Departure. The Owner or Agent of every vessel other than a small ship intending to call at a port shall, as soon as possible, and in any case not later than 36 hours prior to the estimated time of arrival of the vessel, give notice in writing to the Authority of such arrival and, if so desired, the requirement for a berth at a wharf.

2. The notice under this regulation shall be in a form prescribed by the Authority and shall contain full particulars regarding the cargo to be discharged and loaded, the embarkation and disembarkation of passengers, heavy lifts, special or perishable cargo, hazardous and dangerous goods (whether to be discharged at the port or not), and any other matters of importance relating to the working or safety of the vessel in the port.

3. The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted the national colours and the signal letters, if any, of the vessel. The national colours shall be exhibited from 0800 hrs. to sunset whilst the vessel remains in port.

4. The Master of every vessel arriving from outside the State of Sabah shall exhibit the Immigration and Quarantine signals contained in the First Schedule and shall also at the request of a Customs Officer hoist the Customs signals. Such signals shall remain exhibited until the appropriate officer has given permission for them to be lowered.

5. No vessel shall approach within 600 ft. of any other vessel exhibiting the Immigration, Health or Customs signals.

6. No person other than a Pilot may board or disembark from any vessel until the vessel is cleared inwards and the Immigration, Quarantine and Customs signals have been lowered.

7. Every vessel entering a port shall be anchored or efficiently secured to a wharf or buoy before commencing the loading or discharging of cargo and/or the embarkation or disembarkation of passengers.

8. No vessel shall leave any port unless in possession of a valid Port Clearance issued by or on behalf of the Director of Marine.

(b) Special signals:

Significance	*By Day*	*By Night*
Immigration (for ships not carrying passengers)	International code Signal "2 5"	Two green lights, 6 ft. apart hoisted vertically where best seen.
Immigration (for ships carrying passengers)	International Code Signal "3 4"	Two green lights, 6 ft. apart hoisted vertically where best seen.
Quarantine (vessel is Healthy request Pratique)	International Code Signal "Q"	Nil
Quarantine (vessel is suspect)	International Code Signal "Q Q"	A red light over a white light and a separate hoist of red light over a green light and hoisted vertically 6 ft. apart where best seen.
Quarantine (vessel is infected)	International Code Signal "Q L"	
Quarantine (not received Pratique)	Nil	A red light over a white light 6 ft. apart hoisted vertically where best seen.
Request Police Assistance	International Code Signal "S T"	A green light over a white light. 6 ft. apart hoisted vertically where best seen.
Request Medical Assistance	International Code Signal "W"	A red light over a green light. 6 ft. apart, hoisted vertically where best seen.

DEVELOPMENTS: Larger and more modern facilities are being installed under a multi-million dollar project now being implemented. The new facilities are sited upstream of the present wharf to provide 3 additional berths each about 500 ft. long and with a depth of 32 ft. at the outer face. A large portal-frame godown is provided on the wharf deck while ample open storage has been constructed on the foreshore area.

Container Development for Tawau Port: Sabah Ports Authority has just been servicing only feeder route container traffic relying on ship-based cranes. Container facilities are limited to forklift, tractor/trailer system. Plans for up-grading container capability will be determined by potentials of the trade.

SHIPMASTER'S REPORT: 1976.
Government Oil Wharf:
Position: Lat. 04° 15.5′ N., Long. 117° 50′ E. 2 miles N.W. of Main Cargo Pier.

Least depth in channel from sea to berth — 30 ft. Vessels to be ballasted to 1/3rd deadweight. Density, 1025. Vessel docks daylight only, undocks anytime at any stage of tide. Anchorage 0.5 mile S.W. of jetty. 5 lengths of ship's hose required. Manifold, 10 in. Length of shoreline 3,000 ft. All products handled. Shore booster pump cannot be used. No steam.

Pilot boards at Quarantine Anchorage. 48 hours notice required. No tugs available. Accommodation ladder required for Quarantine but not at berth.

Fresh water available ex-barge. Other services available: Fresh provisions, repairs, Machine Shop, Airport, Lloyd's Surveyor, Telex, Doctor, Hospital, Laundry, Groceries and Meats. No slop tanks.

AUTHORITY: Port Manager, Sabah Ports Authority.

NOTES

Please also advise Shipping Guides Ltd.

Maldives

MALE: 04.10 N. 73.31 E.

SHIPMASTER'S REPORT: May 1982.

APPROACHES: As visibility was good landfall was made easily, as T.V. tower South of Male Island in position: 04° 10.2′ N., 73° 30.9′ E., was visible at a distance of 30 miles on radar and also the Islands of Huras and Hembudu were visible. Entrance was made as per "Sailing Directions – West Coast of India Pilot" via East Male Passage. As many small fishing/pleasure vessels are crossing the passage, slow speed is necessary. Also signals on the ship's whistle were given. After rounding the Island of Funadu at a distance of 2 cables, course of 275°(T) was set, to anchor in position West by South from Dunidu at a distance of 6.5 cables, as Roads were occupied by 5 other small vessels. Used port anchor with 7 shackles of chain. No dragging was observed during our stay, not even during squalls. During our stay the ship was heading between North and S.S.W.

We left Male Roads on 24th May at daybreak as no navigational aids/lights are available.

The Northern route via Kaduoigiri Passage as described in the Sailing Directions was taken. Apart from a very strong Westerly set near the reef N.W. of Kaduoigiri Island no particulars were observed.

Beacons in the following positions non-existent:

A. Lat. 04° 11.75′ N., Long. 73° 31.05′ E. (West of Dunidu Island).

B. Lat. 04° 12.37′ N., Long. 73° 30.43′ E. (Reef between Dunidu & Ferdo).

C. Lat. 04° 13.45′ N., Long. 73° 31.54′ E. (Vehamanafushi).

Mooring Buoy (private) in position: 04° 11.45′ N., 73° 30.97′ E. non-existent.

Navigation Warning: Unmanned/unlighted fishing vessel (approximately 60 tons gross) anchored in position: 04° 11.2′ N., 73° 30.55′ E.

DOCUMENTS: *Arrival/Clearance Procedures:* Finished with engines at 0954 hrs. on 20th May. Security onboard at 1000 hrs. Doctor, Immigration, Customs boarded at 1038 hrs. Ship cleared and Agent/Stevedores onboard at 1100 hrs.

Papers Required: Security: 1 Crew List (search party, search all cabins for weapons/pornographic material).

Doctor: Port Health Form (Male Issue), Vaccination List (Cholera Vaccinations).

Immigration: 2 Crew Lists (all passports checked).

Customs: Last Port Clearance, 1 Crew List, Cargo Manifests, Store List from Head of Catering. (Bonded stores were not sealed). Customs also gave the ship a "Notice to Ships Calling at the Port of Male". See "Notice".

Agents: 1 Crew List. All passports taken ashore to be returned upon departure with Customs Clearance.

CARGO HANDLING: (Chief Officer's Report):

Arrived 20th May, 1982. Sailed 24th May, 1982. Port hours: 94 hours 11 minutes.

Three gangs are available in Male to work on board ships, of which 2 were supplied on 20th, 21st and 22nd May. One gang on 23rd May. The gangs arrived diligently between 0750 hrs. and 0800 hrs. in the morning and worked till about 2220 hrs. except on the Thursday, when they worked till 1730 hrs. and on the 21st when work was interrupted from 1000 hrs. till 1415 hrs. being a Muslim religious festival.

No forklift trucks are available for work on board ships in Male and cargo stacked on pallets had to be dragged from the sides of the holds under the hook. This was the cause of damaged bags of flour and cartons of provisions.

There are 6 lighters available. Empty lighters were regularly supplied, except after rainy periods, when discharging of lighters alongside the wharf is interrupted.

Shore tally staff seemed to be very dedicated in their duties and were accompanied by a Customs Officer/Clerk.

Nett tonnages per hour:

Hatch No. 1: 12.1 t.p.h. (182 tons discharged).

Hatch No. 2: 12.2 t.p.h. (216 tons discharged).

Hatch No. 6: 16.8 t.p.h. (411 tons discharged).

A boat schedule was arranged upon arrival but a regular boat service was never carried out. The Agency appeared not to be in possession of any documentation (manifests, stowage plans, etc.) of the cargo to be discharged.

NOTICE: Issued by Maldive Customs.

Notice to Ships Calling at the Port of Male

1. All ships are required to submit a Port Clearance, Cargo Manifest, Passenger and Crew List and where available any other relevant documents.
2. Departure time should be notified and a Port Clearance obtained.
3. All visitors, officers and crew and passengers of ships are requested to use the Customs Jetty when arriving or leaving Male.
4. All articles are subject to inspection by the Customs.
5. All ships anchored at Male Harbour should exhibit on board the under mentioned lights between sunset and sunrise.
   a. White anchor light of all round visibility.
   b. White stern light with 135° illuminated sector.
   c. Mast light with all round visibility.

The Law On Prohibited Imports into Maldives

1. *Prohibited Items of Import Except for the Use of the State:*
   a. Any type of gun powder.
   b. Weapons of war.
   c. Opium, ganja, cocaine, and any other item which could be used as an intoxicant.

Articles carried by foreign distinguished personnel signifying their ranks, titles or honours and articles carried in connection with such ranks, titles or honours by those who accompany such distinguished guests shall be exception to this Article.

2. *Prohibited Items of Import Without a Permit from the Ministry o Home Affairs Except for the Use of the State:*
   a. All forms of poisons and sulphuric acid.
   b. Nitrates.
   c. Dangerous animals.
3. *Totally Prohibited Items of Imports Into Maldives:*
   a. Pornographic literature and posters.
4. *Prohibited Items of Import Without a Permit from the Ministry o External Affairs Except for the Use of the State:*
   a. Alcoholic drinks.
   b. Dogs.
   c. Pigs or pork.
   d. Statues (used for worship).

In addition to items stipulated in this Bill, the Principal Collector o Customs shall withhold such items, the import of which is in his opinio shall be prohibited and bring the matter to the notice of the Department of Finance. The final settlement will be in accordance with the decisio of that Department.

AUTHORITY: Ministry of Transport, Male, Republic of Maldives.

NOTES

Please also advise Shipping Guides Ltd.

Malta

VALLETTA: 35.54 N. 14.31 E.

DOCUMENTS: On arrival the Master has to fill the pratique deposition, the stores list, the crew declaration, and the crew list (two copies). The forms for the pratique deposition and for the store list are supplied by the Customs Boarding Officer.

Arrival Notice: In accordance with the Port's Regulations Master or Agent of a vessel should give the ETA to the Port Department on a form prescribed by the regulations as early as possible prior to arrival and 48 hours in the case of vessels carrying petroleum or other hazardous cargoes.

PILOTAGE: Pilotage is compulsory for vessels above 500 g.r.t. Pilots board vessels at Fairway Buoy, weather permitting. Pilots available round the clock all the year round. In bad weather Pilots board vessels inside entrance, subject to size of vessels, Master's knowledge of the port and Master's willingness to bring vessel up to Bighi Bay.

Pilot boat is equipped with VHF on Channels 12, 14 and 16.

ANCHORAGES: Anchorage in territorial waters and in other harbours is prohibited unless expressly authorised by the Port Department.

RESTRICTIONS: Maximum depth at entrance is 16 m. Dredging works are in hand for channel and berth at Menqa Basin to provide 13.7 m. of water. Nature of bottom in entrance channel, rock and mud. Harbour channels – mud.

Harbour entrance and approaches affected by current. With North-Westerly winds there is a set of up to 0.5 knots from N.W. to N.E.

Port is subject to closure in gregale (N.E. gale) conditions – Winter months occasionally, not more than 4 times a year.

MAX. SIZE: Discharging Berths:

Deep Water Quay – 500 m. long, depth 10.0 m.

Berths No. 1, 2 and 3 have maximum depth of water alongside of 9.75 m. Maximum displacement tonnage of 15,000 tons.

Berth No. 4 has the same depth of water and can take maximum displacement of 25,000 tons.

Laboratory Wharf has a length of 220 m. with a depth of 12 m. Two other small berths adjacent to the main wharf are used for Ro/Ro and direct deliveries.

There are other berths at Coal Wharf (length 275 m., depth 7.0 m.) for cargoes intended for discharging direct to trucks. There are various berths for various sizes of ships at Bighi Bay, Fish Market, Fuel Wharf and Bridge Wharf.

Also see "Developments".

HEALTH: Port Medical Officer grants pratique after boarding vessels on arrival. Accelerated pratique may be granted through Agent provided crew are all in good health and ship has not called at any infected port during previous 15 days and is coming from a European port.

RADIO: Call sign 9HD. Radio telephone working frequency 2625 kHz. Listening watch 2182 kHz.

RADAR/VHF: No radar service available. VHF available at Port Signal Station. Operating on VHF Channels 11, 12, 14 and 16.

Also see "Pilotage".

TUGS: Meet vessels just inside harbour entrance. Lines given at discretion of ship's Master under advice from Pilot.

BERTHING: Berthing conference held at the Port Department daily at 1100 hrs. between Monday and Saturday when berths are allocated for expected ships. No specific requirements necessary. Once berth has been allocated by Port Department vessels can berth at any time at the allocated berth (container and Ro/Ro berths are available).

EQUIPMENT: One gantry crane maximum lifting capacity 35 tons. One mobile crane maximum lifting capacity 250 tons. Two mobile cranes with maximum lifting capacity of 75 tons (for container handling). Various other mobile cranes. Fork lift trucks 2×40 tons. Various other smaller fork lift trucks and other cargo handling equipment.

STEVEDORES: Ship Agents of liner vessels normally act as stevedores. Port workers for stevedoring are ordered by Shipping Agents and labour is allocated from a pool operated by the Manager of port workers.

Working Hours: 0800 – 1200 hrs., 1300 – 1700 hrs. Vessels may work till 2100 – 2200 hrs. to complete. Nightwork: 1900 – 0400 hrs. (mainly containers).

Work may be arranged on Saturdays, Sundays and Holidays at special rates.

MEDICAL: Notice must be given to Agents as early as possible. Hospital facilities available. Crew must be in possession of inoculation/vaccination certificates.

TANKERS: Vessels must be gas-free except for the tank cleaning berth. Facilities for discharging slop or residue are available.

N.B. Vessels not gas-free are not allowed to enter port between sunset and sunrise.

FRESH WATER: Limited amount ex-barge subject to permission from Water Authority. Notice, as long as possible required.

FUEL: Sea Malta Co. Ltd. Grades handled include gas oil, fuel oil, thin fuel oil 30 CST up to 380 CST.

FIRE PRECAUTIONS: Precautions as laid down in Ports Regulations for cargo ships and as in Petroleum Ships Regulations for tankers. Civil tugs partly equipped with fire fighting equipment.

GANGWAY/DECK WATCHMEN: Gangway recommended. Deck compulsory.

OPENING/CLOSING HATCHES: By ship's crew or shore labour.

CERTIFICATES: Ship's Register; Load Line Certificate; Derat Certificate; Factory Act Book.

CUSTOMS ALLOWANCES: 200 cigarettes for each crew member, plus one bottle spirits (officers only).

CARGO GEAR: Certificates of cargo handling gear have to be valid before cargo work can commence. Factory Act Book to be endorsed quadrienially and annually.

IDENTIFICATION CARDS: A personal identification card not required. Passports or seamen's books will suffice.

CONSULS:

Embassies in Malta for following countries:

Australia	38201/5	Italy	621985
People's Republic of China	34695	Korea (D.P.R.)	800003
Czechoslovakia	511330	Kuwait	37131
Arab Republic of Egypt	34769	Socialist People Libyan Arab Jamaharija	34947
France	31107	Spain	514164
Federal Republic of Germany	36531	Sudan	—
Great Britain	621285	U.S.S.R.	515703
Israel	513094	United States of America	621240

Consul Generals (and Honorary):

Austria	29182/627356	Netherlands	624858
Denmark	624858	Norway	625488
Japan	623977	Pakistan	27401
Liberia	623977	Sweden	624858
Republic of Korea	22372	Turkey	624306
Monaco	625488		

Consuls (and Honorary):

Belgium	28180	Portugal	626333
Brazil	25966	Senegal	20064
Greece	606788	Spain	28180
Honduras	—	Switzerland	624159
Iceland	621207	Thailand	30924
Mexico	605802	Tunisia	407000

Vice Consuls in Malta for following countries:

Austria	29182	Spain	28180

REPAIRS: Malta Drydocks has the capability to carry out normal and specialised engine, hull and machinery repairs such as:

Engine, (diesel, steam, turbine)
Auxiliaries (turbine and diesel)
Turbine re-blading
Propeller servicing, repairs including re-tipping (tips cast in yard) and balancing
Dynamic balancing of rotors
Boiler and heat exchanger chemical cleaning
Rudder and tailshaft alignment and repairs
Gritblasting (internal/external) to all standards
Hull cleaning by high pressure water jet
Refrigeration system repairs
Replacement of lignum vitae stern tube bearings
Installation of Deutsche Werft Simplex stern tube sealings
Internal/external cathodic protection
Combustion control system repairs
Re-tubing of boilers, brickwork and lagging
Renewal of heating coils, cargo and stripping lines
Hull repairs (welded and rivetted)
Jumboizing.

Travelling Repair Parties:

Malta Drydocks Travelling Repair Parties are available to carry out repairs at sea both as an emergency repair, or as a means of reducing lay-up time during normal voyage repairs or classification surveys.

It is possible to shorten the time of refits by employing a travelling repair party to commence work before entering or complete after leaving the Drydocks, non-critical items being completed on passage.

Malta allows the maximum use to be made of Travelling Repair Parties, situated as it is in the centre of the Mediterranean, midway between Gibraltar and Port Said. It is ideally placed on the shipping lanes between the East and West and connected by daily air services to Europe and North Africa.

Malta Drydocks Travelling Repair Parties are equipped to carry out the following work:

1. Repairs to main and auxiliary boilers, including re-tubing, renewal of brickwork and insulation and fitting of new furnaces in Scotch type boilers.
2. Overhauling and repairing deck and engine room auxiliary steam and diesel plant, cargo systems and valves.
3. Repairs or replacement of cargo tank heating and stripping line systems, in cast iron, steel or aluminium/brass.
4. "Metalock" cold repairs to castings by trained specialists.
5. Gas or electric welding to Classification Society requirements for steelwork repairs and reinforcements.
6. Repair or renewal of electrical wires and cables.
7. Overhaul or installation of any electrical machinery.
8. Repair or installation of all navigational aids, i.e., radar, radio, auto-pilots, gyros by qualified personnel.

Any enquiry will receive immediate attention by radio, telex or telephone.

SURVEYORS: Lloyd's Register of Shipping; The London Salvage Association; American Bureau; US Salvage Association; Det Norske Veritas; Registro Navale Italiano; Bureau Veritas; Germanischer Lloyd; Panama Bureau of Shipping; Nippon Kaiji Kyokai.

BANKS: Bank of Valletta, Central Bank of Malta, Lombard Bank (Malta) Ltd., Mid-Med Bank Ltd., Melita Bank International Ltd.

REPATRIATION: Facilities exist for crew changes and repatriation by air.

AIRPORT: Luqa Airport is 4 miles from port, served by Air Malta and other airlines.

Daily flights to London and Rome. Also other flights to other countries.

TIME: GMT plus 1 hour in Winter. Summer time kept from last Sunday in March until last Sunday in September.

HOLIDAYS: New Year (1st January – no work); St. Paul's Shipwreck (10th February); St. Joseph's Day (19th March); National Day (31st March); Good Friday (no work performed at all on this holiday and in the afternoon of Tuesday Carnival); St. Joseph the Worker (1st May); Ascension Day (date changes); St. Peter and St. Paul (29th June); Assumption of B.V. Mary (15th August); All Saints' Day (1st November); Immaculate Conception (8th December); 13th December (Republic Day); Christmas Day (25th December); (no work performed at all).

DRY DOCKS: Malta Drydocks.

Docking Facilities:

Dock Number	*Length (m.)*	*Inside Beam (m.)*	*Depth (m.)*	*Cranes (Capacity-tons)*	*Other Facilities**
1	153.92	21.64	5.57	1×50 1×5	A–S–FW–SW
2	169.6	24.68	9.96	1×4 3×5 1×20	A–S–FW–SW
3	142.9	17.67	9.55	1×4 2×10 1×20	A–S–FW–SW
4	262.5	39.6	10.3	1×5 1×10 1×50	A–S–FW–SW
5	216.4	28.04	10.52	1×5 1×10 1×50	A–S–FW–SW
6	360.0	62.0	10.72	1×150 2×30	A–S–FW–SW O–P
7	100.0	35.35	4.32	1×150	FW–SW–A

*A – Compressed Air   FW – Fresh Water   O – Oxygen
S – Steam   SW – Salt Water   P – Propane

Capacity of No. 6 Dock 300,000 d.w.t.

SERVICES: Tank cleaning and underwater hull cleaning undertaken by Malta Drydocks.

Ricasoli Tanker Cleaning Installation:

The tanker cleaning installation at Ricasoli accepts cleaning for drydocking, repairs and survey for upgrading tankers.

The jetty area consists of a 100 m. jetty, situated immediately inside the Grand Harbour, and capable of berthing tankers up to 100,000 d.w.t. at a maximum draft of 8.5 m. in 10 m. of water.

Tankers are assured of immediate attention on arrival from a trained crew of tank-cleaning personnel. Work is continuous 24 hours per day from the time of arrival of the vessel, together with a 24-hour security watch.

1. Washing: The installation supplies hot wash water at a temperature of 60°C and a pressure of 14kg. per sq.cm. to operate four washing machines simultaneously, with a delivery rate of 30–34 t.p.h. The discharge of slops and/or ballast is at a maximum of 1,200 t.p.h. Chemical cleaning is also undertaken and Malta Drydocks holds stocks of well-known chemicals.
2. Gas-freeing: The installation operates 3 compressors and 6 Meco ventilators, together with trunking, are available for gas-freeing.
3. Steam Supply: This is available at the jetty when required. All associated tank-cleaning equipment is available for ship's use.

Full fire-fighting facilities are available at the jetty.

The installation also makes distilled water for sale to ships and a separate line is available at the jetty for the discharge of this product.

The reception and treatment area incorporates reception tanks, treatment tanks and an observation tank with separating baffles and oil sump. In addition there is an oil storage tank and a distilled water storage tank.

The boiler house accommodates 3 Scotch boilers with all associated auxiliary equipment. The steam supply is extensively used in the plant area for heating and treatment purposes. An evaporator-distiller is incorporated in the Boiler House for the production of distilled water.

The whole area has been designed to be perfectly safe and is to the standards laid down by the Institute of Petroleum Safety Codes for Installations storing Class A Petroleum. Strict safety regulations are applicable to the whole plant and the tank-cleaning crew has been thoroughly trained in these matters.

POLICE/AMBULANCE/FIRE: Police 28135; Ambulance 961; Shore Fire Brigade 99.

TELEPHONES: Can be arranged at the Drydock berths, and on buoys.

GENERAL: Important that tankers are gas-free before entering, and that vessels do not carry explosives.

DEVELOPMENTS: *Marsaxlokk:* To be developed as a transhipment port. In the first stage (completed) the following is available.

Berth	*Length (m.)*	*Depth (m.)*	*Remarks*
A-B	50	3.0	Service Berth
B-C	128	9.5	General Cargo and Containers
C-D	167	9.5	
D-E-F	620	13.5	
F-G	200	13.5	

In the second stage a breakwater berth, length 1,030 m., and depth alongside 15 m. – 20 m., will be constructed. Completion late 1985.

Stage three will consist of a Container and Ro-Ro Terminal 1,400 m. length and 12.0 m. – 17.0 m. depth.

Valletta: Grain Terminal under construction. Length of quay 440 m. Capacity of silos 86,000 tons. Completion early 1985. Max. size 60,000 d.w.t. and later after dredging 80,000 d.w.t.

AUTHORITY: Director of Ports, Port Department, Marina Pinto, Valletta. *Tel:* 22679. *Telex:* 226 MW. *Contact:* Director of Ports.

AGENT: Kirton & Co. Ltd., 18/19 Floor 3, Europa Centre, Floriana, Malta. Cable address: 'Kirton Malta'. Tel. 624360. After hours 820599. Telex. MW 1241. Sole and exclusive Agents for Lambert Brothers Ship Agencies Ltd.

NOTES

Please also advise Shipping Guides Ltd.

Commonwealth of the Northern Mariana Islands

SAIPAN (Commercial Port): 15.13 N. 145.44 E.

DOCUMENTS:
5 General Declarations
5 Crew Manifests
5 Passenger Manifests
4 Crew Personal Effects Lists
3 Sealed Stores Lists (food, medication, etc.)
3 Cargo Manifests
3 Dangerous Cargo Lists
2 Crew Vaccination Lists
2 Entry Permits
Note: Entry permit may be requested via cable to Northern Marianas Immigration or through local Agent.

PILOTAGE: Pilot available on request. Advance notice of least 24 hours required. Pilot boards at Tango Buoy (15° 12′ 07″ N., 145° 40′ 20″ E.).

ANCHORAGES: Outside harbour at Garapan Anchorage and inside harbour basin.

RESTRICTIONS: No waste discharge within harbour or within territorial waters (3 miles). Harbour depth restricted to 30 ft. MSL.

MAX. SIZE: Berth space limited to 500 ft. at longest portion of dock. Vessels longer than 500 ft. require special permission from Port Superintendent.

HEALTH: No formal clearance required; however, authorities may demand proof of immunisation against certain communicable diseases if ship is coming from infected countries.

VHF: Saipan Port Control on Channel 16 for berthing assignment. U.S. Coastguard on Channel 16 for emergency.

RADAR: Not available.

TUGS: None.

BERTHING: Berth No. 1, length 200 ft.; Nos. 2 and 3, length 500 ft.; No. 4, length 200 ft.

CRANES: 2× 50 ton cranes; no heavy lifts available.

BULK CARGO FACILITIES: None.

SPECIALISED CARGO HANDLING FACILITIES: None.

BRIDGES: None.

STEVEDORES: Available on request prior to arrival of vessel, at least 24 hours advance notice required.

MEDICAL: At least 48 hours advance notice for requests other than emergencies. Hospital facility is limited.

TANKERS: Discharging or loading of fuel at Berth Nos. 2 and 3 only. 1×2 in. connection, standard thread.

FRESH WATER: Available between the hours of 0600 – 2000 hrs. local time. Rate approximately 100 gallons per minute. Cost – 30 cents per ton.

FUEL: Mobil diesel fuel ASTM No. 2 D grade, flash point 150°, API 34 – 42, viscosity SSU at 100°F. 33 – 45.

REPAIRS: No repair facilities.

DRY DOCKS: None.

SURVEYORS: None.

GANGWAY/DECK WATCHMEN: None.

HATCHES: Stevedore in charge.

CUSTOMS ALLOWANCES: 1 case beer; 0.6 gallons spirits; 3 cartons cigarettes, duty free for personal consumption.

REPATRIATION: Not possible.

AIRPORT: Approximately 9 miles from port. Continental Airlines and Japan Air Lines serving Saipan from Guam and Japan, 3 times daily and 4 times a week, respectively.

TIME: GMT plus 10 hours.

HOLIDAYS: New Year's Day (January 1st); Commonwealth Day (January 8th); President's Day (February 21st); Covenant Day (March 24th); Memorial Day (May 30th); Liberation Day (July 4th); Labour Day (1st Monday of September); Discovery Day (October 10th); Thanksgiving Day (last Thursday of November); Constitution Day (December 8th); Christmas Day (December 25th).

POLICE/AMBULANCE/FIRE: Police Tel: 6333/6431. Ambulance Tel: 6222/6115. Fire Tel: 9222/6222.

EMERGENCY CO-ORDINATION CENTRE: U.S. Coast Guard Tel: 6101. Civil Defence (local) Tel: 6592.

SERVICES: Scuba divers available.

BANKS: Bank of Guam Telex: 607. California 1st Bank Telex: 634. Bank of Saipan Telex: 682. Bank of Hawaii Telex: 621. Commonwealth Bank Tel: 7204.

SHORE LEAVE: Crew members are allowed on shore once cleared by Immigration and Customs.

DELAYS: Due to limited berthing space, vessels are usually delayed until the berth is unoccupied.

AUTHORITY: Commonwealth Ports Authority, P.O.Box 1055, Saipan, CM 96950, Commonwealth of the Northern Mariana Islands. *Contact:* Carlos A. Shoda, Executive Director. *Tel:* 67315/16/17. Jose D. L. G. Diaz, Port Superintendent. *Tel:* 9865/9973.

NOTES

Please also advise Shipping Guides Ltd.

Martinique

FORT DE FRANCE: 14.36 N. 61.04 W.

(See Plan Book)

PORT LIMITS: The straight lines joining Pointe des Negres, the South extremity of Fort St. Louis and Pointe d'Alet.

DOCUMENTS:

Maritime Declaration of Health.
4 Crew Lists.
2 Provisions Lists.
2 Lists of Passengers in Transit.
5 Lists of Passengers Disembarking.
2 Lists of Crew Personal Effects.
2 Vessel's Particulars Declarations.
2 Cargo Manifests.

Tankers Only: Certificate of Insurance against Oil Pollution.

PILOTAGE: Call Pilot by International Code flag "G" or by sounding "G" on whistle. Pilot launches are painted black. The Pilot joins vessel on arrival at Pointe des Negres. If Pilot not available, vessel must anchor in the Baie des Flamands East of Point des Negres to await Pilot.

ANCHORAGES: In Baie des Flamands in front of the town. Depths of 10 m. – 14 m.

MAX. SIZE: Length: 180 m. for vessels with one right hand propeller and without bow-thruster. 250 m. if vessel has two propellers and bow-thruster. See also "Tankers".

HEALTH: Request Free Pratique by radio or can be obtained on arrival when Master completes Health Declaration and presents Health Certificates.

RADIO: Fort de France Radio, call sign FFP. ETA message to Agent required 24 hours before arrival on working days or 48 hours on holidays. Message to include number of crew on board, flag, ship's name, tonnage, length, beam, max. draft on arrival, date and time of arrival.

VHF: Port Authority on Channel 16.

RADAR: None.

TUGS: None available.

BERTHING:

Quay	*Length m.*	*Depth m.*	*Remarks*
Avisos – Arsenal	106	6.5	
Ouest	138.5	7.5	West Quay
Tableau Ouest	93	6.5 (2.5)	
Bassin Radoub	200	8	Dry Dock
Aux Huiles	88.5	8	Oil
Grands cargos	135	8	Large cargo vessels
Darse	110	9	
Annexes	113	8.5	
Tableau Tourelles	83	11	
Tourelles	320	11	
Poste Ro/Ro			Ro/Ro berth
Battellerie	135	5.5	Small craft
Phares – Balises	50	4	
Hydrobase	340	11	
A conteneurs	250	12	Containers

Tidal range 0.4 m. maximum. Load/discharge by ship's own gear. Cement handled at Petroleum Pier.

Container Quay: Length 250 m., depth 12.0 m. 2 Paceco gantry cranes with lifting capacity of 40 tonnes. Request for use to be made 10 days in advance to Chambre de Commerce et d'Industrie de la Martinique (C.C.I.M.), 50 Rue Ernest Deproge, B.P. 478, 97205 Fort-de-France Cedex. Telex: Chamco 912633.

CRANES: None available.

MEDICAL: Doctor and hospital facilities available.

TANKERS: *Petrol Pier:* Depth alongside 17 m., can accommodate tankers up to 300 m. length and 120,000 tonnes displacement. Crude discharge through 2×12 in. Chicksan Arms, capacity 4,500 t.p.h.

DENSITY: About 1028.

FRESH WATER: Available from quay in unlimited quantity except during dry season. Rate 50 t.p.h. – 80 t.p.h.

FUEL: All grades available subject to 12 hours' advance notice.

GANGWAY/DECK WATCHMEN: Recommended. Performed by crew members.

OPENING/CLOSING HATCHES: Can be performed by crew.

CUSTOMS ALLOWANCES: 200 cigarettes per man. All alcohol to be declared.

IDENTIFICATION CARDS: Seaman's Book.

CONSULS:

Belgium
Colombia
Cuba
Denmark
Germany
Haiti
Italy
Netherlands
Norway
Panama
Portugal
Spain
Sweden
U.S.A.
Venezuela

REPAIRS: Minor repairs possible.

DRY DOCK: 1×200 m. length, 21 m. wide. Equipment restricted.

REPATRIATION: Facilities for crew change and repatriation.

AIRPORT: 7 miles from the port, served by regular airlines.

HOLIDAYS: 1st January, Shrove Tuesday, Ash Wednesday, Easter Monday, 1st May, Ascension Day, Whit Monday, 14th July, 15th August, 1st November, 25th December.

POLICE/AMBULANCE/FIRE: Police, Tel: 17 or 71 00 24; Ambulance, Tel: 17 or 71 59 48 – 72 04 20. Fire, Tel: 18 or 71 22 64.

SURVEYORS: *Lloyd's:* Porry Paul, Immeuble Transat, Route du Lamentin. Tel: 71 93 45.

Veritas: Rue Victor Hugo No. 17 – Tel: 71 30 78.

TIME: GMT minus 4 hours.

TELEPHONES: None.

SERVICES: No tank cleaning equipment, tank-washing, or compas adjusting.

SHORE LEAVE: Permitted.

DEVELOPMENTS: Open storage area at Container Terminal bein extended.

Hydrobase Quay to be lengthened by 50 m., completion late 1984. Cruise ship berth being fitted out.

AUTHORITY: Direction Departementale de L'Equipment (DDE), B.P 661, Boulevarde du General de Gaulle, 97262 Fort de France Cedex *Tel:* 70 00 31. *Telex:* 912529 Mr. *Contact:* Monsieur Thouzeau, Po Director. Monsieur Sandrin, General Manager.

Monsieur P. Gibon, B.P. 625, 97200 Fort de France. *Tel:* 702073 o 714074, ext. 46.

NOTES

Please also advise Shipping Guides Ltd.

Mauritania

NOUADHIBOU: (Port Etienne): (See Plan Book)

POINT CENTRAL: 20.49 N. 17.03 W.

DOCUMENTS:

3 Crew Lists.
2 Store Lists.
2 Crew Declaration Lists.
2 Passenger Lists (even if "NIL").
2 Ports of Call Lists of the last 30 days.
1 Health Declaration.
1 Vaccination List.

Maritime Gendarmerie: Officers of the Maritime Gendarmerie of Nouadhibou may come on board. They mainly control if the Mauritanian flag (must be flown day and night) is hoisted and check very closely the concordance between the Ship's Articles, the Seamen Books and the Crew List.

If any difference is found between these three documents a fine may be given to the ship.

Immigration/Police: Crew members are not allowed to go ashore without a safe conduct given by the police. The list of the men asking to go ashore has to be given to Agent on arrival.

Money: On principle, foreign money is not allowed in Mauritania, but Agent may change money into local currency.

No Mauritanian money (Ouguiya) may be kept on board and if the crew have not spent their local money they have to give it back to the Agency (10 Ouguiya about 1 French Franc).

PILOTAGE: Compulsory for vessels calling at Point Central.

An outer pilot station is situated in the vicinity of No. 2 Buoy, bearing 037° distance 4.4 miles from Fairway Buoy No. 0 (Lat. 20° 40′ N., Long. 17° 04′ 30″ W.). Also see "Shipmaster's Report (1977)".

The inner pilot station is 1 mile from the mineral wharf bearing East.

ANCHORAGES: Ships waiting can anchor N.E. of No. 2 Buoy, distance 1 mile in 20 m. of water, good holding ground. Another anchorage on the roadstead, the wharf bearing N.W./N.N.W. distance 1 mile can be used by ships prior to berthing.

RESTRICTIONS: Minimum depth of water below chart datum is 17 m. in the buoyed channels and swinging area. Outer channel width is 400 m. but it varies from 250 m. to 400 m. for the inner channel; the radius of the swinging circle being 500 m.

MAX. SIZE: Not to exceed 310 m. in length and 47 m. in breadth, the extreme reach of the shiploader arm being 28.5 m. from ship's side. At the limit an extreme breadth of 48 m. could be accepted after advice from the DCFP. If possible drawing should be sent prior to acceptance for vessels of more than 100,000 d.w.t.

The recommended draft for large vessels in ballast, or partially loaded is 12 m. on arrival. Smaller ships should have on board a quantity of ballast equal to half their cargo capacity.

Maximum freeboard under shiploader arm is 14 m. With hatch covers opening crosswise (abreast) the maximum freeboard must be understood as the height from sea level to the upper part of hatch covers.

On departure a draft of 16.15 m. is usually admitted.

Essential: All vessels greater than 100,000 d.w.t., which have never visited the port before must have prior approval of the DCFP.

HEALTH: Free Pratique is usually granted after vessel has berthed. Yellow fever vaccination certificates required.

TUGS: None available.

BERTHING:

Mineral Wharf: The ore loading terminal of "Societe Nationale Industrielle & Miniere de Mauritanie" (SNIM) is located at mid distance between Cap Blanc and Nouadhibou, geographical position: Lat. 20° 49′ N., Long. 17° 02′ W. It consists of a platform, 20 m. wide oriented North and South, resting on 8 dolphins, 13 m. in diameter each and 32 m. distant one from the other. The platform supports a conveyor belt and one single shiploader. The maximum travel of the shiploader from one end of the rails (railway) to the other is 165 m.; the virtual loading capacity would be 5,000 t.p.h. while the actual output varies from 2,000 to 4,000 t.p.h. according to ship's size and on condition there is only one quality and grade of ore to load.

To maintain a depth below LLWT (lowest low water astronomical tides) of 16 m. at the berth, ships are laid against 2 big outrigger pontoons leaning on the dolphins and protected on the ship's side by heavy but efficient rubber rollers acting as shock-absorbers.

Ships are generally made fast port side to the quay, coming alongside with the help of the anchors which should be kept at the ready.

Shipmaster's Report: March 1983.

Heavy lifts up to 24 tonnes were discharged alongside the berth with vessel's gear.

TANKERS: *Oil Wharf:* It consists of a light platform placed on top of 3 dolphins of the same diameter as above but 64 m. apart, adjoining the mineral wharf to the Southward. A wooden decking supports the oil pipes which are connected abreast of dolphin No. 10 to the tanker lying portside to the quay, the stern is made fast to a mooring buoy.

CUSTOMS: Regulations are very strict, and a careful declaration of all bonded stores must be made before berthing. Ships have been fined for quantities in excess or missing even when small.

GENERAL: (a) Radiotelegrams stating the date and ETA at pilot station and addressed to SNIM Nouadhibou should be transmitted 72 and 24 hours beforehand via Nouadhibou coast radio station (5 TA) working hours 0800 – 1800 or Dakar (6 VA) hours: continuous.

Shipmaster's Report 1977: Telegrams to Agents through Dakar Radio 6 VA only.

(b) It is of interest to Pilots when coming on board, to know whether the ship is powered by a steam-turbine or diesel engine whether the propeller is left or righthand and if it is a variable pitch propeller, how she behaves when the engine is running astern.

DENSITY: Point Central 1026–1027.

FRESH WATER: *Shipmaster's Report:* March 1983. Fresh water available in limited quantities (approx. 100 tonnes) at a cost of US$1.50 per tonne.

FUEL: Not available at the moment. An oil refinery has been built which will eventually supply fuel.

MEDICAL: There are hospital and medical facilities at the port.

GANGWAY/DECK WATCHMEN: Recommended as stowaways try to board at night.

SURVEYORS: Bureau Veritas, Lloyd's, Salvage Association.

DEVELOPMENTS: Extensions to the Mineral Port are being studied.

SHIPMASTER'S REPORT: (1975), Vessel 169,000 d.w.t.

Iron Ore Marine Loading Terminal:—

Approach to Cap Blanc and Baie du Levrier: Approach was from the Southward. From Dakar the course was laid to cross the 100 fathom line at 20° 04′ N. 17° 41′ W., this being a precipitous shelf, when crossed with D.F. bearings from the Radio Beacon at Port Etienne gave a reasonable fix. Vessel then steamed across the main flow of North/South traffic at quite a broad angle heading for the landfall buoy 6 miles West by South of Cap Blanc. A dense concentration of fishing vessels extending Westwards from Banc Vilmorin offered little hindrance to our landfall. The light of Cap Blanc lighthouse was visually observed in the pre-dawn darkness at 26 miles and radar contact of Cap Blanc was established at 23 miles. The landfall buoy fitted with a radar reflector, gave radar contact at 15 miles.

Pilotage: A Pilot boards in the vicinity of No. 2 Fairway Buoy from a black-hulled, white superstructure, 40 ft. high-speed motor launch with "Pilote" written on the side. VHF contact is made on Channel 16, working frequency Channel 14. Call "Nouadhibou Pilot". The Pilot, a Frenchman, had a good understanding of English and proved to be very competent. The transit inwards and through the Passe du Levrier was at half speed but the last mile towards the berth only an occasional Dead Slow ahead movement was made to maintain steerage way.

Tide/Currents: Berthing for large vessels is on the ebb tide with a Southerly set of about 1 knot. South of the headland the set is to the Eastwards again about 1 knot i.e. directly across the channel. Unberthing is made on the flood tide setting Northerly along the jetty again about 1 knot. Rise and fall is in the region of 1.6 m.

Wind: Ranges from North by West to North by East (May). During darkness it abated to about Force 3 but from early morning through to sunset gusted up to Force 6 causing a short steep sea to run. The Pilot stated that in August and September Easterly winds often occurred hence the placing of 2 mooring buoys about 1 cable off the berth to assist vessels warping clear when leaving.

Tugs: None available.

Quay: Stout cylindrical rubber fenders are chained to the sides of 2 floating pontoons laying to the quay face. An adequate number of bollards are placed along the length of the quay. 3 dolphins, connected by a catwalk, extend the Southern length of the quayside for ship mooring purposes.

Moorings: When approaching and lying off the jetty 2 motorised mooring boats will run ashore 1 synthetic fibre rope (no wire ropes at this stage) from forward and 1 similar rope from the Poop. Vessel is then to warp alongside with these 2 lines aided by helm and small engine movements. Once alongside a spring from the after extremity of the Poop is to be sent away and a forward spring. Vessel secured to the berth with 1 headline to a mooring buoy North of the jetty, 3 forward breast lines, 1 forward spring, 2 stern lines, 2 after breast lines 1 spring from the Poop, and 1 spring from the normal position on the after deck.

Gangway: The accommodation ladder could not be used because of the space between the pontoons lying between ship's side and the quay. A pilot ladder was the means of access to the after pontoon from which access could be obtained to the quay.

Depths alongside: At the first low water soundings were taken around the ship and when reduced to chart datum — obtained from a monthly tide table loaned by the Pilot – a least depth of 16.2 m. was found on the inboard side with depths generally about 18/19 m. elsewhere.

Draft: Maximum permitted for berthing 12 m. Maximum permitted draft for sailing is 16.16 m. (53 ft.) at any state of the tide.

Airdraft: Maximum 14.5 m. In our case several thousand tonnes of hold ballast had to be taken once secure alongside, this delayed loading for 5 hours.

Shiploader: This is a single conveyor belt fed gantry having a range of travel of 165 m. along the quay but the loading arm has no facility to slew horizontally. It can only be luffed in the vertical plane. The maximum outreach was stated to be 23 m. which combined with the airdraft limitation of 14.5 m. made it extremely difficult to plumb the centre of the holds. For the majority of our loading period the ship had a port list (this was exaggerated by the free surface effect of the 4 ballasted holds). To keep the loading arm from fouling the ship's structure and assisting the arm to plumb centre all the port side side-rolling hatch lids were only partially opened.

Shifting: This had to be done on 2 occasions but was successfully achieved by hauling on the 2 spring wires aft and 1 headline to warp a distance of 6 m. forward and heaving on the forward spring and stern lines to warp 26 m. aft. The shifting was necessitated by the fact that the distance centre to centre of our extreme loading hatches was 191 m.

Agency: This was conducted by SNIM, Societe Nationale Industrielle & Miniers, their telegraphic address is "Snimport – Nouadhibou".

Port Capacity: The Pilot stated previous largest ships had been:
(i) *"Atland"* Obo Swedish 84,229 g.r.t.
(ii) *"Thor"* Bulk German 79,270 g.r.t.
(iii) *"Lilyprima"* Obo Italian 72,68 g.r.t.

However, our claim to be the largest vessel to call being 169,080 d.w.t. is unsubstantiated. The Agent claims a shipment of 139,000 metric tonnes is the largest cargo exported from the port.

Loading Rate: The installation foreman claimed a rate of 4,000 t.p.h. Our rate, allowing for the frequent short stoppages, was 2,813 t.p.h.

Documents: Required are:

4 Crew Lists.
2 Store Lists.
2 Crew Declaration Manifests.
2 Vaccination Lists.
3 Passenger Lists.
3 Ports of Call of the Last Month Lists.
2 Ballast Manifests.

The latter 3 lists can be made on 1 sheet of paper (in triplicate). No Maritime Health Declaration was asked for. All these documents were passed to the Agent, no Customs, Port Health, Immigration or Police visited the ship. Although some crew members were without Yellow Fever vaccination certificates this posed no problem with the Agent, he declared no vaccinations can be done here. Nor can the Derat Exemption Certificate be renewed.

Port Restrictions: The Agent warned that crew members could not use pounds sterling, U.S. dollars, Dutch guilders or other foreign currency ashore for fear of confiscation by the "authorities". The local currency is the Ouguiya, 100 of which are on par with £1 (approx.).

Ore: The grade "Siliceous Iron Ore Fines XBF" was extremely dusty. About 10 grades of ore are available from 3 different mines.

Water Density: From our observations at low water 1024 ozs. cu. ft. and at high water 1025 ozs. cu. ft.

Cargo Figures: All tonnages quoted this port are metric tonnes. Ship's figure was about 1,300 tonnes less than the shore quantity, however, the ship's figure was accepted and the foreman stated the shore installations were usually 1% high of the ship figure. Ship was loaded to the maximum draft of 53 ft. but a great deal of difficulty was experienced reading the draft due to the seaway.

Unberthing: This was carried out on the flood tide. Single up to the 2 spring wires aft, using small astern movements and helm movements which aided by the anchor will cant the head from the quay. When the anchor is aweigh, slip the springs and steam ahead of the jetty then using full ahead power and starboard rudder followed by full astern power the vessel is swung well within the turning area to head seawards.

Depths in Channel: Except for the area of the channel abreast Cap Blanc lighthouse where less than 1 m. beneath the keel the remaining parts of the channel showed 3 m. – 4 m. underkeel clearance.

Conclusion: It would appear impractical to enter ships of a larger physical size than ourselves at this port because of airdraft/outreach limitations, draft restriction and manoeuvrability problems. Although we were fortunate in having a trouble–free berthing and unberthing procedure serious problems could be foreseen if a vessel had a main engine failure or a sudden deterioration of the weather occurred during these manoeuvres.

SHIPMASTER'S REPORT: (1977). The landfall buoy 6 miles West-by-South from Cape Blanco does not exist. Buoy No. 0 approx. position 20° 40′ N., 17° 04.7′ W. has been removed.

SHIPMASTER'S REPORT: (June 1978). The following is a brief account of the port which is in addition to the information supplied in the "Guide", which may be read as being correct. The port, formerly Port Etienne, is in Mauritania, I found travellers are afforded every courtesy. There are two flights per week from Paris via Air Africa who are very good. The flights arriving here on Tuesday and Thursday. The plane returning from Dakar Wednesday and Friday. Spare parts can be landed here and taken out to the ship with minimum of Customs formalities though it would prove to be an expensive exercise. It must also be pointed out that it is not always possible for the plane to land here due to high cross winds and resultant sand storms at the runway, in which case the plane then proceeds to Dakar direct.

Custom Authorities are most interested in the amount of foreign currency brought in as there is a strict levy on this, care must be exercised in this respect. They are also most interested in the stores on board the ship and these must be strictly accounted for precisely.

The town itself of which I did not visit is a separate community from the mining town itself. The mining town itself is self-sufficient and both French and Mauritanians live here. There is a hotel, which is practical and clean with reasonable food. There is also a club with tennis courts, a post office, power station and cinema and a hospital where major surgery can be carried out. There is also an oil refinery which is uncompleted. Refined products are imported via a modern berth. Bunkers and fresh water are available here but in limited quantities and I would imagine costly.

There are no tugs. According to the Agent wireless telegraphy may be used alongside the berth although there is a Telex ashore. I found the Agent to be most helpful.

I was assured that seamen joining or leaving here do not require a visa only a passport and discharge book are required, of which I personally was never asked to produce.

The iron ore mine is approximately 650 miles from the loading berth, all the ore coming by rail and attacks are frequent by bandits and guerillas. This can cause lengthy delays to the ship as very little ore is stockpiled.

Loading is carried out by one loading arm which pours approximately 4,000 tonnes per hour. Weights loaded can be measured ashore and have proved to be quite accurate, however it is normally the practice to accept the ship's figures.

AUTHORITY: Societe Nationale Industrielle et Miniere (SNIM), B.P. 42, Nouadhibou, Mauritania. *Tel:* 114. *Telex:* 459 Snim Ndb. *Contact:* Port Department.

NOUADHIBOU HARBOUR: 20.54 N. 17.03 W.

LOCATION: Position of Trading Port 20° 53′ 48″ N., 17° 03′ 10″ W.

DOCUMENTS:

3 Crew Lists.
2 Stores Lists.
2 List of Personal Effects.
2 Lists of Ports of Call.
Cargo Manifest, even if nil.
Manifest of Passengers Disembarking or in Transit, even if nil.
1 List of Foreign Currency held by ship and crew.

PILOTAGE: Not compulsory but recommended, effected by SNIM/Cominor. Pilotage not available at night.

RESTRICTIONS: Depth of buoyed Channel 24 ft. Anchorage strictly prohibited in the Channel.

RADIO: Nouadhibou Radio – Call sign 5TA. Hours 0800 – 1800 daily.

It is recommended that vessels advise their Agent of ETA 72 hours prior to arrival.

VHF: Request Pilot through Port Captain on VHF Channel 16.

TUGS: One tug, 150 h.p.

BERTHING: Pier of 125 m. length connected to shore by a 150 m. long bridge.

Outside general berth for ships with a 24 ft. draft and a 160 m. max. length. According to certain vessel's accommodations, the extreme hatches cannot be discharged through quayside.

Inside berth for ships with a 15 ft. max. draft and a 80 m. max. length.

The maximum payload authorised on the bridge connecting the pier to the warehouses and the storage areas being limited to 10 tons, all heavy lifts over 10 tons are to be compulsorily discharged on lighters.

Lighterage Piers: Southern quay = length 80 m; depth 10 ft. Western quay = 180 m.; depth 10 ft.

The Southern quay is connected to SNIM/Cominor railroad network, allowing the loading of heavy lifts on railcars.

2 covered sheds: total 3,500 sq.m.

1 area with macadamised roads offering 30,000 sq.m. of storage connected to SNIM/Cominor railroad system.

Lighterage: Compulsory for any ship whose characteristics do not allow a safe berth. Compulsory for any loading or unloading of heavy lift over 10 tons.

Not compulsory in case berths are occupied and if manpower and equipment are still available.

CARGO HANDLING EQUIPMENT: 1 lighter × 150 tons, 2 flat top lighters × 200 tons.

14 cranes × 4 tonnes.
2 cranes × 15 tonnes.
4 stacker trucks × 3 tonnes.
1 stacker truck × 8 tonnes.
6 tractors.
16 trailers.
1 rail mounted crane × 70 tonnes (SNIM Property).
1 mobile crane × 50 tonnes, available on request for heavy lifts.
2 cranes on rails for containers.

STEVEDORES:

Working Hours. Normal hours: from 0800 to 1200 and 1400 to 1800 from Saturday to Wednesday.

Overtime: Saturday to Wednesday: 1200 – 1400 hrs. 1800 – 2000 hrs. Thursday: 0800 – 2000 hrs. Fridays and holidays: 0800 – 2000 hrs.

Nightwork possible after 2000 hrs. in order to finish.

During the time of Ramadan work finishes at 1800 hrs.

There is no work on the following holidays: New Year's Day (Jan. 1); Tabaski (El Aid) (variable date); Day of Reunification, (Feb. 26); El Mouloud (variable date); Labour Day (May 1); Africa Liberation Day (May 25); Korite (El Fatar) (variable date); Independence Day (Nov. 28); Christmas (Dec. 25); 1st Moharam (variable date).

The holidays corresponding to the Islamic Religious holidays are calculated from Arabic calendar.

FRESH WATER: Available in small quantities.

FUEL: Available in small quantities.

CARGO GEAR: Ship's gear used.

GENERAL: *Winds* mainly N./N.E. in the morning, N./N.W. in the evening. Wind force: variable from August to January, rather strong from February to July. Tidal current running North during Flood, and South during Ebb (1.5 to 2.5 knots).

Swell 0.80 m. max. Strong surge alongside all berths.

Rise and Fall HW 2.35 m. LW 0.35 m. difference = 2 m.

SURVEYORS: Bureau Veritas, Lloyd's and Salvage Association.

AUTHORITY: Port Autonome de Nouadhibou, B.P. 236, Nouadhibou. *Tel:* 21-34, 22-35, 22-76. *Telex:* 441 Mtn.

NOUAKCHOTT: 18.02 N. 16.02 W. (See Plan Book)

LOCATION: Nouakchott Wharf is situated in position Lat. 18° 02′ 08″ N., Long. 16° 01′ 43″ W., being about 7 km. S.S.W. of Nouakchott.

All vessels anchor off the port and movement of cargo is undertaken by barges and lighters.

WIND: The direction of the wind varies from N.N.W. to N.E. The predominant winds affecting navigation are from the N.N.W.

The rapid onset of bad weather should be noted. When conditions are bad vessels should weigh anchor and proceed seaward as the coast offers no natural shelter.

CURRENTS: There is an almost permanent N.-S. current running at about 0.5 knots; it reverses S.-N. on a few days during the year.

SWELL: 2 kinds of swell have been observed: Local swell due to the coastal winds, varying from N. to N.W. in dry weather, and turning between N.W. and S.W. during the wet season.

ANCHORING ROADS CONDITIONS: The periods during which climatic conditions are liable to upset work are as follows: Strong swell, January/March; rain, July/August/September.

This virtually allows the port to be used during 200 days in the year.

WORKING CONDITIONS: Vessels must locate themselves as closely as possible, where they can anchor without risk, to the wharf, within the limits of their drafts (generally between 0.5 and 0.25 miles), in line. At the lighterage quay there is a depth of water of 7 m. – 8.5 m. It is preferable for a ring of lines to be placed in advance around the sides of the vessel to which barges may tie up.

Experience shows that the tonnage unloaded currently by the wharf is 400 to 500 t.p.d. where goods in sacks are concerned. It is possible to work 2 vessels at once, but each will only work half of this tonnage.

Work is currently carried out on board by private companies, and on land, in the launches and lighters by the Wharf Organisation personnel.

As far as wharf personnel are concerned, during working days, the normal working hours are from 0800 to 1600 hrs.

Overtime day hours are from 1600 to 1900 hrs.

Night time working is considered to apply between the hours of 1900 and 0600 hrs. (currently impossible).

It should be noted that there is an overtime hour at the beginning and end of work, which is the time required to launch or bring barges on to the landing-stage.

RECOMMENDATIONS TO MASTERS OF VESSELS: Vessels must be at all times capable of gaining the open sea rapidly, since bad weather comes up very quickly, and the coast affords no natural protection.

WHARF: The working platform is 86 m.×21 m. and lies in a N.W.-S.E. direction; it is connected to the shore by a gangway 246.5 m. length and 7 m. wide.

The wharf is designed to take a load of 2 lorries of 25 tons (2 axles of 10 tons and 1 axle of 5 tons) or an overload of 1 ton/sq. m.

The wharf manager's office together with Police, Customs and radio office are located on the shore.

WHARF EQUIPMENT: 3 cranes with capacities of 20, 8 and 5 tons respectively.

FLOATING EQUIPMENT: 1 launch of 50 h.p., 2 launches of 100 h.p., 10 steel barges, internal dimensions 10 m.×3 m.×1.25 m. with capacity for 20 tons cargo. 1 steel barge, internal dimensions 13 m.×4 m.×1.35 m. with capacity for 30 tons cargo.

LAND EQUIPMENT: Goods are transported from the wharf to the storage area by 18 trailers each with a capacity of 8 tons. The port is also equipped with 2 tractors of 80 h.p. and 5 fork-lift trucks with capacity of 3.5 tons.

TANKERS: Dakar oil companies are presently building a hydrocarbon oil depot about 400 m. North of the wharf.

The depot will be fed from tankers by means of 2 sea-lines of 900 m. length.

SHIPMASTER'S REPORT: August 1978.
The following is to be read in conjunction with the information above.
Currents: Reversal of current is unpredictable and may last for several days on each occasion.
Anchoring Roads Conditions: While in the main the holding ground is good, there appears to be patches of hard sand where the anchor cannot take hold.
Working conditions: It is practical to work 4 vessels at once plus one of up to 5,000 tons d.w.t. at the new extension to the pier.

Present (August 1978) hours for ships at anchor are 0800 to 1600 hrs. (Ramadan) but Sunday overtime can be worked if vessel gives authority. It seems that this is very expensive as so many are involved.

At the pier extension work has been observed from 0800 to 2400 hrs. and a mobile crane is available there to assist ship's gear.
Wharf Equipment: There are 7 cranes with various capacities, two being used for lifting out barges for repairs and to house the tug launches at night. The mobile crane is backed up by some 8 small fixed jib carriers.
Tankers: The sea berth North of the pier is in operation.
Documentation: See "Nouadhibou".
Customs Control: The officer will not board until the Agent has entered the vessel with the necessary documents, hence there will always be a time interval between arrival and being boarded for inspection. So financial loss must be expected accordingly.
General Observations: Due to the lack of any VHF or similar communication system, it is difficult to assess the true performance of this port. It is most uncomfortable for any vessel of more than 7,500 tons d.w.t. unless the barges are prepared to come out to 7 or more cables from the pier. In the recommended anchorage the effect of swell and surf is such that the vessel frequently swings through a wide arc and the chances of breaking out the anchor are very real. The erratic current direction may also swing the ship towards the pier hence the above opinion. Other vessels may also anchor so as to swing across one's own cable and anchor.

SHIPMASTER'S REPORT: October 1979.
Anchorage: Vessel anchored in position Lat. 18° 02.2′ N., Long. 16° 02.7′ W. (with the lighthouse tower on the jetty bearing 101° distance 3.3 cables).
General: City of Nouakchott (the capital) is in position Lat. 18° 05′ N., Long. 15° 58′ W. The port jetty is in position Lat. 18° 02.1′ N., Long. 16° 01.55′ W. being about 7 km. S.S.W. of the city. The official languages are Arabic and French. There are asphalt roads, one which leads to Dakar. There is an airport (close South of the city) with connections to Dakar and Casablanca. Scheduled flights being published in the daily newspapers.
Time: GMT.
Authorities: No authorities come on board on arrival, however, after a few days an agent's clerk comes on board and takes all port forms and documents ashore. No store rooms are sealed but stores list is to be filled in properly.
Fresh Water: There is no possibility of supplying fresh water to vessels, therefore rationing of water is recommended on arrival due to the fact that turn of 30–40 days is normal for general cargo, bulk cargoes and bagged cargoes. Priority being given to vessels with cement cargo as construction of a new port is taking place 1.5 miles to the South. At most times there are 15-20 vessels at the anchorage.
Documents: Two copies of each of the following are required:
a. Crew List.
b. Health Declaration.
c. Vaccination List.
d. List of Ports of Call.
e. List of Arms and Ammunition.
f. Ship's Register and Tonnage Certificate.
g. Ship's Stores List.
h. Crew's Personal Effects Declaration.
i. Notice of Readiness/Manifest & Stowage Plans.

With regard to notice of readiness it is advisable to send cable via Dakar Radio. It is also advisable to ask the clerk for his identification card and ask him to sign a receipt for the above.
Shore Leave: Passports are needed for going ashore, only method of going ashore is by ship's own lifeboat or during working hours by the motor launches used for transporting barges.
Consuls: West Germany, China and U.K.
Medical: All services can be arranged by Agent.
Stores: Limited amounts of vegetables, cereals, coffee (instant) and milk (condensed) can be arranged by agent (all items are imported). There is no ship chandler.
Repairs: No facilities.
Repatriation: Can be arranged by Agent via Dakar.
Weather: See "African Pilot", Volume 1 and supplements. During the time the vessel was at the port (mid-September to mid-October) there was hardly any rain. Temperatures ranged from 20° C to 42° C depending on the direction of the wind. The barometric pressure was 1008 mb. (min.) to 1012 mb. (max.). Winds normally from the North to Northwest, being influenced by anticyclones in the Dakar and Casablanca areas. Occasionally winds were from the West, S.W., South, S.E. and East. The wind was from Force 3-5/6 for short periods which quickly caused deep swell and surf.

Easterly winds caused sand storms and visibility becomes poor.

The swell is reported to reach high levels in the first and last quarter of the year and vessels are advised to leave the anchorage when the rapid increase in wind appears. These winds come from two directions, namely, Northerly and Northwesterly.
Approaching/Pilotage: No Pilot available. Charts BA 3247 and BA 2078 Plan (1976/correction 1978). Vessels should approach the coast heading 090° from the 20 fathom line 9 miles to the West of the charted lighthouse (Chart BA 3247). The jetty is a good radar target at 37-40 miles and the radio beacon at Nouakchott "KC" on 297 kHz in position Lat. 18° 04.3′ N., Long. 15° 58′ W., is an excellent aid. The depths on this track are between 20 fathoms and a minimum of 30 ft., close to the shore line (0.25 miles offshore). There are no dangers or difficulties encountered approaching.
Navigational Aids: BA Chart 2078 Plan (1976/correction 1978) most charted buoys are not in correct position. The unlit wreck buoy in position Lat. 18° 01′ 32.2″ N., Long. 16° 02′ 48.8″ W., marks a wreck to the S.E., the wreck is not visible and the position is doubtful. For further information see the plan of the port made by the ship's officers.
Anchoring/Berthing: Anchorage is recommended in the area to the North of the green wreck buoy and between 0.25 and 0.5 nautical miles from the shore. A close anchorage is required during discharge to avoid long distances for the lighters and tugs. The jetty berth (N.W. end) could be used by vessels during calm weather and low swell. The berth is 52 m. in length and the jetty which runs in a N.W./S.E. direction is 86 m. long with a width of 21.17 m. If berthed alongside, good fenders must be available at all times and crew must stand by the mooring ropes.

Remarks: Receivers sometimes require a vessel to berth at the jetty but care should be taken, as if vessel causes any damage during the difficult approach or by swell, the authorities may sue the Master/Owners with high penalties and detain the vessel until payment is made. There has been an instance where a Master has been placed under "hotel arrest" and all papers and documents for the vessel kept ashore, resulting in a delay to the vessel of 40 days.
Stevedoring/Port Equipment: The stevedore company is So Ge Co Nouakchott, Societe Generale de Consignation.

The jetty wharf is connected to the shore by a 246.5 m. long bridge with two lanes each of 7 m. width. There is an old pipe-line in the centre of the bridge between the two lanes. The bridge runs in a 104° direction to the shore. At the Southern side of the jetty-platform there are 7 cranes (one damaged) with lifting capacities of 12.5 to 25 tonnes.

There are 5 motor launches (50-100 h.p.) for towing lighters to and from the vessels. There are also 10 steel barges (lighters) with a capacity from 20–70 tonnes. At night the launches are lifted onto the jetty and the lighters are either moored alongside the jetty or at buoys.

In addition to the 7 cranes there are available on the jetty and wharf area 10 mobile cranes and 5 forklift trucks (3.5 tonnes) and 2 tractors for transporting goods on trailers (total 18). Capacity of the trailers being from 8-20 tonnes.

Cargo is discharged into the barges and transported to the shore. Net slings mostly being used for bagged cargo and general cargo. There are stacking areas of 70,000 sq.m. and 45,000 sq.m. near the wharf. So Ge Co have 2 cold rooms (6 m.×3 m.). There are 4 sheds, storage area 2,000–4,000 sq.m. capacity.

Signals: When loaded barges alongside the vessel are to be collected by the launches, vessel is to sound 2 long blasts on the ship's whistle.

Average discharge rate: Bulk cargo 7.5 tonnes per gang hour and bagged cargoes 15 tonnes per gang hour, however, this is dependent upon barges and launches. The average tonnage discharged per day/gang is for general cargo 15–35 tonnes and bagged cargoes 35–86 tonnes.

Working hours: Monday to Friday 0800–1600 hrs. Saturday 0800–1200 hrs. Sundays and local holidays are on overtime.
Note: It is compulsory that 1 hour prior to and 1 hour after working hours is counted as overtime for shore gear preparation.
AUTHORITY: Monsieur Le Directeur Du Port De Nouakchott, Ministere De L'Equipement, Nouakchott, Mauritania.

Societe Nationale Industrielle et Miniere, P.O.Box 1260, Nouakchott. *Tel:* 22-74. *Telex:* 551 Snim Nkc.

Mauritius

PORT LOUIS: 20.09 S. 57.30 E. (See Plan Book)

PORT LIMITS: The commercial area of the port is the area inside the port bounded by the Entrance Buoys and the shore line of the Inner Harbour. Vessels at the Outside Anchorage lie within the limits of the port defined by an imaginary line joining Pointe Aux Sables and Pointe aux Pimentes. In this area commercial activities are restricted to bunkering, ship repair and the landing of passengers or personnel.

PILOTAGE: Compulsory for vessels over 100 tons register. Vessels are piloted inwards and outwards at any time of the day or night if circumstances permit. Inward bound vessels are met about 1 mile seaward of the Entrance Buoys though they may, in some circumstances have to be boarded at a greater distance offshore.

ANCHORAGES: Open roadstead with anchorages for vessels of any draft. Admiralty Chart No. 713 refers.

MAX. SIZE: Harbour Entrance depths from 12.8 m. to 36.3 m. Channel dredged to 12.1 m. Also see "Berthing".

RADIO: The Port Master requires to be notified of the date of the vessel's arrival, the length and draft and purpose of call, by radio as soon as it is possible for Master to communicate with Harbour either:

1. By CW transmission through the Government Radio Station (3 BA) at Vacoas on 500 kHz.
2. By R/T transmission through Port Louis Harbour Radio Station (3 BB 3) on 2182 kHz.

VHF: Port Louis Harbour Radio Station is equipped with VHF and maintains 24 hour watch on Channel 16.

TUGS: 2×830 h.p. diesel-engine tugs, *Betty Des Mascareignes* and *Winnie Des Mascareignes.* These tugs are available for deep-sea towage and salvage and are fitted with fire-fighting equipment, R/T and VHF. 3 smaller tugs of 320 h.p. are also available for harbour work and fitted with VHF.

BERTHING:

Quay No.1: Length 122 m.; maximum draft 11 m. at any state of tide, vessels up to 183 m. overall length can be accommodated. This berth is designed mainly for discharging petroleum products and bulk fertiliser. General cargo vessels and passenger ships are occasionally berthed at the Quay.

Quay Nos. 2-3: Marginal quays having a total length of 366 m.; maximum draft 10.2 m.; vessels up to 195 m. overall length can be accommodated. These berths are mainly used for general cargo operations.

Quay No. 4: (Container Terminal): Length 183 m., maximum draft 10.2 m. This berth is for container operations. A Container Park of 3.2 hectares is available for storage of containers. 2 heavy duty Hyster forklifts of 26 tons are available for handling laden containers.

Vessels must use their own gear to discharge/load containers. The movement from the hook to the Container Park and vice versa is carried out by tractor/trailer system.

1 × Ferranti Type 2 K90 gantry crane, max. payload 30 tons.

Quay D: Length 149 m., maximum draft 9.3 m. can take a vessel up to 183 m. overall length. This berth is used for discharging of petroleum products and loading of bulk molasses. Passenger vessels are also berthed alongside the quay.

Quay C: Length 121 m., maximum draft 5 m. Berth can take a vessel of up to 92 m. length berthed port side to. This berth is used mainly for the inter-island trade and discharge of cattle.

Sugar Terminal: A Bulk Sugar Terminal constructed on the South side of the harbour came into operation in 1980. Sugar is now loaded in bulk at a maximum rate of 1,400 t.p.h. Vessels up to 198 m. overall length can be accommodated at the terminal. Maximum draft for vessels loading sugar is 11 m. Two sheds capable of storing 175,000 tons of sugar each have been constructed. The Bulk Sugar Terminal is operated by the Mauritius Sugar Corporation.

Bulk Cement Berth: A bulk cement discharge point lies between Quay Nos. 1 and 2. Cement vessels up to 135 m. are regularly accommodated at this berth. Vessels up to 183 m. may be occasionally accommodated subject to adjacent berths being vacant.

Buoy Berths: 4 berths capable of taking ships up to 10.7 m. draft.

Length of ships berthed at the mooring buoys varies between 137 m. to 183 m.

Vessels are berthed/unberthed at any state of tide. Tidal range is about 0.8 m. maximum.

SPECIALISED CARGO HANDLING FACILITIES: LPG carriers berthed at Quay D. The Port offers full containerisation facilities. Quay No. 4 which became operational in 1979, is specially designed to receive container vessels. Cement discharging facilities also available. Rate of discharge 500 t.p.h.

STEVEDORES: Undertaken by the Cargo Handling Corporation Ltd.

Working hours: Monday to Fridays from 0700 to 1500 hrs., Saturdays from 0700 to 1300 hrs. Sundays and public holidays from 0700 – 1100 hrs. Overtime work is carried out during weekdays as well as on Sundays and public holidays if necessary.

MEDICAL: Arrangements for medical attendance should be made through ship's Agent. Private clinics available.

FRESH WATER: Fresh water supplied by barges at any berth between 0700 and 1600 hrs. Arrangements can be made for supply before 0700 and after 1600 hrs. on payment of overtime. The loading rate is about 25 – 30 t.p.h. 4 barges of 50, 75, 85 and 110 tons respectively are available.

FUEL: Gas oil, marine diesel and furnace oil obtainable. (Arrangements must be made in advance between Owners and Shell Co.). The pumping capacity of the installations at Port Louis for furnace oil is between 150 and 200 t.p.h., and for marine diesel oil and gas oil 50 t.p.h. Marine diesel oil and furnace oil (35 secs. to 1,000 secs.) is supplied at Quay D. Furnace oil 1,000 secs. only is supplied on No. 5 West Berth.

A 400 ton bunkering barge available to supply vessels in harbour and outside anchorage.

REPAIRS: Almost any type of repair can be undertaken in Port Louis.

DRY DOCK: Stevenson Dry Dock. Largest vessel that can be docked 100 m. × 15 m., with a max. draft of 9.0 m.; vessels of up to 109 m. × 15.3 m. can also be docked, but at least 15 days' notice should be given.

CONSULS: *Consulates:* Australian, Austrian, Belgian, Canadian, Danish, Dutch, Finnish, German (Federal Republic), Norwegian, Portuguese, Spanish and Swedish. *Embassies:* American, Egyptian, French, Malagasy, Pakistan, Peoples' Republic of China and Russian. *High Commissions:* British and Indian.

HOLIDAYS: 1st and 2nd January (New Year's Days), 19th January (Cavadee); 2nd February (Chinese Spring Festival); 29th February (Maha Shivaratree); 12th March (Independence Day); 2nd April (Ougadi); 1st May (Labour Day); 30th June (Id-El-Fitr); 30th August (Ganesh Chaturti), 24th October (Divali); 1st November (All Saints' Day); and 25th December (Christmas Day).

POLICE/FIRE: Police Tel: 999. Fire Tel: 999.

TIME: Local time GMT plus 4 hours.

DEVELOPMENTS:

(i) Construction of a Grain Complex.
(ii) Construction of fishing harbour.

SHIPMASTER'S REPORT: June 1982.

Off Limits Call for Stores, Mail and Crew Changes:

Documents: (All local foms). 1 Parcels List, 1 Shipmaster's Report Inwards, 1 Ship's Record, 1 P.F. 102 – Certificate Finder Act No. 20 of 1973 for Immigration, 1 Maritime Declaration of Health, 1 Crew Declaration, 4 Crew Lists.

Anchorage: Possible but not necessary for the 2 hour stop.

Max. Size: No limit.

Health: Vessel is boarded by 2 Quarantine Officials who grant Free Pratique.

Radio: An amended ETA had not been received 6.5 hours after transmission.

VHF: Port Louis Harbour Radio very helpful and will pass messages. We were not able to contact them until about 30 nautical miles to the West.

General: Vessel is also boarded by, 1 Customs Official, 1 Immigration Official and the Agent. After entry formalities are completed the ship-chandler boards together with any new crew. Despite cabled request our stores were not pre-slung and had to use ship's net slings. Require derrick amidships for stores and good lee, usually port side. Stores' boat is separate from Officials' boat.

SHIPMASTER'S REPORT: July 1982.

Port Limits: The commercial area of the port is the area inside the port bounded by the Entrance Buoys and the shore line of the Inner Harbour. Vessels at the outside anchorage also lie within the limits of the port defined by a line joining Pte. Aux Sables and Pte. Aux Pimentes. In this area commercial activities are restricted to bunkering, ship repair and the landing of passengers and personnel.

Documents: Immigration: 2 Crew Lists, 2 Passenger Lists, 1 Certificate under Act No. 20 of 1973 (Form PF102).

Health: 1 Declaration of Health, 1 Vaccination List.

Customs: 1 Customs Form (Form F24), 1 Parcel List (Form F17), 1 Ship's Report – Inward, 1 Narcotics List, 1 Arms and Ammunition List.

Agent: 2 Crew Lists, 2 Passenger Lists, 1 Ship's Record – Port of Port Louis.

Note: Declare ship's cameras, VHF's TV's, etc. in bonded section of F17. If space allocated on F17 for crew "other items" is insufficient, use of a supplementary list is acceptable.

Clearance: Health, Customs and Immigration board on entrance. Clearance may be obtained at the Outer Anchorage but is subject to availability of personnel and may be limited to the purposes of anchoring listed in "Port Limits" above.

Approaches: Approach directions are well covered in the Sailing Directions and Chart No. 61592. The Citadel is easily recognised from considerable distance during the day. Closer in, the middle and upper ranges are visible, but the separation is not sufficient for good accuracy. The lower range is an orange daymark, located on the red roof of the Port Office, both faded to a rust colour. It is very difficult to locate and can be confused with the daymark on the light located on "B" Berth. The Northern red can buoy is large and makes a good radar target. The Southern BW is of skeletal construction and is subsequently harder to pick up visually or with radar. There is a tidal current that sets across the channel and at right angles to it.

Pilotage: Compulsory for vessels over 100 g.r.t. Vessels are piloted inwards and outwards at any time of day or night if circumstances permit. Inward bound vessels are met about 1 mile seaward of the Entrance Buoys. The pilot boat is a white launch with a deck height of approximately 4 ft. There are only 2 Pilots, so movements may be delayed by congestion and night entrance curtailed.

Anchorage: Open roadstead with anchorages for vessels of any draft. Consult Chart No. 61592.

Tugs: 2 tugs of 830 h.p. and 3 smaller units of 320 h.p. for inner harbour work. Although fitted with radio and VHF, berthing is handled with whistle and arm signals.

Berthing: There are numerous speciality docks and berths for smaller vessels. The main deep-draft berth has 2 sheds for unitised and general cargo with one open container section. This new dock has excellent fenders but the older docks have virtually nothing. Bag goods are generally worked into lighters at mooring buoys.

When berthing to buoys, the vessel is berthed head-out on 2 anchors with additional headlines to a buoy. The stern is secured to the buoy by 4 ship's lines and a heavy shore wire. A messenger is necessary for taking the wire, and lashing straps to tie the eyes to the mooring rings must be supplied by the ship. The wire is taken through the centre stern chock, and one set of bitts must be kept free for it. Chafing gear on stern lines is advisable. Vessels berthed at the container berth may be required to send 4 lines to a buoy about 100 ft. off the corner of the dock.

Stevedores: One private company with monopoly. Expected to be nationalised in the near future. Hours are 0700 – 1500 with 1500 – 1800 overtime shift and overtime on Saturday 0700 – 1300 and 1300 – 1600. Sunday 0700 – 1100. In practice, they start 1 hour late and finish 1 – 2 hours early, with 3 additional breaks during the day. Maximum work day is about 7 hours, but piece work contracts can elicit up to 140 tons per gang/day shift. They refuse to work bag goods without heavy hooks, with resultant bag damage and leakage. The crew is expected to open hatches and perform initial spotting of booms.

Radio: Government Radio Station 3BA at Vacoas is on 500 kHz. and also has high frequency Channels. Port Louis Harbour Radio Station has 2182 kHz. and VHF Channel 16. They do not have regular traffic lists but are easily reached, particularly around weather reporting times.

The Port Master requires to be notified of the date of vessel's arrival, length, draft and purpose of call, by radio, as soon as practical with the above stations.

Medical: Medical and dental facilities are available with arrangements to be made through the Agent. Repatriation can be arranged. Radio Pratique is not available. Cholera and yellow fever vaccinations are required for arrivals from infected areas.

Consuls: The U.S. Embassy is located about 200 yards outside the main harbour gates and is easily recognised. The office is on the 4th floor, hours are 0900 – 1200 Monday – Friday.

Watchmen: 3 shifts: 0700 – 1500 hrs., 1500 – 2000 hrs. and 2000 – 0700 hrs. Number is at discretion of ship, but heavy pressure is applied to the Chief Officer to employ extra, claiming these are "normal" or "routine". If cargo is *free out*, watchmen are hired and paid by receivers, with vessel only providing meals. Quality is poor to fair. If vessel is at Outer Anchorage, no watchmen are available. There have been frequent incidents of thefts by bum-boats, so an adequate crew watch is recommended.

Customs Allowance: On arrival, officers and crew may have in their possession, an 8 day allowance of tobacco products and 4 day allowance of spirits per daily schedule of: Master: 1 oz. tobacco, 0.25 pint of spirits, 1 quart of wine, 1 quart of beer: Other Officers: 0.75 oz. tobacco, spirits same; Crew: 0.5 oz. tobacco, spirits same. (200 cigarettes for the 8 days is accepted as within amounts listed). 2 Customs Officers will be assigned to vessel, usually just during working hours, with vessel expected to provide a suitable room and meals.

Supplies: General supplies are available through Agents and private ship chandlers, though prices can be expected to be high for consumable stores and equipment. Repairs can be performed, but the shipyard dry dock is too small for larger vessels. Foodstuffs are not recommended. Fresh water is about $2/ton via barge. Fuel is expensive, about $45/bbl. for Bunker C. Numerous ship chandlers will solicit the vessel, many falsely claiming to be sent or approved by the agency. At time of writing, only Tropicana Co. is authorised by the agency.

Time: GMT plus 4 hours.

Holidays: There are 11 official holidays, and numerous others are observed in various degrees due to the mixed Chinese, French and Indian heritages.

Agency: Ireland Frasier, part of the Ireland Blyth group. Hours are 0830 – 1615 and the office is equipped with VHF Channel 10.

SHIPMASTER'S REPORT: October 1983.

Off Limits Call for Mail, Stores and Crew changes:

Documents: Documents required may be:

1 Shipmaster's Report Inwards – for Customs.
1 Parcels List Customs F.17.
1 Customs F.16 – Crew Declaration although they *may* accept ship's own form.
2 Copies Master's Report for Mercantile Marine Office also an addendum in duplicate and these forms are taken ashore by the Agent.
1 P.F. 102 – Certificate Finder Act No. 20 of 1973 for Immigration.
3 Crew Lists on arrival.
2 Crew Lists on departure – to show newly joined personnel.

Immigration require international embarkation and disembarkation cards for all joining and departing personnel.

Port Health require Marine Declaration of Health.

All these papers are required even though the vessel is only there between 1 and 2 hours.

Ship's Spares: Any package for the vessel arriving from abroad should preferably be at the airport at least 2 days prior to the vessel's arrival as it takes time to clear such packages through Customs.

General: The Mauritius Sailors Home Society will exchange paperbacks – arranged through Agents.

AUTHORITY: Mauritius Marine Authority, P.O.Box 379, Port Louis, Mauritius. *Tel:* 08-0415. *Telex:* 4238. *Contact:* Director General.

NOTES

Please also advise Shipping Guides Ltd.

Mexico

ACAPULCO: 16.50 N. 99.54 W.

DOCUMENTS:
Health Clearance from previous port.
Health Pratique.
4 Stores Lists.
4 Lists of Crew's Personal Effects.
12 Crew Lists.*
2 Passenger Lists.*
12 Manifests of cargo for the port.*
*One copy to be visaed by Mexican consul.

PILOTAGE: Pilot is ordered by Agent on the basis of Master's ETA, which should be given accurately at least 24 hours before arrival. Pilot boards at the port limits, approx. 1 mile from the entrance. Pilot station on VHF Channel 16 when vessel expected.

ANCHORAGES: Vessels may anchor in the middle of the bay as indicated by the Pilot. Depths up to 150 ft.

RESTRICTIONS: The Bay of Acapulco is a natural harbour surrounded by mountains, approx. 4 miles across at its widest part and 2.5 miles across at its narrowest. There are 2 entrances, 1 called Boca Grande and the other called Boca Chica.

Boca Grande is between Punta Siclata on Isla de la Roqueta and Punta Bruja. The channel is 3,000 m. wide with a depth of 31 fathoms in mid-channel.

Boca Chica Channel, between Isla de la Roqueta and the Peninsula of Las Playas is 300 m. wide with a depth of 14 fathoms in mid-channel.

MAX. SIZE: For berthing alongside max. draft 28 ft. 6 in.

HEALTH: When vessel arrives at the port the following Authorities will board: Port Health Authority, Customs and Immigration, accompanied by the ship's Agent.

RADIO: Coastal station of Acapulco receiving on 8374 kHz in daytime and on 4180 kHz at night. Transmitting on 8514 kHz in daytime and 4250 kHz at night. Radiotelephone receiving and transmitting on 2715 kHz during the day and on 2182 kHz from 2000 – 0600 hrs. local time.

VHF: Service available from 0630 to 2300 hrs.

TUGS: *Shipmaster's Report:* December 1984.
There are no tugs at Acapulco. Berthing and unberthing are unproblematic because of the use of anchor and aft buoy line and furthermore the help of mostly weak prevailing winds which blow parallel to the pier.

BERTHING:

	Length (m.)	*Depth (m.)*
Fiscal Quay	198	8.0
Coastal Quay	150	4.0
Passenger Quay	206	10.0
Fishing Quay	173	4.0
Yacht Quay	340	3.0

MEDICAL: Agent should be advised by radio in advance if any medical assistance required. Hospital facilities available.

TANKERS: Tanker moorings operated by Petroleos Mexicanos situated on the Eastern side of the bay. It is strictly prohibited to discharge oily residues in the bay or within 40 miles of the port.

FRESH WATER: Can be supplied from the quays using ship's hoses, rate about 15 t.p.h.

FUEL: Available.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: Crew members are only allowed to retain cigarettes, tobacco and liquor sufficient for their own consumption while vessel is in port.

IDENTIFICATION CARDS: Not required.

CONSULS:

Denmark	Tel: 2.11.11	Italy	Tel: 2.25.10
France	„ 2.43.83	Norway	„ 2.19.56
Great Britain	„ 2.29.21		

REPAIRS: Minor engine repairs can be effected. No dry docks, only a slipway for vessels up to 100 tons.

Vessels may carry out own repairs only after permission obtained.

REPATRIATION: Can be arranged.

AIRPORT: International Airport situated 22 km. from the port, daily flights to all parts of the world.

TIME: GMT minus 6 hours all through the year.

HOLIDAYS: The following holidays can only be worked in case of emergency: 1st January; 5th February; 21st March; 1st May; 5th May; 16th September; 12th October; 25th December; and in addition 23rd May, Anniversary of the Stevedores' Union.

POLICE/FIRE/AMBULANCE: Police Tel: 2.00.40; Fire Tel: 2.00.42; Ambulance (Red Cross) Tel: 2.02.41. and/or 2.00.88.

TELEPHONES: Cannot be connected on board the ship but Master may make calls from the quay.

SHORE LEAVE: Allowed. Crew List to be left with gate.

AUTHORITY: Delegacion Coordinadora, Costera Miguel Aleman No. 320, 4th Floor, Office No. 2, Fiscal Quay Warehouse No. 2. *Tel:* 2-54-95.

Empresa de Servicios Portuarios, Costera Miguel Aleman, Free Zone Area. *Tel:* 3-56-58 and 3-56-59.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5. Mexico, II D.F. *Tel:* 553 87 11.

CAYO ARCAS: 20.11 N. 91.59 W. (See Plan Book)

SHIPMASTER'S REPORT: January 1982.

DOCUMENTS: *Agents, Customs and Immigration:* The Charterers Agents dealing with the paperwork when loading at Cayo Arcas are Benjamin Negroe Pawling, Consignatario de Buques, Calle 31 No. 1, Ciudad del Carmen, Campeche, Mexico. They only deal with the entry and clearance of the ship and preparation of the cargo papers. They also prepare and obtain a visaed Crew List irrespective of the fact that one might have been prepared and visaed at the previous discharge port.

The Customs and Immigration come by helicopter to the storage tanker and clear the ship when alongside. However, they will also clear the ship in the anchorage coming out on one of the tugs.

Papers Required: 6 Visaed Crew Lists (or plain Crew Lists with a letter from the Agent at the previous port stating that there was no Consul available).
2 Visaed Manifests for cargo on board.
2 Vaccination Lists.
4 Crew Declarations of Personal Effects.
2 Copies of Stores Lists.

During the 3 loadings at Cayo Arcas and the time spent at anchor off Coatzacoalcos no mention was ever made to the Work Permits which it was understood had to be obtained when working on the Pemex Charter. Perhaps these will be issued when the vessel loads at a port on the coast.

ANCHORAGES: 4 to 8 miles to the East of the flare in 25 fathoms, bottom sand, mud and shell. Good holding ground using 9 shackles of cable.

RESTRICTIONS: See "Loading".

RADIO: Radio communication via XFF2 . . . . Pemex Pajaritos, traffic list even hour GMT plus 30 minutes . . . . sometimes 5 to 10 minutes delay. No charges are made for any cables to Pemex.

Transmits:	Receives:
4346	4191
6442.5	6286.5
8690 (8690.5 Off Tune)	8382
12790 (12790.5 Off Tune)	12573
17075.5	16764

Always on 8 MHz, transmits on 12 MHz, receives 16 MHz.

During the course of the voyage, in addition to the arrival and departure cables, Pemex require the vessel's noon position each day, the ETA at the next port and any requirements such as bunkers and water. No acknowledgement is ever received and very few cables are sent to the ship by Pemex. Telex orders and instructions are routed via the Agent in the discharging port.

On approaching Cayo Arcas and the storage tanker, due to language problems (the Pemex operatives only speaking Spanish) all VHF calls are made through the English speaking officers on the tugs 'Eliska Theriot' and 'Martha Theriot' whose calling and working frequency is Channel 9. One of these English speaking officers also accompanies the Mexican Pilot-Berthing Loading Master and Pemex Representative to act as an interpreter when required and also when communication problems arise during cargo operations.

When at anchor off Cayo Arcas, information is usually obtainable via the 'Theriot' tugs.

BERTHING: Vessel moors port side to, alongside the storage tanker. This requires 8 parts of rope both forward and aft, 6 ship's lines and 2 from the storage tanker. All wires have to be fitted with rope pennants. Great care must be taken when going alongside to ensure that the ship's lines do not foul underneath the Yokohama fenders. Two tugs are in attendance, one forward and one aft using the tugs' lines. These are very heavy and require a messenger to heave them on board.

LOADING: Three lines are connected; these being 16 in. flexible rubber hoses with 12 in. reducers to the ship's manifold. They are connected by Pemex personnel but it is essential to have ship's staff operating the winch and the derrick gear. The API of the Maya Crude Oil is about 22.6 and the average loading temperature about 108°F. The maximum loading rate is 30,000 bbls./hr., however if the ship is receiving direct from the field, the rate drops to 15,000 bbls./hr.

It is advisable to leave the loading plan flexible as Pemex are likely to cease loading without prior warning and sail the vessel with deadfreight. The reasons for this can be due to the onset of bad weather or to ensure the ship leaves the storage tanker in sufficient time to enable the next ship to berth before dark. Unberthing is possible during the hours of darkness but the Pilots do not berth ships alongside the storage tanker between the hours of sunset and sunrise. The terminal requires 2 hours' notice prior to completion of loading and 10 minutes to stop operations. Communications between the ship and storage tanker is by a manifold watchman with a radio. These persons have a casual approach to their responsibilities and must be watched closely to make sure they are at the manifold when required.

Charles Martin Surveyors attend the vessel before and after cargo operations and insist on a visual inspection and manual dipping of the tanks. But they do not require water dips of the ship's tanks, a percentage allowance being noted on the Bills of Lading for these impurities.

Hydrogen Sulphide Content of Mexican Crude Oils: The H_2S content of the Maya Crude Oil is extremely high and all necessary safety precautions must be followed and adhered to.

FRESH WATER/FUEL: Fresh water, fuel oil and diesel oil are all available and are delivered to the ship by small coastal tanker or oil-rig supply tenders. They have to be ordered via Pemex preferably on the departure cable after leaving the discharge port. Whilst Pemex prefer to deliver bunkers when the ship is at the loading port, these commodities can be obtained in Curacao where Pemex have rented bunker storage facilities. Ships can avail themselves of this service when bunkers were not delivered in Mexico due to bad weather or some other cause.

DEVELOPMENTS: At the moment the only buoy in operation is No. 1 to which the storage tanker is moored. 'Boya Fija No. 3' and 'Boya No. 2' are in position as is the base for the hotel block 'HB CA1' and the degassing plant 'PBE-CA1'. It is understood the present completion date for these new installations is late March 1982 and production commencing some time after.

SHIPMASTER'S REPORT: May 1982.

DOCUMENTS:

Last Port Clearance.
5 Copies Crew List.
2 Copies Stores List.

PILOTAGE: Compulsory. Pemex Pilot boards 2 miles East of the berth.
ANCHORAGES: Depth 45 m. – 50 m. Bottom is sand.
RESTRICTIONS: Berthing daylight hours only. Unberthing at anytime.
MAX. SIZE: 350,000 d.w.t.
HEALTH: Pratique available day and night.
RADIO: Lantana Radio (WOE).
VHF: Terminal on Channel 11 only.
TUGS: 2 × 8,500 h.p. Both tugs required for docking and undocking.
BERTHING: Vessel berthed at No. 1 berth. Max. size permissible 110,000 d.w.t. Depth of water 42 m. Bottom is sand. Hoses connected on port side. No. 1 berth is alongside the storage tanker. However, after June 1st, 1982 the vessel will berth direct to the SBM.

Loading is through 3×12 in. hoses. Cargo is Maya Crude (API 22) which comes directly from oil production wells, through a gas separator. H_2S content is very high and dangerous.

The storage vessel is equipped with Yokohama fenders and also passes over 3 ropes forward and 1 rope aft.

Berth No. 2 (SBM): Max. size 250,000 d.w.t., hoses connected on port side.

Berth No. 3 (SBM): Max. size 350,000 d.w.t., hoses connected on port side.

No facilities for dirty ballast.
FRESH WATER: Not available.
FUEL: Not available.
REPAIRS: Not possible.
MEDICAL: Services available.

SHIPMASTER'S REPORT: May 1984.

LOCATION: Lat. 20° 12.5′ N., Long. 91° 57.5′ W.

The port of Cayo Arcas Terminal is an open sea terminal located in the Campeche Bank, some 85 miles almost West of Campeche and 90 miles North of Puerto del Carmen. The Middle Cay is the biggest with a lighthouse (round concrete tower) elevation 75 ft., Fl. (2) 14 s. 14 M.

The terminal is formed by:

1. One platform gas stabiliser (called "Cabezal de Valvulas" on Chart 28260) located in position 20° 09.6′ N., 91° 57.8′ W., with a gas burning flare (conspicuous) visible at 30 miles equipped with Racon "C" (– · – ·).
2. One old gas burning structure located 1 mile S.W. of the above platform.
3. SBM No. 1 in position 20° 10.0′ N., 91° 59.0′ W.
4. SBM No. 2 in position 20° 08.8′ N., 91° 59.0′ W.
5. One fixed structure in 20° 11.4′ N., 91° 59.5′ W. to which is permanently moored the storage tanker "Venture Europe", capacity over 2 million barrels.
6. One anchored storage tanker "Seawise Giant" (capacity 4 million barrels) in position 20° 09.0′ N., 92° 01.5′ W.

The platform and both storage tankers are very good radar targets at 24 miles.

DOCUMENTS: 6 Crew Lists visaed by the Mexican Consul of the last foreign port or 6 Crew Lists and a statement from the Agent at the last foreign port that no Consul in the area. 3 Ship's Stores Declarations and 4 Crew Declarations.

CLEARANCE/OUTWARD DOCUMENTS: The Agent will prepare on board after loading, all required documents already signed and stamped by the due Authority. The Agent will also prepare the Bill of Lading and Cargo Manifest with the quantities given by cargo and Pemex Inspectors.

PILOTAGE: Compulsory for berthing/unberthing. Pilot boards 2 miles S.W. of the platform and he remains on board during all operations. Accommodation and meals must be provided.

ANCHORAGES: Outside Prohibited Zone about 8 miles East of the platform or 4.5 miles S.S.E. of the platform in approximately 50 m. of water. Good holding with 9 shackles in winds up to 35 knots.

BERTHING: When mooring at any of the SBMs have ready the port crane or boom to pick up gear. In the forecastle 1 mooring rope (not wire) with a tail of 3 fathoms length and 2.5 in. circumference to lash the shore rope. One gang of 10 men board the vessel with the Pilot to assist in mooring/unmooring and connection/disconnection of hoses. These 10 men remain on board throughout during vessel's stay and accommodation and meals must be provided.

2 Cargo Inspectors and 1 Pemex Inspector, and sometimes the Agent board the vessel with the Pilot. Accommodation and meals must be provided.

When mooring alongside the storage tankers, only 3 or 4 people remain aboard.

Mooring to Storage Tankers: Both storage tankers have Yokohama fenders on starboard side. Mooring port side alongside using 3 head ropes, 2 breast and 2 spring ropes fore and aft plus 2 breast ropes from the storage tanker forward. 2×12 in. hoses used.

Mooring to SBM Nos. 1 and 2: One tug is used (tug's wire) on starboard bow to assist in the mooring. One shore polypropylene rope 9 in. circumference to which a chain is attached must be heaved on deck. Minimum opening of the bracket or stopper 15 in. × 7 in., otherwise 2 shackles with a thick wire must be attached to the chain and passed around the bitt. 2×16 in. hoses used.

COMMUNICATIONS: ETA for Cayos Arcas Terminal: Send ETA to Pemex (Petroleos Maxicanos) Pajaritos via Pajaritos Radio Station, XFF2, working frequencies:

Transmits	*Receives*
4346	4191
6442	6286.5
8690	8382
12790	12573
17075	16764

Of the above frequencies only checked on 8 MHz.

Traffic list on even hours plus 30 minutes although some 5 to 10 minutes delay can be expected. Only listening to this station when South of Florida.

ETA to Pemex Pajaritos can also be sent via Lantana Radio Station, WOE when far from Cayo Arcas.

When close to Cayos Arcas communication with Port Control (stationed aboard "Venture Europe") via VHF on Channel 9.

ETA to Agent can first be sent via telex to Tampa Office relay Ciudad del Carmen and then by cable via Veracruz Radio Station, XFU.

FRESH WATER: Not available.
FUEL: Not available.
REPAIRS: Not possible.
REPATRIATION: Embarking crew have to get permission from Immigration at Ciudad del Carmen before joining the vessel.

Disembarking crew cannot disembark, even if the Agent makes a request, until Immigration has cleared the vessel.

GENERAL:

Authorities: By helicopter from Ciudad del Carmen to "Venture Europe" and then by tug. Accommodation ladder requested.

Agent: Consignaciones de Buques, Canega Inc., with offices in Tampa, Florida. Telex: 803757 Canega B and Ciudad del Carmen, Campeche. Cable Address: Negroe, Ciudad del Carmen.

Charts: U.S.N.O. 28031, 28260.

COATZACOALCOS: 18.08 N. 94.25 W.

PORT LIMITS: From the centre of the channel at the bar with a radius of 0.5 miles to seaward.

DOCUMENTS:

Customs:

Cargo manifest, original and 4 copies visaed by Mexican Consul at place of origin. If no cargo carried for this port a certificate and 2 copies stating the fact.
Stores List, original and 1 copy.
Personal Effects List, original and 1 copy if vessel is arriving from another Mexican port. Customs release from that port must be produced.

Port Captain:

Clearance from last port.
2 copies Crew List.
3 copies Manifest of cargo for this port.

Immigration:

Crew List, original and 1 copy, bearing consular visa.
Passenger List, original and copy, visaed by consul.
All Crew Passports or I.D. Cards.

Health:

2 copies Crew List.
2 copies Passenger List.
Crew Vaccination Certificates.
Derat Certificate.
When vessels are anchored beyond the breakwater authorities board from the pilot launch.

The following must be made available for inspection.

Registration Certificate of Vessel.
Certificate of Inspection of Deck Machinery.
Certificate of Inspection of Machinery.
Freeboard Certificate.
Tonnage Certificate.
Radio Certificate.
Radio-telephony Certificate.
Emergency Procedure in the Case of Abandoning Ship.
Emergency Procedure in the Event of Fire.
Vessel Insurance Policy.
Copy of the Charter Party (where applicable).

PILOTAGE: Compulsory. Pilot meets vessel off the jetties at Coatzacoalcos Estuary. Master should give Agent information not less than 24 hours prior arrival stating vessel's name, flag, and ETA as well as draft.

Pilot boat black hull, white housing and red deck. 2 launches *Alcion* and *Vencedora.* The sound signal for calling the Pilot is 2 long blasts and 1 short blast. The light signal is a blue Bengal light.

There is a new cutter *Siriux.* The pilots' office has a VHF radio station, listening out on Channel 16.

ANCHORAGES: Ample anchorage grounds available outside the Bar of the Coatzacoalcos River.

Two anchorage areas have been established and are bounded by lines joining the following positions:

West Area:	A.	Lat. 18° 12′ 30″ N.,	Long. 94° 26′ 57″ W.
	B.	Lat. 18° 12′ 30″ N.,	Long. 94° 25′ 54″ W.
	C.	Lat. 18° 10′ 54″ N.,	Long. 94° 26′ 57″ W.
	D.	Lat. 18° 10′ 54″ N.,	Long. 94° 25′ 15″ W.
East Area:	A.	Lat. 18° 12′ 32″ N.,	Long. 94° 25′ 22″ W.
	B.	Lat. 18° 12′ 32″ N.,	Long. 94° 23′ 46″ W.
	C.	Lat. 18° 10′ 54″ N.,	Long. 94° 24′ 51″ W.
	D.	Lat. 18° 10′ 54″ N.,	Long. 94° 23′ 22″ W.

Anchorage exposed during Northerly winds when it is advisable to weigh anchor and proceed to sea.

RESTRICTIONS: Access Channel: 5,200 m. in length, depth 12.0 m. Secondary Channel: 2,200 m. length, depth 14.0 m.

MAX. SIZE: Max. draft crossing the bar is 37 ft. The Pajaritos Channel to the bar reaches 42 ft. (will shortly be 45 ft.)

Free Zone: Max. length during the day 200 m., at night 125 m. Max. draft. 31 ft.

Pajaritos: Max. length 225 m. Max. draft 37 ft.

HEALTH: Pratique never given by radio. Vessels granted Free Pratique when berthed alongside if no contagious illnesses aboard.

RADIO/VHF: Telegraphic transmitter type TH 600-M with an open sea range of 500 miles radius, frequencies of 512, 500, 432, and 419.5 kHz. Telephonic transmitter type TSB-500-Be with approx. range of 500 km., frequencies of 2182, 2270, 2542 and 2665 kHz. RDF transmitter type TT-1017-B with approx. range of 300 miles, frequency 312 kHz. Transmitter/Receiver for radiotelephony VHF type VFD-50PT/PR, with approx. range of 50 miles, frequencies in Simplex operation: Channel 12-156.6 MHz and Channel 16 International call-up 156.8 MHz. Duplex operation: Channel 26: Transmission 161.9 MHz, reception 157.30 MHz. Channel 27: Transmission 161.95 MHz and receiving channel 157.35 MHz. At the moment, there is a point to point link-up with national and coastal telegraphs, as well as teleprinters for national and international service No. 078-835 (the latter is said already to be installed and will shortly be operating normally).

Tankers: In addition local requirements are that ETA messages should be sent to Pajaritos PEMEX Terminal, Call Sign XFF2 as soon as possible after departure from the previous port and updated at least 72, 48 and 24 hours prior arrival, using following frequencies: 4191 kHz, 6286.5 kHz, 8382 kHz, 12573 kHz, 16764 kHz, 22253 kHz or 25094 kHz.

TUGS: The Free Zone has the "Servicios Portuarios del Istmo de Tehuantepec S.A de C.V.", who own the tugs *Quetzalcoatl* 2,400 h.p., *Olmeca* 1,600 h.p. and *P.L.M.8* with 600 h.p. for operations in the Free Zone and the Pajaritos Terminal, the first being able to undertake salvaging work due to extensive range of action.

A tug is obligatory for mooring, unmooring or changing position in the port. 1 tug for vessels of 2,500 g.r.t. and 2 tugs for vessels larger than 4,000 g.r.t. The signal for calling up tugs is 2 long and 2 short blasts on the vessel's siren. The signal for the tug to withdraw is 1 short, 1 long and 3 short. The tug will repeat the signal to indicate that it has been heard. Tugs are fitted with VHF radio listening out on Channel 16 and during working, on the channel which the tug captain is ordered to use.

BERTHING: *Free Zone:* This has a quay length of 1,900 m. (1, 2, 3, 4, 5, 6, 7, 8) with varying depths of water from 29 ft. to 31 ft. All necessary services for vessels are available. During the day, vessels up to 200 m. overall length can manoeuvre, and at night only vessels up to a max. length of 125 m.

Restrictions: Night service is suspended during times of strong currents in the Coatzacoalcos river.

Pajaritos Terminal: In this terminal PEMEX has 3 quays operating and 1 being constructed, those operating being PX1E and PX1W with operational depth of 33 ft. and 30,000 tons gross with lengths of 200 m. PX2E and PX2W with operational depths on the Eastern side of 33 ft. and with 37 ft. on the Western side, admits vessels of 225 m. overall length and 35,000 g.r.t. The Provisional Quay admits vessels with 37 ft. draft and 35,000 g.r.t. At this terminal, Pemex exports crude oils, fuel oils, and at the PX1E quay ethylene is loaded specifically. In the Western part of the lagoon, there is a manoeuvring basin with a radius of 300 m.

F.F.M. Quay: In the Eastern part of the Lagoon of Pajaritos, the Empresa Fertilizantes Fosfatados Mexicanos S.A. have their plants and a quay of 425 m., running E. — W., this quay being used for discharge of phosphoric rock in 4 mobile hoppers. Also, liquid sulphur is discharged, phosphoric acid is loaded, as are sulphuric acid and superphosphates. It has an operational draft of 33 ft., and takes vessels of 35,000 g.r.t.

STEVEDORES: No ETA advice necessary. Free Port: Straight working hours: from 0800 to 1200 hrs. and from 1400 to 1800 hrs. Overtime 100% overcharged according Tariffs. Latest times to order gangs: 0730, 1330 and 1730 hrs. Straight time above hours Monday through Saturday. Sunday and holidays allowed to work except "Legal Holidays". Loading and discharging rates: 25 tons gang/hour using ship's derricks. No shore cranes available. Loading sulphur by conveyor belts at 500 t.p.h., working around the clock.

Private FFM Berth: Loading or discharging operations performed by their own personnel working 24 hours per day. Rate of loading by conveyor belt: 500 t.p.h. Rate of discharging 1,100 tons per day with ship's gear.

CRANES: 300 ton crane for handling containers.

MEDICAL: Hospital facilities available. Inform Agent in advance if treatment required.

TANKERS: Also see "Berthing" and "Rabon Grande". Tankers regularly moor in the Pajaritos Roads. There are 4 large quays for mooring 7 vessels up to 233 m., with max. depth at the quay of 33 ft.

The Provisional Quay has 2 lines of operation of 24 in. with 3×8 in. for crude oil.

Bunkers and Lubricants: Not available.

Fresh Water: Available at jetties but should *not* be used for drinking water.

Stores and Laundry Facilities: Available, but no bonded stores.

Limited dirty ballast facilities available. Vessels should arrive with clean ballast. Failing to do so can result in excessive delays.

All tanks lids must be closed when entering or leaving the port.

It is strictly prohibited to emit excessive amounts of smoke from the funnel.

Shore leave is normally permitted by the local Immigration Authorities, however the shore passes are only valid inside the city limit. Severe penalties will be imposed for crew members found outside City Limits. Pajaritos crude oil contains hydrogen sulphide – H_2S.

During rainy season (May/June and November/December) currents of up to 6 knots can be experienced in the river.

DENSITY: Average 1012.

FRESH WATER: Available at berths in Free Port area, delivered by 1.5 in. hose. Loading rate about 8 t.p.h.

FUEL: Fuel can be supplied at Coatzacoalcos port by tank-trucks when vessels need small quantities. Petroleos Mexicanos (PEMEX) has, at Nanchital, a loading terminal which is about 3 miles up-river from Coatzacoalcos (max. draft 27 ft. 6 in.) where Bunker C fuel available.

Diesel oil only available at Minatitlan, about 17.5 miles up-river from Coatzacoalcos (max. draft 21 ft.). If vessel bunkers at Nanchital or Minatitlan there will be at least 1 day delay and heavy extra expenses.

Gas freeing equipment for Gas tanker at Nanchital.

CUSTOMS ALLOWANCES: No restriction for free use on board.

CONSULS: Norway and Netherlands.

REPAIRS: Minor repairs may be effected. Electronic repairs possible.

DRY DOCK: No dry dock available.

AIRPORT: At Minatitlan, about 40 minutes car drive away. 2 regular flights to Mexico City.

TIME: GMT minus 6 hours.

HOLIDAYS: No work performed on following legal holidays: January 1st; March 21st; May 1st; May 5th; September 16th; October 12th; November 20th; December 25th; and December 1st every six years when Federal Government changes President.

TELEPHONES: No facilities for placing telephones on ships.

POLICE/AMBULANCE/HOSPITAL: Police Tel: 2 01 22, Red Cross Tel: 2 02 85; Hospital Tel: 2 00 30.

SHORE LEAVE: Possible. Crew must have I.D. cards or passports. Passengers must have passports.

DEVELOPMENTS: The entrance channel up to Pajaritos roads has been dredged up to 42 ft. The quays in the Free Zone have been completely reinforced, vessels up to 31 ft. draft being able to come alongside. The warehouses for general cargo at quays 2 and 3 have been completed, with a covered area of 4,000 m. and normal loading capacity of 10,000 cu. m. There are sufficient open areas for positioning heavy loads or machinery. Apart from the lighthouse on the Gavilan Hill, in the Allende area (left bank), the port has light towers indicating the main entrance channel, another 2 to indicate the channel leading to Pajaritos roads. All 4 have flashing lights. The branch leading onwards to the Free Zone is indicated by a small tower with flashing white light. The lights of the promontories of the 2 headlands;— the East light is green, and the West light is red. The channel is marked with black coloured buoys with odd numbers, on the port side entering, and red with even numbers on the starboard side. Both sets of lights are of the flashing type. When continuing upstream towards Nanchital or Minatitlan, the bridge has to be passed under. Its characteristics are: Length 1,375 m. vertical clearance with the bridge up 35 m., with the bridge down 8.84 m. Horizontal clearance which can be used: 60 m. To have the bridge raised, vessels must give 3 long and 2 short blasts on the siren.

AUTHORITY: Delegacion Coordinadora, Edificio Zona Franca, Antiguo Puertos Libres. *Tel:* 2-19-46 and 2-10-00.

Empresa de Servicios Portuarios, Edificio Zona Franca. *Tel:* 2-30-89 and 2-03-46.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico, 11 D.F. *Tel:* 553 8711.

DOS BOCAS: 18.37 N. 93.10 W.

PILOTAGE: Compulsory. Pilot boards 2 miles N.W. or North of the SBMs (Lat. 18° 37.5′ N., Long. 93° 10.3′ W.).

ANCHORAGES: North of SBMs in 20 fathoms.

MAX. SIZE: 250,000 d.w.t.

VHF: Pemex on Channels 9 and 16.

BERTHING: 2 SBMs in 14 fathoms and 20 km. offshore.

Tanks: 10 tanks for crude oil, each 500,000 barrels capacity.

DEVELOPMENTS: Project included supply port to service drilling rigs, petroleum port with 3 piers which will be able to load 12 vessels up to 60,000 d.w.t. simultaneously with liquid gas and petroleum products, 3 piers for loading crude carriers up to 100,000 d.w.t. and a container terminal.

SHIPMASTER'S REPORT: December 1984.

Shore Location: Lat. 18° 26.5′ N., Long. 93° 11′ W.

Sea Terminal: There are 2 SBMs 11 miles to the North.

SBM 1: Lat.18° 37.5′ N., Long. 93° 09.5′ W., 2 lines on port side of the ship, diameter 16 in.

SBM 2: Lat. 18° 37.5′ N. 93° 11′ W., 3 lines on port side, 16 in. diameter.

Documents: Customs Officer comes onboard with the Agent before mooring. Documents required:

Last Port Clearance.
6 Crew Lists with vaccination dates.
2 Passenger Lists.
2 Arms Lists.
3 Store Lists.
3 Crew Personnel Effects Declarations.

Anchorage: See British Admiralty chart No. 2626. Located between 5 miles and 10 miles to the North of the SBM. As it is not very good holding ground, pilots usually recommend a position to the N.W. 4 miles or 5 miles from the SBM, as less threatening in case of ship dragging (in Winter there may be Northerly gales).

Pilotage/Berthing: Before arrival call on VHF Channel 16 or 9 for Pemex Operations. Pilot boards at 1.5 miles West or N.W. of SBM with a tug bringing out mooring equipment and shore crew. The tug assists with mooring, then goes aft and passes a line to the poop. No berthing at night time.

Crude oil: Same as Rabon Grande. Loading rate 15,000 – 45,000 bbls./p.h.

Persons on board: During vessel's stay:

1 Pilot.
1 Loading Master.
1-2 Pemex representatives.
1 Inspector (Redwood, etc.).
9 or 10 crew required for mooring, connecting and loading watches (One man permanently on the forecastle deck and one on the bridge).

Repatriation: Crew changes may be arranged.

Shore Leave: It is not possible to have regular connection with the shore.

Shipchandler: Available via pilot boat, but food very expensive.

ENSENADA: 31.51 N. 116.38 W.

RESTRICTIONS: *Access Channel:* Length 1,000 m. Depth 10.0 m.

VHF: Port Authority on VHF Channel 16.

BERTHING:

	Length (m.)	*Depth (m.)*
Coastal vessel quay	483.0	4.0 – 9.5
Deep sea quay	725.0	10.5

Storage: Warehouses 15,024 sq.m. Open areas 40,000 sq.m. Covered areas 30,789 sq.m.

BULK HANDLING FACILITIES: Conveyor belt for handling limestone. Suction units for handling bulk cargoes at high capacity. Mechanical means for discharging Tuna and Anchovies.

MEDICAL: Hospital services available.

FRESH WATER: Available.

FUEL: Available.

REPAIRS: Mechanical, electrical and electronic repairs possible.

DRY DOCK: Floating dock for vessels up to 1,400 tons displacement.

AIRPORT: International airport at Tijuana.

AUTHORITY: Delegacion Coordinadora, Boulevard Teniente Azueta No. 101. *Tel:* 8.35.80 and 8.13.20.

Empresa de Servicios Portuarios, Teniente Azueta No. 224. *Tel:* 8.23.68 and 8.28.60.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico, II D.F. *Tel:* 553.87.11.

GUAYMAS: 27.54 N. 110.52 W. (See Plan Book)

DOCUMENTS:

5 Crew Lists.
6 Passenger Lists.
5 Stowaway Lists.
1 Personal Effects Lists.
2 Stores Lists.
2 Provisions Lists.
2 Arms and Ammunition Lists (1 copy visaed).
4 Cargo in Transit Lists.
Ship's Official Documents.
Ballast Certificate.
Clearance from last port.
International Health Declaration.
Derat Certificate.
Manifest of Cargo for Discharge visaed by Mexican Consul (original and 5 copies).

PILOTAGE: Compulsory. Pilot available throughout 24 hours. Pilot meets vessel at Fairway Buoy.

ANCHORAGES: Good anchorage in the vicinity of the Fairway Buoy. Depth 14.5 m. Bottom mud.

RESTRICTIONS: *Entry Channel:* Length 3,500 m., width 75 m., depth 10.5 m.

HEALTH: Free Pratique available by radio on arrival.

RADIO: Guaymas Coast Radio, "XFY". Receives on 425, 454, 468 and 480 kHz. Transmits on 429 and 489 kHz.

VHF: Pilot and Port Authority on VHF, but communications not reliable.

TUGS: 1×2,250 h.p.

BERTHING:

	Length (m.)	*Depth* (m.)
East Quay	323	10.0
South Quay	350	11.0

Storage: Warehouses 4,800 sq.m., open areas 141,000 sq.m., covered areas 6,772 sq.m.

BULK HANDLING FACILITIES: The port has a specialised installation for the handling of dry bulk cargo, provided and operated by Almacenes Nacionales de Deposito S.A.

Characteristics: Warehousing capacity 68,000 tonnes. 36 silos arranged in 2 batteries. Conveyor belts permitting simultaneous filling of 4 holds of the vessel, with an absolute maximum rate of loading of 900 tonnes/p.h. Truck tipper. Hydraulic ramp for discharging road transport.

CARGO HANDLING FACILITIES: Loading and discharge of vessels is at the following rates:

General cargo – 22 t./hr./hook (average).
Dry bulk cargo – 32 t./hr./hook (average).
Bales of cotton: average handling rate 100 hr./hook.
Railroad and road transport up to alongside ship.

Vehicle ferries of Caminos y Puentes Federales de Ingresos, connect this port with La Paz and Santa Rosalia.

The port has equipment for handling all types of goods.

The Free Zone permits a more rapid transit of goods through the port, and a very great saving in Customs procedures.

Fumigation is provided for cargo, vessels, road and rail transport vehicles.

Lighting for night work permits work throughout 24 hours.

STEVEDORES: Working hours: 0800 – 1200 hrs. and 1400 – 1800 hrs.

MEDICAL: Doctors and hospital available.

TANKERS: Pemex Jetty – depth 10.0 m.

FRESH WATER: Available.

FUEL: Available.

REPAIRS: Mechanical, electrical and electronic repairs possible.

DRY DOCK: Slipway for vessels of less than 800 tons displacement (1,250 d.w.t.). Also see "General".

AIRPORT: International Airport in Guaymas, 10 km. from town.

GENERAL: *Shipyards:* This is an important industry in the port with five shipyards handling the construction of fishing vessels for tuna, sardines and shrimps, with technology of international prestige. There is a slipway for repair of vessels drawing up to 15 ft., with a 135 m. long underwater ramp.

The Rodolfo Sanchez Taboada industrial zone managed by the National Fund for Port Development was created to activate industrial development in the port, and started with promoting industries allied to fishing, there being currently two fishmeal processing plants, a fishing vessel shipyard, and it is planned to install 25 more industries and a shipyard for construction of deep draft vessels covering an area of 173 ha. This complex has asphalted roads, electricity and drinking water supplies.

AUTHORITY: Delegacion Coordinadora, Muelle Patio, Edificio Zona Franca. *Tel:* 2-22-50, 2-34-35 and 2-33-70.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico, 11 D.F. *Tel:* 553-87-11.

Servicios Portuarios de Guaymas, S.A. de C.V., P.O.Box 197, Guaymas, Son., Mexico. *Tel:* 2-32-33, 2-53-60, 2-34-35. *Telex:* 5719 Spgyme. *Contact:* Rafael Castillo, General Manager.

LAZARO CARDENAS: 17.55 N. 102.10 W. (See Plan Book)

PORT LIMITS: Area within limits of anchoring described below. For "Arrived Ship", pilotage limits 1 mile to seaward from breakwaters.

DOCUMENTS:

7 Crew Lists.
2 Vaccination Lists.
1 Sanitary Health Declaration.
3 Stores Lists.
2 Personal Effects Lists.
Clearance From Last Port.
Voyage Memorandum, showing also Ship's Registry.
Derat Certificate and Cargo Gear Certificate regarding cargo.
5 Cargo Manifests.
5 Bills of Lading.

PILOTAGE: 24 hours advance notice through coastal station, addressed to "Puerto" Lazaro Cardenas, Mich. A VHF watch on Channel 16 is maintained Monday to Friday, 0800 to 1900 hrs. and at any time previously requested by ship's Agent. VHF range 45 miles. Pilot will board normally either at Sea Buoy (17° 53.1′ N., 102° 09.6′ W.) or at the anchorage, and at Master's request further out if required. In the event of heavy sea, vessel will be instructed accordingly via VHF.

ANCHORAGES: One mile West of Sea Buoy. Very good holding ground, care should be taken not to anchor on, or near leading line (304°) due to a submarine canyon with over 100 fathoms depths at 1 mile off the breakwater.

RESTRICTIONS: Vessels up to 200 m. LOA and up to 35 ft. salt water draft may enter or leave the port 24 hours a day, larger vessels or those with deeper draft only with daylight. Vessels with over 42 ft. salt water draft must wait for tide.

Access Channel: Length 1,400 m., depth 14.5 m.

Secondary Channel: Length 500 m., depth 14 m.

Turning Basin: 600 m. diameter and 14 m. depth.

HEALTH: Pratique can be granted by VHF radio. Automatic Pratique is granted when coming from another Mexican port.

RADIO: Radio Maritima Manzanillo "XFM" and Radio Maritima Mazatlan "XMA" are recommended coastal stations through which to route ETAs. Initial contact on 2182 kHz.

VHF: At port, 25 watt 45 mile range. Channels 6, 16, 26, 11, 12, 13 and 69. Initial contact to be made on Channel 16, manoeuvring on Channel 6, port operations on Channels 11, 12 and 13.

RADAR: No radar service available.

TUGS: 1 tug stationed permanently at port 1,900 h.p. twin-screw. Tug's lines used, no charge for lines. Vessels over 50,000 tons displacement should apply to Manzanillo for another tug through Agent.

BERTHING:

	Length (m.)	*Depth* (m.)
Metal and Mineral Quay	650	14
Container Quay	284	12
General Cargo Quay	504	9.7 – 9.4

Shore cranes and sometimes ship's gear used for steel products. Significant cargoes are steel structure, coke-breeze, pig iron and finished steel products, also grain and sugar.

BULK CARGO FACILITIES: There is a shore crane clam-bucket type 250 t.p.h. capacity capable of loading and unloading. Clearance from boom to MLLW 35 m. Conveyor belt system in operation.

CRANES: One container crane 40 tons lifting capacity is available. Clearance from boom to MLLW 31.2 m. Also 3×75 ton movable cranes (self-powered) can work anywhere on quay, 4 additional mobile cranes of 20 ton capacity are available.

SPECIALISED CARGO HANDLING FACILITIES: Berth No. 1 can handle containers and heavy lifts up to 40 tons. Berth No. 2 can handle bulk and ores.

BRIDGES: No bridges.

STEVEDORES: Agents will arrange for stevedores with Lazaro Cardenas Port Services Co.
MEDICAL: Advance notice required by Agents when medical assistance required, emergencies can be routed via VHF at pilot station (Channel 16). 2 hospitals and 2 clinics with a total of 40 beds available plus a new hospital with 50 bed capacity will accept seamen. Yellow fever and cholera vaccination desirable.
TANKERS: Mineral Wharf has 10 in. diameter lines to discharge fuel oil.
DENSITY: Highly variable, can range from 1024 in dry season to 1012 in rainy season.
FRESH WATER: Available. 3 in. pipe on Mineral Wharf (American standard thread), but is recommended to boil it for drinking purposes.
FUEL: No fuel available for vessels, only diesel of specific gravity 0.85 available in trucks.
FIRE PRECAUTIONS: Tankers should fit a good ground connection to quay and have 2 lines hanging fore and aft ready for emergency towing.
CONSULS: No consuls available at present.
REPAIRS: Small and medium size repairs can be done at the workshop of the steel works if previous advice sent to Agent and Port Services Company.
DRY DOCKS: No dry docks available.
SURVEYORS: Two independent surveyors available for draft surveys, on/off hire and damage, can be contacted through Agents.
GANGWAY/DECK WATCHMEN: Not necessary or recommended.
HATCHES: Normally done by crew members, or by stevedores at ship's request.
CUSTOMS ALLOWANCES: There are no regulations. It is according to the Master's judgement for his needs for the stay in the port.
CARGO GEAR: Normally done with ship's gear but shore cranes are available upon request. Heavy lift cranes up to 40 tons.
REPATRIATION: All facilities for crew changes.
AIRPORT: Zihuatanejo Airport, nearest 135 km. 5 daily flights to Mexico City with connections to all parts of the world.
TIME: GMT minus 6 hours.
HOLIDAYS: 1st January, 1st February, 5th February, 21st March, 1st May, 16th September, 20th November, 25th December, 1st December every 6 years when there is change of President
POLICE/AMBULANCE/FIRE: Police Tel: 2-0154. Ambulance Tel: 2-05-75. Fire Tel: 2-03-33 ext. 1020 and 1000
TELEPHONE: No shore connection available.
SERVICES: Only ship chandler and laundry.
SHORE LEAVE: Crew members allowed shore leave without any special permit.
IDENTIFICATION CARDS: Seaman's Book is sufficient.
REGULATIONS: No special regulations.
DELAYS: No delays expected.
GENERAL: Salinity in basin and docks always changing and subject to tides and river flow, recommend taking at least 5 samples from keel to surface to get an adequate average of salinity.
DEVELOPMENTS: Fertimex Berth: Phosphate rock, length 509 m., depth from 12 m. to 14 m. Grain Berth: 250 m., depth from 12 m. to 15 m.; "L" shaped berth, outside 250 m., inside 210 m. with depth 11 m.
AUTHORITY: Oficina de Operacion y Desarrollo Portuario. Unidad Administrativa S.C.T. *Tel:* 2-01-97, 2-17-79 and 2-01-24.

Port Services Company: Empresa de Servicios Portuarios, Rio Tepalcatepel No. 29, Lazaro Cardenas, Mich. Mexico. *Tel:* (Operations) 2-00-37, (Administration/Management) 2-17-22, 2-17-23, 2-20-64 and 2-20-65. *Telex:* 01772873 Cplcme.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico 11, D.F. *Tel:* 553-87-11.

MANZANILLO: 19.03 N. 104.20 W. (See Late Plans)

DOCUMENTS:
14 Crew Lists.
20 Passenger Lists.
Derat Certificate.
Vaccination Certificate for each crew member.
Cargo Manifest and one copy to be visaed.
8 additional copies of Cargo Manifest, unvisaed.
10 Bills of Lading, one copy to be attached to each cargo manifest.
PILOTAGE: Pilot station on VHF Channel 16, only keeps watch when vessel expected. Pilots are ordered by Agents basis Master's ETA.

Pilot boat is black with white wheel-house on which is painted letter "H". International Code signals used. Pilot normally boards vessel about 1 or 2 miles from breakwater but if requested in advance the pilot boat will come out to 5 or 6 miles. Pilot cannot board in rough weather. Vessels waiting for Pilot may anchor about 2 – 3 miles N.W. of breakwater in depths of 12-15 fathoms.
ANCHORAGES: Vessels may anchor in the whole North part of the Bay where depths are 12-15 fathoms at a distance of 1 – 2 miles from the coast.
RESTRICTIONS: Vessels may enter at any time day or night.
Access Channel: Length 450 m. Depth 12.0 m.
MAX. SIZE: No limitation for anchoring in the bay. For mooring alongside, max. length 200 m., max. draft 32 ft.

Also see "Tankers".
HEALTH: Port Health Officer and Immigration Officers board vessel at anchorage. Passengers and crew may be required for inspection.
RADIO: Coastal station Manzanillo Radio, call sign XFM, operating 0600 – 1800 hrs. local time.
VHF: See "Pilotage".
TUGS: 1 tug available, compulsory to use tug when mooring alongside. Tug will join vessel as ordered by the Pilot.
BERTHING: Old Port:

Name	*Length* (m.)	*Depth* (ft.)
Muelle Fiscal Quay		
East Side	230	36 (Outer End)
		16 (Inner End)
West Side	220	36 (Outer End)
		20 (Inner End)
Coastal Quay	305	13 – 20
Naval Quay	165	13 – 37

New Port:
1,092 m. of New Quays with depths 32 ft. – 36 ft. completed.
685 m. of new quay under construction, depth alongside 14 m.
Depth in channel and South End of Basin is 36 ft.
STEVEDORES: Advise Agent in advance number of gangs required. Discharge rate approximately 20 t.p.h. – 25 t.p.h. per gang.
MEDICAL: Agent should be advised in advance if medical attendance required on board. Hospital facilities available.
TANKERS: 2 berths available, max. length 650 ft. No restriction on beam. Max. draft: N.E. side 31 ft. (Forward) and 38 ft. (Aft). S.E. side 33 ft. (Forward) and 38 ft. (Aft).
FRESH WATER: Should be ordered in advance. Rate of 10 t.p.h. Vessels must furnish own hose for pumping, 2 in. coupling. No barges available for delivery at anchorage.
FUEL: Should be ordered in advance. All grades available. May be expensive due Customs fees.
GANGWAY/DECK WATCHMEN: No shore service available.
OPENING/CLOSING HATCHES: Normally performed by crew members.
CUSTOMS ALLOWANCES: Each crew member may retain 1 carton of cigarettes, and 1 bottle wine/spirits for his own use. No alcohol may be taken ashore.
IDENTIFICATION CARDS: Not required. A Crew List should be left at the gate for checking crew.
CONSULS: Nearest are at Colima and Guadalajara.
REPAIRS: Only repairs to auxiliary machinery can be effected with permission. At Guadalajara hull repairs may be effected provided dry dock not required.
REPATRIATION: Can be arranged.
AIRPORT: Local airport only for internal traffic.
TIME: GMT minus 6 hours all the year round.
HOLIDAYS: The following holidays can only be worked in case of emergency: 1st January; 5th February; 21st March; 1st May; 5th May; 16th September; 12th October; 25th December; and in addition 23rd May, Anniversary of the Stevedores' Union.
POLICE/FIRE/AMBULANCE: Police Tel. 4; Fire Tel. 23; Ambulance Tel. 96.
TELEPHONES: Cannot be connected on board ships.
SHORE LEAVE: Permitted, except for crews of Russian, Cuban and Communist Chinese vessels.

Crew members left behind by vessel must be covered by 10,000 Pesos bond to guarantee repatriation expenses.
DEVELOPMENTS: Improvements are in progress to accommodate vessels up to 30,000 tons with a draft of 40 ft.
Shipmaster's Report: December 1984. A new port is under construction in Laguna de San Pedrito close East of the Old Port. There are already piers to accommodate 4 medium size vessels, and cement poles are being rammed all around the Lagoon, also dredgers are dredging the Lagoon to an expected depth of about 14 m. (See Late Plans).
AUTHORITY: Delegacion Coordinadora, Teniente Azueta – S/No., Port Operation Buidling. *Tel:* 2-07-89 and 2-00-04.

Empresa de Servicios Portuarios, Fraccionamiento Plaza Azul, Lote 9. *Tel:* 2-12-54 and 2-13-72.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico II D.F. *Tel:* 553 87 11.

MAZATLAN: 23.11 N. 106.26 W.

DOCUMENTS:
Port Clearance from previous port.
4 Store Lists.
12 Crew Lists.
2 Passenger Lists or Nil Passenger List.
(All to be stamped by Mexican Consul or a representative of a friendly country).

On arrival the following officials board:
Port Health Authority.
Customs.
Agricultural Department Authority for checking ship's provisions, mainly vegetables.
Doctor for checking 'meat' in the fridge room.
Immigration.
Ship's Agent.
Port Authority representative.

The (provisions) meat room is sealed after inspection by the doctor; every morning the seal is broken and resealed after the day's provisions are taken out.
PILOTAGE: Pilots can be contacted on VHF Channel 16. Pilots board in position Lat. 23° 10′ 24″ N., Long. 106° 26′ 24″ W. with Creston Island Light bearing 116° (T) × 0.4 miles.

APPROACHES: The approach is clear with no obstructions except Piedra Negra Rock which is just 7 ft. above the water. Vessel should head for Creston Island Light, keeping at least 2 cables clear of Piedra Negra Rock.

ANCHORAGES: *Shipmaster's Report:* Anchorage is not in the position marked on the British Admiralty Chart. I was told about this by the Pilot when he boarded. The anchorage is now shifted and a vessel should anchor East of a line drawn North/South through the Eastern tip of Island Chivas, East and clear of Piedra Negra Rock but outside the 10 fathom line. The holding ground is not good. Creston Island Light is a very powerful light, but its characteristic is now Fl. white every 8 sec. and not as marked on the chart.

RESTRICTIONS: *Access Channel:* Length 1,500 m. Depth 10 m. *Secondary Channel to Fishing Port:* Length 1,400 m. Depth 7 m.

RADIO: Mazatlan has a coastal radio station but only works on medium frequency.

VHF: See "Pilotage."

TUGS: Only 1 tug is available, if a second tug is required it has to be called from another port.

BERTHING:

	Length (m.)	*Depth (m.)*
Main Quays	981	10
Ro/Ro Berths	2 berths	10

TANKERS: Max. draft 29 ft. and LOA 590 ft., however tankers of 629 ft. LOA have discharged.

STEVEDORES: Gangs work from Mondays to Saturdays from 0800 to 1700 hrs. Any work after 1700 hrs. till 0700 hrs. next day and from 1700 hrs. on Saturday till 0700 hrs. Monday is overtime. Cotton bales are loaded at the rate of 85 to 90 bales per hour per gang. The bales stow at 29/30 cu.ft. per bale.

FUEL: Can be supplied, but has to be arranged in advance through PEMEX (Petroleos Mexicanos) office in New York. Diesel oil is normally supplied by trucks.

FRESH WATER: Can be obtained at any time and is supplied by hoses (ship's hoses) from the quay at about 9 Pesos per ton.

REPAIRS: Workshop for mechanical repairs. Electrical and electronic repairs possible.

DRY DOCK: Shipyard and slipway for small vessels.

STORES: Provisions are available, however it is difficult to get a variety and frozen vegetables are not available.

MEDICAL: Assistance available.

IDENTIFICATION CARDS: Not required, crew can go ashore, there are no restrictions, but all passports and seamen's books are kept in the custody of the Master.

REPATRIATION: Can be arranged via Mazatlan Airport or Mexico City.

TIME: GMT minus 7 hours throughout the year.

AIRPORT: International Airport.

SHIPMASTER'S REPORT: December 1978.

Pilotage: Pilot compulsory. Pilot boards 1.5 cables off the South breakwater. ETAs and amendments to be sent as soon as possible after leaving previous port.

Restrictions: Vessels can enter and leave day and night. However, they can only sail on the flood tide. Tidal range approximately 3ft.

Tugs: Tugs available but power not known.

VHF: Pilot, Port Authority and Agent on Channel 16.

Services Available: Fresh water (must be boiled for drinking). Fresh provisions. Airport (3 miles from city). Salvage Surveyor. Laundry service. Bunker fuel oil. Doctor and Hospital. Groceries and meats.

Density: 1020.

Charts: U.S. Chart 21301. B.A. Chart 3060.

Ship Anchored: 4 cables S.W. of Cerro del Creston Light in dense morning fog, depth 13 fathoms.

Pilot Boat: Low power, black hull with white superstructure, only came out to ship when the fog cleared. Requested first a gangway to board but afterwards changed his mind for a pilot ladder in view of a slight swell. Pilot boat also handled the ship's mooring lines at the berth.

Breakwater: Quite narrow to pass through.

Buoys: Mostly all covered in guano.

Berth No.3: As there was a bulk carrier on the next berth the ship had to overhang the berth by approximately 12 m. However there were bollards on shore away from the quay to provide suitable leads for stern lines. The quay was low, lying approximately 3 m. above the water with 1 m. maximum rise and fall of tide.

Note: Admiralty Tide Tables do not give any data for this port other than its range. U.S. tide tables give all required information.

Depth of Water: Average depth after sounding round hull was approximately 9.5 m., shallowest depth 8.5 m.

Officials: There is a Customs and Police gate on the quay.

Cargo Work: The ship loaded from refrigerated road trucks. The labour set their own derricks and took out the beams and plugs. However, it was over two hours before the first sling came onboard. Meal breaks were long necessitating the covering of open decks with plastic sheets to keep the cold air in. The cargo was not stowed very well, most of it was very crooked with large gaps between the deckhead and cargo. Gross hourly cargo rate is approximately 8 t.p.h.

Pilfering: There did not appear to be much pilfering. Keeping the offshore doors and the store rooms locked is a good precaution.

Early Morning Fog: On two mornings we had fog, clearing between 1030 and 1200 hrs.

Fresh Water: Available alongside the berth, appears to have no meter on it and we had to use our own hose and coupling. However pipe was left connected and we could top up whenever required.

Painting: No objection was made to painting the ship's side from a painting punt.

Lifeboat: Starboard lifeboat was used for a trip to the beach, boat however should not be landed because of the heavy swell.

SHIPMASTER'S REPORT: August 1979.

Navigation: Best chart is American. U.S. Chart No. 21301.

Anchorage: Recommended position with Cerro del Creston Lighthouse bearing 310° distant 2 miles in approximately 10 fathoms.

Approach: Straightforward but note that the small island off harbour entrance (Piedra Island) is often unlit.

Communications: Mazatlan Radio (XFL) has a range of 2,000 miles.

VHF: Pilots have Channel 16, also tugboats.

Pilots: Compulsory, board at anchorage or about 1 mile from breakwater entrance. Use a variety of craft. Board via pilot ladder.

No large ship movements permitted at night or during strong tidal streams.

Ro-Ro ferries, which also take Pilots in and out, have priority at all times.

Tugs: 1 only, low powered.

Draft: Presently restricted to 30 ft. salt water.

Cargo Facilities: Discharged 18,100 tons bulk soya bean in 10 working days. Discharge rate very dependent on transport and truck (rail) availability. 24 hour working with 6 gangs into hoppers. All grain type cargoes from South America must be fumigated if loaded onto road trucks, this takes approximately 2 days. Ship's gear usually used for cargo operations.

Authorities: Require the following in addition to ship's certificates:

12 Crew Lists
12 Passenger Lists
2 Crew Effects Lists
Crew Passports
6 Stores Lists.

The meat store of the vessel may be sealed if the Government Inspector considers that the meat is from an unsuitable country.

Repair Facilities: Minimal, mostly involved with the upkeep and repair of very large fishing fleet.

Surveyors: Nil – Nearest ABS Surveyor is in Mexico City 350 miles away, but will attend at two days' notice.

Medical: Good local facilities with English speaking staff.

Provisions: Excellent fruit, fish and vegetables. Meat of poor quality and expensive.

Hatches: Mechanical hatches operated by crew. Essential to have adequate crew available at night in rainy season (August to October) while working cargo at night.

Watchmen: Not required or compulsory. Little thieving experienced.

Laundry: Excellent quality and price.

Cash: Both Mexican pesos and US Dollars available.

Time: GMT minus 7 hours.

Repatriation: Several flights daily from local airport direct to Southern and Western U.S.A. airports. This avoids having the Agents post a 'bond' if travelling via Mexico City.

Agents: Most have telex, either via Mexico City or direct international. Telephoning overseas reasonably efficient. Mail services 7 days to Europe.

Fresh Water: Available at piers – should be chlorinated prior to use.

Bunkers: Only diesel oil available – sole supplier Government owned 'Petromex'.

Shore Labour: Not available as heavy port congestion at present.

General: Mazatlan is one of the largest ports in Mexico, 6 berths and is also a large resort with excellent hotels and large numbers of tourists. It is also the largest fishing port on the West coast of Mexico.

Port delays – Bulk carriers 4 days.
– General cargo ships 2 days.

(As at mid August) – this could change for the worse once the rainy season starts.

AUTHORITY: Delegacion Coordinadora, Av. Miguel Aleman 120-Oriente, Desp. 2. *Tel:* 1-69-45.

Empresa de Servicios Portuarios, Av. Emilio Barragan y Vicente Guerrero, Recinto Portuario. *Tel:* 2-02-78 and 2-38-11.

Comision Nacional Coordinadora de Puertos, Cuenavaca No. 5. Mexico, 11 D.F. *Tel:* 553 87 11.

MINATITLAN: 17.54 N. 94.35 W.

DOCUMENTS: See "Coatzacoalcos".

PILOTAGE: See "Coatzacoalcos Pilotage". Port about 17.5 miles up-river from Coatzacoalcos. Vessels are piloted either up-river or down-river to and from Minatitlan.

ANCHORAGES: Only at Coatzacoalcos. At Minatitlan river is narrow and anchorage not permitted.

RESTRICTIONS: Vessels may enter harbour only in daylight. Latest time for entry and sailing to and from Minatitlan is 1500 hours.

Access Channel: Width 70 m. Depth 7 m.
Manoeuvring Basin: 850 m. × 190 m. Depth 7 m. – 11 m.

MAX. SIZE: Max. LOA at Pemex berths: 475 ft. Max. LOA at Fiscal berth: 440 ft. No breadth restrictions at both. Max. draft permitted: 21 ft. in fresh water.

BRIDGES: See "Coatzacoalcos – Developments".

BERTHING: Normally vessels dock starboard side to. Petroleos Mexicanos (Pemex) has 8 berths for tankers, where they can load crude, fuel oil, gasoline, benzene, xylene, metaparaxylene, toluene and other petroleum derivates. Fiscal berth has a length of 73 m. depth alongside of 7.5 m. Actually only used to discharge harmless bulk fertilisers. Discharge performed by elevator at a rate of 800 tons per 24 hours, also by ship's gear using buckets at a rate of 200 tons per day per hatch.

TANKERS: No ballast to be discharged in the river. All ballast to be discharged to shore tanks through 2×6 in. pipe-lines.

PEMEX No. 1 Marginal Berth: Location 78 m. downstream from the South Face of the Lazaro Cardenas Refinery.
Arrangement: Marginal.
Length: 34 m.
Width: 12.4 m.
Useful Berthing Length: 34 m.
Height Above Average Low Tide: 3.43 m.
Depth: 3.5 m. at Average Low Tide.

PEMEX No. 2 Marginal Berth: Location: Immediately after Berth No. 1.
Arrangement: Marginal.
Length: 103 m.
Width: 9 m.
Useful Berthing Length: 103 m.
Height Above Average Low Tide: 3.43 m.
Depth: 3.5 m. at Average Low Tide.

PEMEX Quay No. 3: Location: 507 m. downstream from the South Face.
Arrangement: T Shaped.
Length: 12.5 m.
Width: 4.6 m.
Useful Berthing Length: 12.5 m.
Height Above Average Low Tide: 3.6 m.
Depth: 8.5 m. at Average Low Tide.
Services: Drinking water, 13 product loading and discharge lines.

PEMEX Quay No. 4: Location: 667 m. from the South Face.
Arrangement: Pier.
Length: 17.9 m.
Width: 14.8 m.
Useful Berthing Length: 37.8 m. with the aid of 2 Dukes of Alba.
Height Above Average Low Tide: 4 m.
Depth: 9.4 m. at Average Low Tide.

PEMEX Quay No. 5: Location: 824 m. downstream from the South Face.
Arrangement: Pier.
Length: 21.5 m.
Width: 15.6 m.
Useful Berthing Length: 31.6 m. with the aid of 2 Dukes of Alba.
Height Above Average Low Tide: 3.7 m.
Depth: 3.6 m. at Average Low Tide.

PEMEX Quay No. 8: Location: 1,063 m. downstream from the South Face.
Arrangement: Marginal.
Length: 91.7 m.
Width: 6.1 m.
Useful Berthing Length: 91.7 m.
Height Above Average Low Tide: 3.9 m.
Depth: 1.5 m. at Average Low Tide.

PEMEX Quay No. 9: Location: 1,178 m. downstream from the South Face.
Arrangement: Marginal.
Length: 240 m.
Width: 29.1 m.
Height Above Average Low Tide: 3.73 m.
Depth: 3.1 m. at Average Low Tide.
Services: Track for mobile crane, bitts, lighting and water (fresh), gas feed points.

Tanks: Tanks which PEMEX has within the General Lazaro Cardenas Refinery.

No. of Tanks	*Content*	*Capacity Millions of Litres*
10	Wax Crude	108.3
1	Non-wax Crude	5.3
10	Petrol	93.2
11	Diesel	94.7
7	Primary Paraffin	32.3
7	Turbosine	12.8
9	Fuel Oil	90.2
5	FR-3 Asphalt	20.3
11	Hexane Aromatics	8.8
2	Heptane Aromatics	0.9
1	Betolime	0.7
20	E. Benzine	13.1
7	Toluene	8.3
9	Xylene	6.8
2	Aromine	1.5
4	F.C.C. Catalytic	19.4
2	Heavy Aromatic	2.3
1	Reformed Naphtha	6.5
2	Formed Wood Spirit	11.6
1	Poli Gasoline	1.7
1	Refined	7.3
1	Primary G.	7.3
4	Absorption Liquid	7.6
3	Recuperated Oil	21.8
8	Neutral Lubricants	5.2
17	Finished Lubricants and those in preparation	2.2
9	Finished Lubricants and those in preparation.	1.5
11	Balance Tanks	81.0

STEVEDORES: No ETA advice necessary. Agent of Receivers of cargo order gangs to discharge. Straight working hours from 0700 to 1500 Mondays through Saturdays. Latest time to order gangs 0645 and 1445 hrs.

HEALTH: Pratique never given by radio. Vessels granted Pratique at anchor at Coatzacoalcos. Vessels must prepare accommodation ladder, to be boarded by port authorities.

TUGS: 1 tug required to accompany vessels past the Coatzacoalcos Bridge. Tugs rejoin vessels in the river on arrival at berth. Tug's lines used. For vessels over 2,000 g.r.t. 1 tug required; over 3,000 g.r.t. 2 tugs required.

DENSITY: Averages 1006.

MEDICAL: Hospital facilities available.

FRESH WATER: Available at all berths, but is not recommended.

FUEL: Marine diesel oil and Bunker "C" obtainable at Pemex berths. Bunker "C" also obtainable by barge, and diesel oil only by tank truck.

CUSTOMS ALLOWANCES: No restrictions. Free use on board. 2 Customs guards remain on vessel while alongside.

REPAIRS: No dry docks available, but small repairs can be done in shore repair shops.

AIRPORT: About 15 minutes' car drive away. Regular flights to Mexico City.

TIME: GMT minus 6 hours.

TELEPHONES: No facilities for placing telephones on ships.

DEVELOPMENTS: Constant programmes for more berths, sheds, dredging and equipment are under way, but rather slow.

AUTHORITY: Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico, 11 D.F. *Tel:* 553 87 11.

MORRO REDONDO, Cedros Island: 28.03 N. 115.11 W.

(See Plan Book)

LOCATION: Morro Redondo: Bulk Salt Terminal Lat. 28° 10′ N., Long. 115° 11′ W.

DOCUMENTS:
3 Crew Lists in Spanish, visaed by Mexican Consulate in previous port.
12 Ordinary Crew Lists.
3 Stores and Provisions Lists.
3 Lists of Crew Effects.
1 List of Crew Vaccinations.
Clearance from Last Port.
Certificate of Registry.

The Authorities such as Port Health, Customs and Immigration together with the Agent will board after the vessel has berthed. Only in exceptional circumstances will the Authorities board at anchor or off the berth.

PILOTAGE: Pilotage available day and night. Pilot arranged by Agent on the basis of ship's ETA. Pilot boards when ship is within 1 to 3 miles of the berth, from a small MFV type pilot launch, painted black with white cabin and red deck. No radio.

ANCHORAGES: Good holding ground is found 1 – 3 miles North of the berth in 20 to 35 fathoms with the ship loading tower in line with the Morro Redondo Lighthouse.

RESTRICTIONS: None. Vessels enter and clear 24 hours a day on a first come first served basis. Height of chute above MLLW is 48 ft.

MAX. SIZE: Minimum depth alongside 17 m. Largest ship to date 160,000 d.w.t.

HEALTH: Pratique granted by Port Health Doctor who boards on arrival. Requires Crew Vaccination Certificates and Master's Declaration of Health.

RADIO: Vessels can transmit and receive through KFS San Francisco Radio or KOK Los Angeles Radio.

VHF: Loading installation calls VHF Channel 16 when ship is expected and gives any information at this time. VHF is normally manned on Channel 12 so further communication is available.

RADAR: None.

TUGS: 5 tugs are available ranging from 2,500 h.p. to 3,200 h.p. each. 2 tugs are normally used for berthing, 1 tug for unberthing. Tugs' lines at no extra charge.

BERTHING: 1 berth only, 710 ft. in length consisting of steel dolphins and wood facings, also large mooring buoys, 1 ahead and 1 astern, each about 600 ft. distance from berth. 2 mooring ropes must be bent together to reach buoys.

The large stockpile of salt at the root of the pier is conspicuous.

CRANES: None.

BULK CARGO FACILITIES: Port is solely for the purpose of loading solar salt in bulk. Loader is belt and spout type and is fixed in position. Vessel must be shifted from hatch to hatch by ship's crew.

STEVEDORES: No special requirements. Average loading rate 2,000 t.p.h.

MEDICAL: No advance notice required, doctor will attend on board at dock. Limited hospital facilities available.

DENSITY: 1026.

FRESH WATER: Not available.

FUEL: Not available.

FIRE PRECAUTIONS: No smoking allowed on dock. Usual requirements for oil receiving terminal.

CONSULS: None.

REPAIRS: No repairs possible.

GANGWAY/DECK WATCHMEN: Shore gangway only, electrically operated and tended by stevedores. Deck watchmen required.

HATCHES: Opened and closed by ship's crew.

CARGO GEAR: One fixed loader only, controlled by stevedores.

REPATRIATION: Possible, with advance notice to Agent.

AIRPORT: Close to berth. Average 3 flights per week to mainland.

TIME: Standard time GMT minus 8 hours. Daylight saving time GMT minus 7 hours from last Sunday in April to last Sunday in October.

HOLIDAYS: Cargo is worked every day of the week including Sundays and holidays (except Labour Day – 1st May).

TELEPHONES: No telephone contact with mainland.
TELEGRAPH: Government public telegraph services available in village about 11 km. from port.
SHORE LEAVE: Allowed. No special shore passes required.
AUTHORITY: Exportadora de Sal, S.A. de C.V., P.O.Box 150, San Diego, CA 92112, U.S.A. 530 "B" Street, No. 1230, San Diego, CA 92102, U.S.A. *Tel:* San Diego (619) 239 0131. *Telex:* San Diego 697829. *Cables:* Essa San Diego. *Contact:* Mr. M. Guzman, General Manager.

There is no telephone or telex on Cedros Island.

NANCHITAL: 18.00 N. 94.27 W.

DOCUMENTS: See "Coatzacoalcos".
PILOTAGE: See "Coatzacoalcos Pilotage". Port about 3 miles up-river from Coatzacoalcos.
ANCHORAGE: See "Coatzacoalcos Anchorage".
RESTRICTIONS: Vessels may enter Coatzacoalcos only with daylight. Navigation from Coatzacoalcos to Nanchital remains closed from 1630 to 0700 hrs.
MAX. SIZE: Max. LOA 580 ft. No breadth restrictions. Max. draft permitted 27 ft. 06 in.
HEALTH: See "Coatzacoalcos".
TUGS: When vessels proceed to Nanchital, 1 tug accompanies vessel to pass the Coatzacoalcos bridge, according to Port Regulations. Tugs again join vessels when arriving at Nanchital berths. Tug's lines used. For vessels over 4,000 g.r.t. 2 tugs used.
BERTHING: Normally vessels dock port side alongside. When current and circumstances permit vessel is turned around and docked starboard side to. There are 2 docks at Nanchital, called Old Pier and New Pier. Both to load crude oil, No. 6 fuel oil by pipe-line of 6 in. and up to 10 in. Mooring, unmooring, connecting and disconnecting hoses performed by Pemex own labourers.

Old Pemex Quay:
Location: Right bank of Rio Coatzacoalcos 10.5 km. from the mouth of the port.
Built: 1950.
Arrangement: T-shaped.
Length: 88.3 m.
Width: 12.4 m.
Useful Berthing Length: 95 m. including Dukes of Alba.
Height Above Average Low Tide: 1.8 m.
Useful Depth: 8 m. at average low tide.
Services: Fresh water, lighting, bollards, fuel supply points.

New Pemex Quay:
Location: Facing the Pemex installations at Nanchital.
Built: 1969.
Arrangement: T-shaped.
Length of Platform: 32.4 m.
Width of Platform: 13 m.
Useful Berthing Length: 86.7 m. using 2 Dukes of Alba.
Height Above Average Low Tide: 2.71 m.
Depth: 9 m. at average low tide.
Services: Fresh water, lighting, fuel supply points, loading hoses.

Marginal Quay:
Location: On right bank of Rio Coatzacoalcos 11 km. upstream from port entrance.
Built: 1959.
Arrangement: Marginal.
Length: 239 m.
Width: 30 m.
Useful Berthing Length: 239 m.
Height Above Average Low Tide: 2.05 m.
Depth: 8 m. at average low tide.
Use: By Pemex.

Tanks: Used by Pemex:
3 for crude oil (8.2 million litres).
1 for fuel oil (15.2 million litres).
Located within inhabited area:
2 for diesel (1.59 and 8.7 million litres).
1 for fresh water (10.3 million litres).

MEDICAL: Hospital facilities available only at Coatzacoalcos.
TANKERS: See "Berthing".
BALLAST: Special regulation for tankers that no ballast water to be discharged in the river. Deballasting performed by 2 pipe-lines of 6 in. diameter to shore tanks.
DENSITY: Average 1006.
FRESH WATER: Available at both berths but is not recommended for drinking.
FUEL: Available only at the Pemex Oil Terminal at any time.
CUSTOMS ALLOWANCES: No restrictions. Free use on board. 2 Customs guards stay on board. Vessel to provide them boarding and lodging.
CONSULS: None.
REPAIRS/DRY DOCKS: No dry docks available, but small repairs can be done in shore repair shops.
AIRPORT: At Minatitlan, about 1 hour car drive away. 2 regular flights to Mexico City.
TIME: GMT minus 6 hours.
TELEPHONES: No facilities for placing telephones on ships.
DEVELOPMENTS: Constant programmes for more berths, sheds, dredging and equipment are under way, but rather slow.
AUTHORITY: Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico, 11 D.F. *Tel:* 553 87 11.

PROGRESO: 21.17 N. 89.39 W.

DOCUMENTS:
Crew List visaed by the Mexican Consul and 7 simple copies.
Derat Exemption Certificate.
Passports or Seaman's Book for all crew.
Clearance from last Port of Call.
Passenger List visaed by Mexican Consul and 7 copies.
6 Stores Lists.
7 Manifests.
7 Bills of Lading (2 to be visaed).
Tonnage Certificate.
Certificate of Free Pratique.

PILOTAGE: Compulsory. Pilot boards about 3.5 miles North of the lighthouse from a fast launch. International signals to be used to call Pilot day and night. ETA should be passed to Agent via radio station at least 24 hours before arrival.
ANCHORAGES: Vessels waiting for a berth anchor 3 miles off the Fiscal Quay. The anchorage is marked on Chart H.O. 0966.
RESTRICTIONS: No night restrictions. Also see "Max. Size". No facilities for tankers.
MAX. SIZE: Max. LOA, 190 m. Max. draft 16 ft. (arriving), 16 ft. 06 in. (sailing).
HEALTH: The doctor boards the vessel at the quay. Where illness or fever is suspected on board, international rules are followed. If the vessel is arriving from another Mexican port, there is no health inspection. Radio Pratique is not obtainable.

Authorities require valid Derat Exemption Certificate.

RADIO: Progreso Radio XFN works from 0600 to 1900 hrs. every day and listens on frequencies 2,182 kHz and Channel 16 VHF on radio-telephony and 500 kHz on radio-telegraphy. Working frequencies are 2,756 kHz, Channel 14, Channel 13 and Channel 12 VHF for radio-telephony, and 420 and 429 kHz on radio-telegraphy. ETA can be passed through this station 24 hours in advance.
TUGS: No tugs available.
BERTHING: One pier heading 355° true. Berth available on both sides, East and West, with 204 m. length on each side, and both with 18 ft. depth alongside.
STEVEDORES: No ETA advice necessary if stowage plan received in advance by Agent. Otherwise, ETA advice for gangs required 6 hours prior to arrival. Stevedores' General Cargo discharging and loading rate about 12 tons per gang/per hour.
MEDICAL: Attention available. The port has a clinic. Hospitals are situated in Merida.
TANKERS: No facilities. See "Developments".
DENSITY: Average 1015.
FRESH WATER: Available from pier by hoses. Fresh water is treated in the plant.
FUEL: Bunkers are available. Delivery by tanker truck equipped with pumps. Diesel and fuel supplied. Agent requires 24 hours' notice.
FIRE PRECAUTIONS: No smoking allowed aboard vessels.
GANGWAY/DECK WATCHMEN: Not necessary, although sometimes Masters require them.
OPENING/CLOSING HATCHES: This work is normally carried out by stevedores, but sometimes is carried out by crew in order to save time in loading or unloading.
CUSTOMS ALLOWANCES: Any quantity to be used on board is permitted.
IDENTIFICATION CARDS: Not necessary, but crew must carry passport or Seaman's I.D.
CONSULS: The Consular Offices are located in Merida, the capital of State of Yucatan (20 minutes from Progreso by taxi):

Cuba	Tel: 1 66 77	Lebanon	Tel: 1 77 76
France	Tel: 1 60 13	Switzerland	Tel: 1 75 00
Germany	Tel: 1 21 77	USA	Tel: 1 60 30
Great Britain	Tel: 1 67 99		

REPAIRS: Small repairs can be carried out in shore shops. No dry docks available.
REPATRIATION: There are facilities for effecting crew changes and arranging necessary repatriation. All matters are handled by the Office of Immigration.
AIRPORT: International Airport in Merida, about 30 minutes from Progreso by taxi. Daily services to Miami, Fla., by Pan American World Airways and New Orleans, La., every 2 days. Other flights to Central America, Jamaica, and Germany.
POLICE: Police Tel: 5 00 26.
HOLIDAYS: January 1st; February 5th; March 21st; May 1st (Labour Day); September 16th (Independence Day); November 20th (Revolution Day); December 1st (every 6 years); December 25th. It is possible to work, paying 100% additional.
TELEPHONE: It is not possible to place telephones on board.
SHORE LEAVE: Crew members are allowed ashore.
DEVELOPMENTS: S.B.M. to be installed.
AUTHORITY: Direccion General de Marina Mercante, Muelle Fiscal, 2 do Piso, Apartado No. 21, Progreso, Yuc. 97320. *Contact:* Captain Jose Omar Montalvo Hinojosa, Captain of the Port.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5. Mexico, 11 D.F. *Tel:* 553 87 11.

PUERTO MADERO: 14.44 N. 92.25 W. (See Plan Book)

PORT LIMITS: A vessel is considered an "arrived ship" when it is alongside the berth.

DOCUMENTS:

10 Crew Lists (Spanish language), 3 stamped.
10 Passenger Lists (Spanish language) 3 stamped.
10 Store Lists (Spanish language).
10 Cargo Manifest (Spanish language), 3 stamped.
3 Arrival Reports.
10 Bills of Lading.
3 Crew Customs Manifest.
1 W.H.O. Form.

All papers must be correct, Immigration Officer checks Crew List against all passports/seamen's book.

Vessels are boarded on arrival by 7 officials.

PILOTAGE: Compulsory. Pilot will board vessel 1 mile S.E. of Fairway Buoy, depth approximately 8 fathoms.

Vessel must send ETA 24 hours in advance of arrival. Ship's Agent to request services of Port Pilot in advance. Pilot will reply by giving instructions to be followed on arrival.

ANCHORAGES: Call the Pilot on VHF Channel 16 and agree on the position of anchorage and the side where the gangway will be positioned.

As a secondary area, vessels may anchor about 2 miles to the S.W. of the port entrance in 10 fathoms of water. The bottom is muddy at the anchorage and throughout the port.

RESTRICTIONS:

Access Channel	1,165 m. long	depth 8 m.
Channel Manoeuvring Area	450 m. long	depth 8 m.
Dock Access Area	350 m. long	depth 9 m.
Fiscal Dock	320 m. diameter	depth 9.5 m.

There is no entry to the port after 1800 hrs., and no sailings may take place before 0600 hrs.

MAX. SIZE: Max. LOA 165 m., max. beam 25 m., max. draft 8.0 m.

Measurements are in accordance with the manoeuvring area and the depth of water throughout the port.

Tankers are not received in the port as there are no discharge lines, and the manoeuvring area does not permit it.

HEALTH: Request Free Pratique 48 hours and 24 hours in advance of arrival via Salina Cruz.

Report any suspicious illness to Agent prior to arrival in order that vessel may be directed to Quarantine Anchorage.

Health Officials require:
Health Declaration.
Derat or Exemption Certificate.
Crew Vaccination Certificates.
Crew List.

RADIO: Via Manzanillo or Salina Cruz, ETA 48 hours and 24 hours prior to arrival.

All vessels approaching the port to berth, and when effecting manoeuvres within the area of the port or when leaving the port, must effect all communications by VHF Channel 16.

Additional communication or for safety provided by the Naval (Coast Guard) on 500 kHz. International Call Sign for Aid to Fishing Vessels 2182 kHz on R/T or Channel 16 VHF.

VHF: Salina Cruz and Puerto Madero on VHF Channel 16.

RADAR: There is a radar system but it is only used by the Naval "Coast Guard", and no contact with this system is possible, although all vessels approaching this port are detected by this radar.

TUGS: There is a service tug (750 h.p.) which comes alongside the vessel at the port entrance, working with vessel until she is berthed alongside a quay. The services of the tug are compulsory for all shipping.

BERTHING (Port under construction): There are 2 reaches, an expansion basin, a turning basin and a general cargo berth 150 m. length, the depth is 9.5 m. at LW (salt water).

The first reach is entered on a heading of 043° (T) and passes between the breakwaters, one of them 850 m. length and the other 650 m. length, the channel has 80 m. width. The second reach commences at the shore end of the breakwaters on a heading of 022° (T) for a distance of 250 m. The third reach is on a heading of 006° (T) and length of 650 m. At the end is the turning basin 320 m. wide and 350 m. length and depth 9.5 m.

Vessels usually moor port side alongside and drop the starboard anchor with 3 or 4 shackles. The cargo handling is by means of ship's own gear and there are four conveyor belts for the handling of boxed bananas.

CRANES: The port has no cranes, discharge and loading has to be with the ship's derricks.

BULK CARGO FACILITIES: In the port is a single general cargo berth. Bulk cargo is handled directly from the hold to the lorry or railway trucks using hoppers and scoops and loaded into the hold and raised by the ship's derrick.

At present the port handles bananas and coffee outwards and bulk fertilisers (and in sacks) inwards. Also bagged cement and heavy machinery for hydro-electric stations.

SPECIALISED CARGO FACILITIES: There is no equipment for handling container vessels.

BRIDGES: The entry of vessels is free, there being no bridges over the channel.

STEVEDORES: Masters of vessels must request the requisite number of gangs 24 hours in advance via the ship's agent.

General cargo – 18 to 20 tonnes/p.h./hook.
Bananas – 3,000 cases per hour by the side-port system.

MEDICAL: 24 hours' notice for requesting medical assistance.

A sick person can be hospitalised if the Master so requests by radio.

International Health requires Certificates of Vaccination and where necessary personnel can be vaccinated if required.

TANKERS: No facilities.

DENSITY: Average 1025.

FRESH WATER: The port quay has drinking water hydrants controlled by the Superintendency of Port Operations.

FUEL: It is possible to provide bunkers in small quantities via pipes, average supply 15,000 litres.

In cases of emergency, bunkers can be requested by radio from the ship's Agent.

FIRE PRECAUTIONS: Those normal for a cargo vessel.

CONSULS: There are no Consulates in the port. There is one in the town of Tapachula, Chiapas, 28 km. from the port.

Consul of Guatemala: 2a Calle Oriente No. 33, 30700 Tapachula, Chiapas. Tel: 6 – 12 – 52.

REPAIRS: It is possible to have repairs made to engines of small vessels in the town of Tapachula.

DRY DOCKS: None.

SURVEYORS: None.

GANGWAY/DECK WATCHMEN: It is necessary to post a watchman of the Immigration Service on the gangway when the vessel is berthed in the port.

HATCHES: Opening and closing of hatches by the crew or stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes or 50 cigars or their equivalent; 1 litre of spirits.

CARGO GEAR: Loading/discharging is carried out by means of the ship's derricks.

REPATRIATION: Possible.

AIRPORT: 12 km. from the port is the new International Airport of Tapachula.

Regular Flights – Aeromexico:

Mexico/Tuxtla Gtz./Tapach LA. Arrival at Tapachula at 1155 hrs., departure at 1255 hrs.

Mexico/Oaxaca/Tapachula. Arrival at Tapachula at 0855 hrs., departure at 0920 hrs.

Aviacion de Chiapas: Tapachula/Tuxtla Gutierrez. Arrival 0800 hrs., leave 0830 hrs. Arrive 1300 hrs., leave 1330 hrs.

In Tuxtla Gutierrez there is a connection with the whole state of Chiapas and part of the state of Tabasco.

Executive Air Services: To any part of the country and Central America.

TIME: Local time is GMT minus 6 hours throughout the year.

HOLIDAYS: 1st January, 5th February, 21st March, 1st May, 16th September, 20th November, 25th December, 1st December every 6 years when the Executive Power is transferred.

Loading and discharge services can be provided on these days, but it is considered as overtime.

POLICE/AMBULANCE/FIRE: Police Headquarters, Tel: 6–10–93, Tapachula, Chiapas.

Mexican Red Cross, Tel: 6–19–49, Tapachula, Chiapas.

Fire Brigade, Tel: 5–20–65, Tapachula, Chiapas.

EMERGENCY CO-ORDINATION CENTRE: Headquarters of the 22nd Military Naval Area on 500 kHz. Also see "Radio".

TELEPHONES: There is no telephone service available in the port.

SERVICES: No tank cleaning or dirty ballast facilities.

BANKS:

Bancomer, S.N.C., Central Poniente y 4a Avenida Norte, 30700 – Tapachula, Chiapas. Tel: 6–12–20. Telex: Bcchme – 77715 Bcchme/77716.

Banamex, S.N.C., 4a Avenida Norte y 1a Calle Poniente, 30700 – Tapachula, Chiapas. Tel: 6–29–24. Telex: Bntpme – 77714.

Banca Serfin, S.N.C., 6a Avenida Norte No. 8, 30700 – Tapachula, Chiapas. Tel: 6–1/–70. Telex: Serfme – 77735.

Multibanco Comermex, S.N.C., 6a Avenida Norte y 5a Calle Poniente, 30700 – Tapachula, Chiapas. Tel: 6–15–22.

Banco de Credito Rural del Istmo, S.N.C., 6a Avenida Norte y 1a Calle Poniente, 30700 – Tapachula, Chiapas. Tel: 6–14–20.

Banco Mexicano Somex, S.N.C., Central Poniente y 2a Avenida Norte, 30700 – Tapachula, Chiapas. Tel: 6–27–60. Telex: Bmsome – 77731.

Banco Nacional Pesquero y Portuario, S.N.C., Central Oriente No. 42, 30700 – Tapachula, Chiapas. Tel: 5–03–52.

Banobras, S.N.C., 6a Avenida Norte No. 4, 30700 – Tapachula, Chiapas. Tel: 5–15–58.

Banco Internacional, S.N.C., 1a Poniente y 2a Avenida Norte, 30700 – Tapachula, Chiapas. Tel: 6–28–00. Telex: Bichme – 77733.

Banpais, S.N.C., 4a Avenida Norte y 1a Calle Poniente, 30700 – Tapachula, Chiapas. Tel: 5–00–31.

Banco del Atlantico, S.N.C., Central Norte No. 18, 30700 – Tapachula, Chiapas. Tel: 5–12–90.

SHORE LEAVE: Possible.

IDENTIFICATION CARDS: A seaman's book is sufficient for going as far as the town of Tapachula, Chiapas.

DELAYS: There are no delays, on arrival a Pilot proceeds to bring the vessel into port, and the work gangs are already on the quay, commencing work as soon as the vessel is secured.

DEVELOPMENTS: It is planned to extend the breakwaters in 1985.

GENERAL: The port is relatively new, it lacks port infrastructure for loading/discharge of goods. But in order to handle any type of cargo, equipment can be brought from the nearest port if the ship's Agent requests it 48 hours in advance and at the same time presents the List of Cargo so as to ascertain the type of equipment required. With regard to the labour force, the gangs can alternate to provide 24 hours working.

SHIPMASTER'S REPORT: February 1977.
Documents:

10 Spanish Crew List (7 Certified).
12 Passenger List (5 Certified).
6 Store List (6 Certified).
6 Priced Shop List.
6 Cargo Manifest (8 Certified with Bills of Lading for Puerto Madero Cargo).
6 Arrival Reports.
2 Health Part 1 and 2.
2 Crew Customs Manifest.

All the above papers were taken.

Officials: Immigration Officer boarded *with the Pilot*, checked all I.D. Cards and Passports against the Crew List.

15 People boarded on arrival, all in uniforms, i.e. Army, Navy, Police, Quarantine and Port Captain.

All bonded lockers were sealed as well as the beer room. All store rooms were checked.

Meals were provided for 11 people. 2 Customs Guards remained on board at all times, a room is required for them at night.

Pilotage: Compulsory. Pilot boards from a large, black hulled launch with a red superstructure, about 0.5 miles off the entrance. Pilot speaks good English.

Approaches: New light structure, painted in red and white bands, and lying 0.3 miles North of entrance is conspicuous from seaward.

This light is expected to be in operation as from mid-February 1978, and will have the characteristics of the old one, lying 1 mile North, viz. Flash every 30 seconds. 2 rubble breakwaters 350 m. apart with red and green lights at their seaward ends are also conspicuous on Radar. All ranges into the port are marked with beacons and lights.

Turning basin is 280 m. in diameter, with a depth of approx. 10 m.

1 tug of 800 h.p. assists berthing, which is difficult. Berthing and unberthing should not be attempted during hours of darkness, nor when sea breeze is so strong as to hinder the attempt. Tidal streams outside the port are influenced by the wind. Tidal information is based on Standard Port of La Union, with a Secondary Port of Champerico, Guatemala, being used for Puerto Madero.

Anchorage: Anchorage may be obtained off the Port S.S.W. of the entrance about 0.5 to 1.5 miles off in mud, good holding ground.

A heavy swell may however be experienced with a passage of a "Tehuantepecer" or of a Tropical Revolving Storm passing far out in the Pacific.

Depths in the roadstead may be between 12 m. to 16 m.

Max. Size: Max. size of vessel handled LOA 145 m. Beam 22 m. Draft 7.5 m.

Radio: Advise ETA 48 hours and 24 hours prior to arrival via any Mexican Coastal station.

Tugs: One tug of 800 h.p. assists in docking and undocking.

Berthing: One wharf at present in use, of 150 m. length, bulkhead type well fendered, depth alongside 10 m. on completion of dredging programme. Proposal for dredging out another wharf at right angles to the first also of 150 m. length and 10 m. depth, this to take place within the next 2 years.

1 Naval facility wharf in side channel and basin, pier 60 m. in length, depth alongside approx. 5 m. to 6 m.

Fishing pier also 60 m. long depth alongside 4 m. to 5 m. No other details known.

Cargo Handling: Ship's Gear, supplemented by 2 conveyor belt systems suitable for cartoned or boxed cargo.

Cranes: None, but mobile tower cranes may be obtained from Tapachula given sufficient notice.

Medical: Medical services available at Tapachula and San Benito, the Hospital will accept seamen.

Fresh Water: Fresh water laid on to principal pier, approx. delivery 12 t.p.h. Should be treated before drinking.

Fuel: Fuel pipe-line is built below principal wharf, but as yet, January 1977, is not connected to any fuel terminal. Fuel Oil may be obtained by road transport for the time being.

Repairs: Only minor repairs at present.

Communications: Road Service to Tapachula, thence air services are readily available to Mexico City, thence to all parts of the world.

Plans are in hand to build a large Airport complex near to Puerto Madero.

No port radio as yet, but future plans call for a Radio Station, and eventually Port Office will have VHF facilities.

Services: Provisions available from Tapachula if notice given. Derat not available.

Consuls: There is a British Consul at Tapachula.

SHIPMASTER'S REPORT: August 1977.
Documents: Clearance from last port.

12 Crew Lists.
4 Store Lists.
4 Personal Effects Declaration.
1 Health Declaration.
2 Passenger Lists.
Ship's Register.
Derat Certificate.

Pilotage: Pilot boards vessel 1 mile West of breakwater. Pilotage is compulsory. 48 hours and 24 hours' notice to "Empresa de Servicios Portuarios de Puerto Madero".

Anchorages: 1.5 miles West of the breakwater in 8 fathoms of water.

Restrictions: No entering of port after 1800 hrs. No leaving of port before 0600 hrs.

Max. Size: Access channel 1,750 m. long, 10 m. deep, with an 80 m. wide bed. Turning basin 280 m.×325 m. and 8.5 m. deep. Pier 151 m. long, depth alongside 8.5 m. Pier equipped with cylindrical rubber fenders.

Tugs: 2 tugs available from November 1977.

Berthing: Loading and discharging operations with ship's gear. Dry bulk 28 m.t./hook hour (average). Sheds to handle banana shipments and conveyor belts, handling with side-ports system and average loading speed of 1,700 boxes per hour.

Fresh Water: Available from pier.

Gangway/Deck Watchmen: Security service rendered.

Time: GMT minus 6 hours all through the year.

Airport: International airport in Tapachula.

Services: The following services can be found in Tapachula City, Chiapas., 23 km. away from the port: Ship chandler service, mechanical and electric repair shops, hospital, telephone, telegraph and telex.

SHIPMASTER'S REPORT: October 1978.
Pilotage: Compulsory. Pilot boards 1 mile S.S.W. of North Breakwater, 24 hours' and 12 hours' notice required.

Restrictions: Limits of channels and Turning Basin are not marked. Daylight berthing and unberthing only.

Max. Size: LOA 160 m. Beam 25 m. Draft 27 ft.

Anchorage: 0.5 – 1.0 mile from North Breakwater, depth 45 ft.

Health: Quarantine Officials require 24 hours' and 12 hours' notice of vessel's arrival.

Radio: Salina Cruz.

VHF: Pilot and Port Authority on VHF Channel 16.

Tugs: One tug, 750 hp.

Berthing: General Cargo Berth: 2,200 m. from entrance. Max. size. LOA – 160 m., beam 25 m. and max. draft 27 ft. Vessel's size limited by width of turning basin. Least depth of water from sea to berth 9.0 m.

There are 6 hoppers available for bulk cargoes. No Ro-Ro facilities. No floating cranes. Security is good, berth surrounded by wire fence with only one entrance.

Density: 1025.

Consuls: British Vice-Consul in Tapachula.

Services available: Fresh water; Fresh provisions (with 24 hours' notice); Telex (at Tapachula); Doctor and Hospital; Airport (at Tapachula) 2 flights daily to Mexico City; groceries and meals (24 hours' notice).

AUTHORITY: Delegacion Puerto Madero, 3a Calle Poniente No.2 – 302, Apartado Postal No. 436, 30700 Tapachula, Chiapas, Mexico. *Tel:* (91–962) 6–34–46. *Contact:* David Hernandez Ramirez, Port Captain. Arturo Elorza Garcia, Port Operations and Development.

Empresa de Servicios Portuarios, Calle Oaxaca, Lote 36, Manzana 4, Fraccionamiento Guadalupe. *Tel:* 6–30–65.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico, II D.F. *Tel:* 553 87 11.

AGENT: Jose Antonio Tellez, P.O.Box 198, Tapachula, Chiapas (Province), Mexico. Tel. Office 612–40, Home 622–54.

Fruit Agent: Jose Leyba, P.O. Box 311, Tapachula, Chiapas (Province), Mexico. Tel: 615–31.

RABON GRANDE: 18.14 N. 94.23 W.

SHIPMASTER'S REPORT: September & October 1982.

LOCATION:
SBM No. 1 Lat. 18° 13′ 34″ N., Long. 94° 23′ 07″ W. Light "S".
SBM No. 2 Lat. 18° 13′ 34″ N., Long. 94° 20′ 29″ W. Light "O".

PILOTAGE: Pilot boards in a position midway between the two buoys. Tug rendezvous in same position with mooring equipment which is loaded on the port side.

ANCHORAGES: Anchorage position as advised by the Pilot is to the N.W. of a line joining the 2 SBMs and about 2 miles distant. A point of note is that there were at least 20 vessels anchored to the North and West of the port entrance, mostly oil tankers awaiting berth in the inner harbour. A U.S. Government chart covers the port area and SBM berths but was not available through the local Agency.

While the vessel was lying off in the rendezvous position waiting for Pilot and mooring equipment a very strong set to the S.E. was experienced, the wind being Northerly, Force 6 throughout the afternoon. Also during the vessel's stay it was noted that the wind increased to Force 5 – 6 every afternoon and gusting to Force 6 – 7 during the night time squalls.

Shipmaster's Report: January, 1982. Not same vessel.

Anchorage 2 to 8 miles Northwards from the breakwater. Poor holding ground anywhere in the area due to the river discharge giving a muddy ooze bottom. Even with over 9 shackles out in 18 fathoms of water, ships drag anchor when subject to the gales which blow from the Northern quadrants.

The onset of these gales are sudden and fierce, blowing towards the shore. Apart from the very accurate weather reports advising that a front is approaching, it was noted that an appreciable rise in barometric pressure preceeded the gale. The normal practice in the event of a gale being forecast was to have the engines on 10 minutes' notice and if the vessel began to drag, the anchor was weighed and the vessel cruised off the area until the storm abated.

RESTRICTIONS: Mooring to SBM in daylight hours only but unmooring allowed at anytime. Both operations depending on prevailing weather conditions.

Recommended arrival drafts are as follows:

Length O.A. (m.)	*Draft Forward* ft.	*Draft Aft* ft.
175 – 200	14	24
200 – 225	16	26
225 – 250	18	28
over 300	20	32

RADIO: Communication between ship and shore is by vessel's VHF set and constantly monitored by shore personnel.

Radio Pratique is obtainable by forwarding the following information to the Agent at least 24 hours before arrival:

(a) Vessel's name and Nationality
(b) Master's name
(c) Total crew on board
(d) Last port.
(e) Derat Certificate – Port and date of issue
(f) ETA local time (GMT minus 6 hours.)

It is also advisable to establish as soon as possible which grade the installation require to load first.

Communications with the Agency was by Telex via Portishead and/or Mobile, Ala., the latter preferred by the Agency until within range of the local station.

Pajaritos Radio Station: Call sign XFF2: Station operated by Pemex.

Traffic lists are broadcast on the even hour plus 30 minutes. Weather forecast at 0830, 1430, 2030 hrs. local time. Local time is GMT minus 6 hours.

Ship (Tx.) kHz.	*Shore (Tx.)* kHz.	*Times*
4191.0	3700.0	Night only
6286.5	6442.5	Day and night
12573.0	12790.0	Day and night
8382.0	8690.0	Day and night
16764.0	17075.0	

It is advisable to pass cargo information, grades, quantities and order of loading through this station as sometimes the Agencies fail to pass on information received from vessels to Pemex, the operating oil company.

On this visit (October 1982) all radio traffic was passed through Mobile Radio Station Alabama, and was received within a reasonable time at Coatzacoalcos.

BERTHING/LOADING: The 2 SBMs are fitted with 2×16 in. hoses with connection to port side of vessel.

Two grades are available, Isthmus Crude and Maya Crude and the line clearing amount is 34,000 barrels.

Loading rates vary from 17,000 to 35,000 U.S. bbls./p.h. depending on stocks and number of vessels loading. During heavy squalls and/or electrical storms loading is suspended. While secured to the buoy engines required on immediate/minimum notice.

During loading operations and while secured to the buoy the Pilot, Loading Master, 2 Petroleum Inspectors and 8 Hose Crew remain on board and have to be fed and housed. The Hose Crew change every morning and the Loading Master every third day or thereabouts.

October 1982: Once again loading on the SBM. 2 grades of oil, Maya and Isthmus Crude oils. The rate of loading varied from 12,000 to 25,000 bbls./p.h.

SHIPMASTER'S REPORT: July 1984.

Vessel (140,000 d.w.t.) anchored 320° (T) 2.1 nautical miles from No. 2 SBM which flashes 'U' every 15 seconds. Bottom was glutenous mud. Accommodation required for 1 Pilot, 1 Loading Master, 2 Cargo Surveyors and 8 hosemen. The 8 hosemen work in shifts so only require 4 beds.

Agent receives all Immigration, Customs and Health Papers. Documents required were 4 Crew Lists (1 visaed), Personnel Effects Lists and Stores Lists.

Launch service to shore available at times agreed with Agent.

In the event of squalls/thunderstorms tug will tow from the stern.

Stores are available and from the quality of items seen ashore – mangoes, avocadoes and fresh fish appear to be of good quality.

ROSARITO: 32.20 N. 117.05 W. (See Plan Book)

SHIPMASTER'S REPORT: 1975.

GENERAL: There is no port or approaches chart for Rosarito.

There are 3 sea berths only, 2 using anchors and stern buoys, and 1 single point mooring platform due to come into service in 1976. There is a continuous Westerly swell (July) and the berth is very exposed. Discharging a full cargo, it is advisable to commence ballasting as soon as possible to maintain a reasonable draft. There is no objection to this by the receivers.

DOCUMENTS: As for other Mexican ports re visaed Crew Lists etc. Suppliers in Curacao supplied all cargo documents with correct number of copies.

PILOTAGE: Pilot boards about 1 mile West of the berths from a black pilot launch equipped with VHF Channel 9. He speaks good English. The Boarding Officer boards with the Pilot. He speaks no English. The Pilot and Boarding Officer remain on board throughout cargo operations, also pilot/mooring launch is at hand at all times. All cargo operation liaison with the shore is by VHF operated by the Boarding Officer, who also does all Customs, Immigration work, etc., with the Pilot as interpreter.

APPROACHES: Straight forward, with a shelving bottom and ample depth of water up to the berths. Anchorage was found about 1.2 miles off the South buoy berth in 14 fathoms with good holding. Approach in poor visibility, common at this time of year, presented little difficulty once a position of berths is ascertained. Coronado Islands are good radar targets for position fixing.

RADIO: Communications to Agents in Ensenada through Manzanillo Radio XFM and then Ensenada Radio XFE on HF.

Petroleos Mexicano (PEMEX), the Charterers, have their own station at Rosarito which supplies berthing instructions, etc. Station XIB83 working on 8690 MHz and 500 kHz. They also keep a listening watch on VHF Channel 9.

OPERATIONS: Local flag tonnage gets preference for the berths. This should have little effect with the single point mooring coming into operation shortly, giving 2 product berths.

The pipe-line is handled by ship's staff. All ullaging etc. done by ship's staff. A comparison between ship's figures, B/Ladings and shore figure is made on completion of discharge, before clearance is issued by the Boarding Officer.

No difficulty was encountered in maintaining the requested back pressure of 6 kg. at the manifold using 1/2 pumps. Liaison with the shore is excellent, by Boarding Officer on VHF with hourly checks.

SUPPLIES: No bunkers or fresh water. Provisions can be obtained in small quantities but are difficult to get on board and expensive. Medical assistance can be obtained ashore, but again with the difficulty in getting ashore it would be only in a serious case.

AGENT: Only communication was on the second day by VHF but did not attend on board ship. This may be explained by the fact that due to the heavy swell it is difficult and sometimes dangerous to clear the breakwater by boat. This is endorsed wholeheartedly by Officers joining the vessel. However they were well attended by the Agent ashore. It is recommended that this port is not used for reliefs unless absolutely necessary. There was no shore leave allowed by me due to this.

SALINA CRUZ: 16.10 N. 95.12 W. (See Plan Book)

RESTRICTIONS: *Access Channel:* Length 760 m., depth 10 m.
BERTHING: Length of quays 915 m., depth alongside 9.5 m.
Repair Quay: Length 382 m., depth 1.5 m. – 4.0 m.
Storage Areas: Warehouses 20,160 sq.m.
Also see "Shipmaster's Report".
MEDICAL: Hospital available.
FRESH WATER: Available.
FUEL: Available.
TANKERS: Tankers of 250,000 d.w.t. will berth at Offshore Terminal in the near future.
REPAIRS: Workshops for mechanical, electronic and electrical repairs.
DRY DOCKS: Drydock for vessels up to 21,000 tons displacement (25 ft. draft) and syncro-lift for vessels up to 8,000 tons displacement. Slipway for small craft.

SHIPMASTER'S REPORT: May 1982.
Berth: New container terminal in Outer Harbour. Length 240 m., depth alongside by sounding 8.8 m. – 12.0 m.
Pilotage: Pilot boards 1 mile South of harbour entrance.
Wharf: Concrete structure on concrete piles, protected by rubber fenders.
Chart: B.A. Chart No. 659.
Tugs: 2 tugs available.
Berthing: To prevent damage to vessel and gantry crane it should be ascertained that the gantry crane has been moved to the North end of the wharf before berthing.

SHIPMASTER'S REPORT: October 1983.
Documents:
Last Port Clearance
12 Crew Lists
3 Vaccination Lists
6 Ship's Store Lists
6 Crew Manifest Declarations
The local Authorities will board vessel on arrival.
Approaches: The Lighthouse of Salina Crûz and the Pemex tanks are easily seen when Bahia de Bamba is abeam to port at a distance of 7 miles.
Pilotage: Pilot will board vessel at position Lat. 16° 08.15′ N., Long. 95° 11.4′ W., if berthing on arrival.
Anchorages: A good holding anchorage at position: 1 mile E.N.E. of Buoy No. 3.
Radio: All telegrams via Mazatlan Radio/XFM or MW Salina Cruz/XFQ.
VHF: VHF Channel 9 is for Pilots/Pemex Operations. VHF Channel 13 is working channel and Channel 16 is for the Agent.
Tugs: Two tugs are used for mooring. One of 4,500 h.p. and the second of 2,600 h.p.

On completion of mooring, the second tug will make fast astern in order to hold vessel away from SBM at all times. It is wise to have engines stand-by on 10 minutes' notice in case of sudden Southern winds and to prevent any damage to the SBM.

Berthing: There are 3 SBMs (Monobuoys). No. 1 has 12 fathoms, No. 2 has 15 fathoms and No. 3 has 20 fathoms depth.
Loading: Two lines of 16 in. each which are connected with the main line of 36 in. to the shore.

Though "Pemex" (suppliers) tanks are placed high above sea level in the mountains, Pemex use 6 loading pumps with a rate of about 12,000 bbls./hr. each.

Cargo is Mexican Blend Crude Oil. API 33.5, temperature 90°F (approx.).

Ballast: There are no facilities for discharging dirty ballast to shore tanks or pits. Vessels must arrive with clean ballast.
Medical: Local Hospital and a Navy Doctor from Pemex available.
Density: 1025.
Fresh Water: Available by barge.
Fuel: Can be obtained via Pemex.
Consuls: None.
Repairs: Available for vessels up to 13,000 gross tons.
Surveyors: Lloyd's Surveyor can be reached via the local Agency.
Repatriation: Repatriation can be arranged. One must take the bus to the "Capital" of the State (two hours' ride). Thence to Mexico City by plane.

Time: GMT minus 6 hours (Standard Time).
Shore Leave: Pemex has a launch which will serve the vessel at certain hours. Agent to be notified of vessel's requirements. No shore-pass requested.
Developments: Port of Salina Cruz is now under construction. Calculated to be completed in three years' time.
General: N.N.E. winds are standard at Salina Cruz, rising up to 40 knots in Summer. Other seasons up to Force 5-6 (Beaufort).

Fresh provisions available at a very fair price.

The language is Castellanos (Spanish). Only "Pemex" representatives speak reasonable English.

AUTHORITY: Delegacion Coordinadora, Av. Tampico No. 39-B Altos. *Tel:* 4-04-36, 4-04-46.

Empresa de Servicios Portuarios, Recinto Portuario. *Tel:* 4-01-01 and 4-00-44.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico, 11 D.F. *Tel:* 553-87-11.

SAN CARLOS: 24.47 N. 112.08 W. (See Plan Book)

PORT LIMITS: The limit of the port is up to parallel 24° 39′ 41.5″ N. which passes through the position of the East Buoy of the channel entrance on Mexican Chart F.H.614.
DOCUMENTS:
Port Captaincy:
Clearance from Last port.
Crew List.
List of Passengers.
Voyage memorandum including dates and ports visited during the previous 3 months.
Port Operations:
Stowage plan.
Certificate of cargo handling equipment on board.
List of pecularities of the vessel.
Health:
List of Vaccination Certificates of the crew.
List of Vaccination Certificates of passengers for the port.
Derat or Exemption Certificate.
Immigration:
Visaed crew list.
List of passengers for the port, also visaed.
Maritime Customs: Vessels without cargo, and arriving from abroad:
Declaration of arrival in Ballast.
Vessels coming from abroad with cargo for the port:
General Manifest for the port.
List of passengers for the port.
List of explosives, corrosives, flammables for the port, visaed.
Vessels coming from a Mexican port to load:
Customs Clearance.
Vessels coming from a Mexican port to unload:
Customs Clearance.
Cargo Manifest, visaed.
List of passengers for the port.
List of explosives, corrosives, flammables for the port.
Inspection of Animal Health:
List of meats (tinned or fresh or refrigerated or in deep freeze).
Vessels bringing animals to the port:
Veterinary Health Certificate.
Transport Permit.
List of Meats (See above).
Inspection of Vegetable Health:
When products are not brought for discharge:
Derat Certificate or Exemption.
When products brought for discharge:
Derat Certificate or Exemption.
Vegetable Health Certificate.
Importation Permit from the Secretariat of Agriculture and Cattle Breeding of Mexico.
PILOTAGE: The Port Captaincy has VHF Channel 16 for receiving ETAs. The Pilot comes on board vessels by motor launch from San Carlos 2 miles from the entrance to the channel.
ANCHORAGES: Any location between meridians 112° 05.0′ W. and 112° 03′ W. and parallels 24° 38.5′ N. and 24° 37.5′ N. Depths approximately 105 ft., sandy bottom.
RESTRICTIONS: With 26 ft. draft, vessels may navigate the Channel between Buoys "C" and "D" to "5" and "8". With a tidal rise of 4 ft., vessels enter and leave with a draft of 30 ft. at high tide.
MAX. SIZE: LOA 600 ft., beam 100 ft. and draft 30 ft.
HEALTH: When coming from abroad, hoist the yellow flag. Inspection is effected when the vessel is berthed or at the Inner Anchorage. If the vessel is coming from another Mexican port, the Health Authority's visit is not necessary.
TUGS: None available.
RADIO: La Paz Coastal Radio: Call sign "XFK".
VHF: Port Captaincy on VHF Channel 16, operates between 0800 and 1800 hrs.
RADAR: This service does not exist.
BERTHING: The "L" shaped quay is made of concrete and has 102 m. of berthing length. There are two "Dukes of Alba" making up a length with the quay for berthing of 204 m. Also there are 2 mooring buoys, one at each end of the berth. The minimum depth at LW is 37 ft. in the berthing area. Loading and discharging is effected using the vessel's own gear. It is possible to work in 2 or 4 gangs, according to the type of vessel and cargo.
CRANES: None.
BULK CARGO FACILITIES: On the quay there are installations of "CONASUPO" with a tower for shipment of grain, located in the angle of the "L". The grain generally shipped is wheat at the rate of 200 t.p.h. The height of the end of the grain output tube above sea level at full tide is 12 m.
SPECIALISED CARGO HANDLING FACILITIES: Vessels berth at the same quay as above with ammonia, unloading by means of installations located in the angle of the "L". These installations are owned by Fertimex.
BRIDGES: None.
STEVEDORES: Vessel's Agent submits a request 24 hours in advance for stevedoring services through the Superintendent of the Port Operations. Three products are mainly handled in the port: cotton at a rate of 90 bales per hr. gang. Bulk wheat at a rate of 200 t.p.h., bagged at the rate of 25 t.p.h. Fertilisers in bags at a rate of 25 t.p.h. Since the mechanical equipment on shore is sufficient for 2 gangs in the case of cotton, stevedores are requested for this number of gangs. As far as wheat is concerned, the loading rate drops to 80 t.p.h. when the warehouse has little wheat in it.

Stevedores work from 0800 hrs. to 0200 hrs. of the following day i.e. they work 18 hours in 24 hours.
MEDICAL: There is a civil hospital in Ciudad Constitucion 45 minutes away from San Carlos. There is a telephone service available for calling ambulances. There are 6 doctors in the port.
TANKERS: No facilities.
DENSITY: 1023.
FRESH WATER: This is supplied when the vessel is berthed. There are various 2 in. hydrants. The rate of supply is 10 t.p.h., and the approximate cost is 6.90 Mexican Pesos per ton.
FUEL: Moderate quantities of diesel oil can be supplied, and it is brought by road tanker from La Paz, the vehicles themselves pumping supplies to the vessel.
CONSULS: There are no consuls in the port.
REPAIRS: There are workshops at Ciudad Constitucion 45 minutes away by road.
DRY DOCKS: None.
GANGWAY/DECK WATCHMEN: This service does not exist.
HATCHES: Hatches are opened and closed by the stevedores.
SURVEYORS: None.
CUSTOMS ALLOWANCES: Tobacco, wine and spirits are placed under seal.
CARGO GEAR: For loading and discharge, ships' gear is used. There are no cranes in the port.
REPATRIATION: There are Immigration Authorities in the port. There are no hotels, however, there are several in Ciudad Constitucion and in La Paz. La Paz, is the capital of the State of Southern Lower California, and is approx. 3 hours away by road.
AIRPORT: None in the port. Airport at La Paz where there is an international airport called General Marquez de Leon.
TIME: GMT minus 7 hours. There are no seasonal time changes.
HOLIDAYS: 1st January, 5th February, 21st March, 1st May, 16th September, 20th November, 25th December, and 1st December (every 6 years). These dates are all obligatory.
POLICE/AMBULANCE/FIRE: In the port there are Municipal and Prison Police, Tel: 25. Ambulance and fire fighting services come from Ciudad Constitucion.
TELEPHONES: No service for installing phones on board vessels, but in the port there is a telephone service for communications with any part of the world.
SERVICES: None available.
SHORE LEAVE: No restrictions.
IDENTIFICATION: Seaman's book is sufficient.
REGULATIONS: No naked lights when there is cotton in the port or ammonia is being discharged.
DELAYS: As there is only one berth, there are times when the berth is occupied, but this does not occur often. Berthing is done in shifts.
DEVELOPMENTS: At the moment, there is no programme.
GENERAL: *Post Office:* At the moment, there is no Post Office in San Carlos.
Telegraph Office: There is a telegraph office but the service is not for maritime traffic. For such purpose, vessels must send their ETA via La Paz Coastal Radio Station.

SHIPMASTER'S REPORT: 1976.
Documents:
Visaed Crew List by Mexican Consul and 9 copies.
Visaed Cargo Manifest from each loading port and 4 copies.
Derat Exemption Certificate.
Valid Smallpox Certificates for all on board.
Passport or Seamen's Book for all on board.
Clearance from last port of call.
Approaches: A very strong current was experienced running from S.E.-N.W. when entering Bahia Magdalena at Pta. Redondo. Caution should be exercised making this approach, because currents can be strong and unpredictable in this area.
Pilotage: Compulsory. Pilot boards at Lat. 24° 39′ N., Long. 112° 05′ W. from small boat with outboard engine.

Anchorage is also good in this position should it be necessary to await Pilot or berth. The 2 buoys marking the entrance make good radar targets and are distinctive.
Restrictions: Channel must be navigated at suitable time of tide giving careful consideration to vessel's draft, in order to clear numerous shallow patches. Max. draft to date of vessel navigating channel was 30 ft. 4 in. on top of high water.
Radio: La Paz Radio (XFK) 500 kHz and 441 kHz. Working hours appear to be uncertain, but there is a working arrangement with Agent to transmit messages free of charge.
Charts: Chart used to navigate channel was Mexican No. FH. 614. Masters are strongly advised to obtain this chart.
Berthing: 1 pier 420 ft. long.

Fresh Water: Available at pier at 10 t.p.h.
Communications: Very poor. No telex, no telephone and no cable service. Telephone available at Villa Constitucion 57 km. away by paved highway. Plans are in force to introduce a telephone service in the fairly near future.
Consul: If consular advice is required it is best to contact the British Embassy in Mexico City. Tel: 5 11 48 80.
Laundry Service: None.
Ship Chandler: None. A pick-up wagon can be supplied by Agent to obtain essential stores from supermarket at Villa Constitucion.

AUTHORITY: Capitania de Puerto de San Carlos.

TAMPICO: 22.16 N. 97.47 W. (See Plan Book)

PORT LIMITS: Vessels in Mexican ports are considered to be arrived vessels as soon as permission to moor has been granted by the Port Authorities.

Permission to tie up will be granted on the quay or whilst in mid-stream, and occasionally during periods of very good weather a vessel is authorised to anchor in the port entrance.

DOCUMENTS:
1 Crew List visaed by Mexican Consul.
9 simple copies of Crew List.
1 Visaed Cargo Manifest from each loading port.
4 simple copies of Cargo Manifest.
1 Visaed Passenger List or visaed Statement to the effect of no passengers, and 5 simple copies.
2 copies of Store List.
2 copies of Personal Effects List.
Derat Exemption Certificate.
Passports or Seaman's Books of all crew.
Clearance from Last Port of Call.
3 copies of lists of packages containing explosives, flammable or corrosive materials.

PILOTAGE: Pilot ordered by Agent who requires 24 hours' notice of vessel's arrival. Pilots board vessels 2 miles off the breakwater. Vessels may anchor about 2 miles off the breakwater waiting for Pilot. Pilots have radio-telephone, frequency 2182 and VHF Channel 16.

ANCHORAGES: About 2 miles East of breakwater in 40-60 fathoms of water.

RESTRICTIONS: There are no restrictions for movements at night. The drafts of the vessels will be governed by the mooring zones in which they are working. The depths at these berths are as follows:

*Free Zone Quay	30 ft.
Minera Autlan Quay	32 ft.
Petroleos Mexicanos Quay	30 ft.
Mexican Gypsum Quay	26 ft.
Metals and Minerals Quay	29 ft.
Anahuac Cement Quay	23 ft.

The navigation channel to the Mexican Petroleum Maritime Terminal has a depth of 38 ft. and that to the Free Zone 31 ft.
*This depth is subject to constant dredger maintenance, the draft being reported weekly to the Ship Agents.

MAX. SIZE: The max. length is 656 ft. There are no restrictions for beam. The drafts will be those admissible in the corresponding berth used.

HEALTH: No Radio Pratique. Pratique granted after docking and presentation of documents to Port Authorities. In case of disease or fever on board, Master to give notice to Agent before arrival.

RADIO/VHF: Tampico has a coastal station with frequency 2182, as have the Port Captain, the Pilots' Office and Gulf Tugs' Office. All have the same frequency and VHF Channel 16.

TUGS: 3 tugs are available, intended solely for port manoeuvres, comprising *Guayalejo* 2,000 h.p., *Tamesi* 1,000 h.p., and *Panuco* 800 h.p. Also Petroleos Mexicanos have tugs whose power varies between 1,000 and 3,000 h.p.

BERTHING:

1 berth at the Minera Autlan quay where manganese is moved by moving belt at the rate of 1,200 t.p.h.

5 berths at the Pemex Quay, where oil and its derivates are moved at the rate of 600-800 t.p.h., by means of 4 in., 6 in., 8 in. and 10 in. pipes.

1 berth at the Mexican Gypsum quay where calcium sulphate is moved by moving belt at the rate of 500 t.p.h.

2 berths at the Metals and Minerals Quay, where bulk minerals are moved by 4 moving belts at the rate of 125 t.p.h. per belt.

1 berth at the Anahuac Cement quay, where bulk cement is moved by means of 10 in. pipes at the rate of 250 tons per pipe, there being 2 ducts.

7 berths at the Tampico Free Zone, where general cargo is moved at the rate of 20 t.p.h. per gang.

Berth	*Length*	*Berth*	*Length*
1	145 m.	5	145 m.
2	145 m.	6	145 m.
3	145 m.	7	180 m.
4	145 m.		

Depth alongside 10.5 m. Official fresh water draft 9.14 m.

All quays have lighting for night operation and telephone facilities.

CRANES: Heavy lift crane, capacity 300 tons.

STEVEDORES: No ETA advice necessary if Stowage Plans received in advance by Agent, otherwise ETA advice for gangs appreciated 48 hours prior to arrival. Stevedores' general cargo discharging and loading rate about 20 t.p.h. per gang. Mineral loading at Metals Pier about 125 t.p.h. per belt (2 conveyor belts available to service both berths).

MEDICAL: Hospital facilities available. No advance notice required.

TANKERS: See "Berthing". Dirty ballast is received ashore.

DENSITY: Average 1006.

FRESH WATER: Available on written request from ship's Agent. Drinking water delivered by pump at the rate of 12 cu.m. per hour.

FUEL: Available preferably at the Petroleos Mexicanos Quays, although with 1 week's advice prior to arrival this service can be provided at the public service quays.

CUSTOMS ALLOWANCES: No allowances to be taken ashore, but reasonable amounts of tobacco and spirits are allowed to be taken out of bond, but to be kept on board for use of crew and passengers only.

CONSULS: Belgium, Brazil, Great Britain, Peru, Germany, Netherlands, Norway, Sweden, Italy, Uruguay and Lebanon.

REPAIRS: Hull repairs can be effected, as can work on steering system, machinery, marine auxiliaries and other equipment of less importance.

There are specialist workshops attached to the dock.

DRY DOCKS: Length 250 m., depth 9.5 m., width 37 m. Max. size 55,000 d.w.t.

GANGWAY/DECK WATCHMEN: No watchmen necessary. Customs guard keeps watch at gangway while vessel alongside.

REPATRIATION: In the port there is an office of the Administrative Secretariat, where the repatriation of any crew member can be negotiated. This negotiation will be for the account of the ship's Agent who is required to deposit a bond of $20,000 per person.

AIRPORT: At a distance of 10 km. from the port, there are regular flights to Monterrey, Nuevo Laredo, and Mexico City with connections in any direction.

TIME: GMT minus 6 hours.

HOLIDAYS: January 1st; February 5th; March 21st; May 1st; September 16th; November 20th; December 25th; December 1st (every 6 years).

FIRE/AMBULANCE/POLICE: Fire Department Tel. 2 12 22; Red Cross Tel. 2 13 33; Police Tel. 2 11 57; Police (Jail) Tel. 2 10 32.

DEVELOPMENTS: Constant programming for more space at wharves, sheds, warehouses, continuous dredging and increasing capacity of operational equipment.

SHIPMASTER'S REPORT: September 1980.

Pilotage & Radio: 2182 does not appear to be in use but 500 kHz and VHF are the popular mode, most Agencies having the latter.

Restrictions:

Minera Autlan Quay for manganese loading: 33 ft.
Muelles des Minerals (Metals & Minerals Quay): 30 ft.

Max. Size: All vessels in river berths moored starboard side to, head up, and if at Muelles des Minerals and over 500 ft. length, the vessel will have to drop down river stern first before turning aided by tugs.

Berthing: Muelles des Minerals: This open apron berth adjacent to the railway sidings at Colonia del Golfo is situated before the sharp bend leading to the main wharfage at Tampico and the bulk cement wharf by the entrance to the Canal Cortadura.

The method of loading is to wheel portable belts adjacent to the hatch in conjunction with another belt lifted aboard and a chute that is suspended from the vessel's gear and braced for direction by guys.

The mineral is dumped into the hopper at the lower end by bulldozer and it will depend upon the situation of the pile as to the speed that can be obtained. Thus if the cargo is in railway gondolas it will be grabbed out by rail cranes into trucks for transport to the apron where a pile is created for the 'dozers, a method which has several areas of slow working or waiting time.

Ideally the cargo has been stockpiled on the rear side of the quay from which it can be lifted directly by the 'dozers for dropping into the belt hoppers. It is this system that can achieve a good rate.

Fresh Water: Observed delivered by road tanker.

AUTHORITY: Delegacion Coordinadora, Edificio Secretaria de Marina, 1er, Piso, Zona Franca. *Tel:* 2-57-44 and 2-27-36.

Empresa de Servicios Portuarios, Madero y Alfaro. *Tel:* 2-20-28, 2-58-35 and 2-10-77. *Telex:* 01-447 Guatam Mex.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico 11, D.F. *Tel:* 553 8711.

TUXPAN: 20.57 N. 97.24 W.

SHIPMASTER'S REPORT: January 1982.

LOCATION: Tuxpan is situated on the North bank of the Rio Tuxpan. On the opposite side (the South bank) is situated part of Tuxpan called Santiago de la Pena.

The entrance of the Rio Tuxpan is situated at Lat. 20° 58.2′ N. Long. 97° 18.1′ W. Breakwaters on both sides of the river mouth. Approximately 100 m. and 120 m. seaward of the mole heads is a bar with quick changing depth over it. The bottom of the bar is sand, covered with a thin layer of mud. After a strong North wind the depth on the bar is one foot less than the day before. The permissible entering draft is 18 ft. – 20 ft. at HW and calm sea with nearly no swell. Occasionally vessels with 21 ft. draft can enter. Normally there is a low swell from the East all the year. After a strong North wind (Norte) you can expect a Northerly swell of 2 ft. – 4 ft. for 1 to 2 days. A dredger is working in the river entrance most of the time.

PORT LIMITS: One mile off all port installations and structures, including SBM and breakwaters.

PILOTAGE: Pilotage is compulsory. Pilot boards vessel approximately 2 miles to 2.5 miles East of entrance. Pilot boat: A white 20 ft. boat with white cabin and blue/white deck.

Equipped with VHF Channel 16. Pilot Office open from sunrise to sunset and listening on VHF Channel 16. Call: "Tuxpan Pilot".

The Pilot has to be ordered by Agent 24 hours in advance.

VHF:

Port Authorities	Channel 16
Pilot	Channel 16
Pemex	Channel 16
Tecomar (Agency)	Channel 68

DOCUMENTS:

1 original and 4 copies B/L's of all Tuxpan cargo.
12 Cargo Manifests.
1 Health Declaration.
8 Crew Lists.
8 Passenger Lists (even when none/nil – lists).
1 Vaccination List (smallpox only).
4 Store Lists.
2 Personal Effects Lists.
(No special forms required/IMO-Forms are sufficient).

Documents which have to be shown to Port Authorities:

Tonnage Certificate.
Ship's Register.
Derat Certificate.
Seaman's Books or Passports.

ANCHORAGES: East of breakwaters from 2 miles – 4 miles on a breadth of 1 mile North and 1 mile South of this line.

Caution: Many submerged gas and oil-pipes in the vicinity of entrance to Rio Tuxpan.

Best anchorage: North mole head bearing 270° (T) and 2.8 miles off. Ground: Muddy sand, good holding.

RESTRICTIONS: Entering port and river only in daytime. Departing vessels have to pass the bar at river entrance before sunset.

MAX. SIZE: Length of ships handled is 190 m., always in accordance with the draft.

HEALTH: There is a hospital at Tuxpan. Surgeons and Dentists are available. No vaccinations can be done.

Meat and vegetable rooms are sealed and opened once a day to take provisions. Garbage has to be kept on board in watertight and covered containers.

RADIO: No radio station at Tuxpan. Closest Tampico or Vera Cruz. Good communication between Tuxpan and these radio stations.

There is no repair of radars, VHF or other electric and electronic equipment possible. If required, technicians and spare parts have to be ordered from Tampico.

TUGS: 2 privately owned tugs are available. One of 500 h.p. and one of 600 h.p. Tugs to be ordered by Agent in advance. The tugs are very helpful when turning in the river.

RIVER: Ground: Mud. Density of water: Approximately 1005.

The current in the river is nearly always outwards and is from 0.5 knots in the dry season up to 6.5 knots in rainy season.

At Tuxpan there is a stationary bridge, which can only be passed by very small ships.

BERTHING: (Places for dry cargoes):

	Length (m.)	*Depth Alongside* (ft.)
Muelle Fiscal	152	23
(Extension under construction)		
Grain Dock	70	22
Ro/Ro Berth	—	18
Berth for the Dredger (North bank)	60	18
Berth for Fishing Boats	80	15

CARGO HANDLING FACILITIES: No shore cranes, no forklifts, 2 small mobile cranes of unknown capacity; 2 special mobile cranes on container yard (These 2 cranes cannot be rented.)

Four mobile grain elevators.

Several oil companies have own small berthing places and handle their cargoes themselves.

STEVEDORES: Agent has to order gangs from Port Operations 24 hours in advance. Approximately 120 men available.

Working Hours: 0800 – 1600 hrs. = 1st shift
1600 – 2400 hrs. = 2nd shift
0000 – 0800 hrs. = 3rd shift

Saturday and Sunday also, but all at overtime rates.

TANKERS: Tankers up to 6,000 tons gross can be taken inside the river to the oil companies' small jetties.

Offshore there are 2 SBMs in position:
No. 2 = Lat. 21° 02.58′ N., Long. 97° 17.43′ W. and
No. 1 = 135° – 1.9 miles from No. 2 SBM.

Tankers with 55 ft. draft acceptable. These SBMs are mainly used by Pemex. 2 additional buoys are to be installed.

FRESH WATER: No potable water available. Small quantities of wash-water can be delivered by trucks.

FUEL: Small quantities of clean diesel oil can be delivered by trucks. No marine diesel oil or heavy fuel oil available.

DRY DOCKS: None.

SHIPYARD: For fishing boats, some slipways available.

REPAIRS: Minor repairs can be done by the fishing boat shipyards.

REPATRIATION: Repatriation is possible via Tajin Airport to Mexico City. Tajin Airport is approximately 30 miles from Tuxpan and can be reached by a good road.

At Tuxpan on the left (North) riverbank is a small Airport (Fausto Vega Santander) only for VFR flights. Runway 1,600 m. No commercial flights.

HOLIDAYS: 1st January, 1st May, 5th May, 16th September, 25th December.

TIME: GMT minus 6 hours throughout the year.

TELEPHONE: No telephone connections at the piers.

Useful telephone numbers: Police, 40252; Port Captain, 40020; Pilot Office, 40043; Custom's Office, 40055.

Office Hours: Monday – Friday 0800 – 1500 hrs.

Some offices are also open on Saturday from 0800 – 1300 hrs.

SHORE LEAVE: Allowed without restrictions. No special identification cards required.

PROVISIONS: No ship chandlers at Tuxpan. Small quantities of vegetables and fish can be bought at the local market. For this Agent orders a permission from Customs Office.

If necessary ship's stores can be ordered within 24 hours from Tampico.

VERA CRUZ: 19.12 N. 96.08 W. (See Plan Book)

PORT LIMITS: Area bounded by the reef lighthouses outside the breakwater.

DOCUMENTS: See "Coatzacoalcos".

PILOTAGE: Compulsory, advise Agent 24 hours before arrival giving name, flag, ETA and draft.

The Port Captain is to be given a minimum of 2 hours' notice by the Agent. This to be done between 0800 – 1800 hrs. (Pilot office hours). Orders for Pilots between 1800 – 0800 hrs. to be made between 0800 – 1800 hrs.

The Pilot normally boards within the port limits, but if his services are requested outside such limits the Pilot will proceed to the location, i.e. the anchorage.

The pilot launch leaves from a "T" shaped pier when expected vessel is sighted. The launch has a black hull with white superstructure and false funnel painted black.

ANCHORAGES: In good weather, vessels may anchor in the outer area off the port, in the case of bad weather, to the South of the Isle of Sacrifices (Isla de Sacrificios). If the vessel prefers to anchor within the port limits, it must request the services of the Pilot and on anchoring for its own account within this sector must pay the fees due to the pilotage service.

RESTRICTIONS: In normal weather conditions there are no restrictions on entry and departure, the sole consideration being the draft of the vessel, since if this exceeds 29 ft. the time of the tide must be taken into consideration, and also after a strong North wind, a vessel drawing more than 24 ft. must wait for the tide. Depth in access channel 10 m. – 12 m.

MAX. SIZE: Length 200 m., at Berth nos. 4 and 6 or the oil terminal.

HEALTH: The International Health Office gives a 24 hour service for the arrival and departure of vessels. To obtain Free Pratique on arrival of vessels there is a medical inspection, with submission of the Maritime Health Declaration, signed by the Master, and examination of documents of Derat Certificate, certificates of vaccination of the crew and passengers; cholera, yellow fever, (dependent upon the location from which the ship has come); examination of crew members or passengers who might be declared as suffering from contagious illnesses. With these formalities fulfilled, Free Pratique is granted. Free Pratique can be granted by radio, provided it is considered that the vessel's arrival will not give rise to the introduction or propagation of illnesses covered by the regulations, and that also the following requirements are fulfilled:

1. Exercise of greater epidemiological vigilance in respect of illnesses covered by International Health Regulations.

2. The Master's radiogram must be presented to the International Health Delegation 8 hours in advance and must invariably fulfil all the stipulations as set out in the attached form.

3. Without prejudice to the foregoing, the Health Doctor or whomsoever he may designate, and where it is considered appropriate, shall go on board for the purpose of receiving the Maritime Health Declaration so that enquiries and verifications as may be considered necessary may be carried out.

Once the vessel has called at a national port, in subsequent national ports the requirements for obtaining Free Pratique will not be required, provided there does not exist on board any alteration in the health conditions as established in the Maritime Health Declaration.

Medical service to crew members and passengers on board foreign flag vessels is provided by doctors and private hospital institutions, through the intermediary of the consignee ship's Agent.

For possible handling of disease covered by the Health Regulations (cholera, yellow fever, bubonic plague), there are isolation wards in the Official Hospitals "Aquiles Serdan" and "Regional de Veracruz".

The Office of International Health has immunisation services required for the diseases covered by the Regulation, which are certified on special international forms, with any cost, to crew members and passengers.

RADIO: Radio station Vera Cruz Radio, call sign XFU. Transmits on 420 and 451 kHz and listens on 425, 454, 463 and 480 kHz. Also VHF Channels 12, 16, 26 and 27.

TUGS: 4 tugs available, 810, 900, 1,000 and 1,200 h.p.; tugs' lines used at no extra charge. Tugs join vessels inside breakwater.

BERTHING:

Berth	*Capacity*	*Length* (m.)	*Depth* (m.)
No. 1	2 vessels	384.50	10
No. 2	2 vessels	431.00	9 to 10
No. 4	5 vessels	795.20	9 to 10
No. 6	5 vessels	725.00	9 to 11
No. 7	5 vessels	548.00	6 to 8
Grain Quay	1 vessel	250.00	9 to 10
Container Quay	1 vessel	170.00	10
Pemex	2 vessels	958.00	10

STEVEDORES: *Handling rates:* General cargo, 12 tons/hook hour. Bulk cargo, 30 tons/hook hour.

BULK HANDLING FACILITIES: Handling of grain at a mechanised plant, with storage capacity of 25,000 tons and an average discharge rate of 250 t.p.h. and loading rate of 400 t.p.h.

Handling of bulk sugar by mechanised installations, with storage capacity of 40,000 tons and an average loading rate of 800 t.p.h.

Handling of aluminium, coal brickettes, cement, latex, crystallised honey, chemical products, vegetable oils and crude oil.

MEDICAL: Doctors, dentists and hospital facilities available (see "Health").

TANKERS: Petroleos Mexicanos berth located in Northern part of port. Max. draft 28 ft. Berthing for 2 vessels of 170 m. LOA. Berth provides 5×8 in. lines for discharge of refined product and 2×12 in. lines for fuel oil.

DENSITY: 1025.

FRESH WATER/FUEL: Available.

Berth	*Location*	*Water connection*	*Diesel connection*
Pier No. 1	North	4 at 2.5 in.	
	Head		
	South	3 at 2.5 in.	
Pier No. 2	North	3 at 2.5 in.	3 at 6 in.
	Head	2 at 2.5 in.	1 at 6 in.
	South	3 at 2.5 in.	3 at 6 in.
Pier No. 4	North	7 at 2.5 in.	2 at 6 in.
	Head	2 at 2.5 in.	3 at 6 in.
	South	8 at 2.5 in.	4 at 6 in.
Pier No. 6	North	3 at 2.5 in.	
	Head	2 at 2.5 in.	
	South	6 at 2.5 in.	5 at 6in.
Coasting	North	6 at 2.5 in.	
	Head	1 at 2.5 in.	
	South	5 at 2.5 in.	
Marginal	Single	4 at 2.0 in.	9 at 3 in. 1 at 2 in.
Pemex.	Single	7 at 2.5 in. APL	6 at 8 in. refined
		1 at 4.0 in. (C/I) 2 at 3.0 in. (C/I) 4 at 2.5 in. (C/I)	10 at 12 in. fuel-oil

CONSULS:

Belgium
Brazil
Costa Rica
Cuba
Denmark
Dominican Republic
El Salvador
Finland
France
Guatemala
Great Britain
Honduras
Netherlands
Panama
Spain
Sweden
Switzerland
U.S.A.
West Germany

REPAIRS: Hull and machinery repairs can be effected by "Astilleros de Veracruz" (Vera Cruz Shipyard Company).

DRY DOCKS: "Astilleros de Veracruz S.A." has 4 docks, 2 floating and 2 dry docks. The largest of them is Floating Dock No. 4 with the following characteristics:

Length on stocks	169.210 m.
Internal useful beam	30.400 m.
Height of keel stocks	1.400 m.
Max. draft on keel stocks	8.200 m.
Lifting capacity	30,000 d.w.t.

Dock No. 2: with capacity for vessels up to 10,000 tons

Useful length	154.000 m.
Useful beam	19.400 m.
Draft	5.180 m.

Served by a 45 ton capacity crane

Floating Dock No. 3: with 3,000 ton capacity lifting capacity

Useful length	25.900 m.
Useful beam	13.550 m.
Draft	5.800 m.

Served by 2 cranes of 10 ton capacity each.

Dry Dock No. 1

Length	45.720 m.
Useful beam	7.920 m.
Draft	2.130 m.

SURVEYORS: Lloyd's, Norske Veritas and Germanischer Lloyd.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: Mechanical hatches usually opened by crew, otherwise by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per man and will attend as necessary for further issues.

CARGO GEAR: Piers 1 and 2, 4×20 tons, 6×10 ton, 3×5 ton and 10×4 ton mobile cranes. Various cranes at piers 4 and 6. 2 floating cranes available max. lift 46 tons.

REPATRIATION: Possible, arranged by Agent.

AIRPORT: 8 km. from Vera Cruz, flights daily to Mexico City.

TIME: GMT minus 6 hours all year round.

HOLIDAYS: During the year the following holidays are observed: 1st January, 5th February, 21st March, 1st May, 5th May, 16th September, 12th October, 20th November and 25th December.

GENERAL:

Government Secretariat – Local Administration Office

In accordance with the stipulations of Article 75 of the General Local Administration Law, vigilance of foreign crew members in vessels of any nationality tied up in national ports, together with visits or stays by the said crew members will be subject to the following requirements:

I. Heads of Local Government will designate accordingly personnel who will carry out vigilance of the vessel, in accordance with the provisions of Section II of Article 29.

II. Crew members may visit ports during the stay of the vessel, provided they deposit at the Local Administration Office their identity documents which for such purpose may be issued to them and their passports and other documents, all of which will be returned to them on re-embarkation.

III. Shipping companies, their Agents or consignee firms, for all legal purposes shall be responsible for the complete embarkation of crew members and for the costs involved in repatriating any who may remain behind after the vessel sails. When a crew member wishes to stay in the country, he must obtain documentation in compliance with one of the categories as set out in the appropriate Law and Regulations.

POLICE/FIRE/AMBULANCE: Police – 2.28.23, Fire Brigade – 2.25.00, Red Cross – 2.01.40.

TELEPHONES: Available on most piers but not on vessels.

SERVICES: Provisions, laundries, and dunnage available. Garbage must be removed every 48 hours.

SHORE LEAVE: Possible.

DEVELOPMENTS: A new petroleum quay is to be constructed to take 2 tankers of 40,000 tons.

A transtainer, portainer crane and other equipment will be acquired in the near future.

SHIPMASTER'S REPORT:

Documents:

1 Visaed and 9 Plain Spanish Crew Lists.
1 Visaed and 5 Plain Passenger Lists.
1 Visaed and 2 Plain Spanish Stores Lists.
2 Crew Customs Declarations.
5 Cargo Manifests.
1 Arrival form.

The Customs require a complete list of all shop goods priced in U.S. Dollars, failure to produce this will cause confiscation and $10,000 fine. The Customs thoroughly check bond and beer locker and seal same. All storerooms are also checked.

The Agricultural Inspector insists that all dry stores are fumigated and kept under seal for 24 hours. All refrigerated stores – except U.S.A. meat is sealed up.

Pilotage: Pilot boards 1 mile W.N.W. of Angeguda de Adentro Light beacon from black boat flying pilot flag.

Tugs: 2 tugs available for berthing.

Restrictions: Port open day and night. Prevailing Northerly winds are sometimes too strong to allow ship's movement in harbour.

Health: Health authorities board after berthing.

Radio: ETA to be sent 48 hours in advance via XFB Cuidad de Carmen. Agent orders Pilot.

Fuel: Bunker C and Diesel are available. A mixing machine is being installed to supply intermediate. Bunkers are supplied from most quays and are expensive for foreign ships.

Consul: There is a British Consul.

Repairs: There are 3 drydocks and all repairs can be done.

Surveyors: There are Lloyd's and N.B. Surveyors available.

Airport: The airport is 6 km. from Vera Cruz with twice daily flights to Mexico City.

AUTHORITY: Delagacion Coordinadora, Edificio Oficinas Ligadas al Puerto, Plaza de la Republica No. 210, 5th floor. *Tel:* 2–13–19 and 2–30–40.

Empresa de Servicios Portuarios, Plaza de la Republica No. 210. *Tel:* 2–92–22, 2–40–22 and 2–74–11.

Comision Nacional Coordinadora de Puertos, Cuernavaca No. 5, Mexico, 11 D.F. *Tel:* 553 87 11

NOTES

Please also advise Shipping Guides Ltd.

Federated States of Micronesia

TOMIL HARBOUR, Yap: 09.31 N. 138.10 E.

PORT LIMITS: Vessel is considered an "Arrived Ship" on reaching buoy No. 1. Laytime commences at this time.
DOCUMENTS: All necessary documents required by the Clearance Department shall be prepared before arrival. (e.g. Crew Lists, Passenger Lists, Customs, Health Documents, Manifests, Bills of Lading, Ship's Papers, Ship's Certificates etc.)
PILOTAGE: All Pilotage Services must be requested by the Master or his Agent on their behalf 24 hours prior to vessel's arrival.

ETA messages for Pilotage are best routed through Yap Radio Station on VHF Channel 16.
ANCHORAGES: Inside Tomil Harbour, depth is 84 ft. MLW. Distance from dock, 3,000 ft.
RESTRICTIONS: There is no restriction in accordance with the state of tide and draft. However, restriction imposed upon vessel entry after 1800 hrs. and before 0600 hrs. because the channel is marked by an unlit buoy and can. Except in case of emergency arrival/departure will be limited to daylight hours.
MAX. SIZE: The length of the channel is 9,600 ft., breadth is 300 ft. Max. size for any vessel entering the port and for tankers is 6,000 g.r.t. Depth in the channel 78 ft.
HEALTH: Master of vessel or designated Agent should advise Port Authority 24 hours in advance of her arrival of any communicable diseases, sickness or injury found among its crew even if the vessel's last port of call was in the Federated States of Micronesia.
RADIO: Vessel should route her ETA via Yap Radio by using 5.205 kHz or use VHF Radio Channel 22A or 16.

Port Authority does not have VHF Radio Communication facilities in operation, therefore please use above frequencies to contact Port Authority with vessel's ETA.

Also see "Pilotage".
VHF: Yap Radio – Channels 16 and 22A.
RADAR: No port radar.
TUGS: None.
BERTHING: Dock is 451 ft. long, depth is 78 ft. MLW, max. size permissible at LW (salt water) is 6,000 gross tons.
CRANES: None. Discharge is by ship's gear.
BRIDGES: None.
STEVEDORES: ETA advices required 24 hours before arrival in order to arrange Terminal personnel.

Terminal Operator: Waab Trans Co. Inc., P.O.Box 177, Yap, Western Caroline Islands 96943.
MEDICAL: Advise Agent prior to arrival if medical assistance required.
TANKERS: Load/discharge lines are 2 in. diameter for Federated States of Micronesia registered vessels. Other vessels will require reducers.
DENSITY: Average 95% salt water, 5% fresh water.
FRESH WATER: Available on pier apron using fire hose connected to fire hydrant for drawing fresh water.
FUEL: Advance notice required through Agencies' Offices in order to arrange fueling with Mobil Oil Inc. Plant. Fuel line available at the dock.
CONSULS: No consuls available.
REPAIRS: Deck and engine repairs are possible upon request of the Ship's Master. Location for such repairs will be designated by the Sea Port Director.
DRY DOCKS: Not available.
SURVEYORS: None.
HATCHES: Normally opened/closed by combination of crew and stevedores.
CUSTOMS ALLOWANCES: Each crew member is permitted to hold out of Bond a maximum of 2 bottles of wine, 2 cartons of cigarettes, 12 cans of beer, etc.
CARGO GEAR: Discharge is by ship's own gear. Other relevant gear such as forklifts and trucks provided by the Terminal Operator (see "Stevedores").
REPATRIATION: Effecting crew changes will be arranged by the proper Agency Office.
AIRPORT: Distance from Sea Port to Airport is 2.5 miles, served by regular airline with 3 flights per week on Tuesdays, Thursdays and Saturdays.
TIME: GMT plus 10 hours. No alterations made throughout year.
HOLIDAYS: Cargo work can be arranged on holidays.
POLICE/AMBULANCE/FIRE: Police tel: 3333, Ambulance tel: 3444, Fire Department tel: 3222.
TELEPHONES: Placement available only for Yap State owned vessels. Telephone available at the dock terminal for other vessels.
SERVICES: Tank cleaning equipment, discharge of slops, compass adjustment, etc., are not available in this port.
SHORE LEAVE: Crew members are allowed ashore if no communicable disease found onboard.
IDENTIFICATION CARDS: Seamen's book is sufficient.
DELAYS: Usually depends on the quantity of cargo, especially bulk cargo.
GENERAL: *Garbage:* Disposal of garbage in port is strictly prohibited.
DEVELOPMENTS: There are expected draft increases. New facilities and installations are expected in the foreseeable future.
AUTHORITY: The Port Director – Tomil Harbour, Yap Transportation Division Office, P.O.Box 290, Yap, Western Caroline Islands, Federated States of Micronesia. *Tel:* 2178. *Cables:* Sto Yap. *Contact:* Frederick Figir, Port Director.

NOTES

Please also advise Shipping Guides Ltd.

Monaco

MONACO: 43.44 N. 07.26 E. (See Plan Book)

PORT LIMITS: The seaward boundaries of the port are materialised by the 2 breakwaters at the Eastern entrance.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists – 3 Landing Passenger Lists.
2 Store Lists.
1 Manifest (cargo).
1 Bill of Health.
Ship's Register.

PILOTAGE: ETA via Monaco Radio – Channels 16, 12, 23, 15, within range. Pilot boat is a small white tugboat with a black "P" painted on the hull. Meets vessels 1 mile radius from the harbour entrance.

Pilotage available: 15th June – 15th September (0800 hrs. – 2300 hrs.). 16th September – 14th June (0800 hrs. – 2000 hrs.).

ANCHORAGE: One half mile East of the Southern breakwater lighthouse. Depth at the anchorage 68 m.

MAX. SIZE: Max. length 130 m. Stern to the pier on the West side or alongside the North quay, only from October to March and with 8 days' notice. Max. draft allowed: West Pier 8 m; North Quay, 7 m.

HEALTH: Health Declaration must be handed to the Customs. If coming from neighbouring countries (France, Italy, Spain) not requested.

RADIO: Monaco Radio VHF Channel 16. Port operations Channel 12. Public telephone calls Channels 23 and 25.

RADAR: No port radar service.

TUGS: Pilot boat 96 h.p. available without notice. 1 tug boat 200 h.p. with notice and 1 tug boat 450 h.p. available with notice.

BERTHING: All 3 quays plus inner sides of the breakwaters and Western "T" pier are available for mooring yachts stern to. The port may be congested during the Summer season. The possibility remains of anchoring off the dock.

MEDICAL: There is a state hospital fully equipped for surgery, etc.

FRESH WATER: Can be supplied at all berths alongside the quay. If vessel on Roads, water may be provided by barge up to 500 tons per day, with one week notice. Tel. Cannes 39.36.12.

FUEL: There is a fuel berth in S.W. area of port for ships up to 80 ft. LOA. Bunkers are available on the quay by truck but no heavy fuel available.

CONSULS: Most countries are represented in Monaco.

CUSTOMS ALLOWANCES: Same as in French ports.

REPAIRS: Only for yachts.

DRY DOCKS: 1 slipway × 100 tons, 1 slipway × 40 tons, 1 crane × 10 tons.

REPATRIATION: Good railway connections.

AIRPORT: Nice – Cote d'Azur. Distance 25 km.

TIME: GMT plus 1 hour. May to September GMT plus 2 hours.

HOLIDAYS: New Year; National Holiday, (Jan. 27th); Easter Monday, (May 1st); All Saints' Day; His Serene Highness' birthday Nov. 19th. Harbour services work on Sundays and Holidays.

POLICE/FIRE/AMBULANCE: Maritime Police, Quai Antonie 1st Tel. 30.22.39; Ambulance/Police Secours Tel. 17; Fire brigade Tel. 18.

TELEPHONE: Available at all berths.

SERVICES: Engine repairs. Electronics. Maintenance for yachts. 220 volts available at all berths. TV aerial sockets at all berths free of charge.

SHORE LEAVE: Crew members allowed ashore.

DEVELOPMENTS: The new yacht harbour at Fontvieille (West of the old town of Monaco) is now open. It is a private harbour with about 100 berths for yachts up to 35 m. All berths are fitted with water and electricity. Port Office Telephone No. 50.80.99.

This new port provides very good shelter regardless of wind direction.

REGULATIONS: *Recommendations to Ship-Owners, Masters and Crew Members:* Ship-owners, Masters and Crew members are strongly requested not to dispose of hydrocarbon, household refuse and other rubbish into the Monaco harbour (i.e. cartons and mainly plastic containers).

Used motor oils and other petroleum residues must be transferred into tanks exclusively provided for this purpose at the beginning of the North and South jetties and on the landing stages facing the Rainier III swimming pool.

These tanks are signposted with panels bearing the words "Huiles Usees" (used oil) in red letters on a white background.

Household refuse and other rubbish is to be put into garbage containers located around the harbour throughout the year. Furthermore, during the Summer, special individual bags are made available free of charge to all in-coming vessels.

Those responsible for ships equipped with used water tanks or bilges are requested to empty these containers off the coasts of the Principality at a minimal distance of 6 miles.

Those whose ships are not equipped with these used water tanks are requested not to dispose of their used water during their stay in the Monaco harbour, and to use the sanitary installations and facilities made available to them within the harbour.

Offenders infringing the above provisions will be penalised in accordance with the stipulations of Law No. 954, dated April 19th, 1974, dealing with the fight against water and air pollution.

AUTHORITY: Service De La Marine, Avenue J. F. Kennedy, MC 98000 Monaco. *Tel:* (93) 30-76-87. *Contact:* Captain Gaston De Welle, Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Morocco

AGADIR: 30.25 N. 09.38 W. (See Plan Book)

DOCUMENTS:

Health Declaration.
4 Cargo Manifests.
6 Stores Lists.
6 Crew Lists.
6 Passenger Lists.

PILOTAGE: Compulsory. Pilot boards at port entrance. International code signals used. Pilot on VHF Channel 16, day and night.

ANCHORAGE: Good anchorage in open roadstead.

MAX. SIZE: Up to 29 ft. draft. Max. LOA 160 m., however vessel with LOA 190 m. has been accepted.

HEALTH: Pratique given immediately after berthing when port doctor boards.

TUGS: 3 tugs available, 1 × 350 h.p., 1 × 1,275 h.p., 1 × 1,500 h.p.

RADIO: Agadir Radio operates 24 hours a day.

BERTHING:

No. of Berths	*Length (m.)*	*Depth (m.)*	*Remarks*
4	150	9.0	—
1	110	7.0	Ro/Ro.
3	100	6.0	Oil tankers and butane carriers.
1	—	6.0	Used by Moroccan tankers only.
1	120	5.0	Equipped with fish pumps.

STEVEDORES:

Working Hours: 0700 – 1200 hrs., 1400 – 1800 hrs. , 2000 – 0600 hrs. (With 24 hours' notice of ETA).

New times to be introduced but date not fixed: 0700 – 1500 hrs. and 1500 – 2300 hrs.

CRANES: One Titan crane of 40 tons capacity.

MEDICAL: Doctor and hospital facilities available.

FRESH WATER: Available from pipe-line at berths.

FUEL: Fuel and gas oil available from pipe-lines at berths.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: Crew allowed normal daily consumption of tobacco, wine and spirits.

IDENTIFICATION CARDS: Required.

CONSULS:

	Tel.		*Tel.*
Belgium	217 00	Norway	238 40
France	228 29	Spain	221 26
Italy	226 66	U.K.	209 05 (Casablanca)

REPAIRS: Small machinery (up to 500 h.p.) and electronic repairs can be effected.

POLICE/FIRE/AMBULANCE:

	Tel.		*Tel.*
Police	19	Hospital	224 77
Fire/Ambulance	15	Port Police	223 49

HOLIDAYS: Fete du Trone, (Throne holiday); 3rd March; Fete du Travail (Labour Day); 1st May; Al Massira Al Khadra, 6th November; Fete de l'Independance (Independence Day) 18th November; Aid El-Fitr, (1st and 2nd Chaoual); 1st January; Aid Adha (10 et 11 Hija); Le Premier Moharrem (The first Moharrem) and Aid Maouloud Annabaoui (12 et 13 Rebia I).

Note: Chaoual, Hija and Rebia are months in the Muslim calendar.

The following days are movable feasts governed by the Arabian Calendar – 1/2 Choual, 10/11 Diahijja, 1 Moharram, 1/13 Rabia I.

Work may be arranged on all holidays.

SHORE LEAVE: Allowed.

DEVELOPMENTS: 2 quays under construction, length 375 m., depth 6.0 m.

SHIPMASTER'S REPORT: November 1979.

Documents:

3 Copies Crew's Personal Effects.
6 Crew Lists.
3 Stores Lists.
3 Vaccination Lists.

Anchorage: Vessel anchored 0.5 miles South of breakwater.

Pilotage: Compulsory. Pilot boards 0.5 miles S.W. of the outer buoy. 1 hour's notice required.

Restrictions: Vessel can enter and sail during hours of darkness and at any stage of the tide.

Max. Size: Max. LOA 600 ft. (approx.) and max. draft. 26 ft. (approx.). Size of vessel limited by the swinging room.

Radio: Agadir Radio.

VHF: Pilot and Port Authority on Channel 16.

Tugs: Two available.

Berthing: Vessel berthed at No. 8 berth on the South mole which is about 7 cables from the harbour entrance. Max. LOA approximately 600 ft. and max. draft approximately 26 ft. Least depth of water in channel from sea to berth is approximately 30 ft. The bottom at the berth is sand and mud and the density is 1025.

There are no special bulk handling facilities. There are 10 cranes with safe working load of 10 tonnes. Ro/Ro facilities available, no floating cranes. There is ample equipment for handling palletised cargoes also storage space for palletised and break bulk cargoes. Containers are handled by ship's gear and storage space for containers is limited.

Facilities: The following are available: Fresh water (poor quality), fresh provisions, small repairs, there is a small machine shop, airport, Lloyd's Surveyor and laundry service.

AUTHORITY: Ministry of Equipment, Agadir Port Directorate, Agadir, Morocco. *Contact:* M. Abdelali, Port Director.

CASABLANCA: 33.36 N. 07.37 W. (See Plan Book)

PORT LIMITS: Vessels considered as "arrived" when passing buoy CA 5 in position Lat. 33° 37′ 05″ N., Long. 7° 35′ 02″ W.

DOCUMENTS:

Certificate of Registration.
Cargo Manifests.
Crew Lists.
Passenger Lists.
Customs Declaration.
Bill of Health.
Ship's Entry Declaration.
International Tonnage Certificate.

PILOTAGE: Compulsory for all merchant vessels of 100 tons and over, in the area between the meridians 7° 37′ 10″ W. (the foot of Jetee Moulay Youssef) and 7° 33′ 50″ W. (Table d'Oukacha) and South of the parallel 33° 37′ 4″ N. Pilotage is available day and night. The Pilot meets vessel at the CA5 buoy.

A red flag displayed at the signal station by day indicates that the Pilot cannot come out, on account of the sea, but vessels may enter the port at their own risk, and the Pilot will await them under the shelter of Jetee Moulay Youssef. Should bad weather prevent the Pilot from coming out, a vessel should not attempt to enter the harbour at night. The Master may contact the Pilot station for port radar service by VHF Channel 12.

ANCHORAGES: The anchorage outside Casablanca Harbour is partially protected from winds between South and West but a Westerly swell finds its way into the bay. With a heavy Westerly or Northwesterly swell the anchorage becomes dangerous.

The holding ground in most places outside the harbour is poor, but a berth with good holding ground may be obtained in a depth of 13 fathoms North of Jetee Moulay Youssef. There are numerous anchorage berths in the harbour, some at mooring buoys, in depths up to 12.8 m. (42 ft.).

MAX. SIZE: Max. length permissible, about 884 ft.; max. breadth permissible, about 105 ft.; max. draft permissible, about 32 ft.; but normally 30 ft. for berthing alongside. Tankers: up to 34 ft. draft.

HEALTH: Masters must fill in the declaration of health and display the "Q" flag, to obtain Pratique. In the event of any suspected disease or fever on board, Masters have to warn their Agent before the ship's arrival.

RADIO: The name of radio station for ETA cables to Agents, receivers, etc., is Casablanca Radio.

TUGS: There are 6 tugs of 800 – 1,500 h.p. 3 of them are sea-going tugs fitted with modern salvage apparatus. Normally tugs join the vessel at port entrance. To call them, 4 long blasts and 1 short for 1 tug, 4 long blasts and 2 short for 2 tugs, etc. Ship's lines are mostly used.

BERTHING: To arrange berth, ETA message should be given 24 hours before the ship's arrival.

Mooring: When making fast to the jetty by the stern, the anchor should be let go at a sufficient distance from the jetty to allow for a good scope of hawsers.

Vessels are recommended to secure with special 10 in. coir hawser tailed with wire. It is recommended to moor head to the swell, but in bad weather a vessel should be ready to leave at short notice.

CRANES: Floating crane, 45 tonnes capacity.

CARGO HANDLING: Phosphate loading: up to 5,000 t.p.h. Depth alongside 32 ft. to 26 ft.

Grain Handling: discharging 800 t.p.h., loading 400 t.p.h. Depth at silo berths 30 ft.

Containers: straddle carrier for handling up to 20 ft. containers.

Roll-on/roll-off: three berths for Ro/Ro vessels, depth 30 ft.

STEVEDORES: There are 13 stevedoring companies. Normal working days are in two shifts (from 0700 to 1500 hrs. and 1500 to 2300 hrs.). Ship's Agents arrange gangs in connection with stevedores. Two daily orders (at 1100 hrs. and 1600 hrs.) are made to fix the number of gangs.

MEDICAL: It is necessary for Agent to receive advance notice of required medical attention. Hospital facilities available.

TANKERS: There are 4 tanker berths, *(a)* one for Import and Export of white products and max. permitted draft 34 ft. (Berth P3). *(b)* three berths for Import and Export of black products. These berths (No. 60, 61 and 62) are situated inside the harbour, vessel's draft should not exceed 30 ft. Security tug necessary when handling certain petroleum products.

FIRE PRECAUTIONS: Two firemen remain on board tankers while vessel berthed alongside. One fireman is required for other vessels carrying dangerous cargo.

FRESH WATER: Numerous feeders along berths. Also delivery by barges is possible.

FUEL: All grades available. Ex-wharf or by barge.

CONSULS: The following countries are represented by consuls in Casablanca:

Algeria
Argentina
Austria
Belgium
Brazil
Denmark
Finland
France
Germany
Great Britain
Greece
Haiti
Italy
Netherlands
Norway
Panama
Poland
Portugal
Spain
Sweden
U.S.A.
Yugoslavia

GANGWAY/DECK WATCHMEN: It is necessary to have watchmen on board. They are hired by the ship's Agent.

OPENING/CLOSING HATCHES: This work is normally carried out by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes are permitted for each crew member to be held out of bond.

IDENTIFICATION CARDS: Needed.

REPAIRS: Only small repairs and dry docking works are carried out.

DRY DOCKS: One large dry dock, 152 m. long and 22 m. wide (lifting power 10,000 tons). Three slips for ships up to 700 tons.

REPATRIATION: Facilities exist for effecting crew change and arranging any necessary repatriation.
AIRPORT: Distance from airport, 25 miles. International connections.
POLICE/AMBULANCE/FIRE: Police, 2210-74 or 19; Ambulance, 15; Fire, 15.
TELEPHONES: Only arrangements for placing telephones on board passenger ships are possible.
SHORE LEAVE: Crew members are allowed ashore.
AUTHORITY: Directeur du Port.
AGENT: Lasry Maroc, 30, Avenue de l'Armee Royale, Casablanca. Telex: 21949-21092. Tel: 2688-75, 2669-46. Cables: "Jolasry".

EL AAIUN (Laayoune): 27.04 N. 13.28 W.

LOCATION: Lighthouse at phosphate terminal in Lat. 27° 03′ 55″ N., Long. 13° 27′ 45″ W.
DOCUMENTS: See "Casablanca".
APPROACHES: There is a light located at the end of the bulk phosphate terminal in position Lat. 27° 03′ 09″ N., Long. 13° 27′ 07″ W. at the top of mineral silos, at a height of 180 ft. 1 flash every 5 seconds, range 10 miles.

There is also a fixed green light located at the Northern part of the terminal, range 10 miles, and a fixed red light at the Southern part of the terminal, range 10 miles.

The phosphate terminal installations give a good radar target at a distance of 25 miles. Vessels approaching from the North should keep 10 miles off the coast until the pier is bearing 090° and then steer towards the pier.

At night the installation lights are always visible and with a clear atmosphere can be seen from 25 miles off the coast.
PILOTAGE: Compulsory. Pilot boards about 0.75 miles off the pier head.
ANCHORAGES: Good anchorages can be found in 10 fathoms of water. When waiting for the Pilot it is recommended to anchor 0.75 miles Westward of the pier. No shelter in strong winds. Service of powerful auxiliary boats is available when lying at anchor.
MAX. SIZE: Depth 17.0 m. at LWL at the phosphate terminal berth, and 8.0 m. LWS at the berth for general cargo ships, located at the middle of the pier.
HEALTH: Valid yellow fever and cholera certificates are required. Otherwise, usual clearance.
RADIO: There is no coast radio station in El Aaiun. VHF radio communication is being placed at the phosphate terminal to work on Channels 12 and 16.

Ships calling at the terminal are required to send ETA cables or telegraph 72, 48 and 24 hours prior arrival to "Phosboucraa el Aaiun".
TUGS: 2 tugs, each 960 h.p., are available to assist vessels.
BERTHING: Aaiun Mineral Terminal located approx. 6.5 miles South of El Aaiun City.

The terminal head is in a North-South direction. Vessels are moored alongside dolphins that cover the three loading stations for 100,000 (non-inclinable), 40,000 and 20,000 d.w.t. ships. The loading pier has a height above water of 50 ft. and the dolphins approx. 20 ft.

Facilities consist of modern equipment available for handling phosphate in bulk at a loading rate of 4,000 t.p.h. in 2 of the stations, and 2,000 t.p.h. at the 3rd. The phosphate is loaded by means of movable loading machines with telescopic spouts to permit perfect trimming.

Facilities at the general cargo berth available for vessels up to 8,000 d.w.t. are 2 cranes of 6 tons each, and 1 derrick of 150 tons capacity.

No gangway to be rigged at this terminal. Communication from ship-to-shore is by means of elevator from the loading machines.
AIRPORT: Aaiun (30 km. from harbour).
REPAIRS: No repairs can be effected at this port.
BUNKERS: No bunkers available.
PROVISIONS: Provisions may be obtained.
AUTHORITY: Phosboucraa – Laayoune, B.P. 76, Laayoune, Morocco. *Tel:* 22-36-28, 22-36-29, 22-36-30. *Telex:* 31727 M. *Contact:* Port Manager. Operator: DC/AV Casablanca and DC Paris.

EL JADIDA (Mazagan): 33.15 N. 08.31 W. (See Plan Book)

DOCUMENTS: As for "Casablanca".
PILOTAGE: Arranged by Agent, basis vessel's ETA given in advance. Pilot boards about 2 miles from the port entrance.
ANCHORAGES: About half a mile from head of North jetty in depths of 13 m. to 14 m. Hard rock bottom covered in sand. Holding ground is fair only.
RESTRICTIONS: The port comprises an entrance channel 50 m. wide and an outer harbour area 7 hectares, partially dredged to 3 m. depth to make a waiting basin. In the Southern part of the outer harbour is a quay, called the barge quay, 120 m. long, dredged to 6 m. depth.
MAX. SIZE: No limitations for vessels anchoring. For entering harbour, max. length 80 m., draft 5 m., entering at high water.
RADIO: No local radio station. Use Casablanca Radio for messages to Agent.
TUGS: Available. Normally join vessel 2 miles from port entrance.
CRANES: 2 electric cranes and 2 diesel cranes available.
MEDICAL: Hospital facilities available. Vaccinations can be arranged.
FRESH WATER: Available at the quay.
FUEL: Can be supplied subject to 24 hours' notice.
WATCHMEN: Recommended to employ watchmen.
OPENING/CLOSING HATCHES: Work performed by ship's crew.
CONSULS: The only consular representatives are those of France an Portugal.
REPATRIATION: Can be arranged via Casablanca.
REPAIRS: Small repairs can be done on board, or parts sent Casablanca. One small dry dock reserved for Port Authority vessels an fishing boats.
AIRPORT: Nearest commercial airport is Nouasseur. The airport Camp Cazes, Casablanca, operates for internal flights only.
HOLIDAYS: Sundays and holidays, except for National holidays, can b worked on payment of overtime.
POLICE/AMBULANCE/FIRE: Police, Tel: 19; Ambulance, Tel: 15; Fir Tel: 15.
TELEPHONES: Cannot be connected to vessel, but telephone situate on the quay.
AUTHORITY: Arrondissement de L'Equipment et de la Promotic Nationale.
AGENT: Lasry Maroc S.A., 2 Rue William Redman, El Jadid Tel: 3276, 3370. Telex: 23690 Jolasry M. Cables: Jolasry El Jadida.

JORF LASFAR: 33.08 N. 08.38 W. (See Plan Book

SHIPMASTER'S REPORT: May 1984.

LOCATION: The port of Jorf Lasfar is situated approximately 62 nautic miles by sea, and 120 km. by a good tar sealed surfaced road from th town of Casablanca, in Morocco. The natural deep water bay along th coast has afforded the development of an industrial complex, designe for the export of phosphates and minerals, also phosphoric acid an sulphuric acid.

Local sources of information have indicated to me that developme began some 7 years ago. Large earth moving equipment carved awa the hillsides, moving several million cu.m. of rock and earth, an transformed an area approximately 2,200 m. × 1,700 m. which no forms the complex harbour and port of Jorf Lasfar. The port area an wharves are enclosed by a man made breakwater.

The principal breakwater, (Outer Breakwater) extends in a directio N.W. from the shore, 1.75 miles S.S.E. of Cap Blanc du Nord, on whic is erected a "Yellow" square tower 31 m. in height with a black top, th position of which is Lat. 33° 09.8′ N., Long. 08° 37.6′ W. The lig exhibited from tower is occulting white and red 6 secs., eclipse 1.5 sec White visibility 9 miles 018° – 190° (172°), red visibility 6 mile 190° – 018° (188°). The breakwater then turns S.W. and S.S.W. for total length of 3,100 m. The Contre Digue or Lee Breakwater extend 1,250 m. N.W. from the shore 1 mile S.S.W. of the root of the Oute Breakwater.

Light structures stand each side of the entrance, on the Oute Breakwater about 500 m. N.N.E. of its head, and on the head of the Le Breakwater (Contre Digue).

On arrival and during the vessel's stay in port (April 1984), these ligh were unlit.

Local Authorities advise me that as electric power has not yet bee laid on to the port area the lights are functioning by gas, but whether was for economical purposes, or any other reason, as already reporte the lights were not functioning. Unless for some specific reason, this is no consequence as entry into the port is only permitted in daylight hour

Development appears to progress very slowly as will be seen from th facilities at present available. Local Authorities assured me that the po will be fully operational in 1985. Our stay was 22 days to discharge cargo of bulk wheat and corn (55,000 tons).
APPROACHING: *Noon Day Before Arrival:* Position Lat. 33° 00′ N Long. 12° 59′ W. Course 088°(T) allowed 2° set Gyro course 086°.
Day of Arrival: 0139 hrs. Sat. Nav. fix Lat. 33° 04′ N., Long. 09° 39′ W disallowed set.

Radar observation of the coastline was made when 43 miles off (rad JMA 159B/3 cm.) but no positive fix. Vessel running in on Sat. Nav. D position.

0443 hrs. Radar fix obtained of Cap Blanc du Nord, 25 miles.

As vessel had no port information or charts ETA given as 0700 hrs (Sunrise 0612 hrs. GMT).

Called Casablanca Port Control on Channel 16 from 0530 hrs Reception was poor and distorted.

Called Jorf Lasfar Pilot on Channel 12 . . . No reply.

About 7 miles off, the Principal Breakwater was clearly outlined o radar screen, and observed 1 small coaster at anchor off the port.

Weather was cloudy, visibility clear, a light Easterly wind was blowing slight sea with low, heavy, Westerly swell.

When about 4 miles off, contact was made with the Pilot. Due to th berthing of the coaster, we were delayed, and vessel was turned aroun on reciprocal course. At 0745 hrs. turned vessel around and mad approach to embark Pilot, on his advice.
Embarking of Pilot: Under normal circumstances a pilot launch available. Unfortunately for us, the launch was under repair and Pil came out to embark on a rather large tug. Not a very suitable propositio at the best of times.

No positive position for Pilot Boarding has yet been established an no Sea Buoy to indicate any approach.

Ladder was rigged on starboard side. The tug had great difficulty manoeuvre to come alongside, but after several attempts and muc helm and engine movements, further hampered by the heavy swe running for both vessel and tug, the Pilot (French) boarded without an incident.

I am of the opinion, that the Pilot should board approximately 1.0 to 1.5 miles off the Principal Breakwater Head, by pilot launch, with vessel's speed about 5 knots, to afford a good lee and counteract the swell. The tugs should be secured before the ship enters the port as there is about a 90° to 120° port turn to line up with the entrance, with very little room for error. Both anchors to be ready for letting go. Once the turn into the entrance is made, the way must be taken off the vessel quickly and stopped, to effect a port swing again of 90° to back into the berth, for starboard side alongside berthing at Quay No. 2 where vessel berthed.

The 2 tugs attending, "El Hafid" and "Casablanca", 2,000 h.p. and 1,600 h.p. respectively, were adequate under the prevailing conditions. Both tugs used ship's lines. Vessel was secured with 5 head and 5 stern lines also 2 springs forward and aft.

Whilst alongside with a heavy swell outside the harbour area, surge was experienced alongside. Rope springs are suggested for use, or wire springs with rope tails.

The foregoing was a deeply laden vessel, length 224.5 m., draft 38 ft. salt water even keel.

PORT LIMITS: The seaward boundaries of the port have not yet been defined. There are no designated anchorages off the port for vessels carrying the various categories of cargo.

There is no designated Pilot Boarding Ground.

There is no Sea Buoy, or Channel Marker Buoys to indicate a safe Fairway.

Charterer's particular requirements to vessel's Agents to be sent through Casablanca Radio, CNP (8 MHz).

We were able to contact Casablanca Radio, 5 days prior to arrival (1,600 miles).

Preliminary "Notice of Readiness" was tendered to Agents and receivers of cargo by radio on arrival (0700 hrs.).

I prepared 5 copies of my own "Notice of Readiness" which was handed to the Agent on berthing. He signed in acknowledgement, for transmission to the receivers.

"Notice of Readiness" was accepted at 0830 hrs., which was office opening hours on our arrival day.

DOCUMENTS:

Crew List, 6 copies.

Passenger List, 6 copies.

Customs Crew Personal Effects Declaration, 1 copy and 1 copy for Agent.

Ship's Stores List, 1 copy and 1 copy for Agent.

Ship's Manifests. If on board for delivery to Agent.

Bills of Lading. If on board for delivery to Agent.

Ship's Particulars, 1 copy for Agent's use.

Ship's Certificates: To produce Ship's Register, Safety Equipment, Ship Construction, Safety Radio, Tonnage Certificate, Derat Exemption.

PILOTAGE: Give ETA to Agent at Casablanca. He arranges Pilot and tugs. Pilot comes by road from Casablanca.

Apparently 1 tug is always stationed at Jorf Lasfar port, but is not manned. A second tug comes from Casablanca. (Ordered by Agent, who arranges time). Two tugs seemed adequate for this vessel under the prevailing conditions. Advise Agent accordingly if you require more. Pilots consider 2 tugs are adequate.

Minimum 24 hours' notice is required for Pilot and tugs.

Pilot Launch: Approximately 7 m. in length, black hull, white topsides, with the word "Pilote" painted in white bold lettering on each side. (Also see "Approaching".)

ANCHORAGES: See "Port Limits".

Pilots recommended 2 miles off breakwater, keep entrance to harbour clear. Holding ground good. Obstructions not charted.

Keep well clear of Cap Blanc du Nord. I have seen heavy breakers 0.5 miles to 0.75 miles off this point in strong Westerly winds and heavy swell/sea.

Depth lines showing a 1 m. difference in soundings have been charted on locally produced chart.

RESTRICTIONS: Movements, entry and departure are restricted to daylight hours only. From observations (personal) tidal range at spring tides is approximately 8 ft. No tidal predictions are as yet available.

We entered with a draft of 38 ft. (11.58 m.) salt water even keel. No adverse effect, or ground effect noticeable. Be careful of lift and fall in heavy swell, and rolling which will increase draft. As previously stated, apart from the light on Cap Blanc du Nord, no other lights are as yet available as an aid to navigation.

Depths: Entrance Channel 17 m. No. 1 Berth 13.5 m. (phosphate).

MAX. SIZE: Nothing yet stipulated by Port Authority.

Our vessel: Overall length 224.50 m. Moulded breadth 32.20 m. Max. Summer draft 12.956 m. Max. d.w.t. (Summer) 64,931. G.r.t. 35,417, N.r.t. 21,296. Panamax bulk carrier.

Also see "Restrictions" and "Cargo Gear".

HEALTH: Pratique free from one Moroccan port to next Moroccan port.

Master to send cable 24 hours prior to arrival to Agent. Cable to include following information: Number of crew (including Master) on board, certify vessel free of infectious disease, all crew healthy, and in possession of valid health and travel documents (passports) and last port or ports of call (21 days prior) arrival, and request Agent to supply for Radio Pratique and Immigration Clearance.

Prepare Health Declaration Papers if on board, otherwise Agent will prepare on arrival at berth, for signature.

Vaccination Lists, 2 copies.

RADIO: "Casablanca Radio". Call sign CNP on 8 MHz.

We made contact 5 days (approximately 1,600 miles from Casablanca) prior to arrival.

VHF: Use Casablanca. Call CNP2. Frequency Channels 16, 12 and 14.

When you know from the Agent that the Pilot will board on arrival at Jorf Lasfar, then call "Jorf Lasfar Pilot" on Channel 12.

Also see "Approaching".

RADAR: Not available.

TUGS: Tugs do not have their own lines, ship's lines are used.

Also see "Approaching" and "Pilotage".

BERTHING:

Berth No.	*Depth Alongside* (m.)	*Length of Wharf* (m.)	*Width of Wharf* (m.)	*Surface Area* (sq.m.)
1	15.60	300	82.28	24,684
2 – 3	12.50	180	75.00	13,500
4 – 5	12.30 – 11.50	180	30.00	5,400
6 – 7	11.50	45	30.00	1,350
8 (Oil Berth)	15.60	45	15.00	675
9 (Oil Berth)	12.70	45	15.00	675
Q.C./10	5.25 – 6.75 – 9.00	360	20.00	7,200
Q.S.	3.50 – 4.00 – 5.00	215	20.00	4,200

Note: The above information has been obtained from the Port and Harbour Authority. The maximum permissible draft for our vessel at Berth No. 10 was declared as 26 ft. This information was given by the Pilot who shifted the vessel from Berth No. 2 to Berth No. 10 and agreed to by the Port and Harbour Authority. I requested this in writing before shifting the vessel.

From the above legend for the Quai de Commerce (Berth No. 10) the shallowest part is at the Eastern end near the Ro/Ro adjustable run-off. *Berth No. 10* Surface unsealed, and consists of loose metal/sand/stones, many potholes, dry grass, and totally unsuitable for discharge of grain.

Note of Protest and Indemnification of Liability served on the receivers by the vessel's command through the Agents. Receivers accepted it without question.

I am led to understand that the port is to be divided into 2 sections. Berth Nos. 1 to 7 will be privately operated, and the remainder of the port will be operated by the government.

On some plans, a grain silo is shown on the Southern side of "Quai de Commerce", adjacent to the Ro/Ro terminal. This I believe will now not be developed, and Jorf Lasfar will not be used as a grain port. At times vessels use Jorf Lasfar to lighten ship to 30 ft. and then proceed to Casablanca for further discharge.

Berth use (on completion of port):

No. 1	Phosphates	Nos. 8 & 9	Petroleum
No. 1 Bis	Coal	Nos. 10 & 10 Bis	General
No. 2	Phosphates	No. 11	Service
No. 2 Bis	Coal	No. 12	Fish
No. 3	Phosphates	No. 3	Ro/Ro
No. 3 Bis	Minerals	No. 14	Cereals
Nos. 4 & 5	Sulphur	No. 15	Containers
Nos. 6 & 7	Acid		

CRANES: There are no permanent cranes to speak of at any of the berths.

6 mobile cranes were made available for the discharge of our vessel.

Type: Gottwald/Dusseldorf, luffing and slewing, diesel/motors.

Capacity: 6 tons × 8 m., 6 tons × 25 m.

Outreach: With base spreaders out, and tyres afloat, and in position the cranes could not plumb further than the centreline of the ship. (Beam 32.2 m. max., fenders alongside wharf).

No heavy lift cranes ashore or afloat available.

While in port 3 vessels were seen discharging heavy lifts for the industrial complex with their own gear.

One vessel discharged machinery and general cargo with ship's cranes.

Note: 1. Gearless ships would be serviced by the above mentioned mobile shore cranes.

2. Vessels with their own gear would have no difficulty to discharge cargoes such as grain/ores/coal/fertilisers/sulphurs/copra, etc.

BULK CARGO FACILITIES: Refer to legend of berths, cranes, and additional notes.

SPECIALISED CARGO HANDLING FACILITIES: A container terminal is envisaged but at time of writing is non-existent, (wharf or cranes).

Berth is available for Ro/Ro vessels with adjustable ramp, (power facilities and terminal non-existent).

Berth for tankers (Berth Nos. 8 and 9), available but as yet no pipe-lines to storage tanks, behind the ridge of hills in the background of the port, have been laid on.

Berths available for liquid chemicals, (see plan), but no pipe-lines or facilities as yet available.

No facilities for LPG/LNG.

BRIDGES: None.

STEVEDORES: Agent will organise gangs with receivers.

Port Working Hours: Monday to Saturday inclusive 0700 – 2300 hrs. over 2 consecutive shifts 0700 – 1500 hrs. and 1500 – 2300 hrs. Overtime, Sundays and holidays when available and/or compulsory. A third shift overtime also possible when ordered by receivers and agreed by Port Authority (2300 – 0700 hrs.).

There appeared to be no "meal breaks" or "smokos".

There is a language barrier unless you speak French and/or Arabic.

Rates of Work: Nothing established for the port. The labourers work very hard. I estimate rate would be for bulk grain discharge 5 gangs, 16 hours per day = 80 gang hours. 30 – 35 t.p.h.

TANKERS: Two berths. No pipe-lines laid at present.

DENSITY: During vessel's stay, when cargo discharged, calculations and final draft survey by ship was necessary. The average salinity (density) corrected for temperature was 1027.5/1028. Temperature varies between 16° – 25°C.

FRESH WATER: No fresh water available at Jorf Lasfar, nor are there any facilities yet laid on the wharf for this purpose.

Vessel maintained consumption, average 12 tons per day (which included domestic, culinary, toilet flushing purposes and laundry) from the water made by evaporator at sea on passage and prior to arrival.

Agents advise me that in very urgent circumstances, fresh water is available by tug, approximately 40 tons maximum, from Casablanca, but very expensive. (Not less than US$2,500 per 40 ton delivery.)

MEDICAL: See "Documents".

There is a private clinic, and 3 hospitals for the general public, available at a town called El Jadida, about 25 km. from Jorf Lasfar.

Notify Agents who will make the necessary arrangements. Preferably 24 hours' notice is required due to the fact that there is no communication available from the ship or wharves (telephone). There is a telephone available at the Port Authority Office some 1.5 miles distant from the wharf area, but the office is not open day and night, also the Agent lives at Casablanca some 120 km. distant. My crew were cautioned to exercise care in their work habits to avoid accidents. Shore labourers will request first aid from the ship for minor cuts and bruises.

Dental treatment is also available at El Jadida.

It is advisable to have Cholera/Yellow Fever/Smallpox inoculations. Some charterers include this as a must in their charter parties. There is a Port Health Officer stationed at El Jadida, who clears the vessel on arrival.

FUEL: Not available.

FIRE PRECAUTIONS: Normal ship safety fire precautions. No equipment available from wharf. Nearest available fire brigade is from El Jadida.

CONSULS: None available at Jorf Lasfar, or El Jadida, nearest is Casablanca. British Consul will act for certain Marine matters for British registered vessels.

I was able to have an extension to the vessel's "Safety Equipment Certificate" done in 30 minutes.

Take your passport to the British Embassy to gain entry. This will be checked after you have filled in a small form to indicate the purpose of your call.

REPAIRS: There are no facilities available for ship repairs, deck or engine.

The nearest repair yards and facilities are available at Casablanca. From the port plan, it would appear that there is to be 2 small docks or slipways, with workshop attached.

DRY DOCKS: None.

SURVEYORS: 1. Cargo Surveyors/Inspectors not available at Jorf Lasfar.

2. Ship's Surveyors (Lloyds/ABS/BV) not available at Jorf Lasfar.

Agents will arrange for Surveyors from Casablanca to attend. I was able to get the Lloyd's Surveyor at Casablanca to extend vessel's "Safety Construction Certificate". It took 7 days. Lloyd's Surveyor: Mr. A. Hamad.

GANGWAY/DECK WATCHMEN: Compulsory. Two per vessel, one for ship and one on the wharf. It was noticed that they do a 24 hour shift. It is not essential to victual them, but as there is food available, it would seem the best idea to feed them and get good co-operation and service. The watchmen are ex-seamen and understand English. Agent will sign the victualling voucher.

HATCHES: Opening and closing by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 750 ml spirits per man/per week. They will open the bond stores for further issue weekly. Cost of obtaining Customs Officials per week 600 Dirhams which is about US$75.

Beer is not sealed.

If vessel's stay is to be an extended one, obtain permission and take out the required amount for the stay, on *arrival.* This will save you the charge each time the bond store is opened. The Agent only advised me of this after the first request for additional allowance.

Customs Officials will examine personnel and their baggage on leaving ship and returning from shore.

CARGO GEAR: Discharge was effected by shore gear, as our vessel is a gearless vessel.

Grabs were used, of which there were 8. They leak like sieves. ("Note of Protest" for loss of weight/quantity was served on receivers). The grabs are not the automatic open release type. They were landed on the hopper steel framework to effect release. The crane hooks were not moused, thus several times the grab wires came unsecured.

6 hoppers, the sides were not high enough, hence constant spillage.

A corkscrew type shaft, with an 8 in. tubular outer casing powered with a small electric motor at its head, driven by portable mobile electric generator, is used as a mini-elevator to load the grain which is dumped on the wharf into trucks and transported to the various consignees is one of the methods employed.

Cargo is also bagged from this stockpile on the wharf and carried and stacked on flat top trucks (240 bags per truck average) for delivery to consignees.

Canvas tarpaulins are used to cover the grain, in the event of rain.

We experienced 2 heavy downpours lasting about 3 to 5 hours, when pools and deep puddles of water developed (Berth No. 10), and 2 to 3 light rain periods lasting about 1 hour.

Include in your protest on arrival "Ship not responsible for damage due to discharge in wet or inclement weather, or for contamination and deterioration". This will be accepted by the receivers without question.

Direct loading from grab to hopper to trucks is also carried on. There is no weighbridge for weight checking.

Also see "Port Nador" – "Report, January 1984".

REPATRIATION: Crew members are able to join vessels or be repatriated.

Visas are required for certain citizens, whose country of domicile do not have diplomatic reciprocal consulates. Therefore please check before effecting any crew replacement.

On arriving at "Mohammed V" Airport at Casablanca, Immigration Authorities will endorse your passport with an entry permit. Cable or advise Agent the flight number and request Agent to assist in Immigration entry facilities.

You will have a baggage check at the airport.

When cleared you have to proceed to El Jadida where the Immigration will again endorse your passport. You will possibly have another baggage check at Customs in El Jadida and then proceed to Jorf Lasfar. This is because Jorf Lasfar is outside the jurisdiction of Casablanca.

AIRPORT: "Mohammed V" Airport is situated approximately 35 km. from Casablanca, allow 45 minutes driving time from the heart of the city. The airport is serviced by a great many airlines, to name but a few, Royale Air Maroc, Iberia, Air France, Sabena, British Caledonian, K.L.M., Swiss Air, Aeroflot, Lufthansa, British Airways, Iraqi Airways, Kuwait Airways, Libyan Arab Airlines.

Internal domestic flights are available to Agadir (on the coast), Marakesh and Ouarzazate (inland), Rabat the capital city of Morocco and Tangier.

There is no airport at Jorf Lasfar.

TIME: From October to May time kept is GMT/UTC.

From May to October time kept is GMT/UTC plus 1 hour. This is official. However, when we arrived (April '84) Summer Time GMT/UTC plus 1 hour was already in operation, so it will pay to check.

HOLIDAYS: There are 5 official governmental holidays.

There are 3 religious holidays (movable dates).

New Year's Day (English calendar).

On the above days "No Work is performed". This is questionable as we did work and sail on May 1st (Labour Day), which is one of the supposedly official holidays.

POLICE/AMBULANCE/FIRE: As yet there are no facilities available at the wharf in Jorf Lasfar. There are facilities at El Jadida 25 km. away. No assistance will be afforded the Master if he wishes security escort or Immigration facility for discharging crew members who are being dismissed for offences aboard ship, and have to be lodged in hotels prior to repatriation. They will only assist if there has been criminal assault on board.

EMERGENCY CO-ORDINATION CENTRE: None available at Jorf Lasfar. The Agent is your co-ordinator.

TELEPHONES: None at all available on ship, or wharf, at time of writing. Also see "Medical".

Overseas calls are possible from the Post Office at El Jadida or some of the 4 or 5 star hotels at Casablanca. There are no direct dialling facilities. Connections are made through Paris.

I had difficulty contacting my Owners at Singapore, so had to use the telex from the hotel and request them to call me, which did not take long.

SERVICES: None available at Jorf Lasfar. Casablanca is the nearest town to offer facilities for radio and radar repairs, through the Agents.

BANKS: None available at Jorf Lasfar. "Banque Credite Maroc" operates in El Jadida. Casablanca is the nearest city to offer any facilities for transactions.

STORING: Vessels can be stored by truck.

No barges available. No launches available, only the pilot launch. In due course when the port becomes fully operational storing from barge on the offside will be possible with ship's gear.

No regulations in force regarding storing at present.

Trucks can proceed alongside ship at the berths.

Fork lift trucks (2 available – 3 ton) belonging to the port. 1 front end loader rubber tyre was available.

Customs Regulations: Ship's machinery, spare parts, deck stores, goods shipped from overseas, are subject to Customs clearance.

VERY IMPORTANT: Declarations/invoices *must* be in the French language, proper, clear and precise nomenclature for *every item,* with the cost per individual item.

e.g. It took 9 days to clear a container (LCL) containing equipment for the installation of "Halon 1301" after the container was landed at Casablanca to be delivered to ship's side.

SHORE LEAVE: Shore leave is permitted for ship's Officers and crew. Passes are issued by the Immigration Authorities, after the vessel has berthed.

You must be in possession of your pass ashore.

If intending to stay at an hotel in El Jadida or Casablanca take your passport to check in at the hotel, as without it, you might not gain entry. Your passport will be held at the reception desk until account settled prior to checking out.

There is no way to obtain a taxi *from* the port.

Cargo transport trucks, initially offered crew transportation to El Jadida or Casablanca. Transport is available (taxis) from Casablanca or El Jadida, to the ship. Cost varies (day or night). Normal fare: El Jadida to ship 50 Dirhams (US$6). Casablanca to ship 350 Dirhams (US$42). Small mini-taxis are available for short distance transport in Casablanca. They do not have meters, 10 Dirhams seem to be the normal fare, for reasonably short distances.

"Siesta Time" is from 1330 to 1500 hrs. Business Houses (offices) close from 1300 to 1430 hrs. Working hours from 0830 to 1300 hrs. and 1430 to 1830 hrs.

Hotels: Casablanca: Several from 3 star to 5 star and prices range from 135 – 300 Dirhams for a single. Hyatt, 500 – 600 Dirhams. Consult tourist guide for information.

El Jadida: 2 hotels, the "Salam" and "Dounia", on the beach front. The former is more modern.

Sunbathing and swimming permitted in and around the hotel swimming pools. Tennis courts, volley ball, archery, horse riding, indoor dance and disco. Price for a single room 120 Dirhams. (No T.V. or telephone). Prices quoted do not include breakfast, lunch or dinner.

IDENTITY CARDS: See "Shore Leave".

REGULATIONS: No regulations as yet promulgated by the Port Authority. A Moroccan Harbour Master was appointed 1 week before we sailed.

As mentioned earlier Pilots are ordered by the Agent and come from Casablanca. The Harbour Master will not be doing pilotage.

DELAYS: We had none, having berthed on arrival. However, I would expect some delay if the wharf area has not been cleared from the previous vessel's cargo.

WEATHER: *April:* During the vessel's stay in port, strong winds Beaufort Force 7 were logged, coming from a West to W.N.W. direction. Winds backed to South and East, Beaufort Force 5. Heavy rain showers accompanied the winds. Temperatures ranged from 15°C at night to a maximum of 25° – 27°C during the day. Heavy dew after sunset.

AGENT: The Charterers and Owners both used the services of the same Agency.

Lasry Maroc, 30 Avenue de l'Armee Royale, Casablanca. Telex: 21949, 21092. Tel: 31.38.75, 31.19.54. Cables: Jolasry.

The above Agent has an office equipped with telex and telephone facilities at El Jadida.

Lasry Maroc, 2 Rue William Redman, El Jadida. Telex: Jolasry 78990 M. Tel: 3276, 3370. Cables: Jolasry, El Jadida.

Note: 1. The telex number at Casablanca we used was Sagnav 24646 M.

2. The telephone numbers at Casablanca shown above are those printed on Agent's visiting cards.

KENITRA: 34.17 N. 06.30 W.

Situated on the left bank of the Oued Sebou, 17 km. from the Atlantic.

PILOTAGE: Pilotage is compulsory for entering and leaving port. Vessels must wait outside the port entrance for the tide. It is possible to enter from 2 hours before until 1 hour after HW during the night, and from 3 hours before until 2 hours after HW during the day. The Pilot boards vessels at river mouth. The Pilot will be on station 2 hours before HW.

On arrival at the Roads or after 0830 hrs., call the Pilotage Department and advise arrival time at the Roads and draft. Pilotage Department on VHF Channel 16 and 2182.

RESTRICTIONS: From the mouth of the river up to the port is a dredged channel. Depths are 4.20 m. during neap tides and 5.40 m. during spring tides. Height of tide during neap tide is 2.60 m. Height of tide during spring tide is 3.80 m. The constant is 1.60 m.

During the Winter it is recommended to stay outside the port in strong squalls. Ships are advised by Kenitra port radio of the possibilities for entering port.

Between November and April there is a total of 6 or 7 individual days when the port is closed to navigation, due to weather conditions.

Vessels are berthed and unberthed in daytime only at present time.

RADIO: Messages to ship's Agent should be sent through Casablanca Radio. In the ETA message to Agent, also advise vessel's draft. There is a radio station at Kenitra for port use only. Watch-keeping hours are only during HW, on 2182 kHz.

TUGS: Two tugs of 250 h.p. and one of 130 h.p.

BERTHING: The outer port used only by trawlers, and a mooring quay of 360 m. length belonging to the Royal Moroccan Navy. The length of main quay is 870 m. and includes 10 berths. In addition to the above there is a jetty for wine vessels, and a jetty for oil tankers.

FRESH WATER: Supplied alongside the quays.

FUEL: There are supplies of diesel oil, gas oil and petrol in the port. These products supplied by tanker lorry along the quay.

REPAIRS: There are workshops for small running repairs in the port. There is a slipway for ships up to 400 tons.

CONSULS: The Consular representatives at Kenitra are those of Belgium, France and Portugal.

AIRPORT: The nearest commercial airport is that of Rabat-Sale and there is a small airfield at Kenitra.

AUTHORITY: Directeur du Port.

AGENT: Consortium Industriel Commercial et Maritime, 19 Boulevard Imam Ali, Kenitra. Tel: 22 56 (3 lines). Telex: 91030 Boutrans and/or 91966 Incomar. Cables: "Incomar Kenitra".

MOHAMMEDIA: 33.45 N. 07.22 W. (See Plan Book)

DOCUMENTS:

Bill of Health.
3 Crew Lists.
3 Passenger Lists.
3 Provisions Lists.
Manifests and Ship's Papers for Agent.

PILOTAGE: Compulsory for vessels entering or leaving the harbour or shifting berth. Pilot available for vessels arriving during night and wishing to enter the basin when conditions are possible.

ANCHORAGES: Three good anchorages in depths of 11 to 6.5 fathoms about a mile N.E. of the entrance, and N.W. and S.E. of the pipe-line area.

RESTRICTIONS: Vessels with a draft over 15 ft. wishing to berth in the basin are obliged to wait for tide.

MAX. SIZE: Sea line installations:

No. 1 Berth – Tankers up to 100,000 d.w.t.
No. 2 Berth – Tankers up to 120,000 d.w.t.
For the basin: max. length 150 m., max. draft 6.9 m. (22 ft. 8 in.).

HEALTH: Port Sanitary Control Officer boards immediately after arrival for Pratique delivery. In the event of any suspected disease or fever on board, it is necessary to advise by radio to Agent 24 hours before arrival. Pratique is automatic after calling at another port of Morocco.

RADIO: Casablanca Radio Station.

TUGS: There are no tugs but 3 pilot boats of 150 h.p. will assist vessels if necessary, or tugs can be ordered from Casablanca.

BERTHING: Vessels up to 150 m. in length and drawing up to 6.9 m. (22 ft. 8 in.) at Spring tides and 5.4 m. (18 ft.) at Neaps.

Quay No. 1 has a length of 70 m. with a depth of 8.50 m. (28 ft. alongside).

Quay No. 2 has a length of 170 m. with a depth of 5.50 m. (18 ft. alongside). Max. LOA 120 m. Max. draft 6.0 m.

Quay No. 6 has a length of 60 m. with a depth of 6.00 m. (19 ft. 8 in. alongside).

TANKERS: Sea line installations located in position Lat. 33° 44′ 01″ N., Long. 7° 23′ 02″ W. in depth of water 70 ft. Diameter of swinging area: 850 m.

Vessels may be berthed by day. Mooring is effected by 6 floating nylon ropes, each 200 m. long, made fast to the after end of the vessel and by both anchors.

The buoy is connected to a floating crude oil line, 20 in. diameter, with two flexible hoses of 16 in. diameter. One flexible hose of 8 in. diameter is available for discharging refined products. There are no facilities for discharge of slops or dirty ballast.

Smaller tankers may also berth at harbour quay No. 1.

Also see "Max. Size".

STEVEDORES: The loading and discharging capacity of general cargo or timber is 300 tons per day. Gangs are arranged by the stevedores according to the cargo plan given by the consignee to the harbour authorities.

MEDICAL: There is the hospital in Mohammedia, and other hospitals and clinics in Casablanca (16 miles away). Vaccinations can be arranged.

DENSITY: 1025.

FRESH WATER: Water can be supplied at any time alongside the quays at the rate of 15 t.p.h. There is no fresh water supply to the offshore tanker terminals.

FUEL: Available from Casablanca at 48 hours' notice.

FIRE PRECAUTIONS: All tankers are confined by gates and watched over by special firemen.

GANGWAY/DECK WATCHMEN: Watchmen are recommended.

OPENING/CLOSING HATCHES: This work is normally carried out by crew. When carried out by stevedores the cost is charged.

IDENTIFICATION CARDS: Passport required and police permit for leaving the harbour.

CONSULS: There is no consul in Mohammedia. All are in Casablanca.

AIRPORT: The nearest airport for international flights is Nouasseur. Casablanca Airport operates internal flights only.

HOLIDAYS: 1st January; 1st May; 3rd March; 18th November; and any other religious holidays which are not at regular dates. Only on two days (1st January and 1st May) no cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Police, 21.51; Ambulance/Fire, 15.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Breakwater, length 2.6 km. under construction. The breakwater will have 5 berths with depths of 20 m. which will be able to accept tankers up to 150,000 d.w.t.

AUTHORITY: The Harbour Master, RAPC, Port de Mohammedia.

PORT NADOR (Beni Enzar): 35.17 N. 02.56 W.

SHIPMASTER'S REPORT: November 1979.

DOCUMENTS:

6 Crew Lists.
3 Stores Lists.
Vaccination List.

PILOTAGE: Compulsory. Pilot boards off the breakwater and requires 1 hour's notice.

ANCHORAGE: About 0.5 miles N.E. of the breakwater.

RESTRICTIONS: Vessel is able to enter and leave at any stage of the tide, day or night.

MAX. SIZE: LOA 500 ft. (approx.). Max. draft 8.5 m. (approx.). Size of vessel limited by swinging room. Underkeel clearance of 1.5 m. required.

RADIO: Nador Radio.

VHF: Port Authority and Pilot on Channel 16.

TUGS: One tug of 600 h.p. An additional tug of 1,500 h.p. may be available.

BERTHING: *Berth No. 1:* The berth is close to the entrance and the max. size permissible is approximately 400 ft. LOA and approximately 8.5 m. draft. The least depth in the channel from sea to the berth is 13 m. The nature of the bottom at the berth is sand and mud and the density is 1025.

Cargo Facilities: There is 1 ore loader for small vessels. There are 4 mobile cranes with safe working load of 6 tonnes. No Ro/Ro facilities. There is ample mechanised equipment for handling palletised cargoes. There is storage space for break-bulk cargoes and storage for palletised cargoes, however, there is little covered space. There is no equipment for handling containers and there is no storage space for containers as there is no hard ground.

FACILITIES: The following are available: fresh water, fresh provisions, small repairs, small machine shop, airport (at Oudja 140 km.), Lloyd's Surveyor, Salvage Surveyor, laundry service, doctor and hospital, groceries and meats.

CONSULS: Spanish Consul located in the port. British and French Consuls at Oudja.

TIME: GMT.

GENERAL: Port Nador is situated next to Melilla, and the same entrance between the breakwaters is used for entering, although both ports are run entirely separately, Melilla being Spanish and Port Nador being Moroccan. The Moroccans are sure that Melilla will soon be theirs, then it will become one large port.

The port under construction is to have 14 berths, at the moment there are only 2 berths working, both of which are only partially completed. The only shed constructed is used for palletising and storing fruit.

Maximum intended draft when all is completed will be 13 m.

DEVELOPMENTS: Port construction is taking place at the present time and eventually 14 berths will be available and when this is completed Melilla and Port Nador are expected to become one port. There will be 1 oil/mineral berth with depth of 12.5 m., 2 berths with 8.5 m., 1 berth with 6.5 m. and 1 berth with 5 m. in the initial stages.

REPORT: Dated September 1980.

This port is still under construction but for the last 2 years has been open for trade of iron ore, lead and citrus fruit (seasonal). There are 3 piers now in use as follows:

Mole No. 1 (S.W. side) for the shipping of iron ore.
Mole No. 2 (N.E. side) for lead and general cargo.
Mole No. 2 (S.W. side) for citrus fruit.

The N.E. side of Mole No. 1 will also be for minerals but is still under construction.

REPORT: January 1984.

Ships have discharged on voyage charter at Nador on two occasions with similar experiences in the discharge of grain. Ships berthed at an open quay and the cargo was 'dumped' by portable cranes of light construction which are fitted with anemometers, in an area too far from the side of the ship to allow the use of ship's cranes. When the wind reaches Force 4 it is considered too dangerous to continue discharge and work ceases.

Charterers claim that work is stopped by the Port Authorities and that such time lost does not count as laytime, claiming it is a non weather working day.

This method of discharge is used because of a shortage of lorries, which, if they were available, could be loaded using ship's gear alongside the ship during such stoppages for wind.

Whilst no delays have been experienced at the port of Jorf Lasfar, the Master informed us that the same method of discharge was used at that port.

Owners should endeavour to protect themselves when fixing business which is likely to include discharge at this port as the wind seems to reach Force 4 on many days and a lot of time is lost resulting in costly delays.

AUTHORITY: R.A.P.C.

SAFI: 32.19 N. 09.12 W.

DOCUMENTS: Clearance procedure is very simple. 3 Crew Lists, 1 Personal Effects Lists, 3 Passenger Lists and 1 Stores Lists only are required. Other documents are presented on berthing.

PILOTAGE: Arranged by vessel's Agent, to whom a correct ETA should be given. There is VHF radio contact with the pilot station and Harbour Master's Office. The pilot boat is located inside the harbour and the Pilot boards in position Lat. 32° 19′ N., Long. 9° 16.1′ W. Pilot ladder only is required.

ANCHORAGE: Recommended anchorage is S.W. of harbour entrance. Safe holding ground for 25,000 d.w.t. vessels. Vessels should keep port entrance clear.

MAX. SIZE: Vessels with a draft of more than 28 ft. and up to a max. of 30 ft. enter and sail at high water.

Also see "Shipmaster's Report".

HEALTH: Health Officer boards shortly after berthing but Agent must be advised before arrival if suspected disease or fever on board. Health clearance in one Moroccan port holds good for the next.

RADIO: Casablanca Radio for normal traffic or Safi Radio for local R/T traffic. Harbour Radio VHF Channel 16.

TUGS: Tugs stand by vessel inside breakwater and, usually, ship's lines are used.

BERTHING: Vessels berth in order of arrival. Port used for export of manganese and barytes. No night entry after 1900 hrs.

STEVEDORES: Gangs are arranged by vessel's Agent. Night work is possible from 1800 to 2200 hrs. and, very exceptionally, until 2400 hrs.

MEDICAL: Advance notice of required medical attendance is advisable but not essential. Modern hospital and clinic are available. Vaccination is only necessary when vessels have called at cholera and yellow fever ports.

TANKERS: Only small tankers used in this port. White products and gas oil imported; no export. Ammonia tanker berth max. draft HW 30 ft.

DENSITY: Density varies between 1024 and 1026.

FRESH WATER: Availability not limited; by hoses from quay.

FUEL: Limited supplies gas oil; diesel available but must be stemmed. Fuel oil and large quantities diesel, gas oil can be delivered by tanking lorry from Casablanca.

GANGWAY/DECK WATCHMEN: Watchmen necessary. One watchman day and night.

OPENING/CLOSING HATCHES: Normally done by crew but can be arranged by stevedores with advance notice.

CUSTOMS ALLOWANCES: 200 cigarettes, and one open bottle of spirit allowed each man. Bond is sealed and heavy fines are imposed by Customs for smuggling.

IDENTIFICATION CARDS: These are needed.

CONSULS:

Denmark,	Tel: 30.39	France,	Tel: 27.97
El Salvador,	Tel: 28.76	Portugal,	Tel: 23.58
Finland,	Tel: 31.40	Sweden,	Tel: 29.06

REPAIRS: Major repairs not possible; small workshops only for repairing fishing boats.

REPATRIATION: Repatriation by air or sea through Casablanca, 150 miles away.

AIRPORT: Nearest at Nouasseur, served by principal European airlines.

HOLIDAYS: On the following holidays no work is possible: 1st January (New Year's Day); 3rd March (Coronation Day); 1st May (Labour Day); 18th November (Independence Day). Other Moslem and Christian holidays are subject to last minute decisions as far as tariff is concerned, but work can be arranged.

TELEPHONES: No telephones can be placed on board. Public telephone available on the quay during working hours only.

GENERAL: Masters are strongly advised to take local currency from their Agent. Landing of foreign currency encourages black market transactions and incurs confiscation and heavy fines as well as delays by the Customs Authorities.

SHORE LEAVE: Police permits are required by crew and are delivered by Immigration Authorities.

SHIPMASTER'S REPORT: January 1983.

Max. Size: Maximum draft on entry was said to be 35 ft. (10.67 m.) on HW.

At Phosphate Wharf vessels loading to more than 8.8 m. must – due to berth/draft restrictions – work for completion on HW. Max. LW draft at inner end was given as 9.3 m. minus 0.5 m. for surge effect.

Air draft problems affect large vessels in ballast and it is advisable to keep tank ballast in until alongside.

Conveyor outreach limits can cause problems for wide beam twin hatch vessels.

Berthing: Restriction on night entry on longer vessels applicable. (This vessel sailed at 2300 hrs. on HW with a draft of 10.54 m. Pilot transferred to another large deep draft vessel which was to move into our berth after we cleared).

Stevedores: At Phosphate Wharf, 24 hour working to suit tides, via 2 conveyors each of capacity 750 t.p.h., weights found to be accurate.

General: Small amounts of foreign currency may be taken/used ashore; occasionally gate officials enter amount on back of landing permit.

Phosphate company generally require all final ships' paperwork to be signed in their office ashore.

AUTHORITY: Capitainerie de Port.

AGENT: Lasry Maroc, 14 Quai de l'Industrie, Safi, Morocco. Tel: 313875, 311954. Telex: 71067.

TANGIER: 35.47 N. 05.48 W. (See Plan Book)

PORT LIMITS: To the South by the coast and port installations and to the North by a line joining Pointe de Malabata and the Mouth of L'Oued el Youd.

DOCUMENTS: Required on arrival:

Health Declaration.
2 Crew Lists.
7 Cargo Manifests.
5 Lists of Passengers Disembarking.
4 Lists of Passengers in Transit.

Required on departure:

5 Cargo Manifests.
5 Manifests of Passengers Embarking.

PILOTAGE: Pilotage is compulsory for ships of more than 50 g.r.t. for entering, leaving and shifting in harbour. Departure possible throughout 24 hours, entry up to the last departure. Pilot on VHF Channel 16 throughout 24 hours. Vessels should advise arrival 6 hours and 1 hour in advance.

Pilot boards 0.5 miles North of head of breakwater.

ANCHORAGES: There are good anchorages to the East and Southeast of the breakwater head in depths of 10 m.–16 m.

RESTRICTIONS: The harbour area between the breakwater and the extremity of the main pier has a minimum depth of 9 m.

HEALTH: Apart from the international laws which must be obeyed, vessels coming from an infected area must send in advance (12 hours) a telegram to "Saniport Tangiers" describing the state of the vessel and persons on board.

Vessels having a sick person on board to be landed at the port must send a telegram as soon as possible to "Saniport Tangiers" with all details concerning the case to be brought ashore and await the corresponding reply.

Hospitalisation will be in a State hospital, or, if needs be, in a clinic. No disembarkation of a sick person may take place without the presence or ruling of the health authorities of the port.

Vaccinations necessary in case of need are carried out on the spot and in accordance with the requirements of the OMS.

Evacuation of sick persons is effected by ambulance, either municipal or private, after having advised the Port Health authorities.

RADIO: Tangiers Radio listens on 2182 kHz and VHF Channel 16. Weather forecast at 0915 hrs. and 1630 hrs. GMT on 1911 kHz.

TUGS: The port owns 1 tug of 1,500 h.p. equipped with fire-fighting equipment.

BERTHING:

Total Length	*Max. Draft*	*Remarks*
290 m.	28 ft.	
300 m.	28 ft.	New Mole
200 m.	20 ft.	
100 m.	14 ft.	

Berth TC: (extension of the new mole) has a depth of 12.0 m.

Car Ferry Berths: 3 installations for car ferries (2 ramps and 1 quay). Max. load on ramps 60 tonnes (30 tonnes per axle).

Roll-on/Roll-off: Berth T3: Length of quay 90 m. Max. draft 5 m. Width of vehicle approach way 5.30 m. Max. weight permitted 40 tonnes.

Berth T4: Length of quay 140 m. Max. draft 6 m. Width of ramp at landside 6.60 m. and at ship's side 10.8 m. Max. capacity 50 tonnes.

CRANES: 7 mobile cranes, lifting capacity 6 tonnes. 1 Titan rail mounted crane with capacity of 60 tonnes. No floating crane available.

STEVEDORES: Normal working hours are from 0800–1200 hrs. and from 1400–1800 hrs. Overtime: 1200–1400 hrs. and 1800–2400 hrs. Usual loading and discharging rates are as follows: 15–18 t.p.h. goods in sacks; 12–15 t.p.h. for bales; 10 t.p.h. for general cargo; 7–8 t.p.h. for cork.

TANKERS: Length of berth 60 m. Butane gas carriers also handled.
FRESH WATER: Replenishment of fresh water can be made at all times alongside the quays at the rate of 30 t.p.h.
FUEL: There are no refuelling installations at the quays. Only very small quantities can be supplied by tanker lorries belonging to the oil companies.
GANGWAY/DECK WATCHMEN: Advisable, order through Agent.
REPAIRS: Slipway for small vessels, no shipyard.
AIRPORT: International airport 12 km. from port on the road to Rabat.
TIME: GMT in Winter. GMT plus 1 hour in Summer (Date of change variable).
TELEPHONE: Installation only possible at the jetty.
POLICE/AMBULANCE/FIRE: Police: Tel. 19; Town Ambulance: Tel. 324-44, 342-42 and 376-83; Private Ambulance: Tel. 210-89; Fire Brigade: Tel.15.
GENERAL: *Tides:* Height of Springs, 2.20 m. Height of neaps, 0.50 m. *Wind:* (October – May) W. and S.W., (May – October) E.N.E. (sometimes Force 8).
Swell: From the N.W. in Winter which creates fairly rough seas in the port.
Currents: Insignificant.
AUTHORITY: Regie d'Aconage du Port de Tanger, B.P.305, Tangier, Morocco. *Tel:* 360-40/45. *Telex:* 336-90. *Contact:* Port Commandant.
AGENT: Lasry Maroc (Tangier), 4 Rue de la Mediterrannee, Tangier. Telex: 33064. Tel. 335-75-325-76. Cables: "Jolasry".

TAN-TAN: 28.29 N. 11.01 W.

The following is a translation of French Notices to Mariners.

The new fishing port of Tan-Tan is situated close to and to the S.W. of Cape Nachtigal. The main breakwater is 1,698 m. long, running N.E. for about 900 m. and then to the East towards the coast. The counter-dyke (230 m.) is perpendicular to the main breakwater at about 100 m. from its end. In the extension of the counter-dyke, and starting from the coast, the cross dyke is 548 m. long.

The port entrance faces S.W., the passage is about 100 m. wide between the ends of the counter-dyke and the cross dyke.

The port has 2 berths with 6 m. and 4 m. depth, one berth on the cross dyke and the other on the main breakwater. It also has a slipway 100 m. long and 50 m. wide.

Inside the port care must be taken when the winds are from West to North which produce a fairly strong undertow.

In October 1979 there were no lights or buoys. Arrival by day is recommended. A characteristic gap in the cliff and buildings to the N.E. of the port, together with a mountainous summit to the South will be seen. To the North of the main breakwater, the sea breaks over a barrier reef. Near the port the current runs Southwards.

Anchoring is possible in 12 m. – 13 m. of water, with sandy bottom and very firm, 1.2 miles to the W.S.W. of the end of the main breakwater. A shallow of 6.4 m. is located 0.5 miles to the West of the end of this breakwater.

VILLA CISNEROS (Dakhla): 23.42 N. 15.55 W.

DOCUMENTS: *Foreign Vessels*
Crew List.
Health Pratique.
Passenger List.
Cargo Manifest.
Safety Equipment Certificate.
Radio Safety Certificate.
Seaworthiness Certificate.
PILOTAGE: Pilot is necessary to cross the bar and for river navigation. Pilot joins at anchorage. Pilotage compulsory for all vessels over 50 g.r.t. Contact Pilot by radio-telephone, via Port of Villa Cisneros Radio operating on 2182 and 2626 kHz from 0800 to 1300 hrs. and from 1500 to 2000 hrs. GMT.
ANCHORAGES: In depths of more than 10 m. about 0.6 miles East of the breakwater head. This situation is well protected from swell from the S.W. but open to winds from the N.E. which are frequently strong creating difficult conditions for very small vessels. There are no mooring buoys.

Vessels loading transhipment cargo anchor in position with Punta Galera Light bearing 030°T, 1.2 miles off. The prevailing winds blow mostly from the North up to Force 3 with a long low swell mostly from a Northwesterly direction.
MAX. SIZE: Length 100 m., beam 12 m., draft 5 m.
HEALTH: Masters are required to complete a health certificate for the Port Captaincy declaring that the vessel has not called at any infected ports.
TUGS: None available, only one small launch which may assist.
BERTHING: Breakwater of 750 m. length extends towards the S.E., berths alongside the last 200 m., 1 concrete pier for small vessels, 3 small jetties enclosing 2 docks, can be used by vessels of medium size.
STEVEDORES: Employed by Port Authority and engaged by ship's Agent.
MEDICAL: Hospital available for any kind of medical attention; doctors and ambulance service available.
TANKERS: Moor at Jetty No. 2. Pipelines 4 in. diameter.
FRESH WATER: On the quays are 3 hydrants, capacity 3 t.p.h. and 4 of 2 t.p.h.
FUEL: Atlas Company can supply fuel subject to advance notice.
OPENING/CLOSING HATCHES: Opened and closed by crew.
CUSTOMS ALLOWANCES: Crew are allowed to take only sufficient tobacco ashore for their own consumption. It is not permitted to take alcohol ashore.
IDENTIFICATION CARDS: Seamen going ashore must take an identity card or a shore pass, issued by the Master.
CONSULS: No local representation.
REPAIRS: Only facilities for very minor repairs.
REPATRIATION: Can be arranged provided that documentation is in order.
AIRPORT: Situated 1 km. from the port. 5 flights per week.
TIME: GMT is used all year round.
HOLIDAYS: Mohammedan Holidays: Aid el Queber (2 days); Aid el Mulud (1 day); Aid el Seguer (2 days).
POLICE/FIRE/AMBULANCE: Police Station situated 100 m. from the quays. Fire, Tel: 18. Ambulance, Tel: 17.
SHORE LEAVE: Allowed without restriction.

NOTES

Please also advise Shipping Guides Ltd.

Mozambique

BEIRA: 19.46 S. 34.50 E. (See Plan Book)

PORT LIMITS: Vessels are considered to be "arrived ships" when they enter the pilotage area, i.e. when they enter within a radius of 5 miles from the pilot boat. The custom of the port is that vessels are in "Free Pratique" only when they have entered port and have been cleared by the Immigration Authorities. Immigration will only clear vessels in port.

DOCUMENTS:

Customs Clearance from last port.
Health Certificate.
8 Crew Lists.
8 Lists Passengers in Transit.
8 Lists Passengers Disembarking.
2 Stores Lists.
2 Lists Deck Stores.
2 Lists Cargo in Transit (main items of cargo only).
8 copies of Manifest of Beira Cargo.

Shipmaster's Report: March 1981.
Customs Clearance from Last Port.
Declaration of Health (Form Modelo No. 101-s.s.).
2 Sets Vaccination Lists.
7 Crew Lists.
7 Passenger Lists (with Passport Nos.)
2 Store Lists (Lista De Mantimentos).
2 Crew Declarations (Company Form).
3 In-Transit Cargo Lists (Tonnage and Main Items) Company Form/Letter.
3 Hazardous Cargo Manifests.
Register of Entrance (Form DSM-079) (To Pilot).

Note: Shore passes issued at gate in exchange for seaman's ID card/book. Radio Pratique not available.

PILOTAGE: Compulsory for all ships other than naval vessels. Ship's name, ETA and draft should be radioed via Beira Radio, call sign CRS, 24 hours in advance to Port Captain Beira and owner's Agent.

The pilot boat – black hull, grey upperworks, black funnel with white "P" – is stationed Lat. 19° 52′ 47″ S., Long. 34° 57′ 21″ E. Pilot boat call sign CRL H – W/T: listens on 500 kHz, replies on 480 kHz, – R/T: listens on 2,182 kHz, replies on 2,341 kHz. – VHF: frequency 156.6 MHz. (Channel 12).

Unless instructed to the contrary by the pilot boat, vessels with a draft under 25 ft. anchor by "P" buoy, 19° 52′ 47.3″ S., 34° 57′ 21.1″ E., and vessels with draft over 25 ft. anchor between "P" and "A" buoys, 19° 56′ 20.1″ S., 35° 02′ 44″ E.

In bad weather pilot boat may leave above position and enter port. In such cases vessels should anchor as indicated above, weather permitting.

ANCHORAGES: At Bar, "P" and "A" buoys as indicated above. There is anchorage for 4-6 ships, depending on size, in inner harbour off Cabedelo sand-pit.

RESTRICTIONS: Ships with draft 16 ft. and under can enter at any time. Ships with draft over 16 ft. generally enter 2 hours either side of high water.

MAX. SIZE: Max. permissible length about 800 ft. Max. permissible drafts between 33-36 ft. at springs, about 27-29 ft. at neap tides.

HEALTH: Vessel to radio "Sanidade Maritima", Beira, their ETA and "All Well". If "All Well", Health Certificate given by Pilot.

RADIO: Vessels to route messages through Beira Radio – call sign CRS. Agents radio ships through same station. Naval Radio Station – call sign CRX 3 available for distress signals.

TUGS: Join incoming vessels at inner anchorage, about 1 mile distant from quays. Ship's lines used. 4 tugs available, up to 3,200 h.p.

BERTHING: No night berthing done unless with prior consent of Chief Pilot, otherwise no specific requirements.

Pungue Wharf:

Berth No.	*Depth (ft.*	*in.)*	*Length of Berth (ft.)*	*Cranes (Electric)*
1	32	02	580	2× 6 tons 4× 3 tons
2	31	02	530	2× 6 tons 4× 3 tons
3	33	00	530	3× 6 tons 3× 3 tons
4	32	00	525	2× 6 tons 3× 3 tons
5	26	09	530	2×3.5 tons 1× 5 tons 1× 3 tons
6	26	03	540	1× 10 tons 5× 5 tons
7	29	04	540	1× 10 tons 5× 5 tons
8	32	00	630	Conveyor Belt
9	27	08	540	1× 10 tons 5× 5 tons
10	31	06	550	1× 20 tons 5× 5 tons

Note: Wharf No. 1 is generally used by trawlers, No. 2 by trawlers and coasters, No. 3 by vessels loading cement, Nos. 4, 5, 6, 7, 9 and 10 for general cargo.

Range of Tides: 15–21 ft. Maximum depth of water should only be taken as an approximate guide as actual depths are dependent on the port dredging programme. Maximum permissible draft for turning ships round at or off the wharves is 30 ft.

Chiveve Cais; length, 446 m.; depth, max. 10 m., min. 3 m.

CARGO HANDLING FACILITIES: There is a mechanical ore appliance at No. 8 Berth Pungue Wharf, used mainly for minerals like chrome, coal, etc. This appliance has an average loading rate of 1800-2000 tons per 20 working hours. It is equipped with only one spout.

Mobile Cranes: 25 cranes with capacity 1-10 tons.

Electric Cranes: See "Berthing" – Pungue Wharf.

Steam Cranes: 19 cranes at Chiveve Wharf with capacity 3-20 tons.

Molasses: Storage tanks, capacity 18,000 tons. Served via No. 8 Berth.

Vegetable Oils and Tallow: 3 tanks×400 tons capacity.

STEVEDORES: Ordered by Agent. Vessels should advise Agent their ETA at least 12 hours in advance (weekdays), 24 hours in advance (week-ends).

Port Cargo Working Hours:

Normal	–	Weekdays	– 0700–1100 1300–1700
		Saturdays	– 0700–1100
Overtime	–	The remainder of the day and up to 1700 hrs. on Sundays is considered overtime. All vessels are required to work full overtime including Saturdays and Public Holidays as ordered by Port Authorities. The only time when no work is carried out is from 1700 hrs. on Sundays to 0700 hrs. on Mondays.	

MEDICAL: No advance notice required for medical attention, unless urgent assistance necessary. Hospital facilities available. Crew members and passengers should be in possession of valid cholera and yellow fever certificates on international forms. Vaccination fever inoculations and certificates may be obtained ashore if required.

TANKERS: Discharge lines white and black oils, 2×10 in. lines feeding into 12 and 14 in. lines leading to storage tanks. Also a 22 in. discharge line for crude oil. No slop discharge facilities. 2 tanker berths max. permitted drafts about 31 ft.

DENSITY: In harbour area allow 3 to 4 in.

FRESH WATER: Available at all Pungue Wharf berths, pumping rate about 50 t.p.h.

FUEL: Fuel oil 1,000 Secs R. viscosity, marine diesel 43.1 Secs R., diesel 34.1 Secs R. 3-4 days advance notice required. Bunkers delivered when alongside, no bunkering barge available.

GANGWAY/DECK WATCHMEN: Compulsory to employ watchmen to prevent pilferage.

OPENING/CLOSING HATCHES: Can be done by either crew or stevedores. Often done by crew.

CUSTOMS ALLOWANCES: There is no restriction on crew member holding in his cabin any amount of tobacco/wine, spirits.

SHIP CERTIFICATES: Tonnage Certificate to be produced to Pilot, as certain port dues are based on vessel's registered tonnage.

CARGO GEAR: All gear supplied by stevedores except rope slings, rain tents, and spreaders for heavy lifts.

IDENTIFICATION CARDS: Required. Passport if possible, otherwise Seamen's Book.

CONSULS: None at present time.

REPAIRS: Most types of deck and engine repairs are possible, but major repair jobs are not undertaken.

DRY DOCKS: 1 dry dock 115×17×8.5 m., suitable for ships up to 5,000 tons, LOA 377 ft. and max. beam 55 ft.

REPATRIATION: Facilities exist and a valid passport is necessary as Immigration Authorities do not recognise a Seamen's Book as a valid travel document.

AIRPORT: Beira Airport situated 7 miles from sea port and is served only by domestic airline which maintains 2 flights per day to Maputo from where international connections available.

TIME: Local time 2 hours. ahead of GMT. No alterations made to clocks during year.

HOLIDAYS: January 1st (New Year's Day); February 3rd (Hero's Day); April 7th (Woman's Day); May 1st (Labour Day); June 25th (Independence Day) and September 25th (Army Day).

POLICE/AMBULANCE/FIRE: Port Police (Tel. 22920); Ambulance (Tel. 22442); Fire (Tel. 22222).

TELEPHONES: No telephones placed on vessels.

SERVICES: Services normally available for tank cleaning, compass adjusting, minor repairs to radar and radio.

SHORE LEAVE: Crew members and officers are allowed ashore, and shore passes are issued against Seaman's Book or Passport.

DELAYS: Generally no delays, but sometimes 24-48 hours' delay following rain or bunching of arrivals.

GENERAL: Beira port works 20 hours per day, 7 days a week (except 1st January) and overtime working is compulsory.

DEVELOPMENTS: A long term master plan is to be undertaken.

The plan includes a new oil terminal for tankers up to 50,000 d.w.t., new coal terminal for vessels up to 125,000 d.w.t., new bulk terminal for sugar and cereals and new container/multi-purpose terminal. The access channel will also be deepened in order to accommodate larger vessels.

AUTHORITY: Direccao do Porto da Beira.

AGENT: Rennies Freight Services (Mozambique) SARL, P.O.Box 270, Beira. Tel: 2 2091. Telex: 7332. Cables: Thaine.

MAPUTO: 25.59 S. 32.36 E. (See Late Plans)

DOCUMENTS:

6 Crew Lists.
1 Stores List.
6 Passenger Lists.
Last Port Customs and Port Clearance.
1 List of Ports of Call.
1 Health Declaration (given by Pilots on arrival).
1 Entrance Report (given by Pilot on arrival).
1 Customs Entrance (given by Agent on arrival).
1 Railway Statistics Form (given by Agent on arrival).

Shipmaster's Report: March 1981.
Same as Beira Report except:
6 Crew Lists (1 to Pilot).
1 Stores List.
6 Passenger Lists.
1 Crew Declarations.
1 List Ports of Call.
In Transit and Hazardous Cargo not required.

Notes: Immigration requires all-hands muster with I.D. card/book both entering and sailing.

Immigration Clearance: Inwards: 0600 – 1800 hrs. only inside harbour proper. Outwards: 0600 – 2400 hrs. except in special circumstances.

N.B. Vessels at the pilot station cannot obtain Pratique because this includes Immigration clearance and can therefore be considered as not having arrived or not being in all respects ready to load.

PILOTAGE: Compulsory. Channels in 24 hour use, but sailing after 2400 hrs. only by special arrangement with Immigration. Berthing only during daylight.

Pilot granted only if 16 hours' notice of ETA given.

On arrival vessels can contact Pilot on VHF Channel 16 (working on Channel 12).

The pilot ladder is used together with the accommodation ladder in order that the Pilot has a climb of 9 ft. on the pilot ladder.

Pilot Boarding Position: See "Shipmaster's Report".

ANCHORAGES: Inside harbour: One each for vessels drawing 33, 31, 27 and 26 ft. respectively. Six for vessels between 17 ft. and 19 ft. Vessels delayed in berthing are brought in from pilot station at port's convenience.

RESTRICTIONS: Berthing during daylight only. Unberthing 0600 hrs. to 2400 hrs. with exceptions of Matola piers where ships can only unberth during daylight. Ships over 650 ft. may not pass through dredged Channels at night. Ships up to 23 ft. may sail at any time, any tide up till midnight. Thereafter arrangements to be made with the Pilot Department for ETD.

MAX. SIZE:

	Max. LOA	*Depth LWOST*
General Cargo Wharf	750 ft.	22 ft.–34 ft.*
Matola Oil Pier	750 ft.	32 ft. 6in.
Matola Ore Appliance	820 ft.	40 ft. but governing draft is at the North Bar.*

*Maximum drafts published by Port Authorities. Approximately 34 ft. 5 in. to 37 ft. 2 in. depending on tide.

BERTHING: At Matola Ore Berth vessels must berth only at permissible times according to tides.

Main Wharf: All facilities owned and operated by Caminhos de Ferro de Mocambique (CFM), except stevedoring.

Dimensions: Wharf is in an uninterrupted line running roughly N.E./S.W., accommodating 12 – 15 vessels. Length: 3,033 m.

For loading or discharging bulk grain there are 2 Buhler machines at a berth with 33 ft. depth of water LWOST. About 120 t.p.h. A recent vessel averaged 2,900 tons per day.

Coaling Appliance (Reported Inoperative): The coaling appliance can berth vessels of LOA 750 ft., beam 91 ft. 10 in. and a max. draft of 34 ft. 6 in.

The best loading rate, in theory, is about 10,000 tons per day, however, in practice, allowing for shunting trucks, warping ship, etc., average rate is about 7,500 tons per day.

The length of the chute is 181 m. and it operates between angles of 46° and 58° to the perpendicular. At 46° the tip of the chute is 4.80 m. above wharf level and 9.50 m. from the wharf edge. At 58° the tip of the chute is 7.60 m. above wharf level and 11.80 m. from the wharf edge. At lowest spring tide the water at the coaling berth is 5.90 m. below wharf level and at highest spring tide 2.15 m., the difference between max. extremities being 3.75 m.

Sugar Terminal: The daily intake capability of installation is 2,000 tonnes and it has storage facilities in three sheds with a capacity of 40,000 tonnes each. It has a nominal loading capacity of 750 tonnes. The stowage within each hold is done by means of a telescopic trough and a mechanical distributor (projector) and is capable of projecting the sugar in various angles and distances. Max. reach of the jib is 17 m. Min. reach of the jib (in use) is 11.50 m. and the limit of inclination of the jib (in use) is ± 15°. Max. draft alongside is 33 ft. 06 in.

Depths Alongside:

Berth A	30 ft.
Berth B	32 ft.
Berth C	30 ft.
Berth D	31 ft.
Berth D3	31 ft.
Coal Tip	33 ft.
Berth Frigo	30 ft.
Berth G	33 ft.
Berth H	33 ft.
Wharf extension	40 ft.

LPG Carriers: Berth at Matola Ore Berth.

Timber: Vessels berth at Matola, Post No. 1 (P.I.). Max. draft 32 ft. Max. LOA, 600 ft. Vessels over 550 ft. LOA and draft over 25 ft. berth and sail during daylight hours only.

HEALTH: Pratique granted by Pilot unless disease prevalent on board when Masters should telegraph "Saude" Maputo.

RADIO: Advice of arrival 16 hours before to the Port Captain or Chief Pilot and Port Health should be sent through the station CRX (Naval), operating 24 hours on 500 kHz, replying on 437 kHz, also 2000 to 0500 hrs. GMT on 8356 to 8376 kHz (replying 3642 kHz) and 0800 to 2000 GMT on 12534 and 12564 kHz (replying 1299 kHz). All other non-official messages through station CRL, operating 0200 – 1800 GMT on 6 MHz at even hours, 0400 to 1800 GMT on 4 MHz at even hours plus 30 minutes (answering on 4259 kHz). Continues watch 0200 – 0400 GMT on 4 MHz. Radio telephone through CRL on 2132 kHz at even hours plus 45 minutes 0600 – 1700 GMT answering on 4415 kHz.

VHF: Pilot boat (Inhaca Station) and port radio operate on Channel 16 (calling) and Channel 12 (working) from 0530 to 1830 hours.

TUGS: 4 tugs available, 3,200 h.p., 3,200 h.p., 1.500 h.p. and 1,200 h.p.

CRANES: *Electric Cranes:* 82 units with capacity 3 to 20 tons.
Mobile Cranes: 63 units with capacity 4 to 12 tons.

Heavy lift crane with capacity of between 60 – 80 tons.

STORAGE CAPACITIES:

Ore and Coal Dumps: Gorjao Wharf.

	Tons
Coal	96,000
Ores	600,000
Copper	40,000
Vermiculite	4,000
Steel, Beams and Billets	46,000
Vanadium	7,000

Oil: Storage capacity 200,000 tons.
Molasses: 4 tanks, capacities 6,000, 9,000, 11,000 and 7,000 tons.
Fruit: 7,500 tons (1.133 cu.m./ton) in 100 chambers.
Fish: 200 tons.
Ore: Matola. Capacity 1.3 million tons. Loading speed for iron ore 1,500 t.p.h. and chrome ore 750 t.p.h. (via trucks) and 1,200 t.p.h. (ex bins).
Sugar: See "Berthing".
Containers: Containers and steel handled at the New Wharf Extension (Length 3,000 ft. – 3,500 ft.). 20 ton cranes available, also 20 ton fork lifts for moving steel. Ro-Ro vessels are handled.

STEVEDORES: *Working Hours:*

Normal:	Weekdays:	0700 – 1100, 1300 – 1700
	Saturdays:	0700 – 1100.
Overtime:	Weekdays:	1900 – 2300, 0000 – 0600.
	Saturdays:	1300 – 1700, 1900 – 2300.
	Sundays:	All day.

Overtime is compulsory on a daily basis (including Saturdays and Sundays) from 1900 – 2300 hrs.. and from 0000 – 0600 hrs.

The responsibility for overtime costs should be clearly defined in the Charter Party, normally 50/50 between charterers and owners.

TANKERS: Matola Mineral Wharf, 40 ft. LWOST, max. length of vessel 820 ft. Matola Oil Jetty, 32 ft. 6 in. LWOST, max. length of vessel 750 ft.

Dolphin berth at Matola (P3) has been erected for tankers. Max. draft 35 ft. Max. LOA 750 ft.

FRESH WATER: Available at all berths, not available ex-barge.

FUEL: Vessels can be supplied from pipe-lines whilst working at all berths, including the Matola Appliance and Tanker jetty, but excluding the new wharf extension, where pipes have been laid but the system is not yet ready for delivering bunkers. The rate of delivery varies between 300 to 500 tons per hour depending on the type of vessel taking bunkers. At present, supplies of gas oil and marine diesel oil are not in very plentiful supply, recommended to stem as far in advance as possible.

MEDICAL: No advance notice required for medical attention, unless urgent assistance necessary. Hospital facilities available. Crew members and passengers should be in possession of valid yellow fever certificates (cholera certificate too if cholera area) on international forms. Vaccination/fever inoculations and certificates may be obtained ashore if required. Men for sick parade must first go through the port doctor whose hours are week-days 0800 – 1130 hrs. and 1400 – 1730 hrs.; Saturdays 1000 – 1130 hrs., but always available on an emergency call.

REPAIRS: No dry dock except for small coasters. Facilities for most normal work, except underwater riveting, cutting and welding, and shaft balancing.

CONSULS:

Brazil
France
Germany
Italy
Norway
South Africa
Spain
Sweden
Switzerland
United Kingdom
U.S.A.

IDENTIFICATION CARDS: Crew and passengers are issued with Immigration Boarding Permits and they must be carried at all times. (Such permits to be returned to Immigration Officer prior to sailing.)

WATCHMEN: Strongly recommend employing services of a local watchman, who will also control visitors and labour passes.

OPENING/CLOSING HATCHES: Can be done by either crew or stevedores. Often done by crew.

CERTIFICATES: Tonnage Certificate to be produced to Pilot, as certain port dues are based on vessel's registered tonnage.

REPATRIATION: Facilities exist for nationals of those countries maintaining diplomatic relations with Mozambique. A valid passport and visa is necessary as Immigration Authorities do not recognise a Seaman's Book as being a valid travel document.

AIRPORT: About 5 miles from centre of town.

CUSTOMS ALLOWANCES: Bonded stores are usually not sealed.

HOLIDAYS: No cargo work on 1st January and 25th December, on other holidays, work continues normally in the port.

TIME: Local time GMT plus 2 hours. No alterations made to clocks during the year.

SHORE LEAVE: Crew are allowed ashore, from 0600 – 2400 hrs. excepting nationals of those countries not maintaining diplomatic relations with Mozambique.

TELEPHONES: A telephone will be placed on board the vessel.

GENERAL: Crew and passengers not to take photographs in the dock area. Permission through Agent required to lower any boats or gear overside into the water or on to the wharf.

Do not immobilise main engines or carry out engine trials at the wharf until permission has been obtained by the Agent as the Authorities require vessels to maintain sufficient steam for main engines to be used at 2 hours' notice.

Customs guards to be supplied with meals and accommodation whilst at Inner Anchorage and alongside the wharf otherwise cost per guard will have to be paid by Agent on Owner's behalf.

DEVELOPMENTS: Administration are considering the construction of a deep-sea port on the coast between Inhaca Island and the Natal border. This port will be mainly used by coal and iron-ore carriers and have a capacity of approximately 6 million tons per annum.

2 container cranes to be installed in 1984.

Dredging to be undertaken.

SHIPMASTER'S REPORT: May 1984.

Chart: B.A. Chart No. 644.

Pilotage: Pilot boards at the South Entrance within 1 mile radius of Buoy No. 4 (position Lat. 25° 56′ S., Long. 32° 44.5′ E.).

Also see "Tugs".

Anchorage: Between Baixo Ribeiro Beacon Light and Buoy No. 4.

Radio: Maputo Radio, Durban Radio or Capetown Radio.

Tugs: One tug working. Tug used for berthing and embarking/disembarking Pilot at Buoy No. 4. Delays of 2 – 3 hours may be expected if ships leaving port.

Berthing: No fenders on piers. Damage to vessel or piers possible.

Fresh Water: Available alongside.

Fuel: Available if advance arrangements made.

Watchmen: Compulsory. Ship to provide meals.

Identification Cards: Issued by Immigration Office at main gate in return for seaman's book. Seaman's book returned when crew return to main gate.

Customs/Quarantine: No crew muster. Customs check and seal bonded store.

Shore Leave: Crew: 1800 – 2400 hrs. Officers: 0800 – 2400 hrs.

Provisions: Not available.

SHIPMASTER'S REPORT: August 1984.

Vessel: 80,000 d.w.t.

Arrival Draft: Forward: 6.6 m., Aft: 8.6 m.

Cargo: 8,000 tons Cracked Fuel Oil.

Approaches: Following a report received from a Master dated May, 1984, it was noted that the original Pilot Boarding Area had been changed from N.W. of Inhaca Lighthouse to 1 mile East of No. 4 S Buoy. Also in view of this report which advised that the majority of the buoys were unlit and some out of position it was decided to make the approach to the North Channel Buoy (No. 2 N) and the subsequent passage in daylight. The vessel ended passage at 0400 hrs. abeam of Inhaca Light and proceeded with caution from there with the echo sounder running continuously.

Buoy No. 2 N: (North Channel Approach Buoy) – found to be in the recently corrected charted position but unlit. This buoy, however, was visible on the 3 cm. Radar at 12 miles and was observed visually at 5 miles. This buoy carries no topmark and the colour is indistinguishable.

Lacerda Lighthouse: Unlit and covered with bush – not conspicuous.

Macomana Lighthouse: Unlit and covered with bush – not conspicuous.

Buoy No. 4 N: Unlit, Radar conspicuous at 6 miles (3 cm.), fitted with radar reflector. Has a definite can shape, is rusty in colour and covered with weed.

Buoy No. 1 N: Unlit, no radar reflector, reasonable target on 3 cm. Radar, again can shaped with general appearance of spar buoy, colour again indistinguishable.

No. 3 Buoy: In position but unlit.

No. 6 N Buoy: Approx. 4 cables North of charted position, unlit.

Red Can Buoy: (No. 3 Buoy for South Channel) Unlit, Radar conspicuous 3 miles, has damaged radar reflector, definite can shape but rusty in colour.

Buoy No. 4 S: Fl. R. 5 sec: This appears to be one of the maintained buoys, Pilot boards 1 mile East of this buoy, however, is often obscured by vessels at anchor near the Pilot Station.

Ribeiro Light Beacon: (The Mast) Unlit but good 3 cm. target at 15 miles, visual at 7 miles – 8 miles.

NOTE: 1. There is a very conspicuous wreck on the shoals in position Lat: 25° 52′ S., Long: 32° 44.9′ E., visible in daylight at 7 miles and giving a good radar image. This wreck is not charted but its position was ascertained by Radar.

2. The tip of land on Pta. de Macaneta obviously uncovers more than the chart shows and should be considered unreliable for radar images.

3. The coastline between Lacarda Lighthouse and the tip of Macaneta shows well on the radar at 6 miles range but is very low lying and rather indistinguishable at ranges over 10 miles.

Tidal Effect: Found almost negligible.

Soundings: As mentioned, inbound, the echo sounder was running throughout the period vessel entered the North Channel on a rising tide and the minimum under keel depth recorded was 3 m. However, when leaving the port about 2 hours after High Water heavy mud/water was observed in vessels' wake from No. 4 S Buoy and No. 6 N Buoy with the echo sounder showing almost zero. The vessel's departure draft being 6.6 m. and 8.2 m.

Pilotage at Maputo: Pilot boards 1 mile from No. 4 S Buoy, this is the only fully working buoy in the port system (painted bright red).

The following comments are made in conjunction with BA Chart 646.

Buoy No. 4 S: In charted position, can buoy painted red with light.

No. 5 Buoy: In charted position, unlit, but fitted with radar reflector, a conical buoy of a nondescript dark colour.

No. 6 Buoy: In charted position, unlit, no radar reflector, conical buoy of rusty colour.

No. 7 Buoy: Unlit, fitted with radar reflector. In charted position, rusty colour, conical shape.

No. 8 Buoy: Unlit, No radar reflector. Conical of nondescript colour, in position.

No. 9 Buoy: Missing.

No. 10 Buoy: In charted position, newly painted Red can buoy, unlit with half the top structure missing.

No. 11 Buoy: In position, unlit.

No. 12 Buoy: In position, unlit, with radar reflector.

No. 13 Buoy: Missing.

No. 14 Buoy: In position, unlit, with damaged radar reflector, no topmark but of a definite black colour.

No. 15 Buoy: In position, unlit, no radar reflector, no topmark, conical of a nondescript colour.

No. 17 Buoy: In charted position, unlit, but a large distinctive can buoy with radar reflector. Colour black to grey.

No. 14A Buoy: Missing.

General Comments: Pilotage this voyage was handled by the Senior Pilot but only after a meeting ashore and also subject to his inspection of the vessel prior to entry. This apparently was due to the fact that the supposed max. length of vessels entering Maputo is restricted to 200 m. while this vessel was 242 m. We were also restricted to entering the port in daylight and at High Water.

There are only 2 tugs in operation, one of which is only operating on half power, while the other appears to have stability problems as it develops a rather alarming list when it alters course.

There is no pilot boat, the half power tug acts in this capacity (this is the reason for the pilot station being brought in to No. 4 S Buoy). The port has 10 Pilots plus a number of local personnel under training. Should several vessels be leaving the Port at the same time, they must wait in the vicinity of the pilot area until the final ship arrives, then the tug will do the rounds and pick up all the Pilots. The standard of pilotage was very good, the main problem being lack of back-up.

Harbour has not been dredged for 10 years, thus charted depths are suspect.

Matola Oil Berth:

1. See "Late Plans" for mooring arrangement.
2. Berth ended approximately quarter ship's length from aft thus only access to vessel was by pilot ladder and the only way to connect shore hoses to ship's manifold was to run approximately 300 ft. of 8 in. hose along maindeck. The state of these hoses was suspect as the last test date was 1968, the average life of flexible hose being about 18 months.
3. Maximum discharging rate was found to be 350 t.p.h. with 8 kilo pressure at the rail, while the maximum loading rate was between 350 t.p.h. – 400 t.p.h.
4. No emergency back-up system, no fire service available, tugs not fitted as fire tugs, the only fire fighting appliance observed was 1 × 50 lb. fire extinguisher.
5. Communications between ship and shore almost non-existent, the only way to raise the Agents was through the vessel's VHF. This was assuming that the city was not blacked out through power failure.
6. No illumination at all on the jetty.
7. Only 1 mooring boat of insufficient power to handle wires.
8. Vessels are required to backflush the cargo lines with water before disconnecting, this was not convenient for an SBT tanker and our vessel overcame the problem by using the ship's air supply. Agent advised that the jetty was a prime target for terrorist attacks, this was apparently official Government advice.
10. Shore leave was available for all crew, however, there were no taxis available.
11. Any cash drawn by Master cannot be returned to Agent.
12. Vessel moored using starboard anchor to swing, when alongside moorings as per plan.

AUTHORITY: Capitania do Porto de Maputo.

AGENT: Rennies Freight Services (Mozambique) SARL, P.O.Box 351 or 292, Maputo. Tel: 2 3021/6. Telex: 6221. Cables: Reniform.

MOZAMBIQUE: 14.58 S. 40.45 E.

DOCUMENTS:

Customs Clearance from last port.
Port Clearance.
Health Certificate.
6 Crew Lists.
6 Passenger Lists in Transit.
7 Passenger Lists Disembarking.
2 Stores Lists.
2 Lists Deck Stores.
2 Lists Cargo in Transit (main items of cargo only).
6 copies of Manifest of Mozambique Cargo.

PILOTAGE: One Pilot available, 24 hours Pilot boat is black and grey. Ships take Pilot near buoy No. 2 (Red Buoy) placed off Goa Island. At night ships should send Morse signals with Aldis lamp to the middle of Mozambique Island (location of port office). ETA should be given as soon as possible to pilot station off Mozambique Island and/or to ship's Agent.

ANCHORAGES: When waiting for Pilot, or due to their draft (more than 30 ft.) ships may drop anchor off red buoy No. 2 (0.5 miles seawards). Depths between 60 ft. and 90 ft. Bottom with sand and some broken coral; current from North to South, sometimes up to 4 knots.

MAX. SIZE: Only ships with drafts less than 30 ft. can cross the bar and enter the Port.

HEALTH: Quarantine flag should be flown, even after calling at other ports in this country. Health Certificate given by Pilot.

RADIO: Radio Mozambique call sign CRQ. Also available Maputo or Beira Radio Stations.
TUGS: Tugs are not necessary in this port.
BERTHING: No quay berths. Vessels work cargo at anchor.
STEVEDORES: All requirements on this purpose must be sent to the Agent.
MEDICAL: Medical assistance can be given at any time, even to vessels unable to cross the bar because of draft. Hospital with adequate facilities, and emergency services available.
FRESH WATER: Always available in any quantity. Supplied by barge of 40 tons capacity.
FUEL: Small quantities available.
OPENING/CLOSING HATCHES: By stevedores.
CARGO GEAR: Vessels anchor in bay and load and discharge by lighter and barges.
IDENTIFICATION CARDS: Required.
CONSULS: No local representatives.
REPAIRS: Light repairs can be effected.
REPATRIATION: All facilities available.
AIRPORT: Situated about 7 km. from Mozambique. Connections to Beira and Maputo every day.
HOLIDAYS: 1st January; 2nd March; 1st and 10th June; 15th August; 5th October; 1st November; 1st December; 8th December; 25th December. Cargo handling can be arranged on these days.
POLICE/AMBULANCE/FIRE: Maritime Police, Customs and Agents will always be on board during stay.
TELEPHONES: No telephones, but walkie-talkies are available; arrange with Agent.
AUTHORITY: Capitania do Porto de Mocambique.

NACALA: 14.32 S. 40.37 E.

PORT LIMITS: The line joining Ilha Goman to Cabo Columulomo Light at the entrance of Bay of Fernao Veloso.
DOCUMENTS:
Customs Clearance from last port.
Port Clearance from last port.
Health Certificate.
7 Crew Lists.
7 Lists Passengers In Transit.
7 Lists Passengers Disembarking.
4 Stores Lists.
4 Lists Deck Stores.
4 Lists Cargo In Transit (main items of cargo only).
10 Copies of Manifests of Nacala Cargo.
4 Lists of Dangerous Cargo.
6 Copies, Ports of Call of Present Voyage.
Shipmaster's Report: March 1981.
Same as Beira Report except:
5 Passenger Lists.
6 Lists Ports of Call.
In Transit & Hazardous Cargo not required.
PILOTAGE: Compulsory for berthing/unberthing. Normally working only during day time. Vessels come inside the bay and wait for Pilot at inner anchorage.
ANCHORAGE: Fine natural harbour. Entrance half a mile wide, depths up to 60 m. Good anchorage for any size vessels. Sand and mud bottom.
MAX. SIZE: For anchoring, no restrictions. For berthing, up to 31 ft. draft.
RADIO: No facilities at present. Advise ETA through Agent.
HEALTH: Due to poor communication, health services should be contacted by Agents.
VHF: Channel 16.
TUGS: One available, 1,000 h.p.
BERTHING:
North Wharf: There is a pier with berths for 4 vessels with a length of 426 m.
Depths: Wharf 1: 24 ft.
„ 2: 21 ft.
„ 3: 30 ft.
„ 4: 30 ft.
Cranes: 11 cranes available 8×5 tons
2×10 tons
1×20 tons
South Wharf: There is a pier to berth 2 vessels.
Depth: 45 ft.
Cranes: 5×5 tonne cranes under construction.
CRANES: 11 electric cranes with capacity 1 to 20 tons.
BULK CARGO FACILITIES: Not available, bulk cargoes discharged through buckets at an average of 100/200 tons per day of 24 hours. 3 gangs working from 0600 – 2200 hrs. and 1 gang 2200 – 0600 hrs.
SPECIALISED CARGO HANDLING FACILITIES: Two 20 ton forklifts available for handling containers. Containers handled at the South Wharf at an average of 600 per month Imports/Exports. Vessel to be geared as no shore cranes on container berth. If vessel ungeared, berth at general cargo wharf No. 2, where 20 tons crane available and quantity normally limited to 5 containers.

At container berth, a gantry crane available for loading/unloading of the wagons, cannot be used for vessel's handling.

Ro-Ro vessels also able to berth and load/discharge at South Wharf. No special equipment available to handle Ro-Ro vessels.

STEVEDORES: Working hours 0600 to 1400 hrs., 1400 to 2200 hrs. (2200 – 0600 for container vessels) weekdays, Saturday and Sundays. One stevedoring firm in operation, under Port Railway control.

Gang requested at the following hours:

0930 –	for day shifts –	1400 – 2200
1500 –	for night shifts –	2200 – 0600
	for day shifts –	0600 – 1400
1000 –	for Saturday and Sunday –	For whole weekend until 0600 – 1400 hrs. on Monday

Very important that Agents are advised of accurate ETA as vessels normally not berthed or worked if gangs not requested. If gangs are requested and vessel not available, standby fines paid.
FRESH WATER: Available and delivered direct from the pier or by barges.
FUEL: Only available if requested from Petrmoc at Maputo.
CONSULS: Not available locally, only at Maputo/Beira.
REPAIRS: Not available.
DRY DOCKS: Not available.
SURVEYORS: Available operated by M/s Cory Mann George (Malawi) Ltd. Lloyd's Sub-Agents.
CUSTOMS ALLOWANCES: No restrictions provided quantities in crew's possession declared on vessel's arrival.
AIRPORT: The only commercial airport is Nampula Airport, 200 km. from Nacala.
MEDICAL: No advance notice required for medical attention, unless urgent assistance necessary. Hospital facilities available. Crew members and passengers should be in possession of valid yellow-fever certificates, cholera certificate compulsory. Vaccination/fever inoculations and certificates may be obtained ashore if required.
GANGWAY/DECK WATCHMEN: Compulsory, under supervision of Immigration Department.
OPENING/CLOSING HATCHES: By ship's crew.
CERTIFICATES: Tonnage Certificate to be produced to Pilot, as certain port dues are based on vessel's registered tonnage.
REPATRIATION: Facilities exist for nationals of those countries maintaining diplomatic relations with Mozambique. A valid passport is necessary as Immigration authorities do not recognise a Seaman's Book as being a valid travel document.
TIME: Local time 2 hours ahead of GMT. No alterations made to clocks during year.
POLICE: Tel. No. 2820, 2710.
AMBULANCE: No telephone. Contact must be done through Agents, local hospital Tel. No. 2347.
TELEPHONES: Not possible to place telephones on board.
SERVICES: Not possible to perform any service to the vessels, as no facilities.
SHORE LEAVE: Crew members are allowed ashore, excepting nationals of those countries not maintaining diplomatic relations with Mozambique, weekdays from 1800 – 2400 hrs. only. Saturdays from 1400 – 2400 hrs. and Sundays/Holidays from 0800 – 2400 hrs.

Passports/Seaman's Book to be remitted at Immigration premises, 50 m. outside the gate. As shore leave hours often vary, times should be confirmed with Immigration when port clearance is given.
HOLIDAYS: New Year's Day (1st January); Mozambican Hero's Day (3rd February); Mozambican Woman's Day (7th April); Workers' Day (1st May); Independence and Frelimo's – Foundation Day (25th June); Lusaka Agreement Day (7th September); Revolution and Forcas Populares de Libertacao de Mozambique's Day (25th September); Family Day (25th December).

Normally no cargo work on 1st January and 1st May; while on other days work continues with reduced personnel.
REGULATIONS: Crew are not allowed to take cameras on shore also are not allowed to take photographs in the port area.

When vessels are at anchor, special attention must be taken with the small fishing boats whose owners normally approach the vessels and try to exchange local goods with clothes, soaps, etc. These transactions must be avoided at all costs otherwise Masters will be subject to heavy fines.
DEVELOPMENTS: Installation of Coast Station (Radio): 1984.
Installation of telex link Nacala-Blantyre (Malawi): 1984.
Renewal of rail-line Nacala/Malawi border: 1984-1988.
Ship/shore crane for container berth: 1986.
Acquisition of 3 Ro/Ro trucks and trailers: 1985.
AUTHORITY: Direccao Nacional dos Portos, Direccao do Porto de Nacala, Caixa Postal No. 70, Nacala.
Administracao Maritima de Nacala, C.P. No. 10, Nacala.
AGENT: Navir Sarl, P.O.Box 175, Nacala. Cables: 'Navir Nacala'.

PEMBA: 13.00 S. 40.28 E.

DOCUMENTS:
6 Crew Lists.
6 Lists of Passengers Disembarking.
6 Lists of Passengers in Transit.
1 Master's Declaration.
1 Stores and Provisions List.
1 Health Declaration.
5 Sets Cargo Manifests.
2 Sets non-negotiable Bills of Lading.
Clearance Documents from last port.
PILOTAGE: It is necessary to order by radio request to Agent 14 hours before arrival.

ANCHORAGES: Vessels may anchor South of the dock about 300 m. off. Other suitable anchorages will be indicated by the Pilot.
RESTRICTIONS: Vessels may enter with Pilot at any hour day or night.
MAX. SIZE: Draft up to 27 ft. 6 in. for berthing.
HEALTH: In case of contagious disease on board, the Port Health Authorities must be advised in advance.
RADIO: Send messages through Beira radio.
TUGS: None available
BERTHING: One berth, length 182 m., depth alongside 28 ft.
STEVEDORES: In ETA message to Agent, indicate number of gangs required and advise quantity and description of cargo for discharge.
MEDICAL: In case of urgency advise Agent by radio before arrival. Hospital facilities available. Vaccinations can be performed.
FRESH WATER: Available.
FUEL: Available.
GANGWAY/DECK WATCHMEN: Not necessary as there is a permanent guard on board.
OPENING/CLOSING HATCHES: Performed by stevedores.
CUSTOMS ALLOWANCES: Bond is not sealed and no restrictions made.
IDENTIFICATION CARDS: Required by police.
REPATRIATION: Can be arranged.
AIRPORT: Situated 7 km. away. Flights to Beira and Maputo daily.
TIME: GMT plus 2 hours. No alterations during the year.
HOLIDAYS: No work performed from 1700 hrs. Christmas Eve until 0600 hrs. 26th December; no work performed from 1700 hrs. New Year's Eve until 0600 hrs. on 2nd January. Work may be arranged on the following holidays: 1st January, 3rd February, 7th April, 1st May, 25th June and 25th September.
POLICE/FIRE/AMBULANCE: Police, Tel: 2828; Hospital, Tel: 2211.
SHORE LEAVE: Allowed. Except for nationals of countries not maintaining diplomatic relations with Mozambique.
AUTHORITY: Capitao do Porto de Pemba.

NOTES

Please also advise Shipping Guides Ltd.

Namibia

LUDERITZ: 26.39 S. 15.09 E. (See Plan Book)

PORT LIMITS: East of the line from Angra Pt. to a point 1,097 m. due North thereof, thence by a line from the latter point to the South shore extremity of N.E. Point.

DOCUMENTS:

1 copy South African Transport Services arrival form T958.
2 copies Crew List.
2 copies Passenger List.
Certificate of Ship's Registry.
Ship's Articles.
Manifests.
Charter Party.
Bills of Lading.
Official Log Book.
List of Dutiable Stores.
Ship's Radio Station Licence.
Safety Certificate.
Light Dues Certificate.

PILOTAGE: ETA at least 72 hours in advance if possible; unless in an emergency. Cables addressed to Harbourmaster Luderitz.

All pilotage inside port limits is compulsory unless a Pilotage Exemption Licence has been granted (in the case of local vessels of 70 m. length or less).

Pilot boarding positions: Fine weather: One mile North of Angra Point. Adverse weather: 0.7 miles N.E. of Angra Point.

Pilot vessels: "Fisant": Black hull, white wheelhouse and yellow roof. Yellow funnel. "Tern": Black hull, white upperworks, wooden wheelhouse. Yellow funnel.

Specific requirements:

Two manropes at ladder.
Lifebuoy at ladder.
Ship's officer in attendance when pilot embarking or disembarking.

At night, the ladder is to be lit without blinding pilot. No broken or slippery ladder rungs. Also see "Radio" and "VHF".

ANCHORAGES: Outside port limits: Shearwater Bay; between Diaz Pt. and Angra Pt. Good holding ground. Depth up to 20 m.

Inside port limits: Luderitz Harbour: between Angra Pt. and Shark Island. Good holding ground. Depth up to 16 m.

Robert Harbour; between Shark and Penguin Islands. Good holding ground. Depth up to 9 m. Confined anchorage.

Anchorage may take place inside the port limits between 0600 hrs. and 2200 hrs. or at any other time in an emergency.

RESTRICTIONS: Docking and undocking may take place between 0600 hrs. and 2200 hrs. or at any other time in an emergency.

MAX. SIZE: Shearwater Bay: No restrictions. Luderitz Harbour: No length restrictions, draft 15 m. Robert Harbour: Length approx. 140 m., draft 7.5 m. Alongside main jetty: Length normally approx. 95 m., draft 6.0 m.

HEALTH: Port Health Officer carries out formalities. Tel: 2815. Cables: "Port Health Luderitz".

RADIO: Radio-telephone calls, cables etc. to Agents, Shippers, etc, through Walvis Bay Radio; call sign ZSV. Frequencies as per International Telecommunication Union list of Coast Stations.

VHF: VHF contact with Port Control on Channel 16. Working Channels: 6, 8, 9, 10, 11, 12, 13, 14, 17, 67, 68, 69, 70, 71, 72, 73 and 74. Same VHF channels apply to Pilot and Tugs.

Diaz Point Lighthouse maintains a 24 hour watch on VHF Channel 16; with working channels as for Port Control. If no reply from port control, contact Diaz Point Lighthouse.

RADAR: No port radar service.

TUGS: Two small tugs are stationed at the Port: "Tern" (diesel) of 850 h.p. length 26 m. and "Fisant" (diesel) of 220 h.p. length 14 m.

Tugs usually join vessel at head of the channel in Robert Harbour. Tugs lines' are used; at no extra charge.

Tugs are equipped with fire fighting hoses and salvage pumps.

BERTHING: Entrance Channel: Length 708 m., width 60.9 m., depth 6.1 m.

Turning Basin: 236 m. by 198 m., depth 6.1 m.

Main Jetty: Length 242 m. Two berths of 92 m. length, depth 6.1 m.

Wooden Jetty: Length 168 m., depth 3.5 m.

One berth is available on each side of the main jetty for vessels up to approximately 95 m. in length. Longer vessels may be accommodated by prior arrangement; weather conditions, etc., permitting. A draft restriction of 6 m. at low tide exists.

The wooden jetty is used mainly for the local fishing fleet of small wooden boats.

No specialised berths exist at Luderitz, at present.

CRANES: 2 × 4 ton cranes able to work over either side of jetty but unable to work in tandem. Any heavier lifts by ship's gear only.

STEVEDORES: 72 hours' notice is required in order to arrange gangs. Average rates: Frozen fish 18 t.p.h. General cargo 32 t.p.h. Timber 45 t.p.h.

MEDICAL: 2 doctors, one hospital (36 beds), one hospital (160 beds), notice of 4 hours required, except emergencies.

TANKERS: 2 × 10 in. diameter DGO pipe-lines, all necessary fittings ashore. SG 0.854.

DENSITY: 1025.

FRESH WATER: Available on jetty by pipe-line through meter at approximately 25 t.p.h.

FUEL: Gas oil connections to 2×254 mm. pipe-lines from shore tanks.

Gas oil bunkers points on the main jetty supply at approximately 25 t.p.h. 1,200,000 litres of gas oil are available.

Small quantities of gas oil by 6,819 litre capacity road tanker are also available at immediate notice.

CONSULS: None.

REPAIRS: Light engineering facilities exist.

DRY DOCKS: One slipway of 400 tons capacity and 1×150 ton capacity. Used mainly by local fishing boats.

SURVEYORS: Department of Transport surveyor is available at Walvis Bay. Cargo surveys, underwater surveys and other independent surveys are available by Master Mariner.

GANGWAY/DECK WATCHMEN: Not necessary but available if required.

HATCHES: Opened and closed by crew.

CARGO GEAR: Alongside jetty by shore cranes (4 ton capacity) by ship's gear at anchor when using lighters. Eight lighters, 26 m. long, 150 ton capacity are stationed at the port.

REPATRIATION: Handled by Agent with little difficulty.

AIRPORT: 12 km. from harbour. 6 flights a week (Tarmac Air Cape) to and from Windhoek and Cape Town. Charter flights may be arranged.

TIME: GMT plus 2 hours.

HOLIDAYS: Cargo can be worked on any day.

POLICE/AMBULANCE/FIRE: Police: 10111, Ambulance: 2266, Fire: 2607.

TELEPHONES: Available R30.00 per connection plus usage.

SERVICES: Compass adjusting, diving and cargo surveys.

SHORE LEAVE: 24 hours at anchorage, launch available.

IDENTIFICATION CARDS: Seaman's book.

DELAYS: No delays normally, except due to weather.

GENERAL: Fresh provisions, supplies and services available by arrangement with Agent.

Basic weather conditions: Summer – South to S.W. wind up to 35 knots frequently experienced. Winter – winds variable but mainly North up to 20 knots. Fog is frequently experienced West of Angra Pt.

Charts: BA. 3861 and 3863; South African Naval Charts: 1002 and 1003.

DEVELOPMENTS: The buoyage system presently used in the port is due to be changed to the IALA Maritime Buoyage System during 1984/85.

SHIP'S OFFICER'S REPORT: December 1983.

Medical: No facilities for blood tests; these can only be done when there is a direct flight to Capetown.

Surveyors: Pilot/Harbourmaster acted as Cargo Surveyor.

Customs: Very strict regarding magazines. These should be sealed in bonded store, otherwise fines payable.

Shore Leave: Possible from anchorage using tug.

Stores: Fresh vegetables available, but at very high prices.

AUTHORITY: South African Transport Services, P.O.Box 88, Luderitz 9000. *Tel:* 2337 or 21240. *Contact:* Captain I. G. Rees, Harbour Master and Pilot.

AGENT: King & Sons (Pty.) Ltd. P.O.Box 11, Luderitz 9045. Tel: (06331) – 2054. Telex: 56-796. Cables: Baronet.

WALVIS BAY 22.57 S. 14.30 E. (See Plan Book)

PORT LIMITS: The area bounded on the West by a line drawn from Pelican Point Lighthouse to a point North (true) for a distance of 4 km; on the North by a line from this point drawn East (true) to the mainland; together with the foreshore therein and the jetties, harbour works and harbour lands vested in the Government. For the purposes of calculating port charges a vessel is regarded as an "arrived ship" when it enters the dredged channel in Walvis Bay Harbour or when the vessel anchors in the port limits.

DOCUMENTS:

5 copies Crew List.
8 copies Passenger List.
2 copies Report Inwards/Outwards.
2 Certificates of Clearance DA3.
2 copies Transire DA4 for each port of call.
Manifest of Cargo in duplicate.
3 copies Manifest of Stores DA5.
1 SATS Clearance.
Shipping Master's Certificate.
Immigration Certificate.
Post Office Certificate.
Income Tax Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Load Line Certificate.

PILOTAGE: Pilotage is compulsory. The vessel's Master must radio his ETA to his local Agent, who completes Form T.958 for submission to the Port Authority.

Channel 16 on VHF radio can be used to call the Port Control Office, working Channel 12. Pilot boats are normally black with a white superstructure and have a yellow funnel with horizontal green stripes.

The Pilot boards at a point approximately 0.5 miles North of the Fairway Buoy (Entrance Channel Buoy) in the direction of the Bell Buoy (Pelican Point Spit Buoy).

The Pilot will inform the Master by means of the VHF on which side the pilot-boarding ladder and manropes are required.

ANCHORAGES: Varying in depth from 13 m. – 14 m. at LWOST 1.0 miles North of Fairway Buoy. Bottom – sand and silt. (Please also see "Africa Pilot" Vol. II).

RESTRICTIONS: The movement of Oil Tankers and vessels carrying explosives or dangerous goods are restricted to daytime hours (berthing 0600 hrs. – 2000 hrs., unberthing up to 2145 hrs). The maximum permissible draft is 9.9 m.

MAX. SIZE: Max. LOA 224 m., max. draft 9.9 m.

HEALTH: Master to contact Port Health via Walvis Bay Radio to request Pratique. Same procedure applicable if disease reported.
RADIO: Call sign ZSV. VHF radio in Port Captain's Office.
VHF: Port Control equipped with VHF Channels 16 – 12. Port working Channels 9 – 11.
RADAR: Radar is fitted to the harbour tugs and pilot boats. Master to contact Port Control for radar service.
TUGS: Two first-class tugs equipped with radar, wireless telegraph and telephone, direction-finding apparatus and salvage and fire-fighting appliances; 2 Pilot boats and 1 launch.

Tugs normally join a vessel on Pilot's request in the entrance channel and are secured by means of the tugs' wires.
BERTHING: 8 berths available excluding tanker berth. Quay length 1,409 m., max. permissible draft 9.9 m. (salt water). Load/discharge by shore cranes unless cargo of such nature that it is essential to use ship's derricks. Berth Nos. 1 – 6 general cargo, No. 7 container berth and No. 8 berth allocated to bulk loaders, also utilised as repair berth.
CRANES: 18 cranes available, 17 × 4 tons, 1 ×15 tons.
BULK CARGO FACILITIES: Berth Nos. 1 – 6 utilised if necessary. Berth No. 8 exclusively used for salt loading as this utilises ship's gear only. Berth Nos. 1 – 6 served by shore cranes. Max. draft 9.9 m. (salt water). Bulk cargoes at Walvis Bay consist of salt/petalite. Loading rate salt by shore crane approximately 95 t.p.h., petalite approximately 30 t.p.h.
SPECIALISED CARGO HANDLING FACILITIES: Berth No. 7 utilised as container berth. Ro/Ro vessels berthed at No. 6, liquid chemicals at Berth No. 5. Container stacking area and 2 container stacking cranes available. Ship's gear will still be required for loading and unloading containers. Liquid chemicals are handled in tank containers.
STEVEDORES: Stevedoring is undertaken by private enterprise and stevedores are appointed by Ships' Agents.

Stevedores require minimum notice 72 hours prior arrival. Main export salt in bags rate 18/25 t.p.h. depending on method of delivery to ship's side (rail/road).
MEDICAL: Hospitals are available but prior arrangements have to be made with Agents for medical assistance.
TANKERS: Only one berth available. Max. length of vessel accommodated 650 ft. Diameter of load/discharge lines 10 in. and 12 in. Discharge rate 10 in. – 240 t.p.h. and 12 in. – 350 t.p.h. Max. draft 9.9 m.
DENSITY: 1025.
FRESH WATER: Available and delivered by hose ex-wharfside – hydrant at 35 t.p.h.
FUEL: Gas oil only available, 12 hours' notice required. Delivery by pipe-line or tank truck.
FIRE PRECAUTIONS: When berthed alongside a wharf or jetty, a ship having explosives or any other goods of a dangerous nature, the Master shall, if the Port Captain so directs, have a fireman in attendance, the cost whereof shall be borne by the Owner of the ship and the Master of any such ship shall also, at the expense of the Owner of the ship, adopt such other or further precautionary measures as the Port Captain may consider reasonably necessary for ensuring the safety of the harbour, the ship or the cargo.
CONSULS: France.
REPAIRS: All types of deck and engine repairs possible.
DRY DOCK: There are no dry-docks available at this port. A syncrolift with a lifting capacity of 2,000 tons, maximum permissible length of 72 m., max. beam 13 m., and a depth of 10 m. is operated and owned by the Department of Sea Fisheries.
SURVEYORS: Lloyd's and N.V. represented.
GANGWAY/DECK WATCHMEN: Arrangements have to be made with vessel's Agents to secure services of gangway/deck watchmen.
HATCHES: Opened by crew.
CUSTOMS ALLOWANCES: Officers: 200 cigarettes, wine 3 litres, spirits 1 litre, beer 2 litres.

Crew: 3 litres wine, 200 cigarettes.

Allowances are based on 4 day issues.
CARGO GEAR: Loading/discharging of cargo is effected by means of shore cranes. 30 ton mobile crane available in case of emergency.
REPATRIATION: All facilities available.
AIRPORT: Situated 14 km. from Walvis Bay. Served by Namib Air/Air Cape, 3 flights per week, Wednesday/Friday/Sunday.
TIME: GMT plus 2 hours.
HOLIDAYS: New Year's Day (1st January); Good Friday; Easter Monday; Ascension Day; Day of Covenant (16th December); Christmas Day; Boxing Day (26th December).

Cargo worked on all holidays except Christmas.
POLICE/AMBULANCE/FIRE: Police Tel. 10111; Ambulance Tel. 3441; Fire Department; Municipal: Tel. 3117.
TELEPHONES: Arrangements have to be made with Post Office to have a telephone connected.
SERVICES: 24 hour launch service available, divers inspect fouling, underwater photography, tank cleaning, hold cleaning, compass adjusting, radar repairs, hull cleaning.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Seaman's Book sufficient.
REGULATIONS: A copy of the Regulations are supplied gratis to Masters on arrival.
DELAYS: Most delays caused by fog.
GENERAL: Various sports and recreational facilities exist.
AUTHORITY: S.A. Transport Services, Private Bag 19, Walvis Bay, Namibia. *Tel:* 8213. *Telex:* 295. *Contact:* The Port Manager.

AGENT: King & Sons (Pty.) Ltd., P.O.Box 529, Walvis Bay 9190. Tel: (0642) 2771. Telex: 56004. Cables: Baronet, Walvis Bay.

NOTES

Please also advise Shipping Guides Ltd.

Nauru Island

NAURU: 00.32 S. 166.56 E. (See Plan Book)

DOCUMENTS:

International Declaration of Health, 1 copy.
Clearance from Last Port.
Crew Lists, 2 copies.
Passenger Lists, if any, 2 copies.
Manifest, 1 copy.

PILOTAGE: Pilotage compulsory and is available without charge; Masters are advised to avail themselves of this service. It is necessary that Masters, through Radio Nauru, inform telegraphic address "Nauruphos Nauru" of ETA 48 hours before arrival, confirming or altering this 12 hours before arrival. "Nauruphos" will reply through Radio Nauru on receipt of second message giving time for the vessel to close in to 0.5 miles West of loading plants, where Pilot will board. In case of adverse weather or congestion, Masters will be notified by radio, or by VHF Channel 16, 156.8 MHz. with range of about 40 miles. Vessels are handled inwards in daylight only, and should fly flag when approaching island. A safe and clean pilot ladder should be provided, a good lee made for the Pilot to embark.

ANCHORAGES: No anchorages are available owing to the extreme depths of water. Vessels waiting normally drift off and return at daybreak or when instructed to do so.

RESTRICTIONS: Tide and draft have no bearing on entry but it is normal not to handle vessels into berth in darkness. However, vessels are unmoored at all hours.

MAX. SIZE: Vessels have been handled up to an overall length of 630 ft. Beam should not exceed 90 ft., but there are no draft limitations.

HEALTH: Masters of vessels approaching Nauru are required to send a telegram addressed to the Quarantine Officer, Nauru within 24 hours of arrival. The telegram should state the name of last port, date, presence of any infectious disease. On receipt of telegram, the Quarantine Officer will send reply indicating whether or not Pratique is granted. It is still necessary to fill out the International Declaration of Health and hand this to Boarding Officer after berthing.

RADIO: Nauru Radio Station, call sign C2N. Should, through atmospheric conditions, difficulty be found in raising Nauru, it is suggested that the message be passed through Sydney or any other convenient coastal station.

VHF: Port Radio VHF, calling Channel 16, working Channel 12, permanent service.

TUGS: No tugs available for berthing.

BERTHING: Such special requirements which relate to berthing in the port are contained in a Letter of Advice to Ship Masters issued by the APC. Shore labour boards the vessel with the Pilot to assist in mooring to the buoy system.

STEVEDORES: As stevedoring is carried out by Nauruphos, no separate advice is required. Loading rate of bulk phosphate is as high as 3,000 t.p.h.

MEDICAL: Medical treatment can be given at short notice. Limited hospital facilities are available, and emergency surgery can be carried out. Smallpox vaccination is required, and cholera if the vessel has come from an infected area.

TANKERS: Lengths and drafts as for bulk phosphate vessels. 8 in. discharge line to shore storage tanks.

DENSITY: Normal salt water all states of tide.

FRESH WATER: Island water is imported, and water will be supplied only in cases of emergency.

FUEL: Island stocks are imported for use in the phosphate industry, and only limited quantities of heavy fuel or diesel oil can be made available in cases of extreme urgency.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Carried out by crew.

SHIP CERTIFICATES: Derat Certificate only.

CUSTOMS ALLOWANCES: No restrictions apply.

CARGO GEAR: Cargo gear should be up to the standard demanded in Australian ports.

CREW IDENTIFICATION CARDS: Some form of identification, passport, discharge book, or identity card should be carried by crew members.

CONSULS: An Australian Representative is resident on the Island.

REPAIRS: The phosphate industry requires good workshop facilities of various kinds for maintenance of their own heavy plant and such workshops are kept busy at all times. Small repairs such as welding, brazing, lathe work, etc., can be carried out, but only when essential to allow the vessel to proceed on its voyage. Main engines cannot be immobilised whilst the vessel is moored to any section of the buoy system.

REPATRIATION: Repatriation can be arranged. No facilities for crew changes.

AIRPORT: Air Nauru operates a twice weekly service to Melbourne and Hong Kong. Other routes include Fiji, Majuro, Japan, Samoa, Vila, Honiara and Taiwan.

TIME: Local time is GMT plus 12 hours. No alterations during the year.

HOLIDAYS: Christmas Day, New Year's Day, and Good Friday are normally closed holidays. Other National holidays occur during the year but normally work continues on these days.

POLICE/AMBULANCE/FIRE: All emergencies are handled by the Harbour Masters, one of whom remains aboard the vessel throughout the time the vessel is attached to the mooring system.

TELEPHONES: Telephones are put aboard for the use of island staff working the vessel.

SERVICES: No special services available.

SHORE LEAVE: This may be granted at the discretion of the Master but should in all cases terminate at 1700 hrs.

PORT REGULATIONS: No vessel may immobilise main engines whilst moored to the buoy system. Main engines should be on instant readiness, deck power should be available at all times, and the vessel must proceed to sea when instructed to do so by the Harbour Master.

DELAYS: Normally no delays should be expected. Vessels could wait a day, or possibly 2 due to port congestion, but this seldom happens; delays can occur due to adverse weather, the duration of which is unpredictable.

AUTHORITY: Nauru Phosphate Corporation, Aiwo, Republic of Nauru, Central Pacific. *Tel:* 4189, 4439. *Telex:* Nruphos Zv 33082. *Cables:* Nauruphos, Nauru. *Contact:* G. Israni, Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Netherlands

AMSTERDAM: 52.22 N. 04.54 E. (See Plan Book)

PORT LIMITS: Notice of Readiness will only be accepted (subject to C/P terms) if vessel has actually arrived at Amsterdam, which means that vessels have to enter from sea and pass the locks at Ymuiden, proceeding through the North Sea Canal to Amsterdam. There are various buoys and quays available where vessels can be moored waiting for final discharging berth.

DOCUMENTS:

Health Certificate. Forms obtainable from sea Pilot.

Crew List in triplicate.

2 copies of Crew Manifest for cigarettes, cigars, spirits, etc., belonging to crew.

Passenger List in triplicate.

1 copy of Manifest.

1 copy of Bills of Lading.

Dangerous Cargo List.

Ship's Register.

1 copy Stores List.

PILOTAGE: Pilotage is compulsory. Pilot boards from tender in the vicinity of Ymuiden between the light whistle buoy and the moles.

In order to avoid delays, Masters who require a Pilot must advise their ETA not less than 4 hours in advance to "Pilotage Ymuiden". This advice must be amended, if vessel's ETA changes more than 2 hours from the original advice.

The text of the message must contain: *(a)* the words "ETA-pilot", *(b)* expected time arrival (group of 4 figures) in middle European time, *(c)* draft with indication of unit applied, *(d)* port of destination.

"Pilotage Ymuiden" can be informed via Scheveningen Radio or via VHF Channel 12. Pilotage and navigation is possible at night.

Pilotage by Helicopter: When the pilot service by pilot cutter has been suspended owing to weather conditions it is possible to take a Pilot on board vessels by helicopter. Helicopter pilotage is carried out for vessels which have an obstacle free hoisting area on deck of minimum 15 ft. diameter. Deck plans should be provided in advance.

Restrictions:

1. Min. visibility 800 m. at 150 ft. above sea level.
2. Max. wind force 10 (55 kts.).
3. Severe turbulence and icing conditions at or below 150 ft.

Pilot Ladders: Pilots strictly adhere to regulation 17b, Chapter V of the International Convention for the Safety of Life at Sea, which reads as follows:

"Whenever the distance from sea level to the point of access to the ship is more than 30 ft. (9 m.), access from the pilot ladder to the ship shall be by means of an accommodation ladder or by another equally safe and convenient means".

ANCHORAGE: Anchoring in Ymuiden outer harbour, North Sea Canal and in harbour of Amsterdam is prohibited.

RESTRICTIONS: Entry possible at night. Official max. draft is 43 ft. (salt water). By permission of Government Harbour Master at Ymuiden it is possible to enter with max. draft 45 ft. (S.W.). Such permission to be applied for at least 14 days prior to arrival.

MAX. SIZE: Vessels proceeding to Amsterdam have to pass locks at Ymuiden. Dimensions of Northern lock (largest): 1,312 ft. long, 164 ft. wide and 49 ft. 2 in. deep.

The official max. draft to enter Ymuiden is 43 ft. salt water. Vessels with a draft of 43 ft. to 45 ft. salt water may enter Ymuiden and proceed to Amsterdam after special permission thereto has been given by the Government Harbour Master at Ymuiden. Such permission to be applied for well in advance.

RADIO: Cable Agents giving ETA, draft, cash and other requirements via Scheveningen Radio/PCH.

RADAR/VHF: Harbour radar is installed at Ymuiden. In bad visibility radar assistance will be given for incoming ships day and night. A radio portophone is provided by Pilot. Direct communication between incoming and outgoing ships and commanding post of locks is possible by means of VHF radio telephone, Channel 11. Government patrol boats are also equipped with VHF installations. The Radio-Radar Station (Redeplot) can also be contacted via VHF Channel 12 before approaching Ymuiden.

Gemeentelijk Havenbedrijf Amsterdam (Port Management of Amsterdam) on VHF Channel 14, day and night.

V.T.S. in operation.

TUGS: Sea-going tugs available between piers at Ymuiden assisting vessels, into locks or outer harbour. Harbour tugs available in locks assisting vessels to Amsterdam. The rates include use of tug hawser.

CRANES:	*Capacity*	*Number*
General cargo cranes	1 – 30 tons	93
General cargo cranes for inland craft	1.5 – 5 tons	6
General cargo cranes for timber	1 – 10 tons	4
Bulk-cargo cranes (shipping)	2 – 16 tons	10
Container cranes	50 tons	3
Mobile container cranes	36 tons	2
Container railway cranes	35 tons	2
Van carriers	30 tons	3
Table cranes	5 – 30 tons	7
Transporter bridges	7 – 50 tons	8
Floating general cargo cranes	2.5 tons	3
Floating bulk cargo cranes	2.5 – 16 tons	8
General cargo cranes (industry)	1 – 40 tons	13
Bulk cargo cranes (industry)	1.5 – 6 tons	10
Mobile cranes (shipping)	1 – 6.5 tons	12
Overhead travelling cranes	1 – 7.5 tons	34
Floating derricks	10 – 300 tons	12

STEVEDORES: In order to enable Agents to order gangs in time it is recommended to keep Agents duly informed about ETA. No ETA to stevedores necessary.

BERTHING: Possible at night. If no berth available vessels may be moored on buoys.

Length of quays for sea-going vessels and depth of adjacent navigable water.

Quay	*Length* (m.)	*Depth* (m.)
Amerikahaven	250	15.00
ADM	1,530	7.00 – 15.50
Australiehaven	—	15.00
Aziehaven	—	13.00
Dokhaven A.D.M.	310	7.00 – 9.00
Westhaven	2,174	15.00 – 10.00
Sonthaven	88	13.00
Suezhaven	1,108	10.00
Beringhaven	262	9.00
Hornhaven	537	12.50 – 10.00
Jan van Riebeeckhaven	170	13.50 – 8.50
Adenhaven	180	10.00
Usselincx-haven	—	12.50 – 13.50
Petroleumhaven	—	10.50 – 10.00
Coenhaven	3,835	10.00
Mercuriushaven	500	15.00
Vlothaven	2,318	15.00 – 12.00
Neptunushaven	220	10.00
Nieuwe Houthaven	—	7.50 – 6.50
Noordzeekanaal (Superfosfaatfabriek)	310	10.20
NSM	800	7.50 – 9.00
Minervahaven	—	6.50
Oude Houthaven	—	10.00 – 6.00
Silokade	170	8.50
De Ruyterkade	130	7.50
Cornelis Douweskanaal (West)	—	4.00 – 15.80
Joh. van Hasseltkanaal (East)	400	7.00 – 6.50
Joh. van Hasseltkanaal (West)	350	3.50 – 3.00
Kop O. Handelskade	80	7.70
Oostelijke Handelskade	1,885	9.80 – 7.70
Javakade	1,100	7.70
Sumatrakade	1,383	9.80
Surinamekade	792	9.80
Levantkade	580	8.50
Ertskade (Ertshaven)	315	8.50
Panamakade	724	7.50 – 9.00
Spoorwegbassin (South)	780	6.50 – 11.00
Borneokade	815	7.50
Zeeburgerkade	185	7.50
Gemeentelijk Handels-Entrepot (Entrepothaven)	650	7.50

Length of Quays for Inland Craft: In the port area 5,990 m., in town about 5,000 m. All quays provided with railway-connections (115 km.)

34 Buoys for sea-going vessels offering a berth for 24 sea-going vessels.

MEDICAL: If immediate medical assistance will be required in the locks at Ymuiden, Agents must receive advance notice.

CARGO HANDLING FACILITIES: Grain: *I.G.M.A. (Internationale Graanoverslag Mij. Amsterdam B.V.):* The grain terminal is specially designed for the fast discharge and transhipment of grain.

Depth alongside 49 ft. 3 in.

A fast conveying installation transports grain into the silos or to receiving ships. Capacity of the silos: 51,000 tons. Also soyabeans are transhipped to the soyaoil extraction plant.

Equipment: The installation has a main jetty of 1,200 ft. length to accommodate 2 vessels up to 100,000 d.w.t. The ships are unloaded by 2 mobile pneumatic suckers, with a capacity of 200 t.p.h., 2 screen grain dischargers with a capacity of 800 t.p.h. each and 2 floating elevators one of which has a capacity of 400 t.p.h. and one which has a capacity of 250 t.p.h. Two weighing towers with a capacity of about 300/400 tons heavy grain each, used for transhipment of cargoes ex seagoing vessels per crane are operated. A floating crane, capacity 8 tonnes is available for handling stores, spare parts, etc. Further there is an installation to fill bags so that bagged cargoes can can be delivered ex-silo.

Despatch: With the modern equipment and the efficient way of handling, a good despatch can be realised. If two or three suckers are available, a bulkcarrier with 30,000 tons will be completed within 2 days. Daily discharge capacity in total is about 25,000 tons.

Supplies: Water obtainable from ashore, stores must be transhipped on barge at the quay as jetty is not accessible to trucks; bunkers by barge.

Pier C: Alongside this berth bulk carriers and tankers can be accommodated to load directly ex-silo. Max. draft 30 ft., max. airdraft 30 ft. Loading capacity 2,000 t.p.d.

Cargill B.V.: Located adjacent to the IGMA Grain Terminal.

Importing vessels are berthed alongside the IGMA pier and the plant receives the soyabeans directly by conveyor belt.

The finished products are loaded into coasters which moor alongside the jetty of the plant along the Mercuriusharbour. Loading capacity: About 200 t.p.h.

Ore, Coal, Agricultural Products, Derivates, etc.: *B.V. Overslagbedrijf "Amsterdam":* This stevedoring company for the transhipment and storage of all kinds of dry bulk cargoes is situated in the West Dock, only 10 miles from Ymuiden. Along the quay with a length of 2,600 ft., large bulkcarriers with a draft up to 45 ft. salt water can be accommodated.

There are no restrictions as to the length, height or beam of the ships. Maximum outreach of loading/discharging gear over water: 164 ft.; maximum height of loading/discharging gear above water level: 80 ft.

Equipment: Four high speed gantry cranes, gross lifting capacity 3 × 30 tons (15/18 tons net) and 1 × 50 tons (30/33 tons net) with built-in electronic weighing system.

Double independent conveyor belt-system for simultaneous stockpiling/reclaiming into barges and/or railcars with separate cranes for that purpose.

Grain loading and discharging systems, capacity 1,700 cu.m.p.h.

Loading machines for (push) barges and sea-going vessels up to 18,000 d.w.t.

Discharging equipment for railcars. Double track rail connection with Dutch Railway System with automatic weighing equipment. Storage capacity up to 3 million tons.

Capacity: Total discharging rate of gear: For ore up to 100,000 tons per 24 hours; for coal up to 60,000 tons. Loading rate of gear into seagoing vessels from stockpile: up to 2,000 t.p.h. Ex barges: depending on size of barges.

Supplies: Water, stores and bunkers can be delivered by truck and/or barge.

Anthraciet Handels Vereniging on the Adenhaven, quay of 180 m., water depth 33 ft., 1 table crane of 7.5 tons.

Scheepvaart en Steenkolen Maatschappij in the Spoorweghaven, quay length 40 m., water depth 25 ft., 1 table crane of 6 tons.

Havenbedrijf Ertskade in the Ertshaven, quay length 170 m., water depth 28 ft., 1 table crane of 6 tons.

Havenbedrijf de Rietlanden B.V. Besides two electric gantry cranes on their main premises in the eastern port with a depth of 35 ft. and a quay length of 4,800 ft., they own 2 large floating grab cranes which can be used anywhere in the port area and can also perform transhipments at buoys where a depth of 45 ft. is available. They have 700,000 sq.ft. of paved yards (approx.) with portable partition walls for careful and clean storage. Railway connections are excellent and own weighing bridge for railway trucks is available.

Equipment: 2 gantry cranes with a capacity of 7 tons each; 1 grab crane of 4 tons; 2 floating grab cranes, 1 of 16 tons and 1 of 10 tons each.

Capacity: Capacity of about 15,000 tons per running day. When combined working of gantries and floating cranes even more.

Supplies: Stores, bunkers can be delivered by truck, and/or barge.

Phosphate: *Amfert B.V.*

At the fertiliser works, rock phosphate is discharged and after manufacture the ready product (fertiliser) shipped in bulk.

Equipment and berth: The main jetty has a depth alongside of 31 ft. and 2 vessels of up to about 25,000 tons can be accommodated. With the 2 grab cranes a daily out turn of 7,000 tons phosphate is reached.

Container and Ro-Ro/Ferry Terminals:

Combined Terminals Amsterdam B.V. (C.T.A.): Combined Terminals Amsterdam B.V. offer a complete container terminal service on the Westterminal which is located in the Westhaven.

Container Freight Station and Intercontainer Railway Terminal incorporated on the terminal site.

Roll-on/Roll-off ramp especially constructed for heavy axle loads. Car terminal facilities for handling large quantities of factory automobiles/trucks.

Berths:
Berth No. 1: Length 250 m. Depth alongside 13 m. (42 ft.)
No. 2: Length 215 m. Depth alongside 11.5 m. (37 ft.)
No. 3: Length 140 m. (Ro/Ro) Depth alongside 11.0 m. (35 ft.)
No. 4: Length 290 m. Depth alongside 11.0 m. (35 ft.)

Equipment: 3 Portainers, with lifting capacity 50 tons each, outreach 36 m. (116 ft.), rail width 20 m. (65 ft.) and backreach 24 m. (80 ft.) with 20 ft., 30 ft., 40 ft. and adjustable spreaders, also to lift two 20 ft. containers simultaneously.

Two multi-purpose-rail mounted dock cranes with lifting capacity of 30 tons on 20 m. (66 ft.) and 12 tons on 40 m. (131 ft.) outreach.

Two rail mounted transtainers, capacity 35 tons and 45 tons with 28 m. (90 ft.) and 40 m. (129 ft.) span rotating and adjustable spreader serving 3 railway tracks.

Eight van carriers, terminal tractors and chassis and heavy lift trucks equipped for containers, steel coils and pulp.

Facilities: Container storage yard 130,000 sq.m. (35 acres) with expansion possibilities of 600,000 sq.m. (150 acres).

Car park 140,000 sq.m. (28 acres).

Container freight station 3,000 sq.m. (33,000 sq.ft.) 46 doors.

Two transit sheds 16,000 sq.m. (172,000 sq.ft.).

Workshop for the maintenance and repair of containers and road chassis.

40 reefer receptacles at the required voltages.

Depot of lease containers and road chassis. Container railway terminal.

Working Hours: Usually around the clock, 7 days per week.

Supplies: Fresh water obtainable from the quay, bunkers by barge.

Verenigd Cargadoorskantoor: VCK operates 2 modern stevedoring terminals of which one is equipped for Roll-off/Roll-on and passenger traffic: the Scandia Terminal. Regular ferry services sail from there to Norway (Summer passenger service) and Finland (cargo service).

Scandia Terminal: Located in the Suezhaven, 10.5 nautical miles from the sealocks in Ymuiden. Total area 105,080 sq.m., marshalling area 625,630 sq.m., quay length 530 m., depth 33 ft., shed space 39,451 sq.m. and 1 cold storage shed of 1,600 sq.m., modern passenger building. 3 Ro/Ro berths and a mobile container crane with a capacity of 35 tons.

Vlothaven Terminal: 1 mobile container crane of 45 tons. 11 breakbulk cranes of 2 tons – 10 tons. Total area: 5,600 sq.m., quay length: 570 m., shed space: 13,700 sq.m. Marshalling area: 42,340 sq.m.

Also available on both terminals: side loaders (20 tons), tugmasters, slave trailers, flats, containers and forklift trucks.

P. Ter Haak & Zn. B.V.: Double berth Ro-Ro Terminal – Draft 39 ft. Regular Ro-Ro Service to East Coast Sweden.

Molasses: Tradax–2 jetties, max. draft 11.30 m. receiving capacity 1,000 t.p.h. Max. d.w.t. 65,000 tons (approx.). Connections 8 in.

Minerals: Eggerding & Co. B.V. Length of quay 400 m. Depth alongside 33 ft. Discharge is carried out by floating cranes.

TANKERS: *Oiltanking B.V.:* 1 jetty for 2 vessels of 100,000 tons. Max. draft 44 ft. 6 in., 2 jetties for 2 vessels of 3,500 tons, 1 jetty (used in case of fire). One jetty for 1 ship up to 45,000 d.w.t. Pipe-line connection 6 in. and 8 in. Receiving rate 2,000 t.p.h. Loading rate 2,000 t.p.h. depending on grade and condition. Fresh water available from jetty, fuel by barge. Stores by barge or trucks. (Jetty not accessible to trucks). Dirty ballast by barge.

Mobil: 2 jetties, 1 for vessel of 30,000 tons and another for vessel of 80,000 tons. Max. draft 44 ft. 6 in. pipe-line connections 10 in. and 12 in.

One jetty for coast tankers or LPG tankers up to 2,500 tons.

The receiving rate for crude oil is 4,000 cu. m./hr. The loading rate varies from 400–1,900 cu.m/hr. depending on grade.

Fresh water available from jetty. Fuel available, pipe-line 8 in. Facilities available for dirty ballast if vessel to load at berth. Max. capacity 10,000 tons. Stores by barge or truck (Jetty not accessible to trucks).

Amatex: 4 jetties, depth alongside 32 ft. – 41 ft. Pipe-line connections 6 in. – 12 in.

Receiving rate, 4–1,200 t.p.h. depending on grade and back pressure, if any. The loading rate is about 1,000 t.p.h. depending on grade.

Fresh water available by barge. Fuel available by barge. There are facilities for dirty ballast under special conditions. Stores mainly by truck (Jetties not accessible to trucks).

Comos: Two jetties, depth alongside 44 ft. 4 in. Pipe-line connections 8 in. and 12 in. Four jetties available for seagoing vessels and barges up to a max. draft 14 ft. 9 in.

The receiving capacity is about 2,000 t.p.h. and loading rate up to about 1,000 t.p.h.

Fresh water available by barge. Fuel available by barge or pipe-line. Stores by truck. There are no facilities for dirty ballast.

Smid & Hollander: 2 berths for receiving crude oil, max. draft 42 ft. 8 in. Fresh water and fuel available by barge. Stores by truck (Jetty not accessible to trucks).

Noord Europees Wijnopslagbedrijf B.V.: One jetty, max. draft 41 ft. Fresh water and fuel available by barge. Stores by truck.

CERTIFICATES:
Ship's Register.
Usual Cargo Certificate.
Safety Radio.
Safety Equipment Certificate.
Crew Roll.
All usual certificates required for navigation.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per man or equivalent of tobacco or cigars. Wine and/or Spirits: 5 litres of wine per man. Spirits: total 5 litres for the whole ship.

CARGO GEAR: Usual cargo certificate.

IDENTIFICATION CARDS: Not needed.

CONSULS:	*Tel:*
Argentina (C.G.), 94 Herengracht	23 27 23
Austria (C.G.), 251 Weteringschans	26 80 33
Bangladesh (C.), 7 De Ruyterkade	26 34 56
Barbados (C.), 21 Nieuwe's-Gravenlandseweg, Bussum	(02159) 3 25 94
Belgium (C.), 541 Herengracht	24 87 71
Bolivia (C.), 4 Hacquartstraat	79 66 12
Brazil, 169 Beethovenstraat	72 40 85/73 02 30
Central African Republic (C.), 3 Raphaelplein	73 00 79
Chile (C.G.), 314 N.Z. Voorburgwal	24 64 03
Colombia (C.G.), 55 Oranje Nassaulaan	71 78 67
Costa Rica (C.G.), 693 Prinsengracht	25 63 89
Cyprus (C.), 208 Amstel	23 51 77
Denmark (C.G.), 139 De Ruyterkade	23 41 45
Dominican Rep. (C.G.), 548 v. Heuven Goedhardtlaan, Amstelveen	41 28 12
Ecuador (C.G.), 278 Prinsengracht	25 28 30
Finland (C.G.), 462 Herengracht	24 90 90
France, (C.G.), 2 Vijzelgracht	22 58 11
Germany (C.G.), 172 De Lairessestraat	73 62 45
Great Britain (C.G.), 7 Joh. Vermeerstr.	76 43 43
Greece (C.G.), 81 Vondelstraat	18 84 24
Haiti (C.), 7 Beethovenstraat	76 48 44
Honduras (C.G.), 584 Keizersgracht	23 34 26
Iceland (C.G.), 107 De Ruyterkade	26 26 58
Italy (C.G.), 609 Herengracht	24 00 43
Ivory Coast (C.), 917-919 Prinsengracht	22 55 33
Jamaica (C.G.), 316 Herengracht	24 34 12
Japan (C.G.), 573-575 Keizersgracht	24 35 81
Luxembourg (C.), 503 Herengracht	23 14 86
Mauretania (C.), Schiphol-Oost, Building 144, Room 116	47 18 11
Mauritius (C.), 534 Keizersgracht	25 12 55
Mexico (C.), 147 Beethovenstraat	73 02 30
Monaco (C.G.), 634 Keizersgracht	24 52 50
Morocco (C.G.), 1 Oranje Nassaulaan	73 62 15/16
Nepal (C.), 687 Prinsengracht	25 03 88
Norway (C.G.), 107 De Ruyterkade	24 23 31
Panama (C.), 312 Nassaukade	18 84 44
Peru (C.G.), 12^{11} Binnenkant	22 85 80
Philippines (C.G.), 376 Herengracht	22 19 44
Seychelles (C.), 105 Leidsekade	22 86 74
Sierra Leone (C.), 1 Gijsbrecht v. Amstelstr., Hilversum	(035) 1 35 04
Spain (C.G.), 51 Jacob Obrechtstraat	79 65 91
Suriname (C.G.), 11 De Cuserstraat	42 67 17/42 61 37
Sweden (C.), 39^{11} Koningslaan	64 41 01
Switzerland (C.G.), 16 Joh. Vermeerstraat	64 42 31
Thailand (C.), 66^{1} Kalverstraat	22 00 78
Togo (C.), 319 Amsteldijk	44 57 90
Uruguay (C.), 10 J. W. Brouwerplein	79 91 82
U.S.A. (C.G.), 19 Museumplein	79 03 21
U.S.S.R. (Econ. Aff.), 22 Veluwelaan	44 74 77
Venezuela (C.G.), 12 Binnenkant	22 83 01

DENSITY: Amsterdam is not a tidal port. The water is brackish to fresh.
FRESH WATER: Drinking and boiler water can be supplied by barge, or if connection available, from shore. Price depends on quantity ordered.
FUEL: All grades of fuel are available and delivered mainly by barge. Advance notice 48 hours.
FIRE PRECAUTIONS: No repair work to be carried out to tankers without permission of Harbour Authorities. Usual non-smoking precautions, etc.
GANGWAY/DECK WATCHMEN: Not required. Dependent on commodity of cargo.
OPENING/CLOSING HATCHES: Liner vessels by crew or by stevedores, payable per man per hour. Tramp vessels as per Charter Party.
REPAIRS: All types of deck and engine repairs are possible including gas-freeing and tank-cleaning.
DRY DOCKS: ADM: 4 dry docks, largest of which length 817 ft., breadth 120 ft., depth 28 ft. Capacity 72,000 d.w.t.; 2 floating docks largest of which length 677 ft., breadth 97 ft. 6 in., lifting capacity 40,000 tons d.w.t.; other floating docks available for vessels up to 4,500 tons.

SURVEYORS:	*Tel:*
Lloyd's Register of Shipping, 159 Pr. Hendrikkade	23 23 88
Bureau Veritas, 9 Stationsplein, Room 71	24 45 47
American Bureau of Shipping, 32 v.d. Helstlaan, Naarden	(02159) 4 53 78
Det Norske Veritas, 75 Klaprozenweg	31 52 01

REPATRIATION: Facilities for repatriation of crew to any destination are available.
AIRPORT: Distance to Schiphol Airport (served by regular airlines) 15 km.
TIME: GMT plus 1 hour. Summer time GMT plus 2 hours.
HOLIDAYS: New Year's Day; Good Friday; Easter Sunday; Easter Monday; Queen's Birthday (April 30th); Ascension Day; Whit Sunday; Whit Monday; Christmas Day and Boxing Day.

Cargo can be worked during these days subject to labour being available at premium rates.
POLICE/AMBULANCE/FIRE: Police 222222; Ambulance 355555; Fire 666666.
TELEPHONES: Telephone connections on board are only possible on certain quays (passenger ships). It is possible to rent portable mobilephones.

BANKS:	*Tel:*
Alcredis Bank B.V., 541 Herengracht	5 20 49 22
Algemene Bank Nederland, 32 Vijzelstraat	29 91 11
American Express Int. Banking Corp., 13-15 Leidsegracht	22 93 22
Amsterdam-Rotterdam Bank N.V. (AMRO), 47 Rembrandtplein	28 93 93
Amsterdamse Crediet & Handelsbank N.V., 553 Herengracht	24 34 99
Banco de Brasil s.a., 457 Herrengracht	25 59 42
Banco de Jerez, 471 Keizersgracht	23 81 55
Banco de Viscaya, 479 Herengracht	26 30 33
Banco do estado de Sao Paulo, 565 Keizersgracht	22 45 22
Banco Exterior Nederland N.V., 31b Leidseplein	26 12 61
Banco Popular Espagnol, 28/1 Rokin	26 15 51
Bank Kyowa Ltd., 1 Frederiksplein	26 91 31
Bank of America, 617 Keizersgracht	21 46 21
Bank of Tokyo, 603 Keizersgracht	5 20 89 11
Banque Chaabi du Maroc, 87 Rokin	23 47 05
Banque de Paris et des Pays-Bas, 539-543 Herengracht	5 20 49 11
Banque de Suez Ned. N.V., 320 Herengracht	22 97 26
Banque National de Paris, 477 Herengracht	26 22 20
Barclays Bank Intern. Ltd., 500 Herengracht	26 22 09
A. de Bary & Co. N.V., 448-454 Herengracht	21 33 12
Canadian Imperial Bank, 79 Vijzelstraat	22 93 97
Chase Manhattan Overseas Corp., 478 Herengracht	25 56 44
Crocker National Bank, 530-534 Keizersgracht	25 12 55
Dai-Ichi Kangyo Bank, 540 Singel	26 41 82
Daiwa Europe N.V., 344 Singel	22 99 77
First National City Bank, 545 Herengracht	26 44 55
Gilissen N.V., Theodoor, 12-14 Nwe Doelenstraat	24 73 73
Grenswisselkantoren, Hal Central Station	22 13 24
Hollandsche Bank-Unie N.V., 434-440 Herengracht	29 92 22
Hollandse Koopmansbank, P.O.Box 569	23 66 60
Hongkong and Shanghai Banking Corp., 499 Herengracht	22 02 67
Indonesian Overseas Bank, 662 Keizersgracht	23 95 13
Jugobanka, 512 Singel	24 92 74
Kas-Associatie N.V., 172 Spuistraat	21 25 21
Korea Exchange Bank, 31 Sarphatistraat	25 40 22
Labouchere & Co. N.V., 12 Tesselschadestraat	16 00 11
Lloyds Bank Int. Ltd., 29 Leidseplein	26 35 35
Mees & Hope, 548 Herengracht	5 27 91 11
Mendes Gans & Co. N.V., 619 Herengracht	23 81 81
Midland Bank, 26 Weteringschans	26 34 59
Nederlandsche Bank N.V., 1 Westeinde	5 24 91 11
Nederlandsche Credietbank N.V., 458 Herengracht	21 27 27
Nederlandsche Middenstandsbank N.V., 2 E.v. Beinumstraat	5 43 91 11
Nederlandse Overzeebank N.V., 542 Herengracht	5 27 91 11
Nomura Europe N.V., 7 De Boelelaan	44 48 60
Philippine National Bank, 272 Herengracht	23 25 40
Pierson, Heldring & Pierson, 214 Herengracht	21 11 88
Ship Mortgage Int. Bank, 530 Keizersgracht	22 29 11
Slavenburg's Bank N.V., 179-181 Herengracht	22 72 20
Soc. Generale, 17 Museumplein	76 83 21
Tokai Bank, 431 Keizersgracht	23 96 25
Yamaichi International, 1 Frederiksplein	24 24 56

SERVICES: 1 tank cleaning installation, compass adjusting/direction finder calibration, representatives of all leading radio installations, radar and other nautical instruments available.
SHORE LEAVE: Crew members allowed ashore.
DELAYS: Usually no congestion.

AUTHORITY: Gemeentelijk Havenbedrijf Amsterdam. (Port Management of Amsterdam), De Ruyterkade, 7, 1013 AA Amsterdam. *Tel:* 20-221201. *Telex:* 12247 Ampor Nl. *Contact:* J. Den Toom, Managing Director or C. J. Muilwijk, Harbour Master (Tel: 20-221515).

AGENT: Wm. H. Muller & Co. Nederland B.V., "Havengebouw", 7 De Ruyterkade, P.O. Box 182, 1000 AD, Amsterdam. Telegrams "Mineral". Telex 12058. Tel. (020) 26 34 56.

DELFZIJL: 53.20 N. 06.54 E. (See Plan Book)

LOCATION: On the estuary of the River Ems, opposite Emden.
DOCUMENTS: See "Rotterdam".
PILOTAGE: Pilot boats normally cruise at Wester-Ems Buoy. During bad weather they withdraw into estuary, but never further than Borkum Roads. Pilot boats listen on Channel 6 and Pilot Office on Channel 14 VHF; distance from pilot station to Delfzijl 36 miles. Pilot service compulsory for all vessels drawing over 2.2 m. Foreign vessels may call Pilot on 2182 kHz. Traffic between the cutter and the vessel will be held on 1657 kHz.

Approaching vessels from sea should inform the Pilot Commissioner of their ETA in M.E.T. with a notice at least 4 hours in advance via Scheveningen Radio (PCH); the pilot cutter may be informed via VHF.

The ETA message should contain the following details: *(a)* ETA Pilot Westereems (time in M.E.T. in a group of 4 figures); *(b)* Draft; *(c)* Port of destination.

Departing vessels should apply for a Pilot at least 1 hour before ETD; the request should be made to the Office of the Inspector of Pilotage.

Pilotage from Delfzijl to Emden is not compulsory. On request however a Pilot may be put at the Master's disposal for a trip to Emden. This is not applicable for a trip from Emden to Delfzijl or Eemshaven.
ANCHORAGE: Vessels up to 4,000 tons d.w.t., which for some reason have to anchor outside the piers can do this East of the harbour entrance near Oterdum. Anchorage is situated within the following area: a line connecting the buoys 53/PS1-55 and PS2-BW28. Request for anchorage at the Pilot Office, VHF Channel 14. Larger vessels should seek an anchorage in the Doekegat. There is no anchorage inside the harbour.
ENTRANCE: The harbour entrance lies opposite the former village of Oterdum. The entrance extends to reach the deep water of the Bocht van Watum, and lies opposite the dredged channel between the Bocht van Watum and the Oostfriese Gaatje near Paapsand Sud.

The harbour entrance has an initial depth of N.A.P. – 10 m., and a bottom width of 200 m. The harbour channel has the same depth, and a width of 100 m.

Depths: All depths are indicated in relation to N.A.P. LLWS at Delfzijl lies 2.03 m. below N.A.P. (Normal Amsterdam Level).

Tides: The range at Springs is 3.05 m. and at Neaps 2.35 m. Tidal movement is diurnal with an average range of 2.7 m.
MAX. SIZE: The harbour entrance has a depth of 8 m. at LLWS. Vessels drawing up to 9 m. can enter under normal HW circumstances; a keel clearance of about 1 m. will be maintained. Masters of vessels with large draft are recommended to contact the Pilot Service in good time with regard to the water level to be expected near Paapsand-Sud and in the Zeehavenkanaal. In the harbour "always afloat" can be guaranteed along the entire length of the Handelskade West for vessels with a draft up to 8.7 m. See "Depths" above.
TUGS: Tugs up to 850 h.p. available. Additional tugs can arrive within 3 hours from Emden.
BERTHING: The Outer Harbour is divided into 3 communicating basins: Handelshaven, Balkenhaven and Zeehavenkanaal.

Handelshaven, in the Western part of the Outer Harbour, has a deepwater quay, 520 m. long, with a depth of 11 m. alongside, 2 mooring buoys in a depth of 11 m. also jetties 110 and 130 m. in length, with a depth of 7 m. alongside.

Balkenhaven, East of Handelshaven, has depths of 8.5 m. to 5.5 m.; there are berths at several mooring buoys for small sea-going vessels.

Zeehavenkanaal is the Eastern part of the Outer Harbour and is being developed as a deep-sea harbour; it has a depth of 10.0 m. – 10.5 m. There are several private mooring facilities in the Sea Harbour Channel, from West to East:

a. Private quay of Wagenborg Terminal B.V. with a depth of 7 m.;
b. Private jetty of the Alcohol Factory. Tankers up to 25,000 d.w.t. can be accommodated here. Depth alongside 12 m.;
c. Private jetty of N.A.M. Tankers up to 6,000 d.w.t. can be handled. Depth alongside 9.5 m.;
d. Private jetty of AKZO is equipped with a loading station with a loading capacity of 500 tons salt/hour. Ships up to 25,000 d.w.t. can be accommodated here; depth alongside 12 m.;
e. Private jetty of the Methanol Chemie Nederland (M.C.N.) equipped with a loading station with a loading capacity of 500 tons of methanol per hour. Tankers up to 20,000 d.w.t. will be accommodated here in the future;
f. Private jetty of Aluminium Factory equipped with 1 crane and is able to accommodate ships up to 30,000 d.w.t. Depth alongside is 12 m.

The Oosterhornhaven behind the dyke is a basin with a total length of 3,100 m. and a width of 60 m.

Navigating Oosterhornhaven is prohibited for vessels having a LOA exceeding 75 m. and/or having a maximum beam exceeding 12.50 m. and or having a draft exceeding 4.50 m., unless a special permission is obtained from the Harbour Master subject to certain conditions.

Amongst others there are mooring facilities located in this canal alongside the yard of Azko, Methanol Chemie and Upjohn Polymer, equipped with loading installation and a tanker jetty.

The Eemskanaal:

Several private mooring facilities are located here. These are the following:

Name	*Type*	*Suitable for*
Jonker's Terminal	Potatoflour, bulk term	Coasters
Aceco	Grain elevator	Inland vessels/Coasters
Terminal Delfzijl	Timber Terminal	Coasters
North Sea Petroleum	Oil storage	Inland vessels
O.M.O.	Oil storage	Inland vessels/Coasters
Eemsmond	Cement factory	Inland vessels/Coasters
Mulder Marne	Grain elevator	Coasters

The Sea Locks:

The link between the Outer Harbour and the Eemskanaal and also the Oosterhornhaven of the port area is formed by the provincial sea locks. Sea-going vessels up to 6,000 tons d.w.t. with a beam of 16 m., a length of 120 m., and a draft of up to 5 m. can use these locks. As this will generally apply to vessels in ballast, the locks for this size of vessel are only of importance for the Groningen Shipyards.

For loaded vessels, the limit lies between 2,000 and 2,200 d.w.t. In the Outer Harbour of the locks sufficient berths have been provided for vessels waiting to pass through the locks.

Dimensions of Locks:

The Western (small) Lock has a length of 123 m. at falling tide and 81 m. at rising tide, a width of 7 m., a depth of sill outside 4.2 m. inside 2.4 m.; across each lock head lies a bascule bridge. The Eastern (large) Lock has a length of 120 m., a width of 16 m., depth of sill 5.4 m.; across each lock head lies a drawbridge. The opening times of the locks are continuous on weekdays.

Sheds and Warehouses:

There are several sheds and warehouses (total capacity: 3,250 sq.m.); also open storage. Grain silo with a storage capacity of 2,000 tons loose and 500 tons in bags. Also several private sheds, warehouses and grain silos.

CRANES: There are 7 shore cranes with capacities up to 30 tons for handling general cargoes and bulk commodities, a floating 60 ton crane and mobile cranes.

STEVEDORES: *Working Hours:* Work carried out 24 hours. 0500 – 1300 hrs., 1300 – 2100 hrs. and 2100 – 0500 hrs. Each shift has 30 minutes' break.

Work on Saturdays and Sundays: Work on Saturdays and Sundays can be arranged in the same manner as this is done in the ports of Rotterdam and Amsterdam, *viz.* in consultation with the stevedores.

RADIO: Cable to Agents via Radio Scheveningen. (PCH).

VHF: The Harbour Master's Office is equipped with a VHF installation, Channel 14. The station is constantly manned.

BRIDGES: Bridge to the Damsterhaven may always be worked. Bridge to the Oosterhornhaven will be handled from Monday to Saturday. On Sunday bridge may be opened on special request at the Harbour Master's Office.

DENSITY: Ranging between 1012 and 1018, depending on the tide.

FRESH WATER: Water obtainable alongside the quays or can be delivered by motor tankers, capacity 20 t.p.h.

FUEL: Fuels in limited quantities for coasters are always available. For bunkering of larger vessels, arrangements should be made in advance.

GANGWAY/DECK WATCHMEN: According to Port Regulations, Master has to keep watchmen on board.

AIRPORT: Eelde (Groningen).

OPENING/CLOSING HATCHES: Normally carried out by ship's crew.

CONSULS:

At Delfzijl		*At Groningen*	
Denmark	Tel: 05960-15026	Belgium	Tel: 050-141555
Finland	Tel: 05960-16016	France	Tel: 050-345322
Norway	Tel: 05960-15026		

REPAIRS: Most engine and deck repairs can be carried out by two local shipyards.

DRY DOCKS: Dry-docking is limited to ships up to 3,000 d.w.t. with a draft not exceeding 32 dm. For larger vessels, dry-docking facilities exist in the nearby port of Emden (Germany).

CERTIFICATES: The Tonnage Certificate should be shown to Harbour Master on first call every year.

HEALTH, MEDICAL ATTENDANCE, HOLIDAYS, LOCAL TIME, CUSTOMS ALLOWANCES: See "Rotterdam".

REGULATIONS: *Regulations for Arrival and Departure of Sea-Going Vessels:*

1. The arrival of a sea-going vessel, other than vessels passing through the port, must be reported in writing by the Master, or his local representative at the Harbour Master's Office 24 hours prior to arrival;
2. The declaration of arrival must contain:
   a. name and flag of vessel;
   b. nature and amount of the cargo to be discharged and/or loaded;
   c. dangerous goods, according to the IMO Code;
   d. last port of call;
   e. ETA and next port of call.
3. Declaration of Arrival must be made on the special forms or per teleprinter (53299 Hsddz);
4. At least 3 hours before departure the Master, the shipping company or its local Agent must notify the Harbour Master's Office of the intended departure, stating the estimated time of departure and the destination of the vessel.

DEVELOPMENTS: New Quay of 320 m. length to be built for ocean-going vessels and inland shipping.

AUTHORITY: Port of Delfzijl/Eemshaven Authority, Noordersingel 1, 9934 AK Delfzijl or P.O.Box 20004, 9930 PA Delfzijl. *Tel:* 05960 – 14966. *Telex:* 53299 Hsddz. *Contact:* C. Biemond, Port Director. Captain R. K. Mast, Harbour Master. Captain G. Martini, Deputy Harbour Master.

AGENT: Maritima Scheepvaart en Handelmaatschappij B.V., De Vennen 52, Delfzijl. Tel: (05961) 6444. Cables "Maritima". Telex 53153.

DORDRECHT: 51.49 N. 04.40 E. (See Plan Book)

LOCATION: At the junction of four important rivers, the "Merwede", which is the lower end of the Rhine and main route of all inland water traffic to Germany, France and Switzerland; the "Noord" leading to Rotterdam; the "Dordtse Kil" leading to Antwerp and Belgium and the "Oude Maas" giving Dordrecht its own open connection with the North Sea. Vessels up to 31 ft. can be accommodated.

Entrance: The main entrance is via Maasmond (see "Rotterdam"), Rotterdam waterweg and Oude Maas, a distance of 26 miles above Hook of Holland, with a least depth of 32 ft. below NAP.

DOCUMENTS:

2 copies Cargo List.
3 copies Crew List.
Health Certificate.
Also see "Rotterdam".

PILOTAGE: Compulsory. Vessels have to enter New Waterway at Hook of Holland and proceed to Dordrecht via this New Waterway and the River Oude Maas. Masters of vessels bound for Dordrecht should state destination in ETA message as Pilots for Dordrecht embark from pilot cutter at roads. Deep-drafted vessels may have to exchange Pilots just inside breakwaters at Hook of Holland. (See Rotterdam "Ordering a Pilot").

ANCHORAGE: At sea off Hook of Holland (see "Rotterdam"). No anchorage between entrance to New Waterway and Dordrecht.

RESTRICTIONS: Maximum L.B.P.P. 175 m., beam 25 m., draft 31 ft. Vessels exceeding maximum length or beam could be allowed to navigate the Oude Maas under certain conditions.

For tankers a minimum visibility of 500 m. is required (1,640 ft.). For dangerous cargoes, see "Rotterdam".

The Pilot will decide the number of tugs required for passage on the Oude Maas, usually a min. of 3 – 4.

Vessels exceeding 135 m. LOA or 17.5 m. beam must give notice to the Harbour Co-ordination Centre (H.C.C.) before navigating the Oude Maas. (H.C.C. Tel: 010-764855, Telex: 27370 Drhcc NL.)

Notice should contain: Ship's name, call sign, nationality, GRT, length, beam and draft, first port of call and berth (port and berth in case of ships leaving or shifting berth), ETA in Oude Maas or time of departure if leaving/shifting berth, Agent's name.

Tides and Currents; The tides are diurnal, with a daily rise and fall of 1 m. – 1.2 m. The current turns about half an hour after HW and LW.

RADAR: No radar service on River Oude Maas or Dordrecht.

RADIO/VHF: See "Rotterdam".

TUGS: Tugboats ordered by Pilot when entering New Waterway. Tugs normally meet vessels at Dordrecht.

BERTHING: *Harbours:* There are 6 basins for sea-going vessels.

Wilhelmina Harbour: Has a water area of 52 acres, can accommodate ocean-going vessels with a draft of about 31 ft. A 300 ft. wide pier with railway connections, a spacious transit shed and an open storage site of 200,000 sq.ft. for bulk cargo has been constructed. Furthermore, at a distance of 80 ft. from this pier, there is a jetty 900 ft. long and 31 ft. wide with a depth alongside of about 31 ft. below NAP. Rivercraft can moor either directly alongside the large vessels or in the basin between pier and jetty. The basin has a depth varying between 13 ft. and 20 ft. below NAP. There are 9 mooring buoys.

Juliana Harbour: 3 basins, has a water area of 67.5 acres and a depth of about 29 ft. below NAP. The basins are mainly in use for handling of mineral oils and chemicals. The Gebr. Broere B.V. has established a big tank storage installation with a capacity of 250,000 cu.m.

The storage terminal has 7 jetties by which quick despatch can be given to sea-going tankers and river-tankcraft. Moreover, its situation is excellent for further distribution by river tankcraft, rail and road-tankers to inland destinations. Three smaller companies handle gasoline and grease-oil. There are 2 sand and gravel jetties, 1 cattle fodder jetty owned by the Fret Co. This last jetty has a depth of 27 ft. alongside. There are 2 sheds for general cargo with a capacity of 30,000 sq.ft.

The Mallegat: 2 basins, has been closed by 2 dams, one 500 m. North of the Wilhelmina Harbour entrance and the other 600 m. South of the Juliana Harbour entrance. By closing the Mallegat, the area of the harbours of Dordrecht has been increased by about 40 acres. The North basin with a water area of 18 acres and a depth of 16 ft. below NAP. The South basin with a water area of 22 acres and a depth of 24 ft. below NAP. Besides, as a sea harbour. Dordrecht is an important centre of inland navigation.

Principal Riverside Quays:	*Length*	*Depth – NAP*
Buitenkalkhaven	1,000 ft.	12 ft.
Hooikade	550 ft.	10 ft.
Groothoofd Passenger Landing Pier		13 ft.
Merwekade	1,050 ft.	13 ft.
Handelskade	450 ft.	16 ft.

Coasters can be accommodated at the Handelskade, Buitenkalkhaven, 2nd and 3rd Merwedehaven. For clearance of inward and outward bound coasters, the lower part of the Handelskade has been reconstructed. Mooring free of harbour dues is restricted to the time needed for clearance only.

Principal Harbours – Inland Vessels and Coasters:

	Length	*Width*	*Depth – NAP*
Binnenkalkhaven	800 ft.	230 ft.	11 ft.
Bomhaven	265 ft.	165 ft.	10 ft.
Wolwevershaven	1,000 ft.	165 ft.	8 ft.
Riedijkshaven	650 ft.	120 ft.	10 ft.
1st Merwedehaven	2,000 ft.	400 ft.	10 ft.
2nd Merwedehaven	2,000 ft.	450 ft.	15 ft.
3rd Merwedehaven	2,000 ft.	600 ft.	15 ft.

CRANES: 2 Transporting bridges 15 tons each, 2 Portal cranes 12.5 tons each, 1 Portal crane 7 tons, 1 cargo crane 5 tons capacity.

BRIDGES: Bridges across the River Oude Maas are opened day and night. Sea traffic has preference over shore traffic.

Immediately above first confluence into Nieuwe Maas, the Oude Maas is spanned by 2 lifting bridges:

1. The Botlek Bridge with a free width of 53.80 m.
2. The Spijkenisse Bridge with a free width of 80.00 m.

A secondary entrance is from S.W. via Roompot and Hollands Diep, a distance of 58 miles with least depth of 5.2 m. (17 ft. 6 in.), or 7.6 m. (25 ft.) at HW. The S.W. approach through Roompot is spanned by the Zeeland-Bridge, a 3-mile long road-bridge with only 11.5 m. (38 ft.) clearance under the middle of each passage span. A bascule span at the Northern end has a free width of 35 ft.

STEVEDORES: Working hours: 0730 hrs. on Monday until 1900 hrs. on Saturday.

TANKERS: Oil installation of Gebr. Broere N.V. has 7 tanker berths. Max. draft 9.0 m. There are other tanker berths for small tankers. No slop (residue) storage facilities.

DENSITY: Fresh water.

REPAIRS: B.V. Scheepswerf en Machinefabriek "De Biesbosch" Maasstraat 24, 3313 CR Dordrecht, Tel: 078-14 70 77, Telex: 29494 Biesb. NL.

Machinefabriek L. Straatman B.V. Kuipershaven 61, 3311 AM Dordrecht. Tel: 078-14 24 22.

B.V. Scheepswerf Hoebee, Merwedestraat 56, 3313 CS Dordrecht. Tel: 078-13 00 88.

Machinefabriek C.P. Bolier B.V., Grevelingenstraat 21, 3313 LB Dordrecht. Tel: 078-16 41 11, Telex: 29329 Bomak. N.L.

FRESH WATER: At oil installations fresh water can be supplied from shore or supply by waterboat.

FUEL: Available by barge.

CONSULS: Denmark Tel: 132177, Norway Tel: 132177. Other consulates at Rotterdam at 20 km. distance.

POLICE/AMBULANCE/FIRE: Tel. Police 339911; Ambulance and Fire 133333.

AIRPORT: Rotterdam and Amsterdam airports at a distance of 30 km. and 90 km. respectively served by regular airlines.

PILOT CUTTERS, HEALTH, MEDICAL ATTENDANCE, BUNKERS, CUSTOMS ALLOWANCES: See "Rotterdam".

HOLIDAYS: New Year's Day, Easter Day, H.M. Birthday (30th April), Ascension Day, Whit Sunday, Christmas Day.

TIME: GMT plus 1 hour. Summer plus 2 hours.

AUTHORITY: Gemeentelijke Havendienst der Gemeente Dordrecht, Binnen Kalkhaven 47, 3311 JC Dordrecht, Netherlands. *Tel:* 078-134211. *Telex:* NL 29492 Haven. *Contact:* R. L. Guicherit, Harbour Master.

AGENT: See "Rotterdam".

EEMSHAVEN: 53.27 N. 06.50 E. (See Plan Book)

LOCATION: On the Western shore of the River Eems, about 15 km. N.W. of Delfzijl.

PILOTAGE: See "Delfzijl".

ANCHORAGE: Near the Western Mole of the Eemshaven is an anchorage with a depth of about 16 m.

RESTRICTIONS: The entrance channel Doekegatkanaal has a depth of 11 m. thus enabling ships with draft up to about 11 m. to enter at HW. Plans exist to increase the possible draft to about 13 m.

Tides: The range at Springs is 3.05 m. and at Neaps 2.35 m. Tidal movement is diurnal with an average range of 2.7 m. (all approx.).

Depths: All depths are indicated in relation to N.A.P. LLWS at Eemshaven lies 1.84 m. below N.A.P. (Normal Amsterdam Level).

RADIO/TUGS/VHF: See "Delfzijl".

BERTHING: The harbour is divided into 4 communicating basins:

Doekegatkanaal: Has a depth of 14 m. at the entrance and 11 m. further on. The bottom width at the moles is 300 m. at 14 m.; the minimum width is 275 m. at 11 m. At the end of the Doekegatkanaal is a turning basin with a diameter of 500 m. and a depth of 10 m.

Wilhelminahaven: East of the turning basin is a special basin for tankers with a depth of up to 17 m. and a bottom width of 200 m. This basin has a length of 600 m. Mooring facilities will be constructed by future industries.

Julianahaven: Located West of the turning basin. This basin has a length of 1,200 m. and a width of 250 m. to 300 m. ultimately. The depth of this basin varies between 14 m. and 17 m.

To the South of this basin a quay has been constructed with a length of 600 m. and a width of 300 m. The quay is equipped for general and unitised cargo handling to be handled with 4 cranes with a maximum lifting capacity of 20 tons and 1 crane with a lifting capacity of 30 tons. A Ro/Ro ramp is incorporated in the construction of this quay. To the West of the existing quay, the quay will be extended by 500 m. (under construction from April 1984).

Emmahaven: Has been constructed South of the quay and West of the swinging basin. This basin with a length of 600 m. and a width of 130 m. has been dredged to 10 m.

A floating jetty for inland ships with a length of 150 m. has been constructed and is operated by the Port Authority.

SUPPLIES: Fuel oil and provisions should be arranged in advance.

REGULATIONS: See "Delfzijl".

AUTHORITY: Port of Delfzijl/Eemshaven Authority, Noordersingel 1, 9934 AK Delfzijl or P.O.Box 20004, 9930 PA Delfzijl. *Tel:* 05960-14966. *Telex:* 53299 Hsddz. *Contact:* C. Biemond, Port Director. Captain R. K. Mast, Harbour Master. Captain G. Martini, Deputy Harbour Master.

AGENT: See "Rotterdam".

FLUSHING: 51.27 N. 03.35 E. (See Plan Book)

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
1 Store List.
1 Personal Effect List.
Ship's Register.
1 Manifest or Bill of Lading.

PILOTAGE: Position of pilot cutters in the Scheldt Estuary: Pilotage is compulsory.

Wielingen (Southern approach) or via Scheur: Vessels approaching the Scheldt estuary from the English Channel pass the lightvessels Sandettie Banks and West Hinder. The Belgian pilot cutter *Wandelaar* is stationed near Buoy A1 at Lat. 51° 22′ N. and Long. 02° 53′ E. This cutter has a black hull with a white number on her bow, a yellow funnel with black top and flies a red flag with the letter "P" in white.

A vessel bound for Flushing to discharge, bunker, load, to embark or disembark passengers or for repairs will be provided with a Dutch Pilot, who will take the vessel into harbour. Other vessels for Flushing (sheltering, awaiting orders, unplanned repairs, etc.) will be provided with a Belgian Pilot to Flushing Roads, where a Dutch Pilot comes on board to take the ship into harbour.

Oostgat (Northern approach): Vessels approaching the Scheldt estuary from the North can take a Pilot in the vicinity of the S.B.Z. lightbuoy (Lat. 51° 42.3′ N. and Long. 03° 14.3′ E.) where a Dutch pilot cutter is stationed, flying a blue flag with the letter "L" in white. As a rule vessels bound for Flushing are provided with a Dutch Pilot.

ETA Messages: Masters' telegrams via Scheveningen Radio, call sign P.C.H., are passed on to Agents 24 hours a day, week-ends inclusive.

For this reason it is advisable that Masters communicate with Agents via Scheveningen Radio, via which station Agents also route their messages to vessels.

Vessels bound for the River Scheldt should cable, at least 4 hours in advance, their:

1. ETA "Wandelaar" (Southern Approach) to:
   "Pilotage Ostend", via Ostend Radio (OST):
2. ETA "Steenbank" (Northern Approach) to:
   "Pilotage Flushing", via Scheveningen Radio (PCH).

The ETA message should contain the following details: *(a)* the words "ETA Pilot Wandelaar or Steenbank". *(b)* ETA central European time shown in a group of four figures. *(c)* draft (S.W. or FW) with indication of unit applied. *(d)* port of destination and berth.

Pilot cutters may be contacted on VHF Channel 6.

During bad weather both pilot cutters shift to Flushing Roads.

APPROACHES:

Approaches to the Scheldt Estuary are:

	Depth MLWS	*Max. Draft SW Neap*	*Max. Draft SW Spring*	*Keel Clearance*
S. Channel:				
Wielingen	26 ft. 02 in.	33 ft. 06 in.	36 ft. 09 in.	5 ft.
Scheur	37 ft. 6 in.	45 ft.	48 ft. 06 in.	5 ft.
N. Channel:				
Oostgat	27 ft.	31 ft.	34 ft.	5 ft.

ANCHORAGE: The Roads of Flushing offer a safe and spacious anchorage with a sandy bottom. Vessels anchoring in the roads are recommended to do so Southward of the Koopmanshaven (the Western harbour of Flushing) at not less than 0.75 of a mile from the Northern Coast. In this part of the roads depths vary from 10 m. (33 ft.) to 26 m. (85 ft.).

The greatest depths and the strongest tides are encountered on the Southern part of the roads. When lying there vessels are less exposed to the risk of collision in foggy weather etc. and are well away from vessels proceeding up and down the river, manoeuvring for the purpose of landing and/or embarking Pilots, and from ferry boats crossing between Flushing and Breskens.

At the Northern part of the roads the tidal stream slackens gradually until HW is reached and under normal conditions of tide and wind the ebb stream is already felt along the shore from half an hour after HW until 1 hour after LW. From 1 hour after LW the flood tide sets in again and is felt until shortly after HW.

At the South side of the roads the tidal stream is running until slightly over an hour after HW when the stream slackens and turns. Two hours after HW the stream is running in N.W. direction gradually veering West.

A new anchorage Wielingen Noord, North of the line of the lightbuoys W6 and W10, is marked by yellow conical buoys. It is strongly recommended that vessels carrying dangerous cargoes anchor there, exceptional circumstances excepted and weather permitting.

MAX. SIZE: *Flushing East Harbour:* Entrance 34 ft. 4 in. at MLWS. A depth of 38 ft. (length 550 m.) and 41 ft. (length 350 m.) alongside the quay.

Max. draft at Buoys 41 ft. (2 berths).

Outer Harbour: West side, max. draft 40 ft.

Inner Docks: Max. depth 24 ft.

Total: Max. length 280 m., max. draft 49 ft. (S.W.), max. d.w.t., 100,000 tons. However, draft is controlled by the depth in the approach channels.

HEALTH: No certficates required. In event of any disease or fever contact Agents.

BERTHING: *Outer Harbour:* West side, quay of 1,150 ft. long, depth of water 40 ft. LWOST. Quay height above sea level 2 m. at high tide and 7 m. at low tide. In Northern part of Outer Harbour a landing stage with length of 360 ft. Depth at low tide 20 ft. Depth at HW 29 ft.

Flushing East Harbour: Quay length 1,740 ft., depth 38 ft. LWOST and 1,030 ft., depth 41 ft.

Inner Docks: A double lock and sluice give access from Outer Harbour to inner docks and canal through Walcheren. Largest lock length 455 ft., width 72 ft., depth on still LWOST of 17.5 ft. The other lock is 213 ft. long, 26 ft. wide, and 10 ft. deep. Sluice 113 ft. wide, 28 ft. deep. Constant depth of water at quay 24 ft.

STEVEDORES: Provided by N.V. Haven Van Vlissingen (Port of Flushing Limited). Tel.: 01184–15070. Telex: 37837 A.

Stevedore Company – Westerschelde. Tel: 01184-60020. Telex: 37798.

RADIO: All messages to Agents via Scheveningen Radio.

Flushing Radio can be reached by VHF Channel 14. Harbour tugboats and pilot cutters operate on VHF Channel 6. Port Authority VHF Channel 9.

RADAR/VHF: Port radar service available. River service under consideration. Flushing Radio Channel 14. Every 5 minutes each hour this station transmits information regarding visibility, water-level, hindrances, anchorages, etc. Harbour tugs Channel 6.

TUGS: Join vessels in Flushing Roads. Vessel's lines usually used. Extra for tug lines. For contract holders 5% reduction.

MECHANISED CARGO HANDLING: Quay length 2,800 ft. equipped with 2 portainers (65 tons capacity), suitable for handling 20 ft. up to 40 ft. containers. Straddle carriers capacity 32 tons and fork-lifts capacity
32 tons available.

Roll-on/Roll-off service between Flushing and Sheerness. Service twice a day. Vessels berth in the Outer Harbour at the Olau Line Terminal. At Flushing-East, Ro-Ro facilities for deep sea vessels, as well as Ro-Ro facilities for short sea Ro-Ro traffic.

TANKERS: Vessels carrying over 4,400 gallons of combustible liquids with a flash point up to 21° C., or over 22,000 gallons with flash point up to 55° C. require Harbour Master's permission for entry.

2 discharging berths alongside the quay. Discharge lines 3 × 8 in. diameter with capacity of about 2,000 t.p.h.

Total: See "Max. Size".

One jetty for tankers up to 100,000 d.w.t. and 3 jetties for barges and coasters with depth of 20 ft. and 30 ft.

Connections:

Commodity	Loading arms
Fuel oil	2×12 in.
Clean products	2×10 in.
Bunkers (fuel oil only)	1× 8 in.

The two fuel oil loading arms can also be used for the discharge of crude oil. The loading arms are hydraulically operated.

Deballasting: One 12 in. and one 10 in. loading arm can also be used for the discharge of dirty ballast water in unlimited quantities at the rate of about 1,000 t.p.h.

Capacities: Discharging rate of crude oil 3,000 t.p.h. and the loading rate of fuel oil about 2,700 t.p.h.

Supplies: Water obtainable from jetty. Bunkers by barge. Stores by small vehicles max. axle load 12 tons.

MEDICAL: Two hospitals available.

DENSITY: About 1024.

FRESH WATER: Can be supplied either alongside the quay or by water boat. Possible to supply fresh water in Flushing Roads weather permitting.

FUEL: All grades obtainable from major oil companies and supplied by barge only.

Economical bunkering arrangements can be made at the sheltered anchorage Schaar van Everingen, a few miles up river from Flushing. No harbour dues. Max. draft HW Neaps 42 ft. Springs 45 ft.(S.W.).

GANGWAY/DECK WATCHMEN: Available but not compulsory or necessary.

OPENING/CLOSING HATCHES: On liners by crew or stevedores, ship's option.

CERTIFICATES: On arrival, ship's register only.

CUSTOMS ALLOWANCES: 200 cigarettes for each member of crew and total on board out of bond 5 litres spirits and 100 litres wine.

CARGO GEAR: The port is equipped with modern mobile cranes, which can be used both in the outer harbour and in the inner docks, with the following capacities:

2 cranes – 30 tons	2 cranes – 10 tons
2 cranes – 25 tons	1 crane – 8 tons
3 cranes – 12 tons	

Floating cranes are available with capacities of 225, 75, 40 and 8 tons.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	tel. 66989	Germany	tel. 01188–1764
Denmark	tel. 14272	Norway	tel. 12272
France	tel. 12373	Sweden	tel. 16828

REPAIRS: All repairs possible.

DRY DOCKS: Largest (Graving) 712 ft. 5 in., width 98 ft. 4 in. Draft 28 ft. 6 in., 45,000 d.w.t. and 4 smaller docks.

A dry dock with 300,000 metric d.w.t. capacity is planned.

REPATRIATION: All facilities available for crew changes; good railway connections.

AIRPORT: Rotterdam (Zestienhoven) 125 km.; Brussels (Melsbroek) 150 km.; Amsterdam (Schiphol) 180 km.

TIME: GMT plus 1 hour. Summertime, GMT plus 2 hours.

HOLIDAYS: New Year's Day (January 1st); Easter Monday; Queen's Birthday (April 30th); Ascension Day (May 15th); Whit Monday; Christmas Day (December 25th); Boxing Day (December 26th).

Work can be arranged on above days, however dependent upon permission of the Docker's Inspection.

POLICE/AMBULANCE/FIRE: Police 13333; Ambulance and Fire 14444.

TELEPHONES: Possible to place telephones on board and for vessels berthing at the shipyard "De Schelde".

SERVICES: Compass Adjuster; Radio/radar services also calibration of the Direction Finder, Seamen's Home (Mission to Seamen); Lloyd's Sub-agents; Ship's Laundries.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

AUTHORITY: Flushing Ports Authority, Engelandweg, Sloehaven, Vlissingen-Oost, P.O.Box 1056, 4388 ZH Oost-Souburg, Netherlands. *Tel:* 01184-68080. *Telex:* 37865 Haven Nl. *Contact:* Captain H. Th. Giezen, Harbour Master. Tel: 01184-70270 (Residence).

AGENT: Wm. H. Muller & Co. Nederland B.V., 16 Boulevard de Ruyter, P.O.Box 81, 4380 AB Flushing. Tel.(01184) 12171. Telex 37868. Cables "Mineral".

GRONINGEN: 53.15 N. 06.34 E. (See Plan Book)

The port is connected with the Ems Estuary via the Eemskanaal and the lock at Delfzijl.

DOCUMENTS: Clearing is done at Delfzijl.

PILOTAGE: For the approach of the lock see "Delfzijl".

The length of the lock is 120 m. and the width 16 m. Depth over sill at LW 3.9 m. and at canal level 6.07 m.

On the locks Canal-Pilots are available but pilotage on the canal is not compulsory. The length of the canal is 14 miles and it has a least depth of 5.2 m. There are 3 bridges all 16 m. wide.

MAX. SIZE: Maximum size for ships passing lock and navigating canal; beam 13 m. and draft 4.5 m. (Vessels with greater beam and draft possible with permission of the Canal Authority.)

TUGS: Available at Delfzijl and Groningen.

BERTHING: *Hunzehaven:* South side 300 m. quayage, railway connected, max. draft 4.5 m., four grab cranes 3.5 tons.

Oosterhaven: North side 150 m. quayage, max. beam 12 m., max. draft 3.6 m.

Deense Haven: 3 mooring buoys, max. draft 4.5 m. One private grab crane on wharf, capacity 8 tons.

Eemskanaal: Private silo. Max. beam 12 m., max. draft 3.6 m., private timber yard max. beam 12 m., max. draft 3.6 m.

Van Starkenborghkanaal: Private silo. Max. beam 9.6 m., max. draft 2.9 m., private timber yard max. beam 9.6 m., max. draft 2.9 m.

CRANES: Floating sheerlegs up to 250 tons.

STEVEDORES: Available.

MECHANICAL CARGO HANDLING: Silos with equipment for bulk-handling of grain on Eemskanaal and Van Starkenborghkanaal.

MEDICAL: 3 hospitals available.

FRESH WATER: Supplied by Authority's water boats.

FUEL: By barge only.

CERTIFICATES: On arrival, Ship's Register only.

CONSULS: Belgium, Tel: 138222; Norway, Tel: 189444; Spain, Tel: 137879.

REPAIRS: All repairs possible at Delfzijl.

DRY DOCKS: Transverse slipway at Delfzijl.

AIRPORT: Eelde, 10 km. from Groningen, daily services to Schiphol.

HOLIDAYS: New Year's Day, Easter Monday, Queen's Birthday (30th April), Ascension Day, Whit Monday, Christmas Day, Boxing Day.

POLICE/AMBULANCE/FIRE: Police Tel: 121212; Ambulance Tel: 123456; Fire Brigade Tel: 123456.

TELEPHONES: Can be placed on board alongside Hunzehaven Quay.

AUTHORITY: Gemeentelijk Havenbedrijf Groningen, Bornholmstraat 4, 9723 Ax Groningen. *Tel:* 050-120306 and 125777. *Contact:* H. J. de Lange, Harbour Master. *Tel:* 050-347192 (Private).

ROTTERDAM: 51.55 N. 04.24 E. (See Plan Book)

DOCUMENTS: Maritime Declaration of Health, Tanker Check List (all tankers over 1,600 b.r.t.), obtainable from River Pilot. Crew List in duplicate on special Dutch forms, obtainable from Agents. Ship's Register. Store List. Crew Customs Declaration showing quantity cigars, cigarettes, tobacco, spirits, wine, radios, cameras, etc., and souvenirs for each crew member.

Also see "Shipmasters Report".

Oil Pollution Damage Certificate: Tankers carrying over 2,000 tons of oil or oil products in bulk have to produce in Dutch ports a certificate of insurance in respect of civil liability for oil pollution damage (TOVALOP Certificate). Fines will be imposed if vessels do not comply with these international regulations and authorities will not allow such vessels to leave the port.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg".

PILOTAGE: River pilotage compulsory from sea to harbour area and vice versa, except vessels in ballast drawing less than 7 ft. 3 in.

Harbour pilotage compulsory from fairway to berth in harbour area and vice versa, except for vessels under 475 g.r.t.

Pilot Cutters: Cruising continuously, day and night, off entrance to New Rotterdam Waterway, one North of line North Mole/Maasbuoy and one near Maasbuoy. Characteristic signals:

1. By day pilot flag, being a blue flag with white letter "L", displayed from main top mast.
2. At night, lights as prescribed by Regulations for Preventing Collisions at Sea.
3. During bad visibility the fog signal prescribed by Rule 35 of these Regulations.

Ordering a Pilot:

1. Vessels bound for New Rotterdam Waterway must cable, at least 6 hours in advance, ETA pilot station, gross tonnage and draft to:
   (a) Pilotage Hook of Holland via Coastal Station Scheveningen Radio (PCH) or
   (b) Coastal Station Maassluis Radio (Radio Dirkzwager) by VHF Channel 12 (Port operations) or
   (c) Station Maas Approach at Hook of Holland by VHF Channel 20.
   This ETA notification shall, with due observance of the aforementioned 6 hours period, be rectified if the ETA will be more than 1 hour later than the ETA last reported.
   Without prejudice to this provision the Master shall indicate his requirement for a Pilot by displaying the prescribed visual signals when his vessel arrives within visual range of the pilot vessel.
   The ETA message shall contain:
   (a) The words "ETA Pilot"
   (b) ETA (group of 4 figures) in Central European Time
   (c) Draft of vessel including unit of measurement (feet or decimetres)
   (d) Port of destination.

BRIDGES: Bridges across the River Oude Maas are opened day and night. Sea traffic has preference over shore traffic.

Immediately above first confluence into Nieuwe Maas, the Oude Maas is spanned by 2 lifting bridges:

1. The Botlek Bridge with a free width of 53.80 m.
2. The Spijkenisse Bridge with a free width of 80.00 m.

A secondary entrance is from S.W. via Roompot and Hollands Diep, a distance of 58 miles with least depth of 5.2 m. (17 ft. 6 in.), or 7.6 m. (25 ft.) at HW. The S.W. approach through Roompot is spanned by the Zeeland-Bridge, a 3-mile long road-bridge with only 11.5 m. (38 ft.) clearance under the middle of each passage span. A bascule span at the Northern end has a free width of 35 ft.

STEVEDORES: Working hours: 0730 hrs. on Monday until 1900 hrs. on Saturday.

TANKERS: Oil installation of Gebr. Broere N.V. has 7 tanker berths. Max. draft 9.0 m. There are other tanker berths for small tankers. No slop (residue) storage facilities.

DENSITY: Fresh water.

REPAIRS: B.V. Scheepswerf en Machinefabriek "De Biesbosch" Maasstraat 24, 3313 CR Dordrecht, Tel: 078-14 70 77, Telex: 29494 Biesb. NL.

Machinefabriek L. Straatman B.V. Kuipershaven 61, 3311 AM Dordrecht. Tel: 078-14 24 22.

B.V. Scheepswerf Hoebee, Merwedestraat 56, 3313 CS Dordrecht. Tel: 078-13 00 88.

Machinefabriek C.P. Bolier B.V., Grevelingenstraat 21, 3313 LB Dordrecht. Tel: 078-16 41 11, Telex: 29329 Bomak. N.L.

FRESH WATER: At oil installations fresh water can be supplied from shore or supply by waterboat.

FUEL: Available by barge.

CONSULS: Denmark Tel: 132177, Norway Tel: 132177. Other consulates at Rotterdam at 20 km. distance.

POLICE/AMBULANCE/FIRE: Tel. Police 339911; Ambulance and Fire 133333.

AIRPORT: Rotterdam and Amsterdam airports at a distance of 30 km. and 90 km. respectively served by regular airlines.

PILOT CUTTERS, HEALTH, MEDICAL ATTENDANCE, BUNKERS, CUSTOMS ALLOWANCES: See "Rotterdam".

HOLIDAYS: New Year's Day, Easter Day, H.M. Birthday (30th April), Ascension Day, Whit Sunday, Christmas Day.

TIME: GMT plus 1 hour. Summer plus 2 hours.

AUTHORITY: Gemeentelijke Havendienst der Gemeente Dordrecht, Binnen Kalkhaven 47, 3311 JC Dordrecht, Netherlands. *Tel:* 078-134211. *Telex:* NL 29492 Haven. *Contact:* R. L. Guicherit, Harbour Master.

AGENT: See "Rotterdam".

EEMSHAVEN: 53.27 N. 06.50 E. (See Plan Book)

LOCATION: On the Western shore of the River Eems, about 15 km. N.W. of Delfzijl.

PILOTAGE: See "Delfzijl".

ANCHORAGE: Near the Western Mole of the Eemshaven is an anchorage with a depth of about 16 m.

RESTRICTIONS: The entrance channel Doekegatkanaal has a depth of 11 m. thus enabling ships with draft up to about 11 m. to enter at HW. Plans exist to increase the possible draft to about 13 m.

Tides: The range at Springs is 3.05 m. and at Neaps 2.35 m. Tidal movement is diurnal with an average range of 2.7 m. (all approx.).

Depths: All depths are indicated in relation to N.A.P. LLWS at Eemshaven lies 1.84 m. below N.A.P. (Normal Amsterdam Level).

RADIO/TUGS/VHF: See "Delfzijl".

BERTHING: The harbour is divided into 4 communicating basins:

Doekegatkanaal: Has a depth of 14 m. at the entrance and 11 m. further on. The bottom width at the moles is 300 m. at 14 m.; the minimum width is 275 m. at 11 m. At the end of the Doekegatkanaal is a turning basin with a diameter of 500 m. and a depth of 10 m.

Wilhelminahaven: East of the turning basin is a special basin for tankers with a depth of up to 17 m. and a bottom width of 200 m. This basin has a length of 600 m. Mooring facilities will be constructed by future industries.

Julianahaven: Located West of the turning basin. This basin has a length of 1,200 m. and a width of 250 m. to 300 m. ultimately. The depth of this basin varies between 14 m. and 17 m.

To the South of this basin a quay has been constructed with a length of 600 m. and a width of 300 m. The quay is equipped for general and unitised cargo handling to be handled with 4 cranes with a maximum lifting capacity of 20 tons and 1 crane with a lifting capacity of 30 tons. A Ro/Ro ramp is incorporated in the construction of this quay. To the West of the existing quay, the quay will be extended by 500 m. (under construction from April 1984).

Emmahaven: Has been constructed South of the quay and West of the swinging basin. This basin with a length of 600 m. and a width of 130 m. has been dredged to 10 m.

A floating jetty for inland ships with a length of 150 m. has been constructed and is operated by the Port Authority.

SUPPLIES: Fuel oil and provisions should be arranged in advance.

REGULATIONS: See "Delfzijl".

AUTHORITY: Port of Delfzijl/Eemshaven Authority, Noordersingel 1, 9934 AK Delfzijl or P.O.Box 20004, 9930 PA Delfzijl. *Tel:* 05960-14966. *Telex:* 53299 Hsddz. *Contact:* C. Biemond, Port Director. Captain R. K. Mast, Harbour Master. Captain G. Martini, Deputy Harbour Master.

AGENT: See "Rotterdam".

FLUSHING: 51.27 N. 03.35 E. (See Plan Book)

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
1 Store List.
1 Personal Effect List.
Ship's Register.
1 Manifest or Bill of Lading.

PILOTAGE: Position of pilot cutters in the Scheldt Estuary: Pilotage is compulsory.

Wielingen (Southern approach) or via Scheur: Vessels approaching the Scheldt estuary from the English Channel pass the lightvessels Sandettie Banks and West Hinder. The Belgian pilot cutter *Wandelaar* is stationed near Buoy A1 at Lat. 51° 22′ N. and Long. 02° 53′ E. This cutter has a black hull with a white number on her bow, a yellow funnel with black top and flies a red flag with the letter "P" in white.

A vessel bound for Flushing to discharge, bunker, load, to embark or disembark passengers or for repairs will be provided with a Dutch Pilot, who will take the vessel into harbour. Other vessels for Flushing (sheltering, awaiting orders, unplanned repairs, etc.) will be provided with a Belgian Pilot to Flushing Roads, where a Dutch Pilot comes on board to take the ship into harbour.

Oostgat (Northern approach): Vessels approaching the Scheldt estuary from the North can take a Pilot in the vicinity of the S.B.Z. lightbuoy (Lat. 51° 42.3′ N. and Long. 03° 14.3′ E.) where a Dutch pilot cutter is stationed, flying a blue flag with the letter "L" in white. As a rule vessels bound for Flushing are provided with a Dutch Pilot.

ETA Messages: Masters' telegrams via Scheveningen Radio, call sign P.C.H., are passed on to Agents 24 hours a day, week-ends inclusive.

For this reason it is advisable that Masters communicate with Agents via Scheveningen Radio, via which station Agents also route their messages to vessels.

Vessels bound for the River Scheldt should cable, at least 4 hours in advance, their:

1. ETA "Wandelaar" (Southern Approach) to:
   "Pilotage Ostend", via Ostend Radio (OST):
2. ETA "Steenbank" (Northern Approach) to:
   "Pilotage Flushing", via Scheveningen Radio (PCH).

The ETA message should contain the following details: *(a)* the words "ETA Pilot Wandelaar or Steenbank". *(b)* ETA central European time shown in a group of four figures. *(c)* draft (S.W. or FW) with indication of unit applied. *(d)* port of destination and berth.

Pilot cutters may be contacted on VHF Channel 6.

During bad weather both pilot cutters shift to Flushing Roads.

APPROACHES:

Approaches to the Scheldt Estuary are:

	Depth MLWS	*Max. Draft SW Neap*	*Max. Draft SW Spring*	*Keel Clearance*
S. Channel:				
Wielingen	26 ft. 02 in.	33 ft. 06 in.	36 ft. 09 in.	5 ft.
Scheur	37 ft. 6 in.	45 ft.	48 ft. 06 in.	5 ft.
N. Channel:				
Oostgat	27 ft.	31 ft.	34 ft.	5 ft.

ANCHORAGE: The Roads of Flushing offer a safe and spacious anchorage with a sandy bottom. Vessels anchoring in the roads are recommended to do so Southward of the Koopmanshaven (the Western harbour of Flushing) at not less than 0.75 of a mile from the Northern Coast. In this part of the roads depths vary from 10 m. (33 ft.) to 26 m. (85 ft.).

The greatest depths and the strongest tides are encountered on the Southern part of the roads. When lying there vessels are less exposed to the risk of collision in foggy weather etc. and are well away from vessels proceeding up and down the river, manoeuvring for the purpose of landing and/or embarking Pilots, and from ferry boats crossing between Flushing and Breskens.

At the Northern part of the roads the tidal stream slackens gradually until HW is reached and under normal conditions of tide and wind the ebb stream is already felt along the shore from half an hour after HW until 1 hour after LW. From 1 hour after LW the flood tide sets in again and is felt until shortly after HW.

At the South side of the roads the tidal stream is running until slightly over an hour after HW when the stream slackens and turns. Two hours after HW the stream is running in N.W. direction gradually veering West.

A new anchorage Wielingen Noord, North of the line of the lightbuoys W6 and W10, is marked by yellow conical buoys. It is strongly recommended that vessels carrying dangerous cargoes anchor there, exceptional circumstances excepted and weather permitting.

MAX. SIZE: *Flushing East Harbour:* Entrance 34 ft. 4 in. at MLWS. A depth of 38 ft. (length 550 m.) and 41 ft. (length 350 m.) alongside the quay.

Max. draft at Buoys 41 ft. (2 berths).

Outer Harbour: West side, max. draft 40 ft.

Inner Docks: Max. depth 24 ft.

Total: Max. length 280 m., max. draft 49 ft. (S.W.), max. d.w.t. 100,000 tons. However, draft is controlled by the depth in the approach channels.

HEALTH: No certficates required. In event of any disease or fever contact Agents.

BERTHING: *Outer Harbour:* West side, quay of 1,150 ft. long, depth of water 40 ft. LWOST. Quay height above sea level 2 m. at high tide and 7 m. at low tide. In Northern part of Outer Harbour a landing stage with length of 360 ft. Depth at low tide 20 ft. Depth at HW 29 ft.

Flushing East Harbour: Quay length 1,740 ft., depth 38 ft. LWOST and 1,030 ft., depth 41 ft.

Inner Docks: A double lock and sluice give access from Outer Harbour to inner docks and canal through Walcheren. Largest lock length 455 ft., width 72 ft., depth on still LWOST of 17.5 ft. The other lock is 213 ft. long, 26 ft. wide, and 10 ft. deep. Sluice 113 ft. wide, 28 ft. deep. Constant depth of water at quay 24 ft.

STEVEDORES: Provided by N.V. Haven Van Vlissingen (Port of Flushing Limited). Tel.: 01184-15070. Telex: 37837 A. Stevedore Company – Westerschelde. Tel: 01184-60020. Telex: 37798.

RADIO: All messages to Agents via Scheveningen Radio.

Flushing Radio can be reached by VHF Channel 14. Harbour tugboats and pilot cutters operate on VHF Channel 6. Port Authority VHF Channel 9.

RADAR/VHF: Port radar service available. River service under consideration. Flushing Radio Channel 14. Every 5 minutes each hour this station transmits information regarding visibility, water-level, hindrances, anchorages, etc. Harbour tugs Channel 6.

TUGS: Join vessels in Flushing Roads. Vessel's lines usually used. Extra for tug lines. For contract holders 5% reduction.

MECHANISED CARGO HANDLING: Quay length 2,800 ft. equipped with 2 portainers (65 tons capacity), suitable for handling 20 ft. up to 40 ft. containers. Straddle carriers capacity 32 tons and fork-lifts capacity 32 tons available.

Roll-on/Roll-off service between Flushing and Sheerness. Service twice a day. Vessels berth in the Outer Harbour at the Olau Line Terminal. At Flushing-East, Ro-Ro facilities for deep sea vessels, as well as Ro-Ro facilities for short sea Ro-Ro traffic.

TANKERS: Vessels carrying over 4,400 gallons of combustible liquids with a flash point up to 21° C., or over 22,000 gallons with flash point up to 55° C. require Harbour Master's permission for entry.

2 discharging berths alongside the quay. Discharge lines 3 × 8 in. diameter with capacity of about 2,000 t.p.h.

Total: See "Max. Size".

One jetty for tankers up to 100,000 d.w.t. and 3 jetties for barges and coasters with depth of 20 ft. and 30 ft.

Connections:

Commodity	Loading arms
Fuel oil	2×12 in.
Clean products	2×10 in.
Bunkers (fuel oil only)	1× 8 in.

The two fuel oil loading arms can also be used for the discharge of crude oil. The loading arms are hydraulically operated.

Deballasting: One 12 in. and one 10 in. loading arm can also be used for the discharge of dirty ballast water in unlimited quantities at the rate of about 1,000 t.p.h.

Capacities: Discharging rate of crude oil 3,000 t.p.h. and the loading rate of fuel oil about 2,700 t.p.h.

Supplies: Water obtainable from jetty. Bunkers by barge. Stores by small vehicles max. axle load 12 tons.

MEDICAL: Two hospitals available.

DENSITY: About 1024.

FRESH WATER: Can be supplied either alongside the quay or by water boat. Possible to supply fresh water in Flushing Roads weather permitting.

FUEL: All grades obtainable from major oil companies and supplied by barge only.

Economical bunkering arrangements can be made at the sheltered anchorage Schaar van Everingen, a few miles up river from Flushing. No harbour dues. Max. draft HW Neaps 42 ft. Springs 45 ft.(S.W.).

GANGWAY/DECK WATCHMEN: Available but not compulsory or necessary.

OPENING/CLOSING HATCHES: On liners by crew or stevedores, ship's option.

CERTIFICATES: On arrival, ship's register only.

CUSTOMS ALLOWANCES: 200 cigarettes for each member of crew and total on board out of bond 5 litres spirits and 100 litres wine.

CARGO GEAR: The port is equipped with modern mobile cranes, which can be used both in the outer harbour and in the inner docks, with the following capacities:

2 cranes – 30 tons
2 cranes – 25 tons
3 cranes – 12 tons
2 cranes – 10 tons
1 crane – 8 tons

Floating cranes are available with capacities of 225, 75, 40 and 8 tons.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	tel. 66989	Germany	tel. 01188–1764
Denmark	tel. 14272	Norway	tel. 12272
France	tel. 12373	Sweden	tel. 16828

REPAIRS: All repairs possible.

DRY DOCKS: Largest (Graving) 712 ft. 5 in., width 98 ft. 4 in. Draft 28 ft. 6 in., 45,000 d.w.t. and 4 smaller docks.

A dry dock with 300,000 metric d.w.t. capacity is planned.

REPATRIATION: All facilities available for crew changes; good railway connections.

AIRPORT: Rotterdam (Zestienhoven) 125 km.; Brussels (Melsbroek) 150 km.; Amsterdam (Schiphol) 180 km.

TIME: GMT plus 1 hour. Summertime, GMT plus 2 hours.

HOLIDAYS: New Year's Day (January 1st); Easter Monday; Queen's Birthday (April 30th); Ascension Day (May 15th); Whit Monday; Christmas Day (December 25th); Boxing Day (December 26th).

Work can be arranged on above days, however dependent upon permission of the Docker's Inspection.

POLICE/AMBULANCE/FIRE: Police 13333; Ambulance and Fire 14444.

TELEPHONES: Possible to place telephones on board and for vessels berthing at the shipyard "De Schelde".

SERVICES: Compass Adjuster; Radio/radar services also calibration of the Direction Finder, Seamen's Home (Mission to Seamen); Lloyd's Sub-agents; Ship's Laundries.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

AUTHORITY: Flushing Ports Authority, Engelandweg, Sloehaven, Vlissingen-Oost, P.O.Box 1056, 4388 ZH Oost-Souburg, Netherlands. *Tel:* 01184-68080. *Telex:* 37865 Haven NI. *Contact:* Captain H. Th. Giezen, Harbour Master. Tel: 01184-70270 (Residence).

AGENT: Wm. H. Muller & Co. Nederland B.V., 16 Boulevard de Ruyter, P.O.Box 81, 4380 AB Flushing. Tel.(01184) 12171. Telex 37868. Cables "Mineral".

GRONINGEN: 53.15 N. 06.34 E. (See Plan Book)

The port is connected with the Ems Estuary via the Eemskanaal and the lock at Delfzijl.

DOCUMENTS: Clearing is done at Delfzijl.

PILOTAGE: For the approach of the lock see "Delfzijl".

The length of the lock is 120 m. and the width 16 m. Depth over sill at LW 3.9 m. and at canal level 6.07 m.

On the locks Canal-Pilots are available but pilotage on the canal is not compulsory. The length of the canal is 14 miles and it has a least depth of 5.2 m. There are 3 bridges all 16 m. wide.

MAX. SIZE: Maximum size for ships passing lock and navigating canal; beam 13 m. and draft 4.5 m. (Vessels with greater beam and draft possible with permission of the Canal Authority.)

TUGS: Available at Delfzijl and Groningen.

BERTHING: *Hunzehaven:* South side 300 m. quayage, railway connected, max. draft 4.5 m., four grab cranes 3.5 tons.

Oosterhaven: North side 150 m. quayage, max. beam 12 m., max. draft 3.6 m.

Deense Haven: 3 mooring buoys, max. draft 4.5 m. One private grab crane on wharf, capacity 8 tons.

Eemskanaal: Private silo. Max. beam 12 m., max. draft 3.6 m., private timber yard max. beam 12 m., max. draft 3.6 m.

Van Starkenborghkanaal: Private silo. Max. beam 9.6 m., max. draft 2.9 m., private timber yard max. beam 9.6 m., max. draft 2.9 m.

CRANES: Floating sheerlegs up to 250 tons.

STEVEDORES: Available.

MECHANICAL CARGO HANDLING: Silos with equipment for bulk-handling of grain on Eemskanaal and Van Starkenborghkanaal.

MEDICAL: 3 hospitals available.

FRESH WATER: Supplied by Authority's water boats.

FUEL: By barge only.

CERTIFICATES: On arrival, Ship's Register only.

CONSULS: Belgium, Tel: 138222; Norway, Tel: 189444; Spain, Tel: 137879.

REPAIRS: All repairs possible at Delfzijl.

DRY DOCKS: Transverse slipway at Delfzijl.

AIRPORT: Eelde, 10 km. from Groningen, daily services to Schiphol.

HOLIDAYS: New Year's Day, Easter Monday, Queen's Birthday (30th April), Ascension Day, Whit Monday, Christmas Day, Boxing Day.

POLICE/AMBULANCE/FIRE: Police Tel: 121212; Ambulance Tel: 123456; Fire Brigade Tel: 123456.

TELEPHONES: Can be placed on board alongside Hunzehaven Quay.

AUTHORITY: Gemeentelijk Havenbedrijf Groningen, Bornholmstraat 4, 9723 Ax Groningen. *Tel:* 050-120306 and 125777. *Contact:* H. J. de Lange, Harbour Master. *Tel:* 050-347192 (Private).

ROTTERDAM: 51.55 N. 04.24 E. (See Plan Book)

DOCUMENTS: Maritime Declaration of Health, Tanker Check List (all tankers over 1,600 b.r.t.), obtainable from River Pilot. Crew List in duplicate on special Dutch forms, obtainable from Agents. Ship's Register. Store List. Crew Customs Declaration showing quantity cigars, cigarettes, tobacco, spirits, wine, radios, cameras, etc., and souvenirs for each crew member.

Also see "Shipmasters Report".

Oil Pollution Damage Certificate: Tankers carrying over 2,000 tons of oil or oil products in bulk have to produce in Dutch ports a certificate of insurance in respect of civil liability for oil pollution damage (TOVALOP Certificate). Fines will be imposed if vessels do not comply with these international regulations and authorities will not allow such vessels to leave the port.

DEEP SEA PILOTAGE: See "Brixham" or "Cherbourg".

PILOTAGE: River pilotage compulsory from sea to harbour area and vice versa, except vessels in ballast drawing less than 7 ft. 3 in.

Harbour pilotage compulsory from fairway to berth in harbour area and vice versa, except for vessels under 475 g.r.t.

Pilot Cutters: Cruising continuously, day and night, off entrance to New Rotterdam Waterway, one North of line North Mole/Maasbuoy and one near Maasbuoy. Characteristic signals:

1. By day pilot flag, being a blue flag with white letter "L", displayed from main top mast.
2. At night, lights as prescribed by Regulations for Preventing Collisions at Sea.
3. During bad visibility the fog signal prescribed by Rule 35 of these Regulations.

Ordering a Pilot:

1. Vessels bound for New Rotterdam Waterway must cable, at least 6 hours in advance, ETA pilot station, gross tonnage and draft to:
   (a) Pilotage Hook of Holland via Coastal Station Scheveningen Radio (PCH) or
   (b) Coastal Station Maassluis Radio (Radio Dirkzwager) by VHF Channel 12 (Port operations) or
   (c) Station Maas Approach at Hook of Holland by VHF Channel 20.
   This ETA notification shall, with due observance of the aforementioned 6 hours period, be rectified if the ETA will be more than 1 hour later than the ETA last reported.
   Without prejudice to this provision the Master shall indicate his requirement for a Pilot by displaying the prescribed visual signals when his vessel arrives within visual range of the pilot vessel.
   The ETA message shall contain:
   (a) The words "ETA Pilot"
   (b) ETA (group of 4 figures) in Central European Time
   (c) Draft of vessel including unit of measurement (feet or decimetres)
   (d) Port of destination.

Please note that vessels which do not comply with the abovementioned Regulations and fail to state their ETA timely or accurately, may only be provided with a Pilot 6 hours after their arrival at the pilot station, provided that other vessels which reported themselves correctly will not be delayed.

2. Vessels bound for Port of Dordrecht should also state their destination, as Pilots for Dordrecht embark from pilot cutter on roads.

On arrival at pilot station vessels requiring Pilot are to display following signals, separately or together:

1. *By day:* International code signal "G". Pilot flag, viz., vessel's National Flag with white border from foremast.
2. *By night:* Morse signal "G" by flash light. Blue lights at intervals of 15 minutes. A bright white light shown just above bulwark for 1 minute at short intervals.
3. *During bad visibility:* At least 3 seconds after the normal fog signal the international code signal "G". Pilot vessel will answer: the normal fog signals, followed after at least 3 seconds by international code signal "H" (I have Pilot on board).

Vessels constrained by their draft (68 ft. – 70 ft.) are to announce their expected time of arrival as follows:

The announcement shall be reported at least 24 hours before arrival at the rendezvous, "13 miles North from Cap de la Hague" if the Pilot is to be embarked in the channel.

Pilotage for Deep Draft Vessels and Helicopter Service: Vessels drawing 57 ft. (SW) and over must make use of the "Eurochannel" between the "Euro Buoy" and the "Maas Centre Buoy". Pilots board by helicopter in position Lat. 52° 00′ N., Long. 03° 00′ E. Helicopter may ask vessel to work on Channel 12 or 20.

For vessels drawing over 57 ft. (SW) 1.5 times the pilotage tariff Sea – Hook of Holland is applicable.

Restrictions:

1. Min. visibility 800 m. at 150 ft. above sea level.
2. Max. wind force 10 (55 knots.).
3. Severe turbulence and icing conditions at or below 150 ft.

Pilot Ladders: Vessels with a freeboard over 9 m. must provide an accommodation ladder in addition to the pilot ladder. If boarding equipment does not strictly comply with the SOLAS provisions, Pilots must be embarked/disembarked by helicopter. Generally Pilots refuse to use mechanical pilot hoists or other constructions not within the recommendations of the "European Maritime Pilots Association".

Notice: *Informal Translation of the Neth. N.t.M. 112/84.*

Netherlands Regulations for requesting a Pilot in the district "Rijnmond".

The Director of the district "Rijnmond" (D.G.S.M.): paying attention to Article 38 of the Algemeen Loodsreglement (General Pilotage Regulations), (Stb. nr. 433 van 1932); announces:

Article 1.

The expected time of arrival (ETA) at the pilot stations "Maas Center" or "MW 5" has to be announced as follows:

(a) The announcement shall be reported at least 6 hours before arrival at the pilot station concerned;

(b) The announcement shall be transmitted to Scheveningen-Radio (call sign PCH) or directly via VHF Channel 20 to Traffic Centre "Maas Approach" at Hook of Holland;

(c) The announcement is to be addressed to D.G.S.M. district "Rijnmond-HCC", Rotterdam;

(d) The announcement shall, include the following particulars:
  1. Vessel's name, call sign and gross tonnage;
  2. The words "ETA-Pilot";
  3. Port of destination;
  4. The ETA (group of 4 ciphers) in Central European Time;
  5. The max. draft of the vessel, on arrival (feet or decimetres);

(e) The announcement shall be rectified if a delay of 1 hour or more is being expected.

Article 2.

Vessels constrained by their draft are to announce their ETA as follows:

(a) The announcement shall be reported at least 24 hours before arrival at the rendez-vous "13 sea-miles North from Cap de La Hague" if the Pilot is to be embarked in the Channel;

(b) Other vessels constrained by their draft are to announce their arrival at the rendezvous (Lat. 52° 00′ N., Long. 03° 00′ E.) at least 8 hours in advance

(c) Article 1, sub (b), (c), (d) and (e), is applicable accordingly;

(d) By or on behalf of the Director of the district "Rijnmond" further particulars can be requested.

Article 3.

The Master of a vessel lying in a port in district "Rijnmond" requiring a Pilot, shall make an application for a Pilot at least 3 hours in advance to the "Loodsenbesteldienst" of the D.G.S.M. district "Rijnmond-HCC" Rotterdam (Tel: 010-762855/762408, Telex: 27370 D.G.S.M. district "Rijnmond").

In case of vessels constrained by their draft, the request is to be made at least 6 hours in advance.

The request should include the following particulars:

(a) Vessel's name;
(b) Nationality;
(c) Gross tonnage;
(d) Maximum draft;
(e) Port of destination;
(f) Nature of cargo;
(g) Berth;
(h) Means of transport by Pilot;
(i) Name of Master and/or shipbroker's clerk, as well as the telephone number(s) where they are attainable;
(j) Agency with telephone number;
(k) Expected date and time of departure as well as the time upon which the Pilot is required.

The request for a Pilot is to be rectified as soon as possible, if it appears, that the ship's departure may be delayed by 1 hour or more.

Note: The corrections mentioned in Neth. N.t.M. 151/84 are incorporated.

(Gids Ned. Kust 1979 blz. 45 t/m 48).

(Nr. 3 and 10/84 D.G.S.M. Rijnmond: Hydr. L23).

Rotterdam, April 1984.

ANCHORAGES:

The following 5 anchorages are available:

1. Long term anchorage for deep draft vessels.
2. For deep draft vessels which have to wait for a short period (for tide or pilotage) before they can enter the DW route to Rotterdam-Europort.
3. For vessels which on account of their draft cannot normally anchor in 4 or 5.
4. "Maas West".
5. "Maas Noord".

See Chart L (D2-D5) 3371.

RESTRICTIONS:

Dangerous Goods

General Information:

Regulations are based on several Governmental laws and Municipal bye-laws.

The "Dangerous Goods Department" of the Municipal Port Management is the centre where all information on dangerous goods on board vessels is collected, administrated and distributed to those concerned.

Inspection on board vessels berthed in the Port of Rotterdam will be carried out mainly by inspectors of the Municipal Dangerous Goods Department, although in certain cases (e.g. explosives), Governmental Dangerous Goods Inspectors are in charge as well.

For detailed information the following Regulations should be consulted:

Rotterdtam Port Bye Laws (Havenverordening Rotterdam)

Order of the State Secretary for Traffic and Public Works No. i-3/V20146 of 10 Jan. 1980

(Beschikking van de Staatssecretaris van Verkeer en Waterstaat Nr. i-3/V20146 of 10 Jan. 1980)

Notice to Shipping of the Governmental Harbour Master No. 11/1980 (Bekendmaking aan de scheepvaart No. 11/1980)

Notice to Shipping of the Dept. of Public Works No. 50/1967 (Bekendmaking aan de scheepvaart No. 50/1967)

From these Regulations the following significant obligations have been extracted:

1. Signals:

Vessels carrying:

In Packages

(*a*) More than 100 kg. gross of IMO class 1.1 and 1.5

(*b*) More than 1,000 kg. gross of IMO class 1.2, 1.3, 1.4 (explosives) and 5.2 (organic peroxides).

(*c*) More than 1,000 kg. poisonous gases of IMO class 2.

In Bulk

(*d*) Any dangerous substances in any quantity. Also empty tanks which are not certified as being clean by an acknowledged expert should hoist the following signals before entering the Rotterdam Waterway area:

I. by day: the International signal "B";

II. by night: 2 red lights at the same level at a distance of 1 m.

2. Prior Notification:

Masters of vessels carrying:

a. Dangerous goods of class 1 and 5.2 in packages;

b. More than 1,000 kg. gross weight per substance of the other IMO classes in packages.

c. Dangerous substances in bulk: Report these commodities to the Dangerous Goods Dept., of the Municipal Harbour Master 24 hours before arrival.

3. Explosives:

There is a restriction on the carriage of explosives by ships, dependent on kind, quantity and stowage of the explosives.

Permission to deliver explosives is given by the Minister of Transport.

Masters of vessels are advised to make sure whether such a permission has been granted.

4. Dangerous Cargo List:

Apart from these obligations the Rotterdam Port Bye Laws prescribe that a vessel having any dangerous cargo on board is prohibited from being in the harbour unless there is a list on board and an identical list has been submitted to the Harbour Master, stating the correct technical names, IMO class flashpoint if below 61° C and the stowage of these materials.

5. Operational Notice:

Masters of vessels showing the signals as mentioned above ("B" flag or 1 red light) shall give notice to "Pilot Maas" on VHF Channel 20 on arrival.

This notice shall be given at least half an hour but not more than 1 hour before the ship enters the Rotterdam Waterway area.

Upon departure: On Channel 1 to "Central Post" or Channel 3 if sailing from the Europoort area.

This notice shall contain: ship's name, position, destination and expected time of entering or leaving the Rotterdam Waterway area.

Should there be considerable alteration in this time, "Pilot Maas" should be notified again 30 minutes in advance.

After the first notice and during the further voyage on the Rotterdam Waterway, VHF Channel 14 should be kept on stand-by. Listening watch should be kept on.

When visibility is less than 500 m., ships are prohibited from navigating the Rotterdam Waterway, unless permission has been obtained from State Harbour Master.

6. Pilotage:

Ships carrying:

a. more than 1,000 kg. explosives (IMO Class 1), liable to mass explosion;

b. substances of IMO Class 2, Class 3 (not miscible with water) or Class 6.1 in bulk, must have a Pilot on board when entering the Rotterdam Waterway area. At least 24 hours before arrival and 1 hour before departure the following particulars shall be given to the Governmental Harbour Master via the H.C.C. (Harbour Coordination Centre);

1. Name and call sign;
2. Nationality;
3. Gross tonnage and draft;
4. Nature and quantity of dangerous cargo;
5. Berth;
6. ETA/ETD;
7. Agent.

Incoming ships shall also give notice 4 hours before arriving at the Pilot Cruising Station stating:

1. Name and call-sign;
2. Draft;
3. ETA;
4. The code word "IMO".

by radio telegram via the Netherlands Coastal Radio Station (PCH) addressed to: "Pilotage Hook of Holland" or by VHF on Channel 12 to "Maassluis Radio" (Dirkzwager).

Navigation on the Rotterdam Waterway might be prohibited if circumstances make this necessary.

Alterations:

For commodities in quantities above those mentioned in the list, there might be restrictions on certain berths.

Name of Dangerous Goods or Group of Dangerous Goods	*Limited Quantity*
1. Chlorine	1,000 kg.
2. Phosgene	1,000 kg.
3. Fluorine	1,000 kg.
4. Hydrogen Cyanide	5,000 kg.
5. Hydrogen Sulphide	5,000 kg.
6. Carbon Disulphide	5,000 lit.
7. Hydrogen Bromide	10,000 kg.
8. Hydrogen Chloride	10,000 kg.
9. Hydrogen Fluoride	10,000 kg.
10. Sulphur Dioxide	10,000 kg.
11. Methyl Bromide	10,000 kg.
12. Acetone Cyanohydrin	40,000 lit.
13. Acrylonitrile	40,000 lit.
14. Acrolein	40,000 lit.
15. Allyl Alcohol	40,000 lit.
16. Allyl Chloride	40,000 lit.
17. Epichlorohydrin	40,000 lit.
18. Acetonitrile	40,000 lit.

For bigger amounts apply to the Harbour Master.

Remarks:

a. Particular berths are the Eemhaven basins and the harbour basins to the West of them on the South bank of the New Rotterdam Waterway.

b. Liquid dangerous cargoes in bulk only in the oil harbours.

Restrictions for entering:

Fog: Tankers and vessels carrying poisonous and explosive cargoes may not be allowed to manoeuvre in fog with visibility of less than 500 m. (1,640 ft.).

Entry times: Depend on prevailing circumstances, as follows:

Europoort: Tankers:

up to 65 ft. (SW) draft – Any time.

over 65 ft. (SW) draft – Ships have to sail inward over the top of high water Hook of Holland to keep track with the prevailing keel clearances.

Vessels with a draft of 57 ft. (SW) or more and/or a length of 250 m. or more must comply with the "Shipping rules for large vessels".

On entering Europoort, tugboats are made fast just inside the breakwaters. On departure tug's hawsers must be used aft.

The time at which deeply loaded vessels destined for Europoort enter the New Waterway depends on the prevailing circumstances and is always subject to agreements made between the Pilot Service and the Harbour Master.

Botlek:

Max. draft 44 ft. (SW), exceptionally 45 ft. (SW), under certain conditions. To obtain permission one should apply to the State Harbour Master at H.C.C. in writing, if possible 10 days before arrival, giving particulars of call and vessel.

Max. length 270 m. Vessels exceeding 270 m. in length and drawing 44 ft. (SW) may have to lighten at Europoort/Maasvlakte.

As a rule entering times are as follows: (Salt Water draft).

33 ft. – 37 ft. Anytime, except from 4.5 hours before, till HW at Rotterdam.

37 ft. – 39 ft. At Slack Low or at Slack High Water, depending on the prevailing circumstances.

39 ft. – 44 ft. At Slack High Water.

Vessels with a length of over 200 m. (656 ft.) can only enter at slack tide.

Vessels which have been lightened at Europoort/Maasvlakte terminals should arrive at the Botlek entrance at slack water according to before-mentioned rules.

Waalhaven:

Vessels with a draft of 36 ft. salt water, or a length of over 200 m. should arrive at the entrance of the Waalhaven at slack water Rotterdam.

Other basins: Vessels with a draft of 28 ft. or more and a length of over 180 m. are generally tidebound.

All harbours in the Rotterdam area can be entered at any time during day and night.

Restrictions for several harbours are made on some drafts and ships' lengths as follows: (To be read in conjunction with the above).

Botlek and 3rd Petroleum Harbour: For ships with a length over 200 m. or a draft over 33 ft.

U.K.F.: Draft over 30 ft., no length restriction.

1st Petroleum Harbour: Draft over 25 ft. or longer than 200 m.

2nd Petroleum Harbour: Draft over 31 ft. or longer than 200 m.

Vulcaanhaven Vlaardingen: Draft over 33 ft.

Eemhaven: Draft over 36 ft. or longer than 240 m.

Schiedam, Shipyard Wilton: Ships longer than 200 m.

Schiedam, Wilhelminahaven: Draft over 21 ft. or longer than 200 m.

Shipyard R.D.M.: Ships longer than 180 m.

Waalhaven: Draft over 36 ft. or longer than 200 m.

MAX. SIZE: (Also see "Developments")

Entrance and river area	*Channel width in m.*	*Max. SW draft (High tide)*	*Keel-clearance*
Euro buoy – Euro 5A	600	70 ft.	20%
Euro buoy – Euro 5A	1,200	65 ft.	20%
Euro 11 buoy – Maas centre	600	70 ft.	17.5%
Euro 11 buoy – Maas centre	1,200	65 ft.	17.5%
Maas centre buoy – Entrance	600–400	70 ft.	15%
Entrance – Europoort	400–350	70 ft.	10%
Entrance – Botlek	250	44 ft.	10%
Botlek – Waalhaven	250	40 ft.	10%
Waalhaven – Rijnhaven	200	34 ft.	10%

Shipping Rules for Large Vessels:

Vessels drawing 68 ft. – 70 ft. (20.7 m. – 21.4 m.) must embark the district Pilots for the Eurochannel off Cherbourg, they should request them via the vessel's Agency in Rotterdam at least 48 hours before ETA off Cherbourg.

The message should contain the following items:

Vessels name;
Call sign;
Time (UTC), date and position where the Pilot has to embark;
Draft in metres;
Name of Agent.

Vessels drawing 17.4 m. (57 ft.) (SW) to 68 ft. (20.7 m.) must make use of the approach channels "Eurogeul" and Maasgeul". Such vessels must report, at least 2 hours prior to their arrival at the Pilot "rendezvous" position 52° N. 03° E., by radio telegram to "Traffic Centre Hook" (TCH) via Scheveningenradio (PCH), the following information:

(a) Name and call sign of the ship
(b) GRT and deepest arrival draft in SW
(c) ETA rendezvous position
(d) Confirmation that the following equipment functions well:
1. Gyro compass
2. Radar installation
3. VHF, operational on Channels 6, 14 and 20
4. Decca receiver Mark XII or XXI, provided with a connection for the so-called Brown Pattern Indicator (Brown Box Connection).

The intention to leave Europoort must be reported by the Master or the Agents, at least 3 hours prior to departure to "Traffic Centre Hook", giving the information mentioned above under a, b and d.

Vessels with a length of 250 m. or more but with a draft of less than 57 ft. SW (not bound to use the approach channels) must report, at least 6 hours prior to their arrival at the "Maasbuoy", the information mentioned above under a, b, c and d, 1, 2 and 3.

The intention to leave the port must be reported by the Master or the Agents, at least three hours prior to departure to "Traffic Centre Hook", giving the information mentioned above under a, b, d, 1, 2 and 3.

The 6 hours' report prior to arrival will also be considered the 6 hours' ETA message for obtaining a Pilot.

Vessels equipped with a "T.O.R." installation can send their messages to "Traffic Centre Hook" via Dirkzwager's message relay and ships reporting station: Telex No. 26751 "dirk nl".

Outward bound vessels drawing 57 ft. (SW) or more, having to make use of the "Maasgeul" and "Eurogeul" must give 12 hours notice of their intended departure to the Harbour Coordination Centre/Municipal Harbour Service, giving the information mentioned under a, b and d.

Shifting: Vessels which have been partly discharged at Europoort/Maasvlakte terminals should arrive at the Botlek entrance at slack water according to Rules. The following rules in view of length and draft apply:

Max. length overall	*Max. draft allowed*
up to 260 m.	44 ft. SW
260–270 m.	42 ft. SW
270–280 m.	41 ft. SW
280–300 m.	39 ft. SW

Tidal Information:

The mean height of sea-level off the Hook of Holland = 1.5 in. below DATUM (=N.A.P.).

LLWS (Low Low Water Spring) = 3 ft. 5 in. below DATUM
MLW (Mean Low Water) = 2 ft. below DATUM

All permissible drafts and depths of water mentioned are given at MLW, unless otherwise mentioned.

Tidal Range:

	Neap Tides	*Spring Tides*
Mean Rise above DATUM	2 ft. 11 in.	3 ft. 5 in.
Mean Fall below DATUM	2 ft. 3 in.	2 ft. 4 in.
TIDAL RANGE	5 ft. 2 in.	5 ft. 9 in.

Duration of the flood tide:.. 4 hrs. 34 min.
Duration of the ebb tide: .... 7 hrs. 51 min.

HEALTH: Master has to fill in and sign Maritime Declaration of Health which is handed to him by Pilot. Vessels subject to medical inspection have to hoist flag signal according to Pilot's orders.

RADIO: *E.T.A. messages and T.O.R.:*

Masters' telegrams via Scheveningen radio, call-sign P.C.H., are passed on to Agents 24 hours a day, weekends inclusive. For this reason it is advisable that Masters communicate with Agent via Scheveningen Radio, via which station they also route messages to vessels.

Ships equipped with "Telex Over Radio" may, outside office hours, channel their messages to Agent via Dirkzwager's message relay and ships' reporting station at Maassluis, Telex No. 26751 Answerback "Dirk NL". Such messages are passed on to Agent immediately, also during weekends.

OBO-Carriers:

Masters of this type of vessels must, when calling to load and/or discharge dry cargo, cable at least 24 hours prior to arrival, the following information:

1. that vessel has no slops on board and is certified gasfree or alternatively
2. a. correct name of liquid cargo carried last, with place and date of discharge
   b. stowage of cargo remnants (gases and/or liquids) and whether mixed with water or not
   c. whether non-gasfree spaces are adjacent to dry cargo holds and if so, which holds
   d. which spaces contain inert gas.

RADAR/VHF: Chain of 8 shore-based radar stations permits navigation during all weather conditions. Radio and Radar station Maas Approach, at Hook of Holland, communicates via VHF Channel 20 (Port Operations).

VHF range = about 15 miles.

Radar range = about 14 miles in S.W. and West direction, and 10 miles in North direction.

Masters are requested to call this station, especially during bad visibility, well in advance of arrival at pilot station. Mass Approach provides vessels within range with nautical information and acts as a link with pilot cutters.

Radio-Radar Station

The radio station, "Traffic Centre Hook" (TCH), in Hook of Holland acts as a Communication Centre and a Traffic-Regulating Station near the entrance and on the New Waterway. The station provides weather forecasts on request by VHF Channel 14. Radar assistance is provided on VHF Channel 3 from CA2-NW1 separation buoy into Europoort and vice versa.

Information on berths, Harbour Pilots, tugboats and linesmen in Europoort can be obtained on Channel 11.

TUGS: Tugs normally join vessel on river when nearing the basin where vessel will be accommodated. Vessel's towing lines used. On departure from Europoort the tow ropes, fastened to the stern, must be supplied by the tugs.

BRIDGES: New Waterway connects port of Rotterdam with North Sea, without any locks or bridges. Only to reach some shipyards, situated East of Rotterdam, vessels have to pass the "Maas-Bridges" (Koningshaven), which are on working days opened at regular times.

To reach berths in Brittanniehaven vessels have to pass the Calandbridge. To reach berths in Seinehaven and Neckarhaven vessels have also to pass the Rozenburg locks (between the Calandcanal and Hartelcanal).

SPECIALISED CARGO-HANDLING FACILITIES: Quick dispatch, Brittanniehaven Car Terminal. Quay length 300 m., storage capacity about 15,000 cars.

Ro/Ro Facilities:

Company	Location	Number of ramps
Maatschappij Zeeland	Hook of Holland	2
Multi-Terminals C.V.	Waalhaven	2
Seaport Terminals B.V.	Prins Johan-Frisohaven	2
	+ 2 Brittanniehaven (1985)	
Quick Dispatch B.V. (Tor Line)	Prins Johan-Frisohaven	2
Quick Dispatch B.V.	Prinses Beatrixhaven	2
Europe Container Terminus B.V.	Prinses Margriethaven	1
	+ 1 Europahaven (1985)	
North-Sea Ferries B.V.	Beneluxhaven	2
Transport Ferry Service (Townsend Thoresen)	Beneluxhaven	1
Vijfwinkel	Merwehaven	1

L.A.S.H.: Vessels discharge and load at buoys in Waalhaven. Average permissible draft at buoys 36 ft. (FW). Max. draft at Buoys 6, 12 and LASH buoys, 40 ft. (SW).

Esso Chemie N.V.: The fertiliser plant in Europoort produces ammonia, urea, nitric acid, calcium ammonium nitrate.

Max. size: 30,000 d.w.t., length 690 ft., draft 42 ft. 6 in. in SW.

GENERAL CARGO FACILITIES: General Cargo Terminals:

	Max. FW draft at LW	*Length of quay*	*No. of cranes*	*Capacity in tons*
Schiehaven	9.0 m. (29 ft. 6 in.)	620 m.	8 1	5—17.5 30 tons (Containerlift)
Lekhaven	10.0 m. (32 ft. 10 in)	855 m.	8	5—25
Merwehaven	10.0 m. (32 ft. 10 in.)	600 m.	8	5—25
Waalhaven, Pier 1	10.5 m. (34 ft. 6 in.)	860 m.	12 1	5—25 30 ton (Containerlift)

The 17.5/25 ton cranes are mainly used for the handling of containers and steel. In combination these cranes can lift 28 tons.

General Cargo Facilities: *(continued)*

Multi-Purpose Terminals:

	Maashaven	*Waalhaven Pier 6*	*Prinses Beatrixhaven*
Facilities/commodities	Containers and Unit Loads General Cargo	Steel Products Roundwood Forest Products	General Cargo Steel & Forest Products
Maximum Draft	9 m. (29 ft. 6 in. FW)	11 m. (36 ft.)	10 m. (33 ft.)
Quay Length	750 m.	771 m.	733 m.
Marshalling area	62,900 sq.m.	72,800 sq.m.	61,000 sq.m.
Sheds	3	2	2 + 1 office building
Covered storage area	12,958 sq.m.	6,097 sq.m.	18,370 sq.m. all temperature controlled
Open storage area	27,000 sq.m.	34,352 sq.m.	22,460 sq.m.
Level luffing cranes number – capacity	4 – 5 tons 2 – 25 tons 2 – 30 tons*	2 – 5 tons floating cranes 1 – 25 tons 3 – 30 tons*	6 – 5 tons 4 – 17.5 tons 1 – 30 tons*
Transtainer	1 – 45 tons		
Transporter bridges (barges)		1 – 12.5 tons	
Containerlifts	1 – 30 tons		1 – 30 tons
Dynalift	1 – 35 tons		
Tugmasters	3		3
Logcarrier		1	
Tractors	1	1	3
Locomotives			1
Weighing bridges			3
Flatbedcars			1
Forklift trucks upto 13 tons	20	5	21
	Annual capacity: 30,000 containers Workshop for repair & maintenance of containers	Special gear for handling of pipes & forest products	

*The 30-ton cranes are mainly used for the handling of containers, logs and pipes. In combination these cranes can lift 48 tons.

GRAIN HANDLING FACILITIES:

	Max. draft at MLW	*Quay Length*	*Number of Elevators*	*Total Discharge Capacity*	*Loading Capacity*	*Silo Capacity (tons)*
1. **Grain Elevator Company (G.E.M.)**						
a. Beneluxhaven, Europoort						
1. Discharging Pier, Outside	59 ft. SW	580 m.	4 shore	4,000 t.p.h.		110,000
Discharging Pier, Inside	42 ft. 6 in. SW	370 m.	4 floating	3,600 t.p.h.	1,500 t.p.h.	
2. Coaster pier for the simultaneous loading of	23 ft. SW	2×150 m.	8 loading pipes		2,400 t.p.h.	
2 coasters or 1 vessel up to 25,000 d.w.t.	36 ft. SW	170 m.	4 loading pipes		1,200 t.p.h.	
3. Dintelhaven, 4 barge piers each for loading of 2 barges simultaneously			16 loading pipes	4,800 t.p.h.		
b. Botlek discharging section:	42 ft. 6 in. SW	2×245 m.	5 shore	3,500 t.p.h.		60,000
loading section:	32 ft. 6 in. SW	2×142 m.				
c. Chemiehaven	32 ft. SW	225 m.	2 shore	700 t.p.h.		
d. Botlek Buoys	44 ft. SW					
Waalhaven Buoys	39 ft. FW		12 floating	300 – 800 t.p.h each		
Maashaven Dolphins	30 ft. FW					
2. **Grainwave B.V.**						
Botlek, Waalhaven, Maashaven	see "d" above		2 floating	400 t.p.h.		
			1floating	600 t.p.h.		
			1 floating	1,000 t.p.h.		
3. **Europoort Silvo B.V.**						
Beneluxhaven, Europoort	52 ft. 6 in. SW	230 m.	2	2,400 t.p.h.	1,600 t.p.h.	100,000
4. **Maashaven-Silo**	26 ft. FW	150 m.	5	700 t.p.h.		90,000
5. Latenstein Silo Excelsior B.V.						
Rijnhaven				1 shore at 60 t.p.h.		32,200
6. J. Soufflet Holland B.V.						
Lekhaven				1 shore at 100 t.p.h.		1,300
7. N.V. Silo-En Veembedrijf Meneba						
Maashaven				2 shore at 80 t.p.h.		100,000

Total annual discharging capacity of the Grain Elevator Comp. (G.E.M.): 25 million tons.

Berthing possibilities for bulk carriers and OBO's:

Beneluxhaven: Europoort Silo B.V. 1; G.E.M.-Europoort 4.

Botlek: G.E.M. installation 2; G.E.M. buoys 1; Buoy No. 21 1.

At the G.E.M.-Europoort terminal it will be possible to discharge vessels of up to 200,000 d.w.t. Conveyor belts (1 per elevator) will transport the grain at a capacity of 800 cu.m.p.h. to a central building with automatic weighing machines.

Grain Loading: Grain loading into vessels of up to 30,000 d.w.t. can be effected both by means of floating elevators, ex-barges, and at the G.E.M.-Botlek shore installation.

Unimills B.V.: On a site between G.E.M. installation and Europoort Silo B.V., situated at the Beneluxhaven and Dintelhaven, a soya extraction plant has been built. Annual capacity: 1.25 million tons. Both the supply of raw material and the loading of extracted soyameal are effected via the adjacent installation of the G.E.M.

CONTAINER HANDLING FACILITIES:

Europe Container Terminus B.V.:

Europe Container Terminus B.V. (E.C.T.), specially equipped for the handling of container vessels, is situated in Prinses Margriethaven and in Prins Willem Alexanderhaven.

At present 38 container lines including a number of feeder services are operating from the E.C.T. terminal.

145 Container trains are despatched every week to 45 destinations in Europe.

Present capacity: 1,000,000 containers per year.

At this terminal 3rd generation container vessels and containers of all sizes and weights are handled.

Technical Data:

15 container cranes.	
18 forklifts (13 ton)	12 Forklifts (up to 2.5 ton)
40 van-carriers	75 terminal trucks
4 stacking cranes	535 terminal chassis
2 railway gantry cranes	3 rail tracks of 500 m.
1 Ro/Ro ramp.	
Quay length:	3,000 m. (9,840 ft.)
Marine terminal:	88 ha. – marshalling area
Control terminal:	10 ha. – data processing, administration
Land terminal:	12 ha. – storage empty containers, chassis, C.F.S. activities

The maximum draft allowed amounts to 40 ft. (SW) although the water depth alongside the quay permits drafts of up to 41 ft. 4 in. (SW) in view of trim during cargo handling. Depth of water: 13 m. at LW.

A new container-terminal, called Delta Terminal, located at the Maasvlakte, is being developed in 2 phases. Phase I, operational in 1984 has a quay length of 1,200 m. and an area of 81 hectares. It is equipped with 7 container gantry cranes. Phases II and III provide for a further 290 hectares when required with ample quay lengths available. The biggest container vessels can be handled. There will also be a Ro-Ro facility.

Multi-Terminals Rotterdam B.V.:

Multi-Terminals Unitcentre B.V.: Waalhaven Pier 7. Full container terminal

Annual capacity: 350,000 containers.

Technical data:

Maximum draft	12.2 m. (40 ft. FW)
Quay length	800 m.
Pier width	250 m.
Storage and marshalling area	240,000 sq.m.

	number	capacity	outreach
Container gantry cranes	5	60 tons	45 m.
Rail-mounted gantry cranes for stacking	6	45 tons	45 m.
Railway tracks	5		
Reefer station	65 connections		

Ro/Ro ramp: For vessels with an angled or slewing ramp a special outer ramp is available.

Container/Ro-Ro Terminal Heijplaat and CFS: This is a container/Ro-Ro terminal with an annual throughput capacity of 150,000 containers. There is a quay length of 800 m. provided with 3 cranes having a maximum capacity of 60 tonnes on 24 m. outreach and 40 tonnes on 40 m. There is is common user Ro-Ro berth having a length of 270 m. and a ramp width of 9 m.

Technical data:

Indoor storage capacity:	13,500 sq.m.
Outdoor storage capacity:	40,000 sq.m.
Container Freight Station	
Storage/repair of containers	

Multi-Terminals Waalhaven B.V.: Waalhaven Pier 2. Multi-purpose terminal Ro/Ro ramps.

Technical data:

Maximum draft:	10.36 m. (36 ft. FW)
Quay length:	1,500 m.
Marshalling area:	60,000 sq.m.
Covered storage and consolidating area:	45,000 sq.m.

	number	capacity
Level luffing cranes	11	5–45 tons
	1	60 tons
Mobile cranes	3	4–25 tons
Floating crane	1	7 tons
Rail-mounted gantry cranes for stacking	1	36 tons
Forklift trucks	63	up to 37 tons
Tugmasters		
Terminal chassis railway connections		

Ro/Ro facilities: One ramp for stern operations
One ramp for angled platforms (45°)

Bell Lijn B.V.: Brittanniehaven. The Bell Line B.V. Terminal consists of a concrete piled jetty 219 m. in length, 50 m. wide with a minimum depth of water alongside of 6.5 m. The berth is accessible at all states of the tide. The total area of the terminal is 3.7 hectares and it is served by a Kone gantry 35 ton and a Paceco Vickers gantry crane of 32 tons capacity. The effective outreach over water is 19 m. and 60 m. over the marshalling area and containers are stacked up to 3 high. The handling operation is controlled by one man who is in touch with the crane driver and the ship by VHF radio.

Services:

Between Rotterdam and the UK/Ireland:

Bell Lines

Rotterdam – Teesport (Middlesbrough) – 4 to 5 sailings weekly.
Rotterdam – Waterford – 3 to 4 sailings weekly.
Rotterdam – Bellport (Newport, Gwent) – 1 to 2 sailings weekly.
Rotterdam – London – 3 sailings weekly.

BULK HANDLING FACILITIES: Also see Tables on pages 979 & 981.

Europees Massagoed – Overslagbedrijf (EMO), B.V.: (European Bulk Transhipment Company (EMO) B.V.) Also see "Tables".

World's largest bulk transhipment and storage installation is situated on the Maasvlakte, which has been reclaimed from the North Sea. Fully loaded ore carriers up to 270,000 d.w.t. can be handled.

EMO B.V. is an executing company which concludes transhipment contracts, primarily for ores and secondly for coal. Participants in this company are: SNV, 51%; Frans Swarttouw, 30%; Manufrance, 19%.

A.G. Messrs. EMO operate 2 transhipment installations:

1. Maasvlakte Terminal – E.K.O.M. (Erts Kolen Overslag Maasvlakte).
   Participants: Frans Swarttouw
   Manufrance
   S.N.V. (Transport – en Handelmaatschappij Steenkolen Utrecht B.V.)

A conveyor belt system connects the discharging pier in the Mississippi Haven with the barge loading section in the Hartelhaven and with the loading installation for railway wagons, both direct and via the stockpiling area.

Technical data:
Discharging quay, length 600 m., draft 69 ft. S.W.
Additional (May 1984), length 460 m., draft 72 ft. S.W.
Future, length 460 m., draft 75 ft. S.W.
Loading barges, length 700 m., draft 15 ft. F.W.
2×50 ton unloaders, capacity 11,000 t.p.h. (max.)
1×85 ton unloader, capacity 6,000 t.p.h. (average)
3 stackers/reclaimers, capacity 11,000 t.p.h.
1 loading machine (4/1984), 6,000 t.p.h.
2 barge loaders, 11,000 t.p.h. (max.), 6,000 t.p.h. (average)
1 railway loader, 3,000 t.p.h.
Outreach discharging gear – 45 m. (148 ft.).
Max. height of gear above MHW – 30 m. (98 ft.).
Storage capacity – 8 million tons.
Transhipment capacity – 25 million tons per year.

2. Botlek Terminal – Botlek B.V. See "Tables".

Ertsoverslagbedrijf Europoort C.V.:

This transhipment installation, specialised in the handling of iron ore, is situated between Caland Canal and Dintelhaven.

Participants in this installation, partly via their Dutch sister companies, are: August Thyssen-Hutte A.G.; Fried. Krupp-Huttenwerke A.G.; and Mannesmann A.G. (50%, 30%, 20%).

A conveyor belt system connects the discharging quay in the Caland Canal with the barge loading section in the Dintelhaven, both direct and via the stockpiling area. For further details of this installation see "Tables".

Technical data:
Quay length discharging section 645 m. (2,116 ft.).
Max. draft allowed at MLW – 59 ft. SW.
Max. capacity – 6,900 t.p.h.
Average discharging rate – 4,500 t.p.h.
Outreach discharging gear – 34.75 m. (114 ft.)
Max. height of gear above MHW – 24 m. (78 ft. 8 in.)
Storage capacity – 3.5 million tons
Transhipment capacity – 15 million tons/year.

TANKER BERTHS:

Europoort

Installation	*Basin*	*No. of berths*	*Max. SW draft*	*Hoses*
Shell (No. 104)	Beneluxhaven	1	68 ft.	4 at 16 in.
(No. 103)	4th Petr. haven	1	57 ft.	4 at 16 in.
(No. 102)	4th Petr. haven	1	52 ft.	4 at 12 in.
(No. 101)	4th Petr. haven	1	46 ft.	4 at 12 in.
Maatschap	4th Petr. haven	2	46.6 ft.	3 at 12 in.
(Chevron/Esso)	5th Petr. haven	2	68 ft.	3 at 16 in.
Kuwait Petroleum Corp	5th Petr. haven	1	53 ft.	4 at 12 in.
		1	47 ft.	5 at 10 in.
		1	42 ft.	
B.P.R.N.	6th Petr. haven	2	68 ft.	4 at 12 in.
		1	43 ft.	4 at 10 in.
		1	40 ft.	4 at 10 in.
		2	38 ft. and 32 ft.	
Maatschap Europoort Terminal (Mobil)	7th Petr. haven	2	68 ft.	4 at 16 in.
Europak	7th Petr. haven	2	68 ft.	4 at 16 in.
Vo-Matex	7th Petr. haven	1	68 ft.	
		1	51 ft. 4 in.	
MOT	8th Petr. haven	2	70 ft.	
Botlek				
Esso	3rd Petr. haven	2	38 ft.	2 at 10 in.
		1	25 ft.	
Tank Terminal Rotterdam	Torontohaven	4	42 ft.	
Vo-Matex	3rd Petr. haven	6	39.5 ft. (FW)	4, 6, 8, 12 and 16 in.
	Vlaardingen	3	39 ft. (FW)	
Paktank	3rd Petr. haven	4	39.6 ft. (FW)	4, 8 and 14 in.

Pernis (Max. LOA 810 ft.)

Installation	*Basin*	*No. of berths*	*Max. draft*	*Hoses*
Paktank	2nd Petr. haven	2	37.6 ft. FW	10 and 14 in.
Panocean	1st Petr. haven	2	34 ft. FW	8 and 10 in.
	Chemiehaven	3	41 ft. FW	
Shell	1st Petr. haven	7	28 ft. FW	4 at 8 in.
	2nd Petr. haven	7	39.6 ft. FW	4 at 8 in.
Chevron/ Texaco	2nd Petr. haven	1	32 ft. FW	3 at 12 in.
		1	35 ft. FW	3 at 12 in.
Mobil	2nd Petr. haven	1	33 ft. FW	6 and 8 in.

No facilities for discharging dirty ballast at Mobil at 2nd Petrol Haven, Chevron/Esso at 5th Petrol Haven, Tank Terminal Rotterdam, Panocean and Paktank.

No bunkers (ex-installation) at Mobiloil, Esso, Tank Terminal Rotterdam, Panocean, Vo-Matex, Chevron and Esso.

Tank Cleaning – Ballast Water:

Messrs. Tankcleaning United C.V. and Booy Clean have floating and rolling equipment for all cleaning jobs and for the collection of contaminated ballast water.

Shore installation at: Verolme Tankcleaning, Botlek.

Crude Oil Washing System:

For applying the crude washing system to tankers the permission of the oil installation, the Charterers and the Port Authorities is required.

Moerdijk:

The route New Waterway, Oude Maas and Dordtse Kil is frequently used by 20,000 ton tankers, loaded for 70%, proceeding to and from the Petrochemical installations of Shell Moerdijk, which are connected by pipe-lines to Shell-Chemie at Rotterdam-Pernis. Cleaning/gas-freeing is not allowed in this area.

All vessels with a LOA exceeding 135 m. and/or a beam exceeding 17.5 m. and planning to navigate the rivers Oude Maas and/or Dordtse Kil shall report in writing (telex no. 26043) to the State Harbour service at the H.C.C., 24 hours in advance:

(a) name and call sign of vessel,
(b) nationality,
(c) LOA and beam,
(d) g.r.t.,
(e) port of destination or departure,
(f) deepest draft and
(g) ETA at Oude Maas/Dordtse Kil or ETD from berth.

Restrictions:

Max. draft Oude Maas 30 ft., max. draft Dordtse Kil 25 ft. 6 in.; max. length 175 m., max. width 23 m. (max. width 25 m. with special permission under specific conditions. Information to be obtained from State Harbour Master's Office), max. height 41 m., channel width 250 m.

The use of tugboats is compulsory for certain categories of vessels, the number of which depends upon length, draft and circumstances.

STEVEDORES: Normal working hours:

Bulk cargoes except grain: Monday 0730 – Saturday 1400 hrs. uninterrupted.

Europoort C.V. operate throughout 24 hours.

Grain: Europoort Silo B.V.: (Beneluxhaven).

	Day-shifts	*Night-shifts*
Monday-Friday	0700 – 1130 hrs.	1530 – 1930 hrs.
	1200 – 1530 hrs.	2000 – 2400 hrs.
Saturdays	0700 – 1100 hrs.	
	1130 – 1500 hrs.	

In principle no work is performed on Saturday-nights, Sundays and holidays.

Grain Elevator Company (G.E.M.) B.V.: Europoort (Beneluxhaven).

Continuously from Monday 0730 until Saturday 1530 hrs.

Meal breaks	1130 – 1200 hrs.	0330 – 0400 hrs.
	1930 – 2000 hrs.	

Botlek and Floating Elevators:

Monday-Friday	Monday-Thursday
0730 – 1130 hrs.	1630 – 2030 hrs.
1200 – 1600 hrs.	2100 – 0045 hrs.
Saturday	Friday-night
0730 – 1130	1630 2030
1200 – 1530	

Overtime: The Grain Elevator Company *does not charge* any overtime expenses, except for work on Sundays and holidays and the nights preceding and following them.

For weekend work after Saturday 1530 hrs. permission will normally only be granted when the operations can be completed on Sunday-morning early. Labourers have to be obtained on a volunteer basis.

Permission to work on Sunday from 0045 until 2200 hrs. is granted in exceptional cases only.

Official Office Hours at Rotterdam:
Monday – Friday 0900 – 1700 hrs.
Saturday 0900 – 1200 hrs.

Off-Port Notice Clause: In view of the fact that for large vessels a restricted number of berths is available only, such vessels frequently have to wait for a berth outside at sea.

In such cases laytime will count only in case the relevant Charter Party contains a proper off-port notice clause.

(continued on page 982)

BULK HANDLING FACILITIES: (continued)

Installation		Quay-length (m.)	Max. depth at MLW	Equipment	Discharging rate (t.p.h.)	Max. outreach discharging gear	Max. height of gear above MHW	Loading rate (t.p.h.)	Max. outreach loading gear	Capacities
1. EMO B.V.	disch.	600	69 ft. SW	3 unloaders	Max. 11,000	45 m.	30 m.			Storage 8 million tons
Massvlakte	section	460	72 ft. SW	conveyor-belts	Average 6,000	(148 ft.)	(98 ft.)			Transfer 25 million tons
				3 stacker/reclaimers						
	loading	700	15 ft. FW	2 loading machines				Max. 14,000	20 m.	
				1 wagon loading inst.					(65 ft. 8 in.)	
				1 loading machine				Max. 6,000		
2. Europoort C.V.	disch.	645	59 ft. SW	3 unloading towers	Max. 6,900	34.75 m.	24 m.			Storage 3.5 million tons
	section	395	70 ft. SW	conveyor-belts	Average 4,500	(114 ft.)	(78 ft. 8 in.)			Transfer 15 million tons
				4 stacker/reclaimers						
	loading	850	20 ft. SW	2 loading machines				Max. 6,000	18.1 m.	
									(59 ft. 4 in.)	
3. Europoort		230	52 ft. 6 in. SW	2 unloading towers	Max. 2,400	26 m.	20 m.	Max. 1,600	24 m.	Silo 100,000 tons
Silo B.V.				conveyor-belts, silos		(85 ft.)	(65 ft.)	for vessels up to	(79 ft.)	Transfer 2-3 million tons
				loading installation				60,000 d.w.t.		
4. G.E.M. Europoort	disch.	580	59 ft. SW	4 shore elevators	Max. 4,000	28 m.	23.8 m.	Vessels at buoys		Silo 105,000 tons
	section	370	42 ft. 6 in. SW	4 floating elevators	Max. 3,600	(91 ft. 7 in.)	(77 ft. 10 in.)	up to 30,000 d.w.t.: 1,500		
						26.5 m.		At installation		
	loading	2×150	23 ft. SW	8 loading pipes	Max. 4,800	(86 ft. 8 in.)		up to 8,000 d.w.t.: 2,400		
		1×170	36 ft. SW	2 loading pipes	Max. 1,200			up to 25,000 d.w.t.: 1,200		
5. G.E.M. Botlek	disch.	2×245	42 ft. 6 in. SW	5 shore elevators	Max. 3,500	20 m.	18 m.			Silo 60,000 tons
	section			conveyor-belts and silos		(65 ft.)	(59 ft.)			
				6 floating elevators	Max. 2,400			Max. 1,600	13.5 m.	
	loading	1×142	32 ft. SW	4 loading pipes				up to 25,000 d.w.t.	(44 ft. 4 in.)	
Chemiehaven		225	32 ft. SW	2 chain transporter	Max. 700	13.7 m.	13.3 m.			
(derivatives)		(vessels' length)		machines		(45 ft.)	(43 ft.)			
6. Frans Swarttouw	disch.	835	42 ft. 8 in. SW*	2 transporter bridges	Max. 1,400	44.5 m.	25.2 m.	If direct overboard	If direct overboard	1.5–2 million tons open storage
St. Laurenshaven	section					(146 ft.)	(82 ft. 10 in.)	dependent on size	see discharging	27 steel silos – 170,000 cbm
Botlek				1 transporter bridge	Max. 650	40.8 m.	16.5 m.	oncarrying barges	gear	3 sheds – 100,000 cbm
						(134 ft.)	(54 ft. 2 in.)			
				1 transporter bridge	Max. 450	38 m.	15.2 m.			
						(124 ft. 8 in.)	(49 ft. 10 in.)			
				3 cranes	Max. 400/	32 m.	35.8 m.			
					650	(105 ft.)	(117 ft. 6 in.)			
	loading	180	23 ft. SW	2 loading machines				Max. 1,000	16.5 m.	
									(54 ft. 2 in.)	
Frans Swarttouw	disch.	250	42 ft. 8 in. SW*	2 unloaders	Max. 2,000	19.5 m.	14.6 m.			Storage 1.3 million tons
Botlek terminal	section					(64 ft.)	(48 ft.)			Transfer 9 million tons
		250	38 ft. SW	conveyor-belt	Average 1,600			Max. 4,400		
				1 stacker				Average 1,000		
	loading	200	29 ft. SW	1 reclaimer				for vessels up to		
				2 loading machines				15,000 d.w.t.	20 m.	
				1 wagon loading inst.					(65 ft.)	
				1 floating crane	Average 1,250	29.5 m.	32 m.			
Frans Swarttouw		626 quay	34 ft. FW*	3 transporter bridges	Max. 1,950	42 m.	16 m.			0.7 million tons open storage paved
Vulcaanhaven						(138 ft.)	(52 ft. 6 in.)			8 silos – 80,000 cbm
Vlaardingen		buoys	39 ft. FW	2 electric cranes	Max. 350	36 m.	18 m.	Phospates via belt		6 sheds – 40,000 cbm
						(118 ft.)	(59 ft.)	Max. 600		
				1 bulk loading machine					20 m.	
				4 floating cranes	Max. 1,000				(66 ft.)	
7. S.H.V. Waalhaven		345	36 ft. FW	4 transporter bridges	Max. 1,400/	39 m.	14 m.	Ex stock-pile 500.	When loading	80,000 tons coal
pier 5					1,600	(128 ft.)	(46 ft.)	Ex barges 150/400	ex. barges max.	
									beam of vessels	
The activities on this coal pier to be transfered to E.M.D. Massvlakte.									amounts to 106 ft.	

*Max. draft allowed at HW in Botlek 44 ft. (SW), under certain conditions 45 ft. (SW) and in Vulcaanhaven 39 ft. (FW).

Bulk cargoes are also handled at the buoys in all basins by means of floating cranes of Messrs. Aegir, S.H.V. and Interstevedoring.

STEVEDORES: *(continued from page 980)*

Lay-by Berth: In case the off-port notice clause stipulates the use of a lay-by berth, the vessel, in such a berth, should be at the immediate and effective disposition of the charterers.

In order to avoid heavy extra shifting expenses the charter party should stipulate that such a lay-by berth should be situated in that part of the port where the discharge will be actually effected (Europoort or Botlek).

Shifting Expenses: Berths midstream at the buoys in Botlek, Waalhaven and at the dolphins in Rijnhaven and Maashaven are recognised regular discharging berths where bulk cargoes are handled by means of floating equipment.

Disputes about shifting expenses from the buoys, especially when no work has been done there, to the Botlek shore installation can be avoided by stipulating for whose account shifting expenses between "berths" are.

Oil: At the oil refineries of Shell, Chevron, Esso, Gulf and B.P. tankers can discharge continuously, including week-ends without extra charge. This also applies to the Mobil Oil Terminal and to the Maasvlakte Oil Terminal.

The oil storage companies Paktank and Nieuwe Matex work from Monday to Friday during daytime only, unless overtime arrangements are made.

General Cargo:

A. *In daytime Monday – Saturday*
morning shift 0730 – 1145 hrs.
afternoon shift 1230 – 1600 hrs.

B. *Night-work Monday – Friday:*
evening shift 1600 – 2015 hrs.; 2045 – 0015 hrs.
night shift 0000 – 0330 hrs.; 0400 – 0730 hrs.

Gangs have to be ordered for two shifts.

Overtime (weekends and holidays):

1. *Saturday 0730 – 1600 hrs.*
One third of the labour is available.
More labour may be engaged on a volunteer basis.
2. *Saturday 1600 – Sunday 0730 hrs.*
Permission can be granted if operations will be completed before Sunday 0730 hrs. Labour on a volunteer basis.
3. *Sunday 0730 – 2400 hrs.*
Permission is granted in exceptional cases only. Labour on a volunteer basis.
4. *Sunday 0000 – Monday 0730 hrs.*
Permission is usually granted. Labour on a volunteer basis.
5. *Official Holidays:*
The surcharge for work on official holidays is identical to that for work on Sundays. The nights prior to and following a holiday are to be regarded as Saturday/Sunday nights.
The possibilities to engage gangs are limited.
No work is permitted:
24th December 1600 hrs. – 26th December 0730 hrs.
31st December 1600 hrs. – 1st January 1700 hrs.

Containers: The large Container Terminals E.C.T. and Unitcentre operate around the clock, week-ends inclusive. No work is permitted: 24th December 1530 hrs. – 26th December 0715 hrs. and 31st December 1530 hrs. – 1st January 1515 hrs.

Agents should be kept closely advised of vessel's position. In view of ordering gangs for next morning/evening Master's final ETA message is required before 1400 hrs. For work on Monday mornings a final ETA is required before Friday 1400 hrs.

DENSITY: *Europoort:* At high water 1025; at low water 1022.

Botlek: At high water 1014; at low water 1001.

Waalhaven and other basins in the Rotterdam port area: at high water 1004; at low water 1000. All depending upon amount of fresh water carried down river.

MEDICAL: All medical facilities available. Advance notice only in emergency or if attendance required during week-end.

OPENING/CLOSING HATCHES: On liners by stevedores. On tramp vessels by crew; stevedores lifting beams.

FRESH WATER: Can be supplied ex quay at many berths. Where no shore connections are available and at buoys: by waterboat.

Fresh water can also be supplied in the Roads off the Hook of Holland, weather permitting.

FUEL: All types of oil bunkers can be supplied by means of barges or ex-shore installations for tankers. Coasters can take bunkers ex installation during their inward or outward passage. Advance notice is required for vessels which are only 24 hours or less in port and for bunkering during week-ends.

FIRE PRECAUTIONS: No floating objects are allowed alongside tankers during discharge or loading of dangerous cargoes and during ballasting.

CUSTOMS ALLOWANCES: Spirits: first arrival each month, 5 litres per vessel plus 1 bottle per man. Otherwise, 0.75 litre per man with a max. of 5 litres per vessel. Wine: 5 litres per man.

Each Crew member permitted out of bond 200 cigarettes, or 25 cigars, or 500 gm. tobacco.

GANGWAY/DECK WATCHMEN: Recommended.

CERTIFICATES: Ship's Register and Derat Exemption Certificate.

Tankers bound for a general cargo basin or a shipyard need to have a Gas Free Certificate (issued by a recognised Marine Chemist after inspection), before entering into the basin.

CONSULS: Area Code 010.

	Street	*Telephone No.*
Belgium	11 Koningin Emmaplein	363633
Bolivia	222 Westblaak	333444
Brazil	45 Stationsplein	119656
Cape Verde Islands	326 Mathenesserlaan	778977
Chile	48e Schiedamsevest	116898
Costa Rica	106 Meent	130320
Cuba	45 Stationsplein	128970
Cyprus	56 Westerstraat	131809
Denmark	27 Westerkade	360440
Dominican Republic	567 s-Gravelandseweg, Schiedam	739444
El Salvador	28 Parklaan	361343
Ethiopia	30 St. Jobsweg	767196
Finland	28 Parklaan	365500
France	57 Eendrachtsweg	116315
German Fed. Republic	36 Parklaan	365133
Greece	9 Westplein	365600
Haiti	51 Mecklenburglaan	138937
Honduras	1 Zalmstraat	549911
Iceland	25 Scheepmakershaven	117580
Ireland	23 Willemskade	143322
Italy	24 Eendrachtsweg	139361
Japan	89 Coolsingel	632818
Korea, Rep. of South'	2 Scheepsmakershaven	332633
Lebanon	134 Meent World Trade Center	147425
Luxembourg	44 Kraandrijverstraat	845011
Madagascar	46 Schiedamse Vest	122268
Malawi	15 Galvinistraat	894151
Malta	8 Westplein	364088
Morocco	42 Eendrachtweg	143088
Mexico	45 Stationsplein	126084
Monaco	233 Mathenesserlaan	760055
Nepal	160 Gordelweg	656566
Nicaragua	53a Havenstraat	254546
Norway	12 Willemskade	144488
Pakistan	41 Calandstraat	362988
Panama	723 Weena	138512
Paraguay	66 Oostzeedijk	139801
Peru	21 Houtlaan	176600
Philippine Republic	21 Houtlaan	176319
Portugal	18 Willemskade	111540
Spain	19c Delftsestraat	133400
Sweden	6 Westblaak	132835
Switzerland	723 Weena	139535
Syria	50 Westerstraat	148166
Thailand	58 Coolsingel	130866
Tunisia	30 St. Jobsweg	763099
Turkey	67 Eendrachtsweg	132270
United States of America	1 Vlasmarkt	117560
Uruguay	75 Coolsingel	118382

REPAIRS: (Also see "General"). A variety of shipyards and workshops is available for engineering and all types of repairs. Various yards have specialised in the construction of dredgers, ferry boats, offshore equipment, heavy derrick vessels and/or in the jumboizing of vessels.

The largest drydocks in the Rotterdam port area are owned by the following shipyards of the Rhine-Schelde-Verolme group:

Verolme Dock- and Shipbuilding Company	Graving dock 7	500,000 d.w.t.
Wilton-Fijenoord, Schiedam	Graving dock 8	160,000 d.w.t.
Rotterdam Drydock Company	Floating dock 10	110,000 d.w.t.

Wilton-Fijenoord, Rotterdam Dockyard Co. and Verolme Rozenburg have combined their fleet of tugboats for assistance at the R.S.V. shipyards in the New Waterway area.

If V.L.C.C.'s with a length of over 270 m. do not have full engine power for manoeuvring or have not made sufficient engine trials after repairs they must be escorted to and/or from the repair yards by two tugboats of sufficient capacity.

The Government Harbour Master (Rijkshavenmeester) must be notified in this respect 12 hours prior to arrival or departure.

Tank cleaning facilities are available.

Voyage repairs are carried out in the entire port area including Botlek and Europoort/Maasvlakte.

Some shipyards are situated beyond the bridges across the river Maas, East of Rotterdam. They can be reached via the Koningshaven, where a traffic and a railway bridge have to be passed.

Max. draft at HW: 21 ft. FW.
LW: 17 ft. FW.

Opening Times of the Koningshaven Bridge:

Open	*Closed*
0032 hrs.	0045 hrs.
0230 hrs.	0245 hrs.
0322 hrs.	0339 hrs.*
0434 hrs.	0449 hrs.*
0558 hrs.	0618 hrs.
0659 hrs.	0719 hrs.*
0940 hrs.	0955 hrs.
1040 hrs.	1100 hrs.*
1240 hrs.	1300 hrs.
1440 hrs.	1500 hrs.*
1639 hrs.	1654 hrs.
1840 hrs.	1900 hrs.*
2040 hrs.	2056 hrs.
2240 hrs.	2255 hrs.*

*Also on Sundays.

Boele's Scheepswerven en Machinefabriek B.V., Bolnes: Postal Code 2980 DA, Ridderkerk, Holland. Tel: 0 1804-18555. Cables: Boele, Bolnes. Telex: 20012 Boele Nl.

UK Agents: G. C. Ridley & Co. Ltd., 15 St. Helen's Place, London EC3A 6DH. Tel: 01-588 5125. Telex: 885852.

Docks: 4. Lengths, 184.4 m. × 33.5 m. × 15.3 m.; 175.2 m. × 25.9 m. × 13.41 m.; 160 m. × 23.7 m. × 12.8 m.; 105 m. × 19.25 m. × 14 m.

Extreme Breadth: 41 m., 32.6 m., 30.6 m., 26.4 m. respectively.

Draft over Blocks: 8.4 m., 6.8 m., 7 m., 7.20 m. respectively.

Lifting Capacities: 22,500 tons, 13,000 tons, 11,000 tons, 5,000 tons respectively.

Slipways: 3. Patent electric side-slips, 122 m. long, up to 7,000 d.w.t.

Repair Quays: 8.

Engine Repairs: All types, steam and diesel.

Repair licensees, for Doxford, Gotaverken, Mirrlees Blackstone, Pielstick, Grandi Motori (Fiat) and Sulzer, Burmeister & Wain, Akasaka, Mitsubishi-UE, Kobe Diesel.

D. Van de Wetering B.V.: Bunschotenweg 134, 3089 KC Rotterdam, Holland. Tel: 010-29.62.55 (day and night) Telex: 28122 NL.

U.K. Agents: G. C. Ridley & Co. Ltd., 15 St. Helen's Place, London EC3A 6DH. Tel: 01-588 5125. Telex: 885852.

Engine Repairs: All types.

Specialised work: Port repairs for hulls, deck and electrical equipment. Cleaning and engine repairs.

Other work: After-sales service and spare parts for Daihatsu and Hanshin diesels, Thune Eureka pumps, Pusnes deck machinery, Tanabe compressors, Naniwa pumps, Hitma Crosby safety valves.

DRY DOCKS: Largest dry dock for vessels up to 500,000 d.w.t. with tank cleaning installation for largest vessels.

REPATRIATION: All arrangements for crew changes and repatriation can be made.

AIRPORT: Rotterdam airport Zestienhoven (distance 6 km.) and Amsterdam airport Schiphol (distance 70 km.) are served by regular airlines.

TIME: During Winter GMT plus one hour. During Summer GMT plus 2 hours.

HOLIDAYS: New Year's Day; Easter Monday; Queen's Birthday (30th April); Ascension Day; Whit Monday; Christmas Day (25th December) no work; Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Police head office tel. 14.31.44; Alarm and accidents tel. 14.14.14; Ambulance tel. 33.33.00; Fire tel. 29.29.29.

TELEPHONES: At major shipyards, oil and grain terminals telephone is placed on board without extra charge.

DEGASSING/CLEANING: Free translation of circular issued 17th April 1973 by the Docks Industry of the Municipality of Rotterdam, reads: Safety requirements in regard to degassing/cleaning of tanks and/or holds on board ocean tanker vessels.

A recent accident during cleaning activities of tanks having contained combustible gases or liquids, poisonous or not, has resulted in the following directives to maintain the safety and to protect the environment in the dock area.

The articles 55 and 56 of the Port Regulations Rotterdam (Municipal Gazette 1971, No. 3) prescribed a written consent of the Port Superintendent for degassing/cleaning. To obtain such a written consent on behalf of an ocean tanker vessel, the Master should apply to the Office of the Port Superintendent, Department of Dangerous Substances, at least 24 hours before the actual cleaning. Conditions may be made in respect of, and amongst other things:

(a) safe cleaning procedure, and

(b) presence of an expert.

To that effect an investigation may be held on board as to a safe rinsing procedure, and relevant subjects, in consultation with the ship's management.

A statement may be demanded from the Master stating whom he charges with the supervision of the activities. From this person expertise is demanded, to the satisfaction of the Port Superintendent. This "Expert" may be a member of the ship's crew, respectively a person to be designated by the Owner (e.g. a laboratory expert). Without the express consent of the Port Superintendent cleaning must not be started.

These measures have become effective at once and are applicable to all ocean tanker vessels, of which the tanks to be cleaned have contained a combustible liquid as its last contents with a flash-point lower than, or equal to, 55° C.

For ships berthed at a shore tank-cleaning station and handled by that company, the cleaning-company concerned shall be liable for a safe treatment and consequently no separate consent shall be required.

In the following summary, the ship's data necessary to obtain a consent has been stated.

The cleaning of tanks, as indicated in this circular, is not permitted without the consent of the Port Superintendent of Rotterdam. Concerning stench-causing substances further directives will be issued.

It will be tried to restrict the delays possibly occurring as a result of this new regulation minimum.

Summary: By "degassing" to be understood: Degassing or ventilating a tankage, steaming or cleaning and the activities related thereto.

Reporting: At least 24 hours before commencement of the cleaning activities the ship (ship's Agent) should make a request by Telex to the Port Superintendent of Rotterdam (Port co-ordinating centre) to obtain a consent pursuant to Art. 55 or 56 Port Regulations.

The following data should be stated when making the application: (1) name ship; (2) nationality; (3) tonnage in g.r.t.; (4) name Agent; (5) berth where cleaning is to be carried out; (6) indication of tanks to be cleaned; (7) correct technical denomination of the last 2 products carried in these tanks; (8) expected time of commencement cleaning; (9) cargo still on board; (10) by whom cleaning will be carried out (ship's own crew respectively name cleaning company); (11) destination slush (remaining on board respectively discharge to . . .).

GENERAL:

Ship Repairing: For repairing (except cold work outside the cargo-area) on board any vessel outside a ship-repair yard permission from the municipal Harbour Master is required.

Dependent on nature and location of repairs a certificate may be required to be issued by a recognized Marine Chemist after inspection.

For sea-going tank vessels an application for permission shall be made by telex to the Harbour Master of Rotterdam (Harbour Co-ordinating Centre, Dangerous Goods Department. Telex GEVST 25720), containing the following information:

1. Ship's name.
2. Date of commencement repairs.
3. Duration of repairs.
4. Berth.
5. Nature of repairs.
6. Location of repairs.
7. By whom repairs will be carried out.
8. Any cargo-operations, bunkering etc., during repairs.
9. Cargo on board and stowage.
10. Effect of repairs on ship's manoeuvrability and time and duration of immobilized situation.

The Municipal Dangerous Cargo Department will contact the Harbour-Inspectorate, which organisation is in charge of the National law: cleaning and repairing of tank vessels.

Inspection of International Safety Certificates:
As from January 1st, 1979 Harbour Pilots on board foreign vessels entering the port area of Rotterdam will keep a check on the presence of valid international safety certificates according to the "International Convention for the Safety of Life at Sea 1960" and the "International Convention on Loadlines 1966".

This check will be executed on behalf of the State Shipping Inspection to which Harbour-Pilots have to report. The Harbour-Pilots entrusted with this inspection are in the possession of an authorisation provided with photograph issued by the State Shipping Inspection (Scheepvaartinspectie). Should the reporting of a Harbour-Pilot be negative, any measures to be taken will solely remain the task and responsibility of the State Shipping Inspection.

"Off-Port Notice" clause:
Large grain vessels still often have to wait off the port for a berth. For that reason a proper "Off-Port Notice" clause is still recommended in order to avoid loss of time and sometimes heavy shifting expenses.

Control on delivery of cargo:
At Rotterdam, bulk grain cargoes are mainly discharged direct overboard into receivers' barges. Therefore, a careful supervision by an independent control company is recommended so as to make sure that no cargo is delivered to receivers before original Bills of Lading have been presented.

DEVELOPMENTS: In December 1981, a start was made on deepening the Approach Channel to Rotterdam to enable vessels with a draft of 72 ft. to berth at Europoort and Maasvlakte Terminals (1985). From August 1983 vessels with a draft of 70 ft. can be accommodated and, from January 1985, 72 ft. will be accommodated from Euro-1 Buoy to Maas Pilot at the Hook of Holland.

Radar Service: The present chain of 8 shorebased radar stations will be replaced by a new system, which should be fully operational in 1985.

The equipment which the central and regional traffic control stations will use in future is described as Vessel Traffic Management System (VTMS), which is a nautical operational data-processing system.

The system will comprise a centrally operated traffic control from the approach routes off the Hook of Holland up to the Van Brienenoord bridge, East of the city and to the Spijkenisser bridge over the river Oude Maas. The radar screenings will include the major harbour basins so as to be able to pass-on traffic and position data to tugboats and seagoing vessels manoeuvring in these basins.

Maasvlakte Coal Terminal: Maasvlakte Coal Terminal (M.C.T.) has been set up jointly by:

Shell, Esso and B.P.
Frans Swarttouw
SHV
Ruhrkohle
Thyssen
Manufrance

The MCT is situated North of, and adjacent to, the transhipment installation EKOM. The installation is planned to be constructed and developed in three phases:

The first phase of MCT became operational in 1983. Coal carriers are discharged at the EKOM installation and the cargo stockpiled at the MCT area of 10-15 ha. (25-37.5 acres) at a capacity of 4 million tons annually.

Stockpiling and bargeloading machines are available.

In the second phase the Municipality will construct a separate harbour providing 1,100 metres quay length suitable for vessels up to 250,000 d.w.t.

In the final phase, planned for the years 1990-1993, a transhipment of 25 m. tons of coal is foreseen on a site of 110 ha (275 acres).

Container Overflow Terminal: Work on a new container terminal (location Maasvlakte) started in April 1982. The 81 ha. (200 acres) terminal with a quay length of 1,200 m. and 5 cranes is planned to be operational in 1984.

Bulk Transport to the Ruhr: Ore cargoes are usually transhipped at the Maasvlakte and Europoort terminals into combinations of max. 4 push barges of up to 2,750 tons and transported to the Ruhr area via the Hartelcanal (since 1982 without locks), the rivers Oude Maas, Waal and the Rhine.

Pusherboats of 5,400 h.p. could during normal conditions, move 16,000 tons in 6 barges.

SHIPMASTER'S REPORT: November 1981.

On stores lists, wines and spirits should be total amounts in litres.

Require 4 crew lists, 2 stores lists and 2 crew declarations. Immigration board and take one crew list and leave one stamped. Any personnel joining should have their particulars put on the back of this crew list which will be collected by the Agent prior to departure.

Regulations regarding craft coming alongside are very strict. Basically, once discharging, ballasting or gas-freeing operations have commenced then no craft is allowed to come alongside a vessel if its engine is running when it is less than 25 m. from the vessel. Therefore, if bunkering or storing from barges these craft must be alongside before discharge etc., commences.

SHIPMASTER'S REPORT: July 1984.

Agents required us to use Dirkzwager Radio for all communications to them, chandlers and shore authorities. COW permissible but only after inspection by harbour authorities. Berthing Pilot boards around entrance to Europort.

AUTHORITY: Port of Rotterdam, P.O.Box 6622, 3002 AP Rotterdam. *Tel:* 010-896911. *Telex:* 23077 (Eurot Nl) *Cables:* Eurogate. *Contact:* ECZ Department.

AGENT: Wm. H. Muller & Co. Nederland B.V., Westerlaan 1, P.O.Box 770, 3000 AT Rotterdam. Tel. 010–36.43.00. Telegrams: "Mineral". Telex 21245 (3 lines).

SCHEVENINGEN: 52.05 N. 04.15 E. (See Plan Book)

PILOTAGE: For Pilot service via the Hook Tel: (01747) 4840 and for service via Ijmuiden Tel: (02550) 19027.
MAX. SIZE: Max. draft 4.80 m. (afloat).
VHF: Port Radar Services on Channel 21, Port Operations on Channel 14.
TUGS: Available up to 335 h.p.
BERTHING: Outer Harbour, depth 7 m.
First Harbour, depth 6 m.
Second Harbour, depth 4 m.
Third Harbour, depth 6 m. Two ro/ro berths available.
FUEL: Available.
FRESH WATER: Available.
REPAIRS: Possible.
SERVICES: Compass adjusting.
POLICE/AMBULANCE/FIRE: Police Tel: (070) 104911. Fire Tel: (070) 949311.
SHIP SUPPLY SERVICE:
Rederij Jac. Vrolijk B.V., Doorniksestraat 7, 2587 XJ 's-Gravenhage.
Rederij Trip B.V., Dr. Lelykade 3, 2583 CL 's-Gravenhage.
G. de Ruiter's Scheepsagenturen, Statenlaan 156, 2582 GX 's-Gravenhage.
Jaczon Offshore B.V., Visserhavenweg 38, 2583 DK 's-Gravenhage.
AUTHORITY: Gemeentelijke Dienst Van Haven – En Marktwezen, Visafslagweg 1, 2583 DM Scheveningen, Netherlands. *Tel:* 070-514031. *Telex:* 33378 Gdhmw Nl. *Contact:* Harbour Master.

SCHIEDAM: 51.54 N. 04.25 E.

DOCUMENTS: See "Rotterdam".
PILOTAGE: See "Rotterdam".
ANCHORAGES: See "Rotterdam".
RESTRICTIONS: See "Rotterdam".
MAX. SIZE: *Wilhelminahaven:* Length 260 m., draft 24 ft.
Wiltonhaven (private): Length 305 m., draft 33 ft.
HEALTH: See "Rotterdam".
RADIO: See "Rotterdam".
VHF: See "Rotterdam".
RADAR: See "Rotterdam".
BERTHING: Offshore facilities operated by Brown & Root B.V. at the Wilhelminahaven. Several berths for all kinds of offshore vessels are available.

J. Soufflet Holland B.V. import French and British cereals for transhipment at Wilhelminahaven. Length of berth 100 m.

CRANES: None.
BULK CARGO FACILITIES: None.
SPECIALISED CARGO HANDLING FACILITIES: None.
BRIDGES: None.
STEVEDORES: None.
MEDICAL: Full hospital facilities available (2 hospitals).
DENSITY: 1000.
FRESH WATER: See "Rotterdam".
FUEL: See "Rotterdam".
FIRE PRECAUTIONS: Specific precautions for tankers during repairs at "Wilton-Fijnoord B.V." are according to the Harbour Regulations Schiedam.
REPAIRS/DRY DOCKS: Largest dry dock 1,000 ft. long and a depth of 35 ft. (graving dock). One graving dock 656 ft. in length and 98 ft. wide at entrance with 2 building berths; 2 graving docks each 700 ft. long 93 ft. wide at entrance, and with a depth of 32 ft.

One of the largest floating docks in Europe – extreme length 760 ft., width at entrance 128 ft., depth on blocks 33 ft.

There are 3 other floating docks with lifting capacities of 3,700 – 12,500 and 21,500 tons respectively.

SURVEYORS: See "Rotterdam".
GANGWAY/DECK WATCHMEN: Not necessary.
CUSTOMS ALLOWANCES: See "Rotterdam".
REPATRIATION: See "Rotterdam".
AIRPORT: Zestienhoven, 6.4 km. (Rotterdam). Schiphol 96 km. (Amsterdam).
POLICE/AMBULANCE/FIRE: Police, Tel: 260760; Ambulance, Tel: 333300; Fire, Tel: 735544.
TELEPHONES: This service is available aboard vessels at all berths at the shipyard.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not required.
AUTHORITY: Municipal Harbour Master, Havenstraat 6, 3115 HD, Schiedam. Postal Address: P.O.Box 79, 3100 AB Schiedam. *Tel:* 010–622222 (ext. 168–169). *Telex:* 24407 Onsdm Nl. *Contact:* Captain Th. Sabel, Harbour Master.

TERNEUZEN: 51.20 N. 03.50 E. (See Plan Book)

LOCATION: At mouth of the ship canal from the River Scheldt to Ghent. Lat. 51° 20′ 14″ N., Long. 3° 49′ 39″ E.
DOCUMENTS: Also see "Rotterdam". Customs clearance takes place in the docks, except vessels bound for Belgium. Clearing of ships comprises the production of a document signed by the Master, accompanied by the following documents in triplicate: Cargo and Crew Manifest, and Stores List. Masters are requested to have Crew List completed beforehand to avoid delay in the lock.
PILOTAGE: Compulsory for all sea-going vessels entering, leaving, and navigating inland waterways. Sea Pilot meets inward vessels at Buoy A1, Lat. 51° 22.00′ N., Long. 2° 53.24′ E. for ships entering by Wielingen Channel; or at Middensteen Bank Buoy, Lat. 51° 39.30′ N., Long. 3° 19.00′ E. for ships entering by the Oostgat Channel.

In Wielingen Channel Belgian and Dutch Pilots available. In Oostgat Channel a Dutch pilot cutter is stationed. Belgian pilot boat carries at the masthead a red flag with a white letter "P", the Dutch pilot boat has a blue flag with a white letter "L". Communicate with pilot cutter by VHF Channel 6.

Also see "Ghent – Pilotage" in Belgium.

Warning: In approaches Masters may encounter fishing boats steaming a parallel course about 300 ft. apart. The net is being towed between the two vessels. If there is danger of fouling the net, the fishing vessels will display by day International Code flag "D", or by night a searchlight from each vessel.

ANCHORAGE: Vessels anchor outside fairway where depth is at least 49 ft. Mud bottom and good holding ground.
RESTRICTIONS: No restrictions on night entry.
MAX. SIZE: Controlling depth 31 ft. 4 in. Keel clearance 3 ft. 0 in. Height of tide 12 ft. to 15 ft. A vessel of max. draft 40 ft. 6 in. can reach Terneuzen in most circumstances.

Ships not exceeding the following dimensions are allowed to pass through West lock and canal: length 256 m., breadth 34 m., draft in fresh water (canal) 12.25 m.

Vessels loading a maximum cargo for Ghent should not exceed 12.25 m. draft.

Also see "Ghent".

Also see "Berthing".

HEALTH: Arriving vessels are only subject to medical examination when arriving from countries where contagious diseases reported or when such cases suspected on board. Medical Officer will board in Terneuzen Roads or Outer Harbour.
RADIO/RADAR: Communicate via Traffic Control Terneuzen on Channel 3 between Buoy Nos. 17 and 35 including the Braakmanhaven West, East and Ferry Harbour.

Radar Control also operates between Buoy Nos. 17 and 35 on Channel 3. 24 hour watch maintained.

Every 5 minutes to each hour a weather-bulletin, navigation reports and warnings are given.

Communicate on the Canal via Traffic Control Terneuzen, Channel 11.

TUGS: Towage not compulsory. Tugs can be ordered from Terneuzen Tugboat Company or Towage and Salvage Union Ltd. respectively by Channel 72 and Channel 32. Both companies maintain continuous listening watch on Channels 6, 11 and 14.
BERTHING: The port has 4 outer harbours: Braakman, West, East and Ferry. The Braakman Harbour is only in use for handling chemical products. There are 2 jetties, also see "Dow Chemical". Braakman Jetty 450 m. in length, least depth 0.8 m., max. length of ship 140 m. Ocean Dock 350 m. length, least depth 14.5 m., max. length of ship 252 m. The West Harbour has 2 locks (West and Middle), which is mainly used by sea-going vessels. The East Harbour has 1 lock (East Lock) for inland craft, while the Ferry Harbour (no locks) is used mainly by fishing craft and yachts. Ships not exceeding the following dimensions are allowed to pass through the West Lock and Canal: length 256 m., breadth 34 m., fresh water draft (canal), 12.25 m. Middle Lock is under construction and cannot be used until 1985. East Lock: ships of a length 140 m., breadth 22.80 m., draft 4.0 m. can pass. This lock is used by inland craft. Sea-going vessels with a max. length of 65 m. and a max. draft of 9 m. may also pass through the East Lock.

There are 4 harbours on the East bank of the canal situated about 1 mile South of Terneuzen Locks.

Noorderkanaalhaven (Northern Canal Harbour): Length of North Quay, 170 m., max. draft 5.50 m.; South Quay, 192 m., max. draft 5.50 m.; in the middle of the harbour max. draft 7.50 m.

Zuiderkanaalhaven (Southern Canal Harbour): Length of North Quay, 225 m., max. draft 2 m.; South Quay, 230 m., max. draft 5.75 m.; in the middle of the harbour max. draft 8.25 m. and 5 m.
Massagoedhaven (Bulk Harbour): Length of North Quay 504 m., max. draft 12.25 m. and 6.50 m. Length of South Quay 275 m., max. draft 6.50 m.
Zevenaarhaven (Zevenaarharbour): Length of North Quay 421 m., max. draft 8.25 m.; South Quay, 259 m., max. draft 8 m., in the middle of the harbour max. draft 9.50 m. *Sluiskil* (sub-port, about 4 miles South of Terneuzen) length of quay, 900 m., max. draft 10 m. to 10.50 m. *Sas van Gent* (sub-port, on the canal about 7 miles South of Terneuzen) length of quay, 210 m., max. draft 7.50 m.

There are several sheds and warehouses, total capacity 160,000 sq.ft., also open storage, total capacity, 100,000 sq.ft. Grain silo with a storage capacity of 10,000 tons. Vessels up to 80,000 d.w.t. which for some reason have to anchor outside the piers can do so on the River Scheldt near Buoy No. 27. Ships with max. draft of 40 ft. 6 in. can reach Terneuzen under practically all circumstances.

Also see "Developments".

Cranage: 10 movable cranes of 5 tons capacity; 4 floating cranes, 1×8.5 tons and 3×16 tons; 1 floating derrick of 40 tons. At Sluiskil there are 2 coke-loading plants, 3 cranes of 15 tons and 4 loading bridges. Sas van Gent has 2×5 ton cranes. Water and provisions available.

Container and Ro-Ro Facilities: Ro-Ro Harbour, width 24 m., max. draft 6.75 m. Ro-Ro Berth Zevenaarharbour South, width 15 m., max. draft 9.50 m. Ro-Ro Berth Zevenaarharbour North, width 28 m., max. draft 8.25 m. In Zevenaarharbour a ro-ro berth for 2 vessels, depth 10 m. and 7.50 m.

Ore and Bulk Cargo Facilities: Available at the Massagoedharbour.

Dow Chemical: *On the Scheldt River – The Scheldt Jetty:* The Scheldt Jetty provides 1 berth only and is suitable for accommodating vessels, ranging from barge-size up to ocean-going ships with a maximum of 22,500 tonnes deadweight (d.w.t.).

The jetty has no draft limitations and the maximum allowable length of the vessels (LOA) is 200 m. Also see "Product Handling Facilities".

In the Braakman Harbour – The Barge and Coaster Docks: The Barge and Coaster Docks have 3 platforms, providing 5 berths for loading and unloading purposes.

Berth A (East) is for the handling of barges only and excluded for the accommodation of seagoing vessels.

Certain draft limitations as well as size restrictions for the various berths have to be taken into account. See "The Braakman Harbour". For product handling facilities at the Barge and Coaster Docks see "Product Handling Facilities".

In the Braakman Harbour – The Ocean Dock: The Ocean Dock provides 2 berths and is suitable for accommodating vessels, ranging from barge-size up to ocean-going ships with a maximum of 100,000 tonnes deadweight (d.w.t.).

Certain draft limitations as well as size restrictions have to be taken into account, see "Braakman Harbour". For product handling facilities at the Ocean Dock see "Product Handling Facilities".

General Facilities and Limitations: Bunkering facilities are not available.

Supplies of bunker oils, fresh water or large quantities of stores can be supplied with a barge alongside the vessel. In this case the cargo operations have to be interrupted for the time the barge is alongside. Depending on conditions in the port such operations will as a rule be limited to those vessels for which bunkering on the roads is legally not allowed. (LPG vessels with one or more cargo tanks greater than 3,000 cu.m. in size and LPG vessels of over 15,000 cu.m. tank capacity in total).

Bunkering at the berth requires 24 hours' notice and will be co-ordinated by the Loading Master. Limited quantities of stores can be taken on board via the jetties.

If for bunkering or any other reason a barge or boat has to moor alongside a ship, moored on one of the Dow Jetties, the Loading Master has to be informed 24 hours before the operation.

With the permission of the Loading Master it is allowed to transport cylinders with acetylene, nitrogen, helium, hydrogen, freon and oxygen from the jetty on board the moored ships and vice versa. By hoisting the cylinders it is obliged to use the specially made blue hoisting-containers from Dow. The cylinder valves must be protected by the screw-caps.

Slops or ballast water cannot be received.

Tank cleaning of oil or chemical tankers is not permitted alongside the jetties. LPG vessels can be purged. Nitrogen and methane for purging purposes are available.

Vessels, moored at the Dow Jetties, have to comply with the International Ship/Shore Safety Checklist and the additional Dow Marine Safety Regulations.

Dow Chemical Marine Department can be contacted by VHF radio on Channels 6, 8, 11, 13 and 34. Constant radio watch is kept on Channels 6, 13 and 34.

A telephone set and an intercom will be placed on board immediately after berthing. The intercom is for direct communication with the Loading Master.

The Braakman Harbour: General lay-out: See "Plan Book".

It should be noted that given water depths on the plans are valid immediately after dredging. A certain siltation should be taken into account. *The average rate of the siltation is unknown.*

Given water depths are translated to the General Mean Level for the Netherlands (N.A.P.). For the calculation of actual water depths, undermentioned tidal differences should be taken into account.

Tidal differences in metres:
High Water Spring (HWS) +2.7
High Water (HW) +2.0
Mean Level (N.A.P.) ±0.0
Low Water (LW) −2.0
Low Water Spring (LWS) −2.6

Barge and Coaster Docks:
Dock A (West) – Max. size 10,000 d.w.t. Depth 11 m.
Dock A (East) – Barges only. Depth 7.5 m.
Dock B (West) – Max. size 15,000 d.w.t. Depth 11 m.
Dock B (East) – Max. size 8,000 d.w.t. Depth 9.5 m.
Dock C (West) – Max. size 10,000 d.w.t. Depth 11 m.

In addition to the information, given on the Plan, the following "General Directives" should be observed:

For all berths, the overall length of vessels is restricted to a maximum of 140 m.

Berth A (East) is reserved for the accommodation of barges only.

Mooring at Berth B (East) is limited to the port side only.

The Ocean Dock: North and South Berth: Max. d.w.t. 100,000 tonnes. Max. length 252 m. Depth 18.5 m.

In addition to the information, given on the Plans, the following "General Directives" should be observed:

Time of berthing at/or departing from the Ocean Dock depends on tidal conditions and max. d.w.t. or draft of each vessel and will be appointed by the pilotage.

The maximum allowable draft of vessels is determined by the water depth at the Scheldt River Entrance, at Scheur. At present max. draft is at least 43 ft. (approx.). New figures are published every month.

Berthing with ship's bow pointing seaward is compulsory.

Port Regulations: To maintain Order and Safety of Navigation and based on Article 7 of the Port Regulations, the Director of the Port Authority of Terneuzen has announced the following with regard to the Braakman Harbour and the berths, situated therein:

Admittance into the Harbour:

1. The largest admittable lengths and/or widths are for:

Sea-going vessels:

– in the harbour	:	length overall 252 m.
– along the Ocean dock	:	length overall 252 m.
– along the B & C docks	:	length overall 140 m.
inland craft	:	length 140 m.
push barges	:	length 185 m. width 22.8 m. considering that an additional length of 8 m. is permitted, provided that the maximum length of the barge does not exceed 153 m. and the pushtug is lashed in the axis of the barge.
lashed barges	:	length 110 m. width 22.8 m.

2. It is prohibited to enter the harbour with vessels or boats which:
   a. Do not have to load or unload in the harbour.
   b. Do not have to carry out any work.
   c. Are not equipped with an VHF radio, suitable for transmitting and receiving on Channel 3.

3. Dispensation from measurements and conditions as mentioned in sub. para 1 and sub. para 2 above can be granted by the Director of the Port Authority or his Substitute. Such Authority can also be prosecuted by the Harbour Master or his substitute with the exception for 'maximum admittable length' of 252 m. as mentioned in sub. para 1.

Traffic Control:

1. Traffic is controlled by the Terneuzen Traffic Control Station. Tel: 01150-12161. Telex: 55482. VHF: Channel 3.

2. The procedure of "Reporting in Writing" is also compulsory for inland craft, whereby the term of 3 hours also applies for the activities as mentioned in (a).

3. Terneuzen Traffic Control Station must be contacted by VHF, Channel 3, when:
   (b) Entering or leaving the harbour.
   (c) Berthing or unberthing.
   (d) Shifting berth.

4. All traffic inside the harbour or harbour entrance is obliged to have VHF radio tuned to Channel 3.

5. If necessitated by weather, or other circumstances, the required number of tug boats can be prescribed by, or on behalf of the Harbour Master to seagoing vessels and/or inland craft.

6. *Seagoing* vessels, having to carry the signals in accordance with Article 22 of the Decree of the Ministry of Transport and Public Works, dated 31/12/1971 Nr.A-5/071054 (Regulations for Dangerous Goods) are not allowed to enter the harbour if the visibility is 500 m. or less.

Inland craft, having to carry the signals in accordance with Article 10 of the Decree of the Ministry of Transport and Public Works, dated 31/12/1971 (Regulations of Dangerous Goods) are not allowed to enter the harbour if the visibility is 500 m. or less.

Above mentioned vessels, which during the approach enter into these conditions of visibility may be ordered by, or on behalf of the Harbour Master, to berth or drop the anchor at a place which, according to his opinion, is suitable.

Dispensation from the paragraphs as provided above may be granted by or on behalf of the Harbour Master.

7. Entering the harbour is prohibited if a second red light is shown next to the normal red harbour light.

Mooring:

1. Masters must ensure that their vessels remain afloat under all circumstances.

2. Masters must moor their vessel in such a manner that the berth can be left without delay, unless decided otherwise by, or on behalf of the Harbour Master.

At least 1 steel wire must be positioned on both the bow and the quarter of the ship. Each wire must be properly made fast and adjusted for easy pick-up by a tug.

Pilotage: Pilotage is compulsory for seagoing vessels, entering, leaving or manoeuvring in the harbour.

Dispensation may be granted by or on behalf of the Harbour Master. Further to the above, and in connection with the completion of a number of modifications in the Braakman Harbour and the Ocean Dock having become operational, the Director of the Port Authority of Terneuzen withdraws publication Nr.3 (dated 8th August, 1977), Nr.4 (dated 6th September, 1977), Nr.5 (dated 5th September, 1977), and announces the following:

Marking:

1. The entrance of the harbour is marked by a fixed green, and a fixed red light on top of piles on West side and East side of the white leading lights.

2. Night and day, the axis of the harbour entrance is marked by 2 synchronous interrupted white leading lights (iso 2 sec.) located on the Southern Harbour Dyke. Bearing is 191°.

3. The green and red harbour lights are located respectively 170 m. and 215 m. from the axis, indicated by the white leading lights.

The minimum width of the harbour entrance on either side of the axis, measured at right angles, is 112 m.

4. Night and day the centre of the turning-basin, West of the Ocean Dock, is indicated by interrupted green leading lights (3 sec. on, 1 sec. off). These lights are located on the Southern Harbour Dyke. Bearing is 211.5°.

5. The centre of the almost circular turning basin lies at the intersection of the green leading lights and the Westward lengthened axis of the Ocean Dock. The radius of the turning basin is 200 m.

6. During fog, 2 sodium fog-lights are lit underneath the green light of the harbour entrance.

One of these fog lights is directed towards the Scheldt River, the other one towards the harbour.

During the night and poor visibility, the piles, marking the harbour entrance are illuminated by floodlights.

7. The shoal in the harbour, extending from the South side of the Barge and Coaster Docks to further Southward is covered by 2 light buoys, located on a water depth of N.A.P. −7.5 m.

The line between the North Buoy "Bra 2" (Qk. Fl. Red) and the South Buoy "Bra 4" (iso 8 sec., Red) marks the Western boundary of the shoal.

Depths:

1. The dredged bottom-depths in the harbour are:

In the Harbour Entrance : N.A.P − 15 m.
In the Turning Basin : N.A.P − 16 m.
The Western Berths of the
B & C Docks : N.A.P − 11 m.
B & C Dock Berth B-East : N.A.P − 9.5 m.
B & C Dock Berth A-East : N.A.P − 7.5 m.

The above mentioned bottom depths are target figures and certain deviations as a result from siltation has to be taken into account.

2. Information with regard to admittable draft can be obtained from the Harbour Masters' Office or from the Traffic Control Station, mentioned under 2 sub. para 1.

Addition:

A seagoing vessel, not equipped with a bow-thruster has to be assisted at least by 1 tug-boat during arrival and departure from the jetties in the Braakman Harbour.

A seagoing vessel, calling for the Ocean Dock, has to be moored with the bow in N.W. direction, unless otherwise agreed by the Harbour Master.

Turning the vessel has to be done preferably in the Turning Basin.

Product Handling Facilities and Capabilities: LPG.

Storage: Propylene, butadiene, spent C-4 and crude C-4 are stored in pressurised tanks at ambient temperatures.

For propylene, there are in-line cooling facilities available for product delivery to vessels at a minimum temperature of −10°C.

Ethylene is stored at atmospheric pressure in refrigerated tanks. (−95°C to −102°C.). In-line cooling facilities are available for product delivery to vessel at −103°C.

Butane and propane are stored in refrigerated – or pressurised tanks and loaded/unloaded at ambient temperature and refrigerated.

Two refrigerated storage tanks of 50,000 cu.m. each, for propane and butane, are operational.

Marine Loading Equipment: All LPG products are loaded/unloaded at the Barge and Coaster Docks. Butane and propane can also be loaded/unloaded at the Ocean Dock. The following equipment is available:

B & C (A-West): 2 stainles steel loading arms for ethylene, propane, nominal diameter 6 in., minimum temp. −104°C.

1 carbon steel loading arm for LPG (propylene, butadiene, spent C-4, crude C-4, butane and propane), nominal diameter 6 in., with integrated vapour return line, nominal diameter 4 in., minimum temp. −10°C.

B & C (A-East): 1 carbon steel loading arm for LPG (propylene, butadiene, spent C-4, crude C-4, butane and propane), nominal diameter 6 in., with integrated vapour return line, nominal diameter 4 in., minimum temp. −10°C.

B & C (B-West): 1 carbon steel loading arm for LPG (propylene, butadiene, spent C-4, crude C-4, butane and propane), nominal diameter 8 in., with integrated vapour return line, nominal diameter 6 in., minimum temp. −10°C.

B & C (B-East): 1 carbon steel loading arm for LPG (propylene, butadiene, spent C-4, crude C-4, butane and propane), nominal diameter 8 in., with integrated vapour return line, nominal diameter 6 in., minimum temp. −10°C.

B & C (Dock C): 2 stainless steel loading arms for ethylene, nominal diameter 6 in., minimum temp. −104°C.

O.D. (South): 2 low temperature steel loading arms for LPG, nominal diameter 10 in., minimum temp. −50°C.

O.D. (North): 2 low temperature steel loading arms for LPG, nominal diameter 12 in., minimum temp. −50°C.

Except for the carbon steel loading arm on Berth A (West and East), all other arms are equipped with an emergency shut-off/disconnecting device and a fire fighting nozzle, directed on the ship's cargo line manifold.

On the Braakman Jetty a butane vaporiser and booster pump are available for butane unloading from barges which do not have own discharge facilities.

Without vaporiser also propane can be unloaded with this booster pump. Nitrogen or methane supply from shore is necessary to reach enough overpressure in the ship tanks.

Purging: Purging of LPG vessels with nitrogen or methane can be carried out at the Barge and Coaster Docks. Maximum delivery rate of nitrogen is 2000 Nm3/hr., Methane 1800 Nm3/hr.

Nitrogen can be heated to a temperature of +80°C. to increase the drying effect of ship's cargo tanks which were waterwashed prior to the purge.

Prior to loading, LPG vessels must meet the requirements as laid down in the "Guidelines for Cargo Tank Condition".

MEDICAL: Two modern hospitals available.

TANKERS: Slop tanker available. Also see "Berthing" – Dow Chemical.

FRESH WATER: Available from water barge.

FUEL: Fuel oil and lubricating oil available from lighter or tanker barge. Bunker coal available by prior arrangement.

GANGWAY/DECK WATCHMEN: Available. Tariff increase 100% on Sundays and holidays.

OPENING/CLOSING HATCHES: Can be effected by crew or stevedores.

CUSTOMS ALLOWANCES: See "Rotterdam".

IDENTIFICATION CARDS: Not required.

CONSULS:
- Belgium
- France
- Finland
- Norway
- Spain

REPAIRS: Terneuzen Shipbuilding Yard situated at junction of East and West Canal branches. Able carry out hull and engine repairs. Floating cranes and diving equipment available.

SURVEYORS: See "Flushing" or "Rotterdam".

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: See "Rotterdam".

SERVICES: Repairs of radio, radar, etc., can be effected.

BANKS: Amsterdam-Rotterdam Bank, Herengracht 15, 4531 GM Terneuzen. Tel: 94041. Telex: 55249.

Raiffeisen-Boerenleenbank, Herengracht 1, 4531 GM Terneuzen. Tel: 94651. Telex: 55260.

Algemene Bank Nederland, Herengracht 7, 4531 GM Terneuzen. Tel: 95051. Telex: 55429.

EMERGENCY CO-ORDINATION CENTRE: Harbour-Control Terneuzen continuous watch on VHF Channel 11. Tel: 12161. Telex: 55482.

STORING: Vessels can be stored by barge and truck. At Braakman Harbour only with special permission of Dow Chemical Company, and not during loading and discharging. Trucks can proceed alongside at the berth except at Braakman Harbour. Approximate distance from truck to ship at Braakman Harbour, about 300 m.

At Braakman Harbour, no forklift trucks can be used to handle stores.

For Customs Regulations, see "Rotterdam".

Local Riggers can be employed to assist with storing.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Plans made to widen and deepen Outer Harbour.

New terminal (August de Meyer B.V.) to be built by extending Zevenaar Harbour. The basin will be extended by 300 m. and deepened to 13.5 m. to provide accommodation for vessels up to 65,000 d.w.t. The terminal will be equipped with 2 Kangaroo cranes, each with a capacity of 440 t.p.h. and fitted with dust-free grabs. The 2 warehouses will have a capacity of 130,000 tons in total.

AUTHORITY: Havenschap Terneuzen, Maritiem District Scheldemond, Buitenhaven 1, P.O.Box 1033, 4530 GA Terneuzen. *Tel:* 01150-95651. *Telex:* 55494. *Contact:* Port Director.

AGENT: See "Flushing".

VLAARDINGEN: 51.54 N. 04.20 E.

On the Waterway about 5 miles from Rotterdam.

DOCUMENTS: See "Rotterdam".

PILOTAGE: Harbour Pilots are always available.

TUGS: Available.

BERTHING: *Old Harbour (Municipal):* For tugs and inland craft. Depth at entrance 10 ft. at LW. Total length of quay 2,000 m.

Koningin Wilhelminaharbour (Municipal): Depth 12 to 17 ft. at LW. Length of quay 1,300 m.

Vulcaan Harbour (Private): Suitable for vessels up to a draft of 10 m. (33 ft.) at LW. Stevedoring by: Frans Swarttouw's Havenbedrijf.

Length of quay for cargo-handling: 750 m. Phosphate loading jetty (on riverside) for barges 140 m. 3 electric 16-ton cranes, 3 electric 6-ton cranes and two 5-ton mobile-cranes. Belt conveyors on phosphate jetty. Large shed with a capacity of 30,000 tons and 6 storage tanks with a total capacity of 90,000 tons for various bulk cargoes.

Nieuwe Matex Wharves (Private): 3 berths for sea-going vessels on riverside up to 35 ft. draft at L.W. Several berths for barges and coasters on inner side of jetty up to 22 ft. draft.

Large tank installation; bonded warehouse, 424 storage tanks (total) capacity 450,000 cu.m. for vegetable and mineral oils, molasses, latex and chemicals.

Lever-Sunlight Jetty (Private): Jetty 75 m. max. draft 10 ft. at LW. (no harbour dues).

N.V. Van Neerbos Ind. en Handel My. Jetty (Private): Length of jetty 70 m., max. draft 10 ft. at LW. 1 electric 3-ton crane.

Royal Shell Jetties (Private): 4 jetties, length 25 m. each, with berths for vessels up to 12 ft. draft. Tank installation for mineral oils; 77 tanks, total capacity 412,640 cu.m.

Harbour dues by arrangement.

Windmill Holland Fertilizer Works Harbour (Private): Length of harbour 300 m. max., draft 11 to 14 ft. at LW. One jetty on riverside, length 105 m. Max. draft 16 ft. at LW. Harbour dues by arrangement.

FRESH WATER: Available by barge.

FUEL: Available by barge.

REPAIRS: *Ship Repair Yard "Vlaardingen Oost":* All kinds of repairs undertaken. Outfitting quay of 1,100 ft. length. Anchor and chain factory. *Machinefabriek Kreber:* Builders and repairers of boilers, engines and various kinds of dredgers.

SURVEYORS: Saybolt Cargo Inspectors available at Vlaardingen, others (Caleb Brett, Bureau Verwey, etc.) at Rotterdam.

Lloyd's Register, American Bureau, Bureau Veritas and Det Norske Veritas Surveyors available at Rotterdam.

DRYDOCKS: Three drydocks (capacity 3,500, 4,200 and 5,300 tons) and one broadside slipway of 400 ft. (capacity 3,500 tons) in Vulcaan Harbour (Western part).

AIRPORT: Rotterdam Airport (designed for international short and medium haul air traffic) lies at a distance of 10 km. from the Vlaardingen port area.

EMERGENCY CO-ORDINATION CENTRE: Alarmcentrale Politie. Tel: 34 44 44. Telex: 26420. VHF Channel 11 (Port of Rotterdam).

AUTHORITY: Port of Vlaardingen, Gemeentewerken, Hoflaan 27, P.O.Box 141, 3130 AC Vlaardingen, Netherlands. *Tel:* 010 – 340044/342370. *Contact:* Mr. S. van Berge, Harbour Master.

YMUIDEN (Ijmuiden): 52.28 N. 04.34 E. (See Plan Book)

Also refer to "Amsterdam".

DOCUMENTS:

2 Personal Effects Lists.
2 Stores Lists.
3 Crew Lists.
3 Passenger Lists.
Declaration of Health.

PILOTAGE: On entering and leaving Ymuiden Government pilotage is compulsory. A pilot vessel with Pilots cruises at sea in the vicinity of Ymuiden between the light whistle buoy and the moles. Pilot boarding position: Lat. 52° 28.8′ N., Long. 4° 25.6′ E.

In order to avoid delay, Masters, who require a Pilot must advise their ETA not less than 4 hours in advance to "Pilotage Ymuiden". This advice must be amended, if vessel's ETA changes more than 2 hours from the original advice.

The text of the message must contain:

a. The word "ETA-Pilot".
b. Expected time arrival (group of 4 figures) in middle European time.
c. Draft with indication of unit applied.
d. Port of destination.

"Pilotage Ymuiden" can be informed via Scheveningen Radio or via VHF Channel 12. Pilotage and navigation are possible at night.

Pilot Ladders: Pilots strictly adhere to Regulation 17b, Chapter V of the International Convention for the Safety of Life at Sea, which reads as follows:

"Whenever the distance from sea level to the point of access to the ship is more than 30 ft. (9 m.), access from the pilot ladder to the ship shall be by means of an accommodation ladder or by another equally safe and convenient means".

Pilot from Helicopter: When the pilot service per pilot cutter has been suspended owing to weather conditions it is possible to take a Pilot on board vessels by helicopter. Helicopter pilotage is carried out for vessels which have an obstacle free hoisting area on deck of minimum 15 ft. in diameter. Deck plans should be provided in advance.

Helicopter rates:

Dfl. 5,170. – per flying hour/pro rata exclusive fuel costs.
Dfl. 282. – per hoist transfer.
Dfl. 400. – Additional charge per flying hour from 1800 until 0600 hrs. and on Saturdays, Sundays and Dutch public holidays.

A variable fee per flying hour for fuel consumption fluctuating monthly.

Restrictions

1. Minimum visibility 800 m. at 150 ft. above sea level.
2. Maximum wind Force 10 (55 kts.).
3. Severe turbulence and icing conditions.

ANCHORAGE: Vessels may anchor off Ymuiden outside the breakwaters.

MAX. SIZE: For North Sea Canal, entrance lock 1312 ft. long, 164 ft. wide. 49 ft. 02 in. depth. Density: 1016.

The official maximum draft to enter Ymuiden is 43 ft. salt water. Vessels with a draft of 43 ft. to 45 ft. salt water may enter Ymuiden and proceed to Amsterdam after special permission thereto has been given by the Government Harbour Master at Ymuiden. Such permission to be applied for well in advance.

HEALTH: Pratique granted automatically on arrival after completion of Maritime Declaration of Health. In case of suspected disease on board notify Agent by radio before arrival advising full details.

RADIO: *Obo-Carriers:* Masters of this type of vessel must, when calling to load and/or discharge dry cargo, cable at least 24 hours prior to arrival, the following information:

1. That vessel has no slops on board and is certified gas free or alternatively;
2. a. Correct name of liquid cargo carried last, with place and date of discharge.
   b. Stowage of cargo remnants (gases and/or liquids) and whether mixed with water or not.
   c. Whether non-gas free spaces are adjacent to dry cargo holds and if so, which holds.
   d. Which spaces contain inert gas.

RADAR/VHF: The port is equipped with a shore based radar installation to facilitate navigation if necessary. Ymuiden has a VHF installation and Masters of vessels entering or leaving the port area are strongly recommended to contact the Harbour Master's Office by VHF Channel 11 to obtain information for safe navigation and rapid locking.

New Maritime Traffic Control Centre in operation.

TUGS: Available. Meet vessel in harbour entrance if required.

BERTHING: Outer Harbour: Coal and ore cargoes discharged to Blast Furnace and Steel Works Company in Outer Harbour.

Quay 1: Length of quay: 1,360 ft. Depth alongside quay: 29 ft. 6 in. LLWS.

Opposite the quay there are 3 dolphins available where one vessel can wait for a loading/discharging berth (up to 34 ft. depth).

Equipment:

2 cranes, lifting capacity 30 tons, max. outreach 57 ft.
1 crane, lifting capacity 30 tons, max. outreach 63 ft.

Finished products such as rolling mill products, pig-iron, cast iron, steel ingots, slabs and coils are handled.

Supplies: Water obtainable from quay. Stores can be delivered by truck, bunkers by barge.

Quay 2: Length of quay: 1,800 ft. Depth alongside quay: 45 ft. 9 in. at LLWS.

Max. draft: The entrance to Outer Harbour is accessible to vessels up to 43 ft. draft and with special permission of the Harbour Authorities up to 45 ft. draft salt water.

Equipment:

3 bridgecranes, lifting capacity 40 tons each, max. outreach 115 ft.
2 conveyor belt systems (capacity 6,000 t.p.h.).

Despatch:

About 60,000 tons iron ore per 24 hours. About 50,000 tons coal per 24 hours.

Supplies: Water obtainable from quay. Stores can be delivered by truck, bunkers by barge.

Quay 3: Length of quay: 825 ft. Depth alongside quay: 31 ft. 6 in. LLWS. With special permission of the harbour authorities, max. sailing draft 34 ft. 6 in. West of the quay are 4 dolphins available where a vessel can wait for a loading/discharging berth (up to 31 ft. 6 in. draft).

Equipment: 2 cranes with a capacity of 60 tons each. Outreach 70 ft.

Inner Harbours: These harbours are mainly used for loading or discharging smaller vessels having drafts between 11 ft. and 20 ft.

Finished products such as rolling mill products, pig-iron, cast iron, steel ingots, slabs, coils but also fertilisers are handled.

CRANES: Inner Harbour No. 1 – 1 portal crane.
Inner Harbour No. 2 – 1×7.5 ton portal crane.
Inner Harbour No. 3 – 3×30 ton portal cranes.

STEVEDORES: *Working Hours:* In the Outer Harbours round the clock, also on Sundays and holidays.

In the Inner Harbour round the clock except from 1400 hrs. on Saturdays until 0600 hrs. on Monday.

FRESH WATER: Available from quay.

FUEL: Available by barge.

MEDICAL: Doctors, hospital and all services available.

REPAIRS: Possible.

DRY DOCKS: None.

CUSTOMS ALLOWANCES: 200 cigarettes for each crew member; 5 litres spirits for whole ship.

CONSULS: And all general information; refer to "Amsterdam".

DEVELOPMENTS: Proposed new outer port to be built South of South Harbour Entrance Mole to accommodate vessels up to 62 ft. draft.

AUTHORITY: Rijkshavendienst Ymuiden.

AGENT: See "Amsterdam".

ZAANDAM (Zaanstad): 52.26 N. 04.49 E. (See Plan Book)

LOCATION: Zaandam lies on the Northern side of the North Sea Canal, near to Amsterdam. See "North Sea Canal" and "Amsterdam" plans. The port of Zaanstad is divided into two parts by "Wilhelmina" sluice, the outer harbour being for large vessels and the inner harbour for coasters, etc.

PORT LIMITS: A line drawn from the Western side of Nieuwe Zeehaven entrance to the Eastern side of Zijkanaal "G" entrance defines the port limits.

DOCUMENTS: IMO crew list, IMO fal form 5, other Customs papers to be supplied by Agents.

PILOTAGE: Procedure, etc. same as for Amsterdam. Not compulsory, but recommended. Pilot will take vessels all the way to Zaanstad. Amsterdam Harbour Service should be notified on VHF Channel 14 of vessel's intentions, they will arrange for Zaanstad Harbour Service vessel to meet the vessel at the entrance to Zijkanaal "G" and direct it to its berth. When a vessel is leaving for sea, notice should be given to the Sluice Command via VHF Channel 11.

ANCHORAGE: It is prohibited to anchor in the port of Zaanstad.

RESTRICTIONS: Vessels with dangerous cargoes will not be handled at night.

All Zaandam harbours have direct unrestricted connection with the North Sea Canal.

LOCKS: Wilhelmina Sluice is 116.8 m. long, 12 m. wide and has a depth of 3.12 m.

MAX. SIZE: Max. draft 9.0 m.

HEALTH: Same as Ijmuiden.

RADIO: Scheveningen Radio.

VHF: Wilhelmina Sluice – Channel 20. Alexander Bridge – Channel 20. Hembrug Bridge (across North Sea Canal) – Channels 14 and 11.

RADAR: No port radar service.

TUGS: Available.

BERTHING: (Docks)

Isaac Baarthaven: Length 900 m., width 70 m., depth 9 m. Quayage 370 m., with depths of 5 m. – 9 m. alongside.

Dirk Metselaarhaven: Length 600 m., width 112 m., depth 10 m. Quayage 180 m., for transhipping liquids only (Private).

Zijkanaal E: Length 400 m., width 45 m. depth 7 m. Quayage 40 m., for transhipping only.

Old Timber Harbour:
Quay length 230 m., Depth 9 m.
Quay length 300 m., Depth 5 m. – 9 m.
Havenstraat, 4 Dolphins, 170 m. Depth 5 m.
Quayage, Pont-south, 90 m., Depth 5 m.
Quayage, Pont-north, 90 m., Depth 8 m.
Slipways only for small ships.
4 Ro/Ro berths, Width approximately 20 m. each, depth 9 m.

Nieuwe Zeehaven: Length 700 m., Width 130 m., Depth 9 m. Vessels up to 9 m. draft can berth. No bridges and no locks.

CRANES: Mobile cranes only.

BULK CARGO FACILITIES: None.

SPECIALISED CARGO HANDLING FACILITIES: Ro/Ro vessels can be discharged in Oude Haven.

BRIDGES: *Regulations concerning railway bridge (Hembridge) across the North Sea Canal:*

If, on account of the bridge being closed to shipping, more than one ship has to come to a stop on either side of the bridge, vessels have to wait in the order they arrived, keeping proper distance. In foggy weather, two fixed white lights with adjustable power are shown from the South pillar West side and the protecting pillar East side and one identical fixed white light on the protecting pillar West side and the protecting pillar East side. When visibility is
Less than 1000 m.: minimum power
Less than 500 m.: half power
Less than 200 m.: maximum power.

If the Hembridge is closed, vessels with a maximum height of 10.70 m. above Amsterdam level (that is 11.20 m. above ordinary canal level) are allowed to pass underneath, only if a yellow light is shown in the lower line of the revolving part above the fairway.

Notices, indicating the distance from the bridge, have been placed at 500 m. at either side and notices to stop at 150 m. at the West side and 225 m. at the East side. Near each notice to stop a scale shows the height of the bridge's revolving part above the canal level.

When the bridge is closed Masters must stop their ships and they may on no account proceed unless the signal is given that passage is allowed. Ships, however, being in the actual course of proceeding towards the bridge and with their bows already passed the 500 m. distance notice, at the time the signal is hoisted that the passage is obstructed, may continue and pass the bridge as yet. Ships whose bows have not passed the 500 m. distance notice at the time the signal is given, must be brought to a full stop before the stop notice.

After the bridge is opened again the ships must pass in the order they arrived.

Between the notices mentioned ships sailing in the same direction must keep a distance of at least 70 m.

STEVEDORES: *Working Hours:* Monday – Friday 0600 – 2130 hrs.
Saturday/Sunday: 2130 – 0600 hrs.

MEDICAL: Full hospital facilities available without prior notice.

DENSITY: 1015.

FRESH WATER: Available.

FUEL: Arranged from Amsterdam.

REPAIRS: Possible.

DRY DOCKS: At Amsterdam.

CONSULS: Ghana, Tel: 075-35 16 31.

All others at Amsterdam (20 km.).

REPATRIATION: Possible.

AIRPORT: Schiphol Airport (Amsterdam) 20 km.

POLICE/AMBULANCE/FIRE: Tel: 075-32 32 32.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Port holidays similar to major Dutch ports, plus 2 extra holidays (Whit Tuesday and 1st May).

AUTHORITY: Municipality of Zaanstad, Westkade 2, 1506 BA Zaandam, Netherlands. *Tel:* 075-12 30 60. *Contact:* P.C.C. Majoor, Harbour Director.

NOTES

Please also advise Shipping Guides Ltd.

Netherlands Antilles

BARCADERA, Aruba: 12.29 N. 70.00 W.

(See Plan Book)

LOCATION: The industrial harbour of Aruba is situated three miles S.E. of Oranjestad.

DOCUMENTS: Documents and all general information, refer to "Oranjestad".

PILOTAGE: Compulsory.

RESTRICTIONS: Harbour open day and night. Depth of water in entrance and throughout harbour is 36 ft. Swinging basin width 1,000 ft.

MAX. SIZE: Max. LOA 232 m., max. draft 33 ft.

TUGS: Available.

BERTHING: 1,150 ft. of dockside accommodation.

FRESH WATER: Not available.

FUEL: Can be supplied.

AUTHORITY: See "Oranjestad".

BONAIRE TERMINAL (Brasil): 12.13 N. 68.23 W.

(See Plan Book)

OPERATORS: Bonaire Petroleum Corporation N.V. Terminal is capable of handling all types of crude oil and heavy oils (bunker C and residual fuels). Heated and non-heated storage tanks are available for storage, blending and transhipment.

LOCATION: No. 1 Jetty is situated on the South coast of the Northern portion of the Island of Bonaire in Lat. 12° 13′ 12.9″ N., Long. 68° 23′ 17.2″ W.

DOCUMENTS:

5 Crew Lists.
2 Stores List.
2 Lists of Personal Effects of Crew.
5 Medicine and Drugs Lists.
1 Vaccination List.

PILOTAGE: Compulsory. The Pilot-Berthing Master will board the vessel at the established arrival point in Lat. 12° 10′ N., Long. 68° 25′ W., which is 3.6 miles, 208° True from No. 1 Jetty.

The Pilot will embark from one of the tugs or launches assigned to assist the vessel in the berthing operation. The Pilot will assist the Master in every way possible to manoeuvre the vessel from the arrival point into the berth with the assistance of 2, or in case of a VLCC 3 tugs and utilizing the services of 1 or 2 mooring launches to run mooring lines from the vessel to the breasting and mooring dolphins.

ANCHORAGE: There is no anchorage area at Bonaire for tankers; therefore, if the berth is occupied, vessels will be appropriately instructed to remain within radio/telephone (VHF Channels 16 and 13) radius pending advice with respect to a clear berth or other advices.

NAVIGATION: Navigable waters surrounding Bonaire Island are clear; however, the coasts of the Island are steep-to and should be avoided. The currents in the offing and off the points of the Island set Westward. On days with little wind a weak current sets to the Westward, generally parallel with the coast from Kralendijk Roads toward Wekoewa Point and parallel to the coast line in way of the jetty. It is urged that reference be made to the British Admiralty South American Pilot Volume V or United States HO Pub. 22 Sailing Directions for the West Indies Volume II or equivalent publication of the Netherlands Government.

Lacre Point, on which a light is shown, is at the Southern extremity of Bonaire. A light is situated on Boca Spelonk, the Eastern mid-point of the Island. Seroe Bentana Light, situated near the Northern extremity of the Island, is visible for approach from the N.E. through N.W. South of 250°/070° on the West side of the Northern end of the Island this light is obscured and then jetty lights and Radio Netherland Towers may be used for bearings.

Prevailing winds are the E.N.E. trade winds.

HAZARD ZONE: *Radio Transmitting Installation:* Vessels approaching Bonaire should remain clear of an area within a radius of 3 nautical miles from the Radio Netherlands Towers situated on the Island of Bonaire in Lat. 12° 13′ N., Long. 68° 19′ 15″ W. This area is noted as a danger area due to strong radiation from the powerful radio transmitters on shore. Bonaire Terminal is situated sufficiently West of this area to be well clear of any radio radiation influence.

HEALTH: There are no health formalities.

RADIO: When a vessel leaves its loading port, the shipper should advise the date of anticipated arrival at Bonaire. For vessels departing from remote loading ports, the estimated arrival date should be revised at least once each week while the vessel is en route.

A government wireless/telegraph station operates daily from 0700 to 2130 hrs. local time (1100 to 0130 hrs. GMT). Vessels bound for Bonaire should route their messages for Bonaire through Curacao Radio (PJC).

Arrival Advice: The Master should advise his estimated time of arrival not less than 72 hours in advance, again 48 hours in advance and again 24 hours prior to arrival, and this last message should be revised if an unusual change in the ETA should occur. Wireless telegraph messages of this nature must be sent to the ship's Agent who, in turn, will immediately relay the information to the Terminal Management.

Tankers from Mediterranean, Africa and Middle East should give ETAs 10 and 5 days as well as 72, 48 and 24 hours.

The text of any one of the arrival advices should contain the following data in addition to the declared time of arrival:

1. Draft of vessel, fore and aft.
2. Available fittings, i.e. number and diameter of connections at deck manifold system for prompt connecting of 2×24 in. and/or 2×12 in. steel swivel loading arms.
3. Any conditions which may affect loading or unloading operations.
4. Any unusual condition which may require abnormal attention prior to berthing.
5. Quantity of ballast and estimated time of deballasting.

VHF: International VHF Maritime Band Communication should be commenced within a radius of 30 miles from the Terminal, or more, if possible. The Terminal may be called on International VHF Channel 16 (156.800 MHz). When radio/telephone contact with the Terminal has been established, communication should then be shifted to Channel 13 (156.650 MHz).

After initial radio/telephone contact has been established, radio/telephone communication with the Terminal will remain on Channel 13. This will include communication with the 2 tugs and the 2 mooring launches on standby, all of which will be available to assist the vessel into the berth.

Mooring, Unmooring VHF Communication: Communication on Channel 13 during the immediate approach and mooring procedure will be confined rigidly to berthing operations which includes all directives from the Berthing Master to the tugs, the mooring launches and the jetty. The only messages which may interfere with these communications will be those caused by an extreme emergency.

After the vessel has been secured in the berth and the Berthing Master has cleared all berthing operations, communication on VHF Channel 13 will be secured and all base VHF receivers will be returned to guard Channel 16 pending an emergency or when the Berthing Master resumes his function for a departing vessel. It is to be noted that hand radio/telephone sets transmit and receive only on Channel 13. The base sets in the Terminal Office (Control Room) and on each of the tugs and launches is equipped with radio/telephone equipment for transmitting and receiving on Channels 16 and/or 13.

Radio/Telephone UHF (Private Frequency): Communication between the platform and the vessel and the Terminal before, during and after transfer of product will be via portable intrinsically safe, hand carried, radio/telephones supplied by the shore on a private UHF frequency.

Radio/Telephone VHF Resume Use Departing: When the vessel is ready to depart and the Berthing Master has boarded and resumes his function, VHF radio/telephone communication will again be established on International Maritime Channel 13 between the vessel's bridge, the 2 or 3 tugs, the mooring launches and the jetty, so that the casting off operation may be properly accomplished.

Radio Telephone – Guard Call Channel 16: After the Berthing Master disembarks and the tugs are dismissed, and the vessel has departed full away, it is expected the vessel will resume a guard watch on Channel 16. The terminal station may be called on Channel 16 and/or 13.

Radio Repairs: A Radio Holland Service Engineer available and can be arranged through the Agent.

TUGS: Tug assistance is compulsory. Mooring launches are available.

Normally 2 tugs are used for ships up to 75,000 g.r.t. Above 75,000 g.r.t. 3 tugs are used.

When 2 tugs are used, 1 each at the fore and aft ends of the main deck. The third tug is used on the port side bow until vessel is in front of the platform, then third tug moves to starboard side centre of the main deck. Each tug supplies 2 lines. When unberthing only 2 tugs are used to push and do not make fast.

CUSTOMS/IMMIGRATION: When the vessel is secure in the berth and the gangway is landed on deck, the Immigration Officer, the Customs Officer and the Agent will board to attend formal entry of the vessel. The Immigration Officer may act on behalf of the Quarantine Service.

Immigration: Two copies of the crew list are to be ready for presentation to the Immigration Officer. Crew List is to be delivered to the Terminal Gate for Security Control, therefore no Gate Passes are required.

Customs: The Customs Officer will require 1 Crew List, 1 Stores List, 1 List of Personal Effects for those crew men leaving the vessel at Bonaire and 1 List of all Medicines and Drugs. The Customs Officer with the assistance of the ship's Agent will prepare the Inward Clearance document. This document is to be signed by the Master. Upon completion of the above formalities, the vessel is declared free and shore leave may be granted.

BERTHING: Berth No. 1: Max. size vessels 500,000 d.w.t. on full draft and no restrictions for length and beam.

Minimum size vessels approximately 25,000 d.w.t. due to distance between the Inner Breasting Dolphins Nos. BD2 and BD3.

Mooring Facilities: Berth No. 1 consists of an operating platform 132 ft. 10 in. (40.48 m.) long facing the sea and 94 ft. (28.65 m.) wide toward the shore with 2×24 in. and 16 in. swivel jointed steel loading arms for the transfer of petroleum products. Loading arms are equipped with hydraulic quick couplings and will fit on all standard ASA/DIN flanges. The 24 in. loading arms are constructed to fit on 16 in., 18 in. and 24 in. ship connections and the 16 in. loading arms are constructed to fit on 10 in., 12 in., 14 in. and 16 in. ship connections. The waterfront side of the platform is 22 ft. 3 in. (6.787 m.) inside and away from the ship's side.

Breasting Dolphins: There are 6 breasting dolphins, 4 of which are designed for the vessel to rest against and to which forward and back spring lines are to be secured to heavy quick-release mooring hooks. At each end of the system of breasting dolphins there is 1 landing dolphin offset to allow a vessel 5° off the parallel line to land against the berth system. These are noted "a" for the offset dolphin and the main dolphin is noted "b". The dolphins are numbered from No. BD1a and BD1b in the West and through BD2, BD3 and BD4 and BD4a to the East. The centre line of the berthing facility is 17 ft. 5 in. (5.3 m.) East of the centre line of the operating platform. This point is well marked on the seaward panel of the platform with a 4 in. wide white reflecting vertical stripe. BD2 and BD3 are each 135 ft. (41.148 m.) West and East of this white vertical stripe. BD1b is 80 ft. (24.4 m.) further West from BD2 and BD4 is 119 ft. (36.4 m.) further East from BD3.

Mooring Dolphins: Inshore 215 ft. (65.532 m.) perpendicular from the berthing line are 6 mooring dolphins. These dolphins are numbered from MD1 in the West to MD6 in the East, MD3 and MD4 are each 350 ft. (106.680 m.) West and East from the centre line of the mooring structure system noted by the white vertical stripe on the seaward face of the operating platform. MD2 and MD5 are each 250 ft. (76.200 m.) West and East respectively, from MD3 and MD4. MD1 and MD6 are each again 250 ft. (76.200 m.) West and East respectively, from MD2 and MD5.

Berth No. 2: Max. size vessels 150,000 d.w.t. with limited ballast or cargo quantity on board, down to 90,000 d.w.t. fully loaded. Max. depth of water on mooring line is 60 ft.

Minimum size vessels approximately 25,000 d.w.t. due to distance between the Inner Breasting Dolphin Nos. BD2 and BD3.

Mooring Facilities: Berth No. 2 consists of a triangular platform 49 ft. (14.94 m.) long, facing the sea and 42 ft. 6 in. (12.95 m.) wide towards the shore with 3×12 in. swivel jointed steel loading arms for the transfer of petroleum products. The waterfront side is 11 ft. 6 in. inside and away from the ship's side. All loading arms are equipped with hydraulic quick couplings and will fit on all standard ASA/DIN flanges of 10 in., 12 in., 14 in. and 16 in. on ship's manifold.

Breasting Dolphins: There are 4 breasting dolphins for the vessel to rest against and to which forward and back springs are to be secured to heavy quick-release mooring hooks. The dolphins are numbered BD1 and BD2 on the West side of the platform and BD3 and BD4 on the East side. BD2 is located 139 ft. 4 in. (42.5 m.) West of the centre line of the platform and BD3 is located 123 ft. (37.5 m.) East of the centre line. BD1 and BD4 are each 5.7 m. further West and East respectively from BD2 and BD3.

Mooring Dolphins: Inshore, 164 ft. perpendicular from the berthing line are 3 mooring dolphins of which 2 are on the East side and 1 on the West side to handle respectively the head and sternlines. These dolphins are numbered MD1, MD2 and MD3 from West to East. MD1 is 328 ft. (100 m.) West of the centre line of the operating platform. MD2 is 328 ft. (100 m.) East of the centre line of the operating platform, MD3 is 262 ft. (80 m.) East of MD2.

General information applicable for both jetties:

Capstans: On each of the breasting and mooring dolphins there is a small capstan with sufficient power to heave up on to the deck of the dolphin a ship's mooring line for securing to the heavy quick-release hooks.

Mooring Lines: Prior to coming alongside, the vessel must have all mooring lines on station and available on that side which will be to the berth (normally port side to). Bearing in mind that the product transfer is via steel swivel loading arms, it is imperative that the forward and back spring lines be adequate to maintain a minimum fore and aft motion of the vessel to remain within the limitation of the envelope of loading arms.

Spring, Breasting, Head and Sternlines: The first lines lead out are headlines to the mooring dolphin, immediately followed by the forward and back springs to the breasting dolphins. Hereafter respectively the forward and after breasting lines are lead out to the appropriate mooring dolphins and finally the sternlines to the mooring dolphin. The procedure may be altered in accord with physical equipment on the ship, weather and sea conditions, along with other circumstances, all subject to the Berthing Master's requirements and combined approval of the Master and terminal management.

Mixed Mooring Lines Prohibited: Mixed moorings are prohibited, i.e. a wire and a fibre rope in parallel service is undesirable due to unequal elasticity. All mooring lines must be so arranged that loss of effect cannot occur when slacking off or heaving in one line, as required, due to the rise or lowering of the vessel during discharge or loading of cargo.

Mooring Machinery – Deck Winches: All deck machinery used for the heaving in and control of mooring lines must be operable. A vessel having deck machinery in poor state of maintenance to that point where mooring lines cannot be hove tight or brakes that tend to slip under tension will be sufficient reason to require consideration of terminal management to refuse connecting of the steel loading arms, or if same are already connected and the mooring lines become insecure, all transfer of product will be stopped and the steel loading arms disconnected pending correction of the mooring situation.

Surge-Tension Controls Prohibited: Wire mooring lines not on winch drums are not to be used for spring lines. Mooring wires secured on surge and tension controlled winches are prohibited. All mooring lines must be secured positively, i.e. on winch drums with the brake properly drawn tight or properly secured on bitts.

Power to Deck Machinery: At no time during the period the vessel is in berth is the power to operate deck machinery to be shut off.

Motion of Vessel in Berth: The vessel, while loading arms are connected, must not be permitted any motion alongside or away from its proper position in berth.

Surveillance of Mooring Lines: Mooring lines must remain under constant surveillance during unloading and loading operations. Failure to ease tension on mooring lines during unloading or failure to maintain proper tension on mooring lines while loading will be sufficient reason to stop transfer of product.

Fire Warp – Emergency Towing Wire: After the vessel is all fast fore and aft, an emergency wire of suitable quality and strength to tow the vessel should be positioned on the offshore bow and the after offshore quarter of the ship. This towing wire should be secured so that the eye may be readily picked up by a towing vessel. It is required that the length of the wire hawser should be not less than one-half again that of the highest freeboard of the vessel at the point of its location on the ship where the ship end is well fast on bitts.

EMERGENCY SIGNAL: In the event of any form of emergency such as fire, bursting of transfer piping, Operating Platform emergency signal will be an intermittent signal on the general alarm system for not less than 15 seconds. Since a shore radio is supplied to the vessel for proper communication, this radio must be used in the event of an emergency to inform the Loading Master. The vessel will use its own emergency signals in the event of any emergency on board.

To co-ordinate any emergency procedure, the personnel on the Operating Platform must be advised of the vessel's emergency signals.

In the event of any emergency either on board the vessel or the operating platform all oil transfer must be stopped and all oil transfer valves closed.

LOADING: *Electric Bond – Earthing:* Prior to manoeuvring the loading/unloading steel mechanical loading arms toward the vessel from the Operating Platform, the electric bond wire must be connected to a clean metal contact on the vessel in the area of the manifold.

The electric bond wire shall not be disconnected until the loading/unloading mechanical arms have been disconnected and manoeuvred well clear of the vessel.

The flame proof switch on the jetty will remain open until the electric bond wire has been connected to the ship. Prior to disconnecting the electric bond wire from the ship, the flame proof switch on the jetty will have been opened.

Connection to Oil Transfer Piping System: On both jetties there are steel pipe swivel jointed loading/unloading arms. (See also "Berthing").

This equipment is controlled either from the deck of the Operating Platform or from the ship's deck by using a remote control panel. Connections of the fittings requires clean flat faced flanges on the vessel's manifold, using a O-ring gasket, to ensure a secure tight connection.

Cargo and Ballast Transfer: Before transfer of cargo or ballast may be started, the Chief Officer and the Terminal Representative will ensure that all necessary controls and safety measures have been attended. A Declaration of Inspection is to be signed by a responsible Ship's Officer and the Terminal representative certifying that all precautionary measures have been taken, that all equipment used in the transfer operation is in proper order and that all concerned are in agreement on the proper procedure of the operation.

Discharge of Cargo: Upon advice from the Terminal Loading Master to the Ship's Officer in charge that oil transfer may be started, the Officer will arrange for the initial flow to be slow with sufficient pressure to permit inspection of all transfer piping and connections for any leakage. When the terminal personnel advise they are receiving product, the flow may be increased to the rate agreed upon.

Completion of Cargo Discharge: After all cargo tanks have been drained and the pumps have lost suction and the discharge of cargo has been declared finished, the flow of product will have stopped. With the agreement between the Ship's Officer and the Terminal Marine Supervisor, the oil transfer valves on the Operating Platform will be closed. All product remaining in the unloading arms will be drained back into the vessel. If the vessel's pipe-line system does not allow the complete draining of the unloading arm, then arrangements must be made to drain the arm into a container or via a drain hose led into a cargo tank. *No product will be permitted to drain out onto the open deck of the vessel!* After the arms have been completely drained, they may be disconnected and the ends blanked off to prevent any drippage of oil.

Loading of Cargo: Upon advice from the Ship's Officer in charge that oil transfer may be started, the Terminal Loading Master will arrange for the initial flow of product into the vessel. When the Ship's Officer advises that he is satisfied that product is flowing in accord with the loading programme, he will advise the terminal personnel and the flow will be increased to the rate agreed upon.

Communication, Audible, Visual: Constant contact with the personnel on the Operating Platform during the topping off procedure is mandatory! The rate of flow of product is to be adjusted to that point where complete control is constant and that in the event of an emergency immediate shut down will not create any pressure surge on the shore transfer piping.

Topping Off of Cargo Tanks: Every precaution must be observed to avoid over-filling of any tank or causing any listing of the vessel. Observance of the trim by the stern shall be constant to avoid any undue strain upon the vessel's longitudinal structure. The cargo tanks and pipe-lines thereto on most tankers are segregated into groups. One tank in each group should be selected for the overflow relief tank by maintaining the level of liquid considerably lower than the other filling tanks to permit prompt relief of that tank reaching an overfilled level.

Completion of Loading: After all cargo has been loaded all product remaining in the loading arms will be drained into the vessel. If the vessel's pipe-line system does not permit complete draining of the loading arms, then arrangements must be made to drain the arm into a container or via a drain hose led into a cargo tank. *No product will be permitted to drain out onto the open deck of the vessel!* After the arms have been drained they may be disconnected and the ends blanked off to prevent any drippage of oil.

CRUDE OIL WASHING: Crude Oil Washing (C.O.W.) must be requested before arrival to obtain approval of the Terminal Manager.

It is the terminal's intention to allow vessels to C.O.W. at the terminal. However, the vessel must strictly adhere to the International Safety Guide for Oil Tankers and Terminals Guidelines pertaining to C.O.W. procedures and a terminal representative will check the procedure before and during the C.O.W.

BALLAST: *Ballast Loading:* Should the vessel have permanent ballast tanks with entirely separate pipe-lines and ballast transfer system sea water ballast may be loaded in accord with the Master's requirements.

Sea water ballast is not to be loaded into any cargo tanks or through any oil transfer system while there is any cargo on board the vessel. In the event of an emergency, special arrangements must be agreed upon with the terminal management for the loading of ballast into any cargo tanks before all of the cargo has been completely discharged.

The vessel's Senior Officer in charge will personally supervise the arrangement of the pumproom system for the ballasting operation. The Public Cargo Inspector will accompany the Officer into the pumproom to break the seals on the sea suction valves.

No sea suction valve may be opened until all down coming pipe-lines have been drained and are completely free of product and the down coming valve closed. In most instances the pumps should be operating just prior to opening the sea suction valve.

Ballast loading will be under the entire control of the ship's personnel and it is expected that all normal loading precautions will be observed.

Deballasting: En route to Bonaire the vessel should have thoroughly cleaned certain appropriate tanks for the containment of clean ballast for discharge overboard. Only dirty ballast (oil contaminated sea water) and tank cleaning slops are to be discharged into the terminal's ballast receiving system.

Ballast, Oily Water, Discharge: Under no circumstances will dirty ballast water be discharged overboard within a radius of 50 miles from any Netherlands Antilles Island.

Ballast Discharge to Shore: After the steel loading arm to be used has been connected to the ship's manifold, the discharge of ballast water will be accomplished in the same manner as the discharge of cargo.

Tank Bottoms and Slops: Upon completion of the deballasting operation, all of the vessel's tanks will be inspected and approved for the reception of cargo. The sea suction valves will then be sealed in the closed position by the public inspector or by a Bonaire Petroleum Corporation N.V. representative. Any bottoms and slops remaining must have the approval of terminal management prior to "loading on top".

MEDICAL: Modern facilities are available for medical and dental treatment. A "Medical Service Request" form must be signed by the Master for crew members requiring medical or dental attention.

In the case of crew members having to be left behind at Bonaire for hospitalisation or otherwise, Master must sign authorisation guaranteeing expense of attention rendered and repatriation.

FUEL: Bunkers for steam propelled tankers are available.

Bunker Transfer: During the period of time the vessel is in berth, the transfer of bunkers from one tank to another is prohibited. All bunkers to be consumed while in port must be available in that tank from which bunkers are normally consumed.

Fuel: Marine gasoil is available in small quantities from a shore storage tank. Limited Luboil available and supplied in drums. Water and fuel oil chemical treatment is available in drums by Drew-Chemical.

FRESH WATER: Fresh water on Bonaire is desalinised sea water and the supply is minimal, but available. 72 hours' notice is requested and maximum 100 tons can be supplied.

REPAIRS: There are no repair facilities on the Island of Bonaire. Upon sufficient advance notice, special service personnel and minor mechanical repair work may be arranged from Curacao. Transportation for such service personnel is via scheduled airline.

POLICE/AMBULANCE/FIRE: Tel. 8000 via Terminal's Control Room or Office.

CARGO INSPECTION: Along with the Government Boarding Officers the representative of the petroleum inspecting organization mutually engaged by the Shipper and Bonaire Petroleum Corporation N.V. will board the vessel for the purpose of gauging the cargo tanks, obtaining the temperature of the cargo and obtaining required samples. His function is to protect the interest of the vessel as well as the Shipper and the consignee. Every assistance is to be rendered to expedite his function on board the vessel. An Officer should accompany the Inspector while on board and should assist by making available all information requested such as cargo tank calibration tables, etc. Cargo transfer may not be commenced without the approval of the Inspector.

Completion of Discharge of Cargo – Inspection: Upon completion of discharge of the cargo, the Inspector will examine all of the cargo tanks and will sign the tank inspection certificate.

Loading Cargo, Inspection: In the case of a vessel arriving to load cargo, the Inspector will examine all of the cargo tanks to determine the condition of the cargo tanks for reception of the cargo. Upon completion of loading all of the cargo, the Inspector will gauge the cargo tanks, take temperatures and samples as required.

Incomplete or Part Cargo: In the event the vessel does not complete the discharge of cargo, or does not load a full cargo, the Inspector will board the vessel to gauge the cargo tanks to record the amount of cargo in the vessel after transfer operations have been completed.

Cargo Pumproom Sea Suctions: Prior to loading or unloading the Public Inspector will certify that the sea suction valves connected to the vessel's oil transfer system are closed, lashed and sealed. *Do not lock these valves under any circumstances.* These valves are to be sealed in the *Closed* position and sufficiently lashed so they may not open due to vibration or any other reason.

STORES/PROVISIONS/LAUNDRY: All stores and provisions are available. There are no deck and engine stores available. Upon sufficient advance notice, all items not available on Bonaire may be obtained from Curacao.

Laundry service may be arranged through the ship's Agent and available for unlimited quantities. Advance notice required.

DEVELOPMENTS: Clean product storage will be available from mid 1984.

A process-unit is under construction and is operational July 1984. This process unit is specially designed to upgrade off-spec. products and dewater product.

SHIPMASTER'S REPORT: 1977. *In his report the Master called the port – "Brasil".*

Documents:

5 Crew Lists.
3 Stores Lists.
3 Personal Effects Lists.
1 Vaccination List.

Immigration Officer acts on behalf of Quarantine service. State of health on board to be given in 72 hour ETA message.

Services: Fresh water by truck from Kralendijk and very expensive. Very limited quantities of shipchandlery supplies. No deck or engine stores. Gas oil limited and by drums only. Bunker "C" only. Lube oil limited to some brands and limited supply by drums. Water and fuel oil chemical treatment available. Radio Holland Service Engineer available. Repair men can be flown in from Curacao. Very limited laundry service. If required at least 4 days' notice advisable. Tankers from Mediterranean, Africa and Gulf should give ETAs 10 and 5 days as well as 72/48/24 hours, any of which to give arrival draft F & A, number and diameter of connections, any condition affecting loading or discharging, ballast quantity, clean or otherwise and slops quantity, Pilot advised that 10 days longest, so far, that vessel waited off for berth. Have adequate fresh water on board for this contingency.

Berthing: No. 1 Jetty: Least depth alongside 110 ft. Loading/discharging Chiksans 2×24 in. and 2×12 in. Max. Size 500,000 d.w.t.

No. 2 Jetty: Least depth alongside 60 ft. Loading/Discharging Chiksans 3×12 in. Max. size 80,000 d.w.t. Product handled: Crude. Max. pressure; 125 p.s.i.

VHF contact with BOPEC on Channel 16 at 25 miles, then stand-by on Channel 13 for instructions. On berth VHF supplied to maintain shore contact with control who pass messages to Agent at Kralendijk.

Immobilising of engines or transfer of bunkers not permitted on berth. Port side alongside always.

SHIPMASTER'S REPORT: May, 1979.

Documents: Immigration require 2 crew lists on IMO forms. One additional crew list to be supplied to Agent and another to the security gate also required are 2 personal effects lists and 3 stores lists.

Pilotage: The Pilot requires a combination of accommodation ladder and pilot ladder. He will not use the pilot hoist.

Berthing: For vessels of about 140,000 d.w.t. 2 tugs are used, 1 each at the fore and aft ends of the main deck. Each tug supplies 2 lines.

When unberthing the tugs push and do not make fast.

Tankers of 250,000 d.w.t. use 3 tugs.

Moorings: 3 head lines are passed ashore first, followed by 2 breast lines and 2 forward springs. At the after end 2 spring lines are passed ashore first followed by 2 breast lines and finally 3 stern lines. Only one mooring boat is used and he passes forward shore lines ashore first.

SHIPMASTER'S REPORT: February, 1980.

Documents: 3 Crew lists for Agent and 2 for Immigration.

Pilotage: Pilot requires accommodation ladder (usually starboard side) when disembarking for VLCCs.

Tankers: Crude oil washing permitted only for tanks which will be used for ballast.

Shore Leave: Passes not required.

AUTHORITY: Bonaire Petroleum Corporation N.V., Bopec Building, P.O.Box 117, Kralendijk, Bonaire, Netherlands Antilles. *Tel:* 8175, (Head Office), 8177 (Terminal). *Telex:* 1283 Bopec NA (Head Office), 1284 (Terminal). *Contact:* Dr. Th. G. M. Tijssen, Managing Director.

The Harbour Master of Bonaire.

BULLEN BAY, Curacao: 12.11 N. 69.01 W.

(See Plan Book)

LOCATION: Bullen Bay is an open bay on the South coast of Curacao, 8 miles N.W. of Willemstad.

DOCUMENTS: Documents and all General information, refer to "Willemstad".

PILOTAGE: Pilotage is compulsory and rendered day and night. There is no resident Pilot at the Bay. Ships arriving are piloted by government Pilots supplied from Willemstad. Ships leaving are piloted by Pilots employed by the Curacao Oil Terminal.

Pilot Station: 1 mile S.W. of Cape St. Marie (that is the cape on the West side of Bullen Bay).

Communications: Ships destined for Bullen Bay are to inform Traffic Control at Willemstad (call "Fort Nassau" on VHF Channel 16) and also Curacao Oil Terminal at Bullen Bay (VHF Channel 11) of their approach. The Pilots at Bullen Bay operate on VHF Channel 9.

ANCHORAGE: There is no anchorage in the bay. Ships that have to wait for berth are to remain in the vicinity within VHF radio range.

MAX. SIZE: 540,000 d.w.t. on full draft, LOA 1,350 ft.

TUGS: Compulsory. There are 2 tugs of 3,852 h.p. with 53 tons and 60 tons bollard pull and 1 tug of 2,500 h.p. with 35 tons bollard pull, stationed at Bullen Bay. 2 tugs will assist the tankers on their arrival and departure.

3 tugs will assist the VLCCs on their arrival and 2 tugs will assist on their departure.

BERTHING: *Curacao Oil Terminal:* Curacao Oil Terminal (COT) located at Bullen Bay facilitates economical trans-shipment of Eastern hemisphere crude arriving in very large crude carriers (VLCCs) for storage and on-carriage in smaller ships to draft restricted U.S. ports.

Jetties: Ships moor port side alongside.

Tanker jetties from East to West:

No. 1: 250,000 d.w.t. 4×12 in. connections, heading 196°
No. 2: 70,000 d.w.t. 4×12 in. connections, heading 177°
No. 3: 100,000 d.w.t. 4×12 in. connections, heading 146°
No. 4: 540,000 d.w.t. 4×16 in. connections, heading 129°
No. 5: 100,000 d.w.t. 4×12 in. connections, heading 127°
No. 6: 350,000 d.w.t. 4×16 in. connections, heading 124°

The tugboat jetty is located between Jetties No. 2 and 3.

Total tank capacity: 17,750,000 barrels.

1 – 1,000,000 barrels capacity – 1,000,000
16 – 750,000 barrels capacity – 12,000,000
6 – 375,000 barrels capacity – 2,250,000
38 – small tanks capacity – 2,500,000

Pipe-lines: Main track consists of 5 strings of 36 in. pipe. The jetties carry 2 strings of 36 in. pipe in a loop. The loading rate is up to 12,000 t.p.h. Tankers' discharge rate is up to 25,000 t.p.h.

Deballasting: Capacity 4,000 t.p.h. per jetty. Ballast treatment produces affluent of less than 20 parts per million (20 ppm) oil content.

Throughput:

Transhipment	1,200,000 barrels per day
Refinery import	250,000 barrels per day

Operators: Curacao Oil Terminal NV, P.O.Box 660, Willemstad, Curacao, Netherlands Antilles. Telex No. Curacao 1175.

FRESH WATER: Fresh water available at the piers.

FUEL: Bunker facilities for all grades are available at a rate of 3,800 bbls.p.h.

NAVIGATIONAL AIDS: There is a leading range of 043° True bearing on the West side of the bay for ships entering the bay, running 851 m. (approx. 4.5 cables) clear of the shore near Cape St. Marie, with red daymarks and a green and (yellowish) red light at night.

SHIPMASTER'S REPORT: February 1979.
Restrictions: Crude oil washing permitted subject to notice below. Tank wash piping must be tested before arrival and oxygen metres calibrated.
Health: As for U.S.A.
VHF: Channel 9 to give Notice of Readiness and for berthing with Pilot and tugs. Call Agent on Channel 25.
Berthing: Shore gangway at 2 largest berths.
Notice No. 1: Issued by Curacao Oil Terminal (C.O.T.)

Crude Oil Washing

Only tankers equipped with a well constructed inert gas installation and provided with fixed tank washing machines connected to the tank wash piping system by means of fixed steel piping may crude wash cargo tanks under the following conditions:

1. Oxygen content in cargo tank may not exceed 5% (*metres calibrated*).
2. Minimum inert gas pressure in cargo tank to be 250 mm. (10 in./water column) (0.025 hg/sq.cm. = −0.36 lb./sq.in).
3. Continuous supervision by a specifically appointed and experienced operator is mandatory.
4. The "in-line" O_2 analyser must be arranged to allow for calibration during inert gas operation.
5. The hydrants of the tankwash piping must be equipped with screwed-on heads.
6. Tankwash piping must be tested for tightness.
7. Exceed of discharge time will be for ship's account.

For each "crude washing" a request for cleaning must be submitted to the Head Operations of C.O.T.

Please sign for receipt: Curacao Oil Terminal N.V.
Signed..........................

Master
Operation Manager

Notice No. 2: Issued by N.V. Curacaosche Scheepvaart Maatschappij. Emmastad, Curacao, N.A.

CUSTOMS REGULATIONS
BONDED STORES

In connection with revised Customs Regulations for the ports of Curacao, we draw your attention to the following:

1. All stores on board of vessel on arrival, also personal effects, must be declared to Customs Officials when clearing in vessel.
2. While ship is in port, Customs Officials may seal bonded stores, e.g. beer, wine, spirits, cigarettes and tobacco.
   When sealing bonded stores, permission may be granted by the Customs Officials, to take out a certain amount of these stores, from the bonded store-room, before sealing the store-room.
3. Stores on board, which are *not* sealed by the Customs Officials, may be used on board vessels, but may not be taken ashore without permission of Customs.
4. All stores ordered in bond at the port of Curacao, MUST REMAIN UNBROACHED, until departure of vessel from Curacao, and it is more likely than not, that Customs Officials will board before departure for control. If bonded stores are found opened up, or missing, Customs will charge import duties, whilst the possibility exists that the ship may be fined for such breach of law.

SHIPMASTER'S REPORT: December, 1982.

Customs require one Narcotics List and will seal beer store if it contains more than 100 cases of beer.

If vessel requires to use shore crane for stores, etc., written permission must be obtained. This permission is supplied by Loading Master.

AUTHORITY: Harbour Master of Curacao.

CARACAS BAY, Curacao: 12.04 N. 68.52 W.

LOCATION: Caracas Bay is an open bay on the South coast of Curacao, 6 miles S.E. of Willemstad. This port, mainly used by tankers, bunker ships and large passenger liners, is specially fitted as an oil terminal.
DOCUMENTS: Documents and all general informations, refer to "Willemstad".
PILOTAGE: Pilotage is compulsory and rendered day and night. There is no resident Pilot at the bay. Ships at Caracas Bay are piloted by government Pilots supplied from Willemstad.

Pilot station: 1 mile SW of Lijhoek (that is the cape on the West side of Caracas Bay).
ANCHORAGE: There is no anchorage in the bay.
MAX. SIZE: Vessels with a max. overall length of 1,050 ft. and max. draft of 45 ft. can be accommodated. Max. depth 47 ft.
VHF: Ships destined for Caracas Bay are to inform traffic control at Willemstad (call "Fort Nassau" on VHF Channel 16) of their approach. There is no VHF radio station at Caracas Bay.
TUGS: Tugboats operate from Willemstad. Tug assistance only for ships arriving. Tugs are automatically provided:

1 tug for tankers up to 20,000 gross tons.
2 tugs for tankers above 20,000 gross tons.
1 tug for cargo and passenger ships exceeding 16,000 g.r.t. and 600 ft. length.
2 tugs for cargo and passenger ships exceeding 30,000 g.r.t.
Ships leave without tug assistance.

BERTHING: 2 piers owned by Shell Curacao Ltd. are at the East side of the bay, naturally protected from prevailing wind and sea, with depths up to 47 ft. alongside. Vessels dock directly with their port side along the piers. Pier No. 2, with a depth alongside of 47 ft., and pier No. 3, with a depth alongside of 47 ft., are newly built concrete piers/quays, modern and equipped for handling oil in bulk, with enough platform to serve also as passenger terminal. The largest cruise ships moor along these piers regularly.

The oil is transported through pipe-lines from the refinery at Emmastad to the storage tanks at Caracas Bay. 2 ships can bunker simultaneously. New electrically-driven centrifugal pumps, metering and blending equipment at the bay stand for efficiency to reduce bunkering time. Subject only to the capacity of ships receiving connections, loading rates up to 2,000 t.p.h. of bunker oil can readily be achieved.
FUEL: The piers are built as oil piers, modern and equipped to supply any kind of bunker or lubricating oil to any vessel.
FRESH WATER: Fresh water can be obtained via pipe-line on the wharves.
STEVEDORES: Lighters and longshoremen are supplied from Willemstad.
REPAIRS: Small repairs can be done at the bay through working barges alongside.
GENERAL: Clearance, port administration, port charges and regulations are the same as at Willemstad.
AUTHORITY: Curacao Port Authority, N.V., Werf de Wilde Z/N, Willemstad, Curacao, Netherlands Antilles. *Tel:* 611133, 611740. *Contact:* E. P. Sint Jago, Harbour Master.

FUIKBAY, Curacao: 12.03 N. 68.50 W.

LOCATION: Fuikbay, on the South coast of Curacao, 7 miles S.E. of Willemstad, is an inland bay with a 147 ft. wide navigable entrance. The depth of this harbour is 26 ft.
DOCUMENTS: Documents and general information, refer to "Willemstad".
PILOTAGE: Pilotage is compulsory.
ANCHORAGE: There is an anchorage area in the West side of the bay.
RESTRICTIONS: As a rule vessels only enter this port during daylight. Sailing can take place day and night.
MAX. SIZE: Vessels can enter and leave with a max. draft of 24 ft. and a max. length of 360 ft.
BERTHING: This bay is mainly used as a loading terminal of the "Mining Company Curacao" for export of phosphate rock mined out of the "Tafelberg". There is one berth under the conveyor which transports the phosphate rocks from shore into the holds of the vessel alongside. Depth alongside is 28 ft.

There is also a 84 ft. berth available for handling explosives or other cargo, usually named Westwerf. Only small vessels with a max. draft of 12 ft. can come alongside. Vessels with more draft can moor with the help of floats between ship and quay.

The piers are privately owned by "Mining Company Curacao" situated on private territory of this company.
FUEL: This port has no bunker facilities, so vessels bound for this port must take bunkers in Caracas Bay or Willemstad before or after calling at this port if bunkers are desired.
GENERAL: Other services such as tugboats, repairs, power, etc. are rendered from Willemstad. 5 ton mobile crane available.
AUTHORITY: Curacao Port Authority N.V., Werf de Wilde, Willemstad, Curacao, Netherlands Antilles. *Tel:* 611133, 611740. *Contact:* E. P. Sint Jago, Harbour Master.

KRALENDIJK, (including Salina) Bonaire: 12.09 N. 68.17 W. (See Plan Book)

PORT LIMITS: Within 3 miles of the Port.
DOCUMENTS:

	Customs	*Immigration*	*Agent*
Passenger list	1	2	2
Crew list	1	2	2
Personal effects list of crew	1		
Store list	1		
Curio list	1		

PILOTAGE: Pilot service is compulsory. Pilot meets vessels 0.75 miles S.W. of the berths. Pilot boat flies "H" flag by day and red over white light at night. The pilot boat is either a small tugboat or a fast speed GRP boat, orange hull, white superstructure with words "Pilot" on both sides.
ANCHORAGES: Unlimited. Depth 30 ft. and over.
RESTRICTIONS: Notify the Agent at least 24 hrs. in advance. No tide.
MAX. SIZE: Length 1,050 ft., also see "Berthing".
INWARD CLEARANCE: Inward clearance is effected on board immediately on docking. Immigration Officer arrives on board immediately after docking. Passengers disembarking at Bonaire must present themselves for documents check.

Customs Officer boards immediately after docking and together with a representative of the Agency's Shipping Department the inward clearance document of the vessel (in ballast or with cargo in transit, as the case may be) is prepared and signed. This document must be signed by the Master. Occasionally the Customs Officer may insist that the Master sign in his presence. Only upon completion of the above formalities, usually carried out in a very short time, is the vessel declared free and passengers and crew may go ashore. It is recommended that one of the public rooms be made available for the purpose of inward clearance in order to avoid congestion in the Purser's Office.

HEALTH: Free Pratique is granted by the Pilot.

RADIO: A Government Radio Station operates daily from 0700 to 2400 hrs. In case of emergency Bonaire Radio can be contacted by telephone. Vessels bound for Bonaire should route their messages for Bonaire through Curacao Radio (PJC). The Government Radio and Telephone Station maintains daily telephonic communication with Curacao, also with the United States, Europe, etc.

VHF: Call sign "Bonaire Pilots". Calling Channel 16, working Channel 11. Rescue operations Channel 6. Watchkeeping 0730 – 1200 hrs. and 1330 – 1700 hrs. except Saturdays, Sundays and holidays. Plans being made for 24-hour service.

RADAR: There is no Radar Port Control.

TUGS: Two 4,000 h.p. tugs are available. The Agent should be notified in advance if a tug is required, in order to make the necessary arrangements with the Petroleum Company.

BERTHING: *North Pier:*

Berthing space	225 ft.
Depth	30 ft. alongside at LW
Height	6 ft.

Max. permitted load factor on pier is 2,000 kilos per sq.m.

Vessels of max. 30,000 g.r.t. or a max. length of 738 ft. are allowed to berth alongside.

Southern Pier:

Length	394 ft.
Width	46 ft.
Depth	50 ft.alongside
Height	6 ft.
Length of connecting bridge from shore to pier	199 ft.
Width of connecting bridge from shore to pier	68 ft.
Max. LOA	1,050 ft.

Mooring Facilities:

A: Double Mampaey easy-release electrical capstans (100 tons each)
B: Two (2) bollards 50 tons each
C: Double Mampaey easy-release electrical capstans (100 tons each)
D: Bollards of 50, 25 and 10 tons (every 20 m.)

Fendering: Vredestein Gigant Fenders; Block fenders and D-fenders (made of rubber).

Roll-on/Roll-off Facilities: At the South Pier a small Ro-Ro Platform for "coaster-size" ships and small "landing-craft" type. Max. permitted load factor 2,000 kilos p.sq.m. Depth 5 m.

Off the Harbour Office between the North Pier and the South Pier a Ro-Ro Pier for ships up to 3,000 gross and/or a max. length of 90 m. Max. permitted load factor unlimited. Depth 6 m. Max. size: LOA 300 ft. Draft 15 ft.

For the mooring and unmooring at the pier shore labourers are engaged by Agents at the expense of the shipping line. Motor-boats are available for running lines.

Salina: Position: Lat. 12° 05.3′ N., Long. 68° 16.7′ W. This port is situated 4 miles South of Kralendijk and is owned by the Antilles International Salt Co., loading of salt in bulk only can be carried out at this pier. Pilot boards 0.75 miles from jetty.

Vessels of approximately 40,000 tons d.w.t. can be accommodated.

Depth alongside 45 ft. The Pilot will board vessels destined for this port 0.75 miles West of the jetty, from a motorboat displaying the signals as referred to for Kralendijk. Also see "Bulk Cargo Handling Facilities".

CRANES: There are 2 mobile cranes available 1×18 tons and 1×24 tons lifting capacity.

BULK CARGO FACILITIES: Salt in bulk is handled at the port of Salina. The pier consists of 5 breasting dolphins and 2 mooring dolphins. The loading chute is situated on the centre breasting dolphin. Loading rate approximately 2,000 t.p.h. The chute is fixed and for shifting ship there are 2 mooring buoys, one on each side of the pier. The total length of the pier is 614 ft. and the max. draft is 45 ft. although the max. size of vessel which can be accommodated is approximately 40,000 d.w.t.

SPECIALISED CARGO HANDLING FACILITIES: There are no liquid, chemicals and LPG facilities. For Roll-on/Roll-off facilities see "Berthing".

BRIDGES: There are no bridges in the port of Bonaire.

STEVEDORES: There are no regular stevedores (longshoremen) available in Bonaire. For cargo handling operations ordinary labourers are engaged by the Agents for account and risk of the ship.

Working Hours: Monday-Friday 0700 – 1200 and 1300 – 1600. Overtime possible.

MEDICAL: Modern facilities are available for medical and dental treatment. A "Medical Service Request" form must be signed by the Master or other authorised officer for crew members requiring medical or dental treatment. In case of crew members having to be left behind at Bonaire for hospitalisation or otherwise, Master must sign an authorisation guaranteeing expense of treatment and repatriation.

TANKERS: There is no tanker facility in the port.

DENSITY: Average salinity of water is 1025.

FRESH WATER: Fresh water from the Government water distillation and power plant can be supplied at the pier.

FUEL: On advance request, bunkers are delivered by craft at rates comparable to those in Curacao or Aruba.

FIRE PRECAUTIONS: No specific precautions.

CONSULS: Venezuela and Colombia.

GANGWAY/DECK WATCHMEN: Watchmen are not necessary but recommended; Overtime as usual.

OPENING/CLOSING HATCHES: This work is normally carried out by crew.

IDENTIFICATION CARDS: Passengers: No landing cards required, but some ships carrying a large number of passengers furnish landing cards to passengers for their own control of passengers returning on board. Crew: No landing cards required.

REPAIRS: There are no facilities for carrying out major repairs. Qualified technicians are available for electronic instrument repairs.

DRY DOCKS: No dry dock facilities.

SURVEYORS: No classification surveyors available, nearest port is Curacao. Cargo inspectors Saybolt and Caleb Brett, Independent Maritime Bureau represents ICS, P and I club nautical and technical inspectors, inspectors for Liberian Bureau of Maritime Affairs.

CUSTOMS ALLOWANCES: No specific regulations, customs allow only a reasonable quantity out of bond.

CARGO GEAR: Load/discharge operations always by ship's gear.

REPATRIATION: All facilities exist for crew changes. Good connections, several times a day to Curacao and several times a week to U.S.A. and Europe.

HOLIDAYS: The following are the official holidays observed in Bonaire: New Year's Day (Jan. 1st); Good Friday; Easter Monday; Queen's Birthday (April 30th); Labour Day (May 1st); Ascension Day; Holy Saturday (Monday after Carnival); Kingdom Day (December 15th); Christmas Day (December 25th); Second Christmas Day (December 26th).

TIME: 4 hours slow of GMT. No summer time kept.

AIR SERVICES: There is a good daily air service between Bonaire and Curacao. 8 to 10 flights a day with good connections at Curacao with the international services to and from many parts of the world.

CUSTOMS OFFICERS ON BOARD: 1 or 2 Customs Officers will remain on board during the vessel's stay in port. Such officer(s) must be furnished meals at regular meal hours.

POLICE/AMBULANCE/FIRE: Police, tel. 8000; Ambulance, 8000; Fire, Tel. 8000.

TELEPHONE: Telephone connection on board is possible, to be arranged by ship's Agent in advance.

SERVICES: No tank cleaning equipment or facilities for discharge of tank washings. Compass adjusting, draft and quantity surveys, damage surveyors, marine consultants. Survey of tanks and machinery contact Independent Maritime Bureau, Tel: 8151.

SHORE LEAVE: No restrictions for shore leave.

REGULATIONS: No particular or unusual regulations for the port.

DELAYS: As a rule there is no delay in berthing, loading or discharge. Delay in loading or discharging may be caused by rain.

BANKS: ABN Bank, Simon Bolivarstraat, Tel: 8417 and 8429.

Maduro and Curiel's Bank, P.O.Box 66. Tel: 8420 and 8414. Telex: 1201 Mcbon NA.

Banco Barclays Antillano N.V. Breedestraat, Tel: 8295.

EMERGENCY CO-ORDINATION CENTRE: Nearest Emergency Co-ordination Centre is the Rescue Co-ordination Centre of the Royal Netherlands Air Force on Curacao, Tel: Curacao 81622 and 81628.

STORING: As a rule the vessel is stored by truck. Trucks can proceed alongside at the berth. Forklifts can be used on jetty to handle stores.

No particular Customs Regulations regarding storing.

Local people can be employed for storing, contact ship's Agent.

GENERAL:

Live Animals: The importation of dogs, cats, horses and certain other animals is permitted, provided these animals are accompanied by a certificate issued at place of origin by a licensed Veterinarian, stating that the animal in question is free from any contagious disease. Dogs must have, in addition, a certificate of Rabies Inoculation. All animals imported (including birds) will moreover be examined on arrival.

Prohibited Imports: The importation of the following is strictly prohibited: Parrots and parakeets, absinth, explosives, firearms, ammunition and firework, except with prior permission from local authorities. All kinds of narcotics and drugs, the sale and use of which is regulated by International Conventions, except for legitimate use by and for sale to drugstores by duly accredited importers. Unauthorised reprints of copyrighted scientific and literary works of art. Copper, bronze and nickel coins, except for account of the Government of the Netherlands Antilles. Obscene printed matter.

Immigration Law: All passengers disembarking in Bonaire as temporary visitors, for business purposes, on vacation, or in transit to other destination, must be in possession of:

(a) Valid passport/birth certificate.
(b) One passport photograph.
(c) A return ticket, through ticket or passenger-order to next destination outside of the territory of the Netherlands Antilles.
(d) All documents and visas necessary for continuing to next destination or return to place of origin.
(e) Sufficient means to be able to support themselves during their stay in the territory.

No visa is required from a Netherlands Consul on any of the aforementioned documents.

DEVELOPMENTS: No developments expected in the near future.

AUTHORITY: Bonaire Port Authority, Harbour Office, Kralendijk, Bonaire, Netherlands Antilles. *Tel:* 8151. *Telex:* 1292 Gobon NA. *Contact:* Captain Reginald M. Berenos, Harbour Master.

ORANJESTAD, Aruba: 12.31 N. 70.02 W.

(See Plan Book)

DOCUMENTS:

Clearance from last port.
Derat Exemption Certificate.
Ship's Register.
Manifest of Cargo (or ballast), or Bills of Lading for import goods and transit goods separately.
Crew List (4 copies).
List of Stores on Board (2 copies).
Consignee Mail (if cargo for discharge).
Passenger List (if any passengers).

The Passenger List must carry full names, ages, sex, nationality and occupation of passengers landing at Aruba. The ultimate destination of in-transit passengers must also be shown on the Passenger List.

Derat Exemption Certificates can be renewed at Oranjestad, Barcadera and St. Nicholas.

Outward clearance, cargo documents and list of outgoing passengers are delivered on board by the Agent's representative, thereby making it unnecessary for Masters to visit the Customs Office to obtain outward clearance.

PILOTAGE: Masters are requested to advise Agents of their expected time of arrival at least 48 hours in advance. Arrival messages should include advice regarding cash or other requirements. This information is particularly necessary in order to give prompt attention to vessel's requirements and to avoid delay after arrival.

Pilots are government employees and pilotage is compulsory for vessels from 50 g.r.t. upward entering or leaving the harbour. Pilots board inbound vessels within 2 miles of shore. The Agent's representative will arrange for Pilots to board vessels as necessary. Inbound vessels should close the West entrance of the harbour as near as prudently possible and make a lee to facilitate the Pilot's boarding.

Every vessel arriving or departing must provide and properly secure a pilot ladder which conforms with the standards of construction normally accepted by international safety standards. Failure to provide such a ladder may result in the Pilot's refusal to board a vessel.

ANCHORAGE: Anchorages, suitable even for deepest draft vessels, are located outside the protecting reef along the whole length of the Western and S.W. coast. The depth of water ranges from 10 to 35 fathoms. Because of the sharply shelving nature of the bottom in this area, it is recommended that the services of a Pilot be obtained in taking up an anchorage. Ships are anchored only during daylight hours.

TUGS: A tugboat of 1,000 h.p. is available for assisting vessels to and from the docks. The tug-boat is fitted out with radio-telephone which is open on 2182 kHz. while tug is in operation.

An additional tug, 2,200 h.p. fitted with VHF Channel 16 (Working Channel 11), is available.

MINIMUM DRAFTS: For tankers arriving or sailing in ballast the following minimum drafts are required for manoeuvring under normal weather conditions:

G.R.T.	*Forward*	*Aft.*
16,600 (T-2)	8 ft.	18 ft.
18,000	8 ft.	18 ft.
27,000-30,000	10 ft.	20 ft.
30,000-36,000	14 ft.	22 ft.
37,000	14 ft.	24 ft.
46,000	16 ft.	26 ft.

MAX. SIZE: The harbour itself has a depth of 36 ft. at MLW. The safe salt water draft approved for entering and leaving is 33 ft. Vessels normally enter via the West channel and depart via the East channel.

HEALTH: The Port Doctor will visit an arriving ship only if there is a case of quarantinable disease on board, if the ship has no clean Bill of Health or if one of the preceding ports of call has been declared to harbour a quarantinable disease. The Netherland Antilles Bill of Health is free of charge.

RADIO: Shore station for R/T communication with 24-hour service. VHF Channel 16, 156.80 MHz (calling); Channel 11, 156.55 kHz (working channel).

HF 2182 kHz, 2558 kHz (working frequency transmitter), 2158 kHz (receiving frequency SSB).

BERTHING: In total there are 4,070 ft. of dock length available to accommodate ocean-going vessels and 1,090 ft. of dock for small craft, of which:

1,720 ft. with 36 ft. of water alongside
2,350 ,, ,, 34 ,, ,, ,, ,,
460 ,, ,, 16 ,, ,, ,, ,,
230 ,, ,, 10 ,, ,, ,, ,,
400 ,, ,, 6 ,, ,, ,, ,,

CONTAINER FACILITIES: 30 acre container terminal in operation. Length of quay 450 m., depth alongside 12.0 m. 1×50 ton container crane. 2×35 ton forklifts.

STEVEDORES: Stevedoring is performed at a fairly fast rate compared with other ports in the Caribbean area. All cargo has to be handled with ship's tackle, while on the docks and in the warehouses fork-lift trucks are used for transportation of merchandise. General cargo is handled at an average of 8 tons per gang per hour.

REPAIRS: There are no facilities at Aruba for major ship repairs. Local workshops can do repairs of minor nature. Preliminary advice regarding such minor repairs should be included in ETA messages and work requisitions for repairs should be prepared for handing to the Agent's representative immediately upon arrival.

Radar, radio and gyro repairs can be carried out. However, it is important that Masters radio in their requirements as early as possible and give a brief reference as to the nature of the breakdown or fault of the equipment concerned.

While alongside vessels must be prepared to move at 1 hour's notice. Engine repairs to the effect of demobilizing the vessel may only be carried out with special permission.

MEDICAL: Excellent medical and dental attention is available at any hour of the day or night to crew members of all vessels.

FRESH WATER: Boiler and drinking water of purest quality is supplied by hose from the docks at a rate of 200 t.p.h. (in special cases 400 t.p.h.).

FUEL: The port of Oranjestad is an official Esso bunker station. All grades of bunker fuels can be supplied from shore tanks at a rate of 1,500 bbls./p.h. A minimum of 48 hours advance notice is required.

SURVEYORS: Representatives of the American Bureau of Shipping, the Lloyd's Register of Shipping and the Norske Veritas are resident in the area. Masters may request the surveyors' services through the Agent.

BALLAST: Vessels must arrive with sufficient ballast to permit safe handling. All vessels should enter port with clean ballast that can be pumped over board when alongside, as it is prohibited to pump dirty ballast into the harbour.

GANGWAY/DECK WATCHMEN: An efficient and continuous watch must be maintained on deck and in the engine-room of all ships while in port, and a sufficient number of men must be on board at all times to move vessels either for harbour operations purposes or in emergency situations.

OPENING/CLOSING HATCHES: This work is normally carried out by the crew.

AIRPORT: The port of Oranjestad – the commercial and tourist harbour of Aruba – is only 5 miles by road from the airport. The connection by air with the U.S.A. and Europe is very good and frequent (TCA, KLM, VIASA); other airlines operating in Aruba are: ALM, LAV, Aerocondor, and Caribbair.

POLICE/AMBULANCE/FIRE: Police, Oranjestad, Tel: 1000; Ambulance, Oranjestad, Tel: 2010/1234; Fire Alarm, Tel: 00.

CONSULS: The following countries have consular representatives at Aruba:

Brazil
Chile
Colombia
Costa Rica
Denmark
Dominican Republic
El Salvador
Great Britain
Guatemala
Haiti
Italy
Lebanon
Liberia
Nicaragua
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
Venezuela
West Germany

Necessary for Masters of Panamanian and Italian flag vessels to visit Consulates at Oranjestad to present documents and receive despatches. Other Consulates have similar requirements. Masters may check with Agent for clarification.

TIME: Local time is 4 hours slow of GMT. Vessels are requested to use local time in ETA messages and when dealing with their Agents.

CUSTOMS GUARDS: Local authorities assign 1 or more Customs guards to each vessel during its stay in port; the charges for guarding are for the account of the vessel. These officials must be provided with meals on board at regular meal hours.

SHORE LEAVE: Under normal circumstances no restrictions are imposed by the Government Immigration Authorities on shore liberty. Masters are requested to endeavour to have all crew members on board prior to departure time, so that the ship will have no delay in sailing.

AUTHORITY: Aruba Ports Authority N.V., L. G. Smith Boulevard 68, Oranjestad, Netherlands Antilles. *Tel:* 26633. *Telex:* 5120.

PHILIPSBURG, St. Maarten: 18.05 N. 63.10 W.

(See Plan Book)

LOCATION: Philipsburg, capital of Netherlands St. Maarten, lies in a well-protected bay in the S.E. corner of the island. The only obstruction to the harbour is "Proselyte Reef" or "Man-of-War-Shoals", located Lat. 17° 56′ N., Long. 63° 04′ W., with a minimum depth of 2.5 fathoms. Entrance to the harbour can be accomplished by passing either to the North or the East of this reef.

DOCUMENTS:

Crew List: Immigration 1 copy.
Agent 1 copy.
Passenger List: Immigration 1 copy.
Agent 1 copy.
Store List: None required.
Ship's Register: Pilot will require to see this document for obtaining the official tonnage.

Note: No special form is prescribed for the above documents, consequently these may be made out in Company's regular form.

No consular visa required on any of the above documents.

Immigration: Immigration Officer boards ship immediately after docking. Passengers and crew are usually free to disembark immediately after boarding.

Agency Personnel: Agency personnel board immediately after vessel is docked together with Immigration Officer.

PILOTAGE: Pilotage is compulsory and performed by Government Pilots. Ships bound for the pier at Philipsburg should await the Pilot at a max. distance of 1 mile from the line Point Blanche-Fort Amsterdam. Pilotage service available day and night.

Pilot Ladder: Jacob's ladder, in clean and sound condition is sufficient.

Time to Berth: From pilot station to pier, about 15 to 30 minutes.

ANCHORAGE: Ample suitable anchorage area available with sufficient depths of water for several large ships simultaneously.

A good anchorage can be found in 40 ft. depth at the cross point of line joining the pier and Fort Amsterdam (Fl. ev. 4.5 secs.) and line joining radio masts and the mountain "Naked Boy".

If and when the pier is already occupied by another cruise-ship, cruise-ships can proceed to anchorage, in which case communications between ship and shore to be by ships' own launches.

For ships proceeding to anchorage, pilotage is also compulsory.

MAX. SIZE: 1 berth (North side of pier) max. LOA 300 ft. and draft 30 ft. 1 berth (South side of pier) max. LOA – no limit, max. draft 30 ft. Vessels berth portside alongside. 1 berth (East side of pier) max. LOA 360 ft. and maximum draft forward 12 ft.

RADIO: The Government radio and telegraph service operates daily from 0700 L.T. to 2400 L.T. worldwide.

Radio Telephone: VHF Channel 16.

ETA Messages: ETA messages should be sent to Agent preferably in local time at least 24 hours in advance and any changes occurring thereafter should be advised.

Use of Ship's Radio in Port: Prohibited.

TUGS: None available.

BERTHING: *A. C. Wathey Pier:* The new concrete pier at Philipsburg is located at Point Blanche in Great Bay and has a length of 210 m., with an additional 60 m. of berthing space, located at a 60° angle to the finger pier. Minimum depth is 34 ft. of water. 4 jumbo rubber fenders are located along the berthing space.

Height from sea-level to the deck of the pier at high tide is 4.02 m., at low tide 4.48 m. Ship will lie with port side to the pier.

Mooring and Unmooring: 3 dolphins are located in an extended line of the berthing space for mooring. Minimum required size of openings in shackles is 40×50 cm. Mooring boat is available.

Equipment: Cranes are available with a capacity of 20 tons max. Forklifts up to 40 tons for handling 20 ft. and 40 ft. containers and sufficient flat-bed trailers and low-buoys are also available.

STEVEDORES: There are 3 gangs available. Each gang has a total of 9 workers.

MEDICAL: Government physicians are available in Philipsburg and there is also a small, but up-to-date hospital operated by the Netherlands Antillean Government. A "Medical Service Request" form must be signed by the Master or other Authorised Officer for crew members requiring medical treatment.

Dental facilities available.

FRESH WATER: Available.

FUEL: No facilities for carrying out repairs except for radio and radar (Radio Holland).

SURVEYORS: There is a representative of Lloyd's on the island.

AIRPORT: The island is served by A.L.M. (Dutch Antillean Airlines), Air France, Eastern Airlines, K.L.M. (Royal Dutch Airlines), L.I.A.T. (Leeward Island Air Transport), Prinair.

There are direct, almost daily flights, to and from New York and Miami connecting to other major places.

TIME: GMT minus 4 hours.

HOLIDAYS: The following Official holidays are observed in St. Maarten: New Year's Day (January 1st); Good Friday (varies); Easter Monday (varies); Queen's Birthday (April 30th); Labour Day (May 1st); Ascension Day (varies); Whit Monday (varies); St. Maarten Day (November 11th); Kingdoms Day (December 15th); Christmas Day (December 25th); Boxing Day (December 26th).

TELEPHONE: Service from ship to shore is not available.

GENERAL:

Ship's Bars and Shops: No restrictions and these may remain open for business while in port.

Laundry: Available.

Wind: Prevailing winds on the island between the months of March and December are East to South, velocity 6 to 10 knots. Between December and March winds are generally North to East at a velocity of 8 knots to 15 knots.

Tide: The tidal range in Philipsburg is at most 2 ft., but regularly not more than 1 ft.

Current: The current outside Philipsburg Harbour changes from Easterly to Westerly, with a max. velocity of 2 knots. At the Pier the current generally runs from North to South, with an average velocity of 0.5 knots.

Gangways: No gangways are available from the pier and ship's gangways will have to be used.

Ship's Launches: There are no restrictions on the use of ship's launches.

Stores: Available.

Garbage: No disposal facilities available.

Port Health: No regulations or requirements.

Customs: None.

AUTHORITY: Harbour Office, Philipsburg, St. Maaten, Netherlands Antilles. *Tel:* 2307-2348. *Contact:* John Ph. F. Craane, Harbour Master.

ST. EUSTATIUS: 17.29 N. 63.00 W. (See Plan Book)

LOCATION: Statia Terminals N.V.'s jetty and shore facilities are located at Tumbledown Dick Bay on the Northwest shore of the island in position Lat. 17° 29′ 25.8″ N., Long. 63° 00′ 00.8″ W.

The jetty extends approximately 0.5 miles seaward and can accommodate a vessel on each side.

Vessels of up to 175,000 tons can be accommodated in the Southern berth and up to 100,000 tons on the Northern berth.

A barge loading berth and tug berth are located inshore of the platform on the South side of the pier.

Vessels are also bunkered at the anchorage which lies to the South of the jetty.

DOCUMENTS:

2 copies Crew Lists.
2 copies Passenger Lists.

PILOTAGE: The Pilot will normally board vessels 2 miles from the end of the finger jetty.

Pilotage to the terminal berths is compulsory.

Pilotage to the anchorage is not compulsory but is available on request.

ANCHORAGE: The recommended anchorage is off the village of Oranjestad where a shelf with depths of up to 90 ft. extends almost 2 miles offshore.

Vessels awaiting bunkers by barge should anchor in the Northern part of the anchorage off Fort Royal (Interlopers Point), which is closer to the barge loading facility.

The anchorage area provides good holding ground throughout.

MAX. SIZE: See "Berthing".

HEALTH: Pratique will normally be granted when the Pilot boards. Masters must report on any communicable disease which may have occurred on board prior to arrival.

RADIO: Statia Terminal and the pilot station maintain listening watch on Channel 16 and Channel 9 is used as a working Channel between ship and shore.

Vessels to make contact on Channel 16, 4 hours prior to arrival for berthing/anchoring instructions.

ETA: ETA should be sent 72, 48 and 24 hours prior to arrival. Fullest details of the vessel and her cargo should be sent in the initial message. Cables should be addressed to "Staterm, Saint Eustatius" and sent via Radio Curacao (PJC).

TUGS: Two twin screw Kort nozzle tugs, "Statia" and "Saba", assist vessels at the terminal.

The Pilot will normally board from one of the tugs.

BERTHING:

Berth	*Max. d.w.t.*	*Max. Draft (ft.)*	*Loading Arms*
No. 1 (South Berth)	175,000	60.0	3×12 in. 1×6 in.
No. 2 (North Berth)	100,000	60.0	4×12 in. 1×6 in.

Bunker "C", I.F.O. and M.D.O. can be handled at both berths.

Connection to the shore is by Chicksan loading arms which the vessel's crew will connect under the supervision of a responsible officer.

Discharge is by ship's pumps assisted by shore booster pumps as required.

Loading is by gravity and/or shore pumps.

Both berths can accommodate vessels of up to 60 ft. draft.

Maximum discharge rate is 25,000 bbls./hr. and loading rate 30,000 bbls./hr.

The bunker "C" and I.F.O. arms on the jetties are fitted with 12 in. presentation flanges, and the diesel and gas oil arms are fitted with 6 in. presentation flanges.

Both berths are fitted with gangways for ships' use.

Ballast Facilities: The terminal can receive up to 63,000 barrels of dirty ballast, which is processed at 2,800 bbls./hr. The terminal will not accept ballast containing any chemical which may affect the processing systems.

MEDICAL: A qualified general practitioner practices on the island and there is a local hospital in Oranjestad.

In the case of more serious illness the patient can be evacuated for hospitalisation at St. Kitts or St. Maarten.

FRESH WATER: Available.

FUEL: All grades of bunkers can be supplied at the terminal berths.

In addition, Statia Terminals operates a bunker barge which can deliver all grades of bunkers in the anchorage area.

SAFETY/FIRE PRECAUTIONS: The provisions of the current edition of the "International Safety Guide for Oil Tankers and Terminals" will be observed by vessels alongside the terminal facilities, and a copy of the Company's "Terminal Information and Regulations" booklet will be given to the Master by the Pilot on boarding.

REPAIRS: There are very limited repair services on the island.

AIRPORT: Windair services the island with four flights per day to and from St. Maarten, where international connections can be made.

CUSTOMS: There are no Customs restrictions.

TIME: Local time is GMT minus 4 hours.

BANKS: Barclays Bank of the Netherlands Antilles N.V. operates a sub-office in Oranjestad, St. Eustatius. The address of the main office in St. Maarten is: P.O.Box 141, Front Street, Philipsburg, St. Maarten, Netherlands Antilles. Tel: 3511. Telex: 8022.

SHIPMASTER'S REPORT: June, 1983.

Approaches: Except for the Saba Bank about 10 miles to the West of the Island, the waters in the vicinity of St. Eustatius Island are generally clear of obstructions. However, vessels are advised to heed the cautionary notices on the charts of the area regarding the existence of shoal patches, and should keep outside the 200 m. line where possible. The bottom slopes gently all around the Island and in the terminal area the depth one mile off shore is 150 ft.

The Island, and the neighbouring islands of St. Kitts and Saba, are steep to and present excellent radar targets. The mountains on all 3 islands also provide good visual bearings during the approach. The Southern portion of the Island is dominated by an extinct volcano 600 m. high (the Quill) while a lesser hill 289 m. high (Boven) is located at the Northern end.

Statia Terminals maintains a navigational light on the seaward mooring dolphin of the jetty. The position is Lat. 17° 29′ 25.8″ N., Long. 63° 00′ 08″ W., at a height of approximately 9 m. The characteristic is flashing white every five seconds and the light has a nominal visual range of 10 miles.

Documents: 2 copies Crew List.
2 copies Passenger List.

Pilotage: Pilotage to and from the jetty berths is compulsory.

Pilotage to the anchorage is not compulsory but is available on request.

Pilotage is available around the clock and is provided under the terms and conditions of the Statia Pilotage/Towage Certificate. The terms and conditions contained in the Conditions for Use of Terminal Facilities control the legal and practical relationship between Statia and the vessels using the terminal. The Statia Pilotage/Towage Certificate summarises these terms as well as providing data necessary for controlling terminal operations. The Certificate must be signed by Masters of all vessels using the terminal.

The Pilot will board incoming vessels about 2 miles from the end of the finger jetty. Communications with the Pilot is by VHF radio. Contact should be established on Channel 16 after which vessels will be asked to shift to another Channel.

Pilot ladders must conform to internationally accepted standards of construction. When vessels arrive at the pilot station, a good lee should be provided for the Pilot who will normally board from one of the tugs attending the vessel.

Radio: ETA must be communicated 72, 48 and 24 hours prior to arrival by cable addressed to Staterm St. Eustatius via Radio Curacao (PJC). Thereafter if ETA varies by more than 2 hours, the terminal must be advised. The initial message should include the following:

Discharging Vessels:
1. Name of vessel, call sign.
2. ETA St. Eustatius.
3. Draft on arrival.
4. Gross barrels and temperature on arrival (by grade).
5. Expected discharge rate.
6. Number and size of manifold connections.
7. Ballast hours required after completion.
8. Bunker requirements: quantity and grade.

Loading Vessels:
1. Name of vessel, call sign.
2. ETA St. Eustatius.
3. Draft on arrival.
4. Ballast: quantity and discharge time.
5. Last cargo carried.
6. Ability to load while deballasting.
7. Maximum loading rate.
8. Number and size of manifold connections.
9. Departure draft.
10. Bunker requirements: quantity and grade.
11. Slops retained: quantity and grade.

Tugs: Statia has 2 tugs to assist vessel to and from the berths. These vessels, the "Statia" and the "Saba", are twin screw and twin rudder vessels and are fitted with Kort Nozzles producing a 34 ton bollard pull. The tugs are equipped with fire fighting monitors capable of delivering either water or foam.

The lines needed for use with the tugs will be provided by the tugs. Tugs are normally made fast alongside the vessel, forward and aft.

Berthing: The axis of the jetty lies in a direction 245° 42′, and construction is of steel pilings supporting a trestle catwalk and loading platform. The co-ordinates of the seaward dolphin of the jetty are: Lat. 17° 29′ 25.8″ N., Long. 63° 00′ 08″ W.

Vessels lie alongside flexible, woodfaced breasting dolphins on either side of the jetty. Vessel mooring lines are secured to mooring dolphins fitted with quick release hooks. Spring lines are secured to the breasting dolphins. Vessels are usually moored with their bows shoreward.

Berth No. 1 on the South side of the jetty can accommodate vessels from 20,000 d.w.t. to 175,000 d.w.t. in 62 ft. of water, and Berth No.2 on the North side of the jetty can accommodate vessels from 20,000 d.w.t. to 100,000 d.w.t. in 62 ft. of water. The water inshore along the jetty shoals gradually. The tug and barge berths are at the shore end of the jetty.

The normal tidal range at the jetty does not exceed 2.5 ft.

Loading arms are used for the transfer of cargo and bunkers.

Fire fighting monitors are installed on the loading platform.

Fresh Water: Available from barge "St. Maarten" (4,000 d.w.t.).

Fuel: Vessels using the jetty will generally be bunkered from the terminal jetty. Vessels not using the jetty will be bunkered from the barge "St. Maarten", capable of handling gas oil, marine diesel, intermediate fuel oils, bunker C and potable water.

General: Between the months of May and October hurricanes may develop in the Caribbean area although St. Eustatius is outside the normal hurricane tracks. However, in the event that hurricanes should threaten, all seamanlike precautions should be taken by vessels using the anchorage and terminal facilities.

OPERATOR: Statia Terminals, N.V., Staterm Building, P.O.Box 170, Oranjestad, St. Eustatius, Netherlands Antilles. *Tel:* 2300. *Telex:* 8029 Term NA. *Contact:* Captain D. C. McNab, Marine Operation Manager.

Statia Terminals Service Inc., 345 Palermo, Coral Gables, Florida 33134. *Tel:* (305) 445-2639. *Telex:* 807578.

SAN NICOLAS, Aruba: 12.26 N. 69.55 W.

(See Plan Book)

DOCUMENTS/HEALTH and all General Information, refer to "Oranjestad".

PILOTAGE: (Inner Harbour) Pilotage is compulsory. Pilot boards 1.5 miles S.W. of the West Entrance Buoy.

A pilot service for anchoring off Lago Aruba Terminal is available upon the Master's request, providing radar and echo sounder are functioning properly.

ANCHORAGES: There are 3 anchoring areas off Aruba.

1. About 3 miles W.S.W. of Noordwest Point.
   This anchorage can be affected by swell so equipment and personnel changes can be risky in poor weather. Because of the changeable weather this anchorage is not recommended for vessels staying for long periods or for VLCCs. When anchoring care should be taken to avoid the submarine cable in this vicinity.
2. About 6 miles S.W. of Oranjestad.
   This anchorage is generally quieter than the one described above, however, transport to the shore may take longer. This area is suitable for all ship sizes and with many years of experience there have been no reported problems of anchors dragging.
3. The "Restricted Anchorage".
   There is a Restricted Anchorage about 2 miles off-shore and some 4 miles N.W. of Oranjestad. This anchorage is only to be used by vessels engaged in operations requiring assistance from the shore. Operations would include repairs, hull cleaning or tank cleaning. Vessels proceeding to this anchorage will be specially advised by Charterers or Owners. For anchoring Masters are recommended to take a Pilot.

It should be noted that in all the anchorages described above inward clearance and other formalities are not necessary, as long as there is no direct contact with the shore. If crew changes or other direct contact with the shore is to take place then normal procedures have to be followed.

Tug and launch services are available at all the anchorages for stores or personnel reasons.

Whilst waiting for orders or acting as floating storage, vessels are required to take every precaution to avoid all forms of pollution including dumping of floating garbage.

Prohibited Anchorage: Lat. 12° 25.83′ N., Long. 69° 55.52′ W., in the vicinity thereof.

RESTRICTIONS: The port is open for day and night navigation, allowing vessels to enter at any hour. The safe salt water draft approved for entering is 39 ft. and 40 ft. for leaving. Vessels normally enter via the West channel and depart via the East channel.

Tides: Diurnal with max. amplitude of 18 in. Datum used is MLW., water level never falls more than 6 in. below MLW.

MAX. SIZE: *Reef Berths:* Tankers up to 550,000 d.w.t. No. 2 Reef berth, depth alongside, 105 ft. MLW. Also see "Reef berths".

Inner Harbour: 90,000 d.w.t.

RADIO: Radio-telephonic communication is possible on frequency of 156.70 VHF (Channel 14). Calling and listening Channel 16. Call sign "Lagomarine". Agency business is conducted on international Channel 19 (call sign "Stanship Aruba").

TUGS: 2 diesel-powered tugs are used for berthing and unberthing. For vessels over 50,000 d.w.t. a third tug is used.

BERTHING: All port facilities are controlled by Lago Oil and Transport Company.

The max. limitations for vessels using San Nicolas facilities are:

Berths	*Length (ft.)*	*Beam (ft.)*	*Salt water max. draft (ft.)*	*Bow to manifold (ft.)*	*Approx. Deadweight*
1 South	710	UNL	38	340	50,000
1 North	690	110	37	340	50,000
2 South	800	120	39	400	50,000
2 North	720	120	38	350	50,000
3 South	870	130	39	440	90,000
3 North	760	120	39	380	80,000
HDS Pier	600	90	30	UNL	30,000 (dry cargo only)

The max. entering draft is 39 ft. even keel salt water. The maximum sailing draft from No. 2 South, No. 3 South and No. 3 North is 40 ft.

The following is the suggested ballast draft for vessels.

MDWT	*Fore (ft.)*	*Aft (ft.)*
10 – 20	8	18
20 – 30	10	20
30 – 40	14	22
40 – 50	14	24
50 – 100	16	26

REEF BERTHS:

VLCC anchorage: When anchoring is necessary, Masters of VLCCs may wish to anchor in the following position; 12° 24′ N., 70° 07′ W., approx. 12 miles West of San Nicolas Harbour in approx. 25 fathoms.

Pilot Station: 2 miles to 3 miles West of San Nicolas Harbour entrance. When Pilot is boarding, the vessel should be on an Easterly course with a speed of not more than 2 knots.

Embarking Pilot, Loaded VLCCs: On the port side with either pilot hoist or conventional pilot ladder.

Ballast VLCCs: On the port side with a combination of accommodation ladder and conventional pilot ladder, or with only accommodation ladder.

Disembarking Pilot, Loaded VLCCs: On the starboard side with either pilot hoist or conventional pilot ladder.

Ballast VLCCs: On the starboard side with a combination of accommodation ladder and conventional pilot ladder, or with only accommodation ladder.

Tugs: Normally 4 tugs used for tankers over 250,000 d.w.t. 2 on long lines, 1 forward and 1 aft and 2 alongside starboard side. Tug's lines used.

Docking: Always portside to, with starboard anchor ready, walked out to 1 shackle in the pipe.

Approach Velocity: RB II is equipped with a Doppler traffic light system.

Approach velocity 00–12 ft./min.=green.
12–20 ft./min.=amber.
above 20 ft./min.=red.

When the vessel is receding, the light is always green.

Mooring Launch: Used for all lines, except for the spring lines fore and aft. Forward moorings first, after moorings second.

Mooring Capstans: All mooring and breasting dolphins are equipped with capstans, 2 ton pull capacity, 100 ft./min. line hauling capacity.

Max. Size:

	MDWT	*Max. LOA (ft.)*	*Beam*	*Depth (ft.)*	*Max. draft (ft.)*	*Pier Heading*	*Approac angle*
RB I	40–400	1200	UNL	80	75	130° true	15°
RB II	40–550	1400	UNL	105	95	114° true	10°

Sailing Draft Ballast VLCCs: about 25 ft. fore and 35 ft. aft.

Lines and Winches: Mooring lines assumed to be 1.625 in. diameter steel wire with a breaking strength of 90–100 tons.

Mooring winches assumed to have about 25 metric tons heave capacity and 55 metric tons brake holding capacity (minimum).

Combination of a wire and a synthetic line to a single dolphin will not be permitted.

Mooring lines must not be stressed beyond 55% of their breaking strength.

Self tensioning is not permitted. Automatic winches should be used on manual brake.

Synthetic tails on wires should have a higher breaking strength than the wire to which they are connected. The eyes of the tails should be protected from abrasion with suitable coverings, and tails should be connected to wires with suitably designed shackles.

A maximum of only 2 layers of line to be allowed on working or tension drum of split drum winches.

Current and Wind: Current is less than 0.5 of a knot 90% of the time. Wind is less than 20 knots 70% of the time, and less than 25 knots 97% of the time.

Wind direction True	*% of time*	*Current direction* True	*% of time*
20° – 40°	2	40° – 70°	24
50° – 60°	6	100° – 110°	17
70° – 80°	33	140° – 240°	10
90° – 100°	40	260° – 290°	24
110° – 120°	13	320° – 340°	25
140° – 170°	1		
220°	5		

Wind tolerance: At 30 knots steady, loading will be discontinued, and the loading arms will be drained, engine to be confirmed ready for use.

At 35 knots steady, arms will be disconnected and tugs will be on stand-by.

Loading Arms: RB I; four 16 in. cargo arms with 16 in. bolted flange connections. One 8 in. bunker arm (No. 5 arm, the most Westerly arm). RB II; five 16 in. cargo arms with 16 in. connections.

Discharge/Loading Lines: RB I 36 in., 3,000 ft. long. RB II 56 in., 4,000 ft. long.

Radio Contact: Contact between Loading Master, control room, marine office by VHF and UHF. Particulars will be given by Loading Master.

Bunkers: RBI; through bunker arm (No. 5). RB II; through No. 1 or No. 5 loading arms with reducers.

Water: Not available.

Provisions: By launch; to be taken on board by ship's lifting gear on the port quarter.

Shore Leave: No pedestrian traffic allowed between ship and main gate. Arrangements for crew transportation can be made with Agent.

LIGHTERING OPERATIONS: VLCCs discharging at Aruba may be called upon to discharge part of their cargo by ship-to-ship transfer off Aruba. The lightening operation is carried out by vessels suitably equipped for ship-to-ship transfer operations, and is under the control of Exxon's Lightening Master on the lightening vessel.

The Lightening Master will board about 1.5 miles off San Nicolas Haven to discuss the operations. A derrick or crane should be ready on the lee side to pick up various equipment for the mooring and pipe-line connection. A Lightening Assistant stays on board to advise and assist with mooring procedures.

The VLCC and the Lightening vessel rendezvous in position: Lat. 12° 24′ N., Long 70° 14′ W. Communications are by portable radio placed on board and/or VHF Channel 8. The designated lightening area is bounded by the following positions:

(1) Lat. 12° 25′ N., Long 70° 04.4′ W.
(2) Lat. 12° 25′ N., Long 70° 10.3′ W.
(3) Lat. 12° 30′ N., Long 70° 13.5′ W.
(4) Lat. 12° 30′ N., Long 70° 07.2′ W.

The mooring takes place whilst steaming into the prevailing wind on an Easterly course at about 3 knots. Thereafter the VLCC anchors within the designated lightening area for the ship-to-ship transfer. Wind speeds in excess of 23 knots are considered unsuitable for the mooring and the lightening operations to take place.

Masters need not come ashore to clear ship with Customs. The ship's Agent can do this by proxy. Ship's papers for clearance and signed proxy will be picked up from ship off port by tug or launch.

FRESH WATER: Not available.

FUEL: All grades of bunkers available.

Berth: Vessels arriving for bunkers only with a draft greater than 39 ft. or over 90,000 d.w.t. must use the Reef Berths. As the berth is used for crude oil trans-shipment bunkering vessels can expect delays. Also the following considerations apply:

1. Vessels working cargo have priority over vessels bunkering.
2. In assigning tugs, vessels working cargo take priority. (2 to 3 hours tug service required at the sea berth.)
3. Vessels using the Reef Berths must have at least 12 good mooring lines. All mooring winches and equipment will be inspected and must be in good order. Vessels may not be docked if equipment is faulty.
4. In the event of marginal weather, deep draft vessels calling for bunkers may not be docked.

REPAIRS: A local workshop can do minor repairs.

PORT FIRE PROTECTION: The port of San Nicolas is very well equipped with modern equipments for fire-fighting and fire prevention.

BALLAST: Vessels must arrive with no more than 8% d.w.t. dirty ballast. Clean ballast will be discharged overboard after docking. Slops can be discharged to the disposal facilities ashore. Shore reception facilities are limited.

SPECIAL REGULATIONS: Strict compliance with Harbour Safety Regulations is mandatory. Stringent regulations prohibit the transportation of alcoholic beverages through Lago refinery and harbour area. No liquor or beer may be taken on board or removed from vessels except only bonded stores ordered by the Master.

SHORE LEAVE: As all ship's personnel when going ashore have to pass through the docks and the company's concession, every seaman must carry an identity card to check off against ship's crew list at main gate. Seamen must have special pass to use any other gate than refinery main gate.

POLICE/AMBULANCE/FIRE: Dial 2222 on jetty telephone. Call "Lagomarine" on UHF set which is supplied to every ship whilst alongside.

AUTHORITY: Lago Oil and Transport Co. Ltd., Seroe Colorado, Aruba, Netherlands Antilles. *Tel:* 9-2067. *Telex:* 5026. *Cables:* Essolago Aruba (Manufacturing). "Stanship" (Marine). *Contact:* J. D. Vanderlinde.

SINT MICHIELSBAY, Curacao: 12.09 N., 69.01 W.

LOCATION: Sint Michielsbay, on the South coast of Curacao, 5 miles N.W. of Willemstad, is an open bay, naturally protected from prevailing winds and sea.

PILOTAGE: Compulsory.

ANCHORAGE: In the bay 650 ft. out of the coast in 130 ft. water is laid a S.P.M. buoy, which gives a good anchorage to vessels which, because of dangerous cargo, quarantine or because of a defect cannot enter another port of Curacao.

BERTHING: Vessels moored with their stern to the buoy and their bow anchors are heaved out to hold the foreship from the coast.

REPAIRS: Repairs or handling cargo can be carried out by way of barges. A landing jetty for barges is available.

GENERAL: Other services as tugboats, lighterage, stevedoring, etc. are rendered from Willemstad.

AUTHORITY: Curacao Port Authority, N.V., Werf de Wilde Z/N, Willemstad, Curacao, Netherlands Antilles. *Tel:* 611133, 611740. *Contact:* E. P. Sint Jago, Harbour Master.

WILLEMSTAD/EMMASTAD, Curacao: 12.06 N. 68.56 W. **(See Plan Book)**

DOCUMENTS:

For Immigration:

2 copies of Crew List.

2 copies of list of passengers. Passenger lists should indicate full names, age, sex, civil state, and occupation. Passengers must show proof of citizenship (a passport, voter's registration or birth certificate is acceptable).

For Customs:

1 copy of list of stores (deck, engine and stewards department).

Manifest of cargo for Curacao, if any, in duplicate, on special form called "Vrachtlijst" itemising the cargo by lots of the same mark and showing numbers, kind of packages, general description of contents and weights in kilograms or pounds of each lot.

Manifest of cargo for Curacao, in transit, for transhipment to other ports, if any, in duplicate for each different port separately on special form and itemised as indicated above.

Manifest of cargo on board, in transit, if any, in duplicate on special form as indicated above, showing only the total number of packages on board, general description of the merchandise and total weight in kilograms or pounds; if the cargo is in bulk, this is indicated accordingly.

2 copies of tally books of cargo for discharge at Curacao, if any.

1 copy of crew list plus 1 copy of personal effects list.

1 copy passenger list landing at Curacao.

If the ship is in ballast, only the stores list is required.

The Customs Officer will then make out his "Akte van inklaring" (Certificate of Entry).

The above documents have to be signed by the Master. They may be made out in Dutch, English, Spanish or French.

PILOTAGE: Pilotage is compulsory. Rendered day and night. Pilots are government officials and are stationed at Willemstad. The Harbour Master is also the head of the Pilot Service.

Vessels must provide a lighted, manned, properly secured and clean pilot ladder, fitted with sufficient spreaders.

A life buoy fitted with a Holmes light, as well as a reliable heaving line, should be placed close to the pilot ladder and the embarkation and disembarkation should be supervised by an officer. Vessels arriving or leaving with a freeboard exceeding 30 ft. must use the accommodation ladder in conjunction with the pilot ladder (Safety of Life at Sea Convention 1960).

Vessels bound for Curacao should proceed to Willemstad harbour except when they have specified orders for another bay.

Vessels in sight of Willemstad will be contacted by the signal station at Fort Nassau for further orders. From this same station, lights are shown to direct the traffic in port.

Vessels should stay 3-4 miles off shore S.W. of the harbour entrance to await Pilot. Both anchors should be ready for immediate use. Defects of engines, steering gear, anchor gear and other defects which influence the manoeuvring ability of the vessel should be reported before entering to the Harbour Master. The pilot motorboat is identified by a blue flag with the letter "L" in daytime, and a red light above a white light at night.

ANCHORAGE: As a rule there is no anchorage area in the harbour of Willemstad, but in the Eastern part of the Schottegat there is a dolphin with mooring buoy on each side available to await berth or orders for limited time subject to permission and conditions from the Harbour Master.

4 vessels, 2 vessels alongside each other can be safely moored at these buoys. Depth: 40 ft.; distance between each buoy and dolphin 1,000 ft. Furthermore, in the Southern part of the harbour a set of 2 dolphins can accommodate 2 vessels with length up to 600 ft. and a max. draft of 20 ft.

RESTRICTIONS: The harbour of Willemstad consists of a 1,400 yd. long and min. 270 ft. broad channel, the Santa Anna Bay, with depths from 50 ft. to 79 ft. and an adjacent inner bay, the Schottegat, a 150-acre body of water with a depth of more than 10 ft. and a max. of 79 ft.

The navigable portion of the entrance of the port is 865 ft. wide, marked on either side by a light-buoy, and the minimum depth is 50 ft.

Required minimum draft for tankers arriving, shifting and sailing:

g.r.t.	fwd. ft.	aft. ft.
up to 11,000	10	16
11,000–15,000	11	18
15,000–19,000	13	19
19,000–25,000	14	20
25,000–29,000	15	21
29,000–35,000	17	23
35,000–43,000	18	24
43,000–45,000	19	25
45,000–47,000	20	25
47,000–50,000	21	26
50,000–55,000	22	28
55,000–60,000	22	29
60,000–65,000	23	30
65,000–70,000	23	31
more than 70,000	24	32

Maximum trim for tankers: 10 ft. by the stern, 2 ft. by the head.

BRIDGES: Santa Anna Bay is crossed by 2 bridges, the Queen Emma floating pontoon bridge and the new, fixed bridge.

The pontoon bridge opens day and night for in and outgoing vessels. There will no longer be any waiting period at the harbour entrance. Automobile traffic will be diverted to the new bridge and those on foot will have continuous ferry service available. Ships will have overall preference for openings.

The new fixed bridge, dominating Willemstad's skyline and the entrance to Schottegat Bay, is 185 ft. high, (clearance 180 ft.) enabling the biggest vessels to pass under. The bridge is of box girder construction and is open to automobile traffic only. Glare-proof lights are installed to prevent interference with light signals that harbour Pilots rely on when bringing a ship through the channels.

Tankers passing through the Santa Anna Bay must have all tank-lids properly closed, even if they are gas free. This is a harbour regulation.

MAX. SIZE: Length 850 ft., draft 45 ft. Vessels with a LOA of 1,000 ft. have been piloted in the harbour.

RADIO: Port Operations Station (Operated by Harbour Authorities): Location, Fort Nassau. Call sign, Fort Nassau. Frequencies, International Channels 16 (156.80 MHz), calling and safety; 12 (156.60 MHz), working, first choice; 14 (156.70 MHz). Watchkeeping, 24 hours on Channel 16. Type of operation, Simplex, Frequency modulated. Range, 20 to 25 miles.

Main Private Station (Operated by Shell Curacao N.V.): Location, on the Zwartberg. Call sign, Shell Curacao. Frequency, international Channel 25 (receiving, 157.25 MHz); (transmitting, 161.85 MHz). Type of operation, Duplex working, frequency modulated; operated by remote control from Shell's telephone exchange; ask operator for connection with party desired. Range, 20 miles. Watch-keeping, 24 hours on Channel 25; normal daily business, 0730 hrs. till 2400 hrs.; urgent business only, 2400 hrs. till 0730 hrs.

Tug Base Station: Location, on the Zwartberg. Call sign, Marine Department – for tug movements only and in an emergency to direct the tugs. Watchkeeping during office hours. Central Post – for tug movements only. Watchkeeping 24 hours. Shell Curacao – for emergency calls to tugs only after having been alerted on Channel 25. No watchkeeping. Frequency, International Channel 14 (156.70 MHz). Operation, Simplex – frequency modulated. Operation by remote control from Shell's Marine Department, Central Post and telephone exchange.

Tug Mobile Stations: Location, 1 on each tug. Call sign, Balau, Drado, Koraal, Passaat, Karet, Piku, Buni, Mula and Orca. Frequency, International Channels 16, 12, 14, 9, 8 and 6. Watchkeeping, 24 hours on Channel 14. Operation, Simplex – frequency modulated.

Curacao Drydock Co. – VHF Channel 6. SEL Maduro and Sons Inc. – VHF Channel 10.

HEALTH: The Port Doctor will visit only if there is a case of quarantinable disease on board. The Netherlands Antilles Bill of Health is free of charge.

TUGS: Compulsory for all tankers exceeding 3,000 g.r.t. Tankers exceeding 700 ft. overall length must make one tug fast forward before entering.

S.I.A. (Smit International Antilles N.V.) has 3 modern powerful tugs stationed at Bullen Bay, for rendering services to tankers calling at Bullen Bay.

The "Piku", 4,000 h.p., 59 tons bollard pull, built in 1974.
The "Buni", 4,000 h.p., 59 tons bollard pull, built in 1975.
The "Drado", 2,800 h.p., 37 tons bollard pull, built in 1976.

They are also used by "ship to ship transfer" in the coastal waters South of Curacao.

All tugs are provided with extensive firefighting and salvage equipment, and each tug carries some 25 tons of oil dispersant together with a spray system to be utilised in case of oil spill.

Another tug the "Balau", 2,800 h.p., 37 tons bollard pull and built in 1976 is stationed in the harbour of Willemstad for rendering towage and salvage assistance both inside and outside the harbour.

Shell Curacao N.V. has three sea-going motor tugs stationed at Willemstad.

The "Passaat", 1,250 h.p., 280 g.r.t., bollard pull 18 tons.
The "Karet", 2,250 h.p., 280 g.r.t., bollard pull 34 tons.
The "Koraal", 1,250 h.p. 298 g.r.t., bollard pull 18 tons.

The tugs can be engaged for rendering towage assistance both inside and outside the harbour. As a rule, however, all vessels dock or undock at all wharves and enter or leave the port without tug assistance. In case of abnormal circumstances or in case the Harbour Master may require tug assistance.

Tugs can be requested by the Master for speeding up docking or undocking the vessel.

There are about 20 small harbour tugs available, varying from 60 h.p. to 300 h.p. and about 80 lighters, to receive cargo or bring it alongside a vessel, varying from 60 to 250 tons capacity.

Also see "Services".

BERTHING: There are berths on either side of the Santa Anna Bay North of the pontoon bridge, with depths varying from 18 ft. to 33 ft. alongside, generally used for bunker, cargo and passenger ships.

On the Eastern side four wharves: the Handelskade, depth 18 ft.; the Kleinewharf, depth 24 ft.; Grotewharf, depth 31 ft.; and Salazar, depth 24 ft.

On the Western side six wharves: the Matheywerf, depth 23 ft.; Westwerf S., 25 ft.; Westwerf N., 36 ft.; Nieuwewerf, 33 ft.; Motetwerf, 33 ft.; Oranjewerf, 19 ft.

In the Schottegat there are seven more berths, generally used for bunker, cargo or passenger ships.

Prins Hendrikwerf which closes the Western corner Santa Anna Bay/Schottegat, has a depth of 35 ft.; however, ships with a draft of more than 35 ft. can be moored by way of placing rafts of 10 ft. width between vessel and the quay.

At the Eastern part of the Schottegat are the Admiral Brion Wharves, which has 3,000 ft. docking space available with 34 ft. depth alongside.

In the Schottegat on the peninsula of Asiento are situated the 14 piers owned by Shell Curacao N.V., which are mostly used by tankers; however, other vessels are enabled to use these wharves for bunker facilities. Pier No. 1 may be used for general cargo (mostly packed oil products).

The names and the depths alongside these piers from West to East are: Pier I, 32 ft.; Piers II and III, 34 ft.; Pier IV, 40 ft.; Pier V, 46 ft.; Pier VI, 41 ft.; Pier VII, 34 ft.; Pier VIII, 46 ft.; Pier IX, 36 ft.; Pier X, 33 ft.; Pier XI, 19 ft. Also see "Tankers".

The Schottegat also has about 5,000 ft. of quay available for repairs. The names of the wharves, lengths and depths alongside are: Beatrix I and II, 1,300 ft. (each) – 21 ft.; Beatrix III, 400 ft. fore, 10 ft. aft – 35 ft.; Beatrix IV, 350 ft. – 31 ft.; Beatrix V and VI, 1,000 ft. (each) – 37 ft.; Repair Quay, 1,650 ft. – 35 ft.

There are sufficient covered and open storage places available on the wharves to load or unload a ship, generally dry cargo. Total covered storage area: 219,500 sq.ft., open storage: 1,100,000 sq.ft.

These areas can be used for transit as well as local cargo; also barges are used for transit cargo.

In the N.E. part of the Schottegat LASH lighters can be moored at 2 sets of buoys, depth 20 ft.

Storage capacity for liquid petrol products is 4,600,000 tons in tanks of refineries of "Shell Curacao N.V.".

All Shell piers are modernly equipped to handle oil in bulk, safely, and speedily, in order to make the turn around of the vessels as short as possible. Sufficient hose connections are installed to load or discharge oil, water-ballast or residue, and to supply steam and fresh water.

The wharves in Santa Anna Bay and the Brion wharves are all modernly equipped to supply different kinds of bunkers and also handle cargo simultaneously. Normally, general cargo is handled with the ship's tackle; there are no apron cranes or cargo masts or conveyors.

There are lighters alongside, and sufficient pallets and fork-trucks are available. Mobile and floating cranes are available if needed up to 140 tons.

Docking of cruise ships in Willemstad harbour: The following piers are regularly used by cruise ships and cargo ships:

Nieuwewerf, Motetwerf: West side St. Anna Bay. Type: quay. Construction: sheet piling, concrete top, stelcon plates floor. Length: 1,200 ft. Draft: 33 ft. Height above water: 4 ft. One transit shed each: Nieuwewerf, width 65 ft., length 216 ft., area 14,000 sq.ft.

Motetwerf, width 65 ft., length 216 ft., area 14,000 sq.ft. Open space area 200,000 sq.ft. One warehouse facility 6,500 sq.ft.

Oranjewerf: On West corner St. Anna Bay/Schottegat. Type: quay. Construction: iron piles, concrete top, concrete floor. Length: 418 ft. Draft: 19 ft. Height above water: 6 ft. Special bunker pier, cargo handling mostly via lighters alongside.

Prins Hendrikwerf: In the Schottegat near West corner Santa Anna Bay. Type: quay. Construction: iron piles, concrete top, concrete floor. Length: 400 ft. Draft: 34 ft. Height above water: 5 ft. One transit shed: width 65 ft., length 385 ft., area 25,000 sq.ft. Open space area 100,000 sq.ft. No warehouse facilities.

Admiral Brion Wharves: Nos. 1, 2, 3, 4, 5 and 6 situated at the East side Schottegat. Type: quay. Construction: sheet iron cells with concrete top, asphalt floor. Total length: 3×1,000 ft. Depth: 34 ft. Height above water: 5 ft. Two transit sheds: one with width 65 ft., length 680 ft., area 44,000 sq.ft.; one with width 65 ft., length 330 ft., area 21,000 sq.ft. Open space area 510,000 sq.ft. Two special platforms for Ro-Ro ships have been constructed. Max. draft 23 ft.–33 ft. These platforms are also the mooring berths for ferry service between Curacao-Venezuela-Aruba and Bonaire.

Kleinewerf, Grotewerf, Salazarwerf: East side of St. Anna Bay. Type: quay. Construction: sheet piling, concrete top, asphalt floor. Total length wharf: 1,470 ft. Maximum draft alongside 24 ft.–31 ft. Height above water: 2 ft. One transit shed, width 65 ft., length 330 ft., area 21,500 sq.ft. Open space area 154,000 sq.ft. No bunkering facilities.

Matheywerf, Westwerf, Westwerf North: West side Santa Anna Bay. Type: quay. Construction: sheet piling, concrete top, asphalt floor. Total length wharf: 640 ft. Draft: 23 ft. Height above water: 4.5 ft. One transit shed: Mathey loods. Width: 61 ft. Length: 320 ft. Area: 19,000 sq.ft. Open space area: 17,000 sq.ft.

Westwerf: West side Santa Anna Bay. Type: quay. Construction: sheet piling, concrete top, asphalt floor. Length: 396 ft. Draft: 25 ft. Height above water: 4.5 ft. One transit shed: Westwerf. Width: 61 ft. Length: 396 ft. Area: 20,000 sq.ft. Open space area: nil.

Westwerf North: West side Santa Anna Bay. Type: quay. Construction: sheet piling, concrete top, asphalt floor. Length: 396 ft. Draft: 36 ft. Height above water: 4.5 ft. One transit shed: Westwerf North. Width: 61 ft. Length: 106 ft. Area: 6,400 sq.ft. Open space area 18,000 sq.ft.

Cargo handling and bunkering can be carried out simultaneously.

STEVEDORES: Gangs must be engaged between 0600 and 0630 hrs. for the day, on weekends and Saturdays. For work on Sundays and holidays, gangs must be ordered between 0600 and 0630 hrs. on Saturday or the workday preceding the holiday. Masters of vessels carrying out cargo operations are consequently recommended to advise Agents their ETA well in advance of above deadlines.

TANKERS: Besides the wharves mentioned in "Berthing", there are 13 oil piers in the Schottegat for discharging crude oil and feed-stocks for the Shell refinery and loading products. These wharves are therefore used mainly by tankers. They are all equipped to provide bunkers.

All main grades of marine lubricants are stocked at the port of Curacao. Shell Marine lubricants and Marine Technical Service with laboratory facilities for the examination of used oil samples are available 24 hours a day.

Name	*Max. Draft (ft.)*	*Max. Displ. (tons)*	*Max. Length (ft.)*
Shell Jetty 1	27	25,500	580
Shell Jetty 2	30	25,500	575
Shell Jetty 3	33	25,500	575
Shell Jetty 4	38	54,000	775
Shell Jetty 5	45	100,000	850
Shell Jetty 6	39	54,000	750
Shell Jetty 7	31	25,000	560
Shell Jetty 8	45	100,000	850
Shell Jetty 9	33.5	40,000	850
Shell Jetty 10	For'd 21 Aft 3	40,000	850

SLOP RECEPTION FACILITIES: Available at all Shell Terminals.

FRESH WATER: Fresh water for drinking and use in boilers is available day and night in sufficient quantities at all wharves through pipe-lines. Fresh water is distilled from sea water by one of the biggest distillation plants in the world. The quality is very good and chemically pure.

Fresh water is also delivered alongside by means of water barges. 5 water barges are available. Each barge can deliver 50/100 tons of fresh water per hour. The rate of delivery depends on the quantity required and how many barges can simultaneously deliver fresh water in the vessel. It also depends on the amount of connections on board the vessel and the height above water to be lifted.

On the *Admiral Brion Wharves, Motetwerf, Nieuwewerf* and *Prins Hendrikwerf* water can be delivered by means of a pipe-line.

FUEL: Besides the Shell piers there are 2 bunkering installations: namely, the "Admiral Brion Wharves" comprised of 6 berths and the "Motet" bunkering installation comprised of 4 berths.

The "Admiral Brion Wharves" bunkering installation is directly supplied from the refinery by means of 2 pipe-lines with diameters of 12 in. and 8 in. The pipe-lines run the full length of the piers, each with 5 bunkerpits, from which the oil can be delivered directly to the ships via a mobile blending unit if this is required. The capacity of the pipe-line and the pumps is 600 t.p.h. for fuel oil and 300 t.p.h. for diesel oil. Gas oil is also available.

The bunkering facilities of the "Motet" installations in Otrabanda, which are comprised of 7 storage tanks and pumping facilities, are supplied through 2 pipe-lines of 12 in. and 6 in. diameter from the refinery. The rate of delivery, by gravity and pumps, is 600 t.p.h. for fuel oil and 500 t.p.h for diesel oil.

Modern fuel blending facilities are available at all installations in Willemstad.

REPAIRS: The Curacao Drydock Company Inc. has repair yards and 2 graving docks laid out in the Schottegat.

The largest graving dock is 919 ft. long, width of entrance between wheel fenders 152 ft. and a depth of water over sill of 27 ft. 10 in. Suitable for up to 120,000 d.w.t. Movable cranes of 25 and 75 tons lifting capacity are fitted alongside the dock.

The Curacao Drydock Company Inc. has 6,000 ft. of repair wharf with varying depths up to 40 ft. Cranes alongside up to 75 tons lifting capacity. A floating crane with capacity of 30 tons and a mobile truck crane of 140 tons also available.

Electric shore-power A.C., D.C. 110, 220 or 440 volts can be supplied directly from shore at wharves of Shell Curacao N.V. and at other wharves from generators on barges. Shell can also supply steam directly from the shore at a pressure of 8–15 kg./cm.

SURVEYORS: A.B.S., Lloyd's, N.V., B.V., R.I. and G.L.

Caleb Brett, Independent Marine Bureau and T. J. Kerklaan.

TIME: GMT minus 4 hours.

HOLIDAYS: New Year's Day, Carnival Monday (February), Good Friday, Easter Monday, Queen's Birthday, Labour Day, Ascension Day, Kingdom Day, Christmas Day, Second Christmas Day. "No work", holidays for cargo operations: New Year's Day, Good Friday, Labour Day and Christmas Day.

POLICE/AMBULANCE/FIRE: Police and Fire, Tel: 44444. Ambulance Tel: 25822.

EMERGENCY CO-ORDINATION CENTRE: Curacao is a major Search and Rescue Centre in the Southern Caribbean and disposes of the following means:

Communications: Curacao Radio is listening on the standard frequencies (VHF Channel 16) (2182 kHz. (voice) and 500 kHz (morse) Fort Nassau (Channel 12 and 16) is the harbour semaphore and traffic control centre.

Co-Ordination: MLD (Royal Netherlands Navy Air Service) Rescue Co-Ordination Centre (Curacao Rescue) at the Dr. Albert Plesman International Airport. Tel: 81628 (24 hours service).

During the emergencies the following frequencies are being used: 2182 kHz VHF Channel 16.

The Curacao RCC maintains a communication link with the United States Coast Guard RCC in San Juan (Puerto Rico) and can use the AMVER information.

Air Search: In case of a missing aircraft or vessels the following forces are available for conducting Search and Rescue missions under control of the Curacao RCC:

RNN long range patrol aircraft of the type Lockheed Neptune SP-2H gradually to be replaced by Fokker F27 Maritime aircraft (both aircraft can communicate on Channel 16 and 2182 kHz).

Coast Guard Auxiliary (CITRO) short range aircraft. Consisting of single and twin-engined light aircraft flown by Civil Pilots under RCC direction. Some of them can communicate on Channel 16.

Helicopters are unavailable.

Rescue Units: Commercial tugboats. Coast Guard Auxiliary (Citizens Rescue Organisation of the Netherlands Antilles CITRO). Using private boats and especially designed 20 knots life-boat, especially equipped to handle all emergencies, including medical evacuations.

Royal Netherlands Navy. If available the station vessel (a destroyer) will be despatched for emergencies.

Merchant Navy ships of convenience; in general Merchant Navy vessels which will be directed by the aircraft described before, to emergencies. This in accordance with the Mersar-booklet on Search and Rescue.

GENERAL: Customs Officers remain on board on duty during the vessel's stay in port. They must be fed by the ship and are entitled to the equivalent of officers' mess or first-class dining saloon.

REGULATIONS: Both anchors should be ready for immediate use. Defects of engines, steering gear, anchor gear and other defects which influence manoeuvring abilities of the vessel should be reported before entering, to the Harbour Master.

Dangerous Cargo: Explosives, ammunition, fireworks, radio active material and other dangerous cargo.

All vessels carrying explosives or other dangerous cargo, for discharge at Curacao, for transhipment or in transit without transhipment, *require special permission in writing, obtained prior to arrival,* for entering any port in the island of Curacao. Full details must be furnished in advance.

Only limited quantities of explosives, etc., are permitted in the port of Willemstad. For calls with larger quantities outports are used. Details of the regulations in force on the subject will be furnished on request by shipping Agents.

Entry permit required for ships carrying dangerous and/or hazardous cargo. Cost of form including stamp is fls. 4.00. Additionally administration fee is charged on the following basis:

Cargo in transit not being off-loaded from the ship – Nil. Local cargo to be discharged from the ship:

Up to 500 kilos	Cfls. 5.00
500 kilos to 5 tons	Cfls. 15.00
5 tons up to 25 tons	Cfls. 30.00
25 tons to 50 tons	Cfls. 45.00
over 50 tons	Cfls. 60.00

Transhipment cargo landed from one ship and reloaded on another ship: Double the local charge, indicated above.

At the discretion of the Harbour Master a special guard may be assigned onboard vessels handling or having dangerous and/or hazardous cargo on board. The charge, if and when incurred, is Cfls. 15.00 per hour in straight time and Cfls. 30.00 in overtime. Please note that this happens very seldom.

AIRPORT: There are daily international flights from Dr. Albert Plesman Airport.

ALM: Frequent daily trips to Aruba and Bonaire. Daily flights to Miami and New York. Regular air services to St. Maarten, Caracas, Maracaibo, Colombia, Haiti, Sto. Domingo, Puerto Rico, Trinidad and Paramaribo.

Eastern Airlines: Daily flights to Puerto Rico and transfers to all points.

American Airlines: Daily flights to New York and transfers to all points.

VIASA: Regular scheduled flights to Caracas, Sto. Domingo, Paris and Amsterdam.

Aerocondor: Daily flights to Colombia.

LAV: Many daily flights to Caracas.

KLM: Daily flights to Amsterdam, Lisbon, Madrid, Frankfurt and Zurich.

Ferry: Ferry's Del Caribe S.A. runs a regular service with a new modern ferry which carries 1,200 people and 120 automobiles. This ferry has regular service between Curacao and Coro, Venezuela on Monday, Tuesday, Wednesday and Thursday. On Thursday the ferry also goes to Aruba and Punto Fijo, Venezuela.

SERVICES: *Salvage, etc.:* A supply vessel named "Orca" is permanently stationed at Willemstad by "Smit Tak International Antilles N.V." on a 24 hours service base. She is provided with extensive salvage equipment such as pumps, hoses, burning and welding equipment and an hydraulic crane with a capacity of 10 tons.

Facilities for divers such as compressors, decompression tank, etc., are on board. The ship is furthermore very suitable for bringing stores, spare parts, packed oil products, crew on board, passing, or on the roads, waiting ships.

Underwater Cleaning/Underwater Services Smit Tak (Antilles) N.V.:

Cleaning of submerged hull sections of ships while afloat. This cleaning can take place while the ship is moored in the main harbour at Willemstad and also at other locations, such as Caracas Bay, Bullen Bay and St. Michiels Bay.

Cleaning of cruise ships takes place while bunkering and the passengers are ashore.

Smit Tak (Antilles) N.V. has developed its own underwater cleaning apparatus which cleans ships up to 250,000 d.w.t. within 24 hours. Also the rudder and propeller are properly cleaned. The cleaning does not affect the paint but only removes the very thin upper layer of spent anti-fouling paint, leaving the active anti-fouling exposed.

Smit Tak (Antilles) N.V. carries out various kinds of underwater works e.g. sealing off sea-intakes and ropeguard, all other kinds of cutting and welding works, underwater inspections, made by certified divers, which can be combined with photographing of bottom condition in colour and black and white. Closed circuit underwater television with video-tape recorder is available.

Smit Tak (Antilles) N.V. is the largest professional salvage and underwater cleaning company in the Netherlands Antilles and has experienced divers able to make certified damage reports.

Peteres Divers Company Ltd.: The following underwater services are carried out by Peters Divers Company Ltd. Underwater hull cleaning by means of the "Scamp" makes it possible to clean the largest VLCC's during loading or discharging.

The average cleaning time for a VLCC is 12 hours. Underwater T.V. system for underwater surveys and inspections are available.

Further underwater services are: welding, cutting, photographing of the bottom condition, etc. in colour and black and white, sealing of intakes, etc. All inspections are carried out by licensed marine engineers.

DEVELOPMENTS: There is a Container Terminal under construction South of Admiral Brion Wharves. Length of quay 500 m., depth 40 ft., of which 20 m. will be a Ro-Ro quay. Total area 90,000 sq.m.

New floating dock under construction. 80,000 ton graving dock in planning stage.

AUTHORITY: Curacao Port Authority N.V., Werf de Wilde Z/N, Willemstad, Curacao, Netherlands Antilles. *Cables:* Harbour Office Curacao. *Tel:* 611133, 611740. *Contact:* E. P. Sint Jago, Harbour Master.

AGENT: SEL Maduro & Sons (Curacao) Inc., Maduro Plaza, P.O.Box 3304, Willemstad, Curacao, Netherlands Antilles. Tel: 76900. Telex: 1092, 3325 or 3393. Selms NA. Cables: "Maduroship".

NOTES

Please also advise Shipping Guides Ltd.

New Caledonia

BABOUILLAT: 20.23 S. 164.08 E.

SHIPMASTER'S REPORT: October 1983.

LOCATION: Babouillat is a village located at the Northern part of the Island of New Caledonia at approximate position Lat. 20° 23.2′ S., Long. 164° 07.6′ E., at Baie De Nehoue which is incompletely surveyed. There is a chrome ore mine nearby operated by International Nickel France.
DOCUMENTS: Last Port Clearance, 1 Health Form, 2 Store Lists, 2 Personal Effects Lists, 3 Crew Lists. Customs Officers and Agents board vessel on arrival at anchorage. As Agents come from Noumea, 450 km. away from Babouillat (takes 5 hours by car), they come only on arrival and on departure. Any contact should be made by telegram through Noumea Radio Station.
PILOTAGE: Pilot is picked up on arrival at Deverd Passage, Lat. 20° 44′ S., Long. 164° 12′ E., marked by Fl.4s. light buoy. An accurate ETA message is required 24 hours prior to arrival as Pilot comes from Noumea by tug.

Only day time pilotage is possible to Babouillat. Vessels with draft not exceeding 25 ft. can use Inner Route, otherwise the vessel must drift outside Gazelle Passage with Pilot aboard and pass through Gazelle Passage in daylight. Vessels can also await daylight at anchor in Deverd Passage with the Pilot aboard.

For departure, Noumea Pilots require 24 hours' notice. Latest departure time is 1530 hrs.; earliest departure time 0545 hrs. Pilot disembarks at Gazelle Passage.

Also see "VHF".
ANCHORAGES: The anchorage is located at Lat. 20° 22.2′ S., Long. 164° 06.1′ E., 3 cables South of Ilit Ti (80 m. high), with depths from 13.5 m. to 18 m. and good holding ground.

Vessels load high grade low silica fines (refractory), which are Chrome ore concentrates of Tiebaghi Area, at the anchorage from barges.
RADIO: Noumea Radio Station.
VHF: Pilot has a portable VHF with Channel 16. Tug which brings Pilot from Noumea has no VHF.
BULK CARGO FACILITIES: Loading effected by ship's gear (cranes) and shore equipment (shovel like 12 tonne capacity equipment which are filled in the barge with a bulldozer and mechanically discharged into the hold). It is possible to load 3,000 to 3,500 tonnes per day with 3 gangs and work from 0500 hrs. to 2200 hrs.
MEDICAL: Doctor is available at Coumac Hospital located at Lat. 20° 34′ S., Long. 164° 16.5′ E. The boarding representative of shippers can make the necessary arrangements.
REPATRIATION: All facilities exist to foreign countries for crew changes and repatriation through Noumea Airport.
AUTHORITY: Port Autonome de Noumea, P.O.Box 14, Noumea. *Tel:* 275966. *Telex:* c/o Comin, 045 NM. *Contact:* Captain Jean Louis Boglio, Port Captain – Noumea.
AGENT: Establissement Ballande. Telex: Ballande 025 NM. Cable Address: Ballande, Noumea.

NOUMEA: 22.16 S. 166.27 E. (See Plan Book)

PORT LIMITS: *Port Area:* Main Harbour as far as entrance between Port Lestelle and Point Kongou.

Secondary Harbour and Orphelinat Bay as far as the entrance between Brun Islet and Point Denouel.
DOCUMENTS:

8 Copies Cargo Manifest.
2 Copies Manifest of parcels to be unloaded for New Caledonian Residents.
2 Copies List of Personal Objects.
(detailing photographic material, audio-visual equipment, watches, etc.).
2 Copies List of Foreign Currency.
2 Copies List of Provisions.
2 Copies Inventory of Consumable Matter.
2 Copies List of Drugs and Narcotics.
(which *must* remain on board).
2 Copies List of Weapons and Ammunition.
(under Master's responsibility).
4 Copies List of Crew Members.
4 Copies List of Disembarking Passengers.
(or notification of no Disembarking Passengers).
4 Copies Transit Passenger List.
1 Copy Maritime Health Certificate.
4 Copies Declaration of Vessel's Specifications.
1 Copy Submission Form.

PILOTAGE: Compulsory for foreign vessels (exemption for vessel with French registery under 60 m. LOA), pilotage rendered day or night. Ladder to be 1.5 m. above water.

Pilot boats are wooden launches about 15 m. long, with black hull, equipped with VHF (permanent reception on Channel 16. Channels 12, 14 and 17 working). Pilot boats also transmit on 2182, 4072.3 and 8207.4 and receive on 2197.5, 4366.7 and 8731.3

Two access channels to Noumea through reef.

Boulari Channel: (Lat. 22° 30′ S., Long. 166° 26′ E.)

Pilot boards 1 mile off, on the Leads of Amedee Lighthouse.

Havannah Channel: (Lat. 22° 21′ S., Long. 167° 03′ E.)

Pilot boards off Goro Lighthouse on the Leads of Cap N'Dua by day, and off Port Boise at night.

In bad weather, pilot launches remain on leads as close as possible to entrance.

Pilot should be ordered at least 6 office hours before departure or moving.

ANCHORAGES: In Great or Small Road. Prohibited zone shown on chart in vicinity of underwater sealine.
RESTRICTIONS: Vessels may enter and anchor at any time, mooring may be effected at night, except for tankers at buoys.
MAX. SIZE:
Cargo Vessels: Max. draft 10.30 m.
Tankers: Max. LOA – 300 m. Max. draft 14.80 m.
HEALTH: If vessel is "healthy", Pratique is accorded by the Pilot at the entrance, or by the Harbour Master (VHF).

In the case of contagious disease or death on board the Harbour Master must be notified by radio (VHF) before entering inner reef and the vessel must anchor at the Quarantine Station at N'Die (East of Freycinet Islet in Dumbea Bay).
Port Regulations: All vessels must comply with current Quarantine Regulations and if necessary undergo fumigation and disinfestation before tying up.

Before docking, any vessel arriving from a country infected by Rhino Beetle (*Oryctes Rhinoceros*) must:

a) Anchor 400 m. from the coast between sunrise and sunset, keeping holds closed.

b) Be visited by a Quarantine Inspector and if necessary disinfested.

c) Holds must remain closed 2 hours after fumigation.

Infected Countries: Fiji, Tonga, Samoa, Wallis/Futuna, Bismarck Archipelago (New Britain, New Ireland, New Hanover), Sarmi, Manokwari Sorenarwa (Western Irian Jaya), Palau Islands (Carolines), Indonesia, Philippines, Taiwan, Japan, Dominican Republic/Haiti, Cuba.

d) Any ship coming from Japan is inspected to prevent contamination by *Papillia Japonica.*

e) Any vegetable goods to be unloaded must be accompanied by a Quarantine Clearance Certificate.

f) Special permit is necessary from the New Caledonian Agricultural Department prior to importation of plants and seeds, etc.
Hygiene: All ships alongside must be equipped with rat guards.

RADIO: All messages by Coast Station Noumea, call sign FJP. Harbour Master's Office equipped with VHF Channels 16, 12 and 14, operated during normal working hours.
Arrival Advice: To Agent 48 hours before arrival: Indicate: Arrival time at Pilot pick-up point; name of pass; overall length; forward and aft drafts of vessel; damage or mechanical problems, if any to vessel's apparatus and cargo; tonnage to be unloaded; dangerous cargo, explosives, etc.

Note: This information must be lodged with the Harbour Master's Office 24 hours before arrival.

VERY IMPORTANT: Tankers carrying hydrocarbons must notify their Agent as to whether they have or have not the International Certificate for Prevention of Pollution by Hydrocarbons.

To Agent and Pilot Station 24 hours prior to arrival: Confirmation of arrival time at Havannah Passage or passes outside the Southern Zone.

12 hours prior to arrival: Confirmation of arrival time at Boulari Pass.

Note: Application for a Pilot must be made to the Pilot Station during official office hours (Monday to Friday 0700 to 1100 hrs. and 1330 to 1730 hrs.; Saturday 0700 to 1100 hrs.), either by telephone or telegram by the ship's Master addressed to the Pilot Headquarters and transmitted to the Coastal Communications Centre (Tel: 27.32.74).
TUGS: Tug's service is compulsory for vessels over 60 m. LOA. One tug of 1,200 h.p. and 2 of 400 h.p. available to assist. Tugs equipped with VHF Channels 16, 12 and 14.

BERTHING:

Berth	*Length* (m.)	*Depth* (m.)
Petite Rade (Small Road):		
Main Wharf (Berth Nos. 1–3)	428	5.50 – 7.00
Coaster Wharf	190	3.50 – 5.50
Coastal Trader Wharf	140	3.50 – 4.50
Tourist Vessel Wharf	75 (with 2 dolphins 155 m. apart)	9.50 (For vessels up to 170.0 m. LOA)
Grande Rade (Great Road):		
Fishing Vessel Wharf	121	8.00
Coaster Wharf	140	3.80 – 5.00
Main Wharf (Berths Nos. 4–7)	694	10.00 – 10.50

Note: Access to Berth No. 4 limited to 8.80 m. by shoal 70 m. off wharf.

There is one mooring buoy 160 m. from the N.W. corner and in line with the main wharf.

BULK HANDLING FACILITIES:
Grain: 3 grain silos of 815 tonnes each.
Cement Berth: Private berth located in Baie de Numbo (position: Lat. 22° 15′ S., Long. 166° 25′ E.). Initially designed for vessels of LOA 135 m. but can handle vessels with a max. LOA not exceeding 168 m. and draft not exceeding 9 m. Vessels berth alongside 3 dolphins 110 m. apart with mooring buoys fore and aft. Middle dolphin equipped with crane, hopper and conveyor. Fresh water available.
Usine le Nickel: Private wharves with 3 berths for ore carriers, tankers and freighters.

Quai Sud: 1 berth, length 170 m., depth 9 m. Equipped with 3 shore cranes for unloading ore carriers.

Quai Nord Ouest: 2 berths. Total length 397 m. Berth No. 3/4 depth 9 m. Berth No. 5/6 depth 10 m. Loading of processed metal and unloading of tankers on behalf of Shell.

Also see "Tankers".

STEVEDORES: Service provided by three private companies. 2 or 3 days' notice required to arrange work.
Working Hours: Normal Hours: Monday to Friday 0700 – 1100 hrs. and 1300 – 1700 hrs. Overtime: Monday to Friday 1800 – 2300 hrs., Saturday 0700 – 1100 hrs. and 1300 – 1700 hrs.

EQUIPMENT: Stevedore Company equipment:

Societe du Chalandage:

Fork Lift Trucks: 6×1.5 tons, 10×2.5 tons, 12×4.0 tons, 3×5.0 tons, 4×6.0 tons, 10×10.0 tons.

Forklift/Frames (for Ro-Ro/Spreaders): 1×30 tons, 1×25 tons, 2×22 tons, 1×12 tons.

Karry Crane: 5×3 tons (6 tons doubled).

Tractors for Vehicles: 2.

Cranes: Poclain P.P.M. automotive, 14 tons (4 – 5 tons useful load). Richier on carrier (jib 24 m.) 40 tons (at 3 m.).

Self-Loading Trailers for Container Vessels: 20 tons (1 container 20 ft.). 30 tons (containers 20 ft. – 40 ft.)

Spreaders for Containers: 3 automatic for 20 ft., 1 automatic for 40 ft.

Trucks with Crane: 2 with jib 6 m., 7.5 tons/m., 1 with jib 7 m., 9 tons/m.

Semi-Trailer: 10×12 m. long. 7 Espadon type.

SOFRAC:

Crane Belotti: 1×22 tons with directional spreader.

Forklifts: 2×22 tons with frontal frame.

Forklifts: 3×8.5 tons, 2×6.5 tons, 1×6 tons, 1×5 tons, 3×4 tons, 2×3 tons, 1×3 tons (lowered for unloading containers), 1×2.5 tons (lowered for unloading containers), 2×2 tons (lowered for unloading containers).

Karry Crane: 1×3 tons (6 tons doubled).

Semi-Trailers for Containers: 6 for 20 ft., 24 tons. 4 for 20 ft. – 40 ft., 24 tons.

Heavy Duty Tractors: 6 for loads from 38 tons to 60 tons.

Tank Trucks: 1×35 cu.m. (1 tank), 22 tons. 1×24 cu.m. (2 tanks), 22 tons.

Automatic Spreaders: 2 for containers 20 ft., 25 tons. 1 for containers 40 ft., 30 tons.

Suction Pumps for Grain: 1×140 t.p.h., nominal 40 – 45 t.p.h. 1×35 t.p.h., nominal 25 t.p.h. 1×200 t.p.h.

Semi-Trailer with Worm: 1 for unloading grain containers.

S.A.T.O.:

Forklift Trucks: 2×2.5 tons (on board), 4×4 tons, 3×6 tons, 1×8 tons, 1×12 tons, 1×25 tons.

Karry Crane: 1×3 tons (6 tons).

Automatic Spreader for Containers: 1×20 ft., 25 tons.

TANKERS:

SBM: (Societe le Nickel): In the entrance to Grande Rade (position: Lat. 22° 14′ 15″ S., Long. 166° 23.4′ E.). Mooring during daylight only. Max. LOA 300 m. Max. draft 14.80 m. Pumping rate for No. 2, heavy fuel oil 3,000 cu.m./h.

Baie des Dames: (Mobil Oil Australia). (Position: Lat. 22° 14′ S., Long. 166° 24′ E.).

1. 5 mooring buoys (max. distance between East and West Buoys 361 m.) 2×8 in. lines for clean and black oils (each marked by a Spar Buoy and a Marker Buoy). Max. LOA 200 m., max. draft 10 m. The buoy mooring is used to discharge Mobil/Total tankers and bunker cargo vessels, liners and ore carriers.

2. "T" shaped jetty, length 9 m. 4 mooring dolphins and 2 mooring buoys (110 m. apart). Max. LOA of tankers 100 m., max. draft 5 m. Berth used for discharge of tankers and liquid gas carriers, bunkering of vessels and loading of tankers.

Also see table below.

Oil Terminals:

	Bay des Dames		*SBM (SLN)*	*Doniambo (SLN)*
	Mooring	*Anchorage*	*Main Harbour*	*Shell Tankers*
Position	22° 14.3′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 23.4′ E.	22° 15.6′ S. 166° 25.9′ E.
Controlling Depth	12 m.	12 m.	16.8 m.	10 m.
Nature of Bottom	Mud	Mud	Mud	Mud
Description of berth	Berths at jetty/4 dolphins and 2 buoys	5 buoys	1 buoy 3 m. high 11.5 m. dia.	Berths/wharf
Companies using oil terminal	Mobil Shell Total	Mobil Shell Total	SLN	Shell
Tanker:				
d.w.t.	1,200	28,000	100,000	28,000
LOA (m.)	100	200	200	200
Beam (m.)	—	25	—	—
Draft (m.)	5	10	14.8	10
Grades handled	Light oil Black oil	Light oil Black oil	— Black oil (Black Fuel Oil No. 2)	Light oil —
Max. weight cargo hoses (tons)		3		2
Pump Rate (t.p.h.)				
Discharging Clean oil	100	280	—	150/200
Discharging Black oil	80	340	3,000	—
Bunkering Clean oil	70	120	—	—
Bunkering Black oil	80	100	—	—
Minimum quantity	50	50	—	—
Pressure kg/sq.m.				
Clean oil	7	7	—	7
Black oil	7	7	10	—
	These two terminals are operated by Mobil Oil and are used for discharging and loading tankers as well as for bunkering all types of vessels.		Terminal owned by SLN who makes available its berthing Master. Follow instructions SLN/SIE 146, September 1979.	For tankers containing products for Shell.

LPG Terminal:

Gas carriers berth port side to wharf, against the jetty and the 4 dolphins which make up the Mobil Oil installations in Bay des Dames.

Limits: Overall length : 100 m. Draft: 5 m.

Capacity of reservoirs: 3,115 tons. Sphere No. 1: 330 tons; Sphere No. 2: 560 tons; Sphere No. 3: 2,225 tons.

All the spheres can be used for stocking butane.

Sphere No. 1 can also stock propane.

Average density of butane gas: 0.580.

Maximum pressure of liquid: 15 kg/sq.cm.

Normal delivery pressure: 7 kg/sq.cm.

Maximum vapour pressure: 5 kg/sq.cm.

Pumping speed: Maximum 70 t.p.h. Minimum speed: 10 t.p.h.

Hoses used by vessel: 1 hose for liquids 4 in. diameter; 1 hose for vapours 3 in. diameter.

Obligatory requirements for tankers carrying Hydrocarbons: Masters of all vessels carrying hydrocarbons and on the point of entering New Caledonian waters are under obligation to send to the Marine Commander in Noumea (F.U.J.), a message, indicating:

(1) Intended course.

(2) Navigation and manoeuvring possibilities.

6 hours before entering territorial waters.

6 hours before sailing.

Note: During sojourn or transit in New Caledonian waters, permanent radio contact is observed; international radotelephonic call frequency on the maritime metric band.

Tankers must use the following passes:

Havannah or Boulari: Tankers carrying less than 8,000 tons of petroleum products and less than 8 m. draft.

Pilot pick-up point 5 nautical miles off Boulari:

1. Entry via Boulari Pass if less than 20,000 tons of petroleum products and draft under 10 m. (night or day);

2. Entry via Dumbea Pass if more than 20,000 tons of petroleum products or more than 20 m. draft (daytime only).

Thio and Poro:

Tankers: Less than 20,000 tons of products and draft under 10 m.

Very Important:

Docking of tankers is in accordance with the possession of:

International Certificate for the Prevention of Pollution by Hydrocarbons; consequently:

This must be indicated to ship's Agent 48 hours prior to arrival.

Certificate must be shown to Pilot at the entrance, and to the Harbour Master or his representative upon docking.

MEDICAL: Clinique de Magenta, Rue du 18-Juin, Magenta, Box H5. Tel: 28.49.29.

Clinique Magnin: Route Territoriale No. 13, Vallee des Colons, Box 64. Tel: 27.26.01.

Hospital Gaston-Bourret, Avenue Paul-Doumer, Noumea, Box C5. Tel: 27.21.21.

Polyclinique de l'Anse-Vata, Route de l'Anse-Vata. Tel: 26.14.22.

Note: Numerous dispensaries located in villages and mining centres of the interior. If necessary, urgent medical evacuation possible by plane or helicopter.

DENSITY: 1026.

FRESH WATER: Supplied by pipe-line at the quays in the Commercial Port, S.L.N. and Numbo Private Cement Factory; rate, 40 t.p.h.

FUEL: Refuelling with marine diesel oil (M.D.O.) or bunkering fuel oil (B.F.O.) is possible.

Authorisation previously obtained by the shipowner from the Australian or French Head Offices of the 3 companies present in Noumea can aid local formalities:

Mobil Tel: 27.31.52

Shell Tel: 28.57.20

Total Tel: 27.52.91

"Light" fuels can be delivered by tanker, but "heavy" fuels must be loaded at the Mobil refuelling post, Bay des Dames.

Docking: LOA 100 m. draft 5 m.

Mooring to buoys: LOA 183 m. draft 10 m.

Note: When tying up to buoys: One must count 3/4 hours' lost time for the various operations. A derrick capable of lifting the hose (3 tons) is necessary.

GANGWAY/DECK WATCHMEN: Recommended, but not compulsory.

OPENING/CLOSING HATCHES: Can be performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per man(400 cigarettes at Outports). Additional allowance can be made after 10 days. Maximum 2 bottles of spirits per man. Wines and beer not limited. Landing of cigarettes, wines and spirits prohibited.

SURVEYORS: *Marine Surveyors:*

Bureau Naval Serve, 32 Rue du General-Gallieni, Noumea. Tel: 28.25.02.

Bureau Veritas, 21-23 Rue de l'Alma, Noumea. Tel: 27.20.31.

Lloyd's Register of Shipping, 7 Rue Anatole-France, Noumea. Tel: 27.20.83.

For all problems relating to cargo and/or vessel damages.

Draft surveys for estimation of nickel ore loads per ship.

Classification Societies:

Lloyd's Register of Shipping, Societe W. A. Johnston, 7 Rue Anatole-France, Noumea, Box 445. Tel: 27.20.83. Cables: Johnston. Telex: 070 NM.

Bureau Veritas, Societe des Etablissements Ballande, 21-23 Rue de l'Alma, Noumea, Box C4. Tel: 27.20.31. Cables: Ballande. Telex: 025 NM.

Germanischer Lloyd and Nippon Kaiji Kyokai. Bureau Naval Serve, 32 Rue Gallieni, Noumea, Box 2387. Tel: 28.25.02. Cables: Surveyor. Telex: Gemar 065 NM.

REPAIRS: Many engine, hull and electronic repairs can be effected. Slipway for small vessels. One slipway, to lift vessels of 1,000 tonnes.

CARGO GEAR: Ship's gear normally used. Possibility of hiring cranes 10 ton – 104 tons.

IDENTIFICATION CARDS: Recommended that crew carry Seamen's Books.

CONSULS: Australia, 19-21 Avenue du Marechal-Foch, Noumea. B.P. 22. Tel: 27.24.14. Cables: Austcom. Telex: 087 NM.
Belgium, 13 Rue Jules-Ferry, Noumea. Box 2683. Tel: 28.46.46.
Indonesia, 4 Rue de Strasbourg, Noumea. Box 26. Tel: 28.25.74.
New Zealand: 4 Boulevard Vauban, Noumea. Box 2219. Tel: 27.25.43. Cables: Kereru. Telex: 036 NM.

REPATRIATION: All facilities available for crew change and repatriation.

AIRPORT: Tontouta Airport situated 50 km. from Noumea. Several connections a week to all parts of the world.

TIME: GMT plus 11 hours. N.B. Daylight saving is sometimes introduced between December and February.

HOLIDAYS: 1st January, Easter Monday, 1st May, Pentecost Monday, Ascension Day, Whit Monday, 14th July, 15th August, 24th September, 1st November, 11th November, 25th December. Work may be arranged on Sundays and holidays.

POLICE/AMBULANCE/FIRE: Police, Tel: 17; Fire, Tel: 18; Ambulance, Tel: 27.21.21.

EMERGENCY CO-ORDINATION CENTRE: Call "Noumea Marine" on VHF Channel 11.

BANKS: Banque de l'Indochine et de Suez, Corner of Rue de l'Alma and Avenue du Marechal-Foch, Noumea. Box G5 Tel: 27.22.12. Cables: Indosuez. Telex: 023 NM.

Banque Nationale de Paris/Nouvelle-Caledonie. 60 Avenue de la Victorie, Noumea. Box K3. Tel: 27.55.55. Cables: Natio Par. Telex: 022 NM.

Banque de Nouvelle-Caledonie Credit Lyonnais. 75 Rue de Sebastopol, Noumea. Box L3. Tel: 28.50.69. Cables: Calbank. Telex: 091 NM.

Banque de Paris et des Pays-Bas-Nouvelle-Caledonie. Corner Rue del'Alma et Rue Georges-Clemenceau, Noumea. Box J3. Tel: 27.51.81. Cables: Paribas. Telex: 086 NM.

Societe Generale Caledonienne de Banque. 56 Avenue de la Victorie, Noumea. Box G2. Tel: 27.22.64. Cables: Pacsoge. Telex: 067 NM.

STORING: See "Prelims" page viii.

1. By Truck.
2. None.
3. Yes.
4. Yes.
5. Duty Free.
6. Yes.

WEATHER: *Wind:* The prevailing wind is the South-Easterly Tradewind blowing regularly from June to October.

N.B.: The Tradewind freshens with the sun.

Close to shore: Maximum around 1400 hours.

Open Sea: Maximum around 1800 hours.

Cyclone Season: From November to April (variable winds, rain, gusty conditions).

Rainfall: Dry season: Minimum 50 mm./month.

From January to March: Heaviest rainfall owing to the Cyclone season.

Rainfall varies between coasts depending on their exposure to winds.

Temperature: Average temperature: 24°C.

The maximum temperatures are during the month of February: 34°C.

Tides: Semi-diurnal type affected by daily inequalities. The high and low April tides are on an average 0.40 m. higher/lower than the October tides.

SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT:

Communications: Radio W/T. Short wave service and MF service very good. First message to state which passage used – Draft – Tonnage – and nature of dangerous cargo, this should be sent at least 24 hours before arrival, Agent and Harbour Master required this message.

Shore Telephone. Service available as receivers can be connected.

VHF. Available to Harbour Office and pilot station during office hours 0700 to 1100 hrs. and 1300 to 1700 hrs. Monday to Friday. Pilot vessel when at Havannah Passage keeps VHF watch 1 hour before the last given ETA. In our case we made contact with the pilot vessel when 12 miles from Havannah Passage. If at anchor VHF contact to Agents can be made via Harbour Office.

Pilotage: Boarding ground. Canal de Havannah. The Pilot boards the vessel when on the leads, but inside the reef, when the vessel is off Port Goro. The 3 leading lights stand out well at night time, each light is individually powered in case of failure, in our case they were seen 25 miles away. During strong S.W'ly winds the Pilot will board in the lee of Ioro Reef. As the leads do not stand out so well in day time, night time seems to be the best arrival time. This channel has been swept to a depth of 34 ft. Strong cross currents can be expected at the entrance to Havannah Passage.

Anchorages. See CHINPACS for area dangerous due to mines. Otherwise vessel anchors Grande Rade.

Quarantine. Pratique granted by Pilot, Health Signal not required unless notifiable sickness on board.

Controlling Factors: Berthing times. Vessels are now berthed at any time, the usual side to being Starboard side, a 1,200 h.p. tug being used to assist.

Length. No limit at berth.

Berthage. 700 m. at the New Wharves.

Stevedoring. Working time. 0700 to 1100 hrs. then 1300 to 1700 hrs. and overtime from 1800 to 2200 hrs. The labour will also clean out the hatches provided one gang is actually working cargo, otherwise they stop when cargo work is all finished. Saturday is not an overtime day. Only Sunday is an overtime day. Good Friday and Easter Saturday are considered normal working days. The Stevedoring is good, with a fast working rate, but I regret to state that some pillage took place. As regards unprotected cars, the most minor marks were claimed against the vessel, these were repudiated.

Documents:

1 Cargo Manifest.
1 List of Dangerous Cargo.
2 Crew Lists.
1 Crew Personal Effects List, this list to include currency held, (French Forms accepted).
1 Bonded Stores List.
1 Health Form.

OUTPORTS: (See Plan Book).

For Ore loading vessels:

Nepoui: Lat. 21° 20.1′ S., Long. 164° 25.5′ E.

LOA vessel 163 m. Draft 8.7 m. Telescopic shuttle clearance 12.5 m. Loading rate 1,250 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose, weight 2 tons, 8 in. pipe-line. Pumping rate 200 t.p.h. Pressure 7 kg/sq.cm.

Thio: Lat. 21° 37.5′ S., Long. 166° 15.5′E.

LOA vessel 170 m. Draft 10.8 m. Telescopic shuttle clearance 11 m. Loading rate 686 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose weight 2 tons. 6 in. pipe-line. Pumping rate 130 t.p.h. Pressure 7 kg/sq.m.

Kouaoua: Lat. 21° 24′ S., Long. 165° 49.8′ E.

LOA vessel 150 m. Draft 8.5 m. Telescopic shuttle clearance 10.5 m. Loading rate 628 t.p.h.

2 Launches (1 shared with Poro) available.

Poro: Lat. 21° 19′ S., Long. 165° 44′ E.

LOA vessel 169 m. Draft 9 m. Telescopic shuttle clearance 11.05 m. Loading rate 900 t.p.h.

2 Launches (1 shared with Kouaoua) available.

Tankers: 8 in. flexible hose, weight 2 tons. Pipe-line 6 in. Pumping rate 130 – 150 t.p.h. Pressure 7kg/sq.cm.

Baie Ugue: Lat. 21° 09′ S., Long. 165° 33′ E.

LOA vessel 170 m. Draft 11 m. Telescopic shuttle clearance 12 m. Loading rate 600 t.p.h.

1 Launch and 1 tug 400 h.p. available.

Loading of Ore by Lighters:

Vessels anchored in bays, sheltered from the ocean swell by the barrier reef, but not sheltered from heavy seas caused by wind.

West Coast: Poum/Paagoumene, Karembe, Teoudie, Poya, Bourail (anchorage and mooring buoy), Bay N'Go (anchorage and mooring buoy).

East Coast: Moneo, Kouaoua, Nakety, N'Goye, Ouinne (anchorage and mooring buoy).

Loading Operations: Loading is carried out under supervision of the miner and his stevedore who embarks and lodges part of his personnel on board the vessel.

1. Lighter train towed by a tug, runs a shuttle between the loading wharf and the anchored vessel. Very few powered lighters.
2. Trucks empty their load into lighters.
3. Lighters are emptied by unloading apparatus on board vessel.
4. Ore estimations (richness and humidity) are carried out on shore by the miner and a Japanese representative of O.M.I.C., and a sample is placed on board for the smelter, another sample being reserved for the Department of Mines.
5. Non-stop loading, except in some bays where tide flow inhibits loading lighters at low tide.

Loading rate: From 1,500 to 9,000 tons per day.

Depending on:

1. Whether port is sheltered or not;
2. Distance between loading point and anchorage.
3. Tide flow at lighter loading point;
4. Number of lighters and tugs used by the stevedore.

OFF-LYING ISLANDS: (See Plan Book).

Art Island – Wala Wharf: Lat. 19° 43′ S., Long. 161° 19′ E. Wharf orientated N.N.E./S.S.W., parallel to shore. Length 30 m. framed by 2 dolphins each 15 m. Width 7 m. Wharf top 3.50 m. above low tide. Depth 4 m. Roadway: 85 m. long, 2.7 m. wide with 2 footpaths 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Ouvea Island – Wadrilla Wharf: Lat. 20° 35′ S., Long. 166° 33′ E. Wharf orientated W.N.W./S.S.W., perpendicular to shore. Length 40 m. with mooring buoy 35 m. from the end. Width 7 m. Wharf top 3.5 m. above low tide. Depth 4 m. Roadway: 220 m. long, 2.7 m. wide with 1 footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Lifou Island – We Wharf: Lat. 20° 55′ S., Long. 167° 17′ E. Wharf orientated N.E./S.W., parallel to shore. Length 40 m. prolongated to the N.E. by a dolphin 15 m. away. Width 7 m. Wharf top 3.5 m. above low tide. Depth 5.5 m. Roadway: 90 m. long, 4 m. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Mare Island – Tadine Wharf: Lat. 21° 33′ S., Long. 167° 53.5′ E. Wharf orientated N.N.E./S.S.W. Length 48 m. with an adjacent wharf 13 m. long (150 in. lower). Width 2 m. Wharf top 2.8 m. above low tide. Depth 3 m.

Isle of Pines – Kuto Wharf: Lat. 22° 39.7′ S., Long. 167° 26′ E. Wharf orientated W.N.W./E.S.E., parallel to shore. Length 30 m. framed by 2 dolphins 15 m. away. Width 11 m. Wharf top 3.35 m. above low tide. Depth 4 m. Roadway: 118 m. long, 2.70 m. wide with one footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

EQUIPMENT: Stevedore Company equipment:

Societe du Chalandage:

Fork Lift Trucks: 6×1.5 tons, 10×2.5 tons, 12×4.0 tons, 3×5.0 tons, 4×6.0 tons, 10×10.0 tons.

Forklift/Frames (for Ro-Ro/Spreaders): 1×30 tons, 1×25 tons, 2×22 tons, 1×12 tons.

Karry Crane: 5×3 tons (6 tons doubled).

Tractors for Vehicles: 2.

Cranes: Poclain P.P.M. automotive, 14 tons (4 – 5 tons useful load). Richier on carrier (jib 24 m.) 40 tons (at 3 m.).

Self-Loading Trailers for Container Vessels: 20 tons (1 container 20 ft.). 30 tons (containers 20 ft. – 40 ft.)

Spreaders for Containers: 3 automatic for 20 ft., 1 automatic for 40 ft.

Trucks with Crane: 2 with jib 6 m., 7.5 tons/m., 1 with jib 7 m., 9 tons/m.

Semi-Trailer: 10×12 m. long. 7 Espadon type.

SOFRAC:

Crane Belotti: 1×22 tons with directional spreader.

Forklifts: 2×22 tons with frontal frame.

Forklifts: 3×8.5 tons, 2×6.5 tons, 1×6 tons, 1×5 tons, 3×4 tons, 2×3 tons, 1×3 tons (lowered for unloading containers), 1×2.5 tons (lowered for unloading containers), 2×2 tons (lowered for unloading containers).

Karry Crane: 1×3 tons (6 tons doubled).

Semi-Trailers for Containers: 6 for 20 ft., 24 tons. 4 for 20 ft. – 40 ft., 24 tons.

Heavy Duty Tractors: 6 for loads from 38 tons to 60 tons.

Tank Trucks: 1×35 cu.m. (1 tank), 22 tons. 1×24 cu.m. (2 tanks), 22 tons.

Automatic Spreaders: 2 for containers 20 ft., 25 tons. 1 for containers 40 ft., 30 tons.

Suction Pumps for Grain: 1×140 t.p.h., nominal 40 – 45 t.p.h. 1×35 t.p.h., nominal 25 t.p.h. 1×200 t.p.h.

Semi-Trailer with Worm: 1 for unloading grain containers.

S.A.T.O.:

Forklift Trucks: 2×2.5 tons (on board), 4×4 tons, 3×6 tons, 1×8 tons, 1×12 tons, 1×25 tons.

Karry Crane: 1×3 tons (6 tons).

Automatic Spreader for Containers: 1×20 ft., 25 tons.

TANKERS:

SBM: (Societe le Nickel): In the entrance to Grande Rade (position: Lat. 22° 14′ 15″ S., Long. 166° 23.4′ E.). Mooring during daylight only. Max. LOA 300 m. Max. draft 14.80 m. Pumping rate for No. 2, heavy fuel oil 3,000 cu.m./h.

Baie des Dames: (Mobil Oil Australia). (Position: Lat. 22° 14′ S., Long. 166° 24′ E.).

1. 5 mooring buoys (max. distance between East and West Buoys 361 m.) 2×8 in. lines for clean and black oils (each marked by a Spar Buoy and a Marker Buoy). Max. LOA 200 m., max. draft 10 m. The buoy mooring is used to discharge Mobil/Total tankers and bunker cargo vessels, liners and ore carriers.

2. "T" shaped jetty, length 9 m. 4 mooring dolphins and 2 mooring buoys (110 m. apart). Max. LOA of tankers 100 m., max. draft 5 m. Berth used for discharge of tankers and liquid gas carriers, bunkering of vessels and loading of tankers.

Also see table below.

Oil Terminals:

	Bay des Dames		*SBM (SLN)*	*Doniambo (SLN)*
	Mooring	*Anchorage*	*Main Harbour*	*Shell Tankers*
Position	22° 14.3′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 23.4′ E.	22° 15.6′ S. 166° 25.9′ E.
Controlling Depth	12 m.	12 m.	16.8 m.	10 m.
Nature of Bottom	Mud	Mud	Mud	Mud
Description of berth	Berths at jetty/4 dolphins and 2 buoys	5 buoys	1 buoy 3 m. high 11.5 m. dia.	Berths/wharf
Companies using oil terminal	Mobil Shell Total	Mobil Shell Total	SLN	Shell
Tanker:				
d.w.t.	1,200	28,000	100,000	28,000
LOA (m.)	100	200	200	200
Beam (m.)	—	25	—	—
Draft (m.)	5	10	14.8	10
Grades handled	Light oil Black oil	Light oil Black oil	— Black oil (Black Fuel Oil No. 2)	Light oil —
Max. weight cargo hoses (tons)		3		2
Pump Rate (t.p.h.)				
Discharging Clean oil	100	280	—	150/200
Discharging Black oil	80	340	3,000	—
Bunkering Clean oil	70	120	—	—
Bunkering Black oil	80	100	—	—
Minimum quantity	50	50	—	—
Pressure kg/sq.m.				
Clean oil	7	7	—	7
Black oil	7	7	10	—
	These two terminals are operated by Mobil Oil and are used for discharging and loading tankers as well as for bunkering all types of vessels.		Terminal owned by SLN who makes available its berthing Master. Follow instructions SLN/SIE 146, September 1979.	For tankers containing products for Shell.

LPG Terminal:

Gas carriers berth port side to wharf, against the jetty and the 4 dolphins which make up the Mobil Oil installations in Bay des Dames.

Limits: Overall length : 100 m. Draft: 5 m.

Capacity of reservoirs: 3,115 tons. Sphere No. 1: 330 tons; Sphere No. 2: 560 tons; Sphere No. 3: 2,225 tons.

All the spheres can be used for stocking butane.

Sphere No. 1 can also stock propane.

Average density of butane gas: 0.580.

Maximum pressure of liquid: 15 kg/sq.cm.

Normal delivery pressure: 7 kg/sq.cm.

Maximum vapour pressure: 5 kg/sq.cm.

Pumping speed: Maximum 70 t.p.h. Minimum speed: 10 t.p.h.

Hoses used by vessel: 1 hose for liquids 4 in. diameter; 1 hose for vapours 3 in. diameter.

Obligatory requirements for tankers carrying Hydrocarbons: Masters of all vessels carrying hydrocarbons and on the point of entering New Caledonian waters are under obligation to send to the Marine Commander in Noumea (F.U.J.), a message, indicating:

(1) Intended course.

(2) Navigation and manoeuvring possibilities.

6 hours before entering territorial waters.

6 hours before sailing.

Note: During sojourn or transit in New Caledonian waters, permanent radio contact is observed; international radotelephonic call frequency on the maritime metric band.

Tankers must use the following passes:

Havannah or Boulari: Tankers carrying less than 8,000 tons of petroleum products and less than 8 m. draft.

Pilot pick-up point 5 nautical miles off Boulari:

1. Entry via Boulari Pass if less than 20,000 tons of petroleum products and draft under 10 m. (night or day);

2. Entry via Dumbea Pass if more than 20,000 tons of petroleum products or more than 20 m. draft (daytime only).

Thio and Poro:

Tankers: Less than 20,000 tons of products and draft under 10 m.

Very Important:

Docking of tankers is in accordance with the possession of:

International Certificate for the Prevention of Pollution by Hydrocarbons; consequently:

This must be indicated to ship's Agent 48 hours prior to arrival.

Certificate must be shown to Pilot at the entrance, and to the Harbour Master or his representative upon docking.

MEDICAL: Clinique de Magenta, Rue du 18-Juin, Magenta, Box H5. Tel: 28.49.29.

Clinique Magnin: Route Territoriale No. 13, Vallee des Colons, Box 64. Tel: 27.26.01.

Hospital Gaston-Bourret, Avenue Paul-Doumer, Noumea, Box C5. Tel: 27.21.21.

Polyclinique de l'Anse-Vata, Route de l'Anse-Vata. Tel: 26.14.22.

Note: Numerous dispensaries located in villages and mining centres of the interior. If necessary, urgent medical evacuation possible by plane or helicopter.

DENSITY: 1026.

FRESH WATER: Supplied by pipe-line at the quays in the Commercial Port, S.L.N. and Numbo Private Cement Factory; rate, 40 t.p.h.

FUEL: Refuelling with marine diesel oil (M.D.O.) or bunkering fuel oil (B.F.O.) is possible.

Authorisation previously obtained by the shipowner from the Australian or French Head Offices of the 3 companies present in Noumea can aid local formalities:

Mobil Tel: 27.31.52

Shell Tel: 28.57.20

Total Tel: 27.52.91

"Light" fuels can be delivered by tanker, but "heavy" fuels must be loaded at the Mobil refuelling post, Bay des Dames.

Docking: LOA 100 m. draft 5 m.

Mooring to buoys: LOA 183 m. draft 10 m.

Note: When tying up to buoys: One must count 3/4 hours' lost time for the various operations. A derrick capable of lifting the hose (3 tons) is necessary.

GANGWAY/DECK WATCHMEN: Recommended, but not compulsory.

OPENING/CLOSING HATCHES: Can be performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per man(400 cigarettes at Outports). Additional allowance can be made after 10 days. Maximum 2 bottles of spirits per man. Wines and beer not limited. Landing of cigarettes, wines and spirits prohibited.

SURVEYORS: *Marine Surveyors:*

Bureau Naval Serve, 32 Rue du General-Gallieni, Noumea. Tel: 28.25.02.

Bureau Veritas, 21-23 Rue de l'Alma, Noumea. Tel: 27.20.31.

Lloyd's Register of Shipping, 7 Rue Anatole-France, Noumea. Tel: 27.20.83.

For all problems relating to cargo and/or vessel damages.

Draft surveys for estimation of nickel ore loads per ship.

Classification Societies:

Lloyd's Register of Shipping, Societe W. A. Johnston, 7 Rue Anatole-France, Noumea, Box 445. Tel: 27.20.83. Cables: Johnston. Telex: 070 NM.

Bureau Veritas, Societe des Etablissements Ballande, 21-23 Rue de l'Alma, Noumea, Box C4. Tel: 27.20.31. Cables: Ballande. Telex: 025 NM.

Germanischer Lloyd and Nippon Kaiji Kyokai. Bureau Naval Serve, 32 Rue Gallieni, Noumea, Box 2387. Tel: 28.25.02. Cables: Surveyor. Telex: Gemar 065 NM.

REPAIRS: Many engine, hull and electronic repairs can be effected. Slipway for small vessels. One slipway, to lift vessels of 1,000 tonnes.

CARGO GEAR: Ship's gear normally used. Possibility of hiring cranes 10 ton – 104 tons.

IDENTIFICATION CARDS: Recommended that crew carry Seamen's Books.

CONSULS: Australia, 19-21 Avenue du Marechal-Foch, Noumea. B.P. 22. Tel: 27.24.14. Cables: Austcom. Telex: 087 NM.

Belgium, 13 Rue Jules-Ferry, Noumea. Box 2683. Tel: 28.46.46.

Indonesia, 4 Rue de Strasbourg, Noumea. Box 26. Tel: 28.25.74.

New Zealand: 4 Boulevard Vauban, Noumea. Box 2219. Tel: 27.25.43. Cables: Kereru. Telex: 036 NM.

REPATRIATION: All facilities available for crew change and repatriation.

AIRPORT: Tontouta Airport situated 50 km. from Noumea. Several connections a week to all parts of the world.

TIME: GMT plus 11 hours. N.B. Daylight saving is sometimes introduced between December and February.

HOLIDAYS: 1st January, Easter Monday, 1st May, Pentecost Monday, Ascension Day, Whit Monday, 14th July, 15th August, 24th September, 1st November, 11th November, 25th December. Work may be arranged on Sundays and holidays.

POLICE/AMBULANCE/FIRE: Police, Tel: 17; Fire, Tel: 18; Ambulance, Tel: 27.21.21.

EMERGENCY CO-ORDINATION CENTRE: Call "Noumea Marine" on VHF Channel 11.

BANKS: Banque de l'Indochine et de Suez, Corner of Rue de l'Alma and Avenue du Marechal-Foch, Noumea. Box G5 Tel: 27.22.12. Cables: Indosuez. Telex: 023 NM.

Banque Nationale de Paris/Nouvelle-Caledonie. 60 Avenue de la Victorie, Noumea. Box K3. Tel: 27.55.55. Cables: Natio Par. Telex: 022 NM.

Banque de Nouvelle-Caledonie Credit Lyonnais. 75 Rue de Sebastopol, Noumea. Box L3. Tel: 28.50.69. Cables: Calbank. Telex: 091 NM.

Banque de Paris et des Pays-Bas-Nouvelle-Caledonie. Corner Rue del'Alma et Rue Georges-Clemenceau, Noumea. Box J3. Tel: 27.51.81. Cables: Paribas. Telex: 086 NM.

Societe Generale Caledonienne de Banque. 56 Avenue de la Victorie, Noumea. Box G2. Tel: 27.22.64. Cables: Pacsoge. Telex: 067 NM.

STORING: See "Prelims" page viii.

1. By Truck.
2. None.
3. Yes.
4. Yes.
5. Duty Free.
6. Yes.

WEATHER: *Wind:* The prevailing wind is the South-Easterly Tradewind blowing regularly from June to October.

N.B.: The Tradewind freshens with the sun.

Close to shore: Maximum around 1400 hours.

Open Sea: Maximum around 1800 hours.

Cyclone Season: From November to April (variable winds, rain, gusty conditions).

Rainfall: Dry season: Minimum 50 mm./month.

From January to March: Heaviest rainfall owing to the Cyclone season.

Rainfall varies between coasts depending on their exposure to winds.

Temperature: Average temperature: 24°C.

The maximum temperatures are during the month of February: 34°C.

Tides: Semi-diurnal type affected by daily inequalities. The high and low April tides are on an average 0.40 m. higher/lower than the October tides.

SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT:

Communications: Radio W/T. Short wave service and MF service very good. First message to state which passage used – Draft – Tonnage – and nature of dangerous cargo, this should be sent at least 24 hours before arrival, Agent and Harbour Master required this message.

Shore Telephone. Service available as receivers can be connected.

VHF. Available to Harbour Office and pilot station during office hours 0700 to 1100 hrs. and 1300 to 1700 hrs. Monday to Friday. Pilot vessel when at Havannah Passage keeps VHF watch 1 hour before the last given ETA. In our case we made contact with the pilot vessel when 12 miles from Havannah Passage. If at anchor VHF contact to Agents can be made via Harbour Office.

Pilotage: Boarding ground. Canal de Havannah. The Pilot boards the vessel when on the leads, but inside the reef, when the vessel is off Port Goro. The 3 leading lights stand out well at night time, each light is individually powered in case of failure, in our case they were seen 25 miles away. During strong S.W'ly winds the Pilot will board in the lee of Ioro Reef. As the leads do not stand out so well in day time, night time seems to be the best arrival time. This channel has been swept to a depth of 34 ft. Strong cross currents can be expected at the entrance to Havannah Passage.

Anchorages. See CHINPACS for area dangerous due to mines. Otherwise vessel anchors Grande Rade.

Quarantine. Pratique granted by Pilot, Health Signal not required unless notifiable sickness on board.

Controlling Factors: Berthing times. Vessels are now berthed at any time, the usual side to being Starboard side, a 1,200 h.p. tug being used to assist.

Length. No limit at berth.

Berthage. 700 m. at the New Wharves.

Stevedoring. Working time. 0700 to 1100 hrs. then 1300 to 1700 hrs. and overtime from 1800 to 2200 hrs. The labour will also clean out the hatches provided one gang is actually working cargo, otherwise they stop when cargo work is all finished. Saturday is not an overtime day. Only Sunday is an overtime day. Good Friday and Easter Saturday are considered normal working days. The Stevedoring is good, with a fast working rate, but I regret to state that some pillage took place. As regards unprotected cars, the most minor marks were claimed against the vessel, these were repudiated.

Documents:

1 Cargo Manifest.
1 List of Dangerous Cargo.
2 Crew Lists.
1 Crew Personal Effects List, this list to include currency held, (French Forms accepted).
1 Bonded Stores List.
1 Health Form.

OUTPORTS: (See Plan Book).

For Ore loading vessels:

Nepoui: Lat. 21° 20.1′ S., Long. 164° 25.5′ E.

LOA vessel 163 m. Draft 8.7 m. Telescopic shuttle clearance 12.5 m. Loading rate 1,250 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose, weight 2 tons, 8 in. pipe-line. Pumping rate 200 t.p.h. Pressure 7 kg/sq.cm.

Thio: Lat. 21° 37.5′ S., Long. 166° 15.5′E.

LOA vessel 170 m. Draft 10.8 m. Telescopic shuttle clearance 11 m. Loading rate 686 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose weight 2 tons. 6 in. pipe-line. Pumping rate 130 t.p.h. Pressure 7 kg/sq.m.

Kouaoua: Lat. 21° 24′ S., Long. 165° 49.8′ E.

LOA vessel 150 m. Draft 8.5 m. Telescopic shuttle clearance 10.5 m. Loading rate 628 t.p.h.

2 Launches (1 shared with Poro) available.

Poro: Lat. 21° 19′ S., Long. 165° 44′ E.

LOA vessel 169 m. Draft 9 m. Telescopic shuttle clearance 11.05 m. Loading rate 900 t.p.h.

2 Launches (1 shared with Kouaoua) available.

Tankers: 8 in. flexible hose, weight 2 tons. Pipe-line 6 in. Pumping rate 130 – 150 t.p.h. Pressure 7kg/sq.cm.

Baie Ugue: Lat. 21° 09′ S., Long. 165° 33′ E.

LOA vessel 170 m. Draft 11 m. Telescopic shuttle clearance 12 m. Loading rate 600 t.p.h.

1 Launch and 1 tug 400 h.p. available.

Loading of Ore by Lighters:

Vessels anchored in bays, sheltered from the ocean swell by the barrier reef, but not sheltered from heavy seas caused by wind.

West Coast: Poum/Paagoumene, Karembe, Teoudie, Poya, Bourail (anchorage and mooring buoy), Bay N'Go (anchorage and mooring buoy).

East Coast: Moneo, Kouaoua, Nakety, N'Goye, Ouinne (anchorage and mooring buoy).

Loading Operations: Loading is carried out under supervision of the miner and his stevedore who embarks and lodges part of his personnel on board the vessel.

1. Lighter train towed by a tug, runs a shuttle between the loading wharf and the anchored vessel. Very few powered lighters.
2. Trucks empty their load into lighters.
3. Lighters are emptied by unloading apparatus on board vessel.
4. Ore estimations (richness and humidity) are carried out on shore by the miner and a Japanese representative of O.M.I.C., and a sample is placed on board for the smelter, another sample being reserved for the Department of Mines.
5. Non-stop loading, except in some bays where tide flow inhibits loading lighters at low tide.

Loading rate: From 1,500 to 9,000 tons per day.

Depending on:

1. Whether port is sheltered or not;
2. Distance between loading point and anchorage.
3. Tide flow at lighter loading point;
4. Number of lighters and tugs used by the stevedore.

OFF-LYING ISLANDS: (See Plan Book).

Art Island – Wala Wharf: Lat. 19° 43′ S., Long. 161° 19′ E. Wharf orientated N.N.E./S.S.W., parallel to shore. Length 30 m. framed by 2 dolphins each 15 m. Width 7 m. Wharf top 3.50 m. above low tide. Depth 4 m. Roadway: 85 m. long, 2.7 m. wide with 2 footpaths 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Ouvea Island – Wadrilla Wharf: Lat. 20° 35′ S., Long. 166° 33′ E. Wharf orientated W.N.W./S.S.W., perpendicular to shore. Length 40 m. with mooring buoy 35 m. from the end. Width 7 m. Wharf top 3.5 m. above low tide. Depth 4 m. Roadway: 220 m. long, 2.7 m. wide with 1 footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Lifou Island – We Wharf: Lat. 20° 55′ S., Long. 167° 17′ E. Wharf orientated N.E./S.W., parallel to shore. Length 40 m. prolongated to the N.E. by a dolphin 15 m. away. Width 7 m. Wharf top 3.5 m. above low tide. Depth 5.5 m. Roadway: 90 m. long, 4 m. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Mare Island – Tadine Wharf: Lat. 21° 33′ S., Long. 167° 53.5′ E. Wharf orientated N.N.E./S.S.W. Length 48 m. with an adjacent wharf 13 m. long (150 in. lower). Width 2 m. Wharf top 2.8 m. above low tide. Depth 3 m.

Isle of Pines – Kuto Wharf: Lat. 22° 39.7′ S., Long. 167° 26′ E. Wharf orientated W.N.W./E.S.E., parallel to shore. Length 30 m. framed by 2 dolphins 15 m. away. Width 11 m. Wharf top 3.35 m. above low tide. Depth 4 m. Roadway: 118 m. long, 2.70 m. wide with one footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

EQUIPMENT: Stevedore Company equipment:

Societe du Chalandage:

Fork Lift Trucks: 6×1.5 tons, 10×2.5 tons, 12×4.0 tons, 3×5.0 tons, 4×6.0 tons, 10×10.0 tons.

Forklift/Frames (for Ro-Ro/Spreaders): 1×30 tons, 1×25 tons, 2×22 tons, 1×12 tons.

Karry Crane: 5×3 tons (6 tons doubled).

Tractors for Vehicles: 2.

Cranes: Poclain P.P.M. automotive, 14 tons (4 – 5 tons useful load). Richier on carrier (jib 24 m.) 40 tons (at 3 m.).

Self-Loading Trailers for Container Vessels: 20 tons (1 container 20 ft.). 30 tons (containers 20 ft. – 40 ft.)

Spreaders for Containers: 3 automatic for 20 ft., 1 automatic for 40 ft.

Trucks with Crane: 2 with jib 6 m., 7.5 tons/m., 1 with jib 7 m., 9 tons/m.

Semi-Trailer: 10×12 m. long. 7 Espadon type.

SOFRAC:

Crane Belotti: 1×22 tons with directional spreader.

Forklifts: 2×22 tons with frontal frame.

Forklifts: 3×8.5 tons, 2×6.5 tons, 1×6 tons, 1×5 tons, 3×4 tons, 2×3 tons, 1×3 tons (lowered for unloading containers), 1×2.5 tons (lowered for unloading containers), 2×2 tons (lowered for unloading containers).

Karry Crane: 1×3 tons (6 tons doubled).

Semi-Trailers for Containers: 6 for 20 ft., 24 tons. 4 for 20 ft. – 40 ft., 24 tons.

Heavy Duty Tractors: 6 for loads from 38 tons to 60 tons.

Tank Trucks: 1×35 cu.m. (1 tank), 22 tons. 1×24 cu.m. (2 tanks), 22 tons.

Automatic Spreaders: 2 for containers 20 ft., 25 tons. 1 for containers 40 ft., 30 tons.

Suction Pumps for Grain: 1×140 t.p.h., nominal 40 – 45 t.p.h. 1×35 t.p.h., nominal 25 t.p.h. 1×200 t.p.h.

Semi-Trailer with Worm: 1 for unloading grain containers.

S.A.T.O.:

Forklift Trucks: 2×2.5 tons (on board), 4×4 tons, 3×6 tons, 1×8 tons, 1×12 tons, 1×25 tons.

Karry Crane: 1×3 tons (6 tons).

Automatic Spreader for Containers: 1×20 ft., 25 tons.

TANKERS:

SBM: (Societe le Nickel): In the entrance to Grande Rade (position: Lat. 22° 14′ 15″ S., Long. 166° 23.4′ E.). Mooring during daylight only. Max. LOA 300 m. Max. draft 14.80 m. Pumping rate for No. 2, heavy fuel oil 3,000 cu.m./h.

Baie des Dames: (Mobil Oil Australia). (Position: Lat. 22° 14′ S., Long. 166° 24′ E.).

1. 5 mooring buoys (max. distance between East and West Buoys 361 m.) 2×8 in. lines for clean and black oils (each marked by a Spar Buoy and a Marker Buoy). Max. LOA 200 m., max. draft 10 m. The buoy mooring is used to discharge Mobil/Total tankers and bunker cargo vessels, liners and ore carriers.

2. "T" shaped jetty, length 9 m. 4 mooring dolphins and 2 mooring buoys (110 m. apart). Max. LOA of tankers 100 m., max. draft 5 m. Berth used for discharge of tankers and liquid gas carriers, bunkering of vessels and loading of tankers.

Also see table below.

Oil Terminals:

	Bay des Dames		*SBM (SLN)*	*Doniambo (SLN)*
	Mooring	*Anchorage*	*Main Harbour*	*Shell Tankers*
Position	22° 14.3′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 23.4′ E.	22° 15.6′ S. 166° 25.9′ E.
Controlling Depth	12 m.	12 m.	16.8 m.	10 m.
Nature of Bottom	Mud	Mud	Mud	Mud
Description of berth	Berths at jetty/4 dolphins and 2 buoys	5 buoys	1 buoy 3 m. high 11.5 m. dia.	Berths/wharf
Companies using oil terminal	Mobil Shell Total	Mobil Shell Total	SLN	Shell
Tanker:				
d.w.t.	1,200	28,000	100,000	28,000
LOA (m.)	100	200	200	200
Beam (m.)	—	25	—	—
Draft (m.)	5	10	14.8	10
Grades handled	Light oil Black oil	Light oil Black oil	— Black oil (Black Fuel Oil No. 2)	Light oil —
Max. weight cargo hoses (tons)		3		2
Pump Rate (t.p.h.)				
Discharging Clean oil	100	280	—	150/200
Discharging Black oil	80	340	3,000	—
Bunkering Clean oil	70	120	—	—
Bunkering Black oil	80	100	—	—
Minimum quantity	50	50	—	—
Pressure kg/sq.m.				
Clean oil	7	7	—	7
Black oil	7	7	10	—
	These two terminals are operated by Mobil Oil and are used for discharging and loading tankers as well as for bunkering all types of vessels.		Terminal owned by SLN who makes available its berthing Master. Follow instructions SLN/SIE 146, September 1979.	For tankers containing products for Shell.

LPG Terminal:

Gas carriers berth port side to wharf, against the jetty and the 4 dolphins which make up the Mobil Oil installations in Bay des Dames.

Limits: Overall length : 100 m. Draft: 5 m.

Capacity of reservoirs: 3,115 tons. Sphere No. 1: 330 tons; Sphere No. 2: 560 tons; Sphere No. 3: 2,225 tons.

All the spheres can be used for stocking butane.

Sphere No. 1 can also stock propane.

Average density of butane gas: 0.580.

Maximum pressure of liquid: 15 kg/sq.cm.

Normal delivery pressure: 7 kg/sq.cm.

Maximum vapour pressure: 5 kg/sq.cm.

Pumping speed: Maximum 70 t.p.h. Minimum speed: 10 t.p.h.

Hoses used by vessel: 1 hose for liquids 4 in. diameter; 1 hose for vapours 3 in. diameter.

Obligatory requirements for tankers carrying Hydrocarbons: Masters of all vessels carrying hydrocarbons and on the point of entering New Caledonian waters are under obligation to send to the Marine Commander in Noumea (F.U.J.), a message, indicating:

(1) Intended course.

(2) Navigation and manoeuvring possibilities.

6 hours before entering territorial waters.

6 hours before sailing.

Note: During sojourn or transit in New Caledonian waters, permanent radio contact is observed; international radotelephonic call frequency on the maritime metric band.

Tankers must use the following passes:

Havannah or Boulari: Tankers carrying less than 8,000 tons of petroleum products and less than 8 m. draft.

Pilot pick-up point 5 nautical miles off Boulari:

1. Entry via Boulari Pass if less than 20,000 tons of petroleum products and draft under 10 m. (night or day);

2. Entry via Dumbea Pass if more than 20,000 tons of petroleum products or more than 20 m. draft (daytime only).

Thio and Poro:

Tankers: Less than 20,000 tons of products and draft under 10 m.

Very Important:

Docking of tankers is in accordance with the possession of:

International Certificate for the Prevention of Pollution by Hydrocarbons; consequently:

This must be indicated to ship's Agent 48 hours prior to arrival.

Certificate must be shown to Pilot at the entrance, and to the Harbour Master or his representative upon docking.

MEDICAL: Clinique de Magenta, Rue du 18-Juin, Magenta, Box H5. Tel: 28.49.29.

Clinique Magnin: Route Territoriale No. 13, Vallee des Colons, Box 64. Tel: 27.26.01.

Hospital Gaston-Bourret, Avenue Paul-Doumer, Noumea, Box C5. Tel: 27.21.21.

Polyclinique de l'Anse-Vata, Route de l'Anse-Vata. Tel: 26.14.22.

Note: Numerous dispensaries located in villages and mining centres of the interior. If necessary, urgent medical evacuation possible by plane or helicopter.

DENSITY: 1026.

FRESH WATER: Supplied by pipe-line at the quays in the Commercial Port, S.L.N. and Numbo Private Cement Factory; rate, 40 t.p.h.

FUEL: Refuelling with marine diesel oil (M.D.O.) or bunkering fuel oil (B.F.O.) is possible.

Authorisation previously obtained by the shipowner from the Australian or French Head Offices of the 3 companies present in Noumea can aid local formalities:

Mobil Tel: 27.31.52

Shell Tel: 28.57.20

Total Tel: 27.52.91

"Light" fuels can be delivered by tanker, but "heavy" fuels must be loaded at the Mobil refuelling post, Bay des Dames.

Docking: LOA 100 m. draft 5 m.

Mooring to buoys: LOA 183 m. draft 10 m.

Note: When tying up to buoys: One must count 3/4 hours' lost time for the various operations. A derrick capable of lifting the hose (3 tons) is necessary.

GANGWAY/DECK WATCHMEN: Recommended, but not compulsory.

OPENING/CLOSING HATCHES: Can be performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per man(400 cigarettes at Outports). Additional allowance can be made after 10 days. Maximum 2 bottles of spirits per man. Wines and beer not limited. Landing of cigarettes, wines and spirits prohibited.

SURVEYORS: *Marine Surveyors:*

Bureau Naval Serve, 32 Rue du General-Gallieni, Noumea. Tel: 28.25.02.

Bureau Veritas, 21-23 Rue de l'Alma, Noumea. Tel: 27.20.31.

Lloyd's Register of Shipping, 7 Rue Anatole-France, Noumea. Tel: 27.20.83.

For all problems relating to cargo and/or vessel damages.

Draft surveys for estimation of nickel ore loads per ship.

Classification Societies:

Lloyd's Register of Shipping, Societe W. A. Johnston, 7 Rue Anatole-France, Noumea, Box 445. Tel: 27.20.83. Cables: Johnston. Telex: 070 NM.

Bureau Veritas, Societe des Etablissements Ballande, 21-23 Rue de l'Alma, Noumea, Box C4. Tel: 27.20.31. Cables: Ballande. Telex: 025 NM.

Germanischer Lloyd and Nippon Kaiji Kyokai. Bureau Naval Serve, 32 Rue Gallieni, Noumea, Box 2387. Tel: 28.25.02. Cables: Surveyor. Telex: Gemar 065 NM.

REPAIRS: Many engine, hull and electronic repairs can be effected. Slipway for small vessels. One slipway, to lift vessels of 1,000 tonnes.

CARGO GEAR: Ship's gear normally used. Possibility of hiring cranes 10 ton – 104 tons.

IDENTIFICATION CARDS: Recommended that crew carry Seamen's Books.

CONSULS: Australia, 19-21 Avenue du Marechal-Foch, Noumea. B.P. 22. Tel: 27.24.14. Cables: Austcom. Telex: 087 NM.

Belgium, 13 Rue Jules-Ferry, Noumea. Box 2683. Tel: 28.46.46.

Indonesia, 4 Rue de Strasbourg, Noumea. Box 26. Tel: 28.25.74.

New Zealand: 4 Boulevard Vauban, Noumea. Box 2219. Tel: 27.25.43. Cables: Kereru. Telex: 036 NM.

REPATRIATION: All facilities available for crew change and repatriation.

AIRPORT: Tontouta Airport situated 50 km. from Noumea. Several connections a week to all parts of the world.

TIME: GMT plus 11 hours. N.B. Daylight saving is sometimes introduced between December and February.

HOLIDAYS: 1st January, Easter Monday, 1st May, Pentecost Monday, Ascension Day, Whit Monday, 14th July, 15th August, 24th September, 1st November, 11th November, 25th December. Work may be arranged on Sundays and holidays.

POLICE/AMBULANCE/FIRE: Police, Tel: 17; Fire, Tel: 18; Ambulance, Tel: 27.21.21.

EMERGENCY CO-ORDINATION CENTRE: Call "Noumea Marine" on VHF Channel 11.

BANKS: Banque de l'Indochine et de Suez, Corner of Rue de l'Alma and Avenue du Marechal-Foch, Noumea. Box G5 Tel: 27.22.12. Cables: Indosuez. Telex: 023 NM.

Banque Nationale de Paris/Nouvelle-Caledonie. 60 Avenue de la Victorie, Noumea. Box K3. Tel: 27.55.55. Cables: Natio Par. Telex: 022 NM.

Banque de Nouvelle-Caledonie Credit Lyonnais. 75 Rue de Sebastopol, Noumea. Box L3. Tel: 28.50.69. Cables: Calbank. Telex: 091 NM.

Banque de Paris et des Pays-Bas-Nouvelle-Caledonie. Corner Rue del'Alma et Rue Georges-Clemenceau, Noumea. Box J3. Tel: 27.51.81. Cables: Paribas. Telex: 086 NM.

Societe Generale Caledonienne de Banque. 56 Avenue de la Victorie, Noumea. Box G2. Tel: 27.22.64. Cables: Pacsoge. Telex: 067 NM.

STORING: See "Prelims" page viii.

1. By Truck.
2. None.
3. Yes.
4. Yes.
5. Duty Free.
6. Yes.

WEATHER: *Wind:* The prevailing wind is the South-Easterly Tradewind blowing regularly from June to October.

N.B.: The Tradewind freshens with the sun.

Close to shore: Maximum around 1400 hours.

Open Sea: Maximum around 1800 hours.

Cyclone Season: From November to April (variable winds, rain, gusty conditions).

Rainfall: Dry season: Minimum 50 mm./month.

From January to March: Heaviest rainfall owing to the Cyclone season.

Rainfall varies between coasts depending on their exposure to winds.

Temperature: Average temperature: 24°C.

The maximum temperatures are during the month of February: 34°C.

Tides: Semi-diurnal type affected by daily inequalities. The high and low April tides are on an average 0.40 m. higher/lower than the October tides.

SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT:

Communications: Radio W/T. Short wave service and MF service very good. First message to state which passage used – Draft – Tonnage – and nature of dangerous cargo, this should be sent at least 24 hours before arrival, Agent and Harbour Master required this message.

Shore Telephone. Service available as receivers can be connected.

VHF. Available to Harbour Office and pilot station during office hours 0700 to 1100 hrs. and 1300 to 1700 hrs. Monday to Friday. Pilot vessel when at Havannah Passage keeps VHF watch 1 hour before the last given ETA. In our case we made contact with the pilot vessel when 12 miles from Havannah Passage. If at anchor VHF contact to Agents can be made via Harbour Office.

Pilotage: Boarding ground. Canal de Havannah. The Pilot boards the vessel when on the leads, but inside the reef, when the vessel is off Port Goro. The 3 leading lights stand out well at night time, each light is individually powered in case of failure, in our case they were seen 25 miles away. During strong S.W'ly winds the Pilot will board in the lee of Ioro Reef. As the leads do not stand out so well in day time, night time seems to be the best arrival time. This channel has been swept to a depth of 34 ft. Strong cross currents can be expected at the entrance to Havannah Passage.

Anchorages. See CHINPACS for area dangerous due to mines. Otherwise vessel anchors Grande Rade.

Quarantine. Pratique granted by Pilot, Health Signal not required unless notifiable sickness on board.

Controlling Factors: Berthing times. Vessels are now berthed at any time, the usual side to being Starboard side, a 1,200 h.p. tug being used to assist.

Length. No limit at berth.

Berthage. 700 m. at the New Wharves.

Stevedoring. Working time. 0700 to 1100 hrs. then 1300 to 1700 hrs. and overtime from 1800 to 2200 hrs. The labour will also clean out the hatches provided one gang is actually working cargo, otherwise they stop when cargo work is all finished. Saturday is not an overtime day. Only Sunday is an overtime day. Good Friday and Easter Saturday are considered normal working days. The Stevedoring is good, with a fast working rate, but I regret to state that some pillage took place. As regards unprotected cars, the most minor marks were claimed against the vessel, these were repudiated.

Documents:

1 Cargo Manifest.
1 List of Dangerous Cargo.
2 Crew Lists.
1 Crew Personal Effects List, this list to include currency held, (French Forms accepted).
1 Bonded Stores List.
1 Health Form.

OUTPORTS: (See Plan Book).

For Ore loading vessels:

Nepoui: Lat. 21° 20.1′ S., Long. 164° 25.5′ E.

LOA vessel 163 m. Draft 8.7 m. Telescopic shuttle clearance 12.5 m. Loading rate 1,250 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose, weight 2 tons, 8 in. pipe-line. Pumping rate 200 t.p.h. Pressure 7 kg/sq.cm.

Thio: Lat. 21° 37.5′ S., Long. 166° 15.5′E.

LOA vessel 170 m. Draft 10.8 m. Telescopic shuttle clearance 11 m. Loading rate 686 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose weight 2 tons. 6 in. pipe-line. Pumping rate 130 t.p.h. Pressure 7 kg/sq.m.

Kouaoua: Lat. 21° 24′ S., Long. 165° 49.8′ E.

LOA vessel 150 m. Draft 8.5 m. Telescopic shuttle clearance 10.5 m. Loading rate 628 t.p.h.

2 Launches (1 shared with Poro) available.

Poro: Lat. 21° 19′ S., Long. 165° 44′ E.

LOA vessel 169 m. Draft 9 m. Telescopic shuttle clearance 11.05 m. Loading rate 900 t.p.h.

2 Launches (1 shared with Kouaoua) available.

Tankers: 8 in. flexible hose, weight 2 tons. Pipe-line 6 in. Pumping rate 130 – 150 t.p.h. Pressure 7kg/sq.cm.

Baie Ugue: Lat. 21° 09′ S., Long. 165° 33′ E.

LOA vessel 170 m. Draft 11 m. Telescopic shuttle clearance 12 m. Loading rate 600 t.p.h.

1 Launch and 1 tug 400 h.p. available.

Loading of Ore by Lighters:

Vessels anchored in bays, sheltered from the ocean swell by the barrier reef, but not sheltered from heavy seas caused by wind.

West Coast: Poum/Paagoumene, Karembe, Teoudie, Poya, Bourail (anchorage and mooring buoy), Bay N'Go (anchorage and mooring buoy).

East Coast: Moneo, Kouaoua, Nakety, N'Goye, Ouinne (anchorage and mooring buoy).

Loading Operations: Loading is carried out under supervision of the miner and his stevedore who embarks and lodges part of his personnel on board the vessel.

1. Lighter train towed by a tug, runs a shuttle between the loading wharf and the anchored vessel. Very few powered lighters.
2. Trucks empty their load into lighters.
3. Lighters are emptied by unloading apparatus on board vessel.
4. Ore estimations (richness and humidity) are carried out on shore by the miner and a Japanese representative of O.M.I.C., and a sample is placed on board for the smelter, another sample being reserved for the Department of Mines.
5. Non-stop loading, except in some bays where tide flow inhibits loading lighters at low tide.

Loading rate: From 1,500 to 9,000 tons per day.

Depending on:

1. Whether port is sheltered or not;
2. Distance between loading point and anchorage.
3. Tide flow at lighter loading point;
4. Number of lighters and tugs used by the stevedore.

OFF-LYING ISLANDS: (See Plan Book).

Art Island – Wala Wharf: Lat. 19° 43′ S., Long. 161° 19′ E. Wharf orientated N.N.E./S.S.W., parallel to shore. Length 30 m. framed by 2 dolphins each 15 m. Width 7 m. Wharf top 3.50 m. above low tide. Depth 4 m. Roadway: 85 m. long, 2.7 m. wide with 2 footpaths 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Ouvea Island – Wadrilla Wharf: Lat. 20° 35′ S., Long. 166° 33′ E. Wharf orientated W.N.W./S.S.W., perpendicular to shore. Length 40 m. with mooring buoy 35 m. from the end. Width 7 m. Wharf top 3.5 m. above low tide. Depth 4 m. Roadway: 220 m. long, 2.7 m. wide with 1 footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Lifou Island – We Wharf: Lat. 20° 55′ S., Long. 167° 17′ E. Wharf orientated N.E./S.W., parallel to shore. Length 40 m. prolongated to the N.E. by a dolphin 15 m. away. Width 7 m. Wharf top 3.5 m. above low tide. Depth 5.5 m. Roadway: 90 m. long, 4 m. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Mare Island – Tadine Wharf: Lat. 21° 33′ S., Long. 167° 53.5′ E. Wharf orientated N.N.E./S.S.W. Length 48 m. with an adjacent wharf 13 m. long (150 in. lower). Width 2 m. Wharf top 2.8 m. above low tide. Depth 3 m.

Isle of Pines – Kuto Wharf: Lat. 22° 39.7′ S., Long. 167° 26′ E. Wharf orientated W.N.W./E.S.E., parallel to shore. Length 30 m. framed by 2 dolphins 15 m. away. Width 11 m. Wharf top 3.35 m. above low tide. Depth 4 m. Roadway: 118 m. long, 2.70 m. wide with one footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

EQUIPMENT: Stevedore Company equipment:

Societe du Chalandage:

Fork Lift Trucks: 6×1.5 tons, 10×2.5 tons, 12×4.0 tons, 3×5.0 tons, 4×6.0 tons, 10×10.0 tons.

Forklift/Frames (for Ro-Ro/Spreaders): 1×30 tons, 1×25 tons, 2×22 tons, 1×12 tons.

Karry Crane: 5×3 tons (6 tons doubled).

Tractors for Vehicles: 2.

Cranes: Poclain P.P.M. automotive, 14 tons (4 – 5 tons useful load). Richier on carrier (jib 24 m.) 40 tons (at 3 m.).

Self-Loading Trailers for Container Vessels: 20 tons (1 container 20 ft.). 30 tons (containers 20 ft. – 40 ft.)

Spreaders for Containers: 3 automatic for 20 ft., 1 automatic for 40 ft.

Trucks with Crane: 2 with jib 6 m., 7.5 tons/m., 1 with jib 7 m., 9 tons/m.

Semi-Trailer: 10×12 m. long. 7 Espadon type.

SOFRAC:

Crane Belotti: 1×22 tons with directional spreader.

Forklifts: 2×22 tons with frontal frame.

Forklifts: 3×8.5 tons, 2×6.5 tons, 1×6 tons, 1×5 tons, 3×4 tons, 2×3 tons, 1×3 tons (lowered for unloading containers), 1×2.5 tons (lowered for unloading containers), 2×2 tons (lowered for unloading containers).

Karry Crane: 1×3 tons (6 tons doubled).

Semi-Trailers for Containers: 6 for 20 ft., 24 tons. 4 for 20 ft. – 40 ft., 24 tons.

Heavy Duty Tractors: 6 for loads from 38 tons to 60 tons.

Tank Trucks: 1×35 cu.m. (1 tank), 22 tons. 1×24 cu.m. (2 tanks), 22 tons.

Automatic Spreaders: 2 for containers 20 ft., 25 tons. 1 for containers 40 ft., 30 tons.

Suction Pumps for Grain: 1×140 t.p.h., nominal 40 – 45 t.p.h. 1×35 t.p.h., nominal 25 t.p.h. 1×200 t.p.h.

Semi-Trailer with Worm: 1 for unloading grain containers.

S.A.T.O.:

Forklift Trucks: 2×2.5 tons (on board), 4×4 tons, 3×6 tons, 1×8 tons, 1×12 tons, 1×25 tons.

Karry Crane: 1×3 tons (6 tons).

Automatic Spreader for Containers: 1×20 ft., 25 tons.

TANKERS:

SBM: (Societe le Nickel): In the entrance to Grande Rade (position: Lat. 22° 14′ 15″ S., Long. 166° 23.4′ E.). Mooring during daylight only. Max. LOA 300 m. Max. draft 14.80 m. Pumping rate for No. 2, heavy fuel oil 3,000 cu.m./h.

Baie des Dames: (Mobil Oil Australia). (Position: Lat. 22° 14′ S., Long. 166° 24′ E.).

1. 5 mooring buoys (max. distance between East and West Buoys 361 m.) 2×8 in. lines for clean and black oils (each marked by a Spar Buoy and a Marker Buoy). Max. LOA 200 m., max. draft 10 m. The buoy mooring is used to discharge Mobil/Total tankers and bunker cargo vessels, liners and ore carriers.

2. "T" shaped jetty, length 9 m. 4 mooring dolphins and 2 mooring buoys (110 m. apart). Max. LOA of tankers 100 m., max. draft 5 m. Berth used for discharge of tankers and liquid gas carriers, bunkering of vessels and loading of tankers.

Also see table below.

Oil Terminals:

	Bay des Dames		*SBM (SLN)*	*Doniambo (SLN)*
	Mooring	*Anchorage*	*Main Harbour*	*Shell Tankers*
Position	22° 14.3′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 23.4′ E.	22° 15.6′ S. 166° 25.9′ E.
Controlling Depth	12 m.	12 m.	16.8 m.	10 m.
Nature of Bottom	Mud	Mud	Mud	Mud
Description of berth	Berths at jetty/4 dolphins and 2 buoys	5 buoys	1 buoy 3 m. high 11.5 m. dia.	Berths/wharf
Companies using oil terminal	Mobil Shell Total	Mobil Shell Total	SLN	Shell
Tanker:				
d.w.t.	1,200	28,000	100,000	28,000
LOA (m.)	100	200	200	200
Beam (m.)	—	25	—	—
Draft (m.)	5	10	14.8	10
Grades handled	Light oil Black oil	Light oil Black oil	— Black oil (Black Fuel Oil No. 2)	Light oil —
Max. weight cargo hoses (tons)		3		2
Pump Rate (t.p.h.)				
Discharging Clean oil	100	280	—	150/200
Discharging Black oil	80	340	3,000	—
Bunkering Clean oil	70	120	—	—
Bunkering Black oil	80	100	—	—
Minimum quantity	50	50	—	—
Pressure kg/sq.m.				
Clean oil	7	7	—	7
Black oil	7	7	10	—
	These two terminals are operated by Mobil Oil and are used for discharging and loading tankers as well as for bunkering all types of vessels.		Terminal owned by SLN who makes available its berthing Master. Follow instructions SLN/SIE 146, September 1979.	For tankers containing products for Shell.

LPG Terminal:

Gas carriers berth port side to wharf, against the jetty and the 4 dolphins which make up the Mobil Oil installations in Bay des Dames.

Limits: Overall length : 100 m. Draft: 5 m.

Capacity of reservoirs: 3,115 tons. Sphere No. 1: 330 tons; Sphere No. 2: 560 tons; Sphere No. 3: 2,225 tons.

All the spheres can be used for stocking butane.

Sphere No. 1 can also stock propane.

Average density of butane gas: 0.580.

Maximum pressure of liquid: 15 kg/sq.cm.

Normal delivery pressure: 7 kg/sq.cm.

Maximum vapour pressure: 5 kg/sq.cm.

Pumping speed: Maximum 70 t.p.h. Minimum speed: 10 t.p.h.

Hoses used by vessel: 1 hose for liquids 4 in. diameter; 1 hose for vapours 3 in. diameter.

Obligatory requirements for tankers carrying Hydrocarbons: Masters of all vessels carrying hydrocarbons and on the point of entering New Caledonian waters are under obligation to send to the Marine Commander in Noumea (F.U.J.), a message, indicating:

(1) Intended course.

(2) Navigation and manoeuvring possibilities.

6 hours before entering territorial waters.

6 hours before sailing.

Note: During sojourn or transit in New Caledonian waters, permanent radio contact is observed; international radotelephonic call frequency on the maritime metric band.

Tankers must use the following passes:

Havannah or Boulari: Tankers carrying less than 8,000 tons of petroleum products and less than 8 m. draft.

Pilot pick-up point 5 nautical miles off Boulari:

1. Entry via Boulari Pass if less than 20,000 tons of petroleum products and draft under 10 m. (night or day);

2. Entry via Dumbea Pass if more than 20,000 tons of petroleum products or more than 20 m. draft (daytime only).

Thio and Poro:

Tankers: Less than 20,000 tons of products and draft under 10 m.

Very Important:

Docking of tankers is in accordance with the possession of:

International Certificate for the Prevention of Pollution by Hydrocarbons; consequently:

This must be indicated to ship's Agent 48 hours prior to arrival.

Certificate must be shown to Pilot at the entrance, and to the Harbour Master or his representative upon docking.

MEDICAL: Clinique de Magenta, Rue du 18-Juin, Magenta, Box H5. Tel: 28.49.29.

Clinique Magnin: Route Territoriale No. 13, Vallee des Colons, Box 64. Tel: 27.26.01.

Hospital Gaston-Bourret, Avenue Paul-Doumer, Noumea, Box C5. Tel: 27.21.21.

Polyclinique de l'Anse-Vata, Route de l'Anse-Vata. Tel: 26.14.22.

Note: Numerous dispensaries located in villages and mining centres of the interior. If necessary, urgent medical evacuation possible by plane or helicopter.

DENSITY: 1026.

FRESH WATER: Supplied by pipe-line at the quays in the Commercial Port, S.L.N. and Numbo Private Cement Factory; rate, 40 t.p.h.

FUEL: Refuelling with marine diesel oil (M.D.O.) or bunkering fuel oil (B.F.O.) is possible.

Authorisation previously obtained by the shipowner from the Australian or French Head Offices of the 3 companies present in Noumea can aid local formalities:

Mobil Tel: 27.31.52

Shell Tel: 28.57.20

Total Tel: 27.52.91

"Light" fuels can be delivered by tanker, but "heavy" fuels must be loaded at the Mobil refuelling post, Bay des Dames.

Docking: LOA 100 m. draft 5 m.

Mooring to buoys: LOA 183 m. draft 10 m.

Note: When tying up to buoys: One must count 3/4 hours' lost time for the various operations. A derrick capable of lifting the hose (3 tons) is necessary.

GANGWAY/DECK WATCHMEN: Recommended, but not compulsory.

OPENING/CLOSING HATCHES: Can be performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per man(400 cigarettes at Outports). Additional allowance can be made after 10 days. Maximum 2 bottles of spirits per man. Wines and beer not limited. Landing of cigarettes, wines and spirits prohibited.

SURVEYORS: *Marine Surveyors:*

Bureau Naval Serve, 32 Rue du General-Gallieni, Noumea. Tel: 28.25.02.

Bureau Veritas, 21-23 Rue de l'Alma, Noumea. Tel: 27.20.31.

Lloyd's Register of Shipping, 7 Rue Anatole-France, Noumea. Tel: 27.20.83.

For all problems relating to cargo and/or vessel damages.

Draft surveys for estimation of nickel ore loads per ship.

Classification Societies:

Lloyd's Register of Shipping, Societe W. A. Johnston, 7 Rue Anatole-France, Noumea, Box 445. Tel: 27.20.83. Cables: Johnston. Telex: 070 NM.

Bureau Veritas, Societe des Etablissements Ballande, 21-23 Rue de l'Alma, Noumea, Box C4. Tel: 27.20.31. Cables: Ballande. Telex: 025 NM.

Germanischer Lloyd and Nippon Kaiji Kyokai. Bureau Naval Serve, 32 Rue Gallieni, Noumea, Box 2387. Tel: 28.25.02. Cables: Surveyor. Telex: Gemar 065 NM.

REPAIRS: Many engine, hull and electronic repairs can be effected. Slipway for small vessels. One slipway, to lift vessels of 1,000 tonnes.

CARGO GEAR: Ship's gear normally used. Possibility of hiring cranes 10 ton – 104 tons.

IDENTIFICATION CARDS: Recommended that crew carry Seamen's Books.

CONSULS: Australia, 19-21 Avenue du Marechal-Foch, Noumea. B.P. 22. Tel: 27.24.14. Cables: Austcom. Telex: 087 NM.

Belgium, 13 Rue Jules-Ferry, Noumea. Box 2683. Tel: 28.46.46.

Indonesia, 4 Rue de Strasbourg, Noumea. Box 26. Tel: 28.25.74.

New Zealand: 4 Boulevard Vauban, Noumea. Box 2219. Tel: 27.25.43. Cables: Kereru. Telex: 036 NM.

REPATRIATION: All facilities available for crew change and repatriation.

AIRPORT: Tontouta Airport situated 50 km. from Noumea. Several connections a week to all parts of the world.

TIME: GMT plus 11 hours. N.B. Daylight saving is sometimes introduced between December and February.

HOLIDAYS: 1st January, Easter Monday, 1st May, Pentecost Monday, Ascension Day, Whit Monday, 14th July, 15th August, 24th September, 1st November, 11th November, 25th December. Work may be arranged on Sundays and holidays.

POLICE/AMBULANCE/FIRE: Police, Tel: 17; Fire, Tel: 18; Ambulance, Tel: 27.21.21.

EMERGENCY CO-ORDINATION CENTRE: Call "Noumea Marine" on VHF Channel 11.

BANKS: Banque de l'Indochine et de Suez, Corner of Rue de l'Alma and Avenue du Marechal-Foch, Noumea. Box G5 Tel: 27.22.12. Cables: Indosuez. Telex: 023 NM.

Banque Nationale de Paris/Nouvelle-Caledonie. 60 Avenue de la Victorie, Noumea. Box K3. Tel: 27.55.55. Cables: Natio Par. Telex: 022 NM.

Banque de Nouvelle-Caledonie Credit Lyonnais. 75 Rue de Sebastopol, Noumea. Box L3. Tel: 28.50.69. Cables: Calbank. Telex: 091 NM.

Banque de Paris et des Pays-Bas-Nouvelle-Caledonie. Corner Rue del'Alma et Rue Georges-Clemenceau, Noumea. Box J3. Tel: 27.51.81. Cables: Paribas. Telex: 086 NM.

Societe Generale Caledonienne de Banque. 56 Avenue de la Victorie, Noumea. Box G2. Tel: 27.22.64. Cables: Pacsoge. Telex: 067 NM.

STORING: See "Prelims" page viii.

1. By Truck.
2. None.
3. Yes.
4. Yes.
5. Duty Free.
6. Yes.

WEATHER: *Wind:* The prevailing wind is the South-Easterly Tradewind blowing regularly from June to October.

N.B.: The Tradewind freshens with the sun.

Close to shore: Maximum around 1400 hours.

Open Sea: Maximum around 1800 hours.

Cyclone Season: From November to April (variable winds, rain, gusty conditions).

Rainfall: Dry season: Minimum 50 mm./month.

From January to March: Heaviest rainfall owing to the Cyclone season.

Rainfall varies between coasts depending on their exposure to winds.

Temperature: Average temperature: 24°C.

The maximum temperatures are during the month of February: 34°C.

Tides: Semi-diurnal type affected by daily inequalities. The high and low April tides are on an average 0.40 m. higher/lower than the October tides.

SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT:

Communications: Radio W/T. Short wave service and MF service very good. First message to state which passage used – Draft – Tonnage – and nature of dangerous cargo, this should be sent at least 24 hours before arrival, Agent and Harbour Master required this message.

Shore Telephone. Service available as receivers can be connected.

VHF. Available to Harbour Office and pilot station during office hours 0700 to 1100 hrs. and 1300 to 1700 hrs. Monday to Friday. Pilot vessel when at Havannah Passage keeps VHF watch 1 hour before the last given ETA. In our case we made contact with the pilot vessel when 12 miles from Havannah Passage. If at anchor VHF contact to Agents can be made via Harbour Office.

Pilotage: Boarding ground. Canal de Havannah. The Pilot boards the vessel when on the leads, but inside the reef, when the vessel is off Port Goro. The 3 leading lights stand out well at night time, each light is individually powered in case of failure, in our case they were seen 25 miles away. During strong S.W'ly winds the Pilot will board in the lee of Ioro Reef. As the leads do not stand out so well in day time, night time seems to be the best arrival time. This channel has been swept to a depth of 34 ft. Strong cross currents can be expected at the entrance to Havannah Passage.

Anchorages. See CHINPACS for area dangerous due to mines. Otherwise vessel anchors Grande Rade.

Quarantine. Pratique granted by Pilot, Health Signal not required unless notifiable sickness on board.

Controlling Factors: Berthing times. Vessels are now berthed at any time, the usual side to being Starboard side, a 1,200 h.p. tug being used to assist.

Length. No limit at berth.

Berthage. 700 m. at the New Wharves.

Stevedoring. Working time. 0700 to 1100 hrs. then 1300 to 1700 hrs. and overtime from 1800 to 2200 hrs. The labour will also clean out the hatches provided one gang is actually working cargo, otherwise they stop when cargo work is all finished. Saturday is not an overtime day. Only Sunday is an overtime day. Good Friday and Easter Saturday are considered normal working days. The Stevedoring is good, with a fast working rate, but I regret to state that some pillage took place. As regards unprotected cars, the most minor marks were claimed against the vessel, these were repudiated.

Documents:

1 Cargo Manifest.
1 List of Dangerous Cargo.
2 Crew Lists.
1 Crew Personal Effects List, this list to include currency held, (French Forms accepted).
1 Bonded Stores List.
1 Health Form.

OUTPORTS: (See Plan Book).

For Ore loading vessels:

Nepoui: Lat. 21° 20.1′ S., Long. 164° 25.5′ E.

LOA vessel 163 m. Draft 8.7 m. Telescopic shuttle clearance 12.5 m. Loading rate 1,250 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose, weight 2 tons, 8 in. pipe-line. Pumping rate 200 t.p.h. Pressure 7 kg/sq.cm.

Thio: Lat. 21° 37.5′ S., Long. 166° 15.5′E.

LOA vessel 170 m. Draft 10.8 m. Telescopic shuttle clearance 11 m. Loading rate 686 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose weight 2 tons. 6 in. pipe-line. Pumping rate 130 t.p.h. Pressure 7 kg/sq.m.

Kouaoua: Lat. 21° 24′ S., Long. 165° 49.8′ E.

LOA vessel 150 m. Draft 8.5 m. Telescopic shuttle clearance 10.5 m. Loading rate 628 t.p.h.

2 Launches (1 shared with Poro) available.

Poro: Lat. 21° 19′ S., Long. 165° 44′ E.

LOA vessel 169 m. Draft 9 m. Telescopic shuttle clearance 11.05 m. Loading rate 900 t.p.h.

2 Launches (1 shared with Kouaoua) available.

Tankers: 8 in. flexible hose, weight 2 tons. Pipe-line 6 in. Pumping rate 130 – 150 t.p.h. Pressure 7kg/sq.cm.

Baie Ugue: Lat. 21° 09′ S., Long. 165° 33′ E.

LOA vessel 170 m. Draft 11 m. Telescopic shuttle clearance 12 m. Loading rate 600 t.p.h.

1 Launch and 1 tug 400 h.p. available.

Loading of Ore by Lighters:

Vessels anchored in bays, sheltered from the ocean swell by the barrier reef, but not sheltered from heavy seas caused by wind.

West Coast: Poum/Paagoumene, Karembe, Teoudie, Poya, Bourail (anchorage and mooring buoy), Bay N'Go (anchorage and mooring buoy).

East Coast: Moneo, Kouaoua, Nakety, N'Goye, Ouinne (anchorage and mooring buoy).

Loading Operations: Loading is carried out under supervision of the miner and his stevedore who embarks and lodges part of his personnel on board the vessel.

1. Lighter train towed by a tug, runs a shuttle between the loading wharf and the anchored vessel. Very few powered lighters.
2. Trucks empty their load into lighters.
3. Lighters are emptied by unloading apparatus on board vessel.
4. Ore estimations (richness and humidity) are carried out on shore by the miner and a Japanese representative of O.M.I.C., and a sample is placed on board for the smelter, another sample being reserved for the Department of Mines.
5. Non-stop loading, except in some bays where tide flow inhibits loading lighters at low tide.

Loading rate: From 1,500 to 9,000 tons per day.

Depending on:

1. Whether port is sheltered or not;
2. Distance between loading point and anchorage.
3. Tide flow at lighter loading point;
4. Number of lighters and tugs used by the stevedore.

OFF-LYING ISLANDS: (See Plan Book).

Art Island – Wala Wharf: Lat. 19° 43′ S., Long. 161° 19′ E. Wharf orientated N.N.E./S.S.W., parallel to shore. Length 30 m. framed by 2 dolphins each 15 m. Width 7 m. Wharf top 3.50 m. above low tide. Depth 4 m. Roadway: 85 m. long, 2.7 m. wide with 2 footpaths 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Ouvea Island – Wadrilla Wharf: Lat. 20° 35′ S., Long. 166° 33′ E. Wharf orientated W.N.W./S.S.W., perpendicular to shore. Length 40 m. with mooring buoy 35 m. from the end. Width 7 m. Wharf top 3.5 m. above low tide. Depth 4 m. Roadway: 220 m. long, 2.7 m. wide with 1 footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Lifou Island – We Wharf: Lat. 20° 55′ S., Long. 167° 17′ E. Wharf orientated N.E./S.W., parallel to shore. Length 40 m. prolongated to the N.E. by a dolphin 15 m. away. Width 7 m. Wharf top 3.5 m. above low tide. Depth 5.5 m. Roadway: 90 m. long, 4 m. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Mare Island – Tadine Wharf: Lat. 21° 33′ S., Long. 167° 53.5′ E. Wharf orientated N.N.E./S.S.W. Length 48 m. with an adjacent wharf 13 m. long (150 in. lower). Width 2 m. Wharf top 2.8 m. above low tide. Depth 3 m.

Isle of Pines – Kuto Wharf: Lat. 22° 39.7′ S., Long. 167° 26′ E. Wharf orientated W.N.W./E.S.E., parallel to shore. Length 30 m. framed by 2 dolphins 15 m. away. Width 11 m. Wharf top 3.35 m. above low tide. Depth 4 m. Roadway: 118 m. long, 2.70 m. wide with one footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

EQUIPMENT: Stevedore Company equipment:

Societe du Chalandage:

Fork Lift Trucks: 6×1.5 tons, 10×2.5 tons, 12×4.0 tons, 3×5.0 tons, 4×6.0 tons, 10×10.0 tons.

Forklift/Frames (for Ro-Ro/Spreaders): 1×30 tons, 1×25 tons, 2×22 tons, 1×12 tons.

Karry Crane: 5×3 tons (6 tons doubled).

Tractors for Vehicles: 2.

Cranes: Poclain P.P.M. automotive, 14 tons (4 – 5 tons useful load). Richier on carrier (jib 24 m.) 40 tons (at 3 m.).

Self-Loading Trailers for Container Vessels: 20 tons (1 container 20 ft.). 30 tons (containers 20 ft. – 40 ft.)

Spreaders for Containers: 3 automatic for 20 ft., 1 automatic for 40 ft.

Trucks with Crane: 2 with jib 6 m., 7.5 tons/m., 1 with jib 7 m., 9 tons/m.

Semi-Trailer: 10×12 m. long. 7 Espadon type.

SOFRAC:

Crane Belotti: 1×22 tons with directional spreader.

Forklifts: 2×22 tons with frontal frame.

Forklifts: 3×8.5 tons, 2×6.5 tons, 1×6 tons, 1×5 tons, 3×4 tons, 2×3 tons, 1×3 tons (lowered for unloading containers), 1×2.5 tons (lowered for unloading containers), 2×2 tons (lowered for unloading containers).

Karry Crane: 1×3 tons (6 tons doubled).

Semi-Trailers for Containers: 6 for 20 ft., 24 tons. 4 for 20 ft. – 40 ft., 24 tons.

Heavy Duty Tractors: 6 for loads from 38 tons to 60 tons.

Tank Trucks: 1×35 cu.m. (1 tank), 22 tons. 1×24 cu.m. (2 tanks), 22 tons.

Automatic Spreaders: 2 for containers 20 ft., 25 tons. 1 for containers 40 ft., 30 tons.

Suction Pumps for Grain: 1×140 t.p.h., nominal 40 – 45 t.p.h. 1×35 t.p.h., nominal 25 t.p.h. 1×200 t.p.h.

Semi-Trailer with Worm: 1 for unloading grain containers.

S.A.T.O.:

Forklift Trucks: 2×2.5 tons (on board), 4×4 tons, 3×6 tons, 1×8 tons, 1×12 tons, 1×25 tons.

Karry Crane: 1×3 tons (6 tons).

Automatic Spreader for Containers: 1×20 ft., 25 tons.

TANKERS:

SBM: (Societe le Nickel): In the entrance to Grande Rade (position: Lat. 22° 14′ 15″ S., Long. 166° 23.4′ E.). Mooring during daylight only. Max. LOA 300 m. Max. draft 14.80 m. Pumping rate for No. 2, heavy fuel oil 3,000 cu.m./h.

Baie des Dames: (Mobil Oil Australia). (Position: Lat. 22° 14′ S., Long. 166° 24′ E.).

1. 5 mooring buoys (max. distance between East and West Buoys 361 m.) 2×8 in. lines for clean and black oils (each marked by a Spar Buoy and a Marker Buoy). Max. LOA 200 m., max. draft 10 m. The buoy mooring is used to discharge Mobil/Total tankers and bunker cargo vessels, liners and ore carriers.

2. "T" shaped jetty, length 9 m. 4 mooring dolphins and 2 mooring buoys (110 m. apart). Max. LOA of tankers 100 m., max. draft 5 m. Berth used for discharge of tankers and liquid gas carriers, bunkering of vessels and loading of tankers.

Also see table below.

Oil Terminals:

	Bay des Dames		*SBM (SLN)*	*Doniambo (SLN)*
	Mooring	*Anchorage*	*Main Harbour*	*Shell Tankers*
Position	22° 14.3′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 24.1′ E.	22° 14.5′ S. 166° 23.4′ E.	22° 15.6′ S. 166° 25.9′ E.
Controlling Depth	12 m.	12 m.	16.8 m.	10 m.
Nature of Bottom	Mud	Mud	Mud	Mud
Description of berth	Berths at jetty/4 dolphins and 2 buoys	5 buoys	1 buoy 3 m. high 11.5 m. dia.	Berths/wharf
Companies using oil terminal	Mobil Shell Total	Mobil Shell Total	SLN	Shell
Tanker:				
d.w.t.	1,200	28,000	100,000	28,000
LOA (m.)	100	200	200	200
Beam (m.)	—	25	—	—
Draft (m.)	5	10	14.8	10
Grades handled	Light oil Black oil	Light oil Black oil	— Black oil (Black Fuel Oil No. 2)	Light oil —
Max. weight cargo hoses (tons)		3		2
Pump Rate (t.p.h.)				
Discharging Clean oil	100	280	—	150/200
Discharging Black oil	80	340	3,000	—
Bunkering Clean oil	70	120	—	—
Bunkering Black oil	80	100	—	—
Minimum quantity	50	50	—	—
Pressure kg/sq.m.				
Clean oil	7	7	—	7
Black oil	7	7	10	—
	These two terminals are operated by Mobil Oil and are used for discharging and loading tankers as well as for bunkering all types of vessels.		Terminal owned by SLN who makes available its berthing Master. Follow instructions SLN/SIE 146, September 1979.	For tankers containing products for Shell.

LPG Terminal:

Gas carriers berth port side to wharf, against the jetty and the 4 dolphins which make up the Mobil Oil installations in Bay des Dames.

Limits: Overall length : 100 m. Draft: 5 m.

Capacity of reservoirs: 3,115 tons. Sphere No. 1: 330 tons; Sphere No. 2: 560 tons; Sphere No. 3: 2,225 tons.

All the spheres can be used for stocking butane.

Sphere No. 1 can also stock propane.

Average density of butane gas: 0.580.

Maximum pressure of liquid: 15 kg/sq.cm.

Normal delivery pressure: 7 kg/sq.cm.

Maximum vapour pressure: 5 kg/sq.cm.

Pumping speed: Maximum 70 t.p.h. Minimum speed: 10 t.p.h.

Hoses used by vessel: 1 hose for liquids 4 in. diameter; 1 hose for vapours 3 in. diameter.

Obligatory requirements for tankers carrying Hydrocarbons: Masters of all vessels carrying hydrocarbons and on the point of entering New Caledonian waters are under obligation to send to the Marine Commander in Noumea (F.U.J.), a message, indicating:

(1) Intended course.
(2) Navigation and manoeuvring possibilities.
6 hours before entering territorial waters.
6 hours before sailing.

Note: During sojourn or transit in New Caledonian waters, permanent radio contact is observed; international radotelephonic call frequency on the maritime metric band.

Tankers must use the following passes:

Havannah or Boulari: Tankers carrying less than 8,000 tons of petroleum products and less than 8 m. draft.

Pilot pick-up point 5 nautical miles off Boulari:

1. Entry via Boulari Pass if less than 20,000 tons of petroleum products and draft under 10 m. (night or day);
2. Entry via Dumbea Pass if more than 20,000 tons of petroleum products or more than 20 m. draft (daytime only).

Thio and Poro:

Tankers: Less than 20,000 tons of products and draft under 10 m.

Very Important:

Docking of tankers is in accordance with the possession of:

International Certificate for the Prevention of Pollution by Hydrocarbons; consequently:

This must be indicated to ship's Agent 48 hours prior to arrival.

Certificate must be shown to Pilot at the entrance, and to the Harbour Master or his representative upon docking.

MEDICAL: Clinique de Magenta, Rue du 18-Juin, Magenta, Box H5. Tel: 28.49.29.

Clinique Magnin: Route Territoriale No. 13, Vallee des Colons, Box 64. Tel: 27.26.01.

Hospital Gaston-Bourret, Avenue Paul-Doumer, Noumea, Box C5. Tel: 27.21.21.

Polyclinique de l'Anse-Vata, Route de l'Anse-Vata. Tel: 26.14.22.

Note: Numerous dispensaries located in villages and mining centres of the interior. If necessary, urgent medical evacuation possible by plane or helicopter.

DENSITY: 1026.

FRESH WATER: Supplied by pipe-line at the quays in the Commercial Port, S.L.N. and Numbo Private Cement Factory; rate, 40 t.p.h.

FUEL: Refuelling with marine diesel oil (M.D.O.) or bunkering fuel oil (B.F.O.) is possible.

Authorisation previously obtained by the shipowner from the Australian or French Head Offices of the 3 companies present in Noumea can aid local formalities:

Mobil Tel: 27.31.52
Shell Tel: 28.57.20
Total Tel: 27.52.91

"Light" fuels can be delivered by tanker, but "heavy" fuels must be loaded at the Mobil refuelling post, Bay des Dames.

Docking: LOA 100 m. draft 5 m.

Mooring to buoys: LOA 183 m. draft 10 m.

Note: When tying up to buoys: One must count 3/4 hours' lost time for the various operations. A derrick capable of lifting the hose (3 tons) is necessary.

GANGWAY/DECK WATCHMEN: Recommended, but not compulsory.

OPENING/CLOSING HATCHES: Can be performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes per man(400 cigarettes at Outports). Additional allowance can be made after 10 days. Maximum 2 bottles of spirits per man. Wines and beer not limited. Landing of cigarettes, wines and spirits prohibited.

SURVEYORS: *Marine Surveyors:*

Bureau Naval Serve, 32 Rue du General-Gallieni, Noumea. Tel: 28.25.02.

Bureau Veritas, 21-23 Rue de l'Alma, Noumea. Tel: 27.20.31.

Lloyd's Register of Shipping, 7 Rue Anatole-France, Noumea. Tel: 27.20.83.

For all problems relating to cargo and/or vessel damages.

Draft surveys for estimation of nickel ore loads per ship.

Classification Societies:

Lloyd's Register of Shipping, Societe W. A. Johnston, 7 Rue Anatole-France, Noumea, Box 445. Tel: 27.20.83. Cables: Johnston. Telex: 070 NM.

Bureau Veritas, Societe des Etablissements Ballande, 21-23 Rue de l'Alma, Noumea, Box C4. Tel: 27.20.31. Cables: Ballande. Telex: 025 NM.

Germanischer Lloyd and Nippon Kaiji Kyokai. Bureau Naval Serve, 32 Rue Gallieni, Noumea, Box 2387. Tel: 28.25.02. Cables: Surveyor. Telex: Gemar 065 NM.

REPAIRS: Many engine, hull and electronic repairs can be effected. Slipway for small vessels. One slipway, to lift vessels of 1,000 tonnes.

CARGO GEAR: Ship's gear normally used. Possibility of hiring cranes 10 ton – 104 tons.

IDENTIFICATION CARDS: Recommended that crew carry Seamen's Books.

CONSULS: Australia, 19-21 Avenue du Marechal-Foch, Noumea. B.P. 22. Tel: 27.24.14. Cables: Austcom. Telex: 087 NM.

Belgium, 13 Rue Jules-Ferry, Noumea. Box 2683. Tel: 28.46.46.

Indonesia, 4 Rue de Strasbourg, Noumea. Box 26. Tel: 28.25.74.

New Zealand: 4 Boulevard Vauban, Noumea. Box 2219. Tel: 27.25.43. Cables: Kereru. Telex: 036 NM.

REPATRIATION: All facilities available for crew change and repatriation.

AIRPORT: Tontouta Airport situated 50 km. from Noumea. Several connections a week to all parts of the world.

TIME: GMT plus 11 hours. N.B. Daylight saving is sometimes introduced between December and February.

HOLIDAYS: 1st January, Easter Monday, 1st May, Pentecost Monday, Ascension Day, Whit Monday, 14th July, 15th August, 24th September, 1st November, 11th November, 25th December. Work may be arranged on Sundays and holidays.

POLICE/AMBULANCE/FIRE: Police, Tel: 17; Fire, Tel: 18; Ambulance, Tel: 27.21.21.

EMERGENCY CO-ORDINATION CENTRE: Call "Noumea Marine" on VHF Channel 11.

BANKS: Banque de l'Indochine et de Suez, Corner of Rue de l'Alma and Avenue du Marechal-Foch, Noumea. Box G5 Tel: 27.22.12. Cables: Indosuez. Telex: 023 NM.

Banque Nationale de Paris/Nouvelle-Caledonie. 60 Avenue de la Victorie, Noumea. Box K3. Tel: 27.55.55. Cables: Natio Par. Telex: 022 NM.

Banque de Nouvelle-Caledonie Credit Lyonnais. 75 Rue de Sebastopol, Noumea. Box L3. Tel: 28.50.69. Cables: Calbank. Telex: 091 NM.

Banque de Paris et des Pays-Bas-Nouvelle-Caledonie. Corner Rue del'Alma et Rue Georges-Clemenceau, Noumea. Box J3. Tel: 27.51.81. Cables: Paribas. Telex: 086 NM.

Societe Generale Caledonienne de Banque. 56 Avenue de la Victorie, Noumea. Box G2. Tel: 27.22.64. Cables: Pacsoge. Telex: 067 NM.

STORING: See "Prelims" page viii.

1. By Truck.
2. None.
3. Yes.
4. Yes.
5. Duty Free.
6. Yes.

WEATHER: *Wind:* The prevailing wind is the South-Easterly Tradewind blowing regularly from June to October.

N.B.: The Tradewind freshens with the sun.

Close to shore: Maximum around 1400 hours.

Open Sea: Maximum around 1800 hours.

Cyclone Season: From November to April (variable winds, rain, gusty conditions).

Rainfall: Dry season: Minimum 50 mm./month.

From January to March: Heaviest rainfall owing to the Cyclone season.

Rainfall varies between coasts depending on their exposure to winds.

Temperature: Average temperature: 24°C.

The maximum temperatures are during the month of February: 34°C.

Tides: Semi-diurnal type affected by daily inequalities. The high and low April tides are on an average 0.40 m. higher/lower than the October tides.

SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT:

Communications: Radio W/T. Short wave service and MF service very good. First message to state which passage used – Draft – Tonnage – and nature of dangerous cargo, this should be sent at least 24 hours before arrival, Agent and Harbour Master required this message.

Shore Telephone. Service available as receivers can be connected.

VHF. Available to Harbour Office and pilot station during office hours 0700 to 1100 hrs. and 1300 to 1700 hrs. Monday to Friday. Pilot vessel when at Havannah Passage keeps VHF watch 1 hour before the last given ETA. In our case we made contact with the pilot vessel when 12 miles from Havannah Passage. If at anchor VHF contact to Agents can be made via Harbour Office.

Pilotage: Boarding ground. Canal de Havannah. The Pilot boards the vessel when on the leads, but inside the reef, when the vessel is off Port Goro. The 3 leading lights stand out well at night time, each light is individually powered in case of failure, in our case they were seen 25 miles away. During strong S.W'ly winds the Pilot will board in the lee of Ioro Reef. As the leads do not stand out so well in day time, night time seems to be the best arrival time. This channel has been swept to a depth of 34 ft. Strong cross currents can be expected at the entrance to Havannah Passage.

Anchorages. See CHINPACS for area dangerous due to mines. Otherwise vessel anchors Grande Rade.

Quarantine. Pratique granted by Pilot, Health Signal not required unless notifiable sickness on board.

Controlling Factors: Berthing times. Vessels are now berthed at any time, the usual side to being Starboard side, a 1,200 h.p. tug being used to assist.

Length. No limit at berth.

Berthage. 700 m. at the New Wharves.

Stevedoring. Working time. 0700 to 1100 hrs. then 1300 to 1700 hrs. and overtime from 1800 to 2200 hrs. The labour will also clean out the hatches provided one gang is actually working cargo, otherwise they stop when cargo work is all finished. Saturday is not an overtime day. Only Sunday is an overtime day. Good Friday and Easter Saturday are considered normal working days. The Stevedoring is good, with a fast working rate, but I regret to state that some pillage took place. As regards unprotected cars, the most minor marks were claimed against the vessel, these were repudiated.

Documents:

1 Cargo Manifest.
1 List of Dangerous Cargo.
2 Crew Lists.
1 Crew Personal Effects List, this list to include currency held, (French Forms accepted).
1 Bonded Stores List.
1 Health Form.

OUTPORTS: (See Plan Book).

For Ore loading vessels:

Nepoui: Lat. 21° 20.1' S., Long. 164° 25.5' E.

LOA vessel 163 m. Draft 8.7 m. Telescopic shuttle clearance 12.5 m. Loading rate 1,250 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose, weight 2 tons, 8 in. pipe-line. Pumping rate 200 t.p.h. Pressure 7 kg/sq.cm.

Thio: Lat. 21° 37.5' S., Long. 166° 15.5'E.

LOA vessel 170 m. Draft 10.8 m. Telescopic shuttle clearance 11 m. Loading rate 686 t.p.h.

1 Launch available.

Tankers: 6 in. flexible hose weight 2 tons. 6 in. pipe-line. Pumping rate 130 t.p.h. Pressure 7 kg/sq.m.

Kouaoua: Lat. 21° 24' S., Long. 165° 49.8' E.

LOA vessel 150 m. Draft 8.5 m. Telescopic shuttle clearance 10.5 m. Loading rate 628 t.p.h.

2 Launches (1 shared with Poro) available.

Poro: Lat. 21° 19' S., Long. 165° 44' E.

LOA vessel 169 m. Draft 9 m. Telescopic shuttle clearance 11.05 m. Loading rate 900 t.p.h.

2 Launches (1 shared with Kouaoua) available.

Tankers: 8 in. flexible hose, weight 2 tons. Pipe-line 6 in. Pumping rate 130 – 150 t.p.h. Pressure 7kg/sq.cm.

Baie Ugue: Lat. 21° 09' S., Long. 165° 33' E.

LOA vessel 170 m. Draft 11 m. Telescopic shuttle clearance 12 m. Loading rate 600 t.p.h.

1 Launch and 1 tug 400 h.p. available.

Loading of Ore by Lighters:

Vessels anchored in bays, sheltered from the ocean swell by the barrier reef, but not sheltered from heavy seas caused by wind.

West Coast: Poum/Paagoumene, Karembe, Teoudie, Poya, Bourail (anchorage and mooring buoy), Bay N'Go (anchorage and mooring buoy).

East Coast: Moneo, Kouaoua, Nakety, N'Goye, Ouinne (anchorage and mooring buoy).

Loading Operations: Loading is carried out under supervision of the miner and his stevedore who embarks and lodges part of his personnel on board the vessel.

1. Lighter train towed by a tug, runs a shuttle between the loading wharf and the anchored vessel. Very few powered lighters.
2. Trucks empty their load into lighters.
3. Lighters are emptied by unloading apparatus on board vessel.
4. Ore estimations (richness and humidity) are carried out on shore by the miner and a Japanese representative of O.M.I.C., and a sample is placed on board for the smelter, another sample being reserved for the Department of Mines.
5. Non-stop loading, except in some bays where tide flow inhibits loading lighters at low tide.

Loading rate: From 1,500 to 9,000 tons per day.

Depending on:

1. Whether port is sheltered or not;
2. Distance between loading point and anchorage.
3. Tide flow at lighter loading point;
4. Number of lighters and tugs used by the stevedore.

OFF-LYING ISLANDS: (See Plan Book).

Art Island – Wala Wharf: Lat. 19° 43' S., Long. 161° 19' E. Wharf orientated N.N.E./S.S.W., parallel to shore. Length 30 m. framed by 2 dolphins each 15 m. Width 7 m. Wharf top 3.50 m. above low tide. Depth 4 m. Roadway: 85 m. long, 2.7 m. wide with 2 footpaths 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Ouvea Island – Wadrilla Wharf: Lat. 20° 35' S., Long. 166° 33' E. Wharf orientated W.N.W./S.S.W., perpendicular to shore. Length 40 m. with mooring buoy 35 m. from the end. Width 7 m. Wharf top 3.5 m. above low tide. Depth 4 m. Roadway: 220 m. long, 2.7 m. wide with 1 footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Lifou Island – We Wharf: Lat. 20° 55' S., Long. 167° 17' E. Wharf orientated N.E./S.W., parallel to shore. Length 40 m. prolongated to the N.E. by a dolphin 15 m. away. Width 7 m. Wharf top 3.5 m. above low tide. Depth 5.5 m. Roadway: 90 m. long, 4 m. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Mare Island – Tadine Wharf: Lat. 21° 33' S., Long. 167° 53.5' E. Wharf orientated N.N.E./S.S.W. Length 48 m. with an adjacent wharf 13 m. long (150 in. lower). Width 2 m. Wharf top 2.8 m. above low tide. Depth 3 m.

Isle of Pines – Kuto Wharf: Lat. 22° 39.7' S., Long. 167° 26' E. Wharf orientated W.N.W./E.S.E., parallel to shore. Length 30 m. framed by 2 dolphins 15 m. away. Width 11 m. Wharf top 3.35 m. above low tide. Depth 4 m. Roadway: 118 m. long, 2.70 m. wide with one footpath 80 cm. wide, supporting vehicles of up to 19 tons (axle 13 tons).

Touho Bay: Lat. 20° 46.5′ S., Long. 162° 55′ E. Wharf orientated E.N.E./W.S.W., parallel to shore – 4 bollards. Length 12.6 m. Width 6.7 m. Wharf top 4 m. above low tide. Deep water at 20 m. from end of wharf.

Paagoumene Wharf: Lat. 20° 29.2′ S., Long. 164° 10.5′ E. Wharf orientated N.E./S.W. Length 15.6 m. N.E. section: Length 30.5 m. S.W. section: Length 43 m. Overlapping landing stage, 2.14 m. Wharf top 3.83 m. above low tide.

AUTHORITY: Port Autonome de Noumea, Avenue Cook, P.O.Box 14, Noumea. *Tel:* 27.59.66. *Telex:* Care of "Comin" 045 NM. *Contact:* Andre Courtot, Port Director. Jean Louis Boglio, Port Captain.

NOTES

Please also advise Shipping Guides Ltd.

New Zealand

GENERAL: All ports.

AGRICULTURE:
The New Zealand Ministry of Agriculture and Fisheries requires a Shipmaster's Bond and Guarantee (Form Ag.L35) to be completed in triplicate if vessel is carrying animals, i.e. cats, dogs, fish, birds, etc.

In addition, the Masters of all overseas vessels are required to complete in duplicate a Ship's Meat Locker Certificate (Form Ag.L36). Ship's Meat Lockers (chambers) containing prohibited meat from overseas countries are sealed on arrival at the first port in New Zealand, and must remain sealed during the vessel's stay on the New Zealand coast.

All goods of an agricultural nature are held by Customs Department until they have been inspected and a Permit to Land (Form Ag.G.78) issued by the Ministry of Agriculture and Fisheries.

Crews signing off are required to check with the Agriculture Quarantine Officer and obtain Release/Treatment of any agriculture items which they wish to take ashore.

Authority: Ministry of Agriculture & Fisheries, DFI Building, 110 Featherston Street, Wellington. *Tel:* 720-367. *Contact:* Director, Agriculture Quarantine Service.

SHIPMASTER'S REPORT:
Health: Coming from an Australian port the clean bill of health was accepted.

Documents:
2 Poison Lists (if there is poison in the cargo).
2 Reports of Pillaged Cargo (marks and numbers).

Cargo Gear: When working general cargo with derricks "in union purchase" without preventer guys, ship (via Agent) must seek an exemption from Regulation 2 (a) of the General Harbour (Safe Working Load) Regulations 1935 Amendment No. 5 by applying for dispensation from the Chief Surveyor of Ships, Marine Department, Ministry of Transport, Private Bag, Wellington.

AUCKLAND: 36.51 S. 174.45 E. (See Plan Book)

PORT LIMITS: South of a line drawn from Toroa Point to the S.W. Point of Rakino Island.

DOCUMENTS:
3 Copies Passenger List.
3 Copies Crew List.
1 Copy Search List (Form 2).
1 Copy Stores List (Form 3).
1 Copy Prohibited and Restricted Immigrants.
1 Copy Poisons List.
1 Copy Animals and Birds List.
1 Copy List of Firearms (not cargo).
1 Copy Arrival Manifest (Form 1), plus 2 for other ports visited (Reg. Form 16 refers).
1 Copy of List showing the gross tonnage of cargo for discharge in New Zealand.
3 Copies Shipmaster's Bond and Guarantee (Form Ag.L35).
2 Copies Meat Locker Declaration (Form Ag.L36).
Ship's Register to be presented to the Harbour Master on first visit.

PILOTAGE: Vessel approaching port to give 24 hours' notice by radiotelegraphy and addressed "Harbourmaster Auckland". A second notice by radiotelephone confirming or amending first to be sent 4 hours before expected time. Signal Station on Mt. Victoria, call sign "Auckland Harbour Radio", calling frequency 2182 kHz, working frequency 2012 kHz. VHF, call sign "Auckland Harbour Radio", Channel 12 and 16. Continuous listening watch on Channel 16.

Pilot launch is 20.0 m. long, single mast, painted white. Name is *Akarana*. Standard flag and lights are shown. Word "Pilot" painted in black on white above cabin. Pilots board 1 mile North of Rangitoto Beacon, but will proceed farther when necessity arises. Good pilot ladder with manrope required to within 1.5 m. of water-line with proper lighting at night. Heaving lines will be needed for mail.

ANCHORAGES: For vessels waiting Pilot: (Bearings and distances from Rangitoto Beacon). Gulf Anchorage No. 1 bearing 000° distance 2 miles; No. 2 bearing 006° distance 2.5 miles; No. 3 bearing 012° distance 3 miles.

All inner anchorages in pilotage area can be indicated by Pilot. All anchorages are in 20 m. – 33 m. with good holding ground.

RESTRICTIONS: Ships may enter harbour at any time of day or night. Main channel has least depth of 11 m. chart datum. Vessels with greater draft must wait for tide to make and enter at Harbour Master's orders. Tankers not berthing immediately on arrival anchor as directed at one of Gulf Anchorages.

See "Bridges".

MAX. SIZE: No limits, within reason, on the length or breadth. Controlling depth at chart datum: entrance 11 m.; Rangitoto Channel 11 m.; anchorages 9.8 m. – 15.0 m.; berths 6.09 m. – 12.20 m.

RADIO: Station for routing traffic to the Auckland area is Auckland Radio. Call sign ZLD. Working both W/T and R/T on continuous watches.

VHF: See "Pilotage".

RADAR: Radar station with range of 72 km. located on Mt. Victoria Lat. 36° 49′ 42″ S., Long. 174° 47′ 57″ E. Masters may call on radio telephone and request particulars of their bearing and range as shown on radar screen. Responsibility for the use of this information rests entirely with Master of vessel.

HEALTH: 12 – 24 hours before arrival time, despatch message to Port Health, Auckland. Message to state ETA, last port, and date of departure therefrom, number of crew, number of passengers and state of health and indicate if there is a doctor amongst the crew. 12 hours before arrival confirm ETA.

Doctor boards by way of vessel's shipside gangway (not pilot ladder) when in harbour. This gangway to be ready immediately on arrival in order to avoid any delay. A responsible person should meet doctor at head of gangway and conduct him to appropriate person.

Papers Required:
Completed Maritime Declaration of Health.
Derat Certificate.
Complete Crew List with dates of last smallpox vaccination.
N.B. Crew and Passenger Lists to be certified as being correct by the Master.
List of Addresses of Disembarking Passengers.
List of Dangerous Cargo on board.

Pratique is granted initially, and covers all subsequent coastal movements in New Zealand for that voyage. Radio Pratique can be granted only after prior approval from New Zealand Health Department.

Vessels requesting Pratique should exhibit appropriate International Code Signals by day and night until Pratique is granted.

TUGS: 4 tugs available. Tugs join vessel East of Eastern Tide Wall. Tugs supply lines at no extra charge.

BERTHING: Tankers berthing at Eastern Tide Wall, BP Depot, must berth in accordance with weather and tidal conditions. Tankers must arrive at pilot station not later than 30 minutes before sunset, otherwise berthing will be postponed until following morning.

Depth of water: Bledisloe 10 m.; Captain Cook 8 m. – 10.5 m.; Eastern Tide Wall 10 m. – 10.5 m.; Hobson 4 m. – 6 m.; Jellicoe 10 m. – 11 m.; Marsden 3.5 m. – 8 m.; Princes 9 m. – 11 m.; Queens 9 m. – 10.5 m.; Wynyard 9 m. – 11 m.; Freyberg 10 m. – 11 m.; Fergusson 11 m. – 12.2 m.

CRANES: At Fergusson Container Terminal there is 1 twin lift container crane of 45.72 tonnes capacity and 2 single lift container cranes of 40.64 tonnes capacity. In the conventional cargo port quay-side cranes of 3 or 5 tonne capacity are provided at all except 2 berths. At the bulk fertiliser berth there are four 5 tonne capacity multi-wire grabbing cranes and at the bulk sugar berth there is a 5 tonne capacity gantry grabbing crane. Self propelled floating crane 101.6 tonnes capacity.

BULK CARGO FACILITIES: *Cement:* A special berth is provided where bulk cement is discharged pneumatically via pipe-line to privately owned silos. Depth at chart datum 6.0 m., quay length 94 m.

Sugar: Bulk sugar is discharged at Chelsea Wharf. This wharf is equipped with a 5 tonne capacity gantry grabbing crane and a conveyor system connected to the refinery store. Depth at chart datum 9.9 m. Quay length 91 m.

1 berth is set aside for the discharge of bulk fertiliser bases. 4×5 tonne capacity multi-wire grabbing cranes and 4 rail mounted hoppers of 10.7 cu.m. capacity are available. Depth at chart datum 11.0 m. Quay length 335 m.

4 other berths can also be made available for discharge of dry bulk cargo as required.

See "Bridges".

SPECIALISED CARGO HANDLING FACILITIES:
Tanker Terminals: 2 berths are at a continuous quay 486 m. long, depth at chart datum 9 m. – 11 m. The third is a dolphin berth, depth at chart datum 10.5 m. All the berths are connected by pipe-line to adjacent tank farms.

Container and Ro/Ro Facilities: Fergusson Wharf Container Terminal: Quay length 610 m. Depth at chart datum 12.2 m. The terminal is equipped with 3 Vickers Hoskins/Paceco gantry container cranes, 2 single lifts of 40.64 tonnes capacity and a twin lift of 45.72 tonnes capacity. Total back-up area of the terminal is 21.71 hectares of which 17.41 hectares is used for container handling and storage and 4.30 hectares is used for container repairs and LCL containers. Included in the latter area is the Monash Street Container Base which provides 7,432 sq.m. of covered transit storage for LCL cargo. Rail exchange sidings are located immediately adjacent to the terminal. There are power outlets for 1,424 refrigerated containers. Container terminal equipment includes 17 straddle carriers as well as various tractors, trailers and fork lift trucks. The terminal is operated by the Auckland Harbour Board.

Freyberg Wharf: A common user Ro/Ro berth for quarter ramp vessels up to 228 m. in length is provided at Freyberg Wharf.

Bledisloe Roll-on Terminal: Quay length No. 1 Berth 137 m., No. 2 Berth 224 m. Depth at chart datum 9.5 m. Each berth is equipped with a link span with a fork lift axle load capacity of 56.9 tonnes and a low loader capacity of 182.9 tonnes. No. 2 Berth can accept ships equipped with a port quarter ramp. A total back-up area of 4.8 hectares is provided including a cargo shelter of 4,000 sq.m. and rail exchange sidings. The terminal is operated by Union Steam Ship Company.

BRIDGES: Navigation in daylight hours only under Auckland Harbour Bridge. Navigation span is 45.2 m. – 43 m. above MHWS for 76 m. each side of centre. Only ships berthing at Chelsea Wharf sugar berth need pass under the bridge.

STEVEDORES: Labour commences at 0730 hrs. In order to ensure labour for this time ETA should be received at Agent's office before 1500 hrs. previous day, or before 1500 hrs. previous Friday for a Monday start. Delays on radio messages may be up to 3 hours.

MEDICAL: In case of urgent medical attention being required, Agents can arrange for doctor to board in stream at any notice. Hospital and ambulance services available 24 hours.

TANKERS: See "Special Cargo Handling Facilities".

Any size pipe-lines can be used, oil companies have all reducing pieces needed.

No facilities for slop discharge.

DENSITY: Always 1025.

FRESH WATER: Fresh water always available. Delivery rate 80 t.p.h., through canvas hoses. AHB supplies all equipment.

FUEL: Light fuel oil, diesel, gas oil and heavy fuel are available. To be ordered in ETA notice.

FIRE PRECAUTIONS: In addition to usual precautions, Class I tankers are under extra security with a nightwatchman from Harbour Master's staff in addition to the normal tanker guard.

CONSULS: (Consuls, Trade Commissioners, etc.): Australia, Belgium, Brazil, Great Britain, Costa Rica, Denmark, El Salvador, Fiji, Finland, France, Germany (West), Greece, Ireland, Italy, Japan, Korea (South), Nauru, Netherlands, Norway, Peru, Philippines, Portugal, Sweden, Switzerland, Tonga, Turkey, U.S.A., Venezuela, Western Samoa.

REPAIRS: Any ship repairs can be carried out. A slipway can take vessels of 600 tons displacement and up to 64 m. LOA.

DRY DOCKS: Max. size of vessel that can be accommodated in Calliope Dry Dock is 181.35 m. LOA and 19.6 m. beam. Water on sill at MHWS 10 m.

SURVEYORS: American Bureau of Shipping, Bureau Veritas (Paris), China Corporation Register of Shipping, Det Norske Veritas, Germanischer Lloyd, Lloyd's Register of Shipping, Nippon Kaiji Kyokai, Registro Italiano Navale, USSR Register of Shipping.

GANGWAY/DECK WATCHMEN: Watchmen are necessary. Best to use crew.

OPENING/CLOSING HATCHES: Crew open completely mechanical hatches only. All other hatches opened by waterside workers.

CERTIFICATES: Register, Derat, Load Line, Safety Equipment, Safety Radio, Articles of Agreement, are main Certificates required.

CUSTOMS ALLOWANCES: 1 bottle of spirit (in use) *or* 1 bottle of wine (in use) *and* 12 quart bottles (or the equivalent) of beer, 200 cigarettes *or* half a pound of tobacco *or* 50 cigars. For ship use only. To be declared on Search List. Also gifts up to a total value of $10.0 may be landed.

CARGO GEAR: Preventer guys must be entirely wire. All blocks and shackles must be moused. Safety strops on all heel blocks. All wires, ropes, chains and blocks to have Certificate of Test.

REPATRIATION: All facilities exist for repatriation.

AIRPORT: 23 km. from harbour to airport. Served by all major international airlines.

TIME: Local time is GMT plus 12 hours, add 1 hour for Summertime, October to March.

HOLIDAYS: Only the Container Terminal works during the following holidays. New Year's Day (1st January); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (first Monday in June); Labour Day (fourth Monday in October); Christmas Day; Boxing Day; Waitangi Day early February. In addition, each Province has an Anniversary Day and a Waterside Workers' Picnic Day. In Auckland these are in last half January.

POLICE/AMBULANCE/FIRE: All emergency services are called through one telephone number. Dial 111 and state service required.

TELEPHONES: Telephones at all berths. Cost is $3.02 fee phone per day, plus the cost of any overtime incurred in connecting or disconnecting any such telephone. Telephones (coin operated) may be hired for use of crew on application to Post Office.

SERVICES: Services include tank cleaning, compass adjusting, all cargo surveying, average adjusting, etc. Tank washings may be pumped to road tankers.

GENERAL: *Refuse Disposal:*

It is important that no refuse be allowed to pass into tidal waters either directly or indirectly. This is covered by strict Government Regulation.

Masters should ensure that refuse is lowered into refuse boat "Manui" and not thrown into boat from any great height.

No refuse will be collected from stern of vessel as this is hazardous for collection craft. A suitable site in way of the flat side of the vessel on off shoreside should be chosen.

SHORE LEAVE: Crew members may go ashore.

IDENTIFICATION CARDS: Not required.

REGULATIONS: All guests aboard vessel in the evening must have passes signed by the Master. All visitors' passes expire at 2300 hrs. All ships in port are subject to the Rules and Regulations contained in the Harbours Act 1950, and the By-laws of the Auckland Harbour Board. On first visit to the Port copies of these and other relevant Regulations are supplied to ships.

DELAYS: Average delay 10 hours for container ships. Seldom any delays awaiting other berths.

DEVELOPMENTS: Kings Wharf – a heavy duty quay is under construction, depth 12.2 m. completion late 1985.

Rangitotd Channel to be dredged in 1985-87.

AUTHORITY: Auckland Harbour Board, 1 Queen Street, P.O.Box 1259, Auckland, New Zealand. *Tel:* 795-950. *Telex:* NZ 2705. *Cables:* Haboard, Auckland. *Contact:* J. M. Halling, Chief Administrative Officer and Secretary.

BLUFF: 46.37 S. 168.22 E. (See Plan Book)

DOCUMENTS: See "Auckland".

PILOTAGE: Pilotage is compulsory. Pilots board vessels from launch in position Lat. 46° 39′ S., Long. 168° 21′ E. Arrangements regarding boarding will be made by radio-telephony, wireless-telegraphy or visual signal from signal station at Stirling Point.

Vessels, other than those which are exempt from pilotage, must not proceed within the pilotage area without a Pilot.

A 24 hour pilotage service for tidal conditions. Vessels generally enter and leave the port at slack HW and slack LW.

Caution: Vessels stopping to pick up a Pilot are particularly warned not to approach entrance shoal too closely, especially during flood stream as stream sets strongly on to entrance shoal, North-Eastward.

Coastal Pilots: Coastal Pilots are available on 24 hours' notice for piloting service from Tairoa Head to Milford Sound.

ANCHORAGE:

Southward of Stirling Point: In fine weather, vessels missing tide ma anchor in 10 to 12 fathoms with Stirling Point lighthouse bearing abou 356° and Dog Island lighthouse bearing about 108°.

Eastward of Dog Island: Anchorage for vessels delayed longer tha 6 hours awaiting to enter Bluff is situated 5 miles East of Dog Island.

Safe anchorage in heavy Westerly weather may be found off the N.W coast of Stewart Island between Otaku Point and Gull Rocks, position Lat. 46° 47′ S., Long. 168° 02′ E.

RESTRICTIONS: The safest time to enter the harbour is at slack water Strict attention should be paid to signals passed from the signal station on Stirling Point. No vessel should attempt to enter without a Pilot unless possessing local knowledge.

Least depth in fairway is 8.53 m. on Northern edge of Channel Rocks also 7.62 m. (about 1 cable West North-Westward of the tidal beacon).

MAX. SIZE: Length 198 m., beam 29 m. Vessels of over 182 m. length and/or 28 m. beam are restricted to HW arrival and departure. Vessels up to Panamax size 225 m.×33 m. will be handled at a reduced draft a the Harbour Master's discretion.

Max. draft is 9.15 m. ordinary HW and up to 9.6 m. at HW Springs. LW max. draft is 6.7 m. up to 7.2 m. at Neap tides.

The Board has been carrying out extensive blasting and dredging in the entrance channel and it is anticipated that a further increase in the present port draft of 9.15 m. in the entrance channel will be made bu this will be publicised at the time when it can be confirmed.

HEALTH: Radio Pratique available at Berth.

RADIO: A signal station is situated on Stirling Point and is connected by telephone with harbour officials. A continuous watch is maintained and vessels can communicate by the International Code of Signals or the Morse Code. There is a radio-telephone at signal station. Call sign is "Bluff Harbour Radio", calling frequency is 2,182 kHz, and the working frequency is 2,012 kHz. VHF radio having Channels 16 and 12. A continuous watch is maintained on 2,182 kHz and VHF Channels 16 and 12.

TUGS: Two tugs are available. Both twin-propulsion Voith Schneider vessels of 1,200 i.h.p. and 15.3 tons static pull and 2,600 h.p. and 30 tons. Both vessels are equipped for fire fighting and salvage. Tugs supply towing lines.

BERTHING:

Wharves	*Length Wharf* (m.)	*Max. Length Vessel* (m.)	*Berth Depth MLWS* (m.)	*Max. Draft* (m.)	*Deck Above MLWS* (m.)
Island Harbour No. 1	160	150	8.0	7.7	4.37
Island Harbour No. 2	190	170	8.0	7.7	4.37
Island Harbour No. 3a	152	150	9.0	8.75	4.37
Island Harbour No. 3	426	198 (1981)	10.7	10.4	4.37
Island Harbour No. 4		198 (1981)	10.7	10.4	4.37
Island Harbour No. 6	135	90	8.0	7.75	4.37
Island Harbour No. 5	213	198 (1981)	10.7	10.4	4.37
Island Harbour No. 7	100 (1981)	90 (1981)	9.1	8.5	4.37
Island Harbour No. 8	230	198 (1981)	12.0	11.0	3.77
Town Wharf No. 11	210	192	9.45	9.15	3.46
Town Wharf No. 12	183	180	9.0	8.7	3.46
Town Wharf No. 14	157	140	8.3	8.0	3.46
Ferry Wharf	200	150	7.0	6.5	4.19
Tiwai Wharf – (273 m. including mooring dolphin)	200	250	11.0	10.5	5.68

All Island Harbour Berths except Nos. 6, 7 and 8 have rail access. Rail access to Nos. 12 and 14 limited. No rail at Tiwai Wharf.

Bulk phosphate or sulphur cargoes are discharged at Berth Nos. 11 or 12 into hoppers thence road trucks.

A Ro/Ro linkspan is situated at Berth No. 1.

A bulk grain facility serves Berth No. 2. Silo capacity 6,600 tonnes, loading rate 500 tonnes/p.h. Bulk tallow is loaded at Berth Nos. 3 and 3A. Ten storage tanks with total capacity of 4,775 tonnes are connected to ship's side by a 300 mm. diameter heated pipe-line giving a loading rate of 400 tonnes/p.h.

Four all weather meat-loaders are situated at Berth No. 5.

Berth No. 8 is a bulk woodchip loading facility (via conveyor) and also serves the log and sawn timber trade.

Bulk cargoes for Tiwai Aluminium Smelter are discharged at the Tiwai Wharf by a mobile twin unit pneumatic unloader with a capacity of 300 tonnes/p.h.

STEVEDORES: Agents require ETA in advance to arrange labour for cargo handling.

MEDICAL: Port doctor available through Agents. Nearest hospital is at Invercargill City, 16 miles from Bluff. Medical service whilst at sea through Awarua radio.

TANKERS: Tankers are berthed at Berth No. 11 only, Town wharf. Side connections are to be used. Only 1 pipe-line connection on wharf. Black products are handled through 250 mm. lines, white products through 200 mm. lines.

It is not permitted to commence the discharge of oil cargoes during the hours of darkness. No vessel carrying a cargo of motor spirit or having discharged such cargo will be handled during the hours of darkness.

Oil cargoes for Tiwai Point discharged at Tiwai Wharf via manifold and 300 mm. pipe-line.

DENSITY: 1025.

FUEL: Bunkering facilities are available. Boiler fuel is supplied by 8 in. diameter pipe-line located at Berth No. 11, Town wharf. Delivery rate 240 t.p.h. Limited quantities of coal, light diesel oil and lubricating oil can be arranged for delivery by road or rail to the wharves.

Gas oil available by pipe-line at Berth Nos. 11, 12 and 14 and by road tanker at all other berths.

FRESH WATER: Available alongside all berths, rate 20 tonnes/p.h.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Usually carried out by stevedores, by crew if automatic hatches.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
DRY DOCKS: The Board operates a "Syncrolift" docking facility capable of accommodating vessels with a displacement up to 1,000 tonnes on a platform 40.3 m. × 13.4 m. The installation is designed for future extension to a capacity of 1,700 tonnes on a platform 65.6 m. × 13.4 m.
REPAIRS: Major repair work can be undertaken by the following: 2 small machine shops at Bluff; a foundry at Invercargill; a slipway for vessels of up to 500 tons displacement at Bluff. A diver is available for underwater inspections through Agents.
REPATRIATION: Facilities exist.
AIRPORT: Internal air services from City Airport, Invercargill, 16 miles by road connecting with international airports of Christchurch, Wellington and Auckland.
TIME: GMT plus 12 hours. Summer Time GMT plus 13 hours from November to February inclusive.
HOLIDAYS: Christmas Day; Boxing Day; New Year's Day; Second of January; Watersiders' Picnic Day (4th Monday, January); Good Friday; Easter Saturday (except by special arrangement); Easter Monday; Easter Tuesday; Labour Day; Anzac Day; Reigning Sovereign's Birthday.
POLICE/AMBULANCE/FIRE:

	Tel. *(Emergency)*	*(Other)*
Ambulance	Bluff 111	Inv'gill 81-949
Police	Bluff 111	8844
Fire Brigade	Bluff 111	

TELEPHONES: By arrangement, all vessels can be connected with telephone system.
SERVICES: Compass adjusting, refuse collection daily.
SHORE LEAVE: Allowed.
AUTHORITY: Southland Harbour Board, P.O.Box 1, Bluff, New Zealand. *Tel:* Bluff 8159. *Telex:* 5206 Onebluf NZ. *Cables:* "Harbluff" for general messages or "Harbour Master Bluff" for arrival messages. *Contact:* Captain J. A. Henderson, Operations Manager. Captain L. Mounsey, Harbour Master.

GISBORNE: 38.42 S. 178.02 E. (See Plan Book)

PORT LIMITS: All of Poverty Bay within a line from the Northern point of Young Nick's Head to Tuaheni Point.
DOCUMENTS: See "Auckland".
PILOTAGE: Telegraphic address – Harbour Master, Gisborne. Advance notice – 24 hours before ETA and further confirmed at 4 hours before ETA. VHF Channel 16 and 12.

Pilot boat is painted white with word "Pilots" on both sides, 13.71 m. in length; exhibits pilot flag or lights. Pilot boards on line of leads (332°) 2 miles from breakwater light.
ANCHORAGE: Vessels awaiting Pilot and berth anchor with Tuaheni Light bearing 084° 3.2 miles in 18.29 m. of water.
RESTRICTIONS: Vessels may be berthed at night according to size, draft and weather conditions.
MAX. SIZE: Maximum length 173.72 m. Beam, no restriction. Draft, 8.23 m. at HW, 6.7 m. at LW. Contact Harbour Master for current situation as there can be slight variations according to heights of tide and weather conditions.
HEALTH: Same procedure as "Auckland".
RADIO: Auckland Radio ZLD, Wellington ZLW.
VHF: Signal station not permanently manned. Listening watch Monday–Friday 0800 – 0815 hrs.; 1130 – 1145 hrs.; 1330 – 1345 hrs.; 1600 – 1615 hrs. Signalman in attendance 1 hour before vessel's arrival. Call sign: "Gisborne Harbour Radio", Channel 16 and 12.
TUGS: Tug joins vessels in channel outside breakwater. Normally use tug's lines, no extra charge.

A twin screw Schottel Rudder/Propeller 22 m. steel tug is in service. Bollard pull 14 tonnes, 1,000 h.p.
BERTHING: 213.35 m. at 9.75 m. depth at LW; 426.7 m. at 5.49 m. – 6.1 m. depth at LW.
Moorings: Shore hawsers placed on vessels on arrival.
SPECIALISED CARGO FACILITIES: Two 1,000 tons silos for bulk grain, etc. behind No. 7 berth and a conveyor for loading grain, etc. in ships. Loading rate 400 t.p.h. There is also a fish unloader, rate 40 t.p.h.
STEVEDORES: Advice of ETA and particulars of stowage required in order that required number of gangs can be ordered. Hours of work, Monday to Friday, 0700 – 1200 hrs., 1300 – 1800 hrs.; Saturday, 0700 – 1200 hrs.
MEDICAL: No advance advice required for medical attention. Full hospital facilities available.
TANKERS: Tankers discharge fuel oil and bitumen.
DENSITY: 1025 at all stages of tide.
FRESH WATER: Available by 63 mm. (2.5 in.) hoses at approx. 20 t.p.h. per hose.
FUEL: Fuel is at present only available by rail tanker and should be ordered through ship's Agent in advance.
GANGWAY/DECK WATCHMEN: Ships provide own watchmen.
OPENING/CLOSING HATCHES: Stevedores normally carry this out.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Normal maintenance repairs.
SURVEYORS: 1. Ministry of Transport Surveyors in Napier for grain cargo. Private surveyors available in Gisborne.
2. Lloyd's Register available on request, also A.B. Shipping.
DRY DOCKS: One 400 ton slipway.
REPATRIATION: Full facilities available for effecting crew changes and repatriation. However, no seaman's pool operating at Gisborne. Replacement crew must be obtained from either Auckland or Wellington.
AIRPORT: 3.5 miles. Regular internal service.
TIME: Standard Time is 12 hours ahead of GMT. Daylight time GMT plus 13 hours from last Sunday in October to first Sunday in March normally.
EMERGENCY CO-ORDINATION CENTRE: Local Police Station for minor emergency operations otherwise all Search and Rescue Co-ordinated from Wellington.

Local Police	Tel: 82119 or 111
Wellington S.A.R.	Tel: 721 – 253

STORING: See "Prelims" Page viii.
1. By truck or launch – only.
2. Not applicable.
3. Trucks can come alongside at berths, only restricted for Tankers.
4. Fork Lifts available and used.
5. Customs clearance required for bonded goods.
6. Yes.

AUTHORITY: Gisborne Harbour Board, P.O.Box 549, Gisborne, New Zealand. *Tel:* 85129. *Telex:* None. *Cables:* Harbour Board. *Contact:* Captain R. T. W. Dunn, Harbour Master. Mr. T. N. Gedye, Secretary/Manager.

LYTTELTON: 43.35 S. 172.42 E. (See Plan Book)

PORT LIMITS: All those tidal waters of the Port of Lyttelton comprised within the area enclosed by the arc of a circle having a radius of 3 nautical miles from the Northernmost point of Adderley Head.
DOCUMENTS: Customs procedure: Overseas vessels, on arrival in New Zealand, should have following papers ready to produce to Customs Officers:

Particulars of Ship's Certificates.
List of Persistent Oils (Tankers only).
Notification of Liability to pay entry tax (Fishing vessels only).
Register.
Names of Owners and Agents.
Crew List.
Passenger List.
List of Prohibited or Restricted Immigrants.
Search List.
Stores List.
List of any stock or birds on board.
List of Poisons.
List of Firearms.
Statement of excess Tonnage of Cargo.
Statement of quantity of Fuel Oil in double bottoms.
Declarations by Passengers arriving in New Zealand.
Baggage Declarations by Passengers for duty purposes.

On departure for overseas, Master or his Agent is required to produce:

Manifest of Cargo.
Stores List.
Crew List.
Passenger List (if any).
Clearance from the Marine Department (if a British ship).

A home trade vessel under *transire* is required to produce her cargo book to Collector of Customs and such particulars as to passengers, crew, and cargo as the Collector may at any time demand. Cargo book shall contain name and port of registry of ship, Name of Master, and date of arrival at, and departure from each port. Particulars as to dates of arrival and departure must be entered not later than 24 hours after time of such arrivals and departures.
PILOTAGE: Masters requiring services of a Pilot must notify Harbour Master of their estimated time of arrival and maximum draft not later than 1600 hrs. on day prior to arrival (Monday to Friday). If estimated time of arrival is on a Saturday, Sunday or any public holiday which falls on a Monday, notification must be given before 1600 hrs. on previous Friday. International Code of Signals or Morse Code used for communicating with signal station. Station also equipped with radio telephone. Call sign is "Lyttelton Harbour Radio", calling frequencies is 2182 kHz and working frequencies are 2012 kHz and 2162 kHz, a continuous listening watch being maintained. Radio telephone equipment also installed in the tug, pilot cutter and Harbour Master's office, and same call signs, frequencies and watches are employed. VHF in operation on International Channels 12, 14 and 16.

Pilot vessel is 16.46 m. in length. Equipped with radar, radio telephone and echo sounder. The pilot vessel is located at the tug wharf in inner harbour and any vessel awaiting arrival of the Pilot, should anchor about 1.5 miles to seaward of Godley Heads, in a depth of 16 m. to 18 m. and await instructions.

The limit of pilotage is a line joining Godley and Adderley Heads.

Every facility must be provided to ensure safe boarding of the Pilot.
ANCHORAGES: *Camp Bay:* Permission must be obtained from the Harbour Master before using this anchorage and draft of vessel is restricted to 8.5 m. All vessels drawing more than 8.5 m., whether awaiting a Pilot or not, must use the outside anchorage. Vessels using Camp Bay anchorage should anchor with the anchorage lighted leading beacons, situated on the Southern shore of Camp Bay, in transit, bearing 195.5°. Each beacon is painted white and exhibits a fixed red light. Vessels may anchor to the Westward of this bearing but must not proceed Westward of a line bearing 345° from the rear anchorage beacon.
Note: Anchoring in or near the dredged channel which extends 2 km. inside Heads is not permitted.

Also see "Pilotage".

RESTRICTIONS: Tankers are berthed during hours of daylight only. All vessels can depart from their berths during hours of darkness. Vessels holding pilotage exemptions may also enter or depart during the hours of darkness.

The following are the controlling depths at mean low water springs, mud bottom in each case;

Entrance to port 14.6 m.
Dredged channel 11.60 m.
Inside anchorage 11.0 m. (Camp Bay)
Approaches to berth 11.6 m. – 9.8 m.
Alongside berths 12.20 m. – 8.60 m.

MAX. SIZE: Max. draft permissible for entering or leaving: 11.60 m. at high water and 9.75 m. at low water. Vessels drawing less than 9.75 m. can enter at any state of the tide. Max. size permissible for entry: length 260 m. at Cashin Quay, any additional length contact Harbour Master, 230 m. at Inner Harbour. No limit on vessel's beam.

HEALTH: Master of every ship about to enter a New Zealand port shall, not later than 12 hours and not earlier than 24 hours before expected time of arrival at that port, inform Port Health Officer by radio of last port of call, date of departure therefrom, and state of health of vessel.

Arrival of vessels: On arrival, vessel showing International Code quarantine signal, should proceed to inspection area to await arrival of Port Health Officer. Inspections are normally carried out at berth.

Radio Pratique: Certain ships may be granted Pratique by radio and hence need not be visited by a Port Health Officer, provided that medical officer carried as part of ship's complement.

Maritime Declaration of Health: Masters of all vessels arriving in New Zealand from any port beyond New Zealand shall complete and deliver to Port Health's Officer a Maritime Declaration of Health countersigned by the ship's medical officer, if required.

Crew List and Passenger List: Master of every ship liable to quarantine should be prepared to furnish Port Health Officer a list of all passengers, showing in respect of each passenger, name, sex, race, age, and port of embarkation; and a list of crew giving the name, nationality, and rating of each member.

RADIO: Wellington Radio, call sign ZLW; Awarua, call sign ZLB; or Auckland, call sign ZLO.

TUGS: Normally join vessel at Parsons Rock Beacon. Tug lines are used, charge for which is included in the overall hire for tug. Number of tugs required depends on type of vessel and draft.

BERTHING: Requirements for berthing at Berths 2, 3, 4, 5, 6 and 7 for vessels over 1,000 tons net are; bow out, the anchor to be used and gangway turned in until vessel secured at berth.

STEVEDORES: Waterside labour can be ordered after arrival of ship at 0630 hrs. up to 0900 hrs. For work on Saturdays orders must be placed by 0900 hrs. Friday. Saturday afternoon work to be ordered by 1030 hrs. Saturday.

For supplementary hours labour must be requisitioned by 1500 hrs. previous Friday and confirmed by 0700 hrs. Monday and daily.

SPECIALISED CARGO HANDLING FACILITIES:

No. 1 Cashin Quay: Grain silos. 2,000 tons capacity, 400 t.p.h. loading rate for coastal and overseas shipments. Bulk Loading Facilities: Woodchips, grain and coal.

No. 2 East: Bulk cargo discharges: 6×5 ton electric cranes, 3×100 ton mobile bulk hoppers.

No. 3 Cashin Quay: Lo-Lo Container Terminal.

Gladstone Pier, West: Roll-on/Roll-off Coastal and Trans-Tasman Cargo Terminal.

No. 2 Jetty West, Inner Harbour: Roll-on/Roll-off, Passengers and Cargo Terminal.

Also see "Developments".

MEDICAL: Hospital facilities are available at Christchurch, 12 km. from port, and international regulations apply in regard to inoculations, vaccinations, etc. Agents can be notified at any time of medical allocation required, preferably with 24 hours' notice.

TANKERS: All tankers berth alongside oil wharf in Inner Harbour. One berth only is available with a max. draft of 11.60 m. A 10 in. line is used for discharging and loading with suitable fittings for reduction to 8 in. Slop or oily residue facilities are not available.

Oil hoses can be connected and disconnected during hours of darkness with Harbour Master's permission. Side connections are connected to discharging arms situated at the middle of the oil wharf.

Berthing is generally starboard to, head out.

DENSITY: 1025, salt water.

FRESH WATER: Available at all berths delivered by hose at a discharge rate of 20 t.p.h.

FUEL: Bunkering facilities available. Boiler fuel oil, supplied by 4 in. and 6 in. diameter bunker hose connected to an 8 in. diameter pipe-line, located on the oil wharf.

FIRE PRECAUTIONS: Tankers are not permitted to immobilise engines at the oil wharf. Repairs may be carried out at other wharves with Harbour Master's permission. Boiler and galley fires are not required to be extinguished when loading or discharging. All scuppers are to be plugged and cemented in case of spillages.

GANGWAY/DECK WATCHMEN: All ships must be provided with a watchman whilst at oil wharf; a shore watchman is also required. Watchmen can be ordered at any time by contacting Union Maritime Services, Lyttelton 7149.

OPENING/CLOSING HATCHES: This work is carried out by waterside labour.

CUSTOMS ALLOWANCES: 8 ounces and/or 200 cigarettes per man. 1 bottle of wine and/or 1 bottle of spirits per man.

IDENTIFICATION CARDS: Passes are necessary at oil wharf but not required otherwise.

CONSULS: At Christchurch.

Australia	66-221	Italy	62-799
Belgium	77-905	Japan	60-446
Denmark	899-099	Netherlands	65-669
Finland	60-709	Norway	65-079
France	60-085	Sweden	65-179
		U.S.A.	65-864

REPAIRS: Major work can be undertaken at Lyttelton where a machine shop and foundry are available.

DRY DOCK: A graving dock is available for vessels up to 6,500 gross tons and dimensions of dock are: Floor length 137.15 m., top length 146.75 m., top width 25 m., entrance width 18.90 m., width in way of ship's bilge 16.61 m., sill depth at MHWS 6.63 m. Max. draft entering drydock 5.0 m. A patent slip is available for vessels up to 231 tons.

REPATRIATION: Facilities available.

AIRPORT: Distance from Christchurch – 6 miles, served by regular airlines.

TIME: Local time is 12 hours ahead of GMT. N.Z. daylight time from 0200 hrs. (NZST) on last Sunday in October until 0200 hrs. (NZST) on the first Sunday in March – 13 hours ahead of GMT.

HOLIDAYS: Holidays throughout year shall be New Year's Day; Anzac Day; Provincial Anniversary Day; Waitangi Day; Good Friday; Easter Monday; Labour Day; Birthday of Reigning Sovereign; Christmas Day; Boxing Day; and the Harbour Board's employees picnic day (to be held on same day as the Waterside Workers' Union picnic day. No cargo work is carried out on these days.)

POLICE/AMBULANCE/FIRE: For emergency calls from ship's telephones, dial 111 and ask the operator for service required.

TELEPHONES: Arrangements can be made with Harbour Master for telephones to be placed on board.

SERVICES: Tank cleaning and tank washing facilities are available as well as a compass adjuster.

SHORE LEAVE: Crew members are allowed ashore.

DEVELOPMENTS: The container terminal at Cashin Quay No. 3 was first used by "ACT 2" in June 1977 and has the following facilities: Heavy duty berth 285 m., depth alongside 12.6 m., draft 11.6 m., terminal area 8ha, container slots 1600 stacked two high, 546 reefer electrical connections, one Paceco 40 tonne single-lift container crane, seven Clark No. 520 straddle carriers – forklifts, container washing and repairs, CFS – No. 2 transit shed 6680 sq.m., Operator – Lyttelton Harbour Board.

AUTHORITY: Lyttelton Harbour Board, P.O.Box 2108, 297 Madras Street, Christchurch, New Zealand. *Tel:* 793800. *Telex:* NZ 4141. *Cables:* Harbaboard. *Contact:* I. B. Brokenshire, General Manager. P. G. Morgan, Market Manager.

NAPIER: 39.29 S. 176.54 E. (See Plan Book)

DOCUMENTS: See "Auckland".

PILOTAGE: Pilotage is compulsory. Refer to New Zealand Port Information Manual Part I, Admiralty Pilot No. 51 (New Zealand Pilot), Chart NZ5713.

ANCHORAGES: No. 1 Anchorage – 2 miles East of breakwater with Southern Leading Beacons in line. 9.5 fathoms, sand, mud.

No. 2 Anchorage – 1 mile NE of North Pania Buoy with Northern Leading Beacons in line. 11 fathoms, sand.

RESTRICTIONS: Vessels are berthed between 0500 hrs. and sunset. Other times by arrangement. Vessels up to 8.6 m. draft may berth at any state of tide.

MAX. SIZE: Max. LOA 230 m.; beam, no limit; draft, 10.4 m.

HEALTH: Cable Port Health Napier 24 hours before arrival. Port Health will board on arrival.

RADIO: Radio telephone - Napier Watch tower listens on 2182 kHz for 15 minutes. Call sign "Napier Harbour Radio ZMH 75" at following times; 0400, 0800, 1200, 1600, 2000, 2400 hrs., and by arrangement. Working frequency is 2162 kHz. VHF listening watch as above for R/T and continuous during office hours.

TUGS: Two tugs available.

BERTHING: Vessels at max. draft limited to HW for arrival and/or departure. Vessel's ETA must be given to Harbour Master, Napier, 24 hours before arrival or on departure from previous port if less than 24 hours, and amended 4 hours prior to arrival. Max. draft arrival to be included.

Vessels arriving during a weekend, ETA to be given by 1500 hrs. Friday and at 1500 hrs. on a day preceding a public holiday.

SPECIALISED CARGO FACILITIES: *Woodpulp Storage:* Adjacent Higgins Wharf, Shed Nos. 7 and 9. Total capacity, 49,000 tons.

Bulk Fertiliser Storage: Adjacent Higgins Wharf, Shed No. 8 – rock phosphate, capacity 60,000 tons; Shed No. 10 – fertiliser bases, capacity 32,000 cu.m.

General Cargo Sheds: Adjacent Geddis, Herrick & Kirkpatrick Wharves, Shed Nos. 1, 2 and 3, size 5,300 sq.m.

Container Packing/Devanning: Adjacent Kirkpatrick Wharf, Shed No. 5, size 3,000 sq.m.

Electric power and storage for 240×20 ft. reefers. 4 acre paved dry box yard. Serviced cleaning yard for 20×20 ft. reefers.

Tanks for tallow and edible oils.

Cement Silos.

STEVEDORES: ETA required for discharging ships 24 hours before arrival. Loading ships 48 hours before arrival with proposed stowages and vacant spaces. Advise number of gangs able to work. All work done by ship's gear.

MEDICAL: No prior notice required for medical attention. Hospital facilities available. Advice would be needed of any contagious disease on board in advance, in accordance with Port Health Regulations.

TANKERS: Standard size discharge lines. All connections supplied by oil companies. 5 berths available: 2, max. length 200 m., draft 10.4 m.; 1, max. length 230 m., draft 10.0 m.; 2, max. length 180 m., draft 9.2 m.

DENSITY: Variable, generally 1020 – 1025.

FRESH WATER: Available all berths 20 t.p.h. per hose.

FUEL: 220 and 1,000 sec. Oil available ex-pipe-line at 110 t.p.h. Marine diesel and gas oil ex-road tanker. All at immediate notice. Lubricating oil available. 1 week's notice. Residue service available when tank vessels discharging/loading or having hazardous goods in transit.

FIRE PRECAUTIONS: Watchman supplied on wharf at ship's expense.
GANGWAY/DECK WATCHMEN: All ships must have gangway watchmen. Cargo and deck watchmen available on request.
OPENING/CLOSING HATCHES: Hatches normally opened and closed by stevedores unless automatic type.
CERTIFICATES:
Ship's Register.
Health Certificate.
Cargo Safety Certificate.
Radio Safety Certificate.
Load Line Certificate.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
REPAIRS: First class service available.
REPATRIATION: On arrangement with Customs and vessel's Agents.
AIRPORT: Hawke's Bay Airport, served by internal airline 3 miles from port.
TIME: Winter GMT plus 12 hours. Summer GMT plus 13 hours.
HOLIDAYS: New Year's Day; 2nd January; Picnic Day (last Monday in January); Anniversary Day (2nd to last Monday in January); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (1st Monday in June); Labour Day (nearest Monday 25th October); Christmas Day; Boxing Day. Vessels berthed but cargo not worked on any of these holidays.
POLICE/AMBULANCE/FIRE: Emergency telephone 111.
TELEPHONES: Connections at all berths.
SHORE LEAVE: No restrictions.
AUTHORITY: Hawkes Bay Harbour Board, Private Bag, Napier, New Zealand. *Tel:* 58684. *Telex:* NZ3694 Napharb. *Cables:* Napharb. *Contact:* Captain G. Gunn, M.N.I., Harbour Master.

NELSON: 41.16 S. 173.17 E. (See Plan Book)

PORT LIMITS: Within 3 miles radius of Old Lighthouse on Boulder Bank.
DOCUMENTS: See "Auckland".
PILOTAGE: Compulsory for vessels of 100 g.r.t. and over. 24 hours' notice of ETA to Harbour Master. Confirm ETA before 1500 hrs. Friday if arriving during weekend or public holiday.

Radio telephone 2182 kHz and 2162 kHz, call sign "Nelson Harbour Radio". Listening watch 10 minutes every 4 hours commencing at 0000 hrs. After contact has been established a further listening schedule can be arranged.

VHF on Channel 16 listening and Channel 12 working. Pilots board inward-bound vessels 2 miles to seaward of main entrance.

Anchorage awaiting Pilot in depth about 30 ft., and with Old Boulder Bank Lighthouse (conspic.) bearing 180° distance 1.8 miles. By night landfall light (K 4224) bearing 160° distance 2 miles. Pilot vessel 40 ft. planing hull, speed 19 knots, painted orange.
ANCHORAGES: Anchorage as indicated in pilotage or further seaward according to weather conditions, draft and length of stay at anchor.
RESTRICTIONS: Vessels may enter, berth, unberth, or leave during hours of darkness. Overseas vessels (over approx. 116 m.) enter port on flood tide and usually swing and berth port side to.
MAX. SIZE: Max. permissible length 200 m. Beam 32.5 m. Draft limits 9.2 m. Max. draft at Main Wharf is 7.9 m.
Note: Max. draft of 9.2 m. may be exceeded at Harbour Master's discretion.
HEALTH: Radio Pratique usually granted. Pratique automatic after clearance at first port. If suspected disease or fever on board advise Medical Officer of Health, Nelson, by radio and await instructions.
RADIO: ZLW Wellington Radio; ZLB Awarua Radio; ZLD Auckland Radio.
TUGS: Two tugs available, join vessel inside harbour. Tug's own line used on berthing. Tugs are equipped for fire-fighting.

Also see "Ship Supply Service".
SPECIALISED CARGO-HANDLING FACILITIES: Facilities are available at one general cargo berth for discharging motor spirits and oil. Another berth is used for loading wood chips pneumatically (the loading equipment is owned by Nelson Pine Forest Limited, Nelson). Common user Roll-on/Roll-off Linkspan.
STEVEDORES: Labour ordered 0700 hrs. for weekday work; 0900 hrs. Friday for Saturday work. ETA should be received by Agents before these times.
MEDICAL: Advise Agents of any medical attention required, giving up to 24 hours' notice. Hospital facilities are obtainable.
TANKERS: Diameter of discharge pipe, 10 in. white products; 8 in. black oil. No slop discharge facilities. Oil tanker berth, one only. Max. draft at berth 7.9 m.
DENSITY: Average sea water, 1025.
FRESH WATER: Obtainable at any time. Approximately 20 t.p.h. delivery rate.
FUEL: Marine fuel oil, gas oil. Notice required, 24 hours.
GANGWAY/DECK WATCHMAN: Watchman necessary but usually provided by ship's crew. Shore watchman can be engaged if requested by vessel. Cost in accordance with national award.
OPENING/CLOSING HATCHES: By stevedores only.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
REPAIRS: Deck and engine repairs are possible. Limited underwater repairs available and hull cleaning service.
DRY DOCKS: Slipway available for up to 1,500 ton vessels.
REPATRIATION: Facilities exist.
AIRPORT: Distance 3 miles. Served by internal airline only.
TIME: GMT plus 12 hours. Daylight saving in Summer months, advance clocks 1 hour to GMT plus 13 hours.
HOLIDAYS: New Year's Day (1st January); 2nd January; Picnic Day (usually near end January); Anniversary Day (1st Monday in February); New Zealand Day (6th February); Good Friday; Easter Monday; Queen Elizabeth II Day (1st Monday in June); Labour Day (4th Monday in October); Christmas Day; Boxing Day. No cargo work on these days.
POLICE/AMBULANCE/FIRE: Police 88309; Ambulance 88299; Fire 81589; Emergency calls, dial 111.
EMERGENCY CO-ORDINATION CENTRE: S.A.R. Emergency Centre situated in Wellington covers the whole country.
TELEPHONES: Can be connected on board.
STORING: Vessels can be stored by truck (no barges available) which may proceed alongside (except tankers). Fork lift trucks available, however no riggers available.
SHORE LEAVE: Allowed.
SHORE POWER: 400 v., 3 h.p. 50 Hz, 60 amps maximum.
SHIP SUPPLY SERVICE: The Nelson Harbour Board operates 2 tugs and one pilot vessel. The larger tug, "Huria Matenga", is 3,000 h.p. Niigata Z pellar, the smaller tug, "W. H. Parr" is 1,500 h.p. Schottel, and the pilot vessel, "Waimea" is a 60 ft. planing hull vessel with a top speed of 19 knots.

Nelson also has a locally based helicopter firm of Helicopters (N.Z.) Ltd. based at Nelson Airport, who undertake contract work, as well as emergency work. Their helicopters also have marine VHF Channel 16.
AUTHORITY: Nelson Harbour Board, P.O.Box 844, Nelson, New Zealand. *Tel:* NN 82099. *Telex:* Nelharb NZ 31066. *Cables:* Nelharbour. *Contacts:* Harbour Master, Captain B. J. Westbrooke (after hours *Tel:* NN 86192).

Deputy Harbour Master, Captain J. G. Tregidga (after hours *Tel:* NN 521125).

NEW PLYMOUTH, Port Taranaki: 39.03 S. 174.03 E. (See Plan Book)

PORT LIMITS: All waters contained within the area of a circle with radius 2.5 nautical miles whose centre is the trig station on Mount Moturoa in position Lat. 39° 03′ 56.8″ S., Long. 174° 01′ 44.9″ E.
DOCUMENTS: *Customs:* See "Auckland".

Agriculture: Shipmaster's Bond List. Meal Locker Declaration Form AGL 36 (2 copies).

Health: Maritime Declaration of Health (issued by Port Health Officer).
PILOTAGE: Compulsory. Telegraphic address "Harbour Master, New Plymouth". 3 days' notice preferable with 1 day confirmation. VHF Channel 16. R/T 2182 kHz.

Pilot boat white with buff deckhouse, either "Rawinia" or "Pilot" in black on side. Pilot taken on board about 1.5 miles due North of Main Breakwater Head.
ANCHORAGE: Vessels can anchor to the West of a line due North from the Main Breakwater head seaward of the 10 fathom line. Good holding on sandy bottom. Not recommended in Northerly weather conditions.
RESTRICTIONS: Ships not berthed during hours of darkness although permitted to sail. Draft max. 30 ft. (9.15 m.) may be exceeded after prior consultation with Harbour Master. Ships under 21 ft. not affected by state of tide. In range 21 ft. to 30 ft. (9.15 m.) time of berthing relevant to high tide.
MAX. SIZE: Max. size 700 ft. (213.4 m.) overall, breadth no limit.
HEALTH: Port doctor boards on arrival at berth. In event of suspected disease on board, will board in pilotage area. Pratique automatic if vessel has already called at another New Zealand port.
RADIO: Radio telephone system operates watches for 15 minutes every 4 hours from midnight. Call sign New Plymouth Harbour Radio, call frequency 2182 kHz. Working frequency 2012 and 2162 kHz. 24 hour watch maintained on VHF Channel 16. ETA cables generally received through Wellington Radio. All outward messages routed through Wellington Radio.
TUGS: One 700 h.p. tug available. A second tug, 30 ton bollard pull, will be in service mid-1984.
BERTHING: In general all ships are swung in basin coming alongside berth stern first. Shore moorings are used.

Breakwater: Length, 122 m.; width, 10 m.; depth alongside LWOST, 6.5 m. For use by oil field barges, supply vessels and fishing vessels. Road transport only.

Moturoa Wharf: Length, 335 m.; width, 27.4 m.

East side of wharf: 1 berth 260 m. long, depth al ongside LWOST 10 m. Four 3 tonne portal cranes (5 tonne at reduced radius). 1 berth 76 m. long, depth alongside LWOST 6.5 m.

West side of wharf: 1 berth 137 m. long, depth alongside LWOST 7.9 m. Bunkerin point on No. 2 berth. Road and rail transport may be used to load and discharge dry cargo.

Newton King Wharf: Tanker use only. Max. LOA 192 m.Motor Spirit, Bitumen, Oils, Caustic, Chemicals. Exports: Condensate, Methanol and LPG, Synthetic Petrol (1985).

Blyde Wharf: West side of the wharf: length, 426 m., width of apron, 19 m.; width including open storage, 82 m.; depth alongside LWOST, 11 m. Rail and road transport may be used to load and discharge cargo. Limited open hard standings for transit cargo storage are available, a small container facility is provided handling approximately 20 self-sustaining vessels annually.

East side of the wharf: Length, 80 m.; width, 5.5 m. and 13.4 m.; depth alongside LWOST, 5.5 m. Road transport only. For use by oil field supply vessels.

One mobile Lima heavy lift crane capacity 70 tons at 12 ft. from wharf edge to 25 tons at 40 ft. from wharf edge available at No. 2 berth; with restricted loading may be used on Blyde No. 1 also.

Also see "Developments".

RESTRICTIONS: Tankers are berthed during hours of daylight only. All vessels can depart from their berths during hours of darkness. Vessels holding pilotage exemptions may also enter or depart during the hours of darkness.

The following are the controlling depths at mean low water springs, mud bottom in each case;

Entrance to port 14.6 m.
Dredged channel 11.60 m.
Inside anchorage 11.0 m. (Camp Bay)
Approaches to berth 11.6 m. – 9.8 m.
Alongside berths 12.20 m. – 8.60 m.

MAX. SIZE: Max. draft permissible for entering or leaving: 11.60 m. at high water and 9.75 m. at low water. Vessels drawing less than 9.75 m. can enter at any state of the tide. Max. size permissible for entry: length 260 m. at Cashin Quay, any additional length contact Harbour Master, 230 m. at Inner Harbour. No limit on vessel's beam.

HEALTH: Master of every ship about to enter a New Zealand port shall, not later than 12 hours and not earlier than 24 hours before expected time of arrival at that port, inform Port Health Officer by radio of last port of call, date of departure therefrom, and state of health of vessel.

Arrival of vessels: On arrival, vessel showing International Code quarantine signal, should proceed to inspection area to await arrival of Port Health Officer. Inspections are normally carried out at berth.

Radio Pratique: Certain ships may be granted Pratique by radio and hence need not be visited by a Port Health Officer, provided that medical officer carried as part of ship's complement.

Maritime Declaration of Health: Masters of all vessels arriving in New Zealand from any port beyond New Zealand shall complete and deliver to Port Health's Officer a Maritime Declaration of Health countersigned by the ship's medical officer, if required.

Crew List and Passenger List: Master of every ship liable to quarantine should be prepared to furnish Port Health Officer a list of all passengers, showing in respect of each passenger, name, sex, race, age, and port of embarkation; and a list of crew giving the name, nationality, and rating of each member.

RADIO: Wellington Radio, call sign ZLW; Awarua, call sign ZLB; or Auckland, call sign ZLO.

TUGS: Normally join vessel at Parsons Rock Beacon. Tug lines are used, charge for which is included in the overall hire for tug. Number of tugs required depends on type of vessel and draft.

BERTHING: Requirements for berthing at Berths 2, 3, 4, 5, 6 and 7 for vessels over 1,000 tons net are; bow out, the anchor to be used and gangway turned in until vessel secured at berth.

STEVEDORES: Waterside labour can be ordered after arrival of ship at 0630 hrs. up to 0900 hrs. For work on Saturdays orders must be placed by 0900 hrs. Friday. Saturday afternoon work to be ordered by 1030 hrs. Saturday.

For supplementary hours labour must be requisitioned by 1500 hrs. previous Friday and confirmed by 0700 hrs. Monday and daily.

SPECIALISED CARGO HANDLING FACILITIES:

No. 1 Cashin Quay: Grain silos. 2,000 tons capacity, 400 t.p.h. loading rate for coastal and overseas shipments. Bulk Loading Facilities: Woodchips, grain and coal.

No. 2 East: Bulk cargo discharges: 6×5 ton electric cranes, 3×100 ton mobile bulk hoppers.

No. 3 Cashin Quay: Lo-Lo Container Terminal.

Gladstone Pier, West: Roll-on/Roll-off Coastal and Trans-Tasman Cargo Terminal.

No. 2 Jetty West, Inner Harbour: Roll-on/Roll-off, Passengers and Cargo Terminal.

Also see "Developments".

MEDICAL: Hospital facilities are available at Christchurch, 12 km. from port, and international regulations apply in regard to inoculations, vaccinations, etc. Agents can be notified at any time of medical allocation required, preferably with 24 hours' notice.

TANKERS: All tankers berth alongside oil wharf in Inner Harbour. One berth only is available with a max. draft of 11.60 m. A 10 in. line is used for discharging and loading with suitable fittings for reduction to 8 in. Slop or oily residue facilities are not available.

Oil hoses can be connected and disconnected during hours of darkness with Harbour Master's permission. Side connections are connected to discharging arms situated at the middle of the oil wharf.

Berthing is generally starboard to, head out.

DENSITY: 1025, salt water.

FRESH WATER: Available at all berths delivered by hose at a discharge rate of 20 t.p.h.

FUEL: Bunkering facilities available. Boiler fuel oil, supplied by 4 in. and 6 in. diameter bunker hose connected to an 8 in. diameter pipe-line, located on the oil wharf.

FIRE PRECAUTIONS: Tankers are not permitted to immobilise engines at the oil wharf. Repairs may be carried out at other wharves with Harbour Master's permission. Boiler and galley fires are not required to be extinguished when loading or discharging. All scuppers are to be plugged and cemented in case of spillages.

GANGWAY/DECK WATCHMEN: All ships must be provided with a watchman whilst at oil wharf; a shore watchman is also required. Watchmen can be ordered at any time by contacting Union Maritime Services, Lyttelton 7149.

OPENING/CLOSING HATCHES: This work is carried out by waterside labour.

CUSTOMS ALLOWANCES: 8 ounces and/or 200 cigarettes per man. 1 bottle of wine and/or 1 bottle of spirits per man.

IDENTIFICATION CARDS: Passes are necessary at oil wharf but not required otherwise.

CONSULS: At Christchurch.

Australia	66-221	Italy	62-799
Belgium	77-905	Japan	60-446
Denmark	899-099	Netherlands	65-669
Finland	60-709	Norway	65-079
France	60-085	Sweden	65-179
		U.S.A.	65-864

REPAIRS: Major work can be undertaken at Lyttelton where a machine shop and foundry are available.

DRY DOCK: A graving dock is available for vessels up to 6,500 gross tons and dimensions of dock are: Floor length 137.15 m., top length 146.75 m., top width 25 m., entrance width 18.90 m., width in way of ship's bilge 16.61 m., sill depth at MHWS 6.63 m. Max. draft entering drydock 5.0 m. A patent slip is available for vessels up to 231 tons.

REPATRIATION: Facilities available.

AIRPORT: Distance from Christchurch – 6 miles, served by regular airlines.

TIME: Local time is 12 hours ahead of GMT. N.Z. daylight time from 0200 hrs. (NZST) on last Sunday in October until 0200 hrs. (NZST) on the first Sunday in March – 13 hours ahead of GMT.

HOLIDAYS: Holidays throughout year shall be New Year's Day; Anzac Day; Provincial Anniversary Day; Waitangi Day; Good Friday; Easter Monday; Labour Day; Birthday of Reigning Sovereign; Christmas Day; Boxing Day; and the Harbour Board's employees picnic day (to be held on same day as the Waterside Workers' Union picnic day. No cargo work is carried out on these days.)

POLICE/AMBULANCE/FIRE: For emergency calls from ship's telephones, dial 111 and ask the operator for service required.

TELEPHONES: Arrangements can be made with Harbour Master for telephones to be placed on board.

SERVICES: Tank cleaning and tank washing facilities are available as well as a compass adjuster.

SHORE LEAVE: Crew members are allowed ashore.

DEVELOPMENTS: The container terminal at Cashin Quay No. 3 was first used by "ACT 2" in June 1977 and has the following facilities: Heavy duty berth 285 m., depth alongside 12.6 m., draft 11.6 m., terminal area 8ha, container slots 1600 stacked two high, 546 reefer electrical connections, one Paceco 40 tonne single-lift container crane, seven Clark No. 520 straddle carriers – forklifts, container washing and repairs, CFS – No. 2 transit shed 6680 sq.m., Operator – Lyttelton Harbour Board.

AUTHORITY: Lyttelton Harbour Board, P.O.Box 2108, 297 Madras Street, Christchurch, New Zealand. *Tel:* 793800. *Telex:* NZ 4141. *Cables:* Harbaboard. *Contact:* I. B. Brokenshire, General Manager. P. G. Morgan, Market Manager.

NAPIER: 39.29 S. 176.54 E. (See Plan Book)

DOCUMENTS: See "Auckland".

PILOTAGE: Pilotage is compulsory. Refer to New Zealand Port Information Manual Part I, Admiralty Pilot No. 51 (New Zealand Pilot), Chart NZ5713.

ANCHORAGES: No. 1 Anchorage – 2 miles East of breakwater with Southern Leading Beacons in line. 9.5 fathoms, sand, mud.

No. 2 Anchorage – 1 mile NE of North Pania Buoy with Northern Leading Beacons in line. 11 fathoms, sand.

RESTRICTIONS: Vessels are berthed between 0500 hrs. and sunset. Other times by arrangement. Vessels up to 8.6 m. draft may berth at any state of tide.

MAX. SIZE: Max. LOA 230 m.; beam, no limit; draft, 10.4 m.

HEALTH: Cable Port Health Napier 24 hours before arrival. Port Health will board on arrival.

RADIO: Radio telephone - Napier Watch tower listens on 2182 kHz for 15 minutes. Call sign "Napier Harbour Radio ZMH 75" at following times; 0400, 0800, 1200, 1600, 2000, 2400 hrs., and by arrangement. Working frequency is 2162 kHz. VHF listening watch as above for R/T and continuous during office hours.

TUGS: Two tugs available.

BERTHING: Vessels at max. draft limited to HW for arrival and/or departure. Vessel's ETA must be given to Harbour Master, Napier, 24 hours before arrival or on departure from previous port if less than 24 hours, and amended 4 hours prior to arrival. Max. draft arrival to be included.

Vessels arriving during a weekend, ETA to be given by 1500 hrs. Friday and at 1500 hrs. on a day preceding a public holiday.

SPECIALISED CARGO FACILITIES: *Woodpulp Storage:* Adjacent Higgins Wharf, Shed Nos. 7 and 9. Total capacity, 49,000 tons.

Bulk Fertiliser Storage: Adjacent Higgins Wharf, Shed No. 8 – rock phosphate, capacity 60,000 tons; Shed No. 10 – fertiliser bases, capacity 32,000 cu.m.

General Cargo Sheds: Adjacent Geddis, Herrick & Kirkpatrick Wharves, Shed Nos. 1, 2 and 3, size 5,300 sq.m.

Container Packing/Devanning: Adjacent Kirkpatrick Wharf, Shed No. 5, size 3,000 sq.m.

Electric power and storage for 240×20 ft. reefers. 4 acre paved dry box yard. Serviced cleaning yard for 20×20 ft. reefers.

Tanks for tallow and edible oils.

Cement Silos.

STEVEDORES: ETA required for discharging ships 24 hours before arrival. Loading ships 48 hours before arrival with proposed stowages and vacant spaces. Advise number of gangs able to work. All work done by ship's gear.

MEDICAL: No prior notice required for medical attention. Hospital facilities available. Advice would be needed of any contagious disease on board in advance, in accordance with Port Health Regulations.

TANKERS: Standard size discharge lines. All connections supplied by oil companies. 5 berths available: 2, max. length 200 m., draft 10.4 m.; 1, max. length 230 m., draft 10.0 m.; 2, max. length 180 m., draft 9.2 m.

DENSITY: Variable, generally 1020 – 1025.

FRESH WATER: Available all berths 20 t.p.h. per hose.

FUEL: 220 and 1,000 sec. Oil available ex-pipe-line at 110 t.p.h. Marine diesel and gas oil ex-road tanker. All at immediate notice. Lubricating oil available. 1 week's notice. Residue service available when tank vessels discharging/loading or having hazardous goods in transit.

FIRE PRECAUTIONS: Watchman supplied on wharf at ship's expense.
GANGWAY/DECK WATCHMEN: All ships must have gangway watchmen. Cargo and deck watchmen available on request.
OPENING/CLOSING HATCHES: Hatches normally opened and closed by stevedores unless automatic type.
CERTIFICATES:

Ship's Register.
Health Certificate.
Cargo Safety Certificate.
Radio Safety Certificate.
Load Line Certificate.

CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
REPAIRS: First class service available.
REPATRIATION: On arrangement with Customs and vessel's Agents.
AIRPORT: Hawke's Bay Airport, served by internal airline 3 miles from port.
TIME: Winter GMT plus 12 hours. Summer GMT plus 13 hours.
HOLIDAYS: New Year's Day; 2nd January; Picnic Day (last Monday in January); Anniversary Day (2nd to last Monday in January); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (1st Monday in June); Labour Day (nearest Monday 25th October); Christmas Day; Boxing Day. Vessels berthed but cargo not worked on any of these holidays.
POLICE/AMBULANCE/FIRE: Emergency telephone 111.
TELEPHONES: Connections at all berths.
SHORE LEAVE: No restrictions.
AUTHORITY: Hawkes Bay Harbour Board, Private Bag, Napier, New Zealand. *Tel:* 58684. *Telex:* NZ3694 Napharb. *Cables:* Napharb. *Contact:* Captain G. Gunn, M.N.I., Harbour Master.

NELSON: 41.16 S. 173.17 E. (See Plan Book)

PORT LIMITS: Within 3 miles radius of Old Lighthouse on Boulder Bank.
DOCUMENTS: See "Auckland".
PILOTAGE: Compulsory for vessels of 100 g.r.t. and over. 24 hours' notice of ETA to Harbour Master. Confirm ETA before 1500 hrs. Friday if arriving during weekend or public holiday.

Radio telephone 2182 kHz and 2162 kHz, call sign "Nelson Harbour Radio". Listening watch 10 minutes every 4 hours commencing at 0000 hrs. After contact has been established a further listening schedule can be arranged.

VHF on Channel 16 listening and Channel 12 working. Pilots board inward-bound vessels 2 miles to seaward of main entrance.

Anchorage awaiting Pilot in depth about 30 ft., and with Old Boulder Bank Lighthouse (conspic.) bearing 180° distance 1.8 miles. By night landfall light (K 4224) bearing 160° distance 2 miles. Pilot vessel 40 ft. planing hull, speed 19 knots, painted orange.

ANCHORAGES: Anchorage as indicated in pilotage or further seaward according to weather conditions, draft and length of stay at anchor.
RESTRICTIONS: Vessels may enter, berth, unberth, or leave during hours of darkness. Overseas vessels (over approx. 116 m.) enter port on flood tide and usually swing and berth port side to.
MAX. SIZE: Max. permissible length 200 m. Beam 32.5 m. Draft limits 9.2 m. Max. draft at Main Wharf is 7.9 m.
Note: Max. draft of 9.2 m. may be exceeded at Harbour Master's discretion.
HEALTH: Radio Pratique usually granted. Pratique automatic after clearance at first port. If suspected disease or fever on board advise Medical Officer of Health, Nelson, by radio and await instructions.
RADIO: ZLW Wellington Radio; ZLB Awarua Radio; ZLD Auckland Radio.
TUGS: Two tugs available, join vessel inside harbour. Tug's own line used on berthing. Tugs are equipped for fire-fighting.

Also see "Ship Supply Service".

SPECIALISED CARGO-HANDLING FACILITIES: Facilities are available at one general cargo berth for discharging motor spirits and oil. Another berth is used for loading wood chips pneumatically (the loading equipment is owned by Nelson Pine Forest Limited, Nelson). Common user Roll-on/Roll-off Linkspan.
STEVEDORES: Labour ordered 0700 hrs. for weekday work; 0900 hrs. Friday for Saturday work. ETA should be received by Agents before these times.
MEDICAL: Advise Agents of any medical attention required, giving up to 24 hours' notice. Hospital facilities are obtainable.
TANKERS: Diameter of discharge pipe, 10 in. white products; 8 in. black oil. No slop discharge facilities. Oil tanker berth, one only. Max. draft at berth 7.9 m.
DENSITY: Average sea water, 1025.
FRESH WATER: Obtainable at any time. Approximately 20 t.p.h. delivery rate.
FUEL: Marine fuel oil, gas oil. Notice required, 24 hours.
GANGWAY/DECK WATCHMAN: Watchman necessary but usually provided by ship's crew. Shore watchman can be engaged if requested by vessel. Cost in accordance with national award.
OPENING/CLOSING HATCHES: By stevedores only.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
REPAIRS: Deck and engine repairs are possible. Limited underwater repairs available and hull cleaning service.
DRY DOCKS: Slipway available for up to 1,500 ton vessels.
REPATRIATION: Facilities exist.
AIRPORT: Distance 3 miles. Served by internal airline only.
TIME: GMT plus 12 hours. Daylight saving in Summer months, advance clocks 1 hour to GMT plus 13 hours.
HOLIDAYS: New Year's Day (1st January); 2nd January; Picnic Day (usually near end January); Anniversary Day (1st Monday in February); New Zealand Day (6th February); Good Friday; Easter Monday; Queen Elizabeth II Day (1st Monday in June); Labour Day (4th Monday in October); Christmas Day; Boxing Day. No cargo work on these days.
POLICE/AMBULANCE/FIRE: Police 88309; Ambulance 88299; Fire 81589; Emergency calls, dial 111.
EMERGENCY CO-ORDINATION CENTRE: S.A.R. Emergency Centre situated in Wellington covers the whole country.
TELEPHONES: Can be connected on board.
STORING: Vessels can be stored by truck (no barges available) which may proceed alongside (except tankers). Fork lift trucks available, however no riggers available.
SHORE LEAVE: Allowed.
SHORE POWER: 400 v., 3 h.p. 50 Hz, 60 amps maximum.
SHIP SUPPLY SERVICE: The Nelson Harbour Board operates 2 tugs and one pilot vessel. The larger tug, "Huria Matenga", is 3,000 h.p. Niigata Z pellar, the smaller tug, "W. H. Parr" is 1,500 h.p. Schottel, and the pilot vessel, "Waimea" is a 60 ft. planing hull vessel with a top speed of 19 knots.

Nelson also has a locally based helicopter firm of Helicopters (N.Z.) Ltd. based at Nelson Airport, who undertake contract work, as well as emergency work. Their helicopters also have marine VHF Channel 16.

AUTHORITY: Nelson Harbour Board, P.O.Box 844, Nelson, New Zealand. *Tel:* NN 82099. *Telex:* Nelharb NZ 31066. *Cables:* Nelharbour. *Contacts:* Harbour Master, Captain B. J. Westbrooke (after hours *Tel:* NN 86192).

Deputy Harbour Master, Captain J. G. Tregidga (after hours *Tel:* NN 521125).

NEW PLYMOUTH, Port Taranaki: 39.03 S. 174.03 E. (See Plan Book)

PORT LIMITS: All waters contained within the area of a circle with radius 2.5 nautical miles whose centre is the trig station on Mount Moturoa in position Lat. 39° 03′ 56.8″ S., Long. 174° 01′ 44.9″ E.
DOCUMENTS: *Customs:* See "Auckland".

Agriculture: Shipmaster's Bond List. Meal Locker Declaration Form AGL 36 (2 copies).

Health: Maritime Declaration of Health (issued by Port Health Officer).

PILOTAGE: Compulsory. Telegraphic address "Harbour Master, New Plymouth". 3 days' notice preferable with 1 day confirmation. VHF Channel 16. R/T 2182 kHz.

Pilot boat white with buff deckhouse, either "Rawinia" or "Pilot" in black on side. Pilot taken on board about 1.5 miles due North of Main Breakwater Head.

ANCHORAGE: Vessels can anchor to the West of a line due North from the Main Breakwater head seaward of the 10 fathom line. Good holding on sandy bottom. Not recommended in Northerly weather conditions.
RESTRICTIONS: Ships not berthed during hours of darkness although permitted to sail. Draft max. 30 ft. (9.15 m.) may be exceeded after prior consultation with Harbour Master. Ships under 21 ft. not affected by state of tide. In range 21 ft. to 30 ft. (9.15 m.) time of berthing relevant to high tide.
MAX. SIZE: Max. size 700 ft. (213.4 m.) overall, breadth no limit.
HEALTH: Port doctor boards on arrival at berth. In event of suspected disease on board, will board in pilotage area. Pratique automatic if vessel has already called at another New Zealand port.
RADIO: Radio telephone system operates watches for 15 minutes every 4 hours from midnight. Call sign New Plymouth Harbour Radio, call frequency 2182 kHz. Working frequency 2012 and 2162 kHz. 24 hour watch maintained on VHF Channel 16. ETA cables generally received through Wellington Radio. All outward messages routed through Wellington Radio.
TUGS: One 700 h.p. tug available. A second tug, 30 ton bollard pull, will be in service mid-1984.
BERTHING: In general all ships are swung in basin coming alongside berth stern first. Shore moorings are used.

Breakwater: Length, 122 m.; width, 10 m.; depth alongside LWOST, 6.5 m. For use by oil field barges, supply vessels and fishing vessels. Road transport only.

Moturoa Wharf: Length, 335 m.; width, 27.4 m.

East side of wharf: 1 berth 260 m. long, depth al ongside LWOST 10 m. Four 3 tonne portal cranes (5 tonne at reduced radius). 1 berth 76 m. long, depth alongside LWOST 6.5 m.

West side of wharf: 1 berth 137 m. long, depth alongside LWOST 7.9 m. Bunkerin point on No. 2 berth. Road and rail transport may be used to load and discharge dry cargo.

Newton King Wharf: Tanker use only. Max. LOA 192 m.Motor Spirit, Bitumen, Oils, Caustic, Chemicals. Exports: Condensate, Methanol and LPG, Synthetic Petrol (1985).

Blyde Wharf: West side of the wharf: length, 426 m., width of apron, 19 m.; width including open storage, 82 m.; depth alongside LWOST, 11 m. Rail and road transport may be used to load and discharge cargo. Limited open hard standings for transit cargo storage are available, a small container facility is provided handling approximately 20 self-sustaining vessels annually.

East side of the wharf: Length, 80 m.; width, 5.5 m. and 13.4 m.; depth alongside LWOST, 5.5 m. Road transport only. For use by oil field supply vessels.

One mobile Lima heavy lift crane capacity 70 tons at 12 ft. from wharf edge to 25 tons at 40 ft. from wharf edge available at No. 2 berth; with restricted loading may be used on Blyde No. 1 also.

Also see "Developments".

STEVEDORES: Labour must be engaged between 0700 – 0900 hrs. Monday to Friday. Agents should be advised ETA at least 24 hours, preferably 72 hours, in order arrange cargo if vessel loading. Normal cargo working hours Monday – Friday 0700 – 1200 hrs., 1300 – 1700 hrs. Saturday 0700 – 1200 hrs. Supplementary hours may be worked Monday – Friday 1700 – 2300 hrs. if labour available. No work on Sundays.

MEDICAL: Hospital services available.

TANKERS: Black oils 10 in. pipe-line; white oils 8 in. pipe-line. 2 berths available for tankers, max. draft 30 ft. (9.15 m.). Private de-ballasting tank available 8,000 tonnes. Condensate S.G. 0.7738 Loading rate about 1,250 t.p.h.

DENSITY: Sea water.

FRESH WATER: Available all berths from main supply at about 100 t.p.h. Cost 56 cents per metric ton.

FUEL: Bunkers are obtainable at Moturoa and Newton King Wharves only. Gas oil line at Blyde No. 3 and Moturoa Berths.

FIRE PRECAUTIONS: Tanker berths closed to public with Harbour Board watchman in attendance.

GANGWAY/DECK WATCHMEN: Available but not necessary.

OPENING/CLOSING HATCHES: Stevedores must carry out this work.

CERTIFICATES:

Normal Safety Certificates.

Ship's Register.

CUSTOMS ALLOWANCES: See "Auckland".

IDENTIFICATION CARDS: Not required.

CONSULS: None available locally.

REPAIRS: All repairs except underwater work of a major nature.

SURVEYORS: Surveyors can be arranged.

REPATRIATION: Facilities exist.

AIRPORT: 7 miles from city, 10 miles from port. Served by domestic service only, 2 flights Northbound and Southbound each daily.

TIME: 12 hours ahead of GMT. N.Z. Daylight time observed.

HOLIDAYS: New Year's Day; 2nd January; Stevedores Picnic (4th Monday in January); Waitangi Day (6th February); Provincial Anniversary Day (2nd Monday in March); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (1st Monday in June); Labour Day (4th Monday in October); Christmas Day; Boxing Day.

POLICE/FIRE/AMBULANCE: Telephone numbers respectively, 75449, 75505, 75439.

EMERGENCY CO-ORDINATION CENTRE: Police, Tel: 75449. Co-ordinate S.A.R. and emergencies other than fire.

TELEPHONES: Can be connected on board.

STORING: By road or rail truck to shipside. Tankers by road to wharf gate and hand truck to shipside approx. 400 ft. Customs available. Ship's crew to be used for stores.

SHORE LEAVE: No restriction.

GENERAL: Ship's garbage must be in covered containers supplied by Harbour Board and removed daily. Any meats on board vessel on arrival which have been supplied from other than Australia or New Zealand will be sealed off and fresh supplies obtained.

DEVELOPMENTS: New reclamation of 23 acres providing berths for 2 overseas vessels is now fully operational. These berths are suitable for handling heavy lifts. PAD type Roll-on/Roll-off vessels, limited container use and a container cleaning installation is provided.

Harbours Board is undertaking dredging of the entrance and fairway to Newton King Tanker Terminal. This project will provide a dredged depth of 11 m. below water in the fairways, 11.9 m. at the berths, and 13 m. at the entrance. The work, commenced in June 1984, is expected to be finished by June 1988.

AUTHORITY: Taranaki Harbours Board, P.O.Box 348, New Plymouth, New Zealand. *Tel:* 510-200. *Telex:* NZ 3500. *Cables:* Taragate. *Contact:* Harbour Master.

ONEHUNGA: 36.56 S. 174.47 E. (See Plan Book)

PORT LIMITS: All that area of water contained within an area bounded to seaward by an arc of a circle 4 miles radius from the Southern extremity of Paratutai Island.

DOCUMENTS: See "Auckland".

PILOTAGE: Not compulsory, but arrangements can be made with the Harbour Master at Auckland to supply the services of a Pilot if required. A Pilot will then board a vessel off Te Pirau, situated about 2 miles N.E. of South Head main light.

Pilotage District: All those waters of the Manukau Harbour contained within a line drawn 180° to the South shore from Jackie Hill on Kaiteke Point 015.5° – 2.85 miles approximately from the Southern extremity of Paratutai Island.

The signal station is equipped with both medium frequency and VHF radiotelephone. Call sign is "Manukau Harbour Radio" and VHF Channel, 10, 11, 12, 13, 14 and 16.

Listening watches are maintained as follows—

0800 to 0830 – Call 2182 kHz, work 2012 kHz.
0830 to 0900 – Calling and working 2012 kHz.
1800 to 1830 – Calling 2182 kHz, working 2012 kHz.
1830 to 1900 – Calling and working 2012 kHz.
0800 to 0900 – VHF Channel 16.
1800 to 1900 – VHF Channel 16.

Other times by arrangement.

Note: Should a vessel be crossing the bar during the scheduled watch periods, the signalman will be working on 2012 kHz with that vessel and not listening on 2182 kHz.

Vessels equipped with radiotelephone must maintain contact with the signal station while crossing the bar.

Weather conditions permitting, information concerning bar conditions will be supplied on request from the signal station. Such information can only be regarded as a guide, as observations are made from the signal station which is situated about 5 miles from the bar and elevated 243.84 m. (800 ft.).

Radiotelephone – Onehunga: A radiotelephone is installed at the office of the Officer-in-Charge at Onehunga. The call sign is "Onehunga Harbour Radio" and the working frequency 2012 kHz.

Vessels equipped with radiotelephone, when within Puponga Point, must maintain a listening watch on 2012 kHz for information relative to berthing, harbour traffic or other harbour conditions.

No regular watches are maintained.

ANCHORAGES: After crossing the bar it is not advisable to anchor until after rounding Puponga Point, if proceeding to Onehunga; or after rounding Kauri Point (situated about 15 miles S.E. of Puponga Point), if proceeding to the Southward.

Prohibited anchoring and fishing area: Within an area extending 2 miles from Destruction Gully front beacon in a 182° direction and having a width of 152 m. (500 ft.) on each side of the transit of Destruction Gully beacons.

Prohibited Anchorage: Within 91 m. (300 ft.) of a sewage submarine pipe-line laid in a 152° direction across Wairopa Channel about 1 mile Westward of Onehunga Wharf. On the Northern shore, 2 white triangular beacons, each bearing the word "Sewer" in black letters, mark the middle of the prohibited anchorage. The pipe-line lies approximately 3 m. (10 ft.) to the Eastward of the beacons when in transit.

Prohibited Anchoring and Fishing Area: Anchoring and fishing are prohibited within an area bounded by a line commencing at the South end of Renton Road (Lat. 37° 00.08′ S., Long. 174° 45.2′ E.); thence running 180° for 2,590 m.; thence 090° for 5,291 m.; thence 050° to the shore. The Northern boundary commences at Nganui Point (Lat. 37° 00′ S., Long. 174° 48.4′ E.); thence 090° to the opposite shore.

The above area, adjacent to Auckland International Airport, is marked by following lights and beacons, bearings and distances from Aero light (37° 00′ 48″ S., 174° 47′ 31″ E., approx.).

Light F. 058° 45′ – 1,936 m.
Beacon 259° 30′ – 3,185 m.
Beacon 220° 45′ – 2,848 m.
Beacon 183° 15′ – 1,890 m.
Beacon 143° – 2,317 m.
Light Beacon Qk.Fl. 239° – 3,642 m.
Light Beacon Fl.R.2 secs. 122° 45′ – 3,466 m.
Light Beacon Fl.R.2 secs. 112° 45′ – 3,261 m.
Light Beacon Fl.R.2 secs. 108° 30′ – 2,453 m.

RESTRICTIONS: Berthing and unberthing during the hours of darkness is not recommended.

	Controlling Depths Below Chart Datum	*Nature of Bottom*
Entrance to port (Southwest Channel)	5.48 m.	Sand.
Anchorages	5.486 m. – 7.62 m.	Mud, Shell, and Sand.
Channel	3.048 m.	
Approaches to berth	3.048 m.	
Berth (Onehunga)	3.3 m. – 4.7 m.	

MAX. SIZE: LOA, 95 m. Beam, No limit. Draft 4.7 m.

HEALTH: See "Auckland".

RADIO: See "Auckland".

VHF: See "Pilotage".

RADAR: A radar station having a maximum range of 72 miles is operated by the Auckland Harbour Board at South Head Signal Station Lat. 37° 03.2′ S., Long. 174° 32.6′ E. Masters may call on radio telephone and request particulars of their bearing and range as shown on the radar screen. Responsiblity for the use of this information rests entirely with the Master of the vessel.

TUGS: 1 twin screw *Manukau* is available. 52.5 tonnes gross, 400 b.h.p., static pull 3.5 tonnes. Tug is equipped with both medium and VHF Radiotelephone.

BERTHING: The principal wharf is situated at Onehunga and is a ferro-concrete structure 293 m. in length which includes a launch jetty of 17 m. at the Eastern end, and with a width of 49 m. A grid for the use of small craft has been constructed immediately North of the wharf. There is a small jetty at Cornwallis.

The deck level of the wharf is 6.401 m. above chart datum.

The wharf is connected to the railway system and the distance from the outside face of the wharf to the centre of the railway track is 3.73 m.

CRANES: No quay-side cranes. One 12.5 tonne capacity mobile crane available. For heavier loads cranes available for hire from outside port.

BULK CARGO FACILITIES: Eastern end of quay is equipped with a pipe-line for the discharge of bulk cement to adjacent privately owned silos.

SPECIALISED CARGO HANDLING FACILITIES: No facilities.

BRIDGES: None.

STEVEDORES: Arranged by Agents. See "Auckland".

MEDICAL: See "Auckland".

TANKERS: No facilities.

DENSITY: 1025.

FRESH WATER: Available.

FUEL: Boiler fuel oil, diesel oil, and lubricating oil are available from tank wagons; delivery at the rate of 13,500 litres per hour through a 50 mm. hose. Coal is not kept in stock but can be obtained.

CONSULS: See "Auckland".

REPAIRS: Outside firms are available to do machine shop and foundry work.

DRY DOCKS: No facilities.

SURVEYORS: See "Auckland".

GANGWAY/DECK WATCHMEN: See "Auckland".

HATCHES: See "Auckland".

CUSTOMS ALLOWANCES: See "Auckland".

CARGO GEAR: See "Auckland".

REPATRIATION: Full facilities exist.
AIRPORT: 8 km. from port. Served by major international airlines.
TIME: See "Auckland".
HOLIDAYS: See "Auckland".
POLICE/AMBULANCE/FIRE: All emergency services are called through one telephone number. Dial 111 and state service required.
SERVICES: No special services.
SHORE LEAVE: Crew members may go ashore.
REGULATIONS: See "Auckland".
IDENTIFICATION CARDS: Not required.
DELAYS: Seldom any delays.
DEVELOPMENTS: None currently in progress.
AUTHORITY: Auckland Harbour Board, 1 Queen Street, (P.O.Box 1259), Auckland, New Zealand. *Tel:* 795-950. *Telex:* NZ 2705. *Cables:* Haboard, Auckland. *Contact:* J. M. Halling, Chief Administrative Officer and Secretary.

OPUA: 35.19 S. 174.07 E. **(See Plan Book)**

PORT LIMITS: Commencing at Northern extremity of Cape Wiwiki, thence by a straight line to the Eastern extremity of the Nine Pins, thence by a straight line to the North Western extremity of Cape Brett.
DOCUMENTS: See "Whangarei".
PILOTAGE: Compulsory Southward of a line from the Western extremity of Kororareka Point following a true bearing of 253° towards the flagstaff at Waitangi Treaty House. Pilotage shall be optional within the waters contained Northward of the above mentioned line and Westward of a line commencing from the Eastern extremity of Tapeka following a 350° True bearing to the Eastern extremity of the Black Rocks, thence in 271° True direction to the mainland. Pilots are available all hours day and night subject to prior minimum notice of 24 hours being received during normal weekday working day. Second notice confirming or amending first to be sent 4 hours before expected arrival. The Pilot supplies Harbour By-laws. Pratique, Agriculture and Customs clearance is normally undertaken on arrival at berth. Pilot vessel under private contract. No VHF contact. Pilot from Whangarei.
ANCHORAGE: Renown Anchorage as per Bay of Islands Chart N.Z. 5122.
RESTRICTIONS: Veronica Channel dredged to 7 m. at Chart Datum. Max. draft is 8.53 m.
RADIO: See "Whangarei".
TUGS: Available by arrangement with Northland Harbour Board, Whangarei. At least 72 hours' notice required.
BERTHING: Total length 214 m., width 12.5 m., overseas berthage on Eastern side of wharf. Depth at berth is 9.45 m. at MLWS. Wharf is serviced by rail.
CARGO HANDLING: Ship's own gear. 2 permanent gangs available subject to Stevedore requirements as per Whangarei.
MEDICAL: Hospital and Ambulance at Kawakawa, 12.8 km. (8 miles) from Opua. Port Doctor at Paihia, 8 km. (5 miles) away.
DENSITY: 1025.
FRESH WATER: Fresh water available – 200 tonnes in storage. 40 cents per 1,000 litres.
FUEL: By arrangement with oil companies via road transport.
CUSTOMS ALLOWANCES: See "Whangarei".
CONSULS: See "Whangarei".
REPATRIATION: See "Whangarei".
TIME: See "Whangarei".
HOLIDAYS: See "Whangarei".
POLICE/AMBULANCE/FIRE: See "Whangarei".
TELEPHONES: Telephones available.
SHORE LEAVE: See "Whangarei".
SURVEYORS: See "Whangarei".
AIRPORT: See "Whangarei".
REGULATIONS: See "Whangarei".
DELAYS: See "Whangarei".
AUTHORITY: Northland Harbour Board, Private Bag, Whangarei, New Zealand. *Tel:* 87-099. *Telex:* NZ 2955. *Cables:* "Harbour". *Contact:* Harbour Superintendent.

OTAGO, (includes Dunedin, Port Chalmers and Ravensbourne): **(See Plan Book)**

PORT CHALMERS: 45.49 S. 170.38 E.
DUNEDIN: 45.53 S. 170.31 E.

PORT LIMITS: The harbour limits are defined by a line extending from Heyward Point Trig Station in an 020°T direction for 3 miles thence 126°T for 1.75 miles thence 200°T to the shore off Howlett Point.

The entrance to Otago Harbour is situated in the bay between Heyward Point and Taiaroa Head.

Within the entrance the harbour extends about 13 miles South-Westward and at its head stands the city and Port of Dunedin. The town and port of Port Chalmers is situated about 6 miles within the harbour entrance.

About 1 mile Southward of Port Chalmers, the Portobello Peninsula, with Quarantine Point at its head, together with the adjacent Quarantine and Goat Islands, form a natural barrier across the Otago Harbour inlet. That part of the harbour which lies North-Eastward of this barrier is the "Lower Harbour" and that which lies South-Westward is the "Upper Harbour".

DOCUMENTS: See "Auckland".
PILOTAGE: Address "Harbour Master, Dunedin." Through coastal radio stations ZLW (Wellington) or ZLB (Awarua) giving ship's name, draft, and ETA. First message 72 hours out, revise 24 hours out: if from another New Zealand port (coastwise) similar message as soon as possible after leaving that port. Subsequent contact with port private radio station Taiaroa Heads on 2182 kHz or VHF Channel 16. Pilot boat is 16.76 m., white launch, also fitted with VHF frequencies, which meets vessels as required but does not remain on station otherwise. Boarding position is with Taiaroa Head Lighthouse bearing 180° distant 2 miles; good anchorage with Taiaroa Head Lighthouse bearing 160° – 2 miles, depth 12 fathoms. Pilots can board in this vicinity provided Master has ship under way at slow speed and obeys Pilot's instructions. Vessels arriving to work general cargo should endeavour to embark Pilot by 0500 hrs. in order to be alongside berth ready to take labour on board at normal commencing hour of 0700 hrs.

ANCHORAGES: *Anchorage outside the Harbour entrance:* A recommended anchorage which is considered safe in all winds except rare Easterly gales is, in a least depth of 13 fathoms (23.8 m.), sand, with Taiaroa Head light house bearing 160°T and Heyward Point light tower bearing 220°T.
Note: There is no anchorage inside the Harbour entrance, but in a case of emergency, vessels up to 500 ft. (152.4 m.) long may be able to anchor in the swinging basin at Port Chalmers.
Prohibited Anchorage: Anchorage is prohibited in the vicinity of a submarine power cable laid between Battery Point, Port Chalmers, and Quarantine Point at the North-Western end of Portobello Peninsula.

The cable is marked on its North-Western end by 2 beacons situated approximately 1.5 cables South by West and approximately 2.25 cables South by East from Observation Point. Both beacons are rectangular in shape and painted in green and white horizontal stripes. The latter beacon also serves as No. 31 channel beacon, and exhibits a flashing green light – these beacons when in line bearing 139.5° T indicate the route of the power cable across the channel.

APPROACHES: *Harbour Entrance Channel:* A sand bank extends about 1.25 miles Northward of Taiaroa Head, and the dredged entrance channel effectively divides this into Eastern and Western banks. There is a least depth of 21 ft. (6.4 m.) on the Eastern bank, and the sea can break dangerously over it in heavy weather. The Western bank has a least depth of 28 ft. (8.5 m.).

The entrance channel extends from the seaward (Northern) edge of the bank to a gap between North Mole and Taiaroa Head. The channel is dredged to 45 ft. (13.7 m.), and is 600 ft. (183 m.) wide – it is unprotected and sea and swell can cause vessels to pitch, roll, and lift bodily in the approaches.

North Mole, an artificial rock breakwater, extends about 4,000 ft. (1,219 m.) N.E. from the low sand spit on the Western side of the entrance. The underwater toe extends about 400 ft. (122 m.) N.E. of the visible head.

The tidal range in the entrance channel is 6.5 ft. (2.0 m.) at Springs, and 4.3 ft. (1.3 m.) at Neaps. Tidal streams run generally along the axis of the channel at rates up to 2 knots on flood and ebb but, near the harbour entrance, vessels may be set to the Westward on the flood stream, and to the Eastward on the ebb stream.

RESTRICTIONS: Tankers proceeding to or from the oil jetty at Dunedin make passage of the upper harbour in daylight hours only. Otherwise ships are not boarded between 2000 hrs. and 0500 hrs. as no working time is gained by so doing, unless vessel requires HW for transit. Also see "Max. Size".
Entering and Leaving: Any vessel wishing to enter, leave, or move within the Port of Otago must first obtain permission to do so from the signal station at Taiaroa Head, or that at Dunedin, and this directive shall include any boat or yacht exceeding 11 m. in length wishing to enter the Upper Harbour.
Upper Harbour – Overhead Power Line: An overhead power line from Port Chalmers to Portobello crosses the channel via Goat and Quarantine Islands, supported by steel lattice-work towers painted in bands of orange and silver. The vertical clearance beneath the power line where it crosses the channel is 168 ft. (51.2 m.) at Mean High Water Springs.
Upper Harbour – Submarine Power Cables: A power cable buried 10 ft. (3.1 m.) below the sea bed runs across Victoria Channel between beacons No. 40 and 41. From beacon No. 41 the cable is laid on the sea bed in a 280°T direction to the shore. From beacon No. 40, 3 cables are laid on the sea bed in 115°T, 118°T, and 131°T directions to the shore. Anchoring is prohibited in this vicinity.

MAX. SIZE: *Lower Harbour to Port Chalmers:* Vessels up to 850 ft. (259 m.) length overall, and 38 ft. (11.6 m.) draft can transit the Lower Harbour to and from Port Chalmers by day and night. Longer vessels may be handled by prior arrangement with the Harbour Master.

The maximum draft permissible at LW is 36 ft. (11 m.) which may be further reduced to a minimum of 32.5 ft. (9.9 m.), if there is a heavy swell in the entrance channel.
Upper Harbour to Dunedin: Vessels up to a maximum of 604 ft. (184 m.) length overall, 90 ft. beam (27.4 m.) and 26 ft. (7.9 m.) draft can transit the Upper Harbour channel to Ravensbourne and Dunedin. Non gas-free tankers, and vessels over 550 ft. (167.6 m.) in length transit the Upper Harbour in daylight hours only, but all other vessels can be handled both day and night. The maximum draft permissible at LW is 21 ft. (6.4 m.).

HEALTH: Master to radio to Port Health Officer (entry port in N.Z. only) 24 hours before ETA requesting Free Pratique or declaring adverse state of health. Agents will advise Port Health Officer and Health Department inspectors who will board vessel on arrival, alongside actual wharf if Free Pratique requested. N.Z. regulations will require sealing of domestic meat chambers and purchase of local meats for use coastwise.

RADIO: Through Awarua Radio ZLB or Wellington Radio ZLW.

RADAR/VHF: A signal station is situated on Taiaroa Head about 1 cable Southward of the lighthouse. Vessels can communicate with the signal station by flashing lamp or radiotelephone.

VHF and MF radiotelephones are fitted in the signal station and continuous watch is maintained on VHF Channel 16 (156.8 MHz) and 2182 kHz. The call sign is "ZMH 32".

If using VHF, initial contact should be made on Channel 16 (156.8 MHz), and Channels 14 (156.7 MHz) or 12 (156.6 MHz) should be used for subsequent working.

If using MF, initial contact should be on 2182 kHz, 2162 or 2012 kHz should be used for subsequent working. In addition to these frequencies the MF radiotelephone is fitted with the following crystal tuned frequencies:

Transmitter: 2045, 2129, 4125 and 4419.4 kHz.

Receiver: 2045, 2129, 2444, 2638, 4125, 4419.4, 6215.5 and 6218.6 kHz.

Dunedin Signal Station: A radio station is situated in the Otago Harbour Board Office at the Western end of Birch Street Wharf. Continuous watch is maintained on VHF Channel 16 (156.8 MHz), and Channels 14 (156.7 MHz) and 12 (156.6 MHz) are fitted as working frequencies. The call sign is "Dunedin Harbour Radio".

Notice of Arrival: Estimated times of arrival together with maximum draft must be passed to the Harbour Master by radio 12 hours, and confirmed 4 hours, before reaching the Pilot station. This is in addition to any previously submitted notification. Radar operated at station on request has range in excess of 20 miles to North and East.

TUGS: 2 tugs, each 2,000 h.p. (30 ton bollard pull). Tugs used in vicinity of wharves turning, berthing and unberthing, etc. Tug's lines used without charge.

BERTHING:

Port Chalmers

Beach Street Wharf: 2 berths with a total length of 375 m., each with road and rail connections. 2×5 ton electric cranes and a large transit shed 152.4 m.×30.48 m. Half the shed is used as a container packing depot, the remainder being available for use by conventional cargo vessels. The outer berth is supported by 9 acres of reclaimed land used mainly for the storage of export logs and woodchips. Depths alongside are 10 m. LWOST.

Container Terminal: A 274.3 m. concrete container berth has been constructed at Port Chalmers capable of accommodating vessels up to 260 m. in length at a maximum draft of 11.58 m. LWOST. 2×46 tonne portainer cranes in operation and a 12.54 hectare storage area.

Dunedin:

Wharves with a total length of 950 m. Depths alongside being 8.53 m. at main berths and 7.62 m. to 6.10 m. at coastal berths. All berths have transit sheds with a total floor space of 3,600 sq.m. All berths have roads at sheds, Victoria and Birch Street wharves have rail connection. There are 6× 5 ton electric cranes, 16 fork lift trucks and 10 tractors available for use at wharves.

Roll-on/Roll-off Terminal: A special Roll-on/Roll-off ferry wharf 152 m. long with adjustable stern ramp is supported by 2.83 hectares of paved storage and sheltered shed. Depth alongside being 7.31 m. LWOST.

Ravensbourne Wharf: Situated 1 mile from Dunedin is available for the discharge of bulk phosphate and sulphur via hoppers and conveyor belt direct into works. Maximum size of ship for this jetty 184.1 m. overall. Depth alongside 8.53 m.

LPG Berth: A dedicated berth for coastal gas tankers has been constructed 300 ft. (91.5 m.)×106°T from end of Roll-on/Roll-off wharf.

All berths in the port have fresh water connections, ample floodlighting and telephone facilities.

STEVEDORES: Labour for Saturday work must be ordered by 0830 hrs. Fridays, otherwise by 1430 hrs. for following day. Advise Agents of firm ETA in time to judge this.

Wharf working hours are the same as for most other New Zealand ports: 0700 – 1200 hrs. and 1300 – 1700 hrs. Monday to Friday inclusive with option of additional work 1800 – 2100 hrs. to finish a vessel. 0700 – 1200 hrs. on Saturday, with option of additional work 1300 – 1700 hrs. to finish a vessel.

No wharf work on Sundays or public holidays, but ships are berthed or sailed as required.

Container Terminal shifts: 0700 – 1430 hrs. and 1430 – 2200 hrs. every day of the year.

CRANES: The Container terminal is equipped with 2 Vickers Hoskins Paceco 40 tonne Mach Container Gantry Cranes with an outreach of 33.22 m. and a backreach of 10.67 m.

Also see "Berthing".

MEDICAL: Emergency medical services and full hospital services always available at short notice. Emergency advice by radio available. Top priority given arrangements for landing urgent cases for medical treatment.

TANKERS: Diameter of lines 200 mm.; minor slop facilities only; one tanker discharge berth 220 m. long, 7.5 m. depth alongside at low water. Max. size 184 m. long.

DENSITY: Harbour density 1024 all states of tide.

FRESH WATER: Fresh water is available at all berths. Delivery rates are approximately 15 tonnes/p.h. at Dunedin wharves and 25 tonnes/p.h. at Port Chalmers.

FUEL: Marine diesel, heavy and light fuel oils, and lubricating oils are usually available. Small quantities can be delivered to any berth by tank trucks, and larger quantities can be loaded by pipe-line at the Oil Jetty at a rate of about 100 tonnes/p.h.

GANGWAY/DECK WATCHMEN: Shore watchman not normally required except at entry to oil jetty, such watchman arranged for by ship's Agents. Ships required to maintain own gangway surveillance.

OPENING/CLOSING HATCHES: Automatic hatch gear may be operated by ship's personnel. Manual hatches by shore labour only.

CERTIFICATES: Normal cargo gear and equipment certificates as required for British ports; also Fumigation (Derat) or Exemption Certificate.

CUSTOMS ALLOWANCES: See "Auckland".

IDENTIFICATION CARDS: Not required for British subjects. Alien identification cards to be retained on board in case of need.

CONSULS: Consular Agencies: Denmark, France, Germany, Italy, Netherlands, Norway, Portugal, Sweden.

REPAIRS: Private companies capable of undertaking all forms of repair work are established in Dunedin and Port Chalmers. There is no dry dock, but a 500 tonne slipway capable of accommodating vessels up to 120 ft. (36.6 m.) long is available.

DRY DOCKS: None.

REPATRIATION: Repatriation arrangements can be made.

AIRPORT: Dunedin is served by all internal main airlines with connections to overseas via Christchurch, Wellington and Auckland. Airport 35 minutes (25 km.) from Dunedin City by car.

TIME: N.Z. Standard Time throughout year is GMT plus 12 hours, except that Summer time now operates from last Sunday in October to first Sunday in March. (Add 1 hour).

POLICE/AMBULANCE/FIRE: Police 776011; Ambulance 777111; Fire Brigade 779111; Hospital 740999; Emergency (serious) dial 111 and ask for any service needed.

TELEPHONES: Slot telephones can be put on board with all local calls free, others by cash in slot.

						Cranes		
Berth	*Length*	*Depth*	*Max. Draft*	*Height Above Datum*	*Decking*	*No.*	*S.W.L. (tonnes)*	*Out-reach*
Port Chalmers								
George Street (Container Terminal)	274.3 m. 900 ft.	11.8 m. 38 ft. 8 in.	11.28 m. 37 ft.	4.6 m. 15 ft.	Concrete	2	46	32.4 m. 106 ft. 3 in.
Beach Street	335.3 m. 1,100 ft.	10.11 m. 33 ft. 2 in.	9.6 m. 31 ft. 6 in.	4.6 m. 15 ft.	Concrete	2	5.08	16.7 m. 55 ft.
Dunedin								
Victoria Wharf – T & U	175.3 m. 575 ft.	7.7 m. 25 ft. 3 in	7.24 m. 23 ft. 9 in.	4.6 m. 15 ft.	Concrete	4	5.08	16.7 m. 55 ft.
Ro/Ro	152.4 m. 500 ft.	7.4 m. 24 ft. 3 in.	7 m. 23 ft.	3.8 m. 12 ft. 6 in.	Concrete	—	—	—
Rattray Street	254.8 m. 836 ft.	5.6 m. 18 ft. 4 in.	5.3 m. 17 ft. 6 in.	4.6 m. 15 ft.	Wood	—	—	—
Rattray Street Q								
Rattray Street Qa								
Rattray Street R								
Rattray Street S								
Victoria Wharf – X&Y (Fishing)	213.4 m. 700 ft.	6.8 m. 22 ft. 4 in.	6.4 m. 21 ft.	4.6 m. 15 ft.	Wood	—	—	—
Birch Street (Fishing)	304.8 m. 1,000 ft.	7 m. 23 ft.	6.7 m. 22 ft.	3.8 m. 12 ft. 6 in.	Concrete and Wood	2	5.08	16.7 m. 55 ft.
Cement Wharf	137.2 m. 450 ft.	5.5 m. 18 ft.	5.2 m. 17 ft.	4.1 m. 13 ft. 6 in.	Wood	—	—	—
Oil Jetty	219.5 m. 720 ft.	7.5 m. 24 ft. 7 in.	7.1 m. 23 ft. 3 in.	4.6 m. 15 ft.	Concrete	—	—	—
Ravensbourne (Fertiliser)	149 m. 489 ft.	8 m. 26 ft. 3 in.	7.6 m. 25 ft.	4.4 m. 14 ft. 6 in.	Wood	—	—	—
L.P.G. (Dolphins)	49 m. 160 ft. 9 in.	6 m. 19 ft. 8 in.	5.4 m. 17 ft. 8 in.	3.9 m. 12 ft. 9 in.	Concrete	—	—	—

HOLIDAYS: As for all N.Z. ports, i.e. January 1st and 2nd; Good Friday and Easter Monday; Anzac Day (April 25th); 1st Monday in June; Labour Day (Monday, nearest October 24th); Christmas Day and Boxing Day; Waterside Picnic day (Monday at end January). Where New Year and Christmas holidays coincide with Saturdays and/or Sundays, holidays are taken following Monday and/or Tuesday. General cargo not worked on these days nor on Sundays: tankers discharge 365 days: ships arrive and depart regardless of holidays. Container ships worked all days except Good Friday and Anzac Day.

GENERAL: No special moorings are required. Harbour, though tidal, is landlocked and there is no surge at any berth. Tide rise averages 6 ft. above datum (extremes 1.52 m. and 2.44 m.).

Harbour Chart: N.Z.6612 Otago Harbour.

Adjacent Coastal Charts: N.Z.64 Banks Peninsula to Otago Peninsula.
N.Z.66 Taiaroa Head to Nugget Point.

Sailing Directions: New Zealand Port Information Manual.
New Zealand Pilot.

Communications: Dunedin and Port Chalmers are connected with the post, telegraph, telephone, and telex systems.

State Highway No. 1 and the main trunk railway line both pass through Dunedin. Regular road and rail services operate to other South Island towns.

SERVICES: Radar and gyro compass technicians available. Good shop and providore facilities. Compass adjuster usually available. Divers employed by a private company are available for underwater inspections.

SHORE LEAVE: Crew members not restricted ashore.

REGULATIONS: No special local regulations, but all N.Z. ports have very strict rules for garbage collection and disposal, etc. and against oil spillage.

DELAYS: Ample berths normally available. Occasional delays for labour shortage or wet weather (rainfall average 762 mm. per year). Small quantities bunkers available ex-tank wagons at any berth. Larger quantities obtainable by shifting to oil jetty outside cargo work hours or as otherwise convenient.

DEVELOPMENTS: The depths at most berths are presently below standard due to siltation but it is intended that restorative dredging will be implemented to achieve the following objectives in due course:

Berth	*Intended Depth*	
George Street	12.2 m.	(40 ft.)
Beach Street	10.7 m.	(35 ft.)
T & U	8.5 m.	(28 ft.)
Ro-Ro	7.6 m.	(25 ft.)
Rattray Street	8.5 m.	(28 ft.)
X & Y	8.2 m.	(27 ft.)
Birch Street	7.6 m.	(25 ft.)
Cement Wharf	6.7 m.	(22 ft.)
Oil Jetty	8.5 m.	(28 ft.)
Ravensbourne	8.5 m.	(28 ft.)

AUTHORITY: Otago Harbour Board, P.O.Box 1, Dunedin, New Zealand. *Tel:* 024-740-881. *Telex:* Ohbterm NZ 5250. *Cables:* Koputai. *Contact:* K. D. MacLeod, Secretary.

PICTON: 41.17 S. 174.00 E. (See Plan Book)

PORT LIMITS: Inside straight lines from Cape Jackson to Cape Koamaru and from East Head to West Head at Tory Channel Entrance.

DOCUMENTS: See "Auckland".

PILOTAGE DISTRICT: *Queen Charlotte Sound:* Inside a straight line drawn in a 303° direction from Paparoa Point on Arapawa Island to the opposite shore, and the arc of a circle radius 1 mile centred on West Head Light.

Pelorus Sound: Inside a straight line drawn in a 121° direction from Paparoa Point (East of Harding Point) to Alligator Head.

PILOTAGE: Pilotage is compulsory inside a straight line drawn in a 180° direction from Snake Point to the opposite shore, including all the waters of Tory Channel. Pilotage in the Outer Reaches of Queen Charlotte Sound and in Pelorus Sound is optional. Unless otherwise requested, Pilot will board vessels in a position 090°T, 0.6 miles from Motuara Island Light Tower. By arrangement with the Harbour Master, Pilots will board vessels in a position 045°, distance 2.5 miles from Deiffenbach Point Light Tower, East of Snake Point, where a Pilot is not required in the optional pilotage area. By arrangement with the Harbour Master, vessels may enter and leave via Tory Channel, subject to weather, when Pilot will board and leave in a position 135°T, distance 1 mile from West Head Light Tower. Application for a Pilot must be made at least 4 hours before the estimated time of arrival. For vessels arriving at night or during the weekend, application should be made no later than 1530 hrs. on the last previous working day. Pilot boat 14.6 m. in length equipped with VHF radio Channel 16. Call sign "Picton Pilot Launch".

ANCHORAGES: Except during strong N.W. winds, there is a good anchorage Northward of Mabel Island in 16 fathoms for vessels of all sizes.

Quarantine Anchorage: Within the navigable area to Westward of Mabel Island enclosed between the foreshore and a line from Kaipupu Point 047° to the Western extremity of Mabel Island, thence 349° to Wedge Point. Vessels not in quarantine can use this anchorage.

RESTRICTIONS: Controlling depth in approaches to anchorage is 13 m. MLWOS.

MAX. SIZE: Max. length 201 m. Draft 11 m. aft, 8 m. – 10 m. forward depending on length. Vessels of this size can berth at any state of the tide. Longer vessels may be accommodated by arrangement with the Harbour Master.

HEALTH: First entry at a New Zealand port Pratique is granted after vessel berths provided she has a clean bill of health from her last port, otherwise vessel would anchor in the Quarantine Anchorage, where port Health Officer would board. Once clear at the first port in New Zealand no further Pratique is required.

RADIO: Port is equipped with medium frequency and VHF, call sign "Picton Harbour Radio", calling frequency 2182 kHz. Watch is maintained Monday to Friday, 0900 to 0933, 1140 to 1203, 1540 to 1603 hrs. daily and at other times by arrangement. In addition the following schedule is maintained for communication with the road/rail ferries: 0103, 1140, 1640, 2020, 2050 hrs. Sundays only: 1603 hrs.

TUGS: None.

BERTHING: One overseas wharf 240 m. length with accommodation for 2 vessels. Depth at wharf up to 11.58 m.

Two road/rail ferry berths 152 m. long with modern terminal facilities for Roll-on/Roll-off traffic.

STEVEDORES: Agents will provide gangs and other facilities provided Master gives prior notice of his requirements.

MEDICAL: It is necessary for Master to give his Agent as much advance notice as possible. Two doctors reside in the port. Hospital at the port and main hospital at Blenheim, 35 km. by road. Ambulance service available.

DENSITY: 1025.

FRESH WATER: Supplies available at 30 t.p.h. Cost 29 cents/tonne.

FUEL: By tank wagon only.

GANGWAY/DECK WATCHMEN: Required by general harbour regulations and is generally carried out by ship's deck hands.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: See "Auckland".

CARGO GEAR: Marine Department control this and regulations are issued accordingly. These regulations are very similar to those in the United Kingdom.

IDENTIFICATION CARDS: Not required.

CONSULS: At Wellington.

REPAIRS: Small repairs undertaken by three companies.

SURVEYORS:

1. Cargo Surveyors available.
2. Lloyd's Register available. Other societies available from Wellington.

REPATRIATION: Crew changes can be made.

AIRPORT: Woodbourne – 36 km. by road from Picton, served by feeder services to Wellington – Christchurch. Local seaplane service from Picton Harbour.

TIME: GMT plus 12 hours. Daylight saving time, plus 1 hour, in force from October to March.

HOLIDAYS: New Year's Day, Anniversary Day, Good Friday, Easter Monday, Labour Day, Sovereign's Birthday, Christmas Day, Boxing Day, Anzac Day, Waterside Workers Picnic Day, New Zealand Day.

POLICE/AMBULANCE/FIRE: Police Tel: 439. Ambulance, through doctor or in case of emergency Tel: 207. Fire, ring exchange operator.

EMERGENCY CO-ORDINATION CENTRE: S.A.R. Co-ordination Centre, Wellington. Tel: 881035. If in port contact Harbour Master.

TELEPHONE: Facilities exist to place telephones on board.

BANKS: Bank of New Zealand, High Street, Picton.

SHORE LEAVE: Allowed.

SHIP SUPPLY SERVICE: No ship supply services operate in this area.

Notwithstanding the above, there are a number of commercial operators in the district who have the capability to provide a variety of supply services.

There are sheltered areas in the outer reaches of the Marlborough Sounds which would be ideal for vessels transiting Cork Strait to take advantage of a ship supply service, incurring a minimum of delays in the process.

The Customs Department have advised that by prior arrangement it would be possible for a vessel in transit to take aboard mail and/or goods from a launch without completing full Customs formalities.

Of the large number of commercial operators in the area, one in Pelorus Sound and one in Queen Charlotte Sound have been selected as examples, with both passenger and freight carrying capabilities, together with the major operator of tourist launches in Queen Charlotte Sound.

1. *Emergencies:*
   Contact: Marlborough Harbour Board, Picton.
   Telegrams: "Marlharb" Picton.
   Radio Call Sign: "Picton Harbour Radio".
   Radio frequencies: MF 2182 kHz or VHF Channel 16.
   Notice Required: 4 hours if possible.
   (NB: Helicopter available ex-Wellington).
2. *General Supply Services:*
   a. Pelorus Sound:
      Contact: Johnsons Barge Services, Cook Street, Havelock, Marlborough Sounds.
      Radio Call Sign: "Havelock Association Radio".
      Radio frequencies: MF 2182 kHz or VHF Channel 63.
      Facilities available: 100 tonne capacity Roll-on/Roll-off Barge, 39 passenger capacity launch.
      Operation Area: Pelorus Sound and approaches, D'Urville Island.
   b. Queen Charlotte Sound:
      Contact: Kenny Barging, Picton.
      Radio Call Sign: "Kenny Base".
      Radio Frequencies: VHF Channel 63.
      Facilities Available: 50 tonne capacity Roll-on/Roll-off Barge, 40 passenger capacity launch.
      Operation area: Queen Charlotte Sound and approaches.
3. *Tourist Launches:*
   Contact: Friendship Tourist Cruises, Picton.
   Radio Call Sign: "Picton Association Radio".
   Radio Frequencies: MF 2182 kHz or VHF Channel 63.
   Facilities Available: Passenger launches of varying capacities up to 91 passengers in restricted limits.
   Operation area: Queen Charlotte Sound and approaches.

Rendezvous points would depend on the needs of the vessel requiring the service, survey limits of the vessel providing the service and weather conditions prevailing at the time.

STORING: See "Prelims" page viii.
1. Storage from trucks only available.
2. No restrictions on storing.
3. Trucks can proceed alongside berth.
4. Forklift trucks can be used to handle stores.
5. Purchase of stores requires Customs Dept. approval.
6. Stevedores available for loading stores.

AUTHORITY: Marlborough Harbour Board, P.O.Box 84, Picton, New Zealand. *Tel:* Picton 270. *Cables:* Marlharb. *Contact:* The General Manager or D. I. Jamison, Harbour Master.

TAHAROA: 38.11 S. 174.42 E.

LOCATION: The Port of Taharoa is situated on the West Coast of the North Island of New Zealand, in Lat. 38° 10.7′ S., Long. 174° 42.4′ E. It is one of the few ports in the world where a solid cargo, ironsand, is pumped in a slurry form and loaded into ships moored at a single point mooring buoy.

Kawhia extended river limits: Taharoa harbour lies within the Kawhia extended river limits, which is delineated by a straight line commencing near Taranaki Point in a 270° direction to the East Point of Gannet Island, then 180°×15.5 miles, thence 090° to the shore.

PORT LIMITS: The port limits is the arc of a circle radius 2 miles centred on the pumping station, Lat. 38° 10.7′ S., Long. 174° 42.4′ E. and the pilotage district is the arc of a circle of radius 3 miles also centred on the pumping station.

There are no known dangers in the pilotage district, and the sea bed depth increases at a reasonably uniform gradient from the beach seaward.

The Motunau Beacons, which are unlit, are established some 4 miles South of the SBM in line bearing 158° (T). This line passes 835 m. inshore of the SBM, and from the North to the point where it crosses the Southern prohibited anchorage line gives a least depth of 22 m.

A 1.5 m. diameter wave rider buoy, which is difficult to see, is positioned some half mile E.S.E. of the SBM.

PILOTAGE: Pilotage is compulsory in the Pilotage District. Application for a Pilot should be made to New Zealand Steel Mining Limited, telegraphic address "Ironsands Taharoa", via Awarua Radio.

Pilots embark and disembark by helicopter. Ships awaiting the Pilot, should lie, head to wind, about 3 miles W.N.W. of the buoy.

Depending on weather conditions ships can be berthed by day or night though much better conditions are required for night berthing. As a general but not absolute rule, ships can be berthed with a significant wave height of up to 3.5 m. and a maximum wind gust of 40 knots. While at night the maximum wave height must be less than 2.0 m., and the wind gusts less than 15 knots.

Also see "General".

ANCHORAGE: Ships awaiting the berth are normally anchored about two miles W.N.W. of the buoy in good holding ground. The anchorage is exposedto the Westward, and in weather conditions in which it is not possible to moor, ships should head out to sea.

Prohibited Anchorage: All that area bounded by straight lines, commencing at the low water mark in position Lat. 38° 10.8′ S., Long. 174° 42.4′ E. Thence to Lat. 38° 11.1′ S., Long. 174° 40.1′ E. Thence to Lat. 38° 10.3′ S., Long. 174° 42.15′ E., thence to the point of commencement.

The Northern and Southern limits are marked by rectangular beacons painted in red and white vertical bands. The Northern Beacons are in line bearing 088° (T), and the Southern Beacons in line bearing 081° (T).

NAVIGATION: *Lights:* Taharoa main light, exhibited from a 16 m. high frame work tower painted in red and white bands, in position Lat. 38° 10.1′ S., Long. 174° 42.15′ E. has the characteristics group flash 2 white every 20 secs. A fixed red obstruction light is also exhibited on the tower.

The SBM has white light flashing every 5 secs.

The wave rider buoy light has the characteristics group flash 3 white every 15 secs.

The prohibited anchorage beacons each exhibit a fixed red vertical light.

RESTRICTIONS: Arrival draft should be: Forward – 3 per cent of the vessel's overall length and Aft – propellor submerged.

HEALTH: *Quarantine:* At least 24 hours before the expected time of arrival, ships must send to New Zealand Steel Mining Limited for onward transmission to the Department of Health in Hamilton, a message detailing the last port of call, the date of departure, and the state of health on the vessel.

Vessels calling regularly at Taharoa are usually given Pratique by radio, though Quarantine Officers reserve the right to inspect the vessel at any time.

RADIO/VHF: *Communications:* Ship loading at Taharoa must advise New Zealand Steel Mining Limited of their departure from the last port before arriving in Taharoa, and give their ETA.

The ETA must be updated 7 days, 3 days and 24 hours before arrival.

The ETA 3 days before arrival is particularly important, as special shift patterns have to be set for loading, which by agreement with the unions, are based on this arrival time.

The port operations centre, which is manned only when a ship is in port or expected, is equipped with radio. (Medium frequency 2182 kHz, single side band, and VHF Channels 9, 10 and 16).

Ships calling at Taharoa should maintain a listening watch on 2182 kHz, at 0833 and 1503 New Zealand standard time, the day before arrival, and call up the Port Operations Centre, call sign "Port Taharoa", on Channel 9 when 2 hours out.

Radio messages to New Zealand Steel Mining Limited should be addressed to "Ironsands Taharoa", via Awarua Radio, or alternatively Auckland Radio.

BERTHING: The berth is a single point mooring buoy, 11 m. in diameter designed by SBM Inc., using a catenary anchor leg mooring (CALM), to secure it to the sea bed. It is capable of mooring ships up to 150,000 tonnes deadweight.

There are 6 anchor legs, arranged radially 60° apart, each consisting of some 347 m. of 102 mm. chain, attached to a 9,000 kg. Bruce Mk II anchor. Each leg is pre-tensioned to 220 tonnes, and has a holding power of 400 tonnes.

The buoy is 1.64 miles offshore in position: Lat. 38° 10.6′ S., Long. 174° 40.25′ E. The depth of water at the buoy is 30 m. at MWL.

Loading: Loading rate 1,200 dry tonnes/p.h. on each line. Sand density 4.64 average.

MOORING: *Mooring Rope:* The mooring rope is a 52 m. endless grommet of 168 mm. diameter two-in-one braided nylon rope, which has a breaking strain of 1,000 tonnes. One end of the grommet is attached to the buoy, and the other end, when the ship is moored, is placed over the ship's single centreline mooring post.

The ship's end of the rope has a 5.5 m. soft eye protected with a chafing sleeve. An heaving eye, which is attached to a 60 m. heaving tail of 80 mm. two-in-one braided polypropylene rope, breaking strain 76 tonnes, is attached 1.5 m from the crown on one part of the ship end eye.

Ship's Equipment: To moor at Taharoa, a ship should be fitted with a mooring post (700 mm. diameter) on the centreline, between 2.0 m. and 3.5 m. from the fairlead. The post should be about 750 mm. in height and the top should slope forward.

The centreline fairlead should have minimum dimensions of 1,400 mm.×1,700 mm., and the bearing surface lined with stainless steel; if this lining is not fitted, all paint should be removed from the fairlead, and the bearing surface coated with tallow, before the ship arrives. Tallow will be supplied by New Zealand Steel Mining Limited, but the ship must provide a suitable bucket, so that it can be transported from the Operation Centre on the helicopter.

A roller on a stand, 1 m. in height, should be positioned about 2.0 m. abaft the mooring post, and set slightly off the centreline.

The ship should have a 300 m.×80 mm. strand polypropylene messenger line, either on a warping drum, or suitably flaked out. To one end of the messenger line a 16 mm. polypropylene heaving line should be attached. The heaving line is then passed through the centreline fairlead, and led down the ship's side, (usually the port side, though the Pilot will confirm this when he boards) to about the after end of No. 1 hatch, from where it will be passed to the service vessel.

MOORING PROCEDURE: The service vessel will have checked the buoy, mooring rope and hoses before the ship arrives, and when the Pilot boards will stand off and wait for the ship to close the buoy. The Pilot will manoeuvre the ship to approach the buoy usually along the line of the hoses, and when about 300 m. from the buoy will instruct the service vessel to pick up the heaving line. The service vessel will then manoeuvre close alongside abreast of where the heaving line is prepared. The heaving line should be thrown to the service vessel foredeck, from where the crew will pass it aft to their winch. When this is done, the service vessel will steam ahead, to a position about 100 m. ahead of the ship, winching in the mooring messenger until there is about 6 m. inboard.

As both the ship and the service vessel steam slowly towards the buoy, the line should be paid out so as to keep the rope slack at all times, but at no stage should the rope be allowed to run aft of the ship's stern.

When the service vessel is close enough, the messenger line will be connected to the heaving tail. As the ship will be moving ahead while this is being done, any slack should be picked up, but under no circumstances should the rope be lifted out of the water between the ship and the service vessel.

As soon as the connection between the messenger and the heaving tail is made, the service vessel will steam clear, and the rope should be heaved in at a steady rate. Normally, the mooring line is stored on a platform on the buoy, so that sufficient weight must be put on the messenger to heave the mooring line into the sea. Once the mooring rope is clear, it is important that as the ship closes the buoy, only the slack in the ropes is picked up.

When the ship is about 15 m. from the end of the main mooring rope, the ship's end eye and 2 flotation covers may be lifted out of the water. Gradually, as the ship moves closer to the buoy, a little more of the rope may be lifted out of the water, until with the ship end eye of the main rope at the bull nose, there is about 15 m. from the stem to the point where the rope touches the water. Should the bows pay off, or the ship move astern, the heaving tail should be slacked down immediately, so as to maintain a minimum distance of 15 m. from the stem to the point where the rope touches the water.

When the rope is actually being made fast, it should hang almost vertically from the centreline fairlead.

HOSES: *Equipment:* The ship's manifold should be on the starboard side, abreast No. 1 hatch, loading through either 1 or 2 lines. The flanges must be standard 150 lb. ASA 12 in. flange, with 12×1 in. holes, 1 hole at the exact top. The hose handling derrick should be capable of plumbing over the manifold with sufficient height to lift a 10.7 m. hose just clear of the deck, and have a SWL of 8 tonnes.

4×15 mm. wire pennants 3.0 m. long, and 4 chain blocks, or tackles, will be required to make fast the hose hang off chains.

Picking up the hose: As soon as the ship is fast, the service vessel will put a dinghy in the water, to bring the No. 1 hose pick-up line to the ship's side. An heaving line should be passed to the dinghy, so that the pick-up line can be brought on board. The pick-up line, which is a 55 m. length of 56 mm. square line polypropylene rope is then used to winch the first hose of the string to deck level where the derrick hook can be attached, and the hose lifted to its full extent.

In marginal weather conditions, a second heaving line should be passed to the dinghy, while the first is still being heaved in. This, when attached to the No. 2 hose pick-up line, is secured to the rail, and can be heaved in later. The dinghy can then be released, reducing the time it has to spend in the water.

When lifting the hose, the derrick should be plumbed about 1.5 m. inboard from the ship's side. This keeps the hose against the ship's side thus reducing the oscillating effect in marginal weather conditions.

With the first hose in the string lifted to its full extent, the hang-off chains can be grappled, brought on board and secured to a 15 mm. diameter wire pennant, attached to a chain block or tackle, so that the length of the unit can be adjusted if necessary.

Letting go the hose: A small wire strop is passed through one of the eyes on the hose nipple, and anchored by an 80 mm. long by 24 mm. diameter stainless steel bar, to which is attached a heaving line. The lifting wire is hooked into the strop, and when all the connecting bolts are removed, the hose is lifted to its full extent and wire pennants disconnected from the hang off chains. The hose is then lowered into the water and when the weight comes off the lifting wire, the bar can be pulled clear.

MEDICAL: There is no resident doctor or nurse. The nearest hospital is in Te Kuiti about 1 hour's drive away over a bad winding road.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: Not possible.

GENERAL: *Provisions:* Supply of provisions, which come from Hamilton, can be arranged if adequate notice is given.

Weather: The prevailing wind is Southwesterly. The winds are usually stronger in Winter and Spring than at other times of the year, though gales can occur at any time, from any direction.

The significant height of the combined sea and swell is above 1.5 m. for 50% of the time, and the maximum recorded sea height has been 12 m.

Customs and Agriculture: Officials from the Departments of Customs and Agriculture will clear the vessel on arrival, and before departure.

Regulations: The general harbour regulations for New Zealand are applicable.

Tidal Streams and Currents: The tidal stream sets Northward with a rising tide and Southward with a falling tide, but these are weak and generally do not affect mooring.

During Southwesterly weather an intermittent current sets Northward parallel to the coast, and can reach a velocity of 1.0 – 1.5 knots.

Agency: New Zealand Steel Mining acts as its own Agent, and will act for others when prior arrangements have been made.

Administration: The Port is under the jurisdiction of the Marine Division of The Ministry of Transport, but is leased to New Zealand Steel Mining Limited, who own the buoy and the loading equipment.

The Pilots are contracted to New Zealand Steel Mining Limited, and remain on board during the time the ship is moored, acting as Loading Masters. A change of Pilots usually takes place at 0630 hrs. and 1830 hrs.

OPERATOR: New Zealand Steel Mining Ltd., Taharoa, Te Anga, RD. 4, Te Kuiti, New Zealand. *Tel:* Te Anga 859. *Telex:* NZ 21172. *Cables:* Ironsands Taharoa. *Contact:* Captain C. F. Durham, Port Superintendent.

TAURANGA (Mount Maunganui): 37.39 S. 176.11 E. **(See Plan Book)**

PORT LIMITS: An arc of a circle of 2 nautical miles radius running from the landward boundary of the foreshore on Matakana Island, and thence into the Bay of Plenty to a position intersection of a straight line with North Rock Light, bearing 273°; thence to North Rock Light; thence in a 180° direction to the landward boundary of the foreshore, and having as its centre, trig. station A, Mount Maunganui, Block 6 Tauranga Survey District.

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
1 Search List (on regulation form).
1 Bonded Store.
1 Gift List.
1 Inward Report Check List (C. Form 98).
1 Declaration by Master of Restricted Immigrants.
1 M.O.T. Declaration of Safety Certificate.
1 Maritime Declaration of Health.
1 Cargo Manifest (for each Port of discharge).
1 Derat Certificate.
1 Clearance, Last Port.
1 Poisons on Board.
1 Firearms on Board.
1 Ship's Papers.

ANCHORAGES: 3 sheltered anchorages are situated in the Western Channel of Tauranga Harbour, these include the Quarantine and Explosive Anchorage, and are available for vessels of 152 m., and a maximum draft of 6.00 m. (HW).

RESTRICTIONS: Vessels may enter, berth, unberth, or depart during hours of darkness in fine weather. Tankers are handled during daylight only, except tankers in ballast and gas free which may sail at night. Vessels over 95 m. generally enter or depart on HW or slack LW.

MAX. SIZE: Max. length permissible is 225 m. (229 m. at Harbour Master's discretion), no restrictions on beam. Max. arrival and departure draft at high water is 10.7 m. and at low water 9.20 m.

PILOTAGE: Pilotage is compulsory for merchant vessels of over 100 tons net tonnage; Pilot boards vessel about 2.5 miles N.E. of Mount Maunganui light structure. All vessels inward bound must give 24 hours' notice by radio of their ETA off the port limits. If bound from Auckland or near ports, vessels send their ETA immediately on departure from that port.

A second message confirming or amending the first is to be sent 4 hours before the ETA. Should, however, the vessel expect to arrive later than her 24-hour message, her 4-hour message shall be sent 4 hours before the ETA given in her original message.

All communications, which should be addressed to "Harbour Master, Tauranga", will be attended to at all hours of the day or night.

The pilot launch, which is 15 m. in length, is painted white and equipped with R/T 2182 kHz, 2162 kHz, and 2012 kHz, VHF Channels 16, 15, 14 and 12, and radar.

Vessels awaiting to enter Port may find suitable anchorage in 12 fathoms, 2 miles N.E. of Mount Maunganui. The holding in sand and shell is good in all but extreme conditions.

HEALTH: Radio notification to be sent to "Port Health Tauranga", regarding state of health of crew and ETA 24 hours before arrival.

Pratique is granted by Port Health Officer on arrival. Notification, should be made by radio to Port Health in case of suspected disease or fever on board.

Pratique is automatic if vessel has been previously cleared at another New Zealand port. Radio Pratique may be granted in case of passenger vessels or such vessels as carry a doctor on board.

RADIO: Nearest coastal radio station to Port of Tauranga is "Auckland Radio" – call sign ZLD.

The Harbour Board Watch Office, call sign "Tauranga Harbour Radio", is fitted with VHF and R/T; a continuous listening watch is maintained on Channel 16 and 2182 kHz.

RADAR/VHF: Radar is fitted to the pilot launch and 2 tugs. VHF is fitted to both tugs and pilot launch. Channels 16, 15, 14 and 12 available.

TUGS: 2 tugs are available, each with a bollard pull of approximately 28 and 15 tons. They usually join inward vessels in the vicinity of the Harbour entrance. Tug's lines are normally used, for which there is no extra charge. A third tug (bollard pull 15 tonnes) available if requested.

BERTHING: Berthing normally takes place 30 minutes after negotiating harbour entrance at HW or slack LW. The quay type concrete wharf 1,842 m. in length, (nominally eleven berths), is fitted with wooden spring piling and rubber buffers. A linkspan is situated in the centre of the wharf area.

A 40 tonne SWL multi-purpose crane is in operation on the Southernmost 100 m. of Mount Maunganui Wharf.

STEVEDORES: ETA to stevedoring companies is usually worked in conjunction with ETA to Harbour Master.

MEDICAL: Unless specifically required for arrival, Agents do not require advice. Local medical practitioners are consulted and services of one public and one private hospital are utilised.

TANKERS: Discharge of black and white products is carried out at a specially built tanker berth, permissible draft presently 10.7 m. Both products are discharged through 250 mm. pipe-lines. The flexible connection to ship is 200 mm.

Chemical tankers discharge and load at the same facility. There are no slop facilities available.

DENSITY: Salt water, 1025.

FRESH WATER: Fresh water is supplied by pipe-line at 20 tonnes/p.h., prior arrangements must be made with the Harbour Master for quantities in excess of 1,000 tonnes.

FUEL: Bunkering connections are placed at Nos. 1, 2, 3, 4, 5, 6, 9, 10 and 11 berths. Quantities of L.F.O., 200 secs, Redwood No. 1 and H.F.O. 1,000 secs, Redwood No. 1 can be supplied by prior arrangement with the Oil Companies.

FIRE PRECAUTIONS: The tanker berth is securely fenced and the gate is manned by the Board's Security Staff to prevent entry by unauthorised persons. A pass system operates. Normal precautions are taken. The berth is equipped with a remotely controlled foam monitor and 2 of the Board's tugs are equipped with foam.

GANGWAY/DECK WATCHMEN: Ship's watchmen are usually employed by overseas ships.

OPENING/CLOSING HATCHES: Usually performed by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams tobacco. 1 part bottle of spirits or wine.

IDENTIFICATION CARDS: Not required, but crew list should be handed to the Security Staff. At the Master's discretion temporary passes may be issued for crew guests to gain access to the berth.

REPAIRS: All types of engine and deck repairs are possible. A slipway can take vessels of 610 tonnes displacement and up to 56 m. length.

SURVEYORS: *Registered Cargo Surveyors:* Camping & Rutherford, P.O.Box 5001, Mount Maunganui. Tel: Tauranga 56-988.

Caleb Brett & Sons Ltd., New Zealand. Representatives: G. W. Dunsford & Associates Ltd., 42 Custom Street, Auckland. Tel: 797-171. Telex: NZ 2437. Cables: Dunship, Auckland.

Classification Societies – Surveyors: American Bureu of Shipping: Surveyor N. K. Farell, P.O.Box 1974, Auckland. Tel: 31284. Telex: 21638. Cables: "Record".

Bureau Veritas: Surveyor – J. C. Edwards, P.O.Box 1284, Auckland. Tel: 779-095. Telex: NZ 2531. Cables: "Randship".

Lloyd's Register of Shipping, Principal Surveyor: P. Betteridge, P.O.Box 2682, Auckland. Tel: 733-311. Telex: NZ 21157. Cables: "Lloydsreg".

United States Salvage Association Inc., Non-exclusive Representatives: G. W. Dunsford and Associates Ltd. P.O.Box 4076, Auckland.

REPATRIATION: All facilities exist.

AIRPORT: The airport is situated 1.6 km. from the wharf and is served with regular internal flights to other main centres where overseas flights may be connected with.

TIME: GMT plus 12 hours. GMT plus 13 hours in Summer.

HOLIDAYS: New Year's Day; 2nd January; Picnic Day and Anniversary Day, both in latter part of January; Waitangi Day, 6th February; Good Friday; Easter Monday; Anzac Day, 25th April; Queen's Birthday, 1st June; Labour Day, 26th October; Christmas Day and Boxing Day (12 days).

POLICE/AMBULANCE/FIRE: All connected through automatic exchange, Emergency No. 111.

EMERGENCY CO-ORDINATION CENTRE: When vessels are in port, any queries should be directed to the Harbour Board's Signal Station which is manned 24 hours per day. For specific emergencies (Fire, Police, Ambulance) dial 111.

TELEPHONES: Telephones are placed on board all ships when they arrive.

SERVICES: Local compass adjusters are available. Ship's stores can be provided by local Providore firms. Fumigation can be arranged. Ships' garbage is collected daily. No facilities for discharge of tank washings exist.

STORING: Vessels can be stored by truck – barges not used. Trucks can proceed alongside at the berth and remain close alongside if not interrupting cargo operations.

Forklift trucks may be used to handle stores but normally not necessary. Customs regulations in force when Bonded Stores are being loaded. Not customary for local riggers to be employed to assist with storing.

SHORE LEAVE: Crew are permitted ashore at Master's discretion.

SHIP SUPPLY SERVICE: A small scale launch service is available when required for the ship-to-shore transport of personnel and/or essential stores and/or sick crew members:

1. Harbour Transport Ltd., P.O.Box 260, Tauranga, New Zealand. Tel: 64-075-87276.
2. Faulkner Ferries Ltd, P.O.Box 445, Tauranga, New Zealand. Tel: 64-075-87709.

AUTHORITY: Bay of Plenty Harbour Board, Private Bag, Mount Maunganui. *Tel:* 53039 (Tauranga). *Telex:* Patga NZ 2378. *Cables:* "Harboard". *Contact:* F. M. Williams, General Manager. E. L. Hubbard, Harbour Master. A. J. Herbert, Secretary.

AGENT: Russell & Somers (Bay of Plenty) Limited, 194 Maunganui Road, POB 5087, Mount Maunganui. Tel. 53059. Telex: 2942 "Lumberco". Cables: "Rusticated" Mount Maunganui.

TIMARU: 44.24 S. 171.19 E. (See Plan Book)

PORT LIMITS: 1.5 miles radius with centre at Eastern Extension Light.

DOCUMENTS: See "Auckland".

PILOTAGE: Pilotage is compulsory, and Pilots are available day and night. A vessel requiring a Pilot should remain 1.5 miles seaward of Eastern Extension Mole, near and to South of Entrance Beacon. Vessels should not proceed Northward of line of leading lights on Benvenue Cliff.

Contact Pilot on VHF Channels 16 and 12 ("Timaru Harbour Control"). Pilot boards vessel at Fairway Buoy.

ANCHORAGES: A vessel should anchor in a depth of not less than 12.8 m., sand, and Eastward of harbour light structure, and not within 1.5 miles of Eastern Extension Mole.

RESTRICTIONS: Tidal conditions may affect time of entering harbour.

MAX. SIZE: Length, 198 m. (LOA 227 m. if fitted with bow and stern thrusters); Beam, no limit; Max. permissible draft 9.70 m. HWOST. Time of berthing vessels of over 6.4 m. draft will depend on tidal conditions and at Harbour Master's discretion.

HEALTH: Due to exposed nature of anchorage, incoming vessels are examined and Pratique is granted after a vessel berths. In event that vessel is quarantined, she will be required to return to anchorage without any contact being made with shore.

TUGS: 1 tug, 1100 h.p. and Pilot launch/tug, 460 h.p. available.

BERTHING: Berthing space available, 947 m. with 9.75 m. at LWOST, 197 m. with 9.29 m. at LWOST. and 365 m. with 8.53 m. at LWOST. Loading and unloading by ship's gear; railway lines on all wharves. Rail to Christchurch and Dunedin.

SPECIALISED CARGO HANDLING FACILITIES: *All Weather Mechanical Loaders:* 4 all-weather mechanical meat loaders. Each machine is capable of loading 720 units per hour, to a max. of 2,500 units per hour. Also butter, cheese, frozen vegetables can be handled. Can be used to unload suitable cargoes, e.g. fruit.

Ro-Ro facilities available for coastal vessels.

Roll-on-Roll-off Container Terminal: Terminal available for handling overseas Ro-Ro vessels. Port currently handles ScanCarrier Ro-Ro service to Continent, Gearbulk service to Japan/Korea and Jebsen Service to Near and Far East. Discharge and loading by ship's equipment. Containers handled by forklift, crane/ship's gear. Container cleaning and inspection facilities available.

BULK HANDLING FACILITIES: Two silos with total holding capacity of 2,200 tonnes. Loading rate, 300 tonnes/p.h. into vessel; into silo 120 tonnes/p.h. A modern bulk handling installation with 8 silos providing storage for 11,600 tonnes of lucerne or 13,000 tonnes of grain. Loading in rates by road and/or rail transport, up to 300 tonnes/p.h. Ship loading rates, lucerne 650 tonnes/p.h., grain 700 tonnes/p.h. Inert gas protection provided for lucerne. Wharf conveyor has maximum belt rate of 1,000 tonnes/p.h. Plant able to handle lucerne, all grains and certain types of minerals.

Fertilisers and Sulphurs discharged through 6 mobile hoppers 27 cu.m. capacity each.

CRANES: 1×20 tonne mobile crane, 1×48 tonne crawler crane, 1×30 ton crawler crane, 1×20 tonne crawler crane and 1×6.7 ton crawler crane.

STEVEDORES: Gangs must be ordered before 0700 hrs. weekdays, and before 0900 hrs. Friday for Saturday work.

RADIO/VHF: Timaru Harbour Board has a radio telephone station equipped with both medium frequency and VHF installations.

Call sign "Timaru Harbour Radio", calling frequency 2182 kHz, working frequency 2162 kHz. Fixed watches maintained for a period of 15 minutes every 4 hours, e.g.: 0345 – 0400, 0745 – 0800, 1145 – 1200, 1545 – 1600, 1945 – 2000, 2345 – 2400 hrs. (New Zealand Standard Time) and at other times mutually arranged. VHF call sign is "Timaru Harbour", Channels 6, 12, 16.

MEDICAL: Full medical facilities are available as required, including an excellent public hospital.

TANKERS: 1 tanker berth, discharge through 8 in. hoses.

DENSITY: Specific gravity 1025 at all states of tide.

FRESH WATER: Available at all berths, delivered at up to 25 t.p.h. (cost 48 cents per 1,000 litres).

FUEL: Bunkers available, heavy and medium fuel oil. 24 hours advance notice required.

FIRE PRECAUTIONS: When tankers are discharging, access to wharf is prohibited except to those holding passes. Fire-fighting equipment is placed in readiness on wharf.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: See "Auckland".

IDENTIFICATION CARDS: Not required.

SURVEYORS: Lloyd's Surveyor – Captain A. Grieve.

REPAIRS: Most deck and engine repairs can be undertaken.

REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriations.

AIRPORT: Two flights each day to and from Wellington. Christchurch International Airport is 160 km. North of Timaru.

TIME: Approximately March-October New Zealand Standard Time (GMT plus 12 hours). Approximately November-February New Zealand Daylight Saving Time (GMT plus 13 hours). Actual dates of changeover to and from Daylight Saving Time decided annually.

HOLIDAYS: New Year's Day; 2nd January; Picnic Day (port holiday Monday of the week in which 29th January falls); New Zealand Day, (6th February); Good Friday; Easter Monday; Anzac Day (25th April); Queen's Birthday (first Monday in June); Dominion Day (third Monday in September); Labour Day (last Monday in October); Christmas Eve (work ceases midday); Christmas Day; Boxing Day. Work can be arranged only by private negotiation on a voluntary basis.

POLICE/AMBULANCE/FIRE: Emergency No. 111 and ask operator for service required. Other than emergency calls: Police, 84-199 Timaru; Ambulance, 47129 Timaru; Fire Brigade, 47089 Timaru.

EMERGENCY CO-ORDINATION CENTRE: If within the port area contact Harbour Master's Office, in Ritchie Street. Tel: 44199.

TELEPHONES: Can be supplied to vessels at all berths, rental N.Z.$10.80 per day.

STORING: See "Prelims", page viii.

1. Storing by truck only.
2. N/A.
3. Yes.
4. If necessary.
5. None.
6. If necessary.

SHORE LEAVE: Allowed.

SHIP SUPPLY SERVICE: Harbour Board craft will assist with transfer of sick crew.

DEVELOPMENTS: The depth in the entrance channel is being deepened to 10.0 m. HWOST.

Planning for heavy duty berth, reclamation areas and larger capacity tug.

AUTHORITY: Timaru Harbour Board, P.O.Box 76, Timaru, New Zealand. *Tel:* 44199. *Telex:* NZ 4773 Timport. *Cables:* Centreport. *Contact:* The General Manager.

WANGANUI: 39.57 S. 175.00 E. (See Plan Book)

PORT LIMITS: Arc of a circle of 3 nautical miles radius centred at the flagstaff at Castlecliff, sited Lat. 39° 56′ 49″ S., Long. 174° 59′ 23″ E.

DOCUMENTS: See "Auckland".

PILOTAGE: If Wanganui is first N.Z. port, initial application for Pilot and vessel's ETA should be passed to local Agent by radio through one of three Post Office radio stations. If not first N.Z. port, this information should be given to local Agent by Agent at previous port. Final details settled when R/T contact made between pilot station and ship.

Pilot launch "Karere", LOA 41 ft. painted white, high midship wheelhouse. Pilot boards at anchorage position. International signals for Pilot should be used if no R/T contact made.

ANCHORAGES: One anchorage for vessels awaiting to enter.

RESTRICTIONS: Port worked day or night at HW when bar conditions are suitable.

MAX. SIZE: Length 120 m., beam 20 m., draft dependent on bar depths at particular time but usually 5.0 m. max. at HWS. No installations outside main port area.

HEALTH: See "Auckland".

RADIO: Wellington Radio ZLW. R/T frequencies 2182, 2162, 2012.

VHF: Channels 16, 12, 9, 68 and 14.

TUGS: No tug available. Pilot launch used for swinging.

BERTHING: Berthing takes place at HW.

SPECIALISED CARGO HANDLING FACILITIES:

No. 6 Berth: Pipe-line for bulk cement connecting wharf with adjacent silos.

No. 1 Wharf: Direct handling into cool store for fruit.

Portable hoppers used for bulk cargoes to load directly into road trucks.

There are no facilities for containers, roll-on/roll-off traffic, liquid chemicals or LPG carriers.

CRANES: One mobile crane, capacity 4 tons. 3–20 ton from contractor.

STEVEDORES: Requirements for labour should be given with ETA and request for Pilot. At least 24 hours' notice required.
MEDICAL: 24 hours' notice required if possible. Hospital facilities available. Inoculations, certificates, etc.
DENSITY: 1020 at HW. 1005 at LW. These figures vary greatly according to amount of fresh water in river.
FRESH WATER: Plentiful supply through wharf hose connections. Rate of delivery depends on height of ship's filling pipe above wharf level.
FUEL: All grades available but ship has to pump out of road tankers. Amount of notice depends on grade required.
GANGWAY/DECK WATCHMEN: Watchman necessary, either crew member or shore watchman.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCES: See "Auckland".
IDENTIFICATION CARDS: Not required.
REPAIRS: Minor deck and engine repairs possible.
REPATRIATION: Facilities exist but more easily accomplished at a main port.
AIRPORT: About 4 miles. Airport caters for internal services only.
TIME: N.Z. Standard Time (12 hours in advance of GMT). N.Z. Daylight Time (13 hours in advance of GMT) is kept from last Sunday in October until first Sunday in March.
HOLIDAYS: As Auckland, except Anniversary Day holiday which is that held in Wellington Province. No cargo is worked on these days.
POLICE/AMBULANCE/FIRE: Ambulance, 53909; Police, 54488; Fire Brigade, Wanganui, 58505; Fire Brigade, Emergency 111.
TELEPHONES: Arrangements can be made for placing telephones on board.
SHORE LEAVE: Allowed.
DELAYS: Fresh onshore winds could make entrance unworkable for a vessel waiting to enter. Cargo work stops in rain and in unusually strong wind. Bunkering would be slow if large amount of bunkers required.
DEVELOPMENTS: Development plan in course of preparation but as yet no details of size of any possible new installations or draft increases.
AUTHORITY: Wanganui Harbour Board, P.O.Box 8001, Castlecliff, Wanganui, New Zealand. *Tel:* 46626. *Cables:* Harboard. *Contact:* R. A. King, Harbour Master. T. H. Gibson, Port Captain.

WAVERLEY HARBOUR: 39.51 S. 174.36 E.

LOCATION: Waverley Harbour is located on the West coast of the North Island of New Zealand in the Northern end of the South Taranaki Bight.
PORT LIMITS: Waverley harbour is defined as being all that area of water bounded by the line of mean high water spring tides, and having as its seaward limit the arc of a circle of 2 nautical miles radius centred at 39° 49.6′ S. 174° 36.5′ E, near the mouth of the Wairoa Stream.
DOCUMENTS: Besides the Port Health Doctor, other Government personnel boarding the vessel by helicopter for inward clearance are: 1 Port Health Officer, 1 Customs Department Officer, 1 Agriculture Department Officer.

Port Health Officer will inspect Derat Certificate and (possibly with Agriculture Officer) inspect food store rooms, refrigerated spaces, galley, pantry, etc.

Customs Officer: The Customs Boarding Officer acts for the Immigration Department and the Marine Department and will inspect the following ship's documents: Register, Load Line Certificates, Safety Equipment Certificates, Radio Certificates.

The following documentation is required on Inward Clearance:
1 copy Form 1A General Declaration
1 copy Form 1B Cargo Declaration
1 copy Form 1C Crew List
1 copy Form 1D Passenger List
1 copy Form 3A Ship's Stores List
1 copy Reg Form 2 Search List
1 copy Declaration re Safety Certificates
1 copy List of Poisons
1 copy List of Firearms
For Outward Clearance (Customs):
2 copies Form 1A General Declaration
2 copies Form 1B Cargo Declaration
2 copies Form 1C Crew List
2 copies Form 1D Passenger List
2 copies Form 3A Stores List
1 Passenger Arrival Card for any Crew or Passenger leaving vessel.
Agriculture Officer: on arrival:
2 copies of Ship's Meat Locker
Reg. 1966 Agl. 36.

The Boarding Officer will inspect the vessel's meat locker and inspect the garbage containers.

Australia, United States, Canada and New Zealand meat not loaded in the place of origin, and Japanese meat will be sealed up on vessel's arrival by the Agriculture Officer.

At sailing time, the Agriculture Officer may attend to check on garbage, sealed lockers, etc., together with the Customs Officer, who issues the Port Clearance, to check if all crew are aboard, and that the Bonded Stores Seal is intact.
NAVIGATION AIDS: SBM – radar reflector, white flashing light, one flash every 9 seconds, range 6 miles.
Leading Lights: In transit bearing 355° 33′.
Range Lights: In line bearing 312° 03′.

All four light towers are of louvred timber construction, painted white with vertical centre line painted red.

The pumphouse building immediately to the West of the two leading lights is prominent with a radar visibility of 15 miles.

PILOTAGE: Pilotage is compulsory for Waverley Harbour and under control of the Waverley Harbour Master.

It has become customary for vessels to await the Pilot in a position 2 miles South of the SBM. Vessels equipped with VHF will be contacted accordingly when within range. Information on weather conditions and time of Pilot boarding will be advised through this medium.

Due to the nature of the coastline adjacent to Waverley Harbour and the weather conditions experienced, the transportation of the Pilot (and other port official personnel) is effected by helicopter, from a pad adjacent to the Administration building. It must be ensured that radio antennas running respectively from foremast to bridge and bridge to aft, as the case may be, are lowered clear in good time prior to the arrival of the helicopter and the landing area cleared of loose gear and portable foam fire equipment properly charged, available for immediate use at the landing area.

Berthing to the S.B.M. is normally effected in daylight, dependent on weather conditions, visibility and flying conditions being acceptable to the helicopter pilot and in concurrence with the Master of the vessel.

For night flying a wind sock will be erected for the helicopter pilot's observation of wind direction, and vessel is to be floodlit overall.
ANCHORAGES: The recommended anchorage off the port is a rectangular area 0.75 miles East and West, and 1 mile North and South of a position 3 miles South of the SBM. The bottom is sandy in 11 to 12 fathoms and the holding ground is reported fair.

A safe anchorage for vessels having to leave the buoy and/or to await suitable weather to moor to the buoy is recommended in Golden Bay. Distance is approximately 90 miles S.W. of Waverley, the approaches are clear and lights on Farewell Spit and Separation Point, of 15 miles and 12 miles respectively, most reliable. The holding ground is good and depth of water 15 to 16 fathoms.
WEATHER: The Harbour and SBM is exposed to the West through South to South-east. The swell conditions caused by Westerly and South-westerly weather are considerably reduced by the shallow ground to the Westward, but Southerly swell rolls in unhindered. Very sudden changes of weather are experienced on this coast with the rapid movements Eastward of cold fronts over the Tasman Sea.
PRATIQUE: Vessels arriving at Waverley on consecutive voyages Japan/New Zealand should radio to "Health, Wanganui" 24 hours before arrival Waverley, advising number of passengers and crew, and "All Healthy" in which case Pratique is automatically granted without any acknowledgement to the vessel.

If a vessel has any suspected diseases on board this information should be stated in the radio message to "Health, Wanganui". The Port Health Doctor will then attend on board on arrival for inspection of all International Health Certificates, and carry out vaccinations as required.

The doctor will supply, on arrival, N.Z. Maritime Declaration of Health Form H-Q2 for completion by the vessel. It is customary to procure an additional form for the following voyage to facilitate easy inward health clearance thereafter.
RADIO: There is no Government Radio Station at Waverley. Vessels trading to Waverley use ZLD Auckland Radio, ZDB Awarua Radio, or ZLW Wellington Radio.

Advice of Arrival: Vessels to radio ETA to "Wavemarine" Waverley on departure from last port, and 48 hours and 24 hours prior to arrival.

In addition to the vessel's ETA to "Wavemarine", arrival draft and details of the hatch loading plans should be advised.

Vessels equipped with VHF should listen in on Channel 14 (156.7 MHz) when in range of Waverley Harbour.

Base Station is at the Shiploading Pump Station, on board the tender vessel *Otapiri* and a remote control unit is fitted in the main administration building. Mobile units are also employed during the loading operation.

Base Station Channels are:

Channel 6 – 156.3 MHz	Intership.
Channel 9 – 156.45 MHz	Private and Loading.
Channel 14 – 156.7 MHz	Port Operations/Docking.
Channel 16 – 156.8 MHz	Safety.

Meteorological information for shipping is broadcast by the Coast Radio Stations ZLW, ZLB and ZLD at frequent scheduled times. ZLW broadcast by radio telegraph on 417.5 kHz, ZLD 487.5 kHz.
BERTHING: Vessels will be secured to the S.B.M. by a single 21 in. nylon hawser with chafing chains at each end.

When the carrier approaches the buoy, the tender vessel "Otapiri" will receive a 3 in. messenger rope from the carrier. "Otapiri" will then shackle the messenger to a 10 in. polypropylene pick-up rope. The carrier heaves the messenger and pick-up rope inboard until the chafing chain passes through the bull nose.

Dedicated ships secure the chafing chain to a quick release hook fitted for this purpose.

Ships without a quick release hook should advise "Wavemarine" by radio on departure from last port.

It is essential that two or three good heaving lines be available with the messenger rope in the first instance to pass to the tender vessel, to avoid any delays in mooring.
HOSES: The floating loading hose string comprises eleven 35 ft. lengths of hose, with the shipboard end supported by a steel buoy. After mooring is completed the tender vessel will tow around the floating hose underneath the pick-up derrick, plumbed over the manifold connection on the port side of the foredeck abaft the forecastle head. The pick-up buoy of the hose-end will have shackled into it a 30 ft. length of polypropylene, of 7 in. circumference, to which is attached a 100 ft. length of 2.25 in. circumference for passing to the vessel. The 7 in. polyprop is hove up to the rail and hooked into the vessel's cargo hook. The flange elbow with attached camlock coupling is then hove up and connected to the vessel's deck hose manifold. The hose is presently supported on the ship's derrick and stayed fore and aft after coupling up has been completed.

It has been estimated that after the iron sand slurry has been loaded, and the excess water decanted from the surface of the cargo, that the bulk density of the iron sand should be 190 lb. to the cubic foot.

BERTH DESCRIPTION: The single point mooring buoy of 11 m. diameter is moored in 57 ft. at low water, 1.5 miles from the shore in position 39° 51′ 02.2″ S. 174° 35′ 52.14″ E.

LOADING: All compartments to be loaded should be clean with all drain sumps and double bottom butterworth hole filter places clear.

If weather conditions permit, the vessel should arrive with the after hatch lid of each hold open to facilitate visual inspections of the hold decanting eductors.

FRESH WATER/FUEL: Not available.

REPAIRS: Emergency repairs can be arranged, including radio.

MEDICAL: The Port Health Doctor is a qualified doctor of medicine and can be acquainted of any medical problems affecting any crew member; the necessary arrangements can then be made for treatment aboard or ashore, as convenient.

CUSTOMS ALLOWANCES: See "Auckland".

CONSULS: There are no consular representatives at the port of Waverley.

REPATRIATION: Lists of personal effects, accounts of wages, etc., of any vessels' personnel left ashore, hospitalised or deserted, should be available to Agent as early as possible.

A letter of authorisation is required if the Agent is to provide accommodation, meals, medical attention, transportation or travel expenses, and/or cash advances for account of vessel.

SHORE LEAVE: Shore leave for vessel's personnel is not practicable.

GENERAL: No Port Authority personnel remain on the vessel during the loading period at the SPM Buoy.

The Marine Department require that all vessels, while moored, "shall at all times be kept in readiness to proceed to sea".

The Pilot who is the loading master for Waipipi Iron Sands Limited will accept the Notice of Readiness for the vessel, and acts as Agent for all the vessel's requirements. It is customary for the Pilot/Loading Master/Agent to be accommodated on board the vessel during her period on the buoy.

Whistle signals in an emergency may be used for medical, police, etc., as required.

Storing is accomplished by helicopter, cost of which is borne by the ship.

No garbage is to be thrown over the side of the vessel whilst she is on the New Zealand coast and moored to the buoy. Garbage must be retained on board and not dumped until the vessel is one day's steaming clear of the Northern point of New Zealand.

AUTHORITY: Waipipi Iron Sands Limited, Beach Road, P.O. Box 137, Waverley, New Zealand. *Tel:* 390. *Telex:* NZ 3284. *Cables:* Wavemarine. *Contact:* V. S. Wein, General Manager. *Tel:* 386 (Private).

WELLINGTON: 41.17 S. 174.46 E. (See Plan Book)

PORT LIMITS: All the waters comprised within the harbour of Wellington having as their outward seaward limit the arc of a circle running from the landward boundary of the foreshore at Fitzroy Bay and thence into Cook Strait and thence to the landward boundary of the foreshore at Island Bay, such arc being an arc of a circle 3 nautical miles radius and having its centre at a point on the Outer Rock of Barrett Reef in the harbour of Wellington.

DOCUMENTS:

Port Health Authorities:

Maritime Declaration of Health (1 copy).

Crew List, stating name, rank, sex and nationality (1 copy).

Current International Derat Exemption Certificate.

Customs Authorities: See "Auckland".

Agent:

Crew List, stating name, rank-rating, sex and nationality (1 copy).

Freight Manifest (3 copies).

Note: Manifests should be airmailed by loading port to arrive in New Zealand at least 1 week prior to vessel's arrival.

Stowage Plan, airmailed same as Manifest (2 copies).

Agricultural Authorities:

Agriculture Quarantine Service – Ship's Meat Locker Regulations 1966. A Master's Certificate is required if there are pets on board.

PILOTAGE: The Pilotage District is the same as for Port Limits. Pilotage is compulsory within that area of the pilotage district being Northward of a line drawn 090° from Gordon Point through the rear leading light on Hope Shoal to the Eastern shore, for all merchant vessels over 100 n.r.t., except vessels whose Masters have Pilotage Exemption Certificates and to which exemption applies.

Pilot Boarding Place: Pilots will normally embark West of the line of the leads in a position 232° × 2.1 miles from Pencarrow Light. In heavy Southerly weather it may be necessary to embark or disembark the Pilot in smoother water at or near the compulsory limit. The Master will be advised by the Pilot if this is necessary.

Pilotage by Leading or Signalling: Extract Wellington Harbour Board Bylaws: No. 14(c):

"In that part and area of the Pilotage District in and for which pilotage is optional it is hereby determined and declared that leading of ships by or signalling to ships from a pilot boat under the conduct of a Pilot shall be pilotage which may be requested by a Master as a service for his ship either inwards or outwards if the circumstances are such that by reason of adverse sea or weather conditions the Pilot available to pilot the ship decides that in the optional pilotage area he is not or will not be able with safety to board or disembark from the vessel requesting his services".

Notice for Requiring Pilot: The pilot vessel is not normally on station outside the entrance, and all vessels requiring a Pilot are required to give 24 hours' notice by radio of their expected time of arrival at the pilot boarding place. A second notice confirming or amending the first is to be sent 4 hours before the expected time of arrival. In the event of a ship expecting to arrive earlier than the time given in her 24 hour message, the 4 hour message shall be sent 4 hours before the new expected time of arrival. Should, however, the vessel expect to arrive later than her 24 hour message, her 4 hour message shall be sent 4 hours before her expected time of arrival given in her original 24 hour message. All communications, which should be addressed "Harbour Master, Wellington", will be attended to at all hours of the day or night.

Should it not be possible to give previous notice of arrival it may be up to 1.5 hours after a vessel is sighted by the signal station on Beacon Hill before a Pilot may board the vessel.

ANCHORAGES: Depth in anchorages 15 m. to 22 m.

Fairway: Within portion of harbour lying inshore and to Westward of a line drawn from Post Point, the Easternmost point of Oriental Bay, in a 349° direction, to Kaiwharawhara Shore.

Inner Anchorage: Within portion of harbour lying between the Eastern boundary of Fairway Anchorage and a line drawn from Point Jerningham, in a 359° direction to Kaiwharawhara Shore.

Outer Anchorage: Within portion of harbour Eastward of Inner Anchorage.

Note: Vessels anchoring in Outer Anchorage should take up a position well up towards Kaiwharawhara.

Explosives Anchorage: Within that portion of the harbour contained in a circle with a radius of 0.3 nautical miles having as its centre a point bearing 000° true, distant 1.45 nautical miles from Point Halswell Light Beacon or in such other place within the Harbour of Wellington as may be specified by the Harbour Master on any occasion having regard to weather conditions.

Caution: It is advisable when anchoring (especially when in light draft) to drop 2 anchors in an Easterly and Westerly direction, veering from 75 to 90 fathoms of cable, as it frequently blows hard with heavy gusts of wind off the high land that surrounds the harbour, causing a vessel to sheer about. In very strong winds a ship will lie much easier by having both anchors down. A strict visual and radio watch should be kept.

Prohibited Anchorages: Anchorage is prohibited within 152 m. of the jetty situated on the N.E. side of Somes Island.

RESTRICTIONS: *Entering and Leaving:* All vessels may enter or depart during the hours of darkness. Berthing is carried out at any state of the tide.

Max. draft permissible: 9.75 m. (32 ft.) plus the height of the tide in moderate conditions. Also see "Berthing".

Max. length of vessel – No limit. Max. beam of vessel – No limit.

Tides: Tidal range: Neaps 0.92 m., Springs 1.04 m. Tidal stream in Entrance Channel: Neaps 0.5 knots, Springs 0.5 knots, average. Max. 0.8 knots.

Currents caused by wind may increase or decrease the effect of tidal streams, according to direction.

HEALTH: *Health Officer's Examination Ground:* Within that portion of the harbour contained in a circle with a radius of 0.2 nautical miles, having as its centre a point bearing 347° (true), distant 0.56 nautical miles from Point Jerningham Light Beacon or in such other place within the Harbour of Wellington as may be specified by the Harbour Master on any occasion having regard to weather conditions. Until Patique has been granted vessels arriving from ports beyond New Zealand must not proceed inwards beyond the limits of this area.

BERTHING:

Wharf	*Berth No.*	*Length of wharf* (m.)	*Maximum length of vessel* (m.)	*Maximum draft* (m.)
Overseas Passenger Terminal	2	238	213	8.8
Overseas Passenger Terminal	3	259	244	9.3
Taranaki Street Breastwork	—	233	152	7.5
Taranaki Street Terminal	—	152	152	7.5
Queen's Wharf	1	224	No limit	7.5 and 6.2
Queen's Wharf	2	93	85	5.2
†Queen's Wharf	3	92	85	4.9
Queen's Wharf	4	114	122	7.1
†Queen's Wharf	5	79	76	4.6
¶Waterloo Quay	2	114	107	5.6 and 6.1
¶Waterloo Quay	3	107	122	5.3
Inter Island Wharf	2	150	143	7.3
Inter Island Wharf	3	213	183	8.2 and 7.3
Glasgow Wharf	1	84	67	4.9
Glasgow Wharf	2	218	213	8.5
Glasgow Wharf	3	240	229	8.4 and 7.1
King's Wharf	1	91	67	3.6
King's Wharf	2	251	244	8.5 and 6.8
Thorndon Container Wharf	1	292	No limit	11.1
Thorndon Container Wharf	2	292	No limit	10.6
Aotea Quay	1-6	1,122	No limit	8.8 to 9.3
Rail/Road Ferry Terminal	1	143	142	8.1
Rail/Road Ferry Terminal	2	147	142	9.1
Rail/Road Ferry Terminal Jetty	—	68	61	6.2
Seaview Wharf	—	250	No limit	11.2
Petone Wharf	—	111	107	1.3 to 3.3
Point Howard Wharf	—	163	182	9.5 to 10.1
Burnham Wharf	—	257	No lmit	9.3 and 6.5
Miramar East Wharf	—	140	122	5.5
Miramar West Wharf	—	165	170	9.5 and 8.1

†Berths for tugs and pilot launches

¶Berths for fishing vessels

SPECIALISED CARGO HANDLING FACILITIES:

Container Facilities: The container handling complex at Thorndon comprises 2 berths each 292 m. in length and back-up area (including facilities) amounting to 24.3 hectares. 3 quayside container cranes are available.

Storage of containers: 5,500 (two high) with power outlets for up to 1,376 refrigerated containers.

The Harbour Board owns and operates the container handling cranes and the complex is operated by an independent operator (Container Terminals Ltd.) using straddle carriers.

Roll-on/Roll-off Facilities: There are Roll-on/Roll-off facilities at the Rail Road Ferry Terminal (2 berths) used exclusively by the N.Z. Railways Corporation, which operates a Cook Strait Ferry Service, and at the Taranaki Street Terminal where the Union Steam Ship Co. of N.Z. Ltd., operates a Trans-Tasman and Coastal Service.

Bulk Cargo Facilities: At Aotea Quay there are bulk cement handling facilities operated exclusively by the Golden Bay Cement Co. Ltd. Other bulk handling facilities include those for petroleum products at tanker terminals, bulk bitumen at Burnham Wharf, bulk molasses and wheat at Aotea Quay and bulk tallow at city wharves.

STEVEDORES: Available. No particular ETA advice required except as normally sent by Master.

RADIO:

Radio Telephone: Beacon Hill Signal Station is equipped with both medium frequency and VHF radiotelephones.

VHF: Call sign is "Wellington Harbour Radio". Calling, Channel 16. Working, Channel 12, 13 and 14. A continuous watch is maintained on Channel 16.

Medium Frequency: Call sign is "Wellington Harbour Radio", calling frequency only 2182 kHz, working frequency 2012 kHz. A continuous watch is maintained on 2182 kHz.

Port Operations: Vessels equipped with radiotelephone when within harbour limits must maintain a listening watch on 2182 kHz or Channel 16 to ensure immediate contact if required. Only calls for information on harbour conditions, berthing, or safety of navigation will be accepted.

Vessels are notified of their berth by radio telephone (VHF or MF) or morse lamp from Beacon Hill (viz Wellington Harbour Radio). On occasions this may be confirmed by Pipitea Tower.

Signal Stations: Beacon Hill: A signal station (Wellington Harbour Radio) is situated on Beacon Hill, about 2 miles N.N.W. of Pencarrow Head. A continuous visual watch is maintained.

Pipitea Tower: A yellow and black chequered signal tower is situated 355 m. Westward of the S.E. corner of the Thorndon Container Terminal. This tower is not manned continuously.

TUGS: The Harbour Master may direct the Master of any vessel to engage the services of a tug or tugs and also direct the manner in which the tug or tugs shall be used. 3×2,700 b.h.p. Voith Schneider tugs, guaranteed bollard pull 28 tons, speed 12 knots, all 3 tugs are equipped for fire fighting duties and 2 for salvage duties. The tugs are owned by Wellington Harbour Board.

MEDICAL: 4 hours' notice is sufficient for Agent to mobilise the service concerned. For minor attention it is sufficient that Master advises Agent on arrival. Hospital facilities are available.

TANKERS: Tankers can berth alongside Seaview, Point Howard, Aotea Quay, Burnham and Miramar Wharves. See also "Restrictions-Entering and Leaving".

Side hose connections are to be used at all wharves. Boiler and galley fires are not required to be extinguished.

Discharge of oil cargoes is permitted during hours of darkness. During the hours of darkness pipe-lines must not be disconnected without first obtaining permission of the Harbour Master. All precautions must be taken to avoid oil pollution of the harbour. Scuppers must be plugged and absorbent material kept at hand in case of spillage.

Point Howard Wharf and Seaview Wharf are exposed to the weather and in the event of a Southerly gale special attention must be paid to the vessel's moorings.

Details of industry pipe-lines serving these wharves are as follows:

Seaview Wharf:	1×150 mm. pipe 3×100 mm. pipes 2×350 mm. pipes 1×250 mm. pipe 1×200 mm. pipe
Miramar Wharf:	1×200 mm. pipe
Point Howard Wharf:	1×250 mm. pipe (chemical products)
Aotea Quay:	1×300 mm. pipe 1×200 mm. pipe
Burnham Wharf:	1×250 mm. pipe 1×250 mm. pipe (bitumen)

FRESH WATER: Available at all wharves.

DRY DOCKS: *Floating Dock:* A floating dock capable of lifting a vessel of 17,000 tons displacement is available. The principal dimensions of the dock are:

Length over platforms	178.00 m.
Length over keel blocks	162.46 m.
Overall width	35.81 m.
Clear width between fenders	26.52 m.
Depth of water over keel blocks	7.62 m.
Height of side walls	10.67 m.

The dock is fitted with fire and wash-down services, air compressors, telephone and electrical plant for lighting and power distribution. A 5 tonne electrical portal travelling crane of the mast type is installed on the Eastern wall of the dock.

Four guide dolphins are situated at the entrance of the floating dock to facilitate the working of vessels entering or leaving.

Slipway: Patent slipway available to accommodate vessels up to 250 tons.

Floating Crane: Harbour Board has an 80 ton revolving and self-propelling floating steam crane of sufficient radius and height to serve the largest vessels when floating in light draft conditions.

DENSITY: Water salinity varies but at approaches to berths it is between 32 and 36 parts per thousand.

FUEL: Lubricating oil: Available at all wharves.

Boiler fuel oil and diesel oil: Available at Burnham, Miramar, Aotea Quay, Seaview and Point Howard Wharves.

REPAIRS: Major repairs can be undertaken. There are machine shops and foundries. Diving equipment and the services of trained divers are available for underwater inspections and repairs. Marine Radio and Radar Services, licensed compass adjusters.

SURVEYORS: Marine surveyors from the Marine Division, Ministry of Transport and Lloyd's Surveyors are available.

GANGWAY/DECK WATCHMEN: Shore watchmen available.

OPENING/CLOSING HATCHES: Work normally carried out by stevedores. Only time crew are to open and close top hatches is when advised by stevedore. In case of hydraulic hatches in tweendecks, crew are to open and close, not stevedores.

CERTIFICATES: Customs Department require Ship's Register on arrival. Marine Department require:

- Load Line Certificate.
- Tonnage Certificate.
- Certificate of Registry.
- Convention Certificates, i.e.
  - Safety Equipment Certificate.
  - Safety Radio-telegraphy Certificate.
  - Safety Construction Certificate.
  - Exemption Certificate (if any).
  - If passenger ship, Passenger and Safety Certificate.
  - Cargo Gear Register.
  - Certificates for all Cargo Gear, i.e. runners, spans, shackles, swivels, etc.
  - Derat Certificate.
  - Oil Pollution Certificate.

CUSTOMS ALLOWANCES: See "Auckland".

IDENTIFICATION CARDS: Not required.

CONSULS: Argentina, Australia, Austria, Belgium, Great Britain, Canada, Chile, People's Republic of China, Czechoslovakia, Denmark, Ecuador, Egypt, Finland, Fiji, France, Federal Republic of Germany, Greece, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Republic of Korea, Malaysia, Mexico, Netherlands, Norway, Papua New Guinea, Peru, Philippines, Poland, Portugal, Romania, Singapore, South Africa, Sweden, Switzerland, Thailand, U.S.A., U.S.S.R., Western Samoa, and Yugoslavia.

REPATRIATION: Facilities are available for crew changes and arranging any necessary repatriations.

AIRPORT: Situated 7 km. S.E. of City Wharves by road; regular internal and Australian services.

TIME: Local time is GMT plus 12 hours in Winter, (Daylight saving of one extra hour during Summer months).

HOLIDAYS: New Year's Day (1st January); 2nd January; Wellington Province Anniversary Day (22nd January); Waterside Workers Union Picnic Day (generally observed on Monday of the week 29th January falls); Waitangi Day, (6th February); Good Friday; Easter Monday; Anzac Day (25th April); Sovereign's Birthday Observance (first Monday in June); Labour Day (fourth Monday in October); Christmas Day (25th December); Boxing Day (26th December).

Note: Pilotage services available public holidays. Container vessels at container berths work on public holidays.

POLICE/AMBULANCE/FIRE:

	Routine	*Emergency*
Wharf Police	723-000	Dial 111 and ask operator for service required
Ambulance	722-999	
Fire Brigade	850-188	

TELEPHONES: Vessels may be connected to telephone system at city berths by application to the Harbour Master.

SHORE LEAVE: Crew members are allowed shore leave at all times.

SERVICES: *Shore Electricity:* Available at all berths. Type AC, voltage 230 or 400, 3 phase 60 amps (or more on request) 50 Hertz.

GENERAL: For nautical and more detailed information on New Zealand ports, refer to the following publications which are kept up to date by the issue of Notices to Mariners in respect of nautical matters:

New Zealand Port Information Manual
New Zealand Pilot
New Zealand Nautical Almanac

These publications and up to date charts are available from New Zealand Government Shipping Offices.

Garbage: Garbage may only be disposed of in accordance with strict Government regulations and must be arranged with the Harbour Board. Special cans will be supplied as required and collected regularly by truck. Cans must not be placed on the wharves.

DEVELOPMENTS:

Kaiwharawhara: Future reclamation planned.

AUTHORITY: Wellington Harbour Board, Queen's Wharf, Wellington. P.O.Box 893. *Tel:* 728-899. *Telex:* NZ 30504. *Cables:* "Harbord Wellington". *Contact:* T. J. Blewman, Secretary.

WESTPORT: 41.45 S. 171.40 E.

LOCATION: The port is situated at the mouth of the Buller River and has a bar at its entrance. Two breakwaters approximately 155.5 m. apart form the entrance and farther within are 3 tide training walls.

Passage over the bar is considered impracticable when the river is in flood or during a N.W.'ly gale. In bad weather the sea breaks heavily over the outer part of the bar.

The town of Westport and wharves are situated on the Eastern bank of the Buller River, about 1.5 miles within the entrance.

PILOTAGE: Pilotage is compulsory. All vessels should notify the Harbour Master of their intention to enter at least 12 hours before arrival. No vessel must attempt to enter the port until authority to do so is received from the signal station. In the event of a Pilot being unable to board, a vessel will be led through the bar.

Pilotage District: All the waters comprised within the harbour of Westport having as their outward seaward limit the arc of a circle running from the landward boundary of the foreshore Westward of the Western Breakwater and thence into the Tasman Sea and thence to the landward boundary of the foreshore Eastward of the Eastern Breakwater such arc being the arc of a circle 1.5 nautical miles radius having as its centre the signal station on the Western Breakwater.

Signal Station: The signal station is in a square concrete building with a white lattice signal mast and is situated about 1.5 cables within the head of the Western Breakwater. It has a large white diamond painted on the seaward wall and white horizontal bands on the East and West walls. Vessels can communicate by radiotelephone, VHF, or by morse signalling lamp. Call sign: "Westport Harbour Radio".

Visual watches are maintained for pilotage purposes and for all vessels entering and leaving harbour (at the Harbour Office situated at the lower end of the Crane Wharf).

APPROACHES: *Cape Foulwind:* A light flashing every 12 seconds, visible 21 miles (nominal range 14), is exhibited at an elevation of 70.40 m. (231 ft.) from a white concrete tower situated on Cape Foulwind, a headland about 6 miles Westward of the harbour entrance. The light is obscured when bearing more than 242°.

Main Harbour Light: A light flashing every 5 seconds (flash 1 sec.), visible 8 miles, is exhibited at an elevation of 19.8 m. (65 ft.) from a white lattice tower on the signal station situated about 1.5 cables from the head of the Western breakwater.

Caution: At night, care must be taken not to mistake the powerful electric lights of a coal industry situated about 9 miles Eastward of Westport, or the lights of cement works about 3 miles Westward of Westport, for the harbour lights.

Directional Light: A fixed red, white, and green directional light is exhibited from the same tower as the Main Harbour Light. This light is redirected to suit the best water over the bar. The arcs of the sectors from East to West are red 12°, white 2°, and green 6°, and their nominal ranges 12, 16, and 12 miles respectively.

Radio Masts: Red fixed obstruction lights are shown from radio masts situated about 8 cables S.S.W. and 5.5 miles Westward of the main harbour light.

Landmark: Three chimney stacks, each 60.7 m. (199 ft.) in height, close together with two adjacent silos, are situated about 4 miles Westward of Westport. They are of white appearance and are conspicuous from seaward.

Entering: When within 2 miles of the harbour entrance or on the Harbour Master's advice, steer to bring the main leading beacons on the Eastern Full-tide Wall in line. On entering between the breakwaters, the inner leads will be in line at approximately abeam of the signal station and course should be altered to starboard to maintain the inner leads in line. Pass the white flashing light on the Western Half-tide Wall on starboard hand. These inner leads direct ships between the Western Half-tide Wall and the Eastern Full-tide Wall. When abeam of the fixed light on the Eastern Full-tide Wall, this light will change colour to fixed green; on observing this change steer for the wharves.

Note: Wharf working lights close to the line of the outer leads will be extinguished as and when required for vessels which have notified their intention to enter.

Floodlights: Two powerful floodlights are exhibited from two lattice-work towers, 29 m. (95 ft.) in height, situated in the railway yards at Westport. These lights, about 3.75 cables apart, are in line bearing 163°. They must not be used for navigational purposes.

ANCHORAGES: Vessels can anchor in Buller Bay in depths of from 18.3 m. to 23.7 m. (10 to 13 fathoms). A recommended berth is in a position 2 miles Northward of the signal station.

Caution: There is poor holding ground Eastward of the entrance to the harbour and in the S.W. part of Buller Bay. Vessels should be prepared to proceed to sea directly there are signs of wind rising from the West to North quarter, as anchorage in Buller Bay is unsafe during N.W. gales. A falling barometer and lightning Westward and S.W. of Westport are almost certain indications of deteriorating weather conditions.

Quarantine Anchorage: In the open roadstead within the navigable area enclosed in a circle having a radius of 2 nautical miles from the signal station, or such other position within the aforesaid area as may be indicated by the Westport Harbour Authorities in accordance with existing local weather conditions.

RESTRICTIONS: All vessels, may, depending on weather, bar and draft conditions, enter, berth, unberth, and depart during the hours of darkness. Vessels berth and unberth at or near HW.

MAX. SIZE: LOA 131.7 m. Beam – no restriction.

Bar Depths: Depths over the sand and shingle bar vary between 1.8 m. (6 ft.) and 3.6 m. (12 ft.) at chart datum.

River Depths: There is ample depth in the river for all vessels which can cross the bar. Vessels up to 106.7 m. (350 ft.) in length can turn in the harbour at HW neaps provided they do not draw more than 4.9 m. (16 ft.) forward; vessels up to 131.7 m. (432 ft.) in length can use the port, but there is only swinging room if drawing not more than 3.2 m. (10 ft. 6 in.) forward.

VHF: Westport Harbour Radio and tug on VHF.

RADAR: A radar station, having a maximum range of 15 miles, operated from the signal station by the Westport Harbour Authoritie (Position of scanner Lat. 41° 43′ 54″ S., Long. 172° 35′ 15″ E.). Maste of vessels equipped with VHF or radiotelephone may request from th Harbour Master's Office, during conditions of restricted visibilit particulars of their bearing and range as shown on the radar screen. Th information given will be in the following form:

According to my observation you are bearing ………… degre ………… miles from the Westport Radar Station.

TUGS: A single-screw tug of 329 h.p., the "James O'Brien", is equippe with VHF and radiotelephone. The tug can be made available for use short notice. The radio call sign is ZMYT; watches are kept only whe the tug is in use.

BERTHING: *Crane Wharf:* A quay-type wharf 670.6 m. (2,200 ft.) length of wooden construction which has 243.8 m. (800 ft.) of useab berthage with depths of 5.8 m. (19 ft.) below chart datum alongside. Th bottom is shingle.

The deck level is 7.2 m. (23 ft. 6 in.) above chart datum.

Merchandise Wharf: A quay-type wharf of wooden construction situate about 243.8 m. (800 ft.) farther Southward to Crane Wharf. Maximu berthage is 152.4 m. (500 ft.) with depths alongside of from 4.3 m. 5.2 m. (14 ft. to 17 ft.) below chart datum. The bottom is shingle.

The deck level is 6.5 m. (21 ft. 3 in.) above chart datum.

In the inlet to the lagoon, from the seaward end of the Crane Wha there is a wharf used for Harbour Authority vessels.

CRANES: 3×15.2 tonne (15 ton) movable electric cranes with 18.3 (60 ft.) outreach are situated on Crane Wharf.

MEDICAL: Local hospital for minor ailments. Base hospital Greymouth. Dentist locally available.

FRESH WATER: Available.

FUEL: Diesel and lub oil available in limited quantities in drums.

REPAIRS: One foundry and one machine shop for minor repairs.

SURVEYORS: Stationed at Greymouth and Christchurch.

GENERAL: *Berthing Signals:* These are given from the signal statio Vessels drawing more than 2.4 m. (8 ft.) must inform the signal static on arrival of their draft.

Tidal and Bar Information: All information regarding bar conditions ar tides is communicated by radiotelephone, VHF, or morse signallir lamp.

Tides: Heights of tides above chart datum are:

MHWS	3.26 m. (10.7 ft.)	MHWN	2.53 m. (8.3 ft.)
MLWS	0.27 m. (0.9 ft.)	MLWN	0.88 m. (2.9 ft.)
Range	2.99 m. (9.8 ft.)	Range	1.65 m. (5.4 ft.)

A tidal gauge, situated in the Harbour Master's Office, show automatically the depth above chart datum.

For information concerning heights and times of high and low wat see New Zealand Nautical Almanac.

Tidal Streams and Currents: Outside the bar the flood stream se Westward and the ebb stream Eastward. The rate of the tidal stream least about the time of HW and during 1 to 2 hours before and after HW

During river freshes, which may occur at any time of the year, the rive current in the harbour attains a rate of from 8 to 10 knots.

The tides rise highest with Easterly winds and lowest with Wester winds.

Currents set across the bar according to the direction and force of th wind. Strong winds from the West and S.W. cause Easterly sets wi rates of up to 6 knots; Easterly winds cause sets to the Westward wi less effect.

Berthing Light: A small quick-flashing amber light is placed on the ber at night to indicate where the vessel's bridge should be place alongside.

Garbage: Refuse must be kept on board. No arrangement is made for i collection.

Communications: Westport is on the railway. There are connections Christchurch and Greymouth. There are also bus services to Greymout and Nelson daily (Sundays excepted). The domestic airport lies South the port.

Customs: Westport is a Customs sub-port controlled by the Collector Customs, Greymouth.

REGULATIONS: The Master of any vessel which touches the bar whe outward bound shall inform the Harbour Master by radiotelephone, VH or morse signalling lamp after he is clear of the bar. This will b acknowledged by the Harbour Master or the watchkeeper on duty at th Harbour Master's Office.

AUTHORITY: Ministry of Transport – Marine Division, P.O.Box 12 Palmerston Street, Westport, New Zealand. *Tel:* (0289) 7248. *Contac* Captain C. S. Baugh, Harbour Master.

WHANGAREI: 35.45 S. 174.21 E. (See Plan Book

PORT LIMITS: From a point due South of the summit of Sentinel Roc thence to a point 5 cables due East of Sentinel Rock, thence to a poi 5 cables due East of Bream Head, thence to a point 5 cables due East Tutukaka Head, thence to Tutukaka Head.

DOCUMENTS:

3 copies Passenger List.
3 copies Crew List.
1 copy Search List (Form 2).
1 copy Stores List (Form 3).
1 copy Prohibited and Restricted Immigrants.
1 copy Poisons List.
1 copy Animals and Birds List.
1 copy List of Firearms (not cargo).
1 copy Arrival Manifest (Form 1).
1 copy List showing the gross tonnage of cargo for discharge New Zealand.

PILOTAGE: Compulsory. Pilots embark on the line of leads 141°/321° at the seaward extremity of Pilotage District, i.e. up to 1.5 miles South-Eastward of the Fairway Buoy. In heavy Easterly weather, it may be necessary for pilot vessel to lead ship in through the Outer Channel and embark in the lee of Frenchman Island.

Pilots are available all hours day and night subject to prior minimum notice of 24 hours being received during normal week-day working hours. Second notice confirming or amending first to be sent 4 hours before expected arrival. The Pilot supplies a set of Harbour bylaws. Pratique, Agriculture and Customs clearance is normally undertaken on arrival at berth.

Pilot boat is equipped with VHF. Working frequency is Channel 11, but Channels 6, 8 and 16 are also fitted. Pilot vessel *Manaia* – call sign ZM3830; pilot vessel *Ngapuhi* – call sign ZM2146. Range approximately 20 miles. *Manaia* painted blue, varnished housing, yellow funnel: *Ngapuhi* painted blue, white housing, yellow capping rails.

Pilot ladder with manropes required.

ANCHORAGE: Is situated 5 to 10 cables Eastward of the Fairway Buoy in 12 to 20 fathoms (21.63 m. – 36.57 m.) of water in the section enclosed by the Fairway Buoy bearing 225° T to 315° T. Holding ground good in fine sand, but exposed to Easterly weather.

Harbour Anchorage. At Marsden Point, 2 cables West of Passage Island light, in 5 fathoms (9.14 m.) of water. Max. draft 7.31 m. (24 ft.). Good holding ground, sand and shell bottom.

RESTRICTIONS: Controlling depth in entrance channel 15.24 m. (50 ft.) MLWS. Depth in upper harbour channel maintained at 8.53 m. (28 ft.) MLWS.

MAX. SIZE: Marsden Point: Oil Refinery dolphin berths, LOA no restriction, draft 15.24 m. (50 ft.), Cargo berth LOA 182.88 m. (600 ft.), draft 8.52 m. (28 ft.)

Port Whangarei: LOA 182.88 m. (600 ft.), draft 9.44 m. (31 ft.).

HEALTH: All vessels examined by Health Officer on arrival.

RADIO/VHF: The station is Marsden Point, Whangarei. Call sign "Whangarei Harbour Radio" Continuous 24-hour watch is maintained on VHF Channels 16 and 11, range 40 miles. Medium frequency, call sign ZLKW, listening watch on 2182 KHz., working frequency range 200 miles. Station transmits on 2012, 2045, 2162 and 4139 kHz.

RADAR: Tugs and pilot boat *Manaia* fitted with radar.

TUGS: Available. Tugs equipped with VHF. Tugs usually secure to vessels entering in vicinity of Frenchman Island. Numbers of tugs normally used are: 1 tug for vessels up to 25,000 d.w.t., 2 tugs for vessels up to 45,000 d.w.t., 3 tugs for vessels up to 65,000 d.w.t. 4 tugs over 65,000 d.w.t. Unberthing: 1 tug is normally required for vessels under 25,000 d.w.t., and 2 tugs for all other vessels, subject weather conditions.

BERTHING: Marsden Point Oil Berths (2) – operated by the New Zealand Refining Company, Marsden Point. LOA no restriction. Max. draft 15.24 m. N.Z. Refining Co. places restrictions on vessels in excess of 125,000 tonnes displacement.

Marsden Point Cargo Berth (1), LOA 182.88 m., max. draft 8.53 m.

Port Whangarei berths (3), LOA 182.88 m., max. draft 9.44 m.

Portland berths (2), bulk cement berth; LOA 82.89 m., max. draft 5.63 m. cargo berth; LOA 106.68 m., max. draft 5.63 m.

SPECIALISED CARGO HANDLING FACILITIES: Portland bulk cement loading jetty.

Port Whangarei, 7 portable hoppers for use discharge of bulk cargoes. Cargon system of butter loading.

STEVEDORES: Confirmation of arrival time 4 hours before ETA or revised ETA, whichever is earlier is required. Notice of arrival during a week-end or public holiday must be given not later than 1400 hrs. on the last working day preceding arrival.

MEDICAL: Hospital and dental services available.

TANKERS: *ETA Advice:*

96 hours before arrival:

(a) ETA to Agent, and if more than one grade, state discharge preference.

Whether the vessel can discharge two grades simultaneously if required.

Best estimate of discharge and ballasting times including details of any mechanical defect which may hinder the discharge.

Quantity and origin of "slops" on board.

Amount of free water in the "slops" and stowage of same, i.e. in a special "slop" tank or commingled with the cargo. If the latter is the case, the total contents of the tank is also required.

Amount of water in the main cargo.

Also arrival draft fore and aft.

(b) Request for permission to lie alongside for repairs if so required.

(c) Bunker, fresh water, stores, medical, repairs, and all other requirements.

(d) If ship's first visit then advise full details of manifold connections.

24 hours before arrival:

Confirmation of ETA to Agents and Harbour Master. If ETA is Saturday, Sunday or a Monday Public Holiday, notice must be given before 1400 hrs. on previous Friday. Also, advise that vessel is oil tight.

4 hours before arrival:

Final ETA to Harbour Master, confirming or amending 24 hour advice. Also see "Radio/VHF".

Berthing: Marsden Point Oil Berths – Vessels up to approximately 30,000 d.w.t. are berthed at any state of the tide and swing bow to tide before berthing.

Vessels in excess of 30,000 d.w.t. are berthed at high and low slack water only. Max. draft LW 13.1 m.; max. draft HW 15.24 m. Ship's gangway should be positioned 6.09 m. upstream of hose connections prior to arrival.

The Pilot will board approximately 1.5 hours before high or low water for vessels in excess of 30,000 d.w.t.

Restrictions: Due to limited operating height of hose gantry at both berths, vessels must at all time restrict the vertical distance from top of manifold to waterline to 15 m. or less. Experience has shown that, as a general rule, vessels with a moulded depths of 17.4 m. (57 ft.) or less, can comply, whereas vessels over this moulded depth would have to work ballast and cargo concurrently, either permanent ballast only, or permanent ballast and cargo tank ballast. On some ships, the latter may necessitate suspension of discharge to avoid cargo contamination.

During the ballasting operation a safe trim must be maintained and every care must be taken to ensure that no oil escapes into the waters of the harbour.

Tankers over 100,000 tonnes/s.d.w. will be requested to stop discharging if the wind reaches 40 knots from any direction. Hoses will be disconnected and the Master will be requested to load additional ballast if safe and practical to do so. If the wind increases to 45 knots 2 tugs will be in attendance under jurisdiction of a Pilot if the vessel has less than 50 per cent of summer deadweight aboard.

When 60 knot winds are expected, 2 tugs will be used irrespective of deadweight.

Loading/Discharging: Slop reception facilities are available. Diameter of load/dischage line 10 in. ASA.

Regulations: Vessels must be oil tight. Prior to entering an inspection is made by the pilot boat to confirm this.

All deck scuppers must be plugged and made oil tight.

Masters must ensure that all doors, openings, etc. are kept closed during discharge/loading or ballasting operations.

All tank openings, sighting and ullage ports must at all times be fitted with antiflash gauze covers.

DENSITY: 1025.

FRESH WATER: At Northland Harbour Board wharves by hose 20 t.p.h. at 40 cents per 1,000 litres. Refinery jetties limited and arranged by Refinery.

FUEL: Available from berths (viscosities 3,500 secs. Red 1. 1,500 secs. Red 1 and MDO).

OPENING/CLOSING HATCHES: Usually carried out by stevedores.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or 0.5 lb. tobacco or 50 cigars permitted each crew member. Wine/spirit: one opened bottle wine/spirits for each crew member.

A New Zealand flag ship arriving from overseas may have a concessionary allowance.

IDENTIFICATION CARDS: Refinery passes are required when berthed at the Refinery wharves. Passes are brought on board by Agent.

CONSULS: None.

REPAIRS: Most repairs undertaken.

DRY DOCKS: None. 1 slipway capable of receiving vessels up to 1,500 tonnes/d.w.

REPATRIATION: Facilities exist.

TIME: GMT plus 12 hours. Daylight saving time observed from early October to early March.

HOLIDAYS: The following are recognised holidays: New Year's Day; 2nd January; Anniversary Day (usually last week in January); Waitangi Day (6th February); Good Friday; Easter Monday; Anzac Day (25th April); Sovereign's Birthday (first Monday in June); Labour Day (fourth Monday in October); Christmas Day; Boxing Day; Waterside Workers Picnic Day.

POLICE/AMBULANCE/FIRE: Telephone 111 for emergency, and ask for service required.

EMERGENCY CO-ORDINATION CENTRE: Contact any harbour radio station or police station.

TELEPHONES: Available at wharves.

SHORE LEAVE: Allowed.

FIRE PRECAUTIONS: Fire fighting tug on duty 24 hours a day. Tankers to have fire wires fore and aft.

SURVEYORS: 1. Cargo Inspectors are readily available and are employed by ships' Agents, usually in the form of a reputable Master Mariner working for the Harbour Authority.

2. Surveyors for Lloyd's, American Bureau, Bureau Veritas etc., should be arranged through the offices of the surveyor required in Auckland.

AIRPORT: 12.8 km. (8 miles) from Port Whangarei; regular daily internal flights.

SERVICES: Tank cleaning, radio and radar repairs. Compass adjuster from Auckland.

SHIP SUPPLY SERVICE: Harbour Board craft will assist with transfer of crew and stores in an emergency.

REGULATIONS: Issued by Pilot on arrival.

DELAYS: Tidal delays and berth vacancies.

AUTHORITY: Northland Harbour Board, Private Bag, Whangarei, New Zealand. *Tel:* 87-099. *Telex:* NZ 2955. *Cables:* Harbour Whangarei. *Contact:* P. N. McKellar, Deputy General Manager and Harbour Superintendent.

Nicaragua

GENERAL

DOCUMENTS: *Consular Documents:*

The Consular Law of October 26, 1904, amended by a decree of September 5, 1952, provides that "Nicaraguan Consuls must, regardless of the flag of the vessel, visa, certify or draw up in conformity with the Master; the crew list and the passenger list, or the "no passengers" declaration, or changes in any of the lists, when for that voyage, the lists were visaed, certified or formulated by the Nicaraguan Consul, or where there is none, by the Consul of a friendly country".

There is much confusion in enforcing of the Consular Regulations, since often consular clearances in ports of loading that are not the last port of call before reaching Nicaragua are complete, that is with visa of all forms, not merely the manifest. Visa of the original bill of lading by the shipper is also required, a procedure that is later monitored by Customs through the import policy. The fine for failure to comply with this requirement is 100% of the FOB value of the goods.

Required Prior to Arrival:

Arrival Notice:

48 hours before the vessel's arrival in the Pilot Waiting Area, the Shipping Agency must submit to the Port Authority the form entitled "Arrival Notice" in 5 copies.

24 hours before, the ship's arrival is reported in writing to the Captain of the Port, Customs, Maritime Health and the Delegation of the Agricultural Ministry.

Information on Cargo for the Port:

The arrival notice is accompanied by a stowage plan, if any, plus a breakdown of the cargo to be unloaded. At least the total tonnage of cargo to be handled is to be reported.

Additional Requirements:

If the ship carries export cargo, that fact must be reported to the Port Authority 2 to 6 days in advance, according to the amount of cargo, so that the ship can tie-up at the pier most suitable for unloading its cargo.

On Arrival:

Type of Document	*Number and Distribution of Documents*						
Basic Forms	*Captain of Port*	*Customs*	*Security*	*Maritime Health*	*Agriculture*	*Port Authority*	*Total*
General Declaration	1	3	–	–	1	2	7
Cargo Manifest	2	2	–	–	1	2	7
Crew List	1	1	1	1	1	1	6
Passenger List	1	2	–	–	1	1	5
Ship's Stores List	1	2	1	–	1	1	6
Crew Effects Declaration	–	1(a)	1(a)	–	–	1(a)	3(a)
Maritime Health Declaration	–	–	–	1	–	–	1
Mail List	–	–	–	–	–	–	1
Additional Documents:							
Clearance from Last Port(b)(c)	1	1	–	–	–	–	2
Consular Manifests	–	3(d)	–	–	–	–	3(d)
Crew List(c)	–	1	–	–	–	–	1
"No Passenger" Declaration	1	2	–	–	1	1	5
List of Passengers or "No Passengers" Declaration(c)	–	1	–	–	–	–	1
Manifest of Missing or Extra Packages	5	–	–	–	–	2	7
Sets of Bills of Lading	–	–	–	–	–	1	1
Dangerous Cargo List	–	–	–	–	–	2	2
List of Cargo to be Loaded	–	–	–	–	–	–	1
Stowage Plan of Cargo to be Loaded	–	–	–	–	–	2	2
Tally Books	1	7	–	–	1	7	16

(a) This form is not required, but if it is available, carry 3 copies.
(b) Customs checks the clearance from the last port and remits it to the Captain of the Port.
(c) With consular visa.
(d) 3 visaed manifests for each port of loading are required, but 1 visaed and 2 without visa are acceptable.

Other Requirements:

In the port of Corinto, the following documents must be submitted:

Basic Forms: Cargo Manifest, 20 copies, 3 of which must be visaed. Crew List, 8 copies, 3 of which must be visaed. Passenger List, 8 copies, 3 of which must be visaed. Ship's Stores List, 8 copies, 3 of which must be visaed. Maritime Health Declaration, 2 copies.

Additional Documents: Clearance from the last port, certified. Ballast Manifest, 12 copies, 5 of which must be visaed. Voyage Memorandum, 10 copies. Bill of Lading, 3 sets for each port of loading. Stowage Plan, 3 copies. List of Cargo Distribution, 4 copies. Tally Books, 10 copies.

Prior to Departure:

Before clearance, a report is submitted to Customs on export cargo, so that it can be compared with the export policies.

The vessel's clearance permit is requested from the Captain of the Port, which requires payment of 84 cordobas for this service, and for the official visit.

Customs considers the ship cleared and countersigns the clearance permit when the following payment vouchers have been submitted to it:

Mayor's Fee	300.00 cordobas
Municipal Welfare Fund	300.00 cordobas
Maritime Health Official Visit	56.00 cordobas
Agriculture Official Visit	30.00 cordobas
Customs Administration Fees	14.00 cordobas for unloading 21.00 cordobas for loading and unloading or, loading only

Certification that the vessel's documents were approved by the Nicaraguan Consul at the last port of call before arrival in the country. If there is no consulate, the Port Captain's declaration is accepted. If the documents are visaed and stamped "fees to be collected in Nicaragua", the fees amount to 207 cordobas (US$31), which are divided as follows:

Clearance Permit	US$ 9.00
Manifest	US$10.00
Crew List	US$ 6.00
Passenger List	US$ 6.00

If consular visa is not obtained, Customs charges twice the rates mentioned.

If the cargo comes from other ports and is bound for Nicaragua, only a visaed manifest is required, which costs US$10. Failure to comply with this requirement is punishable by a fine of US$50 for each manifest.

PIRACY: Report dated 1982.

"Our vessel was off the East coast of Nicaragua at Lat. 14° 10′ N., Long. 83° 07′ W., on the morning of January 31st. The main engine was stopped for minor repairs when an armed motor boat with seven men and no identification attacked our ship putting hundreds of bullet holes in the bridge, funnel and elsewhere but not injuring any crew. The attack commenced at 1115 hrs. and was broken off at 1145 hrs., when the vessel got back under way".

CORINTO: 12.30 N. 87.11 W. (See Plan Book)

ARRIVED SHIP: Vessels are considered as arrived only after having negotiated the entrance channel and are safely inside the proper harbour; vessels at the Pilot station are not considered as having arrived.

DOCUMENTS: (Also see "General" before first port).

For the official clearance, the following authorities will board the vessel:

The Port Captain
The Public Health Delegate
The Delegate from the Ministry of Agriculture and Livestock
A representative of the Port Authority
Two Customs Officers
A representative of the steamship agency.

Each vessel must present documents legalised by the Nicaraguan Consul from the port of origin of the cargo as well as from the last port of call before Corinto. The documents required are the following:

	Legalised	Non-legalised
From the port of origin of the cargo:		
Cargo Manifest	3	18
Bills of Lading	—	2
Tally Books	—	14
From the last port of call:		
Manifest	3	18
Clearance	1	—
Crew List	—	6
Passenger List	3	6
Stores List	—	6
Health Declaration	—	6
Voyage Memorandum	3	10

In the cases where there is no Nicaraguan Consul at the port of origin of the cargo or at the last port of call, the documents may be legalised by the Consul of a friendly nation or can be certified by some competent authority of the port certifying that there is no Nicaraguan Consul in said port. When a vessel brings cargo for Corinto from the last port of call, then it must also bring both sets of documents mentioned above, the manifest in the second group being replaced by the Cargo Manifest.

Once these documents are satisfactorily received, the vessel is declared in "Free Pratique" or rather, officially cleared and numbered by the Port Authorities.

Vessels are cleared, numbered and attended in their successive order of arrival with the exception of vessels loading perishable cargo (bananas). In Corinto there is no preferential treatment given to these vessels since they operate on their own special berth.

To clear the vessel for sailing, the only requirement is the presentation of a Customs Solvency Certificate and the Clearance for the next port of call extended by the Port Captain.

Customs: Customs assigns 2 Customs Guards to each vessel docked or anchored, the vessel being under the obligation to provide these guards 3 meals daily. Besides meals, guards on anchored vessels must be given a cabin since watches are made in shifts.

PILOTAGE: The Port Authority must receive in writing from Agents advice regarding vessel's ETA 72 hours prior to vessel's arrival and a confirmation 12 hours prior to arrival. All advice must be sent through Agents by cable via Balboa or Limon Station. Pilotage is compulsory on all vessels exceeding 500 g.r.t or exceeding 7 ft. draft. Pilot boards 1 mile off Isla de El Cardon.

ANCHORAGES: The anchorage inside the harbour can accommodate 6 – 10 vessels, depending on size and draft.

RESTRICTIONS: The port is open 24 hours; however, entry is restricted in accordance with tide and vessel's draft. Access channel and turning basin dredged to 13.0 m. – 13.2 m. Due allowance should be made for heavy swell if necessary. Speed limit 8 knots in Corinto Bay, and 5 knots in the vicinity of berths or other craft.

MAX. SIZE: Maximum permissible length 650 ft., 80 ft. beam. Draft controlled by depth of water in approach channel and state of swell (typical draft 10 m.).

RADIO: ETA cables are generally routed via NBA Balboa Station or TIM Limon Station, and received through Tropical Radio & Telegraph or All America Cable.

VHF: The Port Authority has a VHF station to communicate directly with all vessels nearing the port.

HEALTH: After entry and vessel has berthed or anchored, 3 long blasts are given requesting Free Pratique; after these blasts the Authorities board the vessel together with the Agent's representative and proceed with distribution of the documentation. In the event of any suspected disease on board, the action to be taken will be given by the Representative of the Health Department. There is no automatic Pratique even though vessel is proceeding from another port in the same country.

Although the port is open 24 hours, vessels arriving after 2100 hrs. are not boarded by the Authorities until 0600 hrs. the following day, unless the vessel will berth and commence operations immediately. This being the case, Free Pratique is granted regardless of the hour. This arrangement is restricted to 0100 hrs. as gangs are not allowed to commence operations after that hour.

TUGS: Compulsory for berthing and unberthing. The tug joins vessel just after vessel passes Buoy No. 7. Tug's lines are generally used: however, at times ship's lines are used. There is no charge for use of tug's lines. 1 tug of 2,182 h.p. (30 ton bollard pull), 1 tug of 1,100 h.p. and one launch of 167 h.p. available.

BERTHING: There is no preferential berthing, and berthing is indicated by the Port Authority. Vessels are attended to in the manner "first come first served".

Berthing facilities are as follows:

1. Container Pier, length 240 m. Depth alongside 13 m. (Designed for 25,000 d.w.t. vessels).
2. Concrete Pier (Container Pier extension of this Pier). Length 370 m. (2 berths). Depth alongside 12.1 m.
3. A special berth with conveyor-belt system for loading of carton boxes such as bananas, frozen meat, as well as the handling of inbound and outbound cargoes such as fertiliser and cottonseed meal. Bananas can be loaded into 4 hatches at one time at a rate of 4,500 boxes per hatch per hour. Depth alongside at LW is 11.2 m.

Port Authority equipment includes fork-lift trucks with capacity up to 7,000 lb., 6 tractors with 5,000 lb. capacity, 95 trailers with 4,000 lb. capacity, 10 trailers of 40 tons for 20 ft. and 40 ft. containers, 3 front end loaders for 20 ft. and 40 ft. containers and 3 barges (2×60 ton and 1×80 ton capacity).

CRANES: Two mobile cranes, capacity 30 tons and 25 tons and 1×40 ton crane for containers.

STEVEDORES: *Working Hours:* The Port gives service 24 hours a day under the following schedule:

From 0700 to 1200
From 1300 to 1800
From 1900 to 2400
From 0001 to 0600

Each shift is of 8 hours. Meal hours are from 0600 to 0700; 1200 to 1300 and 1800 to 1900. The first shift commences at 0700 and is completed at 1600; the second shift is from 1600 to 2330. When a vessel announces with sufficient notice its intention to work during night-time continuously until the following day then a second shift does not work a full 8 hours but is relieved at 2200 hrs. and completely new gang takes over from 2200 until 0600 the following day.

When a vessel does not wish to work during the entire night, it may do two things: (1) Suspend all operations at 2330; (2) Work with the gangs of the second shift up until 0230 hrs. of the following day after which time the gangs of said second shift cannot continue working. Normally gangs are called at the following fixed official hours: 0630, 0930, 1230, 1530, 1830 and 2130, however on special occasions and with the approval of the syndicate, it is possible to integrate gangs at any hour of the day.

Average Cargo Handling Rates:

Exports:	Tonnes per gang hour
Cottonseed meal in bulk	48
Raw sugar in bulk-dumped by hand	48
Cottonseed in bags	45
Coffee in bags	45
Sesame seed in bags	45
Cotton in bales of 250 kilos each	40
Frozen meat	28
Lumber	12

Imports:	Tonnes per gang hour
Drums	40
Wire rolls	40
Bulk cargo (discharged by clam-shells)	35
Fertilisers – insecticides in bags	30
Vehicles (by weight)	30
Paper rolls	27
Wheat (by aspirators)	20
Oats (by aspirators)	15
General cargo	15

TANKERS: The only tankers which frequent this port are those of Esso Standard and Parcel Tankers. There is one tanker berth; depth alongside 12.2 m. and each of the above-mentioned companies have their particular load/discharge lines.

The Esso tankers only discharge oils, the Parcel tankers discharge solvents and occasionally others load cotton seed oil.

There are 9 lines belonging to the consignees ranging from 4 in. to 12 in.

Loading rates:		Tonnes per hour
Molasses	12 in. pipe	140
Bunker or asphalt	8 in. pipe	409
Aviation gasoline	6 in. pipe	237
Hexane	6 in. pipe	240
Aromatics	6 in. pipe	203
Chemical Products	6 in. pipe	210
Turpentine	6 in. pipe	125
Coconut oil	4 in. pipe	60
Lubricants	4 in. pipe	45
Tallow	4 in. pipe	35

MEDICAL: There are several doctors in the port and most of the Agents have a particular doctor to their service. Hospital facilities are also available. No particular inoculation is required.

DENSITY: (Average) Rainy season 1014, dry season 1020.

FRESH WATER: Fresh water is available and is supplied from connections on the pier, by gravity, at a rate of approximately 10 t.p.h.

FUEL: Corinto cannot supply bunkers. In emergencies small quantities of bunkers and/or diesel oil may be supplied by private firms.

GANGWAY/DECK WATCHMEN: After entering, 2 Custom Officers are placed on board all vessels and their meals must be furnished on board.

OPENING/CLOSING HATCHES: If vessel is equipped with regular hatch boards or pontoons, stevedores open and close hatches as well as swing out booms. However, if covers are of the McGregor type or mechanical, the crew has to do the job.

CERTIFICATES: Ship's Registry Certificate is required from ships making their first call at the port.

CUSTOMS ALLOWANCES: There is no limit on tobacco allowance to be held out of Bond but crew members are only permitted to take 2 packages of 20 cigarettes ashore. Crew not permitted to take any alcohol ashore. Anyone trying to do so will be subjected to heavy fine through Master of their vessel.

IDENTIFICATION CARDS: Crew members allowed ashore if they wish to do so after being previously identified by means of a seaman's book or a passport. This document is kept by the Customs Guard at the foot of the gangway and given back to the crew member when he returns to the vessel.

CONSULS: In Corinto:

Colombia
Costa Rica
Denmark
Ecuador
El Salvador
France
Honduras
Mexico
Sweden
Venezuela

REPAIRS: There are no shipyards; no large scale repairs available. Small motors and generators may be repaired in shops in Corinto and Chinandega.

AIRPORT: The airport at Managua is approximately 150 km. from the port and served by regular airlines with daily flights.

REPATRIATION: Can be effected.

SERVICES: *Provisions:* There are several ship chandlers operating in the port who are in position to supply vessels with provisions necessary and required by stewards, engine or deck departments.

Laundry: The same ship chandlers can take care of any amount of laundry. Drycleaning can be done by these suppliers in the nearby city of Chinandega.

Cleaning: There are special gangs of labourers in the port who work on vessels doing odd jobs such as cleaning, chipping, painting, etc.

Transportation: For anchored vessels, there is a very efficient ship-to-shore launch service.

There is taxi service available for transportation by day or night to any part of the country. There is an air-conditioned express bus service between Corinto and Managua under the following schedule:

From Corinto	0400 hrs.	arrive Managua	0645 hrs.
From Corinto	0600 hrs.	arrive Managua	0845 hrs.
From Managua	1445 hrs.	arrive Corinto	1800 hrs.
From Managua	1745 hrs.	arrive Corinto	2030 hrs.

Hotels: There is a small third-class hostel in the port, however in the city of Chinandega there is the Hotel Cosiguina with all the modern conveniences and facilities desired. Chinandega is connected to Corinto by a modern highway.

TIME: Local time is Central Standard Time, GMT minus 6 hours. There are no alterations during the year.

HOLIDAYS: Official holidays are: January 1st (New Year's Day); Holy Thursday; Good Friday; May 1st (Labour Day); May 3rd (Local Patron Saint's Day); July 14th (Annullment Chamorro-Bryan Treaty); September 14th (San Jacinto Independence Battle Day); September 15th (Independence Day); October 12th (Columbus Day); December 25th (Christmas Day).

In accordance with regulations, no work will be done on these days, however, from experience, with the only exception of May 1st (Labour Day), all other holidays are workable under special arrangement.

POLICE/AMBULANCE/FIRE: Police 269; Ambulance 313; Fire 421.

SHORE LEAVE: Allowed. See "Identification Cards".

DEVELOPMENTS: Projected installation of bulk handling plant, additional warehouses and extension of pier by 1,500 ft. with 2 transit sheds, new administration building, stevedores shed, equipment shed and repair shops; re-designing of range lights and buoys and increasing amount of same, also area for Industrial Park.

A 40 ton container handling crane, 70,000 lb. capacity front loader, tractors and trailers have been ordered for the container berth.

SHIPMASTER'S REPORT: August 1981.

Documents:

12 copies Ship's Particulars.
3 Legalised and 7 without Visa Ballast Manifests.
3 Legalised and 7 without Visa Passenger Lists.
10 copies Negative List.
3 Legalised and 7 without Visa Crew Lists.
3 copies Crew Declaration List.
3 Legalised and 7 without Visa Store Lists.
7 copies Mail List.
Vaccination List.
Health Declaration Form.

Pilotage: Compulsory. Pilot boards by No. 2 Buoy. Notice required 72 hours.

Anchorage: 3 miles West of Isla Cardon Lt. Depth at LW is 48 ft.

Max. Size: LOA 700 ft., max. draft 28 ft., mean tidal range 8 ft.

Restrictions: Vessels may enter and leave anytime, day or night.

Radio: Limon Radio.

VHF: Port Authority on Channel 16.

Tugs: None available at time of visit.

Nicaragua

GENERAL

DOCUMENTS: *Consular Documents:*

The Consular Law of October 26, 1904, amended by a decree of September 5, 1952, provides that "Nicaraguan Consuls must, regardless of the flag of the vessel, visa, certify or draw up in conformity with the Master; the crew list and the passenger list, or the "no passengers" declaration, or changes in any of the lists, when for that voyage, the lists were visaed, certified or formulated by the Nicaraguan Consul, or where there is none, by the Consul of a friendly country".

There is much confusion in enforcing of the Consular Regulations, since often consular clearances in ports of loading that are not the last port of call before reaching Nicaragua are complete, that is with visa of all forms, not merely the manifest. Visa of the original bill of lading by the shipper is also required, a procedure that is later monitored by Customs through the import policy. The fine for failure to comply with this requirement is 100% of the FOB value of the goods.

Required Prior to Arrival:

Arrival Notice:

48 hours before the vessel's arrival in the Pilot Waiting Area, the Shipping Agency must submit to the Port Authority the form entitled "Arrival Notice" in 5 copies.

24 hours before, the ship's arrival is reported in writing to the Captain of the Port, Customs, Maritime Health and the Delegation of the Agricultural Ministry.

Information on Cargo for the Port:

The arrival notice is accompanied by a stowage plan, if any, plus a breakdown of the cargo to be unloaded. At least the total tonnage of cargo to be handled is to be reported.

Additional Requirements:

If the ship carries export cargo, that fact must be reported to the Port Authority 2 to 6 days in advance, according to the amount of cargo, so that the ship can tie-up at the pier most suitable for unloading its cargo.

On Arrival:

Type of Document	*Number and Distribution of Documents*						
Basic Forms	*Captain of Port*	*Customs*	*Security*	*Maritime Health*	*Agriculture*	*Port Authority*	*Total*
General Declaration	1	3	–	–	1	2	7
Cargo Manifest	2	2	–	–	1	2	7
Crew List	1	1	1	1	1	1	6
Passenger List	1	2	–	–	1	1	5
Ship's Stores List	1	2	1	–	1	1	6
Crew Effects Declaration	–	1(a)	1(a)	–	–	1(a)	3(a)
Maritime Health Declaration	–	–	–	1	–	–	1
Mail List	–	–	–	–	–	–	1
Additional Documents:							
Clearance from Last Port(b)(c)	1	1	–	–	–	–	2
Consular Manifests	–	3(d)	–	–	–	–	3(d)
Crew List(c)	–	1	–	–	–	–	1
"No Passenger" Declaration	1	2	–	–	1	1	5
List of Passengers or "No Passengers" Declaration(c)	–	1	–	–	–	–	1
Manifest of Missing or Extra Packages	5	–	–	–	–	2	7
Sets of Bills of Lading	–	–	–	–	–	1	1
Dangerous Cargo List	–	–	–	–	–	2	2
List of Cargo to be Loaded	–	–	–	–	–	–	1
Stowage Plan of Cargo to be Loaded	–	–	–	–	–	2	2
Tally Books	1	7	–	–	1	7	16

(a) This form is not required, but if it is available, carry 3 copies.
(b) Customs checks the clearance from the last port and remits it to the Captain of the Port.
(c) With consular visa.
(d) 3 visaed manifests for each port of loading are required, but 1 visaed and 2 without visa are acceptable.

Other Requirements:

In the port of Corinto, the following documents must be submitted:

Basic Forms: Cargo Manifest, 20 copies, 3 of which must be visaed. Crew List, 8 copies, 3 of which must be visaed. Passenger List, 8 copies, 3 of which must be visaed. Ship's Stores List, 8 copies, 3 of which must be visaed. Maritime Health Declaration, 2 copies.

Additional Documents: Clearance from the last port, certified. Ballast Manifest, 12 copies, 5 of which must be visaed. Voyage Memorandum, 10 copies. Bill of Lading, 3 sets for each port of loading. Stowage Plan, 3 copies. List of Cargo Distribution, 4 copies. Tally Books, 10 copies.

Prior to Departure:

Before clearance, a report is submitted to Customs on export cargo, so that it can be compared with the export policies.

The vessel's clearance permit is requested from the Captain of the Port, which requires payment of 84 cordobas for this service, and for the official visit.

Customs considers the ship cleared and countersigns the clearance permit when the following payment vouchers have been submitted to it:

Mayor's Fee	300.00 cordobas
Municipal Welfare Fund	300.00 cordobas
Maritime Health Official Visit	56.00 cordobas
Agriculture Official Visit	30.00 cordobas
Customs Administration Fees	14.00 cordobas for unloading 21.00 cordobas for loading and unloading or, loading only

Certification that the vessel's documents were approved by the Nicaraguan Consul at the last port of call before arrival in the country. If there is no consulate, the Port Captain's declaration is accepted. If the documents are visaed and stamped "fees to be collected in Nicaragua", the fees amount to 207 cordobas (US$31), which are divided as follows:

Clearance Permit	US$ 9.00
Manifest	US$10.00
Crew List	US$ 6.00
Passenger List	US$ 6.00

If consular visa is not obtained, Customs charges twice the rates mentioned.

If the cargo comes from other ports and is bound for Nicaragua, only a visaed manifest is required, which costs US$10. Failure to comply with this requirement is punishable by a fine of US$50 for each manifest.

PIRACY: Report dated 1982.

"Our vessel was off the East coast of Nicaragua at Lat. 14° 10′ N., Long. 83° 07′ W., on the morning of January 31st. The main engine was stopped for minor repairs when an armed motor boat with seven men and no identification attacked our ship putting hundreds of bullet holes in the bridge, funnel and elsewhere but not injuring any crew. The attack commenced at 1115 hrs. and was broken off at 1145 hrs., when the vessel got back under way".

CORINTO: 12.30 N. 87.11 W. (See Plan Book)

ARRIVED SHIP: Vessels are considered as arrived only after having negotiated the entrance channel and are safely inside the proper harbour; vessels at the Pilot station are not considered as having arrived.

DOCUMENTS: (Also see "General" before first port).

For the official clearance, the following authorities will board the vessel:

The Port Captain
The Public Health Delegate
The Delegate from the Ministry of Agriculture and Livestock
A representative of the Port Authority
Two Customs Officers
A representative of the steamship agency.

Each vessel must present documents legalised by the Nicaraguan Consul from the port of origin of the cargo as well as from the last port of call before Corinto. The documents required are the following:

	Legalised	Non-legalised
From the port of origin of the cargo:		
Cargo Manifest	3	18
Bills of Lading	—	2
Tally Books	—	14
From the last port of call:		
Manifest	3	18
Clearance	1	—
Crew List	—	6
Passenger List	3	6
Stores List	—	6
Health Declaration	1	—
Voyage Memorandum	3	10

In the cases where there is no Nicaraguan Consul at the port of origin of the cargo or at the last port of call, the documents may be legalised by the Consul of a friendly nation or can be certified by some competent authority of the port certifying that there is no Nicaraguan Consul in said port. When a vessel brings cargo for Corinto from the last port of call, then it must also bring both sets of documents mentioned above, the manifest in the second group being replaced by the Cargo Manifest.

Once these documents are satisfactorily received, the vessel is declared in "Free Pratique" or rather, officially cleared and numbered by the Port Authorities.

Vessels are cleared, numbered and attended in their successive order of arrival with the exception of vessels loading perishable cargo (bananas). In Corinto there is no preferential treatment given to these vessels since they operate on their own special berth.

To clear the vessel for sailing, the only requirement is the presentation of a Customs Solvency Certificate and the Clearance for the next port of call extended by the Port Captain.

Customs: Customs assigns 2 Customs Guards to each vessel docked or anchored, the vessel being under the obligation to provide these guards 3 meals daily. Besides meals, guards on anchored vessels must be given a cabin since watches are made in shifts.

PILOTAGE: The Port Authority must receive in writing from Agents advice regarding vessel's ETA 72 hours prior to vessel's arrival and a confirmation 12 hours prior to arrival. All advice must be sent through Agents by cable via Balboa or Limon Station. Pilotage is compulsory on all vessels exceeding 500 g.r.t or exceeding 7 ft. draft. Pilot boards 1 mile off Isla de El Cardon.

ANCHORAGES: The anchorage inside the harbour can accommodate 6 – 10 vessels, depending on size and draft.

RESTRICTIONS: The port is open 24 hours; however, entry is restricted in accordance with tide and vessel's draft. Access channel and turning basin dredged to 13.0 m. – 13.2 m. Due allowance should be made for heavy swell if necessary. Speed limit 8 knots in Corinto Bay, and 5 knots in the vicinity of berths or other craft.

MAX. SIZE: Maximum permissible length 650 ft., 80 ft. beam. Draft controlled by depth of water in approach channel and state of swell (typical draft 10 m.).

RADIO: ETA cables are generally routed via NBA Balboa Station or TIM Limon Station, and received through Tropical Radio & Telegraph or All America Cable.

VHF: The Port Authority has a VHF station to communicate directly with all vessels nearing the port.

HEALTH: After entry and vessel has berthed or anchored, 3 long blasts are given requesting Free Pratique; after these blasts the Authorities board the vessel together with the Agent's representative and proceed with distribution of the documentation. In the event of any suspected disease on board, the action to be taken will be given by the Representative of the Health Department. There is no automatic Pratique even though vessel is proceeding from another port in the same country.

Although the port is open 24 hours, vessels arriving after 2100 hrs. are not boarded by the Authorities until 0600 hrs. the following day, unless the vessel will berth and commence operations immediately. This being the case, Free Pratique is granted regardless of the hour. This arrangement is restricted to 0100 hrs. as gangs are not allowed to commence operations after that hour.

TUGS: Compulsory for berthing and unberthing. The tug joins vessel just after vessel passes Buoy No. 7. Tug's lines are generally used: however, at times ship's lines are used. There is no charge for use of tug's lines. 1 tug of 2,182 h.p. (30 ton bollard pull), 1 tug of 1,100 h.p. and one launch of 167 h.p. available.

BERTHING: There is no preferential berthing, and berthing is indicated by the Port Authority. Vessels are attended to in the manner "first come first served".

Berthing facilities are as follows:

1. Container Pier, length 240 m. Depth alongside 13 m. (Designed for 25,000 d.w.t. vessels).
2. Concrete Pier (Container Pier extension of this Pier). Length 370 m. (2 berths). Depth alongside 12.1 m.
3. A special berth with conveyor-belt system for loading of carton boxes such as bananas, frozen meat, as well as the handling of inbound and outbound cargoes such as fertiliser and cottonseed meal. Bananas can be loaded into 4 hatches at one time at a rate of 4,500 boxes per hatch per hour. Depth alongside at LW is 11.2 m.

Port Authority equipment includes fork-lift trucks with capacity up to 7,000 lb., 6 tractors with 5,000 lb. capacity, 95 trailers with 4,000 lb. capacity, 10 trailers of 40 tons for 20 ft. and 40 ft. containers, 3 front end loaders for 20 ft. and 40 ft. containers and 3 barges (2×60 ton and 1×80 ton capacity).

CRANES: Two mobile cranes, capacity 30 tons and 25 tons and 1×40 ton crane for containers.

STEVEDORES: *Working Hours:* The Port gives service 24 hours a day under the following schedule:

From 0700 to 1200
From 1300 to 1800
From 1900 to 2400
From 0001 to 0600

Each shift is of 8 hours. Meal hours are from 0600 to 0700; 1200 to 1300 and 1800 to 1900. The first shift commences at 0700 and is completed at 1600; the second shift is from 1600 to 2330. When a vessel announces with sufficient notice its intention to work during night-time continuously until the following day then a second shift does not work a full 8 hours but is relieved at 2200 hrs. and completely new gang takes over from 2200 until 0600 the following day.

When a vessel does not wish to work during the entire night, it may do two things: (1) Suspend all operations at 2330; (2) Work with the gangs of the second shift up until 0230 hrs. of the following day after which time the gangs of said second shift cannot continue working. Normally gangs are called at the following fixed official hours: 0630, 0930, 1230, 1530, 1830 and 2130, however on special occasions and with the approval of the syndicate, it is possible to integrate gangs at any hour of the day.

Average Cargo Handling Rates: Exports:	Tonnes per gang hour
Cottonseed meal in bulk	48
Raw sugar in bulk-dumped by hand	48
Cottonseed in bags	45
Coffee in bags	45
Sesame seed in bags	45
Cotton in bales of 250 kilos each	40
Frozen meat	28
Lumber	12

Imports:	Tonnes per gang hour
Drums	40
Wire rolls	40
Bulk cargo (discharged by clam-shells)	35
Fertilisers – insecticides in bags	30
Vehicles (by weight)	30
Paper rolls	27
Wheat (by aspirators)	20
Oats (by aspirators)	15
General cargo	15

TANKERS: The only tankers which frequent this port are those of Esso Standard and Parcel Tankers. There is one tanker berth; depth alongside 12.2 m. and each of the above-mentioned companies have their particular load/discharge lines.

The Esso tankers only discharge oils, the Parcel tankers discharge solvents and occasionally others load cotton seed oil.

There are 9 lines belonging to the consignees ranging from 4 in. to 12 in.

Loading rates:		Tonnes per hour
Molasses	12 in. pipe	140
Bunker or asphalt	8 in. pipe	409
Aviation gasoline	6 in. pipe	237
Hexane	6 in. pipe	240
Aromatics	6 in. pipe	203
Chemical Products	6 in. pipe	210
Turpentine	6 in. pipe	125
Coconut oil	4 in. pipe	60
Lubricants	4 in. pipe	45
Tallow	4 in. pipe	35

MEDICAL: There are several doctors in the port and most of the Agents have a particular doctor to their service. Hospital facilities are also available. No particular inoculation is required.

DENSITY: (Average) Rainy season 1014, dry season 1020.

FRESH WATER: Fresh water is available and is supplied from connections on the pier, by gravity, at a rate of approximately 10 t.p.h.

FUEL: Corinto cannot supply bunkers. In emergencies small quantities of bunkers and/or diesel oil may be supplied by private firms.

GANGWAY/DECK WATCHMEN: After entering, 2 Custom Officers are placed on board all vessels and their meals must be furnished on board.

OPENING/CLOSING HATCHES: If vessel is equipped with regular hatch boards or pontoons, stevedores open and close hatches as well as swing out booms. However, if covers are of the McGregor type or mechanical, the crew has to do the job.

CERTIFICATES: Ship's Registry Certificate is required from ships making their first call at the port.

CUSTOMS ALLOWANCES: There is no limit on tobacco allowance to be held out of Bond but crew members are only permitted to take 2 packages of 20 cigarettes ashore. Crew not permitted to take any alcohol ashore. Anyone trying to do so will be subjected to heavy fine through Master of their vessel.

IDENTIFICATION CARDS: Crew members allowed ashore if they wish to do so after being previously identified by means of a seaman's book or a passport. This document is kept by the Customs Guard at the foot of the gangway and given back to the crew member when he returns to the vessel.

CONSULS: In Corinto:

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REPAIRS: There are no shipyards; no large scale repairs available. Small motors and generators may be repaired in shops in Corinto and Chinandega.

AIRPORT: The airport at Managua is approximately 150 km. from the port and served by regular airlines with daily flights.

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HOLIDAYS: Official holidays are: January 1st (New Year's Day); Holy Thursday; Good Friday; May 1st (Labour Day); May 3rd (Local Patron Saint's Day); July 14th (Annullment Chamorro-Bryan Treaty); September 14th (San Jacinto Independence Battle Day); September 15th (Independence Day); October 12th (Columbus Day); December 25th (Christmas Day).

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POLICE/AMBULANCE/FIRE: Police 269; Ambulance 313; Fire 421.

SHORE LEAVE: Allowed. See "Identification Cards".

DEVELOPMENTS: Projected installation of bulk handling plant, additional warehouses and extension of pier by 1,500 ft. with 2 transit sheds, new administration building, stevedores shed, equipment shed and repair shops; re-designing of range lights and buoys and increasing amount of same, also area for Industrial Park.

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Pilotage: Compulsory. Pilot boards by No. 2 Buoy. Notice required 72 hours.

Anchorage: 3 miles West of Isla Cardon Lt. Depth at LW is 48 ft.

Max. Size: LOA 700 ft., max. draft 28 ft., mean tidal range 8 ft.

Restrictions: Vessels may enter and leave anytime, day or night.

Radio: Limon Radio.

VHF: Port Authority on Channel 16.

Tugs: None available at time of visit.

Berthing: Vessel berthed at Banana Pier (Lat. 12° 28.6′ N., Long. 87° 10.2′ W.). Distance from entrance to berth is 4 miles. Max. LOA 600 ft., max. draft 25 ft. Least depth in Channel to berth 26 ft. 6 in. Density 1016.

Services: The following are available: Fresh water ($2.00 per cu.m.), fresh provisions, Lloyd's Surveyor, telex, diesel oil (expensive), doctor and hospital.

General: On arrival at the Pilot Station the Pilot will board accompanied by a member of the Quarantine Department who will insist on going into every cabin, Store Room, etc., armed with a pressurised can of insecticide for fumigation purposes. This will take approximately 1 hour. The vessel is not allowed in the channel until the Quarantine fumigation formalities are over so it is advisable to approach the Pilotage Station No. 2 Buoy at right angles to the channel.

Once safely secured and if in convenient position to lower the accommodation ladder it must be lowered or B.O.T. gangway rigged to one of the dolphins. Ensure that the Board of Trade ladder is in good condition and the wheels running free as the vessel tends to roll a little at the Banana Pier if there is any swell outside. No official or stevedore labour will climb a pilot ladder so it is essential to have one of these access ready on arrival.

The Doctor will board and after medical clearance the Port Officials (Army) and Immigration Officer will board. They will browse through the various documents whilst Immigration Officer will check all Passports, I.D. Cards, etc., and eventually he will physically check that everyone is on board. These Officials and Immigration Officer do not speak a word of English, the Agent is conversant in English and is most helpful.

On completion of Immigration formalities 2 Ship's Officers are required to escort two groups of Port Authority Officials who will search every cabin except the Master's for drugs. On completion the Customs Officer will seal the bond and beer lockers. Beer is allowed out of the locker before it is sealed. There is no set allowance for cigarettes and spirits within reasonable bounds.

Shore leave; if anyone requires shore leave a form is furnished by the Immigration Official which must be filled in. Shore leave is allowed from 1700 hrs. to 2200 hrs. Anyone extending this period will be fined U.S.$25.

Time taken for clearance is approximately 2 hours.

Clearing vessel outwards most Immigration Officers want to physically check everyone on board, this takes 1½ hours.

It is essential that Rat Guards are fitted to *all* ropes, if not a heavy fine will be imposed.

Navigation: Pilots are satisfactory. The depths of water on the Chart are dubious. Have echo sounder on at all times. If docking or undocking between tides, both Ebb and Flood tides are very strong and there is no tug.

At the Banana Pier there is an unprotected dolphin (solid concrete) at the North end and one at the South end, the others are fendered.

AUTHORITY: Autoridad Portuaria de Corinto, Apartardo Postal No. 11, Corinto, Nicaragua. *Tel:* 211-214. *Telex:* 1294. *Contact:* The General Manager.

Empresa Nacional de Puertos, Apartado Postal No. 3570-2727, Managua, Nicaragua. *Tel:* 74452, 74430, 74383. *Telex:* 2422. *Contact:* Cesar Delgadillo Machado, Director General.

PUERTO CABEZAS: 14.01 N. 83.23 W.

DOCUMENTS: (Also see "General" before first port).
1 Clearance from Last Port.
10 Voyage Memorandums.
11 Crew Lists.
10 Passenger Lists.
10 Stores Lists.
1 Bill of Health.
12 Ballast Manifests.
13 Manifests of Cargo.
4 Bills of Lading.
10 sets Tally Books.

PILOTAGE: ETA required 24 hours before arrival at the port. The Pilot uses a boat with an outboard motor and boards about 1 mile off the port. Agent advises the Pilot the date of arrival, he goes out when he sees vessel.

ANCHORAGES: Vessels can anchor about 0.5 mile South of the wharf. Depths in anchorage 20 ft. – 22 ft.

MAX. SIZE: Max. length 400 ft. Draft 19 ft. 6in. Difference between high and low tide is 18 in.

HEALTH: The inspection takes place on arrival. It is not necessary when the vessel comes from another port in Nicaragua.

RADIO: The Nipco has a radiotelephone for personal use, but they make contacts with vessels. The frequency is 2738. It is better to use or send radiogram via Radio Tropical in Managua.

TUGS: There is no tug service.

BERTHING: One wooden quay, length 683 m. Width 8.4 m. and depth 6.7 m. at the seaward end. There is wreck in front of the wharf. The location is: Lat. 14° 0′ 57″ N., Long. 82° 22′ 4″ W., 1,200 yd. from wharf end.

STEVEDORES: The Agent advises stevedores of arrival of vessel. They discharge 8 tons of general cargo each hatch (one gang) per hour.

MEDICAL: Not necessary to advise the need of a doctor, only for emergencies. One hospital and two other doctors, apart from the official doctor of the port.

TANKERS: There are 2 pipes of 6 in. diameter on the wharf. There is no special berth for oil tankers.

DENSITY: 1025.

FRESH WATER: Fresh water is carried to the wharf by truck or from one pipe on the wharf. Boiler water is carried to the vessel by the pipe on the wharf.

FUEL: Gasoline, diesel oil and lubricants are supplied by Texaco. Arrangements are made when the vessel arrives.

GANGWAY/DECK WATCHMEN: It is not obligatory. It is customary to have two Customs guards on the gangway.

OPENING/CLOSING HATCHES: The opening and closing of hatches is done together by the crew of the vessel and the stevedores.

CUSTOMS ALLOWANCES: Each of the crew can have 2 packs of cigarettes with the seal broken, and one bottle of wine or liquor opened.

IDENTIFICATION CARDS: Not needed, just passport or seaman's book.

CONSULS: Only consul of Panama available locally.

REPAIRS: Minor repairs only can be effected.

REPATRIATION: It is possible and only a passport needed. Necessary to go to the capital by air, thence to any part of the world.

AIRPORT: Distance to airport from wharf is about 2 km. Service every day to the capital except Sundays and holidays. The name of the only airline is Lineas Aereas de Nicaragua (Lanica).

TIME: Local time is Central Standard Time, GMT minus 6 hours.

HOLIDAYS: Holidays are 1st January; Holy Thursday; Good Friday; 1st May; 14th July; 14th and 15th September; 12th October and the 25th December.

SHORE LEAVE: The crew is allowed to go ashore after the vessel is received by the Authorities.

DELAYS: Delays in berthing can be expected due to bad weather.

DEVELOPMENTS: A hydrographic survey has been completed in the port zone and surrounding area to establish the best place for future port facilities or whether expansion should be made to the existing port. This survey is being effected in view of projected installation of paper and pulp industry and forthcoming development of agricultural and mineral products which could be exported through the port.

The Port Authority is taking the necessary steps to get technical and financial help to make a general survey of the zone in order to find an adequate and/or protected site to place the new port installations. Port plans are combined with the paper and pulp industry, which is supposed to be installed in the next few years.

AUTHORITY: Empresa Nacional de Puertos, Apartado Postal No. 3570, Managua, Nicaragua. *Tel:* 74430, 74452, 74383. *Telex:* 2422. *Contact:* Cesar Delgadillo Machado, Director General.

PUERTO SANDINO: 12.12 N. 86.46 W.

DOCUMENTS: (Also see "General" before first port).
Clearance from previous Port.
6 copies Voyage Memorandum.
6 Stores Lists.
6 Passenger Lists or negative declaration, 3 to be visaed.
6 Crew Lists.
8 Cargo Manifests, 3 to be visaed.
8 Tally books.
6 Lists of Mail, Explosives or Drugs if carried.

9 crew lists and 6 store lists should be despatched by the Nicaragua Consul at loading port if possible, otherwise they are forwarded by Agents from the Panama Canal.

PILOTAGE: Optional; by local Pilots. Leading lights are installed, at the entrance to the port, prominently sited on a hill. Several buoys indicate exact anchorage positions.

Tankers: A Pilot is provided by the oil company in agreement with the Panama Canal Authority. Pilot boards about 0.5 mile West of the sea berth.

ANCHORAGES: About 1.75 miles off port entrance, depth is 30 ft. at low water, and about 45 ft. at high water.

RESTRICTIONS: Port is open day and night without exception.

MAX. SIZE: Tankers at Sea Line Terminal up to 850 ft. length and 41 ft. draft.

HEALTH: Port Health inspector boards all vessels on arrival.

RADIO: There is a radiotelephone installation at the Customs Office. No VHF.

TUGS: Not available for manoeuvring vessels. 5 small tugs employed for shifting lighters.

BERTHING: No quays for ocean-going vessels. Vessels work cargo to lighters at the anchorage.

2 lighters (100 ft. × 30 ft.) each with capacity of 400 tons.

STEVEDORES: Port has 4 gangs of 40 men each for boarding vessels.

TANKERS: *Sealine Terminal:* The sea berth is situated in approximate location Lat. 12° 10′ N., Long. 86° 49′ W., about 2 miles offshore in a depth of 47 ft. There are 5 mooring buoys, 2 at the bows and 3 at the stern of the vessel. The first lines to the buoys should each consist of 2 good ropes lashed end to end to effect the length required. 5 lines are normally used at each end of the vessel. Discharge rate 7,500 bbls. p.h.

Strong winds may delay berthing or cause vessel to vacate the berth once moored. Sailing at night is not recommended for safety reasons. The discharge hose is lifted on the port side by ship's crew.

MEDICAL: Doctor available in case of emergency. Nearest hospital at Leon, 35 km. away.

FRESH WATER: Not available for supply to ships.

FUEL: Not available for supply to ships.

OPENING/CLOSING HATCHES: Normally performed by stevedores. Mechanically operated hatches are opened by ship's crew.

CUSTOMS ALLOWANCES: Each crewman allowed two packets of cigarettes. No wine/spirits allowed to be taken ashore.

IDENTIFICATION CARDS: Seaman's Book required for going ashore.

CONSULS: Nearest at Leon, 35 km. distant.

REPAIRS: Small items for repair can be sent to Leon.

REPATRIATION: No facilities for crew changes. If crew member left behind, Agents are responsible for his repatriation at vessel's expense.

AIRPORT: Las Mercedes international airport at Managua, 75 km. away.

TIME: Central standard time, GMT minus 6 hours. No alterations.
HOLIDAYS: All holidays can be worked.
POLICE/FIRE/AMBULANCE: Police available locally. Nearest fire and ambulance stations are at Leon, 35 km. away.

SHIPMASTER'S REPORT: 1976.

Port authorities board the vessel at 0600 hrs., either at outer anchorage or at discharging anchorage. There is no night work performed unless the vessel reaches discharging anchorage with last daylight.

In general, stevedores are well acquainted with handling cars. Vessels carrying cars for Pto. Sandino should avoid loading No. 1 hatch for this port, as there is a permanent swell at anchorage, barges cannot lie safely under No. 1 hatch.

There is a Pilot available, on request, who also acts as stevedore-foreman.

SHIPMASTER'S REPORT: 1978.
Approach: Coastwise from the North, no difficulties being encountered.
Anchorage: Vessel anchored in position with the rear leading light bearing 088°(T) – 2.1 miles, starboard anchor used, 4 shackles in 8 fathoms of water.

It is advisable to run in to the anchorage slightly to the North of the leading line, thus avoiding the shoal patches on and to the Southward of the line. The anchor should, however, be let go right on the leads, otherwise the vessel will be required to shift anchorage, as happened in our case.

Buoyage was as per B.A. Chart 1960.
Point Penas del Tiscuco: Now has a large power station on it, not shown on the Chart. This is a good land mark when making the port. The shape of the point, as observed on Radar, appeared slightly different from the shape shown on the Chart.
Pilotage: Pilot is available if required, but was not used. I would advise a deep draft vessel to take a Pilot.
Communications: For long distance communications, it is best to maintain radio watches.

The Charterer's Agents have a VHF set in their Office at Corinto and contact can be maintained for day to day matters in this way.
Charterer's Agents: They have a resident water clerk at Pto. Sandino, who can be contacted on Channel 27, VHF. He is available from 0800 to 1200 hrs. and from 1400 to 1800 hrs.

Under normal circumstances, a representative from Corinto will meet the vessel on arrival and visit her prior to departure, but this was not possible on this occasion.
Documents required: As per "Guide to Port Entry".
Officials: Were helpful. 1 Customs guard is on duty at all times, but the Guards are regularly relieved from the shore and the ship is not required to provide accommodation for them.
Cargo Work: Continuous and fast. Large, modern lighters, towed by powerful tugs, were used. Due to the swell, these lighters ranged heavily alongside. Although the lighters were well fendered, several indentations were caused in the ship's side. Delays due to lack of lighters were minimal.

Rate of discharge, net of delays, was 60 tons per gang hour, steel coiled rod.
Pratique: Granted on arrival.
Provisions: Not purchased.
Fresh Water: Unobtainable.
Shore Leave: Under normal circumstances, can be arranged by using the lighters.

AUTHORITY: Empresa Nacional de Puertos, Apartado Postal No. 3570, Managua, Nicaragua. *Tel:* 74430, 74452, 74383. *Telex:* 2422.
Contact: Cesar Delgadillo Machado, Director General.

SAN JUAN DEL SUR: 11.15 N. 85.53 W.

SHIPMASTER'S REPORT: December 1984.

DOCUMENTS:

10 copies Passenger Declaration.
10 copies Ballast Declaration.
10 copies General Declaration (Ship's Particulars).
6 copies Provision and Store Lists.
6 copies Personal Declaration.
1 copy Ammunition List.
12 copies Crew List.
Clearance from last port.

Authorities: The following Authorities board after anchoring: Customs, Immigration, Port Captain, Doctor, Military.

A Customs search will probably be made. It takes 4 hours to clear vessel.
PILOTAGE: Pilot available. We arrived after dark and had to wait until 0600 hrs. the following day for the Pilot.
APPROACHES: Straight in from sea on an 067° (T) course to anchorage. At the time of the vessel's visit the light on the headland South of the bay (Fl. 6 secs.) and 1 red leading light were extinguished.
ANCHORAGES: Vessel anchored about 1.5 miles out in 15 fathoms to await Pilot.

Discharging anchorage is about 0.5 miles from the jetty in 5 fathoms. We anchored about 1 mile from the jetty in 10 fathoms as another vessel occupied the innermost anchorage. Walking back anchor to bottom and paying out cable as ship falls astern is recommended. When anchor was dropped in 15 fathoms area it took some time to hold.

The holding ground at the working anchorage was good, both vessels lying to 1 anchor in Force 6 – 7 winds and choppy seas.
TUGS: There is a small tug which is used to tow barges, also numerous launches.
EQUIPMENT: 4 barges of 150 tons – size about 24 m. × 5 m. 3 barges of 40 tons – size about 12 m. × 3 m.

Barges are open and are fitted with tyre fenders. Barges can also be obtained from nearby ports.

4 Fork lift trucks of 8 tons and 2 of 2.5 tons capacity. (Not all of these trucks were sighted).

3 mobile cranes for discharging barges ashore. There are also flatbed trucks and tractors ashore.
Storage: There is a large storage shed and an unsurfaced storage yard.
STEVEDORES: Port Authority stevedores. The port works 24 hours a day as follows:

From 0700 – 1200 hrs. Straight time.
From 1300 – 1800 hrs. Straight time.
From 1900 – 2200 hrs. Straight time.
From 2200 – 0600 hrs. Double time.
Sundays and holidays triple time.

Labour works 24 hours and are then replaced by other gangs.

Meal hours are from 0600 – 0700, 1200 – 1300 and 1800 – 1900 hrs., however, these hours are flexible often expanding to 2 hours. Labour go ashore for their meal hour.

The steel was discharged at about 35 tons per gang hour.
FRESH WATER: Not available.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: One armed military guard, an Immigration Officer and 1 Customs Officer live on the vessel during vessel's stay.
OPENING/CLOSING HATCHES: McGregor hatches opened by the crew, we also used crew for pontoons.
CERTIFICATES: Certificates inspected on board, not taken ashore.
CUSTOMS ALLOWANCES: Not known. The Master of another vessel advised that the Customs were quite generous.
SHORE LEAVE: Passes are issued to the crew. 3 senior officers are given 24 hour passes, other officers and crew required to be on board by 2200 hrs.
CONSULS: None.
REPAIRS: Noted that barges were being constructed at San Juan and it is possible that steel work could be done in an emergency.
AIRPORT: At Managua some 2 hours by road.
TIME: GMT minus 6 hours.
DEVELOPMENTS: It is planned to build a pier in order that vessels may berth alongside.
GENERAL:
Charts and Publications: General Chart BA 1049 – Ellana bay to San Jose.

Harbour Chart BA 1960 – Plans on West Coast of Central America.

Port Information: Admiralty Sailing Directions Vol. 8, Eighth Edition, "Pacific Coasts of Central America" and United States Pilot.
Weather: Winds from N.E. Force 6 – 7 from December to February.

Winds from S.W. in July and August.
Squalls experienced in May and October.
Refer to Admiralty Sailing Directions.

Hotels: One small third class hotel and a number of boarding houses. A tourist hotel is being built but is not complete.
Communications: Post Office can place telephone calls internally and internationally, reception on international line bad.

The Post Office is equipped with an internal telex machine.
Operations: Good. The speed at which a vessel can be discharged depends on the availability of gangs and lighters. The turnaround time of barges is quite rapid and the gangs work well. We achieved 35 tons per gang hour and the other vessel, discharging bagged beans, did equally as well.

Nigeria

GENERAL

DOCUMENTS: The Port Authorities have to be provided with 7 copies of the Cargo Manifest 14 days before the vessel berths, otherwise berthing will not be possible.

In the near future 12 copies of the Cargo Manifest and 5 copies of the Freighted Manifest will be required.

SHIPMASTER'S REPORT: 1978.
No ship is to enter Nigerian waters unless issued with a Ship's Entry Number.

RADIO:
Accurate ETA Required:
The following circular has been received from the Nigerian Ports Authority (N.P.A.):
Quote:

It is observed with regret that ships arrive in our territorial waters/roads long before their published Expected Time of Arrival, thus building up unnecessary congestion which Decree 40 of 1975 (now Act 40) was promulgated to check. The effect of this phenomenon is that the control built into the 'Ship Entry Notice' is neutralised and abused.

To give the desired effect to the control of ships inflow as intended in the 'Ship Entry Notice' no ships arriving 7 days earlier or later than their Expected Time of Arrival will be treated as Arrived Vessels and therefore will not be accorded berthing facilities. Action will be taken to clear such ships from our roads to the high seas and such Owners or Agents will be blacklisted.

With the Federal Government's relaxation of import restrictions which is followed by a progressive rise in the number of ships calling, the need for rigid application of the provisions of Act 40 cannot be over-emphasised. It will therefore be in the best interest of all concerned to co-operate in this direction with a view to controlling a possible build-up of waiting vessels.

Shipping companies are invited to take advantage of other ports outside Lagos and Port Harcourt, where facilities are under-utilised, such as Calabar and the Delta ports.

Fines will be imposed if vessels arrive early.
Unquote.

ANCHORAGE:
Thefts from Vessels at Anchorage: There have been several recent reports of vessels being boarded and robbed of ship's stores (tarpaulins, paint, ropes, etc.) while the vessels were laying at anchor in the Lagos Roads and the Bonny River.

In some cases the thieves were seen to be armed.

We regret to have to caution Masters of the danger of theft, and to ensure attractive goods are kept under safe lock. Guards should be posted at night, whether in port or in the Roads. Alternatively, while in the roads, vessels could steam out a further few miles out of reach of small boats.

CARGO GEAR: N.P.A. inspect all cargo gear certificates on arrival.

SURVEYORS: If a Lloyd's Surveyor is required at any port other than Lagos at least 3 days' notice is required to make travel arrangements.

BONNY RIVER PORTS: *Compulsory Pilotage:*
Pilotage is now compulsory for all classes of vessels including service boats, fishing boats, etc. Harbour Master Bonny has been instructed that no vessel shall be allowed to enter Bonny town anchorage until all NPA dues are fully paid in advance and clearance for entry is received from the Chief Port Harbour Master, Port Harcourt.

All vessels will therefore be piloted to their various berths by Nigerian Ports Authority Pilots only and no exception will be granted and all genuine unexpired local pilotage licences are now revoked.

REPATRIATION/CREW CHANGES: Immigration Authorities now insist that expatriate crew members should obtain entry visa prior to coming into Nigeria to join any vessel trading within Nigerian Territorial Waters. The entry visa should be valid for 3 months and at the expiration can be extended for another 3 months and no more.

DOCUMENTS: From Port Manager – River Ports.
Central Planning and Information Centre: It will be mandatory on all Shipping Companies Agents and others intending to work their vessels in our ports to submit the underlisted documents to the Principal Traffic Officer in charge of C.P. & I.C. at the former office of the Deputy Dock Superintendent inside the wharf at least 7 days before the commencement of discharging operations of their vessels:

(a) Ship's Entry Notice (SEN).
(b) Ship's Manifest.
(c) Stowage Plan.
(d) Hatch List.
(e) Bulk Item List.
(f) Special/Valuable Cargo List.
(g) Hazardous/Dangerous Cargo List.

This stipulation came into effect as from 22nd August, 1983. It should be emphasised that as from that date preference is given to any ship which complies with the above stipulation.

FUEL: The following advice was received in March 1984.
Bunkering suppliers who were previously registered as official and recognised suppliers, have had their licences revoked. Some licences are said to have been reinstated but no official notification has been made regarding which companies, firms or persons may officially supply bunkers. Therefore until the situation is clarified, Owners should ensure that vessels have enough fuel oil, etc., on board to carry them through operations in Nigerian ports.

BOYCOTT: Any vessel which has called at any South African Port, cannot call at any Nigerian Port until a period of 6 months has elapsed between the time the vessel called a South Africa Port and her call to a Nigerian Port.

BONNY: 04.26 N. 07.09 E. (Inshore Terminal)
04.11 N. 07.14 E. (Offshore Terminal)

(See Plan Book)

IMPORTANT NOTICE: The Company, as Operator for the NNPC/SHELL Joint Venture, has been directed that the following vessels will not be permitted to enter Nigerian Waters to load Nigerian Crude Oil:

(A) Any vessel which is owned directly or through subsidiaries or chartered or managed by Companies or Persons in South Africa, Namibia or Israel, or is registered in any of these countries.

(B) Any vessel which has called at a port in South Africa, Namibia or Israel during a period of 6 weeks immediately preceding her arrival off any of the Company's Terminals. (A Port Call includes the calling off or near a port for the purpose of receiving services from the shore by helicopter or launch/boat.)

(C) Any vessel which has among its officers, crew, passengers or supernumeraries any person who is a national or resident of South Africa, Namibia or Israel or who has visited any of these countries as evidenced by an entry in that person's passport or other identity document.

Vessels arriving off the Company's Terminals are subject to check by Government Authorities to ensure that the above-mentioned provisions have been adhered to. Any infringement is liable to cause serious consequences for the Master, Manager, Charterer and/or Owner of the vessel.

Vessels lifting crude oil must in addition comply with any other restrictions that may be generally imposed by the Government of the Federal Republic of Nigeria on vessels entering Nigerian Waters for any purpose whatsoever.

DOCUMENTS:
3 Copies Stowaway List.
6 Crew Lists.
3 Vaccination Lists.
1 Maritime Declaration of Health.
4 Lists of Last Port of Call (6 weeks).
5 Lists of Birds & Animals.
5 Passenger Lists.
4 Stores List.
4 Personal Effects Lists.
5 Arms & Ammunition Lists.
3 Narcotics Lists.
3 Kroo Boy Lists.
1 Clearance Last Port.
Agent: Requires NPA Lights and Buoy Dues form.

ANCHORAGES: *Inner Berths:* Consult chart.
Outer Berths: 3 miles South of manifold platform in position Lat. 4° 11.2′ N., Long. 7° 14.2′ E.

Vessels must not proceed inshore of this position without a Pilot. When at anchor listening watch must be kept on VHF Channel 8 and this Channel must not be used for inter-ship communication.

RESTRICTIONS: *Inshore berths:* Tide, no night pilotage.
Offshore berths: Worst weather period June – September, when heavy swell may be encountered.

The maximum draft to which a vessel can load at Bonny is governed by three factors *viz.*
1. Datum Depth in Bonny Channel.
2. Height of the tide.
3. The underkeel clearance allowed.

Datum depth of the Bonny Channel is dependent on the amount of dredging; at present time (mid-1984) the Datum depth is 33 ft. 5 in. (10.2 m.)

Note: This depth can change and Operators and Charterers of vessels stemmed for the Inshore berths are reminded to ensure that they are in possession of the latest depths which can be obtained on application from their Agents.

Tide is variable but the relevant factor is the height of the tide at the time the vessel will transit the Channel. The underkeel clearance allowed is dependent on the time of the year and is related to the height of the swell expected to be encountered in the Bonny Channel.

The present allowances during the year are as follows:

1/1 to 15/2 = 2 ft. 6 in. – 0.76 m.
16/2 to 15/3 = 2 ft. 9 in. – 0.84 m.
16/3 to 31/3 = 3 ft. 0 in. – 0.91 m.
1/4 to 30/4 = 3 ft. 3 in. – 0.99 m.
1/5 to 15/5 = 3 ft. 6 in. – 1.07 m.
16/5 to 31/5 = 3 ft. 9 in. – 1.14 m.
1/6 to 31/8 = 4 ft. 0 in. – 1.22 m.
1/9 to 15/9 = 3 ft. 0 in. – 1.14 m.
16/9 to 30/9 = 3 ft. 6 in. – 1.07 m.
1/10 to 15/12 = 3 ft. 3 in. – 0.99 m.
16/10 to 31/10 = 3 ft. 0 in. – 0.91 m.
1/11 to 15/12 = 2 ft. 9 in. – 0.84 m.
16/12 to 31/12 = 2 ft. 6 in. – 0.76 m.

Thus it can be seen that the maximum draft at any particular time is equal to:

Datum Depth plus Height of Tide minus Underkeel Clearance Allowance.

A typical calculation would be as follows:

		ft.	in.
Datum Depth	=	33	5
Height of Tide	=	+ 7	0
Underkeel		40	5
Clearance Allowance	=	– 3	9
Max. Draft	=	36	8

PILOTAGE: *Inshore berths:* Pilotage is compulsory. Pilots board off Fairway Buoy; incoming ships must *not* enter Bonny Channel without a Pilot on board.

Offshore berths (SBMs): Berthing Master will board vessel on arrival or at anchorage, and remains on board throughout and acts as Loading Master. On arrival at anchorage contact Berthing Master on VHF Channel 10, call sign "Ocean Berthing Master".

N.B. Also contact Bonny Terminal on Channel 8 on arrival at Offshore anchorage to ensure vessel's arrival, etc. is recorded.

MAX. SIZE: *Inshore Terminal:* Min. size approximately 18,000 tonnes SDWT or 161 m. (530 ft.) LOA. Max. length 320 m. (1,050 ft.). Max. beam no restriction. Max. SDWT – 135,000 tonnes, subject to review during wet season, i.e. May to October. Max. draft, see "Restrictions", draft may be reduced due to silting (mud and sand shifting, caused by current).

Offshore Terminal: Min. SDWT 45,000 tonnes. Max. SDWT 320,000 tonnes. Max. length no restriction. Max. beam no restriction. Max. Draft 22.8 m. (75 ft.).

Also see "Port Harcourt" – "Report".

HEALTH: "Q" flag to be shown on arrival, except if from another Nigerian port, yellow fever inoculations compulsory. In case of suspected disease on board, advance notice to Agent advisable. Valid Yellow Fever and Smallpox Certificates to be produced for all crew members. Also Derat Exemption Certificate.

RADIO: Original ETA messages should be sent via Lagos Radio to the Lagos Agents at least 72 hours before arrival. 48 hours before arrival at the Fairway Buoy a further ETA message should be sent to Lagos Agents. When approaching or anchored at the Fairway Buoy vessels should contact Bonny Terminal on Channel 8 and Bonny Harbour Master on Channel 14 when bound for the Bonny Inshore Berths passing date and time of arrival, thereafter keeping watch on VHF Channels 8 and 16. Failure to comply with the requirements for ETA messages may result in delays in berthing the ship.

ETA by Radio for all Ships: In view of communication difficulties with our terminals at Bonny and Forcados and in order to avoid undue delays, in addition to normal W/T advices to Agents and Shell Lagos we wish to inform you about the possibility of passing to us your ETA via M.V. Oil Maintainer, call sign GYEU.

The Oil Maintainer (Golf Yankee Echo Uniform) keeps a daily listening watch on single side band R/T on following frequencies and times:

From 1600 to 1620 hrs. local time 16587.1 MHz (Tx/Rx)
From 1620 to 1640 hrs. local time 12435.4 MHz (Tx/Rx)
From 1640 to 1700 hrs. local time 8294.2 MHz (Tx/Rx)

Please advise 72 hours before arrival Bonny or Forcados:

1. Vessel's Name.
2. ETA.
3. To load .... tons .... grade.
4. Last Port.
5. First Nigerian port to load.
6. Any other Nigerian ports to load.
7. Name of Shipping Agency.
8. Next discharge port.

The GYEU will acknowledge only and further calls are not required unless ETA changes by 2 hours or more.

VHF: NPA Bonny Harbour Master and Pilots – Channels 14 and 16. Bonny Terminal – Channels 8, 16 and 10.

Special Regulations: It is essential for ships proceeding to inshore berths to pass time of arrival on Channel 14 VHF as soon as possible on arrival off Fairway Buoy.

Also see "Radio".

BERTHING: *Inshore Terminal:* There are 3 berths (CBMs) designated A, B and C, from upstream. A and C consisting of 5 buoys (1 astern, 1 on each quarter, 1 ahead and 1 on the inshore bow). A and C are flood tide berths. B is ebb and flood tide berth consisting of 6 buoys, the 6th buoy is on the offshore bow or quarter depending on which direction the ship is berthed.

Tankers berth on the flood tide (or ebb at berth B) using the offshore ship's anchor as an additional mooring point. Ships moor by means of 40 mm. wires (provided by the Terminal). One 40 mm. wire is picked up from each of the buoys and ship's ropes are not normally used. Mooring is carried out by ship's crew; and care must be taken to ensure that the mooring wires are laid out in a seamanlike manner to prevent the formation of runs and kinks. Mooring wires must not be kept on tension winches, but stoppered off by means of Carpenter's stoppers provided by the Terminal, and then "turned up" on the bitts. Two men from the Terminal are put on board the vessel to assist the ship's crew to position and set up the Carpenter's stoppers.

Vessels must be equipped with hose handling derricks with a SWL of not less than 5 tonnes.

Vessels must arrive with clean ballast.

Load-on-top system operates at Bonny. Slops cannot be accepted ashore. Maximum loading rate: 5,000 t.p.h.

Grades handled: both light and medium crudes.

Offshore Terminal: 2 SBMs fitted with 2 OCIMF standard 15 in. nylon moorings and 1 hose string terminating in 2×16 in. diameter end hoses.

No. 1 SBM is S.S.W. of the Platform. No. 2 SBM is S.S.E. of the Platform and they are designated Bonny West and Bonny East respectively.

Berthing effected under guidance of Berthing Master and assistant who both remain on board throughout loading operations. Accommodation for both to be provided. Whilst berthed a mooring rope must be ready on the poop deck so that the mooring launch (line boat) may, in the event of the vessel riding up on the SBM, make fast and tow to re-align vessel.

Vessels must be equipped with hose handling derricks with a capacity of not less than 10 tonnes.

Vessels must arrive with clean ballast.

Load-on-top system operates at Bonny. Slops cannot be accepted ashore. Max. loading rate: 6,000 t.p.h. Grades handled: Bonny light crude.

TUGS: None available.

HOSES: *Inshore Terminal:* (Amidships). Vessels should endeavour to present 2×12 in. diameter 150 ASA connections on the port side of the vessel when berthing at A and C berths. On B berth 2×12 in. 150 ASA connections should be provided on the port or starboard sides of the vessel – dependent on whether the vessel is berthing on ebb or flood tides. Vessel's hose handling derrick to be rigged and plumbed overside. Hoses will be connected by shore labour, but winchmen must be supplied to operate the ship's lifting gear. The derrick runner must be equipped with a suitable hook. The estimated weight of each hose string at berths A and C, when lifting with the ship in light condition is between 3 tonnes and 5 tonnes. Ships fitted with only 5 tonne derricks should exercise care when lifting to avoid shock loads. On "B" the estimated lifting weight is between 5 tons and 7 tons.

Weight of Hoses: The following table gives the approximate weights of hose strings in tonnes (including fittings, floats and pick-up buoy) with all hoses full of crude oil S.G. 0.850. The assumed total lift is 7.5 m. (25 ft.) above deck level, with the tanker on light draft.

d.w.t.	*12 in. I.D. Hoses* *tonnes*
100,000	5.1
70,000	4.9
50,000	4.7
35,000	4.5
18,000	4.2

Offshore Terminal: Port or starboard side amidships (dependent on which SBM is used). Vessels should endeavour to present 2×16 in. standard 150 ASA connections on arrival. Ship's crew are required to connect and disconnect the hoses under the advice of the Berthing Master and/or his assistant. A derrick SWL at least 10 tonnes must be rigged ready on both port and starboard sides and plumbed clear of this side. Derrick runner must be equipped with suitable hook.

Weight of Hoses: Indication only of approximate weights 16 in. I.D. hose strings in tonnes (including fittings, floats, and pick-up buoys with all hoses full of crude oil SG 0.850. Assumed lift is 7.6 m. (25 ft.) above deck level, with vessel in light draft condition.

Weight of Hoses: The following table gives the approximate weights of hose strings in tonnes (including fittings, floats and pick-up buoy) with all hoses full of crude oil S.G. 0.850. The assumed total lift is 7.5 m. (25 ft.) above deck level, with the tanker on light draft.

Size of Tanker d.w.t.	*16 in. I.D. Hoses* *tonnes*
500,000	11.4
330,000	9.4
270,000	9.1
200,000	8.7
100,000	7.5
70,000	7.1

SHORE LINE SYSTEM: *Inshore Terminal:* Crude oil is loaded at berths A and C via 32 in. submarine lines and 2 strings of flexible hoses consisting of 6 lengths of 12 in. hose and 5 lengths of 12 in. hose respectively.

At berth B, loading is via a 28 in. submarine line and 2 strings of 12 in. flexible hose, each consisting of 7 hose lengths. Reducers are made available by the Terminal on request.

Offshore Terminal: Vessels load through SBM from shore through a 48 in. diameter line, thence through a 24 in. diameter floating hose which is terminated by a "Y" piece and two 16 in. diameter hose tails which connect to the ship's manifold. Loading rates up to 6,000 t.p.h. may be expected. The 48 in. submarine loading line from the Terminal is some 20 miles in length, therefore great care must be exercised during loading when ship's valves are manipulated to avoid pressure surges. Pressure recorders are normally fitted at the spool piece between ship's manifold and tail end of the hose string to monitor pressure changes generated on board the vessel.

BALLAST: No facilities for dirty ballast, no tank cleaning facilities.

MEDICAL: Hospital at Bonny.

DENSITY: *Inshore Terminal:* 1020 at HW. 1015 at LW during rainy season.

Offshore Terminal: Salt.

FRESH WATER: Available by barge at rate of 15 t.p.h. 48 hours' advance notice required as barge comes from Port Harcourt.

FUEL: Available only by barge from Port Harcourt.

WATCHMEN: Whilst berthed at the SBM a security watch must be kept on the forecastle head by member(s) of the ship's crew throughout the hours of darkness, to raise the alarm and advise the Berthing Master on the approach of local small craft. Instances have occured at Nigerian offshore terminals where a nylon mooring rope has been cut and stolen with the vessel in the berth. The Berthing Master should also be advised in the event that the vessel rides up to the SBM.

CUSTOMS ALLOWANCES: 200 cigarettes per man per 7 days. 1 wine or 1 bottle of spirits per officer per 7 days.

IDENTIFICATION CARDS: Crew to carry passport or seaman's book whilst ashore.

CONSULS: Nil.

REPAIRS: Nil. See "General".

REPATRIATION: Possible via Port Harcourt and Lagos.

AIRPORT: 28 miles by river, to Port Harcourt, then 30 km. by road, flights twice daily to Lagos, 5 international flights per week to London, Rome and Amsterdam.

TIME: GMT plus 1 hour, no change.

POLICE/AMBULANCE/FIRE: Contact Via Harbour Master or Shell, VHF Channel 8.

SHORE LEAVE: Not permitted.

GENERAL: Accommodation ladder must be rigged – used in conjunction with pilot ladder at offshore terminal – and for direct access in inshore terminal.

Limited medical assistance available but in extreme emergencies only. Treatment of minor ailments and vaccinations, etc. is under no circumstances available. It may be possible in the event of an accident to obtain medical advice. Contact terminal VHF Channel 8 in first instance.

Pollution of the sea by dirty ballast, bilge discharge or any other means will result in heavy fines, or in severe cases, imprisonment.

Any attempt on the part of the boarding officers to persuade the Master to supply more than normal representation should be resisted. In the event of any problem arising over such a matter full details should be *reported to the Agent.*

Nigerian flag to be flown.

Air letter forms are not acceptable unless with Nigerian stamps.

Delays: Inshore berths: None if the channel buoys are lit. Otherwise, only daylight pilotage.

Offshore berths: Worst weather period June–September when heavy swell may be encountered.

Immobilisation of engines: Not permitted at the inshore berths. Not permitted at SBMs. Not advised at sea anchorage due to indifferent holding ground and the existence of obstructions and foul ground in the vicinity.

Loading: Ships are required to load cargo as rapidly as possible by day and night in accordance with the terms of their charter parties.

This means that ships are expected to load as fast as the Company can supply or they can safely receive. The question of how fast a ship can load is the responsibility of the Master having regard to his Owner's instructions, the charter party and the experience of ship's personnel. However, as further guidance and in absence of any instructions to the contrary, ships are accepted by the Company on the understanding that ships will be able to accept a bulk loading rate per hour of not less than ten per cent of the summer deadweight of the vessel.

At offshore berth the Berthing Master acts as Loading Master during loading operations and is provided with walkie-talkie radio to ensure adequate ship/shore communication.

Loading Masters visit each vessel, and Masters are requested to co-operate in the completion of the Company's Tanker Port Performance Time Sheet by ship and shore personnel. Only crude oil is handled at Company's terminals, loading temperatures and specific gravities of the two grades of crude, Bonny Light and Bonny Medium are reasonably constant and are approximately:

Bonny Light	0.8365 at loading temperature
Bonny Medium	0.9044 at loading temperature

Early Departure Procedure: Offshore Terminal: A modified early departure procedure is in operation at Bonny Offshore Terminal. Masters are requested to sign all documents in blank, retaining in their possession Masters' consignee copies. On completion of loading, the Berthing Master will supply Masters with figures required for the completion of the retained documents. Masters requested to complete these documents before the departure of the vessel. Customs and Agency representatives will normally board vessels before commencement of loading. Depending on other commitments of the offshore launch, it may be necessary to request Masters to provide temporary accommodation for these officials.

NOTICE: *Special Notice to all Masters:*

There have been recent cases of serious theft from vessels in the port of Bonny. It appears that the intruders who invariably gain access to the vessel via the anchor hawse pipe have on occasions been armed.

In your own interest we would advise you to arrange to have a strong jet of water running down the hawsepipe of the anchor in use. The other anchor should be stowed in the pipe and not left hanging off. In addition, you should implement the normal standard precautions of augmenting deck watches and arranging over-board floodlights where possible. Jets of water around the stern will also deter intruders from gaining access by other means.

All the assaults on ships have been made from canoes; therefore we suggest that traders and other persons in canoes be discouraged from coming close to your vessel.

Should unauthorised persons gain access to your vessel, instruct Shell Company Radio Operator to contact the terminal who in turn will contact the local police.

SHIPMASTER'S REPORT: January 1983.

Pilot on arrival and departure requires 4 copies NPA Master's Declaration.

Immigration liable to check all Discharge Books.

Health Doctor liable to check all vaccination dates in books.

Shore boat keeps a constant check on ballast discharge.

According to Customs no 'Ladies' are allowed to visit and if any found on board then Customs are liable to rummage vessel.

There was no night navigation in channel as buoys were unlit.

Vessels normally unberth at half tide and if waiting for daylight channel navigation, will anchor in the Prohibited Anchorage Area off berths.

SHIPMASTER'S REPORT: November 1983.

Documents: Also required:

3 copies Kroo Boy List (People under 18 years.)
3 copies Currency List.

Pilotage: Inshore Terminals: Pilot boards at buoy No. 29 (former Buoy "N") Nomination of buoys changed and now green buoys at starboard side with odd numbers and red buoys at port side with even numbers in white.

AUTHORITY: Nigerian Ports Authority.

Operator: The Shell Petroleum Development Company of Nigeria Ltd., Freeman House, 21-22 Marina, Private Mail Bag 2418, Lagos, Nigeria. *Tel:* 601600 (17 lines), 601820 (9 lines). *Telex:* 21235. *Cables:* "Shell, Lagos".

BRASS TERMINAL: 04.04 N. 06.17 E. (See Plan Book)

LOCATION: Brass Terminal is an open mooring located 13.5 miles off the South Nigerian coast at: Lat. 4° 04′ N., Long. 6° 17′ 10″ E.

Chart of the area is BA 1863.

Brass Terminal operates on a 24 hours, seven days a week basis, including public holidays.

FLAG: All vessels are required to fly the Nigerian Flag on the foremast during daylight hours.

GENERAL:

Description: Brass Terminal consists of 2 SBMs. These buoys serve as a single mooring point for a tanker and enables it to freely rotate a full 360° angle while handling cargo. Each ground mooring consists of 6 sets of radial chains, each set is attached to an anchor pile. The 6 mooring legs are made of 3.25 in. diameter chain. Water depth is approximately 90 ft. Two strings of floating hoses connect each buoy with the header at the end of the sea line. The system is built to provide a safe mooring for tankers up to 300,000 d.w.t. under the following environmental conditions:

(a) Max. wind speed of 30 knots and max. significant wave height of 9 ft.

(b) Max. wind speed of 20 knots and max. significant wave height of 10 ft.

(c) Max. wind speed of 10 knots and max. significant wave height of 11 ft.

However maximum overall length should be 1,200 ft., and the minimum 720 ft.

Signals: Each single buoy is equipped with:

Radio Beacon – Racon (the ship's radar must operate at X band 3 cm., 9300 to 9500 MHz and with horizontally polarized radiation. The controls for radar gain, sea clutter and differentiator FTC should be set at normal position).

NOTICE OF READINESS: Notice of Readiness will be tendered on arrival provided that vessel is ready to load in all respects and after Free Pratique has been granted. Lay time will commence six hours after acceptance of Notice of Readiness for vessels arriving within agreed ETA range or when loading commences whichever is earlier.

DOCUMENTS: To be submitted on arrival:

Maritime Declaration of Health
4 copies Vaccination List
8 copies Arrival Crew List
6 copies port of call list —for the past 6 weeks or 3 previous ports with dates of Arrivals/Departures)
6 copies Passenger List
6 copies Animal or Livestock List
6 copies Arms and Ammunitions List
4 copies Store List
4 copies Crew Declaration List signed by all crew members
Customs Clearance for last Port of Call.

The Naval Office in charge of the task force on crude oil liftings at Brass Terminal has advised that all tankers calling at Brass from other Nigerian Ports must obtain, in addition to the normal Customs Clearance, a Health Clearance Certificate from the first Port of Call.

PILOTAGE: The Mooring Master will board the tanker in the anchorage area and all manoeuvring of ships within the Terminal area shall be done only in accordance with advice of the Mooring Master subject to the understanding that in all cases and circumstances the Master of the vessel being manoeuvred shall remain solely responsible for the safety and proper manoeuvring of the vessel and possible damage to the Terminal or service boats.

The Berthing Master and 3 local assistants remain on board throughout loading operations and accommodation to be provided.

RADIO: VHF radio telephone Channel 16 (156.800 MHz) is in use 24 hours a day as a stand-by Channel. A not too busy Channel (6 – 8 – 10 – 12 – 14) will be used as work band by the Marine Office/Berthing Master acting as Loading Master during Mooring/Loading operations. They are provided with walkie talkie radios to ensure adequate ship/shore communications.

Cablegrammes: Cables to Brass Terminal may be sent to LAGOS RADIO and addressed to AGIPOIL LAGOS and FREIGHT LAGOS.

Acceptance Procedures: The following vessels are not permitted to enter Nigerian territorial waters:

(a) Any vessel which is owned directly or through subsidiaries or chartered or managed by companies or persons in South Africa, Namibia, Zimbabwe (Rhodesia) or Israel, or is registered in any of these countries.

(b) Any vessel which has called at a port in South Africa, Namibia or Israel during a period of 6 weeks immediately proceeding her arrival off any of the Nigerian Terminals (a port call includes the calling off or near a port for the purpose of receiving services from the shore by helicopter or launch boat).

(c) Any vessel which has as officers, crew, passengers or supernumeraries who are nationals or residents of South Africa, Namibia, Israel and Zimbabwe (Rhodesia).

All vessels must give the Company at least 5 days' notice of arrival at Brass; this ETA to be updated 72, 48 and 24 hours prior to arrival by cablegramme sent via Lagos Radio and addressed to: AGIPOIL LAGOS and FREIGHT LAGOS.

The messages should specify cargo requirement, ANSI diameter of flanges used for loading connections, safe working load of port derrick, advise whether a Smit's towing bracket is available, last port of call and final (discharging) port, sickness on board if any.

Vessels should contact the Brass Marine Office by VHF as soon as possible.

Upon arrival of vessel off the Terminal, Government Authorities shall check to ensure that the above mentioned provisions, set in points (a), (b) and (c), have been adhered to. Any infringement of said provisions may have serious consequences for the Master, Owner or Charterer of the vessel.

ANCHORAGE: Vessels awaiting the Mooring Master should anchor in a position approximately 2.5 miles N.E. of the terminal. Depth of anchorage area range from 15 fathoms to 16 fathoms. Holding ground is fairly good.

BERTHING:

Mooring: *Fore:* Each single buoy mooring is equipped with a mooring line system. The chain is fitted with a special open link which can be used if the vessel is equipped with Smit's bracket.

Aft: Whilst berthed, mooring rope must be ready on the poop deck so that the mooring launch (line boat) may in the event of the vessel riding up on the SBM make fast and tow to realign vessel. Whilst berthed at an SBM a security watch must be kept on the forecastle head by member(s) of the ship's crew throughout the hours of darkness to raise the alarm and advise the Berthing Master on the approach of any local small craft.

Instances have occurred at Nigerian offshore Terminals where a nylon mooring rope has been cut and stolen with the vessel in the berth.

LOADING: The line boat will tow the end of the floating hoses to the point below the tanker's port cargo manifold. The safe working load of the tanker's port derrick should be at least 7 tons.

Loading Operations can commence only after the Loading Permit is issued by the Custom Authorities, NNPC inspectorate and Navy Commander.

Ships are requested to load cargo as rapidly as possible by day and night in accordance with the terms of their Charter Party.

Ships are expected and nominations of vessels are accepted by NAOC on the understanding that ships will be able to accept a bulk loading rate per hour of not less than 10% of the summer d.w.t. of the vessel or at the optimum terminal loading rate, whichever is lower.

It is extremely dangerous to close ship's valves against the oil stream as such operation may create excessive pressure in terminal pipings and hoses.

Should damage result from failure to observe this precaution the Master of the vessel will be held responsible.

During the loading operations the following signals shall be displayed:

International Code Flag "B" during day-light.

A red light, visible all round the horizon at a distance of at least 2 miles.

Brass Blend crude oil loading temperature is reasonably constant as well as API gravity at approximately:

Brass Blend	85°F	40.00 API	R.V.P. 10.00 (approx.)

The approximate loading rate is 5,000 t.p.h.

POLLUTION: Pollution of rivers and beaches by oil is a serious matter. The Mooring Master shall inspect tanker's ballast so that there will be no chance of even a small amount of pollution when the ballast is pumped out, thereby lessening any possibility of infringement of the pollution restrictions envisaged by Nigerian law.

Pollution of the sea by dirty ballast bilge discharge or any other means will result in heavy fines or in severe cases, imprisonment.

MEDICAL: Although medical assistance is normally not available locally, Agency will provide medical assistance to the tankers' personnel when required in advance. In case of emergency the Terminal medical facilities will be at tanker's disposal.

FUEL: Not available.

FRESH WATER: Not available.

REPAIRS: There are no facilities available in the Terminal for vessel repairs. However, in case of necessity contact Agent.

REPATRIATION: Permitted only in cases of emergency and only if the person concerned holds the necessary documents, i.e. Yellow Fever Certificates.

SHORE LEAVE: Crew members cannot leave the vessel at Brass except in cases of emergency.

MAIL: Ship's mail and personnel mail will be handed through vessel's Agent.

SAFETY:

Smoking, lighters, matches: Smoking is prohibited on board during loading operations except those areas in the accommodation jointly agreed to by the Master and the Terminal Representative. Personnel on board the vessel other than in the accepted areas, must not carry lighters or matches.

Portable equipment: Any electrical equipment which is not wholly within an approved explosion proof container, an approved air pressurised container or any equipment which is not intrinsically safe, must be disconnected from the power supply.

Hand Torches: Only those hand torches provided with a Certificate of Approval delivered by a recognised authority are allowed.

Radio transmitters, radar: The main transmitting aerials must be grounded. VHF apparatus are allowed provided their output power is not higher than one watt.

Portable radio transmitter must be of approved type for safe operation in flammable gas areas.

Radar must be switched off.

Doors and portholes: Amidship doors and portholes are to be kept closed during loading operations except for entering or leaving accommodation.

Doors and portholes on the fore-end of the after accommodation must be kept closed.

Access to the after accommodation may be from the stern or from the side doors.

Air conditioning: Central air-conditioning is allowed but air intakes must be shut off and full circulation must be adopted.

All window type coolers must be disconnected unless the units are safe to operate in flammable gas areas (as certified by a recognized authority).

Ventilators: Should any doubt arise that flammable gases may enter the area, ventilators must be completely closed.

Galley: Gas, oil or coal fires are prohibited. Only approved flame-proof electrical equipment or steam heated galleys are permitted.

Lights: During loading operations vapour-proof electric lights only are allowed.

Moored vessels discharging ballast or loading cargo during period of darkness will brilliantly illuminate the sea around the ship so that any pollution can be readily observed.

Cargo and unused connections: A deck officer is also requested to inspect cargo connections and hoses to ensure that they are in good condition.

All unused connections must be blanked.

Cargo tanks: All tank lids are to be kept closed. The method of venting requested by the terminal is the closed system.

Should the ship not be equipped with the closed venting system, tank portholes will be opened for intermittent periods but such portholes will be protected with flame arresters.

Main engines: The ship's engines must remain ready for immediate use in case of emergency. Therefore no engine repairs or overhauling are allowed.

Boilers: Blowing of boiler tubes is forbidden whilst moored.

Vessel maintenance: During the time a vessel is moored at Brass Terminal, use of tools which may cause sparks or fire is forbidden in dangerous areas.

Fire fighting: The Master of the vessel must keep a continuous fire watch during loading operations. All fire equipment must remain ready for immediate use.

Unsafe operations: The Master of the vessel will remain solely responsible for damage of any sort that may occur and which is due in whole or in part to infringement of aforesaid safety regulations.

Lifebuoys: Lifebuoys should be available in loading manifold area and at the entry and exit from ship, e.g. at the pilot ladder.

Scuppers: All scuppers must be plugged with leak-proof plugs, and remain plugged until all hoses are disconnected.

WEATHER: *Climate:* The weather is generally fine from November to April, but it is unfavourable during the remaining period of the year owing to the high humidity degree. The temperature varies comparatively little from 70°F to 100°F and averages over 80°F.

Winds: Most winds are from South-Westerly direction with a normal speed range 5 to 18 knots.

Tides: The tidal mean range is 4.6 ft. Main values (referred to chart datum) are as follows:

Mean LW spring level	0.2 ft.
Mean HW spring level	6.1 ft.
Lowest LW level	−0.6 ft.
Highest HW level	7.1 ft.

Currents: Maximum total strength of the current (tidal + density + wind drift) is about three knots.

Direction: North-North Westerly for approximately 75% of the year, South-South Easterly for the remainder. The currents often reverse direction very quickly causing the tanker to swing heavily at the buoy.

SHIPMASTER'S REPORT: 1976.

Documents:

1 Maritime Declaration of Health.
2 Vaccinations Lists.
6 Crew Lists.
4 Passengers Lists.
2 Stores Lists.
2 Personal Effects Lists.
4 Arms and Ammunitions Declarations.
4 Lists of Animals and Birds.
4 Lists of Ports of Call (last 6 weeks).
Clearance last port.

Approaches: Coast line is well defined on high definition radar at a distance of 12 miles to 15 miles and sounding machine will assist efficiently while approaching.

Terminal consists of a central platform showing 2 flashing lights (one red and one white) – letter "U".

Two SBMs: No. 1 situated 1 mile East of the platform is equipped with a Racon (letter "A"). No. 2 situated 1 mile West of the platform.

Pilotage: Berthing Master will board the vessel 2.5 miles North East of the platform. Contact "Brass Terminal" on VHF Channel 16 for berthing instructions and immediately on anchoring to ensure that vessel's arrival is recorded.

Anchorage: 2.5 miles N.E. of the platform.

Restrictions: Vessels berth in daylight hours only.

Max. Size: About 250,000 d.w.t.

Pratique: Agent, Health and Customs Officers board at same time as Berthing Master.

Radio: ETA to be given via Lagos Radio, 120, 72, 48 and 24 hours before arrival at the Terminal anchorage.

Tugs: None available.

Berthing: Effected under the guidance of Berthing Master assisted by a party of 4 Nigerian people and ship's crew.

Whilst berthed a mooring rope must be ready on the poop deck so that the mooring launch, in the event of the vessel riding up on the SBM, may make fast and tow to realign the vessel.

Each SBM is fitted with 2 nylon mooring ropes connected on a single chain and two hose strings with 16 in. end hoses. Position of hoses connection: amidship port side. Vessel should endeavour to present on arrival 2×16 in. connections on port side. A derrick of 7 to 10 tons SWL with a suitable hook must be rigged ready on port side.

Medical: No facilities but assistance may be given on an emergency basis.

Fuel: Not available.

Fresh Water: Not available.

Density: About 1025.

Repatriation: No crew changes possible.

Shore Leave: Not permitted.

General: Crude oil handled is: Light Nigerian Crude API=44.0. Temperature about sea temperature, R.V.P.=10.5. Two of the four Nigerian crew stay on the forecastle head and maintain security watch throughout loading operations. Accommodation must be provided for Berthing Master and 2 men. Accommodation ladder is not required. Pilot ladder or pilot hoist are more suitable because of the swell. Immobilisation of engine is not permitted at SBMs.

Early Departure Procedure: Masters are required to sign all documents in blank. On completion of loading, seals are controlled by customs officer and Agents complete Master's and Consignee's copies of documents whilst ship is disconnecting and leaving berth.

SHIPMASTER'S REPORT: May 1980.
Documents: 5 each of Passengers or Nil passengers, Nil stowaways, Nil distressed seamen, Nil birds and animals, Narcotics List, Ports of Call, Clearance Last Port and 3 copies Deviation Cable.
Customs: All lengths of cloth to be placed under seal.

AUTHORITY: *Operator:* Nigerian AGIP Oil Co. Ltd. Head Office, 9/11 MacCarthy Street, Lagos. P.O.Box 1268, Lagos. *Tel:* 600880/9 (10 lines). *Cables:* Agipoil – Lagos. *Telex:* 21268.

District, New Base Mile 4 – Port Harcourt, P.O.Box 923. *Tel:* 300400/20 (21 lines). *Telex:* Agipoil – Port Harcourt.

AGENT: Alraine (Nigeria) Ltd., 26 Creek Road, Apapa. P.O.Box 265, Apapa and P.O.Box 2206, Lagos. Tel: 47770. Telex 21 244. Cables: "Freight Lagos".

BURUTU: 05.21 N. 05.31 E. (See Plan Book)

No commercial vessels are today using the port of Burutu. Future developments include the construction of a major ship repair facility with graving dock, capacity 150,000 d.w.t.

CALABAR: (See Plan Book)
Old Port 04.57 N. 08.27 E.
New Port 04.50 N. 08.17 E.

LOCATION: New Calabar Port (Lat. 04° 50′ 24″ N., Long. 08° 17′ 31″ E.) is situated about 93 km. from the Fairway Buoy in Calabar River going through a well marked channel by 58 buoys (IALA System). The channel is dredged to 7 m. charted datum with 150 m. in width. Old Port is 83 km. from Fairway Buoy.
DOCUMENTS:
Nigerian Ports Authority:
15 copies of Manifest.
1 SEN (Ship Entry Notice).
Agent to pay in advance for ship.
Clearing Agent to pay wharfage and wharfinger.
4 Stowage Plans.
4 Hatch Lists.
3 Hazardous Cargo Lists.
4 Container Lists.
5 Master's Declarations.
1 Passenger List.
Customs:
2 Crew Lists.
2 Stores List.
List of Ports of Call.
1 Animals List.
1 Arms and Ammunition List.
1 Passenger List.
1 Crew Personnel Effects List.
Quarantine:
2 Crew List.
1 Inoculation List.
2 Derat Certificates.
1 Clearance from Last Port of Call.
1 Stores List.
Vaccination Certificates.
PILOTAGE: Compulsory pilotage as from anchorage area which is between Buoys Nos. 24 and 25 (near Parrot Island). Ship calls Calabar Port Control on VHF Channel 16 asking for advice from 0600 – 1800 hrs. Ship will be advised when the Pilot will board her, normally it takes about 1.5 hours for the Pilot to reach the ship. There is no Pilot vessel but a pilot cutter flying "H" flag. The vessel is normally allowed to enter after the Agent books a Pilot, and dues are paid,.
ANCHORAGES: The area between Buoy Nos. 24 and 25 is a good area for anchorage. The depth is about 7 m. – 8 m., with 3 – 4 shackles the ship holds well. There is a deeper area called "Parrot Deep" which varies between 10 m. – 11 m. chart datum.
RESTRICTIONS: When a vessel arrives at the Fairway Buoy Lat. 04° 18′ 31.7″ N., Long. 08° 14′ 51.3″ E., which can be passed on either side, the vessel can call "Calabar Port Control" or "Harbour Master's Office" on VHF Channel 16 and if no contact made, vessel may proceed to Parrot Island. No night navigation in channel.
MAX. SIZE: Length 150 m. and draft 7 m. at HW. Old Port: LOA – 160 m. Also see "Developments".
RADIO/VHF: No radio service in Calabar at present. "Port Control" operate from 0600 – 1800 hrs. on VHF Channel 16. Steps are in hand to extend the service for 24 hours and to establish S.S.B. 2182 kHz.
RADAR: No radar service.
TUGS: 4 small tugs of 240 h.p. 1 manoeuvring tug of 2,400 h.p. Ship's lines to be used if towing, at a charge.
BERTHING: Old Port:
Ashland Oil Co. – Mellerio Wharf (Private): Length 51 m., max. draft 8 m. Can accommodate vessels up to 150 m. LOA.
Ashland Oil Co. – Jackson Wharf (Private): Length 27 m., max. draft 8 m. Can accommodate vessels up to 100 m. LOA.
Calcemco Wharf (Private): Jetty 75 m. but the depth is affected at the moment, and draft is restricted to 4 m. Can accommodate vessels up to 160 m. LOA.
Calabar Shipping Lines – MacIver Jetty (Private): 55 m. long, max. draft 5.5 m. Used by lighters.
New Port: Length of berth 860 m., can accommodate 4 – 5 vessels of 150 m. LOA with a depth alongside of 9 m. Distance between bollards 30 m.
Pool: 11 mooring buoys can accommodate 10 vessels, length between buoys varies from 220 m. to 130 m.
CARGO FACILITIES: 3 transit sheds, each 175 m. long by 40 m. wide. 2 warehouses of the same dimensions, fire station, fully equipped with up-to-date fire fighting appliances.
Cargo Equipment: 52 forklift trucks, 3 – 6 tons capacity. 7 mobile cranes, 25 tons capacity. 20 trailers of 40 – 60 tons capacity. 6 Mafi tractors. 3 freight lifters of 25 tonnes and 3 freight lifters of 13 tonnes. 9 Portal cranes 10 – 25 tons capacity. 2 tower cranes 36 tons capacity.

Modern Gear Store with new cargo handling gear including spreaders and wires for 20 ft. containers plus lorry and lifting gear. (Note: Shipping Companies should provide their own gear for heavy lifts and 40 ft. containers).
Barges and Pontoons: There are a number of barges and pontoons for seaward-side or mid-stream discharge – tonnages vary between 60 tons and 500 tons.
Container Areas:
A. Pack I 5,500 sq.m.
B. Pack II 4,000 sq.m.
C. Pack III 4,000 sq.m. for empty containers only.
STEVEDORES: Supplied on request of Agent round the clock if required.
MEDICAL: There is private clinic as well as Government Hospitals. Swiss Air Ambulance also available for repatriation. Ikpeme Clinic at 18/20 Ambo Street, Calabar is very modern.
FRESH WATER: Can be supplied in the New Harbour.
FUEL: Diesel oil can be supplied by motor tankers (30 tons each).
REPAIRS: Minor repairs only. Spares often in short supply.
WATCHMEN: Security men are compulsory and supplied by the Agent.
OPENING/CLOSING HATCHES: Crew.
REPATRIATION: A good air link from Calabar Airport to different places in the world via Port Harcourt, Lagos, Douala.
POLICE/AMBULANCE/FIRE: Contact Harbour Master and Agent.
CUSTOMS ALLOWANCES: See "Lagos".
IDENTIFICATION CARDS: See "Lagos".
SHORE LEAVE: See "Lagos".
DEVELOPMENTS: Steps in hand to bring the depth to 9 m. chart datum and to widen the channel.
AUTHORITY: Nigerian Ports Authority, Private Mail Bag: 1014, Calabar, Cross River State, Nigeria. *Managed By:* Port Manager – Tel: 221179, 220088 Office; 221192 House. Traffic Manager: Tel: 220189,220088 Office; 221561 House. Asst. Chief Port Harbour Master – Tel: 221562 220088 Office; 222480 House. *Cables:* "Genports" Calabar.

AGENT: Intertrans (Nigeria) Ltd. P.O.Box 10, Calabar. Tel: 087-222-554. Telex: Via Lagos 21244. Attn: Calabar.

DEGEMA (Including Abonnema): 04.44 N. 06.46 E.

LOCATION: Degema and Abonnema are very close to each other on the Sonbreiro River and are divided by a Creek through which launches and small craft sail to Port Harcourt.
PILOTAGE: Compulsory through Boler Creek. Pilots embark at Bonny.
BERTHING: The ports are approached from Bonny via Boler Creek, which has a depth of 4.88 m. at HW. Anchorages for 3 vessels in harbour to load/discharge, max. draft 16 ft. (limited by depth of Boler Creek). Cargo is handled by lighters.

Bulk Oil Plants of Nigeria Ltd. operate a berth for the loading of bulk palm oil onto main line vessels.
AUTHORITY: Harbour Master, Port Harcourt.

ESCRAVOS: 05.30 N. 05.00 E. (See Plan Book)

DOCUMENTS: Required and brought out by Pilot:

4 Nigerian Ports Authority/Master's Declaration.
2 Customs and Excise (Form C 13).
4 Ship's Report (Gulf). } on behalf of Agent.
2 Requests for Service } on behalf of Agent.

An extra set of documents is put aboard for the vessel's next visit.

The sailing clearance will be completed after B/L figure of cargo loaded is available, and will be delivered to the ship before sailing.

Shipmaster's Report: November, 1982.

Papers required:

1 Crew List.
2 Passenger or Nil Passenger Lists.
2 Animal Lists.
2 Narcotics Lists.
2 Arms & Ammunition Lists.
1 Stores List.
1 Crew Declaration.

Pilot gives Master a form for signing. This form is then sent ashore and Terminal will not start loading until they have received this form. It is advisable to obtain a receipt for this form from whoever takes it ashore.

In addition Master to sign two forms.

1. CERTIFICATE OF UNDERTAKING

As a result of excessive ship/shore difference of . . . . Long Tons, ship's figures higher, I, ... the Master of the above named vessel undertake to furnish you with out-turn figures at the port of discharge.

Signed . . . . Master.

2. In addition to the conditions of use of the Terminal Facilities (see Escravos Terminal Booklet – pp. 11 – 14 Loading Procedures and Responsibility of the Master) the tanker will be loaded under the direction and full responsibility of the ship's personnel with the co-operation of the Mooring Master acting as liaison for radio contacts between ships and Terminal.

Stoppage of loading at the completion of cargo will be ordered exclusively by the ship's Master or his delegate to the Mooring Master who will transmit the order to the Terminal.

Therefore it is understood that in no event the Gulf Oil Company (Nig.) Limited could be held liable for deadfreight incurred by the vessel and should the vessel require the Terminal to stop loading at the predetermined quantity, the vessel remains the sole responsibility for any difference occurring in cargo figures and subsequent deadfreight or overweight.

Please acknowledge receipt of this letter by signing the attached copies.

Signed . . . . Master.

PILOTAGE: Compulsory. Boarding area is in a position approximately 3 miles W.N.W. of the Berth Operations Platform. Also see "General".

Supervisor Pilot's Report: From my personal experience here at the Tank Farm, I can add that in poor visibility or when Tankers approaching this Terminal are having difficulties with their Radars, I am guiding them to proper anchorage using a small R.D.F. which is located at the local airport – Heliport in the Tank Farm and used by local aircraft traffic. The signal comes as "ES" (· · · ·) on 305 kc/s and gives a good bearing from a distance of 30 miles. This is not an official Navigational Aid, but I have used it successfully for many years and besides, when you have nothing else in the area, this is a great help to obtain a line-position.

NAVIGATION AIDS: *Berth Operations Platform:* This is a conspicuous steel structure 85 ft. high (Position 05° 30′ 32″ N., 05° 00′ 19.5″ E.), between the berth and the shore. On top of this structure is a heliport, which at night is surrounded by red lights. In the event of a power failure a green intermittent light will be shown from one corner of the seaward side of the platform.

A RACON reflector is mounted on this platform for easy identification of the Gulf sea loading area. Radar transmission from the incoming vessel triggers the RACON Unit which responds with the Morse Code letter "G" (– – ·), followed by a solid tail. This signal is observed visually on the ship's radar screen and appears very close to the point where the radar echo of the berth operations platform itself should appear.

Berth No. 2 – SBM: Light: White. Light 6.0 secs., Eclipse 4.0 secs. Range 5 miles. Radar Reflector.

Foghorn: Electric air oscillator. Range 0.5 miles, blast every 20 secs. Blast 2.0 secs., silence 18.0 secs.

Berth No. 3 – SBM: Light: White. Light Fl. 10 secs. Range 4.5 miles. Radar Reflector.

Foghorn: Range 2 miles, blast two secs. on and 18 secs. off.

Charts: B.A. 1862 and B.A. 3304.

RADIO: Vessels bound for Escravos must advise their ETA to Gocon, Lagos, 72 hours and 24 hours before arrival – the message to contain the vessel's name, ETA, Master's name. A 24 hour watch is maintained on VHF Channel 16, in the Senior Mooring Master's Office, and ships are usually able to make contact on this Channel at a distance of 20 miles to 40 miles on the seaward side of the Berth Operations Platform. Channels 10 and 10A used for internal traffic and ship berthing operations. Also see "Anchorage".

ANCHORAGE: Vessels required to anchor on arrival will anchor in position approx. 3 miles W.N.W. of the Berth Operations Platform, i.e. in a position Lat. 05° 31′ 00″ N., Long. 04° 57′ 30″ E., or as otherwise instructed.

On approaching the terminal, VHF contact can be established with the Mooring Master on Channel 10, 10A and 16 and the vessel will be advised of which berth has been nominated for her cargo. At the same time, the vessel will be advised where the Mooring Master will board. In cases where VHF contact is not made, the vessels will remain in the anchorage area until such time as contact is made by radio or the pilot boat. Vessels are advised to anchor only in the stated area due to the existence of submarine pipe-lines in other areas.

Anchorage is forbidden in the mooring area.

RESTRICTIONS: Mooring and unmooring operations will be undertaken by day and by night under normal weather conditions.

Notice of Readiness will be accepted by the Company representative on arrival providing that the ship is in all respects ready to load.

MAX. SIZE: The Escravos Terminal consists of two Single Buoy Mooring Berths Nos. 2 and 3 only, the conventional Sea Berth (Berth No. 1) having now been de-commissioned.

The location of the Sea Terminal Berth No. 2 (SBM) for vessels up to 120,000 d.w.t. is off the North of the Escravos River in a position Lat. 5° 30′ 37″ N., Long. 4° 59′ 25″ E., and has a minimum depth of water of 65 ft. at LWS.

Berth No. 3 (SBM) is situated 4.25 miles W.S.W. of No. 2 berth in a position Lat. 5° 29′ 29″ N., Long. 4° 55′ 54″ E., and will accommodate vessels up to 300,000 d.w.t. in a minimum depth of 100 ft. at LWS on a year round basis, but during the dry season, October to March, vessels up to 350,000 d.w.t. will be accommodated on receipt of their acceptability by the Terminal.

MOORING: Before arrival at the pilot boarding area, it will be necessary to ensure that the following moorings are ready for use on arrival at the berths:

Forward: 2 mooring ropes on forecastle – buoyant lines if possible, e.g. polypropylene, on the forecastle head.

When the vessel is within reasonable distance of the buoy, 1 ship's line will be carried by the mooring launch to the floating buoy lines and secured to same, this line will then be heaved aboard. As the buoy rope comes clear of the water it will be noted that a chain is attached to it. This chain is to be secured to either a bow stopper or a towing bracket if fitted on the vessel otherwise terminal provided Pelikan hooks will be used, the latter being secured to a set of bitts on the vessel. This chain is to be secured in such a manner that the mooring rope is outside of the extreme length of the vessel; i.e. so that the chain will absorb any chafing if the buoy line crosses the bow.

Power must be available at all times on deck winches and windlass while vessel is at the berth.

Aft: A mooring line must be available aft, secured to the bitts and of sufficient length to enable a tug-boat to pick up the eye and tow on it to realign the vessel if necessary. If available, a buoyant line is also preferred in this position.

There are no special arrangements for unmooring.

CARGO: Nigerian Light Crude - API 37° approx. Temperature 85° F. (fairly steady throughout the year).

HOSES: Lifting, connecting, disconnecting, lowering and other handling of hoses will be performed by the ship's crew, as advised by the Company representative, and where possible the Company will provide a pipe-line gang to assist the ship's crew. At all times a deck officer must be in attendance.

Both derricks must be rigged and ready for use on arrival and vessels are cautioned that the weight of each hose is at least 7 tons under favourable conditions. Where possible, it is requested that the derrick runner is on one winch and the topping lift on another, as this will make the hose-handling operation much smoother and faster. In any case, members of the ship's crew will be required to operate the winch or winches.

Particular care should be taken during the hose handling operations in order to avoid serious damage to the hoses, the plastic floats and buoys on the plate edges, rails, etc. The cargo hoses are fitted with Camlock connections, blank flanges and chafing plates.

As no equipment will be supplied from the shore; it is essential that all vessels nominated for this port have an adequate supply of gaskets, nuts, bolts, spanners, tools, etc. ASA reducers for use with the Camlock connections can be supplied in an emergency in the standard sizes. Failure to have these items will lead to delay in berthing and could even lead to a situation where the vessel may no longer be accepted by the terminal. Such delays would be for the ship's account.

Before hose handling operations begin, materials must be near the manifold and remain near the manifold to cope with any escape of oil, i.e. drip trays, sand, detergent, etc., and must in the event of a spill be utilized as rapidly as possible.

Berth No. 2: Loading is through an SBM which is approx. 40 ft. in diameter and held in position by 4 chains secured to piles sunk into the seabed. 1×24 in. floating hose is secured to buoy and has 2×12 in. tailing pieces attached to it with 12 bolt holes ASA 150 flanges; they are also fitted with Camlock connections.

Berth No. 3: Same as No. 2 but improved type and more heavily moored with 8 chains secured to piles sunk into the seabed. There is 1×24 in. floating hose with 2×16 in. tailing pieces. There are ASA flanges with Camlock connections, similar to those at Berth No. 2.

There are 2 SBM Berths only at this terminal – the conventional berth (No. 1) has been de-commissioned. The max. loading rate is 30,000 b.p.h. (approximately 4,000 t.p.h.).

LOADING/BALLAST: *Deballasting and Loading Procedures:* Vessels proceeding to Escravos to load must arrive with sufficient clean ballast for safe manoeuvring. A vessel arriving with dirty ballast will incur costly delays as it is not permitted to discharge dirty ballast to the sea. The "Load on top" system is accepted at this terminal and vessels are requested to arrive with the slop tank "settled out" as far as is possible and so avoid any chance of pollution of the Terminal waters from this particular tank.

The Nigerian Government has very strong views on pollution and vessels are warned that a very careful watch is kept at all times to ensure that pollution does not take place, or that if pollution should occur it is controlled as quickly as possible.

All vessels are cautioned to keep a close watch on the floating hose (or hoses) towards the end of deballasting, as it is possible, under certain conditions of weather and tide for the hose to become trapped under the fore-foot of the vessel. Should this situation appear likely to arise vessels are requested to attempt to keep the fore-foot submerged by transfer of water or bunkers, etc. If the hose becomes foul, it must be disconnected and towed clear causing considerable delay to the vessel.

During the hours of darkness it is requested that searchlights from bridge wings and approved floodlights be used to illuminate the surrounding water to facilitate detection of oil and assist generally in loading operations. Vessels are advised that failure to supply sufficient lighting could result in cargo operations not being allowed during the hours of darkness. Such delay would be for the ship's accounts.

After the ballast tanks have been inspected and found to be satisfactory, deballasting will commence on the advice of the Company Representative. When all the ballast has been discharged, the tanks will again be inspected and if ready for cargo a Dry Certificate, if presented, will be signed by the Company representative. In any case, cargo will be loaded when both ship and shore are ready to commence operations. In no circumstances will the vessel be expected to load at a faster rate than that requested by the Master. It is the ship's responsibility to check that the requested loading rate is not being exceeded. The Company for their part will make every effort to maintain the requested rate and will advise of any alteration of loading rate immediately; prior warning being given if circumstances permit.

Simultaneous Deballasting and Loading: In order to reduce the turn around time at this Terminal, but with close attention to safety, vessels will be permitted to load cargo and discharge ballast simultaneously, provided that no contamination of cargo or pollution of the Terminal waters can occur. Vessels desirous of adopting this method of loading can do so, but will be required to advise the Company in writing, stating that the vessel accepts full responsibility if this method of loading results in contamination of cargo and/or pollution of the Terminal waters.

Throughout the deballasting and cargo operations, a deck officer must be on deck with sufficient crew members to safely handle the operation. Company representatives will be on board throughout to co-ordinate terminal and marine operations and will be in constant communication with the terminal by portable and/or ship's VHF sets. Before loading commences the amount of cargo required must be given to the Company Representative in writing and the Terminal will, in conjunction with the vessel, arrange to stop the flow of cargo at this predetermined figure.

THERE ARE NO FACILITIES AVAILABLE TO DISCHARGE EXCESS CARGO SHOULD THE VESSEL OVERLOAD.

When requesting the tonnage required in writing, a statement should be included, and will be deemed to include, that Gulf Oil Company (Nigeria) Limited will not be held responsible for any errors or any costs or claims arising directly or indirectly from such errors. Such statement is a condition of loading. It is recommended that frequent checks are made on the loading speed and the quantities received and required so that, if possible, adjustments can be made.

The Company Representative will advise on the detailed procedure for shutting down and disconnecting, but briefly, after cargo is completed and oil has ceased to flow, loading valves on the shore and Berth Operation Platform (BOP) will be closed. Then and not before, the vessel's manifold valves may be closed.

Do not close ship's valves against incoming oil as such procedure creates excessive pressure which may damage hoses, terminal facilities, or ship's piping. Vessels will be held liable for damages resulting from failure to observe this precaution. In addition to the above, serious pollution could result which will involve the vessel in further claims and/or fines. Therefore, for the sake and safety of all parties concerned, please use the utmost care and vigilance when loading at this terminal.

Figures taken after completion will be passed to the shore by VHF and a ship/shore difference obtained. On request, full sets of cargo papers will be prepared and delivered to the Master as speedily as possible. However the briefer form of documentation is used at this terminal, and the remainder of the documents will be forwarded by airmail. At the same time the Company will arrange clearance for the vessel.

Loading signal to be displayed is the International Code flag "B" from a conspicuous halyard during the hours of daylight. During the hours of darkness a red light visible all around the horizon at a distance of at least one mile is to be exhibited.

REPAIRS: No facilities of any kind are available at this port.

Under no circumstances are engine repairs or the immobilisation of main engines permitted within the port limits.

REPATRIATION: Not permitted except in grave emergency and then only if the person concerned holds all the necessary valid certificates and documents, e.g. valid Cholera and Yellow Fever Certificates.

WEATHER AND CURRENTS: Wind and swell are mostly from a South-westerly direction. The weather is generally good from November to May, but is unfavourable during the wet season, i.e. May to November. For approximately 75% of the year the current sets in a N.N.W. direction and for the remainder of the year it is reversed, i.e. S.S.E. The strength of the current varies from 0.5 to 1.5 knots, and the currents frequently reverse direction very quickly causing the vessel to yaw (swing) heavily at the berth.

FRESH WATER: Not available.

FUEL: Not available.

MEDICAL: Not available except in an emergency.

STORES: Stores are not available at this Terminal and urgent spares/equipment forwarded by air can take up to 3 weeks to clear formalities. In view of this it is essential that Gulf be advised of the airwaybill number at the earliest opportunity to avoid further delays.

TIME: Local time is GMT plus one hour throughout the year.

SHORE LEAVE: In view of the isolated positions of the buoy moorings (approx. 15 and 19 miles from shore) Masters are strongly advised not to grant shore leave. The weather and swell conditions could result in persons being injured either embarking or disembarking from the vessel, and in addition the boat journey will take approx. 2 – 2.5 hours. Should the weather deteriorate, it could mean delay to the vessel as outward clearance would not be granted until all the crew were on board the vessel. As the terminal does not own any suitable boats, it would be necessary for the vessel to charter one for shore leave purposes.

In view of the foregoing, the terminal does not recommend shore leave being granted.

NATIONAL FLAG: Available from the Company.

GENERAL: In view of the exposed location of the berths, the Mooring Master and pipe-line gang will have to remain on board throughout the vessel's stay at the berth and, therefore, it will be necessary for the vessel to arrange food and accommodation for this period. A pipe-line gang will usually consist of four men, but this number may be varied at the discretion of the Company.

It is assumed that the Mooring Master will be accommodated in the Pilot Room; but where such a room does not exist on board, then accommodation equivalent to a minimum standard required for a Senior Officer is to be provided. In the case of meals, due allowance and provision is to be made for the fact that irregular hours of work by day and night may be involved.

AGENCY: The Gulf Oil Company (Nigeria) Ltd. will assist with the Agency work for vessels calling at the Terminal but does not perform a general Agency function. Owners of vessels calling at the Terminal can arrange for their own Agents, although due to the location of the Terminal there are no Agents' offices in the area. All payments to the Company while assisting the Agents should be sent to: Gulf Oil Company (Nigeria) Ltd., 19 Tinubu Square, Private Mail Bag No. 2469, Lagos, Nigeria. *Tel:* 650820. *Telex:* 21314. *Cables:* Gocon.

AUTHORITY: Gulf Oil Company (Nigeria) Limited (see "Agency" above).

FORCADOS (Offshore Terminal): 05.10 N. 05.10 E. (See Plan Book)

IMPORTANT NOTICE: The Company, as Operator for the NNPC/Shell Joint Venture, has been directed that the following vessels will not be permitted to enter Nigerian Waters to load Nigerian Crude Oil:

(A) Any vessel which is owned directly or through subsidiaries or chartered or managed by companies or persons in South Africa, Namibia or Israel, or is registered in any of these countries.

(B) Any vessel which has called at a port in South Africa, Namibia or Israel during a period of 6 weeks immediately preceding her arrival off any of the Company's Terminals. (A Port Call includes the calling off or near a port for the purpose of receiving services from the shore by helicopter or launch/boat.)

(C) Any vessel which has among its officers, crew, passengers or supernumeraries any person who is a national or resident of South Africa, Namibia or Israel or who has visited any of these countries as evidenced by an entry in that person's passport or other identity document.

Vessels arriving off the Company's Terminals are subject to check by Government Authorities to ensure that the above-mentioned provisions have been adhered to. Any infringement is liable to cause serious consequences for the Master, Manager, Charterer and/or Owner of the vessel.

Vessels lifting crude oil must in addition comply with any other restrictions that may be generally imposed by the Government of the Federal Republic of Nigeria on vessels entering Nigerian Waters for any purpose whatsoever.

DOCUMENTS:

	Customs	*Health*	*Agent*
Vaccination List	1	1	3
Maritime Declaration of Health	1	1	3
List of Last Port of Call (6 weeks)	1	1	3
List of Arms and Ammunition	2	–	3
List of Animals and Birds	2	1	3
Crew Labour List	–	–	3
Passenger List	1	1	3
Stowaway List	1	1	3
Personal Effects List	1	–	–
Clearance from Last Port of Call	1	–	–

Derat Exemption Certificate to be produced.

Vaccination Booklets for all crew to be sighted.

APPROACHES: An efficient sounding machine and a high definition radar will assist in making the terminal for the first time. A heavy cluster of radar echoes from the Escravos area may be recorded on passing the 100-fathom line. On making the 20 fathom line, it is reported that the coastline from North Point to Moore Point and from South Point to Ajamabri shows on the radar screen with good chart comparison.

Once the vessel's position is ascertained and the course for Forcados adopted, the first and most obvious sighting, at night, will be that of the platform, which is marked with numerous fixed lights at several levels. The platform, which also serves as a helicopter platform, is in close proximity to the two SBMs.

PILOTAGE: Berthing Master will board vessel on arrival or at anchorage, and remains on board throughout. Contact Berthing Master on VHF Channel 8. Call sign "Forcados Offshore Pilots". *N.B.:* Also contact "Forcados Terminal" on Channel 8 immediately on anchoring to ensure that vessel's arrival is recorded and that berthing turn will be in correct sequence.

Arriving tankers are to make a good lee for the embarking Pilot. Boarding facilities such as pilot ladders must not be made of nylon rope.

ANCHORAGES: 3 miles West of or 2 miles N.W. of Production Platform in position Lat. 5° 10′ 17″ N., Long. 5° 10′ 42″ E.

Vessels must not proceed inshore from these positions without a Pilot. When at anchor a listening watch is to be maintained on Channel 8 and this Channel must not be used for ship-to-ship exchanges.

Note: A 14 mile × 48 in. pipe-line extends from the coast at South Point near Forcados to the manifold Platform and thence to the SBMs. Vessels are warned not to anchor in the vicinity of the pipe-line.

RESTRICTIONS: Vessels berth at any state of tide, night or day.

Also see "Max. Size".

MAX. SIZE: Minimum size 45,000 tonnes Summer d.w.t. Max. size 320,000 tonnes Summer d.w.t. Vertical distance bow fairlead to water line not to exceed 60 ft. at any time. No restriction on length and beam. Max. draft 65 ft.

PRATIQUE: Health and Customs Officers board at a convenient hour and come from Forcados, 20 miles distant from the buoys. Normally travel by high-speed launch, but may occasionally use helicopter.

RADIO: All ships to radio their ETA via Lagos Radio to the Lagos Agents at least 72 hours before vessel's ETA at the terminal anchorage.

ETA also to be reconfirmed 48 hours prior to arrival.

ETA by Radio for all Ships: In view of communication difficulties with our terminals at Bonny and Forcados and in order to avoid undue delays, in addition to normal W/T advices to Agents and Shell Lagos as contained in Port Information Book, we wish to inform you about the possibility of passing to us your ETA via M.V. Oil Maintainer, call sign GYEU.

The Oil Maintainer (Golf Yankee Echo Uniform) keeps a daily listening watch on single side band R/T on following frequencies and times:

From 1600 to 1620 hrs. local time 16587.1 MHz (Tx/Rx)
From 1620 to 1640 hrs. local time 12435.4 MHz (Tx/Rx)
From 1640 to 1700 hrs. local time 8294.2 MHz (Tx/Rx)

Please advise 72 hours before arrival Bonny or Forcados:

1. Vessel's Name.
2. ETA.
3. To load ...... tons ...... grade.
4. Last Port.
5. First Nigerian port to load.
6. Any other Nigerian ports to load.
7. Name of Shipping Agency.
8. Next discharge port.

The GYEU will acknowledge only and further calls are not required unless ETA changes by 2 hours or more.

TUGS: No tugs required and none available.

BERTHING: Effected under guidance of Berthing Master and local assistant who both remain on board throughout loading operations. Accommodation for both to be provided. Whilst berthed a suitable buoyant mooring rope must be ready on the poop deck so that the mooring launch (line boat) may, in the event of the vessel riding up on the SBM, make fast and tow to realign vessel.

Two SBMs each fitted with 2 OCIMF standard 15 in. × 150 ft. nylon grommet ropes and 1 hose string some 870 ft. long with 2×16 in. end hoses. No. 1 SBM is South of platform and No. 2 is West.

Position of hose connections: Amidships on starboard side. Vessels should endeavour to present 2×16 in. (400 mm.) (150 ASA) connections on arrival. Ship's crew are required to connect and disconnect the hoses under the advice of the Berthing Master and/or his assistant. A derrick, SWL at least 10 tonnes, must be rigged ready on both sides and plumbed clear of ship's side. Derrick runner must be equipped with suitable hook.

In the case of vessels with a heavy multisheaved block a short wire strop of adequate strength with a hook should be provided.

Weight of Hoses: The following table gives the approximate weights of hose strings in tonnes (including fittings, floats and pick-up buoy) with all hoses full of crude oil of SG 0.850. The assumed total lift is 7.5 m. (25 ft.) above deck level, with the tanker on light draft.

Size of Tanker	*16 in. Inside Diameter Hoses*
500,000 d.w.t.	11.4
330,000 d.w.t.	9.4
270,000 d.w.t.	9.1
200,000 d.w.t.	8.7
100,000 d.w.t.	7.5
70,000 d.w.t.	7.1

Loading: Load-on-top system operates at Forcados. Slops cannot be accepted ashore. Vessels must arrive with clean ballast. Maximum loading rates 11,000 t.p.h.

A single grade of crude oil is handled which is known as "Forcados Blend".

Shore Line System: Vessels load through SBM from shore through 48 in. line to SBM. The 48 in. submarine line to the SBM is some 14 miles in length, therefore great care must be exercised during loading when ship's valves are manipulated to avoid pressure surges. Pressure recorders are normally fitted at the spool piece between ship's manifold and tail end of the hose string to monitor pressure changes generated on board the vessel.

MEDICAL: Limited medical assistance available but in extreme emergencies only. Treatment of minor ailments and vaccinations, etc. is under no circumstances available. It may be possible in the event of an accident to obtain medical advice. Contact Terminal VHF Channel 8 in first instance.

DENSITY: 1025.

FUEL: Not available.

FRESH WATER: Not available.

REPATRIATION: No crew changes possible.

SHORE LEAVE: Not permitted.

GENERAL: Nigerian flag to be flown.

Air letter forms are not acceptable unless used with Nigerian stamps.

Freeboard: The maximum forward freeboard is 60 ft. while vessel is moored to the SBM. Masters are requested to comply with this limitation.

Loading: Ships are required to load cargo as rapidly as possible by day and night in accordance with the terms of their charter parties.

This means that ships are expected to load as fast as the Company can supply or they can safely receive. The question of how fast a ship can load is the responsibility of the Master having regard to his Owner's instructions, the charter party and the experience of ships' personnel. However, as further guidance, and in absence of any instructions to the contrary, ships are accepted by the Company on the understanding that ships will be able to accept a bulk loading rate per hour of not less than 10% of the summer deadweight of the vessel.

At offshore berth the Berthing Master acts as Loading Master during Loading Operations and is provided with "walkie-talkie" radios to ensure adequate ship/shore communication.

Loading Masters visit each vessel, and Masters are requested to co-operate in the completion of the Company's Tanker Port Performance Time Sheet by ship and shore personnel. Only crude oil is handled at the Company's terminal, loading temperature and specific gravity of the grade of crude, Forcados Blend is reasonably constant and is approximately: 0.8837 at loading temperature.

Immobilisation of Engines: Not permitted at SBMs. Not advisable at sea anchorages as there are many obstructions if vessel drags anchor.

Restrictions Which may Cause Delays: Weather. Worst period June–September when heavy swell may be encountered.

Early Departure Procedure: A modified early departure procedure is in operation at Forcados offshore terminal. Masters are requested to sign all documents in blank, retaining in their possession Master's consignees copies. On completion of loading, the Berthing Master will supply Masters with the figures required for the completion of the retained documents. Masters are requested to complete these before the departure of the vessel. Customs and Agency representatives will normally board vessels during daylight hours. Government regulations require that all vessels are cleared inwards before commencement of loading. Depending on other commitments of the offshore launch, it may be necessary to request Masters to provide temporary accommodation for these officials. Any attempt on the part of the boarding officers to persuade the Master to supply more than normal representation should be resisted. In the event of any problem arising over such a matter full details should be reported to the Agent.

WATCHMEN: Whilst berthed at an SBM, a security watch must be kept on the forecastle head by member(s) of the ship's crew throughout the hours of darkness to raise the alarm and advise Berthing Master on the approach of local small craft. Instances have occurred at Nigerian Offshore Terminals where nylon mooring ropes have been cut and stolen with the vessel in the berth. The Berthing Master should also be advised in the event that the vessel rides up to the SBM.

SHIPMASTER'S REPORT: The SBMs are situated about 11 miles offshore.

Moorings: Starboard derrick topped and doubled up. If accommodation ladder rigged, then on port-side. Not necessary for vessels up to 50,000 d.w.t.

Hoses: All sizes of reducers available.

SHIPMASTER'S REPORT: 1979.

Documents: Ship's stamp to be on all documents.

5 lists ports of call; 5 arms and ammunition (3 for Agent, 2 for Customs); 4 each of vaccinations; nil passengers; nil stowaways; crew labour list (presumably DBS); 1 copy of diversion cable; 4 lists "Nil" animals or birds.

Pilotage: Require accommodation ladder with pilot ladder for large vessels due to swell.

VHF: Channel 8 for all communications with Pilot, Loading Terminal, and Cargo Operations.

Berthing: Line required aft should preferably be polypropylene or one that floats.

Tankers: Loading temperature about 99°F, will vary slightly depending on loading rate.

OPERATOR: The Shell Petroleum Development Co. of Nigeria Ltd., Freeman House, 21-22 Marina, Private Mail Bag 2418, Lagos, Nigeria. *Tel:* 601600 (17 lines), 601820 (9 lines). *Telex:* 21235. *Cables:* Shell, Lagos. *Contact:* Port Captain, Forcados Terminal.

KOKO: 06.01 N. 05.29 E. (See Plan Book)

DOCUMENTS: See "Lagos".

APPROACH: Escravos Fairway Buoy 05.30 N. 05.04 E. for entry to Escravos River. Present draft limit 6.4 m. Dredging of channel from Escravos down to 10 m. expected to be completed by end of 1984.

PILOTAGE: On arrival at Escravos Fairway buoy the Master should call Delta Pilots Union on VHF Channel 16 to send a River Pilot onboard to pilot vessel to the mid-stream of Koko for further pilotage alongside the port by the NPA Harbour Pilot. Daylight pilotage only.

The mouth of Escravos River (05° 35′ N., 05° 10′ E.). is the main entrance for the Delta Creek ports of Warri, Koko, Burutu and Sapele. Before entering any of the creeks, rivers or channels from Escravos to the above mentioned ports, vessels are required to broadcast their intentions and to keep constant VHF radio watch. Positions and movements must be exchanged with other vessels in the vicinity.

The Pilot Station at Escravos is located 0.5 miles North of the Escravos Beacon. The boarding position of the Pilot is 1.0 miles West of buoy No. 5 (close to the breakwater) when vessel is ready for proceeding inward. Vessel will always drop anchor at Escravos inner breakwater anchorage until further instruction is received from the Port Authority.

In addition; On arrival of vessels at Escravos the Pilot normally boards with one helmsman and remains onboard until vessel's departure.

RADIO: See "Lagos" for ETA advices to Agent. Assistant Harbour Master at Sapele, or Beach Master at Koko to be contacted on VHF Channel 16.

VHF: Contact Pilot VHF Channel 16. Contact Agent in Sapele on VHF Channel 16.

BERTHING: Two hard quay berths giving a total quay length of 137 m. and max. draft of 7.32 m. Berthing during daylight hours only.

MEDICAL: Facilities available.
FRESH WATER: Available and delivered by barge.
FUEL: Diesel oil available locally and delivered by barge. Fuel oil available by barge from Warri and arranged through Agent, both products in limited supply.
FIRE PRECAUTIONS: No local facilities.
REPAIRS: No local facilities. See "Warri".
GANGWAY/DECK WATCHMEN: Compulsory during the night while in port.
REPATRIATION: By road to Benin or Warri, both connected with Lagos by regular air service.
TIDE: Range approx. 2 m., and velocity up to 3.5 knots.
DENSITY: Salt.
SHORE LEAVE: See "Lagos".
IDENTIFICATION CARDS: See "Lagos".
TELEPHONES: Not available for placing on board. Available in Post and Telegrams office in Sapele, and at Agent's office at Warri.

SHIPMASTER'S REPORT: 1977.
Documents: Livestock List also required.
Pilotage: Request Creek Pilots through Escravos Pilot on VHF Channel 16. The Pilots are local fishermen and race each other to the vessel to offer their services. They will not proceed beyond the breakwater. Special care must be taken when entering, as many of the buoys are out of position.

A strong N.W. current runs by the breakwater, also there is a heavy swell which makes steering difficult.

Draft varies but seems to be not less than 18 ft. at LW to 24 ft. at HW. In Escravos not only a Pilot boards the ship but a helmsman too. The latter is quite useful especially in the narrow part of Nanacreek.

Koko has a VHF station Channel 16 for port operations.

Cargo shed capacity is insufficient, so more often than not this shed is full and cargo is discharged into "direct delivery". But because of the bad infrastructure of this port and the frequent lack of lorries, this discharge is a slow operation (sometimes less than 100 tons per day).

Ships waiting for berthing at Koko can anchor downstream or upstream of the berth. The anchorage is good and the "Creekpilots" stay onboard, i.e. they stay till the ship's return to Escravos, where they boarded.

Repatriation: By road to Warri and there by small plane to Port Harcourt or Lagos.

AGENT: See "Sapele".

LAGOS (including Apapa and Tin Can Island):
06.27 N. 03.24 E. **(See Plan Book)**

DOCUMENTS:
Documentation Procedures:

1) By Federal Decree 2 months prior to vessel's arrival the Agent requires certain information from Principals in order to register the vessel with NPA for obtaining the Ship Entry Notice (SEN). Not applicable to vessels carrying petroleum products in bulk, or in ballast.

Without SEN the vessel cannot enter Nigerian territorial waters (30 nautical miles).

Information required is as follows: Name of ship, nationality, g.r.t., n.r.t., draft, LOA, Port of Registry, Certificate of Registry Number, Owners and/or Agents in Nigeria, Port of Origin, Port(s) desired in Nigeria, ETA, Total Tonnage of Cargo to be Carried (Outward and Inward), Description of Landings and Loadings for which permission is sought, e.g. General Cargo, Containers (in container vessel or mixed cargo vessel). Cement, Bulk Liquid, etc.

In addition, for preparation of preliminary Manifest, the following are required: Shipper, name and address, Consignee, name and address, Cargo Marks, Cargo Quantities (numbers), Cargo Description, whether Freight Prepaid or Collect, Estimated Time of Departure from Port of Loading.

2) 14 days prior to arrival Agent requires:
  10 Manifests.
  3 Stowage Lists.
  3 Hatch Lists.

3) On arrival at Lagos, Master must be prepared to present:
  5 Ports of Call Lists (last voyage).
  5 Crew Lists.
  4 Kroo Boy Lists.
  4 Animal Lists.
  *4 Arms and Ammunition Lists (if none on board only 2).
  1 Extra Manifest for transhipment (if applicable).
  1 Stores List.
  1 Crew Declaration List (personal effects).
  1 Declaration of Health.
  1 Vaccination List.
  1 Narcotics List
  1 Parcel List.
  5 Passengers Lists.
  1 Stowaway List.
  1 Declaration – fuel in double bottom tanks.

Currency List (for National Safety Organisation). Foreign currency may have to be deposited ashore.

*Ship's Master allowed 1 gun and 100/150 rounds of ammunition.

Where not applicable all documents still to be prepared bearing the marking "Nil".

Other forms prepared by the Agent and furnished on arrival.

4) For departure all documentation prepared by the Agent.

Berthing Procedures:

1) Master to cable Agent via Lagos Radio ETA 7, 4, 2 and 1 day prior to arrival enabling Agent to declare vessel at the Berthing Committee Meeting well in advance.

2) Master to contact Agent on VHF Channel 16 prior to arrival at anchorage (range approximately 30 miles).

3) On arrival at anchorage Master to contact Lagos Port, Call Sign "East Mole Station" giving all vessel and cargo particulars, Agent's name, SEN No. and date of issue. Vessel also to cable Harbour Master's Office for identical information. Thereafter watch on VHF as per Agent's instructions.

4) Only on arrival and strictly after declaration can Agent book Pilot and time for boarding will be advised.

5) The pilot station (Call sign "Chief Pilot's Office") will contact vessel well in advance to allow her to proceed to the Fairway Buoy for boarding of Pilot.

6) The Agent with the Health, Immigration and Customs and Excise Authorities board the vessel after berthing.

Unberthing Procedures:

1) Agent prepares (outward) Customs clearance and delivers a copy to Master.

2) Agent books Pilot and advises time for boarding.

3) Vessel keeps continuous watch on VHF for instructions from the Chief Pilot's Office.

PILOTAGE: Compulsory. Hoist "G" flag. Contact Pilot by VHF Channel 16. No pilot boat stationed outside. Daylight service only (until 1600 hrs.).

Only on arrival, and strictly after declaration, can Agent book Pilot; time for boarding will be advised.

The Pilot station (call sign "Chief Pilot's Office") will contact vessel well in advance to allow her to proceed to the Fairway Buoy for boarding of Pilot.

ANCHORAGES:

	Length	*Draft*
Pool 1	480 ft.	24 ft.
Pool 2	600 ft.	28 ft.
Pool 3	450 ft.	26 ft.
Pool 4	450 ft.	26 ft.
Badagry Creek	380 ft.	22 ft.

Vessels not permitted to remain at anchor at Pool 1 during hours of darkness due to poor holding ground.

4 vessels, maximum length 380 ft. can anchor at Badagry Creek Anchorage. Max. draft 22 ft.

RESTRICTIONS: Max. draft Pool Anchorage 8.23 m., Bruce Mooring Buoys 8.23 m., Marina Mooring Buoys 8.23 m., Apapa Hard Quay Nos. 1 – 14, 8.23 m., Apapa Hard Quay Nos. 15 – 20 10.50 m. and Tin Can Island Berth Nos. 1 – 10, 9.50 m.
MAX. SIZE: Max. draft 10.0 m. (salt water)
HEALTH: Port Health Officer boards vessel on arrival. ETA's must be advised by ship or Agent direct to Port Health. Pratique automatic when from Nigerian port. Also see "General".
RADIO: Master to cable Agent via Lagos Radio ETA 7, 4, 2 and 1 day prior to arrival, enabling Agent to declare vessel at the Berthing Committee Meeting well in advance.

Master to contact Agent on VHF Channel 16 prior to arrival at anchorage (range approx. 30 miles).

On arrival at anchorage, Master to contact Lagos Port, call sign "Signal Station" giving all vessel and cargo particulars, Agent's name, SEN No. and date of issue. Vessel also to cable Harbour Master's Office identical information. Thereafter watch on VHF as per Agent's instructions.

TUGS: No specific joining position, depending on tide and on Pilot's request, otherwise close to berth. Normally ship's line used. 1 tug 1,800 h.p., 1 tug 1,226 h.p., 1 tug 825 h.p. and several smaller for towing lighters. 24 hour service available. Also see "General".
BERTHING: Daylight hours only.

No specific arrival time is required for berths, except for Petroleum Wharf where tankers need high water. Berthing on ebb tide required for Fish Wharf and Ijora Wharf.

Unberthing: See "Documents".

Apapa Berths: 19 general cargo berths, 1 bulk cargo berth at Ijora. 6 container berths including 1 Ro/Ro ramp. Also 3 petroleum berths, 1 gas oil, 3 bulk oil and 1 grain berth, 5 storage sheds, although no cold storage available. Quay cranes not operative. The third Apapa Wharf extension is now completed and in full use. Container Quay 1,005 m. 2 gantry cranes with 40 tons lifting capacity have been installed and are in use with stacking area for Ro/Ro and containers. General cargo quay 525 m. Depth alongside 10.5 m. Vessel's Agent to make arrangements for discharge of 40 ft. containers due to lack of equipment.

Tin Can Island Berths: Tin Can Island Port (TCIP) is situated N.W. of Apapa, North of Badagry Creek.

Draft Restrictions: Berths 1 – 10, 9.50 m.
Tugs: 2 of 1,400 h.p.
Accommodation: Area 73 hectares, quay length of 3.5 km. Extensive quay apron 40 m. wide with berthing capacity for 10 – 15 vessels, of which 3 for Ro/Ro, depending on size of vessels and one of which has fixed stern ramp. Bulk berth for handling bulk commodities. Two service berths for tugs and light craft.

Dredged Channel is 200 m. wide with turning basin.

Two fresh water wells (250 m. deep) with purification plant.

Ten quayside cranes – 8 of 6 tonnes at 28 m. radius, 2 of 10 tonnes at 25 m. radius, transit sheds and warehouse each of 7,000 sq. m. area.

No cold storage.

Midstream Berth: 8 Marina Buoys and 1 Bruce Buoy.
CRANES: 1 floating crane of 100 metric tonnes and 1 of 250 metric tonnes. Apapa and Tin Can Island equipped with mobile cranes, forklift trucks, tractors, freight lifters, conveyors, trailers and container handlers.

250 ton crane:	50 ton lift at 31 m.
	100 ton lift at 28 m.
	150 ton lift at 21 m.
	250 ton lift at 10 m.

STEVEDORES: Available. First shift: 0730 – 1530 hrs.; 2nd shift: 1530 – 2230 hrs.; 3rd shift: 2230 – 0730 hrs. Overtime is paid for 2nd and 3rd shifts. Saturdays 0730 – 1530 hrs.

Overtime, Sunday and third shift not always worked as NPA making cutbacks.

MEDICAL: Agents to be given advance notice of medical attention required as early as possible. Hospital facilities available. International Certificates of yellow fever required.

TANKERS: 3 berths operated by the Port Authority. Length 177 m. Max. draft 7.62 m. No night berthing. Water and bunkers available. (Subject to tidal restriction).

Atlas Cove Berth: The Atlas Cove Jetty has 2 berths of LOA 180 m. and 80 m. and draft of 10.7 m. and 6.3 m. respectively.

Report: October 1981

Facilities for tankers discharging clean products.

(a) No ship entry is required for tankers coming into Nigeria to load/discharge cargo.

(b) There are three main oil tanker jetties available in Lagos namely PWA, NOJ and BOP each with max. LOA of 175 m. and max. draft. 7.6 m. There is also another jetty called "Ijora Wharf" from which Mobil Oil mostly take delivery of their cargo. This jetty has max. LOA of 115 m. and 18ft. 6 in. draft.

(c) Bunkers are supplied to vessels at these jetties by pipe-line as well as by barges.

(d) Fresh water is also available from both NPA and private barges but difficult in most cases.

DENSITY: 1012.

FRESH WATER: Delivery by barges at between 20 to 40 t.p.h. Advance notification needed. Available by pipe-line at Tin Can Island.

Notice: February 1984.

It is hereby notified to Owners/shipping companies including their Agents that owing largely to the limited quantity of available fresh water in the port, the maximum quantity of fresh water to be approved to any vessel for one request is 50 tons only.

Other new requests for the same vessel will not be approved until all requests previously recorded before them are supplied. The Assistant Harbour Masters will not allow any request for more than 50 tons of fresh water to be paid for. Please ensure strict compliance.

FUEL: Fuel oil available by barge only, coal bunkers obtained from Ijora Wharf. A guarantee of sufficient bunkers to last the period of stay on a berth will be one of the conditions to be satisfied before a vessel is allocated a berth.

SEN also required for vessels taking bunkers only.

Also see "General – Notice No. 2/83".

FIRE PRECAUTIONS: Tankers and vessels with explosives: fire-boat always in attendance with fire-control depot ashore working in conjunction with the Harbour Master on VHF Channel 16. Port area tugboats also equipped for fire fighting.

GANGWAY/DECK WATCHMEN: Compulsory during night while in port. Recommended at night also for vessels anchored Lagos roads unless at least 20 miles offshore.

OPENING/CLOSING HATCHES: Stevedores/crew.

CUSTOMS ALLOWANCES: Tobacco allowance: 200 cigarettes per person, re-issue after 7 days. Wine/Spirit: 1 part bottle, re-issue to officers after 7 days.

IDENTIFICATION CARDS: Passports or identity cards.

CONSULS: Most countries maintain Embassies/High Commissions or Consuls.

REPAIRS: Major repairs available. Spares often in short supply.

DRY DOCKS: Authority maintains large, well-equipped dockyard, which, while primarily for maintenance of Authority's own fleet, provides facilities to commercial interests. There is a modern floating dock which has lifting capacity of 4,000 tons. Max. draft 18 ft. Synchro-lift available lifting capacity 100 tons max.

In addition to facilities offered by Authority's dockyard, major shipping agencies in port maintain dockyard installations, including slipways for taking smaller vessels and lighters; can provide first-aid repair for main line vessels.

Bull Nose – No. 1 – can accommodate a vessel of 380 ft. in length and max. draft 16 ft. 6 in.

Bull Nose – No. 2 – can accommodate a vessel of 250 ft. in length and max. draft 16 ft. 6 in.

REPATRIATION: Facilities available for effecting crew changes and arranging any necessary repatriations.

AIRPORT: Ikeja 14.4 km. from port, served by regular airlines.

TIME: GMT plus 1 hour.

HOLIDAYS: Fixed: New Year's Day (1st January); National Day (1st October); Christmas Day (25th December); Boxing Day (26th December). Variable: Good Friday; Easter Monday; Eid-El-Fitir Festival; Eid-El-Kebir Festival; Maolud Nabiyyi (Mohammed's Birthday). Port closed on National Day, Good Friday and Christmas Day.

POLICE/AMBULANCE/FIRE: Police Apapa 45798, Lagos Custom 20030; Ambulance Apapa 41341/227; Fire Apapa 41741, Lagos Custom 20777, General Emergencies 199.

TELEPHONES: No arrangements for telephones on board.

SHORE LEAVE: Crew members allowed ashore after clearance by Port Health and Immigration Authorities.

GENERAL: Notice issued by the Harbour Master in May, 1976:

Will all ships' Agencies note that from the date of this circular letter, Lagos Radio has been instructed to reject any telex messages from any ship addressed to the Harbour Authority unless the itemised particulars are included:

(a) Ship's name.
(b) Ship's call sign.
(c) Ship's Agent's name.
(d) Ship's length overall.
(e) Ship's tonnage loaded.
(f) Ship's draft.
(g) Nature of cargo (i.e. cement, general cargo, etc.).
(h) Last port of call.

Notice issued by the Nigerian Federal Ministry of Health in May, 1976:

Please communicate to all Masters that request for Radio Pratique either by international sanitary codes or otherwise must state clearly the following:

(a) Last port of call.
(b) Number of crew.
(c) Vaccination and inoculation of crew.
(d) Date and time of arrival.
(e) Condition of ship.
(f) Number of passengers onboard.
(g) Name of Agent.

Notice dated 1982 issued by NPA.

The following documents must be despatched with manifest from the last loading port in order to report vessel in advance to the Department of Customs and submit advance manifest to facilitate payment of NPA dues to berth vessel on arrival.

1. Crew Declaration.
2. Crew List.
3. List of Arms and Ammunition.
4. Passenger List.
5. Animals List.
6. List of Ports of Call.
7. Mail List.
8. Authority to Act as Agents.

Two copies of each of the documents are necessary.

NPA Harbour Master's Notice No. 2/83:

"BUNKERING IN PORT

Further to my previous circulars concerning bunkering in port, it is still observed that Masters/Agents of vessels calling at port of Lagos are not advising the Harbour Master before bunkering the vessel about their intention to bunker the vessel.

It is imperative that Masters/Owners of vessels/Agents should, before 'repeat' before bunkering the vessel, forward to the Harbour Master, the N.N.P.C. document showing that the supplier is an authorised one and the NPA Licence permitting the barge to supply vessels with bunkers.

This notice should also be in good time before bunkering the vessel to enable the Harbour Master to advise the Chief Fire Officer about the operation. This instruction should be carried out whenever a vessel is getting bunker to ensure that N.N.P.C. instructions and NPA regulations are complied with, failing which heavy fines must be imposed."

SERVICES: Small services available.

AUTHORITY: Nigerian Ports Authority.

AGENT: Alraine (Nigeria) Ltd., 26 Creek Road, Apapa, Lagos. P.O.Box 2206, Lagos. Tel: 803470/1/2/3/4. Cables: "Freight Lagos". Telex: 21244.

PENNINGTON OFFSHORE TERMINAL:

04.15 N. 05.36 E. **(See Plan Book)**

COURTESY FLAG: All vessels must exhibit the Nigerian National Ensign from their foremast or as appropriate while in the vicinity of the moorings.

LOCATION: The floating storage vessel, is the VLCC m.v. "Oloibiri" (272,535 d.w.t.) moored to SPM–A, one of two single point mooring berths.

1. SPM-A is located approximately 20 miles off the mouth of Fishtown River in a position

Lat. 4° 14′ 35.2″ N.
Long. 5° 36′ 53.2″ E.

2. The Export Tanker Buoy (SPM-B) is capable of accommodating vessels up to 250,000 d.w.t. and is located at

Lat. 4° 15′ 0.0″ N.
Long. 5° 36′ 10.5″ E.

on a bearing of North 60° West and a distance of approximately 5,000 ft. from SPM-A. The minimum water depth at SPM-B is approximately 88 ft.

APPROACHES: Incoming tankers should make their terminal approach from a Westerly direction to a point not less than 2 miles Westward of the Export Tanker Berth. At this location the Mooring Master will board the vessel, or will direct the vessel to the Anchorage (2.5 miles S.W. of the terminal).

DOCUMENTS: Following documents required by Customs and Health Officials.

Last Port Clearance.
Ship's Register.
3 copies Vaccination List.
1 copy Stores List.
1 copy Crew Declaration.
4 copies Crew List.
4 copies Passenger List.
5 copies Animal List.
4 copies Ports of Call (last 6 weeks).
5 Arms and Ammunition List.
3 copies Stowaway List.
3 Crew Labour Lists.
20 Copies Dry Tank Certificate.

Also on arrival, 20 copies of Readiness Letters.

Before sailing and immediately upon completion of loading, vessel must provide 20 copies of Ullage Report.

Government Officials representing various departments may, at their discretion, board the vessels in the Terminal area.

PILOTAGE: (See "Approaches"). The Company Mooring Master, together with Customs Officials will board incoming vessel about 2 miles Southwestward of the Terminal Export buoy. Vessel's Master will be advised on approach to the berth details in respect of mooring, unmooring, connecting and disconnecting hoses, loading operations and departure from the berth.

Vessels are requested to have a combination ladder safely and securely rigged for immediate use, and long enough to reach the Mooring Master's launch. A light line should be ready to take on board the Mooring Master's radio and/or briefcase.

The Mooring Master will remain on board during loading operations and he will be in direct control of all ship communications while in Terminal area.

RESTRICTIONS: Operation of the terminal is on a 24 hour, seven days a week basis, weather and other circumstances permitting.

MAX. SIZE: Max. d.w.t. 250,000 tons.

RADIO: Vessels proceeding to be loaded at the Terminal must cable their ETA to the Company (Cable Address: "Topcon – Lagos") 96 hours and again 24 hours prior to arrival. The Company in Lagos will then notify the Chief Mooring Master on board the Special Purpose Vessel. Also as early as possible prior to arrival, vessels should establish direct communication with the Terminal. The Terminal radio station watch keeping is for 5 minutes at 0700 – 1100 – 1500 – 1900 hrs. GMT.

Call Letters: 5 NDF (Oloibiri)
On A1 Listen on 8362 – 8365 kHz
On A2 Listen on 500 kHz.

Ship to Terminal communication while vessels are in the export tanker berth will be by portable VHF radio-telephone units, provided by Terminal.

The Company Mooring Master will advise ship's Master regarding emergency whistle signals set up for use in event radio-telephone units become inoperative. Use of ship's radio station and/or battery charging is prohibited while loading is in progress.

VHF: When in VHF range vessels shall contact the Terminal on VHF Channel 16 (156.8 MHz).

TUGS: *SPM Vessels:* The Terminal will have available 2 line handling vessels and one SPM-Hose maintenance vessel. These 3 vessels are under the control of the Mooring Master and are used to assist the mooring of the Tanker as required. These service vessels are not available to the Tanker for any other work.

READINESS: The Company will make every effort to load vessels upon arrival, or as promptly as berth is available, weather permitting.

"Notice of Readiness" will be accepted as at time of arrival, provided vessel is in all respects ready to load.

Arrival time will be considered as at the time Mooring Master boards vessel, or at the time vessel anchors off the terminal, which ever occurs first.

The Mooring Master may reject a vessel if in his judgment she is not properly equipped or suitably manned, or if, upon inspection, he deems her to have dirty ballast or tanks unsuitable for cargo. However, Company will not issue any certificate or representation purporting to state that vessel's tanks, pipes and pumps and appurtenances are clean or acceptable for receiving cargo nor will the Company assume any responsibility for "contamination of cargo aboard ship caused by condition of ship's tanks, pipes, pumps or appurtenances".

The vessel shall have in readiness 2 nylon ropes with a minimum diameter of 2 in., each approximately 200 ft. long and each terminated with 2×2.25 in. joining shackles to attach and retrieve the SPM mooring lines.

Vessels must be adequately equipped with blocks, tackle and booms to hoist the floating hose string in a safe, efficient and expeditious manner. Vessels must also have an adequate supply of nuts, bolts, gaskets and wrenches to connect cargo hoses system.

BALLAST: Absolutely no provision is made for dirty ballast. Vessels with dirty ballast will be rejected and all costs therefrom will be to the vessel's account.

It is the Ship Master's responsibility to see that no oil or oily ballast is pumped or spilled overboard. Drip pans must be used at all times and all scuppers must be plugged. The waters in and adjacent to the Terminal must not be polluted, and only clean oil-free ballast and/or clean bilge water may be discharged at the Terminal.

As soon as practicable after arrival, and prior to acceptance for loading, all vessel's tanks will be inspected for evidence of oil in ballast, and during discharge of ballast, similar inspections will continue. If evidence of oil appears at these inspections, the vessel may have to vacate berth. Upon her return, vessel will be obliged to tender new "Notice of Readiness".

If, during the first inspection or during process of loading it is revealed that vessel's tanks are not oil-tight, she will be rejected, or refused further loading.

In addition to lights usually displayed, vessels discharging ballast or loading cargo during darkness will illuminate the area around the ship to satisfaction of the Mooring Master, in order that any oil on the surface of the sea may readily be detected and appropriate action taken. Vessels unable to illuminate sea satisfactorily may not discharge ballast during darkness. Vessels should provide suitable floodlights for working on deck during night operations.

In the event any vessel should accidently discharge dirty ballast or spill oil in the vicinity of the Terminal, the Company shall have the right to take any action that may be necessary to clean up or remove any contamination or pollution resulting from such discharge of dirty ballast or spillage. In addition, the Company shall have the right to settle any claims of third parties arising from such contamination or pollution. All costs and expenses incurred by the Company to carry out the cleaning up of such contamination or pollution or the settlement of third party claims, shall be the joint and several liability of the Vessel, its Owners and Managers, and the Company shall be entitled to claim reimbursement accordingly in any jurisdiction.

Vessels properly equipped will be encouraged to discharge clean ballast and load simultaneously.

BERTHING: All manoeuvring of vessels within the loading berth area is to be done only in accordance with advice of the Company's Mooring Master, subject to the understanding that in all cases and circumstances the Master of the vessel being manoeuvred shall remain solely responsible for the safety and manoeuvring of the vessel. Vessel's Master or a qualified Deck Officer must be on bridge at all times during manoeuvring.

EXPORT TANKER BERTH FACILITIES: The Export Tanker Buoy is a conventional SBM which is 10 m. in diameter and held in position by 6 chains secured to piles sunk in the seabed. Two mooring hawsers with one chain and a single floating hose string extend from the buoy.

CONNECTING MOORING LINES: When the vessel is within reasonable distance of the SPM-B, ship's line will be carried by a line handling launch to the floating buoy line and secured. This line will then be heaved aboard. As the buoy ropes come clear of the water it will be noted that chains are attached to them. This chain is to be secured to the bits in such a manner that the nylon is outside of the extreme length of the ship; i.e. so that the chain will absorb any chafing if the buoy line crosses the bow. Power must be available at all times on all winches and windlass while vessel is at the berth.

HOSES: The hose system is 910 ft. long (26 sections) terminating in a 12 in. hose.

LOADING: During loading, the International Code Flag "B" shall be displayed from top-mast signal halyard during daylight hours. During hours of darkness, a red light shall be displayed, visible at a distance of at least 1 mile, and showing unbroken light all around the horizon.

Raising, connecting, disconnecting and lowering of the floating hose system will be performed by vessel's crew under direction and supervision of an appropriate vessel's Officer as advised by the Mooring Master, who will remain on board while the vessel is in moorings.

After the vessel is securely moored the floating hose will be lifted to the rail on the starboard side amidships. The weight of the lift is approximately 5 tons and is lifted with the vessel's gear. The Mooring Master advises the vessel's personnel in the lifting, connecting, disconnecting and lowering of the hose system. A vessel's Deck Officer must be present, and direct the crew in all hose handling. There must be sufficient crew on deck to perform this work.

The vessel's Master is responsible for own vessel at all times. The max. loading rate is about 15,000 b.p.h. and the Company Mooring Master will advise in respect to loading pressures and hazards, but will not direct the loading except as may be necessary to protect the Terminal facilities. Manipulation of the vessel's valves is the direct responsibility of vessel's personnel.

Prior to commencement of loading, the Chief Officer will assure the Mooring Master that sea suction valves are *closed* and he will make note to that effect in Mooring Master's log before cargo loading is started. Final ullaging and computation of cargo will be done by an Officer of the vessel who will hand this information to the Mooring Master for transmittal to the Terminal for use in comparing metered-out cargo.

Caution: The incoming oil stream is controlled by the Terminal and it is extremely dangerous to close a cargo valve against the incoming stream. Such a procedure creates excessive pressure, which may damage hoses, piping or Terminal facilities. Vessels will be held liable for damages resulting from failure to observe this precaution.

Emergency Signal: When normal ship-to-Terminal communications fail, the emergency signal to stop the flow of oil will be a continuous blast on the whistle until oil ceases to flow. Steam or air should never be shut off from the whistle during loading. Whenever emergency whistle is used, all loading operations will be shut down until communications can be re-established.

Fire on Board of Export Tanker: The emergency signal must be given immediately to the Terminal. A vessel's Deck Officer with sufficient crew members must be ready and when so ordered by Mooring Master, close the manifold, disconnect the hose and standby on fo'castle ready to let go of the mooring line.

Terminal Stops: Request for the Terminal to stop the flow of cargo at a predetermined tonnage must be made in writing. Requests must include the statements that the Company will not be held responsible for any error and in case of overloading, the excess cargo cannot be pumped back to the Terminal. Some delays are always incurred when such a Terminal stop request is made.

SAFETY: The vessel's personnel are responsible for the safety of the vessel, and must take all necessary precautions whether or not so advised by the Mooring Master. Any safety precautions imposed by the Company Mooring Master and disregarded by ship's Officers or Crew, will be considered just cause for rejection of the vessel and all expenses and liabilities related thereto will be for account of the tanker.

Not less than 1 Deck Officer and 3 seamen shall be available on deck at all times while vessel is in the moorings.

One of those to be kept always on look-out on the bow to avoid contact with the SBM.

Power must be available at all times on deck winches and windlass while vessel is in the moorings.

The presence of unauthorized craft alongside is extremely hazardous and Masters are requested to require all unauthorized craft to clear the vessel's side prior to ballast pumping and cargo loading.

Mooring Masters are authorized to shut down loading operations during severe electrical storms, if another vessel or craft of any description comes alongside the loading vessel, and under any other circumstances which imperil loading operations.

MEDICAL: Medical assistance on an emergency basis only.

REPAIRS: No facilities of any kind are available. Pennington Offshore Terminal is considered an open roadstead and under no circumstances may engines be shut down for repairs while a vessel is moored in the Export Tanker Berth. The vessel must be able to depart from the berth immediately on instructions to do so.

FUEL: Not available.

STORES: Not available.

REPATRIATION: Not permitted except in grave emergencies.

SHORE LEAVE: Not permitted.

WEATHER/CURRENTS: Wind and swell are mostly from a S.W'ly direction. The weather is generally good from November to May but is unfavourable during the wet season months of May to November. The currents are irregular and at times strong. The Mooring Master will provide the Master with this information when boarding the vessel.
FRESH WATER: Not available.
GENERAL: Cargo inspection services are available from E. W. Saybolt and Co. S.A. who have offices in Lagos. The use of this service will be for account of vessel or Consignee.

Cash and laundry service not available.

SHIPMASTER'S REPORT: December 1983.
Radio: Export tanker radio transmits on 8385 kHz and receives on Channels 5/6. Advisable to give tanker a 2 day ETA.
Berthing: During vessel's stay 1 Berthing Master, 1 Cargo Surveyor and 2 Nigerians stay on board and require food and accommodation.

The 2 Nigerians keep a buoy watch together with the vessel's own watchman.
Loading: API is usually 36.9 at 60°F. Loading rate approx. 2,000 t.p.h at 84°F.

After loading there is no EDP and it is necessary to leave the berth, anchor and wait about 5 hours for paperwork.
Customs: Customs inspect store rooms.
Developments: Existing (12 in.) pipe-line is being replaced by a 16 in. pipe-line, which will increase loading rate.

AGENCY: The Company does not perform general agency functions. Owners of vessels calling at the Terminal may arrange for their own Agents, although due to the location of the Terminal there are no Agent's offices in the area. For this reason the Company will arrange for the minimum agency service necessary to document and clear vessel and export cargo through Nigerian Customs. Costs of this Agency service will be charged back to appropriate parties.
NOTE: Should any vessel or craft sink or become an obstruction in the vicinity of the Terminal or at the Terminal, the Terminal Operator shall be empowered and shall have the right to take any steps it may deem necessary to remove the obstruction without notice to the owners. All expenses of such removal shall be borne by the vessel or craft or by those owning it at the time of the accident causing the obstruction, and the Terminal Operator shall be entitled to reimbursement by them for any such expenses incurred by it.
OPERATORS: Texaco Overseas (Nigeria) Petroleum Company.

PORT HARCOURT (incl. Okrika Refinery): 04.46 N. 07.00 E.

DOCUMENTS: Ship Entry Notice, See "Lagos".
14 days prior arrival Agent requires:
- 10 Manifests.
- 3 Stowage Plans.
- 3 Hatch Lists.

On arrival at Port Harcourt, Master to present:
- 7 Ports of Call Lists.
- 7 Crew Lists.
- 2 Kroo Boy Lists.
- 3 Animal Lists.
- 5 Arms and Ammunition Lists.
- 1 extra Manifest for transhipment is applicable.
- 4 Stores Lists.
- 3 Crew Declaration Lists (belongings).
- 1 Declaration of Health List.
- 4 Vaccination Lists.
- 3 Narcotics Lists.
- 2 Parcel Lists.
- 6 Passenger Lists.
- 2 Stowaway Lists.

Where not applicable, forms to be marked "nil". All other forms including departure documentation prepared by Agent.
PILOTAGE: Compulsory from Bonny Fairway buoy. The pilot station for Port Harcourt is at Bonny, 15 miles from Fairway Buoy, 28 miles from Port Harcourt. The Harbour Master keeps watch on VHF Channels 16 and 14 and on 2182 kHz from 0700 hrs. to 1800 hrs. Pilot boards at Fairway Buoy from pilot-cutter green hull, stone colour superstructure.

Position of Fairway Buoy: Lat. 4° 12′ 56″ N., Long. 7° 00′ 28″ E.

It should be noted that Bonny is an Oil Terminal and as such heavy traffic of tankers is continuous. In extreme circumstances vessels may be requested by Harbour Master to pass the channel from Fairway Buoy at Bonny, and anchor at Bonny without a Pilot, in which case latest Notices to Mariners should be studied in order not to damage oil pipelines in prohibited anchorage areas.
ANCHORAGES: Position West of Fairway Buoy, depths 8–9 fathoms. Also on Bonny River at Bonny Town.
RESTRICTIONS: Vessels for Okrika and Port Harcourt can only navigate during daylight.
MAX. SIZE: Also see "Berthing" and "Report". Max. draft is 7.32 m. at HW. Max. length 600 ft., no restrictions on beam. Ebb tide reaches a max. of 3 knots off the berths and 2.5 knots in the river, flood tide 2.5 knots off berths and in the river.
RADIO: Master to cable "Agent" Lagos via Lagos Radio ETA 7, 4, 2 and 1 day prior arrival. Master to contact Bonny Harbour Master on VHF Channel 14 on arrival at anchorage giving all vessel and cargo particulars, Agent's name, SEN No., and date of issue.

Master also required to advise Port Harcourt Harbour Master identical information through Lagos Radio and to contact Port Harcourt Agent on VHF Channel 14, keeping watch on this Channel per Agent's instructions.

HEALTH: Q-flag to be shown on arrival, except if from another Nigerian port. Yellow fever inoculations compulsory.
TUGS: 3 N.P.A. tugs of about 1,000 h.p.
BERTHING: *Port Harcourt:* 8 berths for general cargo at hard quays. Maximum practical draft 7.32 m.

8 dry cargo berths depth 33 ft. – 35 ft.

Mooring buoys, Dockyard Creek with 5 buoys, max. draft 7.62 m.; Dawes Island anchorage discharging for about 12 vessels, max. draft 8.23 m.; Pool 4 buoy berths max. draft 6.01 m.; Tanker buoy 1 berth.

B.O.P. Berth. This berth lies outside the Quay area, and is for the loading of palm oil by means of a direct pipe-line from the installation of Bulk Oil Plants (Nigeria) Limited. It consists of a central "T" jetty with dolphins and is capable of berthing vessels up to 480 ft. in length. It is also used for the discharge of explosives as such cargo is not permitted to be handled across the general cargo Quay.

Oil is supplied by a 6 in. diameter pipe at a maximum rate of 250 t.p.h.

Coal Handling Facilities: Facilities for loading coal have been completed and a conveyor capable of loading about 60 t.p.h. is working. Max. draft at the coal berth is 7.62 m. This berth is situated at the Northern end of the port, berth No 8.
Okrika Oil Refinery: (Lat. 04° 44′ N., Long. 07° 05′ E.). Okrika lies on the Bonny River, 56 km. from the sea. The approach over the bar is by a channel 12.8 km. in length. Depth in channel: See "Bonny". The river from Bonny to Okrika has been dredged as necessary to a depth of 8.84 m. Chart Datum. The bar channel and river are well buoyed with light buoys, port and starboard. There are also beacons in the river. Jetty at the oil refinery suitable for berthing coastal and ocean tankers up to 33,000 d.w.t. The jetty is "L" shaped with a square dolphin at the end of the arm. Ocean tankers secure on the outside of the jetty making fast to two sets of mooring dolphins each end. The coastal vessels and barges are berthed on the inside of the jetty. Oil is supplied via gantry hoses on either side.

Max. draft limit for tankers sailing from port 9.67 m., draft for berthing 7.92 m.

Fresh water available from the jetty.

The tugs based at Port Harcourt are available if required.

Pilotage is compulsory from the Fairway Buoy to the Refinery Jetty except for Naval vessels and vessels of less than 1,000 tonnes whose Master holds a licence issued by the Nigerian Ports Authority. All vessels using the Refinery Jetty will berth and unberth on the flood tide only during daylight hours until further notice.

Also see "Report".
STEVEDORES: Gang requirements and hatch distribution should be included in 48 hours ETA cable to Agent. Discharging general cargo 8 tons per gang/hour, cement 15 tons per gang/hour, bagged cargo 20 tons per gang/hour, loading produce 15–20 tons per gang/hour.
MEDICAL: Doctors available 24 hours, but limited supply of medicines available. Yellow fever vaccination required.
TANKERS: See "Berthing" and "Shipmaster's Report" – May 1981.
DENSITY: Approx. 1015.
FRESH WATER: Limited supply by barge.
FUEL: Most standard lubricants available, fuel and gas oil available by barge or road tanker. Requirements by 48 hours ETA cable.
GANGWAY/DECK WATCHMEN: Compulsory during hours of darkness.
OPENING/CLOSING HATCHES: Normally by crew.
CUSTOMS ALLOWANCES: 200 cigarettes per man per 7 days. 1 wine or 1 bottle spirits per officer per 7 days.
IDENTIFICATION CARDS: Crew to carry passport or seaman's book whilst ashore.
REPAIRS: Only very minor repairs available, no spares.
REPATRIATION: Possible via Lagos or Port Harcourt.
AIRPORT: Port Harcourt International Airport 30 km. from port. International and domestic flights.
TIME: GMT plus 1 hour, no changes during the year.
HOLIDAYS: See "Lagos".
POLICE/AMBULANCE/FIRE: All can be contacted by telephoning 999.
SHORE LEAVE: Allowed provided crew carry passport or seaman's book.

REPORT: September 1984.
- (a) Okrika sailing draft now 31 ft. 9 in.
- (b) Compulsory pilotage for all classes of vessels including service boats is now in force.
- (c) All vessels are to direct radio messages/cables advising ETA's to the port of destination and not to N.P.A. headquarters in Lagos to avoid delays.
- (d) Station Tanker "Maryland" – 152,035 d.w.t., LOA 915.34 ft. Summer draft, 58 ft. and operating on max. draft of about 40 ft. with which she is capable of lifting 85,000 tonnes of product. Vessel's position is approximately Lat. 4° 25′ N., Long. 7° 08′ E. at Bonny Inner Anchorage.

SHIPMASTER'S REPORT: 1977.
The ETA for this port should be sent via Lagos Radio, but much earlier than 48 hours. Better as soon as possible, for communication between Lagos and the out-ports is poor.

The normal practice at the moment is that the Master enters the Bonny River himself after permission from Bonny Harbour Master. The anchorage position on Bonny roads is given by Harbour Master and vessel can proceed as far as buoy 1A. (A few miles up Bonny River).

Discharging at Port Harcourt not only occurs alongside, but from Dawes Island upwards to Port Harcourt. Ships are discharged while laying at anchor. No buoys available. The cement cargo ships especially are discharged this way.

At Dawes Island the Bonny River Pilot leaves the ship and is replaced by a Port Harcourt Pilot.

Tugs are not available for mooring.

SHIPMASTER'S REPORT: May 1982.
Documents: 6 Crew Lists, 5 Passenger Lists (or negative), 8 Arms and Ammunition Lists (or negative), 6 Livestock Lists (or negative), 7 Ports of Call Lists, 2 Bonded Store Lists, 5 Vaccination Lists, 2 Crew Declarations.

As we were a tanker in ballast we did not present any Manifests and Bills of Lading. However, the Immigration Officer asked for a declaration from Master that there were no stowaways on board. No special form used.

Pilotage: Pilot keeps watch on Channel 14 and all traffic passed from this Channel to others (12, 13). As there is a shortage of Pilots, sometimes one Pilot comes out at Fairway Buoy and boards the first vessel to enter. The two or three other vessels entering at same time are directed to follow the vessel with the Pilot on board through the entrance channel to Bonny. When no Pilot waits at "N" buoy, the Pilot on board the first vessel will direct the others to the anchorages at Bonny as far as Buoy 1A.

During our stay it was observed that sailing out was performed at any hour but sailing in was only performed during daylight hours.

As the channel from Fairway Buoy and Bonny is a one-way channel all traffic is controlled by Bonny Signal Station who keep watch on VHF Channel 14 continuously and gives permission to vessels who intend to use the channel regarding the other vessels who are using it.

The Pilot from Port Harcourt to Bonny will normally disembark at Bonny outward bound. However, if another vessel is waiting at the fairway buoy to proceed inward or if requested by Master, Pilot will take vessel to the fairway buoy.

Our Pilot left at Bonny Pilot Station and vessel can proceed to sea after getting permission from Bonny Signal Station to do so. If outward channel is not clear from inbound vessels you are requested to wait until the last vessel reaches "N" buoy. In some circumstances they will allow vessels to cross each other near "M" buoy but no further than that.

On this occasion it was noted that "L" buoy (starboard) was missing.

Tankers between Bonny and Port Harcourt can only proceed with Pilot and during daylight hours. When proceeding to Okrika the Pilot boards at Bonny Pilot Station or at Bonny Anchorage and conducts vessel up river to Okrika and berths vessel. If possible he starts from Bonny when tide begins flooding up river, it takes about two hours for tide to reach Okrika and vessels take about same time in steaming, so when we reached Okrika the tide begins flooding.

Tankers berth port side to and use starboard anchor to make the turn. Pass a line to a mooring buoy so that it will be on starboard bow when the vessel is berthed to assist the berthing. After completion of berthing this line is taken in, as it has no more use and on account of thieves. Vessels remain secured by 3 breast lines to dolphins forward and aft and 1 spring line to jetty forward and aft.

When sailing, after taking in all lines, the last ones being one breast line forward and aft, the starboard anchor will assist the vessel to leave the jetty and reach the middle of the channel.

Maximum draft for sailing out of Okrika Terminal is 32 ft. (9.75 m.), when berthed port side to the jetty. If berthed starboard side to the jetty the maximum sailing draft is 25 ft. (7.60 m.). It is convenient when sailing at maximum draft to go to the jetty always port side as if going starboard side to when loaded to 25 ft., vessel has to stop loading, unberth, turn and berth one more time and all these operations must be performed only during daylight hours and at special stages of tide.

Sailing out from Okrika with 32 ft. will be performed in daylight and vessels must leave jetty two hours before high tide at Bonny.

The channel from Okrika to Bonny has been kept dredged to the Chart Datum, it was well buoyed and was made by the vessel loaded without any difficulties. Our sailing draft was 32 ft.

Health: "Q" flag to be shown on arrival, on river and on berth, till the Health Authorities board the vessel and give clearance.

Okrika Jetty: Further to the information above there is a new jetty, down river, close S.E. of the former, which is ready as a normal quay, but will have to have oil loading facilities and pipe-lines, connected to the existing ones at the middle of the connection to shore of the former jetty. The new jetty is provided with six buoy fenders (cylindrical type), four of them in the middle, (the small type) and two (large type) near the extremities of jetty. It is expected that the mounting of pipe-lines, oil loading facilities and other facilities will take about 2–3 years.

Density: During our stay, May 6th – 9th, we experienced the following: at LW 1018; at HW 1019; water temperature 30° C.

Fuel: Fuel oil, diesel oil and gas oil are available. We took gas oil without difficulty but fuel oil takes a long time as occasionally they need to flush all lines and this takes a long time. Orders must be placed well in advance as it takes a long time to get confirmation from Lagos about the supply.

Shore Leave: No difficulties, but recommended in daylight hours.

Communications: Between Lagos and Port Harcourt are very poor. Telex lines were inoperative at time of our stay and all messages between Lagos and Port Harcourt Agency Offices were passed by radio or telephone with delays.

AUTHORITY: Nigerian Ports Authority.

AGENT: Alraine (Nigeria) Limited, P.M.Bag 622, Port Harcourt. Tel: 084 222.531. Telex: Freight Lagos 21244 attention – Port Harcourt.

QUA IBOE: 04.20 N. 07.59 E. (See Plan Book)

LOCATION: The Terminal is located on the Eastern side of the estuary of the Qua Iboe River in approximate position Lat. 4° 33′ 00″ N., Long. 7° 59′ 30″ E.

The crude oil storage facilities consist of seven tanks each of 500,000 barrels capacity.

At the present time considerable work is being carried out in the area.

ESSENTIAL REQUIREMENTS:

1. No dirty ballast.
2. Advise arrival time.
3. Vessel to have ready prior to arrival:

(a) Two ships' ropes on the bow, or long nylon messenger 1.5 in. diameter. One floating ship's rope (polypropylene) on the stern for the mooring boat to tie-up.

(b) Port side derrick, and gear rigged to lift floating hoses.

4. Mooring Master meets vessel in the suggested safe anchorage area.
5. Have pilot accommodation ladder combined ready, *or air hoist.*
6. Make a lee for the Mooring Master to board the vessel.
7. The Master of the vessel is responsible for the safety of his ship at all times.
8. Ship's crews perform all operations of mooring, unmooring, connecting and disconnecting hoses on board ship.
9. No shore leave.
10. Whilst arriving fly the Nigerian Ensign (Green-White-Green, vertically arranged). By day: Fly flag "Q" for quarantine service. By night: Display red over white light.
11. Nigerian time is GMT plus 1 hour.
12. No supplies of any kind, no medical services (except in cases of emergency) or other services are to be expected at Qua Iboe Terminal.
13. No Agency.

All vessels loading at Qua Iboe must have 2 bow anchors and a minimum of 10 working shots of chain attached to each anchor.

DOCUMENTS:

The following documents are required by the Nigerian Government Customs Representative at Qua Iboe Terminal:

4 Copies Crew List.
4 Copies Ports of call within the last three months.
2 Copies List of Birds and Animals.
1 Copy Passenger List.
1 Copy Stores List.
2 Copies List of Arms and Ammunitions.
1 Copy Crew Personnel Effects List.
3 Copies Vaccination List.

Attached to the store list, should be a list of Narcotics.

If the vessel has a clearance for another port the deviation cable has to be shown to the Customs Officer.

PILOTAGE: Vessels loading at Qua Iboe will be boarded by a Company Mooring Master either at the anchorage or where directed.

The Mooring Master will advise the ship's Master in regard to the approaches to the berth; and the mooring, unmooring, connecting, disconnection of hoses, departure from the berth and loading operations.

All vessels must have upon arrival a pilot ladder in good, clean condition safely and securely rigged. A vessel arriving with freeboard of 30 ft. or more must use its accommodation ladder in conjunction with the pilot ladder unless a "pilot hoist" or similar arrangement is available.

In the event that a vessel is deemed by the Mooring Master to be improperly or insufficiently equipped with adequate mooring facilities, lines or gear, then he shall so inform the ship's Master. In such an event the vessel will not be brought into the mooring until satisfactory gear or equipment is provided.

ANCHORAGE: Numerous submarine pipe-lines and structures exist in the approaches and close vicinity of the loading berths.

Under no circumstances whatsoever should vessels anchor except in the approved anchorage described below.

The safe Anchorage Area is located 2 miles S.E. of the Berth Operation Platform (BOP) and clear of the SPMs between the parallels of Latitude 4° 10′ North and 4° 13′ North and meridian 8° 03′ East and 8° 07′ East.

Vessels bound for the Qua Iboe Terminal should proceed with extreme caution from the S.E. to the safe Anchorage Area. If uncertain of the vessel's position because of poor visibility stay S.E. and clear of the safe Anchorage Area until visibility has improved.

HEALTH: Pratique may be granted by radio (Lagos Radio).

The vessel should have a clean Bill of Health or an equivalent document from the last port of call. The vessel's Master and all members of the crew shall possess International Certificates of Health showing valid Cholera and Yellow Fever Vaccination Certificates.

MAX. SIZE:

Berth	*Length*	*Beam*	*Draft*
No. 2 (SPM1)	No restriction	No Limit	72 ft.
No. 3 (SPM2)	No restriction	No Limit	72 ft.

RADIO: Cable address: Mobil Oil Lagos. Telex: 21228.

Vessels proceeding to load at Qua Iboe must radio:

1. Mobil Oil, Lagos indicating their cargo requirements, last port of call and ETA 7 days prior to arrival. When their passage time is such as to not permit a 7 day ETA then the maximum possible advance notice must be given.
2. Mobil Oil, Lagos, confirming or amending the ETA given in (1) above at 72 hours and 24 hours prior to arrival.
3. The Nigerian Government Port Health Officer at Lagos at least 72 hours before arrival advising the following:
    - (a) Vessel's name and call sign.
    - (b) ETA Qua Iboe Terminal.
    - (c) Last port of call.
    - (d) Cargo requirements.
    - (e) Number of crew and whether healthy or not.
    - (f) Whether or not a doctor on board.
    - (g) Requesting Free Pratique.

If the request for Free Pratique is granted, the Port Health Officer will o advise by radio. If the request has not been radioed to the vessel, the ellow flag "Q" by day or red over white lights by night must be displayed n arrival at Qua Iboe.

In addition, as soon as possible prior to arrival vessels should stablish direct communication with the Terminal ("Qua Iboe Control") n VHF international calling Channel 16 (156.8 MHz).

Vessels not equipped with VHF or whose equipment is not fully nctional should advise Mobil Oil, Lagos, at the time of their ETA essages previously referred to.

The (BOP) Berth Operation Platform is fitted with a racon and ansmits the Morse signal "K" (– · –). All vessels equipped with 3 cm. dar will be able to pick this up on their radar screen at a distance of pproximately 17 miles – 20 miles. The B.O.P. is located in position: at. 04° 14′ 11″ N., Long. 08° 02′ 25″ E.

After direct contact has been established with the vessel, Qua Iboe ontrol will transmit preliminary requirements and berthing instructions.

HF: The primary system of communication with the terminal while in erth shall be through the Mooring Master by means of a portable VHF nit provided by the company.

UGS: None. Terminal launches assist in berthing.

ERTHING: The tanker loading facilities consist of 2 berths:

No. 2 Berth: A Single Point Mooring (SPM) Buoy located in a position at. 04° 13′ 05″ N., Long. 08° 02′ 45″ E., approximately 19.4 nautical iles 170° from the terminal tank farm. Depth of water at manifold 85 ft. lax. draft 72 ft.

No. 3 Berth: A Single Point Mooring (SPM) Buoy located in a position at. 4° 13′ 30″ N., Long. 08° 03′ E., approximately 18.8 nautical miles 65° from the terminal tank farm. Depth of water at the manifold 85 ft. lax. draft 72 ft.

All vessels must be equipped with adequate on-deck and overside ghting. A spotlight should be rigged on the bridge when berthing during e hours of darkness.

To assist in the vessel's turnaround, tankers should have all booms nd cargo gear rigged on the port side before the ship is boarded by the looring Master.

Berthing Requirements: Berth Nos. 2 and 3: All vessels proceeding to e SPM must secure their anchors with chain stoppers or compressors. loating hoses taken aboard on the port side.

The moorings have been designed in general accordance with the ecommendations of the SPM Forum. The mooring lines consist of ×18 in. braided nylon ropes each 160 ft. long with floats attached.

In order to heave the mooring lines aboard, the vessel should have eady on the forecastle a ship's rope or a rope messenger not less than .5 in. in diameter and a minimum length of 120 fathoms. The rope essenger is led through a fairlead, large enough to permit the entry of 3.25 in. diameter chafing chain, on port side or centre line (Panama ead) down to the water clear of the ship's bulbous bow. This rope must ave a good lashing attached to the eye.

The terminal line boat assisting in mooring, will proceed to the vessel, s soon as she is within her reach, to pick up the ship's rope and to ake the connection with the terminal provided 12 in. circ. polyropylene rope. The ship will then heave steadily on the rope until the hafing chain lies across the fairlead of the vessel.

Tenders by vessels to load crude oil cargo at Qua Iboe, will be ormally accepted and berths assigned to vessels in chronological order f arrival providing such vessels have current nomination for cargo valid t the time of tender, carry clean ballast, if any, and have cargo tanks in fit condition to receive cargo. Also they must be in all respects properly quipped and ready to moor. Should berthing be delayed on account of ad weather, vessels will keep their position in line.

OSES: Berth Nos. 2 and 3 SPMs are equipped with 2 floating hose trings. 29 hoses on the left hand and 28 hoses on the right hand facing e buoys. The over-the-rail hoses have a 12 in. ASA connection rovided with a butterfly-valve at the end.

anker on Light Draft: Weights of Hose strings for SPM: Indication of ose strings approximate weights of hose strings in *long tons* (including ttings and floats) with all hoses full of crude oil S.G. 0.850. Assumed otal lift 25 ft. above deck level.

	Inside Diameter of Hoses
Size of Tanker	12 in. – 16 in.×30 ft.
285,000 d.w.t.	6.8 tons
200,000 d.w.t.	6.0 tons
100,000 d.w.t.	5.2 tons
80,000 d.w.t.	5.0 tons
50,000 d.w.t.	4.5 tons

LOADING: All vessels must be adequately provided with bollards or cruciforms and suitable leads to facilitate the hanging off of the hoses during the lifting operation.

The Mooring Master will inspect the vessel's cargo tanks and will sign the Dry Certificate prior to the commencement of loading.

The Mooring Master may reject a vessel if it is not upon inspection properly equipped or if it is not suitably manned or if deemed to have dirty ballast or tanks unsuitable to receive cargo. Any vessel rejected because of being insufficiently equipped, will automatically nullify her (NOR) "Notice of Readiness" and will not be accepted until satisfactory evidence is produced, that the vessel's gear is in good working condition.

The ship's Master or a suitable Qualified Officer must be on duty on the bridge at all times while the ship is manoeuvring, mooring and unmooring or whenever requested by the Mooring Master.

All mooring, unmooring and hose connection and disconnection must be carried out by the ship's crew under the supervision of a suitable Qualified Officer acting on the advice of the Mooring Master.

Ship's loading manifolds should be prepared for 2×12 in. hose connections prior to arrival at the Qua Iboe Terminal. Sundry equipment should include tools to connect the hoses, nuts, bolts, gaskets and rope strops as none of these items are supplied by the Terminal. All 12 in. hoses have ASA flanges.

The Notice of Readiness will be signed by the Mooring Master on behalf of the Company. The time for giving the Notice of Readiness is the time of the vessel's arrival at the usual anchorage, or the time of boarding of the Mooring Master, whichever is the earlier. Notice of Readiness will not be accepted unless the vessel is ready to load.

Loading rates will vary according to conditions but can be expected to be up to 62,000 bbls.p.h. at the SPMs.

Information as to the anticipated loading rate should be obtained from the Mooring Master who will also advise the expected specific gravity and loading temperature.

The maximum possible notice in regard to slowing the loading rate for "topping off", etc. should be given to the Mooring Master.

Pressure Surges: Because of the long lengths and large diameters of the pipe-lines, ships' loading valves must not be closed against the flow of oil.

Vessels provided with mechanically or hydraulically operated valves whose closing time is less than 30 seconds must advise the Mooring Master accordingly. In such circumstances the loading rate may have to be reduced.

EARLY DEPARTURE PROCEDURE: The Early Departure Procedure will be used at the Qua Iboe Terminal. The procedure is as follows:

(All vessels are advised in advance of EDP)

1. Official declaration indicating Acceptance will be signed by Master on arrival.
2. Bill of Lading and Cargo Manifest will be prepared in advance except for cargo figures and be presented to Master for signature. Master will authorise MPN as Agent to sign all documents on his behalf.
3. Copies of the above documents will be retained on board as indicated by Documentation Instructions.
4. On completion of loading it is the Mooring Master's responsibility to ensure that all data is correctly recorded on the proper form, and that all EDP documents are filled out in full, before sailing, he then will sign all cargo documents on behalf of the company.

BALLAST: There are no facilities for the shore reception of ship's ballast. Vessels are accepted for loading on the express understanding that only clean ballast will be discharged into the sea.

Masters are required to sign oil pollution advice form letters on arrival. If a vessel is observed to be discharging dirty ballast, then it may be liable to prosecution or penalty and all further discharge will cease. The discharge of oil from bilges or other spaces is similarly strictly prohibited.

A vessel must have sufficient ballast for safe manoeuvring into the berth.

Vessels equipped with a separate system of ballast tanks will be allowed to discharge ballast and load simultaneously; providing approval is first obtained from the Company Operations Superintendent.

DENSITY: 1018.
FRESH WATER: Not available.
FUEL: Not available.
STORES: Not available.
MEDICAL: Only emergency medical facilities.
TIME: Nigerian local time is GMT plus 1 hour throughout the year.

CUSTOMS ALLOWANCES: Nigerian Government Customs Officials will board the vessel as soon as possible after arrival to give inward clearance and "Free Pratique" service. Nigerian Government Regulations are strictly enforced.

Cigarettes, cigars, tobacco, matches, spirits, wines, perfumes, arms, ammunition and possible other items have to be locked under Customs seal from time of arrival of ship in port until time of leaving territorial waters.

Each person is allowed 200 cigarettes per week of stay or equivalent amount of tobacco or cigars in lieu thereto. Each person is allowed 1 bottle of spirit and 1 case of beer. Special allowances are made for Masters under special circumstances. If the slop chest items and the bonded store items are not combined in one locker, the Customs Officer has to be informed.
REPATRIATION: Crew changes not possible.
SHORE LEAVE: Not possible.

GENERAL: *Agency:* The Company will handle documentation requirements for vessels loading at the Terminal. It does not carry out general vessel agency functions. Ship's mail and personal mail will be handled through the Mooring Master.

Courtesy Ensign: All vessels must exhibit the Nigerian National Ensign from the foremast or as appropriate while in the vicinity of the moorings.

"B" Flag: During loading, the International Code Flag "B" must be displayed from a topmast signal halyard during daylight hours. During hours of darkness a red all around light must be displayed where it can best be seen.

Charts: The following charts and nautical publications may be used to assist vessels bound for Qua Iboe.

British Admiralty Chart: No. 1860
British Admiralty Sailing Direction: Africa Pilot Vol. I
U.S. Naval Oceanographic Chart: No. 2352, 2353
U.S. Naval Oceanographic Sailing Directions No. 50-S. West Coast
Also appropriate tide and tidal stream tables.

Weather: Throughout the year a long low Southwesterly swell is prevalent. During the wet season, June to November, this swell together with a rough sea becomes very high, especially during heavy squalls.

Local winds have on rare occasions been recorded at 55 – 60 knots in the vicinity of the berths. Heavy rain, thunder and lightning may accompany these winds. They are unpredictable in direction and force and precautions are necessary to avoid difficulties.

Tidal currents prevailing in Easterly/Westerly direction of some 3 knots to 4 knots can be experienced. At times, the direction of these currents is variable.

SHIPMASTER'S REPORT: December 1984.

1 Pilot and 1 cargo surveyor live on board.

Immigration and Customs Officials board for usual formalities and store room inspection.

Lineboat tows astern most of time using ship's line.

Although EDP is supposedly used, vessel does not obtain clearance until ship's figures checked against shore figures, after which, Customs Clearance is received. This can involve a wait of several hours. Vessel has to complete consignees' papers after sailing. Supernumeraries may cause difficulties with Immigration, it is best to have everyone signed on.

For vessels waiting, a good anchorage can be obtained in position 03° 55′ N., 05° 46′ E., taking care to avoid the 120 fathom hole in position 03° 55.5′ N., 05° 42.9′ E. When hove up, the cable was very clean with only a little mud on the anchor.

AUTHORITY: Mobil Producing Nigeria – Qua Iboe Terminal, Marine Office, c/o Bookshop House, 50 Broad Street, Private Mail Bag 12054, Lagos Nigeria. *Tel:* 630216. *Telex:* 21228. *Cables:* Mobiloil Lagos. *Contact:* Captain P. F. Obersteller, Senior Mooring Master; Captain N. A. M. Austwick, Mooring Master, Qua Iboe Terminal. A. K. Koch, General Manager, Lagos. A. Agbim, Area Operations Manager, Lagos.

SAPELE: 05.55 N. 05.42 E. (See Plan Book)

PORT LIMITS: Escravos Fairway Buoy.

DOCUMENTS: See "Warri".

APPROACHES: Escravos fairway buoy Lat. 05° 30′ N., Long. 05° 04′ E. for entry to Escravos River. Present draft limit 6.4 m. Dredging of channel 100 m. from Escravos down to 10 m. expected to be completed by the end of 1984.

PILOTAGE: River Pilot takes vessel all the way to Koko Anchorage during daylight only. NPA Pilot takes vessels from Koko Anchorage to Sapele Port with a tug. Contact Pilot on VHF Channel 16.

The mouth of Escravos River (05° 35′ N., 05° 10′ E.) is the main entrance for the Delta Creek ports of Warri, Koko, Burutu and Sapele. Before entering any of the creeks, rivers or channels from Escravos to the above mentioned ports, vessels are required to broadcast their intentions and to keep constant VHF radio watch. Positions and movements must be exchanged with other vessels in the vicinity.

The Pilot Station at Escravos is located 0.5 miles North of the Escravos Beacon. The boarding position of the Pilot is 1.0 miles West of buoy No. 5 (close to the breakwater) when vessel is ready for proceeding inward. Vessel will always drop anchor at Escravos inner breakwater anchorage until further instruction is received from the Port Authority.

In addition; on arrival of vessels at Escravos the Pilot normally boards with one helmsman and remains onboard until vessel's departure.

ANCHORAGES: At Koko with max. LOA 170 m. and max. draft 6.4 m.

MAX. SIZE: Max. permissible length 170 m., draft 6.4 m., alongside berths 10.0 m.

HEALTH: See "Lagos".

RADIO: See "Lagos" for ETA advices to Agent. Port Authority Sapele to be contacted on VHF Channel 16.

TUGS: A tug is available as Koko to Sapele is a compulsory pilotage district.

BERTHING: Six berths (incl. one Ro-Ro) at new port. Mooring during daylight hours only.

MEDICAL: NPA Port Clinic with a doctor and a number of para-medical staff available Monday to Saturday.

FRESH WATER: Available in Sapele and supplied by water hydrant and by barge.

FUEL: Fuel oil available by barge from Warri. Diesel available locally. Both products in limited supply.

GANGWAY/DECK WATCHMAN: Compulsory during hours of darkness while in port or at Koko Anchorage.

CLOSING/OPENING HATCHES: Either by crew or stevedores.

CUSTOMS ALLOWANCES: See "Lagos".

IDENTIFICATION CARDS: See "Lagos".

REPAIRS: No facilities.

DRY DOCKS: None.

REPATRIATION: By road to Benin, or Warri, both connected with Lagos by regular air service.

TIME: GMT plus 1 hour.

POLICE/FIRE: Police/fire services are available in the port every day throughout the year.

TELEPHONES: External (P. & T.) and internal telephones are available in the port.

SHORE LEAVE: See "Lagos".

DEVELOPMENTS: New road connections to FCT (Abuja).

AUTHORITY: Nigerian Ports Authority, Sapele Port Complex, Private Mail Bag 4024, Sapele, Nigeria. *Cables:* Genports. *Contact:* The Port Manager.

AGENT: Alraine (Nigeria) Ltd., P.O.Box 4030, Sapele.
Tel. 177. Telex: Lagos 21244.
N.B. Correspondence should be addressed to Warri office.

WARRI: 05.30 N. 05.44 E. (See Plan Book

DOCUMENTS:

(a) Ship Entry Notice, SEN. (See "Lagos").

(b) 14 days prior arrival Agent requires:
- 12 Copies of Manifest.
- 5 Stowage Plans.
- 5 Hatch Lists.

(c) On arrival Master to present:
- 7 Ports of Call Lists.
- 8 Crew Lists.
- 5 Kroo Boy Lists.
- 2 Vaccination Lists.
- 5 Animal Lists.
- 4 Arms and Ammunition Lists.
- 1 Extra Manifest for Transhipment (if applicable).
- 1 Store List.
- 1 Crew Declaration List (crew belongings).
- 1 Maritime Declaration of Health.
- 1 Narcotics List.
- 2 Parcel Lists.
- 5 Passenger Lists.
- 1 Stowaway List.

All above to be prepared and if not applicable to be marked nil. Othe forms prepared by Agent and furnished on arrival.

(d) Warri Ro/Ro Terminal Company require:
- 12 Copies of Manifest.
- 4 Copies of Dangerous/Hazardous Cargo List.
- 4 Copies of Discharge Plan.
- 2 Copies General Arrangement Plan for each vessel.

PILOTAGE: Compulsory. Berthing in daylight only. Whenever ships ar bound for Warri Port, on arrival at Escravos fairway buoy the Maste should call Delta Pilot Union Escravos on VHF Channel 16. A local Rive Pilot will then be sent aboard before the breakwater to Pilot vessel t Bennet Island where the NPA Harbour Pilots normally come aboard t take vessel alongside.

The mouth of Escravos River (05° 35′ N., 05° 10′ E.) is the mai entrance for the Delta Creek ports of Warri, Koko, Burutu and Sapele Before entering any of the creeks, rivers or channels from Escravos t the above mentioned ports, vessels are required to broadcast the intentions and to keep constant VHF radio watch. Positions an movements must be exchanged with other vessels in the vicinity.

The Pilot Station at Escravos is located 0.5 miles North of th Escravos Beacon. The boarding position of the Pilot is 1.0 miles West o buoy No. 5 (close to the breakwater) when vessel is ready fo proceeding inward. Vessel will always drop anchor at Escravos inne breakwater anchorage until further instruction is received from the Po Authority.

In addition; on arrival of vessels at Escravos the Pilot normally board with one helmsman and remains onboard until vessel's departure.

ANCHORAGES: 1 anchorage known as "the pool", opposite Okorodud Town; max. draft for pool anchorage 14 ft. MLWS. Further anchorage a Forcados for vessels waiting to proceed to Burutu or Warri.

APPROACHES: Escravos Fairway Buoy Lat. 5° 30′ N., Long. 5° 04′ E for entry to Escravos River. Present draft limit 6.4 m. Dredging c channel from Escravos down to 10 m. expected to be completed by en of 1984.

MAX. SIZE: LOA 156 m., and due to Escravos bar max. draft 6.4 m.

HEALTH: International Pratique Regulations prevail. Pratique *no* necessary when coming from another port in Nigeria.

RADIO: See "Lagos" for ETA advices to Agent. Contact Port Authorit and Agent via VHF Channel 16.

TUGS: NPA's 2,100 h.p. tug with fire fighting equipment on board.

BERTHING:

Warri: The new Warri Port facilities now include:

11 hard quay berths of which 1 equipped with ramp for Ro/Ro.

10 buoy berths. Berthing daylight hours only. New Warri Port qua length 1,600 m. and depth alongside 11.50 m. 4 new sheds with tota 28,800 sq. m.

Warri Refinery: 2 oil loading jetties and 2 cargo jetties specially fo refined products. Berthing only during daylight hours. Refinery jettie total quay length 121.2 m. and depth alongside 7 m. Products availabl for lifting: AGO, HPFO, LPFO, DPK, PMS, LPGO Butane and Propane Fresh Water available.

Private Jetty: Delta Steel Corporation at Aladja can accommodat vessels with max. draft 6.4 m.

CRANES: NPA Warri has got one 250 metric tonne floating crane an portal cranes of 10 metric tonnes and 6 metric tonnes. Mobile crane also available.

UNBERTHING: Agent prepares outward Customs Clearance Certificat and delivers copy to Master. Agent books Pilot and advises Master time of boarding. Vessel to keep continuous watch on VHF Channel 16 fo instructions from Harbour Master and Agent.

STEVEDORES: See "Lagos".

TANKERS: See "Berthing".

MEDICAL: Facilities available.

DENSITY: Brackish.

FRESH WATER: Available; delivered by barge or via hydrant.

FUEL: See "Lagos".

FIRE PRECAUTIONS: NPA provides modern fire-fighting equipment

GANGWAY/DECK WATCHMAN: Compulsory in port and at anchorag Bennet Island during darkness.

OPENING/CLOSING HATCHES: By crew.

CUSTOMS ALLOWANCES: See "Lagos".

IDENTIFICATION CARDS: See "Lagos".

REPAIRS: Minor repairs only. *N.B.* Spare parts in short supply.

REPATRIATION: Regular airline services between Warri and Lagos

TIME: GMT plus 1 hour.

POLICE/AMBULANCE/FIRE: All these services available in port area

TELEPHONES: Not available – see Agent.

SHORE LEAVE: See "Lagos".

NOTES

Please also advise Shipping Guides Ltd.

SHIPMASTER'S REPORT: January 1983.

The vessel departed from Apapa, Nigeria, on the 13th January, 1983, drawing 8 ft. 6 in. forward and 13 ft. 1 in. aft, arriving at Escravos, the entrance of Warri River, on the morning of the 14th January, 1983.

The approach to the Fairway Buoy (Escravos Pilot Station) was impaired by very limited visibility (Harmattan) and the presence of numerous oil platforms and tanker buoys, their positions being unreliable. The coast near the breakwaters has extended by about 1.5 miles, whilst the position was impossible to fix through the lack of a clear picture on the radar screen (Raytheon – 10 cm.), which was in an optimum condition. The Satnav provided the best aid and navigating prudently the Fairway Buoy with "Escravos" painted on it, was sighted. To double check, course was set to Buoy No. 1, which verified our position.

The Agency at Apapa had advised us to engage a Pilot named Bob Gula, but on approach, when calling him over the VHF, numerous rival Pilots tried to contact us. A pilot launch, near us and carrying a placard "Delta Pilots" and flying "U.P." was contacted and a Pilot engaged, there being no sign or word from Bob Gula. The Pilot proved to be a very capable navigator. Fully informed about all aspects concerning the directions to Warri and keeping in close contact with Warri Harbour Control about shipping movements, most essential in these narrow waters.

The Delta Pilots Union is a branch of the Nigerian Union of Seamen and Transport Workers which has a roster of 35 Pilots. Their aim is, and they are succeeding, to provide an efficient and reliable service to vessels and to eliminate the so-called "Pirate" Pilots, who refuse to join the Union and who create chaos on the VHF.

The entrance to Warri River, near the breakwaters, which on departure disappeared from our radar screen at 1.5 miles, very low, is now marked by a pylon, Qk. Fl. (unlit) Nauto, and a pair of buoys, red and green, Nos. 5 and 6. The next ones are numbered 7 and 8, etc. B.A. Charts 3304 and 3305 were used, albeit positions and numbers were incorrect. Except for a few buoys all are unlit, hence only daylight pilotage. At some parts buoys are in pairs, at some parts only single buoys. Least depth sounded was 28 ft., reduced to mean level 24 ft. We were told that 24 ft. vessels are being berthed.

At Bennett Island a Harbour Pilot boards the vessel for berthing. One large and several small tugs are available.

The River Pilot remains on board for the return trip. Accommodation plus food has to be provided.

If anchoring is required, 3 anchorages are available in the vicinity of :

a. Excravos Lighthouse.
b. Warri Point.
c. Bennett Island.

AUTHORITY: Nigerian Ports Authority, Burutu.

AGENT: Intertrans (Nigeria) Ltd., 4 Khalil Road, POB 374, Warri. Tel. Warri 341. Telex: Via Lagos 21.244. Attention "Warri".

Norway

GENERAL: Also see "Appendix".

REGULATIONS FOR USING THE COMMON SEA-LINE APPROACH TO THE PORT AREAS IN GRENLAND:

Pursuant to the second paragraph of Section 18 of the Act of 24th June 1933 relating to the Harbour Administration, cf. Royal Decree of December 1977, the Ministry of Fisheries lays down the following provisional regulations:

1. Introductory Provisions (Also see "Appendix" – Articles No. 1 and 2).

1.1 *Aim:* The aim of these regulations is to ensure the safety of shipping and the local environment in the Grenland area.

1.2 *Definitions:* For the purpose of these regulations the following shall mean:

Vessel: any vessel of 50 g.r.t. and above, including vessels without displacement and seaplanes used or usable as a means of transport by water, as well as all vessels which tow or push other vessels or objects.

Dangerous Cargo: — cargo classified under the International Maritime Dangerous Goods Code when the quantity carried is 5 tons or more (IMDG Code).

— cargo classified under the IMO code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (Chemicals Code).

— cargo classified under the IMO code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (Gas Code).

— cargo carried in bulk with a flash point lower than 61°C.

1.3 *Application:* These regulations shall be applicable to vessels navigating the waters North of a line through the North point Molen — North point Sasteinen.

Vessels which have been carrying dangerous cargo, and which in ballast are not gas-free, shall be regarded as vessels with dangerous cargo. In addition, for the transportation of chlorine, special rules laid down by the Maritime Directorate shall apply.

2. Specific Provisions (Also see "Appendix" – Articles No. 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15).

2.1 *Sea-Traffic Co-ordination Centre:* The function of the Sea-Traffic Centre will be to co-ordinate sea traffic within the area for which the Centre is responsible, and at the same time to contribute to ensuring that all traffic proceeds safely and effectively.

With the help of communication equipment and other technical aids, the Sea-Traffic Centre shall pass on information to the vessels, thus providing them with a surer basis for decisions regarding the vessels' passage and navigation.

The Sea-Traffic Centre may initiate such safety measures as are deemed necessary to ensure sea traffic the maximum degree of safety at all times.

The Sea-Traffic Centre may not interfere actively with the individual vessel's passage and navigation. The Shipmaster has sole responsibility for all aspects of the vessels passage, navigation and manoeuvring.

It is the responsibility of the Sea-Traffic Centre to see that these regulations, as well as instructions issued pursuant thereto, are observed.

Inward vessels or vessels already in the waters shall direct all reports and questions connected with the vessel's passage and navigation to the Sea-Traffic Centre over the VHF radio-telephone Channel 11, or by telephone or telex. Other radio messages concerning the vessel's business operations shall be transmitted via the nearest coastal radio station.

2.2 *Clearance:* Vessels intending to use these waters must obtain permission from the Sea-Traffic Centre before the vessel may enter the waters or leave the quay or anchorage.

Clearance must be obtained in good time and at least one hour before the vessel arrives at or shall enter the waters concerned. Vessels carrying dangerous cargo moreover required to give at least 24 hours' notice of their port of arrival.

Requests made to the Sea-Traffic Centre for clearance must contain the following information:

(a) Name of vessel.
(b) Call sign.
(c) Nationality.
(d) Length.
(e) Breadth.
(f) Draft.
(g) g.r.t.
(h) Port of destination.
(i) Type of cargo.
(j) Amount (in tons) of dangerous cargo.
(k) Expected time of arrival.
(l) Expected time of departure.
(m) Name of Ship's Master.

Furthermore, the vessels may be required to give the Sea-Traffic Centre such information as may be deemed necessary to ensure that all traffic proceeds safely and effectively.

In addition, attention is drawn to the reporting requirements in connection with notification of position and the ordering of Pilots.

2.3 *Notification of position and VHF radio-telephone listening duty:* Vessels intending to use the waters defined under item 1.3 must have maritime VHF radio-telephone equipment in proper working order.

Notification of Position: Vessels shall report their position when:

(a) passing the line through North point Molen — North point Sasteinen
(b) leaving quay or anchorage
(c) arriving at quay or anchorage.
(d) passing any other position determined by the authorities.

Such notification shall contain the following information, dependent on whether the vessel is inward or outward bound.

Inward:

— name of vessel
— time of passing the line through North point Molen — North point Sasteinen
— expected time of arrival at quay or anchorage
— time of arrival at quay or anchorage

Outward:

— name of vessel
— time of departure from quay or anchorage
— expected time of passing the line North point Molen — North point Sasteinen
— time of passing the abovementioned line.

Notification of position shall be addressed to the Sea-Traffic Centre (Trafikksentralen), Brevik, via VHF Channel 11.

If the notification of position cannot be delivered direct to the addressees VHF station, it must be sent without delay by other means, in port by ordinary telephone/telex or at sea via Tjome Radio.

Listening Duty: While underway in the area, all vessels passing through the stated waters must listen to VHF Channel 11.

This provision regarding listening duty also applies to pleasure craft equipped with a VHF radio-telephone.

2.4 *Use of Norwegian State Pilot:* Pursuant to Section 5 in the Pilot Service Act, on 21st June 1978; the Ministry of Fisheries laid down regulations regarding the compulsory use of Pilots for vessels passing through the waters North of a line between North point Molen — North point Sasteinen.

2.5 *Ordering of Pilots:* Vessels for which it is compulsory or which wish to use a Pilot must as far as possible comply with the 'Provisions for prior notification in regard to ordering of Pilots' included in the Pilotage Book (Losboken) and in Information to Seafarers No. 1. In addition, the following provisions apply to the ordering of Pilots for vessels which are arriving in or leaving ports in the waters described under item 1.3:

— Vessels approaching from the sea and desiring a Pilot shall as far as possible order a Pilot 24 hours in advance and thereafter confirm arrival at pilot station 2 hours in advance.

— Vessels lying in port and desiring a Pilot shall as far as possible order a Pilot 4 hours in advance and thereafter confirm departure from the port 2 hours in advance.

Orders for Pilots shall be addressed to the Sea-Traffic Centre in Brevik.

2.6 *Limited visibility:* If due to fog, rain, snow, air pollution or other factors, visibility is reduced to less than 1 nautical mile (1,852 m.) in these waters or parts thereof, the Sea-Traffic Centre shall stop or detain all vessels with dangerous cargo.

2.7 *Capacity Restrictions:* Below follow the maximum permitted length, breadth and draft for vessels intending to pass respectively Dypingen, Kalven and Brevikstrommen.

Dypingen	
Length	600 ft.
Breadth of vessel with dangerous cargo	80 ft.
Breadth of vessel otherwise	85 ft.
Draft	34 ft.
Kalven	
Length	600 ft.
Breadth	95 ft.
Draft	34 ft.
Brevikstrommen	
Length	600 ft.
Breadth of vessel with dangerous cargo	80 ft.
Breadth of vessel otherwise	85 ft.
Draft	32 ft 6 in.

2.8 *Traffic Separation:* Between Langesundbukta and Brevik, two separate marked fairways have been established. The Sea-Traffic Centre shall indicate, after consultation with the Shipmaster and Pilot, which fairway is to be used when the vessel obtains the clearance signal to proceed into these waters.

2.9 *Safety Zones:* Off the quays at Rafnes and Heroya, safety zones have been established as indicated in Chart Nos. 5, 473 and 474. Only vessels proceeding to or from quays and installations or on fully documented assignments within these zones may cross the boundaries of the zones.

2.10 *Anchorages:* Two anchorages have been set aside in these waters which must be used if it is necessary for the vessel to anchor.

Helgeroafjorden: South of a line through Fugloyskjaer light beacon —Amlirogna light beacon.

Frierflaket: East side of Frierfjorden, between Versvikbukta and the Hydro plant, but not within 300 m. of the quays.

Anchoring outside these two areas should be avoided.

Before anchoring, the vessel must have obtained clearance from the Sea-Traffic Centre.

For reasons of safety the Sea-Traffic Centre may order a vessel to proceed to the designated anchorage if the situation so requires.

2.11 *Use of Tugs:* The Sea-Traffic Centre may, after consultation with the Shipmaster and Pilot, require vessels with dangerous cargo to use tugs in manoeuvring in to and away from the quay and during passage in these waters, if this is deemed necessary for reasons of safety.

2.12 *Towlines:* During inward and outward passage, vessel with dangerous cargo shall have made fast and lowered to the water fore and aft a non-sparking non-flammable towline with eyelet.

2.13 *Pleasure-craft traffic:* Pleasure-craft and open boats shall as far as possible keep out of the way of larger vessels and commercial vessels. Insofar as feasible they shall keep close to shore within a maximum distance of 100 m.

Pleasure-craft — including open boats — shall not cross the shipping lane or fairway in such a way that this might disturb the passage of vessels which can only proceed with safety in such lanes or fairways. Attention is drawn to Sections 9 and 44 in the International Regulations for Preventing Collisions at Sea.

3.0 *Exemption:* In exceptional cases the Coast Directorate may grant exemption from these regulations. Requests for exemption must be submitted in writing to the Coast Directorate, preferably one month prior to the arrival of the vessel.

4.0 *Penal provisions:* Anyone wilfully or negligently violating these regulations shall be punished in accordance with Section 418 in the Penal Code, unless stricter penal provisions are applicable.

5.0 *Entry into force:* These regulations shall enter into force on 1st August 1978.

APPENDIX: Following has been translated by Shipping Guides Ltd.

Appendix to State Law No. 2/1984 comprises:

Laid down by the Fisheries Department on 1st March, 1984 in support of the law covering port matters of 24th June, 1933 Art. 18,2, and Royal Resolution of 16th December, 1977.

ART. 1.

Geographical and pertinent scope:

This regulation covers vessels which use marine lanes to the North of a straight line through the Northern point on Molen and the Northern point on Sasteinen.

The regulations cover vessels over 50 g.r.t., those without displacement and seaplanes, which are used or can be used as transport means on water, and vessels which tow or push another vessel or object.

Vessels carrying hazardous cargo are defined also as those transporting highly inflammable condensed gases with a flashpoint lower than 23° C, and which in ballast are not gas-free.

For the transport of chlorine in bulk the corresponding rules of the sea are additionally valid.

ART. 2.

Definitions:

In these regulations:

Vessel: = boat, barge, lighter and craft of any kind.

The Fisheries Department shall have the final decision as to what shall be understood to be a vessel.

G.r.t. = gross registered tonnage as is stated in the vessel's certificate. If the certificate shows two tonnages, the highest shall be used for the purpose of this regulation.

Dangerous Cargo:

(a) Materials which are packed are classified in accordance with the IMO General Index in the International Maritime Dangerous Goods Code – IMDG (Packed goods code) with subsequent amendments, the quantity of which is 10 tonnes or more. This makes exception for cargoes with a flashpoint between 23°C and 61°C, class 3.3, according to IMDG codes, provided that the cargoes are specified in the code without secondary hazards (poisonous, corrosive, etc.).

(b) Materials in accordance with Chapter VI in the IMO Code for the Construction and equipment of ships carrying gases in bulk (gas code) with subsequent amendments.

(c) Materials in accordance with Chapter XIX in the IMO Code for the Construction and equipment of ships carrying liquefied gases in bulk (gas code) with subsequent amendments.

(d) Materials which do not come under points (b) or (c), but which carried in bulk and have a flashpoint below 23°C.

The following substances are, nevertheless, not considered to be hazardous cargo:

Product designation	*Chemical formula*	*UN No.*	*UN Class*
Ammonium nitrate	NH_4NO_3	1942	5.1
Amm. nitrate fertiliser		2067	5.1
Amm. nitrate fertiliser		2068	5.1
Amm. nitrate fertiliser		2069	5.1
Amm. nitrate fertiliser		2070	5.1
Amm. nitrate fertiliser		2072	5.1
Amm. nitrate fertiliser		2071	9.0
Argon	Ar	1006/1951	2.0
Caustic potash	KOH	1814	8.0
Carbon dioxide	CO_2	1013/2187	2.0
Formic acid	HCOOH	1779	8.0
Magnesium granules	Mg	2950	4.3
Sodium hypochloride	NaOCl	1791	8.0
Caustic soda	NaOH	1824	8.0
Spent caustic			8.0
Ammonium hydroxide	NH_4OH	2672	8.0
Nitrogen	N_2	1066/1977	2.0
Nitric acid	HNO_3	2031	8.0
Hydrochloric acid	HCl	1789	8.0
Sulphuric acid	H_2SO_4	1830	8.0
Titanium trichloride	$TiCl_3$	2441	4.2

The Coastal Directorate may determine that new materials shall be considered as hazardous cargoes. In arriving at their decision, emphasis will be placed on possible damage arising from such materials which might effect the environment in the event of leakage due to grounding, collision, or similar.

ART. 3.

Traffic Centres:

The Traffic Centres can set in motion safety measures shown to be necessary for providing maritime traffic with the highest degree of safety at any time.

The Traffic Centres cannot take an active part in the sailing and navigation of vessels. These regulations in no way detract from the responsibility of Masters for all circumstances connected with the forward movement, navigation and manoeuvring of their vessels.

Vessels requiring to enter channels or are already in such channels must address all reports and enquiries concerning their sailing and navigation to the Traffic Centre via VHF radio telephone Channel 11, or by telephone or telex. Other radio traffic concerning the operation of the vessel should be transmitted via the nearest coastal radio station.

ART. 4.

Clearance:

Vessels wishing to enter the channel must obtain permission in advance from the Traffic Centre. Permission must be sought in good time and at least 1 hour prior to the vessel arriving at the channel, or before she leaves the quay, anchorage or any other mooring location.

The Traffic Centre, when it sees fit, may, in the interest of safe traffic movement, withdraw permission or set special conditions for permission.

The Traffic Centre may in individual cases give a vessel permission to use only a specific part of the channel.

Vessels with hazardous cargo must, however, report their impending arrival in port 24 hours in advance.

When applying for permission, the following details must be given to the Traffic Centre.

(a) Name of Vessel.
(b) Call Sign.
(c) Nationality.
(d) Length.
(e) Beam.
(f) Draft.
(g) G.r.t.
(h) Port of Destination.
(i) Type of Cargo.
(j) Quantity in tonnes of Hazardous Cargo.
(k) ETA.
(l) Expected Sailing Time.
(m) Name of Master.

It is incumbent upon vessels to give the foregoing data, as Traffic Centres consider it essential for ensuring a safe and effective control of traffic.

ART. 5.

Position Reporting and Listening-out:

Vessels requiring to enter channels must be equipped with fully operative maritime VHF radio-telephone.

Where the VHF radio installation is operated from the vessel's own mains, it must be possible to disconnect it rapidly and changeover to battery operation, or the vessel must be equipped with transportable VHF with battery charger. The transportable VHF must have adequate range of function.

All communications with the Traffic Centre on VHF Channels 16, 14, 13, 12 and 11 are automatically recorded on tape.

Vessels must send position reports when:

(a) Passing the channel limit to the South.
(b) Leaving the quay, anchorage or mooring point.
(c) Arrival at the quay, anchorage or mooring point.
(d) Passing of other positions which may be determined by the Traffic Centre.
(e) In the event of accident.
(f) At the request of the Traffic Centre.

Reports must contain the following details:–

On entry

- vessel's name
- time for passing line between the Northernmost point on Molen and the Northernmost point on Sasteinen
- ETA at the quay, anchorage or mooring point.

On sailing

- vessel's name
- departure time from quay, anchorage or mooring point
- estimated time for passing the line through the Northernmost point on Molen and the Northernmost point on Sasteinen.
- actual time for passing this line

On sailing inside the channel

- vessel's name
- departure time from quay, anchorage or mooring point
- ETA at quay, anchorage or mooring point
- actual time of arrival at quay, anchorage or mooring point.

Position reports must be addressed to the Traffic Centre, Brevik, on VHF Channel 11. Where the position report cannot be delivered directly to the addressed VHF station, it must without delay be sent in another manner, in port by telephone or telex, and at sea via Tjome Radio.

Vessels under way in the channel, must listen out continuously on VHF Channel 16 and 11. This requirement applies to all vessels equipped with VHF radio telephone, irrespective of the vessel's movement.

ART. 6.

Limited Visibility:

When visibility is less than 1 nautical mile (1852 m.) in the channel or a part of it, the Traffic Centre will hold back all vessels with hazardous cargo.

ART. 7.

Capacity Restrictions:

When passing Dybingen, Kalven and Brevikstrommen, no vessel must have greater length, beam and draft than the following limits:

Dybingen		
	Length	600 ft.
	Beam of vessel with hazardous cargo	80 ft.
	Beam of other ships	85 ft.
	Draft	34 ft.
Kalven		
	Length	900 ft.
	Beam	150 ft.
	Draft	44 ft.

Brevikstrommen

Length	650 ft.
Beam of vessel with hazardous cargo	90 ft.
Beam of other ships	100 ft.
Draft	32 ft. 6 in.

The Traffic Centre can in special circumstances permit vessel without hazardous cargo to pass Brevikstommen in daylight with draft up to 34 ft.

ART. 8.
Traffic Separation:

The Traffic Centre will indicate which marked course shall be used between Langesundbukta and Brevik when the vessel receives permission to enter the channel.

ART. 9.
Anchorages:

Vessel may only anchor when this is necessary. Before a vessel proceeds to anchor, she must obtain permission from the Traffic Centre. The Traffic Centre can, on grounds of safety, decree that the vessel must go to a specific anchorage. Ships may only anchor at any time in the following areas:

Helgeroa Fjord
South of a line through Fugloskjaer Lighthouse and Amlivogna Lighthouse.
Eidanger Fjord
North of a line running East – West through the Southernmost point of Orviktangen.
Frierflaket
East side of Frier Fjord, between Versvik-bay and Hydros, but not nearer to the quay than 300 m.

The Traffic Centre can, after obtaining a decision from the Coast Directorate, indicate other anchorages.

Nevertheless, a vessel can anchor outside these areas when it is necessary to obviate danger. The Traffic Centre must be informed accordingly.

The Traffic Centre may refrain from giving a vessel permission to leave its anchorage, or may instruct an already cleared vessel to vacate the anchorage.

ART. 10.
Use of Tugs:

Vessels over 500 g.r.t. carrying liquid condensed gases, and those over 2,000 g.r.t. carrying bulk hazardous cargo, as defined in these regulations, must use a tug during entry and departure and manoeuvring to and from the quay or anchorage. The Traffic Centre can compel vessels, which are below the aforementioned tonnage limits, and which carry gases and other hazardous cargo in bulk, to use tugs. The towing connection, on entry, must be established immediately after the Pilot comes on board, provided that wind and sea conditions permit this.

On departure, the tug must be attached to the vessel before she leaves the quay or anchorage until she has passed Dypingen or Helgeroa Fjord. The Traffic Centre can on the grounds of safety, require more than one tug to be used.

Vessels without hazardous cargo, but which exceed one or more of the following measurements:

Length	600 ft.
Beam	86 ft.
Draft	32 ft. 6 in.

must have a tug attached on passing Brevikstrommen between Gjermesholmen and Saltbua Light.

Tugs used must have the capacity to restrain the movement of vessels under control at any time. Also, they must have adequate fire fighting equipment.

ART. 11.
Towlines:

During entry and departure, vessels with hazardous cargo must have a towing cable attached and lower than water level at the stern and at the bow, which is spark-free and fire resistant, and fitted with eyes.

ART. 12.
Pleasure Craft Traffic:

Pleasure craft and open boats must as far as possible leave paths free for large vessels and those of a work and utility nature. They must, wherever possible, sail along the coast within a distance of 100 m.

Pleasure vessels, and open boats, must not cross the path or channel being followed by a vessel which can only follow the said path or channel. Also Maritime Navigation Regulations 44 and 9 refer.

ART. 13.
Exemptions:

In any special situation, the Coastal Directorate may give dispensation from the observance of these stipulations. Requests for dispensation must be submitted in writing to the Coastal Directorate, where possible, 1 month prior to the arrival of the vessel.

Traffic Centres can in very special circumstances give dispensation from the determinations and permissions in Art. 4.

ART. 14.
Determination of Penalties:

Any contravention or non-observation of these Regulations is subject to the provisions of law 418, unless more stringent penalties are seen fit to be applied.

ART. 15.
Entry into Force:

These Regulations enter into force on 1st April, 1984. From that date onwards, existing regulations for the use of the common channels for the port district in the coastal area issued by the Fishery Department on 21st June, 1978 are cancelled.

(Coastal Directorate/Pilotage Department, Oslo, 20th March, 1984).

AGOTNES: 60.25 N. 05.01 E. (See Plan Book

DOCUMENTS:

1 General Declaration.
2 Cargo Declarations.
1 Stores List.
1 Health Declaration.
1 Personnel Effects.
2 Manifests.

PILOTAGE: Usual entrances to port at Korsfjord and Fedje.

Provisions for Advance Reports in connection with the ordering o Pilots. Issued by the Director of Pilotage.

1. Vessels approaching from the sea and desiring a Pilot should orde the Pilot at 24 hours notice insofar as possible and confirm arrival at pilo station at 2 hours notice.

The advance order can be sent in the following manner:

a. From ships at sea over radio direct to the sea pilot watc (calling frequency 2182 kHz from 2 minutes past unti 10 minutes past each full hour, or over VHF-radio telephone calling frequency 156.80 MHz, Channel 16).
b. From ships at sea over coastal radio station to pilot station o pilot office.
c. From broker or shipowner over telephone to sea pilot station o to any pilot office which will immediately convey the report t the sea pilot station.

2. Vessels lying in port and desiring Pilot will order the Pilot from the nearest pilot office during its office hours and if possible at 4 hours notice.

3. Vessels approaching from the sea as well as vessels lying in por shall, when making an advance order state the name and destination o the vessel and whether 1 or 2 Pilots are desired.

4. The Pilots will on the whole be despatched to the ships in accordance with the advance orders, and vessels are therefore requested to comply with the foregoing rules as far as possible in order to avoid having to wait for Pilot.

5. The international provisions for summoning Pilots by signal flags o blue lights, etc., are still in force, but should in future be used as a supplement to the radio communications or as the sole communicatio in emergencies.

ANCHORAGE: About 1,600 ft. North of CCB quay, depths 29 m. - 74 m.

RESTRICTIONS: No special restrictions upon entry to the port.

MAX. SIZE: Water depths up to 60 ft. at quayside.

HEALTH: No Certificates required. In event of any disease or fever, contact Agents.

RADIO: All messages to Agents via Bergen Radio or Rogaland Radio.

VHF: Bergen Radio on Channel 16 or direct on Channel 10 (24 hou service).

TUGS: Available upon request. Vessel's lines usually used. No extra charge for tug's line.

BERTHING:

West side, quay of 100 m. long. Depth of water 60 ft.
East side, quay of 105 m. long, Depth of water 14 m.
North West side, quay of 120 m. long. Depth of water 7.2 m.
South side, 2 berths, each 60 m. long. Depth of water 10 m.

CRANES: 1 Mobile crane 280 tons lifting capacity. 6 Mobile cranes 50 tons lifting capacity. 4 Mobile cranes 35 tons lifting capacity.

BULK CARGO FACILITIES: For drilling mud and cement only.

SPECIALISED CARGO HANDLING FACILITIES: Loading/unloading carried out by mobile cranes and trucks.

BRIDGES: Bridge between Knarrevik and Drotningsvik. Height at mean level 50 m.

STEVEDORES: Provided by Coast Centre Base.

MEDICAL: 4 hospitals available (Bergen). No advance notice except serious illness.

TANKERS: Bunker line 6 in. No slop facilities.

DENSITY: About 1024.

FRESH WATER: Can be supplied alongside the quay, rate 70 t.p.h.

FUEL: New tank of 5,000 cu.m. 3 ships may take bunkers at the same time at a rate of 120 cu.m./hr.

No advance notice required.

CONSULS: (in Bergen). Belgian, Brazilian, British, Danish, Finnish, French, Greek, Islandic, Netherlands, Panama, Peruvian, Portuguese, Spanish, Swiss, Swedish, Turkish, German, Uruguay, Austrian.

REPAIRS: All repairs possible.

DRY DOCKS: Available in Bergen. 3 Dry docks 365 ft. long with 12.5 ft. – 21 ft. depth on blocks.

1 floating dock for vessels up to 10,000 g.r.t. and 2 smaller floating docks. Largest vessel 51,839 g.r.t. Draft 34 ft. 4 in.

Drafts up to 35 ft. can be accommodated.

SURVEYORS: Lloyd's, A.B.S. and Norske Veritas.

GANGWAY/DECK WATCHMAN: Not necessary.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: 0.75 litres of spirit and 200 cigarettes for each member of the crew.

REPATRIATION: All facilities available for crew changes.

AIRPORT: 35 km. from Bergen Airport served by regular airlines.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: New Years Day (January 1st); Maundy Thursday; Good Friday; Easter Monday; May 1st; May 17th; Ascension Day; Whit Monday.

Cargo work can be arranged with special agreement.

POLICE/AMBULANCE/FIRE: Bergen 002; Bergen 003; Bergen 001 respectively.

EMERGENCY CO-ORDINATION CENTRE: Tel: Bergen 002.

TELEPHONES: No arrangements for connection on board ships. Telephone box on quayside.

SERVICES: Compass adjuster, Radio/Radar service. Also calibration of the Direction Finder, Ships laundries.

BANKS: Bergen Bank, 5363 Agotnes.

STORING: See "Prelims", page viii.
1. Vessel can be stored by barge or truck.
2. No special regulations regarding storing.
3. Trucks can proceed alongside at the berth.
4. Forklift trucks are available.
5. No special regulations regarding customs.
6. Local riggers can be employed on request.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.
IDENTIFICATION CARDS: Not required.
REGULATIONS: No particular or unusual regulations.
DELAYS: No particular reason for delays.
DEVELOPMENT: A new Ro/Ro berth is planned at Dock No. 1.
AUTHORITY: Coast Center Base A.S. & Co., P.O.Box 55-22B, 5363 Agotnes. *Tel:* (05) 33 40 00. *Telex:* 42 835 ccb n. *Cables:* Ceeceebee. *Contact:* Knut Aas, Managing Director.

ALESUND: 62.27 N. 06.09 E. (See Plan Book)

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Customs Documents.
1 Health Documents.
3 Manifests.
3 Bills of Lading.
1 Ship's Papers.
1 Stores Lists (provisions).

PILOTAGE: From open sea, Pilot is taken on board at Rundo pilot station. Watch 24 hours a day. To be called 3-4 hours before ETA by VHF 16, or radio.
ANCHORAGE: On the North side of the town in Valderhaugfjorden in depths of 20 m. – 60 m.; bottom, sand and mud.
On the South side of the town in Aspovagen in depths of 20 m. – 40 m., bottom mud.
RADIO: Alesund Radio 2182 kc/s and VHF Channel 16. Harbour Office (VHF Channels 16 and 12) is manned 24 hours. Tel: 21425.
TUGS: Meet vessel normally before entering the harbour, or by order.
BERTHING: *Storneskaia:* East side, length 85 m., depth 6 m. – 14 m. On this side Ro/Ro berth available ramp width 22 ft. South side, length 153 m., depth 10 m. – 14 m. West side length 60 m. depth 5.0 m. Warehouse capacity 1,600 sq.m.
Prestekaia: South side, length 220 m., depth 13 m. – 16 m. West side, length 40 m., depth 5 m. – 13 m. North side length 41 m. Depth 5 m. – 13 m. Warehouse capacity 4,100 sq. m.
Skutvika: Special quay for fishing vessels, length 330 m., depth 4 – 6 m. Only mooring on N.E. side. Quay, length 80 m., depth 4 – 7 m.
Sjogata: Mooring quay, length 180 m., depth 8 m. At Northern Harbour there is one commercial quay.
Skansekaia: North side, length 195 m., depth 10 m. – 13 m. West Side, length 60 m. Depth 4 m. – 8 m. South side, length 130 m., depth 4 m. – 5 m. This quay forms protection for a small inner harbour with several smaller quays.
Flatholmen: Length 50 m. Depth 7.0 m. Dirty ballast facilities available.
Brunholmkaia: Length 100 m., depth 4.0 m.
Skansegata: Length 200 m., depth 6.0 m.
Spjelkavik Kai: Length 50 m., depth 7.0 m.
STEVEDORES: Obtained by Agent who requires ETA 12 hours before ships arrival.
CRANES: Mobile crane to lift 18 tons available. Floating crane to lift max. 100 tons available.
CONTAINERS: Depot for *C.T.I.* containers.
FRESH WATER: Available. Tel: 071-21424.
FUEL: Bunkering facilities from all major oil companies. Loading by barge or pipeline at berth.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: This work is normally carried out by crew.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes. Wine/Spirit: 1 bottle of spirits.
IDENTIFICATION CARDS: Not required.
REPAIRS: Available.
DRY DOCKS: 2 dry docks, lifting capacities 2,750 tons and 8,000 tons.
SURVEYORS: Det Norske Veritas. Tel: 071-25290.
AIRPORT: Alesund airport, Vigra. Passenger flights (3 times a day) to and from Oslo. Trondheim, Bergen.
TIME: GMT plus 1 hour, GMT plus 2 hours in Summer.
HOLIDAYS: 1st May; 17th May.
POLICE/AMBULANCE/FIRE: Police 21321; Ambulance 25560; Fire 22000.
TELEPHONES: No arrangements for placing telephones on board.
DEVELOPMENTS: The quays at Spjelkavik to be extended to 200 m.
AUTHORITY: Alesund Havnevesen, Skansekaia, 6000 Aalesund, Norway. *Tel:* 071-21832 or 21425. *Contact:* K.M. Bardsen, Harbour Master. Tel: 071 21-586 (Private).

ALVIK: 60.26 N. 06.24 E.

Alvik located in inner part of Hardangerfiord. Ferrosilisium works. Vessels from abroad may call Haugesund for inward Customs' clearance.
DOCUMENTS: See "Bergen".
PILOTAGE: Compulsory. Belonging to Bergen Customs' district.
BERTHING: Quay No.1, length 80 m. 2 cranes, 7.5 and 9.5 tons. Quay No. 2, length 90 m. 1 crane 7.5 tons.
AUTHORITY: Alvik Port Authority, A/S Bjolvefossen, 5614 Aalvik, Norway. *Tel:* 055 57200. *Telex:* 42146. *Cables:* Ferro Aalvik. *Contact:* Helge Amdahl, General Manager.

ARDALSTANGEN: 61.14 N. 07.42 E. (See Plan Book)

LOCATION: Ardalstangen Aluminium works located in innermost part of Sognefiord. Lat. 61° 14′ 03″ N., Long. 7° 42′ 28″ E.
DOCUMENTS:
Receivers: Bills of Lading.
Manifests.
Crew List.
Customs: Bills of Lading.
Manifests.
Health Documents.
Ship's Certificates.
Ship's Papers.
Ship's Stores Declaration.
General Declaration.
3 Crew Lists.
Crews Personal Effects Declaration.
Inward and Outward Clearance.

PILOTAGE: Compulsory. Pilots belong to Bergen Customs District.
ANCHORAGE: Depth 500 ft.
RESTRICTIONS: No berthing after 2100 hrs. or before 0600 hrs.
VHF: Channel 16.
TUGS: None available. Local lineboat available if required.
BERTHING: One quay, length 600 ft., depth alongside 31 ft. 06 in. 1×14 ton crane, 1×5 ton crane and 1×25 ton crane.
One quay, length 300 ft., depth alongside 36 ft. 1×30 ton crane.
The berths are ice free.
STEVEDORES: No work Saturdays, Sundays and holidays.
DENSITY: 1026.
FRESH WATER: Available, cost 3.50 NK per ton.
OPENING/CLOSING HATCHES: By crew.
CARGO GEAR: Loading/discharging by shore gear.
TELEPHONES: Available if required.
AIRPORT: 1 hour 20 minutes by ferry to airport at Sogndal.
AUTHORITY: Ardal og Sunndal Verk A/S, P.O. Box 175, 5875 Ardalstangen, Norway. *Tel:* 056-61164. *Telex:* 42610 ARAL N. *Cables:* Ardalverk, Ardalstangen. *Contact:* K. Ulvestad, Harbour Master (056-61011).

ARENDAL: 58.28 N. 08.46 E. (See Plan Book)

DOCUMENTS: See "Bergen".
PILOTAGE: The Pilot boat *Arendal* is stationed at Arendal. Contact may be made on VHF/RT or telephone 21347–23668 or out of office hours via Kristiandsand Radio or Tjome Radio.
ANCHORAGE: Safe anchorage ground is readily available and there are numerous mooring places for vessels not docking alongside the quays.
MAX. SIZE:

	Depth (ft.)	*Length (m.)*
Nye Tollbodkaien	33	230
Batterrikaien	33	110
Hotellbryggen	30	77
Malmkaien	28	30
Stenkaien	26	110
Utstikkerkaien Barbu	24	58
Fryselagerkaien	22	76
Jaktekaien	20	50
Gamle Tollbodkaien	20	45
Kallevigs Brygge	20	43
Langbryggen	15	120
Ferjekaien	26	30

No tide even in exceptional weather conditions, increase in water level never exceeds 3 ft.
TUGS: 2 small tugs. 500 h.p. and 300 h.p.
RADAR/VHF: Radar at Pilot station. VHF see "Pilotage".
CRANES: 1 × 3 ton crane and 1 × 20 ton mobile crane at Nye Tollbodkaien. At Vindholmen, 1 crane 100 tons capacity and 1 crane 60 tons capacity.
MEDICAL: Advance notice required for medical attention.
FRESH WATER: Available all quays.
FUEL: Advance notice required.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: Crew or stevedores.
CERTIFICATES: Normal International Certificates required.
CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle spirits.
IDENTIFICATION CARDS: Not required.
CONSULS: Sweden, Denmark, Finland.
REPAIRS: Port has well-equipped workshop to carry out engine repairs as well as hull work above water line.
AIRPORT: Kjevik 60 km.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Police 22030; Fire Station 22255.
TELEPHONES: Can be placed aboard.
AUTHORITY: Arendal Havnekontor, P.O.Box 33, 4801 Arendal, Norway. *Tel*: (041) 21071, 23668. *Contact*: Harbour Master.

BATSFJORD: 70.38 N. 29.44 E. (See Plan Book)

PORT LIMITS: Straight line from the light at 'Skrovneset' to the 'Prestelv' defines the port limits.

DOCUMENTS:
3 copies Maritime Declaration of Health.
4 copies Cargo Declaration.
3 copies Ship's Store Declaration.
3 copies Crew Effects Declaration.
3 copies Crew List.
2 copies General Declaration.
Clearance from last port.
3 copies Passenger List.

PILOTAGE: Not necessary. Harbour pilotage is optional, but if required, 24 hours' notice should be given.

ETAs to be reported 24 hours and 3 hours prior to arrival. Information given should include:
a) Name/call sign of vessel.
b) Nationality.
c) Length, draft and g.r.t.

Pilot boarding ground 2 miles off entrance.

ANCHORAGES: Unlimited anchoring available at the Outer Harbour. Very good anchor conditions for fishing vessels in bad weather.

RESTRICTIONS: No restrictions other than maximum draft.

HEALTH: Cable Agent with following information: Ports of call during voyage, nature of cargo, number of crew and passengers, port of destination and Agent, condition of health of all on board with details of any sickness.

RADIO: Vardoe Radio, VHF and MF.

VHF: Pilot and pilot boat use Channels 16 and 12. All communications with Harbour Authorities should be conducted on Channel 12.

TUGS: One tug available. Will be ordered by Pilot on request.

BERTHING: Pilotage optional. Berths are arranged by Harbour Master. Linesmen and boatmen are arranged through Harbour Office.

Berth Number	*Wharf Length* (m.)	*Depth at LW* (m.)	
1	92	7	
2	70	5	
3	77	3	
4	250	7	(under construction)
5	73	3	
6	50	—	(under construction)
7	110	6	
8	60	5	
9	50	8	(under construction)
10	200	6-10	
11	92	5·5	
12	60	3	
13	100	4	
14	32	3	
15	90	6	

CRANES: Mobile cranes available on request. Stationary cranes on most private piers.

STEVEDORES: Arranged through Harbour Authorities.

MEDICAL: No advance notice required except in case of serious illness which is to be included in arrival cable. Doctor and dental facilities available.

TANKERS: Discharge lines: 6 in. Slop removal possible.

DENSITY: 1025.

FRESH WATER: Available at all berths.

FUEL: Fuel delivered by pipe-line at 4 berths, and by tank trucks at all other berths. Major grades of bunker fuel and diesel as well as marine lubricants can be obtained through suppliers.

REPAIRS: Most deck and engine repairs can be carried out.

DRY DOCKS: To be established in 1984. Size: 70 m. × 25 m.

SURVEYORS: Norwegian Ship Control Office.

GANGWAY/DECK WATCHMEN: Usually carried out by ship's crew, but watchmen available. Ship's gangway used, but shore gangway available.

HATCHES: Opening/closing by ship's crew.

CUSTOMS ALLOWANCES: Check with Agent.

REPATRIATION: Crew changes and repatriation can be carried out without difficulty.

AIRPORT: Distance 5 km. Served by 3 flights daily.

TIME: GMT plus 1 hour. Summertime kept.

HOLIDAYS: New Year's Day, "Skjaertorsdag" and Good Friday, Easter Monday, 1st May, 17th May, Whit Monday, Christmas (2 days).

POLICE/AMBULANCE/FIRE: Police: 83131. Ambulance: 83116. Fire: 51122. Area Code: 085.

EMERGENCY CO-ORDINATION CENTRE: Bodo Rescue Centre: Tel: 081-25000. Rescue Vessel Station in Batsfjord: 83498 or VHF Channel 16.

TELEPHONES: No arrangements for telephone on board.

SHORE LEAVE: No restrictions.

SHIP SUPPLY SERVICE: The port renders full service for transport of passengers and goods.

For transport of sick and injured people from ships, the port is equipped with the rescue vessel m.v. "Sjofareren" all the year round.

Telephone numbers for these services are as follows:

Passenger/goods transportation: 085-83385 or 085-83607 also VHF Channels 16 and 12.

Sickness/injuries: 085-83498 also VHF Channel 16.

For helicopter services, this will be covered by the Rescue Station in Bodo, Tel: 081-21267.

Tug services will be carried out by the "Sjofareren" – see above.

SERVICES: Compass adjusting, radar repairs, R/T repairs, gy compass repairs, all types of electronic equipment repaired.

Divers available for surveys and underwater repairs. Several sh chandlers, ice delivery, freezing plant, Forwarding Agent, weekly arriv of UK-Continent liner.

BANKS: A/S Fiskernes Bank, P.O. Box 56, 9991 Batsfjor
Tel: 085-83451. Telex: 64378.

Ost-Finnmark Sparebank, P.O. Box 310, 9991 Batsfjor
Tel: 085-83369.

AUTHORITY: Port of Batsfjord, P.O. Box 68, N-9991 Batsfjor
Tel: +47/85-83385 or 83607. *Cables:* Harbour Authority, Batsfjor
Contact: Bjarne Paasche, Harbour Master, Holmenvn. 3, 99
Batsfjord.
Tel: 085-83553.

BERGEN: 60.24 N. 05.19 E. (See Plan Boo

DOCUMENTS:

1 Provisions List.	2 Crew Lists.
1 List of Bonded Stores.	2 Passenger Lists.
1 Health Declaration.	Certificate of Tonnage.
2 Manifests.	Dangerous Cargo List.

PILOTAGE: Compulsory. Main entrance to port at Marstein Lighthouse (pilot station) 60° 24′ N., 5° 18′ 50″ E. 24 nautical miles fro town, but vessels from South may enter at Skudesnes (88 nautic miles) and from North at Fedje pilot station (32 nautical miles). VH Channel 16. Practically no tide. Port free of ice throughout whole Wint and well sheltered from all winds. Sound signals for Pilot, 3 long a 1 short. Harbour pilotage not compulsory but advisable.

ANCHORAGE: Puddefiord. Good holding grounds. Depth 10 fathoms 50 fathoms of water.

RESTRICTIONS: Vessels can enter day and night.

MAX. SIZE: Max. draft 35 ft. Vessels up to 50,000 tons have be berthed at Dokkeskyaersquay. Oil installation up to 30,000 d.w.t.

HEALTH: See "Documents". If vessel carries quarantine flag contagious diseases, radio communication should be sent to Agents instructions, otherwise no special regulation.

RADIO: Communication to Agent should be sent through Rogala Radio or Bergen Radio.

VHF: VHF radio for port operations. Call sign "Bergen Port Radio".

TUGS: 2 tugs, each 1,000 h.p. available. Ship's lines to be use contractors Bergen Steamship Co. Tugs normally join vessel Puddefiord or subject to requirements.

BERTHING: Berthing instructions from Harbour authorities throu Agent's office.

CONTAINER FACILITIES: Container terminal at Dokkeskjaerskai are The quay is 130 m. long with a depth of 9 m. at MW. One 50 container crane. It is intended for bow/stern loaders and is equipped w a Ro/Ro bridge with an axle load of 60 tons and 15,000 sq.m. area storage and container handling.

BRIDGES: A bridge between Knarrevik and Drotningvik is complete Height of bridge from the water will be 50 m. at mean water level. Brid position will be 5 miles from harbour in the entrance to port from Sou

STEVEDORES: Stevedoring arranged by Agents subject requirements. 24 hours notice, important obtain in good time accur ETA. Ordinary working hours at port 0730 hrs. – 1530 hrs. Saturd until 1300 hrs.

CRANES: 15 shore cranes, lifting capacity 6 tons. One heavy lift cra 50 tonnes capacity.

MEDICAL: Masters to advise by radio prior arrival if medical attendan required on board. Hospital facilities available.

TANKERS: Discharge lines usually 6 in. and 8 in. No slop (residue discharge facilities. Number of tanker berths 5: Shell, Esso, Fi Mobil Oil, and BP. Max. drafts 30 ft.

DENSITY: Salt water.

FRESH WATER: From all quays and wharves with exception of so oil berths where water barge necessary.

FUEL: All grades of diesel, fuel and gas oil including lubricating available at all wharves in main entrance. Supplies also from bar subject reasonable notice.

FIRE PRECAUTIONS: No special precautions. Special harbour fi fighting boat. As usual no smoking permitted during discha operation.

GANGWAY/DECK WATCHMEN: Obtainable on request for 12 hou watch from 1900 hrs. to 0700 hrs.

OPENING/CLOSING HATCHES: Crew allowed to open and cl hatches.

SHIP'S CERTIFICATES: All certificates to be on board. Ship's tonna certificate to be produced to Custom authorities upon arrival.

CUSTOMS ALLOWANCES: Tobacco, 20 cigarettes per day 20 grams tobacco per crew member. Wine and/or Spirit, 1 bottle spirit wine for consumption on board allowed per crew member.

IDENTIFICATION CARDS: Not required.

CONSULS:

Austrian	210 173	Italian	218 135
Belgian	233 873	Netherlands	256 000
British	210 990	Panama	200 011
Danish	215 000	Peruvian	218 028
Finnish	230 700	Portuguese	218 140
French	230 050	Spanish	214 192
German	219 984	Swedish	219 760
Greek	215 090	Swiss	215 115
Guatemala	214 493	Turkey	210 105
Icelandic	219 680	Uruguay	213 307

REPAIRS: All repairs possible.
DRY DOCKS: Major: Bergens Mekaniske Verksteder. Minor: Mjellem & Karlsen Verksted A/S, Bergen. 6 patent slips and 1 dry dock, 365 ft. long. Floating dock for vessels up to 20,000 tons d.w.
REPATRIATION: All facilities available.
AIRPORT: Flesland Airport, 12 miles outside Bergen. Bus service from town, daily connections with Europe and U.S.A.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: General holidays: New Year's Day (January 1st); Maundy Thursday; Good Friday; Easter Monday; Labour Day (May 1st); Ascension Day; National Holiday (Sunday in May); Christmas Eve (December 24th); Christmas Day (December 25th); Boxing Day (December 26th); New Year's Eve (December 31st).
POLICE/AMBULANCE/FIRE: Police 002; Ambulance 003 or 210 185; Fire 001.
TELEPHONES: Telephones may be installed on board during ship's stay at Dokkeskjaesquay or Skoltegrunnsquay if required.
SERVICES: Compass adjusting, laundry, ship chandlers for delivery of provisions and bonded stores. Radar servicing for following types: Decca, Nera, RCA, AEI, Raytheon, Kelvin Hughes, Therma Sperry. Service arranged through port agent.
SHORE LEAVE: No restrictions.
DELAYS: Under normal conditions, no special delay should be expected.
AUTHORITY: Bergen Havnevesen, Slottsgt. 1., 5000 Bergen, Norway. *Tel:* 05.31.64.00. *Contact:* Nils Standal, Port Director.

BODO: 67.17 N. 14.24 E.

DOCUMENTS:
2 Store Lists.
2 Crew Lists.
2 Lists Crew's Personal Effects.
PILOTAGE: Sea Pilot North of Fleinvaer Island position Lat. 67° 12′ N., Long. 13° 48′ E. White Pilot boat with VHF Channel 16. Harbour Pilot outside breakwater head – 24 hours' notice.
ANCHORAGE: Outside breakwater. According instructions from Sea or Harbour Pilot. No draft limitation.
RESTRICTIONS: None – weather permitting.
MAX. SIZE: Max. gross tonnage for oil carriers 18,000 tons with max. draft 32 ft. Otherwise max. draft 22 ft. along quays for coal, salt and warehouse goods.
RADIO: Bodo Radio/LGP. VHF Harbour Office and Bodo Radio.
TUGS: Rescue Vessel/Tug available on 24 hours notice.
BERTHING: Usually on arrival – otherwise Harbour Pilot will bring instructions from Agent or Port Authorities.

A new harbour with quay of 250 m. and 9 m. depth, together with a new terminal for warehouse goods.
STEVEDORES: Ordered by Agents – working day and night.
MEDICAL: 24 hours' notice of medical attention required. Hospital facilities available.
TANKERS: Shore lines, 6 in., 8 in. and 12 in., 2 berths, slop facilities not available, max. draft 32 ft. Fresh water available.
DENSITY: 1025.
FRESH WATER: Available all quays.
FUEL: All kinds of bunkers and oil without notice from 2 installations.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Normally by crew.
CERTIFICATES: Ship's Certificates.
CUSTOMS ALLOWANCES: 200 cigarettes or 150 gm. tobacco and half bottle of spirit.
CARGO GEAR: No additional requirements. Ship's gear to be used except for discharging coal, coke and salt where special cranes used.
IDENTIFICATION CARDS: Not required.
CONSULS:

Denmark	21070	France	21000	Sweden	20115
Finland	20010	Germany	20089		

REPAIRS: Minor deck and engine repairs possible.
DRY DOCKS: None.
REPATRIATION: Good facilities.
AIRPORT: 2 km. distant. Regular airlines.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: 1st May and 17th May (national holiday) Cargo work may be arranged.
POLICE/AMBULANCE/FIRE: Police 20020; Ambulance 22360; Fire 22622.
TELEPHONES: No arrangements for placing telephones on board.
GENERAL: Imports oil, coal, coke and salt. Exports fish, herring meal, herring oil.
SERVICES: Compass adjusting, all kinds of nautical instruments. Ships' chandler.
SHORE LEAVE: No restrictions.
AUTHORITY: Bodo Havnevesen.

BREVIK: 59.03 N. 09.43 E. (See Plan Book)

PORT LIMITS: Port limits begin in Langesundfjorden, 2 nautical miles S.E. of Brevik.
DOCUMENTS:
Crew List.
Tobacco and Spirit List.
Cargo and Stores List.
3 copies of Manifest.
Declaration of Health List.
PILOTAGE: Langesund Pilot Station – call sign LHXP. 24 hours prior notice and 2 hours before arrival. VHF Channel 16 – radio telephone 2182. Pilot boat located 1 mile S.E. of Langoytangen Lighthouse (position: Lat. 58° 59′ 30″ N., Long. 9° 45′ 30″ E.). One hour before arrival at pilot station vessels are to contact "Brevik Traffic Centre" for instructions (Channel 11). Also see "Regulations".
ANCHORAGE: At Helgerofjorden, 2 miles East of Langoytangen Lighthouse. Depths 15 fathoms – 25 fathoms.
RESTRICTIONS: No entry restrictions, except in bad visibility.
MAX. SIZE: Tankers: LOA 600 ft. Beam 85 ft. Max. Draft 34 ft.

New Bulk Terminal (Coal): LOA 900 ft. Beam 150 ft. Max. draft 46 ft. Others: LOA 600 ft. Beam 85 ft. Max. draft 34 ft.
HEALTH: Pratique obtained when alongside wharf; arranged by Customs.
RADIO: Rogaland Radio, call sign LGQ.
TUGS: Tugs not normally used in Brevik. 1 tug, 1,200 h.p. and 1 tug 3,000 h.p. used for tankers.
STEVEDORES: 24 hours prior notice required for ordering gangs.
BULK HANDLING: 1 berth handling bulk cargo, situated at Norcem, half a mile North of Brevik. Cargo: Cement and cement-clinker. Length of berth: 200 m. Depth alongside 36 ft.

Coal Terminal: Operated by Norcem A/S. Berth length 200 m. 2 cranes, average discharge rate 11,000 tonnes per day.

Also see "Max. Size".
MEDICAL: No advance notice required for medical attention.
TANKERS: Discharging hoses 8 in. diameter. No slop discharge facilities. 2 tanker berths draft 32 ft.
DENSITY: Brackish water, density from 1012 to 1023.
FRESH WATER: Hoses from shore, capacity 10 t.p.h.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Watchmen available but not compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew members.
CERTIFICATES: Ship's Register and Derat Certificate required.
CUSTOMS ALLOWANCES: 200 cigarettes per man. 1 bottle of spirits per man.
IDENTIFICATION CARDS: Not needed.
REPAIRS: All types of repairs possible (deck and engine).
SURVEYORS: S.G.S. available.
REPATRIATION: Can be arranged.
AIRPORT: Fornebu – Oslo airport – 100 miles, served by regular airlines.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day; Day before Good Friday; Good Friday; Easter Monday; May 1st; Ascension Day; May 17th; 25th and 26th December. No work done on these days.
POLICE/AMBULANCE/FIRE: Police 51040; Ambulance 50170; Fire 51522.
EMERGENCY CO-ORDINATION CENTRE: Brevik Traffic Control, VHF Channel 11 or telephone 71233.
TELEPHONES: Can be placed on board at no extra cost.
BANKS: Telemarksbanken, Brevik – Telex 21154 – Tel. 70777. Sparebanken, Brevik – Tel. 70822.
STORING: See "Prelims" page viii.
1. Yes.
2. No regulations.
3. Yes.
4. Yes.
5. Only bonded stores.
6. Yes.

REGULATIONS: *Regulations requiring the use of Pilot Services in the Grenland Area.*

In pursuance of Section 5 of Act No. 2 of 9th April 1948 relating to the Pilot Service, cf. Royal Decrees of 29th April 1977, the Ministry of Fisheries lays down the following regulations:

Section 1

State Pilots shall be used by vessels of 100 g.r.t. and above navigating the waters North of a line through the North point Molen – North point Sasteinen.

Section 2

The Coast Directorate or anyone it so empowers may grant exemption from the provisions in Section 1 in respect of vessels of under 500 g.r.t. which are not carrying dangerous cargo, provided that the Shipmaster is able to satisfy the authorities that he has obtained, through regular calls at ports in the area, a comprehensive knowledge of these waters and is conversant with the rules and regulations currently applicable with respect to passage and navigation in these waters. Requests for exemption shall be addressed to the Coast Directorate and forwarded via the Pilot Master in Porsgrunn.

Exemption thus granted may be revoked at any time.

Section 3

Anyone wilfully or negligently violating these regulations shall be punished in accordance with Section 418 in the Penal Code, unless stricter penal provisions are applicable.

Section 4

These regulations do not entail any changes to the rules concerning the use of State pilots for foreign non-military vessels of 50 g.r.t. and above laid down by Royal Decree of 9th February 1968 concerning provisions on prohibited zones in Norwegian territorial waters.

Section 5

These regulations shall enter into force on 1st September 1978.

Also see "General" before first port.

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: Porsgrunn Havnevesen, P.O.Box 20, 3951, Brevik, Norway. *Tel:* 035-71080/71088. *Cables:* Porsgrunn Havnevesen. *Contact:* Hans Roe Edvardsen, Harbour Master.

AGENT: Stiansen & Wiborg A/S, P.O.Box 85, 3951 Brevik. Tel. (035) 70040 and 70833. Telex 21338 STIWI N. After hours Tel: (035) 70835 and (035) 70833. Cables: "STIWI".

BRONNOYSUND: 65.30 N. 12.13 E.

DOCUMENTS: See "Bergen".

PILOTAGE: Pilot ordered through Harbour Office tel. 20 078. Cable address "Losforman".

ANCHORAGE: Prestoytaren. Lat. 65° 29.0′ N., Long. 12° 11.5′ E. Depth 28 ft. to 180 ft.

MAX. SIZE: Inner Harbour: Depth 18 ft. – 24 ft. Outer Harbour: Quay length 100 m., depth 60 ft.

RADIO: Rorvik Radio or Bodo Radio

TUGS: None.

BRIDGES: Bronnoysund Bridge, max. clearance – 33 m.

VHF: Bronnoysund Port Radio. Channel 16 – 156.800 MHz; Channel 12 – 156.600 MHz primary work; Channel 14 – 156.700 MHz secondary work; Channel 13 – 156.650 MHz pilotage work.

STEVEDORES: Bronnoysund Discharge and Loading Society. Tel. 20 326.

MEDICAL: Medical service ordered through Harbour Office. Small Hospital. Air Ambulance.

FRESH WATER: Delivered by hose to all Port Authority Berths.

FUEL: Delivered to all berths, 24 hour service.

GANGWAY/DECK WATCHMEN: Watchmen at gangways and pilot ladders optional. Can be ordered through Bronnoysund Discharge and Loading Society.

OPENING/CLOSING HATCHES: Usually by port workers.

CUSTOMS ALLOWANCES: Master 400 cigarettes or 40 grams tobacco; all other crew 200 cigarettes or 20 grams tobacco. Wine/spirits; Master 2 litres; all other crew 0.75 litre.

IDENTIFICATION CARDS: Crew to possess identification card with passport photo.

CONSULS: None.

REPAIRS: Limited deck and engine repairs. Turner's shop and welder's shop available.

AIRPORT: 2 km. from port. Regular airlines. Helicopter base.

TIME: GMT plus 1 hour, GMT plus 2 hours in Summer.

HOLIDAYS: During Sunday and holidays not permitted discharge/load between 1000 to 1300 hrs., but dispensation can be obtained.

POLICE/AMBULANCE/FIRE: Police 20 400; Ambulance 20 800; Fire 20 000.

AUTHORITY: Bronnoysund Havnevesen, P.O.Box 65, 8901 Bronnoysund, Norway. *Tel:* (086) 20078. *Contact:* R. M. Jorgensen, Harbour Master.

DRAMMEN: 59.45 N. 10.13 E. (See Plan Book)

DOCUMENTS:

Bill of Health.
2 Crew Lists.
2 Passenger Lists.
2 Customs Lists for crew members and passengers.
Bills of Lading.
3 Manifests for every port of discharge.

PILOTAGE: Give 6 hours notice by R/T 2182 kHz or VHF Channel 16 to "Faerder Pilot". Coast stations "Tjome Radio" LGT or "Farsund Radio" LGZ can also be used. Harbour Pilots ordered through ship's Agents. Harbour pilotage is not compulsory.

ANCHORAGES: Pilot service supplies information regarding anchorages.

RESTRICTIONS: Svelvikstrommen Channel, depth 10 m. equipped with beacons and radar reflectors for safe navigation.

During ice-breaker season, which may last from end-December, to middle-March, ice breaker is in radio contact with port and with ships needing assistance.

MAX. SIZE: Max. draft for main harbour 30 ft., otherwise no restrictions.

HEALTH: International procedure followed to obtain Pratique. In case of suspected diseases or fever inform. Port Authorities, Tel: 81 88 90. When arriving from a Norwegian port Pratique automatic.

RADIO: Tjome Radio, call sign "LGT" Farsund Radio, call sign "LGZ". Oslo Port Radio or VHF Channel 16.

Port Authority maintains VHF radio-telephone watch: Monday – Friday 0630 hrs. – 2130 hrs. and Saturday 0630 hrs. – 1230 hrs. Call sign "Drammenhavne Radio". Not on holidays.

TUGS: Under normal conditions not necessary except for large vessels, but available on request. Normally ship's hawsers or lines used for towing. Tugs ordered through Agent.

RADAR/VHF: VHF Channel 16 and 12 when communicating with Drammen Port Authorities. No port radar service.

BERTHING: *Main Harbour*

Quays	*Depth Alongside* (m.)	*Length* (m.)	*Use*
Tollbukaia	7	100	Coastal/local traffic.
Krankaia	7	200	General cargo/paper
Myrakaia	7	155	Coal. Pyrites. Gen. Cargo
Langbrygga	8	260	Paper. General Cargo
Tjomekaia	7	165	Paper
Holmen South	9	421	Gen. Cargo. Air conditioned
Roll-on/Roll-off Holmen South	7	*	Cars, Trailers, Containers
Holmen East	7	100	Paper
Roll-on/Roll-off Holmen East	7	60	Cars, Trailers, Containers.
Risgarden	10	151	Cars, Trailers
Roll-on/Roll-off	10	†	Containers
Kattegatkaia	16	260	Tankers
Roll-on/Roll-off Kattegatkaia	10	—	Cars, Trailers, Containers, Tankers

*Special arrangement for stern and bow ramps

†Size of vessels decided by max. draft 30 ft.

Container and Ro-Ro Facilities: Three Ro-Ro quays for containers, vehicles and trailers.

1. Holmen South Ro-Ro:
   Max. Depth 25 ft.
   Length (Approx.) 300 ft.
   Beam 33 ft.
   Height of working ramp 3 ft.
   Mooring boat advisable when berthing.
2. Holmen East Ro-Ro:
   Max. Depth 18 ft.
   Length (Approx.) 350 ft.
   (i) Inside ramp: Beam 30 ft., Height 5 ft.
   (ii) Outside ramp: Beam 30 ft., Height 1 ft. 6 in.
3. Risgarden Ro-Ro:
   Max. Depth 30 ft.
   Beam 105 ft.

Length of vessels berthing is dependable of max. draft.
Height of working ramp 6 ft.

Fruit Storage 21,600 sq. ft. Air conditioned fruit-storage.
Also see "Tankers".

CRANES: 2×50 ton mobile cranes (50 ton at 35 m. – 10 ton at 40 m.) when combined are able to lift 90 tons.

2×23 ton mobile cranes. One each situated at Holmen South Quay and Langbrygga Quay.

STEVEDORES: Labour must be ordered latest 1530 hrs. day before arrival. Saturdays before 1230 hrs. Working hours: Monday to Friday from 0700 to 1600 hrs. with breaks from 0900 to 0930 hrs. and 1300 to 1330 hrs.

Saturday from 0700 to 1230 hrs. with break from 0900 to 0930 hrs.
Overtime can be arranged through Agent.

MEDICAL: In case of emergency, notice regarding required medical treatment must be given as soon as possible. First class hospital facilities available. No special inoculation or fever certificates necessary, except those according to international health regulations.

TANKERS:

Kattegatkaia: See "Berthing". Fresh water available.

Pipe-line connections: Gas oil 8 in.; light fuel oils 9 in.; asphalt 8 in.

Holmen South Berth

Concrete quay, max. draft 29.53 ft. (9 m.). Fresh water available.

Pipe-line connections: Gas oil 8 in.; light fuel oils 8 in.; paraffin 6 in. heavy fuel oil 4 in.

B.P. Berth, Solumstrand

9 m. wide quay at end of pier, max. draft 16.4 ft. (5 m.).,

Pipe-line connections: Light gas oil 6 in.; petroleum 4 in.; white spirit 3 in.; propane 2 in.

Bakketomta Berth, Lierstranda

Concrete quay, 23 m. long, max. draft 16 ft. (4.88 m.).

Pipe-line connections: Super petroleum 8 in.; petroleum 8 in.; light fuel oil 8 in.; gas oil-paraffin 6 in.; white spirit 4 in.

Esso Berth, Solumstrand

Concrete quay, 23 m. long, max. draft 16 ft. (4.88 m.).

Pipeline connections: Light fuel oil 6 in. and 4 in.; gas oil 6 in.; petroleum 6 in. and 4 in.

Folakroken Quay: New Berth: Gullaug explosives factory. Situated 6 nautical miles North of Svelvik Narrows on East side of Dramsfjorden

Length	114 ft. (35 m.)
Depth alongside	19 ft. (6 m.)

DEPTHS: Chart depths vary only slightly owing tidal fluctuations. Exceptional conditions, such as snow melting in Spring, heavy rainfall and prevailing strong Southerly or Northerly winds will cause stronger currents and a variation in water levels.

FRESH WATER: Delivery by hose, available anywhere.

FUEL: Tronstad berth: gas oil 200 sec. Holmen S.: fuel 2000 sec., marine diesel 200 sec. Bakketomta Lierstrand: Bunkering by tanklorry possible if necessary. Esso Solumstrand: gas oil visc. 1,2 at 20 degrees cel.; diesel visc. 1,7 at 20 degrees cel. Lubricating greases and oils available.

FIRE PRECAUTIONS: International danger signals and precautions practised. Wires for towing must be ready for immediate use. In case of fire on board or in vicinity, vessel must leave quay and harbour as soon as possible.

GANGWAY/DECK WATCHMEN: Watchmen recommended, through Agent.

OPENING/CLOSING HATCHES: If necessary hatches can be opened or closed by stevedores, but usually by crew.

CERTIFICATES: Usual ship's certificates according to international regulations.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes/100 grams of tobacco allowed weekly. Wine or Spirits, 1 bottle wine or spirits usual weekly allowance.

CARGO GEAR: International Safety Regulations followed.

CRANES: 11 electric cranes 3-10 tons, 2 mobile cranes 10-50 tons, 2 electric cranes for discharging of coal, capacity 500 t.p.d. each.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	Tel. 831485	Germany	Tel. 819780
Denmark	„ 833650	Sweden	„ 838670
Finland	„ 832985		

All other consulates situated in Oslo.

REPAIRS: Shipyard facilities for all kinds of deck and engine repairs available.

DRY DOCKS: 2 floating docks, 20,000 tons and 3,000 tons capacity. Nearest dry docks in Horten and Oslo. Distance by sea respectively 24 miles and 46 miles.

REPATRIATION: All facilities available.

AIRPORT: Nearest airport Oslo Airport, Fornebu, situated 16 miles by road from Drammen. Regular services to all parts of the world.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: On Saturdays work stops at 1230 hrs., but if ships can be finished, loading and discharging is continued to 1900 hrs.

All Sundays; 1st January; Maundy Thursday; Good Friday; Easter Monday; 1st May; Ascension Day (17th May); Whit Monday; Christmas Day; 26th December.

On Easter, Whit, Christmas, and New Year's Eve work stops at 1400 hrs.

POLICE/AMBULANCE/FIRE: Fire-alarm accidents 832020; First-aid station 831585; Hospital 834585; Police 838170; Taxi 835060.

TELEPHONES: Telephones can be connected if ordered through Televerket. Tel: 832380.

SERVICES: Ice-breaker assistance available during Winter months.

SHORE LEAVE: No restrictions on shore leave when all formalities in order.

DELAYS: Delays may occur, when very heavy traffic cause shortage of labour.

GENERAL: Notice will be given to local Agents regarding changes or new developments which can affect usual procedure in port.

AUTHORITY: Drammen Havnevesen, Hans Kiaersgaten 1A, N-3000 Drammen, Norway. *Tel:* (03) 818890-94. *Contact*: H. E. Hansen, General Manager.

EGERSUND: 58.27 N. 06.00 E.

DOCUMENTS: Health Certificate (forms obtainable from Customs when entering harbour). Crew List, Dangerous Cargo List, Ship's Register. Vessels bound for Egersund must be provided with document signed by Master, setting out specification of cargo to be discharged Egersund, also quantities all provisions and stores on board. Document must include name, tonnage, port of registration, last port, next port, and number of crew and passengers on board.

PILOTAGE: Pilot – if necessary – to be ordered latest 3 hours prior arrival pilot station. Order to be given to Pilot Office – telephone 49.13.28 (day) 49.17.45 (night) or to ship's Agent, giving ETA, name of vessel, gross tons, where Pilot required, draft in feet, and discharging/loading place. Vessels entering Egersund liable to inward and outward pilotage dues, mileage money according distance piloted; and pilot dues, whether services of Pilot used or not. Pilot station lying on Eigeroy – and Pilot available for Southern and Northern entrance, from pilot boat. Southern entrance mostly used, max. draft 37 ft. In case of using Northern entrance, ship has to pass bridge between Eigeroy and the continent. Max. height 23.5 m. Max. draft 16 ft.

ANCHORAGE: Any place in harbour available for anchorage. Especially used is Hovlandsviken – 36 ft. draft.

MAX. SIZE: Largest vessel which has entered Egersund – 45,000 d.w.t. Max. draft 31 ft. In harbour there are 2,000 ft. of quayage with 18 ft. – 27 ft. alongside.

RADIO: Rogaland Radio and Farsund Radio.

TUGS: Not available in Egersund.

BERTHING: 3,000 m. of quay frontage. Facilities for container and Ro-Ro vessels. 30 tonne fork lift.

STEVEDORES: Ordered by Agent – no ETA to stevedores necessary. Time for ordering gangs for next morning must be given by 1300 hrs. day before.

FRESH WATER: Can be delivered at most discharging/loading places.

FUEL: Gas oil and Light Marine Diesel oil available.

GANGWAY/DECK WATCHMEN: Available – but not compulsory.

OPENING/CLOSING HATCHES: Crew allowed to open and close.

CERTIFICATES: On first call Registered Tonnage Certificate necessary – thereafter not required unless gross/net tonnage changed.

CUSTOMS ALLOWANCES: (Dependent size – destination, etc.) each crew member is allowed 100 cigarettes, 20 cigars or 100 grams tobacco and one bottle spirits.

CARGO GEAR: No additional requirements. One 150 ton crane, one 30 ton crane and some mobile cranes 5 tons – 15 tons available.

IDENTIFICATION CARDS: Not required.

CONSULS: Denmark and Sweden.

REPAIRS: All minor repairs possible. Service station for electronic aids.

HOLIDAYS: Work can usually be arranged on all holidays.

POLICE/AMBULANCE/FIRE: Police 49.16.00; Fire 49.15.00; Hospital/Ambulance Tel: 49.00.22.

AUTHORITY: Egersund Havnevesen, Havnebygget, Strangt. 2, P.O. Box 117, 4370 Egersund, Norway. *Tel:* (04) 49.13.28. *Contact:* Mikal Hovland, Port Captain.

FIBORGTANGEN (Skogn): 63.43 N. 11.10 E.

PORT LIMITS: Holsandbukta.

DOCUMENTS:

1 Crew List
1 Passenger List
1 Crew Personal Effects List.
1 Stores List
1 List of Animals
Last Port Clearance
Safety Certificates:
Safety Equipment, Load Line, Radio, Construction.

PILOTAGE: Pilotage is compulsory for all foreign vessels.

Notice of ETA and request for Pilot can be made to the local Agents, not less than 24 hours before ETA at Grip Lighthouse.

Confirmation of ETA is required 2 hours before arrival at Grip Lighthouse.

Channel 16 VHF is continuously watched by Kristiansund Radio and Pilot boat.

The usual pilot boarding point is inside Grip Lighthouse Lat. 63° 16′ N., Long. 07° 36′ E.

Pilot boat has orange upper works, white hull with the word "LOS" on each side.

The usual international signals may be employed by vessel requiring a Pilot.

In case of bad weather the pilot boat will lead ahead to sheltered waters. There is no anchorage for vessel awaiting a Pilot.

ANCHORAGES: At the bay North and N.E. of the wharf in about 20 m. of water, bottom sand, good holding ground.

Electric power cables cross from Valoya – Hestoya, anchorage in this area is prohibited.

MAX. SIZE: Vessels up to 160 m. LOA (vessels with LOA 214 m. have berthed) and 11.50 m. draft can be accepted at the North side of the wharf. On the East side 150 m. LOA, 8 m. draft.

HEALTH: Vessels will be cleared alongside.

RADIO: Kristiansund Radio is the long range area station.

VHF: Kristiansund Radio and Orland Radio. Continuous watch. All calling should be on Channel 16. Pilot boat also monitors Channel 16.

TUGS: Can be ordered by the local Agents.

BERTHING: The wharf is made of concrete. The North berth is 141 m. long, depth 12 m. The East berth is 141 m. long, depth 8 m. Permissible wheel loading for standard type vehicles is 12 tonnes.

STEVEDORES: *Working hours:*

Monday – Tuesday	0700 – 2400
Wednesday	0700 – 1930
Thursday	0700 – 2400
Friday	0700 – 2030

MEDICAL: Full hospital facilities available without prior notice.

FRESH WATER: Good quality water is available in unlimited quantities at about 20 tonnes per hour per connection.

FUEL: Not available, but can be ordered from Trondheim.

GANGWAY/DECK WATCHMEN: Can be ordered by the local Agents.

OPENING/CLOSING HATCHES: Normally handled by ship's crew.

CARGO GEAR: Discharging and loading is by ship's gear, however, some mobile cranes up to 30 tonnes capacity are available for extended hire at short notice.

REPATRIATION: Scheduled aircraft connected with direct overseas flights leaves from Trondheim Airport several times a day.

TIME: Local time is GMT plus 1 hour. Summertime is used.

POLICE/AMBULANCE/FIRE: All emergency services are available through the gate watchman.

Automatic fire alarms are installed at the wharf.

SHORE LEAVE: When Immigration and Customs have been satisfied, there is no restriction on crew's shore leave as long as they rejoin the vessel before departure.

BANKS: Bondernes Bank. Tel: 076-85163. Telex: 55219. Levanger Sparebank. Tel: 076-85137.

STORING: Vessel can be stored by truck during loading or discharging. Fork lift trucks can be used on the jetty to handle stores. Local Riggers cannot be employed to assist with storing.

SURVEYORS: Cargo Inspectors: Can be ordered by local Agents.

Bureau Veritas	Tel: 07-525030
Norsk Veritas	Tel: 07-917500
Lloyd's Register	Tel: 07-520124

EMERGENCY CO-ORDINATION CENTRE: Call nearest radio station.

AUTHORITY: Norske Skogindustrier A.S., 7620 Skogn. *Tel:* 076-85406. *Telex:* 55216 Skogn N. *Contact:* Charles Lillevik, Transport Engineer.

FLORO: 61.31 N. 05.02 E. (See Plan Book)

DOCUMENTS:

2 Manifests.
Crew List.
Provisions List.
Health Document.
Passenger List.

PILOTAGE: Nearest station Fedje (Lat. 60° 51′ N., Long. 04° 37′ E.). Distance to Floro harbour about 52 nautical miles. Pilot boat a white-painted cruiser-type marked "OS" on both sides of bow.

Fixed watch on Fedje island covers both Holmengra and Hellesoy. VHF Channels 8, 12 and 16. Listening first 10 minutes of every hour. ETA 24 hours before arrival. Telegram "Feielos". If bad weather, Pilot to be picked up on Eastern side of Fedje Island.

ANCHORAGE: No anchorages close to pilot station. Floro harbour: space of about 1 sq. km., depths from 15 fathoms to 30 fathoms.

RESTRICTIONS: Tide difference about 1.5 m. Max. draft entering Floro harbour 40 ft.

MAX. SIZE: Entering Floro harbour: No restrictions in main harbour concerning length and breadth. Max. draft berthing: "Gunhildvagen" (Bunkering – Offshore industry) 25 ft. and length of 120 m.

NB. – "Gunhildvagen" lies outside main harbour, and has narrow entrance. Weather permitting, ships of 100 m. length and breadth 20 m. can pass.

BERTHING: *Vestlandske Kjopelag:* A bulk grain/molasses terminal for vessels up to 6,000 d.w.t. Berth length, 100 m. Depth alongside 7.0 m. Storage capacity 20,000 tons of Grain/Molasses.

Fugleskjaerskaia: The deep-sea pier to the West of Fugleskjaerskaia is in operation. Fugleskjaerskaia now offers 500 m. of pier frontage, depth from 16 ft. to 43 ft. New section: 36 m., 18 ft. depth; 140 m., 33 ft. depth; and 1 berth 43 ft. depth.

The extension of Fugleskjaerskaia provided 21,000 sq.m. new cargo handling space. A Ro-Ro facility is also provided, max. axle load 60 tons.

STEVEDORES: ETA before 1600 hrs. for gangs required next morning.

MEDICAL: Hospital close to harbour, and available any time.

TANKERS: Harbour is only used by small tankers, about 500 to 1,000 reg. tons.

FRESH WATER: Only available alongside berth. Delivery about 30 t.p.h., possibility of 60 t.p.h. At Fugleskjaerskaia fresh water available at a rate of 200 t.p.h.

FUEL: Ordinary fuel. Diesel and gas oil delivered by truck. Ships up to about 1,000 g.r.t. receive oil bunkers directly by berthing bunker station.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Mostly done by crew.

CREW IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: Most repairs possible.

DRY DOCKS: None. There is a new berth at Ankerlokken Shipyard. Length 100 m. Depth alongside 9 m. – 10 m.

AIRPORT: Regular service with DeHaviland Twin Otters, 5 flights to Bergen and 2 to Aalesund each day. (Runway 860 m.).

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: Cargo work can be arranged any time, holidays included.

POLICE/AMBULANCE/FIRE: Police 42101; Ambulance 41011; Fire 41000.

TELEPHONES: Can be arranged on board alongside wharf.

SHORE LEAVE: Permitted.

SERVICES: Servicing for all kinds of ships navigation instruments can be arranged, except adjusting radio bearings.

SHIP SUPPLY SERVICE: The port has 6 small passenger vessels (50 ft. – 60 ft.), all capable of 20-27 kts., one or more are vacant at any time, and willing to take on assignments.

Services can be ordered through K. Jansen, 6900 FLORØ. Tel. (057) 41010.

Helicopters can obtained from Helicopterservice, Bergen.

GENERAL: The nature of the traffic in the harbour has changed, currently 3 offshore drill rigs are supplied from Fugleskjaerskaia. Bulk tanks for cement and baryte have been erected on the quay.

DEVELOPMENTS: A new mole has been constructed on the S.W. side of entrance to Floro harbour.

North berth at Ankerlokken now blasted down to 14 m.

Botnaneset: The new offshore base is coming into operation. One quay, 80 m. long, 10 m. depth, completed. Also a deepwater quay, 50 m. long, 19 m. depth alongside. Construction started on quay for STATOIL, 60 m. depth of water. Construction of tank farm for bunker oil in progress.

Offshore supply trade will gradually transfer from Fugleskjaerskaia to Botnaneset. (Fjord Base)

AUTHORITY: Floro Havnevesen, P.O.Box 17, 6901 Floro, Norway. *Tel:* 41428. *Contact:* N. A. Hovland, Assistant Harbour Master.

AGENT: K. Jansen, Shipping Agent, Stevedore, Shipbroker. P.O.Box 15, N–6901 Floro. Tel: 057–41010, 057–42303. After office hours: 057–42277 or 057–41131. Telex: 40214 jans.

FRAFJORD: 58.51 N. 06.17 E. (See Plan Book)

SHIPMASTER'S REPORT: May 1979. Also see "Agents Report" below.

Vessel loading stones.

The berth at Frafjord is situated at the Eastern end of the Fjord leading to Frafjordsoyr (Lat. 58° 50′ 40″ N., Long. 06° 17′ E.) and consists of an angled quay 15 m. in length.

The Pilot is embarked at Kvitsoy pilot station and vessel then proceeds to Stavanger for customs clearance and agency work due to the remoteness of the loading berth. Pilots are changed at Stavanger and this Pilot remains on board until Kvitsoy outwards.

Approach to the berth is made at right angles with three shackles out on the starboard anchor until the headline and forward spring can be passed to the quay, the vessel is then turned on the anchor.

The quay is made of wood and is in poor condition with one end and bollard damaged. On the quay a single fixed conveyor is situated with a mobile extending arm and this is fed from a bin filled by tip-up lorries. The approximate lorry load is 13 tonnes. The extending arm can be remotely controlled in and out but is not quite long enough to adequately fill the outboard side. If loading mixed stones the lighter stones can be projected outboard. The loading foreman tended to be inexperienced and care has to be taken not to let the height of the stow build up too much and also along the inboard side as a slight starboard list is preferable due to the shallow areas of water on the inboard side and slack ropes aft will facilitate a general movement to the deeper water, (by sliding off the bottom).

No. 2 hold is loaded completely and then the stern is canted deeper water in order to load in No. 1. The sequence that was ado by this vessel was to load 750 tonnes in the after end of No. 1 follo by 750 tonnes in the forward end of No. 2 and then 700 tonnes in after end of No. 2. This increased the after draft to approximately 6. The stern was then canted out into deep water and the final 800 to was loaded forward. The vessel has to be constantly moved along quay in order to get an even stow height approximately one-third way up the hatch coaming.

The bollards on the beach are very badly positioned and the one the quay which were used for the springs were on the verge of b ripped out, one already having done so on the damaged end of the q

Loading commenced at 1600 hrs. on 11th May and cease 2215 hrs. that day, resumed at 0720 hrs. on 12th May and complete 1000 hrs. on 12th May. 3010 tonnes of stone chippings were loa final draft being, forward 5.32 m., aft 5.66 m. No gangway can be u only pilot ladder.

Little wind was experienced during our stay but I would consider any adverse weather conditions during berthing, loading or unbert must make this a dangerous operation.

AGENT'S REPORT: August 1984.

The Pilot can be embarked at Kvitsoy, Tananger or Skudesnes station.

Vessel proceeds direct from pilot station to loading berth (Pilot s on board during loading), which normally takes 6 hours for a vess 3,000 tons. Agency/Customs clearance is now performed at Frafjo

The loading berth is now of concrete and extended – mooring p are new, and there is no need to use anchor when approaching berth. Official draft limitation is 18 ft.

The max. length allowed at the berth is 95 m.

The loading foreman is now well experienced and is conducting loading/shifting with professional skill.

AGENT: Odd H. Torjusen A.S., P.O.Box 336, N-4371 Egers Norway. Tel: (04) 491322. Telex: 33357. Cables: Torjusen.

FREDRIKSTAD: 59.12 N. 10.57 E. (See Plan Bo

DOCUMENTS:

Bill of Health.
2 Crew Lists.
2 Passenger Lists.
2 Custom List for Crew Members and Passengers.
Bill of Lading.
3 Manifests for each port of discharge.

PILOTAGE: Compulsory. Pilot boarding at Faerder Lighthouse, 59. 10.32 E. Agents report vessel's ETA to pilot station and vessel to 2 hours' notice by R/T 2182 kHz or VHF Channel 16 to Faerder Coast station Tjome Radio LGT or Farsund Radio LGZ can als used. Harbour Pilot and tugs, when necessary, will be arrange Agents to meet at Belgen.

ANCHORAGES: Safe anchorage for larger vessels Belgen, entrance. For smaller vessels anchorage to be pointed out by Pil Harbour Master.

RESTRICTIONS: Max. draft, East entrance 36 ft.; West entrance, 1 Otherwise no restrictions.

HEALTH: See "Documents".

If vessel carries Quarantine Flag for contagious diseases, communication should be sent to Agent for instructions, otherwis special regulations.

RADIO: Communication to Agent through Tjome Radio or Roga Radio.

TUGS: Three tugs, 750 h.p., 1,200 h.p. and 2,700 h.p. Stronger tugs be ordered from Oslo if necessary.

BERTHING: As instructed by Harbour Master through Agent, depen on vessel's draft and size.

East River Berths:

Oera Quay:

Southern part, max. draft 34 ft.
Northern part, max. draft 28 ft. – 33 ft.

Denofa Lilleborg Quay:

Max. draft 33 ft. (5 m. off the quay).

Additional Facilities:

4 warehouses, each at 2,000 sq.m. with 300 sq.m. of cool stora
4 ordinary cranes up to 3 – 6 tons (radius 8 m. – 26 m.).
1 mobile harbour crane up to 36 tons at 18 m. radius.
2 × 30 ton fork lifts.
30 × 2 ton – 12 ton fork lifts, 6 equipped to handle bales and re
5 Tugmasters, capacity 120 tons.
2 Ro-Ro terminals with an open area of about 40,000 sq.m.

STEVEDORES: To be arranged by Agent subject to requireme 24 hours notice important to obtain in good time accurate ETA.

Ordinary working hours 0700 to 1500 hrs.; Saturday until 1230 Bulk cargoes are usually discharged in shifts until Saturday 2200 h

MEDICAL: Master to advise by radio prior arrival if medical attenda required on board. Hospital facilities available.

TANKERS: Discharge pipe-lines usually 6 in. and 8 in. No (residues) discharge facilities. Tanker berths are at BP Denofa/Lilleborg.

Sulphuric Acid is loaded at Oera Quay.

DENSITY: Brackish water, 2.7% salt water.

FRESH WATER: From shore or by barge.

FUEL: All grades available. For larger quantities, delivery arrange barge.

GANGWAY/DECK WATCHMEN: Obtainable.

OPENING/CLOSING HATCHES: Crew members allowed to open and close hatches.
SHIP'S CERTIFICATES: To be produced to Customs Authorities on arrival.
CUSTOMS ALLOWANCES: *Tobacco:* 20 cigarettes or 20 gms. tobacco per man, per day. *Wines/Spirits:* 1 bottle of spirits or wine for consumption on board per crew member.
IDENTIFICATION CARDS: Not required, except at the quay of Defona/Leborg, when Master, upon arrival, will receive a sufficient number of cards for filling-in for each crew member, to be shown when passing the gate.
CONSULS: Danish, French, Finnish, Netherlands, Swedish.
REPAIRS: All repairs possible.
DRY/FLOATING DOCKS:
A/s Fredrikstad mek Verksted: Dry dock 945 ft. length, 126 ft. breadth, 25 ft. draft when docking. Floating dock, 900 tons, 181.6 ft. length, 52.6 ft. breadth, 14 ft. draft when docking.
Sarpsborg mek Verksted: Floating dock, 3,000 tons, 380 ft. length, 55 ft. breadth, 18 ft. draft when docking.
REPATRIATION: All facilities available.
AIRPORT: Fornebo, Oslo, 110 km. from Fredrikstad. Frequent connection by train.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day (1st January); Maundy Thursday; Good Friday; Easter Monday; Labour Day (1st May); Ascension Day (11th May); Constitution Day (17th May); Christmas Eve; Christmas Day; New Year's Eve.
POLICE/AMBULANCE/FIRE: Police, Tel: 17700; Doctor, Tel: 13333; Hospital, Tel: 11080; Ambulance, Tel: 13000; Fire, Tel: 12345.
TELEPHONES: May be installed on board at the quay of Oera.
SERVICES: Compass adjusting, laundry, ship chandler for delivery of provisions and bond stores.
SHORE LEAVE: No restrictions.
AUTHORITY: Fredrikstad Havnevesen, Ferjestedsveien 2, 1600 Fredrikstad, *Tel:* (032) 12319, 16422. *Contact:* Port Manager.

GLOMFJORD: 66.50 N. 13.57 E.

DOCUMENTS:
3 Crew Lists.
Customs List.
Shipping Manifest.
Health Statement.
Bill of Lading.
Ship's Certificate of tonnage.
PILOTAGE: Pilot station, approach from South, is Aasvaer, 66° 17′ N., 12° 18′ E., VHF/radio telephone, frequency 2182.
Pilot station, approach from North, is Fleinvaer, 67° 13′ N., 13° 42′ E. Order Pilot over Bodo Radio, Tel: Bodo 22115.
ANCHORAGE: No berth for anchoring in Glomfjord but possible anchor at Sandaabukten close to Glomfjord.
HEALTH: Health certificate – only for first port in Norway.
RADIO: Sandnessjoen or Bodo Radio station.
VHF: On quay. Call: Hydro Glomfjord Port station on Channel 16.
TUGS: None.
BERTHING: No specific requirements relating to berthing. Quay length 317 m. and depth 8 m.
STEVEDORES: In accordance with Charter Party.
MEDICAL: Medical aid in Glomfjord, and hospital in Bodo.
TIDE: Difference between high and low water about 3 m.
FRESH WATER: Alongside quay.
FUEL: None.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CERTIFICATES: Usual certificates.
CUSTOMS ALLOWANCES: 200 gm. tobacco or 200 cigarettes per man. 0.75 litre spirits or 0.75 litre wine per man.
CARGO GEAR: Discharging by cranes on quay. Loading by conveyor.
IDENTIFICATION CARDS: Usual passport necessary.
CONSULS/REPAIRS/REPATRIATION: None.
AIRPORT: Airport in Bodo.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: See "Drammen".
POLICE/AMBULANCE/FIRE: Police station 52100 Meloy.
TELEPHONES: On quay.
REGULATIONS: No particular or unusual regulations. Control by passing gate between dock area and surrounding fifield.

SHIPMASTER'S REPORT: 1976
Anchorage: The nearest anchorage to the berth, which is part of Norsk Hydro's chemical plant is Sandabukta, about 6 miles away. It is safe and sheltered and the Agent will board there. Communication with Glomfjord is by VHF Channel 16 or via the local boatman with whom private arrangements for shore leave are possible.
Clearance: Ship is boarded on arrival at the anchorage by the Glomfjord Customs officer who also acts as Immigration and Port Health.
Weather: This vessel called at Glomfjord in April but weather conditions were not attractive. Frequent snow squalls reduced visibility to zero but were usually short-lived.
Pilotage: There are no harbour Pilots at Glomfjord. If proceeding direct to berth, Sea Pilot will put ship alongside. If awaiting berth at Sandabukta anchorage, Pilot leaves there and it is normal for ships to complete the passage unaided. A Pilot can be obtained from Bodo but is not always available. If another ship is arriving at the anchorage, Pilot will transfer.

AUTHORITY: Norsk Hydro a.s. Glomfjord Fabrikker, 8160 Glomfjord, Norway. *Tel:* (081) 52 321. *Telex:* 64061 HYDRO N. *Cables:* Norskhydro *Contact:* Finn Nordmo.

HALDEN: 59.08 N. 11.25 E. (See Plan Book)

DOCUMENTS: See "Bergen".
PILOTAGE: Pilot boat at Faerder light station. Pilot boat at Herfol Losstation-Hvaler. Ordering usually over Radio Land Station. Tjome Radio = LGT (also VHF). Signals according to ordinary international requirements. Exact area for Pilot boat: Faerder light station (Store Faerder); Herfol pilot station; Hvasser pilot station.
ANCHORAGE: At Faerder light station in Oslofiord-Singlefiorden West side.
RESTRICTIONS: No special restrictions but larger vessels have to take necessary care with passing Svinesund. The tide current altering according to high and low water time.
MAX. SIZE: For the harbour inside Svinesund (Main Harbour) length 560 ft., beam 70 ft., draft. 25 ft.
HEALTH: Pratique, ordinary.
TUGS: If required tugs join outside Sponviksskansen Light at the entrance to Svinesund. Usually ship's lines.
RADIO: All radio services over Tjome Radio-Land Station (use the ordinary international frequency — (600-705-800 m.).
VHF: Port Authority on Channels 16 and 12.
BERTHING:

Quay	*Depth* (ft.)	(m.)
Ytre Molbrygge	23	7.2
Indre Molbrygge	23	7.2
Jernbanebryggen	22	6.9
Krankaien	27	9.0
Brokaien	23	7.2
Sundsbrygge	16	5.3
Felleskjopet	16	5.0
Corn Silo	12	3.8

TANKERS: Max. 20,000 d.w.t. received.
FRESH WATER: Available; good quality.
FUEL: Available.
FIRE PRECAUTIONS: According to Harbour Regulations.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Carried out by crew.
IDENTIFICATION CARDS: Required.
REPAIRS: Only small repairs carried out.
DRY DOCKS: None.
REPATRIATION: No facilities.
AIRPORT: Nearest Fornebu–Oslo.
POLICE/AMBULANCE/FIRE: Fire 81212; Police 80111.
TELEPHONES: None available for shipboard use.
SHORE LEAVE: Allowed.
AUTHORITY: Halden Havnevesen, Langbrygga 3, 1750 Halden, Norway. *Tel:* 031-81208. *Contact:* Rolf Gravningen, Port Director.

HAMMERFEST: 70.40 N. 23.40 E. (See Plan Book)

DOCUMENTS: See "Bergen".
PILOTAGE: Entering from sea, a state Pilot is compulsory as vessel has to pass through prohibited sea area. Pilot should be ordered 4 hours in advance, and boards ship at Tarhalsen (situated at Eastern-most tip of Soroy island). Harbour Pilot boards outside harbour breakwaters.
ANCHORAGE: Anchoring as appointed by the State Pilot or Harbour Pilot.
MAX. SIZE: Alongside ships up to 30,000 g.r.t., with max. draft 30 ft. For anchorage no limitation.
RADIO: Hammerfest Radio, equipped with VHF.
TUGS: One small tug, bollard pull 6 tons.
BERTHING:

Berth No.	*Length*	*Berth No.*	*Length*
1	138 m.	12	45 m.
2	75 m.	13	85 m.
3	46 m.	14	265 m.
4	50 m.	15 (private)	37 m.
5	150 m.	16 (private)	25 m.
6 (private)	32 m.	17 (private)	170 m.
7	32 m.	18 (private)	30 m.
8	70 m.	19 (private)	60 m.
9	142 m.	20 (private)	30 m.
10	130 m.	21 (private)	60 m.
11	65 m.	22 (private)	18 m.

MEDICAL: Hospital facilities available at Hammerfest.
TANKERS: Discharge line 8 in.
DENSITY: Salt water.
FRESH WATER: Capacity 300 t.p.h. at Harbour Board Quay. No water barge available.
FUEL: All grades except heavy fuel oil available.
CUSTOMS ALLOWANCES: See "Stavanger".
IDENTIFICATION CARDS: Not required.
CONSULS: French, Danish, Finnish, Icelandic, Netherlands and Swedish Vice-Consuls.
REPAIRS: Slipway for smaller ships, up to 200 ft. Only minor repairs and radar repairs available.
DRY DOCKS: None.
REPATRIATION: Daily connection by ship and air.
AIRPORT: Hammerfest Airport. Regular service several times a day.
AUTHORITY: Hammerfest Havnevesen, P.O.Box 123, 9601 Hammerfest, Norway. *Tel:* 084-11201/11202. *Contact:* Arvid J. Solstas, Harbour Master.

HARSTAD: 68.48 N. 16.39 E. (See Plan Book)

PORT LIMITS: Inside a straight line from Trondenes Church to Stangnes Light.
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Derat Certificate.
PILOTAGE: If entering via Andenes, 12 hours' advance notice of ETA in order to arrange Pilot. If entering via Lodingen, 2 hours' notice. VHF Channel 16 both at Lodingen and on pilot-cutter at Andenes. 24 hour watch maintained.
ANCHORAGE: Inside harbour limits, fairly good anchorages available, Pilot will assist.
RESTRICTIONS: No restrictions, except all foreign ships must have a Coast Pilot on board in inland waters.
MAX. SIZE: Any size vessel can anchor in harbour.
HEALTH: In case of suspected disease doctor has to be called by radio before entering. After calling at another Norwegian port and no disease, Pratique is not necessary.
RADIO: Routing of ETA cables to Agents at Harstad is best over Harstad Radio. VHF installed at Harbour Office.
TUGS: Two small tugs available.
BERTHING: Public quays of 680 m. Private quays of 1,200 m.
MEDICAL: No advance notice required. Hospital facilities available. No medical information required if no suspected disease on board.
SPECIALISED CARGO-HANDLING FACILITIES: One coal bunkering station; draft about 24 ft.; equipped with crane.
Two mobile cranes, capacity 30 tons each.
Trucks: 1×20 tons, 1×10 tons. Also fork lift trucks between 1 ton and 6 tons.
TANKERS: Two berths. Esso 33 ft. Norol 36 ft.
TIDE: Rise in tide about 6 ft.
FRESH WATER: Available at most quays day and night.
FUEL: All grades available. In the Winter 3–4 hours' notice required.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Usual international certificates.
CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes or equal amount of tobacco. Wine and/or Spirits: Spirit half a bottle per person.
IDENTIFICATION CARDS: Not needed.
CONSULS:
Danish Vice-Consulate:
Samasjovn 22, 9400 Harstad. Tel: 0 82 64560 or 64219.
Finnish Vice-Consulate:
Rikard Kaarbos gt. 2 – 9400 Harstad. Tel: 0 82 64990.
German Vice-Consulate (Germany F.R.):
Torfinns gt. 7 – 9400 Harstad. Tel: 0 82 61472.
REPAIRS: All types of repairs possible.
DRY DOCKS: 1 dry dock 110 m. long, 17 m. wide. Capacity: 8,000 d.w.t.
SURVEYORS: Cargo Inspectors available.
Lloyd's Register and Det Norske Veritas in Harstad.
REPATRIATION: Facilities available.
AIRPORT: Airport of Evenes, about 45 minutes (45 km.) drive from Harstad by road.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: Cargo work can be arranged on holidays, except 1st and 17th May, Easter Day and Christmas Day.
POLICE/AMBULANCE/FIRE: Police: 62010; Ambulance: 64900; Fire: 64580.
EMERGENCY CO-ORDINATION CENTRE: The nearest emergency centre is Hovedredningssentralen in Bodo. Tel: 081-21 267.
Local contact in Harstad is the Harbour Office. Tel: 082-62 880/62 459 or Senja Police Office. Tel: 082-62 010.
TELEPHONES: Available, can be arranged by Agent or Dockyard.
SERVICES: Harbour Office: Tel. 082 62880 and 62459. The Norwegian Government has decided that Harstad is to be the main base for most of the oil activity North of 62° N., and the town and the harbour are under construction to meet future requirements in this connection.
BANKS: One bank in Harstad which is operating internationally. Bergen Bank, Sjogaten 5, 9400 Harstad. Telex: 64002.
In addition there is A/S Fiskernes Bank, Tromsbanken A/S, Harstad Sparebank and Trondenes Sparebank.
STORING: See "Prelims" page viii.
1. Vessel can be stored by barge and/or truck.
2. No special regulations.
3. Trucks can proceed alongside the berth.
4. Fork lift trucks can be used on the jetty to handle stores.
5. No special regulations.
6. Local riggers can be employed to assist with storing.

SHORE LEAVE: Allowed.
DEVELOPMENTS: *Sor-Stangnes:* New harbour development area of about 40 acres. It will be possible to build a quay of 550 m. length and a minimum depth of 10.0 m.
AUTHORITY: Harstad Havnevesen, Box 193, 9401 Harstad, Norway. *Tel:* 082-62 880, 62 459. *Contact:* Ragnar Tonder, Harbour Master.

HEROYA: 59.07 N. 09.38 E.

DOCUMENTS:
Clearance documents – forms obtainable from Custom Officers o arrival.
Derat Certificate.
Bill of Lading.
Manifest.
2 Crew Lists.
Ship's Register.
PILOTAGE: Ship's Agent gives ETA pilot station 24 hours before arriva and direct to Pilots 2 hours before arrival. Telegraphic address Pilotstation, Langesund. VHF Channel 16 to be used when contactin Pilots. Pilot boards at Steingrunnen Light Buoy Langesund Bay Lat. 58° 55′ N., Long. 09° 44′ E. Flag, sound and morse signal "G" Pilotage compulsory for all foreign vessels but dispensation can b obtained for smaller Scandinavian vessels. Also see "General" befor first port (Agotnes).
ANCHORAGES: All anchoring at Frierfjorden. Also see "General before first port (Agotnes).
RESTRICTIONS: No restriction on night entry except for large vessel when Pilots prefer daylight. Also see "General" before first por (Agotnes).
MAX.SIZE: Max. draft 32 ft. 6 in., max. length 600 ft. entering Kjorttinger between Langesund and Brevik. Also see "General" before first por (Agotnes).
HEALTH: See "Documents". Norwegian Health Certificate required o clearance inwards.
RADIO: Cable Agents giving ETA, draft and cash required via Tjom Radio/LGT or Farsund Radio/LGZ.
TUGS: Tugs join at berthing place. Ship's lines used.
BERTHING: No specific requirements relating to berth.
CARGO HANDLING FACILITIES: On the East side of the river, a bert of 800 ft. length, 20 ft. to 21 ft. alongside. A new quay for vessels up t 10,000 tons, 26 ft. to 27 ft. depth, specially for handling bulk cargoes.
No berth equipped for handling-Roli on/Roll off traffic, but bert available for liquid chemical and LPG carriers.
Oil Pier Norsk Hydro A/S, vessels up to 20,000 d.w.t.
Main Quay Norsk Hydro A/S, length 1,838 ft., draft 26 ft. to 34 ft. 6 in.
Western Quay Norsk Hydro A/S, length 1,263 ft., draft 26 ft. t 32 ft. 6 in.
CRANES:
Main quay Norsk Hydro A/S:
4 cranes reaching 10 m.-11 m. outside quay border capacity 6 tons
2 cranes reaching 18 m. outside quay border capacity 6 tons.
3 elevators for loading of bagged cargo reaching 16 m.
Western Quay Norsk Hydro A/S:
2 cranes reaching 18 m. outside quay border capacity 7 tons.
1 crane reaching 15 m. outside quay border capacity 8 tons.
1 crane reaching 9 m. outside quay border capacity 3 tons.
3 elevators for loading of bagged cargo reaching 8 m.
Deep Water Jetty:
2 cranes reaching 16 m. outside quay border capacity 10/12 tons f bulk cargo only.
1 crane capacity 5 tons for handling of stores, etc.
BRIDGES: Brevik Bridge max. height 45 m. Porsgrunn Bridge (VH Channel 12) only when proceeding to Menstad, Borgestad, Waterlo and Skien, liftbridge with breadth of 30 m. Sound signals for passin bridge inward, 1 long and 2 short. Outward signals, 1 long and 1 shor
STEVEDORES: Ordered by Shippers/Receivers or Agents.
MEDICAL: All medical assistance to be arranged via Agents.
TANKERS: Discharge lines 4 in., 6 in., 8 in.
DENSITY: Brackish 4 in. – 6 in. allowance.
FRESH WATER: Obtainable various quays.
FUEL: All grades available.
FIRE PRECAUTIONS: Tankers discharging, smoking only by Officers i saloon, crew in messroom.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Crew normally open and close Otherwise according Charter Party.
CERTIFICATES: Registered Tonnage Certificate; Derat Certificate Otherwise normal international certificates.
CUSTOMS ALLOWANCES: 400 cigarettes for the Master and 200 fo each crew member. *Wine and/or Spirits:* 4 bottles spirit for Master an half bottle for each crew member.
CARGO GEAR: No additional requirements, but using vessel's rai tents.
IDENTIFICATION CARDS: Only necessary at quays belonging t Norsk Hydro. Special identification cards will be delivered to Master o arrival.
CONSULS: Belgium 20083 (Skien), Denmark 50069, Germany 2509 (Skien), Netherlands 22742 (Skien), Finland 52620.
REPAIRS: Repairs possible.
DRY DOCK: Draft 14 ft ., length 155 m., breadth 20 m., also 4 smalle docks.
REPATRIATION: Facilities exist for effecting crew changes an repatriation.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day, Maundy Day, Good Friday, Easter Ev (half day), Easter Monday, Christmas Eve (half day), Christmas Da 26th December, New Year's Eve (half day).
POLICE/AMBULANCE/FIRE: Police 51040; Ambulance 51070; Fir 51522. Other numbers: Pilot Station 71233; Tug Station 71144; Nors Hydro Central 51120; Porsgrunn Bridge 52492; Custom House 5454 Taxi 54112; Harbour Office: 71080 – 71088.
AUTHORITY: Porsgrunn Havnevesen, P.O.Box 20, 3951 Brevi Norway. *Tel:* 035-71080/71088. *Contact:* Hans Roe Edvardse Harbour Master.

HORTEN (on West Side Oslo Fjord): 59.24 N. 10.28 E.

DOCUMENTS: Health Certificate, Provision List, etc., all forms obtainable from Customs Officer boarding on arrival. Ship's Register and 2 copies of Manifest (with or without freight).

PILOTAGE: Compulsory for foreign ships over 50 g.r.t. Pilot station at Hvasser (Sandosund) outer Oslofjord, Tel: Hvasser 178 via Tjome Radio, VHF Channel 16 and RT 2182 kHz. Cutter or motorcruiser at Faeder Lighthouse bearing 3 miles N.N.E. White hulls with word LOS in black letters. Pilot usually ordered through Agent. Inner Harbour, Horten, compulsory Harbour Pilot ordered through Agent.

ANCHORAGE: Langgrunn outside Horten, any size vessel.

RESTRICTIONS: No restrictions night entry, but Inner Harbour at Horten only entered with Harbour Pilot on board.

MAX. SIZE: Ships up to max. length 900 ft. (anchored moorings outside jetty). Deep-water Wharf, length of N.E. side 530 ft. Draft 28 ft.

HEALTH: See "Documents". Advise Agent if suspect any disease or fever.

RADIO: Cable Agent giving ETA via Tjeme Radio. Local Harbour Master's Office can be contacted by VHF Channels 14 or 16. Hortens Brygge's "Pilotboat" when in service VHF Channel 16.

TUGS: Tugs if required use ship's line. Tugs ordered through Agent.

BERTHING: Max. draft alongside quay 28 ft.

STEVEDORES: Ordered by Agents.

MEDICAL: No special notice required, but preferred if urgent. Local hospital-Horten Sykehus Tel: 43191.

DENSITY: About 1022.

FRESH WATER: Available at most berths and from lighter.

FUEL: All grades. Direct from Installation and also by lighter. If large quantities, give earliest possible notice.

FIRE PRECAUTIONS: Usual restrictions and no smoking inside Cleaning Installation gate.

GANGWAY/DECK WATCHMEN: Available, not compulsory.

OPENING/CLOSING HATCHES: Usually opened/closed by vessel's crew.

CERTIFICATES: Ship's Register and usual certificates.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes or 250 grammes tobacco, 200 cigarette papers for persons over 15 years only. Wine and/or Spirit, Spirit of max. 60% 1 bottle (0.75 litre) and 1 litre wine (1.25 bottle) – 2 litres of wine if no spirits and 2 litres of beer (for persons over 21 years only).

CARGO GEAR: No additional requirements except when extra heavy lifts (20 tons).

IDENTIFICATION CARDS: Not needed.

CONSULS: Only Finnish Consul in Horten Tel: 42189, but most Consulates in Tonsberg – 18 km. distant. British Vice-Consul, Tonsberg Tel: 11605, Netherlands Vice-Consulate Tel: 13224.

REPAIRS: Any kind can be carried out.

DRY DOCKS: Dry docks for vessels up to about 60,000 d.w.t.. at A/S Horten Verft.

REPATRIATION: Crew changes, etc., can be arranged.

AIRPORT: Nearest international Airport is Oslo Airport (Fornebu), but charter flights may be arranged to and from Sandefjord Airport – any size of plane, and small aircraft at Jarlsberg Airfield. Distance to Sandefjord about 30 km., to Jarlsberg about 18 km.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day; Thursday before Good Friday; Good Friday; Easter Monday: 1st May; 7th May; (Ascension Day); 17th May; Whit Monday; Christmas Day; 26th December. 24th December is half holiday – work stops at noon or 1300 hrs.

POLICE/AMBULANCE/FIRE: Horten for immediate help telephone 000 covering Police, Ambulance and Fire.

TELEPHONES: Can be placed on board at Deepwater Wharf, the Cleaning Installation and the Dockyard (A/S Horten Verft) at comparatively cheap rates.

GENERAL: A/S Horten Verft are licensed Sulzer builders. Important Electronic Industry.

SERVICES: Tank cleaning and facilities for discharge of tank washings. Adjusting of all kinds of ship's instruments.

SHORE LEAVE: Crew members are allowed on shore.

REGULATIONS: Compulsory harbour Pilot when calling at Inner Harbour and yard (A/S Horten Verft).

DEVELOPMENTS: Committee at present working with plans for building more berths for ferries and traffic.

AUTHORITY: Horten Havnevesen, Post Box 167, 3191 Horten. *Tel:* 033-41021. *Contact:* Kjell Fjellin, Harbour Master.

HOYANGER: 61.10 N. 06.04 E.

LOCATION: Hoyanger Aluminium Works located North of Bergen in outer part of Sognefiord. Lat. 61° 10′ 18″ N., Long. 6° 04′ 07″ E.

DOCUMENTS: See "Bergen".

PILOTAGE: Compulsory. Belonging to Bergen Customs District and unless otherwise arranged beforehand vessels from abroad must call Bergen for inward clearance.

BERTHING: Length of Quay: 600 ft. (approx.) Depth alongside: 36 ft. Cranes. Ice free.

HUSNES: 59.52 N. 05.46 E. (See Plan Book)

DOCUMENTS:
- 3 Crew Lists.
- 2 Passenger Lists.
- 2 Bills of Lading
- 2 Manifests.

PILOTAGE: No pilotage in port. Sea Pilots in stations at Skudesnes, Kvitsoy (or Kopervik) and Utsira.

ANCHORAGE: Lat. 59° 53′ N., Long. 05° 45′ E. in 20 m.

MAX. SIZE: 70,000 tons.

HEALTH: Custom authorities to be advised on entrance.

RADIO: Best radio stations: Rogaland Radio. ETA to Receiver's cable address: "Soeraluminium, Husnes".

TUGS: Normally not necessary. If wanted, can be ordered from Bergen or Haugesund.

BERTHING: 240 m. Depth alongside: South 10 m., North 17 m. 2 cranes, on quay, each 8 tons at 20 m. and 1 pneumatic gear for discharging alumina. Capacity 5,000 tons per 24 hours.

STEVEDORES: Normal working time: Monday-Friday 0700 – 1530 hrs.

MEDICAL: Hospital at Stord (about 1 hour by ferry and car).

TANKERS: Discharging line 9 in.

FRESH WATER: Available, direct from quay to ship.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Crew.

OPENING/CLOSING HATCHES: To be carried out by crew.

CARGO GEAR: Per Norwegian safety regulations for loading and discharging.

IDENTIFICATION CARDS: Crew need cards signed by Master.

CONSULS: None.

REPAIRS: Only small workshops.

DRY DOCKS: None.

REPATRIATION: No facilities for obtaining new crew (Haugesund or Bergen).

AIRPORT: Bergen-Flesland. 2 hours – 2.5 hours from Husnes to Bergen by hydrofoil, and 0.5 hours by plane. Haugesund Airport 3 hours by car from Husnes.

POLICE/AMBULANCE/FIRE: Alarm telephone number 110 or 111.

TELEPHONES: Agent has one telephone in office on quay.

SERVICES: No services at quay. Tank cleaning at Bergen, compass adjusting at Haugesund.

SHORE LEAVE: Permitted. Crew required proceed direct from quay to gate of plant.

SHIPMASTER'S REPORT: September 1979 (Type "Panamax.).
Tugs: For large ore carriers 2 tugs ordered for arrival, and 1 tug on departure by Sor-Norge Aluminium A/S.
Stevedores: Normal working time for alumina carriers from Sunday 2200 hrs. till Saturday 1400 hrs.
Fresh Water: Flat charge of Nkr. 400 for all water taken. Smaller vessels additional Nkr. 3.0 per ton.
Discharge Rate: The discharge rate for alumina is still in the region of 5,000 tonnes per day despite the reduction in working hours.

AUTHORITY: *Shippers/Receivers:* Sor-Norge Alumium a/s.

AGENT: Sor-Norge Aluminium A/S P.O.Box 85, 5460 – Husnes. Mr. Torunno, Tel: Kvinnherad 054-71122. Telex: 42420. After hours Tel: (054) 71423.

KIRKENES (Bokfjord): 69.36 N. 30.03 E.

DOCUMENTS:
- 3 Crew Lists.
- Bill of Health.
- Bill of Lading.
- Ship's Certificates.

PILOTAGE: Pilot to be notified 24 hours in advance, boards vessel at Oksebaasen, and to be contacted over Channel 16 VHF. Pilot vessel carries white flag "H". Pilot office Tel: 91115.

ANCHORAGE: As directed by Pilot.

MAX. SIZE: Oil carriers 20,000 d.w.t., draft 33 ft. Iron ore carriers 120,000 d.w.t., sailing draft max. 51 ft. under optimal conditions.

HEALTH: If any contagious sickness quarantine to be informed by radio.

RADIO: Vardo Radio.

TUGS: 2 tugs, 2,200 h.p. and 2,300 h.p. Join vessel within harbour basin. Ship's lines to be used during towage.

BERTHING: Vessel to employ harbour Pilot.

BULK HANDLING FACILITIES:
- Operator: Aktieselskabet Sydvaranger.
- Berth: Length 180 m., depth 16.5 m.
- Loading: 1 Shiploader with travel of 215 m. and 20 m. outlay. Height above water level 14.63 m. Average loading rate 60,000 tonnes per day.

MEDICAL: Agents to receive advance notice of required medical attention. Hospital facilities available.

TANKERS: Diameter of load/discharge lines 8 in. Max. draft 33 ft.

DENSITY: Specific weight of water at 17.5 centrigrades = 1.02622 – 1.011 (varies very much with time of year).

FRESH WATER: Available, delivered through pipes from quay.

FUEL: None.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Must be carried out by crew.

CUSTOMS ALLOWANCES: *Tobacco and cigarette paper:* may be freely disposed of for use on board for up to 10 days as follows:

Master of the vessel: 400 cigarettes or 400 grammes of other tobacco goods and 200 cigarette papers.

Other crew members: 200 cigarettes or 250 grammes of other tobacco goods and 200 cigarette papers.

Spirits: of which the volume percentages of alcohol must not exceed 60 – and *Wine* may be freely disposed of for use on board as follows:
Master of the vessel: 2 litres altogether.
Other crew members: 1 litre of spirits and 1 litre of wine.

Quantities above those specified must be deposited in the care of the Master and on his responsibility stored in a locked room. Other forms of storage are punishable under the Customs and Excise Act.

If according to regulations governing exemption from duty for travel equipment and luggage a member of the crew brings goods ashore without payment of duty or fees, a corresponding reduction shall be made in the quantity of goods which he may dispose of freely for use on board according to the provisions above.

CARGO GEAR: 2 cranes, 20 tons and 75 tons.
IDENTIFICATION CARDS: Not needed.
CONSULS: Sweden, Finland, West Germany.
REPAIRS: No repairs possible.
DRY DOCKS: None.
REPATRIATION: Facilities exist for crew changing, but normally no crew available. Arranging repatriation possible.
AIRPORT: Distance to airport 16 km. Airport served by regular airlines, 2 flights per day.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: January 1st, Easter Day, Whitsun Day, May 1st, May 17th, December 25th and 26th. Work carried out if permission given by the authorities.
POLICE/AMBULANCE/FIRE: Fire alarm 91942; Ambulance 91701; Police 91151.
TELEPHONES: Ship's telephone connections not available.
SHORE LEAVE: Crew members allowed ashore.
AUTHORITY: Kirkenes Loskontor (Pilot Office), P.O.Box 158, 9901 Kirkenes, Norway. *Tel:* 91115. *Contact:* Pilot Master.

KOPERVIK: 59.17 N. 05.19 E.
SKUDENESHAVN: 59.08 N. 05.16 E.

PORT LIMITS: Harbour entrance of each port constitutes their port limits.
DOCUMENTS:
Declaration of Health.
General Declaration for Customs.
Cargo Declaration.
Ship's Stores Declaration.
Passenger List.
Crew's Effects Declaration.
PILOTAGE: 24 hours notice for Pilot. Pilot boat and office maintain 24 hour watch on VHF Channel 16. Pilot boards vessels off Skudenes in the Skude Fjord. The Pilot office is in Kopervik.
ANCHORAGES: *Kopervik:* 1 mile North of the harbour in 30 m. of water.
Skudeneshavn: Between Bakarholmen Island and Karmoy in depths of 6 m. – 7 m.
MAX. SIZE: *Kopervik:* Length 80 m., depth of water 10 m.
Skudeneshavn: Length 90 m., depth of water 5.5 m.
Fosen (for lay-up): 500,000 d.w.t.
RADIO: Rogaland Radio.
VHF: VHF sets operated by Rogaland Radio, Kopervik Pilot Office, Karmoy Harbour Office and Pilot boat.
RADAR: No port radar.
TUGS: Available from Stavanger and Haugesund with approx. 2 hours notice required.
BERTHS: Kopervik:
No. 1 Berth; length 55 m., depth 5 m.
No. 2 Berth; length 75 m., depth 6 m.
No. 3 Berth; length 55 m., depth 10 m.
No. 4 Berth; length 100 m., depth 5.5 m.
No. 5 Berth; length 200 m., depth 5 m.
Skudeneshavn:
2 Ro-Ro berths for regular ferry traffic.
One berth; length 60 m., depth 5 m.
CRANES: Mobile cranes available. At Skudeneshavn, there is one stationary heavy lift crane, lifting 50 tons maximum.
SPECIALISED CARGO FACILITIES: Refrigeration plants available at Kopervik, Skudeneshavn and Aakrehamn.
STEVEDORES: Arrangements to be made by Agents.
MEDICAL: Full hospital facilities at Haugesund.
REPAIRS: There are several shipyards in the area able to carry out repairs.
DRY DOCKS: There is a drydock at Skudeneshavn, with the following dimensions: Length 74 m., width 14 m. and depth 4.4 m. Larger drydocks are available at Haugesund and Stavanger.
DENSITY: 1026.
FRESH WATER: Available ex-wharf.
FUEL: Contact local oil companies.
FIRE PRECAUTIONS: Normal fire precautions.
CONSULS: None, nearest at Haugesund.
SURVEYORS: None, nearest at Haugesund and Stavanger.
AIRPORT: At Karmoy and Haugesund.
BANKS: Local banks only.
EMERGENCY CO-ORDINATION CENTRE: Haugesund Police Tel: 11011.
STORING: See "Prelims" page viii.
1. Vessels are stored both by trucks and barges
2. No special regulations.
3. Trucks can proceed alongside at the berth.
4. Fork lifts can be used.
5. Bonded store to be sealed.
6. Local riggers can be employed.

AUTHORITY: Karmoy Havnevesen, Post Box 70, 4250 Kopervik. *Tel:* (047) – 50 243-551055. *Contact:* Rasmus Ellingsen, Port Manager, 4280 Skudeneshavn. *Tel:* (047) – 58 513. Erling Mosbron, Harbour Master, *Tel:* (047) – 55 619.

KRAGERO: 58.52 N. 09.25 E.

DOCUMENTS:
Ship's Register.
Passenger List.
Crew List.
1 List of Articles – radios, cigarettes, tobacco, spirits, etc.
If on inspection, articles or quantities not in conformity or in excess, Master responsible, articles removed and heavy fine imposed.
PILOTAGE: Pilot to be ordered by Agent on given ETA. The pilot boat will be at the light buoy at time given. Listening on Radio 2182 kHz or VHF Channel 16. Calling "Pilotboat Kragero".
ANCHORAGE: Almost anywhere in the Fjord, watch out for sign of waterpipes and telephone cables.
RESTRICTIONS: Weather permitting, draft up to 30 ft.
RADIO: Tjome Radio Station or Farsund Radio Station.
TUGS: Only small tugs in harbour, tugs available from nearby town order to be given 24 hours in advance.
STEVEDORES: To be ordered by Agent. Notice to be given before 1530 hrs. for next morning, or 3 hours before work to start.
MEDICAL: Doctor and hospital facilities available.
FRESH WATER: Available at Centre Quay.
FUEL: May be available with trucks ordered from nearby town.
OPENING/CLOSING HATCHES: To be carried out by crew.
CUSTOMS ALLOWANCES: 100 cigarettes or 50 cigars. 1 bottle wine or spirits per man.
CONSULS: France Tel: 81555. Denmark Tel: 81055. Netherlands Tel: 81020.
REPAIRS: Small repairs may be available.
AIRPORT: Kristiansand 170 km. away. Oslo 200 km.
HOLIDAYS: Work can be arranged on most Holidays, except New Year's Day, Easter Day, 1st and 17th May and Christmas Day.
TELEPHONES: Police, 81401. Ambulance, 81436. Fire and First Aid 81200. On most berths telephones are available.
SHORE LEAVE: No restrictions.
AUTHORITY: Kragero Kommune – Havnestyret, P.O.Box 158, 3771 Kragero, Norway. *Tel:* 036-81750. *Contact:* H. Carlsten, Harbour Master.

KRISTIANSAND S.: 58.09 N. 08.00 E. (See Plan Book)

DOCUMENTS:
3 Cargo Manifests for Customs.
Tobacco/Spirits List.
Bill of Health (if arriving from outside Scandinavia).
Passenger List for Immigration.
No Crew List required.
PILOTAGE: Oksoy Pilot Station. Compulsory pilotage for non-Norwegian ships, 2 hours notice minimum, contact on ordinary shipping Channel, or VHF call Channel 16 and 13, pilot boat marked "LOS" on each bow, international light or sound signals, Pilot boarding between Oksoy and Gronningen Lighthouse, no special anchorage for vessel awaiting a Pilot, but Pilots available around clock.
ANCHORAGE: Several good and safe anchorages in inner and outer harbour for vessels of any size.
MAX. SIZE: Any size in harbour. Max. 24,000 gross tons at quay.
RADIO: Farsund Radio LGZ.
RADAR: At Oksoy Pilot Station.
VHF: Port Radio, Channels 16, 12 and 14.
TUGS: A/S Sorslep. Tel. 22590. 2 Tugs 750 h.p., 1 Tug 425 h.p. 1 mooring boat.
BERTHING:

Berth	*Depth at MLW (ft.)*
Railway and Car Ferry Terminal	20
Car Ferry Terminal	26
Car Ferry Terminal	26
Coastal Berths (4)	16–26
Roll-on/Roll-off Terminal	30
Fishing Harbour	20
Tug Terminal	12
Grain, Concrete and Overseas Terminal	33 (North end) 40 (Mid-section) 60 (South end)
Oil Terminal	40
Overseas Ro/Ro Terminal	30
General Cargo Terminal	30

STEVEDORES: ETA to Agents who arrange stevedoring.
MEDICAL: Hospital in Kristiansand. Doctor available around clock.
TANKERS: B.P. Bunker Station: 1 Berth depth 33 ft.
Shell Bunker Station Odderoy: 1 Berth depth 31 ft.
FRESH WATER: Available from quays and water barges.
FUEL: All grades up to 2000 sec. available at short notice.
GANGWAY/DECK WATCHMEN: Available if required.
OPENING/CLOSING HATCHES: Normally carried out by crew, but can be done by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes or equivalent tobacco for each crew member per 10 days and 1 bottle spirits.
CONSULS:

Denmark	Tel. 23097	Iceland	Tel. 21068
Finland	„ 29596	Netherlands	„ 26990
France	„ 26210	Portugal	„ 29616
Germany	„ 22455	Spain	„ 21040
Gt. Britain	„ 24452	Sweden	„ 26160
Greece	„ 24446		

REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: Largest dry dock; length 689 ft. width, 100 ft. width at entrance, 95.9 ft. Depth 25 ft. for vessels up to 13,000 d.w.t.
REPATRIATION: Can be arranged.
AIRPORT: Situated 17 km. from harbour, served by regular air lines.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
TELEPHONE: Police, 29500; Ambulance, 32000; Fire, 21010. Possible to place telephone on board at some quays.
SHIP SUPPLY SERVICE: 2 tugs able to assist, contact Agent.
AUTHORITY: Kristiansand Havnevesen, Havnebygget, Vestre Strandgate 29, P.O.Box 3, 4601 Kristiansand S, Norway. *Tel:* (042) 29552. *Contact:* Helge Andresen, Harbour Superintendent.

KRISTIANSUND N.: 63.07 N. 07.43 E.

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Customs Document.
1 Health Document.
1 Ship's Papers.
1 Stores List.
3 copies Manifest.
3 copies Bill of Lading.
PILOTAGE: From open sea. Pilot is taken on board at Grip Lighthouse. Watch 24 hours a day. Vessels approaching from the sea and desiring a Pilot should order the Pilot at 24 hours' notice as far as possible.
RADIO: From ship at sea via Alesund Radio (LGA) direct to the Sea Pilot. Watch calling frequency 2182 or by VHF radio-telephone, calling Channel 16. Harbour Office is manned day and night, Tel: 71483.
ANCHORAGES: Several good and safe anchorages in inner and outer harbour for vessels of any size.
MAX. SIZE: Max. depth alongside quay 40 ft., length of all quays about 900 m.
RADIO: Alesund Radio – LGA.
TUGS: None, but small motor vessels assist when required.
BERTHING:

Storkaia	length 330 m., depth 19 – 40 ft.
Holmakaia	length 100 m., depth 34 ft. (East Side)
Holmakia	length 80 m., depth 24 ft. (South Side).

BRIDGES: Sorsund Bridge 140 m. wide, 38 m. high. Nordsund Bridge 50 m. wide, 28 m. high.
STEVEDORES: Obtained by Agents provided ETA given 12 hours before arrival.
FRESH WATER: Delivered from quay or from water boat.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Available but not necessary.
OPENING/CLOSING HATCHES: This work will normally be carried out by crew, but can be done by stevedores.
CUSTOMS ALLOWANCES: For each man – 200 cigarettes, 1 bottle of spirits for 10 days.
IDENTIFICATION CARDS: Not required.
CONSULS: Following countries are represented at Kristiansund N.:
Denmark
Finland
France
Germany (FDR)
Great Britain
Italy
Netherlands
Portugal
Spain
Sweden
Uruguay
REPAIRS: All kinds of repairs may be effected, deck and engine. Patent-slips for vessels up to 250 ft. long, crane-lift up to 40 tons. Ice-free harbour.
REPATRIATION: All facilities available.
AIRPORT: Kristiansund Airport, Kvernberget. Passenger flights 3 times a day to Oslo. 2 flights a day to Trondheim and Bergen. Situated about 4 miles from centre of Kristiansund N. (about 15 minutes by car).
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: 1st May and 17th May.
POLICE/FIRE/AMBULANCE: Police, Tel: 75000; Ambulance, Tel: 72011; Fire, Tel: 71000.
TELEPHONES: May be installed during the ship's stay at the quay.
SERVICES: Laundry, ship chandlers for delivery of provisions and bonded stores, and servicing for all kinds of ship's navigation instruments can be arranged.
SHORE LEAVE: Allowed.
AUTHORITY: Kristiansund N., Havnevesen, Havnefogden, Kaibakken 1, 6500 Kristiansund N., Norway. *Tel:* 74333. *Contact:* Sverre D. Lervik, Harbour Master.

LARVIK: 59.03 N. 10.02 E. (See Plan Book)

PORT LIMITS: The official port limits for the port of Larvik is a line from Stensnes in East to Rodbergodden in West. Notices of Readiness for loading or discharging, however, will be accepted when the vessel is anchored in any of the anchorages in inner Larvik Fjord.
DOCUMENTS:
Maritime Declaration of Health.
Tolliste, i.e. tobacco and curio list for total number of crew.
1 "Varefortegnelse med proviantliste", i.e. cargo and provisions list. (2 copies required for dulk cargoes.)
"General-varefortegnelse", i.e. list of general cargo – 3 copies required.
3 Ship's manifest.
3 Bills of Lading.
Customs Officer will accept tobacco and curio lists, also provision lists filled in on foreign forms, if all goods correctly stated.
PILOTAGE:
1. Vessels approaching from the sea and desiring a Pilot shall order the Pilot at 24 hours' notice insofar as possible and confirm arrival at pilot station at 2 hours' notice:
   (a) by telephone or telegram from ship to the pilot office concerned or sea pilot station over an official coastal radio station.
   (b) by telephone or telegram from broker/shipowner to the pilot office concerned or sea pilot station.
2. For direct connection between ships desiring Pilot and the pilot service, VHF-radio telephone Channel 16 (156.8 MHz) shall be used for calling and reply, and a VHF-radio telephone ship-to-ship Channel or harbour Channel shall be used for conversations. Ships not equipped with VHF-radio telephone may use the distress and calling frequency 2182 kHz for calling pilot vessel, but both the ship desiring Pilot and the pilot vessel shall in such cases immediately turn to ship-to-ship frequency. At such connections minimum transmission effect shall be used.
3. Vessels lying in port and desiring Pilot will order the Pilot from the nearest pilot office during its office hours and if possible at 4 hours' notice.
4. Vessels approaching from the sea as well as vessels lying in port shall, when making an advance order, state the name and destination of the vessel and whether 1 or 2 Pilots are desired.
5. The Pilots will on the whole be despatched to the ships in accordance with the advance orders, and vessels are therefore requested to comply with the foregoing rules as far as possible in order to avoid having to wait for Pilot.
6. The international provisions for summoning Pilots by signal flags or blue lights, etc., are still in force but should in future be used as a supplement to the radio communications or as the sole communication in emergencies.
7. These provisions came into force on the 1st April, 1984.

Description of pilot boat: White painted, orange wheelhouse, 2 masts, "Los" on both sides of bow. The pilot vessel is situated in Langesund Harbour on watch 24 hours every day. Pilot boards ships S.E. of Langoytangen lighthouse 58° 59.4′ N., 9° 45.8′ E.

The Agent must in general order Pilot before 1200 hrs. and before 1530 hrs. Friday when Pilot is required before Monday morning.
ANCHORAGES: Safe anchorages at end of fjord, West side. Masters should consult Pilots and/or charts before anchoring. Ample water and good holding ground for all sizes of vessels.
MAX.SIZE: Largest vessel berthed at Larvik Canal Quay, LOA 644 ft. 8 in., breadth 83 ft. 3 in., max. draft 32 ft. 6 in.
HEALTH: Advise Agents of any suspected disease or fever on board by radio or telephone before entering. Vessel will then anchor in anchorage and be boarded by state doctor. When vessel is healthy, Customs Officer will grant Pratique.
RADIO: Tjome Radio LGT, Rogaland Radio LGQ.
TUGS: No tugs at Larvik. Tugs to be ordered via ship's Agents from Fredrikstad or Porsgrunn. If tugs required Agents should be given 12 to 24 hours' notice. Tugs join vessel in fjord off harbour breakwater. Extra charges for use of tug's lines.
BERTHING:
Revquay West (Vester Revkai): Length 118 m. Depth alongside 9 m. Newest quay for general and miscellaneous cargo. New warehouse, measuring 1600 sq.m. Asphalted area outside measuring 10,000 sq.m. Railway track.

Adjacent to this quay is the Roll-on/Roll-off berth. Max. length vessels 170 m. Depth alongside 8 m.

Kanalquay (Kanalkaia): Kanalquay North – length 335 m. Depth. 10 m. Kanalquay West – length 120 m. Depth 6 m. Kanalquay South – length 90 m. Depth 5 m.

Facilities available at Kanalquay and Revquay West: Railway tracks, 3 portable electric cranes, capacity 6 tons – 23 tons. Portable pneumatic grain discharging plant, capacity 85,000 tons. Warehouses measuring 4,000 sq.m.

Outdoor storage area: 20,000 sq.m.

East Pier (Ostre Brygge): Length 130 m. Depth 8 m. New Ferry quay with Roll-on/Roll-off facilities. Car park for 560 cars or 52 lorries/trailers 18 m. Passenger terminal. Customs.

West Pier (Vestre Brygge): Depth – East side 6 m. West side 7 m. Ferry quay with Roll-on/Roll-off facilities on West side. Good parking.

Private Wharves: Treschow-Fitzoe Pulp Quays – West side: Length 50 m. Depth alongside 5 m. East side: Length 90 m. Depth alongside 6.3 m. 1 portable electric crane capacity 5 tons.

B.T. Transport A/S: Length 50 m. Depth 3 m. – 11 m.
STEVEDORES: Gangs to be ordered before 1600 hrs. and cranes before 1500 hrs. for following day. During office hours 2 hours' notice required.
MEDICAL: No advance notice required, unless in urgent medical cases and when ambulance needed. No particular inoculations required.
DENSITY: Salt water, brackish at times.
FRESH WATER: Delivered by hose from wharf.

MEDICAL: Medical attention available. Hospital facilities at Bergen.
DENSITY: Salt water.
FRESH WATER: Available from the jetties. Cost per ton Nkr. 2.50.
FUEL: All grades available.
FIRE PRECAUTIONS: Special safety regulation forms given when berthed.
CONSULS: Consuls available at Bergen from the following countries: Austria; Belgium, Brazil, Denmark, Finland, France, Great Britain, Greece, Iceland, Italy, The Netherlands, Panama, Peru, Portugal, Spain, Sweden, Switzerland, Turkey, Uruguay, West Germany.
REPAIRS: Repair shop facilities available. Repair work must not be commenced without the agreement of the Port Captain.
SURVEYORS: The following Classification Societies represented by Surveyor at Bergen: American Bureau of Shipping, Bureau Veritas, Det Norske Veritas, Germanisher Lloyd and Lloyd's Register of Shipping.
GANGWAY/DECK WATCHMEN: Available.
CUSTOMS ALLOWANCES: 200 cigarettes or 200 gm. tobacco and 1 bottle spirit or 2 bottles of wine, each man.
REPATRIATION: All facilities. Bus or Taxi transport to international airport.
AIRPORT: Flesland Airport, approx. 86 km. (54 miles) distance from Mongstad. Distance Bergen to Mongstad approx. 45 km.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Police, Tel: Knarvik 350504 and 350505. Ambulance and Fire fighting brigade available at the refinery.
TELEPHONES: No telephones on board. Long distance calls to be arranged via Agent. Local calls from Gatehouse.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Shore passes delivered on board on arrival.
PORT REGULATIONS: *Moorings:* Mixed moorings in the same direction are not allowed. Wire ropes shall have nylon "tails" not longer than 12 m. Nylon "tails" are available for purchase. Due to occasionally heavy swell in the fjord, particular attention is paid to the moorings.
AUTHORITY: Rafinor A/S & Co., N-5154 Monstad, Norway. *Tel:* 05-360300. *Telex:* 42266 A Olje N. *Contact:* Captain O. Dyblie, Port Captain.

MOSJOEN: 65.51 N. 13.11 E. (See Plan Book)

DOCUMENTS:
Health Certificate.
Crew List.
Passenger List.
Ship's Register.
Cargo List.
Bonded Store List.
PILOTAGE: Pilot station at Asvaer, location 66° 15′ 9″ N., 12° 18′ 03″ E. Telegraphic address: Pilot Station, Asvaer. VHF Channel 16. Telegraph ETA 24 hours prior to arrival. Piloting around clock.
ANCHORAGES: Hellesvik. Location 66° 01′ 30″ N., 12° 54′ 20″ E.
RESTRICTIONS: No restrictions on night entry. If draft above 33 ft. enter on high tide and commence discharging immediately.
HEALTH: Free Pratique given automatically when "Q" flag not to be flown.
RADIO: Rorvik Radio LGD.
TUGS: Stationed at Sandnessjoen. Have to be ordered through Agents 24 hours prior to arrival. Normally used by vessels above 20,000 d.w.t.
BERTHING: Drafts over 33 ft. berthed only on high tide and commence discharging immediately. No restrictions on length and breadth.

Crane for bulk cargo (alumina), capacity 300 t.p.h. Mosjoen Aluminiumverk, private berth. Maximum outreach from quay – 15 m.

No other special facilities (Roll-on/Roll-off facilities may be constructed).
STEVEDORES: Ordered through Agents. No ETA to stevedores necessary.
MEDICAL: Master to advise prior to arrival if medical attention required. Hospital facilities available.
DENSITY: Brackish in port.
FRESH WATER: Supplied from installations at berth.
FUEL: Gas oil, delivered by lorries.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Performed by vessel's crew.
CUSTOMS ALLOWANCES: 1 bottle spirits, 200 cigarettes, 200 gm. tobacco.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Minor repairs possible.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day; Good Friday; Maunday Thursday; Easter Monday; Workers' Day (1st May); 17th May; Ascension Day; Whit Monday; Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Fire Tel: 70222; First Aid Tel: 70800; Police Tel: 71611.
AUTHORITY: Mosjoen Havnevesen, 8650 Mosjoen, Norway. *Tel:* (78) 70265. *Cables:* Harbour Master. *Contact:* Arne Lund, Harbour Master.

NAMSOS: 64.28 N. 11.30 E. (See Plan Book)

DOCUMENTS:
Crew list.
2 Passenger lists.
2 Health Certificates.
Manifests.
Ship's papers.
PILOTAGE: Pilot can be ordered by ship's Agent from Trondheim.
ANCHORAGE: Good anchorage inside harbour.
MAX. SIZE: Vessels up to 15,000 d.w.t. have entered harbour. 3 small oil berths with depth 5 m. LW.
HEALTH: Normal Norwegian regulations.
RADIO: Rorvik Radio. No radar.
VHF: Channels 12 and 14.
TUGS: No tugs in Namsos. 1 tug stationed at Bangsund and can be hired.

Berth	*Length (m.)*	*Depth (m.)*
Tiendeholmen	55	8
S.T.K.	120	6
Jernbanekaia	95	8
Sandkaia	65	7
Ekspedisjonskaien	150	7/9
Lokalrutekaien	60	5
Private		
Norske Skogindustrier A/S Kai	120	8
Felleskjopet	50	5
Ole Morkved	100	5
Shell	20	5
Norsk Olje	20	5
Esso	20	5

CRANES: 50 ton mobile crane.
STEVEDORES: Notify day before arrival to arrange gangs.
TANKERS: 3 tanker berths with 5 m. alongside LW.
DENSITY: Average density 1020 in Spring, and in Summer 1015.
FRESH WATER: Available by hose. Capacity 10-15 t.p.h.
FUEL: Light grades available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Stevedores operate hatches.
CERTIFICATES: Usual international certificates.
IDENTIFICATION CARDS: Not needed.
CONSULS: None.
REPAIRS: Small repairs available.
SURVEYORS: None.
REPATRIATION: Organised by seamen's office.
AIRPORT: 4 km. from town. Regular service twice a day South and North.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Police 72151; Ambulance 72500; Fire 72000.
TELEPHONES: Can be placed on board.
SHORE LEAVE: Crew allowed ashore.
STORING: Vessels may be stored by truck. Trucks may proceed alongside the berth. Fork-lift trucks and riggers available.
DELAYS: None expected.
AUTHORITY: Namsos Havnevesen, Postboks 107, 7801 Namsos, Norway. *Tel:* Office: 077-72400, Private 077-72401. *Contact:* John Holm, Harbour Master.

NARVIK: 68.25 N. 17.24 E. (See Plan Book)

The following information applies mainly to vessels arriving to load ore cargoes.

LOCATION: The Port of Narvik is located in position: Lat. 68° 25′ 30″ N., Long. 17° 24′ 00″ E.
DOCUMENTS: All ships arriving from a foreign port will be boarded by Customs.

The following documents should be completed prior to arrival:
Maritime Declaration of Health Form 1 – 1012.
General Declaration IMO Form 1 in quadruplicate.
Ship's Stores Declaration IMO Form 3 in triplicate.
Crew's Effect Declaration IMO Form 4 in triplicate.
Crew List in triplicate.
The above forms will be supplied by mail on request.
PILOTAGE: *Sea Pilot:* Sea Pilot will embark off Tranoy Pilot Station. Location: Lat. 68° 11° N., Long. 15° 34′ E.

Distance from Tranoy to Narvik 46 nautical miles.

Note: Vessels bound for Narvik will have to pass through Restricted Area. It is compulsory for all foreign non-military vessels of not more than 50 g.r.t. to have a Norwegian State Pilot on board when approaching Restricted Areas in Norwegian Waters.

The Sea Pilot will assist during undocking and leave the vessel off Tranoy Pilot Station.

Harbour Pilot: The use of Harbour Pilot is compulsory during docking. When docking on arrival, the Harbour Pilot will board the vessel inside the harbour limits.

Ordering of Pilots: Vessels approaching from the sea shall order the Pilot at 24 hours' notice in so far as possible and confirm arrival at pilot station at 2 hours' notice.

Provisions for Advance Reports in Connection with the Ordering of Pilots:

Issued by the Director of Pilotage, 10th May, 1963, amended 1st January, 1971.

1. Vessels approaching from the sea and desiring a Pilot shall order the Pilot at 24 hours' notice in so far as possible and confirm arrival at pilot station at 2 hours' notice:
   (a) By telephone or telegram from ship to the pilot office concerned or sea pilot station over an official coastal radio station.
   (b) By telephone or telegram from Broker/Shipowner to the pilot office concerned or sea pilot station.
2. For direct connection between ships desiring Pilot and the Pilot Service, VHF radio-telephone Channel 16 (156.8 MHz) shall be used for calling and reply, and a VHF radio-telephone ship-to-ship channel or harbour channel shall be used for conversations. Ships not equipped with VHF radio-telephone may use the distress and calling frequency 2182 kHz for calling pilot vessel, but both the ship desiring Pilot and the pilot vessel shall in such cases immediately turn to ship-to-ship frequency. At such connections minimum transmission effect shall be used.
3. Vessels lying in port and desiring Pilot will order the Pilot from the nearest pilot office during its office hours and if possible at 4 hours' notice.
4. Vessels approaching from the sea as well as vessels lying in port shall, when making an advance order, state the name and destination of the vessel and whether 1 or 2 Pilots are desired.
5. The Pilots will on the whole be despatched to the ships in accordance with the advance orders, and vessels are therefore requested to comply with the foregoing rules as far as possible in order to avoid having to wait for Pilot.
6. The international provisions for summoning Pilots by signal flags or blue lights, etc. are still in force, but should in future be used as a supplement to the radio communications or as the sole communication in emergencies.
7. These provisions come into force on 1st January, 1971.

Vessels in Port: Luossavaara-Kiirunavaara AB will notify the Sea Pilot in due time before completion of loading. LKAB will also arrange for Harbour Pilot to assist during docking or when otherwise required by vessel's Master.

ANCHORAGES: Anchoring must take place in the recommended areas as advised by the Pilot, i.e. inside the harbour basin or to the South West and West of "Framnesodden".

Warning: The bottom usually gives good anchorage but vessels are requested to keep continuous watch while at anchor. Frequent anchor bearings must be taken during adverse weather conditions.

Vessels at anchor inside the harbour basin are especially exposed to gusting winds from S.E. (locally named "Beisfjord-winds").

HEALTH: The Master of a ship arriving from a foreign port, must hand to the Customs Officers a Maritime Declaration of Health form signed by the Master. If there is a ship's Surgeon on board, the declaration to be countersigned by this person.

A valid Derat Certificate to be presented to the Customs on request.

RADIO: *ETA Notices:*

1. Please cable ETA to Malmexport Stockholm 6 days prior to arrival at loading port and to MALMEXPORT NARVIK as follows:

Sailing from last port and 48 hours and 24 hours before arrival.

If any change in ETA of more than 1 hour occurs after transmission of the 24 hour ETA, the vessel must send a corrected ETA.

2. Following should be included in the 48 hours ETA notice:
   a. Tonnage of cargo required and quantity in each hold.
   b. Cash advance requirement.
   c. Order for repairs, bunkers, stores, charts etc.
   d. In case of repatriation, please state name of crew member(s) to be repatriated, destination and date of departure preferred.
3. Docking instructions – prospects.

Request for docking instructions, loading time etc. should preferably be included in the 48 hours ETA.

Docking instructions will also be advised by Pilot on arrival Tranoy Pilot Station.

4. Estimated time for ballast pumping after arrival should be advised with the 24 hours ETA.

Other Vessels: Cable Agents giving ETA, draft and cash required. Radio station: Rogaland Radio/LGB but other stations can be used.

VHF: Contact with LKAB can be obtained by VHF (Channel 14) on a 24 hour basis. Vessels at anchor are requested to keep continuous VHF watch. It is also advisable for vessels alongside to have the VHF switched on. Messages to the Agent should be given by VHF.

Local and long distance calls can be ordered via Bodo Radio on VHF Channel 28.

Other Vessels: Local and long-distance calls may be ordered through Harstad Radio on Channel 16.

Port frequency is Channel 14, on which vessels may communicate with the port ferry launch and Agent (ore-loading vessels).

FUEL: Bunkers are available on an emergency basis only. Orders for fuel and diesel should preferably be given in due time directly to the supplier. Fuel oil can only be supplied from coastal-tankers.

Diesel oil can be delivered by the tug M.V. "Rombak" at the daily market rate and from the supplier used by the tugboat company.

Capacity per delivery about 100 cu.m.

An extra fee will be charged for the tug per delivery.

It is also possible to supply diesel oil by tank wagons. Capacity per delivery about 10 cu.m. – 12 cu.m.

Lubricants: Can be procured, but due notice must be given as all types are not kept in stock.

TUGS: Tug service is compulsory at LKAB's Ore Berths.

Luossavaara-Kiirunavaara AB reserve the right to order the number of tugs (maximum 3) which they consider necessary to ensure safe mooring and unmooring of a vessel.

Vessels above approximately 70,000 d.w.t. will normally be assisted by 3 tugs.

Main particulars of tugs available: M/V "Svarta Bjorn", g.r.t. 277, b.h.p. 1,640, bollard pull 23 tons, 11 knots. Fluid couplings and single reduction gearing. Reverse gear to screwshaft.

M/V "Rallaren", g.r.t. 435, b.h.p. 3,800, bollard pull 43 tons, 12.4 knots. Two Voith-Schneider directional propellers.

M/V "Rombak" g.r.t. 440, b.h.p. 4,000, bollard pull 47 tons, 12.5 knots. Two Voith-Schneider directional propellers.

Tugowners: A/S Bukserbater, Narvik.

Towing lines will be provided from the tugs.

Normal communication between tugs and Pilot is by VHF. Operating Channel 6 (156.3 mHz.).

Bilge Pumps: The tugs M/V "Rallaren" and M/V "Rombak" are equipped with 2 transportable bilge pumps. Average pumping capacity of each pump: 2,000 litres per minute.

Fire Fighting: Tugs M/V "Rallaren" and M/V "Rombak" are equipped with foam/water guns for fire fighting.

Other Vessels: Must be employed for tankers, 3 tugs available, capable of assisting vessels up to 250,000 d.w.t.

BERTHING:

General Description: The Ore Berths, hereinafter described as Berth Nos. 3, 4 and 5, allow 3 ships to be berthed simultaneously.

The ore is transported from the stockyards to the shiploaders on conveyor belts. Both stockpiling and loading is automatically directed from a central control station. On the way to the pier belts, the ore is transferred via sampling stations which also include computer controlled screen analysis for pellets.

After having passed the sampling station, the ore is weighed by electronic belt scales with a very high degree of accuracy.

Mooring: Ships usually berth:

Starboard side to Berth No. 3.

Port side to Berth No. 4.

Starboard side to Berth No. 5.

It is the responsibility of the Ship's Master to provide for and make sure that his ship has sufficient mooring ropes and wires ashore at all times, and that the moorings are properly and evenly tightened.

Ships berthing at No. 5 Berth should preferably use floating mooring ropes (nylon, polypropylene or similar) for head- and sternlines.

Berth Nos. 3 and 4: Consists of a slender reinforced concrete pier, supported by 13 heavy concrete pillars resting on steel piles which are rammed through clay and silt to solid rock some 30 m. – 35 m. below the pier deck, above which the superstructure, carrying the conveyor belts, rises about another 15 m.

The outer end of the concrete pier deck is based on a caisson, placed on a reinforced concrete foundation slab, resting on steel piles driven to rock base.

The caisson as well as the pier itself is equipped with heavy rubber fenders of Seibu type and with heavy rubber tyre fenders.

Shiploaders: There are 2 travelling boom loaders on each side of the pier with a working area of approximately 150 m.

If 2 ships are loaded simultaneously, only 1 shiploader can be used on each side.

Designed capacity of each shiploader is 4,500 tonnes/p.h., but the average capacity should be calculated between 3,000 tonnes/p.h. and 2,000 tonnes/p.h. depending on the kind of ore being loaded.

Berth No. 5: Is a concrete caisson berth, parallel to the shoreline.

The basement of the berth consists of 5 cylindric caissons resting on foundations connected to solid rock.

The face of the berth is fitted with heavy Seibu fenders, dimensioned to obtain pressure of a 40% ballasted ship of about 350,000 d.w.t., approaching at a speed of 0.15 m. per second.

The Shiploader: Is of a linear slewing type, turnable around a fixed point in the rear. The loader travels on rails along the berth in a length of 140 m. The shiploader boom can be elevated to any suitable height over a vessel's hatch coamings. Maximum horizontal loading range is 220 m.

Designed capacity is maximum 11,000 tonnes/p.h. for lumpy ore and fines, and approximately 7,500 tonnes of pellets per hour.

Apatite Berth: The berth is located between Berth No. 5 (East side) and shore. Minimum depth 12 m. Vessels up to approx. 10,000 d.w.t. can load Apatite in bulk at this berth. One shiploader with designed capacity 800 metric t.p.h. The cargo is stored in a silo of 7,035 cu.m., containing about 11,000 tonnes apatite.

Loading takes place via a closed and dustfree system through special openings in vessel's hatchcovers.

Fagerneskaien: There is a deepwater quay, "Fagerneskaien", located to the South of the harbour.

Length of quay 280 m.

Depth alongside on LW 15 m.

The quay has easy access from the shore side and suitable for ships taking onboard heavy goods and provisions as well as for ships carrying out repairs.

There is a workshop with structural, plate and welding factory situated at the quay.

The quay is directly connected to the main railway.

Fresh water is available with connections conveniently located.

LOADING:

Docking Data for Ore Berths: (Measurements in metres, unless otherwise stated).

	Berth No. 3	*Berth No. 4*	*Berth No. 5*
Building completed (year)	1950 (Caisson in 1967)		1977
Type	Concrete Pier		Concrete Caisson Berth
Length	214.00	214.00	208.00
Breadth	13.50	13.50	Min. 8.25, Max. 18.00
Depth alongside at LWOST	*13.50	13.00	27.50
Height under shiploader (Airdraft) on HWOST	13.00	11.00	26.00
Max. outreach of shiploader from fender line	15.00	11.00	43.00 When perpendicular to wharf
Number of shiploaders	2	2	1
Suitable ship's size in d.w.t. (approx.)	40-75,000	5-45,000	70-250,000
Max. ship's size in d.w.t. depending on type and construction	90-100,000	45-50,000	over 300,000
Limitation of ship's length from bow (bulb) to aftermost loadpoint	200.00	175.00	No limitation
Max. length between ship's foremost and aftermost loadpoint loadable without warping	152.00	152.00	220.00

*Note: Maximum guaranteed draft at Berth No. 3 is 13 m. on LWOST (minimum 0.5 m. under-keel clearance required).

Loading to draft exceeding 13 m. may take place during favourable tide and weather conditions.

Iron Ore Qualities/Average Stowage Factors:

Ore Qualities	*tons/ cu.m.*	*cu.m./ tons*	*tons/ cu.ft.*	*cu.ft./ tons*
KBZ (Kiruna BZ)	3.30	0.30	0.093	10.8
KBS (Kiruna BS)	3.00	0.33	0.085	11.8
KBF (Kiruna B Fines)	3.20	0.31	0.091	10.9
KDZ (Kiruna DZ)	3.05	0.33	0.086	11.6
KDF (Kiruna D Fines)	3.00	0.33	0.085	11.8
KPB (Kiruna Pellets B)	2.05	0.49	0.058	17.2
MPB (Malmberget Pellets B)	2.25	0.44	0.064	15.6
PF (Pellets Fines)	2.50	0.40	0.071	14.1

Weighing: The ore is weighed continuously during loading by electronic belt scales.

Margin of error maximum ±0.25%.

All weights as well as quantities issued in the Bills of Lading are expressed in metric tonnes (1,000 kg.).

Loadline Zones:

Winter: 1st November – 31st March.
Summer: 1st April – 31st October.

STEVEDORES: Ordered by Agent. Not necessary to contact stevedores.

Working Hours: Ordinary working hours 24 running hours, except Saturday 2200 hrs. to Sunday 0600 hrs.

CRANES: Fixed crane, SWL 5 tons, is available at Fagerneskaien (deep-sea wharf), and mobile cranes can be hired from local companies.

DENSITY: 1022.

FRESH WATER: Can be supplied from all berths. Connections are conveniently located with hoses available on the dock.

Fresh water can also be delivered by tugs. An extra fee will then be charged.

Capacity per delivery: M.V. "Rallaren" 93 cu.m.
M.V. "Rombak" 112 cu.m.

GANGWAY/DECK WATCHMAN: Available but not compulsory.

OPENING/CLOSING HATCHES: May be handled by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 gm. tobacco and 0.75 litre spirit or 2 bottles of wine. Must be declared on Customs List together with radios, tape recorders, binoculars, etc.

IDENTIFICATION CARDS: Not required.

CONSULS: See "Telephone Numbers".

REPAIRS: Minor repairs can be effected by local repair firms.

SURVEYORS: Lloyd's representative and surveyor are available at the port.

DRY DOCKS: None.

AIRPORT: Narvik Airport, 5 minutes by taxi from the port. Local commuter service with connection to the nearest major airports.

Evenes Airport, 1.5 hours by bus from Narvik. Regular service to Oslo (Fornebu Airport) and other major Norwegian airports.

REPATRIATION: Facilities exist for crew change and necessary repatriation.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day; May 1st; May 17th; Easter; Christmas Day; December 26th. Also see "Customs of the Port".

POLICE/AMBULANCE/FIRE: Police 41060; Hospital 44044; immediate help 4300 (only at night time); Ambulance 43600; Fire 41122.

LAUNCHES: The Agent will supply a time table and tickets on arrival. If a launch is required, the "B" flag or red light should be displayed from the signal mast.

SERVICES: Compass adjusting can be arranged when necessary.

SHORE LEAVE: Allowed.

TELEPHONES: Vessels at berth may hire a telephone. A telephone watch should then be kept on board.

TELEPHONE NUMBERS:

		Telephone No.	*After Hours No.*
Ambulance		43 600	
Hospital		44 044	
Fire Brigade	Brannbakken 1	41 122	
Police Station	Town Hall	41 060	
Custom House	Fagernesveien 2	41 580	41 582
Harbour Office	Havnegt 2	42 222	
Harbour Master	Havnegt 2	42 142	42 796
Pilot Office	Lodingen	31 104	
Lloyd's Agency	Havnegt 28	41 020	44 382
Lloyd's Surveyor	Ankenesstrand	56 325	56 325
Det Norske Veritas Surveyor	Havnegt 2	44 090	43 685
British Vice Consulate	Kongens gt 50	44 036	42 202
Danish Vice Consulate	Dronningens gt 51	41 546	42 232
Netherlands Vice Consulate	Verkstedbakken 12	42 011	55 576
Finnish Vice Consulate	Verkstedbakken 12	41 540	41 365
French Consulate	Dronningens gt 51	44 015	43 555
German Consulate	Fagernesveien 3	44 565	42 982
Swedish Consulate	Havnegt 28	41 020	
Apostleship of the Sea "Stella Maris"	Harekst gt 2	41 634	
International Seaman's Centre of the Swedish Church	Kongens gt 1	41 414	
Telegraph/Telephone Inquiry		018	

CUSTOMS OF THE PORT:

1. The ships will generally be loaded in regular turn, providing they present with starting hatches opened and holds properly cleaned and do not have ballast pumping which will exceed expected loading time.

2. For establishing turn of vessels a ship will be considered "Arrived" at the time of passing a line between the S.W. point of "Framnesodden" and "Batberget", or if anchored outside the Harbour limit, at the time of anchoring.

3. The time of arrival stated in the Notice of Readiness shall be the time when a ship has moored alongside loading berth, (finished with engines) or when loading berth is not available, at the time of anchoring.

4. Notice of Readiness shall be given by the Master on arrival whether in berth or not any time SHINC with the exception of certain holidays.

5. Loading plans, duly dated and signed, stating quantity in each hatch and rotation of loading, must be presented to the Agent on arrival and to the loading foreman as soon as the ship has moored.

6. All weights shown on the Bill of Lading will be the same as recorded on the weighing facilities of Luossavaara – Kiirunavaara AB. The weights will be given in tonnes of 1,000 kilogrammes (metric tonnes).

7. Pilots and tugs will be ordered in due time before loading is finished. The ship must leave the pier upon completion of loading when the cargo documents have been received. If any delays occur in preparing the cargo documents, or on occasion of missing crew members, or in case of any dispute or otherwise, the ship must leave the pier immediately when so ordered by the shippers, and matters will be settled while the ship is waiting in the roads.

8. Ore – Oil and OBO vessels will not be accepted for loading unless gas-free certificate has been obtained.

9. *Working Hours:*

Ordinary working hours 24 running hours.

Loading does not take place on the following holidays:

December 24th 1300 hrs. – December 26th 2200 hrs.
December 31st 1300 hrs. – January 1st 2200 hrs.
Maundy Thursday 1400 hrs. – Easter Monday 2200 hrs.
Whitsun Eve 1400 hrs. – Whitmonday 2200 hrs.
April 30th 2200 hrs. – May 1st 2200 hrs.
May 16th 2200 hrs. – May 17th 2200 hrs.

Note: The above stipulated working hours are subject to alteration without notice.

GENERAL:

Tide: Range of tide: Maximum approximately 3.30 m.
Minimum approximately 0.50 m.
Average 1.75 m.

Currents: The existing currents are mainly caused by tide water. The average speed of the current varies from 1 knot – 3 knots.

During May – June there is a constant Northwesterly flood-current setting out from "Beisfjorden" (a narrow fjord to the South of the harbour).

This current reaches an estimated speed of 4 knots – 5 knots when it coincides with the fall of the tide.

The direction of the current in the harbour basin is exposed to seasonal and local variations owing to snow-melting and changes in water temperature.

It is important that the Ship's Masters are aware of the fact that the existence of variable currents in the harbour may affect the manoeuvrability and bring vessels at anchorage in the bay to turn in dissimilar directions.

Winds: The local fall winds from Southeast occur suddenly and unexpectedly but are most frequent and strongest during the Winter season, when winds force 30 sec./m. have been measured.

Harbour Charts: Norwegian Chart No. 461 and British Admiralty Chart No. 3753.

Garbage: Trucks will remove garbage from vessels at berth on request. Garbage can also be removed by lighter if necessary from ships at anchor.

Launch Service: A regular launch service is operated and administrated by the Harbour Authorities.

Port Passenger Ferry Service: Until further notice is given, the Narvik Port Authority's passenger ferry service to/from all vessels anchored on the inner/outer roads is scheduled as follows:

INNER ROADS

Weekdays: Departure Ferryquay: 0715 – 0800 – 0900 – 1000 – 1200 – 1300 – 1400 – 1600 – 1800 – 2000 – 2200 – 2400.

Saturdays, Sundays and Holidays: Departure Ferryquay: 0800 – 1000 – 1200 – 1400 – 1600 – 1800 – 2000 – 2200 – 2400.

OUTER ROADS (outside Framnesodden)

Every day: Departure Ferryquay: 0800 – 1000 – 1200 – 1400 – 1600 – 1800 – 2000 – 2200 – 2400.

The ferryboat will call at your vessel *only* if passengers are to be put on board, *or* if the ship by means of proper signals indicates that ferry service is required.

The proper "ferryboat requested" signals are:

In daylight: A red flag hoisted at the yardarm.
In darkness: A well visible red light.

Pilot Ladders/Gangways: For safe embarkation/disembarkation of passengers to/from any vessel anchored on the roads, the following regulations should be observed:

1. Either pilot ladder or gangway to be rigged on the leeward side of the vessel. In rough weather, both a pilot ladder and a gangway must be arranged on the leeward side in such a way that the ladder can be reached from the embarking/disembarking platform of the gangway when lowered to the sea surface.

2. The pilot ladder is – when rigged – to be safely secured on the main deck, and extend to the sea surface. In order to prevent capsizing, every 4th rung of the ladder should be extended.

3. Properly secured on deck, 2 strong holding ropes should be arranged close to the pilot ladder, 1 on each side, and extend to the sea surface.

During darkness, proper lights to be rigged above ladder/gangway, so that embarkation/disembarkation may be carried out in a safe way.

4. The vessel's watchman should stand by the ladder/gangway during embarkation/disembarkation, in order to assist the passengers when necessary.

General: During unfavourable weather conditions, when the sea is rough, the captain of the ferryboat may have to cancel one or more scheduled calls at your vessel, until conditions have improved.

You may communicate with the ferryboat on VHF Channel 14.

With reference to the above regarding Ferryboat service, we regret that the last ferry from shore leaves at 2400 hrs.

Transport to the ship in the Roads between 2400 hrs. and 0715 hrs., respectively 0800 hrs. on Saturdays, Sundays and Holidays, can only be arranged in case of absolute emergency.

Officers and crew members on ordinary shore leave who miss the last ferry at 2400 hrs., will have to wait until the first ferry the following morning.

Provisions and Stores Available: Advance notice preferred.

Ship's Laundry: Can be taken care of.

Agency: Luossavaara-Kiirunavaara AB (LKAB) will handle the Agency and perform all normal service functions at this port. Tel: 082-41020. Cable address: "Malmexport Narvik". Telex: 64022. Answerback code: lkabn N. VHF (24 hour basis) calling Channel 14, Working Channels 12 and 14. Call sign: LKAB.

Advance funds sufficient to cover estimated compulsory port expenses and additional outlays, such as cash to Master, must be remitted prior to vessel's arrival.

Bank remittances should be sent to LKAB's account No. 6370.05.01045 with Christiania Bank og Kreditkasse Narvik. Cable address: "Kreditkassen Narvik". Telex: 64081. Answerback code: Cbknk n.

AUTHORITY: Narvik Havnevesen, P.O.Box 627, 8501 Narvik, Norway. *Tel:* 42142. *Contact:* G. Berntsen, Port Manager.

OSLO: 59.54 N. 10.43 E. (See Plan Book)

DOCUMENTS:

Maritime Declaration of Health.
Sealing Certificate.
2 Crew Lists.
2 Passenger Lists.
2 Lists Crew Personal Effects.
Provisions List.
3 Cargo Manifests.
Certificate of Tonnage.
Dangerous Cargo List.

PILOTAGE: Compulsory. Pilot boards at Faerder Lighthouse, 50 miles from docks. Give 24 hours notice "Faerder Pilot". Pilot station on VHF Channel 13.

ANCHORAGE: Good sheltered anchorage in Western Harbour Basin, depths up to 20 m.

RESTRICTIONS: Vessels may enter at any time. No tide or current.

MAX. SIZE: Vessels up to 34 ft. draft may berth at Filipstad Quay and Sjursoya Quay.

Tankers: Up to 36 ft. draft at Oslo, or 38 ft. draft at Fagerstrand.

HEALTH: International procedure followed to obtain Pratique. In case of suspected disease or fever on board, inform the Harbour Master's Office in advance. When arriving from a Norwegian port, Pratique is automatic.

RADIO: Communicate through Tjome Radio, call sign LGO. Harbour Master's Office equipped with VHF, Channel 16.

TUGS: Sufficient tugs available for all requirements.

BERTHING: Instructions given from Harbour Master. Masters of ships are requested to send their ETA to the Harbour Master's Office through Oslo Havne Radio, VHF Channel 12.

Filipstad Quay: Up to 11 m. depth alongside.
Sjursoya Quays: Up to 11 m. depth alongside.
Vippetangen: Up to 8 m. depth at Pier No. 2.
Pipervika: Up to 12 m. depth at Akershus Pier.
Bjorvika: Up to 7 m. depth at Lang Quay.
Bispevika: Up to 9 m. depth at Sorenga Pier.
Gronlia: Up to 8 m. depth alongside.
Kongshavn Quays: Up to 7 m. depth alongside.
Bekkelaget: Up to 11 m. depth alongside.
Ormsund: Up to 8.0 m. depth alongside.

BULK CARGO FACILITIES: Container traffic handled at Filipstad, Bekkelaget and Sjursoya North.

Sorenga Pier equipped for palletised cargo handling and containers, Ro/Ro.

15 berths for Roll-on/Roll-off traffic. 2 Container cranes for 20 ft., 30 ft. and 40 ft. units, up to 35 tons (net) and container handling equipment, quay cranes and mobile cranes and floating Ro-Ro ramp.

Sjursoya North: Cement, phosphate, grains, molasses and containers.
Sjursoya South: Gasoline and oil and propane gas.
Bekkelaget North: Molasses, general cargo and oil.
Sorenga: General cargo and containers.
Kongshavn: Building material.
Ormsund: Containers.

STEVEDORES: Arranged by Agents. Working hours 0700-1600 hrs., Saturdays overtime is voluntary.

TANKERS: Also see "Slagen".

Oslo: Oil pier at Sjursoya, depth alongside 12 m. A tug required to stand by during discharge.

Fagerstrand: Terminal operated by Norske Braendselolje A/S situated in Oslo fjord, 12 miles S. of Oslo. 1 berth for tankers up to 30 ft. draft. 1 berth for tankers up to 38 ft. draft.

MEDICAL: All facilities available. Masters to advise by radio prior to arrival if medical attendance required on board.

DENSITY: Salt water, 1025.

FRESH WATER Available by pipeline from all quays.

FUEL: All grades available, ex-wharf at many quays. Can be delivered by barge.

FIRE PRECAUTIONS: 2 boats fully equipped with fire-fighting equipment.

CUSTOMS ALLOWANCES: 200 cigarettes allowed weekly, 1 litre of wine and 1 litre of spirit weekly, for each man.

CARGO GEAR: International Safety Regulations to be observed.

IDENTIFICATION CARDS: Not required.

CONSULS: Following countries are represented at Oslo:

Austria
Bangladesh
Belgium
Brazil
Bulgaria
Canada
Chile
China
Colombia
Costa Rica
Cyprus
Cuba
Czechoslovakia
Denmark
Ecuador
Egypt
Finland
France
Gambia
Germany F.R.
Great Britain
Greece
Guatemala
Hungary
Haiti
Honduras
Hungary
Iceland
India
Indonesia
Iran
Ireland
Israel
Italy
Japan
Jordan
Korea
Lebanon
Liberia
Luxembourg
Mexico
Morocco
Netherlands
Pakistan
Panama
Philippines
Poland
Portugal
Romania
Senegal
Singapore
South Africa
Spain
Sudan
Sweden
Switzerland
Thailand
Tunisia
Turkey
Uruguay
U.S.A.
U.S.S.R.
Venezuela
Yugoslavia

REPAIRS: All types of hull and machinery repairs can be effected.

REPATRIATION: All facilities available without restrictions.

AIRPORT: Fornebu Airport situated 8 km. from city centre. Regular services to Europe, South America, Far East and U.S.A.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: January 1st; Good Thursday; Good Friday; Easter Monday; May 1st; May 17th; Whit Monday; Christmas Day; Boxing Day.

No cargo work normally on Saturday, Sunday and Holidays.

POLICE/FIRE/AMBULANCE: Police, Tel: 11.00.11; Fire, Tel: 42.99.00; Ambulance, Tel: 20.10.90.

TELEPHONES: Can be placed on board vessels at most quays.

SHORE LEAVE: No restrictions.

DEVELOPMENTS: Extensions of the land areas in the port by approx. 200,000 sq. m. Quay extensions of 1,000 m. Storage halls in hills, 100,000 sq. m. or more, sheds and service buildings.

AUTHORITY: Oslo Port Authority, Prinsens Gate 2, 0152 Oslo 1. Postal address: P.O.Box 230, Sentrum 0103 Oslo 1. *Tel:* (02) 41 6860. *Telex:* 17191 Oport N. *Cables:* Osloport. *Contact:* General Manager.

RISOR: 58.43 N. 09.14 E.

DOCUMENTS:
3 Crew Lists.
3 Customs Lists.
Ship's Register.
Bill of Lading.
PILOTAGE: Contact Arendal Pilot.
ANCHORAGE: In 15 fathoms depth.
MAX. SIZE: 10,000 d.w.t., draft 28 ft.
RADIO: Farsund and Tjomoy Radio. VHF Channel 16. No radar.
TUGS: No tugs for berthing.
STEVEDORES: Available. 24 hours notice of ETA required.
FRESH WATER: Available by pipe-line at berth.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: May be performed by ship's crew.
CUSTOMS ALLOWANCES: Tobacco: Wine/Spirits: 200 cigarettes per crew member for 10 days. 3 bottles spirit for ship's Master only for 10 days.
IDENTIFICATION CARDS: Not needed.
CONSULS: French and Swedish.
REPAIRS: No shipyard.
AIRPORT: 10 miles; every day service.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: Work can be arranged by 100% overtime.
TELEPHONES: Can be arranged on board.
AUTHORITY: Risor Havnekontor, Tangegt 12, 4950 Risor, Norway. *Tel:* 50450. *Cables:* Havnekontoret, Risor. *Contact:* J. Espevik Svendsen, Harbour Master.

SARPSBORG: 59.17 N. 11.07 E.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
1 Health Certificate.
3 Manifests.
1 Bill of Lading.
2 Tobacco/spirit Lists.
PILOTAGE: Pilot ordered by Faerder Losstasjon or Herfol Losstasjon via Tjome Radio. Harbour Office can be contacted by VHF.
Pilotage compulsory for all vessels of 100 g.r.t. and over.
ANCHORAGE: Between Struten Light and Stromtangen Light.
MAX. SIZE: 24 ft. draft.
HEALTH: No particular action necessary, but Agent to be informed.
RADIO: Tjome Radio.
VHF: Harbour Master's Office, Channels 16 and 12. Day and night service.
TUGS: Small harbour tug available.
BERTHING: A Roll-on/Roll-off berth has been built to handle vessels of up to 6,000 tons gross. Depth alongside 28 ft. Vessels will moor alongside the old Alvim Pier enabling them to work through the side doors and stern doors.
STEVEDORES: Ordered through Agent.
MEDICAL: If medical attention necessary Agent must be informed in advance.
FRESH WATER: Only at Alvim Kai, average 15 t.p.h.
FUEL: Fuel obtained only with tank cars.
GANGWAY/DECK WATCHMEN: No gangways from shore. Watchman can be obtained.
OPENING/CLOSING HATCHES: Carried out by crew.
CUSTOMS ALLOWANCES: 100 gm. tobacco or 200 cigarettes per crew member. Wine 1 litre per member or 1 bottle of spirit.
IDENTIFICATION CARDS: Have to be used for Melloes Quai only.
CONSULS: Denmark, Finland, Iceland, Sweden and Greece have vice-consulates.
REPAIRS: Deck and engine repairs possible.
DRY DOCKS: One for 3,100 tons d.w.t.
REPATRIATION: No facilities.
AIRPORT: Fornebu Airport 110 km. from Sarpsborg. Served by regular airlines.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: 1st January; 1st May; 17th May; 25th/26th December. No work on these days.
POLICE/AMBULANCE/FIRE: Police 52000; Ambulance 52040; Fire 51234.
TELEPHONES: No arrangements exist for placing telephones on board.
SHORE LEAVE: No restriction.
AUTHORITY: Sarpsborg Havnevesen, Strandgaten 2, 1700 Sarpsborg, Norway. *Tel:* 031-52073. *Contact:* Harbour Master.

SAUDA: 59.40 N. 06.22 E. (See Plan Book)

DOCUMENTS:
Health Certificate.
Crew List.
Derat Certificate.
Ship's Register.
PILOTAGE: Skudefjorden Pilot Station, Tel: 047-58337 (or pilot boat "Skudefjord" on VHF). Kvitsoy, position Lat. 59° 05′ N., Long. 05° 20′ E.
ANCHORAGES: Safe anchorages everywhere in Sauda Harbour area.
RESTRICTIONS: No restrictions on night entry – but Sea Pilots usually refuse to take in vessels over 10,000 d.w.t. between 1800 hrs. and 0600 hrs. during Winter time, October-March.
MAX. SIZE: *Sauda Smelteverk A/S* (Private Quays): Draft 30 ft. – but vessels over 30 ft. are allowed to get alongside at owner's own risk. Length no restriction. Breadth, 75 ft.
Official Quays: Length of quays – 230 ft. and 200 ft. Max. draft 13 ft.
RADIO: Cable Agents giving ETA, draft and cash requirement via Rogaland Radio.
VHF: VHF installed in Agents office, Channels 16 and 9.
TUGS: Not necessary.
BERTHING: May take place at any time provided quay available.
(1) Import Quay: 250 m. long. 2 unloading towers with a capacity of about 3,500 tons ore per day.
(2) Export Quay: 115 m. long. 2 loading cranes with a capacity of about 1,600 tons ferro alloys per day. One loading machine with capacity 400 t.p.h.
STEVEDORES: Ordered by Agents. Normal working hours 0700 – 2300. Saturdays and Sundays – No work.
MEDICAL: Masters to advise by radio prior arrival if medical attendance required aboard. Modern hospital.
DENSITY: Brackish in port area, average salinity 2.39%.
FRESH WATER: Good fresh water available, delivery irrespective of quantity.
FUEL: No fuel available at Sauda, must be ordered from Stavanger.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed to open and close.
CERTIFICATES: Registered Tonnage Certificate required.
CUSTOMS ALLOWANCES: Master: 400 cigarettes or 400 gm. tobacco, 2 litres spirits/wine.
Crew: 200 cigarettes or 250 gm. tobacco, 1 litre spirits and 1 litre wine.
CARGO GEAR: No additional requirement.
IDENTIFICATION CARDS: Not necessary. Crew list at gate.
CONSULS: No consulates at Sauda. Nearest in Stavanger.
REPAIRS: Minor repairs possible.
DRY DOCKS: No dry dock at Sauda. Nearest in Stavanger and Haugesund.
REPATRIATION: Repatriation may take place.
AIRPORT: Stavanger and Haugesund.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Labour Day (May 1st); National Day (May 17th); Ascension Day; Whit Monday; Christmas Day; Second Christmas Day (December 26th) (no work on these days).
POLICE/AMBULANCE/FIRE: Police 93266; Ambulance 92811 or 92511; Fire 93222
TELEPHONE: Not available to vessels.
REGULATIONS: Strictly prohibited throw wastes or garbage into sea within port area, fjords and on Norwegian coast.
DELAYS: All vessels loaded/unloaded in turn, very seldom any congestion in port.
AUTHORITY: Sauda Havnevesen, Raadhusgaten, N-4201 Sauda, Norway. *Tel:* 047-92585. *Contact:* Henning Hansen, Harbour Master.
AGENT: Sauda Skipsekspedisjon A/S, P.O.Box 111, N-4201 Sauda. Cables: Saudex. Telex: 40947 Agent N. Tel: 047-92415, 047-92260 or 047-92586. Office hours: 0830 – 1600 local time. Telephone after office hours: 047-93019 (Capt. Aaker). VHF Channels 16 and 9.

SKIEN (incl. Menstad and Vollsfjorden): 59.12 N. 09.38 E.

DOCUMENTS:
Clearance documents, forms obtainable from Customs Officers on arrival.
Derat Certificate.
Bill of Lading.
Manifests.
2 Crew lists.
Ship's Register.
PILOTAGE: Ship's Agent gives ETA pilot station 24 hours before arrival and direct to Pilots 2 hours before arrival. Telegraphic address: Pilot station, Langesund. VHF Channel 16 to be used when contacting Pilots. Pilot boards at Steingrunnen light buoy, Langesund Bay, (58° 55′ N., 09° 44′ E.). Flag, sound and morse signal "G". Pilotage compulsory for all foreign vessels but dispensation can be obtained for smaller Scandinavian vessels.
MAX. SIZE: Between Porsgrunn and Skien, Norsk Hydro have loading place, Menstad, for vessels up to 425 ft. length and max. draft 18.5 ft. Between Menstad and Skien Grain Silo for vessels with max. length 425 ft. and max. draft 18 ft. 06 in. At Skien vessel's length must not exceed 335 ft. and max. draft 18 ft. 06 in.
RESTRICTIONS: No restrictions on night entry for vessels of above mentioned sizes.
BRIDGES: On passage from sea, vessels pass Porsgrunn where there is a lifting bridge with breadth 30 m. Signals for passing bridge inward: 1 long and 2 short sound signals. Outward signals, 1 long and 1 short sound. There is also a bridge at Brevik: Max. height 45 m.
RADIO: Tjome Radio/LGT or Farsund Radio/LGZ.
TUGS: Modern tugs available.
BERTHING: Also see "Max. Size".
Vollsforden:
Bridges: From sea vessels pass Brevik Bridge, max. height 45 m.
Overhead Cable: At Kjeoya there is an overhead cable which permits an airdraft of max. 37 m.
Tugs: A number of modern tugs are available.
Berthing: 2 quays, No.1; length 135 m. (Ro-Ro facilities with ramp of 20 m. breadth in operation) depth from 8.5 m. to 11 m. No.2; length of quay 125 m. but open to sea with mooring pillar at 250 m. from ro-ro ramp. This quay has Ro-Ro facilities with ramp of 30 m. breadth, and depth of 11 m. for full length.
Cranes and Ro-Ro Materials: No stationary cranes, any size of mobile crane and floating cranes up to 250 tons available. Container truck of 30 tons and 22 tons lift/capacity, 2 Tugmasters of 21 tons towing power. Forklifts from 3 – 6 tons, Warehouse 6,000 sq.m. Unlimited open space.
Density: Practically fresh water.

DENSITY: At Menstad and Skien practically fresh water.
STEVEDORES: Ordered by Agents.
FRESH WATER: Obtainable.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: By crew or stevedores.
CUSTOMS ALLOWANCES: 400 cigarettes and 4 bottles spirit for the Master. 200 cigarettes and half a bottle spirit for each crew member.
CONSULS: Belgium, Netherlands, Sweden, Germany, Finland.
REPAIRS: All repairs possible. Dry dock: Lifting capacity: 2,000 tons. Radar/radio services can be arranged through Agents.
MEDICAL: All medical assistance to be arranged via Agents.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Eve (half day); Easter Monday; Labour Day (1st May); Ascension Day; National Holiday (17th May); Whit Monday; Christmas Eve (half day); Christmas Day; (26th December), New Year's Eve (half day).
REPATRIATION: Facilities exist for effecting crew changes and repatriation.
AIRPORT: International at Oslo and Skien airport.
AUTHORITY: Skien Havnevesen, Postboks 1234, 3701 Skien, Norway. *Tel:* 035-95435. *Mobile telephone:* (094) 50439. *Telex:* 21160 Sterm-N. *Contact:* P. Hagen, Harbour Master.

SLAGEN: 59.20 N. 10.31 E. (See Plan Book)

LOCATION: A/S Norske Esso's Slagen Refinery is located on the West coast of the Oslo Fjord near Tonsberg, about 20 miles from the Ferder Light House. The Marine Terminal, a finger pier, is located at Slagentangen, near the refinery.

DOCUMENTS:

Ship's Register (Certificate)	(For Customs examination)
Derat Certificate	(For Customs examination)
Health Declaration	(For Customs examination)
Cargo Manifest	(For Consignee)
3 Copies Provision List	(For Customs information)
3 Copies Crew List	(For Customs and terminal information)
1 Copy Personal Effects List	(For customs information)

NOTE: Crew list to show date and place of birth for each crew member.

PILOTAGE: Pilotage is compulsory for all foreign flag ships. The pilot boats lay in a harbour on Hvasser Island from where a radar and VHF watch is kept. The pilot station listens out on Maritime Channel 16 and when your ship is about 10 miles from Ferder Island (Store Faerder) contact should be made. You will be given instructions as to where and how the Pilot will board. The Pilot boards East of Ferder Island from a 20 m. long white boat marked LOS and capable of doing 18 knots. In bad weather, ships of less than 10,000 d.w.t. may have to proceed in as far as Fulehuk before a Pilot can board.

The pilotage service is provided by the Norwegian Government. There are about 50 Pilots all recruited from the Norwegian Merchant Navy after they have obtained a 1st Mate's licence. Only Pilots with at least 10 years service pilot large tankers.

Berthing Pilot: A Berthing Pilot will board off Lysboye from one of the berthing tugs. He will come equipped with a portable VHF set with which to talk to the tugs and will also advise mooring procedures.

The Berthing Pilots are also Norwegian Government Pilots from the Horten Pilotge District. There are only 3 Pilots, all senior men recruited from other pilotage districts and their experience factor is high.

APPROACHES: The approaches to the Oslo Fjord via the Skagerrak are free of any particular navigational dangers and there is deep water close to the Norwegian coast.

Tankers of 40,000 d.w.t. or larger are requested to keep a minimum distance of 15 nautical miles off the Norwegian coast until entrance to the Oslo Fjord, where traffic separation scheme is in force inside territorial waters.

There are no particular navigational difficulties in the Oslo Fjord, all depths of less than 35 m. (115 ft.) can be easily avoided.

Deep draft vessels (40,000 d.w.t. and larger) in fully loaded condition, should exhibit the internationally recognised 3 red vertical lights at night and a black cylinder by day, indicating that the vessel is hampered in her ability to comply with the Steering and Sailing Rules and that other vessels should not impede her safe navigation in the Fjord.

Navigation Aids:
Norske Esso has provided two leading light/marks, one on the jetty itself and one on shore at Stubrekk. These lights when in line bear 309° true and mark a deep approach (least depth 25 m., 82 ft.) between Lysboye and the Slagen Terminal jetty.

ANCHORAGE: North of pier head. Particulars regarding anchorage will be given by Pilot.

MAX. SIZE: Tankers up to 350 m. length and 66 ft. draft can be berthed. Berth No.1 designed for vessels 250,000 d.w.t. Depth of water alongside 69 ft.

HEALTH: Clearance is effected on arrival. International procedure followed to obtain Pratique. In case suspected disease or fever on board inform port authorities in advance.

RADIO: 72 hours prior to arrival at pilot station, radio Agent ETA, cash, bunkers, personnel, bonded stores, or other special requirements. ETA should be repeated 48, 24 and 12 hours prior arrival pilot station. All radio messages should be transmitted via Rogaland Radio, and when within closer range via Tjome Radio. When Pilot has embarked, contact should be established with Slagen Harbour Office via VHF Channel 16 or 14 for exchange of information prior to berthing, such as berth availability, current, wind, draft, ballast to be discharged, etc.

TUGS: A total of 8 tugs ranging from 1,100 to 5,200 b.p.h. can be made available to shipping at Slagen. However, none of the tugs are normally stationed at the terminal, except when a vessel of 20,000 d.w.t. or larger is discharging or loading. On such occasions one or two tugs will be kept on stand by at the terminal. If additional tugs are required they must be ordered from Horten or Oslo.

The number of tugs required for berthing are ordered by the Agent in accordance with the berthing Pilot's advice. All tugs are diesel powered, single screw, single rudder and suitable for towing on the hook or alongside. When on the hook, ship's towlines are used.

The tugs are normally made fast enroute between the Slagentangen light buoy and the terminal.

Communications: All communications between Pilot and tugs will be made over the Pilots' portable VHF. Should there be any breakdown, ship's whistle will be used. It is very important that communications within the ship between bridge, forecastle head and poop be good, particularly on the larger ships.

BERTHING: The main effect on ship handling in the berth approaches comes from the current, which for most of the time sets S.E. across the jetty which is aligned N-S. Ships berthing on the West side of the jetty (Berths 2 and 3) will tend to set down onto the berth. The marine terminal has a current speed and direction meter and advises the Pilot.

A submersible oil boom enclosing the pier is anchored on the sea bed, and the boom and its system of anchorage will be damaged if vessel's anchors are dropped in the shaded area on plan. *Except in emergency situations anchors should not be used within the shaded area.* Manoeuvres to and from the berths should be discussed with the Harbour Office which will give you information on currents.

Ice affects navigation at the terminal about every 6 years, and Pilots use special manoeuvres to deal with ice situations.

The Terminal: The terminal consists of a finger pier. On the East side (Berth No.1) the water depth is 21 m. (69 ft.) and vessels with max. length 365 m. (1200 ft.) and max. draft 20.1 m. (66 ft.) can be accommodated. On the West side (Berth Nos. 2 & 3) there is a water depth of 11.5 m. (37 ft. 9 in.). The West side is mainly used for coasters and barges, but vessels up to a max. length of 192 m. (630 ft.) with max. draft 10.6 m. (34 ft. 9 in.) can also be accommodated on this side of the pier.

Fendering: On Berth No.1, the breasting face is protected with timber-faced gravity fenders and timber-faced panels backed by laminated rubber units. Berths Nos. 2 & 3 are fendered with timber-faced panels backed by rubber tubing.

Limitation on Berthing Speeds/Angles: On Berth No. 1, the *maximum* speed of approach ranges from 8.15 m. (26.5 ft.) per minute for a fully loaded 100,000 d.w.t. tanker to 5.19 m. (17 ft.) per minute for a fully loaded 250,000 d.w.t. tanker. (See Plan). For the larger tankers, the target should be 1 m. (3 ft.) per minute. The speed of approach is monitored by Doppler Radar and the Pilot is kept frequently informed of the speed. The angle of approach should be as small as possible, a parallel landing being the target.

Berthing: Tankers for Berth No. 1 are usually berthed port side to, by paying off the bow to starboard and having tugs push the ship bodily, against the prevailing current, on to the berth. Headlines are usually run out first to the Northern-most dolphin.

The larger ships berthing on Berths Nos. 2 and 3 usually go port side to berth with tugs on the hook holding the ship off against the current. The approach to Berths Nos. 2 and 3 is normally facilitated by the fendered sliding front.

Moorings: Moorings are taken ashore by mooring boats and lifted onto dolphin/jetty by power capstans.

Shore Moorings Used: On Berth No. 1 a 48 mm. (1.875 in.) diameter shore-based mooring wire is placed on board large tankers as an extra aft back spring. The wire has an eye which is put over the bitts after being taken on board by rope messenger. No shore moorings are used on Berths Nos. 2 and 3.

Gangway: At Berth No. 1, near the Southern end of the breasting island, there is a telescopic hydraulic operated gangway reaching a deck height of about 22 m. above sea level. Also a portable gangway is available to accommodate handy size vessels. Whenever the latter one or when the vessel's own gangway is used, the vessel shall provide a safety net under the gangway, and a lifebuoy with not less than 15 fathoms of line attached should be positioned near the gangway for use in an emergency.

Cautionary Advice, Mooring Supervision: Breast moorings at the jetty have a scope of only 25 m. (82 ft.). The offsetting current at Berth No. 1 makes the tending of moorings during the discharge of a tanker with large light freeboard a very important operation and should only be done under the supervision of a ship's officer.

The area dredged to 21 m. is limited, and a VLCC needs to take care that it does not get too far to the South. When in position, there is 25 m. (82 ft.) clearance between the stern and the edge of the dredged area. It is for this reason a shore wire backspring is provided.

It is of the utmost importance that large vessels, in particular, are moored adequately and that moorings are carefully tended.

Before hard arms are connected, the ship's moorings and the mooring equipment are checked by the terminal personnel.

Special Regulations: If the wind speed reaches 20 knots or offsetting current reaches 0.6 knots, the discharge of a VLCC is stopped and the arms drained. All tank lids and ullage plugs must be closed and a tug will be ordered to stand by.

If the wind speed reaches 25 knots or offsetting current reaches 0.7 knots, the arms will be disconnected and the ship ordered to stand by for possible departure.

Weather forecasts in addition to actual current and wind velocity readings are available from the terminal office.

Preparation of Manifold Area: All crude ships should arrive with manifold stripped to the outboard 12 in. flange. All derricks, stays, radio aerials, etc. should be removed from the vicinity of the manifold to be used.

Ullaging, temperatures, water finding, etc.: On arrival ullages, temperatures and water dips should be taken by ship's personnel in co-operation with terminal representative. Vessel equipped with an inert gas system will be requested to depressurize tanks sufficiently to allow for sampling, ullaging, temperature and water dipping on arrival, and for checking of oil and residues left on board after completion of discharge.

Deballasting Facilities: All ballast must be pumped ashore unless from segregated tanks. Maximum quantity receivable, if advanced notice given, is 12,000 cu.m.; any quantity greater than this will cause delays.

Restriction on concurrent loading, discharging, ballasting, deballasting. Max. back pressure at ship's manifold:

No concurrent loading, discharging, ballasting, deballasting is allowed unless the two systems are entirely separate. Should a discharging ship require to reduce her freeboard due to weather or hard arm/hose limitation, she will be required to stop all cargo operations while ballast is taken on. The responsibility for ensuring remaining cargo is not contaminated by water rests with the ship. Maximum back pressure at ship's manifold is 10.55 kg./sq.cm. (150 p.s.i.).

HOSES:

Grades of Cargo, Bunkers Handled, Connections and Lines:

Crude oil and most grades of clean and dirty products and pressurized LPG are handled at the terminal.

Berth No. 1: Crude oil is received/shipped via 4×12 in. fully counterbalanced hard arms with 12 in. ASA flanges. Maximum pressure at ship's rail 12 kg./sq. cm. (170 p.s.i.).

Clean products are handled through 2×10 in., dirty products through 1×10 in. and bunkers through 1×8 in. all fully counterbalanced hard arms. The 8 in. bunker arm can also be used for loading dirty products. LPG is handled through 1×3 in. hose or through 1×4 in. half hose half metal arm.

Berth No. 2: Dirty products are handled through 1×10 in. and 1×6 in., clean products through 2×8 in. all half hose half metal arms. Also 1×12 in. fully counterbalanced hard arm for clean products.

Berth No. 3: (Coaster berth). Dirty products are handled through 1×6 in., clean products through 1×6 in. and LPG through 1×4 in. all half hose half metal arms.

All flanges are to ASA Standard.

There are no check (non-return) valves in the import lines; and, therefore, the contents of shore tanks which are situated on high ground will flow back into ship if allowed to do so.

The crude oil discharge rate is up to 10,000 t.p.h., 1 booster pump of 400 cu.m./hr. capacity is used on steam cracked naphtha imports.

BALLAST: Shore ballast capacity 100,000 bbls. All ballast to be discharged ashore.

MEDICAL: Medical attention and hospital facilities available.

DENSITY: 1017 – 1020.

FRESH WATER: Fresh water is available ex-jetty at a rate of 30 cu.m. an hour. Water is supplied by 2 in. hose and is metered. Cost is $1 per ton. Quality is good. Quantity required must be included in arrival cable.

Distilled Water: Distilled water is not normally available and can only be supplied with great difficulty. Maximum notice must be given. It is expensive.

FUEL: All main grades of bunkers, lubricants and hydraulic oils are available. Quantities and specification required must be included in the cable of advice of ETA. Lubricants and hydraulic oil are available in bulk as well as barrels.

FIRE PRECAUTIONS: Special safety regulation forms given when berthed.

GANGWAY/DECK WATCHMEN: Oil Pollution/Safety Inspector placed on board all vessels over 20,000 d.w.t.

CUSTOMS ALLOWANCES: 200 cigarettes/or 200 gm. tobacco and 1 bottle spirits for each man.

IDENTIFICATION CARDS: Gate pass delivered to ship when berthed.

CONSULS: Denmark, Finland, France, Great Britain, Netherlands, Spain, and Sweden have representatives in Tonsberg. W. German Consul in Sandefjord. All countries represented in Oslo.

REPAIRS: All kind of ship repairs can be undertaken by nearby ship yards. Service for radio, gyro, radar, echo sounder, data bridge, etc. available. Also classification surveyors representing NV, LR or AB can be called upon.

No ship may immobilise its engines, steering gear, etc. while alongside the Slagen jetty.

DRY DOCKS: Available at Sandefjord about 35 miles from Slagen.

REPATRIATION: Changes of crew are available. Transportation by train and plane from Oslo (about 100 km. from Slagen), passenger lines from Oslo. Hotel accommodation available at Tonsberg (10 km. from Slagen).

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Labour Day (1st May) 17th May; Ascension Day; Whit Sunday and Whit Monday; Christmas 25th and 26th: Discharging/loading all days.

POLICE/AMBULANCE/FIRE: Ambulance/Fire local at the refinery. Police Tonsberg 13355.

TELEPHONES: Available at berth.

SERVICES: Tanker cleaning services available at Horten, about 15 miles from Slagen.

GENERAL: *Safety:* A safety inspector will attend the vessel upon arrival, complete a safety check-list and remain on board during cargo and bunkering operations.

Oil Pollution, Clean-Up Facilities: A very serious view is taken of oil pollution of Norwegian coastal waters and every effort must be made to prevent it.

Should oil pollution occur, it must be reported and tackled at once.

The terminal has supplies of oil dispersant, spill booms, sawdust and two mechanical removal devices. These will be used to combat any oil pollution and costs will be billed to the ship if the ship is responsible for the pollution.

Firefighting Facilities: The terminal is equipped with comprehensive fire fighting facilities including an 800 cu. m./hour fire pump, a supply of foam compound, remote-controlled elevated foam cannons and other fire hydrants, hoses, etc. A tug which stands by the terminal has fire fighting facilities and other fire fighting tugs can be summoned in an emergency.

Shore Steam, Shore Electricity: Normally not available.

Stores: All regular ship's stores, laundry and other similar facilities can be supplied by local ship's chandlers.

Tank Cleaning: Tank cleaning and gas freeing are not allowed alongside.

SHORE LEAVE: Shore passes are issued on board on arrival and each crew member must be in possession of a shore pass before he goes ashore.

AUTHORITY: A.S. Norske Esso, P.O.Box 388, N-3101 Toensberg, Norway. *Tel:* 033 – 30080. *Telex:* 21558 ERAFF N. *Cables:* Essoship. *Contact:* Thor Gran, Harbour Master.

AGENCY: Several shipbroker firms are established in Tonsberg and may be called upon as acting Agents for owners and/or charterers. A/S Norske Esso, S & T Dept. act as general Agent for all Exxon owned tonnage, cable address "Essoship" Tonsberg.

STAVANGER: 58.58 N. 05.44 E. (See Plan Book)

DOCUMENTS:

Declaration of Health, 1 copy.

List of Goods, including stores, 1 copy.

Crews Lists of Goods liable to duty, 1 copy.

List of Goods, 2 copies for each port of discharge. All Bills of Lading to be entered with marks, numbers, weight and quantity.

General List of Goods, one copy.

A form for entering ports of call where discharging will take place.

PILOTAGE: Vessels approaching from sea and desiring a Pilot should order at least 24 hours' notice in so far as possible and confirm arrival at Pilot station at 2 hours' notice. Advance order can be sent in following manners:

(a) From ships at sea over radio direct to Sea Pilot watch (calling frequency 2182 kHz, from 2 minutes past until 10 minutes past each full hour, or over VHF radio-telephone calling, frequency 156.80 MHz; Channel 16).

(b) From ships at sea over coastal radio station to pilot station or pilot office.

(c) From broker or shipowner over telephone to sea pilot station or to any pilot office which will immediately convey report to sea pilot station.

Vessels lying in port and desiring Pilot will order Pilot from nearest pilot office during its office hours and if possible at 4 hours notice.

Vessels approaching from sea as well as vessels lying in port shall when making an advance order state name and destination of vessel and whether 1 or 2 Pilots are desired.

Pilot will be despatched to ships in accordance with advance orders, and vessels are therefore requested to comply with foregoing rules as far as possible in order to avoid having to wait for Pilot.

International provisions for summoning Pilots by signal flags or blue lights, etc., are still in force, but should in future be used as a supplement to radio communications or as sole communication in emergencies.

Pilots are taken on board at:

A. Feistein Lighthouse, 19 miles South of Stavanger, or in bad weather 6 miles North of lighthouse under the lee of Rott.

B. Skudefjorden, 18 miles N.W. of Stavanger. In bad weather under the lee of Karmoy or Kvitsoy, as weather permits.

Pilot boats are stationed at Tananger and Skudesneshavn. No boats are out cruising.

ANCHORAGE: Found in the Byfjord, 3 nautical miles North of Stavanger. Pilots recommended when anchoring.

MAX. SIZE: Largest depth alongside goods and passenger quays is 30 ft. Depth alongside oil refinery 16.5 m. Max. draft for tankers, 48 ft.

BERTHING: The port has a total quay length of approximately 3,400 m. The coasting and the foreign trade is located in the East and West harbour, comprising the 3 main quays namely the Bekhus Quay, the Skagen Quay and the Strand Quay. These quays measure 2,000 m. with depth alongside 24 ft. – 30 ft. The quays are equipped with 1×60 tons portable crane and 4×3 tons travelling cranes. A floating crane with a lifting capacity of 100 tons available.

Grain: Rogaland Felleskjop: Capacity for storing 72,000 tons quay length 190 m., depth alongside 48 ft. Discharging capacity 200 t.p.h. Stavanger Havnesilo: Storing capacity 140,000 tons, quay length 170 m., depth alongside 51 ft. Discharging capacity 500 t.p.h.

Roll-on/Roll-off: Traffic is offered by a ferry berth constructed for ships up to 10,000 g.r.t., depth alongside 30 ft.

Containers: Sandvika Container Quay. Length 170 m., depth alongside 40 ft., also fitted with Ro/Ro facilities for vessels up to 20,000 g.r.t.

Offshore oil-exploration bases: Aker-Norsco A/S at Risavik, Tananger, North Sea Exploration Services A/S, Dusavik, Stavanger.

TANKERS: Discharge at Sola refinery terminal where there are 3 berths, depth alongside up to 16.5 m. It is intended to enlarge these facilities to accommodate 200,000 d.w.t. vessels with restricted draft.

Esso Norske: 3 nautical miles South of central harbour, depth alongside 45 ft.

Norske Shell A/S: 14 nautical miles S.W. of central harbour, depth alongside 38 ft.

Norske Braendselolje A/S: 7 nautical miles South of the central harbour.

Texaco Oil: 1 nautical mile from central harbour, depth alongside 25 ft.

A/S Kulimport: Coal and coke. Length of wharf 116 m., depth alongside 27 ft.

RADAR/VHF: Radar service for inner harbour.
TUGS: Normally used.
STEVEDORES: No particular ETA advices required.
MEDICAL: Agents should get advance notice to secure speedy service. Hospital facilities available.
DENSITY: 1025, no change in relation to state of tide.
FRESH WATER: Delivered from quay or from water boat.
FUEL: Normal grades available without advance notice.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Usually carried out by crew.
CUSTOMS ALLOWANCES: Tobacco: 20 cigarettes per day. Wine and/or Spirit: 2 bottles of wine or 1 bottle of brandy.
CONSULS:

	Tel. No.		*Tel. No.*
Belgium	555334	Greece	525030
Denmark	57001	Iceland	532025
Finland	532030	Netherlands	520080
France	527500	Sweden	527500
West Germany	522594	United Kingdom	525801

REPAIRS: All kinds of repairs available.
DRY DOCKS: One, 545 by 75 by 24 ft. Marine slipway up to 1,500 d.w.t.
AIRPORT: 10 km. from port. Airlines to Continent, U.S.A. and U.K.
TIME: GMT plus 1 hour in Winter. Summertime GMT plus 2 hours from 6th April 1980 – 15th September 1980.
HOLIDAYS: 1st January; Maundy Thursday; Good Friday; Easter Monday; 1st May; 17th May; Whit Monday; Christmas Day and Boxing Day.
POLICE/AMBULANCE/FIRE: Police Tel. 534000; Ambulance 531000; Fire 522111.
TELEPHONES: There are arrangements for placing telephones on board.
SHORE LEAVE: No restrictions.
AUTHORITY: Stavanger Havnevesen, Nedre Strandtg. 51, 4000 Stavanger, Norway. *Tel:* 04532045. *Cables:* Stavanger Havnevesen. *Contact:* Bergsvik Edgard, Harbour Master.

SUNNDALSORA: 62.41 N. 08.36 E.

DOCUMENTS:
2 Crew Lists
2 Passenger Lists
Declaration of Health
General Declaration
Cargo List
Cargo Manifest
Personal Effects List

PILOTAGE: Telegraphic address of Pilot Station: "Grip Pilot". Description of Pilot Boat: White hull, orange wheelhouse, length 43 ft., speed 18 knots. The Pilot has to be taken on board 1 nautical mile East of Grip Lighthouse (Lat. 63° 14′ N., and Long. 07° 37′ E.), no alternative area. No anchorage for vessel awaiting Pilot.
ANCHORAGE: Poor conditions in the Sunndalsfjord. Possible to anchor at Freifjord and Bolgsvaet West of Kristiansund.
RESTRICTIONS: No restrictions.
MAX. SIZE: Max. draft 31 ft. 06 in.
HEALTH: "Declaration of Health" to be issued before arrival.
RADIO: Rogaland Radio and (20–30 hrs. before arrival) Alesund Radio.
VHF: For inner harbour on Channel 16 (normally in use when mooring).
RADAR: No Port Radar Service.
TUGS: Not available in Sunndalsora. Nearest Alesund, steaming time about 12 hours. Tugs only required when Pilot/Master find it necessary.
BERTHING: Length of quay: 1,007 ft. Max. draft 31 ft. 06 in. Load/discharge normally by shore equipment.
CRANES: 1×10 tons, 1×15 tons, 1×25 tons and 1×50 tons.
BULK CARGO FACILITIES: 1 grab crane 280 t.p.h.
SPECIALISED CARGO HANDLING FACILITIES: None.
BRIDGES: None.
STEVEDORES: No notice required.
MEDICAL: Doctors available in Sunndalsora. Nearest hospital: Kristiansund or Molde (60 miles from Sunndalsora).
TANKERS: The usual rules for tankers to be complied with.
DENSITY: Average density of the port 1019 – 1020.
FRESH WATER: Available.
FUEL: Available in smaller quantities (from Mobil and BP).
FIRE PRECAUTIONS: No specific precautions.
CONSULS: None. Nearest at Kristiansund: Great Britain, Denmark, Finland, France, Netherlands, Portugal, Sweden, West Germany.
REPAIRS: Only small repairs can be carried out.
DRY DOCKS: None.
SURVEYORS: Nearest Kristiansund (Norske Veritas) and Bergen (Lloyd's).
GANGWAY/DECK WATCHMEN: Not required.
HATCHES: Opening/closing to be carried out by crew.
CUSTOMS ALLOWANCES: Quantity permitted for each Crew member to be held out of bond: 200 cigarettes or 200 gm. tobacco, 1 bottle spirit and 1 bottle of wine.
CARGO GEAR: Load /discharge effected by shore gear.
REPATRIATION: Crew changes and repatriation possible.
AIRPORT: Kvernberget (Kristiansund) and Aro (Molde), both at 60 miles distance and with regular air service.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: May 1st and May 17th. No cargo work can be arranged on those days.
POLICE/AMBULANCE/FIRE: Police Tel.: 91166, Ambulance (doctor) 91479, Fire 91122, Lifeguard 91933.
TELEPHONE: On request, telephone may be rented from Ardal og Sunndal Verk a.s.
SERVICES: Not available. Nearest Kristiansund or Molde.
SHORE LEAVE: Crew members allowed ashore.
IDENTIFICATION CARDS: Ardal og Sunndal Verk a.s. demands identification cards, obtained from Dock Master.
REGULATIONS: Forbidden to take photographs within boundaries of Ardal og Sunndal Verk a.s.
DELAYS: Usually no delay if notice of arrival given to Agent in good time.
GENERAL: No cargo on Saturday and Sunday.
DEVELOPMENTS: No developments expected in foreseeable future.
AUTHORITY: Sunndal Verk A/S, 6600 Sunndalsora, Norway. *Tel:* (073) 91011. *Telex:* 55222 Sual N. *Cables:* Ardalverk, Sunndalsora. *Contact:* Eilif Gran, Tel: (073) 91011, ext. 330.

SVOLVAER: 68.14 N. 14.35 E.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Custom Documents.
Stores List.
Manifest.
Bill of Lading.
Ship's Papers.
Valid Derat Exemption Certificate.

Ships arriving from Finland, Denmark, and Sweden need Customs permit from last port.
PILOTAGE: Vessel approaching Svolvaer may call Bodo Radio, 2182 kHz. by radio asking for Svolvaer harbour pilot. Telegraph ETA Svolvaer 24 hours before arrival. All communication with harbour pilot boat on VHF Channels 16 and 12. Exact position for pilot boat is Lat. 68° 11′ 13″ N., Long. 14° 36′ 00″ E. Different types of pilot boats are used, but usually the pilot boat flies pilot flag. No special requirements for boarding, except usual pilot ladder.
ANCHORAGES: Boundaries for safe anchorage Lat. 68° 13′ 36″ N., Long. 14° 37′ 00″ E.; Lat. 68° 13′ 48″ N., Long. 14° 36′ 12″ E. Depth in area about 25 fathoms.
MAX. SIZE: Max. permissible length 520 ft., draft 30 ft.
HEALTH: Pratique is automatic, given by radio. Vessel only required fly yellow flag. In event of any suspected disease or fever on board call Svolvaer Harbour Master by telephone via Bodo Radio (2182 kHz).
RADIO: Call Bodo Radio by R/T 2182 kHz or VHF-Channel 16. Svolvaer Harbour office VHF-Channel 16/12.
TUGS: Small tugs available.
STEVEDORES: All information regarding gangs, loading and discharging rates can be obtained by calling ship's Agent in Svolvaer via Bodo Radio.
MEDICAL: Hospital facilities available.
TANKERS: There are 2 discharging berths for oil carriers in Svolvaer. Diameter of lines at B.P. berth 6 in. and 8 in., at Shell 8 in. At the Shell berth tankers moor stern to and discharge through stern lines.
DENSITY: Density in port is 1025.
FRESH WATER: Delivered from piers by hose with a rate of about 20 t.p.h. Water is also available at B.P. berth.
FUEL: All kinds of fuel oil are available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally done by ship's crew but can also be done by stevedores.
CERTIFICATES: Ship's Register.
CUSTOMS ALLOWANCES: Tobacco: Quantity for each crew member is 20 cigarettes or 20 gm. tobacco and 20 leaves cigarette papers per day. Wine and/or Spirit: For crew members 1 bottle spirit or wine (0.75 litre) for each passenger 0.25 litre.
IDENTIFICATION CARDS: Not required.
CONSULS: Swedish and Italian consulates.
REPAIRS: Nearly all types of engine and deck repairs. Both for internal combustion and turbine engines.
DRY DOCKS: No dry docks in port, only slipways for ships up to 240 ft.
REPATRIATION: Facilities for effecting crew changes are available.
AIRPORT: 4 km. from town. Nearest main airport is Bodo.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: Official holidays stated by Norwegian Government.
POLICE/AMBULANCE/FIRE: Tel. 70177.
TELEPHONES: Telephones on pier.
SERVICES: Compass adjusting.
GENERAL: Svolvaer is the main port in Lofoten Island, and a typical fishing harbour. Radar, Decca, Radio and VHF service, and all other electrical services can be executed.
AUTHORITY: Svolvaer Havnevesen, P.O.Box 121, 8301 Svolvaer, Norway. *Tel:* 088-71011. *Cables:* Harbourmaster. *Contact:* Eilif Mosand, Harbour Master.

THAMSHAVN (Thamshamn): 63.20 N. 09.52 E.

DOCUMENTS:
Health Certificate.
Crew List.
Passenger List.
Store list.
Bill of Lading.
3 Manifests.

PILOTAGE: 24 hours prior arrival Grip, Pilots can be ordered by cable to "Loskontoret, Kristiansund N." or by telephoning Kristiansund Pilot Office, tel. 74333 during office hours, and 74595 private. Pilots can also be ordered by radio through Kristiansund Radio or through Agents. Use Channel 16 for VHF., contact to Kristiansund Pilot Office, or pilot boat. Pilot boat equipped with radio telephone 2182, carries red and white flag during day and white and red light during night.

ANCHORAGES: Vessels should anchor 150 m. off piers where depth between 26 m. and 30 m. Anchoring between piers and buoys is not permitted.
MAX. SIZE: Depth at Import Quay 24 ft. MLW. Ships of 28 ft. draft can load at Pyrites Quay.
RADIO: Vessel should route ETA cables to Agent through Rogaland Radio or Aalesund Radio.
TUGS: No tugs needed or available.
BERTHING: Berthing only between 0700 and 2400 hrs.
CARGO HANDLING: 1 berth is specially equipped for handling of concentrates in bulk. Ships of 28 ft. draft can load at the pyrites quay. Loading by conveyor. There are no berths equipped for containers or Ro-Ro traffic, nor berths handling liquid chemicals or LPG carriers.
STEVEDORES: Arranged by Agent. No ETA to stevedores necessary.
MEDICAL: Hospital facilities available.
FRESH WATER: Available, delivered at berth.
FUEL: No fuel supplies available. Nearest port for such supplies is Trondheim.
GANGWAY/DECK WATCHMEN: Not compulsory, and this service is left to the discretion of the Master.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Ship's Register.
CUSTOMS ALLOWANCES: Each crew member allowed 20 cigarettes on shore. When leaving ship, 200 cigarettes and 1 bottle of wine and 1 bottle of spirit permitted.
IDENTIFICATION CARDS: Not required.
CONSULS: Nearest consul available in Trondheim.
REPAIRS: Only small repairs can be carried out.
DRY DOCKS: None.
AIRPORT: Nearest airport, Vaernes, 62 miles N.E. Served by regular airlines with several flights per day.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: January 1st; Easter Holidays; Ascension Day; Whit Monday; 1st and 17th of May; December 25th and 26th.
POLICE/AMBULANCE/FIRE: All mentioned services obtained through Agent or by contacting local telephone exchange.
TELEPHONES: No facilities for placing telephones onboard ships.
BANKS: Forretningsbanken A/S, 7300 Orkanger, Norway.
SERVICES: Provisions available.
SHORE LEAVE: Permitted.
AUTHORITY: (Private Wharves): Orkla Metal A/S and Co., P.O.Box 10, 7301 Orkanger, Norway. *Tel:* (074) 80400. *Telex:* 55628. *Cables:* Orkla, Orkanger. *Contact:* Mr. A Lauritzsen, Shipping Manager.

TONSBERG: 59.16 N. 10.25 E.

DOCUMENTS:
Ship's Register.
Crew Lists.
Customs Manifest for each crew member (cigarettes, spirits, etc.).
Store List. Cargo Papers. Health Certificate.
PILOTAGE: Sea Pilots obtainable from Ferder Pilot Station. Pilots normally take vessels to berth.
ANCHORAGES: Good anchorages at Byfjorden and Traela; anchorages for large vessels are found in Narverodbukten and Husoyflaker.
MAX. SIZE: 18 ft. draft for East entrance and 24 ft. draft for West entrance. Up to 30,000 tons in ballast.
RADIO: Cable ETA via Tjome Radio prior arrival.
TUGS: Available.
BRIDGE: 1 bascule bridge over East entrance. Working days open 0600 to 2100 hrs., holidays 0900 to 1700 hrs. Signal 1 long and 2 short to open bridge. Opening can also be arranged by VHF during night-time. Horizontal clearance 88 ft., depth 22 ft.
Pleasure craft have to pay dues before bridge opens.
MEDICAL: Medical, dental and hospital facilities available.
DENSITY: Occasionally brackish.
FRESH WATER: Available from hydrants at quays.
FUEL: Delivered by lorry.
GANGWAY/DECK WATCHMEN: Available on request.
CUSTOMS ALLOWANCES: 200 cigarettes or tobacco and 1 bottle spirits, for each man.
CONSULS: (Vice-Consuls) France, Netherlands, Finland, Denmark, Sweden and Spain.
REPAIRS: All types of repairs available.
DRY DOCKS: At Kaldnesmek, a shipyard for total length of 515 ft. The shipyard is building ships up to about 50,000 d.w.t.
REPATRIATION: Available by train from Tonsberg, plane and passenger lines from Oslo (about 100 km. from Tonsberg). Fairly good hotel accommodation in Tonsberg.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day; Maundy Thursday; Good Friday; Easter Monday; Labour Day (1st May); 17th May; Ascension Day; Whit Monday, Christmas (25th and 26th December). Mostly no working.
POLICE/AMBULANCE/FIRE: Police 13355; Ambulance 13370; Fire 11656.
TELEPHONE: Lines available on board vessel.
SERVICE: Mostly all services or equipment available from Tonsberg or Oslo. Inform prior arrival.
SHORE LEAVE: Crew members allowed to go ashore.
DELAYS: Ice during January and February, but port kept open by ice breakers.
AUTHORITY: Tonsberg Havnekontor, 3100 Tonsberg, Norway. *Tel:* 033-11278. *Cables:* Tonsberg Havnekontor. *Contact:* Reidar Sturod, Harbour Master.

TROMSO: 69.39 N. 18.58 E.

DOCUMENTS:
Trade Certificate.
Tonnage Certificate.
Certificate of Nationality.
Number of Crew and Passenger Lists.
Customs and Health Documents.
Manifest and Bills of Lading.
PILOTAGE: Telegraphic address of pilot station is "Tromso Pilot Station". Order latest 12 hours before arrival.
ANCHORAGES: Depth at anchorage is 15 m. – 35 m.
RESTRICTIONS: No restrictions on night entry.
RADIO: Harstad Radio, all VHF Channels.
VHF: Harbour Office Channel 16 and 12. 20 miles from town.
TUGS: If necessary, join vessel North or South end of harbour.
BERTHING: Ships can berth at quay, depths up to 34 ft., lengths of quay 100 m. – 300 m. (New harbour, Breivika), equipped for container handling, truck 20 tons.
BRIDGES: Tromso Bridge, 60 m. wide, 36.5 m. high.
Sandnessundet Bridge, 120 m. wide, 41 m. high, min. dredged depth 10.4 m.
STEVEDORES: Ordered by Agent. No ETA to stevedores necessary.
MEDICAL: Master to advise by Radio prior to arrival if medical attention required aboard. Hospitals in town (University).
TANKERS: There are 4 oil berths:
Norol – 20 ft. depth.
Mobil Oil – 21 ft. depth.
Esso – 31 ft. depth.
Shell – 39 ft. depth.
FRESH WATER: Most berths supplied by pipe-line.
FUEL: All grades available.
FIRE PRECAUTIONS: Ordinary restrictions.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Crew allowed to open and close.
CUSTOMS ALLOWANCES: Crew members 200 cigarettes or 20 cigars or 100 gm. tobacco, and 1 bottle spirits.
IDENTIFICATION CARDS: Not required. Seaman's book.
CONSULS:

Belgium	81074–82417	Sweden	85090–81336
Denmark	81148–82310	Germany	81088–85665
France	81144–85663	Italy	85040–82604
Great Britain	84050–82395	Netherlands	85040–82604

REPAIRS: All engine and instrument repairs. Shipbuilders' Yard.
DRY DOCKS: 4 slipways 80 ft. – 222 ft. 1 small dock.
AIRPORT: 5 km. from town.
TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.
HOLIDAYS: No work on New Year's Day and Christmas Day.
POLICE/AMBULANCE/FIRE: Police 85080; Ambulance 81113; Fire 004. Port Pilot Station 81191–82537.
SURVEYORS: Lloyd's, N.V.
SHORE LEAVE: Permitted.
REGULATIONS: Harbour Pilot compulsory. Max. speed in port waters 6 knots. Ships size passing Tromso Bridge max. 7,000 tons displacement.
DELAYS: Minor delays only.
SERVICES: Compass adjusting, stores, etc.
AUTHORITY: Tromso Havnevesen, P.O.Box 392, Kirkegt. 1, 9001 Tromso, Norway. *Tel:* (083) 81191. *Contact:* Captain Knut A. Mortensen, Harbour Master.

TRONDHEIM: 63.25 N. 10.24 E.

DOCUMENTS: See "Bergen".
PILOTAGE: Harbour Pilot: Havne Kontoret, Tel: 20233 and 28015 or VHF Channel 16.
RESTRICTIONS: The fjord is very deep and easy to enter. The channel is clear and ice-free throughout the year.
MAX. SIZE: Controlled by depth at berth.
HEALTH: Call "Havne Kontoret" by radio for Free Pratique.
RADIO: Orlandet Radio (also VHF).
TUGS: Arranged by Agent.
BERTHING:
Pier 1, Ro/Ro berth length 442 ft., depth 26 ft.

River Harbour	Quays	1–10	Depth alongside up to	26 ft.
Outer Harbour	,,	12–18	,, ,, ,, ,,	18 ,,
Inner Harbour	,,	19–24	,, ,, ,, ,,	20 ,,
Ilha Pier	,,	26–32	,, ,, ,, ,,	34 ,,
Pier II	,,	A–D	,, ,, ,, ,,	30 ,,

Rosenborg Quay	Length	630 ft.	,, ,, ,, ,,	16.5 ft.
Ladehammer Quay	,,	760 ,,	,, ,, ,, ,,	16.5 ,,
Strandvei Quay	,,	1190 ,,	,, ,, ,, ,,	16.5 ,,
Transit Quay	,,	780 ,,	,, ,, ,, ,,	29 ,,
Coal Crane Pier	,,	700 ,,	,, ,, ,, ,,	23 ,,

BRIDGES: Skansen Bridge, Jernbanebrua, and Brattor Bridge divide Inner Harbour.
STEVEDORES: Available.
MEDICAL: All facilities available.
TANKERS: Berth Depth 9 m. – 12 m. Total length of quays 270 m. easy access. Mobil, Esso, Norsk Olje (Norol) and Shell installations.
FRESH WATER: By hose from quay.
FUEL: Available.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirit, 1 bottle wine allowed each man.

IDENTIFICATION CARDS: Required.

CONSULS:

Belgium	Tel. 19 100	Greece	Tel. 29 771
Costa Rica	,, 30 000	Ireland	,, 22 861
Denmark	,, 20 580	Italy	,, 32 080
Finland	,, 20 025	Netherlands	,, 29 590
France	,, 28 526	Portugal	,, 20 361
Germany	,, 29 644	Spain	,, 20 689
Great Britain	,, 35 590	Sweden	,, 31 000

REPAIRS: All types of deck and engine repairs are possible.

DRY DOCKS: 1 available with capacity of 3,600 d.w.t. and a floating dock for vessels of 8,000 d.w.t.

REPATRIATION: Can be arranged.

AIRPORT: 35 km. away from port. Regular airlines.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

HOLIDAYS: Christmas (2 days); Easter, (4 days); 17th May; Ascension Day; Whitsun, (2 days).

POLICE/AMBULANCE/FIRE: Police 27500; Ambulance 21-510; Fire 21-505.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Plans for reconstruction of outer Basin with new bridges planned.

AUTHORITY: Trondheim Havnevesen, Havnekontoret, Havnegt 15, 7000 Trondheim, Norway. *Tel:* 28015. *Contact:* Einar Kjolsrod, Harbour Master.

VADSO: 70.04 N. 29.45 E. (See Plan Book)

DOCUMENTS:

Trade Certificate.
Tonnage Certificate.
Certificate of Nationality.
Number of Crew and Passenger Lists.
Customs and Health Documents.
Manifests and Bills of Lading.

PILOTAGE: Vessels approaching from sea and desiring Pilot should order at 24 hours' notice and confirm arrival at Pilot Office, Vadso, a 2 hours' notice. The advance order can be sent over coastal radio station to Pilot Office, the Harbour Master, Vadso, Tel: Vadso 51235 or 51143. Harbour Pilot has to be taken on board in position Lat. 70° 45′ N., Long. 29° 41′ E. VHF Channel 16.

ANCHORAGES: Anchorage for vessels up to 400 tons in basin, with depths varying between 14 ft. and 21 ft. Larger vessels anchor West of the mole in 16 m. to 20 m. Outer harbour inside breakwater, inner harbour, further to East. Entrance to inner harbour is by buoyed and lighted channel 1,560 ft. long and 115 ft. wide, this has been extended by the addition of a fishery basin 750 ft. long 800 ft. wide. Outer harbour is 1,000 ft. long, 700 ft. wide, depths 15 to 30 ft.

MAX. SIZE: Max. length of vessel 300 ft. and breadth 45 ft. Draft 16 ft. Ship about 3,000 g.r.t.

HEALTH: Health documents necessary.

RADIO: Call Vadso Coastal Radio Station, through which contact by telephone Agent or Harbour Master or Vadso Harbour on VHF Channel 16.

STEVEDORES: Stevedores arranged. Agent Tel: 51395 Vadso.

TANKERS: Only small tankers can discharge. Discharging berth only for 500 g.r.t. tankers, draft 13 ft.

FUEL: Gas and diesel oil.

FRESH WATER: Water available on all quays.

GANGWAY/DECK WATCHMEN: Watchmen necessary. Master can use ship's crew as gangway and deck watchmen. Not necessary to use watchmen from the Watchmen Service.

CUSTOMS ALLOWANCES: Tobacco: Wine/Spirit: For 10 days, each crew 200 cigarettes, or 200 gm. tobacco. 0.25 litre spirit, for each crew member.

CONSULS: Finland, Tel: 51225 Vadso.

REPAIRS: Only smaller types of deck and engine repairs are possible.

AIRPORT: Vadso Airport 4 km. from port. Flights 4 times per day.

TIME: GMT plus 1 hour. GMT plus 2 hours in Summer.

POLICE/AMBULANCE/FIRE: Police 51271 or 51593 Vadso; Ambulance 51845 or 51691 Vadso; Fire 51122 or 51554 Vadso.

AUTHORITY: Vadso Havnevesen.

NOTES

Please also advise Shipping Guides Ltd.

Sultanate of Oman

GENERAL:

ANCHORING:

Notice to Mariners No. 1/84:

All vessels anchoring South of Latitude 24° parallel and within the territorial waters of Sultanate of Oman (12 miles), for the purpose of waiting for orders or in order to carry out engine repairs, should anchor within Lat. 23° 40′ N., and Long. 58° 10′ E. and Long. 58° 27′ E.

No vessel shall anchor in any other part of Mina Al Fahal except when actually loading/discharging on SBM buoys. All cargo ships should call at Mina Qaboos when handling cargo or at anchorage West of Fahal.

Signed: Superintendent General Maritime and Ports Affairs.

Notice: Received from ship's Agent.

Vessels can anchor within Lat. 23° 53′ N. and the coastline of Oman and between the meridians of Long. 58° 10′ E. and Long. 58° 28.5′ E., which is West of Fahal Island. On arrival contact Mina Qaboos Port Control on VHF Channel 16 or 14 for reporting arrival and request anchoring position giving vessel's particulars. Vessel not permitted to lower life-boat or unauthorised boats to lie alongside. Agent requires 5 copies Crew List, 1 Stores List, 1 Crew Declaration List and 1 Vaccination List. Distance to anchorage being such we have to commute by tugboat hired at O.R. 55/– per hour or part thereof. Launch service possible only during daylight hours and weather permitting. Following particulars of vessel should be furnished in advance:

1. Flag/port of registry.
2. D.w.t./g.r.t./n.r.t./call sign.
3. Ports of call including last port and next port.
4. Nationality of Master and Crew.
5. Whether any dangerous/hazardous cargo on board.

Vessels on arrival should be cleared through Immigration, Customs and Health by an Agent.

MINA-AL-FAHAL: 23.39 N. 58.32 E. (See Plan Book)

DOCUMENTS: Required on arrival (provided by vessel):

6 copies Crew List (2 copies required by Pilot).
2 copies of Vaccination List.
2 copies Stores List.
1 copy Bonded Stores List.
1 copy Personal Effects List.

All other necessary papers will be supplied on arrival by the Berthing Master.

PILOTAGE: The Berthing Master will board incoming tankers off Fahal Fairway Buoy, or as directed by VHF. Tanker should arrive at this position, make a good port lee, and take way off.

Harbour steaming is deemed to start at this point. The port side derrick should be rigged and crew standing by at the derrick ready to lift the mooring equipment from the launch when the Berthing Master comes on board.

The pilot access should be in good condition, clean and ready on the port side. Tankers of 70,000 tons Summer deadweight and above in ballast or partly loaded condition should have either a pilot hoist or a combination of accommodation ladder and pilot ladder rigged.

Also see "Ship Supply Service".

ANCHORAGES: *Tankers:* Before anchoring tankers should contact Fahal Control on VHF Channel 12 for a designated anchoring position.

In all cases tankers are required to anchor at least 2 miles West of Fahal Island and at least 2 miles clear of the Omani coastline.

Cargo ships:

i. Fahal Is. Lt. Brg. 340° × 2.0′
ii. Fahal Is. Lt. Brg. 345° × 1.6′
iii. Fahal Is. Lt. Brg. 000° × 1.7′
iv. Fahal Is. Lt. Brg. 015° × 1.6′

Ships proceeding to an anchorage within the Port Area should pass North of Fahal Island and under no circumstances enter the prohibited area unless instructed to or accompanied by a Mina al Fahal Berthing Master.

RESTRICTIONS: Open sea approaches.

All tankers calling at Mina-al-Fahal must be equipped with inert gas system in good working order.

MAX. SIZE: No length limitation. Draft up to 96 ft. Tankers up to 550,000 d.w.t. can be accommodated.

HEALTH: When advising ETA, include in message whether any sickness on board.

Port Health Officer, Immigration and Customs board with Berthing Master; Port Officer will carry out any necessary vaccinations. 'Q' flag to be flown until Pratique granted.

RADIO/VHF: ETA messages should be sent to "Petromar Muscat" via Muscat Radio (call sign A4M). If no contact can be established with Muscat Radio, the message should be sent through an alternative coast station such as Bahrain Radio.

The message should contain the following information.

(*a*) ETA in local time and date in plain language to avoid multilation.
(*b*) Whether there is any sickness on board.
(*c*) Whether any crew require medical treatment and very briefly the nature of the complaint.
(*d*) Last port of call.

VHF communications should be established as soon as possible calling Fahal Control on Channel 12. The range is about 80 miles to the Northward but only 20 miles to Eastwards because of screening by mountains. Working Channel is Channel 12 and is manned 24 hours a day by either Fahal Control or Fahal Pilots. The station may call vessels on Channel 16, although a permanent watch on Channel 16 will *not* be maintained. The mooring launches are also equipped with Channels 16 and 12 but mooring operations are carried out using UHF radio sets.

TUGS: None available and not required.

BERTH DESCRIPTION: 3 single buoy moorings with floating hose strings. SBM lights are Iso.W.

SBM No. I: Crude export and marine fuel oil import and export.

This buoy is served by 2 × 30 in. submarine crude lines and 2 × 10 in. submarine fuel lines each 10,300 ft. long.

The floating crude hoses are 2 × 810 ft. long × 20 in. reduced to 16 in. for manifold connection. Same hoses are used for fuel oil imports, these lines having a displacement connection ashore for emptying the crude content. Bunkering is by a single 12 in. hose 820 ft. long.

This buoy is capable of handling any vessel up to 554,000 tonnes d.w. and max. sailing draft allowed at this SBM is 64 ft.

SBM No II: For crude and bunker export and is served by 1 × 40 in. submarine crude line and 2 × 10 in. submarine fuel oil lines each 13,980 ft. long. The floating crude hoses are approx. 2 × 1,100 ft. long x 20 in. reduced to 16 in. at manifold connection. Bunkering is by a single 12 in. floating hose. Maximum size ship 550,000 tonnes d.w. and max. draft of 96 ft.

SBM No. III: Products imports only (Gas Oil, Mogas, Jet-A1) served by 2 × 10 in. submarine hoses, length 8,003 ft. Floating hoses are 660 ft. in length with 8 in. manifold connections. Max. size of ship is 100,000 tons and max. sailing draft allowed at this SBM is 46 ft.

Loading crude is by gravity and rates vary. If loading from upper tank farm 9,000 t.p.h. but only 5,500 t.p.h. if loading from lower tank farm.

Bunker rate is approx. 450 t.p.h., bunker discharge at SBM-I maximum 3,000 t.p.h., maximum back pressure 150 p.s.i.

BERTHING: Vessels berth head to buoy and are provided with 2 x 4.5 in. mooring snotters picked up from the mooring launch when the Pilot boards. Vessels over 230,000 tonnes d.w. are provided with two 15 in. × 80 ft. nylon braidline snotters. Connection at SBM-III is to two 12 in. plaited nylon lines 150 ft. long; at SBM-I and SBM-II to two 15 in. plaited nylon lines 150 ft. long. A suitable messenger rope should be provided by ship. An Assistant Berthing/Loading Master will advise in all mooring and hose connection operations which are carried out by ship's staff.

HOSE CONNECTIONS: Ship's port side derrick must plumb over relevant manifold. This derrick should be ready on arrival at the pilot boarding area to pick up the mooring gear and reducers (if necessary), safety chains, etc. for hose connection. Derrick to be in good condition and be rigged for a SWL of a minimum of 10 tons for SBM-I and II and 5 tons for SBM-III.

LOADING: Every 2 hours ship-shore check has to be made via the Loading Master.

BALLAST: No facilities for reception of dirty ballast.

Tankers should arrive with clean ballast, lines and pumps and no oil should be released into the sea.

MEDICAL: Medical treatment can be given by Petroleum Development Oman L.L.C.'s medical staff to crews of ships on Time Charter to Shell International Marine and on ships using P.D.O.L.L.C.'s tanker agency facilities. A charge of R.O.24 is made per hour for launch hire and transport facilities. Dental treatment available but at least 24 hours' notice required.

REPAIRS: It is not permitted to immobilise main engines whilst moored to the SBMs; under no circumstances should the propeller be turned in the ahead direction.

DENSITY: Approximately 1026.

FRESH WATER: Not available.

FUEL: Fuel oil only available. Limited store facilities and at least 24 hours' notice is required.

A wide range of marine lubricants is available and is supplied in drums. At least 24 hours' notice is required for supplying lubricants.

REPATRIATION: Crew changes are possible at Mina-al-Fahal provided the Agent receives at least 6 days' notice giving full particulars of embarking/disembarking crew, such as full name, nationality, place and date of birth, passport/seaman's book number with date and place of issue and expiry date, and also destination for repatriation of disembarking crew members, to enable Agents to obtain necessary permits and arrange air passages.

Notice for crew change to be given as soon as possible as the issue of N.O.C's. (Non Objection Certificates) can take up to 7 days.

N.B. If the information required as above is received on a Thursday or a day preceding a holiday, the time mentioned of 72 hours will not be sufficient as no permits can be obtained from the Authorities during holidays.

TIME: GMT plus 4 hours all year round.

SHORE LEAVE: Not possible.

SHIP SUPPLY SERVICE: The port of Mina al Fahal is operated by Petroleum Development Oman, and they have 3 launches, 2 of which are on 24 hours' duty every day. These launches would assist in a marine emergency, but are normally used for ships loading at Mina al Fahal, or for ships using their agency, Petromar Muscat. Mina al Fahal Pilots keep watch on VHF Channel 12.

GENERAL: *Liquor.* Trading in liquor strictly prohibited and no alcoholic drink should be offered to Arab nationals.

AUTHORITY: Petroleum Development Oman L.L.C., P.O.Box 81, Muscat, Sultanate of Oman. *Tel:* 607230, 607231, 607232. *Telex:* 3212 ON Muscat. *Cables:* Petro Muscat. *Contact:* Captain P. Branton, Port Captain, or Duty Berthing Master.

AGENT: See "Port Qaboos" (Mutrah).

Petroleum Development Oman L.L.C. can also act as Agent. Petromar Muscat are on VHF Channel 12.

PORT QABOOS (Mutrah): 23.37 N. 58.34 E.

(See Plan Book)

Muscat has ceased to be a commercial port and instead vessels now call at Port Qaboos.

PORT LIMITS: From the level of HWS at a point near Ras Kab at Long. 58° 33′ 12″ East on a line due North to Lat. 23° 41′ North;

Thence due East to Long. 58° 35′ 36″ East;

Thence due South to Jazirat Muscat;

Thence in a generally Southerly direction by the line of HW on the Western side of Jazirat Muscat to Pinnacle Rock;

Thence S.W. to the Easternmost point of Siraz al Gharbiyah;

Thence by the line of HWS to the point of commencement.

DOCUMENTS:

Required on Arrival:

Clearance from Last Port.
4 Copies Crew List.
1 Copy Maritime Health Declaration form with ports of call from commencement of voyage.
3 Copies of Crew Personal Declaration List.
3 Copies of Ship's Bonded Stores List.
2 Copies Vaccination List.
6 Copies Passenger List.
3 Copies In-Transit Passenger List.

To be Airmailed in Advance:

3 Copies Hatch List, and other details of vessel (Flag, Draft, LOA, Last Port, Next Port, G.R.T., etc.).
3 Hazardous Cargo Lists.
3 Heavy Lift Lists.
5 Copies Cargo Stowage Plans.
9 Copies Cargo Manifest.
1 Copy Freight Manifest.
2 Copies Bills of Lading.

Customs and Immigration Requirements for Vessels Entering and Leaving Ports: 24 hours' advance notice, cargo manifest and passenger list, crew personal declaration. Cargo vessel is allowed to enter and complete Immigration formalities alongside except if ordered otherwise.

PILOTAGE: Compulsory for vessels other than exempted vessels as defined in Port Rules and Regulations and Port Tariff.

Arrival notice requirements: ETA, LOA, draft 72 hours, 48 hours, 24 hours before arrival. Berthing and unberthing – 24 hours a day.

MAX. SIZE: Depth of entrance channel 34 ft. at LAT. Also see "Berthing".

Circular: Issued by the Harbour Master.

As you are aware in the past the Port has limited the length of vessels to 750 ft. in order to maintain its high standard of safety.

Recently we have been approached by some Shipping Agents requesting us to admit ships considerably over 750 ft. with a draft of 30 ft.

The port is keen to attract more ships, if possible with greater lengths and drafts than currently permitted. Upgrading of facilities is underway although will take some time to complete.

Meanwhile, on an experimental basis, ships up to 785 ft., after suitability clearance from Harbour Master's Department, will be permitted to use the Port. Agents must apply for initial suitability clearance for every vessel over 750 ft. and up to 785 ft. (240 m.) in length, under their Agency.

Every vessel found suitable will have to give an undertaking indemnifying the Port against all losses before such berthings are undertaken.

For your guidance only, vessels with good engines and extra manoeuvrability powers of bow thrust and stern thrust will be given clearance.

If the Principals agree we look forward to berthing such vessels up to 785 ft. (240 m.) in length.

This experiment will be carried out for a period of 6 months during daylight hours only commencing from 1st January, 1985.

APPROACH: Port Qaboos has a very open approach with a deep water anchorage. The hilly coast is radar conspicuous. Lights on Fahal Is., Jazirat Muscat and the Breakwater make night navigation fairly simple. There is no appreciable current once inside the bay.

Ship Masters calling at Mina Qaboos are advised that vessels navigating under their charge and approaching Mina Qaboos whether from East or West must first pass 5 cables Eastwards of Mina Al-Fahal Fairway Buoy before making final approach to Mina Qaboos Anchorage or Breakwater Head for picking up Pilot.

In no case should they keep close-in to Khawr Muscat Entrance or remain waiting in the Prohibited Anchorage Area.

ANCHORAGES: Vessels should anchor Northwest of the breakwater within the area enclosed by the following perimeters:

1. A line extending 060° (T) from Port Qaboos Breakwater.
2. The Westernmost extremity of Port Qaboos.
3. A line extending 325° (T) from Muscat Forward Leading Light after crossing perimeter (1).

All areas described above are clearly defined in the current edition Admiralty Chart No. 2869.

Prohibited Anchorage Area: The area enclosed by the following perimeters is a Prohibited Anchorage Area:

North Boundary: The parallel of Lat. 23° 41′ 00″ N.
East Boundary: The meridian of Long. 58° 36′ 00″ E.
South Boundary: Sultanate of Oman coastline.
West Boundary: Muscat Forward Leading Light bearing 145° (T) from seaward and Port Qaboos Breakwater Light bearing 240° (T) from seaward.

Severe penalties are imposed for vessels infringing the above prohibited area.

TUGS: Four twin screw tugs, 1,400 h.p., 1,600 h.p., 1,900 h.p. and 2,400 h.p. Tugs normally join vessel 1 mile N.N.W. off breakwater light.

HEALTH: International Health Regulations apply. Pratique may be granted by the Port Health on receipt of following information:

1. All Cholera vaccinations valid.
2. Valid Derat Certificate.
3. No sickness on board.
4. No sickness at last Port.
5. Country of origin and date of departure.

Port Health normally board alongside and issue Health Form. They require:

1 Crew List.
1 Vaccination List.
Valid Derat Certificate.
Last Port Clearance.

RADIO: Port Control can be contacted on VHF Channel 16 or Channel 14 or on R/T via Muscat Radio. 24 hour operation except Friday when hours of operation depends on actual movement in the Port.

Notice of Arrival: Vessels should advise their Agents of their ETA, LOA and draft. The Agents will in turn inform Port Services Corporation Ltd. ETA from Masters of vessels should also be cabled direct to Harbour Master, Port Services Corporation Ltd. (Telex No. 5233 ON) 72, 48 and 24 hours in advance of arrival.

Three hours prior to arrival off the port, vessels should contact Mina Qaboos Signal Station on VHF Channel 16 and working Channel 14 and request berthing instructions, etc.

BERTHING: There are 9 deep water berths: 3 coaster berths and 1 berth for launches. The berths vary in length from 76 m. to 228 m. and are sheltered by a breakwater on one side and cliffs on the other.

Supporting the berths are 9 modern transit sheds facing broad uncluttered aprons, providing both covered and open storage space. Two berths front directly on to large open areas ideally suited for rapid discharge of containers and oversized units requiring direct delivery.

Berth	*Length*		*Depth at LAT*		*Max. draft*
No.	(ft.)	(m.)	(ft.)	(m.)	(ft.)
1	600	183	41	12.5	34
2	600	183	41	12.5	34
3	750	228	32	9.8	31.5
4	600	183	30	9.1	30
5	600	183	30	9.1	30
6	650	198	30	9.1	30
7	600	183	30	9.1	29.5
8	600	183	30	9.1	28
9	450	137	13	4.0	13
10	500	152	13	4.0	13
11	600	183	30	9.1	30
12	250	76	10	3.1	10
13	500	152	7	2.2	7

Nos. 1 and 2, 4, and 5, 7 and 8 Berths are "in line", therefore larger vessels can occupy part of a second berth when necessary.

Transit Sheds and Cold Storage Facilities: 9 transit sheds and 1 cold store adjacent to the port, capacity of cold store 3,000 tonnes plus cool rooms, blasting facility and ice making plant. Facilities for electrical connection of refrigerated containers with Kheops and Wilco Plugs.

SPECIAL HANDLING FACILITIES: Bulk Cement Silos: Capacity 6,000 tons, supplied by underground pipe line from the berth. Vessels carrying bagged cement can only be accepted for discharge providing their LOA does not exceed 500 ft. (152.4 m.) and draft 29 ft. (8.84 m.).

Grain Silos: Capacity 60,000 tons supplied by quayside underground conveyor from the berth. In conjunction, 2 km. from the port, a highly automated mill produces various flour and animal feed products for local consumption and export.

The port has modern container and Ro/Ro handling equipment, including a Mafi-type roll trailer system, backed up by mobile cranage of up to 150 tons capacity and heavy fork-lifts.

The container terminal is equipped with 2 highly sophisticated 35 ton gantry cranes supported by 5 heavy duty forklifts. The terminal has a large storage yard to accommodate about 2,200 TEUs.

Containers are also accepted from self-sufficient vessels. Containers are transported by trailers and handled in stacking area by mobile crane or forklift truck. Reliance Mercury Tractors of 160 b.h.p. with Mafi-type trailers are available for Ro/Ro vessels. LASH and BACAT service.

CRANES: 12 mobile cranes 3 tons – 150 tons including 1 mobile crane 70 tons and 1 mobile crane 150 tons, 57 fork lift trucks 3,000 lb. – 10,000 lb., 5 fork lifts 35 tons, 10 tractors and 36 trailers available.

There are no fixed quay cranes.

STEVEDORES: The labour position is fair, except in the date-picking season (June to August).

Landing rates: bagged cargo 4/600 tons per day; general 200 tons per day; timber 100 – 150 tons per day during fair weather provided no congestion on jetty and if cargo stowed in more than 3 hatches.

Working Hours:

Saturdays/Wednesdays	Day Shift	0700 — 1300	
		1300 — 1500	Lunch Break
		1500 — 1700	
		1700 — 1900	On overtime
	Night Shift	2000 — 2300	
		2300 — 2400	Tea break
		2400 — 0600	
Thursdays	Day Shift	0700 — 1400	
	Night Shift	2000 — 2300	
		2300 — 2400	Tea break
		2400 — 0600	
Fridays	No Day Shift		
	Night Shift	2000 — 2300	
		2300 — 2400	Tea break
		2400 — 0600	

MEDICAL: Port Clinic and Government hospitals available.

CONSULS: Republic of China, Denmark, Egypt, France, Germany, India, Iran, Iraq, Japan, Jordan, Korea, Kuwait, Norway, Pakistan, Qatar, Somali Democratic Republic, Sudan, U.A.E., U.K., U.S.A.

FRESH WATER: Available at all berths and at the anchorage, 72 hours' notice required for barge supply.

FUEL: Gas oil available at Berth Nos. 4, 5, 6 and 8 and at the anchorage by bunker barge owned by the port, 72 hours' notice required. Other fuels can be supplied by arrangement with Owner's Agent. Marine lubricating oils available.

SERVICES: Fresh and dry provisions from chandler. Limited availability of ship and engine room stores. Radio, radar and electrical repairs possible.

GANGWAY/DECK WATCHMEN: To be provided by vessel.

REPATRIATION: Is now possible if Masters give full particulars of the seamen to be repatriated by telegram at least 72 hours earlier. This also applies to embarking crew members. The 72 hours' notice is not enough in the case of a Friday, or any other holiday which falls in between.

Also see "Laying-Up".

CUSTOMS ALLOWANCES: Vessels will no longer be permitted to have free use of their stores (Tobacco goods, Alcohol, etc.) whilst in the confines of the port.

On arrival in port, an allowance will be given by the Customs Boarding Officer and the surplus stores will then be placed under Customs Seal. The allowance will be:

200 cigarettes or 50 cigars or 250 gm. tobacco.
One bottle (1 litre) alcoholic spirit.
One bottle (1 litre) wine.
24 cans beer.
Various used personal effects such as radios, cameras, etc.

Should a vessel remain in port for more than 4 days, an issue of stores will be given upon request being made to the Customs Authorities.

These Regulations also apply to ships at the Anchorage.

SHORE LEAVE: Crews are only allowed ashore between the hours of 0700 – 1900.

GENERAL:

Ships Arriving at Port Qaboos:

Ships may approach Port Qaboos without a Pilot as far as the perimeter of the limits of the port. No ship shall proceed through the entrance to or from the port without the permission of the General Manager or the Harbour Master.

All ships, other than expected ships, shall be under the pilotage of a Pilot appointed by the Port Authority when underway within the limits of the port. The ship shall have rigged and ready for use a pilot ladder of modern pattern, in good repair and provided with reliable manropes. Such pilot ladder shall be well illuminated between dusk and daybreak. The ship shall have a boat-rope ready rigged from the break of the forecastle to abaft the pilot ladder.

No ship shall enter or leave Port Qaboos unless her draft marks are correctly shown and clearly visible.

Every ship shall at all times when entering, navigating in or leaving the port have both anchors ready for immediate use.

Ships proceeding to berth at the port premises shall have no list and shall be trimmed upright.

Before entering Port Qaboos every ship shall hoist the following flags: The ship's signal letters. The "Q" flag, International Code, unless the Port Health Officer has previously given Pratique. The "H" flag, International Code, denoting that a Pilot is on board. The "I" flag, International Code, if the ship is carrying passengers.

Until Pratique has been granted communication between ship and shore shall be made by: Flag hoist, using the International Code of Signals, Morse Code, by signal light, or radio-telephone on approved frequencies, which will be promulgated for use for such purpose.

Conduct: The Master or Owner of every ship shall be held directly responsible for the proper conduct and behaviour of the crew of such ship while in the port and for strict observance of the laws of the Sultanate of Oman, particularly those laws concerning the sale, transference or consumption of any narcotic or alcoholic or intoxicating drink of any kind.

Flags: Every merchant ship within Port Qaboos between the hours of sunrise and sunset shall fly her national flag and the national flag of the Sultanate of Oman.

Repairs: The Master of any ship wishing to carry out major engine repairs or adjustments, which will affect the mobility of the ship whilst in the port shall make written application to the Harbour Master to do so. The Harbour Master shall give his permission or otherwise in writing.

Safety of Ships and Persons: The Master of every ship anchored or moored in the port or berthed at the port premises shall, unless the Harbour Master concede some relaxation in this port rule, at all times retain on board sufficient crew to work or move the ship.

Ships Berthed or Anchored Within Port Limits: No person shall swim from any ship berthed at the port premises.

No person shall make fast or anchor any country craft or boat of any kind at any quay, wharf, pier or landing place or at any steps provided thereat in the port premises except with the prior permission of the Harbour Master.

Pollution: It shall be unlawful for any person, or corporation to deposit, place, or discharge into the waterways of Port Qaboos, either directly or through private or public sewers, any sanitary sewage, butcher's offal, garbage, dead animals, gaseous liquid or solid matter, oil, gasoline, residium of gas, calcium chloride, trade waste, tar or refuse or any other matter, which is capable of producing floating matter or scum on the surface of the water, sediment in the bottom of the waterways, or the odours and gases of putrefaction.

Vessels discharging ballast, oil from bilges or tanks or solid matter into the waters of Port Qaboos will be reported to the Pollution Control Officer and be subject to a fine of R.O. 500.00 for each offence, imposed by and payable to Port Qaboos. Such fine shall be in addition to any other fines, which may be levied for the same offence by the Sultanate of Oman.

Hygiene: The port provides garbage bins at various points for use by vessels. The use of these bins is compulsory and a charge for this facility will be made whilst the vessel is alongside.

Rat Guards: The use of rat guards on all mooring ropes and wires is compulsory whilst vessels are alongside. Vessels without their own rat guards will be required to hire from the Corporation.

Ships Leaving Port Qaboos: Port Rules applying to ships arriving at Port Qaboos apply equally, in so far as they are relevant, to ships leaving the port.

Merchant ships shall fly the "P" flag International Code, for 24 hours before sailing from the port.

The Port Authority may refuse to grant the Master of any ship outward clearance, unless and until all charges due in respect of the ship and any penalties, to which the ship or her Master are due, have been paid or secured to the satisfaction of the Port Authority.

Working of Cargo at Port Qaboos: Ships may be permitted to discharge or load cargo in the anchorage if a berth is not available at the port premises or if in the opinion of the Port Authority the ship's cargo is more suitable for handling to or from barges or lighters.

The Master or Owner of any ship shall be held responsible for any loss or damage arising from careless or improper slinging of cargo onboard such ship.

Any cargo, cargo-handling equipment or ship's gear, which may be dropped overboard shall at once be reported by the Master or appointed Officer to the Port Authority and shall be immediately recovered by the ship's personnel if it is reasonably possible so to do. Failing this, it may be recovered by the Port Authority at the ship's expense. The Port Authority shall not be responsible for any damage to or loss of cargo, equipment or gear so recovered.

The Master of every ship discharging or loading cargo in the port, whether at anchor or berthed alongside shall provide drinking water for all cargo handling labour and all other persons appointed and directed to be on board such ship in connection with the discharge or loading of cargo.

If the labour or transport allocated or engaged for the purpose of landing, loading or transhipping cargo from or to any ship is not fully continuously employed by reason of a fault or action attributable to such ship, the expenses incurred thereby shall be paid by such ship.

In the event of any accumulation of cargo or goods upon the quay or jetty or in a lighter for any cause that may appear reasonable to them, the Port Authority may require the ship discharging such cargo or goods to suspend or reduce the rate of discharge of such cargo or goods.

The Port Authority may refuse to permit cargo to be landed from any ship until suitable shed or open storage space or other accommodation is or becomes available for such cargo.

Delivery of cargo or goods shall not be deemed to have been made to the Port Authority until such cargo or goods have been brought into the port premises and until the Port Authority accepted delivery of such cargo or goods and have issued an official receipt therefor to the Master of the ship discharging such cargo or goods or to the ship's Agent or to any other person duly authorised so to do, conveying such cargo or goods to the port premises.

LAYING-UP: Vessels can anchor within the limit Lat. 23° 53′ N. and the coastline of Oman and between the parallels of Long. 58° 10′ E. and 58° 28.5′ E.

Port dues per g.r.t. for each period of 7 days or part thereof is payable. Vessels on arrival should be cleared through Immigration, Customs and Health by an appointed Agent. Distance being such that Agents have to commute by hired tugboat (minimum 4 hours required for a trip and back). Launch service permitted only during daylight hours and weather permitting.

No vessel shall temporarily lay-up in the "Waiting Anchorage" for more than 3 months without the permission of the Harbour Master, Mina Qaboos.

No vessel shall temporarily lay-up without its full complement of crew and sufficient power to handle any emergency.

Crew Change: While anchored within Omani Territorial Waters crew changes can be effected through Mina Qaboos only and not from any other neighbouring country. Vessels are also not permitted to lower lifeboat or allow unauthorised boats to lie alongside.

For purpose of effecting crew changes Passport or Seaman Book particulars should be furnished in advance for obtaining Visas for crew to join/leave vessel. Issuance of Visas will take minimum 7-10 days. Particulars required are as follows:

Full Name.
Nationality.
Passport or Seaman Book Number.
Date of Issue.
Date of Expiry.

And only after obtaining confirmation that Visas are obtained can crew be sent to Muscat failing which they will not be permitted to land and will be deported at Owner's expense.

Mail/spare parts/provisions, etc. can be delivered to vessels at anchorage. Invoices should be attached along with spare parts arriving by air and consigned to: Master (vessel's name), c/o Agent, "Ship's Spares in Transit".

AUTHORITY: Port Services Corporation Ltd., P.O.Box 133, Muscat, Sultanate of Oman. *Tel:* 734001-6. *Telex:* ON 5233 M Qaboos. *Contact:* The President or Captain K. B. Trilokeker, Harbour Master.

AGENT: Gulf Agency Co. (Oman) L.L.C., P.O.Box 3740, Ruwi, Sultanate of Oman. Tel: Mutrah 714888, 714779, 713603. After Hours 702249 or 701712. Telex: 5284/5284B ("Gacship ON"). Cables: "Confidence", Muscat. VHF Channel 16. Call sign "Confidence Muscat".

PORT RAYSUT (Salalah): 16.56 N. 54.01 E.

(See Plan Book)

PORT LIMITS: Going on the level of HW the water limits of the port are bounded by:

1. Crossing of coastline with Long. 54° 04′ E.
2. Then in the True South direction to Lat. 16° 55′ N.
3. And to the West the limits, follows the coastline interception with Lat. 16° 55′ N., and along the coast to the starting point (subject to approval).

DOCUMENTS:
4 copies of Crew Lists and Passenger List (if any).
Valid Vaccination Certificate.
Valid Derat Certificate.
Last Port of Clearance.
Customs Documents.
8 copies of Manifest.
Ship's Papers and Ship's Certificates.
2 copies of Stowage Plans.
2 copies of Hatch List.

PILOTAGE: Compulsory for vessels of more than 150 n.r.t., except Port Authority craft and naval ships of Oman. Pilots wait near the East breakwater, vessels are to proceed to the entrance of the harbour on request either from Pilot or harbour control. Pilot boat has a black hull with white superstructure and an Oman National flag on the mast. Boats keep VHF radio watch on Channel 12. The entrance of the harbour is marked with a Buoy-Flashing Green light for a duration of 1 second in every 5 seconds.

On an experimental basis, (May 1982), Pilot available inward (0730 hrs. – 2000 hrs.) and outward (0730 – 2200 hrs.), including Fridays and Holidays. This is on a trial basis and if satisfactory results are attained, efforts will be made to introduce port working on round-the-clock basis for Pilotage.

ANCHORAGES: The Roads of Raysut offer an open sea anchorage with a sandy bottom. The depth at the entrance of the Buoy is 13 m. and North-Eastward it increases, however anchorage position at present is given to all vessels upon reporting by VHF radio. Anchorage positions are set with 0.5 miles between each ship in a minimum of 10 m. of water for large vessels, less depth of water as required for coasters.

Anchorage Area:

1. Lat. 16° 57′ N., Long. 54° 04′ E.
2. Lat. 16° 55′ N., Long. 54° 04′ E.
3. Lat. 16° 55′ N., Long. 54° 02′ E.
4. Lat. 16° 57′ N., Long. 54° 02′ E.

RESTRICTIONS: None.

MAX. SIZE: Max. draft for cargo vessels is 9.5 m. and tankers about 12 m. Vessels will be brought to the berths regardless of the tide conditions since the port operates as a year round all weather port.

HEALTH: Quarantine procedures are followed and all ships upon arriving must fly flag "Q" until completion of quarantine procedures. Public health requires certificates of vaccination for cholera and yellow fever. Derat certificate also required.

RADIO/VHF: For advance ETA data the harbour control listens on 2182 kHz and works on 2023.5 kHz. VHF watch is kept on Channel 16 and other Channels available are 12, 10 and 6. The service is available around the clock. Area weather available on request.

RADAR: None available at present.

TUGS: Join vessels with the Pilots. 2 powerful tug boats (1,700 h.p. and 2,250 h.p.) of harbour/ocean going type, fitted with fire fighting and salvage facility, are available in addition to the 2 small mooring tugs equipped with 2 engines: 120 h.p and 220 h.p. respectively.

BERTHING: The new harbour provides a quay of 522 m. with a depth of water 10 m. Also available: 200 m. length with 8 m. depth and 510 m. length with 4 m. depth. An oil terminal, dolphin type, 130 m. length with 12 m. depth. 1 ramp for small landing craft.

Berth No.	*Depth* (m.)	*Permissible Draft* (m.)
1	10.0	9.5
2	10.0	9.5
3	10.0	9.5
4	8.0	7.5

CRANES: *(a)* There are 9 mobile cranes in the port operating in the range of 2 to 5.5 tons. There is 1 mobile crane rated at 100 tons.

(b) 4 luffiing quay-side electric cranes. 2 rated at 6 tons and 2 at 15 tons.

(c) 1 Container gantry crane at 35 tons at Berth No. 1. Height of spreader above quay – 22 m. Travelling range 280 m.

BARGES: 350 ton barge will be acquired by the port very shortly.

SPECIALISED FACILITIES: There are no special facilities. Ro/Ro services are carried out in the existing port at present. However such vessels must meet the standard requirements for entry to the berth. There are no bulk handling facilities.

BRIDGES: None.

STEVEDORES: Arrangements must be made through the Agent for maximum notification of arrival to arrange gangs. Minimum notification 24 hours. Normal working hours from Saturday to Wednesday 0700 to 1500 hrs. Thursday from 0700 to 1300 hrs. with no lunch break.

Working hours are subject to change during the month of Ramadan.

Overtime can be worked from 1500 – 2300 hrs. and would be charged as hours worked outside normal working hours. Overtime will be worked at the request of the Agent and will be worked on Fridays and public holidays at special request.

On an experimental basis, the Port Authority, with existing facilities and manpower, has decided to introduce the following with immediate effect:

Discharging: 2 shifts (0700 – 1500 hrs., and 1500 – 2300 hrs.) provided maximum 2 vessels in port with 2 to 3 workable hatches. If only 1 or 2 workable hatches, up to 3 vessels can receive 2 shifts.

This is on a trial basis and if satisfactory results are attained efforts will be made to introduce port working on round-the-clock basis, for discharge operations.

MEDICAL: Agents handle all medical matters. A hospital is available in the town of Salalah (17 miles away). Also see "Health".

TANKERS: Tankers up to 35,000 d.w.t. are accommodated at the Oil Pier which is 130 m. in length and about 12 m. in depth.

FRESH WATER: For vessels at berths fresh water is available ex-pipeline.

FUEL: Available to ships at the berth by tank truck, must be arranged by the Agent.

FIRE PRECAUTIONS: Fire hydrants available alongside berths.

CONSULS: None available.

REPAIRS: No facilities.

DRY DOCKS: None available.

SURVEYORS: Lloyd's representative is Oman United Agencies in Salalah.

GANGWAY/DECK WATCHMEN: Not required except as deemed necessary by the Master of the vessel and then he must supply his own.

HATCHES: Opening and closing hatches is normally done by the crew but arrangements may be made with the port for provision of this service. Agents can advise.

CUSTOMS ALLOWANCES: 200 cigarettes or 50 cigars or 250 gm. of tobacco. 1 bottle (1 litre) alcoholic spirit. 1 bottle (1 litre) wine. 24 cans of beer and various used personal effects such as radios, cameras, etc.

CARGO GEAR: Normally handled by shore equipment and shore gear. Any special lifting equipment required must be provided by the vessel. Ships in the anchorage are normally expected to supply all gear required. The port has rental gear for those vessels requiring same.

REPATRIATION: Permitted, arrangements may be made by the Agent for this service. Crew changes may be effected at this port.

AIRPORT: Salalah International Airport. Distance 25 km.

TIME: Time local is GMT plus 4 hours.

HOLIDAYS: All Muslim holidays are observed. Working hours are reduced during the period of Ramadan. Special National days celebration is held from 17th to 21st November each year. Working of overtime may be arranged during most of the holiday periods, Agents can advise.

POLICE/AMBULANCE/FIRE: The port has police available at the port at all times. Ambulance service must come from Salalah. The port has the only telephone service and the police located within the port also maintain telephone service. Required numbers are familiar to all persons in these two areas.

A complete fire fighting system is installed in the Port with 20 fire hydrants (4 in.) distributed through the jetty capable of handling all kinds of fire. The new tug boats are fitted with fire fighting facilities.

TELEPHONES: For any long distance calls Omantel maintains office in Salalah where calls may be placed and paid for. For local calls the port will permit the use of port phone on a limited basis.

SERVICES: None available.

SHORE LEAVE: Master, First Officer and Chief Engineer are permitted restricted shore leave but all other members of the crew are restricted to the ship or port area.

IDENTIFICATION CARDS: Seaman's book or passport are sufficient for those persons going ashore.

REGULATIONS: No vessel shall enter the port area unless authorised by the Harbour Master. The Harbour Master may at his discretion refuse to allow vessels, with the exception of vessels in distress, to enter the port, and may order from the port any vessel with the exception of vessels unfit for sea, which does not have business within the port, or is in breach of these Regulations.

No vessel shall anchor, or weigh anchor or move within the port area except when and where required by the Harbour Master.

No unclean water ballast which is not free from oil or other harmful contaminants, shall be discharged into the waters of the port area. In case of the pumping of bilges or pollution by oil or harmful contaminants into the waters of the port area, the vessel will be responsible for any fines imposed by the Port Authority and any compensation or other damages according to Port Rules and Regulations.

Should fire break out aboard any vessel the Master should make an immediate signal either by a continuous sounding of long or short blasts on the ship's whistle or siren or by ringing of a fire bell.

In cases of adverse weather it is the sole responsibility of the Harbour Master to decide whether the sea conditions are suitable for handling cargo with barges in the Anchorage or whether the day will be declared a "Weather non-working day".

Masters shall be responsible for the adequate provisions of safety equipment and lights on board whilst cargo is being handled.

Conveyance of alcoholic liquor, other than manifested cargo under Customs supervision, from any vessel to the shore or from one vessel to another is prohibited.

No unauthorised person may enter the port area. Visitors to vessels are prohibited except by permission of the Harbour Master.

Ship's personnel and passengers are not permitted ashore except by permission of the Immigration Authorities and the Harbour Master.

Every merchant vessel in port shall fly her national flag, and the national flag of Sultanate of Oman, between sunrise and sunset.

GENERAL: The port operates on a year round basis today with the exception of vessels requiring barging. All barging is closed from mid-June to late September depending on the sea state.

DEVELOPMENTS: Bulk cement and grain facilities, slipway for repairs and maintenance and facilities for vessels of 22,000 d.w.t. are planned.

SHIPMASTER'S REPORT: 1978.
Radio: Send ETA, draft, LOA, g.r.t., n.r.t., cargo to discharge, last port, to: General Manager, Port Raysut, Salalah, Sultanate of Oman, giving 48 hours', 36 hours', 24 hours' notice.
Labour: A gang consists of 10+1 men.
Fresh water: Available only on berth and supplied by trucks for the time being. NOT available at anchorage.
Provisions: Supplied by Agent.
Airport: Daily flight to Muscat.
Telex-Telephone-Cable-Posts: Available by "Cable & Wireless" offices.
Hospital: Very good.
Workshop: Nil.
Fuel Oil: Not available.

AUTHORITY: Directorate General of Communications, P.O.Box 8369, Salalah, Sultanate of Oman. *Contact:* Mohd. Ahmed T. Rawas, Manager, Port Raysut.

AGENT: Gulf Agency Co. (Oman) L.L.C., P.O.Box 19346, Salalah, Sultanate of Oman. Tel: 290405, after hours 292003. Telex: 7647 ("GAC SAL ON"). Cables: "Confidence", Muscat or Salalah.

Pakistan

KARACHI: 24.49 N. 66.59 E.

DOCUMENTS: *Required before vessel's arrival:*
2 copies Freight Manifest.
2 sets Bills of Lading.
3 copies Stowage Plan.
2 copies Passenger Manifest.
3 copies Cargo Manifest.
3 copies Hatch Lists.
1 copy Exception Lists.
6 copies Passenger Lists.

With vessel:
2 copies Cargo Manifest.
Last Port Clearance Certificate.
6 copies each Passenger List, disembarking and transit.
2 copies List of favour parcels.

The following special Pakistan forms are brought on board by Agent for completion on arrival:
2 Customs Arrival Reports.
2 Opium and Dangerous Cargo Certificates.
2 Ship's Currency Lists.
6 Deck Cargo Certificates.
1 Company's Arrival Report.
1 Ship's Crew Advance (if required).
1 Expiry date of Ship's Certificate.
1 Same Bottom or In Transit Cargo.
1 Water Indent.
10 Crew Lists.
3 Stores Lists.
3 Crew Effects Lists (including cameras, radios, etc.)
7 Cargo Gear Information Forms.

Metric weights and measures to be used on Particulars of Cargo, Tonnage Certificates, Stevedoring Bills, Manifests and Bills of Lading.

Immigration:
(i) Masters should ensure that all crew in possession of valid health documents.
(ii) All nationals, other than those holding British Passports, require visas for entry into Pakistan. Ship's crew can enter and leave Pakistan on Seaman's documents for purposes of joining vessel and/or on repatriation.
(iii) Seaman books/Passports are required to be collected from Immigration authorities prior to sailing of vessel on surrender of the shore passes.
(iv) Taiwan and Israel nationals are not allowed shore leave facilities.

PILOTAGE: Pilotage is compulsory for ship of 200 n.r.t. and upwards. Pilot boards at the Outer Anchorage.

Vessels are piloted day and night, subject to tides, length and draft, to berths lying on the East and West of the fairway, which is 4.27 miles long. Pilotage distance is about 5 to 6 miles.

ANCHORAGES: Outer Anchorage where ships await berth safe except during the S.W. monsoon from mid-May to September. During monsoon no anchorage is recommended. Vessels should anchor a safe distance outside the breakwater within Lighthouse bearings 045° and 025°. Depth of water at the anchorage is about 9 fathoms.

RESTRICTIONS: Datum depth is 27 ft. Dry cargo vessels with a draft in excess of 32 ft. are not permitted to enter Karachi due to dredged depths at berths.

Berthing at any time, except vessels with bridge aft which permitted daylight only.

Sailings permitted during flood tide only. Tankers with LOA over 525 ft. permitted to sail on flood tide during daylight hours only. Vessels with bridge aft permitted to sail on flood tide during daylight hours only.

Vessels coming alongside another ship (double bank) are handled during daylight only and therefore abreast berthing during the night not permissible.

MAX. SIZE:

	Length	*Draft*
Bulk carriers and general cargo (dry cargo)	945 ft.	32 ft.
Bulk oil tankers, white oil product	750 ft.	35 ft.
Bulk oil tankers, black oils	750 ft.	35 ft.
New oil pier No. 4, crude oil	850 ft.	39 ft.

HEALTH: The Port Health Authorities give automatic clearance on receipt of a "clean" standard quarantine message and this will be conveyed by the Pilot. However, ships from Yellow Fever areas must be cleared during daylight hours by the Port Health Officer on arrival alongside. On sailing to ports outside India and Pakistan, a medical inspection takes place on the day before sailing. It is, in theory, necessary for a member of the crew to be present at this inspection, although usually the inspection is only a formality. All vessels required obtain Immigration Clearance on arrival.

All vessels which have touched any port or ports between Port Sudan and Durban, on the East Coast of Africa, including these ports, are considered "suspected" vessels on account of Yellow Fever and Jigger and may not have communication with the shore till cleared at berth by the Port Health Officer, who attends only between sunrise and sunset, except in special circumstances. The incubation period for Yellow Fever under the rules is given as 9 days, but vessels arriving later than 9 days are still not free from quarantine because there is no incubation period for Jigger.

TUGS: There are 6 diesel tugs owned by Port Trust. Four tugs have bollard pull varying from 10 to 18 tons and 2 tugs have 27 tons bollard pull.

Towage inside the harbour is rendered by Port Trust on signal from Pilot. Towage is not provided outside the breakwater except in very special circumstances at the discretion of the Deputy Conservator, subject to weather permitting and availability of tugs on special terms and conditions.

RADIO/VHF: Port Authorities equipped with VHF radio-telephone, calling Channel 16, working Channel 12. Control Station call sign "Manora Pilot Control".

Vessels should establish radio contact with control station as soon as they are within VHF range.

Use of Channel 12 is restricted to the following: Ships while entering harbour are to maintain watch on Channel 12 as soon as Pilot boards. Ships in harbour scheduled to sail are to keep a listening watch half an hour before sailing till their clearance from the port.

"Intercommunication with the ships, other than Pilot Control, at outer anchorage or ships in harbour on Channel Nos. 12 and 16 is strictly prohibited. The Manora Pilot Control Station is equipped with multi-channel VHF Radio Telephone sets which are operating on International Maritime Channels 8, 9, 11, 12 and 16 subject to above restrictions."

Vessel's Registration: All vessels calling at Karachi Port, upon arrival at anchorage are required to make immediate contact with Port Control (Manora Station) by Aldis Lamp and notify arrival time, vessel's name, flag, cargo, and position. Also vessel is to make contact on VHF repeating all of the above information, declaring readiness of vessel to berth, and the time noted by Port Control by light is taken as the time of arrival off the Port, both for berthing turn and also serving NOR (in case of Charter Vessel) to receivers/charterers.

BERTHING: There are 17 berths at East Wharves, total quayage 8,622 ft. Berth Nos. 1 to 17 are on a concrete quay wall of the latest type. All berths are rail-served. Berth lengths vary from 470 ft. to 550 ft. Available depths vary from 26 ft. to 31 ft. There are 13 berths at West Wharf and their length varies from 550 ft. to 700 ft. Depths available vary from 29 ft. to 31 ft.

There are 4 Bulk Oil Piers having length of 425 ft., 644 ft., 750 ft. and 850 ft., which can accommodate tankers of overall length between 525 ft. and 850 ft. Also see "Tankers".

Moorings: Three moorings of 700 ft. each and one LASH Mooring of 1,000 ft. have been laid and are commissioned for accommodating the vessels of sizes between 600 ft. and 850 ft. respectively.

Bulk Wheat: Discharged by bulk evacuators at Berth No. 17.

Passenger Vessels: Berth No. 24.

Fertiliser: Discharge at Berth No. 22. Bagging machines installed.

Vessels with LOA 900 ft. and over berth at No. 16 and 17.

CRANES: All berths except Nos. 5, 6, 7 and 17 are equipped with electric cranes.

STEVEDORES: Working Hours: Monday through Thursday and Saturday, day shift: 0730 – 1130 and 1230 – 1630 hrs. On Fridays day shift: 0730 – 1230 and 1400 – 1630 hrs. Mondays through Saturday, night shift: 1900 – 2300 and 2330 – 0330 hrs. next day.

Overtime periods: 0330 – 0630, 1130 – 1230, 1630 – 1830 hrs.

TANKERS: Mineral oils discharged at the Bulk Oil Pier, 4 berths, and at West Wharf Berth 20. Heavy grades may be discharged at the steamer wharves but dangerous petroleum only at the Oil Piers.

Vegetable oils are handled at both the terminals mentioned above, and at East Wharf Berth 9.

New Oil Pier No. 4: Max. LOA 850 ft., max. beam 130 ft., max. loaded draft 39 ft., max. size 75,000 d.w.t. and 95,000 tons, max. gross displacement.

Slop reception facilities: Available at Oil Pier No. 4 only.

Also see "Berthing".

FRESH WATER: Available alongside by pipe-line at all shipping berths. Also available alongside and at outer anchorage by private barges.

At times due to water shortage vessels are required to arrive with sufficient water for duration of stay.

FUEL: In addition to coal, 3 grades of petroleum are available – furnace oil, light diesel oil and high speed diesel oil. Furnace oil can be supplied by pipe-line at all berths. Light diesel only at Berths 1 to 4. Large quantities can be supplied by pipe-line at the Bulk Oil Pier only.

DRY DOCKS: The Karachi Shipyard and Engineering Works Ltd. have 2 dry docks. One of 609 ft.×90 ft.×18 ft. above keel blocks which can accommodate vessels up to 25,000 d.w.t. and the second dry dock measuring 560 ft.×80 ft.×16 ft. above keel blocks and can dock vessels up to 18,000 d.w.t. Prior booking of the dry dock is essential.

REPAIRS: Repairs can be carried out at the anchorage except in the monsoon season. 2 ship repair jetties are available in the port. In addition, Karachi Shipyard and Engineering Works Ltd. provide all kinds of repair and ship-building facilities.

Immobilisation of Main Engine: Requests for immobilisation must be included by the Master of the vessel in their arrival messages so that the permission of the Deputy Conservator, Karachi Port Trust may be obtained for the period required to carry out maintenance and necessary repairs. Oil Tankers are not permitted to immobilise engines, particularly at oil pier berths.

CARGO GEAR: *Cargo Gear Certificate:* The Dock Labour Safety Officer (Government Department) is very strict and requires all gear/derricks/winches and accessories to have valid certificates. In the event their certificates are out of date, delays will be incurred before cargo discharge operations are allowed to commence.

HOLIDAYS: Eid-ul-Azha; Muharram; Republic Day (23rd March); Eid e Miland un Nabi; Independence Day (14th August) Defence of Pakistan Day (6th September); Jamat-ul-Wida; Eid-ul-Fitr; Anniversary of Death of Quaid-e-Azam; Christmas Day and Birthday of Qaid-e-Azam (25th December).

TIME: GMT plus 5 hours all year round.

AIRPORT: Karachi Airport, 7 miles from city. International connections to all parts of the world.

SHORE LEAVE: Shore passes are granted by Immigration Authorities when they first go on board and must be returned on departure of the vessel. These passes permit entry/exit to the docks until 2200 hrs.

Indian crew are not allowed ashore except in emergency. An Immigration policeman will remain on board in port where Indian crew are carried. This policeman will ask for some sort of accommodation. This need only be given if it does not cause inconvenience to the ship.

SHIP SUPPLY SERVICE: There are privately operated services for transportation of personnel and some essential stores, etc., for ships lying at Outer Anchorage to inside the port. These services are of a small scale and carried out by small launches, only during good weather. In bad weather such as monsoon season these services are suspended.

GENERAL: The Karachi Port Authorities advise that in order to avoid delays to ships requiring abreast berths for working cargo, it has been decided not to berth more than 1 vessel for receiving supplies of fresh water and bunkers. Ships due to call at Karachi are therefore *recommended to arrive with sufficient fresh water and bunkers to last for two or three weeks from the date of arrival at the outer anchorage.*

DEVELOPMENTS:

Modern integrated container terminal for third generation vessels to be built and be ready in 1989 (1st phase). One container crane already commissioned at Berth No. 23.

4 general cargo berths completed and commissioned for operations 1984.

New oil products terminal to be built and ready by 1987 for 75,000 d.w.t. tankers.

2 new Voith-Schneider tugs with 35 tons bollard pull and 2 modern seagoing pilot boats under construction and ready for operations in 1985.

SHIPMASTER'S REPORT: January 1980: Survey Vessel.

Approaches/Pilotage: There were a large number of ships anchored in the approaches – even in the "Prohibited Anchorage Zone".

Port Control system: Contact must first be made by Aldis lamp, and a vessel's arrival is not acknowledged until this has been done. On our first visit we had some trouble as the actual Signal Station is not at the position marked "Signal Station" but at 24° 48.8′ N., 66° 57.0′ E. marked F.S. on the Chart. I was politely informed on the VHF that unless I contacted them by Morse lamp, they would not be able to speak to me on the VHF.

The Pilot boards 2 miles S.W. of the breakwater – if vessel comes closer it will be sent out again. Manropes are required for the ladder.

Quarantine: The normal message should be sent 24 hours before arrival. A doctor boarded on arrival alongside, and required Vaccination Lists, together with the Maritime Declaration.

Port Officials: Immigration/Docks/Customs: A vessel bound for Karachi would do well to get a set of local forms from the Agent in advance.

The main Customs Declaration is very detailed.

Ship's own Personal Effect Declaration lists showing, in addition, beer, watches, cameras, and foreign currency, were accepted.

At least 12 copies of the Crew List on arrival are required, plus 2 Sailing Crew Lists.

When all other Officials have finished, the Customs seal up the Bond.

Special Warning: Pakistan is a Muslim country. Notices should be displayed warning that it is prohibited:

1. To use cameras.
2. Give alcohol to locals.
3. Change money without obtaining a proper receipt.

Berths: We called at Karachi twice, and each time, in spite of a very full port, Agent managed to obtain a berth alongside.

Explosives: Loaded ex-barge, whilst alongside. No problems. Shore stevedore gang used.

Bunkers: Ex-road wagon, well organised and quick.

Water: Ex-quay. Good rate. Good quality.

Lub Oils: Received two drums of Stern Tube Oil, which we had not been able to obtain elsewhere.

Divers: The services of a diver were used to clear fouling from engine cooling water intakes.

Ship Chandler: Only fresh vegetables and some chickens were purchased, but these were good quality.

Laundry: Good and fast.

Watchmen: Supplied by Shipwrights. With the rise and fall of tide in Karachi, the gangway needed constant attention. Nothing was reported stolen.

Repatriation: Possible.

AUTHORITY: Karachi Port Trust, Head Office, Mereweather Tower, Bunder Road, Karachi 2. *Tel:* 202740/49. *Telex:* 2739 Kpt Pk. *Cables:* Portrust, Karachi. *Contact:* S. F. Rab, General Manager – Operations.

PORT MUHAMMAD BIN QASIM: 24.46 N. 67.21 E. (See Plan Book)

PORT LIMITS: Seaward Boundaries: Area enclosed within the following geographical co-ordinates:

(a)	Lat. 24° 42′ N.	Long. 66° 56′ E.
(b)	Lat. 24° 47′ N.	Long. 67° 07′ E.
(c)	Lat. 24° 28′ N.	Long. 67° 05′ E.
(d)	Lat. 24° 32′ N.	Long. 67° 13′ E.

DOCUMENTS: 3 Stowage Plans, 2 Bills of Lading, 2 Freight Manifests, 3 Cargo Manifests, 3 Hatch Lists, 10 Crew Lists, Ship's Certificates, Deck Cargo Certificates, Dangerous Cargo Certificates, 2 Customs Arrival Reports, 3 Stores Lists, Last Port Clearance, Property Declaration.

PILOTAGE: Compulsory. Licensed Pilots are available. Pilots embark one nautical mile off Fairway Buoy (Lat. 24° 33′ N., Long. 67° 03′ E.). Pilot boats carry "H" flag when carrying Pilots. Usual safety measures to be taken during boarding and disembarkation of Pilots.

Give 48 hours' and 24 hours' notice to Manager – Harbour Operations by cable/Telex and later contact by VHF on Channel 16 about 12 hours before arrival.

Caution: During S.W. monsoon buoys are liable to shift, shoals exist outside the marked Navigation Channel.

ANCHORAGES: Geographical position:

(a)	Lat. 24° 35′ N.	Long. 67° 00′ E.
(b)	Lat. 24° 35′ N.	Long. 67° 02′ E.
(c)	Lat. 24° 32′ N.	Long. 67° 00′ E.
(d)	Lat. 24° 32′ N.	Long. 67° 02′ E.

Holding ground is good (medium sand) but during S.W. monsoon heavy swell persists and it is advisable to anchor near Western proximity of the anchorage and pay out extra cable.

RESTRICTIONS: Night pilotage likely to commence October, 1984. Presently night pilotage available in emergencies only.

MAX. SIZE:

Periods	*Berths*	*Max. Draft* (m.)	*Max. LOA* (m.)	*Max. Beam* (m.)
(i) Monsoon				
16th May to 15th September	IOC Berth	10.5	201.0	25.3
	MW Berths			
	1 to 4	10.0	183.0	25.0
	5 to 7	10.5	183.0	25.0
(ii) Non-Monsoon				
16th September to 15th May	IOC Berth	12.0	225.0	25.3
	MW Berths			
	1 to 4	10.0	183.0	25.0
	5 to 7	11.0	183.0	25.0

Note: 1. Draft is subject to change monthly and without any notice.
2. Minor deviation permissible at the discretion of Port Qasim Authority on submission of Indemnity.

HEALTH: Pratique normally granted only after berthing. If the vessel is not coming from yellow fever area then Pratique usually automatic.

RADIO/VHF: Send all messages via Karachi Radio, call sign ASK, MF 500 kHz, 466 kHz, 484 kHz, HF 8644 kHz, 1302 kHz, 3024 kHz, 8361.2 kHz, 12541.8 kHz and 8658 kHz.

Karachi Radio can also be contacted on Radio telephony on following frequencies:

Channel	*MHz*
16	158.80 VHF
10	156.50 VHF
07	160.95 VHF
02	160.70 VHF
05	160.85 VHF

Contact should be made with Port Qasim Control as soon as within VHF range and ETA transmitted. Berthing and boarding of Pilot instructions are given on VHF by Port Qasim Control on following Channel/Frequencies:

Channel	*MHz*
16	156.800 VHF
10	156.500 VHF

Round the clock watch on above Channels is maintained.

RADAR: No shore based radar at present.

TUGS: 3 tugs namely "Chara", "Gharo" and "Kadiro" assist vessels and they join the vessel about 1.5 miles off the jetty. Each tug 3,500 b.h.p., bollard pull approximately 40 tons. In addition two light tugs each 1,000 b.h.p. are available. Ship's lines are usually used.

BERTHING: 7 multi-purpose berths along a marginal wharf for general cargo handling and one special berth for bulk handling of iron ore and coal for steel mills.

Lengths of the berths at Marginal Wharf, 200 m. each, and at IOC Berth is 279 m.

Loading and discharging is normally carried out by ship's gear at Marginal Wharf.

CRANES/EQUIPMENT: No rail mounted shore based cranes are available, however, mobile cranes and other cargo handling equipment as mentioned below are available for hire.

10 mobile cranes	: Capacity ranging from 1 ton to 35 tons
39 forklift trucks	: Capacity ranging from 3.2 tons to 9.0 tons
37 tractor towing units	: Capacity ranging from 1 ton to 4.5 tons-bar pull
73 trailers	: 20 tons

BULK CARGO FACILITIES: For iron ore, coal and manganese ore; length of berth: 279 m.; depth alongside 13.0 m. Two gantry cranes with grabs each weighing about 12 tonnes; together they discharge 15,000 to 18,000 tonnes (approx.) per day of 24 hours. Cargo is directly carried to steel mills by means ofconveyor belt 4.5 km. long. Maximum height of discharging grab above jetty level is 20 m.

SPECIALISED CARGO HANDLING FACILITIES: None at present.

BRIDGES: None.

STEVEDORES: Integrated terminal operation carried out by cargo handling companies appointed by Port Authority. Average handling rate per hook hour for following commodities is:

Rice	: 43.0 tonnes
Pig Iron	: 38.0 tonnes
Cotton	: 12.0 tonnes
General Cargo	: 10.0 tonnes

12 hours' advance notice to be served in order to arrange gangs.

Working Hours: 0800 – 1600, 1600 – 2400, 2400 – 0800.

MEDICAL: Services available through local Agents; presently hospital facilities are available at Karachi.

TANKERS: No facilities available at present.

DENSITY: Average density of water is 1025.

FRESH WATER: Available through shore connection and by barge.

FUEL: Available through local oil companies, delivered by oil barge or road tankers.

FIRE PRECAUTIONS: Normal fire precautions, fire hydrants are located at Marginal Wharf and I.O.C. Berth. Port has two fire tenders (water and foam) plus 5 fire trailers (heavy duty) with water and foam to fight fires.

CONSULS: Available at Karachi.

REPAIRS: All types of repairs can be carried out through private contractors of which prior notice, with details, must be given to Agents in good time.

DRY DOCKS: None at Port Qasim, however, available at Karachi Port.
SURVEYORS: Cargo Surveyors available, services if required can be arranged through local Agents; also Classification Surveyors of various societies such as Lloyd's Register, American Bureau, Bureau Veritas, etc., have local offices in Karachi.
GANGWAY/DECK WATCHMEN: Provided by ship.
HATCHES: Opening and closing by ship's crew.
CUSTOMS ALLOWANCES: 200 cigarettes and 6 ozs. of spirits (for non-Muslims only) per week.
CARGO GEAR: Heavy lift cargo and normal loading/discharging carried out by ship's gear. Mobile cranes available on hire on request.
REPATRIATION: Possible. Advisable to give prior notice to Agents to complete formalities.
AIRPORT: Karachi International Airport is approximately 30 km. from Port Qasim and is served by regular national and international airlines.
TIME: GMT plus 5 hours throughout the year.
HOLIDAYS: Fridays and Government of Pakistan gazetted holidays.
POLICE/FIRE/AMBULANCE: Bin Qasim Police Station Tel. No. 419811-12, extension 2224. Fire brigade service phone: dial 03. Tugs equipped with fire fighting equipment available. Ambulance: Stationed in port – services may be requested via Port Control on VHF or by dialling 21.
EMERGENCY CO-ORDINATION CENTRE: Pakistan Navy frequencies – 500 and 8364 kHz. on HF and 282 and 243 MHz. on VHF.
TELEPHONES: Facilities for installing telephones on board not available, however, telephone calls can be made by telephones in the C.H.C. offices, located on jetties.
SERVICES: All facilities such as compass adjusting, radio and radar repairs, tank cleaning, etc., can be arranged through respective shipping Agents.
BANKS: National Bank of Pakistan, Tel. No. 719700 – 09 extension 93.
STORING: Stores supplied by trucks only. Trucks can proceed alongside ships on berths. Forklifts can be used to handle stores. Customs regulations require shipping bills, IGM/EGM, Bill of Entry, etc., regarding permission to bring stores on board.
SHORE LEAVE: Shore passes issued by Immigration Authority to ship's crew.
IDENTIFICATION CARDS: Only valid shore passes used as identification.
REGULATIONS: As per Gazette of Pakistan notification No. S.R.O. 42 (KE)/81 dated: 17th October, 1981.
DELAYS: None.
DEVELOPMENTS: Establishment of Container Terminal and Oil Tanker Terminal are in future development plans.

SHIPMASTER'S REPORT: September 1982.
Port Limits: A vessel is considered to be an arrived ship when she is in the anchorage marked on the chart West of fairway buoy. Vessel must register with Port Bin Qasim Control as an arrived ship and only when same confirmed by the port can the Master tender notice of readiness. Pilot boards about 1 nautical mile off fairway buoy.
Documents: Same as for Karachi. Keep extra Crew Lists at hand. Private property declaration must contain serial numbers, make, etc., wherever possible. All currency must be declared.
Pilotage: Give 48 hours' and 24 hours' notice to Bin Qasim Pilot Control by cable and later contact them by VHF Channel 16, about 12 hours before arrival.
Anchorage: Outer anchorage is in area bounded by position A, B, C, D with following co-ordinates.

(A)	Lat. 24° 35′ 00″ N. Long. 67° 00′ 00″ E.	(B)	Lat. 24° 35′ 00″ N. Long. 67° 02′ 00″ E.
(C)	Lat. 24° 32′ 00″ N. Long. 67° 00′ 00″ E.	(D)	Lat. 24° 00′ 00″ N. Long. 67° 02′ 00″ E.

Holding ground is good but during S.W. monsoons heavy swell persists and it is advisable to anchor near Western proximity and pay out extra cable.
Restrictions: No night pilotage. Vessel must dock before dark and similarly must sail out in sufficient time to clear the channel before dark. Draft restrictions as per tide. Heavy swell/tide runs across the channel at S.W. monsoons.
Max. Size: Presently max. size is 50,000 d.w.t. but main limiting factor is the depth of water in the channel which varies with the tide.
Health: Pratique granted only after berthing. Radio Pratique not possible.
Radio: Send all messages via Karachi Radio. Contact should be made with Bin Qasim Port Control as soon as within VHF range on Channel 16 and ETA given. Berthing instructions are given on VHF.
Tugs: Port has two tugs and they join the vessel about 1.5 miles from the jetty. Usually ship's lines are used for tugs.
Berthing: Iron ore and coal jetty owned by Pakistan Steel Mills for importing coal and iron ore for the steel plant. Jetty is 900 ft. long, 12.80 m. depth alongside.
Cranes: Two cranes with grabs each weighing about 11 tons. Together they can discharge bulk coal at approximately 15,000 tonnes per day of 24 hours. Cargo is carried directly to the steel mill by conveyor belt – about 2 miles long.
Bridges: None.
Stevedores: Pakistan Steel Mills personnel.
Medical: No facilities exist in Bin Qasim. All medical facilities in Karachi.
Density: Salt water.
Fresh Water: Available by shore connection. Costs about Pak. Rs.45/– per ton.
Fuel: Not available.
Consuls: At Karachi.
Repairs: Only very minor repairs possible by workshops from Karachi. Prior notice with details must be given to Agents in good time.
Dry Docks: None.
Surveyors: Available from Karachi.
Gangway/Deck Watchmen: Not necessary.
Hatches: Opening/closing carried out by crew.
Customs Allowances: One bottle spirits and 200 cigarettes per week. Before arrival Master must collect all cameras to be placed under seal by Customs.
Cargo Gear: Shore gear is used.
Repatriation: Possible. Advisable to give prior notice to Agents to complete all formalities prior arrival.
Airport: Karachi International airport is about 35 miles from Port Bin Qasim.
Time: GMT plus 5 hours throughout the year.
Telephone: Available on jetty only.
Shore Leave: Shore passes issued by Immigration and crew allowed ashore.
Delays: Usually none.
General: All the information above is for Iron Ore and Coal Jetty at Port Bin Qasim only.

I called at this port on 25th with 27,100 tonnes of coal in bulk from Newcastle (N.S.W.) and sailed out on 27th.

I was asked to arrive at a maximum draft of 10.00 m. For deep drafted vessels Pilot normally boards about 2.5 hours before HW so that vessel docks alongside at HW. The channel (about 25 miles) is dredged to 11.30 m., while alongside berth and in the turning basin off the berth the depth is 12.80 m. However, in my case the Pilot boarded about 2 hours after HW and by the time vessel tied up alongside it was almost LW. All along the channel I noticed that there was at least 2 m. clearance under the keel at all times.

AUTHORITY: Port Muhammad Bin Qasim Authority, P.O. Port Qasim, Karachi-48, Pakistan. *Tel:* 719700-09. *Telex:* 2633 Qasim Pk. *Cables:* Port Qaty. *Contact:* Rear Admiral A. Waliulla, Chairman. Captain W. M. Ansari, Operations. Captain Khalid Ali Khan, General Manager – Operations.

NOTES

Please also advise Shipping Guides Ltd.

Republic of Panama

AGUADULCE: 08.14 N. 80.30 W. (See Plan Book)

LOCATION: The port of Aguadulce is located 7 km. from the coast on the Palo Blanco inlet in the Bay of Parita, Pacific coast of Panama.

The port consists of a single quay 70 m. long used mainly for shipment of bulk sugar and molasses to ports in the U.S.A.

DOCUMENTS: The same documents are required and the same procedures are followed as for Almirante, Puerto Armuelles and Bahia Las Minas. See "Almirante".

PILOTAGE: There is an official pilotage service with Pilots available 24 hours a day. Pilotage is compulsory for all vessels greater than 150 g.r.t., wishing to enter and leave the port. To request the Pilot, the vessel's Agent must make arrangements with the National Port Authority. The pilot station is in Aguadulce. Vessels can also ask for Pilot by calling the National Port Authority on Channel 12 VHF.

ANCHORAGE: Vessels must await the Pilot at the anchorage located near the sea buoy which is painted white with a white light flashing every 2 seconds. Position of the buoy is Lat. 08° 13′ N., Long. 80° 25′ W. Depth of water at the buoy's location is 7.4 m. (22 ft.), average low tide, and in places 1 mile to the N.E. it increases to 10.14 m. (30 ft.).

RESTRICTIONS: The port is on an inlet. It has an access channel 13 km. long from the sea buoy. The width of the channel varies from 200 m. in its widest part down to 75 m. at its narrowest.

The channel is marked by buoys which are lit and coming from the sea the buoys on the starboard side are red with even numbers and red lights and those on the port side are green with odd numbers and green lights.

The port is tidal and vessels may only enter and leave on the high tide. At low water the access channel has depths of less than 1 m. (3 ft.) for which reason the maximum draft permitted in the port is 6.4 m. (19 ft.) with 6.1 m. (18 ft.) high tides. Furthermore, inside the inlet there are fairly sharp curves which do not permit entry of vessels greater than 100 m. overall length and 2,500 g.r.t. In the future it is planned to dredge the access channel to provide minimum depths of 3.3 m. (10 ft.) at low tide.

HEALTH: As with other Panamanian ports, the doctor boards the vessel with the other officials of the reception commission. If there is any infectious illness on board, the Master must communicate this to the Port Authority by VHF Channel 12.

VHF: The Port Authority has VHF equipment. Call on Channel 12. It operates throughout the day.

TUGS: None available.

BERTHING: There is a main quay 70 m. long with an average low water depth of 3.3 m. (10 ft.) There is also a small quay 30 m. long which is not used. The quay has a fender system. There is also a dolphin type quay for shipment of molasses with depth 2.7 m., and a 50 m. berth for sugar carriers, which has automatic sugar loaders, depth 2.7 m.

No loading equipment available. Unloading must be by ship's gear. There are belt type sugar loaders. Mobile cranes can be contracted in Aguadulce.

There are two storage tanks for molasses of 1,000,000 and 500,000 gallons capacity respectively.

There are also open air facilities for storage of general cargo.

STEVEDORES: Loading and unloading work is carried out by a gang of local workmen contracted by the ship's Agent, via their representative.

FRESH WATER: Available via tanker lorries. No supply via pipes.

FUEL: None available.

POLICE/AMBULANCE/FIRE: Available in Aguadulce 5 km. from the port.

REPAIRS: No facilities.

PROVISIONS: Supplies available in Aguadulce.

TIME: GMT minus 5 hours.

CONSULS: None; the nearest are in Panama City 193 km. from the port by road.

MEDICAL: Hospital in Aguadulce.

CUSTOMS ALLOWANCES: See "Almirante".

TELEPHONES: Telephone communication from the port by public telephone by micro-wave to any part of the world. No facilities for phones on board vessels.

DENSITY: Approximately 0.9971 gm./c.c. at 85° F.

SHORE LEAVE: No restrictions.

REPATRIATION: There are Immigration Officials on the quay. Repatriation presents no difficulty.

COMMUNICATIONS: The port is connected to the town of Aguadulce by an asphalt highway 5 km. long.

Aguadulce is connected to Panama City by road, the capital being 193 km. distant.

AIRPORT: At Aguadulce there is a small airstrip. There is an airport at Chitre 60 km. from Aguadulce and where a local airline effects two trips between this town and the airport of Paitilla in Panama.

AUTHORITY: National Port Authority, Apartado 8062, Panama 7, Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director General; Ing. Carlos Urriola, Director of Operations.

National Ports Authority – Aguadulce, Carretera del Puerto, Aguadulce, Provincia de Cocle, Panama. *Tel:* 97-4264. *Contact:* The Port Administrator.

ALMIRANTE (Bocas del Toro): 09.18 N. 82.23 W. (See Plan Book)

LOCATION: Located in Almirante (Bocas del Toro) Bay, on the N.E. end of the Atlantic coast of Panama.

The Port of Almirante consists of a pier 204.5 m. long used for loading bananas. The port is used principally by reefer vessels coming from Europe and bound for European ports.

The port was built by the United Brands Company and later transferred to the Government. Currently, it is rented by United Brands but is administered by the National Port Authority.

DOCUMENTS:

2 General Declarations.
1 Clearance from last port.
5 Cargo manifests or declaration that no cargo is carried.
2 Crew lists.
4 Passenger lists or declaration that no passengers are carried.
2 Supplies declarations for crew or declaration that there are no supplies.
2 Crew personal effects declarations.
1 Maritime Health Declaration.
2 Mail lists.
1 Bill of lading (1 copy of each).

The above documents must be presented by the Master of the vessel when the Reception Commission boards the ship, this Commission comprising the following: National Port Authority, Customs, Immigration, Health (Doctor), Vegetable Health and National Guard.

Once the Reception Commission finds the documents to be correct, Free Pratique is given enabling the vessel to commence operations.

PILOTAGE: Pilotage is compulsory for vessels entering Almirante.

The service is provided by a private Pilot who has his station in the town of Bocas del Toro. To request his services, the Agent must make arrangements with the Port Administration. Vessels using Almirante frequently take the Pilot on board in the Bay of Almirante, in front of the town of Bocas del Toro. The pilot cutter is blue with white superstructure, and has VHF radio. To communicate with the cutter, call up on VHF Channel 12 and Channel 16, with SSB fitment.

The Port Authority has established an official pilotage service, and all arrangements for the services of the Pilot must be made with the Port Authority. For vessels arriving for the first time in Almirante, they must anchor outside the entrance of Bocas del Toro aligned at 150° to 180° to Toro Point and 8 cables off. At this point, they must await the Pilot.

ANCHORAGES: Within the Bay of Almirante there are good locations with depths up to 27.4 m.

In front of the quay there is space to anchor with depths of 15.2 m. – 18.3 m.

RESTRICTIONS: The entrance channel has a minimum depth of 9.2 m. and is marked by buoys and light floats as indicated on the Port Nautical Charts. Also see "Developments".

Shipmaster's Report: The water depths on passing Bocas del Toro are greater than 9.2 m. as you follow the charted course lines.

Proceeding at a reduced speed consisting of "dead slow" and "stop", with enough manoeuvrability, to minimise the vessel's pitching, you can enter or leave the Bocas del Toro with a draft of 7.9 m. without any difficulties.

On entering and leaving I was forced by cargo circumstances to berth with a 7.9 m. deepest draft, and never had less than 3.05 m. below my vessel's keel (deepest section), at low water.

MAX. SIZE: There are no restrictions as to beam and size of vessel; but as far as draft is concerned this must not exceed 9.2 m.

Bocas del Toro can be entered and left with drafts of 8.84 m. without difficulty.

HEALTH: The doctor on boarding the vessel with the Reception Commission receives his documents and declares Free Pratique.

In the event of illness on board, Agent must be advised by VHF radio and this will be passed on to the doctor.

RADIO: Cables for and from the Agent are sent by radio operated by Tropical Radio Telegraph Co. The Port Authority has VHF and SSB equipment. The SSB equipment operates on the call-up frequency of 7447.5 kHz.

VHF: VHF communications can be made on Channel 12 at a distance of 30 miles from the port. Furthermore, United Brands Co. has VHF equipment which receives calls on Channel 16.

TUGS: None available.

BERTHING: A banana quay 204.5 m. long with a single mooring frontage and with 4 automatic banana loaders. It is recommended that vessels moor on the starboard side. Also there is a general cargo quay 103.05 m. long which has pipes for discharge of refined oil. The depth at the quay is 7.3 m. – 9.7 m.

Equipment: 4×4 tonne forklift trucks, 1×5 tonne mobile crane.

STEVEDORES: Loading work is carried out by the local Workers Union. The Agent must make contact with United Brands Co. for these workers.

TANKERS: Quay No. 2 fitted with pipes for discharge of refined products.

FRESH WATER: Available throughout the year. The pumping capacity is 2–3 t.p.h.

FUEL: Not available.

REPAIRS: No facilities for repairs to vessels.

PROVISIONS: Obtainable in the local market; but it is preferable for provisions to be obtained in Colon.

TIME: GMT minus 5 hours.

CONSULS: Costa Rica, El Salvador, Honduras, Nicaragua.

MEDICAL: A modern hospital is available in Changuinola 20 km. from Almirante. Almirante also has a small hospital.

CUSTOMS ALLOWANCES: The Customs offices are in the port vicinity. Permitted quantities are 2 packs of cigarettes of 20 packets each per crew member and 2 bottles of whisky or other alcoholic drink per crew member for consumption on board.

TELEPHONE: There is a micro-wave telephone service to Panama and other places in America. The Port Authority has telephones in their offices, but there are none available for installation on vessels.
OPENING/CLOSING HATCHES: Carried out by stevedores.
DENSITY: 1.022 gm./cu.cm.
SHORE LEAVE: No restrictions.
POLICE/AMBULANCE/FIRE: Available in Almirante.
REPATRIATION: Can be effected without difficulty.
AIRPORT: There is a small airport at Changuinola 21 km. from Almirante, which connects the province of Bocas del Toro with the rest of the Republic. There are 2 flights a day between the airport of Changuinola and General Omar Torrijos Herrera in Panama City. Changuinola is connected with Almirante by railway.
DEVELOPMENTS: It is planned to reposition the buoys marking the port entrance channel for the purpose of obtaining a minimum depth of 9.7 m. along the whole of the port access channel.
AUTHORITY: National Port Authority, Apartado 8062, Panama 7, Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director General; Ing. Carlos Urriola, Director of Operations.

Port Administrator-Almirante, *Tel:* 78-9301.

BAHIA LAS MINAS (Colon): 09.24 N. 79.49 W. (See Plan Book)

LOCATION: Situated 11 km. to the East of the entrance of the Panama Canal on the North Coast.
DOCUMENTS:

2 General Declarations.
1 Clearance certificate from last port of call.
5 Cargo manifests, or declaration to the effect that no cargo is carried.
4 Passenger lists, or declaration that no passengers are onboard.
2 Supply lists, or declaration that no supplies are carried.
2 Lists of Crew's personal effects, or declaration that none carried.
1 Maritime Health Declaration.
2 Mail lists or declaration that no mail is carried.
2 Crew lists.

PILOTAGE: Compulsory for all vessels entering the port and is offered by the Pilots of the Marine Department of the Refineria Panama S.A.

Vessels must await the Pilot beyond buoy No. 1 painted white, with a flashing white light every 3 seconds. The best position for anchoring is near buoy No. 1 in position Lat. 09° 25′ 30″ N. Long. 79° 40′ 35″ W. where there is a depth of 63 ft. to 66 ft.

Vessels wishing to enter the port may call up the Port Authority on VHF Channel 12 or Refineria Panama on VHF Channel 16.

The Pilot craft has a black hull and white superstructure. When weather conditions are bad, a tug is used for boarding vessels.

The boarding ladder is placed in accordance with conditions of the sea.

Vessels may also ask for a Pilot via their Agents who will communicate the request to Refineria Panama. In this case, they must give an ETA 12 hours in advance.

RESTRICTIONS: The port of Bahia Las Minas is mainly an oil port, specialised in importing crude oil and exporting refined products, being operated from an oil aspect by Refineria Panama S.A., and administered by the National Port Authority.

Apart from the tanker quays, there is a small quay for handling general cargo, length 90 m. This quay is administered and operated by the National Port Authority. The access channel to the port has a width varying from 300 m. in its widest part to 100 m. in its narrowest part, and a minimum depth of 40 ft. at the tanker quays. However, the general cargo quay can only take vessels of up to 23 draft. Tidal variation in this port is less than 1 ft., and so there are no restrictions for entry and leaving relating to tides.

MAX. SIZE: The port can be used by vessels up to 240 m. LOA at its tanker installations and their draft may not exceed 40 ft.

The general cargo quay can be used by vessels up to 152 m. LOA and 23 ft. draft. However, restrictions in vessels' lengths vary when the quay is used by Ro/Ro vessels which tie up by the bow or the stern, and in this case vessels up to 600 ft. length are permitted.

HEALTH: When a vessel arrives it must hoist the yellow flag of the International Signalling Code. Free Pratique will be granted by the Reception Commission after handing over of documents (See "Documents".) In the case of illness on board, this must be communicated to the vessel's Agent so that he may pass on the information to the Authorities. The vessel may not moor or carry out any operations until the doctor has come on board and verified that the illness does not constitute any danger.

RADIO: Vessels may communicate via the coastal station of the Panama Canal. Generally speaking, the same ships' agencies operating in the Canal are those who represent vessels arriving at Bahia Las Minas.

VHF: The Port Authority has VHF equipment at Colon which operates 24 hours a day on Channels 12 and 16.

For calls to the Port Authority, Channel 12 must be used. Refineria Panama also has VHF radio equipment and calls must be made via Channel 16.

RADAR: There is no radar service.

TUGS: Refineria Panama S.A. supplies this service to vessels which may require it. There are 4 tugs available. Generally, tugs work at the bow and stern of the ship, and lines must be fixed by the vessel's crew.

BERTHING:

Quay	*Length*	*Depth (Average low tide)*
Tanker quay	140 m.	40 ft.
2 lighter quays (refined products)	75 m. each	20 ft.
General cargo quay	90 m.	23 ft.

CRANES: There is no cargo handling equipment on the general cargo quay. All unloading must be by ship's gear.

SPECIAL CARGO FACILITIES: The dry cargo quay is used by Ro/Ro vessels making regular trips between Miami and Panama. The port offers unloading and loading services to these vessels.

The oil quays have special equipment for unloading and loading oil and its derivates.

STEVEDORES: These are provided by the Colon Port Workers' union, and must be contracted by the ship's Agent. Working hours: 0700 – 1500 hrs. and 1700 – 0100 hrs.

MEDICAL: Hospital available in the town of Colon 15 minutes from the port.
FRESH WATER: Available.
FUEL: Pipe-lines are available at all oil quays, but no such facility is available at the general cargo quay.
PROVISIONS: These can be obtained in the town of Colon via local suppliers, the Agent making the necessary arrangements.
DENSITY: 1.0212 grams per cu.cm. at 85° F.
TIME: Local time is GMT minus 5 hours.
CONSULS: Denmark, Finland. Norway, South Africa, Sweden, U.K.,
REPAIRS: Refineria Panama S.A. has a machine shop for minor repairs.
TELEPHONE: None available for connection to vessels. Available in the Port Authority offices. Tel: 42-1658.
AIRPORT: There is a small runway at Colon. At Panama, 90 km. from Colon, is the airport General Omar Torrijos Herrera, which is an international airport, served by the main world airlines.
HOLIDAYS: 1st January, 9th January, Mardi Gras, 1st May, 11th October, 2nd and 3rd November, 4th November, 8th and 25th December.
POLICE/AMBULANCE/FIRE: Available in Colon. Refineria Panama has a small fire brigade, and also in the town of Colon, 15 km. away, there is a fire brigade.
REPATRIATION: This can be done without difficulty via the Immigration offices.
SHORE LEAVE: No restrictions; but due to the distance between the port and Colon, a taxi service must be used. The tariff in a Refineria Panama taxi to Colon is approximately 5 U.S. dollars.
SERVICES: No special services offered. In the ports of the Canal it is possible to have compass adjustments, laundry, chemicals, etc.
AUTHORITY: National Port Authority, P.O.Box 8062, Panama 7, Republic of Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director General; Ing. Carlos Urriola, Director of Operations.

National Port Authority, Bahia Las Minas, Colon, Republic of Panama. *Tel:* 42-1658, 47-9181. *Contact:* Port Administrator.

BALBOA: 08.58 N. 79.34 W. (See Plan Book)

(N.B. For items not listed below, see "Panama Canal".)
DOCUMENTS: See "Panama Canal".
PILOTAGE: Pilotage in the port of Balboa is compulsory, and is effected by Pilots of the Canal Commission.

Vessels arriving for the purpose of using the port area in order to make use of a port facility must also pay for the pilotage service, which will be requested by the Agent.

Vessels of 150 g.r.t. or less do not require a Pilot.

When due to "force majeure" a vessel may have to enter the waters of the port area, this may be done without using a Pilot.

With regard to pilotage, furthermore, the vessel must comply with the 4 points in the Notice to Shipping which appear under the heading "Pilotage" in the port of Cristobal.

Also see "Cristobal".

ANCHORAGES: Vessels must anchor in the various allocated areas for the port.

a) *Anchorage for Merchant Vessels:*
This area is limited by the following co-ordinates:

Lat. 8° 51′ 50″ North,	Long. 79° 30′ 00″ West
Lat. 8° 54′ 30″ North,	Long. 79° 30′ 46″ West
Lat. 8° 54′ 46″ North,	Long. 79° 30′ 00″ West
Lat. 8° 53′ 26″ North,	Long. 79° 31′ 22″ West

and continuing out to sea.

b) *Prohibited Anchorage Area:*
This is limited by the following co-ordinates:

Lat. 8° 51′ 50″ North,	Long. 79° 30′ 00″ West
Lat. 8° 52′ 47″ North,	Long. 79° 31′ 38″ West
Lat. 8° 52′ 58″ North,	Long. 79° 32′ 31″ West
Lat. 8° 54′ 15″ North,	Long. 79° 33′ 36″ West
Lat. 8° 55′ 12″ North,	Long. 79° 32′ 25″ West
Lat. 8° 54′ 17″ North,	Long. 79° 30′ 52″ West
Lat. 8° 53′ 26″ North,	Long. 79° 31′ 22″ West

and from here to the initial point.

c) *Anchorage Area for Vessels Carrying Explosives:*
This area is defined by the following co-ordinates:

Lat. 8° 52′ 47″ North,	Long. 79° 31′ 38″ West
Lat. 8° 51′ 52″ North,	Long. 79° 31′ 38″ West
Lat. 8° 51′ 52″ North,	Long. 79° 33′ 00″ West
Lat. 8° 52′ 36″ North,	Long. 79° 32′ 31″ West

and from here to the initial point.

RESTRICTIONS: Port open throughout 24 hours.

MAX. SIZE: Harbour limitations generally unrestricted as to length and beam. Depth about 40 ft. low water. Vessels in excess of 38 ft. 6 in. draft not handled during period 2.5 hours before and 2 hours after low water. Average tide 3.97 m. (13 ft.).

Tankers working cargo restricted to 700 ft. length and 36 ft. salt water draft.

TUGS: Available and assigned for berthing by Pilot. Tug's lines used at no extra charge.

VHF: Vessels must make contact with the port via VHF Channel 12. Commercial telephone calls and messages to Agents must be made via Panama Radio, VHF Channel 16.

BERTHING: No specific requirements as to arrival times. Nine berths available.

(Pleasure yachts, under 65 ft. length, may be permitted to dock at Panama Canal Yacht Club or Balboa Yacht Club after clearance by Boarding Officer and after Master has received permission from Port Captain, Customs Authorities and Yacht Club Officials concerned. Chief Customs Inspector shall have authority to grant or deny such permission at his discretion.)

Rodman Naval Station: Piers can accommodate vessels of 700 ft. length and up to 39 ft. draft for oil discharge, bunkers or stores.

NPA Dock:

Dock	*Usable length*	*Maximum S.W. draft*	*Remarks*
4	492 ft.	30 ft.	Tankers
6	742 ft.	36 ft.	Bunkering/Tankers
7	1,058 ft.	34 ft.	Containers
8	470 ft.	26 ft.	Repairs/Containers
14	775 ft.	36 ft.	Containers, Bunkering and Bulk Cargoes
15	1,146 ft.	40 ft.	
16	742 ft.	38 ft.	
18–A	500 ft.	39 ft.	General Cargo and Bunkering
18–B	500 ft.	35 ft.	
18–C, D	1,000 ft.	40 ft.	

STEVEDORES: In Balboa there are 7 ship gangs and 4 shore gangs, who are available every day of the year, 24 hours a day.

Endeavour to arrange arrival to avoid cost of "stand by" as Agent arranges gangs for 0700 hrs. or 1700 hrs. commencement. Working Hours: 0700 –1500 hrs., 1700 – 0100 hrs. Overtime possible between 1500 – 1700 hrs. and 0100 – 0700 hrs.

CARGO HANDLING EQUIPMENT: The port of Balboa has different equipment for handling cargo. To handle general cargo and containers, there are cranes with capacities of 2, 4, 10, 15, 30 and 40 tons, chassis, internal lorries, tractors of the agricultural towing type, roller platforms. Bulk cargo handling is by conveyors and suction pumps.

CRANES: Docks 14 and 15 each have a container crane with 32.5 and 40 ton capacity. These cranes are owned by Evergreen and U.S. Lines respectively, one unit moving on rail. Mobile cranes of 10 tonnes and 18 tonnes available.

The Dry Dock Department has 4 cranes: A "D-4", steam crane, with max. capacity of 50 tons, and a "D-19" diesel electric crane with max. capacity of 30 tons. These 2 cranes run on rails alongside Dry Dock No. 1, and along Docks 8 and 13, also providing service to Docks 2 and 3.

Apart from cranes "D-4" and "D-19", the Dry Dock Department has two petrol-electric portable cranes with max. 5 ton capacity.

MEDICAL: Medical attention on arrival at the port of Balboa can be immediate, since there is a First Aid Clinic with a doctor and nurse on duty by day. At night there is a nurse on duty.

DENSITY: The density of the water in the anchorages in the Port of Balboa is 1.01219 gm./cu.m., at a temperature of 85°F (63.87 lbs./cu.ft. at 85°F).

TANKERS: Max. draft 36 ft. (Under certain conditions 40 ft. draft can be accommodated). Tankers receive preferential treatment at Docks 4 and 6, and at Quays 1, 2 and 3 of the Rodman Naval Station.

FRESH WATER: Available at Docks 14, 15, 16 and 18.

FUEL: Bunker "C", marine diesel, petrol, light diesel, paraffin, HDO, LDO and FO are available at Quays 4, 6, 7, 14, 15, 16 and 18. At some of these quays, only certain of the mentioned products are available.

Rate of discharge of fuel is 2,000 – 4,000 bbls./p.h. Crew members are required to connect and disconnect fuel lines on board vessels. The vessel provides the accessories for necessary coupling adjustment to U.S. standard of 4 in. and 6 in. 150 lb. flanges.

A bunkering area has been established in the Pacific Anchorage.

REPAIRS: Emergency repairs possible. The most current repairs are: Machinery in general, welding, different kinds of painting, hull cleaning and sand blasting.

DRY DOCK: There are 3 docks, of which the main one is Dry Dock No. 1 (60,000 d.w.t.). Characteristics of Dock Nos. 1, 2 and 3 are:

Dry Dock	*Total Length* (m.)	*Width* (m.)	*Depth Max.* (m.)	*Depth Av.* (m.)	*Depth Min.* (m.)
No. 1	318.21	43.59	12.77	8.88	8.35
No. 2	111.56	28.04	8.05	4.09	3.62
No. 3	71.73	14.94	5.76	1.87	1.31

POLICE/AMBULANCE/FIRE: All quays have special connections for water to be used in fire-fighting.

The telephone numbers of the departments of police, ambulance and fire brigade which are nearest to the port are:

	Tel.
Police	104
Ambulance	64-3871 (Social Security)
Hospital	
Santo Tomas	25-1436
Red Cross	28-2786 and 28-2787
Fire Brigade	52-2592 (Balboa)

AIRPORT: The international airport of General Omar Torrijos Herrera is located 32 km. (approx.) by road. This airport has flights to different parts of the world.

TELEPHONES: Telephone services can be installed on board by arrangement between the Master and the Port Administrator.

SHORE LEAVE: Generally permitted, landing card required.

CUSTOMS: Customs and Immigration Inspection Service available Monday to Saturday from 0700 to 1700 hrs. Charges for such service after hours and on Sundays and holidays. Number of Inspectors required will be determined by Chief Customs and Immigration Inspector of port.

DELAYS: Delays in berthing, load or discharge or bunkering are minimal and infrequent. Eight hours is considered excessive.

AUTHORITY: National Port Authority, Apartado 8062, Panama 7, Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director General; Ing. Carlos Urriola, Director of Operations.

Balboa Port Administrator. *Tel:* 32-5844 (Ext. 103).

AGENT: C. Fernie & Co., S.A. Apartado 212. Cable Address: "Fernie-Balboa". Also VHF. Telephone Nos.: 52 5657-5371. After office hours telephone number: Panama City 26-3872.

All communications should be directed to Cristobal, Republic of Panama.

CHIRIQUI GRANDE: 08.56 N. 82.07 W. (See Plan Book)

LOCATION: The Petroterminal Transhipment Terminal is located in the Laguna de Chiriqui on the Western side of the village of Chiriqui Grande in approximate position Lat. 8° 56′ N., Long. 82° 07′ W.

The Terminal is linked by pipe-line to Puerto Armuelles Oil Terminal in the Pacific. Oil flow is one way only from the Pacific to the Atlantic Terminus.

PILOTAGE: *Pilotage for Canal del Tigre:* Pilotage for the channel leading into the Laguna de Chiriqui is optional.

Masters requesting a Pilot for the passage into the lagoon should follow the procedure outlined under "Anchorage".

The Master will act as Pilot for those vessels wishing to proceed directly to the inner (lagoon) anchorage, without taking a Pilot, and will observe all applicable Navigation Rules.

Vessels arriving and intending to proceed through the Canal del Tigre to anchor are requested to give outbound vessels priority in the use of the buoyed channel.

In sending arrival times, it should be remembered that the pilot boat requires about 1 hour to travel from the base at Chiriqui Grande to the pilot station (see "Pilot Station" below).

Pilotage/mooring/unmooring to the SBMs is available on a 24 hour basis and supplied by the Terminal on terms set out in the Terminal's Pilotage/Towage contract, which must be signed by all Masters.

Pilot Station: For arriving vessels which require a Pilot, the pilot station is in position Lat. 9° 12′ N., Long. 81° 59′ W. For ships arriving, the ladder will normally be rigged on port side (heading S.W.) approximately 4 ft. from the water and for ships departing, on starboard side approximately 4 ft. from water. Pilot ladders to be in good condition and conform to international standards.

Vessels with a freeboard of 30 ft. or more shall provide a suitable accommodation ladder in addition to pilot ladder. This ladder must be rigged on the starboard side to avoid interference with the cargo hose connection. Vessels rigged in this manner may have to turn N.E. to make a proper lee for boarding the Pilot.

The Master remains responsible for the proper navigation of his vessel, Pilot aboard or not, throughout the time his vessel is attending this facility.

Pilot Boats: Pilot boats are 36 ft. in length, with blue hull, white deckhouse with "Pilots" on either side. The boats are equipped with VHF Channels 16, 14, 13, 12, 11 and radar.

Also see "Mooring".

DOCUMENTS: The following documents are required:

2 General Declarations.
1 Clearance from Previous Port.
5 Cargo Manifests or Declaration that no cargo is carried.
3 Crew Lists.
4 Passenger Lists or Declaration that no passengers are carried.
2 Supplies Declarations (Stores Lists) for Crew or Declaration that there are no supplies.
2 Crew Personal Effects Declarations.
1 Maritime Health Declaration.
2 Mail Lists.
1 Bill of Lading.

Also see "Health".

ANCHORAGES: All vessels at anchor awaiting turn at the SBMs should maintain a radio watch with the terminal ("Rambala Control") on Channel 16 VHF calling (working Channel 14).

Vessels Not Berthing on Arrival: Pilot will be available to bring vessel into lagoon anchorage, if requested by the Master (call on Channel 16 or 14).

If Pilot is not available, vessel should anchor outside the lagoon and maintain a listening watch on VHF Channel 16. The terminal will advise vessel of docking time sufficiently in advance to make necessary preparations.

Outside: Vessels may anchor on the coastal shelf outside the lagoon. Suggested anchorage location in area Lat. 9° 12′ N., Long. 82° 00′ W. where the mud bottom provides good holding ground.

At the Master's option, the vessel may proceed to the lagoon anchorage. Vessels inbound are requested to make a VHF traffic call before entering the channel, and give priority to vessels outbound.

In Lagoon: The area to the East of the SBMs is probably the most convenient area for anchoring. The bottom of the lagoon is reported to be soft mud. Vessels should keep at least 2 miles clear of SBM if at anchorage. Suggested anchorage location between Latitudes 8° 59′ N. and 9° 00′ N. and Longitudes 82° 00′ W. and 82° 04′ W.

RESTRICTIONS: Depth at SBM 72 ft. Depth in approach channel 120 ft.
MAX. SIZE: 150,000 d.w.t.
HEALTH: *Quarantine/Pratique/Documentation:* The Port Officials will board the vessel after mooring or at the anchorage within the lagoon as the case may be.

The ship's Agent will advise the Master of the anticipated boarding time sufficiently in advance.

APPROACHES:

Laguna de Chiriqui: Laguna de Chiriqui deep-water bay, about 30 miles long, in an East/West direction, and about 10 miles wide, is bound on the East by Peninsula Valiente, on the South and West by the mainland, and on the North by Isla Popa, Cayo Agua, and the adjacent islands and reefs. Canal del Tigre, which lies between Peninsula Valiente and Cayo Agua, is the main access channel into the lagoon.

The North side of the lagoon, including the entrance is fringed by detached shoals. These lie up to about 5 miles South of the entrance and along the East shore of the lagoon. The West end of the lagoon South of the fringing reefs is almost entirely clear of dangers.

The low shores of the lagoon are indented by numerous small bays and rivers and marked by several villages.

Canal del Tigre (Tiger Channel): the North approach to Canal del Tigre lies between Roca Tigre and the S.E. side of Cayos Zapatilla to the West.

Punta Valiente (Lat. 9° 11′ N., Long. 81° 55′ W.) a bold densely wooded point, rises to an elevation of 152.4 m. to 182.9 m. (500 ft. to 600 ft.) on the East side of the East entrance to Laguna de Chiriqui. Foul ground extends about 1.25 miles West from the point and continues South about 1.75 miles to the entrance to Bluefield Creek. Cayos Valiente, a group of islets extending about 0.25 miles in an East and West direction lie on the North part of this reef. Virginia Rocks lie on the West edge of the reef about 1.25 miles W.S.W. of Punta Valiente, and Bluefield Rock, 9.8 m. (32 ft.) high, stands on the South edge about 1.5 miles South of the point.

Valiente Peak (Lat. 9° 10′ N., Long. 81° 55′ W.), a conspicuous 231 m. (758 ft.) hill, stands about 1 mile south of Punta Valiente.

Cayos Tigres (Tiger Cays), several islets lying in an East and West direction for about 1 mile, stand about 1.75 miles North of Punta Valiente. Roca Tigre, a detached 8.5 m. (28 ft.) rock marked by a white beacon, stands about 2.5 miles N.N.W. of the same point. Tiger Breakers, over which the sea breaks heavily, together with several shoal patches, lie on a bank within about 0.75 miles N.W. of Roca Tigre.

Canal del Tigre leads into Laguna de Chiriqui, this channel is buoyed (see "Navigation").

NAVIGATION: Approach to the Terminal is from approximately N.E.

The controlling depth for the port is 72 ft. (at the SBMs). There is deeper water in the approach.

The are 4 principal navigation aids available to mariners:

1. Roca Tigre Light.
2. Roca Tigre Racon.
3. Canal del Tigre buoys.
4. Terminal leading lights and daymarks.

SBMs: The SBMs are fitted with flashing white lights, and the hoses with white winker lights (Fl.W. ev. 1 sec.).

SBM No. 1 (North) Lat. 8° 58′ 04″ N., Long. 82° 06′ 27″ W.
SBM No. 2 (South) Lat. 8° 57′ 28″ N., Long. 82° 06′ 06″ W.

Terminal Leading Lights and Daymarks: Lights in line 212° – 032° (T).
Front Lat. 8° 56′ 29.8″ N., Long. 82° 06′ 47.9″ W. Fl.W. ev. 1 sec. (0.3 sec. on, 0.7 sec. off)
Rear Lat. 8° 56′ 28.9″ N., Long. 82° 06′ 48.5″ W. Oc.W. ev. 4 sec. (3.7 sec. on, 0.3 sec. off)

These lights are cylinder lights visible approximately 10° each side of transit line.

Daymarks: White panels 24 ft. in height, 12 ft. wide with 4 ft. vertical black stripe in centre.

Canal del Tigre – Channel Marking Buoys

Buoy	*Position*	*Characteristic*
No. 1	Lat. 9° 08′ 34″ N. Long. 81° 58′ 56″ W.	Fl.G. 4 sec.
No. 2	Lat. 9° 08′ 40″ N. Long. 81° 59′ 56″ W.	Fl.R. 4 sec.
No. 3	Lat. 9° 08′ 00″ N. Long. 81° 59′ 13″ W.	Fl.G. 4 sec.
No. 4	Lat. 9° 07′ 59″ N. Long. 82° 00′ 9″ W.	Fl.R. 4 sec.
No. 5	Lat. 9° 06′ 16″ N. Long. 82° 00′ 11″ W.	Fl.G. 4 sec.
No. 6	Lat. 9° 06′ 11″ N. Long. 82° 01′ 01″ W.	Fl.R. 4 sec.
No. 8	Lat. 9° 05′ 35″ N. Long. 82° 01′ 20″ W.	Fl.R. 4 sec.
No. 9	Lat. 9° 04′ 33″ N. Long. 82° 00′ 16″ W.	Fl.G. 4 sec.

All buoys are equipped with a solar panel and radar reflector built into the tower structure of the buoy.

Roca Tigre: Light exhibited from steel tower 50 m. above sea level. (Beacon on chart). Lat. 9° 13′ 02″ N., Long. 82° 56′ 28″ W. Flash ev. 5 sec. (1.5 sec. on, 3.5 sec. off). Visible 35 miles on a clear night.

Racon: Frequency range – 9500 MHz (3 cm.) swept frequency type.
Azimuth coverage 360°
Nominal range 18 miles.
Sweep period – 70 sec.
Transmission – 24 hours.

This racon operates in the marine radar band, being actuated by the ship's radar in the course of normal operation. It gives the observer his range and bearing from the position of the beacon.

The racon signal appears as narrow flash/letter "P" (· — — ·) or lengthened echo superimposed on the radar screen on the bearing of the racon, commencing at a point just beyond the racon position and continuing radially outwards, away from the vessel.

The racon sweeps the frequency band 9300/9500 MHz once every 70 seconds approximately, and the flash will appear on the screen for a few radar trace revolutions.

The number of successive flashes seen will depend on the distance of the ship from the racon site and will be fewest at maximum distance.

Range measured to the point where the flash begins will be about 60 m. greater than the range of the racon.

If interference with the normal radar display is experienced from the racon signal, it may be reduced by suitable adjustment of the differentiator or anti-clutter controls on the ship's radar set.

Terminal Lights: It is reported that the yellow lights on the crude oil tanks, located at Lat. 8° 56.6′ N., Long. 82° 08.3′ W., elevation 200 m., can be seen at a great distance on a clear night.

The red communications tower light, located 200 m. East of the crude oil tanks, and elevation of 250 m. can be similarly observed.

The white working lights within the terminal are also reported to be conspicuous.

RADIO: Notices/Time of Arrival:

A. ETAs:

ETAs may be sent via ship's Agents who will notify the Terminal. All communications with Chiriqui Grande should be in local time (ZD+5).

ETAs at the pilot station should be received by the Terminal at least 72 hours prior to the vessel's arrival and any variation of more than 4 hours advised.

B. ETAs should include:

1. Vessel's name.
2. ETA pilot station (local time).
3. Quantity of oil required.
4. Any condition that will affect loading operations, including estimated quantity of ballast to be discharged ashore.
5. Deviations from the recommended fittings.

In practice the Terminal is notified by the customer what cargo is required and the Terminal has the data on all vessels that have already visited Petroterminal.

In giving arrival times, it should be noted that the Terminal is interested in the time the vessel will arrive at the pilot station (not when the ship made "end of passage").

Notice of Readiness: Notice of Readiness is considered to be received by the Terminal when the vessel arrives at the pilot station or, if going to anchorage, when the vessel anchors.

VHF: *Radio Communications:*

Frequency Allocation

Channel	*Use*
13	Cargo handling only.
11	Alternative cargo frequency. (Use only on instruction from "Rambala Control").
14	Pilots' and boats' working Channel.
16	Calling. All vessels at anchor maintain a listening watch on this Channel.

General: Vessels at anchor within the lagoon are requested to refrain from using VHF Channel 13; since a persistent FM "Duct" causes interference with cargo operations at the other PTP Terminal at Puerto Armuelles. Channel 14 use should be minimised for the same reason.

Always identify calling vessel and vessel being called.

Vessels approaching the Terminal should establish VHF communications as soon as they are within range (about 50 miles).

The Terminal maintains a continuous listening watch on Channel 16.

Call sign for the Terminal is "Rambala Control".

Call sign for the Pilots is "Chiriqui Grande Pilots".

Vessels at anchor should maintain a listening watch on Channel 16.

Most Terminal radios are equipped with Channels 11, 13, 14 and 16.

Communications while at SBM: All communications while at the SBM will be conducted in the English language.

Deballasting and loading operations will be controlled by VHF radio communication between the vessels at the SBM and "Rambala Control" on VHF Channel 13.

The Berthing Master will bring 2 portable VHF radio units on board at the time the ship begins its approach to the SBM. One of these radios will be assigned to the person in charge of ballast and cargo operations. The person in charge must maintain this radio in his possession *at all times*. This radio must not be changed to any other channel unless instructed to do so by "Rambala Control".

All cargo communications will be identified by ship name.

Communications Failure: In the event of a complete communications failure, vessels at the SBM will indicate their inability to make VHF contact by sounding 5 long blasts on the ship's whistle or siren. At night, the vessel's signal searchlight or Aldis lamp may be used to alert control room personnel (at the base of the pier).

(It may not be possible for a vessel at the North SBM to see the Control Room while lying West of the buoy).

Agency Communications: Agents wishing to contact ships will call "Rambala Control" on VHF Channel 16 and request the operator on duty to so advise the ship.

Ships may call their Agent on Channel 16. Ship/agency business cannot be communicated on Channel 13.

Ships must use their bridge VHF, on LOW POWER, when communicating with Agents, to avoid interference with cargo communications.

The cargo operations radio must not be used for agency traffic, or changed from Channel 13 unless so directed by "Rambala Control".

TUGS: *Floating Equipment:* 2×36 ft. Mon Ark Pilot Boats, equipped with radar and echo sounder. 2×6V-71 GM engines.

2×42 ft. Mooring Launches (DAMEN). 1×8V-71 GM engine.

1×1,000 h.p. 85 ft. tug "Carey".

1 Work Barge equipped with 40 ton crane, accommodation and workshops, 140 ft.×40 ft.

1×30 ft. Marco Oil Skimmer Boat.

Various small boats powered by outboard engines.

SBMs: The catenary anchor leg mooring buoys are designated "South SBM" and "North SBM". A double channel rotating head on the turntable allows two completely segregated flow streams to be routed through the buoy. The rotating head can be connected with the tanker through 2×20 in. hose strings. For initial operation only one string will be used. 2×20 in. manually operated ball valves act as block valves between the rotating head and each 20 in. hose with a third 20 in. manually operated ball valve mounted in a by-pass between the two. This allows interchangeability of the hose strings when both strings are in use or allows diversion of the ballast water into its respective channel in the rotating head when only one hose string is installed.

Battery driven navigation lights and fog horn are installed in accordance with marine regulations. The fog horn is remotely operated by radio from Chiriqui Grande Control Room.

EQUIPMENT: Strops and shackles will be held by the Terminal for use in the event a vessel does not have this equipment.

The vessel to have the following equipment:

On Forecastle Head:

1. 2 Ship's mooring ropes with 12 ft. tails of 3.5 in. – 4 in. circumference lashings to make fast to pick-up rope. These two mooring ropes must be married together using one of the 12 in. tails before approaching the buoy.
2. 3 stoppers of 3.5 in. – 4 in. circumference and 12 ft. long.
3. Fire axe.
4. 100 ft.×3.5 in. – 4 in. messenger rope.

Anchors to be ready for use but in *stowed* position in hawsepipe.

Bow Chocks of Vessel: Should be of suitable size (approx. 24 in.×18 in.) to take the 3 in. chafe chain approximately 16 in. × 8 in. for the rope rig (13 in. circumference rope eye).

If Smit or other type brackets are fitted, they should be in accordance with OCIMF publication "Standards for Equipment Employed in the Mooring of Vessels at SBM".

Manifold Area:

1. 2×12 in. reducers in place on the manifolds to be used for discharging ballast and loading cargo.
2. Cargo boom – SWL 5 tons. Plumbed 2 – 3ft. inboard and mid-way between two manifolds.
3. 1 handy-billy (small 2 and 1 block and tackle).
4. 2 nylon hose slings (wide).
5. 1 small come-along (approx. 1.5 tons).
6. 1 heaving line.
7. 3 bolts long enough to bolt hose/manifold flange.
8. 2×3.5 in. – 4 in. circumference rope slings approximately 8 ft. length.
9. 2×3.5 in. – 4 in. circumference rope approximately 60 ft. length (eye in one end).
10. 1 boat hook or chain hook.
11. 4×12 in. gaskets.

At Stern of Vessel: One mooring rope – eye lowered to water level and made fast on bitts.This will enable launch to pull vessel away from buoy.

Note: It may be requested that the vessel leave steam cracked open on astern turbine to avoid vessel riding up on buoy.

Petroterminal Launch Will Carry:

1. Sufficient bolts to bolt hoses.
2. Suitable ring spanners.
3. 2×6 ft. chain stoppers with 3 in. circumference nylon tails 8 ft. long.
4. Spare keys to camlocks.
5. Spare rope slings.

MOORING: *Mooring Gang/Hose Gang:* As the vessel approaches the SBM the Terminal Mooring Gang of approximately 5 persons will board the vessel by pilot ladder and/or accommodation ladder. The same ladder used by the Pilot will suffice.

If there is additional gear to be put aboard the vessel, the boom at the port side manifold should be manned and the hook lowered to lift the bucket of gear.

Winch/Capstan/Windlass Operators: The ship will provide personnel to operate all deck machinery and assist the Petroterminal Mooring Gang. On completion of hose connection the gang will leave the vessel.

The Pilot/Berthing Master: Remains aboard the vessel whilst the ship is at the SBM. A cabin should be provided for his use.

A Berthing Master will assist and advise in the connection and disconnection of hoses/moorings, etc. During deballasting and loading operations he will be available to assist and advise on procedures. In cases of oil spill or other emergencies, he will advise the Master.

The Berthing Master will be the Terminal's Representative on board the vessel and will have the authority to stop all operations if regulations or required procedures are not observed.

Where any disagreement arises between the vessel personnel and the Berthing Master regarding some aspect of the SBM procedure, the procedure to be followed will be that which provides closest compliance with guidelines established by the latest edition of International Safety Guide for Oil Tankers and Terminals, published by the International Chamber of Shipping, Oil Companies International Marine Forum.

Mooring to SBM: The ship will approach the buoy from downwind maintaining the wind exactly ahead. (Adequate ballast should be retained to maintain manoeuvrability).

From the stem chock, or a port bow chock close to the stem, lead a mooring rope (eye-end) and lower the eye to the waiting launch.

(For the Smit Bracket, a chock approximately 24 in. × 18 in. will be required.)

The launch will take the ship's mooring rope and secure it to the buoy approach rope. This approach rope (480 ft.×10 in. plaited polypropylene) is hove aboard with the ship's windlass, heaving the vessel toward the buoy. Made fast to the end of the buoy approach rope is a 45 ft. × 13 in. circumference stable braid strop with a 5 ft. eye. The eye of this strop should either be placed on the bitts or made fast by means of a short strop and shackle.

Vessels equipped with a Smit bracket will secure the buoy rig to the bracket using a pear link and shackle.

ALTERNATIVE RIG: See "Plan Book".

From the port bow or centre chock, a mooring rope (with eye in end) is lowered through a fairlead sufficiently large to permit the entry of chain chafing cable and steel triangular plate 9 in. × 7 in.

The launch will take this rope and secure it to the buoy approach rope. This approach rope (480 ft. of 10 in. plaited polypropylene) is hove aboard first, heaving the vessel toward the buoy.

Prior to heaving the buoy rope aboard, a heavy wire strop will have been placed on the port side of the forecastle, onto suitably placed bitts, with 50 ton shackles in readiness.

This shackle is secured both to the wire strop and the triangular plate. Once the shackle is fast, the weight is released from the approach rope and allowed to come onto the wire strop. The chafing chain tail and buoy rope are then cast off the windlass.

Strops and shackles will be available from the terminal for use in the event a ship does not have this equipment.

The approach rope is made fast to the bitts.

If required additional back-up is needed, ropes can be made fast to the other links in the chafing chain. This should not be necessary with the good weather conditions of Chiriqui lagoon.

HOSES: *Connection of Hoses:* Once the vessel is safely secured at the buoy, the launch which had been holding the hoses clear during this operation will tow them to the port side of the vessel and they will be connected.

The hoses will be 2×12 in. and will be fitted with short spool camlock couplings. Forward 12 in. hose will be lifted first.

1. The vessel's boom will be plumbed so that it is approximately 2 ft. – 3 ft. inboard of port side and midway between the manifolds to be used.
2. The forward hose will be lifted first by the eye attached to the hose blank.
3. Hose will be lifted clear of water and level with ship's deck. Snubbing chain will then be brought on deck before hoisting hose any higher.
4. Once hose is at correct height above deck, snubbing chain will be made fast to bitts, hose lowered so weight is taken by snubbing chain. Hose will bend over to face ship's manifold. After the hose end blank has been removed, the hose will be connected to the ship's manifold with camlock couplings. "Come alongs" or handy billies may be used for positioning hoses. After securing the connection, check each camlock fitting to ensure that the ratchets are engaged.
5. The same procedure is followed for second hose.
6. When both hoses have been connected, the boom will be plumbed over the hoses and bar and webbing straps used to support hose, throughout transfer operations.
7. If camlocks alone will not provide a leak-free connection it may be necessary to use bolts to tighten the connection.

Camlock couplings at hose end: Pipe size, 12 in.; flange OD, 19 in.; flange thickness, 1.25 in.; seal ID, 13.375 in.; number of cams, 4; minimum locking range, 1 in.; maximum, 1.5 in.

Disconnection of Hoses: Once cargo operations have been completed, a reverse of the connection procedure is followed and the hoses lowered over the side, but made fast to the ship's side until the ship slips from the buoy or are towed clear by the launch – the reason for not immediately releasing the hoses is to keep them clear of the vessel's propeller.

Weight of Hose Strings for Single Buoy Moorings: The following table gives the approximate weights of hose strings in tonnes (including fittings, floats and pick-up buoy) with all hoses full of crude oil of S.G. 0.850. The assumed total lift is 7.5 m. (25 ft.) above deck level, with the tanker on light draft.

Size of Tanker	*12 in. I.D. Hose*
270,000	6.5
200,000	6.2
100,000	5.4
70,000	5.1
50,000	4.9
35,000	4.7
18,000	4.3

Information taken from International Safety Guide for Oil Tankers and Terminals manual.

Hose Information – Petroterminal:

	Tanker Rail Hose 12 in. (Barbel type)	Floating Hose 12 in.
Length	9.25 m.	12.19 m.
Weight	890 kilograms	1,940 kilograms
Electrically	Discontinuous	Continuous
Built-in fitting type	ASA 150	ASA 150
Ancillary equipment weight (flanges)	317 kilograms	—
Bend radius	1.85 m.	—

Hose make: Kleber (France).

BALLAST: Within the lagoon, ballast should be handled by type, as per international convention, as follows:

Segregated: All ballast in segregated ballast tanks should be visually inspected prior to discharge. After inspection, segregated ballast may be discharged overboard according to standard shipboard procedure.

Dedicated Clean: All ballast in dedicated clean ballast tanks should be visually inspected prior to discharge. After inspection, dedicated clean ballast tanks may be discharged overboard in accordance with IMO Regulations.

Treated: Ballast water which has been chemically treated (with detergents, emulsifiers, etc.) must be retained on board.

Others: All other ballast water will be pumped ashore prior to loading. The Terminal has 3×120,000 barrel tanks for the reception of dirty ballast. The ship will advise the Terminal of the quantity of ballast to be discharged ashore prior to commencing discharge.

Crude Oil Washing (C.O.W.): As vessels will be loading only, we do not anticipate any crude oil washing requests. Should the necessity arise, the Terminal should be advised.

LOADING: *Safety Check List:* Prior to start of operations, the Berthing Master and responsible Officer will complete the Safety Check List and also agree:

(A) Designated Smoking Areas.
(B) Galley and Appliance Limitations.
(C) Emergency Assistance.
(D) Vessel will be ready to move under her own power at all times whilst moored to SBM.

Pre-Transfer Conference: A Pre-Transfer Conference will be held between Berthing Master and responsible Officer prior to commencement of operations. (IOTTSG Chapter 5) to agree on procedures for deballasting and loading, including:

1. Communications between ship/shore/Berthing Master.
2. Deballasting procedures.
3. Cargo start-up procedure.
4. Any deviations from normal procedures.
5. Loading rates, initial, maximum and topping off.
6. Notice times required to change rates and shutdown procedure.
7. Emergency shutdown, moorings failure, oil spill, etc.
8. Any ship's deficiencies to be made known.
9. Any Terminal deficiencies to be made known.
10. Completion of loading.
11. Designated smoking areas.
12. Galley and appliance limitations.
13. Emergency assistance.
14. Vessel will be ready to move under her own power at all times while moored at the SBM.

Prior to the start of operations, the Berthing Master and responsible officer will complete the Safety Checklist.

Flow Rates: The tanker loading system is designed to be able to load a tanker at each SBM simultaneously. Each system has a maximum loading capacity of 50,000 bbls.p.h. using 2 × 12 in. hoses or 60,000 bbls.p.h. using 3×12 in. hoses. The third 12 in. hose is not currently fitted.

Deballasting of tankers is also handled through the same hose as used for loading, at a designed rate of 30,000 bbls.p.h.

Pressures:

Maximum crude oil static pressure on shoreside manifold 339 p.s.i.g.

Maximum allowed static pressure on buoy system 275 p.s.i.g.

Maximum allowable static pressure at ship's manifold to be determined by the ship's Master and communicated to the Berthing Master.

All vessel operations in connection with deballasting/loading, switching of tanks, topping off, must be directly supervised by a responsible officer.

Deballasting/Loading: Upon being informed by the responsible officer that the vessel is ready in all respects to commence operations, the Berthing Master will request that deballasting or loading operations proceed according to previously agreed plans as discussed at the pre-transfer conference.

Deballasting procedures are conducted in the following sequence:

1. After the 2×12 in. hoses are connected, Terminal personnel will line-up the buoy valves, prior to vessel opening manifold valves.
2. Vessel will be notified when Terminal is ready to receive ballast.
3. Vessel will be instructed to commence deballasting at approximately 11,000 bbls.p.h.

   Rambala Control will advise when the discharge rate can be increased to the required tanker rail pressure to attain a 30,000 bbls.p.h. deballasting rate (111 – 120 p.s.i.g.).
4. The vessel will advise when deballasting is completed and shut down at manifolds.
5. The terminal will secure ballast system ashore.

Loading Operations:

Loading procedure will follow the sequence below:

1. The Terminal will change from ballast to cargo piping alignment at buoy (because of piping arrangement, ship can expect to receive about 400 barrels of dirty ballast at start of cargo loading).
2. The vessel aligns its piping to load cargo.
3. The vessel opens manifold and advises "Rambala Control".
4. The shore valves will be slowly opened to pressurise the system.
5. The vessel confirms that cargo is being received into tanks.
6. The Terminal will advise vessel hourly of loading rate. This routine also provides a radio check. If the ship does not receive its hourly rate check at the expected time, it should attempt to contact "Rambala Control".

Topping off/Completing: When topping off, the following procedures will be observed:

1. The vessel advises shore prior to start, topping off, and requests desired flow rate.
2. Using shoreside flow/pressure control valves, give vessel loading rate required.
3. When vessel indicates "Stop" the flow/pressure shoreside valve will be closed.
4. When flow has stopped ashore, "Rambala Control" will notify the ship to secure its manifold valves.
5. The vessel closes ship's manifold valves.

Stripping:

1. Shoreside stripping pumps will be started to clear the hose ends of crude oil. (Vent valves at ship's manifold should be opened.)
2. SBM and shore tank valves will be shut. Close vent valves.

Disconnection of Hoses: Once cargo operations have been completed, the procedure for disconnecting hoses is a reverse of the connection procedure. Hoses are then lowered over the side, but made fast to the ship's side until the ship slips from the buoy or the hoses are towed clear by the launch.

The reason for not immediately releasing the hoses is to keep them clear of the vessel's propeller.

Emergency Shutdown: In the event of an oil spill, line rupture or other cause which requires immediate shutdown, the vessel will advise the control to "Stop Stop Stop" and the flow/pressure control valves will be immediately shut. Simultaneously the vessel will close its manifold valves.

The ship will be advised immediately these valves have closed.

Oil Type:

Alaskan North – Slope Crude.
API Gravity 26.7° – 26.9°.
Sulphur 1.05.
Flash Point 0°F.
Reid Vapour Pressure 3.8 at 100°F.
Viscosity 60°F, 68 centistoke seconds.
Viscosity 100°F, 22 centistoke seconds.
Approximate loading temperature 80°F to 90°F.

EMERGENCY PROCEDURES:

Oil Spillages: Should an oil spillage occur from a vessel, from SBM, or from sea lines, "Rambala Control" is to be advised immediately and all shore and ship valves closed in the shutdown sequence.

The Berthing Master will be informed and will initiate action to counter oil spill following procedures as outlined in terminal oil spill manual.

Ship's crew will recover spilled oil from ship's deck.

Fire: In case of fire aboard a vessel, in addition to the internal ship board alarms, Masters are requested to sound a prolonged blast on the main siren or whistle.

If deballasting or loading, the vessel should:

1. Immediately cease all operations. If loading, call Control Room for emergency shutdown.
2. Initiate fire fighting procedures.
3. Be prepared to disconnect hoses and unberth.

Any other vessel at SBM should also shut down operation and be prepared to unberth.

Loss of Communication: Vessel to sound 5 long blasts on whistle or siren. All operations will be shut down immediately and remain so until communications have been restored.

UNMOORING:

Unmooring from the SBM: To unmoor from the buoy, the approach rope is taken to the windlass and the weight taken whilst the shackle is released from the Triangular Plate or Open Link.

The rope is slacked into the water as the ship goes slowly astern.

At this time, the hoses are also slipped from the ship's rails if they have not previously been slipped and towed clear by the launch.

EARLY DEPARTURE PROCEDURE: All loading vessels are requested to use an early departure procedure (E.D.P.).

(A) If the Master of vessel consents to use the E.D.P. it will be implemented in the following manner:

1. The Master will sign a letter agreeing the use of E.D.P.
2. The cargo documents and other relevant forms will be put aboard the vessel.
3. On completion of loading, the vessel's tanks will be gauged by the Cargo Inspector.
4. The vessel will sail.
5. The terminal will transmit Bill of Lading figures to the vessel by VHF radio. The cargo documents are to be completed by the Master.
6. Written confirmation of these figures will be provided by the vessel's Agent.

(B) If the Master of a vessel does not agree to use E.D.P. the vessel will be unberthed immediately after loading. Terminal's representative will bring completed cargo papers by launch.

MEDICAL: There are no medical or dental services available. Emergency medical requests will be handled by the vessel's Agent.

DENSITY: 1018 (approx.).

FRESH WATER: Not available.

FUEL: Not available.

SURVEYORS: *Petroleum Inspection:* Vessels will be inspected by inspectors from Caleb Brett or Saybolt Inspection Companies.

These inspectors will follow the procedures laid down by Sohio, Exxon, Arco, etc. as the case may be.

REPATRIATION: Possible using daylight airstrip (length 1,120 m.).

TIME: GMT minus 5 hours.

SHORE LEAVE: See "General".

WEATHER:

Wind: The normal seasonal wind regime occurring at the lagoon is as follows:

November – March: Wind speeds greater than 19 m.p.h. occur 20.4% of the time in February. The predominant directions are from N. and N.E. (72.2%, occurrence in February). This is the primary windy season. February is the windiest month.

April – June: Wind speeds exceed 19 m.p.h. 3.3% of the time in June. The predominant directions are N., N.E., and E. (58.3% occurrence in June). This season is the secondary calm season.

July – August: Wind speeds exceed 19 m.p.h. 8.8% of the time in July. The predominant directions are N., N.E., and E. (71.2% occurrence in July). This season is the secondary windy season.

September – October: Wind speeds exceed 19 m.p.h. 2.3% of the time in October. Predominant wind directions are N. and N.E. (28.4% occurrence in October), and S. and S.W. (27.6% occurrence in October). This season is the primary calm season.

Waves: The seasonal wave height is:

November – March: Significant wave height exceeds 1.9 ft. 36.2% of the time in February N. and N.E. wave directions predominate, occurring 72.2% of the time in February. This is the roughest season. February is the roughest month.

April – June: Significant wave height exceeds 1.9 ft. 7.8% of the time in June. N., N.E. and E. wave directions predominate, occurring 58.3% of the time in June. This is the secondary calm season.

July – August: Significant wave height exceeds 1.9 ft. 19.7% of the time in July. N., N.E. and E. wave directions predominate, occurring 71.2% of the time in July. This is the secondary rough season.

September – October: Significant wave height exceeds 1.9 ft. 3.9% of the time in October. N. and N.E. wave directions, occur 28.4% of the time, and S. wave directions occur 14.6% of the time in October. This is the primary calm season.

Rain: Rain squalls with strong winds of short duration may be expected from time to time, being more prevalent from November through March.

GENERAL:

Charts: U.S.H.O. (Defence Mapping Agency) 28042 and 28041. British Admiralty 1793.

Sailing Directions: U.S.H.O. Publication – Pub. 144 – Sailing directions for Caribbean Sea and British Admiralty Pilot No. 7A.

Tides: The maximum tidal range is 2.1 ft. The Mean Range is 0.8 ft. The tidal flow in the Lagoon is weak.

Currents: Cross currents of varying velocity have been observed entering Canal del Tigre.

At the offshore anchorage prevailing currents are predicted to be from the E.N.E.

Launch Service: The terminal launches are for terminal use only. Crew members are not permitted aboard these launches.

The launch attending the vessel will be available to the cargo officer of a vessel loading/discharging for the purpose of reading the vessel's draft.

Shore Leave: The terminal will not provide a launch service for shore leave and crew members may not use the launches.

Smoking Regulations: Smoking is Prohibited in the following locations:

1. Entire terminal crude tank area.
2. Aboard launches within 0.5 miles of the vessel.
3. In motor vehicles in crude tank area, also in area of ballast tanks except inside designated buildings.
4. On ships except in places designated by the Master and agreed by the terminal's representative.

In accordance with IOTTSG; 2 locations only will be established in the after end of the vessel.

N.B. If an oil spill occurs on jetty or ship, all smoking will be prohibited until the spill has been removed.

SERVICES:

Chandlers: None.

SHIP SUPPLY SERVICE: The terminal has 1 small tug which is able to assist with stores, etc. Launches also available and helicopters are easily hired.

OPERATOR: Petroterminal de Panama, S.A., P.O.Box 8-179, Panama 8, Republic of Panama. *Tel:* 69-7777. *Telex:* 3792527. *Contact:* Captain G. Moss, Marine Manager.

AGENT: See "Puerto Armuelles".

COLON: 09.21 N. 79.55 W. (See Plan Book)

LOCATION: Located in the Bay of Limon, the port of Colon constitutes Quay No. 3 in the area of Fort Lesseps.

DOCUMENTS: The same documents are required and the same procedures are followed as at Bahia Las Minas.

PILOTAGE: No pilotage service at Colon. Vessels berth and unmoor under the orders of their Masters.

RESTRICTIONS: The port is restricted to vessels of length not greater than 100 m. due to the size of the quays. Draft at the berths varies from 2.6 m. to 6.1 m., which also restricts the size of vessels.

Aids to Navigation: The port entrance channel has no aids of its own for navigation. Maritime accesses are however marked clearly by the Panama Canal Commission.

HEALTH: Same as Bahia Las Minas.

RADIO: Vessels can communicate with the Port Administration on Channel 12 VHF.

TUGS: None at Quay No. 3, but they may be contracted in the Canal.

BERTHING:

Berth	*Length*	*Depth (average low tide)*
Quay 2	75 m.	4.9 m.
Quay 3	58 m.	2.05 m.

STEVEDORES: All loading and unloading operations are carried out by the Union of Port Workers of Colon. The ship's Agent must make the necessary arrangements.

CRANES: None.

FRESH WATER: Available.

FUEL: Available at the quay by pipe-line. Also Refineria Panama supplies fuel in the Bay of Colon by means of lighters.

PROVISIONS: Available in Colon.

DENSITY: 1.0212 grams cu.cm. at 85°F.

TIME: GMT minus 5 hours.

CONSULS: Denmark, Finland, Norway, Sweden, UK.

MEDICAL: In the town of Colon.

TELEPHONE: Available in the offices of the National Port Authority. Tel: 47-9181.

POLICE/AMBULANCE/FIRE: Available in Colon.

GENERAL:

Shelter: All the quays are protected from the sea by the breakwater which protects the canal entrance in the Atlantic sector.

General Description: The port of Colon (Quay No. 3) is used by small vessels of length not greater than 100 m. engaged in coasting trade between Colon and Bocas del Toro, and international trade between Colombia and Panama.

Port Maritime Access: The Colon port access is the same as that which leads to the port of Cristobal in the Canal.

Nature of Bottom: Soft mud and clay.

AUTHORITY: National Port Authority, Apartado 8062, Panama 7, Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director General; Ing. Carlos Urriola, Director of Operations.

CRISTOBAL: 09.21 N. 79.55 W. (See Plan Book)

(N.B. For items not listed below, see "Panama Canal".)

PORT LIMITS: Ship's arrival time is normally determined by their passage between the breakwater lights. Those that anchor outside the breakwater by arrangement with the Port Captain are timed as arrived when they drop anchor.

DOCUMENTS:

(a) Documents are to be presented by vessels in transit; who do not embark or disembark passengers; or handle cargo, to the Canal Commission.

General Declaration Form: 2 copies
Crew List: 2 copies
List of Passengers: 2 copies
Local Cargo Manifest: 1 copy
Stores or Supply List: 1 copy
Mail List: 1 copy
Clearance Outwards Certificate from last port visited: 2 copies

(b) Documents which vessels must present when they embark or disembark passengers, or handle cargo, to the National Port Authority.

General Declaration Form: 2 copies
Local Cargo Manifest: 4 copies
Crew List: 3 Copies
List of Passengers: 4 copies
Stores or Supply List: 2 copies
Crew Effects List: 2 copies
Maritime Health Declaration: 1 copy
Mail List: 1 copy

PILOTAGE (Also see "Panama Canal"): Pilotage into Cristobal not compulsory, although services of Pilot outside breakwater are available on request.

Vessels arriving outside Cristobal Breakwater who have requested an outside Pilot are required to *heave to and make a good lee.*

A pilot ladder rigged with appropriate spreaders and well illuminated at night to be provided by vessel. Accommodation ladders not acceptable for embarking Pilots outside breakwater.

Notice to Shipping:

1. A vessel shall, weather permitting, have both an accommodation ladder and a pilot ladder rigged and ready for use upon arrival in Canal Waters.
2. The pilot ladder shall conform to Regulations of the International Convention for the Safety of Life at Sea (SOLAS) and to all additional recommendations of the International Maritime Organisation (IMO).
3. The accommodation ladder may be turned in and secured after the Pilot has boarded the vessel in the anchorage, provided the freeboard does not exceed 9 m. (30 ft.). If the freeboard exceeds 9 m., the accommodation ladder may not be turned in until the last Panama Canal employee boards prior to arrival at the locks.
4. A pilot hoist may be used provided the design and construction of the hoist and ancillary equipment are of such a standard as to ensure an effective and safe means of embarkation and disembarkation. The pilot hoist should only be used when:
    - *(a)* A conventional pilot ladder is rigged and ready for immediate use but triced up well clear of the hoist;
    - *(b)* A lifeline attached to a safety stop and a lifebuoy fitted with a self-igniting light are ready for immediate use.

ANCHORAGES: Vessels will ordinarily proceed to anchorage area according to length and draft unless otherwise directed. Arriving vessels expected to anchor as far to South and inward from main channel in their anchorage area as is consistent with safety. Vessels anchoring in non-designated areas may be required to move.

Anchorage Area "A". For all ships with a deep salt-water draft of not less than 10.4 m.(34 ft.) and not in excess of 11.9 m. (39 ft.). Minimum charted depth is 12.2 m. (40 ft.).

This area starting at	Lat. 9° 23′ 21″ N.,	Long. 79° 55′ 21″ W.,
thence to	Lat. 9° 22′ 48″ N.,	Long. 79° 56′ 15″ W.,
thence to	Lat. 9° 22′ 14″ N.,	Long. 79° 56′ 15″ W.,
thence to	Lat. 9° 21′ 56″ N.,	Long. 79° 55′ 48″ W.,
thence to	Lat. 9° 21′ 25″ N.,	Long. 79° 55′ 48″ W.,
thence to	Lat. 9° 21′ 25″ N.,	Long. 79° 55′ 21″ W.,

thence due North to starting-point. However, restricted area North and West of Buoy 2, as charted, must be observed. Explosive sector charted in this area to be avoided whenever possible.

Anchorage Area "B". For all ships with salt-water draft under 9.7 m. (32 ft.) Minimum depth is 8.8 m. (29 ft.). Explosive sector restricted to vessels carrying explosives or specially designated vessels. All ships of such length are under no circumstances swing into Anchorage Area "A".

This area starting at	Lat. 9° 22′ 48″ N.,	Long. 79° 56′ 15″ W.,
thence to	Lat. 9° 22′ 32″ N.,	Long. 79° 56′ 41″ W.,
thence to	Lat. 9° 21′ 42″ N.,	Long. 79° 56′ 41″ W.,
thence to	Lat. 9° 21′ 52″ N.,	Long. 79° 56′ 00″ W.,
thence to	Lat. 9° 21′ 25″ N.,	Long. 79° 56′ 00″ W.,
thence to	Lat. 9° 21′ 25″ N.,	Long. 79° 55′ 48″ W.,
thence to	Lat. 9° 21′ 56″ N.,	Long. 79° 55′ 48″ W.,
thence to	Lat. 9° 22′ 14″ N.,	Long. 79° 56′ 15″ W.,

thence due North to starting-point.

Anchorage Area "C". Required pilotage waters for inbound vessels.

This area starting at	Lat. 9° 21′ 25″ N.,	Long. 79° 55′ 21″ W.,
thence to	Lat. 9° 21′ 25″ N.,	Long. 79° 56′ 00″ W.,
thence to	Lat. 9° 20′ 48″ N.,	Long. 79° 55′ 57″ W.,
thence to	Lat. 9° 20′ 27″ N.,	Long. 79° 55′ 27″ W.,

thence due North to starting-point. Restricted area East and South of Buoy 2, as charted, must be observed.

Anchorage Area "D". For all ships of over 106.7 m. (350 ft.) in length and a deep salt-water draft of less than 10.7 m. (35 ft.) except where minimum charted depth is 9.7 m. (32 ft.).

This area starting at	Lat. 9° 23′ 19″ N.,	Long. 79° 55′ 15″ W.,
thence to	Lat. 9° 22′ 55″ N.,	Long. 79° 54′ 21″ W.,
thence to	Lat. 9° 22′ 22″ N.,	Long. 79° 54′ 21″ W.,
thence to	Lat. 9° 22′ 02″ N.,	Long. 79° 54′ 55″ W.,
thence to	Lat. 9° 22′ 02″ N.,	Long. 79° 55′ 15″ W.,

thence due North to starting-point.

Anchorage Area "E". For all ships less than 106 .7 m. (350 ft.) and small craft. Minimum charted depth of water is 7.3 m. (24 ft.)

This area starting at	Lat. 9° 22′ 55″ N.,	Long. 79° 54′ 21″ W.,
thence to	Lat. 9° 22′ 27″ N.,	Long. 79° 53′ 54″ W.,
thence to	Lat. 9° 22′ 22″ N.,	Long. 79° 53′ 54″ W.,
thence to	Lat. 9° 22′ 22″ N.,	Long. 79° 54′ 21″ W.,

thence due North to starting-point.

Anchorage Area "F". For small craft and yachts. Pilotage for this area will be decided by Cristobal Port Captain, based on merit of each individual case. Under no circumstances may a vessel proceed to this area prior to being cleared by Boarding Officials. (Bounded by Channel Buoy "3" by a direct line through Buoys "A," "B," "C," "L4," "L2" and return to Buoy "3".)

Outer Anchorage Area. Established N.W. of Cristobal breakwater has the following co-ordinates: Commencing at Lat. 09° 23′ 14″ N., Long. 79° 55′ 21″ W. (West breakwater light); thence to Lat. 09° 24′ 40″ N., Long. 79° 56′ 00″ W. (buoy "A", whistle sea buoy); thence to Lat. 09° 24′ 40″ N., Long. 79° 57′ 00″ W.; thence to Lat. 09° 23′ 14″ N., Long. 79° 57′ 00″ W.; thence due East to starting point.

During periods of harbour congestion, large, deep-draft vessels and/or any vessel so directed may anchor outside the breakwater in the approved area. Such vessels must advise Cristobal Signal Station, by VHF Channel 12, the time of passing sea buoy, in order to establish order of transit. Masters will be given a definite time to enter the breakwater, where the vessel will be met by transit Pilot(s) and Boarding Officials.

Vessels must strictly adhere to the breakwater entry times as given, in order that transit schedule can be maintained.

Prohibited Anchorage. Eastern side of channel, Canal waters South of Lat. 9° 22′ 02″ N. to Mole Buoy in order to give clear access to Colon Harbour. Also, no vessel or craft may proceed South of Lat. 9° 21′ 25″ N. prior to being cleared by Boarding Officials. No vessel may anchor with any part of the vessel in the main channel or closer than 274 m. (900 ft.) to either East or West breakwater lights.

In cases due to harbour congestion, any vessel may be directed to anchor to Westward outside breakwater entrance and given an order as to the time it is to pass through the breakwater entrance.

RESTRICTIONS: Port open throughout 24 hours.

MAX. SIZE: Harbour limitations generally unrestricted as to length and beam. Draft 12.2 m. (40 ft.).

HEALTH: The Official who comes on board has to verify that the vessel complies with the requirements of the Republic of Panama as far as International Health, Animal and Agricultural Health, Migration and Customs are concerned. If there is any violation, non-fulfilment or omission in respect of any of the International or National requirements concerning human, agricultural health and Customs, the granting of Free Pratique will be suspended until the Competent Authority has been informed and has finally decided as to whether or not Free Pratique can be granted. Also, the respective Authority has to inform the competent authorities of the circumstances, evidence or a reasonable indication that on board the vessel there is danger to human, animal and vegetable life.

RADIO: The Port Captain may be contacted via VHF Channel 12. Commercial telephone calls and messages to Agents may be made via Panama Radio, VHF Channel 16.

TUGS: Available and assigned for berthing by Pilot. Tug's lines used at no extra charge.

BERTHING: No specific requirements as to arrival times. Fifteen cargo and bunkering berths.

Cristobal Harbour Controlling Depths:

Dock	Berth	Usable Length (m.)	Max. S.W. Draft (m.)	Max. Lgth. of Ship at Max. Draft (m.)	Beam Limit (m.)	Total Lgth. Avail. of Dock Face (m.)	Remarks
6	AB	314.0	10.90		None	314.0	FO, HDO, Water, General Cargo, 20 ft. Containers
6	B		10.90		None		
6	CD	314.0	12.20		None	314.0	FO, HDO, Water, General Cargo, 20 ft. Containers
7	AB	298.0	11.98		None	298.0	FO, HDO, Water, General Cargo, 20 ft./40 ft. Containers
7	B		10.90		None		
7	CD	304.8	11.90		None	304.8	FO, HDO, Water
7	E	76	10.10		None	73.2	Water
8	AB	302.0	11.60		None	301.7	FO, HDO, Water, General Cargo
8	B		9.14		None		
8	CD	308.0	12.19		None	307.8	FO, HDO, Water, General Cargo
9	AB	325.0	11.30		None	325.5	Gasoline, DO, FO, Water, General Cargo/OCL
9	B		8.50		None		
10		129.0	9.14	183.0	None	129.0	FO, HDO, Gasoline, Water.
16	AB	326.0	12.20		None	326.1	FO, Water, Gasoil, Gasoline
16	CD	326.0	12.20		None	326.1	FO, HDO, LDO, Water, Gasoil, Gasoline (no Gasoil at 16D)
16	E	140.0	8.84	91.4	None	139.6	Water, Gasoil, Gasoline, Diesel

Also see "Developments".

STEVEDORES: Endeavour arrange arrival to avoid cost of "stand by" as Agent arranges gangs for 0700 hrs. or 1700 hrs. commencement.

CARGO HANDLING EQUIPMENT: The Port has all kinds of equipment for handling cargo arriving at the quays.

To handle container and other types of cargo, there are dock lorries, chassis, fork lift trucks of varying capacities (2,4,10,15,30,40 tons), agricultural type towing tractors, rolling platforms, and other smaller aids.

CRANES: The only crane in the port is at the pier end of Quay No.8 at Berth A. It has a steel arm capable of lifting 40 tons to a height of 27.45 metres (90 ft.)

MEDICAL: Medical attention on arriving in the port of Cristobal can be immediate, since the port contains a first aid clinic in which a doctor and a nurse are present during the day, and a nurse at night. In the town of Colon there are hospitals and private clinics.

TANKERS: Four berths available.

FRESH WATER: Available from piers.

FUEL: Bunker "C", diesel, light fuel and light diesel available at Government wharves from commercial companies. Rate of delivery 2,000 bbls. per hour.

The Southern part of Anchorage C, Cristobal Harbour, has been designated a limited bunkering area for vessels whose draft is too great to use the East breakwater bunkering area.

Pilotage is compulsory out and into this area for vessels and bunkering barges.

Also see "Balboa".

REPAIRS: Emergency repairs possible.

DRY DOCK: (Not available for commercial activities). Length 117.6 m. (386 ft.), breadth 18.3 m. (60 ft.), depth over blocks 6.2 m. (20 ft. 6 in.) MLW.

POLICE/AMBULANCE/FIRE: Police 104, Fire 103.

TELEPHONES: May be placed aboard through arrangement with Agent.

SHORE LEAVE: Generally permitted.

CUSTOMS: Customs and Immigration Inspection Service available Monday to Saturday from 0700 hrs. to 1700 hrs. Charges for such service after hours and on Sundays and holidays. Number of inspectors required will be determined by Chief Customs and Immigration Inspector of port.

DELAYS: Delays in berthing, load or discharge or bunkering are minimal and infrequent. 8 hours is considered excessive.

DEVELOPMENTS: Amongst the plans for future developments in the port of Cristobal are:

a) Improvements to existing installations.

b) *Containers:* Amongst the facilities available at this terminal for containers, is the open area for handling and storage of containers covering 7.5 hectares, and a capacity up to 3,000 TEUs. It includes 8 points for reefer containers, a loading and consolidation building for containers, with an area in all of 6279.20 sq.m., a control building with a weighbridge of 60 tonne capacity, an entry point, handling equipment, a workshop for repair and maintenance.

Furthermore, the port of Cristobal has other facilities to complement the services of the Container Terminal, such as: a mooring length of 428 m., with depth of water of 40 ft. It also has drinking water supply, bunkers, collection of pollutants, victualling, electricity supply and all communication services, i.e. radio, telex and telephone.

The Container Terminal has been operational since 1983, and will have 40 tonne gantry cranes. The first will be installed after June 1985, and the other in December, 1985.

SHIPMASTER'S REPORT: July 1979.

Bottom Cleaning: Following a recent bottom clean of this vessel in Cristobal by 'Subservices, Inc.' I now forward two items of information which may prove useful to other Shipmasters.

a) Because of the nature of the sea bottom in Cristobal, 'Subservice' required approximately 3.0 m. (10 ft.) beneath the keel. In anything less, the water displaced by the machine disturbed the mud sea bottom reducing underwater visibility.

b) Contrary to advice received from the local signal station the deepest water was found in a position where the West Breakwater light bore 000° True at 3 cables. Due to the proximity of vessel to fairway a running moor was used. Average depth was 15.2 m. (50 ft.).

AUTHORITY: National Port Authority, Apartado. 8062 Panama 7, Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director General; Ing. Carlos Urriola, Director of Operations. Cristobal Port Administrator: *Tel:* 41-4848 (Ext. 112).

AGENT: C. Fernie & Co., S.A. Apartado 5042, Cable address: "Fernie-Cristobal". Telephone Nos.: 45-1133 (5 lines). Telex Nos.: 8814 or 8520. Also VHF. After office hours telephone numbers: 42-1424 or 45-2495 or 45-2278.

PANAMA CANAL (entering **Cristobal** or **Balboa**) (See Plan Book)

§ Indicates Panama Canal – Code of Federal Regulations Number.

REGULATIONS: The following are some of the important Canal Regulations.

§101.2 Boarding of arriving vessels:

(a) Unless otherwise directed, all arriving vessels will anchor in designated anchorages to await Boarding Officers. No person other than Boarding Officers of the Panama Canal Commission and the Republic of Panama may go on board or leave any vessel until such vessel has been entered by the Commission and, where applicable, by the Republic of Panama.

(b) Arriving vessels that are subject to inspection for compliance with Panama Canal shipping and navigation regulations will be boarded upon arrival. The boarding will occur inside the breakwater at the Atlantic entrance of the Canal or off the seaward end of the dredged, marked channel at the Pacific entrance. It will be performed by a Commission Boarding Officer in accordance with the procedures established under this Part. When such vessels are not boarded immediately upon arrival, they shall anchor in a designated anchorage area and await the Boarding Officer.

(c) Admeasurement functions shall be performed on arriving vessels either while at anchor or during transit.

§101.3 Definitions and functions of the Boarding Officer:

(a) Boarding Officer means any official or employee of the Panama Canal Commission who is duly assigned the functions of a Boarding Officer, including admeasurement and sanitation.

(b) The Commission Boarding Officer shall perform the functions of admeasurer for the purpose of determining Panama Canal tolls and shall make inspection for the purpose of insuring compliance with Panama Canal shipping, navigation and sanitation regulations.

§101.4 Measurement of vessel making maiden transit:

A vessel that arrives after 2000 hrs. and is to make her maiden transit will normally be admeasured on the following day.

§101.1 Signal stations at the Canal entrances:

The Panama Canal Commission maintains established signal stations at both the Atlantic and Pacific entrances of the Canal. A vessel arriving at the Canal must communicate with the signal station which is located at the entrance of the Canal at which that vessel arrives. Vessels required to be equipped with a radiotelephone pursuant to Part 123 of this subchapter must, upon arrival, communicate with the appropriate signal station on Channel 12, 156.000 MHz. All other vessels may use International Code and flashing light. Such stations are also utilised to assist in control of traffic within Panama Canal waters.

5. The cross reference which follows §101.1 is revised as follows:

Cross Reference: See Part 123 for provisions respecting radio communication by vessels prior to arrival and while they are in Panama Canal waters.

§103.7 Temporary holding of vessels:

The Canal authorities may hold a vessel for the purpose of investigating a marine accident under Parts 115 or 117. A vessel may also be held until, in the opinion of the Canal Authorities, its tenderness, trim, list, cargo, hull, machinery, and equipment have been put into such condition as will make the vessel reasonably safe for her passage through the Canal. No claim for damages shall be allowed or considered because of any such temporary holding of vessels.

§103.8 Order of transiting of vessels:

The Canal authorities may dispatch vessels through the Canal in any order and at any time they may see fit. Priority of arrival at a terminal does not give any vessel the right to pass through the Canal ahead of another that may arrive later, although order of arrival will be consideration in determining the order of passage.

§103.4 Load and trim:

(a) A vessel shall not be permitted to transit the Canal if she:

(1) Has a list of more than 10 degrees; (2) Is so tender or otherwise so loaded as to dangerously affect her stability or manoeuvrability; or (3) Is so trimmed as to dangerously affect her manoeuvrability.

(b) A vessel having a list of between 3 degrees and 10 degrees, or which is so loaded or so trimmed as to adversely affect her manoeuvrability, may be permitted to transit at the discretion of the Chief, Navigation Division or his designee. If such vessel is allowed to transit, however, it may do so only at its own risk and, to the extent and in the proportion that such failure to meet the requirements of this section proximately causes or contributes to a casualty and resulting damages, the Master of such vessel on behalf of said vessel, her Owners, Operators, or any other persons having any interest in her, and for himself, will be considered to have released the Panama Canal Commission and the United States from, and to have indemnified them against, any loss, damage, or liability incurred by the Commission, or the United States under or in respect to:

(1) Sections 1411 through 1416, inclusive, of Pub. L. 96 – 70, 93 Stat. 485 – 87.

(2) Property of the Panama Canal Commission or the United States; and

(3) Panama Canal Commission employees under the Federal Employees' Compensation Act, 5 U.S.C. 8101, *et seq.*, or any other employee compensation system.

The Master of the vessel that fails to meet the requirements of this section may be required to execute, in the presence of a Commission official, a form undertaking to release the Panama Canal Commission and the United States from liability in case of an accident and to indemnify the Commission and the United States for any damages sustained. The failure of the Master of a vessel to sign such a form, however, will not relieve the vessel, her Owners, or any other person having an interest in her from liability incurred as a result of the vessel's failure to meet the requirements of this section.

(c) Nothing shall be done, or permitted to be done, by the Master or any member of the crew, which would alter the trim or draft of a vessel while it is transiting the Canal, without the prior, express approval of the Pilot.

§103.10 Vessels required to be equipped with certain indicators:

(a) All vessels in excess of 150 ft. in length shall be equipped with properly operating rudder-angle and engine-revolution indicators in the wheelhouse so located and illuminated as to be readily visible to a Pilot.

(b) All vessels with beams in excess of 80 ft. shall be equipped with properly operating rudder-angle and engine-revolution indicators in the wheelhouse and on each bridge wing so located and illuminated as to be readily visible to a Pilot.

(c) All vessels in excess of 150 ft. in length which are equipped with variable pitch propellers shall have properly operating pitch indicators in the wheelhouse so located and illuminated as to be readily visible to a Pilot.

(d) All vessels with beams in excess of 80 ft. which are equipped with variable pitch propellers shall have properly operating pitch indicators in the wheelhouse and on each bridge wing so located and illuminated as to be readily visible to a Pilot.

(e) Any vessel which fails to meet the requirements of this section may be denied transit. If the Canal authorities decide that a vessel can be handled without undue danger to equipment or to personnel, notwithstanding her failure to comply with other requirements of this section, and permit her to transit, such vessel may do so only at its own risk and, to the extent and in the proportion that such failure to meet the requirements of this section proximately causes or contributes to a casualty and resulting damages, the Master of such vessel, on behalf of said vessel, her Owners, Operators or any other persons having any interest in her, and for himself, will be considered to have released the Panama Canal Commission and the United States from, and to have indemnified them against any loss, damage or liability incurred by Panama Canal Commission or the United States under, or in respect to:

(1) Sections 1411 through 1416, inclusive, of Pub. L. 96 – 70, 93 Stat. 485 – 87;

(2) Property of the Panama Canal Commission or the United States; and

(3) Panama Canal Commission employees under the Federal Employees' Compensation Act, 5 U.S.C. 8101, *et seq.*, or any other employee compensation system.

The Master of the vessel that fails to meet the requirements of this section may be required to execute, in the presence of a Commission official, a form undertaking to release the Panama Canal Commission and the United States from liability in case of an accident and to indemnify the Commission and the United States for damages sustained. The failure of the Master of a vessel to sign such a form, however, will not relieve the vessel, her Owners, or any other person having an interest in her from liability incurred as a result of vessel's failure to meet the requirements of this section.

§103.27 Clear view forward from the bridge and steering light requirement for certain vessels:

(a) A vessel may not be navigated in Canal waters unless there is a clear, unobstructed view forward from the bridge.

(b) Vessels having a distance from the bridge to the stern of 250 ft. or more shall have installed, at or near the stem, a steering range equipped with a fixed blue light which shall be clearly visible from the bridge along the centreline. If said range and light so placed would be partially or completely obstructed, then two such ranges and lights must be installed at an equal distance from the centreline and shall be clearly visible from the bridge along lines parallel to the keel.

(c) Naval or military vessels exempted from the requirements of Part 111 of this chapter shall also be exempt from the requirements of paragraphs (b), (d), and (e) of this section.

(e) The use of this steering light shall be at the discretion of the Panama Canal Pilot who has control of the navigation and movement of the vessel.

§109.5 Ship's gear to be ready during transit; test:

Before beginning transit of the Canal, a vessel shall have hawsers, lines and fenders ready for passing through the locks, for warping, towing, or mooring as the case may be; and shall have both anchors ready for letting go. The Master shall assure himself, by actual test, of the readiness of the vessel's main engines, steering gear, engine room telegraphs, whistle, rudder-angle and engine-revolution indicators, and anchors. During the transit, at all times while a vessel is underway or moored against the lock walls, her deck winches, capstans, and other power equipment for handling lines, as well as her mooring bitts, chocks, cleats, hawse pipes, etc., shall be ready for handling the vessel, to the exclusion of all other work.

OIL POLLUTION: Every vessel subject to the Federal Maritime Commission's oil pollution financial responsibility requirements, must maintain on board and make available to Panama Canal Commission boarding inspectors the original or copy of its certificate. Any vessel that does not have the necessary certificate on board will not be permitted to transit the Panama Canal. The 1969 CLC Certificate is also required where applicable.

If pollution occurs the Master's appearance in court may be required with possible heavy fine and attendant delays.

DOCUMENTS: (a) *Documents for Commission Boarding Officer:* All documents listed below shall be ready for immediate delivery to the Boarding Officer when he boards the vessel upon each arrival of the vessel at the Canal.

Documents Required and Number of Sets:

	Number of Sets
1. Ship's Information (Panama Canal Form 4398).	1
2. Clearance from Last Port.	1[1]
3. All certificates of sanitary nature.	1[1]
4. Stores List.	1
5. Cargo Declaration (Panama Canal Form 4363).	1[2]
6. Panama Canal Tonnage Certificate.	1
7. National Register.	1[1]
8. General Arrangement and Engine Room Plans.	1[3]
9. Declaration of all Arms and Munitions of War aboard other than explosives declared separately.	2[2, 4]
10. Crew List (Panama Canal Form 1509).	2
11. Passenger Lists, Transiting and Landing (Panama Canal Forms 18 and 20)	2

[1] For examination and possible retention.

[2] Not required of vessels of war or auxiliary vessels as those terms are defined in the Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal (September 7, 1977).

[3] Not required unless ship transits Canal.

[4] Not required unless such cargo is carried.

(b) *Crew List:* For purposes of additional identification of crew members, all copies of the crew list required by this section shall include for each seaman the serial number of his certificate of identification, continuous discharge book, passport or other satisfactory identifying documentation. In addition, the given name and middle initial, as well as the family name, shall be shown for all seamen.

(c) *Passenger List:* All copies of the passenger list required by this section shall be accurate and legible and shall be delivered to the Boarding Officer. The list shall show passengers in alphabetical order.

PILOTAGE: *§105.4 Pilotage Charges:* Pilotage for vessels in transit through the Canal is free, but whenever any vessel requires a Pilot for other than transit, it is liable for the applicable pilotage charge.

§105.5 Pilotage Beyond Atlantic Breakwater

Should a vessel desire a Pilot to meet it outside the Atlantic breakwaters, such vessel shall remain there and make signal to that effect.

§105.6 Status and Function of Pilot

The Pilot assigned to a vessel shall have control of the navigation and movement of such vessel.

§105.1 Pilots Required

(a) Except as provided by §105.2 and §105.3, or by paragraph (c) of this section, no vessel shall pass through, enter or leave the Canal or manoeuvre in the Canal or waters adjacent thereto, including the ports of Cristobal and Balboa, without having a Panama Canal Pilot on board.

(b) Normally, a vessel will, unless advised to the contrary by the Chief, Navigation Division or his designee, be boarded by the Panama Canal Pilot inside the breakwater at a point North of the Mole Beacon at the Atlantic entrance and in the Merchant Vessel Anchorage to seaward of Buoys 1 and 2 at the Pacific entrance.

(c) In conformity with past practice, vessels anchored in Anchorage Area C and Anchorage Area F, as shown in the Pilot Handbook, Limon Bay Chart, may proceed to sea without a Panama Canal Pilot on board. All such vessels, prior to getting underway, must obtain permission to depart from the Cristobal Signal Station.

(d) Whenever the Administrator finds there is a critical shortage of Certified Panama Canal Pilots available for movement of vessels in Canal waters, he may suspend the rule on compulsory pilotage set out in paragraph (a) of this section. The Administrator shall impose such conditions upon the suspension of the rule, with respect to any given vessel, as are reasonable and appropriate to protect human life and property and to safeguard the facilities of the Panama Canal.

§103.19 Requirements for Pilot Platforms

(a) Any vessel that, in accordance with Panama Canal operation standards, is required to have 4 Pilots aboard, shall provide suitable pilot platforms for the assisting Pilots. The purpose of the pilot platforms is to provide shelters from sun and rain for Pilots working near the bow or the stern of a vessel and to provide adequate visibility around the Locks in order to reduce the danger of damage.

(b) See sketch of platform in "Plan Book".

(c) Each platform is to be erected over the furthest forward point of the extreme beam at the waterline and not more than 6 in. from the vertical plane of shell plating. For vessels of unorthodox design requiring aft platforms, they shall be erected at a position which is approximately over the aftermost point of extreme beam at the waterline and not more than 6 in. inboard from the vertical plane of shell plating.

(d) The awning indicated in the sketch in paragraph (b) of this section is to be made of suitable material to provide shelter from sun and rain. The deck of the pilot's platform is to be made of wood or other material with non-skid surface.

§103.18 Pilot Ladders, Hoists and Side Ports

(a) A vessel shall, weather permitting, have both an accommodation ladder and a pilot ladder rigged and ready for use upon arrival in Canal waters.

(b) The pilot ladder shall be constructed and rigged in accordance with Regulation 17, Chapter V, International Convention for Safety of Life at Sea, 1974, TIAS 9700, except that;

(c) When the distance from the water line to the point of access of the vessel exceeds 9 m. or 30 ft., a combination pilot ladder and short brow accommodation ladder must be provided for boarding purposes.

(d) A mechanical pilot hoist may be used for Boarding Officials and Pilots only at their discretion, and provided that the design and construction of the hoist and ancillary equipment are in accordance with Regulation 17, Chapter V, International Convention for Safety of Life at Sea, 1974.

(e) When a mechanical pilot hoist is used, a ring buoy fitted with a lifeline and self-igniting light shall be available and ready for immediate use. The pilot ladder required by §103.18 (a) shall be in close proximity to the pilot hoist, ready for immediate use but lashed up so as not to interfere with the pilot hoist.

(f) When the side ports are used for boarding, the minimum vertical distance between the waterline and the bottom of the side port at any draft shall be 6 ft.

ANCHORAGES: No vessel shall anchor within the navigable waters of the Canal in other than a designated anchorage, except in an emergency, and no craft shall tie up to any aid-to-navigation in Canal waters.

1. *Merchant Vessel Anchorages:* (a) *Atlantic Entrance Merchant Vessel Anchorage:* An area to the West of the Canal channel bounded as follows: Starting at a point "A", located in position Lat. 9° 21′ 25″ N., Long. 79° 55′ 31″ W., and marked by Gas Buoy No. 2, thence 900 yards 270° true to a point "B" located in position Lat. 9° 21′ 25″ N., Long. 79° 55′ 58″ W., thence to lighted Buoy "1", thence to lighted Buoy "H", thence due North to a point "C" located in position Lat. 9° 22′ 07″ N., Long. 79° 56′ 41″ W., thence 2,800 yards 59° true to a point "D" located in position Lat. 9° 22′ 50″ N., Long. 79° 55′ 29″ W., and thence to the starting-point. The line extending due West from the Cristobal Mole through lighted Beacon No. 1 and lighted Buoy No. 2 (Lat. 9° 21′ 25″ N.) marks the Southern limit of the anchorage area. No vessel shall pass this line without having been passed by the Boarding Officer and without having a Canal Pilot on board.

(b) *Gatun Lake Anchorage Basin:* An area immediately East of th Canal channel line, bounded by a line extending to a point 450 yard 120° true from the East wing-wall at the South end of Gatun Lock thence 690 yards, 148° true to flashing white lighted Buoy "A" thenc 700 yards, 070° true to flashing white lighted Buoy "1" thence 1,13 yards, 148° true to quick flashing white lighted Buoy "3" thence 2,80 yards, 224° true through fixed white lighted Buoy "5" and black can Buo "7" to the Canal channel line at flashing white lighted Buoy "9"; th channel prism being the Westerly boundary line of the anchorage area

(c) *Pacific Entrance Merchant Vessel Anchorage:* An area bounde as follows: beginning at a point in position Lat. 8° 51′ 50″ N., Long. 79 30′ 00″ W., marked by a lighted whistle buoy which is painted wit alternating black and white vertical stripes and which shows short-lon flashing white light every 8 seconds, i.e. light 0.4 seconds, eclipse 0. seconds, light 1.6 seconds, eclipse 5.6 seconds; thence due East t Long. 79° 28′ 00″ W.; thence due North to Lat. 8° 54′ 31″ N., thence du West toward Flamenco Island Light to a point Lat. 8° 54′ 31″ N., Long 79° 30′ 46″ W.; thence S.W. touching the N.W. corner of San Jose Roc to position Lat. 8° 53′ 27″ N., Long. 79° 31′ 23″ W., marked by cana entrance lighted Buoy No. 2, thence S.E. to the point of beginning.

§113.2 Anchorage Areas for Ships Loaded with Dangerous Cargoes

The anchorage areas for ships loaded with explosives or with high volatile products are designated as follows:

(a) *Atlantic End:* 1. Inside area included in rectangle 1,000 yards wid immediately South of West Breakwater starting at a point on Wes Breakwater 1,000 yards from West Breakwater Light and thenc extending Westward 2,000 yards along breakwater.

2. Outside area bounded by a line from Point A at position Lat. 9° 23 53″ N., Long. 79° 56′ 29″ W. then to Point B at position Lat. 9° 24′ 40″ N Long. 79° 56′ 29″ W. thence to Point C at position Lat. 9° 24′ 40″ N Long. 79° 57′ 00″ W. thence to Point D at position Lat. 9° 23′ 53″ N Long. 79° 57′ 00″ W. thence to Point A.

(b) *Pacific End:* Area South of Naos Island bounded on the East by line drawn South (True) from entrance Gas Buoy No. 1; on the South b a line drawn East (True) from Tortolita Island, and in the North and Wes by the curve of 30 ft. depth.

§113.3 Vessels to Anchor and Wait Instructions

(a) Vessels carrying dangerous cargoes in bulk or more than 5 ton of explosives as defined by §113.1 (a) or tankers in ballast which are no gas free shall anchor in the outside explosive anchorage on the Atlant end or the explosive anchorage on the Pacific end, as described i §113.2 (a) (2) and §113.2 (b) respectively. Such vessels will be allowe alongside Commission Wharves in Canal waters only as prescribed i §113.5 and each case will be handled individually by the Chie Navigation Division, or his designee.

(b) Vessels arriving on the Atlantic side and carrying dangerou cargo in bulk will anchor in the outside anchorage. These vessels sha not enter the breakwater until given orders to do so. Such orders will b issued through the appropriate Commission signal station by the Cana Authorities. Orders will be given only after the Pilot is standing by t board and has received the assurance from the signal station that ther are no outbound vessels.

When weather and boarding conditions permit, the Pilot may boar outside the breakwater. On Northbound vessels carrying dangerou cargo bound for sea, the Pilot must remain on the bridge until the vesse passes the Mole Buoy. The Pilot shall not leave the bridge until he ha arranged with Marine Traffic Control and the signal station for one-wa traffic outbound through the breakwater.

MAX. SIZE: *Note:* Max. draft in August 1984 was 39 ft. 06 in. (tropica fresh water). However this subject to change.

§103.6 Size and Draft Limitations of Vessels

(a) *Definitions as Used in This Section:*

1. "TFW" means Tropical Fresh Water of Gatun Lake, density 0.995 gm./c.c. at 85°F. (Transition to fresh water frequently alters the trim o large vessels 3 in. to 4 in. by the head.)

2. "Published TFW Maximum Draft" means the deepest point o immersion in Gatun Lake waters as promulgated by the Marine Directo taking into account the water level of Gatun Lake and other limitation deemed necessary because of restrictions in the Canal.

3. "Maximum Authorised Transit Draft" means the deepest point o immersion in TFW of a particular vessel authorised at anytime, Gatu Lake level and Canal restrictions permitting.

4. "Commercial Vessel" means a self-propelled vessel other than a naval, military or other public vessel.

5. "Integrated Tug-Barge Combination" means a barge that i specifically configured to receive a tugboat and with the tug, becomes, i effect, a single self-propelled unit.

6. "Non-Self-Propelled Vessel" means a vessel which either does no have an installed means of propulsion, or has an installed means o propulsion which is not functioning during transit.

7. "Barge" means a flat-bottomed vessel of full body and heav construction without installed means of propulsion.

(b) Maximum authorised transit draft of vessels with draft in excess o 35 ft. 6 in.

1. Prior to the initial transit of a vessel whose transit draft will excee 35 ft. 6 in., Owners, Operators, or Agents must supply in full th information required in sub-paragraph (b)(2) of this section and reque the maximum authorised transit draft for the vessel (deepest point o immersion TFW) from the Chief, Navigation Division or his designee, no later than 2 weeks prior to loading of the vessel. This request will b returned with the approved maximum authorised transit draft stampe thereon.

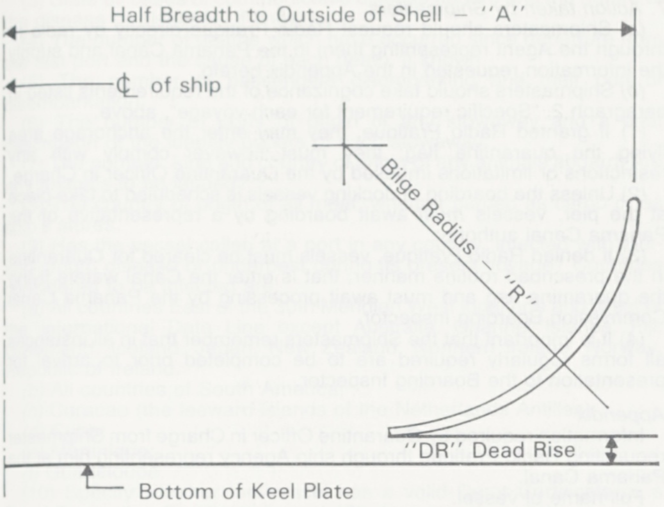
2. The information required by sub-paragraph (b)(1) of this sectio shall be submitted in the following format:

Information Needed Prior to Initial Transit Through the Panama Cana

Bilge Information

Name of Vessel .... Date..........
Authorised Tropical Fresh Water Load Line ....
Admeasurer .... Certified as Correct..........
(Master/Owner/Agents

1. "A" – Half breadth of vessel to the outside of shell ....
2. "R" – Radius of turn of bilge (feet and inches) ....
3. "DR" – Dead rise at side of vessel (inches) ....



Notes:

1. The Panama Canal Commission is not responsible for damage to bilge keels resulting from transit through the locks.

2. On an off centre lockage with the vessel touching the lock wall, the turn of the bilge will clear the lock-wall batters at the most critical point as shown in (d) No. 3 below.

(c) *Draft During Initial Transit*

The initial transit is permitted at the maximum authorised transit draft. After the initial transit, unless the vessel's Agent or Owner is notified of any restrictions imposed by Canal Authorities, this maximum authorised transit draft will remain in effect.

(d) *Minimum Transit Drafts, Measured in Salt Water*

1. All vessels transiting the Canal must have sufficient ballast to permit safe handling during transit. The following are minimum salt water drafts (TSW) for ships anticipating transit.

Length	*Minimum Drafts*
Up to 425 ft. –	Trimmed so Pilot can see the ranges over the forecastle from centre of navigation bridge
Over 425 ft. –	8 ft. forward, 14 ft. aft, TSW
Over 475 ft. –	18 ft. forward, 20 ft. aft, TSW
Over 525 ft. –	20 ft. forward, 22 ft. aft, TSW
Over 580 ft. –	22 ft. forward, 24 ft. aft, TSW
Over 625 ft. –	24 ft. forward, 26 ft. aft, TSW

2. The vessel's drag must not adversely affect manoeuvrability.

3. The following table provides the limiting drafts due to bilge radius:

Table of Limiting Drafts due to Bilge Radius
Contacting Chamber Batters
(Allows for 6 in. thick rubber fenders on lock walls at batter locations.)

	Radius of Turn of Bilge (ft.)				
in.	1 ft.	2 ft.	3 ft.	4 ft.	5 ft.
0	35 ft. 08 in.	36 ft. 06 in.	37 ft. 04 in.	38 ft. 02 in.	39 ft. 00 in.
1	35 ft. 09 in.	36 ft. 07 in.	37 ft. 05 in.	38 ft. 03 in.	39 ft. 01 in.
2	35 ft. 10 in.	36 ft. 08 in.	37 ft. 06 in.	38 ft. 04 in.	39 ft. 02 in.
3	35 ft. 10 in.	36 ft. 08 in.	37 ft. 06 in.	38 ft. 05 in.	39 ft. 03 in.
4	35 ft. 11 in.	36 ft. 09 in.	37 ft. 07 in.	38 ft. 05 in.	39 ft. 03 in.
5	36 ft. 00 in.	36 ft. 10 in.	37 ft. 08 in.	38 ft. 06 in.	39 ft. 04 in.
6	36 ft. 01 in.	36 ft. 11 in.	37 ft. 09 in.	38 ft. 07 in.	39 ft. 05 in.
7	36 ft. 02 in.	37 ft. 00 in.	37 ft. 10 in.	38 ft. 08 in.	39 ft. 06 in.
8	36 ft. 03 in.	37 ft. 01 in.	37 ft. 11 in.	38 ft. 10 in.	
9	36 ft. 03 in.	37 ft. 01 in.	38 ft. 00 in.	38 ft. 10 in.	
10	36 ft. 04 in.	37 ft. 02 in.	38 ft. 00 in.	38 ft. 10 in.	
11	36 ft. 05 in.	37 ft. 03 in.	38 ft. 01 in.	38 ft. 11 in.	

Example: To find draft of ship having a radius-of-turn-of-bilge of 4 ft. 4 in. read across top of table to column headed 4 ft. thence down column opposite 4 in. – read 38 ft. 5 in.

Note: Dead Rise not included in above tabulations and must be added to above readings.

4. A vessel whose ballast draft does not meet the minimum draft requirements established by this section may be accepted for transit on a regular basis, provided the vessel operator requests permission and submits the following information to the Marine Bureau of the Panama Canal Commission: (i) principal dimensions of the vessel; (ii) deepest attainable minimum draft (fore and aft); (iii) limitations on visibility fore and aft from the navigation bridge; (iv) necessary excerpts from the vessel's plans, drawings and manoeuvring data that relate to the vessel's suitability for transit.

5. The vessel will be inspected by the Canal Authorities upon its first visit after such a request is made. If the vessel is acceptable for transit at less than the prescribed minimum draft, the Operator will be notified that transit on a regular basis is authorised provided the vessel meets the special minimum draft that is specified in the notice.

6. If the vessel is found not to be acceptable for transit on a regular basis, a single transit may be authorised, at the discretion of the Canal Authorities, subject to the imposition of any special conditions that may be required for reasons of safety or continuance of regular Canal operations.

(e) *Maximum Length*

1. The maximum length overall including bulbous bow, for a commercial vessel acceptable for regular transit is 900 ft., except passenger and container ships may be 950 ft. in overall length.

2. The maximum length for integrated tug-barge combination acceptable for regular transit is 900 ft. overall, including the tug. A tug-barge combination must transit together as one unit, with the tug supplying the propelling power.

3. The maximum aggregate overall length for non-self-propelled vessels acceptable for transit is 850 ft., including accompanying tugs. Accompanying tugs must lock through with the non-self-propelled vessel.

(f) *Maximum Beam*

1. The maximum extreme beam for a commercial vessel and the integrated tug-barge combination acceptable for regular transit is 106 ft.

2. At the discretion of the Chief, Navigation Division or his designee, commercial vessels, including integrated tug-barge combinations, having an extreme beam of between 106 ft. and 107 ft. may be permitted to transit on a one-time basis only if the deepest point of immersion does not exceed 37 ft. TFW.

3. The maximum extreme beam for non-self-propelled vessels (other than integrated tug-barge combinations) acceptable for transit is 100 ft.

(g) *Previous Approvals and One-Time Transits.*

Vessels approved for regular transit prior to December 20, 1976, whose maximum length or beam slightly exceed the limits set forth in paragraphs (e) and (f) may continue to transit on a regular basis. After that date, approval will not be given for transit of other commercial vessels whose extreme beam exceeds 106 ft. by any amount, except for vessels transiting on a one-time delivery basis.

(h) *Release from Liability*

If a vessel having a beam in excess of 106 ft. is permitted to transit on a one-time basis, such vessel may do so only at its own risk and, to the extent and in proportion that such failure to meet the requirements of this section proximately causes or contributes to a casualty and resulting damages, the Master of such vessel, on behalf of said vessel, her Owners, Operators, or any other person having an interest in her, and for himself, will be considered to have released the Panama Canal Commission and the United States from, and to have indemnified them against, any loss, damage or liability incurred by the Panama Canal Commission or the United States under, or in respect to:

1. Sections 1411 through 1416, inclusive, of Pub. L. 96-70, 93 Stat. 485-7;

2. Property of the Panama Canal Commission or the United States; and

3. Panama Canal Commission employees under the Federal Employees' Compensation Act 5 U.S.C. 8101, *et seq.*, or any other employee compensation system.

The Master of the vessel that fails to meet the requirements of this section may be required to execute, in the presence of a Commission Official, a form undertaking to release the Panama Canal Commission and the United States from liability in case of an accident and to indemnify the Commission and the United States for any damages sustained. The failure of the Master of a vessel to sign such a form, however, will not relieve the vessel, her Owners, or any other person having an interest in her from liability incurred as a result of the vessel's failure to meet the requirements of this section.

(i) *Denial of Transit*

A Vessel shall not be permitted to transit the Canal under the following circumstances:

1. When the vessel's maximum point of immersion exceeds its maximum authorised draft.

2. When the vessel's maximum point of immersion exceeds the published TFW maximum draft then in effect;

3. When the length overall, including bulbous bow, exceeds that stated in paragraph (e) of this section, unless the vessel was approved for regular transit prior to March 16, 1981; or

4. When the extreme beam exceeds that stated in paragraph (f) of this section by any amount, unless the vessel was approved for regular transit prior to March 10, 1981.

(j) *General*

1. Vessels of 100 ft. beam and over whose list, trim or handling characteristics are such as to endanger themselves, Panama Canal appurtenances or a third party, may have such further limitations placed on them as Canal Authorities deem necessary to ensure reasonable safety.

2. The draft of non-self-propelled barges of 550 ft. or more in length may be limited when, in the opinion of Canal Authorities, such a limit is necessary to ensure reasonable safety.

3. Non-self-propelled vessels, other than integrated tug-barge combinations, will be accepted only on an individual basis; advance permission for initial transit as a non-self-propelled vessel is required. Displacement of these vessels is limited to 35,000 tons and the draft requirements of paragraph (d) of this section are applicable. Riding crews must be provided in sufficient numbers, as required by the Chief, Navigation Division, to safely handle towboat lines and boarding ladders, and to assist in mooring.

4. The numerous constraints affecting the transit schedules of vessels and tows make it important that information provided in advance of the initial transit of a vessel include a capacity plan, general arrangement plans, engine room plans, and whenever possible, a photostatic copy of National Register, Load Line Certificate and Panama Canal Tonnage Certificate. This advance information will minimise the time spent aboard the vessel by Panama Canal Officials before commencement of the initial transit.

HEALTH: Application for Radio Pratique is available to all vessels arriving in Panama Canal waters. Radio Pratique is a quarantine clearance by radio, based upon information from the vessel prior to its arrival at Balboa or Cristobal and past experience with the vessel and its personnel. A limited number of vessels will be sampled for compliance with the required standards of health and sanitation on board. The sampling will generally be done on a random basis and will provide a measure of the success of the programme.

It should be emphasised that Radio Pratique applies only to the quarantine section of the required forms and documents for the Panama Canal. All vessels must still complete the required boarding forms, and in most cases, be prepared to receive the Panama Canal Boarding Inspector on arrival in Canal waters. Such forms as crew and passenger lists, ship's information forms, and the cargo declaration must always be completed for presentation to the Panama Canal officials.

Attached is a listing of the items to be reported prior to arrival in the Canal waters. The information is similar to that now required of vessels requesting Radio Pratique in U.S. ports. In addition, there are some special circumstances that make additional information necessary.

The manner of reporting the information required should be clear and orderly as specified in 35 CFR, section 123.4, listing information required in advance. The request for Radio Pratique should originate from the Master and can be submitted directly by radio or through the vessel's local Agent. The local Agent should submit his request with all the required information to the Admeasurement Office at the port of arrival of the vessel. The local Agent will be notified when Radio Pratique is granted or refused and the Agent will communicate this information to the ship.

It is hoped that vessels will take advantage of Radio Pratique when arriving for transit and that in as many instances as possible it may be able to grant this time saving privilege.

Radio Pratique Programme

1. *General*

(a) The granting of Radio Pratique is an Office of Health and Safety responsibility designated to the Industry and Health Division. (35 CFR 61.264) see below.

§61.264 Radio Pratique; vessels only.

The Quarantine Officer in charge may grant Pratique by radio to a vessel upon the basis of information regarding the vessel, its cargo and persons aboard, received prior to arrival of the vessel, when in his judgement, and in accordance with instructions by the Chief, Industrial and Health Division, the entry of the vessel will not result in the introduction, transmission or spread of communicable diseases.

(b) In order to process the details of this programme more expeditiously, communication may be held between the quarantine offices and the ship's Steamship Agent representing the vessel hereinafter called local Agent.

(c) All vessels coming to the Panama Canal may request Radio Pratique by means of the ETA radio message or through the ship's local Agent.

(d) Requests for Radio Pratique may be submitted to the Admeasurement Office at the port of arrival at least 24 hours and not more than 48 hours before vessel is scheduled to arrive.

2. *Specific Requirement for Each Voyage*

(a) The vessel will be maintained free from rats and vermin.

(b) The Derat Certificate or Derat Exemption Certificate must be valid (i.e. date of issue not more than 180 days prior to date of arrival at the Panama Canal).

(c) Vessels arriving within 15 days from the ports designated in the Aedes Aegypti Indices Bulletins must be disinfected with the aerosol described in the Aedes Aegypti Indices Bulletin No. 8, 1970.

(d) The restrictions imposed in 61.281 through 61.302, "Importation of Certain Things", Title 35 CFR, must be strictly adhered to and followed.

3. *Action taken by the Quarantine Officer in Charge**

(a) Radio Pratique *may* be granted by the Admeasurement Office upon request from the vessel or through the ship's local Agent representing the vessel provided it is documented by ship's radio.

(1) If the information requested in the Appendix hereto is complete; *and,*

(2) If the Quarantine Officer in charge* is of the opinion that the vessel is reasonably free from any condition either from a health or sanitation standpoint that might introduce illness into the Canal.

(b) Radio Pratique may be denied by the Quarantine Officer in charge:

(1) If the requested information is incomplete; or,

(2) If the Quarantine Officer in charge* feels that medical or sanitary reasons prevail requiring careful inspection upon arrival of the vessel.

*Or designated representative.

4. *For Sampling and Surveillance of Compliance Purposes*

After the information supplied by the Shipmaster has been reviewed the Quarantine Officer in charge* will advise the ship's local Agent concerned whether Radio Pratique has been granted or denied and if any restrictions or limitations have been imposed. He will also inform the Marine Traffic Controller, and the Immigration and Customs office whether Radio Pratique has been granted or denied.

*Or designated representative.

5. *Action taken by Ship's Local Agent*

(a) The ship's local Agent may submit requests for Radio Pratique to the Admeasurement Office if the vessel has not done so by radio. The information required is listed in the Appendix hereto. Such requests should be submitted, properly documented by ship's radio, not later than 24 hours before the vessel is scheduled to arrive nor earlier than 48 hours before the expected arrival of the vessel.

(b) The ship's local Agent will advise the vessel which he represents whether Radio Pratique has been granted or denied; and any restrictions or limitation imposed.

6. *Action taken by Panama Canal Commission Boarding Inspectors*

On vessels that have been granted Radio Pratique, the Panama Canal Commission Boarding Inspector will:

(a) Ascertain that the Ship's Master has completed the Ship's Information and Quarantine Declaration (Form 4398) *except* the "quarantine data" portion at the bottom of the form; and,

(b) Otherwise process the vessel (e.g. for Admeasurement, and any other non-quarantine requirements) without any further questioning on quarantine matters. This processing may be either in the bay or at the dockside at the discretion of the Admeasurer Watch Supervisor. Passengers that are disembarking from vessels may be processed by the Immigration Service at the docks.

(c) Vessels that are denied Radio Pratique or have failed to request Radio Pratique, will be cleared through Quarantine by the Panama Canal Commission Boarding Inspector in the prescribed routine manner.

7. *Action taken by Shipmasters*

(a) Shipmasters should request Radio Pratique directly by radio or through the Agent representing them in the Panama Canal and supply the information requested in the Appendix hereto.

(b) Shipmasters should take cognizance of the requirements listed in paragraph 2, "Specific requirement for each voyage", above.

(1) If granted Radio Pratique, they may enter the anchorage area flying the quarantine flag; they must however comply with any restrictions or limitations imposed by the Quarantine Officer in Charge.

(2) Unless the boarding of docking vessels is scheduled to take place at the pier, vessels *must* await boarding by a representative of the Panama Canal authority.

(3) If denied Radio Pratique, vessels must be cleared for Quarantine in the prescribed routine manner; that is enter the Canal waters flying the quarantine flag and must await processing by the Panama Canal Commission Boarding Inspector.

(4) It is important that the Shipmasters remember that in all instances all forms regularly required are to be completed prior to arrival for presentation to the Boarding Inspector.

Appendix

Information required by Quarantine Officer in Charge from Shipmaster requesting Radio Pratique through ship Agency representing him at the Panama Canal.

Full name of vessel.
Country of registry.
International radio call letters.
Estimated date of arrival and port.
Whether docking at Balboa or Cristobal and reason therefor.
List of ports of call within past *15* days prior arrival.
Report any illness or communicable diseases on board.

Report any death occurring on board since departure from last port and cause, if known or suspected.

Report the number of passengers to be disembarked and port of disembarking (e.g. Cristobal or Balboa).

Report the date of the Derat Certificate or Derat Exemption Certificate.

Record the number, kind, and origin of all animals aboard and if any are scheduled for disembarking.

Report the origin or source of the meat in the ship's stores.

Only vessels in the following categories need still be subject to "on board" public health clearance upon arrival:

A. Vessels which, during the 15 days prior to arrival in the Canal ports, have or have had on board passenger or crews with any of the following conditions or symptoms of illness:

1. Temperature of 100° F (38° C) or greater *(a)* which persisted for 2 days or more: or *(b)* which was accompanied or followed by any one or all of the following: rash, jaundice, glandular swelling; *or*
2. *Prolonged diarrhoea* (lasting 1 full day or more).

B. Occurrence of death on board for any reason.

C. Vessels which have been in a country infected with plague in the 60 days prior to arrival in the Canal.

RADIO: Balboa Naval Radio NBA.

Signal Stations: (a) Visual-signal stations established for communication on arrival Canal approaches by International Code and/or flashing light, at seaward end of Pier 6 Cristobal, and on Flamenco Island at Pacific entrance.

(b) Flamenco Island and Cristobal Signal Station also contactable on VHF Channel 12 frequency 156.6 MHz, and R/T 2182, 2638 and 2846 kHz – call letters WHC.

(c) Vessels of 85 ft. beam and above awaiting transit at Balboa anchorage should keep VHF radio watch on Channel 12 for transit orders.

(d) Arriving ships may communicate with Port Captain's Office, Cristobal through Cristobal Signal Station. Radio communication is maintained on international maritime VHF Channel 12 (156.6 MHz) through "Cristobal Radio".

§123.4 Advance information required by radio from vessels approaching Canal: (a) Vessels approaching the Panama Canal shall communicate by radio to the Navigation Division not less than 48 hours in advance of arrival at the Canal (or earlier if radio communication is practicable at an earlier time), the information required by this section unless this information has been previously communicated to the Canal Authorities by other means. Symbols of the phonetic alphabet shall be used to identify each item and the word "NEGAT" shall be used after the items that can be answered "no", "none", or "not applicable". The following items of information shall be provided:

ALFA – The Panama Canal Identification Number of the vessel.

BRAVO – Estimated date and time of arrival, port of arrival and request for Canal transit if desired.

CHARLIE – Estimated draft upon arrival, in feet and inches (fore and aft).

DELTA – Any changes in the vessel's name, country of registry, structure, or use of tanks that have occurred since the vessel last called in Panama Canal waters.

ECHO – Will the vessel dock at Balboa or Cristobal? What is the reason for docking? If it is for cargo operations, fuel or water, give the tonnage involved in each case. Is there any other reason the vessel will not be ready to transit upon arrival? What is the reason?

FOXTROT – The nature and tonnage of any deck cargo.

GOLF – If the vessel is a tanker, state names and grades of cargo carried. State names and grades of the cargo last carried in each empty tank which is not gas free.

HOTEL – If the vessel is carrying explosives as cargo, state the grade of each explosive and the amount, in tons of each grade.

INDIA – Quarantine and Immigration information:

(1) Is Radio Pratique desired?

(2) State the ports at which the vessel has called within 15 days preceding its arrival at the Canal.

(3) State all cases of communicable disease aboard and the nature of the disease or diseases, if known.

(4) The number of deaths which have occurred since departure from the last port and the cause of each death, if known.

(5) The number of passengers disembarking and their port of disembarkation.

(6) The number of ports of origin of any stowaway and a brief description of the identity papers of each stowaway.

(7) The number, kind and country of origin of any animals aboard. Are any animals to be landed?

(8) The country of origin of all meat, whether carried as cargo or as ship's stores.

(9) Has the vessel called at a port in any country, infected with foot-and-mouth disease or rinderpest during its present voyage? Countries considered to be infected are:

(a) All countries East of the 30th Meridian West longitude and West of the International Date Line except Australia, Channel Islands, Fiji, Greenland, Iceland, Japan, New Zealand, Northern Ireland, Norway, Republic of Ireland.

(b) All countries of South America;

(c) Curacao (the leeward islands of the Netherlands Antilles);

(d) Cuba;

(e) Martinique;

(f) Guadeloupe.

(10) Specify whether the vessel has a valid Derat Certificate or a Derat Exemption Certificate issued 180 days prior to arrival.

The following additional information shall be transmitted via radio to the Port Captain from all vessels as applicable:

(1) Vessels approaching from the Pacific shall report actual time of passing Cape Mala, or the latitude of Cape Mala, and the vessel's speed.

(2) Vessels approaching from the Atlantic shall report 12 hours prior to arrival at Cristobal any change of 1 hour or more in the expected time of arrival.

(3) Any other matters of importance and interest.

Timely receipt of the above information will facilitate the transit or docking of arriving vessels. Failure to comply with these reporting requirements may subject a vessel to delay since vessels which do comply will receive priority of service and handling over those which do not.

VHF: *§123.3 Radiotelephones required.*

(a) Except for vessels operated by the Panama Canal Commission or another agency of the United States, the following vessels shall comply with the requirements of this section:

(b) A vessel of a type described in paragraph (a) of this section shall be equipped with a radiotelephone which can be operated from the navigation bridge and which can be used to communicate on the following Channels in the 156 – 162 MHz frequency band:

(1) Channel 12, 156.600 MHz;
(2) Channel 13, 156.650 MHz;
(3) Channel 16, 156.800 MHz.

(c) A vessel of a type described in paragraph (a) of this section, which has notified the Chief, Navigation Division or his designee that it is ready to transit or otherwise navigate in Panama Canal waters and requires a Panama Canal Pilot, shall, until a Pilot boards the vessel, maintain a continuous watch on Channel 12. Channel 12 will be used for notification to vessels of their transit time and for advisory harbour control communication in Limon Bay.

(d) A vessel of a type described in paragraph (a) of this section shall maintain a continuous watch on Channel 13 when underway in Panama Canal waters without a Panama Canal Pilot aboard, and shall use Channel 13 only for ship-to-ship or ship-to-coast navigational communications. When such vessels have a Panama Canal Pilot aboard, Channel 13 may be used only by the Pilot or at his direction for navigational communications.

(e) The signal stations on Flamenco Island and in Cristobal may be called on Channels 12 and 16. Channel 16 may also be used by all vessels for ship-to-coast communications with steamship Agents or other commercial businesses.

TANKERS: *Transit Restrictions:* Vessels carrying petroleum products having a flashpoint greater than 80°F and classified lower than Grade C under the U.S. system, or having a flashpoint greater than 23°C and classified higher than 3.2 under the IMO system are not considered to be carrying dangerous cargo for purposes of these restrictions.

Special rules apply to vessels carrying dangerous cargo or not gas free. These rules concern the conduct of navigation in the Canal and in the approaches to the locks. Generally it may be assumed that vessels carrying a dangerous cargo shall:

(a) Not overtake.

(b) Not be overtaken.

(c) Meet oncoming vessels at a safe speed.

(d) Avoid meeting oncoming traffic at turns.

(e) If required to anchor, anchor well clear of the channel and other vessels.

(f) Take a tug at locks and Gaillard Cut if required by the Pilot.

DENSITY: On several occasions vessels arriving for transit have been found to be over authorised draft after entering Gatun Lake. Overdrafts in these instances have been caused, it is believed, by assuming fresh water densities different from what actually exists in Canal.

Using distilled water as 1.000 at 3.98° C, water densities have been determined to be as follows:

	Density	
Location	*Gm./cc. 85° F*	*Lbs./ft³ 85° F*
(a) Gatun Lake	0.9954	62.21
(b) Miraflores Lake	0.9971	62.32
(c) Balboa Anchorage	1.0219	63.87
(d) Cristobal	1.0212	63.76

BOILER WATER: May be taken without charge from Gatun Lake subject Pilot's permission and draft.

FRESH WATER: Available at Balboa or Cristobal.

CERTIFICATES: See "Documents". *(a)* If a valid Derat Certificate or Derat Exemption Certificate is not produced with respect to any arriving vessel the quarantine officer shall:

(1) If he is satisfied that vessel is free of rodents or is kept in such a condition that number of rodents on board is negligible, issue a Derat Exemption Certificate; or

(2) If he is satisfied that a Derat Exemption Certificate should not be issued with respect to such vessel, require derat of vessel.

(b) When, pursuant to paragraph *(a)* (2) of this section, derat has been completed to satisfaction of quarantine officer, he shall issue a Derat Certificate.

CUSTOMS: Hours: The regular hours for the Customs inspection of baggage of landing passengers and for the Customs supervision of landing passengers are from 0700 to 1700 hrs. daily, excluding Sundays, and holidays. Such Customs services may be furnished during other hours, or on Sundays and holidays, only upon the request of the Master or authorised Agent.

Allowances: Tobacco, Wine and/or Spirits at Master's discretion sufficient for immediate consumption. Alcohol not permitted to be taken ashore.

CONSULS:

Norway: Royal Norwegian Consulate General: Consul General for Panama, R. P., Terence O. Ford, Office: 28–25–2347.
Residence: 28–24–1884.
Norwegian Consul, Cristobal, G. R. Morland, Fenton Bldg. 45–1155.
Norwegian Consul for Balboa, Arne Hauge, Office 52–5053.

Republic of South Africa: Consul for the Republic of South Africa, Henry I. Darlington, Office: 28–23–0834.
Residence: 28–23–6779.

Sweden: Royal Swedish Consulate General, Edificio Melinda, Via Argentina, Panama 28–23–9694.

Denmark: Royal Danish Consulate General, Consul General for Panama.
Residence: 45–1155.
Royal Danish Consulate for Colon and Cristobal.
Residence: 3–2361.

REPATRIATION: Crew members may be discharged only with consent of the Immigration Service. Before such consent may be given, the Chief Immigration Inspector at port concerned shall be furnished a memorandum in triplicate showing name, age, nationality, and rating of the crew members proposed to be discharged.

When crew members are signed on a vessel, a memorandum in triplicate showing name, age, nationality, and rating of crew members signed on shall be furnished to Chief Immigration Inspector at the port concerned.

Arriving crew members and particularly visiting Superintendents should if possible possess Panamanian visas.

AIRPORT: General Omar Torrijos Herrera International Airport located outside Panama City, 18 miles from Balboa; 48 miles from Cristobal, served by all major scheduled international airlines operating in Southern hemisphere.

HOLIDAYS: January 1st; January 9th; Good Friday; Carnival Tuesday (day before Ash Wednesday); May 1st; August 15th (Pacific side only); October 11th; November 3rd; November 5th (Atlantic side only); December 8th; December 25th.

TIME: EST. No alterations to clocks necessary throughout the year.

LOCKS: Gatun Locks (Atlantic side) raise and lower vessels 85 ft., Miraflores (nearest to Pacific) 54 ft. and Pedro Miguel (Pacific side) 31 ft.

AUTHORITY: Panama Canal Commission.

AGENT: See "Cristobal".

PEDREGAL: 08.23 N. 82.26 W. (See Plan Book)

LOCATION: The Port of Pedregal is 7 km. to the South of the City of David, Chiriqui Province, in the West part of the Pacific coast of the Republic of Panama. The port is at the head of an estuary of the River Garibaldo.

DOCUMENTS:

General Declaration, 2 copies.
Cargo Manifest, 5 copies.
Crew List, 3 copies.
Passenger or Negative Passenger Declaration, 4 copies.
Stores or Supplies List, 4 copies.
Crew Personal Effects, 3 copies.
Health Documents, 1 copy.
Maritime Health Declaration.
Derat Certificate.
Crew Vaccination Cards.

PILOTAGE: There is no official Pilot in the port. The pilotage service is covered by persons who are duly licensed and who have much experience, since they work full time on ships in this area. When their services are requested, they ask permission of their employers if it is during normal working hours (private undertakings). They obtain a launch which has no means of communication at all with the port.

ANCHORAGE: Vessels intending to enter the port must anchor near the Fairway Buoy installed at the Port Entrance at San Pedro Mouth. Around this buoy are depths of 70 ft. and 80 ft.

RESTRICTIONS: All vessels entering port must do so on high tide. Vessels are not allowed to enter or leave the port area at night. Entry and departure is only allowed if a Pilot is on board. Vessels must advise their local Agents 48 hours in advance of their intended arrival.
MAX. SIZE: The length of the quay is 86 m. and the width is 6 m. at the part where there is a buoy, with 4.2 m. along the rest of it. The max. depth of water for a vessel entering the port is 18 ft.; but the draft of the vessel must not exceed 15 ft.
HEALTH: The vessel is boarded by a Quarantine Inspector, who will inspect the entire vessel, and if there is no suspicion of illness or contamination, and all health stipulations as covered by Panamanian Laws are met, Free Pratique is granted. If there is any suspicion of illness or contamination, the vessel is immediately fumigated far from the quay, with the crew being forbidden to come ashore.
VHF: There is a radio unit for VHF communication and calls are made on Channel 16, passing then to another available channel. This equipment receives calls on frequency 156.8 MHz.
TUGS: None available.
BERTHING: The port consists of a single marginal quay 86 m. long, made of reinforced concrete (both surface and uprights).

The quay has depths of 3.35 m. (11 ft.) and 4.27 m. (14 ft.) at its ends, and in the centre 5.18 m. (17 ft.).

To one side of the quay is a building of reinforced steel covered with sheets of corrugated zinc with an area of 360 cu.m. and a free internal height of 6 m.
CARGO HANDLING: For handling purposes, there are only a few hand trucks, and vessels are obliged to utilise their own resources.
Cranes: Loading and discharge is by the ship's own gear, excluding shipment of sugar which ish done by land-based equipment.
STEVEDORES: There is a stevedores' syndicate which is independent of the National Port Authority.
MEDICAL: There is no doctor in the port; but there is a medical centre not far away.
FUEL: There are no pipe-lines. Oil is supplied by road tankers.
FRESH WATER: There are water installations available for supplies to ships.
FIRE PRECAUTIONS: None.
REPAIRS: No repairs are carried out on ships.
AIRPORT: The National Airport of David is some 5 km. away on the road between Pedregal and David. It has commercial flights only at national level.
POLICE/AMBULANCE/FIRE: In the port there are no services; 5 km. away in the City of David there are services, and their telephone numbers are: Police 75-1446 or 75-2210. Fire Brigade and Ambulance 75-4216.
SHORE LEAVE: Allowed.
DELAYS: Any delays are caused by the tides, another vessel occupying the quay or arrival at night.
GENERAL:
Observations: The quay of the Port of Pedregal is in a bad state in every respect, both the top surface and the water side supports, and some of the piles need to be repaired.
Shelter: The Port of Pedregal, being at the head of an estuary, is not affected by the sea or swell.
Tides: The average tidal difference (average tide) in the port is 2.5 m. (8.2 ft.) and the average Spring tide is 3.05 m. (10 ft.).
Common Operations in the Port: Pedregal is a port whose operations are on a small scale, handling cargo such as fertilisers, general cargo, bulk commodities, and local fishing. International vessels arrive at the port very sporadically, due to the reduced depth of water and the poor state of the quay.
AUTHORITY: National Port Authority, Apartado 8062, Panama 7, Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director General; Ing. Carlos Urriola, Director of Operations.

PUERTO ARMUELLES: 08.17 N. 82.52 W.

(See Plan Book)

SECTION A: GENERAL CARGO PORT.
SECTION B: OIL TERMINAL.

SECTION A: GENERAL CARGO PORT.

LOCATION: Puerto Armuelles is located on the Pacific coast of the Republic of Panama.

Puerto Armuelles is a port solely used for the export of bananas, it is operated by United Brands Co., and administered by the National Port Authority of Panama.
DOCUMENTS: Same documents and the same procedure as Almirante.
PILOTAGE: United Brands Company has a Pilot who is available 24 hours of the day. Pilotage consists in mooring the vessel at the quay from the anchorage, for which the vessel must position a ladder on the port side. The pilot launch is white and has no VHF radio. The mooring operation is fairly complicated and United Brands provide a gang of men who board the vessel and manipulate the cables used in the mooring process. Mooring at the quay is always done on the starboard side of the vessel and the bow must be pointing out to sea.

The Pilot must be contacted by the ship's Agent and requested by the vessel by VHF radio on Channel 12 to the Port Authority or Channel 16 to United Brands Co.
ANCHORAGE: Vessels may anchor half a mile from the pier, where there are depths of 36.6 m. (120 ft.). However, due to the great depth of water in front of the quay, care must be taken in letting out the anchor, it being necessary to find places where the water is not so deep.

It is recommended that for Masters of vessels arriving for the first time in the port ask for the Pilot when anchoring.

There are no aids to navigation indicating the best place to anchor.
RESTRICTIONS: Puerto Armuelles is located in the Bay of Charco Azul, where there are great depths making it unnecessary to have aids to navigation. Access to the port is free of sandbanks or any other obstruction to navigation. There are therefore no restrictions for vessels wishing to enter the port, except on the quay itself.

On the quay proper, restrictions are as follows: Ships are not to be moored during bad weather and mooring is permitted in daytime only, unless there is an emergency. Bad weather usually prevents securing and mooring cannot be performed.
HEALTH: The vessel is boarded by the doctor in the operation of clearance. In the event of illness on board, the Port Authority must be advised on VHF Channel 12 and the vessel must wait at the anchorage for the doctor's visit.
RADIO: A radio service exists via telegraphic cables operated by Tropical Radio Telegraph Co. The Port Authority has VHF/FM equipment which receives calls on Channel 12. United Brands Co. also has VHF and receives calls on Channel 16. The range of these stations is 50 nautical miles. The Port Authority also has SSB equipment which takes calls on frequency 7447.5 kHz.
TUGS: None available.
BERTHING: The quay consists of a pier with a single berth 137 m. long and 12.2 m. (40 ft.) minimum depth. Vessels must moor on the starboard side.

The quay has 4 banana loaders with a loading capacity of 42 boxes of bananas per minute, each weighing 42 pounds. There is no other type of loading equipment.

Since the quay is located in a position open to the sea a set of 3 mooring buoys is used to keep vessels away from the N.E. side of the pier.
CRANES: 1×5 ton rail mounted crane.
STEVEDORES: Loading and discharging work is carried out by the Union of Port Workers. The vessel's Agent must contract the services of the workers via United Brands Co.
FRESH WATER: Supplied at the rate of 2 t.p.h.
FUEL: Not available.
REPAIRS: Facilities for painting, cleaning, ship and machinery repairs are available.
PROVISIONS: Shipchandler facilities available. Can be obtained locally or in the town of David 100 km. away.
TIME: GMT minus 5 hours.
CONSULS: Colombia, Costa Rica, Nicaragua.
MEDICAL: There is a modern hospital in Armuelles.
POLICE/AMBULANCE/FIRE: Available in Armuelles.
CUSTOMS ALLOWANCES: See "Almirante".
TELEPHONE: Micro-wave connects Armuelles with any country in America or Europe. No facilities for telephones on board vessels.
OPENING/CLOSING HATCHES: Carried out by port workers.
DENSITY: 1.0219 gm/c.c. at 85°F.
SHORE LEAVE: No restrictions.
REPATRIATION: Can be effected without difficulty.
AIRPORT: Armuelles has a small airstrip for light aircraft. However, the town of David 100 km. away by road from Armuelles has a larger airport. There are 2 daily flights by local commercial lines between David and the airport of General Omar Torrijos Herrera in Panama; thus repatriation can be effected without difficulties.

SHIPMASTER'S REPORT: 1979.
Documents: Same as for "Almirante", and if no cargo to land at this port, 6 copies of a "Nil" declaration.
Pilotage: Arranged through Agent. Pilot and mooring gang board 0.75 miles East of pierhead by port accommodation ladder, from an old ship's lifeboat painted white.
Anchorage: 1 mile East of pierhead in depths of 45 m. or more. Bottom is very steep-to, in less depth vessel can be too close to shallow water. Recommend U.S. Chart 21581, 'Ports and Anchorages S. Coast of Panama' be obtained.
Restrictions: Almost none, depth alongside over 12.2 m. (40 ft.), breadth is no restriction, berthing face is about 167.6 m. (550 ft.) long, but vessels up to about 207.3 m. (680 ft.) long could be berthed, bows projecting from pier.
Health: Pratique given by doctor on arrival. If any suspected disease, vessel should advise Agent by radio beforehand. Meat products which are not usually acceptable to U.S.D.A., are generally sealed up as in U.S. Ports.
Radio: Balbao Radio.
VHF: Channel 16 for Pilot.
Tugs: None.
Berthing: Pier about 609.6 m. (2,000 ft.) long, lies in South-easterly direction from the shore line, vessel berths starboard side alongside on the N.E. face, seaward end.

Three buoys are moored 76.2 m./91.4 m. (250/300 ft.) off the berth and are used to hold off the pier, the vessel being moored about 3.05 m. (10 ft.) off at all times due to swell. Port anchor is let go approaching the berth and ship's lines used to position vessel, then very heavy mooring springs are secured, 4 at each end. Ship's lines remain on buoys for holding off. On sailing Pilot does not board, only berthing gang who leave by accommodation ladder to boat after vessel is off the berth.
Fuel: Not available.
Fresh Water: Piped to pier, ample hydrants, charge U.S. $150.00 irrespective of amount taken.
Repairs: Workshop and electrical repairs can be undertaken by arrangement.

Fresh Provisions: Available.
Time: GMT minus 5 hours.
Medical: All facilities available.
Customs Allowances: No restrictions as long as nothing landed, bond is sealed on arrival.
Opening/Closing Hatches: Ship's crew. For banana loading starboard side elevator hatches only.
Shore Leave: No restrictions.
Operators: Chiriqui Land Company.

AUTHORITY: National Port Authority, Apartado 8062, Panama 7, Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director-General; Ing. Carlos Urriola, Director of Operations.

Puerto Armuelles Port Administrator: *Tel:* 75-1230.

SECTION B: OIL TERMINAL.

LOCATION: The PTP transhipment Terminal is located on the Western side of Bahia de Charco Azul in position 8° 12.5′ North, 82° 53′ West, on the Eastern side of the Burica Peninsula, approximately 8.5 miles North of Punta Balsa and 3.5 miles South of Puerto Armuelles.

DOCUMENTS: The following documents are required for entry and clearance:

2 copies General Declaration.
1 copy Clearance from Previous Port.
5 copies Cargo Manifests or declaration that no cargo is carried.
3 copies Crew List.
4 copies Passenger List or declaration that no passengers are carried.
2 copies Stores List or declaration that there are no supplies.
2 copies Crew Personal Effects Declaration.
1 copy Maritime Health Declaration.
2 copies Mail List.
1 copy Bill of Lading.

PILOTAGE: Pilotage to and from the Terminal Jetties is compulsory and is available on a 24 hour basis.

Vessels should not approach the immediate vicinity of the Terminal without being authorised.

The outgoing or unberthing vessel will have priority over the incoming vessel providing the normal rules of navigation are not infringed.

For discharging vessels, pilot station is 3.5 miles S.E. of Jetty No. 2. For loading vessels, pilot station is 3 miles East of Jetty No. 1.

Ships should make a lee for the Pilot and the ladder should conform to normal international standards. Discharging vessels should place the ladder on the port side when on Northerly heading. Loading vessels should place ladder on the starboard side when on a Westerly heading.

Vessels with a freeboard of 30 ft. or more shall provide suitable accommodation ladder, in addition to pilot ladder.

Vessels shall have both anchors ready for use.

Masters will advise Terminal, before berthing, of any damage or disability to his vessel.

APPROACHES: Approaches to the Terminal are from the South to the S.E. (See Plans).

Lights:

1. Isla Burica 08° 01.5′ N., 82° 52.5′ W., flashing every 10 seconds, 12 miles, white light exhibited from a metal framework tower which is 34 m. high and solar powered.
2. Puerto Armuelles (Banana Pier) 08° 16′ N., 82° 52′ W. An occulting light is exhibited from the head of the pier in combination with a fixed red light.
3. At the Terminal, flashing lights are exhibited from the extremities of the berths.

No. 1 Berth: Flashing red every second.
No. 2 Berth: Flashing red every second.
No. 3 Berth: Flashing white every second.

There are no leading lights.

ANCHORAGE: The area immediately to the East of the Terminal is very deep.

The North East area of the Bahia Charco Azul is believed to be the appropriate area to anchor. The holding ground is reported to be good.

Radio contact should be maintained with the Terminal via VHF Channel 16.

MAX. SIZE: 265,000 d.w.t.

HEALTH: In accordance with standard international practice, ships are required to display International Code Signals for vessels requiring Free Pratique and these should be displayed until Pratique has been granted.

N.B. The Autoridad Portuario Nacional (A.P.N.) permits employees of P.T.P. to board vessels (before the ship receives Free Pratique) for the purposes of setting loading arms. Discharge of ballast may commence in case of a vessel with ballast. Discharge of cargo *is not* permitted. Employees of P.T.P. are not permitted in ship's accommodation areas before clearance.

RADIO: *Notices/Time of Arrival:*

ETAs:

All communications should be in local time. ETAs should be received by the Terminal at least 72 hours prior to arrival and any variation of more than 4 hours should be advised.

ETAs should be sent via ship's Agents who will notify the Terminal. The ETA cables should include the following:

1. Name of vessel.
2. ETA Puerto Armuelles.
3. Draft on arrival, fore and aft.
4. For discharging vessels: B/L, gross and net barrels of oil to nearest barrel.
   For loading vessels: ballast for discharge ashore to nearest 1,000 barrels.
5. Any conditions which will affect loading or unloading operations.
6. Deviations from the recommended deck fittings. (See "Berthing/Loading").
7. Water request, if any.

Notice of Readiness: Notice of Readiness is considered to be received by the Terminal if either:

1. Vessel tenders the Notice of Readiness to load or discharge upon arrival at the Pilot Station.
2. When a berth is not available and a vessel elects not to close the port, it may tender its Notice of Readiness at a distance of 15 miles from the Terminal. In this case notice is considered received at this time *plus 2 hours.*

Nothing in these rules will interfere with any business arrangements made by P.T.P. and the user in respect of lay-time, demurrage, and other contractual obligations.

VHF: Vessels approaching the Terminal should establish VHF communication as soon as they are within range (about 50 miles).

The Terminal keeps a listening watch on Channel 16; call sign "Petroterminal Control". Vessels which have to lay-off the Terminal should maintain a listening watch on Channel 16.

The Terminal also uses Channels 11, 12, 13, 14.

The Terminal tug boats and line handling boats are also equipped with Channels 11, 12, 13 and 14.

The Terminal radio monitors Channels 11, 13, 14, 16 at all times.

Also see "Chiriqui Grande" – re-skip.

Frequency Allocation:

Channel	*Use*
13	Cargo handling ONLY.
14	Tugs and berthing.
(11)	(Alternate channel for cargo).
16	Call-up channel. Vessels at anchor maintain listening watch.

Always identify calling vessel and station being called.

Communication with Agents: Vessels may contact their Agents by using Channel No. 16 (using the bridge set) and shifting to a working channel other than Nos. 11, 13 or 14.

Do not use the cargo radio for any ship's business except cargo operations.

Communications While at Dock: The Terminal will provide a portable radio for the use of the vessel's Person-in-Charge of petroleum and ballast transfer operations.

The Person-in-Charge must maintain the radio in his possession at all times, and it must not be changed to any other channel unless instructed to do so by "Petroterminal Control".

The dock-hand is equipped with a portable radio on the cargo working channel.

A third radio is permanently installed in the dock shed.

All communications are conducted in English.

BERTHING/LOADING:

The Terminal Representative will direct where and when a vessel is to berth.

A. Mooring & Connecting

1. *Mooring Pattern:* At both Berth No. 1 and No. 2 the normal mooring pattern will be:

FORWARD	AFT
3 Headlines	3 Stern Lines
3 Breast Lines	3 Breast Lines
2 Spring Lines	2 Spring Lines

Discharging vessels will normally berth with port side to Berth No. 1. Loading vessels will normally berth port side to No. 1 or No. 3, and starboard side to No. 2 Berth. Any variation will be advised by the Berthing Master and Masters should advise any preference prior to arrival.

Mixed moorings are undesirable, e.g. a wire and fibre rope in parallel service is undesirable due to unequal elasticity. All moorings must be arranged so that loss of effect cannot occur when slacking off or heaving in on one line, as required, due to the rise or fall of the vessel during loading or discharge operations.

It is imperative that spring lines be adequate to maintain a minimum fore and aft movement of the vessel to remain within the limitation of movement of the loading arms.

Wire ropes may be used and are preferred for spring lines.

Marine Manager's Notice to Mariners: Our experience has shown that vessels using synthetic tails on the end of their wire mooring lines have considerably reduced their mooring time at this Terminal.

If your vessel's wires are not already fitted with tails we request they be fitted for your next visit to our Terminal.

Some vessels fitted with 'End Less' tails at the end of their wires do not have the two parts lashed together at the shackle, the tail is then free to pull through the shackle, this also causes difficulties with mooring.

The diagram (see "Plan Book") shows type of shackle we have found most suitable, also length of synthetic tail required.

Your attention to this matter would be appreciated.

Pre-Transfer Conference: The Pre-Transfer Conference will be held between the Control Room/Supervisor and responsible Officer prior to commencement of operations. (IOTTSG Chapter No. 5) to agree on procedures for deballasting and loading, including:

1. Communications between ship/shore/Control Room/Supervisor.
2. Deballasting procedures.
3. Cargo start-up procedures.
4. Any deviations from normal procedures.
5. Loading rates, initial, maximum, and topping off.
6. Notice times required to change rates and shutdown procedure.
7. Emergency shutdown, moorings failure, oil spill, etc.
8. Any ship's deficiencies to be made known.
9. Any Terminal deficiencies to be made known.
10. Completion of loading.
11. Designated smoking area.
12. Galley and appliance limitations.
13. Emergency assistance.
14. Vessel will be ready to move under her own power at all times while moored at the SBM.

Prior to the start of operations, the Supervisor and responsible Officer will complete the Safety Checklist.

Where any disagreement arises between the vessel personnel and the Berthing Master regarding some aspect of Terminal procedure, the procedure to be followed will be that which provides closest compliance with guidelines established by the latest edition of International Safety Guide for Oil Tankers and Terminal, published by the International Chamber of Shipping, Oil Companies International Marine Forum.

Flow Rates: Terminal can receive crude oil at 100,000 b.p.h. or more. Berth No. 1, individually, can receive approximately 60,000 b.p.h. Terminal can receive ballast water at 30,000 b.p.h. or more. Discharge pressure of 125 p.s.i.g. at ship's rail is permitted. The crude oil loading rate is 48,000 b.p.h. by pumping. Higher rates can be given on request.

Cargo operations shall not commence until the Master or Mate has informed the Port Representative that all necessary valves are opened and the vessel is ready to discharge or receive cargo and regulations being complied with.

In the event of a vessel requesting a shore-stop, Masters should understand that Petroterminal accepts no responsibility for any errors in quantity.

Loading Arm Connections: (See also Section B and C below).

Bonding cable shall be secured to a clean surface before loading arm connection.

Ship's crew must be available to assist in connection and disconnecting loading arms to the manifold of the ship.

a. Preferred connections for discharging vessels are 4 each 16 in. ANSI 150# Weldneck flanges on the port side. *Standard flanges are required.*

(1) Non-standard flange thicknesses and/or non-standard outside diameters may prevent loading arm couplings from functioning.

(2) At least 8 in. of straight pipe (free of supports, lugs, or reducer) is required behind the flange for coupling clearance.

(3) The preferred flange spacing fore and aft is 3.0 m. – 3.0 m. – 3.0 m. (10 ft. – 10 ft. – 10 ft.), or less between centres. In no case can the distance be less than 1.6 m. (5 ft 3 in.), 1.1 m. (3 ft. 7 in.), 1.6 m. (5 ft. 3 in.).

b. Preferred connections for loading vessels are 4 each 12 in. ANSI 150# Weldneck flanges on the starboard side. *Standard flanges are required.*

(1) Non-standard flanges thicknesses and/or non-standard outside diameters may prevent loading arm couplings from functioning.

(2) At least 8 in. of straight pipe (free of supports, lugs, or reducers) is required behind the flange for coupling clearance.

(3) The preferred flange spacing fore and aft is 3.0 m. – 3.0 m. – 3.0 m. (10 ft. – 10 ft. – 10 ft.), or less between centres. In no case can the distance be less than 1.6 m. (5 ft 3 in.), 1.1 m. (3 ft. 7 in.), 1.6 m. (5 ft. 3 in.).

(4) Disconnection of loading arms: Once cargo transfer is complete the loading arms will be drained and then disconnected by shore personnel.

B. Berth No. 1 (See Plan). Berth No. 1 is designed for discharging or loading vessels of 28,000 to 265,000 d.w.t., without draft restrictions. Least depth alongside is 80 ft. Jetty head is connected to shore by trestle.

Gangway: Hydraulically operated telescoping gangway from loading platform to ship's deck is provided.

Loading Arms: 4 Mannesmann 16 in. size fully powered loading arms are installed. They are fitted with positive locking hydraulic couplers for 16 in., 14 in. and 12 in. standard flanges. All arms are capable of transfer of crude oil and ballast water.

Crane: A 1 ton capacity crane for handling of supplies, etc., is installed.

Breasting Dolphins: Four single steel tube breasting dolphins equipped with pivoting timber-faced fenders are installed. The two outer dolphins are spaced approximately 380 ft. apart and are equipped with double quick release hooks and power capstans. The two inner dolphins are spaced approximately 260 ft. apart and are similarly equipped.

Mooring Dolphins: There are four mooring dolphins. All are equipped with 3 quick release hooks and power capstans.

C. Berth No. 2 (See Plan). Berth No. 2 is designed for discharging or loading vessels of 28,000-270,000 d.w.t. without draft restriction. Least depth alongside is 77 ft. Jetty head is connected to shore by a trestle.

Gangway: A hydraulically operated telescoping gangway from loading platform to ship's deck is installed.

Loading Arms: 3 Mannesmann 16 in. size fully powered loading arms are installed. They are fitted with positive locking hydraulic couplers for 16 in., 12 in. and 10 in. standard flanges.

Crane: A 1 ton hydraulic crane for supplies, etc., is installed.

Breasting Dolphins: 4 each single steel tube breasting dolphins equipped with pivoting timber faced fenders are installed. The distance between dolphins is 375 ft. Each dolphin is equipped with two quick release hooks and a powered capstan.

Mooring Dolphins: There are four mooring dolphins, all are equipped with 3 quick release hooks and power capstans.

D. Berth No. 3 Platform (See Plan). See "General" – Berth No. 3. Designed for loading vessels up to 60,000 d.w.t. without draft restriction. Least depth alongside 50 ft. Jetty is connected to shore by submarine line only.

Loading Arms: 3 Mannesmann 12 in. size fully powered loading arms are installed. They are fitted with positive locking hydraulic couplers for 12 in., 10 in. and 8 in. standard flanges.

Gangway: A hydraulic gangway is provided.

Crane: A 1 ton capacity crane for handling supplies is fitted.

Breasting Dolphins: Two breasting dolphins are spaced 200 ft. apart fitted with pivoting timber faced fenders.

Mooring Dolphins: Four mooring dolphins equipped with two quick release hooks remotely controlled from the loading platform

Inert Gas: Per User's (Sohio) request: Inert gas vessels will not be requested to depressure for ullaging or sampling unless there is reason to suspect an error.

THERE ARE NO CHECK VALVES IN THE TERMINAL PIPELINES AT THIS TIME – PLEASE CHECK PROCEDURES PRIOR TO COMMENCEMENT OF OPERATIONS.

Petroterminal – Berth Description:

	Berth No. 1	*Berth No. 2*	*Berth No. 3*
Vessel size (design)	28,000 – 270,000 d.w.t.	28,000 – 275,000 d.w.t.	28,000 – 60,000 d.w.t.
Type of berth	Fixed loading platform	Fixed loading platform	Fixed loading platform
Deck level of berth	40 ft. MLLW	40 ft. MLLW	38 ft. MLLW
Depth alongside at MLLW	80 ft.	77 ft.	50 ft.
Loading arms (number and size)	4×16 in. also 14 in. and 12 in. adapters	3×16 in. also 14 in. and 12 in. adapters	3×12 in. also 10 in. and 8 in. adapters
Max. rate loading	48,000 b.p.h. plus	48,000 b.p.h. plus	48,000 b.p.h.
Max. design flow rate (per berth)	100,000 b.p.h.	90,000 b.p.h.	40,000 b.p.h.
Loading arm spacing on operating dock/minimum ship manifold spacing	9 ft. 4 in. (4)	9 ft. 4 in. (3)	9 ft. 6 in. (3)
Quick disconnect coupling size (QDC)	16 in.	16 in.	12 in.
Manifold size range acceptable to QDC (#1)	16 in., 14 in. and 12 in.	16 in., 14 in. and 12 in.	12 in., 10 in. and 8 in.
Maximum ship manifold pressure	PSIG – not to exceed 125	PSIG – not to exceed 125	PSIG – not to exceed 125
Emergency shutdown	Can be initiated by berth operator or by Control Room. Shutdown complete within 6 seconds after initiation	Can be initiated by berth operator or by Control Room. Shutdown complete within 6 seconds after initiation	Can be initiated by berth operator or by Control Room. Shutdown complete within 6 seconds after initiation
Access to ship	69 ft. aluminium gangway	69 ft. aluminium gangway	43 ft. aluminium gangway
No. of mooring dolphins	4	4	4
No. of breasting dolphins	4	4	2
Mooring/breasting hooks	1 triple hook per mooring dolphin/4 double hooks per breasting dolphin	1 triple hook per mooring dolphin/1 double hook per breasting dolphin	1 double hook per mooring dolphin/1 hook per breasting dolphin
Potable water	Limited	Limited	Limited
Bunker facilities	None	None	None
Public telephone	None available	None available	None available

Notes:

1. Although all berths are designed to handle vessels in the 25,000 d.w.t. size, loading arm size requires ship's manifolds to be a minimum of 12 in. in diameter for Dock Nos. 1 and 2, and 8 in. diameter for Berth No. 3.

2. Vessels in the 250,000 d.w.t. range will be acceptable only if dock/deck machinery and mooring leads allow an efficient bow and stern mooring line pattern plus bow to manifold distance.

3. Preferred flange spacing fore and aft is 10 ft. – 10 ft. – 10 ft. (or less) between centres, however, in no case can the distance be less than 5 ft. 3 in. – 3 ft. 7 in. – 5 ft. 3 in.

ANSI No. 150 Weldneck Flanges.

TUGS: 3 tugs of more than 4,200 h.p. are available and usually will make fast alongside. Tug's lines are used for making fast to vessel.

When working tugs alongside, ullage plugs shall be closed.

Tugs available throughout 24 hours.

BALLAST: When alongside, ballast should be handled by type, as per international convention, as follows:

1. *Segregated:* All ballast in segregated ballast tanks should be visually inspected prior to discharge. After inspection, segregated ballast may be discharged overboard according to standard shipboard procedure.

2. *Dedicated Clean:* All ballast in dedicated clean ballast tanks should be visually inspected prior to discharge. After inspection, dedicated clean ballast tanks may be discharged overboard in accordance with IMO Regulations.

3. *Treated:* Ballast water which has been chemically treated (with detergents, emulsifiers, etc.) must be retained on board.

4. *Others:* All other ballast water will be pumped ashore prior to loading. The Terminal has 3×120,000 barrel tanks for the reception of dirty ballast. The ship will advise the Terminal of the quantity of ballast to be discharged ashore prior to commencing discharge.

Ballasting: Before ballasting, the cargo lines shall be drained back into cargo tank. Ballast pumps shall be started before sea valves are opened.

CRUDE OIL WASHING: Crude oil washing may be done during discharge if this does not cause delay to other vessels awaiting berth.

The Terminal should be kept fully advised of any extra time required in order to comply with IMO Regulations.

MEDICAL: Doctor will only board vessel in cases of emergency. There are limited medical and dental services available. Treatment should, when possible, be arranged via Ship's Agent in advance.

DENSITY: Offshore salinity is 1.025. Salinity (Specific Gravity), due to river run-off, is about 1.010 close to the shore during the rainy season (July-November/December). During this period, substantial changes may occur.

Sea temperature varies between 80° and 83°F.

FUEL: There are no bunkers available.

EARLY DEPARTURE PROCEDURE: All loading vessels are requested to use an Early Departure Procedure. (E.D.P.).

(A) If the Master of a vessel consents to use the E.D.P. it will be implemented in the following manner:

1. The Master will sign a letter agreeing to the use of E.D.P.

2. The cargo documents and other relevant forms will be placed aboard the vessel.

3. On completion of loading, the vessel's tanks will be gauged by the vessel's appointed cargo inspector, whose inspection is expected to be completed prior to sailing.

4. The vessel will sail.

5. The Terminal will transmit Bill of Lading figures to the vessel by VHF radio. The cargo documents are to be completed by the Master.

6. Written confirmation of these figures will be provided by the vessel's Agent in the Canal Zone.

(B) If the Master of a vessel does not agree to use E.D.P. the vessel will be unberthed immediately after loading and should proceed to the pilot station. Terminal's Representative will bring papers by launch or tug.

(C) Vessels will be requested to unberth once loading arms have been disconnected regardless of the time set on the sailing board. A terminal launch will be available for returning crew to vessel.

(D) If a vessel fails to vacate its berth upon completion of operations or causes delay to cargo operations because of mechanical breakdown, inadequate loading/discharging rates, lack of adequate crew, non-compliance with these rules, the vessel will be responsible for:

1. Jetty demurrage at the applicable rates.

2. Hold P.T.P. harmless against demurrage detention or loss of any nature incurred as a result of other vessels awaiting berth.

3. Cost of tugs requested to stand-by the vessel by the Terminal Representative if, in his opinion, he considers it necessary.

TIME: GMT minus 5 hours.

INSPECTION: *Petroleum/Tank Inspection (Caleb-Brett):* This will be carried out by Inspectors appointed by the User.

Valdez – Crude Oil Characteristics:

Specific Gravity	0.888 @ 60°F
API Gravity @ 60°F	26.6° API
Pour Point	+15°F
Viscosity	7.3 SSU @ 100°F (22 centistoke) 160 SSU @ 60°F (68 centistoke)
Reid Vapour Pressure	3.8 at 100°F
Sulphur Content	0.99% by weight
Waxing	85 – 117°F (begins to precipitate) 50 – 55°F (bulk of wax begins to come out of solution)
Mercaptan Sulphur	Approximately 20 p.p.m.

SAFETY: No dangerous cargo shall be permitted to be shipped or landed at the jetties. Whilst petroleum loading/discharging operations are being carried out, no other cargo will be handled without permission of the Terminal Representative.

No welding, cutting, etc., is permitted on any vessel in the Terminal.

Blowing or cleaning of boiler tubes in vicinity of the Terminal is prohibited.

Smoking Regulations: Smoking is PROHIBITED in the following locations:

1. Entire Terminal area.

2. Aboard Launches.

3. On Jetties and in motor vehicles inside the Terminal, except inside designated buildings.

4. On ships except in places designated by the Master and agreed by the Terminal's Representative. In accordance with IOTTSG, two locations only will be established in the after end of the vessel.

N.B. If an oil spill occurs on Jetty or ship, all smoking will be PROHIBITED until the spill has been removed.

Emergency Procedure: For cases of fire on vessel, in addition to the normal ship's alarms, Masters are requested to sound a prolonged blast on the main whistle of not less than 10 seconds duration. If the vessel is discharging or deballasting it should:

1. Immediately cease operations.

2. Initiate fire fighting procedures.

3. Be prepared to unberth at short notice.

If loading cargo, the Terminal will, on hearing the signal, immediately stop all operations and:

(I.) Initiate fire fighting procedures from Jetty.

(II.) Put Terminal emergency plan into effect.

(III.) Disconnect loading arms.

(IV.) Order tugs to vessel and make preparations for unberthing.

Vessels at other berths should also cease operations and be prepared to put to sea.

Fire Protection System: Each Jetty is equipped with:

1. Water spray system underneath.

2. Hydrant system on platform.

3. Two 500 g.p.m. remote operated monitors. These are connected to discharge with either water or foam.

The plant water supply is by diesel driven pumps at two locations and the total water flow is 7,000 g.p.m.

SHORE LEAVE: *Launch Service:* The launches at the Terminal are intended for Terminal use only. They may be hired by prior notice, depending on operational requirements. Crew members and visitors use the launches at their own risk.

Berth No. 3: A launch service may be provided depending on Terminal requirements. Masters should inquire about this service upon arrival (also see "General").

Shore Leave: Shore leave is permitted by the local authorities. Crew members should check in at the Customs Gatehouse leaving and returning to the Terminal area. Masters should take reasonable steps to ensure no alcoholic drinks, drugs, etc. are supplied or conveyed to any unauthorised person.

GENERAL: *Charts and Publications:* Charts Ref. USHO 21580, 21581, 21584 and 1018 and BA 1928.

Sailing Directions: USHO PUB 153. B.A.N.P. No. 8 Pacific Coasts of Central America and United States Pilot.

Tides: The maximum tidal range is 12 ft. The mean range is 7.6 ft. The tidal flow in this area is, at present, ill defined.

Strong tides in North-South direction have been experienced close to the docks. At times these are unpredictable.

Currents: Currents in the area are not well defined.

Weather Conditions in Bahia de Charco Azul:

(A) Wind: The seasonal normal wind regime occurring in the Bahia de Charco Azul is:

1. December-March: Wind speeds greater than 14 m.p.h. occur approximately 8% of the time in January. The predominant directions are from W., N.W., N. and N.E. Winds are W., N.W., N. and N.E. approximately 70% of the time in January.

2. December-April: Is considered to be dry season.

3. April-May: Winds exceed 14 m.p.h. 6% of the time in April. The predominant wind directions are S. and S.W., and N. and N.W. Winds are S. and S.W., and N. and N.W. approximately 60% of the time in April.

4. June-August: Wind speeds exceed 14 m.p.h. approximately 13% of the time in July. The predominant directions are S., S.W., and W. (approximately 60% occurrence) in July.

5. June-November: Is considered to be the rainy season.

6. September-November: Winds exceed 14 m.p.h. approximately 22% of the time in October. Predominant wind directions are S., S.W., W. and N.W. Winds are S., S.W., and W. and N.W. approximately 86% of the time in October.

(B) Waves: The seasonal wave height is:

1. December-March: Significant wave height exceeds 3.9 ft. 1% of the time in January N.E., E. and S.E. wave directions predominate, occurring 84.9% of the time in December.

2. April-May: Significant wave height exceeds 3.9 ft. 1.6% of the time in April. N.E., E. and S.E. wave directions predominate, occurring 85.5% of the time in April.

3. June-August: Significant wave height exceeds 3.9 ft. 6.4% of the time in July. N.E., E. and S.E. wave directions predominate, occurring 82.9% of the time in July.

4. September-November: Significant wave height exceeds 3.9 ft. 11.3% of the time in October. N.E., E. and S.E. wave directions predominate, occurring 81.0% of the time in October.

Flag: Every vessel shall fly her national flag and the flag of the Republic of Panama between sunrise and sunset.

Rubbish: The dumping of trash and other garbage is prohibited. Any trash or garbage so dumped will be removed and the expenses involved for the vessel's account.

Berth No. 3: Petroterminal will, under normal circumstances, be able to provide a boat service for vessels berthed at No. 3.

This boat service will be available on demand but subject to the operational requirements of the Terminal (e.g. when other vessels are mooring/unmooring, the launch service will be withdrawn for an unspecified period).

Masters requiring this launch service may indicate their requirement to the Pilot/Berthing Master and the appropriate charges will be added to the pilotage/towage. Bill will be sent to the Agent for payment.

Masters should advise their Officers and crew that construction work is still progressing in the Terminal Area and care must be exercised in passing over these areas. Smoking regulations should be observed.

Petroterminal's launch operators are under strict instructions that they are not to carry any persons whom in their opinion, are under the influence of alcohol or drugs. The carrying of liquor is forbidden.

Whilst every effort will be made to ensure the safety of personnel, Petroterminal will not be held liable for any accident sustained whilst on Petroterminal's craft or property.

Persons use these facilities entirely at their own risk.

FRESH WATER: Fresh water can be supplied, as available, via the jetty connections. Prior notice is requested. Maximum delivery is 200 tons.

SHIP SUPPLY SERVICE: 3 large tugs and launches available to assist with transportation of stores and crew, on an emergency basis only.

Helicopter can easily be hired.

AUTHORITY: Petroterminal de Panama, S.A., Apartado 8-179, Panama 8, Republic of Panama. *Tel:* 64-2655, 64-2246. *Telex:* 3792527. *Contact:* Captain Geoffrey Moss, Marine Manager.

Puerto Armuelles: P.O.Box 26. *Tel:* 70-7246, 70-7261, 69-6377. *Telex:* 3797500, 3797548.

AGENT: Fernie (Puerto Armuelles), S.A., Apartado 22, Puerto Armuelles, Chiriqui, Republic of Panama. VHF: Call on Channel 16. Working 6, 8, 10, 11, 14. Telephone: 70-7301 or 70-7200. Cables: "Fernie". Telex: 368-7508.

With the exception of times vessels are actually in or approaching Puerto Armuelles (i.e. within V.H.F. range) all other communications should be directed to "Fernie Cristobal".

VACAMONTE: 08.51 N. 79.40 W. (See Plan Book)

LOCATION: The fishing port of Vacamonte is located 27 km. S.W. of Panama City, in Arraijan District, Province of Panama.

DOCUMENTS:

Voyage Documents:
General Declaration (1 original and 5 copies)
Cargo Manifest (4 copies)
Crew List (4 copies)
Passenger List (4 copies)
Stores/Supplies List (4 copies)
Crew Effects List (2 copies)
Maritime Health Declaration (Derat) (1 copy)
Mail List (1 copy)

Ship's Documents:
Certificate of Registration
Certificate of Civil Security
Certificate of Radio Safety
Oil Record Book
Safety Construction Certificate
Civil Responsibility Insurance Certificate
Radio Licence Certificate (date of expiry)

Documents Requested from Tuna Vessels:
General Declaration (obligatory)
Crew List (obligatory)
Cargo List (if available)
Clearance from Last Port (obligatory)
List of Stores/Supplies (if available)
Derat Certificate (obligatory)

Documents Required from National Shrimp Vessels:
Clearance from Last Port of Call
Consular and Vessel Clearance Certificate
Monthly Invoice or Last Invoice for Marine Resources
Clearance Documents from the main Treasury Office

PILOTAGE: Pilot is compulsory for any vessel greater than 150 g.r.t. that enters or leaves the Port. Pilot can be contacted on VHF Channel 15.

ANCHORAGE: Located in Lat. 08° 50′ 14″ N., Long. 79° 38′ 45″ W. in the area of the Fairway Buoy near Melones Island.

MAX. SIZE: The Port can receive vessels up to 3,000 tons with maximum length of the vessel of 120 m. and with draft of 7 m. Average tide variation 3.96 m. Also see "General".

HEALTH: When vessels arrive in port, they are received by a Health Official who comes on board to examine documents. The Quarantine Officials inspect stores and store rooms and these are sealed in the event of any anomaly (foodstuffs in poor condition, meats which originate in countries with outbreaks of aphthous fever, etc.).

In the event of illness on board, this must be communicated to the Ship's Agent, who will transmit the information to the Authorities. The vessel must not be moved until the doctor determines whether or not the illness represents a danger for persons on land.

RADIO: S.S.B. with the following frequencies:
2182.00 – Channel 1
2638.00 – Channel 2
2738.00 – Channel 3
4139.50 – Channel 4
4358.80 – Channel 5
7447.50 – Channel 6

For calling use Channel 1.

VHF: Station has 55 channels. Calling use Channel 15 (156.750 MHz). Station in operation throughout 24 hours.

TUGS: 2 tugs of 700 h.p. each.

BERTHING:

Tuna Fleet Facilities: Pier: Head-length 132 m. Width of pier 12.5 m. 2 inside berths each 60 m. The "T" head pier can accommodate 4 tuna vessels at the same time. The area surrounding the pier has a depth of 9 m. at MLWS.

Potable water and fuel obtainable at the pier.

Shrimp Fleet Facilities: 2 piers which are able to receive 8 vessels at any one time, depth 4 m. Fuel and potable water available.

There are 2 additional piers where vessels are able to undertake repair operations.

Fresh Fish Market: 1 marginal pier which is able to accommodate 8 vessels at one time, depth 4 m. Adjacent to the pier is a fish cleaning station and 2 cold rooms.

Freight Elevators: 1 freight elevator of 10 tons capacity. 10 freight elevators of 2 tons capacity.

EQUIPMENT: 4 fixed cranes (shrimp quays) × 1.5 tons. 12 × 2 ton fork lift trucks. Cold storage for 3,000 tons of tuna.

STEVEDORES: The National Port Authority does not offer a stevedoring service in the port. In case of need, the Ship's Agent is able to contract one or more private gangs to carry out the work.

MEDICAL: There is a doctor in the port for first aid treatment. There is also an ambulance to transport urgent cases to the nearest medical centre.

FUEL: For supplies to vessels, the port has a modern fuel pumping system and two tanks of good capacity.

FRESH WATER: The NPA offers a service of water supply to vessels requiring it. The port has a water tank with a capacity of 600,000 gallons which meets all the needs of the port.

FIRE PRECAUTIONS: The port has its own corps of fire fighters and a modern fire engine. The aqueduct system for drinking water has numerous hydrants spread throughout the port area.

REPAIRS: Vacamonte has a modern yard for repairs to vessels, including a synchro-lift with 200 tons capacity, and berths for repairing 20 vessels engaged in the national fishing industry, covering an area of 18,000 sq.m. which includes future space for four additional construction berths. There is also a vessel repair workshop with an area of 700 sq.m., and vessel repair offices and shops with an area of 1,000 sq.m.

AIRPORT: Vacamonte is only 25 minutes from Panama City and 25 minutes from there is the international airport of General Omar Torrijos Herrera.

WATCHMEN: The NPA has a complete security corps working throughout 24 hours and permanently guarding the port entrance.

POLICE/AMBULANCE/FIRE: Police 510360; Fire Brigade 532222 Ext. 117; Ambulance Tel: Port Authority.

SERVICES: In the port is a ship chandler, an electricity system capable of generating 4,687 kVA, Ships' Agents' Offices, Post Office, Defence Force Member, Customs, Ministry of Health, Warehouse (marine hardware, materials, and accessories) and Banks.

SHORE LEAVE: Officials of the Migration Authority grant a provisional card for coming ashore, including leaving the port area.

GENERAL: There are no restrictions with regard to depth of water, since the various areas of the port have been dredged as follows: the port access channel up to 5.5 m., the main maritime area to 5 m., and 4 m., the area of 'T' quay for tuna vessels to 9 m. The area of quay 'T' for tuna vessels is designed to take 8 tuna vessels of 55 m. LOA, 14 m. beam and 7 m. draft. At the fish quay, 8 vessels of 10 m. LOA can berth simultaneously. The 2 pier quays for shrimp vessels take 6 shrimp vessels of 20 m. LOA, 5.8 m. draft each, simultaneously. The 2 pier service quays take 48 shrimp vessels and give service and victualling to them.

DEVELOPMENTS: The NPA has 100 hectares of land adjacent to the port for industrial development. Here the industrial area will have plots of land from 2,000 sq.m. upwards for installations. The plots of land will be obtained by concession and those in Industrial Area No. 1 have already been acquired.

AUTHORITY: National Ports Authority, Apartado 8062, Panama 7, Panama. *Tel:* 69-5444. *Telex:* 2765. *Contact:* Lic. Nander A. Pitty V., Director General; Ing. Carlos Urriola, Director of Operations.

NOTES

Please also advise Shipping Guides Ltd.

Papua New Guinea

GENERAL:

APPLICABLE TO ALL PORTS IN PAPUA NEW GUINEA

(See also details under individual ports) **(See Plan Book)**

DOCUMENTS: International conditions i.e. at the first port of call in Papua New Guinea the following inward Customs documents are required to be handed to Customs Department within 24 hours of ship's arrival.

3 Copies Inward Passenger List.
7 Copies Inwards Customs Manifest.
3 Copies List of Crew.
3 Copies Articles in private possession of officers and crew Form 5.
3 Copies Stores List.
2 Copies Immigration Restriction Ordinance List (Form 6) being complete list of passengers disembarking and in transit.

If other than first port of call:
3 Copies Inward Passenger List.
7 Copies Inwards Customs Manifest.
Outward Customs Clearance from last port of call.

RESTRICTIONS: Night berthing is not recommended, but is subject to weather conditions in Lae, Rabaul and Port Moresby.

HEALTH:

(a) Vessels arriving directly from Australia. Pratique is given by radio to vessels which voyage directly from Australia to a Papua New Guinea port, Master of vessel notifies Quarantine Officer at the port of entry to which he is proceeding of ETA, the number of passengers and crew and whether there is any sickness aboard. This notification from Master is sent not longer than 24 hours and not less than 12 hours of ETA. If there is no sickness aboard a reply is sent stating that Pratique is granted, and when a vessel arrives the actual pratique form is delivered to Master of vessel or to Collector of Customs to hand to Master. Full Pratique is given.

(b) Vessels arriving from a Foreign Port. All vessels which arrive from a foreign port must anchor in the designated position and await arrival of a Quarantine Officer who boards the vessel by himself – no other person (except a Pilot) is to be allowed on board vessel until Pratique has been granted. If a Pilot is on board he must remain on board until Pratique is granted.

Cholera: All passengers and crew are required to be inoculated against cholera if the vessel is expected to arrive at a port in the country within 7 days of leaving an area where cholera is either endemic or is present.

Note: The presence on board of a qualified doctor will normally assist in the granting of Pratique.

RADIO: 2 radio stations are available.

(a) Port Moresby Radio – Call sign P2M operating between the hours of 2100 – 1000 hrs. GMT.

(b) Rabaul Radio – Call sign P2R operating 24 hours per day.

These stations are generally used for all contact with agents or Government Departments, etc.

VHF: VHF services are available at:

a. Port Moresby – Channel 16 and 12
Call Sign "Moresby Harbour Control"
b. Lae – Channel 16 and 12
Call Sign "Lae Harbour Control"
c. Rabaul – Channel 16 and 12
Call Sign "Rabaul Harbour Control"
d. Kieta – Channel 16 and 12
Call Sign "Kieta Harbour Control"
e. Madang – Channel 16 and 12
Call Sign "Madang Harbour Control"
f. Anewa Bay – Channel 6, 12 and 15
Call Sign "Anewa Bay Pilots"
g. Kimbe – Channel 16 and 12
Call Sign "Kimbe Harbour Control"
h. Alotau – Channel 16 and 12
Call Sign "Alotau Harbour Control"
i. Vanimo – Channel 16 and 12
Call Sign "Vanimo Harbour Control"
j. Wewak – Channel 16 and 12
Call Sign "Wewak Harbour Control"
k. Oro Bay – Channel 16 and 12
Call Sign "Oro Bay Harbour Control"
l. Kavieng – Channel 16 and 12
Call Sign "Kavieng Harbour Control"

Normal working hours are 0745 till 1606 hrs. local time, except for Anewa Bay where hours are 0700 till 2300 hrs. local time.

RADAR: No port radar services exist in Papua New Guinea.

TUGS: Berthing. Tugs are available in Port Moresby, Lae and Anewa Bay.

CRANES: There are no wharf mounted cranes in Papua New Guinea, however, mobile cranes are available in most main ports capable of lifting up to 20 tonne containers. Shippers are advised though to check this before shipping and with heavier loads prior advice and approval must be sought from the relevant Port Authority.

BULK CARGO FACILITIES: Except for Anewa Bay (copper concentrate) and the Jant Wharf at Madang (Woodchip), no bulk cargo facilities exist in Papua New Guinea. (Details of the above are given in the appropriate port summaries).

MEDICAL: Medical attention is available in most Papua New Guinea Ports, however as much advance notice as possible should be given by contacting the nearest radio station.

DRY DOCK: No dry dock or major repair facilities exist in Papua New Guinea.

GANGWAY/DECK WATCHMEN: Not usually necessary.

HATCHES: Opening/closing usually carried out by crew.

CONSULS: The following Consulate and Commission services are available.

American Consulate General, P.O.Box 3492, Port Moresby.	Phone 21-1447
Australian Consulate General, P.O.Box 1180, Lae.	Phone 42-3000
Australian High Commission, P.O.Box 9129, Hohola.	Phone 25-9333
Austrian Honorary Consul, P.O.Box 850 Port Moresby.	Phone 21-2588
British High Commission, P.O.Box 739, Port Moresby.	Phone 21-2500
Peoples Republic of China Embassy, P.O.Box 1351, Boroko	Phone 25-9856
French Embassy, P.O.Box 1155, Port Moresby.	Phone 25-3740/25-1323
German Honorary Consulate, P.O.Box 1549, Boroko.	Phone 25-6311
Indonesian Embassy, P.O.Box 7165, Boroko.	Phone 25-3116
Italian Consulate, P.O.Box 276, Lae.	Phone 42-3987
Embassy of Japan, P.O.Box 3040, Port Moresby.	Phone 21-1800
Korean Embassy, P.O.Box 381, Port Moresby.	Phone 25-4755
Malaysian High Commission, P.O.Box 1661, Port Moresby.	Phone 25-1506/25-2663/25-2076/25-2201
New Zealand High Commission, P.O.Box 1144, Boroko.	Phone 25-9444
Philippines Embassy, P.O.Box 5916, Boroko.	Phone 25-6577
Sweden Consulate, P.O.Box 1228, Boroko.	Phone 25-5411
Swiss Consular Agency, P.O.Box 136, Port Moresby.	Phone 21-1307

CUSTOMS ALLOWANCES: Entry regulations permit 200 cigarettes or 1lb. of tobacco, and 40 oz. of wines or spirits.

Crew members may hold 200 cigarettes and 1 carton of beer (or 1 bottle of spirits) out of bond per week.

CARGO GEAR: Wharf equipment supplied by stevedores, load/discharge by ship's gear.

REPATRIATION: Possible, frequent scheduled air services to Australia, Hong Kong, Manila, New Zealand, Singapore and USA via Fiji.

TIME: Local time in all ports is 10 hours ahead of GMT.

HOLIDAYS: The only days on which cargo cannot officially be worked are Good Friday and Christmas Day.

TELEPHONES: Not available at present for ship to shore connection.

SHORE LEAVE: Crew members are allowed ashore.

IDENTIFICATION CARDS: Generally a seamans book is held at the main entrance to the port. Individual passes are not normally required for crew.

BERTH RESERVATIONS: A berth reservation system applies for all overseas vessels at all Papua New Guinea Harbours Board ports.

At Anewa Bay cargo vessels must vacate berth for concentrate carriers.

Samarai does not handle overseas traffic.

AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 671, Stanley Esplanade, Port Moresby, Papua New Guinea. *Tel:* 21 1400 (8 lines) *Telex:* NE 22243 (A/B Harbours). *Cables:* Harbours, Port Moresby.

AITAPE: 03.08 S. 142.21 E. (See Plan Book)

(See General section on Papua New Guinea ports).

PILOTAGE: Not compulsory. Pilot Boarding Place: Lat. 3° 08.25′ S., Long. 142° 23.9′ E.

TUGS: Not available.

RADIO: Communications not available.

BERTHING: Position of wharf Lat. 03° 08.51′ S., Long. 142° 21.24′ E. Length of berthing head 18.3 m. (60 ft.). Width 6.2 m. (20.3 ft.). Height of deck above L.A.T. 2.5 m. (8.3 ft.). Minimum depth of water at L.A.T. at wharf head 4.3 m. (14 ft.) – subject to seasonal change. Maximum tidal range 1.4 m. (4.6 ft.)

MEDICAL: Hospital facilities 3 miles from port can attend to minor cases.

STEVEDORES: *Working hours:* 0700 – 1200 hrs., 1300 – 1800 hrs.

FRESH WATER: Not available to ships.

FUEL: Not available.

AIRPORT: Distance 1 mile, daily flights to Wewak and Vanimo.

CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams tobacco. 1 litre of spirits or 1 litre of wine or 6 beers (total 4.5 litres) for each 7 days. Aitape is not a port of entry.

GENERAL: *Chart:* AUS 652

AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 3, Aitape. *Tel:* 872044, 872052 (after hours). *Cables:* Portman, Aitape. *Contact:* Robert Parer, General Manager, W. & R. Parer Pty. Ltd., Agent for P.N.G. Harbours Board.

ALOTAU: 10.19 S. 150.27 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)

PORT LIMITS: Seaward Boundary: From a position in Lat. 10° 20′ S., Long. 150° 26′ E. bounded on the West by a straight line due North to the coastline. From the same point bounded on the South by a straight line due East to a position in Lat. 10° 20′ S., Long. 150° 28′ E. thence bounded on the East by a straight line due North to the coastline.

PILOTAGE: Pilotage is not compulsory. There are no pilots stationed at Alotau but a pilot will attend from Port Moresby given 48 hours notice of the ship's estimated time of arrival.

Pilot boarding ground: 10°19.2′ S., 150° 26.75′ E.

ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival again via Port Moresby Radio (P2M).

ANCHORAGE: There are no recommended anchorage areas for large vessels in the vicinity of Alotau.

HEALTH: Quarantine Officer Tel: 61 1049. Health Officer Tel: 61 1164.

RADIO: None.

VHF: "Alotau Harbour Control" on Channels 16, 12 and 8 during working hours and when vessels are expected during non-working hours.

TUGS: Not available.

BERTHING: Overseas Wharf is 93 m. long 18.0 m wide, height of deck above L.A.T. 2.4 m., minimum depth of water at face at L.A.T. 10.0 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).

Coastal Wharf: Length 55.8 m. (183 ft.) Width 9.8 m. Minimum depth of water 4.9 m. (16 ft.). Height of deck above L.A.T. 2.1 m.

Barge Ramp available.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.

Licenced Stevedores: Alotau Stevedoring and Transport Pty. Ltd., P.O.Box 28, Alotau. Tel: 61 1318.

TANKERS: Facilities for Coastal Tankers only.

FUEL: Available by road tanker. Supplier: B.P. Also through pipe-line. Arrangements through stevedores.

FRESH WATER: Available in limited quantities and restricted periods of the year. Prior application to be made to the Port Manager.

REPAIRS: No facilities available.

CUSTOMS: Port of Entry. Collector of Customs Tel: 61 1034.

AIRPORT: Gurney Airport approximately 20 km. from Alotau is served regularly but not daily.

POLICE/AMBULANCE/FIRE: Police: 611222. Hospital: (No separate Ambulance) 611200. Fire: 611055.

DELAYS: Delays at Alotau are most unlikely.

GENERAL: *Storage:* Covered Storage Area for Overseas Cargo – 1,874 sq.m. Open Storage Area – 7,640 sq.m.

Chart: AUS 629.

DEVELOPMENTS: A 30 m. small ships wharf is proposed to be built in 1985 at Alotau Port.

AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 42, Alotau, Papua New Guinea. *Tel:* 61 1276. *Telex:* NE 22243. *Cables:* Portman, Alotau. *Contact:* General Manager.

ANEWA BAY: 06.11 S. 155.33 E. (See Plan Book)

PORT LIMITS: Seaward Boundary – a line joining the Southern end of Takanupe Island and Karikiberia Shoal.

DOCUMENTS: Crew List – 4 copies; Ship's Store's List – 2 copies (P.N.G. forms); Crew Declaration Form – 2 copies of P.N.G. Form 5; Vaccination Certificates of all crew members for sighting; International Declaration of Health.

PILOTAGE: Compulsory. Boarding station 06° 07′ S., 155° 35.3′ E., from a tug 'Masthead' or a launch 'Kuruki', normally between the hours of 0600 and 2200, or in certain circumstances, as per arrangement. ETA advices 72, 48 and 24 hours in advance via Rabaul Radio or Port Moresby Radio to Boucop Loloho NE95812; when in close vicinity, VHF Channel 12.

ANCHORAGE: Available at Port Authorities advice, but safe anchorage exists 1 mile N.E. of Dakome Pt. in 30 fathoms of water.

APPROACHES: 3 km. wide channel runs in a Southerly direction between Kuruki Reef and Banaru Reef, to between Takanupei Island and Karikiberia Shoal. The depth of this channel is in excess of 180 m. After crossing the 180 m. line, depths exceed 35 m. until adjacent to the wharf. The only hazard near the approach is Bara Shoal, 1.6 km. Southward of Takanupei Island.

MAX. SIZE: Maximum draft permitted alongside is 12 m. (40 ft). The longest vessel yet to have berthed measured 226 m. (partly loaded tanker). It is envisaged that vessel to load copper concentrate should ensure that, on berthing, hatch covers are not more than 12 m. (40 ft.) above water line, to enable ship loader to be positioned on board.

HEALTH: Vaccination Certificates required. Quarantine Officer boards either with Pilot or at the berth. When anchoring, Free Pratique will be granted then. Code of signals 'Q' flag should be exhibited on arrival off Port. Pratique is automatic for vessels arriving from other P.N.G. ports, New Zealand and Australia.

RADIO: ETAs are best routed through either Rabaul Radio, Port Moresby Radio or Sydney Radio, who in turn will relay to Pilots and Agents.

VHF: The Port Control operates Channel 6, 12 and 16, but normally, messages between Vessels, Pilots, Port Control, Tug and Lines Boat are relayed on Channel 12. Therefore a vessel should use this channel when approaching. VHF services are available between 0700 hrs. and 2300 hrs. daily.

TUGS: 'Masthead' – 28 tons bollard pull – 1600 b.h.p., equipped with hydraulic warping winch and fire fighting equipment. Pilot may join incoming vessels from tug. It is common to use the tug's lines. Charges etc. on application.

BERTHING: Wharf (Position Lat. 06° 11.1′ S., Long. 155° 32.7′ E.) is 77 m. long with mooring dolphins located 59 m. and 107 m. Eastward and 59 m. Westward of main wharf. Maximum draft is 12 m. This berth is used for all vessels and normally starboard side alongside. Loading/discharge of general cargo, containers, etc., by ship's own gear.

CRANES: 140 ton mobile crane can be made available if required.

BULK CARGO FACILITIES: Bulk loading gantry for copper concentrate situated just Eastward of the main berth. Net loading rate approximately 800/1,200 tonnes/hr. Please note that gantry is a fixture and vessels are required to shift to facilitate loading.

SPECIALISED CARGO HANDLING FACILITIES: 2 × 25 ton forklifts available for handling of containers. Berth has proved suitable for certain Roll-on/Roll-off traffic. Westward of berth are provisions for discharge of white oils, black oil, and M.I.B.C. Small L.P.G. carriers anchor in position Lat. 06° 11.4′ S., Long. 155° 32.7′ E., and by way of hoses connected up to shore facilities.

STEVEDORES: The Port Authority (Bougainville Copper Limited) operates its own stevedoring function. Working Hours: from 0700–1500 and 1500 to 2300 hrs, 7 days a week. ETA advices as per "Pilots".

MEDICAL: Hospital facilities and medical clinic exist.

FRESH WATER: Available, but limited at times.

TANKERS: Heavy oils: 2×30 cm. marine connections to a 56 cm. main discharge line, giving a maximum discharge rate of 4,000 tonnes/hr.

Light oils: 1×25 cm. marine connection to a 20 cm. discharge line giving a maximum discharge rate of 700 tonnes/hr.

FUEL: Only small quantities of gas oil by road tanker.

CONSULS: None.

REPAIRS: Not available.

CUSTOMS: As per P.N.G. Regulations.

AIRPORT: Aropa Airport, 32 km. distant. Regular services to other P.N.G. centres, connecting to overseas centres.

TIME: GMT plus 10 hours.

HOLIDAYS: *Local holidays:* As for Papua New Guinea. Port is normally closed Christmas Day and Good Friday.

POLICE/AMBULANCE/FIRE: Initially B.C.L. controlled within Port area, otherwise 95 1222 (Police), 951333 (Fire), 951666 (Ambulance).

DELAYS: Estimated and advised as per weekly shipping schedule.

GENERAL: *Chart:* Aus. 683.

Provisions: Small quantities generally available through local Agents.

SHIPMASTER'S REPORT: 1975 (updated 1984).

Documents:

Crew List. (2 Copies of Papua & New Guinea forms to be filled in on arrival at pilot station).

Ship's Stores List. (2 copies of P.N.G. forms to be filled in on arrival at pilot station).

Crew Declaration Form: – (2 copies of P.N.G. Form 5 – Articles in Private Possession of Officers & Crew to be filled in on arrival at pilot station).

Vaccination Certificates of all crew members for sighting.

International Declaration of Health.

Pilotage: Two Pilots, employees of the Bougainville Copper Company Ltd., are available 24 hours a day. Pilot boards in position Lat. 06° 07′ S., Long. 155° 35′ 18″ E. Pilot vessel is a tug called the "Masthead", which has a dark blue hull and white superstructure or launch "Kuruki". Pilots listen on VHF Channels 12 and 16. ETA's will have been passed to the Pilots by the ship's Agents, as per charter party, but pilot boat should be advised by VHF when vessel is 2 hours and 1 hour respectively from pilot station. Channel 12 is monitored by Pilots daily 0700–2300 hrs. and when vessels are expected. Pilotage is compulsory.

Max. Size: Restriction mainly on draft. Least water on berth is 40 ft. Although the problem has not as yet arisen, max. length is also restricted to about 700 ft.

Pratique: Immigration Officer boards as vessel berths. International Code of Signals "Q" flag should be exhibited on arrival off port. Same officer deals with customs clearance.

Radio: ETA's to Pilots are best routed through Rabaul Radio, call sign P2R, who will pass the message direct to the Pilot Office. Port Moresby Radio may also be used for messages to the ship's Agents.

Tugs: Only one tug, the "Masthead", 28 tonnes bollard pull, is available. Tug's line always used.

Berthing: Only one berth in the port, with a least depth of 40 ft. alongside. The berth is used for the loading of copper concentrates and the discharge of general cargo and containers. Vessels intending to load copper concentrates should ensure that their hatch covers are not more than 42 ft. above the water line on arrival, to enable the loader to be positioned over her holds. In some cases ballast hatches may have to be left filled until after loading has commenced. The berth is approached at an angle of 45° and a mooring boat will take one head rope ashore first. The back spring should be sent ashore by heaving line as soon as possible. All vessels berth starboard side to the quay. The berth itself is 250 ft. long. Dolphins stand 175 ft. Westward and 135 ft. and 310 ft. Eastward of the ends of the wharf. The ore loader is not a movable fixture, and vessels are required to shift up and down the wharf to facilitate loading concentrates at the requisite hatches. When leaving the wharf the vessel is sprung off, using one head rope and the backspring.

Stevedores: Normal cargo hours for vessels loading are 0600 – 2300 hrs. but in cases where required cargo will be worked 24 hours a day. Stevedores are employees of the Bougainville Copper Company. Approx. loading rate for concentrates 750/1,000 t.p.h. Stevedores will render all possible assistance in shifting ship. For vessels discharging, mobile cranes capable of lifting up to 140 tonnes are available. Shore gangway is normally used.

Medical: There are good hospital facilities in both Anewa Bay itself and also in nearby Kieta. Advanced notice of required medical attention not normally necessary.

Tankers: Tankers are also discharged at Anewa Bay's only wharf. As with other vessels, draft is restricted to 40 ft., and length to about 700 ft.

Density: Varies between 1022 and 1025 according to season and amount of rainfall recently experienced.

Fresh Water: Available on the wharf except during periods of drought. Supplied by 3 in. hose at approximately 60 t.p.h. Can only be supplied at main wharf (not at Dolphins) and it is therefore sometimes necessary when loading concentrates to wait until after hatches are being loaded before hose can be put aboard.

Fuel: Only small quantities of MDO (Gas Oil) by road tanker.

Consuls: None.

Repairs: No facilities.

Dry Docks: None close by.
Surveyors: None.
Hatches: Steel hatch covers to be opened and closed by crew.
Customs Allowance: 200 cigarettes and 1 bottle spirits per person.
Repatriation: Regular flights from Kieta Airport (24 km. distant) to Port Moresby, where possible to link up with international flights. Repatriation can therefore easily be arranged from this port. Also possible via Honiara.
Time: GMT plus 10 hours.
Shore Leave: All crew members are allowed ashore. No shore passes required.
Delays: No delays normally experienced, but possible up to 24 hours max.
General: Berth very exposed to S.E'ly winds. Moderate ground swell experienced on berth at times. Considerable rain experienced throughout the year, mainly during the night and early morning.

AUTHORITY: Bougainville Copper Limited, P.O.Box 155, Arawa, N.S.P. *Tel:* 95-1022. *Telex:* NE95812. *Cables:* Boucop, Loloho. *Contact:* Captain J. I. Dalby, Manager – Shipping, Air and Port Services (Ext. 152) after hours 95-1627. Captain B. P. Ross, Superintendent – Marine Operations. Captain M. C. S. Ranson, Superintendent Stevedore Operations. Mr. B. C. Bennett, Superintendent Port Services.

BUKA: 05.26 S. 154.40 E. **(See Plan Book)**

(See General Section on Papua New Guinea Ports).
PILOTAGE: Not available. Not compulsory.
TUGS: Not available.
RADIO: Not available.
BERTHING: Wharf position: Lat. 05° 26′ S., Long. 154° 40.4′ E. Length 31.4 m. (103 ft.) Width 5.2 m. (17 ft.). Berthing dolphins 9.2 m. (30 ft.) off each end. Height of deck above LAT. 2.22 m. (7.3 ft.). Minimum depth of water at LAT. 3.65 m. (12 ft.). Tidal range 1.5 m.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS: Not Port of Entry.
POLICE/AMBULANCE/FIRE: Police Tel: 96 6022. Ambulance Tel: 96 6012.
GENERAL: *Chart:* Aus 643.
Storage: Shed No.1 – 165 sq.m. Open – 1,000 sq.m. (approx.)
Currents: Strong currents in Passage.
AUTHORITY: Papua New Guinea Harbours Board, P.O. Box 19, Buka, Papua New Guinea. *Tel:* 96 6017. *Cables:* Portman, Buka. *Contact:* Port Manager.

DARU: 09.04 S. 143.12 E. **(See Plan Book)**

(See General Section on Papua New Guinea Ports).
PILOTAGE: Not compulsory. Available from Port Moresby on 48 hrs. notice.
Pilot boarding position: 9° 06.9′ S., 143° 19.4′ E.
HEALTH: Quarantine Officer Tel: 659033. Health Officer Tel: 659108.
RADIO: Not available.
TUGS: Not available.
BERTHING: Position of wharf: Lat. 09° 04′ S., Long. 143° 12.6′ E.
Length of wharf head 29.6 m. (97 ft.). Average width 12.2 m. (40 ft.). Height of deck above LAT – 4.8 m. (15.7 ft.) min. depth of water LAT 2.4 m. (8.0 ft.) Tidal range 4.0 m.
The wharf head is connected to the shore by a wharf bridge length 120 m. (394 ft.) and causeway 220 m. (720 ft.).
FRESH WATER: Available in limited quantities.
FUEL: Available in drums. Suppliers – Caltex and Mobil.
POLICE/AMBULANCE/FIRE: Police Tel: 659022. Ambulance Tel: 659064.
CUSTOMS: Port of Entry. Customs Tel: 659114
GENERAL: *Chart:* Aus 840.
Currents: Strong currents off wharf.
Storage: Open storage 1,000 sq.m. (approx.)
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 137, Daru, Western Province, Papua New Guinea. *Tel:* 659025 (Office) 659144 (after hours). *Cables:* Portman, Daru. *Contact:* B. Favave, Port Manager.

KAVIENG: 02.35 S. 150.48 E. **(See Plan Book)**

(See General Section on Papua New Guinea Ports)
PORT LIMITS: Seaward Boundary.
Large vessels should approach from the Nusa Channel where the port limits are as follows:
From the beacon on Cape Siwusat by a straight line 220° (T) to the extreme North point of Usien Island thence by a straight line due West to position in Lat. 2° 37.87′ S., Long. 150° 44.57′ E., thence by a straight line due North to the Western extremity of Edmago Island. From the Eastern extremity of Edmago Island the line of the port limit crosses the Eickstedt Passage in the direction 253° (T) to the Southern extremity of Nago Island.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Rabaul given 48 hours notice of the ship's estimated time of arrival.
Pilot Boarding Ground: Within 300 m. radius of a position with Eastern extremity of Edmago Island bearing due North 900 m.
ETA to be sent not less than 12 hours prior to arrival via Rabaul Radio (P2R) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival again via Rabaul Radio (P2R).
ANCHORAGE: Anchorage may be obtained in sand with depth 20 m. in a position East Reef Light structure bearing 042° (T) distant 890 m.
HEALTH: Quarantine Officer Tel: 942243. Health Officer Tel: 942179.
VHF: Call Kavieng Port Control on Channel 16, 12 and 6. Listening watch maintained during working hours and when ships are expected during non-working hours.
TUGS: Not available.
BERTHING: Overseas Wharf is 93.8 m. long, height of deck above LAT 2.7 m., minimum depth of water at face at LAT 7.0 m. Tidal range 1.2 m.
Vessels may berth port or starboard side to at the discretion of the Port Authority.
Load/discharge is by ship's own gear.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working hours: Day shift 0800 – 1200 hrs., 1300 – 1600 hrs. Evening shift 1600 – 1900 hrs., 2000 – 2400 hrs.
Licensed Stevedores: Burns Philp (PNG) Ltd., P.O.Box 48, Kavieng. Tel: 942087 and New Ireland Shipping Agencies, P.O.Box 123, Kavieng, Tel: 942031.
FUEL: Diesel available through pipe-lines at the wharf. Suppliers: Shell, Mobil and B.P.
FRESH WATER: Available in limited quantities, provided prior application made with the Port Manager.
REPAIRS: No facilities available.
CUSTOMS: Port of Entry. Office, Tel: 942163. Residence, Tel: 942130.
AIRPORT: Kavieng airport is some 5 km. from the wharf and is served by daily Air Nuigini flights.
POLICE/AMBULANCE/FIRE: Police: 942222. Ambulance: 942040. Fire: 942000.
DELAYS: Delays at Kavieng are most unlikely.
GENERAL: *Storage:* Covered Storage Area: 750 sq.m. Open Storage Area: 3,000 sq.m.
Chart: Aus. 667.
DEVELOPMENTS: Feasibility study for development of Kavieng Port is well in hand.
Developments will include: Relocation and enlargement of the Copra Shed, erection of new Port Manager's office, relocation of amenities block and purchase of land from Shell Oil Co.
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 127, Kavieng, New Ireland Province, Papua New Guinea. *Tel:* 942182. *Cables:* Portman, Kavieng. *Contact:* John S. Kotmoi, Port Manager.

KIETA: 06.13 S. 155.38 E. **(See Plan Book)**

(See General Section on Papua New Guinea Ports).
PORT LIMITS: Seaward Boundary
By a straight line bearing 328° (T) from a point in Lat. 6° 10′ S., Long. 155° 42.3′ E., on the seaward edge of Gero Reef to a point in Lat. 6° 07.1′ S., Long. 155° 40.4′ E., thence due West to a point at the Northern most extremity of Banaru Reef.
PILOTAGE: Compulsory – Daylight hours only. (Pilot, Tel: 956063 (office), 956308 (residence).
Pilot boarding ground: Within 400 m. radius of Lat. 6° 07.6′ S., Long. 155° 40.3′ E.
ETA pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours but not less than 4 hours prior to arrival again via Port Moresby or Rabaul.
ANCHORAGE: There are 2 recommended anchorages for large vessels in Kieta Harbour.
HEALTH: Quarantine Officer, Tel: 956073. Health Officer, Tel: 921266.
VHF: Call: Kieta Port Control on VHF Channels 16, 12, 8 and 6. Listening watch maintained during working hours and when ships are expected during non-working hours.
TUGS: 1,200 b.h.p. and 450 b.h.p. tugs available for hire from Bougainville Copper Pty. Ltd., at Anewa Bay.
BERTHING: Overseas Wharf 122 m. long, height of deck above LAT 3.0 m., minimum depth of water at face at LAT 8.5 m. Tidal range 1.7 m.
Vessels may berth either port or starboard side to at the discretion of the Port Authority.
Berth No. 2 (coastal): Length 58 m., depth at LAT 4.8 m.
Berth No. 3 (coastal): Length 58 m., depth at LAT 4.8 m.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working hours: Day shift 0800 – 1200 hrs., 1300 – 1600 hrs. Evening shift 1600 – 1900 hrs., 2000 – 2400 hrs.
Licensed Stevedores: Rabaul Stevedores Ltd., P.O.Box 37, Kieta. Tel: 956350.
TANKERS: Discharge carried out at Anewa Bay.
FRESH WATER: Not available to overseas vessels. Coastal vessels may be supplied depending on availability and following prior arrangement with Port Manager.
FUEL: Diesel available from road tankers. Suppliers: Shell and Mobil.
CUSTOMS: Port of Entry. Collector of Customs, Tel: 956067.
AIRPORT: Aropa airport is some 19 km. from the port and is served daily by Air Nuigini.
POLICE/AMBULANCE/FIRE: Police Tel: 956222. Ambulance Tel: 951266. Fire Tel: 951333.

HEALTH: Quarantine Officer Tel: 61 1049. Health Officer Tel: 61 1164.
RADIO: None.
VHF: "Alotau Harbour Control" on Channels 16, 12 and 8 during working hours and when vessels are expected during non-working hours.
TUGS: Not available.
BERTHING: Overseas Wharf is 93 m. long 18.0 m wide, height of deck above L.A.T. 2.4 m., minimum depth of water at face at L.A.T. 10.0 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).

Coastal Wharf: Length 55.8 m. (183 ft.) Width 9.8 m. Minimum depth of water 4.9 m. (16 ft.). Height of deck above L.A.T. 2.1 m.

Barge Ramp available.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.
Licenced Stevedores: Alotau Stevedoring and Transport Pty. Ltd., P.O.Box 28, Alotau. Tel: 61 1318.
TANKERS: Facilities for Coastal Tankers only.
FUEL: Available by road tanker. Supplier: B.P. Also through pipe-line. Arrangements through stevedores.
FRESH WATER: Available in limited quantities and restricted periods of the year. Prior application to be made to the Port Manager.
REPAIRS: No facilities available.
CUSTOMS: Port of Entry. Collector of Customs Tel: 61 1034.
AIRPORT: Gurney Airport approximately 20 km. from Alotau is served regularly but not daily.
POLICE/AMBULANCE/FIRE: Police: 611222. Hospital: (No separate Ambulance) 611200. Fire: 611055.
DELAYS: Delays at Alotau are most unlikely.
GENERAL: *Storage:* Covered Storage Area for Overseas Cargo – 1,874 sq.m. Open Storage Area – 7,640 sq.m.
Chart: AUS 629.
DEVELOPMENTS: A 30 m. small ships wharf is proposed to be built in 1985 at Alotau Port.
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 42, Alotau, Papua New Guinea. *Tel:* 61 1276. *Telex:* NE 22243. *Cables:* Portman, Alotau. *Contact:* General Manager.

ANEWA BAY: 06.11 S. 155.33 E. (See Plan Book)

PORT LIMITS: Seaward Boundary – a line joining the Southern end of Takanupe Island and Karikiberia Shoal.
DOCUMENTS: Crew List – 4 copies; Ship's Store's List – 2 copies (P.N.G. forms); Crew Declaration Form – 2 copies of P.N.G. Form 5; Vaccination Certificates of all crew members for sighting; International Declaration of Health.
PILOTAGE: Compulsory. Boarding station 06° 07′ S., 155° 35.3′ E., from a tug 'Masthead' or a launch 'Kuruki', normally between the hours of 0600 and 2200, or in certain circumstances, as per arrangement. ETA advices 72, 48 and 24 hours in advance via Rabaul Radio or Port Moresby Radio to Boucop Loloho NE95812; when in close vicinity, VHF Channel 12.
ANCHORAGE: Available at Port Authorities advice, but safe anchorage exists 1 mile N.E. of Dakome Pt. in 30 fathoms of water.
APPROACHES: 3 km. wide channel runs in a Southerly direction between Kuruki Reef and Banaru Reef, to between Takanupei Island and Karikiberia Shoal. The depth of this channel is in excess of 180 m. After crossing the 180 m. line, depths exceed 35 m. until adjacent to the wharf. The only hazard near the approach is Bara Shoal, 1.6 km. Southward of Takanupei Island.
MAX. SIZE: Maximum draft permitted alongside is 12 m. (40 ft). The longest vessel yet to have berthed measured 226 m. (partly loaded tanker). It is envisaged that vessel to load copper concentrate should ensure that, on berthing, hatch covers are not more than 12 m. (40 ft.) above water line, to enable ship loader to be positioned on board.
HEALTH: Vaccination Certificates required. Quarantine Officer boards either with Pilot or at the berth. When anchoring, Free Pratique will be granted then. Code of signals 'Q' flag should be exhibited on arrival off Port. Pratique is automatic for vessels arriving from other P.N.G. ports, New Zealand and Australia.
RADIO: ETAs are best routed through either Rabaul Radio, Port Moresby Radio or Sydney Radio, who in turn will relay to Pilots and Agents.
VHF: The Port Control operates Channel 6, 12 and 16, but normally, messages between Vessels, Pilots, Port Control, Tug and Lines Boat are relayed on Channel 12. Therefore a vessel should use this channel when approaching. VHF services are available between 0700 hrs. and 2300 hrs. daily.
TUGS: 'Masthead' – 28 tons bollard pull – 1600 b.h.p., equipped with hydraulic warping winch and fire fighting equipment. Pilot may join incoming vessels from tug. It is common to use the tug's lines. Charges etc. on application.
BERTHING: Wharf (Position Lat. 06° 11.1′ S., Long. 155° 32.7′ E.) is 77 m. long with mooring dolphins located 59 m. and 107 m. Eastward and 59 m. Westward of main wharf. Maximum draft is 12 m. This berth is used for all vessels and normally starboard side alongside. Loading/discharge of general cargo, containers, etc., by ship's own gear.
CRANES: 140 ton mobile crane can be made available if required.
BULK CARGO FACILITIES: Bulk loading gantry for copper concentrate situated just Eastward of the main berth. Net loading rate approximately 800/1,200 tonnes/hr. Please note that gantry is a fixture and vessels are required to shift to facilitate loading.
SPECIALISED CARGO HANDLING FACILITIES: 2 × 25 ton forklifts available for handling of containers. Berth has proved suitable for certain Roll-on/Roll-off traffic. Westward of berth are provisions for discharge of white oils, black oil, and M.I.B.C. Small L.P.G. carriers anchor in position Lat. 06° 11.4′ S., Long. 155° 32.7′ E., and by way of hoses connected up to shore facilities.
STEVEDORES: The Port Authority (Bougainville Copper Limited) operates its own stevedoring function. Working Hours: from 0700–1500 and 1500 to 2300 hrs, 7 days a week. ETA advices as per "Pilots".
MEDICAL: Hospital facilities and medical clinic exist.
FRESH WATER: Available, but limited at times.
TANKERS: Heavy oils: 2×30 cm. marine connections to a 56 cm. main discharge line, giving a maximum discharge rate of 4,000 tonnes/hr.

Light oils: 1×25 cm. marine connection to a 20 cm. discharge line giving a maximum discharge rate of 700 tonnes/hr.

FUEL: Only small quantities of gas oil by road tanker.
CONSULS: None.
REPAIRS: Not available.
CUSTOMS: As per P.N.G. Regulations.
AIRPORT: Aropa Airport, 32 km. distant. Regular services to other P.N.G. centres, connecting to overseas centres.
TIME: GMT plus 10 hours.
HOLIDAYS: *Local holidays:* As for Papua New Guinea. Port is normally closed Christmas Day and Good Friday.
POLICE/AMBULANCE/FIRE: Initially B.C.L. controlled within Port area, otherwise 95 1222 (Police), 951333 (Fire), 951666 (Ambulance).
DELAYS: Estimated and advised as per weekly shipping schedule.
GENERAL: *Chart:* Aus. 683.
Provisions: Small quantities generally available through local Agents.

SHIPMASTER'S REPORT: 1975 (updated 1984).
Documents:

Crew List. (2 Copies of Papua & New Guinea forms to be filled in on arrival at pilot station).

Ship's Stores List. (2 copies of P.N.G. forms to be filled in on arrival at pilot station).

Crew Declaration Form: – (2 copies of P.N.G. Form 5 – Articles in Private Possession of Officers & Crew to be filled in on arrival at pilot station).

Vaccination Certificates of all crew members for sighting.

International Declaration of Health.

Pilotage: Two Pilots, employees of the Bougainville Copper Company Ltd., are available 24 hours a day. Pilot boards in position Lat. 06° 07′ S., Long. 155° 35′ 18″ E. Pilot vessel is a tug called the "Masthead", which has a dark blue hull and white superstructure or launch "Kuruki". Pilots listen on VHF Channels 12 and 16. ETA's will have been passed to the Pilots by the ship's Agents, as per charter party, but pilot boat should be advised by VHF when vessel is 2 hours and 1 hour respectively from pilot station. Channel 12 is monitored by Pilots daily 0700–2300 hrs. and when vessels are expected. Pilotage is compulsory.
Max. Size: Restriction mainly on draft. Least water on berth is 40 ft. Although the problem has not as yet arisen, max. length is also restricted to about 700 ft.
Pratique: Immigration Officer boards as vessel berths. International Code of Signals "Q" flag should be exhibited on arrival off port. Same officer deals with customs clearance.
Radio: ETA's to Pilots are best routed through Rabaul Radio, call sign P2R, who will pass the message direct to the Pilot Office. Port Moresby Radio may also be used for messages to the ship's Agents.
Tugs: Only one tug, the "Masthead", 28 tonnes bollard pull, is available, Tug's line always used.
Berthing: Only one berth in the port, with a least depth of 40 ft. alongside. The berth is used for the loading of copper concentrates and the discharge of general cargo and containers. Vessels intending to load copper concentrates should ensure that their hatch covers are not more than 42 ft. above the water line on arrival, to enable the loader to be positioned over her holds. In some cases ballast hatches may have to be left filled until after loading has commenced. The berth is approached at an angle of 45° and a mooring boat will take one head rope ashore first. The back spring should be sent ashore by heaving line as soon as possible. All vessels berth starboard side to the quay. The berth itself is 250 ft. long. Dolphins stand 175 ft. Westward and 135 ft. and 310 ft. Eastward of the ends of the wharf. The ore loader is not a movable fixture, and vessels are required to shift up and down the wharf to facilitate loading concentrates at the requisite hatches. When leaving the wharf the vessel is sprung off, using one head rope and the backspring.
Stevedores: Normal cargo hours for vessels loading are 0600 – 2300 hrs. but in cases where required cargo will be worked 24 hours a day. Stevedores are employees of the Bougainville Copper Company. Approx. loading rate for concentrates 750/1,000 t.p.h. Stevedores will render all possible assistance in shifting ship. For vessels discharging, mobile cranes capable of lifting up to 140 tonnes are available. Shore gangway is normally used.
Medical: There are good hospital facilities in both Anewa Bay itself and also in nearby Kieta. Advanced notice of required medical attention not normally necessary.
Tankers: Tankers are also discharged at Anewa Bay's only wharf. As with other vessels, draft is restricted to 40 ft., and length to about 700 ft.
Density: Varies between 1022 and 1025 according to season and amount of rainfall recently experienced.
Fresh Water: Available on the wharf except during periods of drought. Supplied by 3 in. hose at approximately 60 t.p.h. Can only be supplied at main wharf (not at Dolphins) and it is therefore sometimes necessary when loading concentrates to wait until after hatches are being loaded before hose can be put aboard.
Fuel: Only small quantities of MDO (Gas Oil) by road tanker.
Consuls: None.
Repairs: No facilities.

Dry Docks: None close by.
Surveyors: None.
Hatches: Steel hatch covers to be opened and closed by crew.
Customs Allowance: 200 cigarettes and 1 bottle spirits per person.
Repatriation: Regular flights from Kieta Airport (24 km. distant) to Port Moresby, where possible to link up with international flights. Repatriation can therefore easily be arranged from this port. Also possible via Honiara.
Time: GMT plus 10 hours.
Shore Leave: All crew members are allowed ashore. No shore passes required.
Delays: No delays normally experienced, but possible up to 24 hours max.
General: Berth very exposed to S.E'ly winds. Moderate ground swell experienced on berth at times. Considerable rain experienced throughout the year, mainly during the night and early morning.

AUTHORITY: Bougainville Copper Limited, P.O.Box 155, Arawa, N.S.P. *Tel:* 95-1022. *Telex:* NE95812. *Cables:* Boucop, Loloho. *Contact:* Captain J. I. Dalby, Manager – Shipping, Air and Port Services (Ext. 152) after hours 95-1627. Captain B. P. Ross, Superintendent – Marine Operations. Captain M. C. S. Ranson, Superintendent Stevedore Operations. Mr. B. C. Bennett, Superintendent Port Services.

BUKA: 05.26 S. 154.40 E. (See Plan Book)

(See General Section on Papua New Guinea Ports).
PILOTAGE: Not available. Not compulsory.
TUGS: Not available.
RADIO: Not available.
BERTHING: Wharf position: Lat. 05° 26′ S., Long. 154° 40.4′ E. Length 31.4 m. (103 ft.) Width 5.2 m. (17 ft.). Berthing dolphins 9.2 m. (30 ft.) off each end. Height of deck above LAT. 2.22 m. (7.3 ft.). Minimum depth of water at LAT. 3.65 m (12 ft.). Tidal range 1.5 m.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS: Not Port of Entry.
POLICE/AMBULANCE/FIRE: Police Tel: 96 6022. Ambulance Tel: 96 6012.
GENERAL: *Chart:* Aus 643.
Storage: Shed No.1 – 165 sq.m. Open – 1,000 sq.m. (approx.)
Currents: Strong currents in Passage.
AUTHORITY: Papua New Guinea Harbours Board, P.O. Box 19, Buka, Papua New Guinea. *Tel:* 96 6017. *Cables:* Portman, Buka. *Contact:* Port Manager.

DARU: 09.04 S. 143.12 E. (See Plan Book)

(See General Section on Papua New Guinea Ports).
PILOTAGE: Not compulsory. Available from Port Moresby on 48 hrs. notice.
Pilot boarding position: 9° 06.9′ S., 143° 19.4′ E.
HEALTH: Quarantine Officer Tel: 659033. Health Officer Tel: 659108.
RADIO: Not available.
TUGS: Not available.
BERTHING: Position of wharf: Lat. 09° 04′ S., Long. 143° 12.6′ E.
Length of wharf head 29.6 m. (97 ft.). Average width 12.2 m. (40 ft.). Height of deck above LAT – 4.8 m. (15.7 ft.) min. depth of water LAT 2.4 m. (8.0 ft.) Tidal range 4.0 m.
The wharf head is connected to the shore by a wharf bridge length 120 m. (394 ft.) and causeway 220 m. (720 ft.).
FRESH WATER: Available in limited quantities.
FUEL: Available in drums. Suppliers – Caltex and Mobil.
POLICE/AMBULANCE/FIRE: Police Tel: 659022. Ambulance Tel: 659064.
CUSTOMS: Port of Entry. Customs Tel: 659114
GENERAL: *Chart:* Aus 840.
Currents: Strong currents off wharf.
Storage: Open storage 1,000 sq.m. (approx.)
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 137, Daru, Western Province, Papua New Guinea. *Tel:* 659025 (Office) 659144 (after hours). *Cables:* Portman, Daru. *Contact:* B. Favave, Port Manager.

KAVIENG: 02.35 S. 150.48 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)
PORT LIMITS: Seaward Boundary.
Large vessels should approach from the Nusa Channel where the port limits are as follows:
From the beacon on Cape Siwusat by a straight line 220° (T) to the extreme North point of Usien Island thence by a straight line due West to position in Lat. 2° 37.87′ S., Long. 150° 44.57′ E., thence by a straight line due North to the Western extremity of Edmago Island. From the Eastern extremity of Edmago Island the line of the port limit crosses the Eickstedt Passage in the direction 253° (T) to the Southern extremity of Nago Island.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Rabaul given 48 hours notice of the ship's estimated time of arrival.
Pilot Boarding Ground: Within 300 m. radius of a position with Eastern extremity of Edmago Island bearing due North 900 m.
ETA to be sent not less than 12 hours prior to arrival via Rabaul Radio (P2R) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival again via Rabaul Radio (P2R).
ANCHORAGE: Anchorage may be obtained in sand with depth 20 m. in a position East Reef Light structure bearing 042° (T) distant 890 m.
HEALTH: Quarantine Officer Tel: 942243. Health Officer Tel: 942179.
VHF: Call Kavieng Port Control on Channel 16, 12 and 6. Listening watch maintained during working hours and when ships are expected during non-working hours.
TUGS: Not available.
BERTHING: Overseas Wharf is 93.8 m. long, height of deck above LAT 2.7 m., minimum depth of water at face at LAT 7.0 m. Tidal range 1.2 m.
Vessels may berth port or starboard side to at the discretion of the Port Authority.
Load/discharge is by ship's own gear.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working hours: Day shift 0800 – 1200 hrs., 1300 – 1600 hrs. Evening shift 1600 – 1900 hrs., 2000 – 2400 hrs.
Licensed Stevedores: Burns Philp (PNG) Ltd., P.O.Box 48, Kavieng. Tel: 942087 and New Ireland Shipping Agencies, P.O.Box 123, Kavieng, Tel: 942031.
FUEL: Diesel available through pipe-lines at the wharf. Suppliers: Shell, Mobil and B.P.
FRESH WATER: Available in limited quantities, provided prior application made with the Port Manager.
REPAIRS: No facilities available.
CUSTOMS: Port of Entry. Office, Tel: 942163. Residence, Tel: 942130.
AIRPORT: Kavieng airport is some 5 km. from the wharf and is served by daily Air Nuigini flights.
POLICE/AMBULANCE/FIRE: Police: 942222. Ambulance: 942040. Fire: 942000.
DELAYS: Delays at Kavieng are most unlikely.
GENERAL: *Storage:* Covered Storage Area: 750 sq.m. Open Storage Area: 3,000 sq.m.
Chart: Aus. 667.
DEVELOPMENTS: Feasibility study for development of Kavieng Port is well in hand.
Developments will include: Relocation and enlargement of the Copra Shed, erection of new Port Manager's office, relocation of amenities block and purchase of land from Shell Oil Co.
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 127, Kavieng, New Ireland Province, Papua New Guinea. *Tel:* 942182. *Cables:* Portman, Kavieng. *Contact:* John S. Kotmoi, Port Manager.

KIETA: 06.13 S. 155.38 E. (See Plan Book)

(See General Section on Papua New Guinea Ports).
PORT LIMITS: Seaward Boundary
By a straight line bearing 328° (T) from a point in Lat. 6° 10′ S., Long. 155° 42.3′ E., on the seaward edge of Gero Reef to a point in Lat. 6° 07.1′ S., Long. 155° 40.4′ E., thence due West to a point at the Northern most extremity of Banaru Reef.
PILOTAGE: Compulsory – Daylight hours only. (Pilot, Tel: 956063 (office), 956308 (residence).
Pilot boarding ground: Within 400 m. radius of Lat. 6° 07.6′ S., Long. 155° 40.3′ E.
ETA pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours but not less than 4 hours prior to arrival again via Port Moresby or Rabaul.
ANCHORAGE: There are 2 recommended anchorages for large vessels in Kieta Harbour.
HEALTH: Quarantine Officer, Tel: 956073. Health Officer, Tel: 921266.
VHF: Call: Kieta Port Control on VHF Channels 16, 12, 8 and 6. Listening watch maintained during working hours and when ships are expected during non-working hours.
TUGS: 1,200 b.h.p. and 450 b.h.p. tugs available for hire from Bougainville Copper Pty. Ltd., at Anewa Bay.
BERTHING: Overseas Wharf 122 m. long, height of deck above LAT 3.0 m., minimum depth of water at face at LAT 8.5 m. Tidal range 1.7 m.
Vessels may berth either port or starboard side to at the discretion of the Port Authority.
Berth No. 2 (coastal): Length 58 m., depth at LAT 4.8 m.
Berth No. 3 (coastal): Length 58 m., depth at LAT 4.8 m.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working hours: Day shift 0800 – 1200 hrs., 1300 – 1600 hrs. Evening shift 1600 – 1900 hrs., 2000 – 2400 hrs.
Licensed Stevedores: Rabaul Stevedores Ltd., P.O.Box 37, Kieta. Tel: 956350.
TANKERS: Discharge carried out at Anewa Bay.
FRESH WATER: Not available to overseas vessels. Coastal vessels may be supplied depending on availability and following prior arrangement with Port Manager.
FUEL: Diesel available from road tankers. Suppliers: Shell and Mobil.
CUSTOMS: Port of Entry. Collector of Customs, Tel: 956067.
AIRPORT: Aropa airport is some 19 km. from the port and is served daily by Air Nuigini.
POLICE/AMBULANCE/FIRE: Police Tel: 956222. Ambulance Tel: 951266. Fire Tel: 951333.

HEALTH: Quarantine Officer Tel: 61 1049. Health Officer Tel: 61 1164.
RADIO: None.
VHF: "Alotau Harbour Control" on Channels 16, 12 and 8 during working hours and when vessels are expected during non-working hours.
TUGS: Not available.
BERTHING: Overseas Wharf is 93 m. long 18.0 m wide, height of deck above L.A.T. 2.4 m., minimum depth of water at face at L.A.T. 10.0 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).

Coastal Wharf: Length 55.8 m. (183 ft.) Width 9.8 m. Minimum depth of water 4.9 m. (16 ft.). Height of deck above L.A.T. 2.1 m.

Barge Ramp available.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.
Licenced Stevedores: Alotau Stevedoring and Transport Pty. Ltd., P.O.Box 28, Alotau. Tel: 61 1318.
TANKERS: Facilities for Coastal Tankers only.
FUEL: Available by road tanker. Supplier: B.P. Also through pipe-line. Arrangements through stevedores.
FRESH WATER: Available in limited quantities and restricted periods of the year. Prior application to be made to the Port Manager.
REPAIRS: No facilities available.
CUSTOMS: Port of Entry. Collector of Customs Tel: 61 1034.
AIRPORT: Gurney Airport approximately 20 km. from Alotau is served regularly but not daily.
POLICE/AMBULANCE/FIRE: Police: 611222. Hospital: (No separate Ambulance) 611200. Fire: 611055.
DELAYS: Delays at Alotau are most unlikely.
GENERAL: *Storage:* Covered Storage Area for Overseas Cargo – 1,874 sq.m. Open Storage Area – 7,640 sq.m.
Chart: AUS 629.
DEVELOPMENTS: A 30 m. small ships wharf is proposed to be built in 1985 at Alotau Port.
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 42, Alotau, Papua New Guinea. *Tel:* 61 1276. *Telex:* NE 22243. *Cables:* Portman, Alotau. *Contact:* General Manager.

ANEWA BAY: 06.11 S. 155.33 E. (See Plan Book)

PORT LIMITS: Seaward Boundary – a line joining the Southern end of Takanupe Island and Karikiberia Shoal.
DOCUMENTS: Crew List – 4 copies; Ship's Store's List – 2 copies (P.N.G. forms); Crew Declaration Form – 2 copies of P.N.G. Form 5; Vaccination Certificates of all crew members for sighting; International Declaration of Health.
PILOTAGE: Compulsory. Boarding station 06° 07′ S., 155° 35.3′ E., from a tug 'Masthead' or a launch 'Kuruki', normally between the hours of 0600 and 2200, or in certain circumstances, as per arrangement. ETA advices 72, 48 and 24 hours in advance via Rabaul Radio or Port Moresby Radio to Boucop Loloho NE95812; when in close vicinity, VHF Channel 12.
ANCHORAGE: Available at Port Authorities advice, but safe anchorage exists 1 mile N.E. of Dakome Pt. in 30 fathoms of water.
APPROACHES: 3 km. wide channel runs in a Southerly direction between Kuruki Reef and Banaru Reef, to between Takanupei Island and Karikiberia Shoal. The depth of this channel is in excess of 180 m. After crossing the 180 m. line, depths exceed 35 m. until adjacent to the wharf. The only hazard near the approach is Bara Shoal, 1.6 km. Southward of Takanupei Island.
MAX. SIZE: Maximum draft permitted alongside is 12 m. (40 ft). The longest vessel yet to have berthed measured 226 m. (partly loaded tanker). It is envisaged that vessel to load copper concentrate should ensure that, on berthing, hatch covers are not more than 12 m. (40 ft.) above water line, to enable ship loader to be positioned on board.
HEALTH: Vaccination Certificates required. Quarantine Officer boards either with Pilot or at the berth. When anchoring, Free Pratique will be granted then. Code of signals 'Q' flag should be exhibited on arrival off Port. Pratique is automatic for vessels arriving from other P.N.G. ports, New Zealand and Australia.
RADIO: ETAs are best routed through either Rabaul Radio, Port Moresby Radio or Sydney Radio, who in turn will relay to Pilots and Agents.
VHF: The Port Control operates Channel 6, 12 and 16, but normally, messages between Vessels, Pilots, Port Control, Tug and Lines Boat are relayed on Channel 12. Therefore a vessel should use this channel when approaching. VHF services are available between 0700 hrs. and 2300 hrs. daily.
TUGS: 'Masthead' – 28 tons bollard pull – 1600 b.h.p., equipped with hydraulic warping winch and fire fighting equipment. Pilot may join incoming vessels from tug. It is common to use the tug's lines. Charges etc. on application.
BERTHING: Wharf (Position Lat. 06° 11.1′ S., Long. 155° 32.7′ E.) is 77 m. long with mooring dolphins located 59 m. and 107 m. Eastward and 59 m. Westward of main wharf. Maximum draft is 12 m. This berth is used for all vessels and normally starboard side alongside. Loading/discharge of general cargo, containers, etc., by ship's own gear.
CRANES: 140 ton mobile crane can be made available if required.
BULK CARGO FACILITIES: Bulk loading gantry for copper concentrate situated just Eastward of the main berth. Net loading rate approximately 800/1,200 tonnes/hr. Please note that gantry is a fixture and vessels are required to shift to facilitate loading.
SPECIALISED CARGO HANDLING FACILITIES: 2 × 25 ton forklifts available for handling of containers. Berth has proved suitable for certain Roll-on/Roll-off traffic. Westward of berth are provisions for discharge of white oils, black oil, and M.I.B.C. Small L.P.G. carriers anchor in position Lat. 06° 11.4′ S., Long. 155° 32.7′ E., and by way of hoses connected up to shore facilities.
STEVEDORES: The Port Authority (Bougainville Copper Limited) operates its own stevedoring function. Working Hours: from 0700–1500 and 1500 to 2300 hrs, 7 days a week. ETA advices as per "Pilots".
MEDICAL: Hospital facilities and medical clinic exist.
FRESH WATER: Available, but limited at times.
TANKERS: Heavy oils: 2×30 cm. marine connections to a 56 cm. main discharge line, giving a maximum discharge rate of 4,000 tonnes/hr.

Light oils: 1×25 cm. marine connection to a 20 cm. discharge line giving a maximum discharge rate of 700 tonnes/hr.
FUEL: Only small quantities of gas oil by road tanker.
CONSULS: None.
REPAIRS: Not available.
CUSTOMS: As per P.N.G. Regulations.
AIRPORT: Aropa Airport, 32 km. distant. Regular services to other P.N.G. centres, connecting to overseas centres.
TIME: GMT plus 10 hours.
HOLIDAYS: *Local holidays:* As for Papua New Guinea. Port is normally closed Christmas Day and Good Friday.
POLICE/AMBULANCE/FIRE: Initially B.C.L. controlled within Port area, otherwise 95 1222 (Police), 951333 (Fire), 951666 (Ambulance).
DELAYS: Estimated and advised as per weekly shipping schedule.
GENERAL: *Chart:* Aus. 683.
Provisions: Small quantities generally available through local Agents.

SHIPMASTER'S REPORT: 1975 (updated 1984).
Documents:

Crew List. (2 Copies of Papua & New Guinea forms to be filled in on arrival at pilot station).

Ship's Stores List. (2 copies of P.N.G. forms to be filled in on arrival at pilot station).

Crew Declaration Form: – (2 copies of P.N.G. Form 5 – Articles in Private Possession of Officers & Crew to be filled in on arrival at pilot station).

Vaccination Certificates of all crew members for sighting.

International Declaration of Health.

Pilotage: Two Pilots, employees of the Bougainville Copper Company Ltd., are available 24 hours a day. Pilot boards in position Lat. 06° 07′ S., Long. 155° 35′ 18″ E. Pilot vessel is a tug called the "Masthead", which has a dark blue hull and white superstructure or launch "Kuruki". Pilots listen on VHF Channels 12 and 16. ETA's will have been passed to the Pilots by the ship's Agents, as per charter party, but pilot boat should be advised by VHF when vessel is 2 hours and 1 hour respectively from pilot station. Channel 12 is monitored by Pilots daily 0700–2300 hrs. and when vessels are expected. Pilotage is compulsory.
Max. Size: Restriction mainly on draft. Least water on berth is 40 ft. Although the problem has not as yet arisen, max. length is also restricted to about 700 ft.
Pratique: Immigration Officer boards as vessel berths. International Code of Signals "Q" flag should be exhibited on arrival off port. Same officer deals with customs clearance.
Radio: ETA's to Pilots are best routed through Rabaul Radio, call sign P2R, who will pass the message direct to the Pilot Office. Port Moresby Radio may also be used for messages to the ship's Agents.
Tugs: Only one tug, the "Masthead", 28 tonnes bollard pull, is available, Tug's line always used.
Berthing: Only one berth in the port, with a least depth of 40 ft. alongside. The berth is used for the loading of copper concentrates and the discharge of general cargo and containers. Vessels intending to load copper concentrates should ensure that their hatch covers are not more than 42 ft. above the water line on arrival, to enable the loader to be positioned over her holds. In some cases ballast hatches may have to be left filled until after loading has commenced. The berth is approached at an angle of 45° and a mooring boat will take one head rope ashore first. The back spring should be sent ashore by heaving line as soon as possible. All vessels berth starboard side to the quay. The berth itself is 250 ft. long. Dolphins stand 175 ft. Westward and 135 ft. and 310 ft. Eastward of the ends of the wharf. The ore loader is not a movable fixture, and vessels are required to shift up and down the wharf to facilitate loading concentrates at the requisite hatches. When leaving the wharf the vessel is sprung off, using one head rope and the backspring.
Stevedores: Normal cargo hours for vessels loading are 0600 – 2300 hrs. but in cases where required cargo will be worked 24 hours a day. Stevedores are employees of the Bougainville Copper Company. Approx. loading rate for concentrates 750/1,000 t.p.h. Stevedores will render all possible assistance in shifting ship. For vessels discharging, mobile cranes capable of lifting up to 140 tonnes are available. Shore gangway is normally used.
Medical: There are good hospital facilities in both Anewa Bay itself and also in nearby Kieta. Advanced notice of required medical attention not normally necessary.
Tankers: Tankers are also discharged at Anewa Bay's only wharf. As with other vessels, draft is restricted to 40 ft., and length to about 700 ft.
Density: Varies between 1022 and 1025 according to season and amount of rainfall recently experienced.
Fresh Water: Available on the wharf except during periods of drought. Supplied by 3 in. hose at approximately 60 t.p.h. Can only be supplied at main wharf (not at Dolphins) and it is therefore sometimes necessary when loading concentrates to wait until after hatches are being loaded before hose can be put aboard.
Fuel: Only small quantities of MDO (Gas Oil) by road tanker.
Consuls: None.
Repairs: No facilities.

Dry Docks: None close by.
Surveyors: None.
Hatches: Steel hatch covers to be opened and closed by crew.
Customs Allowance: 200 cigarettes and 1 bottle spirits per person.
Repatriation: Regular flights from Kieta Airport (24 km. distant) to Port Moresby, where possible to link up with international flights. Repatriation can therefore easily be arranged from this port. Also possible via Honiara.
Time: GMT plus 10 hours.
Shore Leave: All crew members are allowed ashore. No shore passes required.
Delays: No delays normally experienced, but possible up to 24 hours max.
General: Berth very exposed to S.E'ly winds. Moderate ground swell experienced on berth at times. Considerable rain experienced throughout the year, mainly during the night and early morning.

AUTHORITY: Bougainville Copper Limited, P.O.Box 155, Arawa, N.S.P. *Tel:* 95-1022. *Telex:* NE95812. *Cables:* Boucop, Loloho. *Contact:* Captain J. I. Dalby, Manager – Shipping, Air and Port Services (Ext. 152) after hours 95-1627. Captain B. P. Ross, Superintendent – Marine Operations. Captain M. C. S. Ranson, Superintendent Stevedore Operations. Mr. B. C. Bennett, Superintendent Port Services.

BUKA: 05.26 S. 154.40 E. (See Plan Book)

(See General Section on Papua New Guinea Ports).
PILOTAGE: Not available. Not compulsory.
TUGS: Not available.
RADIO: Not available.
BERTHING: Wharf position: Lat. 05° 26′ S., Long. 154° 40.4′ E. Length 31.4 m. (103 ft.) Width 5.2 m. (17 ft.). Berthing dolphins 9.2 m. (30 ft.) off each end. Height of deck above LAT. 2.22 m. (7.3 ft.). Minimum depth of water at LAT. 3.65 m. (12 ft.). Tidal range 1.5 m.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS: Not Port of Entry.
POLICE/AMBULANCE/FIRE: Police Tel: 96 6022. Ambulance Tel: 96 6012.
GENERAL: *Chart:* Aus 643.
Storage: Shed No.1 – 165 sq.m. Open – 1,000 sq.m. (approx.)
Currents: Strong currents in Passage.
AUTHORITY: Papua New Guinea Harbours Board, P.O. Box 19, Buka, Papua New Guinea. *Tel:* 96 6017. *Cables:* Portman, Buka. *Contact:* Port Manager.

DARU: 09.04 S. 143.12 E. (See Plan Book)

(See General Section on Papua New Guinea Ports).
PILOTAGE: Not compulsory. Available from Port Moresby on 48 hrs. notice.
Pilot boarding position: 9° 06.9′ S., 143° 19.4′ E.
HEALTH: Quarantine Officer Tel: 659033. Health Officer Tel: 659108.
RADIO: Not available.
TUGS: Not available.
BERTHING: Position of wharf: Lat. 09° 04′ S., Long. 143° 12.6′ E.
Length of wharf head 29.6 m. (97 ft.). Average width 12.2 m. (40 ft.). Height of deck above LAT – 4.8 m. (15.7 ft.) min. depth of water LAT 2.4 m. (8.0 ft.) Tidal range 4.0 m.
The wharf head is connected to the shore by a wharf bridge length 120 m. (394 ft.) and causeway 220 m. (720 ft.).
FRESH WATER: Available in limited quantities.
FUEL: Available in drums. Suppliers – Caltex and Mobil.
POLICE/AMBULANCE/FIRE: Police Tel: 659022. Ambulance Tel: 659064.
CUSTOMS: Port of Entry. Customs Tel: 659114
GENERAL: *Chart:* Aus 840.
Currents: Strong currents off wharf.
Storage: Open storage 1,000 sq.m. (approx.)
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 137, Daru, Western Province, Papua New Guinea. *Tel:* 659025 (Office) 659144 (after hours). *Cables:* Portman, Daru. *Contact:* B. Favave, Port Manager.

KAVIENG: 02.35 S. 150.48 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)
PORT LIMITS: Seaward Boundary.
Large vessels should approach from the Nusa Channel where the port limits are as follows:
From the beacon on Cape Siwusat by a straight line 220° (T) to the extreme North point of Usien Island thence by a straight line due West to position in Lat. 2° 37.87′ S., Long. 150° 44.57′ E., thence by a straight line due North to the Western extremity of Edmago Island. From the Eastern extremity of Edmago Island the line of the port limit crosses the Eickstedt Passage in the direction 253° (T) to the Southern extremity of Nago Island.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Rabaul given 48 hours notice of the ship's estimated time of arrival.
Pilot Boarding Ground: Within 300 m. radius of a position with Eastern extremity of Edmago Island bearing due North 900 m.
ETA to be sent not less than 12 hours prior to arrival via Rabaul Radio (P2R) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival again via Rabaul Radio (P2R).
ANCHORAGE: Anchorage may be obtained in sand with depth 20 m. in a position East Reef Light structure bearing 042° (T) distant 890 m.
HEALTH: Quarantine Officer Tel: 942243. Health Officer Tel: 942179.
VHF: Call Kavieng Port Control on Channel 16, 12 and 6. Listening watch maintained during working hours and when ships are expected during non-working hours.
TUGS: Not available.
BERTHING: Overseas Wharf is 93.8 m. long, height of deck above LAT 2.7 m., minimum depth of water at face at LAT 7.0 m. Tidal range 1.2 m.
Vessels may berth port or starboard side to at the discretion of the Port Authority.
Load/discharge is by ship's own gear.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working hours: Day shift 0800 – 1200 hrs., 1300 – 1600 hrs. Evening shift 1600 – 1900 hrs., 2000 – 2400 hrs.
Licensed Stevedores: Burns Philp (PNG) Ltd., P.O.Box 48, Kavieng. Tel: 942087 and New Ireland Shipping Agencies, P.O.Box 123, Kavieng, Tel: 942031.
FUEL: Diesel available through pipe-lines at the wharf. Suppliers: Shell, Mobil and B.P.
FRESH WATER: Available in limited quantities, provided prior application made with the Port Manager.
REPAIRS: No facilities available.
CUSTOMS: Port of Entry. Office, Tel: 942163. Residence, Tel: 942130.
AIRPORT: Kavieng airport is some 5 km. from the wharf and is served by daily Air Nuigini flights.
POLICE/AMBULANCE/FIRE: Police: 942222. Ambulance: 942040. Fire: 942000.
DELAYS: Delays at Kavieng are most unlikely.
GENERAL: *Storage:* Covered Storage Area: 750 sq.m. Open Storage Area: 3,000 sq.m.
Chart: Aus. 667.
DEVELOPMENTS: Feasibility study for development of Kavieng Port is well in hand.
Developments will include: Relocation and enlargement of the Copra Shed, erection of new Port Manager's office, relocation of amenities block and purchase of land from Shell Oil Co.
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 127, Kavieng, New Ireland Province, Papua New Guinea. *Tel:* 942182. *Cables:* Portman, Kavieng. *Contact:* John S. Kotmoi, Port Manager.

KIETA: 06.13 S. 155.38 E. (See Plan Book)

(See General Section on Papua New Guinea Ports).
PORT LIMITS: Seaward Boundary
By a straight line bearing 328° (T) from a point in Lat. 6° 10′ S., Long. 155° 42.3′ E., on the seaward edge of Gero Reef to a point in Lat. 6° 07.1′ S., Long. 155° 40.4′ E., thence due West to a point at the Northern most extremity of Banaru Reef.
PILOTAGE: Compulsory – Daylight hours only. (Pilot, Tel: 956063 (office), 956308 (residence).
Pilot boarding ground: Within 400 m. radius of Lat. 6° 07.6′ S., Long. 155° 40.3′ E.
ETA pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours but not less than 4 hours prior to arrival again via Port Moresby or Rabaul.
ANCHORAGE: There are 2 recommended anchorages for large vessels in Kieta Harbour.
HEALTH: Quarantine Officer, Tel: 956073. Health Officer, Tel: 921266.
VHF: Call: Kieta Port Control on VHF Channels 16, 12, 8 and 6. Listening watch maintained during working hours and when ships are expected during non-working hours.
TUGS: 1,200 b.h.p. and 450 b.h.p. tugs available for hire from Bougainville Copper Pty. Ltd., at Anewa Bay.
BERTHING: Overseas Wharf 122 m. long, height of deck above LAT 3.0 m., minimum depth of water at face at LAT 8.5 m. Tidal range 1.7 m.
Vessels may berth either port or starboard side to at the discretion of the Port Authority.
Berth No. 2 (coastal): Length 58 m., depth at LAT 4.8 m.
Berth No. 3 (coastal): Length 58 m., depth at LAT 4.8 m.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working hours: Day shift 0800 – 1200 hrs., 1300 – 1600 hrs. Evening shift 1600 – 1900 hrs., 2000 – 2400 hrs.
Licensed Stevedores: Rabaul Stevedores Ltd., P.O.Box 37, Kieta. Tel: 956350.
TANKERS: Discharge carried out at Anewa Bay.
FRESH WATER: Not available to overseas vessels. Coastal vessels may be supplied depending on availability and following prior arrangement with Port Manager.
FUEL: Diesel available from road tankers. Suppliers: Shell and Mobil.
CUSTOMS: Port of Entry. Collector of Customs, Tel: 956067.
AIRPORT: Aropa airport is some 19 km. from the port and is served daily by Air Nuigini.
POLICE/AMBULANCE/FIRE: Police Tel: 956222. Ambulance Tel: 951266. Fire Tel: 951333.

DELAYS: Delays rarely occur at Kieta but if so are of fairly short duration, rarely exceeding 48 hours.
GENERAL: *Storage:* Covered Storage: 2,780 sq.m. Open Storage: 14,720 sq.m.
Chart: Aus. 683.
DEVELOPMENTS: *Main Wharf:* The open storage area is to be increased and sealed for containers.
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 149, Kieta, North Solomans Province. *Tel:* 956066 or 956063. *Cables:* Portman, Kieta. *Contact:* A. Pakundu, Port Manager.

KIMBE: 05.33 S. 150.09 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)
PORT LIMITS: Seaward Boundary.
A line from Gigo Point due North for 1,695 m., thence in a straight line due East for 6,821 m., thence in a straight line due South for 2,438 m. to the Eastern extremity of Telagavu Point.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Rabaul given 48 hours notice of the ship's estimated time of arrival.

Pilot boarding ground: Lat. 5° 30.5′ S., Long. 150° 13.5′ E.

ETA to be sent not less than 12 hours prior to arrival via Rabaul Radio (P2R) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival again via Rabaul Radio (P2R).
ANCHORAGE: There are no recommended anchorage areas for large vessels in the vicinity of Kimbe.
HEALTH: Health Officer, Tel: 935023. Quarantine Officer, Tel: 935002.
VHF: Call Kimbe Port Control on VHF Channels 16, 12 and 6. Listening watch maintained during working hours and when ships are expected during non-working hours.
TUGS: Not available.
BERTHING: Overseas Wharf is 60.9 m. long, height of deck above LAT 3.1 m., min. depth of water at outer face at LAT 10.7 m. Tidal range 1.2 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/Discharge is by ship's own gear (except under special arrangement).
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working Hours: 0800 – 1200 hrs., 1300 – 1600 hrs., 2000 – 2400 hrs.
Licensed Stevedores: I. S. O'Hanlon, P.O.Box 27, Kimbe. Tel: 935107.
FRESH WATER: Available on request from Port Manager.
FUEL: Diesel is available by road tanker. Suppliers: Shell and B.P.
CUSTOMS: Port of Entry. Collector of Customs, Tel: 935056.
AIRPORT: Hoskins Airport is approx. 50 km. distant and is served by Air Nuigini several times a week.
POLICE/AMBULANCE/FIRE: Police: 935022. Ambulance: 935024. Fire: 935411.
GENERAL: *Storage:* Covered Storage: 745 sq.m. Open Storage: 6040 sq.m. *Chart:* Aus. 674.
DEVELOPMENTS: A small ships jetty adjacent to the barge ramp is to be built.
AUTHORITY: Port Manager, P.O.Box 65, Kimbe, Papua New Guinea. *Tel:* 935134. *Cables:* Portman, Kimbe.

LAE: 06.44 S. 146.59 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)
PORT LIMITS: A straight line bearing 167° (T) from Voco Point to a point at the Northern most extremity of Parsu Point on the Salamaua Peninsula.
PILOTAGE: Pilotage is compulsory – 24 hours a day. Tel: 42 2477 (Office), 42 1795 (Residence).

Pilot Boarding Ground: Lat. 6° 44.5′ S., Long. 147° 00′ E.

ETA at Pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours and not less than 4 hours prior to arrival (VHF Channel 16 – call "Lae Port Control" then to Channel 12 or 6 for working Channels.)
ANCHORAGE: There are no recommended safe anchorage areas for large vessels in the Port of Lae.
HEALTH: Quarantine Tel: 42 4199. Health Tel: 42 2033.
VHF: Call Lae Port Control on VHF Channels 16, 12, 8, 6. Listening watch maintained during normal working hours and when ships are expected outside normal working hours.
TUGS: Two tugs between 450 b.h.p. and 700 b.h.p. available for hire from private operator.
BERTHING: Overseas Wharf is 430 m. long, height of deck above LAT 2.7 m., min. depth of water at face at LAT 11.0 m. Tidal range 1.2 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working hours: Day shift: 0800 – 1200 hrs., 1300 – 1700 hrs., 1800 – 2200 hrs. Evening shift: 2200 – 0200 hrs., 0300 – 0800 hrs. (limited gangs).
Licensed Stevedores: Bunting Stevedores Pty. Ltd., P.O.Box 170, Lae. Tel: 42 3114. Robert Laurie (N.G.) Pty. Ltd., P.O.Box 1032, Lae. Tel: 42 3811 Rabaul Stevedores Ltd., P.O.Box 434, Lae. Tel: 42 4796. United Stevedores Ltd., P.O.Box 2191, Lae. Tel: 42 1099.
MEDICAL: Maximum possible notice should be given so that full arrangements can be made with regard to hospitalisation, etc. Full hospital facilities are available approximately 2.5 miles from the wharf.
TANKERS: Discharge and bunkering facilities are available for all ship requirements.
FRESH WATER: Sometimes restricted but generally available at the rate of 30 t.p.h.
FUEL: Diesel and fuel oil available at the wharf. Suppliers: Mobil, Shell and B.P.
CUSTOMS: Port of Entry. Collector of Customs, Tel: 424899.
REPAIRS: No repair facilities available.
SURVEYORS: Lloyd's Agent.
AIRPORT: Lae Airport at Nadzab is approximately 40 km. distant. Serviced daily by Air Niugini flights.
POLICE/AMBULANCE/FIRE: Police: 422222. Ambulance: 421211. Fire: 424333.

Fire alarms are connected to the Gatehouse which has a direct telephone link to the Police station for emergency purposes.
DELAYS: Lae is the largest and busiest of the country's ports (except for Anewa Bay) and at times delays for up to 48 hours can be expected.
GENERAL: *Storage:* Covered Storage: 14,285 sq.m. Open Storage: 39,000 sq.m.
Chart: AUS 574. BA 2054.
DEVELOPMENTS: A new sheltered tidal basin will be built over the next few years to the West of the existing port. The new berth (Container Terminal) Length 180 m. Depth 11.0 m. at LAT. Completion expected in 1984.

SHIPMASTER'S REPORT: 1978
Approaches: No difficulties were encountered either approaching or leaving. There is deep water close to the shore. Muddy water from the outflow of the Markham River is encountered off the port, but is of no navigational significance.
Wharf: Modern, well-fendered and convenient. Currents and tides alongside are irregular and unpredictable, being almost entirely influenced by the discharge from the Markham River. A tanker berth, consisting of concrete dolphins, is under construction close Eastwards of the main wharf and a pile-driving barge is operating. When berthing, some vessels use the off-shore anchor but under normal conditions this appears to be unnecessary and can in fact be something of an embarrassment when leaving. We did not use either anchor or tugs, weather conditions being good. Powered line boats are available and were used. There is a depth of water alongside of about 11 m.
Anchorage: The usual anchorage is as described in Pacific Islands Pilot Vol. 1, 9th Edition and Supplement No. 5 of 1976. We lay quietly to the port anchor in 30 m. of water, with 4.5 shackles in the water, in position with the Northern of the 2 beacons shown on Chart Aus. 385 bearing 268°(T) distant 2.1 miles approximately.

It is not customary to take a Pilot for the anchorage.
Pilotage: Compulsory when berthing and unberthing.
Tugs: There are 3 in the port, privately owned. As most of their income is derived from sources other than berthing and unberthing ships, their availability is uncertain. No doubt a vessel requiring a tug or tugs would be able to make advance arrangements.
Communications: Vessel came from Gladstone, Queensland, and our advices were sent through P2M, Port Moresby Radio, no difficulties being encountered.

Pilots and Harbour Control are available on Channel 16, VHF, when shipping movements are expected.
Documents Required:

5 Passenger Lists.
5 Crew Lists.
7 Inward Customs Manifests.
3 Lists of Crew Effects.
3 Stores Lists.
2 Arms and Ammunition Lists.

We were able to obtain local forms prior to arrival, and experienced no problems. Also see 'Pratique'.
Officials: The Bond and Beer Rooms are sealed on arrival. The Customs stuck rigidly to the rules and confiscated any undeclared goods, particularly alcohol, cigarettes and what they judged to be pornographic literature. No fines were levied nor charges brought.

The Port Authority allocates berths and decides priorities for vessels.

During our stay, and for a considerable period prior to then, the port had been very busy.

Depending upon the nature of her cargo and the rate of discharge, it is possible for a vessel to reserve a berth in advance.

Because such a vessel arrived when we were alongside and neither our cargo nor our rate of discharge brought us into the berth reservation category, we were obliged to go out to anchor until a berth again became available.
Cargo Working: Our cargo for Lae consisted of 1,524 tonnes of bulk wheat in No. 1 hatch and 9 containers, the heaviest of which was 19.76 tonnes, on No. 2 hatch. The containers were discharged in 3 hours 20 minutes by ship's gear, no problems being encountered.

Our grain cargo was discharged in 36 hours, including time taken rigging and unrigging the sucker and adjusting the length of the suction pipe. Thus, an average rate of 42.3 m/t.p.h. was achieved.

Grain is discharged by means of a portable sucker, weighing approximately 3.5 tonnes, placed on the hatch lids, where it stays throughout discharge. From the sucker, the grain is transferred to a hopper ashore and from there to lorries that transport it to the Mill, about 1 km. away. No significant delays on account of a lack of transport were encountered.
Working Hours: The standard working day is from 0800 hrs. to 2400 hrs. On 2 occasions, once successfully, attempts were made by receivers to start work at 0700 hrs.

The vessel being on Voyage Charter, receivers made strenuous efforts to arrange for discharge after midnight, but without success. They are also investigating making grain discharge an all-weather operation. This could easily be achieved by rigging a tent over the sucker and open portion of the hatch, but whether Union and/or Government Rules would permit this is another matter.

Pratique: If coming from Australia or New Zealand, Pratique is not required, nor is a Health Declaration. Nevertheless, Radio Pratique was requested but no reply was received.

Provisions: Available but very expensive. We stocked up prior to departure Gladstone and this proved to be a wise decision.

Fresh Water: Available from the wharf, at a rate of 15 tonnes/p.h. This is well water and not used by the local residents, who collect the rainwater off their roofs. To be on the safe side it was treated with Chloride of Lime.

Repairs: Only minor repairs can be undertaken. We called in a local firm for some non-urgent burning and welding work, but they were unable to do anything due to a products tanker discharging astern of us. The Chief Engineer reports that appearances suggest that competent work would be done, but that prices would be rather high.

Weather: Was hot and humid, with temperatures ranging from 23.2°C to 28.2°C. During the afternoons a South-Easterly breeze, about Force 2-3 usually came up, dying away in the evenings. Rain showers were prevalent, night and morning.

Health: Local residents confirmed that malaria is present at Lae and the usual precautions were taken on board.

AUTHORITY: Port Manager, P.O.Box 563, Lae, Papua New Guinea. *Tel:* 422477. *Telex:* NE 42414. *Cables:* Portman, Lae.

LORENGAU: 02.01 S. 147.16 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)

PORT LIMITS: Seaward Boundary.

From the Eastern extremity of Hauwei Island by a straight line due North for 2,050 m., thence by a straight line due East for 2,920 m., thence by a straight line due South for 2,000 m. to the Old Light House on Ndrilo Island.

PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Madang given 48 hours notice of the ship's intention to call at Lorengau.

Advice from an officer of the PNG Defence Force may be obtained for ships proceeding to Lombrum Naval Base.

Pilot Boarding Ground: Lat. 01° 56.6′ S., Long. 147° 18.3′ E.

ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R) and to be confirmed at not more than 5 hours and not less than 4 hours prior to arrival. No VHF facility.

ANCHORAGE: Anchorage may be obtained in soft mud in depths of about 30 m. anywhere in Seeadler Harbour but an anchorage in position Bear Point 210° (T) 2,600 m. is recommended.

HEALTH: Contact Port Manager if Quarantine Office or Health Officer required.

TUGS: Not available.

BERTHING: Nabu Wharf at Lorengau is 15.2 m. long with a berthing dolphin 25.9 m. from the Northern end of the wharf. The height of the deck above LAT is 2.9 m., minimum depth of water at face at LAT 5.1 m. Tidal range 1.3 m.

Nabu Wharf is not suitable for large ships but overseas vessels occasionally use the wharf at Lombrum Naval Base in position Lat. 2° 02.1′ S., Long. 147° 22.6′ E., which now lies within the declared port of Lorengau, however the continued use of this facility is in doubt.

Berthing at Nabu Wharf may be delayed during the N.W. season, December-March.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.

R. L. & V. J. Knight, P.O.Box 108, Lorengau. Tel: 409159
Manus Transport, P.O.Box 190, Lorengau. Tel: 409165.

FRESH WATER: Not available.

FUEL: Diesel available by pipe-line at Nabu Wharf and by road tanker. Suppliers: Caltex and Mobil.

CUSTOMS: Port of Entry. Collector of Customs Tel: 409034.

AIRPORT: Momote airport is some 45 km. from Lorengau and is served by Air Nuigini but not daily.

POLICE/AMBULANCE/FIRE: Police and Fire: Lorengau 409122. Ambulance: 409055.

DELAYS: Delays at Lorengau are most unlikely.

GENERAL: *Storage:* Covered Storage: None. Open Storage: 1,000 sq.m.
Chart: AUS 662.

DEVELOPMENTS: No development for the port is envisaged in the near future.

AUTHORITY: Port Manager, P.O.Box 21, Lorengau, Papua New Guinea. *Tel:* 409078. *Cables:* Portman, Lorengau.

MADANG: 05.13 S. 145.49 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)

PORT LIMITS: Seaward Boundary.

By a straight line due East from the Easternmost extremity of Kramket Island to position Lat. 5° 11.9′ S., Long. 145° 51.5′ E., thence due South to position Lat. 5° 13.5′ S., Long. 145° 51.5′ E., thence by straight line due West to a point on the Easternmost extremity of the Kalibobo (Schering) Peninsula known as Cape Kusseron.

PILOTAGE: Compulsory. Pilots based at Madang, Tel: 82 2351 (office), 82 2916 (residence).

Pilot Boarding Ground: Lat. 5° 12.7′ S., Long. 145° 50.1′ E.

ETA pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours but not less than 4 hours prior to arrival again via Port Moresby or Rabaul.

ANCHORAGE: Anchorage area is inside the Dallman Passage in the area to the North of the main channel bounded by Beliau Island to the West and Kramket Island to the East. Depth of water, 40 m. Good holding ground in soft mud. Ships should not proceed to anchorage area without Pilot's advice.

HEALTH: Quarantine Officer Tel: 82 2193. Health Officer Tel: 82 2224.

VHF: Call Madang Port Control on VHF Channels 16, 12, 8, 6. Listening watch maintained during normal working hours and when ships are expected during non-working hours.

TUGS: None available.

BERTHING: Overseas wharf 137.1 m. long, height of deck above LAT 3.1 m., minimum depth of water at face at LAT 10.1 m. Tidal range 1.2 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).

A separate facility to serve woodchip vessels (and Caltex tankers) only is situated within Binnen Harbour West of the main wharf facilities.

STEVEDORES: 72 hours' notice preferred, but a minimum of 24 hours required. Working hours: 0800 – 1200, 1300 – 1800 and 1900 – 2200.
Licenced Stevedores: Rabaul Stevedores Pty. Ltd., P.O.Box 226, Madang. Tel: 82 2225. B. J. Back Pty. Ltd., P.O.Box 642, Madang. Tel: 82 2157.

TANKERS: Discharge at main wharf for both Shell and Mobil. Caltex discharge by floating pipe-line while moored at the Jant woodchip facility.

FRESH WATER: Limited supply available seasonally at wharves and following prior arrangements with Port Manager.

FUEL: Diesel and diesel fuel is available from road tankers. Suppliers: Shell, Mobil and Caltex.

REPAIRS: A coastal slipway at Madang but only minor deck repairs P.O.Box 605, Madang.

AIRPORT: Madang airport is 6 km. from the port and is served daily by Air Nuigini.

CUSTOMS: Port of Entry. Collector of Customs Tel: 82 2757.

POLICE/AMBULANCE/FIRE: Police: 82 2222. Ambulance: 82 2022. Fire: 82 2777.

DELAYS: Although there is only one overseas berth at the main wharf, Madang delays are not common and are of short duration when they do occur.

GENERAL: *Storage:* Covered Storage: 4,600 sq.m. Open storage: 8,830 sq.m. *Chart:* AUS 648.

DEVELOPMENTS: When traffic justifies expenditure an extension of the overseas wharf Eastward will be undertaken.

AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 273, Madang, Papua New Guinea. *Tel:* 82 22351/2. *Cables:* Portman, Madang. *Contact:* Port Manager.

ORO BAY: 08.54 S. 148.29 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)

PORT LIMITS: Seaward Boundary.

From the extreme North point of the mainland on the South side of the entrance to Port Harvey by a straight line due North for 2,935 m. thence by a straight line due West for 2,760 m. to the coastline.

PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Port Moresby given 48 hours notice of the ship's intention to call at Oro Bay.

Pilot Boarding Ground: Within 300 m. radius of a position with the North corner of Oro Bay wharf bearing 225° (T) distant 1,850 m.

ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival.

ANCHORAGE: In sand and mud at 15 m. depth may be obtained on the leading marks 239° (T) distant 400 m. from the North corner of the wharf.

VHF: Call Oro Bay Port Control on VHF 16, 12 and 6. Listening watch maintained during working hours and when ships are expected during non-working hours.

TUGS: None available at present. Arrangements may be possible via Kamusi Timber if tugs required.

BERTHING: Wharf is 60.3 m. long, height of deck above LAT 2.5 m., minimum depth of water at outer face at LAT 11.4 m. Tidal range 1.3 m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear (except under special arrangement).

Berthing may be delayed during the N.W. season, December – March.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.
Licensed Stevedores: New Guinea Forwarding Agencies: P.O.Box 77, Popondetta Tel: 297050/297268. Carnell Carriers: P.O.Box 151, Popondetta Tel: 29 7095.

FRESH WATER: Not available.

FUEL: Diesel is available by road tankers. Suppliers: Shell and Mobil.

AIRPORT: Popondetta airport is 40 km. from the port and is served by Air Nuigini, but not daily.

POLICE/AMBULANCE/FIRE: Police: 29 7122. Ambulance: No service available. Fire: 29 7144.

DELAYS: Delays at Oro Bay are most unlikely.

GENERAL: *Storage:* Covered Storage: 739 sq.m. Open Storage: 4,645 sq.m.
Chart: AUS 520.

DEVELOPMENTS: The area around Popondetta is being developed as major palm oil plantations and this could eventually lead to expansion of the port.

AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 160, Popondetta, Papua New Guinea. *Tel:* 29 7295. *Cables:* Portman, Popondetta. *Contact:* Murray M. Arua, Port Manager.

PORT MORESBY: 09.29 S. 147.09 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)

PORT LIMITS: Seaward Boundary.

A straight line bearing 300° (T) from a point at the South Western extremity of Nateara Reef to a point at the Southernmost extremity of Sinari Reef.

PILOTAGE: Pilotage is compulsory – 24 hours a day. Tel: 212805 (Office), 214910 (Residence).

Pilot boarding ground: 9° 32.8′ S., 147° 06.85′ E. *OR* in bad weather the pilot boarding ground will be withdrawn inside the Basilisk Passage to a position Basilisk Beacon 220° (T) 950 m.

ETA at Pilot boarding ground not less than 12 hours prior to arrival via Port Moresby Radio (call sign P2M).

Confirm or amend ETA not more than 5 hours and not less than 4 hours prior to arrival (VHF Channel 16 – call "Moresby Pilot" thence switch to Channel 12 for working Channel).

ANCHORAGE: Vessels may, subject to permission being granted by the Pilotage Authority, proceed inwards without a Pilot to an anchorage area in the outer harbour centred in position North Point Manubada Island 090° (T) 1,275 m.

Depth of water 27 m. Good holding ground in soft mud and sand.

HEALTH: Health Officer Tel: 255566. Quarantine Officer Tel: 211475.

VHF: Call sign "Moresby Port Control" Channels 16, 12 and 6. Listening watch during normal working hours and outside hours when vessel expected.

TUGS: Two tugs of between 550 b.h.p. and 750 b.h.p. are available for hire from private operator.

BERTHING: Old Port:

	Length (m.)	*Width* (m.)	*Water Depth Below LAT* (m.)	*Deck Height Above LAT* (m.)
Berth 1 (Main Wharf):	106	18.2	7.6	4.4
Berth 2 (Main Wharf):	107	18.2	7.6	4.4
Berth 3A (Coastal):	67	18.2	3.8	4.4
Berth 3B (Coastal):	113	18.2	4.5	4.4

Barge Ramp 1: Width 6 m. Grade 1 in 8
Barge Ramp 2: Width 9 m. Grade 1 in 8

Storage: Shed 1: 1,790 sq.m. (73.2 m. × 24.4 m.)
Shed 2: 1,790 sq.m. (73.2 m. × 24.4 m.)
Shed 3: 1,110 sq.m. (30.4 m. × 36.5 m.)
Coastal Shed: 650 sq.m. (36 m. × 18 m.)

Open (Old Port): 3,100 sq.m.
Open (APC): 3,250 sq.m.

New Port:

	Length (m.)	*Width* (m.)	*Water Depth Below LAT* (m.)	*Deck Height Above LAT* (m.)
Berth 4 (Container):	125	25.3	10.6	3.6
Small Ships Jetty:	25	5.0	3.0	2.0

Storage: Shed 4: 5,110 sq.m. (140 m. × 36.5 m.)
Open: 28,400 sq.m.

Load/discharge is by ship's own gear.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required. Working hours: Day shift: 0800 – 1200, 1300 – 1700, 1800 – 2200 hrs. Night shift: 2200 – 0200, 0300 – 0700 hrs. (limited gangs).

Licensed Stevedores: Port Services PNG. PTY. Ltd., P.O.Box 699, Port Moresby. Tel: 211688.

TANKERS: Tankers may discharge at Oil Company buoys N.W of the wharf area, max. draft 13 m. The discharge is through submarine pipelines.

Berthing and unberthing of tankers from the buoys is in daylight hours only. Bunkering facilities for overseas vessels will be accommodated at the new facility.

FRESH WATER: Available at Berth No. 1 – 4, rate of 20 t.p.h.

FUEL: Diesel available by road tanker at Berth Nos. 1 – 3 and by pipeline at Berth No. 4. Suppliers: Shell, Mobil and B.P.

CUSTOMS: Port of Entry. Collector of Customs Tel: 214428.

REPAIRS: A small slipway for coastal vessels only is situated adjacent to the old main wharf.

AIRPORT: Jacksons Airport, Papua New Guinea's only international airport is 13 km. from the wharf and is served by flights to and from Australia daily, to Manila, Hong Kong, Japan, Singapore and Honolulu weekly as well as almost daily flights to all main internal centres.

POLICE/AMBULANCE/FIRE: Police Tel: 258122. Ambulance Tel: 256822. Fire Tel: 212332.

DELAYS: The port now has 3 overseas berths although only 1 of these is capable of handling direct container traffic. Some delays can be expected at peak times.

GENERAL: *Storage:* See "Berthing".
Chart: AUS 621.

AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 384, Port Moresby, Papua New Guinea. *Tel:* 214625, 211637. *Telex:* NE 22243 (via Harbour Board Head Office). *Cables:* Harbours, Port Moresby. *Contact:* Port Manager, Tel: 211637, 259030 (after hours).

RABAUL: 04.12 S. 152.10 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)

PORT LIMITS: Seaward Boundary.

By a straight line due South from a point on the Easternmost extremity of Matupi Island for 4,375 m. to a position in 4° 16.8′ S., 152° 11.8′ E., thence by a straight line due West to a point on the S.E. extremity of the land known as Vulcan.

PILOTAGE: Compulsory – 24 hours a day. Tel: 92 1533 (Office), 92 2438 (Residence).

Pilot Boarding Ground: Within 400 m. radius of a position with Matupi Island Lighthouse bearing 360° (T) distant 1,800 m.

ETA at pilot boarding ground not less than 12 hours prior to arrival via Rabaul Radio (P2R). Confirm or amend ETA not more than 5 hours and not less than 4 hours prior to arrival (Rabaul Radio – (P2R)).

ANCHORAGE: There are no recommended anchorage areas for large ships, but anchorage in approx. 30 m. of water may be obtained in good holding ground in a position lower leading light bearing 015° (T) distant 1,110 m.

HEALTH: Quarantine Officer and Health Officer Tel: 92 1416.

VHF: Call Rabaul Port Control on VHF Channels 16, 12 and 6. Listening watch maintained during working hours and during non-working hours when ships expected.

TUGS: Two 165 b.p.h.×12 m. workboats available for hire from a private operator.

BERTHING: There are two overseas berths. Bay Road Wharf is 152.4 m. long, height above LAT 2.8 m., min. depth of water at LAT 10.2 m.

Blanche Street Wharf is 121.9 m. long. Height of deck above LAT 2.8 m. Minimum depth at LAT 7.9 m.

Vessels may berth either port or starboard side to at either wharf at the discretion of the Port Authority.

Load/discharge is by ship's own gear (Except under special arrangement).

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.

Working Hours: Day shift: 0800 – 1200, 1300 – 1600 hrs.
Evening Shift: 1600 – 1700, 1800 – 2400 hrs.
Limited work after midnight.

Licensed Stevedores: Burns Philp (PNG) Ltd., P.O.Box 87, Rabaul. Tel: 92 2489.

Rabaul Stevedores Ltd. P.O.Box 271, Rabaul. Tel: 92 1933.

Niugini Islands Cargo Services Pty. Ltd., P.O.Box 1231, Rabaul. Tel: 92 2467.

TANKERS: Discharge facilities are available for overseas vessels at the Blanche Street Wharf.

FUEL: Diesel fuel and distillate available by road tanker. Suppliers: Shell, Mobil and B.P.

FRESH WATER: Available at a rate of 25 t.p.h., supply sometimes restricted. Fresh water also available by barge at anchorage.

CUSTOMS: Port of Entry. Collector of Customs Tel: 92 1173.

REPAIRS: Only light deck repair facilities available.

SURVEYORS: Lloyd's Agent, Burns Philp (N.G.) Ltd., P.O.Box 87, Rabaul.

AIRPORT: Rabaul Airport is 4 km. from the port and is served daily by Air Nuigini.

POLICE/AMBULANCE/FIRE: Police: 922222. Ambulance: 922162. Fire: 921411.

DELAYS: Delays at Rabaul are unlikely.

GENERAL: *Storage:* Covered Storage: 10,180 sq.m. Open Storage: 20,300 sq.m.
Chart: AUS 680.

DEVELOPMENT: The only development planned at Rabaul for the next few years are new coastal facilities.

AUTHORITY: Port Manager, P.O.Box 592, Rabaul, Papua New Guinea. *Tel:* 92 1227. *Telex:* NE 92918. *Cables:* Portman, Rabaul.

SAMARAI: 10.36 S. 150.39 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)

PORT LIMITS: Seaward boundary.

From a point on the Northernmost point of Samarai Island due North for 800 m. thence due West for 1,300 m. thence due South for 1,000 m. thence due East for 1,000 m. to a point on the N.W. coast of Samarai Island.

PILOTAGE: Not available.

ANCHORAGE: There are no recommended anchorage areas for large vessels in the vicinity of Samarai.

HEALTH: Quarantine Officer Tel: 62 1257. Health Officer Tel: 62 1225.

TUGS: Not available.

BERTHING: Berth No. 1. (Main Wharf). Length 28 m. Depth at LAT 7.8 m. Tidal range 1.0. m.

Vessels may berth either port or starboard side to at the discretion of the Port Authority.

Load/discharge is by ship's own gear.

STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.

Licensed Stevedores: Murina Stevedoring Company, P.O.Box 33, Samurai.

Steamships Trading Co. Ltd., P.O.Box 1, Samarai. Tel: 62 1238.

TANKERS: Discharge only at main wharf.

FUEL: Diesel available by pipe-line. Supplied by Shell and Mobil Oil.

FRESH WATER: Not available.

AIRPORT: There is no airport at Samarai. The nearest airport is at Gurney, outside Alotau.
CUSTOMS: Port of Entry. Collector of Customs Tel: 62 1226.
POLICE/AMBULANCE/FIRE: Police Tel: Samarai 62 1222. Ambulance Tel: 62 1225. Fire: No service available.
DELAYS: Delays at Samarai are most unlikely.
GENERAL: *Storage:* Covered Storage: 950 sq.m. Open Storage: 140 sq.m.
Chart: AUS 625.
AUTHORITY: Papua New Guinea Harbours Board, P.O.Box 6, Samarai, Papua New Guinea. *Tel:* 62 1346. *Cables:* Portman, Samarai. *Contact:* K. M. Kagaiavi, Port Manager.

VANIMO: 02.41 S. 141.18 E. (See Plan Book)

(See General Section on Papua New Guinea Ports).

PILOTAGE: Pilot Boarding Place: Lat. 2° 39′ S., Long. 141° 18′ E.
HEALTH: Quarantine Officer Tel: 87 1166. Health Officer Tel: 87 1108.
VHF: Call Vanimo Port Control on VHF 16 and 12. Listening watch maintained during working hours and when ships are expected during non-working hours.
TUGS: None available.
BERTHING: Position of wharf: Lat. 02° 41.09′ S., Long. 141° 17.84′ E. Length, 18.7 m. (61.5 ft.); width 6.1 m. (20 ft.). Minimum depth alongside at LAT 4.9 m. (16 ft.). Tidal range 1.6 m.
FRESH WATER: Not available to ships.
FUEL: Distillate available by road tanker. Supplier: Steamships Trading Co.
CUSTOMS: Port of Entry. Collector of Customs Tel: 87 1192.
POLICE/AMBULANCE/FIRE: Police Tel: 87 1022. Ambulance: 87 1080.
GENERAL: *Storage:* 1 Shed – 135 sq.m.
Chart: AUS 389.
AUTHORITY: Port Manager, P.O.Box 71, Vanimo, Papua New Guinea. *Tel:* 87 1024. *Cables:* Portman, Vanimo.

WEWAK: 03.34 S. 143.39 E. (See Plan Book)

(See General Section on Papua New Guinea Ports)

PORT LIMITS: Seaward Boundary.
From Wewak Point by a straight line due North for 2,900 m. thence by a straight line due East for 3,725 m. thence by a straight line due South for 4,780 m. to a point 800 m. due East of Cape Boram, thence to Cape Boram.
PILOTAGE: Pilotage is not compulsory but a Pilot will attend from Madang if given 48 hours notice of the ship's intention to call at Wewak. A Pilot will shortly be stationed at Wewak.
Pilot Boarding Ground: Lat. 3° 32′ S., Long. 143° 39.4′ E.
ETA to be sent not less than 12 hours prior to arrival via Port Moresby Radio (P2M) or Rabaul Radio (P2R) and to be confirmed not more than 5 hours and not less than 4 hours prior to arrival. No VHF facility.
ANCHORAGE: There are no recommended anchorage areas for large vessels in the vicinity of Wewak.
HEALTH: Quarantine Officer Tel: 86 2586. Health Officer Tel: 86 2166.
VHF: Call Wewak Port Control on VHF Channels 16, 12, 6. Listening watch maintained during working hours and when ships expected during non-working hours.
TUGS: None available.
BERTHING: Overseas wharf is 73.1 m. long, height of face above LAT is 3.5 m., min. depth of face at LAT is 6.7 m. Tidal range 1.3 m.
Vessels may berth port side to only.
Load/discharge is by ship's own gear.
Berthing may be delayed during the N.W. season December – March.
STEVEDORES: 72 hours notice preferred, but a minimum of 24 hours required.
Working Hours: Day shift: 0800 – 1200, 1300 – 1600. Evening shift: 1600 – 1900, 2000 – 2400. 2 hours extension to finish possible.
Licenced Stevedores: Sepik Coastal Agencies, P.O. Box 118, Wewak. Tel: 86 2464. Wewak Stevedores, P.O. Box 27, Wewak. Tel: 86 2181.
TANKERS: No overseas discharge or bunkering facility exists.
FRESH WATER: Not available.
FUEL: Diesel available from road tankers. Suppliers: Mobil and Shell.
CUSTOMS: Port of Entry. Collector of Customs Tel: 86 2591.
AIRPORT: Wewak Airport is 5 km. from the port and is served regularly by Air Nuigini.
POLICE/AMBULANCE/FIRE: Police: 86 2222. Ambulance: 86 2166. Fire: 86 2122.
DELAYS: Delays at Wewak are unlikely but if they do occur are of short duration.
GENERAL: *Storage:* Covered Storage: 2,200 sq.m. Open Storage: 11,500 sq.m.
Chart: AUS 651.
DEVELOPMENTS: The port development plan which is unlikely to take effect for a few years, calls for a land backed facility off the causeway joining the land to the existing wharf.
AUTHORITY: Port Manager, P.O.Box 270, Wewak, Papua New Guinea. *Tel:* 86 2298. *Cables:* Portman, Wewak.

NOTES

Please also advise Shipping Guides Ltd.

GENERAL:

DOCUMENTS: *Consular Documents:*

If ports on embarkation are non-Paraguayan, the Agency must submit an original cargo manifest and two copies, as well as three copies of the crew list to the Paraguayan Consulate. The Consul returns the original and one copy of each of these documents, and the Agency must ensure that these papers are mailed, time permitting, or delivered to the vessel.

Prior to Arrival:

Arrival Notice:

The time and date of the vessel's arrival shall be reported at least 24 hours in advance to the following Authorities: Port Authority (National Navigation and Port Administration), the General Prefecture of Ports (National Navy), Customs, Migration, and Maritime Health.

Information on Cargo for the Port:

The shipping Agency must receive duly in advance the following documents for presentation to the Authorities and for the preparation of the tally books: cargo manifest and stowage plan. It is of the utmost importance that manifests be received duly in advance, even if by telex, to avoid any delay in servicing the vessel.

The manifests and a written request that may be submitted 72 hours prior to the arrival of the vessel, must be delivered to Customs. Customs opens a Customs file and allocates a number to the vessel to expedite the processing of the import documents.

Requests for Port Services:

A request must be submitted to ANNP, indicating the expected time of arrival (ETA) of the vessel, to obtain clearance for berthing and port services. 5 copies of the manifests giving the number assigned by Customs to the vessel and 1 copy of the stowage plan must be presented, as well as copies of the tally books, and a list of container contents.

In the absence of manifests, clearance for berthing will not be given and, therefore, the cargo cannot be handled.

On Arrival:

Type of Document	*Number and Distribution of Documents*						
Basic Forms	*Gen. Pref. Ports*	*Customs*	*Immigration*	*Marit. Health*	*Veterinarian†*	*Agency*	*Total*
1. General Declaration(a)	1	–	–	–	–	1	2
2. Cargo Manifest	1(b)	1(b)	–	–	1	1	4
3. Crew List	1(b)	1(b)	1	–	–	1	4
4. Passenger List	1	1	1	–	–	1	4
5. Ship's Stores List	–	1	–	–	1	2	4
6. Crew Effects Declaration	–	1	–	–	–	1	2
7. Maritime Declaration of Health	–	–	–	1	–	–	1
8. Mail List	–	–	–	–	–	1(c)	1
Additional Documents:							
9. In-ballast Declaration	1	1(b)	–	–	–	1	3
10. Bills of Lading	1	1(b)	–	–	–	1	3

† Transitory provision of the Ministry of Agriculture, of November 1978.

(a) If the vessel has the forms, LAFTA/OAS Form 1 should be employed; if not, Agencies use their own form, containing data on 1 through 10 and 11A of the General Declaration.

(b) Visaed by the Consulate of Paraguay.

(c) For the Postal service.

Prior to Departure:

A departure request must be filed with Customs, to which the export cargo manifest and the provisional export permit must be attached. This procedure cannot be started until the entire cargo has been loaded.

After this request has been recorded by the Registration Division and the Cashier's Office, the Customs Administration issues the safe-conduct for departure.

Once the safe-conduct is obtained from Customs, this is attached to the crew list and submitted to the General Prefecture of Ports, which authorises clearance, and designates the Pilots who are to guide the ship on the stretch Asuncion-Confluencia.

NOTES

Please also advise Shipping Guides Ltd.

Peru

GENERAL:

DOCUMENTS:

Prior to Arrival:

Arrival Notice:

Notice of a vessel's arrival must be sent 24 hours in advance to the Captain of the Port, Customs, International Police, Migration and Public Health.

Information on Cargo and Passengers for the Port:

The Agency must have received the following documents by air, sufficiently in advance to submit them by the deadlines indicated in the following paragraph, and to prepare the tally sheets:

5 sets Cargo Manifest.
2 sets Freighted Cargo Manifest.
1 copy Passenger List.
6 copies List of Container Contents.
5 copies Dangerous Cargo List.
2 copies List of In-Transit Dangerous Cargo.
2 copies Stowage Plan.

Deadlines for Submission of Documents:

(a) Vessels from South American and Pacific coast ports are exempt from submitting documents by air mail in advance. However, the Agency must receive by telex, in sufficient time to prepare and submit before initiating tally sheet operations, the following information on regional cargo: marks, numbers, amount, class and weight of cargo, its location on board, shipper and consignee.

(b) Vessels from Panama and Colombian ports on the Atlantic. 24 hours before the vessel's arrival. Fine for failure to comply with the deadline.

(c) Vessels from Central American ports. 48 hours before the vessel's arrival. Fine for failure to meet the deadline.

(d) Vessels from any other port. 72 hours before the vessel's arrival. Fine for failure to meet the deadline.

Request for Port Services:

24 hours before the vessel's arrival, the request for pilotage and berthing, and port services shall be submitted to the marine terminal of the Peruvian National Ports Agency (ENAPU) on special forms.

On Arrival:

On entrance of the vessel, the following documents must be submitted on forms LAFTA/OAS 1 to 8:

Type of Document	*Number and Distribution of Documents*						
Basic Forms	*Captain of Port*	*Customs*	*ENAPU*	*Police*	*Migration*	*Public Health*	*Total*
1. General Declaration	1	2	2	–	–	–	5
2. Cargo Manifest	1	2	4	–	–	–	7
3. Crew List	1	2	–	1	1	1	6
4. Passenger List	1	2	2	1	1	1	8
5. Ship's Stores List	–	2	1	–	–	–	3
6. Crew Effects Declaration	–	2	–	–	–	–	2
7. Maritime Health Declaration	–	–	–	–	–	1	1
8. Mail List	–	2	2	–	–	–	4
Additional Documents:							
9. Clearance from last Port	1	–	–	–	–	–	1
10. In-transit manifest	1	1	–	–	–	–	2
11. "No passengers" Declaration	1	2	2	1	1	1	8
12. List of Passengers in-transit or "No in-transit Passengers" Declaration	1	2	2	1	1	1	8
13. List of Passengers Baggage or "No Baggage" Declaration	–	4	4	–	–	–	8
14. List of unaccompanied Baggage or "No unaccompanied Baggage" Declaration	–	4	4	–	–	8	16
15. Bill of Lading	–	1	2	–	–	–	3

Prior to Departure:

Clearance Documents:

The clearance permit must be duly paid for at the Bank of the Nation. Receipts therefore must accompany the request for clearance.

The clearance permit is requested from the Captain of the Port on a special form in triplicate, accompanied by 3 sets of the general declaration, the crew list and the list of passengers on board, in-transit or "no passengers" declaration.

At the time of clearance, a representative of the Captain of the Port returns on board a stamped set of these documents.

In addition, the following must be submitted before clearance:

Documents:

	ENAPU	*Migration*
Crew List		1
List of Passengers Embarked or "No Passengers" Declaration	1	
List of Passengers Baggage or "No Baggage" Declaration	1	
Bill of Lading for all cargo loaded	2 sets	

Within 24 hours after clearance, Customs must be given a copy of the export cargo manifest or a set of the bills of lading for all export cargo.

Request for Pilotage:

Requests for unberthing, including the request for pilotage shall be submitted daily at 1500 hrs. to the ENAPU on a special form.

SHIP REPORTING:

Position and Safety Information System in Peruvian Waters: National and foreign merchant and fishing vessels, of more than 1,000 g.r.t., are obliged to report their position by radio to Coastguard General Director, by Peruvian Coast Stations of Paita, Mollendo or Callao, if they enter, stay or depart from Peruvian waters.

Instructions on Preparing the Message Report:

(a) Message structure information:

Identification Message		SHIPREP (Identification System)
	A	A group of 2 letters Report "PW" (Ship enters into Peruvian waters) Report "SP" (Navigation plan or crossing route) Report "PR" (Position report. Ship crosses Lat. 12° S) Report "FR" (Final report. Ship arrives at Peruvian port or departs from Peruvian waters)
Vessel	B	Vessel's name, call sign and flag
Date and local time	C	A group of 6 numbers to indicate day, hours/minutes
Situation	D	Sailing port, last port of call or crossing
Latitude and Longitude	E	A group of 4 numbers to indicate: Latitude (degrees and minutes) with suffix N or S A group of 5 numbers to indicate: Longitude (degrees and minutes) with suffix E or W
Course	F	A group of 3 numbers
Speed (knots)	G	A group of 2 numbers
Destination Port	H	Arrival port or destination port
Estimated Time of Arrival (ETA)	I	A group of 6 numbers to indicate day, hours/minutes

(b) Message Report Types:

Message "PW" — Ship enters into Peruvian waters. Required information is as follows:
SHIPREP/A/B/C/D/E/F/G/H/I

Example:
FM: YAMAZURU MARU
TO: COASTGUARD GENERAL DIRECTOR

$$\text{SHIPREP/}\overbrace{\text{PW}}^{A}/\overbrace{\text{YAMAZURU MARU}}^{B}/\overbrace{\text{JEVF}}^{B}/\overbrace{\text{JA}}^{B}/\overbrace{\text{051200}}^{C}/\overbrace{\text{POHANG}}^{D}/$$

$$\overbrace{\text{1813S}}^{E}/\overbrace{\text{07620W}}^{E}/\overbrace{\text{330}}^{F}/\overbrace{\text{20}}^{G}/\overbrace{\text{SANNICOLAS}}^{H}/\overbrace{\text{06100}}^{I}$$

Message "PR" — Ship crosses to Peruvian waters (Lat. 12°S). Required information is as follows:
SHIPREP/A/B/C/E/F/G/H/I

Message "SP" — Ship departs from Peruvian port. Required information is as follows:
SHIPREP/A/B/C/D/F/G/H/I

Message "FR" — Ship departs from Peruvian waters or she arrives at the destination port. Required information is as follows:
SHIPREP/A/B/C/H

(c) Coast Station Frequencies:
Frequencies in order to get in contact with coastal stations.

Radio Station Name	*Call Signal*	*Frequencies Transmission*	*Frequencies Reception*	*Kind of Emission*	*Working Hours*
Paita Radio	OBY2	8527 2182-2738 156.70 156.80	8363.2-8366.4 2182 C.14 C.16	0.1A1A H3E/J3E F3E F3E	24
Callao Radio		460-500 8546 13015.5 2182-2738 156.60 156.70 156.80	500 8363.2-8366.4 12544.8-12549.6 2182 C.12 C.14 C.16	0.1A1A 0.1A1A A1A H3E/J3E F3E F3E F3E	24
Mollendo Radio		8490 2182-2738 156.70 156.80	8363.2-8366.4 2182 C.14 C.16	0.1A1A HE3/J3E F3E F3E	24

Note: Copies of radio messages are required at reception.

Vessels failing to comply, fined US$1,000.00 first time, US$5,000 for repetitions.

If unable to raise Peruvian Coastal Stations, notation to this effect must be entered in Radio Log, verified on arrival by Authorities to whom copies of messages must be given.

ATICO: 16.14 S. 73.43 W.

Atico is an open roadstead and unprotected. The main activity is the loading of fishmeal.
PILOTAGE: Not available.
ANCHORAGE: Vessels anchor in the open roads.
TUGS: 1 available.
LIGHTERS: 3 available, 100 tons each.
CRANES: None.
STEVEDORES: See "Pimentel" for working hours and overtime rates. There are 2 gangs available.
MEDICAL: Available at Mollendo.
FRESH WATER: Not available.
FUEL: Not available.
GENERAL: *Swell Period:* Heavy swell in the Winter months, June-September.

CALLAO: 12.03 S. 77.10 W. (See Plan Book)

DOCUMENTS:

Airmail copies must be presented to Port Authorities 72 hours before arrival of vessel as otherwise vessel will be fined. No docking is allowed until Cargo Manifests and Cargo Plan are presented.

Vessel copies to be delivered on clearing vessel inbound on arrival when Health, Customs and other Authorities board.

	By Air	*By Sea (With the Vessel)*
Cargo Manifests, including additionals. Must be faithful copies of Bills of Lading descriptions	5	*7
Same Manifests, but freighted	5	2
Cargo Manifests covering cargo shortshipped but manifested on previous vessels calling at Callao	5	*7
(If Master Stencils are airmailed, the required number of Manifests will be printed)		
Transit Cargo Manifests	–	3
Freighted copy of each Bill of Lading	–	4
List of Containers with their numbers	2	2
Content List, each Container, properly identified with marks, numbers and Bills of Lading numbers	2	2
Dangerous Cargo Lists showing complete description of goods, Flash Point, IMO Classification, Type of Label, marks, numbers and Bills of Lading numbers	3	3
Transit Dangerous Cargo Lists	3	3
Mail Manifests	5	5
Passenger Lists	1	*10
Transit Passenger Lists	–	*10
Tally Books	–	16
Stowage Plan	3	–
Consolidated Stowage Plan, prepared or checked on board	–	3
Visaed Tonnage Certificate or General Declaration from First Port receiving cargo for Peru and every port of call thereafter	–	1
Health Clearance, last port of call	–	1
Vaccination List	–	*1
General Declaration	–	*7
Crew List	–	*10
Crew Personal Effects Declaration	–	*3
Store List	–	*4
Sealed Consular Documents addressed to Customers, in envelope	–	1

*Must be made out on LAFTA Forms (See "Shipmaster's Report"). Also see "General" before first port.

PILOTAGE: Pilots must be requested by Agent and board ships outside port at anchorage. Various pilot launches painted white, black and red.
ANCHORAGE: Very large area to the West of entrance buoys.
RESTRICTIONS: Vessels of up to 32 ft. draft may enter at any time. Vessels of more than 32 ft. draft must enter at high water. Pilots available 24 hours.
MAX. SIZE: Length and breadth practically unlimited, draft 32 ft. plus height of tide making allowance for keel clearance.
RADIO: Radio Costera, OBC3, 460, 500, 8546, VHF 16 and 14 (Peruvian Navy 24 hours).

Arrival Advice: 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.

Shipowner's Report: October 1982.
Please note there is a new regulation for vessels calling Callao. All ships must send 1 hour prior to arrival at Callao Roads a telegram addressed to "Costera Callao" indicating their revised ETA. If this is not done and Authority gets notice of this, vessel will be fined.

As per experience this telegram arrives at "Costera Callao" after vessel has departed. Sometimes Authority asks for presentation of telegram copy.

Radio Officer's Report: September 1982.

During a recent call at Callao and Pisco at the beginning of September 1982, only slight difficulties were experienced in establishing radio contact with Callao Radio – OBC3.

However, Callao Radio seems mostly to be listening only on 8364 kHz HF, answering calls on its working frequency 8546 kHz. Also the station seems to be using "QRY-operation". Ships' radio operator will get his turn number, whereafter Callao Radio calls back in due time for QSO.

Even at a very close range, no answer was obtained on 500 kHz. However, a call on VHF Channel 16 was answered at once, and vessel was advised to shift to the above mentioned HF frequency for QSO.

HEALTH: Cable Agent requesting Free Pratique. Agent must be notified in advance if any illness or disease suspected on board. Free Pratique is hardly ever given unless Health Officer and Captain of the Port and other Officers board.
TUGS: Port Authority Tugs join vessel once inside mole, 1 or 2 as required, using vessel's lines, later passed to pier. 4 tugs available; 2 a 175 h.p., 1 at 500 h.p. and 1 at 800 h.p.
BERTHING: There are 9 piers with a total of 24 berths, 22 for larg vessels, and 2 for coasters.

The various berths of the port can be subdivided into areas for thei appropriate usage as follows:

	Quays	*Berths*
General cargo	1, 2, 3, 4, 5	1A, 1B, 2A, 2B, 3A, 3B, 4A, 5A, 4B.
Dry bulk cargo	11, 9	11A, 11B, 11C, 9A, 9B, 9C.
Liquid bulk cargo (Oil derivates)	7	7A, 7B.
Minerals	5	5B, 5C, 5D, 5F.
Logistic supplies and coastal vessels	9, 10	9D, 10A, 10B.

All piers except the petrol pier are connected to railway system fo unloading and loading to railway wagons.

Within port limits anchorages can be used for discharge of livestock scrap and occasionally for general cargo after permission obtained fro the Port Authorities.

Berths 5B, 5C, 5D and 5E are equipped with conveyor belts fo shipping granulated bulk ore.

Berths 9A, 9B and 9C have a conveyor belt for shipping fishmeal i pellets.

For discharge of grain, there are three pneumatic mobile suctio towers and silos with a capacity up to 23,000 tons. The average rate discharge of the pneumatic towers is 2×100/150 t.p.h. and 1×300 t.p.h

STEVEDORES: No particular advice necessary but Agent must receiv Stowage Plan beforehand to advise Port Authority of planned operatio

Working Hours: 1st shift 0700 – 1200 hrs. and 1300 – 1600 hrs. 2n shift 1700 – 2400 hrs. Both are compulsory, except 2nd shift on Sunday and Holidays. 3rd shift 0100 – 0700 hrs., optional, except after Sunday and Holidays when not worked. There is an additional charge of 25% fo the 3rd shift.

Lighters: In the port, a lighter service is provided by private concern to enable vessels to discharge at moorings, and thus reduce the tim they are at the quays.

CRANES: There are a number of cranes with lifting capacity from 4 ton to 50 tons. The Callao Naval Base has a floating crane with a liftin capacity of 80 tons, which can be called upon if necessary.
MEDICAL: Advance information as to sick crew members not require but helpful. Ample first class facilities in the Lima area.
TANKERS: *Petroleum Pier: Pier No. 7:* Max. depth 35 ft., howeve depth in approaches to berth is 33 ft. at HW and 31 ft. at LW, max. lengt about 200 m.

There are numerous loading and discharge pipe-lines of differen diameter to handle oil derived products.

These lines can be used simultaneously at the berths A and B, b also depending on store facilities on shore or delivery into trucks.

Discharging pressure of the lines: 100 lb./sq.in. for 12 in. to 22 i lines. On the pipe-line of 6 inches it is possible to reach a pressure 250 lb./sq.in., for discharge of LPG.

Connections: There are connections from 4 in. to 10 in. for all kind flanges.

Water: Supply of water is possible, 40 t.p.h.

Discharge of ballast or slops inside mole prohibited. Tankers loadi fish oil must arrive free of ballast.

DENSITY: Sea water.
FRESH WATER: All berths equipped with fresh water supply at a average rate of 30 t.p.h.
FUEL: The following are available from Petroleos del Peru, Bunker " 3,500 seconds, Petroperu No. 5 (intermediate 4) 400 seconds, Dies 2 (marine diesel) 100 seconds.
FIRE PRECAUTIONS: Use of Port Authority Fire Equipment mandato during discharge of petroleum products with charge for service. Safe equipment charge applied to all vessels on tonnage moved.
GANGWAY/DECK WATCHMEN: Recommended.
CERTIFICATES: All may be required but normally only the De Certificate is asked for. If Ratguards are not used on all lines, vess liable to fines.
CUSTOMS ALLOWANCES: Any amount over normal consumpti usually cause difficulties including searching.
CARGO GEAR: No additional requirements.
IDENTIFICATION CARDS: Supplied by Agent and stamped Immigration. Authorisation required for all crew members.
CONSULS:

Argentina
Austria
Belgium
Bolivia
Brazil
Canada
China
Colombia
Costa Rica
Denmark
Dominican Republic
Ecuador
Egypt
El Salvador
Finland
France
Germany F.R.
Great Britain
Greece
Guatemala
Haiti
Honduras
India
Israel
Italy
Japan
Jordan
Lebanon
Mexico
Netherlands
Nicaragua
Norway
Panama
Paraguay
Poland
Portugal
Spain
Sweden
Switzerland
Uruguay
U.S.A.
U.S.S.R.
Venezuela
Yugoslavia

REPAIRS: Normal Deck and Engine repair facilities available throu private companies in Lima and Callao.

DRY DOCKS: Major repairs can be undertaken by the Naval Industrial Department, including careening and repairs in dock.
(a) Dry dock – length 632 ft., width 82 ft., depth 21 ft.
(b) Floating dock 107 – length 408 ft., width 48 ft., depth 20 ft.
(c) Floating dock 106 – length 288 ft., width 46 ft., depth 14 ft.
SURVEYORS: Lloyd's Register of Shipping, ABS, R.I., and N.V.
REPATRIATION: All foreign crew members who do not have Peruvian Visas, which only obtainable abroad, must be repatriated by quickest means (Air) by Agent, paying all detention expenses. Peruvian and foreign crew members available.
AIRPORT: Lima/Callao within city limits has regular direct international service to North and South America, Europe and Far East.
HOLIDAYS: Only 1st May when work is not possible.
DEVELOPMENTS: Quay No. 5 to be converted to a container terminal. Completion expected 1984.

SHIPMASTER'S REPORT: September 1980.
Navigational Notice: All vessel navigating in Peruvian waters to a distance of 200 nautical miles from the coast are required to radio their position, course, speed and destination every 12 hours to: "Capitania General de Costera y Capitania de Puerto Callao" via Callao Radio, which is very difficult to contact as naval traffic appears to be their main concern. Other coastal radio stations are even less available.
Documents: Cancel all reference to LAFTA documents which are now obsolete and also there is no longer any visaed or consular items to obtain. The requirements for air mailed copies still remains for bills of lading, cargo manifest and contents list where applicable. The remaining requirements are the same as listed.
Pilotage: The Pilots boarding station is 1.25 miles 095° from that marked on BA Chart 1853.
Anchorage: Very large area to the North and West of entrance leading line. The area to the South is reserved for Peruvian naval and merchant vessels which navigate therein without lights on occasions.
Restrictions: The maximum draft dictated by the entrance channel is 33 ft. 10 in. (10.30 m.). On occasions with a maximum tide, vessels in excess will be docked but the chances are based upon the Pilot's willingness. With a 3 ft. (1 m.) rise this vessel charted a minimum under keel clearance of 1.3 ft. on a draft of 34 ft. 3 in. within the channel outside the breakwaters.
Density: This was checked daily and found to be 1027.5 to 1028 in Berth 11.
Berthing: For discharge of grain there are 3 pneumatic suction towers on rails with 3 suction pipes to each. The two Southern units are reserved for loading road trucks while the third and most Northern discharges onto the silo belt only. Thus delays may be experienced due to lack of trucks and subsequent order of discharge regulated to accommodate this factor. There is a minimum depth of 36 ft. by hand lead at this berth.
Fresh Water: Very early request via Agent and follow up. Max. 10 t.p.h.
Gangway/Deck Watchmen: The strictest watch must be maintained at ALL hours for persons who board to steal. The worst are those whose identity card is for "Tribulante" indicating a seafarer, for they know where most ship's officers stow gear and where the keys to the chartroom are, etc. A patrol is required as well as a static gangway watch. Cargo thieves are very well organised.

Ashore, no person should travel alone in Callao or Lima.
Port Authority Permits: These are required for repairs, overside painting, etc., and a 3 man inspectorate will board to check progress and conditions.

SHIP'S OFFICER'S REPORT: January 1985.

Hull maintenance only possible after permission obtained from Port Captain.

A very extensive cabin search made on sailing day and articles not declared on arrival were taken away (if possible).

The following were not declared on arrival (but should have been declared): Cabin refrigerators, portable cabin heaters, Loadmaster computer.

In our case all charges and fines were waivered after consultations. Therefore if in doubt all items should be declared.

Make sure all ratguards are marked with ship's name otherwise they may be stolen and resold to the ship.

Ensure correct courtesy ensign is flown otherwise a fine will be imposed.

AUTHORITY: Port Captain, Terminal Maritimo de Callao.

CHANCAY: 11.35 S. 77.16 W. (See Plan Book)

Chancay is an unprotected open roadstead about 31 miles North of Callao. The main activities are the loading of fishmeal and discharging of fertilisers.
PILOTAGE: Compulsory. The Port Captain currently acts in this capacity.
ANCHORAGES: There is a good anchorage, in 5 and 8 fathoms of water, on a sand and mud bottom, located in the outer area of the bay, which is 0.5 mile long by 0.5 miles wide.
RADIO: *Arrival Advice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.
TUGS: 2 Tugs of 56 h.p.
BERTHING: There is a pier for loading barges.
LIGHTERS: 12 lighters with a capacity of 40 tons each.
CRANES: 2×14 tons capacity.
STEVEDORES: The same system applies here as throughout the Republic, the tariff only altering according to the number of workers employed.

3 shifts and 2 more if necessary.
MEDICAL: Medical consultations possible.
FRESH WATER: Not available.
FUEL: Not available.
AUTHORITY: Port Captain.

CHIMBOTE: 09.05 S. 78.37 W. (See Plan Book)

Chimbote is a berth port with possibilities to load and discharge from and into lighters if berths are not available. Main activity: Loading of fishmeal and minerals; discharging of iron, steel, and general cargo.
DOCUMENTS:
For Entry
2 Entry Declarations (Form No.1).
1 Departure License of the last foreign port en route.
1 Maritime Health Declaration (Form No. 2).
2 Passenger Lists with entry baggage (Form No. 3).
1 Consular Roll of the last foreign port en route.
1 Consular Passenger List of the last foreign port.
Customs Administration
1 Original Cargo Manifest(s) with the Consular stamp. (Form No.4).
The envelope(s) from the Consul, enclosing copies of the Consular invoices, bill of lading and cargo manifest for the port with the Consular stamp.
1 Cargo Manifest (Form No.4).
1 Cargo Manifest of cargo, but with further destination for another national or foreign port (Form No. 4).
1 Cargo Manifest in transit.
1 Gross or Net Tonnage Certificate, with Consular visa.
1 Unaccompanied Baggage List (Form No. 5).
Customs
1 Entry Declaration (Form No. 1).
1 Cargo Manifest(s) for port without Consular visa (Form No. 4).
1 Manifest of Cargo for port, but with further destination for another national or foreign port, without Consular visa (Form No. 4).
2 Passenger Lists with entry baggage (Form No.3).
2 Unaccompanied Baggage Lists (Form No. 5).
1 Crew Personal Effect List.
1 Store List, food and spirits.
1 Mail List.
Port Administration
1 Entry Declaration (Form No.1).
1 Passenger List with entry baggage (Form No. 3).
1 Unaccompanied Baggage List (Form No. 5).
3 Cargo Manifests for the port, without the Consular visa (Form No.4).
3 Manifests of Cargo for port, but with further destination for another national or foreign port, without Consular visa (Form No. 4).
3 Sets of Bills of Lading.
Also see "General" before first port
PILOTAGE: Compulsory. Official Pilot boards vessels at entrance to bay and leads ship to appropriate anchorage according to draft. Private Pilot to moor to the quays of the "Corporacion Peruana del Santa" and to "Sogesa". Vessels enter the inner roadstead through Southern side of each channel. Depart through Northern side of channel.
ANCHORAGES: Good anchorages in bay according to draft. Anchorages are of mud and sand. Best place to anchor ship of medium draft is inner side of Paso del Norte, 6 fathoms deep, near port and safe. Another good anchorage for ship of medium draft is with Island bearing 170° and Rosas Blancas bearing 275°, 6 fathoms deep.
HEALTH: Health Authorities board on arrival.
RADIO: Hablanaves Radio at Talara and Trujillo (Buenos Aires), Radio Costera at Callao.
Arrival Advice: 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.
TUGS: 6 private, 3 of 80 h.p., 1 of 60 h.p. and 1 of 165 h.p. and 1 of 180 h.p. The Port Authority has two tugs, 1 of 400 h.p. and 1 of 200 h.p.
BERTHING: 3 Piers available.
No. 1 Pier: Length 158 m., width 16 m., depth alongside 27 ft. – 28 ft.
No. 2 Pier: Used only for the loading and discharge of lighters (fishmeal). Length 54 m., width 18.40 m. Average depth 4.5 m.
No. 3 Pier: Operated by Siderperu. Length 265 m., width 25 m., depth alongside 28 ft. – 31 ft. There are two bridges for discharging coke and minerals by clamp. (Total capacity 300 t.p.h.)
LIGHTERS: 12 for dry cargo: 2 at 150 tons and 10 at 50 tons. 10 tank lighters with a total capacity of 1,300 tons.
CRANES: 5 cranes: 3×17 tons, 1×13.8 tons and 1×6.25 tons capacity.
STEVEDORES: See "Callao".
MEDICAL: Agent arranges emergency attention. Hospital and private clinic available.
TANKERS: Three zones for load/discharge of fish-oil and lubricants. Ship loads fish-oil by barges at anchor. Discharge of fuel when ship anchored to buoys by means of submarine lines.
FRESH WATER: Two barges to supply fresh water to ships, one of 40 tonnes and one of 25 tonnes. Fresh water available at Pier No. 1.
FUEL: Available by tanker lorries if special arrangements are made.
GANGWAY/DECK WATCHMEN: Watchmen are necessary.
OPENING/CLOSING HATCHES: This job is carried out by stevedores.
CUSTOMS ALLOWANCES: Tobacco: 10 packets per person per week. Wine and/or Spirits: With approval of Customs, within normal consumption.
CARGO GEAR: Vessel's derricks used, the quay has fixed crane for 50 tonnes and 3 mobile cranes for 15 tons.
IDENTIFICATION CARDS: Needed for both crew and passengers.
CONSULS: Only the Vice-Consul of Spain and Panama.
REPAIRS: Only minor repairs are possible.
DRY DOCKS: "Sima" have a 15,000 ton floating dock.
REPATRIATION: Facilities for crew changes and arranging any necessary repatriation.
AIRPORT: Port has airstrip, but it is only for national use, not for international flights.
TIME: GMT minus 5 hours, all year round.
HOLIDAYS: Cargo work can be arranged on holidays with an extra 100% charge over basic pay. The only exception is 1st May, on which cargo work cannot be arranged.
TELEPHONES: No arrangements for placing telephones on board. They are about 50 m. from ship.

SHORE LEAVE: Crew members allowed ashore.
REGULATIONS: Not allowed to use wireless when ship is in port. Nor allowed to put any boat on the water without permission of Capitania del Puerto. Not allowed to throw any waste or litter into bay. Not allowed to make unnecessary sound signals.
GENERAL: *Swell Period:* February/March and June/October.
DEVELOPMENTS: New quays to be built.
AUTHORITY: Capitan de Puerto – Direccion Capitania de Puerto Chimbote.

CONCHAN: 12.10 S. 77.00 W.

Tanker Buoy berth about 30 miles South of Callao.
DOCUMENTS: Tankers calling at Conchan must first call at Callao anchorage to be received and cleared by Authorities. Not necessary to call at Callao after discharge as clearance is simultaneous with reception.
PILOTAGE: Private Pilot boards vessel at Callao anchorage and either remains on board or returns to take vessel out, as required by Master.
BERTHING: Vessels moor to buoys. One submarine line of 16 in. reducing to 12 in. at vessel's connection, running 1,000 m. from shore opposite Conchan refinery.
LAUNCH: Launch service between Conchan and Callao or Conchan and Fish Pier at Barranco, southern suburb of Lima, during vessel's stay in port.
GENERAL: Two Customs police and two refinery employees board at Callao and remain on vessel during discharge.

ETEN: 06.56 S. 79.52 W. (Port closed)

Eten is about 348 miles North of Callao. The port is an unprotected open roastead. All cargo operations are undertaken by lighters. The main activities are the export of sugar and import of fertiliser and general cargo.
PILOTAGE: Not available.
ANCHORAGE: Vessel anchors about 0.5 miles off the Mole Head in 7 – 8 fathoms.
RADIO: *Arrival Notice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.
TUGS: 4 tugs of 80 h.p. each.
LIGHTERS: 13 lighters with a total capacity of 635 tons.
BERTHING: There is a pier for handling barges.
CRANES: 3 steam cranes, 2 × 2 tons and 1 × 15 tons. 1 diesel crane of 3 tons capacity.
STEVEDORES: See "Pimentel".
FRESH WATER: Not available.
MEDICAL: There is a hospital at Chiclayo 15 km. from the port.
CONSULS: Vice-consul of the Netherlands.
GENERAL: *Swell Periods:* Eten being an unprotected open road port it frequently occurs that the port has to be closed due to heavy swell. The swell comes up suddenly and is not subject to any specific period, but it occurs more frequently during June/September and the Easter week.

GENERAL SAN MARTIN: 13.48 S. 76.17 W. (See Plan Book)

PISCO: 13.43 S. 76.14 W.

PILOTAGE: Compulsory.
RADIO: *Arrival Advice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.
Also see "Callao" – Radio Officer's Report.
TUGS: 16 tugs available. 10 h.p. – 800 h.p.
BERTHING: 1 quay with 4 berths each 175 m. in length. Max. draft 32 ft. (25,000 tons). Cargo is loaded by portable conveyor belts.
LIGHTERS: 28 wooden lighters for general cargo, total capacity 1,800 tons. 5 steel lighters (not immediately available), total capacity 600 tons. 3 lighters for liquid cargoes, total capacity 500 tons.
CRANES: 1×13.61 tons, 1×22.68 tons and 1×6.25 tons capacity.
STEVEDORES: *Working Hours:* 0800 – 1200 hrs., 1300 – 1700 hrs., 1800 – 2400 hrs., 0100 – 0700 hrs.
109 stevedores available.
MEDICAL: There is a hospital available.
TANKERS: *Submarine Pipe-line:* The pipe-line belongs to Petroperu. Position Lat. 13° 36′ 20″ S., Long. 76° 15′ 54″ W. Length of pipe-line 700 m., diameter 8 in. Pilotage is compulsory. Depth of water 7.5 fathoms. Pumping rate 70-75 t.p.h.
FRESH WATER: Available.
FUEL: Not available.

HUACHO: 11.07 S. 77.37 W.

Huacho is an unprotected open roadstead about 69 miles North of Callao. The main activity is the loading of fishmeal and minerals and discharging of fertilisers.
PILOTAGE: Not available.
ANCHORAGE: Vessels anchor in open roads.
RADIO: *Arrival Advice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.
TUGS: 4 tugs available, 1 each at 50, 60, 72 and 180 h.p.
LIGHTERS: 29 lighters, total capacity 1,450 tons.
BERTHING: There is a pier for mooring barges, length 223 m.
CRANES: 3×13.60 tons each.
STEVEDORES: See "Pimentel" for working hours and overtime rates.
4 gangs of 9 men each available.
MEDICAL: Assistance available.
FRESH WATER: Not available.
FUEL: Not available.
GENERAL: *Swell Period:* Frequently during the Winter months (May-September).

HUARMEY: 10.06 S. 78.10 W.

Huarmey is an unprotected open roadstead for the loading of fishmeal.
PILOTAGE: Not available.
ANCHORAGE: Vessels anchor in the open roads.
RADIO: *Arrival Notice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and Agent.
TUGS: 4 tugs available, 2×145 h.p. and 1 each at 120 h.p. and 165 h.p.
LIGHTERS: 18 at 50 tons each.
CRANES: 1 of 2 tons capacity and 1 mobile crane.
STEVEDORES: See "Pimentel" for working hours and overtime rates.
3 gangs of 9 men each available.
MEDICAL: Assistance available.
FRESH WATER: Not available.
FUEL: Not available.
GENERAL: *Swell Period:* June to August.

ILO: 17.39 S. 71.21 W. (See Plan Book)

DOCUMENTS:
6 Entry Declarations.
4 Passenger Lists (disembarking).
4 Passenger Lists (in transit).
3 Personal Effects Lists.
3 Stores Lists.
1 Maritime Health Declaration.
3 Sets Cargo Manifest.
10 Cargo Manifest.
Also see "General" before first port.
PILOTAGE: No pilot station; there is a Pilot in the Capitania del Puerto, who should be notified in advance by Agents. Two hours' notice of ETA required. Pilot boards at anchorage 800 m. from extension of the SPCC quay.
ANCHORAGES: 400 m. to the North of the end of the SPCC quay, in 15 fathoms depth.
MAX. SIZE: See "Berthing".
HEALTH: Pratique given by Captain of the Port. In cases of suspected illness a doctor should be requested in advance. When the ship arrives from another Peruvian port Free Pratique is automatic.
RADIO: Cables connect with National Communications network. ETA sent to Port Authority and to Agencies.
TUGS: 1×690 h.p. tug available.
BERTHING: Berthing anytime. There are two piers, one belonging to Southern Peru Copper Corp. and one to ENAPU.
SPCC: Two vessels are able to berth alongside. Length of pier 520 ft., width 60 ft. Depth alongside varies from 35 ft. to 50 ft.
ENAPU: Length of pier 300 m., width 27 m. Depth alongside varies from 18 ft. to 60 ft. Vessels able to berth both sides. South side depth 18 ft. at inner end, 54 ft. at outer end. North side depth 24 ft. inner end, 60 ft. outer end.
STEVEDORES: Stevedores come under the Capitania del Puerto and are ordered by Agents.
Loading Rates: Copper sheets loaded 65 metric t.p.h. Fish-flour loaded at 100 metric t.p.h. in an 8-hour shift.
Working Hours: 0700 – 1200, 1300 – 1600, 1700 – 2400, 0100 – 0700 hrs. Ten gangs available of nine men each.
MEDICAL: Medical assistance ordered by Agents. Hospital "El Centro de la Salud", and the Saint Geronimo Hospital.
TANKERS: *Ilo:* Discharge line diameter 10 in., 2 lines, connection to the ship's manifold 8 in. Connection and flexible line working pressure 100 lb. A buoy mooring berth.
Depth of water 40 ft. pumping rate 80-90 t.p.h. Vessels of Petroperu have preference.
Punta Tablones: Discharge line diameter 12 in., connection to the ship manifold 8 in. Flexible connection line, working pressure 100 lb. or 400 b.p.h. A buoy mooring berth.
Max. length 750 ft. Depth of water 40 ft.
DENSITY: Salt water.
FRESH WATER: Available.
FUEL: None available.

GANGWAY/DECK WATCHMEN: Watchmen provided by Agents when necessary.
OPENING/CLOSING HATCHES: Strictly forbidden for the crew; must be done by stevedores.
CERTIFICATES: When the ship comes from foreign port it is compulsory to produce Certificate of Gross Tonnage.
CUSTOMS ALLOWANCES: Tobacco: 10 packets per person. Wine and/or Spirits: Sufficient for meal times. Normal crew consumption only.
IDENTIFICATION CARDS: Agents arrange for cards to be signed by Port Authority for each crew member.
CONSULS: None.
REPAIRS: Some minor repairs.
REPATRIATION: There are facilities for effecting crew changes and arranging any necessary repatriation. Those who are going to be repatriated must have a permit from the Port Authority to be allowed ashore.
AIRPORT: Ilo Airport, 8 km. Scheduled flights twice a week on Tuesdays and Saturdays. Regular airport in Tacna, 1.5 hours by taxi, scheduled flights twice daily to Lima.
TIME: GMT minus 5 hours. No alterations during the year.
HOLIDAYS: 1st January (New Year); Maundy Thursday and Good Friday; 1st May (Labour Day); 29th June (Saint Peter and Saint Paul); 28th and 29th July (Motherland Days); 30th August (Saint Rosa of Lima); 1st November (All Saints Day); 8th December (Our Lady); 25th December (Christmas).

Holidays which are not in the Calendar but are considered Holidays with reference to payments to the workers: 6th January (King's Day); 19th March (Saint Joseph); Corpus Christi (varies every year); The evening of the 24th June (India man day); 30th July (Motherland Day); 15th August (Feast of the Assumption); 24th September (Las Mercedes); 12th October (Race Day); 27th November (Tarapaca Battle); 9th December (Ayacucho Battle).
POLICE/AMBULANCE/FIRE: Southern Peru Copper Corporation operate fire service. Police, Tel: No. 3; Ambulance, Tel: No. 3.
TELEPHONES: No arrangements for placing telephones on board.
SHORE LEAVE: Crew members allowed ashore and identify themselves with cards signed by Capitania del Puerto given through ship's Agents.
GENERAL: Tank cleaning and well cleaning must be done 5 miles leeward of port. Not allowed to unload explosive cargo.
DELAYS: Only delays when quay is occupied by two ships. In the load/unload operations the port can attend to 4 ships simultaneously and 4 more when new quay (now being built) is completed.
DEVELOPMENTS: Terminal quay of 900 ft. long is now being built.
AUTHORITY: Capitan del Puerto, who is a Navy Officer.

LA PAMPILLA: 11.55 S. 77.09 W.

Tanker Buoy Berth about 30 miles North of Callao.
DOCUMENTS, ETC.: As for Callao.

Tankers calling at La Pampilla must first call at Callao Anchorage to be received and cleared by Authorities. Not necessary to call Callao after discharge as clearance simultaneous with reception.
PILOTAGE: Pilot boards vessel at Callao anchorage and either remains on board or returns by launch to take vessel out, as required by Master.
BERTHING: Vessels moor to buoys. 1 submarine line of 18 in. reduced to 10 in. at vessel's connection running 1,500 m. from shore opposite La Pampilla refinery. Max. size 200,000 d.w.t. or 250,000 d.w.t. with part load.
LAUNCH: Launch service between La Pampilla and Callao during vessel's stay in berth.
GENERAL: 2 Customs police and 2 refinery employees board at Callao and remain in vessel during discharge.

MATARANI: 17.00 S. 72.07 W. (See Plan Book)

Matarani is a berth port. Main activity: loading of minerals, wool, coffee, skins, tin-ingots, discharging general cargo. Matarani is an important transhipment port for cargo to and from Bolivia.
PILOTAGE: Compulsory.
RADIO: *Arrival Advice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent through Radio Station in Naval Station, frequencies as per Callao.
TUGS: 1×780 h.p., 1×690 h.p. and 1×800 h.p.
BERTHING: 1 quay with 4 berths. Length 540 m., width 20.15 m. Vessels of 570 ft. length can berth. Depth alongside 30 ft.

Berth 1A, 1B and 1C each 150 m. length. Berth 1D length presently 90.50 m., but being lengthened to 132.9 m. length.
CRANES: 5×10 tons, 4×6.25 tons and 1×20 tons lifting capacity.
MEDICAL: A hospital is available.
STEVEDORES: *Working Hours:* 0800–1200, 1300–1700, 1700–2400, 0000–0600 hrs.

9 gangs available of 15 men each.
FRESH WATER: Available.
FUEL: Not available.
GENERAL: *Swell Period:* From June to August.
DEVELOPMENTS: A Ro/Ro berth is under construction at the Southern end of Muelle de Atraque. Completion expected 1984.

PACASMAYO: 07.24 S. 79.35 W.

DOCUMENTS:
3 copies Voyage Log Extract.
2 originals and 5 copies of Entry/Exit Declaration, endorsed by Consul.
8 copies of Passenger Lists for the Port.
8 copies of Transit Passenger List.
4 copies of Store List.
4 copies of Personal Belongings Manifest.
13 copies of Cargo Manifest.
1 Maritime Health Declaration.
2 Crew Lists.
1 Vaccination List.
When this is the first Peruvian port, Gross Tonnage Certificates.
When having cargo for the port, Statement of Cargo, endorsed by Consul.
When Pacasmayo is the first or last port called, Lists or Manifests of cargo in transit (2 copies each).
Also see "General" before first port.

PILOTAGE: The port has no Pilots because it is an open bay.
ANCHORAGE: To the South of an East-West line from the quay, as there are obstacles to the North.
APPROACHES: Reference points are the lighthouse of Cruz Punta Pacasmayo with a range of 12 miles, and during the day the cylindrical tower of cement factory with a height of 50 m. situated in the S.E. of the bay. On the head of the quay there is also a small iron tower of 9 m. height with a permanent red light of 2 miles visibility. The quay is very old and only flat boats can moor.
MAX. SIZE: Wide anchorage without problems concerning length or breadth. Recommended draft 4 fathoms, but it is possible to find 6, 8 or 10 fathoms towards the West. Current from South to North at an average of 6 knots.
HEALTH: Sanitary control is carried out by the health doctor who comes on board with port officials. Normally, Masters notify any suspected illness or any other information by telegraph.
TUGS: They only bring in or take out flat bottomed barges to the vessel once the vessel is anchored.
BERTHING: Vessels anchor in open bay. There is an Iron Quay for the use of barges, length 533 m., width 10 m., depth at West end 3 m.
LIGHTERS: 9 lighters with a total capacity of 400 tons.
CRANES: 1×1 tons, 2×3 tons.
STEVEDORES: Agents order the number of gangs required. These gangs work at a tariff hour/ton and the amount is controlled by the Port Captain. The number of gangs (9 men each) depends on loading/discharging speed required and on the number of holds and winches available. For overtime rates see "Pimentel".
MEDICAL: Can be provided by Centro Preventivo del Area de Salud or by Hospital Regional de Chepen, 35 km. from port (150 beds).
DENSITY: Salt water.
FRESH WATER: Not available.
FUEL: Not available.
OPENING/CLOSING HATCHES: Carried out by the stevedores.
SHIP CERTIFICATES: Derat or Fumigation Certificate; Vaccination Certificate for Crew and Passengers; Tonnage Certificate when coming from abroad.
CUSTOMS ALLOWANCES: Only tobacco, wines, spirits required for normal consumption, which must be included in vessel's stores list.
CARGO GEAR: Ship's gear used.
IDENTIFICATION CARDS: Not required unless leaving the vessel.
CONSULS: There are no Consuls in the port.
REPAIRS: There is a small workshop in the port for minor repairs such as soldering, etc. There is no foundry.
DRY DOCKS: Nearest at Callao.
REPATRIATION: Members of crew and passengers can be repatriated subject to Port Authorities' permission and passport control.
AIRPORT: There is a small emergency airport 2 km. from the port where planes can land.
TIME: GMT minus 5 hours.
HOLIDAYS: Holidays have been restricted. The national official holidays are: 27th and 28th July (National Independence Days); 1st January (New Year); 25th December (Religious Fete); Maundy Thursday and Good Friday; variable days and 1st May (Workers' Day).
POLICE/AMBULANCE/FIRE: Police 2126; Ambulance 2225; Fire 2081.
TELEPHONES: It is not possible to install telephones on board. Communication by walkie-talkie radio.
GENERAL: Fresh and dry provisions can be supplied, such as meat, poultry, vegetables and fruits.
SERVICES: There is no tank-cleaning equipment and the discharge of tank washing and any other kind of garbage is forbidden, for the bay is a bathing area.
SHORE LEAVE: Allowed.
DELAYS: The vessel is anchored on arrival. Delays can occur due to heavy sea or rain in case of cement loading.
DEVELOPMENTS: When the mines of Micchiquillay (copper) start working, the loading capacity of the port has to be 100,000 tons per month. Consequently it is planned to build a quay for minerals or otherwise a floating island 6 miles from the port for loading raw materials by pipe-lines.
AUTHORITY: Captain of the Port.

PAITA: 05.05 S. 81.07 W. **(See Plan Book)**

DOCUMENTS:

5 Copies Peruvian "Declaracion de Entrada".
13 Crew Lists.
5 Cargo Manifests, from each port where cargo loaded, or negative.
5 Copies of each Bill of Lading.
3 Personal Effects Lists.
13 Stores Lists.
1 Tonnage Certificate from first and last port.
1 International Maritime Health Certificate.
13 Passenger Lists, disembarking, or negative.
13 Passenger Lists, in transit, or negative.
1 Clearance from last port.
1 Sealed envelope from Peruvian Consulate addressed to Customs.
(Documents should be visaed by Peruvian Consulate.)

Also see "General" before first port.

PILOTAGE: Compulsory. There are two Pilots, on 24 hour service. Arranged by Agent. The boat is an old disembarking launch, hoisting blue flag with a white "P" Pilot will board after Free Pratique has been granted by Port Captain and Health Authorities.

ANCHORAGE: Recommended in Lat. 5° 04′ S., Long. 81° 07′ W.

RESTRICTIONS: Draft restricted to 31 ft. at low water.

MAX. SIZE: Length and breadth practically unlimited.

HEALTH: Agent will notify Health Authorities about the vessel's arrival.

RADIO: Recommended Balboa Radio.

Arrival Notice: 24 hours' Notice of Arrival should be sent to the Captain of the Port and Agent.

TUGS: 1 tug of 850 h.p., 1 tug 360 h.p. and one launch 60 h.p. used by the Pilot.

BERTHING: One finger pier, length 475 m. width 36 ft. Four berths available, depths are as follows:

No. 1A (North-West Berth)	32.0 ft.
1B (North-East Berth)	32.0 ft.
1C (South-West Berth)	23.8 ft.
1D (South-East Berth)	22.9 ft.

A safety margin of 3 ft. should be observed. It is advisable to request (from Pilot) Berths "B" or "D", if empty, due to the prevailing winds. The berths have good fenders.

Cranes with capacity of 25,000, 15,000 and 10,000 lbs. available.

STEVEDORES: Arranged by Agent at 24 hours' notice.

Working Hours: 0800 – 1200, 1300 – 1700, 1700 – 2400 and 0000 – 0700 hrs.

Night Work: Possible, as long as it is ordered in plenty of time.

10 gangs of 9 men each available per shift.

MEDICAL: There is a local hospital with all facilities.

TANKERS: There are 4 mooring buoys 0.25 m. East of the finger pier. Facility is the property of Petro-Peru. Oil loaded and discharged by submarine pipe-line.

DENSITY: 1030.

FRESH WATER: There are 3 drinking water hydrants on each side of the pier. Vessels require pumps to take on water from the storage tank (capacity 14 tons).

FUEL: Not available.

FIRE PRECAUTIONS: Port Authority fire equipment stationed at the end of the pier.

STORES: Fresh provisions available.

GANGWAY/DECK WATCHMEN: Available on request.

CERTIFICATES: Not requested.

CUSTOMS ALLOWANCES: Two cartons and one bottle per person.

CARGO GEAR: No additional requirements.

IDENTIFICATION CARDS: Not required.

CONSULS: Ecuador.

REPAIRS: No facilities.

REPATRIATION: Allowed on request to the Port Captain.

AIRPORT: Piura, airport 55 km. with domestic flights to Lima International Airport.

HOLIDAYS: 1st May only.

GENERAL: Painting and chipping ship's side restricted. Very strict concerning rat-guards, disposal of garbage, etc.

AUTHORITY: Captain del Puerto.

PIMENTEL: 06.50 S. 79.56 W. **(See Plan Book)**

Pimentel is an unprotected open road port, loading/discharging only from/into lighters. Clearance is possible day and night, including Sunday and holidays, but of course with overtime additional. Main activity: Sugar export, import of fertilisers and general cargo.

PILOTAGE: Not available.

ANCHORAGES: Vessels usually anchor about 1.5 miles off the Pier Head in 7 – 8 fathoms.

RADIO: *Arrival Notice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: 2 at 82 h.p., 2 at 120 h.p. and 2 at 134 h.p.

LIGHTERS: 15 lighters with a total capacity of 1,170 tons.

CRANES: On the mole there are 3 diesel cranes each 3 ton capacity, 3 steam cranes with 4, 6 and 15 ton capacity. Maximum dimensions of cargo handled 27 ft. (length)×15 ft. (wide)×21 ft. (height).

STEVEDORES: *Working Hours:* 0700 – 1100 and 1300 – 1700 hrs. Overtime (plus 100%) 1100 – 1300 and 1700 – 2400 hrs. Overtime (plus 200%) 0000 – 0700 hrs.

On Sundays and holidays an additional 100% to the above-mentioned tariffs.

MEDICAL: There is a hospital at Chiclayo 15 km. from the port.

TANKERS: *Submarine Pipe-line:* Diameter 8 in. max. draft 18 ft. 1 pipe-line for clean products and 1 for dirty products. Length of pipe-line 1,770 m.

FRESH WATER: Not available.

FUEL: Not available.

CONSULS: Vice-consul of the Netherlands.

SURVEYOR: Mr. Manuel S. Reyes H., sub-agent of Lloyd's of London.

GENERAL: *Swell Periods:* Pimentel being an unprotected open road port it frequently occurs that the port has to be closed due to heavy swell. The swell comes up suddenly and is not subject to any specific period, but it occurs more frequently during June-September and the Easter week.

PUERTO CHICAMA: 07.42 S. 79.26 W.

Puerto Chicama is about 295 miles North of Callao. Fishmeal is loaded from lighters in an open roadstead.

PILOTAGE: Not available.

ANCHORAGE: Vessels anchor about one mile from the Mole.

RADIO: *Arrival Advice:* Advise general Agents in Lima who will telephone Port Agents.

TUGS: 3 tugs available, 1 of 65 tons and 2 of 80 tons each.

BERTHING: 1 Pier, length 324 m.

LIGHTERS: 20 lighters with a total capacity of 1,000 tons.

CRANES: 4 cranes, 2 of 2 tons, 1 of 4 tons and 1 of 6 tons.

STEVEDORES: Working hours are from 0700-2400 hrs. These hours may be exceeded to complete loading. Five gangs of 9 men are available.

FRESH WATER: Not available.

FUEL: Not available.

GENERAL: *Swell Period:* During the months of June, July and August.

SALAVERRY: 08.13 S. 78.59 W. **(See Plan Book)**

DOCUMENTS: See "Callao".

PILOTAGE: Compulsory.

RESTRICTIONS: Harbour entrance is sand and liable to silting. Advisable to check draft requirements in advance, as depths are subject to latest dredging. Designed depths: Entrance channel 11.0 m. Basin 10.0 m. Berths 11.0 m.

MAX. SIZE: Approx. 25,000 d.w.t. with up to 29 ft. draft. Draft varies greatly and quickly due to heavy constant sanding, although dredging is practically continuous.

HEALTH: Cable Agent requesting Free Pratique. Agent must be notified in advance if disease suspected on board.

RADIO: *Arrival Advice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: 4 tugs available, 1 each at 690 h.p., 190 h.p., 85 h.p. and 40 h.p.

BERTHING: *No. 1 Pier:* Length 225 m. Vessels able to berth both sides. Max. draft 28 ft. There are pipes installed for the discharge of liquids and loading of molasses and alcohol.

No. 2 Pier: Length 230 m. Vessels able to berth both sides. Max. draft 28 ft. This pier is specially for the loading of sugar in bulk, 2 loading bridges available, loading rate 300 metric t.p.h. each.

STEVEDORES: *Working hours:* 0700 – 2300 hrs. Sugar and molasses in bulk loaded 24 hours a day. 10 gangs available of 9 men each.

CRANES: 1×22.68 tons, 1×13 tons, 2×6.25 tons and 1×4.5 tons.

MEDICAL: At Trujillo, 15 km. from the port.

TANKERS: *Submarine Pipe-line:* Length 700 m., diameter of 10 in., depth 26 ft.

FRESH WATER: Available. Capacity of shore tank 800 tons.

FUEL: Not available.

REPAIRS: Workshops available.

GANGWAY/DECK WATCHMEN: Recommended.

CUSTOMS ALLOWANCES: Any amount held over normal consumption may result in Customs search being imposed.

IDENTIFICATION CARDS: Supplied by Agent and stamped by Immigration. Required for all crew members.

HOLIDAYS: Only 1st May when work is not available.

CONSULS: Nearest at Callao/Lima.

GENERAL: Due to constant swell and undertow which, during Winter months, May/September, may even close port, it is recommended vessel moor with greatest possible number of synthetic lines which must be constantly adjusted, otherwise usual line breakage will increase.

SAN NICOLAS: 15.14 S. 75.14 W. **(See Plan Book)**

LOCATION: The port of San Nicolas Bay is located between the parallels of 15° 09′ 30″ S. and 15° 14′ 30″ S.

The harbour and its approach were surveyed in 1962 by the Peruvian Navy Hydrographic Service and the following charts were published in 1965: Chart 2218 shows the San Juan and the San Nicolas Bay, Chart 2220 shows the Southern part and the pier area of San Juan Bay. Chart 2231 shows the Southern part and the pier area of San Nicolas Bay.

A vessel is considered to be an "arrived vessel" when, after entering San Nicolas Bay, she has arrived at pilot station (1 mile North of Pier Head).

DOCUMENTS: The following documents are required for presentation to Port Authorities on arrival and departure:

On Arrival:

Type of Documents	Total	Port Capt.	Customs	Immigration	Agent
Clearance from previous port.	1	1	—	—	—
Health Declaration (Declaracion Maritima de Sanidad). World Health Organisation Form. Reglamento No. 2 Anexo 5. (Master may prepare this upon arrival on form furnished by Agent if none available on board).	2	1	—	—	1
General Declaration Form No. 1 (Declaracion General). Instructions on reverse side of form to be provided by Agent.	5	1	2	—	2
Cargo Manifest (Sobordos) Form No. 2, for San Nicolas.	4	1	2	—	1
Cargo Manifest in Transit. (If there is any cargo on board).	3	1	1	—	1
Crew List Form No. 3. Instructions on reverse side of form.	5	1	2	1	1
Passenger List Form No. 4. To San Nicolas from all ports of call or statement that there are no passengers for San Nicolas.	5	1	2	1	1
Passengers Baggage Declaration. If there is any (itemised list).	4	1	2	—	1
Ship's Store Declaration (Store List/Bazaar List) Form No. 5, including itemised list of slopchest. It is most important that exact quantities of all stores be shown. Vessels at time of reception by Customs Officer will have physical check made, all quantities found in excess of those listed will be confiscated and vessel fined.	5	1	2	—	2
Crew's Personal Effects Declaration. It is most important that all cigarettes, tobacco, wine, spirits, radio sets, binoculars, cameras and all new articles in possession of Officers and crew be shown in this declaration.	4	1	2	—	1
Postage Manifest.	2	1	—	—	1
*P&I Certificate (copy).	1	1	—	—	—
*Hull Insurance Certificate (copy).	1	1	—	—	—

**Note:* If vessel does not have on board, Owners have to telex, giving name and number of companies covering them to prevent fines.

On Departure:

Type of Documents	Total	Port Capt.	Customs	Immigration	Agent
Health Declaration (Declaracion Maritima de Sanidad). World Health Organisation Form, Reglamento No. 2, Anexo 5. (Master may prepare this upon arrival on form furnished by Agent if none available on board).	1	1	—	—	—
General Declaration Form No. 1 (Declaracion General). Instructions on reverse side of form to be provided by Agent.	5	1	1	—	3
Cargo Manifest (Sobordos) Form No. 2, for San Nicolas.	5	1	3	—	1
Cargo Manifest in Transit. (If there is any cargo on board).	2	1	—	—	1
Crew List Form No. 3. Instructions on reverse side of form.	5	1	2	1	1
Passenger List Form No. 4. To San Nicolas from all ports of call or statement that there are no passengers for San Nicolas.	5	1	2	1	1
Passengers Baggage Declaration. If there is any (itemised list).	1	1	—	—	—
Ship's Store Declaration (Store List/Bazaar List) Form No. 5, including itemised list of slopchest. It is most important that exact quantities of all stores be shown. Vessels at time of reception by Customs Officer will have physical check made, all quantities found in excess of those listed will be confiscated and vessel fined.	1	1	—	—	—
Crew's Personal Effects Declaration. It is most important that all cigarrettes, tobacco, wine, spirits, radio sets, binoculars, cameras and all new articles in possession of Officers and crew be shown in this declaration.	1	1	—	—	—
Postage Manifest.	1	1	—	—	—

The above has been up-dated according to new Peruvian Government Regulations issued by Supreme Decree No. 011-83-MA dated July 18th, 1983.

The Master must be sure to get the corresponding clearance from the previous port, and to fill in the official forms provided by the Agency.

If the vessel has no forms on board, they will be filled in after arrival, and an extra set provided for the subsequent voyage.

Controls are very strict and any attempt to smuggle goods is heavily fined; the same applies to any contravention of port regulations, which are internationally known, such as anti-pollution measures, use of the radio whilst at anchor, disorderly conduct of crew members, etc.

Normally Masters can change foreign currency in the local banks. Any crew member or passenger going ashore with foreign currency should change his money in the bank. This is not now a strict regulation, as it was before. For security sake, however, it is better to change money in the bank or in the Agency Office. The Agency will help the Master with Peruvian cash advances, that he might require, or will direct crew members through proper channels to the local banks.

The following documents should be available for inspection:

Ship's Papers.

Valid Fumigation or Exemption Certificate.

Crew's Identity Documents.

International Vaccination Certificates of all persons aboard.

List with following data: Date and port of issue of Ship's Register, date and port of issue of Health Certificate, date of vessel's building and yard, list of ports of call with dates during previous four months.

PILOTAGE: Pilotage is compulsory for berthing. When approaching the pier, the docking speed should not be more than 50 cm. per second, or about 1 knot. No vessel may proceed to the pier until permission to berth has been granted. While loading, during periods of heavy swells and surge, a Pilot will be on board permanently. Masters are requested to make arrangements and facilities available.

Upon arrival in port, vessels must wait for Pilot. The starboard accommodation ladder must be rigged for Port Officials and Agency representatives. Ships approaching San Nicolas must fly their national, Peruvian, call letters and quarantine flags. If vessel is carrying any type of explosive material, she must fly "B" flag.

ARRIVAL ADVICE: All vessels proceeding to San Nicolas Port will telex to Empresa Minera del Hierro del Peru, Telex: 20005PE Hierrope; and Agentes Navieros San Nicolas, S.A., Telex: 21410PE Agnav; her ETA, 5 days, 48 hours and 24 hours prior to arrival.

When vessels are within or outside the 200 miles of jurisdictional Peruvian waters, they have to contact Paita (OBY2), Callao (OBC3), or Mollendo (OBF4) coastal stations, in order to transmit their messages; a Pre-Stowage Hatch List has to be transmitted to Agnav giving tonnage per hatch and loading sequence.

Berthing instructions and other messages from port Agent at San Nicolas will be transmitted by the above coastal stations.

The port Agency is Agentes Navieros San Nicolas, S.A., Telex: 21410PE. Any inquiry regarding berthing, loading, etc. will be answered promptly by the coastal stations above.

Changes in ETA should be transmitted as soon as possible.

Vessels can get in contact by VHF communication system (Channel 16) 4 hours before arrival at San Nicolas by calling Agnav.

Anything not related to vessels calling at San Nicolas or San Juan should be addressed to Head Office in Lima, Paseo de la Republica 3587, 8th Floor or P.O.Box 1229, Lima, Peru. Tel: 418314.

Also see "Radio".

BREAKWATER: A 2,653 ft. long breakwater has been built in order to reduce the effects of the swell alongside the pier. The breakwater is at the West side of the pier 875 yards off and does not run parallel to the pier, but at N. 36° 35′ 28″ E. angle. The North end of the breakwater is 1,430 ft. from the North end of the dolphin, but the perpendicular distance from the pier to the closest point of the breakwater is only 1,090 ft.

At the North end of the breakwater there is a light with the following characteristics: Fixed red light, visible 3 miles.

AIDS TO NAVIGATION:

(a) San Juan Lighthouse, located on Pt. San Juan, Lat. 15° 21′ 27.2″ S., Long. 75° 10′ 49.1″ W. Characteristics: 2 W.Fl. ev. 22.5 secs. light 0.4 secs. eclipse 3.6 secs. light 0.4 secs. eclipse 18.1 secs. Height of light above sea level 85.03 m. vis. 22 miles. Sector illuminated 360°. Type of building: Circular concrete tower, white.

(b) San Nicolas Lighthouse, located on Pt. San Nicolas in Lat. 15° 15′ 11.0″ S., Long. 75° 15′ 20.6″ W. Characteristics: 1 W.Fl. ev. 4 secs. Height of light above sea level 58.60 m. vis. 20 nautical miles. Sector illuminated 360°. Type of building: Square steel and plastic tower, painted 2 sides black and 2 sides white.

(c) Fixed red light, vis. 3 nautical miles, located on the head of the San Nicolas Pier.

(d) Around the dolphin which is North of the pier head, there are 9 red lights, 10 ft. above the water level and lower than the dolphin deck, visible only from 1 mile distance.

(e) There is a radio beacon located Lat. 15° 21′ 27″ S., Long. 75° 10′ 09″ W., transmitting on 395 kHz – 24 hours and signal letters SJN.

(f) In position Lat. 15° 14′ 36.5″ S., Long. 75° 14′ 08.5″ W. exists a luminous buoy with following characteristics: 1 white flash ev. 4 secs. light 0.4 secs. eclipse 3.6 secs. Sector illuminated 360° vis. 3 miles. Height 5 ft.

ANCHORAGES: The anchorage recommended for vessels waiting for berth is in inner portion of the bay, North of the parallel and East of meridian through San Nicolas Point in depths of 15 to 20 fathoms. When anchoring, it is essential to leave sufficient sea room, about 0.75 miles for ships to manoeuvre in and near the berth.

Wreck of M/S *Templar* lies in position: Lat. 15° 13′ 27″ S., Long. 75° 15′ 01″ W., or 341° from the pier head, distance 1.6 nautical miles. The obstruction lies in approximately 150 ft. of water. Clearance above the obstruction is 60 ft. Do not anchor in the vicinity of the wreck.

MAX. SIZE: The following are the maximum permissible vessel's characteristics to be accepted at the Hierro-Peru – San Nicolas Loading Pier:

LOA – 1050 ft.

Max. beam – For OBO's, or bulk carriers 53 m.
For ore carriers or O/O 161 ft. (49 m.)

Max. draft – 59 ft. (17.98 m.)

Max. airdraft – 40 ft. 3 in. (12.26 m.)

RADIO: Coast Radio Station "OAS" is located in port of San Juan and serves both San Juan and San Nicolas. This station listens on 500 kHz, 1200 – 2200 hrs. GMT each day. It handles traffic on 410, 425, 444, 448, 454, 468, and 480 kHz.

There is a new transmitter with the following frequencies schedule:

8,680 kHz – 1600 – 1630; 2000 – 2030 hrs. GMT

16,978 kHz – 1330 – 1400; 1630 – 1655; 2100 – 2200 hrs. GMT

TUGS: 2 small tugs available at 300 h.p. each

BERTHING: *Pier and Mooring Facilities:* The pier is located at the South side of the bay and is built in a North-South direction. It is constructed of pre-stressed concrete and steel pipe-lines with deck 1,000 ft. long and 50 ft. wide. The deck is 11 ft. 3 in. above MLW.

At the pier head, a 50 ft. diameter mooring dolphin has been constructed to make fast the stern lines of any vessel bigger than 900 ft. overall length. Distance from Northern end of pier to Northern end of dolphin 198 ft.

There are 3 big bollards, 2 pelican hooks and an electric winch to make fast the stern lines. There is also a connecting bridge from the pier to the dolphin, which is 148 ft. long.

There is a fendering system on both sides of the pier consisting of wood pilings and a continuous rail of laminated lumber and rubber cylinders which keep vessels 5 ft. from the concrete pier. On the West side of the pier (ore-loading side) there are 28 mooring cleats, 12 bollards and 3 double mooring bitts. At the centre of the pier-head there is one bollard. On the East side of the pier there are 23 cleats, 2 bollards and one double mooring bitt.

The depth of the loading berth at the West side of the pier is 18.9 m. alongside the pier and up 91.44 m. Westward from the pier fender, except in the place known as "anchor pocket" which is located between the pier-head and the dolphin. The anchor pocket is 70 ft. deep, 250 ft. long and 300 ft. wide. When docking the 2 anchors are let go in that pocket where enough water exists to prevent any collision of the ship with her own anchors when she is fully loaded.

The East side of the pier still has the original depth, which is 12.5 m. The bottom alongside is mud and sand. The ore ship loader has a pier straddle clearance height of 14 ft. and width of 12 ft. when the gantry is positioned inshore.

Berthing and Mooring: Vessels calling at San Nicolas for the discharging of general cargo must berth on the East side of the pier with the starboard side of the ship to the pier. Such vessels use their own regular mooring lines.

Ore vessels berth at the West side of the pier with the port side of the ship to the pier. Wires are not permitted as moorings to the pier except when attached to tension winches.

VERY IMPORTANT: While vessels are alongside the pier, engines must be ready for immediate use. Sufficient crew must be on deck at all times to tend mooring lines and heave in the slack as loading progresses. Failure to do so may result in a stoppage of loading and the vessel being moved out from the berth.

LOADING: Prior to commencement of loading the Master or Chief Officer will deliver to the port Agent a pre-stowage plan with the following information:

Total cargo required, calculated tonnage per hatch, sequence of loading, fuel on board, water and stores on board in long tons, and calculated draft and trim upon completion of loading.

Loading is generally carried out at a rate of about 4,000 long tons per hour.

Tonnage on board at any stage of the loading is available from the Loading Master, the Pilot on board, or at the scale house at the upper end of the pier. In order to avoid last minute delays, it is very important that a constant check be made of vessel's draft, ballast left to discharge and cargo on board during the entire loading. *Any change in tonnage of cargo required must be reported to the Port Agent or Loading Master not later than when there is approximately 2,000 long tons remaining for completion of loading, and always in writing.*

It is convenient to check drafts, ballast and tonnage of cargo on board each time the loading gantry shifts from one hatch to the next. While loading is actually in progress in a hatch, no loading interruptions are permitted except in case of emergency. At the termination of each pouring, a slip stating cargo loaded and draft readings, will be delivered to the Chief Officer.

In calculating the tonnage required to fully stow a hold, it should be remembered that cargo is spout trimmed only.

No trimmers/bulldozers are available at San Nicolas. Vessels will depart from the pier immediately upon completion of loading.

The Pilot will take the vessel out from the berth. If the Master wants to anchor in San Nicolas Bay prior to proceeding to sea, he must advise the Pilot who will in turn advise suitable anchorage. The Master will advise the Pilot of the estimated time of departure in order that this may be reported to the Port Authority.

Delays of port operations, as well as delays of other vessels waiting to berth, caused by a vessel which for any reason is not prepared and able to move from the pier when so ordered, *are chargeable to the vessel which causes the delay.*

Clearance papers, bills of lading, statement of facts and all necessary papers for clearance of the vessel will be delivered shortly after completion of loading. This can be accomplished while the vessel is being moved from the berth, or at anchor, but never alongside the pier when other vessels are waiting for loading turn.

CRANES: None.

MEDICAL: Medical attention may be arranged through the port Agent's office. No person will be attended unless he is provided with a letter from the Master authorising such treatment. All costs incurred will be for the vessel's account.

Send radio message advising how many people require medical attention in order to make proper appointments with doctors at San Juan Hospital. Otherwise the medical inspection will be very difficult.

STEVEDORES: *Working Hours:* 0800 – 1200, 1300 – 1700, 1800 – 2400, 0100 – 0700 hrs.

TANKERS: On the West and East side piers there are 3 raisers to which 3×8 in. diameter hoses can be connected to a main pipe-line of 16 in. diameter for the discharging of bunker C. Flanges are U.S. Standard (ASA). Location on the pier is for midship connection on vessels. Maximum pressure permissible is 125 p.s.i. and maximum temperature 135° F. The length of the 16 in. pipe-line from the manifold on the pier to the storage tanks is 4,840 ft. There are 3 storage tanks of 7,000 bbls., 67,000 bbls. and 252,000 bbls. Total capacity 326,000 bbls. The height of the tanks above MLW is 142 ft. to the bottom and 190 ft. to the top of the tanks. The intakes to the tanks are at the top.

Diesel oil is discharged in San Nicolas, only one diesel oil storage tank of 67,000 bbls.

There is a crew on the pier to sling the hoses; the vessel's crew is required to operate the winch, boom, hoist the hoses on board, and connect same to vessel's manifold.

BALLAST: Special attention is called to ballast requirements of vessels which do not need ballast in order to enter under the loading boom. Such vessels are required to carry sufficient ballast for safe handling during berthing. It is permissible to discharge clean ballast in the bay.

A ballast discharge rate of 4,000 long tons per hour is recommended. Any delay in loading operations due to slow deballasting, is not only on account of the vessel, but if any other vessel is waiting for loading turn, the vessel slowing down the loading process is liable to be undocked in order that the vessel waiting for turn to load may be docked. All time lost and expenses for undocking and redocking the vessel is for Owner's account.

FRESH WATER: Not available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Recommended by crewmen to prevent stowaways.

OPENING/CLOSING HATCHES: Stevedores/crew.

CARGO GEAR: The loading boom extends 60 ft. from face of pier fender, and can be retracted from this position to a minimum length of 29 ft. Gantry with loading boom is mobile. Range of its mobility is 900 ft. starting at a point 110 ft. from the head of the pier. Shifting of vessels during loading is therefore not required. When not loading, the gantry is parked at the inner end of the pier, and its boom with the loading conveyor belt is raised in a vertical position. In the most vertical position the boom has a clearance of about 4 ft. inside the face of the dock fender.

After the gantry has been moved into loading position, the boom is lowered to horizontal position. Height from water level to underside of boom is 41 ft. Vessels must be ballasted so that height of any coaming or any other objects in the vicinity of the hatch where loading is to start will not exceed 40 ft. above waterline.

IDENTIFICATION CARDS: Required (Seaman's Book or Passport).

Also see "Shore Leave".

CONSULS: At Lima.

REPAIRS: Except in extreme emergency, ship repairs cannot be effected at this port.

TELEPHONES: Available, Masters are able to communicate with any port in the world.

REPATRIATION: In cases where crew changes are to take place in San Nicolas, at least 7 days' advance cable notice is required to obtain the necessary Immigration Authorities' permission. The advance cable must set forth name, nationality and passport number. If the above is not complied with, crew changes cannot be carried out. The above applies also to passengers.

GENERAL: It is forbidden to throw out garbage, debris or any kind of dirty ballast in the Bay.

It is forbidden to hunt seabirds; to throw out explosive material or to use any pyrotechnic object on board.

Vessels can do underwater work only with Port Captain's permission.

Reception: Official hours for Port Officials are from 0700 to 1100 and 1300 to 1800 hrs. Monday to Friday. Upon request, Port Officials will board vessels at any time day or night, Sundays and holidays included. Office hours for loading operations are from 0800 to 1600 hrs. Monday to Saturday.

Emergency Signals: A number of short blasts on the whistle indicates an emergency. The whistle will not be used except for emergency in accordance with Peruvian regulations.

Provisions: Provisions are available from a local ship chandler. Cable address: Pronamar Sannicolas. Cold, chilled and dry stores available upon arrival. Mailing address: Pronamar y Cia., S.A. c/o. Empresa Minera del Hierro del Peru. Apartado 1229, Lima, Peru. Neither Agnav or Hierro Peru has any interest in this independent company.

Stowaways: Unauthorised persons should not be allowed on board the vessel. Cases of attempted stowaways have occurred. Masters must take all necessary care and precautions to insure against unauthorised personnel being on board while in port.

Stowaways aboard on arrival should be reported to the Port Captain in order that the necessary steps be taken to prevent their unauthorised landing. It should be noted that all costs for the repatriation of stowaways is for account of the vessel concerned.

Crew Members Left Ashore at Time of Departure: Masters are requested to have all vouchers and lists of personal effects (in triplicate) prepared for delivery to port Agent as soon as possible covering deserters and hospitalised crew members.

A letter of authorisation is required when the port Agent is expected to provide hotel accommodation, meals, medical attention, transportation, travel expense, and/or cash advanced for account of vessel.

No man may be paid off from a foreign vessel without prior permission from the Port Captain. Under Peruvian Law, Agents are responsible for repatriation of all foreign seamen left in Peru. Masters will be requested to sign letter of indemnity covering seamen landed for hospitalisation, paid off, or desertion. Disembarking of crew or passengers for reasons other than emergency is not permitted at this port, unless the prior authorisation of Peruvian Immigration and Maritime Authorities is granted to that effect. Authorisation for disembarkation requires at least 7 days' prior notification by radio. The notification must provide names, passport number, age and nationality of persons to be embarked or disembarked.

WEATHER: There is generally a prevailing S.E. wind which may vary from a light breeze to a strong wind. The months of May, June, July, August and September are Winter months. Swell and surge are occasionally experienced in the port.

SHORE LEAVE: Shore leave may be granted at the Master's discretion. All crew members must be issued ship's passes before proceeding ashore. These must be shown to the Immigration Authorities when required. Peruvian laws and Immigration Regulations must be strictly adhered to in order to avoid unnecessary difficulties. Crew members are not permitted to travel 100 km. outside of San Nicolas – San Juan port areas without written authorisation or pass from the Master approved by Immigration Authorities.

CONDITION OF CARGO HOLDS: Cargo holds must be properly cleaned. In this respect, special care must be taken when vessel, prior to her arrival at San Nicolas, has carried the following cargoes: Gypsum, phosphate, pyrite, coal, sulphur, silica, aluminium, sand gravel or quartz, or any other ore containing arsenic, phosphorous, silica, aluminium or copper.

Prior to commencement of loading, cargo holds will be inspected by a Representative of the Shippers. Chief Officer has to accompany the Surveyor during the inspection.

MAIL: All mail received for holding by the port Agent, will be delivered to the vessel upon arrival. For quickest delivery, mail should be addressed as follows: c/o Agentes Navieros San Nicolas, S.A., Apartado 1229, Lima, Peru.

Officers or crew members should be advised that duties will be charged by the Peruvian Customs Authorities on contents of parcels mailed to them at Peruvian ports. Outgoing ship and crew mail will be accepted ONLY directly from the Master or his designated Officer. The vessel will be billed the corresponding amounts for postage.

AGENT: Agentes Navieros San Nicolas, S.A., P.O. Box 1229, Lima. Tel: 410636. Telex: 20005PE Hierrope. Cables: Agnav Sannicolas.

SUPE: 10.48 S. 77.45 W.

Supe is about 84 miles North of Callao. Cargo operations are undertaken in an open unprotected roadstead. The main activities at the port are the loading of fishmeal and discharging of fertilisers, cellulose and chemical products.

PILOTAGE: Not available.

ANCHORAGE: Vessels anchor in the open roads.

RADIO: *Arrival Advice:* 24 hours' Notice of Arrival should be sent to the Captain of the Port and the Agent.

TUGS: 8 tugs available, 1 of 65 h.p., 2 of 85 h.p., 4 of 134 h.p., and 1 of 165 h.p.

BERTHING: There is a pier for mooring barges, length 331.5 m.

LIGHTERS: 32 (14 of wood and 18 of steel) for dry cargo only. The capacity of the lighters varies from 50 to 100 tons. Total capacity being 2,100 tons.

CRANES: 3×9 tons and 1×11 tons.

STEVEDORES: See "Pimentel" for working hours and overtime rates. 5 gangs of 9 men available.

MEDICAL: There is a hospital at Barranca.

TANKERS: *Submarine Pipe-line:* One line 10 in. diameter for dirty products and one line 8 in. diameter for clean products. Depth of water 48 ft. At Paramonga there is a 10 in. line, depth 36 ft.

FRESH WATER: Not available.

FUEL: Not available.

GENERAL: *Swell Period:* June/August.

TALARA: 04.35 S. 81.17 W.

DOCUMENTS, and all general information, refer to "Callao".

PILOTAGE: Compulsory. In the vicinity of Talara there are several off-shore oil drilling platforms and near the entrance to the port there is a shallow of 24 ft.

ANCHORAGES:

Summer	Lat. 04° 34′ 09″ S.,	Long. 81° 17′ 36″ W.	9.25 Fathoms
Winter	Lat. 04° 34′ 12″ S.,	Long. 81° 17′ 29″ W.	10 Fathoms
3rd Position	Lat. 04° 34′ 03″ S.,	Long. 81° 17′ 42″ W.	6 – 10 Fathoms

RADIO: Arrival Notice should be sent at least 24 hours before arrival to Captain of the Port and Agent via the government radio station OAH. Station on 500 kHz from 0800 to 2400 hrs.

TUGS: 1×13.5 h.p.

BERTHING: At Talara there are 2 berths for loading fuel and water; 1 is a regular quay, the other a petroleum berth in which vessels lie, moored to dolphins alongside hose platform.

Quay length 385 ft., depth alongside 18 ft. to 34 ft.

Petroleum berth, length 585 ft., depth alongside 34 ft.

Talara is mainly a bunkering port as it is the main port for the Northern Peru Oilfields. The little general cargo discharged is done at the quay; bunkering being done at the quay and at the dolphin berths.

Larger vessels load/discharge into lighters at anchorage. Seven lighters are available, total capacity 1,400 tons.

CRANES: 3×5 tons, 1×31 tons and 1×22.5 tons.

TANKERS: See "Berthing".

Submarine Pipe-lines: 12 in. diameter. Vessels with a max. draft of 36 ft. can moor to the pipe-line.

STEVEDORES: It is possible to work 24 hours a day with interruptions at meal hours. 3 gangs of 16 men each available. Overtime only charged for Sundays and holidays at 50%.

FRESH WATER: Available alongside berths.

FUEL: Available alongside berths. Bunker "C" 3,500 seconds, Petroperu No. 5 (Intermediate 4) 400 seconds, Diesel 2 (marine diesel).

MEDICAL: A private clinic is available.

CONSULS: Panama and Nicaragua.

REPAIRS: Minor repair facilities.

GENERAL: Smoking is prohibited on deck, at the piers and near the refinery installation.

NOTES

Please also advise Shipping Guides Ltd.

Philippines

GENERAL

DOCUMENTS: *To be submitted in all Government & Private ports:*
1 copy of Quarantine Pratique.
6 copies of the Inward Cargo Manifest for all cargoes to be discharged in the Port.
2 copies of Cargo Storage Plan or Hatch List.
3 copies of Store List.
3 copies of Passenger List.
4 copies of the Crew List.
4 copies of the Crew Declaration List.
3 copies of Bonded Store List.
3 copies of Firearms and Ammunition Inventories.
3 copies of List of Drugs and Narcotics.

Original copies of all through cargo manifest destined to other ports to be deposited with the Customs Inspector on board and to be returned to the Master prior to the departure of the vessel.

Clearance from the last port.

SHORE LEAVE: Nationals of countries with whom the Philippines maintains diplomatic relations are allowed ashore after securing a pass from the Immigration Officer in the Port.

REGULATIONS: We quote below pertinent sections of PPA Administrative Order No. 13–77 regarding PPA General Port Regulations on Arrivals/Departures of Vessels and Berthing Regulations:

Article II – Arrivals and Departures

Section 4. *Notice of Arrival* – The Owner or Agent of every vessel other than a vessel of 100 g.r.t. or less, intending to call at a port shall, within the time specified in Section 29 of these Regulations, prior to the ETA, give notice in writing to the Authority of its arrival, and make application for a berth if it is intended to berth at the wharf, pier, or anchorage within the Port, Port District or harbour limits.

Section 5. *Particulars to be furnished* – The notice of arrival and the Application for a Berth shall be a form prescribed by the Authority and shall contain full particulars regarding:
(a) Name of vessel and its flag.
(b) The Gross Registered Tonnage (g.r.t.) and Nett Registered Tonnage (n.r.t.).
(c) Draft, LOA, and beam.
(d) Names of the Owner, Master, ship's Agent in the port of call.
(e) ETA and ETD of vessel.
(f) Tonnage of cargo to be discharged and loaded.
(g) Dangerous Cargo (Whether to be discharged or not).
(h) Number of passengers, disembarking and embarking.
(i) Any other pertinent information relating to the working (e.g. heavy lifts) or safety of the vessel in the port.

Section 6. *Hoisting of National Colours* – The Master of every vessel entering or leaving a port between sunrise and sunset shall cause to be hoisted its national colours and signal letters, if any. The national colours shall continue to be exhibited while the vessel remains in port.

Section 7. *Immigration and Quarantine Signals* –
(a) The Master of every vessel arriving from a foreign port shall exhibit the Customs, Immigration and Quarantine signals as prescribed by those government agencies. Such signals shall remain hoisted until the proper officer has given the permission to lower those signals.
(b) No vessel other than an authorised vessel shall approach within 200 m. to a vessel which is exhibiting the Immigration, Health, or Customs signals. An authorised vessel shall mean an Immigration, Health, Customs, Pilot Launch, or Philippine Coast Guard (PCG) vessel.
(c) No person other than a Pilot or authorised government officer(s) may board or disembark from any vessel coming from a foreign port until the vessel is cleared by the Immigration, Quarantine, Customs and PCG officers and the respective signals have been lowered.

Section 8. *Securing of Vessel before Discharge/Loading* – Every vessel entering a port shall be anchored or properly secured to a wharf, pier, or buoy before commencing the loading or discharging of cargo, and/or the embarkation or disembarkation of passengers.

Section 9. *Port Clearance* – No vessel shall leave a port unless in possession of a valid PPA Port Clearance issued by, or on behalf of, the Authority, in addition to the requirements of other government agencies and the final clearance issued by the PCG.

Article IV – Berthing

Section 29. *Berthing Regulations* –
(a) The allocation of a berth belonging to, or operated by, the Authority shall be at the Authority's discretion.
(b) A vessel shall be considered for berthing allocation only after the Agent of said vessel has filed an application for berth.
(c) All applications for berthing at pier/wharf/anchorage shall be submitted 24 hours before arrival for vessels on scheduled runs and 36 hours for tramping vessels (without regular schedules). In either case application should be filed within sufficient allowable time.
(d) All applications received after berthing meeting shall be deliberated upon the following day before the actual arrival of the vessel.
(e) No vessel shall be berthed or unberthed alongside a wharf or pier belonging to, or operated by, the Authority without its permission or contrary to its directions, nor shall any vessel occupy a berth other than the berth allocated to said vessel.
(f) First-come-first-served basis shall be the general rule in determining berthing priorities of vessels, subject to the exceptions hereunder provided. Vessel's arrival will mean the time a vessel drops anchor at the Anchorage Area when there is no available area or the time a vessel reaches the Port's Boarding Area when a berth is available.
(g) When the available berthing space is inadequate for berthing a larger vessel having the priority to berth, the smaller vessel next in priority which can be accommodated shall be allowed to berth on condition that should additional space be made available such that the larger vessel can be accommodated, the smaller vessel shall be moved to the anchorage to allow the larger vessel to berth.
(h) The Pilot manoeuvring a vessel to berth shall be advised by the Authority as to the position or berth which the vessel will occupy and the vessel shall comply with the directions or instructions therefor of the Authority and/or the Pilot.
(i) When a vessel scheduled to berth encounters some mechanical troubles thereby restraining said vessel from docking, an allowance of one (1) hour shall be given for repairs. If after the lapse of this grace period, said vessel is still inoperative, the priority to berth shall be passed on to the vessel having the next priority to berth.
(j) Vessels with berthing priority but scheduled to depart the following day shall be allowed to berth to allow passengers to disembark. Provided, however, that said vessel shall pull-out from berth to give way to passenger vessel scheduled to depart on the same day.
(k) Any vessel intending to berth solely for the purpose of loading fresh water, bunkering or victualling, before such vessel will be able to depart for another port, shall be given priority over other vessels, provided that such stay shall not exceed the time fixed by the Authority.
(l) Government-owned vessels on official business, vessels of foreign government not engaged in foreign trade, vessels under stress, and vessels carrying perishable articles or goods shall be given berthing priority over other vessels.
(m) Whenever practicable, passenger liner or tourist vessel shall, subject to the discretion of the Port Manager/OIC, also be given priority of a limited number of hours stay at berth over purely cargo vessel.
(n) Berthing priority of any vessel shall not be waived in favour of another vessel.
(o) Vessels waiting for cargoes shall be moved to anchorage to allow the next vessel to berth. However, said vessel shall be allowed to berth again, provided that cargoes for loading are ready, unless another vessel is allowed to take the berth temporarily by the Authority.
(p) Domestic vessels may be allowed by the Authority to dock at berths designated for foreign vessels if there are no other vessels waiting to dock at such berths.
(q) Shut-down time caused by heavy rains and other major calamities or accidents which will stop work on a vessel shall be excluded from the time limitation prescribed herein. However, breakdown of lifting gear and also loading of fresh water, bunkering and victualling which should be done simultaneously with cargo handling operations shall not be considered as reason for time extension.

AUTHORITY: Philippines Ports Authority, P.O.Box PA62, Manila. *Telex:* 40404 (ITT) and TA BX 0203. *Cables:* Phports Manila.

ANTIMONAN: 14.00 N. 121.55 E. (See Plan Book)

SHIPMASTER'S REPORT: 1976.

Berth in position Lat. 14° 00′ 30″ N., Long. 121° 55′ 30″ E. Vessel required to be ballasted to one third deadweight. Tidal range 6 ft. Nature of bottom at berth, mud and sand. Density 1025. Anchorage 0.5 miles S.E. of jetty.

Terminal Information: Ship's hoses used to rail only. Length of shoreline, 3,000 ft. diameter 8 in. Products handled at the berth, coconut oil and pellets of copra.

Port Information: Pilotage compulsory. Notice of 24 hours and 12 hours required. Pilot boards from a small catamaran flying the pilot flag. Boarding position 2 miles S.W. of the port. Vessel is able to enter or leave at any stage of the tide. Vessel cannot enter after dark and it is not advisable to leave after dark as some of the piles on the sea bed near the jetty are broken. Also there are no navigation lights in the bay and many vessels are fishing. Max. LOA 650 ft. Max. beam 100 ft. Max. draft 44 ft. No tugs available. Radio station used, Manila, though messages delayed in receipt at Antimonan.

Facilities Available: Fresh water in small quantities for cash. Fresh provisions, groceries and meats in small amounts, doctor and hospital.

No repair facilities, laundry, fuel or slop facilities.

Improvements: The face of the jetty is being piled and breasting dolphins created.

At the present time a barge is inserted between the ship and jetty as the piling is broken.

APARRI (Including Port Irene, San Vicente, Claveria, Mission, Abulog, Maconacon and Divilacan): 18.22 N. 121.38 E. (See Plan Book)

See "General" before first port.

PORT LIMITS: Quarantine anchorage or loading point.

DOCUMENTS: *Before the Vessel's Arrival:*

Submit/transmit to Philippine Ports Authority (PPA-PMU) Aparri, the vessel's Notice of Arrival, at least 48 hours before ETA for foreign vessels and 24 hours before ETA of domestic vessels.

Upon Vessel's Arrival:

PPA-PMU Aparri Safety Officer will inspect cargo handling gear of all incoming vessels.

Submit to PPA-PMU-Aparri a copy of the following documents:

Inward Foreign Manifest (for foreign vessels); Coasting Manifest (for domestic vessels).
Passenger Manifest.
Crew List.
Stowage Plan/Hatch List.
Transit Cargo/Manifest (if any).
Oath of Master.
Vessel's Roll Book – to be temporarily filed.
Vessel's Information Sheet – to be completed.

Before Vessel's Departure:

Submit to PPA-PMU-Aparri a copy of the following documents:

Outward Foreign Manifest (for foreign vessels); Coasting Manifest (for domestic vessels).
Passenger Manifest.
Transit Cargo Manifest (if any).
Oath of Master.

Entrance and clearance formalities in the traditional sense of the terms of foreign and domestic vessels shall remain with the Bureau of Customs until Port Management Unit's own clearance is duly stamped in the Manifest and after all port charges, fees, dues and other charges had already been paid.

Payment of charges leviable against the vessel and cargo shall be made either in cash, Manager's or Cashier's Cheque to the Port Management Unit.

Notice must be transmitted to Port Management Unit Office of Aparri when Export Entry is processed and Wharfage fee is paid to the Philippine Ports Authority – Manila.

PILOTAGE: ETA to be sent to Aparri Pilotage Station, Aparri, Cagayan. Pilot Boat is a motorised launch.

ANCHORAGES:

Port of Aparri: Boundaries – Lat. 18° 22′ 39″ N., Long. 121° 35′ 33″ E. Depth – 11 fathoms.

Port Irene: Boundaries – The portion between Nulton Pt. and Batulinao Pt. This bay known as Casambalangan. Depth – 12 m.

San Vicente Port: Boundaries – Lat. 18° 30′ 43″ N. Long. 122° 08′ 26″ E. Depth – 15 fathoms.

Sub-port of Claveria: Boundaries – Between Centenela and Lacaylacay Pt. Depth – 15 fathoms.

Port of Divilacan: Depth – 11 fathoms.

Mission Port (Cagayan): Boundaries – Lat. 18° 17.5′ N., Long. 121° 54.2′ E. Depth – 8 fathoms.

Abulog Port (Cagayan): Boundaries – Lat. 18° 28.8′ N., Long. 121° 26.5′ E. Depth – 9 fathoms.

Maconacon Port (Isabela): Boundaries – Lat. 17° 24.25′ N., Long. 122° 14.75′ E. Depth – 7 fathoms.

RESTRICTIONS: Enter channel in daytime only.

RADIO: RCPI. TELEFAST. PT & T. TELECOM. All in Aparri, Cagayan.

VHF: RCPI. TELEFAST. PT & T. TELECOM. All in Aparri, Cagayan.

RADAR: Pagasa Weather Bureau Radar, located in Bukig, Aparri, Cagayan.

TUGS: Available at Claveria, Aparri, Port Irene, Abulog, Mission, Maconacon and Divilacan.

BERTHING:

Port of Aparri: Anchorage area. Ship's side loading and ship's own gear. Cargoes handled at Shipper's log pond.

Port Irene: One available berth. Ship to pier with ship's derricks. Cargoes to be handled at a specified reclaimed area.

San Vicente: Anchorage area.

Sub-port of Claveria: Anchorage area. Ship's side loading and ship's own derricks. Cargoes handled at Shipper's warehouse log pond.

Port of Divilacan: Anchorage area. Ship's side loading and ship's own gear. Cargoes handled at Shippers log pond.

Mission Port: Anchorage area. Ship's side loading and ship's own gear. Cargoes handled at Shipper's log pond.

Abulog Port: Anchorage area. Ship's side loading and ship's own gear. Cargoes handled at Shipper's log pond.

Maconacon Port: Anchorage area. Ship's side loading and ship's own gear. Cargoes handled at Shipper's log pond.

CRANES: Truck mounted cranes.

BULK CARGO FACILITIES: None.

SPECIALISED CARGO HANDLING FACILITIES: None.

BRIDGES: No bridges.

STEVEDORES: North Luzon Port Services Inc. – Aparri, Cagayan. Krisandra Services Corp. – Port Irene. Taggat Industries Inc. – Sub-port of Claveria. ACME Group of Companies – Maconacon, Isabela.

MEDICAL: Aparri Emergency Hospital.

TANKERS: River stream-draft 16 ft. Discharge lines are through depot discharging pipe-lines Aparri, Cagayan.

DENSITY:

Port of Aparri: 30%.
Port Irene: Salt.
San Vicente Port: 30%.
Sub-port of Claveria: 30%.
Port of Divilacan: 30%.
Abulog Port: 30%.
Mission Port: 30%.
Maconacon Port: 30%.

FRESH WATER: None.

FUEL: Diesel, gasoline and kerosene.

FIRE PRECAUTIONS: None.

CONSULS: None.

REPAIRS: None.

DRY DOCKS: None.

SURVEYORS: None.

GANGWAY/DECK WATCHMAN: Available from Stevedore in Aparri.

HATCHES: Normally carried out by crew and stevedore.

CARGO GEAR: Cranes.

REPATRIATION: With permission of Bureau of Immigration, Aparri, Cagayan.

AIRPORT: Flights Monday, Wednesday and Friday (suspended at present).

TIME: GMT plus 8 hours.

POLICE/AMBULANCE/FIRE: Aparri Integrated National Police, Tel: 2-2222; Aparri Emergency Hospital, Tel: 2-2233; Aparri Fire Department, Tel: 2-2014. All in Aparri, Cagayan.

TELEPHONES: None.

SHORE LEAVE: Request permission from the Bureau of Customs.

SERVICES: None.

IDENTIFICATION CARDS: Issued by the Bureau of Customs and Philippine Ports Authority.

REGULATIONS: See "General" before first port.

DELAYS: Weather conditions.

SHIP SUPPLY SERVICE: *Water Taxi Services:*

There are 4 private operators engaged in the ship-to-shore transport of personnel duly registered and authorised by the The Port Authority, namely:

1. O. Ragonjan Water Taxi Services – Orlando Ragonjan (Operator/Owner).
2. G. Alveza Water Taxi Services – Gregorio Alveza (Operator/Owner).
3. Five Star Water Taxi Services – Domingo Raquipo (Operator/Owner).
4. Cartagena Water Taxi Services – Leonardo Cartagena (Operator/Owner) – c/o Mr. Napoleon Sotto..

The business addresses of the above operators are all located at Punta, Aparri, Cagayan.

Ship Supply/Shipchandling Services:

The Port Authority has granted a permit to operate to the Aparri Ship Chandlers, Inc. owned and operated by Myrna Casenas, with office located at Aparri.

All the above listed operators are based in Aparri, Cagayan. However, special arrangements could be made with any of them for precise details and other conditions relative to the services required including rendezvous positions. They could be contacted through local telecommunications systems available in the locality such as RCPI, PT & T, and the Philippine Long Distance & Telephone Co., Inc.

AUTHORITY: Philippines Ports Authority, Port Management Unit, Aparri, Cagayan. *Tel:* 2-2134. *Contact:* Simeon T. Silva, Jr., Port Manager. Captain German Yap, Chief Pilot. Captain Bonaparte Casenas, Co-Pilot.

Head Office: Philippines Port Authority, P.O.Box No. PA62, Manila, *Telex:* 40404 (ITT). 0203 (Tx Bx). *Cables:* Phports, Manila.

BATAAN (Limay): 14.30 N. 120.38 E. (See Plan Book)

(A) BATAAN. (B) BATAAN – CBM. (C) BATAAN – SBM. (D) PRODUCT PIER. (E) LPG PIER.

SECTION (A).

See "General" before first port.

PILOTAGE: Pilotage is compulsory, Pilots assigned by the Manila Pilots Association. Pilot boards vessel just off the berth.

ANCHORAGE: There is a good anchorage with depth of 9.1 m. – 11.3 m.

RESTRICTIONS: Approaches are open deep water. Vessels may berth and unberth at any hour and any stage of the tide. Keel clearance of 10 ft. required.

MAX. SIZE: LOA 1,000 ft. Max. draft 52 ft. at conventional buoy mooring. See "Section B".

RADIO: Manila Radio. At the berth, shore communication with vocaline JRC 475 transceivers on 465 MHz.

HEALTH: Port Health Officials board with the Pilot. Radio request for Free Pratique can be made prior arrival.

TUGS: Available.

BERTHING:

Private Piers	*Length* (m.)	*Width* (m.)	*Depth* (m.)
Bataan Refining Corp.	343.20	15.90	9.90 to 30.00
Planters Products	317.99	n.a.	14.60
LPG Pier	24.60	3.00	5.40

DENSITY: 1025.

MEDICAL: Doctor and hospital facilities available. Advance notice required of any medical attention needed.

TANKERS: *Products Pier:* Inner berth depth 13 ft. Outer berth depth 32 ft. Can accommodate vessel up to 530 ft. length. No slop discharge facilities available. Also see "Shipmaster's Report – September 1980" and "Section B".

FRESH WATER: Not available at berth. Can be supplied by barge.

FUEL: Bunkers, fuel and diesel, obtainable from berth, advance notice required.

REPAIRS: Repair facilities available at Philippine Shipyard and Engineering Co., located at Subic Bay, Zambales. Drydock capacity up to 300,000 d.w.t.

SURVEYORS: (1) Cargo Inspectors available.

(2) Surveyors such as Lloyd's Register, American Bureau, etc., have offices in Manila.

CERTIFICATES:
Certificate of Registration.
Certificate to Operate.
Certificates of Officers and Engineers (Licenses).
Officers and Seaman's book.

CUSTOMS ALLOWANCES: 200 cigarettes for each crew member, and 1 bottle of liquor for each crew member.

IDENTIFICATION CARDS: Essential.

REPATRIATION: Effecting crew changes and arranging necessary repatriation are carried out by the Immigration Office in the port with the assistance of the ship's Agent and the Foreign Embassy concerned.

TIME: Local Civil Time is 8 hours ahead of GMT throughout the year.

HOLIDAYS: New Year's Day (1st January); Bataan Day (9th April); Holy Thursday (variable); Good Friday (variable); Labour Day (1st May); Independence Day (12th June); Republic Day (4th July); All Saints' Day (1st November); National Heroes Day (30th November); Christmas Day (25th December); Rizal Day (30th December). When any holiday falls on a Sunday, the following day (Monday) is by law considered a public legal holiday. Employees of the Philippines Port Authority – Port of Manila, Limay Sub-Port, report for work on Saturdays, Sundays and Holidays.

GENERAL: Customs Inspector and 2 guards accommodated on board during vessel's stay.

BANKS: No American or European banks are operating in the area. Excellent banking facilities and services available at Manila.

EMERGENCY CO-ORDINATION CENTRE: For emergencies, please contact Philippine Ports Authority, Port of Manila, PNR Building, South Harbor, Port Area, Manila. Tel: 47-34-41 to 49.

Limay Sub-port is equipped with a radio for direct voice contact with PPA – Manila.

STORING: See "Prelims" page viii.

(1) Vessels can be stored by barge or "water taxi".

(2) Vessels can be stored by barge only after discharging at the anchorage.

(3) Not applicable.

(4) Not applicable.

(5) Companies which sell stores to ships calling at Limay must secure clearance from the Philippine Ports Authority – Port of Manila, Limay Sub-port and from the Bureau of Customs.

(6) Local riggers may be allowed to assist in storing.

SHIPMASTER'S REPORT: November 1979.
LIMAY: Lat. 14° 34′ N. Long. 120° 36′ E.

Documents: 3 copies of Visaed Crew List. The form for the crew list should be in the approved form and these are available from the Philippines Embassy at the loading port.
4 Copies of Ship Stores List.
7 Copies of Ordinary Crew List.
1 Copy of Maritime Declaration of Health.

Approaches: This is a very minor port with 1 berth for discharging dry cargo and 1 berth for tankers. The only conspicuous land mark is a single gantry crane. Limay Port Authority has a VHF station and can be contacted on Channel 13. The vessel has to clear Health and Immigration prior to berthing. The quarantine anchorage and pilot boarding ground is between 14° 30′ N. – 14° 31′ N. and 120° 37′ E. – 120° 38′ E. Immigration and Health Authorities board the vessel (generally only during daylight, especially since the weather deteriorates at night) on arrival and clear the vessel.

Pilotage: Pilotage is compulsory. 2 Pilots are available. The Pilots are from Manila and they are stationed at Limay for 2 weeks duration on rotation.

Port: The dry cargo berth is about 500 m. long consisting of 3 concrete dolphins on either side of the crane. The crane is gantry type with 6 tons SWL grabs. The berth juts out from the land and the discharged cargo is directly taken into the factory by conveyor. If there are no breakdowns cargo can be discharged at up to 3,500 tons per day.

Bulldozers are used to collect the cargo in the hold. The crane is fixed and the vessel has to be warped fore and aft if cargo has to be discharged from more than one hold. Stevedores work 24 hours. Berth is mainly used by the Farm Products Co., which imports muriate of potash and urea. They export NPK fertiliser. The maximum depth found alongside by hand lead and line was 48 ft. and minimum 41 ft.

There is one wreck near the dry cargo berth where a tanker blew up and sank. The position of the wreck is approximately Lat. 14° 30.3′ N., Long. 120° 37.3′ E. which is marked by an unlit buoy.

Tugs: 2 tugs are available. They are normally stationed at Manila and brought to Limay when vessel berthing/unberthing at Limay. 6 hours notice has to be given. The large tug is 750 b.h.p.

As per "Pilot" during the months of October-November the surface current runs North-South and the undercurrent which is very strong runs East-West. Due to this, it is very "tricky" while berthing and unberthing. Tankers are not berthed or moored during night. Dry cargo vessels may be berthed at night if weather is good. The pier is not very well lit. Moreover very often empty barges, etc., may be in the fairway to the berth and thus makes berthing or unberthing more difficult.

Density: Between 1017 and 1020 reducing during rains.

Fresh Water: Not available from the jetty. If required water can be supplied by barges from Manila, if given prior advice. It is expensive due to transportation.

Fuel: Can be arranged from Manila.

Repairs: Not available.

Stores: Available but expensive compared with Manila.

Watchman: It is advised to take watchman due to piracy which was reported recently. Generally watchmen are arranged by the Agents.

Hatches: To be opened by the ship's crew.

Customs Allowances: 1 bottle of spirits and 200 cigarettes per crew member.

Cargo Gear: Not required.

Repatriation: Can be arranged. The nearest airport is at Manila which is 2 hours by car.

Shore Leave: Shore leave is allowed. But no crew are allowed to pas through the factory. Boat has to be arranged to take crew to the neares village next to the factory. The nearest town is Balanga which is th capital of the District. Small mini buses run frequently between Lima and Balanga which is about 20 miles away by these buses.

Medical Facilities: Good medical facilities are available at Manila.

SHIPMASTER'S REPORT: September 1980.
Locally the port is known as Limay, Bataan. VHF Channel 11 appears t be used for all communications. 7 copies each of all forms.

If any crew members being repatriated then Agents require their fu names, nationality, ages, and passport or seaman's books number i advance.

Hand soundings alongside South side of jetty indicated 38 ft. an 34 ft. at Eastern end and about 450 ft. Westward (inshore) respective at LW.

Liberty boat from vessel to shore as crew personnel are not allowe through refinery. Vessel loaded Mogas at rates of between 250 an 450 t.p.h. Good holding ground in the anchorage off berth in Manila Bay – SBM for VLCCs being constructed in approximate positio Lat. 14° 31.7′ N., Long. 120° 38.8′ E. (See "Section B").

Experienced a strong Southerly current, about 4 knots, the day after typhoon passed about 100 miles to the North. This current due to floo waters leaving the bay.

3×500 h.p. tugs used for berthing, only pushing, do not make fas 2.5 hours to Manila by bus. No shore passes required. Fresh water b barge from Manila but very expensive. I was advised that the firs 137 tons would cost £285.00 including tug. For the next 163 tons tug an barge would cost £841.00.

SHIPMASTER'S REPORT: April 1981.
Ship to ship transfer into m/t "Petron Gasul".

Approaches: Chart BA 976. The approach is straightforward with goo fixes being available by radar and visual means. The light on La Monic is extinguished. Ample water and there is nothing to be gained by usin the South Channel.

Advised that the transfer position would be 14° 31′ N., 120° 37.5′ E although this may be altered slightly to suit "Petron Gasul" and may b affected by the amount of shipping at anchor off the refinery.

PNOC carry out a number of lightening operations in the area an awaiting tankers may be encountered between Lat. 14° 28′ N. t Lat. 14° 34′ N., and bounded by Long. 120° 40′ E. (This anchorage are is not official). Besides the buoys marked on the chart there is a moorin buoy in approximate position Lat. 14° 31.8′ N., Long. 120° 38′ E. Th red buoy has a pipe-line attached and you are advised to anchor we clear to allow PNOC vessels access to the buoy. There is a large whi cross on Mt. Samat which is not marked on the chart and affords a goo reference point for anchor bearings.

Large numbers of unlit fishing vessels may be met in the bay and th approach channels and especially so at sunset and sunrise. Thes fishing boats also haunt the anchorage area.

Advised by Agents that movements were limited between sunrise an sunset but this appears to depend upon the local Pilots. The anchorin on arrival was done without a Pilot.

Documents:
Clearance from Last Port of Call.
8 copies Crew List – visaed, if possible, at departure port.
List of Passengers.
Lists of Animals, Narcotics, Firearms, mails.
List of Bonded Provisions, including Deck and Engine Stores.
List of Animals, etc., were simply 'nil' statements and were perfec satisfactory.

Formalities are unlikely before 0800 hrs., and were straightforwar Bonded stores sealed and application may only be made after 10 day for an issue of cigarettes, etc.

Health: The doctor who clears for Pratique is a local doctor and will car out any necessary vaccinations. Very helpful. Crew requiring special or hospital treatment must go to Manila.

Shore Access: By means of small outrigger launch. The daily charge f 3 journeys to and from the ship was 800 pesos.

Agents: The main agency (C. F. Sharp) is in Manila although they statio a representatitve locally ashore in Limay. Attendance was very goo and only hampered by local communications by telephone, telex an VHF. Our visit coincided with the Easter holidays and this serious disrupted communications to and from U.K. As an urgency measu radio messages were sent via Manila Radio. VHF contact to Manila wa easy via Channel 16 and thence to working channel.

Transfer: Contact may be made with "Gasul" on Channel 13. Th "Gasul" in effect is used as a storage vessel by PNOC and delays ma be expected due to the status of her tanks on arrival and the availabil of fenders. This last is serious since there only appears to be one set fenders for all lightening operations and this includes oil tanker transfe

Small local gas tankers take the product from "Gasul" and as the are few in number this can also lead to considerable delay. A certa amount of blending of propane and butane is sometimes necessary in these craft and on the whole tends to lead to a very confused situatio as regards the probable time of commencement of transfer. Estimat varied wildly from day to day and perhaps the most reliable estimat may be gleaned direct from "Gasul".

The Master and Chief Officer will board to discuss the transfer an decide on the final transfer position.

A Pilot will board to shift to the new position. "Gasul" is manoeuvre alongside by a Pilot and 2 tugs. If necessary another tug may take a li from your stern to hold the vessel steady during berthing. Three of h lines each end further supplemented by our own moorings.

"Gasul" was well fendered with three (3.3 m.×6.5 m.) and tw (2.5 m.×5.5 m.) fenders.

Reputed to have a full range of hoses and reducers on board b some have 300 ASA flanges.

The transfer was completed without any difficulties although "Gasul" can only accept one grade at a time necessitating shifting lines from one manifold to another. VRL used.

Surveyors: SGS attended with PNOC surveyor. Figures based on our vessel's outturn since the gauging devices and temperature recorders on "Gasul" are suspect.

Pilots are reluctant to unberth during the hours of darkness and this decision will also be affected by the prevailing weather conditions. Two Pilots for the operation.

AUTHORITY: Bureau of Customs, Philippines Ports Authority – Port of Manila, PNR Building, South Harbour, Port Area, Manila, Philippines. *Tel:* 47-34-41/49. *Contact:* Commander Eduardo MA. R. Santos, Port Manager.

SECTION (B) — CBM.

LOCATION: The Seaberth of Bataan Refining Corporation is located at Limay Town in Bataan Province.

The berth is a conventional buoy mooring (CBM) system and is located in position 14° 32.1′ North., 120° 35.9′ East.

The enterprise is owned by Philippine National Oil Company and operated by the Bataan Refining Corporation.

Products handled: Crude oil, NSFO and jet fuel.

Also see "Single Buoy Mooring".

Immigration: Vessels coming from countries where Filipino Consular Authority is available are required to have, on arrival, visaed crew lists. However, in the event that the vessel, for some reason, is not able to obtain a visaed crew list, this requirement is waived, provided the Agent furnishes a guarantee for payment of the visa fee.

When the vessel has on board personnel from countries without political relations with the Republic of the Philippines, at least 2 Immigration Officers remain on board during the vessel's stay in port. These personnel are forbidden to leave the vessel and are not granted shore leave.

The following documents are required by Immigration on arrival:

Visaed Crew List (1 original and 1 copy).
Ordinary Crew List (12 copies).

Customs: Bonded lockers containing spirits, cigarettes, etc., are required to be sealed. Each crew member is allowed to retain 1 carton of cigarettes. Cigarettes in excess should be placed in bonded lockers.

A Customs Inspector and 2 guards will remain on board throughout the vessel's stay in port. Food and a spare cabin should be provided for them.

The following documents are required by Customs:

Crew Personnel Effects List (6 copies).
Stores List (6 copies).
Firearms and Ammunitions List (6 copies).
Bonded Stores List (6 copies).
Narcotics List (6 copies).
Currency belonging to Crew and Ship List (6 copies).
Last Port Clearance.
Ship's Register.

Outward Clearance: This clearance is granted by the Coastguard which boards the vessel prior to departure and effects the clearance on board.

Also, an Immigration Inspector goes on board, just prior to departure, and musters the crew and verifies that all crew members are on board.

The following documents are required for the outward clearance:

Port Clearance.
Immigration Clearance.
Customs Clearance.
Coast Guard Clearance.

The above documents are prepared and arranged by Agent.

APPROACHES: *From End of Sea Passage to Pilot Station:*

Manila Bay is entered between Limit Point and Cochinos Point. The entrance is divided into 2 channels, named South Channel and North Channel, by Corregidor and Caballo Islands; both these channels are deep and clear of dangers in the fairway.

As a general rule, vessels use the channel which provides the shortest route into the bay. Entry is not recommended during darkness or periods of poor visibility if vessel is not equipped with radar.

Vessels entering Manila Bay through the North Channel shall pass midway between La Monja Island and Guardia Shoal and shall proceed directly through the middle of the channel between Corregidor Island and the mainland, steering 070° until 1 mile distance from the shore is cleared. The same route shall be followed by vessels when leaving Manila Bay through the North Channel.

Vessels entering Manila Bay through the South Channel should not approach any shore closer than 1 mile and shall keep South of the restricted area, South of La Monja, Corregidor and Caballo Islands, which is embraced within The North section of the following bearings: 296° from El Fraile Island and 236° from Caballo Island lighthouse. Furthermore, on the Southern side of the channel, they should not approach the line joining El Fraile and the N.W. point of Limbones Island closer than 1 mile. The same restriction applies to vessels leaving Manila Bay through the South Channel.

Deep draft laden crude tankers should always enter through the Southern Channel, which is wider and deeper.

After having entered the channel, vessels should make for the Pilots embarking point. Pilot boat usually waits 2 miles off Lokanin Point. During the approach to the above position, vessels should steer clear of land for at least 1 mile.

Many fishing boats are operating in the area and very often they are without lights and unable to move from their fishing position as they have nets laid down. Therefore, utmost caution should be exercised; radar watch and visual lookout should be maintained and a wide berth, to the maximum possible extent, should be given to any fishing boat.

When entering or leaving the port, especially during hours of darkness, we suggest to consider having the tanker preceded, at a close distance, by a service boat or a tug boat. This boat steaming right ahead of the vessel could clear the vessel's way of fishing boats or other craft or could at least warn the tanker in advance of any danger laying ahead.

ANCHORAGE: Vessels awaiting berth should anchor about 0.5 miles S.E. of the Conventional Mooring Buoy (CMB).

RESTRICTIONS: *Controlling Depth:* Entry Channel more than 66 ft. below MLLW. Approach Channel 64 ft. below MLLW. Alongside Berth 64 ft. below MLLW.

LOA Limitation: 1,000 ft.

Breadth Limitation: Unlimited.

Berthing and Unberthing: No particular restriction applies and vessels are berthed and unberthed at any stage of the tide; also during hours of darkness except during particularly severe metereological conditions. Following unberthing, ship is expected to move out, preferably with assistance of tugs instead of using her own power. The strong turbulence created by the ship's propellers tends to get the hoses entangled with each other.

MAX. SIZE: Below are the maximum vessel sizes that are acceptable at the Bataan Refining Corp. – CBM facilities:

DWT	120,000 tons
LOA	890 ft.
Beam	135 ft.
Draft	52 ft.

However, crude tankers greater than 120,000 d.w.t. with LOA and beam up to 1,000 ft. and 160 ft., respectively, could be accepted at the sea berth if the tanker is partially loaded, such that draft does not exceed 50 ft. and if the prevailing climatic condition warrants safe berthing.

RADIO: Whilst at sea, vessel is to communicate with Philippine National Oil Co. – Manila via Manila Radio. VHF Channel 13 is the working frequency of PSTC, owners of tugs and service boats assisting the mooring.

In the arrival message, Master to include: ETA, forward and aft drafts, confirmation that instructions contained in port information are understood and will be adhered to, any requirement.

It is most essential that vessel confirms ETA 72, 48 and 24 hours before arrival.

Communications between vessel, tugs, mooring gang and refinery are well established by various portable VHF sets supplied by the refinery and contractors and working is on several channels.

HEALTH: The Quarantine Doctor boards the vessel in the outer roads during her approach to the port. After Pratique is granted, the Pilot, Customs and Immigration Officers, the Loading Master, the BRC representative, and the hose gang are allowed to board.

No Radio Pratique is contemplated.

The following documents to be ready prior to arrival of health officials:

Maritime Declaration of Health.
Vaccination Lists (4 copies).
Health papers of all ratings.

BERTHING: The sea terminal consists of 8 mooring buoys of 16 ft. dia.

Buoys 2, 3, 4, 6 and 8 are fitted with 1 self-releasing Pelican hook and buoys 1, 5 and 7 are provided with 2 Pelican hooks each.

Mooring/Unmooring: Currents usually set in a North-South direction at the berth, and vessel always approaches and enters the berth from South. However, berth is so designed that tankers, depending on prevailing wind and/or current direction, could enter from the North, if necessary. Mooring and unmooring may take place also during hours of darkness, provided meterological conditions are fair and visibility is good. Currents are weak and berthing or unberthing takes place at any state of the tide.

Berthing of vessels should be assisted by a Pilot, a Mooring Master, and a Radio Operator, the latter two of Luzon Stevedoring Company, which also provides the mooring gang. The Radio Officer brings along his own portable VHF radio set for communicating with the mooring crew and service boats.

Vessels usually approach the berth from a S.S.E. direction and are stopped some 3,000 ft. off the South end. From this point vessels proceed to and enter berth at dead slow speed between buoys 5 and 6. Just before entering, the starboard anchor is usually dropped. This anchor is dragged or paid out accordingly in order to check the vessel's bow. The bow is brought abeam of buoys 1 and 2 where the port anchor is dropped. Lines are then given ashore and the vessel is backed into final position approximately 40 ft. abeam of the floating beacon marking the pipe-end manifold. When using anchor, caution should be exercised so as not to foul the buoy legs or cargo pipes and hoses.

Usually, 3 powerful service launches are in attendance. These launches are suitable for handling the heavier wire ropes. Usually, 2 lines are run on buoys 1, 2, 7 and 8 and one to buoys 3, 4, 5 and 6. There is no particular requirement on whether ropes have to be of wire or nylon. Pilots indicated that they may require, at times when wind from S.E. is particularly strong, additional lines to be run to buoys 3 and 5.

Night berthing is carried out with the assistance of the service boats, which tie up alongside buoys 1, 7 and 8 and indicate quite effectively the approach and entry to the berth.

Vessels calling at the CBM should make use exclusively of wire ropes of suitable dimensions, quality and condition.

When leaving, vessel must be towed and engine of tanker shall be at standstill to prevent kinking of hoses caused by strong current generated by the tanker/vessel propeller.

HOSES: At present, 2 strings of hoses are used. Each string consists of 1 length of 20 ft. × 20 in. dia., 2 lengths of 30 ft. × 16 in. dia., and 3 lengths of 30 ft. × 12 in. dia. The 2 over-the-rail lengths are provided with a 12 in. ASA 150 p.s.i. hand-operated butterfly valves.

The end of each hose is marked by a buoy consisting of 2 cans welded together. When resting on the sea bed, the ends of the hoses are attached to these buoys by means of a chain. For lifting the hoses onboard, divers disconnect the chain from the cans and pass them to the vessel's derrick hook. The marker buoys remain on the water.

The hoses are connected and disconnected by a shore gang supplied by a contractor. It takes, on the average, about 1 hour 30 minutes to have 2 hoses connected and cargo started. Ullages and cargo calculations are carried out concurrently with connecting of cargo hoses. It takes about 30 minutes to 1 hour for disconnecting, but this is done concurrently with ballasting operations after discharge.

In order to expedite turnaround time, vessels should arrive with both derricks rigged for a minimum safe working load of 7 tons.

Blanks at 2 connections of the port manifold should be removed prior to arrival and 2 reducers, if available, should be installed to have the manifolds ready for the 12 in. ASA hose connections.

Safe working load and connections available should be notified to BRC prior to arrival.

Minimum acceptable manifold height above deck is about 20 in. Minimum spacing of ship's cargo manifold for connecting hoses to adjacent manifolds is about 18 in.

The hoses when in operation are not suspended from ship's gear but are fastened to the vessel's superstructure by means of chains.

There are no specific guidelines for disconnecting in emergency. The hose gang remains on stand-by throughout the operation and can be readily available.

Hoses are to be connected to the vessel's reducers with bolts and nuts fastened to every second hole of the flange.

The maximum pressure requested at the vessel's manifold is 150 p.s.i.

LOADING: *Description of Cargo System:*
Crude is presently received at the 8 buoy seaberth, located about 2,100 ft. off the end of the product pier. The current crude receiving facilities consist of a 28 in. dia. line. The line from the tank to the berth is about 4,700 ft. long. This includes the submerged section from the pier head to the berth of 2,040 ft. The end pipe-line manifold is fitted with 2 outlets. Each outlet is provided with a 20 in. butterfly valve, a 20 in. check valve and a 20 in. chicksan swivel joint where currently 2 strings of 1 × 20 in. dia. × 30 ft., 2 × 16 in. dia. × 30 ft. and 3 × 12 in. dia. × 30 ft. hoses are connected. The butterfly valves are manually operated by divers.

The pipe manifold is marked by a floating beacon, and in order not to put hoses under strain, the vessel's manifold should be abeam of this marker at a distance of about 40 ft.

FRESH WATER: Supply is by barge. Requirements should be included in arrival message. Ample notice is required if water is supplied by barges.

FUEL: Bunkering is by barge. Bunkering may take place concurrently with discharging operations. Ample advance notice required.

MEDICAL: The Agent will arrange for transportation to and from Manila for crew members requiring elaborate medical or dental attention; otherwise, they will be attended to in Manila.

REPAIRS: There are several repair firms in Manila that can undertake minor repairs. Requirements for repairs should be passed on to the Agent, and briefly outlined in ETA message. Major classification societies available.

STORES: Stores and provisions can be supplied by ship chandlers in Manila. Master should radio requirements at least 36 hours before arrival to the Agent so that stores can be transported from Manila to the ship on time. Bonded stores are unavailable, except for local beer. Laundry requires a minimum of 36 hours.

WEATHER/WIND/TIDE: *General:* Although the Bataan Refinery is only 26 miles across the bay from Manila, rainfall data is not exactly the same for both of these locations. This is partially due to the mountain directly behind the refinery, which tends to precipitate the S.W. monsoon immediately as they come over the mountain, dissipating them to some extent by the time they reach Manila.

The average rainfall for the Bataan Refinery is about 98 in. per year varying from 56 in. to 136 in. per year. Maximum and minimum air temperature are about 102°F and 58°F respectively.

Wind and Typhoon: During the typhoon season, from June through September, the winds are predominantly from the S.W. and are known as the S.W. monsoons. In October through January, the winds are from the N.E. For the month of February, the winds are predominantly from the East and in March through May, from the S.E.

The typhoons are frequent during their season and bring with them high winds and heavy rains. The typhoons generally go up the East coast of Luzon, however, late in the year, they cross the land mass.

Range of Tide: For Lamao, data obtained from the coast and geodetic survey of the Philippines are:

Extreme High Water	5.6 ft. (58 year record)
Mean Higher High Water	2.99 ft.
Mean High	2.54 ft.
Mean Tide Level	1.41 ft.
Mean Sea Level	1.36 ft.
Mean Low Water	0.29 ft.
Mean Lower Low Water	0.00 ft.
Extreme Low Tide	2.00 ft.
Mean Tide Range	2.25 ft.

There are no unusual metereological conditions associated with these tides.

Intensity and Direction of Currents: A hydrographic survey in February and March, 1958 indicated that current, at its greatest strength, to be not exceeding 1 knot. However, there was sufficient indication that the current is of the reversing type; that is, tidal in nature. Current varies from day-to-day, principally in accordance with the range of tide, its diurnal inequality, and its daily routine, whether diurnal or semi-diurnal. The rising tide is counteracted, to some extent, by the water which enters Manila Bay from rivers, and thereby lessening its velocity. The ebb tide is assisted by this water and accounts for the maximum recorded velocity, which, however, seems always to be less than 3 knots.

Water Density: Salinity varies from a high of 36.1 parts per thousand to a low of 4.6 parts per thousand during a monsoon. The mean salinities are 14 in June, the lowest month, and 34 in May, the highest.

The surface temperature of the sea water adjacent to the site ranges from about 76°F to 90°F.

Tankers arriving at BRC in laden condition should not consider this density variation, which is very difficult to predict and to determine.

Waves: About 2 ft. to 3 ft., based on information given by Pilots.

Sea Bottom: Upper layer of sea bottom is soft mud.

GANGWAY: For vessels at the CBM, gangway to be prepared an rigged prior to arrival, on port side.

SECURITY: Serious security problems may arise during nightime an strict surveillance and alertness must be exercised at all times. Guard supplied by a local contractor and arranged by the Agent should b employed at all times. Stores and cabins should be kept under lock.

Vessel's Master, at all times, should take positive steps to preven smuggling and keep native boats away from the ship and watch fo pilferage while the vessel is approaching or is in port. We believe tha security guards may be of help and we recommend Masters to use them at all times.

Shore leave may be arranged by Agent. Crews are ferried to and from the CBM to the near local village. Launch service is arranged by th Agent.

Crews of vessels moored at the product pier or LPG pier have also t go ashore by boat since nobody is authorised to pass through th refinery.

EMERGENCY PROCEDURES: BRC is not provided with a anemometer nor specific procedures to vacate the berth under sever metereological conditions. Should weather conditions deteriorate, th vessel's Master, in consultation with the Pilot, Mooring Master, and BRC representative, take the decision to vacate the berth.

A close watch should be maintained for typhoon and weathe forecast. At all times, vessels should maintain a state of readiness an engines should be kept on standby and at short notice. No repairs o tank cleaning should be allowed alongside.

BRC REPRESENTATIVE: An employee of a third party surveyor (representing BRC) boards the vessel after quarantine clearance t co-ordinate unloading operations. A ship-to-shore portable radio i placed on board for communication and controlling ship's discharg only. The BRC representative remains onboard throughout discharg and liaises between shore and ship. During the pre-discharge, soundin and final inspection after discharge, a BRC operator boards an accompanies the third party surveyor.

SHIPMASTER'S REPORT: June 1982.

Pilotage: Arranged by Manila Agent.

Health: Doctor will board and give Free Pratique and perform vaccinations.

Radio: Arrival message to include Master's name and number an nationalities of all crew.

VHF: Contact was made Channel 11 at 25 miles from S.W.

Tugs: One tug stands by during vessel's stay and 1 service boat i available for transportation to and from the shore.

Berthing: The sea berth has 4 buoys each side, with hoses on port side derrick required and shore hose gang for connecting. Buoys t starboard are numbered 1 to 7 buoys and to port are numbered 2 to from forward to aft in both cases and these numbers are referred to b Pilot when berthing. There is also a Loading Master on the bridge wh liaises for ship's positioning regarding hoses. 2 tugs for pushing an 1 tug puts line aboard. 2 service boats for running lines. It is best to have wires without rope tails and service boats are quite powerful enough t run the wires. 1st lines are headline to No. 1 buoy and stern line to No. buoy. Then usually No. 2 and No. 8 buoys, followed by No. 4 and No. buoys. Usual final moorings are 3 lines each to Nos. 1, 2, 7 and 8 buoys and 1 each to 3, 4 and 5 buoys. No. 6 buoy not normally used unless there is a strong offshore wind. It is advisable to keep a note of the orde of putting out ropes in case of letting go during the hours of darkness. O approaching berth it is usual to let go starboard anchor to 2 shackles The anchor is hove up before commencing to single up on departure.

Medical: If Doctor boards for vaccinations then he will attend to an patients.

Tankers: For Sea berth 2×12 in. reducers, for SBM 2×16 in. reducers

SECTION (C) BRC — SBM.

LOCATION: Position: Lat. 14° 31′ 32.47″ N., Long. 120° 37′ 48.90″ W

RESTRICTIONS: *Water Berth:* 94 ft.

Max. Operating Conditions: Wave height 8 ft. Wind speed 55 m.p.h. an current 3 knots.

MAX. SIZE: 300,000 d.w.t. 1,120 ft. LOA. 175 ft. beam and 70 ft. draft

BERTHING: The SBM is installed in Manila Bay, approximately 1 mile offshore. From the surface, all that is visible is the top of the 23 f diameter mooring buoy and 2×800 ft. long strings of floating loading hose. The mooring buoy is painted orange, yellow and white and th hose strings are orange and black spiral stripes. At night the buoy i marked by a white flashing light and the hose strings are marked b 8 white flashing lights. The hose strings will generally float in th direction of current but they may be influenced by the wind direction.

Preparation of the Tanker: Generally, 2 launches should be availabl for mooring tankers. 1 launch will be used to pass the mooring lines t the tanker forecastle. The other launch will pull the floating hoses to th side as the tanker approaches the mooring and then attach the tanke derrick lines to the hoses in preparation for hose hook-up.

All tools and materials required for the mooring and hose hook-u operations should be placed aboard the hose handling and moorin launches in readiness for passing to the tanker.

Prior to the approach of the tanker, the Pilot or other termina personnel should ascertain the size of the tanker's cargo manifolds, th capacity of its hose lift derricks, and the arrangement and capacity of it forward fairleads, bollards and winches. If spool pieces, lines an special fittings are required, these should be made ready.

The hoses may be brought to either side of the tanker, although it i customary that they be brought to the port side. The appropriate derric should be rigged for lifting the end of each hose string. The lift to th manifold of a loaded tanker will be approximately 4 tons. However, a lif capacity of approximately 11 tons will be required to lower each hos string from the tanker in a light condition (based on 70 ft. dra amidships).

A clear area is required adjacent to the manifold for storage of the pick-up buoys. Cables and come-alongs should be rigged to strong points in the vicinity of the manifold to tie-off the hoses.

A boarding ladder should be rigged on the tanker side opposite the operating manifold. Boat ropes should be rigged along each side of the tanker. Messenger lines should be made ready on the forecastle for picking up the hawsers.

The arrangement of fairleads, fittings and obstructions should be studied carefully to determine the best means of securing the tanker to the mooring.

The mooring fittings should be capable of withstanding the appropriate loads. If the environment should worsen to the capacity of the mooring or the tanker fittings then the tanker should apply ahead power, suspend discharging, lower the hoses and leave the mooring.

Each mooring line is provided with three individual tanker chafing chain assemblies as follows: Type "B", Type "C" and Type "D". Type "B" assembly remains connected to the hawser thimble at all times and is for use with vessels of 100,000 d.w.t. – 300,000 d.w.t. having chain stoppers or no conventional mooring fittings. The type "D" assembly is for use with vessels of the same size (100,000 d.w.t. 200,000 d.w.t) but equipped with mooring fittings of the "Smit Lock" design. When required, this assembly is connected to the primary triangular plate in the type "B" assembly, and the remainder of said assembly should be removed from the first Kenter Link until such time as unmooring operations take place.

The type "C" chafiing chain assembly is for use with vessels up to 100,000 d.w.t. and when required should be connected to the type "B" assembly at the first Kenter Link following the primary triangular plate and the remainder of the type "B" assembly removed until such time as again required.

At the end of chain assemblies type "B" and "C" is a secondary triangular plate for connection of the 500 ft. polypropylene pick-up ropes. These ropes are incorporated in the assemblies, strictly for the purpose of winching the mooring assemblies on board the vessel and should on no account be used for mooring. The chains must be brought partway through fairleads on the forecastle and secured to towing brackets, bitts or other fittings on the deck of the tanker.

Experience has indicated that no standard means of securing the chain can be advised since a wide variety of arrangements are apt to be encountered on a tanker forecastle. It is recommended that the chains are secured to Smits towing brackets or chain stoppers if these are available. Otherwise wires or ropes will have to be improvised to secure the chains to ship's fittings. It is important that, whatever means and fittings are used, the arrangement must be adequate to withstand severe loads.

Fairleads as close to the stem as possible should be used to pass the chafing chains. If available, a lead in the centre of the bow should be used to pass both lines. Arranging the mooring lines through fairleads as close together as possible will assure that loads are equally distributed between the lines and will minimise the possibility of parting a line.

Mooring: Prior to making the approach to the mooring, the Pilot and tanker Master should carefully study the wind, waves and current to determine the best approach direction. The approach should be made in the direction in which the tanker can best be handled at very low speed and can best be held stopped in the water. There is adequate depth to manoeuvre a loaded 300,000 d.w.t. tanker (70 ft. draft) within a 3,360 ft. (1025 m.) radius of the mooring buoy.

The side to which the hoses should be brought should also be determined. This is preferably the port side for tankers with conventional right hand screws as the tanker will then move away from the hoses as the tanker moves forward out of the mooring. At the single anchor leg mooring the hoses may be brought to either side of the tanker. In cases where it is evident that the hoses will tend to string to starboard of the tanker during the entire unloading operation, it may be preferable to bring the hoses to the starboard manifold.

The instructions given here assume that the hoses are to be brought to the port manifold. These instructions should be reversed if the hoses are to be brought to the starboard manifold.

The tanker may, if necessary in an emergency, drop an anchor or anchors while approaching the mooring. Anchors should not be dropped, however, within 200 ft. of the mooring buoy, or along the route of the submarine pipe-lines. If an anchor is dropped during an approach to the mooring, it may not be left down after the mooring is completed. A tanker may not remain moored to both the mooring buoy and its own anchor during unloading. Care must be taken not to foul the hose strings or mooring lines in dropping or lifting an anchor.

Just prior to the approach of the tanker to the mooring, the hose launch should pull the hoses to a position to port of the direction of approach. In making the approach the tanker must stay well clear of the hose. During the final approach the tanker should take a course which would pass to starboard of the buoy so that, if the tanker moves too far forward it would safely pass the buoy and not endanger the hoses.

As the tanker approaches the mooring, a messenger line should be passed from the forecastle to the mooring launch. The mooring launch should then proceed ahead and to port of the tanker and make the messenger fast to the port mooring pick-up line. If the large messenger line marker buoys are in position they should be removed from the line and stowed on the launch. The small buoys can pass through the ships fairlead and may therefore be left in position.

At this point the tanker should have only enough headway to carry it within about 150 ft. of the mooring buoy. As soon as the launch is clear, the messenger should be winched aboard the tanker as rapidly as possible. As the mooring pick-up line is winched on deck, it should be coiled on deck. When the chafing chain passes through the fairlead, it should be snubbed in the best manner possible to secure ship fittings.

Stern movement should be used if necessary to avoid overrunning the mooring. The tanker should be allowed to settle back slowly on the port mooring line. Meanwhile, the mooring launch should take another messenger line from the forecastle and secure it to the starboard mooring line messenger. As soon as the launch is clear, the starboard messenger should be winched aboard and the chafing chain made fast to ship's fittings.

Once the tanker is secured to the mooring, the engines should be placed on stand-by. Grease may be applied to the chafing chains at the fairlead to prevent wear. The mooring lines, chafing chains and other mooring gear should be inspected frequently while the tanker is at the mooring.

Connecting the Cargo Hoses: As soon as the tanker is securely moored, the hose launch may tow the ends of the floating hoses to a position beside the tanker manifold. The necessary tools and fittings should be made ready on the tanker deck. The manifold derrick runner should then be lowered to the launch and secured to the pick-up buoy of the hose nearest the tanker.

The hose should be lifted approximately 20 ft. above deck level and the end swung inboard. Make sure the hose is not lying over sharp edges at the rail. Anti-chafing material may be necessary to protect the hose. The hose should be securely tied-off with cables and come-alongs to strong points on the tanker.

Remove the blind flange from the hose end. There should be no danger of oil spillage because the hose remains sealed by the butterfly valve. Check the "O" ring seal on the quick coupling. The hose can now be connected to the tanker manifold by the quick coupling. The hose lifting chain may now be lowered and the hose marker buoy stowed near the rail. the second hose may now be lifted and connected to the manifold in the same manner.

Fit the hand wheels to the butterfly valve gear operators. The tanker manifold valve and butterfly valves may now be opened. *The butterfly valves should be locked in the open position. Under no circumstances should the hose end butterfly valves be operated while oil is flowing through the hose.*

The shore station should be notified that the tanker is prepared to begin discharging. When instructed by the shore station, pumping should begin. Pumping should begin slowly at first until crude oil is recorded reaching the shore station and it is determined that the whole system is operating satisfactorily. The hose launch should inspect the hose strings and the area around the mooring buoy for evidence of leakage.

When it is certain that the entire system is operating correctly, the pumping rate may be increased to the maximum rate prescribed by the shore station. The pumping pressure must not exceed 200 p.s.i. During discharge, periodical inspections should be made of the manifold connection, the entire hose system and the area around the mooring buoy. This inspection may be made from the deck and forecastle of the tanker during daylight hours, night or when visibility is poor, the inspection should be made from a launch.

At regular intervals the pressure at the manifold and the quantity of cargo discharged from the tanker should be recorded. These figures should be compared with those recorded by the shore station. Any marked discrepancy between quantities should be investigated immediately.

It is inadvisable to allow the tanker to get to a completely light condition. Ballast should be taken aboard as necessary to keep the tanker near ballasted trim with the screw completely submerged at all times.

Disconnecting the Hoses and Departing the Mooring: When discharge is completed, the butterfly valves and tanker manifold valves should be closed and the hand wheels removed and returned to the hose launch. Beginning with the hose string further from the tanker, connect the derrick to the hose pick-up chain with the marker buoy in place, and take up the weight of the hose. Depending on the freeboard of the tanker, the lift load may be great. Disconnect the manifold connection and replace the blind flange on the quick coupling. A small amount of cargo may spill into drip pans during this operation.

The hose securing lines should now be released. After both hoses are released the hose launch should pull the hoses away from the side of the tanker.

After the hoses have been disconnected and released and the tanker has taken on sufficient ballast, the tanker may leave the mooring by disconnecting and lowering the mooring lines. The mooring pick-up line should be attached to the chafing chain and the assembly should be lowered until the end of the chain is at the water surface. The mooring pick-up lines may then be dropped. The tanker should get up steam and may use power to move forward before dropping the lines.

Once the lines are dropped, the tanker may either drop slowly astern until clear of the floating hose or may proceed forward and to starboard to pass beside the mooring buoy on the side opposite the hoses. The tanker may then proceed on its voyage.

SHIPMASTER'S REPORT: September 1983.

Prior to Arrival: Prior to arrival Agent requests (if using SBM) height from deck to centreline of manifold, distance of manifold flange faces from side railings and the flange diameter PCD and bolt size manifold or reducers. Also requires dimension of fairlead opening, distance of Smith lock pin to fairlead, bracket clearance of Smith lock assembly and pin diameter.

Berthing: Our vessel (140,000 dwt.) berthed at SBM during SW Monsoon. We picked up one line from the buoy while larger vessels take two lines. PNOC officials will inspect vessel's Smith lock or other mooring arrangement. Used one tug for berthing with tug's line starboard.

Require Customs clearance before commencement of discharge.

Fuel: Bunker suppliers wanted payment or Agent's guarantee thereof before supplying.

Circular: Following letter received on arrival:

M/T ....Port of Limay, Bataan
Attn: M/T ....The Master/Chief Engineer

Gentlemen:

As in ports all over the world, the quality of the environment has become a matter of vital concern to the government. Thus, the Port of Manila Authorities have promulgated regulations covering water pollution, oil spillages and indiscriminate dumping of waste.

Our Company, VRV Resources Corporation, in line with the government's ever continuing campaign to keep Manila Bay and the waters surrounding the Philippine archipelago clean from oil pollution, service inter-island and ocean-going vessels on the *safe handling of slops, used oil* and *contaminated fuel.*

To service our ever-increasing clients, we have a fleet of self-propelled barges and trained personnel ready to receive and safely dispose of potential water pollutants efficiently and without any delay to the ships' schedule. This service is our contribution to the government's effort to keep Manila Bay clean without any expense to the vessel, that is *free of charge.*

SECTION (D) BRC — PRODUCT PIER:

The pier is an open concrete structure, finger shaped, extending 840 ft. in an East/West direction from a 280 ft. long causeway. The piling is of steel pipes covered by concrete from the pier deck to just below the lower tide level. There are 3 loading stations on each side (North-South) of the pier.

The structural strength of this pier is sufficient to safely handle up to 30,000 d.w.t. vessels. Stations 5 and 6 are provided with a fendering system consisting of panels made up of vertical members and horizontal walers faced with wooden rubbing strips and backed up by Raykin fender buffer units. At the other stations, fender panels, faced with rubbing strips and backed by resilient fender buffers, are used. Stations 5 and 6 are provided with 2 bollards of cast steel material of 50 tons capacity and 3 others of 25 tons which should be sufficient to handle fully loaded "Kure Class" vessels.

The fendering system is designed to absorb the impact of 18,000 d.w.t. approaching at a speed of 1 knot and it is suitable to contain the impact energy of the smaller vessels and barges using this pier.

Barges and vessels' Masters should carry out proper manoeuvring, limiting their approach speed of 2 knots and coming alongside almost parallel or at a small angle of incidence (10° max.).

Should Masters be unable to manoeuvre properly, assistance of a service boat or tug boat should be sought and charged to the vessel's Owners.

Berthing operations are normally witnessed by a BRC representative and claim for any damage is properly filed holding owners of vessels responsible. A fully loaded "Kure Class" vessel, down at her tropical mark and drawing 31 ft. 6 in. may be accommodated at this berth. Vessel would come alongside with her starboard side to, but special care should be exercised for the aft mooring arrangements since the stem of the vessel would be over the pier by about 50 ft. Approach to the pier is somewhat obstructed by the CBM. When going alongside either the North or South side of the pier, use the offside anchor for keeping the bow under control.

Considering the limited width of the dredged basin and presence of cross currents, 2 tugs of 400 h.p. each are recommended to manoeuvre in an out of this berth.

The Northern slope of the – 35 ft. below MLLW basin extends seaward parallel to the South face of the pier. In front of the jetty head, close to and parallel the to North slope of the basin the submarine pipes running to the CBM are laid down. The depth of water above these pipes is not well defined but is certainly less than that of the dredged basin. Deep draft laden tankers leaving or entering Station 5 should at all times avoid passing North of the Northern slope of the basin since a danger of running aground and hitting the submarine system exists.

Masters and Pilots should be aware and read poster placed at the pier end warning mariners of this danger.

Smaller tonnage should also make use of the Pilots and assistance of a service boat (100 h.p.) in view of cross currents when manoeuvring alongside or off Berths 5 and 6.

SECTION (E) BRC – LPG FACILITIES:

Alongside the breakwater, there is a "T"-shaped jetty designed to accommodate LPG vessels. The pier consists of 2 breasting and 2 mooring dolphins. The breasting dolphins are provided with a fendering system consisting of a panel made up of vertical steel members and horizontal waler faced with wooden rubbing strips and backed up by rubber arch fenders.

Maximum dimensions of vessels received at this berth are as follows: LOA 210 ft., beam unlimited, d.w.t. 700 long tonnes. Energy of absorbtion, maximum displacement and speed of approach are not available.

The approach basin to and alongside this berth has been dredged(in 1971) and sounding revealed a minimum depth below MLLW of 18 ft. Therefore, a max. draft of 16 ft. appears safely acceptable at all tidal conditions.

Because of the limited size of the basin and lack of any beacon or buoy indicating its extent, assistance of Pilot should be sought. Also, it would be advisable to request the assistance of a 100 h.p. service boat to enter and leave the basin since the approach and the clearing of the berth has to be made in a parallel direction to the axis of the berth.

LPG is loaded through a Niigata Chicksan loading arm which carries both the liquid and vapour lines. Liquid line is connected directly on the loading arm with a bolted 4 in. flange. The vapour line is connected by a section of 2 in. diameter × 5 ft. long hand rubber hose terminating in a 2 in. ASA flange. An additional 2 in. rubber hose is available should vessel's vapour and liquid connection be more than 5 ft. apart.

AUTHORITY: *Operator:* Bataan Refining Corporation, 7901 Makati Avenue, MCC P.O.Box 1053, Makati, Metro Manila, Philippines. *Tel:* 85-90-61/95. *Telex:* 22259 PNO PH, 63667 PNOC PN, 45270 PNOC PM, 14817 PNOC PS. *Cables:* Bataanref-Manila.

Plant Site: Limay, Bataan. *Tel:* 49-16-20/29, 48-17-77.

BATANGAS, Luzon (including Tabangao):
13.45 N. 121.03 E. **(See Plan Book)**

See "General" before first port.

PORT LIMITS: Batangas Harbour embraces all waters of Batangas Bay extending seaward up to an imaginary line connecting Cazador Poin and Matuco Point.

DOCUMENTS: Upon arrival, the following papers should be forwarded to the Authorities:

2 Crew lists (visaed).
3 List of Stores, Deck, Engine, Stewards Dept.
3 List of Stores, Firearms, Medicine and Narcotics.
6 Personal Effects Declaration.
6 Inward Manifest.
8 Ordinary Crew List.
Clearance from last port of call

PILOTAGE: Pilotage for shifting from Quarantine Anchorage, docking and undocking compulsory for all vessels engaged in foreign trade The vessel is met by the harbour pilot approximately 2 miles South of the wharf. Pilotage for entering the Batangas Harbour and anchoring in the Quarantine Anchorage is optional but pilotage for shifting therefrom o changing in the stream is compulsory for vessel engaged in foreign trade. At least 48 hours before ships arrival, advise ship's Agents o estimated time of arrival (ETA).

Visual Signals, "I need a Pilot" – The single hoist of the Internationa Code flag "G".

Sound Signals – "I need a Pilot" – the International Morse Code "G" o 2 prolonged blast, followed by 1 short blast of the ship's siren.

Pilot Launch: 25 g.r.t. white with a black "P" at both sides of bow and with International Code Flag "H" hoisted. At night time, all around white ligh on top of a red light in a vertical line, with green and red sidelights.

APPROACHES: "Suggested Approach" From the South between Matuco Point and Malajibomanok Islands, with an opening of 3.5 miles White flashing beacon on Malajibomanok Island duration 0.3 seconds every 10 seconds visible for 8 miles in clear weather. Islands and poin can be approached within 0.5 mile.

Landmarks and Coastal Lights: Government pier at Bo. Sta. Clara may be approached safely from either direction paralleling its face. Batangas church dome, Bauan church bell tower, refinery stacks and columns and wharves are good landmarks. Batangas Lighthouse is Gp. Fl. (3) green every 5 seconds.

ANCHORAGE: All vessels entering Batangas Harbour shall show their colours and signal letters shall be kept flying until the vessel is boarded by the proper Officials within 2 miles before arriving at the designated Quarantine Anchorage.

1.	13° 45′ 06″ N.	121° 02′ E.	Quarantine
2.	13° 45′ 13″ N.	121° 02′ 14″ E.	for vessels less than 1,000 g.r.t.
3.	13° 45′ 06″ N.	121° 02′ E.	for vessels over 1,000 g.r.t.
4.	13° 45′ 30″ N.	121° 01′ 55″ E.	for vessels over 3,000 g.r.t.
5.	13° 45′ 30″ N.	121° 01′ 42″ E.	
6.	13° 46′ N.	121° 01′ 15″ E.	for Caltex wharf
7.	13° 43′ 35″ N.	121° 02′ 50″ E.	for Shell wharf
8.	14° 42′ 54″ N.	121° 03′ 06″ E.	for Pacific flour mills pier
9.	14° 46′ 18″ N.	120° 58′ 15″ E.	for Batangas Bay Terminals, inc. pier.

MAX. SIZE: See "Berthing" and "Tankers".

TUGS: Tug service is not furnished by the two oil refineries. The use of a tug for berthing and unberthing is required. Although a tug is normally available at Batangas it may be necessary to dispatch a tug from Manila Accordingly, it is important for Masters of vessels to provide at leas 48 hours advance notice of ETA to ensure availability of the tug boat.

BERTHING: Berthing may be done any time during the day or at nigh and Masters should exercise their own judgement in this respect Vessels moor either port or starboard side to, depending on prevailing conditions.

Batangas Govt. Pier:

	Length (m.)	*Width* (m.)	*Depth* (m.)
Pier I	127.5	15	10.5
Pier II	105.0	15	10.00
	48.0	12	
Pier III	84.0	15	5.0

Bauan and Mainaga Pier:

Bauan: Lat. 13° 46′ 48″ N., Long. 121° 04′ 06″ E.
Mainaga: Lat. 13° 35′ 48″ N., Long. 120° 57′ 12″ E.

Alternative loading or discharging ports, but only in cases when there is congestion at the government piers at the Port of Batangas.

Pacific Flour Mill: Location: The area contained from the Southernmos pile of the Shell Refinery to the area West of Little Tabangao River extending 1 mile Westward.

Max. Size: LOA 492 ft., draft 45 ft.

Pier: Length 93 m. with 142.5 m. causeway, width 7.5 m., depth 14 m.

Special Regulations:

(A) That a navigational and mooring area of 0.5 mile from the Northernmost and Southernmost mooring dolphins of the PFM pier be free from fish traps and other fishing devices.

(B) That a freeway from incoming and outgoing vessels from the PFM pier be kept free from all fish traps of any forms, and/or any other fishing devices that may obstruct navigation for a distance of 0.5 mile North and South of the PFM pierhead outside of the 50 ft. depth contour approach to the pier.

Batangas Bay Terminal, Inc: Pier facilities: 3 breasting dolphins 80 m apart; 2 fender piles (wooden) and 2 mooring dolphins. Causeway 290 m. long.

Max. Size: LOA – 700 ft. Draft – 39 ft.

Location: The Batangas Bay Terminal, Inc. located at 13° 47′ 00″ N., and 120° 59′ 02″ E. It is in Bo. Bolo, Bauan, Batangas, the total area (shoreland) is 5.5 hectares and 18 hectares (foreshore) land.

Special Regulations:

(A) That the area contained between the S.W. site of the BBTI for a distance of 1 mile from shoreline North and South be entirely free permanently from all forms of fishing devices.

(B) That a distance of 100 yards around the pier be entirely free from all forms of fish traps, fish corrals, fish weirs, etc. and it be "Off Limits" to all unauthorised persons, including fishermen and those travelling by bancas underneath the said pier.

PNOC Shipping and Transport Corp.:

Max. Size: LOA 340 ft., draft 14 ft. Pier: Length 97 m., width 4.87 m.

PNOC Energy Supply Base:

Max. Size: LOA 426 ft., draft 25 ft.

All vessels proceeding to Batangas should radio either Caltex or Shell, whichever is their destination, their estimated time arrival at Batangas as early as possible, but not less than 96 hours before arrival, amending this ETA subsequently if it varies more than 2 hours from the original estimate in order to arrange towing gangs with the Luzon Stevedoring Corporation.

Vessels Loading Sugar: See "Iloilo – Shipmaster's Report".

STEVEDORES: Stevedoring is usually handled by Luzon Stevedoring Corporation.

MEDICAL: Both refineries have small hospitals for handling emergency cases. Should any ship's personnel need prolonged hospitalisation, arrangement will have to be made to transfer the patient to Manila or to the Provincial Hospital of Batangas where suitable medical attention is available. Dental treatment can be obtained from local dentists in the town of Batangas.

TANKERS: *Shell Refinery, Tabangao:* Jetty 1; two hoses of 10 in. diameter. Jetty 2; 4 arms of 12 in. diameter. Slops acceptable at 500 t.p.h. up to limit of 3,000 tons.

Two wharves with the following dimensions:

(a) Length 336 m. Concrete	(b) Length 700 m. Concrete
Width 9 m.	Width 9 m.
Depth 15 m.	Depth 15 m.

Crude oil is delivered by tankers of up to about 75,000 d.w.t.

LPG: Report: Dated June 1984.

1. Send ETA to "Shell Gas Manila".
2. Vessel to dock port side alongside.
3. Shore manifolds from stern to bow – Butane – Butane Vapour – Propane Vapour – Propane.
4. Shore flange characteristics:
   - Butane liquid 12 in. diameter ANSI 150 lb. flat flange.
   - Butane vapour 8 in. diameter ANSI 150 lb. flat flange.
   - Propane vapour 8 in. diameter ANSI 150 lb. flat flange.
   - Propane liquid 12 in. diameter ANSI 150 lb. flat flange.
5. Appropriate cross-overs and reducers for simultaneous discharge of propane and butane (both with vapour return) should be installed by ship prior to arrival.
6. Vapour will be returned to ship while discharging.
7. Cargo must arrive as cold as possible, propane at −43°C and butane at −10°C, during discharge. Ship's tanks back-pressure against vapour return must not exceed 80 millibars gauge. To achieve the above conditions, the ship may have to operate its refrigeration equipment at full capapcity during the inward voyage and while discharging cargo at the port.
8. The ship should provide an accommodation ladder or gangway.

Caltex Refinery Wharf: The Caltex Refinery including the island wharf is located North of the government pier and at night can be distinguished by illumination lighting on its structures and red aviation warning lights at the top of the columns. A gas flame at the top of the 150 ft. flare stack is also visible several miles from shore. The Caltex wharves are adequately lighted to facilitate night berthing or unberthing operations if desired. LOA 755 ft., draft 41 ft. Jetty designed for 45,000 d.w.t.

Location: Lat. 13° 48′ 24″ N., Long. 121° 01′ 00″ E.
Lat. 13° 46′ 12″ N., Long. 121° 01′ 36″ E. (Service Wharf)

Construction: 2 wharves with the following dimensions:

T-Head: Length 84 m., width 13 m., depth 14 m., with 2 mooring buoys 244 m. apart parallel to the berths facing the shoreline.

Island Wharf: 2 breasting dolphins 91 m. apart. Length 16 m., width 12 m., depth 27 m., with unloading platforms installed in between the dolphins and provided with 2×125 ton quick release hooks and 2×125 ton bollards.

Crude oil is delivered by 200,000 d.w.t. to 300,000 d.w.t. supertankers.

Special Regulations:

(A) That a distance of 100 yards. around each of the 2 wharves (including island wharf) be entirely free from all forms of fishing devices such as "bonbons" fish corrals, fish weirs etc., and that it be "Off Limits" to all unauthorised persons, including fishermen and those travelling by bancas within the areas.

(B) That a navigational and mooring area of 0.5 mile North and South respectively of the limits stipulated be likewise free from fish traps and other fishing devices, but with option to fishermen to fish with hooks or with bancas within the said area provided that they do not come within 100 yd. around the jetty.

(C) That a freeway for incoming and outgoing vessels from the Shell Refinery piers be kept free from "bonbons" and/or any other fishing devices that may obstruct navigation for a distance of 0.5 miles North and South of the jetty head outside of the 50 m. depth contour approach to the jetty.

See "Shipmaster's Report".

DENSITY: 1026.

FRESH WATER: Fresh water is available to vessels loading, unloading or bunkering at Batangas Port. It is delivered to the vessel through hose connections. The water satisfies the physical and chemical requirements for drinking water.

CUSTOMS ALLOWANCES: Sufficient amount for crew's consumption while in port.

IDENTIFICATION CARDS: Not required in the Port of Batangas. Pedestrian and vehicle passes required.

FUEL: Bunkers are available from the 2 refineries. Prior advice should be given through the ship's Agent.

FIRE PRECAUTIONS: At both refineries smoking or open fires are prohibited on the wharves or on vessels alongside or within 100 yards of either wharf. Furthermore, each vessel's personnel is responsible for the safety of its own ship at all times.

CONSULS: Consulates are stationed in Manila.

REPAIRS: *Keppel, Philippines:* (Finger Pier) Total berth of 300 m. with deep water, provides facilities for repair of vessels of up to 5,000 d.w.t.

Cranage: 1×5 ton travelling crane on floating deck; 2×37 ton crawler cranes; 1×12 ton mobile crane.

Hull shop: 80 m.×22 m. covered workshops equipped with 2 units 10 ton overhead travelling crane; 1×750 ton×6 m. long flanging press; 1×500-ton hydraulic portal press.

Machine shop: 80 m.×14 m. covered workshop equipped with 1×5 ton overhead travelling crane, 1×10 m. long×800 m. swing lathe, other lathes, milling machines, drilling machines, etc.

Electrical shop: Facilities for electrical repairs, rewinding, insulation repairs, etc., other shops are pipe and carpenter shop to give full range of services for new constructions and repairs.

PNOC Marine Corporation: Principal Facilities:

Shiplift Drydock:
- Lifting Capacity: 7,500 long tons.
- Length of Platform: 172.5 m.
- Width of Platform: 28 m.
- Maximum Draft Liftdock at MLLW without Keel Blocks: 7.97 m.
- Elevation at Top of Pier at MLLW: 4.6 m.

Transfer System Parameters:
- Total Rated Lift Capacity: 7,500 long tons.
- Maximum Lift Capacity: 11,300 long tons.
- Keel Block Bogie Jacks: 164 units (maximum).
- Outrigger Bogie Jacks: 46 units (maximum).
- Rail Lift Cylinders: 120 units (maximum).

Work Berths:

New Construction Berth No. 9: Capacity 7,500 long tons (light displacement weight). Length 168.3 m. Width 27 m.

Repair Berth No. 8: Capacity 7,500 long tons (light displacement weight). Length 168.3 m. Width 27 m.

Repair Berth No. 7: Capacity 5,000 long tons (light displacement weight). Length 108 m. Width 27 m.

Repair Berth Nos. 1 – 6: Capacity 2,700 long tons (light displacement weight). Length 108 m. Width 21 m.

Other Facilities, Buildings and Shops:

Lift Control Building. New Construction/Erection Area. Gantry Crane (50 ton capacity). Whirley Crane (42 ton capacity). Receiving and Control Building. Covered Fabrication Area. Steel Fabrication Shop. Open Storage. Carpentry Shop and Mold Loft. Vehicle Repair Shop. Power Plant. Propane Storage Pad. Flammable Storage. Oxygen Plant. Water Storage Tank. Pump House. Crane Control House. Warehouse. Gate and Control Building. Parking Area. Administration/Clinic Building. Employee Service. Canteen. Outfitting Shop. Piping Storage. Foundry Shop. Transfer Area.

DRYDOCKS: Keppel, Philippines has its floating dock with the following data of information: Max. length of vessels, 110 m.; Max. beam of vessels, 19 m.; Max. draft of docking, 5 m.

REPATRIATION: Pre-arrangement by ship's Agent and/or Master of the vessel and the Immigration Officer assigned on board the vessel.

AIRPORT: At Manila.

TIME: GMT plus 8 hours.

HOLIDAYS: New Year's Day (January 1st); Holy Thursday; Good Friday; Labour Day (May 1st); Independence Day (June 12th); R.P-U.S. Friendship Day (July 4th); Bonifacio Day (November 30th); Christmas Day (December 25th); Rizal Day (December 30th); Special holidays declared by the President of the Philippines are also included. If any other legal holiday falls on Sunday the following day is observed as a holiday. Cargo handling work can be arranged on any or all holidays with the vessel's Agent.

POLICE/AMBULANCE/FIRE: PPA Port Police: 725-2882. National Customs Police: 725-2971. Batangas City Police: 725-2125. Ambulance: 725-2890. Fire Department: 725-2470.

TELEPHONES: At present placing telephones on board foreign vessels is not available; however, telephone service is available on the jetty of both refineries.

GENERAL: *Discharge of Ballast:* No dirty ballast may be dumped into the territorial waters of the Republic of the Philippines. The refineries have provisions for off-loading a limited amount of oil water ballast.

Rat Guards: Rat Guards shall be placed on all mooring lines to the wharves and piers.

Parking Facilities: 7,226 sq.m.

DEVELOPMENTS: New coal discharge terminal to be completed in 1984 for vessels of 100,000 d.w.t., discharge rate 1,600 t.p.h.

SHIPMASTER'S REPORT: June 1982.

Caltex Island Wharf:

Prior to arrival call "Luzsteveco" (Luzon Stevedoring Co.) on Channel 16 or 11 for berthing information. Berthing is slow as pilot boat runs lines and is not powerful enough to handle big wires. Moorings are 3, 2, 2. We were advised 16 in. reducers but they prefer 14 in. which are more suitable for their hydraulic clamps. 4 surveyors on board for cargo. Boat required to get ashore.

AUTHORITY: Philippine Ports Authority, Port of Batangas, Batangas City, Philippines. *Tel:* 725-2862, 725-3793. *Contact:* Salvador L. Reyna, Port Manager.

BISLIG, Mindanao: 08.14 N. 126.22 E.

See "General" before first port.

PILOTAGE: Vessel should send direct advice to the Pilot or through its Agents 48 hours prior or at the very least 24 hours before ETA by commercial telegraphy.

There is no VHF operated by the Pilot.

Pilot boat is painted black (hull) and white (bridge and mast). International Code Signals used to call Pilot.

Pilot station is located at Lat. 8° 11.4′ N., Long. 126° 21.2′ E.

Pilot boat will be located (if by prior advice/arrangement by Master requiring specific service of meeting vessel outside of entrance and conducting vessel through channel to inner harbour) at Lat. 8° 16.85′ N., Long. 126° 26.50′ E. or 340°, 2.35 miles off Sanco Pt. Lighthouse.

Pilot will always board a vessel (outside of entrance) via the Pilot's or Jacob's ladder on the leeward side of the vessel.

ANCHORAGE: While waiting for a Pilot, the recommended anchorage (at entrance) is at Lat. 8° 16.1′ N., Long. 126° 26.1′ E. on or about this position and/or within an area of 0.5 miles radius from this point.

Quarantine anchorage or inner harbour is based on the point Lat. 8° 12.9′ N., Long. 126° 22.0′ E. to within 0.25 miles radius from this point as centre, otherwise 1 mile North of BBLCI Pier's end.

Working anchorage at stream. When vessel is through with all the port formalities, she has to go to a working area for loading/unloading operations, thus:

BBLCI. Vessels will anchor at least within a 0.5 mile radius from the tip of BBLCI pier.

PICOP. Is especially preferred during N.W. monsoon at least within a 0.5 mile radius from the foot/base of PICOP breakwater.

Bislig Bay. In general is bounded by a line from *(a)* Sanco Pt. to *(b)* Mawes I. to N.W., thence to *(c)* the town of Bislig to the S.W., thence to *(d)* the village of Mangagoy to the S.W., and back to *(a)* Sanco Pt.

MAX. SIZE: 30 ft. at PICOP Pier.

HEALTH: Any vessel can be given Free Pratique if upon inspection everybody is healthy, vessel is clean and all certificates of vaccination are complete. However, if there is a suspicious quarantinable disease, a probationary Pratique should be issued and after 6 days, if it was found out that there was no quarantinable disease at all, Free Pratique will be issued.

RADIO: RCPI, Clavecella and CRC.

TUGS: Tugs normally meet vessel with Pilot at the 5 miles limit and assist Pilot in docking, using ship's lines. 5 available. 4 at 225 h.p. and 1 at 112 h.p.

BERTHING: Berthing is on a first-come first served basis. During the N.E. monsoon berthing is in daylight only for precautionary measures.

BBLCI and PICOP maintain 2 piers and 1 marginal pier.

BBLCI: Pier Position Lat. 8° 11′ 51″ N., Long. 126° 21′ 55″ W. This is an all concrete pier 800 ft. long and 30 ft. wide with berthing space of 550 ft. on each side. Max. draft 28 ft. at seaward end, 22 ft. at shore end. Both sides are protected by dolphins constructed of pile fenders and large tyres as absorbers. Largest vessel to berth at pier at present is 18,500 tons gross. Lumber, veneer, plywood and logs are loaded at this pier.

BBLCI Marginal Pier. For vessels of less than 1,000 tons gross and 10 ft. draft.

PICOP Piers:	*Length (m.)*	*Width (m.)*	*Depth (m.)*
Pier I (concrete)	244	8.0	8.8
Pier II	130	17.7	9.1

There are several patches of reefs projecting N.W. of the channel from Sanco Point to the fairway leading to the PICOP Piers. The port therefore should be entered only during daylight.

January, February and March, the season of the N.E. monsoon, makes it difficult for approaching and securing ship because of strong winds and heavy seas.

CARGO HANDLING FACILITIES: Both companies have ample equipment. Fork lifts, lighters, mobile cranes max. lift 50 ton (BBLCI), and 75 ton (PICOP), sideloaders, trucks and trailers.

STEVEDORES: ETA should be advised 2 days before ship's arrival stating workable hatches and gang requirement for berthing and gang arrangement.

20 gangs available, shifts change at 0600 and 1800 hrs. when port is full. If only few ships in port change at 0600, 1500 and 2300 hrs.

MEDICAL: It is necessary for the Agent to receive advance notice if there is serious medical attendance and hospitalisation. However, less serious medical attendance does not need notification. Port of Bislig has hospital facilities with complete cholera, El Tor and typhoid vaccine available.

DENSITY: About 1025 with tendency to become heavier during dry season and on flood tide.

FRESH WATER: Available at East end of BBLCI Pier. The connection is 2 in., situated 100 ft. from the approach, discharge rate 20 g.p.m.

FUEL: Small quantities available. BBLCI maintain 3 tanks for Caltex.

1. Bunker oil tank	30,000 bbls.
2. Diesel oil tank	11,300 bbls.
3. Gasoline tank	5,100 bbls.

Tank trucks available to deliver oil and gasoline.

GANGWAY/DECK WATCHMEN: P1.00 per hour for at least 3 men.

OPENING/CLOSING HATCHES: Rigging of booms is done by ship's crew, while opening and closing of hatches is carried out by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle liquor for each man.

IDENTIFICATION CARDS: Needed.

REPAIRS: May be made to ship's gear and equipment by arrangement with BBLCI. The company have an engine repair shop, machine shop and foundry.

AIRPORT: 5 km. distant; daily flights.

TIME: Local Standard Time is 8 hours ahead of GMT.

HOLIDAYS: On Christmas Day; New Year's Day and Good Friday. Cargo work may be arranged.

GENERAL: Engineering supplies available from BBLCI and PICOP. Dunnage available through BBLCI. Provisions available through chandler or market 1 km. from BBLCI Pier.

DEVELOPMENTS: More berthing facilities are on the programme for the next 3 to 5 years when the pulp and paper mill is in operation. Installation of more log-processing plants to increase shipments.

SHIPMASTER'S REPORT: June 1978

Bislig Bay – East coast of the Philippines – 8° 15′ N., 126° 25′ E.

Apart from the B.A. Charts, Philippine Charts 4627 and 4664 were used. (Available at Manila).

Directions: Experienced an insetting current along the coast before entering the bay. For High and Low water Bislig Bay see A.T.T. Hinatuan, No. 5057.

(a) The tower at Sanco Point has been destroyed though the foundation (5 m. high) is still visible when not obscured by trees when entering the bay.
(b) All buoys have disappeared.
(c) Beacon B was blown away but beacons A & C are conspicuous.
(d) Prominent Hill of 920 ft. in the direction of 230° was invisible because of morning mist.

Kept beacon "A" on bearing 205° till beacon "C" was 130° and the small island of Agonoy 270°. One way of keeping clear of the shallow depths near the entrance.

Altered course to 230° and steered for the Quarantine Anchorage when Agonoy was 320°.

There is one Pilot available. Pilotage is compulsory. He embarked halfway between Sanco Point and the anchorage from a prao, displaying a large H-flag.

Berthed starboard side to at the East side of the pier with starboard anchor one shackle in the water slacking away when necessary. Observed a noticeable swell on the other side of the pier.

Moored with 3 headlines and 1 spring forward. Two springs from Hatch VI leading forward and 2 lines from the fore-end of Hatch No. V, Hatch No. VI could not be accommodated alongside the wharf. Inferring not to stow any Bislig cargo in that hatch. It is possible but this hampers the despatch as cargo has to be driven by fork lift truck from the deck of Hatch VI to Hatch V.

Two small mooring boats assist in the berthing. On departure these 2 boats assisted in pushing the vessel around.

The normal Quarantine telegram, as for other countries, is not necessary for the Philippines.

Two cabins are required for Immigration and Customs.

Connection with shore: Via the offside gangway and prao. There is a curfew from midnight till 0600 hrs.

Cargo handling: The width of the wharf and the lack of fork lift trucks slowed down operations. Another factor is the presence of another discharging or loading vessel alongside the other side of the pier.

Agency: Agent from Manila Office flew from Manila to assist the local offices.

Fruits and vegetables available.

AUTHORITY: Collector of Customs.

CAGAYAN DE ORO, Mindanao: 08.30 N. 124.40 E.

(See Plan Book)

See "General" before first port.

DOCUMENTS:

Application for Berth.
Vessel's Information.
Inward and Outward Manifests.
Passenger Lists.
Oath on entering Vessel from Foreign Port.
Oath of Clearance of Vessel.
Crew Lists.
Store Lists.
Personal Effects Lists.

PILOTAGE: Pilotage is compulsory for vessels engaged in foreign trade of 100 tons or over, docking or leaving at or leaving the Government Wharf or any privately owned wharf in the Port of Cagayan de Oro.

Notice of ETA should reach the Pilot Association of Cagayan de Oro 24 hours before vessel's arrival. For purposes of berthing allocation, foreign vessel's ETA should be received by PPA 72 hours before arrival. Approaching vessels are required to blow whistle (2 long and 1 short blast) stop the engine and wait for the Pilot to come. A foreign vessel is met by the Harbour Pilot approximately 2 miles from the wharf except for vessels docking at Philippine Sinter which requires the Pilot to meet the vessels 5 miles from the PSC wharf.

ANCHORAGE: The depth of safe anchorage is 60 fathoms, about 400 m. from the shore.

MAX. SIZE: Max. draft of 13 m. alongside, 80 m. from the Northern portion of the quay; the rest 8.5 m. along the quay side.

HEALTH: Foreign ships will clear quarantine on arrival at Cagayan de Oro Harbour. Quarantine officers will board the vessel before the pilot's boat meets the vessel.

RADIO: It is not wise to send ETA of vessel through the radio station. ETA could be best transmitted through the different telegram offices in the city such as RCPI, PT&T, Telefast, Clavecilla and Globe Mackay which is worldwide.

TUGS: Tugs for hire are not available at the Government Wharf. However, Resins, Inc. maintains 1 tug for hire which can be made available by arrangement.

BERTHING: Berthing may be done any time during the day or during the night. Max. permissible ship's draft along the 80 m. portion from the North of the quay is 13 m. and 8.5 m. along the rest of the quay. The present quay is 477.7 m. in length giving a total of 8 berthing spaces.

CARGO HANDLING FACILITIES: The Gold City Integrated Port Service, Inc. has 2 serviceable cranes with capacities of 25 tons and 10 tons; Itadand Hydra truck crane with a capacity of 15 tons, 38 forklifts, 1 with a capacity of 20 tons, 1 with 15 tons, 1 with 5 tons and the remainder 3 tons.

MEDICAL: Hospital facilities are available in the city of Cagayan de Oro.

FRESH WATER: The Philippine Ports Authority supplies water at the Cagayan de Oro Port, fresh water which is safe for drinking. Water is delivered through hose connections direct from PPA's water pipes. With a capacity of loading 40 t.p.h. for every outlet. There are 8 outlets with meters installed.

FUEL: Vessels are required to apply for bunkering at PPA and a bunkering fee of P15.90 is charged per vessel. Fuel oil is supplied by the local distributors of Petron, Caltex, Mobil and Shell.

REPAIRS: Minor repairs, not to exceed 2 hours, may be allowed for vessels at berth upon approval by the Philippine Ports Authority. Major repairs have to be done at the anchorage.

SURVEYORS: None.

HATCHES: Opening and closing of hatches is carried out by the Gold City Integrated Service, Inc.

CUSTOMS ALLOWANCES: Sufficient amount for crew's consumption whilst in port.

AIRPORT: Lumbia Airport is 9 km. from the Macabalan Wharf and is served by regular airlines.

TIME: GMT + 8 hours.

EMERGENCY CO-ORDINATION CENTRE: Philippine Coast Guard Station, Port Area, Cagayan de Oro City. No telephone.

HOLIDAYS: New Year's Day (January 1st), Holy Thursday, Good Friday, Labour Day (May 1st), Araw ng Kagitingan (May 6th), Independence Day (June 12th), Phil. American Friendship Day (July 4th), Bonifacio Day (November 30th), Rizal Day (December 30th).

Special Holidays declared by the President of the Philippines are included. If a legal holiday falls on a Sunday, the following day is a holiday. Normally, the integrated port service works on the vessel regardless of the day except for a 4 hour break in the afternoon of Good Friday, Christmas and New Year's Eve.

POLICE/AMBULANCE/FIRE: Police Tel. 110; Ambulance: Tel. 35-01 (Northern Mindanao Regional Training Hospital). Fire: Tel. 112.

IDENTIFICATION CARDS: Seaman's Book and/or Passport, Shore Leave or Liberty Pass.

STORING: See "Prelims" page viii.

1. Truck.
3. Yes.
4. Yes.
6. Yes.

SHIP SUPPLY SERVICE: The following Chandlers operate in the Port:

Alpha Premier Enterprises, 30 Matilde Neri St., Cagayan de Oro City.

Amity Shipping Agency, 70 Gomez Cor. Capistrano Sts., Cagayan de Oro City.

Andres A. Maandig, Jr., Corrales Ext., Cagayan de Oro City.

Citizen Protective Agency, 1346 Buara, Puntod, Cagayan de Oro City.

Corinne's Kitchenette, Passenger Terminal, Port Area, Macabalan, Cagayan de Oro City.

D A Ship Chandler, 248 San Juan II, Lapasan, Cagayan de Oro City.

Frejeper, 165 Kolambog, Gusa, Cagayan de Oro City.

JBF Services Co., 199 Lapasan, Cagayan de Oro City.

Our Chandling Services, Dr. 2 Sombilon Apt., Corrales Ave., Cagayan de Oro City.

Pair Marine Supplies, 190 CM Recto Ave., Lapasan, Cagayan de Oro City.

Phil. Pisces Marketing & Services, 151 Pabayo-Gomez Sts., Cagayan de Oro City.

Portman Terminals & Warehousing, Inc., c/o Philippine Ports Authority, Macabalan, Cagayan de Oro City.

Q.C. Magada Shipping Agency, YMCA Bldg., J. Pacana St., Cagayan de Oro City.

DEVELOPMENTS: Phase II of port development in progress and will provide: 415 m. quay extension with 10.5 m. draft; 10 hectares reclamation area; construction of 5,000 sq.m. open Transit Shed and 5,500 sq.m. of Container Freight Station, basic marshalling yard and control gate-parking complex. Completion expected mid-1985.

SHIPMASTER'S REPORT: June 1978

Anchored 4.75 cables, 337° from the lighthouse. (F.R. 58 ft.) lowered 4 shackles into the water and after dropping slacked away to 7 shackles in the water in 50 fathoms of water.

Moored portside to owing to the distribution of the cargo in hatches Nos. V and VI. The Pilot prefers to berth starboard too.

Fore and aft springs, use nylon ropes (no wires, to facilitate the handling by the boatcrews). Small tugs push vessel alongside. Anchor lowered with 1 shackle in the water, slacking away when necessary.

Cargo handling was good. Pallets were nicely stacked on the wharf. Provisions, vegetables and fruit, available.

Recommendation: Arrivals at daylight only. Consult Agents before signing papers.

AUTHORITY: Philippine Ports Authority, Port of Cagayan de Oro, Port Management Unit, Macabalan, Cagayan de Oro City, Philippines. *Tel:* 44-48, 45-48. *Contact:* Rogelio G. Soledad, Port Manager.

CEBU, Cebu Island: 10.18 N. 123.53 E. (See Plan Book)

See "General" before first port.

GENERAL:

Port of Cebu City: General Description:

Situated at the city frontage between Cebu and Mactan Island. 4,474 m. of quayside (including international and domestic zones).

3 finger piers at 155×32.8 m. The international zone has a length of 451 m., excluding the 2 finger piers.

3 government transit sheds on each pier with a total area of 6,264 sq.m.

Total port area is 423,245 sq.m.

Port District of Cebu:

(a) The National main Port of Cebu.

(b) Aside from the main Port of Cebu, there are 11 other ports within Cebu Harbour namely:

1. The Ludo Private Port.
2. The Mandaue Municipal Wharf.
3. Ouano Private Wharf.
4. San Miguel Corp. Private Wharf.
5. Fil Oil Depot Private Pier.
6. General Milling Corp. Private Wharf.
7. Matimco Private Wharf.
8. Opon Municipal Wharf.
9. Mobil Oil Depot Private Wharf.
10. Caltex Oil Depot Private Wharf.
11. Shell Island Depot Private Wharf.

DOCUMENTS: *For Entry:*

7 Copies of the Inward Foreign Manifest listing therein all cargoes to be discharged in the port.
4 copies of the Cargo Stowage Plan.
3 copies of the Store List.
3 copies of Bonded Store List.
3 copies of Firearms and Ammunition List.
3 copies of List of Drugs and Narcotics.
3 copies of Passenger List.
3 copies of Crew List.

The original copy of the manifest for all through cargo destined for other ports to be deposited with the Customs Inspector on board.

For clearance:

3 copies of Post Office Clearance (for mail discharged or loaded).
3 copies of Request for Clearance.
5 copies of B.C. Form 101 (Customs Inspector report on departing vessel).
5 copies of B.C. Form 98 (Clearance of Vessel to Foreign Port).
5 copies of B.C. Form 198 (Oath of Master).
3 copies of Quarantine Clearance.
1 copy of Plant and Animal Quarantine Clearance.
7 copies of B.C. Form 88 (Outward Foreign Manifest).
6 copies of B.C. Form 88–A (Statistical Supplement).
5 copies of Master's Oath covering list of officers on board.
5 copies of Crew List.

PILOTAGE: At least 48 hours before arrival, the Shipmaster shall transmit to the ship's Agent in Manila through the Coastal Station, Manila Radio (DSZ, operated by the Association of International Shipping Lines), a message indicating the ship's position and the estimated time of arrival (ETA).

In turn, the ship's Agent shall pre-arrange the meeting time at the designated boat station through a telegram to the Cebu Harbour Pilots' Association.

Boat Station No. 1:

One mile off Black Buoy No. 1 in the vicinity of Bantolinao Lighthouse, Mactan Island for foreign vessels coming from the North of Cebu Harbour.

Boat Station No. 2:

One mile off Lauis Ledge, Mactan Island for foreign vessels coming from the South of Cebu Harbour.

Visual Signals: Request for Pilot. The single hoist of the international code flag "G".

Sound Signals: Request for Pilot. The international morse code "G" or 2 prolonged blasts, followed by 1 short blast of the ship's whistle.

Pilot Boats:

During night-time:

1. All around white light on top of a red light in a vertical line.
2. Side lights.

During daytime:

A motor launch of approximately 20 gross tons, with the single hoist of the international code flag "H".

ANCHORAGE:

(a) 1st Anchorage: In front of Pier 3 in position, Lat. 10° 17.8′ N., Long. 123° 54.90′ E. Depth MLLW=4 fathoms.

(b) 2nd Anchorage: In front of William Lines Warehouse in position, Lat. 10° 18.0′ N., Long. 123° 55.25′ E. Depth MLLW=5 fathoms.

(c) 3rd Anchorage: In front of Aboitiz Terminal in position, Lat. 10° 18.2′ N., Long. 123° 55.5′ E. Depth MLLW=6 fathoms.

South Stream:

(a) 1st Anchorage: Opposite Ludo Wharf in position, Lat. 10° 16.88′ N., Long. 123° 53.43′ E. Depth MLLW=6 fathoms.

(b) 2nd Anchorage: N.E. of Cawit Island in position, Lat. 10° 16.54′ N., Long. 123° 53.33′ E. Depth MLLW=8 fathoms.

(c) 3rd Anchorage: Lat. 10° 16.17′ N., Long. 123° 53.28′ E. Depth MLLW=6 fathoms.

(d) Explosive Anchorage: South of Lipata Point, West of Lauis Ledge.

Anchorage Instructions:

(a) Only 3 vessels of 600 ft. overall length can anchor at the anchorage with a safety margin for dragging and swinging during bad weather with 4 shackles in the water recommended for safe anchorage.

(b) For each vessel of 600 ft. overall length with 4 shackles of anchor chain in the water, approximate turning circle radius is 960 ft.

PORT LIMITS: The Port Limits of Cebu define as: Cebu Harbour as that portion of the Strait between Mactan Island and the Island of Cebu within the following boundaries: an imaginary line extending from Bantolinao Point, Mactan Island, due North (true) to the Island of Cebu; and an imaginary line extending from Lauis Ledge, Mactan Island, to Lipata Point, Island of Cebu.

RESTRICTIONS:

1. Foreign ships are not allowed to pass the North Channel, due to the bridge between Madaue and Opon. However, ships of 80 ft. vertical height from MLW and length of 300 ft. may pass with utmost care.
2. Draft limitation of 40 ft. for Cebu Channel while port established berthing spaces vary from 10 ft. up to 30 ft.
3. Ballast, oil are prohibited to be discharged within the Cebu Harbour and Philippine waters.

MAX. SIZE: See "Berthing".

HEALTH: Pratique obtained after Quarantine personnel have boarded, mustered crew and passengers, and examined ship's health documents. Pratique automatic if vessel coming from another Philippine port.

RADIO: Globe Mackay & Radio Corp. Call letters DZM. (Other call letters and frequencies available).

Working Frequencies: 4328 kHz, 6492 kHz, 8656 kHz, 12984 kHz.

Listening Frequencies: 425 kHz and 500 kHz; 6258.5 – 6265.5 kHz; 8354 – 8374 kHz; 12531 – 12561 kHz.

Master may contact Cebu Stevedoring Company through Channel 1 (156.7 MHz) and Channel 2 (157.8 MHz) VHF.

VHF: Harbour Pilots may be contacted on VHF Channel 16.

BERTHING: Berthing may be done at any time during the day or at night and Masters should exercise their own judgment in this respect. Vessels moor either port or starboard side to, depending on prevailing conditions.

Port of Cebu: Berthing of vessels engaged in foreign trade are limited to moor only at the following berthing areas.

(a) National Main Port:

Berth Number	*Length of Berthing space (m.)*	*Draft Limitation (ft.)*
7	193	30
8	258	18
Pier 1 South side	153.65	25
Pier 1 North side	153.65	25
Pier 2 South side	155.65	25
Pier 2 North side	155.65	25

(b) Ludo Private Port: Berthing of vessels engaged in foreign trade at Ludo Private Port are moored to concrete dolphins running N.E. or S.W. of the Ludo Pier. Draft limitation: 40 ft.

Port Establishment of Mandaue: Berthing of vessels engaged in foreign trade are not allowed at Mandaue. Draft limitation: 12 ft.

Port Establishment of Madan: Berthing of vessels engaged in foreign trade are allowed at General Milling Corporation Private Wharf, and Shell Island Depot Private Wharf.

Port District	*Draft Limitation (ft.)*
General Milling Corp. Pvt. Wharf	25
Opon Municipal Port	15
Mobil Oil Depot	25
Caltex Oil Depot	25
Shell Island Depot	30

Cebu is a principal port of entry open to both foreign and domestic trade.

Other Ports of Entry under PMU-Cebu.

I. Mactan. Another port of entry, N.E. of the Port of Cebu City. Considered as an industrial port, it has jurisdiction over all of Mactan, Shell and Olango islands. Average ship call is 145 vessels (foreign and domestic) per month.

Other ports of entry under the jurisdiction of PPA-Mactan but owned by private entities are:

General Milling Corporation – A 275 m. private marginal wharf with an average depth of 12.20 m. Foreign vessels usually carry raw wheat materials for processing at GMC mills.

Mobil Oil Philippines – 97 m. long with an average depth of 9.90 m. Has total storage capacity of 424,162 bbls. Used exclusively by tankers.

Caltex – Shell – 156.34 m. long with total storage capacity of 273,750 bbls.

II. Tagbilaran. Situated at the S.W. portion of the island-province of Bohol, the Tagbilaran Port has a total area of about 10,393.48 sq.m. Average depth is 3.28 m. (This is an ongoing project. Reclaimation to 90 m. × 28 m. × 6.30 m. depth).

Pilotage is compulsory which is handled by the Tagbilaran Harbour Pilots Association.

Philippine Sinter Corporation (PSC) Private Port: Situated in Garcia Hernandez, S.E. of Bohol and is 53 km. from Tagbilaran City.

III. Other Private Ports Which Also Serve as Ports of Entry.

Atlas Consolidated Mining & Development Corporation (ACMDC). Under the jurisdiction of the PPA Subport of Toledo, this private port caters to ocean-going vessels which unload imported machinery and equipment, anhydrous ammonia, sulphuric acid among others. While those exported are copper concentrates and pyrite cinders.

Durano Private Port in Danao, Cebu.

APO Cement Corporation Private Port in Tina-an Naga, Cebu.

Philippine Mining Service Corporation Private Port, located at the Municipality of Dalaguete, Cebu caters to foreign vessels to load dolomite with the use of conveyor belts.

National Power Private Port, located at Tina-an Naga, Cebu caters to foreign and domestic vessels to load or unload coal.

Total Bulk Corp. in Mandaue City.

Prime White Cement in Asturias, Cebu.

Petrophil Corp. in Mandaue City.

TUGS: The Cebu Harbour Pilots Association has available tugs of varying h.p. When additional h.p. is required, Cebu Stevedoring Co. can provide tugboat with h.p. ranging from 350 to 690 h.p.

BRIDGES: The Opon-Mandaue Bridge crossing the North channel is completed and open to traffic. According to Cebu Pilots Association, clearance is 76 ft. at HW and 80 ft. at LW.

STEVEDORES: Ordered by Agents, no ETA to stevedores necessary from Master.

Cranes (50 ton floating crane), forklifts, trucks, tugs, barges and lighters are used for cargo handling and are mostly owned by private contractors.

MEDICAL: No advance notice to Agents needed. Hospital facilities available anytime.

TANKERS: See "Berthing".

DENSITY: 1030.

FRESH WATER: Most berths supply by shore installation, otherwise by barge or trucks.

FUEL: Fuel oil can be obtained by arrangement with the different oil installations on Mactan Island.

FIRE PRECAUTIONS: Tankers discharging: smoking only allowed in saloon (officers), crew in the messroom.

GANGWAY/DECK WATCHMEN: Services of watchmen necessary subject Master's recommendation.

OPENING/CLOSING HATCHES: Stevedores, with aid of ship's crew.

CUSTOMS ALLOWANCES: (Tobacco) 1 carton a week for each crew member. (Wine and/or Spirits) 1 bottle a week for each crew member.

IDENTIFICATION CARDS: Required by Immigration Authorities.

CONSULS: Norwegian 9-77-20; Chinese 7-45-85; American 7-31-51.

REPAIRS: Minor repairs possible.

DRY DOCK: Cebu Shipyard – max. 1,000 d.w.t. only. 5 smaller dry docks available (300 d.w.t. – 800 d.w.t.).

REPATRIATION: Facilities available.

AIRPORT: Distance 7 miles from port and regularly served by all domestic airlines.

TIME: Local time based on the 120° East meridian. GMT plus 8 hours.

HOLIDAYS: Cargo can be arranged during holidays, which are the following: New Year (January 1st); Holy Thursday; Good Friday; Bataan Day (April 9th); Labour Day (May 1st); Independence Day (June 12th); Republic Day (July 4th); Bonifacio Day (November 30th); Christmas Day (December 25th); Rizal Day (December 30th).

SHORE LEAVE: Possible after clearance from Immigration.

SERVICES: Compass adjusting services available. Contact Captain Chong at G.P. Shipping Lines or Captain Basa at Aboitiz Shipping Lines.

DELAYS: Berthing on North side of piers depends upon tide and current. South side of piers, vessel can dock any time.

PROPOSED PORT DEVELOPMENT:

I. *Container – Foreign Trade Terminal:*

Foreign trade terminal to be constructed at the Northernmost section of the PEA reclamation. It will be provided with facilities for handling containerised cargoes (both in domestic and foreign trade) and conventional foreign cargo. It will also accommodate the bulk grain handled by the National Grains Authority (NGA).

The terminal will be provided with 550 m. of deep water quays (−9.00 m. below MLLW designed for the first generation container vessel and a 15,000 d.w.t. mixed cargo freighter) and a back-up area of about 18 hectares. Completion expected early 1985.

The terminal layout allocated berths for domestic and foreign container traffic and a berth for conventional foreign traffic. The Southernmost section of the new waterfront will be used for NGA bulk grain handling.

The 4 berths will be designed for gradual installation of heavy lift level-luffing and gantry container cranes. The back-up area of the 4 container berths will be provided with a wide operational quay apron. A container marshalling yard of 19 hectares is planned for high stacking by a travelling bridge crane, a CFS area consisting of a 13,000 sq.m. shed, container stuffing/unstuffing dock, and a cargo delivery dock. The whole of the terminal area will be protected by a security fence. An access to the terminal is provided through a control gate complex which will include truck and car waiting and parking area, weighbridges on a connecting lane to PEA-planned outside road system. The position of the gate was planned in coordination with PEA/BANCOM's urban and traffic planning of adjacent new business centres. An auxiliary gate will connect the terminal with the other sections of the port area.

The new quay is aligned parallel to the existing PEA reclamation bulkhead and is located 70 m. seaward of it. This alignment resulted from the operational layout requirements and the constraints of PEA/BANCOM's urban planning. The gap between the new quay lines and the existing PEA reclamation waterfront is bridged at the Southwestern and by a short pile bulkhead having water depth varying from 9.0 m. to 7.5 m. The bulkhead is planned to be utilised as NGA bulk grain berth. The Northeastern section of the gap will be closed by a rubble dyke. The area between the new and the existing quay will be reclaimed after removal of the overlaying unsuitable seabed layers.

The main shore structure of the terminal are the CFS-transit shed, the gate complex, administrative building, fire station, maintenance shop and mobile equipment compound and pavings.

II. *Domestic Conventional Berths:*

The existing marginal waterfront and the adjacent available back-up area, excluding the section assigned to the deep water terminal, will serve, after rehabilitation, the domestic container traffic.

Engineering and rehabilitation works at the existing port area cover the paving of the 40 m. – 50 m. wide apron along the PEA reclaimed area including the installation of relevant facilities fencing of the 50 hectare section of PEA reclamation to be transferred to PPA control, including paving of interval circumferential and circulation roads and associated utilities.

III. *Cargo Handling Equipment:*

The expected volume of container traffic and introduction of foreign container services to Cebu will require specialised equipment in the port.

For the 1984 phase the equipment to be provided shall be 3-level luffing cranes, 3 transtainers, 7 tractors and 28 trailers.

IV. *Future Port Development:*

Reclamation of an additional area in the shallow basin Northward of the existing port will serve as the room for expansion of the proposed facilities. The area is divided into three development stages with varying implementation schedules, depending on its viability.

The proposed reclamation will have wider potential back-up areas, less constraints in layout design and the availability of the areas for Stages II and III for future expansion of cargo handling facilities. The disadvantages include the shortage of suitable fill materials, the probable settlement in the newly reclaimed areas and longer construction. (Detailed surveys and soil investigations have already been completed for these sites).

AUTHORITY: Philippine Ports Authority, Port of Cebu, 3rd Floor, MSK Building, Corner Juan Luna and Lapulapu Streets, Cebu City, Philippines 6401. *Tel:* 9-18-59, 7-08-15. *Cables:* PPA-Cebu. *Contact:* Antonio B. Elumir, Jr., Port Manager.

AGENT: See "Manila".

DADIANGAS (General Santos City): 06.06 N. 125.09 E.

(See Plan Book)

See "General" before first port.

PORT LIMITS: Port of General Santos embraces all that portion of Saranggani Bay bounded by an imaginary line extending across the bay from Tampuan Point to Sumpang Point, thence along the shoreline until the point of commencement (Lat: 06° 06′ N., Long: 125° 09′ E.). This shall include all foreshore areas and delineated port area of Makar Wharf.

DOCUMENTS: Vessels calling at General Santos are required upon entry to submit to the Philippine Ports Authority the following: 2 copies of inward manifest, passenger and crew declaration list, 1 copy of cargo storage plan, and hatch list and vessel particulars.

PILOTAGE: Pilotage is compulsory for all vessels of foreign registry of 100 g.r.t. and over, and domestic vessels of 50 g.r.t. or over. The pilotage district covers the waters and harbours of the Port of General Santos, Mulbuk, Saranggani Bay, Glan, Kiamba and other ports of South Cotabato.

Pilot Boarding Ground: One mile East of Dole Pier by a red and white pilot launch flying the "H" flag. Privately owned pilot launches are used by the Harbour Pilots in serving vessels calling at General Santos. The pilot launches are painted white and red with the marking "Pilot" at their bows and fly a small Philippine flag and the red and white flags. These launches are stationed at the Western end of the quay.

One Pilot is on duty for 5 successive days on a 24-hour basis with one Harbour Pilot as reserve.

Docking Priority: As a general rule, the port has adopted the "first-come-first-served" basis in determining berthing priorities of vessels, subject to the exceptions hereinafter provided. Vessel's arrival means the time a vessel drops anchor at the Anchorage Area when there is no available area at the time a vessel reaches the port's Boarding Area when a berth is available.

Navigation Signals:

The following signals are recognised by all Pilots:

The pilot jack hoisted at the fore.
The international code signals or P.T.
The international code signal P.T. by flashing lights.

APPROACHES: At sea, navigating towards Dadiangas, there is only 1 navigational marker (Tinoca Point in Saranggani Strait) and that is an approach from the open Pacific, about 40 miles from Dadiangas. There are no buoys, beacons or other radar targets. The sea and harbour approaches are open and free of obstruction, and there is deep water almost to the beach, all the way into Saranggani Bay. The only apparent hazard on approach are the numerous fishing craft that are fishing at night and working along the traffic lane. Nevertheless, the fishing craft are well lighted.

ANCHORAGE: Vessels drop anchors at the designated area along the Saranggani Bay Cove near Barangay Bula Zone and just off the city. Vessels proceed immediately upon arrival to the anchorage area either to wait for berth at the public or private wharves or to wait for Customs boarding formalities and quarantine.

Anchorage of vessels is prohibited at the Fairway area, between the Dolefil Pier and Makar Wharf.

RESTRICTIONS: No restrictions on entering the harbour limits even at night time, but shipping Agents must notify and secure permits from the Authorities before incoming vessels are allowed to enter.

MAX. SIZE: See "Berthing".

HEALTH: Foreign vessels calling at the port are inspected by Immigration Officers to determine whether the vessels observe quarantine rules and regulations or whether the vessels are free from any quarantinable or communicable diseases.

RADIO: There is a privately owned radio installation in Dadiangas which should be listened to for special instructions and late priority needs.

Dadiangas – Dole/Stanfilco Marine
Call Sign – DXA2
Frequency – 8722
Power – 250 to 300 watts
Open – 0630 to about 0700 hrs. daily. Special arrangement can be made provided the station has been advised earlier.

When at anchorage, 1 hour's notice of berthing is to be given on VHF Channel 16 by the ship sailing into the wharf.

Estimated Time of Arrival (ETA) Notices:

The Master of the vessel sends a radio message to the ship's Agent in Manila containing advance shipping information as follows: name of vessel, port of destination, discharging/loading point (public or private wharf, at anchorage or at berth), ETA, LOA (length overall), estimated draft while alongside (in metres), nature and tonnage of cargo for discharging, and special berthing or cargo handling gear/equipment requirement.

The ship's Agent relays this shipping information at the earliest possible time to the shipping line branch/agency or Agent either by telegram, long distance or radio message which in turn, the branch Agent applies for berthing and/or anchorage allocation at the PPA, Port of General Santos. In the case of foreign or domestic vessel where it has no local Agent, messages are sent to the Harbour Pilot and to the government concerned agencies and its supervisor usually comes to arrange with agencies involved in the berthing/anchorage allocation of the vessel.

BERTHING: Berthing of vessel is done by Harbour Pilot and assisted by tugboat anytime during the day or night.

Generally, the length and breadth of a vessel entering the approaches of the Port of General Santos do not pose any problem. Vessels always berth head in, starboard side to.

On approach to the dock, walk the port anchor out until 1 shackle is at the water's edge. When about half a ship's length from the wharf, Pilot will order the anchor paid out.

	Length (m.)	*Width* (m.)	*Depth Alongside* (m.)	
Public Berth:				
Makar Wharf	561	20	8.5	MLLW
Private Berths:				
Dole Pier	145	18	11.5	
GMC Wharf	47	9	12.6	
Congson Pier	(under construction)			

BULK CARGO FACILITIES: Bulk cargoes can be discharged/loaded at Makar Wharf, Dole Pier and GMC Wharf.

Port Services:

a. Port facilities servicing the banana, fish and pine industries with the use of refrigerated cargo container equipment are at the Dolefil Pier.
b. Port facilities servicing copra/by-products and other agricultural products are at Makar Wharf and GMC Pier.
c. Port facilities handling containers using the vessels' cranes or booms are at Makar Wharf, Dole Pier and GMC Pier.

SPECIALISED CARGO HANDLING FACILITIES: The port has no cargo handling facilities for Roll-on/Roll-off vessels or gantry cranes.

BRIDGES: None.

STEVEDORES: Agent of incoming vessel should advise and arrange gangs with cargo handling contractor at last 24 hours before arrival.

MEDICAL: There are three hospitals in General Santos City: Doctors' Hospital, St. Elizabeth Hospital and the General Santos Emergency Hospital. Shipping Agent makes arrangements with hospitals concerned in advance.

TANKERS: There are no available discharge facilities for tankers at the port except at the designated anchorage area where devices are installed by oil companies to allow vessels to discharge their cargo.

DENSITY: Variable.

FRESH WATER: Supply of fresh water is available alongside the quay. The Authority (PPA) has its own water system capable of supplying fresh water simultaneously to all vessels lying alongside the wharf. Present rate is P5.00 per ton.

FUEL: Supply of fuel or bunkering is done privately by local oil companies. A vessel shall be allowed to refuel at berth provided prior permit from the Authority is secured.

FIRE PRECAUTIONS: As a precautionary measure, vessels intending to refuel at the port are required to provide fire extinguishers for use in case of emergency.

CONSULS: None.

REPAIRS: Minor repairs at berth may be allowed provided that a permit is secured from the Authority.

DRY DOCKS: None.

SURVEYORS: None.

GANGWAY/DECK WATCHMEN: Shipping Agents arrange with private security agencies the hiring of gangway/deck watchmen when the service is needed.

HATCHES: Stevedores usually open and close hatches. But when a vessel is of different model and the hatches are constructed differently, Crew members are requested to assist stevedores.

CUSTOMS ALLOWANCES: Quantity of goods permitted for each Crew member to be held out of bond are goods the crew can use personally, usually one or two bottles of wine and a pack of cigarettes.

CARGO GEAR: Special cargo equipment used in the discharge or loading of heavy lifts can be arranged with private contractor.

REPATRIATION: Shipping Agent can arrange this with the Bureau of Immigration Office.

AIRPORT: There are two airports intended for domestic flights: Buayan Airport located 10.5 km. N.E. from the port; and the Allah Valley Airport in Surallah, South Cotabato is located 75 km. from Makar Wharf. The frequency of flight is twice weekly.

TIME: GMT plus 8 hours.

HOLIDAYS: There are about 11 public holidays in the Philippines. Cargo work can be arranged with the contractor during any of these holidays.

POLICE/AMBULANCE/FIRE: Use telephone system. Contact is made through the operator.

SERVICES: Aside from the usual services rendered by the port, other ancillary services which are performed by private contractors are bunkering, re-watering, victualling, tug assistance, mooring, etc.

SHORE LEAVE: Crew members are allowed ashore provided that at all times there are sufficient personnel on board to attend in case of movement/shifting of vessel lying alongside the wharf.

IDENTIFICATION CARDS: Seaman's book or shore pass is sufficient.
REGULATIONS: PPA gate pass system is enforced to regulate and control the movement of vehicles and pedestrians in the port zone.
DELAYS: Work stoppages due to rain/inclement weather.
GENERAL: The Port of General Santos is considered the country's first modern port and is equipped with the newly introduced cylindrical rubber fenders fixed to the wharf's cope line which serve as protectors to both berthing vessels and the wharf.
AUTHORITY: Philippine Ports Authority. Port of General Santos, General Santos City.

DAVAO: 07.04 N. 125.38 E. (See Plan Book)

See "General" before first port.
PORT LIMITS: Vessels enter the port through the Southern entrance of Pakiputan Strait. A vessel is considered to be an "arrived ship" and laytime will commence (subject to Charter-Party Terms) at the Pilot's boarding position located approximately 3 miles off the lighthouse at Sta. Ana Pier.
DOCUMENTS: Required on entry
The Philippine Ports Authority (PPA):
3 Inward Foreign Manifest.
1 Cargo Stowage Plan and Hatch List.
1 Passenger List.
1 Crew Declaration List.
The Bureau of Customs (BOC):
7 Inward Foreign Manifest.
5 Cargo Stowage Plan and Hatch List.
5 Stores List.
5 Bonded Stores List.
5 Firearms and Ammunitions List.
5 Drugs and Narcotics List.
5 Passenger List.
5 Crew Declaration List.
Clearance from last port of call.
PILOTAGE: The pilot station is furnished with a copy of the approved Application for Berthing/Anchorage Permit filed with the Port Authority 36 hours prior to ship's arrival, serving as a notice for meeting an incoming vessel.
ETA Notices: The Master of the vessel sends a radio message to the ship's Agent in Manila through the coastal radio station (DSZ) Manila, operated by the Association of International Shipping Lines containing the advance shipping information as follows:
Name of vessel.
Port of destination and discharging/loading point.
ETA.
LOA.
Estimated draft whilst alongside.
Nature and tonnage of cargo for discharging.
Special berthing or cargo handling gear/equipment requirement.
The ship's Agent in Manila consequently relays this shipping information to the local Agent at the Port of Davao either by long distance telephone, telegram or telex. Where the vessel does not have a local Agent, necessary messages are sent to the Harbour Pilot and Government Agencies directly involved; the supercargo normally comes a day ahead of the vessel's ETA.

Continued next column.

Signals: The following signals are recognised by all Pilots:
To ask for Pilot by day:
The pilot jack hoisted at the fore.
The International Code Signals or P.T.
To ask for a Pilot by night:
The pyrotechnic light, commonly known as blue light, flashed eve 15 minutes.
A bright white light, flashed or shown at short or frequent intervals jus above the bulwark for about a minute at a time.
The International Code Signal P.T. by flashing lights.
Pilot Launches: A total of 6 launches are regularly used by the Harbou Pilots distinctively painted red and white with a number preceded by "P at their bows and fly a small Philippine flag and a red and white fla 3 Pilots are posted to attend to all pilotage needs of vessels on a 8 hour shift scheduled for 24 hours. The pilot launches are stationed a Sta. Ana Pier, Sasa Wharf and Hijo Wharf.
The Pilot's boarding position is at 7° 02.0′ N., 125° 39.0′ E.
TUGS: There are no regular tugboats for vessels entering the port. Tug may be availed of on pre-arranged conditions from Luzon Stevedorin Corp.
ANCHORAGE: General Anchorage.
Sta. Ana Anchorage: Vessels awaiting berth availability, anchor abou 450 yards N.E. or S.E. of Santa Ana Pier in 12 fathoms, mud The anchorage is well protected except during the S.W. monsoon.
Loading Anchorage.
Maco Anchorage: Anchor in 50 fathoms with the sawmill bearing 057 the white plantation house near the mouth of Madaum River bearin 288°, and, the Western tangent of Bassa Point bearing 223°. The botto is mud and evidently is good holding ground.
Tambungon Anchorage: Anchorage can be taken in 10 to 20 fathom with good holding ground.
Bunawan Anchorage: Vessels anchor Eastward of the ruined pier in 8 t 15 fathoms.
Tibungco Anchorage: Vessels anchor Eastward of the ruined pier abou 0.5 mile offshore in 12 to 15 fathoms.
Talomo Anchorage: Vessels anchor at the Southwestern part of the ba in 20 fathoms, mud bottom. It is open to the S.W. monsoon.
Daliao Anchorage: Vessels anchor about 300 yards Southeastward o the ruined pier in 8 to 15 fathoms. This anchorage is exposed to Easter winds and sea.
Tagabuli Anchorage: A deep inlet, 0.9 mile long and about 500 yard wide, is 2.3 miles Northward of Digos Point. The anchorage is protecte from winds, except those from E.S.E., is in the middle of the bay in 16 t 20 fathoms, mud bottom, where the width of the bay is about 400 yard between the edges of the reefs.
Malalag Anchorage: Anchorage for vessels of any size and with mor protection is Northeastward of the pier in 16 to 19 fathoms, mud bottom Vessels entering the bay for shelter will find good protected anchorag between the islet near the head of the bay and the North shore i 20 fathoms mud.
RESTRICTIONS: There are no particular restrictions in entering th harbour limits, even at night time, after prior advices have been serve and prescribed berth/anchorage permit has been secured from the Po Authority.
MAX. SIZE: Generally, length and breadth of any vessel does not pos a problem in entering the approaches of the Port of Davao, howeve berthing in individual ports varies on the ports' facilities an characteristics as listed: See table below.

Name of Port Facility	*Location*	*Controlling Draft (m.)*	*Length Overall (m.)*	*Approx. Heading/ Position*	*MLLW Elevation (Sea Level) (m.)*	*Remarks*
A. Principal Ports. (Port of Entry).						
1. Sasa Wharf	Sasa, Davao City	N–14.8 C–11.0 S–13.5	920.0	007°/187°	10.0	General cargo.
2. Sta. Ana Pier	Sta. Ana Davao City	Inner end 10.0	N–104.4 S–88.5	270°	4.0	General cargo, domestic only.
B. Sub-port of Entry						
1. Mati Wharf	Mati, Davao. Oriental	7.3	81.0	—	—	General cargo.
C. Private Ports. (Port of Entry).						
1. Caltex Jetty I	Sasa, Davao City	7.0	66.0	030°/210°	—	Oil berth.
Caltex Jetty II	Sasa, Davao City	9.7	55.18	041°/221°	—	Oil berth.
2. Legoil Wharf	Sasa, Davao City	9.3	205.0	042°/222°	4.3	Coco oil, general cargo. Foreig only.
3. Shell Jetty.	Sasa, Davao City	10.4	42.98	032°/212°	—	Oil berth.
4. Tefasco Wharf	Ilang, Davao City	10.0	400.0	017°/197°	3.0	General cargo.
5. MCP Wharf	Ilang, Davao City	8.8	101.0	347°/167°	—	General cargo, banana berth.
6. Pacinter Wharf	Bayawa, Panabo, Davao	12.0	110.0	050°/230°	3.6	General cargo, banana berth.
7. Tadeco Wharf	Bayawa, Panabo, Davao	12.0	258.5	050°/230°	4.3	General cargo, banana berth.
8. HPI Wharf	Madaum, Tagum Davao,	13.0	270.0	318°	4.3	General cargo, banana berth.
D. Municipal Ports						
1. Dawis Pier	Digos, Davao del Sur	5.0	27.0	6° 45′ N. 125° 30′ E.	2.5	General cargo, domestic only.
2. Malalag Wharf	Malalag, Davao del Sur	10.0	30.0	6° 36′ N. 125° 35.5′ E.	5.0	Cane molasses and general cargo.

HEALTH: Vessels arriving from foreign ports are subject to quarantine inspection at their first port of call in the Philippines. A vessel inspected and granted a Pratique in a Philippine port is not subject to quarantine inspection at its next Philippine port of call except when during the trip there has been a case of illness or death on board or its last Philippine port of departure is infected with a quarantinable disease.

Vessels from the U.S.A., Canada, Australia, or New Zealand are permitted to enter a port, disembark and commence operations provided they have complied with the provisions of the Controlled Free Pratique.

The following are required from the Master:

1. Maritime Declaration of Health duly signed by the Master.
2. Crew List.
3. A valid Derat and/or Exemption Certificate.
4. Cargo Manifest.

For any suspected disease or fever on board, the following will apply:

1. For quarantinable disease, special measures by the Quarantine Medical Officer will be undertaken to prevent its entry.
2. For a non-quarantinable disease, patients should be disembarked and hospitalised and the local Health Officer notified. For non-landing patients, they should be isolated on board and treated.

RADIO: Other than those mentioned under "Pilotage", all messages from vessels to Agents can be sent via Apo Communication Service in Davao City, HF frequency DXF and VHF, DXF-6.

VHF: Radio communication facilities are not available linking vessel to landside operations. Maritime Company of the Philippines and Everett Steamship Corp. have VHF radio sets capable of connecting a ship in port to local office communication.

RADAR: No radar facilities available.

BERTHING: For details of available berths and types of cargoes handled respectively thereat, see table of port facilities under "Max. Size". Normally, discharging and loading of cargoes are by ship's gear.

CRANES: 65 ton, 35 ton and 25 ton cranes are available at Sasa Wharf and 30 ton cranes at Legoil and Tefasco wharves.

BULK CARGO FACILITIES: Bulk cargoes, if any, are handled at general cargo berths. Loading rate is from 10-20 tonnes per net gang hour at Sasa government wharf and various banana berths.

SPECIALISED CARGO HANDLING FACILITIES: There are none available, except for those mentioned as oil berths, all other ports are utilised as multi-purpose berths.

BRIDGES: The fairway is clear of bridges.

STEVEDORES: Upon arrival, the Arrastre Stevedoring Company is furnished a copy of the Application for Berthing Permit which is filed 36 hours prior to ship's arrival. Based thereon, gangs are mobilised as would be necessary to service the size of cargoes to be handled.

Conventional cargoes are worked at the rate of 14 tons per net gang hour at Sasa government wharf.

MEDICAL: There is 1 government hospital and 4 private hospitals in the area equipped with adequate medical services and facilities.

TANKERS: Diameter of discharge lines at oil berths range from 1.5 in. – 8.0 in.

DENSITY: Average salinity – 1025.

FRESH WATER: Fresh water is available and delivered either through tank lorries or barges; tank barges also service vessels worked at loading anchorages.

Point of Delivery	*Distance (Nautical Miles)*	*Minimum Delivery (Tons)*	*Method of Delivery*
1. Source	—	—	
2. Sta. Ana	10	50	Barge
3. Sasa	12	50	Barge Lorry
4. Panacan	16	50	Barge Lorry
5. Panabo	24	100	Barge
6. Madaum	29	100	Barge
7. Maco & Malalag	31	200	Barge

FUEL: All grades available – bunkering and other special fuel.

Mindanao Trucking Corp Lanang, Davao City Tel: 7-55-15, 7-41-33.
Caltex (Phils) Inc Sasa, Davao City Tel: 7-82-52.
Shell Chemicals Co (Phils) Inc Sasa, Davao City Tel: 7-84-91, 7-91-17.

FIRE PRECAUTIONS: At the oil berths, there are no specific fire precautions other than the usual non-smoking precaution.

CONSULS:

Japanese Consulate	Tel. No. 7-37-81
Indonesian Consulate General	Tel. No. 7-84-86

REPAIRS: Engine overhaul; all types of deck repairs; underwater bottom cleaning.

DRY DOCKS: Temporarily non-operational; capacity – 1,600 g.r.t.

SURVEYORS: R. J. del Pan Mindanao Surveyors, Inc. representing Lloyds, A.B.S., N.K.K., Cargo and Marine Engineers, P&I Club, G.L. and Cargo Gear Bureau.

GANGWAY/DECK WATCHMEN: Watchmen recommended. Minimum cost per watchman – Philippine P.4.50 per hour.

HATCHES: Normally, opening/closing of hatches is carried out by the stevedores.

CUSTOMS ALLOWANCES: Crew members are allowed to bring out supplies to be held out of bond but not to cost more than P.10.00 per article. Generally, sufficient amount for crew's consumption while in port is permitted.

CARGO GEAR: Ship's gear usually used in loading and discharging. When shore cranes are needed, vessel's notice to Agent should contain the requirement.

REPATRIATION: The Immigration Station can effect crew changes and likewise, allow the disembarkation of alien seamen for repatriation to their countries of origin, provided, they possess valid travel documents. Final repatriation shall be effected in Manila after securing the necessary immigration clearances.

AIRPORT: Davao International Airport, 3 km. from Sasa Wharf. Regular daily jet flights to Manila and other major cities. Turbo-prop services available for other points.

TIME: GMT plus 8 hours.

HOLIDAYS: New Year's Day (Jan. 1st); Holy Thursday; Good Friday; Labour Day (May 1st); Independence Day (June 12th); National Heroes Day (Nov. 30th); Christmas Day (Dec. 25th); Rizal Day (Dec. 30th). Special holidays declared by the President of the Philippines. Work can be arranged on any holiday with the shipping Agent.

POLICE/AMBULANCE/FIRE: Police Tel: No. 7-26-48; Ambulance Tel: No. 7-27-31; Fire Tel: No. 07.

EMERGENCY CO-ORDINATION CENTRE: Philippine Port Authority, Sasa Wharf, Davao City 9501, P.O.Box 501, Philippines. Main office: Tel: 7-40-12, 7-17-33, 7-47-98; Sasa Terminal Office: Tel: 7-95-86; Sta. ANA Sub Office: Tel: 7-49-54. Mati Sub-port: Tel: 596.

TELEPHONES: No facilities for placing telephones onboard.

SERVICES: Cleaning on board is done either by stevedores or hired deckhands with the use of ship's equipment.

SERVICES AVAILABLE: Catering, laundry, Shiphandling.

SHORE LEAVE: Crew members are issued shore pass by the Bureau of Immigration Officers.

IDENTIFICATION CARD: Seaman's Book is sufficient.

REGULATIONS: All vessel's movements and works thereof are regulated by the Port Authority.

DELAYS: Usual causes of delays are due to non-availability of berth and rain.

GENERAL: Sasa Wharf, St. Ana Pier, and Mati Wharf are government port facilities; the others are privately-owned.

SHIP SUPPLY SERVICE:

Launches Services:

Arcal Development Inc. Cor. Guzman & 3rd Ave., Davao City. Tel: 7-69-32, Gen. Manager: Mr. Rafael N. Garcia.

Coco Traders Inc. Cor. 2nd Ave., Sta. Ana, Davao City. Manager Mr. Ricardo Ng Suy.

Garcia's Water Transportation, Dona Rosario Bldg., Guzman St., Davao City. Tel: 7-66-60. Manager: Antonio D. Garcia.

DEVELOPMENTS: Proposed construction of 60 m. × 108 m. transit shed and pavement of container stacking area with drainage and lighting system facilities.

SHIPMASTER'S REPORT: September 1977 (Updated 1984).

Documents:

14 Copies Inward Foreign Manifest
12 Copies Crew List
8 Copies Passenger List
8 Copies Narcotic List
8 Copies Personal Effects List
10 Copies Store List
5 Copies Vessel's General Information
8 Copies Money List
8 Copies List of Arms and Ammunition
8 Copies Parcel List
1 Copy Clearance from last port
2 Copies Quarantine Declaration
8 Copies Plant List
8 Copies List of Animals

Note: Narcotic List, Money List, List of Ammunition and Arms, List of Plants and Animals may be on the same sheet.

Radio/VHF Communications:

APO Communications DXF and Marphil Radio. The Agents Maritime Company of Phil and Everett Steamship Company are equipped with VHF in their offices.

Berthing (for bananas):

1. HPI Wharf – Del Monte, Banambo, Fruiti Rita bananas
2. Tadeco Wharf – Chiquita bananas
3. Pacinter Wharf – Dole bananas
4. MCP Wharf – Del Monte bananas.

Berthing (for general cargo):

Sasa Wharf: Max. draft North 14.8 m., Centre 11.0 m. and South 13.5 m.; max. length 920 m. with 1 Ro-Ro berth, 2 container berths and 4 general berths.

Hospital: Davao Medical Centre (government-owned); Brokenshire Memorial Hospital, San Pedro Hospital, Davao Doctors' Hospital, Ricardo Limsu Medical Centre. All hospitals located in Davao City.

Identification Card: Not required.

Shore Leave: Curfew hours from 2400 (0000) up to 0400 hrs.

Repatriation: Expensive. Crew to be escorted by one Immigration Officer from Davao City to Manila and all expenses including overtime of Immigration Officer to be charged to Owner's account.

Holidays: New Year – Jan. 1st; Bataan Day – April 19th; Labour Day – May 1st; Independence Day – June 12th; Fil-Am Day – July 4th; All Saints Day – Nov. 1st; Bonifacio Day – Nov. 30th; Christmas Day – Dec. 25th; Rizal Day – Dec. 30th.

Bunkers: Fuel, diesel and lube oils available, clearance takes only a short time.

Shipchandler/Laundry: Available, prices reasonable.

Working Gangs for Painting Cleaning etc (1984): Foreman: regular time – Peso 5.26/hour; overtime – Peso 7.10/hour. Ordinary workers: regular time – 4.35/hour; overtime – 5.87/hour.

Other charges: Meals. Foreman require 3 meals per day; ordinary require 2 meals per day. Transportation included in working hours.

Repairs of Ship's Instruments: Radar – any type; Radio – any type; Gyro – any type.

Ship Repairs: Minor.

Time: Standard time minus 8 hours on GMT (but 1977 was the first year with Summer time which commenced in March until September.)

AUTHORITY: Philippine Ports Authority, Port Management Unit, Port of Davao, P.O.Box 502, Sasa Wharf, Davao City 9501, Philippines. *Tel:* 7-17-33, 7-40-12, 7-47-98. Sasa Office 32-72, 33-82. Sta. Ana Office 7-49-54, 32-73. *Telex:* ITT 48200 or 40104 PPA-Davao. *Cables:* PPA-DAVAO *Contact:* Vicente T. Suazo, Jr., Port Manager.

AGENT: See "Manila."

DUMAGUETE, Negros: 09.15 N. 123.18 E.

REPORT: August 1983.

Bacong Ammonia Terminal.

PILOTAGE: Pilots/Port Officials come from Dumaguete City, which is approx. 10 km. North of Bacong Terminal.

MAX. SIZE: Max. draft 12 m., max. d.w.t. 20,000 tons.

TUGS: No tug assistance.

BERTHING: Length of pierhead – 40 m. Wooden fenders fore and aft, 40 m. from pierhead.

HOSE CONNECTION: 6 in. single manifold. Pipe-line 6 in. diameter, 300 m. long, leading to shore tank with 6,000 tonnes capacity.

GINGOOG, Mindanao: 08.50 N. 125.06 E.

SHIPMASTER'S REPORT: October 1982.

The loading berth for Copra expeller pellets is situated in position Lat. 8° 52.5′ N., Long. 125° 02.6′ E. This is not marked on the Admiralty Charts. There is deep water all around and the approach is fairly safe. The Pilot boards about 1.5 miles N.E. of the berth and approaches in a mechanised canoe with outriggers. Vessel is berthed either side alongside depending on the flood or ebb. No night pilotage. The loader height is sufficient and deep water at the berth. No VHF facilities. Repatriation not possible. Neither fresh water or bunkers can be supplied at this berth. No piracy or thefts but vigilance of security should not be neglected.

HONDAGUA, Luzon Island: 13.56 N. 122.14 E.

SHIPMASTER'S REPORT: 1974.

APPROACHES: B.A. Charts 3806 and 3475, neither of which are of very much assistance. There are no navigational marks by night, but the water is deep and we made a comfortable approach by Radar.

PILOTAGE: Minimum 12 hours' notice required. Pilot boards at Siain, a village 10 miles West of Hondagua on the North coast of the mainland. Pilot boat is a small dug-out canoe fitted with outriggers and an outboard motor, and by day exhibits the pilot flag, and at night a single white light similar to a normal fishing canoe. Pilot shouts to attract attention when close to the vessel at night.

DOCUMENTS: Officials embark at Siain but not before 0630 hrs. due to curfew. Accommodation ladder required. All documents required as for first port of entry, excepting quarantine which is not performed twice.

10 Ship's Store Lists.
8 Crew Personal Effects lists.
12 Crew Lists.
3 Health Declarations.
2 Visaed Crew Lists.
2 Plant Quarantine Lists.
2 Animal Lists.

Officials disembark again at Siain with the exception of the 3 Customs Officers, who remain on board and who require meals and accommodation.

TUGS: Not available.

BERTHING: One berth only, for grain discharge and for coastal tankers supplying fuel to the Mill. Berth lies East/West with approx. depth at LW East Dolphin 28 ft., Elevator about 34 ft. 6 in., and West Dolphin about 39 ft. The berth is thought not to be suitable for vessels exceeding 500 ft. LOA. The dolphins are of timber-pole construction, and the elevator is concrete. Arrival and departure from the berth is during daylight only. Mooring arrangement is 2 headropes to buoy, 2 breastropes to shore, spring-wire to bollard on elevator, 4 sternlines to concrete dolphin, and 1 spring-wire to bollard on elevator. An old landing-barge is used as a mooring boat, but this has only one engine on the port side and is not very manoeuvrable. A motorised dug-out canoe also assists, but is not powerful enough to pull a line very far. The elevator has two discharging suckers, but these are fixed and the vessel has to be shifted hatch to hatch. Combined capacity about 80 t.p.h. which could be improved, but foundations of conveyor-belt system damaged by earthquakes.

FRESH WATER: Available at berth but not of very good quality. Ship's hoses required.

AIRPORT: None. There is a train service to Manila, about a 6 hour journey.

CURFEW: Area is under Martial Law. Curfew from 2300 to 0600 hrs.

ILIGAN, Mindanao: 08.14 N. 124.14 E. (See Plan Book)

PILOTAGE: Pilotage for docking and undocking at government and privately owned piers/wharves for foreign vessels is compulsory. For domestic vessels pilotage is necessary only when docking. The Harbour Pilot meets the vessel 1 to 2 miles N.W. of the pier. Vessels coming from foreign ports intending to dock at any of the private piers will first anchor at designated anchorage area for boarding formalities.

ANCHORAGES: Anchorage areas are found at least 0.5 to 1 mile from beaches and wharves and the average depth varies from 37 m. to 56 m. The characteristics of the bottom near the beach is muddy. Beyond 0.5 mile is good holding ground of sand and gravel. In case of strong S.W. winds, vessels may resort to the natural protection of the mountains of Initao and Kiwalan.

RESTRICTIONS: See "Berthing".

MAX. SIZE: Max. LOA 240 m. Max. Draft 25 ft. and 15,000 d.w.t. at Pier No. 3 (For foreign-going vessels).

HEALTH: Vessels clear quarantine upon arrival from foreign port. Health Officer boards the vessel 2 miles off the pier at designated quarantine area.

TUGS: The Iligan Harbour Pilot's Association owns 2 tugs both serving the domestic and foreign vessels. The use of tug is necessary especially when docking and undocking foreign vessels on government and private piers. Additional tugs are also available if the Harbour Pilot thinks necessary. It is important that the Masters of vessels/shipping Agents notify the Harbour Pilot at least 48 hours in advance of vessels arrival to ensure the availability of tugs.

BERTHING: Berthing for domestic vessels may be done anytime of the day or night. Foreign-going vessels berth during daylight hours and undock at anytime.

	Length	*Width*	*Depth*
Pier No. 1 (Concrete)	96 m.	12 m.	5.4 m.
Pier No. 2 (Concrete)	96 m.	12 m.	5.4 m.
Pier No. 3 (R.C. Wharf)	240 m.	15 m.	7.62 m.

STEVEDORES: Domestic and foreign-going vessels proceeding to Iligan should cable their Agents or representatives as to their ETAs, at least 24 hours prior to arrival in order that the stevedoring company may assign sufficient number of gangs to the vessel. Later, if the ETA is revised, shipping Agent should immediately notify the Arrastre and stevedoring firm of change. The Arrastre and stevedoring firm that controls the government pier in Iligan is handled by the Iligan Merged Arrastre and Stevedoring Corporation (IMASCO).

FRESH WATER: Fresh water is available to vessels loading or unloading at Pier No. 1 and 3 which is equipped with connection direct from the City Waterworks.

FUEL: Bunkers are available provided prior notice is given through the ship's Agent.

IDENTIFICATION CARDS: Not required.

CONSULS: In Manila.

REPATRIATION: Local Immigration takes care of any repatriation or disembarkation provided advance notice and they are given names and destination of each crew member.

AIRPORT: Baloi Airport 15 km. Cagayan de Oro Airport 110 km.

TIME: GMT plus 8 hours.

HOLIDAYS: New Year's Day (January 1st); Holy Thursday and Good Friday (movable); Labour Day (May 1st); Independence Day (June 12th); RP-US Friendship Day (July 4th); Thanksgiving Day (September 21st); Christmas Day (December 25th); Rizal Day (December 30th). Special holidays declared by the Prime Minister of the Philippines are also included. Legal holidays which fall on Sundays are observed the following day. Cargo work can be arranged on any or all holidays with the vessel's Agent.

POLICE/AMBULANCE/FIRE: Police Tel. 101. City Hospital Tel. 20593. Fire Dept. Tel. 103

GENERAL: It is necessary during berthing and unberthing that the ship's engines, tackle and all other gear be in an operating condition and in a state of readiness for use at the moment's notice as required.

TELEPHONES: Placing of telephones on board foreign vessels is not available at present.

DEVELOPMENTS: Coal Terminal under construction, ship unloader to have 500 t.p.h. capacity.

SHIPMASTER'S REPORT: 1974

Approaches: B.A. Chart 3426. This is of not very much use as an approach chart as the scale is too small. However, the water is deep and therefore it does not matter too much. On this voyage we made an approach in darkness and solely on Radar. The only navigational light, a fixed red, being very hard to distinguish.

Pilotage: The Pilot boards about 1 mile N.W. of the piers. Pilot boat is a river-type launch about 50 ft. in length with a grey hull and a white funnel.

Anchorage: 2 cables from old-harbour piers. 7 shackles in 50 fathoms.

Radio: No VHF facilities.

Officials: Iligan is a Port of Entry. Officials board at the anchorage. Accommodation ladder required. Usual procedures take about 1 hour to 1 hour 30 minutes.

Documents:

20 Ship's Stores Lists.
14 Crew Personal Declarations.
3 Vaccination, and inoculation dates.
3 Ports of Call and dates for previous 3 months.

Immigration: Before leaving last foreign port for the Philippines, obtain 4 official Crew List Forms from the Philippine Consul. Complete these forms and have them visaed by the Consul who will retain 2, and return 2 to the ship. Passes are required for crew members going ashore.

Customs Allowance: 1 bottle and 200 cigarettes per person. 3 Customs officers live on board all the time, and require accommodation and meals.

Tugs: Up to 4 tugs available if required, but it is advisable to give notice of requirements well in advance, since these tugs may be engaged in towing barges elsewhere around the island.

Berthing: Quinalang Cove: 1 grain discharge berth. Depth at berth 40 ft. and ample room for a vessel of 600 ft. L.O.A. Discharge is by suckers direct to the Silo. There are 2 suckers with a combined average discharge rate of 100 t.p.h., but suckers are located in fixed positions requiring the vessel to be shifted hatch to hatch. Berth is well-fendered with a shore gangway. Stevedores supply a good hatch-tent for working in the rain. 1 bulk-copra loading berth, 600 ft. in length and draft said to be 32 ft. 1 bulk-cement loading berth, reported to be capable of accommodating vessels of 25,000 g.r.t.

Camp Overton: Located South of Iligan, there is reported to be a steel loading berth to accommodate vessels of 750 ft. length, and 36 ft. draft.

Fresh Water: Available at most berths.

Shore Leave: Crew members should take special care when proceeding ashore, and should not carry cameras or wear wristwatches, etc. It is advisable to return aboard before darkness.

Airport: About 20 miles distant. Daily flights to Cebu and Manila.

Stores: Fresh fruit available, also good supply of seafood.

Repairs: Only very minor repairs can be undertaken.

Time: GMT plus 8 hours.

SHIPMASTER'S REPORT: September 1976.

Coconut Oil Berth: Located at "Quinalong Cove" 08.17 N., 124.15 E. Least depth of water in channel from sea to berth – 40 fathoms. Mean tidal range 5 ft. Density 1025. Nature of bottom at berth – mud. Vessels can berth in daylight only, unberthing anytime.

Anchorage: 3 cables S.W. of City Pier. Depth at LW 70 fathoms, cable should be "walked out".

Vessel's hoses used, length of shoreline 300 m., size 12 in. No shore booster pumps used. Products handled, coconut oil and coconut products.

Pilotage: Compulsory. Pilot requires 24 hours' notice and boards 1 mile N.W. of City Pier.

Max. size of vessel that can enter the port of Iligan is 100,000 d.w.t. and draft 45 ft. Keel clearance required, about 2 ft.

5 small and medium size tugs available.

Nearest consuls are in Manila.

Facilities available: Fresh water, 5 t.p.h. Fresh provisions. Laundry.

No slop tanks, surveyor, repair facilities, fuel.

Documents:

2 Visaed Crew Lists (Philippine) from previous port. If diverted at sea, a copy of the diversionary cable required.
6 Ordinary Crew Lists.
6 Personnel Effects Lists.
6 Store Manifests.
6 Parcel Lists.
6 Arms Lists.
6 Mail Lists.
6 Narcotics Lists.
6 Animal Lists.
6 Plant Lists.
6 Cargo Manifests.
6 Transit Manifests.
6 List of Ports.
6 Currency Lists.

There is a cabin search by 4 Customs Officers, accompanied by 2 Ship's Officers. They collected an undeclared radio and 2 cameras. They did not impose any fine, as they said they had been courteously treated, and this was the vessel's first visit.

3 Customs Officers remain aboard, and have to be fed.

AUTHORITY: Philippine Ports Authority, Port of Iligan, Port Area, Iligan City, Philippines. *Tel:* 21013, 21022 and 21780. *Contact:* Ferdinand C. Piencenaves, Port Manager.

ILOILO, Panay: 10.41 N. 122.35 E. (See Plan Book)

See "General" before first port.

PORT LIMITS: Also see "Anchorage" – last paragraph. Iloilo Harbour is defined as that portion of Iloilo Strait within the following boundaries: an imaginary line extending from the Northern bank of Dumangas River, Island of Panay, across Iloilo Strait to Navalas Point on the Northern coast of Guimaras Island; thence along the N.W. and West shore of Guimaras Island to Luzaran Point thence along an imaginary line extending from Luzaran Point to the South bank at the mouth of Siuaragan River in the municipality of San Joaquin, Province of Iloilo, Island of Panay. Thence along the Southern shore line of the Island of Panay to the North bank of Dumangas River, the point of commencement.

DOCUMENTS:

Bureau of Customs:

1. On Arrival:
   7 Inward Foreign Manifests.
   3 Crew Lists.
   3 Personal Effect Lists.
   3 Store Lists.
   3 Arms and Ammunition Lists.
   3 Narcotics Lists.
   3 Mail Lists.
   3 Bonded Stores Lists.
   3 Passenger Lists.
   3 Storage Plan (if vessel has cargoes to be discharged).
   2 Bills of Lading.
   1 Clearance from last port of call.
2. On Departure:
   4 Statistical Supplement (for vessels leaving directly for a foreign port).
   7 Outward Foreign Manifests.

Philippine Ports Authority:

1. On Arrival.
   2 Inward Foreign Manifests.
   2 Passenger Lists.
2. On Departure:
   2 Outward Foreign Manifests.

PILOTAGE:

1. Application (notice) for pilotage services is usually made by a shipping Agent at least 24 hours before the vessel's arrival. Notice may also be tendered via a commercial telegraph office addressed to Iloilo Harbour Pilot Association, Muelle Loney St., Iloilo City. The Pilot Association does not own any VHF radio.

2. The Pilot Association owns 5 standard-designed pilot boats, with one being utilized as water taxi for vessel's crew intending to go on shore leave.

3. Request for pilotage services may be done in either of the following ways:
(a) 2 long and 1 short blast of the vessel's whistle.
(b) Continuous flashing of blue light during night time.
(c) Display of the international "G" flag during daytime.

4. There are 2 pilot stations where the Pilot may be taken aboard, namely:
(a) Sinapsapan Point at the South entrance, 8 miles from the port.
(b) Nabalas Point at the North entrance, 12 miles from the port.

5. With respect to the boarding and safety measures, the Pilot requires a sturdy and reliable pilot ladder.

ANCHORAGE: (proposed)

The anchorage of the Port of Iloilo is that portion of Iloilo Strait within the following boundaries: an imaginary line extending from Balabago Point, Island of Panay across Iloilo Strait up to Cabugao Point on the Northern Coast of the Island of Guimaras, thence along Northwest and West Shore of Guimaras Island to Bondulan Point; thence along Southern shore line of the island of Panay to Balabago Point, the Point of commencement.

Note: A vessel is considered "arrived" after it drops anchor at any point within the boundaries described above.

RESTRICTIONS: Generally, a vessel may enter the port from the pilot station at any time of the day or night. However, said entrance of the vessel is restricted by the draft of the vessel and the tide at the time of entrance. At MLLW, only vessels with a maximum draft of 28 ft. may enter or depart from the port. At high water (5 ft.) vessels with a maximum draft of 33 ft. may enter or depart from the port.

MAX. SIZE: Foreign pier has a total length of 345 m., Berth 2 (100 m.) has a controlling draft of 33 ft. alongside at MLLW.

HEALTH: The port has 1 Quarantine Doctor. Quarantine formalities are done while vessel is at the Quarantine Station. Notice for quarantine formalities is usually given by the shipping Agent 24 hours before the vessel's arrival.

The following documents are necessary for presentation to the Quarantine Officer on arrival.

A. On Arrival:
1. Derat Exemption Certificate. (If expired or about to expire, the same could be renewed at the port for a period of 6 months).
2. International Certificate of Vaccination. (If expired or about to expire, vessel crew could be vaccinated locally).
3. Maritime Declaration of Health. (Form to accomplish available locally).

Above documents are necessary for the issuance of Free Pratique.

B. On Departure:
1. Quarantine Clearance for Outgoing Vessels. (A fee of P4.00 or approximately $0.53).

Free Pratique is issued at the first port of call. It becomes automatic if the vessel intends to call at another port within the Philippines.

RADIO: Coastal Marine Radio Station:

Location:	Lat. 10° 41.4′ N., Long. 122° 32.8′ E.	
Call Sign:	DYV	
Frequencies:	8632 kHz.	0000 GMT – 0400 GMT 0600 GMT – 0900 GMT
	12948 kHz.	0900 GMT – 1130 GMT
VHF	Channel 16	

Also private telegraph companies with international relaying stations; Central Radio Communications, Radio Communications of the Philippines., Inc.

VHF: Retransco has a VHF radio. Frequency: Channel 1 – 156.8 MHz, Channel 2 – 156.65 MHz.

TUGS: Tugboats usually join vessels for docking and undocking operation. The services may be provided by the pilot's boat or tugboats of the Visayan Stevedoring & Transportation Corp. The charge is P150.00/tug during daytime and P180.00/tug during nightime.

BERTHING: Also see "Shipmasters Report".

The port has a foreign pier near the mouth of Iloilo River. It has a length of 345 m. divided into 3 berths of 115 m. each. The maximum draft alongside the pier at MLL is 28 ft. However, a vessel may be loaded up to the draft of 31 ft. (at MLL) with the use of a mule barge.

Usually, loading and discharging are done with the use of the vessel's own gear, except catch-all nets and crane for heavy lift cargoes which may be provided by the Stevedore operator.

The Arrestre operator is capable of handling general and heavy lift cargoes, cargoes in bags (like sugar, fertilizers, cements, copra cake, etc.). Bulk loading may be done also by "bleeding" cargoes in bags directly into the vessel's hold.

CRANES: 1 crawler crane with 15 ton capacity owned by private Arrestre. The Ministry of Public Highways has 4 heavy-lift cranes of 25 tons capacity.

BULK CARGO FACILITIES: Within the harbour limit of the port is sugar bulk-loading installation situated at Jordan, Guimaras Island. The berth is capable of accommodating a vessel with a LOA of 182 m. and a draft of 35 ft. at MLL.

Loading is done with the use of a mechanical conveyor which has a rated capacity of 400 – 500 tonnes per hour. The discharging gear has a maximum height of 30 ft. above HWL.

Cargo handled in this berth is exclusively sugar in bulk.

SPECIALISED CARGO HANDLING FACILITIES: The port is *not* specially equipped for handling containers or Ro/Ro traffic.

LPG facilities at Petron.

STEVEDORES: An advice of 24 hours before the vessel's ETA is required to prepare the gangs necessary to perform stevedoring services. Stevedoring services can average at the rate of 900 – 1,000 tonnes of loading/unloading per 24 hours.

MEDICAL: The port itself does not own any medical facilities. However, within the City itself are 6 modern hospitals which could be used by the vessel's sick crew. Vaccinations and inoculations may be done by the Quarantine Doctor who also issues corresponding certificates for the same.

TANKERS: Bunker is handled through 6 in. pipe-lines; however, Petron load bunker through a 4 in. pipe. "White oil products" are handled through 8 in. pipes. There are 2 privately owned oil-water separators.

Types of oil available: premium, regular, automotive diesel fuel oil, kerosene, and bunker C; rate of delivery: 10–12 t.p.h.

FRESH WATER: Fresh water can be supplied by a private supplier, Springwater Marine Services, Iloilo City. Water is supplied to the vessel while at anchorage or at berth from a water barge at the rate of 15 – 20 M.T./hour. cost is P16.00 ($2.13) per tonne. Water is safe and potable.

FUEL: Bunker fuel and fuel oil (of any desired viscosity) are available and can be supplied by Philippine Shell Petroleum Corp., Lapuz, Iloilo City. It can be delivered either by barge or by road tanker at the rate of 10 – 12 t.p.h. An advance notice of 24 hours prior to delivery is necessary.

CONSULS: British, at Hongkong and Shanghai Bank, Ledesma Street, Iloilo City, Tel: 7-50-86.

REPAIRS/SERVICES: The Iloilo Dock and Engineering Company offers the following major services: marine construction and repairs, conversion, machine shop, electronics navigational equipment installation and repairs, steel fabrication, sandblasting, engineering and project consultation. Other services offered: marine salvage, stevedoring and longshoring, lighterage, towing-harbour, inter-island and ocean warehousing and in-transit handling.

Radar: Repair of ships radar may be done by Louman & Sons Technical Service Inc. The company is capable of repairing radar, radio transmitter and receiver, fathometer and steering system. Usually contacted by the ship's Agent.

DRY DOCKS: Largest drydock at Ideco is Shipway 1: Length 587 ft., width 56 ft. depth (draft at MLLW, 10 ft. without keel blocks), capacity 2,500 L.T. There are 4 other smaller docks, and several side berths.

SURVEYORS: Local Marine Surveyor, Delpan.

WATCHMEN: Watchmen are optional, however if the Master so desires, watchmen can be hired.

HATCHES: Opening/closing of vessel's hatches and securing the vessel's derricks, are usually done by the stevedores.

CARGO GEAR: Load/discharge is effected by ship's gear. There is no special cargo equipment except for heavy lift cranes.

CUSTOMS ALLOWANCES: Vessels crew are permitted an individual allowance of 1 bottle of whisky and 1 carton of cigarettes per week. However, if necessary, the Master may request the Collector of Customs through the Customs Inspector on board for a further issue within the week.

REPATRIATION: Crew changes and repatriation may be effected by the local Regional Office of the Immigration Commission with the approval of its head office in Manila.

AIRPORT: An all-weather airport situated about 7 km. from the pier. Regular Iloilo – Manila flight is 3 times a day. Other flights Iloilo – Cebu, Iloilo – Davao.

TIME: GMT plus 8 hours.

HOLIDAYS: *Legal Holidays:* Sundays, January 1st, (New Year's Day); April 9th, (Bataan Day); May 1st, (Labour Day); June 12th, (Independence Day); July 4th, (Phil.-American Friendship Day); November 30th, (National Heroes Day); December 25th, (Christmas Day); December 30th, (Rizal Day).

Note:

1. Special Public Holiday may be issued by the President.
2. Under Philippine Law, if a legal holiday falls on Sunday, the following day (Monday) is also a holiday.

Regular working days in the Philippines are Monday through to Friday. Holidays notwithstanding, the Master/Agent may request continuance of stevedoring work after proper notice has been made with the stevedoring company.

POLICE/AMBULANCE/FIRE: Police Tel: 7-55-21; Fire Tel: 7-30-11; 7-49-89; Ambulance Tel: 7-25-61; 7-24-41.

TELEPHONES: PLDT (Tel Co.) can install a telephone on board a vessel at berth with the following charges:

P200.00	Deposit for the instrument, refundable upon return of the instrument.
74.41	rate/month
45.00	for services
3.00	electrician's fee
322.41	Total charges

Port Authority Telephone Numbers: Manager's Office: 7-69-45; Operations: 7-60-73; Administration: 7-76-43; Security: 7-29-79.

SERVICES: See "Repairs".

SHORE LEAVE: Shore leave is granted after the issue of shore passes by the local official of the Commission on Immigration.

IDENTIFICATION CARDS: Identification card is not necessary for the issue of shore passes. Visaed crew list will suffice.

DELAYS: Occasional congestion of the port may delay vessels berthing. Bunkering may be done whether the vessel is at anchorage or at berth.

GENERAL: Vessel's ETA has to be relayed to Philippines Ports Authority, Iloilo at least 24 hours before arrival.

DEVELOPMENTS: The proposed Iloilo Commercial Port Project has been approved in principle by the World Bank. It will be a container/foreign port equipped with modern container facilities and with ample back-up area. Quay length 400 m. Depth alongside 10.5 m. One Mobile crane and 3×28 ton forklifts to be provided. Completion expected mid-1985.

SHIPMASTER'S REPORT: 1977

There are 3 ports where bulk sugar loading facilities exist, Pulupandan (which see), Iloilo and Batangas Bay. Ships first call at Pulupandan on Negros Island, approximate position Lat. 10° 31′ 30″ N., Long. 122° 47′ 36″ E. and load up to a draft (SW) of 29 ft. The rate of loading by using 1 trimmer is about 300 – 400 tonnes per hour. Pilotage is compulsory and the Pilot boards in a position (approx.) Lat. 10° 27′ 24″ N., Long. 122° 46′ 12″ E. After completion of port formalities, the vessel is berthed alongside the Bulk Sugar Installation with a stationary conveyor.

The vessel then proceeds to Iloilo for loading up to 32 ft. This vessel, which is 675 ft. in length, loaded bulk sugar in hatches 2, 4, 6, 7 and 8. It was possible to load in hatch No. 1 also. The loading is done from a fixed conveyor with 2 trimmers and the loading rate is between 400 - 500 tonnes per hour. Finally the vessel proceeds to Batangas Bay and after the usual formalities, goes alongside the Batangas Bay Terminals Inc. (BBTI) at Bolo – Bauan – Batangas, where there is no draft restriction. The loading rate is about 300 – 400 tonnes per hour. Loading is done from a fixed conveyor with one manually operated trimmer. Pilotage is compulsory and ships awaiting Pilots can anchor either at Santa Rita or Santa Clara (Batangas City) or Tabangas.

The main sugar crop is brought to Iloilo, known locally as Sugar City, because it is the main sugar exporting port, from Negros Island, where most of the sugar farms and factories are situated. The sugar for export at BBTI is brought from factories around Laguna Bay by trucks. The Stowage Factor for bulk sugar worked out to between 40 – 41.

AUTHORITY: Philippine Ports Authority, Iloilo City.

AGENT: See "Manila".

JOLO (Jolo Island): 06.03 N. 121.00 E. (See Plan Book)

See "General" before first port.

DOCUMENTS: 4 copies each of Crew Lists; Passenger List; Import Cargo Manifest; Oath of Master and a copy of Vessel's Information Sheet.

PILOTAGE: Pilots are stationed at nearby Zamboanga City. Advice of ETA at least 3 days before is requested to facilitate arrangement of pilotage service.

ANCHORAGE: Anchorage areas are N.W. of Jolo Wharf and West of Caltex Depot.

MAX. SIZE: Main wharf; Draft 4 m. LOA: 60 m. At Caltex, Mobil and Petron Oil depot: LOA: No limit; Draft: 6 m.

HEALTH: Ships will be cleared by quarantine officers upon arrival at anchorage.

RADIO: Local Port Authority is equipped with SSB radio linking all Port Authorities nationwide. Ships may send message through Radio Communications of the Philippines, Inc. which has international connections.

BERTHING: Berthing space at main wharf is reserved for large foreign vessels; Max. permissible draft at MLLW is 4 m. (SW); Cargo handling by ship's own gear; Cargo may be worked at open storage and direct delivery only.

STEVEDORES: 24 hours advice before ETA is required. Stevedores provided by Sulu Dockhandlers and Forwarders, Inc.

MEDICAL: 2 hospitals are available.

TANKERS: The private wharf of Sulu Agro Industrial Corporation within the port limit is designed to handle Crude coconut oil.

FRESH WATER: Supplied by Sulu Water Works Authority with 4 in. piping all along the main wharf.

FUEL: Supplied by Petron Philippines, Inc.

FIRE PRECAUTIONS: Dangerous cargoes are worked at assigned berthing area.

CONSULS: In Manila.

REPAIRS: Minor repairs maybe undertaken by and within the vessel itself after permission is sought and granted by the Port Authority.

GANGWAY/DECK WATCHMEN: Customs Guard and Customs Inspector are on routine and continuous guard.

HATCHES: May be opened by stevedores.

CUSTOMS ALLOWANCES: Minimum quantity for personal use permissible only on board.

TIME: GMT plus 8 hours.

AIRPORT: Jolo Airport, flights to Zamboanga only, 2 flights a day.

HOLIDAYS: Cargoes are worked on holidays.

POLICE/AMBULANCE/FIRE: Central telephone system connects port Authority with Police, Ambulance and Fire Departments.

SHORE LEAVE: Curfew hour is from 2200 hrs. to 0400 hrs. Crew members are allowed ashore. Identification cards not necessary.

REGULATIONS: No discharge of ballast oil in any territorial waters of the Philippines.

DELAYS: Delays in cargo handling: Rain.

DEVELOPMENTS: Reclaimation in progress.

AUTHORITY: Philippine Ports Authority, Port of Jolo, Jolo, Sulu Philippines. *Contact:* Tantung L. Abam, Port Manager.

JOSE PANGANIBAN, Luzon: 14.18 N. 122.40 E. (See Plan Book)

See "General" before first port.

DOCUMENTS:

Inward Coasting Manifest.
Hatch Plan or Stowage Plan.
Vessel's Information Card.

PILOTAGE: Pilotage is compulsory. ETA advise should be sent to the Harbour Pilot Association, Legazpi City at least 36 hours before vessel's arrival. The vessel is met by the Harbour Pilot about 2 km. from the wharf aboard a boat displaying a pilot flag.

ANCHORAGE: Within Tanay Strait but not less than 500 m. from existing wharf.

RESTRICTIONS: Present port facilities could only allow vessels at anchorage considering the draft limitation and length of the pier.

MAX. SIZE: LOA 230 m. Draft 30 ft.

HEALTH: Vessels clear quarantine on arrival at Jose Panganiban Harbour. Quarantine Officers will normally board the vessel 2 km. from the wharf.

BERTHING: Present port facilities have been damaged by typhoon. Only 75 m. of the wharf is usable for berthing purposes. Length of quay 75 m., width 12 m. Max. depth of water 30 ft. Quay height above sea level 2 m. at high tide and 5 m. at low tide. Average rate of loading/discharging 18 tons per gang hour. Storage area 1.15 hectares.

CRANES: The port is not provided with shore cranes. Each vessel calling at the port is required to use her own gear.

STEVEDORES: Bicol Port Services.

MEDICAL: 1 government hospital located in the town about 3 km. from the wharf.

FRESH WATER: Can be provided by means of lorries and pipe-lines.

FUEL: All grades except premium gasoline obtainable from major oil depots and supplied by lorries alongside.

GANGWAY/DECK WATCHMEN: Available but not compulsory or necessary.

HATCHES: Opening and closing of hatches are part of stevedores' work or at the Master's option.

REPATRIATION: All facilities available for crew changes; good land and air connections.

AIRPORT: At the capital town of Daet, Camarines Norte.

TIME: GMT plus 8 hours.

HOLIDAYS: New Years Day (Jan. 1st); Holy Thursday; Good Friday; Labour Day (May 1st); Independence Day (June 12th); P.I. – U.S. Friendship Day (July 4th); Bonifacio Day (Nov. 30th); Special holidays declared by the Prime Minister of the Republic of the Philippines are also included. If any other legal holiday falls on a Sunday the following day is observed as a holiday. Cargo work can be arranged on any or all holidays with the vessel's agent.

SHORE LEAVE: Crews are allowed ashore in company of an Immigration Agent.

GENERAL: Vessels intending to call at Jose Panganiban shall apply for a berth space at least 24 hours before arrival. No dirty ballast may be dumped into the territorial waters of the Philippines. Rat guards shall be placed on all mooring lines. Berth allocation is on a first-come-first-served basis.

DEVELOPMENTS: Repairing of damaged wharf and water pipe-lines.

AUTHORITY: The Supervising Officer, Philippine Ports Authority, Legazpi.

LEGAZPI: 13.10 N. 123.45 E. (See Plan Book)

See "General" before first port.

DOCUMENTS:

Inward Coasting Manifest.
Hatch Plan or Stowage Plan.
Vessel's Information Card.

PILOTAGE: Pilotage is compulsory. ETA advise should be sent to the Harbour Pilot Association, Legazpi City at least 24 hours before vessel's arrival. The vessel is met by the harbour Pilot about 2 km. N.E. of the wharf aboard a boat displaying a pilot flag.

ANCHORAGE: Within the Albay Gulf outside the imaginary line within the vicinity of Legazpi Port from San Roque Lighthouse to the East breakwater with depths varying from 80 ft. to 100 ft. with good holding grounds. The bottom is generally of sand and coral.

RESTRICTIONS: Present port facilities allow for 1 vessel at a time considering the draft limitation and length of the pier.

MAX. SIZE: Legazpi Port: LOA – 120 m.; Draft – 25 ft.
Leg Oil Company: LOA – 230 m.; Draft – 35 ft.

TUGS: No tugs available. Motor launch is used to attend to mooring and unmooring.

BERTHING: Only the end of the wharf is usable by foreign vessels considering the draft limitation and constricted manoeuvring area. Legazpi Oil Company, Private Pier is, however, capable of accommodating vessels of any type and tonnage.

Legazpi Port: Length of quay 328 m. Width 30 m. Max. depth of water 30 ft. Quay height above sea level 2 m. at high tide and 5 m. at low tide. Average rate of loading/discharging 15.95 tons per gang hour.

Legazpi Oil Company, Private Pier: Length of quay 100 m. Width 10 m. Max. depth of water 60 ft. Quay height above sea level 3 m. at high tide and 6 m. at low tide. Average rate of loading/discharging 83.33 tons per gang hour. Facilities are suitable for handling of bulk copra, pellets, copra cakes and copra crude oil by conveyor and pipe-lines.

HEALTH: Vessels clear quarantine on arrival at Legazpi Harbour. Quarantine Officers will norrnally board the vessel 2 km. N.E. of the wharf.

RADIO: Following Stations are normally used:

RCPI	FILTEL
TELEFAST	CLAVECILLA
CRC	

CRANES: The port has no shore cranes. Mobile cranes are provided by the Arrastre Operator to load/unload cargoes on non-sustaining vessels.

STEVEDORES: *Legazpi Port:* Provided by Regal Arrastre and Stevedoring, Incorporated. Tel: 3168 and 3107.

Legazpi Oil Company, Private Pier: Provided by Norleinco Arrastre Services.

MEDICAL: 1 government hospital and 6 private hospitals available.

TANKERS: See "Berthing".

FRESH WATER: Can be provided by means of lorries.

FUEL: All grades obtainable from oil depots and supplied by lorries alongside.

GANGWAY/DECK WATCHMEN: Available but not compulsory or necessary.

HATCHES: Opening and closing of hatches are part of stevedores' work or at the Master's option.

REPATRIATION: All facilities available for crew changes; good land and air connections.

AIRPORT: 5 km. from port area. Flights to Manila twice a day.

TIME: GMT plus 8 hours.

HOLIDAYS: New Year's Day (January 1st); Holy Thursday; Good Friday; Labour Day (May 1st); Independence Day (June 12th); P.I. – U.S. Friendship Day (July 4th); Bonifacio Day (November 30th); Special holidays declared by the President of the Republic of the Philippines is also included. If any other legal holiday falls on a Sunday the following day is observed as a holiday. Cargo work can be arranged on any or all holidays with the vessel's agent.

POLICE/AMBULANCE/FIRE: Police, Tel: 4222; Ambulance, Tel: 4432; Fire, Tel: 2333.

TELEPHONES: Placing of telephones on board can be arranged with the local telephone company (MATELCO).

SHORE LEAVE: Crews can be allowed ashore in company of an Immigration Agent.

GENERAL: Vessels intending to call at Legazpi shall apply for a berth space at least 24 hours before arrival. No dirty ballast may be dumped into the territorial waters of the Philippines. Rat guards shall be placed on all mooring lines. Berth allocated is on a first-come first-served basis.

DEVELOPMENTS: Dredging of port basin to an average depth of 25 ft.

SHIPMASTER'S REPORT: April 1981.

Berth: Legazpi Oil Co. Jetty. Vessel loaded Copra Expeller Pellets in bulk.

For all details regarding control, pilotage, harbour installations, documents, etc., see "B.A. Pilot No. 33" and "Guide to Port Entry".

The docking manoeuvres were effected from an Easterly direction. The anchor was let go with 1 shackle prior to berthing. This served later, together with the rear cross buoy, to hold the vessel away from the pier (bad condition), and to heave off during the undocking manoeuvres.

The mooring buoys are secured to the bottom by 3 anchors each and 1 concrete block. However, their positions are not finite.

The vessel is to be maintained about 1.5 m. from the Dukes of Alba at the end of the pier, and therefore damage to the deteriorating pier is avoided.

A landing stage was positioned from the land, and was positioned likewise by the vessel on runners, since the vessel was rolling considerably in the persistent swell.

According to the Pilot, the swell in January is at its worst, and then the berth is not safe. During July and August, it is at its quietest in Albay Gulf. From October to December it is "Typhoon Time" and during November/December it is the heaviest rainy period, however, during the time we were in port there was considerable rainfall.

The pilot station has no VHF. The Pilot is ordered via the Agent, who was most co-operative. The pilot vessel brings the lines from the shore and to the buoys.

The copra expeller pellets were stored in a warehouse of approx. 80 m. × 50 m. According to the statement of the loader they were consistently loaded. The fresh goods, which came from the press at a temperature of approx. 44°C, were always loaded straight on top of the cargo already loaded. On board, temperatures of 32°C to 45°C between surface and core were measured.

According to the opinion of the loader the high cargo temperature is not dangerous, but he was emphatic that a danger existed through wetness.

The expeller was brought to the weighbridge by lorry and then moved to the pile.

The conveyor belt is not covered, and the nozzle reached right up to the landside hatch coaming on the vessel.

The wet conveyor belt was "operated dry" with expeller and the wet material piled on deck, where it was bagged and shipped back to land. Also where due to sudden rainfall the cargo in the hold became wet, this was carefully segregated by the trimmer, and sent back to the land.

A trim extractor is available, and was partly used. The main trimming work is carried out by a gang of approximately 25 men.

Every instruction given from the ship was promptly executed by the conveyor belt personnel.

Delivery rate: 55 t.p.h. (approx.).
Stowage factor: 1.7 cu.m. to the ton (approx.).
Working time: Around the clock.

The loaders made sure that no chemical additive such as benzene, benzol or hexane had been used to extract the oil, and handed over a certificate with the following values:

Moisture content: 9.6%; Oil content: 6.2%.

The certificate of an independent surveyor showed 8.51% humidity and 7.15% oil content.

SHIPMASTER'S REPORT: October, 1982.

Our ship was an 63,770 tons d.w.t. gearless bulk carrier of overall length of 225.03 m. which loaded 3,500 metric tons of Copra expeller pellets in bulk and stowing at an S.F. of 1.6 cu.m/ton. The loading terminal of the Legazpi Oil Company is situated in Lat. 13° 11.5′ N., Long. 123° 45.4′ E., which is unmarked on the Admiralty chart. There is over 54 ft. of water at the berth but the height of the loader is only 40 ft. hence it is important that ships do not arrive with a greater air draft than 39 ft. The port does not have VHF facilities or tugs. The Pilots are well experienced and normally meet vessels about 2 miles N.E. of the berth. The loader is protected by, recently constructed, 4 concrete dolphins and the vessel normally berths starboard side alongside. Two lines are passed to the shore side dolphins fore and aft, one line each to the seaward buoys and one line each to axis buoys and one spring fore and aft. The buoys are situated over 1,000 ft. from the axis of the berth and may necessitate joining of the mooring lines. The loading rate is about 80 t.p.h.

While we were at this berth we had the misfortune of encountering tropical revolving storm "Typhoon Irwing" which passed directly overhead. Berth was vacated when the storm was 150 miles from us to the East. Shelter was sought at an anchorage off the Legazpi harbour breakwater (bearing 230° – 1.0 mile from us). The eye of the typhoon passed directly over us within 24 hours and winds reached a velocity of 75 m.p.h. maximum. The holding ground was good and we rode out the typhoon with 9 shackles of chain out with engines going dead slow ahead when the winds increased to over 40 knots. With the aid of the doppler log on ground tracking and satellite navigator we were able to remain rock steady in the strongest gusts.

Wave heights at this anchorage was never more than one metre. The loading berth is directly exposed to sea and had we remained at the berth the vessel would have been pounded against the dolphins.

The Port Authorities are co-operative. There were no incidents of piracy or thefts.

AUTHORITY: Philippine Ports Authority, Port of Legazpi, P.O.Box 164, Legazpi City, Philippines. *Tel:* 20-12. *Contact:* C. E. Dinopol, Jr., Port Manager.

MANILA, Luzon: 14.35 N. 120.58 E. (See Plan Book)

See "General" before first port.

PORT LIMITS: Manila Harbour is defined as that portion of Manila Bay within the following boundaries:

A line extending from the Vitas Estero due West (270°) to its intersection with a line running South (180°) to Sangley Point Light, thence along this latter line towards Sangley Point Light until its intersection with a line running N.E. (075°) to the N.W. corner of the airport site to the shore to the mouth of the Vitas Estero, the place of commencement. (Philippine Coast Pilot, Part 1, Coast and Geodetic Survey, 1968 edition, p.5-92).

However, Port of Manila jurisdictional district includes that of the Pasig River and the Limay and Mariveles Sub-ports.

DOCUMENTS:

Quarantine:

Innoculation List of Crew.
Innoculation List of Passengers, if any.
Health Certificate from Last Port of Call.

Customs:

General Declaration (6 copies) – APAA Form.
Cargo Manifest.
Crew List.
Ship's Stores List.
Passenger List.
Crew Effects Declaration.
Maritime Declaration of Health.
Transit Passenger List.
Plant and Animal List.
Arms and Ammunition List.
Mail List.
Parcel List.
Drugs and Narcotics List.
Stowaway List.
Foreign Currency List.
Dangerous Goods List.

Immigration:

Crew List.
Passenger List, if any.
Seaman's Book.
Passports.

Customs Boarding Officer:

Oath of Master.
Inward Foreign Manifest.
Parcel List.
Stores List.
Medicine List.
Crew List.
Passenger List.
Plant List.
Animal List.
Crew Declaration List.
Narcotics and Dangerous Cargo List.
Arms and Ammunition List.
Ship's Clearance from Last Port of Call.
Through Cargo Manifest.
Through Parcel List.
Foreign Currency List.

Note: Above documents are requirements depending if there is such cargo on board vessel.

In order to avoid delay, the Owner, Master or Agent of a ship bound for the Port of Manila must notify the following government and private entities (advance notice of arrival) at least 24 hours prior to ship's arrival.

1. Philippine Ports Authority – Harbour Division
   Attention: Harbour Master
2. Bureau of Customs – Boarding and Inspection Section
   Attention: Boarding Officer
3. Bureau of Quarantine
4. Commission on Immigration and Deportation
5. Bureau of Plant Quarantine
6. Bureau of Animal Quarantine
7. Philippine Coast Guard Boarding Team
8. Manila Pilots' Association (Private)
9. Arrastre Contractor (Private)

PILOTAGE: Pilotage in and out of Manila Harbour and to the piers and into the Pasig River is compulsory.

Agents or owners of vessels calling at the Port of Manila shall inform the Pilot of their vessel's arrival. Agents can contact the Pilots Association through Channel 13, 24 hours a day including Sundays and Holidays. Pilots are available day and night.

The pilot boat is a white vessel with a big letter "P" and the number of the boat painted red at the forward end of the vessel. It is usually located in the vicinity of Quarantine Anchorage where port formalities are conducted.

During bad weather, the pilot boat is located inside the breakwater upon the expressed permission of Port Authorities.

Foreign vessels are boarded outside the breakwater while inter-island vessels at Buoy No. 1 near the entrance to the Pasig River and off the lighted buoy North of North Breakwater.

Notice of vessel's arrival shall be made at least 24 hours before their arrival.

Lights exhibited when a vessel has a Pilot on board are white over red together with other regular navigational lights. Otherwise, only navigational lights are displayed.

During typhoons and bad weather, Pilots require vessels to rig the pilot or accommodation ladder on the lee side.

ANCHORAGES: Vessels which for any reason do not intend to enter either harbour or the river immediately on arrival may anchor anywhere outside of the Entrance Channel. There is also deep water anchorage inside the breakwater. Anchorage is regulated by the Harbour Operations, Port of Manila, Philippine Ports Authority.

Quarantine Anchorage: The Manila Quarantine Anchorage is bounded as follows: Beginning at the Manila Outer Harbour Lighted Buoy 1, approximate position Lat. 14° 33′ 09″ N., Long. 120° 54′ 04″ E. thence 000°, 2,360 yards to position Lat. 14° 34′ 23″ N., Long. 120° 54′ 00″ E., thence on a range of 076° 24′ (Customhouse in line with City Hall Tower), 4,000 yards to approximate position Lat. 14° 34′ 50″ N., Long. 120° 56′ 14″ N., Long. 120° 56′ 00″ E., thence 242° 30′, 4,440 yards to the Manila Outer Harbour Lighted Buoy 1, the point of commencement.

Forbidden Anchorage: Anchorage is prohibited in that portion of Manila Bay known as the Cable Area which is defined as follows: From a point approximately at Lat. 14° 33′ 42″ N., Long. 120° 59′ 05″ E., the junction of the breakwater forming the South side of the Yacht Basin with the shore of Manila Bay, thence along the breakwater to its end, from its end 255° to 3.65 miles North of Sangley Point Light, thence 066° to the shore of Manila Bay.

Explosives Anchorage: Vessels having gasoline, dynamite or other highly inflammable or explosive compounds on board are not permitted to berth at piers or wharves until such cargo has been discharged. Such cargo must be discharged into lighters from vessels at the anchorage within the circle with a radius of 175 yards centred in Lat. 14° 35′ 15″ N., Long. 120° 54′ 05″ E.

Other Special Anchorages: Lighters, scows, cascos and similar craft are prohibited from anchoring East of the breakwater, Manila Harbour, except in the following designated places:

(a) South of the new Luneta, inside of vessels' anchorages, but only in cases of urgent necessity and with special permission from the Surveyor of the Port.

(b) Along the East side of the West Breakwater and within 85 yards of it, and well clear of the fairway leading to the Engineer Island slipways and well clear of the manoeuvring space ordinarily needed by vessels docking or leaving the oil wharf. No craft shall moor along the breakwater beyond the sharp bend of the breakwater towards the gap.

(c) In the Inner Basin (Engineer Island) East and well clear of the fairway and then only in case of urgent necessity. It is provided that such craft during severe typhoon weather with special permission of the Surveyor of the Port, may anchor temporarily in the Inner Basin West of the fairway, but well clear of the vessels.

Others:

1. No vessel shall anchor or moor in any prohibited anchorage nor use an anchor in that area except for the purpose of assisting in berthing alongside or unberthing.
2. No vessel shall anchor in, or use an anchorage, other than for the purpose for which the anchorage is designated or intended.
3. No vessel shall anchor, berth, moor or lie:
   (a) In the approaches to a port.
   (b) In any principal fairway.
   (c) In such a manner as to obstruct the approach to anchorage or pier/wharf used by other vessels.
   (d) In a cable reserve area, or in any special anchorage indicated on the chart of the Port or Port district except for the purpose specified.
   (e) In a position which is likely to foul a vessel which is anchored, moored, or made fast to a buoy.

RESTRICTIONS:

1. No explosives or dangerous goods shall be loaded or discharged between 1800 hrs. and 0600 hrs. without the permission of the Authority.
2. No vessel or harbour craft with explosives or dangerous goods on board shall remain alongside any other vessel or craft, pier or wharf or other physical landing place between 1800 hrs. and 0600 hrs. without permission of the Authority.
3. No person shall smoke and no fire or naked light, other than navigation or signal lights prescribed by the Collision Regulations, shall be allowed on board any vessel or harbour craft which has or is about to receive on board any explosives or dangerous goods.

MAX. SIZE: The maximum permissible draft inside the port is 9.4 m.

TUGS: Tugs normally join vessel inside the breakwater.

BERTHING: There are 5 finger piers at South Harbour.

Pier No.	*Pier Length* (m.)	*No. of* Berths	*Depth* (m.)
3	375.96	4	10.70 – 11.35
5	361.59	5	11.35
9	385.96	4	11.08 – 11.68
13	433.79	7	8.53 – 10.06
15	396.96	4	10.70 – 11.35

Container Berths: There are 2 container berths at Berth Nos. 3 and 4 of Pier 3. Length 375 m.

One fixed Roll-on/Roll-off berth at Pier 13. 50 ton capacity.

CONTAINER HANDLING FACILITIES:

Manila International Container Terminal:

Address:	Isla Puting Bato, North Harbour, Tondo, Manila.
Telephone No.:	21-72-49 or 26-71-19. Philippine Ports Authority Office (Operations).
Location:	Located North of the Pasig River mouth primarily constructed to handle the foreign container traffic on a 94-hectare reclaimed area.
Navigational Approach:	The Fairway Channel has a length of 4,000 m. and a width of 250 m. Controlling depth is 12.2 m.
Tidal Range:	Mean Range – 0.763 m. Diurnal Range – 1.021 m.
Total Berth:	Length: 986.16 m. Width: 420.28 m. Depth: 10.70 m. alongside

Facilities

Container Yard 1 paved area	—	21.6 hectares
Rated capacity	—	4,650 TEUs daily
Average Container Volume stored Daily	—	1,600 TEUs (34% average space utilisation)
Reefer Facilities	—	40 Outlets/460 Volts
Container Freight Station Area 1	—	8,400 sq.m.
Rated Capacity	—	5,340 tons daily
Average Tonnage Stored Daily	—	4,280 tons daily (80% average space utilisation)
Berths	—	4
Total Length	—	900 m.
Average Depth at Berth	—	34 ft. (10.4 m.)
Average Length per Berth	—	215 m. except Berth No. 1 which has a length of 255 m.
Operational Berthing Space	—	850 m. (can accommodate 4 vessels at any given time with 150 m. LOA per vessel)
Berthing Hours	—	Anytime, with 24-hour notice
Working Hours	—	16 hours with 2 shifts (day/night)

Equipment

Shore Gantry Cranes	—	2 (1 diesel-powered and 1 electrically powered)
Capacity	—	35 tons SWL
Travelling Distance	—	645 m.
Waterside Outreach	—	35.05 m.
Back Reach (Landside)	—	10.66 m.
Upper Lift	—	1 container over 4 containers above deck
Lower Lift	—	8 tiers below deck
Straddle Carriers	—	6 Units
Prime Movers	—	18 Units
Forklifts	—	43 Units (42×3 tons and 1×10 tons)
Chassis	—	45 Units
Service Vehicles	—	7 Units
Ferry Boat	—	1 (MIPTI-owned)

Other Facilities

Weighbridge		—	Privately-owned
Back-Up Area DASSAD	For dangerous cargo	—	5,000 sq.m. with 2 CFS at 1,500 sq.m. each
NAWACO	For overstaying containers	—	28,000 sq.m. with 8 CFS at 1,254 sq.m. each
APEX		—	28,840 sq.m. with 1 CFS

CRANES:

	No. of Units	*Description*	*Capacity*
Container Crane (Liebherr)	2	Electric-powered	35 tons
Mobile Crane	8	Jib-type	10 – 35 tons
	1	Elevated cab	100 tons
Yard Gantry Crane (rubber tyred)	7	Diesel-powered	30 tons with spreader

CONTAINER/GENERAL CARGO STORAGE FACILITIES:

Transit Shed	*Number*	*Use*	*Capacity*
Pier 15	2	Transit sheds – temporary storage for import and export	6,000 tons/ 5,750 sq.m.
Pier 13	1	Transit sheds – temporary storage for import and export	3,000 tons/ 3,100 sq.m.
Pier 9	4	Transit sheds – temporary storage for import and export	13,000 tons/ 14,694 sq.m.
Pier 5	4	Transit sheds – temporary storage for import and export	12,000 tons/ 12,664 sq.m.
Container Yard	3	Asphalt paved	6,000 TEUs/ approx. 18 hectares
Container Freight Station	2	For stripping/stuffing storage purposes	10,000 tons/ 10,336 sq.m.
Dangerous Cargo Area	1	Partly covered storage area	7,000 tons
Open Storage Area	5	Asphalt paved	34,900 tons
Car Compound (STALAG)	1	For cars and other small vehicles	4,000 tons
Warehouses	8	Storage of import/export cargo	37,000 tons
Chassis Parking	1	Asphalt paved	2,000 TEUs approx. 2 hectares

Liquid cargoes are handled at South Harbour, at the anchorage only through ship to ship or in to lighters.

BRIDGES: None.

STEVEDORES: Arranged by vessel's Agent prior to arrival.

HEALTH: There are 3 types of Pratique that can be obtained at the port: Free Pratique, Provisional Pratique and Radio Pratique.

Foreign vessels calling at the port are inspected by Immigration Officers. When all the quarantine rules and regulations are complied with and the vessels found free of any quarantinable or communicable diseases, Free Pratique is obtained by the vessel.

On the other hand, if some of the conditions above are not satisfied, a Provisional Pratique is given by the Quarantine.

Radio Pratique is provided to army and navy ships on the following grounds:

1. A doctor is among the crew of the ship.
2. There is no member of the crew sick of any disease.
3. Vaccination Certificates of the crew are in order and valid.
4. The vessel is not from a sick area.

For vessels calling at the Port of Manila, but already coming from another port of entry in the Philippines, Pratique is automatic. However, if somebody aboard the vessel is sick during the voyage, Pratique shall still be obtained.

RADIO: The particular radio station to be used by a vessel to route ETA cables to agent is at the discretion and selection of the vessel.

Radio Officer's Report: August 1980.

Radio: Intercom Manila Radio, call sign (DZF) operated by the International Radio Communication Philippines. Serving ship to shore and vice versa, domestic and international communications, on HF, MF, and HF radio telephone on 24 hours operation.

VHF: The only coastal station equipped with VHF radio telephone listening on Channel 16 international calling frequency. Simplex and duplex operations on working Channels, for a direct contact with Agents.

Also accepting radio calls on land locally and international link via their local telephone network (PLDT).

VHF: Manila Pilots Association on Channel 16 and 13.

RADAR: No existing Port Radar Service.

MEDICAL: Notice from shipping Agents is required at least 24 hours in advance. There is one hospital clinic available at the port – the Roberto S. Oca Hospital Clinic located at Gate 4, South Harbour.

For quarantinable diseases, there is a 12-bed hospital, the Quarantine Isolation Centre is located at the airport.

TANKERS: Tankers are very seldom accommodated at the Port. The Limay and Mariveles Sub-ports receive tankers.

Rosario: Filoil Refinery Sea Berth: Is located at the entrance to Manila Bay position: Lat. 14° 26′ 30″ N., Long. 120° 46′ 40″ E. This position is 2.5 miles off the shore of Rosario, Province of Cavite.

The mooring area is marked by 6 mooring buoys. A ship's guide buoy marks the point where the ship's starboard anchor will be dropped upon entry into the berth. 4 other buoys inside the berth at midport mark the end of the submarine pipe-line, centre of ship's manifold and the hose ends respectively. The bearing of the centre of the berth is N. 65° E. The depth is 50 ft. at high tide and 45 ft. at low tide approximately.

The weather is quite good during the dry season, but is unfavourable during monsoon season (May to November). Wind and swells are mostly from a S.W. direction and usually prevalent during monsoon season.

It is emphasised that vessels moored at the berth must be in good condition to clear the berth immediately in case of an emergency. Ship's engines and gear must be ready with full power for immediate use. Ship's personnel should be at their stations at all times during mooring, unmooring and cargo unloading operations.

Radio: Filoil Makati Office may be contacted by dialling telephone Nos. 87-40-61 and 87-40-71. The Rosario Refinery may be contacted by dialling telephone Nos. 47-95-51 and 47-95-53.

Communication from the Sea Berth with the Refinery, Filoil's launch and Filoil Representative on board is through VHF radio. If VHF radio fails, the Filoil launch will be despatched to bring the message either way.

Filoil Representative on board maintains a radio watch and constant communication with the shore for general purposes and emergencies.

Luzon Stevedoring Company tugboats also maintain a constant radio communication with their representative at the shore. In case of emergency, messages can be relayed via these tugs.

Ship's Agent: All vessels carrying crude or other cargoes for discharge at Filoil Refinery Sea Berth must appoint their local ship's Agent who will provide them with the necessary ship husbandry services.

Notice of Arrival: They must report their ETA to Filoil Refinery Corporation, cable address "Filoil", Manila, Philippines, 3 days after leaving port of loading and 72 hours before arrival at Manila.

Pilot and Boarding Parties: Pilots are arranged for by the ship's Agent. Generally, Pilots board the tanker at the Manila Anchorage to assist the Master to moor in the berth and leaves at the Sea Berth after berthing.

Filoil Representative boards the tanker 1 mile before the Sea Berth, but if it is the first voyage, he boards the tanker together with the Port and Government Authorities at Manila Anchorage.

Tugs: Tugboat service is arranged for by ship's Agent. Tugs generally come from Manila. Give at least 48 hours' notice when ordering tugs.

Quarantine, Customs and Immigration: Manila is the port of entry for the Rosario Sea Berth. Therefore, entry and clearance must be arranged by the Ship's Agent at Manila. Boarding Officers board the vessel in the Quarantine Anchorage prior to arrival within the mooring area. Pertinent Government Officials should be given sufficient time, usually not less than 24 hours Monday to Friday, and 48 hours Saturday and Sunday. Generally, entry and clearance can be arranged by the Agent who should advise Customs well in advance of the vessel arrival.

Ballast, Bilge and Garbage Disposal: There are no ballast facilities at the refinery. Masters are advised that in Manila Bay, the Harbour-Pollution Regulations are rigidly enforced. Therefore no bilge water, oil contaminated water, garbage or similar refuse which may pollute the sea water in any way, is to be discharged overboard while the vessel is within Manila Bay and approaches thereto. The staff at Rosario are required to report any violation of this Philippine Merchant Marine Regulation.

Launch Service: Regular launch service for crew transportation is not available and has to be arranged through ship's Agent. The Luzon Stevedoring launch is used to run lines, assist in picking up cargo hoses, etc. Filoil's owned or hired launch is for the exclusive use of Filoil Representative and personnel boarding the vessel; however, transportation may be arranged through Filoil Representative in cases of emergency.

Medical: Medical attention can be arranged by the ship's Agent. There is a clinic at the refinery. The nearest hospital is 0.5 miles from the refinery.

Heading for the Sea Berth: As soon as government clearance (Pratique) is granted, vessel weighs anchor and heads for Rosario Sea Berth, a distance of about 16 land miles from Manila Anchorage.

Vessel Mooring Gears and Facilities: The vessel's bow is secured in the moorings by the use of both bower anchors. Therefore, ship must have both bower anchors ready for immediate use, each with a minimum of 150 fathoms of chain. Anchors, chains and anchor windlass must be in good condition and capable of heaving ship ahead with the chain or letting one chain go out on the run while heaving in on the other. Mooring Buoy No. 6 can be used instead of port anchor if 3 mooring lines are hooked up.

Vessels must be equipped with 10 in. manila or better mooring lines of not less than 8 in. circumference and not less than 90 fathoms in length of each line. 2 lines are required for each of 6 mooring buoys, 5 of which are aft to secure the ship's stern position. Therefore, 5 lines are to be available on the fantail for mooring to Buoy Nos. 1, 2, 3, 4 and 5.

Vessels having wire moorings secured on warping winches with surge valve and brake are acceptable. Warping winches must be adequate to handle mooring line under heavy strain. Efficient stopper lines must be readily available to "stop" mooring lines for transfer from winch to bitts without loss of tension.

All chocks other than roller (if free) shall be fitted with chafing gear to protect lines before berthing operation commences, endeavouring to install chafing gear after the ship has been moored has proven impracticable. Old fire hoses or substitute is suggested.

If in the opinion of the Pilot, the vessel's mooring facilities lines and/or gear are inadequate, he will inform the Master and Filoil Representative, and in such event the vessel will not be allowed to enter the moorings until such conditions are deemed satisfactory.

Docking Procedure: To moor, the vessel approaches the mooring heading due South. When in proper position, the starboard anchor is dropped and the chain allowed to run until vessel crosses the mooring area to a point where the port anchor is let go or when the mooring lines are dropped to Buoy No. 6. Then the engines are backed and the vessel with the assistance of the tug, manoeuvred into the mooring area where after lines are run to the 5 mooring buoys and then the anchor chains are brought tight simultaneously with the securing of the stern to the mooring buoys. The vessel is then heading due West parallel with the tide current flow.

When secured in the berth, vessel should not be closer than 10 m. from the end of the submarine pipe-line. Bower anchor chains should have spread of not less than 30° on either side of the ship's imaginary fore and aft line extended forward. Stern buoy moorings should be set as taut as possible and anchors form an approximate angle of 300° with water line.

Submarine Hose Lifting Gear and Manifold Connection: The derrick on the port side in way of the hose connection must be rigged to lift not less than 5 tons. The topping Lift shall be available to raise or lower the boom as required and the winch and whip shall be of a quality and nature to lift the hose exactly and evenly. The hose and fittings are considered to weigh 3 tons. The hose connecting gang and its supervisor are from Luzon Stevedoring Company and are under contract to Filoil. They will use the ship's machinery to raise the 2×10 in. hoses from the bottom and secure same to the ship's side. They will also disconnect the hoses and lower same to the bottom of the sea after completion of discharging of cargo. The ship's manifold must have 10 in. flanges for connection to 10 in. submarine hoses.

Safety Rules and Regulations:

Mooring lines must be in good condition and kept tight at all times.

Sparking smoke stacks must not be permitted. If for any reason a stack catches fire or emits live sparks, cargo operations must be stopped immediately on this and adjoining vessels.

Throw nothing overboard from deck or portholes while at Sea Berth.

During cargo and/or ballast operations, vessels shall show red flag by day and red light by night. No smoking amidships during cargo and/or ballast operations.

No chipping, repairs, welding or hot work is allowed on any vessel while at sea berth unless special permission is given and a safety permit obtained. The ship must always be ready to sail out at a moment's notice. The Authority decides when vessels at pier side and Inner Anchorage be shifted to Outer Anchorage during Typhoons.

Pumping crude oils must be stopped during electrical storms or if lightning appears in close vicinity.

In case of fire, shut down all pumping and sound alarm. Disconnect hoses so as to be ready to shift from berth. All vessels at berth must have main engines ready for use. Water, foamite and steam are never to be used on electrical fires. Use dry chemical or Pyrene. Use foamite, water fog, steam CO_2 or dry chemical on oil fires.

Avoid spilling oil on deck. If any oil is spilled, it must be cleaned immediately. Gasoline or naphtha is not to be used for cleaning.

Only Underwriter's laboratory approved flashlights permissible use in methane and air mixtures by the U.S. Coast Guard are to be used for loading, discharging, ballasting and/or repair work on vessels.

Ullage screens are to be kept in place during cargo and/or ballast operations.

No extension cord or portable cables which are connected to an electric power source shall be used on deck in way of cargo or fuel tanks unless vessel is certified gas-free.

Fire hose shall be laid out and suitable fire extinguishers available. Failure to comply with any of the above rules will result in the vessel being shut down. Sufficient copies are to be presented to the Master so that they may be posted in various places about the vessel. It is the Master's responsibility to see that these rules and regulations are enforced.

Discharge of Cargo: After hoses are connected the Filoil Representative will, after communication with the refinery, advise commencement of pumping. In the beginning the rate is to be slow and the Filoil Representative will advise when pumping rate is to be increased to maximum. Discharge of cargo may be stopped due to adverse weather conditions. In which event, the hoses are disconnected and the submarine hose lowered to the sea bottom. Cargo discharge will be resumed when the adverse weather moderates.

Crude oil discharge through 2×10 in. hoses 255 ft. long through a 10 in. check valve and 10 in. gate valve then into the 24 in. pipe-line which is 2.5 miles in length. The height of the shore tanks (foundation) above sea level if 15.5 ft. Pressure at the ship's side must not be less than 60 lb. Maximum pressure allowed is 120 lb. at the ship's side.

Stripping – Tank Draining: To keep a discharge time to a minimum, tanks should be stripped into one of the ship's tanks and the final stripping shall be from only one tank.

Board and Lodging Accommodation: Sufficient accommodation and meals are requested to be available and prepared for the Filoil's Representative in the Officers' quarters. He will remain with the vessel until casting off or until relieved to be of assistance to the crew.

DENSITY: Variable.

FRESH WATER: Fresh water is available from floating barges.

FUEL: This depends upon the requirement of the vessel. However, as to the quantity, the Philippine Government can only sell vessels sufficient for it to reach the next port of call.

FIRE PRECAUTIONS: The "Absolutely Non-Smoking Area" signs to be exhibited. Permission must be obtained from the Authority before following undertaken – welding work, onboard repairs, vessel imobilisation.

REPAIRS: Only minor repairs possible.

DRY DOCKS: *Bataan Shipyard and Engineering Co. Inc.:*

1 Graving Dock with max. length 164 m., breadth 23.16 m. and depth 12.19 m. Max. size 16,000 d.w.t.

1 Synchrolift for vessels up to 2,000 d.w.t.

Philippine Shipyard and Engineering Corp. (Philseco): Located at Subic Bay.

1 Graving Dock, 350 m.×65 m.×12.5 m.
1 Berth, length 300 m., depth 9 m.
1 Jetty, lengths 185 m. and 135 m., depth 9.0 m.
1×80 ton crane and 1×30 ton crane.

SURVEYORS: None.

GANGWAY/DECK WATCHMEN: This service is available whenever needed.

HATCHES: Stevedores usually open and close hatches. In special cases, when the vessel is of a different model and the hatches are constructed differently, crew members are requested to assist stevedores.

CARGO GEAR: See "Specialized Cargo Handling Facilities".

REPATRIATION: Shipping Agent can arrange this with the Bureau of Immigration.

AIRPORT: The nearest airport is the Manila International Airport, about 8 km. from the Port of Manila. This is served by regular airlines.

TIME: GMT plus 8 hours.

HOLIDAYS: There are about 11 national holidays in the Philippines. Working days are from Monday to Friday, for government employees, and Monday to Saturday, for private employees. However, the Port of Manila does not observe any of these holidays. Operations at the port are on a day-to-day basis.

Work stoppages may be declared on the following holidays:
Good Friday (1800 hrs. Thursday – 1800 hrs. Friday)
Christmas Eve (1800 hrs. 24th December – 1800 hrs. 25th December)
New Year's Eve (1800 hrs. 31st December – 1800 hrs. 1st January)

CUSTOMS ALLOWANCES: The only allowable quantity of goods to be held out of bond is that which the member of the crew can use personally. Usually, one or two bottles of wine and a pack of cigarettes. Those brought out from the vessel beyond this will be considered for commercial consumption and will therefore be charged.

POLICE/AMBULANCE/FIRE: Police Tel: 59-90-11, 59-43-44, 59-63-36, 59-64-49. Ambulance Tel: 59-60-61, 50-30-11. Fire Tel: 47-77-17, 88-00-58, 25-56-80, 87-21-20.

EMERGENCY CO-ORDINATION CENTRE: Philippine Coast Guard Tel: 483-257 (operations).

TELEPHONES: Arranged by vessel's Agent from the Philippine Ports Authority.

SERVICES: Apart from the usual services of the port, others are ship salvage, laundry and container leasing.

SHORE LEAVE: Crew members are allowed ashore as long as sufficient members of the crew are left on board to manage the vessel in case of unforeseeable incidents. This is necessary in order that the vessel can be removed from berth or anchorage.

IDENTIFICATION CARDS: Shore passes are issued by the Bureau of Immigration.

BANKS:

1. American Express Bank, 121 Paseo de Rojas, Makati, Metro Manila. (No telex available).
2. Bank of America, 8947 Paseo de Rojas, Makati, Metro Manila. Telex: 5049.
3. City Trust Banking Corporation, 399 Buendia Ave., Ext., Makati, Metro Manila. (No telex available).
4. Lloyds Bank International Ltd., 6813 Ayala Ave., Makati, Metro Manila.

REGULATIONS: No particular or unusual regulations are observed at the port.

DELAYS: The expected delays are: During inclement weather, some difficulty may be encountered in berthing, and when some of the specialised cargo handling facilities have failures.

DEVELOPMENTS: *Future Plans for the Manila International Container Terminal:*

1. Additional Ro/Ro facility to be constructed.
2. A third container berth to be constructed.
3. Four gantry cranes, 4 transtainers and 4 straddle carriers to be added.
4. Additional Container Freight Station (CFS) to be constructed under Phase II.

AUTHORITY: Philippine Ports Authority (PPA), P.O.Box No. PA 62, 5th Floor, B.F. Condominium, Aduana, Intramuros, Manila. *Tel:* 47-92-04, 40-81-66, 48-24-93. *Telex:* 40404 (ITT), Tx Bx 0203. *Cables:* Phports, Manila. *Contact:* Captain E. Santos, Port Manager.

AGENT: Wallem Philippines Shipping Inc., Wallem Philippines Buildings, 3rd Floor, Beaterio Corner, Legaspi Streets, Intramuruos, Manila, Philippines. Tel: 491211-19. Telex: 63328, 7420297, 7227624. Cables: "WALLEM".

MASAO (Including Nasipit): 09.06 N. 125.22 E. (See Plan Book)

See "General" before first port.

PORT LIMITS: From Bolo-bolo Point up to Diwata Point.

DOCUMENTS:

4 Crew Lists
4 Passenger Lists
2 Store Lists
4 Stowage Plans
2 Personal Effect Lists
2 Inward/Outward Cargo Manifests
1 Ship's Information.

PILOTAGE: Compulsory. Telegraphic address: Masao Pilots Butuan City.

ETA: Ocean going vessels – 24 hours' notice.
Coastal vessels – 12 hours' notice.

Pilot Boat Description: Upper structure white; lower structure, black with a letter "P" at the bow. During night time, when a vessel requires a Pilot, particular light used is permanent red at the uppermost portion of the boat and a flashing white light.

Location of Pilot Station: In Masao, Lumbocan, Butuan City, but they have office at San Francisco St., Butuan City near the Butuan R. C. Wharf.

For the Port of Masao, Lumbocan, Butuan City, there is no alternative area in the event of bad weather as it is an open sea. However, at the sub-port of Nasipit, vessels can seek shelter during bad weather because of its natural cove which protects the vessels against strong winds and heavy currents.

Location of anchorage for vessel awaiting a Pilot is at Quarantine Anchorage Area Lat. 9° 00′ 30″ N., Long. 125° 28′ 15″ E.

ANCHORAGES: Depth of safe anchorage: 75 m. deep along the shore line.

Masao Anchorage Berth:

Anchorage No. 1:	Lat. 9° 01′ 05″ N.,	Long. 125° 29′ 50″ E.
Anchorage No. 2:	Lat. 9° 01′ 00″ N.,	Long. 125° 29′ 40″ E.
Anchorage No. 3:	Lat. 9° 00′ 55″ N.,	Long. 125° 29′ 30″ E.
Anchorage No. 4:	Lat. 9° 00′ 45″ N.,	Long. 125° 29′ 20″ E.
Anchorage No. 5:	Lat. 9° 00′ 35″ N.,	Long. 125° 29′ 00″ E.
Anchorage No. 6:	Lat. 9° 01′ 15″ N.,	Long. 125° 29′ 45″ E.
Anchorage No. 7:	Lat. 9° 01′ 10″ N.,	Long. 125° 29′ 35″ E.
Anchorage No. 8:	Lat. 9° 01′ 04″ N.,	Long. 125° 29′ 25″ E.
Anchorage No. 9:	Lat. 9° 00′ 55″ N.,	Long. 125° 29′ 05″ E.
Anchorage No. 10:	Lat. 9° 00′ 50″ N.,	Long. 125° 28′ 55″ E.

RESTRICTIONS: None.

MAX. SIZE: Masao: No limit.

Nasipit: Maximum possible length of vessel is 550 ft., breadth, 65 ft., maximum mean draft is 25 ft.

TUGS: Tug assistance is only available at the port of Nasipit, if needed.

BERTHING: No berthing facilities available at the Port of Masao, Lumbocan, Butuan City. All vessels anchor at specified anchorage areas. Also see "Max. Size".

At the sub-port of Nasipit, foreign berthing space is available at the Nasipit Government Wharf and NALCO Wharf.

CRANES: None owned by the Authority nor by any cargo handling operators, but can be hired from the Ministry of Public Works and Highway or from private companies.

BULK CARGO FACILITIES: None.

BRIDGES: None.

STEVEDORES: For the Port of Masao, (Lumbocan), the cargo handling services are being undertaken by the PPA-Masao Port Services, the area of operation of which starts at Masao anchorage and along the coastline of 125° 24′ East of the municipality of Buenavista, Masao, Lumbocan, Magallanes, Cabadbaran, Tubay up to Agusan-Surigao coastline boundaries including Magallanes Bay up to Kayukanan Creek.

Cargo-handling services for the sub-port of Butuan is, likewise, handled by the PPA-Masao Port Services. It shall be noted, however, that the arrastre/stevedoring services for the 2 ports will be officially awarded to a new company late 1984.

The sub-port of Nasipit is being handled by the Nasipit Integrated Arrastre & Stevedoring Services, Inc. (NIASSI), whose jurisdiction starts at the Nasipit Government Wharf up to Long. 125° 25′ West of Buenavista, then going Westward including the municipality of Carmen.

ETA advice required to arrange gangs, at least 4 hours before arrival.

MEDICAL: Hospital facilities available:

1. Government hospitals:
   a. Butuan General Hospital
   b. Butuan Maternity and Children's Hospital
   c. City General Hospital and Medical Centre.
2. Private hospitals:
   a. Butuan Doctors Hospital
   b. Santos Hospital
   c. Villanueva Poly-Clinic and Hospital.
   d. Our Lady of Fatima Hospital.

DENSITY: Average density of water in the port and surrounding anchorage area is 1010 – 1012.

FRESH WATER: At the Port of Masao, Lumbocan, Butuan City, the supply of fresh water can only be made possible through the use of barges.

Water supply is available at the sub-port of Butuan through its licensed operators. However, at the sub-port of Nasipit, water supply can be taken from the Nasipit Lumber Company.

REPAIRS: Only minor repairs can be undertaken.

GANGWAY/DECK WATCHMEN: Service of watchmen is optional.

HATCHES: Opening or closing of hatches is normally carried out by stevedores.

AIRPORT: A few kilometers from the city is the Bancasi Airport which caters to domestic flights to and from Cebu and Manila.

HOLIDAYS: New Year's Day (January 1st); Holy Thursday, Good Friday and Easter Sunday; Labour Day (May 1st); Independence Day (June 12th); Fil-American Friendship Day (July 4th); Barangay Day (September 11th); Proclamation 1081 (September 21st); National Heroes Day (November 30th); Christmas Day (December 25th); Rizal Day (December 30th).

Cargo-handling operations, however, can still be arranged on these days.

POLICE/AMBULANCE/FIRE: Police: 115; Fire: 114; Ambulance: 24-14.

TELEPHONES: Not possible to place telephones on board.

SERVICES: Shipchandling Services, Mooring/Unmooring Services, Laundry, Water-Taxi, Cargo-Checking, Cargo Surveying, Carpentery, Forwarding, Bunkering. All ancilliary services operators are duly licensed by PPA.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

AUTHORITY: The Philippine Ports Authority; Port Management Unit; Port of Masao, Butuan City. *Tel:* 31-98, 34-29. *Contact:* Ernesto J. Fernando, Port Manager. Tomas T. Alegarbes, Harbour Master.

MASBATE: 12.35 N. 123.31 E. (See Plan Book)

DOCUMENTS:

Inward Coasting Manifest.
Hatch Plan or Stowage Plan.
Vessel's Information Card.

PILOTAGE: Pilotage is compulsory. ETA advise should be sent to the Harbour Pilot Association, Legazpi City at least 36 hours before vessel's arrival. The vessel is met by the Harbour Pilot about 2 km. from the mouth of the channel of Masbate Bay aboard a boat displaying a Pilot's flag.

ANCHORAGE: Within Masbate Pass, but not greater than 500 m. from the mouth of the channel leading to Masbate Bay. The area within the Masbate Bay could only be used during emergencies and typhoons.

RESTRICTIONS: Present port facilities can only accommodate 1 vessel at a time due to draft limitation and physical length of the wharf.

MAX. SIZE: LOA – 300 m.; Draft – 28 ft.

HEALTH: Vessels will clear quarantine on arrival at Masbate Harbour. Quarantine Officers will normally board the vessel once it is inside Masbate Bay.

BERTHING: The entire berth length of the wharf could be utilised for the loading or unloading of cargoes. Length of quay 180.0 m. Width 10 m. Max. depth of water 30 ft. Quay height above sea level 2 m. at high tide and 4 m. at low tide. Average rate of loading/discharging 20 tons per gang hour.
CRANES: None available.
STEVEDORES: Provided by Masbate Consolidated Arrastre, Inc.
MEDICAL: One government hospital and three private hospitals.
FRESH WATER: Available by special arrangements.
FUEL: All grades obtainable from Caltex depot in the area and supplied by lorries alongside.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
HATCHES: Opening and closing of hatches are part of the stevedores' work or at the Master's option.
REPATRIATION: All facilities available for crew changes; good sea and air connections.
AIRPORT: 3 km. from port area. One flight to Manila daily.
TIME: GMT plus 8 hours.
HOLIDAYS: New Year's Day (January 1st); Holy Thursday; Good Friday; Labour Day (May 1st); Independence Day (June 12th); P.I.U.S. Friendship Day (July 4th); Bonifacio Day (November 30th); Special Public Holidays declared by the President of the Republic of the Philippines is also included.

If any other legal holiday falls on a Sunday the following day is observed as a Holiday. Cargo work can be arranged on any or all holidays with the vessel's Agent.

POLICE/AMBULANCE/FIRE: Police and ambulance can be contacted through the local PPA office.
TELEPHONES: Placing of telephones on board can be arranged with the local telephone company (PILTEL).
SHORE LEAVE: Crews can be allowed ashore in company of an Immigration Officer.
GENERAL: Vessels intending to call port at Masbate shall apply for a berth space at least 24 hours before arrival. No dirty ballast may be dumped into the territorial waters of the Philippines. Rat guards shall be placed on all mooring lines. Berth allocation is on a first-come first-served basis.
DEVELOPMENTS: Extension of the wharf by 80 linear metres.
AUTHORITY: The Supervising Officer, Philippines Ports Authority.

POLLOC: 07.21 N. 124.13 E. (See Plan Book)

LOCATION: The Port of Polloc lies on the Southern coast of Polloc Harbour which, itself, is located N.E. of Illana Bay at about 14 km. in straight line North of Cotabato City. It is situated at Lat. 07° 21′ 12″ N., Long. 124° 13′ 27″ E.
ANCHORAGE: Polloc Anchorage is contained between Lalayang Point and Polloc Island and provides a clear manoeuvring area some 3 km. in diameter with deep water along the marginal shallows which front the low cliffs of its Southern shore.

The anchorage along the Southern margin of Polloc Harbour also provides the port shelter and water depth as well as the best land and water frontage for the development of port facilities and of port-orientated industries.

Bongo Island, 6 miles long, is situated in the North Eastern part of the bay and affords some protection from the Westward to the Mindanao River Delta Area and Polloc Harbour.

HEALTH: Quarantine anchorage is set at Lat. 7° 22′ N., Long. 124° 14′ E.
BERTHING: Main marginal wharf – 400 m. long.
Depth alongside – 10.5 m.
Lighter dock – 67 m. long on both sides.
2 government transit sheds – 11,960 sq.m.
Total port area – 102,350 sq.m.
Total area for open storage – 42,940 sq.m.
Total area reserved for private warehouses – 75,645 sq.m.
GENERAL:

Tides: The tidal cycle is semi-diurnal and synodic form. The characteristics are as follows:
Highest Astronomical Tide = EL +2.3 m.
Mean High Water Springs = EL +1.9 m.
Mean High Water Neaps = EL +1.5 m.
Mean Low Water Neaps = EL +0.6 m.
Mean Low Water Springs = EL +0.2 m.
Lowest Astronomical Tide = EL −0.3 m.

Storm Occurrences: Mindanao is below the main typhoon belt and only minimal effects have ever been observed at Cotabato as a result of occasional typhoons over the island. This is thought to be due to the consistent nature of typhoons in this region which travel S.E. to N.W.

In the sheltered area of Polloc Harbour at the Easterly side of the Port of Polloc, the max. fetch of 8 km. is to the N.W. and only with winds of 40 knot during a storm will waves of 1.2 m. (4 ft.) be experienced. With an "onshore" typical wind of 15 knots from N.W., wave heights will be about 0.3 m. (1 ft.).

Port Site Description: West of the Haines Point which marks the Western Sarmiento boundary is the site of the port. A frontage of some 2 km. can ultimately be reclaimed from the shallows along this shoreline to provide land backing to the wharves of the port.

The Eastern half of the Southern shoreline is occupied by the extensive plywood factory of Sarmiento Industries which has developed its industrial complex on land reclaimed over the sand foreshore with filling from the high land behind.

Main Sub-ports: The Philippine Ports Authority took over on October 26, 1977, the Cotabato City Wharf and Parang Pier. The former is a port with a depth restriction on the bar resulting in ships anchoring in the open sea of the North Mindanao River mouth and there being served by lighters, ferry boats and barges; while the latter caters to large ships which load logs and plywoods at anchor. It contains a deep water pier at the East shore of the bay and also a submerged marine pipe-line for pumping ashore petroleum products into a Tank Farm at Parang.

The Cotabato City Wharf also services inter-island watercraft such as passenger/cargo motor launches and other small sea transports.

Access Roads: The Port of Polloc is accessible by land to Cotabato City through a 13 km. modern concrete pavement which winds up at Simuay Junction at the Cotabato-Davao National Highway extending some 9 km. more to reach the commercial centre. From this point, the port is accessible by all forms of land transport facilities to any place in the Cotabato area.

The port is also expected to serve the Southern-most principalities of the Province of Lanao Sur with the improvement of the Ganassi Road connecting the province with main artery of the Cotabato area.

SHIPMASTER'S REPORT: July 1984.
Port Limits: Entrance to bay.
Documents: Usual for Philippine Ports.
Pilotage: Pilot not available. Port used by coastal cargo and passenger vessels, and only occasional foreign vessels.
Anchorage: 5 cables off the berth.
Restrictions: Advisable to arrive in daylight for foreign ships. Depth alongside wharf 10.5 m. LWST.
Health: Pratique granted on completion of formalities, normal inspection.
Radio: Manila.
VHF: Not available.
Radar: None.
Tugs: None. One man with small private tug produced certificate that he had piloted vessel alongside even though he had only guided through bay in front of vessel and neither towed vessel or handled lines. He did not speak English.
Berthing: 400 m. of well fendered wharf. No shore cranes, ship's gear only – plywood in crates is the main export cargo.
Cranes: None.
Bulk Cargo Facilities: None.
Specialised Cargo Handling Facilities: None.
Bridges: None.
Stevedores: Good – but have a bad habit of smoking down holds. Used small forklift trucks down hold to stack cargo pallets of plywood – very competently handled.
Medical: Doctor and dentist available at Cotabato City.
Tankers: No facilities.
Density: 1025.
Fresh Water: Not available.
Fuel: Not available.
Consuls: None.
Repairs: No facilities available.
Dry Docks: None.
Surveyors: None.
Gangway/Deck Watchmen: Customs and Immigration officials on board throughout vessel's stay.
Hatches: Opening and closing by crew.
Customs Allowances: Normal allowance. Bond sealed.
Cargo Gear: Ship's gear only.
Repatriation: Possible – but not advisable.
Airport: South of Cotabato City. Daily connection to Manila.
Time: GMT plus 8 hours.
Holidays: Usual Philippine holidays.
Police/Ambulance/Fire: No telephones.
Telephones: None.
Services: None.
Shore Leave: Allowed. Shore passes arranged with Immigration Authorities. Going ashore advisable in daylight only – at night it is dangerous and movement on road prohibited after 2200 hrs. – many roadblocks manned by army.
Identification Cards: Shore passes issued but identity card advisable.
Delays: Subject to berth availability.

AUTHORITY: Philippine Ports Authority.

PUERTO PRINCESA: 09.44 N. 118.43 E. (See Plan Book)

See "General" before first port.
Puerto Princesa, a large irregular inlet between Bancaobancaon Point and Panagtaran Point, is 2 miles wide at the entrance, extending about 6 miles in a N.W. direction. Coral reefs about 0.5 miles wide making out on the entrance points narrow down the navigable width of the channel to about 1 mile, depths of 34 fathoms (62.2 m.), shoaling to 9 fathoms (16.5 m.) in the vicinity of the pier. The major portion of the Northwestern and Western part of the bay is mostly shoal. The shoreline is generally fringed with mangroves and fronted by mud flats. The surrounding land consists of extensive wooded plain, backed by a high mountain chain. Several small rivers navigable by launches and small boats empty into the bay. The inner part of the harbour is a good typhoon anchorage.
PORT LIMITS: About 1 mile South of the pier. This is the entrance to the inner harbour of Puerto Princesa.

PILOTAGE: Pilots can be contacted by radio message through the shipping Agent not less than 24 hours before ETA indicating among others the following information:

1. Name of vessel.
2. Name of shipping lines.
3. Country vessel is registered.
4. Type of vessel.
5. Overall length.
6. Draft.
7. G.r.t.
8. Volume of cargo to be discharged and storage required.
9. Nature of cargo.
10. Passengers disembarking, transit and embarking if any.

When Pilot is aboard the pilot boat, an international flag "P" will be seen flying at her foremast.

ANCHORAGE: Vessels not going alongside the T-shaped pier may anchor Southwestward of Princesa Point in 12 fathoms to 16 fathoms (21.9 to 29.2 m.), mud bottom. A better protected anchorage may be had in 9 fathoms to 10 fathoms (16.5 to 18.3 m.) about 400 yards Northward of the end of the pier.

RESTRICTIONS: At night, in approaching Puerto Princesa from offshore, the lights in the vicinity of Canigaran, Northward of the entrance, may cause some confusion to strangers as they are visible long before the Puerto Princesa Light can be seen. The port light which is fixed red, visible 7 miles over an area of 041°, only becomes visible close in and just off the mouth of the harbour. At daytime a course Southward of the range Thumb Peak-Tidepole Point clears the reef on the North side of the entrance. Mount Beaufort on range with Tidepole Point clears the reef on the South side.

MAX. SIZE: Vessels not going to dock alongside the pier may anchor in 9 fathoms to 10 fathoms or 12 fathoms to 16 fathoms. For vessels going to dock alongside the T-shaped pier, permissible length and draft are the following: Length – 277 ft. (92.43 m.) draft – 27 ft. (8.2 m.)

HEALTH: Quarantine doctors are assigned in the Port to board the vessel and check any suspected disease or fever.

RADIO: Vessels at sea usually send their radio messages through the Association of International Shipping Lines in Manila to their Agents.

VHF: Not available.

RADAR: No radar station in the port.

TUGS: Tug service can be availed of by communicating with the local shipping Agent.

BERTHING: The City has a T-shaped concrete pier with a berthing face of 92.43 m. (277 ft.) Depths 27 ft. (8.2 m.) alongside and 31 ft. (9.4 m.) about 6 yards off the face. The Northern and Southern ends of the "T" have depths of 11 ft. (3.3 m.) and 15 ft. (4.5 m.) respectively. The inshore arms of the "T" have depths of 11 ft. (3.3 m.) at each berth. Sailboats and other shallow vessels berth on each side of the concrete approach. Typhoon signals are exhibited from a pole at the foot of the pier.

CRANES: No cranes available.

STEVEDORES: Advise Agent on volume of cargo to be discharged, storage required and nature of cargo.

TANKERS: May drop anchor at anchorage area.

FRESH WATER: Water supply on a limited quantity. Rate of 2 to 3 t.p.h. Source of water now being developed and water supply will increase correspondingly at the pier.

FUEL: Diesel oil, gasoline and kerosene may be purchased in drums.

FIRE PRECAUTIONS: No smoking is allowed when vessels are refuelling within a radius of 100 m.
An improvised 3 in. hydrant is installed at the pier. The lines used to supply fresh water could be used in case of a fire.

CONSULS: Consuls from foreign countries in Manila.

REPAIRS: No repair facilities.

DRY DOCKS: For small boats only.

SURVEYORS: Lloyd's and other classification societies in Manila, none locally.

GANGWAY/DECK WATCHMAN: Watchman can be hired from local Security Agencies of the Port.

HATCHES: Opening/closing of hatches is usually done by stevedores.

CUSTOMS ALLOWANCES: Quantity permitted for each crew member to be held out of bond are the following: Cigarettes – 5 packs. Liquor – 1 bottle.

CARGO GEAR: Loading/unloading is effected by ship's gear.

REPATRIATION: No facilities.

AIRPORT: The airport is about 2 miles from the pier with a schedule of 2 flights from Manila and back daily.

HOLIDAYS: The following are the Philippine National Holidays: January 1st – (New Year's day), Maundy Thursday, Good Friday, April 9th – (Bataan Day), May 1st – (Labour Day), June 12th – (Independence Day), July 4th – (Fil-Am Friendship Day), November 30th – (National Heroes Day), December 25th – (Christmas Day). Cargo handling operations may be arranged on these days at overtime rates.

POLICE/AMBULANCE/FIRE: Puerto Princesa City has all these facilities. There is a provincial hospital in Puerto Princesa. Private practising physicians and drugstores are available.

TELEPHONES: Pilipino Telephone (Piltel) services the City throughout 24 hours with a long distance call between the Port and Manila anytime of the day. Telephone connections for vessels alongside the quay can be arranged with the Telephone Company.

SERVICES: No special services available.

STORING: See "Prelims" page viii.
(1) Truck Only.
(2) N.A.
(3) Trucks may proceed alongside.
(4) Yes.
(5) Regulations not applicable.
(6) Riggers available.

SHORE LEAVE: Crew members are allowed ashore provided they always carry with them their Seaman's book or Passport.

IDENTIFICATION CARDS: Seaman's Book is sufficient for crews to identify them when ashore.

DELAYS: Due to lack of some Port facilities, delay in berthing, loading, discharging and bunkering is sometimes experienced.

DEVELOPMENTS: A proposed 100 m. R.C. wharf extension on the Northern end and reclamation at the Northern foot of the approach, construction of transit sheds, fence, office, road networks, etc.

AUTHORITY: Philippine Ports Authority, Port Area, Puerto Princesa City 2901, Philippines. *Tel:* 2-21. *Contact:* Engr. Edwin L. de la Cruz, Port Manager.

PULUPANDAN: 10.30 N. 122.46 E. (See Plan Book)

See "General" before first port.

PORT LIMITS: The Pulupandan Pilotage District embraces the waters from the approach of the North and South Channel to Pulupandan Government Wharf including Philippine Bulk Corporation Wharf and also Banago Wharf and approaches. (Please take note that this definition of port limits is for the coverage of Pulupandan Pilotage District).

The seaward boundaries of the port within which a vessel is considered to be an *arrived ship* is bounded from the South Buoy at Lat. 10° 27′ N., Long. 122° 46′ E. and the North Buoy Lat. 10° 33′ N., Long. 122° 46′ E.

The "Notice of Readiness" is presented after quarantine and port formalities are completed after which acceptance laytime commences. Any deviation from this is subject to charter-party terms.

DOCUMENTS: The Master of the vessel should prepare the following documents in order to ensure a speedy clearance:
Clearance of a Vessel to a Foreign Port.
Oath on Entering Vessel to a Foreign Port.
Master's Oath.
Crew Lists.
Passengers Manifests (Disembarking and Embarking).
Cargo Manifests (Inward and Outward).
Advance Notice for ETA (Telegram).
Application for Berth.
Vessel's Information Sheet.
Identification Permit to PHILSUCOM (in case of exporting molasses and sugar).
Authority to Load (Telegram).
Guarantee Payment for Wharfage.
Charter Contract (Agreement of shipper and shipping company as to the activity of operations).

PILOTAGE: With the vessel's ETA, the Pilot can only presume that the incoming vessel is entering the port because most vessels usually wait beyond the harbour limits approximately 7 miles to 11 miles from the port. This is due to the restriction in the P.C. & G.S. Chart 4416 which is marked by red lines indicating "Anchorage Prohibited".

The area of "Anchorage Prohibited" is enclosed by the square red line bounded by Lat. 10° 30′ N. to the North side and Lat. 10° 23′ N. on the South side and Long. 122° 40′ E. to the West side and Long. 122° 50′ E. to the East side.

If a vessel anchors 10 miles from the pilot boat station, only the silhouette of the vessel can be seen so there is no guarantee that it is really the expected vessel. In this connection, the Agent makes assurances to the Pilot that it is the vessel expected in order for the Pilot to meet the vessel.

The telegraphic address is "Pulupandan Pilots", Pulupandan, Negros Occidental, Philippines. The required advance notice of ETA must be 48 hours before arrival. A follow-up notice of ETA must be sent 24 hours before arrival and if necessary an amendment of ETA if the vessel is further delayed. VHF is not available in the port of Pulupandan.

The pilot boat is 45 ft. in length with a wooden hull and superstructure painted white. The name "Pilot No. 3" painted in black on a white background is located at the upper portion port and starboard side.

At night time, a white light over the red light can be seen aside from the regular side lights. Sound signals requiring a Pilot are 2 long and 1 short blast on whistle and/or a display of pilot flag "H" during daytime.

ANCHORAGES: Though the Pilot boarding point is within the enclosed area of "Prohibited Anchorage", the vessel can drop anchor at this point and wait for the Pilot, depth 9 fathoms. Another anchorage area recommended for awaiting a Pilot is at Lat. 10° 33′ N., Long. 122° 46′ E. This point has a depth of 39 ft. Two miles North or West of this point is a good anchorage area, the depth ranging from 6 to 7 fathoms with a good holding ground.

The pilot boat is always stationed at the South end of the government pier South of Pandan Pt., for the look-out of incoming vessels. As soon as the expected vessel is sighted, the Pilot proceeds to the pilot boarding point Lat. 10° 27′ N., Long. 122° 46′ E. about 5 miles from the station. If the vessel cannot proceed to the boarding point, the Pilot will meet her beyond this point.

The specific requirement in boarding is a strong and well balanced Jacob's ladder to be placed on the leeward side of the vessel. A manrope is a necessity.

RESTRICTIONS: Entry to this port has no restrictions except in the case of bad weather when the pilot boat cannot proceed to meet the vessel. Since the loading point of a foreign vessel is mostly at Philippine Bulk Corporation Wharf, the docking and/or undocking is scheduled according to tide and current.

MAX. SIZE: The max. permissible length of a vessel handled at this port area particularly docking at PBC Wharf is 186 m. to 200 m. The controlling draft forward is 26 ft. and 30 ft. aft and after dredging a controlling draft of probably 30 ft. Vessels of this length are usually docked from slack to flooding and undocked from slack to ebbing.

HEALTH: Pratique procedure is a requirement for vessels calling at the port. The shipping Agent arranges Pratique procedure with the Department of Health, Department of Animal Industry and Department of Plant Industry. If there is a disease on board, the doctor of the Department of Health and the Plant and Animal Quarantine Officers will take the necessary action in curing the disease and preventing the spread of an epidemic.

RADIO: There is no radio facility available in this port.

VHF: VHF radio facility is not available at this port, hence, there is no communication with vessels approaching the port and also when manoeuvring within the port area.

RADAR: Radar facility is not available.

TUGS: There is no tugboat available at this port that can be readily used in case necessity demands. The Pilot usually requests the Agent and/or Master to hire a tugboat for docking and/or undocking. In most cases, tugs cannot be taken from Iloilo or Cebu. If ever, tugs can be hired from Cebu, the vessel having to wait for 3 days to 5 days.

In this regard, the Pilot will dock the vessel without tug assistance as requested by the Agent and/or Master in order not to delay the vessel. The Pilot encounters difficulties and risks in this situation but the Agent gives to the Pilot an additional bonus for his efforts.

BERTHING: The berth length of the Government Pier is 424 m., providing 241 m. as berthing space for secondary vessels and 183 m. for primary vessels. Secondary vessels usually handle molasses, sugar, lumber and fertilisers. Primary vessels handle as much as twenty-five commodities. Of these commodities, consumer goods, general cargo, metal and metal products, chemicals, live animals and empty bottles are the most common cargo handled.

CRANES: Cranes for cargo handling are not available.

BULK CARGO FACILITIES: The port area of Pulupandan includes the facilities and equipments of private piers of Philippine Bulk Corporation and Total Bulk Corporation.

The berth at PBC Wharf measures 189 ft. and the quay measures 442.09 ft. Conveyor gantry is the berth equipment used in handling molasses and sugar in bulk for exports. The max. height of the discharging-gear above HW level is 128.4 ft. at the discharging rate of 600 t.p.h. Max. loading depends on the draft of the vessel and max. draft is 22 ft. (salt water).

The quay of TBC measures 19.201 m. It has 1 tanker berth 40 ft. depth at MLLW. It has 5 mooring fender piles spaced at 13 m. with 2 mooring bollards 58 m. from both ends of fender piles. 25 ft. is the max. permitted draft.

Cargoes handled for exports through pipe-lines are molasses and alcohol. Load/discharge lines for molasses are 10 in. diameter, 8 in. diameter and 6 in. diameter while that of alcohol is 4 in. diameter. Max. loading/discharging rate for molasses is 350 m.t./h. and for alcohol is 70 m.t./h.

SPECIALISED CARGO FACILITIES: LPG and containerised cargo are also handled at the Government Pier but the port does not have facilities specially equipped for handling containers or liquid chemicals.

BRIDGES: There are no bridges in the harbour passage of Pulupandan port.

STEVEDORES: The shipping Agent should arrange with the arrastre/stevedoring office regarding the arrastre/stevedoring service to be rendered to the vessel. This can be facilitated by giving to the arrastre/stevedoring operator the schedule of the vessel's ETA. After the Customs Formalities which vary from 3 hours to 2 days are completed, the Agent should give to the arrastre/stevedoring office Notice of Readiness to discharge/load. When the Notice of Readiness is accepted, the arrastre/stevedoring workers can discharge/load cargoes from/to the vessel. The monthly average cargo tonnage discharged per vessel is 300 tonnes and 95 tonnes for loaded cargo. Cargo loaded and discharged at the government pier is mostly cargo from domestic vessels.

MEDICAL: Hospitals are not available in the port area but government and private hospitals can be easily reached by public vehicle as they are located in Bacolod City, 30 km. from Pulupandan.

A vessel is not allowed to berth and its crew and passengers not allowed to go ashore should there be fever, epidemic or any suspected disease on board. Inspection undertaken by the doctor of the Department of Health and the quarantine officers of the Department of Animal Industry and the Department of Plant Industry, by whom medical attention is given when needed.

TANKERS: See "Bulk Facilities".

DENSITY: Average salinity of water in the port is 1022 – 1023.

FRESH WATER: Water can be supplied by Nepoteco. Water from deep wells is delivered through a trucking service. The rate of delivery is 1 truckload per hour which costs P15.00 per ton.

FUEL: Fuel can be made available to the Master of a foreign vessel by notifying the shipping Agent of its need for fuel. The shipping Agent applies to the Department of Energy in Manila for the supply of fuel to a foreign vessel. If the application is approved, arrangement is made by the shipping Agent with the supplier.

FIRE PRECAUTIONS: Fire extinguishers are required for every office and establishment in the vicinity of the port.

CONSULS: Consuls are not available in the port of Pulupandan.

REPAIRS: There is no drydock facility in the port.

SURVEYORS: The nearest surveyor is the Del Pan Sugar Surveyors in Bacolod City.

GANGWAY/DECK WATCHMEN: The need for the service of watchmen depends upon the discretion of the Master of the vessel. The cost of their service is P4.50 per hour for the Port District of Iloilo of which the Sub-port of Pulupandan is included.

HATCHES: Opening and closing of hatches carried out by both the crew and the stevedores.

CUSTOMS ALLOWANCES: The quantity of tobacco, wine and spirits allowed for each crew member to be held out of Bond must not be more than for personal consumption.

CARGO GEAR: The loading/discharge of cargo to/from the vessel is effected by the ship's gear.

REPATRIATION: There is no repatriation office in the port.

AIRPORT: The Airport is located in Bacolod City which is 30 km. from Pulupandan. Average number of flights is from 6 to 7 per day to different cities in the Philippines (Manila, Cebu, Iloilo and Davao).

All international flights commence at Manila International Airport.

TIME: GMT plus 8 hours. Daylight saving time is sometimes observed during Summer. This is implemented through a letter of instruction from the President.

HOLIDAYS: The following are National Holidays which are also observed in Pulupandan.

January 1st (New Year's Day), Holy Thursday and Good Friday (these religious holidays have no specific dates but often fall in March or April), May 1st (Labour Day), June 12th (Independence Day), July 4th (Fil-American Friendship Day), September 21st (Declaration of Martial Law), November 30th (Bonifacio Day), December 25th (Christmas Day, religious holiday), December 30th (Risal Day).

Official holidays of legal nature are usually working days for the port users due to the nature of work, while holidays of religious nature are often non-working days even for the port users.

POLICE/AMBULANCE/FIRE: The following are the telephone numbers of fire and police departments and government hospital where an ambulance can be made available.

Fire Department: San Juan 066, 2-31-91; Rodriquez Ave. 065; Lopez Jaena 064.

Police Department: 067; 062; 069.

Ambulance: 068; 2-30-96.

These departments are located in Bacolod City. There is a police department in this town but it does not have telephone facilities.

TELEPHONES: There is no telephone facility at this port.

SERVICES: Special services for tank-cleaning equipment, facilities for discharge of tank-washings, compass adjusting, etc., are not available in this port.

SHORE LEAVE: Crew members are allowed to go ashore.

IDENTIFICATION CARDS: Identification cards are not required as shore passes.

REGULATIONS: Refer to PPA Port Rules and Regulations.

DELAYS: Delay in berthing is due to the draft limitation of the port and the position of the port in case of bad weather.

DEVELOPMENTS: There is regular dredging and maintenance of the port.

AUTHORITY: Philippine Ports Authority, Sub-port of Pulupandan, Port District of Iloilo.

SAN FERNANDO, Luzon: 16.37 N. 120.18 E. (See Plan Book)

See "General" before first port.

APPROACHES: Vessels enter the harbour through a channel marked by 2 buoys and 2 range lights 144.5° (fixed green and red light flashing every 3 seconds.).

PILOTAGE: Pilotage is compulsory. Vessel is met at mouth of harbour by pilot boat that flies a red flag with letter "P" in white. Pilot then brings the vessel to Quarantine Anchorage. Conventional signals are used to call Pilots.

ANCHORAGE: Located at centre of the bay with 8 fathoms to 9 fathoms and good holding ground. In the event of rough weather or strong monsoon wind, vessels in the harbour are brought here for safety.

MAX. SIZE: Size of vessels that could be serviced is controlled by depth along quay:

Pier	*Depth Pier Head*	*Depth Shore End*	*Length*	*Width*
Gov't. RC	54 ft.	12 ft.	600 ft.	60 ft.
Shipside, Inc.				
Timber	60 ft.	30 ft.	850 ft.	80 ft.
Philex Conveyor	32 ft.			
Coal Conveyor	49 ft.	13 ft.	460 ft.	19 ft.

HEALTH: Immediately after vessel anchors at Quarantine Anchorage, Quarantine Officers board and clear vessel. Imported grain will be fumigated on board vessel at anchorage.

Boarding Formalities: Members of party are BOC inspector and guards, Immigration, Philippine Coast Guards, Pratique is then issued to indicate vessel as "arrived" and subject to Charter Party terms, laytime will commence.

RADIO: No direct radio communication system with vessels at sea is available in the locality. Ship Masters report ETA to Agent in Manila who relay message to San Fernando by telex or commercial radiogram. The PMU San Fernando may be reached by Long Distance telephone 41-25-57 or SSB radio transceiver 8776.5 kHz.

Arrival Advice: 48 hours before ETA, ship Agent files request for berth at PMU office indicating: ETA, draft, LOA and breadth, consignee or shipper, type of cargo and stowage, dangerous cargo, (if any). Heavy lifts, (if any), number of hatches to be worked, vessel is self sustaining or not.

24 hours before arrival or earlier, upon receipt of Master's advice by telegram, a berthing schedule is issued by the PMU. Copies are furnished to: Pilot, consignee/shippers, Arrastre-stevedoring contractor, ship Agent.

TUGS: 1 tug owned by Shipside, Inc. of 1,100 h.p., engine equipped with Kort Nozzle, is available for assisting, docking and undocking and launch service. Tug assistance during docking and undocking at the Shipside Pier is compulsory while its use at the Government and Philex Piers are at the option of the Harbour Pilot. A shipping company may bring in tugboat to assist its own vessel.

Tug lines are available at no extra cost. Conventional signals are used by Pilot and Master of tugboat.

Tug assistance rates: 0800 hrs. to 1700 hrs, regular time – others overtime.

BERTHING: See "Max. Size".
STEVEDORES: Stevedores, longshoremen, checkers and watchmen for the 2 piers are provided by:

Government Pier – Northern Carriers Corp. Shipside pier – Shipside, Inc.

Stevedores, checkers, etc. are non-union members. Any number of gangs can be ordered on 3 hours' notice. Stevedores work on 3 shifts:

1st Shift – 0000 hrs. to 0800 hrs.
2nd Shift – 0800 hrs. to 1600 hrs.
3rd Shift – 1600 hrs. to 2400 hrs.

Sundays, holidays and nights, stevedores are paid overtime rates. Christmas, New Year's Day, Easter Sunday, Good Friday and Maundy Thursday, stevedores will work on double pay.
TANKERS: The 4 oil terminals maintaining tank farms in the port zone are Petrophil, Caltex, Shell and Mobil. They operate a common set of pipe-lines for white and black oil product passing under the Government and Shipside Piers. PMU policy is 1 tanker discharging at 1 pier at a time. A "boom" is available at the quay side.
MEDICAL: 3 modern hospitals staffed by trained physicians and specialists and 6 clinics. They are open 24 hours.
FRESH WATER: Fresh water available at both piers alongside the quay via pipe-lines. Pumping rate: 8 t.p.h – Summertime. 12 t.p.h. – Rainy days.

Water samples are tested weekly at the Wallace U.S. Air Force Station at Poro, San Fernando.
FUEL: Bunker and others, POL product obtainable and supplied by lorries.
FIRE PRECAUTIONS: Water pipe-line alongside the quay can be converted to a fire hydrant by manipulating the valves to suck sea water. The oil terminals in the area maintain chemical fire fighting equipment, a "boom" to contain oil spillage and "light water". Voice of America, Wallace U.S. Air Force Station, and the Airport all within a 3 km. radius to the piers, maintain modern fire trucks.
REPAIRS: Atlantic Gulf and Pacific Co. of Manila at Batangas operates ship repair facilities.
GANGWAY/DECK WATCHMEN: Available from Arrastre contractor upon request of ship Agent.
SURVEYORS: Mariaser Surveyors of San Fernando are available on request. Surveyors also available from Manilla, 270 km.
OPENING/CLOSING HATCHES: First open and last close normally carried out by crew. Stevedores operate the hatches when it rains.
CARGO GEAR: Arrastre operators maintain complete loading/discharging gear for bulk, general cargo and heavy lifts. Also available are:

11 units — Forklifts, 1 to 8 tons capacity.
2 units — Mobile cranes, 25 tons capacity.
1 unit — Floating crane, 100 tons capacity.

IDENTIFICATION CARDS: For control of persons inside the port zone and for security, I.D. should be available when requested by guards.
AIRPORT: San Fernando Airport is 3 km. South of Pier. Philippine Air Lines serve the port with 3 flights weekly.
TIME: GMT plus 8 hours.
HOLIDAYS: New Year's Day (January 1st); Holy Thursday, Good Friday; Labour Day (May 1st); Independence Day (June 12th); RP-US Friendship Day (July 4th); All Souls Day (November 1st); Bonifacio Day (November 30th); Christmas (December 25th); Rizal Day (December 30th).
POLICE/AMBULANCE/FIRE: Police, Tel: 41-25-77. Hospitals/Ambulance, Tel: 41-28-44, 41-23-55, 41-26-16; Fire Dept. Tel: 41-24-88; Phil. Constabulary Tel: 41-25-28.
TELEPHONES: Vessels docked at Shipside Pier may request telephone connection.
SHIP SUPPLY SERVICE: The following authorised ship supply service operators with addresses in this port are:

1. A. Neral Chandling and Laundry Services, 32 Mabinin Street, San Fernando, La Union, c/o Mrs. Aurora Neral (privately owned).
2. La Union Chandling and Laundry Service, Catbangen, San Fernando, La Union, c/o Mrs. Caridad Tabisola (privately owned).
3. Bureau of Quarantine, PPA Compound Poro, San Fernando, La Union, (launch services – government owned).
4. Shipside, Inc., Poro, San Fernando, La Union, (launch services – privately owned).

SHORE LEAVE: Crew members are allowed to go ashore without special permission.
GENERAL: *Discharge of Ballast:* No dirty ballast may be dumped into the territorial waters of the Republic of the Philippines.
Rat Guards: Rat guards shall be placed on all mooring lines to the wharf.
Refuse: May be collected by a truck at P25.00 per trip.
Accessibility: Port is accessible by road, rail and air transportation.
Provisions: Fresh vegetables can be supplied directly from the vegetable capital of the Philippines (Baguio City).
Rest, Recreation: Beach resorts with miles of clean beach just minutes away by car. First class hotels with swimming pools, air conditioned rooms. Baguio City, Summer Capital of the Philippines is 70 km. East and 5,500 ft. above sea level. A golf course at Camp John Hay, the R & R centre of U.S. Servicemen can be used by civilians.
AUTHORITY: Philippine Ports Authority, Port Management Unit, San Fernando, La Union, Philippines. *Tel:* 41-25-57. *Contact:* Adolfo Amor, Jr., Port Manager.

TABACO: 13.41 N. 123.58 E. (See Plan Book)

DOCUMENTS:

Inward Coasting Manifest.
Hatch Plan or Stowage Plan.
Vessel's Information Card.

PILOTAGE: Pilotage is compulsory. ETA advice should be sent to the Harbour Pilot Association, Legazpi City at least 24 hours before vessel's arrival. The vessel is met by the Harbour Pilot about 2 km. from the wharf aboard a boat displaying a Pilot's flag.
ANCHORAGE: Within the Tabaco Bay but not less than 500 m. from the existing facility.
RESTRICTIONS: Berthing space is limited due to its physical length and the existence of a shipwreck at the Northern end of the wharf.
MAX. SIZE: LOA 300 m., draft 28 ft.
HEALTH: Vessels clear quarantine on arrival at the Tabaco Harbour. Quarantine Officers will normally board the vessel 2 km. from the existing wharf.
BERTHING: The existing facility can accommodate two foreign-going vessels of regular size at one time. Length of quay 300 m. Width 12 m. Storage area 2 hectares. Max. depth of water 30 ft. Quay height above sea level 2 m. at high tide and 5 m. at low tide. Average rate of loading/discharging 22 tons per gang hour.
CRANES: 2 shore cranes available with capacities of 20 and 25 tons. For heavy lifts, vessels are required to use their own gear.
STEVEDORES: Provided by Tafworks Arrastre Corporation.
MEDICAL: 1 government hospital and 2 private hospitals.
FRESH WATER: Can be provided by pipe-line or hoses from the port facilities.
FUEL: All grades obtainable from major oil depots at Legazpi City which is approximately 27 km. from the port area and supplied by lorries alongside.
GANGWAY/DECK WATCHMEN: Available, but not compulsory.
HATCHES: Opening and closing of hatches is part of the stevedores' work or at the Master's option.
REPATRIATION: All facilities available for crew changes.
AIRPORT: At Legazpi City.
TIME: GMT plus 8 hours.
HOLIDAYS: New Year's Day (January 1st); Holy Thursday; Good Friday; Labour Day; (May 1st); Independence Day (June 12th); P.I-U.S. Friendship Day (July 4th); Bonifacio Day (November 30th); Special Holidays declared by the President of the Republic of the Philippines are also included. If any other legal holiday falls on a Sunday the following day is observed as a holiday. Cargo work can be arranged on any or all holidays with the vessel's Agent.
POLICE/AMBULANCE/FIRE: Police and Fire, Tel. 222; Ambulance, Tel. 215.
TELEPHONES: Placing of telephones on board can be arranged with the branch office of the local telephone company (MATELCO).
SHORE LEAVE: Crew allowed ashore in company of an Immigration Agent.
GENERAL: Vessels intending to call at the port of Tabaco shall apply for a berth space at least 24 hours before arrival. No dirty ballast may be dumped into the territorial waters of the Philippines. Rat guards shall be placed on all mooring lines. Berth allocation is on a first-come first-served basis.
DEVELOPMENTS: Salvaging of the shipwreck at the Northern end of the wharf, extension of the existing facility by 120 m.
AUTHORITY: The Officer-in-Charge, Philippines Port Authority, Port of Tabaco, Tabaco, Albay. *Tel:* 378.

The Port Manager, Philippine Port Authority, P.O.Box 164, Legazpi City. *Tel:* 2012. *Contact:* C. E. Dinopol, Port Manager.

TACLOBAN: 11.15 N. 125.00 E. (See Plan Book)

See "General" before first port.
DOCUMENTS: *Entrance Formalities:* For submission to PPA Harbour Section:

3 copies Inbound Coasting Manifest with enclosed or attached on each copy the following:

Crew List.
Oath of Master.
Passenger List (passenger vessels only).
Import Declaration (foreign vessels only).
Pratique (foreign vessels only).
Roll Book for presentation and clearance from last port of call also required.

Exit Clearance:

3 copies Outbound Coasting Manifest with attached or enclosed on each copy the following:

Crew List.
Oath of Master.
Passenger List (passenger vessels only).
Export Declaration (foreign cargo vessels).

PILOTAGE: The following signals from vessels requiring a Pilot are:

By day:

a) The pilot jack hoisted at the fore.

b) The International code signals or P.T.

c) 2 long blasts followed by 1 short blast on ship's whistle.

By night:

a) The pyrotechnic light, commonly known as blue light every 15 minutes.

b) A bright white light, flashed or shown at short or frequent intervals just above the bulwarks for about a minute at a time.

c) The International code signals P.T. by flashing lights.

Telegraphic address is Tacloban Harbour Pilot's Association, Tacloban City. 24 hours notice of ETA is required before arrival of vessels. No VHF in pilot boat or pilot station.

All pilot boats in general are painted white above the waterline and black below, with the letter "P" not less that 12.5 cm. in length on both bows above the waterline.

During the day, boat in use shall carry at the mast a red and white flag not less than 6 decimeters wide and 9 decimeters long.

The exact location where the Pilot has to be taken on board when entering Tacloban through San Juanico Strait is at Canauay Island about 2 miles N.W. of said Island. For vessels entering Tacloban Port through San Pedro Bay, the Pilot may be taken on board a mile North of Mariquitdaquit Lighthouse.

In case of bad weather, vessels are advised to drop anchor about 3 miles South of Dio Island when waiting for the Pilot.

With respect to safety measures while Pilot boarding vessels, it is suggested that the Master put his vessel to windward in a postion where the pilot boat is protected from big waves and strong winds. They must lower their accommodation ladder or rope ladder.

The location of anchorage for vessels awaiting a Pilot is either 1 mile North of Mariquitdaquit or 2.5 miles S.E. of Dio Island.

ANCHORAGES:

Dio Island Anchorage:
Position – 2 miles S.E. of Dio Island
Depth – 6 – 7 fathoms
Area – 4 square miles

Basey Anchorage:
Position – 1.6 miles West of Jinamoc Lighthouse
(Lat. 11° 15′ 36″ N., Long. 125° 04′ 32″ E.)
Depth – 4.5 fathoms
Area – 0.8 square miles

Tacloban Quarantine Anchorage:
Position – 0.5 miles South of Binatac Point
0.7 miles North of Panirungan Point
Depth – 4 – 5 fathoms
Area – 1 square mile.

RESTRICTIONS: Controlling draft for vessels entering Port of Tacloban via San Pedro Bay is 19 ft.

Due to numerous shoals, reefs and fish traps which abound in the area along the channel, vessels arriving at night must drop anchor either at the point 1.5 miles North of Mariquitdaquit or at the point 2 miles S.E. of Dio Island. The Pilot will conduct the vessels in at daybreak.

Tides in Tacloban show great inequality, mostly at HW. Mean range of tide is about 1.6 ft., whereas the Diurnal range is 2.3 ft. Flood current sets in a Northeasterly direction, while ebb current sets Southeasterly with a maximum velocity of 3 knots.

MAX. SIZE: See "Berthing".

HEALTH: Pratique is only necessary and required in the first port of entry; it is automatic when entering ports in the same country or state.

RADIO: Radio communication of the Philippines, Inc., Manila.

TUGS: Tugs normally join the vessel when inside Tacloban Harbour. For docking, tugs usually use the vessel's lines.

BERTHING: Inform local office of Philippine Ports Authority at least 24 hours before ETA if vessel on scheduled voyage and 36 hours before ETA if a tramping vessel.

Length of quay – 1,048.8 m., with 217.3 m. allotted for foreign vessels, 585.5 m. allotted for domestic vessels and 246 m. allotted for pump boats.

Maximum permissible ship draft at low water (sea water), Foreign vessels – 6 m.; Domestic vessels – 4 m. – 6 m.

Note: Actual depth along berth for foreign vessel at LW, 7 m.; Domestic, 4 m. – 7 m.

Load/ Discharge – Usually by ship's own gear but shore equipment available for rent.

BULK CARGO FACILITIES: See "Berthing" for berth details.

Cargoes handled: Copra, grain, abaca, sugar, rattan, lumber, drinks, goods in cartons, crated products, heavy lifts, steel bars, etc.

Facilties: Rope nets, rope slings, cable slings, spreader sets, sliding boards and pallets.

STEVEDORES: ETA advices should be furnished to stevedores through ship's Agent.

MEDICAL: Advance notice of required medical attention to ship's Agent essential.

TANKERS: No facilities.

FRESH WATER: Fresh water available delivered by water-tank truck.

FUEL: Only available to domestic (small) vessels.

FIRE PRECAUTIONS: Fire station in port area.

CONSULS: None.

DRYDOCKS: None.

GANGWAY/DECK WATCHMEN: Necessary for safety of vessel. Ship's Agent makes all necessary arrangements.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CERTIFICATES: All documents required by International Shipping Rules and Regulations.

CUSTOMS ALLOWANCES: One carton cigarettes per week for each man. Wines/spirits at the discretion of the Collector of Customs.

CARGO GEAR: Load/discharge affected usually by ship's gear but shore equipment available for hire.

IDENTIFICATION CARDS: Needed for inspection by Immigration Officer.

REPAIRS: Not possible.

REPATRIATION: Immigration Officer effects crew changes and arranging necessary repatriations.

AIRPORT: Distance from airport, 9 km., and is regularly served by airlines.

TIME: GMT plus 8 hours.

HOLIDAYS: Depending upon agreement with stevedores, work may be performed during holidays.

POLICE/AMBULANCE/FIRE: All departments are within one minute's call from the harbour.

TELEPHONES: Can be connected on board if required.

SERVICES: No special services available.

SHORE LEAVE: Crew members allowed ashore.

REGULATIONS: No unusual regulations.

DELAYS: Berthing: When all berths are occupied upon arrival. Loading/discharging: Limited number of available haulers due to simultaneous operations of vessels at berth. Bunkering: Simultaneous bunkering of vessels.

AUTHORITY: Philippine Ports Authority, Port Area, Tacloban City.

TANAUAN: 11.06 N. 125.01 E. (See Plan Book)

SHIPMASTER'S REPORT: 1976

N.I.D.C. Coconut Oil Pier: Location of berth Lat. 11° 06′ 15″ N., Long. 125° 01′ 30″ E. The berth is 7 miles from the Pilot boarding point. Least depth of water in channel from sea to berth, 32 ft. At berth bottom is mud and sand. Density 1025. Docking and undocking in daylight only at any stage of tide.

Anchorage 1.5 miles North of Mariquitdaquit Light. Terminal Information: Use shore hoses. Length of pipe-line – 3,000 ft. connection at manifold – 8 in. Shore-booster pump not used. No steam. Product handled, coconut oil.

Port Information: Pilotage compulsory. Pilot requires 12 hours' and 24 hours' notice. Pilot boards 1 mile North of Mariquidaquit Island and comes from Tacloban. It is unsafe to enter and leave after dark. Vessels can enter and leave any state of tide. Max. LOA 1,000 ft. Max. beam 90 ft. Max. draft 31 ft. No tugs available. Vessel able to berth and unberth without aid of tugs.

Facilities available: Fresh provisions available from Tacloban, a small town, 20 km. away. Chandler requires payment in cash for goods.

Airport at Tacloban. Doctor and hospital available. Groceries, meats and laundry available.

No fresh water, repairs, Lloyd's Surveyor or fuel available.

VILLANUEVA: 08.35 N. 124.44 E. (See Plan Book)

SHIPMASTER'S REPORT: May 1980

LOCATION: The port of Villanueva is situated in Macajarlar Bay on the North coast of Mindanao Island in position Lat. 8° 34′ 45″ N., Long. 124° 44′ 22″ E. and has a clear deep water approach.

PILOTAGE: The Pilot and possibly Quarantine Officials board in position Lat. 8° 35′ N., Long. 124° 40′ E. by launch from Cagayan de Oro City.

APPROACHES: When approaching from the East, passage through the Surigao Strait creates no difficulties as there is deep water. There are good radar targets and no excessive tides or currents. Passage between Camiguen Island and the coast is also clear and deep. Numerous fishing vessels encountered throughout the area as well as frequent passings of coastal traffic.

ANCHORAGE: Although there is very deep water to close inshore there is an anchorage position, recommended by the Pilots, in position Lat. 8° 37′ N., Long. 124° 44′ 30″ E. which is 1 mile offshore.

TUGS: There are at least 4 tugs to assist with berthing, all modern efficient vessels of over 3,000 h.p. Tug's ropes used for towing.

BERTHING: Berth is in position Lat. 8° 34′ 45″ N., Long. 124° 44′ 22″ E. and is aligned 050°/230°. The berth is 350 m. in length and fendered with 7 'Yokohama' balloon type fenders. Vessels of up to 300 m. in length berth port side alongside, vessels over 300 m. LOA berth starboard side alongside. Depth alongside 23 m. – 29 m. Daylight berthing only but reported able to leave at any time.

Moorings: Standard mooring equipment used, line boat used to run head and stern lines.

Moorings usually 4 head/stern lines, 2 breast lines and 2 springs at each end of vessel.

LOADING: Loading is carried out by 1 loading unit with a capacity of over 4,500 t.p.h. The product, sinter ore, is a finished product with a stowage factor of 23 cu.ft.–24 cu.ft. per ton relatively clean and not much dust. The product can be loaded into holds previously containing coal without cleaning.

Discharge facilities exist on the same berth where there are 2 units using 60 ton grabs.

A thorough draft survey is carried out on arrival and again after loading completed.

GENERAL: After berthing the vessel is boarded by 14 port officials of various departments from plant quarantine to immigration, paperwork takes about 2 hours on arrival and again before departure after loading completed.

Fresh stores including fish are available of good quality and a reasonable price.

There is no VHF communication but telex service to Manila is reliable.

While alongside 3 Customs Officers/Inspectors remain on board and require food and accommodation on a 24 hour basis.

SHIPMASTER'S REPORT: January 1981.

VESSEL: LOA 259.0 m., beam 39.6 m., draft 52 ft. 6 in.

Discharged 109,000 tonnes of iron ore at Philippine Sinter Corp. Pier.

GENERAL: The pier of Philippine Sinter Corporation at Villanueva is located at the S.E. end of the "J"-shaped bay of Macajalar, in position Lat. 08° 34.45′ N., Long. 124° 45.24′ E., on the North coast of the Philippine island of Mindanao, in the province of Misamis Oriental. Villanueva is only a very small village. The nearest city is Cagayan de Oro, 24 km. (45 minutes) by car from the plant. Our Agent and almost all other offices of some importance, are located here.

DOCUMENTS: The Authorities and the Agents' representatives boarded the vessel at the anchorage (14 persons). The following lists were required:

- 10 Crew Lists.
- 8 Cargo Plans.
- 2 Vaccination Lists.
- 1 Maritime Declaration of Health.
- 6 Ship's Stores Lists.
- 6 Personal Effects Lists.

In addition, there were other lists, but the Agent had all of them made out in advance.

Telegraphic Free Pratique is obtainable. A telegram sent to the Agent 24 hours before arrival stating the number of Philippinos and Europeans is also compulsory.

Upon departure, no Philippino crew member is allowed to depart if his seaman's book has expired, so all seaman's books must be renewed before departure. Philippino citizens who are not seamen (wives, etc.) are not allowed to join the vessel in a Philippine port and stay with the vessel to its next port of call. Visiting was no problem, except that a special Customs Permit must be obtained.

PILOTAGE: Pilotage is compulsory both when anchoring and at docking/undocking. The Pilots have a portable CB radio, but no VHF. The pilot cutter is about 50 ft. long, with a large (for its size) white superstructure. Pilot boarding ground Lat. 08° 37′ N., Long. 124° 42′ E. for inbound vessels. For outbound vessels, Pilot leaves as soon as the vessel is turned, and is about 5 cables off the pier.

ANCHORAGE: The Bay of Macajalar is a deep water bay, with the exception of a shallow area centered at Lat. 08° 40.75′ N., Long. 124° 41.5′ E., and a strip of shallow water extending generally less than 0.5 miles off the coast.

The Villanueva Anchorage is the one exception on the East side of the bay. It is a ledge of less than 100 m. depth extending 1.4 miles Westward from Lat. 08° 37′ N., Long. 124° 45.5′ E. on the shoreline, and it is 3.5 cables wide. The recommended anchorage is 8 cables due West of Lat. 08° 37′ N., Long. 124° 45.5′ E. The depth here is 70 m. or less than 40 fathoms. We anchored here and found it to be good holding ground. Not being more than 0.8 miles from the reefs in a "J" shaped bay, consequently open to wind and sea from West to North, I would not like to anchor there in any strong Northwesterly wind.

In our case the wind was from N.E. to S.E. which, according to the Pilot, were the prevailing wind directions. We did, however, experience quite a bit of swell.

BERTHING/UNBERTHING: Docking and undocking is only done during daylight. There are 4 tugs available in Villanueva, each of 3,500 h.p. The Pilot brought the vessel parallel to the pier about 0.2 miles off, and the 3 tugs we used (1 forward, 1 amidships and 1 aft) pushed us alongside without difficulty. We docked starboard side to. There was, according to the Pilot, no preference for docking starboard or port to, that is, for vessel's discharging.

Vessels loading must always dock port side to due to the construction of the shiploader.

The docking sonar had, in my opinion, the big fault that the Pilot had to rely upon verbal information via the CB radio. A display board visible from the bridge would have enabled us to form instant opinions.

Undocking was a reverse operation; we were pulled by 2 tugs until 0.2 miles off the pier, then the third pushed us around.

CARGO HANDLING FACILITIES: The pier is a concrete structure that rests on several large pipes that are sunk down to bedrock. It lays in direction 049° – 229°. There is a "gangway" connecting the pier to the shore. The pier itself is 380 m. long and about 50 m. wide. Large airfilled bags are used as fenders, 6 m. – 7 m. long with a radius of 1.5 m. – 2.0 m. So even with a relative heavy swell the ship lays very nicely alongside this cushion.

We tied up with 4 head/stern ropes, 2 spring and 2 breast ropes. The discharging cranes are of the same type as "Kawasaki" have in the port of Chiba, max. 6 tonnes with clamshells of 30 tonnes, portable cranes. Hourly average capacity on lump ore 1,100 tonnes per crane, and on fine ore 1,400 tonnes. We averaged 2,794 tonnes with 2 cranes.

The discharging operation was impressive, with regard to speed and precision.

The ship loader was a normal type conveyor belt with an airdraft of about 40 ft. Loading capacity 4,000 tonnes p.h. Free rail area at pier about 280 m., no shifting while loading for a ship of our size.

SERVICES: There is good drinking water available at the pier. Bunkers are obtainable but at what quantity and price I was not able to find out.

As of repair facilities, I had the impression that only simple repair work could be carried out.

The city of Cagayan de Oro has an airport with a twice daily direct flight to Manila, and once a day connections with Cebu and Davao. There are no international flights.

International telephone service is extremely poor. One must make the call directly from the telephone company's office, and a 2 hour – 3 hour waiting time for Europe and the U.S.A. must be expected. A call to Manila may come through in less than an hour. The Agent had telex and this is the only sensible communication with Cagayan de Oro.

With mail from Europe and the U.S.A., one must reckon on 2 weeks to 3 weeks. It seems that all communications go through Manila, with the delays that this automatically causes.

The Agent had a minibus service from the plant to Cagayan de Oro. This proved a necessity, as taxis are scarce.

The ship chandler could only obtain foodstuff.

OPERATOR: Philippine Sinter Corporation.

ZAMBOANGA: 06.54 N. 122.04 E. (See Plan Book)

See "General" before first port.

PILOTAGE: Vessels approaching the port use International Code Signals for calling Pilot.

Pilot Station: Telegraphic address is Zamboanga Pilots, Zamboanga City. Estimated time of arrival (ETA) must be radioed 24 hours in advance. Pilots always on duty. Pilot boat is wooden launch painted white with red trimmings and displaying the pilot flag. The exact area where a Pilot will board vessel is in the vicinity of Little Sta., Cruz Island, for vessels coming from West, and near the vicinity of Rio Hondo for vessels coming from East. Alternative area in the event of bad weather is in the vicinity of Zamboanga Pier at a distance of at least 1 mile either way. Vessels awaiting Pilot should not necessarily drop anchor, provided 24 hours' notice of their ETA is given by local Agents or the Master, to the Zamboanga Pilots, for a Pilot is *always* on duty.

ANCHORAGES: Owing to the steep bank, strong currents and hard, uneven bottom, there are no good anchorages off Zamboanga. However, anchorage may be made anywhere Southward of the wharf at a distance of about 3 cables from shore Eastward of an imaginary line from the Tide Indicator, at a depth of between 25 fathoms and 30 fathoms and giving 7 shackles of chain in the water. This will hold vessel even at strongest current of 6 knots. In the event of very bad weather the vessel should transfer her anchorage to Caldera Bay, which is approximately
7 miles West of the anchorage area.

MAX. SIZE: No limits for anchoring. For berthing, up to 32 ft. draft.

HEALTH: Quarantine Officer will board the vessel for the necessary inspection of all crew on board. Thereafter he issues Pratique, if and when he finds that there is no disease or fever on board. The Pratique is valid until after the vessel departs to a foreign port.

RADIO: Universal Telecommunication Service, the Capitol Radio Telecommunication, the Telefast Radio Communication, the Radio Communications of the Philippines and the Telecom, operated by the National Government for receiving and transmitting radio messages. Night and day services.

TUGS: The position where tugs normally join the vessel is in the stream and the usual ship's lines or tug's lines are used. There is no charge collected for the use of the tug's lines.

BERTHING: The Zamboanga Government Wharf is about 800 ft. long with a depth at the latest survey of the following: East end 30 ft.; mid-section 25 ft. and West end 21 ft. There is a private wharf at Baliwasan and vessels of 15,000 g.r.t. can dock there with the following limitations: Draft forward must not exceed 32 ft.; draft aft must not exceed 36 ft., upon completion of loading. Vessels docking at this wharf can only be docked at *flood* tide (current running East to West) and can only be undocked in the same manner.

2 anchors must be used in berthing and vessels lay alongside the concrete pier port-side-to. This wharf in Baliwasan is for loading coconut oil and copra pellets only.

TANKERS: There are 4 oil depots at Gavilan Pt. and at Baliwasan. (Shell, Mobil, Esso and Caltex.) Max. tonnage of 4,000 gross with a draft of not more than 18 ft. can be moored for discharge.

STEVEDORES: The Master of the vessel shall cable to the local Agents so that contact can be made with the shipper to arrange gangs.

MEDICAL: It is necessary for Agents to receive advance notice of required medical attention. Hospital facilities are available at all times. Inoculations are also required by the Quarantine Officer upon boarding a vessel.

FRESH WATER: Fresh water can be obtained only at night-time due to low pressure. If there is no available space at the Zamboanga Pier the vessel has to wait at the anchorage for a berthing space to get water supply.

FUEL: Fuel, diesel, and crude oil available.

FIRE PRECAUTIONS: Smoking is entirely prohibited on board a tanker entering this port. The Master must advise all persons boarding his vessel.

GANGWAY/DECK WATCHMEN: The services of watchmen are necessary to stop looters from boarding the vessel.

OPENING/CLOSING HATCHES: Normally opening and closing by the crew, and if done by stevedores the vessel has to pay.

CUSTOMS ALLOWANCES: 200 cigarettes per man. Upon arrival in port the cigarettes are sealed in a bonded store by the Customs Authorities, and can be opened only upon permission granted by the Collector of Customs.

IDENTIFICATION CARDS: All crew members to have identification cards for immediate identification in case of trouble while the crews are on shore.

CONSULS: None available.

REPATRIATION: Effecting crew changes and arranging necessary repatriation are carried out by the Immigration Office in the port with the assistance of the ship Agent and the foreign Embassy concerned.

AIRPORT: Distance from Zamboanga Pier to the airport is 3 km. Served by regular airlines. There is a daily flight from Zamboanga to Manila by Philippine Airlines. Airport open to International flights.
TIME: Local Civil Time is 8 hours ahead of GMT.
HOLIDAYS: Cargo work can be arranged with the Stevedoring Company through the shipper to work during holidays, including Sundays.
POLICE/AMBULANCE/FIRE: Police Department, Tel. 06; Ambulance, Zamboanga General Hospital, Tel. 08; and Fire Department, Tel. 00.
TELEPHONES: Telephones cannot be installed on board when docked at the pier as is not allowed by the City Government.
SERVICES: Special services may be available, e.g. tank-cleaning equipment, facilities for discharge of tank-washings, compass adjusting, through representations to be made with the shipper or local Agent of the vessel.
DEVELOPMENTS: A new quay 210 m. length and 10 m. depth to be constructed. Completion expected early 1985.
AUTHORITY: Philippines Ports Authority, PMU-Zamboanga, Port Area, P.O.Box 360, Zamboanga, Philippines. *Tel.* 5191, 5192. *Contact:* Hector E. Miole, Port Manager.

NOTES

Please also advise Shipping Guides Ltd.

Poland

GDANSK: 54.21 N. 18.39 E. (See Plan Book)

ICE: Efforts made to keep port open all year round. Only in very severe Winter are difficulties experienced.

DOCUMENTS:

12 Copies Cargo Manifest.
2 copies Bills of Lading.
Discharge Books to be collected for presentation.
Ship's Register.
Maritime Declaration of Health.
Ship's Articles/Crew List 5 copies.
Derat Certificate or exemption from Sanitary Certificates, covering food cargoes and/or of animal origin, destined for discharge here.
Specification of Dangerous Cargo, even if in transit.
2 Stowage Plans.

PILOTAGE: Compulsory. Boarding in Gdansk Roads. Gdansk Pilot Station available on VHF, Channel 14.

ANCHORAGES: Gdansk Roads. Anchorages Nos. 1, 2 and 3 for ships up to 720 ft. LOA.

Anchorages: No. 1 draft 29 ft. 06 in.; No. 2 draft 34 ft. 05 in.; No. 3 draft 39 ft. 04 in.; Anchorages Nos. 4 and 5 for bulk carriers and tankers of Baltimax size, max. draft 59 ft. 00 in. No tides.

RESTRICTIONS: On arrival or if moving or in every case of emergency conditions contact Harbour Master's Office on Channel 14, Tel: 43-07-10.

MAX. SIZE: Baltimax size for ships entering North Port. Max. size of ships permitted to enter inner port: draft 33 ft. 6 in. brackish water, max. LOA 720 ft. Also see "Berthing".

HEALTH: Maritime Declaration of Health to be presented on arrival. In the event of suspected disease, the vessel should cable to "Quarantine Gdansk", or via Agents.

RADIO: Messages should be sent via Gdynia Radio.

RADAR/VHF: Port Radar Service acting with pilot station, can be contacted on VHF Channel 14.

TUGS: Join in Gdansk Roads. Vessel's lines must be used. Tugs compulsory for all vessels over 2,000 g.r.t. Tugs available up to 2,500 h.p.

BERTHING: Max. draft mentioned below is to be taken as normal water level. No tide. Max. difference from mean level is plus/minus 3 ft. subject to wind direction.

Name of quay	*Length*	*Max. Draft*
Marchlewskiego	563 m.	27 ft. 11 in.
Warynskiego	525 m.	31 ft. 06 in.
Oliwskie	635 m.	26 ft. 06 in.
Westerplatte	1,400 m.	29 ft. 06 in.
Ziolkowskiego	130 m.	17 ft. 00 in.
Obroncow Poczty Polskiej	240 m.	33 ft. 06 in.
Weglowe	800 m.	33 ft. 06 in.
Rudowe	740 m.	33 ft. 06 in.
XX-lecia PRL	1,243 m.	33 ft. 06 in.
Chemikow	210 m.	32 ft. 02 in.
Przemyslowe	235 m.	20 ft. 04 in.
Port Polnocny/North Port:		
Liquid Fuel Terminal	450 m.	49 ft. 03 in.
Coal Terminal	240 m.	49 ft. 03 in.

CRANES: Floating cranes of 26–300 tons capacity. Shore cranes up to 16 tons capacity.

Also see "General Cargo Handling Facilities".

BULK HANDLING FACILITIES: Coal Handling Facilities at North Port Coal Terminal capable of receiving vessel up to max. draft 49 ft. 03 in. Daily loading rate 50,000 tons. Also Inner Port-Weglowe Quay equipped with 7 – 10 tons cranes for vessels up to 33 ft. 06 in. draft. Bulk and liquid sulpher handled at Obroncow Poczty Polskiej Quay. Conveyor system for fertilisers in bulk. 20 tons grab cranes at Chemikow Quay. Grain elevator. In the event of no accessible berth and/or grain elevator not being available, such bulk cargoes are discharged by grabs. Vessels should be suitable for grab discharge.

Timber handling facilities at Rudowe and Westerplatte Quays.

GENERAL CARGO HANDLING FACILITIES: General cargo quays equipped with shore 3 – 16 tons cranes. Container handling on general cargo quays.

Passenger cargo/Ro-Ro terminal at Ziolkowskiego Quay.

TANKERS: Liquid Fuel Terminal at North Port.

Location: Southern part of the Gulf of Gdansk, 54° 25′ N., 18° 43′ E. approximately. Advisable route via "ZN" Beacon, to "ZS" Beacon, then anchorage on No. 5 Beacon 54° 27′ N., 18° 53′ E.

Facilities: 1 L-shaped jetty for berthing consists of 1 main platform and 4 main dolphins, fitted with quick release hooks. The main platform is fitted with gangway tower and 7 movable handling arms for loading and discharging purposes. Only 1 mooring place available. The jetty accessible for vessels having minimum 150 ft. (about 10,000 d.w.t.) and maximum 1,000 ft. (150,000 d.w.t.) length and 49 ft. 03 in. draft.

No facilities for liquefied gases.

For towing purposes there are 3×2,500 h.p. and 2×1,650 h.p. diesel tugs available, if necessary further 1,200 h.p. tugs are at hand. All tugs equipped with fire fighting equipment.

Cargo Handling Equipment: The 7 mobile handling arms, Luceat Production, are used as follows: No. 2, 3 and 4 for discharging of crude oil, rate about 10,000 cu.m./hr. No. 1 and 5 for loading bunker oil and water, rate about 2,000 cu.m./hr. No. 6 and 7 loading liquid fuels and refined products, rate 2,000 – 2,500 cu.m./hr. Loading pressure of vessel's pumps should not exceed 14.5 kg./sq.cm. at any time.

Facilities for handling of vessel's ballast water available.

Services: Marine diesel and fuel oil available at the jetty. Storage tanks located in the neighbourhood of the terminal and connected with central pipe-line system of Poland. Laboratory for testing purposes and repairing facilities available.

STEVEDORES: As gangs for the following day must be ordered before 1100 hrs., vessel's ETA should reach the Agents relevantly in advance.

Stevedores work 24 hours per day, which is considered to be between 2300 – 2300 hrs. following day. First shift from 2300 – 0700 hrs., second shift from 0700 – 1500 hrs., third shift from 1500 – 2300 hrs.

Timber, general cargo and heavy lift operations are usually performed in two shifts only between 0700 hrs. and 2300 hrs. Sulphur, superphosphates, phosphorites, apatites, grain and other awkward dusty cargoes worked in 4 shifts of 6 hours each.

Port works Sundays, holidays and free Saturdays at premium rates. 1 in 4 Saturdays are worked (see "Gdynia").

MEDICAL: No special notice required. Full hospital facilities available.

DENSITY: Salt content: Below 0.3%

FRESH WATER: Available at hydrants, and delivery to vessels in roads.

FUEL: Heavy, intermediate and thin fuels, marine diesel oils and gas oils available ex-shore installation or lighter. 48 hours' notice required.

GANGWAY/DECK WATCHMEN: Recommended and available.

OPENING/CLOSING HATCHES: Normally carried out by stevedores, crew allowed to handle.

CERTIFICATES:

Load Line Certificate.
Cargo Gear Certificates.

CUSTOMS ALLOWANCES: For 3 days – 160 cigarettes or 30 cigars or 150 gm. tobacco per crew member. Master is allowed double ration. 1 bottle wine and 1 bottle of spirits per crew member for each 3 days. Master is allowed double ration.

IDENTIFICATION CARDS: Each crew member must be in possession of a valid Discharge Book/Sailor's Book, and will receive a separate shore permit issued by the Immigration Authorities, entitling him to go ashore within the area of Gdynia/Sopot/Gdansk.

CONSULS:

Chinese People's Republic Consulate General, Tel: 41–64–76.
German Democratic Republic Consulate General, Tel: 41–43–66.
Soviet Consulate General, Tel: 41–06–13.

At Gdynia:

Belgian Consulate, Tel: 20–39–83.
Brazilian Consulate, Tel: 21–61–31.
Swedish Consulate, Tel: 21–62–16.
Italian Vice-Consulate, Tel: 21–51–15.

At Sopot:

Finnish Consulate, Tel: 51–50–52.
Also representing other Scandinavian countries.

REPAIRS: All types of deck and engine repairs performed by specialised ship repair yard.

Floating docks: No. 1, 6,400 tons lifting capacity, dimensions 135×25.20 m. No. 2, 8,000 tons lifting capacity, dimensions 156×27.20 m. No. 3, 11,000 tons lifting capacity, dimensions 176×28.00 m. 1 floating jack of 1,700 tons capacity and 3 minor docking pontoons.

REPATRIATION: Crew changes and repatriation can be arranged by MAG – Morska Agencja Gdynia. Crewing Department Telex: 054301. Supplies all ranks of crews to any Owners on request on the spot.

AIRPORT: Gdansk Airport.

TIME: Middle European Time, which is 1 hour ahead of GMT.

HOLIDAYS: New Year's Day (January 1st); Easter Sunday (movable); Easter Monday (movable); Labour Day (May 1st); Corpus Christi (movable); National Holiday (July 22nd); All Saints' Day (November 1st); St. Barbara, only for workers loading coal, (December 4th); Christmas Day (December 25th); Boxing Day (December 26th). On Christmas Eve and New Year's Eve, work stops at 1500 hrs. In justified and approved cases, overtime on Sundays and holidays can be arranged.

TELEPHONES: Available on most general cargo quays.

POLICE/FIRE/AMBULANCE: Police: Gdansk-Nowy Port, Wladyslawa IV-3, Tel: 31–48–61; Ambulance: Gdansk-Wrzeszcs, Al. Zwyciestwa 49, Tel: 41–10–00; Fire: Gdansk-Nowy Port, Na Zaspy 57, alarm phone Tel: 41–22–22.

STORING: Baltona ship chandlers supply ships with provisions, cabin, deck, bonded stores as well as spare parts for main and auxiliary engines. "Duty Free" shops for crew convenience.

SERVICES: Collecting of oily ballast waters to Ballast-water Treatment Plant. Cleaning of holds, bilges and ship's tanks.

AUTHORITY: The Port of Gdansk Authority, ul. Zamknieta 18, 80-955 Gdansk Nowy Port. *Tel:* 439-101. *Telex:* 0512324. *Cables:* Geport Gdansk. *Contact:* Janusz Janiszewski, Manager.

AGENT: Morska Agencja, Harbour Office Gdansk, Oliwska 33a – Gdansk-Nowy Port. Tel: 430–921 (day and night service). Telex: 051–2641.

GDYNIA: 54.32 N. 18.34 E. (See Plan Book)

ICE: On average, during most of the Winter periods both port and the roads are ice-free. Only prolonged and severe frosts may result in ice cover formation in basins and in the roads outside. Winds of gale force may shift some drifting ice floes from other parts of the bay and render navigation in the roadstead difficult. In such cases the approach channel and the port basins are kept free of ice and unobstructed to navigation by icebreakers of the Polish Ship Salvage Company and powerful tugs of the Port Authority. The cost of icebreaking is borne by the Port Authority. These phenomena, however, are rather rare, since Winters are usually mild in those areas.

PORT LIMITS: A vessel is an "arrived ship" and laytime commences from time of ship's entry into the roads.
DOCUMENTS:
11 copies Cargo Manifest.
2 copies Bills of Lading.
Discharge Books to be collected for presentation.
Ship's Register.
Ship's Articles/Crew List.
Maritime Declaration of Health.
Derat Certificate.
Sanitary Certificates covering food cargoes and/or of animal origin, destined for discharge here.
Specification of Dangerous Cargo (even if in transit).
2 Stowage Plans.
Load Line Certificate.
Cargo Gear Certificates.

PILOTAGE: Compulsory. Boarding in Gdynia Roads. Gdynia Pilot station available on VHF Channel 12. Traffic around the clock.
ANCHORAGES: Gydnia Roads at Buoy GD, up to 200 m. – 500 m. off port entrance. No tides.
RESTRICTIONS: Depth in main entrance 12.3 m.
MAX. SIZE: No limit on length, max. draft 39 ft. 04 in. at Hel Quay, also see "Berthing".

HEALTH: Maritime Declaration of Health to be presented on arrival. In the event of suspected disease the vessel should cable "Quarantine Gdynia", "Radio Medical Gdynia" or via Agents.
RADIO: Message should be sent via Gdynia Radio. Port Radar Service acting with the pilot station, can be contacted on VHF Channel 12, Gdynia. Contact Agent VHF Channel 7.
TUGS: 13 tugs available. Join vessel in Gdynia Roads. Vessel's lines must be used.

BERTHING:

Basin	*Quay*	*Length (m.)*	*Max. Draft (m.)*	*Remarks*
I	Pomeranian	629	8.4	Waiting Quay
II	Silesian	434	8.2	—
III	Swedish	715	9.1	—
	Danish	562	8.2	Containers & Ro-Ro
	Dutch	397	10.2	—
Outer	French	510	11.3	—
IV	Finnish	190	9.6	—
	Polish	1,130	9.6	—
	Rotterdam	310	8.2	Ro-Ro
	Indian	1,018	11.0	Dangerous cargo Oil pier and grain silo capacity 10,000 tons
V	Peace Fighters	817	9.2	—
	Czecho-slovakian	214	8.6	—
	Romanian	864	9.6	—
VI	Hungarian	215	10.1	—
South Channel	Wenda	80	8.3	Waiting Quay
Port Channel	Yugoslavian	183	9.8	Waiting Quay
Port Channel	Hel I	480	12	Containers & Ro-Ro
	Hel II	176	10	Terminal

CRANES:

Quay	*General Cargo Cranes*	*Max. Capacity tons*			*Grab Cranes*	*Max. Capacity tons*	
	No.	6	6-16	32-40	No.	8	8/9
Pomeranian	—				—		
Silesian	—				9	—	9
Swedish	—				11	7	4
Danish	—				—		
Dutch	—				9	—	9
French	16	1	15	—	—		
Finnish	6	5	1	—	—		
Polish	21	5	14	2	—		
Rotterdam	8	8	—	—	—		
Indian	Grain silo and warehouses				—		
Peace Fighters	17	17	—	—	—		
Czecho-slovakian	6	—	6	—	—		
Romanian	31	16	15	—	—		
Hungarian	—				—		
Wenda	—				—		
Yugoslavian	—				—		
Hel I	3	—	—	3	—		
Hel II	—				—		

CONTAINER HANDLING FACILITIES:

Quay	*No. of Ro-Ro berths*	*Length (m.)*	*Max. draft*	*Cranes No. & capacity*	*Stackers-carriers*	*Capacity TEU*
Danish	1	562	8.2	—	2	5,300
Polish	—	200	9.6	2×25-40 tons	9	2,800
Hel I	—	480	12	3×40 tons	9	4,800
Hel II	1	176	10	—	—	

CARGO HANDLING EQUIPMENT: Also see "Cranes" and "Container Handling Facilities".

Shore based grain elevators	16×20-40 tons 7×40 tons 2×60 tons.
Floating elevators	2×250 t.p.h. 2×80-100 t.p.h.
Floating stores	3 (28,600 tons)
Barges	28 (12,400 tons)
Floating cranes	1×60 tons 1×65 tons 1×100 tons
Mobile cranes	1×6 tons 11×12.5 tons 10×15 tons 2×35 tons
Fork lift trucks	226

STEVEDORES: Gangs for the next day must be ordered by 1100 hrs., vessel's ETA should reach the Agents relevantly in advance.
1 in 4 Saturdays are worked.
The following are working Saturdays in 1985: January 5th, February 23rd, March 30th, April 13th and 27th, May 4th, June 8th, July 27th, September 28th, October 12th and 26th, November 9th and 30th, December 14th, whereas all other Saturdays have been declared days free of work.
MEDICAL: No special notice required. Full hospital facilities available.
TANKERS: Berth in No. 3 basin. Up to 35,000 d.w.t., brackish water. Bunkering Station (Reloading Station) length 200 m., depth 11.3 m.
DENSITY: Salt content: 0.73%.
FRESH WATER: Available ex-hydrants or by water barge, arranged by Agent.
FUEL: All kinds of fuel available ex-shore installation or lighter. 48 hours' notice via Agent required. Lubricants available by truck.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: Opening/closing hatches normally carried out by stevedores, but crew allowed to handle.
CERTIFICATES:
Load Line Certificate.
Cargo Gear Certificates.
CUSTOMS ALLOWANCES For each 3 days – 150 cigarettes or 30 cigars or 150 gm. of tobacco per Crew member. Master is allowed double ration. 1 bottle wine and 1 bottle spirits per Crew member for each 3 days. Master is allowed double ration.
IDENTIFICATION CARDS: Each crew member must be in possession of a valid Discharge Book and will receive a separate shore permit issued by the Immigration Authorities entitling him to go ashore within the area of Gydnia-Sopot-Gdansk.

CONSULS:

Belgian V. Consulate	Tel: 20-39-83
Brazilian V. Consulate	Tel: 21-61-31 or 20-47-01
Chinese P.R. Consulate (Gdansk)	Tel: 41-56-00
Dutch Consulate	Tel: 20-06-85
Finnish Consulate	Tel: 51-50-51/52
German D.R. Consulate (Gdansk)	Tel: 41-43-66
Italian V. Consulate	Tel: 20-15-61
Swedish Consulate (also represents Denmark and Norway)	Tel: 21-62-16
U.S.S.R. Consulate (Gdansk)	tel. 41-10-88, 41-06-13
Consulate of India and resident representative of Indian Shipping Lines in Poland	Tel: 20-29-58

REPAIRS: All types of deck and engine repairs performed by specialised ship repair yard. Container repairs performed by Radunia Repair Yard, branch office in Polska Street (Extension tel. 49-32).
DRY DOCKS: 3 floating docks of a lifting capacity of 4,500, 3,500 and 1,200 tons. 12 slipways of 150 tons lifting capacity each.
SURVEYORS: Polcargo: Head Office, 81-963 Gdynia, Zeromskiego 32. Tel: 20-77-78.
Supervise: Head Office, 81-369 Gdynia, Derdowskiego 7, Tel: 20-08-46.
Shipcontrol: Head Office, 81-334 Gdynia, Polska 21, Tel: 20-70-96.
Polski Rejestr Statkow, 80-855 Gdansk, Waly Piastowskie 24, Tel: 31-72-23, Telex: 0512373 Prsg Pl.
Lloyd's Register of Shipping: 80-855 Gdansk, Waly Piastowskie 1, Tel: 31-59-58, 31-58-41.
REPATRIATION: Crew change and repatriation can be arranged.
AIRPORT: Gdansk-Rebiechowo Airport, situated 35 km. from Gdynia. Daily flights to Warsaw to connect with international flights.
TIME: Middle European Time, which is 1 hour ahead of GMT is kept in Autumn and Winter; East European Time, 2 hours ahead of GMT, is kept in Spring and Summer.
HOLIDAYS: New Year's Day (January 1st); Easter Sunday (movable); Easter Monday (movable); Labour Day (May 1st); Corpus Christi (movable); National Holiday (July 22nd); All Saints' Day (November 1st); St. Barbara Day (December 4th, for coal workers only); Christmas Day (December 25th); Second Christmas Day (December 26th). On Christmas Eve and New Year's Eve work is generally suspended at 1500 hrs. In justified and approved cases overtime on Sundays and holidays can be arranged against extra payment.

POLICE/FIRE/AMBULANCE: Police: Gdynia, Chrzanowskiego 6. Tel: 21-61-12 (extension telephone 555); Ambulance: Gdynia, Zwirki i Wigury 14, Office for calls open 24 hours, Tel: 20-00-01, accidents and sudden illnesses Tel: 999; Fire: Gydnia, Chrzanowskiego 15/17, Alarm: 20-68-86; Port's Fire Brigade: Gdynia, Dokerow, Tel. 504, Alarm: Extension Tel: 333.

EMERGENCY CO-ORDINATION CENTRE: Urzad Morski, Gdynia 81–338, Chrzanowskiego 10, Telex: 054285; Tel: 20-69-11; Alarm: Gum Radio. Tel: open 24 hours: 21–61–62, VHF Channel 16.

TELEPHONES: Available on most general cargo quays.

Placing of telephones on board is according to current costs per 24 hours.

GENERAL: Cargo is handled around the clock in 3 shifts of 8 hours each. Work on 3 Saturdays per month is paid by addition of 100 per cent. Sunday and holiday interruptions last from 2300 hrs. on Saturdays or days before holidays and terminate at 2300 hrs. on Sundays or holidays.

Transhipment of cargo at port rates. Extra fast despatch can be arranged at additional charges.

SERVICES: Hold cleaning, container and watchmen provided by "Port Service", Celna Street 5, extension telephone 50-34, 50-36; bunkering provided by "Port Service", extension telephone 50-42. Hold cleaning and container washing provided by Port of Gdynia Authority, Rotterdamska 9, Gdynia.

BANKS: Handlowy S.A., Branch Office, 81–370 Gdynia, Skwer Kosciuszki 14, Tel: 20-63-83.

DEVELOPMENTS:

1. Further development of the Baltic Container Terminal.

Extending of the Ro-Ro and Lo-Lo quays to the total length of 1,080 m. including next fixed ramp Ro-Ro berth at Hel II Quay.

Expanding of the container storage areas.

Building of the container cleaning station, vast parking areas and M+R workship for containers and road trucks.

After the completion of the first stage of construction of the Baltic Container Terminal the handling capacity of the Terminal will go up to 1.5 million tons/170,000 TEU per year and will be able to accommodate various types of container vessels up to 30,000 d.w.t. capacity.

The second and final stage of construction works will increase the handling capacity of the Baltic Container Terminal to 2 – 2.5 million tons/250 – 300,000 TEU per year.

2. Completion of Ro-Ro berth at Danish Quay as part of the Container Terminal at Polish Quay will increase the total storage area from 6 to 10 ha. The final handling capacity is to reach 550,000 tons per year.

3. Completion of modernisation of the last section of the Polish Quay – extension of the quay and equipping it with new cranes.

4. Total reconstruction and modernisation of general cargo warehouses.

5. Converting bulk cargo quays in Basin No. 3 into highly specialised general cargo berths.

AUTHORITY: Port of Gdynia Authority, ul. Rotterdamska 9, 81-337 Gdynia, Poland. *Tel:* 20-10-01. *Telex:* 054221. *Cables:* Gdyport. *Contact:* Hugon Malinowski, Director General.

Harbour Master's Office, *Tel:* 216636 and 202853.

AGENT: Morska Agencja, *Head Office,* Pulaskiego 8, 81-364 Gdynia. Tel. 20-76-71 (9 lines) and 21-75-17 – working from 0730 to 1530 hrs. Telex: 054-301. Cables: "MAG Gdynia".

Harbour Office Gdynia, Rotterdamska 3 – Gdynia. Tel. 21-50-53 (Duty Official), Manager 27-49-16. Telex: 054-376.

SZCZECIN: 53.25 N. 14.32 E. (See Plan Book)

Including Swinoujscie, 53.55 N. 14.15 E.

DOCUMENTS:

12 copies of Cargo Manifests.
2 copies Bills of Lading.
Tonnage Certificate.
4 copies of Crew List.
Passenger List.
Maritime Declaration of Health.
Derat Certificate.
Specification of Dangerous Cargo (even if in transit).
2 copies Stowage Plans.

PILOTAGE: Contact pilot station, VHF Channel 12 and 14, also 26 or 27. Harbour Master's office, Channel 12. Tel: 44-745. Telex: 042-21-47. Light and sound signals used according to international rules. The Pilot is taken on board at the anchorage. Pilot compulsory for all vessels over 150 g.r.t.

RESTRICTIONS: Vessels exceeding LOA 175 m. enter/leave port during daylight only.

MAX. SIZE: *Szczecin:* Max. draft – 30 ft., Max. length – 206 m.

Swinoujscie: Max. draft – 42 ft., Max. length – 235 m.

HEALTH: All ships arriving Szczecin from South of Cape Finistere are subject to sanitary inspection.

RADIO: Szczecin Radio, SPE, 2182 MHz. Medium frequencies.

TUGS: Normally tugs join the vessel at the limits of the port of Szczecin to Kra Quay.

For ships calling at General Cargo Port which exceed 1,000 g.r.t. – 1 tug compulsory.

For ships calling at Bulk Cargo Port which exceed 2,000 g.r.t. – 1 tug compulsory.

For ships over 4,000 g.r.t. – 2 tugs compulsory.

For ships over 12,000 g.r.t. – 3 tugs compulsory.

BERTHING:

Szczecin:

Name of Quay	*Length* (m.)	*Depth* (m.)	*Designation*	*Equipment*
Katowickie	434	9.15	Coal and bulk cargoes	4×7-ton cranes, 3×10-ton cranes, open storage 7,022 sq.m., cargo bins.
Chorzowskie	290	8.6	Coal and ore	2×15-ton bridge cranes, open storage 6,413 sq.m. automatic scales.
Gliwickie	260	9.15	Coal	4×7-ton mobile cranes for coal handling, open storage space 3,000 sq.m. cargo bins.
Bytomskie	330	9.15	Bulk cargo	2×7-ton cranes, 4×8-ton cranes, open storage space 3,770 sq.m., cargo bins
Pirs-Tasmowiec	320	9.10	Coal	Special belt conveyor with a wagon tipper – 750 t.p.h. capacity
Walbrzyskie	263	8.8	Coal	2×8-ton cranes, 2×10-ton cranes, open storage space 5,406 sq.m., cargo bins.
Gornoslaskie	282	8.5	Ore and bulk cargo	1×7-ton crane, 3×10-ton cranes, open storage space 9,314 sq.m., cargo bins.
Parnica	300	6.8	Bulk and liquid cargo	2×7 ton cranes 2×8-ton cranes, open storage space 1,646 sq.m., cargo bins.
Huk	267	7.6	Bulk cargo and timber	4×7-ton bridge cranes, open storage space 12,070 sq.m.
Noteckie	315	6.4	Timber	2×3/6-ton cranes, 2×3/5-ton cranes, timber storage space 24,917 sq.m.
Regalica	210	6.3	Timber	4×3-ton cranes, timber storage 32,472 sq.m.
Zbozowe	200	8.7	Grain	Grain elevator – 65,700 cu.m.
Czechoslowackie	950	8.9	General cargo	12×3/6-ton cranes, Ro-Ro ramp, 6×16-ton cranes, open storage 24,933 sq.m., sheds 11,860 sq.m.
Polskie	260	9.15	General cargo	2×16 ton cranes, 5×3/6-ton cranes, open storage space 7,263 sq.m.
Wegierskie	612	9.20	General cargo	3×3-ton cranes, 9×3/6-ton cranes, 1×8/16-ton crane, open storage space 11,784 sq.m., sheds 10,150 sq.m.
Rumunskie	600	7.10	General cargo	4×3/6-ton cranes, open storage space 1,470 sq.m. sheds 3,740 sq.m.
Albanskie	89	5.49	General cargo	1×3-ton crane, sheds 2,380 sq.m.
Radzieckie	323	8.3	General cargo	3×2-ton cranes, 6×3-ton cranes, open storage 3,500 sq.m., sheds 23,835 sq.m.
Starowka	537	6.0	General cargo	2×1/5-ton cranes, 4×2-ton cranes, 1×7-ton crane, 3×3-ton cranes, open storage space 8,086 sq.m., sheds 5,592 sq.m.
Greckie	627	6.0	Anchorage for ships and barges	
Jugoslawianskie	100	6.2	General cargo	1×2-ton crane
Swinoujscie:				
Portowcow	215	11.43	Bulk cargo	2×7-ton cranes, 2×10-ton cranes, open storage space 684 sq.m., cargo bins, 3,580 sq.m.
Gornikow	260	12.80	Coal	4×10-ton cranes

Suitable for ships of 35,000 to 65,000 d.w.t. Special coal handling installation with loading capacity up to 30,000 tons per 24 hours. Open fully mechanised coal storage of over 440,000 tons capacity with wide range rubber-belt system for fast transport of coal to and from stores. Continuous electronic weighing system. Open storage space – 81,120 sq.m.

Wladyslawa IV	190	9.75	Lay-by berth	2×16-ton cranes
Chemikow	255	12.8	Bulk fertiliser	Gantry with arrangement
	+100	5.5	For barges	for loading and unloading.
Hutnikow	329	12.8	For lighterage	
	+100	5.5	For barges	

In Swinoujscie there is also a defreezing plant for railway cars and railcar dumper.

BULK HANDLING FACILITIES: See "Berthing".

STEVEDORES: 24 hours ETA required to arrange gangs.

1 in 4 Saturdays are worked.

e.g.: January 26th; February 23rd; March 9th and 30th; April 27th; May 25th; June 29th; July 27th; August 31st; September 28th; October 26th; November 9th and 30th; December 28th, whereas all other Saturdays in 1985 have been declared days free of work at the ports in question.

MEDICAL: Doctors and hospital facilities available.

TANKERS: All empty tankers have to give 24 hours ETA advice whether they are gasfree and name of last cargo carried. No residue discharge facilities.

DENSITY: 1000.

FRESH WATER: Fresh water supplied from hydrants on quays or by water tanker. The minimum charge is for 5 tons of water. For supply of water on Sundays and holidays a surcharge of 100% is levied. Cost per ton – via hydrant $1.41, via barge $3.75.

FUEL: All grades of Shell fuel oil and Castrol marine lubricants.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally opened by crew.

CUSTOMS ALLOWANCES: Each man – 160 cigarettes and 1 bottle of spirit. Master allowed double.

CARGO GEAR: No additional requirements; all gear supplied by stevedores except rain tents.

IDENTIFICATION CARDS: Each crew member must be in possession of a valid Discharge Book and will receive a separate shore permit issued by the Immigration Authorities entitling him to go ashore within the city area.

CONSULS: Swedish Consulate (represents Denmark and Norway), Soviet Union Consulate, Czechoslovak Consulate, German D.R. Consulate and Cuban Consulate.

REPAIRS: All types of deck and engine repairs. 2 ship repair yards.

Szczecin Ship Repair Yard, 13 Ludowa Street, 71-700 Szczecin. Tel: 22-44-51. Telex: 0422229 Storem Pl., Sz. Cables: Storem, Szczecin.

Marine Ship Repair Yard at Swinoujscie, 72-600 Swinoujscie, 4 Wiejska Street. Tel: 42-41 to 49. Cables: Morem, Swinoujscie. Telex: 0422341 Pl.

Ship repair yard "Parnica", Gdanska Street, Szczecin. Tel: 368-44, 326-51. Telex: 042-5108 Strp Pl. Cables: Storempar, Szczecin.

DRY DOCKS: Floating docks with lifting capacity of 8,200 tons; 5,500 tons; 3×1700 tons and 650 tons.

SURVEYORS: Polska Izba Handlu Zagranicznego, Oddzial Morski w Szczecinie, Polish Chamber of Foreign Trade, Maritime Branch in Szczecin, 70-207 Szczecin, Pl. Batorego 4. Tel: 447-37. Telex: 042-2225 Pihz Pl. Cables: Polchamber, Szczecin.

Komisariat Awaryjny (Average Agent's Office), Lloyd's Agents. Tel: 393-93. Telex: See above.

Biuro Dyszpaszerskie (Average Adjuster's Office), address, telephone etc., see above.

Lloyd's Register, 71-637 Szczecin, 43 Firlika Str. Tel: 21-13-43.

Germanischer Lloyd and American Bureau of Shipping, Dr. Olaf Zylkowski, 71-382 Szczecin, 67 Jaworowa Str. Tel: 71-382, 760-17. Telex: 042-2379 Namor Pl.

Det Norske Veritas: Represented by Polish Register of Shipping, Plac Batorego 4, 70-207 Szczecin. Tel: 461-28. Telex: 0425371 Prss Pl.

REPATRIATION: Crew changes and arranging repatriation can be done.

AIRPORT: 45 km. from Szczecin. Regular flights to Warsaw. From Warsaw communication to every main airport in Europe.

TIME: GMT plus 1 hour; GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day (January 1st); Easter Monday; Labour Day (May 1st); Victory Day (May 9th.); Corpus Christi; National Holiday (July 22nd); All Saint's Day (November 1st); Christmas Day (December 25th); Boxing Day (December 26th).

POLICE/FIRE/AMBULANCE: Police, 997; Ambulance and First Aid Station, 999; Fire Brigade, 998.

EMERGENCY CO-ORDINATION CENTRE: Polskie Ratownictwo Okretowe/Polish Ship Salvage Company/Gydnia Branch Office: 70-207 Szczecin, Pl. Batorego 4, Tel: 885-43. Cables: Polratok Szczecin.

Rescue Co-ordination Centre at Swinoujscie: 72-601 Swinoujscie, nab. Wladyslawa IV, Tel: 59-29/day and night/, Telex: 042-2632 Pro Pl.

TELEPHONES: Telephone exchange of the Port Authority Szczecin 430-31/Trunk service connections with ships in the port. Port telephone numbers:

Port Fire Bridge – 370-12.
Port Office of the Civil Militia – 880-68.
Port Officer on duty – 889-44.
Port District Medical Dispensary – 428-21.

SERVICES: "Shipservice" – Enterprise for Maritime Services, 70-607 Szczecin, Przejazd 1 Street, Cables: Shipservices Szczecin Tel: 360-11, 385-47. Telex: 0422282 Ship Pl.

Marine Radio Service: "MORS" Morska Obsluga Radiowa Statkow. All services to any radar, radio or navigation equipment – orders via Morska Agencja Szczecin.

Compass adjusting available. Chart corrections possible. British Admiralty and Polish charts available.

SHORE LEAVE: Allowed.

STORING: See "Prelims", page viii.

1. Vessel can be stored by barge/motorboat/or truck.

3. Trucks can proceed alongside at the berth. Vessel can store from barge/trucks during loading/discharging operation using her derricks or port crane.

5. Customs Office must be informed about storing.

6. Local riggers (strictly port's workers) can be employed to assist with storing.

SHIP SUPPLY SERVICE: Supplied by Agent.

DEVELOPMENTS: The Szczecin port has been in the main developed as a general cargo port. A main investment effort has been directed toward an establishment of a modern general cargo potential. New berths and terminals working on the "Roll-on/Roll-off" and "Lift-on/Lift-off" system will be built. The investment will comprise: berths, storage space, cranes, trucks and the other equipment for transhipment of conventional and containerised general cargo.

The port of Swinoujscie is still being built up as a bulk cargo harbour, capable of serving large vessels. Simultaneously the port will be developing ferry services. A modern ferry terminal built up in 1972-1973 is under further development and a target project stipulates 4 berths and 10 arrivals and departures per day.

AUTHORITY: Port of Szczecin – Swinoujscie Authority, 7 Bytomska Street, 70-603 Szczecin, Poland. *Tel:* 430-31 (for further connections). *Telex:* 04222108 Zp Pl. *Cables:* Zetpees Szczecin. *Contact:* Mr. Jurand Kobylarz, Operational Director.

Harbour Master's Office of the Port of Swinoujscie supervises the traffic of ships and the observance of harbour rules in the Port of Swinoujscie.

AGENT: Morska Agencja w Szczecin, 4 Batorego Square P.O.Box 70-207, Szczecin. Tel: 465-63, 45235, Telex: 0422147, 0422148, 0422149.

Harbour Office at Szczecin – day and night service Tel: 39113, 89742. Telex: 0422235.

Harbour Office at Swinoujscie – Tel: 50-21. Telex: 0422330.

NOTES

Please also advise Shipping Guides Ltd.

Portugal

AVEIRO: 40.39 N. 08.45 W. (See Plan Book)

PORT LIMITS: A vessel is considered "arrived" when she is 3 miles from the piers.

DOCUMENTS:
5 Crew Lists.
4 Lists of Passengers Disembarked.
2 Lists of Passengers in Transit.
5 Cargo Manifests.
1 Manifest of Cargo in Transit.
1 Provision List and Spares.
2 Health Certificates.
2 Dangerous Cargo Lists (when applied).
2 Lists of Articles held by the Crew.

PILOTAGE: Send ETA to Agent by cable, 24 hours before arrival. Entrance depending on sea conditions and ship's draft.

Pilots can be contacted by VHF Channel 16 between 0800 – 1200 hrs. and 1400 – 1800 hrs. Tel: 39429. Telex: 37338 Inppda.

Pilot boat displays white flag, surrounded by narrow blue stripe, with black "P" in the centre. Pilot to be taken on board about 1 mile West of harbour entrance; vessel awaiting Pilot can anchor there, if weather permits.

Pilot station, located close to Aveiro lighthouse, hoists black cylinder on signal mast when entry not possible due to bad weather or any abnormal cause. Pilot boat has radar that can assist vessels during approach to harbour entrance.

ANCHORAGES: Anchor West of North Pier, at a distance of 1.5 or 2.0 miles.

RESTRICTIONS: Subject tide and bar conditions. Entering and sailing only during daylight.

MAX. SIZE: Max. draft 16 ft. to 18 ft. dependent on bar conditions. Max. length 90 m. to 100 m. depending on bar conditions.

HEALTH: Free Pratique automatic for vessels coming from other Portuguese ports. Vessels coming from other countries; Health Certificate must be delivered to Agent.

RADIO: Call Aveiro Pilots Radio on VHF. Radio station is Lisboa Radio.

TUGS: Two tugs, one of 240 h.p. and one of 500 h.p.

An additional tug of about 500 h.p. will be available in the near future.

BERTHING: A quay with 1,300 ft. length for handling general cargo; 10 gangways in concrete for ocean fishing boats; 6 electrical cranes of 3.6 and 12 tons and 15 mobile cranes for cargo-handling – 2×3 tons, 6×7 tons, 5×16 tons, 1×60 tons at 6 m., 1×100 tons at 7.32 m., 70 tons at 10 m. and 25 tons at 22 m.

SPECIALISED CARGO HANDLING FACILITIES: A terminal for handling wine, chemicals and turpentine; another for handling liquid combustibles and chemicals.

STEVEDORES: Advise Agent 24 hours before vessel's arrival.

MEDICAL: Hospital and clinics in town. Advance notice not required. Required vaccination certificate, and when ship comes from affected regions, also yellow fever certificate.

TANKERS: Private quay of GALP used by small-sized tankers. Two quays of JAPA for tankers, wine, liquid combustibles and chemicals.

DENSITY: About 1028.

FRESH WATER: Supplied by barges or tank-car or water net system. 20 t.p.h.

FUEL: Only diesel available. Smaller quantities supplied from trucks. Otherwise, from SACOR's private quay (pipe-line).

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Work usually done by crew.

CUSTOMS ALLOWANCES: 125 grams tobacco, and 1 bottle wine/spirits for each man.

IDENTIFICATION CARDS: Crew members going ashore will need a special card issued by Customs Officer and Maritime Authority. Ship's Agent takes these cards aboard, where they are completed in accordance with crew list. See "Lisbon".

CONSULS: Nearest Oporto, 60 km.

REPAIRS: All repairs can be carried out.

DRY DOCKS: 1 Drydock (100 m.×18 m.) for vessels up to 3,000 d.w.t. and 1 floating dock for vessels up to 1,200 d.w.t.

REPATRIATION: No difficulties for crew repatriation.

AIRPORT: Pedras Rubras (Oporto Airport) at about 70 km., with 2 flights per day to Lisbon and 1 flight per week to London.

Lisbon Airport (250 km.) is served by regular airlines covering all the world.

TIME: From October to April – GMT. From April to October – GMT plus 1 hour.

HOLIDAYS: New Year's Day; Liberty's Day (25th April); Portugal's Day (10th June); Workers' Day (1st May); 12th May (Municipal Holiday); August 15th, (Religious Holiday); Corpus Christi (movable); Proclamation of the Republic (5th Oct.); All Saint's Day (1st Nov.); Independence of Portugal (1st Dec.); Immaculate Conception (8th Dec.); Christmas Day. No work allowed on Christmas Day and New Year's Day.

POLICE/FIRE/AMBULANCE: Police 22022; Ambulance 115; Fire 22333.

TELEPHONES: None available on board.

SHORE LEAVE: Crew allowed ashore.

DELAYS: As a tidal port, arrivals and sailings are subject to tides. Delays may occur owing to bad weather, especially during the Winter months.

DEVELOPMENTS: Dredging harbour entrance.

AUTHORITY: Junta Autonoma do Porto de Aveiro, Avenida Dr. Lourenco Peixinho 110-2, Aveiro, Portugal. *Tel:* 24091/92. *Telex:* 37379 Japa P. *Contact:* Joao De Oliveira Barrosa, Managing Director.

AGENT: A. J. Goncalves de Moraes, Lda, 49 Av. Dr. Lourenco Peixinho, 3800 Aveiro. Tel. 24550. Telex 37590. Cables: Amoras. After hours Tel. 24666. Shipping and Forwarding Agents, Chartering and Brokers, Insurance Agents, Stevedoring.

FIGUEIRA DA FOZ: 40.09 N. 08.52 W. (See Plan Book)

DOCUMENTS:
Health Certificate (Pilot supplies form).
5 Crew Lists.
4 Lists of Passengers Disembarking.
2 Lists of Passengers in Transit.
5 Cargo Manifests.
1 Manifest of Cargo in Transit.
Provision and Spares List.
2 copies each Bill of Lading.

PILOTAGE: Compulsory. Send ETA to Agent by cable 24 hours before arrival. Convenient to try arrive 2 hours before high tide. Call Figueira Pilots on VHF Channel 16, from 0900 – 1700 hrs. Alternatively call Figueira-Pesca frequency 2182 kHz and listen on frequency 1834 kHz. Await Pilot 0.5 miles from the piers.

ANCHORAGES: South of N.W. Azimuth of North Pier, at a distance of more than 0.5 miles.

RESTRICTIONS: No services during night.

MAX. SIZE: Max. draft 14 ft. Max. length 90 m.

HEALTH: Free Pratique authorised for vessels coming from other Portugese ports. For vessels coming from other countries, Health Declaration supplied by the Pilot must be filled in.

RADIO: Figueira – Pesca listens on 2182 kHz permanently, except between 1900 hrs. (on Saturday) till 0100 hrs. (on Monday).

TUGS: None available.

BERTHING: The port is in the mouth of the Mondego River. The anchorage is in sand and outside the harbour.

Concrete Quay: Length 360 m. Depth 13 ft. – 14 ft.
Tidal Harbour: Water area 6 ha. Length of quayage 600 m.
Depths on Bar: MHWST 3.8 m. MHWNT 3.00 m.
There is about 320 m. of quayage for small ships and fishing craft.

CRANES:
1×6 tons at 24 m. (electric)
  12 tons at 20 m.
3×3 tons at 24 m. (electric)
  6 tons at 20 m.
1×1.5 tons at 24 m. (electric)
  3 tons at 16 m.
1×1.8 tons at 12 m. (mobile)
2×2.3 tons at 16 m. (mobile)
  16 tons at 3 m.
10 × fork lift trucks.

STEVEDORES: Advise Agent 24 hours before arrival.

MEDICAL: No prior advice is necessary. All medical facilities available.

DENSITY: About 1028.

FRESH WATER: Each quay has its own installations.

FUEL: Only diesel available.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Work usually done by crew.

CUSTOMS ALLOWANCES: No limit, but must be declared.

IDENTIFICATION CARDS: See "Lisbon".

CONSULS: France, Great Britain and Spain .

REPAIRS: There are two shipyards and repair facilities, also a slipway for ships up to 4,000 tons.

REPATRIATION: No difficulty in crew repatriation.

TIME: From last Sunday in September till last Sunday in March GMT and the rest of the year GMT plus 1 hour.

HOLIDAYS: New Year's Day; Good Friday; 25th April; 1st May; Corpus Christi (movable); 10th June; 14th June; 24th June; 15th August; 5th October; All Saint's Day (1st November); 1st December; 8th December; 24th December; 25th December.

POLICE/FIRE/AMBULANCE: Police 22022; Ambulance 22122; Fire 22122.

SHORE LEAVE: Crew allowed ashore.

DELAYS: As a tidal port, arrivals and sailings subject to tides. Delays may occur owing to bad weather, especially during Winter months.

DEVELOPMENTS: Dredging in progress.

AUTHORITY: Junta Autonoma do Porto da Figueira da Foz, Rua Engenheiro Silva 98, 3080 Figueira da Foz, Portugal. *Tel:* 22365, 22366. *Telex:* 52339 Porfig P. *Contact:* Joao de Oliveira Barrosa, Managing Director.

AGENT: A. J. Goncalves de Moraes, Lda., 262-Rua da Republica, 3080 Figueira da Foz – Portugal. Tel: 22584. Telex: 53017. Cables: Amoras. After office hours: 25016 and 24666 ("Aveiro" network). Shipping and Forwarding Agents, Chartering and Brokers, Insurance Agents, Stevedoring.

LEIXOES and OPORTO (Douro River): (See Plan Book)

Leixoes: 41.11 N. 08.43 W. Oporto: 41.09 N. 08.37 W.

DOCUMENTS:
Health Certificate.
5 Crew Lists.
Provision List — ship and individual.
Tobacco Declaration and Entrance Forms supplied by Agent on arrival.
5 Manifests and 2 copies of each B/L concerning cargo to be discharged.
1 Transit Manifest if cargo in transit exists.

PILOTAGE: Pilotage is compulsory for entry and leaving, with the exception of coastal vessels and national flag craft up to 500 g.r.t., coastal and local fishing vessels and pleasure craft. Available day and night in Leixoes, but in Oporto only between sunrise and sunset, and then dependent upon sea conditions. Vessels must communicate their ETA a minimum of 12 hours ahead and confirm again 4 hours in advance. Departures must be communicated 2 hours ahead between 0800 and 1800 hrs. This must be done via the Radar Station.

Pilot boat recognition:

By day – black hull, with the letter "P" painted in white. Also a flag may be hoisted which is white, lined in blue, and with a black letter "P" in the centre.

By night – a white light at the top of the mast forward and lower down a red light.

Call-up signals by ship's siren:

To call Pilot – Letter "G" in morse, or Letter "O".

To call pilot launch – Letter "O" in morse.

APPROACHES: *Leixoes:*

By day: Vessels coming from the North should take due heed of the Orca Rock situated 1,300 m. beyond the Northern Quay on the parallel 41° 10′ 37″ N. and should pass to the South of the breakwater light.

By night: Vessels approaching the port should be guided by the lights of the breakwater and then by the lights of the lighthouse, positioned at the heads of the North and South Moles of the Port, placing the Leca lighthouse in the middle of them.

Entrance Channel: The width of the port entrance between the heads of the breakwaters is 220 m.; in the foreport the channel widens to 500 m., from the entrance for 240 m. and is reduced again towards the entrance of Dock No. 1 to 113 m. By dredging, the depths are maintained at 10 m. The width of the entrance to Dock No. 2 is 58 m.

ANCHORAGES: *Douro River:*

Outside the port: Vessels may await entry, anchoring to the North of the alignment of the bar entrance lights of the Douro River in an area defined by the alignments of the Leca lighthouse, and the N.W. side of the Leixoes mole. In this area the depths vary between 16 m. and 21 m.

The anchorage is not safe in certain weather conditions.

Inside the port: Vessels can anchor with 2 anchors at the bow and 1 small anchor at the stern, and even by passing lines ashore at the following points: Alfandega, Cabrea, Pedras, Bicalho, Gas, Lugan, Carbonifera, Gaia and Monchique.

Leixoes:

Outside the port: Vessels can await entry, anchoring outside a radius of half a mile from the head of the breakwater to the West, and with an Eastern limit as the alignment of the Leca lighthouse with the breakwater light itself.

Anchorage is not safe during bad weather.

Inside the port: Vessels can anchor in the foreport.

RESTRICTIONS: *Douro:* Subject tide and bar conditions.

The main alignments of the bar, are as follows:

1. Tres Orelhas (a pillar with 3 battlements on the upper part, located at Sobreiras) or Marca Nova do Mato, on the Anjo (an archway on the Tower of S. Miguel da Cantareira);
2. Tres Orelhas by Marca Nova da Cantareira (light on iron column).

Marking of navigation channel – The channel is defined by 7 buoys.

MAX. SIZE: *Douro River:* Permitted draft on entering the port, variable with the state at the bar is from 18 to 19 ft. (HWST) and 16 to 17 ft. (HWNT).

The height of the tide of the port is: Average during Spring tides 2.30 m; average during Neap tides 1.80 m.

At times and particularly during the months of January, February and December, normal movement of vessels is affected by the rough sea which in conjunction with the river current causes frequent variation, both in the width and in the depth of the access channel, and necessitates annual dredging in order to guarantee conditions of navigability.

Leixoes: Cargo vessels 31 ft. Also see "Tankers".

HEALTH: Free Pratique authorised for vessels coming from other Portuguese Ports. For vessels coming from other countries Health Declaration supplied by the Pilot must be filled in, and delivered to the Agent. Radio Pratique also available.

BERTHING: *Douro River:* Gaia Quay: Length 280 m. Depth 18 ft. Estiva Quay: Length 80 m. Depth 11 ft. – 17 ft. Porto A Quay and Alfandega Quay are for small craft only.

In addition there are private facilities of Secil, Leiria Cement Company and Mobil.

Outer Harbour: The depth of water at the entrance and in the centre of the outer harbour is 10.00 m. at MLWST; Maximum rise of tides 3.99 m.; Minimum rise of tides 0.07 m.; Total water area 117.36 ha.; Breadth of entrance (harbour) 220.05 m.; Breadth of entrance (Dock No. 1) 113.00 m.

Dock No. 1: Length of North Quay 487 m.; South Quay 551 m.; Maximum draft 29 ft.

Dock No. 2: Length of North Quay 670 m. and South Quay 588 m.; Maximum draft 30 ft.

South Mole: Length of Quay 370 m.; Depth 20 ft.

Ro/Ro Terminal: Quay with a usable length of 145 m. and max. depth of water of 18 ft.

CONTAINER HANDLING FACILITIES: *South Side:* 115 m. of usable quays with a depth ranging from 12 ft. to 31 ft. The total open storage area for containers is 5.5 hectares. It is equipped with a jib crane with a 31.8 ton capacity and a reach of 23.02 m., 4 Karricons for container movement with a capacity of 30.48 tons and 8.44 m. lift, 2 side loaders with a capacity of 30 tons and 5.27 m. lift and also possibly front loading stackers with a max. capacity of 15 tons and a max. lift of 4.41 m.

North Side: 360 m. of usable quay with a depth of 30 ft. Its usable open area for containers is 1.55 hectares. It is equipped with two quay jib cranes with 35 ton capacity and 30.1 m. reach and 5 transtainers with a capacity of 35 tons and various reaches. It will have available 10 tractors/semi-trailers for container transport with a capacity of 50 tons.

CRANES: *Leixoes:* Dock No. 1: 1×94 tons on the North side and 8×3 tons and 2×5 tons on the South side.

Dock No. 2: 2×15 tons and 11×5 tons on the North side, and 20×5 tons on the South side.

South Mole: 6×5 tons.

Douro: Gaia Quay: 2×1.5 tons, 1×3 tons and 1×5 tons.

Porto A: 3×2 tons and 2×3 tons.

Customs Quay: 1×1.5 tons, 1×2 tons, 1×7 tons.

BRIDGES: Bridge at Leixoes between Dock 1 and Dock 2 opening regularly.

STEVEDORES: Ordered by Agents according to berth and cargo.

TUGS: Normally join the vessel.

At Leixoes: 6 tugs, 875–2,800 h.p. In the outer harbour up to 700 g.r.t., no tug required; from 700 up to 1,800 g.r.t. 1 tug compulsory. Over 1,800 g.r.t., 2 or more tugs required.

At Douro River: As a rule service necessary on arrival/sailings. Thus they join the vessel after passing the bar.

RADIO: *Leixoes Naval Radio Station:* Operated by the Leixoes Port Captaincy, working with permanent listening-watch on 2182 kHz for aid to navigation; receives and listens on frequencies 2182, 2097, 2566, 2657, 4474.5 and 7510 kHz. Transmits weather report and Notices to Mariners by radiotelephony for the coastal strip for a distance of 50 miles to seaward of the coast of Portugal at the times 0735 Z, 1005 Z, 1935 Z, 2205 Z, on frequency 2657 kHz.

It listens out permanently on VHF Channel 16 (156.80 MHz) for aid to navigation and has working Channels 11, 13, 19, 39 and 60.

RADAR/VHF: *Leixoes Radar Station:* Operated by the Administration of the Ports of the Douro and Leixoes, it is equipped with radar for control and support to navigation, and has a range of 18 miles. It also has VHF equipment, permanently listening out, working on the 156 – 175 MHz band, it being possible for any vessel, up to a distance of 50 miles to contact this station for identification, port matters and meteorological information. The listening Channels are 11, 12, 13, 16, 67 and 68.

FRESH WATER: Available alongside or by barge.

FUEL: Available from Shell, Petrogal, Mobil, Sonap and B.P.

MEDICAL: Masters to advise by radio prior to arrival if medical attendance is required on board. Hospital facilities available.

TANKERS: *Terminal Operator:* Petroleos de Portugal E.P. (Petrogal).

Pier A: Max. d.w.t. 120,000 tons. Depth of water: 12.0 m. Max. draft 43 ft. (with dredging). Max. draft in Octber 1984 – 43 ft. 06 in. At times max. draft is 37 ft. – 42 ft. Max. length: 217 m. Daylight berthing only.

Products Handled	Capacity t.p.h.	Hoses (in.)
Crude Oil	10,000 disch/2,000 load	4×12
Gas Oil	1,500 load	1×12
Fuel Oil	2,000 load	1×12, 1×10
Naptha	1,200 load	1×10

Pier B: Max. d.w.t. 27,000 tons. Max. draft: 29 ft. Max. length: 200 m. Berthing at night possible. Depth alongside 9.0 m. Depth in approaches 7.7 m.

Products Handled	Capacity t.p.h.	Hoses (in.)
Crude Oil	4,000 load	2×12
Gas Oil	1,500 load	1×10
Fuel Oil	2,000 load	1×12, 1×8
Gasoline	700 load	2×10
Petrol (Jet)	400 load	1×8
Lub Oil	300 load	1×6
Benzine	350 load	1×8
Toluene	350 load	1×8
Octoxylene	350 load	1×8
Paraxylene	350 load	1×8

Pier C: Max. d.w.t. 5,000 tons. Max. draft 19 ft. Max. length 100 m. Berthing at night possible. Depth alongside 5.7 m.

Products Handled	Capacity t.p.h.	Hoses (in.)
Fuel Oil	2,000 load	2×8
Gas Oil	1,500 load	1×8
Gasoline	700 load	2×8
Petrol (Jet)	400 load	1×8
Lub Oil	300 load	1×6
LPG	200 load	1×6
LPG/B	200 load	1×6

Moorings: Vessels are to be moored with following lines, as a minimum:

Pier	Head Lines		Breast Lines		Springs	
	Fore	Aft	Fore	Aft	Fore	Aft
A	4	4	2	2	2	2
B	3	3	2	2	1	1
C	3	3	–	–	1	1

DENSITY: 1026.

OPENING/CLOSING HATCHES: Work always done by crew.

CERTIFICATES:

Ship Register.
Safety Radio.
Safety Equipment.
Load Line and Derat Certificates.

IDENTIFICATION CARDS: See "Lisbon."

CONSULS:	Tel.		Tel.
Austria	312328	Netherlands	24867/316200
Belgium	25956	Italy	26243
Brazil	24463/29140	Iceland	27243
Chile	28421	Japan	690961/60269
Colombia	22037	Mexico	54151
Costa Rica	976364	Norway	27243
Denmark	694584/695071	Peru	23435/28100
Dominican Rep.	21938	Spain	563225
Ecuador	316753	Sweden	27243/318034
France	23349/313448	Turkey	64547
Germany F.R.	65132/690856	U.S.A.	63094/690008
Great Britain	684789		

REPAIRS: All types of deck engine and electrical repairs can be carried out. Contact Ferrinna, Lda. Tel: 995202 in daytime, 9481464 at night VHF: Channels 16, 11 and 32.

DRY DOCKS: Only small dry docks available for fishing boats.

REPATRIATION: No difficulties for crew changes or repatriation.

AIRPORT: Distances: Oporto 17 km., Leixoes 7 km. Airport served twice a day through Lisbon Airport.

TIME: GMT plus 1 hour.

HOLIDAYS: 1985.

Official Holidays: 1st January, 5th April, 25th April, 1st May, 6th June, 10th June, 15th August, 5th October, 1st November, 1st December, 8th December, 25th December. All these are compulsory holidays.

Local Holidays: 19th February, 28th May, 24th June.

Catholic Holidays: 16th February, 19th March, 27th March, 3rd April, 12th May, 22nd May, 2nd June, 15th August, 1st November, 27th November, 8th December, 25th December. Some holidays are variable, particularly those connected with Easter and Whitsun.

POLICE/AMBULANCE/FIRE: Leixoes Police 9951706; Oporto Police 28266; Ambulance 115; Fire Brigade Oporto 484121, Leixoes 930018 or 932701.

TELEPHONES: Only available on certain quays.

SERVICES: Limited tank cleaning may be performed. Discharge of tank washings subject port authorisation. Compass adjusting possible. Diver service available.

SHORE LEAVE: Crew allowed ashore.

SHIP SUPPLY SERVICE: Provided by the Port Administration. Tel: 9953000. Telex: 23674 P.

DEVELOPMENTS: *Leixoes:* Construction of No. 4 Dock. Length 503 m. (North side) and 544 m. (South side). Width 120 m. Depth 12 m.

Surfacing and draining of open sea area North of No. 4 Dock.

Routine dredging of the docks, Douro Bar and manoeuvring area and approaches to Tanker Berth "A".

AUTHORITY: Administracao dos Portos do Douro e Leixoes, Rua de S. Francisco 5-1°, 4000 Porto, Portugal. *Tel:* 21945. *Contact:* M. Cardoso Ferreira, Managing Director.

Head Office: Palacio da Bolsa, Rua Ferreira Borges, 4000 Porto. *Tel:* 26668, 22624, 316209, 316212 *Telex:* 23151.

AGENT: A. J. Goncalves de Moraes, Lda., 18 Rua da Nova Alfandega – P.O.Box 636 – 4011 Porto Codex. Tel: 323741, 323791. Telex: 22381A & B/22420. Cables: Amoras. After office hours: 9620694. Shipping and Forwarding Agents, Chartering and Brokers, Insurance Agents, Stevedoring.

LISBON: 38.30 N. 09.06 W. (See Plan Book)

PORT LIMITS: A vessel is considered to be an "arrived vessel" when, after entering the Tagus Estuary, she has left behind the alignment between the Torre of S. Juliao and the Torre of Bugio.

DOCUMENTS:

Health Certificate.

6 Crew Lists.

10 Passenger Lists.

2 Lists of Articles held by the crew: cameras, binoculars, radios, cigarettes, spirits, etc.

2 Stores Lists.

All to be signed by ship's Master.

Certificates for vessels up to 500 tons: – tonnage register, loading and navigation certificates.

For vessels over 500 tons: – tonnage register; load line; radio; safety equipment and navigation certificates.

Cargo Documents:

10 Manifests.

3 sets of Bills of Lading.

For cargo in transit: 2 Manifests.

PILOTAGE: Compulsory on the East side of the Tower of Belém. Pilot boat anchored outside the river at Cascais Bay, but Pilot can also board vessel inside the river at Belém Station.

Pilots are to be requested not less than 4 hours prior to the ship's arrival, by a radiogram addressed to "Pilotos Lisboa" stating ship's name, estimated time of arrival at the pilotage area (ETA), the station where ship wishes to take a Pilot, vessel's draft and means for the Pilot's embarkation.

Any vessel failing to correct her ETA may have to wait at Cascais before a Pilot is available to board.

Pilots can be contacted by VHF Channels 6, 13, 16 (permanent watch) and 73, and by radio-telephone (watch) 2182 kHz replying on 2341 kHz.

ANCHORAGES: Deep water anchorage limits:

(a)	38° 40.53′ N.	9° 23.00′ W.
(b)	38° 40.53′ N.	9° 24.70′ W.
(c)	38° 39.75′ N.	9° 24.70′ W.
(d)	38° 39.75′ N.	9° 23.00′ W.

MAX. SIZE: See "Berthing".

HEALTH: Ordinary visit made at central area with vessel anchored, from 0800 hrs. to 1900 hrs. Master may ask for Free Pratique to get ship moored immediately on arrival. For this, necessary to cable the Health Authorities, addressing cable as follows: Sanidade Maritima de Lisboa, Rocha do Conde de Obidos, maximum 15 hours and minimum 4 hours prior to the ship's arrival. Text of cable: "ship's name, nationality, code (MIBDU), day and time of arrival" signed by the Master.

RADIO: ETA to be advised by Master, to Agent, 24 and 12 hours before ship's arrival.

VHF: Channels 1–73 used in the port. Pilots on Channel 73, Port Authority on Channel 29, Maritime Police on Channel 39. Ship-to-Ship on Channels 01, 04, 06, 08, 11, 20, 63, 81 and 84. Tugs on Channels 09, 10 and 69.

TUGS: 6×420 h.p. – 2,500 h.p.

BERTHING:

RIGHT BANK: (from seaward)

Berth or Dock	*Length* (m.)	*Depth** (m.)	*Remarks*
Pedroucos (Exterior)	430	4.5	
Pedroucos (Internal)	900	3.5–6.0	
Alcantara Dock	1,228	8.0	Ro-Ro
Rocha	450	8.0–13.0	
Rocha-Alcantara Quay	1,100	10.0–13.0	General cargo Ro-Ro
Rocha (Internal)	350	6.0	
Santos	666	8.0	General cargo
Navy Dock (Exterior)	120	8.0	
Navy Dock (Internal)	480	4.0	
Jardim do Tabaco	451	8.0	
Santa Apolonia	1,260	8.0	General cargo
Santa Apolonia Container Terminal	870	8.0–13.0	Containers
Terreiro do Trigo Dock	460	4.0	
Xabregas-Beato-Poco do Bispo	1,635	8.0	Grain discharge Rate 1,000 t.p.h.
Poco do Bispo Dock	645	4.0	
LEFT BANK:			
Portinho da Costa Quay (NATO)	160	10.0–11.0	
Margueira Shipyard (LISNAVE)	1,300	6.0–9.5	
Coina Quay (National Metal Co.)	340	5.0–9.0	
Barreiro Quay (QUIMIGAL)	730	3.0–8.5	Chemical products (18,000 d.w.t.)
Palenca Quay (TAGOL)	Dolphins 70 m. apart	12.0–16.0	Soya oil extract, discharge rate 600 t.p.h. Storage 50,000 tons

*Depths indicated are possible depths. Actual depths should be checked with the Port Authority.

Principal Piers

Name	*Length* (m.)	*Depth** (m.)	*Remarks*
RIGHT BANK:			
Matinha	**	7.0– 8.0	Chemical products
Cabo Ruivo (Soponata)	460	8.0–11.0	Oil and derivatives 65,000 g.r.t.
Olivais (BP)	19	8.0	Oil, chemical products and liquid gas
Santa Iria (BP)	10	4.0	Gases (liquid) and oils
Alhandra (C.C. Tejo)	180	3.0	Cement
LEFT BANK:			
Trafaria (NATO)	100	11.0	Fuel
Porto dos Buchos (ESSO)	45	10.0–12.0	Fuel and chemicals
Porto Brandao (Sonap)	20	10.5	Fuel
Banatica (Shell)	105	10.0	Fuel and chemicals (2 pier bridges)
Olho de Boi (C.P. Pesca)	125	10.0	Fish
Ginjal (CANPB)	90	10.0	Fish
Rosairinho (Cidla)	30	7.0	Liquid gas
Seixalinho	50	3.0	Local traffic

*Possible depths are shown. For clarification of usable depths at specific times the Port Authority should be consulted.

**Berth has Dukes of Alba which permit vessels of up to 25,000 d.w.t. to berth.

PORT EQUIPMENT/FACILITIES:

76 electric cranes on rails, capacity 1.5 tons – 12 tons, outreach 13.5 m. – 26 m.

2 Coles mobile cranes with capacity 15 tons and 30 tons.

3 container cranes with 30 tons, 30 tons and 33 tons capacity.

3 fork stackers with 2 tons, 2.75 tons and 12 tons capacity.

5 tractors, 5 tons – 30 tons capacity.

28 trucks, 1 ton – 12 tons capacity.

5 transtainers for 20 ft., 35 ft. and 40 ft. containers.

14 stackers, 12 tons – 40 tons capacity.

1 heavy lift crane, capacity 488 tons.

2 floating cranes, capacity up to 600 tons.

Tank Cleaning Station: Located at Porto Brandao; belonging to LISNAVE. It has 2 Dukes of Alba 120 m. apart, a service platform with 5 mooring points for vessels up to 60,000 d.w.t. and depth of 12 m.

The station occupies an approximate area of 60,000 sq.m. and has a storage capacity of 20,000 tons of oil and residue.

Cold Stores: Apart from the warehouses of the fish dock, there are those of FRISSUL – Entrepostos Frigorificos Lda. (Olivais) with a capacity of 15,000 tons, and Sociedad Continental de Alimentacao (Jardim do Tabaco) with 2,300 sq.m. and Comissao Reguladora do Comercio do Bacalhau (Alcantara) with 9,500 tons.

SPECIALISED CARGO HANDLING FACILITIES: *Container Terminal* at Santa Apolonia, length 870 m., equipped with 3 container cranes of 30/33 tons each, 14 stackers, 45 semi-trailers, 5 transtainers, tractors, etc., depth 8 m. – 13 m.

Roll-on/Roll-off Terminal at Alcantara for ferry boats and cargo. Ramp capacity 40 tons.

Grain Elevators and Silos at Poco do Bispo operated by EPAC. Unloading by elevator up to 400 t.p.h. Also see "Shipmaster's Report" and "Developments".

Cement Storage Terminal: This is at Poco do Bispo and is operated by Secil.

STEVEDORES: Ordered by Agents according berth and cargo.

MEDICAL: Masters to advise by radio prior arrival if medical attendance required on board. Hospital facilities available.

TANKERS: Shell and Petrogal berths exposed to 9 knots HWST current. Essential to use good new mooring lines.

Cabo Ruivo Terminal: This is operated, on a concession basis, by Soponata and has depths of 11 m., capable of mooring tankers up to 65,000 d.w.t. alongside its jetty.

Fuel Oil Facilities: The port of Lisbon fuel oil installations belong to private companies and are concentrated along both banks of the Tagus at the following points:

Sacavem and Cabo Ruivo (with oil refinery facilities), Montijo, Barreiro, Santa Iria, Porto Brandao, Porto dos Buchos.

Also see "Berthing".

DENSITY: 1025.

FRESH WATER: Usually supplied by barge unless vessel lying alongside a pier where water provided.

FUEL: Shell, Esso, Petrogal. These companies can supply through their own barges or alongside their private bunkering stations on pier.

IDENTIFICATION CARDS: Crew members going ashore will need a special yellow card issued by Agent and stamped with police visa. The cards are supplied by Agent to be completed on board in accordance with crew list particulars. With these shore passes crew members may circulate between Lisbon and Cascais, and Lisbon and Sintra.

Master and/or Owners will be fined Esc. $1,000 for any crew member found ashore without that card. A double fine will be imposed in case of recurrence.

Similar cards, but white, are required for passengers in transit.

CONSULS: Most countries are represented in Lisbon.

REPAIRS: There are several repair workshops. The biggest is Lisnave Shipyard with several docks, one for vessels up to 300,000 tons and a new dock where vessels up to 1,000,000 tons can be repaired.

AIRPORT: Within the Lisbon area. Regular International services.

REPATRIATION: No difficulties for crew changes or repatriation.

POLICE/AMBULANCE/FIRE: Maritime Police 607732; Ambulance 115; Fire 322222.

TIME: End September-end March – GMT. End March-end September – GMT plus 1 hour.

HOLIDAYS: 1st January; 19th February; 5th April; 25th April; 1st May; 6th June; 10th and 15th June; 15th August; 5th October; 1st November; 1st December; 8th December; 25th December.

DEVELOPMENTS: A large grain silo is under construction at Trafaria. (Completion expected 1984). It is owned by EPAC (Empresa Publica de Abastecimento de Cereais), and occupies an area of 9 hectares and has a capacity of 130,000 tons. It consists of a pier 254 m. × 20 m. and water depths of 14 m. to 17 m. and 4 ship unloaders with a capacity of 1,000 t.p.h. each. Container terminal and coal transhipment terminal also planned.

SHIPMASTER'S REPORT: July 1980.

Grain berths: All elevators and silos are now only used for discharging barges and handling small vessels in the coastal trade. All ocean-going bulk carriers are handled in deep water at the inner or working anchorage situated between 2.2 and 3.5 miles East of the overhead suspension bridge.

All vessels are discharged by means of a floating crane with a grab into barges, whether the vessel has its own cargo gear or not. The capacity of the grabs vary between 2 tons and 6 tons. The capacity of the barges range from 200 tons to 7,000 tons lighter ships.

Rate of Discharge: With 1 average floating crane 2,000 tons a day. With the maximum of 2 floating cranes, of which one is a big crane, an average of 5,500 tons per day is obtainable.

Anchorage: Holding ground is good, although care must be taken when floating cranes and many lighters are alongside.

Draft Restrictions: The draft depends on HW on the bar in the approaches to Lisbon.

Waiting Area: In case no berth is available at the working anchorage, vessels have to wait at an anchorage between 2 miles and 3 miles West of the suspension bridge along the North or South shore of the river.

A deep draft berth with an elevator is under construction on the South shore close to the suspension bridge.

AUTHORITY: Port of Lisbon Authority, Cais do Sodre, 1293 Lisbon Codex, Portugal. *Tel:* 362321, 370727. *Telex:* 18529 P and 18529 S Porli. *Contact:* Comm. F. Rodrigues Catanas, Deputy Manager.

AGENT: A. J. Goncalves de Moraes, Lda., 22 Rua do Alecrim – P.O.Box 2772 – 1119 Lisboa Codex. Tel. 364943 – 366671. Telex: 12296A, B & C. Cables: Amoras. After office hours Tel: 2750594. Shipping and Forwarding Agents, Chartering and Brokers, Insurance Agents, Stevedoring.

SETUBAL: 38.30 N. 08.55 W. (See Plan Book)

DOCUMENTS:

5 Crew Lists.
5 Passenger Lists.
Personal belongings of the Crew (portable radio, binoculars, cameras, etc).
Store List.
Health Declaration.

For cargo: Dangerous Cargo List. Cargo Manifest. Transit Cargo Manifest (if any). Copy of Bills of Lading.

PILOTAGE: The pilotage service is supplied exclusively by the Departamento de Setubal do Instituto Nacional de Pilotagem dos Portos which runs a permanent service.

To assure prompt attention requests for Pilots must be made in the following manner:

Entries: To send at least 6 hours beforehand a radiotelegram or a radiotelephone message preferably on S.S.B./AM to Pilotos de Setubal giving the name of the ship, ETA and draft.

This information must be confirmed on VHF or MF two hours before the ship arrives at the bar.

Departures and movement in the River: Between 0800 hrs. and 1800 hrs. on weekdays and 0800 hrs. and 1300 hrs. on Saturdays, Sundays and holidays to communicate by telephone or on VHF with the "Estacao de Pilotos de Setubal" at least one hour beforehand, giving the name of the ship, the time and place where the Pilot is required and the service needed.

Only in cases of emergency will requests be accepted outside these hours.

To effect requests for Pilots, the Pilots use the following means of communication:

VHF — Listening permanently on Channel 16 (156.80 MHz) being able to reply on any of the following Channels as requested: 11, 12, 13, 16 and 73.

MF — Listening in permanently on 2182 kHz, replying on 2132 kHz, their working frequency. Once contact has been established ships must change to this frequency. Communications can be made in SSB or AM according to the equipment of the ship.

Telephone No. 22914.
Telex: 43271 Inppds P.

The Pilots embark by motor launch based in Setubal and wait near the fort at Portinho da Arrabida when necessary and the weather permits.

To increase speed and safety on embarking and disembarking, ships of more than 4,000 tons gross, when light, and those of greater capacity in any condition, unless they have a door in the side or other modern means for Pilots to board and leave, and if the weather permits, should lower the gangway to about 3 m. above sea level and fix a rope-ladder so that it stays alongside the lower platform of the gangway.

Bad weather from the South, causing breaking waves at the edge of the shoals, sometimes prevents the pilotage service from operating.

In such conditions, ship must contact the Pilots to discover the state of the bar and limitations imposed on the pilotage service.

ANCHORAGES: Only inside harbour with a Pilot aboard.

RESTRICTIONS: No restrictions on night entry. At low tide vessels only up to 22 ft. draft. Max. draft 27 ft., length/breadth no restrictions.

HEALTH: Free Pratique automatically given when ships come from other Portuguese port. Otherwise, Health Certificate is to be handed over to Health Authorities during clearance procedures.

Maritime Health: This station is located next to the Commercial Dock, Avenida de Luisa Todi 80. Apart from normal sanitary visits, observation of sick crew members, etc., the station issues Derat Certificates to vessels of all nationalities. Tel: 2 39 22.

RADIO: Call through Lisbon Radio.

Coastal radio station known as "Setubal-Pesca", with call sign CUX9. Listens out permanently on 2182 kHz and replies on 1848 kHz. On receipt of the reply, vessels must change to 2284 kHz.

The station transmits weather bulletins and Notices to Mariners at 1105 hrs. and 1405 hrs., and makes general calls at 0205, 0505, 0805, 1105, 1405, 1705, 2005, and 2305 hrs.

TUGS: 5 available.

BERTHING: All installations are along the right (North) bank of the Rio Sado Estuary.

Outer Berths:

No. 1: Length 60 m. Depth 6.0 m. Located to the West of the Fishing Dock, used for salt traffic but can be used for other goods.

No. 2: Length 120 m. Depth 5.0 m. Located to the East of the Fishing Dock, used for berthing fishing craft.

No. 3: Length 130 m. Depth 7.5 m. Located to the West of the Commercial Dock, used for general cargo.

Inner Berths: Within the Commercial Dock.

No. 5: Length 30 m. Depth 8.0 ft. at LWST. One electric crane with capacity of 1 ton.

No. 6: Length 30 m. Depth 8.0 ft. at LWST. One electric crane with capacity of 1 ton.

Nos. 7 and 8: Both with reinforced concrete frontage. Used for passenger handling.

Fontainhas Quay: Length 530 m. Depth 9.5 m. – 10.5 m. Used for general cargo and served by railway line. Water and electric power points available. 10 electric cranes, 1.5 tons – 25 tons capacity.

Passenger/Ro-Ro Facilities: There is a passenger handling terminal serving ferries. In the Commercial Dock there is a Ro-Ro berth serving vessels running from Setubal to Troia.

Equipment: 5 mobile crane, capacity 2 tons – 7.5 tons, 5 stacker trucks (1×22 tons for 20 ft. containers, 1×6 ton and 3×3 tons).

Private equipment also available including 1×50 ton Coles mobile crane, 23 stacker trucks and 9 loading shovels.

Private Facilities:
Secil – Companhia Geral de Cal e Cimento: Length 104 m. depth 11 m. Products handled: cement, clinker, coal and sand.
Propam – Consorcio Portugues de Panificacao, S.A.R.L.: Depth 6 m. Pontoon quay.
Pirites Alentejanas, S.A.R.L.: Length 125 m. depth 9 m. Products handled: Pyrites.
Sapec – Societe Anonyme de Produits et Engrais Chimiques du Portugal: Pontoon – Length 80 m. depth 5.5 m. Quay – Length 100 m. depth 9.0 m. Products handled: Pyrites, clay, phosphates.
Mague – Construcoes Metalomecanicas: Length 91 m. depth 9 m. Products handled: Cranes, rolling bridges, alternators. Quay can take loads of 10 20 tons/sq.m.
Portucel – Empresa de Celulose e Papel de Portugal: Length 60 m. depth 7.5m. Pontoon berth handling paper pulp and raw materials.
Setenave – Estaleiros Navais de Setubal, S.A.R.L.: Construction and repair of vessels.
Eurominas – Electro-Metalurgia, S.A.R.L.: Length 130 m. depth 11.5 m. Products handled: Ferro-manganese and silicon manganese.

STEVEDORES: Ordered by the Agent some time in advance.
MEDICAL: Prior to arrival and in order not to delay ship's clearance, Master should inform by radio if medical assistance required, this only in case of contagious or epidemic diseases.
TANKERS: Shell Maritime installation with private pier. Discharge lines 4 in., 6 in. and 8 in.
DENSITY: About 1026.
FRESH WATER: Supplied from shore to all piers.
FUEL: Supply points available at Berth Nos. 1, 2 and 3 and Fontainhas Quay.
FIRE PRECAUTIONS: No smoking on deck or piers.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: By crew unless otherwise specified in C/P. Stevedores usually help.
CUSTOMS ALLOWANCES: About 200 cigarettes and 2 bottles of spirits per man.
CARGO GEAR: Supplied by stevedores.
IDENTIFICATION CARDS: Supplied and filled in by the Agent. Crew members cannot leave Three Castles area (Setubal-Palmela-Sesimbra) without a special permit from Customs Guards obtained through Agency.
CONSULS:

Finland	tel. 26018
France	„ 24612
Spain	„ 22018

REPAIRS: All types available. Lisnave Shipyard and Dry Docks at Lisbon within about 50 miles.
Developments: Setenave has built a Shipyard for new building and repairs for very large ships in the estuary of Setubal.
The facilities consists of: 1 dock for ships up to 700,000 d.w.t. 1 dock for ships up to 350,000 d.w.t. New building berth for ships up to 700,000 d.w.t.
REPATRIATION: All facilities.
AIRPORT: Nearest at Lisbon, about 50 miles away.
TIME: From end September to end March – GMT. From end March to end September – GMT plus 1 hour.
AUTHORITY: Junta Autonoma do Porto de Setubal, Rua Antonio do Nascimento 7, 2900 Setubal, Portugal. *Tel:* 20095. *Telex:* 4300. *Contact:* Jose Norberto Catela das Neves, Director.
AGENT: A. J. Goncalves de Moraes, Lda., 281, Av. Luisa Todi 2900, Setubal. Tel: 22399. Telex: 16212. Cables: Amoras. After office hours: 2750594. Shipping and Forwarding Agents, Chartering and Brokers, Insurance Agents, Stevedoring.

SINES: 37.57 N. 08.52 W. (See Plan Book)

PORT LIMITS: The vessel is considered to have arrived when 1 mile South of the West Mole.
DOCUMENTS:
1 Copy Bill of Lading,
1 Copy Residue Declaration,
1 Copy Ballast Declaration,
1 Photocopy of Tonnage Certificate (via the Agent).
PILOTAGE: Compulsory. Pilot service available 24 hours a day and to be ordered through Marine Services.
ANCHORAGES: (Provisional).
(a) Vessels up to 150,000 d.w.t. (minimum depth 20 m.). Between meridian 08° 52.4′ W. and between the parallel 37° 55.5′ N., and the 20 m. contour.
(b) Vessels of more than 150,000 d.w.t. (minimum depth 21 m.). Between meridian 08° 52.4′ W. and the line which joins the coordinate points:
1. 37° 55.5′ N.
08° 51.5′ W.
2. 37° 54.0′ N.
08° 51.0′ W.
and parallels:
37° 55.5′ N.
37° 54.0′ N.
RESTRICTIONS: Vessels of more than 50,000 d.w.t. may berth in daytime only. Vessels for Berth No. 2 of more than 150,000 d.w.t. berth and unberth in daytime only. In an emergency they may unberth any time.
MAX. SIZE: Max. LOA 350 m. Max. draft 22.5 m.
VHF: The Maritime Services are on Channels 16, 9 and 12. Many additional Channels available.
TUGS: 2×35 ton bollard pull and 3×25 ton bollard pull.
BERTHING: See Table overleaf.
STEVEDORES: Stevedores available for handling of stores, spares and small amounts of cargo. Application for stevedores should be made to the vessel's Agent.
DENSITY: 1025.
DIRTY BALLAST: Facilities available for receiving ballast and residue except for vessels over 150,000 d.w.t.
FRESH WATER: Available in unlimited quantities. Rate of delivery 60 t.p.h.
FUEL: Supplied by the refinery. Application to be made to the vessel's Agent.
SAFETY: Regulations supplied by the Port Administration.
REPAIRS: Repair shops available in Sines. Authorisation for repairs should be obtained from the Port Authority. Application for repair service should be made by the vessel's Agent.
SURVEYORS: Classification Societies represented in Sines and Lisbon.
CUSTOMS REGULATIONS: Same as other Portuguese ports.
REPATRIATION: Possible.
AIRPORT: At Lisbon 165 km. distance.
TIME: GMT. Summertime is kept in Summer.
SHORE LEAVE: Possible. Shore passes issued by Customs.
DELAYS: In Winter, vessels may suffer delays due to bad weather.
SAFETY: The following are some of the safety rules.
Loading and Discharging Operations:
Loading and discharging operations can be commenced only after the Master or his Deputy fills out and signs the Safety Check List.

1. The loading or discharging of static accumulator products such as: Gas oil, Kerosene, Jet fuel, Naphtha, Gasoline, etc., should commence in accordance with the following scheme (a cargo plan of the ship should be produced to the Safety Inspector who, together with the Operations Team Supervisor, will analyse it).

Any loading or discharging shall begin at a slow flow rate (not higher than 1 m./sec.):

(a) In case of loading, and until the ship's lines are full, free from air and water, and the product height in the tank bottom is sufficient (between 0.6 m. and 1 m.) to prevent both air dispersed product particles and liquid surface turbulence.

(b) in case of discharging, until the ship lines and loading arms are full and Refinery confirms that the product is rising in the tank.

Only after beginning in accordance with (a) or (b) above, may the loading or discharging speeds be increased up to 5 m./sec. or to the maximum the ship and Terminal can support, in the event that ship/terminal cannot reach that limit.

2. *Non static accumulator products* (crudes, fuel oil) loading or discharging should commence at a slow rate until:

(a) In case of discharging, the Refinery confirms that the product is filling the tank.

(b) In case of loading, the Chief Officer confirms that product is entering the tank or tanks in accordance with the cargo plan.

As soon as the above conditions are sustained the flow rate can be raised to the required rate.

3. *Loading or Discharging Operations Completion – Pressure Surges:*

The line length between Terminal and Refinery is about 8 km.

The following precautions should be taken while pumping in or off cargoes at high flow rates:

(a) The cargo pump rate should be slowly reduced when finishing or whenever there is a stoppage.

(b) Flow rates should change slowly by controlling the cargo pumps r.p.m.

(c) If the flow rate reductions or loading/discharging operations interruptions are controlled by valves they should be slowly reduced or closed.

Usually motor-valves have an acceptable closing speed which does not cause pressure surges when flow rate reductions or loading/discharging interruptions take place.

Simultaneous loading and deballasting operations are permitted if a previous agreement has been settled between Master and the cargo loader or receiver.

Ballast: Ballast in the cargo tanks cannot be pumped out into Sines Harbour waters.

On arrival Masters must declare the ballast loaded in the cargo tanks.

Ballast will be pumped out into inland ballast tanks or will remain on board. Terminal Safety Inspector may request the ballast tank measurements together with the bottom valves sealing.

The permanent ballast can be pumped out to the sea. Before pumping the permanent ballast into the sea, the Master must be sure it is not contaminated with petroleum products. Terminal Safety Inspector may require a sample of the ballast which will be sealed in the presence of the Master or his Deputy.

Crude Oil Washing – Inert Gas: Sines Terminal gives permission for crude oil washing (C.O.W.) during discharging.

However, this operation can only be permitted if the ship has an inert gas system in good working condition.

The tank atmosphere will be considered inert when the percentage of oxygen in it is not higher than 8%. Nevertheless, during operations, the oxygen percentage in the tanks cannot be higher than 5%.

If by any means the oxygen percentage increases to over 8% or its evaluation is doubtful, the washing procedures should cease at once.

The washing operations also cease if there are leakages or traces of leakages in the deck lines.

If the condition of the pipes is not satisfactory under a visual inspection the washing is not permitted.

Transhipment: This type of operation in the Sines Harbour is subject to the permission of the Port Authority and A.P.S. (Port Administration) who will set up the conditions by which the transhipment should be performed.

When this operation is a ship-to-ship transfer the correct functioning of the inert gas system is compulsory.

During approaching and mooring manoeuvres, ballast, deballasting, internal cargo transfers, bunkering, etc., are not permitted.

If there will be a gas concentration over the ships or the wind velocity is lower than 4 knots, the transhipment will cease.

Also there will be a stopping of the transhipment and separation of the ships if the weather conditions become unfavourable for that type of operation.

All the applicable safety rules should be strictly followed during the transhipment.

Gas Freeing and Cleaning of Ship's Cargo Tanks: Under previous permission of A.P.S. gas freeing and cleaning can be performed by a ship at anchor.

With bad weather threatening or wind velocity lower than 4 knots these operations should cease.

While alongside gas freeing and cleaning are not permitted.

Bad Weather: When there is bad weather threatening, all operations must cease, the tank lids must be closed and secured and the loading arms disconnected. In the case of bad weather, when it is likely the ship will exceed the safety limits of the loading arms, all operations should be brought to a stop.

Masters are requested to strictly follow the Operations Team Supervisor and/or the Terminal Safety Representative instructions.

Even with surplus mooring lines, there will still be a threat to the ship and/or the Port, and vessel must prepare to unberth.

In the case of a thunderstorm threatening from windward about 5 km. away the operations should cease and tank lids be closed.

Undertow: The Port of Sines, as with any other open port, is subject to the undertow effects. The phenomenon is due to waves which may have their source either in the North or South hemispheres.

At Sines the undertow effects show up between November and March. During that period the Masters must be more concerned about their ship's mooring. If necessary and taking into account the weather forecast for the laytime, Masters will be supplied with special safety instructions.

Watchmen and Crew: Master must maintain permanently on duty, sufficient number of qualified members of the crew to ensure the execution of manoeuvres, operations, to face an emergency and stand guard at the gangway.

Foodstuff, Lubricants or Spares: Foodstuff, lubricants or spares can be shipped aft if permission is granted by A.P.S. after ascertaining that there are no operations on board that involve tank lids opening or zones with gas concentrations (next to the pump house, blowers, etc.).

With ship alongside, shipping of foodstuff and spares can be done over the quay when the packages can easily be carried by hand.

Metallic objects or steel banded packages should be handled with care to avoid direct contact with the steel deck plate.

A ship with an inert gas system can receive heavy packages for shipping at the stern while loading, discharging or ballasting. If there is no inert system in the ship, packages to be loaded must be held until after loading.

Shipping of foodstuff, spares, etc., whether the ship is alongside or anchored can only be made with permission of A.P.S.

Visitors: Persons who are not crew such as family, visitors, technicians, etc., must carry a special permit issued by the ship's Agents.

Permits issued by the Terminal Authority are to be used for circulation in the Terminal premises only.

Visitors on board are the Master's responsibility.

During loading, discharging or ballasting operations visitors are not allowed to stay on the forecastle or amidship, especially women and children.

Crew Identification and Circulation in the Terminal: Crew are requested to keep with them their IDs which must be shown on request to any Terminal Officials.

Crew and visitors are not permitted to walk around the Terminal Zone and when in it Safety Rules in force should be strictly followed.

Mooring Lay Time: The ship is not permitted alongside more than 2 hours after operations are completed.

GENERAL: The anchorages are provisional. No difficulties arise in Summer. In Winter, the decision to anchor is at the option of the Master. It is recommended that in the event of bad weather, anchorage be suspended and that vessels should heave to off the coast.

DEVELOPMENTS: Development projects for the port of Sines are in hand on a large scale with a view to reception of coal, movement of ore and containers.

AUTHORITY: Administracao do Porto de Sines – A.P.S., Apartado 16, 7521 Sines Codex. *Tel:* 64021/9. *Telex:* 12027 Sinmar – P. *Contact:* J. Leal, Director of Operations.

BERTHING: Sines Oil Terminal:

		Berth No. 2	Berth No. 3	Berth No. 4	Berth No. 5		Berth No. 6		Berth No. 7	
					Tankers	LPG	Tankers	LPG	Tankers	LPG
Overall Length	Max.	350 m.	270 m.	290 m.	270 m.	270 m.	100 m.	100 m.	100 m.	100 m.
	Min.	250 m.	140 m.	140 m.	140 m.	110 m.	70 m.	70 m.	70 m.	70 m.
D.W.T.	Max.	350,000 tons	100,000 tons	150,000 tons (See Note A)	100,000 tons	45,000 cu.m.				
	Min.	100,000 tons	10,000 tons	10,000 tons	10,000 tons	15,000 cu.m.				
Draft	At any time	22.5 m.	16 m.	16 m.	16 m.	16 m.	9 m.	9 m.	9 m.	9 m.
	Subject to tide		17 m.	18 m.	17 m.	17 m.	10 m.	10 m.	10 m.	10 m.
Loading Arms	Min. height above port zero	5.6 m.	3.8 m	2.6 m.	2.6 m.	5.2 m.	2.5 m.	3.3 m.	2.5 m.	3.3 m.
	Max. height above port zero	34 m.	21 m.	21 m.	21 m.	18 m.	13 m.	13 m.	13 m.	13 m.
Products		CR	CR, FO, GO	CR, GO, GA, JP4, NA, KE, FO	CR, LPG, FO, GO NA, GA, KE, JP4		JP4, NA, KE, GO, GA, FO		JP4, NA, KE, GO, GA, FO	
Loading Arms		3×20 in.	4×12 in.	8×12 in. 2×10 in. (Bunker)	6×12 in. 2×10 in. (Bunker)	2×8 in. 1×4 in. (Return)	3×6 in.	2×8 in. 1×4 in. (Return)	3×6 in.	2×8 in. 1×4 in. (Return)

KEY: CR – Crude FO – Fuel Oil GO – Gas Oil GA – Gasoline
NA – Naphtha KE – Kerosene

Note A: Vessels of more than 100,000 d.w.t. need to ballast by means of discharge since permanent ballast only is not sufficient.

Note: Berth No. 3: It is possible to operate vessels "Sameiro" and "S. Mamede". "M" type vessels can be worked. It is not possible to receive ethylated ballast.

Construction Port:

Quay	*Length* (m.)	*Depth* (m.)	
No. 1	85	8	See Note B
No. 2	50	6	
No. 3	135	6	

Note B: Bottoms are currently limited to 5 m. in relation to port zero.

Petro-Chemical Terminal of Sines:

		Berth No. 9	*Berth No. 10*
Length overall	Max.	145 m.	172 m.
	min.	90 m.	90 m.
	Beam	No Limit	No Limit
Minimum distance of ship's manifold to	Stern or bow	45 m.	45 m.
	Inboard	1 m.	1.5 m.
Height from ship's manifold to deck		0.5 m.	0.5 m.
Height from water line to the manifold with the vessel loaded		2 m.	3 m.
Height from water line to the manifold with the vessel light		10.1 m.	14.6 m.
Max. draft at any time		9 m.	10 m.
Max. draft subject to tide		10 m.	11 m.

VIANA DO CASTELO: 41.41 N. 08.50 W.

(See Plan Book)

DOCUMENTS:
Health Declaration.
3 Crew Lists.
Provision List (ship's and individual).
Tobacco Declaration and Entrance Forms supplied by Agents on arrival.
2 Manifests and 1 copy of each Bill of Lading concerning cargo to be discharged.
1 Transit Manifest if cargo in transit exists.

PILOTAGE: Always compulsory. ETA should be given to Agent with ample notice. Signals; during the day Flag "G" of International Code, and at night 3 long blasts. Boats black with white cabins. Pilots to be taken on board in outer or inner harbour respectively with bad or good weather.

ANCHORAGES: Outer or inner harbour according to weather conditions.

RESTRICTIONS: Entering and sailing only during daylight unless exceptionally good weather. Depth in entrance 4.25 m. – 4.88 m.

MAX. SIZE: Max. draft 15 ft. on HWST and 13 ft. on HWNT, with good sea conditions. Max. breadth 13 m. Also see "Developments".

HEALTH: Free Pratique authorised for vessels coming from other Portuguese ports. For vessels coming from other countries Health Declaration must be filled in and delivered to the Agents.

RADIO: Call Viana do Castelo Pilots frequency 2182 kHz and listen on 2132 kHz.

TUGS: No tugs.

BERTHING: Over 1,000 m. of Commercial Quays.

BRIDGES: 1 bridge which allows entrance/sailing at any time.

CRANES: 1×5.5 tons, 1×25 tons, 2×12.5 tons.

STEVEDORES: Ordered by Agents 8 hours in advance.

MEDICAL: No prior advice is necessary.

FRESH WATER: Supplied by shore installations.

FUEL: Only small quantities of gas oil can be supplied.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Work usually done by crew.

CUSTOMS ALLOWANCES: No limit, but must be declared.

IDENTIFICATION CARDS: Required.

CONSULS: France 22412. Spain 23018.

REPAIRS: All types of deck, engine and electrical repairs can be carried out.

DRY DOCKS: Three dry docks available.

	Length	*breadth*	*draft*
Dock 1	203 m.	34.0 m.	18 ft.
Dock 2	127 m.	18.5 m.	18 ft.
Dock Eng. D. Pacheco	104 m.	11.0 m.	16 ft.
Fitting Dock	190 m.	65.0 m.	21 ft.

No special equipment for tank washing is available.

REPATRIATION: No difficulties for crew repatriation.

AIRPORT: Nearest is Oporto Airport, 55 km.

TIME: From end September to end March – GMT. From end March to end September – GMT plus 1 hour.

HOLIDAYS: 1st January; Holy Friday; 25th April; 1st May; Corpus Christi; 10th June; 15th August; 5th October; 1st November; 1st, 8th, 24th and 25th December.

POLICE/AMBULANCE/FIRE: Tel. 115.

SHORE LEAVE: Crew allowed ashore.

DEVELOPMENTS:
1. Western breakwater, length 120 m.
2. Roadworks.
3. Marina.
4. New Commercial Quay, depth alongside 9 m.

AUTHORITY: Junta Autonoma dos Portos do Norte, 4900 Viana Do Castelo, Portugal. *Tel:* 22592, 24165. *Contact:* Antonio Maria De Menezes Nogueira, Managing Director.

VILA REAL DE SANTO ANTONIO: 37.10 N. 07.26 W.

DOCUMENTS:
2 Health Certificates.
3 Crew Lists.
1 List of Passengers in Transit.
2 Lists of Passengers Disembarking.
2 Dangerous Cargo Lists.
1 Ship's Register.
1 Tonnage Certificate.

PILOTAGE: Black boat, wooden hull, white "P" at bow. Stationed near buoy No. 1 (harbour entrance). All sea-going vessels entering or leaving harbour are obliged to avail themselves of the services of a Pilot. Latest 24 hours before arrival cable "Corporacao dos Pilotos de Vila Real de Santo Antonio" or to Agent. Departing vessels should apply for their Pilots at least 6 hours before the time of departure.

MAX. SIZE: Entrance channel 4,000 m. long, has a depth of 4 m. (12 ft.) at LW. Vessels drawing up to 5.5 m. (16 ft.) can enter under normal circumstances 1 hour before HW, a keel clearance about 1 ft. will be maintained.

TUGS: Tugs up to 105 h.p. available.

BERTHING: 1 pier 300 m. long. Depth at pier 20 ft.

STEVEDORES: Ordered by Agents. ETA to stevedores is necessary. No work allowed on Sundays.

MEDICAL: Inoculations in hospital Marques Pombal - Vila Real de Santo Antonio.

FRESH WATER: Obtainable alongside quay.

FUEL: Gas oil can be supplied in small quantities.

GANGWAY/DECK WATCHMEN: Compulsory.

OPENING/CLOSING HATCHES: Crew allowed to open and close.

CUSTOMS ALLOWANCES: About 200 cigarettes and 1 bottle of spirits per man.

CONSULS:
Britain, Rua Dr. Oliveira Salazar, No. 4
Finland, Avenida da Republica, No. 133
France, Avenida da Republica, No. 114
Greece, Avenida da Republica, No. 109
Italy, Avenida da Republica, No. 11
Netherlands, Avenida da Republica, 73

REPAIRS: There is 1 small ship repair yard at Vila Real de Santo Antonio.

HOLIDAYS: 1st January; Holy Friday; 25th April; 1st May; 10th June; 15th August; 5th October; 1st November; 1st December; 8th December; 25th December.

POLICE/AMBULANCE/FIRE: Police 66; Ambulance 202; Fire 202.

AUTHORITY: Junta Autonoma dos Portos de Sotavento Do Algarve, Rua Conselheiro Bivar 68, 8000 Faro. *Tel:* 22025, 22049.

NOTES

Please also advise Shipping Guides Ltd.

Puerto Rico

AGUADILLA: 18.26 N. 67.10 W.

DOCUMENTS: See "San Juan".
PILOTAGE: Mayaguez's Pilots provide service in Aguadilla. At least 24 hours advance notice required.
RESTRICTIONS: Open port, very deep, safe in good weather. Cold fronts from North cause very heavy swells. Vessels cannot berth during this kind of weather.
MAX. SIZE: 600 ft. long, 36 ft. draft.
HEALTH: Free Pratique granted on arrival.
BERTHING: *Harbour:* 1 mile North of the town is a conveyor pier with 1 dolphin berth at its head. Least depth alongside 12.2 m. (40 ft.). Length of mooring lines not less than 180 m. (600 ft.). Vessels tie up to 4 mooring buoys, with spring lines to 2 bollards at the loading tower. 10 in. connection to molasses line. 1 off-shore tanker berth with 9 m. (30 ft.) depth consists of mooring buoys and pile clusters, connecting platform and pipelines for discharging aviation gas for Borinquen Airport.
MEDICAL: 24 hours' notice preferred; local hospital available.
TANKERS: See "Berthing".
FRESH WATER: Available. 2 in. pipe-line with meter.
GANGWAY/DECK WATCHMEN: Usually crew members are used.
OPENING/CLOSING HATCHES: Performed by stevedores.
CUSTOMS ALLOWANCES: U.S. Customs regulations. For Customs service Aguadilla is under the jurisdiction of the Mayaguez Custom House.
IDENTIFICATION CARDS: Required to go ashore.
CONSULS: No local representation.
REPATRIATION: Can be arranged.
AIRPORT: 20 minutes' drive. Regular airlines.
TIME: Atlantic Standard Time, 4 hours less than GMT. No alterations during year.
HOLIDAYS: Refer to "San Juan".
SHORE LEAVE: Allowed.
DELAYS: No delays unless another ship is already berthed.
AUTHORITY: Puerto Rico Ports Authority (See "San Juan").

GUANICA: 17.57 N. 66.54 W.

DOCUMENTS: See "San Juan".
GENERAL INFORMATION: Refer to "Ponce".
PILOTAGE: Port operations are under the control of the Captain of the Port. Pilot services are available day and night, by previous arrangement with Mayaguez Pilots.
ANCHORAGES: Harbour is located 8 miles Westward of Guayanilla Bay. Though small, it is one of the best hurricane harbours in Puerto Rico.
TUGS: Available from Guayanilla.
BERTHING: Bulk sugar, bulk fertiliser and bulk grain handling facilities. Length 700 ft.; depth alongside 28 ft. During recent years, operations at the port have been practically nil.
FRESH WATER: Available in limited quantities for emergencies only.
FUEL: Available by trucks from Ponce.
MEDICAL: Medical assistance is available; if hospitalisation is required for any crew member, it will probably be necessary to arrange for admittance to a Ponce hospital.
CONSULS: None available locally, nearest at Ponce.
AUTHORITY: Puerto Rico Ports Authority (See "San Juan").

GUAYANILLA (incl. Tallaboa Bay): 18.00 N. 66.46 W.

(See Plan Book)

DOCUMENTS: See "San Juan".
PILOTAGE: Port operations are under the control of the Captain of the Port and Pilot services are available day and night. Pilots stand-by on VHF Channel 16 and operate on Channel 14. Arrangements should be made with at least 4 hours advance notice.
ANCHORAGES: Guayanilla is the largest hurricane harbour and one of the best in Puerto Rico. It has protected anchorage for 5 vessels. Maximum draft permissible is 42 ft. It is protected at its entrance by extensive reefs which extend a mile or more offshore. The entrance channel between these reefs is about 1.5 miles long and about 0.4 miles wide.
HEALTH: Pratique is not necessary. In case of continuous high fever or contagious disease, Agents must be notified prior to vessel's arrival. Agents will immediately contact Public Health for proper action.
RADIO: Chatham Radio (WCC) – Chatham, Massachussetts. Equipped with RCA automatic land line circuit direct to New York, N.Y., San Francisco, California and Washington, D.C.
TUGS: Available 24 hours daily from South Puerto Rico Towing Co., Tel: 809-835-2795, as requested by vessel.
BERTHING: The Union Carbide Company has berthing facilities for barge operations and LPG.

New port facilities for Pittsburgh Plate Glass are owned by the Puerto Rico Ports Authority. 2 berths at jetty, each 240 m. length. Depth alongside 35 ft.

Berths were recently dredged and actual restrictions are as follows:

**Refinery Dock – Guayanilla:*

DWT	80,000 tons	
LOA	830 ft.	
BCM	400 ft.	(Critical)
Draft	42 ft.	(South Face, Berth No. 5)
	42 ft.	(North Face, Berth No. 4).

**Petrochemical Dock – Guayanilla:*

DWT	50,000 tons	
BCM	449 ft.	
Draft	36 ft. 06 in.	(South Face, Berth No. 3)
	30 ft.	(North Face, Berths 1 & 2) Ships only
	28 ft.	(North Face, Berths 1 & 2) Barges only

*Commonwealth Oil Refining Co. Ltd. facilities.

Texaco: There is a private pier owned and operated by Texaco for the receipt of clean petroleum products. Berth 650 ft. long and 24 ft. deep being dredged to 36 ft. Diesel bunker available.
Punta Gotay Pier: 1 berth at Dolphins with depth 38 ft.
Punta Pepillo Pier: 1 berth at Dolphins with depths 12 ft. – 28 ft.
Tallaboa Bay: 1 Dolphin berth with depth 20 ft. and 1 jetty with depth 38 ft.

Also see "LPG".

LPG: Dolphin berth at Cayo Rio in Tallaboa Bay in position Lat. 18° 59′ N., Long. 66° 44.5′ W.
Report: February 1984.
Max. Size: Vessel's dimensions not to exceed: length overall 965 ft. Max. draft 41 ft. Max. beam no restriction.
Manifold Position: The manifold must be positioned within 50 ft. fore or aft of the midpoint of the vessel's overall length.
Dock: The dock has been designed to accept the breasting load from a ship (or ships if vessel to vessel discharging is arranged) of up to 109,000 long tons total loaded displacement.
Depths: Depth of the docking area and approaches has been increased by dredging to over 44 ft. Due to swell and tidal actions, the maximum allowable vessel draft has been set at 41 ft. This draft has been approved by the U.S. Coast Guard and nautical charts affected are being updated accordingly.
Mooring Basin: The docking area is 450 ft. wide and is designed to handle a 125,000 cu. m. (145 ft. beam) vessel and a 75,000 cu. m. (120 ft. beam) vessel moored side by side.
Hose handling: Although connecting hoses and supplying the equipment necessary for doing so is the vessel's responsibility, receivers can, at their discretion, make such connections provided that the carrier's manifold elevation above water plus its manifold distance inboard plus its manifold distance from the midpoint of the carrier's overall length is 60 ft. or less. If it is more than 60 ft. the carrier would have to provide hose handling assistance including a crane to lift the end of the loading hose to the deck.
Carrier/loading platform access: An accommodation ladder will be provided for those carriers that have a deck height of 25 ft. or less above the water and are accessible from loading platform. Carriers that cannot meet the above must provide their own accommodation ladder. Transportation from their accommodation ladder will be provided.
Sanitary waste removal: Dumping of sanitary wastes into Tallaboa Bay is not permitted. Therefore, for those carriers that stay in port for 20 days or more, removal of sanitary wastes by barge will be provided. The carrier must provide the means (to be approved by Union Carbide Company) of transferring the wastes from the carrier to the barge.
Potable water: Potable water is not available at berth, but fresh water is. A fresh water connection is available on the loading platform. The carrier must provide his own hose for hook up. Should the carrier wish to purchase such water a release must be executed.
Bunkers: Bunkers are not available.
Night navigation: No U.S. Coast Guard regulation prohibits the berthing or unberthing of LPG carriers at night unless the incoming/departing vessel is being moored alongside another (storage) vessel.
FRESH WATER: Available whenever requested by the vessel. Water delivery very slow (3 to 5 tons per hour).
FUEL: Available only whenever arranged by Owners of the vessel and/or charterers prior to arrival.
Fuel Dock: Length 680 ft. with deep water alongside. Mooring dolphins and moorings buoys installed to assist with clearing the dock.
MEDICAL: Medical service is available; hospitalisation at Ponce, which is only 15 minutes distant.
REPAIRS: Various marine contractors available in Ponce upon request. Minor repairs available in Guayanilla and Ponce. No drydock facilities in the area. For drydock facilities and other major repairs refer to "San Juan".
Radar: For radar technician contact local Agent prior to vessel's arrival. Various technicians available in San Juan.
REPATRIATION: Arranged by ship's Agents.
AIRPORT: International Airport in outskirts of San Juan served by regular airlines. Small airport in Ponce connects with San Juan.
CONSULS: None available locally; nearest at Ponce. Consuls available in Ponce are: Dominican Republic, Honduras, Norway, Venezuela.
CUSTOMS: For Customs service, Guayanilla is under the jurisdiction of the Ponce Custom House.
SHORE LEAVE: Foreign crew members are allowed to go ashore through U.S. Immigration.
IDENTIFICATION CARDS: Shore passes are sufficient for shore leave.
AUTHORITY: See "San Juan".

JOBOS (Aguirre): 17.56 N. 66.13 W.

DOCUMENTS: See "San Juan".
GENERAL INFORMATION: Refer to "Ponce".
PILOTAGE: The Port of Jobos is served by the Pilots of Ponce. Services must be arranged in advance.
ANCHORAGES: A fine land-locked harbour, located on the South coast, approx. 42 nautical miles Eastward of Ponce and 20 miles West of Point Tuna. Anchorage inside the bay is Southward of the pier in depths of 19 ft. – 24 ft., soft mud bottom.
RESTRICTIONS: The principal entrance is from Westward between Morrillo Cay and Ratones Cay.
TUGS: No tugs available.
BERTHING: To the West of the sugar pier (not in use and not buoyed) is an open concrete barge dock 632 ft. in length with a buoyed access channel for the receipt of fuel oils for the Water Resources Authority.
FUEL: No bunkers are available.
MEDICAL: Medical assistance is available; if hospitalisation is required for any crew member, it will probably be necessary to arrange for admittance to a Ponce hospital.
CONSULS: None available locally; nearest available at Ponce.
AUTHORITY: Puerto Rico Ports Authority (see "San Juan").

LAS MAREAS: (Guayama) 17.55 N. 66.10 W.

(See Plan Book)

The Puerto de las Mareas Terminal is located on the South side of the island of Puerto Rico. It is located approximately 26 nautical miles East of the port of Ponce. The nearest city is Guayama.

All vessels calling at Phillips Puerto Rico Core Inc., Puerto de las Mareas Terminal should be consigned to Phillips Puerto Rico Core Inc., and all official documents for such ships should show them so consigned. In conformance with port regulations, no vessel will be allowed to tie up alongside a pier without having first obtained a berthing permit from the Ports Authority Captain of the Port.
DOCUMENTS: See "San Juan".

The Passenger List must show full names, sex, age, nationality, and occupation of passengers landing at Puerto de Las Mareas. The ultimate destination of in-transit passengers must also be shown in the passenger list.

In most cases, outward clearance and cargo documents will be delivered on board by the ship's Agent, making it unnecessary for Masters to obtain such clearance in person from the U.S. Customs Office (Ponce).
PILOTAGE: The use of Pilots is compulsory for all vessels. Vessel's Agent will arrange for Pilot, upon receipt of the arrival notice. Pilot will board inbound vessels off the entrance to the harbour about 1 mile offshore.

When approaching the dock and channel, vessels must have one anchor, to be designated by the Pilot, free of the hawse pipe and ready for quick release if necessary to stop the vessel.
Note: Every vessel arriving or departing must provide, properly secured, a pilot ladder which conforms to the standards of construction normally accepted by international safety standards.
APPROACHES: The harbour is entered through a channel 250 ft. in width at its narrowest portion, bearing 025.6° (T). It is protected on the Eastern side by a rubble mound breakwater extending approximately 700 ft. from the shore line. The dredged channel extends out to the 40 ft. depth contour and has a width at this contour of approximately 900 ft., narrowing to 250 ft. approximately 2,100 ft. inshore from the 40 ft. contour. The 250 ft. wide portion of the channel is approximately 1,000 ft. long. At the inshore end of the 250 ft. wide channel, the harbour itself extends for a length of 2,300 ft. and a maximum width of 1,100 ft. The harbour has a depth of 38 ft. below MLW but the maximum draft allowable for inbound and outbound vessels is 37 ft. The above dimensions are given to the bottom of the channel; the sides of the channel and the harbour are sloped at 1 in 3.
NAVIGATIONAL AIDS:
A. Lighted Buoy LM: This sea buoy is located 300 ft. West of the centre line of the channel, 2 miles offshore from the end of the rubble mound breakwater. It displays a white light through 360° flashing Morse code letter "A". (0.5 seconds on, 0.5 seconds off, 2.0 seconds on, 0.5 seconds off). The buoy is painted with black and white vertical stripes and is fitted with a radar reflector. Water depth is 70 ft.
B. Channel Marker Buoys:

(1) Buoy 1: This buoy has 360° green light flashing 0.6 seconds on and 3.4 seconds off. It is painted black and has a green retro-reflective tape in buoy superstructure panels. Water depth is 40 ft.

(2) Buoy 2: This buoy has 360° red light flashing 0.5 seconds on and 2.0 seconds off. It is painted red and has red/orange retro-reflective tape in buoy superstructure panels. Water depth is 40 ft.
C. Channel Marker Navigation Lights: There are 4 channel marker navigation lights, 3 are located on piling, and 1 on the end of the rubble mound breakwater.

(1) Channel Marker Number 3: This marker is located on a single pile 400 ft. West from the centre line of the channel, 2,024 ft. inshore from the channel marker buoy No. 1. The light is located 25 ft. above MLW, and is displayed through 360°. It is a green light, flashing 0.6 seconds on and 3.4 seconds off. The marker is fitted with 3 ft. square dayboards with green retro-reflective centre and dark green reflective border, numeral 3.

(2) Channel Marker Number 4: This marker is located on a tower at the end of the rubble mound breakwater, 50 ft. above MLW. The light is displayed through 360°, red, flashing 0.5 seconds on and 2.0 seconds off. The marker has 4 ft.×4 ft. triangular dayboards with red retro-reflective centre and dark green reflective border, numeral 4.

(3) Channel Marker Number 5: This marker is located 175 ft. West from the centre line of the channel, 1,000 ft. inshore from the end of the rubble mound breakwater. It is on a single pile 25 ft. above MLW and displays a green light through 360° flashing 0.4 seconds on and 0.6 seconds off. The marker is equipped with 3 ft. square dayboards with green retro-reflective centre and dark green reflective border, numeral 5.

(4) Channel Marker Number 6: This marker is located 175 ft. East from the centre line of the channel, 1,295 ft. inshore from the end of the rubble mound breakwater on a single pile 25 ft. above MLW. It displays a 360° red light, flashing 0.4 seconds on and 0.6 seconds off. The marker is equipped with 4 ft.×4 ft. triangular dayboards with red retro-reflective centre and dark reflective border, numeral 6.
D. Obstruction Light: This light is mounted on the protective dolphin at 10 ft. above MLW and displays 3 fixed red lights through 360°.
E. Range Lights: LLNR 1380.55 front range light is mounted on a tower located on the centre line of the channel 3,500 ft. inshore from the end of the rubble mound breakwater. It consists of a quick flash white light 86 ft. above MLW and visible on range line only. The tower is fitted with a 6 ft.×12 ft. KRW dayboard, covered with red/orange reflective coating with an 18 in. white stripe down the centre.

LLNR 1380.56 rear range light is mounted 104 ft. above ground on a tower located on the centre line of the channel 5,500 ft. inshore from the end of the rubble mound breakwater. It consists of an equal interval, white, 3.0 seconds on and 3.0 seconds off. The tower is fitted with a 6 ft.×12 ft. KRW dayboard covered with red/orange reflective coating with an 18 in. white stripe down the centre.

RESTRICTIONS: The entrance channel has a depth below MLW of 40 ft. and the harbour itself has a depth of 38 ft. Hence vessels using the port are limited to a maximum draft of 37 ft. Vessels are required to have a minimum draft of 14 ft. forward and 24 ft. aft when entering or leaving the port.
HEALTH: Free Pratique is not required for vessels arriving at Puerto de Las Mareas, except when cases of communicable disease are on board. In such cases, U.S. Public Health Service doctors are available, and should be requested through the Agent 48 hours prior to arrival.
MAX. SIZE: Max. draft 37 ft.

RADIO: Agents of vessels or Owners or its representatives should advise Phillips Puerto Rico Core Inc. by telex, cable or telephone, 72 hours, 48 hours, and again 24 hours before their expected arrival at the sea buoy.

ITT Telex No. 3853347 "Philcorgya".
Puerto Rico Communication Authority-Telex No. 347.
Telephone (809) 865-1515.

Incoming vessels should advise the Agent by radio 48 hours and again 24 hours before their expected arrival at the sea buoy. Coast stations available for such advice are:

Lantana Radio (WOE) - Lake Worth, Florida. (Equipped with RCA automatic land-line circuit direct to New York City, San Francisco and Washington, D.C.)

Transmits Traffic Lists at (GMT) 0005, 0205, 0405, 0605, 0805, 1005, 1205, 1505, 1605, 1805, 2005 and 2205. Transmits weather bulletins at (GMT) 0105 and 1600.

New York Radio (WNY) - New York City. (Equipped with RCA automatic land-line circuit direct to New York City, San Francisco, California, Washington, D.C.)

Transmits Traffic Lists at (GMT) 0010, 0210, 0410, 0610, 0810, 1010, 1210, 1410, 1610, 1810, 2010 and 2210. Transmits weather bulletins at (GMT) 1000, 1400, 1600 and 2200.

Also equipped with teletypewriter (TWX) for direct communication with steamship companies in the United States having this equipment.

Chatham Radio (WCC) - Chatham, Massachusetts. (Equipped with RCA automatic land-line circuit direct to New York City, San Francisco and Washington, D.C.)

Transmits Traffic Lists at (GMT) 0050, 0450, 0850, 1250, 1650 and 2050. Transmits weather bulletins at (GMT) 0100, 1300 and 1700.

San Juan Radio (WCT) - Radio Corporation of Puerto Rico Marine Station, Transmits on 2530 kHz, receives on 2134 kHz, watch on 2182 kHz.

In addition to the above commercial radio facilities, incoming vessels may contact the port through radio facilities on tug stationed at the port. These facilities are as follows:

VHF radio: range 30 miles. Channel 16 (156.8 MHz), working frequency Channel 14 (156.7 MHz).

SSB radio: 12 MHz, 8 MHz, 4 MHz.

Call letters: WA 6617 and WS 6560.

Vessels diverted to Puerto de Las Mareas must furnish the required 48-hour and 24-hour notices of arrival, unless notice of diversion is received less than 48 hours before anticipated arrival, in which case the notice of arrival will be given as soon as notice of diversion is received. In such cases, however, Phillips Puerto Rico Core Inc. reserves the right to refuse to load or unload such vessels if tankage is not available for the cargo, or if cargo is not available to loading.

HURRICANES: The South coast of Puerto Rico is subject to winds of hurricane force, accompanied by abnormally high tides, during the late Summer and Autumn. In the event of such abnormal conditions, vessels may be required to put out additional moorings, or if necessary, to suspend all operations and put to sea until normal conditions prevail.
MEDICAL: Medical assistance or hospitalisation arrangements should be made through the Agent. If hospitalisation is required for any crew member, arrangements should be made through the ship Agent with hospitals located in the municipality of Guayama. Ambulance service can be furnished upon request to the Agent.

TUGS: The use of tugs is compulsory for arriving and departing vessels. Two tugs are stationed in the harbour to assist in docking, undocking and turning. Arrangements for the use of tugs should be made through the Agent well in advance of the vessel's arrival.

Tug Operator: McAllister Brothers Inc. Tel. (809) 721-8888 and 722-8111.

BERTHING: The dock at the terminal consists of a finger pier approximately 800 ft. in length inside the harbour with a tanker loading berth on each side. The finger pier consists of a cargo platform 45 ft. by 90 ft., fitted with fender piling and dolphins (3 breasting dolphins, 2 mooring dolphins and 1 protective dolphin). The cargo platform is connected to shore by a driveway 12 ft. 6 in. wide. The mooring and breasting dolphins outboard of the cargo platform are connected to each other and to the platform by a walkway. No launches are required to handle mooring lines. The top of the cargo platform is 12 ft. above MLW level. Water depth alongside the finger pier is 38 ft. at MLW. There is no current at the dock or in the harbour.

Bollards for mooring lines are provided on the breasting dolphins, the mooring dolphins and the turning dolphins.

Turning basin 1,100 ft. wide and 1,060 ft. long, outboard of the turning dolphin, is provided. The turning basin has a depth over its entire area of 38 ft. at MLW. Normal procedure will be for vessels to enter the harbour and turn prior to docking.

Vessels will be required to vacate berths promptly on completion of loading or discharging cargo. Permission to use a berth when not loading or discharging cargo may be granted under special circumstances, and must be requested through the Agent.

If the vessel fails to vacate the berth on the expiration of the allowed time, it will be held liable for payment of any demurrage and/or damages incurred by Phillips Puerto Rico Core Inc., as a result of delays to other vessels waiting berths, or for any other consequence of its failure promptly to vacate the berth.

TANKERS: The various cargoes available at the Puerto de Las Mareas terminal include motor fuel, cyclohexane, benzene, paraxylene, orthoxylene, mixed xylenes, paraffinic naphtha, and other special products. Feedstock for Phillips Puerto Rico Core Inc. facilities is naphtha, and there is a fuel oil unloading line. Cargo handling is accomplished through various sizes of lines, as follows:

Product	*Hose size (in.) (each side of dock)*	*Line size (in.)*	*Loading/ discharging rate with one pump*
Naphtha Feedstock	3 × 8	20	13,700 b.p.h.
Motor Fuel Regular	3 × 8	20	10,000 b.p.h.
Motor Fuel Premium	2 × 8	12	5,700 b.p.h.
Motor Fuel Unleaded	1 × 8	14	7,000 b.p.h.
Benzene	1 × 8	12	3,800 b.p.h.
Cyclohexane	1 × 8	10	4,000 b.p.h.
Paraxylene	1 × 8		5,000 b.p.h.
Orthoxylene	1 × 6	8	2,200 b.p.h.
LP-7 Raffinate	2 × 8	16	7,500 b.p.h.
Mixed Xylenes	1 × 6	8	2,000 b.p.h.
Toluene	1 × 8	8	800 b.p.h.
Fuel oil	1 × 8	12	3,500 b.p.h.
Ballast	1 × 8	12	6,000 b.p.h.
Domestic water	1 × 2	2	3 t.p.h.
Butane	1 × 6	16	2,000 b.p.h.

CONNECTING/DISCONNECTING HOSES: Service will be provided by the terminal to connect and disconnect hoses on the ship. Vessels are requested to have blanks removed from the cargo lines and hose handling booms rigged on arrival at the dock.

READINESS: Notice of Readiness to load or discharge is warranty that the vessel is in all respects ready to receive or discharge cargo, and that the vessel's equipment is ready and capable of loading or discharging petroleum or petrochemical products. Phillips Puerto Rico Core Inc. reserves the right to refuse to accept such notice of readiness if, upon inspection, the vessel is found not to be ready to receive or discharge cargo. Vessels may tender Notice of Readiness upon arrival, berth or no berth, according to the terms of the charter party or contract of affreightment under which they have been engaged.

BALLAST: Ship's Masters are reminded that they are prohibited by Puerto Rico law from pumping dirty ballast overboard when within the Puerto Rican limits. Facilities are provided for disposing of dirty ballast ashore at Puerto de Las Mareas. U.S. Coast Guard regulations are enforced for any discharge of dirty ballast, and any violations will be quickly detected and reported.

Ballast is pumped ashore through a 12 in. line, capable of receiving at a pressure at the ship's rail of 100 p.s.i. The ballast facilities are sufficient to accommodate 70,000 barrels of dirty ballast. Vessels are requested to arrive with minimum of dirty ballast.

FRESH WATER: Available at the dock in limited quantities.

FUEL: No bunkers are available at Puerto de Las Mareas. However, arrangements for bunkering at any other ports in the island can be made through the Agents.

STORES: May be ordered through the ship's Agent for delivery at the terminal.

CONSULS: No consular representatives are located in the vicinity of Puerto de Las Mareas. Some nations maintain consular representatives in San Juan. Further information can be obtained from the Agent.

REPAIRS: Complete repair and dry dock facilities are available in San Juan. Limited facilities for emergency repairs are available at Ponce. Requests for such services should be made through the Agent.

SURVEYORS: There are no classification society surveyors stationed at Puerto de Las Mareas, but they are available on call from Ponce or San Juan. Requests for survey services should be made through the vessel's Agent at least 24 hours prior to arrival.

CUSTOMS: U.S. Customs and Immigration Authorities will board vessels at the dock, except in unusual circumstances, in which case they will board the vessel at anchor outside the harbour. The vessels will be required to furnish an accommodation ladder.

American Flag vessels will not require Customs entry or clearance unless arriving from or departing to a foreign port.

FIREARMS: All firearms and ammunition should be shown on the stores list and will be removed from the vessel during its stay in Puerto Rican waters. Any violations of this regulation will result in fines and confiscation of firearms and ammunition.

SAFETY: The provisions of Part 35 "Operations" of the Rule and Regulations to Tankvessels, Subchapter D (CG-123) published by the U.S. Coast Guard are in force at Puerto de Las Mareas, and must be observed under penalty of fine and imprisonment as provided therein.

Particular attention is called to the following safety precautions:

(1) Vessels must be, and remain, in readiness to sail from the dock at any time. In the event of engine repairs, which might interfere with such readiness to sail, being required, written permission must be obtained from the Harbour Master before such repairs may be undertaken.

(2) Scuppers must be plugged during cargo-handling operations.

(3) Absolutely no smoking or open lights will be permitted on the dock or open decks.

(4) Screens in good conditions must be used over gauging hatches when not actually gauging.

(5) Operations may be suspended at the discretion of the Master, or may be required to be suspended by the Harbour Master, during severe electrical storms.

(6) In the event of a breakdown of communications between dock and the shore terminal during loading operations, and the need to shut off the flow of cargo to the vessel, an emergency signal consisting of a continuous sounding of the ship's whistle shall be given. The signal shall not be discontinued until the flow of the cargo has been shut off.

(7) An electrical bonding cable will be provided from the dock to the ship. This bonding cable must be firmly secured to a clean metal surface of the vessel's hull or cargo piping before hoses are connected, and must remain in place until the hoses are disconnected.

(8) The vessel must moor bow to seaward when feasible and be prepared to get underway on short notice. A towing cable shall be made ready forward and aft with the bight at water's edge.

(9) Each foreign flag vessel must be in possession of a valid Letter of Compliance issued by the Commandant, USCG for the carriage of the specific products to be loaded or discharged. All vessels must possess a Certificate of Financial Responsibility and be able to produce the same upon demand.

(10) Ship to ship transfer of cargo within the harbour is not permitted.

(11) All persons considered to be intoxicated or under the influence of drugs shall not be allowed to board the ships or enter the facilities during cargo operations.

Violations of these and other safety regulations, as described in Parts 35 of Subchapter D will result in the suspension of cargo-handling operations by the Harbour Master, or the PPRC dock personnel or safety inspectors, without recourse. Such suspension of cargo operations will continue until the violations are corrected or the safety hazards removed.

POLLUTION: *Oil Spill Avoidance:* All vessels must comply with the latest Commonwealth and Federal laws and regulations regarding prevention of oil spills. Such laws absolutely prohibit any discharge overboard of oily water, oily ballast or oil in any form. Since the harbour is an enclosed area with no flow of water through it, any violations, no matter how small, will be quickly detected and reported to the U.S. Coast Guard. VIOLATORS WILL BE VIGOROUSLY PROSECUTED AND ARE LIABLE FOR HEAVY FINES.

Sanitary Regulations: Pollution laws and regulations concerning sanitation apply to the harbour of Puerto de Las Mareas. Trash and galley waste will not be dumped into the waters of the harbour and must be kept on board until the vessel has sailed. Discharge of toilets and bathrooms into the waters of the harbour is prohibited. Sanitary facilities are provided on the dock for use by crew members while their vessels are at the berth.

MAIL: Official and personal mail may be addressed to the vessel care of Agent, and will be delivered to the vessel by the Agent on arrival. The Agent will accept official and personal mail from the vessel, and will ensure its delivery to the local U.S. Post Office, upon receipt of a mail transmittal slip to support disbursements.

SHORE LEAVE: When the vessel is berthed at Puerto de Las Mareas there normally are no restrictions on shore leave. In order to avoid delay in sailing, Masters are requested to ensure that all crew members are on board their vessel at sailing time. There are no facilities to provide shore leave from vessels at anchor awaiting berth.

Crew members from foreign vessels must carry their crewman's landing permit, Form I-95A, when on shore leave.

GENERAL: *Charts:* The general area and the harbour of Puerto de Las Mareas is shown in U.S. Hydrographic charts number 25677 and 25640.

Tides: Tides in the general area of Puerto de Las Mareas have an average yearly range of 0.8 ft. from MLW to MHW.

AUTHORITY: Puerto Rico Ports Authority, see "San Juan". Port facilities operated by Phillips, P.R. Core, Inc.

MAYAGUEZ: 18.13 N. 67.12 W.

DOCUMENTS: See "San Juan".
PILOTAGE: Ship's Agents must make arrangements with Captain of the Port Office at Mayaguez Pier well in advance, not less than 24 hours before arrival of vessel at harbour entrance. Pilot boats are painted black (hull) and white (topside) as required, showing the letter "P" on each bow. Pilots board 1 to 2 miles offshore of Sea Buoy depending on weather conditions. Pilot service available day and night.
ANCHORAGES: Close to the entrance channel and boundaries. Sufficient depths for larger vessels.
RESTRICTIONS: The bay is easily entered day or night and is a good harbour in any weather, except in a hurricane. The harbour is 3.8 miles wide, and offshore is protected by reefs which extend across the harbour entrance in a general North by West direction.

The principal channel is about 0.4 miles wide, with depths at the entrance of about 47 ft. to 120 ft. and it is marked by lighted buoys and the range. Depth in the inner channel is approximately 30 ft. and close alongside the pier from 28 ft. to 29 ft.
MAX. SIZE: Cargo vessels 600 ft. or more in length call at the port. Safe draft for operations at the wharf is 27 ft.
RADIO: Communication to all points, including ships at sea, is available through commercial systems. Cables-Telex via RCA Communications, Inc., a global service of Radio Corporation of America. ITT World Communications, Inc., tel. 830-3316. Puerto Rico Telephone Company, local and overseas communications services, 129 and 128.
TUGS: Not used at Mayaguez Port.
BERTHING: Berthing permit required from the Ports Authority. The Puerto Rico Ports Authority operates the terminal facilities which consist of a bulkhead wharf approximately 1,200 ft. long, apron width 30 ft., and transit sheds and open storage. There are other berthing facilities in the port which are owned by the tuna packing plants.
STEVEDORES: Arrangements are made by the ship's Agents or representatives.
MEDICAL: The Agent should know in advance of any medical needs so that he can make the necessary arrangements with the U.S. Public Health Service. Good medical and hospital services available.
TANKERS: See "Guayanilla".

Regular calls from Esso and Texaco to unload fuel by means of barges in order to supply tanks on land by means of pipes located at berthing facilities.
FRESH WATER: Available alongside the berth in 4 outlets to supply any amount required at any time. Hose connections of 2.5 in. or less, maximum pressure.
FUEL: All grades available.
FIRE PRECAUTIONS: Standard fire and safety precautions throughout. U.S. Coast Guard regulations.
GANGWAY/DECK WATCHMEN: Ship provides gangway watchmen.
OPENING/CLOSING HATCHES: By stevedores.
IDENTIFICATION CARDS: Required to go ashore.
CONSULS: Dominican Republic, France, Tel: 832-4322. Others at San Juan.
REPAIRS: Call San Juan facilities where complete salvage equipment is available. Service to other ports of the island.
REPATRIATION: Arranged by ship's Agents.
AIRPORT: Mani Airport, 15 minutes from pier, served by regular airlines daily from Mayaguez to San Juan.
TIME: GMT minus 4 hours all year round.
HOLIDAYS: Refer to "San Juan".
POLICE/AMBULANCE/FIRE: Telephone numbers: Police, 343-2020, 832-2300; Ambulance, 832-0496, 832-3212; Fire, 343-2330, 832-2330.
TELEPHONES: Can be arranged by Puerto Rico Telephone Company.
SHORE LEAVE: Allowed.
AUTHORITY: Puerto Rico Ports Authority (See "San Juan").

PONCE: 17.58 N. 66.37 W. (See Plan Book)

DOCUMENTS: See "San Juan".
PILOTAGE: Port operations are under the supervision of the Captain of the Port and Pilot services are available day and night.
ANCHORAGES: Harbour is protected from the prevailing Easterly trade winds by enclosing reefs. To the Southward the harbour is exposed and for this reason is not safe in a hurricane.
RESTRICTIONS: Depths: Entrance channel 36 ft.; turning basin, 31 ft.; anchorage, 40 ft.
MAX. SIZE: Max. draft 29 ft.
BERTHING: The municipal pier is a concrete and steel construction 430 ft. long by 100 ft. wide, with a steel and cement transit shed. The municipality has also built a concrete bulkhead wharf extending East-West for 2,260 ft. from the pier. To the North of the bulkhead wharf there is a manoeuvring basin 30 ft. deep. Depth alongside: Pier 1A, 30 ft.; Pier 2, 29 ft. 6 in.; Pier 3, 30 ft.; Pier 4, 30 ft.; Pier 5, East-side, 33 ft.; Pier 5, West-side, 32 ft.

A Paceco Portainer crane, capacity 40 ton for handling 20 ft., 35 ft. and 40 ft. containers is installed at the Trailer Wharf.

Ro/Ro ramp available.
FRESH WATER: Water is available whenever ordered in advance for 24 hour daily service or at request during office hours.
FUEL: Available by pipe-line: (Texaco only) diesel, gas oil, No. 6 fuel oil. By trucks (Chevron, Shell, Esso).
MEDICAL: Ambulance permanently available at dock area, hospital and doctor's service available as requested to the Agent.
CONSULS:

Colombia
Denmark
Dominican Republic
France
Honduras
Netherlands
Panama
Spain
Sweden
Switzerland

REPATRIATION: Arranged by ship's Agents.
TIME: GMT minus 4 hours.
HOLIDAYS: Refer to "San Juan".
DEVELOPMENTS: The expansion of the 260 ft. N.-S. bulkhead is completed and length increased to 600 ft. There is a 76 ton gantry crane in operation.

The Port Board is working on the development of a dry dock for ship repair.
AUTHORITY: Junta Administrativa, Muelle Municipal de Ponce, Apartado Postal 125, Playa de Ponce, P.R. 00731. *Tel:* 842-3095, 842-0170. *Contact:* Hector M. Leon Lopez, Superintendent.

PORT ARECIBO: 18.29 N. 66.42 W.

Port Arecibo is located on the North coast of the island, 32 nautical miles Westward of San Juan. There is a breakwater to afford some protection from heavy seas, but even so the port is not considered safe for vessel's operations, which are practically non-existent, except for a tug-barge operation (liquid chemicals are pumped out from a tank-barge alongside the pier through a pipe-line to P.R. Chemical storage tanks ashore). Also, industrial liquid wastes are pumped from a pierside tank into a barge, the barge towed way out to sea and the wastes pumped out overboard.

A sizable fleet of pleasure craft use a section of the berthing facilities. There has been a significant growth in tug-barge traffic calling at the port.

There is a pier 600 ft. long. Depth alongside is close to 20 ft., but there is a shallow spot towards the inshore end of the pier. There is also a 30,000 sq. ft. cargo shed and open storage area.

The port is mainly used as an industrial port.

Port installations are under the control of the Puerto Rico Ports Authority.

Port Arecibo is not a Customs Port of entry.

PORT FAJARDO: 18.20 N. 65.38 W.

The port of Fajardo lies on the East coast of Puerto Rico. There is a 250 ft. long concrete pier owned by the Puerto Rico Ports Authority for the passenger and cargo ferryboats and other craft which engage in inter island traffic to the islands of Vieques and Culebra.

Port operations are under the control of the Captain of the Port.

For Customs service, the Port of Fajardo is under the jurisdiction of the Fajardo Custom House.

SAN JUAN: 18.28 N. 66.07 W. (See Plan Book)

DOCUMENTS: Customs:

1. American flag vessels engaged exclusively in the coastwise trade (to or from American ports only, U.S. Virgin Islands ports excepted) are not required to make entry or to obtain clearance. A Permit to Depart is required, however, if loading coastwise cargo.

2. No formal entry or clearance is required for American yachts arriving or departing regardless of destination, but a report of arrival must be made within 24 hours after arrival from foreign ports or from the Virgin Islands.

3. All vessels arriving from foreign ports for discharging and/or loading cargo must report arrival within 24 hours and make entry within 48 hours. Vessels arriving in distress or for the purpose of taking on bunkers, water and/or stores and departing within 24 hours need not make entry or clearance, but must report arrival and comply with certain Customs formalities, such as reporting bunkers and stores taken, before departing.

(a) The following valid documents shall be available for examination and return to Master regardless of length of stay in port:
1. Register or Nationality Certificate.
2. Load Line Certificate (if over 150 tons).
3. Water Pollution Certificate (if over 300 tons).

(b) Additional documents, to be filed in duplicate for Customs purposes, are as follows:
1. Master's Oath of Vessel in Foreign Trade (C.F. 1300).
2. General Declaration (C.F. 1301).
3. Cargo Declaration (C.F. 1302) in the English language.*
4. Ship's Stores Declaration (C.F. 1303).
5. Crew Effects Declaration (C.F. 1304).
6. Crew List/Passenger List (Immigration Form I-418).
7. Clearance from Last Port (original only – if available).

(*) Only one copy of the Cargo Declaration is required for in-transit cargo for foreign ports.

4. NOTE: Specific procedures for the entry and clearance of vessels are extensively described under Part 4 of the Customs Regulations (19 Code of Federal Regulations, Part 4) and Title 46, United States Code. Questions on such procedures may be directed to:

District Director of Customs,
P.O.Box 2112,
Old San Juan, Puerto Rico 00902.
Attention: Carrier Control Branch.
Tel: (809) 725-3310
(809) 723-2780 Ext. 259

Or to the Port Director of Customs at the following sub-ports: Fajardo (809) 863-0950, Mayaguez (809) 832-0308, Ponce (809) 842-3195 or 842-1030.

Immigration: From 0800 – 1700 hrs., Monday through Saturday, no charges. Exceptions are Federal holidays, Sundays and periods from 1700 hrs. – 0800 hrs. daily, when overtime charges paid by the Federal Government will be charged to the steamship company according to specified tariff.

Documents required:

1. U.S. Crew List, Form I-418 (only one is necessary) duly visaed by the American Consul at port of departure: if there is no Consul available, list must be signed by the Master and sworn before an Immigration Officer on arrival.

2. If crew is to be given shore leave, Form I-95 is to be prepared for each member of the crew. If this form fully filled out for each member of the crew is not presented to the Immigration Inspectors, crew will be detained on board.

3. Both copies of Form I-95 must be printed (or typed) legibly, not written in script.

4. Whenever passengers are carried, a separate Form I-418 listing each passenger, must be presented in accordance with instructions thereon, together with a Form I-94 if required.

For additional information on Consular Clearances for the Dominican Republic and Venezuela, and Immigration Documentary requirements, said offices should be contacted directly.

Agent:
3 sets of Bills of Lading.
2 copies of Manifest (for San Juan only).
1 copy of Crew List.
1 copy of Stores List.
1 copy of Crew Purchase List.
1 copy of Narcotics List.
1 copy of Passengers List.

PILOTAGE: Pilot services are available day and night. Pilotage is compulsory for: all vessels of foreign registry; American flag vessels bound to or arriving from foreign ports and American flag vessels not having on board a deck officer duly licensed as harbour pilot for Puerto Rico waters.

Ships' Agents must make arrangements with pilot station well in advance (not less than 24 hours) of arrival of vessel at harbour entrance. Pilot boats are painted black (hull) and white (topside). Show the letter "P" on each bow. Pilots board 3 miles offshore of sea buoy. Call Pilot station on Channel 16 VHF. There is no inner anchorage for incoming vessels to wait for the Pilot.

Port Administration: Most of the port terminal installations are under the control of the Puerto Rico Ports Authority. Utilisation of all port terminal facilities is subject to prior application to the Puerto Rico Ports Authority and the issuance of a written berthing permit by the Operations Division of the Maritime Department of the Ports Authority, tel: 723-4011.

Vessels approaching to enter San Juan Harbour shall remain outside, not less than 3 miles to the North of the harbour entrance, to pick up the Pilot; and vessels ready to depart shall inform the Maritime Traffic Control or look-out station via radio-telephone of their intention.

ANCHORAGES: Deep draft anchorage "E", on the S.W. shore of Isla Grande, is for vessels awaiting Customs or Quarantine, and no vessel shall remain more than 24 hours without a permit from the Puerto Rico Ports Authority and U.S. Coast Guard Captain of the Port.

The effective size of this anchorage area has been reduced on its S.E. sector on account of the construction of barge mooring facilities that encroach on the area.

Restricted Anchorage "F" (Fox), shoreward of the West margin of Anegado Channel, is for vessels discharging explosives. Anchorage permit required from U.S. Coast Guard Captain of the Port and the Puerto Rico Ports Authority.

Anchorage "D", East end of San Antonio Channel, is for yachts, schooners and small craft.

RESTRICTIONS: Besides the harbour entrance channel (Bar Channel) and the main ship channel (Anegado Channel) with depths of 48 ft. and 36 ft. 6 in., respectively, there are 4 other navigable channels in the inner harbour:

The Army Terminal Channel, which runs in a straight North to South direction is approximately 1 mile long and 300 ft. wide with a depth of 37 ft. The channel leads into the turning basin off the Army Terminal on the South shore of the bay. On the Westerly margin of the channel there are located the pile clusters berthing facilities, silos and other shoreside installations for the receipt of bulk grain shipments and petroleum products.

The Puerto Nuevo Channel, approximately 1 mile long and 300 ft. wide, with an average depth of 30 ft. 6 in., runs East-Northeasterly from the Army Terminal Turning Basin to the Graving Dock Turning Basin. This provides access to modern marine terminal facilities in the Puerto Nuevo port zone.

The Graving Dock Channel, approximately 1 mile long and 300 ft. wide, with average mid-channel depth of 29 ft., runs in a general Southeasterly direction from Anegado Channel to the Graving Dock turning basin.

San Antonio Channel, approximately 1.5 miles long and 300 yards wide, with average mid-channel depth of 32 ft. 6 in.–36 ft. branches out from Anegado Channel for about 0.25 miles up to Isla Grande Light Beacon, thence along the North shore of Isla Grande in a straight West-East direction for about 1 mile to the small craft anchorage "D" and the Yacht Club. This channel is bounded on the North margin by commercial piers and the Frontier Base berthing facilities and in the South by Isla Grande marginal wharf and the container terminal facilities.

MAX. SIZE: Cargo vessels 750 ft. in length call regularly at the Port of San Juan. Channel to tanker's berth, 36 ft.

TUGS: Crowley Towing & Transportation, tel: (809) 723-6164, telex: ITT 3450056, RCA 3252660, and McAllister Brothers, Inc., Puerto Rico Branch, tel: (809) 724-2360, Telex: Towco 3450469, operate a fleet of tugs. Service is available day and night, subject to previous arrangements.

Use of tugs compulsory for docking and undocking vessels 8,000 tons displacement and over unless equipped with bow or side thrusters.

HEALTH: Foodstuffs and plants not to be taken ashore.

RADIO: Radio communication to all points, including ships at sea, is available through commercial systems. Cables, telex via RCA Communications, Inc., a global service of Radio Corporation of America, tel. 723-6170, San Juan, Puerto Rico. Also, Western Union International, tel: 725-2121, ITT All American Cables & Radio, tel: 723-3732, and ITT World Communications, Inc., tel: 725-1515.

The Maritime Traffic Control Station "KRS – 893" at Fort San Cristobal in San Juan harbour is manned around the clock for radio-telephone communication with incoming and outgoing ships' traffic. Transmitting vessels can communicate with the station through 156.8 MHz (Channel 16) for call and reply and working Channel 14, 156.7 MHz.

BERTHING: Finger Piers No. 1 – 7 and the open bulkheads between them are located in the Old San Juan waterfront and Piers No. 8 to 14 are situated in the section known as Puerto de Tierra on the outskirts of downtown San Juan at the North margin of San Antonio Channel.

With the exception of Pier 15 and Frontier Base which are Navy property, all the piers including those in the Old San Juan waterfront and the new facilities (Terminals A, B, C, D, E, F, G, H, J, K, L, M and 1/2 N) located in the port zone known as Puerto Nuevo, on the South shore of San Juan, are Ports Authority owned installations. The utilisation of the berthing and other facilities by maritime operators is subject to prior approval by the Ports Authority.

The Port installations in San Juan Harbour aggregate in the neighbourhood of 22,700 lineal ft. of berthing space; 1,100,000 sq.ft. transit shed area: 1,500,000 sq.ft. open storage area and 105 acres of marshalling yards. The latter facilities are located mostly at the Puerto Nuevo port zone and Isla Grande.

All vessels must request and obtain well in advance before arrival a berthing permit from the Ports Authority.

Pier 1: North shore of the harbour, in the Old San Juan waterfront, East of Customs Building and next Westerly to the ferryboat landing. Modern twin berth, 770 ft. long, double deck, cruise and passenger vessels' terminal, pierside passenger and baggage gangways, elevators, parking and shopping. Water and light facilities available.

Ferry Terminal: Next Easterly to Pier 1. Ferry terminal for the San Juan-Catano ferry fleet.

Pier 3: North shore of the harbour, Old San Juan waterfront next Easterly to the ferry terminal. Tourist ships' terminal similar to Pier 1. Depths in the approaches and alongside tourist piers 35 ft.

Wharf No. 6: Marginal wharf, 1,300 ft. long, accommodates cruise and passenger vessels. Water and light facilities available.

Pier 7: Northerly continuation of Pier No. 6; 472 ft. long, 1 berth.

Pier 8: East of Pier 7, finger pier, 3 berths, general cargo pier. Transit shed area and other covered storage 171,000 sq.ft., open area 40,000 sq.ft. Water and light facilities available.

Pier 9: East of Pier 8. Finger pier, 3 berths, general cargo pier. Net storage space pier shed 133,738 sq.ft. open area 40,000 sq.ft. Water and light facilities available. South berth is a tug–barge terminal.

Pier 10: North shore of San Antonio Channel. East of Pier 9. Open Finger pier, 1 ship berth, tug and barge terminal. No transit shed space. Water, fuelling facilities and light available.

Wharf No. 11: East of Pier 10, marginal wharf, 1 berth, 580 ft. of bulkhead, general cargo pier. Transit shed area 100,000 sq.ft. ample back area. Water and light facilities available.

Wharf No. 12: An extension of Wharf No. 11 Bulkhead 550 ft. long, wide apron, 15,000 sq.ft. transit shed area, 37,000 sq.ft. open storage. General cargo wharves. Water and light facilities available.

Wharf No. 13: Prolongation of Wharf No. 12: 28,000 sq.ft. transit shed area, 55,000 ft. open storage area, general cargo wharf. Water and light facilities.

Pier 14: Extension of Piers 12–13 bulkhead; marginal wharf, general cargo pier, wide apron. 446 ft. long, 40,000 sq.ft. transit shed area, ample marshalling area. Water and light facilities available.

Frontier Base Pier: Navy facility operated by the Puerto Rico Ports Authority under contract. 2 berths for sea-going vessels. Depth alongside 30 ft. Principally used for berthing of cruise vessels and conventional ocean carriers handling open storage cargo.

Isla Grande Terminal: South shore of San Antonio Channel. General cargo wharf. 1,500 ft. long bulkhead. Wide aprons. Transit shed 32,000 sq.ft. with 240,000 sq.ft. of paved open area. Easterly section of bulkhead for shallow draft vessels.

Container Terminals:

(a) In Westerly section, Bulkhead wharf 1,320 ft. long. Wide apron, ample marshalling yards for trailers. 2×45 tons capacity container handling cranes. Paved marshalling area approximately 1,800,000 sq.ft.

(b) On the South shore, berthing facilities, 300 ft. bulkhead wharf with adjacent areas for TMT's roll-on/roll-off operations. Shoreside concrete ramp extending out to seaward. Tug-barge operation, loading and unloading through bow and side ramps, about 30 acres for trailers on exclusive lease basis. Max. draft approximately 18 ft.

(c) Trailer Marine Transport roll-on/roll-off three level ramp, barge-tug operation; loading and unloading at bow. Max. draft 18 ft.

The lands in Isla Grande and the conventional cargo handling terminal facilities are U.S. Navy property under lease and operated by the Puerto Rico Ports Authority. These facilities are in the process of being transferred to the ownership of the Puerto Rico Ports Authority.

Pier 15: Bulkhead Wharf and Finger Pier used by commercial vessels. Containerised and general cargo facilities. U.S. Navy installation under lease to Perez & Cia. from Puerto Rico.

Pier 16: Navy installation under lease. Graving and floating docks. See "Repairs".

Puerto Nuevo Docks: Terminals "A" and "B" marginal wharves 2×500 ft. berths. 102,000 sq.ft. transit shed area. 2 cargo sheds. 30 ft depth alongside. General cargo piers. Limited open storage area.

Trailership Terminals: 3 at Isla Grande port zone, above, 10 at Puerto Nuevo port zone. Berths C, E, F, G, H, J, K, L and M and West Side Army Terminal.

Berths "J" and "K": P.R. Maritime Shipping Authority Roll-on/Roll-off terminal. Shoreside movable ramps for side loading and unloading. Extra wide pier platform, ample trailer marshalling yards. 600 ft. long marginal wharf.

Berth "D": 100,000 sq. ft. of transit shed space for break-bulk operations and cargo stripping and distribution. Marginal wharf 40 ft. wide, 600 ft. long. Ample trailer marshalling yard. 30 ft. depth alongside, approximately.

Berths "E", "F", "G", "H", "J", "K", "L" (900 ft.), and *"M":* 600 ft. each, continuous bulkhead wharves, lift-on/lift-off operation. Max. draft alongside 30 ft. Extra wide pier platforms. Ample trailer marshalling yards. Five 25 ton capacity pierside cranes are installed at Berth "E" to "H".

Army Terminal Pier: Finger pier; 3 berths. Approximately 50,000 sq. ft. transit shed area. East and West berths 600 ft. each. North berth 200 ft. Under the control of the Ports Authority. West side, ramp for Roll-on/Roll-off operation.

Isla de Cabras Pier: Explosives handling pier at Isla de Cabras. Ports Authority property.

BULK HANDLING FACILITIES:

Bulk Grain Handling Facilities: Berthing clusters, silos and other shoreside installations for the receipt of shipments of bulk grains (Nebraska Mills, California Rice Mills, Red Seal, etc.).

STEVEDORES: Arranged by the ship's Agents.

MEDICAL: Medical attendance and services are available for seamen at the United States Public Health Service in San Juan (out-patients). The Ashford Memorial Community Hospital handles internal cases.

TANKERS: *Caribbean Oil Refinery:* Pile clusters berth for handling gasoline and fuel oils, max. permitted draft 33 ft.

Navy Oil Pier: South shore of the bay, next Westerly to Terminal "A", Puerto Nuevo. G.S.A. property leased to Texaco, Esso, Shell. Berthing facilities 350 ft. long and 24 ft. MLW. Bunkers available.

FRESH WATER: Most of the piers have adequate installations to supply water.

FUEL: Served in barges either alongside the vessel at the pier or at anchor. Other combustible liquids are delivered in tank trucks by Shell, Esso and Texaco.

SURVEYORS: American Bureau of Shipping – Mr. J. A. Schilling – Exclusive Surveyor.

Lloyd's Register of Shipping – Capt. Francis B. Crocco.
Det Norske Veritas
Germanischer Lloyd
Chinese Register of Shipping
Registro Italiano Navale
Nippon Kaiji Kyokai
Hellenic Register of Shipping
Panama Bureau of Shipping
} Captain Francis Crocco acts as non-exclusive surveyor.

REPAIRS: (a) Puerto Rico Drydock and Marine Terminals, Inc., a commercial ship repair and drydock facility at Pier 16. Graving Dock: 632 ft.×83 ft.×24 ft. – reinforced concrete. floating dock: 200 ft.×40 ft.×15 ft. – reinforced steel. Two 1,000 ft. piers, 1,000 ft. bulkhead. Three cranes: Mobile diesel electric crane – 25 ton lift; Diesel mobile crane 50 ton lift and locomotive crane – 8 ton lift.

(b) San Juan Shipyard & Marine, at Isla Grande, operates dry docking and ship repair facilities including a marine railway and a floating dock 203 ft. long, 44 ft. beam capable of taking vessels up to 1,400 tons.

(c) Vaello Shipyard, at La Puntilla, Catano operates a marine railway for dry-docking and repair of small vessels.

DRY DOCKS: Puerto Rico Drydock and Marine Terminals, Inc., Miraflores St., Stop 11, Tel: 723-6010.

Vaello Shipyard, Inc., 1 Barbosa St., Catano, Puerto Rico. Tel: 788-1011.

San Juan Shipyard, Isla Grande, San Juan, Puerto Rico. Tel: 725-2258, 725-2282.

GANGWAY/DECK WATCHMEN: Ship provides gangway watchmen.

OPENING/CLOSING HATCHES: By stevedores.

IDENTIFICATION CARDS: Required to go ashore.

CONSULS:

Belgium	Tel: 725-3179	Great Britain	Tel: 767-4435
Bolivia	„ 723-0180	Honduras	„ 723-5230
Colombia	„ 722-3562	Italy	„ 722-4344
Denmark	„ 725-3885	Panama	„ 767-2175
Dominican Rep.	„ 725-9550	Netherlands	„ 723-1442
	722-4422	Mexico	„ 724-7812
El Salvador	„ 723-9160	Spain	„ 722-1045
Finland	„ 722-0283	Sweden	„ 725-1842
France	„ 722-3415	Uruguay	„ 723-1787
	725-4279	Venezuela	„ 725-4055
Germany	„ 725-5912		
	722-2595		

REPATRIATION: Arranged by ship's Agents.

AIRPORT: On outskirts of port area, served by regular airlines.

TIME: GMT minus 4 hours.

HOLIDAYS: *New Year's Day (January 1st); Three Kings' Day (January 6th); De Hostos Birthday (January 11th); Washington's Birthday (February, Third Monday); Emancipation Day (March 22nd); *Good Friday; De Diego's Birthday (April 16th); Memorial Day (May, Last Monday); *Independence Day (July 4th); Munoz Rivera's Birthday (July 17th); *Constitution Day (July 25th); Barbosa's Birthday (July 27th); *Labour Day (September, First Monday); Columbus Day (October 12th); Veteran's Day (November 11th); Discovery of Puerto Rico (November 19th); *Thanksgiving Day (November, Last Thursday); Elections Day (November every 4 years); *Christmas Day (December 25th). Any holiday falling on Sunday is observed on the following Monday.

*No cargo operations on these dates.

POLICE/AMBULANCE/FIRE: Police, 343-2020; Ambulance, 765-9700; Fire, 343-2330.

A Ports Authority ambulance stationed at Isla Grande, emergency room and nurse are available for emergency service.

USEFUL TELEPHONE NUMBERS:

Maritime Traffic Control Station	Tel: 722-1457
	Tel: 724-1412
P.R. Ports Authority Maritime Operations Division	Tel: 723-2889
P.R. Ports Authority Maritime Bureau	Tel: 724-3262
San Juan Harbour Pilots	Tel: 722-1169
Puerto Rico Ports Authority	Tel: 723-2260
U.S. Customs Bureau	Tel: 723-2780
Federal Bureau of Investigation	Tel: 765-6000
Immigration and Naturalisation Service	Tel: 753-4280
U.S. Coast Guard-Captain of the Port	Tel: 725-1805
U.S. Coast Guard-Marine Safety Office	Tel: 722-2697
U.S. Army Corps of Engineers	Tel: 783-2424
U.S. Public Health Service	Tel: 723-5200
U.S. Quarantine Station	Tel: 791-3444
Federal Maritime Commission, S.J. Office	Tel: 753-4199
Environmental Protection Agency	Tel: 725-5140
Federal Communications Commission	Tel: 722-4562

EMERGENCY CO-ORDINATION CENTRE: U.S. Coast Guard S.A.R., U.S. Coast Guard Marine Safety Office, San Juan Base, La Puntilla, San Juan, Puerto Rico. Tel: 725-1805, 722-2697.

SHORE LEAVE: Possible, however, Form I–95 is to be prepared.

BANKS: Banco Central Economias, Banco Central Economias Building, Ponce de Leon Avenue, Hato Rey, Puerto Rico.

Banco Comercial de Mayaguez, 400 Munoz Rivera Avenue, Hato Rey, Puerto Rico.

Banco Cooperativo de P.R., Condominium The Executive, Ponce de Leon Avenue, Hato Rey, Puerto Rico.

Banco de Ponce, 268 Munoz Rivera Avenue, Hato Rey, Puerto Rico.

Banco de San Juan, 654 Munoz Rivera Avenue, Hato Rey, Puerto Rico.

Banco de Santander Puerto Rico, 251 Recinto Sur, San Juan, Puerto Rico.

Banco Popular de P.R., Popular Center Building, Hato Rey, Puerto Rico.

Bank of America N.T.S.A., Pan Am Building, Hato Rey, Puerto Rico.

The Bank of Nova Scotia, Mercantile Plaza Building, Hato Rey, Puerto Rico.

Bayamon Federal Savings, Bayamon Shopping Center, Bayamon, Puerto Rico.

Citibank N.A., 252 Ponce de Leon Avenue, Hato Rey, Puerto Rico.

Chase Manhattan Bank, 254 Munoz Rivera Avenue, Hato Rey, Puerto Rico.

The Royal Bank of Canada, Pan Am Building, Hato Rey, Puerto Rico.

The Bank of America, Pan Am Building, Hato Rey, Puerto Rico.

STORING: See "Prelims", page viii.

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. Same as U.S. mainland.
6. Yes.

DEVELOPMENTS: The new port sector, under development at Puerto Nuevo, now at an advanced stage, will ultimately comprise 15 berths, of which 12 are already in operation.

Port facilities used predominantly by trailerships are located towards the Southern sector of the bay. These are marginal wharf type facilities immediately adjacent to the Puerto Nuevo Channel. Presently, the Ports Authority has initiated the final stage for the development of some 108 acres of land that will be used as back-up lands in connection with the ocean-front operations of Wharves "J" to "N".

These lands have been in a process of stabilisation over the last years and presently a project is already under way to remove the sand surcharge deposited on them. The material being removed is being used as surcharge material for the stabilisation of other areas.

It is anticipated that the on-going surcharge removal project will be finished around mid-1984. The degree to which this stabilised terrain will be further developed will depend on their demand for use by maritime interests.

AUTHORITY: Puerto Rico Ports Authority, G.P.O.Box 2829, San Juan, Puerto Rico, 00936. *Tel:* Maritime Traffic Control Station, 722-1457, 724-1412; P.R. Ports Authority Maritime Operations Division, 725-4667. P.R. Ports Authority Maritime Department, 724-3262; San Juan Harbour Pilots, 722-1169; Puerto Rico Ports Authority, 723-2260. *Telex:* 9464 Auto DPR. *Contact:* Isidoro G. Davila, Chief Maritime Department. Jose R. Garcia, Chief Operations Division.

AGENT: Continental Shipping, Inc. P.O. Box No. S-2467 San Juan, P.R. 00903. Cable: Conship. Telex: R.C.A. (325) 2770, I.T.T. (345) 0417. Tel. (809) 725-2532.

YABUCOA: 18.02 N. 65.48 W. (See Plan Book)

Man-made harbour and channel located at the S.E. corner of Puerto Rico. Berthing facilities for deep draft tankers and a barge dock. Port and shoreside installations for the receipt and shipment of fuel oils and liquid chemicals for Puerto Rico Sun Oil Company, a petro-chemical complex and barge dock and shoreside facilities for Union Carbide Graphite of Puerto Rico.

Facilities consist of the following: Ship channel 500 ft. wide, 40 ft. depth. Turning Basin. Dock and operating platform for a max. of 100,000 d.w.t. tank vessels. Mooring, breasting and turning dolphins. Catwalks. Additional dock appurtenances (fire-fighting equipment, protective jetty, etc.). Pilot services available day and night and tugboats available.

Port operations under the control of the Captain of the Port.

For Customs service, Port Yabucoa is under the jurisdiction of the Fajardo Custom House.

AUTHORITY: Puerto Rico Ports Authority. See "San Juan".

Qatar

DOHA: 25.17 N. 51.32 E.

DOCUMENTS:

8 copies of the Unfreighted Manifest.
2 copies of the Freighted Manifest.
2 copies of the Hatch List.
2 copies of the Stowage Plan.
2 copies of the Dangerous/Hazardous Cargo List.
1 set of Bill of Lading.
1 set of Crew List.
A list of Food Stuff.
A list of Insecticides and any Poisonous Cargo.

Agents:
1 copy of the Arrival Report (Supplied by the Agent on boarding).
1 copy of the Crew List.
1 copy of the International Declaration of Health.
1 copy of the Passenger List (if applicable).

Port Health:
1 copy of Crew List.
1 copy of Dates and Types of Inoculations.
1 copy of the International Declaration of Health.

Immigration:
4 copies of Lists of Passengers Landing (if applicable).

Customs:
Bonded Store List (Bond will be sealed but issues are available).
Port Clearance Certificate should be procured before the vessel sails.

PILOTAGE: Compulsory pilotage for all vessels of 14 ft. draft or more. Naval vessels exempted. Application for a Pilot should be made to the "Doha Port Control" through VHF (Channel 16), 24 hours prior to the arrival of the vessel at the pilot station (via Bahrain Radio).

Pilot station keeps a VHF watch 24 hours a day on Channel 16. Call sign Doha Port. Similar watch kept on R/T 2182 kHz.

Pilot boat proceeds to the vicinity of the Doha Light Vessel, position Lat. 25° 16′ 08″ N., Long. 51° 41′ 05″ E. when the Pilot is required. Pilot launches are painted white. When the vessel is underway the Pilot requires a pilot ladder complete with manropes. When the sea is calm and the vessel is at anchor the accommodation ladder may be used.

ANCHORAGES: Near the Doha Light Vessel and Southerly from it only. Minimum depth of water 5 fathoms.

RESTRICTIONS: Depth of water in entrance is 27 ft. plus tide and the minimum depth of water required under the keel for manoeuvring in the channel is 3 ft.

MAX. SIZE: Max. length 620 ft., max. breadth 89 ft., max. draft 28 ft. 6 in. on favourable high tide.

HEALTH: The International Flag signals for Pratique must be flown and remain up until the vessel is cleared by the Port Health Authorities. A Port Health Official will board the vessel in the anchorage or at the Deep Water Jetty when the vessel is alongside. There is no Automatic or Radio Pratique available.

RADIO: ETA and Agent's messages should be routed through Bahrain Radio. Radio-telephone communications through Doha Port signal station. Calling and listening 2182 kHz. Working frequencies, 2638 kHz, 2738 kHz, 2570 kHz.

TUGS: 7 Government tugs are normally available to assist in berthing operations.

BERTHING:

5 Berths – Total length 956 m. (Deep Water Berths); depth alongside 9.1 m.

4 Berths – Total length 893 m. (Shallow Water Berths); depth alongside 7.5 m.

Outer and inner dredged approach channels, 8.2 m. and 9.1 m. depth (C.D.) Wharves for smaller craft: West Inner Wharf 207 m., Collins Jetty 135 m.; Country Craft Jetty 287 m.; Fish Factory Wharf 60 m. Depths 2.5 m. to 6.0 m. (C.D.)

Equipment: 2×70 ton, 4×40 ton, 3×30 ton, 3×20 ton, 2 straddle carriers, 2 container cranes and 122 trailers.

Transit storage areas at landward end of approach causeway with extensive paved open storage and transit sheds giving 16,722 sq.m. cover.

New transit storage area on extended main quay with extensive paved open storage, 5 transit sheds giving 30,000 sq.m. cover completed. Construction of 500 ton cold storage completed. Control tower for Doha Port also proposed.

Normally berthing and unberthing to and from the deep water jetty is with certain reservations:

(*a*) Draft and trim of vessel.
(*b*) Height of tide.
(*c*) Visibility from Navigation Bridge.
(*d*) Prevailing weather conditions.

The duty Pilot has the option to berth or unberth a vessel at his discretion after consultation with the Senior Pilot, when the above mentioned conditions are unfavourable.

STEVEDORES: ETA advice is required on the number of gangs workable. Advance notice is required for any heavy lifts (say in excess of 10 tons) and the consignee's name if possible as special arrangements have to be made for handling. Average discharge rate is 75 tons per hook per day.

MEDICAL: Unless an emergency no advance notice is required. Hospital facilities do exist and a doctor will visit on request. Current Vaccination and Cholera Certificates are required.

DENSITY: The density of the water is salt (1025) at all states of the tide.

FRESH WATER: Fresh water is available at the anchorage and when alongside the jetty and is supplied by tankers.

CARGO GEAR: No additional requirements apart from those required by International Law.

IDENTIFICATION CARDS: Discharge Books or Passports are required to be handed to the Police before any crew member may proceed ashore. See "Shipmaster's Report".

FUEL: Bunkers available from Qatar National Tanker and Bunker, Doha.

Actual Bunkering Locations:
Doha Port Harbour
Pilot Station Doha
Umm Said Harbour
Pilot Station Umm Said
Inner Anchorage
Outer Anchorage
Pilot Station – Halul Island

Grades Available: IFO 180, M.D.O., IFO other than 180 with 14 days' pre-notice, upon request.

Supply Method:
Barge QNB.1 – 2 products – 650 tonnes.
Tanker ZOR – 2 products – 5,300 tonnes. Equipped with 3 Yokohama fenders – 1.7 m. diameter × 4 m. on port side.

Pumping Rates: Barge: 2 pumps. 100 tonnes per hour. ZOR: 3 pumps. 750 tonnes per hour.

Operation: 24 hours per day – 7 days per week.

GANGWAY/DECK WATCHMEN: The Public Security Department (Police) post a guard at each gangway, but it is advisable that the ship also supplies a watchman. Before landing *every* crew member must lodge his passport or seamen's identity card with the guard when alongside the jetty and at the dock Police Station when at the anchorage.

OPENING/CLOSING HATCHES: This work may be carried out by crew or stevedores, but usually by the latter.

CUSTOMS ALLOWANCES: Qatar is "dry" and no official allowance is made. The bond is sealed on the ship's arrival.

CONSULS: The following countries maintain embassies in Qatar:

Bangladesh
Egypt
France
Gabon
Germany (F.R.)
Great Britain
India
Iran
Iraq
Japan
Jordan
Korea
Kuwait
Lebanon
Libya
Mauritania
Morocco
Oman
Pakistan
Saudi Arabia
Somalia
Sudan
Syria
Tunisia
U.S.A.
Yemen

REPAIRS: All kinds of repairs can be carried out. Metal-locking, bottom brushing and underwater welding.

REPATRIATION: Crew changes can be carried out. The Agents will need to know the names, discharge book or passport numbers and necessary information of dates, etc. well in advance for the Authorities. Repatriation is normally by air. Crew joining must have Seaman's Book.

AIRPORT: It is about 3 miles from the port to the airport. There are regular flights to Europe, U.K. and India by British Airways, M.E.A., Air India, P.I.A., Gulf Air, etc.

TIME: The standard time in Qatar is GMT plus 3 hours.

HOLIDAYS: The holidays in Qatar are usually religious and therefore fall on movable dates. As far as shipping is concerned there are only 2 days when work is not possible under any circumstances, Idd Al Fitr and Idd Al Adna.

POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required.

TELEPHONES: Telephone available at the new Jetty. No. 414865.

GENERAL: Particular attention must be paid to:

(1)The Qatari flag must be flown at all times at the fore mast.

(2) Liquor is not allowed ashore and it is a serious offence to offer alcohol to a Qatari.

(3) Smoking is not permitted in any of the port areas.

SHORE LEAVE: Shore leave is permitted after the Immigration Authorities have cleared the ship and given permission, in writing, on the Crew List. Seamens' documents or passports must be deposited with the police at the gangway and retrieved on returning aboard.

SHIPMASTER'S REPORT: November 1984.

The Public Security Department warned me that the crew are not allowed to take a walk around the jetty when it is a holiday or the stevedores are not working.

Therefore, the crew must go directly outside the harbour limits or they stay on board.

The Security Department did not post a guard at the gangway but every crew member before landing must present his passport or Seamen's Identity Book to the Immigration and they issue a shore permit that will be shown to the guard together with the Seamen's Identity Book.

The guard will keep the Seamen's Identity Book and the crew can cross to the Harbour Gate with the Shore Permit.

When the crew come back to the ship they collect their Seaman's Identity Books at the Gate but can keep the Shore Permit for the next time they go ashore.

Before the ship sails all the issued shore permits must be returned to Immigration.

AUTHORITY: Department of Ports, Ministry of Communications & Transport, P.O.Box 313, Doha, Qatar. *Tel:* 413322 PABX. 414626 *Telex:* 4378 Mawani DH. *Cables:* "Mawani". *Contact:* The Harbour Master, Tel: 414287. A. Jaber Muftah, Director of Ports.

AGENT: Qatar National Navigation & Transport Co. Ltd., P.O.Box - 153, Doha. Telex: 4206 Melaha Dh. Cable: "Navigation" Doha Telephone: 321175/9, 23684, 21213.

HALUL ISLAND: 25.40 N. 52.25 E.

Halul Terminal S.B.M. **(See Plan Book)**

LOCATION: Halul Island (Position Lat. 25° 40.3′ N., Long. 52° 24.6′ E.) is part of the State of Qatar. Doha, the capital, is situated on the Eastern side of the country.

Halul Island is 52 miles in a N.E'ly direction from Doha. It serves as the export terminal for Qatar Marine Crude which is produced from the offshore oilfields of Idd El-Shargi, Maydan Mahzam, and Bul Hanine. The Halul Terminal is operated by Qatar General Petroleum Corporation (Offshore Operations).

Halul Island: The island is roughly circular in shape with a radius of approximately half a mile. The island is hilly, rising to an elevation of 202 ft. (61.6 m.). (Charts: U.S. Government charts: 62400, 62397, 62402, British Admiralty charts: 2886, 3950, 3517, 3953).

The island is fringed by a reef which in places extends about 3 cables offshore.

The island is barren, with a number of oil storage tanks, a small industrial complex and personnel living quarters. There is a harbour on the Southern side of the island which is only for use of small craft.

DOCUMENTS: Following papers are required on arrival:

Notice of Readiness.
2 Crew Lists.
2 Health Declarations.
1 Latest Light Dues Certificate.

The Berthing Officer acts as ship's Agent and on behalf of National Customs and Immigration Authorities.

PILOTAGE: A Pilot is at all times to be considered as an advisor to the Master. The latter shall remain solely responsible for the safety of his vessel.

Boarding: When VHF contact is made with Halul Control the Pilot will advise the Master whether he should proceed to anchor or whether a Pilot will board the vessel immediately.

A Pilot will board the vessel about 2 miles East of Halul Island. The vessel is expected to make (if necessary) a good lee for the pilot launch.

Ship Deficiencies: The Master should inform the Pilot of any deficiencies on his vessel and any unusual characteristics pertaining to his vessel e.g. lack of astern power, time to change from ahead to astern, etc.

Pilot Signals: The vessel must display the proper signals prior to and subsequent to the boarding of a Pilot.

Pilot Ladder: The vessel shall rig on the starboard side, a pilot ladder which must conform in construction to all recognised international standards for pilot ladders. On vessels over 50,000 d.w.t. there shall be rigged either a mechanical pilot hoist or a combination of pilot ladder and accommodation ladder.

In the latter case the Pilot must not be expected to climb more than 9 m. on the pilot ladder.

There must be provision for the Pilot to pass safely from the head of the ladder to the deck of the ship.

Any such pilot ladder must be rigged well clear of all overboard discharges. 2 manropes are to be fitted, one on each side of the ladder, together with a safety line if conditions warrant such. At night both the ladder and the point of access must be properly illuminated.

A responsible officer must be in attendance when shore personnel are boarding/disembarking.

Note: To prevent unauthorised persons from boarding the tanker unobserved, particularly at night, the pilot/accommodation ladder must be retrieved after the Pilot and his assistant have boarded.

NAVIGATION: A light is exhibited at an elevation of 220 ft. (67.1 m.) from a white concrete tower with a black top, 16 ft. (4.9 m.) in height, situated on the summit of Jazirat Halul. Light characteristic is Fl.W.R. 12 secs. W 19M R 9M. Sectors W 030° – 300° (270°) and R 300° – 030° (90°) over pipe-line area. On the Western and Eastern arms of the small boat harbour there are floodlights illuminating the breakwaters. There are various radio masts with red lights, the highest being 365 ft. above sea level. On each of the SBM loading points there is a light morse "U" every 20 secs.

Deepwater Channel: To the East of Halul there are 2 buoys marking a deepwater channel which is the recommended departure channel for all vessels.

H-1 Green conical – Quick flash green.
H-2 Red – Quick flash red.

Prohibited Navigation: The offshore oilfields are prohibited for navigation because of the numerous production stations, drilling rigs, wellhead jackets and oil and gas pipe-lines.

The location of the 3 oilfields are:–

1. Idd El-Shargi with centre Lat. 25° 28.9′ N., Long. 52° 22.6′ E. radius 2 miles.
2. Maydan Mahzam with centre Lat. 25° 36.0′ N., Long. 52° 33.1′ E. radius 2 miles.
3. Bul Hanine with centre Lat. 25° 25.5′ N., Long. 52° 44.0′ E. radius 5 miles.

Navigational Warning: Masters should be aware, when crossing any pipe-line, that many pipe-lines are not under the seabed and that the charted water depth may be reduced by at least 2 m.

It is strongly recommended that vessels do not pass South of Halul when making passage to/from Umm Said or Doha.

ANCHORAGES: Vessels are advised to anchor in an area centred on a position from Halul Island light 087° × 2.5 miles with radius 6 cables. Water depth is 70 ft. – 80 ft. and the bottom is sand.

Prohibited Anchorage: The area covered by the red sector of the Halul Island light is to be taken as a prohibited anchorage. This is due to the number of oil pipe-lines within this area.

MAX. SIZE: SBM No. 1 up to 22 m. draft. (In certain conditions of weather and tide a maximum draft of 25 m. can be accepted). SBM No. 2 up to 29 m. draft. Displacement limit of 640,000 tons for both SBMs.

HEALTH: See "Medical".

RADIO: *General:* QGPC (Offshore) has its own radio station in Doha call sign Alpha Seven Sierra (A7S). Cable address: Qatoff Doha PDS/4. Telex: Qatoff 4201 DH PDS/4.

A sub-station is also maintained on Halul Island (call sign "Halul Control").

A7S maintains 24 hour watch on 500 kHz while Halul Control maintains a continuous radio watch on VHF Channels 6 and 16.

Vessels bound for Halul should contact "Halul Control" approximately 6 hours prior to arrival on VHF Channel 6.

Long distance communication (initial ETAs, etc.) will normally be routed via Bahrain Radio. However, the 72 hour arrival confirmation and any other queries to the Agent can be sent direct to A7S.

Advance Notice of Arrival: A vessel must advise:

(a) Its ETA at Halul at least 72 hours before arrival.
(b) Confirmation of any amendment to its ETA at Halul 24 hours before arrival at Halul.
(c) On arrival at Halul, the exact time of arrival at Halul.

Note: Any failure to observe the laid down sequence of ETA advice may delay the loading of the vessel at Halul.

Vessels should contact Halul Control on VHF Channel 6 approximately 6 hours prior to arrival at Halul or as soon as VHF contact can be made.

Ships Loading at other Gulf Ports: Masters are advised that when they commence loading at the last port before Halul they should instruct their Agent to send a corrected ETA for Halul to QGPC (Offshore Operations).

Standard Cable: On receipt of the 72 hours ETA advice QGPC (Offshore Operations) will transmit via Bahrain Radio and/or A7S Doha a standard cable containing details of cargo, quantities, etc. (See below.)

If any vessel has any queries with regards to this cable or if the vessel can not comply with the requirements of the cable the Master should contact QGPC (Offshore Operations) immediately.

Halul Terminal Standard Cable via A7S or Bahrain Radio
Ship's ETA..............................
To: Master.................................... Call Sign..............................

We confirm your vessel to load approximately .... bbls Qatar Marine Crude for discharge...........loading temperature .... Degrees F, API..

Vessel to berth at SBM-1 or 2 approximately 3 miles, 130° off Halul Lighthouse.

Terminal will provide 2 mooring lines and you are requested to have 2 messengers ready forward.

Ship's **starboard** manifold and derricks/cranes should be ready to connect 2×16 in. hoses at SBM-1 and at SBM-2. You are requested to have 16 in./20 in. reducers ready. Derrick/crane should be ready to lift 10 tons.

Ship's crew guided by our foreman are required to moor vessel and connect hoses. When Berthing Master, for whom please make a good lee, has boarded, crew should be ready to immediately lift on board mooring gear from the pilot launch on their starboard side.

Please reconfirm final ETA when within range of Halul Control Channel 6. Information for berthing and hose conections will be given by Halul Control prior to arrival. Berthing Master will board 2 miles East of Halul. Please acknowledge. Confirm Derrick/crane equipment suitable. Advise deballasting time, maximum loading rate available, your draft on arrival and on sailing from the SBMs and if patented bow chain stoppers available, indicate type.

Qatoff Doha.

VHF: A Company VHF station on Halul Island, call sign "Halul Control" maintains a continuous watch on Channels 16 and 6 (Channel 6 being the working frequency). The station has a range of approximately 50 miles and incoming tankers should establish communications with this station when within range.

Ship to shore communication during loading is by portable VHF Radio telephone with emergency shutdown system, provided by the terminal.

TUGS: Not available.

BERTHING: Approach is from the open sea, passing to the Eastwards of Halul. There are 2 single buoy moorings. No. 1 SBM in position Lat. 25° 38.7′ N., Long. 52° 26.4′ E. This berth will primarily accommodate vessels up to 640,000 tons displacement. No. 2 SBM in position Lat. 25° 38′ 36″ N., Long. 52° 27′ 35″ E. This berth will accommodate vessels with up to a draft of 29 m. In both berths, mooring lines from the buoys are secured on the forecastle head using equipment provided by the terminal or using ship's bow chain stoppers if fitted. A suitable messenger rope should be ready for use. No moorings are used aft. The Berthing Master will advise in detail the mooring procedure.

	SBM 1	*SBM 2*
Position from Halul Lt.	138°×2.25 miles	126°×3.25 miles
Loading pipe-line	30 in.	48 in.
Submarine hoses	2×16 in.	2×24 in.
Floating hoses	2×16 in.	1×20 in. with 16 in. tail 1×24 in. with 16 in. tail
Length of hoses	1×960 ft. 1×990 ft.	1×1020 ft. 1×1000 ft.
Manifold Connection	2×16 in.	2×16 in.
Mooring Ropes	2×15 in. braided nylon grommets	2×15 in. braided nylon grommets
Water depth	105 ft. (32 m.)	120 ft. (36.5 m.)
Max. draft	72 ft. (22 m.*)	95 ft. (29.0 m.)
Loading rates	7,000 cu.m./hr.	12,000 cu.m./hr.

*Also see "Max Size".

HOSE CONNECTION:

Connection Position: Hoses will be connected/disconnected on starboard side by ship's crew. The Operations Assistant will give guidance to the crew as required.

Connection Sequence: The first hose will be the tanker rail hose string. It must be connected to the forward of the 2 manifold connections.

Hose Sizes: Tanker rail hoses on both SBMs are 2×16 in. diameter.

Ship Lifting Capacity: To lift these hoses a derrick or crane with a SWL of 10 tons minimum is required.

Connection: The hoses shall be bolted to the ship's manifold with a bolt in every other hole. When the hoses are connected the weight of each hose shall be taken by hanging a strop (supplied by shore) from the ship's derrick or crane.

LOADING:

Load on Top: If load on top has been practiced prior to arriving at Halul the Berthing Officer will measure the quantity of residue in the slop tank.

Commencement of Loading: Upon request from the ship's duty officer the Berthing Officer will instruct the shore to commence loading. Loading commences by gravity and when the ship is satisfied that the cargo is flowing into the ship, the shore will be instructed to start pumping.

Loading Rates: SBM 1 maximum loading rate is 7,000 cu.m. using diesel pumps.

SBM 2 maximum loading rate is 12,000 cu.m. using either turbine pumps or a combination of turbine and diesel pumps.

Quantity Checks: During loading, ship and shore should check the quantity of cargo loaded every hour and compare figures. If there is a large discrepancy, the quantities should be re-checked and if the difference remains, with no explanation from the ship, then an inspection of the pipe-line and hose systems may be necessary.

Valve Operation and Surge Pressures: During full speed loading, the ship should inform the Berthing Officer if any valve manipulation, which is likely to restrict the flow of oil, is going to take place. Ships should be aware of the potential dangers of creating a pressure surge by closing valves too quickly and/or restricting the flow of oil by other means, i.e. change of loading lines.

The Master will be held responsible for any apparent or subsequently apparent damage to the shore pipe-line and hose system, resulting from surge pressure(s) caused by failure of the ship's pipe-line/valve system or the mismanipulation of the ship's valves.

A pressure recorder will be installed at the ship's manifold for continuous monitoring of pipe-line pressures.

Completion of Cargo Operations: Final topping up operations should only be conducted in the presence of the Berthing Officer in the cargo control centre. The ship should give the shore 1 hour's notice of completion of cargo followed by 15 minutes' notice.

Loading can be completed by gravity which gives a rate of about 1,500 t.p.h.

Communications: Communication between ship and shore is by VHF radio (supplied by shore) which will be positioned in the cargo control room. This radio will have an emergency stop frequency. In the event of an emergency this facility can be used to stop the loading operation at the shore terminal.

Precautions: A watch must be maintained on the radio link with the shore. Connections at the manifold must also be watched continuously for any signs of leaks, ruptures, etc.

MOORING:

Preparations: When the Pilot has boarded, the ship's crew is required to use ship's derrick or crane over the side to lift the mooring and hose connecting equipment on board from the pilot/mooring launch. An operation is assistant will board with the Pilot. He will give guidance to the ship's crew on mooring and also on connecting the hoses.

Briefing: Prior to approaching the SBM the Master, Pilot and Officer delegated to duty on the forecastle should meet and the Pilot will brief all concerned on the mooring operation.

Mooring Operation: On approaching the SBM the ship should make ready a rope messenger suitable for passing over the stem of the tanker to the mooring launch. This rope will be joined to a 10 in. pick-up rope (500 ft.) which is in turn connected to a 50 ft. pick-up wire and then the chafe chain. Each chafe chain is connected to a 15 in. grommet of braided nylon.

The starboard mooring is always picked up first.

If the ship is not fitted with patent stoppers capable of accepting the chafe chain direct, the shore will supply two snotters. These snotters are 15 in. nylon, 40 ft. long with 5 ft. soft eyes in each end. Both eyes are placed on bitts and then thus created bight shackled to the monkey face in the chafe chain.

Safe practices: Masters and crew should be aware at all times of safe working practices while mooring the ship. Ideally the chafe chains should come through the central Panama Lead. If this is not possible, each mooring should be taken on board at points equidistant from and on either side of the centre line, as close together as possible.

SBM Security: From the time of completion of mooring, the ship shall station a lookout on the forecastle. This lookout must inform the Berthing Officer in the event that the ship is likely to come into contact with the SBM.

Immobilisation of Engines: Under no circumstances should the ship's engine be immobilised, but should be ready to manoeuvre at all times.

Maximum notice will, however, be given where conditions warrant the use of the main engine.

CARGO QUANTITIES/DOCUMENTATION:

Ullaging: On completion of loading the ship must ullage all tanks into which cargo has been received. The Master is required to complete an ullage report provided by the shore.

Early Departure Procedure: In order to avoid delays to ships, Halul Terminal follows the "Early Departure Procedure" for the completion of cargo documents. When cargo loading is completed the Berthing Officer will receive the departure papers from the shore. These will include documents completed as far as possible but without cargo quantities. The Master should sign these forms and retain on board copies of Bills of Lading for Master and consignee and any other completed documents. Final cargo figures will be transmitted by radio to the ship. The Master should insert these quantities in the various incompleted forms on board.

Departure from Halul Island will be dependant on ship/shore agreement on the preliminary cargo quantities.

Forms to be signed: The following is a list of forms which have to be completed for each parcel of cargo and received by the Master. (Not all documents are signed by the Master.)

Bill of Lading.
Cargo Maniest.
Certificate of Quantity and Quality.
Discharge Certificate.
Master's Receipt of Documents.
Arrival Report.
Disbursement Memo.
Certificate of Origin.
Ullage Report.
Customs Export Bill.
Customs Clearance.
Port Timesheet.

Discharge Certificate: We stress the importance of the Discharge Certificate placed on board at the completion of loading. It is absolutely essential that the Discharge Certificate should be completed in duplicate in respect of every discharge whether for entire or part cargo.

The Discharge Certificates will be accompanied by a letter of explanation giving guidance on the processing of these certificates and the attendant correspondence required.

DEPARTURE: *Unmooring:* When all ship's papers have been completed and the hoses disconnected the vessel is ready to sail. The port mooring should be released first. The mooring should be lowered to sea level and the pick-up rope paid out slowly to allow the mooring launch to receive the pick-up rope on board. The starboard mooring will then be released.

Pilot Disembarkation: When the vessel has been unberthed the Pilot will disembark to the East of the two SBMs and well clear of the submarine pipe-line area. Laden vessels should under no circumstances navigate in the pipe-line area to the South of Halul Island.

Final Figures: Final shore cargo figures will be transmitted to ship by VHF Channel 6 if the vessel has just left the berth. If the figures are not available at this time, they will be relayed via Bahrain Radio or A7S in Doha.

BALLAST:

Maximum Freeboard: The SBM loading points off Halul Island can be considered exposed location berths. To ensure that a vessel is always safely moored it may be necessary in times of marginal weather to maintain a certain maximum freeboard in order to reduce chances of shock loads on the moorings. The Pilot will advise the Master accordingly.

Deballasting: Vessels whose pipe-line/pump arrangements permit simultaneous loading and discharging of cargo tank ballast are expected to do so in order to maintain freeboard as low as possible.

The same applies to vessels with segregated ballast systems.

All other vessels will normally deballast prior to loading, however in marginal weather conditions such vessels may be asked to load part cargo prior to deballasting.

Dirty Ballast Facilities: No dirty ballast facilities available. All vessels must arrive with clean ballast.

DENSITY: At berth, 1028/1030 (approximately).

CARGO: Flash point below 32° Fahrenheit.

H_2S Content in Halul Crude: H_2S. Hydrogen sulphide has a disagreeable odour characteristic of rotten eggs which quickly deadens the sense of smell so that a dangerous concentration may be present which cannot be detected by odour.

If exposure to hazardous concentrations of this gas is likely to occur, appropriate safety precautions should be taken. Suitable respiratory protection should be available during ullaging and sampling.

The TLV is given as 10 p.p.m. but concentrations in enclosed spaces should be reduced as far below this level as practicable and if men are to work without breathing apparatus, a nil concentration should be achieved before entry is permitted and effective ventilation should be maintained.

On tankers regularly committed to the carriage of sour crude, H_2S gas indicators should be provided.

It is important to realise that the concentration of H_2S can be measured and expressed in two different ways:

The p.p.m. in the liquid, by weight;
The p.p.m. in the air, by volume.

Producing and Processing Departments at terminal often use the liquid measure for H_2S content, and this could be confusing to tanker officers who usually think of H_2S as expressed in air volume measure. There can be a vast difference between the two measures. The measure in air is higher and can be very much higher. For example, chemists have measured a concentration of 7,000 p.p.m. (deadly) in the vapour stream coming out of ullage opening when a tank is being topped off with a crude oil containing only 70 p.p.m. H_2S in the liquid. Therefore, it is of vital importance to appreciate that a sour crude can release a lethal concentration of H_2S into the air.

The following guide to the effects on exposed persons of various atmospheric concentrations of H_2S gives some indication of its dangers:

Measured in air by volume	
50 to 100 p.p.m.	Eye and respiratory tract irritation after exposure of 1 hour.
200 to 300 p.p.m.	Marked eye and respiratory tract irritation after exposure of 1 hour.
500 to 700 p.p.m.	Dizziness, headache, nausea, etc., within 15 minutes; loss of consciousness and possible death after 30 to 60 minutes exposure.
700 to 900 p.p.m.	Rapidly produces unconsciousness and death occurs a few minutes later.
1000 to 2000 p.p.m.	Death is apparently instantaneous.

Apparent death from H_2S is not irreversible as prompt and efficient artificial respiration may restore life.

The terminal should advise the Master if the cargo to be loaded contains H_2S in concentrations which cause the gases vented during loading to be hazardous if inhaled. When handling cargo with noticeable H_2S content or when ballasting after discharge of such cargo, it is recommended that the following precautions should be taken.

The officer supervising the operations should keep a sharp watch on personnel for signs of fatigue or distress.

Lifelines, breathing apparatus and resuscitator should be readily available.

Loading through the pump room should be avoided where possible to reduce the possibility of H_2S contamination of the pump room atmosphere.

Gas should be vented through the cargo tank venting system and, if open ullaging is necessary, the ullage plugs should be kept open only for a minimum period of time.

When ullaging tanks, personnel should work in pairs and stand at right angles to the wind direction in relation to the ullage opening.

Personnel should not enter a pump room without first starting the ventilation, checking that there is no gas present, and without someone else standing by. If any gas concentration is recorded, a self-contained breathing apparatus should be worn.

Other spaces into which H_2S may have been drawn should be ventilated and checked before entry.

Persons overcome by H_2S should be moved to a gas free area immediately and artificial respiration should be administered at once.

Gas tests should be made on deck and in accommodation at regular intervals and particularly during the topping-off periods. If concentrations exceed 10 p.p.m. inside the accommodation or 50 p.p.m. on deck more than 10 ft. from a gas outlet, the loading rate should be adjusted and if this does not result in a decrease of the gas concentration, loading should be stopped until conditions have improved or other suitable measures are taken.

During discharge, the pump room bilges should be kept dry.

During loading or ballasting operations, conspicuous notices warning of potential danger should be posted on deck and at pump room entrance, and at the entrance to any other space which could be affected.

MEDICAL: There is no doctor on Halul Island. If there is any sickness on board, details should be included in the vessel's ETA message.

In emergencies the services or advice of the QGPC Medical Officer in Doha may be obtained. If the doctor or patient has to be flown from Doha the vessel concerned will be charged for the helicopter hire and the services of the doctor.

TIME: Local time is GMT plus 3 hours.

FRESH WATER: Not available.

FUEL: Various grades of bunkers available, diesel and fuel, ex barge or lighters at Halul anchorage provided minimum 7 days' prior notice given. Also see "Doha".

CONSULS: The following countries maintain Embassies in Qatar.

Bangladesh
Egypt
France
Gabon
Germany (Fed. Rep.)
India
Iran
Iraq
Japan
Jordan
Korea (South)
Kuwait
Lebanon
Libya
Mauritania
Morocco
Oman
Pakistan
Saudi Arabia
Somalia
Sudan
Syria
Tunisia
United Kingdom
U.S.A.
Yemen (Arab Rep.)

REPAIRS: Not available.

SURVEYORS: (1) Watt & Grey, Abu Dhabi. Saybolt, Kuwait.
(2) Lloyd's Register in Bahrain.

TANK CLEANING: No facilities available and ships must arrive with clean ballast, lines and pumps.

SAFETY: Vessels must at all times comply with safety regulations as detailed in the ISGOTT (International Safety Guide for Oil Tanker and Terminals) published jointly by the International Chamber of Shipping and the Oil Companies International Marine Forum.

Safety Check List: This check list must be completed prior to loading. The Berthing Master and the Master of the vessel or a responsible officer will jointly carry out the safety inspection.

Cessation of Loading: If during loading operations, the Berthing Officer becomes aware of any unsafe working practice or safety hazard, loading will cease until such time when the safety hazard has been removed. All delays thus incurred will be for vessel's account.

Hydrogen Sulphide: It is brought to the ship's attention that Qatar marine crude contains Hydrogen Sulphide (H_2S). See "Cargo".

Emergency Towing Wire: Whilst moored to the SBMs all vessels must have Emergency Towing Wires ready, both fore and aft. The total length of the towlines must not be less than 100 m. when paid out. The eyes of the wires must be kept hanging just above sea level, ready for immediate pick-up by a tug/supply boat.

Tanker Emergency: In case of an emergency on board the Tanker the Berthing Officer must immediately be informed. He will act as liaison between ship and shore.

If for whatever reason the Berthing Officer is incapacitated the Master/Officer on duty must inform Halul Control, giving brief details of the type of the emergency via the portable VHF radio (walkie-talkie) provided by shore.

In case of fire, explosion, etc., cargo must be stopped immediately by requesting "Emergency Stop" via the walkie-talkie and/or via the emergency stop frequency (push-button) provided in the radio.

The Master may also call the QGPC radio station in Doha (call sign "Alfa Seven Sierra") on the ship's VHF Channel 16, giving details of the emergency and the kind of assistance required, if necessary.

CUSTOMS: Trading in liquor is *strictly* prohibited and no alcoholic drink should be offered to Arab nationals.

REPATRIATION: Changes of personnel can be carried out at Halul Island. This can only be carried out on a limited scale due to scarcity of accommodation and transport. For crew joining a ship, Owners should notify the Agency, at least 48 hours in advance of arrival in Doha, the details of the personnel and the arriving flight. Crew leaving a ship at Halul can be arranged but advance notice is required.

SHORE LEAVE: Not permitted.

BANKS:

Banque de Paris et des Pays-Bas.
The British Bank of the Middle East. Telex: 4204 BBME DH.
Grindlays Bank. Telex: 4209 GRNDLY BK.
The Chartered Bank. Telex: 4217 CHARBK.
Citibank.

STORING: See "Prelims" page viii.

1. No.
2. N/A.
3. No.
4. N/A.
5. N/A.
6. N/A.

GENERAL:

Meteorological Service: A daily 24 hour weather forecast is issued at 0930 L.T. This forecast covers the area of Halul Island and the offshore oilfields. Details of this forecast can be obtained from Halul Control or, if vessel is at one of the SBMs, from the Berthing Officer on board the vessel.

Tidal Information: Halul Island can be found in British Admiralty tide tables Volume 2. Halul is a secondary port based on the standard port of Shatt al-Arab.

Climatic Conditions: Masters and crews should be aware of the extreme climatic conditions which exist in the Halul area during the months of June through October. Everybody should be made aware of the dangers of heat and sun stroke.

Stores and Laundry: Not available at Halul Island.

Courtesy Flag: The Qatar National flag should be flown during daylight hours when a vessel is at Halul Island.

Mail Service: There is an excellent mail service from Qatar to all parts of the world. Qatar stamps must be used on all mail sent through the national post office.

Blue air letter forms are not accepted.

Mail will be handled after completion of the tanker mailing request.

AUTHORITY: Qatar General Petroleum Company (Offshore Operations) – Marine Department, P.O.B. 47, Doha, Qatar. *Tel:* 332666. *Telex:* 4201 Qatoff Doha. *Cables:* Qatoff, Doha. *Contact:* V. Austel, Marine Superintendent.

Agency: C/o Tanker Agency Department, QGPC (Offshore Operations) PDS/4. P.O.Box 47, Doha – Qatar, (Arabian Gulf). Tel: 332620. Telex: 4201.

UMM SAID: 24.54 N. 51.34 E. (See Plan Book)

DOCUMENTS: See "Doha".

BUOYED CHANNEL: All vessels wishing to navigate the Umm Said Buoyed Channel must obtain prior clearance from Umm Said Control who can be contacted on VHF Channels 14 or 16 or by Telex via Bahrain Radio, addressed to Petroqat Umm Said. This precaution is essential to avoid unexpected encounters with deep-laden oil tankers.

APPROACHES:

Umm Said Approaches

Light Buoys	*Latitude North*	*Longitude East*	*Shape*	*Colour*	*Light*
Karienein (K)	25° 24′ 18″	51° 56′ 16.4″	Pillar Spherical Topmark	R.W.V.S.Radar Reflector	Long Fl. W. 10 sec.
Mishut (M)	25° 15′ 51″	51° 46′ 43.4″	Pillar W Topmark	Y.B.Y. Radar Reflector	Qk. Fl. (9) W. 15 sec.
Pipe-line Buoy (N)	25° 13′ 51″	51° 45′ 23.4″	Can	Yellow Radar Reflector	Fl. Y. 10 sec.
Wakrah (W)	25° 09′ 13″	51° 41′ 50.4″	Pillar W Topmark	Yellow Black Yellow	Very Qk. Fl. (9) W. 10 sec.
Pipe-line Buoy (S)	25° 08′ 18″	51° 41′ 54″	Can	Yellow Radar Reflector	Fl. Y. 6 sec.
Hul (H)	25° 02′ 49″	51° 41′ 50.4″	Pillar W Topmark	Yellow Black Yellow	Very Qk. Fl. (9) W. 15 sec.
No. 1	25° 01′ 01″	51° 42′ 6.4″	Cone	Green	Fl. G. 6 sec.
No. 2	25° 00′ 55″	51° 42′ 15.9″	Can	Red	Fl. R. 5 sec.
No. 3	25° 00′ 40.6″	51° 42′ 13.1″	Cone	Green	Qk. Fl. G.
No. 4	25° 00′ 36.3″	51° 42′ 22.9″	Can	Red	Fl. R. 5 sec.
No. 6	24° 59′ 44″	51° 42′ 26.4″	Can	Red	Fl. (2) R 10 sec.
No. 7	24° 58′ 10″	51° 42′ 29.4″	Pillar E Topmark	Black Yellow Black	Qk. Fl. (3) W 10 sec.
No. 8	24° 58′ 18″	51° 42′ 37.4″	Can	Red	Fl. R. 6 sec.
No. 9	24° 56′ 39″	51° 42′ 4.4″	Cone	Green	Fl. (3) G. 15 sec.
No. 10	24° 56′ 35″	51° 42′ 20.4″	Can	Red	Fl. (2) R. 10 sec.
No. 11	24° 55′ 42.5″	51° 42′ 11.9″	Cone	Green	Fl. G. 2 sec.
No. 12	24° 55′ 43″	51° 42′ 20.9″	Can	Red	Fl. R. 2 sec.
S.E. Arrif	24° 53′ 38″	51° 43′ 4.4″	Pillar E Topmark	Black Yellow Black	Very Qk. Fl. (3) W. 5 sec.
S. Arrif	24° 51′ 02″	51° 40′ 57.4″	Pillar S Topmark	Yellow Black	Very Qk.Fl.(6)+ L.Fl.W.10 sec.
No. 1	24° 52′ 29″	51° 40′ 2.4″	Cone	Green	Fl. (3) G. 15 sec.
No. 2	24° 53′ 36″	51° 39′ 54.4″	Can	Red	Fl. R. 6 sec.
No. 3	24° 54′ 11″	51° 39′ 53.4″	Cone	Green	Fl. G. 2 sec.
No. 4	24° 54′ 07.3″	51° 39′ 47.4″	Can	Red	Qk. Fl. R.
Turning Buoy	24° 54′ 41″	51° 39′ 19.4″	Pillar N Topmark	Black Yellow	Very Qk. Fl. W.
Fairway Buoy	24° 54′ 27″	51° 36′ 25″	Pillar	R.W.V.S. Radar Reflector	Long Fl. W. 10 sec.
S. Anchorage	24° 52′ 53″	51° 33′ 51.4″	Can	Red	Fl. R. 6 sec.
M.B. 1	24° 53′ 57.6″	51° 33′ 36.0″	Cone	White Orange	Fl. W. 5 sec.
M.B. 2	24° 54′ 16.8″	51° 34′ 13.8″	Cone	White Orange	Fl. R. 5 sec.
M.B. 3	24° 54′ 19.8″	51° 34′ 37.8″	Cone	White Orange	Fl. W. 5 sec.

Approach to Umm Said Terminal: With Halul Island peak astern steer 235° for a distance of 31.5 miles to (K) Kareinein Light Buoy in position Lat. 25° 24′ 18″ N., Long. 51° 56′ 16.4″ E., thence 226°, 12 miles to (M) Mishut Light Buoy in position Lat. 25° 15′ 51″ N., Long. 51° 46′ 43.4″ E.

From Mishut Light Buoy steer 214° for a distance of 8 miles to (W) Wakrah Light Buoy, leaving this light buoy on the port hand.

From Wakrah Light Buoy steer 180° for a distance of 6.4 miles, to (H) Hul Light Buoy leaving this buoy to port.

From a position of 2 cables West of (H) Hul Light Buoy, steer 164° for a distance of 1.9 miles to pass between Nos. 1 and 2 Outer Channel Buoys, thence 158° 30′, 0.3 miles to pass between Nos. 3 and 4 Outer Channel Buoys, thence 178°, 0.9 miles to leave No. 6 Outer Channel Buoy on port hand, thence 173°, 1.6 miles to pass between Nos. 7 and 8 Outer Channel Buoys, thence 191° 30′, 1.6 miles to pass between Nos. 9 and 10 Outer Channel Buoys, thence 176°, 0.8 miles to pass between Nos. 11 and 12 Outer Channel Buoys.

From a position midway between Nos. 11 and 12 Outer Channel Buoys, steer 157° for a distance of 2.2 miles, leaving S.E. Arrif Buoy on the starboard hand, thence 217° for a distance of 3.25 miles, leaving S. Arrif Buoy on the starboard hand.

After rounding S. Arrif Buoy, steer 335° for a distance of 1.7 miles, passing close West of No. 1 Inner Channel Buoy, thence 003°, 1.1 miles, passing close East of No. 2 Inner Channel Buoy.

From a position close East of No. 2 Inner Channel Buoy, steer 348°, 0.5 miles to pass between Nos. 3 and 4 Inner Channel Buoys thence 323° to round Turning Buoy, leaving this buoy on the port hand.

From Turning Buoy steer a course to enter the designated Anchorage Area. The Northern limit of the designated Anchorage Area is a straight line joining the Turning Buoy and Fairway Buoy positions.

Masters of vessels anchoring at Umm Said are required to use the appropriate anchorage. With the exception of emergencies only, anchoring outside this area or obstructing the fairway is *not* permitted.

Prohibited Area: A prohibited area enclosed by the pecked lines (See "Plans") has been established. Masters of all vessels are prohibited from entering, anchoring or fishing within this area unless permission has been granted by the Corporation.

Outward Passage: The reverse track is followed as for the inward passage described above.

Charts: Admiralty Chart No. 3787 – Approaches to Musay'Id and Ad Dwaha.

Admiralty Chart No. 3950 – Fasht al Arrif to Ras Laffan.

Admiralty Chart No. 3786 – Umm Said Harbour.

Depths: In the Outer Channel there are least depths of 36 ft. (10.97 m.) in the vicinity of Nos. 1 and 2 Buoys, 3 and 4 Buoys and Nos. 9 and 10 Buoys.

Between the Outer and Inner Channel the depth varies from 40 ft. (12.2 m.) at Nos. 11 and 12 Outer Channel Buoys through 72 ft. (22.0 m.) and 78 ft. (23.8 m.) between S.E. Arrif and S. Arrif Buoys to 47 ft. (14.3 m.) close to No. 1 Inner Channel Buoy.

In the Inner Channel the least depth is 37 ft. (11.28 m.) between Nos. 3 and 4 Inner Channel Buoys.

From the Inner Channel to the Anchorage the depths vary from 43 ft. (13.1 m.) between the channel and Turning Buoy to 48 ft. (14.6 m.) at the Anchorage.

Tidal Conditions: In general the flood stream sets to the S.S.W. and the ebb stream to the N.N.E. the rate being up to 2 knots at Springs.

Cross sets will consequently be experienced in the channel, more particularly in the Northern part of the Outer Channel, between the Outer Channel and S.E. Arrif Buoy and between S. Arrif Buoy and the Turning Buoy. It should be noted that at the Outer Channel Entrance the flood stream continues to set to the Southward for some time after the tide has started to fall.

Tides: The tides in this area have a large diurnal component and at times there is only one HW and one LW in the 24 hours. This irregularity is more pronounced at Umm Said than at the Outer Channel Entrance for which predictions are made.

In December the HHW, or the only HW during periods of single day tides, occurs between 0500 and 1400 hrs.; in March between 2200 and 0900 hrs.; in June between 1800 and 0100 hrs. and in September between 0900 and 2100 hrs.

At Umm Said there are a few days in the year when the tide does not rise above 5 ft. (1.52 m.) and there are considerable periods each day when the predicted height of the tide is greater than 3 ft. (0.91 m.).

In the vicinity of Nos. 3 and 4 Inner Channel Buoys, HW occurs about 1 hour after HW at the Outer Channel Entrance and the rise of tide is slightly more than at the Outer Channel Entrance.

The HHW is normally 5 ft. (1.52 m.) or better rising to 8 ft. (2.44 m.) at exceptional Springs.

Abnormal meteorological conditions may affect all the above tides by ±2 ft. (0.61 m.).

PILOTAGE: Inward and outward pilotage is compulsory for all vessels loading at Umm Said Oil or NGL Terminals.

Pilot will board and leave vessels in the vicinity of (M) Mishut Buoy.

Tankers of 40,000 d.w.t. and over should have rigged, when in light condition, an accommodation ladder lowered to about 12 ft. above the water. This can be adjusted to suit conditions. A pilot ladder should be rigged immediately abaft the accommodation ladder, to within 2 ft. above the water. This will enable Pilot to ascend pilot ladder clear of launch, and then step on to lower platform of accommodation ladder. Vessels should comply with the current U.K. Merchant Shipping (Pilot Ladders) Rules.

Automatic pilot hoists should not be used unless such use is agreed to by the Pilot. On no account should weighted heaving lines be used in the vicinity of the pilot boat or mooring launches.

Pilotage is compulsory for dry cargo ships bound for Umm Said Anchorage. Pilotage performed by Doha Pilots.

RESTRICTIONS: In the case of crude oil shipments, mooring, loading and unmooring is carried out at all times (weather permitting).

NGL Jetty: Mooring and unmooring operations are normally restricted to daylight hours.

ANCHORAGES: Eastern Anchorage. Depth 48 ft.

Prohibited Anchorage: A Prohibited Anchorage has been established in the vicinity of (W) Wakrah Light Buoy to protect submarine pipe-lines laid in the area. A Yellow Can buoy (Fl. Y. 10 secs.) (Radar Reflector) has been laid in position Lat. 25° 13′ 51″ N., Long. 51° 45′ 23.4″ E. and a line drawn 073°/253° from the coast through this position marks the Northern boundary of the Prohibited Anchorage. A similar buoy (Fl. Y. 6 secs.) (Radar Reflector) has been laid in position Lat. 25° 8′ 18″ N., Long. 51° 41′ 54″ E. and a parallel line drawn through this position marks the Southern boundary of the Prohibited Anchorage.

MAX. SIZE: (Also see "Cargo Handling Facilities"). Draft of laden tankers leaving Umm Said is controlled by the depth at the outer end of the Outer Channel. This is 36 ft. (10.97 m.) below Chart Datum and Zero of Predictions. Tide rarely falls below 1 ft. above datum, so that there is normally 37 ft. (11.28 m.) or more in the channel.

Experience shows that even under the worst weather conditions there is no appreciable movement on larger ships in the Outer Channel. As deep-draft vessels always reduce speed between Nos. 3 and 4 Inner Buoys and in the Outer Channel, there is very little "draw down". Deep-draft vessels should endeavour to pass between Nos. 1 and 2 Outer Buoys at HHW for the Outer Channel Entrance.

Subject to the under-keel clearances mentioned hereafter, in general the draft limitations are as follows:

(a) Ships drawing 34 ft. (10.36 m.) or less can sail at any time on any day.
(b) Ships drawing 35 ft. (10.67 m.) will rarely have to use tides.
(c) Ships drawing 36 ft. (10.97 m.) will usually have to use tides.
(d) Ships drawing 37 ft. (11.28 m.) always have to use tides.
(e) Ships drawing 38 ft. (11.58 m.) will occasionally be neaped.
(f) Ships drawing 39 ft. (11.89 m.) will be neaped 120 days ± a year.
(g) Ships drawing 40 ft. (12.19 m.) can sail occasionally. The best months are June and July.
(h) Ships drawing 41 ft. (12.50 m.) are not worth programming as on the few days when predictions indicate they could sail, meteorological conditions may well cut the tides.

NGL Jetty: Max. acceptable length 950 ft., min. length 550 ft. Max. acceptable capacity 120,000 cu.m. Minimum acceptable capacity 30,000 cu.m.

Underkeel Clearance: The following table stipulates the *minimum* underkeel clearance for vessels using the Umm Said Channels.

Vessels up to 99,999 d.w.t. – 3 ft. Clearance
Vessels from 100,000 to 149,999 d.w.t. – 4 ft. Clearance
Vessels over 150,000 d.w.t. and 320,000 d.w.t. – 5 ft. Clearance
(See "Terminal Information – Berth limitations").
LPG Carriers (all sizes) – 5 ft. Clearance

Navigation in Shallow Waters: The navigation of deep drafted vessels at high speeds in shallow waters introduces certain hazards. Pilot/Mooring Masters and Masters of ships should be guided by the following:

(a) Due consideration should be given to the effect of draw down at speed on vessel's draft in shallow water, bearing in mind vessel's trim.
(b) If possible, confirm actual height of tide against predictions and if not, bear in mind that after strong winds the actual height of tide may be reduced and extra caution must be exercised for a few days during and after bad weather.
(c) Ensure accuracy of vessel's draft reading, including the midship drafts, having in mind the tendency of vessels to sag and the adverse effect of a small list.
(d) Reduce to a minimum safe speed to pass over and near shoal areas.
(e) Reduce to a minimum safe speed when negotiating turns in order to reduce heel under helm.
(f) Note that list can mean an appreciable increase in draft.
(g) When strong tidal streams are running across a channel, extra vigilance is required, and allowance made for set, particularly at reduced speed, to ensure vessel proceeds along mid-channel.

HEALTH: (Quarantine and Medical Clearance). Medical attention to Masters and crews of ships provided by Q.G.P.C. Medical Officer when asked for by Master.

RADIO: When advising their ETA ships must state their last port of call within the previous 21 days and report any sickness on board. If the last port of call is Bahrain or Ras Tanura, the previous port must be stated.

Vessels are requested to inform Petroqat, Umm Said by cable of their ETA at (M) Mishut Light Buoy and whether or not Pilot required, 72 hours and confirm 24 hours prior to their arrival. It should be clearly indicated that times quoted are in GMT. They should also state the quantity of cargo, in long tons, and the maximum loading rate required, deballasting time and whether able to load and discharge ballast concurrently. Any crew changes and/or medical treatment required should also be notified in this cable.

Except for Tankers, all vessels must contact Doha on VHF for ETA advice. Umm Said Terminals should be contacted for channel clearance.

These cables should be addressed to Petroqat, Umm Said, and passed via the Bahrain Coast Radio Station.

The following cable is sent to all vessels by Agent (Petroqat):

Quote:

Advise your ETA at pilot station Mishut (M) Buoy in GMT 72 hours and confirm 48 and 24 hours before arrival. Pilotage is compulsory and in order to confirm pilot boat arrangements essential you advise firm ETA 48 hours before arrival to avoid any delays. Rig combination accommodation/pilot ladder port side before arrival. Pilot hoist and weighted heaving lines must not be used. Tugs are available if required. Please advise your requirements 48 hours in advance.

It is preferred that mooring hawsers in general consist of rope where possible but all wire moorings or wires with rope tails are acceptable. Please note, however, that for safety reasons, all springs which are connected to the main jetty must be of rope or wires with rope tails.

Please advise your last cargo, and confirm that your tanks are cooled down and ready in all respects to receive your nominated cargo. Butane and propane can be loaded concurrently if required. Loading lines are 12 in. diameter and vapour return lines are 8 in. diameter all fitted with Class 150 ASA flanges. Your attention is drawn to the Prohibited Anchorage (Lat. 25° 10′ N.) safeguarding the submarine pipe-lines laid in the vicinity of Wakrah (W) Buoy.

If your vessel is fitted with telex which has high (75B) and low (50B) speed transmission, please ensure that your machine is operating on low (50B) speed mode to ensure that we receive clear, ungarbled text.

Petroqat Umm Said

Unquote.

Telex: Vessels fitted with telex machines may make contact through Telex No. 4050 Qpausd Dh. However, only the low (50B) transmission mode should be used to ensure the receipt of clear, ungarbled text.

High (75B) speed transmission mode must not be used.

VHF: Umm Said Terminal is equipped with VHF radio equipment operating on Channels 1 – 29 and 60 – 89 of international maritime mobile telephone service.

A continuous 24 hour listening watch is maintained on Channel 16, the call sign being "Umm Said". The range of station is approximately 50 miles.

TUGS: Given sufficient prior notice a tug can usually be made available on request.

BERTHING: Pilots act in same capacity as Mooring Masters in the berthing of vessels, after which they supervise raising of flexible hoses and connection to ship's manifold. During loading operation they act as the Corporation's representatives.

Vessel's crew are expected to assist with hose connecting.

North Berth is a Single Point Mooring in position Lat. 24° 53′ 37.2″ N., Long. 51° 34′ 54″ E., connected to the shore installation by a 36 in. submarine pipe-line. The seaward end of the pipe-line and buoy terminates in 2×16 in. flexible floating hoses. Vessels are moored by a single hawser from bow to buoy.

The following equipment should be carried by each vessel:

(i) One 4 in. circumference × 40 fathom messenger rope ready for use at the bow together with mooring lines of suitable size ready for use.

(ii) One good boat rope at least 200 ft. long ready at accommodation ladder position.

(iii) Derrick or crane rigged over the port side manifolds should be capable of lifting 16 in. floating hose to a height of up to 30 ft. above deck (S.W.L. 10 tons).

(iv) Reducers or adaptors if necessary to be bolted to the ship's manifold flanges so as to take 2×16 in. loading hoses.

Warning: Ship's anchors must never be used within 0.5 miles of this berth or the 36 in. submarine pipe-line and must therefore be well secured at all times.

The South Berth consists of a Conventional Buoy Mooring, connected to the shore by a 24 in. submarine pipe-line. The seaward end of the pipe-line terminates in 2×16 in. flexible hoses.

Vessels are moored at this berth by ship's anchors and mooring buoys. The following equipment should be carried by each vessel.

(i) Port and starboard anchors to be fitted with marker buoys and sufficient line. This will facilitate recovery of anchor in the event of loss.

(ii) One good boat rope at least 200 ft. long ready at accommodation ladder position.

(iii) 4 good mooring lines aft, of a suitable size for the vessel on which they are used. Each line should consist of 120 fathom hawser, tailed by a similar hawser and ready to run out when required.

(iv) 2 good mooring lines forward similar to the after lines for use on the Shama'al Buoy (No. 6).

(v) Two 3 in. circumference messenger ropes, one forward and one aft.

(vi) 2 good rope stoppers to be available forward. 4 good rope stoppers to be available aft.

(vii) Derricks or cranes rigged over the port side manifolds should be capable of lifting 16 in. flexible hose from the seabed to a height of up to 30 ft. above deck (S.W.L. 10 tons).

(viii) Reducers or adaptors (if necessary) bolted to ship's manifold flanges so as to take 2×16 in. loading hoses.

(ix) Carpenter's stoppers are provided on loan by Q.G.P.C. for use with Corporation's 4.75 in. wires. Chain stoppers must not be used.

Note. Where a vessel has 2 or more loading connections, the ship's flanges should not be less than 4 ft. apart.

TERMINAL INFORMATION:

Berth	*Max. t.p.h.*	*Fixed sea-line*	*Overrail hoses*
North (SPM)	6,500	One – 36 in.	Two – 16 in.
South (CBM)	5,000	One – 24 in.	Two – 16 in.

Depth of Water: Available depth of water at seaward end of sea-line is as follows:

North Berth (SPM)	65 ft. (19.6 m.)
South Berth (CBM)	48 ft. (14.6 m.)

An allowance of 8 ft. for South Berth has been made for height of sea-line end cradle above the sea bed.

Berth Limitations:

North Berth (SPM)	– 320,000 Summer d.w.t. Bow to manifold 590 ft.
South Berth (CBM)	– Maximum 320,000 tons Summer d.w.t. Minimum 50,000 tons Summer d.w.t.

Note: Minimum size of vessels at CBM is governed by vessels length – 650 ft. minimum.

Large tankers loading at either berth will be required to maintain a minimum of 20% of SDWT ballasted/loaded condition at all times and maintain an even trim.

After the vessel has been securely moored in berth, the hoses are lifted and connected to the ship's manifold.

The Mooring Master will not transmit any loading instructions to the shore until the officer-in-charge of the deck is satisfied that the hoses are connected correctly and that all valves have been set for receiving cargo.

While in berth, ships should be ready to move under their own power in the event of their breaking adrift, catching fire, fire in adjacent berths or other emergency. No repairs should be carried out while in berth which would immobilise the ship or impair her fire-fighting efficiency.

The Mooring Master will instruct the Master of the vessel as to any signals needed for local requirements.

The Mooring Master brings an intrinsically safe portable radio to the ship. The radio may not be used for private conversation.

The use of the ship's radio (including the VHF radio, except in an emergency) during loading is strictly prohibited. Portable intrinsically safe radios used by ship's personnel to control loading procedures is permitted however, provided such use does not interfere with ship/shore communications.

When loading is completed, hoses will be disconnected and lowered, under the supervision of the Mooring Master.

Ships will then proceed to an anchorage allocated by the Mooring Master or direct to sea.

NGL Jetty: This is a 'T' type jetty with breasting dolphins flanked either side by 2 mooring dolphins. Water depth at the berth is 42 ft. Chart Datum.

Suitable for berthing vessels of approximate dimensions LOA 550 ft. (168 m.) to LOA 950 ft. (290 m.)

Connections:

(a)	Propane Vapour Return	8 in.	150 ASA flanges
(b)	Propane Liquid	12 in.	150 ASA flanges
(c)	Butane Liquid	12 in.	150 ASA flanges
(d)	Butane Vapour Return	8 in.	150 ASA flanges

CARGO HANDLING FACILITIES: Government Pilots provide berthing assistance. See "Doha".

Max. draft permissible at any state of the tide – 33 ft.
Max. draft permissible at HW – 39 ft.
Max. LOA – 850 ft.

Berth Nos.	*Length* (m.)	*Length* (ft.)	*Depth* (m.)	*Depth* (ft.)	
1	350	1,155	15.0	49.5	QASCO (Steel Cargo)
2	190	627	15.0	49.5	"
3	190	627	15.0	49.5	"
4	190	627	13.0	43.0	Ind. Cargo (QGPC)
5	190	627	13.0	43.0	"
6	190	627	12.0	39.6	"
9	200	660	10.0	33.0	Gen. Cargo (Ports)
10	200	660	10.0	33.0	"
18	255	841.5	13.0	43.0	Petro Chemical
19	255	841.5	13.0	43.0	"
QAFCO N	212	700	11.8	39.0	Ammonia
QAFCO S	212	700	12.0	40.0	Urea

1. *Urea Fertiliser Export:*

Qatar Fertiliser Company – QAFCO Qatar Government joint venture with Norske Hydro who manage the project.

Fertiliser is in polythene bags of 50 kg. nett each.

Loading is by two independent loading towers. Depending on ease of access to ships' holds a 24-hour loading rate of 700 tonnes is given by the loading equipment.

The pile construction jetty lays at right angles to the shore line and along direction 310° – 130°.

Urea loading equipment is on the S.W. face of the jetty. Jetty face length between extreme end bollards is 800 ft. (244 m.).

2. *Ammonia Export:*

The N.E. face of jetty laying 310° – 130° of length 800 ft. (244 m.) has three functions, one of them being for ammonia loading. The pipe-line is 8 in. (203.2 mm.) diameter.

3. *Bulk Grain Import:*

QAFCO Jetty N.E. face is also used as the bulk grain discharge berth, to the Qatar Flour Mill Company situated at the shore end of the jetty.

Discharge Gear: Consists of portable grain suction/blown discharge units placed aboard vessel.

Also see "Terminal Information – NGL Jetty" and "Developments".

CARGO:

It is strongly recommended that all oil tankers loading at Umm Said are fitted with a fully operational Inert Gas System and that all cargo tanks are fully inerted before loading commences.

The right is reserved by the Terminal NOT to load any oil tanker not inerted if weather conditions at the time of loading are such that the build up of large concentrations of gas around the vessel will not be prevented.

1. Flash Point. Flash point of Qatar Crude is below 32° Fahrenheit.

2. H_2S Content. Qatar (Land) Crude contains concentrations of H_2S (sulphuretted hydrogen). This is an evil-smelling poisonous gas which can be lethal depending on concentration of gas in the air inhaled. It can be detected normally by its smell, but a high concentration of the gas rapidly paralyses sense of smell and may lead to a false sense of security. It is, therefore, important that when the presence of the gas is detected the area or compartment concerned must be left with all possible despatch until adequate ventilation can be carried out. The explosimeter will not detect this type of gas.

It is not intended to exaggerate the dangers of H_2S and if a vessel is fitted with an operational inert gas system then these dangers can be regarded as minimal. Large quantities of Qatar (Land) Crude have been carried in the past on non-inerted tankers without accident. However, in the light of experience gained, the under-noted precautions have been proved necessary to provide against a possible accident:

(a) During loading, venting of tanks should be allowed only through the agreed venting arrangements (as noted in the ship/shore safety check list).

(b) Manual ullaging of tanks should be kept to a minimum and, if undertaken, personnel should keep to windward of the tank openings and avoid breathing fumes as much as possible. Breathing apparatus should be worn if manual ullaging of tanks is to be undertaken over a prolonged period or in a confined space.

(c) Entry into pump rooms or any compartments where gas can collect should be avoided. If entry is considered necessary, then an approved breathing apparatus and lifeline should be worn by the person entering and other persons should be standing by, and tending the life-line. One of those persons on stand-by should be wearing a second breathing apparatus set and life line, ready to rescue the person entering the compartment should the latter be ovecome by fumes.

(d) Breathing apparatus, life lines and oxygen resuscitators should be readily available during all cargo and tank cleaning/gas freeing operations.

(e) During cargo discharging and tank cleaning/gas freeing operations, the gas ejector for the pump room should be kept running.

LOADING:

Readiness: Notice of Readiness will be received by the Corporation Representative provided vessel ready to load. Lay time will commence as stipulated in the export agreement between purchasers and vendors. A full cargo is deemed to be the maximum cargo which can be loaded in the ship at Umm Said consistent with safe underkeel clearance on sailing, as advised by Mooring Master.

The Corporation will make every effort to load tanker on arrival provided berth available and weather permits.

Advice from vessel which states she is ready to receive cargo is considered as final, and as indicating that every operation necessary aboard vessel has been completed. As soon as possible after such a signal has been received, and without further advice, loading will commence.

Full cargo is deemed to be the maximum cargo which can safely be loaded in the vessel at Umm Said. Completion of loading is subject to the normally accepted tolerances above or below the required cargo.

Tank Dips: During loading, hourly checks of vessel's tanks shall be made by ship personnel to determine cargo loaded for comparison with shore figures if required. This is to prevent loss of oil through a leaking hose and particularly applies at night when seepage of oil can remain unobserved.

Inspection of vessel's tanks will be made by a ship's Officer before loading and, if required, by a Q.G.P.C. Representative. Opening dips and closing ullages will be taken by ship's personnel and the quantity of cargo calculated.

Particular care must be exercised by ship's personnel, towards completion of loading, in the "Topping off" of tanks to ensure that the Terminal is given timely advice of any decrease in pumping rate required. Adequate "Stand-by" notice should be given before the final "Stop".

Loading Pumps: Three 2,230 h.p. pumps are used to load crude oil and it is important to note that any rapid changes in the oil velocity may cause pressure surges in the loading system. A pressure surge may rupture the flexible hoses connected to the vessel spilling dangerous quantities of crude oil onto the decks or surrounding areas and may also cause excessive damage to the Terminal installations. To avoid these risks, valve operations and tank switching should be done with extreme care. Please ensure that 15 minutes' notice is given for "Slow Speed" and/or "Stop" instructions. A letter of protest will be issued by the Shore Representative/Mooring Master on any occasion a pressure surge is generated, whether Terminal installations have been damage or not.

BALLAST: When a vessel enters Port waters in ballast, the ballast water for overside discharge *must be clean* and a declaration signed by the Master and delivered to the representative of the Terminal to this effect. Oily wastes, oily water or other refuse must not be discharged overboard in Port waters. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard whilst in Port waters.

The attention of Masters is drawn to the volume entitled "International Conference on Prevention of Pollution of the Sea by Oil" 1962 and subsequent publications issued by the International Maritime Organisation.

Vessels may be subject to heavy fines and liabilities for claims arising from pollution of the sea and shore areas.

In Umm Said the "load on top" system is normal procedure and Masters of all tankers are required to certify quantity of slops on board and their intention of "loading on top". If "load on top" system is not used the Master will be required to certify adequate reasons for not doing so, e.g., vessel drydocked in last port, etc.

Note:

(a) Essential that vessel is adequately ballasted to ensure safe handling and manoeuvring. Please comply with Mooring Master's requests as to ballast quantity and disposition.

(b) Umm Said is an open roadstead and subject to sudden changes in weather. Large tankers will be required to maintain a minimum of 20% of SDWT ballast/load condition at all times and maintain an even trim. Masters of all vessels should note that should a situation arise that a vessel has to vacate the berth due to adverse weather or for any other reason, the vessel will be required to have on board sufficient ballast/cargo to enable it to manoeuvre with safety; thus it is of great advantage to commence loading whilst discharging ballast or prior to completely deballasting to avoid leaving the vessel in a flying light condition.

(c) All pump room seacocks must be closed and lashed before commencement of loading unless loading is commenced prior to deballasting, when they will be closed and lashed after deballasting is completed.

FUEL: See "Doha".

FRESH WATER: Available at cargo berths but not at S.B.M., C.B.M. or L.N.G. Berth.

CUSTOMS ALLOWANCES: The State Laws of Qatar are very strict about the import of liquor and its consumption both on the mainland and on vessels in the harbour. No employee, whether senior or junior, is permitted to import any liquor direct or to bring any liquor ashore from vessels, and under no circumstances should liquor be offered for consumption on your vessel to any Q.G.P.C. employee unless he is of senior staff status. At the present time vessels enjoy the privilege of not having to seal their liquor stocks whilst in port, but you will readily appreciate that this privilege would be withdrawn if the above rules are not strictly observed whilst vessel is at Umm Said.

REPATRIATION: Immigration/Transit facilities for arriving or departing ship personnel are good. Ample notice should be given on passport details to ensure minimum delay to travelling personnel.

DISCHARGE CERTIFICATE: The Master of every vessel loading at Umm Said is handed a Discharge Certificate for completion by the Customs or Port Authority at port of discharge and return by air mail to Qatar General Petroleum Corp., P.O.Box 3212, Doha, Qatar within 40 days of sailing from Umm Said.

Instructions regarding the cable to be sent after discharging a cargo loaded at Umm Said must be strictly followed.

It must be emphasised that failure to comply with this requirement may result in delay or even boycott of the vessel upon return to Qatar.

It is therefore in best interest to ensure that Agent at port of discharge attends to despatch of this certificate and the cable with least possible delay. Airmail should be used for Certificate posting.

N.B. If the cargo is destined for onward transit, the final destination of the cargo must be advised on the Certificate.

SECURITY: The Government of Qatar and the Corporation are anxious to ensure that unauthorised persons do not board vessels loading at Umm Said. Vessel's co-operation is requested in checking the identity of all persons boarding.

Vessels are particularly advised to keep all points of access to vessel under surveillance at all times, and to provide maximum night illumination of vessel insofar as the safety regulations permit.

A State Police Launch is present in the area and may be available for assistance if required.

GENERAL: *Stores and Provisions:* At Umm Said there are no facilities for the supply of stores.

Q.G.P.C. Light Dues: A charge is made to cover the provision and maintenance of light buoys in the Approach Channel to Umm Said. This covers one visit to this port, both inward and outward passage.

Qatar Port Dues: The State of Qatar impose Port Dues on all petroleum carrying vessels which load hydrocarbon substances in one or more of the oil loading ports located in the State of Qatar which includes islands and offshore areas belonging to the State of Qatar.

Note: The G.R.T. for purposes of these calculations will be that shown on the Arrival Report signed by the Master.

M.E.N.A.S. Light Dues: M.E.N.A.S. Light Dues at rates fixed by the Middle East Navigation Aids Service are payable at Umm Said to cover both inward and outward passage through the Gulf.

DEVELOPMENTS: The new Umm Said port, opened in 1977, has a total water frontage of 4.5 km. of which 2.5 km. has been developed to provide deep-water berths and a harbour for small craft. Three berths at the Northern end having 15.5 m. minimum depth of water at MLLW are reserved mainly for the requirements of Qatar Steel Company and 2 berths at its Southern end having 13.0 m. minimum depth of water are reserved mainly for the requirements of Qatar Petrochemical Company. Three additional berths having 13.0 m. and two berths having 10.0 m. minimum depth of water at MLLW are available for specialised and general cargoes.

Inner approach channels and manoeuvring areas have been dredged to serve all berths in the new Port.

In addition there are wharves under construction which will be used by general cargo vessels, Ro/Ro vessels, car carriers and container vessels.

A chemical plant is also being constructed.

SHIPMASTER'S REPORT: October, 1980.

Vessel: 210,000 tonnes d.w.

Pilotage: This is now compulsory for the inward passage too for tankers. The Pilot/Mooring Master boards by boat from Doha at Mishut Buoy in position Lat. 25° 16′ N., Long. 41° 47′ E.

Agents/Operators: Qatar Petroleum Producing Authority has now been renamed Qatar General Petroleum Corporation and Notices of Readiness, etc., should be addressed accordingly. Cable address unchanged: PETROQAT.

Documents: No papers at all required from ship.

Radio: A7S was heard after contact had been established on VHF. The Mooring Master did not know of any ships ever using this station.

AGENCY:

(A) *Tankers:*

Qatar General Petroleum Corporation (Onshore Operations), P.O.Box 10070, Umm Said, Qatar. Telex: 4050 DH Qpaush. Cable: Petroqat. Umm Said. Terminal Tel. No.: 322569, 771219, 774221.

(B) *Other Vessels:*

Qatar National Navigation and Transport Co. Ltd., P.O.Box 153, Doha. Qatar. Telex: 4206 Melaha DH. Cable: Navigation. Tel: 321175/9. 23684, 21213.

AUTHORITY: Qatar General Petroleum Corporation (Onshore Operations), P.O.Box 10070, Umm Said, Qatar. *Tel:* 774210, 771852. *Telex:* 4050 Qpa Usd. *Cables:* Petroqat Umm Said. *Contact:* A. A. Al Najjar, Terminal Superintendent.

General Cargo: Director, Department of Ports, Ministry of Communication and Transport, P.O.Box 313, Doha, Qatar. *Tel:* 413322 PABX–414626. *Telex:* 4378 Mawani DH. *Cables:* Mawani. *Contact:* Harbour Master. *Tel:* 414287.

Reunion Island

POINTE DES GALETS: 20.55 S. 55.17 E.

(See Plan Book)

FLAG: French flag.
PILOTAGE: Compulsory for all vessels over 50 m. LOA. Pilot is normally ordered by ship's Agent, or in particular cases by the Harbour Master if contacted by VHF beforehand. Pilot launch carries regulation pilot signals. Pilot boards at the entrance to the port about 1 mile from the breakwaters. Pilot on VHF Channel 16, it is recommended that a watch be kept and ETA confirmed.
APPROACHES: *Channel and Buoyage:* The leading line 102° 30′ for entry is determined by day, by 2 rectangular white signs, bordered in red with a thick black line denoting the centre line. At night the leading line is 2 red lights. In the channel the depth is 10 m., 70 m. wide and is buoyed by 4 spars, 2 on each side.

The leading marks for access to the North Port, South and Fishing Port, respectively 009°, 189° and 260°, are marked as shown below:–

North Port: By day, 2 red rectangular signs, with a thick white line marking the centre line, at night, 2 fixed red lights.

South Port and Fishing Port: 2 rectangular white signs with a black vertical line marking the centre line by day. 2 fixed green lights by night.
ANCHORAGES: There are 2 anchorages in the roads near the port.
(a) In Baie de St. Paul in depths of about 40 m., well marked and safe except in very strong swell. Mooring buoy available in bay.
(b) In Roads of La Possession unmarked anchorage and little used.

If vessel requires a Pilot for anchoring, then anchorage dues are incurred. Vessels anchoring by their own means do not incur charges.
RESTRICTIONS: Manoeuvring is best done in the early morning or at daybreak because during the day wind can make movement difficult. The current in the channel varies in strength (between 1 and 2 knots) and direction. Its direction can only be determined by careful observation during the approach. As a consequence ships should be ready to anchor on instruction from the Pilot while transiting the channel. Vessels swing in the outer port using a long headline.

Berth No. 8 unsafe during swell periods.
MAX. SIZE: Under certain conditions, the topography of the port and jetties, access is limited to the sizes below:–

North Port: Length 160 m., beam 22.0 m., draft for entry 8.5 m. Greater with preliminary agreement of the Port Authorities. Departure draft fixed by the Port Authorities. (Length 160 m. if draft less than 8.50 m.).

South Port: Length 180 m. if draft less than 7.50 m.
175 m. if draft less than 8.00 m.
170 m. if draft less than 8.25 m.

Fishing Basin: Length 55 m. draft 4.50 m.

Otherwise entry or departure will depend on the Pilot's advice. Normally entry only occurs at the following times depending on the season. Maximum daylight 0445 – 1845 hrs.
RADIO: Saint Lys or Saint Denis Radio.
VHF: Harbour Master's Office equipped with VHF. Call on Channel 16 daytime only (Sunrise – Sunset).
TUGS: Only used to assist vessel manoeuvring in the port. Tug joins vessel in outer harbour. Ship's lines always used. Tug will also assist on roads (deliveries of mail).
BERTHING: Berth assigned by Harbour Master, basis vessel's length and draft. Tankers berth in the outer harbour at dolphin berth. No slop facilities.

Fore Port: (Channel: 70 m. usable width. Turning circle 300 m. Dredged to 10 m. Berth H, 175 m. long, dredged to 8.5 m.).

North Port: Access lock: 30 m. width, 10 m. depth.
Berth 1: 160 m. length, 8.50 m. depth.
Berths 2, 3, 4: total length 366 m., 9.00 m. depth. For 2 or 3 vessels.
Berth 5: 150 m. length, 8.5 m. depth. Quay is narrow due to cargo collection (mainly bagged cargoes).
Berth 6: (French Navy) 140 m. length, 6 m. depth.
Berth 7: 210 m. length, 9 m. depth. Bulk sugar loading berth.

South Port: Berths 8, 9: Each 190 m. length, 10 m. depth.
Berth S: 120 m. length, 8.5 m. depth.

Fishing Basin: 6 berths, 70 m. length, 5 m. depth.

The depths above are dredged depths.

Forklifts for handling 22 ton containers at certain berths.
CRANES: No shore cranes.
STEVEDORES: Normal working hours 0700 – 1700 hrs. Possible to work in meal hours 1100 – 1230 hrs. and 1700 – 1800 hrs.

Handling Rates: General cargo: 80/100 tons per day per gang. Bagged cargo: 2,500 bags (less than 80 kilos each) per gang per day.
TANKERS: Discharge at Berth Nos. 8 and 9.
DENSITY: 1025.
FRESH WATER: Available at all times by pipe-line at the quays. Rate 10 t.p.h. minimum.
FUEL: Fuel and marine diesel available at Berth Nos. 8 and 9.
MEDICAL: Doctor and hospital facilities available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally performed by ship's crew who also unlash and hook containers at the 3rd height.
REPAIRS: Repairs can be effected by S.M.A.G. Tel: 42.09.24.
REPATRIATION: All facilities available for crew change and repatriation.
AIRPORT: 30 km. away, daily connections world-wide (Air France, Air Mauritius, S.A.A. and Air Madagascar).
TIME: GMT plus 4 hours. No alterations during the year.
HOLIDAYS: No cargo work on May 1st or November 1st. Possible to work at overtime rates on January 1st, Easter Monday, Whitsun, July 14th, August 15th, December 25th and other holidays.
TELEPHONES: Police 42.00.17 and 42.15.80. Ambulances 18 or 42.06.53 (Private), Fire 18, Harbour Master 42.09.12. Telephones can be placed onboard at all berths.
SERVICES: Harold J. Thomson – P&I Club representative (Oceanus, Strike, London Mutual and others). Speaks excellent English, will assist with any shipping services or supplies. Tel. 42.03.10. Telex: 916252.
IDENTIFICATION CARDS: Seaman's Book compulsory, to avoid visa problems.
DELAYS: General cargo rates 500–1,000 tons per day depending on category and conditions.
SHORE LEAVE: Crew are allowed to go ashore.
DEVELOPMENTS: New port facilities at Baie De La Possession for vessels up to 220 m. LOA approved. Expected to be ready early 1986.

SHIPMASTER'S REPORT: 1978.
Documents: 3 Crew personal effects lists, 3 Crew lists, 3 Bonded stores lists. Declaration of Health (Supplied on arrival).
Pilotage: Pilotage compulsory. Pilot boards 1 mile off breakwater, minimum of 12 hours' notice required.
Anchorage: At Saint Pauls Bay, 5 cables offshore in depth of 20 fathoms – the water is too deep further offshore.
Restrictions: Vessels can enter and leave at any stage of the tide during daytime. Max. beam for North Port 22 m.
Max. Size: Length 180 m. with draft 7.50 m., length 175 m. with draft 8.0 m. and length 160 m. with draft 8.5 m.
Tugs: 1 tug available and required for berthing and unberthing in the North and South Port.
Radio: Radio station – Saint Dennis Radio "FFD".
VHF: Pilot and Port Authority Channel 16.
Special Bulk Facilities: Bulk sugar berth – rate 400 t.p.h. No quay cranes – no Ro/Ro facilities. Facilities for handling containers and storage space for containers in North and South Port.
Fresh Water: Available.
Repairs: Facilities available.
Services: Provisions, Bunker fuel, diesel available.

AUTHORITY: Arrondissemente Mixte, B.P. 08, 97420 Le Port, France. *Tel:* 42-09-55. *Telex:* SERMAR 916428. *Contact:* J. C. Le Clech, Le Chef de l'Arrondissement Mixte.
AGENT: SCAC Transport International, 97420 Le Port De La Reunion. Tel: 42-00-22. Telex: 916137.

NOTES

Please also advise Shipping Guides Ltd.

Romania

CONSTANTZA: 44.10 N. 28.39 E. (See Plan Book)

DOCUMENTS: As soon as vessel is boarded by the border control commission, the Master fills in a form of declaration in 4 copies, which together with Stowage Plan, Cargo Manifests, Sanitary Certificates, is handed to representative of the Agency. Also following documents are to be handed over at Harbour Master's Office:

Derat Certificate.
Certificate of Nationality.
Tonnage Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Safety Radio-telegraph Equipment Certificate.
Ship's Register.
Safety Construction Certificate.

N.B. These documents will not be returned to the vessel until sufficent funds, in U.S. dollars, have been deposited by Owners to cover all vessel's disbursements.

Crew Lists and Passenger Lists must be typed in several copies (up to 7).

Purser's Report: 1976.

The Authorities require all the ship's certificates, discharge books, health declaration, and vaccination certfiicates. At least 10 copies of crew list, personal declaration and 2 copies of stores list containing all items of foodstuff, bonded goods and canteen.

PILOTAGE: Upon arrival in roads, a cable must be sent through radio coast station to Agent, stating hour of arrival and asking for Pilot. If entrance is not possible immediately due congestion Agent will call back the vessel advising when Pilot may board near the port entrance in order to berth vessel.

A Pilot is required for shifting in port, even for warping along the quay. Pilot boat has black hull with "Pilot" in white on sides, and white upperworks. Pilots operate 24 hours a day on VHF Channel 14 only.

MINEFIELDS: See charts of area.

ANCHORAGES: Anchorage areas in Constantza Roads are just near the new port works in an area up to 44 ft. depth. Length and breadth have no special restrictions. Actual official permitted draft for tankers 30.6 ft. will be soon improved in new tanker berths. Constantza Anchorage – East approach Nr. 2. Approach is between limits of Danger Areas Nos. 3B and 3A. Width 1.7 miles, length 15.3 miles, direction 270° – 090°. Centre line joins following positions.

C1: Lat. 44° 09.35′ N., Long. 29° 02.20′ E. At 17.5 miles on bearing 091° 12′ from Constantza Main Lighthouse (nr. 1.5).

C2: Lat. 44° 09.35′ N., Long. 28° 41.00′ E. At 2.25 miles on bearing 099° 12′ from Constantza Main Lighthouse (nr. 1.5).

On this approach non-degaussed vessels with a max. draft 12 m. may navigate.

MAX. SIZE: Vessels up to a max. draft 35 ft. to 36 ft. may berth in Constantza. See "Tankers".

TUGS: Tugs normally join vessel near port entrance assisting them until berthing.

RADIO: Constantza Coast Radio Station, call sign YQ1, frequency 462 kHz. Operation – daily starting at 0650, 1250 and 1850 hrs. GMT.

Agent requires 5 days', 48 hours' and 24 hours' notice of arrival.

VHF: Navlomar Office keeps watch on Channel 10, 0800 – 1300 hrs. and 1800 – 2000 hrs. They listen to vessels in the harbour and in the Roads.

BERTHING: 9 quays (approx. 2,000 m.), including facilities for Ro/Ro vessels and chemical fertilisers.

BULK HANDLING FACILITIES: Max. LOA 220 m., max. draft 36 ft. 2 cranes with grabs, discharge rate 4,000 tonnes per day (jib crane) and 10,000 tonnes per day (bridge crane).

In total there are 6 ore discharging bridges, 2 phosphate discharging bridges, 3 silos, 37 mobile pneumatic installations and 2 floating pneumatic installations.

CRANES: 150 quay cranes and 94 travelling cranes up to 100 tons capacity.

TANKERS: 5 oil wharfs under construction capable of berthing tankers up to 80,000 d.w.t.

MEDICAL: Crew members are offered medical assistance on all working days between 0900 – 1200 hrs. and 1300 – 1700 hrs.

FRESH WATER: Available.

FUEL: *Navlomar Bunkering Service: m.t. "Moreni" and m.t. "Zemes".* With the growth of shipping traffic and the need for greater speed in the bunkering of ships, Navlomar considered it essential to provide a more efficient service. A decision was therefore taken to replace the barge by new self-propelled bunkering vessels built in a Romanian yard using improved cago handling equipment.

The new tankers are equipped to receive gas oil, fuel oil, or a blend of both, and carry a variety of marine lubricants and other petroleum products. Its wide capacity and powerful pumps ensure speedy supplying with Romanian petroleum products of the best quality.

Characteristics: Owners, Navlomar Constantza; length, 54.2 m.; breadth, 10 m.; draft, 3.63 m.; displacement, 442 tons; speed, 6.7 knots; propulsion, 2 engines, "23 August" Bucharest; pumping rates, fuel oil 180 t.p.h., gas oil 190 t.p.h.; cargo capacity, fuel oil 747 tons, gas oil 401 tons, mixture 72 tons, oil in drums 30 tons; metering, fuel oil and oil meter fitted with temperature compensator and direct volume/weight conversion.

GANGWAY/DECK WATCHMEN: Watchmen recommended for special general cargoes. Cost will be arranged through Agent.

CUSTOMS ALLOWANCES: Small quantity permitted for each crew member out of bond but may be renewed if vessel stays longer in port.

HOLIDAYS: Official holidays in Romania: New Year's Days (1st and 2nd January); Easter Orthodox Monday (April); Labourer's Days (1st and 2nd May); Liberation Days (23rd and 24th August); Anniversary of Socialist Revolution (7th and 8th November); Christmas (25th and 26th December); Proclamation of the Republic (30th December).

REPAIRS: Largest dry dock in Constantza has 15,000 tons lifting capacity, second dock up to 8,000 tons.

TIME: Local time is GMT plus 2 hours. In Summer GMT plus 3 hours.

STEVEDORES: Working hours 0800 – 1700 and 2000 – 0500 hrs. Saturday afternoons, afternoon of days before holidays, Monday mornings and days after holidays until 0800 hrs. usually exempted in C/P although work may be effected. Loading and discharging are generally effected by shippers and receivers, respectively at their own expense and they may work also on holidays, Sundays and Saturday afternoons.

SHORE LEAVE: On completion of border inspection, crew can go ashore taking their Seaman's Books (or Passports) and the permits they receive from the soldier at the gangway. The permits must be returned to soldier upon coming back on board. In the event that crew members desire to visit places outside Constantza they must inform Agent.

GENERAL: From the time a vessel enters the territorial waters of Romania until she leaves the respective zone, i.e. 12 miles, it is compulsory to fly the Romanian flag. Ships that call at Constantza for the first time and have not got the Romanian flag on board must have it ordered through the Agent immediately upon berthing.

Following is an extract from "Notice to Sailors" issued by Authorities at Constantza:

1. Crew members are required to observe international rules covering work protection, port sanitation and Customs regulations, and in addition, Romanian law, both within the port and outside that area.

2. In order to avoid accidents concerned with port equipment, cranes, trucks, tractors and trains etc., crew members walking inside the port area are permitted to walk only on the main streets and between the berths where their vessels are moored, and/or to entrance/exit No. 1, the Navlomar Agency, the Harbour Station, the Navlomar tax-free shop or the Seamen's clinic.

3. Crew members are required to enter or leave the port area at gate No. 1.

4. Crew members are required to be back aboard their vessels by 0400 hrs.

5. Crew members wishing to visit other zones in the country are required to obtain a visa from the ship's Agent.

6. Transportation within the port by motor-boat which leaves the Harbour Station every 15 minutes and calls at all berths in the port, is available subject to crew members being in possession of the proscribed ticket issued by ship's Agent and duly signed and stamped by the ship's Master.

7. The tax-free shop is located next to the Harbour Station. All purchases must be retained aboard under Customs control until the vessel has sailed.

8. It is forbidden, either to bring in or to take out Romanian currency. Such currency is obtainable from Navlomar Agency at Master's request and for Owner's account. All Romanian currency remaining in crew members' possession must be returned to the Master before sailing, and the Master is required to return the currency to Navlomar.

9. The port Polyclinic is available for medical attention to crew members at the following times: Monday, Wednesday and Friday, between 1300 and 1600 hrs. Tuesday, Thursday and Saturday, between 0800 and 1300 hrs. In cases of emergency, assistance is obtainable by telephoning 16528.

10. Crew mail and messages are delivered daily by ship's Agents, and outgoing crew mail is collected for despatch at the same time.

SHIPMASTER'S REPORT: Rate of exchange is "Tourist Rate" which is approximately 3 times official rate. It is illegal to take Romanian money into or out of the country, any money which has not been spent must be returned to Agent in front of Customs when clearance is being given.

Any stages, gantlines or painting scows must be taken inboard at night. First opening and closing of hatches are for ship's account. Motor-boats operate a "taxi" service in harbour at a cost of 8 Lei per person per trip.

Control will only issue clearance after all cargo work, bunkering, etc. is completed.

At Mineral Berth iron ore is discharged by 2 large gantry cranes operating grabs, each working at approximately 200 t.p.h. Rate of discharge is frequently disrupted by shunting of railway trucks – 2 tracks serve 5 berths.

AGENT: Navlomar Shipping Agencies. Tel: 11970, 15274. Telex 14258, 14259, 14339. Cables: "Navlor Constantza".

SULINA: 45.11 N. 29.45 E. (See Plan Book)

PORT LIMITS: Line of Sulina Entrance and "Mile 2" on Danube River (Sulina Channel).

DOCUMENTS: Within maximum 1 hour from fulfilment of arrival formalities the Master or Chief Mate reports at the Harbour Master's Office where he tenders the following documents:

Certificate of Nationality.
Tonnage Certificate.
Safety Equipment Certificate.
Load Line Certificate.
Safety Radio-telegraphy Equipment Certificate.
Safety Construction Certificate.
Cargo Gear Certificate.

The above certificates are to be valid and not to expire before ship's sailing the port, Load Line Certificate and Cargo Gear Certificate not to be older than 12 months, and same remain with the Harbour Master until ship's departure when returned through the representative of the Agency that accompanies the Control Commission on departure.

PILOTAGE: Notice of arrival to pilot station at Sulina is to be sent in due time through Sulina Free Port Administration – Agency Department (Navlomar), telex numbers: 52294 (A Apl) and 52295 (B Apl)R.

Channel 16 VHF is continuously watched and ETA may be confirmed or adjusted whenever necessary on this frequency. There is no specific area where pilot boat is located, place where Pilot is to be taken on-board is generally the anchorage location.

Sulina – S.E. approach nr. 5. Width 1.6 miles. Length 7 miles. Direction 146°–326°. Centre line joins the following positions:

S1: 45° 03.01′ N., 29° 53.4′ E. At 11.5 miles on bearing 124° 24′ from Sulina Lighthouse (nr. 1.20).

S2: 45° 08.9′ N., 29° 47.9′ E. At 5.75 miles on bearing 095° 42′ from Sulina Lighthouse (nr. 1.20).

Thence on the No. 01 Sulina black light and whistle buoy, and afterwards on the line of Sulina Entrance leading lights (301° 12′) into Sulina Channel and so to harbour. On this approach non-degaussed vessels with max. draft 7 m. may navigate.

ANCHORAGES: Generally location of anchorage is communicated by pilot station, whether off-shore or inside the channel.

RESTRICTIONS: Vessels calling at Danube ports are obliged to wait in roadstead of Sulina, at least 1 mile away from the black buoy (a black floating cylinder marked "01" in white, which is lighted at night by green flashing light). All vessels both entering and going out of Sulina Channel as well as during navigation in the channel and Danube, are obliged to have on board a Danube Administration Pilot. As a rule, entering and leaving the Sulina Channel, as well as navigation in the channel, is prohibited after night-fall.

MAX. SIZE: The draft at Sulina Bar is 23 ft. (7.01 m.) Vessels up to 180 m. LOA and 7.01 m. draft can be accepted in Sulina Free Port. No tide restrictions.

Any other changes of official draft are broadcast daily, at 1150 hrs. on 1935 m. long wave.

MINEFIELD: See charts of area.

HEALTH: On arrival in Sulina Harbour vessel has to stop to complete border and sanitary formalities and after vessel has completed same, with Danube Administration Pilot on board, proceed to destination. After the vessel has completed manoeuvring to come alongside berth, she is boarded by the sanitary commission. If the vessel has passed the sanitary inspection she is boarded by border control commission which includes a representative of the Agency, the latter assisting the Master in fulfilling arrival formalities and facilitating meeting of any requirements on ship's part. The Master fills in a form of declaration in 3 copies which together with the Stowage, Plan, Cargo Manifest, etc., are handed to representative of the Agency upon his leaving ship. A supplementary declaration is to be completed by the Master, stating:

1. Who supports disbursement expenses (name, mail address, telegraphic address, number of telex).

2. Who supports the supplies of bunkers, provisions, other services, etc. (name, mail address, telegraphic address, number of telex).

RADIO: Constantza – coast radio station. Call signal YQ1, frequency 462 kHz. Operation daily, starting with 0650, 1250 and 1850 hrs. GMT. Contents of transmission: meteorological and navigation notices. Weather forecasts are broadcast in clear English or codified; radio notices to mariners and navigation warnings are broadcast in Romanian, Russian and English.

VHF: High-powered base-station operates in town of Sulina, 24 hours per day, using call-sign: "Pilot Sulina". All calling must be on Channel 16; all other authorities are to make contact on the same Channel (i.e. Navlomar Sulina, Harbour Captain's Office, Sulina Free Port Administration).

RADAR: Not available.

TUGS: Tugs can be ordered whenever necessary either via Sulina Free Port Administration or to Harbour Office; tugs of 2,400 h.p., 800 h.p.and 600 h.p. available for assistance and manoeuvring of vessels and barges.

BERTHING: 4 berths available, of which 2 are in the Maritime Transit Basin and 2 on the Danube River's wharves, both of them 180 m. in length.

Loading/discharge operations performed with floating equipment belonging to Sulina Free Port Administration which also provides shore equipment.

Transhipment with vessel's own gear (i.e. for heavy lift cargo, etc.) possible at all times of year inside the Maritime Transit Basin, or off-shore; for these kinds of operations, assistance (tugs, stevedoring, specialists) from Sulina Free Port Administration is optional.

CRANES: 5 floating cranes of capacity 10 tons to 32 tons available at all berths.

BULK CARGO FACILITIES: No special facilities available. Bulk fertilisers can be transhipped ex-barge, fertilisers in bags can also be stored in covered warehouse. Several types of ore can be handled and stored in open spaces.

SPECIALISED CARGO HANDLING FACILITIES: None available.

BRIDGES: No bridges.

STEVEDORES: Stevedores available 24 working hours per day, in 3 shifts, mechanised assistance available.

On Saturdays from 1400 hrs. till Monday 0700 hrs., or same interval before and after legal holidays, no shifts available except by previous special arrangements.

MEDICAL: Full hospital facilities without prior notice.

DENSITY: At the mouth of the Danube River, average salinity about 1018.

FRESH WATER: Fresh water available at all times from pumps in the Maritime Transit Basin and on several wharves of the town of Sulina.

FUEL: Fuel and complete stock of Shell Marine lubricants available. Prior notice at earliest convenience.

FIRE PRECAUTIONS: Usual fire precautions.

CONSULS: No consulates in Sulina.

REPAIRS: Routine maintenance and boilermaking assistance to light engineering standards. No foundry available. Mechanical workshop with qualified personnel available.

DRY DOCKS: A slipway of 6,500 tons displacement is available.

SURVEYORS: "Lloyd's" Agent as well as representatives of other classification societies and official surveyors can be brought in at short time.

GANGWAY/DECK WATCHMEN: Not necessary.

HATCHES: Opening/closing is normally carried out by the ship's crew.

CUSTOMS ALLOWANCES: Custom's procedure is different in Sulina from that at Galati and Braila as Sulina is a Free Port.

All ships operating exclusively in Sulina Free Port are exempted from Customs dues on condition that no prohibited items are brought ashore. Please also note that ships operating exclusively in Sulina Free Port might be required to pay only half of the usual channel taxes.

All the other procedures (changing of money, Custom control, interdiction to bring in or to take out Romanian currency, etc.) are the usual ones in Romanian Ports, and are to be communicated by Agent. (Money changed at the day's rate.)

Duty free shop available.

Agent to advise shipchandler well in advance of vessel's requirements (foodstuff, cigarettes, drinks, etc.).

CARGO GEAR: Rigging of derricks, good working condition of the winches and derricks, is the permanent obligation of the vessel according to requirements of working gangs. The hatch ways must be opened or closed to their full size. The removable beams or covers shall always be stowed on deck on the side where work is not being carried on, so that they may not hinder working gangs or cause accidents. During operations, the vessel is recommended to close the hatches with rain tents, ship's property, if bad weather. If cargo handling gear breaks down during operations, the waiting time of workers is charged against vessel and such time lost for breakdown of winches not to count as laytime.

Also see "Tugs" and "Cranes".

REPATRIATION: All facilities exist for repatriation and change of crew.

AIRPORT: No airport in Sulina. The nearest airport is in Tulcea (about 70 km. up the Danube River), 6 flights weekly to Bucharest.

TIME: Local time is GMT plus 2 hours. Summer time is GMT plus 3 hours, Summer programme lasting from end of April till end of September.

HOLIDAYS: Official holidays: 1st and 2nd January, 1st and 2nd May, 23rd and 24th August and 30th December. Cargo work can be arranged for these days.

TELEPHONES: This service is available aboard ship, at the Post Office or at Agency Department (Navlomar) Office. Telephone number of Sulina Free Port Administration is (915) 43664, 43242, 43243; local 325.

SERVICES: No special services available.

SHORE LEAVE: When Immigration formalities have been fulfilled, crew can go ashore with shore passes provided by the Agent.

IDENTIFICATION CARDS: Shore passes issued by Coast Guard and provided by the Agent or soldier at the gangway. The passes must be returned to the soldier upon coming back on board.

REGULATIONS: No particular or unusual regulations.

DELAYS: Berthing delays very infrequent.

BANKS: No American or European banks in Sulina, bank facilities can be arranged through Agent by connection to Bucharest, or Tulcea (The Romanian Bank for Foreign Trade).

STORING: See "Prelims" page viii.

1. Vessel can be stored by barge supplied by foreign partners, surveyance and guard of the barges being provided by Sulina Free Port Administration.

2. Previous notification for barge storage compulsory, details to be obtained through Sulina Free Port Administration's representatives.

3. No transhipment into trucks directly possible for the moment.

4. Fork lifts can be used on the jetty to handle stores.

5. No Customs interference regarding storing on the territory of Sulina Free Port, first period (negotiable) of storage free of charges, tariffs to be established by the Administration. Storage possible both in covered and open spaces, on platforms.

6. Riggers belonging either to the Administration or to Romtrans (Specialised Romanian Foreign Trade Enterprise for forwarding activity, which has an office in Sulina Free Port) can be employed, for sorting and arranging cargo on platforms and in warehouses.

GENERAL: From the time a vessel enters the territorial waters of Romania until she leaves the respective zone, i.e. 12 miles, it is compulsory to fly the Romanian flag. Ships that call at Galatz for the first time and have not got the Romanian flag on board must have it ordered through the Agent immediately upon berthing at Sulina Harbour. Throwing garbage overboard or pumping out dirty ballast or bilge water is allowed only beyond the territorial waters of Romania. Non-observance of these rules may result in fines varying between 3,000 and 10,000 lei imposed by the Harbour Master.

DEVELOPMENTS: The Maritime Transit Basin will allow, at the end of 1990s, entrance of 16 vessels of 180 m. in length at one time, and their operations with highly improved shore and floating equipment. A workshop for ship breaking will come into operation in Sulina Free Port.

SHIPMASTER'S REPORT: February 1984.

The entrance route to Danube River from Gura Sulina for Galatz and Braila is as follows: Arrival point Lat. 44° 47′ N., Long. 29° 55.8′ E. and from this point vessel is to steer 000° True till Lat. 45° 05.1′ N., Long. 29° 55.8′ E. and from this point 301° True to No. 1 Buoy. Because of shallow water the vessel must not go South of No. 1 Buoy. With radar, Sfantul Gheorge lighthouse was observed at 15 miles, Sulina at 20 miles and lighthouse at South Mole at 15 miles. Anchorage area is 2 miles East or 1 mile North of No. 1 Buoy. Pilot on VHF Channel 16. Pilot embarks 1 mile East of the No. 1 Buoy.

After anchoring near to Sulina, Customs, Immigration and Doctor board the vessel for clearance. After clearing the vessel another two Pilots board and vessel proceeds to destination. No navigation is permitted during the night for large vessels.

AUTHORITY: By Decree of State Council of Socialist Republic of Romania, Sulina Free Port Administration is both specialised foreign trade state enterprise and Port Authority in Sulina Free Port.

Sulina Free Port Administration, 202 Deltei St., 8829 Sulina, Tulcea County, Romania. *Tel:* (915) 43664, 43242, 43243 or local 325. *Telex:* 52294 and 52295. *Contact:* Mr. Micu Mihai, General Director.

AGENT: Navlomar Shipping Agency. Tel: 43008.

Galatz: 20, 13 Junie. Telex: 51260, 61309. Cables: "Navlomar Galatz".

Braila: 2 Imparatul Traian. Telex: 55232. Cables: "Navlomar Braila".

NOTES

Please also advise Shipping Guides Ltd.

St. Helena

JAMESTOWN: 15.56 S. 05.40 W. **(See Plan Book)**

PORT LIMITS: Within 3 miles radius of the port. Laytime commences at the anchorage.

DOCUMENTS:

4 copies of Crew List.
4 copies of Passenger List.
1 copy of Health Form.

PILOTAGE: No Official Pilot.

ANCHORAGES: The harbour consists of an open roadstead with anchorages shown on charts.

MAX. SIZE: Any size vessel can enter the port. Maximum tide variation approx. 1 m.

HEALTH: Pratique will be granted by the boarding party or by telegram from Port Health Officer. If disease or fever suspected, Port Health should be informed by telegram 24 hours before anchoring so that the necessary precautions can be taken.

RADIO: Name: St. Helena Radio. Call sign for W/T working – ZHH. Frequencies: 500 and 461 kHz. A2, A1. 12963.5 kHz. A1. Working hours: 500 and 461 kHz – Weekdays from 0800 to 2000 GMT. Sundays from 0800 to 1300 GMT. 12963.5 kHz – Daily except Sundays from 1200 to 1300 GMT. Listening watch on Channel 5 and Channel 6.

Call sign for R/T working – St. Helena Radio. Frequencies: 2182 and 3162 kHz A3H, A3J and A3A. 4397.7, 8737.5 and 13150.4 kHz. A3J A3A. Working hours: 2182 and 3162 kHz – Weekdays from 0800 to 2000 GMT. Sundays from 0800 to 1300 GMT. 4397.7, 8735.5 and 13150.4 kHz are only operated on request and ships should answer on Channels 414, 807 and 1217 respectively.

VHF: Harbour Master has VHF facilities. Call sign "Port Control"; Channel 16, working Channel 6, Monday to Friday 0830 to 1600 hrs.

TUGS: None.

BERTHING: Vessels anchor in 18 – 20 fathoms of water.

CRANES: 2×10 ton and 1×30 ton heavy lift crane.

STEVEDORES: 48 hours' notice required by Agents Messrs. Solomon & Co. (St. Helena) Plc, also particulars of tonnage of cargo.

MEDICAL: Harbour Master should be notified if medical attention is required.

TANKERS: No facilities available.

FRESH WATER: Delivered by floating pipe-line at approximately 10 t.p.h.

FUEL: Limited stocks of diesel oil held for local use only.

CERTIFICATES: Vaccination Certificates required for all crew. Derat Certificate should be valid.

CUSTOMS ALLOWANCES: No restrictions. Free use on board.

CARGO GEAR: All discharge carried out by vessel's derricks into lighters.

CONSULS: French Consul. Appointed representatives for Denmark and Norway.

REPAIRS: Small repairs can be carried out (welding or turning, etc.).

DRY DOCKS: None.

SURVEYORS: Messrs. Solomon & Co. (St. Helena) Plc as Cargo Surveyor Agents for Lloyd's.

GANGWAY/DECK WATCHMEN: Supplied by Messrs. Solomon & Co. (St. Helena) Plc.

HATCHES: Opening/closing of hatches normally carried out by crew.

REPATRIATION: No facilities for crew changes. Only for those left behind for hospitalisation.

AIRPORT: No airport on St. Helena.

TIME: GMT throughout the year.

HOLIDAYS: New Year's Day (1st January); Good Friday; Easter Monday; St. Helena Day (21st May); Whit Monday; Queen's Official Birthday; August Bank Holiday; Christmas Day (25th December); Boxing Day (26th December). Cargo work can be arranged except on Christmas holidays.

POLICE/FIRE/AMBULANCE: Police and Fire, Tel: 626. Ambulance, Tel: 241.

SHORE LEAVE: No restrictions unless imposed by Immigration Department.

DELAYS: No delays in berthing. Loading or discharge can be delayed due to bad weather.

AUTHORITY: Harbour Master, The Wharf, Jamestown, Island of St. Helena, South Atlantic Ocean. *Telex:* 202 Govt HI. *Contact:* John Gilbert Cranfield, Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

St. Kitts

BASSETERRE: 17.18 N. 62.43 W. (See Plan Book)

DOCUMENTS:
3 copies of Crew List.
3 copies of Passenger List.
1 copy High Duty Cargo List.
1 copy Crews' Personal Effects List.
1 copy Clearance from last port.
2 copies Ship's Stores List.
7 copies Manifest.
2 copies Bills of Lading.

ANCHORAGES: Harbour at Basseterre is an open roadstead and safe anchorage will be found at a distance of 0.25 to 0.5 miles from the shore opposite the piers in the centre of the town.

RESTRICTIONS: None.

HEALTH: The Harbour Master boards all vessels on arrival at port and inspects the clearance from the last port. If there are no health problems the vessel is immediately granted Pratique. If there is suspected disease or fever on board pre-notification is recommended. If this is done the Harbour Master will have a Medical Officer with him when he boards the ship on arrival.

RADIO: Contact is through Barbados Radio, call sign 8PO.

VHF: Port and Police on Channel 16 throughout 24 hours.

BERTHING: Main Berth: Length 400 ft., depth 30 ft.

Ro/Ro Berth: When berthing dolphins completed berth will be able to handle vessels 400 ft. – 700 ft. LOA. Depth of water 16 ft.

Sugar Loading: Mobile unloaders rated at 150 t.p.h.

CRANES: 5 ton lift, mobile (link-belt); 10 ton lift, mobile (Jones).

Cranes used on cargo pier for offloading barges, ferrying cargo from ship to shore and discharging 20 ft. containers.

STEVEDORES: ETA should be advised 24 hours before arrival of vessel, also tonnage to be discharged and number of gangs required. Discharging rate: 15 tons per gang per hour on bags. 6 tons per gang per hour on general cargo.

MEDICAL: Advance notice if possible – hospital facilities available. Valid Vaccination Certificate for passengers disembarking but not for in transit or cruise ship passengers.

DENSITY: 1025. No tides.

FRESH WATER: Available alongside main berth.

FUEL: Bunkering facilities soon to be available.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Done by stevedores.

CUSTOMS ALLOWANCES: Half pound tobacco or 200 cigarettes. Wine and/or Spirit, 1 bottle.

IDENTIFICATION CARDS: Not needed, however, crew members are liable to be checked by Port Authority on entry and exit by security guard.

CONSULS: Dominican Republic, France, Netherlands.

REPAIRS: The sugar factory has a well-equipped shop for machine, welding and maintenance work. They can assist with most engine repairs.

DRY DOCKS: None.

REPATRIATION: Crew changes and repatriation can be arranged.

AIRPORT: 2 miles from town with regular daily connections to Antigua and Puerto Rico where onward passages to Canada, U.S.A., Great Britain and Europe can be arranged.

TIME: GMT minus 4 hours; no alteration.

HOLIDAYS: New Year's Day (January 1st); Good Friday; Easter Monday; Whit Monday; Queen's Birthday (date fixed by announcement annually); August Monday; Independence Day (September 19th); Christmas Day (December 25th); Boxing Day (December 26th).

POLICE/AMBULANCE/FIRE: Police Tel: 999; Fire Tel: 999; Ambulance (Hospital) Tel: 2515.

TELEPHONES: Available on request.

AUTHORITY: The St. Christopher – Nevis Port Authority, P.O.Box 186, Basseterre, St. Kitts. *Tel:* 4122. *Contact:* The General Manager.

AGENT: S. L. Horsford & Co. Ltd., P.O.Box 45, Basseterre, St. Kitts, W.I. Cable adress: Horsford, St. Kitts. Telex: 6822 Horsfd Skb Kc. Tel: Shipping Manager, Office 4086, Home 2101; Secretary, Office 2429, Home 8032.

NOTES

Please also advise Shipping Guides Ltd.

St. Lawrence Seaway

ST. LAWRENCE SEAWAY (See Plan Book)

DOCUMENTS: For Agent in Montreal, 3 unfreighted copies of Complete Manifest for Seaway Toll purposes covering all cargo to be discharged in the Great Lakes.

The St. Lawrence Seaway Authority requires one Transit Declaration Form. Also for cargo to or from overseas one unfreighted copy of the complete Manifest is required.

In first U.S. port, a "Traveller" is made up by the Customs Inspector with the following documents:

2 complete sets of U.S. Cargo Manifests, plus 6 copies for Agents.
1 set Manifest of Cargo for first U.S. port.
4 Stores Lists.
4 Personal Effects Lists.
4 Firearms and Ammunition Lists.
4 Crew Lists, Form 1–418.
4 Narcotics Lists.
4 Vessel's Itinerary Lists.
Vessel's Registry and copies of Paid Tonnage Tax Certificates.
Health Pratique.
Clearance from previous port.
2 sets Bills of Lading.
3 copies Stowage Plan.

In subsequent U.S. ports the following are required:

5 sets Manifest of Cargo for that port.
The Traveller and Permit to Proceed issued in previous port.
2 Stores Lists.
2 Personal Effects Lists.
2 Firearms and Ammunition Lists.
2 Crew Lists.
2 Narcotics Lists.
2 Sets Bills of Lading.
3 copies Stowage Plan.

Vessels navigating St. Lawrence Seaway are required to complete applications for:

(1) Certificate of financial responsibility,
(2) Certificate of Insurance, form FMC 225,
(3) Oil discharge Assurity Bond, form FMC 226,
(4) Guarantee in respect of liability for discharging oil, form FMC 227.

These applications have to be filed with the Secretary of the Federal Maritime Commission before a certificate is issued. The oil pollution liability certificate should be retained aboard the vessel.

ICE ADVISORY SERVICE: Ships inbound from seaward between December 15th and April 15th should advise the Ice Information Officer, Sydney, 36 hours prior to entering Cabot Strait, stating their position, destination, whether loaded or in ballast. This procedure will facilitate the passing of ice information to the ship as necessary. Ice information is also available from radio stations at Halifax, Seven Islands, Wirringate and Grindstone. The Canadian Broadcasting Corporation Maritime Network also broadcasts ice information daily during the Winter navigation season. Supplementary ice information may also be obtained from the Canadian Marine Service Icebreakers.

During the ice season, radio broadcasts of ice information are made twice daily from Marine radio stations as follows: Cape Race, Newfoundland; Fox River, Quebec; Mont-Joli, Quebec; Halifax, Nova Scotia.

PILOTAGE: The first pilot station when entering the St. Lawrence River is at Les Escoumins, 80 miles West of Father Point. This Pilot will take the ship to the Quebec Pilot station 121 miles to the West. Off Quebec a new Pilot boards to take the ship to Trois Rivieres, where there is another change of Pilot for the remaining trip to Montreal.

Pre-clearance: Vessels intending to transit the St. Lawrence Seaway must be pre-cleared by a representative who shall assume responsibility to the authority for payment of all tolls and charges to be incurred.

Application for pre-clearance Form S-VM 429 may be obtained from the St. Lawrence Seaway Authority, 202 Pitt Street, Cornwall, Ontario K6J 3P7, or from the St. Lawrence Seaway Development Corp., Massena, New York 13662.

RESTRICTIONS: The average navigation season in the Montreal–Lake Ontario section of the St. Lawrence River is from April 1st to December 15th.

Montreal to Lake Ontario – Locks No. 1 to 7: Length between the breast wall and ship arrester 233.48 m., width 24.38 m., depth 9.14 m., channel depth 8.23 m.

Welland Canal – Locks No. 1 to 7: Length between the breast wall and ship arrester 233.47 m. to 234.21 m. No. 8: Length 365.76 m., width 24.38 m., depth 9.14 m., channel depth 8.23 m.

Sault Ste. Marie – Canadian Lock: Length 236.83 m.; width, 17.98 m. The channel depth (lower end) to the Canadian Lock is 6.10 m., with a normal depth of 5.56 m. over the sill. As Easterly gales raise, and Westerly gales lower the water levels below the Lock temporarily, it is recommended that Masters of larger vessels ascertain the available depth from the canal office prior to locking.

Information for U.S. Locks may be obtained from U.S. Corps of Engineers, Detroit District.

Speed Limits: 9.0 knots upbound, 10.5 knots downbound in the Beauharnois Canal; 8 knots in the Welland Bypass Channel and 6 knots in all other canals. The speed limits vary from 8.5 knots to a maximum 16 knots in remaining sections of the St. Lawrence River. Maximum speed limits for vessels in excess of 12 m. in length are contained in the Seaway Handbook. Changes are indicated through Seaway Notices.

For information relating to speed limits, on the Detroit, St. Clair and St. Mary's rivers contact the U.S. Coast Guard, Cleveland, Ohio or the Canadian Coast Guard, Toronto, Ontario.

MAX. SIZE: Length 222.5 m., beam 23.16 m., draft 7.92 m. Masts must not exceed 35.5 m. above water level. Other limiting dimensions are obtained in the Seaway Regulations.

HEALTH: All ocean-going vessels must obtain Free Pratique before entering the Seaway. Vessels entering the Seaway direct may receive quarantine inspection and clearance from the Canadian authorities at Montreal while at anchor awaiting entrance to the Seaway.

RADIO: *Notice of Arrival:* Master must give at least 24 hours' notice to Commander, 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also at least 24 hours' notice of ETA at first U.S. discharge port is required.

St. Lawrence Seaway Authority: Every vessel shall provide at least 24 hours' notice of arrival to the nearest Seaway Station, prior to an initial transit or in case reinspection of the vessel is required.

Calling In requirements are detailed in the Seaway Regulations.

Great Lakes: It is recommended that vessels within a radius of 30 nautical miles of a shore station use their FM transmitting and receiving equipment to ensure better connections. This pertains especially to vessels at anchor or in the proximity of a port or berth.

Radio Stations: Buffalo, New York, marine operator. Port Burwell, Ontario, marine operator. Geneva, Ohio, marine operator. Loraine, Ohio, marine operator. Rogers City, Michigan, marine operator.

IDENTIFICATION CARDS: In the first U.S. port, the Immigration Officer requires an alphabetical crew list made up on Form 1–418 and visaed by the American consul in the last overseas port. This crew list should contain the name of every crew member on board. Also needed are 3 copies of this crew list on the same form. The Immigration Officer will require all seamen's books and passports, to issue the completed crew landing permits made out on Form 1–95A. The Master will be given a crew list receipt which will indicate the names of crew members detained on board, if any. In case a crew member is detained on board, he cannot go ashore, and at irregular times an Officer of the Immigration Service will check if the crew member is on board. A fine of $1,000 will be imposed on the vessel for each detained crew member who is not on board.

TUGS: Whistle signals differ from those in international usage and are as follows:

1. Ship to Tug: 1 Long and 1 short (—.) = ship ready to proceed, O.K. or all right. 1 Long and 2 Short (—..) = let go the bow tow-line. 1 Long and 3 Short (—...) = let go the stern tow-line.
2. Both Ship to Tug and Tug to Ship: 1 Short(.) = work propeller ahead when stopped, *or,* stop propeller when working, either ahead or astern. 2 Short (..) = work propeller astern. 3 Short (...) = slow down or check. 4 Short (....) = work propeller strong in the same direction it is working at the time the signal is blown. 5 or more Short blasts (.....) = the standard danger signal.

SEAWAY EQUIPMENT: *Radio-telephone Equipment:* All vessels, other than pleasure craft of less than 19.80 m. in overall length, must be equipped with VHF radio telephone equipment, in addition to the FM equipment otherwise required. The radio transmitters must have sufficient power output to enable the vessels to communicate with Authority Stations from a distance of 48 km. and must be fitted to operate from the wheelhouse and to communicate on 156.55, 156.6, 156.65, 156.7 and 156.8 MHz.

Stern Anchors: Every vessel of more than 110 m., the keel of which was laid after January 1, 1975 is required to be equipped with a stern anchor.

Propeller Direction Alarms: Every vessel of 1,600 g.r.t. or more shall be equipped with

(a) propeller direction and shaft r.p.m. indicators located in the wheelhouse and the engine room; and

(b) visible and audible wrong-way propeller direction alarms located in the wheelhouse and the engine room, unless the vessel is fitted with a device which renders it impossible to operate engines against orders from the bridge telegraph.

Pitch Indicators and Alarms: Every vessel of 1,600 g.r.t. or more equipped with a variable pitch propeller shall be equipped with:

(a) A pitch indicator in the wheelhouse and the engine room; and
(b) effective April 1, 1984, visible and audible pitch alarms in the wheelhouse and engine room to indicate wrong pitch.

Disposal and Discharge Systems:

Every vessel not equipped with containers for ordure shall be equipped with a sewage disposal system (enabling compliance with applicable laws relative to sewage disposal).

Garbage on a vessel shall be:

(a) destroyed by means of an incinerator or other garbage disposal device; or

(b) retained on board in covered, leakproof containers, until such time as it can lawfully be disposed of.

No substance shall be discharged or disposed of onto a lock or tie-up wall by any means, including overboard discharge pipes.

Vessels not fitted for the Seaway as prescribed above, will incur expenses for the rental, installation and removal of compulsory fittings.

POLLUTION:

1. No vessel shall
   (a) emit sparks or excessive smoke; or
   (b) blow boiler tubes.

2. No vessel shall discharge into Seaway waters any substances not in conformity with applicable United States Federal Regulations and Canadian Regulations with the exception of the waters of the Welland Canal where two specific zones are established in which no substances shall be discharged, namely:
   (a) from lock 7 to mile 17; and
   (b) from lock 8 to the outer Port Colborne piers.

3. A record shall be kept of each location within the Seaway or adjacent waters where bilge water has been discharged.

4. Except as authorised by the Authority or the Corporation, no vessel shall discharge garbage, ashes, ordure, litter or other materials.

REGULATIONS: For additional information on regulations and procedures, Masters and Owners are urged to refer to the Seaway Handbook and Seaway Notices.

AUTHORITY: The St. Lawrence Seaway Authority, 202 Pitt Street, Cornwall, Ontario K6J 3P7. *Tel:* (613) 932-5170. *Telex:* 05-811517. *Contact:* Director of Operations and Maintenance.

St. Lucia

CASTRIES: 14.01 N. 61.00 W. (See Plan Book)

PORT LIMITS: From Lat. 14° 01′ 24″ N., Long. 61° 00′ 05″ W. thence in the direction of 301°T for 1 mile, thence in the direction of 211°T for 1.2 miles, thence in the direction of 121°T for 0.88 miles to La Toc Point at Lat. 14° 30′ 00″ N., Long. 61° 00′ 46″ W. thence along foreshore at the average HW mark from La Toc Point around La Toc Bay to Tapion Point, thence along to the Castries River mouth and thence to the opposite bank including all marine works, wharves and property vested in the Crown. All around the bay to Seraphin Point, thence all around the bay to Veille Ville Point, thence to St. Victor Point and thence all around the shore to Vigie Point and then to Lat. 14° 01′ 24″ N., Long. 61° 00′ 05″ W.

DOCUMENTS:

Report of Ship's Stores. Form 1.
Crew Members' Stores List. Form 2.
List of Unmanifested Cargo. Form 3.
Report of Ship's Manifest. Form 4. (4 copies).
Passenger Lists. (5 copies).
Steamship Company Release. (1 copy).
Crew List. (5 copies).
Clearance from Last Port of Call.
Outbound Cargo.
Loading List.
Customs Report Outwards (Form A7)
Vessel Manifest (Contents of Ship). Form 16. (3 copies).
Entry Outwards and Certificate of Rummage. Forms 9 and 10.
Loading Licence. Form 14.
Clearance. Form 17. Form 18 (Steamship).

Where possible, Cargo Manifests and Stowage Plans should be forwarded by Airmail, ahead of the vessel to the local Agents.

PILOTAGE: Pilotage is compulsory for all craft except for ships of less than 100 g.r.t., Her Majesty's ships, pleasure yachts and fishing vessels.

Notice of ETA and request for a Pilot must be made to the Harbour Master not less than 24 hours before ETA. Cable address: "Paslu". Telex: 6355 Paslu LC. Confirmation of ETA is required 2 hours before arriving at the Boarding Station. Channel 16 VHF is continuously watched and ETA may be confirmed or adjusted on this frequency. Pilot boat is a "Cheverton" built, 8.2 m. LOA, fibreglass hard top, with a "V" hull, single inboard 4236 Perkins diesel engine, complete with navigation and pilot lights. Painted black all around with letter "P" painted in white on both sides of bow. Name of pilot launch "Charles" painted in white at the stern.

The usual International Signals may be employed by vessels requiring a Pilot. The usual pilot boarding point 0.5 miles off Vigie Point. Ships that are 3 hours away are requested to call Vigie Lighthouse on S.S.B. 2182, VHF Channel 16, informing of ETA, draft and length.

Pilot boat stands by on Channel 16 VHF. Pilot station stands by on Channels 14 and 16 VHF.

Pilot boards vessels on the starboard side and for ships outward leaves on the port side.

In the event of bad weather ships will be advised accordingly.

Vessels awaiting Pilot may anchor between 1 and 2 miles N.W. of Vigie Point in 22 m. of water. Rock and sand bottom, very good holding ground, no shelter.

ANCHORAGES/APPROACHES: Deep and sheltered anchorage exists off Castries Harbour entrance. The approach channel is 91.44 m. wide with minimum depth of 14.75 m. to the port proper, which lies within an all protected harbour. The turning basin is 457.20 m. in diameter at a depth of 25.6 m.

Masters familiar with the Port of Castries may be invited to proceed to the Northern Anchorage/Quarantine Area not less than 3 cables off the Vigie promontory.

Care must be taken to drop anchor clear of the entrance range which is for in-going ships, 121°T on the Castries leading lights.

Also see "Pilotage".

RESTRICTIONS: Petroleum tankers are not moved during the hours of darkness except in emergency conditions.

MAX. SIZE: Ships up to 213 m. LOA and 9.1 m. draft can be accepted. No restriction on beam.

Also see "Tankers".

RADIO/VHF: Port Control on VHF Channels 16, 6, 12 and 14. Also 2182, 2146, 2381, 2527, 2582 and 2638 kHz.

TUGS: No tugs are available.

BERTHING: There are six berths numbered 1 to 6 inclusive.

Berth Nos. 1 to 3 are general cargo berths and have a total length of 356.6 m. The draft varies from 5.8 m. at Berth No. 1 to 8.2 m. at Berth No. 3. Berth Nos. 4 and 5 are of recent construction and consist of a reinforced concrete platform supported on concreted piles. Depth of water alongside at LW is 10 m.

Berth No. 4 is a container berth equipped with a heavy lift mobile crane for handling 20 ft. and 40 ft. ISO containers. It has a length of 152.4 m. and storage capacity for approximately 3,500 containers.

A new transit shed with an area of 6,882 sq.m. with cold storage facilities of 2,265.60 cu.m. for reefer cargo.

Berth No. 5 is a break bulk cargo berth as well as Ro/Ro facilities with a ramp 14.6 m. wide. It has a length of 182.9 m. and a depth of 10 m. below LW.

Berth No. 6 is a reinforced concrete deck supported on steel cased piles. The berth is 167.6 m. long and can accommodate vessels of 9 m. draft. It is a general purpose berth and handles banana traffic.

Within the port area there is a total shedded storage capacity of 17,205 sq.m. with a total upland of 15 – 17 hectares.

Dock water density 45.7 gm./cu.m. with prevailing winds from a N.W'ly direction.

Vieux Fort: Depth of 8 fathoms at the entrance and 5 fathoms within the Port. 2 berths, 500 ft. long, 27 ft. 6 in. deep. Also see "Shipmaster's Report".

BRIDGES: There are no bridges or other restrictions to prevent access to the port by vessels of not more than 9 m. draft.

STEVEDORES: The normal working hours are from 0700 – 1600 hrs. Mondays to Fridays. Special arrangements are required outside of the above hours and for Saturdays, Sundays and Statutory Holidays. The hiring or calling of labour are as follows:

Monday to Fridays for work commencing from 0700 – 1100 hrs. request to reach Union before 1500 hrs. previous day.
1100 – 1600 hrs. before 0900 hrs. on the same day.
After 1600 hrs. before 1400 hrs. on the same day.
For vessels working on weekends request to reach Union by 1530 hrs. on Fridays.
Average rate on break bulk general is 15 t.p.h. per gang.

HEALTH: Pratique is usually granted by the Pilot or Boarding Officer and Immigration Department alongside on behalf of the Ministry of Health. In the event of any suspected disease or fever on board, the vessel is not allowed within 91.4 m. of the wharves until Pratique has been granted by the Medical Officer.

MEDICAL: Full hospital facilities available without prior notice.

FRESH WATER: Good quality potable water available in unlimited quantities at 20 t.p.h. per connection ex-quay.

FUEL: Limited quantity for yachts and small vessels only. Refuelling jetty at La Toc Bay owned by Texaco.

TANKERS: Tanker and Liquefied Gas Terminals – available at Coconut Bay through floating pipe-lines.

Also see "Cul de Sac Bay".

CONSULS: British, French, Netherlands, Norwegian, Venezuelan.

REPAIRS: No facilities for large vessels. Routine maintenance or minor repairs are carried out. There is no foundry in the port.

DRY DOCKS: None available.

SURVEYORS: Lloyd's Agents are available and represent other Classification Societies and Surveyors. Others can be obtained from outside at short notice.

GANGWAY/DECK WATCHMEN: Gangway and gate watchmen can be supplied at Union award rates. Hold watchmen are required during discharge/loading operations. Shed watchmen are not necessary.

OPENING/CLOSING HATCHES: Ship's crew shall be required to raise and lower and position beams to the required height, opening and closing of McGregor and pontoon hatches. Wooden hatches are normally handled by stevedores while alongside.

CUSTOMS ALLOWANCES:

1. Wine or spirits not exceeding one quart in all, and
2. Tobacco, not exceeding half a pound, or
3. Cigars not exceeding 50 in number, or
4. Cigarettes, not exceeding 200 in number, or
5. Goods to the aggregate of $50.00E.C. belonging to a passenger, which accompany that passenger and when acquired abroad by him for his personal or household use or as souvenirs or gifts and admitted as such by the Comptroller of Customs.

CARGO GEAR: Discharge of general cargo is usually by ship's gear. Containers, if vessels are not self contained, may be handled by P&H crane 9125TC – 140 ton lorry mounted crane owned and operated by the Ports Authority.

REPATRIATION: Scheduled aircraft connect with all the English speaking islands of the Lesser Antilles several times daily from Vigie Airport which is 2 km. distant from Port Castries. Direct overseas flights arrive and leave from Hewanorra International Airport, Vieux-Fort at least once a week for the United Kingdom, New York, Miami and Caracas, Venezuela.

TIME: Local time is GMT minus 4 hours. Summertime is not used. All ETAs and other messages should be made in local time.

HOLIDAYS: New Year's Day, New Year's Holiday, Independence Day (22nd February), Carnival Monday, Good Friday, Easter Day, Easter Holiday, May Day (Labour Day) (1st May), Whit Monday, Corpus Christi, Queen's Birthday, Emancipation Day (1st Monday in August), Thanksgiving Day (1st Monday in October), National Day (13th December), Christmas Day, Boxing Day.

The port is closed for work on Christmas Day, Good Friday and May Day (Labour Day).

POLICE/AMBULANCE/FIRE: All emergency services are available through Port Police Station on Jeremie Street, within walking distance from the port.

Emergencies can be reported to Vigie Lighthouse on Channel 16 at any time. Emergency Police dial 99; emergency Ambulance dial 95; emergency Fire dial 97.

TELEPHONES: This service is available aboard ships at all berths by prior arrangement through the Agents. Standard rates apply.

SHORE LEAVE: When Immigration and Customs requirements have been satisfied there is no restriction on crew shore leave so long as they rejoin the vessel before departure. They should carry some sort of identification card or shore passes for security purposes especially for non-English speaking persons.

DELAYS: There are no delays for want of a berth. Berthing delays are very infrequent and no labour shortages.

REGULATIONS: Castries is within the Northern zone of tropical storms. The hurricane season usually extends from May to October each year and the port may be more or less affected at any time during that period. When a storm is expected to pass over the island, ships may be placed on short notice for sea in such circumstances and required to maintain themselves in seagoing condition at all times.

BANKS: Bank of Nova Scotia, P.O.Box 301, William Peter Boulevard, Castries, St. Lucia. Tel: 2292/95. Telex: 6385 Scobank L.C.

Barclays Bank International Ltd., Bridge Street, Castries, St. Lucia. Tel: 3306/3300. Telex: 6348 Bacladom L.C.

Canadian Imperial Bank of Commerce, P.O.Box 350, William Peter Boulevard, Castries, St. Lucia. Tel: 3751/3753/3739. Telex: 6352 Canbank L.C.

Royal Bank of Canada, William Peter Boulevard, Castries, St. Lucia. Tel: 2245 and 2684/85. Telex: 6309 Royalbk L.C.

EMERGENCY CO-ORDINATION CENTRE: The Headquarters of the Central Emergency Organisation is the Prime Minister's Office, Government Buildings, Castries, St. Lucia. Tel: 3203 and 3016. Telex: 6394 Foraff LC.

DEVELOPMENTS: Two dolphin berths have been constructed at Pointe Seraphin for passenger vessels with depths of 10 m. and 11.6 m. respectively. The infrastructure has not been completed and is intended to be used as a shopping centre.

SHIPMASTER'S REPORT: 1979.

Pilotage: Compulsory. Pilot boards 0.75 miles West of Vigie Light, ladder usually on the port side.

Restrictions: Vessel is able to enter and leave at any stage of the tide, day or night.

Max. Size: Max. draft 23 ft. 6 in.

VHF: Pilot on Channel 16.

Berthing: No. 6 Berth, West Wharf: Distance from entrance to berth 1 mile. Max. LOA (Approx.) 550 ft. Max. draft 23 ft. 6 in. There is mechanical equipment available to handle palletised cargoes, adequate storage space for breakbulk cargoes and palletised cargoes. The loading rate for bananas is 15 t.p.h. per gang with ship's derrick and the labour was satisfactory. Accommodation ladder required.

Services: Fresh water, fresh provisions, repair facilities, machine shop, Airport, laundry services, bunker fuel oil, diesel oil, lubricating oils, doctor, hospital, groceries and meats.

SHIPMASTER'S REPORT: 1979. Vieux Fort.

Pilotage: No ship exceeding 100 n.r.t. must enter without a Pilot. Pilot boards 0.5 miles S.W. of Mathurin Point (there is a strong N.W. current off Mathurin).

Restrictions: Vessel may enter and leave at any stage of the tide, day or night.

Max. Size: Max. LOA 520 ft.

Tugs: Tugs are not available and are not necessary for docking and undocking.

VHF: Available.

Berthing: One berth only available. Distance from entrance to berth 0.5 miles. Nature of bottom at the berth is mud. All banana loading is carried out by the side doors. Vessels berth port side to the quay. A very high rate of loading is attained (100 t.p.h.). A limited amount of mechanised equipment for handling palletised cargoes is available and also limited storage space for palletised and breakbulk cargoes. No equipment for handling containers is available, but there are storage facilities for containers arriving by tug/barge. Accommodation ladder required.

Services Available: Only fresh water, airport and doctor available (i.e. no fuel or provisions available).

AUTHORITY: Saint Lucia Air & Sea Ports Authority, P.O.Box 651, Castries, St. Lucia, West Indies. *Tel:* 22893/4. *Telex:* 6355 Paslu LC. *Contact:* George C. Girard, General Manager.

CUL DE SAC BAY: 13.59 N. 61.02 W. **(See Plan Book)**

LOCATION: The facilities of Hess Oil St. Lucia Limited (HOSLL) are located in Cul de Sac Bay (Lat. 13° 59′ N., Long. 61° 02′ W.) on the West coast of the island of St. Lucia, West Indies. Ready access for all vessels coming in from the Atlantic is provided by the St. Lucia Channel which lies between St. Lucia and Martinique. This channel is 17 miles wide and has general depths of 914 m. (500 fathoms).

PORT LIMITS: For tendering purposes a vessel will be considered as having taken arrival when it reaches the Pilot Station 2.5 miles due West of Bananes Point. A vessel's "Notice of Readiness" will not be accepted until the vessel has initially reached this point and notified HOSLL by VHF.

DOCUMENTS: The following documents are required for entry and clearance and are to be presented to the respective officers on boarding:

General Declaration for Ships.
Cargo Declaration.
List of Unmanifested Cargo.
Crew List.
Crew Members' Stores List.
List of Packages or Parcels Intended for discharge by Crew Members.

Normally it is necessary to have Customs entry completed before cargo operations can commence.

Customs clearance is accomplished by the vessel's Agent, cargo documents are placed onboard by the Terminal Department.

PILOTAGE: Service is available 24 hours a day and is compulsory for all vessels entering or leaving Cul de Sac Harbour. A HOSLL Pilot will assist the Master of any vessels docking or undocking at the Hess facilities, however, the Master of each vessel retains full responsibility for his ship at all times.

Vessels must remain at the pilot station 2.5 miles due West of Bananes Point until boarded by the HOSLL Pilot who will be placed aboard by a company tug.

The HOSLL Marine and Terminal Office is equipped with a VHF radiotelephone having the following channels:

Initial Contact: Channel 16.
Working Contact: Channels 11, 9 and 6.

Ships must call the HOSLL marine office on VHF at least 3 hours before arrival at the pilot station and advise of any change in their ETA.

Pilot Ladders: If the following regulations are not complied with, HOSLL Pilots may refuse to embark or disembark thus delaying the vessel.

(i) The Officer responsible for the embarkation and disembarkation of the Pilot is to be a Deck Officer.

(ii) The pilot ladder is to be properly secured and adequately lit at night.

(iii) The Pilot should be able to pass safely and conveniently from the head of the ladder onto the ship's deck. Where portable stanchions and bulwark ladders are used for this purpose, the portable stanchions must be rigidly secured to the ship's structure to prevent being unshipped and supported at not less than two points to prevent lateral movement. The bulwark ladder should also be independently attached and firmly secured. The stanchions should be of reasonable height and adequately capped to allow a firm grip.

(iv) The ladder is to be in good condition and its treads are to remain horizontal. The treads are to have a rough upper surface.

(v) The length of the ladder should not exceed 30 ft. Whenever the distance from sea level to a point of access on the ship is more than 30 ft. access from the pilot ladder to the ship must be by means of an accommodation ladder or other equally safe and convenient means.

(vi) The ladder is to be rigged so that each step rests firmly against the ship's side. Spreaders are to be provided not more than 10 ft. apart to prevent the ladder twisting.

(vii) A man rope or a safety line is to be secured at the vessel's rail and lowered over the side adjacent to and for the full length of the pilot ladder. A lifebuoy with self-igniting light is to be readily available.

(viii) The ladder is to be rigged well clear of any overboard discharges and at a place where the best lee can be provided to the boat carrying the Pilot.

(ix) Whenever a mechanical pilot hoist is used, a standard pilot ladder shall be at hand, ready for immediate lowering in the event of a hoist malfunction.

APPROACHES: Cul de Sac Bay is entered from the open sea between Bananes Point about 1 mile North of Marigo Point, and Ciceron Point about 0.75 mile farther Northeast. The tanker port area of Cul de Sac Bay ranges in depth from 40 ft. to 90 ft. below mean low water.

Vessels shall have their anchor windlass manned and their anchors ready to let go upon entering the approach to Cul de Sac Bay.

Navigation Aids: The entrance to Cul de Sac Bay is marked on the North at Ciceron Point by a 7 ft. × 7 ft. square green day marker mounted on a 25 ft. tower. The 7 mile flashing green light for this aid at elevation +40 ft. is programmed to flash 0.6 secs. on −5.4 secs. off.

On the South side of the entrance Bananes Point is marked with a 7 ft. × 7 ft. triangular red day marker mounted on a 15 ft. tower. The 7 mile flashing red light at elevation +85 ft. is programmed to flash 0.4 secs. on −3.6 secs. off.

A 10 mile leading light with a 4 ft. × 16 ft. day marker is installed upland at elevation +115 ft. This white light is programmed to flash 0.4 secs. on −3.0 secs. off.

All elevations given are above mean sea level.

At the inshore end of the bay, small buoys with flashing lights mark a submerged wreck and the shoal areas at the East end of Cul de Sac Bay.

ANCHORAGES: No anchoring is permitted in Cul de Sac Bay without specific permission from the HOSLL Marine Manager.

RESTRICTIONS: Only vessels inbound or outbound from Cul de Sac Bay may use or be present in the Cul de Sac approach area. No vessel shall enter Cul de Sac Bay except for the purpose of using the facilities located therein and then only in compliance with the directions of the HOSLL Marine Manager.

Ballast Drafts:

Vessel dwt	*Forward*	*Aft*
Under 20,000	12 ft.	18 ft.
20,000 to 35,000	14 ft.	20 ft.
35,000 to 50,000	15 ft.	21 ft.
50,000 to 85,000	18 ft.	24 ft.
85,000 to 150,000	28 ft.	32 ft.
150,000 to 200,000	30 ft.	34 ft.
Over 200,000	40 ft.	40 ft.

These guidelines will be adjusted as weather and vessel handling characteristics dictate. Advice concerning any variance will be provided to the vessel by the Pilot in ample time to prevent any unnecessary delays to vessel's ballasting.

MAX. SIZE:

Dock No. 2 (VLCC Berth):

Length – 1,300 ft. LOA.
Beam – No restrictions.
Draft – 82 ft.
DWT – 400,000 long tons.

Larger vessels can be accommodated, however, each such move must be discussed on an individual basis prior to entry.

Dry Cargo Dock:

Length – 750 ft. LOA.
Beam – No restrictions.
Draft – 40 ft.
DWT – 50,000 long tons.

HEALTH: Pratique is required and will be granted by the Customs/Immigration or Health Official boarding the vessel.

All vessels arriving from a foreign port will be boarded by Customs and Immigration Officers. VESSEL PERSONNEL ARE NOT ALLOWED ASHORE UNTIL PERMISSION IS GRANTED FROM THESE OFFICERS.

Quarantine is required only if vessel is coming from a plague infected area or if illness of a suspicious nature or there is a death (from any cause) onboard. The Master is obligated to report to the HOSLL marine office any of the above circumstances well in advance of the vessel's arrival at the pilot station in order that the Health Officials may be notified – failing which the vessel may be delayed.

RADIO: Masters must advise both HOSLL – St. Lucia and their Agents by radio 72, 48 and 24 hours in advance of their ETA giving the vessel's name, date and hour of arrival (local time) and the name of their past port of call otherwise delays to the vessel may result.

VHF: VHF radio frequencies:

1. Calling only – Channel 16
2. Harbour operations – Channel 11
3. Pilotage – Channel 9
4. Agency – Channel 6

Harbour tugs and the HOSLL Marine Dispatchers monitor VHF frequencies 24 hours a day. VHF call sign: Hess St. Lucia.

TUGS: Tug assistance in the harbour, docking and undocking is mandatory and is provided by diesel tugs, stationed in the port to provide this service. Additional tugs are available when required.

When tugs are alongside or assisting a vessel, all cargo tank openings must be closed, unless the cargo tanks are gas-free.

BERTHING:

Dock No. 2 (VLCC Berth): Vessels using this berth will be turned in Cul de Sac Bay and docked port side to.

This dock is equipped with four 16 in. Chiksan arms for handling crude oil and one 16 in. Chiksan for dirty ballast.

Dry Cargo Dock: Vessels using this berth will dock port side to.

This dock is equipped with:

1. Three 10 in. hoses for ballast.
2. Three 10 in. hoses for crude.
3. One 10 in. hose for distillates.
4. One 10 in. hose for gasoline.
5. One 10 in. hose for asphalt.

Also see "Max. Size".

Moorings: A line handling vessel and personnel will be provided for mooring.

Vessels shall at all times remain adequately secured alongside the berth by the use of ropes or wires which are in good condition and properly sized for the load they are likely to incur. Mooring lines shall be regularly tended and kept taut.

The use of automatic tensioning winches to hold mooring lines is forbidden.

Immediately on docking, emergency towing wires of sufficient length to reach the water's edge, with eyes on the outboard ends, must be paid out from the offshore bow and the after quarter. The inboard ends must be made fast to the vessel's bitts.

Wires shall be in good condition, of adequate strength and adjusted as necessary throughout loading/discharging operations to keep the eyes at or above the waterline at all times.

Rat Guards: Rat guards are required only if a vessel is coming from a plague infected area.

Gangway: Where HOSLL provides the gangway, a safety net will be rigged. When the vessel's gangway is used, we strongly urge the use of a vessel supplied safety net under the gangway.

NOTICE OF READINESS: Notice of Readiness to load or discharge is a warranty that the vessel is in all respects ready to load or discharge, and that all of the vessel's equipment (including, but not limited to tanks, pumps, valves and pipe-lines) is ready and fit to load or discharge petroleum and/or petrochemical products. HOSLL reserves the right to refuse acceptance of such Notice of Readiness unless the vessel is in all respects ready to load or discharge.

A vessel will not be deemed ready to load or discharge and pumping will not commence until the Senior Deck Officer shall have executed and delivered to HOSLL the "Declaration of Inspection Prior to Bulk Cargo Transfer".

LOADING/DISCHARGING: Loading or discharging must not start until the Master or Chief Officer has:

(a) Signed a certificate acknowledging receipt of HOSLL's Terminal Regulations.

(b) Displayed in prominent positions on board "No Smoking", "No Naked Light", "No Visitors" notices.

(c) Jointly executed a HOSLL "Declaration of Inspection" with the Terminal Representative certifying that all necessary valves ashore and aboard are properly set; that the agreed loading/discharging signals are understood, and that all other matters relating to safe cargo transfer operations are being carried out.

Bonding Cable: A ground wire from the dock grounding system shall be connected to all vessels or barges loading/discharging petroleum before any hose connections are made. This cable is not to be disconnected until after all hoses or Chiksan arms have been disconnected and blanked off properly.

Connecting and Disconnecting Hoses: A crew will be provided by the terminal to connect and disconnect hoses and Chiksan arms on the vessel. Vessels should have blinds removed from the cargo lines, reducers installed and drip pans in place on arrival at the dock. The HOSLL Dispatcher will advise on arrival the size and number of hoses or arms to be connected. Also see "Berthing".

Communications: HOSLL will supply a VHF radio to the vessel for emergency communication between the vessel and the dock watch during loading/discharging operations.

Cargo Handling Signals: All vessels loading or discharging petroleum cargoes shall fly a red (bunker) flag between the hours of sunrise and sunset and during the night show a red light visible from all parts of the horizon at a distance of not less than 1 mile.

Weather Conditions: The loading and discharge of all crude petroleum and its products will be stopped during any severe electrical storm.

Loading of low-flash products will be stopped during periods of calm when the heavy vapours cannot be dispersed readily enough to prevent hazards from accumulating gas pockets. Vessel's Officers are cautioned to be on their guard during such conditions.

In the event of abnormal weather conditions in the area such as a hurricane, vessels will be notified that additional moorings are required. If the situation so demands, Masters may be instructed to suspend all operations and proceed to sea until normal weather conditions again prevail.

Demurrage: Vessels are required to vacate berths promptly upon completion of cargo handling operation (loading or discharging operations as the case may be). Permission to lay alongside at any time the vessel is not engaged in cargo handling operations must be granted in writing by the Marine Superintendent.

If any vessel fails to vacate its berth upon completion of cargo handling operations and expiration of free laytime for dock usage as outlined below, the vessel will be responsible as follows:

(a) To pay dock demurrage at the rate as specified by HOSLL per hour or a *pro rata* share thereof for a fraction of an hour.

(b) To hold HOSLL harmless for any demurrage and damages incurred as a result of other vessels awaiting berth or for any other consequences of its failure to properly vacate the berth.

The following rules shall govern the determination of demurrage:

(a) One hour free laytime will be allowed after completion of cargo loading operations. This free time will start at the time cargo hoses are disconnected from the vessel's manifold on completion of loading or discharge of cargo. Vessels awaiting cargo papers and/or Customs Clearance must vacate the berth within 1 hour of such completion and move outside to wait for their papers.

(b) Four hours' free laytime will be allowed for ballasting after discharge operations.

(c) Ballasting times for VLCCs will be handled on an individual basis for each vessel.

Overloading: Masters are advised that the international laws regarding overloading are strictly enforced and they should be guided accordingly.

Vessels shall not arrive or sail overloaded. All expenses incurred in discharging or lightering overloaded cargo will be for the vessel's account. Vessels departing to zones requiring lighter draft may sail with the draft permitted in that zone plus an allowance for fuel and water consumption to the zone limit.

Sea Suctions: Pumproom sea suctions and discharge valves are to be sealed on arrival. Seals are not to be broken while the vessel is in the harbour area. If it becomes necessary to break a seal, permission must be received first from the HOSLL dock representative who will check and record the seal numbers.

BALLAST: St. Lucia laws prohibit the pumping of dirty ballast overboard while a vessel is within their coastal waters. All dirty ballast must be pumped to the facilities available ashore. However, if a vessel is especially equipped with clean segregated systems which are reserved for ballast use only, it is permissible to pump overboard at the dock after the ballast tanks have been inspected and approved by a Marine Department Representative.

In pumping dirty ballast ashore, the ballast is received through a 36 in. shoreline at a maximum discharge pressure to the shore installation of 120 p.s.i.

Also see "Restrictions".

MEDICAL: Limited emergency medical attention is available from the public hospital at any hour of the day or night. The vessel's Agency Representative should be contacted by the Master with any requests for crew medical attention.

For routine medical treatment, a Doctor will board the vessel when requested through the vessel's Agency. Dental treatment is available weekdays.

All crew members requiring medical attention should be available upon vessel's arrival.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: Limited supplies of marine hardware are available on the island.

There are no facilities for major repairs closer than Puerto Rico or Curacao.

SURVEYORS: Representatives of the American Bureau of Shipping, Lloyd's Register and other maritime classification societies are available from Puerto Rico and Curacao on 72 hours' notice. The vessel's Agent will assist Masters in soliciting their services.

Representatives of SGS (Societe General de Surveillance S.A.) will be available for cargo quantity and quality inspection as required. Other outside inspection can be arranged upon adequate notice.

TIME: St. Lucia uses Atlantic Standard Time which is 4 hours slow of GMT all year round.

SHORE LEAVE: Under normal circumstances, no restrictions are imposed by the Immigration authorities on shore leave. Masters are requested to have all crew members on board at least 1 hour prior to departure time to avoid delay "waiting crew members".

HOSLL will provide the Master of each vessel with gate passes for the crew upon arrival.

Crew members are not permitted to walk through the terminal. HOSLL will supply transportation between the docks and the main gate at regular intervals. Crew members must make their own arrangements for transportation outside the main gate.

GENERAL:

Winds: The trade winds normally blow from an Easterly direction ranging from N.N.E. to S.S.E. Night winds are generally lighter than the daytime winds. About daybreak the wind speed begins to pick up, reaching maximum strength in the late morning or early afternoon. A return to the lighter night-time winds begins during the late afternoon, usually around 1600 hours.

In past years, hurricanes have occasionally passed close to and over the Island. Hurricane season runs normally from June through October of each year peaking in late August and September. For details see U.S. DMA Hydrographic Center – Sailing directions for the Caribbean Sea – Pub. 144.

Tides and Current: The tides are diurnal and small, the mean range being about 0.5 ft. and the diurnal range less than a foot.

Normally there is a current of 1.0 knot to 2.5 knots moving along the West coast of the Island in a Northerly direction.

Charts: Island of St. Lucia, U.S. DMA Hydrographic Center Chart No. 25521.

Anchorage in St. Lucia Island, U.S. DMA Hydrographic Center Chart No. 25528, B.A. No. 449.

Flags: Vessels entering Cul de Sac Bay during daylight shall fly their national flag and continue to do so during daylight hours when moored. All vessels of foreign registry shall fly the St. Lucian flag at the foremast when moored.

Visitors: No visitors are permitted in the dock area. Only persons on official vessel's business are permitted on the docks.

Mail: Official and personal mail will be delivered onboard by the vessel's Agent upon vessel's entry.

Mail received for vessels while in port will be delivered onboard prior to sailing. Outgoing mail is accepted from Master provided it is accompanied by a mail transmittal slip or support disbursements.

Laundry: Limited vessel's laundry facilities are available.

Liquor: The transportation of alcoholic beverages inside HOSLL's property is strictly prohibited; consequently, no liquor or beer may be brought or removed from vessels. The only exception to the foregoing is the delivery of bonded stores ordered by Masters for their vessels.

Swimming: Swimming in the dock area is strictly prohibited as sharks and barracuda frequent the harbour.

AUTHORITY: Hess Oil St. Lucia Ltd. (HOSLL). *Tel:* 809 452 3105 and 452 3904. *Telex:* 341-6346 A/B 6346 Hess Stl LC. *Cable:* Hessoil St. Lucia.

NOTES

Please also advise Shipping Guides Ltd.

St. Pierre and Miquelon

ST. PIERRE: 46.47 N. 56.10 W. (See Plan Book)

DOCUMENTS: Formalities completed on arrival. Advise Port Service beforehand of vessel's ETA, length, tonnage and draft 24 hours before arrival.

Declaration of Health.
Derat Certificate.
2 Crew Lists.
2 Passenger Lists.
2 Cargo Manifests of any cargo to be discharged.
2 Crew Declarations (tobacco, liquor, souvenirs).
Certificate of Registry.

PILOTAGE: Contact Pilot 1 hour before arrival calling TXU by radio telephone on 2182 kHz or VHF Channel 16. Permanent watch kept. Pilot boats equipped with VHF Channel 12, radar, and radio-telephone. Pilot launch available at entrance to N.E. channel in position 46° 48′ N., 56° 08′ W., in the vicinity of the Land Fall Buoy.

Pilot launch named *Radar,* length 45 ft. The hull is black and superstructure white with "Pilote" painted on each side. Pilot launch carries the International Signals for pilot launch day and night.

When the weather is bad contact Pilot on Channel 12 for instructions.

Pilot is compulsory for vessel of 150 g.r.t. and over.

ANCHORAGES: In the roads, depth 13 m., not secure in strong East winds.

Shipmaster's Report: The anchorage in the roads where fish is loaded ex-trawlers is not secure, even with moderate winds from any direction, and engines should be on stand-by continuously. Several ships have gone on the rocks in a matter of minutes.

MAX. SIZE: New Port: max. length 110 m. Old Port: max. length 70 m. Channel depth 5 m. below chart datum.

New Quay: Max. LOA 200 m. Max draft 10 m.

HEALTH: If suspected disease on board contact St. Pierre Health Service, tel. 41.21.11.

Masters of vessels arriving at St. Pierre may obtain Free Pratique via TXU. Message to be sent to Harbour Master Saint Pierre 24 hours before arrival.

In the message the Master has to specify name of vessel, total number of crew members, where ship coming from, and if everybody on board healthy; in these conditions flag "Q" is not necessary on arrival, but if any suspected disease or fever on board, advise Health Authority as well as Agent, and stand by instructions for berthing. Flag "Q" has to be flown on arrival in the roads.

RADIO: St. Pierre Radio, call sign TXU, receiving on 2182 kHz. transmitting on 2410 kHz.

Masters of vessels arriving are requested to send their ETA to Harbour Master Saint Pierre 24 hours before arrival and corrected by a further message if necessary. The ETA should be given in GMT. Also advise maximum draft and length.

Saint Pierre Radio is equipped with VHF Channels 16 and 25 and maintains permanent watch on Channel 16.

TUGS: No tugs available but the pilot launch (230 h.p.) will assist on Master's request.

BERTHING: Mole du Commerce; length 170 m., depth alongside 8.50 m.

Quai de Peche: length 135 m., depth alongside 6 m. to 7 m. Roll-on/Roll-off terminal, one ramp, max. capacity 50 tons, one shed 1,000 sq.m. for empty containers.

Mole Frigorifique: 3 berths, No. 1; 120 m. length, 7 m. depth. No. 2; 85 m. length, 6 m. depth. No. 3; 120 m. length, 5.5 m. depth.

Old Port: Quai de la Douane: length 123 m., depth 6 m.

Quai de l'Alysse: length 50 m., depth, 6 m.

New Quay: Located to the North of the Port. Depth alongside 12 m.

Pilot will inform Master of berthing prospects and any special requirements.

STEVEDORES: ETA notices are to be sent to Agent 24 hours prior arrival. Stevedore in Saint Pierre is Paturel Freres (tel. 41.32.95 and 41.32.96). Cable Address "Reltupa Saint Pierre". Telex Reltupa 20 QN.

Approximately 60 men are available for working on board vessels when loading/discharging or transhipping in the port. Crew are allowed to work only when no gangs are available.

One normal shift 0730 to 1600 hrs. every week-day, Saturday 0730 to 1200 hrs. Day overtime, every day 1600 hrs. to 1900 hrs. Saturday 1200 to 1600 hrs.

Work done with ship's derricks.

It is requested that a net be put under the gangway before starting work.

Pallets, slings, fork-lift and crane (5 tons) available at a charge.

TANKERS: 1 berth (New Quay) alongside dolphins in depth of 12 m.

MEDICAL: All facilities available.

FRESH WATER: Available at berths. Supplied by hoses, rate 25 cu.m./hr.

FUEL: Only diesel oil SG 825/840 at 15° C available at all berths.

OPENING/CLOSING HATCHES: Normally carried out by crew.

IDENTIFICATION CARDS: Each man to carry passport or seamen's book.

CONSULS: Local representatives for Canada, Netherlands, Norway, Portugal and Spain.

REPAIRS: Small repairs can be effected. Floating dock, capacity 550 tons, for vessels up to 13 ft. 6 in. draft.

REPATRIATION: Can be arranged.

TIME: GMT minus 3 hours all the year round.

AMBULANCE: Tel: 41.21.11 and 41.21.12.

AIRPORTS: Connections from St. Pierre to Halifax (Nova Scotia) International Airport.

TELEPHONES: Not possible to place telephones on board. It is possible to contact the shore on Channel 16 via Saint Pierre Radio.

SERVICES: Compass adjusting, radar repairs, radio, Decca, Loran and gyro-compass repairs and maintenance possible.

AUTHORITY: Officier de Port, P.O.Box 24, St. Pierre, St. Pierre and Miquelon. *Tel:* 41.24.10, 41.29.97. *Contact:* Captain Ronald Admond.

NOTES

Please also advise Shipping Guides Ltd.

St. Vincent

KINGSTOWN: 13.09 N. 61.14 W. (See Plan Book)

PORT LIMITS: The imaginary line joining Old Woman's Point and Cane Garden Point.

DOCUMENTS:

Customs:
2 copies Ship's Stores List.
2 copies Crew's Stores List.
1 copy Crew List (in).
1 copy Crew List (out).
1 copy Passengers List (in).
1 copy Passengers List (out).
1 copy List of Unmanifested Cargo.
Clearance from Last Port.

Immigration:
1 copy Passenger List (in).
1 copy Passenger List (out).
1 copy Crew List (in).
1 copy Crew List (out).

Health Authorities:
1 copy Animal Declaration.
1 copy Derat Certificate.
1 copy Declaration of Health.

Harbour Master:
1 copy Passenger List (in).
1 copy Passenger List (out).
1 copy Crew List (in).
1 copy Crew List (out).

PILOTAGE: Agent to be notified of request for Pilot 24 hours prior to ETA. Boarding by Pilot at harbour entrance about 2 miles from anchorage. By day pilot boat flies pilot flag, by night shows signal-lights. Ship to fly "Request for Pilot" – flag by day and signal-lights by night. Also two long and one short blast (Morse Code "G").

ANCHORAGES: Well protected anchorages. Large vessels lie to in basin 90 ft. – 100 ft. depth. Average sized vessels berth at pier 27 ft. – 40 ft. depth.

RESTRICTIONS: None.

HEALTH: Port Health Officer boards vessel at anchorage. Requires Bill of Health or Master's Declaration, and a copy of Passengers List. Vaccination Certificates are no longer required. Passenger and Crew Muster no longer required. No one allowed to embark or disembark before Pratique granted and Immigration Officials have boarded vessel.

RADIO: Cables should be routed through Cable and Wireless (West Indies) Ltd. Tel: 71901. Telegrams and Telex: 93.

VHF: The Fort Charlotte Signal Station should be contacted on VHF Channel 16 by vessels approaching, entering, manoeuvring in and departing from the Port.

RADAR: None.

TUGS: None.

BERTHING: One berth 900 ft. long. Max. draft approx. 30 ft. (salt water). Loading/discharging by ship's gear. Break-bulk (palletised) cargo handled. 10 ft. and 20 ft. containers handled on a limited scale (max. gross weight 10 tons).

CRANES: None.

BULK CARGO FACILITIES: None at Kingstown.

Campden Park Bay, 2 miles North along the West coast – flour mill complex for receiving grain (bulk) and shipping flour. Max. draft 36 ft. One berth 300 ft. Loading gear – conveyor belt, height adjustable. Discharging into receiving hopper 25 ft. high. Loading: Max. 1,200 bags flour/feed per hour. Average rate 750 bags/hour. Discharge rate: Max. 60 t.p.h. per vacuvator, average 40 t.p.h. Two vacuvators normally used.

SPECIALISED CARGO HANDLING FACILITIES: No specialised berths for containers or Ro/Ro traffic.

Arnos Vale, a bay situated about 2 to 2.5 miles S.E. of Kingstown, features a buoy with a 4 in. floating line for LPG. Draft 14 ft.

BRIDGES: None.

STEVEDORES: 24 hours' notice of ETA required. Advise type of cargo, number of hatches to be worked, this required for arranging gangs of stevedores and longshoremen. Average discharge rate 3 – 5 tons per gang/hour.

MEDICAL: Advance notice to Agent of medical requirement is helpful. Hospital facilities available.

TANKERS: No facilities at Kingstown.

Arnos Vale (see "Specialised Cargo Handling Facilities") has available 3 buoys. Draft 24 ft., 17 ft. 6 in. and 14 ft. Serviced by floating and submarine line 6 in. and 4 in. Fuels available: White Products – Gasoline 93 R Octane, Kerosene Oil, Light Diesel Oil, Aviation Fuel; Black Products – R.C. 2 and Colas. Rate of discharge: White Products: 500 bbls./hr. Black Products: 300 bbls./hr.

DENSITY: Average 1025 oz/cu.ft.

FRESH WATER: Available. $3.00 (E.C.) per 100 gallons (I.G.). Delivery ex-pier by 3 in. line reduced by 1.5 in. nozzle – 2,500 gall./hr.

FUEL: Grades available. See "Tankers". 2 or 3 hours' notice during normal working hours required. Delivery ex Land-Tanker. Convenient to smaller craft only.

FIRE PRECAUTIONS: Usual precautions.

CONSULS: Consulate of the Netherlands (Mr. G. B. Palmer, P.O.Box 354. Tel: 71846).

French Consular Agent (Mr. Clifford Frank, P.O.Box 364. Tel: 61615).

Deputy British High Commissioner (Mr. M. D'ath, P.O.Box 132. Tel: 71701).

Embassy of the Republic of Venezuela. (Sr. Escobar C. Hernani, P.O.Box 852. Tel: 61374).

REPAIRS: Minor facilities only, e.g. minor mechanical repairs and simple welding, etc.

DRY DOCKS: None. There is a small mechanised dry-docking cradle (privately owned) for small to medium sized yachts at Union Island, an island of the Grenadines chain 40 miles South of St. Vincent.

SURVEYORS: Lloyds Insurance (London). London representative: Messrs. Hazells Ltd., Kingstown. Tel: 61311. Telex: Hazells 7512.

GANGWAY/DECK WATCHMEN: Watchmen recommended. Rates fixed per day.

CARGO GEAR: Loading/discharging effected by ship's gear.

REPATRIATION: Facilities for crew changes and repatriation available.

AIRPORT: Arnos Vale Airport 2 miles from Port. Scheduled flights.

TIME: GMT minus 4 hours. No alterations to clock during the year.

HOLIDAYS: New Year's Day, (1st January); St. Vincent and Grenadines Day, (22nd January); Good Friday; Easter Monday; Whitsun Monday; Labour Day, (1st May); Caricom Day, (1st Monday in July); Carnival Day, (1st Tuesday in July); August Monday, (1st Monday in August); Independence Day, (27th October); Christmas Day, (25th December); Boxing Day, (26th December).

BANKS: 1. The Royal Bank of Canada, Middle Street, Kingstown, P.O.Box 118. Tel: 61501, 61502, 61503. Telex: 7513.

2. The Canadian Imperial Bank of Commerce, Halifax Street, Kingstown, P.O.Box 212. Tel: 71587. Telex: 7532 VQ.

3. Barclays Bank International Ltd.,
(a) Halifax Street, Kingstown, P.O.Box 604. Tel: 61706. Telex: 7520.
(b) Bedford Street, Kingstown, P.O.Box 850. Tel: 71384. Telex: 7520.

4. The Bank of Nova Scotia, Corner White Chapel and Halifax Street, P.O.Box 237. Tel: 71601. Telex: 7546 VQ.

EMERGENCY CO-ORDINATION CENTRE: The Royal St. Vincent Police Station, Kingstown. Tel: 71211. Emergency: 99.

POLICE/FIRE/AMBULANCE: Police Headquarters/Fire Department, Tel: 71211. Emergency: 99. General Hospital, Tel: 61185.

TELEPHONE: Two telephones available, $25.00 per day per phone.

STORING: See "Prelims" page viii.
1. Vessels stored by truck.
2. No barges available.
3. Trucks allowed alongside.
4. Fork lift trucks can be used on jetty to handle stores.
5. Customs regulations regarding storing allows stores to be exported duty-free under Customs supervision, and sometimes Customs seals while in port.
6. Local Riggers available for assisting with storing.

SHORE LEAVE: No restrictions.

IDENTIFICATION CARDS: Seaman's Book adequate.

REGULATIONS: No unusual regulations.

DELAYS: Normal delays in berthing etc., as a result of limited docking area.

DEVELOPMENTS: Berth to be extended.

GENERAL: *Charts:* BA. 501 and BA. 791.

SHIPMASTER'S REPORT: January 1979.

Pilotage: Not compulsory. Pilot boards 0.5 miles South of Fort Charlotte Light. A heavy swell may be experienced and vessel is always rolling.

Restrictions: Vessel may enter and leave at any stage of the tide, however, berthing is not recommended during hours of darkness. Unberthing may be carried out at any time.

Max. Size: LOA 550 ft. Max. draft approximately 30 ft.

VHF: Fort Charlotte on VHF Channel 16.

Berthing: One berth only available, vessels always dock port side to. Wharf is concrete with hard rubber fenders. There are storage facilities for breakbulk cargoes and palletised cargoes, there is also mechanised equipment for handling bananas. There is no equipment for handling containers nor is there storage space for containers. Loading rate for bananas 15 t.p.h. per gang using ship's derricks. Vessel's accommodation ladder required.

Facilities Available: Fresh water, fresh provisions, airport, laundry services, doctor, hospital, groceries and meats.

AUTHORITY: The St. Vincent Port Authority, Kingstown, St. Vincent and the Grenadines, W.I. *Tel:* 61830, 71402. *Contact:* Harbour Master: M. Bennett, *Tel:* 71402. Port Manager: D. Byron-Cox, *Tel:* 61830. Chairman: Mr. O'Neil McIntosh.

Sao Tome and Principe, Republic of

NOTES

Please also advise Shipping Guides Ltd.

SAO TOME: 00.21 N. 06.44 E.

SHIPMASTER'S REPORT: May 1984.

DOCUMENTS:

6 copies Crew Lists.
6 copies Animal Lists.
6 copies Passenger Lists.
6 copies Arms & Ammunition Lists.
6 copies Ports of Call.
2 copies Personal Declaration.
2 copies Stores Declaration.
3 copies Cargo Manifests.

PILOTAGE: No service available.

ANCHORAGE: On the leading line shown on the chart, about 8 – 9 cables from the breakwater. By day or night the leading light structures are not easily recognisable. Vessels lie at anchor heading in a S.S.E.'ly direction and do not swing around to the tide. The ground, which is clearly visible when the sea is calm, is sand and holds well.

RADIO: Although Sao Tome has a listed radio station, it is not regularly attended and does not function properly. Masters are advised to send ETA messages via one of the major coast stations such as Cape Town. There is supposed to be a VHF station in port but this is also mostly unattended. There is telex connection to Europe.

BERTHING: *Cargo Handling:* If no other vessel in port, up to 200 tons per day in lighters of 40/60 tons each.

MEDICAL: There is a hospital and medical attention is available.

FRESH WATER: Not available.

AIRPORT: Sao Tome has regular flight connection with Luanda only. A once a month service to the Cape Verde Islands started in April 1984, on an experimental basis.

SHORE LEAVE: Crew members may go ashore but must return on board before 2000 hrs. They must carry their passports with them.

GENERAL: *Provisions:* There is no ship chandling service. Some small amounts of fresh vegetables can be purchased.

Customs: The ship's bonded stores are not sealed by Customs.

Immigration: One policemen stays on board throughout the ship's stay in port.

Currency: The local currency is Dobras, about 33 Dobras = $1.00 (April 1984).

Mail: Because of the lack of direct flight connections, it is advisable not to send mail to or from Sao Tome.

Saudi Arabia

GENERAL

TRAVEL FROM BAHRAIN: Travel is permitted from Bahrain to Saudi Arabia, *provided* travellers *(a)* hold a valid International Vaccination Certificate showing that the holder was immunised at least 5 days before travelling to Saudi Arabia, but not more than 3 months previously; *(b)* that any traveller proceeding to Saudi Arabia from Bahrain should have taken the prescribed doses of Tetracycline over the 48-hour period immediately before travelling. The fact that the passenger has taken the Tetracycline should be certified by the Bahrain Health Department.

TRAVEL TO SAUDI ARABIA: *Crew Members' Wives' Passports:* We have been informed that the Director General of Passports, Riyadh, has notified Director of Passports (Eastern Province) Dammam, that wives of crew members arriving in Saudi Arabia and wishing to join their husbands on board vessels, are required to obtain, prior to arrival, valid Saudi Entry Visas from Royal Saudi Consulate in their countries.

The visa endorsed in passport must state the intention of joining the particular ship to obtain exit via seaport.

AUTHORITY: The Ports Authority of the Kingdom of Saudi Arabia formulates policy for and supervises the management and operation of the following ports:

West Coast:	
Main Ports:	
Jeddah Islamic Port	Lat. 21° 28′ N., Long. 39° 10′ E.
Yanbu Commercial Port	Lat. 24° 05′ N., Long. 38° 03′ E.
Gizan	Lat. 16° 54′ N., Long. 42° 29′ E.
Minor Ports:	
Haql	Lat. 29° 15′ N., Long. 34° 56′ E.
Al-Khuraibah	Lat. 28° 04′ N., Long. 35° 10′ E.
Dhuba	Lat. 27° 20′ N., Long. 35° 45′ E.
Al Wajh	Lat. 26° 18′ N., Long. 36° 24′ E.
Umm Lajj	Lat. 25° 05′ N., Long. 37° 15′ E.
Rabigh	Lat. 22° 48′ N., Long. 39° 01′ E.
Al Laith	Lat. 20° 09′ N., Long. 40° 16′ E.
Al Qunfudah	Lat. 19° 08′ N., Long. 41° 04′ E.
Al Qahmah	Lat. 18° 01′ N., Long. 41° 41′ E.
Farasan	Lat. 16° 43′ N., Long. 42° 00′ E.
East Coast:	
Main Ports:	
King Abdul Aziz Port, Dammam	Lat. 26° 30′ N., Long. 50° 12′ E.
Jubail, Commercial and King Fahd Industrial Port	Lat. 27° 01′ N., Long. 49° 40′ E.
Minor Ports:	
Qatif	Lat. 26° 34′ N., Long. 50° 00′ E.
Darin	Lat. 26° 32′ N., Long. 50° 04′ E.
Al Khobar	Lat. 26° 17′ N., Long. 50° 13′ E.
Al Ugayr	Lat. 25° 39′ N., Long. 50° 13′ E.

INERT GAS SYSTEM: ARAMCO has been informed that the Government of Saudi Arabia has ratified the Solas Convention of 1974 and its 1978 Protocol on May 29, 1984. Therefore, ARAMCO is now obliged to enact the provisions of the said convention as soon as possible.

All Ship Owners/Operators to comply with the following:

1. Effective January 1st, 1985, all vessels of 70,000 d.w.t. and larger calling at any of ARAMCO's terminals to load crude/product cargoes must be equipped with an operable inert gas system in use.
2. Effective May 1st, 1985 all vessels of 20,000 d.w.t. and larger calling at any of ARAMCO's terminals to load crude/product cargoes must be equipped with an operable inert gas system in use.

Vessels not so equipped will not be accepted for loading as of the effective dates mentioned above.

The Solas Convention of 1974 represents a significant contribution to safety of tankers and oil installations and ARAMCO recommends that Ship Owners take immediate steps to comply with provisions of this convention as soon as possible and no later than the effective dates mentioned above. No exceptions will be allowed except in the most unusual circumstances.

Note: ARAMCO will follow the terms of the Solas Convention of 1974 and its 1978 Protocol *including* sections pertaining to exemptions. Any vessels exempted under this Convention will still, however, be required to comply with all Saudi Government Port Regulations as well as ARAMCO Safety Rules.

RULES/REGULATIONS: The Saudi Ports Authority has issued a set of rules and regulations for Saudi Arabian seaports. These rules and regulations became effective on September 10th, 1980.

Every vessel arriving in a port of the Kingdom must have a copy of these on board or must obtain one immediately on first arrival.

Hereunder follows an extract from these rules and regulations:

General Regulations for Cargo Stowage and Handling:

1. The stowage of cargo bound for ports in the Kingdom of Saudi Arabia must be arranged to ensure simultaneous and optimum rate of discharge from the maximum number of hatches compatible with the requirements of seaworthiness.

2. Where practicable all general and bagged cargo of uniform type and size is to be stacked and secured on pallets to facilitate quick discharge when shipped to the Kingdom of Saudi Arabia in conventional vessels.

3. Exceptions to palletisation:
   - a. Bagged cargoes may be pre-slung.
   - b. Bagged cargoes arriving in full ship-loads may be discharged loose provided that such cargo is taken by direct delivery and a minimum discharge rate of 1,200 tons per 24 hours is guaranteed.

   Bagged cargoes arriving in part ship-loads may be discharged loose provided that such cargoes are taken by direct delivery and a minimum discharge rate of 250 tons per hook per 24 hours is guaranteed.
   - c. Foodstuffs, if palletisation would adversely affect the total distribution costs, but the stowage must be arranged to obtain optimum discharge rates.
   - d. Cargo carried on schooners and small craft of less than 70 m. in length which are engaged in coastal trade within the Arabian Gulf, the Red Sea and to/from Somali ports.

The weight per bag shall not exceed 50 kg.

4. Tyres should be in bundles of appropriate size or pre-slung.

5. Bundled steel, profile iron, rebars etc., shall be fitted with slings or lifting points suitable for multiple handling.

6. Steel sheets shall be strapped and stacked in bundles of approximately 2 tonnes each. Wooden bearers and/or spacers shall be used in loading the bundles to facilitate discharge.

7. Pallets must be stowed in a ship's hold in a manner to facilitate discharge and make the best use of cargo handling equipment within the holds.

8. All cargo listed on the dangerous cargo list according to IMO rules must be stowed and handled as prescribed.

9. Masters and shipping Agents are to instruct their stevedoring contractors at loading ports to execute complete separation in accordance with bills of lading and the manifest, and will be held responsible for non-compliance with this regulation.

10. Comprehensive regulations govern the carriage of livestock by sea and their handling at ports in the Kingdom of Saudi Arabia, also the carriage and handling of bagged oil cake and scrap.

Unitisation of Timber:

11. Sawn timber, plywood and veneer is to be unitised. Timber cargoes shall be properly strapped to withstand multiple handling. Bundles shall be separated by skids or dunnage to facilitate lifting or handling by forklifts. Each bundle should weigh between 2 and 3 tonnes.

Bagged Cement, Lime, Gypsum and Similarly Packed Cargo:

12. Bagged cement in paper bags must be packed in 5-ply strengthened paper supported by an inner skin of polythene or similar waterproof material. If there is no synthetic layer, the bag must be made of extra-strengthened paper (minimum 6-ply), or of materials whose proven strength is at least equivalent to the above.

In the square of each workable hatch opening within the plumb of the ship's discharging gear, a block of bagged cement must be left in pre-slung form in flat straps capable of lifting the bagged cement in safe working loads without damaging the packaging. This block must have dimensions of at least 6 m. × 9 m. horizontally and these dimensions must be maintained down to the bottom layer.

(Additional regulations apply.)

13. The Master of any vessel carrying grain to a port in the Kingdom of Saudi Arabia, whether in bulk or in bags, shall present an official certificate from the country of origin stating that the cargo is free from infestation and that it has been fumigated either before or after loading, in addition to a certificate stating that the vessel was free of infestation prior to commencement of loading.

14. The discharge of cargo for transhipment to another port, whether in or outside the Kingdom is strictly forbidden.

The transfer of cargo from one vessel to another at anchorage or alongside berths at any Saudi port is strictly forbidden.

PORT REGULATIONS:

ARRIVAL:

1. Notification to the Port Management

1.1 The Owners of vessels bound for a port in the Kingdom of Saudi Arabia with cargo must give preliminary notice of the vessel's intended arrival to the Port Management of the discharge port or ports by telex or cable either directly or through the vessel's Agents on arrival at the first or sole loading port, before loading commences. Estimated time of arrival and estimated quantity of cargo by type must be given with the preliminary notice.

1.2 On completion of loading cargo for Saudi ports the following information must be sent to the Port Management of the discharge port or ports by telex or cable either directly or through the vessel's Agents:

- a. Vessel's name and former names, if any.
- b. Flag, port of registry and call sign.
- c. Length overall, g.r.t., n.r.t. and d.w.t.
- d. Expected draft on arrival.
- e. Expected time of arrival.
- f. Cargo particulars, including nature, weight, tonnage and stowage by hatches. Car carriers, Ro-Ro and container vessels to give both number and weight in tonnes of each type of unit.
- g. Any other cargo being carried for other destinations.
- h. If dangerous cargo is being carried, the quantity and class must be indicated in accordance with the IMDG code and it must be stated whether this cargo is to be discharged or is in transit.
- i. Number, position and S.W.L. of derricks and/or cranes, and particulars and positions of ramps.
- j. The number and nationalities of passengers to be disembarked or in transit.
- k. Expected requirements for bunkers and water.
- l. Name of vessel's Agent.

1.3 A vessel bound for a port in the Kingdom of Saudi Arabia for loading or bunkering must notify the Port Management immediately orders have been received to proceed to Saudi Arabia giving the information as in 1.2 above but relevant for loading or bunkering

1.4 A further notice of ETA is to be sent 5 days, 2 days and 1 day prior to arrival at the port.

Also see "Advance Notice Requirements".

2. Vessels Failing to Give Required Notifications

2.1 Any vessel failing to comply with the requirements under section 1 above or arriving later than expected under the revised ETA, may lose its berthing registration and will be held responsible for all expenses incurred by the Port Management.

2.2 Exemption from the requirements listed under paragraph 1 above may be granted by the Port Management to vessels engaged in coastal trading or which have departed from a neighbouring country, depending on the possibilities of proper communication between the relevant ports, and the duration of the vessel's voyage.

3. Permission to Enter Port

3.1 The Master of a seagoing vessel must have prior permission of the Port Management to enter the port. Such permission may be subject to special restrictions or conditions if:

a. The vessel arrives before or after the given ETA;
b. The vessel is in danger of sinking;
c. The vessel or the cargo is on fire or if there is the possibility of a fire, or if after a fire, it is uncertain whether it is completely extinguished;
d. The vessel is a tanker;
e. On account of the vessel's size or construction its movements or that of any other vessels or the port operations are endangered, hindered or impeded;
f. On account of the condition of the cargo, the vessel is dangerous;
g. The vessel arrives under tow;
h. The vessel is over-loaded;
i. The vessel has any person or animal on board suffering from an infectious or contagious disease, or if the presence of such infection, contagious or epidemic disease is suspected on board;
j. The vessel is powered by nuclear energy, the arrival of such a vessel must be notified in accordance with the requirements as prescribed in section 1;
k. If the vessel carries deck cargo which extends beyond her side.

4. Registration for Berthing

4.1 Vessels will be registered for berthing in accordance with the time given for arrival in the revised ETA. The Port Management reserves the right to refuse registration or to cancel the registration of any vessel already registered if required by port operations or for any infringement of these regulations by the vessel.

Sambuks, schooners or yachts without radio transmitting equipment shall register at the port control signal station (Harbour Master) immediately after berthing.

5. Priority for Berthing

5.1 Allocation of berths shall be under the control of the Port Management who, in case of excess demand on facilities, shall have the power to use their discretion to give priority to:

a. Vessels carrying passengers or pilgrims;
b. Vessels carrying livestock;
c. Vessels carrying essential or perishable foodstuffs;
d. Vessels carrying refrigerated cargo;
e. Any other vessel for special reasons.

6. Papers and Documents Required (see also special requirements for Jeddah Islamic Port and King Abdul Aziz Port Dammam).

6.1 *Vessel's Papers and Documents*

6.1.1 On arrival at any port in the Kingdom of Saudi Arabia the Master of each vessel shall present or make available for inspection the following papers and documents:

a. Log Books;
b. Registration Certificate;
c. Classification Certificate;
d. Load-line Certificate;
e. Building Safety Certificate;
f. Safety Equipment Certificate;
g. Radio and Wireless Certificate;
h. Cargo Gear Certificate;
i. Marine Health Declaration;
j. Vaccination Certificate;
k. Derat Certificate;
l. Clearance from the Last Port of Call;
m. Israel Boycott Declaration;
n. Ship's Stores List;
o. Grain Shipping Certificate if the vessel is carrying a grain shipment;
p. Mail Transport documents in accordance with the "International Postal Treaty" if any mail is carried aboard;
q. 5 Copies Crew List including name, nationality, date and place of birth, passport number and rank;
r. 5 Copies of the Passenger List including name, nationality, date and place of birth, passport number, port of embarkation, port of disembarkation;
s. 2 Copies of the List of Personal Effects of Crew and Passengers.

6.1.2 To obtain port clearance the Master of the vessel shall present or make available for inspection the following papers and documents to Port Management:

a. Log Book;
b. Registration Certificate;
c. Classification Certificate;
d. Load-line Certificate;
e. Building Safety Certificate;
f. Safety Equipment Certificate;
g. Radio and Wireless Certificate;
h. Port Stevedore Outturn Reports;
i. Receipt for Payment of Custom's Duties;
j. Shipping Note and Cargo Manifest for any cargo loaded.

6.2 *Cargo Papers and Documents*

6.2.1 The following papers and documents must be submitted to the Port Management not later than 48 hours prior to arrival (exemptions may be granted under certain circumstances at the discretion of the Port Management):

a. 5 Copies of the Cargo Manifests for Discharge, including any additions or amendments in English; 10 Copies of the original manifests accurately translated into Arabic;
b. 2 Copies of the Cargo Stowage Plan;
c. 2 Copies of the Hatch List or Bay Plan;
d. 2 Copies of the List of Dangerous/Hazardous Cargo fo Discharge;
e. 2 Copies of the List of Dangerous/Hazardous Cargo in Transit;
f. 2 Copies of the List of Heavy and/or Awkward Cargo whic requires special equipment;
g. 2 Copies of the List of any Wine, Spirits and Narcotics or Cargo o such nature on the vessel and its location or, in the absence o which, a nil return;
h. A Declaration of type of reefer cargo;
i. An Application for discharge permit;
j. Arms and Ammunition List or "Nil" Return.

6.2.2 *Specifications*

a. All copies of the manifests must be taken from the Maste Manifest.
b. The consignee column in all cargo manifests shall include the ful name and address of the consignee. If for legal/commercia reasons a bank or financial institution appears as consignee i the cargo manifest, the name of the final consignee, if known, has to be shown beside the name of the bank.
c. In case of transhipped cargo, the cargo manifest must show the name of the pre-carrying vessel, the port of transhipment and the bill of lading number for each consignment.
d. The List of Dangerous/Hazardous Cargo must show:
  (i) The technical name;
  (ii) The IMDG code class and UN number;
  (iii) The Quantity of each consignment;
  (iv) The location on board and bay number, if stowed i containers, or lash barges or on trailers.

6.2.3 *Exceptions*

a. Vessels will be allowed to produce the aforementioned papers o arrival, provided the Port Management has received the followin details by telex not less than 24 hours prior to arrival:
  (i) Name and flag of vessel;
  (ii) Port(s) of loading;
  (iii) Bill of lading numbers;
  (iv) Marks and numbers as per bills of lading;
  (v) List of dangerous/hazardous cargo;
  (vi) List of heavy packages above 3 tonnes and/or awkwar cargo lifts;
  (vii) Total number of bills of lading. LASH operators shall relate bills of lading to specific barge numbers;
  (viii) Statement of wine and spirit shipments for other ports showing where stowed or in the absence of which a nil return.
b. A vessel carrying more than 200 bills of lading consignments for discharge in any one Saudi port is requested to submit cargo manifests not later than 72 hours prior to arrival.

7. Exempted Vessels

Exempted from the provision of regulations 1, 2 and 4 are vessels entering in case of:

a. Distress;
b. Emergency refuge;
c. Force majeure;
d. Need of medical assistance.

8. Signals and Approach

8.1 Every vessel approaching the limits of a port must hoist the following flags:

a. Ship's signal letters (in case of VHF failure);
b. International code 'Q'-flag(s) in accordance with international health and safety regulations;
c. International code 'B'-flag if the vessel is carrying dangerous goods or hazardous materials;
d. The national flag of the country to which the vessel belongs.

9. The Flag of the Kingdom of Saudi Arabia

9.1 Every vessel entering a Saudi port must hoist the flag of the Kingdom of Saudi Arabia and keep it flying at all times throughout the stay in the port.

10. Pilotage

Pilotage is compulsory for all vessels entering or navigating within or leaving the pilot zones in the Kingdom of Saudi Arabia.

10.1 *Exempted Vessels*

The following vessels are exempted from the provisions of compulsory pilotage:

a. Saudi Warships;
b. Vessels of the government of the Kingdom of Saudi Arabia not designated for commercial use;
c. Vessels under 150 net registered tons;
d. Craft employed solely within port limits;
e. Yachts and pleasure craft;
f. Vessels operated by Port Management;

10.2 *Pilot Signals*

Every vessel subject to compulsory pilotage as above and which requires a Pilot shall:

a. From sunrise to sunset hoist the international code flag "G";
b. From sunset to sunrise give the letter "G"(– –·) by a signal lamp;
c. In the event of poor visibility caused by rain, fog or dust, sound the signal "G" (– –·).

Vessels equipped with VHF should call the Port Control Signal Station on frequencies published by the port as soon as the vessel enters within VHF range.

Vessels having a Pilot on board must hoist the international code flag "H".

11. Valid Cargo Gear Certificate

11.1 All vessels must have a valid Cargo Gear Certificate issued by one of the following societies approved by the Ports Authority:

1. American Bureau of Shipping.
2. Bureau Veritas.
3. Det Norske Veritas.
4. Germanischer Lloyd.
5. Lloyd's Register of Shipping.

6. Nippon Kaiji Kyokai.
7. Polski Rejestr Statkow.
8. International Cargo Gear Bureau Inc.

or any other competent authority recognised by the Government of the country in which the certificates are issued.

11.2 No rope, tackle, block, chain, hook or any other gear which is worn, damaged or otherwise unsuitable shall be used for the purpose of hoisting, lowering, heaving or otherwise handling of slung cargo or other articles. All cargo handling gear is to be tested and inspected according to Schedule B to these Regulations.

11.3 Vessels of more than 15 years of age at the start of a voyage as determined by the date of the first or sole Bill of Lading must carry out a cargo gear inspection of all cargo gear including deck machinery and the supply of power thereto, prior to loading for a Saudi Arabian port, and an appropriate inspection certificate should be issued.

This certificate is valid for a period of 6 months. No general statements will be accepted. The Surveyor has to state that the inspection has been carried out on each part of the gear, deck machinery and its power supply, that he has observed each derrick, crane, winch, etc., in operation and each part has been found in good working order, and that all required current inspections as per Schedule B in this part have been fulfilled.

The Inspection Certificate must be provided by an approved Survey Bureau, Classification Society or an approved Government Department. *Exemptions:* 11.3 above does not apply to vessels less than 70 m. LOA engaged in coastal trades (Red Sea, including ports in Somalia; Arabian Gulf and Gulf of Oman).

ADVANCE NOTICE REQUIREMENTS: The information below has to be telexed twice to respective Port Authority (with copy to Agent). The first telex to be sent (with estimated details) at the time vessel arrives at first port of loading, to be called 'preloading advice'. The second telex to be sent (with correct details) at the time vessel sails from the final port of loading, to be called 'final advice'.

1. Call Sign.
2. Vessel's name.
3. Owners/Line.
4. Nationality.
5. Agent.
6. LOA (m.)
7. Max. Draft (m.)
8. Hatches/holds.
9. G.r.t.
10. N.r.t.
11. D.w.t.
12. Vessel's previous name.
13. Vessel type.
14. Cargo type.
15. Total cargo weight tonnes.
16. Total cargo freight tonnes.
17. No. of containers/units.
18. No. of livestock.
19. ETA.
20. Actual arrival draft.
21. Hatchwise tonnage.
22. Year of build.
23. No. of LCL containers and quantity showing each bill of lading number in that container.
24. Fumigation and Cleanliness Certificates in case of foodstuff cargoes.
25. Each loading port name where cargo loaded for Saudi port.
26. Economic Speed.
27. Vessel position 48 hours before arrival.
28. Previous port prior to Saudi port.
29. Next port after Saudi port.
30. Vessel's Lloyd's registered number.
31. Port of Registry.
32. Hazardous cargo for Saudi port.
33. Hazardous cargo in transit for other ports.
34. P and I Club name and local correspondents.
35. Confirm that 5, 2, 1 day ETA notices with Call Sign, draft, cargo for Saudi port, hatchwise distribution, Master's name, crew number, nationality, previous/next port, vessel's position 48 hours' prior arrival and radar data will be supplied to port by the Principals/Master.

If the undermentioned information has not previously been given it is to be included in the advices:

(a) Type of radar.
(b) Frequency.
(c) Scan rate.
(d) Pulse width.
(e) Pulse peak power.
(f) Pulse repetition frequency.
(g) Beam width.

If the vessel is equipped with several radars the characteristics of each radar must be given.

Upon receipt of such information, the relevant Port Authority will give clearance date for the vessel to enter the port.

The following documents should arrive with the Agent in Saudi Arabian port latest 7 days prior to vessel's arrival date and subject to Arabic translation be submitted to Authorities latest 72 hours prior to vessel's arrival:

18 copies Cargo Manifest.
18 copies Freight Manifest.
18 copies Dangerous Cargo Manifest.
4 copies Hatch List.
4 copies Stowage Plan.
4 copies each Bill of Lading (3 Non-Negotiable)
4 copies Heavy Lift Cargo separately.

Saudi Arabian Port Authorities can be contacted by telex as follows:

Dammam	601138/9 (Dam Sa Sj)
Jeddah	401175, 401595 (Ports Sj)
Jubail	631005 (Jubpt Sj)
Gizan	911018 (Ports Sj)
Yanbu	461005 (Ports Sj)

POLLUTION: Fines and penalties for not complying with the International Convention for the Prevention of Pollution of the Sea by Oil, 1975 are:

(a) Discharging oil or oily-mixture within 100 miles from the Kingdom's Coasts – one year imprisonment or S.R.20,000 (Saudi Riyals) or both.
(b) Saudi Flag Ships discharging oil or oily-mixture in any prohibited zones or areas mentioned in the conventions, the same fine and penalty as in (a).
(c) Not keeping the oil record book in the ship – 6 months imprisonment or S.R.2,000 (Saudi Riyals), or both.
(d) Not keeping the oil record book up to date – fine up to S.R.5,000 (Saudi Riyals).

AUTHORITY: The Ports Authority, Kingdom of Saudi Arabia, P.O.Box 5162, Riyadh, Kingdom of Saudi Arabia. *Tel:* 01-476-0742. *Telex:* 201158 Ports Sj. *Contact:* Fayez I. Badr, President and Chairman of the Board.

AL KHOBAR: 26.17 N. 50.13 E.

ALSO SEE "GENERAL" BEFORE FIRST PORT.

PORT LIMITS:

Harbour Boundaries:

All shore-based port property enclosed by a fence following the shore line extending seawards to a line running between the following points:

Latitude: 26° 16′ 12″ N.	Longitude: 50° 12′ 54″ E.
Latitude: 26° 16′ 12″ N.	Longitude: 50° 13′ 18″ E.
Latitude: 26° 12′ 00″ N.	Longitude: 50° 13′ 36″ E.
Latitude: 26° 12′ 00″ N.	Longitude: 50° 19′ 20″ E.
Latitude: 26° 17′ 12″ N.	Longitude: 50° 19′ 20″ E.
Latitude: 26° 17′ 12″ N.	Longitude: 50° 13′ 06″ E.

PILOTAGE/ANCHORAGE/RADIO: There are no official anchorages, Pilots or radio facilities at Al Khobar port, which is only used by small craft.

BERTHING:

Berth	*Length (m.)*	*Depth (m.)*	*Remarks*
Total	500	3.4	General cargo and passenger, including a 10 m. wide quay ramp.

Total shed area (3 sheds): 8,200 sq.m.
Total open storage area: 6,900 sq.m.
Vehicle parking area: 6,900 sq.m. (inside security).
11,400 sq.m. (outside security).

Passenger terminal: 750 sq.m.

EQUIPMENT:

Forklifts: 5 up to 4 tons, 5 between 4 and 10 tons.
Mobile cranes: 3 up to 20 tons, 1 between 20 and 40 tons.

AUTHORITY: Al Khobar Port Management, *Contact:* Yousef A. Al Sharq, Port Director.

AGENT: See "Dammam".

DAMMAM: 26.30 N. 50.12 E. (See Plan Book)

ALSO SEE "GENERAL" BEFORE FIRST PORT.

LOCATION: Situated approximately mid way along the Eastern coast. It is the principal Port of Saudi Arabia in the Arabian Gulf.

PORT LIMITS: The Seaward Limits of the Port of Dammam are bounded by a line joining the following positions:

Lat. 26° 28′ 34″ N., Long. 50° 10′ 48″ E.
Lat. 26° 29′ 06″ N., Long. 50° 09′ 00″ E.
Lat. 26° 34′ 00″ N., Long. 50° 09′ 00″ E.
Lat. 26° 34′ 00″ N., Long. 50° 10′ 00″ E.
Lat. 26° 34′ 20″ N., Long. 50° 10′ 44″ E.
Lat. 26° 37′ 45″ N., Long. 50° 14′ 42″ E.
Lat. 26° 37′ 45″ N., Long. 50° 16′ 00″ E.
Lat. 26° 26′ 30″ N., Long. 50° 16′ 00″ E.
Lat. 26° 26′ 30″ N., Long. 50° 11′ 48″ E.

and thence to the shoreline by a line 2,000 m. distant from the East side of the causeway.

Within the Port Limits the approach channel to the port is marked by buoys in accordance with IALA "System A". Depth of the approach is 15 m.

FLAG: In addition to the quarantine signals (see "Health") which are to be shown until Pratique is granted, the Saudi Arabian Flag must be flown from vessel's foremast while in port of Dammam. Saudi flags can be hired or purchased locally.

DOCUMENTS: In order to comply with Port, Customs and Agent's requirements, the following documents should be submitted to the Port Management via the Agent, at least 48 hours prior to arrival of vessel at Dammam port:

12 copies of Cargo Manifest for each port of loading (which must include four copies in Arabic), all typed, stamped and signed.
2 copies of Freight Manifest.
3 copies of Hatch List.
3 copies of Stowage Plan.
List of Heavy Lifts.
List of Long Length Cargo.
7 copies of List of Dangerous Cargo on board, if any.
Arms and Ammunition List, or "Nil" return.

The particulars of the certificates required by the SOLAS regulations are entered on the Port's Form on the arrival of the vessel at the anchorage and the certificates are sighted after berthing.

Also see "Health", and "General" before first port.

PILOTAGE: The pilotage area commences at Buoy "D27" (i.e. the channel entrance). Pilotage is compulsory and the normal Pilot Boarding Area is between Buoys "D39" and "D40". The only vessels allowed to proceed South of this position without a Pilot are exempted vessels, and vessels which would, under normal circumstances, require the services of a Pilot but have been instructed by "Dammam Port Control" to anchor in the Holding Anchorage.

Vessels bound for Dammam must contact "Dammam Port Control" 1 hour before arrival at Buoy "D27", giving details of ship (see "Approaching"), and must not enter the channel until permission has been given by "Dammam Port Control".

"Dammam Port Control" operates on the following VHF Channels: 16, 12, 13, 19 and 22.

Vessels Exempted from Compulsory Pilotage: These include:

(i) Vessels of the Royal Saudi Navy.
(ii) Vessels of the Saudi Government which are not assigned for commercial use.
(iii) Vessels whose nett tonnage is less than 150 tonnes.
(iv) Port craft.
(v) Pleasure yachts.

Also see "Radio".

APPROACHING: *Directions and Regulations for Vessels Entering or Leaving Dammam Port:*

Dry cargo vessels drawing 10.4 m. (34 ft.) or less should approach and leave by the East Channel.

Vessels in excess of 10.4 m. draft and vessels from Northward should use the Main Channel.

Prior to vessels entering the Ras Tanura Channel they must contact "Ras Tanura Radar Control" on VHF Channel 10, identify themselves and state where bound. Normal listening watch should then be maintained on Channel 16.

Vessels bound for Dammam Port must call "Dammam Port Control" 1 hour before the vessel's arrival at Buoy "D27" and give the following information:

(i) Vessel's name.
(ii) Length overall.
(iii) Maximum draft.
(iv) Cargo tonnage and main commodity.
(v) Hazardous cargo, if any.
(vi) Whether the vessel has a list.
(vii) Whether the vessel has any mechanical defects.

Vessels must not enter or navigate within the Port Limits without the permission of "Dammam Port Control". Inward vessels shall report the time of passing Buoy "D27" and shall keep a listening watch on Channel 16.

The speed of vessels within the buoyed channel is limited to 8 knots and overtaking other vessels within the channel is prohibited.

Anchoring within the buoyed channel is prohibited.

Upon arrival, if a vessel is instructed not to anchor in the Holding Anchorage, the Pilot will board abeam of Buoy "D39".

ANCHORAGES: The following anchorages are allocated as necessary for vessels:

(i) *Holding Anchorage:* (Depth 15m.) bounded by a line joining the following positions:
Lat. 26° 31′ 42″ N., Long. 50° 11′ 29″ E.
Lat. 26° 31′ 52″ N., Long. 50° 10′ 00″ E.
Lat. 26° 33′ 24″ N., Long. 50° 10′ 00″ E.
Lat. 26° 33′ 46″ N., Long. 50° 10′ 47″ E.
Lat. 26° 32′ 29″ N., Long. 50° 10′ 43″ E.
This anchorage is marked by Buoys.

(ii) *Working Anchorage:* (Depth 10 m.) bounded by a line joining the following positions:
Lat. 26° 32′ 11″ N., Long. 50° 11′ 33″ E.
Lat. 26° 32′ 27″ N., Long. 50° 12′ 03″ E.
Lat. 26° 31′ 52″ N., Long. 50° 12′ 36″ E.
Lat. 26° 31′ 32″ N., Long. 50° 12′ 13″ E.

(iii) *Explosive Anchorage:* (Depth 8 m.) bounded by a line joining the following positions:
Lat. 26° 30′ 53″ N., Long. 50° 12′ 55″ E.
Lat. 26° 31′ 23″ N., Long. 50° 13′ 05″ E.
Lat. 26° 31′ 18″ N., Long. 50° 13′ 33″ E.
Lat. 26° 30′ 53″ N., Long. 50° 13′ 33″ E.

(iv) *Small Craft Anchorage:* (Depth 10 m.) bounded by a line joining the following positions:
Lat. 26° 31′ 32″ N., Long. 50° 12′ 13″ E.
Lat. 26° 31′ 52″ N., Long. 50° 12′ 36″ E.
Lat. 26° 31′ 27″ N., Long. 50° 12′ 58″ E.
Lat. 26° 31′ 00″ N., Long. 50° 12′ 43″ E.

Anchoring in the channel is strictly forbidden.

WEATHER: The peninsula of Saudi Arabia is almost of an equatorial climate. Summertime rising to over 50°C. Rain is generally scarce. During major part of year, but especially during Summer, the relative humidity is high. From July to September it frequently exceeds 85%.

Winds in this area are not predictable for more than a few hours. They vary in strength and direction, although prevailing winds are from N.W.

TIDE: The Diurnal tide range at Dammam Port is approximately 2.00 m. – 2.45 m. at Springs, and 0.80 m. at Neaps. The flood tide sets to the S.E. across the harbour entrance and the ebb tide sets to the N.W. The rate of flow is very much dependent on the wind force and direction but seldom exceeds 2 knots.

MAX. SIZE: See "Berthing".

RADIO: (Also see "Agents", "Pilotage" and "Vessel Appointments").

Dammam Port has a modern radio communications system as follows:

(i) *VHF* – (Call sign "Dammam Port Control"). A continuous listening watch on Channel 16.
Working Channels are: Channels 12, 13, 19 and 22.
(ii) *Radio Telephone* – Facilities are available.

Note: International VHF Channels 01, 68, 71 and 73 are used for port and pilotage operations. Vessels must NOT use these Channels when in the vicinity of Dammam Port.

Telex: Dammam Port is connected to the International Telex network. The telex address is 601138 or 601139 Dapm SJ.

Send the following information, by telex, 48 hours before arrival:

1. Name of vessel.
2. Flag.
3. Name, address, telephone number and telex of Agent.
4. Speed.
5. ETA.
6. Type of radar.
7. Frequency.
8. Scan rate.
9. Pulse width.
10. Pulse peak power.
11. Pulse repetition frequency.
12. Beam width.

Vessels equipped with more than one radar should give the information in Items 6 to 12 for each radar.

Information is available from "Dammam Port Control" covering local weather conditions and any local hazards to navigation that may be appropriate from time to time. For the future, it is planned to give assistance to shipping, navigating locally, by the provision of a Marine Control Tower with radar coverage.

Coast radio station at Dammam officially known as "Dammamradio" with call sign "HZG". Telex: 602600, 602603. Tel: 8276080, 8274449. It is already in service employing radiotelegraphy, radiotelephony and radiotelex to provide radio communication link between vessels at sea and land based concerns.

VESSEL APPOINTMENTS: (See also "Radio").

It is a pre-requisite for all vessels trading to any Saudi Arabian port to give the appropriate Port Management the undermentioned information by telex on arrival at the first Port of Loading for Saudi Arabia:

In the case of Dammam Port, telexes should be sent to: The Port Director General, Dammam Port Management. Telex Nos. 601138 or 601139 Dapm SJ.

(a) The information must be updated on leaving the final port of loading bound for Saudi Arabia:

1. Radio code (Call sign).
2. Vessel's name.
3. Owner/Line.
4. Nationality.
5. Agent.
6. Length overall (metres).
7. Maximum draft (metres).
8. Number of hatches.
9. Gross registered tonnage.
10. Nett registered tonnage.
11. Deadweight tonnage.
12. Previous name (if any).
13. Type of vessel.
14. Type of cargo.
15. Total cargo weight tonnes.
16. Total cargo freight tonnes.
17. Number of containers/units (where applicable).
18. Number of livestock (where applicable).
19. Estimated time of arrival.
20. Actual arrival draft.
21. Tonnage to hatch.
22. Year of building.
23. Last port of call.
24. Foodstuff liable to infestation (Fumigation Certificates).
25. Ports of loading for Dammam discharge.

The name of vessel *and radio code* should be given in every subsequent telex for reference.

The absence of any of the above information may delay the granting of an entry date to the subject vessel.

(b) The above information must be backed up by further confirmation of ETA at 5 days, 2 days and 1 day prior to arrival at each port of call in Saudi Arabia.

Note: Penalties may be imposed by the Saudi Ports Authority if the above rules are not strictly adhered to.

Berthing Arrangements: Providing the requirements above have been complied with, vessels will be allocated to berths, dependent upon type of cargo carried, prior to arrival. Berthing will then take place immediately upon arrival, weather permitting.

VHF: See "Radio".

HEALTH: In accordance with international practice, quarantine signals must be displayed by all vessels approaching Dammam port. These signals shall be displayed continuously until Pratique granted. Signals are as follows: Sunrise to sunset – Quarantine Flag; Sunset to sunrise – Signal Lights – red over white.

The Quarantine Officer will board the vessel either at anchorage or at pier.

Documents required for immediate inspection are the following:
International Maritime Health Certificate (from the last port).
Valid Derat or Derat Exemption Certificate.
Crew List (3 copies).
Passenger List, if any.
Valid Cholera Certificates (of a date not exceeding 3 months) for all crew members and passengers.
Valid Yellow Fever Certificates for all crew members and passengers.
Certificates of Inoculation against any communicable diseases prevailing at the ports of departure.
Ship's Log Books.

TUGS: Dammam Port has a large and varied fleet of Marine Craft to cover all the needs of marine operations, as follows:

Tugs (Total 15):

2 × 2,800 h.p.	4 × 950 h.p.
2 × 1,450 h.p.	4 × 800 h.p.
1 × 1,350 h.p.	1 × 460 h.p.
1 × 1,300 h.p.	

Launches for handling mooring ropes	4
Pilot launches	4
Fire fighting vessel	2
Inspection launch	1
Survey launch (fitted with latest Computerised survey equipment)	1
Buoyage tender	1
Floating incinerator	1
Barges (various)	13
Oil skimming launch	2
Waste collection vessel	1
Oil separator barge	3

The Port's tugs are available to assist vessels in mooring or unmooring.

A mooring gang and Supervisor are provided by the port when a vessel is docking or sailing. Launches are normally used at Berth Nos. 36, 37 and 38 only.

BERTHING: (Also see "Vessel Appointments").

In the main port there are 38 working berths for deep-sea vessels. They are located on 4 quays as follows:

East Port: *West Quay:* (King Abdul Aziz Pier, total length 2,500 m. approximately).

Berth No.	*Nominal Length (m.)*	*Depth (m.)*	*Berth Facilities*	*Type of Operation*
1	240	14	Grain Silos & Flour Mill	Grain/Dir. Dly GC
2	240	14	Zone-Barn	General Cargo
3	240	14	Zone-Barn	General Cargo
4	180	12	Shed-Zone	General Cargo
5	180	12	Shed-Zone	General Cargo
6	150	9	Shed-Zone	General Cargo
7	150	9	Shed-Zone	General Cargo
8	150	9	Shed-Zone	General Cargo
9	179	9	Shed-Zone	General Cargo
10	215	11	Zone	Load Fertiliser
11	180	11	Zone	General Cargo
12	180	12	Shed-Zone	General Cargo
13	180	12	Shed-Zone	General Cargo

Notes:

1. Where there is a shed on the berth the distance from the quay edge to the shed is 30 m.
2. All berths are rail connected.
3. There are 28 portal cranes on Berths 1 to 13, with capacities from 3 to 15 tonnes.

East Quay: (Total length 1,750 m. approximately).

Berth No.	*Nominal Length (m.)*	*Depth (m.)*	*Berth Facilities*	*Type of Operation*
14	180	12	Shed-Zone-Barn Ro-Ro Ramp	General Cargo/ Ro-Ro
15	180	12	Shed-Zone-Barn	General Cargo
16	180	12	Shed-Zone-Barn	General Cargo
17	180	12	Zone	General Cargo
18	180	12	Shed-Zone-Barn	General Cargo
19	180	12	Zone	General Cargo
20	180	12	Shed-Zone-Barn	General Cargo
21	240	14	Zone	Multi-purpose
22	240	14	Zone/Ro-Ro Ramp	Multi-purpose

Notes:

1. Where there is a shed on the berth, the distance from the quay edge to the shed is 40 m.
2. Currently 28 portal cranes are in use on Berth Nos. 14 – 20 inclusive. Their capacities vary from 6 to 15 tonnes.
3. Berth Nos. 21 and 22 make up Dammam Multi-purpose Terminal.

West Port: *East Quay:* (Total length 2,800 m. approximately).

Berth No.	*Nominal Length (m.)*	*Depth (m.)*	*Berth Facilities*	*Type of Operation*
23	240	14	Zone Ro-Ro Ramp	Containers Ro-Ro
24	240	14	Zone	Containers
25	240	14	Zone	Containers
26	240	14	Zone	Containers
27	240	14	Zone	General Cargo
28	240	14	Zone	General Cargo
29	240	14	Zone	General Cargo
30	180	12	Shed-Zone-Barn	General Cargo
31	180	12	Shed-Zone-Barn	General Cargo
32	180	12	Zone	General Cargo
33	180	12	Shed-Zone-Barn	General Cargo
34	180	12	Shed-Zone-Barn	General Cargo
35	205	12	Zone/Ro-Ro Ramp	General Cargo/Ro-Ro

Notes:

1. Where there is a shed on the berth, the distance from the quay edge to the shed is 40 m.
2. Berth Nos. 23 – 26 make up Dammam Container Terminal (DCT).

West Quay: (Total length 690 m. approximately).

Berth No.	*Nominal Length (m.)*	*Depth (m.)*	*Berth Facilities*	*Type of Operation*
36	180	12	Silos/Bagging Plants	Bulk Cement
37	180	12	Silos/Bagging Plants	Bulk Cement
38	180	12	Silos/Bagging Plants	Bulk Cement
39	150	14	Zone	Explosives/ Dangerous Cargo

Notes:

1. The 3 bulk cement berths are each leased to independent companies.
2. All berths are rail connected.
3. The quay, North of Berth No. 39, can be extended by 3,200 m. when additional berths are required in the future.

Updated information on available depths within the Port Limits can be obtained from the Harbour Master's Office.

In addition to the berths in the main port, a Small Craft Harbour is situated to the South of the East Port where small vessels, dhows, fishing vessels and a considerable amount of barge traffic (mainly LASH) are handled. The depth of water varies from 6 m. to 4.5 m. The purpose-built facilities provide in excess of 1,600 m. of quay, large back-up areas and covered storage.

SPECIALISED CARGO HANDLING FACILITIES: *Grain Terminal* (Berth No. 1): This terminal provides purpose built facilities for discharging all types of grain. These can be distributed to silo storage, or delivered direct to road, rail or to the adjacent flour mills. Discharge rate 480 t.p.h. with 2 pneumatic unloaders.

Ro-Ro Berths: There are 4 operational berths in the port with ramps for ro-ro vessels fitted with bow or stern access, as follows: Berth No. 14: At South end of berth. Berth No. 22: Dammam Multi-purpose Terminal. Berth No. 23: Dammam Container Terminal. Berth No. 35: At South end of berth.

Dammam Multi-purpose Terminal (Berth Nos. 21 and 22): This terminal provides facilities for handling multi-purpose vessels (i.e. Ro-Ro, containers and general cargo). It is equipped with 2 container gantries and another is under construction.

Damman Container Terminal (DCT): This comprises Berth Nos. 23, 24, 25, and 26. The stacking area also includes part of Berth Nos. 27 and 28 open storage areas.

The terminal has 6 container gantries, and another is under construction, and its own rail terminal, with 2 rail-mounted, wide-span gantries and container storage area.

Extensive covered facilities are available for Customs inspection and clearance purposes. A purpose-built container freight station (CFS) for handling LCL shipments is also available.

The quayside gantry rails extend to Berth No. 28, so enabling both this berth and No. 27 to be incorporated in the terminal if required in the future.

Bulk Cement Terminals: Dammam Port has allocated 3 berths for the handling of cement in bulk, namely Berth Nos. 36, 37 and 38. The berths are leased to three independent companies, each of whom has provided facilities afloat and on the quay. The three terminals are rail connected.

Silo Vessel "Falcon Cement" at Berth No. 36:

Operator:	REDEC Cement Ltd.
Vessel discharge rate:	20,000 T/day (pneumatic)
Storage capacity:	54,000 T
Total delivery rate:	16,000 T/day
Bulk delivery rate:	6,400 T/day
Bags delivery rate:	9,600 T/day
Shore silo:	6,000 T

Silo Vessel "Arabia Luluah" at Berth No. 37:

Operator:	Saudi Bulk Transportation Co. Ltd.
Vessel discharge rate:	8,000 T/day (by grab)
Storage capacity:	28,000 T
Total delivery rate:	6,500 T/day (pneumatic)
Bagging rate:	4,000 T/day
Bag outlets:	3
Bulk delivery rate:	5,000 T/day
Bulk outlets:	4
Shore silo:	2,000 T

Silo Barge "Unicement 1" at Berth No. 38:

Operator:	United Bulk Cement Co. Ltd.
Vessel discharge rate:	6,000 T/day (pneumatic)
Storage capacity:	26,500 T
Total delivery rate:	6,000 T/day (pneumatic)
Bagging rate:	2,000 T/day
Bag outlets:	4
Bulk delivery rate:	4,000 T/day
Bulk outlets:	3
Shore silos (2)	120 T.

Loading Berth: Berth 10 is allocated for loading Urea (fertiliser) which is manufactured locally by the Saudi Arabian Fertiliser Co. (SAFCO). The bagged Urea is transported by rail from the factory to the quayside where it is loaded directly into the vessel alongside by its own cargo handling gear.

Dangerous Cargo Terminal: This 150 m. long berth has a depth alongside of 14 m. It consists of an open quay for direct delivery only and is road and rail connected.

CRANES: *Floating Crane (Self-Propelled):* Its capacities and corresponding outreaches beyond the fenders are as follows: 200 tonnes, 10 m.; 170 tonnes, 12.5 m.; 140 tonnes, 17.5 m.; 125 tonnes, 23.0 m.; 80 tonnes, 25.0 m.; 60 tonnes, 27.5 m.

The maximum height of the hook above water level is 37 m.

Also see "Cargo Handling Equipment".

STORAGE AREAS: *Enclosed Transit Sheds:* Within the port area, including the CFS and Small Craft Harbour, there are 22 sheds with a total floor area of 151,520 sq.m.

Open Sided Barns: Similarly 12 barns provide a total floor area of 70,620 sq.m.

Open Areas (Zones): As a result of climatic conditions, a large proportion of cargo passing through the port is stored in the open. The total area, including the Small Craft Harbour and CFS, is as follows:

	sq.m.
Berth Nos. 2 – 13	355,800
Berth Nos. 14 – 22	438,800
DCT 23 – 26	412,700
Berth Nos. 27 – 35	744,600
West Port (West & South)	521,000
North Small Craft Harbour	43,000
West Small Craft Harbour	85,500
South Small Craft Harbour	192,200
Container Freight Station (CFS)	134,000
Hazardous Cargo Area	16,600
Total Area:	2,944,200

Inland Yard: This is situated at the landward end of the causeway. It is used for transit cargo storage, also for port materials storage. The respective areas available for cargo storage are: 5 sheds totalling 24,030 sq.m., open areas totalling 231,900 sq.m.

CARGO HANDLING DISCHARGE RATES: A strong and positive set of Port Rules is in operation. This guarantees high discharge rates and high standards of efficiency. Co-operation in observance of these rules by Shipowners and Agents makes a substantial contribution to the port's effectiveness. The most important of these rules are summarised below:

1. Every vessel calling at Dammam must make an appointment.
2. Every vessel, or Agent, must submit appropriate documentation prior to a vessel's arrival.
3. Any vessel over 15 years old shall obtain and submit a certificate issued by a competent and approved Authority that her cargo gear is in good working order before being allowed to discharge.
4. All cargo that is suitable shall be presented in unit loads on pallets or pre-slung.
5. No cargo shall be received into port premises in a damaged condition.
6. Every vessel shall be ready to discharge upon berthing. She shall continue discharging uninterrupted until all Dammam cargo is completed, whereupon she shall leave the berth without delay.
7. Overstowing Dammam cargo with cargo destined for another port is prohibited.
8. Transhipping cargo in Dammam for other ports is not allowed.
9. Cargo which is not removed from the Port by Consignees within 15 days is liable to be auctioned and sold.

The port's efficiency and handling rates are high, as indicated in the table below:

Indicative Handling Rates of Main Commodities during the Year 1981.

Cargo	*Weight Tonnes per Gang Hour*	
	Gross	Nett
Bulk Grain	43.8	43.8
Bulk Cement	277.1	277.1
Bagged Cement	12.0	12.7
Other Bagged Cargoes	12.5	14.2
Steel & Pipes	25.6	26.9
General Cargo	31.9	36.2

CARGO HANDLING EQUIPMENT: Dammam Port has an extensive and modern fleet of equipment. A proportion of the fleet has been allocated to each of the Stevedoring Companies berths and the nearby port of Alkhobar, for which Dammam Port Authority is responsible. The total present fleet (1984) is set out below:

Equipment Type	*Capacity*	*Availability Number of Units*
Forklift Trucks	0 – 4 tons	310
	5 – 10 tons	115
	11 – 25 tons	83
	Over 25 tons	16
	Total	524
Mobile Cranes	0 – 20 tons	84
	21 – 40 tons	78
	41 – 90 tons	5
	Over 90 tons	2
	Total:	169
Straddle Carriers	–	28
Gantry Cranes	31 tons	6
	30.5 tons	2
	Total:	8
Portal Cranes	3 tons	8
	6 tons	24
	15 tons	24
	Total:	56
Terminal Tractors	–	91
Towing Tractors	–	9
	Total:	100
Trailers G.S.	–	120
G.S./Container	–	44
Ro-Ro (MAFI)	–	139
Container	–	26
	Total:	329

STEVEDORES: Stevedoring operations on all berths except bulk grain, bulk cement and the container terminal (DCT) are performed by 3 contracted stevedoring companies.

MEDICAL: Masters may obtain medical attention for ship's personnel from Port Doctor who may, in case of serious illness or injury recommend treatment to a local hospital. Normally the Port Doctor will treat minor illness on board ship.

Urgent hospitalisation can also be arranged via the ship's Agent. Masters of vessels at sea may use services of Dammam Port Radio to obtain medical advice at any time.

DENSITY: The average density (salinity) of the sea-water in the Port of Dammam is 1030.

WATER: Water is available at all berths except No. 10, (but difficulty may be experienced with hose connection as some are not standard). Also, from a private water barge. Vessels requiring a supply of water should make arrangements through their Agent.

FUEL: There are several private Bunkering companies who operate in Dammam Port. By arrangement through the ship's Agent, bunkers can be supplied by barge at anchorage or alongside vessel at her berth. Various grades of fuel are available. Strict rules apply and severe penalties will be imposed should any oil spillages occur during bunkering operations or from any other cause. Anti-oil pollution equipment and dispersants are available.

Also see "Ras Tanura".

CUSTOMS: All materials to be either exported from or imported into Saudi Arabia are subject to examination by Customs Authorities. The importation of the following articles is completely banned.

(a) Alcoholic beverages, including beer and wines.
(b) Narcotics.
(c) Pornographic material.

Trafficking of the above items between ship and shore is strictly prohibited, regardless of whether vessels are alongside at berths or at anchor. Consumption of alcoholic beverages is prohibited during a ship's stay in port.

The following articles can be imported after obtaining permission from the authorities concerned.

(1) Explosives
(2) Fire Arms
(3) Antiques
(4) Religious material not pertaining to the Muslim faith.

CONSULS: The U.S. Consulate General resides at Dhahran (approximately 20 km. inland from Dammam). A British Consular Official visits the Dammam area on 1 day each week.

REPAIRS: A new ship repair yard will become operational during 1984. It contains 2 floating dry docks, with capacities of 22,000 tonnes and 10,000 tonnes, together with all necessary facilities to provide a complete range of ship repairs and maintenance services.

Deep sea divers, operating from modern and well equipped diving boats, are available at Dammam.

Repair and maintenance services for electronic equipment are available at Dammam Port.

Dry Dock: Main particulars:
Lifting capacity 22,000 tonnes.
Length overall 215 m.
Outside width 43 m.
Clear inside width 35 m.
Moulded depth to upper deck 16.45 m.
Immersion depth over keel blocks 7.55 m.

SURVEYORS: *Cargo Surveyor:* Cleghorn Wilton & Co., P.O.Box No. 314, Dhahran Airport, Saudi Arabia. Tel: 83-24737

Ship and Engine Surveyors (Engineers): Arabian Inspection and Survey Co. Ltd., (Agents for Lloyd's & Germanischer Lloyd), P.O.Box 59, Dhahran Airport, Saudi Arabia, Tel: 83-32089.

Arabian Establishment for Trade (act on behalf of Lloyd's and Bureau Veritas), P.O.Box 59, Dhahran Airport, Saudi Arabia. Tel: 83-22837, 83-21036.

Yusuf Bin Ahmed Kanoo (act on behalf of American Bureau of Shipping) P.O.Box 37, Dammam, Saudi Arabia. Tel: 83-23011

Orri Navigation Lines (act on behalf of Bureau Veritas and P and I Clubs), P.O.Box 1504, Dammam, Saudi Arabia. Tel: 83-26644.

AIRPORT: Very good airlines facilities are available from Dhahran Airport. Daily departures take place for any part of the world.

REPATRIATION: This is generally not encouraged but consideration will be given to urgent cases. Details should be verified through ship's Agent. Under Immigration Rules the crew must travel on valid seaman book or valid visa duly endorsed on passport by the Royal Saudi Embassy in the country from which the travel is undertaken. Transit visas are not allowed.

TIME: GMT plus 3 hours all year round.

HOLIDAYS: Dammam Port offers continuous cargo handling operations through the year and sufficient manpower is always available.

All ships must be dressed if they are in port, or entering port, on the following official holidays or events:

1. Eid Al Fitr.
2. Eid Al Adha.
3. Saudi Arabian National Day.
4. Royal visits to the port.

Port staff will advise vessels in port prior to any forthcoming event, and vessels approaching port will be advised by the Port Radio Control.

SHORE LEAVE: Ship's personnel and passengers are not normally permitted ashore unless special permission is granted by Immigration and Police Authorities. The necessary arrangements can be made by ship's Agent upon receiving the Master's request and Seaman's books. While in port, the vessel's personnel are under jurisdiction of the Law of Saudi Arabia.

EMERGENCY CO-ORDINATION: In the event of marine emergencies in the area, the Dammam Port Harbour Master should be contacted.

TELEPHONE: The port's telephone number is 83-32500 and is open for 24 hours. Expansion is planned which will include ship to shore communications at all berths.

USEFUL TELEPHONE NUMBERS:

	Number	*Extension*
Dammam Port (Main Exchange)	83-32500	—
Emergency Numbers		
Ambulance	„	2221
Fire & Safety (Manager)	„	2644
Chief Fire Officer	„	2000
Port Safety Officer	„	2372
Civil Defence	„	2632
Port Main Entrance (Police Duty Officer)	„	2717
Port Medical Clinic (Duty Officer)	„	2219
Port Security (Duty Officer)	„	2555
Customs	„	2472, 2198
Port Officer (Marine Emergencies)	„	2245
Port Control (Radio Room)	„	2233, 2223
Operations Control (Duty Officer)	„	2503
President & Chairman of the Board Ports Authority	83-32737	—
Ports Authority Office Manager	83-32500	2021
Port Directorate		
Port Director General	„	2324
Asst. Port Director (Operations)	„	2613
Asst. Port Director (Technical Services)	„	2042
Director of Administration	„	2315
Director of Finance	„	2513
Marine Department		
Director, Marine	„	2620
Harbour Master	„	2314
Duty Port Officer	„	2245
Port Control (Radio Room)	„	2233, 2223
Chief of Marine Inspection	„	2013
Chief Tugmaster	„	2408
Anti-Pollution Officer	„	2383
Operations Department		
Operations Control Manager	„	2406
Operations Control (Duty Officer)	„	2503
Vessel Appointments	„	2192
Operations Conference Room	„	2249
Engineering Department		
Director Mechanical Workshops	„	2740
Plant and Equipment Adviser	„	2018
Marine Engineering	„	2614, 2566
Public Relations Department		
Manager	„	2701
Port Clearance Department		
Manager	„	2028
Port Transport Department		
Controller	„	2773, 2775

BANKS:

(i) The Saudi British Bank, P.O. Box 35, Dhahran Airport, Al Khobar. Tel. Nos. 86-42868/9. Telex. No. 670007 Sabb SJ

(ii) The Saudi American Bank, P.O. Box 842, Fluor Building, Al Khobar. Tel. No. 86-45630. Telex. No. 670411

(iii) Al Bank Al Saudi Al Fransi, P.O.Box 397, Dhahran Airport, Dhahran, Saudi Arabia; Tel. No. 8320153. Telex No. 601164 Safdam SJ.

(iv) Al Bank Al Saudi Al Holland, P.O.Box 70, Dammam, Saudi Arabia, Tel. No. 8323212. Telex No. 601015 Bashdm SJ.

STORING: Vessels may take stores on board and arrangements should be made through the ship's Agent.

AUTHORITY: Dammam Port Management, P.O.Box 2520, Dammam-31461, Saudi Arabia. *Tel:* 83-32500. *Telex:* 601138/9 Dapm SJ. *Contact:* Mohammed Suliman Al Muhanna, Port Director-General, Dammam Port Management.

AGENT: Gulf Agency Company Saudi Arabia, P.O.Box 86, Airport Post Office, Dhahran, Saudi Arabia, Cables "Confidence Dammam". Telex: 601069 ("GAC SJ") Telephone: Normal working hours 8323427, 8328762-4, 8323425; After office hours 8272077 (ext. 231), 8266630, 8261940, 8337987.

Vessels equipped with VHF, can communicate, when within range, with Agent on stand-by Channel 16 by calling "Confidence Dammam". Voice contacts may be also established via VHF, on the same channel as above, with Ras Tanura office, by calling "Confidence Ras Tanura". Once contact is established on Channel 16, communication will continue by switching on available working Channels as directed.

GIZAN (Jizan): 16.54 N. 42.29 E. (See Plan Book)

ALSO SEE "GENERAL" BEFORE FIRST PORT.

LOCATION: 390 nautical miles South of Jeddah and 360 nautical miles North of Aden.

PORT LIMITS:

Harbour Boundaries:

All shore-based port property enclosed by a fence following the shore line extending seawards to line running between the following points:

	Latitude	Longitude
Qarn Ash Shurra	16° 50′ 36″ N.	42° 33′ 00″ E.
Um al Kuthib	16° 48′ 30″ N.	42° 27′ 12″ E.
Jazirat Hibar	16° 54′ 12″ N.	42° 22′ 42″ E.
Ferafer Island	17° 00′ 00″ N.	42° 23′ 36″ E.
Qarn al Wada	17° 02′ 24″ N.	42° 28′ 18″ E.

DOCUMENTS: See "Health" and "General before first Port."

PILOTAGE: Compulsory, no offshore pilot station. Ships for Gizan should contact Gizan Port Control on VHF Channel 16, 2 hours before arrival.

Pilot Boarding Position:

Lat. 16° 53′ 48″ N. Long. 42° 27′ 00″ E.

APPROACHES: The Northern approach channel, is 82 nautical miles long, marked by 18 light buoys and 3 beacons and provides a safe depth of up to 12 m.

Positioned navigational marks are in accordance with "IALA System A" and fitted with radar reflectors.

The approach buoy "Gizan North" Lat. 16° 56′ 45″ N., Long. 41° 17′ 28″ E. with Racon code "G" as well as Beacon "No. 2" (Code "N") and the beacon "North Ghurab Island" (Code "B").

"Sail Makawa Island" beacon is equipped with white light Fl.4 secs. and black daymark.

A range light, true bearing 96.5°, leads into the port basin through an inner fairway dredged to 13.5 m. depth. For further details refer to B.A. Chart No. 15 and Notices to Mariners.

Southern approach closed.

Notice to Mariners No. 1987(P)/1984:

Approaches to Gizan – Modified North Channel to be established:

(1) The Ports Authority of the Kingdom of Saudi Arabia, has announced that the Northern approach channel to Gizan will be modified, to provide a minimum depth of 29 m. between N1 and N8 buoys, as follows:

(a) Buoyage to be established:

	No.	*Type*	*Colour*	*Character*	*Position*
(i)	N1	Lateral Starboard	Green	Fl(2)G. 9s	16° 59.70′ N., 41° 20.70′ E.
(ii)	N2	Lateral Port	Red	Fl(2)R. 9s	16° 59.77′ N., 41° 19.50′ E.
(iii)	N3	—	—	—	17° 02.15′ N., 41° 22.87′ E.
(iv)	N4	Lateral Port	Red	QR	17° 05.97′ N., 41° 24.50′ E.
(v)	N5	Lateral Starboard	Green	Fl(2)G. 9s	17° 13.60′ N., 41° 34.27′ E.
(vi)	N6	Lateral Port	Red	Fl(2)R. 9s	17° 14.57′ N., 41° 33.23′ E.
(vii)	N7	Lateral Starboard	Green	QG	17° 17.28′ N., 41° 42.67′ E.
(viii)	N8	Lateral Port	Red	QR	17° 18.70′ N., 41° 41.10′ E.

(b) Gizan North light-buoy, 16° 56.58′ N., 41° 17.5′ E. (approx.) is to be amended to: Q.

(c) No. 2 Beacon, 17° 16.8′ N., 41° 33.4′ E. (approx.) is to be amended to a red beacon, Fl(3) 12s.

(2) The modified channel will be opened to shipping on 29th August, 1984.

(3) Mariners are warned to navigate with caution from 22nd August, 1984 whilst work is in progress to change the navigational aids.

ANCHORAGES: *Anchorages within the harbour boundaries:*

Anchorage A. (Cargo vessels).

Lat. 16° 56′ 00″ N.	Long. 42° 27′ 00″ E.
Lat. 16° 54′ 30″ N.	Long. 42° 27′ 00″ E.
Lat. 16° 54′ 30″ N.	Long. 42° 25′ 48″ E.
Lat. 16° 56′ 00″ N.	Long. 42° 25′ 48″ E.

Anchorage B. (Petromin tankers).

Lat. 16° 53′ 00″ N.	Long. 42° 27′ 42″ E.
Lat. 16° 51′ 30″ N.	Long. 42° 27′ 42″ E.
Lat. 16° 51′ 00″ N.	Long. 42° 26′ 12″ E.
Lat. 16° 53′ 00″ N.	Long. 42° 26′ 12″ E.

There are no anchorages outside the harbour boundaries.

ARRIVAL ADVICE: Send ETAs to Gizan Port Management, Telex: 911018 Ports Sj and 911030 Ports Sj.

MAX. SIZE: Length and beam – No limit. Max. draft 10 m. and 12 m.

HEALTH: All vessels should abide by Health Regulations and present necessary documents to the Authorities in accordance with International Laws. Quarantine signals must be displayed by all vessels approaching Gizan Port. These signals must be displayed continuously until Pratique is granted. These signals are:

Sunrise to sunset: Quarantine flag – Yellow.

Sunset to sunrise: Signal lights – Red over white.

RADIO: Masters should give their Agents an ETA not later than 48 hours before arrival. There is no radio station in Gizan Port.

VHF: A base station operates in Gizan Port using the call sign "Gizan Port Control". A 24 hour watch is maintained on Channel 16. All calling should be on Channel 16. Tugs are working on Channel 12.

RADAR: Harbour radar system is under development.

TUGS: Normally join the vessel 3 miles West of breakwaters. Ranging from 850 h.p. to 1,500 h.p.

BERTHING:

Berth	*Length (m.)*	*Depth (m.)*	*Remarks*
7	122	10	General Cargo
8	175	10	General Cargo and Ro-Ro
9	175	10	Cement vessels
Under Construction (Unpaved area)			
10	143	10	
11	217	12	
12	217	12	
1	205	12	
2	176.5	12	
3	176.5	12	
4	171	10	
5	171	10	
6	184	10	

Total Shed Area: 12,000 sq.m.

Total Open Storage Area: 140,000 sq.m.

Weighbridges: 1×60 tonnes.

BULK HANDLING FACILITIES: *Bulk Cement Terminal:*

Silo vessel at Berth No. 3.

Storage capacity: 50,000 tonnes.

Handling capacity: 10,000 tonnes per day; 750,000 tonnes per year

EQUIPMENT: *Marine Equipment:*

2 towing launches, 4 launches, 1 fire fighting launch, 10 self-propelled barges of 400 tons.

Cargo Handling Equipment: Cranes 4 × 16 ton, 2 × 20 ton, 2 × 40 ton, 1 × 90 ton. Forklifts 4 × 3 ton, 5 × 3.2 ton, 22 × 3.5 ton, 6 × 5 ton, 2 × 23 ton. Headmasters 4. Tractors 6. Trailers 19. Ro/Ro forklift 1 × 30 ton.

STEVEDORES: 36 working gangs available. 3 shifts of 8 hours each, 7 days per week.

MEDICAL: Doctors and hospital are available. Agents should be advised in advance of any medical attention required.

DENSITY: Average 1026.
FRESH WATER: Available, no barge supply.
FUEL: Marine diesel available by road tanker.
FIRE PRECAUTIONS: According to local laws, 1 tug is fitted with fire-fighting equipment.
CONSULS: None.
REPAIRS: Minor repairs possible.
SURVEYORS: The main classification societies are available in Jeddah.
GANGWAY/DECK WATCHMEN: 1 Coast Guard is stationed permanently on board. Coast Guards keep constant check on liquor seals and may search personnel going ashore.
CUSTOMS ALLOWANCES: The consumption of alcohol including beer is prohibited. Ship's bonded stores are sealed by the Customs after the vessel has been granted Free Pratique. Any alcohol found after this will be confiscated and a fine imposed of Riyals 1,000 per bottle and possible imprisonment for the offender(s).
REPATRIATION: Several flights daily from Gizan. A visa is required for entering or leaving the Port.
AIRPORT: Situated approximately 3 km. North East of Gizan Port. Several domestic flights daily.
TIME: GMT plus 3 hours all year round.
HOLIDAYS: Gizan Port offers continuous cargo handling operations throughout the year and sufficient manpower is always available.
POLICE/AMBULANCE/FIRE: Emergency Telephone Numbers:

Fire Brigade	322 0555
Ambulance	322 1692/1930
Hospital	322 1205
Police	322 1551/1832

SHORE LEAVE: Possible during daylight hours.
IDENTIFICATION CARDS: Shore passes issued on request.
DELAYS: There are no delays in berthing and discharging.
BANKS: Almost all national banks available.
STORING: All facilities to store a vessel by truck.
No ship chandlers available.

AUTHORITY: Gizan Port Management, P.O.Box 16, Gizan, Saudi Arabia. *Tel:* 07322-1145/1715. *Telex:* 911018 and 911030 Ports Sj. *Cables:* Ports Gizan. *Contact:* Dr. Hammoud A. Saadi, Asst. Director General.
AGENT: Gulf Agency Co. Saudi Arabia. Telex: 911018 ("Ports Sj").
Also see "Jeddah".

JEDDAH: 21.28 N. 39.10 E. (See Plan Book)

ALSO SEE "GENERAL" BEFORE FIRST PORT.
PORT LIMITS: *The boundaries of the harbour and anchorages of Jeddah Islamic Port:* The harbour boundaries are given below and include the tanker terminals and the adjacent waters between Ras Al Jahhas and Ras Al Aswad.
From an onshore position on Ras al Jahhas:

to	Lat. 21° 31′ 36″ N.	Long. 39° 07′ 54″ E.
	Lat. 21° 31′ 36″ N.	Long. 39° 06′ 00″ E.
	Lat. 21° 22′ 00″ N.	Long. 39° 06′ 00″ E.

To an onshore position on Ras al Aswad:

Lat. 21° 22′ 00″ N.	Long. 39° 07′ 50″ E.

DOCUMENTS: See "General" before first port.
Circular: Dated December 1983.
Vessels carrying dangerous cargo, arms, ammunition for discharge Jeddah or any other ports in transit are requested to provide the following information:
(a) A prior notification including the following information:
1. The name of the vessel, her flag and the Shipping Agent's name.
2. ETA.
3. Voyage number.
4. The particulars and the types of dangerous cargo, ammunition, weapons.
5. The quantity.
6. Number of parcels or packages.
7. The weight.
8. Cell location and stowed.
9. The Shipper's name.
10. Port of loading.
11. Consignee's name and address.
12. Port of discharge.
13. Next port for the vessel after departure Jeddah.

(b) The documents such as Manifest, Stowage Plan and Cell Number, Bay Plan, etc., are required to be submitted to the Port Authority 48 hours prior to arrival of vessel.
(c) In case vessel not carrying any dangerous cargo/arms/ammunition/weapons/Military hardware, the Agent should submit the written declaration as 'nil'.
(d) The Master of the vessel is also required to submit declaration for arms/ammunition/weapons to the Port Authority along with cell position, stowage position and how stowed. In case the vessel is not carrying AM Cargo the Master is also required to submit same declaration as 'nil'.
(e) The in-transit dangerous cargo/arms/ammunition should be stored separately so that Jeddah cargo can be discharged without disturbing in-transit cargo.
(f) The Port Management will hold you fully responsible for incorrect information.

Signed:
Acting Director General
Jeddah Islamic Port.

VESSEL APPOINTMENT SCHEME:
Vessels bound fo Jeddah Islamic Port with cargo must provide the following information:

AA. By telex or cable either directly or through the vessel's Agents on arrival at the first or sole loading port, before loading commences:
1. Radio Code (Call Sign).
2. Vessel's Name.
3. Owner and Line.
4. Nationality.
5. Agent.
6. Length Overall (m.)
7. Maximum Draft (m.)
8. Number of Hatches.
9. Gross Registered Tonnage.
10. Nett Registered Tonnage.
11. Deadweight Tonnage.
12. Previous Names (if any).
13. Type of Vessel.
14. Type of Cargo.
15. Total Cargo Weight Tons.
16. Total Cargo Freight Tons.
17. Number of Containers/Units (where applicable).
18. Number of Livestock (where applicable).
19. Estimated Date of Arrival.
20. Actual Arrival Draft.
21. Hazardous Cargo for Jeddah.
22. Hazardous Cargo in Transit for Other Ports.
23. Tonnage to Hatch for Jeddah Discharge.
24. Year of Construction.
25. Lloyd's Register Number.
26. All Ports at which Cargo has been loaded for discharge at Jeddah.
27. Number, Position and S.W.L. of Derricks and/or Cranes, and particulars and positions of ramps.
28. Economic Speed of Vessel.
29. Next Port of Call after Jeddah (irrespective of whether vessel has cargo for that port).
30. All other Ports at which the Vessel will have called between arrival at the first port of loading and arrival at Jeddah Islamic Port.
31. Last Port of Call before Jeddah.

Both the Registered Owner and the Operating Line or Charterer must be shown in item 3. If these are the same company this fact must be confirmed.

All previous names of the vessel must be declared in item 12, or a 'nil' declaration must be shown. Items 21 and 22 must include the tonnage of each. IMDG Class for discharge and in transit which will be on board the vessel at Jeddah.

On completion of loading cargo, items 15, 16, 17, 18, 19, 20, 21, 22, 23, 26, 29, 30 and 31 must be updated as necessary.

BB. A further notice of ETA is to be sent 5 days, 3 days, 2 days and 1 day prior to arrival at the port. The three day notice is to include the vessel's position (Latitude and Longitude or port) 48 hours before arrival.

CC. Vessels will not be cleared to call at Jeddah solely for the purposes of bunkering, taking stores or repairs unless the following information is supplied to the Port Management, *not less than 72 hours in advance of their arrival:*
1. Radio Code.
2. Vessel's Name.
3. Owner and Line.
4. Nationality.
5. Agent.
6. Length overall.
7. Maximum Draft (m.)
8. Gross Registered Tonnage.
9. Nett Registered Tonnage.
10. Deadweight Tonnage.
11. Previous Names.
12. Estimated Time of Arrival.
13. Actual Arrival Draft.
14. Hazardous Cargo in Transit for other Ports.
15. Lloyd's Register Number.
16. Expected Requirements for Bunkers and Water.
17. Economic Speed of Vessel.
18. Next Port of Call after Jeddah.
19. Last Port of Call before Jeddah.

Prior to the provision of any services being authorised an approval must be obtained from the Office of the Director (Traffic and Operations).

The final ship's Clearance Certificate will not be signed by the responsible Jeddah Port Management Officer prior to sailing unless it is accompanied by the original Advice Notice bearing Jeddah Port Management's stamp and the signature of the Clearing Officer.

DD. If the undermentioned information has not been previously given to the Port it is to be included in the Advices mentioned in AA and CC above:
(i) Type of Radar.
(ii) Frequency.
(iii) Scan Rate.
(iv) Pulse Width.
(v) Pulse Peak Power.
(vii) Beam Width.

If the vessel is equipped with several radars the characteristics of each radar must be given.

PILOTAGE: Pilotage is compulsory for all vessels above 150 n.r.t. entering, navigating within, or leaving the port, and is available 24 hours a day. Every vessel subject to compulsory pilotage and which requires a Pilot must:

(a) from sunrise to sunset hoist the International Code Flag 'G';
(b) from sunset to sunrise give the letter 'G' (– – ·) by a signal lamp;
(c) in the event of poor visibility caused by rain, fog or dust, sound the signal 'G' (– – ·).

Vessels equipped with VHF should call the Port Control Signal Station on Channel 16 as soon as the vessel enters VHF range. Vessels having a Pilot on board must hoist the International Code Flag 'H'. The pilot boarding area is one mile West of the Middle Gate beacons in position Lat. 21° 28′ 00″ N., Long. 39° 06′ 00″ E. The pilot boat is orange hulled with white upperworks with the word "Pilot" painted in black letters along each side of the cabin.

The Master of every vessel, when approaching the pilot boat for the purpose of picking up a Pilot, must reduce speed to the minimum steerage way, maintain VHF contact with the pilot boat and provide a good lee if necessary. Vessels must have rigged and ready for use a pilot ladder in good repair and provided with reliable manropes and in accordance with the specifications and terms described in the International Convention for the Safety of Life at Sea 1974. The ladder is to be well illuminated between dusk and dawn, and a lifebuoy with a lifeline is to be available at the ladder for immediate use. A boat rope, ready rigged from the break of the forecastle to abaft the pilot ladder, must also be provided.

Once the Pilot is on board, the Master must advise him of:

a) The draft, length, beam and manoeuvring speeds of the vessel. Such information is also to be displayed in a conspicuous place in the wheelhouse;
b) Any peculiarity, defect or factor which may affect the manoeuvrability of the vessel;
c) Any dangerous and/or hazardous cargo on board.

Vessels awaiting Pilot or documentation, anchor in "D" anchorage. Vessels with dangerous and/or hazardous cargo on board anchor in "C" anchorage. All tankers and vessels calling only for bunkers in "E" anchorage.

ANCHORAGE: Anchorages A, B, W1 and W2 are within the pilotage area and vessels may not enter, or leave these anchorages without a pilot.

The boundaries of the anchorages are as follows:

Anchorage A:

From	Lat. 21° 29′ 13″ N.	Long. 39° 08′ 40″ E.
To	Lat. 21° 28′ 18″ N.	Long. 39° 08′ 40″ E.
	Lat. 21° 28′ 18″ N.	Long. 39° 08′ 02″ E.
	Lat. 21° 29′ 13″ N.	Long. 39° 08′ 40″ E.

Anchorage B:

From	Lat. 21° 27′ 39″ N.	Long. 39° 06′ 54″ E.
To	Lat. 21° 27′ 39″ N.	Long. 39° 07′ 26″ E.
	Lat. 21° 26′ 04″ N.	Long. 39° 07′ 26″ E.
	Lat. 21° 26′ 04″ N.	Long. 39° 06′ 54″ E.
	Lat. 21° 27′ 39″ N.	Long. 39° 06′ 54″ E.

Anchorage W1:

From	Lat. 21° 27′ 46″ N.	Long. 39° 08′ 10″ E.
To	Lat. 21° 27′ 46″ N.	Long. 39° 08′ 42″ E.
	Lat. 21° 26′ 45″ N.	Long. 39° 08′ 42″ E.
	Lat. 21° 26′ 45″ N.	Long. 39° 08′ 22″ E.
	Lat. 21° 27′ 46″ N.	Long. 39° 08′ 10″ E.

Anchorage W2:

From	Lat. 21° 29′ 04″ N.	Long. 39° 07′ 16″ E.
To	Lat. 21° 29′ 04″ N.	Long. 39° 07′ 34″ E.
	Lat. 21° 28′ 27″ N.	Long. 39° 07′ 46″ E.
	Lat. 21° 28′ 27″ N.	Long. 39° 07′ 22″ E.
	Lat. 21° 29′ 04″ N.	Long. 39° 07′ 16″ E.

Anchorages outside the harbour boundaries:

Anchorage C:

From	Lat. 21° 28′ 00″ N.	Long. 39° 03′ 46″ E.
To	Lat. 21° 27′ 46″ N.	Long. 39° 04′ 40″ E.
	Lat. 21° 26′ 47″ N.	Long. 39° 04′ 22″ E.
	Lat. 21° 27′ 02″ N.	Long. 39° 03′ 28″ E.
	Lat. 21° 28′ 00″ N.	Long. 39° 03′ 46″ E.

Anchorage D:

From	Lat. 21° 28′ 16″ N.	Long. 39° 04′ 50″ E.
To	Lat. 21° 27′ 28″ N.	Long. 39° 05′ 58″ E.
	Lat. 21° 26′ 10″ N.	Long. 39° 04′ 29″ E.
	Lat. 21° 26′ 24″ N.	Long. 39° 04′ 15″ E.
	Lat. 21° 28′ 16″ N.	Long. 39° 04′ 50″ E.

Anchorage E (Tanker and bunkering anchorage):

From	Lat. 21° 23′ 19″ N.	Long. 39° 05′ 50″ E.
To	Lat. 21° 23′ 53″ N.	Long. 39° 05′ 56″ E.
	Lat. 21° 24′ 50″ N.	Long. 39° 04′ 53″ E.
	Lat. 21° 23′ 18″ N.	Long. 39° 04′ 01″ E.

APPROACHES: The lights of the new airport North of Jeddah shine brightly. These should not be confused with the correct approach to Jeddah port which is South of the airport.

RESTRICTIONS: There are no restrictions imposed upon entry for vessels of not more than 13.5 m. draft.

MAX. SIZE: The maximum permissible draft is 13.5 m. No restriction on beam. Vessels up to 300 m. in length are handled regularly at some facilities in the port.

HEALTH: Masters of vessels are required to notify Jeddah Port Health and Quarantine Department via Jeddah Radio prior to the vessel's arrival as follows:

a) Vessel's name, ETA, purpose of visit;
b) Complement and General Declaration of Health of crew:
c) Declaraton of Vaccination Certificates held, if any;
d) Declaration of Last Port and date of sailing;
e) Declaration of infected ports of call (Cholera and Yellow fever).

Additionally, the Agent is required to submit an arrival notice to the Port Health and Quarantine Department 48 hours prior to the vessel's expected arrival.

On arrival, before the vessel berths, the doctor boards and grants Free Pratique.

(a) Cholera: All arrivals from infected or endemic areas are required to possess a certificate showing 2 injections made not less than 7 days and not more than 30 days before arrival. For re-vaccination carried out within 6 months of a recorded vaccination or re-vaccination, a single injection renders the certificate valid for a further 6 months.

In addition, arrivals must submit a certificate dated not more than 7 days before their departure recording the negative results of stool culture. This certificate must be delivered by a licensed laboratory and attested by the Health Authority.

(b) Yellow Fever: All arrivals from infected or endemic areas are required to submit a valid Vaccination Certificate in accordance with International Sanitary Regulations.

(c) Mecca: All Muslim crew members who wish to visit Mecca (Makkah) and Medina (Madinah) should have in their possession 2 recent passport-size photos. These should bear the crew member's name and C.D.C. number to enable Agent to obtain permission for the pilgrimage. Crew members must also have in their possession the above-mentioned medical certificates, otherwise permission may not be granted to them to visit Mecca (Makkah) and Medina (Madinah).

TUGS: There are 10 tugs presently operated by the Port. The details of these are given below:

Jeddah 1	1,000 h.p.	Jeddah 10	800 h.p.
Jeddah 2	1,000 h.p.	Jeddah 11	1,960 h.p.
Jeddah 3	1,830 h.p.	Jeddah 12	1,960 h.p.
Jeddah 7	800 h.p.	Jeddah 13	(VSP 3,700 h.p. 1978 salvage tug)
Jeddah 8	800 h.p.		
Jeddah 9	800 h.p.		

1 tug of 1,300 h.p. and 2 of 2,500 h.p. with fire-fighting and pollution control capabilities are on order and expected to be delivered in mid-1982.

With the exception of Jeddah 13, tugs operate within the harbour limits only for the purpose of assisting vessels in berthing and unberthing. Tugs join vessels inside the Inner Gate beacons and normally require the use of the ship's lines. Where the latter are considered inadequate, the tug's lines are used at the vessel's expense.

BERTHING: The following categories of berth, with a draft range from 7.5 m. to 13.5 m., are available: Bulk Cement, Container Terminal, General Cargo, Ro-Ro, Bulk Grain, Livestock, Reefer, Motor Vehicles, Bulk Edible Oil and Passengers.

Berth No.	*Depth (m.)*	
1–8	11.00	Conventional, Ro-Ro & Passenger.
9	12.00	Grain & Conventional.
10–11	11.50	Bulk, Oil & Conventional.
12–30	12.00	Conventional & Cement.
31–33	14.00	Conventional.
34–37	14.00	Container Terminal.
38–41	8.00	Conventional.
42–43	11.00	Conventional.
Ro-Ro	8.00	Ro-Ro.

Please note: Conventional berth Nos. 31 – 33 can accommodate maximum draft 13 m. but delays may occur when vessels require these particular berths pending port situation at actual arriving date.

Storage: Adequate covered and open storage space is available in the form of Warehouses, Transit Sheds, Livestock Sheds, Dangerous Goods Warehouses plus Cells, Cool and Cold Stores, Container Terminals, Ro-Ro Terminal, Container Freight Station, Vehicle Parks, General Cargo Storage and Lube-oil Storage Facilities.

BULK CARGO FACILITIES:

Bulk Grain (Private User Facility):

Operator:	Grain Silos and Flour Mills Organisation.
Max. permissible ship-draft:	11 m.
Unloading:	Gantry booms/vacuum pipes and conveyor.
Loading:	Gantry boom/pipe and conveyor.
Height of gantry boom:	44 m. part at 80°. 33 m. operating at 30°.
Outreach:	22 m. from quay wall (loading). 24 m. from quay wall (unloading).
Outswing:	90°.

Bulk Cement (Private User Facilities):

Silo vessel:	Floating silo (70,000 tonnes capacity).
Operator:	Saudi Research and Development Co.
Max. permissible ship-draft:	11.5 m.
Bag and bulk outlets	Rate 7,000 tonnes per day (bulk)
Silo vessel:	Floating silo.
Operator:	Rolaco.
Max. permissible ship-draft:	11.5 m.
Bag and bulk outlets	Rate 6,000 tonnes per day (bulk) 5,000 tonnes per day (bagged)

Bulk Edible Oil (Private User Facility):

Operator:	Saudi Vegetable Oil and Ghee Co.
Max. permissible ship-draft:	11 m.
Unloading point:	A pump station pit and manifold is located on the quay for hose connection.

SPECIALISED CARGO HANDLING FACILITIES:

Ro-Ro Terminal (Common User Facility):

Max. permissible ship-draft:	7.5 m.
Mobile cranes:	2 of up to 40 tons capacity.
Forklift trucks:	127 of up to 33 tons capacity.
Head trucks:	67
Trailers/Chassis:	126 of up to 40 ft./100 tons capacity.

Jeddah Container Terminal East (Common User Facility):

Max. permissible ship-draft:	11.5 m.
Container cranes:	2 of 30.5 tons capacity with an outreach from the quaywall of 25.9 m./28.95 m.
Straddle carriers:	25
Forklift trucks:	27 of up to 33 tons capacity.
Head trucks:	22.
Trailers/Chassis:	42 of up to 40 ft./60 tons capacity.
Electricity supplies:	'Plug in' points for 192 reefer containers.

Jeddah Container Terminal West (Common User Facility):

Max. permissible ship-draft:	13.5 m.
Container cranes:	4 of 30.5 tons capacity with an outreach from the quaywall of 34.5 m.
Straddle carriers:	23.
Forklift trucks:	20 of up to 25 tons capacity.
Electricity supplies:	'Plug in' points for 192 reefer containers.

BRIDGES: There are no bridges or other restrictions to prevent access to the port by vessels of not more than 13.5 m. draft.

STEVEDORES: The port provides stevedoring services 24 hours a day, 7 days a week. For vessels wishing to discharge cargo at Jeddah Islamic Port, Shipowners or their Agents should provide ETA advice in accordance with the Rules and Regulations for Saudi Arabian Seaports, as follows:

(a) Before loading for Jeddah;
(b) On sailing last load port;
(c) At five, two and one day intervals before the vessel's ETA;
(d) On revising the vessel's ETA.

TANKERS: The Petromin facility has 2 berths in the oil basin and 2 in the inner harbour. Petromin provide their own tugs and launches.

The port does not have facilities for the handling of liquid chemicals or LPG carriers.

Jeddah Port Authority Circular: Vessel calling for bunkering supply or for repair will not be cleared/berthed unless following information is furnished to Jeddah Port Management before ship's arrival:

1. Radio Code.
2. Vessel Name.
3. Owner/Line.
4. Nationality.
5. Agent.
6. LOA.
7. MD.
8. G.R.T.
9. N.R.T.
10. D.W.T.
11. Previous Name.
12. ETA.
13. Arrival Draft.
14. Hazardous cargo transit.
15. Lloyd's Register Serial Number.
16. Requirements bunker and fresh water (approx.).

Before providing any facilities, a Permit Certificate has to be obtained from office of Asst. G. M. for Traffic.

Ship will not be cleared by Port Authority unless above Permit Certificate is attached with Original Arrival Notice signed and stamped by party concerned at Jeddah Port Management.

Also see "Shipmaster's Report No. 2".

CRANES: Rail-mounted electrical level luffing cranes of up to 15 tons capacity are available with an outreach from the quay wall of 25 m.

The port also has available 88 mobile cranes of up to 250 tons capacity, including a floating crane of 200 tons capacity. Other equipment includes 490 forklift trucks of up to 33 tons capacity and 145 trailers of up to 40 ft./60 tons capacity.

General cargo vessels must be adequately geared at each hatch. Port cranes may be hired on request or may otherwise be utilised at the Port Management's discretion.

RADIO: The Coast Radio Station, Jeddah Radio, call sign HZH (Telex No. 403799 RDJD DJ), can be called up at any time on 500 kHz. All vessels send telegrams to Agents, receivers and Port Authorities, etc. through Jeddah Radio.

Jeddah Radio is also on VHF Channel 16 for telephone calls to Agents and Jeddah ship repair yard.

VHF: Jeddah Port Control Signal Station has 4 VHF Channels:

a) Channel 16 (international distress, safety and calling Channel);
b) Channel 14 (Working Channel);
c) Channel 12 (Working Channel);
d) Channel 9 (Working Channel).

Vessels bound for Jeddah Islamic Port contact the Port Control Signal Station on Channel 16, then shift to a working Channel as advised to pass on ETA and other relevant information. When necessary, weather reports, notices regarding navigational aids etc., are broadcast to vessels on Channel 12 after having first been advised on Channel 16. In the event of distress or emergency, vessel traffic is controlled by the Port Control Signal Station as far as circumstances permit. Duplex is available for communication with the Agent for operational purposes.

RADAR: A port surveillance radar system is in operation.

MEDICAL: Full hospital facilities are available. The Agent should be informed of any medical attention required. Vaccination Certificates should be provided as previously specified (see "Health").

DENSITY: 1039.

FRESH WATER: Fresh water can be supplied by the port at berths Nos. 1–36.

The port can supply fresh water to vessels on written application to the Marine Department at a cost of SR 15 per tonne. The rate of delivery varies up to 50 tonnes per hour, depending on the number of vessels being watered at any one time and the hydrant arrangements at the respective berths. Supplies are normally available between the hours of 0700 and 1900 for cargo vessels and at any time for passenger and livestock vessels. The port owns a water barge which will shortly be available for the supply of fresh water to vessels at the anchorages at a cost of SR 20 per tonne.

Also available from private suppliers who currently charge between US$15 and US$18 per metric tonne and normally require approximately one week's notice. The method of delivery is by barge at a rate of 50 to 70 tonnes per hour.

FUEL: There are several suppliers in Jeddah who normally require between 1 and 2 weeks' notice of nomination, either through a broker or directly. All types of bunker oils are available and are supplied by tanker at varying rates of delivery.

If bunkering at anchorage, proceed to "Anchorage E".

Also see "Shipmaster's Reports" and "Reports".

FIRE PRECAUTIONS: Special rules apply concerning fire precautions and fire-fighting. Reference is made to the Rules and Regulations for Saudi Arabian Seaports, Part 1, section 7, and Part 3, section 4.

CONSULS: Most countries are represented in Jeddah.

REPAIRS: Several local agencies provide all types of shipboard repair work in the mechanical, electrical, electronic and refrigeration air-conditioning fields.

The Jeddah Shiprepair Yard has complete facilities for drydocking vessels, conversion work and all types of repairs to hull and machinery.

DRY DOCKS: Jeddah Ship Repair Yard:

	Dock 1	*Dock 2*
Max. d.w.t. (Approx.)	45,000	16,000
Lifting capacity (tonnes)	19,000	11,000
Length overall (m.)	215.00	165.00
Length over keel blocks (m.)	200.00	150.00
Clear width (m.)	33.50	25.00
Water depth over top of keel blocks (m.)	7.55	6.95
Pumping times (minutes)	90	90
Cranage (tons SWL × radius reach (m.)	2×7 ×20.5m.	2×7 ×20.5m.

SURVEYORS: The following Classification Societies are represented in Jeddah: Lloyd's, A.B.S., B.V., D.N.V., N.K.K., G.L. and RINA.

Cargo inspectors also available.

GANGWAY/DECK WATCHMEN: 1 coastguard is stationed at the foot of the gangway of vessels alongside. Coastguards keep constant check on liquor seals and may search personnel going ashore.

HATCHES: The opening and closing of non-mechanical hatches is normally carried out by the Port's stevedores.

CUSTOMS ALLOWANCES: Alcohol must be kept in bond and is not allowed to be consumed or landed within the Kingdom. There are no restrictions on tobacco.

CARGO GEAR: Discharge of general cargo and containers at non-specialised facilities is by ship's gear. However, a wide range of mobile cranes are available for hire at short notice (see "Cranes").

REPATRIATION: There are approximately 30 international flights daily to and from Jeddah. A visa is required for entering or leaving the country.

AIRPORT: The King Abdul Aziz International Airport is located approximately 30 km. North of the port.

TIME: GMT plus 3 hours.

HOLIDAYS: Friday is the weekly day of rest and prayer. The Hegira calendar of 12 lunar months consisting of 354 days provides for two Government holidays. The first, lasting one week between the end of the ninth month (Ramadan) and the beginning of the tenth month (Shawwal), represents the celebration of the end of the month of Muslim fasting. The second is for 10 days, from the 5th to the 15th of the twelfth month (Dhu-al-Hijjah). This is the period when Saudi nationals and Muslims from all over the world come to perform the pilgrimage in the Holy cities of Makkah and Madinah.

The port, however, operates continuously throughout the year, 24 hours a day, 7 days a week.

POLICE/AMBULANCE/FIRE: Masters of vessels should contact the Port Control Signal Station on VHF Channel 16.

EMERGENCY CO-ORDINATION CENTRE: In case of emergency, vessels should contact the Port Control Signal Station on VHF Channel 16. Requirements will be relayed to the Port's Operations Co-ordination Centre.

TELEPHONES: Facilities are available for telephone connection at certain berths, although there are currently no arrangements for placing telephones on board.

Public pay phones are available in the port area.

SERVICES: *Tank Cleaning/Compass Adjusting/Life-Raft Servicing:* There are presently no facilities in Jeddah for tank cleaning, compass adjusting or life-raft servicing.

Fumigation: Fumigation services are available in Jeddah.

Garbage Disposal: The port has a waste incinerating vessel with one waste collection launch and one oil skimming launch. A charge is levied for this service at a rate of SR 1 per metre ship length per day or part thereof.

STORING: Subject to approval from the Customs, Coastguard and Health Authorities, there are no restrictions for the storing of vessels by truck or barge.

IDENTIFICATION CARDS: Shore passes are issued. However, discharge books or passports must be left at the gate and collected when re-entering the port area.

SHORE LEAVE: Permitted on Agent's application to the Immigration Authorities and the Coastguard.

BANKS: Al Bank Al Saudi Al Fransi (Saudi French Bank), P.O.Box 1, Jeddah. Tel: 6448852/6442853/6423521/6423344. Telex: 4001168 Safjed SJ.

Al Bank Al Saudi Al Hollandi (Saudi Dutch Bank), P.O.Box 6677, Jeddah. Tel: 6446731/6446732. Telex: 401012/401207 Bashjid SJ.

Citibank NA, P.O.Box 833, Riyadh. Tel: 4024060/4020270. Telex: 200195 Citifex SJ.

Saudi British Bank, P.O.Box 109, Jeddah. Tel: 6423251/6423621/6446628. Telex: 401051/402048/400493 Sabb SJ.

Banking services provided by the National Commercial Bank are available at Gate No. 2 of Jeddah Islamic Port. Tel: 6442711/6445388.

REGULATIONS: The Rules and Regulations for Saudi Arabian Seaports are published in booklet form and are available on request from the Agent. Every vessel arriving at the port must have a copy on board or obtain one immediately on arrival.

Every vessel entering Jeddah Port must hoist the Flag of the Kingdom of Saudi Arabia and keep it flying at all times throughout its stay in the port.

Vessels wishing to unload cargo at Jeddah Islamic Port must apply to the Director-General by telex for a berthing appointment prior to loading for Jeddah.

DELAYS: Subject to the timely completion of clearance formalities, there are no delays in berthing, loading, discharging or bunkering.

GENERAL: *Other important information:*

(a) Mean height of quay surface from water alongside berth is 2.25 m.

(b) Width of fenders is 30 cm.

(c) Height between highest and lowest recorded tides is 1.02 m.

(d) For reference, please see BA. Chart Nos. 2599 and 2577 and Red Sea Pilot.

Other facilities include:

(a) Modern equipment to combat oil pollution, including an oil recovery vessel, oil separation barges and a full range of spraying equipment, absorbants, dispersants and oil containment barriers. Tugs with pollution control facilities are available.

(b) An integrated fire-protection and fire-fighting system incorporating a sophisticated control centre with electronic monitors for fire alarm and detection equipment, linked with a highly efficient network of sprinklers in all buildings, transit sheds and warehouses. In addition, the port has its own fire station equipped with a full range of appliances. Water-borne facilities are also available in the form of a 1,700 h.p. fire-fighting vessel. A second fire boat is due for delivery in 1982.

(c) *Miscellaneous marine craft and equipment comprising:*

4 self-propelled barges,
12 flat-top barges of 400 tons carrying capacity,
6 pilot boats,
6 service launches,
7 barge towing launches,
4 mooring launches,
1 buoy-laying vessel,
1 hydrographic/VIP launch.

DEVELOPMENTS: Plans are well advanced for the construction of a Livestock Terminal in the S.W. area of the Port. The main berth will be dredged to a depth of 14 m., with berthing to a depth of 8 m. available for smaller vessels. The terminal will receive all livestock entering Jeddah.

Another project, scheduled for the N.W. area of the Port, will involve extensive land reclamation and the creation of harbour basins. A broad spectrum of service and support facilities will be provided, including a multi-purpose/ro-ro terminal, a car terminal, a heavy load terminal, a service harbour and a control tower. This project is expected to be completed 1984.

SHIPMASTER'S REPORT No. 1: 1975.

Berths: These are good, well fendered, and have depths of 33 ft. alongside most of them.

Anchorages: These are both protected and restricted by the series of coral reefs off the port. Due to congestion, the anchorages are very crowded and it is necessary for ships to moor rather than lie to single anchor. Holding ground is not good and when the afternoon breezes blow strongly it is sometimes prudent to have engines on stand by. At night it is frequently calm and fenders are required as ships make contact.

Bunkers: Bunkers are available by barge. On this vessel's last call ships calling at Jeddah for bunkers only were waiting up to 3 days. On our first call, although bunkers were ordered in good time, they were not delivered at all.

Tugs: There seems to be 2 harbour tugs and a number of smaller ones for towing lighters etc. They seldom appear when ordered, this was confirmed by the Pilots.

On our last call, although ship was manoeuvring with difficulty, tugs were not available either for entering port or berthing.

Pilots: Pilots are excellent. Pilot boat waits in El Hariq, North of Qaram Reef. Under no circumstances will Pilot meet ships further out. Departing, Pilot leaves in "Middle Gateway" or before.

Navigation Aids: Port only operates in daylight and there are no lights. The airport radio beacon is very useful especially as in the reduced visibility so often encountered in the Red Sea, nothing is seen visually until the ship is inside the outer dangers.

There are a number of chimneys and water towers visible to the North of the port, but these are not marked on the charts.

The radar picture can be misleading when compared with the coastline on the chart. The strongest echo is given by the anchored ships.

Qaram beacon is lying on its side at present. The wreck on the next reef to the South, which looks like a small ship under way, is usually seen first.

Agency Service: All requests for water, cash, shore labour etc. must be made in good time. At anchor, Agent's launch visits only infrequently. On vessel's last call, Agents did not board ships in the anchorage at all, even though the ship was in a certain amount of trouble. The normal practice seems to be for the Master to go to the agency office himself to chase things up. The office staff are all most pleasant and helpful.

There is good telex communication, except on Fridays, but telephone calls to UK are all but impossible. By local custom, the agency closes at 1400 hrs., reopens at 1900 hrs. daily.

SHIPMASTER'S REPORT No. 2: 1976.

Report on New Clean Oil Terminal.

Charts Required: BA 2599 Approaches to Jeddah, BA 2577 Jeddah Harbour.

Pilot Station: Lat. 21° 27′ 15″ N. Long. 29° 06′ 00″ E.

Position of New Clean Oil Terminal:
Lat. 21° 26′ 55″ N. Long. 39° 09′ 20″ E.

Approach to Terminal: Through Middle Gateway, Inner Gateway then South for 10.5 cables.

Depths: Least depth in approach channel 50 ft. and at berth 40 ft.

Moorings at Berth: Both anchors down with 6 shackles of cable on each. 8 Stern lines to buoys, viz 2 lines on each quarter to stern buoys. 2 Quarter lines on Starboard side to Starboard Quarter buoy. 1 line from main deck to Starboard Quarter buoy. 1 line from main deck to Port Quarter buoy.

Cargo Hoses: 3×8 in. Floating cargo hoses connected to Port side manifolds, viz, one for Mogas/Jet fuel, one for A.D.O./Kero and one for Fuel oil. Shore ends of hoses connected to manifolds on causeway. Shore line sizes given as Mogas/Jet Fuel 8 in. A.D.O./Kero 12 in. and Fuel Oil 12 in.

Back Pressure: Back pressure allowed 100/115 p.s.i. giving the following discharge rates. Mogas/Jet Fuel 160 m/t.p.h., A.D.O. 320 m/t.p.h., Kero 340 m/t.p.h. Fuel Oil 300 m/t.p.h.

Bunkers: Fuel Oil and Diesel Oil are shipped at berth after discharge of cargo.

Fresh Water: Not available at berth.

Accommodation Ladder: Rigged on Port side.

Shore Leave: By boat, takes 20 mins. to cover the 1 mile distance. No one is allowed to land on the causeway.

Seamens' Identification: To leave dock area seamen must deposit their Seamans I.D. Card, C.D.C. Book or passport at the dock gate. Documents are picked up on return to dock gate.

Communications: Jeddah Radio H.Z.H. can be contacted on 500 kHz. and no traffic lists are sent.

Jeddah Port is now operating a VHF Station "Jeddah Signal Station" which can be contacted on VHF Channel 16, but meantime is only concerned with berthing of dry cargo ships. This VHF station is British manned, but is not in contact with Pilots by radio or telephone.

Tanker Operations Communications: Jeddah Oil Refinery can be contacted on VHF Channel 11 when approaching pilot station and will pass messages to Agent and inform Pilot when requested to do so. Unfortunately information supplied by using this method is not always reliable as sometimes they don't know what tanker movements are scheduled. Usually Pilot will take vessel into anchorage if discharging berth is not available. No berthing operations are conducted in the Port of Jeddah between the hours of sunset and sunrise.

SHIPMASTER'S REPORT No. 3: July 1977.

Bunkering Large Tankers: The bunker vessel was calling us on Channel 16 as soon as we were clear of the Gulf of Suez. We contacted him about 300 miles away and gave an ETA. Despite these long ranges it was very difficult to contact him when we were approaching the port. The Master speaks reasonable English, and said he was coming out to us and would come alongside on our starboard side.

Our vessel was stopped in the water and the bunker vessel was soon sighted coming towards us. The "Al Jawhara" about 3,000 d.w.t. is registered at Jeddah and manned by South Koreans. They have air-fired heaving lines with soft padded weights at the end. They have adequate fenders and mooring lines and the berthing operation took only 15 minutes. The weather conditions were ideal with no wind or swell. They advised their maximum pumping rate was 800 long t.p.h. During the 8 hours we were bunkering we did not drift any appreciable amount, despite a force 3 wind blowing most of the afternoon from the N.N.W.

The Master of the bunkering vessel intimated that he would not come outside in the future. A vessel of our size, LOA 886 ft. and draft 59 ft. would, in my opinion, have to anchor well South of Qaham beacon. The anchorage area to the West of Qaham beacon was fairly crowded although there were, apparently, fewer ships there than usual.

The Agent boards the vessel and requires a copy of the Crew list. No other officials boarded.

SHIPMASTER'S REPORT No. 4: May 1977.

Vessel anchored in the Outside anchorage (Qaham beacon bearing 137° True × 1.1′) brought up with 6 shackles on the port anchor in 35 fathoms of water, and in a stiff Northerly breeze this seemed to suffice.

Contact was made with the Jeddah signal station when about 30 miles away. Approaching from the South the high rise buildings of Jeddah show clearly at 48 miles on the radar screen. The first visual object sighted was the beacon on Mismari Reef. There is also a wreck on the reef which comes into view at the same time. On this passage along the coast we remained outside 100 fathoms at all times. The coastline South of Jeddah is very sandy and low and does not show readily on the radar. The aero beacon at Jeddah gives a strong signal on the D.F. and can be recommended for an approach bearing. The high rise buildings of the city came into view at about 20 miles.

We were ordered to anchor and await the Pilot outside Qaham Reef. The Agent's representative arrived unannounced at about 1500 hrs. by launch. He collected the papers for entry and brought with him copies of the papers in Arabic which are required for the Port Authority, Customs and Doctor. He explained that when he received the clearance he would inform the pilot station. It is necessary to have a Pilot to enter the outer gateway which lies between Jahan Reef to the North and Qaham Reef to the South. There is no pilotage from 1800 hrs. to 0700 hrs. in the morning. Our Pilot arrived on board with very little notice at 1100 hrs. He took the ship to the S.W. anchorage and anchored her with Qaham Reef beacon bearing 307°(T)×0.82 miles. He explained that with only 14 Pilots employed and with cargo vessels taking priority over bunkering vessels that would account for our delay in entering the harbour. We anchored in 18 fathoms with six shackles on the starboard anchor.

The bunker vessel "Vitoria" arrived alongside at 1515 hrs. with heavy oil only. She commenced bunkering at 1610 and completed at 2210 hrs. for 740 tonnes H.O. The "Vitoria" is quite a sizeable craft with the appearance of a small coaster. She has tyre fenders over the side and in the stiff Northerly breeze ranges freely, however with ample fuel hose there was no movement at the ship's fitting.

The diesel fuel was delivered by a small barge which tied up alongside our port side. The barge arrived at 1630 hrs. and commenced pumping at 1715 to 2030 hrs. for 132 tonnes. The barge then returned to base for a new load and returned to the vessel at 0635 hrs. He bunkered from 0705 to 0855 hrs. for 74 tonnes. His maximum lifting is 150 tonnes. This was not made clear to us by the Agent so any vessel requiring more than 150 tonnes of D.O. will require two lifts plus. The name of the bunkering firm was El Howi. We did not require any fresh water and as it costs 20 U.S. dollars a ton it is not recommended.

There was no shore leave from the anchorage and no cash was drawn. Bum boats are not allowed in the harbour by the Harbour Authorities. A providore called by in his boat but we required no stores.

The pilot boat is a large white craft with raised cabin three-quarter length and has "Pilots" written in black on the side of the cabin. A traffic list is broadcast at 0700 hrs. each morning for ship's berthing. They use Channel 16 for calling and Channel 12 for relaying messages. The Agent states they are not allowed to have a VHF Channel. It would be much better if they did have their own channel for direct communication. The ship's radio station must close when the papers are signed for entry. It is a very busy port with a lot of commercial traffic and also bunkering ships are increasing in number. There were approximately 65 ships at anchor and alongside. The Pilot informed me it was optional to have a Pilot for sailing and as it was very straightforward I sailed on completion of bunkering without having a Pilot. We were under way at 1000 hrs. for a total detention time of 44 hours 3 minutes.

Our vaccination certificates were all in date for three years, but we had no cholera or yellow fever certificates. With going to the outside anchorage I do not think they are too concerned but I think if the vessel had to go alongside for cargo work the authorities would be stricter about the certificates.

The Authorities normally call on board but with the wind blowing fresh they allowed the Agent to come out to collect the papers. The Agent's representative, spoke excellent English and was most helpful. He endeavoured to obtain a Pilot for us after clearing the ship inwards but was unable to do so in the time remaining before 1800 hrs. Therefore I think it is important to be off the port before 1000 hrs. if the vessel is to enter the port. The roadstead anchorage is about 4 miles from the piers and the launch that is used for transporting the Agent is slow. The Agent delivered the clearance before the bunkers were delivered and was in attendance prior to our departure.

ETAs and information sent via Aden Radio 72 hours in advance of arrival. Jeddah only has medium wave station and can be contacted 24 hours in advance of arrival.

Messages sent to Agent and Port Health Jeddah Port Administration: Sample message to Port Health: Vessels name, call letters, British ship ETA 1500 Saturday 7th for bunkers only gross tonnage 7,740 nett, 4234 Last port Lyttelton N.Z. Sailed 16th April Next port of call Patras Greece Crew 42 All well Doctor onboard All crew have smallpox vaccination certificates Stop Vessel has not called at any port infected with cholera or yellow fever.

Master

SHIPMASTER'S REPORT No. 5: December 1983.

Delays during bunkering experienced as vessel could not be cleared between 1730 and 1000, due to Customs Officers working hours.

REPORT: September 1983.

Fuel: For all vessels calling at Jeddah for bunkers only under Tranship Agency the following procedure must be followed to ensure fastest turnround:

AA) Pre-arrival information (which must reach Tranship offices at least 48 hours prior to arrival of vessel).

(i) Call sign
(ii) Vessel's name
(iii) a) Owner's name
  b) Line
(iv) Nationality
(v) Agent
(vi) LOA
(vii) Max. draft in metres
(viii) GRT
(ix) NRT
(x) DWT
(xi) Vessel's ex-name
(xii) ETA
(xiii) Actual arrival draft
(xiv) Hazardous cargo in transit for other ports
(xv) Lloyd's Register No.
(xvi) Expected bunker requirements
(xvii) Date of building
(xviii) Last port.

BB) Arrival time.

Please note that vessel must anchor at Jeddah prior to 1700 hrs. for clearance/bunkering same day. For vessels arriving after 1700 hrs. and during hours of darkness, clearance is carried out following morning at approx. 1000 hrs.

CC) Please instruct Master –

(i) To cable Tranship "Dammam" with ETA 5 days and 24 hours through Bahrain Radio, quoting as part of cable address Reg. No. 39 and Account No. 1451855.

(ii) If Southbound through Red Sea, give time passing Suez through Canal Agent with ETA Jeddah.

(iii) On approaching Jeddah, contact our tug "Omar" or supply tankers "Marwah I/II/III/IV" at max. range on VHF Channel 13 giving best anchoring times.

(iv) All vessels to anchor in "E" (echo) anchorage area:

Latitude:	Longitude:
21° 23.3′ N.	39° 06.0′ E.
21° 24.7′ N.	39° 05.1′ E.
21° 22.0′ N.	39° 03.1′ E.
21° 22.0′ N.	39° 05.9′ E.

Alternative reference for area "E" is bearing 230°×2.8 miles from Qaham beacon.

(v) Advise Jeddah signal station (VHF Channel 16) of arrival time, name of Agent (Tranship) and that vessel is calling for bunkers only.

(vi) Please note our cable address is "Tranship Jeddah".

DD) Vessel information: To minimise time taken to connect hoses, Owners/Master should telex Tranship at least 48 hours prior arrival with following information.

(i) Hull/superstructure colour.
(ii) Major identification features e.g. cranes or derricks, position of superstructure, funnel markings, etc.
(iii) Bunker manifold size (4-6-8 inch or equivalent).
(iv) Position of bunker manifold and height above waterline.
(v) Max. pumping rate acceptable for F.O. and D.O.

REPORT: May 1984.

Operational instructions for Owners and Masters of vessels taking offshore bunkers from Bakri Bunker Trading Co. at Jeddah:

1. *Radio Contact/Operating Position:*

"al Bakry" (call sign HZGH) maintains continuous watch on VHF Channel 16. VHF range this area is 3-400 nautical miles and Masters should therefore establish contact at least 24 hours ahead of arrival Jeddah. Working channel will be agreed between Masters when contact established, and rendezvous point will be advised by the Master of the bunker vessel, well in advance.

Please note that Customs/waterguard operate only during the hours of daylight. Customs launches leave quay at 0900 daily and clear vessels in order of arrival through approximately 1700 hrs. Vessels arriving too late are not cleared until following day.

2. *Notice:*

a. Wherever feasible vessels taking bunkers from Bakri Bunker Trading Co. must send a cable at least 120 hours prior to arrival off Jeddah to 'best service Jeddah' giving following information in accordance with port management instructions:

(1) Radio code, (2) vessel's name, (3) owner/line, (4) nationality, (5) Agent, (6) LOA, (7) max. draft in m., (8) g.r.t., (9) n.r.t., (10) d.w.t., (11) all previous names, (12) Jeddah ETA, (13) actual arrival draft, (14) details of hazardous cargo in transit for other ports, (15) Lloyd's Register number, (16) Expected requirements of bunkers and water, (17) quarantine requirements of port doctor – name of last 3 ports of call/no. of crew and their state of health/validity of vaccination certificates for cholera, smallpox, and yellow fever, confirmation that none of the crew will go ashore.

Please note: Prior to the provision of any services being authorised, an approval must be obtained from the office of the Assistant Director General (Traffic and Operations.)

The final ship's clearance certificate will not be signed prior to sailing by the responsible Jeddah Port Management officers unless it is accompanied by the original advice notice bearing Jeddah Port Management's stamp and the signature of the clearing officer.

b. Owners must also send a telex minimum of 72 hours prior to their vessel's arrival off Jeddah to Bakri Bunker Trading Co. (Telex: Jeddah 401557 "Bakri SJ" or Jeddah 402125 Penta SJ) repeating the information contained in the cable sent from their vessel. This telex must also confirm that none of the crew of vessel will go ashore. Failure to provide the above information in time could delay clearance by Jeddah Port Management and result in vessel being delayed.

c. Both messages a. and b. must be updated 48 hours and 24 hours ahead of arrival.

3. *Operating/Manoeuvring:*

Will be advised by Master of "al Bakry" on VHF.

4. *Supplies:*

Supplies are made subject to the general terms and conditions for the sale of marine fuels of Bakri Bunker Trading Co. Ltd.

5. All vessels calling for bunkers with Bakri Bunker Trading Co., must comply with the laws of Saudi Arabia, including courtesy flag requirements.

Vessels have recently been delayed by boycott office and Port Authority in Jeddah due belated receipt particulars, especially Lloyds number/all former names. If this data not received minimum 72 hours ahead vessel's arrival, delay will ensue.

AUTHORITY: Jeddah Port Management. *Tel:* Jeddah 6471200. *Telex* 401175 Ports Sj. *Cables:* Ports Jeddah. *Contact:* Mr. Mohammed Ali Al-Ghaithy, Acting Director-General, Jeddah Islamic Port. Mr. Hamid S. Abdulmannan, Vice Director General. Mr. Mustafa M. Hariri, Director of Technical Affairs and Director of Traffic and Operations. Mr. Hassan Burhan Hamdi, Director of Marine Affairs.

AGENT: Gulf Agency Company Saudi Arabia, Algosaibi Centre, Andlus Street, Al Hamra, P.O.B. 2038, Jeddah, Saudi Arabia. Tel. 6531964, 6531968, 6535060, 6535056. After office hours: 6319928, 6373728, 6651823, 6829555. Telex: 401047 ("Gaship Sj"). Cables: "Gulfagency", Jeddah.

JU'AYMAH: 26.56 N. 50.03 W. (See Plan Book)

ALSO SEE "RAS TANURA – SECTIONS (A) AND (B)".

(A) CRUDE OIL TERMINAL.
(B) LPG TERMINAL.

(A) CRUDE OIL TERMINAL.

This section gives specific information regarding Ju'aymah Crude Terminal which includes the Single Point Mooring Berths and is to be read together with "Ras Tanura – Part A".

LOCATION: The Ju'aymah Crude Terminal loading facilities are located approximately 18 miles N.N.W. of the Ras Tanura Terminal and 7 miles offshore.

These facilities consist of an oil metering and manifolding platform, a terminal control platform and 6 Single Point Mooring Berths. The oil metering and manifolding platform is in the following position: Lat. 26° 54.8′ N., Long. 50° 01.2′ E.

Ju'aymah Crude Terminal: The terminal is an ARAMCO crude oil and fuel bunker loading facility designed for loading and topping-off deep draft tankers. The terminal consists of the following facilities:

An Oil Platform (130 ft. by 390 ft.) located in 50 ft. (15.24 m.) of water. This platform receives crude oil and fuel bunkers from the storage tanks on the shore to the S.S.W. through 4×56 in. submarine crude pipe-lines each being about 35,770 ft. long.

The platform is well lighted with general purpose lighting. In addition 1 fixed white light has been established on each corner of the platform with a range of visibility of approximately 5 miles. A Control Platform (70 ft. by 70 ft.) is located 150 ft. North of the oil platform and connected to it by a walkway bridge. This houses the communications and radar equipment, testing laboratory, offices, control system and meteorological equipment. This platform is marked by a fixed red aircraft warning light.

Single Point Mooring Buoys have been established between 1 and 4 miles to the N.E. of these platforms. Crude oil and bunkers are received at each buoy from the oil platform through 1 bunker and 2 crude oil submarine pipe-lines which are connected to the buoy by flexible submarine hoses.

Each buoy is fitted with 2×24 in. floating crude loading hoses with 16 in. or 20 in. tail hoses and 1×12 in. floating bunker loading hose. The length of the string is approximately 1,100 ft. (335 m.).

When an SPM is removed ashore for maintenance, a marker buoy may be installed to indicate the position of the underwater pipe-line and anchor chains.

PILOTAGE: *Pilot Boarding:* A Pilot/Mooring Master and an SPM Representative will board inbound vessels by helicopter if possible as advised.

They will advise the Master on all manoeuvres and operations relative to berthing, connecting and disconnecting hoses and unberthing. They will also provide all communications between vessels and shore during cargo loading and be the ARAMCO Representative with respect to safety observation and other requirements.

These two persons will remain on board the vessel throughout the loading and unmooring and suitable accommodation for them is to be provided.

Dependent on weather and other conditions, vessels will be advised by Ju'aymah Pilots to proceed to a position approximately 8 miles E.N.E. of Ju'aymah Platform and make a lee for the Pilot to board or for the launch carrying mooring and hose connecting equipment. Vessels shall not proceed closer to the berths than this position without instructions from the Pilot/Mooring Master.

INBOUND TRAFFIC PROCEDURE: See "Ras Tanura – Part B" – Traffic Regulations.

Vessels Proceeding Direct to Ju'aymah Crude Terminal: As per "Ras Tanura – Part A" – Navigation – Inbound Traffic Procedures to the Entry Buoy and to a position approximately 2.5 miles N.E. of Buoy 3a.

According to advice from Ras Tanura Port Radar and Ju'aymah Pilots should turn into the Ju'aymah Pilot Boarding Area to anchor or be berthed on arrival.

Vessels Proceeding from Northern Holding Anchorage to Ju'aymah Crude Terminal: Should enter the Separation Scheme under advice of Ras Tanura Port Radar and Ju'aymah Pilots and proceed as above.

Max. Draft in Arrival Channel: The max. draft is 70 ft. (21.34 m.) for vessels proceeding along the Inward Channel of the Ras Tanura Separation Scheme bound to Ju'aymah Crude Terminal.

Vessels Proceeding from Ras Tanura Terminal to Ju'aymah Crude Terminal: Should depart Ras Tanura Terminal and follow the Departure Channel towards the Mid-Channel Marker Buoy R.T. 1. The vessel should then proceed exercising due diligence through the Caution Area and with the advice of Ras Tanura Port Radar and Ju'aymah Pilots into the Ju'aymah Pilot Boarding Area either to anchor or be berthed on arrival.

Prohibited Area: No vessel shall enter the Prohibited Area without a Pilot on board. Under no circumstances shall anchors be used in the vicinity of the berths due to the existence of numerous submerged pipe-lines.

ANCHORAGE: The area West of No. 3 Beacon is used as a final holding anchorage and for vessels awaiting arrival clearance, cargo clearance, sailing documents, etc.

Vessels must leave the inbound route to the berths clear when selecting an anchoring position in this area.

RADIO: *Underway:* At all times when underway in the Arrival Channel and Pilot Boarding Area, vessels must maintain contact with Ras Tanura Port Radar on VHF Channel 10 and with Ju'aymah Pilots on Channel 16 or one of the following VHF working Channels: 10, 11, 12, 13, 14. Prior to arrival vessels will be contacted by Ju'aymah Pilots who will request certain updated and additional information for the use of the Pilot/Mooring Master who will berth the vessel.

At Anchor: A good listening watch should be maintained on VHF Channel 16. Vessels will be called by Ju'aymah Pilots with berthing and other information and instructions.

Under Pilotage and at Berth: The Pilot/Mooring Master will carry a portable intrinsically safe multi-channel radio by means of which all communications regarding approach, mooring and cargo loading will be made. These radios are fitted with an emergency tag which activates an alarm at the Control Platform when removed.

He will also carry battery chargers for these radios during the vessel's stay in the terminal.

In addition, the vessel's VHF radio should be available on the bridge and in the Cargo Control Room for back up communications.

HEALTH: *Pratique and Quarantine:* At Ju'aymah Crude Terminal, no person is permitted to board a vessel, nor is she permitted to proceed to the berth until inward clearance formalities have been completed and the Authorities have visited the vessel. Vessels topping off from Ras Tanura Terminal will already have completed these formalities.

However, during adverse weather conditions permission may be given by Government Officials for the Pilot to board and moor the vessel before clearance is given. Should this occur and weather conditions continue to preclude clearance during the loading operation, the vessel must when unmoored anchor and wait for clearance formalities to be completed.

BERTHING: *Preparations:* Line handling during mooring and unmooring is to be performed by the ship's staff under instructions of the Pilot/Mooring Master.

Vessels assigned to the Ju'aymah Crude Terminal SPMs must be fitted as recommended in the OCIMF publication "Standards for Equipment Employed in Mooring of Ships at Single Point Moorings".

Mooring to strops secured to bitts is not permitted.

During the approach, while mooring and while secured in the berth, the vessel's anchors MUST be secured by stoppers to prevent accidental dropping with subsequent damage to the undersea pipe-lines and equipment.

Both port and starboard derricks should be rigged ready to lift the mooring and hose connecting equipment from the launch on either side. A trolley should be available to transport this equipment about the vessel's deck.

The following vessel's equipment should be ready on forecastle head:

a) Two messenger lines 3 in. to 3.5 in. circumference (24 mm. to 28 mm. dia.) 500 ft. (150 m.) in length.
b) Sledge hammer, large crowbar, large marlin spike, adjustable wrench/spanner.
c) Bag of sawdust or sand.
d) Large flashlight (for night mooring).

Procedure – Mooring:

a) ARAMCO mooring and hose connecting equipment will be lifted aboard the tanker from the launch on either the port or starboard side by means of the ship's derrick.
b) Ship's staff will prepare the forecastle head for the mooring operation at the instructions of the Pilot/Mooring Master.
c) As the vessel approaches the berth, a mooring boat will bring the port hawser pick-up rope (10 in. circumference – 80 mm. diameter) and make it fast to the messenger.
d) At the boat's signal the pick-up rope is hove on deck and by means of this, the chafing chain is lifted in the bow chock and to the mooring bracket.
e) Under the direction of the Mooring Master, the chafing chain is secured in the vessel's mooring arrangement.
f) Ease back on the pick-up rope until the weight is taken up.
g) Repeat for the second mooring hawser.

Procedure – Unmooring:

a) Take the weight of the mooring assembly on the pick-up rope, using the windlass.
b) Disconnect the chafing chain from the mooring arrangement.
c) Slowly slack the pick-up rope until the support buoy is in the water and taking all of the weight of the chain.
d) Pay out the pick-up line either to a mooring boat or as the ship clears the berth.

BERTHING FACILITIES: At the berths, cargo hose connections are 16 in. or 20 in. and bunker hose connections are 12 in. arranged to be connected abaft the crude loading connections. All flanges are 150 ASA.

In order to avoid delays, vessels should have reducers ready at the port side manifold to adapt to these sizes. Maximum crude loading rate is 130,000 bbls.p.h., and maximum bunker loading rate is 5,000 bbls.p.h.

The Single Point Mooring Berths are either Catenary Anchor Leg Mooring (CALM) or Single Anchor Leg Mooring (SALM) types.

Berth No.	*Type*	*Lat. N.*	*Long. E.*	*Minimum Water Depth* (ft.)	(m.)
31	CALM	26° 55.6′	50° 02.4′	93	28.35
33	CALM	26° 57.0′	50° 02.7′	103	31.39
34	SALM	26° 56.6′	50° 04.3′	124	37.79
35	SALM	26° 55.6′	50° 03.6′	112	34.14
36	CALM	26° 55.6′	50° 04.9′	122	37.19

Note: The following crudes are available at Ju'aymah Crude Terminal: Arabian Light Crude, Arabian Medium Crude, Arabian Heavy Crude. Arabian Berri Crude is NOT available.

LOADING: *Loading Hose Connection and Disconnection:* In order to secure the floating hoses to the vessel's manifold, the manifold arrangements must be as recommended in the OCIMF publication – "Standard for Tanker Manifolds and Associated Equipment (May 1975)" and "Tanker Manifolds and Associated Equipment (3rd Edition 1981)".

Preparation – On the Port Side:

(a) Derrick rigged for maximum height and load lifting capacity (10 tons minimum for 16 in. hoses and 15 tons minimum for 20 in. hoses). If possible, the topping lift of the derrick shall be on its own winch.
(b) Two 16 in. or 20 in. 150 lb. ASA flange connections on selected cargo manifolds and one 12 in. 150 lb. ASA flange on the after bunker manifold.

(c) Drip trays, sawdust or sand, dispersant and fire fighting equipment in position.

(d) The following are normally supplied by ARAMCO but their presence will prevent delays in case of deficiency or malfunction: Chain block (not normally supplied), Handy Billy, heaving line, spare spanners, spare wire strop, spare bolts.

Procedure – Connecting Hoses: Connecting and disconnecting of cargo and bunker hoses is to be carried out by ship's staff under instruction of Mooring Master.

(a) Lower derrick hook to the mooring launch which will connect it first of all to the forward hose.

(b) Heave up until the blank flange is level with the hose rail.

(c) Unshackle hose snubbing wires and secure guy ropes to the flange.

(d) Continue heaving up the hose as directed by the Mooring Master.

(e) Secure snubbing wires in a manner to facilitate possible slackening as directed.

(f) Lower the hose to bring the hose flange to the manifold and check the alignment of the flanges.

(g) Lower the hose onto the drip tray and remove the blank flange.

(h) Using the nylon band sling supplied, lift the hose and connect it to the manifold. Never use a wire strop for lifting a cargo hose.

USE ALL OF THE BOLT HOLES AND A GASKET.

The second cargo hose and the bunker hose are connected in the same way.

After all hoses are connected, the cargo hoses must be supported in way of the vessel's side rail by means of the nylon bands supplied and the vessel's derrick.

Procedure – Hose Disconnecting: On completion of loading cargo or bunkers manifold valves must NOT be closed until the Mooring Master directs. This is important for line clearing.

(a) Strop the after hose to the derrick hook, take the weight and disconnect the flange.

(b) Replace the blank flange using *all* of the bolts and a new gasket. Tighten the bolts in sequence to avoid uneven tension on the flange.

(c) Lower hose to deck and secure.

(d) Repeat with forward hose and wait until backfilling of the hoses is complete.

(e) Bunker hose should be disconnected and securely blanked as soon as bunkering is completed and secured on deck until cargo loading is completed. It should be lowered into the water during backfilling of the cargo hoses.

(f) When backfilling is completed, secure the derrick hook to the lifting hook of the after hose and raise the hose until the weight is taken off the snubbing wires.

(g) Release the snubbing wires, lower the hose to rail level and shackle the snubbing wire to the flange.

(h) Lower the hose end into the water and trip the hook to release.

(i) Repeat for the forward hose.

Return all ARAMCO tools and equipment to the steel basket, stow in a seamanlike manner and prepare for lowering to the launch on either the port or starboard side dependent on weather conditions.

Loading Procedures: The loading operation will be controlled by radio voice communications between the Mooring Master on the loading vessel and the Control Platform.

All operations including switching of tanks and topping off must be directly and personally supervised by a ship's officer. Upon being informed by the loading vessel's personnel that the vessel is ready to start loading, the Pilot/Mooring Master will request the loading to proceed according to the previously agreed plan with respect to start-up rates, maximum loading rates and topping off rates.

Under no circumstances is the flow to the vessel to be stopped by the vessel whilst switching tanks etc. Need for emergency shutdown of loading aboard the vessel must be communicated by radio from the loading vessel to the Control Platform.

In the event of failure of the radio communications system, the vessel will sound five long blasts on the vessel's whistle followed by 1, 2, 3, 4, 5 and 6 short blasts for a vessel at Berth 31, 32, 33, 34, 35 or 36 respectively.

Loading operations will be stopped and will not be resumed until communications have been re-established.

It is the responsibility of the vessel to advise the Mooring Master to shut down cargo and bunker loading when the vessel's cargo and bunker requirements are met.

Cargo Calculations and Release: The American system of cargo measurement in Barrels with temperatures in fahrenheit degrees according to the ASTM-IP is used by ARAMCO and the Saudi Arabian Government for cargo measurement purposes. Ship's cargo loaded figures should be available in these units. Generally, if the difference between average normal ship measurement and official cargo measurement is satisfactory the ship will be released to sail, and the Pilot/Mooring Master will leave after unmooring is complete. If the ship/shore difference is large, the Pilot/Mooring Master will survey the cargo according to laid down ARAMCO inspection procedures after unberthing and report his findings to ARAMCO Terminal Planners. The ship is required to stay until released by ARAMCO if ship/shore difference occurs.

Departure: Upon completion of unmooring, the vessel will make a lee for the mooring and hose connecting equipment to be discharged into the launch on either port or starboard side. Depending opon conditions the Pilot/Mooring Master and SPM Representative may leave on the launch or later by helicopter. A separate departure channel has been provided for all vessels using the Ju'aymah facilities. The vessel will proceed via the departure channel between Beacon J1 and Buoy J2 and thence towards the Exit Buoy JE. The vessel should then set an Easterly course North of JD Buoy to the Ju'aymah Light Float.

EMERGENCY PROCEDURES: In addition to the general principles described in Part A of "RAS TANURA", the following apply to Ju'aymah Crude Terminal:

(a) Should a fire or explosion occur at a buoy mooring, the Oil platform or Control platform, all cargo operations will be stopped and all vessels should stand by to disconnect and unmoor when so instructed by the Pilot/Mooring Master or Port Captain, or when the need to take such action becomes self-evident.

(b) The local signal for emergency is a continuous ringing of the vessel's alarm bells supplemented by more than 6 short blasts followed by 1 long blast of the vessel's whistle. Assistance may be summoned on VHF Channel 16. Location, nature of emergency and type of assistance required should be given. (See "RAS TANURA" Part B – EMERGENCY SIGNAL).

BALLAST: *Arrival Ballast Condition:* Due to the exposed location at the Ju'aymah berths, tankers should arrive with sufficient clean water ballast for safe handling having due regard to the existing sea and weather conditions. Unless otherwise instructed, vessels must arrive with propellers just covered and trimmed not more than 8 ft. (2.44 m.) by the stern.

GENERAL: *Boarding Vessels at Berth:* Small craft are not allowed in the vicinity of the vessel and no one is permitted to board or leave a vessel while cargo loading operations are in progress. Should it become urgent to board or leave for any reason during cargo loading, the Pilot/Mooring Master must be contacted to request permission to shut down the cargo loading operation while the small craft is alongside.

S.P.M. Maintenance: In addition to the mooring boats a larger maintenance vessel works on hoses, buoys and subsea systems (RIMTHAN 2).

In bad weather, this work is extremely difficult and involves possible danger to personnel.

For this reason, vessels are requested to give as much assistance as possible by taking seamanlike care of the mooring and hose equipment and returning it to the water ready for the next tanker and in such condition as they would like to find it.

Hose/hawser maintenance is expensive and if ARAMCO judges that a vessel has misused any hose or hawser the vessel will be liable for the expenditure incurred in making repairs.

(B) LPG TERMINAL

This section gives specific information regarding Ju'aymah LPG terminal loading facilities and is to be read together with "Ras Tanura" – Part A.

LOCATION: The Ju'aymah LPG Terminal is located approximately 15 miles N.N.W. of Ras Tanura Terminal and 3 miles S.S.E. of Ju'aymah Crude Terminal Control Platform.

The loading facilities consist of a two-berth pier approximately 6 miles from the shore in position:

Latitude: 26° 52.0′ North
Longitude 50° 02.9′ East

connected to the shore by a trestle.

Ju'aymah LPG Terminal: The Terminal is an ARAMCO operated facility designed to load refrigerated liquefied petroleum gas (RLPG) aboard LPG Carriers ranging in size from approximately 25,000 cu.m. to 200,000 cu.m. capacity.

The onshore complex consists of fractionation, refrigeration, compression and storage facilities. Product storage consists of seven insulated dome-roof tanks of 600,000 barrels capacity each – four in propane (A-140) service and three in butane (A-160) service. Booster and shipper pumps are located in the onshore tankage area. In addition to the LPG product tanks, there are two 50,000 barrel bunker fuel oil tanks and one 30,000 barrel black diesel tank.

A trestle, approximately 6 miles long, connects the onshore facilities to a two berth, offshore loading platform.

A radar station is located on the loading platform for proctection of the facility. This radar station is known as "Ju'aymah NGL Radar".

The trestle consists of an access roadway and a pipeway for the product and bunker lines.

A tower crane is located in the centre of the loading platform.

A helicopter landing platform and two small flares are located near the seaward end of the trestle which is lit by sodium vapour street lamps and emergency navigation lights at night.

PILOTAGE: *Pilot Boarding Position:*

In normal conditions of weather and traffic, an arriving vessel will be advised to proceed from the Ju'aymah Pilot Boading Area by a route South of Buoy J4 to a position 1.5 miles S.E. of SPM 36 to make a lee to pick up the Harbour Pilot. The Pilot will then advise on manoeuvring the vessel to the assigned berth.

INBOUND TRAFFIC PROCEDURES: See "Ras Tanura – Part B" – Traffic Regulations.

Vessel Proceeding Direct to Ju'aymah LPG Terminal: As per "Ras Tanura – Part A – Navigation – Inbound Traffic Procedures" to the Entry Buoy and make for a point approximately 2.5 miles N.E. of Buoy 3a. Under advice of Ju'aymah Pilots and Ras Tanura Port Radar turn into the Ju'aymah Pilot Boarding Area to anchor or to be berthed on arrival.

Vessel Proceeding from Northern Holding Anchorage to Ju'aymah LPG Terminal: Enter the traffic separation scheme under advice of Ras Tanura Port Radar and Ju'aymah Pilots and proceed as above.

Vessel Proceeding from Ras Tanura Terminal to Ju'aymah LPG Terminal: Should depart Ras Tanura Terminal and follow the departure channel toward the mid-chanel marker RT 1. The vessel should pass through the Caution Area with the advice of Ras Tanura Port Radar and Ju'aymah Pilots into the Pilot Boarding Area either to anchor or to be berthed on arrival.

ANCHORAGES: *Ju'aymah Pilot Boarding Area:* The area West of No. 3 Beacon is used as a final holding anchorage and for vessels awaiting arrival clearance, cargo clearance, sailing documents, etc. as for Ju'aymah Crude Terminal. Ships must only use this anchorage when directed to do so by Ju'aymah Pilots and must leave the inward route to the SPM berths clear when selecting an anchoring position in this area.

Ju'aymah LPG Anchorage: This anchorage has been laid out approximately 2.5 miles N.E. of the loading pier to provide a tank cooling area for gas tankers. The depth of water varies between 16 m. and 30 m. (52 ft. and 98 ft.) and holding ground is fair.

BERTHING: *Mooring Procedure:* Mooring boats are not used at Ju'aymah LPG Terminal. Vessels should have heaving lines ready to take the shore messenger after landing alongside. The messenger is then made fast to the vessel's mooring line which is then hove ashore by a capstan. Heavy wires should be sent one by one and ropes two at a time. Jetty crews are continuously on duty to handle mooring lines but will not handle mooring lines aboard vessels.

BERTHING FACILITIES: The 2 loading berths are situated on opposite sides of a platform aligned 335° true compass bearing. Berth 51 being the East (outer) berth and 52 being the West (inner) berth. Minimum water depth at the berths is approximately 78 ft. (23.8 m.) at ISLW (Indian Springs Low Water). There are 4 breasting dolphins at each berth and 6 mooring dolphins. The tower crane located in the centre of the platform is used for moving operational and maintenance equipment. RLPG is loaded via 16 in. LPG loading arms. Maximum loading rate is 15,000 bbls.p.h. per arm. Therefore combined maximum for 2 grades is 30,000 bbls.p.h. Each berth is equipped with 4 LPG loading arms each of which may be used for butane liquid, propane liquid or vapour return. The loading arm connections can be adjusted to fit 12 in., 14 in. or 16 in. 150 ASA flanges. All LPG loading arms are fitted with quick connect/disconnect hydraulic couplers (QCDC). Each LPG loading line has an associated circulation return line. The bunker loading connections can be adjusted to fit 6 in. or 8in. 150 ASA flanges. One bunker/black diesel loading arm is located at each side of the LPG loading station.

Both fuel oil bunkers and marine diesel oil are available at the Ju'aymah LPG berths. The nominal loading rate for fuel oil bunkers is 5,000 b.p.h. and for marine diesel oil is 600 b.p.h. These can be loaded through both of the 8 in. loading arms located on either side of the LPG loading station.

LOADING: *Trim and Stability:* During loading and deballasting operations, the vessel should at all times be adequately stable and in good trim to leave the berth at short notice in the event of an emergency. Excessive lists and trims are not permitted.

Loading Arm Connections: Jetty crews are on duty continuously to handle loading arms and make all connections and disconnections. All loading connections are equipped with electrical insulated flanges therefore ship to shore bonding wires are not required.

Due to the size and bulk of the QCDC couplers, a clear area around each manifold flange of at least 60 cm. (24 in.) is required.The vessel should have suitable 150 ASA reducers and spool pieces fitted to the manifolds it is intended to use.

Loading Procedures: Vapour line must be connected prior to loading LPG cargo of coolant. All excess vapour which cannot be handled by the vessel's recovery equipment will be metered to flare. It is the responsibility of the vessel to advise the jetty operators to shut down cargo and bunker loading when the vessel's requirements of cargo and bunkers are met.

Special regulations govern the acceptance and loading of gas tankers in the Port of Ras Tanura which includes Ju'aymah LPG Terminal.

Cargo Calculations: The American system of cargo measurement in BARRELS with temperatures in fahrenheit degrees according to the ASTM-IP is used for cargo measurement at this Terminal. An independent Inspection Agency is appointed by the Offtaker/Buyer to determine cargo quantity loaded aboard.

Departure: Upon completion of loading, cargo calculation and disconnecting cargo arms, the vessel will be unmoored and the Harbour Pilot will disembark. The vessel will then be free to leave the Port via the Ju'aymah Departure Channel if Early Departure Procedure is used and all relevant documentation is on board. Otherwise, the vessel will proceed to the Ju'aymah Pilot Boarding Area or Cooling Anchorage to await document delivery by the Agent, at the direction of the Pilot.

Contact with Ju'aymah Pilots must be maintained on VHF Channel 16 when in the Ju'aymah Crude Terminal approach area.

GENERAL: *Emergency Procedures:* In addition to the general principles described in Part A of "RAS TANURA" the following apply to Ju'aymah LPG Terminal.

In the event of a fire or explosion at the pier or on board a vessel which is berthed alongside at the Terminal, the local alarm signal will be a series of 10 short blasts on the ship's whistle at which an Emergency Shutdown system will be activated to immediately stop all cargo loading to vessels at the berths. (See "RAS TANURA – Part B" EMERGENCY SIGNAL). In case of a situation requiring urgent removal of a ship from the berth, a system of sequential automatic loading arm disconnection is fitted. This system will only be activated after very careful evaluation of the situation by all parties.

Duty Harbour Pilot and Tugs: Whenever a vessel is at one of the berths at the LPG Terminal, a Harbour Pilot will stand by on the loading platform in constant communication with the vessel(s) and jetty staff by means of the dedicated UHF radios. Pilots on duty for 8 hours (0600 – 1400, 1400 – 2200 and 2200 – 0600 hrs.).

Tugs stand by moored in sight of both loading berths.

RADIO: *General:* The onshore production facilities of the LPG Terminal are known as the NGL (Natural Gas Liquids) Plant, etc. This name is often used in reference to the Terminal. No LNG (Liquefied Natural Gas) is exported from the Terminal.

Underway: In the arrival channel, vessels must maintain contact with Ras Tanura Port Radar on VHF Channel 10. Outside the channel, vessels must maintain contact with Ju'aymah Pilots or Ju'aymah NGL Radar as directed on VHF Channel 16 and working Channels 10, 11, 12, 13 or 14.

At Anchor: A good listening watch should be maintained on VHF Channel 16 for information and instructions from any of the following sources:–

(a) Ras Tanura Pilots,
(b) Aramco Terminal Planners,
(c) Ju'aymah Pilots,
(d) Ju'aymah NGL Radar.

Under Pilotage: The Harbour Pilots carry portable, intrinsically safe radios for contact with tugs which operate on Aramco dedicated mooring frequencies. In addition, the ship's main VHF radio should stand by on Channel 13 for back-up communication.

At Berth: A portable intrinsically safe radio will be supplied to the vessel by the terminal. This radio operates on a UHF frequency dedicated to each berth by means of which constant communication can be maintained during loading. This radio is fitted with a pull-off tag which, when removed, activates an alarm on the radio console in the Control Room and the Pilot Office.

SHIPMASTER'S REPORT: December 1979

The following is a radio message received by the Master from his Agent.

Important Notice Revised Government and Port Regulations Ras Tanura Please acknowledge your compliance.

Para One

Port Authorities now insist that all vessels are not to sail from Ras Tanura (Ju'aymah) until a port clearance (titled sailing report) has been delivered on board STOP Therefore vessels must have onboard both Port Clearance and P2/50 permit of departure before sailing STOP

Para Two

Anti Pollution regulations are now being strictly enforced by Saudi Arabian Government Authorities with heavy fines/delays to vessels/possible arrest for Masters of offending vessels therefore you are strongly advised to AAA Log and report to the Pilot Officer any oil slick P3/50 sightings BBB Closely monitor deballasting operations CCC Acknowledge receipt only of any protest letter submitted by ARAMCO for any alleged pollution incident DDD Advise us immediately a protest letter for an alleged pollution is received on board and name of your P and I Club EEE Issue P4/50 Arab with a separate counter protest letter as required copied to us STOP

Para Three

Please ensure all repeat all alcoholic beverages and pornographic material are removed from cabins/lounges and placed in bonded store for sealing STOP Stores and chillrooms must also be sealed if containing alcohol STOP Vessels are P 5/53 subject to search on arrival and penalties are severe for infringement of Saudi Regulations STOP

Para Four

On arrival Ras Tanura ensure you call this Office advising anchor time and most important advise when Pilot boards your vessel to proceed to berth/SBM in order to avoid delay in clearing your vessel STOP+

SHIPMASTER'S REPORT: December 1980.

Ju'aymah LPG Terminal (N.G.L.):

Approaches: As for Ras Tanura, but use Main Channel only not Eastern Channel. Follow Main Channel to Beacon 3, proceed into Ju'aymah Waiting Area then proceed into "Ju'aymah LPG Anchorage" passing West of Buoy "J6".

Only vessels with authorisation from Ras Tanura Pilot Office will be allowed to proceed direct to LPG Anchorage. If waiting, the Northern Holding Anchorage is used as normal.

Departure: Depart by "Ju'aymah Departure Channel" under control of Ju'aymah Radar.

Control: Can be confusing. The LPG Terminal does not come under Ju'aymah Pilots but Ras Tanura Pilots which must be contacted at all times.

Listen to berthing schedule from "HZY" at 0700 hrs. GMT and 1900 hrs. GMT for berth number and time.

Call "Ras Tanura Pilots" as soon as possible before arrival to find out if loading at North Pier or Ju'aymah.

If cooling down, vessel can take coolant at one berth and load at another, Ju'aymah or North Pier and vice versa.

For transiting Ju'aymah SBM and Waiting Area, Ju'aymah Radar should be contacted.

VHF: At present very overloaded, with both Ras Tanura Pilots and Ju'aymah Pilots using Channel 14 and Ras Tanura Radar and Ju'aymah Radar using Channel 10.

Pilots: Board in Northern Area of LPG Anchorage South of SBM No. 36 from a tug. Pilot ladder-gangway arrangement used when in ballast.

Anchorage: About 1.5 miles to N.E. of pier, South of SBMs. Moderate holding ground so use plenty of cable.

Tugs: Two powerful tugs used. Secure in "American Style". Unberth using a long line. Tugs ropes used. Whilst ship is on LPG Berth both tugs on instant stand-by tied to buoys near Berth No. 52 (inside). It takes 15 minutes to get to Berth No. 51.

Aramco have 6 new tugs being built. 3 of which are Voith Schieder vane tugs of 4,000 h.p. 2 tugs will be used at the LPG Pier.

Notice of Readiness: Tender when ready to load, or if straight on berth at first line ashore. Berth Supervisor acknowledges only. Agent also gets acknowledgement from Aramco.

Conditions: Vessels berth on No. 51 (outside) with winds up to 30 knots but depends on sea conditions and probability of damage to ship or tugs.

Unberth in most conditions at Berth No. 51.

Berth No. 52 (inside) is a bit more awkward and weather conditions are more carefully assesed.

Pier: Berth Head North at Berth No. 51 – port side to, and starboard side to at Berth No. 52. Pilots say there could be conditions such as weather and ship type that may warrant a departure from this rule.

A most imposing structure some 6 miles long with two LPG Berths at present heading S.E. 2 more berths are planned bearing N.W. on the other side of the pier making a "T" configuration.

Water depth at ILWS is 78 ft. at both berths.

Fenders are massive flat beds of timber and rubber and steel plates with rubber and hydraulic springs which I gather can withstand tremendous forces. The pier has been designed for 200,000 cu.m. LPG ships. We lay alongside Berth No. 51 in force 5 with large swell quite happily. The pier was not built for vessels of less than 75,000 cu.m. but due to lack of large vessels and trade conditions quite small ships of down to 15,000 cu.m. have been berthed.

Small vessels cause problems as they can fall inside the fenders on berthing and the Chiksans have to be fitted with spool pieces.

Gangway: A shore gangway on rollers and self levelling with hoist is landed on foredeck from forward end of Chiksan deck.

The berths have a tower crane between them for handling spool pieces and general maintenance. Ship's derricks not used.

Loading Limitations:

Minimum Distance Manifold to Platform Deck Edge	20 ft.
Maximum Distance Manifold to Platform Deck Edge	50 ft.
Minimum Manifold Height above ILWS	25 ft.
Maximum Manifold Height above ILWS	100 ft.

At the lower operating limit fo the arms (i.e. 25 ft. above ILWS) because of the cut-off at maximum outreach, ships of a manifold height of less than 27 ft. would not be loaded.

Minimum distance apart of manifold lines centre to centre 4 ft. (from Official Aramco advice in Pilot Office).

The manifold distance apart (4 ft.) is overcome at present by the use of spools.

Loading: 16 in. Chiksans with auto-couplings (QCDC). 2 loading and 2 vapour each side of jetty.

Spool pieces are connected by ship's crew, Chiksans by shore personnel.

Rates of between 50 b.p.h. to 30,000 b.p.h. (4 to 2,500 tonnes p.h.) total on each product can be achieved. This may be less if 2 ships are taking same product.

Coolant and bulk can be taken on different berths either Berth Nos. 51 – 52 or at North Pier Nos. 6, 8 and 10. We were due to go to North Pier for bulk but in the end took both at Berth No. 51.

Different metering systems from 3 in. to 12 in. are used at each berth.

50 b.p.h. – 900 b.p.h. 1×3 in. meter for low rates such as coolant and topping off.

300 b.p.h. – 4,000 b.p.h. 2×6 in. meter intermediate.

1,900 b.p.h. – 16,000 b.p.h. 3×12 in. meter full rates (1 meter standby).

Lines can be inter-switched between products but maximum of about 30,000 b.p.h. on any one product.

Butane and Propane can be sub-cooled by 5°F by Freon chillers.

Moorings: Basic arrangement 3, 3, 2, each end. Springs first. But variation due to vessel configuration and size may be made.

Lines sent away by heaving line, mooring boats not used.

All lines on quick release hooks with Capstans alongside.

Fire Wire not to be loosely lashed on deck. Made fast with 5 turns on bitts and bight held up by heaving line.

Vapour Return: At present not charged and flared about 1 mile down pier. We were allowed to use it quite freely but this might change.

The amount of vapour being flared can be noted in the Control Room, situated between berths, and is very accurate.

Control Room: Between the two berths is an accommodation block with the Control Room on top with anti-glare windows. Various rooms for duty personnel are situated on different decks with the Shift Supervisor on the bottom deck near the entrance.

The Agent can be phoned from here.

The Control Centre on top is well worth a visit, being most impressive. The Pilots Office and Radar Room can also be found in the Control Area.

Ship's particulars are on a computer with any adverse points as well.

Access: Private cars not allowed on pier. The idea is that all personnel use the Aramco provided bus or helicopter service which lands on helipad at the North end of the berth.

Agent: Requires advance notice of ship's movements and actual notice of movements at all stages. Aramco do not always advise Agents and due to distances involved confusion and delay can result.

Agent will arrange for medical attention to crew members. In an emergency call "Ras Tanura Pilots" who will arrange a Coastguard helicopter to come to berth or anchorage. This usually takes about 30 minutes from calling Pilot Office. Also advise Agent.

General: Bunkers are available from Chiksans at each end of loading arms. Used for both fuel and diesel. 8 in. couplings.

No fresh water available.

All usual conditions apply as for Ras Tanura.

All Air Bill items to anchorage.

Copy of Saudi Port Regulations required but does not apply to Ras Tanura area.

Agent brings down Customs who seal up and handle Immigration matters.

Berth owned by the Saudi Government Company "Petromin" not Aramco.

Aramco operate the berth on a management basis.

AUTHORITY: Arabian American Oil Company, Port Control Centre, North Pier, Ras Tanura, Saudi Arabia. *Tel:* 37250. *Contact:* S. M. Al Shibar, Port Captain – Terminal Marine Piloting Division.

AGENT: Gulf Agency Company Saudi Arabia, Aramco Mail Box 621, Ras Tanura 31941, via Dhahran, Saudi Arabia. Cables: "Confidence" Ras Tanura, Ship-Shore Traffic via Dammam Radio. Telex: 651011, 651059 ("GAC RT SJ") Phone: 6673180, 6670632, 6670636 (24 hour service), 6670624. After office hours phone: 6670644, 6670925.

N.B. Please address crew mail to Rahima P.O. Box 72, Ras Tanura, via Dhahran, Saudi Arabia.

Note: G.A.C. Ras Tanura are connected to the Bahrain Telex Bureau. Messages from ships to G.A.C. Ras Tanura may therefore be addressed "Bahtag 80-1450433 Confidence Ras Tanura" via Bahrain Radio, and they will then be relayed direct by telex to Ras Tanura.

Agent will be responsible for all ship's business, which includes obtaining inward and outward clearance, pratique, medical facilities, provisions, repatriation, repairs and diving services.

JUBAIL: 27.01 N. 49.40 E. (See Plan Book

ALSO SEE "GENERAL" BEFORE FIRST PORT.

(A) COMMERCIAL PORT. (B) KING FAHD INDUSTRIAL PORT IN JUBAIL.

(A) COMMERCIAL PORT.

LOCATION: The Jubail Port Complex is located on the East Coast of the Kingdom of Saudi Arabia, approximately 80 km. North of Dammam. The Port Complex comprises 2 ultramodern facilities: The Commercial Harbour to the South and The King Fahd Industrial Harbour to the North. These harbours have separate entrances and are under separate port managements.

PORT LIMITS: All shore based port property enclosed by a fence extending seawards to include the approach channel as far as Buoy Nos. 11 and 12, the Tanker Anchorage, Freighter Anchorage and Explosives Anchorage to a line running between the following points:

Lat. 27° 04′ 03.7″ N., Long. 49° 36′ 52.2″ E.
Lat. 27° 06′ 00″ N., Long. 49° 41′ 08″ E.

Port Boundaries:

1.	Lat. 27° 04′ 03.7″ N.,	Long. 49° 36′ 52.2″ E.
2.	Lat. 27° 06′ 00″ N.,	Long. 49° 41′ 08″ E.
3.	Lat. 27° 07′ 09″ N.,	Long. 49° 41′ 08″ E.
4.	Lat. 27° 07′ 09″ N.,	Long. 49° 44′ 27″ E.
5.	Lat. 27° 08′ 20″ N.,	Long. 49° 45′ 11″ E.
6.	Lat. 27° 10′ 39″ N.,	Long. 49° 47′ 00″ E.
7.	Lat. 27° 10′ 35″ N.,	Long. 49° 50′ 00″ E.
8.	Lat. 27° 12′ 47″ N.,	Long. 49° 52′ 15″ E.
9.	Lat. 27° 15′ 28″ N.,	Long. 49° 51′ 33″ E.
10.	Lat. 27° 17′ 25″ N.,	Long. 49° 55′ 15″ E.
11.	Lat. 27° 16′ 15″ N.,	Long. 49° 57′ 36″ E.
12.	Lat. 27° 14′ 38″ N.,	Long. 49° 58′ 55″ E.
13.	Lat. 27° 11′ 10″ N.,	Long. 49° 53′ 35″ E.
14.	Lat. 27° 08′ 06″ N.,	Long. 49° 50′ 11″ E.
15.	Lat. 27° 04′ 49″ N.,	Long. 49° 46′ 30″ E.
16.	Lat. 27° 03′ 03″ N.,	Long. 49° 43′ 49″ E.
17.	Lat. 27° 01′ 40″ N.,	Long. 49° 43′ 15″ E.
18.	Lat. 27° 00′ 27″ N.,	Long. 49° 40′ 48″ E.
19.	Lat. 27° 00′ 32″ N.,	Long. 49° 40′ 33″ E.
20.	Lat. 27° 00′ 32″ N.,	Long. 49° 40′ 18″ E.
21.	Lat. 27° 00′ 51″ N.,	Long. 49° 40′ 18″ E.
22.	Lat. 27° 00′ 51″ N.,	Long. 49° 40′ 01″ E.
23.	Lat. 27° 00′ 59″ N.,	Long. 49° 40′ 03″ E.

DOCUMENTS: On arrival at the Port the Master of the vessel shall present or make available for inspection the following papers and documents:

Log Book.
Registration Certificate.
Classification Certificate.
Load Line Certificate.
Building Safety Certificate.
Safety Equipment Certificate.
Radio and Wireless Certificate.
Cargo Gear Certificate.
Marine Health Declaration.
Vaccination List.
Derat Certificate.
Clearance from Last Port of Call.
Israel Boycott Declaration.
Ship's Store List.
Grain Shipping Certificate (if the vessel is carrying a grain shipment).
Mail Transport Documents in accordance with the International Postal Treaty (if any mail is carried aboard).
5 copies of the Crew List.
5 copies of the Passenger List.
2 copies of the List of Personal Effects of Crew and Passengers.

To obtain port clearance the Master of the vessel shall present or make available for inspection the following papers and documents to Port Management:

Log Book.
Registration Certificate.
Classification Certificate.
Load Line Certificate.
Building Safety Certificate.
Safety Equipment Certificate.
Radio and Wireless Certificate.
Port Stevedore Outturn Report.
Receipt for payment of Custom's Duties.
Shipping Note and Cargo Manifest for any cargo loaded.

Cargo papers and documents: The following papers and documents must be submitted to the Port Management not later than 48 hours prior to arrival:

5 copies of the Cargo Manifests in English.
10 copies of the Original Manifests translated into Arabic.
2 copies of the Cargo Stowage Plan.
2 copies of the Hatch List or Bay Plan.
2 copies of the List of Dangerous/Hazardous Cargo for Discharge.
2 copies of the List of Dangerous/Hazardous Cargo in Transit.
2 copies of the List of Heavy and/or Awkward Cargo.
2 copies of the List of any Wine, Spirits and Narcotics, or in the absence of which a nil return.
A Declaration of Type of Reefer Cargo.
An Application for Discharge Permit.

PILOTAGE: Pilotage is compulsory for all vessels of more than 150 n.r.t. Pilots available 24 hours a day, 7 days a week. Pilots will board in the vicinity of No. 17 Channel Buoy. Port Control Station is continuously manned, to be contacted on Channel 16, vessels requiring a Pilot shall use the International Signals. Notice of ETA refer to Rules and Regulations for Saudi Arabian Seaports, Part 1, Para 2.

Pilot Boarding Position: Lat. 27° 07′ 00″ N. Long. 49° 47′ 00″ E.

ANCHORAGES: There are 3 anchoring places: Freighter Anchorage, Tanker Anchorage and Explosives Anchorage, areas between the following buoys and positions:

Freighter Anchorage:

Light Buoy "17/ANCH"	Lat. 27° 06′ 00″ N.	Long. 49° 45′ 19″ E.
"ANCH 4"	Lat. 27° 08′ 20″ N.	Long. 49° 45′ 11″ E.
"ANCH 3"	Lat. 27° 10′ 39″ N.	Long. 49° 47′ 00″ E.
"15/ANCH"	Lat. 27° 10′ 35″ N.	Long. 49° 50′ 00″ E.

Tanker Anchorage:

Light Buoy "13/ANCH"	Lat. 27° 12′ 47″ N.	Long. 49° 52′ 15″ E.
"ANCH 2"	Lat. 27° 15′ 28″ N.	Long. 49° 51′ 33″ E.
"ANCH 1"	Lat. 27° 17′ 25″ N.	Long. 49° 55′ 15″ E.
"11/ANCH"	Lat. 27° 16′ 15″ N.	Long. 49° 57′ 36″ E.

Explosives Anchorage:

Light Buoy "EXPL 1"	Lat. 27° 02′ 00″ N.	Long. 49° 50′ 22″ E.
"EXPL 2"	Lat. 26° 58′ 19″ N.	Long. 49° 51′ 02″ E.
"EXPL 3"	Lat. 26° 56′ 49″ N.	Long. 49° 52′ 47″ E.
"EXPL 4"	Lat. 26° 55′ 41″ N.	Long. 49° 51′ 35″ E.
"EXPL 5"	Lat. 26° 57′ 32″ N.	Long. 49° 49′ 20″ E.
"EXPL 6"	Lat. 26° 59′ 50″ N.	Long. 49° 49′ 56″ E.

RESTRICTIONS: The Port can be approached 24 hours daily.

MAX. SIZE: Berth Nos. 1 to 8: Max. acceptable draft 11.4 m. Berth Nos. 9 to 16: Max. acceptable draft 13.6 m.

HEALTH: Quarantine Free Pratique as per International Rules and Regulations. Health Officer will board when the ship is moored.

VHF: Jubail Port Control continuous watch is maintained on Channel 16. Working on Channel 66. Radar Surveillance Channels 17 and 69.

RADAR: Surveillance and Control System Operational.

Position: Lat. 27° 11′ 39″ N., Long. 49° 57′ 26″ E.

Structure: Grey circular concrete tower with white radar scanners atop.

Height: 43 m. from ground to radar antenna.

Light: Fixed red warning light atop antenna.

Continuous radar surveillance is maintained by the Saudi Ports Authority over the whole extent of the modified Jubail Ports Approach Channel. All ships should inform Jubail Ports Control on VHF Channel 66 prior to entering or crossing this approach channel.

TUGS: 8 tugs ranging from 900 h.p. to 5500 h.p. are stationed at Jubail, of which five have Voith Schneider propulsion. 3 mooring launches assist in berthing manoeuvres. All tugs are fitted with fire fighting equipment.

BERTHING:

Berth Nos. 1 to No. 8, general cargo berths; total length 1,700 m., depth 12 m.

Berth Nos. 9 and 10, multi-purpose berths; total length 600 m., depth 13 m.

Berth Nos. 11 to No. 14, general cargo berths; total length 1,000 m., depth 13 m.

Berth Nos. 15 and 16, container terminal; total length 520 m., depth 14 m. Equipped with 2 Ro-Ro ramps for stern and quarter ramp vessels.

Storage Facilities: 10 transit sheds with a total of 87,000 sq.m. and open storage area of 290,000 sq.m.

Cargo Handling Facilities: 67 forklift trucks ranging from 3 to 35 tons, 19 mobile cranes ranging from 20 to 100 tons, 19 head trucks and tow motors, 40 trailers, chassis and cargo dollies of up to 100 tons, 20 weighbridges of 60 tons capacity. Discharge/load normally effected by ship's gear.

Container Terminal: Storage facilities: 135,000 sq.m. total terminal area. 100,000 sq.m. Container Storage Area, 14,000 TEUs stacking capacity, 120 plug-in facilities for reefer container/trailers (480V., 60 cyc.). Container Freight Station 18,000 sq.m., 60,000 sq.m. storage area. Empty Container Storage Area for long term storage outside Customs area.

Container Handling Equipment: Four container gantry cranes of 30.5 tons under spreader; 9 transtainers of 30.5 tons under spreader; 20 head trucks; 44 container chassis; 18 electric forklifts; 2 forklift trucks of 20 tons; 2 forklift trucks of 35 tons, 16 weighbridges of 60 tons capacity.

Outer port storage area for lease to port customers: 2 warehouses of 18,000 sq.m.

Bulk Cement Terminal: Silo vessel at anchorage. Storage capacity 30,000 tons, handling capacity 5,000 t.p.d. (800 t.p.h.).

STEVEDORES: First shift: 0700–1900 hrs., second shift: 1900–0700 hrs., 7 days a week. Sufficient gangs available to work 4 hatches on every vessel.

Minimum discharge rates breakbulk cargo: 1,000 tons per berth per day. Container terminal: 20 TEU's per workable crane per hour.

DENSITY: 1030.

MEDICAL: Full hospital facilities available, arranged by the Agents.

FRESH WATER: Available, arranged through Agent.

FUEL: Fuel oil, marine diesel and marine gas oil are available, arranged through Agent.

CONSULS: American Consul General at Dhahran.

SURVEYORS: International Marine Surveyors and Classification Society Surveyors are on call from Dammam.

GANGWAY/DECK WATCHMEN: The Coastguard will station a guard at the gangway to prevent unauthorised boarding and landing.

CUSTOMS ALLOWANCES: Possession and/or consumption of alcoholic beverages including beer, table wines and liquors is strictly prohibited in Saudi Arabia. All alcoholic beverages are to be under lock and key during vessel's stay in port.

No restrictions on tobacco and cigarettes.

HATCHES: Opening and closing is carried out by stevedores.

REPATRIATION: Arrangement through Agent. Distance to Dhahran Airport: 120 km. Airport is served by regular airlines. Jubail Airport under construction.

AIRPORT: Dhahran Airport 120 km.

TIME: Local time is GMT plus 3 hours. All ETAs and other messages should be made in local time.

HOLIDAYS: No holidays apply for stevedores.

SHORE LEAVE: To be arranged through Agents.

REGULATIONS: See "Rules and Regulations of Saudi Seaports".

TELEPHONES: Available.

PORT PROCEDURES: Also see "General" before first port.

Notification to Jubail Port Management:

1. The owners/charterers of vessels bound for Jubail with cargo must give preliminary notice of the vessel's intended arrival to the Port Management by telex or cable either directly or through their Agents on arrival at the first or sole loading port, before loading commences. ETA and estimated quantity of cargo by type must be given with the preliminary notice.

2. On completion of loading cargo the following information must be sent to the Port Management by telex or by cable either directly or through the Agent.
   a. Vessel's name.
   b. Flag.
   c. Length overall.
   d. Expected draft on arrival.
   e. ETA.
   f. Cargo particulars, including nature, weight, tonnage and stowage by hatches.
   g. Any dangerous cargo being carried for other destinations.
   h. If dangerous cargo is being carried, the quantity and class in accordance with the IMDG Code whether to be discharged or in transit.
   i. Expected requirements for bunkers and water.
   j. Name of vessel's Agent.

3. A further notice of ETA is to be sent 5 days, 2 days and 1 day prior to arrival at the port.

Vessels failing to give required notification:

Any vessel failing to comply with the requirements under paragraph 1, above, or arriving later than expected under the revised ETA, may lose its berthing registration.

Cargo Papers and Documents:

1. The following papers and documents must be submitted to the Port Management no later than 72 hours (for vessels with more than 200 Bills of Lading) or 48 hours (other vessels).

Prior to arrival:
   a. 5 copies of the Cargo Manifests for discharge, including any additions or amendments in English:
      10 copies of the original Manifests translated into Arabic.
   b. 2 copies of the Cargo Stowage Plan.
   c. 2 copies of the Hatch List or Bay Plan.
   d. 2 copies of the List of Dangerous/Hazardous Cargo for discharge.
   e. 2 copies of the List of Dangerous/Hazardous Cargo in transit.
   f. 2 copies of the List of Heavy and/or Awkward Cargo which requires special equipment.
   g. 2 copies of the List of any Domestic Wine or Spirits or Cargo of such nature on the vessel and its location or, in the absence of which, a nil return.
   h. A Declaration of Type of Reefer Cargo.

2. All copies of the Manifests must be taken from the Master Manifest.

3. The List of Dangerous/Hazardous Cargo has to show:
   a. The technical name.
   b. The IMDG Class and UN number.
   c. The quantity of each consignment.
   d. The location on board respectively in each container or on each trailer or in each barge.

4. Non-compliance will lead to penalties and/or fines.

General Regulations for cargo stowage and handling:

1. The stowage of cargo bound for ports in the Kingdom of Saudi Arabia must be arranged to ensure simultaneous and optimum rate of discharge from the maximum numbers of hatches compatible with the requirements of sea-worthiness.

2. Where practicable all general and bagged cargo of uniform type and size is to be stacked and secured on pallets to facilitate quick discharge.

3. Bundled steel, profile iron, rebars, etc. shall be fitted with slings or lifting points suitable for multiple handling.

4. Steel sheets shall be strapped and stacked in bundles of approx. 2 tonnes each. Wooden bearers and/or spacers shall be used in loading the bundles to facilitate discharge.

5. Masters and shipping Agents are to instruct their stevedoring contractors at loading port to execute complete separation by Bills of Lading and the manifest, and will be held responsible for non-compliance with this regulation.

6. No damaged package or item is to be discharged from any vessel, barge, pontoon or handling craft until it has been repaired or repacked in such a manner as to permit it to be handled without further loss or damage to contents of the package or the item itself.
   a. Where the original outer carton, box or bag is replaced, the replacement carton, box or bag shall be made in the same manner to allow it to be identified with the Bill of Lading and the manifest.
   b. The Port Management has the right, after notifying Customs, Authorities and ship's Agent concerned, to get rid of or destroy damaged good which may cause harm to installations or public health at the expense of the Owner of the goods or the ship's Agent.

Out-turn Report:

1. After completion of the discharging operation of a vessel the Port will furnish an out-turn report which shall indicate the cargo discharged.

The out-turn report must be signed by the ship or ship's Agent. Refusal to sign does not invalidate the report.

2. The ship's Agent has the option of conducting his own counter-tally. Where this is not done, the Port tally must be accepted. If an independent counter-tally is undertaken by the shipowner/Agent, the Port tally supersedes.

3. The cargo handed over into the custody of the Port shall remain at the entire risk and responsibility of the shipowner or its Agents or owner of the goods while on the port premises. The Port Management shall not be responsible in any way for any damage or loss that may occur to goods while within the port premises, whether such damage or loss was the result of accident or negligence on the part of the Owner of the goods or not, except in the case of wilful or gross negligence of port employees.

Storage of goods:

1. The goods will be stored by the port in accordance with marks and numbers and in Bill of Lading lots in those areas stated in the out-turn report.

2. The Port may store suitable cargo in the open areas.

3. The Port may refuse the storage of goods if:

a. There is insufficient space in the Port.

b. The inherent properties of the goods render it dangerous or impossible.

4. Except for Customs purposes, no goods or materials stored in the Port are to be unpacked on Port premises without the special permission of the Port Management and Customs.

5. Consignees or their Agents shall remove their goods from the Port within 15 days of completion of discharge of the carrying ship or such period as may be announced by the Port Authority.

6. All cargo, irrespective of whether it has been cleared through Customs or not, which has not been removed from the Port within 15 days of completion of discharge of the carrying vessel may be moved to a special area. All such cargo may be sold by public auction 21 days after completion of discharge of the carrying vessel. These periods may be changed by an announcement of the Port Authority.

GENERAL:

Rubbish: It is strictly prohibited to throw any garbage, rubbish or food leftovers into the port and territorial waters of the Kingdom.

Every violation of the provision of this article shall cause the ship's Master to be penalized with a fine of up to 10,000 Saudi Riyals.

Vessels calling at Jubail Port will be supplied with plastic bags for garbage disposal.

The stevedore's ship superintendent must be contacted before the vessel has finished loading/discharging operations to take care of disposal of the bags.

The charge for garbage disposal service will be SR. 300 – per vessel.

Documentation: Jubail Port Management will not permit any vessel to berth if documents have not been submitted as follows:

1. Manifest for vessels with more than 200 Bills of Lading at least 72 hours before arrival.

2. Manifest for all other vessels, Stowage Plans, Hatch List etc., at least 48 hours before arrival.

Jubail Port Management will grant berthing permission subsequently not earlier than 72 hours after receipt of documents as per case 1 and not earlier than 48 hours as per case 2.

Vessels discharging cargo to Aramco Overseas Company (AOC) at the Commercial Port:

General instructions and communications procedures.

1. When carrying vessel leaves loading port, details of tonnage aboard for discharge to AOC and tentative ETA at Jubail should be cabled/telexed to Saudi Arabia telex 601220 (ARAMCO SJ) commencing message "DHAMDDSB/AOC TRAFFIC DHAHRAN".

2. 10, 5, 3 days and 1 day prior to arrival, Master of carrying vessel must transmit updated ETA to "DHAMDDSB/AOC TRAFFIC DHAHRAN" via ARAMCO radio station. (call sign HZY) which operates the following receiving schedules:

Frequency (kHz)	Approx. Range (miles)	Daily Operating Time (GMT)
500	500	Continuous
8480	2,000	0400 – 1800
12811	2,000	0600 – 1800
16960	2,000	1000 – 1100

3. Vessel must proceed initially to Jubail Pilot Boarding Anchorage, contacting the Jubail Harbour Master on VHF Channel 16 upon arrival. The anchorage is approached from Al-Jurayed (Latitude 27° 12′ N., Longitude 49° 57′ E.) and is bounded by the following co-ordinates:

Latitude: 27° 03′ N., Longitude: 49° 44.0′ E.
Latitude: 27° 04′ N., Longitude: 49° 45.5′ E.
Latitude: 27° 03′ N., Longitude: 49° 47.5′ E.
Latitude: 27° 02′ N., Longitude: 49° 45.5′ E.

4. Pilotage is compulsory. Coast Guard officials will normally board with the Pilot to commence initial clearance procedures. Customs and Health Authority will complete clearance once the vessel is alongside berth. For guidance the Port currently offers 14 m. water depth in the approach channel and 12 m. alongside the berths (by prior arrangement, it may be possible to utilise the container berths which offer a depth of 14 m. alongside).

5. The AOC Port Master at Jubail, or his authorised representative, will attend on board alongside berth, once clearance has been completed, in order to accept Notice of Readiness for the vessel. AOC staff will be available on board or at shipside throughout the discharge period to protect the safe discharge of AOC cargo and the AOC Port Master, or his representative, will again attend on board prior to sailing in order to countersign the Statement of Facts for the discharge.

6. AOC discharges at Jubail will generally be on a "free-out" basis but will be accomplished by the Ports Authority stevedores. Charges for stevedoring on AOC free-out cargo will be settled directly between AOC and Saudi Ports Authority. Agents must nevertheless notify the Ports Authority of expected vessel arrivals, booking berth space and stevedoring in accordance with the normal customs of the Port. In submitting manifests for AOC cargo to be the Ports Authority, however, Agents should attach to each manifest written advice that stevedoring charges will be settled by AOC.

7. Certain material to be discharged by AOC at Jubail will have been ordered from Saudi vendors and will be consigned "C&F Jubail Commercial Port Free-Out Discharge" with "Ultimate Consignee ARAMCO" included in the body of the Bill of Lading. Such cargo will be accepted by AOC at Jubail in exactly the same way as cargo consigned directly to AOC and Bills of Lading duly endorsed by the original consignee will be presented.

8. In addition to the normal tallying of cargo by the Ports Authority stevedores, AOC will be carrying out a counter-tallying operation in their own interest. This will be aimed at eliminating the possibility of shortlanding, and recording the factual circumstances of cargo damage and at prompt and accurate reconciliation of discharged and manifested quantities. The co-operation of all Masters and Agents is sought in this activity, particularly in the countersigning of any relevant damage or out-turn reports.

9. All requirements stated in this Notice are those of AOC and are *in addition* to any other procedures required by the Saudi Ports Authority. Any Saudi Ports Authority requirements mentioned herein are for guidance only and should be verified with Saudi Ports Authority.

10. Direct enquiries on operational matters to the Terminal Operations Co-ordination Desk or, failing a reply, to the Assistant Superintendent. Address enquiries on policy matters to the Assistant Superintendent or, in his absence, to the Superintendent. Local liaison at Jubail Commercial Port will be handled by the AOC Port Master or his deputy who will also handle all *urgent* enquiries at night, weekends and holiday periods. Telephone connection to the AOC Port Office is expected in the near future.

11. Until further notice, AOC will be handling only duty exempt cargo through Jubail. Cargo which is dutiable, or subject to import permit restrictions, will normally be routed to Dammam. Exceptionally, if isolated dutiable consignments are inadvertently laden to Jubail instead of Dammam, they will generally be handled at Jubail. Similarly small shipments of duty exempt cargo consigned in error to Dammam will generally be handled at that port. It should no longer be necessary under normal circumstances, therefore, for any cargo to be diverted for discharge to a port other than the one to which it was originally laden.

AUTHORITY: Saudi Arabia Ports Authority, Port of Jubail, P.O.Box 276, Jubail, Kingdom of Saudi Arabia. *Tel:* (03) 361-0600. *Telex:* 631005 JUBPT SJ. *Cables:* Ports Jubail. *Contact:* Hamad Saleh Al-Hawas, Port Director General, Jubail Port Management.

(B) KING FAHD INDUSTRIAL PORT IN JUBAIL.

PILOTAGE: Compulsory. Pilots will board from a fast launch in the vicinity of No. 17 Channel Buoy and the Freighter Anchorage. Pilot boarding equipment must comply with the International Convention for the Safety of Life at Sea 1974. Vessels with a high freeboard must provide an accommodation ladder combined with a pilot ladder.

RESTRICTIONS: Entry possible 24 hours a day.

VHF: A control tower for the Industrial Port is under construction and will be in use late 1983. In the interim period all VHF traffic will be handled by the Commercial Port Control Tower. Continuous watch is kept on Channel 16, Working Channels 12 and 9. It is recommended that the vessels also maintain contact with the Port Management.

TUGS: See "Commercial Port".

Tug VHF Working Channels are 9 – 12. Ship's line will be used, tugs will join vessel in the area of No. 19 Buoy.

BERTHING: This industrial port serves the import and export needs of a vast complex of industry directly adjacent to it. This complex, now nearing accomplishment of the planned construction, finally, will be one of the Kingdom's largest works concentrations, comprising refineries, related petrochemical plants, and a steel mill.

The ship movement inside the boundaries of this harbour and all clearance procedures concerned with vessel entry and sailing will be almost same to that followed in Jubail Commercial Port. This harbour is laid out in 4 distinctive sections, namely:

1. The service facility, with a 6 m. depth quay for port craft and others: 2 ramps module input facility – with an 8 m. depth, capacity 2,000 tonnes; with a 1,000 tonnes slipway and marine yard.

2. The dry bulk terminal, 14 m. depth alongside, with 9 berths totalling 2,300 m. quay wall and a Ro/Ro stern ramp comprising 500,000 sq.m. of workable space.

Intended Berth Allocation:

Berth No.	*Allocation*
21	Sulphur
22	Sulphur
23	Sponge Iron
24	Iron Ore
25	Iron Ore
26	—
27	Fertiliser
28	Fertiliser
29	Alumina

3. The liquid bulk terminal, 16 m. depth, with 7 T-head jetties, for the export of refined products, is under construction.

Intended Berth Allocation:

Berth No.	*Allocation*	
41	Methanol	Saudi Methanol, National Methanol Co., Al Jubail Petrochemical Co. (Petchem III)
42	Chemicals	Saudi Petrochemical Co. (Petchem I)
43	Chemicals	Easter Petrochemical Co. (Petchem IV), Saudi Petrochemical Co. (Petchem I). Arabian Petrochemical Co. (Petchem II)
44	Chemicals	Not given yet.
51	Products	
52	Lube	
53	Lube & Petmark bulk	
54	Future	

Berth No. 41: 3×12 in. Chiksans with QCDC to take ASA 150 8 in. – 10 in. – 12 in. Two meters between the arms. Pump rate max. 2,500 MT/h. using 3 arms. Vapour return by 12 in., ASA 150 hose.

Storage at berth 2×16,500 MT.

Storage at factory 2×25,000 MT.

Loading temperature just below air temperature.

4. The open sea tanker terminal (OSTT), depths alongside between 28 m. to 30 m., is completed and can accommodate 4 tankers of up to 300,000 d.w.t.; initially built for the export of crude oil, the terminal presently is being converted to serve for the export of refined products only.

Intended Berth Allocation:

Berth No.	*Allocation*
61	Products
62	Lube
63	Not allocated
64	Not allocated

CARGO HANDLING EQUIPMENT:

Forklifts:	1×6 tonnes
Mobile Cranes:	1×90 tonnes (Not yet commissioned) 4×40 tonnes 4×15 tonnes
Floating Crane:	200 tonnes at 4.5 m. 100 tonnes at 24 m.
Flatbeds:	3
Mafi:	12

STEVEDORES: 1st shift: 0700–1900 hrs., 2nd shift: 1900–0700 hrs., 7 days a week. Sufficient gangs available to work 4 hatches on every vessel.

MEDICAL: There is a hospital in Jubail. Doctors, Dentist and Ophthalmologist are available, all arrangements to be made by ship's Agent.

TANKERS: See "Berthing".

DENSITY: 1034.

FRESH WATER: Fresh water available at all berths on 14 m. quay and will be at other berths in future.

FUEL: Available ex-barge or road tanker.

CONSULS: The American Consul-General is at Dhahran. A British Consular Official visits Dammam weekly.

REPAIRS: A slipway for the repair of vessels up to 1,000 tonnes d.w.t. and 50 m. length.

SURVEYORS: International Marine Surveyors and Classification Society Surveyors are on call from Dammam.

AIRPORTS: The nearest passenger airport is Dhahran, 120 km. by road, there is a freight airport at Jubail.

TELEPHONES: Connections are being developed.

SHORE LEAVE: Ship's personnel are allowed ashore with special passes issued by the Coastguard, at the request of the ship's Agent. The Coastguard will station an armed guard at the gangway to prevent unauthorised boarding and landing.

BANKS: All major Middle East Banks have branches at Jubail.

GENERAL:

Jubail: A developing town with first class hotel facilities. Dammam is the nearest city, some 100 km. by road.

Emergency Procedures: In the event of any emergency involving human life, fire, chemical or oil spillage the Port Control Tower must be advised immediately on Channel 16 VHF. The Port Control Tower will coordinate all emergency procedures. Masters are reminded that they must notify the Port Management immediately of any accidental discharge of oil or chemicals. Skimming and dispersant craft will be available to deal with any pollution emergency.

Port Regulations: Every vessel which arrives in a port of the Kingdom of Saudi Arabia must have a copy immediately on first arrival.

AUTHORITY: King Fahd Industrial Port in Jubail, P.O.Box 547, Jubail – 31951, Saudi Arabia. *Tel:* (03) 341-6515. *Telex:* 632031 – JUPIPT SJ and 632106 GDHFNM SJ. *Contact:* H.E. Dr. Mohiddeen D. Kayal, Director General.

AGENT: Gulf Agency Company Saudi Arabia, P.O.Box 12, Jubail, Saudi Arabia. Cables: "Confidence", Jubail. Telex: 631030 ("GAC SJ"). Tel: 3611064, 3611052, 3613072. After office hours: 3611455, 3613458.

RABIGH (Sherm Rabegh): 22.48 N. 39.01 E.

The Petromin refinery port of Rabigh, located 160 km. North of Jeddah, is presently under construction and expected to be ready for operations in 1984-85. Facilities planned include:

A liquid cargo basin dredged to 26 m. and fitted with pontoons for the berthing of VLCCs.

A bunkering basin dredged to 9 m.

A facility for handling commercial cargoes dredged to a depth of 11 m.

A complete range of support services and facilities will be provided.

RAS AL-KHAFJI: 28.25 N. 48.32 E. (See Plan Book)

The port is located in the offshore area of the Divided Zone of the Kingdom of Saudi Arabia and the State of Kuwait.

The onshore base lies in position approximately Lat. 28° 25′ N., Long. 48° 31′ E., and within a distance of 7 miles (13 km.) offshore the Company has two four-buoy system berths and two single-buoy-mooring system berths for loading tankers, and also an anchorage area for dry-cargo ships. Outside of this distance there is an anchorage area for tankers. These berths and anchorage areas are situated in the territorial waters of the Kingdom of Saudi Arabia.

In addition to exporting crude oil, fuel oil and naphtha are also exported.

APPROACHES: The approaches to Ras Al-Khafji are marked on the appropriate U.S.N.O. and British Admiralty Charts, and deep enough for the majority of vessels visiting the Port to proceed with normal caution using the buoys (Buoys No. 1 and No. 2) as centre line and both side markers (Buoys No. 3 – No. 8). A single patch with a depth of 56 ft. (17.07 m.) marked by Buoy No. 4 exists close to the passage. A patch of minimum depth of water 70 ft. (21.34 m.) exists in the passage 0.6 miles S.S.E. of Buoy No. 7.

All the geographical positions shown are intended for reference purpose only. Users are reminded that certain differences are known to exist between the positions herein and those on the U.S.N.O. and British Admiralty Charts of the area.

The U.S.N.O. Chart Nos. 62422 and 62430 are recommended for navigational use in this area.

For oil tankers arriving at Ras Al-Khafji without the necessary charts, the full information will be given by telegram upon request to "ARABIAOIL KUWAIT" (via "9KK Kuwait Radio Station") a few days before arrival. The same information will be given by telex upon request to the Company's Field Office. Alternatively, if the vessel has VHF, the buoy positions will be given to them upon request to "Ras Al-Khafji" as the vessel approaches, but prior notice of requiring this service should be given in the vessel's arrival message. The navigation message used reads as follows:

"FROM JEZIREH YE FARSI LIGHT 5 MILES OFF ABEAM STEER COURSE 300 DEGREES TRUE FOR 64 MILES TO REACH NUMBER ONE LIGHT BUOY LATITUDE 28° 36.0′ NORTH LONGITUDE 49° 10.0′ EAST RWVS ISOPHASE WHITE TEN SECONDS 10 MILES RAREFL – THENCE STEER 270 DEGREES TRUE FOR 9 MILES TO NUMBER TWO LIGHT BUOY LATITUDE 28° 36.0′ NORTH LONGITUDE 49° 00.0′ EAST RWVS LONG FLASHING WHITE TEN SECONDS 10 MILES RAREFL – THENCE STEER 254 DEGREES TRUE FOR 9.5 MILES TO POINT 0.8 MILE NORTHWARD OF NUMBER FOUR LIGHT BUOY LATITUDE 28° 32.6′ NORTH LONGITUDE 48° 49.0′ EAST RED GPFL FIVE RED TEN SECONDS 6 MILES RAREFL – THENCE STEER 270 DEGREES TRUE ABOUT 2 MILES TOWARD NUMBER SEVEN LIGHT BUOY LATITUDE 28° 33.4′ NORTH LONGITUDE 48° 45.7′ EAST GREEN FLASHING GREEN THREE SECONDS 4 MILES RAREFL – THENCE STEER 243 DEGREES TRUE TOWARD FOR 8 MILES NUMBER NINE LIGHT BUOY LATITUDE 28° 29.5′ NORTH LONGITUDE 48° 37.8′ EAST YELLOW GPFL FOUR YELLOW TEN SECONDS 7 MILES RAREFL MARKS TANKER ANCHORAGE WEST CORNER STOP NUMBER ONE AND TWO LIGHT BUOYS MARK CENTRE LINE OF APPROACH WHICH IS WIDE AND DEEP STOP TWO SHOAL PATCHES NORTHWARD OF APPROACH ARE MARKED BY NUMBER THREE LIGHT BUOY LATITUDE 28° 34.9′ NORTH LONGITUDE 48° 51.5′ EAST YELLOW ABOVE BLACK QUICK FLASHING SIX PLUS LONG FLASHING WHITE FIFTEEN SECONDS 10 MILES RAREFL AND NUMBER FIVE LIGHT BUOY LATITUDE 28° 33.8′ NORTH LONGITUDE 48° 48.0′ EAST YELLOW ABOVE BLACK VERY QUICK FLASHING SIX PLUS LONG FLASHING WHITE TEN SECONDS 10 MILES RAREFL STOP TANKER ANCHORAGE AND PILOT GROUND IS WITHIN 1 MILE RADIUS OF LATITUDE 28° 29.5′ NORTH LONGITUDE 48° 39.0 STOP"

NAVIGATIONAL AIDS: All geographical positions given although approximately correct, are intended for reference purposes only as certain differences are known to exist between these positions and those shown on the U.S.H.O. and British Admiralty Charts of the area.

Conspicuous Marks: The flare stacks in the offshore field and onshore are normally visible at a far distance, but may occasionally be extinguished, and a well structure located 4.5 miles Northward from Light Buoy No. 2 also conspicuous.

No. 1 Flare	Lat. 28° 28.3′ N.,	Long. 48° 57.0′ E.
No. 2 Flare	Lat. 28° 27.0′ N.,	Long. 48° 54.8′ E.
No. 3 Flare	Lat. 28° 29.8′ N.,	Long. 48° 56.0′ E.
No. 4 Flare	Lat. 28° 30.3′ N.,	Long. 48° 58.0′ E.
No. 5 Flare	Lat. 28° 28.5′ N.,	Long. 48° 55.9′ E.
Onshore Flare 1	Lat. 28° 24.5′ N.,	Long. 48° 32.4′ E.
Onshore Flare 2	Lat. 28° 23.7′ N.,	Long. 48° 32.1′ E.
Well Structure	Lat. 28° 40.4′ N.,	Long. 48° 57.8′ E.

Aids to Navigation: See M.E.N.A.S. Notice No. 08/81 after "Services".

DOCUMENTS: *(A) Clearance.* Master should submit following documents to Saudi Arabian Government through Agent (2 copies each):

Maritime Declaration of Health.
Health Condition of Crew.
Details of Air-conditioning.
Crew List.
Vaccination List.
Passenger List (if any).

Note: Forms 1–3 are supplied by the Agent.

(B) Cargo: All the documents listed below except the Ship's Statement of Cargo (Ullage Report) are prepared onshore, and this takes about 1.5 hours after loading completion. The tanker is requested to designate the type of documentation, either early departure or ordinary documentation. The Company usually recommends early departure documentation, either Case I or II. But ordinary documentation can also be requested. In this case, however, it takes a further 30 – 60 minutes before the documents arrive at the tanker. Whenever necessary, the Mooring Master will sign the documents on behalf of the Company.

The following cargo documents are usually to be prepared onshore except (4):

(1) Notice of Readiness
(2) Bill of Lading
(3) Tanker Time Sheet
(4) Ship's Statement of Cargo (Ullage Report)*
(5) Certificate of Discharge**
(6) Master's Receipt of Documents

Note: *Ship's Statement of Cargo includes the items for "Clean Ballast Declaration" and "Dry Inspection" both together in one form, and is to be completed always on board the tanker regardless of Early Departure Documentation.

**Certificate of Discharge should be handed to the tanker's Agent at the port of discharge for certification by the Customs Authorities there. The Agent should then return the Certificates to the Company as soon as possible. Non compliance with this requirement could involve the tanker in serious difficulty as all the member states of the Arab League prohibit the export of any materials through their ports to Israel, and the purpose of the Certificates is to prove that the cargo was not discharged in Israel.

Masters are therefore advised to ensure that their Agents at each discharging port understand this and return the Certificates at the earliest possible moment.

The following is a copy of a letter to a ship's Agent from the Chief of Ras Al Khafji Port. Dated September 1980.

We would like to advise you that effective 1st of Dhul-qadah, 1400 (September 10, 1980) in case you need a port clearance for any vessel under your agency please ensure that ship's crew list consists of name, nationality, date of birth, place of birth, passport/seaman book number and rank. In the absence of this information we are unable to provide you with departure port clearance and you will be held responsible for ship departure delays.

EARLY DEPARTURE DOCUMENTATION: This documentation system aims to assist ships to depart early from this port after they complete loading by saving time awaiting documents. For this reason, relevant tanker documents will be signed previously by ship's Master or signed by their Agents at this port, depending on Master's choice on the request sheet. Completed tanker documents, therefore, will not be despatched to ships after completion of loading.

It must be noted that this system is not compulsory at this port, but it is at Master's option on condition that ships can communicate on Harbour Service VHF Radio or Marine Communication Band 2150 MHz to receive shore figures and time after departure.

READINESS: The Master of each arriving tanker should present a Notice of Readiness to the Company's Mooring Master who will sign it on behalf of the Company. The Notice of Readiness should be tendered at the time of the tanker's arrival at the anchorage area, which is understood to be either the time of dropping the anchor in the anchorage, or if the tanker does not anchor, the time when the Mooring Master boards the vessel.

PILOTAGE: Pilotage is compulsory for arriving tanker's berthing and unberthing at Ras Al-Khafji and a Company's Mooring Master will board the tanker at the anchorage area to take her to her assigned berth. The Company's Mooring Master shall advise the tanker's Master on the manoeuvre and operations relating to berthing, bunkering, connecting and disconnecting the loading hoses. After berthing, the Mooring Master will remain onboard the tanker until she is unberthed and the cargo documents are completed.

Notwithstanding the presence of the Company's Mooring Master onboard, the Master of the tanker remains responsible for his tanker at all times and in all respects.

In the event of any emergency, however, the necessary steps should be taken with the assistance of the Mooring Master.

The Master of each tanker shall give the Mooring Master all information necessary for the safe handling and the safe operation of the tanker while in the berth.

BALLAST: *Prevention of Sea Pollution by Oil:* THE DISCHARGE OF DIRTY BALLAST and/or OIL RESIDUE, BILGE and WASTE OIL by any vessel in the GULF area is STRICTLY PROHIBITED. The Company strongly requests all vessels to observe this rule of sea pollution prevention by oil in conformity with the Saudi Arabian Government's policy objectives as well as their Ports, Harbours and Lighthouses Regulations along with the relevant rules, which are substantially as follows:

In the event of oil pollution of the sea by any vessel, Masters are liable to possible imprisonment and fine, in addition to the refundment of all clean-up costs and damages sustained by any party. Should Masters fail to comply, they may be detained by the Authorities. Shipping Agents will be required to warrant Master's compliance.

Since the terminal has no facilities to receive dirty ballast, oil tankers arriving with dirty ballast will be requested to collect dirty ballast into one tank of the tanker, otherwise load crude oil on top of oil residue.

Recommended Ballast Condition on Arrival: All tankers arriving at this port are required to have sufficient ballast to give a safe draft for manoeuvring in the port. Tankers arriving with insufficient ballast may be required to increase it if the Mooring Master considers it necessary to do so. In good weather conditions, the Mooring Master will permit arriving tankers to start deballasting as they approach the berth in order to save time.

BOARDING: For the benefit of people boarding at the anchorage area, vessels should provide a safe means of access on the lee side.

All vessels are required to provide a safe means of access for personnel boarding and leaving the vessel, and should have their accommodation ladder rigged on the port side. In the case of tankers assigned to Berth No. 3 or No. 4 an accommodation ladder which leads down forwards is liable to be blocked by the floating hoses, and in such a case the ladder should be rigged on the starboard side. A ladder aft is always suitable on the port side.

ANCHORAGE: *Ocean Tankers Anchorage Area:* The oil tankers anchorage area is designated within 1 mile radius from:

Lat. 28° 29.5′ N., Long. 48° 39.0′ E.

Two Light Buoys (No. 9 and No. 10) mark the Western limit and Southern limit of this area respectively. The depth of water varies from 70 ft. (21.34 m.) to 77 ft. (23.47 m.) with a good holding ground of clayey mud. Oil tankers awaiting berthing should anchor as close as possible to these buoys.

Dry-Cargo Ships Anchorage Area: The anchorage area for dry-cargo ships is located about 5.5 miles to the S.W. of the oil tanker anchorage area, and is centred in position: Lat. 28° 26.8′ N., Long. 48° 33.4′ E. at which position a yellow Light Buoy (No. 14) showing a flashing yellow light every 3 seconds has been laid. Dry cargo ships should anchor within 0.5 mile radius of this buoy, where the depths are between 36 ft. (10.97 m.) to 50 ft. (15.24 m.) in a good holding ground of clayey mud.

Prohibited Area from Navigation, Anchoring and Fishing: An area bounded by straight lines joining the following points is prohibited from anchoring and fishing due to the presence of Wellheads, Flow Stations, Gathering Station, etc. and the numerous pipe-lines and power transmission cables on the sea bed.

Additionally, the area bounded by the following 6 points (f) – (j) and (m) is prohibited from navigation of any oil tankers and vessels or craft except those operating on direct instructions from the Company.

(a)	Lat. 28° 24′ 48″ N.,	Long. 48° 31′ 57″ E.
(b)	Lat. 28° 25′ 33″ N.,	Long. 48° 32′ 55″ E.
(c)	Lat. 28° 26′ 45″ N.,	Long. 48° 35′ 16″ E.
(d)	Lat. 28° 25′ 50″ N.,	Long. 48° 35′ 40″ E.
(e)	Lat. 28° 29′ 04″ N.,	Long. 48° 52′ 34″ E.
(f)	Lat. 28° 32′ 00″ N.,	Long. 48° 54′ 00″ E.
(g)	Lat. 28° 35′ 00″ N.,	Long. 49° 00′ 00″ E.
(h)	Lat. 28° 32′ 00″ N.,	Long. 49° 04′ 00″ E.
(i)	Lat. 28° 28′ 00″ N.,	Long. 49° 04′ 00″ E.
(j)	Lat. 28° 24′ 00″ N.,	Long. 48° 52′ 00″ E.
(k)	Lat. 28° 26′ 53″ N.,	Long. 48° 52′ 00″ E.
(l)	Lat. 28° 23′ 13″ N.,	Long. 48° 31′ 48″ E.
(m)	Lat. 28° 28′ 06″ N.,	Long. 48° 52′ 00″ E.

RESTRICTIONS: *Port Closure:* When the weather and sea conditions develop worse than the below mentioned permissible criteria at the port, mooring operations normally become extremely difficult and unsafe. Therefore, in such circumstances, the Company advises that the port is closed to approaching tankers by VHF and requests the tankers to wait at the Tanker Anchorage Area until the port is reopened.

The Company, however, reserves the right of selective berthing of some vessels with better manoeuvrability even during such period.

Permissible Criteria for all Berths:

Wind Velocity: Up to 20-25 knots depending on direction.
Sea Conditions: Up to 5 ft.

MAX. SIZE:

Berth	*Depth of water at ISLW* (ft.)	*Max. Permitted draft* (ft.)	*Designed tanker size* (d.w.t.)
No. 1	53	47	100,000
No. 2	56	50	100,000
No. 3	62–64	54*	300,000
No. 4	70–73	64‡	300,000

*56 ft. permissible using rise of tide.
‡66 ft. permissible using rise of tide.

HEALTH: *Quarantine and Pratique:* Quarantine Office of the Saudi Arabian Government is maintained at the port, and a Quarantine Doctor or a Quarantine Officer may board the vessel, if he considers it necessary.

The Master is requested to submit the following documents for the Government filing through his Agent:

(a) Crew List
(b) Vaccination List } 3 copies each
(c) Passenger List (if any)

All arriving vessels should despatch the following cable to Quarantine Office at the port 48 hours before their arrival at Ras Al-Khafji Port:

"QUARANTINE KHAFJI (ship's Agent cable address)
vessel's name ETA RAS AL-KHAFJI time and date FLAG __ LAST PORT ______ DESTINATION ______ NO. OF CREW ______ NO. OF PASSENGERS ______ ALL HEALTHY NO SICKNESS NO DEATH VALID CERTIFICATE REQUEST FREE PRATIQUE.
MASTER __________________."

Quarantine fee is collected from any vessel according to her Net Registered Tonnage other than tankers lifting hydrocarbon cargoes.

RADIO: *Notice of Arrival:* Arriving vessels should advise their ETA Khafji at least 72 hours before their arrival through normal radio services. As an alternative to the route through Kuwait Radio Station (call sign: 9KK), these vessels may send their first message through Singapore, Bombay or Bahrain Radio. Confirmation of ETA should be made well in advance before arrival by calling "Ras Al-Khafji" on Channel 16 VHF. Shorter notices may result in delays and failure to give at least 24 hours will result in an addition to allowable laytime in the event a demurrage claim is filed against the Company. After anchoring, these vessels should advise their time of anchoring through VHF, and thereafter maintain a continuous watch on Channel 16 until the Company's Mooring Master boards. "Ras Al-Khafji" VHF station normally works 24 hours every day.

Radio Communications: All radio communications between the Company at Ras Al-Khafji and the vessel are made through the Kuwait Government Radio Station (9KK) in Kuwait, or directly to the Company's Field Office by telex.

Vessels may find it helpful to route their first message through Singapore, Bombay or Bahrain Radio Station as it is sometimes difficult to contact Kuwait Radio Station from a long distance.

All cables should be addressed to "ARABIAOIL KUWAIT". The first message should be sent according to the following form, but any items which are the same as a recent previous voyage to this port may be omitted.

(1) ETA Ras Al-Khafji
(2) Last port
(3) Deballasting time
(4) Quantity and type of cargo and bunker required
(5) Maximum loading rate
(6) Diameter of cargo and bunker connections
(7) Distance from manifold to ship's side
(8) Derrick capacity
(9) Estimated sailing drafts – fore and aft
(10) Whether Ras Al-Khafji is first or second port (when taking part cargo).

Note: Item (10) should only be answered in cases where tankers are taking part cargo at Ras Al-Khafji. If coming second port, the first loading port should be mentioned.

Short-range radio communication can be made with the Terminal Office by calling "Ras Al-Khafji" on VHF Channel 16.

VHF: Short-range communication can be made with Terminal Office by calling "Ras-al-Khafji" on VHF Channel 16. Working Channels are 9, 11, 12, 13 and 14. Vessels should call Ras-al-Khafji several hours before arrival to confirm ETA and receive berthing instructions. After anchoring they should advise their anchoring time and then maintain watch on Channel 16 until the Mooring Master boards. Terminal VHF normally operative between 0400–1400 hrs. GMT, and is used outside these hours by special arrangements with individual ships.

TUGS: The undermentioned tugboats are available for mooring and unmooring purposes.

	g.r.t.	*b.h.p.*	*Towing Power (tons)*
"Chiyoda Maru No. 4"	236	2,200	28.3
"Shark"	360	4,200	45.0
"Shark II"	478	4,200	60.5

One of these tugs stands by near the berths as long as the tanker remains moored.

The undermentioned two mooring boats are used for handling ropes and hoses.

	g.r.t.	*b.h.p.*	*Towing Power (tons)*
"Sarah 6"	106	800	7.0
"Sarah 7"	106	800	7.0

BERTHING:

Berths No. 1 and No. 2:

(a) Sea-Berth No. 1:

Position of manifold:	Lat. 28° 26′ 10″ N., Long. 48° 34′ 57″ E.
Depth of water:	53 ft. (16.2 m.) at ISLW.
Permitted draft:	47 ft. (14.3 m.) max.
Type of berth:	The berth is a conventional 4-buoy system where the tanker moors with 2 anchors and 1 buoy forward and to 3 buoys aft.
Length of berth:	The berth is designed for tankers of 800 ft. (244 m.) length but can be used by tankers of any size, although tankers of less than 650 ft. (198 m.) overall length sometimes experience difficulty in mooring if their lines are less than a full 720 ft. (220 m.).
Submarine pipelines and hoses:	From the ex-Loading Dock 1×26 in. crude oil line and 1×18 in. fuel oil line have been laid to the underwater manifold position. From there 2×10 in. rubber hoses for crude oil and 1×12 in. rubber hose for fuel oil are connected, approximately 270 ft. (82 m.) long and the maximum lifting weight of the 2 crude oil hoses together is 4.5 tons – 5.0 tons. For bunkering purpose one section of 6 in. hose is attached to the end of the 12 in. fuel oil hose.

(b) Sea-Berth No. 2:

Position of manifold:	Lat. 28° 25′ 55″ N., Long. 48° 35′ 28″ E.
Depth of water:	56 ft. (17.1 m.) at ISLW.
Permitted draft:	50 ft. (15.2 m.) max.
Type of berth:	Same as Berth No. 1.
Length of berth:	Same as Berth No. 1.
Submarine pipelines and hoses:	From the ex-Loading Dock 1×26 in. crude oil line and 1×10 in. bunker line have been laid to the manifold position. From there 2×10 in. rubber hoses for crude oil and 1×6 in. rubber hose for bunker are connected to the ship's manifold. All these hoses are approximately 360 ft. (110 m.) in length, and the maximum lifting weight of 2 crude oil hoses together is 4.5 tons – 5.0 tons.

(c) Loading Rates:

Crude oil loading rate at Berths No. 1 and No. 2 is 30,000 bbls./hr. or 4,000 tons/hr.

Fuel oil loading rate at Berth No. 1 is 4,000 bbls./hr. or 600 tons/hr., and at Berth No. 2 is 2,700 bbls./hr. or 400 tons/hr.

(d) Preparation on Board before Berthing: Tankers assigned to Berth No. 1 or No. 2 should have the following ready:

(i) Both Anchors.
(ii) Three ropes forward and 9 ropes aft.
Some wires are acceptable in place of the equivalent number of ropes.
Neither ropes nor wires are available from the buoys.
All ropes and wires should be in good condition and preferably without splices.
(iii) Port derrick rigged for a minimum lift of 5 tons, using a wire runner and hook.
(iv) Two 10 in. ANSI 150 hose connections for crude oil, and 1×12 in. ANSI 150 for fuel oil cargo (at Berth No. 1 only), at the ship's port side manifold.
If ANSI 150 is not available, the company should be advised before arrival.

(e) Mooring and Unmooring: On approaching the berth a ship's line is passed to one tugboat from the centre fairlead aft. This line should be of good strength and made well fast on board.

When in position off the berth, the starboard anchor is let go and slacked away easily to about 9 or 10 shackles on deck. The port anchor is then let go and paid out easily as the tanker swings round into the berth using the tugs and engines as required. At the same time, the starboard anchor is hove in to about 6 or 7 shackles on deck and then made ready for slacking away again.

As the tanker backs down the berth the anchors are slacked away as necessary, and the ropes are sent to the forward (No. 4) Buoy. When the stern passes close to the starboard quarter (No. 1) Buoy the ropes are sent away to this buoy, hove in tight and then put on the bitts ready for slacking if necessary.

Ropes are then run to the port quarter (No. 3) Buoy, hove tight, and the lateral position in the berth adjusted between the port and starboard quarter buoys.

Lastly, ropes are run to the stern (No. 2) Buoy and the tug line also passes to this buoy. The fore-and-aft position is then adjusted between the anchors and the sternlines. A second tug is used to assist in the lateral positioning of the tanker, and 2 mooring boats are used for running the lines to the buoys, these normally taking 3 ropes at a time.

In Wintertime 3 ropes are used to each buoy, but in Summer 2 of these may be dispensed with at the Mooring Master's discretion.

When properly positioned in the berth, the distance from the ship's side to the manifold marker buoy should be about 50 ft. – 66 ft. (15 m. – 20 m.).

When hose disconnection is completed, the tanker unmoors usually by letting go all the lines on Buoys No. 3 and No. 4, followed by those on Buoy No. 2 and lastly those on Buoy No. 1. The tanker then heaves both anchors as necessary until they are up and clear, and the tanker can leave the berth. The tugs are used as required to keep the tanker away from the manifold marker and the mooring buoys.

Mooring Masters may vary this procedure according to the prevailing weather.

(f) Hose Connection and Disconnection: After the completion of mooring, the mooring boat will pull the hose marker buoys to the tanker, and connect them to the tanker's cargo hook of port derrick. The 2 crude oil hoses are lifted together from the seabed by the tanker's derrick, and connected directly to the manifold.

The fuel oil hose at Berth No. 1 is lifted separately and connected in similar manner.

The time taken for hose connection is about 1.0 – 1.5 hours depending on the number of hoses to be connected. Hose disconnection takes about 1 hour.

Connection and disconnection of the cargo and bunker hoses are to be performed by the crew of the loading tanker under the direction of the Mooring Master. Bolts, nuts, gaskets, reducers, etc. will be provided by the Company.

(g) Loading Restriction at Berth Nos. 1 and 2: Due to there being only 1 crude oil pipeline between the ex-Loading Dock and the shore, it is not possible to load tankers in Berth Nos. 1 and 2 simultaneously.

During the night time, berthing operation at Berth Nos. 1 and 2 shall not be carried out to prevent accidents.

Berth Nos. 3 and 4:

(a) Berth No. 3:

Position of buoy:	Lat. 28° 27′ 06″ N., Long. 48° 36′ 28″ E.
Depth of water:	62 ft. – 64 ft. (18.9 m. – 19.5 m.), but 59 ft. (18.0 m.) over the pipelines, at ISLW.
Permitted draft:	Normally 54 ft. (16.5 m.), but 56 ft. (17.1 m.) permissible using rise of tide.
Type of berth:	The berth is a single-buoy-mooring system consisting of a buoy 36 ft. (11.0 m.) in diameter, moored to 6 pendant legs of 3.75 in. extra high strength chain 720 ft. (220 m.) long, and having a rotating deck carrying the pipe-line and mooring connections.
Mooring:	Attached to the mooring connections on the buoy are 2 double 15 in. nylon ropes (120 mm. diameter, breaking strain 250 tons/line), these main ropes supported by floats are 160 ft. (49 m.) long, and have at their free end a 35 ft. (10.7 m.) long stud link chain which includes a "Sister-plate" and a "Slender-link" for receiving the shackles used on the deck of the tanker. From the outer end of this chain there is connected a 10 in. (80 mm. dia.), polypropylene "Pick-up" rope about 165 ft. (50 m.) in length. The chain is hung by large iron buoys coloured red and green.

	A 12 in. nylon "Bollard rope" (97 mm. dia., breaking strain 150 tons/line) about 150 ft. (46 m.) in length is connected between each "Sister-plate" and ship's bollard while tankers moor in berth.
Submarine pipe-lines and hoses:	1×36 in. crude oil line and 2×12 in. fuel oil lines are laid approximately 30,000 ft. (9,140 m.) from the shore to a position off the underwater manifold close under the buoy through the Valve Station, which is located at about 4,000 ft. (1,220 m.) Westward of the buoy. From the underwater manifold the crude oil goes to the buoy through a 20 in. submarine hose; the fuel oil lines are joined at the underwater manifold and the fuel oil is led to the buoy through 1×10 in. submarine hose. From the deck of the buoy the 20 in. crude oil hose and the 10 in. fuel oil hose, which are floating, have a length of 720 ft. (220 m.) to a hose raft, at which position the crude oil hose is divided into 3 strings of 12 in. floating hoses. These, together with the fuel oil hose, extend for a further 150 ft. (46 m.) making a total length of 870 ft. (265 m.) including the raft. At their free end the hoses are paired and connected to 2 large marker buoys each 5 ft. in diameter.

(b) Berth No. 4:

Position of buoy:	Lat. 28° 27′ 54″ N., Long. 48° 38′ 36″ E.
Depth of water:	70 ft. – 73 ft. (21.3 m. – 22.3 m.), but 69.5 ft. (21.2 m.) above the pipe-lines, at ISLW.
Permitted draft:	Normally 64 ft. (19.5 m.), but 66 ft. (20.1 m.) is permissible using rising of tide.
Type of berth:	The berth is a single-buoy-mooring system consisting of a buoy 35 ft. (10.7 m.) in diameter, moored to 6 pendant legs of 3.75 in. extra high strength chain of 855 ft. (261 m.) long, and having a rotating deck carrying the pipe-line and mooring connections.
Mooring:	The particulars of mooring are exactly the same as those of Berth No. 3.
Submarine pipe-lines and hoses:	1×36 in. crude oil and 2×12 in. fuel oil lines from onshore are branched at the Valve Station, which is located at about 16,600 ft. (5,060 m.) Westward of the buoy, by 1×48 in. crude line and 1×16 in. fuel line to Berth No. 4. There is also a 30 in. connecting crude line between the ex-Loading Dock and the Valve Station to raise up the loading rate at Berth No. 4. The above 1×48 in. crude line and 1×16 in. fuel line are laid from the Valve Station to a position off the underwater manifold close under the buoy. From there the crude oil goes to the buoy through a 24 in. submarine hose, the fuel oil is led to the buoy through a 10 in. submarine hose. From the deck of the buoy the 24 in. crude oil hose and the 10 in. fuel oil hose, which are floating hoses, have a length of 810 ft. (247 m.) to a hose raft, at which position the 24 in. hose is divided into 3 strings of 14 in. floating hoses. These, together with the 10 in. fuel oil hose, extend for a further 120 ft. (36.6 m.) including the raft. At their free end, these hoses are connected to large marker buoys each 5 ft. in diameter.

(c) Loading Rates at Berth Nos. 3 and 4: The maximum loading rates of crude and fuel oil at Berth No. 3 are 45,000 bbls.p.h. (6,200 t.p.h.) and 2,700 bbls.p.h. (400 t.p.h.) respectively. At Berth No. 4 these are 62,000 bbls.p.h. (8,500 t.p.h.) and 3,400 bbls.p.h. (500 t.p.h.).

(d) Preparation Onboard before Berthing at Berths No. 3 and No. 4: Before arriving at the anchorage, tankers assigned to Berth No. 3 or No. 4 should have ready the following:

(i) Two mooring messenger ropes forward, together with rope stoppers, and also 1 or 2 crow bars.
(ii) Port derrick rigged for 10 tons.
(iii) 3×12 in. ANSI 150 at Berth No. 3 or 3×14 in. ANSI 150 at Berth No. 4 hose connections for crude oil, and 1×10 in. ANSI 150 for fuel oil at the port side manifold. If ANSI 150 is not available, the Company should be advised before arrival.

(e) Mooring at Berths No. 3 and No. 4: The Mooring Master will board from a tugboat which carries the mooring and hose connection materials. Tankers should have their crew stand-by to receive these materials, and should maintain a lee until this is completed.

The Mooring Master will instruct the crew in the setting up of the forward moorings, where 12 in. bollard ropes are made fast round the port and starboard bollard posts with their attached shackles about 12 ft. (3.7 m.) inboard from the panama leads or fairleads as far forward as possible. The size of the fairlead opening should be at least 14 in. to prevent the chain jamming in the fairlead.

On approaching the berth, the tanker should lower a mooring messenger rope from each bow. The mooring boat will take the port rope first, and connect it to the port "Pick-up" rope which should be hove in while the boat returns to take the starboard rope for connection to its "Pick-up" rope. These 2 ropes are then hove in until the chains come into the fairleads, and the shackles can be made fast to the "Sister-plates". The "Pick-up" ropes are then slacked back until the bollard ropes have the weight.

Mooring is then completed, and the usual time from sending away the first line until all fast is about 30 minutes.

Immediately after the tanker moors to SBM, her stern line shall be given to the stand-by tugboat through her middle fairlead to help maintain the tanker in safe position while the tanker is in the berth.

(f) Unmooring from Berths No. 3 and No. 4: After hose disconnection is completed, the weight is taken on the "Pick-up" ropes, the bollard ropes are unshackled, and as the tanker backs off the berth the "Pick-up" ropes are slacked off and then dropped into the water. The tug will come alongside either before or after the tanker backs off the berth, whichever is convenient, and the bollard ropes and the two big shackles are passed to the tug. Unmooring time is usually 10 minutes.

(g) Hose Connection and Disconnection at Berths No. 3 and No. 4: After the completion of mooring, the mooring boat which has been holding the hoses clear during berthing, will bring the hoses to the tanker and connect the hook to the buoy having 1 or 2 hoses, which are usually lifted aboard and connected directly to the tanker's manifold.

The hoses are hung off on 2 in. diameter nylon ropes and lashed to the rail to prevent shock load due to wave action being transmitted to the manifold flanges.

After the first hose has been connected, the second buoy is lifted and the remaining hoses are connected in similar manner. If an arriving tanker requires a loading rate of 5,000 t.p.h. or less at Berth No. 3 and 6,000 t.p.h. or less at Berth No. 4, only 2 crude oil hoses are connected. Hose connection usually takes 2 – 3 hours. Hose disconnection is done in a reverse manner to connection, and takes about 1.5 – 2.0 hours.

Connection and disconnection of the cargo and bunker hoses are to be performed by the crew of the loading tanker under the direction of the Mooring Master. Bolts, nuts, gaskets, reducers, etc., will be provided by the Company.

(h) Loading Restriction at Berths No. 3 and No. 4: Due to there being only 1 crude pipe-line between the Valve Station and shore, it is not possible to load tankers in Berths No. 3 and No. 4 simultaneously.

Berth Loading Control Platform: An oil-well jacket type Berth Loading Control Platform with a rotating light-beacon, typical of an offshore valve station, is located in a position Lat. 28° 27.0′ N., Long. 48° 35.8′ E. about 3,600 ft. (1,500 m.) Westward of Berth No. 3. The light, Fl. R. ev. 10 sec. 16 M. (Ra. Ref.), is visible at a great distance.

Crude floating hose: From S.B.M. to floating manifold length 810 ft., diameter 24 in., test pressure 200 p.s.i., 1 line weight 3,460 kg.

From floating manifold to hose line close to tanker: Number of hoses 3. Nominal size 14 in., length 150 ft. Test pressure 200 p.s.i., weight 2,080 kg.

Floating Bunker Hose: One line of 10 in. diameter. Length 260 ft., test pressure 200 p.s.i., weight 1,210 kg.

Loading rate: Crude 40,000 – 60,000 b.p.h. Bunker light fuel minimum 1,860 b.p.h., heavy fuel minimum 2,000 b.p.h.

Weight of Hose Lines:

Height of Loading Deck above sea surface	*Hose Length*	*Weight 1×14 in. Hose Line (kg.)*	*1×14 in. + 1×10 in. Hose Lines (kg.)*
30 ft. (9.14 m.)	40 ft. (12.2 m.)	3,600	5,500
40 ft. (12.20 m.)	50 ft. (15.2 m.)	4,600	6,100
50 ft. (15.24 m.)	60 ft. (18.3 m.)	5,600	6,700
60 ft. (18.29 m.)	70 ft. (21.3 m.)	6,600	7,300

Note: The above figures include the weight of crude oil, marker buoy, lifting chains and fittings.

LOADING: *Dry Inspection:* Upon completion of deballasting the Mooring Master will inspect the tanker's tanks. If the tanks are not satisfactory, he may require further pumping until they reach the required standard.

Loading Operations: When the tanker is ready in all respects for loading, the tanker's officer must inform the Mooring Master who will transmit the necessary orders to the Central Control Room onshore.

Loading is started by a booster pump, and after everything has been checked and found satisfactory on board, then the loading rate will be gradually increased by starting further booster pumps and then main pumps in sequence until the required loading rate is reached; provided always that the required loading rate is within the capacity of the pumps.

Loading rates can be varied at any time during loading upon 5 – 10 minutes advance notice to the Mooring Master on board. In case of EMERGENCY, the IMMEDIATE STOPPING of all loading can be accomplished.

During loading, any valve operation on the tanker should be reported to the Mooring Master in advance. Especially at the time of Topping Off, the tanker's officer on duty should request the Mooring Master to reduce loading rate prior to any valve closing, in order to avoid any pressure on rubber loading hoses.

When loading is completing, the rate is gradually reduced by stopping first the main pumps and then the booster pumps, one by one according to the request of the tanker's officer. At the final stage of loading only booster pumps should be on the line, and the tanker's officer should tell the Mooring Master to "Stand-by" at least 5 – 10 minutes before finishing it.

Shore pumps will stop about 15 seconds after their control buttons are pressed, but the oil will continue to flow for several minutes.

Any stop notice of loading completion must be given by the tanker's officer as "Shore-stop" is NOT practised at this port.

Overflows and Spillage: In the event of an overflow or spillage during loading, loading will be stopped immediately and will remain stopped unless the Mooring Master is satisfied that all the overflowed oil has been cleared off the deck and there is no longer any unusual danger for resuming loading.

Ullaging and Gauging: After loading is completed, the Mooring Master will witness the final ullaging on board so that the tanker's figures can be calculated.

Onshore the Government and the Company gaugers will take manual gauges of the shore tanks before and after loading to calculate the figures of the Bill of Lading.

MEDICAL: The Company has its hospitals at Ras Al-Khafji. Medical and dental treatment can be given in cases of emergency or serious illness or injury. Epidemic diseases or cases of serious injury or disease requiring operations, etc. are normally transferred to the hospitals in Dammam or in Kuwait. The Company's doctor will not normally attend on board unless the patient is incapable of attending the hospital. Requests for medical attention should be given to the ship's Agent as early as possible before arrival.

FRESH WATER: Not available except in cases of extreme emergency.

STEVEDORES: Dry-cargo vessels calling Ras-al-Khafji to give at least 72 hours notice to Agents to arrange labourers. Stevedores will be arranged from Kuwait. Ship's gear used for discharging which takes place at anchorage into barges.

FUEL: *General Information:* Intermediate fuel oil (IFO) and marine diesel oil (MDO) are supplied as bunker fuel oil to tankers calling at Ras Al-Khafji. Each loading berth has a pipe-line which can deliver intermediate fuel oil. Marine diesel oil is supplied from a barge with a capacity of 200 tonnes for which no extra charge is made.

Bunker Nomination: Owners, Operators or Charterers should nominate their tankers' bunker requirements to the Company's Head Office in Tokyo.

Tankers are requested to confirm the grade and quantity of bunkers required to "ARABIAOIL KUWAIT" via "9KK" through normal radio services at least 72 hours before arrival; or in cases where tankers receive their bunker instructions less than 72 hours away, they should advise their bunker requirements as soon as possible.

Bunkering Operation: Bunker supply to tankers in the berths is normally made while the tankers are discharging ballast and/or loading crude oil. MDO-supply from a barge will be done usually before loading cargo.

Tanker engineers are requested to give all necessary information and assistance to the shore staff attending the bunkering and to pay constant attention to the bunker supply.

Responsibility: Notwithstanding the presence of the shore staff attending the bunkering operation on board, the Master of the tanker remains solely responsible for his tanker at all times and in all respects.

Size of Bunker Connections and Bunkering Rates:

Berth	*IFO*	*MDO (supply from a barge)*
No. 1 (6 in.)	600/300 t.p.h.	80 t.p.h. (4 in.)
No. 2 (6 in.)	400/300 t.p.h.	80 t.p.h. (4 in.)
No. 3 (10 in.)	400/300 t.p.h.	80 t.p.h. (4 in.)
No. 4 (10 in.)	500/300 t.p.h.	80 t.p.h. (4 in.)

Note: In Winter time the rate for IFO decreases due to the low sea-water temperature which increases the viscosity of the oil.

Bunkering for Dry-Cargo Ships: Bunker supply to dry-cargo ships is not available at this port.

CUSTOMS: *Customs Formalities:* Upon arrival, the Master is required to submit to the Customs a manifest of any cargo to be landed at Ras Al-Khafji and to sign a declaration that no intoxicating liquor or drugs will be landed.

A Coastguard accompanied by the ship's Agent boards to seal bonded stores. Dry-cargo ships are boarded by a Customs Officer, a Coastguard and a Quarantine Officer for sealing stores, checking valid certificates and health inspections.

Import of the following articles is strictly forbidden:

(a) Alcoholic beverages, including beer, wine and liquor.
(b) Pornographic literature, photographs, pictures and films.
(c) Explosives.
(d) Firearms or implements of war of any kind.
(e) Religious matters not pertaining to the Moslem faith.
(f) Gambling devices.

The Saudi Arabian Laws and Regulations: The Saudi Arabian Laws and Regulations are strictly enforced, and Masters having any doubts concerning the interpretation of these regulations are urged to consult their Agent. While in port, whether at anchorage or in the berth, the vessel's personnel are under the jurisdiction of Saudi Arabian laws. Taking of photographs while the ship is in the Port of Ras Al-Khafji is prohibited by the Saudi Arabian Government.

All alcoholic beverages, including beer, table wines and liquors are to be under lock and key during the vessel's stay in the Port. The possession and/or consumption of alcoholic beverages is prohibited in Saudi Arabia. Penalties are severe and major delays to vessels can be incurred by the Government investigations of violations.

WATCHMEN: The tanker always has to post at least 2 watchmen on duty: one on the forecastle head to watch and monitor the condition of the mooring ropes and the behaviour of the tanker by forces of wind and tidal current, and another on deck near or within sight of the manifold. They have to report to the Master and the Mooring Master whenever they observe the tanker drifting too close to the berth, or the loading hoses twisted or whenever they recognise anything unusual, so that the Master may properly manoeuvre the tanker and any mishap may be averted.

WEATHER: The local weather at Ras Al-Khafji is similar to that of Kuwait, being hot and dry with little cloud during the long Summer from May to September and considerably colder in December and January.

The prevailing wind in this area is Northwesterly, however winds of varying strength may come from any direction. In Summer, the diurnal sea breeze is light Easterly at about 5 m. – 7 m. per second (10 – 14 knots), and only rarely it increases to 12 m. per second (23 knots). In Winter South-Southeasterly winds of up to 20 m. per second (39 knots) may last one or two days and then veer suddenly to the N.W., often accompanied by gusts or squalls in excess of 20 m. per second. On occasion a type of line squall passes over and winds up to as much as 30 m. per second (58 knots) may be experienced for a short time before settling down to blow for longer periods at 20 m. per second. Little or no warning of these strong squalls is given; they just appear suddenly, often accompanied by thick sand and dust.

In the area of the Sea Berths the waves are prevented from developing by the short fetch of the Northwesterly wind, but waves up to 5 ft. – 6 ft. do occur from this direction. Southeasterly winds raise a short steep sea which quickly reaches 7 ft. – 8 ft. high. This lengthens and increases as the wind freshens and has been known to reach 14 ft. – 15 ft. in the area of the Sea Berths. When the Southeasterly wind veers the swell rapidly decreases but persists for about 24 hours thereafter.

Visibility in the area is generally good, but Northwesterly winds cause rising dust and sand which may reduce visibility to almost zero at times. Haze is common, and on calm hot days mirages are frequent. "Steam fog" may occur at times in the early morning hours resulting in very poor visibility.

NOTICE: M.E.N.A.S. Notice No. 08/81

RAS AL-KHAFJI APPROACH AND CHANNEL BUOYS
CHANGE TO I.A.L.A. SYSTEM "A"
(RED TO PORT)

OUTER CHANNEL LIGHT BUOYS			FORMER CHARACTER		I.A.L.A. CHARACTERISTICS						
STATION			BODY	LIGHT	BODY	LIGHT					
Name Number	Assigned Position	Chart No.	Shape Colour	Rhythm Period Colour	Shape Colour	Rhythm Period Colour	Type of Buoy	Top-mark	Fog Signal	Radar Reflector	Remarks
Ras Al-Khafji Route Light Buoy No. 1	28° 36.0′ N 49° 10.0′ E	3774	PILLAR BWVS	GP.FL(2) W.4 secs.	PILLAR RWVS	ISO W.10 secs.	Mid Channel	Single Red Sphere	—	Yes	—
Ras Al-Khafji Route Light Buoy No. 2	28° 36.0′ N 49° 00.0′ E	3774	PILLAR BWVS	L.FL W.10 secs.	PILLAR RWVS	L.FL W.10 secs.	Mid Channel	Single Red Sphere	—	Yes	—
Showing Shallow Water Light Buoy No. 3	28° 34.9′ N 48° 51.5′ E	3774	PILLAR R	FL R.4 secs.	PILLAR YB	QK.FL(6)+L.FL W.15 secs.	South Card	2 Black Cones, Points Downwards	—	Yes	Previously Numbered as No. 4
Sideline of Channel Light Buoy No. 4	28° 32.6′ N 48° 49.0′ E	3774	PILLAR B	GP.FL(5) W.10 secs.	PILLAR R	FL(5) R.10 secs.	Port Hand	Single Red Can	—	Yes	Previously Numbered as No. 5
Showing Shallow Water Light Buoy No. 5	28° 33.8′ N 48° 48.0′ E	3774	PILLAR R	FL R.3 secs.	PILLAR YB	V.Q.FL(6)+L.FL W.10 Secs.	South Card	2 Black Cones, Points Downwards	—	Yes	Previously Numbered as No. 6
Sideline of Channel Light Buoy No. 6	28° 32.8′ N 48° 47.2′ E	3774	PILLAR B	FL W.4 secs.	PILLAR R	FL R.3 secs.	Port Hand	Single Red Can	—	Yes	Previously Numbered as No. 7
Sideline of Channel Light Buoy No. 7	28° 33.4′ N 48° 45.7′ E	3774	PILLAR R	FL R.4 secs.	PILLAR G	FL G.3 secs.	Star Hand	Single Green Cone	—	Yes	Previously Numbered as No. 8
Sideline of Channel Light Buoy No. 8	28° 31.4′ N 48° 43.9′ E	3774	PILLAR B	FL W.3 secs.	PILLAR R	FL R.6 secs.	Port Hand	Single Red Can	—	Yes	Previously Numbered as No. 9
Showing Western Limit of Anchorage. L.B. No. 9	28° 29.5′ N 48° 37.8′ E	3774	PILLAR R	GP.FL(2) R.6 secs.	PILLAR Y	FL(4) Y.10 secs.	Anchorage	Single Yellow X-Shape	—	Yes	Previously Numbered as No. 10
Showing Southern Limit of Anchorage. L.B. No. 10	28° 28.3′ N 48° 39.2′ E	3774	PILLAR B	FL W.3 secs.	PILLAR Y	FL Y.3 secs.	Anchorage	Single Yellow X-Shape	—	Yes	Previously Numbered as No. 11
Showing Shallow Water Light Buoy No. 12	28° 25.7′ N 48° 36.0′ E	3774	PILLAR R	FL R.3 secs.	PILLAR YB	QK.FL(6)+L.FL W.15 secs.	South Card	2 Black Cones, Points Downwards	—	Yes	—
Showing Pipe-line Light Buoy No. 13	28° 26.1′ N 48° 34.6′ E	3774	PILLAR B	QK.FL W.1 secs.	PILLAR Y	FL Y.4 secs.	Showing Pipe-line	Single Yellow X-Shape	—	—	Newly Numbered
Showing Anchorage area for Dry Cargo Ships Light Buoy No. 14	28° 26.8′ N 48° 33.4′ E	3774	PILLAR R	FL R.3 secs.	PILLAR Y	FL Y.3 secs.	Showing Anchorage	Single Yellow X-Shape	—	Yes	Newly Numbered

M.E.N.A.S. Notice No. 08/81 *(continued)*

LIGHT BUOYS IN LULU OIL FIELD			FORMER CHARACTER		I.A.L.A. CHARACTERISTICS						
Showing North Side of Lulu Well No. 1	28° 46.6′ N 49° 28.6′ E	2884	PILLAR B	FL W.4 secs.	PILLAR BY	QK.FL W.1 sec.	North Card	2 Black Cones, Points Upwards	—	Yes	—
Showing South Side of Lulu Well No. 1	28° 46.5′ N 49° 28.6′ E	2884	PILLAR R	FL R.3 secs.	PILLAR YB	QK.FL(6)+L.FL W.15 secs.	South Card	2 Black Cones, Points Downwards	—	Yes	—
Showing North Side of Lulu Well No. 2	28° 38.9′ N 49° 24.6′ E	2884	PILLAR B	FL W.4 secs.	PILLAR BY	QK.FL W.1 sec.	North Card	2 Black Cones, Points Upwards	—	Yes	—
Showing South Side of Lulu Well No. 2	28° 38.8′ N 49° 24.7′ E	2884	PILLAR R	FL R.3 secs.	PILLAR YB	QK.FL(6)+L.FL W.15 secs.	South Card	2 Black Cones, Points Downwards	—	Yes	—
INNER CHANNEL LIGHT BUOYS											
Inner Channel Light Buoy No. 1	28° 25.4′ N 48° 32.4′ E	3774	PILLAR R	GP.FL(2) G.6 secs.	PILLAR G	FL(2) G.6 secs.	Star Hand	Single Green Cone	—	Yes	—
Inner Channel Light Buoy No. 2	28° 25.3′ N 49° 32.5′ E	3774	PILLAR B	FL W.3 secs.	PILLAR R	FL R.3 secs.	Port Hand	Single Red Can	—	Yes	—
Inner Channel Light Buoy No. 3	28° 25.2′ N 48° 32.1′ E	3774	CAN R	FL R.3 secs.	CAN G	FL G.3 secs.	Star Hand	—	—	—	—
Inner Channel Light Buoy No. 4	28° 25.1′ N 48° 32.1′ E	3774	CAN B	FL W.3 secs.	CAN R	FL R.3 secs.	Port Hand	—	—	—	—
Inner Channel Light Buoy No. 5	28° 25.0′ N 48° 31.8′ E	3774	CAN R	FL R.3 secs.	CAN G	FL G.3 secs.	Star Hand	—	—	—	—
Inner Channel Light Buoy No. 6	28° 24.9′ N 48° 31.8′ E	3774	CAN B	FL W.3 secs.	CAN R	FL R.3 secs.	Port Hand	—	—	—	—
Inner Channel Light Buoy No. 7	28° 24.9′ N 48° 31.6′ E	3774	CAN R	FL R.3 secs.	CAN G	FL G.3 secs.	Star Hand	—	—	—	—
Inner Channel Light Buoy No. 8	28° 24.8′ N 48° 31.6′ E	3774	CAN B	FL W.3 secs.	CAN R	FL R.3 secs.	Port Hand	—	—	—	—
Inner Channel Light Buoy No. 9	28° 24.8′ N 48° 31.5′ E	3774	CAN R	FL R.3 secs.	CAN G	FL G.3 secs.	Star Hand	—	—	—	—

TIDES/CURRENTS: The depths shown on the chart are based on ISLW. The diurnal rise of tide is approximately 6 ft. at the Springs and 5 ft. at Neaps, and the ISLW is 4 ft. below the Mean Sea Level.

The heights of both high and low water are considerably affected by the prevailing weather conditions. Northerly winds tend to reduce the heights of tides and retard them, and Southerly winds increase the heights slightly.

Near the Sea Berths the current flows roughly parallel with the shore, and reverses its direction about 1 hour earlier than the time of high or low water inshore at Ras Al-Khafji. The velocity of the current is approximately 1.5 knots at the maximum.

Both the direction and velocity of the tidal current are much affected by the prevailing weather conditions.

The tidal data for Ras Al-Khafji as compared with that of Mina Al-Ahmadi is given as follows:

Flood tide: Occurs approximately 30 minutes later than Mina Al-Ahmadi.
Height approximately 0.73 times that of Mina Al-Ahmadi.
Ebb Tide: Occurs approximately 20 minutes later than Mina Al-Ahmadi.
Height approximately 1.04 times that of Mina Al-Ahmadi.

"Tide and Current Table" published annually is available from the Company upon request.

REPAIRS: Some minor repairs on board vessels may be made using shore assistance in case of extreme emergency, but such Company's assistance will be provided only on the Master's and the shipping Agent's acceptance for undertaking to pay to the Company all expenses incurred. Preferably all repairs should be carried out at the anchorage area. In all cases when shore assistance is required, the Master should notify the vessel's Agent well in advance.

DRY DOCKS: None.

REPATRIATION: May be accomplished by making special arrangement through the ship's Agent, well in advance of vessel's arrival.

Marine Superintendent of Owners, or Owner's Representatives and businessmen visiting Kuwait must have valid visas. Such visas can be obtained from Kuwait Government's diplomatic missions abroad.

AIRPORT: Crew joining must be routed through Dhahran. Kuwait Airport 110 km. Dammam 325 km.

TIME: GMT plus 3 hours throughout year.

TELEPHONES: No facilities for placing on board.

SERVICES: *Provisions, Deck Stores:* Provisions and deck stores are available from ship chandlers at the Port in limited kinds and quantities. In all cases the ship's Agent should be advised of the requests at the Earliest possible time before arrival.

NOTICE: M.E.N.A.S. Notice No. 08/81 (see Tables on page 1199 and above).

SHORE LEAVE: Not normally permitted by Authorities except by arrangement through the ship's Agent.

AUTHORITY: *Field Office:* Arabian Oil Company Ltd., P.O.Box 256, Ras Al-Khafji, Divided Zone, Saudi Arabia. *Tel:* 03-7660555. *Telex:* 641011-ARBOIL SJ. *Contact:* The Superintendent, Terminal & Shipping Department, Field Office.

Dammam Office: Arabian Oil Company Ltd., Dhahran Street, Social Insurance Building, 6th Floor, Dammam, Saudi Arabia. P.O.Box 154 Dammam, 31411 Saudi Arabia. *Tel:* (03) 8269361, 8264115. *Telex:* 601006-ARBOIL SJ.

AGENT: See "Ras Tanura".

RAS AL MISHAB: 28.13 N. 48.43 E.

PILOTAGE: Pilotage is compulsory and only available in daylight hours (0600 to 1700 hrs.) 7 days a week with short notice prior to vessel's arrival.

Vessels calling at Ras Al Mishab are requested to contact Ras Al Mishab Harbour Office on VHF – Channel 16 prior to arrival at Pilot Buoy, (Buoy No. 5 of Ras Al Mishab Approach Channel) which is located at Lat. 28° 13′ N., Long. 48° 43′ E.; do not proceed beyond this point before consulting with Ras Al Mishab Harbour Office, which is available from 0600 to 1700 hrs. every day except Friday.

APPROACHES: Do not use the old recommended track to Bandar Mishab shown on British Admiralty Chart No. 3774 and U.S. Hydrographic Chart 62422 unless corrected. Ships arriving should follow Ras al Khafji Approach Channel Buoy No. 1 (Lat. 28° 36′ N., Long. 49° 10′ E.) and Buoy No. 2 (Lat. 28° 36′ N., Long. 49° 00′ E.). From Light Buoy No. 2 proceed on a course of 253°(T) for approximately 5 miles and the following is the new approach channel to the anchorage and entrance channel of Ras al Mishab.

The dredged channel of 4 miles is well marked by the buoys and 2 pairs of ranges that lead vessels in and out of the port.

NOTICE: M.E.N.A.S. Notice No. 138/80 (see Tables on page 1201).

ANCHORAGE: Anchorage area is between Buoy Nos. 4 and 5.

RESTRICTIONS: Daylight berthing and unberthing only.

MAX. SIZE: Max. allowed draft at present time is 33 ft. However, after completion of works on expansion of the port, which is under way, port expected to accommodate vessels up to 35 ft. draft regardless of length and/or tonnage.

TUGS: The port has 2 tugboats available to assist vessels in docking and undocking as well as any other service to be rendered in case of need for assistance. Each tugboat is capable of generating 2,000 h.p.

VHF: See "Pilotage".

BERTHING: Ras Al Mishab is a new deep water sea port with 2,400 ft. of berthing space. The turning basin of 1,250 ft. radius provides safe manoeuvring.

The pier is 18 ft. high above the water and accordingly not suitable for Ro/Ro cargo operation, however, the harbour is well equipped for receiving any type and size of cargo including heavy lifts and bulk cement up to 24,000 tons. Silo capacity 25,000 tonnes.

The harbour is fully equipped with forklifts, discharging gear, spreaders for 20 ft. and 40 ft. containers. portable cranes up to 300 tons capacity, all handled by professional stevedores.

NOTICE: M.E.N.A.S. Notice No. 138/80.
The following alterations to I.A.L.A. System "A" buoyage have been carried out in the Ras Al Mishab channel.

RAS AL MISHAB			FORMER CHARACTER		I.A.L.A. CHARACTERISTICS						
STATION			BODY	LIGHT	BODY	LIGHT					
Name Number	Assigned Position	Chart No.	Shape Colour	Rhythm Colour	Shape Colour	Rhythm Colour	Type of Buoy	Top-mark	Fog Signal	Radar Reflector	Remarks
Mishab Approach Channel Buoy No. 1	28° 34.70′ N 48° 55.00′ E	3774	PILLAR BW	QK.FL W	—	—	—	—	—	—	EXPUNGE
No. 1 Buoy New Position	28° 32.20′ N 48° 53.50′ E	3774	—	—	PILLAR YBY	QK.FL(9) W.15 secs.	W CARD	(W)	—	YES	—
No. 2 Buoy	28° 30.00′ N 48° 51.20′ E	3774	PILLAR BW	FL W.10 secs	SPH RWVS	L.FL W.10 secs.	SAFE	—	—	YES	—
No. 3 Buoy	28° 25.00′ N 48° 47.20′ E	3774	PILLAR BW	FL W.15 secs	SPH RWVS	ISO W.6 secs.	SAFE	—	—	YES	—
No. 4 Buoy	28° 19.00′ N 48° 45.20′ E	3774	PILLAR BW	FL W.5 secs.	SPH RWVS	L.FL W.10 secs.	SAFE	—	—	YES	—
No. 5 Buoy	28° 13.00′ N 48° 43.00′ E	3774	CONE B	QK.FL W	CONE B	QK.FL G	STAR	—	—	YES	—

FRESH WATER: Not available.
FUEL: Not available.
GENERAL: Provision not available at this port, and it is suggested that vessels calling to Ras Al Mishab, secure their needs at other ports. Only emergency medical attention shall be provided if requested by Master.

No shore leave is permitted in this port except for the Master for business purposes, the Port Regulations are to be strictly observed by all vessels.

Any other matters such as crew changes, emergency repairs provisions, etc., shall be handled through local Agent.

SHIPMASTER'S REPORT: September 1980.
Pilotage: Pilot boards 3 miles South of Buoy No. 5G.
Berthing: A new berth built 2 years ago at right angles to land with dimensions about 1,000 m. length and 250 m. wide, accommodating 8 ships, 4 on each side. 1 berth is for cement in bulk, having silo. (Sea Island berth is severely damaged and abandoned).
Stevedores: Working day and night in 3 shifts.
Clearance: Vessels are cleared any time during day whilst alongside. (We arrived alongside Thursday 1600 hrs. and we were cleared).
Tugs: 2 tugboats available.
Port facilities: 1 mobile crane 300 tons and 1 mobile crane 50 tons.
Agent: On VHF Channel 16.
AGENT: See "Dammam".

RAS TANURA: 26.38 N. 50.10 E. (See Plan Book)

ALSO SEE "JU'AYMAH" SECTIONS A and B.

(A) GENERAL INFORMATION
(B) REGULATIONS
(C) RAS TANURA TERMINAL

(A) GENERAL INFORMATION

This section contains important information for all ships proceeding to any Terminal in the Port of Ras Tanura.

NAVIGATION:
NAVIGATIONAL AIDS: In May 1981, the buoyage system in the Port of Ras Tanura was changed to the I.A.L.A. System (Region A).

Notices to Mariners have been promulgated concerning these changes.

INBOUND TRAFFIC PROCEDURES: All inbound vessels shall establish early radio contact with ARAMCO.

(a) A vessel with no special instructions or with instructions to proceed to the Northern Holding Anchorage should make for a position approximately 2 miles North of Ras Tanura Light Float (in position: Lat. 27° 05.6′ N., Long. 50° 57.5′ E.); enter the inward channel of the Separation Scheme and then pass the Approach Buoy and the Entry Buoy. The vessel should then proceed into the Northern Holding Anchorage and anchor. After anchoring, the vessel shall immediately advise ARAMCO by radio and Ras Tanura Pilots on VHF of anchoring time and keep a listening watch on VHF Channel 16 and traffic lists for further instructions.

(b) A vessel with instructions to proceed directly to Ras Tanura Terminal, Ju'aymah Crude Terminal or Ju'aymah L.P.G. Terminal should proceed as above to the Entry Buoy and as described under the individual terminal.

ANCHORAGES: The Port of Ras Tanura is an open roadstead but some protection is afforded by shoals and land to such an extent that vessels do not experience heavy movement.

Holding ground in all of the anchorages is fair and it is recommended that anchored vessels lie to a long scope of chain whenever the weather is unfavourable.

The Northern Holding Anchorage is located on the North side of the Ras Tanura Separation Scheme West of the Entry Buoy and North of No. 3 beacon (Racon). This anchorage covers an area of approximately 30 square miles with depths between 82 ft. and 150 ft. (25 m. and 46 m.).

This anchorage is intended as an initial holding area for incoming vessels which, because of berthing prospects, congestion or other reasons will not be berthed on arrival. Anchorages for the individual terminals are described in Ras Tanura Section (B) and Ju'aymah.

MAXIMUM DRAFT IN ARRIVAL CHANNEL: See Section (B) for maximum arrival draft Ras Tanura Terminal (54 ft. + Height of Tide). See Ju'aymah Section (A) for maximum arrival draft Ju'aymah Crude Terminal (70 ft.). Masters of vessels arriving partly loaded or deeply ballasted should navigate with caution in the vicinity of position: Lat. 26° 50′ 30″ N., Long. 50° 10′ 30″ E.

RADAR SURVEILLANCE ADVISORY SYSTEM:
See "Regulations" – Traffic Regulations.

This system is available to provide information and to continuously monitor the movement of all ships in the Port of Ras Tanura.

In addition to identifying, tracking and monitoring ship movements to and from the Terminal areas by means of computer assisted radar and video tape recording, the following services may be provided to vessel Masters:

(a) Advice on channel and port conditions, congestion, weather, tides, navigational aids, etc.
(b) Advice upon the movement of other vessels, dangerous manoeuvring situations and vessels violating port regulations.
(c) Advice upon port regulations regarding the movement of deep draft vessels and the priorities of vessels movements. (It may be necessary for vessels arriving in ballast to reduce speed to permit safe passage for outgoing deep draft vessels).
(d) Advice on berthing prospects and anchoring conditions.

The service has been established in order to increase the safety of ships navigating in the Port of Ras Tanura. However, it is an information and advisory service only and in no way assumes control of or responsibility for ships navigating in the area.

CHARTS AND PUBLICATIONS: Surveys by American and British Authorities in recent years have resulted in the publication of a number of charts of the Port of Ras Tanura and its approaches:

U.S.	or	B.A.
U.S. 62414	or	B.A. 3788
U.S. 62415		B.A. 3777
U.S. 62416		B.A. 3776
		B.A. 3813

Vessels proceeding to the Port of Ras Tanura should be in possession of the latest issues of the above charts or their equivalent. "Sailing Directions" and "Lists of Lights" are published by American and British authorities; these publications should also be available on board.

Navigational Warnings and weather forecasts are broadcast by ARAMCO "HZY" Radio and by commercial radio stations in the Arabian Gulf.

These should be copied well in advance of arrival.

METEOROLOGICAL INFORMATION:

Winds in the area are not predictable for more than a very few hours and may come from any quarter at varying strength. The prevailing wind is from the N.N.W.

Winds of any strength tend to create short steep seas coming up quickly and calming down just as rapidly. Easterly winds however cause heavy seas and swells which can last for a considerable period. For a more complete description of the winds of the Arabian Gulf, refer to "Sailing Directions".

Visibility in this area of the Arabian Gulf is generally fair to excellent, but at times fine dust is held in suspension in the atmosphere and visibility is reduced to a very short distance. This phenomenon is more deceptive than fog in that mariners are apt to believe visibility to be greater than it actually is. Dense fog with or without sand or dust may occur in the morning hours.

Climate of Ras Tanura is comparatively favourable for the Arabian Gulf. The exposed position of the port permits the winds to mollify the heat of Summer. Temperatures have been recorded in previous years as follows: Absolute Maximum 45.6°C (114°F) in June, Mean Maximum 38.4°C (101.1°F) in August, Mean Minimum 12.5°C (54.5°F) in January, Absolute Minimum 0.0°C (32°F) in January.

During most of the year, the relative humidity is high and during late Summer and Fall it frequently exceeds 85%.

Proper precautions should be taken to avoid sunstroke and heat exhaustion particularly during the Summer and early Fall months. Air conditioning plants aboard ships should be in good working condition at these times in view of the necessity to close down accommodation whilst loading dangerous cargoes.

TIDES AND CURRENTS: The depths quoted in U.S. "Sailing directions" and charts of the Arabian Gulf and the datum used by ARAMCO are based on Indian Springs Low Water (ISLW).

Locally the diurnal tide rise is approximately 8 ft. (2.44 m.) at Springs and 5 ft. (1.52 m.) at Neaps. More detailed description of tides and currents in the locality can be found in the "Sailing Directions".

Due to the configuration of the coastline, a system of tidal currents prevail with flood tide setting towards South or S.S.E. and ebb setting towards North or N.N.W.

DOCUMENTS:

GENERAL: All contact between ships and the Saudi Arabian Government and Officials is to be made through the ship's Agent who will advise on specific rquirements and documentation.

The following sections are for guidance only.

ARRIVAL DOCUMENTS: The following must be available to the Agent and boarding Government Officials:

(a) Maritime International Declaration of Health.
(b) Valid Deratting or Exemption Certificate.
(c) Crew List (including supernumeraries) up to 6 copies.
(d) Valid Smallpox Vaccination Certificates.
(e) Valid Inoculation Certificates against communicable diseases prevailing at previous ports of call.
(f) A complete set of log books for the period since the vessel's last visit to Ras Tanura OR for the period since new OR since April 25, 1952.

NOTICE OF READINESS: At all terminals in the Port, to be addressed to ARAMCO Ras Tanura.

EARLY DEPARTURE PROCEDURE: Use of this special service is encouraged and should be requested at the earliest opportunity.

Close co-ordination with the Agent is required in order to expedite the delivery of the required documentation to the ship.

It is essential that Radio contact with ARAMCO be maintained after departure until cargo quantities are received and the Agent has been authorised to sign documents.

DEPARTURE DOCUMENTS: The following three documents MUST be on board before the vessel departs even though the ship has been RELEASED to sail by ARAMCO.

(a) Bill of Lading: Completed by ARAMCO except for the cargo quantities. The Agent will deliver a copy to the Master who will enter the quantities as advised by radio after departure. The Master will then authorise his Agent to sign the original on his behalf.

(b) Permit of Departure: Completed by Agents with information supplied in the quarantine radio message and delivered by them to the vessel prior to departure.

(c) Port Clearance (Sailing Report): Completed in Arabic with information gathered by the Agent and delivered by them to the vessel prior to departure.

BERTHING:

FACTORS: Vessels calling at the Port of Ras Tanura are assigned berths based on a variety of factors including but not limited to the following: nomination date, time of arrival, product to be loaded, vessel size, available berths and loaded draft. If there are no immediate berthing prospects vessels will be directed to anchor in the Northern Holding Anchorage.

DOUBLE BERTHING: ARAMCO reserves the right to advise vessels at which berth or berths and/or Terminals the loading will start and finish.

MOORINGS: All arriving vessels of 75,000 d.w.t. and over shall comply with the wire mooring line requirements detailed in Part "B" – Mooring Regulations.

During periods of unsettled weather, arriving vessels of under 75,000 d.w.t. fitted with wire moorings are preferentially berthed.

BALLAST: Vessels shall complete the deballasting operation promptly after berthing in order to minimise time at berth. Simultaneous loading and deballasting is permitted provided that the vessel has positive segregation between the two operations. Owners/Operators or Charterers of vessels requiring time to deballast in excess of what ARAMCO considers standard will be so notified by letter with a copy to the Master.

No facilities for the reception of dirty ballast are available in the Port of Ras Tanura.

PILOTAGE:

CHANNELS: The channels of the Ras Tanura Separation Scheme ar marked by lighted radar-reflecting beacons and buoys. Channel Pilot are not provided.

BERTHING: The use of Harbour Pilots is compulsory for all vessel calling at the Port of Ras Tanura to use any of the terminal facilities.

Harbour Pilots moor, unmoor and supervise the movements of a vessels in the vicinity of the berths. ARAMCO Harbour Pilots are on dut continuously and at present their services are provided without charg for normal operations, although ARAMCO reserves the right to charg for these services.

PILOT BOATS: 3 steel-hulled pilot launches named El-Alat 9, 10 and 11 are available. They have 1500 h.p. engines and a cruising speed of 14 knots. They are 87 ft. long and have a freeboard of 6 feet.

These launches carry regulation pilot boat signals, are equipped wit radar, VHF radio and are painted white with green hull. The word PILOT is painted in white on the hull.

Also see "Regulations".

TUGS:

DESCRIPTION OF TUGS: ARAMCO operates the following harbou tugs:

3 single screw conventional tugs of 4,000 h.p. with Bollard Pull of 55 tons.

3 twin screw flanking rudder tugs of 6,000 h.p. with Bollard Pull of 72 tons.

3 Voith Schneider propulsion tugs of 4,000 h.p. with Bollard Pull of 40 tons.

METHOD OF USE: These tugs may be encountered at any of the terminals in the Port of Ras Tanura.

Tug's lines are used but vessels should have good quality ropes available to supplement these in periods of bad weather.

At present no charge is made for the tugs when used in norma mooring and unmooring operations but a charge is made for additiona or unusual services.

HELICOPTER OPERATIONS:

GENERAL: Helicopter operations in the Port of Ras Tanura are carried out according to the "International Chamber of Shipping – Guide to Helicopter/Ship Operations" All ships using the service should have a copy of this information and the safety check list on board.

DESCRIPTION OF HELICOPTERS: The helicopters used to transport ARAMCO personnel and equipment to and from tankers in the Port of Ras Tanura are Bell Model 212 and 214 which are twin-engined, kerosene fuelled, carry 11 to 18 passengers.

They are fully equipped for night operations and operate both day and night, with capability for either landing or winching operations as required and permitted.

In addition to being fitted with radar and radios which operate on aeronautical frequencies, the helicopters are fitted with International Marine VHF Ship/Shore Channels 11, 12, 13, 14 and 16.

SHIP INFORMATION: The following ship information should be available to the pilot of the helicopter:

1. Ship's name and call sign.
2. Owner.
3. Port and Country of Registry.
4. Type and Size.
5. Inert gas system installed.
6. Type of deck operating area provided for helicopters.
7. Type, size, markings and location of "Manoeuvring Zone" and "Clear Zone" provided for helicopters.
8. Obstacle types, sizes, markings and locations within and adjacent to helicopter operating area including antennae, handrails, davits, catwalks, valves, piping, etc,
9. Floodlight locations and wattage.
10. Communication frequencies available and those which are guarded continuously.
11. Special conditions, limitations and precautions applying to the particular vessel.

This information is kept on file in the Helicopter Dispatch Office and will be regularly updated.

If the conditions aboard the ship do not agree with the file, the differences must be resolved before a helicopter is dispatched to a ship.

COMMUNICATIONS:

(a) **The Initial Contact** will be made by the helicopter Pilot with the ship on V.H.F. Channel 16 and the working Channel 12 as soon as practicable to confirm the rendezvous time and location, type of service intended, etc.

(b) In the event of **Radio Communication Failure** the helicopter will circle the ship and the ship should reply by signalling lamp with:

1. Steady white light: Ready to receive helicopter
2. Series of short flashes: Reception of helicopter delayed for a period not greater than 15 minutes.
3. Prolonged series of "N" signals: Reception of helicopter delayed for a period in excess of 15 minutes. In this case the helicopter will return to base.

(c) **Initial Navigation Contact.**

The helicopter Pilot will at the appropriate time use the agreed VHF working frequency to request the ship to transmit its call sign on 410 kHz and then to transmit a continuous signal (locked Key) for a sufficient time to determine the bearing to the ship and identify it on the radar.

SAFETY: The Port of Ras Tanura maintains a vigorous cargo handling safety programme.

ARAMCO is a member of the Oil Companies International Marine Forum (O.C.I.M.F.) and as such follows the procedures and safety practices recommended by this international organisation.

As is the practice in other Arabian Gulf Ports, each ship's Master is presented with a form entitled "Declaration by Master" which lists ARAMCO safety regulations. After a detailed review of each safety item with the ARAMCO Safety Representative, the Master must sign the form. Prior to start of loading and later at several times during the loading, ARAMCO Safety Representative will visit the ship and accompanied by one of the ship's officers will check to ensure that safe loading practices are being observed by both the ship and the shore crews.

In cases of blatant or repeated infringements of the Safety Regulations ships will be removed from the berth and will not be reberthed until a thorough inspection has been satisfactorily carried out by an ARAMCO Safety Representative.

Also see "Safety Regulations".

EMERGENCY PROCEDURES: The course of action to be followed by ARAMCO Personnel in the event of a fire or explosion on board a vessel while berthed in this Port will be dictated by the particular facts and circumstances of the incident. Although it is impossible to indicate exactly what practices will be applied during an emergency before an evaluation of the specific situation can be made by the responsible ARAMCO representative, his decisions will be based on the following principles:

1. An evaluation of the particular emergency will be made by the responsible ARAMCO Representative to determine the course of action to be taken. His decision as to the course of action will take into account the location, type and extent of fire or explosion, the berth location and proximity of other vessels, and the tidal and wind conditions.
2. A burning vessel will not be permitted to remain at the berth. Where possible, the fire will be fought with available berth fire-fighting facilities until the arrival of tugs. After hook-up of the tugs to the vessel's fire wires, if the fire is not controllable or extinguished, the vessel will be released or cut free and removed from berth under controlled conditions.
3. Where communication facilities permit, the Master or responsible ship's officer will be advised prior to releasing or cutting free a vessel from berth. The Master should designate a responsible senior ship's officer with whom the senior ARAMCO Representative present can communicate in case of a fire or explosion aboard the vessel. Where possible, this officer will be advised of the actions to be taken in releasing or cutting the vessel free from the berth.
4. Although a vessel may have no power it may be released or cut free from the berth prior to arrival of the tugs and hook up to the vessel's fire wires, if in the opinion of the senior ARAMCO Representative present it is a greater hazard at the berth than drifting free. Normally, however, a burning vessel will be removed by tug boats under controlled conditions.

NOTE: The above mentioned Principles are intended to provide the guidelines of action to protect terminal personnel and facilities, and other vessels at the ARAMCO loading berths.

POLLUTION: ARAMCO adopts a vigorous policy of pollution prevention, detection, and clean-up which is required and supported by the Saudi Arabian Government.

Vessels using terminals operated by the Company are required to observe the IMO conventions relating to the pollution of the sea by oil and are advised that violations will involve the Master/Owner/Agent/Operator in severe penalties.

ARAMCO does not tolerate pollution and will clean oil spills with whatever men, equipment, and material that are required considering the size of the spill, time of day, sea state and weather conditions. The Master, Owners and Operators shall be liable for all expenditure incurred by ARAMCO.

The equipment and material used in the clean up effort is dictated by on site judgement of qualified professional personnel whose goal is to protect the environment and prevent hazardous conditions.

Masters of vessels involved in a pollution incident shall immediately contact their Agent who will arrange the necessary Government contact.

Also see "Pollution Regulations".

SHIP'S AGENTS: Vessels calling at any terminal in the Port of Ras Tanura should address all messages concerning ship's business to their Agents. Matters concerning provision supply, minor repairs, local medical or hopital services, mail, crew changes, etc., are to be handled by the ship's Agent.

SURVEYORS: Independent oil inspection service is available at the terminals in the Port of Ras Tanura by the following companies:

(a) Redwood Petroleum Division,
1 Place des Alpes,
1201 – Geneve 1, Switzerland.
Telephone: 312250
Telex: 22140 SGS CH
(for local information contact Gulf Agency Company)

(b) Caleb Brett & Son Limited,
International House, Mitre Square, 26-28 Greenchurch Lane,
London EC3A 5ED

(c) E. W. Saybolt and Co. S.A.
400, Swenson Drive,
Kenilworth, New Jersey 07033, U.S.A.

(d) Watson Gray (Saudi Arabia) Limited,
c/o Yusuf Bin Ahmed Kanoo,
Aramco Box 711 or P.O.Box 71,
Ras Tanura, via Dhahran, Saudi Arabia.
Telephone: (03)6670180/6670903
Telex: 651012 KANOO SJ

(e) Services et Transports,
Route du Hoc, Gonfreville L'orcher,
Harfleur 76700, France.
Telephone: (35) 26 40 18
Telex: 190634 F.

(f) SPACO (Saudi Petroleum Analytical Company)
c/o SNAS, P.O.Box 5641, Riyadh, Saudi Arabia.
Telephone: (01)4766589
Telex: 201406 SJ

Marine and Engine Surveyors of various companies are available locally. They may be contacted through the vessel's Agent.

FACILITIES:

BUNKERS: ARAMCO fuel bunkers are available at all berths in the port. Black diesel is not available at the Ju'aymah Crude Terminal. Vessels taking only bunkers are urged to call at Ras Tanura *prior* to loading elswhere to avoid delays caused by draft and berthing assignment problems.

Non-ARAMCO bunkering services are available. Vessels employing these services are not permitted to bunker within the operating area of the Port of Ras Tanura.

FRESH WATER: Drinking and boiler water are NOT available in the Port of Ras Tanura. In cases of emergency, ships' Agents may be able to arrange delivery by barge of small quantities.

LUBRICATING OILS: Lubricating oils are available in limited quantities of drums if ordered through ship's Agents well in advance.

PROVISIONS AND CURRENCY: Ship chandlers are available for supply of limited quantities of provisions, and may be contacted through the ship's Agent. The Saudi Arabian unit of currency is the Saudi Riyal (S.R.).

REPAIRS: Repair services are available from local business concerns. ARAMCO will not assist in making emergency repairs on vessels.

It is suggested that Masters discuss repair charges with the ship's Agent prior to requesting or authorising repair work.

DIVERS: Deep sea divers, operating from modern and well-equipped boats are available. Ship's Agents must be contacted for this service.

MEDICAL/HOSPITAL FACILITIES: No medical facilities are available at any of the terminals in the Port of Ras Tanura. Requirements for medical assistance or hospital services must be made through the ship's Agent, who can arrange treatment at one of the government or private clinics or hospitals in Rahima, Al Khobar or Dammam.

The ship's Agent is able to arrange for the Port Doctor to visit vessels to treat minor injuries or illnesses. In serious cases requiring hospitalisation the Port Doctor must attend to certify the necessity. ARAMCO medical facilities are made available in emergencies only when other facilities are not available.

A charge will be made for all such services furnished by ARAMCO. The ARAMCO radio station "HZY" may be used at any time without charge by vessels at sea to obtain medical advice.

REPATRIATION/SHORE LEAVE: All matters relating to crew changes, repatriation of crew personnel or shore leave are to be arranged through the ship's Agent. There is no Seaman's Recreation Centre at any terminal in the Port of Ras Tanura.

DRY CARGO AND FREIGHT: No dry cargo facilities exist in the Port of Ras Tanura and all ARAMCO freight is handled through Saudi Arabian Government Ports in the area.

(B) REGULATIONS

The regulations shall be observed by all vessels proceeding to any terminal in the Port of Ras Tanura.

EXTRACTS FROM SAUDI ARABIAN GOVERNMENT REGULATIONS:

Saudi Arabian Government Regulations are strictly enforced and Masters having any doubts concerning the interpretation of these regulations are urged to consult their agent. At all times while in the Port of Ras Tanura whether at anchor, at the berth in any teminal or in transit between terminals, the vessel and its personnel are under the jurisdiction of Saudi Arabian laws.

QUARANTINE SIGNALS: Quarantine signals shall be displayed by all vessels approaching the Port of Ras Tanura in accordance with International practice. These signals shall be displayed continuously until Pratique is granted.

Sunrise to Sunset – Quarantine flag (Q)
Sunset to Sunrise – Red over White signal lights.

SAUDI ARABIAN FLAG: The flag of The Kingdom of Saudi Arabia shall be flown from the foremast of the vessel by day and by night while in the Port of Ras Tanura. The flag shall be clean and in good condition. Masters should obtain this flag before arrival but if circumstances render this impossible a flag must be obtained from the ship's Agent. Vessels not correctly flying the flag of Saudi Arabia will not be berthed. The flag is properly displayed when the Arabic writing appears on the top and the sword on the bottom.

PROHIBITED ARTICLES: All materials to be either exported from or imported into Saudi Arabia are subject to examination by Customs Authorities. The import of certain articles is strictly prohibited and such articles include but are not limited to the following:

Explosives and firearms including air rifles.
Implements of war of any kind including antique weapons.
Religious matter not pertaining to the Moslem faith.
Playing cards and gambling devices.
Narcotics.
Printed, photographic matter or video tapes depicting what could be considered pornographic.
Alcoholic beverages of any description.

Any of the above items on board any vessel calling at the Port of Ras Tanura shall be secured in appropriate locked storerooms which will be sealed by the Authorities who may carry out inspections to ensure that the seals are intact and that none of the above articles are in use. The seals must remain intact during the entire period of the vessel's stay in the Port of Ras Tanura and must not be broken until after the vessel has finally departed for a port in another country.

Trafficking in any of the above articles between vessels or between vessel's crew and shore personnel is strictly prohibited.

The baggage of crews joining and leaving vessels will be inspected to ensure that it contains none of the prohibited articles.

PHOTOGRAPHY: The use of photographic equipment of any kind is strictly prohibited within the Port of Ras Tanura. Cameras are liable to seizure by the Authorities.

SHORE LEAVE: Vessel's personnel are not permitted ashore nor on the wharves for ANY PURPOSE WHATSOEVER (this includes reading the vessel's draft) until pratique is granted and then only if actually engaged in operational duties. No visiting between vessels at berths is permitted. Shore leave is not normally granted and ship's Agents must be consulted for advice.

PENALTIES: Penalties for violations of Saudi Arabian Government Regulations are severe and considerable fines and/or delays to vessels may be incurred.

SAFETY REGULATIONS: RESPONSIBILITY FOR SAFETY: The vessel's Master and crew shall be responsible at all times for the safety of the vessel and shall make provision to exercise all necessary precautions.

Aramco Terminal personnel are authorised to suspend oil handling operations in the event that any of the Safety Regulations are violated or if any other hazardous situation is observed.

SAFETY REQUIREMENTS:

Notes:

(a) All of these requirements shall be complied with at all times that a vessel is berthed at any ARAMCO facility.

(b) Requirement number 14 is to be complied with at other times as stated.

(c) The title of each requirement is numbered to correspond with the questions in the Safety Check List.

(d) Guidance on methods of complying with these requirements is contained in the ICS/OCIMF publication "International Safety Guide for Oil Tankers and Terminals"

1. *Moorings:* Moorings shall be frequently monitored and carefully tended to maintain the vessel in position and alongside at all times. (See "MOORINGS REGULATIONS").

Anchors shall be effectively secured in the hawse pipe to prevent letting go accidentally.

2. *Emergency Towing:* Towing off wires shall be made fast to bitts as far forward and aft as practicable on the side of the vessel opposite to the cargo connections. The wires shall be in good condition of not less than 3.5 in. in circumference (28 mm. diameter) and secured with a minimum of 5 turns on the bitts.

The wire shall lead directly to the chock with no slack on deck and a heaving line made fast to the eye shall be used to maintain the eye of the wire between 3 ft. and 6 ft. (1 m. and 2 m.) above the water at all times.

3. *Ship/Shore Access:* Personnel shall use only the designated access. Gangways shall be carefully tended at all times and safely illuminated at night.

4. *Readiness To Move:* The vessel's boilers, main engines, steering machinery and other equipment essential for manoeuvring shall be maintained so as to enable the vessel to be unberthed under full engine power at short notice.

A suitable trim shall be maintained for the same reason.

5. *Deck Watch:* A responsible Ship's Officer and sufficient crew shall be on watch to attend to the safe operation of the vessel.

A member of the crew shall be continuously on watch on the loading deck in view of the manifold and access to the vessel.

6. *Ship/Shore Communications:*

(a) A reliable communication system shall be established and tested for control of the cargo handling operation. This shall consist of suitable UHF/VHF radios, telephone or direct voice communication.

(b) The responsible Ship's Officer and the shore operator shall confirm with each other that the communications system and signals for controlling the operations are understood by them and by other personnel on duty at the start of operations and at each change of watch or shift.

(c) A responsible member of the vessel's crew with adequate command of the English language shall man the agreed communication medium.

7. *Operating Procedures:* The procedures for cargo, bunker and ballast operations shall be agreed in writing by the responsible Ship's Officer and the Terminal Representative.

8. *Emergency Shutdown:* Whenever an emergency situation develops aboard the vessel which may require that the cargo loading operation be suspended the vessel's tank/manifold valves shall not be closed against the flow rate under any circumstances until the berth operator has been advised. In order to prevent pressure surges in the loading system the period of valve closure shall be not less than 30 seconds and to prevent accidental closure of power operated butterfly valves they shall be locked or otherwise secured in the open position.

9. *Fire Fighting Equipment:* Fire fighting and emergency equipment shall be kept in readiness at all times.

Vessel's fire hoses fitted with combination jet/spray nozzles shall be connected to the fire main and laid out on deck forward and abaft the loading manifold.

If practicable, a pump shall maintain pressure on the fire main otherwise the fire pump shall be on standby ready for immediate use.

Monitors shall be ready for use and portable fire extinguishers preferably of the dry powder type shall be available in the proximity of the manifold area.

10. *Loading Connections:*

(a) The Master shall ensure that cargo and bunker hoses or arms are visually inspected and in good condition.

(b) The Master shall ensure that the loading connection is made to his satisfaction.

(c) Adequate safe fixed lighting arrangements shall be provided at the manifold at night to ensure a safe working area for personnel engaged in making the connection and to detect any leakage or spillage of cargo.

(d) Cargo hoses and arms at Aramco loading facilities are fitted with insulating flanges or joints. Ship/shore bonding cables shall *NOT* be used.

11. *Cargo Spillage and Leakage:*

(a) All deck scuppers shall be effectively plugged and cemented necessary to prevent spilled oil from escaping overside.

(b) Accumulations of water shall be periodically drained and the scuppers secured immediately after the water has been drained. A crew member shall be in attendance during this operation.

(c) All cargo pipe-line and pumproom valves when not in use shall be closed.

(d) Adequate drip trays shall be provided at the loading connections.

(e) Loading rates shall be regulated to avoid oil being drawn into the gas venting system.

(f) If leakage occurs from a pipe-line, valve, hose or arm, or any connection, operations through that system shall be suspended until the cause has been ascertained and the defect remedied. If a pipe-line, hose or arm ruptures or if there is an overflow, all cargo and bunker operations shall be stopped immediately and shall not be restarted until the fault has been rectified and all hazard from the released oil or product eliminated.

(g) In the event of any spillage of cargo on deck or overside, the Representative of the Terminal Superintendent shall be notified immediately.

12. *Unused Cargo and Bunker Connections:*

(a) All unused cargo and bunker connections shall be properly blanked, fitted with a gasket and bolted with one full-size bolt in every hole.

(b) The stern discharge line if fitted shall be isolated forward of the after accommodation by blanking with a spectacle piece or by removal of a spool piece.

(c) Unused inert gas system connections to machinery spaces shall be properly sealed to prevent entry of cargo or vapour.

(d) Any part of a crude oil washing or slop transfer system which extends into machinery spaces shall be securely blanked and isolated on the tank deck.

13. *Sea Valves:*

At the start of and at regular intervals throughout deballasting and loading, a deck watch shall be maintained to ensure that oil is not escaping through sea and overboard discharge valves (Also see "Pollution Regulations").

When not in use, sea and overboard discharge valves connected to the cargo or ballast systems shall be closed and lashed. When lashing is not practicable as with hydraulic valves, a suitable means of locking shall be used to indicate that the valves are to remain closed. (For further guidance refer to the ICS/OCIMF publication "Prevention of Oil Spillage through Cargo Pumproom Sea Valves").

14. *Tank Lids:*

(a) All cargo tank lids ullage and sighting ports shall be securely closed **before berthing or unberthing operations commence.** To maintain watertight integrity **when manoeuvring in the loaded condition** all cargo, ballast and bunker tanks, cofferdams and pumproom entrances shall be securely closed.

(b) During cargo handling operations all cargo, ballast and bunker tank lids and tank washing openings shall be securely closed.

15. *Tank Venting:*

(a) All vessels shall ensure that vapour displaced by cargo shall be vented in accordance with the written agreement with the Terminal Representative.

(b) All vessels fitted with an Inert Gas System shall ensure that the oxygen content throughout the atmosphere of cargo tanks has been reduced to 8 per cent or less by volume.

(c) Flame arrestors will be employed in accordance with the design features of the venting system.

(d) The loading rate shall be controlled to prevent excess pressure in the cargo tanks.

(e) If ullage ports are required to be open for operational purposes the opening shall be protected by efficient flame arrestors. Ullage ports shall not be left partly covered but shall be fully open in such a way that vapour may leave the tank in the form of a vertical unimpeded jet.

(f) In vessels not fitted with automatic ullaging devices ullage ports may be opened intermittently for short periods for the purpose of ullaging or sighting only.

16. *Hand Torches and Battery Powered Equipment:*

(a) Battery operated flashlights shall be in good condition and of a type certified to be safe for use in hazardous locations.

(b) Portable domestic radios, photographic flash equipment (see "Prohibition of Photography"), portable electronic calculators, recorders and other battery-powered equipment of non-approved type shall not be used on deck or in any place where petroleum vapour may be encountered.

17. *Portable Radio Transceivers:* Portable VHF/UHF transceivers shall be of an intrinsically safe type which is approved by a competent authority. When used this equipment shall be in good condition.

18. *Radio and Radar Transmitters:*

(a) Main radio equipment shall not be used and main transmitting aerials shall be disconnected and grounded.

(b) Radar scanners shall be switched off.

(c) The servicing of radio and radar equipment shall not be permitted without written agreement of the Terminal Representative.

19. *Electrical Equipment:*

(a) The use of portable electrical equipment on flexible leads is prohibited on the tank deck. The supply cables for such equipment shall be disconnected and removed from the tank deck.

(b) All electrical installations on board vessels shall be in good condition. Modifications which have not been approved by an appropriate authority shall not be accepted.

20. *Amidships Accommodation:* All doors, ports and windows in amidships accommodation shall be closed and every effort shall be made to prevent entry of petroleum vapour into this accommodation.

21. *Aft Accommodation:*
  - (a) All doors, ports and openings in the after accommodation (other than pumproom) which lead directly to the loading deck or which overlook the loading deck at any level shall be kept tightly closed.
  - (b) Doors that are required to be closed shall be clearly marked but under no circumstances shall they be locked.
  - (c) Machinery space openings by means of which petroleum vapour may enter shall be closed.
  - (d) Consideration shall be given to the suspension of cargo operations when weather conditions support the entry of petroleum vapour into spaces which cannot be closed.

22. *Air Conditioning Intakes:*
  - (a) Central air conditioning or mechanical ventilation systems shall be adjusted to prevent intake of petroleum vapour if possible by recirculation of air within enclosed spaces so that a vacuum is not created.
  - (b) Any intake within the range of possible petroleum vapour release shall be closed.
  - (c) If at any time it is suspected that petroleum vapour is being drawn into the accommodation, central air conditioning and mechanical ventilating systems shall be stopped and intakes closed or covered.

23. *Window Type Air Conditioning Units:*

Window type air conditioning units shall be disconnected fronm the power supply.

24. *Smoking:*

Smoking shall only be allowed in places in the after accommodation which have been jointly approved in writing by the Master and the Terminal Representative and suitable notices shall be posted at the entrance to designated smoking rooms.

No place will be considered suitable for smoking unless:
  - (a) It is in enclosed accommodation abaft the cargo tanks.
  - (b) It has no doors which open directly onto the outside deck.
  - (c) It has no doors or ports which open directly onto or over the cargo deck or onto decks overlooking cargo spaces.
  - (d) All ports are kept closed and doors into passageways are kept closed except when in use.

25. *Galley Stoves and Cooking Appliances:*
  - (a) Galleys which use only steam or immersed electric heaters shall be considered suitable for use.
  - (b) The use of galley stoves and cooking appliances with non-immersed elements such as electric hot plates and toasters may be permitted in galleys and properly designated pantries with the written agreement of the Terminal Representative.
  - (c) Approved galleys and pantries shall be situated in the after accommodation and shall have no doors or ports which open directly onto the cargo deck.
  - (d) All galley and pantry doors and ports shall be kept closed.
  - (e) Ventilator trunkings and filters of extractor fans in galleys shall be kept clean and free from accumulated oil and fat.

26. *Naked Lights:*

Open flames or fires, exposed incandescent material and any other unconfined sources of ignition are prohibited on deck and in other places where there is a risk that petroleum vapour may be present.

27. *Emergency Escape:*

Means for emergency escapes shall be provided on the side of the vessel opposite to the loading connections. For security reasons such means is to be stowed at deck level in such a manner as to be ready for expeditious use in an emergency. Such means shall be of adequate length to reach the water at all times.

VOLATILE AND NON-VOLATILE PETROLEUM:

Due to the variety of petroleum products available for loading at ARAMCO facilities in the Port of Ras Tanura, all vessels arriving to load crude oil or any petroleum product whether volatile or non-volatile at any berth shall be required to observe the Safety Regulations.

PRECAUTIONS AGAINST STATIC IGNITION: Tanks not properly inerted (see "Safety Requirement") prior to loading static accumulator oils (kerosene, kerosene type jet fuel, white diesel and under certain conditions heavy naphtha and gasoline type jet fuels) shall be gas free within 40% of the lower flammable limit. The following restrictions shall also apply to vessels loading static accumulator oils:
  - (a) Tanks and pipe-lines shall be free of water.
  - (b) Loading overall (splash filling) shall not be permitted.
  - (c) No conducting equipment (ullage tapes, sample cans, thermometers) shall be introduced into a cargo tank until 30 minutes have elapsed after loading has been stopped to that tank.
  - (d) No loose floating objects shall be present in tanks to be loaded.
  - (e) Initial loading rates shall not exceed 1,000 bbls.p.h. per tank. Above soundings of 20 ft. loading rates of up to 1,500 bbls.p.h. shall be permitted.
  - (f) Properly bonded and grounded automatic ullaging equipment may be used at any time.

Vessels with tanks which are properly inerted (see "Safety Requirement") shall not be required to comply with the specific requirements for loading static accumulator oils. However, normal safety precautions shall be observed.

HYDROGEN SULPHIDE HAZARDS: ARAMCO crudes may contain dissolved hydrogen sulphide (H_2S) in concentrations which may be hazardous. It is recommended that Owner's instructions and the ISGOTT recommendations in respect of H_2S hazards are reviewed.

EMERGENCY SIGNAL: In the event of a fire or other emergency, the vessel shall sound a series of 10 short blasts on the ship's whistle.

GAS FREEING: No gas freeing or tank washing shall be carried out at berth.

BOILER TUBE CLEANING: Funnel uptakes and boiler tubes shall not be cleaned while the vessel is at berth. Every precaution shall be taken to ensure that sparks do not escape from the funnel.

REPAIRS: Repairs or maintenance of any kind which may produce a source of ignition shall not be undertaken without the agreement in writing of the Terminal Representative.

PENALTIES: Disregard of or failure to fully comply with any of the Safety Regulations or any safety regulations generally accepted and practised in the marine transport industry will result in the suspension of all operations and the vessel may be required to leave the berth.

Vessels presented for loading with deficient equipment or machinery whether by design or by lack of maintenance will not be berthed. If such deficiency becomes apparent after berthing the vessel will be removed from the berth.

Safety violations due to negligence on the part of the vessel's personnel will result in the suspension of loading operations for investigation and correction. Repeated violations may result in a vessel being removed from the berth.

Removal from the berth as a result of safety violations or deficiencies will be at vessel's expense and ARAMCO will not accept responsibility for any resulting delay to the vessel.

Vessels with unacceptable safety performances will not be permitted to berth at ARAMCO facilities on future visits.

POLLUTION REGULATIONS: Vessels using the Port of Ras Tanura shall exercise every precaution to prevent the pollution of the sea by oil.

1. A crew member shall be stationed on deck to sight the overboard discharge during deballasting operations to ensure that no oil or oil-based products escape into the sea.
   Particular vigilance shall be exercised at any time that a change of operation takes place, e.g. starting of stripping pumps or eductors, change of tanks, commencement of loading, etc.
2. At sea island type berths, all ballast shall be discharged from the side of the ship nearest the berth.
   At pier berths, all ballast shall be discharged from the offshore side of the ship.
   At night, the discharge and the sea area in its vicinity shall be adequately illuminated.
3. No domestic or other rubbish shall be dumped into the sea.
4. In the event of an oil spill the Master shall notify the Terminal Representative on duty.
5. Excessive smoke from the funnels or exhaust gas lines of vessels is prohibited.

PILOTAGE REGULATIONS:

BOARDING ARRANGEMENTS: In order to permit the harbour Pilot to safely embark and disembark from a vessel a pilot ladder shall be provided in accordance with the following requirements:

1. The ladder shall be kept clean and in good order and shall be of adequate length and strength.
2. The vertical distance between the steps must not exceed 15 in. The outboard edge of the step shall project from 5 to 6 in. from the hull. Ladders shall be so constructed that the steps will remain flat at right angles to the hull while supporting the weight of a person.
3. Spreaders at suitable intervals shall be provided to prevent the ladder from twisting and the ladder shall be properly secured with the steps level.
4. The deck in the vicinity of the ladder shall be clean and free of oil and grease or other slippery substances.
5. When possible, on vessels so equipped, the pilot ladder shall be made fast next to an area where there is a break in the rail or an opening in the bulwark. Otherwise, suitable arrangements for safe access to the deck from the top of the pilot ladder shall be provided.
6. The boarding position should be as near amidships as possible so that the whole length of the ladder rests against the flat ship's side, clear of all possible discharges from the ship.
7. Adequate lighting shall be provided at night so that the pilot ladder and the deck area close by the head of the ladder shall be adequately and properly illuminated.
8. Manropes, a safety line and lifebuoy with self igniting light should be rigged ready for use if required.
9. The rigging of pilot ladders and the embarkation and disembarkation of Pilots thereby shall be supervised by a responsible deck officer of the vessel.
10. The vessel's propeller shall be stopped during the approach of the pilot boat and the embarking of the Pilot.
11. Whenever the distance from the water to the deck of the vessel exceeds 30 ft. (approximately 9 m.) the pilot ladder shall be rigged in combination with the accommodation ladder.
12. In any small vessel in which the bulwark rails are below the level of the deck of the pilot boat (approximately 6 ft. or 2 m.) a safe boarding position on each side of the forward end of the poop shall be provided and equipped with manropes.
13. Pilot hoists of the double drum, double-wire type are permitted after inspection and approval by Ras Tanura Pilots.

Failure to provide a safe method of boarding for the Pilot will result in the vessel being ordered to anchor until the fault is rectified.

CONDITIONS OF USE OF PILOTS:

1. ARAMCO Harbour Pilots will berth and unberth all vessels at all Terminals. The manoeuvring of all vessels in the vicinity of or at the berths will be under the advice of an ARAMCO Harbour Pilot.
2. Vessels will not be berthed if they are not equipped with satisfactory mooring equipment, lines, gear, etc., or if they are not sufficiently ballasted. It is the responsibility of the Master to notify the Harbour Pilot of any special conditions, difficulties or pecularities such as engine or boiler deficiencies, defective navigational equipment, mooring lines, tackle, gear or lack of necessary equipment which may impose hazards in connection with the handling, mooring, unmooring, loading or discharging of the vessel. The Master provides this information to the Harbour Pilot before the Harbour Pilot begins to provide pilotage services.
3. If the Master fails to give full and correct information as required in condition No. 2 the vessel will be removed from the berth and shall be liable for the berthing and unberthing costs.

4. The services of the Harbour Pilots are provided without charge and upon the express understanding that while participating in directing the navigation or movement of the vessel and/or its assisting tugs from on board the vessel or elsewhere, the Harbour Pilots become the agents and servants of the Vessel Owner and Master for all purposes and every respect. ARAMCO and its agents, servants, contractors, employees and representatives shall not be liable or responsible for any loss of or damage to or expense incurred in connection with the vessel, its crew and/or cargo or for any loss, damage or injury to third parties caused by or arising out of or resulting from the performance of pilotage services by the Harbour Pilots. The Vessel Owner and Master agree to indemnify ARAMCO and its agents, servants, contractors, employees and representative and to hold them harmless against all claims for any loss of or damage to or expense incurred in connection with the vessel, its crew and/or its cargo and against all claims for any loss, damage or expense suffered or paid out by or on behalf of third parties howsoever caused, arising out of or resulting from the performance of services by the Harbour Pilots.
5. Damage or injury to or impairment of the use of any ARAMCO facility equipment or personnel by any vessel using any loading terminal of the Port of Ras Tanura shall be the responsibility and liability of the Master, Owners and/or Charterers of the vessel.

TUGS AND HARBOUR CRAFT:

USE BY PILOTS: Under normal operating conditions, no tug or other craft shall be permitted alongside any vessel before the Harbour Pilot boards the vessel. Should the Harbour Pilot deem the assistance of a tug to be necessary, he will then give the proper signal.

Vessel's personnel shall not signal for tugs or harbour craft to come alongside except as directed to do so by the Pilot.

CONDITIONS OF USE: Tugs and towing services for assisting the vessel in arrivng at and departing from in berthing and unberthing at ARAMCO facilities are provided without charge and upon the express understanding that such services are performed at the sole risk of the vessel receiving such services, its Owner/Master and its cargo, if any, including the risk of negligence of the tug or tugs and their Masters, Pilots, officers or crews, and of ARAMCO and its Agents, servants, contractors, employees and representatives, all of whom shall, in the performance of such services as they render to the vessel, become and be the Agents and servants of the vessel receiving such towage services and its Owner/Master. ARAMCO and its Agents, servants, contractors, employees and representatives shall not be liable or responsible for any loss of or damage to or expense incurred in connection with the vessel and/or its cargo caused by, arising out of or resulting from the provision of towage services to the vessel by a tug or tugs owned, chartered or employed by ARAMCO. The vessel receiving such towage services and its Owner agree to indemnify ARAMCO and the tugs and their owners, charterers, operators and/or underwriters and to hold such parties and craft harmless against all claims for any loss of or damage to or expense incurred in connection with the vessel, its crew and/or its cargo, and against all claims for any loss, damage or expense suffered or paid out by or on behalf of third parties as a result of or in connection with ARAMCO's provision of tugs and towing services.

REMOVAL OF WRECKS AND OBSTRUCTIONS: If any vessel founders or otherwise becomes in the opinion of the Company, an obstruction or danger to navigation in the Port of Ras Tanura and its Owner or his Agent fails to remove the obstruction or danger so caused within the period of written notice served by the Port Captain, or immediately in an emergency, the Company may, for the purpose of safeguarding the Port, take action to remove the obstruction or danger.

The Owner of any vessel at the time of its becoming an obstruction or danger to navigation in the Port of Ras Tanura shall be liable for the expense incurred in removing the obstruction or danger to navigation.

TRAFFIC REGULATIONS: The following regulations apply to all vessels entering or leaving the Port of Ras Tanura or Dammam by way of the Ras Tanura Channel.

The separation zones and routes shown on the charts of the Ras Tanura Channel are approved by IMO. Violators of the routeing recommendations will be reported to their Owners/Operators/-Agents/Charterers.

1. All vessels shall monitor VHF radio Channel 10 when under way in the Ras Tanura Channel and its vicinity and in the anchorage areas of Ras Tanura Terminal.
2. All vessels using the inbound or outbound channels shall have an underkeel clearance of at least 5 ft. (1.52 m.).
3. Under no circumstances shall inbound vessels navigate in the departure channel nor shall outbound vessels navigate in the arrival channel.
4. Inbound vessels shall:
   (a) report to Ras Tanura Port Radar on VHF Channel 10 when passing Beacon No. 3 and Buoy No. 7.
   (b) not exceed a speed of 5 knots after passing Buoy No. 9.
   (c) not overtake and shall mantain a distance of one mile from vessels proceeding in the same direction after passing Buoy No. 9.
   (d) navigate with extreme caution and give way to vessels departing from the berths and anchorages.
5. Outbound vessels:
   (a) departing from Ras Tanura Anchorage shall advise Ras Tanura Port Radar on VHF Channel 10 of their intentions 30 minutes before weighing anchor.
   (b) shall not overtake and shall maintain a distance of at least one mile from vessels proceeding in the same direction until both vessels have passed clear of Buoy No. 5.
6. Vessels manoeuvring in the area between the South extremity of the Tanker Anchorage and the entrance to the Departure Channel (Buoys 17 and 18) shall limit speed to a maximum of 5 knots.
7. Vessels bound to and from the Port of Dammam shall keep to the Eastern part of the Tanker Anchorage and avoid the manoeuvring area from the anchorage to the sea islands and piers. Outbound vessels from Dammam shall, when passing Dammam Channel Buoy No. D 37, alert Ras Tanura Port Radar of their ETA at the Southern extremity of the Tanker Anchorage.

MOORING REGULATIONS:

GENERAL: The use of nylon or other highly elastic mooring ropes is discouraged.

If a vessel with synthetic mooring ropes is alongside when squall conditions arise, loading to that vessel shall be stopped and loading arms disconnected until weather conditions improve and it is judged safe to resume the loading operation.

Vessels shall be moored to the entire satisfaction of the Harbour Pilot and shall be ready at all times to put out more lines as required by terminal personnel and as may be dictated by weather conditions.

All vessels at berth shall have all deck winches in readiness for immediate use.

All vessels with tension winches shall set the manual brakes on these winches.

MIXED MOORINGS: Vessels equipped with both wire and synthetic lines shall avoid mixing moorings to the same bollard or dolphin.

WIRE MOORINGS: In order to ensure the safety of personnel, vessels and loading facilities and to prevent accidental oil spillages, the following requirements (used as springs and breast lines) are mandatory for all vessels permitted to use the ARAMCO fixed berth loading facilities.

Vessel Size	*Required*	*Recommended*
75–160 m.d.w.t.	8 wires	12 wires
161–250 m.d.w.t.	10 wires	12 wires
251–300 m.d.w.t.	12 wires	14 wires
301–350 m.d.w.t.	12 wires	16 wires
351 m.d.w.t. and above	14 wires	16 wires

The wire size, winch power and winch braking power shall in all cases be adequate for the size of the vessel. All lines shall be properly reeled onto winch drums and the winch brakes shall be set to hold to a minimum load of 60% of the minimum breaking load of the line.

After obtaining the permission of the Port Captain, vessels may use mooring lines other than wire, constructed of a substitute material provided that the elongation of the substitute material does not exceed 3% at 55% breaking load. Tails, if used, should preferably be made of nylon line (3 strand construction should not be used) about 11 m. long overall, and have a breaking strength at least 25% greater than the MBL of the wire to which they are attached. They should be replaced at least every 18 months unless experience and/or inspection indicates more or less frequent replacement is necessary.

Additional information is contained in the O.C.I.M.F. publication "Guide Lines and Recommendations for the Safe Mooring of Large Ships at Piers and Sea Islands".

All vessels shall utilise all of the wire mooring lines with which they are equipped unless the number exceeds that recommended above.

APPENDICES:

INSTRUCTIONS TO VESSELS AND CONDITIONS OF USE OF PORT **RAS TANURA,** SAUDI ARABIA

Date: .... Time .... G.M.T.

THE MASTER S/S — M/V

Please have your vessel ready for berthing by ARAMCO Harbour Pilot at .... hours Greenwich Mean Time ....(Date).

1. Vessel will be moored to Berth No. .... North/South Pier/Sea Island Port/Starboard side to the Wharf as shown on attached diagram.
2. The berth is presently occupied/unoccupied.
3. If a delay occurs, please maintain an alert watch and keep vessel in readiness to move as quickly as Pilot comes aboard.
4. Local Time is GMT plus .... hours.
5. Low Water will be at approximately .... hours GMT and will be approximately .... feet above I.S.L.W. as indicated in U.S. Coast and Geodetic Tide Tables.
6. To avoid delay, please maintain minimum ballast for safe manoeuvring in prevailing weather.
7. Ballast water being discharged while in port MUST BE FREE OF OIL.
8. Immediately following completion of berthing and granting of Pratique, an ARAMCO inspector will board your vessel with Form ARAMCO 3032-1. Declaration by Master and physically inspect the vessel for conformity to safety requirements and check of certain items required.

MOORING AND MANOEUVRING

1. Full Power must be available for manoeuvring to and from wharves.
2. An ARAMCO Pilot will pilot vessel to berth assigned.
3. All manoeuvring in vicinity of, or at piers, will be under supervision of an ARAMCO Pilot.
4. ARAMCO tugs will assist in mooring and unmooring.
5. All tank tops, ullage plugs and sighting ports will be closed before berthing.
6. Vessel's Master must notify the Pilot of any special conditions difficulties or peculiarities such as defective equipment, lines or gear which might impose special hazards in connection with handling mooring or loading of vessels.
7. Steering gear, engine room telegraph, whistle and all navigational equipment must be tested before any manoeuvring to or from piers is started.
8. Pilot will decline to moor vessel with unsatisfactory equipment lines, gear, etc.
9. ARAMCO will loan additional mooring lines if Pilot deems them necessary.
10. Vessels must be moored tc entire satisfaction of Pilot.

11. Vessels must be ready to put out more lines as required by weather changes or at request of Pilot or oil loading personnel.
12. Winches must be ready at all times for immediate use.
13. Except in emergency, no mooring lines will be let go without permission of the Pilot.
14. While alongside wharves, maintain engines and propulsive machinery ready at all times to leave wharf on short notice under full power.
15. No repairs are permitted that will delay or interfere with this manoeuvring.
16. Non-compliance with 13 and 14 constitutes a serious safety hazard. Any towage and delay resulting from non-compliance will be for vessel's account.
17. If fire or other grave emergency occurs or danger appears imminent on either the vessel or pier, do not await arrival of Pilot – immediately let go mooring lines and personally remove vessels from pier in such manner as to best avoid damage to pier or other vessels.
18. Upon completion of loading and/or bunkering and immediately after disconnection of hoses, vessel must leave berth and await clearance in stream.

SAUDI ARABIAN GOVERNMENT PORT REGULATIONS

1. Quarantine signals must be displayed upon entering the coastal waters of Saudi Arabia and approaching Ras Tanura, in accordance with international practice, and shall be continuously displayed until Pratique is granted. These signals shall be as follows:
   Sunrise to Sunset – Quarantine Flag
   Sunset to Sunrise – Quarantine Signal Lights
   (Red over White)
2. The Saudi Arabian flag must be flown from the foremast while your vessel is in the coastal waters of Saudi Arabia. Such flags are available for loan and may be obtained from the vessel's Agent.
3. Importation of liquor or contraband items, or trafficking in such items between vessels, is absolutely prohibited.
4. Ship's personnel are *NOT* permitted ashore nor on the wharves *FOR ANY PURPOSE WHATSOEVER* (this includes the reading of the ship's draft) until Pratique is granted and then are allowed on the wharves only if actually engaged in duties in connection with operations of discharging ballast or loading.
5. All shore leave is contingent upon compliance with Saudi Arabian Quarantine and Passport Regulations. For current details concerning these regulations and shore leave restrictions, ship's agents must be consulted. Failure to comply with 4 and 5 may result in severe penalties.

CONDITIONS OF USE OF PORT

1. The Master of the vessel shall remain solely responsible for the safety and the proper operation of the vessel at all times. Neither ARAMCO nor its personnel shall be responsible for any loss or damage arising in consequence of any assistance, instructions or advice given or tendered in respect of the vessel.
2. The use of ARAMCO premises, facilities and equipment is subject to the express understanding and condition that ARAMCO and its personnel shall be held harmless from all liability, loss or claim thereof arising out of such use.
3. All vessels transiting the "DEEP WATER DEPARTURE CHANNEL" must maintain a minimum five (5) feet keel clearance.
4. The Harbour Pilot is supplied upon the condition that when boarding or assisting the vessel he becomes the agent and servant of the owners and/or charterers of the vessel in every respect. ARAMCO shall not be responsible and shall be held harmless from all liability for any damage resulting from or caused by any action taken, order given, or decision made (or any omission thereof) by the Harbour Pilot or in respect to his handling of such vessel.
5. When the assistance of tugs is provided, the Master and Crews of the tugs shall, in the performance of such services as they render to the vessel, become and be deemed to be agents and servants of the owners and/or charterers of the vessel assisted, and ARAMCO shall not be responsible and shall be held harmless from all liability for any damage that may be done by the tugs of their crews while assisting the vessel, whether occasioned by any act or mission of the tug Master or Crew or by any defect or inadequacy of the tug, its machinery or gear.
6. Pilots will not moor any vessel to ARAMCO wharves unless they have the Master's signature on acknowledgement below.

MASTER'S ACKNOWLEDGEMENT

I hereby acknowledge receipt of a copy of this document and agree to the instructions and conditions set forth therein.

____________________ ____________________
DATE MASTER

____________________GMT ____________________
HOUR VESSEL

SHIP/SHORE SAFETY CHECK LIST

VESSEL:...
BERTH:..
....

Instructions for completion:

The safety of operations requires that all questions should be answered affirmatively after checking by both ship and terminal representatives. If an affirmative answer is not possible, the reason should be given and agreement reached upon appropriate precautions between the ship and the terminal.

Questions	Yes/No	Remarks
1. Is the ship securely moored and anchors secured?		
2. Are emergency towing wires correctly positioned?		
3. Is there safe access between ship and shore?		
4. Is the ship ready to move under its own power?		
5. Is there an effective deck watch in attendance on board?		
6. Is the agreed ship/shore communication system operative?		
7. Have the procedures for cargo, bunker and ballast handling been agreed?		
8. Has the emergency shut down procedure been agreed?		
9. Are fire hoses and fire fighting equipment ready for immediate use?		
10. Are cargo and bunker hoses and/or arms in good condition and properly rigged?		
11. Are scuppers effectively plugged, and drip trays in position?		
12. Are unused cargo and bunker connections, including the stern discharge line, if fitted, blanked?		
13. Are sea and overboard discharge valves, when not in use, closed and lashed?		
14. Are all cargo and bunker tank lids closed?		
15. Is the agreed tank venting system being used?		
16. Are hand torches of an approved type?		
17. Are portable VHF/UHF transceivers of an approved type?		
18. Are the ship's main radio transmitter aerials earthed?		
19. Are electric cables to portable electrical equipment disconnected from power?		
20. Are all external doors and ports in the amidships accommodation closed?		
21. Are all doors and ports in the after accommodation leading onto or overlooking the tank deck closed?		
22. Are air conditioning intakes which may permit the entry of petroleum gas closed?		
23. Are window-type air conditioning units disconnected?		
24. Are smoking requirements being observed?		
25. Are the requirements for the use of galley and other cooking appliances being observed?		
26. Are naked light requirements being observed?		
27. Is there provision for emergency escape?		

Declaration

We have checked with each other the items listed on this check list in the course of a joint inspection, and have satisfied ourselves that the entries we have made are correct to the best of our knowledge.

For Ship Name .... Rank .... Signature ....
For Terminal Name .... Position .... Signature ....
Time...................... Date ....

INSTRUCTIONS TO VESSELS AND CONDITIONS OF USE OF **JU'AYMAH** LOADING FACILITIES

THE MASTER S/S — M/V

1. Vessel will be moored at Ju'aymah Berth No.
2. Discharge into sea of oil base products in combination with ballast water is not allowed. Ships which release oil or oily ballast water in either the berth or anchorage area will be held responsible for all clean-up costs.
3. Prior to loading, the Pilot/Mooring Master will inspect the vessel for conformity with safety requirements and will review in detail each item on ARAMCO Form 5626 "Declaration by Master". This form will be acknowledged and signed by the Master.

MOORING AND MANOEUVRING

1. Full power must be available for manoeuvring in and out of the berth. Manoeuvers with other than full power available shall be performed only after the consent of both the Port Captain and Pilot/Mooring Master have been obtained.
2. The Pilot/Mooring Master will advise the Master during the mooring and unmooring of the tanker and will supervise the connecting and disconnecting of cargo and bunker hoses by the tanker's crew. The loading operation will be performed to the complete satisfaction of the Pilot/Mooring Master.
3. Mooring will be accomplished with the assistance of marine craft assigned to the vessel by ARAMCO.
4. All tank tops, ullage plugs and sighting ports shall be closed before berthing.

5. The vessel's Master shall notify the Mooring Master of any special conditions, difficulties, defective equipment or gear which could impose special hazards when mooring, unmooring or loading cargo.
6. All navigational equipment such as the engine, telegraph, whistle, steering gear, etc., shall be tested prior to getting underway to moor and unmoor. Testing of the tanker's engine when berthed shall be done only after the Pilot/Master has been duly informed and his consent has been obtained.
7. The Mooring Master may decline to moor a vessel with unsatisfactory mooring equipment.
8. No repairs are permitted while the vessel is berthed. The engine and deck machinery will be kept ready to permit the vessel to get underway on an emergency basis.
9. Any vessel delay resulting from failure to comply with any of the provisions of this document shall be for the vessel's account.
10. Upon completion of loading and the disconnection of hoses, the vessel will be unmoored and, if using Early Departure Procedures, the Master should make ready to depart as soon as possible. Otherwise, vessels are to await cargo and port clearance documents while lying in stream.

SAUDI ARABIAN GOVERNMENT PORT REGULATIONS

1. Quarantine signals must be displayed upon entering the coastal waters of Saudi Arabia and approaching Ju'aymah in accordance with international practice and shall be continuously displayed until Pratique is granted. These signals shall be as follows:
   Sunrise to Sunset – Quarantine Flag
   Sunset to Sunrise – Quarantine Signal Lights
   (Red over White)
2. The Saudi Arabian flag must be flown from the foremast while your vessel is in the coastal waters of Saudi Arabia. Such flags are available from the ship's agent. The Saudi Arabian flag is properly displayed when the writing appears on top and the sword on the bottom.
3. Importation and/or use of liquor or contraband items, or trafficking in such items, is absolutely prohibited. The Saudi Arabian Government rigidly enforces these regulations and penalties are severe. In the event of violation considerable delay to the vessel involved could occur.
4. Ship's personnel are not permitted to leave their vessel.

CONDITIONS OF USE OF PORT

1. The Master of the vessel shall remain solely responsible for the safety and proper operation of the vessel at all times. Neither ARAMCO nor its personnel shall be responsible for any loss or damage arising in consequence of any assistance, instructions or advice given or tendered in respect to the vessel.
2. The use of ARAMCO premises, facilities and equipment is subject to the express understanding and condition that ARAMCO and its personnel shall be held harmless from all liability, loss or claim thereof arising out of such use.
3. The Pilot/Mooring Master is supplied upon the condition that when boarding or assisting the vessel he becomes the agent and the servant of the owners and/or charterers of the vessel in every respect. ARAMCO shall not be responsible and shall be held harmless from all liability for any damage resulting from or caused by any action taken, order given, or decision made (or any omission thereof) by the Pilot/Mooring Master or in respect to his handling of the mooring or cargo loading operations.
4. When the assistance of small craft is supplied (mooring launches and/or a utility boat), the craft, Master and Crew thereof shall, in the performance of such services as they render to the vessel, become and be deemed to be the agents and servants of the owners and/or charterers of the vessel assisted. ARAMCO shall not be responsible and shall be held harmless from all liability for any damage that may be done by or to the craft or their crews while assisting the vessel, whether occasioned by any act or omission of the crafts or their crews or by any defect or inadequacy of the craft or the craft's machinery or gear. This shall not give the tanker's Master the right to detain such craft for duties other than mooring, unmooring or hose work nor shall this prevent the craft from being reassigned during mooring, unmooring or hose work.
5. No vessel may berth without an ARAMCO Pilot/Mooring Master on board.
6. Pilots/Mooring Masters will not assist in the mooring of any vessel unless they have the Master's signature on the acknowledgement below.

MASTER'S ACKNOWLEDGEMENT

I hereby acknowledge receipt of a copy of this document and agree to the instruction and conditions set forth therein.

____________________ DATE

____________________ MASTER

____________________GMT (HOURS)

____________________ (VESSEL)

(C) RAS TANURA TERMINAL

This section gives specific information regarding RAS TANURA TERMINAL which includes Sea Island, North and South Piers and is to be read together with **Part (A).**

LOCATION: The Ras Tanura terminal, refinery and tank farms are located on a peninsula, the Southern end of which forms a sand spit, the tip of which is officially known as (RA'S) AT TANNURAH.

At this Southern tip, a survey reference point is located and marked by a beacon, the exact position of which is: Lat. 26° 37′ 25″ N., Long. 50° 09′ 50″ E.

Terminal South Tank Farm, the LPG plant and the piers are located on the sand spit.

Terminal North Tank Farm, which feeds crude to the Northern end of the Sea Island is located approximately 4 miles N.N.W. of Terminal South Tank Farm and the Refinery is a further 2 miles N.W. of Terminal North Tank Farm.

South Pier: The South Pier is connected to the East side of the peninsula by a causeway and trestle 2,300 ft. in length. The "T" Pier has 4 berths (1 to 4) and is 1,200 ft. long and 105 ft. wide.

North Pier: The North Pier is located about 0.75 miles to the North of the South Pier and has a causeway and trestle that extends some 3,600 ft. from the peninsula. The Port Control Centre and Port Radar Station surmounted by a helicopter landing platform are located on the North side of the trestle on the landward side of the berths. This Pier is 2,645 ft. long and 110 ft. wide and comprises 6 berths (6 to 11). Crude oil, products and RLPG are available at North Pier.

Sea Islands: A complex of 4 Sea Islands interconnected by walkways is located approximately 5,600 ft. N.E. of the North Pier. Each of the 4 sea islands consists of 2 berths with a loading station on the platform, 4 to 6 mooring dolphins and 2 to 4 breasting dolphins per berth. The lengths of each pair of berths between outer mooring dolphins are (from South) Sea Island 1, 1,250 ft., Sea Islands 2 and 3, 1,400 ft., Sea Island 4, 1,750 ft.

The berths are numbered from South, on the East side 12, 15, 17, 20, on the West side 14, 16, 18, 19.

The Sea Island loading facilities are serviced by 8 submarine crude loading lines, 1 bunker fuel line with a rated capacity of 12,000 b.p.h. and 1 black diesel bunker oil line with a rated capacity of 900 b.p.h. The loading stations at each of the Sea Island berths are equipped with steel, hydraulically operating loading arms and all berths are equipped with quick release hooks.

Refrigerated Liquefied Petroleum Gases (R.L.P.G.): Facilities for loading refrigerated liquefied Butane and Propane are located at the North Pier berths 6, 8 and 10.

PILOTAGE: *Vessel from Arrival Channel:* Pilot will normally board South of Buoy 17 and 18, as advised by Port Radar.

Vessel at Tanker Anchorage: After heaving anchor, the vessel will be advised by Port Radar towards a position approximately 1.5 miles S.E. of the South end of Sea Island dependent on weather and tidal conditions.

Vessels must not approach any closer than 1.5 miles to the piers or Sea Islands without a Pilot on board due to the tidal streams in the area.

Sea Island Pilots: ARAMCO maintains Pilots on continuous duty on the Sea Islands. They are stationed on the Sea Islands by ARAMCO to provide marine advice to the Loading Masters, to assist in the safe and efficient mooring and loading of vessels berthed at this facility and carry out emergency unmooring. Masters of vessels may contact the Sea Island Pilot through the Pier Operator or by calling the Ras Tanura Pilot Office on VHF Channel 16. Masters of all vessels berthed at the Sea Islands are encouraged to discuss any vessel-related problems with the duty Sea Island Pilot.

Informing Pilots of Finishing Time: As an aid to planning and expediting ships' movements and also to give adequate notice to vessels scheduled to berth, vessels loading at the berths in Ras Tanura shall call the Ras Tanura Pilot Office on VHF Channel 16 one hour before completion of loading.

INBOUND TRAFFIC PROCEDURE: (See Part B) – "Traffic Regulations".

Vessels proceeding direct to Ras Tanura Terminal: As per Inbound Traffic Procedures in Part (A) "Navigation" to the Entry Buoy and following the separation scheme to Buoys 17 and 18 according to advice from Port Radar and Pilots either to anchor in the Ras Tanura Tanker Anchorage or to berth on arrival.

From Northern holding Anchorage to Ras Tanura Terminal enter the separation scheme under the advice of Port Radar and follow the channel as above.

Maximum Draft in Arrival Channel: The maximum draft is 54 ft. + height of tide with an absolute maximum of 59 ft. for vessel proceeding along the inward channel of the Ras Tanura Separation Scheme bound to Ras Tanura Terminal.

See "Berthing – Depths of Water at Berths".

Masters of vessels arriving partly loaded or in deep ballast should navigate with caution in the vicinity of Nos. 5 and 7 channel buoys.

From East Holding Anchorage and East Channel: Follow the buoyed route to RTE 7 and RTE 8. Turn North into the Tanker Anchorage at Port Radar and Pilot's advice.

East Channel Caution: It is recommended that vessels of over 800 ft. (244 m.) length or 35 ft. (10.67 m.) draft do not use the East Channel.

Sea Islands' Submerged Pipe-lines: All traffic must pass East of the Sea Islands due to the existence of numerous submerged oil pipe-lines between all of the Sea Islands and the shore.

Abu Safa Submerged Pipe-line: All vessels are urged to navigate with caution between Channel Buoys 9 and 11 in the arrival channel and are forbidden to drop anchor in their vicinity due to the existence of the submerged oil pipe-line which crosses the channel.

ANCHORAGES: *Tanker Anchorage:* The Tanker Anchorage lies approximately 2 miles East of the Sea Islands and is used as a final holding area for vessels which have immediate berthing prospects or for vessels awaiting cargo clearance, release, sailing documents, etc. and whose draft does not exceed 60 ft. (18.3 m.). Under normal circumstances, no more than 10 vessels are allowed to use this anchorage at one time.

Freighter Anchorage: This anchorage, South East of the "SPIT" buoy is used as holding ground for coastal tankers intended to load at South Pier and miscellaneous small vessels and craft inbound for ARAMCO Marine facilities at the West Pier.

Deep Draft Anchorage: Vessels whose draft is 60 ft. or more and which are required to anchor upon completion of loading must normally do so in the area approximately 0.7 miles North of the Sea Islands. This anchorage has a swept depth of 72 ft. (21.9 m.) and holding ground is only considered fair due to variations in character of the bottom. It is recommended that vessels lie to a long scope of chain in adverse weather. No more than 2 vessels are allowed to use this anchorage at one time.

RADIO: COMMUNICATIONS WITH THE TERMINAL.

Under Way: At all times when under way in the arrival channel and anchorage areas with no Pilot aboard, vessels must watch VHF Channel 10 to keep in contact with Port Radar.

At Anchor: A good listening watch should be maintained on VHF Channel 16. Vessels will be called by Ras Tanura Pilots with berthing and other information and instructions. Port Radar should be called on VHF Channel 10 prior to heaving anchor.

Under Pilotage: Pilots carry portable, intrinsically safe radios which operate on ARAMCO dedicated mooring Channels for contact with tugs and jetty staff. In addition, the vessel's VHF Radio should stand by on Channel 13 for back up communication.

At Berth: An exchange of intrinsically safe portable radios will be made between vessel and jetty personnel in order to assist constant communication whilst loading.

BERTHING:

Mooring Procedures: Mooring boats are not used at Ras Tanura Terminal.

Vessels should have heaving lines ready to take the shore messenger after landing alongside. The messenger is then made fast to the ship's mooring line which is hove ashore by means of a capstan. Heavy wires should be sent one by one and ropes two at a time. Jetty crews are on duty continuously to handle mooring lines. Mooring lines on board vessels will not be handled by ARAMCO Personnel.

BERTHING FACILITIES:

Safe Loading Depths: If at any time a vessel's draft approaches to within about 3 ft. (1 m.) of the depth of water at the berth at North and South Piers, loading will be suspended until a rising tide increases the depth to permit resumption of loading and provide for a safe draft of the fully loaded ship on departure.

At the Sea Island Berths, the maximum sailing draft is 64 ft. plus the height of tide at the time of transiting the Deep Water Channel.

Depths of Water at Berths:

		Max. at ISLW (ft.)	*Max. Arrival Draft* (ft.)
South Pier Berth No.	1	31	29
	2	31	29
	3	30	27
	4	29	27
North Pier Berth No.	6	44	41
	7	37	28
	8	46	43
	9	40	29
	10	46	43
	11	40	29
Sea Islands All Berths		85	

Gangways: At North and South Pier, all vessels are required to provide their own gangways which should be ready prior to berthing.

At the Sea Islands, shore gangways are provided at each berth.

LOADING:

	Berth No.	*Product*	*Manifold Size* (in.)	*Maximum Loading Rate* (bbls.p.h.)
Sea Islands	12 to 18	Crude	16	40,000 to 280,000
	19 and 20	Crude	16 to 24	
	12 to 18	Bunker Fuel Oil	10	12,000
	12 to 18	Bunker Diesel	10	900
	19 and 20	Bunkers	12 to 16	12,000
North Pier	6 to 11	Crude	12	15,000 to 90,000
	6 to 11	Fuel Oil (Cargo)	12	12,000 to 22,000
	8, 9, 10	White Diesel	12	12,000
	8, 9, 10	Kerosene	12	6,500
	6 to 10	Naphtha	12	30,000
	6 to 11	Bunker Fuel Oil	8	5,000
	6 to 11	Bunker Diesel	8	1,200
	6, 8, 10	RLPG	12	30,000
South Pier	1 to 4			
		Fuel Oil (Cargo)	8	12,000 to 15,000
		Black Diesel (Cargo)	8	5,000
		White Diesel	8	8,500 to 15,000
		Gasoline	8	6,000
		Kerosene	8	6,500
		Jet Fuel	8	10,000
		Bunker Fuel Oil	6	5,000
		Bunker Diesel	6	1,200

Notes:

1. All vessels calling at Ras Tanura Terminal should be equipped with reducers to fit these loading connections which all have 150 lb. ASA flanges. These reducers should be fitted before berthing to help expedite ship turnaround time.

2. It is expected that most vessels will be able to accept any cargo as fast as it can be delivered. Officers in charge of loading must have due regard for all safety precautions as well as for individual vessel hazards.

If loading of crude or products is too slow, ARAMCO will so advise the vessel.

Should a demurrage claim be filed against ARAMCO, the slow loading rate may result in an addition to allowed lay time.

3. Special regulations govern the acceptance and loading of Liquefied Petroleum Gas tankers in the Port of Ras Tanura.

4. The following types of crude oil are available at Ras Tanura Terminal:

ARABIAN BERRI (sometimes incorrectly referred to as Light Extra Light) CRUDE, ARABIAN LIGHT CRUDE, ARABIAN MEDIUM CRUDE, ARABIAN HEAVY CRUDE.

Loading arm connection: Jetty crews are on duty continuously to handle hoses/arms and will make connections and disconnections.

All loading connections are equipped with electrical insulating flanges therefore ship to shore bonding cables are not required.

Loading procedures: All operations in connection with the starting of loading, discharging, switching of tanks and topping off must be directly and personally supervised by the ship's officer.

It is the responsibility of the vessel to advise shore personnel to shut down cargo and bunker loading when the vessel's cargo and bunker requirements are met.

Upon completion of loading the vessel will normally be required to leave the berth immediately after disconnecting hoses/arms to await clearance in the Tanker Anchorage.

Cargo calculations and release: The American system of cargo measurement in BARRELS with temperatures in fahrenheit degrees according to the ASTM – I.P. is used by ARAMCO and the Saudi Arabian Government for Cargo measurement purposes. Ships cargo loaded figures should be available in these units. Generally, if the difference between average normal ship measurement and official cargo measurement is satisfactory the ship will be released to sail by ARAMCO under E.D.P. Unusual differences will be investigated by ARAMCO while the vessel waits in the Tanker Anchorage.

BALLAST: *Arrival Ballast Condition:* Vessels arriving at Ras Tanura Terminal shall retain sufficent clean water ballast on board to permit safe handling of the vessel in the prevailing weather conditions. A maximum stern trim of 15 feet with the propeller just covered is recommended.

Ballast pumping equipment should be ready to commence discharging ballast as soon as the vessel is secured in the berth.

DEPARTURE: See "Inbound Traffic Procedure" – East Channel Caution.

Deep Water Departure Channel: Has a clear swept depth of 69 ft. (21 m.) at I.S.L.W.

A minimum of 5 ft. (1.5 m.) keel clearance is required for all vessels transiting this channel during departure.

Departure Pilotage: On departure from Ras Tanura, Masters of vessels 150,000 DWT and above with draft of 60 ft. (18.28 m.) or more, may request additional pilotage assistance to line up for the Deep Water Departure Channel. Such pilotage assistance is compulsory for vessels with a draft of 68 ft. (20.73 m.) or more. In such instances the Harbour Pilot will remain on board until the vessel is aligned on a safe course for the Departure Channel, provided the Pilot can disembark safely. In certain cases it may be possible to arrange for the Pilot to leave by helicopter (See Part "A" – Helicopter Operation). The additional pilotage is also available when it is necessary for a V.L.C.C. to proceed to anchor to await a favourable tide or other reasons. The Pilot will remain on board until the vessel arrives in the anchorage, however, the Master will be responsible for the actual anchoring of the vessel. During adverse sea and weather conditions, a proper lee must be made so as to allow the Pilot to safely disembark.

Vessel proceeding from Ras Tanura Terminal to Northern Holding Anchorage: The vessel should leave Ras Tanura Terminal and follow the Departure Channel observing the separation scheme to the Northern Holding Anchorage under advice of Port Radar.

SEE Part "B" TRAFFIC REGULATIONS

The vessel should advise Ras Tanura Pilots of its anchoring time.

REPORT: *More stringent safety checks:*

Quote:

Due to recent accidents involving tankers at terminals, ARAMCO have tightened up their safety checks and closely follow the issued safety regulations.

ARAMCO, as terminal operator of Ras Tanura/Ju'aymah, inspect all vessels before loading. Anything found not up to the standard of guidelines and recommendations compiled by Oil Companies International Marine Forum are noted, the Master is given a letter of protest, and the Owner is advised to correct deficiencies. At the same time all remarks and recommendations are computer-stored for easy access in the future.

ARAMCO have found that many recommendations are neglected and some vessels are repeatedly given the same remarks.

To prevent this, new actions are being taken by ARAMCO. Vessels which in the past have received recommendations and not followed the same have recently been refused permission to load at Ras Tanura/Ju'aymah.

That a vessel was allowed to load at her last call is not a guarantee that she will be allowed again.

Unquote.

Further to the above, we have been advised that since these deficiency letters do not allow these vessels to berth at the Ju'aymah Terminal's SBMs, vessels will be diverted to either of the three suitable berths at Sea Island. Time lost from berth available at Ju'aymah to berth available at Sea Island will be on the vessel's account.

This will affect vessels between 200,000 – 275,000 d.w.t.

SHIPMASTER'S REPORT: 1977.

I have just loaded at the above port on a 263,000 d.w.t. vessel to a draft of 67.5 ft. As the vessel was loading to a draft that meant navigating the departure channel on a rising tide, and also my first visit to the port, I requested the assistance of a Pilot for the departure channel.

I made this request 8 hours before departure to the port office and was informed it was not provided.

When the Berthing Master came to sail the ship he told me that ARAMCO did not provide this service irrespective of what was said in any publication and he left the vessel before it entered the departure channel.

ARAMCO's comment, June 1980: The above is an accurate statement!

We do not supply channel pilots. However, we do supply pilot and tug assistance for lining up to enter the departure channel after loading at Ras Tanura. This assistance is for vessels with departure drafts over 60 ft. when requested by the Master. For vessels with draft of 68 ft. and over, the assistance of tugs and pilot is compulsory. There is no charge for this service.

SHIPMASTER'S REPORT: August 1979.

Bunkers: "Saudi Bunkers" have a tanker of about 15,000 d.w.t. moored on the East side of Dammam channel.

VHF: Channel 13 or 16. During office hours and not at meal times otherwise call Agent.

Barges: 3 – "Tarra Tiffany" – Panamanian registered. Purpose built Bunkering tanker, built Singapore in 1978. Capacity 1,700 tons H.O. and 200 tons D.O.

"Min Woo II" a coaster with capacity of about 2,500 tons H.O. and 500 tons D.O.

"Corrondel" capacity not known.

All have "Yokohama" fenders and are well equipped. They are very quick at connecting and give good co-operation.

Area: To South of Ras Tanura Tanker Inner Anchorage. We anchored just South of SE corner of anchorage near outer Dammam channel buoys.

The nearer South pier the better but it depends on number of vessels in anchorage and Ras Tanura Radar requirements. *Vessel must not anchor in tanker anchorage if for bunkers only.*

Connecting: 6 in. hose, no reducer. Barge generally comes on vessel's port side. Derrick required. Gangway to be turned in.

Payment: Vessel pays for amount supplied, not ordered, barge request vessel to check barge ullages.

It is possible that bunker operations may be moved to the "Northern Holding Anchorage".

SHIPMASTER'S REPORT: December 1979

The following is a radio message received by the Master from his Agent.

Important Notice Revised Government and Port Regulations Ras Tanura. Please acknowledge your compliance.

Para One

Port Authorities now insist that all vessels are not to sail from Ras Tanura (Ju'aymah) until a port clearance (titled sailing report) has been delivered on board STOP Therefore vessels must have onboard both Port Clearance and P 2/50 permit of departure before sailing STOP

Para Two

Anti Pollution regulations are now being strictly enforced by Saudi Arabian Government Authorities with heavy fines/delays to vessels/possible arrest for Masters of offending vessels therefore you are strongly advised to AAA Log and report to the Pilot Officer any oil slick P 3/50 sightings BBB Closely monitor deballasting operations CCC Acknowledge receipt only of any protest letter submitted by ARAMCO for any alleged pollution incident DDD Advise us immediately a protest letter for an alleged pollution is received on board and name of your P and I Club EEE Issue P 4/50 Arab with a separate counter protest letter as required copied to us STOP

Para Three

Please ensure all repeat all alcoholic beverages and pornographic material are removed from cabins/lounges and placed in bonded store for sealing STOP Stores and chillrooms must also be sealed if containing alcohol STOP Vessels are P 5/53 subject to search on arrival and penalties are severe for infringement of Saudi Regulations STOP

Para Four

On arrival Ras Tanura ensure you call this Office advising anchor time and most important advise when Pilot boards your vessel to proceed to berth/SBM in order to avoid delay in clearing your vessel STOP+

SHIPMASTER'S REPORT: August 1981.

Ras Tanura approach and North Pier LPG Berths:

Buoyage: From May 1981 all IALA System.

Approach: Initial Contact: Contact HZY – ARAMCO, remember this station will accept messages to local Agents but not send Agents' messages to ship, these have to come through Bahrain. Contact HZY at least 48 hours beforehand to give time of arrival at Entry Buoy (RTE 2 Eastern Channel), either Northern or Eastern Holding Anchorages or as soon as possible if coming from another Gulf port.

1. If vessel has no orders, or a nomination but no firm date vessel will have to wait at Northern or Eastern Holding anchorage.
   The Eastern is for ships below 250 m. in length and draft 10.7 m.
2. If vessel has a nomination and date near at hand you may be allowed to proceed to inner tanker anchorage off Sea Island.

Anchor/Proceed: If vessel has to wait, select whichever holding anchorage is suitable. For gas carriers we preferred the Eastern as the channel is easier and quieter than the Main Channel on entry, plus the distance is less if coming from the East. Larger vessels have no option and have to use the Northern. If you are not sure whether you will have to anchor or not at the Holding Anchorages contact Ras Tanura Pilots on Channel 16, working 14, as soon as possible before arrival for instructions.

Listen: Guard HZY well before arrival for standard messages, nomination and berthing instructions. A useful and most important service is the Berthing Schedule given out twice daily at 0700 hrs. and 1900 hrs. GMT on 430 kHz. after Traffic List.

Proceed: If you have firm instructions to proceed to Inner Tanker Anchorage, cable HZY for permission to use either Eastern or Main Channel at least 12 hours beforehand, if possible, or as soon as leaving port (Kharg or Mina, etc.). You will not receive a reply. Call 'Ras Tanura Pilot' one hour before entry buoy for permission to proceed inwards and give time at Entry Buoys (RTE 2 East Channel) and time off Sea Island.

Proceed Inwards: After contacting Pilot on Channel 14 you will be told to report at Entry Buoy. Then when passing this buoy told to report to 'Ras Tanura Radar' on Channel 10 on which close watch must be kept as well as Channel 16.

Main Channel: Ras Tanura Radar will instruct you when to report, remember they have vessel plotted.

A speed of about 12 knots down the channel is safe at manoeuvring full speed.

At No. 9 Buoy a speed reduction to 5 knots is required, before doing this check with Radar – they may require you to continue at greater speed to clear channel.

East Channel: This channel is not so complicated or congested and vessels keep to the starboard side of buoy line. Radar will require reports at given intervals – usually "RTE 2" and "RTE 7", 12 knots can be maintained most of the way.

Proceeding from Head of Gulf: If coming from Kharg or Mina, etc., extra distance will be entailed by using Eastern Channel so use Main Channel but get permission first from Pilots and inform HZY well beforehand.

Inner Tanker Anchorage: The sailing directions will tell you to haul round to East on leaving main channel to clear tanker anchorage if proceeding to Dammam area. You will have already told Radar Control where you are bound and they will probably let you cross tanker anchorage if reasonably empty and few vessel movements off Sea Island.

Anchored: Ras Tanura Radar will require position at anchoring and then to report before heaving up. The tanker anchorage area is not good holding ground, particularly in Winter when strong winds are frequent, plenty of cable is required. During February at the Southern end of the anchorage 9 shackles of cable have been used.

Pratique: Cable in usual ARAMCO format to HZY for Free Pratique 24 hours beforehand or as early as possible before arrival. Pratique not given until alongside and vessel cleared.

Departure: Again depends on draft and destination. If under 10.7 m. draft and proceeding East use Eastern Channel. Radar will require report at "RTE7" and "RTE3". Main channel reports at Nos. 17 and 18 buoys and "2 Alpha".

Bunkers: Obtainable from ARAMCO by chicksan on the berths at North Pier at the same time as loading. If bunkering by barge vessel can only do it at the Northern Holding Anchorage. Saudi Bunkers have three coasters on charter. Their fendering is very good and seamanship good, although English not so good. You can contact Saudi Bunkers on Channel 16, working 13, during office hours, otherwise to barge direct. Generally starboard side alongside, derrick required. Subject to weather delays.

Berths: There are three berths for gas carriers at Ras Tanura: Nos. 6, 8 and 10 on North Pier, 10 being the most modern and Northerly, and two at Ju'aymah.

Minimum draft on the berths is 46 ft. LW. Always port side alongside.

Maximum air draft at manifold: 20 m.

Chicksans: 2×12 in. loading at each berth.

2×8 in. VRL at each berth.

All berths now have auto-couplers which require 1 m. clearance between manifold valve and outer flange, not all berths have enough spool pieces so best have ship's pieces ready, not required on V.R.L.

Moorings: Minimum always 3, 3, 2 with springs crossed each end. If strong winds expected 4, 4, 2 each end. Mooring up can take time especially if ship's mooring gear is slow – about 1.5 hours. Very keen on moorings being kept tight.

Fire wires must have eye each end with eye being hung off on light rope pennant – wire in a bight 1 m. above water.

Pilots: Board 1 mile East of the Southern end of the North Pier from large fast pilot launch. Depending on weather, Pilot will use straight conventional ladder or gangway/ladder arrangement. No berthing if wind over 25 knots. On unberthing it is a regulation that the Pilot is on board and tugs standing by before Chicksan disconnecting can commence.

Tugs: Usually two tugs used, tugs' lines used. Berthing "American fashion" alongside, unberthing long line from bow to stern. Four new tugs of about 6,500 h.p. are being commissioned. Total number in port, 8, two of which at Ju'aymah at any one time. Tugs join vessel off Sea Island.

Procedure: Shore gang connect and disconnect, generally takes about 1.5 hours.

V.R.L.: Considerable tightening up on use and as a rule only to be used in emergencies except when taking coolant.

Loading rate: Maximum loading rate is about 20,000 bbls./h. which roughly corresponds to 1,500 tonnes to 1,900 tonnes/hr. depending on grade. If more than one gas ship loading on North Pier at one time rate will drop appreciably. Very difficult to get a good rate at Berths No. 6 or 8, maximum obtained 8,000 bbls./h.

Pressures/Temperature: Regulations are 0.7 mbs tank pressure arrival alongside and a difference between top and bottom temperatures of 15°C. Maximum 10 tonnes liquid of incompatible grade per tank on arrival.

Cooling Down: If vessel arrives with warm tanks – after drydock/repairs, Ammonia or in Butane going to Propane she will require coolant. ARAMCO very particular on this subject and require ships to leave the berth and cool down after taking sufficient quantity for this purpose. When cooled down to within ARAMCO pressure and temperature limitations the ship will be accepted back alongside and will be required to load at full rate without the V.R.L.

From experience we have found about 1,500 tonnes per product or about 2,000 tonnes of one grade is beneficial, if this can be obtained without extra charge. ARAMCO regulations do not permit more than 10% of nomination of that grade in coolant.

Taking coolant, V.R.L. allowed. Definitely no venting up riser. Maximum rate obtainable on coolant is usually about 3,000 bbls./h. Make sure you do not ask initially for too low a figure because it is quite a job to get it increased. Only allowed to load coolant in one tank of that grade.

Loading Master: Will give you ARAMCO VHF set for pier communications or take ship's set.

Water: Well (Raw) water with a salt/mineral content is easily obtainable on North Pier. Rate about 30 t.p.h. It's far better than rationing. Add lime with softener. Price about $2.0 per tonne, max. 200 tonnes.

Chits have to be obtained from the Agent before the Supervisor will let you connect hoses. Connections are American type couplings. Distilled water is not obtainable.

Stores: Only at the anchorage, by the Agent's launch. No stores are allowed to be loaded, carried or landed along piers. In Winter and early Spring, fresh provisions are reasonably good and moderately priced.

Air Freight: It takes about 2 days to clear goods through Customs at Dhahran.

Crew: Repatriation and joining is best arranged well beforehand. NO Russian visas in Discharge Books or Seamen's Cards for those joining, they will be refused permission to enter. The Agent will require off-going crews' Discharge Books the day before departure. To UK the best flight is BA. 120 at 0130 from Dhahran arriving London at 0530 hrs., for this you have to be off the ship no later than 1600 hrs. the day before clearing formalities and then wait in an hotel at Dhahran.

Medical: Allow at least 6 hours from the time the Agent says he will meet you at North Pier main gate for getting to hospital. Seamen's Books are essential and will be taken by Agent beforehand. Prescriptions and reports take time to be delivered – allow 12 hours.

For emergency cases at anchorage contact 'Ras Tanura Pilots' as well as Agents and they will arrange a Coastguard helicopter immediately to take casualty off. If alongside, contact Agent or 'Pilot'.

Films/Walport: Exchange not possible. This was stopped in 1979 due to Customs problems over local film shows.

Alcohol/Magazines: Definitely no alcohol – all to be sealed. Random checks by Coastguard, punishment very severe. "Playboy" type calendars and magazines to be put in store.

Mail: Takes about 7 days – 10 days from UK and vice versa.

Surveyor/EDP: With gas carriers Surveyor is allowed to complete his survey and check figures with Chief Officer before Pilot will take ship off berth. Most Pilots know this but sometimes consultation is required otherwise Surveyor will have to go off with Pilot. The two main survey companies in Ras Tanura are Watson Grey and Redwood. ARAMCO will cable through HZY your figures for agreement about 18 hours after departure, for insertion on Bill of Lading and authorisation to Agent. With gas carriers due proper survey on arrival and departure generally figures are correct, however checks should be made.

Gangway: This can be turned out prior to berthing. It cannot be landed on any of the berths and must be slung at all times.

Pollution: Very strict. If any oil comes near vessel report to Pilots otherwise you will be liable.

Saudi Flag: Must be displayed 24 hours and be well visible.

Formalities:/Clearance: Make sure you have correct clearance on departure, it comes in three parts – Sailing Report, Export Manifest, Permit of Departure.

Arrival Form: 5 copies required of the standard Arrival Form – Agent's own forms. Handed in on arrival.

Request for Clearance Form: 5 copies on Agent's own printed forms given in on arrival.

Crew List – 5, Health Declaration – 2, Vaccination List – 2, Store List – 2, Crew Declaration – 2.

The above forms sometimes vary in number. 'Q' flag and lights at night must be displayed until Pratique given – VERY IMPORTANT.

Immigration, Quarantine and Customs generally carried out by Agent with Coastguard Officer in attendance, who seals bond.

REPORT: May 1982.

Acceptance for Loading: ARAMCO have advised that vessel's arrival time if vessel berths on arrival is the time Pilot boards vessel, no matter where. If vessel does not berth on arrival, the arrival time is taken when vessel drops anchor at either the North holding anchorage, or at Ras Tanura inner anchorage, if vessel is called down by Ras Tanura Pilots.

If vessel's ETA is close to 1200 hrs. on the nomination date or acceptance date, please try to make an allowance for vessel to be called from entry buoy to Ras Tanura inner anchorage by the Pilots on the assumption that vessel needs 4 hours (approx.) to come from entry buoy to inner anchorage. If vessel does not make the announcement and arrives entry buoy at 1100 hrs., and is told to proceed to the inner anchorage vessel's arrival time will be taken as the time she drops anchor in the inner anchorage 1500 hrs. (approx.), therefore vessel would be classed as a non-performer.

With regard to Notice of Readiness tendering time, it is taken when vessel anchors in the Northern holding anchorage or inner anchorage if called down on arrival. If vessel is told that she is berthing on arrival when she reaches the entry buoy then tendering time is taken at entry buoy or when Pilot boards on her passage inwards.

AUTHORITIES: The Arabian American Oil Company, Port Control Centre, North Pier, Ras Tanura, Saudi Arabia. *Tel:* 37250. *Cable Address:* ARAMCO, Dammam. *Contact:* S. M. Al Shibar, Port Captain – Terminal Marine Piloting Division.

Port Officials: Saudi Arabian Government Port Authorities located in Customs House, Port Office, and Quarantine Office at Ras Tanura.

AGENT: Gulf Agency Company Saudi Arabia, ARAMCO Mail Box 621, Ras Tanura 31941, via Dhahran, Saudi Arabia. Cables: "Confidence", Ras Tanura, Ship-Shore traffic via Dammam Radio. Telex: 651011, 651059 ("GAC RT SJ") Telephone: 6670632, 6670636, (24 hour service) 6673180. After Office Hours: 6670644, 6670925.

Vessels can communicate with SSB radio station, frequencies 3539 and 6910, call-sign "Confidence Ras Tanura".

For ship to shore communication, Ras Tanura office is also equipped with VHF radio, call-sign "Confidence Ras Tanura", on Channel 16, switching to Channels 13, 6, 9 or 14 for communication.

Tanker Crew Mail: To be directed to: c/o Gulf Agency Co. Saudi Arabia Rahima P.O. Box 72, Ras Tanura, via Dhahran, Saudi Arabia.

YANBU (See Plan Book)

Commercial Port: 24.05 N. 38.03 E.

Industrial Port: 23.57 N. 38.13 E.

(A) COMMERCIAL PORT

ALSO SEE "GENERAL" BEFORE FIRST PORT.

LOCATION: Yanbu Commercial Port is on Red Sea coast, about 168 nautical miles N.N.W. of Jeddah.

PORT LIMITS:

Harbour Boundaries:

All shore-based port property enclosed by a fence following the shore line extending seawards to a line running between the following points:

Lat. 24° 06′ 00″ N.	Long. 38° 00′ 00″ E.
Lat. 24° 06′ 00″ N.	Long. 37° 57′ 30″ E.
Lat. 24° 03′ 30″ N.	Long. 37° 57′ 30″ E.
Lat. 24° 03′ 30″ N.	Long. 38° 05′ 30″ E.

CHANNEL: Ships entering port pass through a channel of the following measurement: Length 1,647 m., width 200 m.

BEACONS:

1. Schermo Beacon: 11 miles West of Yanbu Port. Lat. 24° 03.08′ N., Long. 37° 51.50′ E. Height 10 m. above datum. Range: 11 nautical miles. Light characteristics: White flash every 5 seconds. (Fl.W. 5 sec.).

Note: Newly installed Racon on Schermo reef in position: Lat. 24° 03′ 20″ N., Long. 37° 51′ 60″ E. Code letter: "Y". Cycle: 75 seconds. Range: Approximately 12 nautical miles.

2. Entrance Beacons: Two Beacons, 1 & 2 at entrance of port channel. Height: 15 ft. Range: 5 nautical miles.

Beacon No. 1: Starboard – hand beacon (Green), green flash every second (Q.G.). Position: Lat. 24° 04.91′ N., Long. 38° 02.08′ E.

Beacon No. 2: Port – hand beacon (Red), red flash every second (Q.R.). Position: Lat. 24° 04.91′ N., Long. 38° 01.87′ E.

Beacon No. 6: 795 m. from channel entrance on port side there is another beacon height 15 ft. (Red), red flash every second (Q.R.). Range: 5 nautical miles.

APPROACHING: A cement factory has been established in position: Lat. 24° 16.1′ N., Long. 37° 33.2′ E.

The factory provides a strong radar echo and emits a very bright glow at night.

It has been reported that this has confused seafarers who have taken it for the town of Yanbu.

Seafarers are strongly advised to amend their sea charts accordingly.

Masters proceeding to Yanbu Commercial Port should follow strictly the Channel and traffic separation scheme as clearly as delineated in formal charts in force (e.g., British Admiralty Charts 327 and 328.)

Non-compliance in order to save time will be met with a fine.

BUOYS: Channel is buoyed with red and green port and starboard-hand buoys.

Starboard-hand buoys: 7 buoys, odd number: 1A, 3, 5, 7, 9, 11, & 13. Buoy shape: Cone. Light characteristic: Green flash every 2 seconds (Fl. G. 2 secs.).

Port-hand Buoys: Number of buoys: 2, even numbers: 4, 8. Buoy shape: Can. Light characteristics: Red flash every 2 seconds (Fl. R. 2 secs.).

DOCUMENTS: All ships bound for Yanbu Commercial Port should have the following documents prepared for the relevant authorities and the original certificates as specified ready for inspection by the Port Authority's Boarding Officer.

Crew List, original plus 4 copies.
Passenger List, original plus 4 copies.
Personal Effects, Crew original plus 1 copy.
Vaccination List, original plus 1 copy.
Marine Health Declaration, original plus 1 copy.
Israel Boycott Declaration, original plus 2 copies.
Ship's Stores List, original plus 1 copy.
Logbook.
Certificate of Registry.
Certificate of Classification.
Load Line Certificate.
Safety Construction Certificate.
Safety Equipment Certificate.
Radio & Wireless Certificate.
Cargo Gear Certificate.
Derat Certificate.
Port Clearance – Last Port of Call.

PILOTAGE: Pilotage is compulsory. Vessels bound for Yanbu Commercial Port should call Yanbu Port Control on VHF Channel 16 at least 2 hours prior to arrival.

Pilots will normally board in position Lat. 24° 02.6′ N. Long. 37° 45.2′ E. approximately 5 miles West of Schermo Beacon. Pilot boats are painted orange with "Pilot" written in black on white superstructure.

Vessels should exhibit international code flag "G" by day or flash "G" by night. On approaching the Pilot Boarding Area, a pilot ladder should be rigged, reaching approximately 1 m. above sea level. Vessels should ensure a good lee for boarding of the Pilot.

ANCHORAGES: There are no areas suitable for the safe anchorage of vessels in the vicinity of Yanbu Commercial Port.

RESTRICTIONS: The port is open 24 hours per day and vessels may enter and leave port at any time.

MAX. SIZE: There is no restriction as to length or breadth of vessels but a draft restriction of 34 ft. is in force for all vessels to all berths other than those cement vessels nominated specifically for discharge at berth No. 3 or No. 9 where a 36 ft. draft limit is allowed.

HEALTH: Quarantine formalities are effected after vessels are berthed except in the case of passenger/pilgrim vessels which will be anchored inside the harbour for quarantine and immigration clearance.

RADIO: Vessels bound for Yanbu from the North should route their ETA cables through Port Said Radio.

Vessels bound for Yanbu from the South should route their ETA cables through Bahrain Radio.

ETA cables are transmitted to the local Saudi PTT Yanbu Office and thence distributed to concerned parties by telex.

VHF: Yanbu Port Control keeps a radio watch on Channel 16 VHF, 24 hours per day. VHF Channels 14, 12 and 9 are available for standard communications. VHF Channel 14 is normally used by Pilots and tugs for manoeuvring purposes.

RADAR: There is no port radar facility at Yanbu Commercial Port.

TUGS: Tugs normally meet incoming vessels off No. 8 Port Home Channel Buoy abreast of the port Coast Guard station. Ships' lines are used for berthing and unberthing operations.

Tugs range from 800 h.p. – 2,500 h.p.

Yanbu 1 and 2:	800 h.p.
Yanbu 3:	1,310 h.p.
Yanbu 21 and 22:	2,500 h.p.

BERTHING:

Berth	*Length (m.)*	*Depth (m.)*	*Remarks*
1	170	10	General cargo; pilgrims' reception hall.
2	220	10	General cargo, livestock
3	300	11	Bulk cement terminal (discharge) only
4		11	General cargo
5 to 7	800	12	General cargo
8 & 9	440	12	General cargo at No. 8, bulk cement discharge only at No. 9.

Note: Ro-Ro vessels berth stern-to on Berths 5 to 9.

Covered storage area: 62,000 sq.m.

Open storage area: 529,400 sq.m.

CARGO HANDLING EQUIPMENT:

Mobile cranes:	1 × 200 ton
	1 × 36 ton tower crane
	4 × 50 ton
	2 × 40 ton tower cranes
	1 × 40 ton
	1 × 36 ton tower crane
	2 × 35 ton
	5 × 30 ton

One crane is equipped with container tip, lifting capacity 70 tons.

Both 40 ton tower cranes are equipped with container spreaders.

Head trucks:	20
Mafi trailers:	60 × 40 ft.
Fork lifts:	4 × 35 ton container handlers
	1 × 28 ton container handler
	1 × 25 ton container handler
	9 × (10 ton – 25 ton)
	81 × (5 ton – 10 ton)
	23 × (up to 5 ton)

BULK HANDLING FACILITIES: Two terminals (berth 3 and 9) with handling capacity of minimum output 1,150,000 tons a year.

Bulk Cement Terminals:

1. Berth 3
   Silos storage capacity: 40,000 tons.
   Handling capacity: 500 t.p.h. 1,000,000 tons per year.
2. Berth 9
   Floating cement plant.
   Storage capacity: about 41,000 tons.
   Handling capacity: about 1,000,000 tons per year.

Bulk Grain Units:

One unit consists of 2 mobile cranes with 6 ton grabs discharging into 2 hoppers. Each hopper has bagging capability. Handling capacity: About 100 t.p.h./crane. No storage units.

Second unit consists of 3 mobile discharging machines. Each machine has bagging capability. Handlling capacity: About 200 t.p.h/machine. No storage units.

STEVEDORES: Contracted for an integrated cargo handling operation, and work continuously 24 hours per day, 7 days per week. A notice time of 48 hours prior to arrival is required for gang booking.

MEDICAL: Assistance can be given by local general hospital and/or by a small private clinic via the Agents.

No vaccinations are required, but Malaria precautions are recommended.

DENSITY: 1025.

CONSULS: At Jeddah.

REPAIRS: No facilities, however minor repairs are possible in local workshops via the Agents.

FRESH WATER: Available via mains direct to berth at a delivery rate o approximately 25 t.p.h. and a cost of SR15.00 per tonne (1982).

DRY DOCK: Not available.

SURVEYORS: Available via Jeddah.

GANGWAY/DECK WATCHMEN: Service not necessary and no available. Port area is fenced and guarded by Saudi Arabian Coas Guard, and guards are posted on each individual vessel in port.

HATCHES/CARGO GEAR: To vessel's advantage if all hatches an gear are prepared by ship's crew, however stevedores do assist.

CUSTOMS ALLOWANCES: In all Saudi Arabia, possession of an alcoholic beverages is strictly prohibited.

REPATRIATION: Possible.

AIRPORT: Regular flight service on direct flights to Jeddah and Riyad by Saudia. Other Saudi destinations and international destinations vi Jeddah and Riyadh.

Yanbu domestic airport is located approximately 15 km. from the por

TIME: GMT plus 3 hours.

HOLIDAYS: Public holidays do not affect port's activity. But a government offices, banks, etc., are closed to the public durin Ramadan and Haijh holidays which change annually by the Higiria calendar.

TELEPHONE NUMBERS:

Police (Coast Guard):	Port Ext. No. 314
Fire – via Coast Guard	314
Ambulance – via Stevedores	142
or Traffic Department	317

TELEPHONES: Available in near future.

SERVICES: Services like tank cleaning, etc., are not available.

SHORE LEAVE: By Agent's request permitted.

IDENTIFICATION CARDS: Seamen's discharge books are sufficient.

REGULATIONS: Refer to Rules and Regulations for Saudi Arabia Seaports.

DEVELOPMENTS: *Under construction in 1984:* Refrigerated store hazardous cargo store, marine workshop, first aid station and fire station.

Future port developments include an additional 7 berths and a contro tower. No time has yet been fixed for implementation of these projects.

AUTHORITY: Yanbu Port Management, P.O.Box, Yanbu Port, Yanbu Saudi Arabia. *Tel:* 04-3221163, 3222515 (ext. 294). *Telex:* 461005 Ports Sj and 461096 Ypmc Sj. *Cables:* Ports Yanbu. *Contact:* Abdul Rahman Ahmad Al-Khateeb, Port Director-General.

(B) INDUSTRIAL PORT: KING FAHD PORT AT MADINA YANBU AL-SINAIYAH

At present the King Fahd Port at Madinat Yanbu Al-Sinaiyah consist of 7 Terminals listed as follows:

- Construction Support Terminal
- Crude Oil Terminal
- NGL Terminal
- Yanbu Petromin Refinery Terminal
- Export Refinery Terminal
- General Cargo and Container Terminal
- Bulk Terminal

FLAG: Every vessel entering King Fahd Port at Madinat Yanbu Al-Sinaiyah must hoist the Flag of the Kingdom of Saudi Arabia from the foremast and keep it flying at all times throughout the vessel's stay in Port. The Flag of the Kingdom of Saudi Arabia is to be in good condition and is properly displayed when the Arabic writing appears at the top and the sword at the bottom.

DOCUMENTS: Also see "Radio".

Arrival Documentation Requirements: The Rules and Regulations fo Saudi Arabian Seaports specify that Masters must present or make available for inspection the following papers and documents:

- Log Book.
- Registration Certificate.
- Classification Certificate.
- Load-Line Certificate.
- Safety Equipment Certificate.
- Radio and Wireless Certificate.
- Cargo Gear Certificate.
- Maritime Health Declaration.
- Vaccination List.
- Derat Certificate.
- Clearance from last Port of call.
- Israel Boycott Declaration.
- Ship's Stores List.
- Grain Shipping Certificate if the vessel is carrying a grain shipment.
- Mail Transport Documents in accordance with the "International Postal Treaty" if any mail is carried aboard.
- 8 copies of the crew list including name, nationality, date and place of birth, passport number, port of embarkation, port of disembarkation.

2 copies of the list of personal effects of crew and passengers

In addition, the Rules and Regulations for King Fahd Port at Madina Yanbu Al-Sinaiyah require that the Oil Record Book and the Certificat of Fitness (in cases of gas and chemical carriers) are available fo inspection.

CLEARANCE: *Basic Procedure for Clearing a Ship:* On arrival of the ship at anchor or berth, and given that all the pre-entry requirement have been fulfilled, the ship will be boarded by the following fo completion of the required formalities:

- Immigration Authorities.
- Coast Guard.
- Port Health Officer.
- Royal Commission Harbour Master.

In the case of dry cargo vessels, on completion of these formalities the Agent will collect the discharge permit from the Customs Authorities having provided a copy of the manifest well in advance. The Custom

Authorities then issue a Discharge Permit, one copy of which is given to the stevedores while the other is given to Port Management.

Basic procedures for clearing a ship outward: When a vessel completes cargo, the Agent is responsible for issuing a letter of notification to the Customs Authorities. The letter is endorsed by the Customs and copies given to the following:

(i) Immigration Department.
(ii) Criminal Investigation Department.
(iii) Yanbu Port Authorities.
(iv) Intelligence Department.
(v) Coast Guard.

The Coast Guard issues a letter to the Quarantine Department of Yanbu Al Bahr Hospital, in their capacity as Port Health Authority stating:

(i) They have received the clearance letter from Customs.
(ii) The vessel's name.
(iii) The vessel's flag.
(iv) The name of the Agent.

and requesting them to issue the Departure Permit.

The Departure Permit, duly signed and stamped, is taken to the Immigration Department who will dispatch one of their Officers to the vessel. This Officer checks the crew list against the Passports and obtains assurances from the Master that the crew is the same as on arrival, apart from any agreed repatriation, and that no crew member has been involved in any mishap. Once the Immigration Officer is satisfied he gives one copy of the Departure Permit to the Master and one copy to Port Management, concluding the formalities.

EARLY DEPARTURE PROCEDURE: Early Departure Procedure is available and should be requested through the ship's Agent.

PILOTAGE: *Instructions to Vessels and Conditions of Use of all Berths within King Fahd Port at Madinat Yanbu Al-Sinaiyah:* When the Pilot boards an inward bound vessel he will present the Master with a letter "Instructions to Vessels and Conditions of Use of all Berths within King Fahd Port at Madinat Yanbu Al-Sinaiyah". The Master is required to sign the letter, acknowledging receipt and agreeing to the Instructions and Conditions contained therein prior to entry into the Port. No vessel will be allowed to proceed into the Port until this letter has been signed.

Pilotage: Pilotage is compulsory for all vessels entering, navigating within, or leaving the port limits of King Fahd Port at Madinat Yanbu Al-Sinaiyah.

Orders for Pilots must be received at least 2 hours before their services are required.

Vessels of less than 300 g.r.t., pleasure craft, vessels operated by the Saudi Arabian Government and the Royal Commission, and any craft employed solely within the port limits are exempt from Pilotage. These vessels must keep clear of the fairway.

The Pilot boarding area for King Fahd Port at Madinat Yanbu Al-Sinaiyah is in a position Lat. 24° 02′ N., Long. 37° 44′ E. Pilots will embark and disembark from twin screw, steel pilot vessels. When approaching the pilot boat the Master of every vessel must reduce speed to a minimum for steerage way, maintain VHF contact with the pilot boat, and provide a good lee.

Every vessel picking up a Pilot must have rigged and ready for use a safe, clean, properly secured pilot ladder or combination of gangway and pilot ladder. The Pilot boarding arrangements must comply with the current IMO codes of practice concerning pilot boarding. A life buoy, with life line attached, and a boat rope must be provided ready for immediate use, and, in addition, between sunset and sunrise the pilot boarding area must be well illuminated. The rigging of pilot ladders and the embarkation and disembarkation of pilots must be supervised by a responsible deck officer.

Any vessel which overcarries a Pilot to another Saudi Arabian Port, must pay all repatriation expenses. Under no circumstances may a Pilot be overcarried to a Port outside the Kingdom of Saudi Arabia, due to visa restrictions. If weather, or other conditions preclude the disembarkation of a Pilot from a vessel, bound to a Port outside the Kingdom of Saudi Arabia, then that vessel will be delayed, at the vessel's expense, until such time as disembarkation is possible. Any such vessel so delayed may arrange, at their own expense, for the Pilot to be disembarked by helicopter.

The length of Pilotage from the Pilot boarding position is approximately 33 miles, with a minimum surveyed depth of 32 m.

Vessels approaching the Port are reminded that the British Admiralty "Red Sea and Gulf of Aden Pilot" states in its supplement that "Ras Baridi has been reported to be 3 miles Northward of its charted position".

APPROACHES: Masters of deep draft vessels will be aware that there are extensive unsurveyed areas between the main shipping lanes and the approaches to Yanbu. Two approach corridors to the present pilot boarding area off Schermo Reef were surveyed early in 1981. The Northern approach corridor, some 48 miles long and 3 miles wide extends in a Westerly direction from just West of Schermo Reef, at approximately Lat. 24° 03′ N., Long. 37° 45.2′ E. to Lat. 24° 04′ N., Long. 36° 53′ E. Depths range in general from 650 m. inshore to 950 m. offshore, but two isolated domes were discovered with least depths of 132 m. and 184 m. at approximately Lat. 24° 04′ N., Long. 37° 36′ E. and Lat. 24° 07′ N., Long. 37° 36′ E. respectively.

The Southern approach corridor some 43 miles long and 3 miles wide extends in a South-Westerly direction from just West of Schermo Reef at approximately Lat. 24° 03′ N., Long. 37° 45.2′ E. to Lat. 23° 22.5′ N., Long. 37° 28.5′ E. No hazards were discovered with depths generally 650 m. inshore to 790 m. offshore.

ANCHORAGES: The bearing and distance shown below is calculated from *Beacon 2C* and indicates position of the anchoage.

Anchoring Points	*Beacon 2C Bearing*	*Distance*
N1	101°	1.06 miles
N2	110°	1.26 miles
N3	098°	1.56 miles
N4	117°	1.80 miles

Anchorage "N4" will be utilised for VLCCs with a light draft as and when required.

Masters of vessels are advised of the following conditions for the use of the anchorage:

1. No repairs of any sort are permitted at the anchorage unless authorised by the Harbour Master.
2. Main engines to be in a state of readiness at all times to leave the anchorage at short notice.
3. A continuous listening watch on VHF Channel 16 should be maintained.
4. Anchor watches to determine vessel's anchor position at reasonable intervals is recommended.

RESTRICTIONS: *Equipment Requirements:* No vessel shall navigate within the Port, unless the vessel complies with the following equipment requirements:

Efficient VHF Radio Telephone capable of working on the Port frequencies.

Efficient steering gear with fully operational rudder and helm indicators.

Efficient working radar.

Efficient propulsion both ahead and astern and fully operational tachometer.

Both anchors capable of being let go and capable of being raised by the vessel.

Efficient winches and adequate mooring gear to secure the vessels safely, and an efficient mooring stations communication system.

Sufficient crew on board at all times to operate the vessel safely and efficiently and all officers properly qualified and certificated as required by the flag nation.

All secondary power or mechanical systems on the vessel to be in operation and immediately available in the event of failure of any primary system.

If any vessel cannot comply with any of the requirements listed above, Royal Commission Port Control must be advised prior to arrival or departure. The vessel will then be subject to inspection and possible delay. Failure to comply or to notify Royal Commission Port Control may result in the vessel being refused entry to the Port.

Permission to Enter the Port: All Masters of sea going vessels must have prior permission of the Royal Commission Port Control to enter the Port. Such permission may be subject to special restrictions or conditions if:

The vessel arrives before or after the given ETA.

The vessel is in danger of sinking.

The vessel or its cargo is on fire or if there is any possibility of a fire or if after a fire it is uncertain whether that fire is completely extinguished.

The vessel is overloaded or, on account of the condition of the cargo, the vessel is dangerous or has deck cargo which extends beyond her sides.

The vessel has been involved in a collision or has grounded.

The vessel is leaking.

The vessel has a list.

The vessel is in an unstable condition.

Draft Requirements: Vessels will not be permitted entry to the Port unless they arrive at a draft consistent with safe manoeuvring and reasonably trimmed, to the satisfaction of the Pilot.

RADIO: *ETA Requirements:* In addition to the "Pre-Arrival Information and Requirements", further notification of ETA is required 5 days, 72 hours, 48 hours and 24 hours prior to arrival at the Port should be sent by telex (No. 462310 YICT SJ) for information of the Harbour Master. Changes in ETA in excess of 1 hour must be notified thereafter. On coming within range of Royal Commission Port Control, the ETA must be confirmed by VHF.

Government Entry Requirements: The Master will be responsible for complying fully with the requirements of Saudi Arabian Government Departments, Ministries, Agencies and Organisations. Particular attention should be paid to the requirements of the Customs, Coast Guard, Immigration and Port Health Authorities. Masters requiring any advice on these requirements should contact their local Agents.

Masters of tankers calling at Petroline's Crude Oil Terminal and NGL Terminal should be instructed to address all messages to "ARAMCO" via ARAMCO's HZY Marine Radio Station. The above does not apply to messages intended for outside shipping and inspection agencies for which commercial Channels should continue to be used.

PRE-ARRIVAL INFORMATION REQUIREMENTS: The Rules and Regulations for Saudi Arabian Seaports and the Rules and Regulations for King Fahd Port at Madinat Yanbu Al-Sinaiyah specify that certain information must be received by the Royal Commission either directly or through the vessel's Agent before that vessel arrives at the port. Vessels which fail to comply with this requirement may be delayed and/or subject to a fine as laid down in the Rules and Regulations.

Dry Cargo Vessels: The following information must be sent to the Director, Ports and the Harbour Master, as soon as that vessel has completed loading cargo at her previous port:

Name of vessel, and former names if any.

Port of registry, flag, and call sign.

Length overall.

G.r.t., n.r.t. and d.w.t.

Expected draft on arrival.

Cargo particulars, nature and quantities to be loaded and/or discharged and any other cargo being carried to other destinations, including quantities and classes of dangerous cargoes covered by the IMDG Code.

Details of cargo handling gear and ramps etc.

Number and nationalities of passengers to be disembarked or in-transit.

Expected requirements for bunkers and fresh water.

Name of vessel's Agent.

Tankers: The following information must be sent to the Director, Ports and the Harbour Master as soon as the vessel receives orders to proceed to the port. It is requested that the information should also be sent to the relevant Terminal Operator.

AA	Name of vessel.
BB	Former names.
CC	Port of registry, flag, call sign.
DD	LOA, G.R.T., N.R.T.
EE	Summer D.W.T., arrival D.W.T.
FF	Draft on arrival forward and aft.
GG	ETA.
HH	Last port.
II	Cargo on board and flash point, destination of cargo.
JJ	Cargo requirements.
KK	Previous cargo and quantity residues on board for load on top.
LL	IMO Class.
MM	Whether gas free or in an inert condition.
NN	Port of loading ballast and amount.
OO	Quantity of ballast loaded on passage.
PP	Quantity of segregated ballast on arrival.
QQ	Quantity of cargo tank ballast on arrival.
RR	Time for deballasting: Can ship load/deballast simultaneously?
SS	Special conditions, difficulties, defective equipment or gear which could present special hazards or difficulties when mooring, unmooring or during cargo operations.
TT	Agent's name.
UU	Maximum loading rate.
WW	Bunker requirements.
XX	Cargo manifold connections size.
YY	Bunker connections size.
ZZ	Derricks.

Gas Tankers: The following information must be sent to the Director Ports, the Harbour Master and Terminal Operator as soon as the vessel receives orders to proceed to the port.

AAG	Name of vessel, indicating any former names.
BBG	Port of registry, flag, call sign.
CCG	LOA, G.R.T., N.R.T.
DDG	Summer D.W.T., arrival D.W.T., arrival draft forward and aft.
EEG	Last port, ETA Yanbu.
FFG	Quantity of ballast on arrival: where loaded.
GGG	Quantity of dirty ballast on arrival.
HHG	Total cargo capacity in cubic metres. Cargo required.
IIG	Grades and quantities of any part cargoes or cargo residues and where loaded. Grade and quantities of product in deck tanks.
JJG	Are part cargoes to be commingled with Yanbu loadings?
KKG	Gauge pressures; top, bottom and mean temperatures of each cargo tank.
LLG	Quantity of coolant required in addition to cargo requirements.
MMG	Maximum allowable relief valve settings for all cargo tanks.
NNG	Have any cargoes other than LPG been carried during last 3 loaded voyages? Specify.
OOG	Maximum oxygen content by volume per cent of each warm or inerted cargo tank.
PPG	If tank purging required specify whether: (a) Parallel or in series. (b) Liquid from shore direct to cargo tanks. (c) Liquid from shore to vessel's vaporisers. Specify vaporiser throughout in RLPG tonnes/hour.
QQG	If cooling down tanks is required, specify maximum cooling rate in terms of temperature reduction per hours and maximum temperature differential permitted between any two points in cargo tanks.
RRG	Available total capacity of ship's reliquefication plant for each nominated cargo product.
SSG	Type of ship's reliquefication system i.e., direct, cascade or other.
TTG	Capacity of ship's gas blowers to shore vapour return line in volume per hour at reference temperature.
UUG	Maximum loading rate and approximate topping off rate.
VVG	Bunker manifold size. Bunker requirements.
WWG	Manifold presentation; function, ASA rating, size, from Forward.
XXG	Agent's name.
YYG	ICO ship type. Does vessel have valid certificates of fitness?
ZZG	Special conditions, difficulties, defective equipment or gear which could present special hazards or difficulties when mooring, unmooring or during cargo operations.

HEALTH: *Quarantine:* In accordance with International practice, quarantine signals must be displayed by all vessels approaching the port. These signals must be displayed continuously until Pratique is granted.

Sunrise to Sunset – Quarantine Flag
Sunset to Sunrise – Signal lights
Red over white

VHF: *Port Control:* All the marine services and shipping movements within King Fahd Port at Madinat Yanbu Al-Sinaiyah Port Limits are monitored and controlled by "King Fahd Port Control", which is situated at Lat. 23° 57.4′ N., Long. 38° 13′ E. The station is manned 24 hours a day and maintains a continuous VHF watch. Information can be provided to Masters and Pilots on all navigational aspects, including wind and visibility, navigational aids and shipping movements within the port area. The station will also provide a liaison with the Terminal Operators and Emergency Services.

The following VHF channels are continuously available for use by Royal Commission Port Control.

Channel Designator	*MHz Frequency*	*Service*
16	156.800	International Calling and Distress
10	156.500	Port Operations – 1
11	156.550	Port Operations – 2
13	156.650	Port Operations – 4
68	156.425	Port Operations – 2
67	156.375	Pilotage/Berthing Operations
69	156.475	Pilotage/Berthing Operations
73	156.675	Pilotage/Berthing Operations
74	156.725	King Fahd Port Operations – Private

In the event of a Port Emergency, King Fahd Port Control will designate a channel for use during the period of the emergency.

RADAR: Harbour Surveillance Radar will be installed in the new Port Control Complex, and should be operational in 1984.

TUGS: There is no requirement for Masters to order tugs in King Fahd Port at Madinat Yanbu Al-Sinaiyah. The number of tugs to be used during berthing and on departure will be specified by the Harbour Master. If the Master wishes to appeal against the number of tugs allocated, he will do so to the Harbour Master, who will make the final decision.

Any tug whether owned, hired or chartered by the Royal Commission, when used for assisting a vessel, shall be deemed to be under the order and control of the Master, Owner or Charterers of the vessel being assisted. The Royal Commission shall not be liable for damage of any description or any consequential loss suffered by, or to, the tugs or their crews while assisting vessels, whether occasioned by any act or omission of Tug Master or crew or by any defect or inadequacy of the tug, machinery or gear.

Towing lines will be provided by the Royal Commission. Tugs will rendezvous with vessels bound for the NGL and crude terminals in the vicinity of No. 14 Buoy.

All tugs are fitted with foam and water monitors for fire fighting and spray booms for pollution dispersal work.

Royal Commission Craft: The following craft are currently available to service vessels using King Fahd Port at Madinat Yanbu Al-Sinaiyah.

No.	*Type*	*Length (m.)*	*B.P.*	*Speed (knots)*	*Names*
2	Tugs 5,600 h.p. Twin Screw Kort Nozzles	42.00	65	12.0	Radhwa 11, 12
3	Tugs 4,000 h.p. Voith Schneider	36.00	40	11.5	Radhwa 14, 15, 16
1	Tug 2,000 h.p. Voith Schneider	30.00	20	12.0	Radhwa 9
4	Pilot Launches	17.20	—	18.0	Ibn Majid 2,3,4,5
4	Mooring Launches	8.10	—	10.0	Ohod 1,2,3,4

Note: There are 3×5,600 h.p., 5×4,000 h.p. and 1×2,000 h.p. tugs in laid-up status which can be activated at short notice as required.

TANKERS:

Crude Oil Terminal:

The Crude Oil Terminal is a Saudi Arabian Government owned facility operated by ARAMCO. It serves as a tanker loading terminal for the 48 in. crude oil pipeline from Abqaiq in the Eastern Province to Madinat Yanbu Al-Sinaiyah. The incoming crude oil is stored in eleven floating roof oil tanks before it is pumped to tankers berthed at the Crude Oil Terminal. Each crude oil storage tank has a nominal capacity of approximately 1,000,000 barrels, with a working capacity of approximately 850,000 barrels.

The Crude Oil Terminal consists of a jetty trestle with 3 loading berths connected to shore by a free-standing trestle and a causeway. All 3 loading berths are fixed structures with fixed loading platforms, breasting dolphins, and mooring dolphins.

Berth Particulars:

Berth No. 61:

Tanker Size (approx.)	80,000-275,000 d.w.t.
Deck Level of Loading Platform	40 ft.
Depth Alongside Berth No. 1	92 ft. ISLW
Maximum Draft	83 ft.
Loading Arms (number and size)	4×20 in.
Quick Disconnect Coupling Size	16 in., 20 in., 24 in.
Bunker Fuel Arms (number and size)	2×12 in.
Quick Disconnect Coupling Size	8 in., 10 in., 12 in.
Max. Rate Per Loading Arm	37,500 b.p.h.
Max. Rate Per Bunker Arm	14,500 b.p.h.
Number of Breasting Dolphins	4
Number of Mooring Dolphins	4
Available Mooring Hooks	24 (SWL @ 70 M/T)
Distance Between Centre of Inner Breasting Dolphins	239 ft. (73 m.)

Berth No. 62:

Tanker Size (approx.)	275,000-500,000 d.w.t. (See Note)
Deck Level of Loading Platform	40 ft.
Depth Alongside Berth	105 ft. ISLW
Maximum Draft	95 ft.
Loading Arms (Number and Size)	4 × 20 in.
Quick Disconnect Coupling Size	16 in., 20 in., 24 in.
Bunker Arms (Number and Size)	2 × 12 in.
Quick Disconnect Coupling Size	8 in., 10 in., 12 in.
Maximum Rate per Loading Arm	37,500 b.p.h.
Maximum Rate per Bunker Arm	14,500 b.p.h.
Number of Breasting Dolphins	2
Number of Mooring Dolphins	6
Available Mooring Hooks	26 (SWL @ 70 M/T)
Distance Between Centre of Breasting Dolphins	449 ft. (137 m.)

Note: Tankers of less than 275,000 d.w.t. may be accepted if the light water line flat size forward and aft of the manifold is at least 75 m. (246 ft.)

Berth No. 63:

Tanker Size (approx.)	120,000-275,000 d.w.t. (See Note)
Deck Level of Loading Platform	40 ft.
Depth Alongside Berth	90 ft. ISLW
Maximum Draft	81 ft.
Loading Arms (Number and Size)	4 × 20 in.
Quick Disconnect Coupling Size	16 in., 20 in., 24 in.
Bunker Arms (Number and Size)	2 × 12 in.
Quick Disconnect Coupling Size	8 in., 10 in., 12 in.
Maximum Rate per Loading Arm	37,500 b.p.h.
Maximum Rate per Bunker Arm	14,500
Number of Breasting Dolphins	2
Number of Mooring Dolphins	5
Available Mooring Hooks	23 (SWL @ 70 M/T)
Distance Between Centre of Breasting Dolphins	420 ft. (128 m.)

Note: Tankers of less than 120,000 d.w.t. may be accepted if the light water line flat size forward and aft of the manifold is at least 70 m. (230 ft.).

Only two berths of the Crude Oil Terminal can be loaded at the same time. Maximum loading rate to two crude berths simultaneously is 300,000 b.p.h. through 8 × 20 in. loading arms.

Environmental Monitoring System: An environmental monitoring system is installed at Berth No. 61 dock control room with repeater units located in dock control rooms at Berths 62 and 63. The system indicates wind velocity and direction, atmospheric pressure and temperature, current velocity and direction, and wave height and period.

Berthing Criteria:

Maximum berthing velocity: 20 cm./sec.
Maximum approach angle: 7°

For berthing and unberthing purposes, wind, sea, and current conditions have to be within acceptable limits, so that during the final docking the maximum berthing velocity and maximum approach angle is not being exceeded.

Mooring Arrangements: Each mooring dolphin, breasting dolphin, and loading platform is equipped with either double or triple quick-release mooring hooks and with a mooring capstan.

The terminal will furnish a required mooring arrangement for the loading berth to which the vessel is nominated. The mooring diagram shows the number of mooring hooks provided for each berth consecutively numbered from North to South. These mooring hooks are designed to service one mooring line per hook.

Port mooring launches will be used to assist during mooring operations.

The terminal will provide suitable messengers for heaving in mooring lines.

In order to ensure the integrity of the offshore terminal facilities, it is recommended that VLCC's provide an all wire mooring arrangement and that tankers in the 50 to 160 MDWT range provide mooring wires at least for their spring mooring lines and breast mooring lines. The recommended minimum number of wire moorings is as follows:

50,000 – 160,000 d.w.t. tankers:	8 mooring wires
160,000 – 250,000 d.w.t. tankers:	10 mooring wires
250,000 – 350,000 d.w.t. tankers:	12 mooring wires
350,000 plus d.w.t. tankers:	14 mooring wires

VLCCs with an all synthetic mooring system will be accepted if the synthetic mooring lines consist of low elasticity material.

All mooring lines should be of similar size and material and must be in good condition. Manual brakes have to be set and to be secured on all tension winches once the tanker is moored. Ship's crew must tend all moorings to keep the ship in position and mooring lines have to be taut at all times.

Each loading berth is equipped with a mooring load monitor/hook release system. The system is designed to monitor the loads on each mooring hook and to provide an alarm should the loads on a mooring hook exceed the system's set points. Berth operating personnel will monitor the mooring loads and, based on the read-outs they will advise the responsible officer who is expected to immediately correct any undesirable mooring situation.

The mooring load monitoring system does not relieve the vessel's Master from his responsibility to ensure adequate and safe mooring at all times when berthed alongside the Crude Oil Terminal.

Gangway: The Crude Oil Terminal will provide a gangway to the ship at each berth.

Each loading platform has a gangway tower equipped with a self-adjusting gangway. The gangway provides access to and from the tanker and is the only permissible means for any personnel to enter or leave the ship.

Loading: *Loading Arms:* There are four 20-inch crude oil loading arms at each of the loading platforms at Berth Nos. 61, 62 and 63. Each crude oil loading arm is capable of handling 37,500 b.p.h. maximum. The maximum flow rate per berth is 150,000 b.p.h., using 4 arms.

The hydraulic controls for the loading arms are located at the control desk on the loading platform adjacent to the loading arms. All loading arms are fully hydraulic powered and counter-balanced when empty. Each loading arm is fitted with a "Quick Disconnect Cargo Coupler" and a minimum distance of 18 in. is required between the lowest point of the ship loading line flanges to the upper level of the working platform of the spill tank.

All loading/bunker connections are equipped with electrical insulating flanges. Therefore, ship to shore bonding cables are not required.

Loading Plan Agreement: Prior to loading, the Terminal Supervisor will contact the officer in charge for the loading operation on board the tanker and discuss and agree on the loading plan.

The loading plan consists of:

(a) Maximum acceptable loading rates, starting rates, topping off rates, and standby notice requirements. (During loading, all anticipated changes in cargo transfer rates are to be communicated in a timely manner to ship or shore).
(b) Cargo quantities required by tanker's Master and comparison with terminal loading instructions.
(c) Cargo characteristics, required samples and tests.
(d) Assignment of cargo to vessel tanks and preferred order of loading.
(e) Ballast conditions and deballasting time.
(f) Load-on-top procedures.
(g) Quantity of slop oil on board and quantity of free water in slops.
(h) Quantity of bunkers ordered prior to arrival.
(i) Estimated loading time required and estimated departure time.

Crude Oil Characteristics:

Arabian Light

Temperature	120°–150°F
API Gravity	33.2–33.8
Reid Vapour Pressure	3.6–5.0 PSIA
Pour Point	Below 20°F
Viscosity	57 SUS @ 70°F
BS&W	Less than 0.05%
H_2S	Less than 10 PPM

Hydrogen Sulphide Hazards (H_2S): Arabian crude loaded at the Offshore Marine Terminal has been treated for H_2S removal prior to shipping.

However, the crude oil may still contain Hydrogen Sulphide in concentrations which may be harmful to personnel. Personnel on board tankers who may be exposed to concentrations of H_2S gas should observe safety precautions applicable to harmful gases.

Slop Residues: Slop residues cannot be discharged ashore at Petroline's crude oil terminal.

Cargo Tank Inspection: ARAMCO personnel will not inspect cargo tankers or issue dry certificates prior to loading. If Owners/Charterers require tank inspection or dry certificate, arrangements should be made with their Agent for an independent oil inspector.

Tankers which arrive with all tanks inerted must enable ullage inspections of all cargo tanks to be carried out prior to start of cargo transfer operations and after completion of cargo transfer operations.

If the tanker requests load-on-top procedures, measuring of the quantity of oil and water in the slop tank(s) will be witnessed by the Terminal Supervisor.

Loading Signal: During loading the international code flag "B" shall be displayed during daylight hours. During darkness a red loading light shall be displayed.

Watches: During the entire stay of the vessel alongside the Crude Oil Terminal, a deck watch is required.

NGL TERMINAL: The NGL Terminal is a Saudi Arabian Government owned, ARAMCO operated facility designed to load refrigerated liquid petroleum gas (propane and butane) and naphtha product for export. LPG carriers range in size from approximately 25,000 cu.m. to 200,000 cu.m. Naphtha carriers range from 20,000 d.w.t. to 280,000 d.w.t.

The NGL shore complex consists of fractionation, refrigeration and storage facilities. Product storage for LPG consists of seven insulated dome-roof tanks of 600,000 bbls. (95,400 cu.m.) capacity each. Three are dedicated to propane service, three to butane, and one can switch service between either propane or butane. There are three naphtha product floating-roof storage tanks of 600,000 bbls. (95,400 cu.m.) capacity each. In addition to the LPG and naphtha product tanks, there are three ship's fuel cone-roof storage tanks. One 97,000 bbls. (15,400 cu.m.) tank is dedicated to bunker fuel service and a 24,000 bbls. (3,800 cu.m.) tank is dedicated to black diesel service. The third tank has a capacity of 55,000 bbls. (8,700 cu.m.) and can switch service between either bunker fuel or black diesel.

Terminal Facilities: A 1.85 km. long earth-fill causeway and a 1.15 km. pile-supported trestle connect the shore plant to a two berth L-shaped offshore loading facility. The trestle carries a pipeway for the product, bunker and utility lines, and a 1.5 m. wide pedestrian walkway. There is no vehicular access to the piers. Normal personnel and material access to the piers is by boat.

The two loading berths are situated on the offshore side of the base of the "L". Berth 71 is the Southerly berth and Berth 72 is the Northerly berth. Berth alignment is 290° true bearing. A tower crane is located in the middle of each loading platform. Reading from North to South the seven loading arms are designated for the following service; Naphtha, ship's fuel, LPG (four arms), and ship's fuel. All LPG arms are universally manifolded to permit propane or butane liquid loading; or propane, butane or contaminated vapour return. Bunker fuel or black diesel can be loaded through either or both 12 in. ship's fuel arms which flank the LPG loading station. The naphtha arm is capable of delivering naphtha product and receiving small amounts of naphtha slop, which will be disposed of onshore. There are no shore-based ballast handling facilities.

Berth Facilities:

Tanker size (approx.)	16,000 – 200,000 cu.m.
Deck Level of Loading Platform	56 ft. ISLW
Depth Alongside Berths (min.)	60 ft. ISLW
Max. Draft	53 ft. 02 in. (16.2 m.)

Loading Arms

	Number/Size	*Quick Disconnect Couplings:*
(a) Ships' Fuel	2 × 12 in.	8 in. × 10 in. × 12 in.
(b) Naphtha	1 × 16 in.	12 in. × 14 in. × 16 in.
(c) LPG	4 × 16 in.	12 in. × 14 in. × 16 in.

Maximum loading rate:

(a) Ships' Fuel	
1. Diesel	650 bbls.p.h.
2. Bunker Fuel	5,000 bbls.p.h.
(b) Naphtha	30,000 bbls.p.h.
(c) LPG	30,000 bbls.p.h.

Number of Breasting Dolphins	2
Number of Mooring Dolphins	6
Available Mooring Hooks	42
Distance between centre of Breasting Dolphins	300 ft.

Condition of Ship's Products Tanks: The ARAMCO facilities for loading LPG are not designed for loading pressurised cargoes and LPG will not be loaded into a tanker which does not have adequate shipboard refrigeration capacity and chilled tanks.

Mooring Lines and Arrangements: In order to ensure the safety of personnel, tankers and loading facilities, and to prevent accidental oil spillages, ARAMCO strongly recommend that tankers of 75,000 d.w.t. and larger which moor at NGL Terminal berths utilise a minimum of 8 to 12 wire mooring lines (breasts and springs) in accordance with the following:

75,000 to 160,000 d.w.t. : 8 wire lines
161,000 to 250,000 d.w.t. : 10 wire lines
Greater than 250,000 d.w.t. : 12 wire lines

Vessels equipped with both wire and synthetic mooring lines must avoid mixing such lines to the same dolphin. During periods of unsettled weather, arriving vessels fitted with sufficient wires will be preferentially berthed whereas vessels equipped with synthetic lines or too few wire lines will not be berthed until the weather improves. If a ship with synthetic lines is already moored and squall conditions arise, loading to that vessel will be stopped and the loading arms disconnected until weather conditions improve and it is judged safe to resume the loading operation. The use of nylon or other highly elastic line is prohibited.

Each mooring dolphin and breasting dolphin is equipped with triple quick-release mooring hooks and with a mooring winch.

Vessels must be moored to the entire satisfaction of the Pilot. Vessels must be ready at all times to put out more lines as required by the Harbour Master or pier personnel, or as dictated by weather changes. All vessels moored to the piers must have deck winches in readiness for immediate use. All vessels moored with automatic tension winches will set the manual brakes on these winches.

Pier crew are on duty continuously to handle loading arms and mooring lines. Mooring lines on board vessels will not be handled by shore personnel.

All loading connections are equipped with electrical insulating flanges. Therefore, ship to shore bonding cables are not required.

Gangway: The NGL Terminal will provide a gangway to the ship at either berth. Each berth has a gangway tower equipped with a self-adjusting gangway for access to and from the ship, and this is the only permissible means for any personnel to enter or leave the ship.

Loading Plans: After a tanker is secured at the berth and prior to the beginning of any loading operation, the Master (or a ship's officer designated by him) will meet with the NGL Terminal senior shift operations representative in order to discuss and prepare the vessel's loading plan. Items to be discussed will include, but not be limited to, the following:

1. Temperature and pressure of each of the ship's tanks.
2. Product to be loaded in each tank and the sequence of tank loading.
3. Quantity and type of product, if any, in each ship's tank, and whether it is a part cargo or residue required for tank cooling.
4. Loading rates of each product.
5. Safety procedures and safe loading practices.

All clean excess vapours which cannot be handled by the tanker's vapour recovery equipment will be metered to the shore-based vapour recovery system and reprocessed. Contaminated vapours will be metered to the flare.

Refrigerated LPG: Refrigerated LPG is loaded via 16 in. loading arms. The maximum loading rate for each product is 30,000 bbls.p.h. Each berth is equipped with 4 LPG loading arms which may be used for butane liquid, propane liquid or vapour return to a ship's vapour recovery unit, or contaminated vapours to flare. All 8 LPG loading arms are fitted with quick connect/disconnect couplers. Each LPG loading line has an associate circulation return line. Loading lines must be on circulation at least 4 hours prior to commencement of loading. No two ships are loaded from one loading line simultaneously.

The NGL Terminal facilities ARE NOT designed for loading pressurised LPG and NO LPG will be loaded into ship's tanks that are not equipped with refrigeration facilities and are not adequately chilled.

Vapour line MUST be connected prior to loading LPG cargo. This also includes those vessels loading coolant.

Before being transferred from the loading line to the loading barrel and arms, the propane and butane products are metered. The metering system is designed for loading rates between 100 bbls.p.h. and 30,000 bbls.p.h. for each product.

A 3 in. turbine type meter with a capacity of 79 bbls.p.h. – 929 bbls.p.h is provided for low loading rates such as cooldown and topping off.

An 8 in. turbine type meter with a capacity of 679 bbls.h.p. – 7,420 bbls.p.h. is provided for full flow rates.

Every vessel loading LPG at the NGL Terminal will be required to have a copy of ARAMCO GASRUL 9:83 on board. When a copy is not on board prior to arrival ARAMCO and the Agent of the vessel shall be so advised. Extracts of the regulations are included for information as follows:

1. *Propane Loading:*
   (a) The cargo tank bottom is cooled down to a maximum mean temperature of −38°F or −39°C.
   (b) The maximum mean temperature above the mid-depth of the cargo tank, in the range between two-thirds and three-quarters of the Maximum Allowable Tank Filling Level (MATFL), and excluding any temperature indicated in the cargo tank dome vapour space, is −13°F or −25°C.
   or
   The maximum mean temperature at the top of the cargo tank and at or immediately below the MATFL and excluding any temperature indicated in the cargo tank dome vapour space is −8°F or −22°C.
2. *Butane Loading:*
   (a) The cargo tank bottom is cooled down to a maximum mean temperature of +32°F or 0°C.
   (b) The maximum mean temperature above the mid-depth of the cargo tank, in the range between two-thirds and three-quarters of the MATFL and excluding and temperature indicated in the cargo tank dome vapour space, is +57°F or +14°C.
   or
   The maximum mean temperature at the top of the cargo tank and at or immediately below the MATFL and excluding any temperature indicated in the cargo tank dome space is plus 62°F. or plus 17°C.
3. The cargo tank gauge pressure not more than 1.0 p.s.i. or 70 MBS or 0.07 kg./sq.cm. on arrival at berth. During cargo operation the pressure of any cargo tank shall be maintained within the range between zero gauge minimum (atmospheric pressure) and a maximum which shall not exceed 70% of the maximum allowable relief valve setting for that cargo tank or such other lesser maximum percentage as may be determined by ARAMCO for a particular vessel.
4. Butane may be loaded into ship tanks containing residue up to 10% of the cargo to be loaded.
5. Propane may be loaded into ship tanks containing propane residue up to 10% of the cargo to be loaded.
6. Butane or propane may be loaded into ship tanks containing part cargo of the same grade only by authorisation of the offtaker. Quantities of over 10% of the cargo to be loaded shall be considered part cargo.
7. Should the vessel be unable to comply with the provisions of paragraphs 4 and 5, ARAMCO operations management representatives shall confer with the vessel Master and/or Responsible Loading Officer to develop a loading procedure for the safest possible loading for the tank(s) containing dissimilar residue. The procedure shall be in writing, agreed to by both parties and take into consideration loading rates, temperatures, pressures and all possible safeguards to ensure minimising the dangers to ship and shore installations. It must be understood that this procedure will involve delays to the vessel and will impose additional workloads on the shore and ship personnel.
8. IN NO CASE WILL LOADING BE PERMITTED INTO SHIP TANKS CONTAINING LIQUID PRODUCT OF A DIFFERENT GRADE IN EXCESS OF TEN TONS.
9. When a vessel requires special handling, as described above, the vessel shall be given a letter of protest, with copies to Owners and Operators.
10. Refrigerated LPG vessels with warm cargo tanks can be handled at the ARAMCO NGL Terminal. When special circumstances warrant, new ships and other vessels with warm tanks may be accommodated but will be subject to specific conditions.
11. Vessels with part cargo on board of products other than A-140 propane or A-160 butane must be equipped to keep any liquid or vapour completely self-contained from those cargo parcels. There must be no return of non-compatible vapour to atmosphere while at berth. *No mixing of dissimilar refrigerated liquids is allowed at berth.*
12. Vessels loading either propane or butane are expected to use the appropriate vapour return line but only for *excess* vapour which the vessel's vapour recovery equipment cannot handle. Excessive vapour will be metered to a shoreside ship's vapour recovery system. If the excess vapour cannot be handled by using both systems, the vapour will be sent to flare. If the situation cannot be corrected promptly aboard ship, the loading shall be shut down. Loading shall be resumed only after the loading plan has been reviewed with the Master or Responsible Loading Officer by the senior shift operations representative and corrective action has been agreed upon.
13. In the event of a spill of liquid propane or butane on board the vessel, shore loading shall be shut down until corrective action to clean up the spill and to avoid future recurrence has been agreed upon by the Master or Responsible Loading Officer, the shift operations staff and the Harbour Master.
14. There are no facilities at the NGL Terminal for the return of either liquid propane or liquid butane cargo. Vessels must pay strict attention not to overload either of these grades.

Emergency Procedures: In the event of a fire or explosion at the pier, or on board a vessel which is berthed alongside at the Terminal, the alarm signal will be a one minute undulating signal on the siren and an Emergency Shutdown System will be activated to shutdown immediately all cargo loading to vessels at the berths. The course of action to be followed by ARAMCO Terminal personnel will be dictated by the particular facts and circumstances of the incident. It is impossible to indicate exactly and completely what practices will be applied during an emergency before an evaluation of the specfic situation can be made. Masters are advised to familiarise themselves with the Port and Terminal Emergency Procedures.

YANBU PETROMIN REFINERY TERMINAL: The Yanbu Petromin Refinery Terminal is currently under construction. The completion date is forecast for August 1985. The Refinery is owned and operated by the General Petroleum and Mineral Organisation (PETROMIN). When completed there will be 4 berths; the 2 outer berths, Nos. 1 and 2 (West to East), will accommodate vessels with 20,000 to 60,000 d.w.t. capacity; and the 2 inner berths, Nos. 3 and 4 (West to East), will accommodate vessels up to 20,000 d.w.t. capacity.

The channel adjacent to the outer berths has been dredged to a depth of 16 m. below LAT. The turning circle and approach area for the inner berthing area has been dredged to 13.5 m. below LAT. Alongside the two inner berths the water has been dredged to 11.5 m. below LAT.

There are 8 loading arms at each berth to accommodate export of product. At Berth No. 4 there will be 4 additional loading arms to accommodate LPG, LPG (recovery), tetra-ethyl lead and caustic.

A temporary offshore floating hose loading facility is being used pending completion of the terminal. 6 mooring buoys have been anchored in the turning basin area and a tanker can be moored within these buoys. Tankers up to 35,000 d.w.t. can be accommodated.

There is no ballast water reception facility available at this Terminal.

EXPORT REFINERY TERMINAL: The Export Refinery Terminal has 2 separate loading facilities.

A tanker loading facility consisting of 3 berths for bulk petroleum liquids is operated under a lease agreement with the Royal Commission by PETROMIN-Mobil Yanbu Refinery Company Limited (PEMREF).

A chemical loading facility with 1 berth is operated under a lease agreement with the Royal Commission by Saudi Yanbu Petrochemical Company (YANPET).

PEMREF Facilities Particulars:

1. The Short Haul Berth numbered Royal Commission Berth No. 42 is located in the inner basin. It consists of a fixed loading platform with semi-flexible mooring and breasting dolphins. The berth will accommodate tankers from 5,000 d.w.t. to 35,000 d.w.t.
2. A ballast water treatment facility is located adjacent to Berth No. 42 and is capable of processing ballast water from tankers loading at the Export Refinery Terminal including the Chemical Berth.
3. The inner basin has been dredged to a depth of 13.5 m. below LAT. A turning basin with a diameter of 400 m. allows for ready access to the basin.
4. There is a jetty trestle with 2 outer loading berths connected to the shore by a free standing trestle and causeway. The 2 loading berths are fixed structures with fixed loading platforms and semi-flexible mooring and breasting dolphins. These berths named Suez Berth West and Suez Berth East are numbered Royal Commission Nos. 54 and 55. They are capable of handling tankers up to 150,000 d.w.t. in size. The water depth alongside these 2 berths has been dredged to 18.5 m. below LAT.

PEMREF Berth Particulars:

1. Short Haul Berth No. 42:

Min. Size Vessel:	5,000 d.w.t.
Max. Size Vessel:	35,000 d.w.t.
Deck Level of Loading Platform:	5.0 m./16.4 ft.
Depth Alongside Berth:	13.50 m./44.28 ft.
Max. Draft:	12.15 m./39.85 ft.
Loading Arms (number and size):	2×10 in. – Black Products/Ballast 4×12 in. – White Products
Quick Disconnect Coupling Size:	6 in., 8 in., 10 in., 12 in., 16 in.
Bunker Fuel Arms (number and size):	2×6 in.
Quick Disconnect Coupling Size:	6 in., 8 in., 10 in.
Max. Rate per Loading Arm:	10 in. – 1,430 cu.m./hr. 12 in. – 1,590 cu.m./hr.
Max. Rate per Bunker Arm:	Heavy Fuel 480 cu.m./hr. Diesel Fuel 160 cu.m./hr.
Number of Breasting Dolphins:	4
Number of Mooring Dolphins:	4
Available Mooring Hooks:	20
Distance between Centre of	33.0 m./108.25 ft.
Inner Breasting Dolphins:	Port
Normal Shipside to Berth:	Yes
Shore Gangway Provided:	
Waterline to Manifold:	12.80 m./42 ft.
Max. Height:	2.59 m./8 ft. 6 in.
Min. Height:	0.25 m./sec.
Max. Approach Velocity:	±5 degrees
Max. Approach Angle:	

Suez Berths West and East – Berth Nos. 54 and 55:

Min. Size Vessel: (see Note No. 1)	30,000 d.w.t.
Max. Vessel Size:	150,000 d.w.t.
Deck Level of Loading Platform:	7.0 m./22.96 ft.
Depth Alongside Berth:	18.50 m./60.28 ft.
Max. Draft:	16.65 m./54.60 ft.
Loading Arms (number and size):	7×16 in.
Quick Disconnect Coupling Size:	6 in., 8 in., 10 in., 12 in., 16 in.
Bunker Fuel Arms (number and size):	2×10 in.
Quick Disconnect Coupling Size:	6 in., 8 in., 10 in., 12 in.
Max. Rate per Loading Arm:	Heavy Fuel – 4,378 cu.m./hr. White Products – 1,590 cu.m./hr.
Max. Rate per Bunker Arm:	Heavy Fuel 1,590 cu.m./hr. Diesel Fuel 160 cu.m./hr.
Number of Breasting Dolphins:	4
Number of Mooring Dolphins:	4
Available Mooring Hooks:	20
Distance between Centre of Inner Breasting Dolphins:	56.0 m./183.7 ft.
Normal Shipside to Berth:	Starboard
Shore Gangway Provided:	Yes
Waterline to Manifold:	
Max. Height:	19.00 m./62 ft. 4 in.
Min. Height:	4.50 m./14 ft. 9 in.

Note 1: Tankers of less than 30,000 d.w.t. may be accepted at the Suez Berths if the light water line flat side forward and aft of the manifold is at least 34.0 m./111.5 ft., and subject to weather conditions.

Max. Approach Velocity:	0.18 m./sec.
Max. Approach Angle:	±5 degrees

YANPET Facilities Particulars: There is one chemical berth numbered Royal Commission No. 41 located in the inner basin. It can accommodate tankers from 5,000 to 35,000 d.w.t. The turning circle into the inner basin is 400 m. in diameter and is dredged to 13.5 m. below LAT.

The facilities are designed for the export and import of petrochemical products; these include: mono-ethylene glycol (MEG), di-ethylene glycol (DEG), glycol blackflush, hexene, vapour return, propylene, process water, and caustic soda.

Ballast Water Facility: The Export Refinery Terminal incorporates a ballast water facility which is capable of processing ballast water from vessels loading at the 4 berths at the terminal.

The facility has 3 initial storage tanks of 50,000 cu.m. each, which will receive ballast water direct from the tankers.

Ballast water is passed through the facility's separator system; clean water is then passed to retention ponds prior to being pumped to sea, and recovered oil is passed to the recovered oil system.

All ballast water handled at the facility is monitored to ensure compliance with current environmental standards and requirements.

Bunkers: Bunker fuel is available at each of the Export Refinery Terminal's 4 berths, the bunker fuel being supplied from the Royal Commission central bunkering facility. Heavy fuel oil and diesel fuel oil are available, and should be requested in advance of a tanker's arrival at the port.

Berthing Criteria: Max. Berthing Velocity:

Chemical Berth:	0.25 m./sec.
Short Haul Berth:	0.25 m./sec.
Suez Berth West:	0.18 m./sec.
Suez Berth East:	0.18 m./sec.
Max. approach angle:	±5 degrees

Environmental conditions such as current, wind speed and sea state, should be considered in ensuring the above maximum criteria is not exceeded at final docking stage.

Mooring Arrangements: Each mooring dolphin, outer breasting dolphin and loading platform is equipped with either double or triple quick release mooring hooks, each combination of double or triple hooks having a mooring capstan with safe working load of 3 tons.

The terminal will provide a required mooring arrangement for the loading berths. The mooring arrangement shows the number and position of the mooring hooks provided on each berth. The mooring hooks are designed to handle 1 mooring line per hook.

Mooring boats will be utilised to run mooring lines to the mooring dolphins from the tanker. The terminal will provide suitable messenger lines for heaving the mooring lines to the hooks.

In order to ensure the integrity of the berth facilities it is recommended that tankers in the 50,000 d.w.t. to 150,000 d.w.t. range provides mooring wires at least for their spring and breast mooring lines. The recommended minimum for tankers from 50,000 d.w.t. – 150,000 d.w.t. is 8 mooring wires.

Tankers with the recommended mooring wire systems will be given berthing preference during adverse or unsettled weather conditions.

All mooring lines should be of similar size and material and should be in good condition. Manual brakes must be set on tension winches when mooring is completed. The ship's crew must tend moorings at all times to maintain the ship's position at the berth.

Under no circumstances may the longitudinal or lateral movements of a vessel exceed the limited working envelopes (working areas) of the connected loading arms.

Docking Monitoring System: A system of velocity and distance indicating and recording instruments are provided for the 4 berths. The transducers are positioned on the berth structure with electronic equipment housed in the control room. An illuminated display is located on the berth structures to provide an indication of fore and aft ship distance and approach speed to the ship's Pilot.

Gangway: The Export Refinery Terminal will provide a gangway to the ship at each berth. Each berth is equipped with a hydraulically operated self adjusting gangway. The gangway provides the only permissible means of access to and from the tanker.

Ballast Water: Tankers arriving at the Export Refinery Terminal with clean ballast, which meets the current environmental standards of King Fahd Port, will be allowed to discharge the ballast water direct to the sea.

The discharge of clean ballast water into the sea from cargo tanks will only be permitted with the approval of the Harbour Master or his designated representative.

A monitoring procedure will be employed during the discharge of clean ballast to ensure quality is maintained.

Tankers arriving with "dirty ballast" or ballast which does not meet the port requirements must discharge ballast to the Terminal's ballast facility.

Details of this operation will be agreed with the Terminal operator when 'operation agreement' is made.

Slop Residues: Slop oil may be discharged to the ballast reception facilities consistent with content restrictions. Slop residues containing chemicals or emulsifying agents may not be accepted.

Prior to arrival at the Terminal, vessel's Master must request use of this facility giving following details:

1. Total quantity to be discharged.
2. Quantity of oil.
3. Quantity of water.
4. Type of chemicals contained if any.

Loading Arms – Chemical Berth – Berth No. 41: The Chemical Berth is equipped with 8 loading arms, 2×10 in. diameter, 5×6 in. diameter and 1×4 in. diameter as detailed below:

Arm Size	*Product*
6 in.	Hexene.
6 in.	Propylene.
10 in.	Heavy Fuel Oil (Bunkers)/Diesel Fuel Oil (Bunkers)/Ballast Water.

Arm Size	*Product*
10 in.	Mono-ethylene Glycol (MEG).
6 in.	Glycol Backflush.
6 in.	Die-ethylene Glycol (DEG).
4 in.	Caustic Soda.
6 in.	Heavy Fuel Oil (Bunkers)/Diesel Fuel Oil (Bunkers)

Each loading arm is fitted with a quick disconnect coupler. Adaptors are available to fit a range of ships' manifolds.

The loading arms and quick disconnect couplers are hydraulically controlled from a central operating location. A wandering control lead is available for local control on board the vessel for connecting by the berth operator.

Loading Arms – Short Haul Berth No. 42: The Short Haul Berth is equipped with 6 loading arms, 4×12 in. and 2×10 in. as detailed below. 2×6 in diameter bunker loading arms are also provided.

Arm Size:	*Product*
10 in.	Marine Heavy Fuel Oil/Ballast Water.
10 in.	Marine Heavy Fuel Oil/Ballast Water.
6 in.	Heavy Fuel Oil Bunker/Diesel Fuel Oil Bunker/Bunker Cutter Stock.
12 in.	Jet Fuel.
12 in.	ADO/Leaded Gasoline.
12 in.	Jet Fuel.
12 in.	ADO/Leaded Gasoline.
6 in.	Diesel Fuel Bunkers/Heavy Fuel Bunker.

Each loading arm is fitted with a quick disconnect coupler. Adaptors are available to fit a range of ships manifolds from 6 in. to 16 in. ASTM.

The loading arms and quick disconnect couplers are hydraulically controlled from a central operating location. A wandering control lead is available for local control on board the vessel for connecting by the berth operator.

Loading Arms – Suez Berths West/East – Nos. 54 and 55: The Suez Berths are each provided with 7 loading arms of 16 in. diameter and 2 bunker fuel loading arms of 10 in. diameter, as shown below:

Arm Size	*Product*
16 in.	Marine Heavy Fuel Oil/Ballast Water.
16 in.	Marine Heavy Fuel Oil/Ballast Water.
10 in.	Heavy Fuel Oil Bunker/Diesel Fuel Oil Bunker/Bunker Cutter Stock.
16 in.	Naphtha/ADO.
16 in.	Leaded Gasoline Unleaded Gasoline.
16 in.	Jet Fuel.
16 in.	ADO/Naphtha.
16 in.	Leaded Gasoline/Unleaded Gasoline.
10 in.	Diesel Fuel Oil Bunker/Heavy Fuel Oil Bunker.

Each loading arm is fitted with a quick disconnect coupler. Adaptors are available to fit a range of ships' manifolds from 6 in. to 16 in. ASTM.

The loading arms and quick disconnect couplers are hydraulically operated from a centrally located operating panel. A wandering control lead is also available for remote use when connecting arms to ship's manifold.

Grounding: All cargo/bunker loading connections are equipped with electrical insulating flanges, and therefore ships to shore bonding is not necessary.

Maximum Loading Rates:

Short Haul Berth No 42		
Heavy Fuel Oil	2,860 cu.m./hr.	18,000 bbls./p.h.**
Leaded Gasoline	3,180 cu.m./hr.	20,000 bbls./p.h.**
Automotive Diesel Oil	3,180 cu.m./hr.	20,000 bbls./p.h.**
Jet Fuel	3,180 cu.m./hr.	20,000 bbls./p.h.**
Heavy Fuel Bunker	480 cu.m./hr.	3,000 bbls./p.h.
Diesel Fuel Bunker	160 cu.m./hr.	1,000 bbls./p.h.
Suez Berth Nos. 54 and 55		
Heavy Fuel Oil	8,756 cu.m./hr.	50,000 bbls./p.h.**
Leaded Gasoline	5,170 cu.m./hr.	32,500 bbls./p.h.
Unleaded Gasoline	5,170 cu.m./hr.	32,500 bbls./p.h.
Naphtha	5,170 cu.m./hr.	32,500 bbls./p.h.
Automotive Diesel Oil	5,170 cu.m./hr.	32,500 bbls./p.h.
Jet Fuel	5,170 cu.m./hr.	32,500 bbls./p.h.
Heavy Fuel Bunker	1,590 cu.m./hr.	10,000 bbls./p.h.
Diesel Fuel Bunker	160 cu.m./hr.	1,000 bbls./p.h.

Note: Loading rates for products marked ** are for 2 loading arms availability; rates should be halved to indicate rate per loading arm.

PEMREF Operational Agreement: Prior to any operational activity after a tanker is moored, an "Operational Agreement" will be made between the ship's responsible cargo officer and the terminal representative. The Operational Agreement requires an exchange of information between the ship and terminal covering the following items:

1. Grades and quantities of cargo/bunkers required.
2. Loading rates and quantities per grade for start, maximum and topping off.
3. Standby time required for stopping loading and slow down for each grade.
4. Ballast quantity to be discharged to sea or ballast facility.
5. Slop residues to be discharged to facility.
6. Manifold connections/loading arms to be used for each operation.
7. Sequence of loading different grades/products.
8. Estimated time required to carry out each operation, to give total expected load time.
9. Information regarding (a) Communications, (b) Emergency Shutdown Procedures, (c) Tank Venting System, (d) Maximum pressures allowed, etc.
10. Has ship/shore safety checklist been completed.

Ship/Shore Safety Checklist: Prior to operations on board tankers at the Terminal berths a 'Ship/Shore Safety Checklist' will be completed by both ship and Terminal representatives who will together inspect the necessary items listed. Further checks will be made at intervals throughout the vessels time at the berth.

Safety Requirement Letter: The Master of each tanker will be given letter concerning safety requirements. Receipt of the letter has to b acknowledged by signing and returning a copy of the letter to th Terminal representative.

Sea Valves: All sea-valves and overboard valves connected to th tanker's cargo system have to be closed and lashed prior commencement of cargo transfer operations.

Loading Signal: During loading the international code flag "B" shall b displayed during daylight hours. During darkness a red loading lig shall be displayed.

Shore Emergency Signals: Continuous sounding of vessel's fog signa

Emergency Towing Wires: While at the Terminal, tankers have provide emergency towing wires of adequate strength to move th tanker off the dock. The towing wires are to be positioned on th offshore bow and stern quarter of the tanker and the outboard ey should be maintained approximately 1 m. above water level at all time

Emergency Pilot Boarding: A pilot ladder of sufficient length should b at all times on standby at the offshore side of the tanker's main deck. an emergency the pilot ladder should be lowered to 3 ft. above the wat line to enable boarding of the Pilot if this should become necessary.

GENERAL CARGO AND CONTAINER TERMINAL: This facility situated to the North of the Crude Oil Terminal. It has 7 berths along 1,784 m. wharf. The berths are scheduled to become progressive operational from April 1984 to the end of 1984. These include berths fo Ro-Ro, heavy lift, conventional general cargo and cellular containe vessels. Protected by a natural reef, the berths will becom progressively operational with completion planned by the end of 198 The channel inside the barrier reef has been dredged to 14 m. belo LAT and there are 2 turning basins at either end of the 2 km. ber frontage.

The Ro-Ro facility, adjacent to Berth No. 1, situated at the Norther end of the berth frontage, with a dredged depth of 14 m. below LAT operational. A permanent ramp with a 1:25 gradient and an overal wid of 34 m. is located at right angles to the berth frontage. Horizont "Sumimoto" fendering is fixed to the ramp face at a height of 0.75 above LAT. The deck of the ramp is 2.0 m. above LAT rising to 2.36 m 3.0 m. inshore from the ramp face. Three bollards, each rated 90 tonnes are positioned either side of the ramp deck, providing a cle width of approximately 31 m. Additional bollards, also rated 90 tonnes, are situated on the berth frontage, the first 30 m. South of th ramp face and thereafter at approximately 30 m. intervals. "Sumimot 'pie' type fendering, spaced at 10 m. intervals, is provided on the ber frontage.

The maximum uniform live loads on the Ro-Ro ramp 6.25 tonnes/sq.m. The maximum concentrated load is 1,100 tonne when used on a Scheurle platform trailer, which provides for 28 tonnes maximum axle load with a maximum load on a contact area 200 m. × 455 mm. of 7 tonnes: or 60 tonnes on 0.3 m. × 0.3 m. (as fro 20 ft. containers stacked 3 high): or, 91 tonnes on 0.6 m. × 0.5 m. (from 40 ft. containers stacked 3 high): or, 80 tonnes front axle load of container fork lift truck. 3×40 tonne container cranes will ultimately available to support container operations.

Cargo is being handled by Royal Commission stevedores who a currently working one shift of 12 hours, 7 days per week. There a 3 container gantry cranes which will commence operations Novemb 1984.

Particulars of the container cranes are:

Safe working load	40 tons
Out-reach	34.5 m.
Hoisting height above rail	26.0 m.
Elevation of wharf above MHW	3.17 m.

Cycle time is 90 secs. or 40 containers per hour.

The 3 container cranes are numbered 1, 2 and 3 from the Ro-Ro ram end. The berthing arrangements are:

	Length of Wharf
Berth No. 1 Ro-Ro Terminal	200 m.
Berth No. 2 Container Terminal	300 m.
Berth No. 3 General Cargo	200 m.
Berth No. 4 Heavy Lift	180 m.
Berth No. 5 General Cargo	180 m.
Berth No. 6 General Cargo	180 m.
Berth No. 7 General Cargo	180 m.

A minimum clearance of 15 m. between vessels at adjacent berths required during berthing/unberthing operations.

BULK TERMINAL: The Bulk Terminal consists of a wharf 500 m. length with 2 dry bulk berths, Nos. 21 and 22. The wharf is 33 m. wid and can accommodate bulk carriers up to 60,000 d.w.t. The water off th wharf is dredged to 15.5 m. below LAT.

PETROMIN-Mobil Yanbu Refinery Company Limited (PEMREF) w produce approximately 230 tons of "prilled" sulphur per day, whe operating at full capacity.

The sulphur is to be transported by truck from the refinery storag area to silos located at the Royal Commission's Bulk Termina A 1 m. wide conveyor belt runs from the silos to a slewing arm loader o the dock.

Storage at the Terminal comprises 3 large silos with a combine normal working capacity of 13,200 tons and max. capacity 15,000 tons.

PEMREF's sulphur loading equipment is located at the Bu Terminal's "Sulphur Berth" (Royal Commission Berth No. 21) and capable of loading prilled sulphur at a maximum rate of 420 t.p.h.

A slewing arm loader is designed to operate along the face of th sulphur dock to any hold of vessels up to 30,000 d.w.t., without requirin movement of the ship.

Ships mooring at the Bulk Terminal will be required to provid gangway access to ship.

CONSTRUCTION SUPPORT TERMINAL (No longer active): This was the first terminal constructed at Madinat Yanbu Al-Sinaiyah. It was designed specially for the discharge of construction cargoes for those companies engaged in the construction of Madinat Yanbu Al-Sinaiyah and King Fahd Port. It is no longer active since all cargo operations are now conducted at the General Cargo and Container Terminal. However, in the event of a special need it could be reactivated.

The Construction Support Terminal lies just to the South of the Yanbu Petromin Refinery in position: Lat. 23° 54.5′ N., Long. 38° 17.8′ E. It consists of a trestle and pier lying in a 320° – 140° (T) direction and a beach-head heavy lift facility. Both pier and trestle are pre-engineered steel barges jacked up on pile foundations.

Vessels may berth either side of the Pier, which has a width of 30 m. and is 5 m. above ISLW. The length of the outer side is 270 m. while the inner berth length is 250 m. The water depth off the inner and outer berths is 18 m. below LAT. The water depth off the beach-head is 6 m. below LAT.

Each berth is protected by Bridgestone fendering spaced at 10 m. intervals. 6 single leg straight 75 ton capacity bollards, and 6×20 ton capacity staghorn type bollards are provided on each berth and spaced alternately at 20 m. intervals. Where possible, mooring ropes should only be placed on 75 ton capacity bollards. The berthing energy of the Pier is equivalent to a 72,000 d.w.t. bulk carrier moving at a normal velocity of 0.15 m./sec. at 10°.

Lighting on the Pier consists of Sodium Vapour floodlights, fixed on masts along the centre of the Pier, giving a designed illumination of 200 lumens/sq.m.

There are no cranes available on the Pier and vessels using the facility are required to be self-sustaining and be able to work freely on either of the open berths.

The Pier is subject to load limitations of 1950 kg./sq.m. (400 PSF), and the approach trestle 975 kg./sq.m. (200 PSF).

Cargo operations are normally suspended if the wind speed exceeds 25 knots and vessels must be prepared to vacate the berth if winds exceed 35 knots.

Maximum Allowable Loads:

Pier: The maximum allowable loads on the pier are:
Uniform live load of 1,950 kg./sq.m. (400 PSF)
or
Truck axle loads as follows:
Max. single axle load = 16 tons
Max. load for tandem axle consisting of 2 axles = 16 tons/axle
Max. load for tandem axle consisting of 3 or more axles = 16 tons/axle

Trestle:
The maximum allowable loads on the trestle are:
Uniform live load of 975 kg./sq.m. (200 PSF)
or
Truck axle loads as follows:
Max. single axle load = 15 tons
Max. load for tandem axle consisting of 2 axles = 12 tons/axle
Max. load for tandem axle consisting of 3 or more axles = 9 tons/axle

Beach-Head: The Beach-head is a heavy lift docking facility located South of the Construction Support Terminal. Its primary use is for the discharge of heavy lifts.

The Beach-head is approximately 90 m. × 60 m., with the berth being along the 60 m. dimension. It is capable of accommodating vessels of up to 5 m. draft, subject to the vessel's overall length and its ability to be safely secured alongside.

The berth frontage (60 m.) is divided into two parts. The Southern part has a deck elevation of 3 m. above sea level, along 40 m. of the berth frontage. The Northern part of the berth frontage, along the remaining 20 m. has an elevation of 1.5 m. above sea level and slopes upwards towards the shore at a 5% gradient, thereby providing a ramp facility.

Two mooring dolphins are provided at each end, and inside the line of the frontage, of the Beach-head. The inner dolphins, on either side of the Beach-head, are 20 m. from the berth ends, while the outer dolphins are 70 m. from the berth ends.

The maximum allowable loads on the Beach-head are: Uniform live load of 30 tons/sq.m. over an area of 2.4 m. × 9.1 m. placed anywhere on the deck with the 9.1 m. dimension parallel to the dock face, plus 4,875 kg./sq.m. (1,000 PSF) over the remaining area.

Truck axle loads as follows:
Max. single axle load = 50 tons
Max. load for tandem axle consisting of 2 axles = 50 tons/axle
Max. load for tandem axle consisting of 3 or more axles = 13 tons/axle

BALLAST: The discharge of ballast water containing quantities of oil, or high levels of mineral or chemical pollutant, into the water of the Port is prohibited.

The discharge of ballast water from segregated or permanent ballast tanks into the waters of the Port will be permitted provided that the Master signs a declaration that the permanent ballast is clean and not affected by any pollutants.

The discharge of clean ballast water, from cargo tanks, into the waters of the Port will only be permitted if the oil content of the ballast water does NOT exceed 10 parts per million. Cargo tank ballast water will be sampled on the arrival of the vessel and measurements taken to determine the total oil concentration in the water. Subject to the results of the measurements being within the prescribed limits, the Harbour Master, or his deputy, will approve the start of deballasting. Throughout the cargo tank ballast discharge the oil concentrations in the discharged water will be closely monitored and the results reported to the Harbour Master, or his deputy, who will decide when such discharge shall stop.

MEDICAL: Medical facilities are available for the treatment of emergency cases. Masters should, if possible, provide advance notice, to their Agent, of their requirements, together with name, rank, nationality, passport or seaman's identity book number including date of issue and place of issue.

FRESH WATER: Potable fresh water will be available at the General Cargo and Container Terminal, Bulk Terminal and Export Refinery Terminal by October 1984. These are not presently available at the Crude Oil Terminal, NGL Terminal, Yanbu Petromin Refinery Terminal and Construction Support Terminal.

FUEL: Bunkering fuel is available at all berths at the Crude Oil Terminal, and 2 bunker loading arms are located on each loading platform, size 12 in. Maximum flow rate per bunker loading arm is 14,500 bbls./p.h. To avoid any delays to tankers, bunkering has to be accomplished concurrently with cargo transfer operations.

Facilities will be available at other berths by October 1984.

REPAIRS: While alongside berths, engines and propulsive machinery must be ready at all times to leave the berth at 10 minutes' notice, under full power.

No repairs of any kind are permitted alongside any berth unless mutually agreed by the Master, Harbour Master and Terminal Manager.

Any repairs involving "Hot Work" will be subject to special conditions contained in the "Hot Work Permit" which must be obtained from the Harbour Master or Port Safety Officer for work at the General Cargo and Container Terminal, Bulk Terminal and Construction Support Terminal. Permits for hot work at other Terminals will be issued by the Terminal Operators or their designated representatives.

REPATRIATION: Crew changes can be arranged at King Fahd Port at Madinat Yanbu Al-Sinaiyah subject to the approval of the Government Authorities. Masters should advise their Agent of repatriation requirements as far in advance as possible. Agents require the following information for each crew member who is to be repatriated: name, rank, nationality, passport or seaman's identity book number including date of issue and place of issue, and final destination.

SURVEYORS:

Classification Society Surveyors:

American Bureau of Shipping, Kanoo Center, Medina Road, Kilo 7, P.O.Box 812, Jeddah. Tel: 682-3759, ext. 287. Telex: 402051 Kanshp.

Bureau Veritas, c/o Orri Navigation Company, Orri Building, Mina Road, P.O.Box 737, Jeddah – 21421, Saudi Arabia. Tel: 647-6002/647 5874. Telex: 400133 Orri SJ.

Lloyd's Register, Shobokshi Maritime Building, P.O.Box 6560, Jeddah, Saudi Arabia. Tel: 667-5954 ext. 456. Telex: 402654 Shom SJ.

Det Norske Veritas, P.O.Box 6957, Jeddah – 21452, Saudi Arabia. Tel: 665-6614. Telex: 402066 Swtrof SJ.

Petroleum Inspection Companies:

Caleb Brett, Arabian Inspection & Survey Company Ltd., P.O.Box 174, Yanbu. Tel: 322-4356. Telex: 461030 Aet SJ.

G. Watson Gray (Analysts), P.O.Box 88, Yanbu. Tel: 322-4386. Telex: 421027 Kanoo SJ.

S.A.P.E.C. Redwood, P.O.Box 473, Yanbu. Tel: 322-3992/8765. Telex: 461084 Gaship SJ.

CONSULS: *Foreign Embassies:* The following countries have Embassies in the Kingdom of Saudi Arabia. All are located in Jeddah and the telephone numbers should be prefaced by the zone code 02.

Afghanistan	665-3142	Libya	665-1273
Algeria	665-3202	Malaysia	665-2371
Argentina	665-2666	Mali	665-7704
Australia	665-2329	Mauritania	687-8171
Austria	665-5838	Morocco	665-2472
Bahrain	665-1905	Nepal	642-0211
Bangladesh	687-8465	Netherlands	665-3611
Belgium	665-3196	Niger	642-8608
Burundi	680-7991	Nigeria	643-2835
Brazil	665-1182	Norway	665-0438
Cameroon	687-1782	Oman	665-3619
Canada	643-4900	Pakistan	669-2371
Chad	687-4003	Philippines	665-3343
Denmark	665-9349	Qatar	665-2538
Djibouti	688-7140	Senegal	665-4465
Ethiopia	642-3013	Sierra Leone	665-0146
Finland	665-4177	Somalia	665-3025
France	642-1233	Spain	687-4033
Gabon	665-1364	Sudan	643-3512
Gambia	665-2528	Sweden	665-9687
Germany (FR)	665-3344	Switzerland	665-1387
Ghana	665-2779	Syria	665-1049
Guinea	665-3718	Taiwan	665-9161
India	642-1601	Thailand	665-9163
Indonesia	642-1681	Tunisia	687-2121
Iran	665-3143	Turkey	665-4873
Iraq	665-2948	Uganda	665-2386
Ireland	665-5481	U.A.E.	665-3777
Italy	665-5167	United Kingdom	665-2544
Japan	665-2402	U.S.A.	665-2188
Jordan	687-4476	Venezuela	665-1124
Kenya	665-6718	Yemen (YAR)	642-4291
Korea (Republic)	665-5061	Yemen (PDR)	665-6591
Kuwait	665-4103	Zambia	667-3896
Lebanon	665-2488	Zaire	665-2979

CUSTOMS: *Import/Export Prohibitions:* All goods to be imported into, or exported from, the Kingdom of Saudi Arabia are subject to examination by the Customs Authorities. The importation of certain articles is strictly prohibited, for example:

Explosives and Firearms, including air rifles
Implements of war of any kind, including antiques
Alcoholic beverages of any kind
Religious matter not pertaining to the Moslem faith
Pig meat or pig products
Playing cards and gambling games or devices
Narcotics
Pornographic material.

Trafficking in these items between ships, and between ships' crews and shore personnel, is strictly prohibited.

Also see "General".

TIME: The Time Zone is GMT plus 3 hours.

SHORE LEAVE: Ship's personnel are NOT permitted ashore, nor on the wharves FOR ANY PURPOSE WHATSOEVER (this includes the reading of the ship's draft) until Pratique is granted, and then are allowed on the wharves only if actually engaged in duties in connection with operations of discharging, deballasting or loading.

All shore leave is contingent upon compliance with Saudi Arabian Quarantine and Passport Regulations. For current details concerning these regulations and shore leave restrictions the ship's Agents must be consulted.

SAFETY/POLLUTION: *Safety Requirements:* A letter concerning safety requirements will be given to the Master of each vessel by the Terminal Supervisor.

Receipt of the safety requirement letter has to be acknowledged by countersigning and returning a copy to the Terminal Supervisor.

Ship/Shore Safety Check List and Precautions: Terminals in Port follow the recommended safe practice for loading, discharging and related operations as contained in the International Oil Tanker and Terminal Safety Guide and the International Chamber of Shipping's Tanker Safety Guides for Chemicals and Liquefied Gas, or other comparable Guides.

Prior to commencement of any cargo/bunker transfer operations, a ship/shore check list is to be completed and signed by responsible personnel from ship and shore. Each item should be positively verified before it is ticked and, if necessary, a physical check will be performed.

Regular inspections by the Terminal Staff will be made with the ship's Master, or his deputy, to ensure that the relevant safe practices are strictly adhered to. The Harbour Master or his deputies may also carry out inspections. If any infringement of the recommended safe practices is observed, the attention of the person in charge will be drawn to the fact and, if the situation is not resolved immediately, all operations must cease. In the event of continued and blatant disregard of the regulations, the vessel may be ordered off the berth for appropriate action to be taken by the Charterers and Owners concerned.

Tank cleaning and/or gas freeing is only permitted with the approval of the Terminal Manager and Harbour Master and only if tank washings can be discharged into reception facilities.

Crude Oil Terminal Emergency Procedures: Emergency procedures, both on board and offshore, shall be introduced in the event that normal operational practice has to be interrupted or suspended as a result of an unforeseen incident that would create unsafe conditions while loading crude oil at one of the berths of the Crude Oil Terminal.

Crude Oil Terminal Emergencies which would require immediate action by terminal personnel or shipboard personnel are:

1. Electrical storm.
2. Electrical power failure.
3. Mechanical failure.
4. Leakage, spill.
5. High gas concentration.
6. High winds exceeding 35 knots.
7. Fire.

Actions to be taken shall be determined by the type and severity of the incident and are:

(a) Stop loading.
(b) Comply with emergency reporting procedures.
(c) Disconnect loading/bunker arms.
(d) Fire facilities standby.
(e) Standby for unmooring.
(f) Departure from berth.

Emergency actions should be initiated by offshore personnel when an emergency is detected onshore or on board that tanker. It is important that the first able-bodied person or persons at the scene of the emergency should take whatever action is appropriate and necessary to protect personnel, minimise the hazard and to limit the extent of damage.

All Crude Oil Terminal personnel have to be familiar with the King Fahd Port at Madinat Yanbu Al-Sinaiyah Emergency Plans and, on declaration of an emergency for the Port, follow the procedures as listed in these emergency plans. The King Fahd Port at Madinat Yanbu Al-Sinaiyah Emergency Plans apply to all areas within the port limits as defined by the Rules and Regulations for King Fahd Port at Madinat Yanbu Al-Sinaiyah.

Oil Pollution Prevention: Any oil pollution of the waters of the Port will be treated as a very serious matter. In order to prevent oil pollution, the Royal Commission carries out continuous surveillance of the Port area. If any vessel is seen, or there is evidence to suggest a vessel is polluting the water of the Port, instructions will be given for all loading/discharging/deballasting operations to cease. A detailed investigation will be carried out and any vessel held responsible for pollution, will be required to pay the costs of all clean up operations and any fines that may be levied.

Masters, Owners and Charterers are reminded:

A. That before any vessel enters the Port, the Master is required to notify the Pilot of any special conditions, difficulties or peculiarities such as defective equipment, lines or gear, which might impose special hazards in connection with handling, mooring or loading/discharge of vessels ("Instruction to vessels and conditions of use of all berths within King Fahd Port at Madinat Yanbu Al-Sinaiyah").

B. In addition to (A) above, tankers and gas carriers are obliged to give a similar undertaking in their pre-arrival information.

C. All tankers, gas carriers and any vessels bunkering are required under the Rules and Regulations for Saudi Arabian Seaports, Part 3, Section 4, to ensure all alarms and safety trips are tested and working, and that all pipes, valves, hoses or other apparatus shall be in good condition and free from leakage. Drip pans and deck scuppers shall be in position and plugged.

D. Suitable sorbent material or other materials or equipment should be readily available on deck in order to clean up any spillage.

GENERAL: *Emergency Plans:* Information will be supplied to each vessel arriving at the various terminals in the port detailing action to be taken in the event of an emergency situation arising. Masters, officers and crew should familiarise themselves with this information.

A Port Emergency may be declared in the event of:

a fire on a terminal or ship;
a pollution incident occurring from a terminal or ship;
a collision, grounding, sinking or other major incident occurring within the Port area.

A Port Emergency can only be declared and terminated by the Harbour Master who will make a broadcast on VHF to this effect. Instructions will also be issued to inform all vessels that a Port Emergency has been declared. It is vital, therefore, that all vessels should have their VHF available for immediate operation and that provision is made for a continuous listening watch to be maintained in the event of a Port Emergency being declared.

The alarm may be raised by:

Contacting Royal Commission Port Control by VHF Channel 16,
or by continuous sounding of fog signalling apparatus, or
by visual means, or
if ashore by whatever means is available.

Initial action should be taken by those persons at the scene until the arrival of assistance.

The control of all operational activities afloat, and the movement of vessels during a declared Emergency will be exercised by the Harbour Master who will undertake the direction of these activities through Royal Commission Port Control and will liaise with the Royal Commission.

All loading or discharging of dangerous and/or flammable goods in the Port must cease immediately a Port Emergency is declared.

Port Regulations: Every vessel which arrives at the port must have a copy of the Rules and Regulations for King Fahd Port at Madinat Yanbu Al-Sinaiyah which are authorised and approved by the Royal Commission for Jubail and Yanbu, and a copy of the Rules and Regulations for Saudi Arabian Seaports which is to be used in conjunction with the above. On first arrival at the Port, these Rules and Regulations must be obtained.

Saudi Arabian Government Regulations: Saudi Arabian Government Regulations are strictly enforced, and Masters having any doubts concerning the interpretation of these regulations are urged to consult their agent. While in Port, whether at anchorage or at a berth, the vessel's personnel are under the jurisdiction of Saudi Arabian Laws.

The taking of photographs while the ship is in port is strictly forbidden by the Saudi Arabian Government.

All alcoholic beverages, including beer, table wines and liquors, are to be under lock and key during a vessel's stay in port. The possession and/or consumption of alcoholic beverages is prohibited in Saudi Arabia. Penalties are severe and major delays to vessels can be incurred due to Government investigations of violations.

Provisions: Frozen meat (except pig meat), fish and fresh vegetables are available locally, however Masters are advised to contact their Agent well in advance to establish availability and prices.

Stores: Local availability of chandlery items is limited and Masters should contact their Agents well in advance to establish availability.

WEATHER:

Climate: The climatic conditions affecting King Fahd Port at Madinat Yanbu Al-Sinaiyah are seasonal. In Winter onshore, air temperatures range from 25°C during the day to about 12°C at night. In Summer air temperatures range from 35°C during the day to 25°C at night. Extreme air temperatures recorded in recent years in the area have been 49°C in May and 6°C in February. Temperatures offshore are generally several degrees lower. Relative humidity varies throughout the year with average values between 65% and 70% in Winter and 50% to 55% in Summer, however values of 100% may occur for short periods around dawn. The average annual rainfall taken over a 4 year peiod is 3.2 mm.

Winds: A diurnal sea breeze/land breeze cycle occurs almost daily throughout the year and causes wind speeds of 10 knots and above to occur from the North West during the late afternoon. Storms occur as frequently as every 5-10 days and sometimes can last as long as 2 weeks. Although there is little drop in barometric pressure and very rarely any precipitation during these storms, wind speeds of up to 30 knots may occur from the North or North West.

Tides and Currents: The mean tidal range is about 0.34 m., but fluctuations due to non tidal effect, caused by storms, can be up to about 0.50 m. with a drop in mean sea level during the storm and a significant increase after the storm or as it subsides. Generally tides are semi diurnal with a period of 12 hours 25 minutes. Information to date suggests that the following datums be adopted:

Datum	*Elevation above LAT (m.)*
Highest Astronomical tide (HAT)	1.14
Mean High Water Springs (MHWS)	0.80
Mean High Water (MHW)	0.74
Mean High Water Neaps (MHWN)	0.67
Mean Sea Level (MSL)	0.57
Mean Low Water Neaps (MLWN)	0.47
Mean Low Water (MLW)	0.40
Mean Low Water Springs (MLWS)	0.34
Indian Springs Low Water (ISLW)	0.32
Lowest Astronomical Tide (LAT)	0.00

Currents in the area are influenced by local wind conditions, tide, and the general circulatory pattern of the Red Sea. Generally currents within the port have been observed at less than 0.5 knots and run parallel to the coast. However, they are considerably influenced by surface wind activity.

Sea Conditions: Sea conditions can vary considerably within the Port limits. Wave heights in the port area are usually lower than 40 cm. during sea breezes, but during storms, waves in excess of 2 m. are common outside the offshore reefs while waves exceeding 1 m. are common in the inner port area. There is no distinct seasonality in this respect.

Sea Salinity and Sea Water Temperatures: Sea water temperatures are similar to air temperatures and range between 25°C (77°F) and 31°C (88°F). Salinity varies between 37 and 39 parts per thousand.

Visibility: The incidence of fog is rare, but, should it occur, it is more likely during the period November to April. During the summer months from May to September the incidence of poor visibility (less than 5 miles) can be quite high due to mist and haze, or dust particles held in suspension in the atmosphere. However, throughout the year, dust storms may occur obscuring the coastline.

PUBLICATIONS: Information available regarding King Fahd Port at Madinat Yanbu Al-Sinaiyah:

Regulations: Rules and Regulations for Saudi Arabian Seaports. Rules and Regulations for King Fahd Port at Madinat Yanbu Al-Sinaiyah (to be used in conjunction with the Rules and Regulations for Saudi Arabian Seaports).

Charts: British Admiralty Charts:

63 Red Sea – The Brothers to Gezirat el Dibia.
327 Outer approaches to Yanbu.
328 Approaches to King Fahd Port at Madinat Yanbu Al-Sinaiyah – Inner Channel Northern part.

United States Defence Mapping Agency Chart:
62016 The Brothers to Jezair Siyal.
62171 Outer Approaches to Madinat Yanbu Al-Sinaiyah Port.
62172 Inner Approaches to Madinat Yanbu Al-Sinaiyah Port.

Tide Tables: British Admiralty Tide Tables Volume 2 – Atlantic and Indian Oceans.

Pilot Books: British Admiralty Red Sea and Gulf of Aden Pilot, (and supplements) N. 64.

Lights: British Admiralty List of Lights and Fog Signals – Volume "E".

AUTHORITY: Directorate General for Yanbu Project, P.O.Box 31, Yanbu, Saudi Arabia. *Telex:* 462303 Rcyb SJ. *Contact:* Director of Ports, King Fahd Port at Madinat Yanbu Al Sinaiyah. *Tel:* 04 396-7055 or 04 396-7000. Management Services Contractor, Port. *Tel:* 04 396-7000. Harbour Master's Office. *Tel:* 04 396-7104. Port Control. *Tel:* 04 396-7077.

AGENT: Gulf Agency Company Saudi Arabia, P.O.Box 473, C.R. No. 869, King Abdul Aziz Street, Abdul Auf Building, 5th Floor, Flat No. 9, Yanbu, Saudi Arabia. Cables: "Gulfagency", Yanbu. Telex: 461084 ("Gaship SJ"). Telephone: 3223992 and 3228765. After Hours: 3228982, 3226737.

N.B. G.A.C. Yanbu is connected to the Bahrain Telex Bureau. Messages from ships to G.A.C. Yanbu may therefore be addressed "Bahtag 25 1198700 Gulfagency Yanbu" via Bahrain Radio, and they will then be relayed direct by telex to Yanbu.

ZULUF TERMINAL: 28.23 N. 49.14 E.

TERMINAL CLOSED APRIL 1976. THE STORE BARGE HAS LEFT. NO FURTHER OPERATIONS WILL TAKE PLACE AT ZULUF.

NOTICES:

MENAS Notice No. 102/82
ZULUF AND MARJAN OILFIELDS

Mariners are advised that there are lighted structures and numerous unmarked well heads with standpipes of 6 ft. to 8 ft. above the sea bed between the pecked areas delineating the Marjan and Zuluf Oilfields.

Oil rigs and platforms also exist in the Southern approaches to the above oilfields.

Caution and a good lookout is requested in the area and anchoring between the two oilfields is not advised.

MENAS Notice No. 05/84
VESSELS TRANSITING WATERS IN VICINITY OF MARJAN AND ZULUF OILFIELDS

Mariners are advised that new platforms are being erected in the Zuluf Field and both rigs and platforms are positioned between the Marjan and Zuluf fields.

Both fields are clearly delineated on nautical charts and shipping should pass between them. A good lookout is requested and reduced speed when in the vicinity of platforms, oil rigs and their supporting craft.

NOTES

Please also advise Shipping Guides Ltd.

Senegal

DAKAR: 14.40 N. 17.26 W. (See Plan Book)

PORT LIMITS: *North:* From the point of Bel-Air by a parallel from N.E. of the N.E. Jetty of the harbour, to 1 mile N.E. by a meridian passing 2,900 m. East of the Round-Point determined by the crossing of Felix Eboue and Avenue de la Jetee Nord and by the parallel passing 2,060 m. North of Goree Island.

East: By the meridian passing 1 mile East of Goree.

South: By a line joining the Cape Manuel from the South point of Goree prolonged until it encounters the meridian passing 1 mile East of Goree.

DOCUMENTS: Vessels carrying hazardous and/or strong smelling cargoes must declare to the Harbour Master, at least 48 hours before ship's arrival, the nature/quantity/packing of these goods, as well as their stowage on board. Same applies for Arms and Ammunitions.

Health:
2 Crew Lists.
1 Sanitary Declaration.
2 Lists of Date of Vaccinations.
(Valid vaccinations for Smallpox and Yellow Fever for all persons)

Customs:
3 Crew Lists.
2 Stores Lists.
2 Personal Effects Declarations.
2 Slop Chest Lists.
1 List Arms and Ammunition.

Immigration:
4 Crew Lists.
2 Lists of Ports of Call with dates of arrival/departure.

Agents:
1 Crew List.
1 Personal Effects Declaration.
1 Slop Chest List.
2 Lists of Arms and Ammunition.

Papers required on arrival: Bills of Lading for cargo to be discharged and Master's copy. 2 copies of Cargo Manifests for cargo to be discharged.

Great care should be taken in completing all Store Lists, Slop Chest Lists and Personal Effects Lists as Customs check all stores, including fridge spaces.

Customs also board vessels at anchor and inside territorial waters, inflicting heavy fines in cases where stores, etc. are not prepared and ready for inspection. Also, heavy fines are imposed for any discrepancies. Even when calling at port for emergencies (e.g. Medivac) a full set of documents must be prepared before entering territorial waters.

No vessel is allowed to leave Dakar without having received on board an outward manifest duly visaed by the local Customs Authorities. Vessels leaving without such a manifest will be heavily fined.

PILOTAGE: Pilots meet vessels off the North point of the Island of Goree in a naturally sheltered area.

RESTRICTIONS: During the rainy season, all vessels with a draft of more than 32 ft. 6 in. could be delayed, due to the effects of swell, at anchorage in outer roads and await meteorological conditions permitting their entry into the harbour.

Use of whistle signals to call Pilot is forbidden between 2200 hrs. and 0600 hrs. The harbour area is dredged to a depth of 10 m. to 11 m.

Dangerous Cargo: Vessels are allowed to have the following dangerous cargo on board:

For Discharging	*North Area*	*South Area*
I.M.O. 1	20 tons	10 tons
I.M.O. 2	50 tons	25 tons
I.M.O. 3	80 tons	25 tons
In Transit	*North Area*	*South Area*
I.M.O. 1	25 tons	20 tons
I.M.O. 2	50 tons	25 tons
I.M.O. 3	80 tons	40 tons

TUGS: Operated by a private company, 3 tugs available up to 2,000 h.p. (bollard pull 24 tons). Compulsory for loaded tankers.

BERTHING: 10,000 m. of quay length available of which more than half has depths of 8 m. to 11 m. alongside.

Mole D'Escale: 6 berths, depth alongside 10 m., can be used for vessels refuelling simultaneously with cargo operations.

Pier 718 Phosphate Quay (Pechiny): 215 m. long, max. draft of 25 ft. 7 in., loading average of 200 t.p.h.

Pier 52 Phosphate Quay (TA IBA): 170 m. long, max. draft of 36 ft., loading average of 1,000 t.p.h.

The South area has 3 wharves with a depth of 26 ft. – 33 ft.

Dock I is 460 m. long.

Berth No.	12	Draft	26 ft. 3 in.
„ „	13	„	28 ft. 7 in.
„ „	14	„	28 ft. 7 in.
„ „	15	„	33 ft.
„ „	17	„	33 ft.

Dock II

Berth No.	21	Draft	27 ft. 3 in.
„ „	22	„	26 ft. 11 in.
„ „	24	„	26 ft. 3 in.
„ „	25	„	25 ft. 11 in.

Dock III is 350 m. long. Max. draft of 32 ft. 10 in. Reserved for trade with the Republic of Mali.

Mole de Peche: 1,461 m. of quays, supplied with water and bunkers. Areas for spreading out fishing lines and nets.

MAX. SIZE: Ships of 30 ft. draft are able to enter at all stages of the tide by day and night. Vessels up to 36 ft. draft may enter at high tide except possibly during the stormy season, between mid August and mid October.

CRANES:
5 semi-jib cranes × 6 tons at 27 m.
1 electric crane × 40 tons at 20 m.
2 floating cranes, 60 tons and 120 tons.
1 mobile crane × 8 tons at 15 m.
1 mobile crane × 28 tons.

CONTAINER FACILITIES: Containers handled at Mole 1.

TANKERS: The Petroleum Basin is dredged to a depth of 10 m. to 11 m. 2 jetty berths can receive tankers up to 200 m. length, max. draft 32 ft. 6 in. Petroleum Wharf which has 4 berths, depth alongside 12 m. (depth in approaches 11 m.) can receive tankers up to 250 m. length with a draft of 36 ft.

Black products handled at all berths (6 in., 8 in. and 10 in. hoses). White products at Berth, 2 only (8 in. hoses). Distance to tank farm about 5 km. Water to be pumped between grades.

Ship to Ship transfer (STS) is carried out across Petroleum Wharf using 2 × 8 in. hoses. Standard practice – discharging tanker starboard side alongside No. 93 Berth and loading tanker port side alongside at No. 92 Berth. Transhipment supervised by Iransen and Shell.

M'bao Refinery sealine buoy berth is situated 3 miles N.E. of Goree Island. Vessel berths using both bow anchors, stern is secured to 4 buoys using 4×5 in. wires from buoys stern. Ship's ropes not used. Hose connection on port side using 12 in. (300 mm.) hoses. Vessel's derrick to have an SWL of at least 5 tonnes.

STEVEDORES: Normal working hours, weekdays from 0800 to 1200 hrs. and from 1400 to 1800 hrs. Saturdays from 0800 to 1200 hrs. Overtime, weekdays from 0500 to 0800 hrs.; from 1200 to 1400 hrs.; from 1800 to 2200 hrs.; from 2200 to 0500 hrs. Holidays and Sundays from 0000 to 0500 hrs.; from 2200 to 2400 hrs.

HEALTH: Health Officials board vessel immediately after berthing alongside. For passenger vessels, these formalities are effected before berthing to avoid delays. Vessels at sea may obtain medical advice by VHF or telex via Dakar Radio.

Inoculation/Vaccination can be arranged through Agent during weekdays.

Free Pratique can be granted via radio by Agent, by using international Code Words "MIBDU/MIJMA".

RADIO: ETA advice should be sent 96 hours, 48 hours and 12 hours prior to arrival including cargo to discharge, drums to discharge (if any), draft on arrival, expected draft on departure, last port and next port of call. Agents should be notified of tug requirements, VHF Channel 8.

VHF: The Port Captain's Office, pilot station and tugs are equipped with VHF, with the following Channels: Channel 16 used by vessels approaching to contact pilot station or Port Captain's Office; Channel 12 used during manoeuvres for communications between Pilots and tugs; Channel 6 used only by the tug station.

MEDICAL: *Vaccinations:* Possible from 0800 to 1200 hrs. and 1500 to 1700 hrs. Sundays and holidays excluded.

Doctors: All kinds of specialists available.

Hospitals: With qualified doctors and good equipment.

FRESH WATER: All quays are fitted with water hydrants. Water supplied by 3 hoses simultaneously, with a rate from 60 – 100 cu.m.p.h. Can also be supplied by barge up to 400 tons capacity but minimum order 150 tons.

FUEL: All grades can be supplied from the quays up to 1,000 t.p.h. Fuel can also be supplied by barge. Also see "Shipmasters' Report".

REPAIRS: All types of repair can be effected by the Naval Arsenal or by private companies.

DRY DOCKS: At the Naval Arsenal, one dry dock length 189 m., width 23 m., depth up to 9.50 m.

Syncrolift, max. weight acceptable, 1,200 tons.

New Floating Dock will take vessels up to 60,000 d.w.t. Lifting capacity 28,000 tons. Acceptable dimensions 235 m. × 38 m.

REPATRIATION: Seamen can be repatriated to Europe without delays by air.

AIRPORT: International airport with regular services to Europe.

TELEPHONES: All berths are equipped with telephone apparatus which is placed on board vessels without charge.

HOLIDAYS: New Year (1st January); Tabaski (Variable Date); National Day (4th April); Easter (Variable Date); Labour Day (1st May); Ascension Day (7th May); Whit Monday (Variable Date); Maouloud (Variable Date); National Day (14th July); Assumption (15th August); All Saints' Day (1st November); Korite (Variable Date); Christmas (25th December).

GENERAL: Several cases of assault have been reported against crew members returning to their ships during the hours of darkness. For this reason, the delivery of cash from Agents is suspended during the night hours. Although Port Authorities and Security are aware of the situation, it is advisable to acquaint all on board with this.

DEVELOPMENTS: Container and Ro-Ro terminal to be constructed between Mole 6 and Mole 8.

SHIPMASTER'S REPORT: With a draft in excess of 15 m. it is not possible to anchor in the inner roads due to the swell. The swell is worse from July to October (rainy season).

The Pilot directed us to an anchorage 0.5 miles N.E. of Island of Goree but in my opinion it is a little too close. However, the nearer a vessel can anchor N.E. of Goree the better. The holding ground is very good.

It is possible to talk to Mory Fuel Company direct on VHF Channel 2. They have a barge which is able to deliver fuel oil and diesel oil, capacity 500 tons.

Three tugs available, be sure to order one well in advance before completion of bunkering or the vessel may have to wait. Bunkering undertaken day and night.

SHIPMASTER'S REPORT: October 1983.
Documents: Separate Bonded Stores List (4 copies) required by Customs.
Pilotage: Pilots will board 0.2 miles from breakwater entrances.
Health: Advise Port Health Authorities of health state, also vaccinations required. They attend on arrival but do not acknowledge messages.
Fresh Water: Fresh water supply at piers averages 20 t.p.h.
Security: There have been many cases recently of anchored and stationary vessels being boarded by thieves and mooring ropes, etc. purloined. Vessels on regular run to Dakar do *not* stop in port approach areas until daylight. Gangway watchman essential. Shore traders to be confined to one area under supervision if allowed on board.

AUTHORITY: Port Autonome de Dakar, Boulevard de la Liberation, B.P. 3195, Dakar, Senegal. *Tel:* 238-00. *Telex:* 406. *Cables:* Porcomer Dakar. *Contact:* E. Belin, Director General.

AGENT: Socopao Senegal, 47 Avenue Albert Sarrault, B.P. 233. Tel: 23.10.01/21.46.31. Telex: 521, 621, 622 and 496. Cables: "Freight Dakar".

Sub-Agency at Kaolak. Tel: 41.19.07. Telex: 7460.

KAOLACK: 14.09 N. 16.06 W.

DOCUMENTS:
2 Crew Lists.
2 Store Lists.
2 Manifest pacotille (tobacco, wine, etc.). Agents deposit at Customs office.

PILOTAGE: Pilot taken on board, and lands in Dakar. When vessels do not require tank-washing, the Pilot disembarks in roadstead.

ANCHORAGES: Sufficient for three vessels only. About 6 m. deep.

RESTRICTIONS: Night navigation forbidden in River Saloum. Depth available 3.0 m.

MAX. SIZE: Length 105 m. (because of River Valor).

HEALTH: Agent signals to Harbour Master. Provisionally vessels quarantine in Dakar. No hospital.

TUGS: No tugs. (Only from Dakar.)

BERTHING: Signals by flag when berth available. Vessels enter at flood tide so that they can turn at anchorage to be ready for sailing.

Private Berth: Saltworks Wharf, length 52 m. Owned by S.S.S.I.M. Tel: 411904. Telex: 7472 SG.

MEDICAL: Yellow fever vaccinations only at Dakar. No hospital facilities.

DENSITY: August to December: 1025. January to July: 1055.

FRESH WATER: Available at 10 t.p.h.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Arranged by Agent.

OPENING/CLOSING HATCHES: By stevedores.

CUSTOMS ALLOWANCES: Tobacco, no restrictions; Customs control on board (Declaration on manifest). Crew going ashore only allowed cigarettes marked "Vente au Senegal". Wine and/or Spirit, not limited, Customs controlled.

IDENTIFICATION CARDS: Not necessary.

CONSULS: None (Dakar only). French Consulate Agent: Leon Masfrand, Tel: 412176.

REPATRIATION: Not possible (Dakar only).

AIRPORT: None.

TIME: GMT throughout year.

HOLIDAYS: Independence Day (4th April) no loading. Tabaski (dependent on moon phase).

FIRE: Tel: 324.

TELEPHONES: Not possible to place on board.

SHORE LEAVE: Crew members allowed ashore.

REGULATIONS: Vessels must hoist Senegalese flag and notify Agent before entering port.

AUTHORITY: Harbour Master.

AGENT: See "Dakar".

NOTES

Please also advise Shipping Guides Ltd.

Seychelles

PORT VICTORIA, Mahe: 04.37 S. 55.28 E.

(See Plan Book)

DOCUMENTS:

Maritime Declaration of Health – forms obtainable from Medical Officer.
Derat Certificate.
5 Crew Lists and Passengers' Lists.
Dangerous Cargo List.
Ship's Register.
Crew Declaration Form.
Declaration of Stores.
Parcels List.
Firearms List.
List of Animals remaining on board.
Un-manifested Cargo List.
Cargo Manifests.
Clearance from last Port.

PILOTAGE: Compulsory in Inner and Outer Harbour for any vessel of or exceeding 150 g.r.t.

24 hours' notice, giving draft and length. Telegraphic address "Demarine" through Cable & Wireless (on schedule 500 kHz and 8714 MHz. Schedule published in Radio list. Harbour control equipped with VHF Channels 16, 12 and 6).

Pilot Boat: White hull with white cabin, orange top, flying "H" flag.

Signals for Pilot: "G" by flag and/or whistle.

Pilot Boarding Ground: The Pilot boards vessels about 6 cables Northward of the outermost buoy (Fairway buoy) in position 4° 35.7′ S., 55° 29.6′ E. There is no night pilotage. Pilot can board in almost any weather. While awaiting Pilot; vessel can anchor in any suitable anchorage in the pilotage area. Vessels should call "Harbour Control" on VHF, Channel 16, 2 hours before arrival.

ANCHORAGES: Masters of all vessels are requested not to anchor on the leading marks or in any other position so as to block the entrance channel.

The following anchorages are available in the Outer Harbour.

(i) Victoria Lighthouse bearing 238° True. Distance 9.75 cables in depths of 20 m. to 22 m.
(ii) Victoria Lighthouse bearing 232° True. Distance 1 mile in depths of 22 m.
(iii) Victoria Lighthouse bearing 224° True. Distance 1.4 miles in depths of 18 m. to 20 m.
(iv) Victoria Lighthouse bearing 212° True. Distance 1.5 miles in depths of 20 m. to 22 m.

Super tankers and large vessels anchor outside the Fairway Buoy in any suitable anchorage. The Master should always contact Harbour Master for anchorage instructions.

RESTRICTIONS: All shipping movement in Inner Harbour to take place during daylight hours only. In Outer Harbour, night movement at discretion of Master after consultation with Harbour Master. No tide restrictions.

Vessels with draft of more than 31 ft. remain at anchor due to certain draft restrictions in the approach channel.

HEALTH: "Q" Flag or international red over white. Medical Officer boards vessels at anchor and before entering Inner Harbour. Crew Lists with vaccination dates against smallpox, yellow fever and cholera if vessel from infected places. Health clearance given at Port Victoria only. Hospital facilities available. Vessels proceeding to the Inner Harbour may be disinsectised. Radio Pratique may be granted on request.

No animal/pet of any description is permitted to be landed ashore or on the wharf as per Seychelles Quarantine Regulations. Necessary action will be taken against any Master who disregards these instructions in addition to the possibility of destroying any such animal or pet found ashore.

RADIO/VHF: Cable and Wireless, Port Victoria, Mahe. Call sign ZCQ. The Harbour Master's Office, call sign, "Harbour Control" keeps a 24 hour watch on VHF Channel 16. Any further information can be obtained by calling up Harbour Control on Channel 16. Other Channels available – 12 and 6.

TUGS: One twin-engine 2,000 b.h.p. tug in full operation. Vessels of up to 650 ft. are able to berth alongside.

BERTHING: Due to limited space no berth can be reserved either alongside or at anchorage. All assistance given to position every ship in best available place.

Mahe Quay (New deep water port) is now in full operation. Two vessels can berth alongside. Berth No. 1 is allocated to oil and cement tankers and Berth No. 2 to cargo and passenger ships. Maximum depth of water at all berths is 35 ft. There are connections for fuel, fresh water and telephones at all berths. Passenger terminal, Port Offices and Customs are situated at the New Port area.

Masters and Officers of vessels moored at the 2 above mentioned places are reminded of the importance of tending moorings at frequent intervals.

Slack lines present a hazard to the safety of vessels moored alongside.

In the case of tankers and bulk carriers discharging or loading, the hourly difference in draft can be considerable. It is therefore recommended that regular routine checks on moorings be carried out by the Duty Officer.

Movement of Vessels Moored at Mahe Quay, Long Pier or at Anchorage. No movement of any vessel moored at the above mentioned places is permitted without authorisation from the Harbour Master. Ship's boats or lifeboats are not to be used as plying boats or on excursions to nearby islands unless agreements have been made through the Harbour Master's Office and Customs.

TANKERS: Max. length 570 ft. Discharge throughout 24 hours. Discharge line 6 in.

DENSITY: Average 1025 at all states of tide.

STEVEDORES: ETA advice required two to three days before ship's arrival in port. Loading and Discharging: General Cargo: average 8 to 10 t.p.h. per gang (subject weather conditions). Bagged Cargo: average 10 to 15 t.p.h. per gang (subject weather conditions).

FRESH WATER: In good supply. By mains when alongside and steel barges when at anchor. All water supplied is chlorinated. One special steel water barge with capacity of 80 tons with pumping capacity of 40 t.p.h. Vessels should request water at least 72 hours before arrival.

FUEL: Gas oil Kinematic CS at 40°C. = 3.63. Due to limited stock, it is advisable to give one week's notice, preferably through Shell International, London.

Fuel oil now available on North end of berth only. (Fuel oil 180 centistoke). Pour point 70 max. – Kinematic 180 max. – restriction on flow of delivery pending improvement of facilities.

GANGWAY/DECK WATCHMEN: Customs Officer on duty at all times if vessel is discharging cargo.

OPENING/CLOSING HATCHES: Normally carried out by ship's own crew.

CUSTOMS ALLOWANCES: At Custom Officer's discretion.

CARGO GEAR: All cargo slings and gear supplied by ship.

IDENTIFICATION CARDS: See "Shore Leave".

CONSULS: *Embassies:* China, Cuba, France, Libya, U.S.A., U.S.S.R.

High Commissions: Great Britain, India.

Consuls: Belgium, Cyprus, Denmark, Fed. Rep. of Germany, Italy, Malagasy Rep., Norway, Sweden, Switzerland.

REPAIRS: Only minor repairs to deck: gas welding, pipe bending, etc.

DRY DOCKS: None.

REPATRIATION: Crew changes possible. Undertaken by Agents in connection with Immigration Authorities.

AIRPORT: In operation. Several flights weekly.

TIME: GMT plus 4 hours, throughout year.

HOLIDAYS: New Year (1st and 2nd January); Good Friday; Corpus Christi (15th August); Labour Day (May 1st); Liberation Day (June 5th); Independence Day (June 29th); Assumption Day (August 15th); All Saints' Day (November 1st); Immaculate Conception (December 8th); Christmas Day (December 25th).

POLICE/AMBULANCE/FIRE: Emergency: Ring 999 otherwise Police 22011 and Hospital 22031.

A telephone is placed on board ships alongside. Rate Rs 50/- per day.

SERVICES: No tank-cleaning equipment, no facilities for discharge of tank washing, no compass adjusting, radar or radio engineer available for small repairs.

SHORE LEAVE: All members of the crew are allowed ashore. No limit to shore leave. Crew to be in possession of identity card or discharge book.

DELAYS: Berthing: limited berth. Loading or discharging: weather conditions. Bunkering: space alongside.

SAFETY: There shall be no smoking on board vessels carrying petroleum products, chemicals or LPG except in such safe places as may be approved jointly by the Master and Harbour Master. Responsibility for ensuring that the crew of the vessel are informed of the safe places so approved, and that the regulations are complied with, rests with the Master. Such vessels when berthed alongside a quay must have the eye of a wire hanging over the outside bow and quarter to enable tugs to connect up readily in an emergency. The said wire must be suitable for such purposes and shall have sufficient scope on deck for free running.

Engines are not to be immobilised whilst the vessel is berthed alongside the wharf without prior authorisation from the Harbour Master.

Any unsafe condition or action observed on board a vessel will result in immediate cessation of cargo or bunkering operations until such condition or action is corrected. Continued or blatant disregard of these requirements by any ship will result in the removal of the ship from berth or quay at the cost of the vessel and the Owners/Operators/Charterers informed of the circumstances.

Use of radar and radio transmitter are forbidden whilst alongside the wharf.

Portable R/T sets or transceivers must be of an approved design and those used on tankers must be intrinsically safe.

POLLUTION: All ballast discharged over the side must be clean and entirely free from petroleum products of any description in accordance with the Marine Pollution Regulations of 1981. No dirty ballast is to be pumped overboard as per Laws of Seychelles Cap. 210 Section 18. This includes brine from fish tanks in which fish have been stored. All Masters are advised to familiarise themselves, through their respective Agent, with the Marine Pollution regulations 1981. The Master of a vessel found guilty under these Regulations is liable to imprisonment for five years and to a fine of two hundred thousand Seychelles Rupees.

Whilst transferring fuel and/or taking bunkers all scuppers must be effectively plugged to prevent accidental discharge of oil into the sea.

SHIP SUPPLY SERVICE: Ship Supply Services can be made by prior arrangements with any shipping Agencies by using fast hire crafts, which are allowed to operate over 60 miles to any given rendezvous.

List of Shipping Agents:

M/S Union Lighterage Co. Ltd., P.O.Box 38, Victoria, Mahe, Seychelles.
Hunt Deltel & Co. Ltd., P.O.Box 14, Victoria, Mahe, Seychelles.
Mahe Shipping Co. Ltd., P.O.Box 336, Victoria, Mahe, Seychelles.
Union Trading Co. Ltd., Victoria, Mahe, Seychelles.
Harry Savy & Co. Seychelles (Pty) Ltd., P.O.Box 20, Victoria, Mahe, Seychelles.
M/S Allied Agencies Ltd., P.O.Box 345, Mahe, Seychelles.

REFUSE: No refuse to be dumped in the harbour and approaches. When alongside Mahe Quay garbage must be placed in plastic bags and be disposed through a licensed garbage collector at a fee.

AUTHORITY: Department of Transport, Port and Marine Services Division, P.O.Box 47, Mahe, Seychelles, Indian Ocean. *Tel:* 22311, 22800. *Telex:* 2329 Tratur Sz. *Cables:* Demarine. *Contact:* Harbour Master.

Sierra Leone

FREETOWN: 08.30 N. 13.14 W. (See Plan Book)

DOCUMENTS:

5 Crew Lists.
5 Ports of Call Lists.
5 Passengers in Transit Lists.
5 Passengers Landing Lists.
1 Crew Declaration (signed by Crew members).
1 Store List.
1 Arms & Ammunition List.
1 Port Health Declaration.
1 Vaccination List (cholera and yellow fever).

Port Health Declaration, Crew Declaration Form and Arms and Ammunition List, all special forms, which obtained from boarding party or, if required, mailed in advance to ship's Owners.

1. *For Vessels Working Cargo (Discharging):*
   - *(a)* From each port of loading, by air mail to vessel's Agent: 2 copies of Cargo Manifest, 1 copy of Freighted Manifest.
   - *(b)* On arrival: 5 copies of Cargo Manifests, 1 copy each Bill of Lading (non-negotiable).

Note: Customs and Port Authority insists on documents in English, and that Manifests should show weights and measurements. Non-compliance with these instructions places vessel's Agent in difficult position, and vessel may not discharge without payment of fine.

2. *Required by Port and Stevedores for Vessels Working Cargo:*

4 copies Stowage Plan, 4 copies Hatch Lists. List of all lifts over 3 tons.

PILOTAGE: Vessels may at present enter and leave port anchorage without Pilot. Pilotage only compulsory for vessels berthing alongside Queen Elizabeth II Quay, Kissy Oil Jetty, vessels over 20,000 tonnes summer deadweight and vessels over 30 ft. draft. Upon Master's request, Pilot available at Fairway Buoy with 24 hours' notice. Normally only during daylight hours. Port entrance is between Cape Sierra Leone to South and Fairway Buoy to North. Is approx. 1 mile wide and minimum draft 36 ft. To West harbour is protected by sand shoals, nearest to entrance is O'Farrell Shoal about 1.5 miles North of Cape Sierra Leone.

Pilots board from a launch painted black, with white superstructure, with letter "P" on each bow.

Aberdeen Signal Station will give an anchorage to every vessel arriving or, if a vessel is berthing on arrival, will advise where the Pilot is boarding. This is normally off the quay. The Signal station is equipped with VHF, standing-by on Channel 16, switching to Channel 12 for communication.

The Pilot Office, Queen Elizabeth II Quay, is also equipped with VHF, standing-by on Channel 16, switching to Channel 12 for communication. The Port Operations Manager is available on this link.

ANCHORAGE: With Falconbridge Point Beacon bearing as follows (all bearings true): Note: Falconbridge Point Beacon circular steel tower 8 ft. high, painted white with 2 horizontal black bands; Fl. white every 2 seconds.

Anchor Berth	*Bearing (T)*	*Distance (Cables)*	
E. 3	138	10.5	
E. 4	154	9	
E. 5	180	8	
E. 6	207	8	
F. 5	136	7	
F. 6	154	6	
F. 7	184	5	
F. 8	210	5	
F. 9	232	7	
F. 10	242	9	
F. 11	249	11	
G. 1	099	15	
G. 2	100	12	
G. 3	104	7	
G. 4	126	3	
H. 1	184	2	
H. 2	234	3	
H. 3	252	5	
H. 4	258	7	
B. 1	236	11	(Vessels bunkering ex-barge)

With Cline Point bearing as follows:

Anchor Berth	*Bearing (T)*	*Distance (Cables)*
D. 1	232	5.5
D. 2	253	7
D. 3	253	3
D. 4	273	5.5
C. 1	244	4
C. 2	270	5
B. 2	280	7.25

With Kissy Oil Jetty bearing as follows:

Anchor Berth	*Bearing (T)*	*Distance (Cables)*
B. 2	235	1 mile

No draft restriction at anchorage, also no length and beam restrictions and vessels can arrive and sail any hour day and night.

RESTRICTIONS: *Draft Limits for Deep Laden Vessels:*

Draft Limits: 38 ft. (11.6 m.) plus height of tide to a maximum of 48 ft. (14.6 m.).

Time Limits:

1. From 5 hours Flood Tide to HW.
2. From LW to 1 hour Flood Tide.
3. During hours of daylight only.

Vessels of 36 ft. draft and over must keep to the time limits.

Vessels of under 36 ft. draft may navigate the channel at any time but attention is drawn to the strong cross currents.

(H.M.S. Hydra has commented strongly on this danger).

HEALTH: Pratique by radio or on boarding. See "Agent's Cable Requirements".

RADIO: *Freetown Radio, Coast Station:* Watch is maintained on 500 kHz from 0700 – 2200 hrs. GMT on week-days, and 1200 – 1400 hrs. GMT on Sundays and Public Holidays.

The working frequency is 421 kHz and traffic lists are broadcast on this frequency after preliminary announcements on 500 kHz at 0730, 0830 hrs., etc.: up to 2130 hrs. GMT. On Sundays and holidays, traffic lists are broadcast at 0800, 1200 hrs. and 1700 hrs. GMT.

Time GMT	*9LL Freq.*	*Search-band for reply*
0800 – 0900 hrs.		
1300 – 1430 hrs.	6411	6 MHz
1700 – 1830 hrs.		
0900 – 1000 hrs.		
1200 – 1300 hrs.	8710	8 MHz
1830 – 2000 hrs.		
1000 – 1100 hrs.	13042.5	12 MHz
1530 – 1700 hrs.		

On Sundays and other holidays the H.F. Schedules are as follows:—

0830 – 0900 hrs.	8710	8354 to 8374 kHz
0930 – 1000 hrs.	13042.5	12531 to 12561 kHz
1330 – 1400 hrs.	6411	6 MHz
1600 – 1630 hrs.	13042.5	12531 to 12561 kHz
1700 – 1730 hrs.	8710	8354 to 8374 kHz

Traffic lists are broadcast at the commencement of every HF Schedule and repeated at intervals during the Schedule.

Ship's Radio Telephone and Harbour Service: Watch is kept on 2182 kHz for casual R/T traffic from 0800 – 2000 hrs. GMT on weekdays, and 0800 – 1730 hrs. GMT on Sundays and holidays.

Ships are advised to arrange their calls in advance by W/T where possible so it can be ensured that the called party is available. Calls can be connected to or from any number on the Freetown Telephone Exchange. Longer range contacts should be in the 8 MHz maritime band, the frequency of 9LL in this band being 8768.9 kHz.

Other Services: Navigational warnings issued from time to time by the Harbour Master are broadcast on W/T. Spoken telegrams are accepted at ordinary W/T rates on RT.

VHF: *Freetown Radio:* A 24-hour watch is kept on Channel 16 switching to Channel 26 for communication. Calls can be connected to the Freetown Exchange. Masters are advised the fullest use should be made of this service, particularly after office hours and during the early hours of the morning or late at night when no cable service is available. The Authority tugs are also equipped with VHF, watch being kept on Channel 16 switching to Channel 12 for communication. The same is applicable to the lighterage service, which keeps watch and communicates on Channel 12.

Signal Station	Channel 16
Pilot Office (Freetown Pilot)	Channel 16
Harbour Master	Channel 16

AGENT'S CABLE REQUIREMENTS: Masters requested cable ETA as early as possible. Following information required:

(a) For vessels working cargo: 1. Discharge or Loading Hatch distribution. 2. Gangs required. 3. If Explosives on board for Freetown or in transit.

(b) For vessels bunkering: Bunkers and water required.

(c) For Tankers discharging: 1. Total Displacement. 2. Draft. 3. Cargo particulars (quantity and grade).

(d) For vessels embarking/disembarking krooboys: 1. If krooboys provisions required and for how long. 2. Cash requirements. 3. If service on arrival if arriving between 2200 hrs. and 0700 hrs., bearing in mind the high costs for Customs overtime and port service.

(e) In general: 1. Cash requirements. 2. Water requirements. 3. Medical attendance, if required on arrival.

When ETA received and confirmed Agent will cable vessel informing despatch prospects and if not berthing on arrival, anchor berth.

Note: For vessels returning to Freetown from round trip to coast, information should be cabled if any over-carried cargo, etc., to be discharged.

TUGS: 2 seagoing tugs available, *Sewa* (2,200 h.p.) and *Bintimani* (2,200 h.p.). Both are twin-screw with diesel engines and are equipped for salvage having fire-fighting equipment and a 10 ton derrick. Normally 1 tug used for berthing and unberthing operations, but 2 if necessary. Charges for berthing and unberthing include use of 1 tug, whether required or not.

BERTHING: All alongside berths: between hours of 0630 and 2330. Kissy Oil Jetty; max. displacement – 46,000 tons, max. draft 39 ft., berthing flood-tide only.

Queen Elizabeth II Quay No. 1: Berthing length: no restriction; breadth: no restriction; max. draft 31 ft. 6 in. At this draft vessels must be 180 ft. from steps East end of quay. Vessels up to draft not exceeding 24 ft. may berth as far East as steps. Unberthing not permitted from 1 hour after HW until 1 hour after LW.

Berth No. 1A: As for Berth No. 1, max. draft 31 ft. 06 in.

Berth No. 2: Berthing and unberthing, length and breadth no restrictions. Max. draft 31 ft. 06 in. No tidal restrictions.

Berths No 3 and 4: Max. draft 32 ft. 06 in.

Berth No. 5: Max. draft 31 ft. 06 in. – 32 ft. 06 in.

Berth No. 6: Max. draft 29 ft. 06 in.

Facilities for loading palm kernel oil available only at Berth No. 1.

Bulk Grain: No. 1 Berth is equipped for discharging grain in bulk through a conveyor built on No. 1 Shed to the Flour Mill. The actual discharge is effected by mobile vacuvators. Four such units are available with total potential of 80 t.p.h., though a more realistic figure would be in the region of 60 – 70 t.p.h. Grain vessels are worked around the clock.

King Tom Jetty: Berthing *not* allowed.

Dispensation will only be granted in exceptional circumstances to berth or unberth vessels before 0600 hrs. and after 2330 hrs.

During discharging and/or loading, Customs Officers, normally 2, as well as 2 Port Authority Discrepancy Clerks (only when discharging) will be on board.

Sherbro River: Anchorage daylight only. Length of vessel up to 470 ft. Breadth, no restrictions. Max. draft, 24 ft. 06 in. The passage between No. 1 Buoy and No. 8 Buoy and between No. 1 Buoy and Yangsai Anchorage must be navigated in daylight hours only.

The Channel between Buoy Point and Yangsai must be navigated only during period 2 hours to H.W., and on a rising tide, buoy point being area which restricts draft. Bagru River Anchorage Buoy No. 8, length and breadth unlimited. Max. draft 24 ft. 06 in. Limitations as regards vessel's dimensions, drafts and times at which movements may be carried out should not be deviated from without prior permission of the Harbour Master.

MECHANICAL EQUIPMENT:

Type	*Capacity*	*Complement*
Portal Quay Crane	3 tons	2
Portal Quay Crane	5 tons	1
Mobile Crane	15/30 tons	1
Mobile Crane	4 tons	9
Mobile Crane	5 tons	2
Mobile Crane	7 tons	2
Fork Trucks	10 tons	1
Fork Trucks	4,000/5,000 lbs.	34
Tractors	—	15
Trailers	6 tons	17
Trailers	8 tons	1
Trailers	10 tons	12
Trailers	20 tons	18
Trailers (Pole)	10 tons	2
Fire Engine	—	1
Container Handlers	26 tons	3

Berth Nos. 3 to 6 are not equipped with Portal Cranes.

DANGEROUS CARGO: Dangerous cargo, explosives, small arms, ammunition, *must not* be unloaded either alongside or into lighters unless Port Authority has been notified on approved form, and has given permission for cargo to be discharged. Vessels should cable prior arrival if dangerous cargo for discharge on board.

LIGHTERAGE: Lighterage operations have now virtually ceased to exist.

A specially fitted pontoon (PM2) is available for the disembarkation/embarkation of Kroo labour for vessels at anchorage. This service is available throughout the day and night, as is the water supply by barge.

STEVEDORES: (See "Agent's Cable Requirements") ETA as soon as possible. Discharge/loading hatch distribution. Gangs required. Bunkers and water requirements, information re explosives. For tankers discharging – total displacement and draft. Work ashore undertaken by Sierra Leone Ports Authority on cargo quay, Queen Elizabeth II Quay, whilst work on board as well as discharging and/or loading to or from vessels at stream undertaken by Sierra Leone Ports Authority stevedoring division.

Working hours alongside quay: Normal working hours from 0800 hrs. to 1200 hrs. and 1330 hrs. to 1700 hrs. Monday to Friday.

No meal-break but the hour 1200 hrs. to 1330 hrs. counts overtime.

Working at Stream: Discharging and/or loading to or from vessels effected 24 hours a day. Gangs can be arranged at anytime between 0730 hrs. and 1800 hrs. week-days. On Sundays and holidays work must be arranged on the previous day.

MEDICAL: Hospital facilities available.

TANKERS: *Kissy Oil Jetty:* In order that berthing/unberthing operations at Kissy Oil Jetty are carried out without delay Agencies are requested to furnish to the Harbour Master the following particulars, of vessel using Kissy Oil Terminal.

ETA: At least 24 hours' notice to be given.

Displacement and deadweight: The max. permitted displacement is 46,000 tons.

Draft forward and aft: Max. draft 11.90 m. (39 ft.).

Length overall: No restriction.

The time of berthing will be at the discretion of the Port Authority, dependent on tidal and weather conditions, and vessel's draft. This is normally on a flood tide and during daylight hours only.

Notice: Port Authority Circular No. HM/241/354 dated 14th January, 1981.

Oil Tankers Berthing Kissy Oil Jetty: In view of the strain experienced on the forward back springs during ebb tide on above-named jetty, vessels are to moor using double or more forward back springs.

This is necessary to avoid any damage to the discharge/loading arms on jetty.

Agents are advised to inform shipping companies that vessels are required to carry the necessary extra mooring ropes or wires.

Port Authority Pilots are to ensure prior to berthing vessels that sufficient moorings are onboard for extra forward back springs and separate bollards on jetty head are used for each spring.

DENSITY: 1018 to 1025.

FRESH WATER: Good fresh water is available at all quay berths and at Kissy Oil Jetty. There are also 2 water barges with a total capacity of approximately 350 tons.

(Supply Rates:	Old berths	Approx. 20/25 t.p.h.
Dependent on	New berths	Approx. 40/50 t.p.h.
Ship's intake)	Kissy Oil Jetty	Approx. 15/20 t.p.h.
	Barges	Approx. 25/30 t.p.h.

FUEL: A 24 hour Shell/Mobil bunkering service is available at all berths. The supply rate is up to 200 t.p.h. dependent on ship's intake.

The supply rate at Kissy Oil Jetty is 100 t.p.h. Thin fuel oil is not available at the latter jetty but is obtainable at Queen Elizabeth II Quay.

A limited supply of gas oil (Shell) is available ex-bowsers on the quay berths. Sufficient notice should be given to the Oil Company for this service.

Texaco/BP supply bunkers to vessels at anchorage with 3 barges of 750 tons capacity each, supply rate 200 t.p.h. 1 of their tugs also has a storage capacity of 40 tons.

A 24 hour pilotage service is available (including pilotage from the Fairway Buoy if requested) for all vessels requiring bunkers only.

GANGWAY/DECK WATCHMEN: Strongly recommended, available through Agent. It is suggested that gangway is raised after close of work.

OPENING/CLOSING HATCHES: By stevedores, except mechanical hatches.

CERTIFICATES:

Ship's Register.
Derat Certificate.
Deck Passengers Certificate.
Radio Certificate.

CUSTOMS ALLOWANCES: Tobacco, 40 cigarettes *or* 0.25 lb tobacco. Wine and/or Spirits, 0.25 bottles of spirit. Master — 200 cigarettes and 1 opened bottle of spirit.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	50143	Japan	22721
China (People's Republic)	31797	Lebanon	22353
Cuba	26084	Liberia	40322
Denmark	25760	Malagasy	25850
Egypt	23244	Netherlands	25245
France	22477	Nigeria	22444
Gambia	25191	Norway	50824
Germany Fed. Rep.	22511	Sweden	22385
Ghana	23461	Switzerland	23322
Greece	23087	United Kingdom	23961/6
Guinea	23080	United States	26481
India	24340	U.S.S.R.	23991
Italy	30995	United Nations (UNDP)	25311
Ivory Coast	23983		

REPAIRS: All repairs if spares supplied.

DRY DOCKS: No dry docks in Freetown. Slipway of 600 tons capacity.

SURVEYORS: Mining and General Services Limited, P.O.Box 68, Freetown. Telex: 3226. Cables: Mags. Are Lloyd's Agents and undertake cargo surveys.

A Lloyd's Register approved surveyor is available.

REPATRIATION: Can be arranged.

AIRPORT: By bus and ferry to Lungi Airport, 1 hour journey. Served by regular airlines.

TIME: GMT throughout year.

HOLIDAYS: Several religious and anniversary holidays. Port works every day except Good Friday and Christmas Day.

POLICE/AMBULANCE/FIRE: For all emergencies dial 009.

EMERGENCY CO-ORDINATION CENTRE/S.A.R. LINK: Sierra Leone Ports Authority. Telex: 3262. Cables: Portman Freetown.

TELEPHONES: Not available for placing on board.

GENERAL: Always confirm time of entering harbour with the Aberdeen Hill Signal Station to ensure turn for berthing. Draft should be indicated.

SERVICES: Tank cleaning. Tank and hull scaling.

BANKS: Barclays Bank of Sierra Leone, P.O.Box 12, Siaka Stevens Street, Freetown.

Bank of Credit and Commerce International, Sparta Building, 10 Wilberforce Street, Freetown. Telex: 332.

Standard Bank Sierra Leone Ltd., Lightfoot Boston Street, Freetown.

STORING: Moderate quantities of stores are available and can be taken ex-quay. However no bonded stores' facilities exist.

SHORE LEAVE: Allowed. Identity cards must be carried.

DELAYS: No delays experienced.

SHIP SUPPLY SERVICE: Contact: Offshore Services Ltd., P.O.Box 376, Freetown.

DEVELOPMENTS: It is the Port Authorities' intention to surface the front and rear stacking areas at Berth Nos. 5 and 6 for use as a container park.

AUTHORITY: Sierra Leone Ports Authority, P.M.Bag 386, Freetown, Sierra Leone. *Tel:* 50989 or 50111. *Telex:* 3262. *Cables:* Portman FTN. *Contact:* W. Melling, General Manager.

PEPEL: 08.34 N. 13.04 W.

LOCATION: On Sierra Leone River, 15 miles upstream from Freetown. Approach Channel between Freetown anchorage and Pepel is fully buoyed. No night navigation.

DOCUMENTS: See "Freetown".

PILOTAGE: Private pilotage undertaken by mining Company's Pilots who board at Freetown Anchorage. 48 hours ETA required, cable "Mags Freetown Sierra Leone", giving ETA Fairway Buoy, quantity water/fuel required, asking for Free Pratique, and if Pilot required to Freetown Anchorage.

ANCHORAGE: See "Freetown".

RESTRICTIONS: Draft only, decided at discretion of Berthing Master. Entry daylight hours only. Channel between Pepel and Freetown is now deepened so that depth in channel is 38 ft. plus height of tide. According to official tide tables, range of high tides is approximately 7 ft. to 11 ft. above Admiralty Chart Datum.

MAX. SIZE: Length 840 ft., beam 128 ft., depth water 38 ft.* plus height of tide which ranges from 7 ft. to 11 ft. above Chart Datum. September to December additional draft restrictions due channel silting.

* The channel has not been maintained since 1975. Dredging is to take place.

HEALTH: See "Freetown", 48 hours' advance warning for Free Pratique.

TUGS: Not used.

BERTHING: Milton Margai Pier only. Loading up to 3,000 t.p.h. according to size of vessel.

New dolphin mooring system installed to permit handling larger ships. Depth alongside 45 ft. Shiploader max. boom height when in horizontal position is 71 ft. above Chart Datum, with max. outreach 87 ft. from berthing line. Loading rate 4,000 t.p.h. Under the new conditions, limiting dimensions for ships (which must be equipped with satisfactory mooring equipment): Length overall 840 ft. Moulded breadth 128 ft.

Permissible sailing draft with allowance made for safe navigation, of all ships will, as at present, remain absolutely at discretion of Berthing Master at Pepel or his deputy. It is possible that during the months of September to December every year an additional draft allowance will have to be imposed by reason of seasonal silting of the channel, but it is intended to carry out annual maintenance dredging.

Company will be prepared to consider acceptance of ships having dimensions in excess to those above but only after specific approval of fully detailed plans of each ship concerned and, in any event, not in excess of dimensions: Length overall 870 ft., moulded breadth 136 ft., moulded depth 73 ft.

Berthing displacement 63,000 tons on an even keel ballast draft of 23 ft. forward and aft on berthing.

STEVEDORES: Available.

FRESH WATER: Available, 48 hours' notice required.

FUEL: Limited supplies available, 48 hours' notice required.

TIME: GMT throughout year.

TELEPHONES: None available.

SHORE LEAVE: Not allowed. Customs and Immigration regulations prohibit any member of crew from disembarking at jetty or other works.

DELAYS: First come first served.

GENERAL: See "Freetown" for all general information.

NOTES

Please also advise Shipping Guides Ltd.

Singapore

SINGAPORE (incl. Jurong, Pulau Bukom, Pulau Ayer Chawan, Sembawang and Tanjong Penjuru): 01.16 N. 103.50 E. (See Plan Book)

DOCUMENTS:

4 Ship's Passenger Lists (1 copy for Customs).

4 Crew Lists (1 copy for Customs).

5 Cargo Manifests.

3 copies of Customs Declaration for fresh issue of duty free liquor and tobacco Form (C and E 117) to be furnished by Master to Customs boarding officers.

Master, Mate, or authorised officer required to furnish information asked for by Officer in charge of Customs' Boarding Party for Boarding Officer's Report (this only required if ship is to be searched).

Immigration: 6 copies Crew List and 4 copies each of Disembarking and Through-passenger Lists on arrival. At departure, 2 copies Crew List and 2 copies Passenger List.

Declaration regarding presence on board of any stowaway, unauthorised person and/or repatriate.

PSA: All vessels: General Declaration on arrival or departure.

Port Health: Entry Declaration. Derat or Exemption Certificate, Yellow Fever Certificates.

Crew Lists. Passenger Lists.

PSA (The Port of Singapore Authority): Arms and Explosives, and Dangerous Goods and Petroleum Declaration.

Shipmaster's Report: June 1982

If Master's name is not on the ship's Register then Agent requires Master's Certificate of Competency and Passport to obtain vessel's clearance.

ANCHORAGES: Third Schedule

Special Anchorages: The Special Anchorages designated by the Authority are as set out hereunder. The geographical co-ordinates of the designated Special Anchorages are based upon the origin at the Government Offices Building being in Lat. 01° 17′ 15.528″ N., Long. 103° 51′ 10.808″ E. The Charts affected are the Singapore Charts SP1, GSP1, 500, 501, 502 and the BA Metric Charts 2023, 3939, 2014, 2012, 2015, 1995, 2570, 2598, 2556, 2569, 2585 and 3831.

1. The following Anchorages shall be used exclusively for the purposes stated herein in this Schedule.

1.1 *Eastern Explosives Anchorage*

Purpose – For vessels loading or discharging Explosives and Dangerous Goods Group 1 or vessels in transit with such cargo on board.

Latitude:	*Longitude:*
01° 18′ 18″ N.	103° 59′ 46″ E.
01° 18′ 18″ N.	104° 00′ 27″ E.
01° 17′ 39″ N.	104° 01′ 12″ E.
01° 16′ 53″ N.	103° 59′ 46″ E.

1.2 *Eastern Special Purposes Anchorage*

Purpose – For vessels under Arrest, Damaged Vessels, Deep-Draft Vessels requiring repairs, on prior permission of the Port Master.

Latitude:	*Longitude:*	
01° 18′ 18″ N.	103° 56′ 37″ E.	– Bedok Jetty Head
01° 18′ 18″ N.	103° 59′ 46″ E.	
01° 16′ 53″ N.	103° 59′ 46″ E.	
01° 16′ 38″ N.	103° 59′ 19″ E.	
01° 16′ 38″ N.	103° 56′ 37″ E.	

1.3 *Eastern Petroleum Anchorage B*

Purpose – For vessels loaded with Petroleum and Non-Gas-Free Vessels.

Latitude:	*Longitude:*	
01° 17′ 23″ N.	103° 55′ 06″ E.	– Rear Beacon (Resilient)
01° 17′ 23″ N.	103° 56′ 37″ E.	
01° 16′ 38″ N.	103° 56′ 37″ E.	
01° 16′ 38″ N.	103° 56′ 07″ E.	
		– Forward Beacon (Resilient)

1.4 *Laid-Up Vessels Anchorage*

Purpose – For vessels laid up in the port.

Latitude:	*Longitude:*
01° 18′ 00″ N.	103° 55′ 41″ E.
01° 18′ 00″ N.	103° 56′ 37″ E.
01° 17′ 23″ N.	103° 56′ 37″ E.
01° 17′ 23″ N.	103° 55′ 41″ E.

1.5 *Small Craft Anchorage*

Purpose – For harbour tugs, pontoons, barges and other small craft.

Latitude:	*Longitude:*	
01° 18′ 00″ N.	103° 55′ 06″ E.	
01° 18′ 00″ N.	103° 55′ 41″ E.	
01° 17′ 23″ N.	103° 55′ 41″ E.	
01° 17′ 23″ N.	103° 55′ 06″ E.	– Rear Beacon (Resilient)

1.6 *Eastern Petroleum Anchorage A*

Purpose – For vessels loaded with Petroleum and Non-Gas-Free Vessels.

Latitude:	*Longitude:*	
01° 15′ 26″ N.	103° 53′ 55″ E.	
01° 16′ 07″ N.	103° 54′ 59″ E.	– Timor Beacon (Resilient)
01° 15′ 21″ N.	103° 55′ 49″ E.	
01° 14′ 43″ N.	103° 54′ 40″ E.	

1.7 *Eastern Quarantine and Immigration Anchorage*

Purpose – For vessels arriving from the East and seeking Quarantine and Immigration Clearance.

Latitude:	*Longitude:*
01° 14′ 41″ N.	103° 52′ 46″ E.
01° 15′ 08″ N.	103° 53′ 27″ E.
01° 14′ 27″ N.	103° 54′ 10″ E.
01° 14′ 00″ N.	103° 53′ 23″ E.

1.8 *Man-of-War Anchorage*

Purpose – For visiting warships.

Latitude:	*Longitude:*	
01° 17′ 00″ N.	103° 54′ 01″ E.	– Approach Beacon (Resilient)
01° 17′ 00″ N.	103° 53′ 25″ E.	
01° 16′ 31″ N.	103° 53′ 25″ E.	
01° 16′ 31″ N.	103° 54′ 32″ E.	

1.9 *Explosives Anchorage for Lighters and Barges*

Purpose – For small craft loaded with explosives.

Latitude:	*Longitude:*	
01° 17′ 08″ N.	103° 54′ 01″ E.	
01° 17′ 08″ N.	103° 53′ 39″ E.	
01° 17′ 00″ N.	103° 53′ 39″ E.	
01° 17′ 00″ N.	103° 54′ 01″ E.	– Approach Beacon (Resilient)

1.10 *Eastern Working Anchorage*

Purpose – For general purposes of working cargo and/or receiving stores, water and bunkers or awaiting berth.

Latitude:	*Longitude:*	
01° 17′ 00″ N.	103° 52′ 54″ E.	
01° 16′ 00″ N.	103° 52′ 05″ E.	
01° 16′ 05″ N.	103° 51′ 45″ E.	
01° 16′ 00″ N.	103° 51′ 43″ E.	
01° 16′ 07″ N.	103° 51′ 29″ E.	
01° 15′ 02″ N.	103° 51′ 52″ E.	– Outer Shoal Light Tower
01° 14′ 41″ N.	103° 52′ 17″ E.	
01° 14′ 41″ N.	103° 52′ 46″ E.	
01° 16′ 07″ N.	103° 54′ 59″ E.	– Timor Beacon (Resilient)
01° 16′ 31″ N.	103° 54′ 32″ E.	
01° 16′ 31″ N.	103° 53′ 25″ E.	
01° 17′ 00″ N.	103° 53′ 25″ E.	

1.11 *Kuala Johor Anchorage* (closed)

Purpose – For general purposes on prior permission of the Port Master.

Latitude:	*Longitude:*
01° 22′ 59″ N.	104° 01′ 04″ E.
01° 22′ 48″ N.	104° 00′ 43″ E.
01° 21′ 23″ N.	104° 02′ 06″ E.
01° 21′ 34″ N.	104° 02′ 28″ E.

1.12 *Anchorage for Awaiting Singapore Pilot*

Purpose – For vessels awaiting Singapore Pilots to East Johor Strait.

Latitude:	*Longitude:*
01° 20′ 00″ N.	104° 03′ 12″ E.
01° 20′ 00″ N.	104° 03′ 42″ E.
01° 19′ 18″ N.	104° 03′ 54″ E.
01° 19′ 18″ N.	104° 04′ 24″ E.

1.13 *Western Quarantine and Immigration Anchorage*

Purpose – For vessels seeking Quarantine and Immigration Clearance during the North-East Monsoon.

Latitude:	*Longitude:*	
01° 13′ 35″ N.	103° 49′ 42″ E.	– Selegi (No. 15) Bn
01° 13′ 08″ N.	103° 48′ 41″ E.	
01° 12′ 45″ N.	103° 49′ 08″ E.	
01° 12′ 48″ N.	103° 49′ 51″ E.	
01° 13′ 09″ N.	103° 50′ 02″ E.	

1.14 *Western Working Anchorage*

Purpose – Generally for any or all of the following purposes – working of cargo, receiving stores, water and bunkers or awaiting berth.

Latitude:	*Longitude:*	
01° 15′ 27″ N.	103° 48′ 10″ E.	
01° 15′ 03″ N.	103° 47′ 14″ E.	
01° 14′ 18″ N.	103° 48′ 05″ E.	
01° 13′ 58″ N.	103° 47′ 15″ E.	
01° 12′ 59″ N.	103° 48′ 21″ E.	
01° 13′ 35″ N.	103° 49′ 42″ E.	– Selegi (No. 15) Bn
01° 14′ 59″ N.	103° 49′ 00″ E.	– Palawan (No. 44) Bn

1.15 *Western Petroleum Anchorage*

Purpose – For vessels loaded with Petroleum and for Non-Gas-Free Vessels.

Latitude:	*Longitude:*
01° 15′ 03″ N.	103° 47′ 14″ E.
01° 14′ 42″ N.	103° 46′ 25″ E.
01° 13′ 58″ N.	103° 47′ 15″ E.
01° 14′ 18″ N.	103° 48′ 05″ E.

1.16 *Reserved Anchorage*

Purpose – For LASH Ship operations and vessels requiring emergency repairs or damaged vessels.

Latitude:	*Longitude:*
01° 16′ 49″ N.	103° 46′ 06″ E.
01° 16′ 07″ N.	103° 45′ 49″ E.
01° 15′ 42″ N.	103° 46′ 20″ E.
01° 16′ 10″ N.	103° 47′ 11″ E.
01° 16′ 23″ N.	103° 46′ 42″ E.
01° 16′ 16″ N.	103° 46′ 33″ E.

1.17 *Dangerous Goods Anchorage*

Purpose – For vessels loading or discharging Explosives or Dangerous Goods Group 1 or vessels in transit with such cargo on board.

Latitude:	*Longitude:*
01° 17′ 03″ N.	103° 45′ 18″ E.
01° 16′ 26″ N.	103° 45′ 25″ E.
01° 16′ 07″ N.	103° 45′ 49″ E.
01° 16′ 29″ N.	103° 46′ 06″ E.
01° 16′ 36″ N.	103° 45′ 51″ E.
01° 16′ 46″ N.	103° 45′ 54″ E.

1.18 *Coastal Anchorage A*

Purpose – For coastal vessels of 76 m. in length or more awaiting berth at Pasir Panjang or working cargo.

Latitude:	*Longitude:*
01° 16′ 46″ N.	103° 45′ 54″ E.
01° 16′ 36″ N.	103° 45′ 31″ E.
01° 16′ 16″ N.	103° 46′ 33″ E.
01° 16′ 23″ N.	103° 46′ 42″ E.

Coastal Anchorage B (closed)

Purpose – For coastal vessels of less than 76 m. in length awaiting berth at Pasir Panjang or working cargo.

Latitude:	*Longitude:*	
01° 17′ 22″ N.	103° 46′ 05″ E.	
01° 17′ 00″ N.	103° 45′ 59″ E.	– Retan Bn
01° 16′ 48″ N.	103° 46′ 19″ E.	
01° 16′ 27″ N.	103° 46′ 47″ E.	
01° 16′ 34″ N.	103° 46′ 57″ E.	
01° 17′ 01″ N.	103° 46′ 17″ E.	
01° 17′ 11″ N.	103° 46′ 22″ E.	

1.19 *West Jurong Anchorage*

Purpose – For vessels awaiting berth, working cargo, vessels under repairs, or oil rigs.

Latitude:	*Longitude:*	
01° 14′ 54″ N.	103° 38′ 48″ E.	
01° 14′ 54″ N.	103° 36′ 30″ E.	
01° 17′ 00″ N.	103° 36′ 30″ E.	– Alert Shoal Seafix Station
01° 17′ 00″ N.	103° 38′ 48″ E.	

1.20 *Sultan Shoal Quarantine and Immigration Anchorage*

Purpose – For vessels arriving from the West and seeking Quarantine and Immigration Clearance.

Latitude:	*Longitude:*
01° 13′ 44″ N.	103° 39′ 51″ E.
01° 13′ 21″ N.	103° 39′ 03″ E.
01° 13′ 49″ N.	103° 37′ 36″ E.
01° 14′ 32″ N.	103° 38′ 46″ E.

1.21 *West Jurong Petroleum Anchorage*

Purpose – For vessels loaded with Petroleum and for Non-Gas-Free Vessels.

Latitude:	*Longitude:*
01° 13′ 56″ N.	103° 37′ 14″ E.
01° 14′ 54″ N.	103° 38′ 48″ E.
01° 14′ 54″ N.	103° 36′ 30″ E.
01° 14′ 22″ N.	103° 36′ 30″ E.

1.22 *Selat Pauh Anchorage*

Purpose – For vessels under arrest, laid-up or other vessels on prior permission of the Port Master.

Latitude:	*Longitude:*
01° 13′ 25″ N.	103° 45′ 34″ E.
01° 13′ 19″ N.	103° 45′ 01″ E.
01° 13′ 29″ N.	103° 43′ 51″ E.
01° 13′ 47″ N.	103° 43′ 09″ E.
01° 13′ 35″ N.	103° 42′ 47″ E.
01° 13′ 03″ N.	103° 43′ 02″ E.
01° 12′ 49″ N.	103° 43′ 40″ E.
01° 12′ 49″ N.	103° 44′ 39″ E.
01° 13′ 11″ N.	103° 45′ 37″ E.

No vessel shall, except in an emergency, anchor in an area outside its appropriate designated anchorage, even if such an area is not designated as a "Prohibited Anchorage Area".

Also see "VHF" and "Notice".

PILOTAGE: Also see "Notice".

1. *General*

1.1 In exercise of the powers conferred by subsection (1) of section 74 of the Port of Singapore Authority Act (Cap. 173), it is directed that all vessels specified in Table I in paragraph 3 below, unless exempted by the Authority, are to be under pilotage by an Authority Pilot when moving within the Pilotage District. This directive will come into force with effect from 1st June, 1983.

1.2 Vessels belonging to or operated by the Port of Singapore Authority and the Republic of Singapore Navy are not subjected to this directive.

2. *Pilotage District*

The Pilotage District is described in the Port of Singapore Authority (Pilotage District) Notification 1980. For the purpose of this circular, the Pilotage District is divided into four areas viz., "A", "B", "C" and "D". These areas are defined in Annex I and depicted in Annex II.

3. *Compulsory Pilotage*

3.1 Compulsory pilotage will be applicable to all liquefied gas or chemical carriers which have not been certified free from flammable vapours by the Authority Chemist.

3.2 Vessels to which compulsory pilotage applies, when moving within a particular area of the pilotage District, are as indicated in Table I.

Table I

Area of Movement	*Vessels to which compulsory pilotage applies*
"A"	Every vessel of 300 g.r.t. and above.
"B"	Every vessel of 5,000 g.r.t. and above.
"C"	Every vessel of 300 g.r.t. and above or overall length of 45 m. and above.
"D"	Every vessel of 300 g.r.t. and above or of 30 m. height* and above.

Remarks: *Height referred to is the height of highest point of the vessel (including the highest point of cargo, temporary or permanent structure or equipment onboard) above waterline.

4. *Pilotage Exemption*

4.1 Vessels to which pilotage exemption may be granted for movement within a particular area of the Pilotage District are as indicated in the Table II below:

Table II

Area of Movement	*Vessels to which pilotage exemption may be granted*
"A"	A vessel of:
	(a) *Less than 300 g.r.t.:* A blanket exemption is granted unless otherwise specified by the Port Master.
	(b) *300 g.r.t. and above but less than 2,000 g.r.t.:* Exemption may be granted provided that the vessel is fitted with a VHF radio-telephone which is in good working condition and capable of communicating at all times on the required VHF Channel(s). To seek exemption, the vessel is required to call the appropriate control station by VHF radio-telephone on the designated Channel (See Annex III).
	(c) *2,000 g.r.t. and above but less than 5,000 g.r.t.:* Exemption may be granted subject to the following conditions: (i) The vessel is fitted with a VHF radio-telephone which is in good working condition and capable of communicating at all times on the required VHF Channel(s) (See Annex III). (ii) In the case of a sea-going vessel, the registered Master shall have brought the vessel into and out of Port on at least 6 occasions within the 12 months immediately preceding the date of application for exemption. For subsequent exemptions, the Master shall have entered and left the Port on at least 2 occasions. However, the last of the 2 occasions shall not be more than 6 months prior to the date of application of renewal of exemption. (iii) In the case of a licensed harbour craft, the registered Master shall have served onboard as Master for a period of at least 3 months prior to the application for exemption; and (iv) The registered Master has satisfied the Port Master of his knowledge of local waters, regulations, etc.
"B"	No exemption from compulsory pilotage.
"C"	No exemption from compulsory pilotage.
"D"	A vessel of:
	(a) *Less than 300 g.r.t. and of 30 m. height* and above:* Blanket exemption is granted provided the vessel does not enter, leave or transit the Traffic Information Area.
	(b) *300 g.r.t. and above but less than 2,000 g.r.t. and of less than 30 m. height*:* Exemption may be granted provided that the vessel if fitted with a VHF radio-telephone which is in good working condition and capable of communicating at all times on the required VHF Channel(s). To seek exemption for the intended movement the vessel is required to call the appropriate control station by VHF radio-telephone on the designated Channel (See Annex III);
	(c) *300 g.r.t. and above but less than 2,000 g.r.t. and of 30 m. height* and above:* Exemption may be granted provided that the vessel does not enter, leave or transit the Traffic Information Area and is fitted with a VHF radio-telephone which is in good working condition and capable of communicating at all times on the required VHF Channel(s). To seek exemption, the vessel is required to call the appropriate control station by VHF radio-telephone on the designated Channel (See Annex III).

Remarks: *Height referred to is the height of highest point of the vessel (including the highest point of the vessel, the highest point of cargo, temporary or permanent structure or equipment onboard) above waterline.

All Masters of vessels not under pilotage are reminded of the height restrictions in the various areas of the Port indicated in the charts.

4.2 All vessels other than liquefied gas or chemical carriers entering, leaving or shifting within the Sultan Shoal Quarantine and Immigration Anchorage are exempted from pilotage.

4.3 Exemption, when granted, is for the movement other than berthing and unberthing. For berthing and unberthing, the express permission of the Owners/Operators of the berth is also required.

4.4 All exempted vessels, when underway within the Pilotage Areas are to display by day the International Code Flag "N".

4.5 All Masters of vessels are advised not to hamper large or deep draft vessels in the restricted channels of the Port.

4.6 Application forms for pilotage exemption for vessels of 2,000 g.r.t. and above but less than 5,000 g.r.t. can be obtained from Port Master's Department, 20th Storey, Tanjong Pagar Complex, Singapore 0208.

5. *Towage with Pilotage Exemption*

5.1 Only tugs with harbour craft licence and which are not required to be under pilotage or which have been granted exemption are permitted to tow vessels subject to the following conditions:

(i) For movement within Area "A", the aggregate g.r.t. of the tug(s) and tow(s) is less than 2,000.

(ii) For movement within Area "B", the aggregate g.r.t. of the tug(s) and tow(s) is less than 5,000.

(iii) For movement within Area "D", the aggregate g.r.t. of the tug(s) and tow(s) is less than 2,000 and the height* of either is less than 30 m. (Where the tug(s) and tow(s) are required to enter, leave or transit the Traffic Information Area and when either the height of the tug(s) or tow(s) is 30 m. and above, compulsory pilotage shall apply).

(iv) The aggregate engine power of the tug(s) towing vessels of 300 g.r.t. and above is not less than 150 kilowatts (200 b.h.p.).

(v) Compliance with Regulation 49 (3) of the Singapore Port Regulations 1977.

6. *Pilot Boarding and Disembarkation Grounds*

6.1 The 5 Pilot Boarding Grounds for vessels coming into port are:

(i) Eastern Boarding Ground "A" – in position Lat. 01° 13.52′ N., Long. 103° 53.55′ E.

(ii) Eastern Boarding Ground "B" – in position Lat. 01° 15.50′ N., Long. 103° 57.50′ E. This boarding ground is to be used by all tankers requiring Pilots when arriving from the East and proceeding to the appropriate anchorages in the Eastern sector of the port. Other vessels may also use this boarding ground to pick up Pilots provided special arrangement has been made with Port Operations Centre. Anchoring is strictly prohibited at this boarding ground as it is within the submarine cable area.

(iii) Southern Boarding Ground – South of Sebarok Beacon within port limits. (To be used only by special arrangement with Port Operations Centre).

(iv) Western Boarding Ground – in position Lat. 01° 13.73′ N., Long. 103° 36.50′ E.

(v) East Johore Strait Boarding Ground – S.E. of Johore Shoal Buoy in position Lat. 01° 18.00′ N., Long. 104° 05.50′ E.

6.2 The 10 Pilot Disembarkation Grounds as in positions are follows:

No. 1: Lat. 01° 18.47′ N., Long. 104° 05.72′ E.
No. 2: Lat. 01° 16.95′ N., Long. 103° 59.77′ E.
No. 3: Lat. 01° 15.50′ N., Long. 103° 56.90′ E.
No. 4: Lat. 01° 14.25′ N., Long. 103° 54.78′ E.
No. 5: Lat. 01° 13.48′ N., Long. 103° 53.30′ E.
No. 6: Lat. 01° 15.50′ N., Long. 103° 51.87′ E.
No. 7: Lat. 01° 11.75′ N., Long. 103° 49.45′ E.
No. 8: Lat. 01° 10.68′ N., Long. 103° 46.98′ E.
No. 9: Lat. 01° 12.80′ N., Long. 103° 39.28′ E.
No. 10: Lat. 01° 13.97′ N., Long. 103° 37.37′ E.

Vessels may, at the discretion of Port Operations Centre, be directed to make use of the nearest disembarkation grounds.

7. *Pilotage Orders*

7.1 When placing orders for pilotage service, as much advance notice as possible should be given.

7.2 Pilotage service orders may be placed by the following means:

(i) VHF Radio-telephone: For vessels proceeding to or leaving berths in the East Johore Strait orders should be placed on Channel 21 and on Channels 12 or 20 for other areas in the port.

(ii) Telephone: Orders should be placed with Sembawang Control for service in the East Johore Strait and for all other areas, the Port Operations Centre.

(iii) Telex: Companies are encouraged to use telex. For service in the East Johore Strait the telex should be addressed to Sembawang Control, Telex: RS 35962, Answerback: Semco. For all other areas, the telex should be addressed to Port Operations Centre, Telex: RS 34970, Answerback: Portpm RS 34970.

7.3 When placing orders through VHF radio-telephone, telephone or telex the following information should be provided:

(a) Date and time of message transmitted.

(b) Agent's name and valid PSA account number.

(c) Name of vessel, her call sign and nationality.

(d) Vessel's g.r.t., length overall, height of highest point of the vessel above waterline (including highest point of cargo, temporary or permanent structure or equipment on board).
For vessel moving into and out of Area "C", state the max. beam of the vessel.

(e) Date, time and description of pilotage service required.

(f) For arriving vessels, state whether Health/Immigration Clearance is required. State also the applicable Pilot Boarding Ground or if the vessel is at the anchorage, her location in grid reference (refer to Singapore Chart GSP1 on Anchorages and Aids to Navigation).

7.4 Personal application for pilotage service is necessary for companies which do not have accounts with the Port of Singapore Authority. The application should be made at the Pilotage and Tugs Section of Port Master's Department, 21st Storey, Tanjong Pagar Complex, Singapore 0208.

7.5 Vessels are to confirm to Port Operations Centre their ETA at the specified boarding grounds, 2 to 3 hours before arrival. For those bound for the East Johore Strait, confirmation should be made to Sembawang Control, 3 hours before arrival.

7.6 Vessels at anchor and requiring Pilots should display the "White over Red" lights by night and fly the "G" flag by day.

7.7 The Authority reserves the right not to accept orders for Pilot service for vessels at the anchorages, with the exception of the Quarantine/Immigration Anchorages, if the vessels have not reported their anchoring position to Port Operations Centre. All vessels above 300 g.r.t. must report their final anchoring position in the port in terms of bearing and distance from the following reference points:

(i) Eastern Sector	Katong Beacon (in position: Lat. 01° 17.65′ N., Long. 103° 53.30′ E.)
(ii) Western Sector	Tg Rimau Beacon (in position: Lat. 01° 15.60′ N., Long. 103° 48.50′ E.)
(iii) West Jurong and Selat Pauh Anchorages	Sultan Shoal Lighthouse (in position: Lat. 01° 14.38′ N., Long. 103° 38.98′ E.)

8. *Traffic Information System*

Masters of vessels intending to enter, transit or leave the East Johore Strait are to refer to the Port Circular in force (presently No. 33 of 1984 dated 4th May, 1984) on Traffic Information System for Ships Transiting The Serangoon Harbour and where applicable, comply with the directives given therein.

9. *Access to Vessels*

9.1 Mariners are reminded that Pilots and other Government Officers have every right, on grounds of personal safety, to refuse service unless a safe and satisfactory means of access to the vessel is provided. The safety requirements in respect of pilot ladders, should be in accordance with Regulation 17 of Chapter 5 of the SOLAS Convention 1974.

9.2 In the case of accommodation ladders and shore gangways, the following should be complied with:

(i) Accommodation Ladders

(a) The embarkation and disembarkation of Pilots and Government Officers are to be supervised by a responsible Officer of the ship.

(b) The accommodation ladder is to be in good condition, secured and properly illuminated at night. The landing platform is to be properly adjusted to provide safe access.

(c) A manrope is to be attached to the lower bridle in order to provide a good handhold for boarding, and a lifebuoy with self-igniting light is to be available close to the upper platform.

(d) Discharges in the way of the accommodation ladder are to be properly covered or stopped while the ladder is in use.

(ii) Vessel and Shore Gangways

(a) Where a vessel's gangway or a shore gangway is used when the vessel is berthed alongside a wharf, the gangway is to be landed squarely onto the vessel and wharf. No person other than those engaged in the rigging of the gangway should be permitted to embark or disembark before it is properly secured.

(b) Where the gangway is landed onto the ship's bulwark, steps and adequate handholds are to be provided for safe and convenient access.

(c) The gangway shall be adequately illuminated at night and tended by a watchman.

(d) When a shore gangway is used, Masters are advised not to permit it being landed onboard before crew members of the vessel are available to receive it.

10. *Signal Lamp*

During the hours of darkness, all piloted vessels are required to have an Aldis lamp ready for use.

11. Port Circular No. 45 of 1981, dated 8th June, 1981 is hereby cancelled.

Annex I:

Pilotage District Areas

1. Area "A" – is defined as that part of the Pilotage District Westwards of the line joining the following positions including the area up to the causeway in the Johore Strait:

(a) Lat. 01° 16.27′ N., Long. 103° 51.43′ E.
(b) Lat. 01° 15.03′ N., Long. 103° 51.87′ E.
(c) Lat. 01° 14.68′ N., Long. 103° 52.28′ E.
(d) Lat. 01° 14.68′ N., Long. 103° 52.77′ E.
(e) Lat. 01° 13.35′ N., Long. 103° 51.87′ E.
(f) Lat. 01° 12.73′ N., Long. 103° 52.12′ E.

2. Area "B" – is defined as that part of the Pilotage District excluding Area "C" Marina Bay and Kallang Basin Eastward of the line joining the positions referred to in paragraph 1 above up to the line joining the following positions:

(a) Lat. 01° 20.55′ N., Long. 103° 59.80′ E.
(b) Lat. 01° 20.00′ N., Long. 104° 02.80′ E.

3. Area "C" – is defined as follows:

From a position in Lat. 01° 17.89′ N., Long. 103° 51.98′ E., by a straight line to a position in Lat. 01° 17.77′ N., Long. 103° 51.97′ E., thence by a straight line to a position in Lat. 01° 17.63′ N., Long. 103° 51.97′ E., thence along the coastline to a position in Lat. 01° 17.38′ N., Long. 103° 52.01′ E., thence by a straight line to a position in Lat. 01° 17.07′ N., Long. 103° 52.11′ E., thence by a straight line to a position in Lat. 01° 16.91′ N., Long. 103° 52.32′ E., thence by a straight line to a position in Lat. 01° 16.74′ N., Long. 103° 52.45′ E., thence by a straight line to a position in Lat. 01° 16.57′ N., Long. 103° 52.53′ E., thence by a straight line to a position in Lat. 01° 16.68′ N., Long. 103° 52.73′ E., thence by a straight line to a position in Lat. 01° 16.83′ N., Long. 103° 52.52′ E., thence by a straight line to a position in Lat. 01° 17.04′ N., Long. 103° 52.33′ E., thence by a straight line to a position in Lat. 01° 17.33′ N., Long. 103° 52.15′ E., thence by a straight line to a position in Lat. 01° 17.63′ N., Long. 103° 52.05′ E., thence by a straight line to a position in Lat. 01° 17.76′ N., Long. 103° 52.03′ E., thence by a straight line to a position in Lat. 01° 17.85′ N., Long. 103° 52.04′ E., thence by a straight line to the point of origin.

4. Area "D" – is defined as that part of the Pilotage District Northwards of the line joining the following positions up to the causeway in the Johore Strait.

(a) Lat. 01° 20.55′ N., Long. 103° 59.80′ E.
(b) Lat. 01° 20.00′ N., Long. 104° 02.80′ E.
(c) Lat. 01° 20.00′ N., Long. 104° 03.17′ E.
(d) Lat. 01° 19.55′ N., Long. 104° 03.67′ E.
(e) Lat. 01° 18.75′ N., Long. 104° 04.40′ E.
(f) Lat. 01° 18.30′ N., Long. 104° 05.63′ E.
(g) Lat. 01° 19.30′ N., Long. 104° 05.78′ E.

Annex II: See "Plan Book".

Annex III: Reporting Stations

Station	*Function*	*VHF Channel*	*Frequency (MHz)*
Port Operations Centre	General Reporting	12	156.60
	Pilotage Service and Information	20	157.00 161.60
Sembawang Control	Reporting Station for East Johor Strait	21	157.05 161.65
Jurong Control	Reporting Station for Jurong Area	21	157.05 161.65

NAVIGATIONAL CHANNELS:

Name	*Controlling Depth*
Johor Shoal to Johor Port Water Front	12.5 m.
Johor Port Water Front to Sembawang Shipyard	11.6 m.
Sembawang Shipyard to Ordnance Reach	11.0 m.
Approach Channel to Tg. Pagar Container Terminal	12.0 m.
East Keppel Fairway	10.1 m.
West Keppel Fairway	14.8 m.
Sisters Fairway (Selat Tg Hakim)	18.1 m.
Jong Fairway	14.3 m.
Sinki Fairway (In Channel)	14.2 m.
Selat Pandan (Out Channel)	12.5 m.
Western Approach to Esso SBM (Dredged Channel at Selat Sinki)	20.8 m.
Pesek Fairway	12.3 m.
East Jurong Fairway	12.6 m.
Jurong Fairway	12.7 m.
West Jurong Fairway	10.6 m.
Selat Sakra	10.2 m.

Keppel Harbour Aerial Cableway – Vertical Clearance: The vertical clearance of Aerial Cableway across Keppel Harbour is 56 m. above MHWS or 57 m. above MSL.

MAX. SIZE: See "Berthing" and "Tankers".

HEALTH: Also see "Notice".

Inward Health Clearance of Ships:

1. *Revised Inward Health Clearance Procedure*

1.1 With effect from 1st April, 1980, Radio Pratique will be introduced to replace the present practice of granting Inward Health Clearance of ships either at the quarantine anchorages and/or by Radio Provisional Pratique.

1.2 Under the revised procedure, all ships from infected ports (except those stated in para 2.10) will not be required to anchor on arrival at the quarantine anchorages and await for inspection and health clearance by the Port Health Officer. Instead, they should apply for "Radio Pratique".

2. *How to obtain "Radio Pratique"*

2.1 The Master/Agent shall notify the Port Health Office between 8 hours and 24 hours prior to the ship's arrival in Singapore stating that all the crew and passengers are healthy on board; that the ship is in possession of a valid DC/DEC; that there is no death on board; that there is no mortality or illness among rodents; and that Radio Pratique is requested for.

2.2 The notification may be made by cable or wireless, radio telephone or VHF radio Channel 14 to the Port Health Office. The telephone number of the Port Health Office is 2222585.

2.3 If the ship is not equipped with a radio transmitter, the Master or the Agent must notify the Port Health Office whenever practicable before arrival or otherwise immediately on arrival. The ship's Agent may apply for Radio Pratique by completing an application form in Appendix I and handing it over to the Port Health Office.

2.4 The Port Health Office will grant Free Pratique on receipt of the information stated in para. 2.1 and 2.3. The granting of Radio Pratique merely clears the ship in so far as the Port Health Office is concerned. It does not exempt the ship from the requirements of other Authorities.

2.5 On arrival in the working anchorage or alongside the wharves, the Master, Owner or Agent is required to produce to the Port Health Officer, the following documents for verification:–

(a) Entry Declaration signed by the Master;
(b) DC/DEC for the ship;
(c) crew and passenger list.

2.6 These documents should be produced to the Port Health Office for verification not later than 12 hours after arrival of the ship. Port health endorsements for Outward Port Clearance will also be granted at the same time.

2.7 Of the vessels granted Radio Pratique, 10% will be randomly selected and inspected by Port Health Officers on arrival at the working anchorages or alongside the wharves.

2.8 The Port Health Officer reserves the right to examine any ship and the right to require any vessel granted Radio Pratique to return to the Eastern Quarantine Anchorage for Inward Health Clearance, should he subsequently deem it necessary.

2.9 The Master/Owner/Agent is responsible for the compliance of any health requirement and/or correction of any health irregularity immediately after arrival.

2.10 Radio Pratique will not be granted to the following categories of ships which will be required to anchor on arrival at the Eastern Quarantine Anchorage for inspection by the Port Health Officer:–

(a) Vessels which have been in a plague infected area within 60 days prior to arrival in Singapore;
(b) Vessels with illness on board, specifically with the following signs and symptoms:–
  (i) temperature of 38°C or greater or persisted for more than 48 hours and accompanied or followed by one or more of these signs: rash, jaundice, glandular swelling;
  (ii) diarrhoea severe enough to interfere with work or normal activity.
(c) Vessels with a death on board;
(d) Vessels with dead rodents on board.

2.11 The Master/Agent of a ship under any of the categories in para 2.10 shall:–

(a) notify Port Health Office not more than 12 hours and where practicable, not less than 4 hours before arrival;
(b) display the appropriate day or night signal when the ship enters the Singapore Port Limit;
(c) anchor at the Eastern Quarantine Anchorage and until "Free Pratique" has been obtained, ensure that no person, other than a Pilot, Immigration Officer or Customs Officer, boards or leaves the ship without the permission of Port Health Officer.

2.12 Masters, Owners and Agents of vessels wishing to have further information should contact the Port Health Office at 7B Keppel Road number 06-07/09 Tanjong Pagar Complex, Singapore 0208, or telephone number 2226924/2222585.

Appendix 1:

To: The Port Health Officer, Singapore

RADIO PRATIQUE

1. I hereby wish to apply for a Radio Pratique for my vessel ______________________________, Port of Registration____________________which is expected to arrive in Singapore at ____________hours on____________.

2. A copy of the telegram/cable by the Master of the vessel with answers to the questionnaire on health conditions of the vessel is attached.

3. I hereby declare that the information given below is correct:

(a) Name of port and date of visit during the last 14 days:

Name of Port	Date of Arrival	Date of Departure

	ANSWER YES or NO
(b) Has there been any case or suspected case of plague, cholera, yellow fever or smallpox on board?	____________
(c) Has plague occurred or suspected among the rodents on board during the voyage, or has there been an abnormal mortality among them?	____________
(d) Has any person died on board during the voyage other than as a result of accident?	____________
(e) Is there a sick person on board now?	____________
(f) Is there on board or has there been during the voyage any case of illness which you suspect to be of an infectious nature? In the absence of a surgeon on board, the Master should regard the following symptoms and signs as grounds for suspecting the existence of an infectious disease: (i) Fever accompanied by prostration or persisting for 7 days or more; (ii) fever with glandular swelling; (iii) acute skin rash or eruption with or without fever; (iv) severe diarrhoea with symptoms of collapse; (v) jaundice accompanied by fever.	
(g) Are you aware of any other condition on board which may lead to the spread of disease?	____________
(h) Is the Derat Certificate/Derat Exemption Certificate for the vessel valid?	____________

Date:____________ ____________________

SIGNATURE & STAMP OF AGENT

Note: Penalty for untrue declaration is a fine not exceeding $5,000/–.

IMMIGRATION CLEARANCE: Also see "Notice".

Inward Clearance Appendix 'A':

Physical Clearance: Owners/Agents requesting clearance for vessels are required to contact the appropriate offices and to follow the procedures as outlined below:–

Location for Clearance	*Office covering the Location*	*Telephone No./ VHF Channel*	
Eastern/Western and Sultan Shoal Quarantine/ Immigration Anchorages & PSA Wharves	Immigration Finger Pier Checkpoint	2226012/VHF Channel 14	24 hours
Jurong Fishing Port	Immigration Office at the Jurong Fishing Port	2652818	
Sembawang Port	Immigration Woodlands Checkpoint	2692531	

The Owners/Agents contacting the office regarding the ETA of vessels are required to give the following information. Such ETAs should be given at least 24 hours before the arrival of the vessels. The office for this purpose provides a 24-hour service.

(i) Name of Vessel;
(ii) Location for clearance of the Vessel;
(iii) Expected time of arrival (ETA);
(iv) Last/Next Port of Call;
(v) Agents of Vessel;
(vi) Owners of Vessel;
(vii) Number of Passengers, if any, on board;
(viii) Stowaway/Unauthorised persons/survivors, if any, on board.

Any vessel arriving in Singapore, excluding those vessels which have been granted Advance Immigration Clearance, must proceed to the prescribed Immigration/Quarantine Anchorage for Immigration Inward Clearance.

Vessels on arrival must exhibit the necessary signals for easy identification and speedy clearance. The Immigration signal shall be:–

(i) by day, the flags in the International Code of Signals corresponding to:–
  (a) the numerals "25" in respect of vessels not carrying passengers; and
  (b) the numerals "34" in respect of vessels carrying passengers.
(ii) by night, in every case, 2 green lights mounted vertically, 6 ft. apart, visible all-round the horizon for a distance of at least 2 miles.

Agents must ensure that the vessel has a proper and secure gangway which is ready on arrival so that Immigration Officers can board the vessel immediately. The use of rope-ladders is discouraged. Co-operation in this regard will enable Immigration Officers to grant fast clearance.

Procedure on Board

The Master is required to submit 7 copies of the Crew List and if there are passengers, 4 sets of the Passenger List to the Clearing Officer who boards the vessel. The Master has to certify on the original Crew List that the details in the lists submitted are correct and that there are no stowaways or unauthorised persons on board.

If requested by the Clearing Officer, seaman's books/travel documents will have to be produced. Crew members may be required to present themselves before the Officer.

All passengers shall present themselves before the Clearing Officer. Disembarking passengers shall complete the Disembarkation Forms (IMM 23A). Agents may obtain the forms from the Immigration Field Division Headquarters.

The Master shall execute the Seaman's Security Bond, bonding crew members (except the Master) for $1,000/–each. If there are persons who are refused entry by the Clearing Officers, the Master shall execute the Security Bond, bonding such persons who are refused entry, for not less than $2,000/– each.

Summary action will be served on the Master giving him the names of all those who have been refused entry, and/or the breakdown figures of the transit passengers and disembarking passengers.

When clearance has been granted, the Master shall haul down the Immigration signal upon the Immigration Officer leaving the vessel.

Outward Clearance Appendix 'B':

Physical Checkout: Owners/Agents requiring physical checkout of vessels should contact the following offices 12 hours prior to the departure of vessels:–

Location of Vessel	*Office of Contact*	*Telephone No./ VHF Channel*
Eastern/Western Anchorages, PSA and Oil Refinery Wharves and West Jurong Anchorages	Immigration Finger Pier Checkpoint	2226013/VHF Channel 14 } 24 hours
Jurong Fishing Port	Immigration Office at the Jurong Fishing Port	2652818
Sembawang Port	Immigration Woodlands Checkpoint	2692531

Procedure

Vessels requesting Immigration Outward Clearance must either fly the "Blue Peter" in addition to the "25" or "34" signals during the day. By night to display 2 green lights in every case mounted vertically 6 ft. apart, visible all-round the horizon for a distance of at least 2 miles. This is to assist the Officers in locating the vessels.

The Master is required to submit 3 sets of Crew Lists/3 sets of Passenger Lists to the Checking-Out Officer. The Master should certify on the Crew Lists that all crew are on board. Passengers if any and persons who have been refused entry will have to be presented to the Checking-Out Officer.

Inward Clearance Appendix "C".

Advance Immigration Clearance (AIC)

(i) The Advance Immigration Clearance (AIC) facility is extended to merchant vessels over 75 n.r.t. and carrying not more than 12 passengers. Fishing vessels are excluded.
(ii) AIC cannot be granted to vessels arriving from High Seas.
(iii) Application to be submitted at least *6 hours* before arrival of vessel.
  The Owner/Agent of the vessel should obtain from the Master by radio or post the requisite information as outlined below:–
  (a) Crew List – 5 sets required;
  (b) Transit Passenger List (if any) – in quadruplicate;
  (c) Disembarking Passenger List (if any) – in quadruplicate.
  These lists must be inserted with the necessary details and must be duly signed by an authorised representative of the Owner/Agent of the vessel. These lists should be submitted to the Immigration Check-Point, Finger Pier Building, Prince Edward Road, Singapore 0207 (24 hours) or the Immigration Counter at 2nd Floor, Podium Link, Tanjong Pagar Complex, Keppel Road, Singapore 0208 during office hours.
(iv) If AIC is granted, 1 copy each of the Crew List, Transit Passenger List and Disembarking Passenger List bearing the Appropriate Immigration endorsements can be collected by the Owner/Agent on execution of the relevant documents such as Seaman's or other Security Bonds. If any person is not permitted to land, Owner/Agent will be required to inform the Master of the vessel accordingly and upon the vessel's arrival must ensure that such person in fact does not disembark from the vessel.
(v) After the arrival of the vessel, it shall be the responsibility of the Owner/Agent to submit immediately the Master's copy of the Crew List (3 copies) and/or Passenger List (2 copies) to the Immigration Office, Seamen Section at Finger Pier Building (24 hours) or the Immigration Counter at 2nd Floor, Tanjong Pagar Complex during office hours, bearing the signature of the Master of the vessel certifying that the details previously submitted through the Owner/Agent are correct. Whenever required, travel documents and Seaman's books of the crew and/or passengers must be handed over to either one of the abovementioned Immigration Offices, for checking within *4 hours* of the vessel's arrival. Passengers will not land until their passports have been endorsed with the appropriate passes.
(vi) The Owner/Agent may submit the certified copy of the Crew List by *0900 hours* or earlier if his vessel arrives between 0001 hours and 0600 hours on that day.
(vii) If the Port is infected, provisional Radio Pratique should first be obtained from Port Health Authorities before AIC can be considered.

RADIO:

Radiotelegram Services to Ships (Radiotelephony):

Singapore Radio Working Schedules for MF/HF Radiotelephony:

1. The following schedules of watch-keeping will be operated by the Singapore Coast Station:

Singapore Radio	*Transmit Frequency (kHz)*	*Hours of Watch (UTC)*	*Ship Transmit Frequency (kHz)*	*Remarks*
9VG4	2182	Continuous	2182	Call, Reply and Safety
9VG87	4125	Continuous	4125	
9VG88	6215.5	Continuous	6215.5	
9VG89	8780.9	Continuous	8257	Common Calling Frequencies
9VG90	13162.8	Continuous	12392	
9VG91	17294.9	Continuous	16522	
9VG5	2760	Continuous	2527	Working Frequencies
9VG60	4369.8	Continuous	4075.4	
9VG63	8728.2	Continuous	8204.3	
9VG67	13156.6	Continuous	12385.8	

2. Singapore Radio maintains a continuous watch on Call, Reply, Safety and Common Calling Frequencies.

Navigational Warnings and Weather Bulletins:

1.Navigational Warnings and Weather Bulletins for shipping are broadcast from Singapore Radio at the following times:

Singapore Radio	*Frequency (kHz)*	*Times (UTC)*	*Remarks*
9VG 5 9VG63	2760 8728.2	0145	Navigational Warnings and Weather Bulletin.
9VG 5 9VG63	2760 8728.2	0405 0805	Navigational Warnings only.
9VG 5 9VG60	2760 4369.8	1345	Navigational Warnings and Weather Bulletin.

2. The broadcast will normally be made on the two listed frequencies simultaneously except during transmitter maintenance periods when the broadcast will be made on the two frequencies consecutively.

Traffic Lists:

1. Singapore Radio will transmit Traffic Lists on the following two listed frequencies simultaneously except during transmitter maintenance periods when the list will be broadcast on the two frequencies consecutively:

Singapore Radio	*Frequency (kHz)*	*Times (UTC)*
9VG 5 9VG63	2760 8728.2	0005, 0405, 0805 and 1205
9VG 5 9VG60	2760 4369.8	1605

Medical Advice to Ships:

1. A radio Medical Advice service is available to ships of all nationalities and no charge is made for this service.

2. Radiotelegrams requesting medical advice should state briefly and clearly the symptoms of the illness of the person affected and contain a brief description of the contents of the medical chest carried by the ship. Such telegrams should be in English Language, be signed by the Master of the ship and addressed "Radiomedical Singapore".

3. In very urgent cases, the urgency signal (PAN) may be used in order to ensure priority over all other communications, with the exception of those relating to distress calls.

MF and HF Telephone Service:

1. General. The MF and HF radiotelephone service is available continuously to ships at sea, subject to radio propagation conditions and provided that the ships are suitably equipped.

Ships wishing to contact Singapore Radio may do so on any of the calling carrier frequencies listed under "Radio Working Schedules" above.

After establishing contact, the call will be booked. Both the coast and ship station will then change over to any one of the following frequencies as agreed upon by both stations (depending on the position of the vessel and the time of day) prior to connecting the telephone subscriber.

Singapore Radio	*Transmit Frequency (kHz)* Coast	Ship	*Remarks*
9VG52	2780	2685	Connection to the telephone system on demand
9VG61	4376	4081.6	
9VG62	6509.5	6203.1	
9VG64	8762.3	8238.4	
9VG65	8790.2	8266.3	
9VG66	13147.3	12376.5	
9VG68	17270.1	16497.2	
9VG69	17356.9	16584	
9VG70	22630.1	22034.1	

Maritime Radiotelex service available.

Enquiries regarding the Maritime Mobile Services may be made to the Supervisor at either Singapore Radio or the International Telephone Exchange as appropriate, or in writing to Telecoms, Comcentre, Exeter Road, Singapore 0923.

VHF: VHF Radio Telephony transmitting and receiving Channels used within the Port of Singapore. All the stations offer a 24-hour service.

Station	*Frequency (MHz)*	*Channel*	*Functions*
Singapore Port Operations	156.60	12	VHF Channels for reporting ETAs, departures and location of ships within the Port.
Singapore Port Operations	157.00 161.60	20	Pilotage Service and information.
Jurong Control	157.05 161.65	21	Berthing/unberthing at Jurong Commercial Wharves.
Sembawang Control	157.05 161.65	21	Pilotage Services and Berthing/Unberthing in East Johor Strait within Singapore Port Limit.
Bukom Operations	156.95 161.55	19	Berthing/unberthing at Pulau Bukom and Shell SBM.
Pu. Ayer Chawan Operations	156.25 160.85	5	Berthing/unberthing at Pulau Ayer Chawan and Esso SBM.
Waterboats	156.90 161.50	18	Supply of fresh water to vessels at anchor.
Port Health or Immigration	156.70	14	Relevant Services
Singapore Radio	156.80	16	Distress, Safety & Calling Channel.
	157.20 161.80	24	
	157.30 161.90	26	
	157.40 162.00	28	Public Correspondence via TAS Exchange.
	157.25 161.85	25	
	157.15 161.75	23	
	157.35 161.95	27	
Singapore Refinery Centre	156.95 161.55	5	Berthing/unberthing at Pulau Merlimau and PSA SBM.
Marine Police	156.35 160.95	7	Request for assistance from Marine Police. (Also see "Police/Ambulance/Fire".)
	157.05 161.65	21	

Notice:

Port Circular No. 49 of 1981. Issued by P.S.A. 18th June 1981.

Notification of arrival and VHF reporting procedures:

1. Pursuant to regulation 2A of the Singapore Port Regulations, 1977, I hereby direct that the Master of every vessel of 500 g.r.t. and above intending to enter the port of Singapore shall with effect from 1st July 1981 notify the Port Master of the intended arrival of the vessel by means of radiotelegrams at least 12 hours and not more than 24 hours before arrival of such vessel. Masters of vessels coming from nearby ports with less than 12 hours steaming time to Singapore shall immediately on departure from such ports notify the Port Master on telegraphic address "Portmaster Singapore".
2. In notifying the Port Master as provided above, the Master of the vessel shall provide the following information:
   (a) name of ship;
   (b) date and estimated time of arrival;
   (c) height of mast or superstructure or height of cargo equipment whichever is the highest point above the waterline.
   (d) name of local shipping agency;
   (e) last port and next port of call;
   (f) any condition affecting the navigation of the vessel including fire or hazard on board, defective propulsion machinery, defective steering equipment, excessive list or engagement in towing;
   (g) whether or not pilotage service is required on arrival;
   (h) draft of vessel if pilotage service is required.
3. The Master of every vessel of over 300 g.r.t. or every tug engaged in towing, if the combined g.r.t. of the tug and tow exceeds 300 g.r.t., intending to enter the port of Singapore shall with effect from 1st July 1981 report to Singapore Port Operations on VHF Channel 12 when:
   (a) approaching from the East, on crossing meridian 104° 10′ E., (Abbreviation ME 1) or one hour's steaming time away from the Eastern most point along the Singapore Port Limit whichever is the earlier; or
   (b) approaching from the West, on crossing meridian 103° 30′ E., (Abbreviation MW1) or one hour's steaming time away from the Western most point along the Singapore Port Limit whichever is the earlier; or
   (c) approaching from the South, one hour's steaming time away from the Southern most point along the Singapore Port Limit.
4. The report required to be made under paragraph 3 to Singapore Port Operations shall contain the following information:
   (a) name of vessel;
   (b) whether the vessel will enter via the Eastern or Western approaches of the Port;
   (c) whether the vessel will proceed directly to berth or via any Quarantine and Immigration Anchorage;
   (d) date and estimated time of arrival at a particular Pilot boarding ground or a particular anchorage.
5. The Master of every vessel shall, in addition to the requirements in paragraph 4, report to the designated communications centre specified in the 1st schedule hereto *"the height of the mast or superstructure or height of cargo or equipment whichever is the highest point above the waterline"* if the vessels intends to enter, transit or leave any of the following areas:
   (a) East Johore Strait;
   (b) Kallang Basin;
   (c) Eastern Special Purposes Anchorage;
   (d) Eastern Explosive Anchorage.
6. When a vessel anchors or moors within the Port Limit of Singapore and its approaches, the Master shall report immediately to Singapore Port Operations the date, time and place at which the vessel is so anchored or moored. Masters of vessels cleared by Immigration/Health authorities are required to notify Singapore Port Operations and to indicate in their notification whether pilotage services are required for shifting to berths or other anchorages.

6.1 The anchored position shall be reported in the form of a bearing and distance from one of the following reference points:

(a) Eastern Sector – Katong Beacon (Latitude: 1° 17′ 39″ N., Longitude: 103° 53′ 18″ E.)
(b) Western Sector – Rimau Beacon (Latitude: 1° 15′ 36″ N., Longitude: 103° 48′ 30″ E.)
(c) West Jurong – Sultan Shoal Lighthouse (Latitude: 1° 14′ 23″ N., Longitude 103° 38′ 59″ E.)

6.2 When a vessel that is anchored or moored within the Port Limit of Singapore and its approaches ceases to be so anchored or moored or is to be moved within the Port Limit of Singapore, the Master shall immediately report such event to Singapore Port Operations.

7. The Master of every vessel intending to leave Singapore shall advise Singapore Port Operations on Channel 12 of his intention at least 1 hour before the departure.
8. In the interest of safety of navigation, ships transiting the Singapore Main Strait and not calling at Singapore are requested on a voluntary basis to notify Singapore Port Operations in accordance with the procedure set out in paragraph 3 above.
9. If for any reason it is not possible to operate the radiotelephone equipment carried on board a vessel, the Master shall at the earliest practicable time restore it or cause it to be restored to effective operating condition.

9.1 During the time it is not possible to operate the radiotelephone equipment carried on board a vessel, compliance with Section 1 and 2 shall be made by means of radiotelegrams addressed to "Portmaster Singapore".

1st Schedule

Designated Communications Centre	*Channel*	*Usage*
Singapore Port Operations	20 12	For request of pilotage service and reporting of arrivals, anchored positions, movements, departures, as well as other navigational or shipping information.
Jurong Control	21	Berthing/unberthing at Jurong Wharves and reporting of movements within the Jurong Area.
Sembawang Control	21	Pilotage service, berthing/unberthing at Sembawang Area, as well as reporting of movements in the area including East Johore Strait.

MEDICAL: When infectious disease not suspected, permission will be granted by Port Health Officer to Agent to take doctor on board and remove the patient, if necessary, to hospital. Preferably as much notice as possible. Several hospitals, General Hospital, Gleneagles, Mt. Alvernia to name a few. Cholera, smallpox, plague, etc., are not endemic in Singapore.

Also see "Radio" – Medical Advice to Ships.

TUGS: PSA has a fleet of 19 tugs, they are:

Name	*Horsepower*	*Bollard Pull (tonnes)*
Tekun	1,200	16.5
Tenaga	1,200	15.25
Tegap	1,060	13.5
Tambat	1,060	13.0
Teman	674	10.5
Victory (V5)	2×1,500	28.5
Vigilant (V6)	2×1,500	26.0
Valiant (V7)	2×1,500	34.0
VST 1	2×1,276	25.0
VST 2	2×1,276	25.0
VST 3	2×1,276	25.0
VST 4	2×1,276	25.0
Vanguard (V8)	2×1,500	32.7
Vertex (V10)	2×1,500	32.7
Valour (V9)	2×1,500	32.7
Viking (V11)	2×1,500	32.0
Alpha 1	2×1,900	26.0
Alpha 2	2×900	16.0
Alpha 3	2×900	16.0

Shell operates 2 tugs approximately 1,500 b.h.p. A number of privately owned salvage tugs make the port their base.

Tugs join anywhere in port limits by pre-arrangement with Pilots. Normally ship's line used. All PSA and Shell tugs carry tow ropes for use if required. PSA charge for use of tow rope.

BERTHING: Vessel's Agents should submit to Authority a Schedule "A" (Application for Berth) giving overall length, maximum draft alongside, cargo particulars, ETA and ETD of, and Dangerous Cargo Declaration listing out dangerous cargo (including petroleum products and explosives) on board vessel at least 48 hours before berth required.

BERTHING FACILITIES:

NOTE: All depths are reduced to Chart Datum unless otherwise stated.

*Only controlling depths that are shallower than the depths alongside are listed.

Keppel Wharves (PSA):

Godown No.	*Length of Berth*	*Depth Alongside (Year surveyed)*	**Controlling Depth in Approaches*
WTCS	150 m.	6.4 m. (1984)	—
West Wharf 1/2	373 m.	9.9 m. (1984)	—
West Wharf 3/4		9.4 m. (1984)	—
West Wharf 5	953 m.	9.8 m. (1984)	—
West Wharf 6/7		10.1 m. (1984)	—
West Wharf 8/9		10.1 m. (1984)	—
West Wharf 10/11		10.0 m. (1984)	9.8 m. (1984)
West Wharf 12		9.8 m. (1984)	9.7 m. (1984)
West Wharf 13/14		10.0 m. (1984)	—
West Wharf 15/16		10.5 m. (1984)	—
West Wharf 18	183 m.	8.5 m. (1983)	7.8 m. (1984)
West Wharf 19	172 m.	8.0 m. (1983)	7.8 m. (1984)
West Wharf 20	289 m.	6.3 m. (1984)	—
West Wharf 21		7.2 m. (1984)	—
West Wharf 22	122 m.	6.0 m. (1984)	—
East Wharf 23/24	628 m.	8.2 m. (1984)	7.6 m. (1982)
East Wharf 25/26		8.1 m. (1984)	7.6 m. (1982)
East Wharf 27/28		8.0 m. (1984)	7.6 m. (1982)
East Wharf 29/30		8.2 m. (1984)	7.6 m. (1982)
East Wharf 31/32	655 m.	10.3 m. (1984)	—
East Wharf 33/34		10.6 m. (1984)	—
East Wharf 35/36		10.3 m. (1984)	—
East Wharf 37/39		10.0 m. (1984)	—
East Wharf 40/41	555 m.	12.4 m. (1984)	—
East Wharf 42/43		12.2 m. (1984)	—
East Wharf 44	335 m.	10.2 m. (1984)	—
East Wharf 45		10.1 m. (1984)	—
East Wharf 45A	93 m.	7.1 m. (1984)	—
East Wharf 46	377 m.	10.0 m. (1984)	9.8 m. (1984)
East Wharf 47		10.0 m. (1984)	—

Specialised Cargo Berths:

Cargo	Godown
Latex	31/32, 33/34, 35/36
Coconut/Palm Oil	13/14, 15/16
Grain	6/7
Cement Clinkers	5
Vehicles	19, 21, 22, 47

Mechanical Equipment:

Type	Capacity (tonnes)	Unit
Locomotive		2
Railway Wagon		60
Lorry	7 to 10	9
Crane	5 to 10	8
Prime Mover	40.0	10
Chassis		18
Forklift – Diesel	3.6	61
	3.5	103
	2.5	39
	1.8	3
LMV	142.0	1
	32.0	1
Van-Carrier (Baby)	30.0	1
Freightlifter	8 to 10	7
P&H 140-T Crane	127.0	1
PSA Vulcan	120.0	1

Tanjong Pagar Container Terminal:

Berth No.	*Length of Berth*	*Depth Alongside (Year surveyed)*	**Controlling Depth In Approaches*
48	213 m.	10.0 m. (1984)	9.8 m. (1984)
49	914 m.	12.0 m. (1984)	—
50		12.0 m. (1984)	—
51		12.9 m. (1984)	12.0 m.
52 (Feeder Berth)	238 m.	9.4 m. (1984)	—
53 (Ro/Ro Berth)	640 m.	12.1 m. (1984)	—
54		12.2 m. (1984)	—
55	265 m.	11.8 m. (1984)	—

Features of the Ro/Ro Berth No. 53

Wharf Length : 30 m.
Type : Electrically operated Adjustable Ramp
Safe Working Load : 60 tonnes
Safe Working Length : 28.8 m.
Width : 8.4 m.

Height and Span of Container Quay Cranes:

Height of Boom	*AT MHWS*	*At Wharf Level*	*Berth No.*
Hitachi Crane Nos. 1 to 6	29.8 m.	28 m.	49 – 51
Mitsubishi Crane No. 7	32.8 m.	31 m.	49
Hitachi Crane Nos. 8 to 11	29.8 m.	28 m.	53 – 55
Mitsubishi Crane Nos. 12 to 16	32.8 m.	31 m.	42, 43, 54 & 55
Tango Crane Nos. 1 and 2	25.2 m.	23.4 m.	52

Outreach of Crane from seaside rail:

Hitachi Crane Nos. 1 to 6 and Nos. 8 to 11	– 38.1 m.
Tango Crane Nos. 1 and 2	– 24.4 m.
Mitsubishi Crane No. 7 and Nos. 12 to 16	– 38.1 m.

Mechanical Equipment:

Type	Capacity (tonnes)	Unit
Container quay crane (see above)	30 to 35	16
Van carrier	30	20
Yard gantry crane	30 to 35	41
Forklift	2.5 to 3.5	94
Prime mover		111
Trailer/Chassis		217
Weighbridge		7
Heavy forktrucks		6

Telok Ayer Wharves (PSA):

Berths	*Length of Berth*	*Depth Alongside (Year surveyed)*	**Controlling Depth in Approaches*
Finger Pier 1	75 m.	4.1 m. (1984)	—
Finger Pier 2	75 m.	5.0 m. (1984)	—
Finger Pier 3	45 m.	6.4 m. (1983)	5.0 m. (1983)
Marina Wharf 1	90 m.	5.4 m. (1984)	4.1 m. (1984)
Marina Wharf 2	100 m.	5.4 m. (1984)	5.0 m. (1983)
Marina Wharf 3	100 m.	5.3 m. (1984)	5.0 m. (1983)
Marina Wharf 4	100 m.	5.4 m. (1984)	5.0 m. (1983)
Marina Wharf 5	90 m.	5.4 m. (1984)	5.0 m. (1983)

Sembawang Wharves (PSA):

Berths	*Length of Berth*	*Depth Alongside (Year surveyed)*	**Controlling Depth in Approaches*
No. 1	228.2 m.	11.0 m. (1983)	10.2 m. (1983)
No. 2	152.2 m.	10.0 m. (1983)	9.2 m. (1983)
No. 3	152.2 m.	7.9 m. (1983)	7.8 m. (1983)
No. 4	121.7 m.	7.9 m. (1983)	7.8 m. (1983)
No. 5	167.4 m.	8.0 m. (1982)	7.8 m. (1983)
No. 6	136.0 m.	9.5 m. (1983)	9.2 m. (1983)
No. 7	230.0 m.	11.2 m. (1983)	10.2 m. (1983)

Equipment:

Type	Capacity (tonnes)	Unit
PSA forklift	2.5	7
	3.7	13
Contractors' forklift	3.7	4
	5.20	
	2.5 to 10	20

Pasir Panjang Wharves (PSA):

Berths	*Length of Berth*	*Depth Alongside (Year surveyed)*	**Controlling Depth in Approaches*
Lighter Wharves:			
Western Face	216 m.	2.2 m. (1984)	2.0 m. (1984)
Eastern Face	190 m.	2.0 m. (1984)	—
Lighter Berth:			
Shed 300	545 m.	1.7 m. (1984)	—
Shed 301		1.2 m. (1984)	—
Transitional Berth	132 m.	2.6 m. (1984)	—
1	1,321 m.	6.8 m. (1984)	—
2		6.9 m. (1984)	—
3		6.8 m. (1984)	—
4		6.8 m. (1984)	—
5		7.2 m. (1984)	—
6		7.0 m. (1984)	—
7		7.2 m. (1984)	—
8		10.5 m. (1984)	10.0 m. (1984)
9		10.6 m. (1984)	10.0 m. (1984)
10		10.6 m. (1984)	10.0 m. (1984)
11	100 m.	7.2 m. (1984)	6.6 m. (1984)
12	220 m.	6.5 m. (1984)	—

LASH Mothership Moorings – 3 mooring buoys.

Mechanical Equipment:

Type	Capacity (tonnes)	Unit
Crane	10	2
	60	1
Forklift – Diesel	2.7	22
	3.5	84
Forklift	2.5	6
Freightlifter	5.5	3
	8	3
	10	4
	22.86	1
Trailer	40	3
Chassis		8
Prime mover		4
Weighbridge		1

In addition to PSA's mechanical equipment, cranes with capacity ranging from 5 to 60 tonnes are supplied by crane contractors as and when required.

Pulau Sebarok (Van Ommeren Terminal):

Berths	Length of Berth	Depth Alongside (Year surveyed)	*Controlling Depth in Approaches
No. 3	300 m.	16.4 m. (1984)	16.0 m.
No. 4	180 m.	12.3 m. (1984)	

Jurong Commercial Wharves:

Berths	Length of Berth	Depth Alongside (Year surveyed)	*Controlling Depth in Approaches
No. 1	183 m.	12.3 m. (1981)	—
No. 2	183 m.	12.3 m. (1981)	—
No. 3	183 m.	12.2 m. (1981)	11.0 m. (1981)
No. 4	183 m.	11.8 m. (1981)	11.0 m. (1981)
No. 5	196 m.	11.2 m. (1981)	11.0 m. (1981)
No. 6	196 m.	11.7 m. (1981)	11.0 m. (1981)
No. 7	196 m.	11.2 m. (1981)	11.0 m. (1981)
No. 8	197 m.	10.8 m. (1981)	10.8 m. (1981)
No. 9	275 m.	11.0 m. (1981)	10.8 m. (1981)
No. 10	172 m.	5.0 m. (1981)	4.4 m. (1981)
Coastal Berth (Fishery)	213 m.	4.0 m. (1983)	4.4 m. (1981)

Mechanical Equipment:

Type	Maximum Rated Capacity per Unit	No. of Unit
Unloader crane	450 tonnes/p.h.	3
	300 tonnes/p.h.	1
Suction type unloader	100 tonnes/p.h.	2
	200 tonnes/p.h.	2
Scrap Unloader	150 tonnes/p.h.	2

CARGO HANDLING FACILITIES: *Keppel Wharves:* Vessels working only general cargo will normally be berthed at the Keppel Wharves. This is the largest of the 5 gateways of Port of Singapore Authority, having marginal wharves of 4.8 km. that are capable of ,accommodating 30 vessels at one time. There are well-ventilated transit sheds and warehouses totalling 133,400 sq.m., and 61,984 sq.m. of concrete hardstanding for open storage.

Tanjong Pagar Container Terminal: Length of 6 main berths is 1,909 m. Able to handle 6 third-generation vessels at one time. 14 container quay cranes of 35 tonnes average lifting capacity are available, feeder berth 238 m. for coastal vessels and a cross berth of length 213 m. The container freight stations, for stuffing and unstuffing operations presently have an approximate covered area of 34,779 sq.m. The stacking yard of approximately 28.5 hectares can accommodate some 31,000 TEUs stacked 2 to 5 high.

Bunker facilities are available. Bunker fuel can be pumped at the rate of 1,000 tonnes/p.h. through 18 in. diameter mains. There are 48 outlets along the quay. Marine and fresh water are also available.

Sembawang Wharves: The Port of Singapore Authority operates 5 berths at the Sembawang Wharves, situated North of Singapore. The length of the berths totals 822.67 m., with covered storage space available totals 51,100 sq.m. It is geared towards handling of low-value, high volume homogeneous cargoes like bulk sawn timber, logs, grains and fertilisers. There is also 1 container quay crane of 35 tonnes lifting capacity.

Jurong Port: The port is a bulk-handling facility to serve the Jurong Industrial Estate. The marginal wharves of 1,792 m. can accommodate 10 ocean-going vessels. In addition, there is a 172 m. wharf for coastal shipping. There are 85,652 sq.m. of covered storage and 234,068 sq.m. of open storage space.

The terminal has facilities for the discharge of grain (by elevator), sugar, fertilisers, cement, clinker, sulphur, etc. Shore bulk-handling cranes are used.

The equipment includes 2 kangaroo crane unloaders with capacity of 350 – 450 tonnes/p.h. Two gantry type unloader cranes each with capacity of 450 tonnes/p.h. Grain silos with capacities up to 84,000 tonnes. 4 pneumatic grain handling units with discharging capability of 150 – 200 tonnes/p.h./per unit. Two units of scrap iron unloaders capable of discharging scrap iron and pig iron at 150 tonnes/p.h.

Pasir Panjang Wharves: 2,320 m. of wharves which can accommodate 23 lighters, 6 LASH barges, 9 coastal vessels and 3 ocean-going vessels at any one time. There are 7 transit sheds covering 55,750 sq.m., 1 back-up shed 22,296 sq.m., 10 warehouses 163,108 sq.m. (of these 151,068 sq.m. outside the Free Trade Zone) and some 128,297 sq.m. of open storage area.

Telok Ayer Wharves: This gateway caters for coastal vessels and lighters/barges. There is a total of 744 m. of wharves for lighters and coastal vessels. With land reclamation carrying on at this place, 5 new berths can accommodate vessels with a draft of up to 6.4 m.

BRIDGES:

Name	Vertical Clearance Above MHWS (m.)	Vertical Clearance Above MSL (m.)
Sungai Jurong Bridge	9.2	10.0
Bridge connecting Pulau Merlimau and Pulau Ayer Merbau	9.7	10.0
Bridge connecting Pulau Ayer Chawan and Pulau Ayer Merbau	9.2	10.0
Sungai Pandan Bridge	3.6	4.8
Benjamin Sheares Bridge – across Marina Bay Entrance		
North Channel	14.0	15.0
Middle (Main) Channel	10.0	11.0
South Channel	8.4	9.5
Benjamin Sheares Bridge – across Kallang Basin Entrance		
Main Channel	28.0	29.0
Singapore River		
Anderson Bridge	2.9	4.0
Cavenagh Bridge (centre of span)	2.4	3.5
Elgin Bridge (centre of span)	2.7	3.8
Coleman Bridge (centre of span)	1.9	3.0
Read Bridge	1.4	2.5
Ord Bridge (centre of span)	1.5	2.6

Also see "Restrictions".

STEVEDORES: Labour should be ordered by 0900 hrs. for 2nd shift (1500 to 2300 hrs.) on same day and by 1300 hrs. for 1st shift (0700 to 1500 hrs.) for next day, by 1100 hrs. for 3rd shift (2300 to 0500 hrs.) on same day.

Under normal circumstances no work is performed during meal hours, 1100 – 1200 hrs. and 1830 – 1930 hrs. unless the ship is classified as a "key" vessel or the Agent orders work during the meal hours.

TANKERS: Bunkering and discharge facilities available at Eastern and Western petroleum anchorages or installations at Pulau Bukom, Pulau Ayer Chawan, Tanjong Penjuru, Tanjong Berlayer, Jurong and Pulau Merlimau.

PSA operates a Slop and Sludge Reception and Treatment Centre at Pulau Sebarok with facilities for the disposal of slops, sludge, tank cleaning, water and dirty ballast. Also see "Pollution".

Smoking not permitted during period tanker alongside PSA wharves.

Grades permitted for discharge along PSA wharves:

(a) marine diesel oil,

(b) fuel oil.

Shell

Pulau Bukom, 4.6 km. off the S.W. coast of Singapore – 10 berths and a single buoy mooring. Depth of water in approach is 18.3 m. LWOST. Fresh water, fuel oil, gas oil and diesel oil available.

Tank cleaning is carried out alongside or in Roads, as arranged with Pulau Bukom.

Shore tankage for slops/dirty ballast is limited to 15,000 cu.m. for all purposes. Each vessel is normally limited to 400 cu.m., although larger quantities MAY be accepted by prior arrangement, giving preferably 7 days' notice. Waxy slops are only received on wharves 6, 7 and 8. When waxy slops are on board for discharge, vessels are requested to advise Pulau Bukom 48 hours in advance in which case quantity must be stated. Waxy slops should be segregated if other slops are carried.

Berth	*Draft* (m.)	*Max. length* (m.)	*Max. displacement* (tons)	*Remarks*
1	10.67	173.7	33,000	Continuous Jetty
2	10.82	91.4	33,000	
3	11.73	82.3	33,000	
4	12.49	189.0	43,000	
5	12.80	193.6	45,000	
6	14.63	243.8	75,000	
7	13.00	182.87	65,000	
8	13.70	243.83	84,000	
9	13.10	185.92	33,000	
10	15.90	265.16	84,000	Minimum length acceptable 172.2 m.
SBM	23.00	—	353,784	

The refinery has a refining capacity of 23 million tonnes per annum. It manufactures LPG, petrol, aviation turbine fuel, kerosene, gas oil, diesel fuel, solvents, fuel oil, lub oil and bitumen for local and overseas markets. There are 200 oil storage tanks with over 3 million tonnes capacity. All grades of bunkers are available 24 hours a day.

Mobil

5 berths and a shared single buoy mooring (Esso/Mobil). Night time berthing at the discretion of the Pilot. At Berth No. 3 day-time berthing and unberthing only possible, on flood tide.

Berth	*Draft* (m.)	*Max. Length* (m.)	*Max. d.w.t. Displacement*	*Remarks*
1	13.6	274	85,000/ 120,000	
2	13.0	274	50,000	
3	10.9	198	30,000	Vessels over 115 m. LOA subject to tidal conditions. Night berthing in ballast only.
4	6.1	116	5,000	
5 (Pu. Pesek)	10.3	239	50,000	
SBM	20.3	366	285,000	(457 m. swing radius)

Esso

Refinery on an island Pulau Ayer Chawan 2.4 km. South of Jurong Industrial Complex. Refining capacity of 231,000 barrels per day. Lubricant pla 7,000 barrels per day. The jetty has an overall length of 982.1 m. and consists of 5 loading and bunkering berths.

Berth No.	*Design Vessels* (k.d.w.t.)	*Max. Vessel Displacement* (long tons)	*Max. Length*[2] (ft.)	*Max. Approach Velocity*		*Max. Angle of Impact on Fenders*	*Max. Freeboard*[5] (ft.)	*Depth Alongside*		*Tugs Required*
				(ft./min.)	(cm./sec.)			(ft.)	(m.)	
1	0 – 1.7 3.0 [1]	2,500	300	25	13	10°	17.5	33	10.1	None
2	0 – 25	36,000	650	25	13	10°	38.5	41	12.5	2
3	10 – 48	62,000	800	20	10	10°	44.0	41	12.6	2
4	10 – 80[6]	100,000	1,000	17	9	10°	54.5	52	15.8	2
5	1.7 – 90	110,000	1,000	26	13	10°	55.4	52	15.8	2
	120[4]	110,000	—		—	—	—	—	—	—
SHP	2.6 – 12	17,500	500	10	5	0°	N.A.	33.4	10.3	—
SBM	—	—	—	—	—	—	—	—	21.6	—

Notes:

[1] The "Golden Fortune" provided actual displacement does not exceed 2,500 d.w.t.

[2] Lengths are approximate only, based on spacing of mooring points. Actual lengths are governed by minimum separation of 150 ft.

[3] For guidance only. Actual number of tugs is dictated by prevailing conditions.

[4] "Esso Orient" loaded to 90,000 d.w.t.

[5] Maximum freeboard includes height of manifold connection above deck.

[6] Up to 120 k.d.w.t. light loaded.

[7] Approach Channel controlling depth 40 ft. (12.3 m.), except to and from Berth No. 5 using the Jurong Fairway when the controlling depth is 41 ft. (12.5 m.).

Caltex

Operates berths (No. 1 and No. 2) at Tanjong Penjuru which can accommodate vessels alongside up to 13.71 m. max. draft. Berth No. 1 (4 breasting dolphins) capable of handling vessels up to 100,000 tons displacement. Berth No. 2 (4 breasting dolphins) can handle any vessels exceeding 91.4 m. flat sides, up to 32,000 tons displacement and length not exceeding 182.8 m. Night time berthing at the discretion of the Pilot.

B.P. Refinery

Refinery with 3 berths situated at Tanjong Berlayer. Small jetty inside harbour known as Jetty No. 2 can receive small vessels up to 1,000 tonnes as water depth only 4.8 m. below ACD.

Jetty No. 1 at S.W. side of Tanjong Berlayer can accommodate vessels up to 33,000 tons at off-shore mooring where dredged channel 11.0 m. below ACD. Berthing cannot be effected for 43 days of year due strong tidal currents.

At Jetty No. 1A which is Northwards extension from Jetty No. 1 trunkway, vessels up to 5,000 tonnes can be berthed; water depth 7.6 m. below ACD. Simultaneous mooring of vessels at Jetties No. 1 and 1A not allowed as floating hose used to connect Jetty No. 1 to ship at mooring buoys.

Singapore Petroleum

Provides 5 berths for bunkering and other services on Pulau Merlimau, an island off the S.W. coast of Singapore. The marine berth can accommodate vessels up to 85,000 d.w.t. and 14 m. loaded draft, refining capacity 170,000 barrels per day. Night time berthing at Pilot's discretion. Fresh water available ex-pipe-line. Bunkers available by barge or pipe-line.

Gatx Terminals

Vessels berth at marine trestle 1,400 ft. (427 m.) offshore. One berth for vessels up to 85,000 d.w.t. and 1 for vessels of 5,000 d.w.t. 46 operating pipe-lines serve the main berth and 9 pipe-lines serve the subsidiary berth. The terminal handles chemicals and petrochemicals. Total capacity 646,570 barrels in 85 tanks.

Main Berth Docklines	2× 75 mm. dia.
	3×100 mm. dia.
	34×150 mm. dia.
	6×200 mm. dia.
	1×300 mm. dia.
Subsidiary Berth Docklines	6×150 mm. dia.
	2×200 mm. dia.
	1×250 mm. dia.

Singapore Refining Co.

S.B.M. located 2.4 km. S.E. of Sultan Shoal Lighthouse in Selat Sinki. Max. size 320,000 d.w.t. Discharge of crude oil to S.R.C. Refinery. 2 flexible hoses of 600 mm. diameter.

Petro Chemical Corporation of Singapore

Berths	*Depth Alongside (Year Surveyed)*	**Controlling Depth In Approaches*
No. 1 (Unloading)	2.5 m. (1981)	—
No. 2 (Solids)	9.5 m. (1981)	—
No. 3 (Liquid)	8.0 m. (1982)	—
No. 4 (Liquid)	10.9 m. (1982)	10.2 m. (1981)
No. 5 (Liquid)	10.1 m. (1984)	—

*See "Berthing Facilities" – Note.

DENSITY: Usually between 1019 and 1022 unaffected by tide or temperature variations. Variation due to periodic heavy run-off of rain water.

FRESH WATER: Fresh water available at any point of PSA's wharves. PSA also has a fleet of 9 waterboats to supply fresh water to ships anchored within the port limits.

FUEL: All grades available alongside PSA wharves and ex-installation, otherwise by barge. Marine diesel oil. Heavy fuel oil at 180 cst to 380 cst. Blended fuel from 60 cst to 180 cst.

FIRE PRECAUTIONS: Normal precautions with respect to cargo vessels, vessels under repair, etc. Fire boats available. Oil companies apply own regulations at installations.

GANGWAY/DECK WATCHMEN: Recommended, particularly in Roads. Agents normally arrange. Cost varies.

OPENING/CLOSING HATCHES: Conventional hatches by stevedores. Mechanical hatches usually by ship's crew.

CERTIFICATES: If dangerous drugs on board, an export authorisation from country of origin and an import authorisation from country to which drugs being conveyed should be available for sighting and endorsement.

All vessels	Certificate of Registry, Tonnage Certificate, Certificate of Insurance or other financial security as applicable under CLC '69 and International Loadline Certificate or equivalent.
Passenger Ships	Passenger Safety Certificate issued under SOLAS Conventions.
Cargo Ships	Safety Equipment Certificate (if over 500 g.r.t.) or equivalent. Safety Radiotelegraphy Certificate or Radiotelephony Certificate whichever is applicable.

CUSTOMS ALLOWANCES: Tobacco: for crew and adult transit passengers – first day of arrival 50 cigarettes or 15 cigars or other tobacco 60 gms.; and for each subsequent day to the maximum of 7 days. 25 cigarettes or 7 cigars or other tobacco 30 gms.

Wines: 1 bottle per day to maximum of 8 days. Spirits: 7⁄8ths bottle (in opened bottles) on first day of arrival and 1⁄8th bottle per day for rest of 7 days.

CONSULS: Consuls, Embassies and High Commissions. Arab Republic of Egypt, Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Bulgaria, Burma, Canada, People's Republic of China, Denmark, Finland, France, Federal Republic of Germany, Great Britain, Greece, India, Indonesia, Ireland, Israel, Italy, Japan, Democratic People's Republic of Korea, Republic of Korea, Malaysia, Netherlands, New Zealand, Norway, Pakistan, Panama, Philippines, Poland, Romania, Saudi Arabia, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Union of Soviet Socialist Republic, USA.

REPAIRS/DRY DOCKS: All types of repairs (hull, engine and electrical including navigational aids) carried out. Facilities also available for repairs out afloat while vessel in anchorages.

Keppel Harbour (Keppel Shipyard Ltd.)

Dry Docks	*Max. Size at Block Height* (m.)	*Depth Over Sill at LWOS* (m.)
Keppel Hr. King's	261.06 × 28.65	7.27
Keppel Hr. Queen's	187.76 × 25.91	5.03
Keppel Hr. No. 1	117.04 × 13.72	1.65
Keppel Hr. No. 2	132.69 × 15.24	2.86
Pu Hantu Floating Dock (Pu Keppel)	190.00 × 33.00	8.00 (Moulded Depth)
Tuas Temasek	301.00 × 52.00	7.40
Tuas Raffles	355.00 × 60.00	7.40

Repair Berth	*Length of Berth* (m.)	*Depth Alongside (Year Surveyed)* (m.)	**Controlling Depth In Approaches* (m.)
Chermin Wharf	183	3.0 (1983)	—
Cable Wharf	112	6.6 (1983)	—
Oil Wharf 1	152	7.2 (1983)	6.3 (1983)
Main Wharf	274	5.6 (1983)	—
South Wharf	210	9.1 (1983)	—
East Wharf	—	6.6 (1983)	—
Temasek Pier (East)	280	7.2 (1984)	6.4 (1982)
Finger Pier (West)	280	7.4 (1984)	6.0 (1982)
Finger Pier (East)	300	7.2 (1984)	6.0 (1982)
Raffles Pier (West)	430	6.0 (1984)	—
Raffles Dock Entrance	170	6.0 (1982)	—
Raffles Pier (East)	230	6.3 (1982)	6.0 (1982)

*See "Berthing Facilities" – Note.

Tugs:

Name	*Horsepower*
1. Keppel Sembilan	1,600 × 2
2. Keppel Sa-Puloh	1,600 × 2
3. Keppel Lima	1,600 × 2
4. Keppel Enam	1,600 × 2
5. Keppel Tujoh	1,460 × 2
6. Keppel Lapan	1,460 × 2

Launches and Barges: 3 Launches. 4 Barges.

Pulau Samulun (Jurong Shipyard Ltd. – Repair Division):

Dry Docks	*Depth* (m.)	*Length* (m.)	*Width* (m.)
No. 1	10	270	40
No. 2	12	350	56
Slipway	—	100	25

Mooring Quays	*Length* (m.)	*Depth Alongside (Year Surveyed)* (m.)
South Quay (Tg. Kling)	330	5.2 (1982)
South Quay (Tg. Kling)	270	7.2 (1982)
South Quay (Pulau Samulun)	471	4.8 (1981)
West Quay (Tg. Kling)	240	5.0 (1982)
West Quay (Pulau Samulun)	225	5.4 (1981)
East Quay (Pulau Samulun)	65	3.0 (1981)

Tanjong Kling (Jurong Shipyard Ltd. – New Ship Division):

Dry Dock	*Depth* (m.)	*Length* (m.)	*Width* (m.)
No. 1	11 (1975)	350	56

Fitting Wharves	*Depth* (m.)	*Length* (m.)
North Quay	6 (1972)	130
East Quay	5 (1975)	336

Tugs:

Name	*Horsepower*
1. Bunga Tanjong	2,000
2. Bunga Raya	1,600
3. Bunga Mawar	3,200

Tanjong Gul (Hitachi Zosen Robin Dockyard (Pte) Ltd.):

Dry Dock	Depth (m.)	Length (m.)	Width (m.)
No. 1	11.5	350	60
No. 2	11.5	300	60
Slipway	—	90	40

Mooring Quay	*Length* (m.)	*Depth Alongside (Year Surveyed)* (m.)	**Controlling Depth In Approaches* (m.)
No. 1	217	6.1 (1976)	—
No. 2	351	8.8 (1976)	5.6 (1974)
No. 3	270	7.0 (1981)	5.6 (1974)
No. 4	185	7.0 (1981)	5.6 (1974)
Landing Quay	100	4.8 (1976)	3.7 (1976)

Tug: Maju, 3,300 h.p.

Tanjong Gul (Mitsubishi Singapore Heavy Industries (Pte) Ltd.):

Dry Dock	*Approach Depth* (m.)	*Length* (m.)	*Width* (m.)
Repair Dock	7.0	380	80
Slipway	—	85	48

Tanjong Gul (Mitsubishi Singapore Heavy Indstries (Pte) Ltd.):

Mooring Quay	*Length* (m.)	*Depth Alongside (Year Surveyed)* (m.)	**Controlling Depth In Approaches* (m.)
South Quay (S.W.)	300	9.6 (1983)	9.3 (1983)
South Quay (N.E.) (continuous run)	375	7.6 (1983)	7.4 (1983)
West Quay	135	5.0 (1983)	—

Tug: Tiger Orchid, 3,200 h.p.

*See "Berthing Facilities" – Note.

Sembawang Shipyard (Sembawang Shipyard Ltd.):

Dry Dock	*Length* (m.)	*Entrance Width* (m.)	*Max. Depth Over Block* (m.)
Sembawang Premier Dock	384.0	64.0	9.0
King George VI Dock	318.5	39.6	13.6
Floating Dock:			
No. 1	177.3	26.2	7.6
No. 2	123.4	19.7	5.5
Resident Floating Dock	290.0	48.0	8.5

Berthing facilities total 2,026 m. with a depth of 12.2 m.

Sembawang Towing Co. (Pte) Ltd., a subsidiary of Sembawang Holdings (Pte) Ltd., has a fleet of 10 tugs (based in the shipyard) which operate throughout the East Johore Strait.

Tugs:

Name	*Horsepower*
1. T.S.M.T. 'Sea Panther'	2 × 1,600
2. T.S.M.T. 'Sea Cougar'	2 × 1,600
3. T.S.M.T. 'Sea Mastiff'	2 × 1,600
4. T.S.M.T. 'Sea Husky'	2 × 1,600
5. T.S.M.T. 'Sea Basset'	2 × 1,600
6. T.S.M.T. 'Sea Cheetah'	2 × 1,350
7. T.S.M.T. 'Sea Leopard'	2 × 1,350
8. T.S.M.T. 'Sea Terrier'	2 × 920
9. T.S.M.T. 'Sea Setter'	2 × 920
10. M.T. 'Sea Puma'	495

Harbour Launches: 2.

CARGO GEAR: Possession of valid test certificates. At PSA wharves all cargo gear should be inspected by an Authorised Port Officer before use.

IDENTIFICATION CARDS: Sect. 22 (1) (c) of Ordinance provides for issue of Seamen's Identification Card as set out in First Schedule to the Immigration Regs. 1966, but rarely issued nowadays. Normally accept passports, discharge books or any identification cards issued by Masters of vessels for purpose of granting shore leave to Crew members, provided these documents sufficiently identify person concerned

Gate Passes issued against crew list at wharves and installations. No passes required from roads, although some form of identification advisable.

SURVEYORS: A.B.S., B.V., Det Norske Veritas, Lloyd's Register, N.K.K., G.L., Polski Register Stratkow, China Corporation Register of Shipping and Salvage Association.

REPATRIATION: Ships' Agents responsible for repatriating seamen. Mercantile Marine Office undertakes repatriation of distressed British seamen on behalf of Board of Trade, United Kingdom, whenever necessary. Seamen who hold proper documents which ensure entry into their countries of origin, citizenship and destination are normally granted Special Passes after discharge for purpose of repatriation.

AIRPORT: 20 km. from city. Regular and frequent services to all parts of the world.

TIME: GMT plus 8 hours. No seasonal change.

HOLIDAYS: Work can be arranged on all 10 Public Holidays. New Year's Day; Chinese New Year; Hari Raya Haji; Good Friday; Labour Day (1st May); Vesak Day; National Day (9th August); Deepavali; Hari Raya Puasa; Christmas Day.

POLICE/AMBULANCE/FIRE: City Police 999; Fire/Ambulance only, 328111; Flag signal: CB3. VHF Channels 12 or 16. PSA Police 2712211 ext. 2222; Fire ext. 2209 or ext. 2333; Ambulance 2712211.

We quote the contents of Port Circular No. 123 of 1984 issued by the Port of Singapore Authority:

Ships Requiring Police Assistance:

1. The shipping community is hereby reminded that vessels within Singapore waters can directly contact Marine Police for assistance on those matters falling within police jurisdictions.

2. For such assistance, vessels should establish radio contact on:

VHF Channel	*Hours*	*Ship Tran./Rec. Frequencies*	*Call sign (Voice)*
21	24	157.05/161.65 MHz	Marine Police
or			
7	24	156.350/160.950 MHz	Marine Police

Giving the following information:

(a) Name of vessel.
(b) Location of vessel.
(c) Nature of emergency.
(d) Nature of police assistance required.

3. Vessels within the port and requiring immediate police assistance shall display following signals in a conspicuous position to facilitate easy identification by the Marine Police:

By Day: International Code "CB3".
By Night: Red-Red-White (Red on top).

4. Vessels may in addition sound on their whistle or siren at intervals of about 1 minute three prolonged blasts to attract the attention of Marine Police personnel in the vicinity.

5. The shipping community is advised to illuminate and step up surveillance onboard its vessels, particularly those moored just outside the outer limits of the port, to discourage unauthorised boarding of its vessels.

TELEPHONES: Available on board vessel at PSA wharves only.

GENERAL: Master of any vessel in territorial waters of Singapore shall obey any signal from a preventive vessel and any instruction from Officers of Customs. Customs Officers shall have free access to any part of vessel and have powers to mark, lock or seal any dutiable goods on import including sea stores.

SERVICES: Following additional services available: Cleaning and preparing ship's tanks. Cleaning, scaling and painting. Insulation. Interior decorating and furnishing. Refrigeration and air-conditioning. Chemical cleaning of boilers, etc. SCAMP underwater cleaning service. Compass adjusting and DF Calibration. Radar and Radio servicing depots.

SHORE LEAVE: No restriction on crews landing after Immigration and Health formalities have been satisfactorily completed. With rare exception (e.g. CPG Crew), all *bona fide* crew of a vessel allowed shore leave on strength of their passports, discharge books or identification cards.

The following circular was issued in May 1973 by the Singapore Port Authority.

"In line with the Government's decision that action should be taken to deal with the 'long-hair' problem as part of a campaign against undesirable alien influences, the Port of Singapore Authority would be most grateful for your co-operation in implementing this decision by advising all your employees, including ships' officers and Crew members, wishing to come ashore to be more tidy in their general appearance.

"To assist you to decide whether an individual's hair is long, the following definition of long hair may be used as a guide:

(i) Hair reaching below an ordinary shirt collar;
(ii) Hair covering the ears;
(iii) Hair falling across the forehead and touching the eyelashes."

POLLUTION: No oil or mixture containing oil shall be discharged into Singapore waters from any vessel. The Master or person in charge of the vessel committing such an offence shall be liable on conviction to a fine not less than 500 dollars and not exceeding 500,000 dollars or to imprisonment for a term not exceeding 2 years or to both such fine and imprisonment.

No refuse, garbage, waste matter, substance of a dangerous or obnoxious nature or trade effluents to be discharged from any vessel into Singapore waters. The Master or the person in charge of the vessel committing such an offence shall be liable on conviction to a fine not exceeding 10,000 dollars or to imprisonment for a term not exceeding 2 years or to both such fine and imprisonment.

If any oil or mixture containing oil is discharged into Singapore waters:

(a) for the purpose of securing the safety of the vessel or of preventing damage to the vessel or her cargo, or of saving life; or

(b) is found to be escaping, or to have escaped into Singapore waters from a vessel in consequence of damage to the vessel, or by reason of leakage, the Master or the person in charge of the vessel shall report the occurrences to the Director of Marine and the Port Master. Failure to do so shall be an offence and shall be liable on conviction to a fine not exceeding 5,000 dollars.

Slop Reception: The P.S.A. Slop and Sludge Reception and Treatment Centre at Pulau Sebarok has a total tank capacity of 82,000 cu.m.

Berthing facilities consist of 2 piers – Piers 1 and 2. Depths alongside: Pier 1 – 12.8 m., Pier 2 – 11.0 m.

The Centre can accommodate vessels up to an overall length of 264 m. and a displacement of 45,800 tonnes

7 barges with a total capacity of 8,500 cu.m. are used for the reception of slops/tank cleaning water at anchorages and transported to the Centre for disposal.

Communications: VHF Station Channel 61.

Safety and security at the island is well provided and maintained by both the Authority's Police Force and Fire Brigade.

Also see "Shipmaster's Report" and "Tankers – Shell".

DELAYS: Normally none. Occasional congestion due to prolonged rainy weather or other abnormal conditions.

NOTICE: *Port of Singapore Authority – Port Circular No. 114 of 1984. Dated 28th November, 1984.*

CHANGE OF ANCHORAGE FOR HEALTH/IMMIGRATION CLEARANCE AND USE OF ANCHORAGES FOR VESSELS ARRIVING FROM EAST AND WEST

1. *Health/Immigration Clearance*

Masters, Owners and Agents of vessels are hereby informed that with effect from 0600 hours on Saturday, 8th December, 1984, the use of the Eastern Quarantine/Immigration Anchorage for Health/Immigration Clearance will cease until further notice.

Vessels arriving from the East and requiring Health and/or Immigration Clearance are to make use of the Western Quarantine/Immigration Anchorage.

Vessels arriving from the West shall continue to make use of the Sultan Shoal Quarantine/Immigration Anchorage.

2. *Use of Working or Petroleum Anchorages in the Eastern and Western Sectors*

Vessels arriving from the East can continue to make use of the appropriate anchorages in the Eastern or Western Sectors, and likewise vessels arriving from the West can make use of the appropriate anchorages in the Eastern or Western Sectors. In all cases they should first obtain their Health and Immigration Clearances either by Radio Pratique/Advance Immigration Clearance at the appropriate anchorages mentioned in paragraph 1 above.

3. *Use of Controlled Anchorages*

Masters/Owners/Agents requiring to anchor their vessels in any of the following anchorages are to obtain prior permission from the respective Units of the Port Master's Department:

(i) Eastern Explosives Anchorage	Dangerous Goods & Port Limit Craft Unit
(ii) Western Dangerous Goods Anchorage	
(iii) Eastern Special Purposes Anchorage	Enforcement Unit
(iv) Western Reserved Anchorage	
(v) Laid-up Vessels' Anchorage	Shipping Unit
(vi) Selat Pauh Anchorage	

Application should be made in advance by letter or telex stating the name, g.r.t. and maximum draft of the vessel, the required anchorage, the purpose and the period of stay at the anchorage. Vessels intending to use the Eastern Explosives or Eastern Special Purpose Anchorage are to state the height of the highest point of the vessel (inclusive of cargo and superstructure) above waterline.

4. *Pilotage*

Vessels requiring pilotage services are required to use the appropriate Pilot Boarding Grounds specified below:

(i) Vessels from the West proceeding directly to Berths/Anchorages in the Western Sector (with Advance Clearance)	Western Boarding Ground (Sultan Shoal)
(ii) Vessels from the West proceeding directly to Anchorages in the Eastern Sector (with Advance Clearance)	Eastern Boarding Ground A
(iii) Vessels from the West proceeding directly to Keppel Wharves (with Advance Clearance)	Eastern Boarding Ground A or Western Boarding Ground (depending on the tidal stream)
(iv) Vessels from the East proceeding directly to Berths/Anchorages (with Advance Clearance)	Eastern Boarding Ground A or B as arranged with the Pilotage Section.
(v) Vessels from the East requiring Health/Immigration Clearance	Eastern Boarding Ground A

5. The foregoing directives are issued pursuant to Section 65 of the Port of Singapore Authority Act (Cap 173) of 1970.

6. Port Circular No. 18 of 1984 is hereby cancelled.

DEVELOPMENTS: Two conventional wharves at Keppel Wharves to be converted to container handling berths (Berth Nos. 42 and 43). Total length 535 m.

Studies are being made to strengthen the wharf decking at Berth Nos. 44 and 45 to moor feeder containerships.

Petrochemical Plant to be built at Pulau Sakra/Pulau Bakau. Completion expected 1986.

SHIPMASTER'S REPORT: September 1983.

Ballast: Slop reception barges cannot receive slops at more than about 250 t.p.h. Message should be sent to Port Master 1 day before arrival with ETA and height above water and same information repeated to Port Operations Channel 12 three hours before arrival.

AUTHORITY: Port of Singapore Authority, PSA Towers, 3 Maritime Square, Singapore 0409. Postage Address: P.O.Box 300, Singapore 9005. *Tel:* 2712211. *Telex:* RS 21507. *Cables:* "Tanjong" Singapore. *Contact:* Port Master. Senior Public Relations Officer (ext. 2524).

AGENT: Jardine Shipping Agencies, Marina House, 70 Shenton Way, Singapore 0207. Tel: 2218011. Telex: RS 24179. Cables: "Jarship".

NOTES

Please also advise Shipping Guides Ltd.

Society Islands

BORA BORA (Vaitape): 16.31 S. 151.45 W.

DOCUMENTS: All vessels arriving in French Polynesia must first call for clearance at Papeete, or at Uturoa, or at Taiohae. See "Papeete" for documents required.

PILOTAGE: There is no pilotage station at Bora Bora; a Pilot will be provided at Papeete. Vessels are requested to advise their Agents at least 15 days before arrival of their ETA, length and draft of ship. In addition, Masters should confirm their ETA to the Port Captain of Papeete at least 3 days before arrival. Telegraphic address is Capitaine de Port, Papeete.

ANCHORAGES: Vessels may anchor in the port roads in depths of 34 m. – 21 m. Good holding ground in sand and coral.

RESTRICTIONS: Night pilotage is impracticable due to the absence of lighted navigation marks.

MAX. SIZE: Length 220 m., beam 30 m., draft 9 m.

HEALTH: Vessel should ask for Free Pratique by radio message to Sante Maritime Papeete, via coast station Mahina. This message to be sent 24 hours before arrival.

RADIO: Mahina Radio, call sign FJA, operating 24 hours a day on 500, 2182 and 8230 kHz.

TUGS: No tugs available at Bora Bora.

BERTHING: One quay, (Quai de Farepiti) 132 m. length, situated in Faanui Bay. Depth alongside 7.30 m. Only used by small warships, coasters and yachts. One other quay (Quai de Vaitape) 40 m. long and with depth alongside 4 m. Situated at Vaitape. Used by barges and coasters. These two quays were repaired in 1983.

MEDICAL: No doctor available, but there is a local infirmary.

FRESH WATER: Not available.

FUEL: Not available.

CUSTOMS ALLOWANCES: No restrictions for crew members, but all tobacco and alcohol must be declared. Crew men going ashore may not take more than 2 packets of cigarettes.

AIRPORT: Situated 7 km. from Vaitape, only inter-island services.

TIME: GMT minus 10 hours. No change during the year.

HOLIDAYS: See "Papeete".

SHORE LEAVE: Allowed.

AUTHORITY: Capitainerie du Port de Papeete, B.P.91, Papeete (Tahiti), P.F. *Contact:* Harbour Master.

PAPEETE: 17.33 S. 149.34 W. **(See Plan Book)**

DOCUMENTS:

Required by Port Health:

Maritime Declaration of Health (form provided by the Pilot).

Required by Police (2 copies of each):

Crew List.
Lists of Passengers Disembarking.
Lists of Passengers in Transit.
List of Ship's Characteristics.

Required by Customs (2 copies of each):

Manifest of Cargo for Discharge.
Provisions List.
Mail List.
Crew Personal Effect List.
Bonded Stores List.
Ship's Spares List.
Crew List.
List of Passengers Disembarking.
List of Passengers in Transit.
List of Animals Disembarking.
List of Animals in Transit.
List of Plants.
Complete Cargo Manifest.

Required by Merchant Marine Authorities:

1 Declaration of Safe Rules on board ship (form supplied by Pilot).

Required by Port Captain:

Entry Declaration (form supplied on arrival).
Crew List.
List of Passengers Disembarking.
List of Passengers In Transit.

PILOTAGE: Vessels are requested to advise their Agents at least 3 days before arrival giving their ETA, length and draft of the ship, amount of cargo for discharge and any other requirements. In addition, Masters must give their ETA 24 hours before arrival to Capitainerie du Port, Papeete. Pilot station and pilot launches are equipped with VHF and may be contacted on Channel 12 when within 30 miles. Pilot launches have grey painted hull with a white band, with wheelhouse on the fore part. The pilot flag is described as the colours of code flag "W" upside-down. International code flag signals may be used to call Pilot. Pilot boards about 1.5 miles from the entrance channel. There is no anchorage outside the port for ships awaiting a Pilot.

Pilotage available 2400 hours.

ANCHORAGES: Vessels up to 170 m. length can anchor in the port roads in depths of 18 m. – 25 m. Good holding ground in mud.

RESTRICTIONS: Ships coming from a country infested by "oryctes rhinocerus strategus" (coconut beetle) cannot stay alongside in the harbour from 1700 hrs. to 0600 hrs. if they have been at sea less than 20 days since the last infested port.

MAX. SIZE: Length 250 m., beam 32 m., draft 35 ft. The Q.E. II, length 294 m. entered and docked in 1978 and 1983.

HEALTH: Vessels should ask for Free Pratique by radio to Sante Maritime Papeete, via Coast Station Mahina Radio. This message should be sent 24 hours before arrival. Pratique is automatic for vessels coming from another Polynesian port. Also see "Restrictions".

RADIO: Mahina Radio, call sign FJA, operating 24 hours per day on 500, 2182, 8281.8 kHz, and on VHF Channel 16.

G.M.T. 0118 hrs. —	8461 kHz	FJA 8	A1	W/T
G.M.T. 0733 hrs. —	17040.8 kHz	FLA26	A1	W/T
G.M.T. 0433 hrs. —	8461 kHz	FJA 8	A1	W/T
G.M.T. 0503 hrs. —	17040.8 kHz	FJA26	A1	W/T
G.M.T. 0903 hrs. —	4298 kHz	FJA41	A1	W/T
G.M.T. 0933 hrs. —	8461 kHz	FJA 8	A1	W/T
G.M.T. 1333 hrs. —	8461 kHz	FJA 8	A1	W/T
G.M.T. 1733 hrs. —	4298 kHz	FJA41	A1	W/T
G.M.T. 2018 hrs. —	8461 kHz	FJA 8	A1	W/T
G.M.T. 2048 hrs. —	17040.8 kHz	FJA26	A1	W/T

VHF: The Port Captain's Office is equipped with VHF. Watches are kept on Channel 12 when a ship is expected.

TUGS: Tugs join ships as soon as they are in the entrance channel. Generally, tow-lines are not required, as tugs push the vessels only. There are three tugs available up to 1,200 h.p. belonging to the Port Authority, and in addition, there are two naval tugs up to 700 h.p. which may assist if required.

BERTHING: Passenger Quay: 233 m. length, 2 berths, depth alongside 9 m.

Cargo Quay: 450 m. length, depth alongside 10.50 m.

Fishing Boat Quay: 100 m. length, depth alongside 5.50 m.

STEVEDORES: Cargo information should be confirmed to the Agents with ETA 48 hours before arrival.

MEDICAL: Advance notice required if medical attendance needed on board. 2 hospitals available. Passengers disembarking must present a valid vaccination certificate.

TANKERS: 1 tanker berth, 105 m. long. Max. allowed draft 33 ft. Discharging hoses are: Mobil Oil 8 in., Standard Oil 6 in.

1 gas tanker berth, at Pont de Taunoa, accessible via Taunoa Channel. For vessels max. LOA 85 m., max. breadth 13.80 m., max. draft 6.0 m.

FRESH WATER: Available from pipe-lines on all quays. Loading rate is 50 t.p.h. at passenger and cargo quays and 30 t.p.h. at the tanker berth.

FUEL: Diesel available subject to 1 week's notice.

GANGWAY/DECK WATCHMEN: Services of shore watchmen are necessary.

OPENING/CLOSING HATCHES: Hatches opened and closed by crew if they are of mechanical type, otherwise the stevedores will perform this operation.

CUSTOMS ALLOWANCES No restrictions for crew members but all tobacco and alcohol must be declared. Crew members going ashore must not take more than two packets of cigarettes. Passengers disembarking may take 200 cigarettes or 50 cigars or 400 grammes of tobacco and one bottle of alcohol.

CONSULS: The following countries maintain representatives at Papeete:

Austria	Denmark	Netherlands
Belgium	Finland	Norway
Chile	Italy	Sweden

REPAIRS: Woodwork, electrical and welding repairs can be effected. There are 2 floating docks for vessels up to 3,800 tons.

SURVEYORS: Lloyd's Register and Bureau Veritas.

REPATRIATION: Can be effected.

AIRPORT: Tahiti — Faaa Airport is situated 6 km. from the port. Regular international flights.

HOLIDAYS: 1st January, 5th March (Arrival of the Gospel in French Polynesia), Easter Monday, 1st May, Ascension Day, Whit Monday, 14th July, 15th August, 1st November, 11th November, 25th December. No work is carried out on Sundays or on 1st May. All other holidays can be worked on double overtime rates.

TIME: GMT minus 10 hours. No alterations during the year.

POLICE/FIRE/AMBULANCE: Police 17; Fire 18; Ambulance 2 96 74.

EMERGENCY CO-ORDINATION CENTRE: Contact Amiral Commandant la Zone Maritime. Telex: 269 FP. Tel: 2.6501.

TELEPHONES: Can be installed on board vessels at all quays.

BANKS: 1. Banque de Polynesie, Branch of Societe Generale France, Telex: 230 Polybank FP, - B.P. 530, Papeete. (Joined to Credit Cards Visa system).

2. Banque de Tahiti, Branch of Bank of Hawaii, Honolulu. Branch of Credit Lyonnais, Paris. Telex: 237 FP - B.P. 1602, Papeete.

3. Banque Indosuez, Branch of Indosuez Paris, Telex: 232 FP & 244 PF - B.P. 120 Papeete.

STORING: Vessels can be stored by truck, which can proceed alongside the berth. Forklift trucks can be used. Special Customs Regulations in use.

SHORE LEAVE: Allowed without restriction.

SHIP SUPPLY SERVICE: The off-shore ship supply services are operated by the Pilot launches belonging to the Port Authority with 24 hours' notice for ship-to-shore transport of personnel, essential stores and sick crew members.

AUTHORITY: Port Autonome de Papeete, B.P. 91, Papeete, Tahiti, Polynesie Francaise. *Tel:* 3.60.60. *Cables:* Capitaine Port Papeete. *Contact:* J. W. Ahnne, Port Captain.

Solomon Islands

GIZO: 08.05 S. 156.52 E.

Gizo is the copra and cocoa receiving centre for Western Solomons. Situated on Gizo Island West of New Georgia. Entrance to harbour is beaconed and a jetty with depth alongside of 9 ft. Sheltered anchorage available in 16 fathoms. The British Solomons Trading Company Ltd. provides stevedores and conducts a lighterage handling and warehousing service to Importers and Exporters.

HONIARA: 09.25 S. 159.58 E. (See Plan Book)

DOCUMENTS:

Special Documents

Store List, Form C1.
Crew's Store List, Form C2.
List of Unmanifested Cargo, Form C3.
Ship's Report Inward, Form C4.
Entry Outwards/Content Ship, Form C13.

Legalised Documents

None.

Advance Documents

None.

Landing Cards

Finally landing passengers need special landing card.

Health Officer

1 Transit Passenger Manifest.
1 Landing Passenger Manifest.
1 Crew List.
1 Maritime Declaration of Health.
1 Rhinoceros Beetle Free Certificate from Suva.
Derat Certificate.
Health Certificate.

Immigration

1 Transit Passenger Manifest.
1 Landing Passenger Manifest.
1 Crew List.

Customs

1 Transit Passenger Manifest.
1 Landing Passenger Manifest.
1 Crew List.
2 Store Lists, Form C1.
2 Crew Store Lists, Form C2.
2 Ship's Reports Inwards, Form C4.
2 Lists of Unmanifested Cargo, Form C3.
2 Entry Outwards/Content Ship, Form C13.

Agents

1 Transit Passenger Manifest.
1 Landing Passenger Manifest.
1 Crew List.

PILOTAGE: 24 hours' notice ETA stating number of passengers, dangerous cargo, etc., to Harbour Master, Honiara, via Honiara Radio. Usual signals. Pilot boards from launch about 0.75 miles N.E. Pelope Shoal. Vessels normally berthed port side to. Pilot uses port gangway in calm weather.

ANCHORAGES: East of Port Main Leading Lights. Fl. white and fixed green, in about 20 fathoms; coral bottom.

Local boats are available for transporting crew from anchorage to the shore. The landing stage is at Joanna Jetty on the East side of the main pier at Point Cruz. Height above water level is 2 ft. at high tide and 4 ft. at low tide.

APPROACHES: Approaches free from dangers provided vessels keep at least 2 cables off Point Cruz Beacon, identified by quick flashing red light. On foreshore in front of Shell Oil Storage Tanks is beacon with fixed green light, and above on Vavaya Ridge is white light flashes every 5 seconds from Tower on radio station building. When in line these 2 lights give correct approach to anchorage in 20 fathoms on, or East of, the line. Prevailing winds during S.E. season blow from N.E. direction sometimes reaching Force 4 to 5 in early afternoon. During N.W. season direction and force variable generally between North and West up to Force 4 and occasionally Force 5.

RESTRICTIONS: Berthing in daylight hours only – departure any time.

MAX. SIZE: New Wharf, up to 650 ft. long and max. 29 ft. draft. Old Wharf, up to 200 ft. long and max. 13 ft. draft. Tankers, mooring at buoys, 600 ft. long and 27 ft. 6 in. draft.

HEALTH: Pratique can be obtained by radio. Cable Port Health. Suspect vessels should inform Health Authorities and Harbour Master by radio for doctor to board on arrival.

Cable to Quarantine Officer Honiara between 12 and 4 hours before arrival the following message: "Request Radio Pratique negative answers all health questions Maritime Declaration of Health Master." Normally, the P & T Radio Officer may grant Pratique immediately whilst he is in radio contact with the ship. After arrival the Health Officer will check for rhinoceros beetle and will clear.

RADIO: Radio Honiara VQJ. Watch continuous. 6204 kHz, 2182 kHz, 500 kHz. GMT Schedule 0020 – 0030 transmits 11560 kHz receives 8 or 16 MHz.

TUGS: There is a small 100 h.p. tugboat assisting with mooring when necessary.

BERTHING: At Point Cruz, berth length 235 ft., depth alongside 30 ft. Vessel berths port side alongside.

STEVEDORES: At least 24 hours' notice, usually 3 gangs, indicate any extra gangs required. To facilitate quick turn around advisable have cargo in middle holds evenly distributed not at extreme end or massed in one hold only.

MEDICAL: Notice should be given in advance if medical attendance required on board. Inoculations available at clinic on Fridays only. Limited hospital facilities available.

Cholera: Required if arriving from infected area. Vaccination Certificates are checked individually for those passengers permanently disembarking.

For all other passengers and the crew ship's doctor must provide a statement advising that all passengers and crew comply with the health regulations and vaccinations required.

In case some passengers have for health reasons not been vaccinated, a letter from their doctor giving reason why no vaccination given must be produced. Passengers will be allowed to go ashore.

Central Hospital, Tel: 09-61.
Emergency and Ambulance, Tel: 09-33
Doctors, Tel: 09-44
Dentist, Tel: 09-43

All medical facilities are provided from the Hospital. One private doctor available: Dr. M. Strickland, Tel: 770.

TANKERS: Tanker buoys, 8 in. pipe-line, max. draft 32 ft. New Wharf, 4 in. pipe-line, max. draft 27 ft. 6 in. Old Wharf, 4 in. pipe-line, (ADO), max. draft 13 ft.

DENSITY/TIDE: Approx. 1025. Tidal range about 3 ft.

FRESH WATER: At wharf by hoses. 40 t.p.h.

FUEL: Diesel and gas oil available. 48 hours' notice, butane gas.

FIRE PRECAUTIONS: Normal fire precautions, with gang standing by with fire pump.

GANGWAY/DECK WATCHMEN: Watchmen to be recommended. Customs provide a preventive officer for duty at a charge.

OPENING/CLOSING HATCHES: Stevedores assist crew. Crew to rig gear.

CERTIFICATES: Certificate of Registry.

CUSTOMS ALLOWANCES: 200 cigarettes or 0.5 lb. tobacco per crew member. 3 quart bottles of beer per crew member.

IDENTIFICATION CARDS: Required.

CONSULS: Australian.

REPAIRS: Limited facilities only.

DRY DOCKS: Nil.

REPATRIATION: Facilities available.

AIRPORT: Situated approximately 10 miles from the wharf. Air Niugini have 2 flights per week from Sydney via New Guinea, and Air Pacific have 2 flights a week from Suva via New Hebrides.

TIME: GMT plus 11 hours all year round.

HOLIDAYS: Cargo work can be arranged on all holidays except Christmas Day and Easter period.

POLICE/AMBULANCE/FIRE: Emergency phone numbers: Police 666; Ambulance 933; Fire 299.

SERVICES: Labour can be hired for assistance with painting and cleaning. Other services not normally available. 24 hours' notice required.

SHORE LEAVE: Permitted.

VISAS: Transit passengers: not required. Disembarking passengers require visa for a stay over 48 hours. Visa can be obtained from nearest British Consul.

LANDING CARDS: Only permanently disembarking passengers need special Landing Cards which can be obtained from Immigration Officer on arrival.

WEATHER: Cyclone season December to April, winds N.W. to variable, strength 0 – 5. From April to November winds are from N.E., strength 4 – 5.

DELAYS: Nil, except when other ships being worked.

DEVELOPMENTS: Copra Wharf, length 100 m. to be constructed.

AUTHORITY: Harbour Master, Solomon Islands Ports Authority.

SHORTLAND HARBOUR: 07.04 S. 155.52 E.

DOCUMENTS: 3 copies of all documents including "Nil" sheets of Crew Lists, Passenger Lists, Customs, Health Manifests, Bills of Lading, Ship's Particulars, Ship's Certificates.

PILOTAGE: Apply for Pilot by anchoring on Pilot Point and sounding whistle. The pilot vessel is a 50 ft. tugboat and is visible at anchorage from the Pilot Point (Lat. 7° 03′ 30″ S., Long. 155° 53′ E.). The pilot vessel will immediately come to the vessel. The Pilot Point is unaffected by bad weather.

ANCHORAGES: The anchorage is beside the wharf in the channel. It is protected to the East and West by islands and is unaffected by wind, tides or currents. Minimum depth alongside the wharf is 8 m. at the extreme Southern end. The depth at the Northern end is 16 m.

RESTRICTIONS: As no lights are available all entries are made during daylight hours.

MAX. SIZE: Max. length 125 m., breadth, no restriction, max. draft 8 m. draft is applicable at maximum low tide.

HEALTH: Pratique granted on board on arrival. If any suspected or confirmed disease or fever on board notify the Health Inspector immediately on arrival. He will advise procedure. Pratique is automatic when arriving from another Solomon Islands port.

RADIO: Lofung Station and tug on 5775 kHz, telex is HQ 66343.

VHF: Not available.

RADAR: No radar facilities.

TUGS: Tug joins vessel at Pilot Point and escorts vessel in. Ship's lines are used, vessels stand-by to run ship's lines ashore. All charges are included in the Agency fees.

BERTHING: Alongside wharf (07° 03′ 50″ S., 155° 51′ 50″ E.), length 87 m., depth 8.0 m., loading and discharge by ship's gear. Basically only trucks and other machines are discharged and only Solomon Island round logs loaded.
CRANES: None.
BULK CARGO FACILITIES: None.
SPECIALISED CARGO FACILITIES: None.
BRIDGES: None.
STEVEDORES: The stevedores are company personnel and available immediately ship is berthed and cleared.
MEDICAL: A clinic with limited medical and dental facilities available 2 km. away. Usual inoculations and certificates available. Malaria is present in port area.
TANKERS: No facilities.
FRESH WATER: Not available.
FUEL: Not available.
FIRE PRECAUTIONS: None.
CONSULS: None.
REPAIRS: No facilities.
DRY DOCKS: Not available.
SURVEYORS: Not available.
WATCHMEN: Not necessary.
HATCHES: Opening and closing by ship's crew.
CUSTOMS ALLOWANCES: 2 litres spirits, 200 cigarettes.
CARGO GEAR: One forklift available.
REPATRIATION: Not possible.
AIRPORT: 5 miles away by sea on Ballalae Island. Flights Mondays, Tuesdays, Thursdays, Fridays to Honiara.
TIME: GMT plus 11 hours.
HOLIDAYS: Christmas Day, New Year's Day, Good Friday, Easter Monday, 7th July (Independence Day), Queen's Birthday and Whit Monday in June.
POLICE/AMBULANCE/FIRE: Not available.
EMERGENCY CENTRE: Honiara.
TELEPHONES: Not available.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not required.
REGULATIONS: Normal Customs, Immigration and Health requirements.
DELAYS: Normally straight onto berth after Pilot on board.
DEVELOPMENTS: None planned.
GENERAL: Shippers' Office may be contacted on SBB 5775 at 0700, 1200 and 1630 hrs. local time.
AUTHORITY: None.

AGENT: Allardyce Lumber Company Limited, P.O.Box 164, Honiara, Solomon Islands. *Cables:* Alcol.

YANDINA: 09.04 S. 159.14 E.

Yandina is situated in Russell Islands and is copra export port for Lever Solomons Ltd. A concrete and steel wharf on South side of entrance with length 53.34 m. and minimum depth alongside 6.0 m.

Sheltered anchorage for vessels of up to 500 ft. in length, available in Renard Sound. Lever Solomons Ltd. provide stevedores and conduct handling and warehousing service to importers and exporters.
AUTHORITY: Lever Solomons Ltd., Yandina, Russell Islands, Solomon Islands. *Contact:* The Resident Engineer.

NOTES

Please also advise Shipping Guides Ltd.

Somali Democratic Republic

GENERAL:

REPORT: *Immigration Regulations:* According to new Somali Immigration Instructions, no foreigner of any sort (including seamen, supercargo or owners' representative) shall be allowed to enter into Somalia without a visa.

No transit visa will be allowed for seamen joining their vessels in Somali ports.

Anybody arriving at Somalia should first obtain entry or transit visa from the Somali Consulates in their respective countries.

BERBERA: 10.26 N. 45.01 E. (See Plan Book)

DOCUMENTS:

6 Crew Lists.
2 Stores Lists.

2 Lists of Articles owned by Crew i.e. tobacco, wine/spirits, cameras, binoculars, wrist-watch, radio, firearms/swords etc.

1 Cargo Manifest (must be made out in accordance with original Bill of Lading issued. In the column "Consignees" the name of the party to be notified must be mentioned complete with full postal address. Should specify weight in kilos and measurements in cubic metres). 6 copies to be sent in advance unfreighted; 2 copies to be sent in advance freighted; 2 copies to be sent by the ship's box.

1 Copy Non-Negotiable Bill of Lading for each Bill of Lading issued.

2 Lists Transit Cargo (total number of packages and total weight for each destination).

6 Lists of Passengers to be Disembarked.
2 Lists of Passengers In-Transit.

1 Health Document will be prepared on arrival of the vessel in port, on special local form.

PILOTAGE: Compulsory for vessels over 200 n.r.t. Vessels await Pilot on the Outer Roads, 5 – 10 cables S.W. of Tamara Lighthouse. In case of stormy weather and rough seas, it is permitted to wait for Pilot on the Inner Roads.

ANCHORAGES: Outer anchorage 5 – 10 cables S.W. from Tamara Lighthouse. Inner anchorage limited by the line between 10° 26′ 16″ N., 45° 00′ 14″ E. and between perpendiculars from the ends of this line towards Cape of Tamara.

RESTRICTIONS: All ships should anchor in such a position that with any wind they should lie on the leading line, or Southward from it, or opposite the deep water pier.

MAX. SIZE: Draft 28 ft., length/breadth no restrictions.

HEALTH: Pratique granted after Port Authorities, including doctor, board vessel. Any suspected contagious illness aboard to be reported immediately to the doctor on arrival. Vessels calling from other Somali Ports subject to same procedure.

RADIO: Cable Agents giving ETA, draft, length and cargo via port radio station – 6OY call and reply in the frequency 500 kHz, working 450 kHz. Working hours from 0700 to 1700 hrs. local time. Traffic list 3 times a day at 0800, 1200 and 1600 hrs.

TUGS: Use ship's lines. There is one tug of 1,200 h.p. and one of 700 h.p. to assist vessels in berthing and unberthing.

BERTHING: Depth at pier 28 ft., length of pier 320 m.

Transhipment of cargo is allowed with exemption of Harbour Tax and Warehouse Dues. Only handling charges are levied according to port tariff.

STEVEDORES: Vessel must give accurate ETA at least 24 hours in advance to enable Agent to order gangs. No shore facilities, all cargo to be loaded and unloaded with ship's gear.

Working Hours: Normally 0700-1400 hrs., but loading to and discharging from vessel is performed day and night.

MEDICAL: General hospital facilities available, but specialised treatment and surgery is not. Yellow fever and cholera vaccination certificates inspected on arrival.

TANKERS: Discharge at two mooring buoys with connecting hoses of American and British standards.

DENSITY: Salt water at all times.

FRESH WATER: Available alongside quay through hoses. Rate 15/20 t.p.h.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Gangway watchmen services carried out by Customs Police, food on vessel's account. Ships are also supplied with local watchmen through Agent.

OPENING/CLOSING HATCHES: Normally carried out by stevedores with the help of the crew. Vessel's crew may, if required by the vessel do so. Crew may close hatches prior to sailing.

CUSTOMS ALLOWANCES: 200 cigarettes, 2 packets of cigars and 5 bottles of wine. Cigarettes and spirits trafficking alongside and between vessels and shore strictly prohibited.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Crew to carry passport or seamen book whilst ashore.

CONSULS: None.

REPAIRS: Port Management own a well-equipped workshop where minor repairs for ships can be carried out.

TIME: GMT plus 3 hours all year round.

HOLIDAYS: See "Mogadiscio".

TELEPHONES: No possibility for placing telephones on board.

GENERAL: Vessels should not dispose of any waste into harbour or on to quays, lower lifeboats or use radio station without prior permission.

REGULATIONS: Livestock vessels are given priority.

DEVELOPMENTS: The present two berths are being extended by a further two berths. (Work is underway).

SHIPMASTER'S REPORT: June 1981.

References: Guide to Port Entry, Shipping Guides Limited. British Admiralty Chart BA 3530. Red Sea and Gulf of Aden Pilot. (NP64) 12th Edition 1980.

Documents:

2 Crew Lists. 2 Lists Personal Effects.
2 Stores Lists. Cargo Manifest.
Copy Non-Negotiable Bill of Lading for each consignee.
2 Lists of Transit Cargo.
2 Passenger Lists. "Nil" declaration required.
1 Health Document filled in on berthing on special local form.
1 Copy Arrival Report on special local form.
1 Copy Ship's Record and Master's Report on special local form.

Pilotage: Two Somali Pilots available. Pilot boards at Outer Anchorage from tug "Saaxil" which has black hull, white upperworks, funnel markings: blue funnel with white star. Tug has VHF Channel 16. Pilot can also be contacted via Somali Shipping Agency on VHF Channel 16, call sign "Somship Berbera". Agents can usually only be contacted from 0900 – 1200 hrs. and 1600 – 1800 hrs.

Anchorage: Good anchorage obtained in Outer Anchorage shown on BA 3530. Somali Harbour Regulations forbid anchoring in such a way as to obscure leading and other lights.

Radio: Normal 72, 48 and 24 hour notice to Agents via Aden Radio. Berbera Radio (6OY) not heard.

Fresh Water: Only supplied alongside at Commercial Wharf. No water barge available and tug "Saaxil" unable to deliver water at Oil Berth or Anchorages.

Tugs: One tug "Saaxil", 1,100 b.h.p., fitted with VHF Channel 16. No tug lines, all ship's lines.

Gangway/Deck Watchmen: Two watchmen are compulsory under Somali Harbour Regulations. Ship has to provide food and accommodation. Charges for watchmen:

45 Somali shillings for 12 hours (daytime).
55 Somali shillings for 12 hours (night time).

Fridays 50% additional and 26th June 50% additional. 1st July and other public holidays 100% additional.

Customs Allowances: 200 cigarettes or 5 lb. tobacco or 0.5 lb. cigars. 1 bottle of spirits.

Airport: The landing ground shown adjacent to the Oil Tank Farm on BA Chart 3530 has now been taken over for extension of the tank farm and is no longer in use.

A new military airfield is situated 2 miles S.W. by W. from the old landing ground.

All commercial flights are from Hargeisa, 160 km. S.W. of Berbera with 3 flights weekly to Mogadiscio.

Time: GMT plus 3 hours all year round.

Agency: Somali Shipping Agency. Tel: Berbera 142. Cables: Somship Berbera. No telex facilities available and all cables have to be sent to Somali Shipping Agency, Mogadiscio, for transmission out of Somalia.

Somali Shipping are the only Agency allowed in Berbera, being a Government Agency.

Berthing: Oil Berth: (See "Plan Book"),

The submerged pipe-line shown on BA. 3530 was replaced by pipe-lines fitted on a steel jetty built in 1975. The jetty consists of a pier carrying oil pipe-lines to a platform which has 2 chicksan loading arms at its seaward end. The pier is in a poor state of repair and both chicksan arms are in bad condition and no longer usable. Oil is discharged via a 6 in. floating pipe-line connected to the Eastern side of the platform. Maximum allowed discharge pressure is 3 kg./sq.cm. but in practice the discharge pressure was found to be about 2.5 kg./sq.cm. The white conical buoy formerly marking the end of the submerged pipe-line has been removed. Unlit white painted mooring buoys have been laid in positions A, B, C, D, E and F as shown on the Plan. The 2 mooring buoys G and H laid either side of the white conical buoy are still in use. At the time of this vessel's call Buoy B was lying on its side almost awash. Vessel berthed stern up to the berth with both anchors down, 6 shackles on the port and 5 on the starboard. The original tie-up, to Pilot's instructions, was 2 lines each from aft to Buoys F, G and H. During the vessel's first day on the berth the effects of the strong S.W.'ly "Kharif" parted one wire to Buoy F and caused ship to lie down from the wind causing the 2 lines to Buoy G to foul the platform, chafe and eventually part. Vessel resecured to Master's satisfaction using ship's lifeboat and crew as follows:

2 lines from port side after-end main deck to Buoy D.
3 lines from port quarter to Buoy F.
3 lines from starboard quarter to Buoy E.

2 lines from starboard quarter to Buoy H to hold vessel in position during calms between "Kharifs". Swell conditions causing a continual tugging motion on all lines, renders the use of wires, even when fitted with tails, inadvisable. Vessel securely moored for remainder of discharge without further problems. Following discussions with the Senior Pilot for Somalia, travelling as passenger for 10 days from Mogadiscio. I am advised that he is to try and carry out the following changes to the berth to provide for safer moorings and discharge:

Buoy F to be moved approximately 200 ft. South by West.

Buoy B to be raised and brought back into service.

Vessels to then berth head into "Kharif" on heading approximately 230° (true) with both anchors out to 6 shackles on each, spread approximately 60°. 2 lines from starboard quarter to Buoy C. 2 lines from port quarter to Buoy A. 2 lines from aft to Buoy B.

If required, dependent on length of vessel, lines from port and starboard bows to Buoys E and relaid Buoy F.

Ships would then discharge from midships manifolds via floating hose approximately 150 m. off platform.

Deeper water than shown on the chart is reported to the S.W. of Buoy G but vessel was unable to carry out soundings with tug "Saaxil" before sailing. The Senior Pilot intends to carry out a survey in this area.

Additional Moorings: Four unlit mooring buoys have been laid in the Inner Anchorage in the positions shown (see "Plan Book").

Fuel: None available.
Repairs: Minor repairs can be carried out but nothing that could not be carried out by ship's staff.
Weather: During the ship's stay at Berbera the "Kharif" blew as follows:
0000 hrs., S.W., Force 3.
0400 hrs., S.W. by S., Force 6.
0800 hrs., S.W., Force 6 to 8.
1200 hrs., S.W., Force 5.
1600 hrs., S.W. by S., Force 3.
2000 hrs., Calm.

SHIPMASTER'S REPORT: June 1983.
Restrictions: All navigational lights are extinguished.
Pilotage: Only during daytime. Departure at night can be discussed with the Pilot.
Radio/VHF: Coastal radio station is out of order and will not be repaired. No VHF port radio station but sometimes Pilot or Agent will call using VHF from vessel in port.
Medical: Cholera and yellow fever vaccinations are inspected on arrival.
Tankers: Max. draft for tankers is 35 ft. and berthing will be effected with 2 anchors forward and 6 ropes to the mooring buoys, i.e. 2 stern ropes and 1 breast rope on each side. Distance from stern to jetty about 20 m. - stern discharge. Tankers up to 24 ft. – 25 ft. draft can berth between the buoys and use their manifold. In both cases a 6 in. shore hose is hauled up to the ship's connection, max. back pressure allowed is 3 bar and discharge rate of white products about 250 cu.m./hour. After each grade, water has to be pumped to clear the shoreline. Position of oil jetty Lat. 10° 26.18′ N., Long. 45° 00.8′ E., and a steel construction framework pier runs from this position in direction 146° to the shore. Loading arms at pier are in state of deterioration. When berthing, sounding by hand is advisable and have tidal heights available.

AUTHORITY: Somali Ports Authority, Berbera.

CHISIMAIO (Kismayu): 00.22 S. 42.34 E.

DOCUMENTS:
6 Lists of Crew.
2 Stores Lists.
2 Lists of articles owned by Crew, i.e., tobacco, wine/spirits, camera, wrist-watch, radios, binoculars, firearms/swords, etc.
1 Cargo Manifest (must be made out in accordance with original B/L issued. In the column "Consignees" the name of the party to be notified must be mentioned complete with full postal address. Should specify weight in kilos and measurement in cu.m.). 6 copies to be sent in advance unfreighted; 2 copies to be sent in advance (freighted). 2 copies to be sent by ship's box.
1 copy non-negotiable B/L for each B/L issued.
2 Transit Cargo (total number of packages and total weight for each destination).
6 Lists of Passengers to be Disembarked.
2 Lists of Passengers in Transit.
1 Health Document will be prepared on the arrival of the vessel in port, on special local form.

PILOTAGE: Compulsory for vessels over 200 n.r.t. Vessel picks up Pilot at approximate position Lat. 0° 20′ S., Long. 42° 34′ E., 2 miles S.E. of Fairway Buoy.
ANCHORAGES: In the port basin, from 27 ft. to 30 ft. deep, excellent holding ground.
RESTRICTIONS: Entrance channel about 200 m. wide, marked by buoys. Entrance effected during daylight hours only. Port closed for vessels from 1800 hrs. to 0600 hrs.
MAX. SIZE: Port consists of 2 L-shaped quays, one 340 m. length, the other 280 m. Max. draft 28 ft. at lowest low tide.
HEALTH: Pratique granted after Port Authorities, including doctor, board vessel. Any suspected contagious illness aboard to be reported immediately to the doctor on arrival. Vessels calling from other Somali ports subject to same procedure.
RADIO: No local coastal radio operating at present. Cables to Agent could be sent through normal postal R/T and W/T services.
TUGS: Two tugs of 800 h.p. each are available to assist ships in berthing and unberthing. Ship's lines used.
BERTHING: No specific requirement to berth in the port. Vessels entering port basin after 1745 hrs. will berth next day at 0630 hrs. Vessel must sail before 1730 hrs. otherwise sailing will be postponed to next day at 0630 hrs.
STEVEDORES: Vessel must give accurate ETA at least 24 hours in advance to enable Agent order necessary gangs.

No shore facilities, all cargo to be loaded and unloaded with ship's gear.

Working Hours: Normally 0700 – 1400 hrs. but loading to and discharging from vessels is performed day and night.
MEDICAL: Hospital facilities available, but specialised treatment and surgery is not. Yellow fever and cholera vaccination certificates inspected on arrival.
FRESH WATER: Available at wharf through hoses, rate 15/16 t.p.h.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Gangway watchmen service carried out by the Customs Police. Food on vessel's account; ships are also supplied with local watchmen through Agent.
OPENING/CLOSING HATCHES: Normally carried out by stevedores with the help of the crew. Vessel's crew may, if required by the vessel, do so. Crew may close the hatches prior to sailing.
CUSTOMS ALLOWANCES: 200 cigarettes, 2 packets of cigars and 5 bottles of wine. Cigarettes and spirits trafficking alongside and between vessels and shore strictly prohibited.
IDENTIFICATION CARDS: Crew to carry passport or Seaman's Book whilst ashore.
CONSULS: Italian Consul only.
REPAIRS: No facilities available.
REPATRIATION: Air communication via Mogadiscio.
AIRPORT: About 6 km. N.W. of the port.
TIME: GMT plus 3 hours all year round.
HOLIDAYS: See "Mogadiscio".
TELEPHONES: No possibility for placing telephones on board.
GENERAL: Vessels should not dispose any waste into harbour or on to quays, lower lifeboats or use radio station without prior permission.
SHORE LEAVE: Permitted.
REGULATIONS: Banana and livestock vessels are given priority.
DEVELOPMENTS: Facilities to be improved to enable port to handle liquids, livestock and general cargo.
AUTHORITY: Somali Ports Authority, Chisimaio.

MOGADISCIO: 02.02 N. 45.20 E. **(See Plan Book)**

DOCUMENTS:
2 Lists of Crew.
2 Stores Lists.
2 Lists or Declarations of Crew's Baggage, i.e. tobacco, wine/spirits, camera, wrist-watch, radio, binoculars, firearms/swords, etc. Vessels calling from other Somali ports subject same procedure.

Cargo Manifest (must be made out in accordance with original B/L issued. In the column "Consignees" the name of the party to be notified must be mentioned complete with full postal address. Should specify weight in kilos and measurement in cubic metres). 6 copies to be sent in advance unfreighted; 2 copies to be sent in advance freighted and 2 copies to be sent by ship's box.

2 Lists Transit Cargo (total number of packages and total weight for each destination).
6 Lists of Passengers to be Disembarked.
2 Lists of Passengers in Transit.
1 Health Document will be prepared on the arrival of the vessel in port, on special local form.

PILOTAGE: Compulsory for vessels over 200 n.r.t. Pilot joins vessel at anchorage about 0.5 miles offshore. Pilot can be requested by International Code signals or through VHF using Channels 12, 14 or 16.
ANCHORAGES: About 0.5 miles offshore in depths up to 45 ft., in open roadstead. Because of occasional heavy swell maximum recommended draft 31 ft.
RESTRICTIONS: Berthing/unberthing of vessels is restricted to daylight hours. Max. draft permissible is 10 m. at general cargo berths and 12 m. at tanker berths.
HEALTH: Pratique granted after Port Authorities including doctor, board vessel. Any suspected contagious illness aboard to be reported immediately to the doctor on arrival. Vessels calling from other Somali ports, subject to same procedure.
RADIO: No local coastal radio operating at present. Cables to Agent could be sent through normal postal R/T and W/T services.
TUGS: Tugs join vessels at anchorage or as directed by the attending Pilot. Vessel's lines normally used. No extra charge for tug's lines.

Two tugs of 1,400 h.p. each available and 1 tug of 4,000 h.p. available for salvage and rescue operations.

BERTHING: Incoming vessels are assigned berths on a turn basis subject to operational requirements.

Harbour: Alongside deepwater port protected by 820 m. strong breakwater.

Berths: 5 berths. Berth lengths vary from 170 m. – 200 m. with depths alongside 8 m. – 12 m.

BULK CARGO FACILITIES: None.
STEVEDORES: Vessel to give accurate ETA at least 24 hours in advance to enable Agent order necessary gangs. No shore facilities, all cargo to be loaded and unloaded with ship's gear.

Working Hours: Normally 0700 hrs. – 1400 hrs., but loading to and discharging from vessels is performed day and night.

CRANES: Only ships' derricks are used. No portal cranes at quay but a number of mobile cranes are available for handling and stacking cargo with maximum lifting capacity of 50 tons. No floating cranes available.
MEDICAL: No advance notice for medical attention required. Hospital facilities available but specialised treatment and surgery is not. Yellow fever and cholera certificates inspected on arrival.
TANKERS: One berth available for tankers with a draft of 12 m.
DENSITY: Salt water at all times.
FRESH WATER: Available alongside through hoses at a rate of 15 – 20 t.p.h.
FUEL: Fuel oil only may be available, check with Agent.
FIRE PRECAUTIONS: Fire engines situated within easy reach of docks 24 hours per day. The tugboats are also equipped with fire fighting appliances.
CONSULS: Algeria, Belgium, Peoples' Republic of China, Egypt, France, Democratic Republic of Germany, Federal Republic of Germany, India, Iran, Iraq, Italy, Kenya, People's Democratic Republic of Korea, Kuwait, Libya, Netherlands, Nigeria, Pakistan, Qatar, Romania, Saudi Arabia, Sudan, Syria, U.A.E., U.K., U.S.A., U.S.S.R., People's Democratic Republic of Yemen, South Yemen, Yugoslavia.
REPAIRS: No facilities available.
DRY DOCK: None available.
GANGWAY/DECK WATCHMEN: Gangway watchmen services carried out by the Customs Police, food on vessel's account. Ships are also supplied with local watchmen through Agent.

OPENING/CLOSING HATCHES: Normally carried out by stevedores with the help of the crew. Vessel's crew may, if required by the vessel, do so. Crew may close the hatches prior to sailing.
CUSTOMS ALLOWANCES: 200 cigarettes, 2 packets of cigars and 5 bottles of wine. Cigarettes and spirits trafficking alongside and between vessels and shore strictly prohibited.
REPATRIATION: Facilities available.
AIRPORT: About 5 km. to the West.
TIME: GMT plus 3 hours all year round.
HOLIDAYS: Idul Fitr, (1st & 2nd Shawaal); Idul Adha, (9th & 10th Dilhija); Prophet Mohammed Birthday, (12th Rabiul Awal); International Labour Day, (1st May); Independence Day N. Region, (26th June); Independence & Union Day, (1st July); Revolution Festivals, (21st and 22nd October).
POLICE/AMBULANCE/FIRE: Police 28088; Ambulance 30000; Fire 85055.
TELEPHONES: Arrangement for placing telephones on board is not available.
IDENTIFICATION CARDS: Crew to carry passport or seaman's book whilst ashore.
SHORE LEAVE: Permitted.
GENERAL: Vessels should not dispose of any waste into harbour or on to quays, lower lifeboats, or use radio station without prior permission.
Tidal Range: 2.5 m.
Shipchandling: Available.
Major Exports: Fresh bananas, livestock, hides and skins and frankincense.
Imports: General cargo, crude oil, etc.
DELAYS: Nil, except when other ships are working alongside.
DEVELOPMENTS: Construction of 1 more berth with a depth of 10 m. is planned.

SHIPMASTER'S REPORT: June 1979.
Documents:
5 Crew Lists
1 Stores List
1 Crew Personal Effects Declaration
1 Cargo Manifest
1 List Passengers in Transit
1 Health Document (International Declaration of Health)
1 Vaccination List, Crew and Passengers
1 Form "A", Ship's Record and Master's Report
1 Arrival Report (Agency Form)
1 Application for Temporary Use of New Harbour
2 Cargo Plans for Discharging Cargo
6 Lists of Passengers to be Disembarked
Pilotage: Compulsory. Pilot boards about 0.75 miles from breakwater entrance. Ladder on lee side 6 ft. above water with manropes. Usually 1 Pilot, assistant or trainee, and one communications man. Pilots use VHF Channel 16.
Anchorage: Open roadstead about 0.5 – 0.75 miles off breakwater. Assigned anchorage is West of new breakwater light bearing 310°. Do not anchor West of a line drawn perpendicular to West end of breakwater. There is a submerged tanker pipe-line and buoys West of breakwater, unlit at night. There are occasionally small unlit coasters anchored in the anchorage. Depth, clearance and congestion make anchorage unsuitable in heavy weather. During S.W. monsoon, ship's head approximately 180° – 225° without circular swing.
Communications: Send ETAs through Radio Mombasa.
Clearance: Health, Customs, Immigration and Harbour Master board at anchorage. Hours are 0700 to 1600. Agent and Stevedore representative may be present. Seamen's books or I.D. cards are required for shore leave. Crew allowed ashore at anchorage 0730 to 1730 hrs. to comply with harbour curfew at 1800 hrs. Passengers not permitted ashore at anchorage. Curfew of 2400 hrs. exists at dock, and passengers permitted ashore after being recleared by Immigration. They were given a 1900 hrs. curfew.
Customs Allowances: 200 cigarettes, 0.5 lb. tobacco or cigars. Currency exchange strictly controlled at banks and legal hotels. Trafficking in any items strictly prohibited. Coffee, sugar and tea are considered bond items, but were not sealed.
Watchmen: Two by regulations; 1 on duty and 1 off duty. At anchorage, ship must provide sleeping area.
Medical: Smallpox, yellow fever and cholera vaccinations required.
Fresh Water: Fresh water can be made in port due to open status of harbour.
Time: GMT plus 3 hours.
Opening/Closing Hatches: Stevedores will open pontoon type hatches. Recommend modern mechanical or hydraulic hatches to be opened by crew.
Stevedores: Paid on a tonnage basis. Gangs usually given contract of approximately 100 tons bagged goods or equivalent. First shift 0700 to 1500 hrs.; second shift 1500 to 2200 hrs. No third shift, however, 2nd shift may be extended for a set amount of additional tonnage which usually finishes by 0100 hrs. Typical figures; bagged goods, 250 tons per hatch per day with single gangs. Doubling of gangs in hatch subject to warehouse congestion and shortage of transport. Overall quality with bagged goods was fair to good, and stevedores provided own sweepings and bag sewers. No cleaning gangs were hired by vessel, though said to be available.
Launch Service: Available at anchorage 0700 to 1730 hrs. One launch for all ships.
Harbour Development: A new deep water port has been constructed. There are wide aprons, new warehouses, and good rubber fenders. Strong bollards approximately every 75 ft. Plan of N.O. Chart 61240 or BA Chart 671 (both corrected by overlay) show harbour with good accuracy. The red light on end of new breakwater is extinguished and the lights listed as Occ. R. are F.R. The main light is NOT visible as given. It has sufficient brightness, but not sufficient height. It can be seen about 20 – 25 miles depending on draft.

There are three warehouses. Transport to clear warehouses is limited. The main quay formed by the new breakwater has three berths. There is a tanker berth at the East end, and it is not usable by cargo ships. When occupied, there is sufficient room left for one large and one coastal vessel to work general cargo. When empty, two large ships can work. There is an additional berth against the inner wall that can handle 1 cargo ship to about 500 ft. This berth is 'stern first' and is the banana dock. Fruit boats have priority and any ship there must be shifted out. On the main quay, unannounced shifts are likely depending on the tanker berth. There is 1 small livestock berth at the West end of the harbour for coaster size vessels only. The lighterage piers at the East end of the harbour appear to no longer be used, and no lighterage work was observed.

There is considerable surge caused by both the openness of the harbour and lack of protection from onshore winds. "4 & 2" tie-up is recommended and chafing gear advisable.
Tugs: One of 4,000 h.p. and 2 of 1,100 h.p. are available, tugs are new. For berthing, one short ship's line was used from vicinity quarter ship's length from bow and stern, necessitating the bringing of sufficient line from the mooring stations to these locations.
Approaches: Approaching from the South, there are strong cross currents, from last 24 hours out. Sets of over 1 m.p.h. have been experienced. Approach on a North-Easterly heading from seaward should provide the most clarity of landmarks and radar picture. At night, a white loom is visible, with a yellowish flame-off loom noted to the S.W. The harbour and first navigation lights to be sighted are in the North-Eastern half of the white loom. The town steps uphill sharply from the harbour, causing town lights to be visible well before the other navigation lights. Anchored ships may also obscure the lower lights. Harbour is well defined on 3 cm. radar at about 6 miles. Set drops off nearer to shore.

"Registration for port" is the time anchored. Pilots do not board ships to anchor. Pilots (port radio) are on VHF Channel 16. The transmitter is weak and range about 5 miles. When checking in, they will ask Name, Flag, Call Sign; F. & A. Draft; g.r.t. and n.r.t.; discharge tonnage and type. There is usually much repeating so earliest possible contact at slowest speed is advised so that this can be done with sufficient sea room. Only after completion will anchorage be "assigned".
Agency: SOMSHIP is government agency and services accordingly.

SHIPMASTER'S REPORT: March 1981.
Documents:
1 Declaration of Health (Local Form).
1 Set Vaccination Lists.
5 Crew Lists.
6 Landing Passenger Lists.
In-Transit Passenger Lists.
Ship's Record and Master's Report (Form A).
Arrival Report (NSL Form).
Application for Temporary Use of New Harbour (Local Form).
1 Set Cargo Manifests.
2 Sets Discharging Cargo Plans.
Stores List (Company Form).
Crew Declarations.

Notes: Application for use of Harbour Form contains highly objectional liability clause 4(c).

No mail or telex service, no Agency assistance.
Health: Radio Pratique not available.

SHIPMASTER'S REPORT: June 1981.
Documents:
2 Crew Lists.
2 Stores Lists.
2 Personal Effects Lists.
Cargo Manifest.
Copy Non-Negotiable Bill of Lading for each consignee.
2 Transit Cargo Lists.
2 Passenger Lists. "Nil" declaration required.
1 Health Document filled in on berthing on special local form.
2 Copies Declaration of Ship's Details and Cargo Carried for Port Harbour Master on special local form.
4 Copies Pilotage Declaration on special local form.
Pilotage: Pilots listen 0600 hrs. to 1200 hrs. on VHF Channels 16 and 12. At other times the pilot station is usually manned. Pilot boards from a large pilot cutter at the vessel's anchorage position. Pilot cutter has black hull, white upperworks with "Pilot" in black letters. Manropes are essential for use on the pilot ladder due to the normal heavy swell running.
Anchorage: Good anchorage in sandy bottom in 10 – 11 fathoms (approx.), 4 cables South of New Port Breakwater. Monsoon causes currents of up to 4 – 5 knots during S.W. monsoon. (Ref: Admiralty Publication, Africa Pilot Volume III, supplement No. 8, page 48).

The whole bottom area is foul due to cargo lost during time port was operated as a surf port. An anchor and cable is reported to lie close to the intersection of the 311° and 278.42° leading lines.

Somali Harbour Regulations forbid anchoring in such a position as to obscure leading and other lights.
Health: Local doctors available.
Radio: Normal 72, 48 and 24 hour notice to Agents via Aden or Mombasa Radio. Mogadiscio Radio not heard during vessel's stay in Mogadiscio.
Fresh Water: Available from Berth Nos. 1, 2, 3, 4 and 5 at approximately 20 t.p.h.
Stevedores: Rigging of derricks and opening/closing hatches are the responsibility of ship's crew.
Gangway/Deck Watchmen: Two watchmen per vessel. Ship has to provide accommodation and food.
Customs Allowances: 200 cigarettes, or 5 lb. tobacco or 0.5 lb. cigars. Spirits 1 bottle. Bond sealed on arrival but Customs very good and will come down to give issue whenever required.

Airport: Regular international flights from airport situated 8 km. from port. No problems with repatriation. Crew members joining are issued with entry visas at Mogadiscio Airport providing Agents are informed in sufficient time. Mogadiscio is the only international airport of entry. There are local flights approximately 3 times a week to Kisimayu and Berbera.

Time: GMT plus 3 hours all year round.

Berths: Ras Sif Oil Terminal, Lat. 2° 01.05′ N., Long. 45° 20.05′ E.

This is a sea berth 1 cable S.W. of Ras Sif. (See Plan Book). During the S.W. monsoon, vessel secures with both anchors down on a heading approximately 210° (true) about 1 cable offshore. On this vessel's call 10 shackles were put out on each cable position "A" shown on plan. On vessel's approach to the berth no tugs were available for assisting in berthing as fuel for tugs had run out and our vessel had the new supplies on board. Three attempts were made to secure at the Discharge Berth. Final position was that shown in position "A". In this position vessel was heading 185° (true), 10 shackles out on each cable, 3 ship's lines to shore and 2 shore lines to ship. The vessel at this time rode to the wind at 180° – 185° and did not take up a heading into the S.W. monsoon at any time. The effects of the Somali current during vessel's stay was negligible at the berth. The normal berth off Ras Sif is that shown in position "B". I consider this position dangerous at this time of the year as the wind being mainly Southwesterly swings the vessel's stern up towards the shore, far closer than in position "A".

Lines: 2×4 in. floating hoses provided for connection to stern discharge manifold from red painted structure close South of the B & W truncated pyramid on Ras Sif. Maximum discharge pressure 3 kg./sq.cm. (approx. 150 t.p.h.). Height of tanks 24 m., distance to tanks 350 m. 1×6 in. line is available for midships manifold but this is only suitable for small ships. Shore requires water plug prior to commencement of discharge, on completion of each grade and on completion of final grade. Shore staff connect pipe-lines.

Maximum draft on berth 40 ft.

On the evening of 12th June the S.W. monsoon blew very strongly accompanied by a very heavy 15 ft. – 20 ft. swell. Vessel being light was moving a great deal and was eventually forced to carry out an emergency departure after jettisoning pipe-lines following a water plug through and cutting all ship's lines. This berth is wide open to the effect of the S.W. monsoon and when the monsoon is blowing strongly the weather conditions combined with the very poor unmooring facilities render the berth untenable. For these reasons this berth was declared by the Master to not be a "Safe Berth" within the meaning of the relevant Charter Party.

Mogadiscio New Port: Following Ras Sif being declared an unsafe berth arrangements were made for all floating hoses in possession of the Oil Terminal to be led via storm drains to Berth 5 following suggestions made by the ship. Vessels berthed stern up to Berth 4 or Berth 5 and cargo discharged via stern manifold to Ras Sif Oil Terminal.

Berth 5: Maximum draft 27 ft. Berth is well fendered with old tyres. Due to length of berth vessel berthed with starboard anchor down, 6 shackles on same, as maximum vessel length on berth 180 m. This berth is at present being extended by a further 200 m. Maximum discharge pressure 3 kg./sq.cm., maximum discharge rate 150 t.p.h. for products.

Berths 1, 2, 3: Maximum draft 32 ft. All cargo discharged by ship's gear. On Berth 3 there is one 8 in. pipe-line to the refinery 10 miles South of Mogadiscio for crude oil only. Booster pumps for this line are provided at the Ras Sif Oil Terminal.

Berth 4: Drafts alongside from 27 ft. – 32 ft. and is provided with a bridge for landing of livestock although to date this bridge has not been used. This berth is normally used by fishing vessels and smaller ships as a lay-by berth.

Tugs: Two tugs available. "Xamar 1" and "Xamar 2". Both fitted with VHF, 1,500 b.p.h. No tug lines. Ship's lines used for all operations.

Bunkers: Not available.

Repairs: Not available.

Somali Port Regulations: Notice to all ships, Mogadisho Port. Abstracts from Somali Ports Authority Regulation No. 67 of 15-4-1978.

1. All ships must keep their VHF open and standby when approaching the Port and while remaining berthed alongside, on Channel 16.
2. All ships having on board persons suffering from contagious diseases must hoist the quarantine flag when anchoring and keep it hoisted until inspected and instructions given by the Port Health Officer.
3. While anchored in the roads, ships must keep clear from bearing directly obstructing leading lights and beacons on shore.
4. Ships having an N.R.T. exceeding 200 must engage harbour Pilots and tugs while berthing or unberthing at the deep water berths.
5. Ships are not allowed to throw any kind of refuse, dirt or oil spillage into the harbour waters.
6. Ships are not allowed to carry out engine repairs without permission from the Port Manager, while at berth.
7. Ships anchored in the roads or berthed alongside must keep the Somali National flag hoisted at a height clearly visible for a reasonable distance.
8. All ships lying alongside berths must engage the garbage service provided by the authorised garbage group of the harbour.
9. Oil tankers must have on board their own facilities for the retention of oil drainage and sludge, dirty ballast and tank washings.
10. It is prohibited to discharge oil, oily mixtures and any chemical residues at any distance less than 50 nautical miles from the shore line.
11. Officers of the Port Management are authorised to inspect the efficiency of facilities provided on board vessels for the retention of dirty substances, solid or liquid.
12. All ships at anchor or berthed alongside must take sufficient precautionary measures to fight fire outbreaks.
13. All ships berthed alongside must provide ratguards for their mooring lines.
14. Rigging of ship derricks and opening and closing of hatches are the responsibility of the ship's Master and crew.
15. Crew members of all vessels berthed alongside or anchored in the roads are not allowed to go ashore later than 2300 hrs.
16. Crew members going ashore and wishing to return to their ships are not allowed to enter the Port later than 2300 hrs.

Signed – Port Manager

AUTHORITY: Somali Ports Authority, P.O.Box 935, Mogadiscio, Somalia. *Tel:* 30081/3. *Telex:* 708. *Cables:* Somport, Mogadiscio.

NOTES

Please also advise Shipping Guides Ltd.

South Africa

GENERAL:

NOTICES: Following is an extract of British Notices to Mariners No. 1647(1979).

Routing of Laden Tankers off the coasts of South Africa (West):

Laden tankers in the Summer months should pass not less than 10 miles South of Alphard Banks (Lat. 35° 02′ S., Long. 20° 50′ E.) (See *Africa Pilot Vol. III)* and then keep 25 miles off the following points:

Cape Agulhas	(Lat. 34° 50′ S., Long. 20° 01′ E.).
Quoin Point	(Lat. 34° 47′ S., Long. 19° 39′ E.).
Cape Point	(Lat. 34° 21′ S., Long. 18° 30′ E.).
Slangkop Point	(Lat. 34° 09′ S., Long. 18° 19′ E.).
Cape Columbine	(Lat. 34° 50′ S., Long. 17° 51′ E.).

During the Winter, laden tankers should maintain the recommended distance offshore until the Winter Load Line Zone is reached and then keep as close to that line as possible. This will entail passing North of Alphard Banks and then about 12 miles off Quoin Point and Cape Point.

Vessels proceeding to the Replenishment Area (Lat. 33° 55′ S., Long. 18° 15′ E.). off Cape Town should maintain the above distances off shore until in a position where course can be safely altered to approach the Replenishment Area crossing the main traffic flow as nearly at right angles as possible.

Routing of Laden tankers off the coasts of South Africa (East):

Laden tankers in the summer months should pass 25 miles off the following points:

South Sand Bluff	(Lat. 31° 20′ S., Long. 29° 58′ E.).
Bashee River	(Lat. 32° 14′ S., Long. 28° 55′ E.).
Hood Point	(Lat. 33° 02′ S., Long. 27° 54′ E.).
Cape Recife	(Lat. 34° 02′ S., Long. 25° 42′ E.).

and then steer to pass 10 miles South of Alphard Banks (Lat. 35° 02′ S., Long. 20° 50′ E.).

During the Winter laden tankers should maintain the recommended distances off shore until the Winter Load Line Zone is reached and then keep as close to that line as is possible. Between Cape Recife and Cape Agulhas this will entail passing North of Alphard Banks. It is recommended to pass about 6 miles North of these banks.

CAPETOWN (Table Bay): 33.56 S. 18.26 E.

(See Plan Book)

PORT LIMITS: Westwards by a straight line between Green Point and Robben Island Lighthouses, and Northwards by a straight line from Robben Island Lighthouse East (true) to the Eastern shore of Table Bay, thence Southwards along high water mark, so as to include the foreshore to the Castle, thence back to Green Point Lighthouse.

DOCUMENTS:

Customs:
- *Form DA.1, Report Inwards/Outwards for Ships.
- *Form DA.3, Certificate of Clearance for Ships.
- *Form DA.4, Transire – for a destination in the R.S.A.
- *Form DA.5, List of Sealable Goods on board ship.
- Ship's Crew List (Customs Department) 6 Copies.

Post Office:
- *P1/27, Certificate of Departure of Vessel.
- P1/8, Post Office Certificate (Declaration).

Port Health:
- Maritime Declaration of Health.
- Crew List with last vaccination dates.
- Derat Certificate.

Port Authority:
- *T958, Report of Arrival.
- *T962, Departure/Shifting Notification.
- Ship's Manifest.
- *Completed by Agent.

Shipmaster's Report: March 1981.
- Declaration of Health (Form GES-22)
- Set Vaccination Lists. 1st port only; even with Radio Pratique.
- Derat/Derat Exemption (if boarded).
- 2 Crew Lists.
- 2 Intransit Passenger Lists.
- 4 Landing Passenger Lists (Form DI-35).
- Crew Sealable Goods (Form DA-5).
- Crew Declarations (Company Form).
- Inventory of Slop Chest (Company Form).
- Register and Set of Ship's Certificates (used by Agent for clearing and returned).
- Arrival/Departure Record (Form BI-55) (Disembarking passengers only).
- Livestock Form (if nil, write on top of DA-5).
- Ship's Mail Declaration (Form P1/149) (if nil, write on top of DA-5; if mail aboard, cable Postmaster details free message, and forms will be presented by Agent at boarding).
- Certificate of Medical Officer, Master . . . (Form DI-67).
- Report of Arrival (Form T958) (to Pilot).
- Leaving Certificate (Form BI-86).

Notes: Fly "I" flag entering all ports; "B" if flammable cargo aboard. Include ship's entertainment TVs, radios, etc., cameras and walkie-talkies on DA-5. Although part of DA-5, addition of tobacco/spirits on Crew Declarations (Company Form) will allow same form to be used in Mozambique and Somalia.

PILOTAGE: Compulsory. One hour advance notice to be given to the Port Captain through VHF radio, call sign Port Operations, on Channel 16, working Channel 12. Pilot boat fitted with multi-channel VHF. Motor pilot boat, black hull, white housing also 2 pilot vessels with black hull, brown upperworks, gold and green funnel. Pilot taken aboard at port entrance.

RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed. Oil tankers and ships carrying explosives or dangerous goods restricted to daylight hours.

MAX. SIZE: Passenger and dry cargo vessels: max. length up to 1,000 ft. overall; draft 36 ft. Tankers: (for discharging) max. length 820 ft. overall; draft 43 ft. (tidal).

Tankers/ore carriers in ballast up to 350 m. in length, 350,000 d.w.t. and draft 10.7 m. may berth for bunkers, repairs, etc.

HEALTH: Pratique granted at first port of entry in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If Radio Pratique not granted "Q" flag to be flown until ship has been cleared. Valid certificates must be held for yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.

RADIO: Capetown Radio, call sign ZSC. VHF and R/T 2182.

TUGS: Join vessel approximately 0.25 miles from harbour entrance. Tug's wires used at no extra charge.

Stand-by tugs compulsory for tankers discharging crude.

CRANES: *Floating Cranes:* Lifts 60 tons at 24.4 m. radius and another floating crane lifts 200 tons at 21.5 m.

BULK HANDLING FACILITIES: *Grain Elevator:* 1 terminal grain elevator of 27,220 tons storage capacity, with loading conveyors to the Collier Jetty. Continuous intake capacity of elevator, 750 t.p.h.; shipping capacity, 1,000 t.p.h. Other bulk cargoes handled at general cargo berth with shore crane. No LPG facilities.

MEDICAL: Unrestricted hospital facilities. Medical assistance must be arranged through Agents.

DENSITY: 1025.

FRESH WATER: Delivery by hose ex-wharf hydrants. 50 t.p.h.

BERTHING: †Chart datum is that referred to in the South African Tide Tables published by The Hydrographer of South African Navy.

Wharfage	*Length* (m.)	*Depth †Chart Datum* (m.)	*Cranes (electric)* *No.*	*Cranes (electric)* *Lifting capacity* (tons)
Victoria Basin				
No. 1 Jetty, East Side	177.7	5.28	—	
West Side	162.3	5.48	—	
No. 2 Jetty, West Side	195.1	9.98	7	4
East Side	195.1	9.08		
Collier Jetty, North Side	208.5	3.98	—	
South Side	212.4	6.28		
South Arm (Berth Nos. 1*, 2*, 3, 4)	600.5	8.18	1 11	15 4
Cranes operate at Berths 3 and 4 only.				
Elbow	161.5	9.28	8	4
No. 4 Quay	29.0 18.3	2.98	—	
No. 5 Quay	87.8	4.28	—	
No. 6 Quay*	178.4	6.68	—	
No. 7 Quay*	192.0	9.88	—	
East Pier*	239.6	9.48	—	
Cross Berth	137.2	4.38	—	
Fish Quay	91.1	2.38	—	
Alfred Basin				
West Quay	225.9	5.18	1	4
North Quay	134.1	6.08	1	4
East Quay, No. 1 Berth	100.6	3.88	—	
East Quay, No. 2 Berth	70.7	4.08	—	
East Quay, No. 3 Berth	64.0	3.98	—	
East Quay, No. 4 Berth	54.9 39.6	3.98	—	
South Quay	45.7	4.28	—	
Duncan Dock				
Berth "A"	274.3	10.88	8 1	4 15
Berth "B"	243.8	11.18	24	4
Berth "C"	213.4	10.28		
Berth "D"	185.0	9.08		
Berth "E"	225.6	10.58	3 43	15 4
Berth "F"	249.9	8.98		
Berth "G"	249.9	11.18		
Berth "H"	318.5	11.98		
Berth "J"	249.9	10.18		
Berth "K"	249.9	10.28		
Berth "L"	246.3	10.38		
Berth "M", N.W. Side	217.9 43.9 31.5	4.58 4.58 6.08	2	15
Repair Pier, N.E. Side	326.0 100.0	— 9.78		
Repair Pier, S.W. Side	31.5 426.0	6.08 11.18		
Graving Dock Landing	274.3	10.78	—	
Wharf:				
N.E. Side	274.3	13.58	—	
S.W. Side	274.3	11.98	—	
	274.3	13.88	—	
No. 1 Eastern Mole	259.1	12.68	—	
No. 2 Eastern Mole	259.1	13.68	—	

Ben Schoeman Dock:

Berth	Length (m.)	Min. Depth at †Chart Datum (m.)	Cranes No.	Cranes Capacity
Coaster Berths				
Berth 500	201.4	10.68	—	—
Berth 501	183.0	10.68	1	30 tons
Berth 502	183.0	10.68		
Deep Sea Berth				
Berth 600	220.0	10.68	—	—
Berth 601	236.0	12.78	—	—
Berth 602	305.0	13.98	4	40 tons
Berth 603	305.0	13.98		
Berth 604	305.0	13.98		

'Closed for commercial cargo working.

Roll-on/Roll-off Facilities: Available at Berths 500 and 501, as well as at "L" and "M" Berths. 2 berths ("A" and "J") for ships with slew ramps only.

Cold Store: Blue Continent Cold Storage Co. (Pty) Ltd. Tel: 51-3154. Telex: 577355 and 577232. Operates cold store with capacity of 17,000 tonnes at −30°C.

TANKERS: Tanker Basin to accommodate two tankers simultaneously, one of max. overall length of 256.0 m. and one of 204.2 m. overall length. Max. permissible draft 13.1 m., subject to a minimum of 0.9 m. on tide gauge.

Slop tank: Capacity 1,500 tons, available for oily ballast from tankers back loading white oil.

FUEL: 48 hours' notice required. All grades of fuel available.

GANGWAY/DECK WATCHMEN: Ship's Agent makes necessary arrangements.

OPENING/CLOSING HATCHES: Mechanical hatches opened/closed by crew. Other types of hatches by stevedores.

CERTIFICATES:
- Safety Certificates in respect of construction and gear.
- Radio Certificate.
- Load Line Certificate.
- Derat Certificate.
- Certificate of Competent Officers (passenger ships only).

CUSTOMS ALLOWANCES: The Master, officers and other members of the crew who remain on the ship during its stay in port may each be allowed to retain in his possession the following quantities (to cover 4 days) of the undermentioned sealable goods:

	Tobacco in any form grammes	Potable spirits in any form litre	Wine litres	Beer or stout litres
The Master/Pilot	230	1	3	3
Officers (including pursers, surgeons, chief stewards, wireless operators and serangs)	175	1	3	3
Other members of the crew	115	nil	3	nil

Where the Master, officers or other members of the crew remain on board the ship for more than 4 days, the Controller of Customs and Excise may on request authorise the issue from under seal, for consumption on board, of the following further quantities per day:

	Tobacco in any form grammes	Potable spirits in any form millilitres	Wine litres	Beer or stout litres
The Master/Pilot	30	100	1	1
Officers (including pursers, surgeons, chief stewards, wireless operators and serangs)	25	100	1	1
Other members of the crew	15	nil	1	nil

CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection.

IDENTIFICATION CARDS: Not required.

SURVEYORS: Lloyd's, BV, N.V., N.K.K. and ABS.

CONSULS:

Argentina
Australia
Austria
Belgium
Bolivia
Brazil
Canada
Chile
Denmark
Finland
France
Germany F.R.
Greece
Israel
Italy
Japan
Monaco
Netherlands
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
Taiwan
United Kingdom
U.S.A.
Uruguay

REPAIRS: All types of repairs can be undertaken.

DRY DOCKS:

Sturrock Graving Dock: Situated at S.E. end of Duncan Dock:

Dimensions:		
	Overall docking length	360.0 m.
	Length on keel blocks (first to last keel block)	338.3 m.
	Length on bottom (dock floor)	350.4 m.
	Width at coping	47.5 m.
	Width at entrance top	45.1 m.
	Maximum width at bottom	38.4 m.
	Depth on entrance sill, HWOST	13.7 m.
	Depth on inner sill, HWOST	15.1 m.

A docking length of 369.6 m. can be obtained by placing the caisson in the emergency stop at the entrance.

The dock can be divided into 2 compartments of either 132.5 m. and 216.1 m. or 205.7 m., and 142.9 m. respectively.

1×50 ton and 1×10 ton electric crane on 7.6 m. gauge track, 2×5 ton electric cranes on 4.9 m. gauge track and 3×4 ton electric cranes on 4.9 m. gauge track are available.

The dock can be emptied in 4 hours.

A landing wharf 548.6 m. in length is provided on the port side of the graving dock to facilitate the dry-docking of ships.

A repair pier 457.5 m. in length is provided off "M" berth. 2×15 ton electric crane on 9.1 m. gauge track is available.

Robinson Graving Dock: Situated in Alfred Basin:

Dimensions:		
	Overall docking length	161.2 m.
	Length on keel blocks (first to last keel block)	142.6 m.
	Length on bottom	152.4 m.
	Width at coping	27.4 m.
	Width at entrance top	20.7 m.
	Maximum width at bottom	17.2 m.
	Depth on entrance sill, HWOST	7.9 m.

3×4 ton electric cranes on 4.1 m. gauge track and 1×15 ton electric crane, on 4.1 m. gauge track are available.

The dock can be emptied in 3 hours.

Floating Dock No. 2:

Dimensions:		
	Extreme length	62.8 m.
	Length on bottom	61.0 m.
	Length on keel blocks	58.2 m.
	Extreme width	19.2 m.
	Width at entrance	13.7 m.
	Height of keel blocks	1.2 m.
	Draft on keel blocks, HWOST	5.6 m.
	Lifting capacity	1,016 tons

A 4 ton electric crane is mounted on a side wall of the dock.

Syncrolift: Situated in Alfred Basin:

Dimensions:		
	Lifting capacity	1,750 tons
	Maximum length of vessel	61 m.
	Maximum width of vessel	15 m.

Slipways:

There are 4 boat slips for yachts and small craft.

REPATRIATION: All facilities available.

1. *Vessels Docking*
   - (a) Any personnel arriving to join a vessel at Capetown should possess a valid travel document and a brief letter of introduction. Entry Permits can be extended if the vessel is late in arriving.
   - (b) Application to spend time (longer than 48 hours) in South Africa prior to repatriation should be made to the local Immigration Authorities.
2. *Vessels Calling Off Port Limits*
   - (a) The same requirements apply as for 1(a) with the exception of personnel who have entered the country from a vessel calling off Port Limits.
   - (b) The following applies to all personnel disembarking from vessels calling off Port Limits.
     - (i) Repatriation must be made within 48 hours from time of signing off.
     - (ii) In order to comply with local Immigration Authorities the Agent requires the following details, for each individual, at least 72 hours before disembarkation:
       - *(a)* Full name and nationality.
       - *(b)* Rank and, if Technician, name of employers.
       - *(c)* Passport number, place and date of issue.
       - *(d)* Place and date of birth.
       - *(e)* Destination and class of travel.
       - *(f)* If air ticket held on board, full details of routing.
       - *(g)* Reasons for disembarkation.

In the case of personnel transferring from one company vessel to another, the same conditions apply except the maximum time permitted for such transfer is 78 hours. If they have not joined the vessel within this period, repatriation must be arranged forthwith.

There are no difficulties for any personnel disembarking for medical reasons.

AIRPORT: D.F. Malan Airport – 20 km. from harbour. Daily flights to Johannesburg connecting with overseas flights by regular airlines.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st January); Founder's Day (6th April); Good Friday; Family Day; Ascension Day (date varies); Republic Day (31st May); Kruger Day (10th October); Day of the Vow (16th December); Christmas Day (25th December); Day of Goodwill (26th December). Cargo is not worked on Christmas Day and New Year's Day.

POLICE/AMBULANCE/FIRE: Police, 438-3471; Ambulance, 51-5151; Fire, 438-3431 or 22-2222.

TELEPHONES: Telephones can be supplied at all berths. Arrange through Agents.

SHORE LEAVE: Allowed.

SHIP SUPPLY SERVICES:

Helicopter Service: Available for mail and small items of stores for vessels not wishing to enter harbour.

Launch Service: For vessels not wishing to enter harbour, Agent may arrange launch service for mail, stores, etc. In this case service only permissible in area North and West of position at least 5 miles due West of Robben Island.

Supplied by:

Court Helicopters (Pty) Ltd., P.O.Box 2546, Cape Town 8000.
Ocean Ferries (Pty) Ltd., P.O.Box 6426, Roggebaai 8012.
Sealink Ltd., P.O.Box 4962, Cape Town 8000.
Southern Offshore Supplies, P.O.Box 1339, Cape Town 8000.

Also see "Shipmaster's Report".

SHIPMASTER'S REPORT: Off limits launch and helicopter service.

Port, Immigration, Customs and Health Authorities have made it clear that this service is a privilege and not a right. It is therefore of the utmost importance that the regulations are strictly adhered to.

The Agent must apply to the Port Captain for permission to service the vessel and the following details must be submitted. Name of vessel, time and date of arrival, draft, where from, where to, stores required and other reasons for call.

Launch is only allowed to be alongside vessel for 1 hour maximum otherwise vessel will have to enter port limits and incur port dues.

If personnel embarking, Immigration Authorities require name of vessel, tonnage, whether ballast or loaded and names of persons embarking. If persons disembarking then full names, dates and places of birth, nationality, passport or discharge book number and expiry date, whether South African visa held and comprehensive reason for leaving vessel, arrangements made for departure from South Africa (usually 24/48 hours allowed), and flight number. This does not apply to medical cases. Guarantee from Agent accepting full responsibility and liability regarding maintenance and repatriation expenses. Persons disembarking must report immediately to Passport Control. Failure to report or leave South Africa on the booked flight is an offence and in addition to any fine or imprisonment the Owners will be refused any further off limits service for *any of their vessels.*

Port Health require application for Radio Pratique 48/24 hours before arrival. Customs require all bonded stores loaded to be signed for and ship's stamp applied. Stores or spares being landed must have prior notification to Agent and an accompanying letter giving full description and disposal instructions.

Agents require 168, 96, 48, 24, and 12 hours' notices followed by any amendment to ETA. Stores requirements should be sent at least 96 hours before arrival. Three copies of Crew List to be sent ashore with launch (or helicopter).

Services operate 24 hours per day and usual rendezvous position is 5 miles West of Green Point Lighthouse for launch (and 12 miles West for helicopter). Launch can carry up to 30 tons stores (and helicopter up to 2,000 kg.). Vessels should not anchor but provide a good lee and have derrick rigged. Contact should be made with the launch (or helicopter) 1 to 2 hours before arrival rendezvous point using Channel 16.

AUTHORITY: South African Transport Services, Paul Kruger Building, Private Bag X47, Johannesburg 2000, South Africa. *Tel:* 713–3305. *Telex:* 4–24205 S.A. *Contact:* Dr. E. L. Grove, Director-General.

Capetown: P.O.Box 4245, Capetown 8000. *Tel:* (021)–438 2405. *Telex: 57–26544 SA. Contact:* Port Manager.

AGENT: King & Sons (Pty.) Ltd., P.O.Box 220, Capetown, 8000. Tel: (021)–211830. Telex: 57–27417. Cables: Baronet, Capetown.

DURBAN (Port Natal): 29.53 S. 31.02 E.

(See Plan Book)

PORT LIMITS: The area of sea bounded by:

(1) to the North, a line drawn from the coast in position: Lat. 29° 48′ 42″ S., Long. 31° 02′ 32″ E. in a 090° (True) direction to position Lat. 29° 48′ 42″ S., Long. 31° 07′ 30″ E.;

(2) to the South, a line drawn from the coast in position; Lat. 29° 54′ 06″ S., Long. 31° 02′ 30″ E. in a 090° (True) direction to position Lat. 29° 54′ 06″ S., Long. 31° 07′ 30″ E.;

(3) to the East, a line joining the seaward positions in (1) and (2).

DOCUMENTS: See "Cape Town".

PILOTAGE: Compulsory. As much advance notice as possible to be given to Port Captain through VHF radio – Port Operation – calling Channel 16, working Channel 12. Call Pilot by Aldis lamp if necessary. Pilot boats fitted with multi-channel VHF.

Motor pilot boat – hull painted international orange, white housing. "Pilot-loods" painted in black on housing. Pilot taken aboard at Pilot Boarding Area situated approximately 2 miles N.N.E. of South breakwater light.

Vessels not to approach closer than 2 miles from entrance until contact has been made with pilot boat.

RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed. Oil tankers and ships carrying explosives or dangerous goods restricted to daytime hours. The depth of the inner and outer channels is 12.8 m. below chart datum.

Hazardous Cargoes: Details of all hazardous cargo for discharge or loading at Durban and hazardous cargo remaining on board during a vessel's stay, are to be made known to the authorities through the vessel's Agent, not less than 72 hours prior to vessel's arrival.

Information required: Commodity, packaging, weight and volume, IMO group and stowage on board.

Vessels having on board more than 10 tons of hazardous cargo, will require to maintain a fire watch manned by qualified shore firemen and in addition, have an emergency shore telephone on board.

MAX. SIZE: The draft permitted is 38 ft. (11.58 m.) The length of 800 ft. is exceeded with the Port Captain's approval.

Size of vessels permitted to enter during the hours of darkness and also to shift berth at night: Vessels not exceeding 200 m. in length and 26 m. in beam may be brought into port at night provided weather conditions are suitable. Maydon and Esplanade Channels may not be traversed in either direction at night by vessels whose length exceeds 182.89 m. Vessels whose beam exceeds 35 m. are brought into port only when weather conditions are suitable.

RADIO: Durban Radio – ZSD.

VHF: Durban Port Control office is fully equipped with VHF communications.

HEALTH: Pratique message to "Port Health" at port of entry. If Radio Pratique not granted "Q" flag to be flown until ship has been cleared. Valid certificates must be held for yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.

Shipmaster's Report: Valid Yellow Fever Certificate not required.

TUGS: 9 first-class tugs available. Join vessels in entrance channel. Tug's wires used at no extra charge.

Stand-by tugs compulsory for tankers discharging crude.

BERTHING:

Wharfage	*Length* (m.)	*Depth at Chart Datum*		*Cranes (electric)*	
		Max. (m.)	*Min.* (m.)	*No.*	*Lifting capacity* (tons)
Point and "T" Jetty					
A to C Berths	775	11.64	9.04	15 1 1	4 15 80
D to G Berths	1,032	9.04	6.94	16	4
L and M Berths	600	12.14	10.94	15 1	4 15
N Berth	262	12.14	12.14	6	4
O and P Berths	623	12.14	10.94	11 4 1	4 7.5 15
Q and R Berths	377	10.94	10.94	10	4
A Berth Extension (Tug Berth)	62	9.04	9.04	1	15
Repair Quay (Shop 17)	183	6.64	6.64	1	10
Tug Jetty at "R" Berth	344	6.00	6.00	—	—
Pier No. 1					
Berth 101	229	12.74	12.74	6	4
Berth 102	213	12.74	12.74	3 1 2	4 7.5 15
Berth 103	235	12.74	12.74	5	4
Berth 104	351	12.74	12.74	1 4 1	4 7.5 15
Berth 105	235	12.74	12.74	4 2	4 7.5
Berth 106	213	12.74	12.74	3 1 1	4 7.5 15
Berth 107 (Large Ro/Ro vessels)	238	12.74	12.74	3 2	4 7.5
Cross Berth					
Berths 108 and 109	545	12.74	12.74	1	40 (Container Wharf Crane)
Pier No. 2					
Berth 201 (Ro/Ro)	335	12.74	12.74	2×40-ton wharf container crane	
Berth 202 (Ro/Ro)	335	12.74	12.74		
Berth 203	305	12.74	12.74	5×40-ton wharf container cranes in use on this quay	
Berth 204	305	12.74	12.74		
Berth 205	305	12.74	12.74		
Bluff Berths					
Berth 1	148	9.04	9.04	—	
Berth 2	177	10.34	10.34	—	
Berth 3	180	9.04	9.04	—	
Berth 4	238	10.64	10.64	—	
Dolphins Berths— Island View					
Berth 1	236	12.74	12.74	—	
Berths 2 and 3 (167.5 m each)	335	10.64	10.64	—	
Berth 4	186	10.64	10.64	—	
Berths 5 and 6 (186 m. each)	372	10.94	10.94	—	
Berth 7	229	12.74	12.74	—	
Berth 8	229	12.74	12.74	—	
Berth 9	244	12.74	12.74	—	
Salisbury Island					
Berths 1 and 2 (213 m. each)	427	9.04	8.44	1	3
Harbour Craft Quay					
(Dredgers)	276	12.74	9.04		
(Launches)				(Launches also available for commercial use on application).	
Harbour Craft Quay					
(Launches)	103	6.04	6.04	—	
Maydon Wharf (Congella)					
Berth 1	152	9.84	9.84	—	
Berth 2	152	9.84	9.84	—	
Berth 3	152	9.84	9.84	—	
Berth 4	152	9.84	9.84	—	
Berth 5	201	9.84	9.84	—	
Berth 6	198	9.84	9.84	5	4
Berth 7	198	9.84	9.84	4	4
Berth 8	172	9.84	9.84	—	

Wharfage	Length (m.)	Depth at Chart Datum Max. (m.)	Depth at Chart Datum Min. (m.)	Cranes (electric) No.	Cranes (electric) Lifting capacity (tons)
Berth 9	180	9.84	9.84	10	4
Berth 10	226	9.84	9.84	3	7.5
Berth 11	191	10.64	9.84		
Berth 12	274	6.04	6.04	8	4
Berth 13	175	9.84	9.84	—	
Berth 14	175	9.84	9.84	—	
Berth 15	213	9.84	9.84	—	
Graving Dock Return Wall	79	11.24	6.04	1	15
Repair Quay	155	6.04	6.04	2	4
Fish Wharf and Jetty	441	6.04	6.04	—	
Ship-repair Jetty	413	8.44	8.44	1	10
Dept. ship-repair Jetty	300	6.10	6.10	1	15
Fish Wharf (Bayhead)	152	4.51	4.51	—	
Small Craft Harbour (R Berth)	255	6.0	3.7	—	

CRANES: *Floating Cranes:* 2, lifting capacities of 40 tons and 125/200 tons, respectively.

Mobile Cranes: Diesel-electric road cranes: 2×12.5 ton, 1×30 ton and 6×35 ton cranes.

BULK HANDLING FACILITIES: *Bluff Coaling Appliance:* Operators: S.A. Transport Services. 4 berths, BCA 1, 2, 3 and 4 equipped with electrically driven appliances for the loading of coal. 1 belt loader with capability of loading at the rate of 550 t.p.h. and 2 bucket transporters with an aggregate capacity of 1,100 t.p.h. are available. The overhead storage bins have a capacity of 9,220 tons, while concrete bins are provided for ground storage with a capacity of 58,630 tons of anthracite. All exports are brought in by rail trucks. Overall productivity 4,000 tons per 24 hours. There is no work between 1100 hrs. Saturday and 0700 hrs. Sunday.

Coal Anthracite Storage Facilities: Concrete ground storage bins of 18,290 tons capacity at Causeway Road.

Island View 3: Operators: Durban Bulk Shipping Co. (Pty) Ltd. Max. draft 10.64 m., max. length 167.5 m., max. reach 9.4 m., dolphin max. height 13.1 m. Storage capacity: 40,000 tons.

Although a variety of products are handled at this berth, the operators mainly import and export their own product, which is de-fatted germ meal pellets.

Load/discharge Rates in tons per hour:	*Load*	*Discharge*
De-fatted Germ Meal	380	160
Chrome Ore	550	200
Andalusite	550	—
Mono Calcium Phosphate	100	—
Agricultural Commodities	380	160

A tank farm is sited adjacent to the terminal silos with storage facilities for 6,500 tons of vegetable oils and liquid products.

New Pier 109 – Storage Silo – Soda Ash: Operators: St. Auffer. Imports of Soda Ash. Max. length 244 m., max. draft 12.74 m.

Vessels are discharged using 2 vacuum operated suckers to a storage facility of 32,000 tons at 300 t.p.h. or direct to rail trucks at 140 t.p.h.

Maydon Wharf 2 – Sugar Terminal: Operators: S.A. Sugar Association. Exports of bulk and bagged sugar. Max. draft. 9.84 m., max. reach 15 m., max. throw 15 m., max. height 14 m. Max. wharf length of continuous gantry: 131 m. Storage in 3 silos with 520,000 tons capacity.

Loading is facilitated over 2 appliances, but only one operated at a time with a rate of 750 t.p.h. 24 hour operation if required. Stowage Factor: 43.

Maydon Wharf 5 – Multi Product Installation: Operators: Rennies Bulk Terminals. Max. length 189 m., max. draft 9.84 m.

Discharge and loading of minerals, agricultural and processed products in bulk.

Storage capacity: Minerals.

3 covered sheds containing 14 segregated concrete bins – 80,000 tons. 2 concrete silos – 12,000 tons.

Storage capacity: Non-Minerals.

17 concrete silos – 4,540 cu.m. 3 star bins – 690 cu.m.

Loading Rates:

To ship: Agricultural – 400 t.p.h., minerals 700 t.p.h.

Ex-ship: Agricultural – 200 t.p.h., minerals – 200 t.p.h.

Hours of Operation: 24 hours per day, 7 days. Normal Monday – Friday 0600 – 1800 hrs. Balance at overtime rates.

Trimmer and Boom: Max. height of loading MSL +7.2 m., minimum depth of lowest bulkhead MSL + 1 m. Max. distance from quay 19 m. Minimum distance from quay 9.2 m. Max. throw 12 m. Rotation 360°.

Maydon Wharf 8 – Grain Terminal: Operators: S.A. Transport Services. Loading of bulk grain. Max. draft 9.84 m. Vessels have loaded up to 10.6 m. on a rising tide but the Master must take full responsibility and prior permission must be obtained from the Port Captain. Loading through 4 spouts. Storage capacity 34,560 tons (maize) and 15,000 tons (sun flower seed). Loading rate (maize) 1,290 t.p.h. Bagging rate 3,000 bags per day.

Hours of Operation: Ordinary time Monday – Friday 0600 – 1200 hrs., 1230 – 1800 hrs. Overtime: Monday – Friday 1800 – 0600 hrs. Saturday 0600 – 0600 hrs. Sundays and public holidays 0600 – 0600 hrs.

Max. length: Wharf 171.7 m. Gantry 133.56 m. between outermost shipping spouts. Max. beam with elevator spouts extended 27.43 m. Max. height from water level to top of coaming 14 m.

Average Stowage Factors	*Lower Hold*	*Tween Decks*
Conventional Vessels:		
Sorghum	49	51
Yellow Maize – Grade 1	46	47
Yellow Maize – Grade 2	47	48
Bulk Carriers:		
Sorghum	45.5	
Yellow Maize – Grade 1	46.5	
Yellow Maize – Grade 2	46.5	

Maydon Wharf 9 – Bulk Molasses: Operator: Pure Cane Molasses. Max. length 180 m., max. draft 9.84 m., storage capacity 42,000 tons, shipping rate 200 t.p.h. Piping and flanges available from operator. Shipping of Molasses in bulk.

Maydon Wharf 14 – Bulk Soda Ash Appliance: Operator: I.C.I. Max. draft 9.84 m., max. length 190 m., max. reach 17 m.

Discharge of bulk soda ash through 2 vacuum operated suckers simultaneously to shore storage facility of 22,000 tons. Hours of operation 24 hours – 7 days. Rate of discharge 120 t.p.h.. Max. 2,000 tons per 24 hours.

Maydon Wharf 15 – Bulk Manganese Ore Appliance: Operator: Associated Manganese. Max. draft 9.84 m., max. length 230 m., outreach 12 m. Hours of operation: 24 hours – 7 days.

Loading of bulk manganese ore over single boom conveyor. Appliance fed from 30,000 ton capacity open air storage facility, shipping rate 400 t.p.h.

CONTAINER HANDLING FACILITIES: A major container terminal comprising 5 deep sea berths (201-205) and 2 coaster berths (108-109) is equipped with 7×40 ton wharf container cranes at deep sea facility and 1×40 ton unit at Berth 108.

The entire complex covers some 102 hectares and provides very substantial stacking areas backed up by a large terminal building with computer control, workshop complex and a road/rail transfer terminal to handle unit trains conveying 100 TEUs. This rail terminal is served by 2 modern 35-ton container gantry cranes covering 3 rail tracks and 2 traffic lanes. The back up system operates on a combined trailer/straddle carrier system comprising 34×30 ton, 8-wheeled straddle carriers augmented by a substantial fleet of terminal haulers and trailers as well as a large cartage fleet operated by the Port Authority for the local delivery of containers.

A very modern stuffing and re-stuffing depot located on a 13 hectare site immediately adjacent to the harbour terminal is operated by private enterprise (Messrs. S.A. Cargo Depots). The depot is fully equipped with re-stuffing sheds and container handling equipment to cater for LCL traffic.

The container terminal operates a 24 hour day, 7 days a week service.

PRECOOLING FACILITIES: Precooling stores for the export of citrus fruit are available at "B", "L" and "M" berths point. The capacity of the precooling chambers is 9,000 shipping tons.

The following appliances are used:

2 electric haulers.

47×2 ton fork lift trucks.

10×5 ton low-lift platform trucks.

29×4 ton low-lift platform trucks.

10×3 ton fork lift trucks.

STEVEDORES: Stevedoring undertaken by private enterprise stevedores appointed by ship's Agent.

Port Working Hours:

The port is a 7 day, 24 hour port as far as berthing and pilotage are concerned. Cargo working hours are:

Monday – Friday (2 shifts)	0600 – 1400 hrs.
	1400 – 2200 hrs.
Sunday (1 shift)	0700 – 1500 hrs.

Saturday working (0600 – 1200 hrs.) only authorised when the port is congested. Saturday and Sunday working as overtime.

MEDICAL: Unrestricted hospital facilities. Medical assistance must be arranged through Agents.

TANKERS: *SBM:* An off-shore single buoy mooring, suitable for crude dischargers between 70,000 and 300,000 d.w.t., is situated in position 30° 00.5′ S., 30° 58.5′ E. A Mooring Master will board in position 2 miles Eastward of the SBM. A starboard derrick, capacity 10 tons should be ready and crew available to lift mooring equipment on board from launch. A good lee on the starboard side is desirable.

Mooring to the buoy is with 2 lines provided by the terminal but vessels are required to provide a rope messenger, available on the forecastle. The mooring operation is carried out by shore personnel, assisted when necessary by ship's crew.

Pipe-line manifold should be ready to connect two 16 in. discharge hoses ASA 150 flanges. Connection by terminal personnel. The hose connection team remain onboard throughout the discharger's stay at the SBM.

No bunkers, or water are available from the SBM. Vessels using the buoy and receiving water or stores ex-launch may only do so prior to berthing or after leaving the SBM and at a distance of more than 2 miles from the buoy.

Port Tanker Berths: There are 7 tanker berths for vessels of max. length 244 m., max. draft 12.3 m. at Island View.

Slop tank facilities with a capacity up to 4,000 tons are available. Requirements in excess of this volume should be made known to the vessel's Agents with as much prior notice as possible.

Crude oil discharge through 10 in. hoses, white oil 8 in. hoses and loading products through 8 in. hoses.

Bunkers and fresh water available ex-berth.

Chemical tankers up to 183 m. berthing at No. 1 Island View are permitted to berth during hours of darkness. Agent to advise Port Control in advance that SOLAS and Classification Certificates are valid.

2 tugs required for shifting and all tanks to be sealed.

DENSITY: 1025.

FRESH WATER: Delivery by hose ex-wharf hydrants. Rate of delivery 40 t.p.h.

FUEL: The following types of fuel are available as indicated:–

New Pier:	Fuel oil and diesel.
Island View:	Berths 1, 2, 3, 4, 9 – Fuel oil and diesel
Island View:	Berths 5, 6, 7, 8 – Fuel oil, diesel and gas oil.
Point:	Berths A to R – Fuel oil, diesel.

There is a self-propelled bunkering barge called the "Durban Servicer" with a capacity of 140 tonnes of gas oil, 650 tonnes fuel oil and 280 tonnes diesel.

OPENING/CLOSING HATCHES: Mechanical hatches opened/closed by crew. Other types of hatches by stevedores.

CERTIFICATES:

Safety Certificates in respect of construction and gear.
Radio Certificate.
Load-line Certificate.
Derat Certificate.
Certificate of competent officers (passenger ships only).

CUSTOMS ALLOWANCES: See "Capetown".

CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection. Under normal conditions vessels are obliged to use shore cranes.

IDENTIFICATION CARDS: Required, otherwise National Identity Cards, if available.

CONSULS:

Austria	Tel. 69512	Norway	Tel. 316155
Belgium	,, 62139	Panama	,, 329741
Denmark	,, 311612	Paraguay	,, 391750
Finland	,, 316155	Portugal	,, 318293
France	,, 62214	Sweden	,, 251655
Germany	,, 325677	Thailand	,, 311612
Greece	,, 352619	U.K.	,, 313131
Italy	,, 64107	U.S.A.	,, 324737
Netherlands	,, 321770		

REPAIRS: All types of repairs can be undertaken.

DRY DOCKS: *Prince Edward Graving Dock:*

Dimensions—	Overall docking length	352.044 m.
	Length on keel blocks	327.660 m.
	Length on bottom	352.044 m.
	Width at coping	42.215 m.
	Width at entrance top	33.528 m.
	Maximum width at bottom	33.528 m.
	Depth on entrance sill HWOST	12.497 m.
	Depth on inner sill HWOST	13.106 m.

A docking length of 364.44 m. can be obtained by placing the caisson in the emergency stop at the entrance.

The dock can be divided into 2 compartments:
Outer 206.906 m. and inner 138.684 m.

The dock can be emptied in 4 hours.

Dry Dock Cranes:

2×8 ton with 27.50 m. radius
1×10 ton with 27.40 m. radius
1×25 ton with 27.40 m. radius
1×5 ton with 15.20 m. radius
1×10 ton with 18.28 m. radius
1×50 ton with 27.40 m. radius

Floating Dock No. 3:

Dimensions—	Extreme length	106.680 m.
	Length on bottom	106.680 m.
	Length on keel blocks	104.546 m.
	Extreme width	26.822 m.
	Width at entrance	19.482 m.
	Height on keel blocks	1.219 m.
	Draft on keel blocks, HWOST	5.334 m.
	Lifting capacity	3,629 tons
	Crane	4 tons

SURVEYORS: All Classification Societies represented.

REPATRIATION: All facilities available. Also see "Capetown".

AIRPORT: Louis Botha Airport – 15 miles from harbour. Daily flights to Johannesburg connecting with overseas flights by regular airlines.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st January); Founder's Day (6th April), Good Friday; Family Day; Ascension Day (date varies); Republic Day (31st May); Kruger Day (10th October); Day of the Vow (16th December); Christmas Day (25th December); Day of Goodwill (26th December). Cargo is not worked on Christmas Day.

POLICE/AMBULANCE/FIRE: Police, 310-2714; Ambulance, 62333; Fire, 62333 or 4502222.

TELEPHONES: Telephones can be supplied at all berths. Arrange through Agents. Also see "Restrictions" – Hazardous cargoes.

GENERAL: A copy of the Regulations for the Republic of South Africa supplied gratis to Masters on arrival.

SERVICES: Tank-cleaning facilities, compass adjustments and repairs to all electronic gear can be undertaken.

SHORE LEAVE: Allowed.

SHIP SUPPLY SERVICE: Crew changes are permitted by helicopter or launch at Durban and can be arranged with prior permission from Immigration and Customs Authorities provided vessel has been granted Radio Pratique.

Helicopter Services: A single engine Sikorsky S62 helicopter is available for crew changes and supply services to vessels passing off Durban. The above helicopter is available for daylight service only, except in emergencies.

Normal Service: Within 15 nautical miles of Cooper Light.

Note: Normal Rendezvous area is 10 nautical miles off the coast. Bearing (160°T) from Cooper Light. (For service where more than one flight is required the ship MUST route through the 10 nautical miles rendezvous position).

Launch Service: A Company operates launches suitable for servicing vessels off port limits. Up to 20 tons of stores and/or provisions and a maximum of 14 passengers can be carried. The condition of transport is that same is performed solely at Owner's risk.

The costs involved are R100 per half hour or part thereof and nominal charges are raised for the use of the launch's 1.5 ton hydraulic crane and steel cages to carry stores.

Communication can be established with the launch 1 hour prior to the ship's arrival at the Rendezvous position, on either VHF Channel 16 or 2182 kHz. The normal Rendezvous is five miles East of the Durban Harbour breakwater, but this can be easily varied.

The following two private companies have small craft licensed at this port to serve vessels off limits:

1. Messrs. Offshore and Ships Supplies (Pty) Ltd., P.O.Box 29139, Maydon Wharf 4057.
2. Messrs. Southern Offshore Supplies (Pty) Ltd., P.O.Box 38011, Point 4069.

Helicopter service provided by: Helicopter Services (Pty) Limited., P.O. Louis Botha Airport, Durban 4029. Tel: 426101/426192. Telex: 564246 SA.

SHIPMASTER'S REPORT: September 1980.

Pilotage: Pilot ladders should be provided with manropes, uncovered manila, not less than 32 mm. diameter and without knots at the end.

Container Handling Facilities: The terminal has been completed. General cargo vessels with 10 containers or more have to handle these through the container terminal and shift berth later for handling of general cargo.

Bunkers: On Maydon Wharf no bunker facilities, bunkers to be taken by barge, but only one barge available. Sometimes vessels have to shift to bunker pier for bunkering.

SHIPMASTER'S REPORT: June 1979 (updated February 1982).

Approaches: Decca Chain 10C, can be erratic, especially at night. 'Bluff shows up at 48 miles on radar. Cooper Point D/F continuous.

Pratique: Send message to "Porthealth" Durban 36 hours before arrival. If no complications free Pratique given quickly from Durban Radio.

Anchorage: Satisfactory if good weather, within about 4 miles N.E. of breakwaters, however if Southerly winds and swell build up it can be dangerous and it is often best to lie off.

Pilots: Send message to 'Port Captain Durban' 24 hours before arrival; ship's particulars, type, cargo, length, draft and Agent's name. Contact Durban Harbour Radio at least 1 hour before arrival. Pilot boards from large black fast cutter, nearly always on vessel's starboard side (landward side).

Must have fixed ladder with manropes, if vessel has large freeboard gangway required at half height. Pilots dislike hoists.

Entry: Due to swell and cross currents around breakwater vessel has to be "driven" through breakwater entrance which requires full harbour speeds and sometimes more if heavy swell conditions, once well inside breakwaters speed is reduced.

VHF: Durban Harbour Radio and Pilots generally work Channel 12 but numerous other Channels available.

For public correspondence use Durban Radio which usually works Channel 26, but very busy in the morning.

Tugs: 9 large powerful firefighting tugs are on station. Tugs are all diesel powered and comprise Schottel, Z-Peller and Voith propulsion systems with bollard pull varying from 23 tons to 40 tons. Two tugs fitted with extendable hydraulic fire fighting monitors. Very manoeuvrable and excellent stopping power. For most ships two tugs used inward and one outward, tug's wires used. A 20,000 h.p. ocean going tug is usually on station at Durban.

Tugs join vessels just inside breakwaters. For large vessels will accompany vessel on either side from anchorage area and then connect up when swell slackens inside.

Berth: For bunkers, Island View, Starboard side to. Swing in turning basin. For oil transfer of any kind use gantry 'Sheepbridge' with flexible pipes. Shock absorbing fenders. For vessels of 207 m. in length at No. 7, 8 and 9 Berths the straight section of the ship's side lay along the quay. FW available from quay.

Lines: Three head and stern lines, one of which is a shore line from mooring posts ashore. Two backsprings either end to the jetty. Mooring boat used.

Bunkers: Meter pump. Stop on meter at quantity stemmed. Rate up to 200 t.p.h.

Stores: Have to be taken from roadway down to the jetty. Generally local labour has to assist.

General: D/F calibration can be easily undertaken off Cooper Light, good continuous beacon from red tower near water tower, generally little traffic.

Customs/Immigration: Papers as per 'Guide to Port Entry'. Immigration require 'I' flag flown until Immigration clearance granted.

AUTHORITY: South African Transport Services, Paul Kruger Building, Private Bag X47, Johannesburg 2000, South Africa. *Tel:* 713-3305. *Telex:* 4-24205 SA. *Contact:* Dr. E. L. Grove, Director-General.

South African Transport Services, P.O.Box 38022, Point 4069, Durban, South Africa. *Tel:* 310-2434. *Contact:* Captain I. W. Edwards, Port Captain.

AGENT: King & Sons (Pty.) Ltd., P.O.Box 1, Durban 4000. Tel: (031)-319851. Telex: 6-22446. Cables: Baronet, Durban.

EAST LONDON: 33.02 S. 27.55 E. (See Plan Book)

PORT LIMITS: These are defined in the "Regulations for the Harbours of the Republic of South Africa" as follows:

The area of the sea bounded by a line drawn from the Nahoon Point in position 32° 59′ 50″ S. 27° 57′ 07.5″ E. in a 114° direction for 1,852 m. to a position 33° 00′ 13.9″ S. 27° 58′ 12.8″ E. thence in a 216.5° direction to a position 33° 03′ 14.46″ S. 27° 55′ 37.18″ E. and thence in a position 295° direction to the coast in position 33° 02′ 36″ S. 27° 53′ 57″ E. (All bearings are true.)

For Charter Party purposes: An "arrived ship" is when she enters the port limits.

For Harbour Revenue purposes, a vessel "arrives" when it passes into the harbour proper or upon first contact at anchorage whilst waiting for berth.

DOCUMENTS: See "Cape town".

Immigration: Produce their own forms which are:

(a) Arrival and Departure forms.
(b) Prohibition Notice – which states all crew must sail with vessel unless officially signed off through Immigration.
(c) Medical Certificate.
(d) Advice letter from last South African port – if applicable.

They require Crew Lists and the "I" Flag to be flown until vessel cleared by Immigration Officer.

Also see "Capetown" – *Shipmaster's Report,* March 1981. Same Documentation except 3 crew lists and 1 copy "nil" livestock form.

PILOTAGE: Compulsory. One hour advance notice to be given to Port Captain through VHF radio – Port Operation – calling Channel 16, working Channel 12. Pilot boats fitted with multi-channel VHF. Motor pilot boat – black hull, white housing "Pilot-Loods" painted in black on housing. Pilot taken aboard at outer anchorage. Pilots prefer pilot ladder and manrope system for boarding and disembarking.

RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed.

Port operates from: Mondays to Fridays 0600 to 2200 hrs., Saturdays 0600 to 1200 hrs. (Ro-Ro vessels handled up to 1800 hrs. on Saturdays), Sundays 0600 to 1900 hrs. Tankers are handled in daylight only.

MAX. SIZE: Tankers: max. length 204 m. overall, draft 9.9 m.

Passenger and dry cargo vessels: max. length 239 m. overall, draft 9.9 m.

HEALTH: Pratique granted at first port of entry in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If Radio Pratique not granted "Q" flag to be flown until ship has been cleared. Valid certificates must be held for yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.

Vessels will not be brought into harbour until Radio Pratique has been requested/granted, if this is first port of call on the South African range.

RADIO: East London Radio, call sign ZSA.

TUGS: Two tugs available. Join vessel in entrance channel. Tug's wires used at no extra charge.

Stand-by tugs compulsory for tankers dischaging crude.

BERTHING:

Wharfage	*Length (m.)*	*Depth at Chart Datum (m.)*	*Cranes (electric) No.*	*Lifting capacity (tonnnes)*
East Bank				
Fish Wharf	109.7	6.1	—	
No. 2 Quay (C Berth)	205.7	10.7	1	10
No. 3 Quay (F/G Berth)	359.7	9.8	1	15/4
No. 4 Quay (I Berth) (Hely-Hutchinson)	132.0	8.5	9	4
No. 5 Quay	83.8	10.7	1	15/4
No. 6 Quay (K/L Berth)	506.0	10.7	9	4
Repair Quay	109.7	9.1	—	—
West Bank				
West Quay (N, O, P, R Berth)	559.0	8.5	1 11	20 4
New Commercial Berths (S and T Berths)	388.1	10.7	—	
Oil Tanker Berth	259.1	10.7	—	

Containers handled at West Quay. (Length of 10 m. where depth is 9.06 m.).

Ro/Ro vessels handled at No. 5/6 Quays (K Berth).

STEVEDORES: No Saturday work except for refrigerated vessels in fruit season or at Port Manager's discretion.

CARGO HANDLING FACILITIES: One berth equipped for bulk loading of maize. One berth equipped for discharging bulk petroleum products and LPG. All other berths for general cargo. Grain elevator: Storage capacity 75,986 tons; loading rate 1,650 t.p.h. through 4 spouts.

MEDICAL: Unrestricted hospital facilities. Medical assistance must be arranged through Agents.

TANKERS: One tanker berth suitable for vessels of 204 m. length with maximum draft 9.9 m. Diameter of hoses, 300 mm. LPG Tankers accepted, hose diameter 150 mm.

DENSITY: 1025.

FRESH WATER: Delivery by hose ex-wharf hydrants. Rate of delivery 60 t.p.h. Drought conditions can cause restrictions of 150 tons per ship.

FUEL: 48 hours' notice required. Heavy Oil and Gas Oil available.

OPENING/CLOSING HATCHES: Mechanical hatches opened/closed by crew. Other types of hatches by stevedores.

CERTIFICATES:

Safety Certificates in respect of Life Saving Equipment and gear.
Radio Certificate.
Load-line Certificate.
Derat Certificate.
Certificate of Competent Officers (passenger ships only).

CUSTOMS ALLOWANCES: See "Capetown".

CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection.

IDENTIFICATION CARDS: Required, otherwise National Identity Cards, if available.

CONSULS:

Belgium
Denmark
France
Germany
Italy
Netherlands
Norway
Portugal
Sweden
United Kingdom

SURVEYORS: General cargo surveyors available.

Rennie Murray & Co. Ltd. Tel: 29612. Telex: 75–0711 as local Agent for Lloyd's Register, B.V., U.S. Salvage and Salvage Association.

REPAIRS: All types of repairs can be undertaken.

DRY DOCKS: *Princess Elizabeth Graving Dock:*

Dimensions—Overall docking length	198.5 m.
Length on keel blocks	193.1 m.
Length on bottom	198.5 m.
Width at coping	31.2 m.
Width at entrance top	27.2 m.
Maximum width at sill level	22.9 m.
Depth on entrance sill, HWOST	10.2 m.
Depth on inner sill, HWOST	10.2 m.

A docking length of 209.2 m. can be obtained by placing the caisson in the emergency stop at the entrance.

Two 15-ton and one 5-ton electric cranes on 4.9 m. gauge track are available.

The dock can be emptied in 4 hours.

REPATRIATION: All facilities available.

AIRPORT: Ben Schoeman Airport – 8 km. from harbour. Daily flights to Johannesburg connecting with overseas flights by regular airlines.

TIME: GMT plus 2 hours.

HOLIDAYS: See "Capetown".

POLICE/AMBULANCE/FIRE: Police 2–5555; Ambulance 2–1212; Fire 2–1212. National Sea Rescue 22555. Harbour Police 442032.

EMERGENCY CO-ORDINATION CENTRE: Contact Port Captain: Tel: 44–2042 or 44–2142. Telex: 75–0774.

TELEPHONES: Telephones can be supplied at all berths. Arrange through Agents.

SHORE LEAVE: Allowed. No shore pass required.

STORING: See "Prelims" page viii.

1. Truck only.
2. Not applicable.
3. Truck may proceed alongside unless explosives being handled. Vehicles not permitted at tanker berth. (Distance to gate – 200 m.)
4. Yes, except tanker berth.
5. Ship chandler places entries for bonded stores.
6. Ship chandler supplies labour.

DEVELOPMENTS: An additional 5 ton crane is to be provided at "C" Berth (No. 2 Quay). Two additional 4 ton cranes will also be erected at the dry dock.

AUTHORITY: South African Transport Services, Paul Kruger Building, Private Bag X47, Johannesburg 2000, South Africa. *Tel:* 713–3305. *Telex:* 4–24205 SA. *Contact:* Dr. E. L. Grove, Director-General.

East London: P.O.Box 101, East London 5200. *Tel:* 44–2855. *Contact:* Port Manager; Port Captain (Tel: 44–2042 or 44–2142. Telex: 75–0774).

AGENT: King & Sons (Pty.) Ltd., P.O.Box 1, East London 5200. Tel: (0431) 24381. Telex: 75705. Cables: Baronet, East London.

MOSSEL BAY: 34.10 S. 22.09 E. (See Plan Book)

PORT LIMITS: Within a line drawn from Cape St. Blaize Lighthouse to the mouth of the Little Brak River, thence along the high water mark so as to include the foreshore between these points, together with Seal Island, the estuary of the Little Brak River as far as the tide flows.

DOCUMENTS: Refer to "Capetown".

PILOTAGE: Compulsory. 1 hour advance notice to be given to Harbour Master and Pilot through VHF radio. Port operation calling Channel 16, Working Channel 12. Motor pilot boat – black hull, white housing. International pilotage signals used. Pilot boards about 1 mile North of Cape St. Blaize Light.

ANCHORAGE: Open anchorage with unlimited depth.

RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed. No night berthing or sailing for tankers.

MAX. SIZE: Anchorage: no restrictions. Tankers: up to 32,000 d.w.t.

TUGS: 1 of 940 h.p. and 1 of 200 h.p. available.

BERTHING:

Wharfage	*Length (m.)*	*Cope Level above Chart Datum (m.)*	*Depth at Chart Datum Max. (m.)*	*Min. (m.)*	*Cranes (electric) No.*	*Lifting capacity (tons)*
Vincent Jetty	150 (2 sides)	3.20	6.00	4.00		
*Low Level Wharf	61	2.54	1.64	1.64		
*No. 1 Quay	44	3.50	1.64	1.64		
*No. 2 Quay	50	3.50	2.64	2.64		
No. 3 Quay	213	3.44	6.00	5.44		
No. 4 Quay	274	3.64	7.50	7.50	3	4
No. 5 Quay	140	3.50	4.00	4.00		

*Suitable for small fishing craft only.

HEALTH: Pratique granted at first port of entry in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If Radio Pratique not granted "Q" flag to be flown until ship has been cleared.

Valid certificates must be held for yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.

RADIO: Capetown Radio, ZSC. Port Elizabeth Radio, ZSQ.

DENSITY: 1025.

FRESH WATER: Available along Nos. 3 and 4 quays.

FUEL: Limited supplies of Gas oil along Nos. 3 and 4 quays.

MEDICAL: Cape St. Blaize lighthouse on 24-hour watch. Requests for medical assistance passed through lighthouse to Harbour Master and Pilot. Hospital facilities available. Vessels in port should arrange medical facilities through Agent.

CUSTOMS ALLOWANCES: See "Capetown".

CARGO GEAR: All cargo handling equipment must be in good condition and certificates available for inspection.

IDENTIFICATION CARDS: Required. Otherwise National Identity Cards, if available.

REPAIRS: Only minor repairs can be undertaken on a 400 ton capacity slipway.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st January); Founder's Day (6th April); Good Friday; Family Day; Ascension Day (dates vary); Republic Day (31st May); Kruger Day (10th October); Day of the Vow (16th December); Christmas Day (25th December); Day of Goodwill (26th December). Cargo is not worked on Christmas Day and Good Friday.

AIRPORT: George Airport, 40 km.

SHORE LEAVE: Allowed.

AUTHORITY: South African Transport Services, Paul Kruger Building, Private Bag X47, Johannesburg 2000 South Africa. *Tel:* 713-3305. *Telex:* 4-24205 SA. *Contact:* Dr. E. L. Grove, Director General.

Mossel Bay: South African Transport Services, Bland Street, Mossel Bay, South Africa. *Tel:* (04441) 46271. 3404. *Contact:* Harbour Master/Pilot.

PORT ELIZABETH: (Algoa Bay): 33.57 S. 25.39 E.

(See Plan Book)

PORT LIMITS: Bounded on the Southward by a line drawn from Cape Recife, East (true) to a point in the Indian Ocean, distant 1 nautical mile on the Northward by a line drawn from the extreme point of the East bank of the Zwartkops River, East (true) distant 1 nautical mile, on the Eastward by a line drawn between these 2 points, and shall embrace the foreshore between high and low water marks from Cape Recife lighthouse to the aforesaid line at East bank of the Zwartkops River, including that portion of the said river which lies on the seaward side of the bridge carrying the railway line to Alicedale.

DOCUMENTS:

Customs

Form DA.1 Report Inwards/Outwards for ships.
Form DA.3 Certificate of clearance for ships.
Form DA.4 Transire – for a destination in the R.S.A.
Form DA.5 List of sealable goods on board ship.
Ship's Crew List (Customs Department).
Livestock Form (Customs Department).

Post Office

P1/27 Notice of arrival and departure of vessel.
P1/8 Declaration and Post Office Certificate.

Port Health

Maritime Declaration of Health.
Crew List with last vaccination dates.
Derat or Derat Exemption Certificate.

Port Authority

T958 Report of Arrival.
T962 A Departure/Shifting Notification.
Ship's Manifest.

Also see "Capetown" – Shipmaster's Report March 1981.

PILOTAGE: Pilotage is compulsory. Messages addressed to Port Captain, Port Elizabeth. Initial ETA together with draft, 72 hours prior to arrival, updated 12 hours prior to arrival and confirmed with Port Control when within VHF range. VHF radio calling on Channel 16. Working frequency Channel 12.

Pilot boats fitted with multi-channelled VHF. Pilot boats black hull with white superstructure, "Pilot-Loods" painted black on white. Pilot boat stationed inside harbour and meets ship on arrival approximately 3.5 km. East of breakwater. Boarding requirements consist of pilot ladder together with 2-manropes or pilot hoist. Pilot ladder usually rigged on starboard side.

Algoa Bay is considered a safe anchorage for all sizes of ships, the bottom consisting mainly of sand. Usual anchorage for ships awaiting Pilot is 3.5 km. Eastward of breakwater, in the Outer Anchorage. Predominant winds are Westerly all the year, with East/South Easterly during the Summer months. The Westerly winds are the stronger of the two but are off land and cause little difficulty. Easterlies being from the sea are inclined to cause an uncomfortable sea.

ANCHORAGE: See "Pilotage".

RESTRICTIONS: Vessels not permitted to enter unless Agents have been appointed.

Dry-cargo ships 0600 to 2200 hrs. Pilot must be aboard by 2030 hrs.

Vessels which are considered *not gas free* are restricted to daylight entry only.

MAX. SIZE:

	Max. length	*Draft*
Passenger, dry-cargo and container vessels	Subject to Port Captain's prior approval	11.6 m.
Tankers	203.3 m. overall	9.3 m.
Ore carriers	251.5 m.	11.6 m.

HEALTH: Pratique granted at first port of entry in South Africa. Pratique message 24 hours prior to arrival to "Port Health" at port of entry. If Radio Pratique not granted "Q" flag to be flown until ship has been cleared.

Valid certificates must be held for yellow fever. Ships from Eastern ports must also have valid certificates for cholera and typhoid.

RADIO: Port Elizabeth Radio. Call sign ZSQ.

VHF: See "Pilotage".

TUGS: Three "Z-Peller" diesel tugs available, fitted with radar and VHF. Tugs join between anchorage and harbour entrance. Tug's wires used at no extra charge.

BERTHING:

Wharf	*Dimensions* *Length (m.)*	*Cope level (m.)*	*Depth at LWOST* *Max. (m.)*	*Min. (m.)*	*Cranes* *No.*	*Lifting capacity (tons)*
Charl Malan Quay	423	5.2	11.0	11.0	13	4
2 Container berths	633	5.2	12.2	12.2	3	40
East Quay	400	5.2	12.2	12.2	—	—
No. 2 Quay	519	5.2	11.0	11.0	15 2	4 15
No. 3 Quay	519	5.2	10.0	7.0	16 2	4 15
Bulk Handling Quay	360	5.2	12.2	12.2	1 2 ship loaders	4
Tanker berth	242	3.7-4.6	9.9	9.9	—	—
Trawler quay	136	3.4	5.5	5.5	—	—
Fish wharf	101	3.4	4.0	0.9	—	—
Harbour repair quay	165	3.5	6.5	4.0	—	—

Container back-up facilities: 22 ha. with 3,500 ground positions for deep sea container traffic and 52 ground positions for reefer container traffic. 4.3 ha. with 924 ground positions for coastwise container traffic.

10 straddle carriers, 21 haulers and 21 bath-tub trailers for internal use.

A rail terminal for forwarding and receiving containers to and from inland destinations.

Ro-Ro facilities: Side loading for deep sea traffic. End loading for coastwise traffic.

BULK HANDLING FACILITIES: *Ore Loading Plant:* Storage capacity approx. 460,000 tons. Rated loading capacity 1,360 t.p.h.

Ore loaders:

Maximum outreach from quay face	19.35 m.
Extreme elevated height of loaders above HWOST	13.92 m.

MEDICAL: Unrestricted hospital facilities. Medical assistance must be arranged through Agent.

TANKERS: Stand-by tugs for the fire watch compulsory.

DENSITY: 1025.

FRESH WATER: Delivery by hose ex-wharf hydrants. 160 t.p.h.

FUEL: 48 hours' notice required. Bunker fuel and gas oil available at ore berth. Bunker oil available at Berth No. 15.

CUSTOMS ALLOWANCES: See "Capetown".

CARGO GEAR: Undertaken by shore cranes. No floating crane available.

STEVEDORES: To be arranged through ship's Agency.

IDENTIFICATION CARDS: Required. Otherwise National Identity Cards, if available.

CONSULS:

Belgium	Tel: 46561	Netherlands	Tel. 21986
Denmark	„ 41 3489	Norway	„ 52 2021
Germany	„ 545572	Portugal	„ 48451
Greece	„ 25634	Transkei	„ 542224
France	„ 531505	U.K.	„ 52 2160
Italy	„ 52 1461		

REPAIRS: Minor deck and engine room repairs.

DRYDOCKS: None. Electrically operated 1,200 ton slipway; depth on keel blocks F. 3.7 m.; A. 7.5 m. HWOST; telescopic cradle 75.4 m. long, minimum length 44.3 m. Max. length of ship 82 m. and max. beam 12 m.

SURVEYORS: All Classification Societies represented.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Shipmaster to liaise with stevedores.

REPATRIATION: All facilities available.

AIRPORT: 4 km. from harbour. Regular daily S.A. Airways flights to and from all major centres.

TIME: GMT plus 2 hours.

HOLIDAYS: New Year's Day (1st January); Founder's Day (6th April); Good Friday; Family Day; Ascension Day (dates vary); Republic Day (31st May); Kruger Day (10th October); Day of the Vow (16th December); Christmas Day (25th December); Day of Goodwill (26th December). Cargo is not worked on Christmas Day and Good Friday.

POLICE/AMBULANCE/FIRE: Police (City) 10111, Police (Harbour) 520-2280; Ambulance 414111; Fire 2-1555.

TELEPHONES: Telephones can be supplied at all berths. Arrange through Agents.

IDENTIFICATION CARDS: Ship's passes required at container berths.

SHORE LEAVE: Allowed.
DEVELOPMENTS: Bulk loading facility to be extended by 200 m. (depth 12.1 m.) in order that larger vessels may be handled. There will be discharge facilities for petroleum products, LPG, cargo black feedstock and bitumen.
AUTHORITY: South African Transport Services, Paul Kruger Building, Private Bag X47, Johannesburg 2000, South Africa. *Tel:* 713-3305. *Telex:* 4-24205 SA. *Contact:* Dr. E. L. Grove, Director-General.
Port Elizabeth: Port Director, P.O.Box 1139, Port Elizabeth. *Tel:* 52-02000.
AGENT: King & Sons (Pty.) Ltd. P.O.Box 1, Port Elizabeth, 6000. Tel: (041) 521688 . Telex: 74-7627. Cables: Baronet, Port Elizabeth.

PORT NOLLOTH: 29.15 S. 16.50 E.

PORT LIMITS: Northward by a line drawn 245° from North Point to a point 4,827 m. from the shore; Westward by a line drawn 155° from the above point to the point where it meets a line drawn 245° from Guap Point, southward by the latter line.
DOCUMENTS: Port Nolloth is not a port of entry for foreign going vessels. Any vessel arriving from outside South Africa must enter at either Capetown or Walvis Bay. Only document required is one copy of the arrival form.
PILOTAGE: None. Harbour Master will give directions either from the shore, or will come on board a vessel if requested. 72 hours advance notice of ETA required. Harbour Master stands by on VHF Channel 16 and R/T 2182 from 0800 to 1700 hrs. Monday to Friday, 0800 to 1200 hrs. Saturday. Outside these hours only if a vessel is expected.
ANCHORAGES: Anywhere about half a mile seaward of the fairway buoy, usually just North or South of the transit line.
RESTRICTIONS: Daytime port only. Entry usually only possible about 2 to 3 hours either side of HW. Tide gauge on jetty and vessels only allowed to enter when 1 m. above chart datum shown on this gauge.
MAX. SIZE: Length 200 ft., draft 4 m.
HEALTH: Pratique automatic as vessel must have cleared at another South African port.
RADIO: Local radio station as under "Pilotage", or call Capetown Radio.
VHF: VHF in Harbour Master's office; (Multi-Channel). R/T 2182 kHz. Other VHF Channels available (i.e. 6, 10) on portable VHF sets.
RADAR: Not available.
TUGS: None. 40 ft. launch available if required.
BERTHING: 1 berth, 217 ft. long. Depth alongside 3.5 m. at Chart Datum.
CRANES: 1 electric travelling crane, 7.5 tons SWL (only 4 tons SWL under normal cargo working). 1×7.5 ton mobile crane available.
STEVEDORES: Stevedores supplied by CDM (Pty) Ltd. who operate the port. 2 gangs available, no advance notice required.
MEDICAL: Local hospital, no resident doctor. Main hospital at Alexander Bay (80 km. distant). Doctor visits Port Nolloth 4 mornings a week.
TANKERS: Tankers discharge alongside main cargo jetty. Gas oil only. No slop discharge facilities and no loading of oil. Discharge by vessel's pumps, 2 discharge lines available (Shell and Caltex).
DENSITY: 1025.
FRESH WATER: Fresh water available, brackish in quality. Delivery by small bore hose (garden tap size); pressure dependent on municipal mains.
FUEL: Marine diesel available on all 3 jetties (2 fishing jetties and main cargo jetty). Delivery from standard type pump nozzle.
FIRE PRECAUTIONS: Normal when discharging gas oil.
CONSULS: None.
REPAIRS: Small deck and engine repairs can be undertaken.
DRY DOCKS: None. 1 slipway for vessels up to 20 m. length and 60 g.r.t.
SURVEYORS: No cargo surveyors. South African Department of Transport represented by the Harbour Master.
GANGWAY/DECK WATCHMEN: Not required.
HATCHES: Opening/closing carried out by vessel's crew.
CUSTOMS ALLOWANCES: No Customs officers available.
REPATRIATION: In emergency only.
AIRPORT: Alexander Bay 80 km.; Springbok 140 km. Daily flights from Springbok to Capetown. 3 weekly flights from Alexander Bay to Capetown and to Luderitz, Walvis Bay and Windhoek.
TIME: GMT plus 2 hours throughout the year.
HOLIDAYS: Third Saturday each month is a long weekend. Good Friday, Ascension Day, Day of the Vow (December 16th), Christmas Day, Boxing Day and New Year's Day are holidays – cargo work can be arranged on some of these days, but it is not usually asked for.
POLICE/AMBULANCE/FIRE: Police – Port Nolloth Tel: 8320. Ambulance – Port Nolloth Tel: 8345 (municipality) or Tel: 8411 (state). Fire – No fire brigade in the town – CDM fire fighting facilities Tel: 8355 or Tel: 8404 after office hours.
TELEPHONES: No facilities exist for placing telephones on board.
SHORE LEAVE: Permitted, no restrictions.
IDENTIFICATION CARDS: Not required.
DELAYS: Tidal, unless berth occupied.
BANKS: Barclays Bank Ltd., P.O.Box 72, Port Nolloth 8280. Tel: Port Nolloth 8216. Telex: 57–20471 SA.
EMERGENCY CO-ORDINATION CENTRE: Port Captain, Capetown. Tel: Capetown 2183413. Telex: 57–26544 SA.
Port Captain, Walvis Bay, Tel: Walvis Bay 3631.
Port Captain, Saldanha Bay, Tel: 41726.
Any coast radio station, i.e. Capetown Radio or Walvis Bay Radio.
STORING: See "Prelims" page viii.
1. By truck.
2. No barges available.
3. Trucks can proceed alongside the vessel.
4. Yes.
5. None.
6. Yes.

AUTHORITY: South African Transport Services, P.O.Box 30, Port Nolloth, 8280. *Tel:* Port Nolloth 8340. *Contact:* Captain D. M. Bridge, Harbour Master.
Harbour leased to:– CDM (Pty) Ltd., P.O.Box 8, Port Nolloth, 8280. *Tel:* Port Nolloth 8355 and after hours 8404. *Telex:* 57–22056 SA. *Contact:* Mr. H. J. Louw, Port Superintendent.

RICHARDS BAY: 28.48 S. 32.06 E. (See Plan Book)

LOCATION: The port is located some 200 km. North of Durban. Mid point of the bay is approximately Lat. 28° 48′ S., Long. 32° 02′ E.
DOCUMENTS: The following documents should be prepared and ready on berthing:
Port Health:
1 Maritime Declaration of Health.
1 Vaccination List.
1 Crew List.
1 Valid Derat Certificate.
Immigration:
3 Crew Lists ("I" Flag International Code to be flown).
Customs:
2 Crew Lists.
1 Ship's Stores List.
1 Crew Customs Declaration (local form only).
1 Narcotics List.
1 Personal Effects List signed by each crew member.
1 Passenger List.
All vessels using the port, will be subject to Customs Inspection and must obtain a Customs Clearance.
Agents:
2 Crew Lists.
Loading Certificate.
Safety Radio Certificate
Safety Equipment Certificate.
Register.
1 Transire from previous South African port.
PILOTAGE: Pilotage is compulsory and Pilots are provided by the Marine Department of South African Transport Services.

Boarding points are determined by the Pilot, but generally speaking will be within an area approximately 3 nautical miles S.E. of South breakwater.

At the present time vessels can only enter and leave during daylight. Later this position will be reviewed to consider a 24 hour service. Tugs and Pilots normally work 0600 hrs. – 1800 hrs. daily.

Vessels with freeboard in excess of 10 m. must have accommodation ladder rigged in addition to the pilot ladder. Pilot hoists not normally accepted.
ANCHORAGES: 3 to 5 nautical miles off Port but not opposite Entrance (precise area not yet demarcated). *Quality of Bottom:* Sandy.
Note: Anchorage is similar to Durban and in high S.W. winds anchorage is safe, but in high N.E. winds caution should be exercised.
MAX. SIZE: LOA Max. 314 m. Beam max. 47.25 m. Draft max. 17.3 m. D.W. Limit max. 170,000 d.w.t.
Minimum Ballasted Condition on Entry:

Length	*Draft – Fore*	*Draft – Aft*
600 ft. (183 m.)	20 ft. (6.1 m.)	24 ft. (7.3 m.)
700 ft. (213 m.)	25 ft. (7.6 m.)	28 ft. (8.5 m.)
800 ft. (244 m.)	26 ft. (7.9 m.)	30 ft. (9.1 m.)
900 ft. (274 m.)	27 ft. (8.2 m.)	32 ft. (9.8 m.)
over 900 ft. (274 m.)	28 ft. (8.5 m.)	34 ft. (10.4 m.)

HEALTH: Radio Pratique can be obtained by cabling Port Health – Durban using the standard international procedure for working. See "Radio".
RADIO: *Arrival Advice:*
To "Porthealth Richardsbay" – direct through Durban Radio – 24 to 48 hours prior arrival – advising ETA, last port, date sailed, number of crew, full inoculation/vaccination status, and state of health of crew, and requesting Radio Pratique. Porthealth will cable vessel directly, either granting Pratique or requesting further details. These messages are free of charge.

To "Portcaptain Richardsbay" during normal port working hours, otherwise signal station outside hours. – direct through Durban Radio – 48 hours prior arrival, advising ETA, draft, freeboard and reason for call at Richards Bay.
VHF: Vessels can communicate with Port Control on Channel 16 VHF, watch is maintained continuously. When at anchor, listening watch should be kept to receive berthing instructions.

TUGS: Tug attendance is compulsory. Tugs are owned and operated by South African Transport Services and consist of the following:

1. Voight Schneider (2 tugs)	4,200 h.p.
	Bollard Pull 43 tons.
2. Diesel Kort Nozzle (2 tugs)	4,400 h.p.
	Bollard Pull 52 tons.

Stand-by tugs compulsory for tankers dischaging crude.

BERTHING: Line boats are provided by the Harbour Authorities, as are berthing gangs.

Coal Terminal:

Berths No's 301, 302 and 304 are used solely for the export of South African Steam Coal. Berth No. 304 is currently used as a lay-by berth but loading conveyors will be extended to this berth. The plant is owned and operated by the Richards Bay Coal Terminal Company (Pty.) Ltd.

Length (301-304)	1,400 m.
Depth	19 m.
Permissible draft	17.3 m.
Quality of bottom	Sandy to hard
Height of quay above HWOST	3.2 m.

Shiploaders: Three. (Dimensions apply to one machine)

Loading rates:	Loaders 1 and 2
Nominal –	8,500 tonnes. p.h.
Average –	5,000 tonnes. p.h.
	Loader No.3
Nominal –	10,500 tonnes. p.h.
Average –	6,500 tonnes. p.h.
Working Range of Boom	15° up to 15° down
Height of Boom above HWOST with Loader at max. working elevation	21.6 m.

Coal Terminal working hours: 24 hours daily, 7 days per week. Christmas Day not usually worked.

Clean Cargo Berth:

On the North side of the harbour 1,300 m. of quay wall has been constructed and commissioned (Berths 609 and 701 – 703. Height of quay above HWOST 3.2 m. Quality of bottom, sandy.)

Berth 609	length	300 m.
	depth	12.8 m.
	permissible draft	12.0 m.
Berth 701	length	300 m.
	depth	12.8 m.
	permissible draft	12.0 m.
Berths 702/703	length	700 m.
	depth	19 m.
	permissible draft	17.1 m.

Berths 702-703 have a shiploader of max. capacity 2,500 t.p.h. Ship's unloader at berths No. 701 and 702 with max. capacity of 1,250 t.p.h., also ship loader for the export of woodchips with max. capacity 600 t.p.h., as well as rail tracks and adequate back-up areas.

A very substantial multi-purpose bulk handling facility is being developed behind Berths 701-703 for the import of sulphur, petroleum coke and alumina. The terminal, which is partially completed, and comprises truck tipplers, silos, open and covered storage, conveyors, etc. is at present handling the export and import of chrome, coal, alumina, petroleum coke, sulphur, potash clay, vermiculite, wood chips, rock phosphate, zircon, rutile, titanium slag, pig iron and ferro-alloys by means of wharf cranes or belt loader.

Clean Cargo Berth working hours: 24 hours daily except from 0600 hrs. Saturday to 0600 hrs. Sunday when no work. Christmas Day, Good Friday and New Year's Day not usually worked.

Berth 609, which is served by rail tracks and an adequate surfaced area is currently being used for general cargo on a small scale.

A phosphoric acid terminal with a storage capacity of 36,000 tons is located behind the quay and tankers are loaded at a rate of 1,200 t.p.h. via means of pipe manifolds at Berth 703.

MEDICAL:

Hospital: There is a modern and well equipped hospital at Empangeni. (Approx. 25 km. from the berth).

Doctor/Dentist: Usual port services available on 24 hour basis.

DENSITY: 1026.

FRESH WATER: Available at the berth. Rate approx. 25 t.p.h.

FUEL: Heavy and Medium Fuel Oil. Diesel Oil and Gasoil are available by pipe-line at Berths 301, 302 and 209 only. Bunkering can take place concurrently with loading.

Stems for bunkers should be placed with normal bunker suppliers who will arrange delivery through the bunker supply company at Richards Bay. All vessels calling for bunkers must either be gas free or inerted before they will be permitted to enter the port.

CONSULS: In Durban.

REPAIRS: Written approval must be obtained from the Port Authorities, via the Agents for vessel to immobilise engines to carry out repairs. Repairs may be carried out at the berth.

SURVEYORS: Lloyd's, ABS, BV and NV in Durban. Societe Generale de Surveillance and Chettle and Company in Richards Bay.

GANGWAY/DECK WATCHMAN: Recommended.

OPENING/CLOSING HATCHES: By crew.

CUSTOMS ALLOWANCES: See "Capetown".

REPATRIATION: Possible.

AIRPORT: There is an airport at Richards Bay 26 km. from the Coal Berth, and there are 8 flights per week to Durban and 3 flights per week to Johannesburg, where international connections can be made.

HOLIDAYS: *Local Holidays:*

New Year's Day, 1st January; Founder's Day, 6th April; Good Friday; Easter Monday; Ascension Day; Republic Day, 31st May; Kruger Day, 10th October; Day of the Vow, 16th December; Christmas Day, 25th December; Day of Goodwill, 26th December.

Where such a holiday falls on a Sunday, the Monday following becomes a Public Holiday.

TIME: GMT plus 2 hours.

POLLUTION: The Port Authorities demand that no vessel using the port shall discharge any garbage, refuse, vegetable or food matter, deck cleanings, polluted bilge water, oil or rubbish of any description in the vicinity of or in the port of Richards Bay.

Heavy penalties will be imposed for breach of the regulations.

Vessels arriving in Ballast must have clean ballast on board, as deballasting takes place alongside the berth. Dirty ballast pumped into the harbour will incur heavy penalties for pollution.

TELEPHONES: Telephones are available at the berth. Application for the service should be made through the Agents in advance.

All telephone calls made will be charged to the vessel's account.

Caution: With direct dialling available internationally it is strongly recommended that telephones are placed in the custody of a responsible officer to avoid abuse.

SHORE LEAVE: There are no restrictions on shore leave for crew. Entertainment in the Richards Bay area is very limited. Durban, 2.5 hours drive away, however, can offer very much more. (Crew members proceeding to Durban require written permission from Immigration Authorities.)

IDENTIFICATION CARDS: Seaman's Book sufficient.

SHIP SUPPLY SERVICE: A helicopter service through Court Republic Helicopters, P.O. Louis Botha Airport, Durban L, 4029. Tel: (031) 426101. Telex: 624246.

Rendevous position Port Dunford Lighthouse 090°T 23 nautical miles.

Note: Aircraft can carry out approximately 100 mile round trip in 1 hour.

A launch service is carried out by the South African Transprt Service via the Pilot launch. The efficient operation is dependant on the work load of the Port at the time service is required.

Prior to helicopter/launch being permitted to leave, signed authority from Port Health, Customs and Immigration must be obtained.

GENERAL: The harbour and the quays are owned by South African Transport Services.

Provisions: Stores and provisions can be obtained through local Ship's Chandlers.

Game Parks: National Parks Board Game Reserves (Hluhluwe and Umfolosi) are within easy reach of Richards Bay by car.

Car Hire: Cars can be hired, through the Agents at reasonable cost to officers and responsible crew members only. An International Driving Licence is required to make use of this service.

Navigational Aids: Lighthouse (500,000 candlepower). Radio beacon at lighthouse "ZK", on 285.5 kHz. Continuous transmission, North of the harbour at position 28° 48′ S., 32° 06′ E.

Leading lights – Front Red, fixed during day, flashing at night in position 28° 47′ 26.17″ S., 32° 02′ 10.53″ E.

Back leading light, white, fixed during day, occulting at night in position 28° 47′ 09.25″ S., 32° 01′ 19.77″ E. Leading line 110° 44′ 20″.

Breakwater tip lights (2 flashes per 5 secs.) South light Red, North light White.

Tides: Tidal change between HWOST and LWOST is approx. 2 m.

Prevailing Winds: South Westerly; North Easterly.

DEVELOPMENTS: The development of the town and surrounding areas is taking place rapidly together with large scale industrial and commercial developments.

Apart from the development of the extensive multi-purpose bulk handling terminal behind Berths 701-703 the South African Transport Services has provided two additional coal berths (No. 303 and 304) and the Richards Bay Coal Terminal Company are expanding their handling and storage facilities for an export capacity exceeding 40 million tons per annum.

SHIPMASTER'S REPORT: January 1980 (Updated 1984).

Pilotage: Compulsory.

Restrictions: At the present time vessels cannot enter or leave during the hours of darkness. However, 24 hour service is under consideration. Vessels able to dock and undock at any stage of the tide.

Max. Size: 170,000 d.w.t. LOA 314 m., beam 47.25 m., and max. draft 17.3 m.

Tugs: Four tugs available.

2×Voight Schneider 4,200 h.p. Bollard pull 52 tons.
2×Diesel Kort Nozzle, both 4,400 h.p. Bollard pull 50 tons.

Radio: Richard's Bay Signal Station and Port Control.

VHF: Channels used 16, 9, 11, 12, 13 and 14. Pilot and Port Authority on Channels 16 and 12.

Berthing: Distance from entrance to berth 6.5 km. Maximum size 170,000 d.w.t., max. draft 17.3 m.

Hours of movements within the port, 0600 hrs. to 1800 hrs. A multi-purpose bulk handling appliance has been erected. There are 4 cranes of 4 tons capacity available. Ro-Ro facilities for ships equipped with quarter ramp available. No floating crane available. Port not geared to handle palletised cargoes.

Consuls: Nearest Consuls in Durban.

Facilities Available: Fresh water; Fresh provisions; Repairs (limited); Machine ship (limited); Airport; Lloyd's Surveyor; Salvage Surveyor (from Durban); Laundry service; Bunker fuel oil and diesel oil (at Coal Berth) and Berth No. 209; Lubricating oils; Doctor and hospital; Groceries and Meats.

AUTHORITY: South African Transport Services, Paul Kruger Building, Private Bag X47, Johannesburg 2000, South Africa. *Tel:* 713-3305 *Telex:* 4-24205 SA. *Contact:* Dr. E. L. Grove, Director-General. *Richards Bay:* Port Captain, S.A. Transport Services, P.O.Box 18 Richards Bay 3900. *Tel:* 593231.

AGENT: King & Sons (Pty.) Ltd., P.O.Box 9, Richards Bay, 3900 Tel: (0351)-31291/2. Telex: 6-20488. Cables: Baronet, Richards Bay.

SALDANHA BAY: 33.02 S. 17.58 E. (See Plan Book)

DOCUMENTS:

Port Health:
1 Maritime Declaration of Health.
1 Vaccination List.
1 Crew List.
1 Valid Derat Exemption Certificate.

Immigration:
3 Crew Lists only.

Customs:
1 Crew List.
1 Ship's Stores List.
1 Crew Declaration.

Agents:
2 Crew Lists.

Customs: Arrangements have been made with Customs that loading shall commence before Customs Entry is completed. Customs will normally board on arrival for the purpose of checking and sealing Bonded stores, etc.

Immigration: On arrival at the port, any vessel which is not cleared by Immigration shall show the 'I' flag. No persons may disembark or embark without the express permission of the Immigration Officers until such time as Immigration formalities have been completed.

PILOTAGE: Pilotage is compulsory at Saldanha Bay, and is undertaken by fully qualified Master Mariners employed by the South African Transport Services.

High sided vessels which do not *fully* comply with I.M.O. recommendations in respect of Pilot boarding arrangements may be subjected to delay as well as extra charges for helicopter utilisation.

APPROACHES: Masters of vessels are warned not to proceed too close to the shore line in the vicinity of Saldanha Bay harbour, nor to enter the S.B.H. limits without a Pilot. The Wasserfall Bank situated between Jutten and Malgas Islands across the entrance to the outer bay constitutes an unmarked hazard. The recommended position to embark the Pilot is North Head light × 050°T (ships in ballast only). Distance 2 nautical miles but *not* in any circumstances closer to the Saldanha Bay harbour limits.

Ships in loaded or part loaded condition should board Pilot in position North Head light 030° distance 3 nautical miles.

MAX. SIZE: LOA 350 m. Draft 21.25 m.

HEALTH: Vessels requesting Free Pratique should cable Port Health, Capetown, via Capetown Radio (ZSC) at least 24 hours before arrival. There is no charge for messages addressed to Port Health. When Free Pratique cannot be granted, then the vessel will be required to show the 'Q' flag on arrival and will be boarded by Port Health Inspectors at the anchorage in Saldanha Bay.

RADIO: Saldanha Bay will be served by Capetown Radio (ZSC).

Arrival: Vessels calling at Saldanha Bay to load ore will be required to send their ETA 96 hours prior to arrival, stating the approx. tonnage of ore required, the type of ore and the loading programme. Further messages will be required to be sent at 48 hours and 24 hours prior to arrival, updating the ETA. These ETAs are to be sent via Capetown Radio (ZSC) addressed to Port Captain, Iscor Maritime Co-ordinator and also to the Agent. In addition, VHF contact on Channel 16 or MF on 2182 kHz must be established as soon as possible with Port Control. To cater for simultaneous or near simultaneous arrival of ships, Masters are requested to advise Port Control when, if Northbound, they are 12 miles from South Head or if Southbound when 12 miles from North Head to assist in allocation of service.

Vessels calling at Saldanha Bay after leaving Capetown will be required to send by telex their ETA 24 hours before the expected time of arrival at Saldanha Bay, together with their final tonnages of cargo required, type of ore and loading programmes.

With the final 24 hour ETA the Master will be required to provide the draft forward and aft, and the deballasting time required on arrival. If there is any change to this programme a further message should be despatched as soon as possible after any such change is known.

48 hours prior to arrival, in addition to the updated ETA, the vessel must indicate her requirements, i.e. fuel, fresh water, other services to Port Captain, Iscor Maritime Co-ordinator and the Agents. Final advice of loading programme:

1. Quantity
2. Grading
3. Sequence

to be provided at least 24 hours before Notice of Readiness is given. Failure to provide this information may result in a delay of 12 hours before loading commences. Vessels are to request docking instructions from Port Control 6 hours before arrival. Instructions will be given promptly and concisely.

Vessels will be loaded in regular turn subject to cargo availability and Charter Party Lay Days, providing they berth with hatches open and are ready for loading in all respects.

VHF: *Port Control:* Saldanha Bay Port Control is equipped with VHF and contact can be made direct using Channels 16, 12, 11, also MF 2182.

Tugs: The tugs operate with VHF Channels 1 – 28 and 60 – 88, and radio telephone.

TUGS: There are 3 tugs stationed in Saldanha Bay Harbour operated by South African Transport Services. Each tug is propelled by Voith Schneider gear, and is of 4,000 h.p. and 42 ton bollard pull.

Depending on length of vessel, draft, weather conditions, etc., a fourth tug may have to be sent from Capetown at vessel's expense.

There is one small diesel tug of 900 h.p. and four diesel launches for running lines.

BERTHING: The jetty construction is of the caisson type, spanned with a deck construction between the caissons. The total jetty length is 991.65 m. and the total mooring length available will be 650 m. for iron ore loading vessels and 310 m. for oil tankers at a depth of 23 m. below chart datum. Vessels can be accommodated on both sides of the jetty and the jetty is equipped with adequate quick release hooks and fenders.

The design of the jetty makes provision for the mooring of 350,000 d.w.t. loaded vessels with a max. theoretical approach speed of 18 cm./sec.

The width of the dredged area is 260 m. maximum on either side of jetty, tapering to 220 m. at the oil jetty, 380 m. at No. 4 Buoy and 400 m. at No. 1 and 2 Buoys.

A turning basin with a diameter of 580 m. and a depth of 23.20 m. below CD is provided in the navigational channel, seaward of the jetty.

From the turning basin seawards the depth of the navigational channel increases to 23.45 m. CD and eventually to 23.70 m. CD in the section marked by buoys. From the outer buoys the depth increases from 24 m. to 45 m. at the outer harbour approaches.

Loading: Bulk ore loading will be effected by means of two luffing, slewing and travelling ship loaders, together capable of loading continuously at a rate of 8,000 t.p.h. average, with a peak rate of 10,000 t.p.h.

General Cargo Quay: Situated on the Western side of the ore jetty causeway and mid-way between the shore line and the jetty, is in operation. Length 250 m. Depth 12 m. at chart datum. 2×15 ton cranes.

Accepts vessels up to 30,000 d.w.t., 200 m. in length and max. draft 10.5 m. (11.25 m. at high tide). At present lead, zinc and copper concentrates are loaded.

Approach Channel: Parallel to causeway. Length 1.2 km., width 150 m., depth 12.5 m. LWOST.

MEDICAL: *Hospitals:* There is a fully equipped hospital in Vredenberg, 13 km. from Saldanha Bay. Serious medical cases, however, will normally be referred to one of the hospitals in Capetown.

Doctors: There are several doctors available in Saldanha Bay and nearby Vredenberg. To expedite appointments, however, and to arrange for attendance on board, Agents should be consulted.

Dentist: There are several dentists available in the area, and in order to expedite appointments, Agents should be consulted.

AIRPORT: International Airport near Capetown. Military airport locally but special landing rights have to be applied for.

FRESH WATER: Fresh water will be delivered at the rate of 35 t.p.h. Application for the supply of water should be made to Port Captain through the Agents.

FUEL: Bunkers not yet available ex-jetty.

CONSULS: There are no Consulates established in Saldanha Bay, but the following countries are represented at Capetown:

Argentina
Australia
Austria
Belgium
Bolivia
Brazil
Canada
Chile
Denmark
Finland
France
Germany
Greece
Israel
Italy
Japan
Monaco
Netherlands
Norway
Panama
Peru
Portugal
Spain
Sweden
Switzerland
Taiwan
United Kingdom
U.S.A.
Uruguay

CUSTOMS ALLOWANCES: See "Capetown".

HOLIDAYS: The following are recognised Public Holidays in the Republic of South Africa:

New Year's Day, January 1st; Founder Day (6th April); Good Friday; Family Day; Ascension Day; Republic Day, May 31st; Kruger Day, October 10th; Day of the Vow, December 16th; Christmas Day, December 25th; Day of Goodwill, December 26th.

Should any of the above mentioned days fall on a Sunday, the following Monday is observed as a Public Holiday.

Cargo is worked 24 hours every day.

TELEPHONES: Telephone facilities are available from the jetty. In order to obtain a telephone, however, arrangements will have to be made by the Agents. In this respect we would point out that many foreign countries have direct dialling facilities with South Africa, and in all cases arrangements should be made for lockable telephones to be placed on board, and the use of that telephone placed under the control of the Master.

SHIP SUPPLY SERVICE: As Saldanha Bay Harbour is situated only 60 nautical miles North of Capetown the "Off Shore Services" based there are used in the normal course of events.

The harbour tugs of launches could be utilised from Salhanah in the case of medical emergency in the close proximity to Salhanha Bay.

GENERAL: *Removal of Rubbish:* Arrangements are available for the removal of rubbish and can be made through the Agents.

Weather: The climate is temperate. Average high temperatures year round are 20°C (68°F) and average low temperatures are in the region of 11°C (52°F). Sea water temperatures average 16°C. Prevailing winds in Summer are S.S.E'ly and in Winter N.W'ly. Rainfall figures are approximately 300 mm. per annum. Saldanha Bay is a Winter rainfall area. Fog occurs generally in the March to August period. Currents – there are no sea or thermal currents in the harbour area. Tidal currents generally will not exceed 1 knot.

Currency: The standard unit is the Rand. One Rand divided into 100 cents.

Electricity: Can be made available ex-jetty on application to S.A. Transport Services via the Agents.

Compressed Air: Will be available ex-quay on application to S.A. Transport Services via the Agents.

Cranes: A mobile crane will be made available through S.A. Transport Services via the Agents.

Ship Chandlers: Local Chandlers now operating.

Sporting Facilities: Can be arranged for all sports through the Port Captain in co-operation with Military and Naval Authorities in area.

SHIPMASTER'S REPORT: 1977 (Vessel – 150,000 d.w.t. OBO) updated 1984.

Port Limits: A line drawn between North Head and South Head lighthouse. Vessel considered arrived after passing these limits.

Documents: Request Radio Pratique 48 hours before arrival giving (1) Name and Nationality of Vessel (2) Last Port (3) Destination (4) Health condition on board (5) Number of crew and passengers (6) Type of cargo or in ballast (7) ETA.

Pre-arrival cable via ZSC Capetown to Iscor Vredenburg, Port Captain Saldanha and the vessel's Agents.

Advise ETA 96, 48 and 24 hours out and if any changes. With 24 hours ETA, or earlier if available advise Agents:–

- (a) Final stowage required and types of ore. (Hatch Totals).
- (b) Loading sequence. (Hatch Runs, Trimming stops, etc.).
- (c) Deballasting time required.
- (d) Drafts on arrival, estimated drafts on sailing.
- (e) Whether OBO vessel and whether or not in possession of gas-free certificate.
- (f) On vessel's first call – Summer d.w.t., LOA, breadth from foremost hatch coaming to bow, aftermost hatch coaming to stern, distance upper gangway platform to stern and whether leading forward or aft. Advise Agents all requirements 48 hours pre-arrival.

Port Papers: 4 copies Crew and Passenger list.
3 copies report inward DA1 to DA3 (Agents supply).
1 Crew declaration.
1 Store list.
1 Slop chest list.
1 Livestock list if applicable.
1 Gasfree Certificate.

If a vessel's last cargo was oil, or if vessel carries slops, or a valid gas free certificate is not onboard, then a chemist will be required to come from Capetown to inspect vessel and provide gas free certificate on arrival. No vessel may dock to load ore without being certified gas free. Agents will arrange for chemist.

Pilotage: Compulsory. Pilot boards off North Head but in practice comes some way to seaward to meet vessel. Cutter is a rakish red craft capable of 23 knots, fitted VHF, all normal Channels. IMO regulation pilot ladders required complete with manropes. There are 5 Pilots in the port.

Anchorage: Vessels are permitted to anchor in the bay under pilotage. Swell and depth of water make the area to seaward unsafe.

Restrictions: Vessels sailing with a draft of 21.25 m. and arriving with a draft of 20 m. can be handled at HW. The port's largest vessel to date was a 284,000 tonner. When the developments are complete it is expected that vessels of at least 350,000 d.w.t. can be handled.

Pratique: See "Documents".

Radio: ZSC Capetown for messages, and the Port Radio Service on arrival.

Radar: Decca 50S surveillance radar system in Port Control Office, manned 24 hours – VHF communication.

Tugs: 3 Voith Schneider tugs of 3,960 b.h.p. each. Tugs connect to vessel in berth approaches. Tug's lines at no extra charge.

Berthing: Vessels berth against Yokohama fenders on either East or West side of quay. Ordinary moorings but extra moorings available on hire during infrequent heavy swell conditions. Vessels are always swung to berth head out. There is apparatus for indicating vessel's approach velocity.

Handling Facilities: 2 ore loaders nominal capacity 10,000 t.p.h., 1 loading and the other placed for next run. Actual load rate about 7/8,000 t.p.h.

Medical: Services available. Advise through Agents pre-arrival. Small hospital at Vredenburg and extensive facilities in Capetown, 1.5 hours away.

Density: Salt – 1025.

Fresh Water: Available ex-jetty at about 40 t.p.h. Berthing staff connect hose.

Fuel: Not available at present. Small stocks of diesel and gasoil.

Repairs: Small repairs are possible locally. Major repairs can be handled from Capetown, Globe Engineering have a branch at Saldanha. If vessel has urgent repairs pre-arrange attendance with Agent.

Note: Permission is required to immobilise main engine. Also advantageous to pre-arrange.

Surveyors: Available on request from Capetown for all Societies.

Watchmen: Not required, but readily available.

Customs Allowances: (Period of 4 days) – Local officer enforces allowances.

Master: 230 gm. tobacco (any form), 1 litre spirits (any form), 3 litres of wine, 3 litres beer or stout.

Officers and Petty Officers: 173 gms. tobacco, 1 litre of spirits, 3 litres wine, 3 litres beer.

Crew: 115 gm. tobacco, no spirits, no beer, 3 litres wine.

Wine only permitted on ships where wine is part of rations – French, Italian, Spanish vessels etc.

Repatriation: Readily available, 1.5 hours in car to Capetown, thence by International air network. Due regularity of crew changes off Capetown there are competing courier services etc., so very few delays. Hotel accommodation is available in Saldanha if required.

Time: South African Standard.

Holidays: Cargo not worked on Christmas Day and Good Friday.

Police/Ambulance/Fire: Through Port Control and VHF.

Telephones: Available.

Services: Cleaning gangs, riggers, watchmen, etc., readily available.

Shore Leave: Saldanha town 10 miles from dock.

Identity Cards: Not required, except on tankers.

B/L Figures: By survey of ship's drafts. Vessels are not permitted to submerge their Plimsoll Lines, avoid sag or shortshipment inevitable.

General: Provisions and laundry available from Capetown, cable requirements. Lorries permitted on dock provided no interference with operations, but not at tanker berth. Service technicians also available from Capetown.

Trip to and from Capetown regularly and routinely undertaken by all and sundry involved at Saldanha, but to avoid time loss and delay ensure that wherever possible contractors and Agent are aware of requirements.

AUTHORITY: South African Transport Services, Paul Kruger Building, Private Bag X47, Johannesburg 2000, South Africa. *Tel:* 713-3305. *Telex:* 4-24205 SA. *Contact:* Dr. E. L. Grove, Director-General.

Saldanha Bay: Port Captain, South African Transport Services, P.O.Box 105, Saldanha Bay 7395. *Tel:* (02281) 41726. *Telex:* 57-22225.

AGENT: King & Sons (Pty.) Ltd., P.O.Box 102, Saldahna Bay, 7395. Tel: (02281) 41259. Telex: 57-27417. Cables: Baronet, Saldahna Bay.

NOTES

Please also advise Shipping Guides Ltd.

Spain

AGUILAS and HORNILLO: 37.24 N. 01.35 W.
(See Plan Book)

DOCUMENTS: See "Almeria".

PILOTAGE: Hornillo port has no Pilot. The Pilot of Port of Aguilas which is less than a mile from Hornillo, does pilotage services of both. To enter both ports of Hornillo and Aguilas, anchor mile or a mile and half distance from entrance of Aguilas. Wait for Pilot with engine stopped. To call Pilot give three long blasts several times. Pilot's launch is small motor boat painted white, with letter "P" painted on both sides of boat. During night it carries white light on top of mast, and 8 ft. lower a red light, besides the usual lights.

RESTRICTIONS: It is not possible to enter Hornillo port during dark. Wait till dawn outside Aguilas.

MAX. SIZE: Length up to 160 m., draft about 29 ft.

HEALTH: See "Almeria".

TUGS: None in port and not necessary for either port. If necessary, tugs are available from nearby Port of Garrucha.

BERTHING: Aguilas port has a commercial quay with a berth area about 300 m. and depths of between 8 m. – 12 m. Hornillo port has a pier to handle minerals with berth area of 90 m. to 100 m. and depths between 6 m. – 10 m.

BULK HANDLING: 2 conveyor belts. 1×400 t.p.h. capacity and 1×100 t.p.h capacity for grain and other bulk cargoes.

STEVEDORES: Team of stevedores who belong to "Port Workers' Trade Unions" (Sindicato de Obreros Portuarios).

MEDICAL: Master can send cables to consignee requiring this kind of service. There are a number of doctors and a hospital.

FRESH WATER: Available by pipe-line at berths.

FUEL: There are no supplies of fuel in either port.

GANGWAY/DECK WATCHMEN: Not necessary, usually this is done by crew.

OPENING/CLOSING HATCHES: Usually this is done by crew.

REPAIRS: No facilities.

REPATRIATION: Facilities for effecting crew changes exist. Repatriation can be done by train to Madrid and by plane from there.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: See "Almeria".

POLICE/AMBULANCE/FIRE: Ambulance and fire services can be requested from Port Authority. If the police services are required call to "Caseta de Vigilancia" of the Civil Guard in either port.

SHORE LEAVE: Crew members are allowed ashore.

GENERAL: Hornillo port is used only for loading and discharge of minerals, and for this purpose a pier is provided with a railway. The nearest port of Aguilas, less than a mile distant on the West, is the commercial port, with a quay for loading/discharging and a crane of 10 tons capacity.

AUTHORITY: Ayudante de Marina, Capitan del Puerto, Ayudantia de Marina, Aguilas, Murcia, Spain. *Tel:* 968 41 10 74.

ALGECIRAS: 36.08 N. 05.26 W. (See Plan Book)

DOCUMENTS: *Clearance Inwards of Vessels:*
1 copy Maritime Health Declaration.
5 copies Crew List.
2 copies Cargo Manifests: 1 on entry, 1 on sailing.
2 copies Manifests in Transit: 1 on entry, 1 on sailing.

If vessel is in transit:
5 copies Transit Passenger List.
2 copies of Arrival Documents.
2 copies Lists of Passengers who have disembarked or embarked.

Tankers:
2 copies Cargo Manifest: entry, sailing or ballast.

PILOTAGE: Vessels entering port must call the Pilot by International Signal Code, sound, light or VHF.

The pilot boat is painted with a black "P" on both sides at its widest part. By day it will fly a blue flag with the letter "P" in white. At night, it will show the International Pilot Lights. The area where the Pilot boards is a circle 0.5 miles radius with its centre 1 mile East of the Western end of the breakwater extremity (red light).

ANCHORAGE: Vessels awaiting the Pilot can anchor to the North of Barranco Lighthouse in water 30 m. depth under indications given by the Pilot by VHF.

RESTRICTIONS: Vessels may enter by day or by night.

MAX. SIZE: Port of Algeciras – No restrictions as to length, max. draft 36 ft.

Tankers: Gibraltar Refinery: Max. length 315 m., max. draft 60 ft.

Monobuoy: Depth of water 60 m. Designed for vessels up to 500,000 d.w.t. Largest vessel accommodated to date: 423,000 d.w.t. with draft 22.9 m.

HEALTH: Free Pratique is obtained automatically when Authorities board on arrival and Maritime Declaration of Health is completed. In case of suspected disease or fever on board full details should be sent by radio to Sanidad Maritima, Algeciras, before arrival.

RADIO: Tarifa, Mijas, Aranjuez Radio and Cadiz Radio. Vessels bound for the Gibraltar Refinery must announce their arrival on VHF to the Port Captaincy using Channel 16 for calling and Channel 13 for communication.

Agent requires 72, 48 and 24 hours notice of arrival.

TUGS: 8 tugs up to 2,250 h.p., working in accordance with instructions from the Pilot. It is usual for vessels to provide tow-lines.

BERTHING:
Darsena Sur (South Dock):

Name	*Length* (m.)	*Depth* (m.)	*Usage*
Dique Norte	125	8 – 10	Bunkers
	590	10	Bunkers
	703	14	Bunkers
Muelle de la isla Verde	33	8 – 12	General cargo
	750	12	General cargo, containers and solid bulk cargoes.
	150	9	Ro/Ro
Muelle de la Galera (South)	75	4	Passengers
	305	6	Ferries
	264	10	Ferries
Muelle de la Galera (North)	180	8 – 10.5	General cargo and Ro/Ro
(East)	110	10.5	Frozen fish and bulk liquids
Muelle del Navio (East)	500	14	General cargo and containers
(South)	300	12	General cargo, containers
	225	10.5	General cargo
(West)	180	10.5	Ro/Ro

BULK HANDLING FACILITIES: *Cement:* Discharged to 2 storage silos at Muelle de la isla Verde. Rate 200 t.p.h.

Containers: 4×30 ton Paceco (Sealand) gantry cranes at Muelle de la isla Verde and 2×30 ton transtainers.

Scrap iron and metal products: Acerinox Quay: Length: 250 m. Depth 9.5 m. 2 jib cranes, capacity 25 tons each.

CRANES: (Also see "Bulk Handling Facilities").

Location	*Owner*	*No.*	*Capacity*
Muelle de la Galera (North)	Port Control	3	6
Muelle de la isla Verde	Port Control	1	30
Muelle de la isla Verde	Port Control	2	6
Muelle de la isla Verde	Private	1	3 – 8

Junta del Puerto (Port Control) also own mobile cranes, 1×3 – 6 ton, and 2×6 – 25 ton capacity.

STEVEDORES: Ordered by vessel's Agent on basis of Master's ETA.

MEDICAL: Doctors and hospital facilities available. International vaccination certificates only required if vessel is proceeding from an infected area.

TANKERS: Refineria Gibraltar (C.E.P.S.A.) – 5 berths for tankers up to 283 m. length, 2 of which can accept draft up to 65 ft. Loading/discharge lines are 12 in., 10 in., 8 in., 6 in. and 4 in. Refineria Gibraltar has 2 slop tanks each of 600 cu. m. capacity which can accept oily residues.

Berth	*Length* (m.)	*Depth* (m.)
South	700	19 – 20
North	380	17 – 19
North	300	17 – 19
North	115	6
South	115	6

There are 18 hydraulic and 10 manually operated loading arms. Max. pressure permitted 150 p.s.i.

Monobuoy: Operated by Compania Espanola de Petroleos S.A. (C.E.P.S.A.).

Location: Lat. 35° 10′ N. Long. 05° 24.8′ W.

Depth: Approx. 60 m.

Anchorage: Pilot will advise anchorage in accordance with weather conditions.

Prohibited Anchorage: Vessels are not to anchor within 0.3 miles of the monobuoy or within 150 m. of the underwater pipeline which runs in a N. 20° E. direction from the buoy to the Terminal onshore.

Pipelines: There are two underwater pipes, one 42 in. for crude oil and one 16 in. for bunkers.

Navigation Aid: Light: Fl. 3 every 8 seconds ("U") Range 5 miles. Height above sea level 6.0 m.

The buoy is also equipped with a radar reflector 7 m. above sea level, "Racon" letter "U" and fog signal manually operated with characteristic 3 blasts every 3 seconds ("U" in Morse code).

The floating hoses display white flashing lights 70 m. apart, 20 flashes every 60 seconds. Range 1 mile. Height above sea level 0.75 m.

Charts: Spanish: No. 3500 and 3503. British: B.A. No. 1448.

Communications:

Telegraphic Address: Spanoil, Algeciras.

Telex Address: 78007 Cepsa E.

Telegraphic Communications: Once the vessel has left the port of loading, Master must send a telegram via Aranjuez Radio, giving the following information:
(a) Name of vessel.
(b) ETA in GMT.
(c) Amount loaded per Bill of Lading.
(d) Specific gravity.
(e) Maximum draft.
(f) Capacity of tanks.
(g) Slops in the cargo.
(h) Whether it has a central bow installation, in which case give dimensions.
Where not, indicate type, characteristics and distance to the stem.

If vessel is to effect loading operations, once it has left its unloading port, Master must send the following telegram:
(a) Name of vessel.
(b) ETA in GMT.
(c) Quantity of cargo required.
(d) Amount of dirty ballast and deballasting time.

(e) Capacity of tanks.
(f) Amounts of slops and kind.
(g) Whether it has a central bow installation, in which case, give dimensions.

Where not, give type, characteristics and distance to the stem.

If the cargo receiving points are of a different type to 16 in. or 12 in. standard ASA 150 lb. this must be communicated both in the case of a vessel coming to load and one which will be discharging.

Within 72 hours of arrival, the Master must send a second telegram including the following information:

(a) Name of vessel and Master.
(b) ETA in GMT.
(c) Amount of fuel required.
(d) Additional requirements.

Within 48 and 24 hours prior to arrival, he must send further telegrams confirming his ETA.

Radiotelephonic Communications: A soon as the vessel is within VHF range, contact must be made with the Pilots or the Port Captaincy of the "Gibraltar" Refinery on Channel 13 to receive instructions with regard to berthing, this station listens out 24 hours a day.

Notice of Readiness: Will be accepted by the Monobuoy Berthing Master, when the vessel is in all respects ready to commence operations.

Notice of Readiness will be accepted under either of the following situations:

(a) When the Master receives the Monobuoy Berthing Master or,
(b) When the vessel has anchored in the anchorage area.

Port Closed: The Notice of Readiness will not be accepted when port closed.

Port closure periods are considered to be such when the weather conditions prevent vessels coming alongside and berthing. The decision to close the port is made by the Marine Authority.

Berthing sequence: Vessel will berth normally in strict order of arrival and any alteration will be duly communicated and sufficiently in advance.

Services and Facilities:

Pilotage: The Pilotage service is obligatory and the Corporation is available permanently. The waiting area for Pilots is between Lat. 36° 07.5′ and Lat. 36° 08.5′ N. and Long. 5° 24.0′ and Long. 5° 25.0′ W.

Mooring: The Monobuoy Berthing Master will board the vessel in the vicinity of the buoy together with a foreman, 2 deckmen and 2 divers and will assist the Pilot and crew respectively in the berthing operations. These services are provided free of charge and the personnel remain on board during the whole duration of operations during which food and accommodation of an adequate nature must be provided.

Tugs, launches, mooring equipment: Tugs and/or launches can assist the vessel in the operations of berthing and unberthing under the direct control and supervision of the Pilot and the Monobuoy Berthing Master. There are also launches for transporting crew members ashore.

Consignee: The Compania Espanola de Petroleos, S.A. at its "Gibraltar" Refinery, has a Consignee department. Vessels utilising this service must send their radiograms to the following address:

Compania Espanola de Petroleos, S.A.
"Refineria Gibraltar",
San Roque (Cadiz) – Spain
Telephones: 761700 – 764811 – 762600
Telex: 78007 Cepsa E
Telegrams: Spanoil (Algeciras)

Arrival Documents: The following documents are required:

6 copies of the Crew List
1 Negative Passenger List
3 Copies of Passenger List if any onboard
2 Copies of the Cargo Manifest for Algeciras
1 Copy of the Cargo Manifest for cargo in transit
2 Copies of the vessel's manifest list, including bunker, oil, tobacco, alcohol, medicine, belonging to the vessel.
2 Copies of a list of the crew's and passengers' personal effects.

The maximum quantity of tobacco and alcohol permitted for each crew member and passenger outside the manifest is 200 cigarettes and 1 litre bottle.

Free Pratique: It is not necessary to advise the Health Authorities prior to arrival unless there is any sickness on board.

Free Pratique is granted when the vessel is visited by the Health Official at the anchorage or when it is berthed at the Monobuoy and the following documents will be required:

1 Health Declaration
1 Crew List
1 Passenger List or
1 Negative Passenger List

The Health Official will inspect the Derat Certificate or Exemption. This Certificate can be drawn up or renewed at Algeciras if required.

Doctor: Medical Service, if required, can be obtained via the Agent and will be sent as quickly as possible.

Fuel Bunkers: Fuel Oil is supplied via the Monobuoy.

Apart from the advice by radio to the local Consignee, owners must contact Campsa-Madrid, advising them of the type and quantity of bunkers required on arrival.

(The suggestion above is based on the fact that in Spain all supplies are effected directly by Campsa through the authorised refineries).

Direct contact with Campsa by the Owner, and the transfer of funds for the supply, required by the local Agent prior to bunkering taking place.

Oils: A majority of international companies have stocks of oil in the country, requirements to be advised via their Agent sufficiently in advance in order to prepare documentation and delivery. This delivery will not be made whilst the vessel is moored at the Monobuoy carrying out loading or unloading operations since it has to be effected by barge or a tanker type tug. Only vessels operating with inert gas are excepted.

Water: This is supplied by a 200 ton vessel (the "Caracola"), and must be requested 48 hours in advance via the local Agent. There is no water line via the Monobuoy.

Victualling and Provisions: All kinds of stores obtainable in Algeciras and deck and machinery supplies can also be provided, requirements are to be communicated to the Agent or Consignee by radio.

All deck and machinery supplies will be supplied by launches or tugs prior to berthing or after unberthing at the Monobuoy.

Spares to be supplied from abroad for vessels at Algeciras must be sent to the airport of Malaga or the airport of Seville, addressed to the Master of the vessel in question and consigned to the local Agent at Algeciras.

Goods sent by TIR should be despatched to Malaga for Customs clearance.

Repairs: Only minor repairs can be carried out by local workshops. In the event of major repairs being required, there is at Cadiz, which is 120 kilometres away (approx.), all types of workshops and equipment. Any kind of repair which might leave the vessel without means of propulsion is absolutely prohibited whilst it is berthed at the Monobuoy.

Classification Societies: No classification societies have representatives at Algeciras.

The Agent will be advised to prepare the visit of Inspectors from Cadiz where all the Societies have a representative.

Telephone Numbers:
"Gibraltar" Refinery:

Monobuoy Berthing	761700 – 764811 – 762600 (Ext. 243)
Master	761700 – 764811 – 762600 (Ext. 311)
Port Captain	761700 (Ext. 222)
Fire Fighting	764811 – 762600 (Ext. 111)
Ambulance	764811 – 762600 (Ext. 111)
Medical	

Algeciras:

Command Post	663648
Police	660400
Fire Fighting	662222
Ambulance	662054

Mooring:

Preparation for Mooring: Vessels must have in position a Pilot ladder and/or hoisting ladder or a gangway which is safe and firmly protected for immediate use and sufficiently long to reach the Monobuoy Berthing Master's launch.

For vessels with a freeboard of 40 ft. or more, the gangway must be extended, lowered and the platform must not be more than 10 ft. from sea level, a Pilot ladder shall also be provided for boarding the platform.

Vessels must provide a lee on the port side for the embarkation or disembarkation of Monobuoy Berthing Masters.

Vessels must have prepared on the forecastle and in the bow section the following:

(a) 2 mooring cables of polypropylene if possible.
(b) 2 veering cables 5 in. circumference, min. length 300 ft.

Vessels must have ready amidships and on the port side the following:

(a) Derrick equipped and ready to lift equipment from the launch.
(b) Mooring shackles.
(c) Wire and equipment for connecting hoses.

Note: If vessels moor with the aid of tugs, the Port Pilot will indicate the number of tugs to be used and the cables required.

Mooring at the Monobuoy: The Monobuoy is equipped with a cable 19 in. in diameter and 180 ft. long (55 m.) and with a breaking strain of 795.6 tons, its ends having collars and special cable protections with corresponding shackles. The shackle which connects it to the Monobuoy has a test strain of 688.8 tons and this is connected to a meter, which indicates at any time the strain to which the whole assembly is subjected. The shackle placed at the other end has a test strain of 510 tons and is connected to a length of chain of two different dimensions, its total length being 40 ft. (12 m.). The first 25 ft. (8 m.) are of 4 in. ending in two lengths of 702 mm. length and 440 mm. wide, and which are connected to the remaining 15 ft. (5 m.) of chain with a dimension of 2.75 in. which ends in two open links 478 mm. long and 293 mm. wide. The end of this length of chain is connected by means of a shackle S.W.L. 40 tons to a plaited cable of polypropylene 11 in. diameter and 250 ft. (76 m.) long, known as the approaching cable. The end of this cable is identified by means of a small 12 in. diameter buoy connected to it by means of a 0.5 in. guy and 5 ft. long. The weight of the length of chain mentioned above is supported by a cylindrical buoy 3,600 kgs. in weight.

When the vessel is close to the Monobuoy the crew must pay out the end of the veering cable through the central fairlead or nearest alternative lead available on the port side, whilst at the same time, various flexible cables 16 in. or 10 in. are made fast on board, according to the tonnage, to each bitt and also to the bow, and if there is no central fairlead available, onto the bitts on the port side. Once on board, the chain will be made fast to the cables by means of two 4 in. or 2.5 in. shackles according to the type of cable to be used. Where the vessel has a "Smit Bracket" or similar type of berthing fitment, the chain will be made fast to this. Vessels of less than 150,000 d.w.t. will be connected to the 2.75 in. chain and those exceeding this tonnage will be connected to the 4 in. chain.

Whilst the vessel is berthed at the Monobuoy a tug will remain alongside in the event of it being necessary to remove the vessel from the Monobuoy, in which case she must have available at the stern a very good towing line.

Turbine vessels which may have their propellor turning, must go astern so as not to come close to the buoy and cause damage.

Connection and Disconnection of Hoses:

General: The Monobuoy has two floating hoses 20 in. in diameter for discharge and loading which end in 3×16 in. diameter sections, each for direct connection having an approximate weight of 7 tons. The hoses will be hoisted and connected by the crew of the vessel in collaboration with the foreman and two deckmen from the Terminal. The Monobuoy Berthing Master will assist the vessel's officers in the connection operations. For supply of bunkers there is a 12 in. diameter hose available with a weight limit which is less than those mentioned above.

Derricks: All tankers operating at the Monobuoy must have a derrick with minimum capacity of 10 tons on the port side.

Flanges: The connecting flanges are 16 in. ASA for loading/unloading and 12 in. 150 ASA for bunkers. In the event of vessels not having flanges of these dimensions or reducers, this should be notified by radio 72 hours in advance.

Ballasting and Deballasting:

Anti-pollution precautions: The vessel's Master must take the necessary measures so that there is no loss of dirty ballast and is responsible at all times for damages and costs which may originate from this.

Scuppers: Before commencing operations the scuppers must be closed.

Sea Valves: During the operation of ballasting, the tightness of the sea valves and inlets must be checked, taking all precautions to obviate contamination of the sea.

Ballasting/Deballasting during the night: If these operations are carried out during the night, the area must be adequately lit.

Inability to receive dirty ballast: All vessels operating at the Monobuoy must arrive with clean ballast since there is no facility for reception of dirty ballast. In the event that they have residue arising from tank cleaning, this must be pumped to the slop tanks, which will be measured and which will be loaded by the "load on top" system.

Loading and Discharging:

Communications during loading/discharging: All communications relative to loading and discharging of vessels will be made via the Monobuoy Berthing Master who will remain in contact constantly with the Refinery Blending department via portable VHF on Channel 9. In the event of damage to the portable VHF, contact will be continued via the vessel's equipment.

Damage during communication: In the event of damage to all communications with the Blending Department, the loading and discharging operations will cease immediately.

Average of loading and discharge: The installation can operate at an average (max.) of 12,000 cu.m. per hour and at a working pressure of 12 kg/sq.cm., at the vessel's manifold.

The supply of bunkers can be effected at a maximum average of 2,000 t.p.h. with a working pressure equal to 12 kg./sq.cm.

Anti-pollution precautions: Contamination of the sea by hydrocarbons is absolutely prohibited; this prohibition includes pumping. The non-fulfilment of this regulation can give rise to serious penalties and for which reason all vigilance must be applied to stop leaks which would give rise to the immediate cessation of all operations, the Master/Owner being entirely responsible for costs or damages which might arise therefrom. Trays must be provided to catch any possible leaks during connection or disconnection of hoses to the manifold.

Valve closure due to excessive loading: No valve will be closed which may stop or reduce the movement of the product, whilst the shore pumps are operating unless prior advice has been given to and the approval obtained from the Monobuoy Berthing Master. The practice of closing the valves at the vessel's manifold must be obviated.

If a decrease in pumping rate is required the shore terminal will lower the pumping rate to the required level if requested.

The Master will be responsible for any damage which may arise from the sudden stoppage in flow due to faults on board the vessel. It cannot be overemphasised for this to occur it is extremely dangerous and may give rise to extremely extensive damage to the installation.

Sample intakes and empties: All vessels which have available inert gas installations in service must arrive with all tanks depressurised for the purpose of taking samples, emptying water, etc. Once this operation has been effected, tanks can be pressurised once again. Once discharge has been terminated, the tanks will be depressurised in order that they may be inspected.

FRESH WATER: Available from all berths in Algeciras rate 30 t.p.h. – 200 t.p.h. depending or location and at Refineria Gibraltar. Can also be supplied by barge at the rate of 15 t.p.h.

FUEL: Fuel oil and Gas oil supplied by C.A.M.P.S.A. at Dique Norte (North Breakwater) and Muelle de la isla Verde.

Product	*Location*	*No. of Points*	*T.p.h. per Point*	*T.p.h. of Quay*
Heavy fuel No. 1	Dique Norte	4	200	200
Gas Oil "A"	Dique Norte	4	250	250
"B"	Dique Norte	4	250	250
"B"	Dique Norte	1	75	75
"B"	Dique Norte	1	20	20
"B"	Dique Norte	1	30	30
Heavy Fuel No. 1	Muelle de la isla Verde	3	150	150
Gas Oil "A"	Muelle de la isla Verde	3	200	200
Gas Oil "B"	Muelle de la isla Verde	3	200	200

Bunkers can also be delivered by road tanker or barge.

GANGWAY/DECK WATCHMEN: Not available from shore.

OPENING/CLOSING HATCHES: Opened and closed by ship's crew.

CUSTOMS ALLOWANCES: Max. quantity of tobacco permitted in ship's stores is 3 kilos per crew member and 2 kilos per passenger. The quantity that may be held out of bond is 40 grammes tobacco per person per day. Wine/Spirits. 1 decilitre per person per day may be held out of bond.

CONSULS:

Denmark
El Salvador
France
Great Britain
Italy
Morocco
Netherlands
Norway
Panama
Sweden

REPAIRS: Small repairs afloat can be effected. No dry docks.

AIRPORT: Nearest is at Malaga, 120 km. from Algeciras.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day, 6th January, 19th March, Maundy Thursday, Good Friday, Easter Saturday, 1st May, Corpus Christi, 29th June, 25th July, 15th August, 12th October, 1st November, 8th December, 25th December.

POLICE/FIRE/AMBULANCE: *Algeciras:* Police, tel: 660400; Fire, tel: 662222, Ambulance, tel: 662054. *Refineria Gibraltar:* Fire, tel: 761700, 764811, 762600 (ext. 222); Ambulance, tel: 761700; 764811, 762600 (Ext. 111).

SHORE LEAVE: Crew members are permitted to go ashore subject to police control.

AUTHORITY: Junta del Puerto de Algeciras-La Linea, Apartado No. 7, Paseo de la Conferencia S/N, Algeciras (Cadiz), Spain. *Tel:* 651011 – 651050 – 651100 - 651150 – 651390. *Telex:* 78036 JPAG E. *Contact:* Joaquin Lefler Pino, Port Director.

ALICANTE: 38.23 N. 00.28 W. (See Plan Book)

PORT LIMITS: The line drawn from Cabo de las Huertas and Cabo de Santa Pola.

DOCUMENTS:

4 Crew Lists.
4 Passenger Lists.
10 Manifests for Cargo, including cargo in transit as well as cargo for Alicante. Tobacco and Cargo Manifests to be visaed by Spanish Consulate in port of origin.
All vessels' Certificates.

PILOTAGE: The Pilotage service is permanent, and should be requested by means of the International Signals Code. It has a VHF radio station and can be called up on Channel 16. The Pilots have a motor launch painted white with the letter "P" on both sides, and flies a black flag with letter "P" in white, whilst at night it shows lights in accordance with the International Regulations. The launch meets vessels 1 mile from the green breakwater light, but in bad weather closer to that light.

ANCHORAGE: Vessels waiting to enter port may anchor at a distance of 0.5 miles off the breakwater in depths of 16 m.

MAX. SIZE: Vessels of up to 225 m. length and 38 ft. draft (60,000 – 80,000 d.w.t.) can be berthed alongside. For tankers, max. draft 35.20 ft. (10.73 m.) 36,000 d.w.t. at Muelle 11.

Discharge of butane is carried out at buoys located to the South of the port and with a limitation of maximum length of 140 m. between perpendiculars and 28 ft. draft.

HEALTH: Regulations as dictated by the International Regulations for Foreign Health are enforced.

RADIO: Radio-telephone communication through Radio La Costera, Alicante, medium frequency range approx. 220 miles and VHF approx. 40 miles.

TUGS: Only 1 tug available to assist berthing of 1,295 h.p. Normally ship's lines used for connection with tug. Tug meets vessel at Port entrance.

BERTHING: The breakwater extends in a S.W. direction and vessels berth within the breakwater. Max. depth being available at the outer end of the breakwater, decreasing in the N.E. direction.

Muelle 14: Extends along the length of the N.E./S.W. breakwater and depths vary alongside the berth from 12.5 m. at the S.W. end to 8 m. at the N.E. end. Length of quay – 970 m.
Muelle 12: Depth alongside 8.0 m. Length – 296 m.
Muelle 10: Depths alongside the berth vary from 6 m. to 8.75 m. Length – 203 m.
Muelle 9: Depth alongside berth 8.75 m. Length – 103 m.
Muelle 7: Depth alongside berth 8.75 m. Length – 240 m.
Muelle 11: A combined tanker, dry cargo and container berth. Length – 360 m.

CRANES: All quays have cranes of 3 – 6 tons, and on Quay No. 11 there is a 30 ton crane. Loading and discharging operations are always carried out by shore personnel, irrespective of the means used.

SPECIAL CARGO HANDLING FACILITIES: There are 3 berths located at the head of berths 10/12 and 12/14 for Ro/Ro traffic.

STEVEDORES: It is necessary to advise Agents 48 hours in advance of the arrival of the vessel.

The main goods shipped at this port are: canned goods, aluminium ore, asphalt, ground pepper, bulk cement, etc. Average speeds of loading and discharge are: bulk cargo 50 t.p.h.; general cargo 9 t.p.h.; bagged cargo 40 t.p.h.

MEDICAL: Many hospitals and medical services available. Advise Agent prior to arrival if medical assistance required.

TANKERS: Tankers discharge takes place at Muelle 11 (see "Berthing"). Product handled: Fuel oil, (2×12 in.) and Gas oil (2×10 in.)

DENSITY: Average 1030.

FRESH WATER: Available from hydrants at the quays at the rate of 10 t.p.h., per hydrant.

FUEL: Supplied by Campsa. Vessels requiring fuel are requested to berth alongside Muelle 11 and will incur delays if berth is already occupied. Maximum advance notice to Agent is essential.

CONSULS: The following countries have local representation: F.D.R., Belgium, Bolivia, Brazil, Chile, Denmark, Colombia, Finland, France, Gt. Britain, Greece, Guatemala, Haiti, Liberia, Norway, Netherlands, Panama, Paraguay, Peru, Dominican Republic, Sweden.

SURVEYORS: Comisario Maritimo Espanol (Spanish Maritime Commissary) and Lloyd's.

REPATRIATION: Possible, without difficulty.

GANGWAY/DECK WATCHMEN: Agents normally provide watchmen.

OPENING/CLOSING HATCHES: Normally opened by crew and closed by stevedores using cranes.
CUSTOMS ALLOWANCES: 200 cigarettes and one bottle of spirits per person.
CARGO GEAR: All berths have cranes, varying from about 6 tons capacity. There is 1 heavy lift crane capacity 30 tons, and one with capacity 10 tons.
REPAIRS: Only minor repairs carried out. There is a dry dock for small craft.
AIRPORT: About 8 km. distance from Alicante, and serviced by international flights.
IDENTIFICATION CARDS: Additional identification cards only required by crew members of communist-flag ships.
TIME: GMT plus 1 hour in Autumn and Winter. GMT plus 2 hours in Spring and Summer.
HOLIDAYS: Normally no work is carried out on the following holidays: New Year, 1st January; Epiphany, 6th January; La Pelegrina, 26th April; Maundy Thursday; Good Friday; Labour Day, 1st May; Festival of San Pedro, 29th June; Corpus Christi; Santiago Apostol, 25th July; Assumption; Festival of the Spanish Speaking World, 12th October; All Saints', 1st November; Immaculate Conception, 8th December and Christmas Day, 25th December.
POLICE/AMBULANCE/FIRE: Police, Tel: 091. Ambulance, Tel: 20.72.01. Fire Brigade, Tel: 22.90.80.
TELEPHONES: Can be installed on board; the cost of installation currently is about 12,000 pesetas.

SHIPMASTER'S REPORT: October 1983.
Documents: Unnecessary to have any papers visaed in previous port. Normal IMO papers acceptable but preferable to have separate Bonded Stores List.
Pilotage: In bad weather, Master will enter harbour without Pilot. Max. speed of pilot boat 7 knots.
On sailing, call Pilot 30 minutes before required by VHF Channels 16 or 12.
Health: No radio health message required.
Discharging: Discharging rate for boxes of pineapples using shore cranes was 25 t.p.h. per gang.
Fresh Water: Available at approx 15 t.p.h.
Watchmen: No watchman required.
Identification Cards: Agent provides separate I.D. cards for non-E.E.C. country crew members going ashore.

AUTHORITY: Comandancia Militar de Marina, Alicante.
Contact: Manuel Gonzalez Sicilla, Commandante.

ALMERIA: 36.52 N. 02.30 W. (See Plan Book)

DOCUMENTS:
4 Crew Lists.
4 Passenger Lists (embarking, disembarking and in transit).
2 Cargo manifests of goods destined to Almeria, as well as other cargoes in transit.
Store List in duplicate, including tobacco, spirits, radios, etc., belonging to vessel.
Note: Tobacco. In case vessel carries more than 6 kilos of tobacco per man, excess must be declared in a separate manifest, which must be visaed by a Spanish Consul. In absence of Consul, said document will have to be visaed by an Authority of former port of clearance. Otherwise, the vessel would be fined.
PILOTAGE: Compulsory, service is permanent. Pilots board vessels by motor-boat in roads, near entrance formed by two breakwaters. This entrance is 287 m. wide. Pilot boats are painted white and letter "P" is painted in black on each bow. Also boats have a blue flag hoisted on mast, with letter "P" in white on both sides of flag. At night, boats have white light, under this light is a red light. When weather is bad vessels approach as close as possible to entrance so that Pilot can easily board the vessel.
ANCHORAGE: When harbour is congested, vessel can anchor at West Mole while waiting for berth.
MAX. SIZE: Only limitation is draft. Max. draft 38 ft. in the inner port and 43 ft. in the outer port.
HEALTH: Pratique is obtained immediately after berthing, when Health Officer boards vessel, In case of suspected disease or fever on board Master must send a radio message to Agents, in order that they advise the Health Officer. Following documents are required by Health Officer upon berthing: Maritime Declaration of Health, Derat Certificate, 1 Crew List.
RADIO: Nearest important radio stations are Cadiz Radio and Palos Radio.
VHF: Call Almeria Radio on Channel 16 for connection with pilot station.
TUGS: 2 tugs available and compulsory in accordance with LOA, DWT and weather conditions.
BERTHING: Prior to ship's arrival and in accordance with Master's ETA Agent attends Port Authorities to procure a proper available berth. Commercial quays have a length of 475 m. with double sheds and 25 ft. water depth, 350 m. with single shed with max. depth 23 ft and 365 m. with max. depth 24 ft. – 29 ft. for tankers and Ro-Ro traffic. There is 363 m. of berthing space with 32 ft. depth and 250 m. with 39 ft. depth with open storage area for solid bulk cargoes.
There is a Ro-Ro ramp, max. load 20 tons per axle.
Iron Ore Berth: Max. size 80,000 d.w.t. Max. draft 13.9 m. 1 ship loader, rate 2,000 t.p.h.
STEVEDORES: It is necessary that Master sends ETA so that Agent can inform Receiver's stevedores accordingly and arrange for proper reception of cargo and berth. Timetable of shifts available at the port; Daytime, normal working hours, from 0800 – 1200 hrs. and 1400 – 1800 hrs. (1 shift), 0800 – 1400 hrs. (1 intensive shift), 1400 – 2000 hrs. (1 intensive shift). Night time, from 1800 to 2400 hrs.; Sundays and holidays, from 0900 to 1200 and 1400 to 1800 hrs.
MEDICAL: Medical facilities are available; only it would be appreciated for Master to send a radio message if a crew member is in need of urgent medical attention.
FRESH WATER: Always available. Deliveries from quay available at all berths, supplying about 30 t.p.h.
FUEL: Ordinary fuel oil and gas oil is available at local refinery of "Campsa". It is advisable that Shipowners stem bunkers through their own Contractors, with an ETA of 48 hours, so that the order can be received in time.
FIRE PRECAUTIONS: Tankers perform their operations at the berth of "Campsa" at East Pier, which has the necessary fire precautions. No special precautions at other piers.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: This work normally carried out by crew.
CERTIFICATES: Vessel should have the usual documents on board, but only the Safety Wireless, Safety Equipment and Derat Certificates are required by Authorities.
CUSTOMS ALLOWANCES: The quantity allowed per each crew member is 3 kilos tobacco. (See "Documents".) Wine and/or Spirits: Only one bottle for each crew member.
CARGO GEAR: Muelle de Levante: 1 crane capacity 15/25 tons.
Muelle de Ribera: 5 cranes capacity 3 tons.
Muelle de Poniente: 6 cranes capacity 3/6 tons, 2 cranes capacity 6 tons and 2 cranes capacity 12 tons.
IDENTIFICATION CARDS: Not required.
CONSULS:

Denmark, Alvarez de Castro 22	Tel: 212245
Sweden, Alvarez de Castro 22	„ 212245
Belgium, Paseo Generalismo 151	„ 214455
Netherlands, Paseo Generalismo 151	„ 214455
Finland, Aguilar Martell 7	„ 215954
Italy, Paseo Generalismo 18	„ 215790
France, Avenida Vivar Tellez	„ 220050

REPAIRS: All types deck and engine repairs available.
REPATRIATION: Good facilities available.
AIRPORT: Airport is located about 6 km. from town, well served by regular airlines.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: 1st January; 6th January; 19th March; (St. Joseph) Good Thursday afternoon; Maundy Thursday; Good Friday; 1st May (Labour Day); Corpus Christi; 25th July (Santiago), 15th August; Assumption Day; Last Saturday in August (Our Lady of the Sea – Local Holiday); 12th October; 8th December; 25th December and 26th December (second Christmas Day).
POLICE/AMBULANCE/FIRE: Police 214081; Ambulance 215780; Fire 220044.

SHIPMASTER'S REPORT: October 1983.
Pilotage: Pilot boat max. speed 6 knots. In bad weather, vessel should enter breakwater at slow speed and embark Pilot under lee of breakwater.
Health: No radio health message required.
Loading Rate: Vegetables per gang hour 20 – 25 tons using vessel's or shore cranes.
Watchmen: Not necessary.

AUTHORITY: Puerto de Almeria, Avda. Del Generalissimo 159, Almeria, Spain. *Contact:* Manuel Gimenez-Cuenca Nieto, El Director Del Puerto.

AVILES: 43.35 N. 05.56 W. (See Plan Book)

DOCUMENTS:
4 Crew Lists.
2 copies Crew Personal Effects Lists, signed by each crew member.
2 Passenger Lists or a negative.
3 sets of Cargo Manifest of goods destined for the port.
Another Manifest covering transit cargo.
2 Provisions and Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.
Safety Wireless Certificate and Safety Equipment Certificate.
Transit Tobacco Manifest: The Spanish Customs Regulations provide for 6 kilos of tobacco per crew member to be on board as usual provisions. If the total quantity of tobacco (including cigarettes, cigars, pipe and any other kind of tobacco) does not exceed said average of 6 kilos per crew member, such quantity may be declared as "provisions" on the usual Provisions List, and no further documentation is necessary. If the total quantity on board exceeds said average, the excessive quantity must be shown on a special transit manifest. Usual manifest forms may be employed, describing the tobacco in Spanish as "Tabaco en transito". The essential point is that this transit manifest is visaed by the Spanish Consulate, which must insert a full and complete visa. A simple consular stamp is not sufficient. If there is no Spanish Consulate at the last port of call or nearby, the tobacco manifest may be visaed by the local Customs Authority or by another consulate, but the visa is still essential.

PILOTAGE: Compulsory for vessels over 50 g.r.t. Telegrams to be sent to Corporacion de Practicos, San Juan de Nieva – Aviles Tel. 563013 or 566856. Vessel exceeding LOA 130 m. require 2 Pilots.

Send ETA 2 hours in advance, confirming by VHF when vessel some 10 miles off. Pilots listen continuously on Channels 16 and 12. Pilot craft are painted black with a white "P" on each bow. They are equipped with VHF and listen out on Channel 12, having also available Channels 16, 14, 9 and 6. When coming alongside a vessel they hoist the "H" flag. Normally they remain within the port, going out to vessels up to 1 mile from La Forcada.

ANCHORAGE: Outside the port vessels can use the sector between North and W.N.W. of La Forcada and at a distance of 1 mile from it, in 15 m. to 25 m. depth and sandy bottom. There are no sheltered anchorages. When awaiting a berth, vessels must remain at anchorage with one or two anchors.

RESTRICTIONS: Vessels LOA 180 m. – 210 m. enter and sail during daylight only.

Entrance Channel: Breadth: 153 m. Length: 920 m. up to San Juan de Nieva Basin. Depth at LW: 10 m. to 8.5 m. in the axis. Nature of bottom: Sand, hard clay and rock. Exposure: N.W. Breadth: 160 m. Depth at LW: 10 m. Maximum tidal flow: 2.25 knots.

MAX. SIZE: Max. LOA 210 m. In exceptional cases Port Authority may allow vessels up to 220 m. LOA to berth.

Keel Clearance:

LOA up to 130 m. – Keel clearance 2 ft.
LOA 130 m. – 150 m. – Keel clearance 3 ft.
LOA over 150 m. – Keel clearance 4 ft.

The admitted draft is calculated by deducting the number of feet required under the keel from the total depth of water which varies in accordance with tidal conditions. Tide tables are available upon request. In addition, the draft so calculated may still vary (by ± 1 ft.) under special atmospherical conditions. However, for a rough guidance, the following average figures, from which the respective number of feet under the keel must be deducted, may be sufficient:

	Normal	*Equinoctial*
Neap tides	*Spring tide*	*Spring tide*
8.80 m.	9.70 m.	10.60 m.
(23 ft. 10 in.)	(31 ft. 10 in.)	(34 ft. 9 in.)

Alongside the quays (equinoctial LW) draft varies between 11 ft. and 30 ft.

HEALTH: Yellow flag to be hoisted, and once Health Authority has boarded, and the Marine Health Certificate completed, provided this is negative, clearance is automatic.

Health documents required: Marine Health Declaration if coming from another country, but if from another Spanish port, the Health Clearance Document from that port suffices.

Derat, or Exemption Certificate required.

If coming from country where epidemic is in force, certificates of vaccination for each crew member.

If sickness on board, patient will be examined immediately and decision taken as to clearance or isolation.

RADIO: *Coastal Station:* Cabo Penas Radio: Lat. 43° 39′ 22″ N., Long. 5° 50′ 53″ W.

Operational Procedures:

1. Safety, Assistance, and Urgency: All medium wave coastal stations listen out permanently on 2182 kHz. It is of maximum interest for the safety of human life at sea for all vessels in Spanish coastal waters at reasonable distances from the coast to maintain a listening watch for as much time as possible on this frequency.

2. Traffic from the Coastal Stations: Having firstly announced the fact on 2182 kHz, Cabo Penas Radio transmits at 1133 hrs. Call-up lists firstly of foreign vessels and then of national vessels. Weather forecasts are transmitted at 1103 hrs. and 1733 hrs.

3. Operating frequency: The station's main frequency is 1757.5 kHz and the subsidiary is 2649 kHz. In calling vessels on these frequencies, the respective vessel reply frequencies are 2013 kHz. and 3231 kHz.

Where vessels call-up Cabo Penas, they use respectively 2013 kHz and 3231 kHz, the coastal station replying on 1757.5 kHz and 2649 kHz respectively. The frequency of 2182 kHz may be used exceptionally by vessels to call up the coastal station when that frequency is not working emergency traffic.

Vessels which do not have the above frequencies, should call up on 2182 kHz, the coastal station inviting them to pass to one of the frequencies assigned to such ships.

Radio telephone calls and messages: Once radio contact has been established with the coastal station, a request is made as follows:–

Radio telephone calls:

(a) name and call sign of the vessel making the request.
(b) Identity number assigned by C.T.N.E. or in the absence of this, the name of the shipowner or responsible entity for paying the ship's accounts, and the CIAC code in the case of a foreign vessel.
(c) Person requesting the call.
(d) Telephone number of person or entity to be called.
(e) Locality, province or country, if the call is international.

At the end of the call, the coastal station will indicate the length and cost of the call, if requested.

Messages: Only vessels belonging to the Maritime Message Service can use this service. The vessel sends its message to the coastal station, firstly indicating the name of its owner and telephone number.

Radio Medical Service: Crew members at sea can obtain help and advice via the coastal station who will connect the ship to the Radio Medical Centre. There is no charge for this service.

VHF: There is no transmission of weather forecasts, although a vessel may obtain such information on VHF by requesting connection to the Regional Meteorological Centre. Such connections have to be paid for.

Assistance, Urgency and Safety: All VHF coastal stations listen out permanently on Channel 16.

Cabo Penas Radio transmits call-up lists at 1103, 1303, 1703, 1903 and 2030 hrs. It transmits general Notices to Mariners at 0903 hrs. and 1603 hrs.

Its main VHF frequency is Channel 26, but also operates on Channels 24, 25 and 27.

The following table shows the frequencies in MHz for traffic between coastal station and vessel.

Channel	*Coastal Stn.*	*Vessel*	
26	161.90	157.30	Duplex working for public correspondence
24	161.80	157.20	
27	161.95	157.35	
25	161.85	157.25	

Radio telephone calls: These can be made in the same way as the M/F transmission.

Operating Range: Cabo Penas Radio operates between Cabo (Cape) Lastres and Cabo (Cape) Vidio.

TUGS: "Aranon" 600 h.p.; "Adelantado" 1,200 h.p.; "Nieva" 1,200 h.p.; "Raices", 1,800 h.p.

Requirements: LOA 100 – 130 m. – 1 tug.
LOA 130 – 150 m. – 2 tugs (1,000 h.p.)
LOA 150 – 210 m. – 2 tugs (3,000 h.p.)

BERTHING: 10 berths available.

Berth	*Length (m)*	*Depth (m)*	*Use*
Raices	822.84	8.0	Bulk and General
S. San Juan	300.00	6.0	" " "
W. San Juan	277.70	4.0	" " "
S.W. San Juan	90.25	2.0	" " "
New Fish Quay	303.00	5.0	Fish
Aviles Fish Quay	515.94	2.0 – 1.0	Fish
E. Ensidesa	300.00	9.0	Fuel, General, Bulk
E. and S. Ensidesa	715.00	7.0	General, Bulk
S. Ensidesa	107.50	5.0	General
Endasa	132.84	7.0	Bulk cargo

CRANES:

Ensidesa:

4×15 tons lifting capacity
9×12 tons lifting capacity
2× 6 tons lifting capacity
1×150 tons lifting capacity
2 gantry cranes×12 tons lifting capacity

Endasa:

2×10 tons lifting capacity

Commercial Berths:

5 cranes× 6 tons lifting capacity
2 cranes×45 tons lifting capacity
2 cranes×35 tons lifting capacity
2 cranes×12 tons lifting capacity
4 cranes× 5 tons lifting capacity
1 crane × 4 tons lifting capacity

STEVEDORES: Working hours: At "Ensidesa" berth 24 hours a day, 7 days a week, Sundays and holidays included.

All other Quays: Monday/Friday. 0800–1200 hrs., 1300/1700 hrs.

Overtime: 1700/2300 hrs.

Saturdays: 0800/1200 hrs. No overtime.

Sundays and Holidays: No work done.

MEDICAL: Crew members requiring medical attention, hospitalisation, etc., should be reported by the Master to the Ship's Agent in order to make the necessary arrangements. All services available.

TANKERS: Oil/Gas Berth: Equipped with facilities to load/unload oil products and gas through pipe-lines.

Liquified Gas Facilities:

Name	"Muelle de Ensidesa" – Zona "B" and "A".
Type of Berth	Concrete berth with rubber fenders.
Mooring	Normal mooring system giving lines to bollards alongside.
Length	300 m.
Depth	29 ft. LWOST alongside at berth, always afloat.
Type of handling installation	Shore hose connections of 6 in. for liquid and vapour available. No vessels' hoses required.
Largest LGC entered/ discharged (part cargo)	34,230/20,406 g.r.t./n.r.t., 53,400 cu.m. cargo capacity. Length overall: 216.10 m. Max. draft 36 ft. 2 in. (April 1982).
Shore Storage Particulars	
Operator	Empresa Nacional de Fertilizantes, S.A. ("Enfersa").
Other Users	Some Spanish companies occasionally operating by previous agreement with "Enfersa".
Products handled	Ammonia.
Minimum temperature	Minus 33° C.
Cargo pressure	3 kg – 4 kg.
Receiving temperatures	Ambient and fully refrigerated down to minus 33° C.
Maximum discharging rate	500 t.p.h. at minus 33° C.
Actual discharging rate	350 t.p.h. – 400 t.p.h.
Cargo operations permitted by night	Yes.
Round the clock discharging	Yes (SHinc).
Vapour return line available	Yes.
Distance from berth to storage	2.8 km.
Hoses of 6 in. available	Yes
Diameter of shore lines	12 in. Liquid and 8 in. Vapour.
Maximum back pressure permitted	3 kg – 4 kg.

Tanks	*Temperature*	*Capacity*	*Cu.m.*
2 Spherical	Ambient	2,000 tons	2,500
1 Cylindrical	Fully refrigerated	10,000 tons	15,000

Cargo handling equipment at Marine Terminal 1 shore line.

CUSTOMS ALLOWANCES: Normally Customs permit 200 cigarettes per man out of bond. Additional quantities needed on the stay of ship in port. 1 bottle of spirit per man. Also see "Documents".

REPAIRS: There is one shipyard at Aviles for small coasters and fishing trawlers. All types of repairs will be readily attended by specialised workshops. Advanced notification is suggested. Electrical power is supplied ex-wharf. Diver available.

DRY DOCKS: 1 dock at Las Canteres, owned by "Empresa Nacional Siderurgica", length 50 m., width 9.50 m. Capacity 600 tons.

4 docks at El Monumento owned by Astilleros Ojeda y Aniceto, length, 2 of 100 m. and 2 of 85 m. width 3.10 m. Capacity 500 tons.

FRESH WATER: Available ex-wharf or barge. From the wharf connections, it is supplied at 25 t.p.h. and from barge at those berths where there is no supply facility.

FUEL: Fuel and gas oil are supplied to ships by barge. There is a small tanker doing the service. Stem for bunkers can be arranged through usual contractors.

CONSULS: The following countries have consular representation in the nearby port of Gijon: Brazil, Colombia, Costa Rica, Dominican Republic, Finland, France, Italy, Netherlands, Norway, Panama, Peru, Portugal and Sweden.

SURVEYORS: Lloyd's Register, A.B.S., B.V. and G.L.

AIRPORT: The regional airport, named Asturias (in some instances it is still known as Oviedo) is 12 km. away from the port. There are daily flights linking Aviles with Madrid, Bilbao, Barcelona, Malaga, Tenerife and Santiago. Bus service available to and from the airport.

TIME: GMT plus 1 hour, except during Summer when GMT plus 2 hours.

HOLIDAYS: 1st January, 6th January, 19th March, 1st May, 21st June, 16th July (Mercantile Marine), 25th July, 28th August, 8th September, 12th October, 1st November, 8th and 25th December, Maundy Thursday, Good Friday, Easter Monday, Corpus Christi, Ascension Day.

POLICE/AMBULANCE/FIRE: Police 544311 and 544511. Ambulance 540080, 540511, 540733, 540844. Fire 546114, 544127.

AUTHORITY: Ayudantia Militar de Marina, Avenida Conde Guadalhorce, Aviles, Spain. *Contact:* Carlos Gago Lopez, Comandant.
Junta del Puerto y Ria de Aviles, Calle de Muelle 8, Aviles.

AGENT: Alvargonzalez, S.A., Guadalhorce 1, Aviles. Tel: 562075/6. Telex: 87492.

BARCELONA: 41.20 N. 02.10 E. (See Plan Book)

DOCUMENTS:

(1) Manifest of Barcelona cargo: 1 set covering all loading ports; make sure that this manifest is in perfectly good order before ship's berthing, as Customs will board the vessel immediately and take it away as it is; thereafter any omission or excess of pages may lead to a fine. It is important that the Master has copies as Manifests mailed by Agents in loading ports sometimes arrive too late or not at all.
(2) Manifest of Transit Cargo: 2 sets (same recommendations as above).
(3) 3 Crew Lists.
(4) 1 Negative or Passengers List.
(5) 2 sets of Bills of Lading of the Barcelona cargo.
(6) 2 Provisions Lists.

Of items (3), (4) and (6) above several copies will be required for distribution among various authorities, therefore it would be well for the Master to have at least 3 copies of each ready at hand on arrival. Tobacco allowed per crew member is 6 kg.

All tobacco in excess of the 6 kg. allowed by the Spanish authorities should be manifested and signed by the Spanish Consul at the last port of call before Spain. If there is no Spanish Consul at the last port before calling at Spain, then the consulate of a country friendly to Spain or the Port Authorities could carry out the same formality. The same procedure must be followed when the vessel loads a cargo of tobacco for discharge in Spanish ports, or when the tobacco cargo is loaded in transit.

If any item of cargo manifested for Barcelona should be discharged in error at any other port in the ship's itinerary before arrival at Spain, there would be a fine imposed here for shortage of goods if no advice of such shortage is given before arrival.

PILOTAGE: Pilot boats painted black, with letter "P" in white on each bow. Telegraphic address: "Pilot Station-Barcelona". Required notice of ETA 24 hours before arrival. Signals to be made by vessels requiring Pilot: the letter "G" in sound and/or light.

Pilot boats have no radar and are reluctant to venture more than just outside port entrance in poor visibility. Pilots give priority to vessels nearest port entrance. Pilotage is compulsory and the service is permanent. In case of port congestion vessels remain at anchor at the roads.

ANCHORAGES: In the Outer port for small vessels only, with depths over 50 ft. Also at the roads 0.5 miles away from breakwaters where vessels usually remain at anchor.

APPROACHES: *Entrance:* Width 600 m., depth 16 m. Nature of bottom is mud and sand.

MAX. SIZE: Only limitation is draft: max. 45 ft.

HEALTH: Pratique obtained immediately after berthing, when Health Officer boards vessel. In case of suspected disease or fever on board Master must send a message to Agent, to advise Health Office. Following documents are required by Health Officer upon berthing; Maritime Declaration of Health, Derat Certificate, 1 Crew List.

RADIO: Aranjuez Radio, call sign EAD.

VHF: Barcelona Radio can be contacted on VHF Channel 16, 3 hours before arrival and Channel 26 for long distance calls.

TUGS: Tugs join vessel at entrance of port. Usually use ship's lines; if tug's lines used usual charge 10% of official tariff. It is normal for 2 tugs to be used for vessels from 5,000 g.r.t. to 15,000 g.r.t.

10 tugs available, from 800 h.p. to 1,800 h.p.

BERTHING: Commercial quay, length 12,100 m. with depths 6.0 m. – 14.0 m., depending on location. Pier Barcelona, berths for transoceanic maritime passenger traffic, depths 26 ft. and 31 ft. Shore fenders keep vessel about 1 m. off quay.

CARGO HANDLING FACILITIES: Liquid methane reception and gasification plant with a storage capacity for 240,000 cu.m. of liquid gas. Potash reception and loading plant with mechanical loading bridges which can load up to 450 t.p.h. of this product.

General cargo handling is fully mechanised and, apart from the pier cranes, there are fork-lift trucks, truck cranes and a palletisation process.

17 Ro-Ro ramps available.

CONTAINER HANDLING FACILITIES: 2 container terminals, depth 14 m., total area 295,000 sq.m., 4 container cranes of 40 tonnes capacity.

Section A (Maritima Layetana, S.A.): 22 straddle carriers, 17 fork lifts with capacity 2.5 tonnes – 11.5 tonnes.

Section B (Tersaco, S.A.): 3 transtainers, 8 tractors, 16 trailers, 4 fork lifts of 35 tonnes capacity, 12 fork lifts 2.5 tonnes – 5 tonnes capacity.

BULK HANDLING FACILITIES:

Bulk Grain and Seed Discharge Terminal: Capacity 145,000 tonnes. Performance in 24 working hours: 15,000/17,000 tonnes.

The terminal for discharge, silage and delivery of cereals and seeds is located on Muelle Contradique (East Side). It comprises 3 silos with capacities of 20,000, 45,000 and 80,000 tonnes respectively. The terminal itself has a railway and truck-loading bay which may be used for ensiling or delivery.

The terminal has pneumatic facilities on the wharfside for discharging vessels and which may reach optimum rates of 1,200 tonnes/hr.

For delivery, which is gravity fed, there are two 60 tonne weighbridges.

Cereals, especially corn, and soya bean are discharged at this terminal. The latter is taken by belt conveyor to a factory located in Anden Costa for conversion to oil and meal.

These products are shipped in large bulk carriers of up to 280 m. length. The maximum draft at the present time is 13.10 m.

In addition there is another terminal located on the Alvarez de la Campa wharf specialising in the discharge, conversion and processing of soya bean.

It has a 250 m. long wharf with 11.20 m. depth and is equipped with modern pneumatic facilities for discharging, and like the Anden Costa factory described above, meal and oil are also loaded at this terminal.

The terminal's storage capacity is 42,000 tonnes of soya bean and 2,000 tonnes of oil, the discharge rate being 500 tonnes/hr.

Soya Bean Discharge Terminals: 2 terminals. Grinding plants with a capacity for 1 million tonnes. Meal and crude oil production.

Bulk Clinker and Cement Loading Terminal: Located at Muelle Contradique (South Side). Capacity for 50,000 tons clinker and 20,000 tonnes cement.

The terminal is equipped with a 22 m. hoistable and rotary arm gantry crane for loading bulk carriers.

Vessels up to 40,000 tonnes gross and having a draft of up to 12 m. may be loaded here without delays, due to the large storage capacity available at this terminal.

The suitability of this terminal is highlighted by the loading rates achieved: 1,000 tonnes/hr. for cement and 1,500 tonnes/hr. for clinker.

Apart from this terminal, there is another located on Muelle Alvarez de la Campa. Both are leased out under concession. The latter terminal has a storage capacity of 8,800 tonnes. This terminal receives cement from a works in the province of Tarragona for subsequent overland distribution.

Potash Loading Terminal: Storage capacity: 80,000 tonnes. 3 loading gantry cranes: 1,000 tonnes/hr.

Iron, Steel and Scrap: Handled at Muelle del Contradique Sur and Muelle Sur No. 1. 12 tonne and 30 tonne capacity cranes are used. Hourly rate is 80 tonnes for scrap and 250 tonnes for manufactured products.

Coal: Discharged at Contradique Sur, depth 12 m. Muelle Sur No. 1 (North Side) depth 12 m. and Muelle Sur No. 1 (East Side) depth 14 m.

Cranes of 12 tonne capacity are adapted and discharge rate is in excess of 110 tonnes per crane hour. The Storage Area is sufficient for a vessel discharging 60,000 tonnes.

TANKERS: There are 6 berths for oil tankers (refined products), max. size 60,000 d.w.t., discharge rate 1,000 t.p.h., depth alongside 12 m. (2), 11 m. (2), 8.5 m. (2). Diameter of loading lines 4 in. and 8 in., diameter of discharge lines 10 in., 12 in. and some of 16 in. Storage capacity 350,000 cu.m.

There is 1 natural liquid gas berth, depth alongside 12 m.

There are 5 berths for inflammable liquids, asphalt, vegetable oil and tallow, depth alongside 12 m.

Also see "Shipmaster's Report".

STEVEDORES: *(a)* Daytime, normal working hours, from 0800–1200 and 1400–1800 hrs. (1 shift); *(b)* 0800 – 1400 and 1400 – 2000 hrs. (2 "intensive" shifts). Night-time, from 2000 – 0200 and 0200 – 0800 hrs. (2 intensive night shifts). Extra costs are involved for intensive shifts. Nightwork is paid on an overtime basis. Average rates for discharge of grains in bulk are about 7,500/8,000 tons per day of 24 consecutive hours; for general cargo a rate of 100 tons within normal working hours

MEDICAL: All medical facilities are available; it would be appreciated if the Master advises in advance if crew member is in need of urgent medical attention. Contact Barcelona Radio in an emergency.

FRESH WATER: All piers have water available by shore pipes or by barge. Rate of delivery about 16/20 t.p.h. Rate by barge 150 t.p.h.

Ship's Master advises that fresh water is very saline and that it is not advisable to take any.

FUEL: Fuel oil and gas oil available at "Campsa", installation. It is advisable that Shipowners stem bunkers through their own contractors, with advance notice of 48 hours. Delivery either by barge, or at the bunkering pier of "Campsa". Bunker barges allowed alongside vessel during cargo-handling.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally carried out by crew, except in liner vessels which is contracted for by stevedores.

CERTIFICATES: Vessels should have all usual certificates aboard but only the Safety Wireless, Safety Equipment and Derat Certificates are required by authorities.

CUSTOMS ALLOWANCES: Quantity allowed for each crew member is 200 cigarettes and 1 bottle wine/spirits.

CARGO GEAR:

57 Quay cranes up to 3 tons
55 " " " 6 tons
6 " " " 10 tons
8 " " " 15 tons
141 Mobile cranes 1 – 50 tons
3 Floating cranes up to 160 tons

IDENTIFICATION CARDS: Not required.

CONSULS:

	Tel:		Tel:
Argentina	317-58-82	Indonesia	317-19-00
Austria	236-35-44	Italy	215-16-54
Belgium	218-07-58	Japan	310-20-97
Bolivia	250-73-24	Kampuchea	247-42-67
Brazil	301-49-00	Korea (Rep.)	203-82-50
Chile	318-85-86	Liberia	213-81-50
Colombia	254-02-48	Libya	228-11-04
Costa Rica	245-74-04	Madagascar	309-12-58
Cuba	318-19-36	Monaco	227-74-16
Denmark	310-20-91	Morocco	215-34-70
Dominican Republic	228-39-10	Netherlands	217-33-58
Ecuador	217-34-84	Nicaragua	227-92-30
Eire	250-04-48	Norway	215-00-94
El Salvador	245-02-64	Pakistan	257-42-30
Ethiopia	257-47-06	Panama	318-69-83
Finland	310-41-36	Paraguay	239-32-02
France	317-81-50	Peru	230-12-42
Gabon	227-66-27	Portugal	318-81-50
Germany, Fed. Rep.	218-47-50	Senegal	217-86-00
Great Britain	239-08-04	South Africa	318-42-58
Consul General, G.B.	239-08-04	Sweden	318-93-66
Greece	246-22-90	Switzerland	250-05-00
Guatemala	230-77-91	Thailand	301-43-44
Haiti	213-81-50	Turkey	215-20-09
Honduras	302-00-00	Uruguay	317-41-83
Iceland	250-03-93	U.S.A	319-95-50
India	239-78-06	Venezuela	215-01-12

REPAIRS: All types deck and engine.

DRY DOCKS: 1 floating dock, length 111 m., lifting power 12,000 tons; belonging to Port Management.

Dry dock, maximum available length 215 m., available beam 34.7 m. Cross-beam height at zero level of the port 19.6 m. Height of stocks above zero level 8.74 m. Cross-beam height to top of superstructure 12.1 m. 50 ton, 20 ton, 5 ton and 3 ton cranes. Can accommodate vessels of 50,000 d.w.t.

SURVEYORS: Lloyd's; 2410400. A.B.S.; 2399275. N.V.; 3192906 and 2463164.

REPATRIATION: Good facilities available.

AIRPORT: Located about 7 km. from town, well served by regular airlines.

TIME: GMT plus 1 hour; GMT plus 2 hours (29th March – 26th September).

HOLIDAYS: 1st January; 6th January, Good Friday; 1st May, 25th December.

No cargo work Maundy Thursday, Good Friday, Easter Sunday and Easter Monday.

POLICE/AMBULANCE/FIRE: Police 091; Harbour Police 3026367; Ambulance 3171717 (Also 24 hour medical service); Fire 080 and 2535353 (080 is best).

TELEPHONES: Only at Terminal Station.

SERVICES: Carpenters, lashing, hatch and tank cleaning all available.

DEVELOPMENTS: Lengthening under construction of breakwater Dique del Este, and pier Contradique. A wharf for 6 berths for tankers only, plus 4 berths for vessels loading/unloading crudes in bulk with a depth of 39 ft.

2×30 ton cranes on order to be located at South No. 1 Wharf for the handling of bulk solids.

8×6 ton cranes on order to be located at Costa and Anden de Costa Wharves for the handling of general cargo.

2 container cranes on order to be located at the South end of Principe de Espana Wharf.

Completion of 550 m. of new quay at South No. 1 Wharf with a depth of 140 m.

350 m. of new wharf to be built at Alvarez de la Campa Wharf, including a Ro-Ro berth and 45,000 sq.m. of open space and a depth of 12.0 m.

SHIPMASTER'S REPORT: March 1981.

Approaches: If vessel coming from the East, no problems, as the radar picks up the line of the breakwater about 20 miles out. There is also a D.F. station close to the entrance to check vessel's position. Also suitable for calibrating the D.F. if time allows.

The extension to the breakwater is now completed, and the light buoy marking the end of the extension has now been removed.

Anchorage position is about 0.5 miles from the breakwater where vessels usually remain at anchor awaiting instructions.

Port: The large Southern extension of the port is well under way, and it was in this dock that the vessel berthed. It would appear that this extension will be used for general cargo, containers, and oils/gases. The gas berths lie on the Eastern side of the dock. There being 3 berths available at present. The Northern Berth handles LNG/LPG. The second berth LPG and No. 3 Berth handles oils. Dredged depth alongside according to chart B.A. 1180 is 10 m.

Pilots: Pilots board the vessel just outside the breakwater, from a small launch painted black with a white letter "P" painted on its sides. Pilots are reluctant to proceed very far outside the breakwater entrance.

Pilots can be contacted on VHF about 30 miles out at sea. Working Channels 16 and 12.

After completion of cargo, Pilots are called and appear on the vessel within 30 minutes.

For arrival Pilots are required to be given 24 hours' notice.

Berthing/Unberthing: Vessel's usually berth port side to head up the dock, but if it is required by the ship they will berth starboard side to.

Vessels can berth or sail at any time of the day or night.

Vessel assisted by 2 tugs forward and aft. Tugs using ship's lines. The 2 land side tugs put the lines ashore, and then push the vessel onto the quay until mooring is completed. No particular problems with berthing or unberthing.

Berth: The vessel lies alongside dolphin, which carries the pipe-line. The dolphin is adequately fendered. Fenders are large flat wooden faces, with a backing of large rubber tyres.

Aft mooring arrangements not very satisfactory at this call as 2 of the mooring hooks were inoperative. Had they been working the usual arrangement of 3, 2 and 2 could have been possible.

Attention must be paid to the mooring boat, whose crew will take the ropes to any position they feel inclined. This happens forward. Aft they have fewer choices as to where to put the ropes. Vessel tied up at No. 2 Berth on this call.

Cargo Operations: Connection is to a cargo hose 12 in./8 in. line ASA 150. Shore provide the reducer and connect and disconnect. Pumping rate varied between 230/110 t.p.h. (butane). Butane tanks are 3 km. away so the usual high back pressure was experienced. Back pressure during discharge was 8 bars. Discharge was carried out using 2 pumps.

Vessel was informed by the surveyor that it was advisable to use as many pumps as the back pressure allowed, as the shore may protest at the slow discharge rate.

During this stay the shore tanks were full and were being topped off, this could have been the reason for the low rate. Possibly a better rate could be expected with propane as the tanks are only about 1 km. away.

The cargo hose was in a poor condition on the exterior. Burning was in operation on the berth ahead of the vessel, smoking regulations seemed lax.

Communications between the ship and shore were very poor as nobody spoke any English or French. Communications between the jetty and the tanks, were also very poor, messages are passed by sound powered telephone but it would appear that at the tanks nobody is in attendance at all times.

If it is possible and vessel is berthed at No. 2 Berth use the forward manifold otherwise the gangway will not be able to be landed on the dock, and will overhang by a few feet.

General: Papers required for the port are those laid down in "Guide to Port Entry". Chandler available, who can deliver by either road or barge. Storing from the quay would be awkward due to the space available on the dock, and in fact the derrick is supporting the cargo hose. After stores cranes cannot work to the quay. Stores were not taken at this port, for this reason.

Deck and engine repairs can be carried out at this port.

Lloyd's Surveyors are available for hull and engine surveys.

The airport is about 4 miles away and there is no problem with repatriation.

The berth is a considerable distance from the town and arranging taxis to come down to the vessel can cause problems. For this reason the vessel laid on a taxi service for a limited time during the vessel's stay in port. Taxi fare to town was about 400 pesetas.

No telephone available on the berth, but local calls may be made from the gate house of the "Enagas" Terminal across the road from the berth.

Water density 1025 (arrival), 1026 (departure).

AUTHORITY: Puerto Autonomo de Barcelona, Pl. Puerta de la Paz 1, Barcelona-2, Spain. *Tel:* 3188850, 3188750. *Telex:* 54000 JOPB. *Contact:* Jose Ma. Munteis Aumatell, Port Director.

BILBAO: 43.22 N. 03.05 W. (See Plan Book)

DOCUMENTS:

6 copies Crew List.

4 copies Passenger List (if any on board) or 2 Negative Passenger Lists.

3 copies Crew's Personal Effects Lists, if any.

3 copies Ship's Store Lists.

Safety Radiotelegraphy Certificate.

Safety Equipment Certificate (g.r.t. 500 or above)

Safety Construction Certificate (g.r.t. 500 or above)

International Health Declaration Form.

Narcotic List.

Vaccination List.

Declaration of no animals on board.

3 copies Cargo Manifest.

2 copies Manifest of Cargo in Transit.

Tobacco Allowance: Crew members are not allowed to keep more than 200 cigarettes (or the equivalent in tobacco) and a bottle (1 litre) of spirits out of bond. The rest must be included in the vessel's store lists, and is to be sealed. The total maximum quantity that any ship can carry in accordance with the Spanish Laws is 6 kg. of tobacco for each person aboard.

Any quantity over this amount should be manifested as "tobacco in transit" and this manifest to be visaed by the Spanish Consulate in the previous port. For ships diverted at sea to a Spanish port or if a Spanish Consulate is not available at the last port of call, Master is required to send prior to arrival the following cable to:

DIRECCION GENERAL DE ADUANAS-MADRID

"Vessel ....Coming from ....

bound to Bilbao with tobacco Manifest not visaed in the last port of call due to not being available Spanish Consulate.

Master ....

The text of the cable should be entered in the Log Book and a copy delivered to the Custom's Agent when boarding.

Clearance: Health and Customs Authorities will board either when vessel is at anchor or berthed. Customary national and international regulations concerning Free Pratique are applied. Unless contagious sickness being on board, or vessel coming from an epidemic zone, radio advice to Health Authority is not required. Health Declaration, Derat Certificate and Crew List are required by Health Authorities.

PILOTAGE: Pilotage is compulsory for vessels entering and leaving the Port of Bilbao. Vessels must make contact with the pilot station 1 hour before arrival; Masters shall make contact again when 7 miles from the port entrance.

Arrival Information: There are no traffic separation schemes or traffic control systems in the approaches to the port of Bilbao.

The pilot station keeps permanent radio watch on VHF Channel 12. When Pilot on board and ship approaching the berth VHF communication is carried on Channel 14.

ANCHORAGE: Masters will be informed by Harbour Pilot about the estimated berthing time and any other particulars that concern berthing prospects. Should need for anchoring arise, vessels will be requested to anchor under the control of the Harbour Pilot in the usual anchorages, i.e. in waters between former entrance mouth of Santurce and new entrance mouth of Lucero.

Crude and oil product carriers follow the same procedure, the anchorage position is stated by the Refinery Terminal Superintendency, although vessel receives instructions through VHF from Pilot on arrival.

Reference "A": (Open sea outside harbour entrance): Recommended for vessels with a draft greater than 20 m. or over 150,000 d.w.t., in case of emergency it is deemed the better manoeuvring area.

Holding ground: Sand.

Depth: 50 m.

Bearings and distances: Northward from the entrance green lighthouse, 1.7 miles away and bearing 314° from Punta Galea Lighthouse, distance 2.7 miles.

Reference "B": (Inside the harbour entrance): 90,000 – 150,000 d.w.t. vessels whose draft is less than 20 m.

Holding ground: Sand.

Depth: 27 m.

Bearing and distance: 261° from Punta Galea Lighthouse, distance 1.9 miles.

Reference "C": (Inside the harbour entrance): Less than 90,000 d.w.t. vessels.

Holding ground: Sand.

Depth: 24 m.

Bearing and distance: 229° from Punta Galea Lighthouse, distance 1.2 miles.

Reference "D": (Inside the harbour entrance): Used when anchorage "C" is occupied.

Holding ground: Sand.

Depth: 20 m.

Bearing and distance: 204° from Punta Galea Lighthouse, distance 1.2 miles.

Ships in general (other than those bound for Refinery Terminal) that are required to wait due to berthing schedule, or tide level when bound up river, may receive instructions from Pilot to anchor either in between new outer Port Entrance of Lucero and the older Santurce breakwater; or inside waters enclosed by Arriluce and Santurce breakwaters. In this latter area an additional facility of 3 sets of mooring buoys for lightening, LASH type ship turnround operations, etc., are located in waters 14 m. deep.

MAX. SIZE: Drafts available for dry cargo vessels range from 4 m. up to 14.5 m. and tankers up to 32 m. The largest vessel received was 409,499 d.w.t, length 378.01 m. and draft 22.48 m.

HEALTH: Vessels requiring Free Pratique have to fly "Q" Flag whe entering port. If proceeding direct to berth, Pratique obtaine immediately after berthing. Otherwise, at anchorage on arrival. Case suspected disease or fever on board, Master must radio Agent, t advise Health Office. On berthing Health Authorities require Healt Declaration, Derat Certificate and Crew List. Also see "documents".

RADIO: Short wave communication link through Aranjuez Radio an Pozuelo del Rey Radio. Medium wave communication link is throug Machichaco Cape Radio.

VHF: Bilbao Coastal Radio Station on Channel 16.

Other stations in vicinity and operating on the same calling channe are Cabo Mayor, Cabo Machichaco and Choritoquieta.

Petronor Refinery Terminal keeps permanent watch on VH Channels 12 and 14.

TUGS: No tugs required for entering port, only for berthing or shiftin inside river. Ship's lines used, tugs employed according Pilot's advice 28 tugs available, 125 h.p. – 4,000 h.p.

BERTHING: Operated by the Port Authority:

General Cargo:

750 m. of berthing with depth of more than 12 m. and Ro/Ro facility.

1,640 m. of berthing with depth between 8 m. and 10 m.

150 m. of berthing with depth between 6 m. and 8 m.

681 m. of berthing with depth between 4 m. and 6 m.

Bulk Cargo:

174 m. of berthing, water depth 14.5 m.

1,043 m. of berthing, water depth 14 m.

154 m. of berthing, water depth 10.5 m.

1,088 m. of berthing, water depth 8 m. – 10 m.

527 m. of berthing, water depth 6 m. – 8 m.

Liquid Cargoes:

Crude and oil products: Lucero Terminal (leased to Petronor)

Berth No. 1 draft 32 m., length 400 m. (with a fendered jetty 140 m. wide

Berth No. 2 draft 19 m., length 400 m. (with a fendered jetty 96 m. wide

Berth No. 3 draft 13 m., length 200 m. (with a fendered jetty 85 m. wide

Berth No. 4 draft 11 m., length 200 m.

Berth No. 5 draft 11 m., length 200 m.

Berth No. 6 draft 7.5 m., length 100 m.

Other oils and chemicals:

220 m. of berthing, water depth 5 m.

*620 m. of berthing, water depth 9 m.

*980 m. of berthing, water depth 14 m.

*Jointly shared with dry cargo handling operations.

Privately owned Chemical Plants and Mills: Specially fitted for dry and liquid cargo handling, totalling 5,469 m. of berthing space; water depth 4 m. – 8 m.

Containers:

645 m. of berthing with depth of 14 m.

500 m. of berthing with depth between 8 m. and 9 m.

Passenger:

180 m. of berthing with depth between 10 m. and 12 m.

There are also 3 Ro/Ro ramps available.

CRANES: *Dry Bulk:*

Gantry type, 2 (leased)×35 tons lifting capacity.

Luffing type, 12 (leased)×14 tons lifting capacity.

Luffing type, 10 (public)×12 tons lifting capacity.

Luffing type, 32 (public)×6 tons lifting capacity.

Break Bulk:

Luffing type, 2 (leased)×30 tons lifting capacity.

Luffing type, 3 (public)×30 tons lifting capacity.

Luffing type, 6 (public)×12 tons lifting capacity.

Luffing type, 50 (public)×6 tons lifting capacity.

Container Terminals:

Ship to shore, gantry type, 2 (leased)×50 tons lifting capacity.

Ship to shore, gantry type, 2 (leased)×40 tons lifting capacity.

Ship to shore, gantry type, 1 (leased)×32 tons lifting capacity.

Mobile type, 20 (leased)×20 – 100 tons lifting capacity.

Floating Cranes: 4 units for bulk cargoes, 12 tons – 35 tons capacity.

1 for heavy lift cargoes up to 400 tons capacity.

STEVEDORES: Ordinary working time (Monday/Friday) 0800 - 1200 hrs., 1400 – 1800 hrs. (break at noon).

Ordinary working time (Monday/Friday) 0800 – 1400 hrs; 1400 - 2000 hrs. (2 intensive relief turns).

Extraordinary working time: Round the clock, 7 days a week available.

Inform Agent about requirements in advance.

MEDICAL: Medical service must be arranged by the Agent.

TANKERS:

Petronor Refinery: *Location:* The Petronor Refinery is located on the North coast of Spain; the Marine Terminal is situated near the Township of Abanto v Ciervana. Geographical situation is approximately Latitude 43° 22.2′ N. Longitude 3° 05.8′ W.

Arrival Information: Vessels must send radio advice to Petronor (Somorrostro), telephone 6605291 and ETA advice 72, 48 and 24 hours prior to arrival.

The 24 hour advance notice should be updated there after whenever 2 hours delay or more is likely.

Contact can be made via Aranjuez/EAV, or Coastal Radio stations of Corunna, Cabo Mayor and Bilbao (VHF Channel 16).

The arrival cable shall include: Name of the vessel; ETA; Master's full name.

For VLCCs, Pilots will board 3 miles from outer entrance mouth. No traffic separation schemes or traffic control systems are established.

When vessels are coming to load the cable must also specify: the quantity and grade of cargo, loading order when it is more than one grade, tons of ballast and estimated deballasting time, bunkers required and the type. All communications with the Refinery Marine Terminal, do not relieve the Master of keeping the vessel's Agent duly informed.

Anchorage: Masters will be informed by Harbour Pilots of the estimated berthing time and any other information in connection with berthing prospects; should need for anchoring arise due to terminal necessities or any others, vessels will be requested to anchor under the control of the Harbour Pilots in the usual anchoring places, which must be confirmed by Pilots.

Depths: The depth at the entrance and manoeuvring area to berths is 28 m. to 29 m., the maximum tidal range is 4.5 m. All depths refer to low water equinoctial springs.

Health: Garbage or trash must not be dumped into the port waters. The area surrounding the vessel shall be kept clean.

VHF: Petronor Marine Terminal, is provided with a permanent radio watch service through VHF Channel 14 or 12.

Before berthing, Control will monitor VHF Channel 12; when the vessel is approaching the berth, it will change to work on Channel 14. Likewise, Petronor personnel appointed to the berth are constantly in communication with the Port Control through the radio. For internal communications between Berth/Port Control and the Refinery, there is, in addition to radio, a telephone system for restricted use.

Berthing: Speed Reference Lights: Placed inside the West breakwater from its initial point, near the port entrance are vertical blue lights that will help on determining the speed when vessel is proceeding towards berths.

From the initial point of the inside breakwater to Berth No. 1, lights are installed every 200 m. From Berth No. 1 to No. 2 every 100 m.

Berthing Assistance Information; Nereides System: Berths No. 1 and 2 are provided with a radar and sonar system which, by means of a luminous panel placed at berth and easily seen from the vessel, supplies the Master and Pilot with an instantaneous indication of the vessel's speed in cm./sec. of the hull side in connection with berthing at bow and stern; likewise, by means of the sonar, the distance in metres, from the hull to the contact points (fenders) bow/stern, appears on the same panel.

Berth No. 1	HW	LW
Spring tides	15 ft. 6 in.	0
Neap tides	9 ft. 6 in.	4 ft. 11 in.
Currents	None reported	
Depths	31 m.	
Loading arms (Hydraulic speed seal connection)		
Crude	4×16 in.	
Ballast	2×16 in.	
Bunker	1×12 in.	

Moorings
2 quick release hooks of 60 tons each.
3 quick release hooks of 100 tons each.
Mooring wires are permitted.

Berth No. 2	HW	LW
Spring tides	15 ft. 6 in.	0
Neap tides	9 ft. 6 in.	4 ft. 11 in.
Currents	None reported	
Depth	19.5 m.	
Loading arms (Hydraulic speed seal connection)		
Crude/fuel/ballast	2×12 in.	
Clean products/ballast	2×10 in.	

Moorings
2 quick release hooks of 60 tons each.
3 quick release hooks of 100 tons each.
Mooring wires are permitted.

Berth Nos. 3-4-5-6
Tides and currents: Same for Berth Nos. 1-2.

Loading arms

Berth No. 3	Fuel/ballast	2×12 in.	Speed seal
	Clean products	1× 8 in.	Speed seal
	Clean products	1× 6 in.	Speed seal
Berth No. 4	Fuel/ballast	2×12 in.	Speed seal
	Ballast/clean products	2× 8 in.	Speed seal
Berth No. 5	Fuel/ballast	2×10 in.	No Speed seal
	Clean products/ballast	1× 8 in.	No Speed seal
	Gasoline	1× 6 in.	Speed seal
Berth No. 6	Fuel/ballast	2×10 in.	No Speed seal
	Clean products	1× 8 in.	No Speed seal

Moorings: Mooring wires are permitted on the quick release hooks; if shore bitts are used the eyes of mooring line must be of manila, synthetic fibre or similar.

Mooring Lines: Vessels must be provided with suitable mooring lines in quality and quantity in accordance with their size. The quantity should not be less than 4 headlines, 4 breast and 4 springs at bow and stern respectively. The vessel's crew must keep the mooring lines taut and to the satisfaction of the Petronor supervisor at all times; the variations of the vessel due to changes of tide and/or vessel operations shall be taken into account constantly. The use of the tension winches will be carried out under Terminal Chief authorisation, in order to have the protection of the loading arms always guaranteed.

The use of mooring wires by the vessel will be allowed on the quick release hooks. If using wires to the bollards ashore, the tail pieces must be of Manila, synthetic fibre or similar with a breaking load at least equal of the wires.

Cargo information:

Heavy Hydrocarbons: Heavy hydrocarbons, such as Fuels, Diesel, Asphalts, etc., with an ignition point higher than 65°C (150°F) will be loaded in accordance with the rates established by the Refinery or limited to the conditions of the vessel lines.

Middle Distillates: Products such as Kerosenes, JP-5, Jet A-1, JP-4, Naphtha, Gasoline, Benzene, Toluene, etc.

The flow loading rate of these products to the vessel tanks will not exceed 1 m./sec. (3 ft./sec.) till the cargo level is 1 m. over the tank bottoms (covering lines, heating coils, etc.), in order to avoid turbulence and splashes.

This loading rate could be increased up to 5 m./sec. once the liquid reaches the mentioned level and it will be decreased to 1 m./sec. whenever the cargo level reaches 1 m. under the upper maximum level (vessel deck.)

The flow loading rate will be according to the following table:

Cargo line diameter	*Velocity flow rate 1 m./sec. bbls./cu.m.*	*Velocity flow rate 5 m./sec. bbls./cu.m.*
4 in.	168 bbls./h. 27 cu.m.	840 bbls./h. 133 cu.m.
6 in.	380 bbls./h. 60.3 cu.m.	1,900 bbls./h. 301.4 cu.m.
8 in.	675 bbls./h. 107.1 cu.m.	3,375 bbls./h. 535.7 cu.m.
10 in.	1,080 bbls./h. 171.4 cu.m.	5,400 bbls./h. 857 cu.m.
12 in.	1,510 bbls./h. 239.6 cu.m.	7,550 bbls./h. 1,198 cu.m.
14 in.	1,850 bbls./h. 293.6 cu.m.	9,250 bbls./h. 1,467.2 cu.m.
16 in.	2,450 bbls./h. 388.9 cu.m.	12,250 bbls./h. 1,944.4 cu.m.

Medical: Medical services must be arranged through the Agent. In case of emergency this service can be requested through VHF in order to have everything prepared on arrival either at berth or at anchorage.

Petronor will advise the Health Authorities through VHF 16 or 14.

Fresh Water: No fresh water facilities on the berths. Fresh water must be arranged through the Agent in order to be supplied by barges.

Fuel: The fuel-oil/gas-oil requirements will be arranged directly between the vessel's Agent and Campsa. Fuel-oil is only available at Berth No. 1 with fuel-oil and gas-oil at all other berths.

Ballast: All ballast will be discharged into the shore facilities. The Master will report to the terminal when due to bad weather, the ballast quantity is above normal.

The sea suction and overboard discharge valves will be inspected, closed and sealed before starting any operation; representatives from the terminal and the vessel will take part in the inspection of the closing and sealing. The bilge valves of the engine with sea discharge will be also sealed.

Crew landing Permits: There is no restriction.

The Master will receive Control Permits of the terminals on arrival which will be duly completed before going ashore, each member will give one copy to the Petronor Representative at the berth gate.

Communications: The Marine Terminal is located at a distance of 8 km. from the nearest rail station in Santurce; the departure frequency of trains is every 10 minutes.

The distance to/from Bilbao is 25 km. by road.

Visitors: Access to the terminal is only authorised to those persons who under previous justification should get on board.

The Marine terminal of the refinery will issue the pass permit, pointing out the authorised area and time limit.

To go on board, under the previous authorisation of the Master, all persons should be provided with the respective permission of the Spanish Marine Authority.

DENSITY: 1025.

FRESH WATER: Available at some berths, rate 25 – 60 t.p.h., otherwise by barge.

FUEL: Pipe-lines available at some berths, rate at cargo berths 130 t.p.h. per loading point and up to 3,000 t.p.h. and VLCC berth, otherwise by barge. Advise Agent 48 hours in advance.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: Normally by crew, except in liner vessels, when contracted by stevedores.

CERTIFICATES: Have usual documents on board, but only Safety Radio, Safety Equipment and Derat Certificates required by authorities.

CUSTOMS ALLOWANCES: Normally, Customs permit 200 cigarettes, and 1 bottle wine/spirits per man. Also see "Documents".

CARGO GEAR: Usually shore cranes employed in loading or discharging.

IDENTIFICATION CARDS: Not required.

CONSULS:

Argentina
Austria
Belgium
Bolivia
Brazil
Colombia
Costa Rica
Chile
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany (F.R.)
Greece
Guatemala
Haiti
Iceland
Italy
Ivory Coast
Jordan
Liberia
Mexico
Netherlands
Nicaragua
Pakistan
Panama
Paraguay
Peru
Philippines
Portugal
Sweden
Switzerland
Uruguay
U.S.A.
United Kingdom
Venezuela

REPAIRS: Good repair facilities, and several important shipyards.

DRY DOCKS: 3 graving docks. Biggest: length 166 m., breadth: 20 m. (owner AESA).

SURVEYORS: Most internationally recognised and well founded survey companies, concerned with cargo or ships' class certification, are established in the Port of Bilbao as well as those related to insurance in both areas. Ship's Agent can provide detailed information.

REPATRIATION: Good facilities.

AIRPORT: Sondica airport 6 km. from the City, Tel: 4531350.

Foronda airport, 50 km. from the City, Tel: 945-273300.

Overseas services and links to all over the world from both airports.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: 1st January; 6th January; 19th March; Good Friday; 1st May; Corpus Christi Day; 16th July, 25th July; 15th August; 12th October; 1st November; 8th December; 25th December; and another two fixed local holidays.

POLICE/AMBULANCE/FIRE: Police Tel: 4402011.

Ambulance/Hospitals: Basurto Hospital Tel: 4418700. Emergency medical service, Tel: 4614000 – 4614111.

Red Cross: Sea service, Tel: 4600200. Shore service, Tel: 4446256.

Fire Service: Santurce Area, Tel: 4373375. Bilbao Area, Tel: 4233000.

EMERGENCY CO-ORDINATION CENTRE: Marine Authority is in charge of services which are covered by the Coast Guard.

TELEPHONES: Every wharf has fixed public telephone kiosks and stevedoring terminal offices have up to date means of communication. No telephone plugs at berths.

SERVICES: Electronic and conventional marine equipment repairs, tanks and pipe cleaning and services in general up to the level corresponding with a first class port. Detailed information can be provided by ship's Agent.

BANKS: Due to the large activity of the port in international trade, every bank has specialised personnel in charge of overseas maritime commercial affairs.

STORING: Authorised ship chandler service is compulsory in order to arrange Customs Clearance. Ship is free to load up to 10 tons of stores. If over 10 tons dockers must be used.

SHORE LEAVE: In general there are no restrictions.

IDENTIFICATION CARDS: No shore passes are issued. Passport or Seaman's Book should be carried for dock entrance gate checking with Crew List.

DELAYS: Very exceptional and short time if any.

GENERAL: International Seafarers Center, Tel: 4616699 – 4616911.

Stevedores' and Ship Agents' Association, Tel: 4234185 – 4239327.

DEVELOPMENTS: Pier No. 3, in Santurce Port Section, under construction (1,000 m. berthing line, 14 m. draft, 350,000 sq.m. for cargo deposits). Pier No. 2 lengthening will be the next port facility enlargement in the near future.

AUTHORITY: *Port Authority:* Puerto Autonomo de Bilbao, Campo Volantin, 37 Bilbao-7. *Tel:* 4452000. *Telex:* 32708 Padb E. Berthing Superintendency: *Tel:* 4612626 – 4613626. *Telex:* 31282 Jprb E.

Marine Authority: Comandancia Militar de Marina, Ibanez de Bilbao 22-24, Bilbao. *Tel:* 4211132 – 423113. *Telex:* 32795 Marbi E.

BURELA: 43.39 N. 07.20 W.

BERTHING: Sheltered berth for vessels with draft up to 20 ft. Facilities includes 2 silos for bulk cement.

CADIZ: 36.30 N. 06.20 W. (See Plan Book)

DOCUMENTS:

Entrance Declaration.
Health Declaration.
List of Crew on Arrival.
List of Crew on Departure.
List of Passengers on Arrival (if applicable).
List of Passengers on Departure (if applicable).

All vessels must be represented by a local Agent who will be responsible for completing the required Customs, Health and Port Authorities documentation.

PILOTAGE: International Code Signals used to call Pilot. Pilot can be contacted by VHF (Channels 14 and 16) or through telegraphic address. "Praticos Cadiz". 6 to 8 hours' notice of ETA preferred.

Pilots operate diesel launches both painted black with yellow funnel on which letter "P" is painted in black on both sides. Pilot boat does not remain at station but comes out when ordered. Pilot boards in an area between the Rota Light and San Sebastian Light. In case of bad weather the Pilot will board nearer Los Cochinos shore and meanwhile signal instructions to the vessel until the Pilot is able to board.

ANCHORAGE: Vessels waiting for a Pilot may anchor in any safe position according to draft and weather conditions. Tankers or deep draft vessels may anchor West of the Junction Buoy in 16 m. – 18 m. depth where the Pilot boards at first opportunity.

RESTRICTIONS: Entry is restricted only by the depth of the entrance channel, maximum safe draft 30 ft.

Power Cable: In position Lat. 36° 30.9′ N., Long. 06° 15.2′ W. with clearance of 50 m.

HEALTH: Master should radio, not more than 50 hours and not less than 5 hours before arrival, the following information to the Port Authority: name and nationality of ship, date and time of arrival, last port of call, number of passengers and crew aboard, if doctor on board and details of any sickness noted on voyage. Message to be addressed to "Sanidad Maritima Cadiz". International code quarantine signals to be shown on arrival when Free Pratique will be given provided health situation is satisfactory.

TUGS: Normally join vessel off San Felipe Breakwater. 7 tugs available, up to 2,600 h.p.

BERTHING:

Mole No. 1 or Reina Sofia: 370 m. length, depth alongside 10 m. LW.
Mole No. 2 or Alfonso XIII: 300 m. length, depth alongside 10 m. LW.
Mole No. 3 or Generalisimo Franco: 340 m. length, depth alongside 10 m. LW.
Mole No. 4 or Reina Victoria: 232 m. length, depth alongside 10 m. LW.
Mole No. 5 or Marques de Comillas: 425 m. length, depth alongside 10 m. LW.

TANKERS: 3 Tanker berths for vessels up to 27 ft. draft at the piers in the Zona Franca, operated by Campsa. Hoses: Fuel oil 10 in., gas oil 8 in., gasoline 8 in. No slop discharge facilities.

International Terminals Corp. Berth, length 170 m., depth 9.5 m.

FUEL: Fuel, gas oil and several types of marine diesel can be supplied.

REPAIRS: There are 3 shipyards – Astilleros Espanoles SA, at Cadiz and Matagorda. Empresa Nacional Bazan-Carraca, and several workshops of Auxiliar de la Construccion Naval. All types of repairs can be effected.

DRY DOCKS: Largest is 380 m. long, 66.65 m. wide. In addition Astilleros Espanoles (Factoria de Cadiz) have 1 dry dock of 234.7 m. length, 36.3 m. wide, and 2 floating docks, 1 of 231 m. length, 24 m. breadth, lifting capacity 39,400 tons, and the other 100 m. length, 17.54 m. breadth, lifting capacity 4,500 tons.

At Matagorda, there is a dry dock of 150.97 m. length, 19 m. width, and 6.23 m. max. draft.

At Puerto Real Factory there is a dry dock of 500 m. length, 100 m. width, and 9.0 m. draft, where they can accommodate vessels up to 400,000 tons.

OPENING/CLOSING HATCHES: This work is normally effected by the stevedores.

CONSULS: Argentina, Belgium, Bolivia, Colombia, Denmark, Finland, France, Germany, Greece, Italy, Liberia, Netherlands, Norway, Sweden, Portugal and Venezuela.

CUSTOMS ALLOWANCES: Max. of 6 kilos of tobacco for each person on board, all to be declared. Wine or spirits, 1 decilitre per man per day.

AIRPORT: Nearest at Seville, about 150 km. away. Daily flights to Madrid, Barcelona and overseas.

TIME: GMT plus 1 or 2 hours, depending on season.

TELEPHONES: Connection to vessels can be arranged by Agents.

SHORE LEAVE: Crew are permitted to go ashore subject to police control.

DEVELOPMENTS: Astilleros Espanoles is building a new dry dock to accommodate vessels up to 400,000 tons.

Dredging underway to ensure a draft of 11 m. in Entry Channel at LW. Breakwater under construction.

AUTHORITY: Junta del Puerto de Cadiz.

CARBONERAS: 36.58 N. 01.54 W.

SHIPMASTER'S REPORT: November 1983.

DOCUMENTS:

5 Crew Lists.
2 Stores Lists.
2 Crew Declarations.
1 Maritime Declaration of Health.
2 Cargo Manifests (in-transit cargo only).

PILOTAGE: Compulsory. Agents inform Pilot of vessel's requirements. The Pilot boards by tug or small fishing boat, about 1.5 miles off the jetty.

The pilot station is situated at Garrucha, about 15 miles North of Carboneras.

ANCHORAGES: There is a small anchorage South of an island called "Isla Carboneras" locally. The approx. position of the island is Lat. 36° 59.6′ N., Long. 01° 53.9′ W. About 1 mile South of the island vessels can anchor; it is not advisable for larger vessels to stay there long, because this place is too close to the shore and strong Southerly winds can be hazardous.

The depth of this anchorage is between 40 m. and 50 m.

MAX. SIZE: Max. draft 40 ft. Max. LOA 210 m. Max. beam 32 m. Max. airdraft 13 m.

HEALTH: No Radio Pratique available, no yellow flag necessary.

RADIO: The nearest stations are Cabo de Gata – VHF Channels 16, 20, 27 and Cabo de Palos (EAP) – VHF Channels 16, 26, 27, but very poor reception.

VHF: The Pilots have to be called on VHF Channel 16; working Channels 12 or 9. Also see "Radio".

TUGS: 2 tugs are available, each 1,300 h.p. If more tugs are necessary, they have to be ordered via Agents from Almeria.

BERTHING: In front of the entrance to the port the vessel will be turned around by two tugs and enter the port stern first. There is one berth only and the ships always have to berth with the port side alongside. Usually the starboard anchor will be used. 4 headlines made fast to the shore by a small fishing boat as well as 3 sternlines and 1 breastline aft. 2 fore and 2 aft springs are made fast to the jetty. The jetty is fitted with 4 elastic fenders and additional tyres.

BULK CARGO FACILITIES: There is one conveyor for loading cement and/or gypsum with a range of approx. 30 m. Every vessel with a length of approx. 200 m. has to shift for loading all holds. 2 cranes with a capacity of 8 tonnes each are installed.

STEVEDORES: Stevedores work 24 hours a day, including Saturdays and Sundays.

MEDICAL: Only one doctor available. Serious cases are treated at hospital in Almeria. Vaccinations are done in Almeria.

FRESH WATER: Available by lorry only, each lorry carries 8 tonnes. Price in November 1983 = 600 Pesetas per tonne.

FUEL: Available by lorry from Almeria, max. 50 tonnes per lorry.

CONSULS: The nearest Consulates are at Almeria.

REPAIRS: Can be undertaken by workshops in Almeria or Cartagena.

GANGWAY/DECK WATCHMEN: Not compulsory as there is a guard at the factory gate.

HATCHES: Opening/closing done by crew. Open parts of hatches will be covered with tarpaulins by stevedores to prevent dust.

CUSTOMS ALLOWANCES: The quantity allowed per each crew member is 1 bottle spirits and 1 bottle wine. 6,000 cigarettes is to be allowed on board for each person on board.

REPATRIATION: Possible via Almeria, approx. 70 km. from Carboneras.
AIRPORT: At Almeria.
TIME: GMT plus 1 hour; from June to September GMT plus 2 hrs.
HOLIDAYS: See "Almeria".
POLICE/AMBULANCE/FIRE: No facilities. In case of emergency vessel has to inform the stevedores who will contact the agency.
IDENTIFICATION CARDS: Not required. Crew members have to take their seaman's books ashore and the guard at the gate checks their names with a crew list, received from the Agents.
CERTIFICATES: No certificates required by Port Authority or Agents.
OPERATORS: Private port. Owners are "Hornos Ibericos S.A.", a cement and gypsum factory. The port has been active since 1981.

CARTAGENA: 37.35 N. 00.59 W. (See Plan Book)

DOCUMENTS:

6 copies of the Crew List.
6 copies of the Passenger List, or 2 negative copies as the case may be.
2 sets copies Manifests covering cargo destined to Cartagena and carried in transit.
Store Provision List, in duplicate, including items such as: tobacco, spirits, radios, coffee, tea, bunkers, and any other items belonging to the vessel.
2 copies of all Personal Effects Lists, from passengers and ship's crew.

The amount of cigarettes allowed for each member of crew/passenger is 6 kilos; any amount over has to be manifested as "tobacco in transit", and this manifest must be visaed by a Spanish Consul in the last loading/discharging port. If there is no Spanish Consul in the port of call before Cartagena, the Master is requested to send a cable to: Direccion General de Aduanas, Madrid, quoting as follows: "m.v. '. . .' coming from . . . order to proceed to Cartagena tobacco manifest unlegalised = Master".

This cable is to be inserted in the radio log-book, and copy of same to be delivered to local Customs Authorities when boarding the vessel.

PILOTAGE: Compulsory. Position of pilot station 37° 34.6′ N., 0° 59′ W. Position with green light of Dique de Curra bearing 000°, and the white light of Las Losas bearing 090°. This is the position at which the Pilot normally boards.

Vessels bound for Escombreras wait for Pilot in position 37° 34.2′ N., 0° 59′ W., with green light of Dique de Curra bearing 000° and the green light of Dique Bastarreche bearing 090°.

Pilot launch is a motor-boat with cabin, about 9 m. long, white hull, red below water line, black letter "P" painted on both sides.

When bad weather prohibits Pilot boarding in the above position, vessel may be required to embark Pilot inside the harbour breakwaters.

Vessels call Pilot in daytime by code flag "G", or by sounding 3 prolonged blasts on the whistle.

At night, Pilot may be called by flashing code signal "PT", or by 3 prolonged blasts on whistle.

Radio messages, with ETA, may be sent direct to Practicos Cartagena with 24 hours' notice, and confirmed 12 hours before arrival, messages should include vessel's sea water draft and, if calling for the first time, vessel's length overall. Pilot station equipped with VHF.

APPROACHES: Escombreras Bank with datum depth of 9.5 m. situated West of Escombreras Island, extends from 200 m. to 400 m. West of the Eastern tip of the island. This bank is unmarked.

Area of underwater obstructions exists between the coast, the meridian of Santa Ana Buoy, and the parallel of Las Losas Beacon.

There is a zone used for submarine exercises which is marked on the charts. Occasionally, naval divers carry out exercises in the vicinity of the port entrance. These are accompanied by naval vessels showing appropriate signals.

Ships bound for Escombreras, to enter the port, should steer for a point situated at the intersection of the N.S. line of the red light at the extremity of Curra Pier, and the E.W. line through the green light at the extremity of the Bastarreche Pier, at which point, approximately, the Pilot boards the vessel.

The least recorded depth in the entrance to the port is 25 m. The approaches to the port of Escombreras do not present any difficulties.

ANCHORAGE: Vessels anchored within the port limits should not carry out repairs affecting main engines as the possibility of sudden storms in Winter may make it necessary to move to a sheltered anchorage North of Cabo Tinoso, or to put to sea.

Vessels under 29 ft. 6 in. draft may anchor inside the breakwater provided they do not obstruct other vessels' movements.

Anchorage for larger vessels in Cartagena Roads, approx. position 37° 35′ N., 0° 59′ 30″ W. in depths of 40 m.

Anchorage for tankers off Escombreras in approx. position 37° 34′ N., 0° 58′ 23″ W., in depths of 42 m.

MAX. SIZE: No length limitations. For Cartagena max. draft 31 ft. 6 in. For Escombreras max. draft 68 ft.

HEALTH: Free Pratique is immediately obtained when vessels berth any time from sunrise to sunset. Port Health Officers, require Maritime Health Declaration, Derat Certificate, and copy of crew and passenger lists.

RADIO: Cabo Palos Radio, Aranjuez Radio, and/or Gibraltar Radio.

TUGS: 3 tug-boats 500 h.p. – 1,000 h.p. with fire-fighting capabilities. All 3 tugs on duty 24 hours duly equipped, with 2 shifts of crew.

Tugs join vessels in vicinity of port entrance, vessel's lines normally used.

The tugs available to assist berthing tankers in Escombreras are all diesel tugs, equipped with fire-fighting equipment. 5 tugs available of up to 2,400 h.p.

BERTHING: Total length of general cargo quays 679 m. Depth alongside 8 m. – 10 m. Solid bulk materials: total length of berthing 717 m. Depth alongside 8 m. – 10 m.

CRANES:

No.	*Capacity*	*Type*
7	3 – 20 tons	Electric Gantry
2	3 tons	Mobile-Diesel
1	6 tons	Mobile-Diesel
2	25 tons	Mobile-Diesel
1	90 tons	Mobile-Diesel

STEVEDORES: In the case of a vessel calling at Cartagena at night time, Sundays or holidays, it is important that Master cable 24 hours in advance to advise his ETA in order that Agents are able to arrange stevedores' operations. Gangs can be called on as follows: on weekly working days 0800 and 1330 hrs. On Sundays/holidays 0800 hrs. (with prior advice to Union by 1200 hrs. on Saturdays or day preceding holidays). The official working hours are: Monday/Saturday 0800 to 1200 and 1330 to 1730 hrs. – Sundays/holidays: from 0800 to 1400 hrs.

MEDICAL: Medical services rendered as soon as requested but, in case of emergency, Master required to send urgent cable in advance.

TANKERS: Tankers call at port of Escombreras 2 miles away from Cartagena Port, this port owned by Refineria de Petroleos de Escombreras S.A. Slop discharge facilities available at Escombreras.

For ships of 250,000 d.w.t Berth No. 7, of recent construction, consists of 4 dolphins, in a line parallel to Bastarreche Pier. Between the first and third dolphin is situated a loading platform with loading/discharging lines. The centre of this platform is situated at a distance of 230 m. from the head of Bastarreche Pier, bearing 140°.

The least depth in Berth No. 7 is 21.45 m. or 70 ft. 4 in. at the extreme South of the berth. The rest of the area has a depth of between 24 m. to 28 m.

The maximum length foreseen for tankers of 250,000 tons d.w.t. is 250 m. or, 1,145 ft., since the total length of the berth is 430 m.

The maximum allowable draft is 21 m. or 68 ft. 1 in.

Shore lines for crude oil are 1 of 40 in. diameter and 3,500 m. length, and another of 24 in. diameter and 3,500 m. length.

The Woodfield hose-handling gantry has 4×16 in. hoses of which the 2 outside hoses should be used for loading bunkers as well as for discharging. Connecting flanges of 16 in. diameter, type 150 ASA.

Fresh water can be supplied by pipe-line at all berths at a rate of 45 t.p.h.

Only vessels up to about 100,000 d.w.t. may be berthed at night.
8 berths suitable for tankers from 29 ft. 6 in. to 43 ft. draft.
2 berths for LPG carriers up to 29 ft. 6 in. draft.
Also see "Shipmaster's Report".

FUEL: At Cartagena, only gas oil available from tank trucks. At Escombreras all grades of fuel available subject to advance notice given.

FRESH WATER: Available from quay by hose connections, only on working days. On Sundays/holidays notification to be required before 1400 hrs. preceding day.

FIRE PRECAUTIONS: The port area has its own Fire Department under supervision of Port Director. Although there is no water-borne equipment available, tug "Brio" will assist as required as well as Cartagena City Fire Department.

CONSULS: The following countries are represented in Cartagena:

Belgium
Denmark
Finland
France
Greece
Italy
Netherlands
Norway
Panama
Peru
Sweden

GANGWAY/DECK WATCHMEN: Not compulsory, only used when required by Master under Immigration Police Supervision.

OPENING/CLOSING HATCHES: Usually by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes per each crew member, out of bond. The excess to be declared as cargo in transit. Wine and/or spirit: 1 bottle for each crew member or passenger.

CREW IDENTIFICATION CARDS: Not required.

REPAIRS: There are very good repair facilities. A private shipyard "Empresa Nacional Bazan" and 2 other private repair shops.

DRY DOCKS: 1 dry dock can accept vessels (35,000 d.w.t.) of 566 ft. length and 73 ft. beam. 1 floating dock of 6,500 tons lifting capacity. Syncrolift of 8,740 tons lifting capacity.

REPATRIATION: All facilities available.

AIRPORT: San Janvier Airport situated 27 miles from Cartagena with daily service to Madrid, Barcelona and Almeria.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: 1st January; 6th January; 19th March (St. Joseph); Maundy Thursday from 1400 hrs.; Good Friday; 1st May (Labour Day); Ascension Day; Corpus Christi; 29th June (St. Peter and St. Paul); 18th July (National holiday); 15th August; 12th October; 1st November (All Saints' Day); 25th December.

POLICE/AMBULANCE/FIRE: Police, Tel: 501456. Ambulance, Tel: 503470. Red Cross, Tel: 510727. Fire Department, Tel: 501111. Port Fire Department, Tel: 503100.

DEVELOPMENTS: There is a programme to increase berthing-places by building new piers close to breakwaters, available for 3 vessels.

SHIPMASTER'S REPORT: March 1981.
Approaches: Approach to the port provides no great problem coming from either the East or West. Plenty of positions are available from the land as you near the port. The bay in which the port is situated is deep water up to the breakwater. So for anchoring, vessel has to proceed well into the bay. Pilots will advise the number of vessels lying at anchor and a suitable anchorage position.

The bay is exposed to winds from the S.E. through to the S.W. As the weather was good on both occasions that the vessel has visited, no comment can be made as to whether the anchorage would be tenable in strong winds, from these quadrants.

Pilots: Readily available day or night. Pilots board from a small boat, which is rather slow. The same boat acts as line boat when the vessel is berthing. Pilots work Channel 16, and can be contacted about 1 hour out from the port.

Berthing/Berth: Vessel can berth either side of the LPG Pier. Although on the Eastern side of the berth the max. draft allowed aft is 31 ft. 6 in. and forward 28 ft. On the Western side of the pier there is 36 ft. of water. Vessels berth with the assistance of 3 tugs (1 forward and 2 aft). Ship's lines are used to the tugs. Usual tie up forward is 4-2-2 and aft 4 lines go to buoys, 2 springs from the stern, and 2 breast lines from the main deck winch.

Pilots advise that the berth is exposed to S.W. winds and vigilance is required in tending moorings. The berth is adequately fendered with large tyres.

Fresh water is available at short notice, and is piped to the quay. The water man can be found at the gate. Water can be supplied any day except on a Sunday. Bunkers are also available from the quay.

Cargo: Cargo is discharged through a 12 in. 150 ASA "T" connection from which 2×6 in. lines are lead off. Shore supply this connection, and connect the pipe.

Discharge back pressure is 8 bars which means running 2 pumps. Discharge rate is between 70 – 210 tonnes per hour. The discharge rate varies without any notice being given to the vessel by the terminal as they direct the cargo into shore tanks or coastal vessels.

Communications are very poor between the terminal, the vessel and the Agent. Little or no information is relayed to the vessel, as to the state of the tanks, number of coasters arriving, etc. On this occasion we discharged half the cargo into another vessel in order to complete the discharge in time for loading our next cargo.

Customs and the shipper's agreements had to be granted.

Daily cargo surveys are carried out, at either 0800 hrs. or 1600 hrs. Surveyor is happy to take ship's readings without sighting ullages and temperatures himself. For commencing and completion surveys he is of course present. From daily surveys the terminal require total discharged and the hourly pumping rate for the day.

The terminal upon arrival, also asks the ship to sign a letter saying they require the cargo to be pumped with a back pressure of 15 kg./sq.cm. and for the cargo to be heated. A booster pump is required for this port and also a cargo heater (this may soon be supplied). At present the vessel has the pipe work for the heater. Heater and booster pump will be sited on the quay, and ship's power and pumps will be used to run both appliances.

With the high back pressure it is difficult to strip the tanks, so if time allows strip tanks into one tank with the manifold valve closed, and then finally discharge from this tank. In the end this will save time.

Shore will request hot gas to clear the cargo lines.

Chandler: Can supply most items but needs a few days to organise matters. Stores can be supplied by boat. The boat is rather like a small pleasure craft but quite adequate.

Shotblast can be supplied at this port. The shot was also delivered by barge.

Repairs: Engine repairs can be carried out in this port by the local shipyard repair firm.

AUTHORITY: Capitan de Navio, Comandante Militar de Marina de Cartagena, Comandancia de Marina.

CASTELLON DE LA PLANA: 39.58 N. 00.01 W.

(See Plan Book)

DOCUMENTS:

Manifest of Castellon cargo: 1 set covering all loading ports; make sure that this manifest is in perfectly good order before ship's berthing, as the Customs will board the vessel immediately and take it away as it is; thereafter any omission or excess of pages may lead to a fine.

Manifest of the Transit Cargo: 2 sets (the same recommendations as above).

3 Crew Lists.

2 Negative of Passengers.

2 sets of Bills of Lading of Castellon cargo.

2 Provisions Lists.

2 Manifests of personal effects.

PILOTAGE: Compulsory, and service is permanent. Pilots board vessels by a cutter in Roads near entrance formed by the 2 breakwaters.

Pilot cutters are painted white and have the letter "P" in black on each bow. Cutters have a blue flag, with letter "P" in white. Signals to be made by vessels requiring Pilot: 3 long blasts. Telegraphic address: "Practicos, Comandancia Marina, Castellon".

ANCHORAGE: Vessels can remain at anchor at the Roads. Recommended anchorage: 0.5 mile East of lighthouse in depth of 12 m.

RESTRICTIONS: Max. draft 22 ft. for vessels of about 110 m. – 120 m. length. For vessels of more 120 m., to 140 m. length, max. draft is 20 ft. – 21 ft.

HEALTH: Pratique obtained immediately after berthing, when Health Officer boards vessel. In case of suspected disease or fever on board Master must radio Agent to advise the Health Office. Following documents are required by the Health Officer upon berthing: Maritime Declaration of Health, Derat Certificate, 1 Crew List.

RADIO: Aranjuez Radio, call sign EAD, 36 – 48 hours prior arrival nearest radio station is El Grao Radio, call sign EAV.

TUGS: Tugs join vessels at entrance of port. Vessels of more than 100 m. length normally use 1 or 2 tugs. Ship's ropes used.

STEVEDORES: Very important that Master sends in advance short radio notice regarding vessel's ETA so Agent can inform Shippers or Receivers' stevedores accordingly. Official working hours of port are: Monday/Saturday 0830 – 1230 and 1400 – 1800 hrs.

MEDICAL: All kinds of medical services can be arranged. In case a crew member needs medical attendance urgently, it is advisable that Master sends a radio message in advance.

TANKERS: "Campsa" berth in Muelle Serrano Lloberes.

Petroleos del Mediterraneo S.A. Refinery Terminal. Breasting Island; Lat. 39° 56′ 7″ N., Long. 00° 01′ 6″ E. for tankers. Depth of water in the berth is about 12.5 m. (41 ft.).

Vessels berth heading either East or West. The Breasting Island is built on piles. A central platform about 70 m. (230 ft.) long and 15 m. (49 ft.) wide will accommodate the loading arms and the Island services. 2 mooring dolphins are located at about 128 m. (420 ft.) from the centre of the platform. They are linked with the main platform by a walkway. The platform elevation from the sea level is an average of 6.8 m. (22 ft.).

Both sides of the Breasting Island central platform and the Eastern dolphin are provided with a resilient fendering system. No fendering system is installed on the Western dolphin. Vessels can be docked at both sides of the Breasting Island.

2 "swamped" breasting wires are anchored about 200 m. (640 ft.) off both sides of the Breasting Island. Quick-release hooks are provided on the platform corners and on both mooring dolphins.

Hoses: 2 loading arms of 10 in. – 150 lbs./ASA and 2×8 in. loading arms 150 lbs./ASA.

Any vessel from 3,000 d.w.t. through 37,000 d.w.t. can be accepted at the Breasting Island having a deepest draft of 36 ft.

Sea Berth: For crude oil cargoes with submarine pipe-line: Lat. 39° 56′ 4″ N., Long. 00° 02′ 7″ E.

Depth of water in the berth is about 25 m. (82 ft.). Vessels berth heading 075°/080° true using both anchors forward, with about 280 m. (900 ft.) of chain out on each anchor and 2 swamped mooring legs if it is necessary.

The stern is secured to 5 lamgar buoys equipped with 2 release hooks on each. These buoys have flashing lights.

1 navigational range consisting of 2 lighted buoys, is used to proceed to the sea berth and drop the anchors.

Any vessel from 27,000 d.w.t. to 165,000 d.w.t. can be accepted in the sea berth.

Bunkering available. Water available by barge. Provisions available. Pilotage compulsory – Petromed Pilots. Tugs: 2 tugs compulsory.

LPG: See "Shipmaster's Report".

BALLAST: All ballast must be discharged to shore tanks, no exception will be made to this rule. A total of 17,000 cu.m. (110,000 bbls.) can be received by the Refinery ballast tanks.

FRESH WATER: All piers have water available by shore pipes. The rate of delivery is about 8 t.p.h. – 9 t.p.h.

FUEL: Available with 5 days' notice and subject to "Campsa" berthing availability.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Vessels should have usual documents on board, but only the Safety Wireless, Safety Equipment and Derat Certificates are required by authorities.

CUSTOMS ALLOWANCES: Normally, Customs permit 200 cigarettes per man out of bond and 1 bottle of spirit per man.

CARGO GEAR: All commercial piers served by electric shore cranes able to lift 3 – 6 tons and 14 – 18 tons (restricted use).

IDENTIFICATION CARDS: Not required.

CONSULS Italian, Navarra 99, tel. 211004; France, Avda. Almazora S/N, tel. 211717; Norway, Enmedio, 9, tel. 222550; Sweden, Maestro Ripolles, 28, tel. 220053.

REPAIRS: Work shop for small repairs.

REPATRIATION: Good facilities exist.

AIRPORT: Valencia, 70 km. away.

TIME: GMT plus 1 hour. Summertime: GMT plus 2 hours (29th March – 26th September).

HOLIDAYS: 1st January; 6th January; 19th March, St. Joseph; Maundy Thursday after 1400 hrs.; Good Friday; 1st May, Labour Day; Ascension Day; Corpus Christi; 14th June, local holiday; 29th June, St. Peter and St. Paul; 18th July, National holiday; 25th July, St. James; 15th August; 12th October; 1st November; 8th December; 25th December; and 2 or 3 local holidays more, variable.

POLICE/AMBULANCE/FIRE: Police: tel. 220516; Ambulance 213944; Fire 221222.

SHIPMASTER'S REPORT: December 1980.

Approach: Straightforward (Chart BA. 1701). A plan of the port is included on BA. 1458. During final approach care must be taken not to pass between the buoys around the sea berth for oil tankers.

Anchorage: Can be obtained 1 mile Eastwards of Dique de Levante in 15 m.

Pilotage: Call on VHF Channel 16 and Pilot boards approximately half a mile Eastwards of Dique de Levante. Strong S.W.'ly set experienced whilst awaiting Pilot. Pilot boards from small launch which doubles as a mooring boat.

One tug is taken outside the breakwater using 2 ship's lines through the centre lead forward. A second tug makes fast at port main deck aft (tug's line) when vessel is in inner harbour. (Darsena Comercial). Draft limitation of 22 ft.

Berthing: Possible day or night. Starboard side to Muelle de Serrano Lloberes. The berth doubles as a bulk facility and care must be taken to avoid fouling the loading elevator with the bow flare. The elevator is on rails 1.0 m. inside the face. The berth is fendered with tyres on wooden axles – quite common in Spain and quite effective.

There are ample bollards. As soon as first lines are ashore, the forward tug takes up position at the break of forecastle using tug's line to assist in pushing vessel alongside. Lining up takes some little time using mooring winches.

Connection: Six shore anacondas link a hydrant-like pipe, emerging from a manhole on the quay, with the vessel's 10 in. manifold. Hoses are 6 in. (300 ASA) and shore personnel connect/disconnect. Vessel supplies and fits reducers. Starboard derrick used to support a metal cradle carrying hoses over ship's rail.
Discharge: Upon completion of cargo survey, discharge commences slowly whilst hoses are purged by a small hose from the 'hydrant' to the sea. No heater or booster pump are required at this port. Back pressure approximately 3 kg./sq.cm. and average rate of 125 t.p.h. overall with usual hourly rates of 150/160 tonnes/p.h.
Shore Tanks: Are atmospheric and situated some 200 m. N.E. of berth. There are 2 tanks (each 2,000 – 2,500 tonnes capacity). There would appear to be no reliquefaction plant and gas is flared during filling from a flare situated atop each tank. It is reported that this leads to discrepancies in cargo figures but this was not the case for this call. Throughput is estimated at 15,000 tonnes per month with ammonia arriving from U.S.S.R., Libya, and Mexico.
Customs: Attended in the morning. Their visit was brief as transit papers (RUTA) has been prepared prior to the vessel's departure from Cartagena. Remember that bond locker must remain sealed when coasting. Customs checked bond seal.
General: Fresh water is available but none taken this call. Lub oils available via normal Madrid 'permit'. The Pilot can be reached on Tel: 22 24 57 if required during the vessel's stay.

Only 2 tugs available and as preference is given to tankers berthing at sea berths, delays can occur in docking/undocking. We were delayed for four hours on leaving. Tugs are necessary for this port.

Local town (El Grao) is very quiet with numerous small restaurants all within a few minutes walk of the berth. A three star hotel opposite the yacht club is good for telephone calls to U.K. (cost around 265 pesetas for first three minutes).

Castellon proper lies 4 km. inland. Bus fare 30 pesetas.

AUTHORITY: Comandancia Militar de Marina, Grao de Castellon, Castellon de la Plana, Spain.

CASTRO-URDIALES: 43.24 N. 03.14 W.

DOCUMENTS:

3 Cargo Manifests. 1 visaed by the consular authority.
3 Cargo Manifests for other ports if the vessel has called at and loaded in other ports.
3 Ballast Manifests (if the vessel has arrived in ballast).
5 Passenger Lists (if passengers are carried).
5 Master's Certificates to the effect of "No Passengers" if no passengers are carried.
5 Crew Lists.
5 Stores Lists.
5 Crew's Store Lists – cameras, radios, spirits, cigarettes, etc.
Health Certificate.
Certificate of Derat and fumigation against insects.
4 Bills of Lading.
International Freeboard Certificate.
International Safety Certificate.
International Radio Certificate.
Certificate of Stowage of cargo.

PILOTAGE: *To request pilotage:* 1. Advise the arrival of the vessel 24 hours in advance. 2. Hoist flag "G" of the International Flag Code. 3. Anchor within the pilotage limits of the port.

Port Pilotage Limits: Coastal zone comprised between the Onton meridian and that of the Punta del Rabanal at 1 mile from the coast. The Pilot goes out to a limit of 1 mile outside the port. There are no means of radio communication with the pilot boat or pilot station. ETA to be given 24 hours in advance. Sound signals to summon the Pilot – 3 long blasts. In the event of bad weather, the Pilot does not proceed to sea, and the vessel must enter the port and anchor in the bay.

Anchorage to await Pilot: In the mouth of the port at 1 mile distant. The pilot boat carries a blue flag with the white letter "P" upon it. The pilot boat is blue and is a small motor-launch.
ANCHORAGES: The best anchorage is 045° – 800 m. from the green coloured beacon of the breakwater at the port entrance, in a depth of 12 m.
RESTRICTIONS: There are no entry restrictions. Vessels with a draft greater than 6 m. cannot enter the port.
MAX. SIZE: Length 105 m., draft 5 m., depth at the entrance 9.14 m.
HEALTH: The Health Official boards the vessel as soon as it is berthed alongside. In the event of suspected illness or fever, advise Agent by radio and anchor near the port until the Health Doctor authorises entry.
RADIO: The best radio station to pass the ETA telegram to consignees or Agents is Santander Radio station call sign "EAS". Frequency 500 kHz.
TUGS: None available.
BERTHING: Irrespective of tide. The S.E. pier has a total length of 980 ft., of which 500 ft. forms the commercial wharf, mainly for coasters sundry cargoes. No cranes. Fresh water supply. Depth 17 ft. at low water.

Iron ore loading tips: Along open coast adjoining Castro-Urdiales are several cantilever piers connected with the Iron Ore Mines, partly sheltered in creeks or small coves. All vessels bound to load iron ore there should clear and apply at Port of Castro-Urdiales. Vessels cannot remain at these berths during rough weather but may find good anchorage in roads, or immediate shelter at the port of Castro-Urdiales, or better at Bilbao Harbour 9 miles East.

The Iron Ore Loading berths (no length limit) are as follows:

Name	*Situation*	*Approx. ebb tide draft*	*Loading rate per working hour*
Dicido	1 mile E.	21 ft.	800 tons
Saltacaballo	1.5 miles E.	22 ft.	800 tons
Onton	2 miles E.	21 ft.	1,000 tons

STEVEDORES: Ordered by Agent or Shipper. No ETA to stevedores necessary.
MEDICAL: It is not necessary for Agent to receive advance notice that medical attention is required. In the port there is a corps of doctors and one of them is always on duty for any emergency. Furthermore, there is a permanent Spanish Red Cross service with ambulances to transport any patient to a large hospital centre. There is also a hospital in this town.

In the case of serious illness, patients are taken by ambulance to the Cruces Medical Aid Centre (province of Vizcaya-Bilbao) 18 km. from Castro Urdiales.

International Vaccination Certificates are required.
DENSITY: 1016.
FRESH WATER: Water may be taken on board at the San Luis Quay (also known as the Ocharan Mazas Quay). By means of hoses and at a rate of delivery of about 40 t.p.h.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Carried out by crew.
CERTIFICATES: Safety Wireless, Safety Equipment, and Derat generally inspected.
CUSTOMS ALLOWANCES: Normally 200 cigarettes per man. For longer stay, new allotment out of bond obtainable. Wine/and/or Spirit: 1 bottle per man.
CARGO GEAR: At the small commercial wharf ship's derricks are used. At the iron ore loading berths along the coast with Cantilever Piers, conveyor belt employed with spout at the tip.
IDENTIFICATION CARDS: Not required.
CONSULS: None.
REPAIRS: Limited.
REPATRIATION: Crew changes and repatriation can be effected, bearing in mind that any consular negotiation must be made in Bilbao, since there are no Consulates in this port.
AIRPORT: Nearest Sondica (Bilbao) 40 km. by road.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: Sundays; 1st January; 19th March (Saint Joseph); April, Holy Thursday and Friday (variable each year); 1st, 23rd May; 13th and 29th June; 18th and 25th July; 15th August; 12th October; 1st November; 25th December. On holidays, work may proceed if requested.
POLICE/AMBULANCE/FIRE: Police C.G. Tel. 861146; Ambulance Red Cross 861147 and 861191; Hospital 860196; Fire 861294.
TELEPHONES: No arrangements for placing telephones on board.
SHORE LEAVE: Crew allowed ashore.
DELAYS: The only delays that can normally be expected are those due to bad weather.
AUTHORITY: Military Marine Adjutant – Port Captain.

CEUTA: 35.53 N. 05.17 W. (See Plan Book)

DOCUMENTS:

Health Declaration.
2 Cargo Manifests.
2 Stores Lists.
4 Crew Lists.
5 Passenger Lists.

PILOTAGE: Radio Agent advising ETA 24 hours in advance; in the event of any unforeseen delay advice should be direct to the pilot station. International code signals used to call Pilot, or give 3 long blasts. Sound signal used day and night. Pilot boards 1 mile from the breakwater. Pilotage compulsory. Pilot on VHF Channel 16 throughout 24 hours, working Channel 12.
ANCHORAGES: To the N.W. of the green light buoy marking the port entrance and to a distance of one mile, in depths of 10 – 15 fathoms, but vessels must leave this area during strong winds from the first and fourth quadrants, in which case the anchorage in the South Bay is advisable. The outer part of the N.W. side of the Western Quay is very rocky.
Prohibited Anchorage: To the East of the meridian passing through the Red Light on the Eastern Quay, anchorage is prohibited due to the presence of submarine cables.
RESTRICTIONS: Vessels carrying explosives must give ample warning of arrival in advance to the pilot station in order that precautions may be taken.
MAX. SIZE: At berths: Length 220 m. Max. draft 33 ft. 6 in.

In bay: No limits at anchorages.
HEALTH: Pratique obtained immediately after berthing when vessel boarded by health officials.
RADIO: Tarifa, Mijas, Malaga, Gibraltar and Tangiers Radio. Preferably the first 3 stations (VHF Channel 16).
RADAR: No service available.
TUGS: Normally 2 tugs in service, 1,100 h.p. and 2,300 h.p. Tugs use ship's lines.
BERTHING:

Berth	*Length*	*Depth*	*Remarks*
Dock-Quays	270 m.	33 ft. 06 in.	—
	1,250 m.	30 ft. 02 in.	—
Muelle Espana	400 m.	7.0 m. – 9.0 m.	—
Muelle Canonera Dato	4×125 m.	7.0 m.	4 Ro-Ro berths
Muelle Pesquero	260 m.	3.0 m.	Fish Quay
Muelle de Ribera	4×150 m.	7.0 m.	Under construction

CRANES: One crane of 20/30 tonnes capacity and 7 cranes of 3/6 tonnes capacity.
STEVEDORES: To be requested when sending ETA. The times for engaging personnel are from 0730 hrs. to 0830 hrs. and from 1630 hrs. to 1730 hrs., and within these times personnel are appointed up to midnight of that day.

On holidays, engagements take place the previous day at 1730 hrs. For Sundays, personnel are engaged on Saturday at midday. Extraordinary working hours are prohibited. With effect from 2000 hrs., work is considered as nightwork, and is subject to 50% increase in rates. Sundays, holidays, and Saturday afternoons are subject to 40% increase in paid rates.

MEDICAL: Advance notice by radio preferred. Hospital facilities available.

DENSITY: About 3.64%.

FRESH WATER: Available.

FUEL: All grades available, to be ordered in advance. Also see "General".

GANGWAY/DECK WATCHMEN: Available but not essential.

OPENING/CLOSING HATCHES: Performed by stevedores.

CUSTOMS ALLOWANCES: Maximum 6 kilos tobacco for each crew member. Normal daily consumption of wine and spirits allowed.

CARGO GEAR: Loading and discharging permitted using ship's gear. Loading and discharging of containers and handling of Ro-Ro vessels permitted.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium	Tel. 513794	and 515741
Denmark	„ 514307	
France	„ 511268	and 512927
Italy	„ 511053	and 515140
Netherlands	„ 512782	and 511287
Norway	„ 511700	and 511759
Portugal	„ 514213	and 512509
Sweden	„ 514307	

REPAIRS: Only minor repairs can be effected. Slipways for vessels up to 300 g.r.t.

SURVEYORS: Surveyors available for all types of certificates.

Comisario Espanol, Delgado Serrano, 1. Tel: 512932.

Lloyds (Imco Lloyds), Queipo de Llano, 2. Tel: 516933.

REPATRIATION: All facilities available.

List of countries whose subjects can enter Spain with a passport, without need for a visa:

Algeria
Argentina
Austria
Bahamas
Barbados
Belgium
Bolivia
Brazil
Canada
Costa Rica
Chile
Cyprus
Denmark
Dominica
Dominican Rep.
Ecuador
El Salvador
Fiji
Finland
France
Gambia
Germany F.R.
Great Britain
Greece
Guatemala
Honduras
Iceland
Ireland
Italy
Jamaica
Japan
Kenya
Kiribati (Gilbert I.)
Korean Rep.
Leichenstein
Luxembourg
Malta
Mauritius
Mexico
Monaco
Morocco
Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
St. Lucia
Seychelles
Sierra Leone
Singapore
Solomon I.
Sweden
Switzerland
Trinidad and Tobago
Tunisia
Turkey
Tuvalu
Uganda
U.S.A.
Uruguay
Yugoslavia

Exceptions: U.S.A. and Mexico: Diplomatic and official passports do require visas.

Pakistan and Venezuela: Diplomatic and official passports do not require visas, but ordinary passports do.

List of countries whose subjects can enter with National Identity Card.

Germany F.R., Netherlands Antilles, Austria, Belgium, France, Netherlands, Leichenstein, Luxembourg, Monaco, Switzerland, Portugal and Italy.

List of countries whose subjects can enter with Seaman's Books.

Germany F.R., Austria, Netherlands, Belgium, Luxembourg, France, Portugal, Ireland, Greece, Italy, S. Korea (the latter visaed or 15 days' stay without visa) Morocco.

List of countries who are signatories to the O.I.T. Convention, and whose subjects can enter Spain furnished with National Identity Document for Seafarers.

Barbados, Brazil, Canada, France, Ghana, Greece, Guatemala, Guyana, Honduras, Iran, Ireland, Italy, Denmark, Finland, Iceland, Norway, Malta, Mauritius, Mexico, Portugal, U.K., Tunisia, U.S.S.R. Panama, Ukraine, Sweden, Tanzania (only the mainland territory of Tanganyika, not Zanzibar).

AIRPORT: Nearest international airport at Tangier, 100 km. away, (and at Malaga, 137 km. away).

TIME: GMT plus 1 hour in Winter, GMT plus 2 hours in Summer.

HOLIDAYS:

6th January	Epiphany
19th March	St. Joseph
19th April	Maundy Thursday
20th April	Good Friday
1st May	Labour Day
21st June	Corpus Christi
25th July	St. James Apostle
15th August	Assumption
12th October	National Day of Spain and Spanish speaking peoples
1st November	All Saints' Day
8th December	Immaculate Conception
25th December	Christmas Day.

BANKS:

Banco de Andalucia	Tel. 515675	Banco Hispano Americano	Tel. 512600
Banco de Bilbao	„ 518445	Banco Meridional SA	„ 515786
Banco Central S.A.	„ 511139	Banco Popular Espanol	„ 515340
Banco Comercial Espana	„ 518040	Banco de Santander	„ 516685
Banco de Espana	„ 511805	Banco Vitalicio de Espana	„ 513626
Banco Espanol de Credito	„ 513009	Banco Union	„ 512552
Banco Exterior de Espana	„ 512156	Banco de Vizcaya	„ 517342

POLICE/FIRE/AMBULANCE:

National Police	Tel. 513418	Ambulance Services	Tel. 5121
Municipal Police	„ 516122	Fire Brigade	„ 5133
Civil Guard	„ 513300	Red Cross Hospital	„ 5145

TELEPHONES: No arrangements for placing telephones on board.

GENERAL: *Vessels greater than 220 m. in length or 33 ft. 6 in. draf* There are 2 tankers which can effect supplies in the two bays, as well a foodstuffs 24 hours a day. It is necessary to request authorisation fron the Local Marine Authority for embarkation and disembarkation in th Roads, together with any type of operation.

AUTHORITY: Comandancia Militar de Marina de Ceuta. *Tel:* 51262 and 512087. *Contact:* Captain Adolfo Garcia Alonso, Comandante.

AGENT: Ybarrola, Depositos de Aceite Combustible, S.A. Avenida d Espana, 11. P.O.Box 46, Ceuta. Tel. 511800. Cables, Ybarrola Ceuta Telex: 78026 and 78111.

CORUNNA: 43.23 N. 08.22 W. (See Plan Book

DOCUMENTS:

3 Crew Lists.

2 Passenger Lists or a negative.

1 Cargo Manifest of goods destined for the port.

Another Manifest covering Transit Cargo.

2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirit radios, cameras, etc., in possession of crew. In all cases make an number of radios to be indicated.

Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 6 kilos tobacco per man, the excess to b declared in separate manifest, which must be visaed by Spanish Consu at the last port, otherwise vessel is exposed to heavy fine.

PILOTAGE: Compulsory. International code signals used to call Pilot.

RESTRICTIONS: No restrictions on night manoeuvres.

MAX. SIZE: Length and beam not restricted. Cargo vessels 57 ft. dra for berthing.

Tankers: Largest tanker to enter 111,423 d.w.t. Draft on arrival an departure; Forward 15.24 m. Aft. 15.54 m. Depth alongside 17.0 m.

HEALTH: If vessels proceed directly to berth, Pratique can be obtaine immediately after berthing. Otherwise, at anchorage at vessel's arriva

If vessel has sickness on board of a contagious nature Master shoul advise Health Authorities by radio, and they will examine patient immediately upon arrival, to enable vessel to be granted Free Pratique

TUGS: 4 Available up to 2,300 h.p.

BERTHING:

Berth	*Length (m)*	*Depth (m)*
Mendez Nunez	250	8.0
Oil Harbour	1,080	17.0
Bateria	150	8.0
,,	67	5.5
Calvo Sotelo Norte	20	7.0
,, ,, ,,	200	10.0
Calvo Sotelo Sur	200	10.0
,, ,, ,,	200	10.0
San Diego	650	11.0
Espigon Oeste	150	6.0
Espigon Este	50	5.0
,, ,,	150	3.0
Muelle del Centenario	540	17.3

CRANES: 40 electric cranes, capacity 3 – 45 tons, outreach 10 – 35 m 2 diesel-electric mobile cranes, capacity 1.5 – 6.0 tons, outreach 8.0 - 2.5 m. 1 locomotive crane, capacity 5 tons.

BULK HANDLING FACILITIES: *Private Storage Facilities:*

Cement:	3 silos each of 800 tons capacity.
	4 silos each of 1,000 tons capacity.
Aluminium:	3 silos each of 3,000 tons capacity
	1 silo capacity 4,000 tons.
Fertilizer:	2 tanks each of 7,500 tons capacity.
Unspecified Oils:	2 silos each of 1,000 tons capacity.
	2 silos each of 500 tons capacity
	1 silo capacity 600 tons.
	1 silo capacity 350 tons.
	6 silos each of 500 tons capacity.

TANKERS: 2 berths, depth 13.0 m. for tankers of 45,000 d.w.t. an 60,000 d.w.t.

1 pier, depth 17.0 m. Berthing for 1 tanker of 120,000 d.w.t. and th other 65,000 d.w.t.

Storage facilities:

Campsa: 6 tanks of 3,500 cu.m. each and 3 tanks of 2,500 cu.m each.

Petroliber: 18 tanks with capacities from 2,500 cu.m. to 35,000 cu.m Total capacity 220,000 cu.m.

Facilities for reception of dirty ballast.

FRESH WATER: Can be supplied by pipe-line at most berths, rat 30 t.p.h. – 150 t.p.h., or by barge at rate of 150 t.p.h.

FUEL: Can be supplied by pipe-line at most berths. No barges.

CUSTOMS ALLOWANCE: Normally Customs permit 200 cigarettes pe man out of bond. Additional quantities needed depend on the stay o ship in port. 1 bottle of spirits per man.

REPAIRS: Minor repairs can be effected in shore work shops.

AIRPORT: Nearest international airport at Santiago de Compostell 60 km. away.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Work can be arranged on following holidays. New Year's Day (January 1st, full day); Epiphany (January 6th, full day); St. Joseph (March 19th, full day); Easter Thursday (half day); Easter Friday (full day); St. Joseph Artizan (May 1st, full day); Patron Saint of Spain (July 25th, full day); Ascension Day (August 15th, full day); Holiday of Hispanicism (October 12th, full day); All Saints' (November 1st, full day); Immaculate Conception (December 8th, full day); Christmas Day (December 25th, full day).

AUTHORITY: Junta del Puerto de la Coruna, Avenida de la Marina No.3, 15001-La Coruna, Spain. *Tel:* 981.22.74.02 (03-04-05). *Telex:* 82364 Jpco-E. *Cables:* Junta Puerto Coruna – Spain. *Contact:* Jose Luis Lopez Paramo, Port Director.

FERROL: 43.28 N. 08.16 W. (See Plan Book)

PORT LIMITS: Whole of the area in the Estuary joined by an imaginary line between Punta Coitelada and Cabo Priorino.

DOCUMENTS:

3 Crew Lists.
2 Passenger Lists or a negative.
1 Cargo Manifest of goods destined for the port.
Another Manifest covering transit cargo.
2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.
Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 6 kilos tobacco per man, the excess to be declared in a separate manifest, which must be visaed by Spanish Consul at the last port, otherwise vessel is exposed to heavy fine.

PILOTAGE: Compulsory. International code signals used to call Pilots. Pilots board off Ensenada de Carino.

MAX. SIZE: For entering and leaving the River Mouth: Cargo vessels up to 32 ft. draft. Tankers up to 35 ft. draft.

HEALTH: If vessel proceeds directly to berth, Pratique can be obtained immediately after berthing. Otherwise, at anchorage at vessel's arrival. If vessel has sickness on board of a contagious nature Masters should advise Health Authorities by radio, and they will examine patients immediately upon arrival, to enable vessel to be granted Free Pratique.

RADIO: Corunna Radio (Riazor): Calls on 1748 kHz and listens on 2182 kHz and 2122 kHz.

Corunna (Eiris): Call sign "EAR" on 500 kHz and 472 kHz.

VHF: El Ferrol Pilot maintains permanent watch on Channel 14.

Corunna (Eiris): Call sign "EAR" on Channel 16 and 26.

TUGS: Available up to 1,750 h.p. Also salvage tug normally stationed at Ferrol.

BERTHING: Depth alongside quays 25 ft. – 32 ft.

CRANES:

No.	Capacity (tons)	Reach (m.)
2	3/5	15/9
2	3/6	20/15
1	3/6	20/15
1	7.5/15	15/9
1	6	20
4	12	26

Floating cranes available up to 130 tons capacity.

TANKERS: Campsa Oil Terminal, 3 berths, can accommodate tankers up to 656 ft. length and 35 ft. draft.

Tanker Cleaning and Gas-Freeing Plant: A deballasting, gas-freeing and tank cleaning plant is operating at Ferrol. It allows for vessels of any tonnage, and provides washing and degassing of tanks, dirty ballast intake and slops intake. Supply of drinking water and hot water – up to 70°C – is provided for washing tanks with a flow rate of up to 600 cu.m./hr. and an average pressure of 15 kg./sq.cm. Crane facility is also available.

FRESH WATER: Can be supplied from the quays.

FUEL: Can be supplied from the quays.

REPAIRS: Facilities for repairing all kinds of Naval and merchant ships are available. Any kind of hull or machinery repairs and installations can be carried out, as well as annual and 4 yearly surveys, reclassification, transformations and enlargements.

DRY DOCKS: 5 dry docks for building and repairing Naval and merchant ships. Largest dry dock length 330.20 m., width 50 m., capacity 230,000 g.r.t.

Shipyards: There are two main shipyards in the bay area, one of them with a turbine manufacturing section.

CUSTOMS ALLOWANCES: Normally Customs permit 200 cigarettes per man out of bond. Additional quantities needed depend on the stay of ship in port. One bottle of spirits per man.

AIRPORT: Alevedro Airport (La Coruna), two services a day to Madrid. Labacolla Airport (Santiago) 108 km. from the port. Regular services to Oviedo, Santander, Bilbao, San Sebastian, Barcelona, and Madrid.

TIME: GMT plus 1 hour in Winter. Summertime kept from March to September.

HOLIDAYS: Work can be arranged on following holidays. New Year's Day (January 1st, full day); Epiphany (January 6th, full day); Saint Joseph (March 19th, full day); Easter (two days); Easter Monday; St. Joseph Artisan (May 1st, full day); Labour Day (July 13th, full day); Patron Saint of Spain (July 25th, full day); Assumption Day (August 15th, full day); Holiday of Hispanicism (October 12th, full day); Immaculate Conception (December 8th); Christmas Day (December 25th, full day).

SERVICES: A modern deballasting, gas-freeing and tank cleaning plant accepts tankers up to 350,000 d.w.t.

AUTHORITY: Puerto de el Ferrol. *Contact:* Jaime Gonzales Paramo, Port Director.

GANDIA: 38.59 N. 00.09 W. (See Plan Book)

LOCATION: Gandia a small commercial port at the mouth of River San Nicolas, about 20 miles N.W. of Cape San Antonio.

APPROACHES: The harbour is entered along the South side of a 1.0 km. long breakwater, running E.S.E. from the shore North of the harbour. The Entrance Channel is about 600 m. in length with depths of 7 m. to 6 m. (23 ft. – 20 ft.) LWS over a width of 100 m. The distance between the South Pierhead and the root of the breakwater is about 85 m.

PILOTAGE: Compulsory. Arrival notice should be given by telephone to Agent. Vessels are met about 0.5 – 1 mile off the Breakwater Head.

ANCHORAGES: Vessels can anchor off the harbour, in depths of 10 m. to 15 m., bearing of breakwater head (green light) 250° (True) distance 0.5 miles. Bottom sand and mud.

TUGS: There are 2 tugs of 600 h.p. available.

BERTHING: The N.E. end of the commercial basin provides a turning place of about 180 m. diameter, where vessels normally turn for berthing bow seaward.

Muelle Sur: Length 295 m., depth 5.8 m. (19 ft.). Rail track and 1 container crane for 20 ft. and 40 ft. units. Covered warehouses. 1 Ro/Ro berth.

Muelle Frutero: Length 300 m., depth 5.65 m. (18 ft. 6 in.). Covered warehouses. 1 Ro/Ro berth.

Muelle Motoveleros: Length 175 m., depth 4.5 m. (15 ft.).

Muelle Pesquero: Length 100 m., depth 2.7 m. (9 ft.), used only for fishing boats.

Muelle Norte: Length 125 m., depth 5.5 m. (18 ft.). Work in progress for Ro/Ro berths.

CARGO HANDLING FACILITIES: Good warehouse accommodation. Several shore cranes. Forklifts, trucks, clamps, etc.

There is a warehouse for cold/frozen cargoes storage.

STEVEDORES: *Working Hours:* Winter: 0800 – 1200/1300 – 1700
Summer: 0800 – 1200/1400 – 1800.

FRESH WATER: Can be supplied alongside all piers.

REPAIRS: Small repairs can be carried out.

AIRPORT: Valencia Airport, 70 km. distant.

AUTHORITY: Ayudante de Militar de Marina, Gandia. *Tel:* 2842901. *Contact:* Francisco Agudo.

AGENT: Navarro y Boronad, S.L.C., Avda Puerto, 27, Apartado 23, Gandia-Puerto. Tel: 2840100 (5 lines). Telex: 62489 (Nava E). Cables: Nava.

GARRUCHA: 37.10 N. 01.49 W. (See Plan Book)

SHIPMASTER'S REPORT: (Updated 1984).

DOCUMENTS: Usual forms required:

4 Crew Lists
1 Crew Declaration
1 Ship's Stores Declaration
Ship's Register
Cigarettes and spirits sealed.

APPROACHES: Coming in from the East the port is easy to find, first sighting is of a small Spanish town at the edge of the sea. On the radar the harbour breakwater begins to show up at 12 miles, and is clearly distinguished at 6 miles.

PILOTAGE: The Pilot boards from a small open boat about 2 cables from the end of the breakwater, the boat is painted white and for a short spell shows a blue flag with a white "P" on it to convey that he is the Pilot and not a local fisherman.

There are 2 Pilots available. The service of a Pilot is obligatory both on entry and leaving for vessels of more than 50 g.r.t.

ANCHORAGE: On our arrival 1 vessel was anchored in a position off the centre of the town, 2 cables from the end of the breakwater on a line drawn continuing from the breakwater, this appears to be the anchorage mentioned in the Admiralty Pilot Book. We passed close inshore of him and obtained soundings of 14 m. – 16 m. when passing his position, whilst we were alongside another vessel arrived and anchored 1.5 cables to seaward from the breakwater.

RADIO: ETA to Pilots 24 hours prior to arrival.

VHF: Call Pilots on Channel 16, 1 hour prior to arrival.

TUGS: Two tugs of 1,200 h.p. to assist manoeuvring of vessels on entry and departure, the tug's assistance being obligatory for vessels of more than 110 m. LOA or 3,500 g.r.t.

HARBOUR: The maximum permitted draft at the commercial quay is 8.5 m. The commercial quay will be extended to 220 m. length.

The harbour is man-made, the outer wall is made of high stone blocks in an "L" shape, the foot of the "L" attached to the land and the outer part running in line with the shore. It is entered from the South with a mole on the port hand enclosing a small fishing harbour. Minimum depth according to the Pilot is 6.3 m. In the N.W. corner on the outer breakwater there is a large concrete apron extending for a length of approximately 100 m. where we loaded, then from the seaward end to the end of breakwater there is an open berth with a large cantilevered loading chute jutting out over the harbour which is fed from conveyors on the seaward side of the breakwater.

BERTHING: The vessel entered the harbour from the South, when the bow was almost level with the end of the inner berth the starboard anchor was dropped to 1 shackle and the vessel swung to starboard on the anchor, a headline was sent away and when the vessel was three quarters swung the anchor picked up. The face of the quay was protected with large roller rubber tyre fenders.

LOADING: The main export of the port is gypsum stone in bulk, we loaded from quay with 4 conveyor belts being fed by dumper trucks into bins on the end of the conveyor belts from the cargo stacked on the quay. The loading rate with the 4 conveyors was up to 1,000 tonnes/p.h. The labour was helpful in positioning the conveyors to our requirements, and they have one man who keeps a careful eye on the draft.

SUPPLIES: There is a ship chandler in Garrucha. Fresh water is supplied by road tanker and pumped aboard, the tankers holding approximately 6 tonnes and 10 tonnes.

GIJON: 43.34 N. 05.41 W. (See Plan Book)

LOCATION: The port is located on North coast of Spain in Gijon Bay. The harbour of Gijon has 3 main areas: Commercial area (formerly called Puerto del Musel) on N.W. of Bay; Local Harbour on S.E. of Bay (used by fishing vessels and yachts); Central area, where ship and dockyards are located.

DOCUMENTS: A set of *Cargo Manifests* (minimum 3 copies) covering the cargo to be discharged in the port is required. Additional sets of Manifests covering the cargo in transit are also to be presented. If the vessel arrives in ballast, a "nil" Cargo Manifest is still required. The following additional documents are also to be presented by the Master on arrival:

Provisions and Stores List: It has to be submitted in duplicate. Usual international forms to be employed.

Crew List: 4 copies duly signed and stamped are required.

Personal Effects Declaration: It has to be submitted in duplicate and must be signed by all members of crew.

Passenger List: Including passengers in transit, must be presented. Where no passengers are on board a "nil" passenger paragraph has to be included in the Cargo or Ballast Manifest, as follows: "No Pasajeros".

Transit Tobacco Manifest: The Spanish Customs Regulations provide for 6 kilos of tobacco per crew member to be on board as usual provisions. If the total quantity of tobacco (including cigarettes, cigars, pipe tobacco and any other kind) does not exceed said average of 6 kilos per crew member, such quantity may be declared as "provisions" in the usual Provisions List, and no further documentation is necessary. If the total quantity on board exceeds said average, the excessive quantity must be shown on a special transit manifest. Usual manifest forms may be employed, describing the tobacco in Spanish as "Tabaco en transito". The essential point is that this transit manifest is visaed by the Spanish Consulate which must insert a full and complete visa. A simple consular stamp is not sufficient. If there is no Spanish Consulate at the last port of sailing or nearby, the tobacco manifest may be visaed by the local Customs Authorities or by another consulate, but the visa is still essential.

PILOTAGE: On approaching the Port of Gijon, Masters are urged to contact the pilot station via VHF Channel 14. The Pilot will board the vessel in the roads, whether scheduled to berth or to remain at anchorage. The Pilot will be instructed beforehand in respect of ship's berthing/anchorage instructions. Pilotage is compulsory.

ANCHORAGE: The Port of Gijon is located in the Bay of Gijon. It is a wide open area with deep water in the Bay of Biscay. Large vessels remain at anchor (when berth is not available) outside of the inner port limits. Smaller ships may anchor within breakwaters. Masters should contact Pilot for most suitable anchorage place.

RESTRICTIONS: The mouth of the harbour is 400 m. wide, and depth over 21 m. Tidal range: 4.6 m. Also see "Tugs".

MAX. SIZE: See "Tugs" and "Developments".

HEALTH: It is strongly recommended that Masters send a radio message requesting Free Pratique 24 hours before the vessel's arrival in port, to "Sanidad Exterior" Gijon, also notify Agent.

VHF: *Communications with ships at anchor:* Communication may be established by VHF Channels 16 and 26 via Cabo Penas Radio. Pilot station may be contacted through Channel 14.

TUGS: "Jove" (500 h.p.), "Torres" (1,000 h.p.), "Penas" (2,500 h.p.). "Arbeyal" (1,630 h.p.). When required, service is complemented with the tugs based at the nearby port of Aviles.

Entrance Regulations: These Regulations will be applicable to all vessels in good manoeuvring condition. Length is to be understood as overall for bulbous bow ships, and between perpendiculars for all others. Unless otherwise specified, tug's horsepower is to be understood as being not less than 500 h.p.

Group 1:
  Length from 215 m. to 250 m. Max. draft: 45 ft.
  Water beneath keel during entrance manoeuvre: 5 ft.
  Tugs: 3 (1 of 2,000 h.p.) or 4 (2 of 1,000 h.p.)

Group 2:
  Length from 250 m. to 260 m. Max. draft: 45 ft.
  Water beneath keel during entrance manoeuvre: 6 ft.
  Tugs: same as group 1.

Group 3:
  Length from 260 m. to 275 m. Max. draft: 45 ft.
  Water beneath keel during entrance manoeuvre: 7 ft.
  Tugs: 4 (1 of 2,000 h.p. and 2 of 1,000 h.p.)

Group 4:
  Length from 275 m. to 290 m. Max. draft: 43 ft.
  Water beneath keel during entrance manoeuvre: 8 ft.
  Tugs: Same as group 3.

Group 5:
  Length from 290 m. to 305 m. Max. draft: 41 ft.
  Water beneath keel during entrance manoeuvre: 9 ft.
  Tugs: 5 (1 of 2,000 h.p. and 4 of 1,000 h.p.).

Manoeuvring of Groups 2 and 3 will be done during good weather and of Groups 4 and 5 during good weather and preferably in day time.

For ships over 305 m. length, entering must be approved by competent authorities, conditions to be determined.

Ships bound to perform unloading operations at "Muelle Moliner" may enter with a max. draft of 46 ft. and a max. length of 275 m.

BERTHING: Pier's name, depth alongside during lowest Spring tide, usage and facilities

Muelle de Los Porticos (North Pier):
First Section:
  554 m. length. 14 m. depth. Bulk discharge.
  4 portico-type cranes, each discharging 500 t.p.h. Connecting conveyor belt.
Second Section:
  146 m. length. 14 m. depth. Liquefied Gas discharge.
  Connection to gaseoduct.

Muelle Norte:
  415 m. length. 8.5 m. and 11.0 m. depth. 3 cranes of 6 tons handling 60 t.p.h.

Muelles de Ribera:
Primera Alineacion:
  230 m. length. 7 m. depth. General cargo.
  2 cranes of 3 tons handling 28 t.p.h.
  4 cranes of 3 tons handling 30 t.p.h.
Segunda Alineacion:
  109 m. length. 7 m. depth. Bulk cement loading.
  Bulk cement loading installation 400 t.p.h.
Tercera Alineacion:
  156 m. length. 8 m. depth. General cargo and containers.
  1 crane of 45 tons handling 140 t.p.h.
  2 cranes of 3 tons handling 25 t.p.h.
  2 cranes of 5 tons handling 28 t.p.h.

Espigon I:
North Section:
  220 m. length. 8/10 m. depth. General cargo.
  4 cranes of 3 tons handling 30 t.p.h.
South Section:
  360 m. length. 9 m. and 11.5 m. depth. Heavy cargo and steel goods.
  Section I:
  9 m. depth.
  2 cranes of 25 tons handling 140 t.p.h.
  2 cranes of 12 tons handling 90 t.p.h.
  Section II:
  11.5 m. depth.
  1 crane of 25 tons handling 140 t.p.h.
  1 crane of 12 tons handling 90 t.p.h.

Estacion Maritima:
Cuarta Alineacion:
  32 m. length. 6 m. depth. Out of service.
Quinta Alineacion:
  225 m. length. 7 m. depth. Coal loading berth and Ro-Ro ramp.
  Coal loading installation handling 400 t.p.h. each of the 2 bridges.
  1 crane of 45 tons handling rail wagons.
  A Ro-Ro ramp.

Espigon II:
North Section 1:
  80 m. length. 7 m./8 m. depth. Cement loading.
  Cement loading installation: 200 t.p.h.
North Section 2:
  220 m. length. 8 m./9.5 m. depth. Oil and Bulk cargo.
  3 connections for oil products.
  5 cranes of 6 tons handling 60 t.p.h.

Testero:
  90 m. length. 12 m. depth. No equipment.
South Section 1:
  166 m. length. 8.5 m. depth. General cargo, scrap, steel products.
  2 cranes of 6 tons. Handling 60 t.p.h.
South Section 2:
  180 m. length. 9.0 m. depth. General and bulk cargo.
  1 crane of 6 tons handling 60 t.p.h.
  Tanks for vegetable oil: 200 t.p.h.

Pantalan de Petroleros (Oil Berth):
North Section:
  180 m. length. 8.5 m. depth. Oil products.
  Connection for discharging oil products.
South Section:
  180 m. length. 8.5 m. depth. Oil products.
  Connection for discharging oil products.

Muelles del Rendiello:
Sexta Alineacion:
  346 m. length. 5 m. depth. Fishing and small boats. Repairs.
Muelle Adosado:
  443 m. length. 5 m./7 m. depth. Repairs and fitting out.

Muelles de la Osa:
Septima Alineacion 1:
  117 m. length. 8 m./10 m. depth. Bulk, general cargo and containers.
Septima Alineacion 2:
  450 m. length. 12 m. depth. Bulk and general cargo.
  2 cranes of 6 tons handling 60 t.p.h.
  5 cranes of 12 tons handling 100 t.p.h.
Octave Alineacion:
  206 m. length. 11.5 m. depth. Heavy and general cargo.
  3 cranes of 6 tons handling 60 t.p.h.
  2 cranes of 30 tons handling 150 t.p.h.

Novena Alineacion:
  198 m. length, 10 m./11.5 m. depth. No equipment. Repairs/waiting berth.

Muelle Moliner:
  313 m. length. 14 m. depth. Bulk cargo and steel products.
  5 cranes of 12 tons handling 100 t.p.h.

TANKERS: 1 tanker berth owned by Campsa. See "Berthing".

STEVEDORES: *Working Hours:* At "Muelle de los Porticos" only, 24 hours a day, 7 days a week, Sundays and Holidays included. All other quays: Monday/Friday 0800 hrs. – 1200 hrs., 1300 hrs. – 1700 hrs. Overtime 1700 hrs. – 2300 hrs. Saturday 0800 hrs. – 1200 hrs. Sunday/Holiday No work.

MEDICAL: Crew members requiring medical attention, hospitalisation, etc. should be reported by the Master to the Ship's Agent for prompt attention. All necessary facilities are available at Gijon.

FRESH WATER: Available ex-wharf or barge. From the wharf connections it is supplied at 20 t.p.h., and from barge at those berths where there is no shore supply facility.

FUEL: Fuel and diesel oil are supplied to ships either directly from shore connection (available only at oil berth) or by a small tanker in service for the purpose.

CONSULS: The following countries have consular representation in Gijon: Brazil, Colombia, Costa Rica, Dominican Republic, Finland, France, Italy (Vice-Consul), Norway, Netherlands (Vice-Consul), Panama, Peru, Portugal, Sweden.

REPAIRS: There are 5 shipyards at Gijon, and work shops specialised in naval works. All types of repairs will be readily attended. It is recommended that advanced notification is given when assistance is required. Electrical power is supplied ex-wharf.

Spare Parts: In case of spare parts being forwarded by airfreight, each consignment must be accompanied by an original Airwaybill and a commercial invoice (in triplicate).

CUSTOMS ALLOWANCES: See "Documents".

DRY DOCKS: 3 companies own a total of 6 dry docks at Gijon, the largest of which is 170 m. length, 27.40 m. wide for vessels up to 26,000 tons.

TIME: GMT plus 1 hour in Autumn and Winter. GMT plus 2 hours in Spring and Summer.

AIRPORT: The regional airport, named Asturias (in some instances it is still known as Oviedo) is 45 km. away from the port. There are daily flights linking Gijon with Madrid, Bilbao, Barcelona, Malaga, Canary Islands and Santiago. There is a bus service for passengers from Gijon to the airport and vice versa.

HOLIDAYS: (1984) January 1st and 6th, March 6th, Maundy Thursday, Good Friday, May 1st, June 13th, June 21st, July 16th, July 25th, August 15th, September 8th, October 12th, November 1st, December 8th and 25th.

DEVELOPMENTS: The "Muelle de Minerales" has already been built and is now subject to being equipped. Its draft is 19 m. to 21 m. The installation will consist of 2 gantry-type cranes, a storage area, conveyors, etc., for the discharge of large bulk carriers. Estimated outturn: 6,000 t.p.h. Max. size vessel (orientative): 250,000 d.w.t.

AUTHORITY: Junta del Puerto de Gijon, Apartado 82, C/Claudio Alvargonzales 32, Gijon (Asturias), Spain. *Tel:* 354945 and 320000. *Telex:* 87369 Jupo E. *Contact:* El Director del Puerto.

AGENT: Romualdo Alvargonzalez, S.A. Apartado 141, Gijon. Tel.: 344400. Telex: 87366.

HUELVA: 37.16 N. 06.55 W. (See Plan Book)

PORT LIMITS: *Zone I:* The area between the meridians of 6°40.4′ W. and 7° 03′ W. and between the Parallel of 37° North and the coast including the bar as far as the Watchtower Quay (pilotage bar quay on map).

Zone II: From the Watchtower Quay to a line running East/West through Colon Monument on Sebo Point.

Zone III: From Colon Monument up to Odiel Point.

DOCUMENTS:

3 Crew Lists.

2 Passenger Lists or a negative.

1 Cargo Manifest of goods destined to Huelva.

Another Manifest covering transit cargo.

2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.

Safety Wireless Certificate and Safety Equipment Certificate.

If vessel carries over 6 kilos tobacco per man, the excess to be declared in a separate manifest, which must be visaed by the Spanish Consul at the last port, otherwise vessel is exposed to heavy fine.

PILOTAGE: Compulsory. Services from middle to high tide, depending on draft of vessel on arrival or departure. Pilot's motorboat painted white. Letter "P" in black at both bows. Agent must be in close contact with Pilot Office. Pilots are informed by Agent of ETA at bar. In rough weather Pilots will not be available for entries or sailings. Depths of water depend on location, ranging from 15 ft. to 30 ft. in high tide. Pilot station equipped with VHF Channel 16.

Telegraphic address of Pilots – "Practicos–Huelva", 24 hours' notice of ETA required.

At night the regulation lights are exhibited. Contact must be made by VHF to take Pilot on board. Regulation ladder required.

In the event of bad weather the Pilot will board at Cascajera.

MAX. SIZE: Max. length for entry to Cascajera, 200 m. Max. length for entry from Punta del Sebo to Tharsis Quay, 180 m. Max. draft, permitted 28 ft. 05 in. up to 32 ft. 05 in. depending on the tide.

The entry to port is always subject to tides and maximum sizes of vessels able to proceed to inner quay berths will depend upon the berth and the tidal constant.

HEALTH: As long as Masters of vessels notify Medical Office by cable that there are no sick on board and that the ship proceeds from an area free from contagious diseases as specified by the International Sanitary Regulations, Free Pratique will be granted to the vessel, although this does not eliminate all the sanitary measures specified in the Exterior Sanitary Regulations in force.

Notice should be given en-route towards the Port of Huelva and sufficiently in advance to permit the Free Pratique to be granted.

When there is any sickness on board, no operation will be carried out until the vessel or its personnel have been inspected by the Medical Authorities.

The granting of Free Pratique does not signify that the Yellow Flag may be lowered. This will be done once the Medical Authorities have carried out their inspection or are in possession of the Maritime Health Declaration Form signed by the Master.

RADIO: Local coastal radio station Chipiona Radio located at Punta Umbria. Working frequency: 1700 kHz. Listens out permanently on 2182 kHz and Channel 16 on VHF.

Hours of service 24 hours (continuous).

National and International Radio traffic – radio conversation, radio-telegrams, advice to navigators.

TUGS: Only used inside harbour. Ship's lines employed, 4 tugs available. Number required to assist vessels at the discretion of the Pilot in charge.

BERTHING: Mineral loading quay – 435 m. mooring length and 12 m. depth of water at LWST. Has 2 loaders of 1,200 t.p.h. each.

Jetty belonging to "Energia e Industrias Aragonesas S.A." for movement of liquid and solid bulk cargo. Has 150 m. mooring, with 8 m. depth of water at LWST. For movement of solids, a gantry crane of 6 tonnes is available, together with 3 tubes for liquids.

Extension of the Fosforico Espanol S.A. jetty consisting of fitting out liquid quay for movement of solid bulk cargo. Has a 7 ft. depth of water, 3×15 tonnes gantry cranes and pipes for conveyance of phosphoric and sulphuric acids.

"Reina Sofia Quay" of the Union Explosivos Rio Tinto S.A. for the movement of liquid bulk cargoes, is 500 m. long and 8 m. draft at LWST. Has 2 berths for vessels up to 6,000 d.w.t., 1 berth for vessels up to 3,000 d.w.t. and 2 berths for lighters and tugs.

Pantalan de Foret S.A.: Liquids pier for vessels of 60 m. – 120 m. LOA and draft up to 7.5 m.

Levante (Eastern) Quay: Length 1,200 m. of which 700 m. is for general cargo and bulk cargo. Depth 8 m. Equipment includes 2×12 ton, 2×6 ton and 11×3-6 ton cranes.

Tharsis Quay: 320 m. long, depth of water 7 m. 2 gantry cranes of 15 tons for loading ore.

Fertiberia Quay: 120 m. long, depth of water 4.7 m. Used for solid and liquid bulk cargoes.

Pertrechos Quay: Used for fishing boat repairs.

Saltes Quay: 200 m. long, depth of water 5.5 m. Used for fitting out and deballasting.

Ingeniero Juan Gonzalo Quay: 920 m. long, depth of water 12 m. LWST. Equipped with 8 gantry cranes of 12 tons and 2 cranes of 6 ton, used for general cargo and solid bulk cargoes. Discharge rate 5,000 tonnes per day.

STEVEDORES: 48 hours' advice to Agent necessary to engage labour.

MEDICAL: Agent must give at least 24 hours advance notice where medical aid is required. There is a provincial hospital. Vaccination certificates against fevers and cholera are issued by the Provincial Health Authority.

TANKERS: Rio Tinto Minera S.A. (Oil Division) operate a SBM tanker-mooring 7 miles offshore, about 20 miles distant from Huelva. Mooring is suitable for vessels 900 ft. long with draft up to 70 ft. salt water. Mooring 66 ft. is used for discharging only. Discharge rate is about 1,300 t.p.h. through two 12 in. lines and a 30 in. submarine line.

Within Huelva port, there are 2 tanker berths of which one is used by Campsa. The 2 berths at the "Torre Arenillas" quay permit a draft of 12 m. at low water but the max. length permitted at the oil quay is 200 m.

Berth No. 1 (North) loading/discharging:

LPG	8 in. line
Gasoline	10 in. ,,
Naphtha	10 in. ,,
Diesel	10 in. ,,
Fuel oil	10 in. and 12 in. lines

Berth No. 2 (South) loading/discharging:

Benzene	8 in. line
Cyclohexan	8 in. ,,
Gasoline	10 in. ,,
Diesel	10 in. ,,
Distillates	10 in. ,,
Fuel oil	10 in. and 12 in. lines

Residues: There is a receiving station near the oil quay for tank residues, together with a product separator. Connection lines are 10 in.

Product	*S.G.*	*A.P.I.*
Propane	0.507	—
Butane	0.573	—
Gasoline 85-Ron	0.693	72.68
Gasoline 96-Ron	0.735	61.02
Campsa G.O.	0.832	38.57
R.D. 2494	0.789	47.84
Industrial F.O.	0.945	18.24

DENSITY: Water at this port is salt water. Fresh water, in quantity of 1 in. to 7.5 in., only present in heavy rainy weather.

FRESH WATER: The supply of drinking water is made at the Eastern (Levante) quay at the rate of 20 t.p.h. per vessel. This can also be provided by means of tugs at a rate of 50 t.p.h and 30 t.p.h.

FUEL: Fuel oil and diesel available in main port. Not available at offshore tanker terminal.

GANGWAY/DECK WATCHMEN: The employment is at the discretion of Masters, who are free to either employ or do without any watchmen.

OPENING/CLOSING HATCHES: Normally effected by crew, liner vessels excepted.

CERTIFICATES: Safety Wireless, Safety Equipment and Derat Certificates should be at hand for production if requested.

CUSTOMS ALLOWANCES: 200 – 300 cigarettes per man out of bond. If necessary permit may be obtained from Customs Authorities to open bond and provide crew with fresh supplies, if stay in port justifies procedure. Wine and/or Spirit Allowances: Two bottles per man.

IDENTIFICATION CARDS: Not necessary.

CONSULS:

Belgium
Denmark
Finland
France
Germany
Greece
Italy
Netherlands
Norway
Panama
Portugal
Sweden

REPAIRS: Any kind in engine room, and hull above water.

DRY DOCKS: Only 1 small dry dock available for vessels up to 3,500 g.r.t.
REPATRIATION: No difficulty in this respect.
AIRPORT: The nearest is at Seville – San Pablo. A distance of 100 km. from Huelva.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: 1st January; 6th January; 19th March; Thursday preceding Good Friday as from 1400 hrs. Good Friday; 1st May; Corpus Christi; 29th June; 3rd August; 15th August; 12th October; 1st November; 8th December; 25th December.

Permit to work on any of the mentioned holidays (1st January, Good Friday and 25th December excepted) can be obtained, but sufficient reasons must be given to justify permission.
POLICE/AMBULANCE/FIRE: Police and Civil Guard 248992 – 245738; Fire-brigade 244421; Customs 248794.
SHORE LEAVE: Permitted.
TELEPHONES: No arrangements exist, for the time being, to place telephones on board vessels.
DEVELOPMENTS: The breakwater has been completed out to No.2 buoy. The Channel is being dredged to a depth of 10m.
AUTHORITY: Comandancia Militar de Marina, Zona Maritima de Estrecho, Huelva, Spain. *Contact:* Alfonso Jaraiz, Comandante.

IBIZA: 38.54 N. 01.28 E. (See Plan Book)

DOCUMENTS: *Passenger Liners:*
5 Crew Lists (Customs, Comandancia de Marina, Health, Police and Consignee).
6 Passenger Lists (Customs, Police, Guardia Civil, Obras del Puerto, Health and Consignee).
2 Lists of Crew and passengers personal effects (Customs).
2 Store Lists (Customs).
Health Certificate (Health Department).
2 Cargo Manifest, if any. (Customs).
2 Negative Cargo manifest, if no cargo.
Cargo Ships:
5 Crew Lists.
2 Lists of Crew personal effects.
2 Store Lists.
Health Certificate.
2 Cargo Manifests.
PILOTAGE: Pilotage compulsory. No ships allowed to go further than imaginary line between Botafoch Lighthouse and Isla Negra del Este, without a Pilot. Advisable to give 24 hours' notice of ETA. Shortly VHF will be installed in pilot station and boats. Pilot's boat is of the canoe type with white sides and letter "P" in black on both sides. Vessels requiring a Pilot must give three long whistles. By night flash morse "G".

Pilot will board between Botafoch Lighthouse and Isla Negra del Este. In bad weather vessel should follow pilot boat until Pilot is able to board.
ANCHORAGES: Anchorage area situated inside imaginary line: Botafoch-Negra del Este with depths of 40 ft. to 50 ft. Pilot required to anchor.
MAX. SIZE: Max. length for berthing, 135 m. Maximum draft 21 ft.
HEALTH: Report in advance to Pilot if there is any problem. If situation is normal, then, after ship berths the health inspector boards and quickly grants Pratique. In event of any suspected disease or fever on board, the Pilot (without boarding), will show the anchorage area, then health inspectors and authorities will board, and give necessary instructions.

Vessels entering after calling at another Spanish port have no problems obtaining Pratique.
TUGS: Not available.
BERTHING: Depths alongside 4 m. – 8 m.
STEVEDORES: Available, ETA required 24 hours in advance.
MEDICAL: Civil hospital, military hospital, and 3 private clinics available.
TANKERS: Load/discharge lines 10 in. and 8 in. No facilities for discharging residues. 1 berth. Max. draft of the ship is 21 ft.
FRESH WATER: Available at the quays. 9 m.t.p.h.
FUEL: Available. Notice required 24 hours.
FIRE PRECAUTIONS: Tankers should have a rope over bows, at water level while the ship is berthed.
GANGWAY/DECK WATCHMEN: Performed by crew.
OPENING/CLOSING HATCHES: There are no fixed rules on this matter: it varies according to the circumstances.
CUSTOMS ALLOWANCES: There are no free allowances.
IDENTIFICATION CARDS: Required.
REPAIRS: There are good work shops and engineers but with limited possibilities. There is a shipbuilder's yard where they build and repair yachts and canoes.
REPATRIATION: Facilities for effecting crew changes and arranging any necessary repatriations.
AIRPORT: 8 km. away, served by scheduled flights daily.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: Cargo work can be arranged on the official holidays with an extra charge of 40% to the workmen.

New Year; Epiphany (6th January); Saint Joseph (19th March); Maundy Thursday: half-day (the evening); Good Friday; Ascension of our Lord (40 days after Resurrection); Saint Joseph the Artisan (1st May); The Holy Heart (last Friday of June); Exaltation to work (18th July); Santiago, Lord of Spain (25th July); Our Lady of the Snows, Lord of Ibiza (5th August); Ascent of Blessed Virgin Mary to Heaven (15th August); Feast of the Hispanicism (12th October); All Saint's Day (1st November); Festival of the Immaculate Conception (8th December); Christmas Day (25th December).

Although not yet official there will be introduced as a holiday Easter Monday and 26th December.
POLICE/AMBULANCE/FIRE: Police 301131; Ambulance 301214; Fire telephone call to the Comandancia de Marina, tel. 301190.
SERVICES: Compass adjusting.
SHORE LEAVE: Crew members are allowed ashore.
DEVELOPMENTS: Increasing depths in the port to 7 m. It has also been approved to enlarge berthing quays to 220 m. and 7 m. depth, and build a fishing dock.
AUTHORITY: Comandancia Militar Marina – Ibiza. *Contact:* Edmundo Fraga Ferreiro, Comandante.

MAHON: Minorca, 39.52 N. 04.18 E. (See Plan Book)

DOCUMENTS: *Health Department:*
Crew List.
Passenger List.
Disinfect and Derat Certificates.
Port Authorities:
Crew, Passenger List.
Ship characteristics and other details.
Cargo.
Indication of previous Port and destination.
Customs:
Cargo Manifest.
Bill of Lading (Cargo for this port).
Crew List and Passenger List.
Also the Master will produce, if required, Log book and passports of crew.
PILOTAGE: Compulsory to take Pilot on entry, departure and any movements within port. On approaching port, during day, ships will hoist flag corresponding to International Code "I need a Pilot". By night, by means of lights, according to International Code.

During day Pilot's boat is recognised by a square blue flag with letter "P" (painted white) in centre of flag. Pilotage area comprises all the estuary, from inside port to outside Capes of La Mola and San Carlos.
ANCHORAGES: Inside are good anchorages, for instance Cala Llorga and Plana de Cala Figueras.
MAX. SIZE: Unlimited length and width, but draft is limited to commercial port, 25 ft.; and to anchorage, 43 ft.
BERTHING: Commercial Quay: Length 518 m. average depth alongside 8 m.

Container and Ro/Ro Quay: Length 180 m. depth alongside 6.5 m.
STEVEDORES: Available. Loading and discharge is as follows:

Container Berth: 2 fixed cranes 800 tonnes per day loading and discharge.

Commercial Quay: 2 fixed cranes and 1 mobile crane with a capacity of 1,000 tonnes per day. Priority to regular lines.
MEDICAL: In case of accident or illness of any member of crew medical assistance and hospitalisation will be in civil hospital.
FRESH WATER: Available. 4 points on the Container Quay and 7 points on the Commercial Quay.
FUEL: Available from Campsa at Cala Figueras.
OPENING/CLOSING HATCHES: Carried out by crew before 0800 hrs.
IDENTIFICATION CARDS: Not required.
CONSULS: Italy: Tel. 363393; France: Tel. 363889; Netherlands: Tel. 362703.
REPAIRS: Small repairs possible.
AIRPORT: 5 km. from Mahon – international and national flights.
TIME: GMT plus 1 hour from September to March, and 2 hours from March to September.
HOLIDAYS: Main holidays are: 1st January (New Year), Holy Week (variable), 1st May (Labour Day) Corpus Christi (variable), 24th June – National Holiday, 8th September, local holiday, 25th December – Christmas. Work is possible on all these dates provided the labour force is paid extra.
POLICE/AMBULANCE/FIRE: Police: Tel: 36.37.12; Ambulance: Tel: 36.11.80; Fire Brigade: Tel: 36.39.61.
TELEPHONES: No telephones on the Quays.
AUTHORITY: Comandancia Militar de Marina de Menorca, Anden de Levante 12, Mahon, Menorca, Spain. *Tel:* 364107. *Contact:* Ricardo J. Ruiz de Gopegui y Sendagorta, Comandante.

MALAGA: 36.41 N. 04.24 W. (See Plan Book)

DOCUMENTS:
5 Crew Lists.
5 Passenger Lists or Negative.
1 Cargo Manifest of goods destined to Malaga, as well as of other cargoes in transit.
Store List in duplicate, including tobacco, spirits, radios, etc., belonging to vessel.

Details list in duplicate of all personal effects of the crew and Passengers (tobacco, spirits, cameras, radios, etc.). For vessels bigger than 499 g.r.t., Safety Equipment Certificate.
Note: Tobacco: In case vessel carries more than 6 kilos of tobacco per man, the excess must be declared in a separate manifest, which must be visaed by Spanish Consul. In absence of Consul, said document will have to be visaed by an Authority or Consul of a friendly nation at the former port clearance. Otherwise, vessel may be severely fined.
PILOTAGE: Pilotage is compulsory and service is permanent. Pilots board vessel by cutter in roads, near entrance formed by 2 breakwaters. Pilot cutters are painted black and have letter "P" in white on each bow. Cutters have a blue flag hoisted on mast, with the letter "P" in white, at both sides of flag. At night, cutters have white light, and under this light, red one. Entrance between breakwaters is 260 m. wide and easily accessible. When weather in the roads is bad, which seldom happens, vessels approach as close as possible to entrance in order that Pilot can board easily.

ANCHORAGE: Vessels can anchor outside of breakwaters, in roads in depths of 80 ft. – 90 ft. Anchoring is prohibited in vicinity of tanker moorings, the Pilot will advise best position. Weather is bad occasionally when East wind blows, during Winter.

MAX. SIZE: No restrictions in respect of length or breadth. Max. advisable draft to enter port is 42 ft. – 44 ft.

The tanker sealine berth can accept vessels up to 300,000 d.w.t.

Largest vessels to enter port: Passenger ship "Queen Elizabeth II", length 294 m. Draft on entering and leaving 9 m. Bulk-carrier "Soledad Maria" length 254 m., draft on entering or leaving 8.53 m. Tanker "Calatrava", 50,376 d.w.t., length 225 m., draft 12.49 m. on entering.

Largest tanker at buoy mooring "Liotina", 317,521 d.w.t., length 352 m., draft on entering or leaving 22 m.

HEALTH: If vessels proceed directly to berth, Pratique can be obtained immediately after berthing. In case of any suspected disease or fever on board, Master must radio to Agents, in order that they can advise Health Office.

RADIO: Nearest important radio station is Radio Costeva (VHF – Onda Media) Cadiz, or Gibraltar and Aranjuez. Master's messages should be received at least 24 hours before arrival.

TUGS: Ship's lines are used, tug-boats are employed according to Pilot's advice, and upon request. 7 tugs available, 620 h.p. – 1,800 h.p.

BERTHING: Pilots will advise Masters whether vessel has a free berth or not. Also if she has to anchor in Roads. Further particulars can also be obtained from Pilot.

Berth No.	*Length* (m.)	*Depth* (m.)	*Remarks*
1	472	9.4	General Cargo, Bulk and Passengers.
	99	8.0	General
2	450	10.5	General Cargo, Bulk and Passengers
3	189	9.0	Passengers and Ferries
	180	10.5	Passengers and Ferries
	200	8.5	Passengers and Ferries
4	455	8.0	General Cargo, Bulk and Passengers.
5	101	6.5	Armament
6	500	10.5	Bulk Solids and Bulk Liquids.
7	145	9.4	Fish
8	128	5.0	Storage
	135	5.0	Fish
Foreport:			
East side	—	11.0	Berth for passenger ships when weather fine.
7	335	13.5	Quay for bulks, solids and liquids when weather fine (partially completed).
South side	—	13.5	Berth for tankers with crude or refined oil.

SPECIALISED CARGO HANDLING FACILITIES: Quay No. 2 includes 15,000 ton silo for grain, loading and discharging capacity 200 t.p.h.

Quay No. 7 (Foreport) includes 3,312 cu.m. silo for molasses, discharging capacity 150 t.p.h. Also delivery can be performed at Quay No. 6 (Inner Basin).

Quay Nos. 6 and 7 can handle all cargo in bulk, rate for coal 3,000 tonnes per day. Also 3 ton forklifts and a Hyster 620 capable of handling containers up to 26 tons. There are regular car ferries for passengers and cargo, Ro/Ro plying with Tangiers, Genoa, Marseilles and Casablanca, all of them direct. For butane gas a special sea-line outside the port Westward, along the beach in front of the depot. For LPG and chemicals Quay No. 7 and berths in foreport can be used, though loading and unloading has to be done into tank trucks. 20 ft. containers can be handled with a crane up to 30 tons and a Hyster forklift with appropriate spreader, eventually 30 ft. containers also.

CRANES: 33 quay cranes with capacity up to 30 tons and 1 mobile crane with capacity of up to 8 tons.

STEVEDORES: It is important that Master sends advance message regarding the vessel's ETA. Agents can inform Shippers or Receivers' stevedores accordingly, to arrange operations properly. Official working hours of port are: Monday/Saturday 0800 – 1200, 1400 – 1800 hrs.

TANKERS: Petroleum handled at Quay Nos. 6 (partially) and 7. Depths 10.5 m. and 13.5 m. respectively. Also at the Tanker Berth, depth alongside 13.5 m. (see "Max. Size").

Quay Nos. 5, 6 and 7: Operator: Demagrisa. Crude oil discharge pipe-line – 250 t.p.h. Refined oil discharge pipe-line – 800 t.p.h.

Playa Misericordia: Operator: Enpetrol. Sea-line for discharging tankers up to 250,000 d.w.t. Max. discharge rate 6,000 t.p.h. through 1×30 in. pipe-line.

Operator: Butano. Sea-line for butane which also handles propane. Max. discharge rate 300 t.p.h.

Operator: Sociedad Anonima Cros. Ammonia pipe-line for discharging tankers up to 17,500 d.w.t. through 1×10 in. line, depth 9.5 m.

Quay Nos. 6 and 7: Operator: Sociedad Anonima Cros. 4 lines for naphtha discharge. Rate 210 t.p.h.

Operator: Enpetrol. 4 discharge lines for oil. Rate 1,500 t.p.h.

Tanker Berth: Operator: Enpetrol. Crude oil pipe-line, diameter 24 in. with 2 discharge arms and 1 spare. Discharge capacity 2,000 – 2,500 t.p.h. Also Campsa, refined oil. 4 pipe-lines available 3×12 in., 1×14 in., with 2 discharge arms.

Quay Nos. 6 and 7: Operator: Campsa. 4 pipe-lines available, 2×10 in., 1×12 in. and 1×14 in. maximum pumping rate 800 t.p.h.

DENSITY: 1025.

FRESH WATER: Always available. Deliveries are performed directly from the quay, rate 20 t.p.h. – 200 t.p.h. or occasionally by tugs. Minimum tonnage, 10 tons, occasionally supplies by tank-barge, minimum 50 tons.

MEDICAL: Any kind of medical service can be arranged. In case a crew member needs medical attendance urgently, it is advisable that the Master radio in advance.

FUEL: Ordinary fuel oil and gas oil are available at local refinery of "Campsa". It is advisable that Shipowners contract bunkers through their own contractors, with of 48 hours notice, so that order can be received in time. Delivery can be performed at bunkering pier at a rate of 60 t.p.h. or by road tankers.

FIRE PRECAUTIONS: Tankers perform their operations at the petroleum berth by Enpetrol or "Campsa" which have necessary fire precautions.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: This work effected normally by crew, except in liner vessels, which is contracted by stevedores.

CERTIFICATES: Vessels should have the usual documents on board.

CUSTOMS ALLOWANCES: Normally, customs permit 200 cigarettes per man out of bond. 1 bottle of spirit for each crew member.

CARGO GEAR: Usually shore cranes of 2-3-6-12-15-30 tons lifting capacity employed in loading or discharging operations, if vessels require any lightening then vessel derricks are employed.

IDENTIFICATION CARDS: Not required.

CONSULS: Most countries have consulates at Malaga.

REPAIRS: Facilities of a limited nature.

DRY DOCKS: There is a floating dock for vessels up to 2,000 tons.

REPATRIATION: Good facilities.

AIRPORT: The airport is about 8 km. from town. Daily services with Madrid, Barcelona, Seville, Valencia, Tangier and Melilla. Also direct flights to London, Paris, Amsterdam, Brussels, Frankfurt, Stockholm, Helsinki, Geneva, Zurich, Nice.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: 1st January; 6th January; St. Joseph (19th March); Good Thursday; Good Friday; Labour Day (1st May); Corpus Christi; 18th and 29th June; 25th July; 15th August; 8th September; 12th October; 1st November; 8th and 25th December.

POLICE/AMBULANCE/FIRE: Police, Tel: 211302 and 091, 215005. Ambulance, Tel: 390400, 215121, 224400. Fire, Tel: 234567.

DEVELOPMENTS: An extensive plan to increase facilities of port, and for building new piers. Other important work being effected at breakwater, to erect new piers for large passenger ships.

AUTHORITY: Junta del Puerto de Malaga, Muelle de Canovas, Malaga, Spain. *Tel:* 952-214516, 952-210590. *Telex:* 77536 JPMA. *Contact:* Port Director.

MARIN: 42.24 N. 08.42 W. (See Plan Book)

DOCUMENTS:

4 Crew Lists.
1 Health Certificate.
2 Store Lists.
2 Cargo Manifests.
2 Crew Manifests.

PILOTAGE: Compulsory. (Tel. 882040). Pilot on VHF Channel 16 and 6.

MAX. SIZE: Max. draft 23 ft. tidal variation 3.8 m.

RADIO: Send ETA through Cangas Radio or local Agent.

TUGS: Available.

BERTHING:

General Cargo Berths:

	Length (m.)	*Draft* (ft.)	*Cranes*
Commercial Oeste	154	23	—
Commercial Oeste	208	18	—
Commercial Oeste	29	18	—
Commercial Este	154	23	4×6 tonnes
Commercial Este	303	18	2×3/6 tonnes
Commercial Ribera	140	16	1×30 tonnes

STEVEDORES: Working Hours: 0900 – 1300 and 1500 – 1900 hrs.

MEDICAL: Services available.

TANKERS: Max. LOA 100 m. draft 21 ft. No dirty ballast facilities.

DENSITY: 1025.

FRESH WATER: Available.

FUEL: Available (Campsa).

CONSULS: At Vigo (30 km.).

REPAIRS: Possible.

DRY DOCKS: Up to 3,000 tons.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits per crew member.

REPATRIATION: Possible.

AIRPORT: Vigo (30 km.) and Santiago de Compostela (60 km.).

HOLIDAYS: National holidays plus 16th July (Virgin del Carmen) and 8th September (Virgin del Puerto).

DEVELOPMENTS: New commercial mole under construction. Length 240 m. depth 39 ft.

AUTHORITY: Capitan de Puerto, Avenida de Orense, s/n. Marin. *Tel:* (96) 88 11 76.

Junta Del Puerto y Ria De Pontevedra, Las Corbaceiras, s/n., 36002 Pontevedra. Post address – Apartado 8, 36080 Pontevedra. *Tel:* (986) 855200. *Telex:* 88069 JPRP E. *Contact:* Manuel Leiros Freire, Port Director.

AGENT: Ceferino Nogueira Rodriguez – Muelle Comercial s/n, Apartado 9, Marin. Telephone: (86) 88 06 00 (17 lines). Telex: 88012 and 88014 Nogar E. Cables: Nogar – Marin.

MELILLA: 35.18 N. 02.57 W. (See Plan Book)

SHIPMASTER'S REPORT: Though geographically situated in Morocco it is a territory of Spain and the Spanish flag should be hoisted. VHF Channel 16 for Pilots, berthing day or night. A new port adjoining Melilla is being constructed but this is in Morocco (See "Port Nador").

DOCUMENTS:

Health Declaration.
4 Cargo Manifests.
2 Stores List.
5 Crew Lists.
5 Passenger Lists.

PILOTAGE: Compulsory for vessels over 50 tons. ETA to Agent required at least 10 hours before arrival to arrange Pilot. Pilot boards at anchorage near port entrance. International code signals used.

ANCHORAGE: Half a mile East of port entrance, in depths of 14 m. to 20 m.

RESTRICTIONS: Entrance normally in daylight only. In case of emergency vessel may enter at night.

MAX. SIZE: Up to 30 ft. draft.

HEALTH: Pratique obtained immediately after berthing when vessel boarded by health officials.

TUGS: 2 tugs, 1,750 h.p.and 650 h.p., available.

BERTHING:

Quay	*Berth No.*	*Depth (m.)*	*Cranes*	*Remarks*
Muelle Nordeste No. 1	F.1	6.0	—	Ro/Ro
Muelle Nordeste No. 2	AD.1	10.0	—	Ro/Ro and Bulk Liquids
Muelle Nordeste No. 3	CD.1 D.5	10.0	2×6 tons	Bulk and General, 2 Cement Silos
Espigon No. 1	D.2	7.0	—	General Cargo
Espigon No. 2	D.3	7.8	—	General Cargo
Espigon No. 3	D.4	9.0	—	General Cargo
Muelle Ribera No. 1	1-4 D.1	5.7	1×30 tons	General Cargo and Fish
Muelle Ribera No. 2	DH.1	6.0	—	Passengers
Cargadero Mineral		8.3	—	Ore loading berth

MEDICAL: Doctors and hospital facilities available. Vaccinations can be arranged.

FRESH WATER: Available at all quays.

FUEL: Available subject to advance notice.

GANGWAY/DECK WATCHMEN: Available. Consignee Agents have their own watchmen for goods on the quay.

OPENING/CLOSING HATCHES: This work is carried out by stevedores.

CUSTOMS ALLOWANCES: Crew allowed normal daily consumption of tobacco, wine and spirits.

IDENTIFICATION CARDS: Required.

CONSULS: France and Italy are represented locally.

REPAIRS: All types of engine and hull repairs can be effected for smaller vessels.

REPATRIATION: All facilities available.

AIRPORT: Situated 1 km. from the city. 3 daily flights to Malaga and 1 daily flight to Almeria, except Tuesday and Thursday.

HOLIDAYS: 1st January, 6th January, 19th March, Maundy Thursday, Good Friday, 1st May, Ascension Day, Corpus Christi, 29th June, 18th July, 25th July, 15th August, 8th September, 12th October, 1st November, 8th December, Christmas Day. Work may be arranged on all holidays except Good Friday.

POLICE/FIRE/AMBULANCE: Police, tel: 681183 or 681238; Fire, tel: 681693; Ambulance, tel. 681376.

TELEPHONES: It is possible to arrange for a telephone to be placed on board.

SHORE LEAVE: Allowed.

AUTHORITY: Junta del Puerto de Melilla, Avenida del Tte. Garcia Valino No. 2, Melilla. *Tel:* 681340. *Telex:* 77492 JPME E. *Contact:* The Port Director.

MOTRIL: 36.43 N. 03.30 W. (See Plan Book)

DOCUMENTS:

Health Certificate.
5 Passenger Manifests (1 Health, 2 Customs, 1 Police, 1 Agent).
4 Crew Manifests (1 Health, 2 Customs, 1 Agent).
2 Store Lists (for Customs).

PILOTAGE: Arranged by Agent basis ETA given 24 hours in advance. pilot boat distinguished by painted "P". Night pilotage possible approx. 100% extra, on holidays 50% extra. Vessels await Pilot just outside port. Pilot compulsory for all foreign vessels and Spanish vessels arriving from abroad. Pilot should be requested when 1 mile from the port by means of international signals.

ANCHORAGE: Area near port. The Roads to the East of the port have very little depth. The sea is rough in this area and vessels can run the serious risk of beaching. The best location for anchorage is outside the port 0.25 miles S.S.W. from the port entrance, in 14 m. to 25 m. of water, mud bottom.

RESTRICTIONS: None, vessels may enter day or night.

MAX. SIZE: Entrance 33 ft. at LWS. Maximum draft alongside quays, 27 ft.

HEALTH: Free Pratique given on board.

RADIO: Harbour tugboats and pilot operate on VHF Channel 12.

TUGS: One tug, 1,100 h.p. available.

BERTHING: There is 470 m. of quayage with a depth of 8.2 m. (27 ft.) at LWS and 107 m. of quayage with a depth of 6.4 m. (21 ft.) at LWS.

CRANES: There are 5 electric cranes of 3.5 to 6 tons capacity; 3×6 tons and 1×3 tons to 6 tons mobile crane.

BULK CARGO FACILITIES: Muelle de Levante: 300 m. length. Maximum shipdraft 8.2 m. (27 ft.) at LWS. Three cranes 6 ton capacity for handling bulk cargoes (grain, ore, coal, fertilisers, etc.). Loading/discharge rates: 300 t.p.h. One crane 3.5 tons to 6 tons for handling general cargoes.

Muelle de Poniente: 110 m. length. Maximum shipdraft 6.4 m. (21 ft.) at LWS. Two cranes 3.5 tons to 6 tons capacities for handling bulk and general cargoes.

Muelle de Costa: 300 m. length. Maximum shipdraft 8.2 m. (27 ft.) at LWS. Two cranes 3.5 tons to 6 tons for handling general cargoes.

SPECIALISED CARGO HANDLING FACILITIES: Muelle de Poniente equipped for handling liquid chemicals and asphalt, by lines.

Ro-Ro Berths: 2 Ro/Ro berths at Muelle de Costa and 1 Ro/Ro berth at Muelle de Levante.

STEVEDORES: No ETA advice necessary. Agents arrange gangs.

MEDICAL: No advance notice required. All facilities available.

TANKERS: Vessel about 8,000 tons. No special requirements.

DENSITY: 1025.

FRESH WATER: Available alongside all quays.

FUEL: Available at Muelle de Levante. Rates of delivery: 200 t.p.h.

GANGWAY/DECK WATCHMEN: Agent arranges.

OPENING/CLOSING HATCHES: Crew open and close hatches.

CUSTOMS ALLOWANCES: Tobacco: About 100 cigarettes per man. Wine and or spirit. None.

IDENTIFICATION CARDS: Not necessary.

CONSULS: None in Motril. The nearest Granada or Malaga.

REPAIRS: Minor repairs can be affected. There is a slipway for vessels up to 150 tons.

REPATRIATION: Facilities available.

AIRPORT: The nearest airports Malaga 105 km., Granada 70 km. and Almeria 120 km.

TIME: Local time GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day (January 1st), Epiphany Day (January 6th), Vote Day (January 13th), Maundy Thursday, Good Friday, Wort's Day (May 1st), Santiago Day (July 25th), Assumption Day (August 15th), Pilar's Day (October 12th), Local Holiday (October 15th), Immaculate's Day (December 12th) and Christmas Day (December 25th).

Work can be arranged on above days, however dependent upon permission of the Work Authority.

POLICE/AMBULANCE/FIRE: Police Tel: 601221. Ambulance Tel: 600200. Fire Tel: 600200.

TELEPHONES: No facilities for placing telephones on board.

SHORE LEAVE: Crew members are allowed ashore.

DEVELOPMENTS: 1 Roll-on/Roll-off berth under construction on Muelle de Costa.

AUTHORITY: Grupo de Puertos de Granada-Almeria, Direccion del Puerto, Motril (Granada). *Tel:* (958) 601207, 601238. *Contact:* Port Director.

PALAMOS: 41.50 N. 03.08 E.

DOCUMENTS:

3 Crew Lists.
1 Passenger List or negative.
Manifest of goods destination Palamos and in transit.
Store List in duplicate, including tobacco, spirits, radios, etc., belonging to vessel.
Detailed list in duplicate of all personal effects of crew and passengers (Tobacco, spirits, camera, radios, etc.).

Tobacco – any excess over 6 kilos per person must be stated on a separate manifest duly visaed by Spanish Consul.

If on inspection differences are found (more or less), articles removed and heavy fine imposed.

PILOTAGE: Pilotage is compulsory and service is permanent. Often no berths available between 2400 hrs. and 0600 hrs. owing to port occupied by fishing boats. Pilot is informed by Agent of vessels ETA given 24 hours in advance. When vessels approach the breakwater, Pilot will board. Pilot boat is white with a black "P" painted on the side.

RESTRICTIONS: None but for draft. Vessels carrying dangerous cargo should get authorisation for berthing prior to arrival of the ship.

MAX. SIZE: No restrictions in respect of length. The maximum advisable draft for berthing is 24 ft. stern, 20 ft. bow.

HEALTH: Pratique is obtained immediately after berthing. In case of suspected disease or fever on board the Master must radio to Agent in order inform Health Office in time.

RADIO: Radio Costera of Barcelona, Bagur or Marmella.

TUGS: None. Barcelona's tugs could be hired should the vessel's size make it necessary.

BERTHING: Depth of water in centre of harbour 42 ft. – 52 ft. Commercial Wharf length: North 689 ft., depth 18 ft. – 26 ft. South 246 ft., depth 15 ft. – 24 ft.

Pier Wharf or breakwater are not available for commercial traffic. Length 2,100 ft.

Also see "Developments".

STEVEDORES: Information about ETA time is advisable in order to arrange gangs.

MEDICAL: Any kind of medical service can be arranged if information received in time.

FRESH WATER: Plentiful supply of water by means of hoses from the pier to vessel.

FUEL: Can be supplied if required.

GANGWAY/DECK WATCHMEN: It is not compulsory but advisable at night.
OPENING/CLOSING HATCHES: Normally opened/closed by the crew, otherwise according to Charter Party.
CERTIFICATES: Usual documents on board. Safety Wireless, Safety Equipment, Derat and Registered Tonnage Certificates are the only ones required by the Authorities.
CUSTOMS ALLOWANCES: Crew : 6 kilos tobacco per person. Passengers: 2 kilos per person. Any excess on this amount must be declared on a separate Manifest as in transit. Wine and/or Spirit: only 1 bottle per man. Any excess, must be declared on a separate Manifest as cargo in transit and stowed apart from the tobacco and spirits carried under the Provisions List. This Manifest must be visaed by the Spanish Consul at the last port of call. Any infringement of this regulation will subject the vessel to the immediate imposition of heavy fines and confiscation of the excess tobacco.
IDENTIFICATION CARDS: Not required.
CONSULS:

France	Tel: 314472	Portugal	Tel: 320148
Denmark	,, 314400	Sweden	,, 320850
Italy	,, 320200		

REPAIRS: Only small repairs.
REPATRIATION: Good facilities exist.
AIRPORT: Gerona Airport situated at 40 km. distance and half an hour by car from Palamos. Regular flight services with Madrid, Barcelona, Palma Mallorca, London, and all over the world with transfer at Madrid and/or Barcelona.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Police 31 41 87; Ambulance 31 43 50; Fire 31 43 50.
DEVELOPMENTS: A new berth alongside the breakwater, length 200 m., depth 14 m., will be ready in 1984.
AUTHORITY: Ayudante Militar de Marina, Ayudantia Militar de Marina, Palamos (Gerona – Spain). *Tel:* 314070. *Cables:* Ayudante Marina Palamos.

PALMA, Majorca: 39.34 N. 02.38 E. (See Plan Book)

PILOTAGE: Compulsory. Order through Agent.
ANCHORAGE: In outer harbour in depths up to 13 m.
RESTRICTIONS: Depth in harbour entrance up to 15 m.
TUGS: Available if required.
VHF: The Spanish Telephone Company has established a station for ship-to-shore communications.
BERTHING: Quays at Porto-Pi with 12 m. depth alongside. Quays at Puerto de Palma with up to 10 m. depth alongside.
Facilities: Container Terminal, Ro/Ro Terminal and Commercial Quays at New Quay (Dique de Levante)

At Porto Pi there are facilities for cement, oil, petrol and bulk cargoes.
FUEL: Supplied at the quays by CAMPSA. Depth alongside 36 ft. Gas oil available at 120 cu.m.p.h. Fuel oil No. 1 at 250 t.p.h. Intermediate fuel oil also available.
FRESH WATER: Available at the quays.
AIRPORT: Palma Airport well connected with the Peninsula (mainland) and with foreign airports.
AUTHORITY: Junta del Puerto de Palma de Mallorca, Muelle Viejo No.3, Palma de Mallorca, Baleares, Spain. *Tel:* (971) 215100. *Telex:* Jppm 69075. *Contact:* D. Rafael Soler Gaya, Port Director.

PASAJES: 43.20 N. 01.56 W. (See Plan Book)

PORT LIMITS: In this port a vessel is considered to be an "arrived ship" (subject to C/P Terms) when the Pilot leaves the vessel once she is inside the port. The laytime will commence when the Master has delivered in writing the Notice of Readiness.
Agent's Comment: The Pasajes Port Authority consider the port to be limited by an imaginary line linking the West of Arando Grande and the East of Arando Chico.
DOCUMENTS:

4 Crew Lists.
2 Passenger Lists or negative.
2 Cargo Manifests with an individual copy of each Bill of Lading for items to be discharged at port of Pasajes.

Copy of Manifest covering other cargo on board in transit for other ports.

Stores List in duplicate, including tobacco, cigarettes, spirits, radios, etc., belonging to the vessel.

Detailed Crew's Stores List, in duplicate, of all personal effects pertaining to crew and passengers (tobacco, cigarettes, spirits, cameras, radios, arms, etc.).

For vessels exceeding 499 tons g.r.t., Safety Certificate, Safety Equipment Certificate and Derat Certificate should be on board ready for production.

PILOTAGE: Pilot service is compulsory and permanent. Pilots board vessel in an area about 1.5 miles out from leading lights of port entrance. The telegraphic address is: Corporacion de Practicos, Pasajes. Notice should be given 24 hours before arrival; generally Agents keep Pilots informed of vessel's time of arrival when they are advised by Masters. VHF service in operation.

Pilots' cutter is painted in naval-grey with letter "P" painted in white on both sides of bridge; flag with letter "P" in white, is hoisted on cutter's mast.

International pilot signals are used by Pilots, by means of Aldis lamps, when approaching vessel at night. International light and sound signals to be made by vessel when requiring Pilot.

In event of bad weather Pilots cannot board vessel at usual 1.5 miles location. In this case vessel has to wait for instructions (VHF or radio) for entering port.

With respect to boarding and safety measures, the international safety regulations are to be followed.
ANCHORAGES: A limited number of vessels may anchor in Roads inside the port, in good shelter. Depth in area of anchorage is 25 ft. – 29 ft.
RESTRICTIONS: The entrance channel is 80 m. – 120 m. wide, 1,200 m. long and its depth 10 m. at LST, with sandy bottom. Vessels with a length not over 130 m., provided their draft allows, may enter or leave at any time during the day or night. Vessels with a length between 130 m. and 140 m. may enter or leave from 1 hour – 3 hours before high tide during day or night. Vessels with a length over 140 m. may only enter or leave from 3 hours – 1 hour before high tide during daylight. Vessels with a draft over 25 ft., though less than 130 m. in length, will only be allowed to sail or enter from 4 hours before high tide to 2 hours after, on account of their draft, both during the day or at night.
MAX. SIZE: The Port Authority has determined the maximum particulars of the vessels that may use the port: those with a length not over 185 m. and a draft not over 28 ft. forward and 29 ft. aft on entering/leaving. However, a special authorisation must be obtained from the Naval (military) Commandancy for vessels with a length from 175 m. – 185 m. Vessels bound to Lezo Quays are limited to the same draft as above but to 160 m. length.
HEALTH: If vessels proceed directly to berth Pratique can be obtained immediately upon berthing. If vessels anchored in bay, Pratique can be obtained after anchoring. In case of any suspected disease or fever on board, the Master must advise the Agents, by radio, in order that they may inform the Sanitary Authorities in advance.
RADIO: Nearest Radio stations are the coastal radio stations of Igueldo and Cabo Mayor. Messages by radio-telephone can be transmitted via Radio Arcachon (France). Notice of ETA should be sent to Agent 24 hours before arrival.
TUGS: No tug-boats required for vessels with normal steering when entering port. Tug-boats are required for berthing or shifting to and/or from quays for vessels over 80 m. length. Ship's lines are used and tug-boats are employed according to Pilot's advice.

8 tugs available, the smallest and largest being 150 h.p. and 1,250 h.p. respectively.
BERTHING: Berths are allocated by Port Control after notice of arrival and information regarding cargo given by Agent. Pilots inform Masters of location of berth appointed, if any. No tidal difficulties for berthing or shifting inside the port.

Berths belonging to Port Control.

Name	*Length* (m.)	*Depth* (m.)	*Uses*
Ancho	273.2	10	General Cargo
Avanzado Molinao	145.0	10	Liquid gas/bulk cement
Molinao	313.0	10	Containers, scrap, general cargo
Capuchinos	298.3	10	Solid/liquid bulk
Petroleos	159.5	10	Liquids. Special installation
Iberduero	250.0	10	Private
Lezo – 1	298.4	10	Scrap/General cargo
Lezo – 2	150.1	10	Scrap/General cargo
Trasatlantico	234.1	8	General cargo
Lezo – 3	151.0	8	Roll-on/Roll-off
Hospitalillo	87.6	6	Shipbuilding/repairs
Avanzado Norte	63.6	6	Service boats
Avanzado Este	114.6	6	Solid bulk/general
Avanzado Oeste	120.3	6	Solid bulk/general
Darsena de Petroleos	50.0	6	Ship's stores
Herrera	399.4	5	General cargo
Reloj	240.0	5	Solid bulk/scrap

BULK HANDLING FACILITIES: At Capuchinos there are 19 electric conveyor belts with a capacity of 400 tonnes/p.h., 8 electric conveyor belts with a capacity of 30 tonnes/p.h., 2 electric loading jib cranes with a capacity of 400 tonnes/p.h., 1 electric conveyor belt 200 tonnes/p.h., 1 electric conveyor belt system 200 tonnes/p.h., 1 pumping installation 125 tonnes/p.h., 1 pneumatic installation 200 tonnes/p.h., 1 pumping installation of 150 tonnes/p.h., and at Lezo there is also a conveyor belt, 320 h.p., 500 tonnes/p.h.
CARGO HANDLING: *Containers:* 4×30 tonne cranes available for container handling.

Mechanical Handling Equipment: There are 45 fork lift trucks ranging from 1.5 tonnes to 28 tonnes capacity, 10 trucks of 2 tons and 3 tons, 28 loading scoops of between 1.5 tonnes and 16.2 tonnes capacity, 8 tractors, 19 platforms.

The Port Authority also owns 4 additional electrically driven conveyor belts of 2 h.p., giving a loading rate of 40 tonnes and 60 tonnes respectively.

Various ancillary equipment, scrapers, bagging units, bulldozers, barges, lighters, work boats. There are 4 floating cranes, whose power ranges between 6 h.p. and 60 h.p., maximum reach on the largest being 12 m. and its height above sea level being 21 m.

Ro-Ro Traffic: The port has two ramps for Ro-Ro traffic at Avanzado Molinao.

Whenever a vessel arrives with flammable products, such as gas, propane, etc., the quay where vessel is discharging is fenced off.

CRANES:

Location (Berth)	*No. of Cranes*	*SWL* (tons)	*Reach* (m.)	*Output* (tonnes/p.h.)
Trincherpe	1	3.5/6	22.5/12.5	80
Herrera	4	3.5/6	22.5/12.5	80
Reloj	7	3.5/6	22.5/12.5	80
Avanzado Oeste	2	6	22.5	100
Avanzado Este	2	6	22.5	100
Avanzado Este	1	3.5/6	22.5/12.5	80
Trasatlantico	4	3	25	80
Ancho	4	3	25	80
Ancho	2	6	22	100
Ancho	1	6/10	20/10.5	100
Molinao	1	6	22	100
Molinao	4	12	25	150
Molinao	2	30	22.5	200
Molinao	1	12	25	150
Capuchinos	4	6	22	100
Capuchinos	3	12	25	150
Lezo-1	6	12	25	150
Lezo-2	2	6	22	100
Lezo-2	2	30	22.5	200
Iberduero (Container)	1	15	22.7/6	500
Iberduero	1	12.5	16.5	250

Mobile Cranes: 2×2–10 tons, 2×1–6 tons, 1×2–5 tons, 1×7–9 tons and 1×1.5–45 tons.

Floating Cranes: 1×60 tons, 1×6 tons, 1×18 tons (private) and 1×20 tons (private).

STEVEDORES: ETA advice should be received by Agent 24 hours before arrival in order arrange loading/unloading operations with stevedores. The official working time in the port is: Monday/Friday 0800 to 1200 hrs. and 1330 to 1730 hrs. and Saturday 0800/1200 hrs.

MEDICAL: Any kind of medical assistance is available. In case urgent surgical or medical assistance required on vessel's arrival, Agent should be informed in plenty of time to make the necessary arrangements.

No particular inoculations required or vaccination/fever certificates to be produced unless epidemic at last or recently visited ports.

TANKERS: Berth at Muelle Petroleos: 2×8 in. (Gas oil), 2×8 in. (Fuel oil No. 1 & 2 and Gas oil).

FRESH WATER: Fresh water available at all wharves. Rate of delivery 25 cu.m./hr. – 70 cu.m./hr.

FUEL: Fuel is supplied by C.A.M.P.S.A. at Ancho, Molinao and Capuchinos Quays. The rate of delivery is 100 t.p.h. Owners must pay C.A.M.P.S.A. for the fuel 24 hours prior to its delivery.

FIRE PRECAUTIONS: No specific precautions required unless the vessel carries flammable cargo. Special harbour fire-fighting corps.

GANGWAY/DECK WATCHMEN: Not compulsory. Shore watchmen available.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Ship's Registry, Radio, Load Line, Equipment and Construction.

CUSTOMS ALLOWANCES: In case the vessel carries more than 6 kilos tobacco per crew member and more than 2 kilos per passenger, the excess must be declared in a separate Manifest which must be legalised by the Spanish Consular Authorities. In absence of Spanish Consular Authorities that Manifest will have to be legalised by an Authority of last port of clearance wherefrom the vessel proceeds. A reasonable amount of alcohol is allowed per man.

IDENTIFICATION CARDS: Not required.

CONSULS: Consulates/Vice-Consulates at San Sebastian and/or Pasajes:

Argentina
Belgium
Brazil
Colombia
Costa Rica
Chile
Denmark
El Salvador
Finland
France
Germany
Great Britain
Greece
Italy
Netherlands
Norway
Panama
Paraguay
Peru
Portugal
Sweden

REPAIRS: Repair shops and shipyards available, where repairs or overhauls may be carried out.

DRY DOCKS: One (1) floating dock 91.56 m. long. (internal 76.56 m.), 23.25 m. wide (18 m. internal), and 10.40 m. depth of water. Capacity 2,900 tonnes.

One (1) floating dock 66.27 m. long, 23.25 m. wide, and 9.125 m. depth of water.

Two (2) slipways with 8 ramps of length between 130 m. and 157 m. and widths between 3 m. and 9.4 m. Max. admissable vessel tonnage: 1,200.

REPATRIATION: Good facilities for repatriation.

AIRPORT: Airport of Fuenterrabia is situated at 15 km. from Pasajes. Regular daily services with Madrid and Barcelona.

TIME: GMT plus 1 hour in Autumn and Winter. GMT plus 2 hours in Spring and Summer.

HOLIDAYS: 1st January; 6th January; 19th March; Maundy Thursday (afternoon); Good Friday; 1st May; Corpus Christi; 29th June; 7th July; 16th July; 31st July; 15th August; 12th October; 1st November; 8th December; 25th December.

POLICE/AMBULANCE/FIRE: Police 351841; Ambulance 414142; Fire from 0800 to 1930 hrs. tel. 351844, from 1930 to 0800 hrs. tel. 397262; Red Cross (local) 351032; Hospital, San Sebastian, 423632.

TELEPHONES: No possibility of placing telephones on board.

SERVICES: Divers.

SHORE LEAVE: Crew allowed to land immediately upon arrival.

DEVELOPMENTS:

1. Improving the depth in the bay (2nd phase) giving a depth of 12.0 m. at LW and HW.

2. Donibane Area: In the 1st phase a quay length of 360 m. will be provided with a depth of 12.0 m. To be extended in the second phase to 600 m.

3. Lezo Area: Lezo 3 to be extended, permitting Ro-Ro vessels length 145.0 m. and beam 26 m. to berth.

AUTHORITY: Comandancia Militar De Marina De San Sebastian, Pasajes, Spain. *Contact:* Guillermo Aldir Albert, Military Marine Commandant.

Junta del Puerto de Pasajes. *Contact:* Francisco Miner Urdampilleta, Port Director.

AGENT: Sobrinos De. M. Camara S.A., Telegrams "Camara". Tel: 357045, 357046 and 357047. Telex: 36241.

(Shipbrokers, Customs/Forwarding Agents, Chartering Agents, Lloyd's Sub-Agents).

RIBADEO: 43.32 N. 07.02 W.

DOCUMENTS:

Manifest of Cargo, including cargo in transit.
3 Crew Lists.
2 Passenger Lists or negative.
2 Stores Lists.

If vessel carries over 6 kilos tobacco per man, the excess to be declared in a separate manifest which must be visaed by Spanish Consul at last port, otherwise is exposed to heavy fine.

PILOTAGE: Prior advice of ETA required by Pilot, who boards at the mouth of the river at the time advised by Agent. Pilot boat is white-painted motor launch, carrying international pilot signals.

In case of bad weather, Pilot will instruct vessel by signals to proceed to anchorage or to berth.

The Pilot always boards on the lee side, in the latitude of Isla Pancha.

ANCHORAGE: At Ensenada de Arneo, approx. position Lat. 43° 33′ N., Long. 7° 01.6′ W. in depth of 9 m. LW.

RESTRICTIONS: Vessels enter night and day, limited only by draft and state of tide.

MAX. SIZE: Length and beam not limited. Max. draft 15 ft.

HEALTH: Pratique given on arrival on production of clean Bill of Health. International quarantine signals to be used. Port Authorities to be advised if any case of suspected disease or fever on board.

RADIO: Messages may be routed through coastal stations at Vigo, La Coruna or Gijon.

TUGS: None available.

BERTHING: Vessels may berth at the mole at any time, or state of tide, according to draft.

STEVEDORES: Stevedores services operated only by Servicio de Trabajadores Portuarios.

MEDICAL: Nearest clinic at Mondonedo 35 km. from Ribadeo.

DENSITY: 1025.

FRESH WATER: Water connections exist along the length of the mole. Rate, 20 t.p.h.

FUEL: There is a gas oil supply for small vessels, rate 12 t.p.h.

GANGWAY/DECK WATCHMEN: None required.

OPENING/CLOSING HATCHES: Performed by crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine/spirits per man.

CONSULS: Nearest at La Coruna.

REPAIRS: Minor mechanical repairs can be effected. Slipway for vessels up to 200 tons.

AIRPORT: Nearest at La Coruna, 150 km. away, or Aviles, 165 km. away, with regular services to Madrid.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

POLICE/AMBULANCE/FIRE: Tel: Ribadeo 110650.

AUTHORITY: El Ayudante Militar de Marina de Ribadeo.

ROSAS: 42.14 N. 03.10 E. (See Plan Book)

DOCUMENTS:

Crew List.
Passenger List.
(1 of each) Ship's Papers.

PILOTAGE: No Pilots in this port.

ANCHORAGE: Bay of Rosas is anchorage area.

MAX. SIZE: Draft in Commercial Port is 4 m., with berths for cargo ships of about 1,000 n.r.t. (metric).

HEALTH: Once ship is anchored in the bay it obtains Pratique by means of signals, and by raising the yellow health flag. When vessel entering after calling at another port in the same country, this procedure is not required; Health Inspector boards at the quay side.

RADIO: No radio station in the port, but can contact Coastal Radio Station of Barcelona (1730 kHz – 173.4 m.), power 150 W.

TUGS: None.

BERTHING: Advisable during daylight only.

MEDICAL: Port Health Doctor available. Hospitals 18 km. distance.

FRESH WATER: Available at Commercial Port at rate of 8 tonnes/p.h. to 10 tonnes/p.h.

FUEL: Available to small vessels only.

POLICE/AMBULANCE/FIRE: Police Service 25-62-72; Ambulance Service 25-68-28; Fire Service 25-66-32.

AUTHORITY: Ayudante Militar de Marina de Rosas.

SAGUNTO: 39.42 N. 00.14 W. (See Plan Book)

PORT LIMITS: The East/West line through the point of Cape Escollera de Levante.

DOCUMENTS:

2 copies Entrance Manifest.
4 copies Crew List.
Passenger List disembarking at this port.
Passenger List in transit.

Refer to "Barcelona" for other important information concerning Documentation.

PILOTAGE: Port is privately owned, and Pilots employed by Altos Hornos del Mediterraneo S.A. As Pilots are employed in Consignees Office no separate ETA is necessary. They are sent out to meet vessels as required. Pilot boat is not fitted with radar or VHF. Boat displays signals in accordance with international regulations.

ANCHORAGE: From 155° to 170° from the Cape Canet Lighthouse in 20 m. of water.

RESTRICTIONS: Delays may be caused by berth being occupied. Larger vessels may be delayed by bad weather (the Levante), as dredged channel is narrow.

MAX. SIZE: Draft 29 ft. 5 in. No other limitations.

HEALTH: Pratique can be arranged at any time by Consignees.

RADIO: Cadiz Radio-EAC, Cabo Palos Radio-EAP and Valencia Radio EAV.

TUGS: Normally join vessel either in anchorage or 0.5 miles from entrance. Ship's lines are used. Tugs should be ordered in ETA message also mentioning vessel's length and cargo.

BERTHING: Subject to berth occupation and to berthing priority that Altos Hornos gives to different cargoes. Overnight berthing is allowed, in cases of emegency, or for ship safety.

BULK HANDLING FACILITIES: Ore loading pier for Sierra Menera (approx. 1,700 m. in length). Max. draft 48 ft.

CRANES: 10 at 6 tons on the coal quay, 4 at 20 tons, 4 and 60 tons and a 250 ton winch on the new quay.

STEVEDORES: Employed by consignees.

MEDICAL: Medical assistance should be ordered in advance. All kinds of medical assistance available. One hospital owned by Altos Hornos.

TANKERS: No facilities.

DENSITY: Salt water.

FRESH WATER: Available.

FUEL: None available.

FIRE PRECAUTIONS: Fire service organised by Altos Hornos.

GANGWAY/DECK WATCHMEN: Usually by crew. The Civil Guard keep watch on all ships for contraband.

OPENING/CLOSING HATCHES: Effected by ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes only. One bottle spirits per man but bottle should be opened. Spanish spirits allowed; one bottle per man. No control of Spanish wines.

IDENTIFICATION CARDS: Passport only.

CONSULS: Nearest at Valencia.

REPAIRS: Small repairs possible.

REPATRIATION: Facilities for effecting crew changes and arranging repatriation.

AIRPORT: Manises Valencia, 40 km. away.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: *Religious Festivals:* January 6th, March 19th, August 15th, December 8th and 25th. Variable: Good Friday and Corpus Christi. *National Festivals:* January 1st, May 1st, July 25th, October 12th.

TELEPHONES: None on board. Telephones placed in Boat house and Pilots' Office.

SHORE LEAVE: Crew members allowed ashore.

DEVELOPMENTS: Port to be expanded during the next five years to accommodate 300,000 tonners, at specialised cargo handling facilities. (Delayed for time being).

AUTHORITY: Ayudante Militar de Marina, Calle General Mola 75, Sagunto, Spain.

SAN CIPRIAN: 43.43 N. 07.28 W. (See Plan Book)

LOCATION: Located on the N.W. coast of Spain mid way between Burela and Vivero.

The port is owned by Aluminio Espanol and Alumino Espanola, whose factory is dedicated to produce aluminium and alumina. In its construction the most advanced technical systems have been used.

PILOTAGE: 2 Pilots available.

RESTRICTIONS: Harbour Master's Regulations only allow vessels to enter port or sail during daylight hours.

MAX. SIZE: Max. draft 12.95 m.

VHF: New Radio Station with service on Channel 16.

TUGS: The Factory has time-chartered 2 tugs: "Sertosa Diecisiete" and "Sertosa Catorce" to service the port. A third tug based at Aviles is also used to assist large vessels (i.e. 60,000 d.w.t.).

BERTHING: The port is sheltered by the Northern breakwater called "Dique Norte" which is 1,700 m. long.

The Southern breakwater called "Dique Sur" is the commercial wharf. It has a length of 800 m. The bar of the port is 280 m. wide and its depth 22 m.

Southern breakwater main berth ("A" on Plan) is 280 m. long and its depth 14 m. It has been equipped with a tower-type crane to discharge bulk cargoes, particularly bauxite, and it averages 1,100 to 1,200 t.p.h.

Southern breakwater auxiliary berth ("B" on Plan) is 80 m. long and its depth 7.5 m. It is equipped with 2 cranes of 5 tons lifting capacity each and used to discharge petroleum coke at a rate of 2,000 tons per work shift (0800 – 2000 hrs.). Loading of aluminium ingots and slabs is also undertaken, with a load rate of 500 tons per 24 hours of work. This berth is also being equipped in order to accommodate vessels discharging fuel oil and liquid soda.

FRESH WATER: Available.

FUEL: Not available.

AUTHORITY: Harbour Master.

AGENT: Romualdo Alvargonzalez, S.A. Trv. Puerto 2, San Ciprian. Tel: 58.03.33. Telex: 87492.

SANTANDER: 43.28 N. 03.49 W. (See Plan Book)

PORT LIMITS: Between Cabo Menor and Punta Galizano.

DOCUMENTS:

5 Crew Lists.
7 Passenger Lists, or 3 negative.
3 Cargo Manifests of the goods destined to the Port of Santander, 2 sets of manifests for cargoes in transit.
Store List in triplicate, including tobacco, spirits, radios, etc., belonging to the vessel.
Detailed list in triplicate of all personal effects of crew and passengers (tobacco, spirits, cameras, souvenirs, radios, etc.).
For vessels exceeding 499 g.r.t: Safety Wireless Certificate and Safety Equipment Certificate.

Legalisation required for manifests covering tobacco and tobacco products. This legalisation to be effected at the port prior to the first Spanish port of call.

Master and each member of crew of vessel can carry for his own consumption up to 6 kilos of tobacco in whatever form, and, if passengers are carried, up to 2 kilos per passenger, all of which must be declared in provisions list (1 kilo of tobacco = 1,000 cigarettes = 100 cigars). If Masters carry greater quantity than stated above, it cannot be manifested as tobacco for consumption on board, but must be included in Consular Manifest as being in transit, and as such must be separated in the holds from other cargo and hatches or lockers will be sealed by Customs until ship leaves Spanish waters. This Consular Manifest has to be legalised by a Spanish Consul. In the absence of Consul, said document will have to be visaed by an Authority of the former port of clearance. Otherwise, vessel would be severely fined.

PILOTAGE: Compulsory and service is permanent. Pilots board vessel by a cutter at the road, near the entrance off Mouro Island. Pilot cutters are painted white and have the letter "P" in black, on each bow. Cutters have blue flag with letter "P" in white, at both sides of flag. At night cutters have a white light, under this a red one. VHF available.

ANCHORAGES: The harbour consists of a large bay which provides good anchorage.

RESTRICTIONS: Entrance is well marked and there is no bar. Depth at entrance is at minimum 35 ft.

MAX. SIZE: No restriction in respect of length or breadth, the maximum advisable draft to enter port is 35 ft. at LWOST, and 13 ft. – 14 ft. should be added for depths at HWOST.

HEALTH: If the vessel proceeds directly to berth, Pratique can be obtained immediately after berthing. Otherwise, at anchorage at vessel's arrival.

If vessel has sickness on board of a contagious nature Masters should advise Health Authorities by radio, and they will examine patients immediately upon arrival, to enable vessel to be granted Free Pratique. If vessel has to be fumigated or deratted a charge is made.

RADIO: Nearest important radio station is Cabo Mayor Radio, and it is advisable that messages received at least 24 hours before arrival.

TUGS: No tug-boats required for entering the port, only for berthing or shifting when in port. Ship's lines are used, and tug-boats are employed according to Pilot's advice.

BERTHING:

Berth	*Length* (m.)	*Depth* (m.)
Calderon	270	4
Maura	55.6	6.5
Albareda	267	7.25 to 9.5
Almirante	107.2	9.5
Maliano (Sections 10 and 11)	229.1	10.5'
Maliano (Section 9)	129	7
Maliano (Section 8)	106.4	5
Maliano (Sections 1 – 7)	710	8
North Edge	538	9.5
RAOS (No. 1)	300	13.0
RAOS (No. 2)	208	13.0
Campsa Quays	280	8.5
Calatrava Quay	—	11.5

All depths of water quoted above correspond to LWOST and 13 ft. – 14 ft. should be added for depths at HWOST. Bottom is generally soft.

Calatrava Wharf: For discharge of chemicals. Depth alongside 34 ft. with overall length limitation of 980 ft. Up River, at Astillero, beyond the harbour area, there is one spout called Orconera Tip for loading iron ore. Vessels up to 260 ft. – 270 ft. length are allowed with a maximum draft, fully loaded, of 19 ft. Loaded vessels can only sail at high water. A modern installation for dismantling and scrapping vessels is operating up river, on the way to Astillero.

CARGO HANDLING FACILITIES: There are berths for handling bulk cargoes, grain, ore, coal, etc. There are also berths for handling bulk liquids, chemicals. Berth available for Roll-on/Roll-off traffic.

STEVEDORES: It is very important that Masters send advance notice regarding vessel's ETA. With this notice, Agents can inform Shippers or Receivers' stevedores accordingly. Official working hours of port, are: Monday/Saturday: 0800 – 1200 hrs.; 1400 – 1800 hrs.

MEDICAL: Any kind of medical services can be arranged.

TANKERS: "Campsa" (Spanish State Monopoly): Installation is served by two identical concrete wharves situated in Maliano Basin, berthing space of which is 500 ft. with a depth alongside of 29 ft.

DENSITY: Sea water.

FRESH WATER: Always available. Supply is performed by tug-boats and from shore connections at various quays.

FUEL: Ordinary fuel, diesel and gas oil are available at "Campsa". Depth alongside 19 ft. – 32 ft.

Advisable that shipowners stem bunkers through their own Contractors with (at least) 48 hours' notice. Delivery can be performed either by tank-trucks or at bunkering pier.

GANGWAY/DECK WATCHMEN: Not compulsory but available upon request.

OPENING/CLOSING HATCHES: Effected normally by crew, except in liner vessels, which is contracted by stevedores.

CERTIFICATES: Vessels should have the usual documents on board, but only the safety Wireless, Safety Equipment and Derat Certificates are required by Authorities.

CUSTOMS ALLOWANCES: Normally, Customs permit 200 cigarettes per man out of bond. Additional quantities needed depend on the stay of ship in port. One bottle of spirit per man.

CARGO GEAR: Shore cranes are usually employed in loading/discharging operations.

CRANES:

Maura Quay	1 fixed 30 ton crane (electric)	
Albareda Quay	3 electric cranes	3 tons
Maliano Quay (Sections 10 & 11)	6 " "	6 tons
Maliano Quay (Sections 1 to 7)	14 " "	3 – 6 tons
North Edge Quay	4 " "	6 tons
	5 " "	12 tons
RAOS	8 " "	16 tons

Also movable motor cranes, mechanical shovels and similar, available.

IDENTIFICATION CARDS: Not required.

CONSULS:

Belgium
Bolivia
Colombia
Costa Rica
Chile
Denmark
Dominican Rep.
Ecuador
Finland
France
Germany
Great Britain
Greece
Guatemala
Haiti
Honduras
Italy
Monaco
Norway
Panama
Peru
Portugal
Sweden

Note. Acting as Consul of those countries with no Consular Representation: Valentin Lavin del Noval, Dominican Rep. Consul.

REPAIRS: Good repair facilities with various shipyards at port. All types of deck, engine, etc., repairs are possible.

DRY DOCKS: Three dry docks, one of which is within the harbour area and the other at Astillero (beyond the harbour area). Dimensions are:

Extreme length	405 ft.	434 ft.	722 ft.
Breadth at entrance	58 ft.	54 ft.	105 ft.
Depth on sill (high water)	23.7 ft.	20 ft.	38 ft.

REPATRIATION: No difficulties.

AIRPORT: About 4 miles from town. There are regular services with Madrid and Barcelona. Also charter flights to U.K. and other European countries.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS:

January 1st, New Year's Day	Full day	Work can be arranged
January 6th, Epiphany	"	"
March 19th, Saint Joseph	"	"
Maundy Thursday	"	"
Good Friday	"	"
May 1st, Saint Joseph Artisan	"	"
Ascension Day	"	"
Corpus Christi	"	"
June 29th, Saint Peter & Saint Paul	"	"
Labour Day	"	"
July 25th, Patron Saint of Spain	"	"
August 15th, Assumption Day	"	"
August 30th, Martyrs' Day	"	"
September 15th, Virgin La Bien Aparecida, Patron of Santander	"	"
October 12th, Holiday of Hispanicism	"	"
November 1st, All Saints Day	"	"
December 25th, Christmas Day	"	"

POLICE/AMBULANCE/FIRE: Police 222543; Civil Security Guards 232004; Hospital, Casa de Socorro 221214, Valdecilla 231400; Fire 231662; Ambulance Cruz Roja 270235.

TELEPHONES: In very special instances, can be arranged.

SERVICES: Available for tank cleaning, washings, compass adjusting, hull cleaning whilst floating, radio installation repairs, etc.

SHORE LEAVE: Crew allowed ashore at any time.

DEVELOPMENTS: New Ro/Ro and container terminal under construction.

Extensions: The entrance channel has been widened to 200 m. and has some depths between 9.5 m. and 10.5 m. at LWOST.

AUTHORITY: Junta del Puerto-Santander, Paseo de Pereda 33-1° Santander, Spain. *Tel:* 42-21 20 58. *Telex:* 35.936 Jpsr E. *Contact:* Rafael Martinez Diez-Canedo, Director del Puerto.

AGENT: Modesto Pineiro y Cia., P.O.Box 14, Paseo de Pereda 27, Santander. Telegrams: "Pineiro-Santander". Tel: 220000. Telex: 35832. (P & I Club representatives, Shipbrokers, stevedores and chartering Agents, Lloyd's Sub-agents, Brittany Ferries. British, Greek, Netherlands and Peruvian Consulates.)

SANT FELIU DE GUIXOLS (Gerona): 41.46 N. 03.01 E. (See Plan Book)

PILOTAGE: Pilotage is compulsory. Service between 0700 to 2400 hrs. Tel: 320910 or call Barcelona Radio or Bagur Radio (VHF).

ANCHORAGE: Vessels arriving after midnight or due to port congestion are anchored outside the breakwater.

MAX. SIZE: The maximum advisable draft for berthing is 22 ft. and up to 115 m. length.

TUGS: No tugs available.

BERTHING: Due to the fact that a few vessels can work at the same time, it is advisable to know as soon as possible the ETA for berthing arrangements.

Commercial Wharf	Length 108 m.	Depth 22 ft.
Breakwater	Length 116 m.	Depth 22 ft.

A pier for coasting vessels with a maximum draft of 18 ft.

MEDICAL: Any kind of medical services can be obtained in Sant Feliu or Gerona hospital.

FRESH WATER: By means of hoses from the pier.

FUEL: Can be supplied in small quantities.

CARGO GEAR: Commercial pier is served by an electric crane able to lift up to 6 tons. Normally vessel's derricks are used.

AUTHORITY: Ayudantia Militar de Marina, Raig 6, Sant Feliu de Guixols (Gerona), Spain. *Tel:* 972-320967. *Contact:* Harbour Master.

SEVILLE: 37.25 N. 06.00 W. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
2 Cargo Manifest, including cargo for discharge and in transit.
Declaration of Health.
2 Lists of Provisions and Stores.
2 Copies of Bills of Lading.

If vessel carries over 6 kilos tobacco per man the excess to be declared in a separate manifest which must be visaed by Spanish Consul at last port, otherwise is exposed to heavy fine.

PILOTAGE: *At the Bar:* Vessels may commence to enter and leave the river 1.5 hours after low water. Bar Pilots are stationed at Chipiona and come out to board vessels when requested, 2 miles North of Chipiona Lighthouse.

Pilot motor launches about 9 m. long, painted white with black "P" on sides. They carry regulation lights and signals day and night.

River Pilots: Vessels should radio their ETA at least 24 hours in advance to "Practicos Sevilla". River Pilots are stationed at the pier at Bonanza, Lat. 36° 48′ N., Long. 06° 20′ W. Sound signal to call Pilot is 3 long blasts. Pilot boards from white-painted launch marked by black letter "P" and carrying regulation signals. Pilots require means of embarkation in accordance with International Conventions.

ANCHORAGE: At Bonanza, in depth of 20 ft. below chart datum.

RESTRICTIONS: Navigation in the River Guadalquivir is prohibited at night, both inward and outward for tankers or vessels with hazardous cargoes. Any vessel with a draft greater than 19 ft. may not leave at night.

Draft is controlled by height of tide and this should be ascertained by Owners or Agents in advance for the probable date of entry.

MAX. SIZE: Max. draft 21 ft. 6 in., max. beam 24.2 m. (The limitation in beam is for passing through the lock). Lock length 200 m., width 25 m. Tankers are required to have an additional 1 ft. keel clearance.

HEALTH: Pratique is obtained on arrival at Bonanza, on presentation of International Health Certificates.

RADIO: Tarifa Radio – EAC.

TUGS: Normally join vessel in the anteport. Ship's tow line is used.

BRIDGES: Vessels berthing at Delicias Quay must pass through the Alfonso XIII drawbridge. May be opened at any time of day.

STEVEDORES: 24 hours' notice should be given by Agents and confirmed 12 hours before vessels arrival.

MEDICAL: All medical and hospital facilities available.

TANKERS: There are 2 berths, depth alongside 20 ft.

At Quay No. 2, hoses 8 in. diameter.
At Quay No. 3, hoses 8 in. and 10 in. diameter.

DENSITY: Fresh water. The tide has no influence at Seville.

FUEL: All grades available.

GANGWAY/DECK WATCHMEN: Not considered necessary. All quays are watched by the Guardia Civil.

OPENING/CLOSING HATCHES: Performed by ship's crew.

CUSTOMS ALLOWANCES: 6 kilos tobacco per crew man, and 2 kilos per passenger; this includes tobacco in bonded stores. No restriction on wines/spirits.

IDENTIFICATION CARDS: Not required.

CONSULS: The following countries are represented at Seville:

Belgium
Bolivia
Colombia
Cuba
Chile
Denmark
Dominican Republic
Germany, F.R.
Great Britain
Greece
Honduras
Italy
Liberia
Nicaragua
Netherlands
Panama
Peru
Portugal
Sweden
United States
Uruguay
Venezuela

REPAIRS: All types of repairs can be effected.

DRY DOCK: Astilleros Espanoles S.A. have 1 dock, length 149 m., breadth 25 m.

REPATRIATION: All facilities available.

AIRPORT: Situated 12 km. away, regular daily flights to Madrid, Barcelona, other parts of Spain. Some transatlantic flights.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: (1982). 1st January; 6th January; 19th March; Maundy Thursday; Good Friday; 1st May; Ascension Day; Corpus Christi; 29th June; 25th July; 15th August; 11th and 12th October; 1st November; 8th December; 25th December. All holidays may be worked with overtime.
POLICE/AMBULANCE/FIRE: Police: 091; Fire Brigade: 232123; Ambulance: 231945.
TELEPHONES: Can be installed on board if requested 10 days in advance.
SHORE LEAVE: No restrictions.
SERVICES: Fresh provisions and stores available, refuse collection, correction of compasses.
AUTHORITY: Comandancia Militar de Marina de Sevilla, Avenida de Molini, Sevilla, Spain. *Contact:* Comandante, Militar de Marina.

SOLLER, Majorca: 39.47 N. 02.46 E.

DOCUMENTS: See "Bilbao".
PILOTAGE: None available. 2 intermittent lights situated on the Mola indicate the Entry Channel.
MAX. SIZE: Advisable length and draft 60 m. and 4.50 m. respectively.
TUGS: None available.
MEDICAL: It is advisable to give advance notice if medical attention is required. There are no hospitals. Medical service is available 5 km. from the port.
FRESH WATER: Not available at the quay.
FUEL: None available. If required the order should be placed to Campsa through the Agent.
GANGWAY/DECK WATCHMEN: Crew do this operation.
OPENING/CLOSING HATCHES: Crew.
IDENTIFICATION CARDS: It is advisable to have these available.
CONSULS: None.
REPAIRS: No facilities exist.
AIRPORT: The airport is situated 40 km. away; the island is well connected with the Peninsula (mainland) and with foreign airports.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
SHORE LEAVE: Allowed.
AUTHORITY: Jefe Encargo del Despacho de Buques, Oficianas del Destacamento de la Comandancia Militar de Marina en Soller.

TARRAGONA: 41.05 N. 01.14 E. (See Plan Book)

DOCUMENTS: Cargo Manifest of all goods in ship, stating any foreign port from where those goods come. This procedure should always be done in the first Spanish port.

In first Spanish port ship should produce an Itinerary Manifest; and those ships which carry goods to discharge should produce this Manifest in those ports in which they will discharge the goods.

Supplies Certificate for those ships not having any goods to discharge in any Spanish port, or who have previously been in other Spanish port.

Register of the Supplies and Equipment in ship.

Register of the Crew's Effects, if the ship comes directly from a foreign port.

Passenger List (if there are passengers). Negative Passenger List (if there are no passengers).

Crew List.

Health Certificate, if the ship comes from another Spanish port.

Gas Free Certificate for tankers.

PILOTAGE: Every ship upon arrival should note following signals: During day, hoist flag letter "G" of International Signals Code. Sound signal, three long whistles. During the night, flash signal letter "G" of code or the letters "PT". Cable Address: Practicos Puerto Tarragona. VHF station Channels 16, 14, 12 and 9.

Pilot boats: Black colour with letter "P" painted in white on both sides. Lights: according to International Regulations. Pilotage area begins at a max. distance of 2 miles from port entrance. Ships awaiting for Pilot anchor in the Rada and East of the lighthouse. If weather does not allow, Pilot will meet ship at port entrance. Ladder for Pilot to be placed at leeward side.

ANCHORAGES: The West limit is marked by imaginary line running N./S. at the end of the breakwater. East limit is marked by imaginary line between the Paseo de Sta. Clara with the cathedral tower. Depths in Rada are 16 m. and 30 m.; quite good for anchoring (mud and sand).
APPROACHES: *Entrance Mouth:* Width 350 m., depth 15.0 m., max. current 2 knots.
Entrance Channel: Width 250 m., length 1,050 m., depth 15 m., bottom – gravel and sand.
RESTRICTIONS: There are restrictions regarding berthing of Tankers in the Pantalan and Monobuoy of EMP during night hours, whatever their tonnage.
MAX. SIZE: LOA 280 m., draft 44 ft.
Largest Vessels: Bulk Carriers: Length 276 m., draft 12.19 m. and length 280 m., draft 13.31 m.
Tankers: Length 371 m., draft 17.50 m.
LPG Vessels: LOA 220 m., draft 40 ft.

HEALTH: Hospitals and clinics available. There is a doctor service in health department of port, which is authorised to vaccinate, and give certificates against yellow fever authorised by the OMS.
RADIO: No radio station.
VHF: Pilot on VHF Channel 16.
TUGS: 8 tugs, 825 h.p. – 2,610 h.p. Tugs join vessel outside port. Ship's lines are used.

BERTHING: *Port Authority Facilities:*

Name	*Length* (m.)	*Depth* (m.)	*Use*
Ro-Ro Ramp Bernal	21	15.00	General Cargo
Muelle Aragon, 1st Section	673	12.40	Bulk Cargo
Muelle Aragon, 2nd Section	476	12.40	Bulk Cargo
Muelle Lerida, West Side	200	10.00	General Cargo
Muelle Lerida, East Side	250	8.00	General Cargo
Muelle Lerida, Head	90	9.00	General Cargo
Muelle de Levante	352	9.00	General Cargo
Muelle de Costa	420	6.60	General Cargo
Muelle Reus, North Side	260	10.00	Bulk Cargo
Muelle Reus, Head	100	10.00	Bulk Cargo
Muelle Reus, South Side	350	10.00	Bulk Cargo
Muelle Rioja	218	12.00	Mixed Cargoes
Muelle Castilla, South Side	236	14.40	General Cargo
Muelle Castilla, West Side	497	14.40	General Cargo
Ro-Ro Ramp Castilla	26	14.40	General Cargo
Inflammables Platform No. 1 & 2	215	12.40	Liquids
Private:			
Muelle Exposa	428	14.40	General Cargo
Inflammables No. 3	230	14.00	Liquids

STEVEDORES: Advisable to report ETA, in order to have all the necessary equipment and necessary number of workmen required for operations. If there are not enough cranes at a given time, own ship equipment is used.

CRANES:
Electric Cranes:
Muelle Aragon: 4×6 tons, 5×12 tons, 2×14 – 28 tons, 1×35 tons, 4×16 tons.
Muelle Levante: 6×2.5 – 5 tons, 2×6 tons.
Muelle de Costa: 2×2.5 – 5 tons, 5×1.5 – 3 tons.
Muelle Reus (North): 4×3 – 6 tons.
Muelle Reus (South): 4×3 – 6 tons, 1×12 tons.
Muelle Rioja: 5×6 tons.
Muelle Castilla (South): 2×16 tons, 4×12 tons.
Muelle Castilla (West): 2×12 tons, 2×16 tonnes.
Muelle Exposa: 4 portico × 14 – 28 tons. 1 container crane × 40 tons.
Muelle Lerida (South): 1×6 tons, 1×12 tons, 1×16 tons.
Muelle Lerida (North): 4×6 tons.
Mobile Cranes:
3×1 – 6 tons (Port Authority).
1×1 – 6 tons, 1×2.3 – 30 tons (Astilleros Tarragona).
Floating Crane: 1×65 tons.

SPECIALISED CARGO HANDLING FACILITIES:

Location	*Owner*	*Characteristics*
Muelle Aragon	Silos de Tarragona, S.A.	Cereal silos of 44,000 tons capacity, with 2 automatic lifts for grain of 400 t.p.h. and pneumatic scales of 5 tons for weight control, 2 elevators for filling and recirculation of 400 t.p.h., 2 elevators at the entrance and 2 at the exit, all 4 producing 300 t.p.h. each. A grain conveyor belt from the berth to the silos of 400 t.p.h.
	Berge y Cia. S.A.	Polyvalent warehouse for cereals and other uses of 35,000-ton capacity with 4 mechanical lifts for grains with with a capacity of 250 t.p.h. each, 2 conveyor belts of 250 t.p.h. and another of 500 t.p.h.
Muelle Costa	La Vinicola Iberica, S.A.	Pipe of 15 cm. diameter with 3 outlets for the loading of wine in bulk to tankers.
Muelle Reus	EDEGRASA	3 outlets with 4 pipes for the loading and unloading of chemical products onto or from tankers with capacity of 20,758 cu.m. of storage at 150 t.p.h.
Muelle Reus	Cia. Industrial de Abastecimientos, S.A.	Port silos for grain of 30,700 tons capacity, with 3 elevators for filling and recirculation and 2 conveyor belts for filling and unloading of 300 t.p.h. 1 pneumatic unloader of grain from ship to silo of 150 t.p.h. 2 conveyor belts for grain from berth to silos of 300 t.p.h. each.
Muelle Reus	CAMPSA	2×10 in. pipe-lines for the loading and unloading of liquid combustibles producing 250 t.p.h.
Muelle Reus	Terminales Quimicos, S.A.	Vegetable oil discharge. 23 tanks with 13,963 cu.m. capacity. 3 pipes for loading/discharging vessels.
Muelle Rioja	CAMPSA	3×10 in. pipe-lines and 1×12 in. for the loading and unloading of liquid combustibles producing 250 – 350 t.p.h.

Muelle Castilla	Cia. Industrial de Abastecimiento, S.A.	Port silos for grain of 40,000 tons capacity with an automated elevator of 800 t.p.h. and a 10 ton receiving hopper scale, 2 elevators for filling and recirculation and 2 conveyor belts for filling and unloading of 800 t.p.h. each. A pneumatic unloader of 450 t.p.h. for grain from ship to silo. A conveyor belt from berth to silos of 800 t.p.h.
Atraque Inflamables	Butano, S.A.	2×8 in. pipe-lines and 1×10 in. for the loading and unloading of LPG with an average of 100 t.p.h. in normal unloading conditions (they do not allow an operational temperature of less than 4°).
Atraque No. 1 de Inflamables	Terminales Quimicos, S.A.	4 outlets with 4 pipes of 6 in.
Puerto Exterior	Asfaltos Espanoles, S.A.	Dolphin 1,300 m. long with 3 moorings for ships of 7,500, 20,000 and 50,000 d.w.t.
Puerto Exterior	ENPETROL	Dolphin 1,489 m. long with 3 moorings for ships of 11,000, 35,000 and 100,000 d.w.t. Monobuoy for loading and unloading of ships up to 250,000 d.w.t. in normal conditions and exceptionally up to 325,000 d.w.t. and 40 m. draft. 2 floating hoses of 300 m. radius of 24 in. whose connection with the ships is 16 in. ASA or 150 lb. and a capacity of 12,500 t.p.h.

CARGO HANDLING EQUIPMENT: (Private).
Fork Lift Trucks: 2×10 tonnes, 7×2.5/6 tonnes, 21×3/7 tonnes, 13×2.5/12 tonnes, 19×2/4 tonnes, 8×4/7 tonnes, 5×3/5 tonnes, 2×40 tonnes, 6×4/6 tonnes, 1×2.5 tonnes, 1×1.5 tonnes and 1×3 tonnes.
Fork Lifts with Spreaders for Containers: 1×40 tonnes, 1×25/32 tonnes, 1×25/30 tonnes.
Shovel Loaders: 53×0.5 tonnes – 11 tonnes.
Grabs: 13×6.5 cu.m. – 21 cu.m., 9×0.5 tonnes – 60 tonnes.
Hoppers for Trucks: 19×8 tonnes – 50 tonnes.
Conveyor Belts: 23×100 tonnes per hour – 600 tonnes per hour for bulk cargo. 7 belts also available for bags.

GANGWAY/DECK WATCHMEN: Not compulsory, if Master requires them he is provided with specialised staff for this purpose.

OPENING/CLOSING HATCHES: Although this work is normally carried out by crew it can be done as well by the stevedores if required at extra charge.

TANKERS:

Berth	*Length* (m.)	*Depth* (m.)	*Use*
A.S.E.S.A.			
Platform 50	260	14.4	Petroleum
Platform 20	150	10.9	Petroleum
Platform 6	130	9.0	Petroleum (also see "LPG")

ENPETROL:

There are 4 berths with the following identification and characteristics:

Berth	*Max. Draft*	*d.w.t.*	*LOA*
80 S	14.47 m. (47.59 ft.)	100,000	149 m. – 269 m.
35 S	11.40 m. (37.50 ft.)	40,000	85 m. – 210 m.
35 T	11.40 m. (37.50 ft.)	40,000	85 m. – 210 m.
11 S	8.05 m. (26.48 ft.)	11,000	25 m. – 140 m.

Mooring and unmooring manoeuvres are performed with the help of tugs.

No engine repair is allowed that could prevent the immediate departure of the tanker. The International Safety Regulations are to be observed.

Monobuoy:

SBM type, with a diameter of 11 m. Anchored with 6 chains, 42 m. depth. Connected to the Monobuoy are 2 floating hoses of 24 in. diameter, 287 m. length. Vessels sailing in the proximity should give a wide berth.

The Monobuoy geographic location:
Lat. 41° 04.1′ N., Long. 1° 13.3′ E.

Day marking of Monobuoy: Yellow "X" shaped figure. Night marking by yellow light visible all round, with 4 flashes every 20 secs. range 5 miles.

Pipe-lines: There are 2 pipes of 8 in. diameter and 1 of 10 in. diameter from the CAMPSA plant to the Reus and Rioja Quays, the former having a capacity of 250 t.p.h., the latter 350 t.p.h.

Between the Butano, S.A. Plant and the Inflammables Berth there are 2 pipe-lines of 8 in. and 1 of 10 in. for the unloading of LPG with a capacity of 250 t.p.h. The characteristics of these pipe-lines do not permit an operational temperature of less than 4°.

There is a pipe of 15 cm. diameter and a loading capacity of 100 t.p.h. between Vinicola Iberica, S.A. and the Costa Quay.

On the jetty of Asfaltos Espanoles, S.A. (ASESA) there are a total of 24 pipes; 2 of 20 in. diameter for crude and naphtha with a capacity of 12,000 t.p.h. and 1,000 t.p.h. respectively; 1 of 16 in. for ballast at 1,000 t.p.h.; 6 of 12 in. for fuel oil (2), naphtha (2), asphalt (1) and water (1) for fire-fighting with a capacity of 600 t.p.h.; 3 of 10 in. for diesel, petrol and ethylene with capacities of 500, 600 and 250 t.p.h. respectively; 1 of 8 in. for propylene at 120 t.p.h.; 7 of 6 in. for different chemical products with a capacity of 100 t.p.h.; and 1 of 4 in., 1 of 3 in. and 2 of 2 in. for water supply and gas returns.

On the jetty of Empresa Nacional de Petroleo, S.A. (ENPETROL) there are a total of 12 pipes: 1 of 56 in. for crude with a capacity of 12,500 t.p.h.; 1 of 30 in. also for crude at 3,500 t.p.h.; 6 of 20 in. for fuel oil (2), petrol (2), diesel (1) and ballast (1) with capacities of 1,800, 1,400, 1,500 and 1,000 t.p.h. respectively; 2 of 18 in. for naphtha and propylene with a capacity of 400 t.p.h.; 1 of 16 in. for kerosene at 1,000 t.p.h. and 1 of 14 in. for fuel oil supplies with a capacity of 400 t.p.h.

Dirty Ballast:

At the installations of EMP there is a plant for the disposal and treatment of ballast with a maximum capacity of 30,000 cu.m. at a maximum flow of 2,000 cu.m.p.h. The plant is available to all tankers due to take cargo in the Pantalan.

Also see "Specialised Cargo Handling Facilities".

LPG:

Asesa Berth No. C-06:

Ship's Length	Minimum 75 m., maximum 125 m.
Draft	Maximum 27 ft.
Deadweight	Pier owners (Asesa) receive vessels up to 20,000 d.w.t. at this berth.
Allowed weather conditions for berthing	Max. wave height 70 cm. – 80 cm. Max. wind force 35 km./hr. – 40 km./hr.
Mooring Details:	See "Plan Book".

Products:

Ethylene:	
Storage capacity	9,000 tonnes (2 tanks)
Operating pressure storage tanks	10 gm. – 65 gm.
Design pressure storage tanks	70 gm.
Compressor capacity	4.6 tonnes per hour
Pipe-lines to berth	Liquid nominal diameter 10 in. Liquid nominal diameter 2 in. (for pre-cooling purposes only)
Lengths of pipe-lines	1,100 m.
Unloading facilities on dock	Chicksan type DCMA, nominal diameter 8 in., length 46 ft.
Unloading rate max.	400 tonnes per hour at –103°C (at higher temperatures unloading rate decreases fast).
Propylene Oxide:	
Storage capacity	1,600 tonnes (1 tank)
Operating pressure	0.3 – 0.45 kg./sq.m.
Design pressure	0.50 kg./sq.m.
Pipe-lines to berth	Liquid nominal diameter 8 in. Vapour nominal diameter 4 in.
Lengths of pipe-lines	1,100 m.
Unloading Facilities on dock	SS hoses nominal diameter 4 in. (for vapour)

FRESH WATER: Supply of fresh water by means of an underground pipe in all the commercial quays of the port. Rate 5 t.p.h. – 15 t.p.h. per connection. Max. rate per berth, 45 t.p.h. at Muelle Aragon.

Ship's Master advises that water is very saline and it is not advisable to take any on board.

FUEL: Fuel oil, diesel oil and gas oil available. Request of this supply should be done with 24 hours' notice through the Commercial Agent of Campsa.

CUSTOMS ALLOWANCES: It is permitted to have a packet of tobacco per person per day. Unlimited allowance for national drinks.

IDENTIFICATION CARDS: Not required.

CONSULS: Various available.

REPAIRS: Small repairs available.

DRY DOCKS: None.

REPATRIATION: Facilities exist.

AIRPORT: The town of Reus 12 km. distance has a military airport that is also used for charter flights and regular flights to Madrid.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

POLICE/AMBULANCE/FIRE: Police 20-11-29; Ambulance at local hospitals; Fire 20-19-50.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Cataluna Quay, when completed, will accept vessels of 175,000 d.w.t.

AUTHORITY: Junta del Puerto de Tarragona, Explanada Arranque Rompeolas, Tarragona, Spain. *Tel:* 226611 and 226709. *Telex:* 56520 JOPT-E. *Contact:* Jose Munne Costa, President. Joaquin Juan Dalac, Port Director.

TORREVIEJA: 37.58 N. 00.40 W.

PORT LIMITS: The port limits are considered to be at 1 mile distance from the lighthouse at the end of the Eastern Dock or breakwater.

DOCUMENTS:

4 Crew Lists.
4 Lists of Passengers.
10 Cargo Manifests, including cargo in transit, together with cargo for Alicante. Tobacco and cargo manifests visaed by the Spanish Consul in the port of origin. All the vessel's certificates, and where necessary in respect of the cargo which international regulations require.

PILOTAGE: The corporation does not have a radio station, however, it does have a walkie-talkie with a range of about 12 miles on VHF equipped with the following Channels: 6, 9, 11, 14, 16. The pilot craft is 10 m. overall length and is painted white, with the letter "P" painted in black on the sides. The pilot craft normally operates within a 1 mile radius of the white light of the breakwater lighthouse.

ANCHORAGE: The anchorage which is most recommended for vessels is 1 mile from the breakwater, with a sandy bottom and good holding ground.

MAX. SIZE: The port's maximum sizes are: Overall length 150 m. Max. draft on entry of 21 ft., if the vessel has to remain anchored awaiting a berth, and max. departure draft of 29 ft. 6 in.
HEALTH: Regulations as laid down by the International Foreign Health Requirements are enforced.
RADIO: Coastal station at Alicante; on MF with average range of 220 miles, and on VHF with a range of 40 miles.
TUGS: None available.
BERTHING: There is a berth in the Western Dock, with a length of 360 m., and a max. depth of 10 m. The loading operations are effected by shore equipment, provided that bulk salt is being loaded, or with the vessel's gear when bagged salt is being loaded.
CRANES: The port has no cranes, however, a mobile crane can be used for any weight which has to be loaded, the max. capacity of this crane is 7 tons.
STEVEDORES: There are no stevedoring gangs as the work force is employed by the Salt Plant. The only commodity loaded is salt and work is between 0600 hrs. and 2200 hrs.
MEDICAL: If a doctor is required by the Master, medical services can be furnished locally, it being necessary to transfer the patient to clinic in Alicante, if the case is serious.
TANKERS: No facilities available.
DENSITY: Average port density is 1030.
FRESH WATER: Available. Rate 5 t.p.h.
CUSTOMS ALLOWANCES: Each crew member is permitted to have 200 cigarettes and 1 bottle of spirits out of ship's bond.
REPATRIATION: Possible.
HOLIDAYS: Normally no work is done in the port on the following holidays: New Year (January 1st), Epiphany (January 6th), San Vicente (April 23rd), Maundy Thursday, Good Friday; Labour Day (May 1st); Festival of San Pedro (June 29th), Corpus Christi; Santiago Apostol (July 25th); Assumption Day, Festival of the Spanish speaking world (October 12th); All Saints (November 1st); Immaculate Conception (December 8th) and Christmas Day (December 25th).
AUTHORITY: Ayudante Militar de Marina.

VALENCIA: 39.27 N. 00.18 W. (See Plan Book)

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists or a negative.
1 Cargo Manifest of goods destined for the port.
Another manifest covering transit cargo.
2 Store Lists, including tobacco, cigars, cigarettes, coffee, spirits, radios, cameras, etc., in possession of crew. In all cases make and number of radios to be indicated.
Safety Wireless Certificate and Safety Equipment Certificate.
If vessel carries over 6 kilos tobacco per man, the excess to be declared in a separate manifest, which must be visaed by Spanish Consul at the last port, otherwise vessel is exposed to heavy fine.
PILOTAGE: Pilotage is compulsory for this port. Day and night service. The pilot launch is painted black with a letter "P" painted in white on the sides.
ANCHORAGES: There is a good anchorage outside the port, vessels are required to keep the entrance channel clear.
RESTRICTIONS: Entrance to the port faces S.S.E. and is 260 m. wide, with a low water depth of 15 m.
MAX. SIZE: The following size vessels have entered the port.

GRT	*LOA*	*Draft**
85,982 tons	294 m.	10.67 m.
44,688 tons	257 m.	13.30 m.

*Real draft on entry/departure.
HEALTH: If the vessels proceed directly to berth, Pratique can be obtained immediately after berthing. Otherwise, at anchorage at vessel's arrival.
If vessel has sickness on board of a contagious nature Master should advise Health Authorities by radio, and they will examine patients immediately upon arrival, to enable vessel to be granted Free Pratique.
RADIO: Coastal radio station with international frequencies 1580 kHz. ETA to be sent to Agent in advance.
TUGS: Not compulsory for entering port. 10 tugs available up to 1,800 h.p. Two tugs normally used for berthing and unberthing.
BERTHING: Quays operated by Port Authority:

Name	*Length (m.)*	*Depth (m.)*	*Use*
North Pier	174.00	9.00	Containers
Extension, Levante (1st. Section)	495.00	14.00	Containers
Extension, Levante (2nd Section)	200.00	9.00	Containers
Levante	928.00	9.00	General Cargo, Ro/Ro
Transversal of Outer Levante	123.00	7.00	Ro/Ro
Inner Levante Transversal	186.00	7.00	General Cargo, Ro/Ro
Customs Quay (1st. Section)	75.00	7.00	General Cargo
Customs Quay (2nd Section)	165.00	7.00	Containers
Grao Quay	240.00	7.00	Ro/Ro, General Cargo, Passengers
Estacion Quay (1st Section)	130.00	7.00	Ro/Ro, Passengers
Estacion Quay (2nd Section)	130.00	7.00	Ro/Ro, Passengers
Estacion Quay (3rd Section)	98.00	7.00	Ro/Ro, Passengers
Nazareth Quay	175.00	7.00	Ro/Ro
Inner Poniente Transversal	212.00	7.00	General Cargo, Ro/Ro
Transversal of Outer Poniente	206.00	7.00	General Cargo, Ro/Ro
Poniente Quay (1st Section)	186.00	9.00	General Cargo
Poniente Quay (2nd Section)	160.00	11.00	General Cargo, Logs
Turia Pier, Extension North, Section 1	62.00	9.00	Fluids with Special Installation
Turia Pier, Extension North, Section 2	219.00	11.00	General Cargo, Logs
Turia Pier Head	151.00	11.00	Solid Bulks with Special Installation
Turia Pier, Extension South, Section 1	166.00	9.00	Petroleum Products and General Cargo
Turia Pier, Extension South, Section 2	219.00	11.00	Petroleum Products and General Cargo
Turia Quay	404.00	9.00	Bulks and General Cargo
South Quay	600.00	14.00	Bulks, General Cargo, Logs

CARGO HANDLING FACILITIES: Cereals, fertilisers, etc., in bulk are handled at Turia Pier and Turia Quay. Also at Turia Quay is a chemical-handling installation, depth alongside 9.0 m. Solid bulk cargoes, coal, etc., are handled at South Quay, depth alongside 14.00 m. Length 600 m. Loading rate for cement 800 t.p.h.
Containers: The container terminal is located in the extension of Levante Quay and has 2 quays: Extension Levante (length 495 m., depth 14 m.), and North Pier (length 174 m., depth 9.0 m.: this for feeder ships). At present this terminal has 3 container cranes of 30 tonnes for loading and discharging, and 187,000 sq.m. of storage area, provided with 6×30 ton transtainers for internal movement within the terminal.
Ro-Ro: There are 8 berths for Ro-Ro vessels situated in the Inner Basin and Transversal of Outer Levante (depth from 7.5 m. – 9.0 m.). 3 new Ro/Ro berths will soon be completed (depth from 8.0 m. – 11.0 m.). Close to Estacion Quay (1st Section) a new marine station for passengers has been placed into service.
CRANES: One floating crane, capacity 80 tons.
The Port Authority operate 55 gantry cranes with capacity of 3 tons to 30 tons and 3 mobile cranes. 12 privately owned shore cranes and 9 privately owned mobile cranes of 2 tons – 20 tons also available.
TANKERS: *Campsa:* One berth, length 210 m., depth 12.0 m.
Pipe-lines: The port areas equipped for oil traffic are connected to the C.A.M.P.S.A. plant by means of a network of 5 pipe-lines, starting at the Turia pier and quay, and ending at the plant itself. These pipe-lines are 1×10 in. diameter with a capacity of 300 cu.m./hr., and another of 8 in. and 250 cu.m./hr. for movement of fuel-oil.
2×8 in. diameter and 250 cu.m./hr. one for gas-oil and one for gasoline. There are also means of delivery of aviation paraffin by means of 1 pipe-line 6 in. diameter at the rate of 120 cu.m./hr. Also see "Berthing".
Two deballasting berths each length 200 m. Depths 7.50 m. and 9.00 m.
MEDICAL: All medical services available in the port and in the city.
REPAIRS: All types of hull and machinery repairs can be effected.
FLOATING DOCK: 1 floating dock available, owned by Union Naval de Levante. Interior length 143 m., interior width 24.60 m. Lifting capacity 8,000 tonnes.
CUSTOMS ALLOWANCES: Normally Customs permit 200 cigarettes per man out of bond. Additional quantities needed depend on the stay of ship in port. One bottle of spirit per man.
FRESH WATER: Available at all main berths at the rate of 30 t.p.h.
FUEL: Campsa can supply by pipelines at the Turia berths, at the rate of 100 t.p.h. – 280 t.p.h.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
AIRPORT: Valencia Airport, 15 km. from the port.
CONSULS: The following countries are represented in Valencia:

Argentina
Belgium
Bolivia
Brazil
Colombia
Costa Rica
Chile
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany (F.R.)
Great Britain
Greece
Guatemala
Honduras
Iceland
Italy
Nicaragua
Norway
Netherlands
Panama
Portugal
Sweden
Switzerland
U.S.A.
Uruguay
Venezuela
Yugoslavia

POLICE/AMBULANCE/FIRE: Police 091; Fire 3730080; Ambulance 3606211, 3526750.
HOLIDAYS: Work can be arranged on following holidays. New Year's Day (January 1st, full day); Epiphany (January 6th, full day); Saint Joseph (March 19th, full day); Easter (two days); Saint Joseph Artisan (May 1st, full day); Labour Day (July 16th, full day); Patron Saint of Spain (July 25th, full day); Assumption Day (August 15th, full day); Holiday of Hispanicism (October 12th, full day); Holiday of the Virgin Mary (December 8th); Christmas Day (December 25th, full day).
GENERAL: *Shipbreaking:* There is one quay 200 m. length and 7.5 m. depth.
DEVELOPMENTS: The new area of almost 500,000 sq.m. has been completed. The current container terminal has 120,000 sq.m. to add to its surface and the other 380,000 sq.m. is being paved to be used as a storage zone for general cargo. The container terminal will soon receive a new crane with capacity of 30 tons. The building of the new quay in the Darsena Norte of 600 m. length, 16 m. draft and with a surface area of 150,000 sq.m. is in progress.
The container storage area of the current terminal will be increased with an 80,000 sq.m. expansion in the North area reclaimed from the sea.
AUTHORITY: Puerto Autonomo de Valencia, Muelle de la Aduana, S/n, Valencia, Spain. *Tel:* 96-323 09 91. *Telex:* 62510 Pave E. *Contact:* The General Manager.

VIGO: 42.14 N. 08.40 W. (See Plan Book)

DOCUMENTS:

Maritime Declaration of Health.
Crew List.
Passenger List.
Manifest of Cargo for the Port.
Manifest of Cargo in Transit.
Ship's Stores List.
Crew's Personal Effects List.
Ship's Particulars Declaration.

Note: Tobacco. In case the vessel carries more than 6 kilos of tobacco per man, the excess must be declared in a separate manifest, which must be visaed by a Spanish Consul. In the absence of the Consul, said document will have to be visaed by an authority of the former port of clearance. Otherwise the vessel would be severely fined.

PILOTAGE: Pilotage at Vigo is compulsory and the service permanent day and night. Pilots board in auxiliary motor-boats with a letter "P" in white at both sides of the hull and a blue flag with the letter "P" in white, near the entrance of the harbour, in the zone included inside Punta Lameda-Cabo Vicos on the channel of the South Entrance and inside Punta Caballo-Subrido, on the channel of the North, both situated to the West of the harbour. At night the pilot boats have a white light visible around the horizon and under this light another red one, also visible around the horizon. International Code signals used to call Pilot, or 4 long blasts on the whistle. Pilot station situated at Transatlanticos Pier 3. Pilot boats normally on station on a line connecting Borneira and Transatlanticos Pier.

ANCHORAGE: Several suitable anchorages in the Vigo Estuary, naturally sheltered, in depths of more than 35 m. The main anchorage opposite the port on the South side of the "Ria" has depths of 15 m. – 25 m.

MAX. SIZE: No limitation for length and beam, unlimited deep water approaches.

HEALTH: If vessels proceed directly to the berth, Pratique can be obtained immediately after berthing. Otherwise, at the anchorage on vessel's arrival. In case of suspected disease or fever on board, the Master must send a radio message to the Agent in order that they advise the Health Office.

RADIO: The nearest Radio Station is Vigo Radio, situated in the limits of Vigo Port.

TUGS: No tug-boats are required for entering the port. Only used for berthing ships from 120 m. length upwards according to Pilot's advice. At Vigo there are 5 modern tugs of 750 h.p., 950 h.p., 1,375 h.p., 1,600 h.p. and another of 5,000 h.p.. Tugs join vessel off the berth. Tug's line used at no extra charge.

BERTHING: The commercial piers to load or unload have a depth of up to 36 ft. and the Transatlantic Pier, depth of about 40 ft. at LW. The tide difference between HW and LW is about 3.5 m.

At Rande, in the Lower Harbour, there are very modern special loading installations for mineral ore, at an average rate of 2,000 t.p.h. The depth alongside this installation is 36 ft. LW.

Containers: Unloaded at the Arenal Quay with 15 tonne and 28 tonne cranes. Depth 10 m. at Spring low tides, and at the Transversal Quay with a 30 tonne crane.

Ro-Ro traffic: In addition to Bouzas Terminal mentioned below, there is one fixed ramp at the Commercial Quay, berthing length 250 m., depth 9.0 m. and 1 adjustable ramp at the Transatlantic Quay, berthing length, 200 m., depth 6.0 m.

Terminal de Transbordadores de Bouzas: 3 berths with Ro/Ro ramps, lengths 100 m., 150 m. and 200 m. Depths at LWS 8.0 m., 8.0 m. and 10.0 m. respectively. Storage area 60,000 sq.m.

Guixar Quay: 240 m. length with depth 12.0 m. and 550 m. with depth 16 m. Land area 22.0 Ha. The quay will be used for containers, bulk cargo and oil, when completed.

CRANES: 43 cranes with capacity up to 30 tonnes. 2 floating cranes with capacity up to 150 tonnes.

TANKERS: Tankers berth at a pier depth alongside 11 m. at LW. Tankers up to 300 m. length acceptable. Inner berth suitable for vessels of less than 100 m. length with a draft of 6 m. Discharge lines 12 in., 10 in. and 2×8 in. diameter.

STEVEDORES: It is very important that Masters send advance notice regarding the vessel's ETA. With this notice, Agents can inform Shipper's or Receivers' stevedores accordingly, so that they arrange operations properly. The official working hours of the port are Monday-Friday 0830 – 1230 hrs., 1400 – 1800 hrs. Saturday 0830 – 1230 hrs.

MEDICAL: Doctors and hospital facilities available. Advance notice preferred in urgent cases.

DENSITY: Average 1026.

FRESH WATER: Available from the quays at the rate of 50 – 80 t.p.h. Can also be supplied by tugs at 500 t.p.h.

FUEL: Available from the Oil Pier or delivered by barge. 24 hours' notice of requirements recommended.

GANGWAY/DECK WATCHMEN: Available from shore if required.

OPENING/CLOSING HATCHES: Opening may be done by crew to avoid delays. Closing hatches usually performed by crew.

CUSTOMS ALLOWANCES: 200 – 250 cigarettes or 6 kilos of tobacco and 2 bottles spirits may be held out of bond for each person. Wine not restricted.

IDENTIFICATION CARDS: Shore passes are provided by the Agent.

CONSULS: Most countries have consulates at Vigo.

REPAIRS: All types of deck and engine repairs are possible.

SURVEYORS: Lloyd's Register.

FLOATING DOCKS: One floating dock available: length 128 m., breadth 22.40 m.

REPATRIATION: Crew changes and repatriation can be arranged without difficulty.

AIRPORT: Local airport, situated 8 km. from the port, has at least 1 daily flight to Madrid. International Airport of Santiago de Compostela is 100 km. away.

TIME: GMT plus 1 hour in Winter. Summertime from March to September.

HOLIDAYS: 1st January; 6th January; 19th March (St. Joseph); Good Thursday; Good Friday; 28th March (local holiday, Reconquest Day); 1st May (Labour Day); Corpus Christi; 25th July (St. James' Day); 15th August; 16th August (Local); 12th October; 8th December (Immaculate Conception); 25th December.

POLICE/FIRE/AMBULANCE: Police Tel: 21.00.00. Fire Tel: 21.20.00. Ambulance Tel: 21.25.09.

TELEPHONES: No arrangement for connecting on board.

SHORE LEAVE: Allowed without restriction.

STORING: See "Prelims" page viii.

1. By lorry.
2. —
3. Yes.
4. Yes.
5. Consult Agent.
6. Yes.

BANKS: Banco Hispano Americano, calle Urzaiz, 20.
Banco Central, calle Colon, 27.
Banco Espanol de Credito (Banesto), calle Principe, 39 y 41.
Banco de Santander, calle Policarpo Sanz, 44.
Banco de Bilbao, calle Garcia Barbon, 2.
Banco de Galicia, calle Reconquista, 9.
Banco Pastor, calle Policarpo Sanz, 31.
Banco Atlantico, calle Policarpo Sanz, 3.
Banco de Vizcaya, calle Policarpo Sanz, 19.
Banco Exterior de Espana, calle Colon, 8.
Banco Intercontinental Espanol, (Bankinter), calle Principe, 63.

DEVELOPMENTS: See "Berthing" – Guixar Quay.

AUTHORITY: Junta del Puerto y Ria de Vigo, Plaza del Puerto 1, Vigo 1, Spain. *Tel:* 211324. *Telex:* 83144 Jpvi-E. *Contact:* Joaquin Perez Bellod, Port Director.

NOTES

Please also advise Shipping Guides Ltd.

Sri Lanka

COLOMBO: 06.56 N. 79.50 E. (See Plan Book)

DOCUMENTS:
- 5 each of Crew and Passenger Lists.
- 8 Manifests.
- 1 Arrival Report for Pilot.
- 1 Master's Declaration for Immigration, and same for Police.
- 2 Private Property Lists of Officers and Crew for Customs.
- 2 copies of Preliminary Report by Master for Customs.
- 1 Maritime Declaration of Health for Port Health Officer.
- 1 Master's Declaration of Cargo for Quarantine Department.

PILOTAGE: Vessels approaching port apply for Pilot by flying the "G" flag by day or 2 red lights at night. They can, in addition, flash the pilot station or use VHF Channel 16. The telegraphic address of pilot station is "Pilot Station Sri Lanka Ports Authority Colombo" and a provisional ETA 24 hours ahead is advisable with corrections thereafter. However, these are best channelled through the vessel's Agent. Pilot boat is a wooden motor launch with the word "Pilot" on its side. It flies the "H" flag by day or red and white lights by night according to the international code. The Pilot boards within an area of about 1 mile of the harbour entrance. Advice of where to anchor can be obtained from the Pilot by VHF or signal light.

ANCHORAGES: The anchorage off port is within 3 miles of the harbour mouth where up to 14 fathoms of water is available. 18 fathoms of water is available within 6 miles. This anchorage is to be used on instructions from pilot station.

All vessels arriving have to anchor South of Panadura (Lat. 6° 43′ N.) or off Negombo until instructed to proceed to the anchorage off harbour.

RESTRICTIONS: Entry may take place at all hours of the day and night but it is unusual for the Pilot to board between midnight and 0400 hrs.

MAX. SIZE: For entering harbour, max. draft 36 ft. and a length of 800 ft. is permissible. Beam is not critical. There is no appreciable rise and fall of tide.

Tankers' max. dimensions for berthing alongside: length 750 ft., draft 34 ft.

HEALTH: Vessel entering port must fly the "Q" flag until boarded by the Port Health Officer to grant Pratique. Pratique may be granted by radio if there is a doctor on board provided the ship is not calling from a port in India. A radio message should be sent within 24 hours of the vessel's ETA in the following terms "Last port — no quarantinable disease on board – Doctor on board" and the Port Health Officer will reply to the Agent confirming Pratique being granted by radio. Pratique is automatic if the vessel enters after calling at another port in Sri Lanka. If any quarantinable disease on board double "Q" flags must be hoisted prior to entering harbour.

RADIO: "Colombo Radio" with a call sign 4PB is the usual channel for communicating with Colombo.

VHF: The pilot station is presently available on VHF Channel 16 and the Port (Cargo) Corporation on VHF Channels 8, 10, 11, 13 and 14.

TUGS: Tugs normally join the vessel at the harbour mouth and use ship's lines.

BERTHING: There are no specific requirements relating to berthing space but early advice of draft is most advisable. See "Developments".

CRANES: 3×30 ton gantry cranes for containers at Queen Elizabeth Quay.

60 fork lift trucks 2 tons – 33 tons capacity.

STEVEDORES: The stevedores at Colombo are the Port (Cargo) Corporation, a nationalised concern having the monopoly of stevedoring and lighterage. ETA at least 24 hours in advance if possible. Gangs for day shift which commences at 0730 hrs. must be ordered by 0700 hrs. and gangs for the evening shift, commencing at 1630 hrs., by 1600 hrs. This excludes the Poya Day on which only the day shift is worked, and gangs must be ordered by 0930 hrs. on the previous day.

MEDICAL: Although advance notice of medical assistance required is helpful, particularly when port stay is limited, it is not essential. Comprehensive hospital facilities are available either in private nursing homes or the Government hospitals. The following inoculations are required: cholera; yellow fever if calling from ports in East Africa and Mozambique.

TANKERS: There are 3 tanker berths, 1 for importing crude oil suitable for tankers of 750 ft. length, max. draft 34 ft. One berth for white oil tankers with max. draft 33 ft. One berth for fuel oil imports for vessels with a max. draft of 31 ft., and this same berth is used for exports when permissible draft is 33 ft.

The diameter of discharge lines;
Crude oil, 24 in., capacity 1,000 t.p.h.
White oil, 10 in., capacity 250 t.p.h.
Gasoline, 10 in., capacity 170 t.p.h.
Furnace oil, 14 in., capacity 500 t.p.h.
Naphtha, 12.75 in., capacity 450 t.p.h.

Pumping will not be commenced after nightfall. No residue discharge facilities are available.

DENSITY: 1025.

FRESH WATER: Fresh water is readily available by barge. The rate of delivery is approx. 40 t.p.h. The water is of good quality.

FUEL: Furnace diesel and gas oil available. Advance notice of at least 24 hours is advisable as the bunker requirements of the port often exceed the ability of the oil companies to supply immediately.

4 barges available, 450 tons, 650 tons and 1,000 tons. Fuel also available by pipe-line if berth (max. draft 34 ft.) available.

Note: Vessels may be limited to a maximum of 400 tons of fuel oil, also bunkers may only be made available to vessels loading or discharging cargo.

GANGWAY/DECK WATCHMEN: Watchmen are available and are to be recommended unless members of the crew are available to provide this service.

OPENING/CLOSING HATCHES: This work is normally carried out by the stevedores except in the case of McGregor or similar hatch covers which they will not handle.

CERTIFICATES: Register showing vessel's name, port of registry, gross and net tonnages and owner. Safety Equipment Certificates quadrennial and annual, Ship's Articles (British) and clearance from previous port and Derat Certificate.

CUSTOMS ALLOWANCES: Cigarettes 25 per man per day. Tobacco 1 oz. per man per day. Snuff 1 oz. per man per day. Spirits 0.25 bottle per man per day. Wine 1 bottle per man per day. Beer 2 bottles per man per day.

IDENTIFICATION CARDS: These are not essential but the crew is expected to carry some form of identification with a photograph on it when they leave the vessel.

CONSULS:

Belgium
Burma
China
Cyprus
Czechoslovakia
Denmark
Egypt
France
Germany
Greece
Indonesia
Italy
Japan
Maldives
Netherlands
Philippines
Poland
Romania
Thailand
Switzerland
U.S.S.R.
U.S.A.
Yugoslavia

REPAIRS: Most main engine and boiler repairs and minor hull repairs can be effected.

DRY DOCKS: No. 1 – 700 ft.×85 ft.×32 ft. over blocks – Max. size 675 ft. LOA. 80 ft. breadth – Deepest draft 29 ft.
No. 2 – 350 ft.×54 ft.×22 ft. over blocks.
No. 3 – 400 ft.×54 ft.×18 ft. over blocks.
Owners and Operators – Colombo Dockyard Limited.

SURVEYORS:
American Bureau: c/o Malship (Ceylon) Ltd., 80 Reclamation Road, Colombo 11. Tel: 24658, 25856. Telex: 21150.
Salvage Association: c/o Aitken Spence & Co. Ltd., 13 Lloyds Building, P.O.Box 5, Sir Baron Jayathileke Mawatha, Colombo 1. Tel: 27861–7, 27103. Telex: 21142/21598.
Lloyd's Register: c/o Aitken Spence & Co. Ltd., 13 Lloyds Building, P.O.Box 5, Sir Baron Jayathileke Mawatha, Colombo 1. Tel: 27861-7, 27103. Telex: 21142/21598.
Bureau Veritas: c/o Delmege Forsyth & Co. Ltd., 101 Vinniyalankara Mawatha, Colombo 10. Tel: 93361. Telex: 21320.

REPATRIATION: There is no difficulty in arranging repatriation and crew change.

AIRPORT: It is 18 miles to the international airport which is served by regular airlines.

TIME: Sri Lanka standard time is 5.5 hours in advance of GMT, and no alterations are made during the year.

HOLIDAYS: Cargo work can normally be arranged on all except the following holidays:

1st January; Sinhalese & Tamil New Year (1 day in April); 1st May; Wesak Full Moon in May; Republic Day 22nd May; 26th September; Christmas Day.

POLICE/AMBULANCE/FIRE: Harbour Police 21075; Ambulance 20428; Ambulance launch: Exhibit "AL" flags; Port Fire Brigade 32331.

EMERGENCY CO-ORDINATION CENTRE: "Colombo Radio".

TELEPHONES: None are available for placing on board.

BANKS: American Express International Corporation, 45 Janadhipathy Mawatha, P.O.Box 650, Colombo 1. Tel: 23366, 37991, 31288-9. Telex: 21469 "Amex".

Algemene Bank Nederland N.V., 41 Janadhipathy Mawatha, P.O.Box 317, Colombo 1. Tel: 20205. Telex: 21590 "Abn A".

Bank of Credit & Commerce International (Overseas) Ltd., 52 Mudalige Mawatha, Colombo 1. Tel: 21597, 23303-6. Telex: 1411 "Bcci" Ce.

Citibank N.A., P.O.Box 888, Iceland Bldg., Colombo. Tel: 547316/8. Telex: 21445 "Ctbk" Ce.

Banque de l'Indochine et de Suez, Ceylinco House, 69 Janadhipathy Mawatha, P.O.Box 303. Colombo 1. Tel: 36181/2/3. Telex: 1402 "Indosuez" Ce.

Overseas Trust Bank Ltd., 39 Bristol Street, Colombo 1. Tel: 547655-8. Telex: 21489 "Otbsl" Ce.

The Chartered Bank, 17 Janadhipathy Mawatha, P.O.Box 27, Colombo 1. Tel: 26671-4. Telex: 21117 "Banchar" Ce.

Grindlays Bank, 37 York Street, P.O.Box 112, Colombo. Tel: 91161-8. Telex: 21130 "Grindlays" Ce.

Bank of America, P.O.Box 308, Colombo. Tel: 547372/5. Telex: 21481 "Bo Facol" Ce.

STORING: See "Prelims" page viii.
1. Yes, able store both by barge and truck.
2. Yes, vessel could store from barges during both loading and discharging.
3. Trucks could proceed alongside vessel.
4. Yes, fork lift trucks could be used.
5. Any operation could be carried out with prior approval of Customs, under Customs supervision.
6. No. Port Stevedoring labour has to be made use of. However, local riggers can be employed by obtaining special permission from the Chief Operations Manager of the Sri Lanka Ports Authority.

GENERAL: Ships should not discharge oil within territorial waters, dispose any waste into harbour or on to quays, immobilise main engines without prior permission, use radio for transmission in harbour. Ships should hoist national flag during daylight hours.

SHORE LEAVE: There is no restriction on crew members being allowed ashore but advised to carry passport or other identification.

DELAYS: Delays for vessels working cargo are seldom over 24 hours. However, it is very unusual for vessels calling for bunkers, fresh water, stores, etc., to be delayed for more than a few hours.

DEVELOPMENTS: One new alongside dry-cargo berth length 1,000 ft. with a draft of 36 ft. completed. Container berth gantry cranes (2×35 ton) to be installed mid-1985 and present draft of 36 ft. to be increased to 39 ft. at this berth.

Drydock, capacity 90,000 d.w.t., under construction, completion mid-1985.

3 tugs, 1×365 h.p. and 2×550 h.p. under construction.

A second container berth to be constructed, completion mid-1986.

SBM to be installed 10 km. offshore.

AUTHORITY: Sri Lanka Ports Authority, No. 19 Church Street, P.O.Box 595, Colombo 1. *Telex:* 21805 Ports Ce. *Contact:* Mr. W. Ameresekera – Chairman, Sri Lanka Ports Authority – *Tel:* 25559.

Mr. C. D. Chinnakoon – Chief Operations Manager, *Tel:* 25049.

Capt. G. O. Henricus – Harbour Master. *Tel:* 21079.

Capt. S. Chinniah – Deputy Harbour Master. *Tel:* 22674.

GALLE: 06.01 N. 80.14 E.

PORT LIMITS: To the Eastward Unawatuna Point, to the Westward Gindurah Point, to the Southward the usual sea league from the line between these points.

DOCUMENTS: Pilot brings on board:

Arrival Report and Maritime Declaration of Health.

Port Health Officer boards vessel after berthing and collects Crew List, Passenger List, Maritime Declaration of Health. Examines crew, passengers and International Certificates of Vaccination.

Customs. Manifests, Bonded List, Passenger List, Cargo List, List of Currency, Port Declaration.

Immigration. 3 Crew Lists.

PILOTAGE: Apply for Pilots via local Agents. Send ETA not more than 24 hours prior arrival via Colombo Radio. Vessels telegraph direct to Master Attendant, Galle, via Colombo Radio. Vessels advised listen-in on Channel 16, VHF.

Pilot launch about 60 ft. long with white hull carrying word "Pilot". Pilot launch proceeds to vessels from Master Attendant's Office and Pilot will board about 0.25 mile to South of bell buoy. Vessels should anchor until pilot launch arrives and heave-up on approach of pilot launch; due to heavy swell prevalent *essential* vessels provide good lee for Pilot. Proper pilot ladder and two man ropes should be ready. Vessels anchoring should do so to the South or East of bell buoy. See "Anchorages".

ANCHORAGES: Best anchorage lies to Eastward of bell buoy where depth 9 fathoms. To Southward of bell buoy depth increases to 15 fathoms. Vessels should anchor about 0.5 mile from bell buoy.

RESTRICTIONS: Vessels should not proceed North of bell buoy. Entry prohibited after 1700 hrs. and may be delayed by bad weather. Generally a wind force of over 25 knots and a swell of over 4 ft. delays entry.

MAX. SIZE: At present only 1 stream berth available for vessels of length 475 ft., max. draft 23 ft. in N.E. monsoon and length 450 ft., max. draft 21 ft. in S.W. monsoon.

Two alongside berths available for vessels up to 540 ft. length and 26 ft. draft. 750 ft. of quay space available.

HEALTH: The International Declaration of Health, handed to Master by Pilot, must be completed and returned to Port Health Officer, who boards after berthing. Port Health Officer also requires 2 Crew Lists, synopsis of Vaccination Certificates, Derat Certificate and examines Certificate of Vaccination.

RADIO: Colombo Radio.

TUGS: At present only 1 tug of 250 h.p. available throughout year. If sufficient notice given (over 24 hours) an additional tug could be sent from Colombo (only available during N.E. monsoon). Tug meets vessel at berth, tug's lines used. Charges for tugs included in port (pilotage) charges irrespective of ownership of towing lines.

BERTHING: Vessel berthing in stream lies to both anchors and picks up 4 to 6 mooring lines from buoys aft. To pick up mooring lines, vessel should have ready at stern 2 messenger wires of 2.5 in. diameter and 60 fathoms length.

STEVEDORES: All stevedoring carried out by Government Corporation. Gangs, lighters etc. are all arranged by Port (Cargo) Corporation. 16 lighters of approx. 15 d.w.t. capacity available for working vessels in stream berth.

MEDICAL: Vessels arriving in Galle and requiring medical attention should cable Agent and "Port Health – Galle" at least 12 hours in advance.

DENSITY: 1025.

FRESH WATER: In cases of emergency up to 20 tons fresh water could be supplied daily in stream in 400 gallon tanks conveyed by lighters. Alongside main quay up to 50 tons per night could be supplied by Bowser.

FUEL: Bunkering Division of Ceylon Petroleum Corporation, Kolonnawa (off Colombo) can service vessels with small quantities of fuel. 5 days' prior notice required.

GANGWAY/DECK WATCHMEN: Ceylon Police Station. Two policemen aboard every vessel in harbour. For vessels berthed alongside policemen stationed aboard through day. For stream vessels policemen stationed only during hours when cargo worked.

OPENING/CLOSING HATCHES: Shore labour, but there is no objection to hatches being opened prior to labour boarding.

CUSTOMS ALLOWANCES: Present allowance 200 cigarettes per week, 2 bottles beer per day. Others proportionately.

CONSULS: All Consular Officers in Colombo, 72 miles away, 2 hours by train, 2.5 hours by road.

REPAIRS: No repairs possible as Galle open to S.W., essential that vessels have engines ready at all times. No shutdown permitted.

REPATRIATION: Sub-collector of Customs acts as Shipping Master and will sign on/off properly authorised crew changes.

AIRPORT: Colombo.

TIME: Standard Time GMT plus 5.5 hours.

HOLIDAYS: Non-working days in the port (dates variable yearly): Sinhala and Tamil New Year in April; Good Friday, 1st May; Wesak Full Moon in May; 22nd May; 26th September; Christmas Day.

POLICE/FIRE/AMBULANCE: Harbour Police 3222; Ambulance 2261. No fire brigade available.

TELEPHONES: No telephones available aboard.

SHORE LEAVE: Crew allowed ashore.

AUTHORITY: Master Attendant, Master Attendant's Office.

KANKESANTURAI: 09.49 N. 80.03 E.

SHIPMASTER'S REPORT: May 1979.

LOCATION: Kankesanturai (KKS) is situated on the North coast of Sri Lanka in position Lat. 9° 48′ 57.5″ N., Long. 80° 02′ 41.5″ E.

DOCUMENTS: See "Colombo".

APPROACHES: Kankesanturai cannot be approached directly from sea but is approached via the Pedro Channel. The area seaward of Pedro Channel is very shallow and abounding in reefs.

Approaches to Pedro Channel: The East coast is low lying and sandy with only palm trees. The landmarks for making Pedro Channel are (a) Mullaittivll Light and (b) an obelisk situated in position Lat. 9° 35′ N., Long. 80° 27.5′ E. Mullaittivll Light was not working and the obelisk which is 100 ft. high can hardly be distinguished because it is surrounded by vegetation. The best approach is to steam on a course of 280° (T) heading straight for the obelisk. (Note: Radar distances etc., could not be observed as the vessel's radar was out of order). This area is covered by BA Chart Nos. 2197, 2031 and 68A. These charts are not to be fully relied upon as the charts last large correction etc., was in 1947. This vessel did not have a working radar, hence it was decided to lower the boat and sound the intended track ahead. The track sounded was followed until the obelisk was ahead of the track and visible, which was in this case at about 5 miles. Once the vessel enters Pedro Channel it has to proceed on a course parallel to the coast. After altering course in a NW'ly direction the obelisk which is the only mark in the area is soon covered by vegetation and not visible. The next landmark being the Point Pedro Lighthouse which is 25 miles away to the North. The objects marked on the chart like churches, buildings etc., cannot be relied upon at all as they are numerous in number.

Depths in Pedro Channel: As marked on the chart the depth in Pedro Channel varies from 6.5 to 9 fathoms. During this vessel's transit, it was suspected in patches to be less and at certain points, the boat was again lowered and soundings of 28 ft. were obtained.

Approaches to KKS: After passing Point Pedro Light course was altered to West keeping about 3 miles off the land and dangers. "KKS" can be observed from quite a distance because of chimneys of a cement factory. The "KKS" lighthouse could also be visually observed at a distance of about 8 miles. When "KKS" lighthouse bore South, distance 2.5 miles, the vessel was stopped and again the boat was lowered to sound the anchorage area and approaches. Depths of 30 ft. to 36 ft. were found just 0.5 miles distance from the land. The anchorage was approached and this vessel anchored with "KKS" light distance 0.5 miles. Four shackles were used and throughout the stay the vessel held fast.

After anchoring soundings were taken all round the vessel and the least depth obtained was 31 ft. at low water. There is hardly any tide, the maximum difference being about 2 ft. The vessel usually lies in an East-West direction and when swinging around usually does so via North. Only on one occasion throughout the stay did she swing via the South.

RADIO: Communication with "KKS" from even Colombo (telephone) was very difficult, sometimes delays over 4 to 5 hours were experienced. "KKS" has no telex communication. The best method is to keep the vessel's radio station open and communicate via Madras Radio.

CARGO OPERATIONS: *Port of "KKS" and discharging:* This is a anchorage only port which is open from March to October. Cargo is bagged on board and discharged into lighters. The lighters are then beached on the beaches and labour carries bags ashore to the warehouse which is about 30 yards away. On this vessel cargo was bagged during the night and discharged by day. There are at one time about 200 – 300 labourers on board. The labour for bagging and discharging are different. The average discharge rate worked out to about 800 tons. This is the first time the bagging had to be done as normally vessels calling are loaded with bagged cargo. The crane operators are very careful and follow the instructions given by the vessel with regard to the cranes. About 12 vessels call at this port per year during the season.

DENSITY: Density was found to be constant at 1025.

FRESH WATER: None available. Ample fresh water needed as water also has to be supplied to the labour.

PROVISIONS: Almost all types of provisions available at reasonable costs. Rice which is also available is of very poor quality. The Agents also handle the ship chandling.

LAUNDRY: Laundry facilities are available, but costs are slightly on the high side. This is also handled by the Agents.

REPAIRS: There is a small workshop available for mechanical/electrical repairs.

GENERAL: "KKS" is a very small town. The largest town being Jaffna which is 14 miles away. Buses and taxis are available.

CURRENCY: All currencies have to be declared and all currencies except Indian, Pakistani and Bangladesh can be changed in banks. The above three currencies are supposed to be banned in Sri Lanka. Exchange rate was 1 Sri Lanka rupee = 53 Indian Paisa.

TRINCOMALEE (including Pulmoddai):

08.36 N. 81.15 E.

DOCUMENTS:
International Maritime Declaration of Health.
6 copies Crew List.
6 copies Passenger List.
Cholera or Yellow Fever Certificates required if vessel is arriving from an infected port.

PILOTAGE: Call Pilot on VHF Channel 16, also send ETA via Colombo Radio to pilot station. Vessels should indicate ETA through Colombo Radio, either to Agent or direct to Deputy Master Attendant, Trincomalee, at least 24 hours before arrival. No night pilotage. Pilot boards incoming vessels between hours of 0600 and 1800 hrs. about 2 cables Northward of Round Island (Lat. 8° 30′ 48″ N., Long. 81° 13′ 24″ E.). Vessels embarking Pilot should whenever possible lower an accommodation ladder; if this is not practicable should let down a pilot ladder and provide 2 man ropes not less than 3 inches in circumference. Vessels awaiting a Pilot should anchor 0.5 miles N.E. of Round Island light tower in depths from 11 to 13 fathoms.

Vessels arriving between 1800 – 2100 hrs. may be brought in at Deputy Master Attendant's discretion if they come to anchorage 5 cables N.E. of Round Island.

ANCHORAGES: Trincomalee Harbour is the only entirely sheltered natural harbour in Sri Lanka. Good anchorage may be found in almost any part of harbour in good weather.

RESTRICTIONS: Vessels may enter during hours of daylight only. Range of tide is very small and does not restrict entry.

MAX. SIZE: Almost unlimited length and draft can be accommodated in anchorage. Only 1 berth which can accommodate up to 600 ft. length, and 36 ft. draft. This jetty used for discharging tankers and bunkering.

HEALTH: The Port Health Officer boards vessels after arrival at anchorage to grant Pratique. Pratique automatic for vessels arriving from another port in Sri Lanka.

RADIO: All cables to Deputy Master Attendant, Agents, Receivers, etc., should be routed through Colombo Radio; call sign 4 PB.

Pilot carries a portable VHF set, Channel 16, with about 2 miles range.

TUGS: One tug attends when required. Tow-lines generally not used; but if required tug/ship's lines used.

BERTHING: A bulk-grain berth to accommodate vessels of 800 ft. in length, and draft forward 41 ft. and aft 46 ft. is available at Malay Cove, in the vicinity of Round Point.

Pulmoddai: Pulmoddai is a roadstead, on the Eastern coast of Sri Lanka and approximately 38 miles from Trincomalee. The loading season is usually from April to September.

The Mineral Sands Corporation has housing for their staff and a medical practitioner is employed by them who also acts as a Port Health Officer for granting Pratique to vessels.

The Corporation has two godowns with a capacity of 14,000 tons of rutile and 25,000 tons of ilmenite. Presently ore is transported by conveyor belts from the godowns for lighterage along a pier stretching up to 250 ft. into the sea. The Corporation has a fleet of 8 steel lighters, of which 6 are of 100 tons capacity and 2 of 200 tons capacity. The loading rate is around 2,000-2,600 tons per day working five hooks in good and fair weather.

The stevedore labour is private and is recruited from Trincomalee whenever a ship operates at Pulmoddai. As the stevedores stay on board until completion of loading, it will be necessary for the vessel to carry sufficient water to meet the stevedore requirements.

It is customary for the ship to provide food and accommodation for two Customs Officers and a representative of the Shippers during cargo operations.

Prior information is also essential by the Agents of vessel's ETA, etc., which should be passed to the Plant Manager of the Corporation at Pulmoddai by cable or telex to enable him to obtain labourers from Trincomalee.

There is no launch service, but the Corporation provides a launch on a schedule drawn by the Corporation, and the Agents could make use of this facility.

STEVEDORES: Stevedoring operations have been nationalised and are carried out by the Port (Cargo) Corporation, Trincomalee.

TANKERS: One tanker berth at which vessels of 600 ft. length and 32 ft. draft are discharged.

DENSITY: Salt water.

FRESH WATER: Available, supplied by water lighters and from bunkering jetty.

FUEL: Marine heavy diesel and furnace oil can be supplied at 24 hours' notice.

GANGWAY/DECK WATCHMEN: Watchmen are provided by the Port Tally and Security Services Corporation.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CUSTOMS ALLOWANCES: Tobacco issued as required. Wine and/or Spirit issued as required.

IDENTIFICATION CARDS: Identity Cards or Passports are required to be carried by crew members ashore.

CONSULS: All Consular Officers are in Colombo.

REPAIRS: Only minor repairs can be carried out.

REPATRIATION: Crew changes and repatriation can be effected.

AIRPORT: No International flights through Trincomalee.

TIME: GMT plus 5.5 hours.

HOLIDAYS: Dates of holidays are not fixed. Cargo work can generally be arranged on any holiday.

TELEPHONES: Police 308; Ambulance 448; Fire 335. There are no telephone connections for ships.

SHORE LEAVE: Allowed.

DEVELOPMENTS: Alongside facilities to be built. Two floating cement plants to be installed.

AUTHORITY: Master Attendant, Port Commission.

NOTES

Please also advise Shipping Guides Ltd.

Sudan

PORT SUDAN: 19.37 N. 37.14 E.

DOCUMENTS:

Port Sudan Harbour Master's Declaration.
Sudan Customs Declaration.
Quarantine Form.
(All above forms to be filled by Master on arrival).
3 Crew Lists.
3 Passengers Lists.
1 Crew Declaration.
1 Dutiable Stores.
4 copies Manifest.
1 copy B/Lading.
1 Provisions List.

PILOTAGE: 24 hours' notice ETA. VHF Channel 16. Pilot boards South of South Wingate Beacon. Pilotage compulsory.

ANCHORAGES: Towartit Anchorage, approx. 8 km. S.E. of harbour.

RESTRICTIONS: No restrictions providing berth available.

Age Restrictions: The Sea Ports Corporation, Port Sudan, issued the following circular:

"(1) Ships of over fifteen years of age will not be allowed to work in the harbour unless able to produce a Sea Worthy Certificate stating that all deck appliances and propellers are fit for work and capable of lifting and handling all kinds of goods carried on board the ship. The Owner or the Charterers of the ship will be held responsible for the correctness of the Certificate and for any delay incurred due to defect or non-efficiency of ship appliances.

(2) Ships working within the Red Sea Basin will be allowed to enter the harbour despite their age limit or nationality provided that they produce the Certificate referred to in Para (1) above.

(3) Ships carrying goods to Port Sudan Harbour must not carry any packages which cannot be lifted by the ship's own gear or are away from the reach of their gear.

(4) Breaches of any of the above will be subject to a fine of two thousand Sudanese pounds."

MAX. SIZE: Length 850 ft. Max. draft at Oil Terminal 37 ft., other berths between 28 ft. and 34 ft. 6 in.

HEALTH: Radio Pratique obtainable if message sent not more than 24 and not less than 8 hours before arrival to "Quarantine, Port Sudan", with following information: Name of ship and ETA; Name of Agent; Whether surgeon carried or not; Whether illness on board, if so, what illness; Port of departure and last port of call. On receipt the Quarantine Medical Officer will inform ship by wireless whether Pratique is granted or not.

RADIO: Port Sudan Radio (call sign STP). Operates daily on High Frequency as follows: 8652 MHz from 0400 hrs. to 1600 hrs. GMT; 4356 MHz from 1600 hrs to 0400 hrs. GMT; 500 kHz – continuous listening watch for first 10 minutes of every hour. Radiograms may be handed in at Port Sudan Post Office at all times and at Port Sudan Quays Post Office during office hours.

TUGS: About 1 mile from harbour entrance. Either ship's or tug's lines at Pilot's discretion.

BERTHING:

Berth	*Length*	*Depth* Winter	Summer
Nos. 1 to 5 main berths	458 ft.	30 ft.	28/33 ft.
No. 5A	426 ft.	35 ft.	33 ft.
Nos. 6 & 7	606 ft.	35 ft.	33 ft.
Nos. 8 & 9	600 ft.	37 ft.	35 ft.
No. 15	642 ft.	37 ft.	36 ft.
No. 16	230 ft.	37 ft.	35 ft.
Nos. 17 & 18	908 ft.	39 ft.	37.5 ft.

CARGO HANDLING: Grain silo of 50,000 tons capacity situated at Berth No. 15.

Span of coal transporters is 420 ft.

Container traffic handled at Berth Nos. 17 and 18. Ro-Ro vessels handled at Berth No. 16.

Also see "Developments".

TANKERS: At Berth No. 16, vessels up to 600 ft. length can berth with overhang. Max. draft 34 ft. 6 in.

Berths 17 and 18 accommodate tankers up to 37 ft. draft. Berths connected by pipe-line to refinery 8 km. South of Port Sudan.

Used for discharging crude oil and loading refined products.

STEVEDORES: Require 24/48 hours advance notice of ETA and stowage of cargo. Rate of Discharge and Loading: General cargo, 5 – 10 tons per hook per hour. Bagged cargo, 15 – 20 tons per hook per hour.

Exports: Main exports, cotton, cottonseed, gum Arabic, oilcakes, MOP shells, trocas shells, senna, beans, domnuts, oilseed, hides, skins, salt, beeswax, durra, wheat bran, chick peas, karkadeh, ground nuts, livestock, castor seed and edible oil.

Tea: Following exports should not be stowed with tea: castor-seed, hides, linseed, edible oil, oilcake. Cottonseed may be stowed with tea with separation of 3 ft. but it is preferable to stow in separate compartment from tea.

Cotton: Gum should never be stowed with cotton.

Transhipment cargo: Is normally not accepted at Port Sudan without prior permission, except in very small quantities.

Weight: Deadweight of cargo is expressed per ton of 1,000 kilos.

MEDICAL: Advance notice advisable. Hospital facilities available. Crew and passengers must have valid International Health books.

DENSITY: 1025.

FRESH WATER: Available ex-quay and ex-barge.

FUEL: Marine Fuel oil (normally 1000 secs.); marine diesel oil (42/45 secs.); gas oil (35 secs.). 24/48 hours' advance notice advisable. Name of suppliers is required. Bunkers at times in short supply.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Normally by stevedores.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per person. Wine and/or Spirit, 2 bottles of different kinds per person. Only personal requirements may be taken ashore.

IDENTIFICATION CARDS: Not required.

CONSULS: A.R.E. (Egypt) and Nigeria.

REPAIRS: Minor deck and engine repairs.

DRY DOCKS: Slipways for 2 vessels up to 500 tons capacity.

REPATRIATION: Not recommended. Formalities take 2/3 days.

AIRPORT: 3 miles away. Flights twice per day Port Sudan to Khartoum, 2 flights per week Port Sudan to Cairo.

TIME: GMT plus 2 hours. In Summer, GMT plus 3 hours.

HOLIDAYS: The following government holidays will be considered as port holidays. (The dates may vary in other years) January 1st (Independence Day – 1 day), February 19th (Mulid El Nabi – 1 day), March 3rd (National Unity – 1 day), May 1st (Sham el Nassem – 1 day), May 25th (Revolution Day – 1 day), September 3rd-6th (Ramadan Bairam), November 10th-14th (Kurban Bairam), December 1st (Mohammedan New Year – 1 day), December 25th (Christmas Day).

The port will not work on the following days: January 1st (Independence Day), November 10th–14th (First Day Kurban Bairam), December 1st (Mohammedan New Year), February 19th (Mulid El Nabi), May 25th (Revolution Day), September 3rd (First Day of Ramadan Bairam), December 25th (Christmas Day). Overtime will be worked on all other days.

POLICE/AMBULANCE/FIRE: Police 4888; Ambulance 2400; Fire 5922.

TELEPHONES: No arrangements exist for placing telephones on board.

GENERAL: No foreign currency allowed ashore. Crew are permitted to go ashore with any amount Sudanese Currency.

DEVELOPMENTS: The first development stage includes modification of 2 existing berths to accept ships of up to 50,000 d.w.t. and container vessels, relaying railway track in the port area and asphalting. Purchase of 20 mobile cranes with capacity 7 tonnes – 54 tonnes and 60 fork lift trucks completed 1983.

Second phase of development includes extension of 2 container berths, additional works at the Ro-Ro berth and upgrading of the grain silo complex.

AUTHORITY: Managing Director's Office, Sea Port Corporation.

NOTES

Please also advise Shipping Guides Ltd.

Suriname

MOENGO: 05.38 N. 54.25 W.

A bauxite mining town about 70 miles up the Cottica River, a tributary of the Commewijne River, which latter joins the Suriname River at Fort New Amsterdam. Moengo is 94 miles from the Suriname River Light Vessel.

DOCUMENTS/PILOTAGE/GENERAL: Refer to "Paramaribo".

PILOTAGE: Vessel arriving after 2000 hrs. at the light vessel for Moengo can proceed on a suitable tide and anchor at Fort New Amsterdam without having to call at Paramaribo to be entered. In this case vessel will be entered on arrival at Moengo.

Also see "Paramaribo".

TUGS: Two tugs are available, the larger is 1,750 h.p.

Towage is compulsory in the Cottica River from 40 miles below Moengo for vessels over 200 ft. long.

MAX. SIZE: Ships of 525 ft. can be accommodated. Ore vessels call daily. The Commewijne Bar is 18 ft., so that the ruling draft is that of the Suriname River. Maximum admissable draft being 22 ft. 6 in., subject to the Suriname River.

BERTHING: Moengo has two piers at which ore is loaded by a transporter at the rate of 800/1,000 t.p.h. One pier is 430 ft. long and has a depth of 24 ft. alongside. Both will accommodate ships of 525 ft. length. Tracks are laid on the 430 ft. pier and a 25 ton crane is available.

PROVISIONS: Not available.

FUEL: Small quantities can be supplied.

FRESH WATER: Small quantities can be supplied.

AIRPORT: About 5 km. from docks.

AUTHORITY: District Commissioner acts as Harbour Master.

NEW NICKERIE: 05.57 N. 56.59 W.

DOCUMENTS:

2 copies Crew List.
2 copies Passenger List.
Customs Documents; Crew Declaration Lists; for instance, souvenirs, electric apparatus, etc.
2 copies Ship's Store Lists.
3 copies Manifests of Import.
3 copies Manifests of Export.
1 copy Transit Manifest.
2 copies Manifests of Coastal Cargo.
Ship's Papers to be shown on request.

PILOTAGE: Pilotage is compulsory for the Nickerie River for ships bigger than 50 gross tons. There is always a Pilot available; ETA to be sent 48 hours before arrival and, 12 hours before arrival give necessary correction message to the Agent.

Ships can only enter the river at or about the time of high water.

The Pilot boards near the Sea Buoy (Buoy No. 1). The pilot boat is a small wooden, grey and white painted vessel. The pilot boat does not use the international red-white pilot lights at night. It is possible to make radio telephone contact with the boat (Pilot carries a walkie-talkie VHF equipped with Channel 12). There is a signal lamp on board.

Send ETA message to Agent who will order the Pilot. Awaiting high water the vessel can anchor about 3 miles N.N.E. of the Sea Buoy.

ANCHORAGES: With a draft of 15 ft. the ship can safely anchor 3 miles N.N.E. of the Sea Buoy. It is not advisable to anchor in the Nickerie River for a long time, the river is too narrow.

MAX. SIZE: Minimum depth on the bar is 1.20 m. with maximum draft at HW varying from 10 ft. to 13 ft., maximum length is 130 m., governed by the width of the river (170 m. and upriver 70 m.). The vessel has to use the high-inlet for cooling water, etc., while passing the bar.

At low water ships are seated in the mud without consequence to hull, rudder or propeller alongside the wharf. There are berths for oil-carriers.

HEALTH: There is no Pratique procedure. Only in the event of any suspected disease or fever on board must a doctor must be called.

RADIO: Send ETA cables to Paramaribo Radio. The pilot office at Nickerie has a radio telephone transmitter. Frequency 8233.9 kHz; listening hours 0700, 1200, 1800 hrs. local time. SSB and VHF equipment also used.

TUGS: No powerful tugs available.

BERTHING: The port of New Nickerie is 3 miles up river.

Wageningen: Lies 27 miles up river and can be reached with the same draft as New Nickerie, but the width of the river is only 70 m., which restricts length to 200 ft.

STEVEDORES: The Agent orders the gangs (maximum 3 gangs available).

MEDICAL: No advance notice required for medical treatment. There is 1 hospital in Nickerie with a surgeon.

TANKERS: There are 3 piers in Nickerie: Esso, Shell and Texaco pier. Maximum permitted draft 14 ft. 9 in. at Spring tide.

DENSITY: In the dry season the density on the river near New Nickerie is 1015. In the rainy season the density is 1005 near HW, and 1000 near LW. These all depend upon Spring tide or Neap tide.

FRESH WATER: Fresh water is available alongside the wharf of New Nickerie. It is loaded from shore by hose.

FUEL: Small quantities of fuel available from Esso or Shell, also grease and petrol.

GANGWAY/DECK WATCHMEN: It is recommended to have a watchman during the night.

OPENING/CLOSING HATCHES: Patent hatches must be opened by the crew, other hatches by the stevedores.

CUSTOMS ALLOWANCES: Master included: for every 72 hours staying in port: 15 cigars or 60 cigarettes or 30 cigarillos or 150 gm. tobacco plus 0.25 bottle spirits or 5 bottles beer or 1 bottle wine.

IDENTIFICATION CARDS: Not needed.

CONSULS: No consuls in Nickerie.

REPAIRS: Small engine repairs and shaft repairs and some welding repairs can be done.

REPATRIATION: Possible via Paramaribo.

AIRPORT: The airport is 10 miles from the port of Nickerie. Twice per day there is a flight to Paramaribo arranged by a local company, called S.L.M.

Daily bus service between New Nickerie and Paramaribo.

TIME: Local time is GMT minus 3.5 hours. No alteration during year.

HOLIDAYS: New Year's Day; Good Friday; Phagwa; Queen's Birthday (April 30); Ascension Day; Labour Day (May 1st); Day of Liberties (July 1st); Idul Fitre; Christmas Day and Boxing Day. On these days work can be done by paying overtime.

POLICE/AMBULANCE/FIRE: Police 356; Ambulance 241; Fire 333.

TELEPHONES: No arrangements can be made for a telephone connection on board.

SHORE LEAVE: No restrictions.

DELAYS: Delays in berthing: There are only 2 wharves with a total length of 700 ft. Banana ships have priority. Delays in loading and discharging: there are only 3 gangs of stevedores. These can be enlarged to 5 "small gangs".

DEVELOPMENTS: In the future a bigger and deeper port will be built in the Corentyne River, about 20 miles up the river.

AUTHORITY: District Commissioner acts as Harbour Master.

PARAMARIBO: 05.49 N. 55.09 W.

PORT LIMITS: The seaward boundaries of the port, within which a vessel is considered to be "arrived" is the entrance of the Suriname, Matowijne, Coppename, Corantijn and Nickerie Rivers. Laytime commences to count after vessel has anchored or berthed.

LOCATION: On the left bank of the Suriname River about 8 miles above New Amsterdam and 21 miles from light-vessel at river entrance.

DOCUMENTS:

5 Incoming Cargo Manifests (if any cargo), otherwise 3 copies.
1 Cargo Transit Manifest.
4 Outward-going Manifests.

These above-mentioned must be sent ahead to the Agent so that they can be translated into Dutch.

4 Crew Lists.
2 Store Lists.
2 Crew Declaration Lists.
6 Passenger Lists.

PILOTAGE: Compulsory. All ships are requested to amend their estimated time of arrival in local time, at least 12 hours in advance by special message through the wireless station to their Agents or to the Harbour Master. Arrival message should include draft of vessel and other requirements. 6 hours prior to arrival the ETA has to be confirmed and if necessary corrected. The Pilot will be dispatched after receiving the confirmed ETA. As shipping only uses the Suriname River, the Commenwijned River, the Cottica River and the Nickerie River, all Pilots except one for Nickerie are stationed at Paramaribo. Paramaribo Pilots board the vessels 1 mile North of the light vessel and between the light and Braamspunt (Lat. 5° 58′ N., Long. 55° 10′ W.). Pilot station on VHF Channel 12. Pilot station and harbour office to be advised of deepest draft. All vessels have to stop off the light vessel.

ANCHORAGES: Anchorage off town in 18 ft. – 35 ft. of water at LWS. Government Officials board vessels immediately on arrival for inward clearance. Vessels which are required to anchor off the port to wait for berths may be boarded at the anchorage.

CHANNEL: The channel is marked by numbered buoys with radar reflectors, odd numbers on the West with white lights, and even numbers to the East with red lights and painted respectively black and white or red and white chequers.

RESTRICTIONS: The bar at the entrance of the Suriname River controls the ports of Paramaribo, Moengo, Paranam and Smalkalden, and has a depth of 15 ft., with a rise at neaps of 6 ft. 7 in. or springs 8 ft. 10 in., but it is soft mud. Due to the fact that the bar consists of mud, vessels regularly leave the port with drafts between 22 ft. and 23 ft.

LIGHT VESSEL: There is a radio light-vessel which is anchored off the Suriname River 6.75 miles N.N.W. of Braamspunt (Lat. 6° 04′ 37″ N., Long. 55° 12′ 58″ W.) This light vessel is equipped with a radio beacon PZER or PZCR, on 415 or 365 kHz, range 60 miles and also VHF Channel 12.

HEALTH: Port doctor will visit an arriving ship only if there is a case of contagious disease aboard, or if one of the preceding ports of call has been declared to harbour contagious disease. No bill of health is required. A ship with an infection on board must advise the Harbour Master by special message through the wireless station before arrival. Yellow Fever Certificates required. Pratique granted by Customs Officer.

RADIO: There is a 24 hour radio telephone watch at the Harbour Master's Office on 8233.9 kHz; 500 kHz; 2182 kHz; and VHF Channel 12. The coast station, PZN, also maintains a 24 hour radio telegraph (500 kHz) and telephone service in the 2182 kHz band. The light vessel *Suriname River* is equipped with VHF Channel 12.

VHF: Harbour Office on Channel 12, 24 hours a day. Radio Station "PZN" on Channel 16, 24 hours a day.

RADAR: None.

TUGS: Available from Paranam.

BERTHING:

Government Wharf: Length 1,815 ft., depth 21 ft. – 25 ft.

O.G.E.M. Wharf: 120 ft. long, least depth 14 ft. Oil/gas discharge for public undertakings. Wharf partly dismantled and declared unfit to receive vessels.

B.E.M. Wharf: 110 ft. long, least depth 18 ft. Private cement and gravel discharge wharf, Moorings 450 ft. apart.

Banana Export Pier: 297 ft. long, least depth 18 ft. Fresh water can be supplied.

New Oil Terminal: Moorings 570 ft. apart. Least depth 18 ft. Platform length 70 ft. Used for oil and gas.

Flour Pier: 36 ft. long. Moorings 160 ft. apart. Least depth 16 ft. Only possible to discharge flour with a grain elevator, rate 30 t.p.h.

Vensur Cement Wharf: 180 ft. long, depth alongside 14 ft. Moorings 600 ft. apart.

New Haven Dock: 1,815 ft. long. Least depth 19 ft. at LWS. Max. depth 21 ft. Fresh water can be supplied.

Belwaarde: 3 miles above Fort New Amsterdam on the right bank of the Suriname River. Length of pier: 279 ft., least depth 18 ft. – 20 ft. Loading sugar in bags.

Shell Oil Terminal: Moorings 540 ft. apart. Least depth at LWS 21 ft. Exclusively for oil, gas and bunkering.

CRANES: One crawler crane 25 tons capacity.

MEDICAL: Excellent medical and dental attention is available to crew members of all vessels. Four hospitals available.

FRESH WATER: The water is of excellent quality. Available at most berths as mentioned above.

FUEL: Ship's bunkers are available in most ports of Suriname in limited quantities. Advice regarding quantities and specifications of oil should be given to Agent's representative immediately after docking. Suppliers are Shell, Esso and Texaco.

CUSTOMS ALLOWANCES: 60 cigarettes or 15 cigars or 0.5 lb. of tobacco. One-fifth litre of spirits, one-third litre of wine, 2 litres of beer, for each crew member.

All remaining stores must be declared and placed under seal. If vessel remains in port over 72 hours Customs will allow an issue of stores.

REPAIRS: No facilities for major ship repairs. Local workshops can do repairs of minor nature. There are 2 floating dry docks and 1 floating derrick owned and operated by the Suriname Drydock Co. Lifting capacities dry docks: 400 – 650 tons.

SURVEYORS: Lloyd's Register, A.B.S. and N.V.

GANGWAY/DECK WATCHMEN: The Customs board the vessel while riding at anchor or alongside one of the docks. All vessels are required to make a proper gangway available to the Customs Boarding Officer.

The local authorities assign one or more Customs Guards to each vessel during its stay in port. The charges for guarding are for the account of the vessel. These Officials must be provided with meals on board at regular meal hours, and cabins if necessary.

CARGO GEAR: Load/discharge by ship's gear.

REPATRIATION: Under special circumstances vessels may sail without all crew members on board (sickness, etc.). The Master furnishes a letter to his Agent authorising him to accept responsibility for the missing seaman or seamen.

AIRPORT: Zaneerij Airport, 146 km. from Paramaribo. Served by SLM, KLM, ALM and Guyana Airways.

CONSULS:

Austria
Belgium
Brazil
China
Colombia
Denmark
Dominican Republic
Ecuador
France
Great Britain
Germany (West)
Guyana
Indonesia
Japan
Norway
Portugal
Sweden
Venezuela
U.S.A.

TIME: Local time is GMT minus 3.5 hours. Vessels are required to use local time in ETA messages and when dealing with Agents.

HOLIDAYS: New Year's Day, Revolution Day (February 25th), Holi Phagwa (March 10th), Good Friday, Easter Monday, Labour Day (May 1st), Freedom Day (July 1st), Id-Ul-Fitr*, Republic Day (November 25th), Christmas Day, Boxing Day. *These holidays depend on the moon.

SHORE LEAVE: Under normal circumstances no restrictions are imposed by the Government Immigration Authorities on shore leave.

GENERAL: While alongside vessels must maintain engines and propulsion machinery in readiness to leave the pier under full power on short notice. No repairs are permitted which should interfere with this requirement. While alongside, oil tankers should have their offshore anchor out about 50 ft.

All vessels except ships of war, must furnish a statement, of the amount and character of explosives carried, also a certificate to show how they are stored and manner of packing.

Special anchorage areas are provided in the harbour for vessels with dangerous cargo.

All firearms and ammunition must be manifested on store lists and must remain in bond on board during vessel's entire stay in territorial waters of Suriname. Any violation of this regulation renders the vessel subject to fines and confiscation of firearms and ammunition.

BALLAST: Vessels must arrive with sufficient ballast to permit safe handling. All vessels should enter port with clean ballast water that may be pumped overboard while in the harbour, as it is prohibited to pump dirty ballast water or oil residue or sweepings into the harbour.

BANK: Algemene Bank Nederland N.V., Kerkplen 1, Paramaribo. Tel: 71555. Telex: 122 Bancol Sn.

EMERGENCY CO-ORDINATION: Harbour Office. Tel: 72845. Telex: 163 Havkan Sn.

STORING: Can be arranged by Barge or Trucks, whilst loading or discharging, depending on berth, with Customs in attendance. Local labour available.

AUTHORITY: The Ministry of Transport and Industry, Fort Zeelander, Kleine Combieweg, Paramaribo. *Tel:* 72845. *Telex:* 163 Havkan Sn.

AGENT: Alcoa Steamship Company, Inc., P.O.Box 1842. Paramaribo, Suriname. Tel: 77600, 73613. Telex: 113. Cables: Alcoaship Parbo. Steamship Agents/Stevedoring Operators.

PARANAM: 05.38 N. 55.05 W.

Located on left bank of the Suriname River about 42 miles from the light vessel, consisting of bauxite mining, alumina refining and an aluminium smelter with facilities for shipping these commodities.

DOCUMENTS/PILOTAGE: and all General Information refer to "Paramaribo".

RESTRICTIONS: See "Berthing".

MAX. SIZE: Vessels up to 40,000 d.w.t. load to outer bar draft (approximately half load) and usually top off at Trinidad. Max. LOA 700 ft.

HEALTH: Health Officer does not board unless there are quarantinable diseases aboard.

TUGS: Available.

BERTHING: *General Dock:* Concrete pier of about 350 ft., moorings 660 ft. apart. Least depth 30 ft., max. air draft 42 ft., max. beam 80 ft. This dock used for loading bauxite or aluminium ingot and for discharging general cargo, oils, caustic and other raw materials,

Alumina Pier: Depth 25 ft., moorings 680 ft. apart. Used for loading alumina or discharging oils and caustic. Max. air draft 50 ft., max. clearing height 72 ft.

Loading Capacity: Bauxite General Dock: 900 t.p.h.
Alumina at Alumina Dock: 850 t.p.h. Loading by conveyor, spout trimmed (Telescopic chute).

CRANES: One gantry crane 55 tons capacity.

FUEL: Small quantities of light diesel No. 2 only in emergency.

FRESH WATER: Can be supplied.

REPAIRS: None can be effected.

AIRPORT: At Zanderij, 45 km. from dock.

GENERAL: The Outer Bar is the limiting factor for the port. Harbour Office Paramaribo give Bar drafts for each tide.

The river silt is extremely soft and in consequence the river water is very dirty and although fresh (995 at the berths) the evaporators cannot be kept on line. There is also a great danger of blocking the cooling water system, especially when crossing the bars. Blackouts on both motor and steam ships are a common occurance. Care should be taken to ensure that cooling systems are as clear as possible before entering the river.

AUTHORITY: District Commissioner officially acts as Harbour Master but vessel movements, pilotage, etc. handled by Paramaribo Harbour Master's Office.

SMALKALDEN: 05.37 N. 55.05 W.

A bauxite mining town on the left bank of the Suriname River 1 mile below Paranam and 41 miles from the light vessel.

DOCUMENTS/PILOTAGE: and all General information; refer to "Paramaribo".

TUGS: None available.

BERTHING: Wharf with length of 218 ft. Moorings 535 ft. apart, least depth 30 ft. Ships can load to outer bar draft. Bauxite loaded by 1 conveyor with an average of 800 t.p.h. at each berth. Max. LOA 700 ft. Vessels berth port side alongside.

FUEL: None available.

FRESH WATER: Small quantities can be delivered by trucks.

REPAIRS: None.

AIRPORT: At Zanderij, 45 km. from dock.

GENERAL: The tide is 3 hours after Paramaribo and the water becomes fresh before reaching Smalkalden.

SHIPMASTER'S REPORT: 1978.

Documents: 2 Crew Lists, 2 Stores Lists and 2 Crew Declaration Lists.

Customs: Customs board at Smalkalden on arrival and clear vessel. They do not remain on board.

Pilotage: Available and compulsory. Pilot station at Paramaribo.

Anchorage: Safe anchorage available 4 miles North of the Sea Buoy, depth of water about 30 ft., nature of bottom, mud.

Approaches: Inwards: There is a direction finding station at Paramaribo. Light vessel not on station. The buoy channel is almost non-existent as some buoys have disappeared and have not been replaced. The light buoys are extremely poor.

On entering the river, it was noticed that the propeller stirred up dense mud. The main engine cooling filters became choked even though the high suctions were being used. Top side ballast tanks were then used to discharge ballast and cool the main engine at the same time.

Vessel anchored at Suzannasdaal on passage up river to await tide, and clearance of another vessel which was on the berth. The anchorage was good, vessel used five shackles. Vessel then proceeded up river to Smalkalden but on passing Domburg, heard that the other vessel could not complete on time, so we had to pass the berth and anchor off Chatillon. The river is very narrow at this point and engines were kept on standby to be used when turning in case vessel became too close to the shore. Vessel docked at Smalkalden just before HW.

Outwards: On completion of loading, vessel sailed 2.5 hours before HW Paramaribo and proceeded down river. The vessel's draft was 23 ft. 2 in. and in places the river became very shallow and the vessel slid over mud at various points. The worst place noticed being between Beacon "D4" and Buoy No. 12 at Sunoza. The vessel again anchored off Suzannasdaal to await the rising tide, 6 shackles in the water as the current was very strong. The vessel later sailed for the sea 3.5 hours before HW at Paramaribo and again touched bottom at various places whilst proceeding towards the sea. The main engine was cooled using ballast discharge for suction which is higher than normal high suction. whilst on passage Beacons "R6" and "R10" were extinguished and 6 of the Channel Buoys were missing, also buoy lights were of extremely low intensity.

Restrictions: Vessels can enter and leave port day and night.

Max. Size: Agent advised that max. draft was equal to: (4.50 m. + height of tide) – FWA of 4 in.

However Pilot advised differently as follows:

Safe Loading Calculation:
Least channel depth . . . ft.
Plus rise of tide . . . ft.
Equals safe loading draft . . . ft.

*Least channel depth rising tide (from Neap to Spring tide 4.60 m.)
*Least channel depth falling tide (from Spring to Neap tide 4.35 m.)

Pilot also advises that the FWA from Sea Buoy to Suzannasdaal is practically nil – so do not take FWA into account.

VHF: Pilots and Harbour Office maintain a continuous watch on Channel 12.

Tugs: Not available and not normally required. Should vessel experience difficulties tugs can be called from Curacao.

Berthing: Suriname Billiton Bauxite Berth: Maximum permissible draft varies with the tide. Tidal range 1.16 m. to 2.39 m.

Maximum permissible length and breadth of vessel not known.

Loading/Discharge Gear: There are 2 chutes approximately 150 ft. apart which are semi-movable. Loading rate varies between 200 and 600 long tons per hour. Cargo operations continue throughout 24 hours. A gang consists of one foreman and four men.

In addition to the facility at which we berthed, there are general cargo berths alongside the modern quay and a bulk aluminium loading berth with one chute which is semi-movable. See "Paranam".

Density: For the berth, the density is 998. Also see "Max. Size".

Fuel: Not available.

Fresh Water: Delivered by truck with capacity of 7 tons. Delivery is slow and extremely expensive. Arrangements are to be made with the foreman.

Medical: Hospital facilities available.

Shore Leave: Possible, however, crew required on board most of the time as vessel has to be shifted up and down the jetties for loaders.

Gangway: Accommodation ladder not used. Shore ladder is provided.

Provisions: Fresh fruit and vegetables available but of poor quality and very expensive.

Transportation: The town of Smalkalden is about 30 minutes by car from Paramaribo and about 1 hour by bus (taxi fare, 25 Guilders, bus fare 1 Guilder).

Publications: BA 517 and BA 99 also South American Pilot Volume 4 (No. 7A) used. BA Chart 99 does not extend far enough to sea as the sea buoy is not shown on it and the outer anchorage is about 3 to 4 miles outside this buoy. The Pilot informed me that the local Dutch Chart is available from the Harbour Master at Paramaribo and is much more satisfactory.

AUTHORITY: District Commissioner acts as Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Sweden

GENERAL:

ICE-BREAKING SERVICE:
Location: Ice-breaking Directorate, Norrkoping.
Telephone: (011) 19 10 00 (0800 hrs. – 1640 hrs. local time).
(011) 12 29 60 (outside above hours).
Telex: 64416 Ice Serv S.
Cables: Civilmarin.
Procedure: Requests for ice-breaker assistance should be made well before vessel's arrival at the ice to the Directorate, locally (to most Swedish Harbour or Pilot Offices) or to an ice-breaker.

Vessels approaching ice-bound areas may be instructed, in daily Ice Reports issued by Coastal Radio Station (see ALRS Vol. 5), to report to the Directorate. Reports, which should be made well before arrival at the ice are to include the following details of the vessel:

1. Name.
2. Nationality.
3. Call sign.
4. Size.
5. Draft.
6. Engine power.
7. Year built.
8. Ice class.
9. Amount of cargo.
10. Destination.
11. ETA at ice-covered waters.

Vessels which have made a request or report and subsequently cancel or delay their voyage must inform the Directorate, a local office or an ice-breaker immediately.
Information Service: For details of Coastal Radio Stations which broadcast Ice Reports, including positions of ice-breakers, see ALRS Vol. 5.
Ice-Breakers:
Call: Swedish ice-breakers with their call signs are:

Ymer	SPIA	Tor	SCYN
Frej	SBPT	Oden	SBXQ
Atle	SBPR	Thule	SCKD
Njord	SBPO	Ale	SBPQ

Frequency: 500 kHz	WT
2182, 2140 kHz	RT
Channels 16, 6	VHF

Procedure: Calls to ice-breakers may be booked through the nearest Coastal Radio Station. Vessels receiving assistance must maintain continuous listening watch on the channel specified by the ice-breaker.

AHUS: 55.56 N. 14.19 E. (See Plan Book)

DOCUMENTS: See "Stockholm".
PILOTAGE: Pilots meet vessels at Pallagrund. Telegraphic address: "Pilotstation, Ahus". Tel: 044 – 240027. VHF Channel 16 call sign: "Pilot Station, Ahus." Awaiting Pilot, anchor outside Pallagrund. Depth 15 m. – 20 m. (Also see "Stockholm").
ANCHORAGES: Anchorage forbidden in dredged entrance channel.
RESTRICTIONS: No special regulations.
MAX. SIZE: Max. length 160 m., max. draft 7.7 m.
HEALTH: No special regulations.
RADIO: Stockholm Radio (SDI) also VHF, Channel 16 and working Channel.

Ahus Port Radio keeps watch, Monday to Friday 0800 to 1600 hrs. on VHF Channel 16. Working Channel 11, 12 and 13. At other times Ahus Pilot Station.
RADAR/VHF: Radar on pilot station. VHF call sign: Pilot Station, Ahus. Channel 16. Also see "Radio".
TUGS: 1 tug available with advance notice.
BERTHING: Depth alongside (at MW) as follows:

Berth	*Length* (m.)	*Depth* (m.)
Wine Quay	100	4.2
No. 1 – 4	270	5.8
No. 5 – 17	740	7.2
No. 18 – 26A	470	8.2
26B	15	4.2

Depth allowance 0.5 m.
STEVEDORES: Ahus Stuveri AB. Tel: 044-240038. Working hours: Monday to Friday 0700 – 1600 hrs. Meal breaks 0845 – 0900 hrs. and 1200 – 1245 hrs.
FRESH WATER: Delivered from pipe-line.
FUEL: Available day and night.
FIRE PRECAUTIONS: No special regulations.
GANGWAY/DECK WATCHMEN: If wanted, watchmen available.
OPENING/CLOSING HATCHES: Normally by the crew.
CUSTOMS ALLOWANCES: See "Stockholm".
CARGO GEAR: 7 shore cranes, capacity 5 – 25 tons. No cranes at Berths No. 1 – 4 or Wine Quay.
IDENTIFICATION CARDS: Crew list needed. No cards.
CONSULS: Danish Vice-Consul: Vasagatan 17B, 29153 Kristianstad. Tel: 044-114841. Norwegian Vice-Consul: Mast. Bonggatan 2, 29154 Kristianstad. Tel: 044-115605.
REPAIRS: Minor repairs only.
DRY DOCKS: No dry dock. Nearest dry dock Solvesborg.
AIRPORT: Nearest airport about 10 miles away. 2 flights per day.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: See "Stockholm".
POLICE/AMBULANCE/FIRE: Police Tel: 242030; Ambulance Tel: 90000; Fire Tel: 90000.
TELEPHONES: 1 public telephone on quay.
AUTHORITY: Ahus Hamn, Hamnkontoret, 29600 Ahus, Sweden. Tel: 044-242070. *Contact:* Ingvar Ericsson, Harbour Master.

BROFJORDEN: 58.21 N. 11.25 E. (See Plan Book)

PORT LIMITS: Between "Stretudden" (crude oil berth) and the island "Rixo" in Brofjorden.
DOCUMENTS: Documents required for entry and clearance:

Certificate of Registry, Certificate of Tonnage, Derat Exemption Certificate, 3 Crew Lists, 1 Crew Manifest, 1 Declaration of Bonded Stores. Free Pratique will be received via Customs on arrival berth. Oil Pollution Certificate.
PILOTAGE: Pilot station VHF Channel 16 around the clock. Channel 16 for calling only, thereafter changing to an agreed Channel. Call: Lysekils Pilots.

According to harbour regulations VLCCs are requested to give 72 hours ETA, and if any changes 48 and 24 hours ETA.

Product tankers are requested to give 48, if any changes 24 hours ETA.
Position where Pilot will Board:

VLCCs	Lat. 58° 13′ 05″ N.,	Long. 11° 09′ 05″ E.
Product tankers	Lat. 58° 15′ 01″ N.,	Long. 11° 13′ 03″ E.

ANCHORAGES:
VLCCs East Scaw, Lat. 57° 42′ N., Long. 10° 49′ E.
Water depth: 26 m.
Holding ground: sand, good.
Product Tanker Only (up to 60,000 d.w.t.):
Lat. 58° 20′ 03″ N. Water depth: 28 m.
Long. 11° 21′ 00″ E. Holding ground: clay, good
Lat. 58° 19′ 07″ N. Water depth: 26 m.
Long. 11° 23′ 05″ E. Holding ground: clay, good
RESTRICTIONS: *When Berthing VLCC:*

Visibility minimum 4 miles, wind force max. 12 m./sec. and current max. . knot at the outer buoys (Nos. 1 and 2).
MAX. SIZE:

Crude Oil Jetty:	
Deadweight:	50,000 – 500,000 tons.
Length overall:	No limit.
Beam restriction:	No limit.
Draft restriction:	25 m. (82 ft.)
Depth of water:	28.0 m. (92 ft.).
Product Jetty (Berth Nos. 2 and 3):	
Deadweight:	50,000 tons.
Length overall:	230 m. (754 ft.).
Beam restriction:	No limit.
Draft restriction:	14.4 m. (47 ft.).
Depth of water:	16.0 m. (53 ft.).
Product Jetty (Berth No. 1):	
Deadweight:	7,000 tons.
Length overall:	120 m. (394 ft.).
Beam restriction:	No limit.
Draft restriction:	8 m. (26 ft.).
Depth of water:	8.8 m. (28 ft.).

HEALTH: No special papers required. Master informs by radio or on arrival.
RADIO: For ETA cables to Agent and Receivers call Gothenburg Radio.
VHF: VHF stations are installed at the pilot station, the pilot boat, the tug boats and at the Scanraff Harbour Office. Scanraff and Lysekil Pilot listen on Channel 16 day and night.

When mooring: the Pilot, Harbour Master, mooring boats and the mooring gangs carry portable VHF sets. Channel 69 is usually used.
RADAR: At the pilot station two radar sets are installed for watching the entrance.
TUGS: *For VLCCs:* Tugs made fast after passage of Dynabrott and Brandskars Flak Lighthouses.
For Product Tankers: Tugs made fast when passing Bubacka Buoy (opposite crude oil berth).
BERTHING:

Instruments:	SAMI-doppler and current meter at crude jetty.
Salinity:	18 – 34%
Current Velocity:	0.2 – 0.9 knots at entrance.
Nature of Bottom:	Clay.

The crude and product jetties are equipped with quick release hooks. The coaster berth has usual type of bollards.

One Safety Tug-boat is always standing-by within the harbour area in case of emergency. When a Crude Carrier is alongside an additional Safety Tug-boat is standing by.
MEDICAL: Hospital available in Lysekil. No particular inoculations required.
TANKERS:
Crude Jetty:
Concrete jetty for tankers of 50,000 to 500,000 d.w.t.
Length of jetty-deck: 135 m.
Height of jetty-deck above MWL: 6 m.
Minimum distance between fenders: 96 m.
Height of gangway tower: 27 m.
3×16 in. marine arms for cargo handling.
1×12 in. marine arm for bunker supply (Only Bunker "C" available).

All 4 arms are equipped with hydraulic operated speed seal couplings designed for 150 lb-ASA flanges, minimum size 10 in.

Reach capability of arms: Max. 30 m., min. 4 m. above sea level. Max. 11 m., minimum 3 m. from berthing line. Drift: 4.5 m. each side of manifold centre line.

Fresh water can be supplied at a rate of 60 t.p.h.

1×4 in. sewer-line connection is located between manifolds on jetty-deck.

Vessel arriving shall have 1 derrick rigged amidships to lift on board garbage-container.

Shore-connected telephone will be placed on board. Telephone number 605 88. Area number 0523.

Telephone number to Scanraff switchbord 604 60. Area number 0523.

Mooring: Vessel is normally moored port side to jetty.

Approach velocity is continously measured by doppler radar and provided to ship's Master/Pilot during berthing operation.

Max. allowed approach speed is shown in "Plan Section".

Communication between jetty-pilot-tugboats and mooring-boats by VHF.

Under normal weather conditions 6 tugboats representing approx. 23,000 h.p. will be used for berthing of VLCCs. Under abnormal weather conditions additional tugboats can be ordered.

2 mooring-boats are provided to assist in line handling.

18 mooring lines are required for safe mooring. All lines to be provided by the ship.

Mooring lines to be arranged in accordance with "Plan" (See "Plan Section"), or as close to as possible.

Combination of synthetic, ropes and wires in the same direction shall be avoided.

Self tensioning winches are not allowed.

All mooring lines will be put on quick release hooks of 150 tons SWL each.

4×10 in. mooring lines are available on jetty-deck for emergency use.

Safety Precautions: Vessel must be safely moored before gangway is placed on board and marine arms connected.

Correct setting of winch brakes to be checked regularly by ship's personnel.

Safety wires to be properly rigged fore and aft.

Cargo handling and/or bunkering will be stopped if wind velocity reaches 17 m./sec. (33 knots) for wind between N.W.-S.W. and during thunderstorms. If reaching the above limit: Stop discharging/bunkering, drain and disconnect all arms. Close all tank lids and ullage plugs. Tugs to be ordered to ship's side.

2 safety tugboats are always available in Brofjorden Harbour while a crude carrier is alongside the crude jetty.

The Harbour Office together with the ship's Master will decide on approach actions to be taken.

Product Jetty: (Berth 2 and 3)

Berth No. 2: 1×12 in. (F.O. No. 4 and F.O. No. 5).
1×12 in. (F.O. No. 4, F.O. No. 5 and ballast).
2×10 in. (F.O. No. 1 and diesel oil).
1×10 in. (Premium gas).
1×10 in. (Naphtha and regular gas).

Berth No. 3: 1×12 in. (F.O. No. 4 and F.O. No. 5).
1×12 in. (F.O. No. 4, F.O. No. 5 and ballast).
2×10 in. (Diesel and fuel oil No. 1).
1×10 in. (Premium gas).
1×10 in. (Regular gas).
1× 4 in. (TML).

Potable water and bunker oil are available at all berths.

A 4 in. sanitary sewer line is available at all berths and dry garbage can be left ashore (free of charge) in containers placed between Berth No. 2 and 3.

Product Jetty: (Berth 1)

Size	*Flange rating*	*Service*
6 in.	150 lb ASA	Prem. gas, reg. gas.
6 in.	„	Diesel, F.O. 1.
8 in.	„	F.O. 4, F.O. 5 Ballast.
8 in.	„	Sulphur.

Max. discharge rate at Crude Oil Jetty 18,000 cu.m. per hour. Max. pressure allowed 10 kilos. Max. loading rate at Product Jetty 1,500 cu.m. per hour. Max. pressure allowed 10 kilos.

Both Crude and Product Jetty have 4 in. 150 lbs sanitary sewer and 4 in. 150 lbs potable water connections available which may be used by running hose from ship.

All arms are hydraulically operated except those at the Coaster Jetty. No hoses are allowed for oil handling.

Ballast water can be discharged at Product and Coaster Jetties.

FUEL: Bunker "C" only is available at Crude Oil Jetty. Bunker "C" and diesel oil are available at Product Jetties and the Coaster Jetty.

FIRE PRECAUTIONS: A special Fire Instruction will be given on board on arrival.

POLLUTION: Oil pollution prevention. A special instruction will be given on board on arrival.

CONSULS: Denmark, Finland, Netherlands, Norway and Germany have consuls in Uddevalla, 40 km. from Scanraff.

REPAIRS: Uddevallavarvet and Skandiaverken. For hull and engine repairs, harbour and voyage service.

Pemco: For construction work, mechanical erection and repairs.

Andersson & Callenberg: For electrical installations.

Engine repairs must be reported to Port Captain for permission.

DRY DOCK: Gothenburg, capacity 250,000 tons.

SURVEYORS: Saybolt, Caleb Brett and other cargo inspectors are available.

Lloyd's Register, Det Norske Veritas and others surveyors are available.

GANGWAY/DECK WATCHMEN: The crude oil jetty has gangway tower, but accommodation ladder is necessary in the product harbour.

Watchman is compulsory at the Crude Oil Jetty. At the Product Jetty watchman is available on request.

CUSTOMS ALLOWANCES: 1 bottle spirit and 200 cigarettes or 200 grams tobacco.

REPATRIATION: Changing of crew and any necessary repatriation is possible.

AIRPORT: Nearest airport is Gothenburg, 100 km. South of Lysekil.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

POLICE/AMBULANCE: Dial 90 000 and ask for necessary service.

EMERGENCY CO-ORDINATION CENTRE: Skandinaviska Raffinaderi AB Scanraff. Tel: 0523-60460, Fire and Safety Department.

TELEPHONES: A telephone can be connected on board if ordered through Agent or jetty operator. Telephone numbers: Alarm Centre 90 000 (Ask for ambulance, police etc. Can be in action within 10 minutes); Safety tug-boat 608 33; Lysekil Pilot 608 00; Scanraff switchboard 604 60; Product berth No. 1: 608 76; Product berth No. 2: 602 41; Product berth No. 3: 602 34. A slot telephone is also available in the gate house.

SERVICES: Compass adjusting is available. Local ship chandler available.

BANK: Skandinaviska Enskilda Banken, Postbox 22. 453 00 Lysekil. Tel: 0523-14020. Telex: 21020 (Gothenburg Office).

STORING: See "Prelims" page viii.

1. Vessel can be stored by barge.
2. Vessel can be stored by barge during loading/discharging operation if ship's crane abaft the funnel can be used. Storing amidships can be permitted but not during loading/discharging operation.
3. No trucks are allowed to handle stores. Minor storing can be done by means of wagon from the gate to the jetty and via the ship's gangway.
4. Fork lift trucks are not allowed to be used on the jetty to handle stores.
6. Local riggers are employed by the local ship's chandler to assist with storing.

SHORE LEAVE: Crew members are allowed ashore. No identification card or passes are needed.

REGULATIONS: The Harbour Regulations will be placed on board on arrival.

GENERAL: At the Crude Oil Jetty there is a refuse container to be lifted on board by means of the ship's gear. At the Product Jetty are 2 containers, which will remain ashore. These containers are free of charge to the ships.

AUTHORITY: Skandinaviska Raffinaderi AB, Scanraff, Box 10004, S-453 00 Lysekil. *Tel:* 0523-60460. *Telex:* 42135 Scanraff S. *Contact:* Harbour Master.

GAVLE: 60.41 N. 17.11 E. (See Plan Book)

PORT LIMITS: A line from Utvalnas (approx. 60° 45.2′ N. 17° 21.4′ E.) over Bakharen to Langharen (approx. 60° 41.0′ N. 17° 17.5′ E.).

DOCUMENTS:

4 Crew Lists (for European vessels).
2 Crew Lists (for other vessels).
2 Manifests.
2 Bills of Lading.
1 Tobacco List.
1 Stores List.

Following documents supplied by Agent and signed by Master:

On arrival from foreign port:
1 Maritime Declaration of Health.
4 Reports of Arrival (Customs).
1 Declaration of Master (of persons on board).
1 Declaration of living animals (if any).

On arrival from any port:
1 Report of Arrival (Harbour Office).
1 Report of Receivers (Harbour Office).
1 Cargo List (or Manifest).
1 Transfer.

On departure to foreign port:
4 Reports of Departure.
1 Declaration of Master (of persons on board).

On departure to any port:
1 Report of Shippers (Harbour Office).
1 Declaration by foreign Master.

PILOTAGE: *(a)* Sea Pilots: Pilot station: Bonan, Telephone Nos. 991 10 and 992 20. Telegraphic address: Pilotstation, Gavle. 5 hours advance notice of ETA pilot station. Notice of ETA can be given over any Swedish coastal radio station or free of charge on VHF over any Swedish pilot station or Grundkallen lighthouse.

VHF: Channels 16: Calling and Safety } Pilot station and
13: Pilotage traffic } Pilot boats.

All pilot boats are orange. International signals for calling pilot. Pilot boards: S.E. of Grasjalsbadan 60° 43′ N., 17° 27′ E., and on request South of Eggegrund Lighthouse, 60° 43′ N., 17° 34′ E. In case of bad weather closer to pilot station. Anchorages: Graberget roadstead N.E. of Bonan Lighthouse (approx. 60° 44.8′ N. 17° 20.5′ E.), about 350 m. from shore and 18 – 21 m. (10 – 13 fathoms) deep. Open to Easterly winds.

(b) Harbour Pilots: Available for moving within harbour area on application to Port Administration, Telephone Nos. 17 88 61 or 17 88 62 or by VHF to Gavle Port Radio, Channels 16, 14 and 13.

ANCHORAGES: See "Pilotage". Outer roadstead situated inside of Northern entrance and in red sector of Fredriksskans light. Outer roadstead well protected, depth of 15 – 11 metres (8 – 6 fathoms). Anchoring forbidden:

(a) In dredged channel between lights in Northern channel and to a point 800 m. W.S.W. of Light No. 4.

(b) In white sector of Fredriksskans light E.N.E. within a distance of 2,000 m. from same.

(c) In navigable channel from Fredriksskans Light to Gavle Dolphin Light.

(d) In Fredriksskans Harbour basins.

(e) In Gavle River from Berth No. 18 to Berth No. 10.

RESTRICTIONS: Two fairways lead to harbour. Northern fairway is 11.0 m. deep and has bottom width of 60 m. Day-time: Max. LOA 220 m. Max. breadth 28.0 m. Max. draft 10.5 m. or max. breadth 30 m. Max. draft 9.0 m. Night-time: max. draft 7.45 m.; max. length 172 m. Southern fairway (daylight only) permits draft of 3 m. All depths are referred to mean water level. Ships on way from outer roadstead or passing from Fredriksskans Harbour to Inner Harbour shall give way to vessels proceeding in opposite direction. This shall not apply to vessels with tow unless vessel approaching also has tow.

MAX. SIZE: Max. permissible draft (at mean water) as follows:

Fredriksskans Harbour

	Max. Draft *m.*	*ft. in.*	*Real depth* *m.*	*Allowance* *m.*
Oil Berth No. 21	10.5	34 05	10.9	0.4
Max. length 220 m. (722 ft.)				
Oil Berth No. 1	7.45	24 05	7.8	0.35
Max. length 200 m. (656 ft.)				
Oil Berth No. 2 – 3	5.3	17 05	5.5	0.2
Berth No. 4 – 8	7.45	24 05	7.8	0.35
Berth No. 9 – 14	9.0	29 06	9.4	0.4
Ferry Terminal (Ro/Ro)	6.4	21 00	6.6	0.2
Inner Harbour (River Gavle and Nyhamn)				
Berth No. 25 – 38	4.7	15 05	5.0	0.3
Berth No. 8 – 23			4.85	0.15
Karskar				
Berth No. 105 – 106	6.6	21 08	6.9	0.3
Length 195 m. (640 ft.)				
Berth No. 107 – 108	7.9	25 11	8.2	0.3
Length 196 m. (640 ft.)				
Berth No. 109	4.7	15 05	4.9	0.2
Length 90 m. (295 ft.)				
Berth No. 110, South end.	4.7	15 05	4.9	0.2
Length 35 m. (115 ft.)				
Berth No. 110, North end.	6.1	20 00	6.4	0.3
Length 75 m. (246 ft.)				

Terminal Granudden: See "Cargo Handling".

HEALTH: Pratique always automatic. If any suspected disease or fever on board, notify ship's Agent.

TUGS: Join vessel outside Fredriksskans Lighthouse or outside Korsnas Works for berthing, and outside Northern entrance channel for passage through same. Ship's lines always used.

CARGO HANDLING: Container berth, max. draft 9 m. Three cranes with 30 ton capacity, two of which have automatic container spreaders for 20 ft. containers.

Roll-on/Roll-off berth, max. draft 4.7 m.

Terminal Granudden: A new port terminal at Granudden which is situated opposite Fredriksskans Harbour. The terminal comprises 350 m. of quay with a Roll-on/Roll-off berth, having max. draft for vessels: 9.0 m. for length of 150 m. adjacent to Roll-on/Roll-off ramp and 10.5 m. for length of 200 m., 2 warehouses each having an area of 22,000 sq.m., as well as extensive storage space. The total terminal area is 150,000 sq.m. and it will have an annual maximum capacity of 1.2 million tons forest products. The terminal has very good connections with both main roads and the railway system.

STEVEDORES: 24 hours' notice (if possible) order arrange gangs.

MEDICAL: Notice of medical attention to Agent as early as possible. All kinds of medical and hospital facilities available. Vaccinations necessary on arrival from diseased area. (Common for all Swedish ports.) Quarantine Station established at Gavle with Quarantine Anchorage on outer roadstead.

TANKERS: *Tanker Berth No. 21:*

Max. length 220 m. (722 ft.). Max. draft (M.W.) 10.5 m. (34 ft. 5 in.).

Manifold connection size (all grades) 200 mm. (8 in.).

Berth to Depot pipe-line size:

	mm.	in.
Heavy Fuel Oils	450	18
Gas Oil	400	16
Gasoline	350	14
Kerosene	250	10

Tanker Berth No. 1:

Max. length 200 m. (656 ft.). Max. draft (M.W.) 7.45 m. (24 ft. 5 in.).

Manifold connection size:

	mm.	in.
Fuel Oils	250	10
Gasoline	200	8
Kerosene	200	8

Berth to Depot pipe-line sizes:

	mm.	in.
Fuel Oils	350	14
Gasoline	300	12
Kerosene	250	10

Tanker Berth No. 2 and 3:

Max. length 125 m. (407 ft.). Max. draft (M.W.) 5.3 m. (17 ft. 5 in.).

Manifold connection size (all grades) 150 mm. (6 in.).

Berth to Depot pipe-line sizes (all grades) 150 mm. (6 in.).

Tanker Berth No. 105-106:

Max. length 195 m. (640 ft.). Max. draft (M.W.) 6.6 m. (21 ft. 8 in.).

Manifold connection size (all grades) 200 mm. (8 in.).

Berth to Depot pipe-line (all grades) 250 mm. (10 in.).

Tanker Berth 107-108:

Max. length 195 m. (640 ft.). Max. draft (M.W.) 7.9 m. (25 ft. 11 in.).

Manifold connection size (all grades) 200 mm. (8 in.).

Berth to depot pipe-line (all grades) 250 mm. (10 in.).

New Tanker Quay K201:

Max. length 220 m. (722 ft.). Max. draft 10.5 m. (34 ft. 5 in.).

Owned by Krangede A.B.

RADIO: Harnosand Radio (SAH).

RADAR/VHF: No port radar service, but Bonan Pilot Station, Eggegrund Lighthouse, and three pilot cutters equipped with both radar and VHF and assist any ship approaching pilot station on request. After calling pilot station on VHF Channel 16, ships will be given assistance on Channel 13, 12, or 6.

Also see "Pilotage."

DENSITY: Fresh water.

FRESH WATER: Delivered from water posts at all quays in Fredriksskans Harbour. Inner Harbour, at Korsnas Works and on roads fresh water delivered by water boat.

FUEL: All kinds of fuel oils available either from pipe-lines at oil berths or by lorries at all other quays. Following viscosities (Redwood I) normally in stock: 35, 225, 650, 1500, and 3500 secs. Other viscosities can also be delivered. Notice of delivery is required day before.

GANGWAY/DECK WATCHMEN: Available, but not compulsory.

OPENING/CLOSING HATCHES: Can be done by either crew or stevedores. Only patent hatches have to be opened by crew.

CERTIFICATES:

Tonnage Certificate.
Derat Certificate (Not older than 6 months).
Certificate of Nationality (for Swedish ships only).

CUSTOMS ALLOWANCES: Tobacco: each crew member 200 cigarettes or 100 grammes of tobacco out of Bond.

Wine and spirit: Each crew member 1 bottle (75 centilitres) of spirit and moderate quantities of wine and beer out of bond. After a week in Sweden the same quantity may be taken out on request to Customs Office.

IDENTIFICATION CARDS: Not needed.

CONSULS:

Denmark	Tel: 115050	Netherlands	Tel: 105200
Finland	Tel: 121204	Norway	Tel: 188180

REPAIRS: Repairs can be carried out in all parts of harbour by Granges Metalock AB.

DRY DOCKS: None.

REPATRIATION: Crew changes and repatriation arranged by Agent.

AIRPORT: Stockholm Airport (Arlanda) 145 km. (90 miles) served by regular airlines. Rorberg airport 16 km. (10 miles). Regular traffic to Swedish airports.

TIME: GMT plus 1 hour in Winter. Summertime GMT plus 2 hours.

HOLIDAYS: New Year's Day (Jan. 1st); Twelfth Day (Jan. 6th); Good Friday; Easter Day; Easter Monday; First May (May 1st); Whit Sunday; Whit Monday; Midsummer Day (Saturday nearest to June 24th); All Saints' Day (first Saturday in Nov.); Christmas Day (Dec. 25th); Boxing Day (Dec. 26th).

POLICE/AMBULANCE/FIRE: Police Tel: 11 53 00; Ambulance Tel: 12 90 90; Fire Tel: 12 90 90. Emergency Tel: 90 000.

TELEPHONES: Fredriksskans and Inner Harbour: Telephones can be placed on board at all berths in Fredriksskans Harbour and at three berths in Inner Harbour. At Korsnas Works: Telephones can be placed on board at two berths in Karskar and one at Kastet Pier.

SERVICES: Minor quantities of oil and other liquid residues can be discharged into tank lorries with special suction equipment.

DELAYS: Normally no delays in berthing, loading, discharging or bunkering.

DEVELOPMENTS: New shipping terminal for coal and coke where discharging capacity will be very high.

AUTHORITY: Gavle Hamn, Hamntorget 4, 80350 Gavle, Sweden. Tel: 178840. *Telex:* 47349. *Contact:* B. Walfridson, Port Director. (A.O.H. Tel:193369). M. Berglund, Port Captain (A.O.H. Tel: 128482).

GOTHENBURG: 57.42 N. 11.57 E. (See Plan Book)

DOCUMENTS:

2 Cargo Declarations (IMO model).
3 Crew Lists.
2 Passenger Lists.
2 Crew Declarations (must be signed by each crew member).
2 Stores List.
1 Health Document.
Nationality Certificate.
Tonnage Certificate.
Derat Certificate.
Certificate of Insurance or other financial security in respect of civil liability for oil pollution damage (if more than 2,000 tons of oil on board).
Manifests, Bills of Lading.

TRAFFIC CONTROL SYSTEM: The Port of Gothenburg has in co-operation with the National Swedish Administration of Shipping and Navigation established a traffic control system. It is a vessel movement control and information system managed from the Gothenburg Traffic Control Centre (TCC), call sign "Gothenburg Traffic". The system is based on radar control and VHF communication. Vessels over 300 g.r.t. or exceeding 50 m. length should report to the TCC on VHF Channel 13 incoming when 6 miles off Vinga Island, out-going when leaving the berth. There are also certain way-points in the area (marked on the charts) where vessels should report to the TCC. Vessels should keep continuous watch on VHF Channel 13 within the whole traffic-control area. A special "Master's Guide to Gothenburg Port Entry" issued by the Gothenburg Port Authority can be obtained from the Port Authority or from ship's Agent.

PILOTAGE: Incoming vessels have to notify the Traffic Control Centre (TCC) call sign "Gothenburg Traffic" on VHF Channel 13 or by telephone 031-12 54 33 that they require a Pilot. Notification to be done 3 hours before ETA at the pilot grounds at Vinga Island, where the pilot boat will be at hand. The pilot grounds are marked on the charts. Approved pilot ladder (if rail is high, accommodation ladder), heaving line and a man standing by to receive Pilot (Also see "Stockholm").

ANCHORAGES: Anchorages "A", "B" and "C" marked on the charts in the area round Trubaduren light, at Rivo Fjord and Dana Fjord. VLCCs should anchor in Area "A", 2 miles S.W. of Trubaduren light.

MAX. SIZE: Torshamnen, water depth 19.6 m. Fully loaded tankers of 225,000 d.w.t. on draft of 19.05 m. received. Partly loaded tankers of max. 380,000 d.w.t. have been received. Skarvik Harbour, water depth 13 m. Tankers up to 50,000 d.w.t. Skandia Harbour, general cargo, container vessels, water depth up to 12 m. General cargo harbours: for other cargo and passenger vessels 10 m. Water depth at MWL. Tide of no importance.

HEALTH: The Master of every ship, whose voyage has touched lands outside Europe (excepting U.S.A., Canada, Azores, Canaries, Madeira and Morocco), and who, within 28 days, arrives at Gothenburg from a port in any such land, shall submit to Customs on demand a Declaration of Health for the ship in the prescribed form. If ship arrives within 14 days of calling at any such port she must not touch land until inspected by the Quarantine Medical Officer and permission to land granted. Compulsory medical examination not required where a ship liable to inspection has undergone an approved Quarantine Inspection in either a Danish, a Norwegian or a Finnish port, and all questions in the Declaration of Health have been answered negatively. Exemption may also be granted to any other ship which would otherwise be liable for examination, if Master, pursuant to Article 21 of Quarantine Regulations for Sweden, has previously radioed all information regarding state of health on board to Health Authorities (Radio Pratique). Telegraphic address: "Portsan, Gothenburg". Messages must be made not less than 4 hours prior to ETA. (Preferably, messages should not be made during night). Free Pratique messages should include: Name of the ship; estimated time and day of arrival; number of crew; number of passengers; names of the last two ports called at outside Europe, and dates of departure therefrom; replies to the 6 questions contained in Declaration of Health.

RADIO: Goteborgs Radio, call sign SAG.

VHF: Pilot vessel on Channels 13 and 69.

TUGS: Tugs normally join vessel between the islands of Nya Alvsborg and Rya Nabbe. Tugs join at Dana Fiord for tankers bound for Torshamnen. According to Master's desire ship's or tug's lines can be used. Charge for tug's lines SKR 380 per tug; ships over 75,000 d.w.t. SKR 950 per tug.

BERTHING: No restrictions at any time of day and night. VLCCs berth and unberth in daylight only.

STEVEDORES: Goteborgs Hamn provides dock workers.

General Conditions for Assignment of Personnel (excluding external terminals):

Working time and guaranteed hours. (Gothenburg Stevedoring Co. supplement to the general terminal conditions of the Swedish Stevedoring Association).

1. *Normal Working Hours*	Inner Harbour	Skandia Harbour
	Monday-Friday	Monday-Friday
Day time	7 a.m. – 4 p.m.	7 a.m. – 4 p.m.
Shift I		6.30 a.m. – 4 p.m.
Shift II		4 p.m. – 12 midnight
Overtime:	4.30 p.m. – 5 a.m.	4.30 p.m. – 5 a.m.
Please note that all	Saturday	Saturday
overtime work is voluntary.	7 a.m. – 10 p.m.	7 a.m. – 10 p.m.
		Crane work
		7 a.m. – 4 p.m.
	Sunday/Holiday	Sunday/Holiday
	7 a.m. – 10 p.m.	7 a.m. – 10 p.m.
Completion:	Monday-Friday	Monday-Friday
	4.30 p.m. – 5 a.m.	4.30 p.m. – 5 a.m.
	Saturday	Saturday
	7 a.m. – 5 a.m.	7 a.m. – 5 a.m.
	Sunday/Holiday	Sunday/Holiday
	7 a.m. – 10 p.m.	7 a.m. – 10 p.m.

2. *Normally no work will be performed on the following days:* New Year's Day, May 1st, Midsummer Eve, Midsummer Day, Christmas Day, New Year's Eve.

3. *Guaranteed Hours:* Extra labour is guaranteed a minimum of four hours pay.

Overtime:	
Monday-Friday	3 hours
Saturday	5 hours
Sunday/Holiday	6 hours

Guaranteed hours are always to be paid in full. Ordinary labour is entitled to special compensation for work later than 9 p.m. Monday – Friday.

4. *Ordering times for assignment of resources:*

Inner Harbour and Skandia Harbour:	Weekdays latest 10 a.m. on the day before operation. Cancellation latest 12 noon on the day before operation.
Overtime:	Weekdays latest 10 a.m. on the same day. Cancellation latest 12 noon on the same day. Saturday/Sunday latest 10 a.m. on Thursday. Cancellation latest 9 a.m. on Friday. Holiday latest 10 a.m. on the day before the last working day before the holiday. Cancellation latest 9 a.m. on the last working day before the holiday.

5. The working hours are counted for each extra hour or part of that hour.

6. The above regulations are not valid in case of "force majeure" such as strikes, lock-outs, natural catastrophies, or any other unforeseeable incidents of which the Stevedoring Co. could have no control.

7. These regulations are valid until further notice. They can, however, be changed with immediate effect when/if some other agreement is made with labour unions concerned.

CONTAINERS: The Skandia Harbour for container handling with 4 terminals including 20 berths and 13 ferry ramps. Depths up to 39 ft. 04 in. (12 m.). Container cranes 30 ton – 60 ton.

BRIDGES: Alvsborgsbron (suspension bridge) in the Western part of the city (clearance 45 m.), Gotaalvbron (weighbridge) in the centre of the city (clearance 19.5 m.) and Marieholmsbron (railway bridge) in the Eastern part of the city (clearance 5.3 m). The bridges Gotaalvbron and Marieholmsbron keep continuous watch on VHF Channel 9. If no connection, contact "Gothenburg Traffic" on VHF Channel 13.

TANKERS:

Torshamnen:

		Berth No. 801	*Berth No. 800*
Operator		Gothenburg Harbour	
Users		BP, Shell and various	
Product		Crude Oil	
Minimum water depth at mean water	approaches	20.50 m.	20.50 m.
	alongside	19.60 m.	19.60 m.
Under keel clearance	approaches	1.45 m.	1.45 m.
	alongside	0.55 m.	0.55 m.
Dimensions safely acceptable (also see below)	length	335 m.	280 m.
	beam	no restr.	no restr.
	draft	19.05 m.	19.05 m.
	d.w.t. (summer)	abt. 250,000	abt. 115,000
Water density		1.013	1.013
Nature of bottom		clay	clay
Boom arrangement		4×16 in.	4×12 in.
Manifold heights	maximum	22.00 m.	17.00 m.
	minimum	3.00 m.	1.50 m.
Public telephone number		31632446	31632445

Draft: That the above figure, 19.05 m., is given on the basis of mean water level and brackish water (density 1.013). There is very little tide at Gothenburg, only about 20 cm. (8 in.). The draft is more affected by wind, Easterly winds blowing the water away from the coast, Westerly winds blowing the water towards the coast. In winter and early spring (January-May) there can be long periods of Easterly wind, when it would be prudent not to arrive on a deeper draft than 18.60 m./brackish water.

Lightering: In case of need lightering can be arranged 3 nautical miles S.W. of the Trubadur Lighthouse. This is in open sea and restricted to wind force less than 6 – 7 m./s.

For crude oil distribution to other refineries lightering can take place across the finger jetty from Berth No. 801 to Berth No. 800.

Gas lightering is being done via 8 in. acid proof steel pipe-line across jetty. Flanges drilled to ASA 150 and 300. No hoses available, vessels have to provide same.

Ballast: Cannot be received ashore.

Dimensions: The harbour is prepared to accept vessels exceeding 335 m. length provided distance from bow to manifold is max. 180 m. and vessels' draft does not exceed 18.29 m. (60 ft.), brackish water. Special approval needed in each case.

Bunkers: Supplied by barge only.

Moorings: Berth 801 – VLCCs: Owing to the somewhat exposed nature of berth Masters are advised, that when strong off-shore winds are forecast, to ballast the vessel, stop discharge if necessary and, maintain steam on the winches to supplement the brakes. It is strongly recommended that vessels over 210,000 s.d.w.t. make use of the extra mooring as described below.

Instructions for the use of extra mooring (E.M.):

1. Pass ashore a wire and a shackle and make fast to the eye of the E.M. on the caisson. Free the E.M. from its hook by means of the capstan on the caisson. Bring home the E.M. and belay it.
2. At departure. Before letting go the E.M. make fast a strong rope or a wire in the eye of the E.M. and take the other end to the caisson for hanging off the E.M. Let go the E.M. and, by means of the capstan, back to the caisson and place it on its hook, heave it.

Skarvik Harbour:

		Berth No. 521	*Berth No. 520*	*Berth No. 519*
Operator		Gothenburg Harbour		
Users		BP	BP	Shell & various
Products handled		Oil Products		
Minimum water depth at mean water	approaches	13.00 m.	13.00 m.	13.00 m.
	alongside	11.90 m.	11.90 m.	13.00 m.
Under keel clearance	approaches	1.72 m.	1.72 m.	0.66 m.
	alongside	0.52 m.	0.62 m.	0.66 m.
Dimensions safely acceptable	length	240 m.	240 m.	280 m.
	beam	no restrictions		
	draft	11.28 m.	11.28 m.	12.34 m.
Water density		1.011	1.011	1.011
Nature of bottom		clay	clay	clay
Boom arrangement		4×10 in. 3× 8 in.	4×10 in. 3× 8 in.	5×12 in. 2×10 in.
Manifold height	maximum	14.00 m.	14.00 m.	19.00 m.
	minimum	1.50 m.	1.50 m.	2.00 m.
Public telephone number		31632444	31632443	31632442

		Berth No. 512-518	*Berth No. 511*	*Berth No. 510*
Operator		Gothenburg Harbour		
Users		Various	Various	Various
Minimum water depth at mean water	approaches	11.90 m.	11.90 m.	11.90 m.
	alongside	7.00 m.	11.90 m.	11.90 m.
Under keel clearance	approaches	5.20 m.	0.62 m.	0.62 m.
	alongside	0.30 m.	0.62 m.	0.62 m.
Dimensions safely acceptable	length	7 berths total 325 m.	240 m.	240 m.
	beam	no restrictions		
	draft	6.65 m.	11.35 m.	11.28 m.
Water density		1.011	1.011	1.011
Nature of bottom		clay	clay	clay
Boom arrangement		hoses	9×10 in.	9×10 in.
Public telephone number			31632436	31632435

Remarks:

520-521: Only used for loading from or discharging to BP.

519: Mainly used by Shell and for discharge of asphalt crude. Being deepest product berth can in case of need also be used by other importers/exporters after approval by Shell. However, products will then have to be pumped over long distances, causing slow loading/discharge.

510-511: "Common users".

Rya Harbour:		*Berth No. 555*	*Berth No. 553/552/551*
Operator		Esso	Gothenburg Harbour
Users		Esso	Various
Products handled		Oil Products	
			For all
Minimum water depth at mean water	approaches	11.90 m.	11.00 m.
	alongside	10.00 m.	10.00 m.
Under keel clearance	approaches	2.45 m.	2.45 m.
	alongside	0.55 m.	2.45 m.
Dimensions safely acceptable	length	180 m.	180 m.
		(See Note)	
	beam	no restrictions	
	draft	9.45 m.	9.45 m.
Water density		1.011	1.011
Nature of bottom		clay/mud	clay
Manifold height		hoses used	hoses used
Public telephone number		31538420	31632434/ 31632433/ 31632432

Note: Maximum draft:

On lesser draft sizes up to 210 m. – 215 m. may be accepted but special approval from the Harbour Authorities needed on each occasion.

DENSITY: Average density 1012. Tide of no importance.

FRESH WATER: Available from quay or water boats.

FUEL: All grades available at short notice.

GANGWAY/DECK WATCHMEN: Watchmen accepted by Harbour and Fire Authorities on tankers and vessels loaded with explosives. On other vessels not necessary.

OPENING/CLOSING HATCHES: By crew or stevedores.

CUSTOMS ALLOWANCES: Tobacco, per 10 days 200 cigarettes or 250 gram other tobaccos. Wine and/or Spirits, per 10 days 1 bottle of spirits and 1 litre of wine, alternatively 2 litres of wine.

Require report latest 24 hours prior to arrival via Port of Gothenburg Co.

CARGO GEAR: Certificates that equipment is approved.

IDENTIFICATION CARDS: Not necessary. Crew list to be furnished in the oil harbours.

CONSULS:

The following countries are represented in Gothenburg:

Argentina
Austria
Bangladesh
Belgium
Bolivia
Brazil
Costa Rica
Denmark
El Salvador
Finland
France
Fed. Rep. of Germany
Great Britain
Greece
Guatemala
Iceland
Ireland
Italy
Ivory Coast
Japan
Liberia
Mauritania
Monaco
Morocco
Mexico
Netherlands
Norway
Pakistan
Panama
Paraguay
Peru
Portugal
Senegal
South Africa
Spain
Switzerland
U.S.A.
U.S.S.R.
Venezuela
Yugoslavia

REPAIRS: All kinds of repairs possible.

DRY DOCKS: 2 dry docks, 6 floating docks with lifting capacities of up to 230,000 d.w.t.

REPATRIATION: Excellent communications by air or by rail.

AIRPORT: Distance of Landvetter Airport 20 km. – 30 km. depending on where ship is berthed. Airport served by regular airlines.

HOLIDAYS: See "Stevedores".

POLICE/AMBULANCE/FIRE: Tel. 90 000, ask for "Polislarm", "Ambulans", or "Brandlarm".

TELEPHONES: At all quays ships can be connected to telephone.

GENERAL: Seaman's Institute, Amerikagatan 2, open weekdays 1000 to 2130 hrs., Saturdays and Sundays 1400 – 2130 hrs.

SERVICES: Tank-cleaning equipment and facilities for discharge of tank-washings in the Skarvik Harbour. Compass adjusting.

SHIP SUPPLY SERVICE:

1. *Bunker Facilities* — *Telephone*
   ODAB (BP/SP) — 042-12 15 18
   Naftagatan 10
   252 27 Helsingborg

   Svenska Fina (BP/SP) — 042-12 02 15
   Oljehamnsleden 59
   252 27 Helsingborg

   Poltransport (Shell/Gulf) — 042-12 61 60
   Oljehamnsleden 58
   252 27 Helsingborg
2. *Ship Supplies*
   AB J Backes Skeppshandel — 042-11 15 04
   Mollegranden 4
   252 23 Helsingborg

   Lund & Pettersson AB — 042-11 00 29
   Hamntorget 1
   252 21 Helsingborg
3. *Tug/Launch/Salvage/Icebreaking Service*
   Helsingborg Towing Co — 042-10 63 00
   P.O.Box 1434 — 10 63 22
   251 14 Helsingborg — Telex: 722 15
4. *Helicopter Service*
   Euro Air Helicopter Service AB — 042-18 03 65
   Drottninggatan 72
   P.O.Box 1143
   251 11 Helsingborg
5. *Communication Centre*
   Helsingborg Port Control — 042-10 63 00
   VHF Call Channel 16 — 10 63 22 night
   Working Channel 11 — Telex: 722 15

DEVELOPMENTS: Ro/Ro ramp to be built at Skandia Harbour (Berth No. 643).

AUTHORITY: Port of Gothenburg, P.O.Box 2553, S-403 17 Gothenburg, Sweden. *Tel:* (031) 63 23 50. *Telex:* 20957 Scanprt S. *Contact:* Leif Carling, Public Relations Manager; Hans Lind, Deputy Harbour Master.

HALLSTAVIK: 60.03 N. 18.35 E. (See Plan Book)

DOCUMENTS: 4 Crew Lists; other documents see "Stockholm".

PILOTAGE: Svartklubben Pilot Station. VHF Channel 16 and others. Radar at station and in boats. 5 hours' notice prior to arrival. Tel: Hallstavik 0175/10006. Cable: "Pilotstation Hallstavik".

ANCHORAGES: Good and protected anchorage places available.

RESTRICTIONS: Tankers are navigated in daylight only.

MAX. SIZE: Draft not to exceed 23 ft.

HEALTH: No special action except for suspected disease. In case of disease contact Agent for information.

RADIO: Stockholm Radio.

TUGS: Normally available.

STEVEDORES: Loading effected by factory. Ordinary working hours 0630 – 1530, maximum 1 hour overtime. Saturdays no work.

MEDICAL: Medical attendance available day and night.

TANKERS: Max. draft 23 ft. Connection 6 in., pipe to quay-cisterns is about 1,000 m., discharging rate about 200 t.p.h.

DENSITY: Practically fresh water.

FRESH WATER: Available from quay; rate 1 t.p.h.

FUEL: Delivered by lorries from Stockholm.

CONSULS: At Stockholm, 100 km. away.

REPAIRS: Minor repairs only.

OPENING/CLOSING HATCHES: Ship's crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits.

CARGO GEAR: Loading by ship's gear.

AIRPORT: Stockholm Airport, Arlanda, 75 km. away.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Easter; Whitsuntide; Midsummer; Christmas and New Year's Day.

POLICE/AMBULANCE/FIRE: Alarm Tel: 90000.

GENERAL: *Shippers:* Holmens Bruk AB. Export about 300,000 tons of newsreel/year. Import about 130,000 tons of fuel oil. 2 ordinary loading quays and 1 Roll-on/Roll-off berth available.

Agency: Erik Clemedson AB. Cables: "Clemed". Telex: 17277.

AUTHORITY: Holmens Bruk AB, 76301 Hallstavik, Sweden. *Tel:* 0175-21000. *Telex:* 19259. *Cables:* Holmen. *Contact:* N. Magnusson, Harbour Master.

HALMSTAD: 56.40 N. 12.52 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Passenger Lists.
3 Stores Lists (Tobacco and Stores).
5 Manifests.
2 Bills of Lading and Ship's Papers.

PILOTAGE: Advance notice of ETA 5 hours before arrival. Pilot station and pilot boat equipped with VHF Channels 16, 13, 6. Pilot boards by lightbuoy Halmstad Road (L.Fl. 10 sec. 56° 37′ N., 12° 47.5′ E.) (Also see "Stockholm".)

ANCHORAGES: Good holding ground in 30 – 40 ft. on road 1 to 2 miles S.E. of breakwater.

MAX. SIZE: *Inner Harbour:* Length 700 ft., draft 30 ft.

Outer Harbour: Length 770 ft., draft 37 ft.

RADIO: Gothenburg Radio.

RADAR: Pilot station equipped with radar.

VHF: Port Authority on Channel 16, 13 and 9.

TUGS: Meet at Halmstad Road. Ship's lines used.

BERTHING:

Berth	*Length* (m.)	*Max. draft* (ft.)
Ostra kajen	300	30 ft.
Jarnverkskajen	220	27 ft. 6 in.
Ostra kajen	230	27 ft.
Importkajen	470	23 ft. 6 in.
Importkajen	270	22 ft.
Tullkammarkajen	400	18 ft.
Kattegattshamnen	285	27 ft. 6 in.

SPECIAL CARGO HANDLING FACILITIES:

Roll-on/Roll-off: Kattegattshamnen: 2 fixed ramps. 43 m. and 23 m. wide. Max. draft 27 ft. 6 in.

Ostra kajen: 1 fixed ramp. 25 m. wide. Max. draft 27 ft. 6 in.

Containers: Handled at Ostra kajen and Kattegattshamnen.

BULK HANDLING FACILITIES: A new harbour basin (Oceanhamnen) was opened in 1981. Alongside the berth ships with max. LOA 235 m. and max. draft 11.3 m. can be handled. A rail mounted bulk-unloader, screw type, can discharge bulk-cargoes at a capacity of 500 t.p.h. On the quay is a bulk-terminal operated by Nordic Bulk AB, Halmstad.

Bulk cargo can also be handled alongside the Importkajen and Jarnverkskajen with grab-equipped cranes.

CRANES: One mobile crane, 30 tons at 21 m.

MEDICAL: Hospital facilities available.

TANKERS: Max. draft at oil berth 30 ft. Max. LOA – 700 ft. Diameter of discharge lines 8 in. and 10 in.

DENSITY: Average 1005.

STEVEDORES: *Working Hours:* Monday – Friday 0700 – 1630 plus 3 hours' overtime. Saturday – Overtime 6 hours. Sundays – By special agreement.

FRESH WATER: Fresh water available from berth 35 t.p.h.

FUEL: Viscosities available: 1.2 englergrades/20°C. By arrangement ship's Agent.

GANGWAY/DECK WATCHMEN: Not necessary. Available if required.

OPENING/CLOSING HATCHES: Normally carried out by crew, but if carried out by stevedores cost charged to vessel.

SHIP CERTIFICATES: Bill of Measure, Nationality Certificate and Derat Certificate.

CUSTOMS ALLOWANCES: Tobacco/spirits, 1 bottle spirits, 1 bottle wine and 200 cigarettes free on board. Quantity over will be closed under Customs seal. No other restrictions.

IDENTIFICATION CARDS: Only needed in oil harbour.

CONSULS:
Danish, Dutch, Finnish, German and Norwegian.

REPAIRS: Shipyard carries out ship repairs.

DRY DOCKS: 2 slips.

REPATRIATION: Facilities exist for changing crew and repatriation.

AIRPORT: Halmstad Airport, 1 mile from town centre. 2 flights per day for Stockholm.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day; Twelfth Day; Good Friday; Easter Day; Easter Monday; Ascension Day; Whit Sunday; Whit Monday; Mid-Summer Day; All Saints' Day; Christmas Day; Christmas Monday, Labour Day.

POLICE/AMBULANCE/FIRE: Tel. 90 000.

TELEPHONE: For placing a telephone on board cost is 90 crs., and 40 crs. a day for hire.

SHORE LEAVE: Crew members allowed ashore.

GENERAL: *Charts:* BA 3671. Swedish Charts Nos. 92 and 923.

AUTHORITY: Halmstad Hamnforvaltning, P.O.Box 235, 30104 Halmstad, Sweden. *Tel:* 035-11 80 30. *Contact:* J. Benninger, Port Captain.

HARGSHAMN: 60.10 N. 18.29 E.

The port is situated in the Archipelago of Oregrund, about 130 km. North of Stockholm and about 110 km. South of Gavle. Only iron ore products are exported, and the port is managed by the shippers, SSAB Dannemora Gruvor. It is a natural and well sheltered harbour, suitable for vessels up to about 25,000 d.w.t., bigger vessels are loaded with limited cargoes.

DOCUMENTS: ETA is to be given 48 and 24 hours in advance by cable or phone to "Oreship Uppsala". On arrival a cargo plan is to be given to the Agent or foreman, stating quantity required and loading rotation of hatches, as well as estimated draft on sailing.

The Customs Officers require the following documents on arrival:
Tonnage Certificate (Certificate of Registry).
Certificate of Nationality.
Swedish Light Dues receipts for current year.
Crew List IMO FAL Form No. 5, 3 copies
Crew's effects declaration IMO FAL Form No. 3, 1 copy
Ship's stores declaration IMO FAL Form No. 4, 1 copy.

If the international IMO Forms are not available, similar Forms are accepted.

PILOTAGE: Pilotage compulsory for vessels over 1,600 g.r.t.

Pilot is embarked off Svartklubben lighthouse (60° 09′ N., 18° 52′ E.) and has to be ordered 5 hours before needed. Pilot can be ordered via the Agent or the Svartklubben Pilot Station, phone: Hallstavik (0175) 100 06. Cable: "Pilotstation Hallstavik" or by VHF at any of the Swedish pilot stations. Distance to Hargshamn is about 17 miles. For vessels arriving from ports in Gavle district, Pilot will board on request at Oregrund or North thereof, such request to be made as above.

RESTRICTIONS: Loaded vessels with draft over 23 ft. 6 in. at MWL are navigated in daylight and good visibility only.

MAX. SIZE: Max. draft allowed (at MWL in FW) 34 ft. (10.4 m.). Density of water: 1006. Max. length about 575 ft. (175 m.). Max. breadth about 80 ft. (24.4 m.). The breadth limitations may be increased in the case of ore-carriers with side tanks. Max. distance water level to hatch coamings about 33 ft. (10 m.).

TUGS: A tug of 1,200 h.p. is available from Hallstavik, and is normally used to assist vessels over 9,000 d.w.t. on departure only. A small tug of 230 h.p. is available at the port.

BERTHING: There is an ore quay about 90 m. in length and depth alongside of 36 ft. The loading conveyor moves along the quay over a distance of 85 m., therefore only the biggest vessels have to shift during loading. Loading capacity 650 – 800 t.p.h. Stowage factor of the ore 17 – 18 cu.ft./ton and concentrate about 13 – 14 cu.ft./ton.

STEVEDORES: Work is effected in 2 shifts: 0600 – 2200 hrs., Saturdays and days before holidays 0600 – 1200 hrs. Work on night shift and on Sundays/holidays can be arranged on request. However, on the following holidays work cannot be arranged: New Year's Day, Good Friday, Easter Eve, Easter Sunday, 1st May, Whitsun Eve, Whit Sunday, Midsummer holidays (last Friday/Sunday in June), All Saint's Day (1st Saturday in November), Christmas Eve, Christmas Day, New Year's Eve.

FRESH WATER: Available.

CUSTOMS ALLOWANCES: 200 cigarettes per man and 1 bottle of spirits per Officer.

EMERGENCY CO-ORDINATION CENTRE: Stockholm Radio.

STORING: Can be effected with some minor difficulties.

SURVEYORS: From Stockholm (130 km. away).

ICE: The port can be kept open all Winter by an ice-breaking tug. Normally there is ice from the last week of December until the last week of March/first week of April. In port and the entrance there is fast ice up to 1.5 – 2 ft. Navigation is maintained in a broken ice-channel. At the pilot station or in the Aland Sea there is very seldom packed ice or other difficulties during a normal Winter.

AUTHORITY: SSAB Dannemora Gruvor, S-740 73 Hargshamn, Sweden. *Tel:* 0173-20192. *Telex:* 76042. *Cables:* Gruvkontoret Dannemora. *Contact:* R. Soderqvist, Harbour Master.

AGENT: Bjorsbo Shipping HB, S-740 73 Hargshamn. Tel: Osthammar 0173-200 80. Telex: 76042. Telegrams: Oreship Uppsala.

HARNOSAND (Hernosand): 62.38 N. 17.57 E.

DOCUMENTS:
2 Crew Lists and/or 2 Passenger Lists (stating what tobacco, cigarettes or spirits each man has in their possession).
Derat Certificate.
Manifest and/or Bills of Lading.
Register, and if vessels have previously been in Sweden same year, bills for light dues paid.

PILOTAGE: Applications for licensed Pilots should be made at least 5 hours before arrival. When making application, specify name of vessel, tonnage, draft and destination. Also give estimated time for taking Pilot on board and route. If this procedure not followed, the Maritime Service cannot guarantee to supply a Pilot without considerable delay to vessel.

Preferable to make application by telephone or by radio via a coastal station or by some other method direct to pilot station. Also possible to request Pilot by VHF.

Pilot station at Spikarna/Sundsvall for Northbound vessels and Skagsudde/Ornskoldsvik for Southbound vessels.

ANCHORAGES: In port approaches in depth of 15 m. to 40 m.

RESTRICTIONS: During Winter assistance given by State Ice-breakers.

MAX. SIZE: Up to 32 ft. 5 in. draft. Also see "Tankers".

RADIO: Cable Agents to give ETA, draft and cash required via either Hernosand Radio SAH or Stockholm Radio SDJ.

HEALTH: Vessels arriving from ports outside Europe must, for inward clearance, provide Customs Officer with written declaration of freedom from infection. Further instructions will be issued by Customs Office when such a declaration cannot be given.

TUGS: Tug assistance is available.

BERTHING: Depth alongside main quays from 7 m. to 8 m.

TANKERS: *Municipal Oil Pier:* Max. LOA 200 m. Max. draft 10.0 m. Depth alongside 10.5 m. Max. d.w.t. 30,000. Vessels berth starboard side alongside. Tugs available but not required. Offshore anchor used.

DENSITY: Nearly fresh water.

FRESH WATER: Available from the quays or by barge.

FUEL: Can be supplied.

GANGWAY/DECK WATCHMEN: Gangway watchmen available.

OPENING/CLOSING HATCHES: Normally done by crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 75 centilitres spirits per man/week. Extra granted on request.

CERTIFICATES: See "Stockholm".

IDENTIFICATION CARDS: Not necessary.

REPAIRS: Most repairs possible.

DRY DOCK: At Gustavsvik.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day; Epiphany; Good Friday; Easter Monday; Labour Day; Ascension Day; Whit Monday; Midsummer Day; All Saints' Day; Christmas Day; Second Christmas Day.

Work ceases at 1130 hrs. on the following eves of holidays and is voluntary and paid with 100 per cent overtime: Easter Eve; Whitsun Eve; Midsummer's Eve; Christmas Eve and New Year's Eve.

POLICE/AMBULANCE/FIRE: Telephone numbers: Accidents, Police, 90000; Fire: ask for alarm 90000.

AUTHORITY: Harnosands Hamn, P.O.Box 200, 87101 Harnosand, Sweden. *Tel:* (0611) 12119, 12010. *Telex:* 71020. *Cables:* Ramstrom. *Contact:* Harbour Master.

HELSINGBORG: 56.03 N. 12.41 E. (See Plan Book)

DOCUMENTS: See "Stockholm".

PILOTAGE: Call Pilot on the VHF Channel 16 (Tel: 042-110035). Pilots board about 0.5 nautical miles off jetty of Helsingborg Northern Harbour. Good anchorage within area of about 0.5 nautical miles off jetty.

Pilot's Report: April 1982.

Pilotage: Call Pilot on VHF Channel 16. Pilots board about 3 nautical miles North or South of Helsingborg North Harbour. On request Pilot will meet at Svinbadan Lighthouse or at Oresund North Lightbuoy, outside Hoganas. Helsingborg Pilots are also Seapilot for the Sound, Kattegatt, Baltic and North Sea.

Anchorages: It is not recommended to anchor outside Helsingborg due to the heavy ferry traffic.

Good anchorage is found at Raa Roads, about 0.5 nautical miles S.W. from Raa Lighthouse (3 nautical miles South from Helsingborg).

Pilots: 24-hour service. Channel 16, 14 and 13 (VHF relay station on Kullen Lighthouse).

APPROACHES: The harbour basins are very easy to approach. The deep water outside breakwaters – varying from 10 m. to 30 m. (33 ft. - 98.5 ft.) – adjacent to the sailing route in the Sound facilitates port calls. Normally comparatively large ships can proceed directly to the quays without tug assistance.

ANCHORAGES: See "Pilotage".

MAX. SIZE: Permissible length about 220 m.; breadth unlimited; draft 13.0 m. on MLW. No tides but certain variations following prevailing winds.

Tankers: Max. draft 10.5 m.

HEALTH: Pratique automatic for all vessels arriving from non-infected ports. In cases where Pratique should be obtained, notice to be given through ship's Agent. Further directions given by Pilot.

RADIO: For communication – Goteborgs Radio.

VHF: 24 hour watch on Channel 16. Call sign "Helsingborg Harbour", working Channels 11 and 12. Ships to contact the harbour 1 hour before arrival and 1 to 0.5 hour before departure.

Pilots: Channel 16, working Channels 13, 14 and 69.

Tugboats: Working Channels 11, 12 and 69.

TUGS: Join vessel outside entrances. Vessel's lines used.

3 tugs available, up to 2,640 h.p.

BERTHING:

	Berth No.	*Length (m.)*	*Depth (m.)*	*Quay Cranes/ Ro-Ro Ramps*	*No.*	*Lifting Capacity (tonnes)*	*Remarks*	*Floor Area or Volume*
Port Basin 1								
South Quay	101	76	4					
West Quay	102 – 111	662	5					
North Quay	112	92	5					
East Quay	113 – 119	528	6					
	(115)						Silo (Skanska Lantmannen) Silo (Skanska Lantmannen)	5,600 cu.m. 7,600 cu.m.
	(117)						Silo (AB Carl Engstrom) Silo (AB Carl Engstrom)	3,850 cu.m. 2,770 cu.m.
Train and car ferry berths	119 – 121	300	5	Ro-Ro	3			
Port Basin 2								
Central Harbour and Inner Harbour								
Central North Quay (Copenhagen Quay)	201	85	5					
Transverse Quay	202	31	5					
Inner North Quay	203 – 204	115	3 – 5					
East Quay (Kungstrappan)	205	92	2					
Car Ferry Berths	206 – 208	257	5 – 6	Ro-Ro	2			
Ocean Transverse Quay	312	130	7.3					
Port Basin 3								
North Quay	301	123	6					
East Quay	302 – 303	132	6					
	304 – 305	134	4.5					
Equipment Quay at Dry Dock 1	306	117	5					
Equipment Quay at Dry Dock 2	307	170	5	Level luffing jib crane	1	40 10		
				Level luffing jib crane	1	5 2		
West Quay	308	100	4.5	Ro-Ro	1			
	309 – 311	215	7	Level luffing jib cranes 6 – 7	2	3 2.5		
Port Basin 4								
Ocean Terminal								
East Quay	401 – 404 (401 – 402)	265	10	Level Luffing jib crane 8	1	3 2.5		
				Level luffing jib cranes 31 – 33	3	3 5	Refrigerated stores	3,315 sq.m.
	(403 – 405)			Level luffiing jib cranes 29 – 30	2	6 10.5		
	405 – 407	235	8					
	(405 – 406)			Level luffing jib cranes 20 – 23	4	2 5 3		
Sundsterminalen								
South Quay	408							
West Quay	409	98	8					
Berth 1	410	130	7.5	Ro-Ro	1			
Berth 2	411	130	8.5	Ro-Ro	1			
Port Basin 5								
Tanker Terminal								
Breakwater Quay	501 – 502	300	11					
West Oil Berth	503	240	11	Hose lifter 1				
East Oil Berth	504	240	11	Hose lifter 1				
North Oil Quay							Receiving Station for waste oil	270 cu.m.
Oil Storage Area							Storage tanks	482,339 cu.m.
Jet Fuel Depot	(504)						Storage tanks	15,000 cu.m.
Port Basin 6								
Coast Tanker Berth	505	220	8					
South Quay	601 – 602	180	10.5	Level luffing jib cranes 25 – 27	3	6 10.5		
	(601)						Silo (Skanska Lantmannen) Silo (Skanska Lantmannen)	12,800 cu.m. 41,000 cu.m.
	(605)						Silo (Skanska Lantmannen)	19,200 cu.m.
	603 – 605	270	10.5	Multi-purpose cranes	2 2	15 30		
				Level luffing jib crane 28	1	6 10.5		
				Level luffing jib cranes 9 and 13	2	3 2.5		

	Berth No.	Length (m.)	Depth (m.)	Quay Cranes/ Ro-Ro Ramps	No.	Lifting Capacity (tonnes)	Remarks
Port Basin 7							
Industrial Harbour							
Dry Bulk Quay	700 – 703	300	8	Level luffing jib cranes 18 – 19	2	6	
Skane Container Terminal	704 – 705	180	8	Container crane	1		
	706 – 709	360	11.5	on spreader		30.5	
				on hook		45	
				Container crane	1		
				on spreader		30.5	
				on hook		42	
				Ro-Ro	2		
Port Basin 8							
Copper Works Harbour	801 – 803	150	11.5	Level luffing jib cranes	3	10	
	804 – 805	150	9	Gantry crane	1	7	
	806	80	7				
	810 – 811	180	7	Level luffing jib crane	1	6	
Port Basin 9							
West Harbour							
Breakwater	901 – 902		13				1×40 ton mobile multi-purpose crane. One of the cranes at Berth No. 706 – 709 to be moved to Berth No. 904.
Large Basin	903 – 904	575	13	Ro-Ro	1		
Small Basin	905 – 906	420	9.0	Ro-Ro	2		

CRANES: 30 cranes with capacity up to 45 tons. 2 container cranes (45 tons each), 2 transtainers (30 tons each) and 2 multipurpose cranes (30 tons each).

BULK CARGO FACILITIES: 2 berths of 215 m. length for grain and fertilisers, max. draft 9.9 m. Capacity 700 tonnes per hour. Storage 140,000 tonnes.

SPECIALISED CARGO HANDLING FACILITIES: Complete container terminal "Skane Terminal" with 540 m. berths and 2 Ro/Ro berths, max. draft 11 m. There are a total of 10 Ro/Ro berths in the port. All types of handling equipment. Liquid chemicals handled at the tanker terminal.

STEVEDORES: Cargo handling performed by "Skaneterminalen AB" offering all kinds of harbour work including loading, discharging, warehousing, etc.

MEDICAL: For attention, application to be made through ship's Agent. Hospital facilities available.

TANKERS: Dimensions of pipe-lines – for oils, 14 in., 12 in., 8 in., petrol, 12 in., 10 in., 6 in., slops, 6 in. Discharge facilities for slops through pipelines from Berths Nos. 503, 504 and 505. Tankers berth at Quay Nos. 503 and 504 with depth of water alongside 11.0 m. MLW, and Quay No. 505 depth of water alongside 8.0 m. MLW.

DENSITY: 1007. No tides, but slight variations in accordance with prevailing currents.

FRESH WATER: Available from quay connections (Tel: 042-122049).

FUEL: Bunker fuel delivered from pipe-lines. No advance notice required. Any grade available.

FIRE PRECAUTIONS: Standard procedures apply.

GANGWAY/DECK WATCHMEN: Watchmen generally at Master's option.

OPENING/CLOSING HATCHES: By crew or stevedores.

CERTIFICATES:
Certificate of Nationality.
Bill of Measurements.
Bill of Health.
Derat Certificate.
Crew List.

CARGO GEAR: Usual Board of Trade Regulations valid.

IDENTIFICATION CARDS: Not needed.

CONSULS:

Denmark	Tel. 12 60 80	Iceland	Tel. 12 62 20
Finland	„ 14 40 20	Netherlands	„ 13 94 54
France	„ 11 22 87	Norway	„ 12 06 00
Germany	„ 12 09 20	Portugal	„ 11 35 16
Great Britain	„ 11 68 12		

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes or equivalent quantities for each person on board. Wine and/or Spirit, one bottle each member to be held out of bond.

REPAIRS: All kinds of deck and engine repairs can be carried out.

DRY DOCKS: Length of largest dry dock 354 ft. Depth on sill about 16 ft.

SURVEYORS: Lloyd's local agent: AB Otto Hillerstrom.

REPATRIATION: Repatriation possible, by air and by train.

AIRPORT: Kastrup 60 km., Sturup 70 km., Angelholm 30 km.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Official holidays 1st and 6th January, 1st May, 1st Saturday November, 25th and 26th December, plus 2 holidays for Easter, 1 holiday for Whitsun and 1 holiday for Midsummer on appropriate dates.

POLICE/AMBULANCE/FIRE: Police 14 40 40; Ambulance 12 00 35; Fire 9 00 00; or in an emergency situation all functions via tel. 9 00 00.

TELEPHONES: Quay-connected telephones are placed on board on request.

SERVICES: Tank cleaning, discharge of tank washings, compass adjustments, etc., can be carried out after application through local Agents.

Environment Protection: For oil protection, cleaning, sludge-suction, refuse collection etc., call Sylvan & Qvibelius AB, tel. 042-12 75 90.

Dustbins for Ships: Dustbins are available. Galley refuse is to be delivered in plastic bags.

Receiving Station for Waste Oil: By law, water pollution from ships is prohibited. Oil residues may be accepted by the Receiving Station, tel: 042-11 72 73 or 10 63 00.

Provisions: Provisions are supplied by ship-chandlers 24 hours daily. For ships calling for provisions only, no harbour dues apply.

Repair/Maintenance: Repair and maintenance of containers, flats, trailers, trucks and other cargo handling equipment is carried out by AB Scandrep, tel: 042-13 82 72, telex: 72090.

Testing according to CSC provisions (Convention for Safe Containers).

For ship repair call AB Fartygsmekano, tel: 042-12 02 95.

SHORE LEAVE: No restrictions.

REGULATIONS: Normal regulations apply.

DELAYS: No other delays than berths being occupied by working vessels can be expected.

AUTHORITY: Helsingborgs Hamn, P.O.Box 1434, 251 14 Helsingborg, Sweden. *Tel:* 042-10 63 00. *Telex:* 72215. *Contact:* E. Lorentzon, Marketing Manager.

HOGANAS: 56.12 N. 12.33 E. (See Plan Book)

Privately-owned port serving owning company only – Hoganas AB. Customs and pilotage arranged through Authorities in Helsingborg (12 nautical miles S.E. of Hoganas).

DOCUMENTS: See "Stockholm".

PILOTAGE: Compulsory. Pilot obtainable at Hoganas or at Helsingborg. Pilot service day and night, available after request to pilot office at Helsingborg.

RESTRICTIONS: Entrance channel, Length 750 m.; width 65 m.; depth 8.20 m.

The harbour is seldom closed by ice.

MAX. SIZE: LOA 130 m., max. draft 7.40 m.

TUGS: There are no tugs stationed at Hoganas, but tugs are available after request to the Harbour Office at Helsingborg.

BERTHING: *The Pier (Extending South-Westerly).*

Length of quayage:	380.00 m.
Depth alongside:	
For 120 m. (from outer end)	6.60 m.
For the next 160 m.	8.20 m.
For remaining 100 m. varies down to	4.00 m.

The Cross Quay:

Depth alongside at 75 m. from Northern end	3.50 m.
the remainder is unnavigable	

Quay in the Middle of the Harbour:

Length of quay:	180.00 m.
Depth alongside N.W. side:	
For 120 m. (from outer end)	6.60 m.
For the next 35 m. the depth varies from to being unnavigable.	4.2 m.
Depth alongside S.E. side:	
For 30 m. (from outer end)	2.50 m.
remainder	unnavigable

The depth of water at this port is somewhat affected by winds.

CRANES: 1×25 ton rail mounted electric crane (21 tons-grab duty), 1×25 ton mobile crane.

REPAIRS: Machine shop repairs only.

STEVEDORES: Working hours; a normal working day, Monday to Friday from 0700 to 1600 hrs. Normally no working on Saturdays.

FRESH WATER: Available.

FUEL: Can be supplied.

AUTHORITY: Hoganas Hamnbyggnads AB., Box 501, S-263 01 Hoganas, Sweden. *Tel:* 46 42-38000; (Harbour) 042-38224. *Telex:* Hoganas AB 72744 Hbeldf S. *Cables:* Clayworks Hoganas. *Contact:* Bo Norberg, General Manager. Leif Andersson, Harbour Master.

HORNEFORS: 63.37 N. 19.54 E. (See Plan Book)

DOCUMENTS:

1 List of Bonded Stores.
2 copies Tobacco List.
3 Crew Lists.
3 Passenger Lists.
Health documents, none – if all on board healthy. In case of illness on board, this must be reported to Customs on arrival.
Copy B/L and copy Manifest.

PILOTAGE: Pilot station, Bredskar, tel. 090/45021; Pilot must be ordered 5 hours before arrival. If change in position, this must be advised at least 2 hours before arrival. Pilot can also be taken at Skagsudde Pilot Station Tel: 0660/66003. (Also see "Stockholm").

ANCHORAGES: Will be advised by Pilots from case to case.

RESTRICTIONS: Vessels over 100 m. length only taken in and out of harbour during daylight.

MAX. SIZE: Max. length 105 m. Max. draft 20 ft. 08 in. (6.3 m.).

RADIO: Harnosand Radio, Tel: 0611/12733.

TUGS: Available.

BERTHING: No particular arrival times necessary.

CRANES: 1 stationary crane, capacity 3 tons.

STEVEDORES: Labour must be ordered latest 1430 hrs. day before commencement loading, and if such day is Monday labour to be ordered before 1100 hrs. Saturday.

MEDICAL: No special regulations. Hospital and doctors available day and night.

TANKERS: 8 in. connections.

FRESH WATER: By pipe, 2 t.p.h.

FUEL: No fuel available in port. Must be ordered from Holmsund.

GANGWAY/DECK WATCHMEN: Not compulsory, but can be arranged.

OPENING/CLOSING HATCHES: Normally done by ship's crew.

CERTIFICATES:

Lighthouse dues (receipts).
Oil Record Book.
Derat Exemption Certificate.
Nationality Certificate.
Ship's Register (International form).
For open/closed ships – Freeboard Certificate.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes man/week or 250 grams of tobacco man/week. Wines/Spirits, 1 bottle of wine and 1 bottle of spirits man/week. Note: Must be 21 year's of age before crew member is allowed to have spirits or wines.

IDENTIFICATION CARDS: Not necessary.

CONSULS: None.

REPAIRS: No facilities available.

REPATRIATION: No facilities for crew changes.

AIRPORT: 25 km. from port. Served by Linjeflyg domestic services, flights to Stockholm 6 times a day.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Christmas Eve; Christmas Day; Second day after Christmas; New Year's Eve; New Year's Day; Easter Friday; Saturday and Sunday; Midsummer Eve and Midsummer Day; Whitsunday; Epiphany (1st May); Ascension Day; The Day of All Saints (1st weekend November).

POLICE/AMBULANCE/FIRE: Tel. 90 000.

TELEPHONES: None available for placing on board.

AUTHORITY: Norrlands Skogsagares Cellulosa AB, Hornefors Fabriker, P.O.Box 176, 87201 Kramfors 1, Sweden. *Telex:* 54040.

HUDIKSVALL (including Iggesund): 61.44 N. 17.07 E. (See Plan Book)

PORT LIMITS: Vessel is considered to be an "arrived vessel" when berthed alongside quays in port or, if berths not available, at anchor in Inner Roads, outside berths; but not when vessels, owing to darkness etc., are anchored outside pilot stations or in Outer Fairways.

DOCUMENTS: If arriving direct from foreign port, following documents presented to Customs Officer who embarks during office hours (0800 – 1700 hrs.).

3 Crew Lists.
2 Tobacco Lists.
Derat Certificate (not over 6 months old).
Certificate of Nationality.
Certificate of Tonnage.
2 Manifests covering incoming cargo.
Receipts of Light Dues, paid to Swedish Authorities during year.

PILOTAGE: Hoelick Pilot Station Lat. 61° 37′ N., Long. 17° 28′ E. open for ordering Pilots. VHF Channel 16, after contact working Channel VHF 13. Pilot to be ordered 5 hours before arrival. If ordered before 2100 hrs., vessel can also obtain Pilot between 2100 – 0530 hrs. Pilot boat: orange painted cutter. International pilot signals. Pilot boards near "Myran" Lightbuoy: Lat. 61° 36′ N., Long. 17° 29′ E. Telegraphic address of pilot station at Hoelick: "Pilotstation Hudiksvall". (Also see "Stockholm").

Note: Gavleborg Pilots will undertake pilotage. Call "Gavleborg Pilots" on VHF Channels 16/13 to arrange rendezous.

ANCHORAGES: Anchorage places for vessels awaiting Pilot or anchoring owing to weather conditions: 61° 37.5′ N., 17° 25.0′ E.; 61° 37.0′ N., 17° 22.0′ E.; 61° 37.7′ N., 17° 21.3′ E. depending upon prevailing winds, etc. Bottom mud and/or sand. Depth 10 m. – 30 m.

RESTRICTIONS: No tidal water at Hudiksvall. Tankers of more than 100 m. in length between perpendiculars not allowed entry during darkness because of narrow channel with some curves. Dry cargo vessels up to 150 m. length allowed entry after dark.

MAX. SIZE: *Tankers:* Daylight 45,000 d.w.t., length 210 m., draft 10 m. After dark 6,000 d.w.t. length 100 m., draft 7.5 m.
Other Vessels: 16,000 d.w.t., length 160 m., draft 8.7 m.

LW between 0.2 m. – 0.5 m. sometimes as much as 0.7 m. below MWL, may occur often. LW periods may occur when N.W. winds blowing over Northern Sweden.

HEALTH: Pratique automatic. No doctor visits incoming vessels if not specially ordered for treatment on board, etc.

RADIO: Vessels coming from South and having not yet passed the Stockholm area are recommended to call Stockholm Radio – VHF Channels 25 or 28 for vessels between Gotland/Sweden, 24 outside Stockholm South, 28 Stockholm East and North, 23 North of Aalands Sea, and in Gavle Bay. Hernosand Radio SAH: Channels 25 Hudiksvall area, 24 Sundsvall area, 23 Hernosand area, 28 Ornskoldsvik area. Hudiksvall harbour office: Channel 16. Working Channel 9.

TUGS: Tug compulsory for tankers over 6,000 d.w.t. and for other vessels over 8,000 d.w.t. in fairway. Vessels met near isle of "Enbarsskar" at Lat. 61° 39.5′ N., Long. 17° 17.0′ E. For mooring purposes tug compulsory for tankers over 6,000 d.w.t. and for other vessels exceeding 5,000 d.w.t. Ship's lines used. Ice-breaking tug "Mercur", call sign SIJL, 3,000 h.p. available in Hudiksvall during the whole year.

BERTHING: Main berth Hudiksvall draft allowed at MW 8.7 m. alongside 165 m., thereafter 5.4 m. alongside 30 m. and thereafter 4.9 m. alongside 160 m. One Ro–Ro ramp draft allowed 8.7 m. at MW.

Pier at Iggesund 7.4 m. draft allowed MW 150 m. length of pier. Ro-Ro berth 17.4 m. draft if more than 12 m. from Ro-Ro berth, if less, draft allowed 6.3 m. Ro-Ro berth II 7.4 m. draft allowed if more than 12 m. from berth, if less, 6.7 m.

STEVEDORES: Ordered 1600 hrs. on day preceding vessel's arrival. For loading starting Monday morning, gangs to be ordered before 1100 hrs. local time Saturday. 3 – 5 gangs available at Hudiksvall and Iggesund; Stocka 3 gangs. Working hours: Monday-Friday, 0700 – 1600 hrs.; Meal hours: 0900 – 0930, 1230 – 1300. 2 hours' overtime at extra cost of 50% Monday, Tuesday, Thursday, Friday (1600 – 1800 hrs.). For completing vessel, further 3 hours Monday, Tuesday, Thursday, Friday (1800 – 2100 hrs.). Extra cost of 100%. For completing vessel 5 hours' overtime can be obtained on Wednesday (1600 – 2100 hrs.), 2 hours at 50% and 3 hours at 100% extra.

On Saturdays no normal work, but stevedores available for maximum 8 hours' work, 100 per cent overtime has to be paid, and minimum 5 hours has to be paid even if vessel working less than 5 hours on Saturdays.

TANKERS: One berth only. Depth alongside 11 m. Draft allowed 10 m. at MW. Pipe diameter for fuel: 10 in., light oils: 8 in. Connecting hoses between pipes and vessel: 8 in. diameter, both types. Shore tanks lie about 100 m. – 200 m. from berth, 5 m. – 8 m. above sea. Surface of jetty about 2 m. above sea level.

DENSITY: Average 1002 – 1001.

FRESH WATER: Fresh water available all berths. Delivery capacity about 15 t.p.h. – 20 t.p.h. During Winter it is difficult to arrange hoses, vessels assist with own hoses.

FUEL: Available all berths. Delivered by tank-lorries from Sundsvall 50 miles North of Hudiksvall. 24 hours' notice required.

FIRE PRECAUTIONS: No special precautions. Within bounded area oil jetty smoking prohibited. Also on new quay outside sawmill.

GANGWAY/DECK WATCHMEN: Available in all ports, not necessary if not required by vessel.

OPENING/CLOSING HATCHES: By crew.

CUSTOMS ALLOWANCES: Crew over 18 allowed 200 cigarettes; 1 bottle of spirits out of bond. If vessel stays in Swedish ports but still in foreign trade, above quantities obtained from bond once a week (every 7 days). Instead of spirits 1 bottle wine or 6 bottles export beer allowed.

IDENTIFICATION CARDS: Not needed. If crew going to doctor or to hospital preferable he carries passport.

CONSULS:

Country	*Address*	*Tel. Office*	*Tel. Home*
Denmark	Marknadsgatan 1 Hudiksvall	0650/11 712	0650/10 983
Finland	Varvsgatan 2–4 Hudiksvall	0650/15 250	0650/10 056
Great Britain	Drottninggatan 48 Gavle	026/18 03 00	
West Germany	Skeppsbroplatsen Sundsvall	060/15 55 00	060/15 24 40 060/62 22 2

REPAIRS: Small engine and deck repairs. To be ordered through vessel's Agent or through stevedoring foreman onboard.

DRY DOCKS: None.

REPATRIATION: Possible.

AIRPORT: Nearest regular airport is new airport at Hudiksvall. There are daily connections with Stockholm.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: No work on following days, although not all legal holidays. New Year's Day; Epiphany; Good Friday (Easter); Easter Eve; Easter Monday; Labour Day; Ascension Day; Whitsun Eve; Whit Monday; Midsummer Eve; Midsummer Day; All Saint's Day; Christmas Eve; Christmas Day; Second Christmas Day; New Year's Eve.

POLICE/AMBULANCE/FIRE:

Police Hudiksvall	Tel: 0650/15 600 or 90 000
Police Iggesund	Tel: 0650/20 820 or 90 000
Ambulance Hudiksvall	Tel: 0650/10 670 or 90 000
Ambulance Iggesund	Tel: 0650/10 670 or 90 000
Fire Hudiksvall	Tel: 0650/10 670 or 90 000
Fire Iggesund	Tel: 0650/20 329 or 0650/20 812
Doctor Hudiksvall	Tel: 0650/17 370 or 90 000
Doctor Iggesund	Tel: 0650/70 026 or 90 000
Hospital Hudiksvall	Tel: 0650/92 000
Hospital Iggesund	Tel: 0650/92 000

For Stocka: as Hudiksvall.

TELEPHONES: No telephones available for connecting onboard at Iggesund. At Hudiksvall telephones available. Skr 25 per day plus cost of calls.
GENERAL: Hudiksvall port is very near town. Railway station, bus station, etc., very near port. Oil port about 700 m. from town.
The port of Stocka is closed to commercial vessels.
SERVICES: No tank cleaning or discharge of tank washings. Compass adjusting: Tel: 0650/10 339 (Pilot Office). Ordered through Agent.
PORT REGULATIONS: Speed limit: maximum 5 knots within the harbour basin. Plastic pipe is laid out on the bottom around the oil berth, anchoring during berthing is prohibited. Pipe filled with compressed air after vessel's mooring, comes up to the surface forming ring around vessel and oil jetty as protection against oil leakage.
DELAYS: During Winter (December-April) delays on berthing/sailing owing to ice in fairways and alongside quays. Mooring delays will occur owing to ice between vessel and quay.
AUTHORITY: Hudiksvalls Hamnstyrelse, Tullhuset, 82400 Hudiksvall, Sweden. *Tel:* 0650/19166, 17140. *Contact:* Arne Strandell, Harbour Master.

HUSUM: 63.20 N. 19.09 E. (See Plan Book)

PILOTAGE: Contact local Agent: Grundberg Shipping AB, Tel. 0660/10 235.
MAX. SIZE: Max. draft 10.6 m.
TUGS: Available.
BERTHING: No special requirements other than authority from local Agent.
In the South part of the harbour basin there is a new concrete berth; namely the raw material berth.
(i) The South part of the wharf is 180 m. long with 11.4 m. depth.
Loading: Pulp and paper by mobile cranes. Turpentine and resin-oil via 6 in. – 8 in. pipe-connections. Capacity 200 t.p.h.
Discharging: Raw-oil via 12 in. and sodium hydrate via 6 in. – 8 in. pipe-connections. Unloading of limestone, china clay, sodium sulphate, sulphur, aluminium sulphate, softwood and hardwood by mobile cranes.
(ii) The North part of raw-material berth is 65 m. long, 10 m. depth. with a solid Ro-Ro berth 16 m. wide. There are connections available for loading/unloading fluid products.
To the North of the raw material berth there is the loading berth, 300 m. long and approximately 10 m. depth for loading pulp and paper using mobile cranes. Connected to the loading berth is a solid Ro-Ro berth with a length of 30 m.
There are warehouses with a total storage capacity of 15,000 sq.m.
STEVEDORES: Stevedores can be ordered from representative of local Agent. Labour must be ordered prior to 1400 hours to start following day or for a second shift. Labour for the same day at 1000 hours must be ordered at 0800 hours, labour for 1200 hours ordered at 0930 hours and labour to start at 1400 hours ordered prior to 1100 hours.
FRESH WATER: Available through hose pipes.
FUEL: All grades and viscosities available.
AIRPORT: Approximately 30 minutes by car, served by regular airlines.
TIME: GMT plus 1 hour. Summertime kept April to October.
POLICE/AMBULANCE/FIRE: All services available.
TELEPHONES: Available on wharf.
SERVICES: Post and telex facilities. Various other services available or can be provided.
GENERAL:
Tides: Water level in metres above (+) and below (–) average water level.

High water level	+1.0 m.
Normal high water level	+0.7 m.
Normal low water level	–0.6 m.
Low water level	–1.1 m.

Local Travel: Buses from Husum to Ornskoldsvik (25 km.). Railway station at Ornskoldsvik.
AUTHORITY: Mo Do Cell AB, S890 35, Husum, Sweden. *Tel:* 0663-10700. *Telex:* 6058 Massa/Pulp or 6070 Paper/Pulp. *Cable:* Modocell Husum. *Contact:* Frank Pettersson, Harbour Master.

KALMAR: 56.40 N. 16.20 E. (See Plan Book)

DOCUMENTS: See "Stockholm".
PILOTAGE: Compulsory for vessels carrying dangerous cargo and vessels exceeding 800 g.r.t. Pilot may be ordered on VHF, Channel 16 or by telephoning 0480/10719. Approaching from North, Pilot boards at Skaggenas or Krongrundet, from the South at Tradgardsgrundet. Round-the-clock service provided. (Also see "Stockholm").
ANCHORAGES: Good anchorage availale outside port.
MAX. SIZE: Largest vessel 25,000 tons deadweight, draft 24 ft. Channel and harbour depth 26 ft. Ferry berth 22 ft.
TUGS: Available, order by Tel. 15775.
RADIO: Stockholm Radio.
VHF: Harbour Master on VHF Channel 16.
BERTHING:

Quay	*Berth No.*	*Length (m.*	*Depth (m.)*	*Remarks*
Elevator Kajen	2 – 3	200	7.7	—
Finngrundet-Barlastholmen	22 – 31	990	5 – 7.7	1 Floating Ro/Ro Terminal-Link-span
Tjarhov	38 – 47	910	6 – 7.7	—

CARGO HANDLING FACILITIES: 3 portable electric cranes of 5 tons each, 4 mile cranes of 23 – 36 tons and 1 mobile crane of 18 tons. 1 floating crane available, maximum lifting capacity 75 tons.
STEVEDORES: Available weekdays 0700 – 1630 hrs. Overtime is worked Saturdays and eves of public holidays.
TANKERS: Oil Dock (Berth No. 48) has depth of 8 m. alongside and has dealt with partly loaded ships of 25,000 tons. Discharge capacity about 28,000 cu.ft./hr.
MEDICAL: Hospital available.
FRESH WATER: Available from wharves.
FUEL: Bunkers available by barge or at Oil Dock. Tel: (480) 11730.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: Crew or stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes plus 1 bottle spirits.
CONSULS:

Danish Vice-Consulate	Tel. 14719
Finnish Consulate	Tel. 15580
German Consulate	Tel. 26100
Netherlands Vice-Consulate	Tel. 14444
Norwegian Vice-Consulate	Tel. 22050

REPAIRS: Available. Divers for underwater repairs. Major repairs undertaken.
DRY DOCKS: 2 floating docks. 1 for vessels up to 3,000 d.w.t. and 1 for vessels up to 10,000 d.w.t., also slip for vessels up to 850 tons. (AB Kalmar Varv Tel. 0480/15390, Telex 43100).
AIRPORT: 10 km. from the port.
DEVELOPMENTS: Store houses for general cargo and sawn timber of about 7,000 sq.m. have been erected.
AUTHORITY: Kalmar Hamn, Box 810, 39128 Kalmar, Sweden. *Tel:* 480-15775. *Contact:* C. J. Nordheim, Secretary.

KARLSBORGSVERKEN (Kalix District): 65.48 N. 23.17 E.

PILOTAGE: Pilot station "Erikren", Karlsborgsverken. Pilots embark or disembark at Maloren 18 nautical miles South of Karlsborgsverken.
MAX. SIZE: Max. draft entrance to Karlsborgsverken 6 m., to Axelsvik 8.8 m. Size no limit.
TUGS: Available.
BERTHING:

	Max. draft.	*Length of quay*
Cellulose Quay	6.0 m.	145 m.
Timber Quay	6.0 m.	250 m.
Axelsvik Oil Harbour	8.8 m.	60 m.
Tore (17 nautical miles) N.W. Karlsborgsverken	6.0 m.	170 m.

CRANES: No land cranes. Mobile cranes to hire for loading/discharging.
STEVEDORES: Available, No particular ETA advice required except as normally sent by Master to the Agent.
MEDICAL: Hospital and dental services available.
TANKERS: Axelsvik (Oil Harbour) 4 miles East. See "Berthing".
FRESH WATER: Available at all berths except at Axelsvik Oil Harbour.
OPENING/CLOSING HATCHES: Usually carried out by the vessel's crew.
CONSULS: None.
REPAIRS: Workshop available for repairs.
AIRPORT: Lulea 85 km. from Karlsborgsverken.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Telephone 90000 in emergency and ask for service required.
TELEPHONES: Available at quays.
SHORE LEAVE: Allowed.

AGENT: Grundberg Shipping AB, P.O.Box 716, S–941 28 Pitea, Sweden. Tel: 0911–46070. Telex: 68307 Shipexp S. Cables: Grundbergs Pitea. Contact: Ake Kattstrom.
At Karlsborgsvrken: Grundberg Shipping AB, G: a Faktorskontoret, S–950 53 Karlsborgsverken. Tel: 0923-20156. All communications to be via Pitea.

KARLSHAMN: 56.10 N. 14.52 E. (See Plan Book)

DOCUMENTS:
3 Crew Lists (IMO Forms
3 Passenger Lists.
2 Tobacco Lists.
2 Store Lists.
1 Manifest.
1 Bill of Lading.
PILOTAGE: Vessels approaching port call Karlshamn Pilot Station 5 hours in advance on VHF Channel 16. Pilot boat orange coloured. Lights and sound signals as international regulations. Pilot boat always located 2 nautical miles South from Ortholmen Pilot Station, this point marked on charts. Location of anchorage in same area where Pilot taken. (Also see "Stockholm").
ANCHORAGES: Depths of water in anchorage area approximately 20 m. – 25 m.
RESTRICTIONS: Tankers not allowed to enter during darkness. Max. draft for tankers 32 ft. 6 in.
MAX. SIZE: Max. length 180 m., max. draft 32 ft. 6 in.
Oil pier Kolo harbour, outside main harbour, length 270 m., max. draft 41 ft. No tide.
HEALTH: If infectious disease on board Master must immediately send information to Agent.

RADIO: Karlskrona Radio.
RADAR/VHF: The pilot station is fitted with radar and VHF.
TUGS: 2 tugs available, 3,000 h.p. and 2,000 h.p. Join vessels about 1 nautical mile outside harbour boundary. Ship's lines always used.
BERTHING:

Inner Harbour: West Harbour Area.

Berth	*Length (m.)*	*Depth (m.)*
Ocean Quay	150	10.0
Soja Quay	250	8.5
West Quay	400	7.5 – 6.0

These quays are served by 5 rail-bound bulk goods cranes of 5 – 10 tons and have 2 grain elevators.

Via the West Harbour area oil seed plants, copra and vegetable oils for the Karlshamn Oil Factory (AKO) are shipped as well as other bulk goods.

East Harbour Area.

Berth	*Length (m.)*	*Depth (m.)*
East Pier	160	8.5
East Quay	500	6.0

The East Pier is equipped with 2×6.7 tons rail-bound unit goods cranes and served by 2 railway tracks. Adjacent to the East Pier are 2 cold stores with a total floor area of 7,000 sq.m.

Loading and discharging is carried out with mobile cranes at the East Quay. The Harbour has 5 mobile cranes with lifting capacities ranging from 4 to 23 tons.

Goods shipped via the East Harbour area include timber products, timber, bulk goods and general cargo.

Sterno Harbour:

A special harbour for stone products, wood and timber. Water depth is 6 m.

Stone blocks are loaded at a special quay and crushed stone products, chiefly diabase which is used for producing mineral wool, are discharged from quay by a newly-erected stone-crushing plant. The crushing plant is owned by Armerad Betong-Vagforbattringar.

At Sterno Harbour a timber floating terminal consisting of an 80 m. long quay and timber landing areas, both on land and in the water, have been arranged and leased to Mo och Domsjo AB. The timber is floated from Karlshamn to MoDo's pulpmill at Husum.

The quays of the old shipyard are used chiefly for shipping timber. Timber Terminalen AB have built a timber terminal with a sawmill, planing mill and sorting plant adjacent to the quay area.

Stilleryd Harbour:

Karlshamn's new outer harbour; it was inaugurated in 1975 and consists of a 400 m. long quay with water depths of 8 m. and 11 m. on the West side, and one 150 m. long quay on the East side with 8 m. water depth. 2×35 ton luffing cranes are used for loading and discharging vessels and they are backed up by mobile cranes. Double railway tracks serve the quay.

The harbour also has Ro-Ro facilities with a water depth of 8 m. Stilleryd Harbour accommodates vessels of up to 35,000 d.w.t. The harbour area features 3 warehouses with a total storage area of 21,000 sq.m. Adjacent to the quay area is a stockyard of approximately 200,000 sq.m., of which 40,000 sq.m. is asphalted.

Sodra Skogsagarna ship products like paper pulp, paper, wood chips, pulpwood, etc. via the Stilleryd Harbour. Fernstroms Granitindustrier ship stone blocks while Vikingtra AB ship wood and timber via this harbour.

CRANES: In addition to the cranes mentioned above, there is a heavy lift crane capacity 300 tons.
MEDICAL: Hospital facilities available.
TANKERS: Different lines used. From 12 in. to 6 in. depending on cargo to load/discharge. 3 different loading/discharging berths available. 1 at Inner Harbour 32 ft. 6 in. draft, 1 at Kolo Harbour 41 ft. draft and 1 at Oxhaga.

Kolo Oil Harbour:

Position Lat. 56° 09′ N., Long. 14° 43′ E. Pilot boards by Laknallarna, position Lat. 56° 07′ 8″ N., Long. 14° 53′ E. Berthing during daylight only. Max. size 270 m., draft 41 ft. 75,000 d.w.t. or 100,000 d.w.t. with part load. Depth at berth and approaches 46 ft. 2 tugs are generally used.

The pipe-line is 20 in., length 400 m. and hose connection 12 in. Max. rate, 1,500 cu.m./hour (HFO). There are no ballast facilities and no clean ballast can be discharged into harbour. Vessels are allowed to clean tanks and gas free in the roads only.

Fresh water available at 20 t.p.h. by pipe-line.

Old Oil Harbour:

Situated at Sutudden where a large number of major oil corporations and manufacturing companies have their depots. Heavy and light fuel oils, diesel oil, petrol and paraffin are imported and stored here. Storage capacity amounts to approximately 180,000 cu.m. of which half consists of underground rock storage facilities.

The oil quay has a depth of 11 m. and can accommodate fully-laden tankers of up to 30,000 d.w.t.

Oxhaga Oil Harbour:

Karlshamn's new oil harbour, situated at Munkahusviken where the water depth at the quay is 13 m. Underground rock storage facilities with a total capacity of 400,000 cu.m. – 200,000 cu.m. for heavy oil and 200,000 cu.m. for light oil – have been constructed. Storage has been leased to manufacturing companies, municipalities and oil companies.

Oxhaga Nabb's oil harbour is used by fully laden tankers of 50 – 55,000 d.w.t.

An above ground storage area for petroleum, oil and chemicals is planned for the oil harbour areas. Surveys have shown that it is possible to build additional rock storage facilities for petroleum products in the Oxhaga area.

DENSITY: 1003.
FRESH WATER: Fresh water available and delivered by hoses.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Watchmen only necessary when tankers discharge petroleum products.
OPENING/CLOSING HATCHES: By crew.
CERTIFICATES: Certificates of Tonnage, Derat Certificate.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per man/week. Wine and/or Spirits, 1 bottle per man/week.
IDENTIFICATION CARDS: Not needed.
CONSULS:

Denmark, Tel: 52080
Finland, Tel: (0454) 11319
Netherlands, Tel: 10041
Norway, Tel: (0454) 14225

REPAIRS: Small deck and engine repairs can be effected.
DRY DOCKS: None.
REPATRIATION: Facilities for repatriation of crew possible.
AIRPORT: Distance from airport 3 miles. 3 flights per day.
HOLIDAYS: January 1st and 6th; Easter; May 1st, 15th, 26th; June 21st; November 1st; December 25th, 26th. No work can be arranged during holidays.
POLICE/AMBULANCE/FIRE: Tel. 90 000.
TELEPHONES: Telephones on board arranged at cost of 85 Sw. Cr.
AUTHORITY: Karlshamns Hamnar, P.O.Box 8, S-29200 Karlshamn, Sweden. *Tel:* 0454-14220. *Contact:* Nils-Gunnar Sjoberg, Harbour Master.

KARLSKRONA: 56.10 N. 15.36 E.

DOCUMENTS: See "Stockholm".
PILOTAGE: Pilot is taken at Aspo. Tel. 0455/39016. (Also see "Stockholm"). Ordering Pilot between 2100 – 0500 hrs. contact Karlshamn Pilot Station Tel. 0454/14102. Stations operating on VHF Channel 16. Pilot should be ordered 5 hours in advance. Pilot boats usually orange.
ANCHORAGES: On roadstead. Refer to nautical chart No. 821 (Swedish).
MAX. SIZE: Max. draft 9.1 m. (30 ft.).
HEALTH: See "Stockholm".
RADIO: Stockholm Radio. Karlskrona Radio.
VHF: Karlskrona Port Office equipped with VHF Channels 16, 14.
RADAR: Radar service available when entering port. Tel. 0455/25075 or 0455/50780.
TUGS: Tug assistance available.
BERTHING: Total quay length 4,700 ft., oil terminal 400 ft., Depth alongside quay 13 ft. – 33 ft., oil terminal 29.5 ft. Ro-Ro quay 23 ft.
STEVEDORES: Available. Ordered through Agents or directly by Tel. 0455/10518.
MEDICAL: Advance notice to Agents desirable.
TANKERS: No specific requirements applicable to oil carriers. Two tanker berths available. Draft 7.0 m. and 8.5 m.
FRESH WATER: Available, customary delivery from quay-berth.
FUEL: All grades available. No advance notice required.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CONSULS:

Danish Vice-Consul, Tel. 15006.
Netherlands Vice-Consul, Tel. 10926 and 12495.

REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: Largest dry dock: length 185 m., breadth 20.76 m., depth 8.80 m. Six smaller docks.
REPATRIATION: Not allowed.
AIRPORT: 30 km. from port.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Tel. 90000.
TELEPHONES: None available.
SERVICES: Compass adjusting.
AUTHORITY: Harbour Master.

KARLSTAD: 59.23 N. 13.31 E. (See Plan Book)

PORT LIMITS: Vessel considered to be an "arrived ship" when berthed, or anchored South of the Gerholmsrevet buoy in case of congestion.
DOCUMENTS: As usually required in Swedish ports.
PILOTAGE: Not compulsory. However Pilots available.
ANCHORAGES: There is a safe anchorage South of the Gerholmsrevet buoy, sand and clay.
RESTRICTIONS: There are no restrictions imposed upon entry. Vessel to give 1 prolonged blast – 1 short blast – 1 prolonged blast to call the attention of boatmen.
MAX. SIZE: Vessel's length, breadth and draft maximised by the locks of the Trollhatte canal (87 m. × 13 m. × 5.3 m.).
HEALTH: Documents' etc. as usually required in Swedish ports.
RADIO: Gothenburg Radio.
VHF: ETA to be given to Karlstad Port Radio (0800 – 1600 hrs. local time)
RADAR: No port radar available.
TUGS: Two icebreaking tugs available. Ship's lines usually used.
BERTHING:

Vanerterminalen	Length	175 m.
(The Venerterminal)	Ship draft	5.3 m.
Mobile cranes		
Styckegodskajen	Length	270 m.
(The general cargo quay)	Ship draft	5.3 m.
Three general cargo cranes	6 tons	
Trakajen	Length	120 m.
(The wood quay)	Ship draft	5.3 m.
Mobile cranes		

Kolkajen	Length	350 m.
(The coal quay)	Ship draft	5.3 m.
One bulk cargo crane	5 tons	
One heavy-lift crane	28 tons	
Wermlands Kajen	Length	200 m.
(Wermlands Quay)	Ship draft	5.3 m.
One container crane		
Lambergshamnen	Length	230 m.
(The Lamberg Harbour)	Ship draft	5.0 m.
Mobile cranes		
One heavy-lift crane	160 tons	
Inrehamnen (Inner harbour)	Not used by merchant vessels.	
Oljehamnen	Each pier	70 m.
(Oil harbour)	Mooring space both sides	
Three jetties for handling oil, etc.	Ship draft	5.3 m.

STEVEDORES: Modern and extensive machinery equipment. Loading/discharging can be arranged in two or three shifts.
MEDICAL: Hospital facilities available.
DENSITY: Fresh water in the port.
FRESH WATER: Delivered by hose from piping on the quay.
FUEL: All kinds of bunker oil available.
CONSULS: Danish, German and Norwegian.
REPAIRS: All kinds of deck and engine repairs possible. Slipway 2,300 tons
SURVEYORS: All major Classification Societies represented in nearby port of Gothenburg. Government ship surveyor situated at Karlstad.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Usually carried out by crew
CUSTOMS ALLOWANCES: As usually allowed in Swedish ports.
CARGO GEAR: Shore gear usually used.
REPATRIATION: Crew changes and repatriation can be effected.
AIRPORT: Regular domestic airlines. Several flights per day to and from Stockholm and Gothenburg.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Telephone number 90 000.
SERVICES: Tank-cleaning equipment and facilities for discharge of tank washings available.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Not necessary for shore leave.
REGULATIONS: Ship's propulsion machinery may not be used when ship is berthed.
DELAYS: Normally not to be expected.
AUTHORITY: Karlstads Hamn, Box 5030, S-65005 Karlstad, Sweden. *Tel:* 054-195000. *Contact:* Captain P. Thomas Ahsberger, Port Director. Ake Sallas, Harbour Master.

KLINTEHAMN: 57.23 N. 18.11 E.

The Harbour Quay is 330 m. long and depth 5 m. Depth on entrance 5.5 m. The most unfavourable winds are South — West. The harbour is however to be considered as good and safe.

Most products are loaded/discharged with mobile cranes.

Documents needed are Nationality Certificate, Bill of Measurement, Passenger List, Crew List, Derat Certificate, Ship's and Crew Declaration.

Pilot Station at Visby. Pilots have VHF on Channel 16.

Bunkers and water can be obtained.

AUTHORITY: Klintehamn Hamn, Skeppsbron 18, S-62157 Visby, Sweden. *Tel:* 0498-69475. *Contact:* Bengt Widegren, Harbour Master, Island of Gotland.

KOPING: 59.31 N. 16.00 E. (See Plan Book)

DOCUMENTS: See "Stockholm".
PILOTAGE: Via Sodertalje: Pilots obtainable for inward bound vessels from Landsort to Sodertalje and from Sodertalje to Koping; for outward bound vessels from Koping and Sodertalje. Via Stockholm: Pilots obtainable for inward bound vessels from Simpnas, Furusund, Sandhamn, Dalaro and Landsort to Stockholm and from Stockholm to Koping; for outward bound vessels from Koping and Stockholm. (Also see "Stockholm"). Harbour pilotage obtainable but not compulsory in harbour area. Assistance of a boatman is compulsory for arriving vessels.

Distances: Landsort – Sodertalje (nautical miles), 34; Sodertalje – Koping, (nautical miles) 69; Landsort – Dalaro, (nautical miles), 32; Dalaro – Stockholm, (nautical miles), 46; Sandhamn – Stockholm, (nautical miles), 36; Stockholm – Koping, (nautical miles), 78; Vasteras – Koping, (nautical miles), 27; Harbour Pilotage, (nautical miles), 2.
ANCHORAGES: At the "Broken" light buoy, clay bottom.
RESTRICTIONS: Ice is prevalent in Lake Malaren and the inlet from the Baltic from January to March, but the entrance channel is kept open during Winter season.
MAX. SIZE: The pilot station on Lake Malaren, Tel: 0755/30467, will give information on the max. admissible sizes of vessels. In general the following applies:

Max. Admissible	*Via Sodertalje*	*Via Stockholm*
Length	124 m.	110 m.
Breadth	17 m.	15 m.
Draft	6.8 m.	5.65 m.
Height of masts above water level	35 m.	26 m.

The figures stated for the draft are subject to variation according to the water level. The entrance fairway to the port has been dredged to a depth 7.6 m., the width of the bottom being 60 m.
VHF: Work frequency Channel 14. Call Koping port radio, Channel 16.
TUGS: Available day/night.
BERTHING: *Deep-Water Harbour:* (built 1932, large extension 1936-64) has 152 m. of quayage with a depth of 6.2 m. and 377 m. with a depth of 7.3 m. alongside, and is equipped with 2×6 ton portal cranes and 4×7 ton level-luffing jib cranes, 2 of them having a maximum lifting capacity of 10 tons each at 18 m. radius; and further, 1×33 ton "multi-purpose" crane.

There is also an 80 m. quay, depth 6.2 m. – without cranes – where loading/unloading by vessel's own winches can be undertaken.

Mobile cranes also available.

The quays are rail-connected and equipped with connections for supplying electricity, telephones and fresh water.

There are about 10,000 sq.m. of concrete stockyards within reach of the cranes, and outside this area and at a short distance from the cranes, a space of about 40,000 sq.m. is available for storage of goods. There are also about 22,000 sq.m. of sheds of different types in connection to the quays.

The cranes are well equipped with lifting devices such as grabs of different types etc. Conveyor belts of varying length, fork trucks, trimming and other cargo handling equipment are also available.

Old Harbour: 400 m. of quayage with depth varying from 3.6 m. to 4.5 m. alongside, mobile cranes are used.

Oil Harbour: A modern oil harbour is situated at the mouth of River Kopingsan (North side), the jetty having one outside and one inside berth with depth of 7.6 m. and 5.7 m. respectively.

On the North side is an 80 m. concrete quay for grain loading vessels. Depth alongside 7.3 m.

Private Wharves: There is (on the North side) a private 120 m. concrete quay, depth 6.2 m., belonging to Messrs. Tibnor Ltd., (Iron and Steel Merchants). One 10 ton travelling portal crane available.

A private harbour, belonging to Cementa Co., is situated in the immediate vicinity of the "Deep-Water Harbour". There is a 110 m. concrete quay, with 7.3 m. alongside, and 1×6 ton travelling portal crane and 1 belt conveyor available. There is also a 50 m. pier, same depth, for self-unloading (cement) vessels.
STEVEDORES: Working hours: 0700 – 0900 hrs., 0930 – 1300 hrs. and 1330 – 1600 hrs. (Monday to Friday). Special conditions on Christmas Eve, New Year's Eve, Easter Eve, Whitsun Eve and Midsummer Eve.

Overtime work: can usually be executed on Mondays, Tuesdays, Wednesdays, Thursdays and Fridays for 3 hours daily and 6 hours on Saturday.
GANGWAY/DECK WATCHMEN: Always available.
FUEL: Water, provisions, coal and oil obtainable.
REPAIRS: Minor mechanical, electrical and other repairs can be carried out by different local firms. Diver available.
AUTHORITY: Kopings Hamn, P.O.Box 108, S-73123 Koping, Sweden. *Tel:* 0221-18315. *Cables:* "Midlandport". *Contact:* T. Gustafsson, Harbour Master.

KRISTINEHAMN: 59.19 N. 14.07 E. (See Plan Book)

PORT LIMITS: A line drawn Westward from Strandudden to Valon (see Swedish Chart No. 132) defines the seaward limits of the port.
DOCUMENTS:

Certificate of Nationality.
Identification and Measurement Papers.
Oil Log.
Certificate regarding insurance for oil damage.
Derat Certificate.
Last Port Clearance.
1 set of General Declaration (Form 611.10).
2 copies Ship's Stores Declaration (Form 611.13).
2 copies Crew's Effects Declaration (Form 616.8).
2 copies Cargo Declaration (Form 611.7).
1 set Crew List (Form 612.13).
1 copy Declaration on account of Import Prohibition as to Livestock (Form 730.5).
1 copy Maritime Declaration of Health (Form 612.7).

PILOTAGE: Pilotage compulsory for tankers exceeding 1,200 g.r.t. and for all ships carrying dangerous cargo.

Pilots available at Vanersborg, the entrance to the Lake of Vanern after leaving Trollhatte Canal, and at Kristinehamn.

No local pilotage.
ANCHORAGES: In the Varnumsviken, N.W. of Kristinehamn. The roads have a depth of 5 m. – 9 m., bottom clay.
RESTRICTIONS: In Winter, the fairways to the harbour will be kept open by the local icebreaker from 0600 hrs. until 1600 hrs. Any icebreaking services beyond these hours have to be ordered and will be charged accordingly.
MAX. SIZE: All vessels capable of passing through the Trollhatte Canal can enter Kristinehamn. Max. dimensions: length 88 m., beam 13.1 m., draft 5.3 m.

HEALTH: First entry will be cleared alongside, otherwise automatic.

VHF: The port can be reached by VHF Channels 9, 11, 12, 14 and 16. In Winter, the icebreaking tug may communicate on all channels.

Instructions/Regulations regarding traffic communications will be available when passing the Trollhatte Canal.

RADAR: No port radar service.

TUGS: The tug "Dan", 600 b.h.p. and 5 tonnes bollard pull, will assist on request.

BERTHING: The outer harbour (Berth Nos. 20 – 25), has a quay of 360 m. length; in the river there is a quay (Berth Nos. 16 – 19) approx. 170 m. length. Depth 5.7 m at chart datum.

On the S.W. side of the river there is a berth, 88 m. length, for loading grain. Loading equipment on berth. Depth 5.7 m.

On the West side of Varnumsviken, Kroksvik, there is a 80 m. concrete pier for discharging refined oil products. Depth 5.7 m.

Also see "Tankers".

CRANES: Three 7 tonne slewing cranes with luffing jibs, on rails, in the outer harbour (Berth Nos. 20 – 25). Three railway tracks underneath the portals along the quay. One fixed crane, 40 tonnes, at Berth No. 16.

BULK CARGO FACILITIES: On the S.W. side of the river there is a loading elevator for agricultural produce. Loading capacity 200 tonnes per hour.

On Berth Nos. 20 – 25, bulk commodities like coal, ore, grain and scrap iron can be handled by cranes Nos. 8 and 9 equipped with grabs.

SPECIALISED CARGO HANDLING FACILITIES: No special equipment for handling containers. No Roll-on/Roll-off berth.

BRIDGES: None.

STEVEDORES: Working hours 0700 – 1600 hrs., Monday to Friday.

General cargo: 40 – 60 tonnes per gang per hour.

Forest industries produce: Approx. 100 tonnes per gang per hour.

MEDICAL: Full hospital facilities available without prior notice.

TANKERS: There is a concrete pier, length 80 m., on the West side of Varnumsviken, with a berth on each side. Max. draft 5.3 m. The pier is equipped with a crane for lifting lines. Diameters of discharging lines are 6 in. and 8 in. Average discharging rate 500 – 700 cu.m.p.h.

DENSITY: 1000 (Fresh water).

FRESH WATER: Available at Berth Nos. 20 – 25, rate 5 – 10 tonnes per hour.

FUEL: Available at all berths, delivered by truck.

FIRE PRECAUTIONS: As per international standards.

CONSULS: France, Germany (Federal Republic) and Norway are represented at Karlstad, 45 km. distant.

REPAIRS: All types of deck and engine repairs can be carried out.

DRY DOCKS: None.

SURVEYORS: Lloyd's and Norske Veritas.

GANGWAY/DECK WATCHMEN: Not required.

CARGO GEAR: Shore cranes normally used.

REPATRIATION: Can be arranged.

AIRPORT: At Karlstad, 45 km. distant.

TIME: GMT plus 1 hour. Summertime GMT plus 2 hours.

CUSTOMS ALLOWANCES: 1 litre spirits, 1 litre wine, 5 litres beer and 200 cigarettes per person. Additional allowances for the Master.

HOLIDAYS: January 1st and 6th, May 1st and 20th, December 24th, 25th, 26th and 31st. Cargo work can be arranged on these days.

POLICE/AMBULANCE/FIRE: Dial 90000.

TELEPHONES: Can be arranged on request.

SERVICES: No facilities for disposal of tank cleanings.

SHORE LEAVE: Permitted, no restrictions.

DELAYS: Normally no delays.

IDENTIFICATION CARDS: Seaman's book is sufficient.

BANKS: Handelsbanken and Wermlandsbanken represent a number of foreign banks.

EMERGENCY CO-ORDINATION CENTRE: Dial 90000 and the Centre will notify the necessary services.

STORING: See "Prelims" page viii.

1. Vessels can be stored by trucks only.
3. Trucks can proceed alongside the berth.
4. Fork lift trucks can be used when handling stores.
5. Ship's chandler will take care of Customs Regulations.
6. Local riggers can be employed to assist with storing.

DEVELOPMENTS: None.

AUTHORITY: Kristinehamns Hamn, Bajortgatan 9, S–68100 Kristinehamn, Sweden. *Tel:* 0550-15340. *Contact:* Jim N. Hjelmtvedt, Harbour Master.

LANDSKRONA: 55.52 N. 12.48 E. (See Plan Book)

DOCUMENTS: See "Stockholm".

PILOTAGE: Pilot available on request from Helsingborg Pilot Station or from Landskrona Pilot Station in daytime. 5 hours' notice required. Pilot stations and boats equipped with VHF. (Also see "Stockholm").

ANCHORAGES: Vessels of up to 10 m. draft can safely anchor North of Staffans Bank.

MAX. SIZE: Depth in channel and harbour 11 m. (36 ft.) Max. draft 10 m. Max. LOA 190.0 m.

HEALTH: See "Stockholm".

RADIO: Gothenburg Radio call sign SAG; Malmo Radio call sign SDP. Harbour office, pilot station, pilot boats and tug boats equipped with VHF.

TUGS: Tugs usually meet off Pilhaken Lightbuoy. Ship's lines.

BERTHING: Terminal for handling bulk cargoes. Rock phosphate can be discharged with a capacity of 8,000 tons per 24 hours.

MEDICAL: Medical attention and hospital facilities available.

TANKERS: No oil berth in Landskrona.

DENSITY: Density of water changes with currents.

FRESH WATER: Available from quay.

FUEL: Small quantities of fuel oil can be obtained from quay.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: Usually carried out by ship's crew.

CERTIFICATES: See "Stockholm".

CUSTOMS ALLOWANCES: See "Stockholm".

IDENTIFICATION CARDS: Not needed.

CONSULS:

Danish Vice-Consulate	Tel. 0418/16150
Finnish Vice-Consulate	Tel. 0418/78000
Netherlands Vice-Consulate	Tel. 0418/35020

REPAIRS: All types of deck and engine repairs.

DRY DOCKS: Dry dock for ships up to about 25,000 d.w.t. (189 m. length). Floating dock for up to about 5,000 d.w.t.

AIRPORT: Sturup, 60 km.

TIME: GMT plus 1 hour in Winter. Summertime GMT plus 2 hours.

HOLIDAYS: See "Stockholm".

POLICE/AMBULANCE/FIRE: Tel. 90000.

TELEPHONES: Can be placed aboard.

STORING: See "Prelims" page viii.

1. Yes.
3. Yes.
4. Yes.
6. Yes.

REGULATIONS: Anchoring prohibited between and up to 50 m. from harbour lights.

AUTHORITY: Landskrona Hamn, Box 275, 261 23 Landskrona, Sweden. *Tel:* 0418-17911, 0418-10311. *Contact:* Arne Wennberg, Port Director.

LIDKOPING: 58.30 N. 13.10 E.

DOCUMENTS:

3 Crew Lists (IMO Fal Form 5).
2 Crew Effects List (IMO Fal Form 4).
2 Ship's Store Declarations (IMO Fal Form 3).

PILOTAGE: Not compulsory.

MAX. SIZE: Length 88 m., beam 13.1 m., draft 5.3 m. and air draft 27 m. are maximum dimensions for passing through the Trollhatte Canal.

VHF: Lidkoping Harbour operates on Channel 16.

TUGS: One tug available, 600 h.p.

CRANES: 3 shore cranes of 5 tonnes each.

STEVEDORES: Working hours 0700 – 1630 hrs., Monday to Friday.

MEDICAL: Hospital facilities available.

FRESH WATER: Available.

FUEL: Gas oil available.

REPAIRS: Workshops can undertake repairs.

HATCHES: Opening/closing carried out by crew.

REPATRIATION: Facilities exist for carrying out crew changes.

AIRPORT: Nearest International Airport is Gothenburg, 130 km. distant.

TIME: GMT plus 1 hour, Summertime GMT plus 2 hours.

POLICE/AMBULANCE/FIRE: Dial 90000

AUTHORITY: Lidkopings Harbour, P.O.Box 900, S-531 19, Lidkoping.

AGENT: Lindahl & Collin AB, P.O.Box 7091, S-402 32, Gothenburg Tel: 427180. Telex: 2329 Cargo S. Cables: "Lloydsagent".

LULEA: 65.35 N. 22.09 E. (See Plan Book)

DOCUMENTS: See "Stockholm".

PILOTAGE: Telegraphic address, "Pilotstation Lulea". Tel: 170 97 or 120 63. Advance notice 5 hours. VHF Channel 16. Pilot boat, orange with international signals. Pilot boards about 2 nautical miles West of Rodkallen for entering Germandoleden and 1 nautical mile N.E. of Farstugrundens Lighthouse for entering Sandoleden. Location of anchorage when awaiting Pilot: West of Rodkallen and South of Farstugrunden Lighthouse.

APPROACHES: *Fairways:* Two fairways lead into Lulea. The South Fairway, Germandoleden, is about 17 nautical miles long and the North Fairway, Sandoleden, is about 27 nautical miles long.

Special rules and traffic regulations apply to these fairways.

Ice Conditions: The port area is generally ice-infested during the period December-April. During this period, ships at sea are assisted by the State-owned icebreaker and within the harbour area by the Lulea Bogserbats AB port icebreaker. Year-round navigation has been possible since Spring 1970.

ANCHORAGES: Germandofjarden, 1.5 nautical miles S.E. of Larsgrundet Lighthouse and Inner Roads.

MAX. SIZE: Max. draft at MW 11.4 m. in Sandoleden and 7.5 m. in Germandoleden.

HEALTH: No special regulations.

RADIO: Harnosand Radio, call signal SAH.

VHF: Port Authority on Channels 16, 14, 12, 11 and 10.

Traffic Control on Channels 16, 14, 13, 12, 11 and 10 throughout 24 hours. Tel: 932 93 or 122 91.

Tugs on Channel 16.

TUGS: Meet ships at the Inner Road for the ore dock, and in Sandoleden 1 nautical mile South of the coal quay and the oil terminal. Ship's lines to be used.

Two tugs of 4,200 h.p. each are available for towing and icebreaking. *Towing:* Lulea Bogserbats AB is responsible for towing and ice-breaking in the Port of Lulea. Special tug regulations apply at Uddebo Oil Port, SSAB Quay and the Ore Quay. Tugboat assistance can be ordered through the signal station, Tel: 932 92 or 122 91, or through VHF call Channel 16.

Boatmen: The port boatmen are on duty if needed at all quays. They can be ordered through the signal station – Tel: 122 91 – or VHF call Channel 16. At the Ore Quay and the SSAB Quay, however, the respective companies provide their own boatmen.

BERTHING: *Deep Quay:* Length 345 m., depth 6.5 m. – 9 m. General cargo and wood. One 7.5 ton crane. Railway.

SJ Quay: Length 190 m., depth 6.9 m. Railway.

Cement Quay: Length 60 m., depth 9 m. Cement.

LKAB Ore Quay: Length 415 m., depth 13.2 m. Iron ore. Two shiploaders of 4,000 t.p.h. each.

SSAB Quay: Length 498 m., depth 8.0 m. Iron, steel. Eight 6 – 12 ton cranes.

Coal Quay: Length 575 m., depth 12.2 m. Coal, coke, iron, steel, limestone. Three 18 ton grab cranes, 35 tons with hook. Quay to be extended by 150 m. and additional 25 tonne grabbing crane to be operative in 1986.

STEVEDORES: Bottenvikens Stuveri AB.

TANKERS: Diameter of lines from 150 mm. up to 350 mm. 2 oil jetties depth 7.8 m. and 12.2 m. Length 20 m. and 60 m. respectively. Facilities for receiving dirty ballast. Capacity 300 cu.m./hr.

New Oil Berth: Max. LOA 250 m., max. beam 32.3 m., max. draft 11.3 m., max. d.w.t. 45,000. Distance bow to manifold 120 m. Vessels berth starboard side to.

DENSITY: Fresh water, 1000.

FRESH WATER: Fresh water available at all berths.

FUEL: All grades of oil available.

GANGWAY/DECK WATCHMEN: Safety watchmen are to be on board all tankers when loading or discharging.

OPENING/CLOSING HATCHES: Stevedores.

SHIP'S CERTIFICATES: See "Stockholm".

CUSTOMS ALLOWANCES: 200 cigarettes or 250 grams of tobacco for each Crew member every 10 days. (Wine/Spirits) 1 litre for each Crew member over 20 years old, every 10 days.

IDENTIFICATION CARDS: Not necessary.

CONSULS: Telephone Numbers:

Danish 15602	German (F.R.) 53852
Finnish 10445	Norwegian 20600
French 16329	Netherlands 12003

REPAIRS: Only small engine repairs.

SURVEYORS: Ship and Cargo Control, Authorised Inspectors, Sodra hamnplan. Tel: 110 50.

AIRPORT: 10 km. from port. Served by regular airlines.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: See "Stockholm".

POLICE/FIRE/AMBULANCE: Tel: 90 000.

TELEPHONES: Connections available at oil terminal, coal terminal, ore terminal and deep quay.

GENERAL: All ships mooring at oil terminal over 3,000 d.w.t., and ore dock have to use tugs.

Lulea Soldiers' and Sailors' Institute: Seamen and national servicemen who come to Lulea have their own premises at Stationsgatan 72, where various facilities are available, including a canteen with reasonably priced food, billiard table, TV, telephone and a music room. These premises are open Monday-Friday 1700 – 2200 hrs. and Sunday 1800 – 2230 hrs.

Seamen also have access to the services of a Seafarers' Assistant. He can, for example, take seamen to various leisure facilities, arrange sightseeing trips and exchange films and books on ships.

Lulea Soldiers' and Sailors' Institute – Tel: 676 20 or 288 75.

The Seafarers' Assistant – Tel: 259 96.

The Institute is run by the Merchant Navy Culture and Leisure Board, which also employs the Seafarers' Assistant.

AUTHORITY: Lulea Hamn, Varvsgatan 41, S-951 34 Lulea, Sweden. *Tel:* 0920-930 00. *After Hours Tel:* 932 93 or 122 91. *Contact:* Bo Westman, Port Director.

LYSEKIL: 58.17 N. 11.26 E. **(See Plan Book)**

DOCUMENTS: See "Stockholm".

PILOTAGE: Pilot boards 2 miles West of Gaven Lighthouse. 5 hours advance notice required. Pilot ordered by VHF Channel 16 or telephone No. 60800.

ANCHORAGES: Safe anchorages both for small and large vessels just outside harbour in Gullmarsfiord.

RESTRICTIONS: No restrictions night entry, except max. draft possible 30 ft. No tide.

MAX. SIZE: Maximum permissible length for berthing about 600 ft. Draft 30 ft.

HEALTH: Declaration of health only when required from Customs or for vessel coming from outside Scandinavia.

RADIO: Cable Agents giving ETA, draft, cargo and cash required via Gothenburg Radio.

RADAR/VHF: No port radar service, VHF for calling Pilot, Channel 16.

TUGS: Must be requested through Agent at least 12 hours before arrival.

BERTHING: 3 berths available. Gullmarskajen length 600 ft. max. draft 30 ft., Grotokajen 500 ft. max. draft 22 ft. Anderssons Kav 400 ft. max. draft 18 ft. Railway on all berths.

CRANES: Five mobile harbour cranes working all berths. Maximum capacity 40 tons. No restrictions against using ship's own gear.

STEVEDORES: Ordered by Agents.

MEDICAL: Hospital in town.

TANKERS: See the port of "Brofjorden".

DENSITY: About 1027.

FRESH WATER: Available from shore installation.

FUEL: Gas oil and diesel available.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Normally opened by crew.

CERTIFICATES: Registered Tonnage Certificate.

CUSTOMS ALLOWANCES: See "Stockholm".

IDENTIFICATION CARDS: Not required.

CONSULS: Denmark, Finland, Iceland, Norway.

REPAIRS: Small repairs possible.

HOLIDAYS: See "Stockholm".

REPATRIATION: Change of crew and repatriation possible.

AIRPORT: None.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

TELEPHONE: Police, Ambulance, Fire Brigade, Tel: 90000.

DEVELOPMENTS: New berths under construction.

AUTHORITY: Lysekils Hamn, Hamnkontoret, S-45300 Lysekil, Sweden. *Tel:* 0523-14090. *Contact:* Olle Samuelson, Harbour Master.

MALMO (including Limhamn): 55.37 N. 13.00 E. **(See Plan Book)**

DOCUMENTS:

2 Crew Lists.
1 Passenger List.
2 Lists of Personal Effects (Tobacco List).
1 Declaration of Health.
2 Stores Lists.
3 Cargo Manifests.
1 Bill of Measurement.
1 Certificate of Nationality.
1 Derat Certificate.

PILOTAGE: Vessel applies for Pilot by telegram, by telephone or VHF (Telegraphic Address, Pilotstation, Malmo; Tel. (040) 115269; VHF Channel 16). Advance notice required 5 hours before pilotage to commence. Pilot boat orange-coloured cutter equipped VHF and radar. Pilot boards at Malmo roadstead. In case of bad weather vessel awaits Pilot at roadstead. (Also see "Stockholm").

ANCHORAGES: Vessels anchor about 5 cables North of fairway buoy "Roder Prick" and East of leading lights Centralhamnsrannan Nedre and Ovre, and S.W. of leading lights Malmo Oljehamn Nedre and Malmo Oljehamn Ovre. Depth 12 m. to 14 m. and bottom hard clay.

REGULATIONS: All ships over 50 tons gross and ships under towage with a total length over 50 m. are obliged to report to the Malmo Port Radio, VHF Channel 16, working Channel 14, at least 2 nautical miles before approaching respective channels to Malmo and Limhamn (excluding the South Port of Limhamn). The same announcement is valid for the above ship before departure including movements inside port.

RESTRICTIONS: Speed must be reduced inside breakwaters. When red flag hoisted (red lantern at night) at the N.E Dry dock pier head, indicating dock gates open, vessels may pass breakwater at minimum speed. Bridge opening signal for passing from South Wharf Basin 2 long blasts, followed by 1 short.

MAX. SIZE: *Bulk/Oil Harbour (under construction):* Max. length 250 m. on draft not exceeding 12.2 m. for bulk harbour and 10.8 m. for oil wharf.

Free Port: Max. length 220 m. on draft not exceeding 8.6 m. Max. length recommended in New Harbour is 150 m. on max. draft 6.6 m. and in Industrial Harbour 180 m. on max. draft 8.4 m. No tides.

HEALTH: Free Pratique automatically granted arriving from non-infested areas. If arriving from infested areas health declaration must be presented immediately on arrival. If diseases on board suspected, vessel allowed to enter after approval of City Medical Adviser, but nobody allowed on board until vessel's crew examined by doctor and after approval of Medical Adviser.

RADIO: Vessel can route ETA cables to Gothenburg Radio (call sign SAG or Channel 26 on VHF), open all hours. Radio stations can also be called by radio-telephone on 2182 kHz.

VHF: Port Control Office equipped with VHF (Channel 16, 9, 10, 11, 12, 13 and 14), open 24 hours a day. Masters can receive information about berthing place, present traffic and existing hazards to navigation in harbour area.

TUGS: Tugs usually meet vessels at roadstead. Ship's lines used.

Tugs can be arranged through a shipbroker or the Port Control office and are available round the clock from the Roda Bolag. Three tugs are based in Malmo, two of them with 3,000 h.p. Others are available if necessary.

BERTHING:

Passenger Harbour:

Berth	Length (ft.)	Depth (ft.)
301 – 303	1,083	10
304 – 308	1,903	23.5
401 – 404	1,180	16.5 – 19.5
405 – 409	1,330	16.5 – 19.5
410 – 411	670	23.5
412	131	23.5

Also see "Bridges".

Ferry and General Cargo Harbour:

			Quayside Cranes			
Berth	*Length* (ft.)	*Depth* (ft.)	*No.*	*Capacity* (tons)	*Range Outside Quay* (m.)	*Remarks*
501 – 502	656	21.0				Car-ferry berth
503 – 504	636	23.5				Train-ferry berths
505 – 506	560	23.5				Car-ferry berth
507 – 511	1,050	23.5				
512 – 513	656	23.5				
514	328	23.5				
515 – 517	836	23.5				
518 – 523	2,312	23.5	2	6.0	12.55	Also equipped with grabs
524 – 526	607	17.5				

Free Port:

			Quayside Cranes			
Berth	*Length* (ft.)	*Depth* (ft.)	*No.*	*Capacity* (tons)	*Range Outside Quay* (m.)	*Remarks*
600 – 604	1,970	30	5*	6 – 40	22 – 24.5	2×40 tons cranes and 1 screen unloader, capacity 120-200 t.p.h.
605 – 609	1,645	30	6†	2.5 – 6	11 – 21.5	
610	560	30				Oil jetty

*Also equipped with grabs

†One of them also equipped with grab

Container Berth Nos. 612 – 613 with a depth of 9.2 m. alongside. Quay length 240 m. 50 m. wide Ro-Ro ramp. Quay equipped with a 40 tons (46 tons heavy-lift) container crane with a range of 27 m. outside quay. Quay area 85,000 sq.m. 2,100 sq. m. insulated warehouse adjacent to Ro-Ro berth.

Industrial Harbour:

			Quayside Cranes			
Berth	*Length* (ft.)	*Depth* (ft.)	*No.*	*Capacity* (tons)	*Range Outside Quay* (m.)	*Remarks*
801 – 804	1,194	23.5				
805 – 806	—	29.5	5	6 – 20	11.7 – 13	
807 – 810	1,970	23.5	2	5	13.0	
811	387	23.5				
812 – 818	2,135	23.5 – 29.5	3	6	19.0	
901 – 907	2,887	29.5	3	6	19.0	
908 – 909	788	23.5	1	6.5	14.75	Coal discharge quay at Syd-Kraft
910 – 918	2,148	29.5	3	6 – 20	19 – 23.2	2×20 tons cranes
930 – 932	560	19.5				
933	341	19.5	2	6 – 20	19 – 23.2	1×20 tons crane

8 of these cranes can be equipped with grabs

Port of Limhamn: Incorporated with Malmo Port Authority 1978. This port consists of an oil and cement jetty, a centreport and a ferry port.

The Port of Limhamn lies to the South of Malmo and is accessible via two fairways; the Southern one has a depth of 5.0 m. and leads to the Ferry Harbour, and the Northern fairway has two branches, one to the Oil Harbour with a depth of 10.5 m. and one to the Central Harbour with a depth of 8.0 m.

			Cranes	
Berth	Length m.	Depth m.	No.	tons
Centreport:				
107 – 111	500	8.4	1	5 (private berth)
104 – 106	200	8.0 – 8.4	–	
112 – 113	180	8.0	–	
117 – 118	200	8.0	Tanker berth	
Ferry port:				
217, 220		5.0	Car ferry berth	
Oil berth (jetty):				
125	90	10.5	Loading plant for cement and tanker berth	

BRIDGES: Will be opened with certain exceptions 0700 – 1700 hrs. weekdays. May be opened other hours on request to Port Control Office.

STEVEDORES: Normal working hours are from 0700 – 1600 hrs., Monday to Friday. Standard overtime shifts of up to 3 hours can be arranged. Additional overtime work can be obtained by special arrangement with the Terminal Company. Overtime work can also be arranged on Saturdays, Sundays and holidays.

Stevedore Company: Malmo Sjoterminal AB, Hjalmaregatan 1, 211 20 Malmo. Tel: 040-34 40 00. Telex: 32713 Seaterm S. Director: Bertil Cederholm.

CONTAINER HANDLING FACILITIES: 10 Roll-on/Roll-off ramps, 2 container berths with 40 tons capacity container cranes, 3 forklift trucks with 25 – 40 tons capacity.

MEDICAL: No advance notice required for medical attention. Good hospital facilities available. See also "Health".

TANKERS/BULK CARRIERS: The Bulk/Oil Harbour in the Northernmost section of the port of Malmo, and can be reached by a special approach fairway, the Oil Harbour channel, which has a depth of nearly 43.5 ft. The harbour is equipped with 7 berths, 2 of these being for ocean-going tankers with modern equipment for the unloading of oils and chemicals. Water depth varies between 19.5 ft and 39 ft.

The harbour can accept fully-loaded tankers of up to 60,000 d.w.t. as well as partly-loaded ships of up to 100,000 tons.

The berths for ocean-going tankers are each equipped with 3 hydraulically manoeuvrable transfer plants for faster and more reliable unloading. A piping system leads from the berths, unloading capacity of up to 2,000 tons per transfer plant, berth and hour. Tanks and pipes can be heated from a central steam-production station used by all firms. The Oil Harbour area also contains storage tanks for liquid chemicals and solvents. There are also good possibilities for development within the area, e.g. petrochemical industries.

Berth	*Quay Length*	*Depth*	*Crane capacity*
1001 – 1002	656 ft.	43.5 ft.	500 t.p.h.
1003	770 ft.	39 ft.	
1004	770 ft.	39 ft.	
1006 – 1007	295 ft.	19.5 ft.	
1008 – 1009	295 ft.	19.5 ft.	
1010	328 ft.	19.5 ft.	

Also see "Berthing" – Port of Limhamn.

DENSITY: Average density 1010. No tide experienced.

FRESH WATER: Fresh water can be ordered from the Port Control office (Tel: 040-128864) and is available at all quays at a rate of about 20-30 t.p.h.

FUEL: All types of bunker oil are available from tank trucks at various quays in Malmo and Limhamn.

FIRE PRECAUTIONS: Apart from usual non-smoking precautions, vessel discharging or loading dangerous goods of Class 1 in IMO code required to have a fire guard on board at all times.

In Oil Harbour the shore-valve watchman also serves as fire guard.

GANGWAY/DECK WATCHMEN: Not considered necessary other than in Malmo Oil Harbour. Decision to be made by Master.

OPENING/CLOSING HATCHES: Normally carried out by stevedores on ocean-going vessels.

CERTIFICATES:

International Bill of Measurement.
Certificate of Nationality.
Derat Certificate.
Load-line Certificate.
Radio Certificate.
Safety Equipment Certificate.
Gear Certificate.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes or 40 cigars or 150 grams of smoking tobacco per week out of bond. Spirits, 0.75 litre spirits per week out of bond.

CARGO GEAR: No additional requirements.

IDENTIFICATION CARDS: Not needed.

CONSULS:

	Telephone
Austrian Consulate	93 21 11
Belgian Consulate	93 41 00
Brazil Consulate	11 70 38
Danish Consulate-General	12 33 44
Finnish Consulate-General	11 77 80
French Consulate	12 36 48
German Consulate-General	94 54 75
Greece Consulate-General	11 02 26
Guatemala Consulate	722 30
Icelandic Consulate-General	12 81 10
Italian Consulate	13 66 00
Japanese Consulate	783 05
Mexico Consulate	23 95 95
Netherlands Consulate	78283
Norwegian Consulate-General	12 35 00
Polish Consulate-General	674 16
Portuguese Consulate	10 11 30
Spanish Vice-Consulate	23 38 00
Swiss Consular Agent	12 53 52
Turkish Consulate-General	11 48 11
Yugoslavian Consulate	12 42 01/31

REPAIRS: Ship and engine repairs of all kinds, and dockings carried out by Kockums Mekaniska Verkstad, one of biggest shipyards in world. Certain kinds of repairs carried out by other firms in town.

DRY DOCKS: 2 dry docks for ships up to 25,000 d.w.t. and 1 dock with a capacity of 750,000 tons. Efficient crane equipment permits single lifts of up to 800 tons. Kockum are also large manufacturers of ship's engines, in particular MAN diesels and De Laval steam turbines.

SURVEYORS:

1. Cargo Inspectors available.
2. Surveyors available.

REPATRIATION: Facilities exist for effecting crew changes and arranging repatriations.

AIRPORT: Sturup Airport, served by regular airlines, situated about 25 km. from Port of Malmo.

Helioport: Malmo Port, Nyhamnen, service after special order. See "General".

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: See "Stockholm". Oil tankers can be dispatched all hours.

POLICE/AMBULANCE/FIRE: Tel: 90000.

EMERGENCY CO-ORDINATION CENTRE: Marine Centre Malmo (Tel: 040/11 55 55) include Royal Navy, Swedish Coast Guard, Swedish Administration of Shipping and Navigation and Pilots.

SOS – Alarm Centre Malmo (Tel: 90 000).

TELEPHONES: Can be connected at most berths and can be ordered from the Port Control office. Tel: 040-128864.

STORING: See "Prelims" page viii.

1. Vessels can be stored by truck in all docks except the Oil Harbour.
2. If barges available ships may be stored with same if not interfering with cargo handling. In Oil Harbour, regulations must be followed.
3. Yes, excluding Oil Harbour, distance 30 m.
4. Yes, if not interfering with cargo handling.
5. General regulations for Sweden.
6. Yes.

BANKS: Gotabanken, St Nygatan 27, 203 11 Malmo. Telex: 32464 Gotbank S.

Svenska Handelsbanken, Stortorget 21-23, 202 12 Malmo. Telex: 32314 Hanmlm S.

PK Banken, Sodergatan 14, 201 20 Malmo. Telex: 32524 Pkmalm S.

Skandinaviska Enskilda Banken, Ostergatan 39, 205 20 Malmo. Telex: 32850 Essebm S.

Skanska Banken, Sodergatan 10, 205 40 Malmo. Telex: 32720 Sydbnk S.

Sparbanken Malmohus, Gustaf Adolfs torg 4, 201 80 Malmo. Telex: 33108 Smbank S.

Sveriges Riksbank, Diskontogangen 2, 202 50 Malmo. Telex: 19150 Riksbk S (Stockholm).

GENERAL: *Container inspection* and minor repairs can be ordered from the Malmo Sea Terminal Company. Tel: 040-34 40 00.

Customs: The District Office is open Monday – Friday 0800 – 1600. Tel: 040-73130. The Co-Ordination Office is open round the clock. Tel: 040-73130, 79233.

Dangerous goods: Contact the Harbour Master's office (see Port Administration/Harbour Master). If a cargo contains dangerous goods this must be reported 24 hours in advance.

Helicopter service is available at the Malmo Helicopter Station, Hul Quay from AB Osterman Air. Tel: 040-973040, 031-921116.

National Administration of Shipping and Navigation: N. Neptunigatan 5, Malmo. Southern Pilot District. Tel: 040-75155, Malmo Ship Inspection. Tel: 040-74780. Malmo Pilot Office. Tel: 040-115269.

Port Administration: Hjalmaregatan 1, Malmo. Tel: 040-34 40 00. Telex: 33275 M Port. Open Monday – Friday 0800 – 1630. At other times contact the Port Control.

Port Control Office: Open round the clock. Tel: 040-34 41 89, 128864. VHF radio Channel 16.

Salvage work is available from the Roda Bolag in Malmo. Tel: 040-12 44 92.

Seaman's Centre (Sjomansgarden): Fiskehamnsgatan 3, Malmo. Tel: 040-124135. Chapel, lounge, hobby rooms, restaurant, cafeteria, etc.

Seaman's Hotel (Sjofartshotellet): Citadellsvagen 4, Malmo. Tel: 040-239605.

Ship Chandlers: A number of ship chandlers are located in the immediate vicinity of the port.

Waste Containers for ship's waste (but not for engine-room waste or oil) are available on all quays.

Waste Oil: Contact the Port Control Office in order to dispose of waste oil from the engine room.

Watchmen: A number of security companies are active in Malmo – see the telephone book. For safety personnel for discharging of tankers, contact AB Skeppshjalp. Tel: 040-978789.

Weighing Station: Located at the entrance to the Free Port. Tel: 040-123552. Open 0730 – 1200, 1230 – 1600.

Workshop Service: Kockums Shipyard. Tel: 040-74400. Smaller workshops are located in Malmo and Limhamn – see the telephone book.

DELAYS: No delays expected.

AUTHORITY: Malmo Port Authority, Hjalmaregatan 1, S-211 20 Malmo. *Tel:* 040-34 40 00. *Telex:* 33275 Mport S. *Contact:* Lars-Olof Skoglund, Harbour Master. Bertil Cederholm, Port Director. Knut A. Nilsson, Marketing Manager.

NORRKOPING: 58.36 N. 16.12 E. (See Plan Book)

DOCUMENTS: 3 Customs Documents. 3 Health Documents. 3 Crew Lists. 3 Passenger Lists. 3 Manifests.

Master of ship arriving at first Swedish port from abroad has to give Maritime Declaration of Health on special form.

PILOTAGE: See "Stockholm". Ships will be received 2 nautical miles North of the lighthouse Gustav Dahlen. The Pilot must be ordered on radio, telephone or in some other way at least 5 hours before piloting to start.

ANCHORAGES: Lat. 58° 38.7′ N., Long. 16° 22.5′ E. Depth 70 ft.

RESTRICTIONS: Tankers loaded with more than 10,000 tons gasoline must not move in port at night-time. Tankers over 15,000 d.w.t. will not be shifted at night-time. Pampushamnen Oil Jetty: Tankers loaded with more than 10,000 tons must not enter at night-time. Inner Harbour: Tankers loaded with more than 15,000 tons must not enter at night-time.

MAX. SIZE: Pampushamnen Oil Jetty can berth vessel of about 45,000 d.w.t. with max. draft of 11.4 m. MLW. Gastgivarehagen Oil Jetty can berth vessel with a max. draft 8.4 m. MLW and length 195 m. Ramshall and Tallbacken Oil Jetty can berth vessel with max. draft 7.9 m. MLW, length 177 m., breadth 24.4 m., daytime only. General cargo and bulk cargo quay at Pampushamnen with max. draft 11.4 m. MLW. General cargo quay (Ohmanskajen) can berth vessel max. draft 8.4 m. MLW and max. LOA 195 m. Dry cargo vessels of 15,000 d.w.t. or more for Ohmanskajen daylight entry only. Dry cargo vessels of max. LOA 195 m. and max. breadth of 23 m. and vessels of max. LOA 180 m. and max. breadth of 26 m. permitted. Vessels exceeding this size shall obtain prior permission from Pilots to enter the Ohmanskajen through the Lindo Kanal. Vessels must be able to make headway through the Kanal with a speed not exceeding 5 knots. Dry cargo vessels of 25,000 d.w.t. or more should have bridge controlled main engines. Inner Harbour can berth vessel max. draft 6.4 m.

Largest tanker at Pampushamnen, 65,405 d.w.t. LOA 236.66 m. Also see "Tankers".

RADIO: Stockholm Radio, Tingstade Radio.

RADAR/VHF: VHF Channel 9, 14 and 16. No radar.

TUGS: 3 tugs available, 1,680 b.h.p., 1,265 b.h.p. and 310 b.h.p. The 2 large tugs are icebreaking. Join vessel off St. Juten Lat. 58° 38.1′ N., Long. 16° 19.6′ E. Ship's lines to be used. All towing is carried out subject to "Scandinavian Tugowners Standard Conditions of the year 1959 revised 974".

BERTHING: No specific requirements except at Oil Jetty Tallbacken and Ramshall, which require daylight docking and undocking.

Berths specially equipped for grain, berths equipped for containers, berth for Roll-on/Roll-off traffic, berths handling liquid chemicals. 4,500 m. of quayage with depths of 5 m. – 12 m. and 6 oil jetties.

Roll-on Roll-off Berths:

One Ro-Ro berth with a fixed concrete ramp and a water depth of 9 m. Loading and discharging by shore cranes may take place simultaneously with Ro-Ro operations. Stern loading vessels port side alongside.

One Ro-Ro berth with a fixed concrete ramp and a water depth of 8 m. for Ro-Ro operations only. Stern loading vessels starboard side alongside. One Ro-Ro berth with a fixed concrete ramp adjacent to the heavy lift crane specially designed for heavy loads. Water depth 9 m.

Djuron

Grain Terminal, position Lat. 58° 38′ N., Long. 16° 20.1′ E. 160 m. long concrete pier with a water depth of 12.2 m. MLW. Travelling grain loader with maximum loading capacity 500 tonnes/hour. Max. elevation above MLW 18 m.

Braviken

Paper Mill, Holmens Bruk AB. Lat. 58° 38.3′ N., Long. 16° 16.1′ E. 126 m. long concrete pier with a water depth of 8.8 m. MLW. Mobile cranes for loading on request. Otherwise ship's gear. Roll-on/Roll-off fixed concrete ramp 20 m. wide with a water depth of 6.8 m. MLW. Stern loading vessels starboard side alongside.

CRANES: All cranes are owned and operated by the Port Authority. These include 22 electrical transportable quay cranes with a capacity of 4 – 10 tonnes, two 25 tonnes cranes adapted for 20 ft. and 40 ft. container handling which together can lift 45 tonnes, two 25 tonnes mobile cranes, one fixed heavy lift crane with a maximum lifting capacity of 320 tonnes and one 4 tonnes floating crane.

STEVEDORES: Gangs must be ordered before 1500 hrs. day before arriving.

MEDICAL: Arranged by Agent. All services available.

TANKERS: *Pampushamnen:* Pier I: Depth alongside 12 m. The berth is equipped with a crane for the handling of hoses and has pipe connections for all petroleum and bitumen products. Permanent gangway for the use of tankers.

Pier II: Depth alongside 12 m. The berth is equipped with a crane for the handling of hoses, and 3 mechanical couplings and has pipe connections for all petroleum products. Permanent gangway for the use of tankers.

Pier III (coastal tonnage): Depth alongside 7.5 m. The berth is equipped with a crane for the handling of hoses and has pipe connections for all petroleum products.

Fuel oil: one 18 in. and one 16 in. pipe-lines for discharging. 2 connections with 8 in. hoses. Gas oil: 14 in. pipes with 2 connections to 8 in. hoses. Asphalt: 10 in. pipes. Gasoline: 12 in. pipes with 1 connection to 8 in. hose. Connection to bigger or smaller hoses possible through existing flange-connections.

Pipe connections for discharging ballast water are installed at all piers at Pampushamnen. Receiving of ballast water is covered by ballastage. Ballast water containing any chemical agents not accepted. Receiving capacity during the first hour is 650 cu.m. Thereafter, 150 cu.m./h.

Tallbacken (Shell): Depth alongside 8.5 m. Beam of vessels restricted to 24 m. (78 ft. 9 in.) due to passage through the Handelo drawbridge. Vessels require own gear for the handling of hoses.

3 connections for variable kinds of oil, 8 in. hose connections.

Gastgivarehagen (Gulf): Depth alongside 9 m. The berth is equipped with a crane for the handling of hoses.

4 connections for variable kinds of oil, 8 in. hose connections.

FRESH WATER: Delivered by 1 water boat of 90 cu.m.

FUEL: All grades available, delivered by boat. Notice: daytime not necessary.

DENSITY: 1000.

GANGWAY/DECK WATCHMEN: Watchmen are not necessary. Hose-watcher required during loading and discharging of tankers.

OPENING/CLOSING HATCHES: Decided from case to case.

CERTIFICATES: International Tonnage Certificate, Derat Certificate, Trade Certificate, and Radio Safety Certificate.

IDENTIFICATION CARDS: Not needed. Crew List to be used on Oil Jetties.

CONSULS:

British	Tel: 011/10 00 40	German (Fed.)	Tel: 011/12 47 15
Danish	„ 011/12 90 80	Netherlands	„ 011/10 08 00
Finnish	„ 011/10 64 70	Norwegian	„ 011/12 90 40
French	„ 011/19 02 80	Uruguay	„ 011/12 03 18

Belgian Vice-Consul tel. 011/18 62 60

REPAIRS: Small repairs to machinery can be made. No repairs in port without permission of Harbour Master.

DRY DOCKS: None.

SURVEYORS: Authorised Surveyors available representing most P&I clubs, appointed by the Swedish Board of Shipping and Navigation.

REPATRIATION: Can be arranged.

AIRPORT: Distance from Airport "Kungsangen" about 4 miles. Daily communications with Copenhagen.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours.

HOLIDAYS: New Year's Day; Twelfth Day; Good Friday; Easter Monday; May Day; Ascension Day; Whit Monday; Midsummer Day.

POLICE/AMBULANCE: These services can all be reached on telephone number 90 000.

TELEPHONES: Available at different quay berths on request.

SERVICES: Arrangements for discharging waste oil and ballast.

DELAYS: No delays normally expected.

AUTHORITY: Norrkopings Hamn, Styrmansgatan 10, 60181 Norrkoping, Sweden. *Tel:* (011) 100280. *Telex:* 64433 Nrk Hamn S. *Contact:* Harbour Master.

NORRSUNDET: 60.56 N. 17.09 E. (See Plan Book)

LOCATION: On the Southern part of the Gulf of Bothnia and N.W. of Saltharsfjarden.

DOCUMENTS:

3 Crew Lists.
2 Crew Effects Lists.
2 Provision Lists.
Passenger List.

PILOTAGE: Pilot available at Eggregrund Gefle for ships coming from South and at Soderhamn for ships coming from North. Pilot available day and night. Contact Pilots by VHF on Channel 16, 5 hours before arrival.

ANCHORAGES: South Gashallan in white section of Hallstenoren Light.

RESTRICTIONS: During darkness max. length 100 m.

MAX. SIZE: Draft 21 ft. 4 in. and length 135 m.

RADIO: Stockholm Radio or Harnosand Radio.
VHF: Port Authorities on Channel 16.
TUGS: 1 tug-boat available, can be ordered from Pilot or Agent.
BERTHING: The depths in the harbour are from 3.5 m. to 6.5 m. (11 ft. to 21 ft. 4 in.).

Metres of quayage with depths alongside as follows:

Quayage (m.)	*Depth alongside*	
54	4.3 m.	14 ft. 0 in.
37	3.4 m.	11 ft. 2 in.
186	6.5 m.	21 ft. 4 in.

CRANES: No shore cranes. Mobile cranes up to a max. 70 tons available.
FRESH WATER: Available from shore installations, can be ordered from Pilot or Agent.
GANGWAY/DECK WATCHMEN: Not available.
OPENING/CLOSING HATCHES: Crew allowed to open and close.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirits per man.
STEVEDORES: Ordered by Agents. Ordinary working time, Monday-Friday, 0700 – 1600 hrs. To finish a vessel maximum of 3 hours' overtime can be worked.
FUEL: Delivered by truck alongside vessel on pier.
IDENTIFICATION CARDS: Not required.
POLICE/AMBULANCE/FIRE: Tel: 90000.
GENERAL: *Exports:* Wood-pulp, sawn wood-goods and raw tall-oil. *Imports:* Fuel oil and pulp/wood.
AUTHORITY: Norrsundet Bruks AB, Box 4, S-81701 Norrsundet, Sweden. *Tel:* 0297-22180. *Telex:* 47331 Norsund S. *Contact:* S. Jansson, Shipping Department.

NYKOPING: 58.45 N. 17.02 E. (See Plan Book)

DOCUMENTS:
- Tonnage Certificate.
- 5 Crew Lists.
- 2 Manifests.
- 1 Provisions List.

PILOTAGE: Pilot station at Havringe (58° 33′ N., 17° 19.0′ E.), about 15 miles from Nykoping. Pilot must be ordered 5 hours before arrival Havringe. (Also see "Stockholm").
ANCHORAGE: There is good anchorage at Orsbaken in a depth of 9 m.
RESTRICTIONS: The dredged entrance channel from Orsbaken to Nykoping nearly 5 miles long, 98 ft. wide, has a depth of 5.6 m. (18.4 ft.) at MW.
MAX. SIZE: Roll-on/Roll-off vessels up to 4,600 d.w.t. and length 330 ft. can enter the harbour.

Grain Quay	Max. draft 5.0 m.
North-East Quay	,, ,, 4.2 m.
South-East Quay	,, ,, 5.0 m.
South-West Quay	,, ,, 5.1 m.

RADIO: Stockholm.
TUGS: There is a diesel tug of 220 h.p. Larger tug of 1,200 h.p. can be called from Oxelosund.
BERTHING: There is 560 m. of quayage with depth from 5.3 m. to 6.0 m. (17.5 ft. to 19.5 ft.) alongside at MW.
CRANES: There are 2×4.5 tons mobile cranes and 1×4 ton crane.
STEVEDORES: Ordered by Agents. Working hours: 0700 – 1600 hrs.
FRESH WATER: Available.
FUEL: All grades available.
GANGWAY/DECK WATCHMEN: Ordered by Agents, not compulsory.
OPENING/CLOSING HATCHES: Normally by crew.
CUSTOMS ALLOWANCES: Each crew member 200 cigarettes or 25 cigars or 200 grams tobacco and 1 bottle spirits.
CONSULS: Vice Consulate for Denmark and Finland, Tel: 0155/30600.
REPAIRS: Minor repairs can be effected.
DRY DOCKS: None.
AIRPORT: Norrkoping 80 km., and Stockholm 120 km.
HOLIDAYS: New Year's Day; Good Friday; Easter and Easter Monday; Labour Day (1st May); Whit Monday; Midsummer Day and Christmas Day.
POLICE/FIRE/AMBULANCE: Police 17100; Ambulance 90000; Fire 90000.
TELEPHONE: None available for placing on board.
SERVICES: None.
SHORE LEAVE: Permitted.
AUTHORITY: Hamnkontoret Nykoping, O. Langdgatan 14, 61135 Nykoping, Sweden. *Tel:* 0155-12136. *Contact:* Olof Lunden, Harbour Master.

NYNASHAMN: 58.55 N. 17.58 E. (See Plan Book)

DOCUMENTS:
- 2 Crew Lists, and 3 Crew Lists on IMO form.
- 3 copies General Declaration (form supplied on arrival).
- Bill of Health.
- Derat Certificate.
- 3 copies Cargo Manifest/Bills of Lading.
- Tonnage Certificate.
- Certificate of Nationality.
- Stores and Personal Effects Declaration.
- Tovalop Certificate.

PILOTAGE: Compulsory. Pilot boards deep-draft tankers near Landsort Outer Approach Light Buoy (58° 36′ N., 17° 53′ E.).

Pilot boards other vessels 2 miles South of Landsort Light (58° 44′ N., 17° 32′ E.).

RESTRICTIONS: Draft limited to 13 m. through the archipelago to the harbour.
MAX. SIZE:

Berth	*Max. Length of Vessel*	*Max. Distance Bow-manifold*	*Water Depth*
1	300 m.	140 m.	17 m.
		165 m.	15 m.
2	110 m.	60 m.	7 m.
3	250 m.	90 m.	12.5 m.
		105 m.	12.0 m.
4	120 m.	60 m.	12.9 m.
5	70 m.	—	*5.2 m.

*As far as 18.0 m. N.E. of the berth.

HEALTH: Vessels arriving from ports outside Europe must, for inward clearance, provide Customs Office with written declaration of freedom from infection. Further instructions will be issued by Customs Office when such declaration cannot be given.
RADIO: Stockholm Radio; call sign SDJ.
VHF: Nynasoil on Channels 16, working 9 and 13.

Channels 6, 12 and 16 are portable and used during mooring operations.

BERTHING:
Berth No. 1: Loading arms: 3×12 in. for crude oil, 1×8 in. for bunker. Minimum height of loading arms above sea level 2.5 m. Max. height of loading arms above sea level 23 m. Minimum distance between connections of 2 loading arms 1.5 m.

Fresh water supply max. 40 t.p.h.

Ballast water can be pumped ashore at a max. rate of 300 cu.m./hr.

Connection with the loading arms. Vessels usually berth starboard side alongside.

Berth No. 3: Loading arms: 1×10 in. for dirty oil. 1×10 in. for light fuel oil. 1×10 in. for gasoline. Minimum height of loading arms above sea level 1 m. Max. height of loading arms above sea level 16.5 m. Minimum distance between connections of 2 loading arms 1.5 m.

Fresh water supply max. 15 t.p.h.

Ballast water can be pumped ashore at a max. rate of 300 cu.m./hr. Connection with the loading arms. Vessels usually berth portside alongside.

Berth Nos. 2, 4 and 5: For coasters only. Jetty No. 2 and 4 are equipped with loading arms and hose connections of 6 in., 8 in. and 10 in. Jetty No. 5 hose connections only.

DENSITY: 1010.
FRESH WATER: Can be supplied from the piers. No barges.
FUEL: All grades can be supplied from the piers. No barges.
CUSTOMS ALLOWANCES: 200 cigarettes per person per week. 1 bottle of wine and spirits per person per week.
CONSULS: All consuls available at Stockholm.
REPATRIATION: Can be arranged.
AIRPORT: Nearest at Stockholm.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summertime.
SHORE LEAVE: No restrictions.
AUTHORITY: AB Nynas Petroleum, Oil Harbour, Box 1002, S-14901 Nynashamn, Sweden. *Tel:* 0752-14260. *Telex:* 19261 Nypetro S. *Cables:* Nynas Petroleum. *Contact:* Lars Lindgren, Harbour Master.

ORNSKOLDSVIK: 63.17 N. 18.43 E. (See Plan Book)

DOCUMENTS:
- 1 Crew List.
- 1 Passenger List.
- 4 Customs Documents.
- 1 Health Document.
- 1 Manifest.
- 1 Bill of Lading.
- 1 Ship's Paper.

PILOTAGE: Pilot station, Ornskoldsvik, tel. 0660/66003. 5 hours' notice. VHF Channel 16. Orange-coloured motor launch fitted with radar and VHF. International signals. Station 2 miles South Skagsudde Lighthouse. Pilots serve all ports between Umea and Harnosand, also Sea Pilots and ice advisers for Gulf of Bothnia. (Also see "Stockholm").
ANCHORAGES: Ornskoldsvikfjarden 30 ft. – 75 ft. Anchorage forbidden in area Raskarson-Malmon-Buron.
MAX. SIZE: Length 700 ft.; breadth 100 ft.; draft 34 ft.
HEALTH: Customs Authorities give Pratique on arrival from foreign ports. In case of suspected disease inform Customs and Port Authorities.
RADIO: SAH, Harnosands Radio.
RADAR/VHF: Radar service in Skagsudde Lighthouse. Port Authority and Stevedores on VHF Channel 16.
TUGS: In port, available. Ship's lines used.
STEVEDORES: Inform stevedores at latest 1400 hrs. day before gangs required, also if available space for truck-loading in holds. Loose timber, 35 stds./gang/day. Packaged timber, 160 stds/gang/day. Board and wood pulp, 400 tons/gang/day.
TANKERS: Municipal Berth: Max. LOA 200 m. Max. draft 10.0 m. Max. d.w.t. 40,000. 6 in., 8 in. and 10 in. lines.

Shell Oil: Max. LOA 200 m. Max. draft 9.0 m. Max. d.w.t. 30,000. Vessels berth port side to.

DENSITY: Fresh water.
FRESH WATER: From quay or boat. 60 t.p.h.
FUEL: Gas oil, light fuel, heavy fuel.
GANGWAY/DECK WATCHMEN: Watchmen available if desired.
OPENING/CLOSING HATCHES: Stevedores or crew.
CERTIFICATES: Cargo Gear Certificates.
CUSTOMS ALLOWANCES: (Tobacco), 200 cigarettes per week (Wine/Spirits), 1 bottle per week.

CARGO GEAR: Not needed.

CONSULS: Danish, Finnish, Norwegian, Portuguese.

REPAIRS: Medium sized repairs carried out.

SURVEYORS: Cargo Inspectors and Surveyors available locally.

DRY DOCKS: None.

REPATRIATION: Available.

AIRPORT: 10 miles. 3 flights daily Northbound and Southbound.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Cargo work can be arranged on holidays.

POLICE/AMBULANCE/FIRE: Police 10800; Fire 10400.

EMERGENCY CO-ORDINATION CENTRE: SOS Centre – Dial 90000.

TELEPHONES: Cost 20 Sw. crs. to be placed on board.

BANKS: Svenska Handelsbanken, Storgatan 16, Box 69, 891 01 Ornskoldsvik. Tel: 0660/106 30. Telex: 71243.

Sundsvallsbanken, Storgatan 12, Box 19, 891 01 Ornskoldsvik. Tel: 0660/124 50. Telex: 71047.

Skandinaviska Enskilda Banken, Storgatan 26, Box 103, 891 01 Ornskoldsvik. Tel: 0660/150 52. Telex: 19154.

STORING: See "Prelims" page viii.

1. By truck.
3. Yes.
4. Yes.
6. Yes.

DELAYS: None.

AUTHORITY: Ornskoldsviks Kommun, Hamnforvaltningen, Box 125, 89101 Ornskoldsvik, Sweden. *Tel:* 0660-88000 Extn. 100, 101. *Contact:* G. Faxen, Harbour Master.

OSKARSHAMN: 57.15 N. 16.27 E. (See Plan Book)

DOCUMENTS: See "Stockholm".

PILOTAGE: Pilot boards at Furon, 6 miles East of Oskarshamn. Give ETA at least 5 hours prior arrival. VHF Channel 16. Tel: 0491/10036 (Also see "Stockholm").

ANCHORAGES: South of Furon, depth 25 m.

RESTRICTIONS: *Channel:* Oil Harbour depth 11 m. Outer Harbour (for general cargo) depth 11 m. Inner Harbour depth 8 m.

MAX. SIZE: *Max. draft:* Oil and Outer Harbour 34 ft. 6 in. Inner Harbour 25 ft.

VHF: Channel 16.

TUGS: 1 tug of 1,720 h.p. and 1 tug of 800 h.p.

BERTHING: *Oil Harbour:* Quay length 41 m., depth alongside 12 m.

Inner Harbour: South Quay length 470 m., depth 5 m. – 7.2 m.

Bradholm Quay: Length 140 m., depth 4.8 m. Length 88 m., depth 4 m.

North Quay:	Nos. 22 – 28	depth 5.5 m. – 7.8 m., length 470 m.
	Nos. 31 – 35	depth 8 m., length 360 m.
	Nos. 36 – 37	depth 6 m., length 120 m.
Ocean Quay:	Nos. 51 – 54	depth 11 m., length 350 m.

Shipyard Quays: Up to 8 m. depth.

BULK HANDLING FACILITIES: Roll-on/Roll-off berth for goods traffic situated at the North Quay, depth alongside 8.50 m.

CRANES: 3 Portal cranes, 10 tons capacity. 6 mobile cranes, 10 – 36 tons capacity. 1 crane for container handling. Shipyard, one crane 125 tons.

TANKERS: One berth, depth at quay 36 ft.; draft 34 ft. 6 in. Discharge lines 8 in.

FRESH WATER: At every berth.

FUEL: Available.

CERTIFICATES: See "Stockholm".

CUSTOMS ALLOWANCES: 200 cigarettes, one bottle spirits.

IDENTIFICATION CARDS: Not needed.

CONSULS: Denmark Tel: 0491-16135; Finland Tel: 0491/11013; Norwegian Tel: 0491/18810.

DRY DOCKS/REPAIRS: Dry dock length 427 ft. Capacity 30,000 d.w.t. Repair facilities available. Oskarshamn Shipyard. Tel. 0491-17080.

AIRPORT: Oskarshamn, 3 km. away, 2 flights daily to Stockholm.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: See "Stockholm".

POLICE/AMBULANCE/FIRE: Police, Tel: 15090; Alarm, Police/Ambulance/Fire Tel: 90000.

TELEPHONES: Available for connection on board.

SERVICES: Compass adjusting.

DEVELOPMENTS: New Harbour under construction at Klubbdjupshamnen (57° 16′ N., 16° 28.8′ E.).

AUTHORITY: Oskarshamns Port and Stevedoring Co., Norra Strandgatan 50, S-572 00 Oskarshamn, Sweden. *Tel:* 0491-16080. *Telex:* 4988. *Contact:* H. Westerberg, Port Director. Bo Nilsson, Traffic Manager.

OTTERBACKEN: 58.57 N. 14.02 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.
1 Store List.
Ship's Register.
1 Manifest of Bill of Lading.

PILOTAGE: Pilotage is not compulsory. Pilot obtainable at Vanersborg.

ANCHORAGES: In the roads in depths from 16 ft. to 19.5 ft., clay bottom, and in the bay East of Storon from 18 ft. to 16.5 ft., clay and sand bottom.

MAX. SIZE: All ships able to pass through the Trollhatte Canal with a max. draft of 16.9 ft. at MWL can enter the harbour.

HEALTH: No certificates required. In event of any disease or fever contact Agent.

RADIO: All messages to Agent via Gothenburg Radio.

VHF: Port of Otterbacken can be reached by VHF Channel 16.

TUGS: Tugs available when icebreaking is necessary.

BERTHING: Gamla Kajen (old quay): Length of quay 235 ft. Depth alongside 10 ft.

Nya Kajen (new quay): Length of quay 890 ft. Depth alongside 17 ft. – 18 ft.

Galejholmskajen (Galejholms Quay): Length 590 ft. Depth alongside 17 ft. – 18 ft.

CRANES: Two 7 ton travelling bridge cranes; two 10 ton movable diesel cranes; one 5 – 7 ton portal crane.

STEVEDORES: Provided by Otterbackens Hamn AB. Ordinary working hours: From 0700 – 0900 hrs., 0930 – 1300 hrs. and 1330 – 1600 hrs.

MEDICAL: Hospital available.

FRESH WATER: Available.

FUEL: Available.

REPAIRS: Minor repairs only can be effected.

GANGWAY/DECK WATCHMEN: Available but not compulsory or necessary.

HATCHES: Opening/closing is normally carried out by the crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 litre spirits for each crew member.

AIRPORT: Karlstad 90 km; Gothenburg (Torslanda) 180 km.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: January 1st and 6th; Good Friday; Easter Monday; May 1st; Whitsuntide; December 25th and 26th.

POLICE/AMBULANCE/FIRE: Tel: 90000

TELEPHONES: Not possible to place telephones on board. Telephones available at harbour office.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

AUTHORITY: Otterbackens Hamn AB., Fack 65, S-547 02 Otterbacken, Sweden. *Tel:* 0551-22250. *Telex:* 66088 Otbsped S. *Cables:* Otterbacksped. *Contact:* Ulf Levin, I. Wahlin.

OXELOSUND: 58.40 N. 17.08 E. (See Plan Book)

PORT LIMITS: The seaward boundaries of the port is a line between the Eastern point of Ljungholmen and the oil quay. For ore-loading ships, a vessel is considered to be an "arrived vessel" when at anchor at the roads West of Vinterklasen.

DOCUMENTS:

4 Crew Lists (3 for Customs and 1 for Ship's Agent).
4 Passenger Lists, if passengers are not inserted in Crew List.
2 Customs Documents, showing all alcoholic liquors and tobacco, belonging to Officers, crew and passengers.
2 Customs Documents, showing ship's store of alcoholic liquors and tobacco.
Health Documents, not necessary.
Manifests, at least 4 copies, normally only for general cargoes.
Bills of Lading, at least 1 copy if not otherwise stipulated.
Ship's Paper, Ship's Register and Derat Certificate, not older than 6 months.

PILOTAGE: (See "Stockholm"). Pilot station located at Oxelosund, tel. 0155 30200. ETA required 5 hours in advance in order to avoid charge for waiting. When ships in open sea inform pilot station by telephone, transfer via Stockholm Radio, call sign SDJ or Gothenburg Radio, call sign SAG, will be recommended. VHF Channel 16 can be used for contacting Pilot station or Pilot boat. Approaching vessel applies for Pilot when daylight with flag signal "G" and when dark with pilot-light or Morse Code PT. Pilot boats orange. Ships advised to proceed through Northern inlet, where Pilot will board at Norra Krankan Lighthouse, Lat. 58° 37′ N., Long. 17° 27′ E. International requirements with respect to boarding and safety measures. Vessels awaiting for Pilot are prohibited to ride at anchor North of "Gustaf Dalen" Lighthouse.

ANCHORAGES: Suitable anchorages West of Vinterklasen; clay-holding ground, depth 30 m. – 40 m. Ships are not allowed to berth until they receive orders and in the meantime must anchor and await such orders.

RESTRICTIONS: No tides. Draft not over 42 ft. at MLW. No other restrictions with exception of berthing ships of 40,000 d.w.t. and over.

MAX. SIZE: Ore loading berth: Vessels between 3,000 and 80,000 d.w.t. can be loaded. Depth at quay 45 ft. Berth for unloading coal, iron ore: Ships of up to 65,000 d.w.t. can be discharged. Depth at quay 39 ft. 4 in. Berth for general cargo: Depth at quay 32 ft. 10 in. Oil pier: Oil carrier up to 95,000 d.w.t. can be berthed. Depth at quay 45 ft.

HEALTH: No special regulations.

RADIO: Stockholm Radio, call sign SDJ, or Gothenburg Radio, call sign SAG.

VHF: Harbour Authorities and Clearance Department for ore loading ships has VHF Channel 16.

TUGS: 2 combined tugs and ice-breakers of 1,680 and 1,260 i.h.p. Ship's lines to be used. Tugs normally join vessel near Beten Lighthouse, near harbour.

BERTHING: Harbour Pilot compulsory and normally ordered by ship's Agent. No tides. Depths in harbour can vary occasionally from minus 1 ft. 6 in. to plus 1 ft. according to temporary alterations of MWL. Ships of 40,000 d.w.t. and over cannot be berthed when dark.

CARGO HANDLING FACILITIES: The port has, among other things, one ore quay equipped with a travelling ore-loader with an average capacity of 2,000 t.p.h. One quay for unloading coal, iron ore and similar equipped with two travelling cranes with a capacity of 600 t.p.h. At No. 7 Quay there is a 25 m. traverse ferry ramp equipped to accommodate Roll-on/Roll-off traffic.

STEVEDORES: Master of ship with general cargo has to inform Agent in advance number of gangs required.

MEDICAL: Necessary for Agents to receive advance notice of required medical attention, informing Agent if doctor should meet upon ship's arrival, if ambulance is required for transport to hospital and promptness required. No special vaccination/fever certificates necessary. Hospital at Nykoping, about 8 miles from Oxelosund.

TANKERS: One tanker berth, depth at quay 45 ft. Connection to load/discharge lines, diameter of 8 in. – 16 in. Almost all types of heavy fuel oils.

DENSITY: 1006 – 1016, 75% fresh water. No tides.

FRESH WATER: Available. Delivery through lines from quays at a rate of 10 t.p.h. Fresh water can also be delivered by tugs which have fresh-water tanks.

FUEL: Not available.

FIRE PRECAUTIONS: Watchman necessary when loading/discharging gasoline.

GANGWAY/DECK WATCHMEN: When ship berthed, reliable gangway must be arranged to quay. Tankers discharging/loading gasoline must have watchmen, arranged through ship's Agent.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: Usual international certificates. In order not to delay despatch, important that following certificates are available and valid: Measurement, Life-boat, Radio and Derat (not older than 6 months).

CUSTOMS ALLOWANCES: (Tobacco), each crew member permitted out of bond about 200 grams tobacco and 5 packets of cigarette-paper. (Wine and/or Spirits), each crew member is permitted to have out of bond 1 bottle spirits or 2 bottles of wine, if he is over 20.

CARGO GEAR: International certificates necessary. No additional requirements.

IDENTIFICATION CARDS: Not needed.

CONSULS: None.

REPAIRS: Not possible.

DRY DOCKS: None.

SURVEYORS: Surveyors and cargo inspectors in Stockholm.

REPATRIATION: Crew changes can be effected and necessary repatriation arranged by Agent.

AIRPORT: Arlanda 40.4 miles outside Stockholm. Distance Oxelosund – Stockholm 92.8 miles. Total distance 133.2 miles. Served by regular airlines.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: General holidays on which no cargo work can be arranged: New Year's Day; Epiphany; Good Friday; Easter Monday; Labour Day; Ascension Day; Whit Monday; Midsummer Day; All Saints' Day; Christmas Day; Second Christmas Day; New Year's Eve; Whitsun Eve; Midsummer Eve; Christmas Eve.

POLICE/AMBULANCE/FIRE: Dial tel. 90 000 and ask for "Police-alarm", "Ambulance" or "Brandalarm" (Fire alarm).

EMERGENCY CO-ORDINATION CENTRE: Dial 90 000 (Alarm No.).

TELEPHONES: Arrangements for placing telephones on board exist at Berth Nos. 9.5, 10 and 11. Cost for connection is charged per day.

SERVICES: No tank-cleaning equipment. Facilities for discharge of tank-washings.

BANKS: Skandinaviska Enskilda Banken, Box 6, S-613 01 Oxelosund. Telex: Stockholm 19154 Essebs.

STORING: See "Prelims" page viii.

1. By truck alongside dock only.
3. Trucks must remain 3 m. away from vessel.
4. Yes.
5. Regulations for bonded stores only.
6. No.

SHORE LEAVE: No restrictions.

DELAYS: Normally no delays.

AUTHORITY: Port of Oxelosund, Box 1200, S-613 01 Oxelosund, Sweden. *Tel:* 0155-31940. *Telex:* 64025 Portox S. *Cables:* Portox. *Telefax:* 0155-34321. *Contact:* Eric Balldahl, Harbour Master. Bjorn Engstrom, Port Director.

PITEA (Including Haraholmen, Pitsundet): 65.19 N. 21.29 E. (See Plan Book)

Pitea town closed to navigation.

DOCUMENTS:

2 Crew Lists.
2 Lists Spirits and cigarettes.
Manifests and Bills of Lading of incoming cargoes to be presented to Customs.
1 erat Certificate.

PILOTAGE: Pilot to be taken at Gaasoeren-Skelleftea district. Must be ordered at least 5 hours prior arrival. All VHF Channels used – also onboard pilot-boats. (Also see "Stockholm").

Outward-bound vessels must order Pilot from Harbour Office during office hours.

Signal station at Pitsund.

ANCHORAGES: Accordance Pilot's advice.

RESTRICTIONS: No entry in darkness to smaller ports in district.

MAX. SIZE: Max. draft to Skuthamn 22 ft. Max. size through Pitsundet draft up to 22 ft. Max. draft to Skuthamn 22 ft. Bridge over Pitsundet under construction (ready November 1984). For information regarding passage and bridge opening apply to Harbour Office.

No tides. Also see "Berthing" and "Tankers".

HEALTH: No special restrictions. Diseases must be reported to Customs before entering port.

RADIO: Stockholm Radio, Harnosand Radio.

VHF/RADAR: Radar and VHF on all stations. VHF also at signal station in Pitsundet – entrance to Pitea. Channel 16 only. Harbour Office, Channels 16, 9 and 13.

TUGS: Tugs available if ordered beforehand. Tugs compulsory for larger vessels. Costs for 2 tugs about Skr 30,000.

BERTHING: Haraholmen: Quay recently completed, length 600 m. plus Ro-Ro ramp, depth 12.5 m., max. draft 11.5 m. Quay is equipped with electricity, telephones, water and oil. Quay is very strong, capable of taking loads up to 250 tons.

Harbour is specially built for all year round traffic. 10 propeller engines are installed under the quay to keep water running and quay ice-free. Special lights are installed to assist in bad visibility.

Quay is equipped with 2 *"Asea"* cranes of 12.5 tons and 19.5 m. outreach.

BRIDGES: See "Max. Size".

STEVEDORES: Bottenvikens Stuveri AB – Pitea. Labour must be ordered latest at 1400 hrs. for morning start following day. Tariff available from Agents.

MEDICAL: All treatments available without notice.

TANKERS: Only one berth at Haraholmen. Max. size 70,000 d.w.t. Max. LOA 240 m. (approx.). Max. draft 37 ft. 10 in. FW. No further restrictions. 2 tugs compulsory for vessels over 15,000 d.w.t.

FRESH WATER: Available by pipe and lorries.

FUEL: All grades available.

GANGWAY/DECK WATCHMEN: Not necessary but available if ordered.

OPENING/CLOSING HATCHES: Normally done by ship's crew.

CUSTOMS ALLOWANCES: (Tobacco), 200 cigarettes/man per week. (Wine and Spirit), 1 bottle man/week. Only crew members over 18.

IDENTIFICATION CARDS: Not needed.

CONSULS: None.

REPAIRS: All types of repairs can be effected.

DRY DOCKS: None.

AIRPORT: Regular flights 9 times per day. Kallax Airport at Lulea. Distance 50 km. from port. 60 minute flight to Stockholm.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

POLICE/AMBULANCE/FIRE: Tel. 90000.

TELEPHONES: Facilities for placing on board available.

GENERAL: Masters to note the signals to be given before passing Pitsundet. Master must remember that Pilot must be taken at Gaasoeren-Skelleftea district. If Pilot on bridge all way from Skelleftea to Pitea, a distance fee is charged. Piloting from Nygraan Lighthouse (entrance Pitea) only normal fee.

DEVELOPMENTS: A chemical terminal has recently been completed, capacity 10,000 tons. Also see "Max. Size".

AUTHORITY: Hamnkontoret Pitea, Sjofartshuset, P.O.Box 716, S-94128 Pitea, Sweden. *Tel:* 0911-46070. *Telex:* 68307 Shipexp S. *Contact:* Aake Kaettstroem, Harbour Master.

RONNEBY: 56.10 N. 15.17 E. (See Plan Book)

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
4 Customs Documents.
1 Health Document.
2 Manifests.
1 Bill of Lading.

PILOTAGE: Pilot is taken at Karlshamn or Aspo (Karlskrona) pilot stations. Tel. Karlshamn 0454/14102, Aspo 0455/29016. Ordered over Karlskrona Radio on 3289 kHz or by VHF on Channel 16. Pilot should be ordered 5 hours in advance. (Also see "Stockholm").

ANCHORAGE: Open roads.

MAX. SIZE: Limited by depth in fairway: 20 ft. 9 in.

RADIO: Karlskrona Radio, 2182 kHz.

VHF: VHF call sign Ronnebyhamn, Channel 16, 12, 13.

TUGS: None, when necessary such ordered from Karlsham.

STEVEDORES: ETA given to ship's Agent sufficient.

MEDICAL: Medical attention required ordered by Agents.

TANKERS: Only small tankers with max. draft 20 ft. 6 in. 1×10 in. and 1×12 in. line. No facilities for residue discharge.

DENSITY: 1000. No tide.

FRESH WATER: From water post on quay.

FUEL: Diesel oil from tank-lorries.

OPENING/CLOSING HATCHES: Performed by crew.

CERTIFICATES:

Derat Certificate not over 6 months old.
Certificate of Nationality.
Certificate of Tonnage.

CUSTOMS ALLOWANCES: 200 cigarettes plus 1 bottle spirits.

IDENTIFICATION CARDS: Not needed.

CONSULS: Danish Consulate, tel. 0457/15060.

REPAIRS: Minor repairs only.

DRY DOCK: None.

AIRPORT: About 6 miles from Ronneby Harbour; daily flights to Malmo, Stockholm, Visby and Copenhagen.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

POLICE/AMBULANCE/FIRE: Police 90000; Ambulance 90000; Fire 90000.

TELEPHONES: Telephone box on Quay.

AUTHORITY: Ronneby Harbour Board, Box 3160, S-37203 Ronneby, Sweden. *Tel:* 0457-70080. *Contact:* Sven O. Hall, Harbour Master.

SIKEA: 64.09 N. 20.59 E.

SHIPPING HAS CEASED AT THIS PORT.

SKELLEFTEHAMN: 64.41 N. 21.15 E.

DOCUMENTS:

2 copies of Crew Lists (3 copies at Ronnskarsverken).
1 List of Provisions.
Measure Bill.
Manifests and Bills of Lading.

PILOTAGE: Compulsory. Telegraphic address: "Pilot Station Skelleftehamn". Advance notice required, 5 hours. Contact pilot boat or pilot station on VHF Channel 16. Calling signal "Skelleftea Pilot" (pronounced – Shellefteo Pilot). Pilot motor boats usually orange. Pilot taken on board 2 miles East of Gasoren Lighthouse. (Also see "Stockholm".)
RESTRICTIONS: No tides or tidal current.
MAX. SIZE: Maximum permissible length of tanker 185 m. in accordance to dredged basin's length.
HEALTH: In case of disease or suspected disease, ship should call for medical assistance in accordance with Swedish rules.
RADIO: Stockholm Radio or Harnosand Radio. When in reach of VHF station of harbour office, at 0830 – 1200 hrs. and 1300 – 1700 hrs., or else through pilot station VHF. Call signals "Skelleftea Hamnradio" or "Skelleftea Pilot Station".
RADAR/VHF: Radar service available when entering or leaving port. Contact Pilot station (Channel 16).
TUGS: Normally meet at passage of Gasoren Lighthouse. Ship's lines should be used. Tug of 3,000 h.p. also acts as local icebreaker.
BERTHING: No special requirements.
Kage: Depth in harbour at quay 23/20 ft.; length 609 ft.
Ronnskarsverken: Southern quay (jetty), depth 30.5 ft.; length 394 ft. Northern quay, depth 42/19.4 ft. and length 1,814 ft.
Skelleftehamn: North quay, depth 30/21 ft. and length of 1,300 ft. Oil Terminal, (jetty), depth 34 ft. and length 210 ft. with dredged basin of 656 ft. Siporex, quay depth 19.7 ft. and a length of 150 ft.
Bjuroklubb, length 230 ft., depth 17.5 ft.
STEVEDORES: No stipulated ETA regulations.
MEDICAL: Available at short notice. Government hospital in town.
TANKERS: *Municipal Berth:* One tanker berth. Max. d.w.t. 33,000. Max. draft 32 ft. Diameter of discharge lines 8 in. Flanges Din 2633.
Boliden AB: Max. LOA 200 m. Max. draft 11.0 m. Max. d.w.t. 50,000. Vessels berth port side to.
FRESH WATER: At oil terminal 25 t.p.h. Elsewhere 15 t.p.h.
FUEL: All usual grades available.
FIRE PRECAUTIONS: Standard.
GANGWAY/DECK WATCHMEN: Watchmen recommended.
OPENING/CLOSING HATCHES: Carried out by crew.
CERTIFICATES: See "Stockholm".
CUSTOMS ALLOWANCES: (Tobacco): 200 cigarettes. (Wine/Spirits), 1 bottle of wine and 1 bottle of spirits.
CARGO GEAR: No additional requirements.
IDENTIFICATION CARDS: Not needed.
CONSULS: Denmark, Finland, Netherlands and Norway.
REPAIRS: Minor repairs only. Patent slip, max. size 1,000 tons displacement.
REPATRIATION: Every kind of facility for effecting changes of crew.
AIRPORT: 18 km. Regular airlines, 2 flights a day.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day; Good Friday; 1st and 2nd Day of Easter; Ascension Day; 1st and 2nd Day of Whitsuntide; 1st May; Midsummer Day; and 1st and 2nd Day of Christmas. Cargo work cannot be arranged.
POLICE/AMBULANCE/FIRE: 38100, 31080; 90000; 58000.
TELEPHONES: Available for placing on board at the Northern quay in Skelleftehamn.
SERVICES: Small amounts of sludge can be taken ashore. Tug stationed in harbour.
DELAYS: In exceptionally bad weather.
GENERAL: All waste to be taken to special waste containers ashore.
AUTHORITY: Skelleftea Hamnforvaltning, S.a. Hamngatan 35, 93200 Skelleftehamn. *Tel:* 0910–31006, 31069. *Contact:* Stig Lundstrom, Port Director.

SKREDSVIK: 58.25 N. 11.30 E.

Oil harbour in the Lysekil area.

DOCUMENTS:

3 Crew Lists, on IMO form.
1 Cargo Manifest.
1 Copy Bill(s) of Lading.
1 Stores List.
1 Personal Effects List.
Derat Certificate.
Tonnage Certificate.
Certificate of Registry.

PILOTAGE: Pilot station at Lysekil, Tel: 0523/60800. VHF Channel 16. Five hours' notice of ETA required. Pilot vessel is an orange-coloured motor launch fitted with radar and VHF. International signals. Pilot boards between Gaeven and Tovas Ungar, about 6 miles West of Lysekil.
ANCHORAGE: Gullmarsfiord, S.E. of Lysekil, depth about 60 m.
RESTRICTIONS: Draft not to be in excess of 40 ft. on passage from Pilot to Skredsvik.
MAX. SIZE: Length 180 m. – 190 m. draft 10.0 m. No limit on breadth.
TUGS: Have to be ordered either from Gothenburg or from Uddevalla.
CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirits or wine per person per week.
IDENTIFICATION CARDS: Not required.
POLICE/AMBULANCE/FIRE: Police Tel: 0522/14920, or 0524/10068 and 90000; Ambulance and Fire Tel: 0522/10013, or 0524/10550 and 90000.
EMERGENCY CO-ORDINATION CENTRE: (SOS Emergency) Dial 90000.
AIRPORT: Nearest at Gothenburg.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
SHORE LEAVE: No restrictions, but photography and smoking ashore is not permitted.
AUTHORITY: The Swedish National Board of Economic Defence – Skredsvik, 45195 Uddevalla, Sweden. *Tel:* 0524-20100. *Contact:* Hans Hansson, Port Engineer.

AGENT: Ferm & Olsson AB., Post Box 66, 45300 Lysekil. Tel: 0523/14060. Telex: 42080. Cables: "Fermson" Lysekil.

SLITE, Gotland Is.: 57.42 N. 18.50 E.

DOCUMENTS:

Crew Lists.
Customs Documents.
Health Documents.
Bills of Lading.
Measurement Bill.
National Certificate.
Valid Derat Certificate.

All compulsory (also see "Stockholm".)
PILOTAGE: Service centralised to main station at Visby. Service day and night. Tel. 0498/10138. 5 hours' notice required. VHF Channel 16 (also see "Stockholm").
ANCHORAGES: Sheltered anchorage on Inner Road with up to 8.4 m. depth of water.
RESTRICTIONS: No restrictions. Entrance possible day and night.
MAX. SIZE: Draft not to exceed 21 ft. 6 in. alongside for cargo vessels. The depth at the entrance has been increased to 8.4 m. Depth alongside remains at 7.2 m. except for vessels berthing at Bulk cement berth where depth is 8.4 m.
HEALTH: Restrictions only if fever on board or vessel coming from a port where disease or fever in existence.
RADIO/VHF: Tingstade Radio Station, call sign SAE, VHF see "Pilotage".
TUGS: No tug available.
BERTHING: No restrictions if due notice to Port Authority given.
STEVEDORES: Notice to be given latest noon on day before arrival, order to make start next morning (unless special arrangements or agreements made).
MEDICAL: Attention by doctors-in-charge. Central hospital at Visby.
TANKERS: Pipe-line connection flange 8 in.
FRESH WATER: Available alongside quay.
FUEL: Practically all grades bunker oil available subject prior notice.
GANGWAY/DECK WATCHMEN: Not compulsory but available.
OPENING/CLOSING HATCHES: Ship's crew to open or close.
CUSTOMS ALLOWANCES: Presently 200 cigarettes per head/week. Practically no spirits allowed out of bond.
IDENTIFICATION CARDS: Seamen's book or passport if travelling outside port area.
CONSULS: No consul representations at Slite. Nearest consuls (for Denmark, Finland, Norway, West Germany) at Visby.
REPAIRS: Only minor repairs possible.
DRY DOCKS: None.
REPATRIATION: Good possibilities for changing crew.
AIRPORT: About 40 km. to Visby Airport.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Tel: 90 000 (Ambulance, Fire Brigade, Doctor, Police, Sea Rescue, Dentist, etc.).
SERVICES: No services for tank-cleaning, tank washing, or compass adjusting.
STORING: See "Prelims" page viii.

1. Yes.
2. Vessels can store during loading and discharging.
3. Yes.
4. Yes.
5. Duty free goods can be obtained in Visby.
6. Yes.

SHORE LEAVE: Permitted.
AUTHORITY: Cementa AB, Storgat 116, 62030 Slite, Sweden. *Tel:* (0498) 20500. *Telex:* 4136. *Cables:* Cementa Slite. *Contact:* Walter Laakso, Harbour Master.

AGENT: Atktiebolaget Rob. Myrsten, 620 30 Slite, Telex 4137 – A/S Myrsten. Cables: "Myrsten – Slite". Tel. 0498/22070. After hours 0498/20102/20021/25565.

SODERHAMN: (includes Stugsund, Langror oilberth, Sandarne factory berth and Orrskar woodchip berth.) 61.18 N. 17.05 E. (See Plan Book)

DOCUMENTS:

2 Crew Lists.
3 Bills of Lading.
3 Manifests.
1 Tobacco List.

PILOTAGE: Pilot must have 5 hours' notice. Telegraphic address "Soderhamn Pilot Station", Ljusne. VHF Channel 16 for calling pilot boat and pilot station and 13. Pilot boat is orange. International signals to be used. Vessels can normally receive Pilot between Hallgrund and Storjungfrun. In case of bad weather or ice, Master consults Pilot for advice (also see "Stockholm").

ANCHORAGES: Liljungfru Anchorage S.W. Liljungfrun, where depths are 15 m. – 20 m., is W. or S.W. of Norrutharet. Branthalls Anchorage W. Branthall Island, depths 10 m. – 15 m.

MAX. SIZE: Langror oil berth. Breadth of entrance fairway 55 m. – 60 m. and depth 8.5 m. at mean level. Max. ship length about 170 m. at the quay.

Orrskar: Woodchip terminal, breadth of entrance fairway 110 m., depth 13 m. m.l. New quay for general cargo, depth 10.65 m. m.l.

Sandarne: Breadth 30 m., depth 7.2 m. m.l. 55 m. – 60 m. in unlit fairway.

Stugsund: Breadth 30 m., depth 6.2 m. m.l.

Soderhamn: Breadth 10 m. – 15 m., depth 3.7 m. m.l.

Depth varies about 1 ft. below and 1 ft. above m.l. Breadth given at narrowest point in fairway.

HEALTH: No special action except for suspected disease. In case of disease contact Agent for information.

RADIO: Stockholm Radio when vessels come from South and Harnosand Radio from North. Within reach Master may call Soderhamn Port Radio. Tug station is Stugsund. Tug fitted VHF, Channels 16, 13, 12.

There is a radar station at Soderhamn. Pilot station, Ljusne, and some of the pilot boats are fitted with radar.

TUGS: Normally meet large vessels at Otterhallans Lighthouse and others off quays on request. Ship's lines to be used.

BERTHING: Boatmen can be ordered by Pilots or Agents. Large ships berth oil berth only in daylight because channel not lit.

STEVEDORES: Gangs to be ordered by Agent usually at 1500 hrs. for starting next morning at 0700 hrs.

CRANES: One electric crane to lift 10 tons in Stugsund. In other berths mobile cranes can be hired.

MEDICAL: Medical attendant available day and night.

TANKERS: 6 in. or 8 in. connections. Only 1 berth and max. depth at quay 8.5 m.

DENSITY: Practically fresh water.

FRESH WATER: Available in all ports. Delivered through pipe-lines on wharf. Rate: 10 t.p.h.

FUEL: Any normally used grade on request to oil company with few hours' notice.

GANGWAY/DECK WATCHMEN: Watchmen available.

OPENING/CLOSING HATCHES: Normally carried out by crew.

SHIP'S CERTIFICATES: Traffic permission (not necessary for ports within the Custom district boundaries), Nationality and Reg. Certificate (or interim Nationality Certificate), Bill of Measurement, Swedish Sailor's Roll (only Swedish ships), Foreign Nationals Crew Passports, Derat Certificate (6 month), Certificate of Health.

CUSTOMS ALLOWANCES: (Tobacco), out of bond, 200 cigarettes or 100 gm. tobacco and 100 cigarettes. (Wine/Spirits), out of bond, 1 bottle of spirits, 75 cl.

CARGO GEAR: Valid cargo gear certificates.

IDENTIFICATION CARDS: Not needed.

CONSULS: Danish, French and Dutch.

REPAIRS: Minor plate-work and welding can be carried out.

SURVEYORS: A Commonwealth Surveyor is appointed at the Port.

REPATRIATION: Facilities exist for effecting crew changes.

AIRPORT: Nearest international airport Stockholm.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: No work on official holidays, but may be possible on special request. New Year's Day (1st January); Twelfth Day (6th January); Good Friday; Easter Sunday and Easter Monday; 1st May; Whit Sunday and Whit Monday; Midsummer Day; All Saints' Day; 25th December and 26th December; New Year's Eve; Easter Eve; Whitsun Eve; Midsummer Eve; Christmas Eve.

POLICE/AMBULANCE/FIRE: Police 90000 or 0270/10020; Ambulance 90000; and Fire 90000 or 0270/18550.

TELEPHONES: In Sandarne, quay telephones can be placed on board. 2 telephones. Telephone can be placed on board at Orrskar Quay.

EMERGENCY CO-ORDINATION CENTRE: Harnosand Radio, Tel: 0611/20520.

SERVICES: Facilities for discharge of tank-washings max. 20 tons. Tank-cleaning and facilities for discharge of tank-washings of great extent are Stockholm and Sundsvall. Compass adjusting in Stugsund Berth.

BANKS: Skandinaviska Enskilda Banken, Box 4, Kopmangatan 1, 826 00 Soderhamn.

STORING: See "Prelims" page viii.

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. Only bonded stores.
6. Stevedores, on request.

REGULATIONS: Port regulations available from Agent or Port Office.

DELAYS: Fog, ice and bad weather may delay berthing. Rain and snow can delay loading and discharging of dry cargo.

GENERAL: There is a VHF port radio at the Port Office, Soderhamn. Working time 0730 – 1630 hrs. Channel 16 for call and Channel 12 for working. During the ice-breaking season the tug may be out even at night. Tug has same channels. Soderhamn Customs District includes all berths mentioned above.

AUTHORITY: Soderhamns Hamn, S:a. Hamngatan, S-82600 Soderhamn, Sweden. *Tel:* 0270-14828, 11311 and 54125. *Contact:* Ragnolf Eriksson, Port Captain. Christer Bjorklund, General Manager.

SODERTALJE: 59.12 N. 17.38 E. (See Plan Book)

PORT LIMITS: Approximately 2 nautical miles from entrance.

DOCUMENTS:

Crew List.
Cargo Manifest.
List of Ports of Call.

PILOTAGE: Pilot to be ordered at least 5 hours before arrival at Landsort Pilot Station on VHF Channel 13. Distance from Landsort to Sodertalje is 34 nautical miles.

Pilotage compulsory for all vessels carrying petroleum, gas and chemicals.

ANCHORAGES: Pilots direct vessels to suitable anchorages.

RESTRICTIONS: Cables over fairway with vertical clearance of 42 m. at MLW.

MAX. SIZE:

	Length	*Beam*	*Draft*
Uthamnen (Outer harbour)	200 m.	32 m.	8 m.
Sydhamnen (South harbour)	200 m.	32 m.	9 m.
Igelstahamnen (Igelsta harbour)	200 m.	32 m.	9 m.
Oljehamnen (Oil harbour)	200 m.	32 m.	9 m.

HEALTH: Derat Certificate required.

RADIO: Stockholm Radio.

VHF: Channel 13 calling "Pilot Sodertalje" or "Malarbron" for ordering of boatmen 1 hour before arrival.

RADAR: No port radar service.

TUGS: Available through local Agents for vessels over 10,000 d.w.t.

BERTHING: *Sydhamnen:*

Ro/Ro Berth No. 9, length 70 m., draft 6.5 m. MW.
Ro/Ro Berth No. 10, length 130 m., draft 8 m. MW.
Ro/Ro Berth No. 11, length 130 m., draft 8 m. MW.
Ro/Ro Berth No. 12, length 160 m., draft 10 m. MW.

Oljehamnen: Jetty No. 6, draft 9 m. Jetty No. 7/8, draft 7 m.

Uthamnen: Lo/Lo berth (general cargo), length 300 m., draft 6 m. – 8 m. Silo Quay, length 120 m., draft 7 m. – 8 m.

Igelstahamnen: Coal and oil discharge berth, length 150 m., draft 9 m. Coal discharged using shore equipment.

CRANES: *Uthamnen:* 4 cranes up to 10 tons each, 1 crane for heavy lifts up to 25 tons.

Sydhamnen: Mobile cranes up to 18 tons, forklifts up to 42 tons.

Igelstahamnen: Shore equipment for coal discharge.

BULK HANDLING FACILITIES:

Uthamnen: Salt in bulk/bags, fertiliser, coal/coke and general cargo.

Siloquay: Grain loading.

Igelstahamnen: Coal discharge, oil discharge.

Oljehamnen: Oil petroleum products and liquid chemicals.

SPECIALISED CARGO HANDLING FACILITIES: 24,000 sq.m. for cold and warm storage available.

STEVEDORES: Working hours: 0700 – 1230 hrs., 1300 – 1600 hrs, on weekdays. Maximum 3 hours' overtime can be worked. Stevedores can be ordered by telephoning 0755-61040/62210 or by telex No. 10273 Sodstuv.

TANKERS: See "Berthing".

FRESH WATER: Available at all berths.

FUEL: Available at all berths.

REPAIRS: Can be undertaken at all berths.

DRY DOCKS: Nearest at Stockholm.

GANGWAY/DECK WATCHMEN: Available.

HATCHES: Opening/closing carried out by stevedores.

AIRPORT: Nearest at Stockholm, 60 km. distant.

TIME: GMT plus 1 hour. Summertime GMT plus 2 hours.

HOLIDAYS: Cargo work can be carried out by special agreement on holidays.

POLICE/AMBULANCE/FIRE: Dial 90000 and request necessary service.

TELEPHONES: Can be placed on board vessels.

SHORE LEAVE: Permitted.

BANKS: Only Swedish banks are represented.

STORING: See "Prelims" page viii.

1. By truck.
2. Vessels can store while loading/discharging.
4. Forklifts available.
6. Yes.

SURVEYORS: Cargo surveyors are available from Stockholm.

AUTHORITY: Port of Sodertalje, Box 2015, S – 15102 Sodertalje. *Tel:* 0755/21430. *Telex:* 10273 Sodstuv. *Contact:* Captain Erik Nachtweij or Michael Samsioe, General Manager.

SOLVESBORG: 56.03 N. 14.35 E. (See Plan Book)

DOCUMENTS: See "Stockholm".

PILOTAGE: Pilot station at Ahus, Tel: 044/240027, needs 5 hours notice. Pilot Station (Karlshamn): Tel: 0454-14102. Pilot station and pilot boat can be ordered by VHF Channel 16, working on Channel 13. Harbour office in Solvesborg can be called on same frequency. (Also see "Stockholm".)

ANCHORAGES: Roadstead to South of harbour 25 ft. deep with good holding ground.

MAX. SIZE: Depth in outer harbour 8.2 m. (27 ft.) and in inner harbour 7.5 m. (25 ft.) Recommended for ships to have 1 ft. 6 in. of water under keel. Max. length 170 m. (656 ft.) Breadth 30 m. (98 ft.). Draft 7.7 m. (25 ft.) for vessel entering harbour. Largest ships to enter harbour were 26,000 tons oil tanker with load of 16,000 tons and 30,000 ton dry cargo ship loading 5,000 tons of pulp.

HEALTH: See "Stockholm".

Animals: Private dogs and cats etc., not allowed ashore without quarantine.

RADIO: Stockholm Radio and Gothenburg Radio.

VHF: Harbour Office can be reached by VHF, Channel 16. Working frequency Channel 14.

Tug "Hafnia" – Channels 6, 13, 14 and 16.

Tug "Portia" – Channels 6, 13 and 16.

TUGS: 2 tugs available, 1×665 h.p. (ice-breaking) and 1×800 h.p. Ordered through Agent or directly to Harbour Office.

BERTHING:

Location	*Length m.*	*Depth m.*	*No. of cranes (max. load in tons)*
Inner harbour:			
Western quay, Southern section	225	7.5	1 (5)
Western quay, Northern section	129	6.5	1 (6)
Northern quay	85	5.0	Mobile (20)
Blekinge quay	53	4.0	—
Other quays	190	3.0	Mobile (18)
Outer harbour:			
Ro-Ro ramp	20	6.0	—
Side-deck at the Ro-Ro ramp	45	6.0	Mobile (35)
Outer harbour quay	200	8.2	1 (20)
Oil Jetty	25 + Dolphins	8.2	—
Shipyard:			
Fitting-out quay (dock)	165	6.0	1 (15)
New quay	115	6.0	1 (15)

(The Ro-Ro berth, quay and oil landing-stage are situated on a 500 m. line).

An opportunity of using a 200 tons floating (pontoon) crane belonging to the Solvesborg Shipyard.

Within the port area a total of 25 straddle, fork and clamptrucks, as well as 2 front loaders, the biggest fork truck having a lifting capacity of 25 tons.

A storage space of 17,000 sq.m. inside warehouses, and an open air space of 140,000 sq.m.

STEVEDORES: Require notice before 1500 hrs. if loading/discharging shall start at 0730 hrs. following morning, or notice before 1000 hrs. if loading/discharging shall start 1300 hrs. the same day.

Stevedoring Company: Solvesborg Stuveri AB. Tel: 10119,12295.

TANKERS: 3 Shore-lines for oil products from oil jetty to depots.

1. 250 mm. for bunker C (2nd fuel).
2. 200 mm. for paraffin oil.
3. 200 mm. for petrol. For discharge coasters use ship's equipment.

Larger ships discharging bunker C oil use harbour's 8 in. rubber hose.

FRESH WATER: Available.

FUEL: Ordered from oil companies by ship's Agents.

GANGWAY/DECK WATCHMEN: Watchmen normally not needed. Can be ordered by ship's Agents.

OPENING/CLOSING HATCHES: Normally opened/closed by crew.

SHIP CERTIFICATES: See "Stockholm".

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes/week per head. Wine/spirit: normally 1 litre/week.

Customs House, Tel: 12000.

IDENTIFICATION CARDS: Not needed.

CONSULS: Royal Danish Vice-Consulate. Railway Station Building. Tel: 0456/10115.

Royal Norwegian Vice-Consulate, Stortorget 10, Box 115, S-29401 Solvesborg. Tel: 0456-150 20.

REPAIRS: Carried out by Solvesborgs Shipyard. Tel: 0456/15060.

DRY DOCKS: Dry dock in ship yard, 341 ft. long, 51 ft. wide at entrance, 14.5 ft. deep on sill HWOST.

REPATRIATION: Possible.

AIRPORT: 50 km. to Kristianstad Airport and 60 km. to Ronneby Airport. Served by regular inland airlines.

TIME: Local time is GMT plus 1 hour. Summertime GMT plus 2 hours.

HOLIDAYS: See "Stockholm".

POLICE/AMBULANCE/FIRE: Dial 90 000 and ask for Police, Ambulance or Fire Department.

TELEPHONES: Telephones available in Agent's offices at quay and telephone boxes.

DELAYS: Normally no delays.

AUTHORITY: Solvesborgs Hamn, Box 49, S-294 01 Solvesborg, Sweden. *Tel:* 0456-13600 or 10072. *Contact:* Sven Holmer, Harbour Master.

STENUNGSUND: 58.04 N. 11.49 E. (See Plan Book)

LOCATION: Stenungsund is located on the East side of Askero Fjorden about 23 miles North of Gothenburg. There are 2 terminals.

1. The Powerboard Terminal.
2. The Esso Havden Terminal.

Both are located about 20 miles from the Hatteberget Light Tower (57° 52′ N., 11° 28′ E.) and are reached via Marstrands Fjorden and Hake Fjorden.

DOCUMENTS:

3 Crew Lists.

2 Passenger Lists.

1 Tobacco and/or Stores List.

1 Manifest.

1 List of Animals on Board (if any).

Access to the usual ship's papers (measurement, register, certificate, etc.).

If away from Sweden more than 15 days: Bill of Health.

PILOTAGE: The pilot boat is steel hulled, painted orange, and it will meet ships based on ETA and VHF contact. The Pilot boards at Hatteberget Light Tower. Pilots will not handle large vessels during darkness. Those ships must anchor and await daylight. ETA advice to Pilot to be sent to "Lotsarna Marstrand" via Goteborg Radio at least 5 hours before arrival giving ship's name, flag, draft, ETA pilot station and destination.

APPROACHES: When approaching from the West, ships must keep North of the area dangerous due to mines extending to 57° 47′ N., 11° 03′ E.

Currents in this area are unpredictable and are much influenced by the wind. Ships have reported experiencing a change in direction of current on approaching the Hatteberget Light Tower, for example, South-going outside Hatteberget, North-going inside Hatteberget. Currents of 1 to 3 knots have been experienced.

Seabuoy-Berth: For larger ships bound for Stenungsund the recommended track is Algo Fjorden shown on charts as passing between N. Meholm and S. Meholm is not always followed by Pilots, some preferring to pass South of the Hunden Shoal and S. Meholm. Great caution is needed in taking this Southerly route as there are unmarked dangers. During darkness or in poor visibility the Pilot's intentions should be fully discussed before entering Algo Fjorden.

The channel between Bratton, Kallon and Almon Islands at the North end of Hake Fjord and under the Tjornbron (bridge) between Kallon and Almon is in the form of an "S" bend and vision is obstructed. Traffic may be suddenly met with little warning, particularly as some ships do not carry Pilots, and there is no speed limit. Engines should be on standby, anchors ready and manned in this area.

ANCHORAGES: While awaiting berth vessels anchor outside harbour N.W. of Powerboard Jetty. Safe anchorages everywhere, but fairway South of Galteron Lighthouse has to be avoided.

RESTRICTIONS: Navigation of ships drawing more than 9.2 m. (30 ft.). is not practised inwards of Algo Fjorden during darkness.

MAX. SIZE: *Powerboard Jetty:* Max. draft North side 12.30 m., South side 10.50 m.

Esso Havden: Max. d.w.t. 36,000. Max. LOA 210 m. Max. draft 10.4 m. (34 ft.). Distance bow to manifold 99.0 m.

HEALTH: No special Pratique necessary. If any disease or fever suspected on board, doctor must be called on arrival. Pratique automatically granted when entering from another port in Sweden.

TUGS: At present no tugs are stationed in Stenungsund but have to be ordered from Gothenburg at least 2 hours' steaming away.

Tugs are diesel driven, single screw, single rudder. Tugs are made fast after passing Vinterholmen at the North end of Hake Fjord and before passing through the narrows under the bridge. Tugs tow on the hook using ship's ropes. The larger tugs use two ship's ropes out of the same lead and care must be taken to equalise the load on the two lines before full load is taken.

The Pilot carries his own VHF set (having Channels 16, 13 and 12) and uses this to communicate with the tugs.

50,000 d.w.t. tankers use 3 tugs, 1 large tug forward, 1 large and 1 smaller tug aft.

TANKERS: The Powerboard Terminal:

General: The Powerboard Jetty is a finger pier aligned W.N.W – E.S.E. located on the East side of the Askero Fjord about 1 nautical mile North of the town of Stenungsund (58° 05.3′ N., 11° 49.2′ E.). It is shown on BA Chart 890. It is used for the import of fuel oil for the power station located 0.5 mile away and for the import of products, solvents and LPG for oil companies.

Cautionary Advice: Currents in Askero Fjorden are unpredictable both in speed and direction but generally run across the direction of the finger pier. The fendering of the outer corners of the pier is of low energy absorption characteristics and heavy landings must be avoided. Anchors should be manned and ready for letting go.

Berthing Procedures: On proceeding up Askero Fjorden past Havden the ship is swung to starboard with the assistance of tugs and lined up for the pier. Anchors are sometimes used to help steady the bow on the correct heading, and as assistance in bringing the ship up.

Ocean-going ships berth on the North side of the pier and are, therefore, starboard side to berth. When in position, most ships' sterns protrude beyond the end of the pier by as much as one-third of their length, therefore, maximum attention must be paid to the stern moorings. Because moorings placed on the buoy on the starboard quarter or on the bollards on the South shore prevent ships from using the South side of the pier the terminal will not, as a rule, put moorings to these points. However, in periods of unsettled weather, particularly if winds are from the S.W., Masters of the larger ships should insist on stern moorings being sent to the buoy and South shore. It should be borne in mind that tugs are not readily available at Stenungsund. Moorings are taken ashore initially by boat and then by heaving line. The forward spring line is usually first line ashore. No shore moorings are provided.

Gangway: Ship's gangway is used, there is ample room on the jetty to land the gangway abaft the manifold. Note that when ship is light the normal ship's gangway will become very steep (over 50°) and special safety precautions to prevent accidents to personnel will be necessary.

Fendering: The concrete strong points of the pier are protected by tubular rubber 600 mm. diameter erected horizontally. The concrete outer corners are well protected with low friction fenders.

Cargo Connections and Handling: HFO, Heating Oil, Naphtha and Mogas are handled. Ullages and temperatures are taken jointly with shore representative upon arrival alongside.

Starboard manifold should be prepared for 10 in. hoses, 2 or 3 flexible hoses with 10 in. ASA bolted flanges are usually connected. Starboard derrick and a 4 ton shore crane are used for hose connection.

Concurrent loading and discharging are not allowed. Maximum back pressure is 10 kg/sq. cm.

Naphtha receiving capacity is maximum 3,000 cu.m.p.h. Normal discharge rate is about 1,800 cu.m.p.h.

Deballasting Facilities: The terminal has limited high flash ballast reception facilities, about 2,400 cu.m. Discharge rate is about 500 cu.m.p.h.

Clean oil-free ballast may be discharged overboard but it is the ship's responsibility to ensure that the ballast water is oil-free and very heavy penalties are imposed for oil pollution.

Passing Traffic, Weather, Tide, etc.: There are no unusual problems except for strong S.W. winds when it is important that breast moorings are run to the starboard quarter buoy and to the South shore.

Special Regulations: No small craft are allowed alongside ship while at jetty.

Oil Pollution Safeguards: Floating oil booms – partly fixed and partly portable are available to surround the ship and jetty. Mechanical suction equipment is available.

Fire Fighting Equipment: Remote-controlled foam-guns and water monitors are available at the berth.

Fresh Water: Good quality fresh water is available ex-jetty by hose, rate 25 t.p.h.

Additional Information: The berth on the South side of the Powerboard finger pier also handles HFO, heating oil, naphtha and mogas but is mainly used for loading/discharging LPG.

Esso Terminal, Havden: *General:* Esso's Havden terminal berth is located on the North side of the Havden peninsula on the East side of Askero Fjorden (58° 05′ N., 11° 48.5′ E.). It is a marginal type berth with a breasting face about 60 m. long. It is used for the discharge of naphtha and LPG.

Cautionary Advice: See "Powerboard Terminal".

Telegraph cables (shown on the chart) run out from the shore close Northwards of the berth and anchors should not be used. In addition, the dredged area tapers quite sharply towards the East end of the berth and use of an anchor could result in the ship "sitting" on the anchor or its cable.

Berthing Procedures: On arriving off Havden the ship is swung to starboard with the assistance of tugs and steamed slowly to the berth. Ships always berth starboard side to berth. Moorings are taken ashore by motor boat, the forward spring is usually the first line ashore. The stern of the ship is not well sheltered from the prevailing S.W. winds and special attention must be paid to putting out good stern moorings. It must be remembered that tugs are not readily available in Stenungsund. No shore moorings are provided.

Gangway: Ship's gangway used, ample room on the jetty to land the gangway aft of the cargo manifold. Note that, when ship is light, the normal ship's gangway will become very steep (over 50°) and special precautions to prevent accidents to personnel will be necessary.

Fendering: Each of the 3 concrete strong points is fendered by truck tyres around a rubber core slung horizontally. Care should be taken not to land initially between the strong points.

Cargo Connection and Handling: Only naphtha and LPG are handled at this berth. No bunkers can be provided. 2×10 in. fully counterbalanced hard arms of Chiksan manufacture are provided. Each has 10 in. ASA bolted flanges.

Ullages and temperatures are taken together with shore representative upon arrival alongside.

Starboard manifold should be prepared to accept 2×10 in. hard arms. If ship's manifold has large overhang outside the support, this should be jacked up before connection of arms. Stays, derricks, etc., in vicinity of starboard manifold should be removed. There are no facilities for receipt of dirty ballast at the terminal.

Oil Pollution Safeguards: Floating oil booms, partly fixed, partly portable are available to surround ship and jetty. Mechanical suction equipment is available.

Fire Fighting Equipment: The jetty is equipped with a fire water and a foam line and portable monitors.

Fresh Water: Good quality fresh water is available ex-jetty by hose, rate 25 t.p.h.

RADIO: Gothenburg radio.

VHF: Pilot on Channel 16. Working on Channel 6.

MEDICAL: Doctors and dentists available at short notice. Hospitals situated at Uddevalla and Kungalv, ambulances at Stenungsund.

FUEL: Only available by barge from other places (i.e. Gothenburg). Bunkering only during daylight. Can be ordered at short notice.

FIRE PRECAUTIONS: Normal.

GANGWAY/DECK WATCHMEN: Watchmen from ashore necessary when telephone connected.

CUSTOMS ALLOWANCES: 200 cigarettes. 1 bottle of spirits.

IDENTIFICATION CARDS: The gate at the Powerboard Terminal is TV-guarded. Each crew member must carry a Passing Permission allowing passage through the gate. Required number of permissions will be handed over to the Master by the Agent on ship's arrival. Passing Permission at Esso Terminal, Havden, is not required.

REPAIRS: Minor repairs can be made locally, large repairs by labour from Gothenburg shipyards. Gas-freeing alongside with Port Captain's approval only. Repairs alongside with Port Captain's approval only.

CONSULS: At Gothenburg.

SURVEYORS: D & D Marine Consult, Upplandsgatan 25, 11360 Stockholm. Tel: 08-34 1590.

REPATRIATION: All facilities exist.

AIRPORT: Gothenburg 50 km. away. Regular airlines.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: Tankers load and discharge all year round.

TELEPHONES: Connected on board if required. Watchmen attend calls. Fireman and alarm on jetty during whole operation.

SHORE LEAVE: Permitted. Distance to Stenungsund 1 km., Uddevalla 40 km. or Gothenburg 50 km. by bus, train or taxi. Shore passes issued at the gate.

AUTHORITY: Statens Vattenfallsverk, Box 79, S-44401, Stenungsund, Sweden. *Tel:* 46-303-70670. *Telex:* 2408 Svvstd S. *Cables:* Kraftverket. *Contact:* Bengt Jonsson, Harbour Master.

STOCKHOLM: 59.19 N. 18.03 E. (See Plan Book)

DOCUMENTS:

(a) Crew List: Normally 2 copies; for oil harbour at Loudden and Free Port, 3 copies.

(b) Passenger List: Regular passenger services 2 copies; cruise ships (lists for cruise ships must be sent in advance to Agent for forwarding to Immigration Authorities), 2 copies.

(c) Customs Documents: Arrival report (form can be obtained on arrival), 4 copies. Crew Effects Declaration, 2 copies. Ship's Stores Declaration, 2 copies.

(d) Quarantine Certificate or Bill of Health: Derat Certificate not more than 6 months old to be shown. *Note:* Additional quarantine regulations may be imposed in special circumstances.

(e) Manifest: 3 copies.

(f) Bills of Lading: 1 copy of each. Liners may be subject to other regulations with regard to *(e)* and *(f)* above.

(g) Ship's Documents: Tonnage Certificate. Certificate of Nationality.

PILOTAGE: *(Sweden General).* Applications for licensed Pilots should be made at least 5 hours before pilotage is due to commence. When making application specify name of vessel, tonnage, draft and destination. Also give estimated time for taking Pilot on board and route. If this procedure not followed, the Maritime Service cannot guarantee to supply a Pilot without considerable delay to vessel.

Preferable make application by telephone, or by radio via a coastal station or by some other method direct to pilot station nearest point where pilotage is to begin. Also possible request Pilot by VHF telephone to any Maritime Service Pilot Station, Pilot waiting point or lighthouse which is equipped with VHF.

The Maritime Service's network of permanent VHF telephone stations has been extended to give almost complete coverage of all pilot stations and waiting points and is also operative for a number of lighthouses. The radio stations can operate on different Channels and are equipped for frequency modulation. During hours when pilot stations are open, a constant watch is kept on frequency 156.80 MHz (Channel 16). This frequency should be used for all signals and replies – and for distress traffic. Outside these hours, normal traffic transmissions, i.e. applications for Pilots, etc. should be made on frequency of 156.65 MHz (Channel 13) or on reserve operating frequency of 156.60 MHz (Channel 12).

When making VHF telephone call, the type of call signal that should be sent is "Lotsarna (or pilot station) plus the name of the pilot station or the pilotage attendance".

	Arholma	*Sandhamn*	*Landsort*
Cable address	Furusund Pilot Station	Stockholm Pilot Station	Nynashamn Pilot Station
Notice of arrival	5 hours	5 hours	5 hours
VHF Channels	6, 12, 13, 16	6, 12, 13, 16	6, 12, 13, 16
Description of pilot boat	Pilot boat on day duty flies international flag "H". Pilot boat on night duty carries lights conforming to International Regulations for Preventing Collisions at Sea, Rule No. 29.		
	33 ft. steel cutter painted red-orange	33 ft. steel cutter painted red-orange	40 ft. steel cutter painted red-orange
Calling Pilot:			
During daylight	Flag G	Flag G	Flag G
At night	International PT with morse lamp	International PT with morse lamp	International PT with morse lamp
Audible signal in reduced visibility	International PT with siren	International PT with siren	International PT with siren
	Pilot may be called by radio or VHF.		
Boarding point	At Bjorko outside outer Skerries, 2 – 3 n.m. N.W. or E. of Simpnasklubb	2 n.m. S.E. of Revengegrund Light	2.5 n.m. S. of Oja
Anchorage for vessels awaiting Pilot	Near position stated above	Near position stated above	Near position stated above

ANCHORAGES:

	Arholma	*Sandhamn*	*Landsort*
(a) Prohibited anchorage	59° 30′ N. 19° 05′ E. 59° 45′ N. 19° 14′ E.	59° 17′ N. 18° 54′ E.	
(b) Suitable anchorages	2 – 4 n.m. N.N.W. of Simpnasklubb	2 – 4 n.m. E. and S. of Revengegrund	6 – 8 n.m. S.S.E. of Landsort
(c) Depth	33 – 38 fathoms	11 – 22 fathoms	11 – 16 fathoms

RESTRICTIONS: Very large passenger vessels and fully-loaded tankers of approx. 15,000 tons d.w.t. or over not allowed pass through Skerries during darkness.

Ships with gross tonnage exceeding 400 tons must proceed only on an Easterly course in Lindalssundet. Ships with gross tonnage exceeding 400 tons must not proceed through Kodjupet and Sandhamnssundet (between Sandon and Korso).

Tankers with gross tonnage exceeding 22,000 tons must be accompanied by a tug through the Archipelago to Stockholm and nearby ports.

Ships with a gross tonnage exceeding 400 tons, not using a Pilot, must be equipped with VHF telephone which must be continuously watched on Channel 16 and 9.

A vessel reporting system has been established covering the entrances to the Port of Stockholm. Vessels over 300 g.r.t. report to Stockholm pilot station ("Lotsarna Stockholm") when passing way points. Reports to be given by VHF Channel 9.

Tankships with gross tonnage exceeding 800 tons carrying crude oil products, mineral oil and certain chemicals must have licensed Pilot in the passages Arholma-Stockholm; Soderarm-Stockholm; Sandhamn-Stockholm; Landsort-Stockholm; Landsort-Nynashamn; Landsort-Sodertalje and in the Lake of Malaren.

MAX. SIZE:

Max. Dimensions Passenger – or Dry Cargo Ships

DAYLIGHT

	LOA (m.)	*Beam (m.)*	*g.r.t.*	*Draft (m.)*
Sandhamn	245.0	35.0	43,000	11.0
Dalaro/Langgarn	185.0	26.0	18,000	10.0
Furusund/Soderarm	185.0	26.0	18,000	7.0
Gustavsberg	60.0	9.5	—	4.2

Ships larger than 30,000 g.r.t. or longer than 215 m. to be assisted by 2 Pilots and to have assistance of tugs through the Archipelago.

DARKNESS

	LOA (m.)	*Beam (m.)*	*g.r.t.*	*Draft (m.)*
Sandhamn	185.0	26.0	18,000	9.0
Dalaro/Langgarn	175.0	23.0	13,000	9.0
Simpnas Furusund/Soderarm	175.0	23.0	13,000	7.0

Max. Dimensions Tankers

DAYLIGHT AND VISIBILITY EXCEEDING 1 NAUTICAL MILE

	LOA (m.)	*Beam (m.)*	*d.w.t.*	*Draft (m.)*
Sandhamn	200.0	32.0	35,000	11.0
Dalaro/Langgarn	175.0	23.0	15,000	10.0
Simpnas Furusund/Soderarm	175.0	23.0	15,000	7.0

Ships exceeding 22,000 g.r.t. to have 2 Pilots onboard and to be assisted by powerful tugboat through the Archipelago. Ships of this size are normally not handled in winds stronger than 15 m./s.

DARKNESS OR POOR VISIBILITY (LESS THAN 1 NAUTICAL MILE)

	LOA (m.)	*Beam (m.)*	*d.w.t.*	*Draft (m.)*
Sandhamn	175.0	23.0	15,000	9.0
Dalaro/Langgarn	145.0	19.0	10,000 (13,000 double bottom)	9.0
Simpnas Furusund/Soderarm	145.0	19.0	10,000 (13,000 double bottom)	7.0

Tankers:

Tanker Discharge Quay	Max. safe draft	Available Quay length
Bergs Oil Harbour	12.4 m.	230 m.
Flaxenvik	10.3 m.	225 m.
Gashaga	9.8 m. – 10.3 m.	200 m.
Kvarnholmen	9.4 m. – 10.8 m.	183 m. – 230 m.
Loudden	8.1 m. – 11.3 m.	190 m. – 230 m.
Rasta	10.9 m.	213 m.
Telegrafberget	11.4 m.	230 m.
Vartan	7.4 m. – 10.3 m.	190 m. – 230 m.

HEALTH: Vessels arriving from ports outside Europe must for inward clearance provide Customs Office with written declaration of freedom from infection. Further instructions will be issued by Customs Office when such a declaration cannot be given.

RADIO: Stockholm Radio, call sign SDJ.

RADAR/VHF: All 3 pilot stations have radar for internal use. No harbour radar service. VHF Channels 16 and 12. Also see "Restrictions".

TUGS: Very large vessels may be met by tugs by special arrangement at pilot boarding point. Tugs available to special order to assist with berthing; they rendezvous usually near berth.

Rates: According to fixed tariff.

BRIDGES:

HOURS FOR OPENING FOR MOVABLE ROAD BRIDGES OVER HAMMARBY SEALANE

Movable parts of road bridges over sealane of Hammarby opened on request for vessel unable freely to pass under the bridges, all through the year at regular hours.

BERTHING: Services of boatmen available any time day or night. Boatmen are ordered from Stockholm Port Authority. Tel: 08/635500 or by VHF Channel 12. *See Table on page 1316.*

STEVEDORES: Stevedores available from Stockholms Hamngods AB. Tel: 08/635500. Working hours 0700 – 0900, 0930 – 1100, 1115 – 1330 and 1400 – 1600. Stevedores required for 0700 hrs. must be booked previous day.

TANKERS:

Quay	*No. of Berths*	*Max. d.w.t.*	*Depth alongside (ft. in.)*	*Diameter of Discharge Pipe-lines (in.)*
Bergs (Esso)	1	65,000	43 00	12 – 20
Flaxenvik (Powerboard)	1	30,000	35 08	12
Gashaga	2	50,000	34 01 – 35 08	6 – 12
Kvarnholmen	2	30 – 65,000	33 00 – 39 04	8 – 14
Loudden (Municipal)	5	25 – 60,000	33 02 – 39 00	6 – 12
Rasta (Shell)	1	38,000	37 08	8 – 10
Stora Hoggarn (Esso)	1	50,000	38 08	6 – 10
Telegraph Berget (Texaco)	1	65,000	39 04	6 – 8
Vartan (Esso/Shell)	3	20 – 60,000	24 08 – 36 00	8 – 10

CONSULS:

Algerian Embassy	211070, 214070, 214080
Argentinian Consulate	202685
Australian Embassy	244660
Austrian Embassy	233490
Belgian Embassy	118958
Brazilian Embassy	631285
British Embassy	670140
Canadian Embassy	237920
Chilean Embassy	627690
Chinese People's Republic, Embassy of the	217539
Colombian Embassy	218489
Danish Embassy	231860
– Consulate and Visa Office	208748
Ecuadorian Embassy and Consulate	100701
Egyptian Embassy	629603, 629687
Finnish Embassy, Consulate and Passport Office	240270
French Embassy	630270
German Embassy (Federal Republic)	631380
German Democratic Republic	235030, 218122
Greek Embassy	608860, 617880
Hungarian People's Republic, Embassy of the	616762, 636639
Icelandic Embassy	624016, 672753
Indian Embassy	113237, 113213
Indonesian Embassy	7652029, 7677929
Iranian Embassy and Consulate	627068, 627368
Iraqi Embassy	639110, 639120
Irish Embassy	618005, 617409
Israeli Embassy	630435
Italian Embassy	245805
Italian Consulate	610310, 619525
Japanese Embassy	630440
Jugoslav Embassy	218436, 203912
Korean (Republic) Embassy	160480
Korean (DPR)	215171, 111254
Lebanese Consulate-General	244950
Liberian Embassy	621040
Mexican Embassy	635170, 603970
Netherlands Embassy	247180
Nicaraguan Consulate-General	671754
Norwegian Embassy	670620
Norwegian Consulate-General	214018
Pakistani Embassy	635905
Panamanian Consulate-General	511788
Paraguayan Consulate	204363
Peruvian Embassy	110019, 110041
Peruvian Consulate-General	113085
Polish Embassy	114132
Polish Consulate-General	116374
Portuguese Embassy	626028
Portuguese Consulate	634555
South African Legation	243950
Spanish Embassy	625494, 616005
Swiss Embassy	231550, 217270
Tanzanian Embassy	244870
Thai Embassy	678090, 672160
Thai Consulate-General	7885000
Tunisian Embassy	236470
Turkish Embassy	230840
Turkish Consular Department	672960
Union of Socialist Soviet Republics, Embassy	130440
– Consular Department	533732, 208652
United States Embassy	630520
Uruguayan Embassy	603196, 603197
Venezuelan Embassy	110996, 110997

DENSITY: Salt content of 0.5%. No variations.

FRESH WATER: Fresh water may be obtained from quayside only. 1,000 cu.ft./hr. can be delivered from quayside, but at Loudden max. 3,500 cu.ft./hr. can be delivered. Water supply capacity of tugs and waterboats varies up to max. of 1,750 – 5,250 cu.ft./hr.

BERTHING:

Principal Quays and harbours	*Berth Numbers*	*Length of quay (m.)*	*Depth of water at mean water 4 m. from quay* (m.)*	*Quay cranes** Number*	*Quay cranes** Lifting capacity tons*	*Warehouses, sheds, etc. Number*	*Warehouses, sheds, etc. Kind*	*Notes*
On Baltic								
Stadsgardshamnen	151 – 167	1,930	9.5 – 5.5			2	Custom-buildings	
						2	Sheds	
						2	Pass. Term Bldg.	2 Ro-Ro ramps
Skeppsbrohamnen	101 – 108	570	6.2 – 5.4			3	Custom-buildings	
Sodra Blasieholmshamnen		275	3.5					
Nybrohamnen	1 – 10	469	5.5 – 3.0					
Strandvagen	11 – 27	1,003	5.0 – 2.5					
Vartahamnen	500 – 507 509 – 511 515 – 526	2,081	10.9 – 6.5	7	3.0 – 6.0	1	Pass. Term. Bldg.	2 Ro-Ro ramps
Free Port Harbour	610 – 611 620 – 625 630 – 638 640 – 641 650 – 656	1,766	10.4 – 7.5	17	5.0 – 24.0	17	Sheds	2 Ro-Ro ramps
						7	Warehouses	
						1	Grain-silo building	Suction installation for 120 t.p.h.
Oil harbour at Loudden	701 – 710	1,020	11.9 – 8.9					Shore with 8 loading jetties and 1 pier
Norra Hammarbyhamnen	301 – 322	1,690	6.3 – 3.5	4	5.0 – 6.0	1	Custom-building	
						1	Shed	Fixed crane
Sodra Hammarbyhamnen	351 – 358 363 – 369	1,391	6.3 – 3.9	2	5.0 – 7.5			
Small wharves		429	8.0 – 2.5					
Total for installations on the Baltic-side		12,624		30				
On Lake Malar								
Riddarholmshamnen		70	4.4					
Norr Malarstrand	453 – 466	769	6.4 – 2.0			1	Shed	
Soder Malarstrand	10 – 21, 25 – 26	918	4.5 – 4.0					
Ballstahamnen		209	5.0 – 4.1					
Hornsbergsstrand		368	6.9 – 4.1	2	6.0			
Hasselbyverkskajen		289	7.0 – 4.0	1	8.0			Administered by the Energy Supply Authority
Small wharves and quays		680	6.9 – 2.9					
Total for installations on the Lake Malar-side		3,303		33				
Grand total		15,927						
Principal private quays and wharves								
On Baltic								
Inside and close to the Port of Stockholm area		475	12.9 – 3.7					
On Lake Malar								
Inside the Port of Stockholm area		1,312	6.9 – 4.0					

Water level		*Baltic* (m.)	*Lake Malar* (m.)
High water highest observed	HHW	+0.65	+1.00
normal	MHW	+0.25	+0.55
Mean water	MW	−0.30	+0.30
Low water normal	MLW	−0.75	+0.15
lowest observed	LLW	−0.90	−0.10

* Different heights of the water refer to the Swedish State Measure Datum.

** Besides the quay cranes there is a pontoon crane of 260 tons lifting capacity, with own propelling machinery. The number of cranes is thus 34. In addition to these there are some cranes in private ownership. The port also owns a floating link-span.

MEDICAL: Duty Medical Officer available all hours day or night. Tel. Stockholm 21 55 49, 11 83 31 or 20 30 91. Seamen admitted to hospital with note from Medical Officer for Seamen, but not necessary for emergency admissions. Valid certificates of vaccination must be produced. Any necessary vaccinations carried out by Medical Officer for Seamen.

FUEL: All grades bunker oil, lubricating oil, etc. can be supplied.

GANGWAY/DECK WATCHMEN: Not essential, but recommended for large tankers.

OPENING/CLOSING HATCHES: If opened and closed by stevedores, subject to extra fee.

CERTIFICATES:

Tonnage Certificate.
Certificate of Nationality.
Derat Certificate not more than 6 months old.
Ship's articles, crew list or similar document listing all persons signed on aboard.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per person per week or 200 g. (7 oz.) of tobacco per person per week. Wine and/or spirit: One bottle of spirits per person per week, one bottle of wine per person per week.

CARGO GEAR: Cargo vessels carrying goods which constitute a fire or explosion hazard or other flammable or otherwise dangerous goods must notify Port Authorities in advance the nature and quantity of goods concerned. In certain cases a red flag or red light must be carried at mast head.

IDENTIFICATION CARDS: Passport or seaman's discharge book with photograph.

REPAIRS: All types of deck and machinery repairs can be carried out.

DRY DOCKS: Gustav V Dock, length 598 ft., width 79 ft., depth 31 ft. Also 3 other dry docks and 5 floating docks.

REPATRIATION: Crewmen may be signed-on and paid-off. Whether paid-off crewmen will be allowed to remain in the country and seek new employment, depends on existing bi-lateral agreements between countries. Generally, only a citizen of a Scandinavian country may seek work in Sweden without a special labour permit.

AIRPORT: Arlanda, approx. 22 miles from central Stockholm. Served by regular airlines.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: New Year's Day (January 1st); Epiphany (January 6th); Good Friday (variable Friday in March/April); Easter Monday (variable Monday in March/April); May 1st; Ascension Day (variable Thursday in May/June); Whit Monday (variable Monday in May/June); Midsummer Day (variable Saturday in June); All Saints' Day (first Saturday in November); Christmas Day (December 25th); Boxing Day (December 26th). No work is normally done on these days.

POLICE/AMBULANCE/FIRE: Tel. 90 000.

TELEPHONES: Ship-to-shore telephone connections can be provided at most quays.

SERVICES: Electric current can be laid on at some quays. Port has a special barge for collection of oil residues. Licensed compass adjusters available.

SHORE LEAVE: No restrictions.

DELAYS: Occasionally shortage of stevedores. Some delay may be caused by ice, but port kept permanently open by ice-breakers.

AUTHORITY: Stockholms Hamn, P.O.Box 27314, S- 10254 Stockholm. *Tel:* 08/635500. *Telex:* 10612. *Cables:* Capitalport. *Contact:* Thomas Krokstedt, Harbour Master.

STORUGNS, Gotland Is.: 57.50 N. 18.48 E.

(See Plan Book)

Situated on Eastside of Bay of Kappelshamn on the North coast of Gotland.

DOCUMENTS:

Vessels arriving from foreign ports shall have the following documents:

1 Crew Manifest.
1 Stores List.
3 Crew Lists.
Tonnage Certificate.
Certificate of Nationality.
Declaration of Health (Derat Certificate), not older than 6 months. Not applicable to vessels from Scandinavian ports.

NOTICE OF ARRIVAL: On which the loading turn number is based, should be given when the vessel has passed Lat. 57° 52′ N. The notice can be given by VHF (Storugns Harbour Radio).

Vessels may not berth without permission of the Company.

PILOTAGE: Pilot boards in the outer approaches and should be ordered at least 5 hours in advance by Tel: 0498/27010 (Storugns) or 10138 (Visby). Pilots keep watch on VHF Channel 16.

ANCHORAGES: With good holding ground. Vessels waiting in the roads should keep watch on VHF Channel 16 during ordinary harbour working hours.

Ships lying in the roads shall anchor so that in-going and out-going vessels can pass without hindrance or risk. Anchoring in Kappelshamnsviken in the area between Lat. 57° 51′ N. and an E.W. line 200 m. South of the quay's Southernmost point is prohibited unless permission is obtained from the Company.

Prohibited Anchorage: From 57° 52.45′ N., 18° 46.85′ E. thence North to 57° 27.7′ N. then East to Eastern shore, then South along the shore to 57° 52′ N., then West to the point of origin.

RESTRICTIONS: The harbour can be entered at all times regardless of wind direction except during strong Northerly winds.

The bay is normally ice-free. During exceptionally cold spells with Northerly winds traffic may be temporarily stopped or hindered by ice-floes.

MAX. SIZE: Depth at entrance and at quay 10 m. Vessels up to 20,000 tons have loaded to full draft. Max. draft 9.2 m.

HEALTH: No restrictions provided no disease or fever on board and vessel not arriving from port where disease or fever in existence.

RADIO: 96 and 24 hours before vessel's ETA preliminary notice must be given to the Company. Changes of ETA exceeding 10% of the remaining time must be reported. It is, however, not necessary to report changes of less than 1 hour. The Company may under special circumstances waive the obligation to give 96 hour notice.

On the arrival of a vessel in the harbour area notice of arrival must be given either in writing, or by telephone 0498/27160 or by VHF radio. In respect of notice of arrival the harbour area is Kappelshamnsviken South of Lat. 57° 52′ N. If a vessel, owing to bad weather or for any other reason cannot safely lie within the harbour area, the Company may accept notice of arrival from vessel North of above mentioned latitude.

Between 0500 and 2230 hrs. vessels waiting in the roads shall keep watch on VHF radio or, if the vessel is not equipped with such, on the ordinary radio.

Coastal Radio Stations: Stockholm Radio and Tingstade Radio (Tingstade Radio, radio telegrams only).

VHF: Storugns Harbour Radio VHF Channels 16 and 9.

TUGS: Not available on the island of Gotland.

BERTHING: The harbour which is situated on the Eastern side of Kappelhamsviken is intended solely for the loading of limestone which is obtained from the nearby quarry. The Gotland limestone, which is of high purity and has a very low percentage of impurities, is used in cellulose, sugar, metallurgic and chemical industries, and in iron production.

The limestone is delivered in 11 different grades. The density is 2.5/2.6 tons/cu. m.

The stowage factor varies between 17 and 26 (17 – 18 for grades 0 – 3 mm., 23 – 26 for grades between 3 and 120 mm., and 20 – 24 for grades above 120 mm.).

Quay		*Length*		*Depth*	
Quay 1	outside	140 m.		outside	9.5 m.
	inside	120 m.		inside	7.0 m.
Quay 2		48 m.	(no loading)		5.0 m.
Quay 3		110 m.		outer	7.0 m.
				inner	6.0 m.

Boatmen: Vessels with Pilots on board need not order boatmen. Other vessels can obtain boatmen service through their Agents or by calling the boatmen service firm "Trossvakt" over Tel: 0498/254 33 or over VHF Channel 16. Booking should be done at least 2 hours before ETA. Shipper/NordKalk AB cannot offer boatmen service.

BULK HANDLING FACILITIES: The loading elevators are movable along their respective quays. The capacity on Quay 1 is about 500 – 600 t.p.h and on Quay 3 about 300 – 350 t.p.h.

Shipmaster's Report: 1979. Loading rate 967.5 t.p.h.

Cleaning of holds, discharging of ballast and opening of hatches shall be carried out in sufficient time to avoid delays in loading. The loading should be so planned that shifting of the vessel and loading elevators can be avoided as far as possible.

STEVEDORES: Normal working hours are Monday-Friday 0530 – 2230 hrs. Overtime working to complete loading is available to a limited degree, as is loading on Saturdays and Sundays. Vessels requiring overtime loading Saturday/Sunday must give notice not later than Friday 1100 hrs.

During ordinary working hours vessels are loaded by turn. The turn is based upon the time of notice of arrival.

MEDICAL: Central hospital at Visby.

FRESH WATER: Not available.

FUEL: Most grades available from Visby subject prior notice.

GANGWAY/DECK WATCHMEN: Not compulsory but available.

OPENING/CLOSING HATCHES: Ship's crew open and close.

CUSTOMS ALLOWANCES: Presently 200 cigarettes per head/week. Practically no spirits allowed out of bond.

IDENTIFICATION CARDS: Seamen's book or passport if travelling outside port area.

CONSULS: Nearest consuls (for Denmark, Finland, Norway, West Germany) at Visby.

REPAIRS: Only minor repairs possible.

DRY DOCKS: None.

REPATRIATION: Good possibilities for changing crew.

AIRPORT: Visby.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

SHORE LEAVE: Permitted.

POLICE/AMBULANCE/FIRE: Tel: 90 000.

AUTHORITY: NordKalk AB, Storugns, S-620 34 Laerbro, Sweden. *Tel:* 0498-27100. *Telex:* 4150 Nkalks. *Contact:* Gote Sandberg.

STROMSTAD: 58.56 N. 11.10 E.

DOCUMENTS/PILOTAGE: See "Stockholm".

ANCHORAGES: Available within port for vessels up to and including 3,000 d.w.t.

MAX. SIZE: Cargo ships (not tankers), max. 3,000 d.w.t.

BERTHING: No particular restrictions for berthing within the port.

FRESH WATER: Available.

FUEL: None available.

GANGWAY/DECK WATCHMEN: Necessary.

OPENING/CLOSING HATCHES: Carried out by crew.

IDENTIFICATION CARDS: Needed.

CONSULS: Norway: Bertil Alen, Hjartagatan 13.

REPAIRS: Repairs possible.

REPATRIATION: Facilities exist for effecting crew changes.

AIRPORT: Landvetter (Gothenburg). Distance: 200 km. There is also a local taxiplane.

HOLIDAYS: Cargo work cannot be arranged on holidays.

POLICE/AMBULANCE/FIRE: Police 12530; Ambulance 90000 (ask for ambulance); Fire 90000.

TELEPHONES: No arrangements exist for placing telephones on board.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

DELAYS: No delays in load or discharge.

AUTHORITY: Hamnforvaltningen Stromstad.

SUNDSVALL: 62.25 N. 17.20 E. (See Plan Book)

DOCUMENTS:

3 copies Crew Lists.
3 copies Passenger Lists (if passengers onboard only).
2 copies Crew Declaration on tobacco, liqueur, cigarettes and spirit, etc.
2 copies Ship's Stores List.
1 copy Cargo Declaration.
Derat Certificate.
Tonnage Certificate.
Register.
Swedish Light Dues.
Manifest and/or Bill of Lading.

PILOTAGE: Pilot station (Tel: 060-58 60 00/7) at Spikarna Southern Point of Alno Island VHF Channel 16. For communication and instructions Channel 13.

Pilot boarding from pilot cutter 2.5 miles East of Gubben Lighthouse in position Lat. 62° 21′ N., Long. 17° 40′ E.

Entrance passage Gubben Light – Spikarna Light – Draghallan Light all 14 m. deep.

ANCHORAGES: Between islands of Tjufholmen and Alno and also in Svartvik Bay.

MAX. SIZE: See "Berthing".

RADIO: Cable Agents giving ETA, draft and Cash requirements either via Hernosand Radio SAH or Stockholm Radio SDJ. At least 24 hours' notice required. Change in ETA to be given at least 5 hours before ETA Pilot.

TUGS: Available, ordered by Agent. Compulsory at Sundsvall Oil Terminal for tankers of more than 10,000 d.w.t.

BERTHING: Around the clock berthing. No restrictions except draft. Following drafts (fresh water) accepted in Sundsvall and adjacent ports.

Kubikenborg: Lat. 62° 22.7′ N., Long. 17° 22′ E.

Length of quay 150 m. Max. length 192 m. Max. draft 10.5 m. 1 shorecrane, capacity 5 tons. 1 suction-installation, capacity 150 t.p.h. Pilot distance 12 nautical miles. Distance from Sundsvall Town 4 km.

Norra Nyhamn: Lat. 62° 20′ N., Long. 17° 24.8′ E.

Length of quay (pierhead only) 8 m. Tankers to be secured aft and drop both anchors forward. Discharging aft-connection. Max. draft along the quay, 6 m. Pilot distance 6 nautical miles. Distance from Sundsvall Town 18 km.

Ortviken: Lat. 62° 23.8′ N., Long. 17° 21.8′ E.

Oil Berth: Quay length 140 m. Max. draft at max. 200 m. length is 10.8 m. Pilot distance 12 nautical miles. Distance from Sundsvall Town 4 km.

Ostrand: Lat. 62° 29′ N., Long. 17° 21′ E.

Salt Berth: Length of quay 75 m. Max. draft 5 m. (port side alongside). 1 shore crane, capacity 5 tons.

Glaubersalt Berth: Length of quay 40 m. Max. draft 5.4 m. 1 shore crane, capacity 4 tons.

Oil Berth: Tankers berthed outside 3 timber rafts, max. LOA 200 m., max. draft 6.0 m. Pilot distance 17 nautical miles. Distance from Sundsvall Town 15 km.

Soraker: Lat. 62° 30.5′ N., Long. 17° 30′ E.

Length of quay 150 m. Max. LOA 90 m. Max. draft 5.8 m. 1 shore crane, capacity 10 tons. Pilot distance 11 nautical miles (East of the Alno Island). Pilot distance 20 nautical miles (West of the Alno Island). Distance from Sundsvall Town 34 km.

Stockvik: Lat. 62° 20′ N., Long. 17° 22′ E.

Length of quay 190 m. Max. draft 7 m. 3 shore cranes, capacity 6 tons each. Pilot distance 10 nautical miles. Distance from Sundsvall Town 9 km.

Sundsvall Town Quay: Lat. 62° 23.5′ N., Long. 17° 19.5′ E.

1 Berth:	Length 90 m. Max. draft 7.8 m.
1 Berth:	Length 175 m. Max. draft 5 m. – 7 m.
1 Ferry/Ro-Ro Berth:	Max. beam 15 m. Max. draft 7.5 m.

No cargo is handled on Sundsvall Town Quay. Pilot distance 12 nautical miles.

Sundsvall Oil Berth: (Vindskarsudde) Lat. 62° 23.2′ N., Long. 17° 21.8′ E.

Length of quay 100 m. Max. LOA 250 m. Max. draft 11.3 m. Max. d.w.t. 70,000. 3 swinging arms, each of 10 in. dimension. Pilot distance 12 nautical miles. Distance from Sundsvall Town 3 km. Vessels berth port side to.

Svartvik: Lat. 62° 19′ N., Long. 17° 22′ E.

Length of quay 140 m. Max. draft at 100 m. length is 6.5 m.

Oil Berth: Tankers berthed outside 3 timber rafts. Max. draft at 170 m. length – Forward 6.9 m., Aft 9.1 m. Pilot distance 10 nautical miles. Distance from Sundsvall Town 11 km.

Port of Sundsvall (Tunadalshamnen): Lat. 62° 25′ N., Long. 17° 23′ E.

Length of quay 450 m. Max. draft 9.2 m. 3 shore cranes, capacity 10 tons. Additional berth: Length of quay 200 m. Max. draft 12.6 m. Pilot distance 13 nautical miles. Distance from Sundsvall town 7 km.

Ro/Ro Berth: Max. beam 30 m. Max draft 9.2 m.

Tunadal Sawmill: Lat. 62° 25′ N., Long. 17° 23′ E.

Length of quay 195 m. Max. draft at 80 m. length is 7 m. Pilot distance 13 nautical miles. Distance from Sundsvall Town 7 km.

Vivstavarv: Lat. 62° 29′ N., Long. 17° 28′ E.

Length of quay 160 m. Max. draft 7.3 m. Pilot distance 17 nautical miles. Distance from Sundsvall Town 18 km.

MEDICAL: First class medical attention and dental care available.

TANKERS: See "Berthing".

STEVEDORES:

Ordinary working hours Monday – Friday 0700 – 1600 hrs.

Overtime on Saturdays 0700 – 1330 hrs. at 100% additional cost.

CRANES: 3 cranes available 10 – 20 ton. At Tunadalshamnen cargo is also handled by mobile cranes. Also see "Berthing".

CUSTOMS ALLOWANCES: See "Stockholm".

DENSITY: Nearly fresh, 1005.

FRESH WATER: Supplied at Sundsvall, Kubikenborg, Stockvik and Tunadal.

FUEL: All grades delivered. Notice must be given in good time, since these installations normally close down at weekends.

SHIP WATCHMEN AND SHIP'S TELEPHONE: Available. Compulsory at oil terminals only.

CONSULS: Denmark, Finland, Germany, Iceland, Netherlands, Norway.

REPAIRS: Most repairs possible through local repair shops.

DRY DOCKS: Lunde Varv outside Kramfors.

SURVEYORS: Cargo inspectors available through Sundsvall Control Service or Lloyd's Agency for cargo or vessel.

Surveyors available from Stockholm in most cases. Call Agents for details at time.

AIRPORT: International airport 22 km. outside town. Good facilities to effect repatriation.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

HOLIDAYS: See "Stockholm".

POLICE/AMBULANCE/FIRE: Tel: 90 000.

EMERGENCY: CO-ORDINATION CENTRE: Tel: 90 000 giving full details of situation or call Harnosand Coast radio station VHF or MF.

STORING: Vessels stored by truck only, through assistance of stevedores and forklifts. Can be done close alongside ship.

GENERAL: *Dangerous Cargo:* Ships carrying dangerous cargo must notify Port Authorities in advance of nature, quantity and IMO code number of goods concerned.

Wintertime: Ice-breaker service available if needed (Wintertime mid-December to mid-April).

AUTHORITY: Sundsvalls Hamnforvaltning, Hamnplan 4, S-851 85 Sundsvall, Sweden. *Tel:* (060) 19 10 00. *Contact:* Erik Westerlund or Sten Lundell, Harbour Masters, Tel: (060) 19 15 91.

TRELLEBORG: 55.21 N. 13.09 E. (See Plan Book)

DOCUMENTS: See "Stockholm".

PILOTAGE: Available day and night. To obtain Harbour Pilot report 5 hours in advance. To obtain outward Pilot report 24 hours in advance of departure. Meet inward-bound ships on Roads with motor boat. Outward-bound Pilot obtained from pilot station of Trelleborg. Tel: 040-115269, 040-978315. Pilot boats provided with short-wave radio telephone, and in pilot station an up-to-date radar set is installed. Also see "Stockholm".

ANCHORAGES: Recommended West of entrance fairway between Fairway Buoy and No. 1 Light Buoy. Depth varies from 7 m. – 14 m. Anchor ground good – clay and sand.

RESTRICTIONS: Entrance a straight, perch-buoyed fairway of about 1,300 m. length, having measured depth of 8.5 m., and a bottom width of 100 m. Distance between moles (outer – 125 m.) and (inner – 96 m.)

HEALTH: See "Stockholm".

VHF: Port and pilot station on Channels 16 and 9.

TUGS: Tug-boats can be obtained promptly from Malmo.

BERTHING: New Harbour has depth of 8 m. with quay on Northern side of basin. It is 1,640 ft. long and served by 1 bridge crane (6.2 tons) and 1 mobile crane of 36 tons. Western Harbour Basin has depth of 7 m. in Western and Northern part and 8 m. in Eastern part. Eastern Harbour Basin has depth of 6.5 m. in Eastern and Northern part and 8 m. in Western part. Oil Quay 230 ft. long, depth at quay of 8 m. is situated on Southern side of New Harbour. Tankers of max. length 570 ft. can approach this quay. From oil harbour area direct importation of oils is made to Svenska Fina, Statens Jarnvagar (the Swedish State's Railway Company), the Trelleborgs Gummifabriks AB (Trelleborg Rubber Factory Ltd.). Five berths equipped for Ro/Ro traffic.

STEVEDORES: Available (Tel: 43135).

FRESH WATER: Available on all quays at request to Harbour Office.

FUEL: All grades bunker oils supplied at oil quay through direct pipe-line from sea depot. rder on phone Trelleborg 107 76.

REPAIRS: Available through private firms. Tel: Trelleborg 150 60, 109 66 or 124 50.

CONSULS: Denmark, Finland, Norway and West Germany.

TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.

TELEPHONES: Ship's telephone available at Oil Quay, Tel: 148 28, and at the Harbour Bridge, Tel: 147 67. Order is made through Harbour Office.

SERVICES: Divers available through the Harbour Office. Refuse containers can be hired.

AUTHORITY: Trelleborgs Hamn, Box 26, 23101 Trelleborg, Sweden. *Tel:* 0410-41015. *Contact:* Karl-Axel Green, Harbour Master.

UDDEVALLA (including Froland): 58.21 N. 11.56 E. (See Plan Book)

DOCUMENTS:

3 Crew Lists.

3 Passenger Lists.

Health Document. Derat Certificate when ship arrives from abroad, except from Denmark, Norway and Finland.

3 Manifests.

1 copy of Bill of Lading.

Tonnage Certificate.

Nationality Certificate.

1 Crew Effects Declaration.

2 Ship's Stores Declaration.

1 Declaration of Living Animals (if any).

PILOTAGE: Pilotage at Marstrand. Address "Marstrand Pilotstation". Required ETA 5 hours. VHF 16 and 11. Pilot boat S.W. of Hätteberget Lighthouse (Lat. 57° 51.8′ N., Long. 11° 27.65′ E). (Also see "Stockholm".)

MAX. SIZE: Draft 11 m., height 44 m.

HEALTH: Cable to Agent and he will arrange with Health Authorities.

RADIO: SAG. Gothenburg Radio (Goteborg Radio).

RADAR/VHF: No port radar service, VHF Channels 16, 11 and 14.

TUGS: 3 Tugs up to 3,200 h.p. available. Can be ordered through Pilot or Agent.

BERTHING: Depths alongside (at MW) as follows:

	Length (m.)	*Depth* (m.)
Skeppsholm Quay	290	10.7
Bado Quay	430	7.0 – 9.5
Bave Quay	180	7.0
Skans Quay	180	6.0
Thule Quay	105	4.0
Juno Quay	200	6.0
Froland	225	12.0

CARGO HANDLING FACILITIES:

Skeppsholmspiren: 6 electric cranes of 12 to 35 tons capacity. This berth is especially constructed to handle the loading/unloading of bulk cargoes ore, coal, coke, scrap iron etc. Very large storage areas. 1 berth equipped for Ro-Ro traffic.

Bado Quay: 8 electric cranes with capacities of 7 – 12 tons. 9,000 sq.m. of warehouses and 13,000 sq.m. of storage.

Bave Quay: 2 electric cranes with capacities of 6 tons. 3,400 sq.m. of warehouse and 14,000 sq.m. of storage.

Grain Cargoes: 2 silos owned by private companies.

Froland: (Lat. 58° 20′ N., Long 11° 52′ E.) Total length 225 m., depth alongside 12 m., 3 electric cranes with capacities of 35 tons. 35,000 sq.m. of storage. One berth equipped for Ro/Ro traffic, depth 8.0 m.

STEVEDORES: Arranged by Agent.
TANKERS: Draft in the Skeppsviken Oilport, 11 m.; at the Bado Oilport, 9.5 m.
FRESH WATER: Available at all quays.
FUEL: All grades available.
FIRE PRECAUTIONS: Watchmen necessary when loading or discharging oils by pipe-lines.
GANGWAY/DECK WATCHMAN: Watchman accepted by Harbour and Fire Authorities on vessels loaded with explosives.
OPENING/CLOSING HATCHES: Preferably by crew. Can be arranged by stevedores.
CERTIFICATES: Tonnag Certificate, Nationality Certificate, Derat Certificate.
CUSTOMS ALLOWANCES: 100 cigarettes and 0.5 bottle of spirits for each (every 3rd day) man as a normal quantity. Possible to be increased for Master.
IDENTIFICATION CARDS: Not required.
CONSULS:

Denmark	Tel: 151 91	Netherlands	Tel: 144 60
Finland	Tel: 161 00	Norway	Tel: 910 00
	Tel: 388 60	West Germany	Tel: 360 00

REPAIRS: Facilities available.
SURVEYORS: All kinds of cargo inspectors and surveyors available.
REPATRIATION: In accordance with instructions of Consul.
AIRPORT: Gothenburg, 100 km.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
POLICE/AMBULANCE/FIRE: Police Tel: 90 000; Ambulance Tel: 90 000; Fire Tel: 90 000.
EMERGENCY CO-ORDINATION CENTRE: Dial telephone number 90 000 for Fire/Ambulance/Police.
TELEPHONES: Available for placing on board.
SERVICES: Compass adjusters and ship's chandler available.
BANKS: Gotabanken, Kungsgatan 15, 451 30 Uddevalla. Tel: 0522-143 50. Telex: Stockholm 19420 Gotban S. Goteborg 21750 Gotban S.

P.K. Banken, Kungsgatan 7, Box 373, 451 19 Uddevalla. Tel: 0522-361 00. Telex: Stockholm 19310 Pkbank S. Goteborg 2562 Pkgot S.

Skandinaviska Enskilda Banken, Kungsgatan 12. Box 136. 451 16 Uddevalla. Tel: 0522-363 10. Telex: Stockholm 11000 Essebh S., Goteborg 21020 Essebg S.

Svenska Handelsbanken, Kungsgatan 10, 451 30 Uddevalla. Tel: 0522-363 30. Telex: Stockholm 11090 Handst S., Goteborg 27500 Handgb S.

STORING: See "Prelims", page viii.
1. Vessel can be stored by barge or truck.
2. Before storing the Port Authority must be contacted.
3. Trucks can proceed alongside at every berth.
4. Fork lift can be used.
5. Storing under Customs supervision.
6. Local riggers can be employed.

SHORE LEAVE: No restrictions.
AUTHORITY: Uddevalla Hamn, 451 81 Uddevalla, Sweden. *Tel:* 0522-147 70. *Telex:* 42269 Uddport S. *Contact:* Trafik Department.

UMEA: 63.49 N. 20.16 E. (See Plan Book)

DOCUMENTS:

Ship's Documents:
Tonnage Certificate.
Certificate of Nationality.
Derat Certificate (not older than 6 months).

Supplied by Master on arrival:
1 copy of each Manifest.
1 copy of each Bill of Lading.

Supplied by Agent and signed by the Master on arrival from foreign ports:
1 Maritime Declaration of Health.
3 Crew Lists (one set).
2 Passenger Lists (one set).
1 Crew Effects Declaration.
2 Ship's Stores Declarations.
2 Cargo Declarations.
4 Reports of Arrival.
1 Declaration of Living Animals (if any) (supplied by the Customs Officer).

Furthermore on arrival from any port:
1 Report of Arrival, with double net tons, if applicable (Harbour Office).
1 Passenger List (if any in transit).
1 Crew List.

On departure to a Foreign Port:
5 Reports of Departure.

PILOTAGE: Umea Pilot Station: Bredskar. Tel: 090-45021 and 090-45544. Telegraphic address "Pilotstation Umea".

At least 5 hours' advance notice of ETA at pilot station, stating time and pilot station and destination, can be given over any Swedish coastal radio station or free of charge on VHF over any Swedish pilot station and some lighthouses.

Pilot station and pilot boats fitted with VHF Channel 16 – calling and safety; Channel 13 – pilotage and traffic; Channel 12 – spare Channel.

All pilot boats orange with flag "H" and equipped with radar.

Boarding point, Lat. 63° 36.5′ N., Long. 20° 25.5′ E., 1.0 nautical miles 145° (T) from Vaktaren Lighthouse. In case of bad weather, in the fairway, closer to the pilot station.

Anchorage for vessels awaiting Pilot: Lat. 63° 36′ N., Long. 20° 28′ E., 1.5 nautical miles S.E. of Vaktaren Lighthouse. Depth 18 m. to 30 m.

ANCHORAGES: See "Pilotage".

Osterfjarden roadstead between Umea hamn and Obbola. Length about 2,800 m. and about 400 m. wide, midstream in River Umea. To the North and South of Lat. 63° 42.3′ N., Long. 20° 21.0′ E. and with a depth of 12 m. to 22 m.

Anchorage is forbidden around position Lat. 63° 40.5′ N., Long. 20° 20.0′ E.

Cables and fresh water pipe-line on Osterfjarden roadstead passing East-West around Lat. 63° 42.5′ N.

RESTRICTIONS: Entry permitted during darkness, for tankers, not more than 13,000 d.w.t. and a max. draft of 7.62 m., and dry cargo vessels with a draft not exceeding 8.53 m.

During unsuitable weather conditions, according to the Pilot on duty. Tankers exceeding 1,600 g.r.t. and with a cargo of mineral oil products and other dangerous cargoes, must take a Pilot.

MAX. SIZE: Max. depth and max. permissible draft (at MW) in the fairway as follows:

The fairway to:	*Maximum draft (m.)*
Ferry Station No. 1-2	7.6
Ferry Station No. 3	10.2
Stormskar Oil Berth and Obbola	10.2
Holmsund Oil Jetty	5.5
Umea Inner Harbour and Gimonas Oil Jetty	3.0

No tide.

HEALTH: Free Pratique automatically for ships arriving from non-infected areas. In event of any suspected disease or fever on board notify the Agent, who will give necessary directions. It is possible to send a telegraphic message to "Sanitary Authority, Umea" containing state of health on board, in ordinary items or code. (Also see "Documents").
RADIO: Harnosands Radio (SAH) on 2182 kHz or on VHF Channel 23-26 or 28 (depending on ship's position).

Port radio: Umea port radio keeps watch, Monday to Friday, 0815 – 1630 hrs. on VHF Channel 16. Working Channels 11 and 13. At other times Umea pilot station. No port radar service, but Umea Pilot Station and the pilot boats are equipped with VHF and can assist on request.

TUGS: Normally necessary only for larger tankers when berthing. Tugs join vessels just off the jetty. Ship's lines always used.
BERTHING: Depth alongside (at MW) as follows:

Umea Outport:	*Depth in metres*
Ferry Stations:	
No. 1 Hillskar	6.0
No. 2 Hillskar	7.0
No. 3 Truthallan	7.0
Oil Berth, Stormskar	11.0
Pilot Berth	5.3
South Quay, Berth Nos. 9 to 10	11.0
Pier Quay, Berth Nos. 7 to 8	9.0
North Quay, Berth Nos. 2 to 6	7.0
North Quay, Berth Nos. 1 to 2	6.0

CRANES:
North Quay: 3 cranes, 2 – 7.5 tons.
Pier Quay: 3 cranes, 3 – 7.5 tons.
South Quay: 1 crane of 40 tons.
Ferry Station No. 3: 1 crane 3 – 5 tons.

TANKERS: Oil berths at Port of Umea.

Stormskar: Depth 11 m. Reducing pieces for all diameters between 6 in. and 12 in. and all types of flanges available. One crane for handling hoses. Max. LOA 215 m., max. beam 30.0 m., max. draft 10.2 m. (channel limitation at MLW is 9.7 m.) Max. d.w.t. 42,000. Vessels usually berth starboard side to.

Obbola: Oil Jetty, depth 11.0 m. Max. LOA 200 m., max. draft 10.2 m. (channel limitation at MLW is 9.7 m.). Max. d.w.t. 40,000. Vessels berth port side to.

DENSITY: Nearly fresh water.
STEVEDORES: Holmsunds Stuveri AB. Tel. 090-40970. To be ordered before 1300 hrs. local time, day before gangs required. For work on Saturdays, Sundays, and holidays, special regulations.

Working hours: Monday to Friday 0600 – 1500 hrs., meal hour 1000 – 1100 hrs. Coffee breaks 0800 – 0810 hrs.; 1300 – 1310 hrs.

MEDICAL: All kinds of medical attention and hospital facilities available. Notify Agent as soon as possible.
FRESH WATER: Delivered from water posts in Port of Umea at Ferry Station No. 1, Oil Berth, Berth Nos. 1 – 10 and in Umea Inner Harbour.
FUEL: All kinds and grades of fuel oil available in Port of Umea. Bunkering at Berths 1 – 10 possible during normal loading or unloading from pipe-line. At Ferry Station Nos. 1 and 2 and the Oil Berth also bunkering from pipe-line. Fuel can also be delivered from lorries. Notice as soon as possible.
FIRE PRECAUTIONS: Security watchmen from port of Umea while alongside the Oil Berth. Alarm regulations in writing will be delivered on arrival.
GANGWAY/DECK WATCHMAN: Available but not compulsory except for tankers.
OPENING/CLOSING HATCHES: Can be done by stevedores if necessary, except patent hatches.
CUSTOMS ALLOWANCES: *Tobacco:* 200 cigarettes or 250 grammes of tobacco (7 ozs.)

Spirits and Wine: 1 bottle of each (1 litre), minimum age 20 years.

Above mentioned quantities are per crew member and per week in Sweden. After a week quantities are taken out after request to the Customs Office.

IDENTIFICATION CARDS: Not required. Seaman's book sufficient.
CONSULS: Following countries have representatives in Umea: Denmark, Finland, Netherlands, Norway.
REPAIRS: Most deck and engine repairs.
REPATRIATION: Facilities exist for effecting crew changes and arranging repatriation.

AIRPORT: Umea, approx. 20 km. away, served by regular airlines.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: New Year's Day (1st January); Twelfth Day (6th January); Good Friday; Easter Monday; May Day (1st May); Whit-Sunday; Whit-Monday; Midsummer's Day (nearest Saturday to 24th June); All Saints' Day (1st Saturday in November); Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Alarm central 90-000 and ask for service required.
TELEPHONES: Available for placing on board at Berths 1 – 10 and Oil Berth at Stormskar.
AUTHORITY: Umea Hamn, S – 91300 Holmsund, Sweden. *Tel:* 090-24230. *Contact:* Per Ove Englund, Port Director.

VALLVIK: 61.11 N. 17.11 E. (See Plan Book)

DOCUMENTS: See "Stockholm".
PILOTAGE: Pilot station at Soderhamn (Ljusne Station).
ANCHORAGES: *(a)* Ljusne bight sheltered from W., N. to N.E. winds, depths 6 to 8 fathoms. *(b)* North side of Storjungfrun island sheltered from South to S.W. winds, depths 10 to 12 fathoms.
RESTRICTIONS: No direct restrictions. Ships of about 5,000 tons d.w.t. or more are recommended not to enter or leave the harbour in darkness (due to Pilot and weather conditions).
MAX. SIZE: Max. draft in fairway 7.5 m. Loading pier is 200 m. Berthing possible on both sides.

	Distance	Depth MWL (m.)
East side (from outer end):		
	0 – 80 m.	8.3
	80 – 85 m.	7.7
	85 – 110 m.	7.2
	110 – 140 m.	6.7
	140 – 175 m.	5.8
	175 – 195 m.	5.7
	195 – 200 m.	5.2
West side (from outer end):		
	0 – 40 m.	7.6
	40 – 70 m.	5.8
	70 – 90 m.	5.5
	90 – 140 m.	4.6

HEALTH: No special action except if suspected disease. In that case contact Agent.
RADIO: Northward bound ships contact Stockholm Radio, Southward bound Harnosand Radio.
RADAR/VHF: No port radar service. There is a radar station at Ljusne. Pilot station and some of the pilot boats are fitted with radar. Master may contact Pilot by means of VHF Channels 16 and 13.
BERTHING: Ship's Agent keeps contact with port Authorities.
STEVEDORES: Agent arranges required or available gangs according to the Shipmaster's wishes.
TANKERS: 10 in. diameter discharging hoses and pipe-line. Tanker berth at loading pier, 3 different connecting points.
FRESH WATER: Delivered by hose from quay. Rate about 8 t.p.h.
FUEL: Tanker lorries ordered through Agent, available with a few hours' notice.
GANGWAY/DECK WATCHMEN: Not necessary. If wanted, can be arranged.
OPENING/CLOSING HATCHES: Normally carried out by crew. Can be done by stevedores.
CARGO GEAR: Cargo gear certificates valid.
IDENTIFICATION CARDS: Not needed.
CONSULS: Danish, Dutch, and French Consuls in Soderhamn.
REPAIRS: Machinery repairs, plate-work and welding can be carried out to a certain extent.
DRY DOCKS: None.
REPATRIATION: Facilities for crew changes available.
AIRPORT: Nearest airport Arlanda, about 15 miles North of Stockholm.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: See "Soderhamn".
POLICE/AMBULANCE/FIRE: See "Soderhamn".
TELEPHONES: No arrangements for placing telephones on board. Telephone for ship's use available in Harbour Master's Office.
AUTHORITY: Vallviks Hamn, NCB-Vallvik, 82021 Vallvik, Sweden. *Tel:* 0270-69510. *Telex:* 47011. *Contact:* Benny Westin.

VARBERG: 57.07 N. 12.15 E. (See Plan Book)

DOCUMENTS:
Crew List.
Passenger List.
Maritime Declaration of Health (including Derat Certificate).
Ship's Certificate of Registry.
Manifests and B/L copies.

PILOTAGE: Application for Sea Pilot through ship's Agent. Telephone to Pilot station 0340/10300. Pilot to board vessel on the road about 0.5 nautical miles off Varberg. (Also see "Stockholm".)
ANCHORAGE: On the roads 33 ft. depth.
RESTRICTIONS: No tide or other entry restrictions.
MAX. SIZE: Length 170 m., breadth 25 m., draft 23 ft. No tide.
HEALTH: Vessel to be kept in quarantine if disease on board suspected.
RADIO: Gothenburg Radio, SAG. VHF Channels 16 and 26.
TUGS: Tugs to be ordered 12 hours in advance.
STEVEDORES: Gangs to be ordered in advance through ship's Agent.
MEDICAL: Hospital facilities available. Desirable to give advance notice.
TANKERS: 1 tanker berth, max. draft 23 ft.
FRESH WATER: Available all docks 35 t.p.h.
FUEL: Fuel Oil No. 1 – 5 available from tank trucks.
FIRE PRECAUTIONS: Oil and petrol to be discharged under supervision of watchman.
GANGWAY/DECK WATCHMEN: Recommended.
OPENING/CLOSING HATCHES: Generally done by stevedores.
CERTIFICATES: Certificates of Registry and Derat and also Crew List.
CUSTOMS ALLOWANCES: (Tobacco), 200 cigarettes per man. (Wine/Spirits), 1 bottle per man.
IDENTIFICATION CARDS: Not needed.
CONSULS:
Vice-Consul of Finland, Tel: 0340/16000
Vice-Consul of Netherland, Tel: 0340/16270
Vice-Consul of Denmark, Tel: 0340/16130

REPAIRS: Only minor repairs.
REPATRIATION: Can be effected.
AIRPORT: Nearest airport with regular airlines, Torslanda/Gothenburg, 50 miles North of Varberg.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: Principal Swedish Holidays – when no cargo work is obtainable: New Year's Day; Good Friday; Easter Day; 2nd Easter Day; Labour Day (May 1st); Whitsun Day; 2nd Whitsun Day; Midsummer Day; All Saint's Day (November); Christmas Day; 2nd Christmas Day.
POLICE/AMBULANCE/FIRE: Tel. 90 000.
TELEPHONES: Available on dock and one for placing on board.
DEVELOPMENTS: Planned increases of draft at the entrance to 9 m. = 29 ft. and in the harbour to 8 m. = 26 ft.
AUTHORITY: Port Authority of Varberg, Hamnkontoret, 43200 Varberg, Sweden. *Tel:* 0340-88528. *Contact:* Tore Gustavsson, Port Manager.

VASTERAS: 59.37 N. 16.33 E. (See Plan Book)

DOCUMENTS:
Ship's Register.
2 Crew Lists.
1 Tobacco List, signed by all hands on board.
1 Valid Derat Certificate.
1 copy of Manifest or Bill of Lading for each Swedish port of call.
Light dues receipts, if on board.

PILOTAGE: Incoming ships receive Pilot from Landsort. Pilot ordered by VHF Channel 16 or by RT. Pilot boats fitted with VHF. Give order 5 hours before Pilot required. Pilots meet ships about 2 nautical miles outside Landsort. Light and signals in accordance with the international rules. (Also see "Stockholm".)
ANCHORAGES: Within harbour area. Depth 9 m. – 10 m.
RESTRICTIONS: None. No tides.
MAX. SIZE: Vessels reach port through two deep navigable channels – through Sodertalje Ship Channel or via Stockholm through Hammarby Ship Canal. Least depth of channels at average water level is 7.3 m. (24 ft. 1 in.).

Sizes of Locks:

	Length	*Width*	*Depth*
Sodertalje	136 m.	20 m.	7.5 m.
Hammarby	115 m.	17.4 m.	7.0 m.

Limitation of Vessels: For Sodertalje: With beam of 18 m. max. draft 6.5 m. With beam of 17 m. max. draft 6.8 m. Max. LOA 124 m.
HEALTH: No special requirements or health documents, only valid Derat Certificate. Disease or fever on board must be declared before entering port.
RADIO: Stockholm Radio.
VHF: Harbour Office, VHF Channels 16 and 14, Monday-Friday 0800 – 1600 hrs. Traffic – Channel 11.
UGS: 1 tug for unberthing. Ship's lines. Boatmen can be ordered via VHF Channel 16.
BERTHING:

Berth	*Length* (m.)	*Depth* (m.)	*Remarks*
Djuphamnskajen	660	7.6	2* container cranes 12 tons – 33 tons 2 cranes × 8 tons 1 crane × 5 tons 1 crane × 22 tons
Oljekajen	125	7.6	
Kolkajen (Ro/Ro)	120 plus dolphins	7.6	2 container cranes 12 tons – 33 tons
Ostra Kajen	527	5.0 – 7.6	1 container crane 22 tons 5 cranes × 5 tons 1 heavy lift crane 210 tons
Lillakajen	120	7.6	2 cranes × 5 tons
Silokajen	130	7.3	1 unloader, rate 750 t.p.h.
Tullhus	483	3.0 – 5.0	1 crane × 6 tons 1 crane × 2 tons
Kraftverkshamnen	210	5.8	2 cranes × 6 tons

*In 1985 an additional 33 ton crane will be available for containers.
BRIDGES: 4 bridges. All of them to be opened at passage except bridge at Sodertalje which closed from 1630 – 1830 hrs. weekdays and 1300 – 1500 hrs. Saturday or day before a holiday.
STEVEDORES: Stevedores for next working day ordered by at least 1500 hrs. day before and ETA to be given in due time. Tel: 021-12 71 20.
MEDICAL: Necessary service given by local hospital and private doctors. Vaccinations carried out.
FRESH WATER: Ordered through Port Administration.

FUEL: Bunkering of all grades of oil can be carried out at all quays from trucks.
FIRE PRECAUTIONS: Accordance harbour regulations.
GANGWAY/DECK WATCHMEN: Can be obtained from shorewatch companies at different rates for night/day work.
OPENING/CLOSING HATCHES: Crew. Can be carried out by stevedores.
CERTIFICATES: Measurement certificate and all gear test certificates required, if ship's gear to be used.
CUSTOMS ALLOWANCES: (Tobacco), 200 cigarettes or 200 gr. tobacco. Additional allowance depending on expected stay in port and size of vessel. (Spirits), 1 bottle of 0.75 c.l. for each crew member over 21. Additional allowance on request.
IDENTIFICATION CARDS: None required.
CONSULS: Denmark, Finland and Norway.
REPAIRS: Most deck and engine repairs, as well as electrical.
DRY DOCKS: None.
REPATRIATION: Possible. Accommodation to be ordered in good time.
AIRPORT: Arlanda, 120 km. International lines.
IME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: See "Stockholm".
POLICE/AMBULANCE/FIRE: Tel. 90000.
TELEPHONES: In oil and deep-water harbour, most quays fitted with telephones.
SERVICES: Compass adjusting. Small radio repairs by local radio men.
SHORE LEAVE: Crew can leave vessel after Customs clearance and Immigration control.
DEVELOPMENTS: Constant new development and extensions. Additional room for extension in old harbour, deep harbour and oil harbour.
AUTHORITY: Vasteras Hamn, Sigurdsgatan 1, Box 256, S-721 06 Vasteras, Sweden. *T:* 021-180100. *Contact:* Stig Raberg, Port Director. Goran Noren, Port Captain. Stig Jansson, Traffic Manager.

VASTERVIK: 57.46 N. 16.38 E.

PILOTAGE: Compulsory. Pilot boards in 57° 45.1′ N., 16° 57.3′ E., available day and night. Telephone: 0490-28041. Call sign "Lotsarna Ido".
BERTHING: *Outer Harbour:* Djuphamnskajen Lucernakajen), length 200 m., depth 8.3 m.
Oil Quay (North part of Lucernakajen): Depth 8.3 m., equipped with 3×8 in. pipe-lines.
Ferry Harbour: Quay length 100 m., depth 6.3 m.
Inner Harbour: Quay length 900 m., depth alongside from 4 to 6 m.
Oil berth: Length 15.0 m., depth alongside 6 m.
FRESH WATER: Can be obtained from all quays.
AUTHORITY: Vasterviks Hamn, Box 3093, 593 03 Vastervik, Sweden. *Tel:* 0490-10690, 16920. *Contact:* Olof Lindroos, Harbour Master.

VISBY: 57.38 N. 18.17 E. (See Plan Book)

DOCUMENTS: See "Stockholm".
PILOTAGE: Tel. 0498-10138 between 0600 – 2200 hrs., if possible 5 hours before arrival. Pilotage day or night. Embark/disembark outside port entrance. Radar and VHF at pilot station. (Also see "Stockholm".)
ANCHORAGES: Outside harbour, water depth 30 m. to 50 m. Clay bottom. No mooring buoys.
RESTRICTIONS: No tide in harbour. Currents outside harbour up to 4 knots running along coast. Prevailing winds, Summer time mostly S.W., Winter between N.W. and N.E. Harbour open to winds between S.W. – W., which with strong winds produces swell along the piers.
MAX. SIZE: After re-building the max. size will be 5,000 – 6,000 d.w.t. and 150 m. LOA, turning in harbour.
TUGS: None available.
BERTHING: The harbour comprises 2 new Ro/Ro berths, 160 m. and 200 m. in length, with a depth of 7 m. Width of Ro/Ro berth 35 m. A new oil quay with depth of 8 m. for vessels up to 5,000 d.w.t.
Old Harbour: The old Harbour contains 4 Ro/Ro ramps, an oil quay, a berth of 120 m. for general cargo and a berth of 150 m. for grain. Depth alongside 5 m. – 6 m.
BRIDGES: No bridges or overhead cables.
STEVEDORES: Working hours, Monday – Friday 0700 – 1600. Overtime possible.
TANKERS: See "Berthing".
FRESH WATER: Available.
FUEL: Oil available.
REPAIRS: Only small repairs are possible.
AUTHORITY: Visby Harbour Office, Skeppsbron 18, S-62157 Visby, Sweden. *Tel:* 0498-69475. *Contact:* Bengt Widegnen, Harbour Master.
AGENT: AB Carl E. Ekman, Hamngatan 3, Box 2067, S-62102 Visby, Sweden. Tel: 0498-49000. Telex: 4134. Cables: Ekman.

WALLHAMN: 58.01 N. 11.42 E. (See Plan Book)

DOCUMENTS:
3 Crew Lists.
2 Passenger Lists.
1 Tobacco and/or Stores List.
1 Manifest.
PILOTAGE: Pilots board West of Skallen Lighthouse outside Marstrand. Address: "Marstrand Pilot Station", Tel: 0303-60004, VHF Channel 16. 24 hours' notice to be given through Agents.
ANCHORAGE: Whilst awaiting berth, vessels can anchor South of the entrance.
MAX. SIZE: Draft not to exceed 11.0 m. At stone loading berth – 6.0 m.
HEALTH: No special action except for suspected disease, in which case Agent should be contacted for further information.
RADIO: Gothenburg Radio.
VHF: Wallhamn Harbour Radio – VHF Channel 16.
TUGS: Tugs from Gothenburg will join at entrance.
BERTHING: Four berths for Roll-on/Roll-off: (2) 180 m. × 11 m. depth. (3) 130 m. × 11 m. depth. (4) 130 m. × 8.5 m. depth (5) 240 m. × 8.5 m. depth and (6) 110 m. × 6 m. depth, quay for loading of stone products.
STEVEDORES: ETA given to Agents is sufficient.
MEDICAL: Doctors and dentists available at short notice. Nearest hospital in Kungaelv, 35 km.
FUEL: Most grades of bunker oil available with short notice.
GANGWAY/DECK WATCHMEN: Available.
OPENING/CLOSING HATCHES: By crew or by stevedores.
IDENTIFICATION CARDS: Not necessary. Seamen's Book or Passports should be carried.
CONSULS: In Gothenburg, 60 km. away.
REPAIRS: Smaller repairs performed by own workshop. More complicated repairs to be arranged by Agent.
REPATRIATION: All facilities available.
AIRPORT: Landvetter International Airport, Gothenburg, 85 km. away.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: Stevedoring and clearance of vessels can be performed every day of the year, 24 hours' service.
POLICE/AMBULANCE/FIRE: Tel. 90 000.
SHORE LEAVE: No restrictions.
AUTHORITY: Wallhamn Hamn AB., S-44060 Skaerhamn, Sweden. *Tel:* 0304-60720. *Telex:* 2429 Wallhmn. *Cables:* Wallhamn. *Contact:* L Naevergaardh, Agency Manager. B. Evertsson, Port Captain, Per Nilsson, General Manager.

YSTAD: 55.26 N. 13.50 E. (See Plan Book)

DOCUMENTS:
Crew List.
Passenger List.
Custom Documents.
Manifests.
Bills of Lading.
Ship's Papers, etc.
TRAFFIC WARNING SYSTEM: Vessels approaching Ystad listen on Channel 16 for broadcast announcing ferry departures. All inward bound vessels have to make contact.
PILOTAGE: Vessels approaching Ystad's Harbour must apply for Pilot at Trelleborg at least 5 hours before pilotage due to commence. Tel: 0410 – 10141 or VHF (Channel 16), stating tonnage, draft and destination. VHF call sign "Lotsarna" plus name of pilot's station. (Also see "Stockholm".) Pilot boards at Ystad entrance buoy.
ANCHORAGES: Road: 1.0 nautical mile S.W. harbour entrance, 9 m. – 10 m. depth; sand and clay, good anchorage ground. The road is open to winds from S.S.W.
MAX. SIZE: Largest fully loaded vessel that can enter harbour about 5,500 d.w.t. Depth 7.2 m., max. draft 6.7 m. (22 ft.)
RADIO: Goteborg and Stockholm.
VHF: 24 hour watch at Trelleborg pilot station on VHF Channel 16 and "Ystad Port Radio" on Channel 16 during office hours (0700 – 2400 hrs.).
TUGS: Tug usually meets vessel at entrance buoy. Ship's lines used. Tugs not compulsory.
BERTHING: Vessels of 150 m. length and 20 m. breadth can enter harbour. Max. draft 22 ft. at MWL.
Ro/Ro Berth: Three movable ramps for lorries/goods. Breadth 8 m., 10 m. and 12 m. One railway ferry ramp with a fixed car ramp to upper deck.
CRANES: 2×6 tons (9 ton with double gear), 1×5 ton, 1×3 ton. All cranes are rail-mounted and electric.
STEVEDORES: Stevedores must be ordered from Ystads Stuveri AB, Tel: 0411-18080. Working hours Monday – Friday 0700 – 1630 hrs. Meal intervals 0900 – 0930 hrs. and 1200 – 1230 hrs.
MEDICAL: Agents to be notified in advance if medical attention wanted.
TANKERS: Load/discharge lines 8 in. diameter, but reducing pieces for 6 in. and 10 in. diameter. (Tankfarm of 40,000 cu.m.)
FRESH WATER: Available from quays. About 10 t.p.h.
FUEL: Coal and oil can be obtained by lorries.
GANGWAY/DECK WATCHMEN: Can be arranged.
OPENING/CLOSING HATCHES: Crew or stevedores.
CERTIFICATES: See "Stockholm".
CUSTOMS ALLOWANCES: (Tobacco), about 200 cigarettes or 200 gram of tobacco for each member of crew. (Spirits), 1 bottle for each member of crew.
CARGO GEAR: Loading/discharging with shore cranes and Roll-on/Roll-off ramps.

IDENTIFICATION CARDS: Not needed.
CONSULS: Danish Consul, Tel: 13800. Finnish Consul, Tel: 13940. Norwegian Consul, Tel: 13930.
REPAIRS: Mechanical workshop.
SURVEYORS: Surveyor appointed by the Swedish National Administration of Shipping and Navigation at the Port Office.
AIRPORT: 30 km. distant and served by regular airlines.
TIME: GMT plus 1 hour in Winter. GMT plus 2 hours in Summer.
HOLIDAYS: Christmas; New Year; Easter; Whitsun and Midsummer. No cargo work.
POLICE/AMBULANCE/FIRE: Police, Tel: 13620; Ambulance and Fire, Tel: 90000.
GENERAL: *Refuse Disposal:*

Contaminated Water: To the reception station at Revhuskajen (max. 500 cu.m.).

Waste Oil: Via a tank-truck (max. 10 cu.m.).

Solid Garbage: Via a motorised container to a refuse dump (max. 12 cu.m.).

SHORE LEAVE: Permitted.
AUTHORITY: Ystads Hamn, Hamnkontoret, Hamngatan 18, S-27100 Ystad, Sweden. *Tel:* 0411-77263, 77000. *Cables:* Southport. *Contact:* Gunnar Berntson, General Manager.

NOTES

Please also advise Shipping Guides Ltd.

Switzerland

BASLE: 47.33 N. 7.34 E. (See Plan Book)

PORT LIMITS: A line drawn 50 m. off the shore.

DOCUMENTS:
1 Rhine-Manifest or "T"-Paper.
1 Provisions List.

The respective documents, mentioned in No. 1.10 of the Rhine Shipping Police Regulation have to be on board. Where possible, cargo manifests and stowage plans should be forwarded ahead of the vessel to the local Agent.

PILOTAGE: Holders of a High Rhine Shippers Licence have to Pilot the vessel between Basle and Birsfelden. Such licence-holders can be ordered at Signal-station (VHF Channel 18 or telephone 65 44 00).

ANCHORAGES: Vessels moored at riverside quays have to use anchors.

RESTRICTIONS: Shipping is blocked from high water mark II (gauge Rheinfelden 430 cm. up– resp. 450 cm. downstream of the Middle Bridge at Basle). Other restrictions will be announced by the Port Authority.

MAX. SIZE: Water Depth: 3.00 m. in basin II, port of Kleinhuningen; 3.50 m. in all the other port areas.

Air Draft: 5.70 m. to basin II, port of Kleinhuningen; 7.00 m. to all the other port areas of Basle Town; 4.80 m. to 7.00 m. to the ports of Basle Country.

Beam: 11.40 m. to basin II, port of Kleinhuningen and through the locks of Birsfelden.

Length: 110 m. for the section between the Middle Bridge at Basle and the locks of Birsfelden.

VHF: Port Authority on Channel 18 (call: SIGNALSTATION). Working hours: Monday to Friday 0500 – 2100 hrs., Saturday 0500 – 1300 hrs.

TUGS: Only one private tug/pushboat is available (call: BRAGTANK, Tel: 65 44 22 or from ship to ship on VHF Channel 10: VOGEL GRYFF). Tug assistance is necessary for the section between Basle and Birsfelden from High Water Mark I (gauge Rheinfelden 350 cm.) for single engine vessels.

BERTHING: Two artificial basins at Kleinhuningen, riverside quays at Kleinhuningen (Klybeckquai), St. John, Birsfelden and Au. Load/discharge of dry cargo is done by shore equipment.

Also see "Max. Size".

CRANES: 62 shore cranes with lifting capacities up to 2×300 tons.

SPECIALISED CARGO HANDLING FACILITIES: No specific container berth, but most of the stevedore companies are able to handle containers. No LPG berth.

BRIDGES: Railway bridges across the channel to basin II, port of Kleinhuningen, permit a max. air draft of 5.70 m.

STEVEDORES: Working hours: Monday to Friday 0500 – 2100 hrs., Saturday 0500 – 1300 hrs.

MEDICAL: Hospital facilities available.

FRESH WATER: Good quality potable water available.

FUEL: Diesel oil available.

TANKERS: Tanker piers at Kleinhuningen (Klybeck quay and basin I; the last one for oil only), St. John (vegetable oil and heavy stove oil), Birsfelden and Au.

Tankers with dangerous goods (K1 and K2 products) are not allowed to enter the basins. Load/discharge done by vessel's pumps.

CONSULS:
Austria
Belgium
Benin
Brazil
Denmark
Dominican Republic
Ecuador
Finland
France
Italy
Jamaica
Mali
Mexico
Monaco
Netherlands
Norway
Peru
Uruguay
Sweden
Spain

REPAIRS: Deck and engine repairs are possible as well as those to electric installations and electronic equipment.

DRY DOCKS: No dry dock, no slip.

SURVEYORS: Agents of Surveillance and Classification Societies are nearby.

GANGWAY/DECK WATCHMEN: At least one member of the crew has to stay aboard as watchman.

HATCHES: Opening/closing carried out by ship's crew before arrival or alongside the quay.

CUSTOMS ALLOWANCES: Swiss Regulations apply.

REPATRIATION: Scheduled aircraft connect Basle-Mulhouse airport daily with most important European airports. Also good railway connections.

AIRPORT: See "Repatriation".

HOLIDAYS: The ports are closed for work on New Year's Day, Carnival (two half days in February or March), Good Friday, Easter Monday, 1st May, Ascension Day, Whit Monday, Christmas Day and Boxing Day.

POLICE/AMBULANCE/FIRE: Emergency services are available through the Port Authority (VHF Channel 18) or direct by telephone:
Ambulance: 144
Police: 117
Fire: 118

TELEPHONES: This service is available aboard ships at the berths for passenger boats by prior arrangement through the Agents.

SERVICES: Oily waste disposal boat available from Monday to Friday 0700 – 1800 hrs.

SHORE LEAVE: Permitted when Immigration and Customs requirements have been satisfied, as long as the crew rejoin the vessel before departure.

IDENTIFICATION CARDS: It is recommended to carry an identification card or a passport. Shore passes are not issued.

REGULATIONS: All the Rhine Shipping Regulations, recommended by the Central Commission for the Navigation on the Rhine, are valid.

DEVELOPMENTS: A Roll-on/Roll-off ramp in the port of Au. Also new tanker piers in the port of Au and at the Klybeckquai (port of Kleinhuningen).

AUTHORITY: Rheinschiffahrtsdirektion Basle, P.O.Box CH-4019 Basle, Switzerland. *Tel:* 061-654545.

NOTES

Please also advise Shipping Guides Ltd.

Syrian Arab Republic

GENERAL

PORT REGULATIONS:

In corroboration of Articles 2 and 8 of the Decree Law No. 154/1961 which created the General Directorate of Ports and invited them to control the safety and security of ports and territorial waters and empower them to enact communiques and instructions for same and for public interest, the following provisory instructions will be in force for vessels lying in the Syrian ports and territorial waters until permanent regulations are issued for the safety of the harbours.

1. Any vessel calling at Syrian ports should contact the pilotage station or the signal towers upon entering Syrian territorial waters 12 miles (marine) giving her name, nationality and her cargo in case the whole or part is dangerous, also her ETA at the waiting zone of the port of destination.
2. The Masters of foreign vessels lying in Syrian ports should hoist the Syrian flag (size 63 cm. × 126 cm.) in accordance with international maritime courtesy. The Agent should supply any vessel without same upon her arrival at Syrian ports.
3. The vessel should hoist international signals for a Pilot or for dangerous cargo, also the quarantine flag, etc., in accordance with her situation while approaching Syrian ports.
4. The vessels once in territorial waters are not authorised to receive any person on board before Free Pratique is granted by Harbour Authorities.
5. It is forbidden to receive any person after Free Pratique and during the stay of the vessel either in road or inner basin unless by written authorisation from the Harbour Authorities. Customs and Security are exempt when in service.
6. It is forbidden for a vessel to use her wireless when lying in Syrian ports or at anchorage unless with authorisation from the Harbour Authorities and in emergency cases.
7. It is forbidden for vessels lying in Syrian ports to use their own steam or electrical blowers, amplifiers or make any other signals not allowed by international rules to avoid sea collisions or the light signals authorised by the Harbour Authorities in accordance with Article 14 of the present communique.
8. Masters should keep at any time on board of their vessels while lying in the ports a continuous watch and enough seamen in order to secure the exploitation department necessities or during emergency cases, and in order to take the necessary steps to avoid fire and damages to others (Article 17 of D/Law 193).
9. If a Syrian watchman is appointed to watch the vessel, he must have an authorisation order from the Harbour Authorities. The shipping Agent is responsible for the execution.
10. It is forbidden to use the vessel's life-boats in the ports or in territorial waters unless by previous written authorisation from the Harbour Authorities on the basis of a written request stating the causes, the time of the dropping down of the life-boat from the vessel, and the time of its lifting provided the cause is necessary.
11. All vessels should keep their gangways up from sunset to 0700 hrs.
12. The hatches, stores, etc., should be covered and locked, if possible, during the night.
13. In case any objects from the vessel or their cargo drop into the sea, the Master should inform both the Port Co. and the Harbour Master immediately of same.
14. The following signals should be used for the above mentioned cases as follows:

	Signals	
Case	*Sound*	*Lights*
a) Attack by thieves	Sequence of 6 short blasts.	Sequence of 6 light signals and flashes from the foremast.
b) Case of fire onboard or alongside	Sequence of long blasts, each set 6 blasts.	Sequence of 6 long flashes.
c) Case of serious injury	Sequence of 2 long blasts.	Sequence of 2 long flashes from the foremast.
d) Case of stranding	Sequence of 4 long blasts.	Sequence of 4 long flashes.

N.B.

1. Distance time between each sequence is half a minute, but the length of the signals should be in accordance with international signals regulations.

2. The above signals should be accompanied by wireless call on Channel 16 to both Pilotage and Stations in Syrian ports.

3. The above instructions do not forbid the use of other sound and light signals stated in the international rules.

NOTICE: Vessels proceeding to Syrian ports are required to signal the following to the port radio station when 50 miles from the port of destination.

(a) ETA.
(b) Nationality.
(c) Name.

BANIAS: 35.14 N. 35.56 E. (See Plan Book)

DOCUMENTS:

5 Copies Crew List.
1 Copy Vaccination List.
1 Copy Store List.
1 Copy Private Store List.
1 Copy Slop Chest.
In case of cargo to be discharged, Original and 2 Copies Manifest and 3 Copies Bill of Lading.

PILOTAGE: Compulsory. Pilots board all tankers approaching the Terminals. These Pilots act in the same capacity as Mooring Masters in the berthing of vessels, after which they supervise the raising of the flexible hoses and their connection to the ship's manifold. During loading operation they act as the Company's Representatives. The Company's Mooring Masters will meet tankers in the vicinity of Marqab Light Buoy.

It is requested that tankers of 40,000 d.w.t. and over should have rigged, when in light condition, an accommodation ladder lowered to about 12 ft., above the water. This can be adjusted to suit conditions. A pilot ladder should be rigged abaft the accommodation ladder, to within 4 ft. above the water. This will enable the Pilot to ascend the pilot ladder clear of the launch and then step on to the lower platform of the accommodation ladder. United Kingdom Merchant Shipping (Pilot Ladders) Rules is relevant.

APPROACHES: Vessels approaching the port should keep to the authorised passage, defined by the following co-ordinates:

(a) Lat. 35° 13′ 00″ N., Long. 35° 42′ 00″ E.
(b) Lat. 35° 13′ 00″ N., Long. 35° 56′ 00″ E.
(c) Lat. 35° 16′ 00″ N., Long. 35° 55′ 24″ E.
(d) Lat. 35° 16′ 00″ N., Long. 35° 40′ 34″ E.

ANCHORAGE: In the event of a berth not being available, or suspension of mooring operations on arrival, a good anchorage can be used South of the berths in the vicinity of the Marqab Light Buoy positioned at: Lat. 35° 12′ 7″ N., Long. 35° 54′ 46″ E. It is important to maintain a listening watch on VHF, Channel 16 or visual watch on the shore Signal Station positioned approximately at Lat. 35° 13′ 25″ N., Long. 35° 57′ 00″ E. and recognised at night by lozenge shaped lights, in order to avoid delays.

Vessels awaiting at anchorage for confirmation or other reasons, will be boarded by Mooring Master within 4 hours after berthing is decided.

MAX. SIZE:

Berth No.	*Draft Winter (ft.)*	*Draft Summer (ft.)*	*Length of Vessel (ft.)*	*Purposes*
1	Removed			
2	48	50	900	Discharging Crude Oil
	50	51	925	Loading Crude Oil
3	49	50	950	Discharging Crude Oil
	51	52	950	Loading Crude Oil
4	40	42	800	Loading/Discharging Crude Oil
5	40	42	800	Fuel Oil and White Products
6	32	34	700	Fuel Oil and White Products
7	22	24	400	Liquid Gas
	26	28	550	Jet

Danger Marker: Positioned South of Berth No. 7, Lat. 35° 13′ 03″ N., Long. 35° 56′ 03″ E.

NOTICE OF READINESS: Time of Notice of Readiness tendered will be considered when vessel arrives in the very near vicinity of the Marqab Light Buoy (position Lat. 35° 12′ 27″ N., Long. 35° 54′ 46″ E.), where the Mooring Master, who is the Company's Representative, will board and receive ship and remain on board throughout the entire operation.

HEALTH: Masters of tankers due may obtain Free Pratique by addressing the usual quarantine message to their Agents through commercial radio channels.

TUGS: Available only on demand from General Directorate of Harbours at Lattakia.

RADIO/VHF: Syrian Company for Oil Transport, Banias Terminal must be informed 72, 48 and 24 hours prior to arrival of a vessel's ETA, quantity of cargo required if in a state to load and maximum loading rate required. All times to be given in GMT.

Banias Terminal Radio Station – Call sign: "YKM 5". Frequency: 500 kHz and 442 kHz and VHF Channel 16. Also see "Radio Procedure" below.

Tanker VHF Radio Communications: Vessels approaching Banias can communicate with the Terminal by FM, VHF, Channel 16. Range 30 to 40 miles. Frequency 156.8 MHz. Simplex Operation. Call sign: "Banias". On arrival, ship's radio installations will be sealed according to normal practice and the boarding Mooring Master will put his own portable equipment on board. Communications will then be as follows:

Banias – Equipment: Fixed station sited in the Terminal. Call sign: "Banias". Frequency: Transmitting 163.6 MHz. Receiving 159.1 MHz. Range: 8 miles. Watches: Continuous whilst vessels are in port or immediate vicinity.

Mobile Station – Equipment: Placed aboard vessel on arrival at Banias. Call sign: Ship's name. Frequency: Transmitting 159.1 MHz. Receiving 163.6 MHz. Range: 5 miles. Watches: Mutually agreed between ship and the Terminal on first establishing contact.

Note: The radio telephone circuit is connected with the main Company Communications network in Banias Terminal.

Radio Procedure:

Station *Banias Syria*
Private station for communication
with tankers bound for Banias, Syria.

Call sign: YKM5
Address: S.C.O.T. Banias – Syria

MF Schedules (A1)

Banias radio station (YKM5) keeps a 24 hours continuous watch on 500 kHz and answers calls on 500 kHz QSY 440 kHz for traffic. Broadcasts traffic list on 500 kHz at 0430, 0830, 1230, 1630 and 2030

(GMT) receives on ship frequencies 425, 454, 468, 480 and 512 kHz – also broadcasts traffic lists, on 440 kHz at 0432, 0832, 1232, 1632 and 2032 (GMT).

HF Schedules (A1)

Time GMT	*Listens on*	*Answers on*	*Traffic list at (GMT)*
04 – 05	4 MHz Band	4351 kHz	0410
05 – 06	8 MHz Band	8667 kHz	0510
08 – 09	6 MHz Band	6493 kHz	0810
09 – 10	12 MHz Band	12987 kHz	0910
12 – 13	8 MHz Band	8667 kHz	1210
13 – 14	16 MHz Band	16967 kHz	1310
16 – 17	16 MHz Band	16967 kHz	1610
17 – 18	6 MHz Band	6493 kHz	1710

VHF Schedules (F.3)

Banias Terminal keeps watch on 156.8 MHz (Channel 16). This has a range of approximately 40 miles and its call sign is "Banias".

Confirmation of ETA's: It is essential that tankers, bound Banias, communicate with YKM5 at least 48 hours prior to arrival and thereafter maintain contact, stating cargo quantity and grade, maximum loading/discharging rate and pressure at ship's manifold, SWL of derrick capacity, n.r.t. and d.w.t. and actual draft.

Failure to give any notice at least 24 hours prior to arrival will increase the laytime allowed by an amount equal to the difference between 24 hours and the number of hours prior to arrival.

Note 1: YKM5 deals only with TFC. For:
S.C.O.T., Banias
QSJ Nil.

Note 2: YKM5 uses only two frequencies out of HF Schedule until further notice.
0500 – 0600 8667 kHz
0800 – 0900 6493 kHz
1700 – 1800 6493 kHz

MOORING REQUIREMENTS: For tankers loading/discharging at Banias are as follows:

Forward:

Anchors to be fitted with marker buoys with 20 fathoms of line.
2×120 fathom mooring lines.
2 rope stoppers.
1 suitable wire stopper (preferably carpenter patent) for use with 4.75 in. to 5.5 in. mooring lines.

Aft:

4×120 fathom mooring lines.
4 rope stoppers.
2 suitable wire stoppers (preferably carpenter patent) for use with 4.75 in. to 5.5 in. mooring lines.

Boat Ropes

To be rigged on either side of ship, and of not less than 4.5 in. circumference.

BERTHING: At all berths vessels moor using both anchors forward, with wires to a buoy on the port bow, one buoy astern and one on each quarter. Hoses are lifted on the port side to be connected to the ship's manifold which must have pressure gauge fitted.

Berthing Operations: Berthing Operations will take place:

a) Loading Crude Oil: Day and night SHinc weather permitting.
b) Discharging Crude Oil: Only between 0600 hrs. and 1600 hrs. local time SHinc weather permitting. Number of hours beyond the restricted hours will not count as lay-time for vessels on demurrage or not.
c) Loading/Discharging Products: According to "Mahroukat" and "Banias Refinery" instructions.

HOSES:

Berth No. 2: 2×20 in./16 in. hoses. } End in 12 in. reducers
Berth No. 3: 2×20 in./16 in. hoses. }
Berth No. 4: 1×16 in. hose. }

Berth Nos. 5 and 6: 2 submarine pipes of 24 in. each connected with 2 strings of 7 hoses by 16 in. each ended with 12 in. reducers.

Berth No. 7: One liquid gas line of 10 in. connected with 1 string of hoses by 8 in. ending with butterfly valve and camlock.

One balance line of 6 in. connected with 1 string of 7 hoses by 4 in. ending with butterfly valve and camlock.

One kerosene line of 20 in. conncted with 1 string of 7 hoses by 12 in. ending with 12 in. butterfly valve for 150 ASA flange.

SWL of Derricks:

Berth Nos. 2, 3, 4, 5 and 6: Minimum 7 tons.
Berth No. 7: Minimum 3.5 tons.

FRESH WATER: Available through Agents by means of barges, cost US$10.00 per ton.

FUEL: Bunkers are not available at Banias.

BALLAST: All tankers should ensure ballast is clean. Authorities are most strict and impose heavy fines for the slightest contravention. Ballast quantity should be kept to the minimum required to ensure safe manoeuvring. No facilities for disposal of ballast ashore.

Banias is an open roadstead and sudden changes in weather can be experienced especially during the Winter months. It is good practice to commence loading as soon as hoses are connected and whilst ballast discharge is still in progress, always providing this can be achieved safely and with no danger of contamination.

POLLUTION: The Port Authorities will, in cases where pollution is ascertained, collect a declaration from the Master of the offending ship, in which declaration he authorises his Agents to pay any fine to be levied by the official committee in the future.

In the light of the above and to avoid any delay to vessels, owners are kindly requested to:

1. Supply vessels with necessary chemicals to destroy any quantity of oil overflowing into the sea.
2. Provide a bank guarantee of Stg. £5,000 to be deposited against eventual fines. Such a guarantee (or cash) must be given before offending vessel is released.

LOADING: Ships' Personnel are solely responsible for the loading operation, i.e. starting, loading rate, tank switching, topping off, stopping, etc. The Mooring Master will pass requirements to the shore control. It is in vessel's interest to advise loading rate required, also to give 30 minutes' notice of expected time of commencing loading. Order to start will be taken as final.

The Mooring Master must be advised when ship estimates 1,000 tons to go for completion of loading.

Ensure scuppers are effectively plugged. On no account are plugs to be removed.

A complete watch on deck must be maintained throughout the operation, especially towards the shore signal station, to ensure safe loading and avoid delays.

Discharging pressure which should be maintained during the operation at ship's manifold is to be according to the Terminal Requirements which will be handed over to the Master at each call of vessel.

MEDICAL: Hospital facilities or other relevant medical information are available through Agent on and/or prior to arrival of vessel.

TANKERS: See "Hoses". Slops (residue) are not allowed to be discharged as no facilities for treating same are available.

CUSTOMS ALLOWANCES: According to regulations or at Customs' own discretion.

SURVEYORS: Through Agents – Shipco.

REPATRIATION: Facilities exist through Agents.

TIME: Local time is GMT plus 2 hours.

SHORE LEAVE: Permission may be obtained from Immigration Dept. ashore through Agents.

DELAYS: Confirmation, restricted berthing hours, unsuitable weather and free berths.

REGULATIONS: Terminal Requirements and Conditions of Use of Terminal Facilities will be handed over to Master of vessel at each time of call. The following are some of the regulations in the booklet.

Vessel in Berth: Ships are not allowed to remain in berth for any reason when loading operation stopped. Hoses should be disconnected and dropped to sea unless stay authorised by Terminal Superintendent.

Lighting: During hours of darkness the manifold and poop mooring area of the sea in vicinity of ship should be adequately lit.

Main Engines: Must be kept on shore notice. Repairs which will immobilise must not be carried out in berth.

Deck Machinery: Must be ready for immediate use at all times.

Whistle or Siren: To be available at all times.

Signalling: An "Aldis" type lamp to be readily available.

Stores, Provisions, Etc.: It is strictly forbidden for provisions, stores or other items to be received or discharged whilst loading is in progress. Launches or other craft must not lie alongside during the same period.

Tanker Safety Regulations: Tanker Safety Requirements must be strictly adhered to at all times. The Mooring Master is authorised to stop all operations should he consider the safety regulations are not being complied with.

Boarding: The boarding of a vessel whilst in mooring should be restricted to persons holding valid passes which are issued by the Syrian Company of Oil Transport (SCOT) on application to ship's Agents and authorised chandlers.

This restriction is carried out in conjunction with the Syrian Harbour and Security Authorities.

WEATHER: The Director of Port Authorities has issued statistics of the weather conditions along the Syrian coast after an experience of 20 years.

State of winds and whirlwinds on the Syrian Coast

Winter	*Kind and direction of winds*
December	Regular winds blowing from N.E. to S.E., sometimes S. to S.W., the alteration of winds is accompanied with rains.
January	Excess of storms starting to blow from S.E. to N.E. The alteration of winds from the E. is occasionally accompanied by heavy rains with probability of hail.
February	Excess of storms and heavy rains blowing from S.W. to N.E. and E.
Spring	
March	Variable winds from S.E. to S.W. and accompanied by heavy rains and altering to N.W. slight.
April	Variable winds from N.W. and S.W., and S. winds accompanied with light rains.
May	Regular winds blowing S.W. to N.W. and altering to S. sometimes accompanied by rain.
Summer	
June	Slight winds from S.W. and S.
July	Moderate winds from S. to S.W.
August	Slight N.W. winds.
Autumn	
September	Winds S.W. and N.W. accompanied by some rain from 15th September. Winds will lighten during the end of the day and will alter at night to slight E.
October	Variable winds from W. to S. and N.W. accompanied by rain will alter at night to E.
November	The winds are variable from N.E. and N.W. accompanied sometimes by rain which will alter to E.

SERVICES: In the event of tankers requiring assistance to lift loading hoses, recover lost anchors, and cables, etc., limited aid may be given during normal working hours. Current charges are available on application from Agent.

SHIPMASTER'S REPORT: Cigarette allowance is strictly enforced at 40 cigarettes per man, and has to be carefully declared. If the Chief Steward has a slop-chest, it has to be carefully declared. Whisky has to be declared separately from other spirits, but in practice it is better to declare each type of spirits separately.

The ship's Log Book is stamped by the police.

The new flag is red, white and black, with an eagle in the centre and may be obtained through the Agent.

AUTHORITY: Syrian Company for Oil Transport (S.C.O.T.), P.O.Box 13, Banias (Tartous), Syrian Arab Republic. *Tel:* 00963-0421-22300-303. *Telex:* Scot 441012 Sy. *Cables:* Scot, Banias. *Contact:* Terminal Superintendent.

AGENT: The Shipping Agencies (Shipco) Syria, P.O.Box 28, Banias. Tel: 21583. Telex: 470020 Sy. Cables: Shipco, Banias. Radio: VHF Channel 16.

BORJ ISLAM: 35.40 N. 35.48 E. (See Plan Book)

SHIPMASTER'S REPORT: October 1980.

LOCATION: Borj Islam is located at Lat. 35° 40′ N. Long. 35° 47′ 35″ E. 1.4 miles to the North of Ras El Fasori.

This location was adapted about 2 years ago by the Syrian Government as a discharge zone for LPG carriers and tankers of small tonnage. In this respect, we know that the last vessel to visit this port was an LPG carrier of approximately 5,000 tons.

The coast is a conspicuous promontory with deep water in front of it. For mooring at night, there are no lights indicating this berth, and this presents difficulties.

By day, one can steer towards the cement works which is the most important point of reference in that vessels berth beneath these works.

ANCHORAGE: Vessels arriving by night should anchor in the nearby roads of Lattakia.

By day, the advisable anchorage is 200 m. on a bearing of 140° from the cement works.

PILOTAGE: Pilot must be contacted on arrival on VHF Channel 16 at Lattakia, and instructions will be given for berthing. The Pilot boards vessels at Borj Islam.

BERTHING: This is very difficult since there are no berths or buoys. The vessel berths "stern to the land" with 2 anchors 6/7 shackles on each and lines are fixed on to rocks.

Great attention must be paid to winds from the S./S.W. and W./N.W., since this location is open to such winds.

DISCHARGE: This is effected with hoses (supplied by the ship for connection purposes). The product is discharged slowly to tanker trucks.

The position where the vessel anchors has a depth of water from 11 m. to 40 m.

LATTAKIA: 35.31 N. 35.46 E. (See Plan Book)

PORT LIMITS: The seaward boundary of the port is about 2 miles West of the main breakwater, starting with the entrance line of 133° South.

DOCUMENTS: In addition to the copies of Bills of Lading, Cargo Manifests and the various Ship's Certificates, the Master of an arriving vessel must produce the following documents:

Crew List, showing full names of crew members, nationality, date of birth, and rank onboard.
Stores List.
Passengers List.
Health Certificates and International Inoculation Certificates.
All other documents relevant to the ship.

PILOTAGE: Upon a vessel's arrival at the anchorage area, she may call the Pilot in any of the following ways:

(a) Flying the internationally recognised flag.
(b) Blowing the ship's whistle – 2 long and 1 short.
(c) Calling the pilot station on VHF – Lattakia pilot station – using Channel 16.
(d) Signalling the pilot boat. – Grey colour hull and white colour bridge, always flying the Pilot's flag.

The Pilot boards an arriving vessel when she has reached a distance of about a few hundred metres West of the Breakwater Head under good weather conditions. When the weather is bad, an arriving vessel is directed to the port basin entrance by VHF. The Master is advised the proper directions to follow and when he is to lower the pilot ladder to the lee side.

Traffic List: Broadcast twice daily on VHF Channel 16:

1. At 1200 hrs. for container and Ro/Ro vessels.
2. At 1800 hrs. for work list for the next day.

ANCHORAGES: Upon arrival at the anchorage area referred to under "Port Limits", the vessel has to wait for orders. This Anchorage Area has a depth of 20 m. – 25 m., and all Masters waiting there have to keep listening on VHF Channel 16, from 0600 until 0900 hrs. and from 1800 until 2100 hrs. local time, for fresh orders. It is always recommended to keep a special watch on VHF Channel 16, for sudden orders.

RESTRICTIONS: The state of tide at Lattakia is negligible, and all vessels may enter and sail out of the harbour by night or day provided she has a Pilot onboard.

MAX. SIZE: The maximum permissible length, breadth and draft of an arriving vessel are determined by the place of berth or anchorage point.

HEALTH: All arriving vessels are boarded by the quarantine service to whom all relevant documents are submitted, in particular the Derat Certificate, and incidents onboard reported.

The application is filed by the Agent, who accompanies the boarding authorities. Free Pratique is never automatic.

RADIO: The name of the Lattakia station is "Lattakia Radio" on 2182 kHz or Channel 16 on the VHF. Following first contact another Channel is agreed upon, leaving Channel 16 for the pilotage service.

VHF: See "Radio" and "Pilotage".

TUGS: Tugs are always under the direct orders of the Pilot and join the vessel at the point the Pilot boards. Usually ship's lines are used but there is no charge for the use of the tug's lines.

BERTHING: Quay berths available as follows:

Name	*Length* (m.)	*Depth* (ft.)	*Remarks*
Khahaleh Quay	600	31	28 ft. 6 in. at the root.
Silo Quay	185	25	27 ft. 6 in. at the root.
Passenger Quay	240*	22 – 31	
*East Division	55	—	21 ft. at the root.
*West Division	185	—	25 ft. at the root.
Eastern Quay	270	22	
Northern Quay	276	13	
Others	530	—	For Port Services.

None of these quays is a specialised one. The water is always salty. Cargo is loaded or discharged either by the ship's gear or Port Co. Cranes, at the entire discretion of the latter. A ship may operate in the basin or open road in and from barges.

CRANES: 2 floating cranes, 100 ton and 32 ton.

BULK CARGO FACILITIES: *Grain Silos:* In the silo, there are 72 storage bins, the capacity of each is 45,000 tons of grain in which operations of sieving, fumigation, drying and filling can be carried out.

Grain is shipped automatically onboard vessels at a rate of 150 t.p.h. This rate can be doubled when the repairs are completed. Grain is discharged ex-vessels by sucking devices, the total capacity of which reaches 200 t.p.h. A study is being carried out to provide grain silos with automatic intake equipment and to develop the silos quay.

STEVEDORES: 24 hours' ETA advice is required to arrange working gangs if vessel is scheduled to operate on arrival. The average loading and discharging rates vary with the type of vessel, nature of cargo, where berthing and whether working in lighters or not.

MEDICAL: Except for urgent cases on board, the Agent need not be notified in advance. Hospitals in town available, and likewise doctors and private clinics. No particular inoculations are required.

DENSITY: Salinity is 1.033 (33 grams Salt per cu.m.).

FRESH WATER: Supplied either from hydrants alongside main quay or from tank barge (capacity 170 tons).

FUEL: All types of marine fuels are available, may be delivered in any quantity from tank trucks alongside quay. 48 hours' notice is required.

FIRE PRECAUTIONS: No specific precautions except that vessels carrying explosives must operate and discharge into lighters in the open Roads.

CONSULS: Sweden, Finland, Netherlands, Greece, Italy, Spain, Portugal.

REPAIRS: Only minor deck, radio, and radar repairs may be carried out. Extensive and specialised workshops are not available.

DRY DOCKS: Not available. Only a 900 ton slipway is in operation.

SURVEYORS: Only minor surveys by Lloyd's, German Lloyd's and Veritas.

GANGWAY/DECK WATCHMEN: Compulsory and are supplied at a hire rate of LS 48.00 per watchman per day.

HATCHES: Normally opened and covered by the ship's crew.

CUSTOMS ALLOWANCES: Cigarettes, 2 packs per man. Spirits, as would be reasonably agreed with the Customs on board prior to sealing the vessel's stores.

CARGO GEAR: Two floating cranes are available – one of 100 tons capacity and the other of 32 tons. Both may be used at the entire discretion of the Lattakia Port Company. Also one mobile crane of 25 tons capacity.

HOLIDAYS: Following the Lunar Calendar, the first 2 days of Bayram and Al-Adha are the only non-operational days.

POLICE/AMBULANCE/FIRE: Police Tel. No. 93; Ambulance Tel. No. 93; Fire Tel. No. 91.

TELEPHONES: No proper arrangements exist. Vessels in port may use VHF Channel 16 with the pilot station of Lattakia Radio.

SHORE LEAVE: Crew members allowed ashore with shore passes.

IDENTIFICATION CARDS: Shore passes in addition to the seaman's book.

DELAYS: Vary with state of congestion prevailing in the port.

DEVELOPMENTS: The execution of the 2nd development stage underway and it will cover the following new facilities:

Specialised container and Ro/Ro quays.

Draft	*Length*	
13.3 m.	260 m.	Containers
11.8 m.	190 m.	Containers
11.8 m.	200 m.	Ro/Ro
11.8 m.	350 m.	General Cargo
10.5 m.	425 m.	General Cargo
7.0 m.	450 m.	General Cargo

In addition there will be new warehouses and stacking areas totalling 230,000 sq.m.

In its planning, the Company has provided for the import of equipment and machinery in a way that meets the needs of the enlarged area. Same will be supplied in accordance with fixed time schedules corresponding to the progress of execution.

There have been calls for tenders for the supply of the following equipment:

16 mobile quay cranes of 6 tons capacity (contract presently being negotiated).

2 mobile quay cranes of 16 tons capacity (contract presently being negotiated).

2 tug boats 1,500 tons (under contract).

3 passenger boats, each can accommodate 15 passengers (under contract).

Gantry cranes 40 tons capacity (under contract).
10 forklift trucks 10 tons capacity (under contract).
2 forklift trucks 30 tons – 35 tons capacity (under contract).
4 straddle carriers (under contract).

A call for tender for the supply of the following equipment is presently being prepared:

Diesel mobile crane 10 tons capacity.
A pilot boat.
VHF station and equipment.

REPATRIATION: All facilities exist and are attended to by the vessel's Agent.

AIRPORT: Damascus International airport is 340 km. from Lattakia by road.

TIME: Winter Time GMT plus 2 hours. Summer Time GMT plus 3 hours.

SHIPMASTER'S REPORT: December 1979.

Documents: Health Declaration, De-Rat Certificate, Ship's Register, Cargo Manifest, all Safety, Loadline and Radio Certificates.

Pilotage: Compulsory. Pilot boards in the Roads. Normal ETAs required.

Anchorage: Vessel anchored approximately 1 mile West of the breakwater in 60 ft.

Restrictions: Vessel may enter and leave at any stage of the tide; day or night.

Max. Size: Max. draft at present 28 ft. 6 in., (this is to be increased). Keel clearance of 1.5 ft. required.

Health: Vessel anchors on arrival. Free Pratique filed by Agent who accompanies boarding authorities. The authorities sign the log book and inspect all certificates which must be up-to-date.

Radio: Lattakia Radio or Banias Radio.

VHF: Pilot and Port Authority on Channel 16.

Tugs: 5 tugs available. Tugs are required for berthing, however vessels may unberth without tugs.

Berthing: Vessel berthed at the main quay which is 1 mile from the entrance. A total of 4 berths are available plus a Ro/Ro berth. Max. size (approximately) LOA 190 m., beam 25 m. and deepest draft 28 ft. 6 in. The least depth of water in the channel from sea to the berth is 30 ft. Mean tidal range is negligible. Nature at the bottom is mud and the density is 1033.

Cargo Handling Facilities: There are bulk handling facilities for grain and molasses.

Cranes: There are approximately 20×5 ton cranes on the main quay. There are 2 floating cranes, 1 of 35 tons capacity and the other 100 tons capacity, (capacity at the present time reduced to 60 tons).

There is limited storage space for containers, however this is to be increased. There is equipment for handling 20 ft. and 40 ft. containers.

Facilities: The following are available: Fresh water (poor quality), fresh provisions (poor quality), minor repairs, airport (at Damascus 340 km.), Lloyd's Surveyor (Agency), Salvage Surveyor (Agency), ship's laundry (good but expensive), bunker fuel oil and diesel oil (by truck), doctor and hospital, groceries and meats.

Consuls: Sweden, Finland, Netherlands, Greece, Italy and Portugal.

SHIPMASTER'S REPORT: January 1982.

Approaches to Lattakia: The entrance to Lattakia Harbour is well defined but vessels must approach the Green Buoy near breakwater with extreme caution. A wreck is located in position: Lat. 35° 32′ N., Long. 35° 43′ E., approximately on a bearing of 275° – 1.8 miles from the Green Buoy. A wide berth must be given on entry to Lattakia to this wreck (m.v. "Bravo Neck") with full load of cargo.

The harbour is generally congested and a long delay at outer anchorage must be anticipated. It is advisable for ships to register in advance if this is feasible, to avoid delay. The outer anchorage does not afford good holding ground and during near gale force winds ships are liable to drag anchor.

A traffic list is generally broadcast on VHF Channel 16 at 0600 hrs. and 1800 hrs. daily.

Logistic supplies are poor and water is a difficult commodity to obtain. Ships are advised to top up with water and fuel before arrival at Lattakia.

A prominent land mark (whitish hotel) is visible approximately 1 mile West of Rasibin Hani Light.

AUTHORITY: Lattakia General Port Company, P.O.Box 220, Lattakia, Syrian Arab Republic. *Tel:* 23900/1/2. *Telex:* 451008. Lapoco Sy. *Cables:* Latakia Port. *Contact:* Ramadan Attiehe, General Manager.

AGENT: Shipco (Sole Agent), P.O.Box 28, Lattakia. Telex: 51057. Cables: Shipco.

TARTOUS: 34.53 N. 35.45 E. (See Plan Book)

DOCUMENTS: Bill of Health – The usual International form should be filled in on arrival and the Agent will deliver on board the Bill of Health and Port Clearance upon departure.

Manifests – Should be certified by the Syrian Consulate at port of loading in 4 copies.

Ship's Registry – To be presented to the Port Authorities upon request.

Crew List – 4 copies should be handed over to the Agent along with passenger or transit manifests.

Store List – 2 copies required by Customs who will allow 40 cigarettes to be retained by each person on board, the balance of slop chest and stores shall be sealed during ship's stay in port. Customs officers are at liberty to search crew quarters.

Derat Certificate – Valid certificate required and no extension can be obtained.

APPROACHES: Vessels approaching the port should keep to the authorised passage defined by the following co-ordinates:

Lat. 34° 56′ 24″ N.	Long. 35° 38′ 00″ E.
Lat. 34° 56′ 24″ N.	Long. 35° 48′ 36″ E.
Lat. 34° 59′ 00″ N.	Long. 35° 50′ 00″ E.
Lat. 34° 59′ 00″ N.	Long. 35° 52′ 36″ E.
Lat. 34° 54′ 24″ N.	Long. 35° 51′ 12″ E.
Lat. 34° 54′ 24″ N.	Long. 35° 37′ 48″ E.

ANCHORAGE: Vessels proceeding to Tartous pick up Pilot at the Anchorage which is 0.5 miles S.W. of the main breakwater. The rocky bottom constitutes good holding ground with a depth of up to 20 m. of water.

MAX. SIZE: At present minimum depths are at the entrance of the harbour about 2 cables seaward of the green light on the S.W. Breakwater. Depth about 33 ft. Max. draft 32 ft. dependent on swell. Also see "Tankers".

RADIO: *Confirmation of ETA:* Before arriving at Tartous terminal, tankers must inform Tartous Control (T.T.C.) of their ETA, 72 hours and 24 hours in advance, stating: Discharging port and quantity of cargo required. Also must make contact with T.T.C. at least 2 hours before ETA at Tartous anchorage area to receive loading instructions.

Procedures for Coast Station Communication: All times in GMT.

1. After general call on 500 kHz, terminal broadcasts traffic lists on 479 kHz at 0730, 1130, 1430 and 2030 hrs., and keeps watch on 500 kHz from 0500 hrs. till 2130 hours. Answers on 479 kHz.

2. After general call, transmits its traffic lists simultaneously on 8472 and 12699 kHz at 0830, 1330 and 1930 hrs.

Keeps watch on the 8354 – 8374 kHz band from 1100 – 1130 hrs.
from 1500 – 1530 hrs.
from 1800 – 1830 hrs.

And answers simultaneously on 8472 and 12699 kHz.

3. Keeps watch on Channel 16 for 24 hours.

4. Keeps watch, calls and replies on 2182 kHz from 1100 – 1130 hrs.
from 1430 – 1500 hrs.

5.Land station charge free for motor tankers.

Tartous Terminal Station, Lat. 34° 57′ N., Long. 35° 52′ E.:
FC YKI 500 A1 600 watt. Hours 0700 – 2300 hrs.
479 A2
427 A2
8479 A1
12699 A1

BERTHING: Mooring Masters are temporarily supplied by Lattakia Port and vessels should therefore contact Agents at Lattakia giving them their ETA and requirements. Vessels berth heading to the predominant S.W. winds, i.e. starboard side alongside unless contrary winds prevail at the time of the berthing.

Southern breakwater – 2,650 m. long called Main breakwater
Northern breakwater – 1,650 m. long called Lee breakwater

The distance between the 2 heads of these breakwaters is 250 m. with a depth of 10.5 m., which is being dredged in order to bring it up to 13 m.

The harbour is divided into 3 basins which are protected by the 2 breakwaters: (1) The North basin; (2) The Middle basin; (3) The Southern basin. The Southern basin is the only one used presently, for the discharge of cargo.

12 vessels can be moored at anchor inside the breakwater of this basin, the depth being between 8 m. – 13 m. The turning circle at the entrance is 450 m. diameter with a depth of 11 m. – 13 m.

The main quay which is 150 m. wide offers on its Southern side from the shore side 300 m. of jetty with a depth alongside of 2 m. – 4 m., 300 m. with 8 m. and 200 m. with 9 m. to 10.5 m. depth. A standard gauge railway line is installed on the entire length of the quay.

POLLUTION: See "Banias".

TANKERS: *Operator:* Syrian Crude Oil Transportation Co.

Maximum safe length of tankers acceptable – 280 m.
Maximum safe draft of tankers acceptable – 68 ft.
Maximum deadweight of tankers acceptable – 100,000 tons.

There are 2 berths for loading:

No.	*Max. Rate*	*Sealine*	*Hoses*	*Depth of Water*
1 (North)	4,000 t.p.h.	1×28 in.	2×12 in.	76 ft.
2 (South)	5,000 t.p.h.	1×28 in.	2×12 in.	72 ft.

Loading is by gravity and loading rate depends upon height of tank and level of oil. All strings of hoses are fitted with 12 in. connections.

Notice of Readiness: Notice of Readiness will be accepted when vessel arrives in the very near vicinity of the anchorage area (Position Lat. 34° 56′ 42″ N., Long. 35° 49′ 30″ where the Mooring Master, who is Company's representative, will board and receive vessel and remain on board throughout the entire operation.

Pilot Ladder: Combination of accommodation and pilot ladder to be rigged, accommodation ladder to be lowered to within 12 ft. of water. Pilot ladder to be placed abaft and to within 3 ft. of water.

Anchorage: In the event of berth not being available or suspension of mooring operations on arrival a good anchorage is to be used South of the berths in the vicinity of the anchorage area.

Shore Control will keep vessel advised of expected time of berthing, etc.

It is important and in the vessel's interest to maintain a listening watch on Channel 16 or a visual watch on the shore, to avoid delays.

On being advised of expected time "Mooring Master will board", heave short anchor before his arrival.

Moorings:

Forward: Anchors to be fitted with marker buoys with 20 fathom of line. 2×120 fathom mooring lines; 2 rope stoppers; 1 suitable wire stopper (preferably carpenter patent) for use with 4.75 in. – 5.5 in. circ. mooring wires.

Aft: 4×120 fathom mooring lines; 4 rope stoppers; 2 suitable wire stoppers (preferably carpenter patent) for use with 4.75 in. – 5.5. in. circ. mooring wires.

Boat Ropes: To be rigged on either side of ship and of not less than 4.5 in. circ.

Derricks and Cranes: SWL of 7 tons is recommended. it must be capable of plumbing overside abreast of loading manifold.

Loading Manifold: 2 suitable reducers to be fitted prior to arrival on port side and to be connected to the Oil Company's hose connections (12 in. series 150 flanges). The following tools to be available: 2 spanners 0.375 in., 2 spanners 0.875 in., 2 hammers 7 lbs., 1 axe 2.5 lbs.

Hose hang-off bitts are required at about 10 ft. from the ship's rail at the loading manifold to secure submarine hoses on the port side.

Safety of Mooring: On completion of mooring operation vessel must have not less than 7.5 shackles of anchor chain in the water.

Ballast: No dirty ballast.

(a) The Port Authority is most strict and will impose heavy fines for any oil pollution of the sea. In addition they may order vessel out of the berth to sea to clean any such contaminated ballast, and keep it on board vessel in a separate or slop tank. N.O.R. will not be accepted until ballast becomes clean.

(b) Ensure ballast quantity on board is kept to a minimum to safe manoeuvre in the prevailing weather conditions.

(c) Excess ballast causes delay, Tartous is an open roadstead consequently sudden changes in weather can be experienced especially during the Winter months. It is good practice to commence loading as soon as hoses are connected and whilst ballast discharge is still in progress, always providing, this can be achieved safely and with no danger of contamination.

(d) Leakage or spillage of oil on board ship must be collected and not be swept or washed overboard.

Ship's Assistance: Ship's crew with an Officer in Charge to assist in all operations as advised by the Mooring Master. This includes lifting, connecting, disconnecting, lowering of hoses and tending anchor cables and moorings.

Deck Watch: A complete watch on deck must be maintained throughout the operation, especially towards the shore Signal Station to ensure safe loading and to avoid delays.

Deck Scuppers Plugs: Ensure scuppers are effectively plugged. On no account should plugs be removed.

Loading Operations: (a) Ship's personnel are solely responsible for the loading operations, ie. starting, loading rate, tank switching, topping off, stopping, etc. The Mooring Master will pass requirements to Shore Control. It is in vessel's interest *to advise loading rate required, also to give 30 minutes notice of expected time of commencing loading.*

(b) Should vessel require adjustments in the loading rate, please advise the Mooring Master, sufficient notice must be given to enable shore operators to comply. Failure to give proper warning may cause delay or a tank overflow on board.

(c) The Mooring Master will not transmit any loading instructions to the shore until the responsible Ship's Officer has admitted that:

Ship is safely moored.
Hoses are correctly connected.
All valves have been set for receiving cargo.

Order to start will be taken as final.

Vessels in berth: Ships are not allowed to remain in berth for any reason when loading operation is stopped, or disconnect hoses and drop them into the sea unless authorised by Terminal Superintendent.

Lighting: During hours of darkness the manifold, poop, mooring area of sea in vicinity of ship should be adequately lit.

Main Engines: Must be kept on short notice. Repairs which will immobilise them must not be carried out in berth.

Deck Machinery: Must be ready for immediate use at all times.

Whistle or Siren: To be available at all times.

Signalling: An "Aldis" type lamp to be readily available.

Stores, Provisions, etc.: It is strictly forbidden for provisions, stores or other items to be received or discharged whilst loading is in progress, launches or other craft other than Company launches must not lie alongside during the same period.

Tanker Safety Regulations: Must be strictly adhered to at all times. The Mooring Master is authorised to *stop all operations* should he consider that Safety Regulations are not being complied with.

Boarding: The boarding of vessel whilst in mooring should be restricted to persons holding valid passes which are issued by the Terminal Superintendent on application to ship's Agents and authorised Chandlers. This restriction is carried out in conjunction with the Syrian Harbour and Security Authorities.

Vessel not allowed to send any crew or materials outboard for any reason before asking Agents for granting the official authority.

Guests: Masters wishing to receive guests on board should make arrangements through their Agents.

Action in case of emergency: In the event of fire, oil spillage or other emergency on the vessel

The Emergency Signal is
3 or more blasts of not less than 10 seconds duration each
on whistle or siren supplemented by a continuous ringing
of the general alarm bells.

Corridor: The corridor must be followed by vessel to Tartous Terminal:

Corridor Leading to Tartous Terminal

(a)	Lat. 34° 59′ 00″ N.	Long. 35° 50′ 00″ E.
(b)	Lat. 34° 59′ 00″ N.	Long. 35° 52′ 36″ E.
(c)	Lat. 34° 56′ 24″ N.	Long. 35° 38′ 36″ E.
(d)	Lat. 34° 56′ 24″ N.	Long. 35° 38′ 00″ E.
(e)	Lat. 34° 54′ 24″ N.	Long. 35° 37′ 48″ E.
(f)	Lat. 34° 54′ 24″ N.	Long. 35° 51′ 12″ E.

FRESH WATER: Unlimited supplies available to vessels berthed alongside the main pier.

FUEL: Only available in very limited quantities by tanker truck.

MEDICAL: Medical facilities are available, but serious cases may involve transportation to Lattakia or Damascus.

FLOATING CRANE: A floating crane of 100 tons lifting capacity available.

SHORE LEAVE: No amenities for the crew exist in the town of Tartous but crew may, if required, proceed ashore with a landing permit issued by the local security services.

WEATHER: See "Banias".

DEVELOPMENTS: A new quay for phosphate is now under construction 300 m. long and 4 m. depth and will be prolonged by a quay of 250 m. length and 11 m. depth for vessels loading phosphate up to 35,000 tons capacity. 1 shiploader, rate 1,000 t.p.h.

A dry dock will be soon under construction for repairing vessels and tankers with a capacity varying between 40,000 tons and 60,000 tons. Also 2 slip-ways for general overhaul for small vessels of 1,000 tons and less.

SHIPMASTER'S REPORT: September 1979

Time Zone: GMT plus 2 hours.

Paper Required:

1 Health Declaration.
8 Crew Lists.
1 General Information Sheet (Ship's details)
1 Provision List.
1 Bonded Stores List.
1 Crew Effects List.
1 Firearm & Ammunition Declaration (Letter even if none).

Radio: Certain regulations are in force when approaching Tartous. When 50 miles off the coast, the following should be sent through Lattakia Radio to Tartous Harbour Master.

1. Name of ship.
2. Nationality.
3. Type of Vessel.
4. Position and time.
5. Maritime Passage to port of call.
6. Speed.

From experience it was found that Lattakia Radio did not answer until 0630 hrs. Local Time.

Approaches: Approach to Tartous should be made along the Maritime Passage between the parallels of 34° 54′ 24″ N. and 34° 56′ 24″ N. on a course of 090° from 12 miles off.

Pilotage: Pilots commence work between 0530 hrs. and 0600 hrs. and can be called on VHF Channel 16. The pilot station will require draft, length, and type and tonnage of the cargo. The latter being important as vessels with less than 300 tons have priority, as do container vessels and Ro/Ro ferries.

It is most probable that it will be necessary to anchor off because of congestion. Vessel was anchored in a position with the end of the main breakwater bearing 110° True, distance 1.35 miles in a depth of 15 fathoms. Holding ground is reputed to be good.

Clearance: Vessels will normally be cleared on arrival at the anchorage if arriving in the morning or before 1400 hrs. If not, then Notice of Readiness can be sent via Tartous Radio.

Registration: It is possible to proceed to Tartous, register a turn for berthing and then proceed to another port.

When waiting for a berth, provision should be made for a delay of about two weeks.

Fresh Water: Requests for fresh water should be made in good time. At time of writing, there is only one meter in the port, though all the berths have water laid on, so vessels have to take it in turn. Applications should be made through the Agent for water. Vessels at anchor are brought in and tie up stern to the N.W. corner of the Southern pier, the water hose then being passed over the stern, ship's hoses will be required. Pressure is good, water being supplied at about 15 to 20 tonnes/p.h. As supply of water cannot be guaranteed when a request is made, water stocks should be conserved.

Berthing: Bèrths are available on both sides of the Southern pier and at the end, though this area is reserved for the Ro/Ro ferries and small craft. Further berths are at the breakwater with the vessels tying up in a "Mediterranean Moor", i.e., stern to.

General: The Government Agency, Shipping Agencies Co., can be reached on Channel 16 or through Tartous Radio, their telephone numbers being 21541 & 20940.

Information regarding berthing is given by the pilot station on Channel 16, possibly in the evening before berthing, or in the morning about half an hour before berthing. Standard procedure is to weigh anchor and proceed slowly towards the four buoys marking the entrance channel. The Pilot may request that you enter the port slowly and he will board inside the breakwater. There is no difficulty in this, but it should be noted that there is a noticeable current flowing Northwards even though there is no wind.

In the Summer months, there is a seasonal low over the mainland of Syria which gives rise to a prevailing South-westerly air stream, more noticeable in the afternoons with the advent of the sea breezes. Periods of calm are also experienced and winds from other directions but not of any great force. In the Winter months gales are experienced.

A launch service is available for vessels at anchor and at the breakwater berths, this can be arranged through the Agents. Four tugs are available, two large and two small, one of the latter doubling as the pilot launch, identifiable by the pilot flag.

Cranes are available on both sides of the pier except where the silo is under construction. A phosphate berth is situated at the South side of the harbour, there being silos for this berth, at present it is fed by road transport from the mines inland. However, it is understood that a railway is being constructed for this. Another pier (mole) is being constructed between the existing Southern Pier and the Naval Pier in the North of the harbour. Fresh vegetables are available in season.

AUTHORITY: Harbour Master, Tartous, Tartous Port Administration. *Telex:* 20562.

Oil Terminal: Syrian Crude Oil Transportation Company, P.O.Box 52, Tartous, Syrian Arab Republic. *Telex:* 41052. *Cables:* Petsyria. *Contact:* S. Mualla, Terminal Superintendent.

AGENT: Shipco *(Sole Agent):* P.O.Box 3, Tartous, Syrian Arab Republic. Tel: 21541 and 20940. Telex: 41063. *Cables:* Shipco.

Taiwan

GENERAL:

RESTRICTIONS: The Taiwan Authorities have the following countries on their blacklist: The People's Republic of China, Albania, Rumania, North Korea, Cuba, Vietnam, Kampuchea and the Soviet Union. They have decided that ships are not allowed to call at a port in Taiwan immediately before or after a call in these countries, and that ships belonging to, managed by, or operated by companies in breach of these rules are not allowed to call at ports in Taiwan.

ENTRY PERMIT: Vessels flying the flags of nations not having diplomatic relations with the Republic of China (Taiwan) must obtain an Entry Permit before arrival. To enable Agents to apply for an Entry Permit, the following documents must be supplied prior to vessel's arrival:

1 photograph, 6 in. × 8 in., shipside view, clearly showing the vessel's name, 1 copy of the vessel's Certificate of Registry. (In the case of a Danish, Norwegian or Swedish vessel, a copy of the International Tonnage Certificate will serve this purpose).

The following ships do not require an entry permit:

(a) those flying the flag of Japan, Liberia, the Philippines or the U.S.A.

(b) those flying the flag of any country having diplomatic relations with the Republic of China (Taiwan).

Vessels arriving at Taiwan ports to carry out cargo discharging and/or loading operations must be registered with the Harbour Authorities, and the following documents are required.

Discharging: A letter of appointment from the vessel's Registered Owners (not Managers, Operators, Agents, or Disponent Owners) to the vessel's Taiwan Agents. If the agency appointment is made by a Charterer, then a copy of the Charter Party (and Time Charter Party if relevant) will be required. If the Charter Party is signed on behalf of Owners, then a copy of the authority from the Owners to the signatory will be needed. In all events, documents clearly showing the line of authority from Registered Owner to Agency Appointed must be produced.

Loading: As for discharging, together with a copy of the Export Permit issued by the Board of Foreign Trade.

When a vessel is loading export cargo where freight is paid in Taiwan, a detailed Freight List and a deposit or a bank guarantee covering the total freight must be lodged with the Harbour Bureau. The deposit, or guarantee, is returnable after the cargo reaches its destination.

HUALIEN: 23.59 N. 121.38 E. (See Plan Book)

PORT LIMITS:

(A) Lat. 23° 56′ 28″ N., Long. 121° 36′ 13″ E.
(B) Lat. 23° 56′ 29″ N., Long. 121° 36′ 48″ E.
(C) Lat. 24° 00′ 20″ N., Long. 121° 38′ 45″ E.
(D) Lat. 24° 00′ 47″ N., Long. 121° 38′ 18.1″ E.

DOCUMENTS:

Ship's Register.
Derat Certificate.
Last Port Clearance.
Aids to Navigation Charges Memo.
Pratique.
8 Copies Crew List.
1 Copy Crew List visaed by office of China Mission (applicable to American vessels).
8 Copies Passenger List – landing and transit.
1 List showing dates of vaccination of all crew and any landing passengers from infected areas.
1 Chinese Maritime Customs Stores List.
1 copy Crews Personel Effects List.
1 List Foreign Currency in Safe.
1 List Narcotics in Safe.
2 Lists Arms and Ammunition.
1 Set of copy Bills of Lading.
3 Manifests of Inward Cargo.
2 Manifests of Through Cargo.
3 Lists of Unmanifested Inward Parcels.
3 Lists of Mail for Landing.
Vessel's Log Book.

PILOTAGE: Compulsory. Pilot boards at quarantine anchorage. At anchorage hoist 'G' flag.

ANCHORAGE: *Quarantine Anchorage:*

Positions:	(A) Lat. 23° 57′ 25.5″ N.,	Long. 121° 36′ 15.5″ E.
	(B) Lat. 23° 57′ 18″ N.	Long. 121° 36′ 33.5″ E.
	(C) Lat. 23° 57′ 53.3″ N.	Long. 121° 36′ 52.5″ E.
	(D) Lat. 23° 58′ 01″ N.	Long. 121° 36′ 34.1″ E.

APPROACHES: Vessels should approach on a course of not less than 280°(T). There is extensive construction work taking place on both the Eastern and Western breakwaters with caissons anchored in the channel.

The inner channel is very narrow (80 m.) and care should be taken when adjusting course, when approaching and passing Berth No. 1.

RESTRICTIONS: Hualien Harbour closed to all ships at 0000 hrs. until 0500 hrs. Large ships not allowed to enter after sunset.

MAX. SIZE: Draft not exceeding 10.5 m. may enter Hualien Harbour at present time.

HEALTH: At anchorage hoist 'Q' flag.

RADIO: Hualien Radio XSY; ETA reported at least 24 hours before arrival.

TUGS: Normally used in harbour. Ship's lines should be used. 2 tugs, 1×1,600 h.p. and 1×1,200 h.p.

BERTHING: *Deep Water Wharf:* 2,887 m. (17 berths) capable of berthing 2 – 3×6,000, 3 – 4×7,000, 4 – 5×1,000 and 3 – 4×15,000 and 30,000 ton vessels, at the same time.

Berths No.	*Length (m.)*	*Max. Draft (m.)*	*Remarks*
1	123	8.2	General Cargo
2	153	8.5	General Cargo
3	134	8	General Cargo
4	160	10	Sugar
5	160	10	Gravel
6	150	9.4	General Cargo
7	220	7	Gravel
8	103	10	Gravel
10	183	10	Cement Clinker
11	185	10	Minerals
12	150	8.4	Construction Ship use
13	185	10	Logs and Woodchips
14	185	10	Logs and Woodchips
15	100	10	Logs and Woodchips
16	122	8	Not in use at present
17	200	10	Open yard
18	200	10	Open yard

SPECIAL CARGO FACILITIES: There are 6 godowns on the Western wharves with a total capacity of over 40,000 tons.

At Berth Nos. 5, 7, 8, there is a conveyor system for loading gravel, at Berth No. 10 a cement silo (8,000 tons) owned by Asia Cement Co., and at Berth No. 11 a conveyor for loading dolomite.

There are 4 hoppers at Berth Nos. 13 and 14, owned by Chang Hwa Pulp and Paper Corp., for discharging woodchips into rail wagons or trucks.

CRANES: There is one fixed shore crane at Berth No. 3, capable loading up to 45 tons.

In the port area there are mobile cranes; 1×150 tons, 2×12 tons (Rated at 20 tons) and 1 × 20 tons (Rated at 40 tons). In addition there are 26 forklift trucks (Rated from 2 tons – 10 tons).

There is a 70 ton floating crane.

STEVEDORES: Stevedores will be assessed against ships except when otherwise agreed between ships and consignees or shippers.

Advise ETA before 0800 hrs. in order to arrange gangs for 1800 hrs. same day.

Port Performance:

Working hours: 0800 – 2200.

General cargo: 200-250 tons per day if sufficient landside back-up is available.

Bulk: Cement loader at Berth No. 10 can load 5,000 tons in 24 hours.

Dolomite elevator: 1,500/2,000 per hour.

Gravel elevators: 5,500 t.p.h.
6,800 t.p.h.
8,600 t.p.h.

MEDICAL: Hospitalisation can be arranged through Agent.

FRESH WATER: Fresh water available at all berths. Water supply will be assessed against ships and ordered through Agent.

FUEL: 4 grades obtainable from Chinese Petroleum Corporation:

1. Light marine diesel – SUS at 100°F, max. 38.
2. Heavy marine diesel – SUS at 100°F, 35 – 45.
3. MF – 80 (MD – 600) C.S. at 122°F, max. 80 (RD No. 1 100°F, max. 600)
4. Fuel oil – SFS at 122°F, max. 200.

Fuel line 6 in. connection, no barge available, notify in advance.

REPAIRS: Only minor repairs can be attended to in Hualien. For other repairs the nearest facilities are at Keelung or Kaohsiung.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CARGO GEAR: Loading/unloading normally effected by ship's gear.

CERTIFICATES:

Ship's Nationality Certificate.
Passenger ship Safety Certificates.
Cargo ship Safety Construction Certificates.
Cargo ship Safety Equipment Certificates.
Cargo ship Safety Radiotelegraphy (Radiotelephony) Certificates.
International Load Line Certificate.
International Oil Pollution Prevention Certificate.
International Sewage Pollution Prevention Certificate (1973).

SHORE LEAVE: Crew members are allowed ashore only in the city of Hualien, from 0600 hrs. till 2400 hrs. Before going ashore each crew member must apply for shore pass at the Immigration Office.

IDENTIFICATION CARDS: Passport or Seaman's book required.

AIRPORT: Domestic airport (10 km.) with connection to Taipei and Kaohsiung Airport.

TIME: GMT plus 8 hours.

POLICE/AMBULANCE/FIRE: Police, Tel: 223419. Ambulance, Tel: 223419. Fire, Tel: 223419. Emergency, Tel: 119 or 223419.

DEVELOPMENTS: The outer harbour extension began 1978 and will be completed in 1988. The project will increase the berthing capacity to 25 ship berths.

AUTHORITY: Hualien Harbour Bureau, Hualien, Taiwan, Republic of China. *Contact:* Lee Chao-Min, Chief of Harbour Management Department.

AGENT: Sub-Agent controlled by: Jardine, Matheson & Co. Ltd., 13/14th Floor, World Trade Building, P.O.Box 81, 50 Hsin Shen South Road, Section 1, Taipei. Tel: (02) 393-1177. Telex: 21851, 11391 Jardines. Cable: "Jarocean Taipei".

KAOHSIUNG: 22.37 N. 120.16 E. (See Late Plans)

PORT LIMITS: Ship considered to be an "arrived vessel" when anchored at either of following locations:

1. Northern Anchorage: Within 2 miles radius off Kaohsiung Lighthouse (Lat. 22° 37′ 01″ N., Long. 120° 15′ 25″ E.) forming a sector between Southern side of outer harbour channel toward shore line Southward.

2. Southern Anchorage: Within a radius of 2.5 miles from the signal station of the second harbour entrance (Lat. 22° 33′ 21″ N., Long. 120° 18′ 28″ E.) forming a sector between Northern side of outer harbour channel toward shore line Northward.

3. For VLCC to discharge at 2 Monobuoys: SBM No. 1 position Lat. 22° 30′ 29″ N., Long. 120° 17′ 49″ E. SBM No. 2 position Lat. 22° 29′ 45″ N., Long. 120° 16′ 41″ E. Tankers are to anchor 1.5 miles West of the respective SBM as directed by Agents.

DOCUMENTS:

10 Crew Lists.
1 Customs Stores List (plain form acceptable).
1 Narcotic List.
1 Foreign Currency List.
1 Crew's Declaration List.
1 Arms and Ammunition List.
1 Parcel, Passenger and Mail List (all 'nil' items may be put in one statement).
1 Set of Bills of Lading and Manifests if any.

PILOTAGE: Compulsory. Agents will arrange for Pilot to board vessel at anchorage outside breakwater. Pilot boat flies code flag "H".

Container ships over 15,000 g.r.t. and other freighters or tankers over 200 m. LOA must take 2 Pilots at double pilotage.

APPROACHES: The Northern entrance is dredged to 11 m. MLWS. The Southern entrance, dredged to 16 m. can accommodate vessels up to 100,000 d.w.t.

ANCHORAGES: To avoid being charged double pilotage fees, arriving vessels should anchor within a 2 miles radius of Chihoushan Lighthouse (Lat. 22° 38′ N., Long. 120° 15.4′ E.) unless instructed to wait off the Southern Entrance, in which case they should anchor within a 2.5 mile radius of the Southern Entrance Signal Station (Lat. 22° 33.4′ N., Long. 120° 18.4′ E.). The holding ground at both anchorages is good, and they are sheltered from the worst of the N.E. monsoon winds in Winter. Vessels may have to vacate the anchorages and proceed to sea should a typhoon approach.

Tankers arriving at the SBM terminals should anchor 1.5 miles West of the respective buoy to await arrival clearance, quarantine, Immigration, Agent and Cargo Supervisor who will board by Agent's launch. CPC Pilot, Loading Master and Watchmen will board by CPC tug. After discharge, the vessel should proceed to the Northern Anchorage to await clearance for sailing.

Also see "Port Limits".

RESTRICTIONS: Container ships can enter and sail 24 hours a day. Other vessels up to midnight only. Vessels with max. draft 34 ft. must await high water to enter via Northern entrance.

MAX. SIZE: Length and breadth no restriction (largest container ship entered: 950 ft. LOA and 106 ft. beam). Max. draft inner harbour 34 ft. during high tide. Tankers with draft over 34 ft. discharge at Monobuoy outside.

HEALTH: Free Pratique granted at anchorage after Master completes Quarantine Declaration Form furnished by quarantine doctors. Radio Pratique available (see "Keelung"). No quarantine necessary if second port in Taiwan.

Shipmaster's Report: Master visited the port in 1976 and Cholera Certificates were not requested for inspection.

RADIO/VHF: Kaohsiung Radio (XSW). Normally used by Agents when cabling vessels. Contact with the Agent and Port Authorities may be made via Kaohsiung Port Radio on VHF Channel 16. Call Port Radio on Channels 16/14, 1 hour before arrival to report ETA at Kaohsiung Roads.

TUGS: Harbour tugs usually join vessel after entry and while berthing. Ship's lines always used. 32 tugs, 800 h.p. – 3,200 h.p.

BERTHING: No specific requirement except bulk-carriers and tankers with max. draft of 34 ft. must berth during high tide.

Berth No.	*Length (m.)*	*Depth (m.)*	*Remarks*
4 – 9	150	10	Coastal-Japan/Korea general cargo
17, 18	150	10	CPC bunkering berths
24	150	10	Taiwan Aluminium Corp. (discharge bauxite)
29	150	10	Formosa Plastic Corporation
31, 32	200	10	Australian/New Zealand Trade
33	200	10	Grain silo (40,000 tonnes), 2 unloaders, 4 suckers
34	200	10	General cargo
35 – 37	200	10	Middle East/Arabian Gulf trade
38, 39	200	10	U.S.A. Trade
40	200	10	Ro-Ro/LASH vessels
41 – 43	200	10	Container Terminal No. 1
44	200	10	Grain silo (40,000 tonnes) 2 unloaders, 4 suckers
45	200	10	Bulk cargoes
46 – 47	200	10	Taiwan sugar loading berths
49 – 57	200	10	Bulk cargoes – coal, steel, scrap, ore, logs etc.
61 – 62	200	10	Petrochemicals
63 – 66	250	12	Container Terminal No. 2
68 – 70	320	14	Container Terminal No. 3
71 – 72	320	14	Grain silo (80,000 tonnes) 3 unloaders, 6 suckers

Wharves: There are at present 85 wharves with a total length of 18,055 m. and 25 mooring buoys capable of accommodating 127 ships.

Container Terminals: Total length 848 m. No. 1 – consists of 4 berths, Nos. 40 – 43. Berth Nos. 42 – 43 served by 1 MHI 35 ton gantry crane. 4 straddle-carriers available for 20 ft./40 ft. containers.

No. 2 – Includes 5 berths total length 1,205 m., Nos. 63 – 67. Berth Nos. 64 – 66 are leased to lines for exclusive use. Berth 63 is the only common user berth. Container handling equipment includes 6 SIS gantry cranes and 20 straddle-carriers for handling 20 ft./40 ft. containers.

No. 3 – Includes 3 berths, Nos. 68 – 70, with total length of 960 m. and a depth of 14 m. The terminal has 6 container cranes and a 60 hectares container yard.

No. 4 – Container Terminal No. 4 is located at Chung-Hsinung Commercial Harbour Area. The project is to build 8 deepwater container wharves from No. 116 to No. 123 with a total quay length of 2,210 m. The 99 hectare container yard is capable of storing 35,000 containers (TEU). Berth No. 116, 320 m. in length and 14 m. depth, commenced construction in 1983 and is expected to be completed in 1984.

BULK HANDLING FACILITIES: *Coal:* China Steel Berth: Max. Size 130,000 d.w.t. Max. LOA 320 m. Max. Draft 14 m. 2 cranes, 2 grabs and conveyors. Daily rate 10,000 tonnes.

Berth Nos. 52 – 57: Max. LOA 200m. Max. Draft 10.5 m. Discharge by grabs and ship's gear. Rate 3,500 tonnes per day.

Grain: There are 3 silos, 2×40,000 tons capacity and 1×80,000 tons capacity, unloading rate 400 – 600 t.p.h. 105 grabs also used to discharge grain by ship's gear at hourly rate of 40 – 50 tons per gang/hour.

CRANES: 43 cranes, 14 stationary derricks, 6 tractors, 100 towing tractors, 223 forklifts, 13 container gantries, 2 P&H container gantries, 25 straddle carriers, 14 container tractors, 2 railtainers, 2 transferers, 105 grab buckets, 60 hoppers and 1,840 small trailers. The CSBC shipyard has 2×350 ton cranes.

4 floating cranes (30 ton, 60 ton, 100 ton and 200 ton), other floating equipment includes 10 dredgers, 5 mud barges, 21 barges and 70 small craft of various descriptions.

STEVEDORES: All Government stevedores ordered by Agents as required.

Cargo Working Hours:

General Cargo:
0830 – 1130
1330 – 1730
1900 – 2300 (plus 100%)
2400 – 0600 (plus 150%)
0600 – 0800 (plus 100%)

Night shifts only by special arrangement with Harbour Bureau and cargo receivers.

Containers:
0800 – 1200
1230 – 1800
1830 – 2400 (plus 100%)
0100 – 0700 (plus 150%)

N.B.: For quick despatch, relief gangs can be hired to work through meal breaks.

Port Performance:

Containers: 25 crane moves per hour.
General: 25 CBM/gang/hour or 350 tons/gang/day.
Bulk (except at special berths): 50 tons/gang/hour.

TANKERS: Discharge lines at oil terminal inside harbour 8 in. (2 berths), and 12 in. at Monobuoy outside with necessary reducers supplied from ashore. In latter case, Master must inform Agents size of ship's manifold.

There are two Monobuoys situated about 7 miles S.S.E. of the Northern Anchorage. Their positions are:

SBM No. 1 – Lat. 22° 30′ 29″ N., Long. 120° 17′ 49″ E. A white flashing signal light is mounted at the centre of the buoy with a range over 5 miles. The light appears for 1 second and goes off for 2, it then appears for 1 second and goes off for 11 seconds. This cycle is repeated. The area around the mooring buoy has a depth of 72 ft. and can accommodate tankers up to 150,000 d.w.t. The current runs at a maximum of 2.5 knots.

SBM No. 2 – Lat. 22° 29′ 45″ N. Long. 120° 16′ 41″ E. depth around the area about 98 ft. capable of discharging tankers up to 250,000 d.w.t. Characters of signal light mounted at the centre of the buoy: White flash 1 second on and 1 off for 3 times then 1 second on and 8 seconds off in that cycle.

The 2 buoy moorings have facilities for 2×12 in. hose connections. Bunkers and fresh water not obtainable. Stores can be arranged for delivery by boat. Other services available to tankers at the buoys are confined to those of urgent nature.

VLCCs programmed to use the SBM Terminal are required to anchor 1.5 miles West of the respective SBM for arrival clearance. Pilot/Quarantine/Immigration, Cargo Supervisor and his hose-handling party board in this area from a tug. After the discharge of cargo, the vessel is required to proceed to the Northern Anchorage to receive sailing clearance.

Petrochemical Storage Centre – Berth No. 61: Max. LOA 232 m. (225 m. preferred) Max. Draft 10.0 m.

LPG: At Talinpu at Southern entrance to Kaohsiung Harbour.

LOA – Minimum 130 m. Chicksan flange 23.0 m. above LWL. Liquid line 16 in. Vapour line 8 in. Max. Depth 14.0 m. Discharge rate up to 2,000 kl.p.h. Tank capacity: (C3) 30,000 kl, (C4) 30,000 kl.

Berth	*Shore Lines*	*Hoses*	*Grades Handled*	*Max. P.S.I.*	*Rate t.p.h.*
17 – 18	4 in. – 16 in.	4 in. – 8 in.	Crude, FO, DO, Avgas, JP4, JP5	100	700
60 – 62	4 in. – 8 in.	4 in. – 8 in.	Products, chemicals, LPG		680
Talin E, W	10 in. – 24 in.	10 in. – 24 in.	Crude, FO, DO	100	6,000
SBM No. 1	1×34 in.	2×12 in.	Crude	100	5,000
SBM No. 2	1×42 in.	2×12 in.	Crude	100	7,000

N.B.: At SBM derricks/cranes of 10 tons SWL required. There are no tank cleaning or ballast disposal facilities.

MEDICAL: No advance notice required unless emergency case. Vaccination Certificates against cholera inoculation (6 months) required.
See "Health" – Shipmaster's Report.

DENSITY: Average 1015 in Summer, 1023 in Winter.

FRESH WATER: Most berths supplied from shore line, otherwise from barge paying additional lighterage.

FUEL: All grades, mostly received from 3 barges (capacity 500 tonnes each). Owners must contact suppliers for nomination through Chinese Petroleum Corp. before ship's arrival.

FIRE PRECAUTIONS: No specific regulations, but routine precautions should be enforced.

GANGWAY/DECK WATCHMEN: Recommended, to meet local security requirement.

OPENING/CLOSING HATCHES: Mostly handled by stevedores except steel hinged covers, which are to be done by crew.

CERTIFICATES: Ship's Registry, Load-line, Safety Construction, Safety Equipment, Safety Radio-telegraphy and Derat Exemption Certificates must be inspected by Customs/Harbour Authorities.

CUSTOMS ALLOWANCES: 200 cigarettes or 1 box cigars and 1 bottle of wine or spirit allowed each. Application can be made to break seal for next issue once every 4 days.

CARGO GEAR: No additional requirements, but Cargo Gear Certificate must be valid.

IDENTIFICATION CARDS: Not required.

CONSULS: All in capital city Taipei, 230 miles North of Kaohsiung.

REPAIRS: China Shipbuilding Corp. provide 1,800 m. of quaywall and can handle any kind of repairs.

DRY DOCK: China Shipbuilding Corp. have a dry dock of 950 m. long with breadth 92 m. and average depth of 14 m. This dry dock is separated into 3 stages by 2 intermediate gates in between, of 380/390/180 m. respectively. Each stage can be independently operated to facilitate fabrication of ship sections, as well as to dock and repair ships.

A floating dock "Viva Island" LOA 174 m. with distance between side walls of 30 m. Draft over keel blocks 7.3 m. with lifting capacity of 11,500 tons.

REPATRIATION: Crew changes can be arranged.

AIRPORT: Kaohsiung Airport has frequent scheduled flights to major cities in Taiwan as well as regular international flights to Hong Kong and Japan. For other international destinations, travellers must use C.K.S. International Airport which can be reached by motorway (3.5 – 4 hours) or via Taipei by domestic flight (40 minutes) and motorway (40 minutes).

TIME: Local: GMT plus 8 hours. No alteration during the year.

HOLIDAYS: New Year's Day (Jan. 1st – 2nd); Youth Day (Mar. 29th); Ancestors' Memorial Day (Apr. 5th); Labour Day (May 1st); Dragon-boat Day (5th day of 5th Lunar Month); Mid-Autumn Festival (15th Day of 8th Lunar Month); Confucius' Birthday (Sept. 28th); National Day (Oct. 10th); Taiwan Restoration Day (Oct. 25th); Late Pres. Chiang's Birthday (Oct. 31st); Dr. Sun's Birthday (Nov. 12th); Constitution Day (Dec. 25th); and Chinese Lunar New Year's Day (2 days mostly in Feb.). No work on New Year's Day (Jan. 1st), Labour Day (May 1st) and Chinese Lunar New Year's Eve and New Year's Day. Double stevedoring rates for rest of holidays.

POLICE/AMBULANCE/FIRE: Police and Ambulance: call 562311 Ext. 441; Fire: 562311 ext. 441 or 226119.

TELEPHONE: Telephone available for ships alongside wharf.

SERVICES: Laundry, ship-chandler and competent technicians available for repair of radar, radio, compass adjusting and other navigational aids. Tank cleaning equipment and facilities not available.

SHORE LEAVE: Normally can be arranged.

SHIP SUPPLY SERVICE: Off-limits deliveries can be arranged, although they are the exception rather than the norm.

REGULATIONS: No curfew exists. Port opened for container ships 24 hours day and night; for other vessels between 0600 – 2300 hrs. only. Vessels flying flag of nations without diplomatic relations with the Republic of China must send 1 copy each of ship's photo (8 in.×10 in. broadside) and photocopy of Registry or Tonnage Cert. and 10 crew lists for application of entry permit.

DELAYS: With rapid extension of the harbour and more new wharves and container terminals built, delay has been considerably reduced and very rarely occurs.

DEVELOPMENTS: A bulk transhipment terminal is to be built. Facilities will include 2 berths for 60,000 d.w.t. vessels, grain silo of 110,000 tons capacity, loading unloading equipment and packing facilities.

Offshore coal terminal is expected to be built. When completed the floating dock will be able to handle vessels of 300,000 d.w.t.

Also see "Berthing – Container Terminal No. 4".

SHIPMASTER'S REPORT: June 1983.

Pilotage: Normal pilotage fees are charged from 0800 hrs. to 1800 hrs., a 50% surcharge is levied from 1800 hrs. to 2400 hrs., and 100% surcharge from 2400 hrs. to 0800 hrs. If the Pilot/s is/are embarked 2 miles or more from the breakwater at the Northern entrance the above charges are doubled.

Pilot chits should have the embarkation position marked on them and a line drawn through the space on the left side of the chit where the Pilot may otherwise write O/L (Outside Limits).

Immigration: Immigration Officials board with the Pilot/s off the Northern entrance, and will join at any time between 0800 hrs. and 1800 hrs. Between 1800 hrs. and 2400 hrs. they only leave their office on the hour, and between 2400 hrs. and 0800 hrs. they only leave on the even hour. Time from leaving office to boarding is approximately 30 minutes.

AUTHORITY: Kaohsiung Harbour Bureau. *Contact:* Admiral C. Y. Yuan, Harbour Director. Y. S. Ma, Deputy Harbour Director. S. T. Chou, Chief Engineer.

AGENT: Jardine, Matheson & Co., Ltd., 4-5th Fl., 168 Chung Cheng 4th Road, Kaohsiung. Tel: (07) 231-7141., 281-2804. Telex: 81957 Jardines. Cable: "Jarocean Kaohsiung".

KEELUNG: 25.09 N. 121.44 E. (See Plan Book)

PORT LIMITS: Any ship is considered to be an "arrived ship" once she has reported to Keelung Port Radio Station whether or not actually entering the outer harbour. However, Quarantine and Customs Inspectors do not attend ships outside the breakwaters due to lack of adequate transportation also they do not consider any ship an "arrived ship" unless she actually enters the outer harbour.

LOCATION: Exact position of Port – Lat. 25° 09′ 26.5″ N., Long. 121° 44′ 22.5″ E.

DOCUMENTS:

Ship's Registry.
International Load Line Certificate.
International Safety Certificates.
Cargo Ships: Safety Equipment, Safety Construction, Safety Radio Telegraphy
Passenger Ships: Passenger Safety
Last Port Clearance.
Crew List.
Fumigation Certificate.
Import Manifests.
Through Cargo List.
Stores List.
Arms and Ammunition List.
Narcotics List.
Foreign Currency List.
Parcel List.
Passenger List.
Yellow-book for every person on board (Vaccination Certificate).

PILOTAGE: Compulsory from anchorage to dock and any other movements in port. Pilot may also meet ships within 1 or 2 nautical miles North of breakwaters, commencing sunrise till sunset upon ship's/Agent's request. While waiting outside breakwaters for a Pilot, vessels shall keep adequate space and take care of both ship's and Pilot's safety. Before arrival, vessels shall contact Keelung Port Radio Station (Lat. 25° 09′ 42.5″ N. Long. 121° 44′ 57.5″ E.) via VHF on Channel 16 to ascertain Pilot's exact boarding time.

ANCHORAGES: Area in outer harbour is 13.0 m. to 13.5 m. in depth and can only contain 4 ocean-going vessels at a time. Vessels may also anchor outside breakwaters for Pilots or entry instructions.

HARBOUR APPROACHES: At a location of 1.5 nautical miles N.N.W. from Keelung Isle ships should take Wan Jen Tsui Pi lighthouse and Chiu Tzu Shan lighthouse as coordinates and sail in on course of true bearing 201°. When 2 nautical miles North from harbour entrance, ship's course should be adjusted for entry. Ships should allow adjustment for their planned course and speed and should pay special attention to Hsin Lai Reef, East Breakwater, wind and current.

RESTRICTIONS: Keelung Port Radio Station consists of Naval Harbour Control Signal Station and Harbour Bureau Signal Station. The former controls the entry and exit of all the vessels with the latter's assistance. Any ship shall apply in advance of her actual entry/exit by light signal or via VHF to Keelung Port Radio Station and shall not leave dock nor weigh anchor nor sail and remain close to harbour entrance before obtaining from Naval Harbour Control Signal Station the signal permit to enter or leave.

Pilots berth vessels 0700 hrs. – 2300 hrs. Unberthing at any time.

MAX. SIZE: Max. possible overall length less than 900 ft. Vessels or Agents shall declare ETA to Harbour Bureau 24 hours prior to their arrival.

HEALTH: Radio Pratique possible. Pratique will be granted when vessel is in anchorage. Three measures will have to be conducted by ship, these are: disinfection of ship, sampling of food and water, tetracycline drug for person, if the vessel arrives from an affected area within 5 days.

1. To obtain Free Pratique by radio, the Master is required to cable the following information to Agent within 6 to 36 hours prior to the vessel's arrival at the port.
   (1) Ship's name.
   (2) First port of the voyage and date/time of sailing.
   (3) Name(s) of port(s) and respective departure time, where the vessel called within the last 10 days prior to arrival at Republic of China ports.
   (4) ETA.
   (5) Kind of Derat Certificate, place and date of issue.
   (6) Number of crew and passengers on board.
   (7) If any illness or death occurred within 10 days prior to the vessel's arrival, and if so, give a detailed report.
   (8) If any rat or abnormal death of rats is found on board within 10 days before the vessel's arrival.
   (9) If there is any shipment of foodstuff on board from an infected area.
   (10) Any other information (if any doctor on board, etc.)
   (Example:)
   mv "......................................" (ship's name)/New York 1st Mar 1300/Honolulu 16th Mar/25th Mar 1000/Yokohama 1st Nov 1977 Exemption/Crew 35 Passenger Nil/7 to 10 None
2. Vessels under the following conditions are not allowed to apply for the Radio Pratique:
   (1) The interim time from the date when the vessel left the infected area and/or the place where infection is suspected to the date of the vessel's ETA at the Republic of China port, is not over the legal incubative period of infectious disease, i.e. 5 days for cholera, 6 days for plague and yellow fever.
   (2) Infectious disease and/or suspected infectious disease and death occurred within 10 days prior to the vessel's arrival in the Republic of China.
   (3) When any inactive rat is found or abnormal death of rats is found on board within 10 days prior to the vessel's arrival in the Republic of China.
   (4) When the vessel possesses no valid Derat/Exemption Certificate.

3. The Quarantine Officer may still go on board the vessel after her berthing for re-inspection even if the radio Free Pratique is granted.

   If any discrepancy is found twice or more, then the vessel will be deprived of the right to apply for the Radio Pratique for one to three voyages.
4. Fumigation by hydrocyanic acid gas (discoids) and methyl bromide is carried out by quarantine station. Derat Certificate or Derat Exemption Certificate issued also by quarantine station.

TUGS: The Harbour Bureau operates 9 tugs viz., 2 × 2,800 h.p. 1 × 2,400 h.p., 4 × 1,600 h.p. China Petroluem Corporation (CPC) operate 2 × 2,200 h.p. at their Shen Ao Terminal.

BERTHING: Docking during daytime, and also during night-time if weather permits.

Berths (all 200 m. length)	*Depth* (m.)	*Remarks*
Eastern Berths		
E2	9.00	Passenger Terminal, Quick Dispatch Berth (QDB) for cargo vessels.
E3	9.00	Quick Dispatch Berth.
E4	9.00	General Cargo/Bulk.
E5	9.00	Private use.
E6	9.00	Quick Dispatch Berth.
E7	9.00	General Cargo/Bulk.
E8	9.00	General Cargo/Bulk.
E9	9.00	General Cargo/Bulk.
E10	12.00	Container Terminal. 2×35 ton Gantry Cranes.
E11–E22	Various	Shallow water berths.
Western Berths		
W2	9.00	
W3	9.00	
W4	9.00	Quick Dispatch Berth.
W5–W6	9.00	Private.
W7–W8	9.00	Keelung-Hong Kong Line.
W12B	9.00	Bulk Wharves.
W13	9.00	
W14	9.00	2 cranes.
W15	9.00	2 cranes.
W16	9.00	1 crane.
W17	10.00	2 cranes.
W18	10.00	2 cranes.
W19	11.50	Berths, 19-20 Container Terminal.
W20	12.00	19 also used for general cargo, no cranes.
W21	12.00	Berth 20 is leased by Yang Ming, 2×35 ton container carriers.
W22–W23	11.50	Container Terminal No. 1.
W24	12.00	2×35 ton container cranes at No. W22–W23.
W25–W26	12.00	3×35 ton container cranes at No. W25–W26.
W27	7.50	Coastal Shipping.
W29	7.25	Coastal Shipping.
W30	11.50	Grain Silo 50,500 ton Capacity (Rate: 600 t.p.h. 3 Suckers)
W31	11.50	Wharves for bulk cargo but with strengthening to allow discharge of heavy lifts.
W32	11.50 m.	
W33	10.85	Oil Tanker berth.
W33B	8.20	Oil Tanker berth.

In total there are 37 deep water berths and 21 shallow water berths.

Four mooring buoys can accommodate 6 vessels of up to 10,000 tons and length overall 215 m.

SPECIALISED CARGO HANDLING FACILITIES: Wharves No. 2, 3, 14, 15, 16, 17 and 18 equipped with 3 ton cranes. Wharf No. 4 equipped with a stationary 30 ton shore crane. Other wharves can be served by 10 tons – 100 tons mobile cranes, and No. 19 to No. 26 wharves can be served by 250 tons mobile crane.

Wharves No. 19 to No. 26 and East No. 10, for container ships, Ro/Ro ships, and "LASH" vessels, equipment includes 10 gantry cranes, capacity 35 tons; 12 straddle carriers for 20 ft. – 40 ft. containers; 2 port stackers, capacity 35 tons; 2 transtainers, capacity 35 tons; 5 forklifts (2×35 ton, 2×15 tons and 1×10 tons capacity) and 9 yard trucks.

Wharves No. 30, 3 pneumatic unloaders for grain in bulk, max. capacity 600 t.p.h. average capacity 480 t.p.h. Silo capacity 50,500 tons.

Wharf No. 31-32: Max. LOA 120 m. Max. draft 10.5 m. Coal discharged into trucks by ship's gear and shore grabs. Average discharge rate 3,000 tonnes per day. Working Hours: 0800 – 1800 hrs., 1900 – 0300 hrs. and 0300 – 0500 hrs..

CRANES: 22 mobile cranes, capacity 10 tons – 250 tons, 17 wharf cranes, capacity 3 – 30 tons. 10 container cranes, capacity 35 tons, 4 floating cranes, capacity 110 tons, 60 tons, 30 tons and 30 tons.

Other equipment: 194 forklifts, capacity 1 ton – 25 tons; 5 portable pneumatic unloaders (for grain unloading), and 75 grab buckets and 15 excavators.

STEVEDORES: According to the stowage plan and cargo details, stevedores are assigned by Harbour Bureau. Work time is divided into dayshift and nightshift.

Cargo Working Hours:

General Cargo and Bulk Wharves:	Container Terminal:
0800 – 1200 hrs.	0800 – 1220 hrs.
1300 – 1800 hrs.	1300 – 1820 hrs.
1900 – 2300 hrs.	1900 – 2320 hrs. – 100% Extra Charge.
0001 – 0300 hrs.	0001 – 0620 hrs. – 150% Extra Charge.

Port Performance:

General cargo up to 30 tons/gang/hr.

Average rate per day 480 tons/day.

Coal up to 60 tons/gang/hr. Rate per day 1,500-2,500 tons/day depending on availability of trucks.

China Steel's berth – 10,000-15,000 tons/day.

Containers – 25 per crane/hr. excluding waiting time.

RADIO:

1. Call Name: Keelung Port Radio Station is called Keelung Port Radio (or K.P.R.).
2. Channel:
   - (1) Channel 14 (156.7 MHz.) is used for longer communications after making contact on Channel 16.
   - (2) Channel 12 (156.6 MHz.) is a spare Channel, used for emergency.
3. Communication Contents:
   - (1) Messages for vessels to enter or leave.
   - (2) Matters concerning navigation and anchorage.
   - (3) Other Emergencies.
4. Communication Distance: Any waters within diameter of 10 nautical miles from this station.
5. Priority:
   - (1) Emergency salvage at sea.
   - (2) Messages for vessels departing.
   - (3) Messages for vessels waiting outside breakwaters for entry instructions.
   - (4) Messages for vessels at anchor in outer harbour.
6. Languages to be used:
   - (1) Mandarin.
   - (2) English.
7. Remarks: Communications always in plain language. Any codes or private conversations are not allowed unless approved by officers in charge.
8. Vessels shall contact Keelung Port Radio Station via VHF as soon as they are 10 nautical miles from the harbour and shall not be considered as "reported" unless answered by the station. The reporting time is to be counted for the basis for allocating berths. The report includes:
   - (1) Nationality.
   - (2) Vessel's Name.
   - (3) Call Letters.
   - (4) ETA Outside Harbour.
9. Communication Procedures: In accordance with international radio communication procedures.
10. Vessels without VHF or with VHF out of operation and thus unable to report earlier to Keelung Port Radio Station (25° 09′ 42.5″ N., 121° 44′ 57.5″ E.) shall contact the station by light signal until answered, as they report when vessel arrives within the visual scope of Ton Pan Yu Signal Station (domiciled with Keelung Port Radio Station) in the waters outside the harbour. The report includes:
    - (1) Nationality.
    - (2) Vessel's Name.
    - (3) Call Letters.
    - (4) Actual arrival time or anchoring time outside the harbour.
11. Vessels unable to report by light signal through lack of power shall use other means to report same information as indicated in item 10 above or hoist vessel's call letters enabling registration at the station.

Keelung Radio (XSW) 500 kHz and 460 kHz. Also on 8 MHz.

RADAR/VHF: No radar service to aid navigation in port. VHF and flashing lamp only used on ship's arrival. However, Pilots carry pocket walkie-talkie's to communicate with tugs and line-men on dock.

MEDICAL: All clinics and hospitals in Keelung area with English-speaking doctors. Modern hospitals available in Taipei, a city 30 km. away.

TANKERS: Bulk oil is discharged at berth No. 33 and No. 33B which are fitted with 8 in. and 4 in. pipe-lines. Length: 210 m. and 100 m., maximum draft: 10.85 m. at No. 33 and 8.2 m. at No. 33B.

Tankers may also discharge oil at Shen Ao monobuoy in a bay 7 miles East of Keelung. Water depth is 12 m. Monobuoys are also situated at Sha Lun, (W. Taiwan), connected to Taoyuan refinery, at positions:

No. 1	25° 09′ 00″ N.,	121° 11′ 27″ E.
No. 2	25° 08′ 32.4″ N.	121° 10′ 06.3″ E.

Discharge is possible at Shen Ao and Sha Lun only under good weather conditions.

DENSITY: 1002 to 1023.

FRESH WATER:

1. Water supply facilities: Every wharf equipped with 2 hydrants of 2.5 in. in diameter, each tap delivering at rate of above 20 t.p.h.
2. 4 water barges, each barge delivering at rate of over 60 t.p.h.
3. Price:
   - (1) Water supplied alongside priced at NT$39.00 (current exchange rate NT$38.00 to US$1.00) per ton.
   - (2) Water supplied by barges at NT$74.00 per ton.
4. Application: Ships/Agents shall notify Harbour Bureau as early as possible if they need fresh water.

FUEL: Bunkers available subject to ship's/Agent's advance notice to C.P.C. who operate the bunker facilities. 5 bunker barges available.

FIRE PRECAUTIONS: Special wharves for tankers, wharves No. 33 and 33B having automatic fire equipment; fire brigade and fire boats available.

GANGWAY/DECK WATCHMEN: Harbour policeman always assigned by authorities at gangway free of charge. Other gangway/deck watchmen are recommended.

OPENING/CLOSING HATCHES: Normally carried out by stevedores, excepting new designs on modern vessels.

IDENTIFICATION CARDS: Passport or other identification papers are needed.

CUSTOMS ALLOWANCES: (1) Each crew member allowed 200 cigarettes in bulk or half a pound of tobacco. (2) Each crew member allowed 1 opened bottle of wine and 12 cans of beer.

CONSULS: None. Mostly stationed at Taipei.

REPAIRS: Any ship which needs repairs must itemise repairs and declare them to Harbour Bureau via shipping company or Agent and then the repairs will be carried out in accordance with the relating articles under Administration Regulations on Harbour Business for Taiwan Provincial Commercial Harbours. As to docking, ships may deal with China Shipbuilding Corp. Keelung Dockyard or Keelung Harbour Bureau repair plant via shipping companies or Agents.

There are over 400 m. of repair wharves, cranes up to 60 tons, plate and machine shops and foundry and a full staff of skilled tradesmen.

Repairs to radio, navigational and electronic equipment can be effected.

DRY DOCK: China Shipbuilding Corp. Keelung Dockyard has 3 dry docks, 2 for vessels under 100,000 tons and another for 25,000 tons. Keelung Harbour Bureau Repair Plant has 1 dock for vessels under 5,000 tons.

SURVEYORS: Surveys of all types can be arranged. Major classification societies are represented.

REPATRIATION: Crew repatriation usually carried out through International Airport in Taoyung, and Immigration prefer either individual or group visa for landing crew from ship.

AIRPORT: Taiwan's international airport C.K.S. is 65 km. from Keelung via the motorway. Travelling time approx. 1 hour. Flights are available direct to U.S.A., South Africa and most Asian destinations, and for Europe/Australia via Hong Kong. Taipei domestic airport (30-40 minutes travelling time) has frequent scheduled flights to most major cities in Taiwan.

TIME: GMT plus 8 hours. No alterations.

HOLIDAYS: New Year's Day (1st–2nd Jan.); Chinese Lunar New Year's Eve and Day (3 days in Jan. and Feb.); Youth Day (29th Mar.); Ancestor Memorial Day (1 day in April); Labour Day (not a national holiday but only for labourers) (1st May); Dragon Boat Day (1 day in June); Mid-Autumn Day (1 day in September); Confucius' Birthday or Teachers' Day (28th Sept.); National Day (10th Oct.); Taiwan Restoration Day (25th Oct.); late President Chiang's Birthday (31st Oct.); Dr. Sun's Birthday (12th Nov.); Constitution Day (25th Dec.).

POLICE/AMBULANCE/FIRE: The gangway guard assigned by Harbour Police or ship's Agent will act in emergencies.

TELEPHONE: Local telephones available to be placed on board.

SHORE LEAVE: Crew allowed ashore except for crew members from Communist countries.

REGULATIONS: Searching for stowaways is strictly carried out on arrival and departure.

Discharge of smoke, tank washings, garbage, etc., not allowed.

DELAYS: Keelung has rainfall on about 210 days in a year, port is sometimes congested after continuous rain.

GENERAL: Shore pass issued by Immigration for each crew member on ship's arrival and will be collected on ship's departure. Anyone who loses a shore pass is subject to fine.

DEVELOPMENTS: 100,000 tonne grain silo to be built.

AUTHORITY: Keelung Harbour Bureau, No. 1 Chung Cheng Road, Keelung, Taiwan, Republic of China. *Tel:* (032) 231111. *Cables:* Kehbroc Keelung. *Contact:* Y. C. Chu, Harbour Master, S. C. Teng, Director.

AGENT: Jardine, Matheson & Co. Ltd, 10 Chung Yit Road, Keelung. Tel: (032) 230161, 230220. Telex: 32187 Jardines. Cable: "Jarocean Keeling".

SUAO: 24.36 N. 121.52 E. (See Late Plans)

PORT LIMITS: Radius of 1 mile from North Point Lighthouse.

DOCUMENTS: Ship's Register, Derat Certificate, Last Port Clearance, Taiwan Tonnage Dues Certificate (valid 1 year), Crew List (8 copies), Stores List, Vaccination List and Yellow Book, Foreign Currency in Safe, Narcotics List, Bills of Lading, Manifest of Inward Cargo, Manifest of Through Cargo, Mail and Parcels List. Also see "General".

Distribution:

Quarantine Station: One copy each of Health Declaration, Crew List, Ports of Call, Manifest of Inward Cargo, Manifest of Through Cargo.

Customs Office: One copy each of Arms and Ammunition List, Narcotics List, Foreign Currency List, Parcels List (including Landing Parcels and Through Parcels), Stores List, Crew List, Specimen Signatures of Master and Chief Officer, Taiwan Customs Tonnage Dues (can be purchased from the Customs Office), and 3 copies each of Manifest of Inward Cargo and Manifest of Through Cargo.

Immigration Office: One copy each of Crew List, Arms and Ammunition List, Manifest of Inward Cargo, Ports of Call List.

Port Authority: One copy each of Crew List, Manifest of Inward Cargo, Manifest of Through Cargo.

Local Shipping Agent: One copy each of Ship's Particulars, Crew List, Manifest of Inward Cargo, Manifest of Through Cargo, Ports of Call.

PILOTAGE: Compulsory. Pilot boards at outside anchorage position (Lat. 24° 35′ 20″ N., Long. 121° 52′ 30″ E.). Hoist "G" flag.

ANCHORAGES: Water area from North shore to South shore, depth 14 m. to 31 m. and outer depth over 30 m. Ship may anchor and remain outside breakwater (under construction) when waiting for Pilot or entry instructions.

APPROACHES: If approaching from the North or East, Kui Shan (Turtle Shaped) Island, 15 miles N.N.E. of the harbour entrance, provides a good landmark, with its 408 m. elevation.

San-Shien-Tai Island (30 m.), 1 mile E.N.E. of the entrance, is a good leading mark, and vessels should make their approach from the S.E., clearing the island by half a mile, before turning to enter. A 4.7 m. shoal exists about 450 m. S.W. of the island and another lies to the N.W. A red light sector marks danger areas near the entrance. The channel depth at the entrance is 22 m. The inner channels have depths of 15 m. to the North and 10 m. to the South.

RESTRICTIONS: Permission to enter must be granted by naval signal station located on North shore, ship's Agent should give ship's ETA to Port Authority of Suao 24 hours before arrival. Port closes from 2301 hrs. to 0200 hrs. daily.

MAX. SIZE: Max. draft 14 m. and LOA less than 240 m.

HEALTH: Radio Pratique possible (see "Keelung"). Quarantine will clear vessel in anchorage area. Stool test will be conducted if vessel arrives from an affected area within 5 days.

RADIO: Radio Suao, send cables to Harbour Master Suao, or Agent. Report ETA, draft, etc.

VHF: Channel 14 – 156.7 MHz for calling. Call sign "Suao Harbour Radio".

TUGS: Port Authority tugs assist with mooring and unmooring. Ship's lines used. 4 tugs, 1×2,400 h.p., 1×1,600 h.p., 1×1,000 h.p., and 1×600 h.p.

BERTHING: Docking during daytime, departure also during daytime, but sometimes at night time if permission granted from Authorities. Pilot compulsory. Vessel usually anchors in outer harbour for Pratique and inspection.

Deep water wharf 2,705 m. (13 berths) capable of accommodating vessels up to 298,000 d.w.t.

Wharf No.	*Length* (m.)	*Depth* (m.)	*Designed Depth* (m.)	*Uses*
1W	210	7.0	7.5	Service Craft
2W	170	10.5	11.0	Breakbulk
3W	215	10.5	11.0	Breakbulk
4W	300	10.5	11.0	Breakbulk
5W	200	10.5	11.0	Breakbulk
6W	290	14.0	15.0	Containers
7W	240	12.5	13.0	Containers
8W	125	7.0	7.5	Timber
9W	125	7.0	7.5	Timber
10W	175	8.5	9.0	General Cargo
11W	175	8.5	9.0	General Cargo
12W	200	8.5	9.0	Breakbulk
13W	180	8.5	9.0	Breakbulk

CARGO HANDLING FACILITIES: The port has no special facilities, 1 gantry crane for bulk handling container cargoes, and a 35 ton floating crane with 360° radius. For the present time ship's derrick only for logs, timber, cement and general cargo.

Grabs: 12×3.5 cu.m. (3.5 tonnes each).
16×2.2 cu.m. (1.8 tonnes each).

Fork Lifts: 8×3 tonnes.
2×2 tonnes.
1×7.5 tonnes.

Mobile Cranes: 2×40 tons
1×20 tons
4×16 tons

Shovels: 1×3 ton (Bulldozer)

STEVEDORES: Arranged by local Agent. Working hours: 0800 – 1200, 1300 – 1700, 1800 – 2300 and 0000 – 0600.

MEDICAL: Clinics with English speaking doctors available, modern hospitals available in Lotung, Ilan and Taipei by train or by car, 20 minutes, 30 minutes and 2 hours away respectively.

DENSITY: 1025.

FRESH WATER: Available by barge or alongside, subject 24 hours' advance notice.

FUEL: Supplied by tanker trucks.

GANGWAY/DECK WATCHMEN: Harbour policeman always assigned by Authority for gangway, free of charge.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CERTIFICATES: International certificates, Register, Safety Equipment, Safety Construction, Safety Radio, Load Line, Cargo Gear, etc.

CUSTOMS ALLOWANCES: Each Crew member allowed 200 cigarettes for own use and 1 bottle of wine for entertaining and for own use, Master enjoys some privileges and can keep additional cigarettes for entertaining.

IDENTIFICATION CARDS: Shore pass for foreigners issued by Immigration Office according to the passport or other identification papers.

CONSULS: None.

REPAIRS: Minor repairs can be carried out in port.

REPATRIATION: Crew repatriation usually carried out through international airport in Taoyuan, near Taipei. Application to be made to Keelung Harbour Bureau.

AIRPORT: International airport in Taoyuan, 3.5 hours by car from port.

TIME: GMT plus 8 hours. For local time check in Chinese, dial telephone 117 (free of charge).

HOLIDAYS: New Year's Day (January 1st), Youth's Day (March 29th), Late President Chiang Kai-Shek's Death – Memorial Day (April 5th), Labour Day (May 1st), Dragon-Boat Day (May 5th of Lunar Calendar), Mid-Autumn Festival (August 15th of Lunar Calendar), Birthday of Confucius (September 28th), Double Tenth Day (October 10th), Recovery Day of Taiwan (October 25th), Late President Chiang Kai-Shek's Birthday (October 31st), Birthday of Dr. Sun Yet-Shen (November 12th), Constitution Day (December 25th), Eve of Chinese New Year's Day (December 29th or 30th of Lunar Calendar), Chinese New Year's Day (first day of Lunar Calendar).

POLICE/AMBULANCE/FIRE: The gangway guard assigned by Harbour Police or ship's Agent will act in emergencies; in case of fire dial 119. Police and ambulance dial 110.
TELEPHONE: Local telephones available to be placed on board.
SHORE LEAVE: Crew allowed ashore, except for crew members from Communist countries.
REGULATIONS: Crew cannot shelter any unlawful person on board. Searching for stowaways is strictly carried out on arrival and departure.
DELAYS: Port is sometimes congested after continued rain and delays of a few days may be caused.
GENERAL: 3 Crew Lists sent by airmail from last port to Agent. Shore pass issued by Immigration Office for each crew member on ship's arrival and will be collected on ship's departure.
AUTHORITY: Suao Harbour Bureau, Suao, Ilan, Republic of China. *Tel:* 039-962853. *Contact:* M. C. Chiang, Port Director.

AGENT: Sub-Agent controlled by: Jardine, Matheson & Co. Ltd., 13/14th Floor, World Trade Building, P.O.Box 81, 50 Hsin Shen South Road, Section 1, Taipei. Tel: (02) 393-1177. Telex: 21851, 11391 Jardines. Cables: "Jarocean Taipei".

TAICHUNG: 24.18 N. 120.29 E. (See Plan Book)

PORT LIMITS: In radius of 1.5 miles from centre of the entrance between North and South breakwater.
LOCATION: Exact position of Port – Lat. 24° 17′ 40.3″ N., Long. 120° 29′ 27.3″ E.
DOCUMENTS: *Required by Quarantine Station:*
1 copy Health Declaration.
1 copy Crew List.
1 copy Passenger List.
1 copy Ports of Call List.
1 copy Manifest of Inward Cargo.
1 copy Manifest of Through Cargo.
1 copy Derat Certificate.
Required by Customs Office:
1 copy Arms and Ammunition List.
1 copy Narcotics List.
2 copies Foreign Currency List.
3 copies Parcels List (1 for landing parcel, 2 for through parcels).
1 copy Stores List.
2 copies Crew List.
2 copies Mail List.
2 copies Passenger List.
4 copies Manifest of Inward Cargo.
4 copies Manifest of Through Cargo.
1 copy Personal Effects List.
1 copy Specimen Signatures of Master and Chief Officer.
1 copy Log List (for log ships only).
1 copy Taiwan Tonnage Dues (can be purchased from the Customs Office).
1 copy Ship's Register.
Required by Immigration Office:
2 copies Crew List.
2 copies Passenger List.
2 copies Arms and Ammunition List.
2 copies Narcotics List.
2 copies Manifest of Inward Cargo.
4 Photographs of each Chinese Crew Member (only for first arrival).
Required by Port Authority:
1 copy Crew List.
1 copy Passenger List.
3 copies Manifest of Inward Cargo.
2 copies Manifest of Through Cargo.

Besides above documents, ship's Master should present Certificates of Ship's Registry, Safety Equipment, Safety Construction, Safety Radio and Load Line to the Port Authority for inspection.

Required by Local Shipping Agent: One each of Ship's Particulars, Crew List. Last Port's Name and Leaving (Last Port) time should be forwarded by airmail to the local Agent.
PILOTAGE: Compulsory. At anchorage hoist "G" flag, contact Taichung Port Radio on VHF Channel 16. Pilots board 0.5 – 1 mile off the end of the breakwaters. In the winter, however, the pilot launch is sometimes unable to leave the shelter of the breakwaters, and the Pilot must embark inside the breakwaters. Alternatively, if sufficient notice is given, vessels may pick up a Taichung Pilot off either Keelung or Kaohsiung. When it is known that bad weather exists off Taichung, this latter course of action is recommended to avoid possible berthing delays and danger to the ship.
APPROACHES: Daytime entry only.

The entrance channel has a minimum depth of 11 m. (MLWS), is 16 km. long and 300 m. wide in a direction of 115° (T). Sometimes strong cross currents exist outside the breakwaters. In strong winds, the pilot vessel may be unable to leave the shelter of the breakwaters and vessels must pick up the Pilot inside the harbour entrance (see "Pilotage"). There have been groundings outside the harbour but these all appear to have been the result of bad navigation or the neglect of basic precautions.
ANCHORAGE: Water area in port limits, except entrance channel can be used for anchoring, depth from 10 m. to 18 m. Ship may anchor and remain outside breakwater when waiting for Pilot.
RESTRICTIONS: Permission to enter must be granted by signal station. Ship's Agent to report ETA to Port Authority 24 hours before arrival.
MAX. SIZE: Max. draft 13 m., LOA no limit.
HEALTH: Radio Pratique acceptable, also quarantine will clear vesse at anchorage. Special quarantine will be conducted if vessel arrives from a cholera affected area within 5 days.

Also see "Keelung".
RADIO: Via Radio Taichung (X5W2) or Radio Keelung and Radio Kaohsiung. Send cables to Agent or Harbour Master Taichung for reporting ETA, draft, etc.
RADAR: No radar service to assist navigation in port.
VHF: Call sign "Taichung Port Radio", Channel 16 (156.8 MHz) for calling purpose, Channel 14 (156.7 MHz) for further communication. Pilots use walkie-talkies to communicate with tugs and mooring men.
TUGS: Authority tugs assist mooring and unmooring, ship's line used. 10 tugs, 250 h.p. – 4,600 h.p.
BERTHING: Wharf 1, depth 13 m., length 250 m., for grain cargo, discharged by shore grain unloaders.
Wharves 2 and 3, depth 13 m., 500 m., for bulk cargo.
Wharf 4, depth 11 m., length 200 m., for liquid cargo.
Wharf 4A, depth 9 m., length 180 m., for logs.
Wharves 5, 5A, 6, 7 and 8, depth 11 m., length 1,000 m., for general cargo.
Wharf 8A, depth 11 m., length 260 m. for general cargo.
Wharf 9, depth 14 m., length 260 m., for bulk cargo.
Wharves 10 and 11, depth 13 m., length 640 m., for containers.
Wharves 12, 13, 14 and 15, depth 10 m. to 11 m., length 760 m., for general cargo.
Wharves 23, 24 and 25, depth 10 m. to 11 m., length 560 m., for general cargo.
Wharves 26 and 27, depth 11 m., length 408 m., for general cargo.
Wharf 28, depth 11 m. to 14 m., for general cargo.
Wharf 29, depth 14 m., length 250 m., for coal (coal unloader is planned).
Wharves 31 and 32, depth 14 m., length 640 m., for containers.
Oil and Chemicals Wharf, depth 13 m., length 250 m.
(For their locations see "Plan Book").
SPECIALISED CARGO HANDLING FACILITIES:
Container Terminal: Wharves 10 and 11. Each has 1×35 ton quay-side container crane.
Grain: Grain Elevator installed at Wharf 1, silo capacity 60,000 tons. 2 unloaders, 400 t.p.h. each.
CRANES: 7 mobile cranes up to 40 tons capacity, 1 mobile crane of 140 tons capacity. Large supply of forklifts, hoppers, grabs, electro magnets, conveyors, etc.
STEVEDORES: Stevedores and equipment can be hired from the Taichung Harbour Warehousing & Stevedoring Co. and Teh-Long Warehousing & Stevedoring Co.

Cargo Working Hours:
0800 – 1200
1300 – 1700
1800 – 2300 (plus 100%)
0000 – 0600 (plus 150%)

Port Performance: General cargo 200 tons/gang/day. Bulk (other than grain silo) 300 tons/gang/day.
MEDICAL: Clinics and hospital with English speaking doctors available at town of Wuchi near the port.
DENSITY/TIDE: 1023/High tide and low tide difference 4.5 m., when alongside pier keep watch on moorings.
FRESH WATER: Available, no limitation on quantity.
FUEL: Ordinary bunkers available but 24 hours' advance notice required. Fuel barge (550 tons) operated by C.P.C.
GANGWAY/DECK WATCHMEN: Harbour policeman always assigned by authority at gangway free of charge.
OPENING/CLOSING HATCHES: Normally carried out by stevedores, except new designs on modern vessels.
CUSTOMS ALLOWANCES: Each crew member allowed 200 cigarettes and 1 bottle of wine for own use. Bonded store will be sealed on arrival.
IDENTIFICATION CARDS: Not required, however passports or other identification papers must be submitted for request of a shore pass.
CONSULS: None.
REPAIRS: Minor repairs can be carried out in port.
REPATRIATION: Crew repatriation usually carried out through international airport in Taoyuan near Taipei, or Kaohsiung, about 200 km. from this port.
TIME: GMT plus 8 hours. For correct local time dial tel. 117, time report in Chinese, free of charge.
HOLIDAYS: Commemoration Day of the Republic of China and New Year's Day (1st and 2nd January), Lunar New Year's Eve and Spring Festival (3 days late in January or early February), Youth Day and Chinese Martyrs' Day (29th March), National Tombs' Sweeping Day and Death of President Chiang Kai-shek (5th April), Labour Day (1st May, for labourers only), Dragon Boat Festival (one day in June), Mid-Autumn Festival (one day in September), Confucius' Birthday and Teacher Day (28th September), National Day (10th October), Taiwan Restoration Day (25th October), Chiang Kai-shek's Birthday (31st October), Dr. Sun Yat Sen's Birthday (12th November), Constitution Day (25th December).

Cargo work can be arranged on holidays except Lunar New Year's Day, Labour Day, Dragon Boat Festival (only afternoon) and Mid-Autumn Festival (only afternoon).
POLLUTION: Discharge of tank washings, etc., in port is prohibited (Also see "Regulations – Harbour Bureau Notice").
POLICE/AMBULANCE/FIRE: Call Taichung Harbour Police Tel: 562394 or Liaison Centre of Taichung Harbour Bureau Tel: 562164.
TELEPHONE: Local telephone available to be placed onboard.
GENERAL: Recommended chart: Chinese Navy Chart No. 0357, Tai-Chung Kang.
SHORE LEAVE: Crew allowed ashore except for crew members from communist countries.

REGULATIONS: Searching for stowaways is strictly carried out on arrival and departure.

Harbour Bureau Notice:

1. Please show your shore pass together with your hand-carried articles to the gangway guard when going ashore and to the gate police when coming aboard.

2. Photographing of the harbour, storing of explosive articles and displaying of fire crackers in the harbour area are prohibited.

3. Before obtaining a boarding pass which can be applied for you by your ship's agency, you are not allowed to board another ship with your shore pass.

4. Before going ashore, read over carefully the notice on your crew shore pass and comply with it.

5. Be sure not to lose your shore pass, nor should it be used by others, since it is an important official document. The expense of announcing the loss of shore pass for 3 days in the local newspapers is to be on loser's account.

6. To avoid getting lost, keep in your mind the number and location of the wharf at which your ship is alongside, and in case the location of the ship is shifted contact your ship's Agent.

7. Always maintain aboard your ship a sufficient number of crew in case of emergency.

8. For the prevention of stowaways, thefts and accidents, crew quarters and passenger cabins should be kept locked before their shore leave.

9. Pumping wasted oil and throwing rubbish into the water, or exhausting thick smoke in the port area shall be subjected to a heavy fine.

10. For the protection of foreign copyrights, pirated editions of foreign books and records are not exportable.

11. Unless an application is approved by the Customs, any taxable article should not be taken off the ship, while each crew member is allowed to carry ashore 2 opened packs of duty free cigarettes, 10 cigars or 2 ounces of tobacco.

12. Each crew member may carry ashore no more than 2,000 New Taiwan Dollars (NT $2,000).

13. Each crew member is allowed purchases not exceeding US $200 in value in local products or handicrafts which can be carried aboard by the buyer with purchasing invoice; a Customs permit should be shown to the guard if exceeded.

14. Whenever you need assistance, please feel free to call 562394 or 562611 ext. 275 upon which the Foreign Affairs Division of the Harbour Police is obliged to serve you.

15. For further information, please consult directly with your Agency or Authorities concerned, as the rules contained in this notice may be revised at any time.

Thank you very much for your co-operation.

DEVELOPMENTS: With the 1st phase of construction completed there are 28 berths.

The 2nd phase project with an expansion of the commercial harbour and a new industrial harbour will be carried out according to the economical situation.

SHIPMASTER'S REPORT: November 1982 (updated May 1984).

Stevedores: Cargo work: Around the clock. 0800 – 1200 hrs., 1300 – 1700 hrs., 1800 – 2300 hrs. and 0000 – 0600 hrs.

Health: Smallpox and Cholera still declared in Radio Pratique message but no action taken if certificates are out of date.

Customs: Issues can be made after 5 days.

VHF: Pilots and Port Radio also officially work Channel 16 but we only make contact on Channel 14.

Berthing: No. 11 (Container Berth) is completed (Extension of No. 9 and 10)

Consuls: No British Consul.

Airport: Nearest airport at Tauyuan.

Report: This is a new port midway up the West coast of Taiwan. Plans for very extensive developments are at present in hand, stage one is almost completed.

The Western coast is low lying and exposed. During N.E. monsoon season, when cold front comes from mainland China, the wind can be very strong, ships are advised to go South or North so that the Pilot may be taken off at Kaohsiung and Keelung. The water shelves fairly slowly and I am given to understand that in bad weather Panamax vessels anchor 2 miles West of port entrance, holding conditions not known. We were fortunate with calm conditions and anchored 5 cables S.W. of Breakwater South Light for a short period with no difficulties.

Pilot boards from launch outside and 1 tug is normally taken outside. VHF Channel 14 is used. They also use walkie-talkies to contact Harbour Control and tugs. Panamax vessels normally berth during daylight hours but may sail at any time. Pilot seemed competent and had an Assistant/Trainee Pilot with him.

Depth of Water: Vessel berthed at half tide with 12 m. draft. Grain silo 13 m. Berth No. 10 depth 13 m. Berth No. 9 depth 14 m. Dredging being carried out. Rise and fall of tide 3.5 m. depth 4.0 m. Dock water density Berth No. 10 found to be 1023.

Tugs: There are 5 modern tugs. 3×2,400 h.p. and 2×1,600 h.p. Ship's ropes used. Normal conditions for Panamax, 1 tug each end.

Berths: Berth No. 10 (Berth No. 9 is similar) is a brand new container berth with 2 gantries for containers. Berth used for bulk coal discharge into lorries until new coal berth constructed. Large flat area. Mooring bollards set at jetty edge every 23 m. A further set of unequally spaced large bollards are set along line 34 m. in from jetty. When mooring 4 head/stern lines, 2 springs and 2 long breasts each end are recommended. We experienced winds of over 30 knots off berth for short period, nobody seemed at all surprised, so would suggest this is reasonable tie-up.

Discharge: As stated this is a container berth. Panamax vessel with side opening hatches, port side to. Hatch centre stops and minor hatch fittings burnt off. Centre piece of hatch rail track tack welded on. Both hatch lids moved to starboard side. Section of ship's side rail in line with hatch burnt off. Wood sleepers placed on deck and mobile cranes lifted on board, 1 per hatch. These use small 4 – 5 ton grabs and discharge into lorries. Small bulldozer type vehicle put in each hold to move cargo to port side. Preparation about 1 day, discharge 9 days, replacing of pieces, etc., 1 day.

Bunkers: Heavy oil and diesel available by barge.

Lub. Oils: Most available, plenty of advance notice required.

Fresh Water: Available, from jetty or barge.

Repairs: Ship repairs undertaken with a 10,000 ton dry dock.

Money: Only New Taiwan Dollars available. US Dollars can NOT be obtained. Obtain any other requirements at previous port.

Immigration: For non-Taiwanese crew this is a problem, including Hong Kong, British and Indian. If any crew changes expected give plenty of notice. Visiting Hong Kong shore staff such as Superintendents, etc., required to renew dock pass every 2 days. Crew issued with shore pass (with photo for Chinese ratings) this has to be shown at dock gate outward and inward. Passes collected in on sailing, loss of pass results in fine on holder.

Stores: Victualling, fresh fruit and vegetables, reasonable price and good quality. Milk, meat, European style tinned goods all up to Chinese National Standard (CNS). Chinese dried foods, etc. appear good.

Beer can be obtained but not spirits or foreign cigarettes.

Customs: One person at least, around all the time. Bond and beer locker sealed. Issue will be given after a week in port, but give plenty of notice.

Certificates Required: Register, Loadline, Safety Equipment, Safety Construction, Radio Safety, Derat, Liferaft.

Documents: Crew List, 10 copies. Crew Manifest, watches, etc. and including foreign money. List of Stores. Deck, Engine, Victualling, Bond, Arms & Ammunition List, Narcotics List, Arrival Report, Declaration of Health, Departure Report (these three their forms). Specimen signature Master and Mate, General paperwork, large amount for any purpose. If landing spares or items for overhaul (motors rewound, etc.) give plenty of notice.

Medical Facilities: All available.

Drugs: Do not appear to be a problem in this port.

Grain Silo: I was informed that usual discharge rate is 5,000 tonnes per day.

Radio Station: Taichung Local. 24 hour watch M/F, W/T no difficulties encountered.

Cameras: Not to be taken ashore.

Walport: Possible to change video tapes. NOT films.

Telephone: Placed on board.

AUTHORITY: Taichung Harbour Bureau, Wuchi, Taichung County, Taiwan, Republic of China. *Tel:* (04) 2220414 and (046) 562611. *Contact:* Rear-Admiral H. C. Kung, Harbour Master.

AGENT: Sub-Agent controlled by: Jardine, Matheson & Co. Ltd., 13/14th Floor, World Trade Building, P.O.Box 81, 50 Hsin Shen South Road, Section 1, Taipei. Tel: (02) 393-1177. Telex: 21851, 11391 Jardines. Cables: "Jarocean Taipei".

NOTES

Please also advise Shipping Guides Ltd.

Tanzania

CHAKE CHAKE: 05.14 S. 39.46 E.

DOCUMENTS, HEALTH: Refer to "Zanzibar", where vessel required to call for clearance by Port Officals.

PILOTAGE: Not compulsory, but restricted to daylight only.

RESTRICTIONS: Entrance approached through Owen Channel or through passage between Mesale Island South and Ras Kingojelin. Depths from 10 to 22 fathoms but there are patches of 2.5 fathoms. Narrowest part of channel is 1.5 cables wide.

Vessels may enter and leave at any state of the tide, but in daylight hours only.

ANCHORAGES: No mooring buoys. Vessel's work cargo to lighters. Depth decreases to 3 fathoms for coastal anchorage off Ras Banani.

MAX. SIZE: 170 ft. length, 15 ft. draft.

TUGS: Not available and not required.

FRESH WATER: Not available.

FUEL: Not available.

STORING: Very limited facilities and it is recommended that where necessary all storing be done in Zanzibar.

AUTHORITY: See "Zanzibar".

DAR-ES-SALAAM: 06.50 S. 39.17 E. (See Plan Book)

PORT LIMITS: The port of Dar-es-Salaam includes all tidal waters enclosed by a boundary which, commencing at high water mark at a point S.E. of Ras Koronja (approximately 9.66 km. East of the city of Dar-es-Salaam), follows a straight line due North to the West tip of the Outer Sinda Island. Thence a straight line to Makatumbe Lighthouse, thence a straight line drawn to South tip of Mbudya Island, thence a straight line drawn 254° to the high water mark at a point on the mainland South of the entrance to Mto Peremji. Thence following the high water mark around Msansani Bay, Dar-es-Salaam Inner Harbours to the first point due South of Outer Sinda Island.

DOCUMENTS:

Health Certificates (forms supplied by Pilot).
6 Crew Lists.
10 Passenger Lists.
Ship's Manifest.
Heavy Lift List.
Dangerous Cargo List.
Ship's Register.
Declaration and Advice of Consumable Stores (Form C-7 supplied by Customs).
Crew Declaration (Form C-8 supplied by Customs).

Shipmaster's Report: March 1981.

Declaration of Health.
1 Set of Vaccination Lists.
7 Crew Lists.
6 Passenger Lists.
Clearance from Last Port.
Ship's Register (Copy).
Dangerous Cargo Manifest.
Stores List (Form C-7).
Crew Declarations (Form C-8).
Parcel List (Form C-3).
Ship's Record & Master's Report (Form EAH-6007) (To Pilot).
Entry Report (Nasaco Form).
Departure Report (Nasaco Form).
Shore Pass (Form TIF 10).

PILOTAGE: Compulsory South of Makatumbe Lighthouse for all vessels over 200 n.r.t. The pilot launch is painted white and shows the conventional day and night signals. Vessels wishing to enter must await the arrival of the pilot launch at the Outer Anchorage, and, if necessary, must anchor clear of the leading marks. During the hours of darkness ships entering or leaving the port are limited to 485 ft. LOA on tides not exceeding 9 ft. range.

ANCHORAGES: Anchorage outside in 7 – 8 fathoms, sheltered by Makatumbe Island during S.W. monsoon but exposed to swell in N.E. monsoon.

Shipmaster's Report: In good weather tankers waiting can anchor in a depth of 18 m., 12 cables from Makatumbe Light bearing 250° true.

RESTRICTIONS: Movements in and out of the basin are subject to restrictions depending on drafts and state of the tide at Spring tides. Tankers, vessels over 135 m. LOA and vessels carrying explosives are not allowed to leave or enter during hours of darkness.

There is a signal station (with tower, flagstaff and red roof) on East Ferry Point (Lat. 6° 50' S., Long. 39° 18' E.). Entry prohibited signals are: day signal – black flag on masthead; night signal – 3 red lights disposed vertically, and distant signals – black square on white background.

The entrance channel at North end of the basin is about 1.25 miles in length from its outer entrance between the edges of the banks fronting North and South Reefs to the Inner Harbour, South of West Ferry Point.

There is a sharp bend in the channel at West Ferry Point. Minimum depth of 6.7 m. LWOST, and minimum width of 128.02 m. between the 4 fathoms contour lines. A very strong ebb and flood runs through the channel at periods of Spring tides. Maximum current at Spring tides – 3.5 knots. During period of S.E. monsoon strong winds and heavy seas may make entry difficult, but in Inner Harbour port working is normally unaffected by weather.

MAX. SIZE: Twin-screw vessels not exceeding 182.9 m. Draft 10.1 m. at HWOST, 7.0 m. at LWOST, and 9.1 m. at HWNT, and single-screw vessels not exceeding 175 m. Tankers LOA 175.26 m., 36,000 d.w.t., and draft 9.75 m. Also refer to "Mjimwema".

HEALTH: Radio Port Health Officer giving ETA, name last port and health condition of passengers and crew. "Q" flag to be displayed until Free Pratique given. Radio Pratique not available.

TUGS: Five tugs available.

BERTHING: In the Inner Harbour there are mooring and anchorage berths for up to 9 deep-sea ships ranging from 350 ft. to 600 ft. (106.48 m. – 182.88 m.) in length and from 23 ft. to 30 ft. (7.01 m. – 9.14 m.) in draft.

Deep water quays total length 2,016 m. comprising berths numbers 1-11 with 10.06 m. in depth at LWOST.

Accommodation:

Harbour sheltered and roomy, water area 95.9 ha; consists of tidal basin and Southern Creek, the latter having 11 deep-water berths. Anchorage in basin and creek.

		Depth	*Max. length*
"A"	Stern mooring	9.1 m.	183 m.
"B"	Moored mooring	7.6 m.	153 m.
"C"	Moored mooring	7.6 m.	183 m.
"D"	Single anchor	7.3 m.	183 m. waiting berth only.
"F"	Moored, buoys and anchor	7.3 m.	152 m.
"G"	Buoys	7.3 m.	168 m.
"H"	Buoys	7.1 m.	168 m.
"K"	Moored, buoys and anchor	9.1 m.	183 m.

In addition there are 2 coaster anchorages. The Southern Creek, at the S.E. corner of the basin has a navigable distance of 1.5 miles for ships drawing up to 30 ft. of water.

CARGO HANDLING FACILITIES: The port has no special facilities for bulk handling cargoes but, subject to advance notice being given, vacuvators and grabs can be made available.

Equipment and Other Facilities:

Deep water vessels berthed in stream are loaded and discharged by lighters. At the lighter quay there are 8 electric portal cranes for working lighters (1 × 5 ton and 7 × 3 ton), on the main quay, the port has 6 × 7 ton and 21 × 5 ton. There are 8 other portal cranes on the stacking yards as per details below:

(a)	Belbase (AMI)	—	2 × 10 ton cranes.
(b)	Tanzania	—	3 × 5 ton cranes.
(c)	Yard 5, 6 & 7	—	1 × 7 ton and 1 × 7-20 ton Gosna Cranes
(d)	Yard 8	—	1 × 5 ton Conrad.

Main Quay Cranes: Berth Nos. 1 – 11 have between them 44 portal cranes of 7 tons capacity each.

Mobile Cranes: 2 × 30 ton, 13 × 11 – 7 ton, 14 × 6 ton, 2 × 4 ton, 1 × 60 ton floating Crane – "Kifaru" and 1 × 120 ton floating crane – "Ndovu". These are moved between deep-water quays, lighterage quays and any other points of work on the stacking yards as and when required.

DENSITY: 1025.

TANKERS: Bulk Oil Jetty at which tankers up to 175.26 m. LOA and 9.75 m. draft can discharge to tanks ashore. Depth alongside 10.06 m. There is a refinery on the opposite side of the creek to the Bulk Oil Jetty; the tankers serving the refinery are not to exceed 20,000 s.d.w.t. capacity. Also refer to "Mjimwema".

STEVEDORES: Week days (except Saturday) 0700 – 1500 hrs. (45 minutes' break), 1500 – 2200 hrs. (no break), 2200 – 0600 hrs. (no break). Saturdays 0700 – 1345 hrs. (no break), 1400 – 2100 hrs. (no break). Sundays and public holidays 0700 – 1500 hrs. (45 minutes' break), 1500 – 2200 hrs. (no break).

FRESH WATER: Available at deep-water berths, and a water barge supplies water to ships at anchorage. All water is chlorinated but should be boiled and filtered. Water for boiler requires feed treatment (formal solutions adequate).

FUEL: Not generally available.

MEDICAL: Doctors and good modern hospital facilities exist.

REPAIRS: Several light engineering workshops. There is a Tanzania Harbour Authority Dockyard for construction and maintenance of Tanzania Harbour Authorities' lighters and other small craft. This has a slipway for vessels up to 100 ft., lifting power 100 tons. The Port Administration employs a skin diver.

REPATRIATION: Can be arranged.

CUSTOMS ALLOWANCES: Each crew member is allowed 1 carton of cigarettes, 1 opened bottle of spirits and 8 small beers.

All cabins are inspected by Customs.

AIRPORT: International airport with daily connections to all parts of the world.

TIME: GMT plus 3 hours. No alterations.

HOLIDAYS: Christmas Day and International Workers' Day are the only holidays on which no work is performed. Other holidays on which restricted working may be carried out are: Zanzibar Revolutionary Day (January 12th); Id-el-Fitr (2 days); Id-el-Haj; Good Friday; Easter Monday; Union Day (April 26th); Maulidi Day; Saba Saba Day (July 7th); Tanganyika Independence and Republic Day (December 9th).

SHORE LEAVE: Allowed.

SHIP SUPPLY SERVICE: Contact: Pac Lloyd (International) Inc. P.O.Box 1301 Dar es Salaam or Eagle Tugs P.O.Box 98574, Mombasa.

DEVELOPMENTS: Future plans of the port include the construction of 2 additional deep water Berth Nos. 12 and 13, expansion of the dockyard capable of dry docking tugs, small ships up to 1,500 d.w.t. A new oil jetty will be constructed to give way for the construction of 2 additional deep water berths. Straightening, widening and deepening of the entrance channel to at least 10 m. depth will enable vessels of up to 35,000 d.w.t. to enter the port at all times of the day. It will also enable night pilotage to all types of ships which at present is restricted to vessels of up to 135 m. in length only.

Further improvements include converting two berths (Nos. 10 and 11) into a container terminal, construction of warehouse, grain terminal and container depot, paving and wharf rehabilitation. Work expected to start in 1984 for completion in 1988.

AUTHORITY: Tanzania Harbour Authority, P.O.Box 1130, Dar-es-Salaam, Tanzania. *Tel:* 21212. *Telex:* 41346. *Cables:* Portreeve. *Contact:* Port Manager.

MJIMWEMA TERMINAL: 06.49 S. 39.22 E.

DOCUMENTS and all General Information; refer to "Dar-es-Salaam".

LOCATION: The position of the Monobuoy is Lat. 6° 49′ 20″ South, Long., 39° 22′ 00″ East, lying approximately 1.5 miles offshore in Mjimwema Bay. The buoy lies in 24 m. depth of water. The currents are up to about 1 knot and the direction varies.

PILOTAGE: Mooring Master/Pilot boards at position Lat. 6° 46.9′ N., Long. 39° 22.2′ E. Should the Pilot not be available on arrival, vessels are advised to keep underway and await the Pilot rather than anchor.

After mooring operations a Mooring Master/Pilot will remain on board.

Vessels must provide adequate means of boarding for Pilot, Customs and other officials. A pilot ladder with spreaders 4 ft. from the water and manropes are required.

The Mooring Master shall be provided with meals and accommodation comparable to a senior officer on board. The crew of the mooring launch will be provided with food comparable with ratings on board. No special foods need be provided. Accommodation also required for 2 Divers.

RESTRICTIONS: Berthing during daylight hours only. Unberthing at anytime.

MAX. SIZE: Monobuoy accommodates tankers up to 100,000 d.w.t. (part discharge) and 125,000 d.w.t. (complete discharge). Minimum length allowed 650 ft. Max. draft allowed 55 ft.

HEALTH: Customs, Port Health and Immigration will board vessels on arrival.

RADIO: Within 6 hours of clearing the loading port, each tanker shall provide the Agent with the following information:

- *(a)* Name of Ship.
- *(b)* Name of last port from which the vessel cleared and the loading port if different from above.
- *(c)* Estimated date and time of arrival at Dar-es-Salaam (Mjimwema).
- *(d)* Cargo loaded.
- *(e)* API gravity.
- *(f)* Arrival draft, fore and aft.
- *(g)* Lifting capacity of derricks.
- *(h)* Size of manifolds.
- *(i)* Personnel requirements.

72 hours from the pilot station, a second cable should be sent to Agent with following information:

- *(a)* Name of ship.
- *(b)* Amended time of arrival.
- *(c)* Names of crew leaving the vessel (if any).
- *(d)* Requirements of doctor and dentist.
- *(e)* Any other requirements.

A final cable should be sent about 36 hours from the pilot station giving finally amended ETA.

When within 20 miles of Dar-es-Salaam Signal Station vessel should call the Signal Station on either Channel 12 or 16. A continuous watch is kept on both Channels. Call sign is Dar-es-Salaam Signal Station.

VHF Channels 16 calling, 12 berthing. VHF Channel whilst discharging to be decided.

Portable radios can be provided for vessels not having a VHF set and the Agent should be so informed in order to allow time to dispatch a portable radio on arrival. A vessel arriving without suitable means of communication and not having informed the Agent of the fact could incur delays which would be to ship's account.

The Mooring Master will be in direct control of all radio communications on the vessel while in the terminal area. Any unauthorised communications may result in the immediate cessation of all operations and removal from the berth.

READINESS: Notice of readiness will only be accepted by the Pilot/Mooring Master on behalf of the Harbour Authority, when the ship is berthed and connected.

Any vessel which is not, in the opinion of the berth controller, ready in all aspects to discharge, may be rejected until corrections are made. The Harbour Master's decisions are final.

BERTH: The Monobuoy is a single point mooring buoy. The body of the buoy being secured in a fixed position with 6 moorings and the top of the buoy is in the form of a turntable allowing the ship, moorings and hoses to take up the position the vessel lies naturally due to tide, wind and current conditions.

MOORING: The following equipment is required to moor with safety: Two 10 in. nylon circumference ropes, 100 ft. in length. 4 end joining shackles.

The vessel approaches the Monobuoy head to wind and tide or the resultant of these forces, and should have 2 mooring ropes lowered to the water, each having a 15 ft. lashing of 3 in. rope on it.

As the vessel nears the mooring, a launch will take the port rope from the ship and connect it to the port pick-up rope and return to the ship to take the starboard rope and repeat the operation on that side.

The vessel should heave on the ropes as soon as they are inboard and heave herself to the buoy until the chain is on the fairlead. The ship wire should then be shackled to the chain and turned up on bits. This applies to both sets of moorings.

HOSES: Raising and lowering of, connecting and disconnecting of hoses as well as other shipboard duties will be performed by the ship's crew under the advice of the Mooring Master. The ship should be capable of lifting 10 tons on her derrick, with a minimum of 7.5 tons.

When the vessel is securely moored, the launch will bring the hoses alongside on the port side. The vessel will lower the cargo hook to the boatman who will hook it on to the lifting ring on the forward hose. The hose will then be lifted to full height on the boom and secured on the "Hang off Chains" supplied. The hose is then lowered to the deck and the operation repeated with the after hose.

After completion of discharge the hoses will be filled with sea water by the ship. The hoses can then be disconnected from the manifold and lifted over the side of the ship and hung there on the slip ropes to be slipped off simultaneously with the moorings. This last operation will be carried out on the advice of the Mooring Master.

UNMOORING: On sailing, hoses will already have been disconnected and ready to be slipped at the direction of the Mooring Master.

The weight will be taken on the 2 approach ropes by heaving slowly with the winch. The shackles will then be released and the ropes slacked away until they are finally paid out through the fairlead and dropped into the sea. The shore equipment should then be collected together under the derrick and returned to the boat.

BALLAST: Ballasting will be allowed during discharge but only with the express permission of the berthing controller, and in the case of ballasting in dirty tanks a dry certificate must be issued. Vessels will not be allowed to tank clean. There are no sludge tanks ashore.

FUEL: Agip Tanzania have a bunker barge but can only supply fuel oil.

FRESH WATER: Only very limited quantities of fresh water in the region of about 50 tons can be provided.

STORES: Stores are available in Dar-es-Salaam, but the Tanzania Harbours Authority cannot undertake to transport stores to the Monobuoy. Transport of stores to the buoy will be the responsibility of the Agent.

REPAIRS: During periods of calm and the fact that there is little current, it is foreseen that the problem of riding up on the buoy may occur. The vessel's engines shall therefore be available at all times and the telegraph shall be on stand-by while the vessel is in the berth. Engine repairs are not permitted. Should a vessel not be able to use her engines the cargo will be stopped and the vessel towed to a safe anchorage at the vessel's cost, until she can safely return to the berth.

SHORE LEAVE: Shore leave can be arranged through Agents. Should any of the crew require to be landed for medical or relief reasons, the Agent will be reponsible for providing transport to the Inner Harbour. Tanzania Harbours Authority craft will on no account be available to ferry crew members to and from the passenger pontoon. The Monobuoy lies 4.5 miles from the passenger landing pontoon, which is situated in the Inner Harbour.

POLLUTION: It is the Master's responsibility to see that no oil of any kind is pumped or spilled overboard from his vessel. This includes oily water from bilges, crude residues from the previous voyages or any other matter that may result in the pollution of the area. Owners and Masters should comply with any international regulations and recommendations concerning the prevention of pollution of the sea.

Serious consequences will arise if the above rule is broken. All costs and expenses involved will be for the account of the vessel concerned and the Master may be prosecuted under the Tanzania Merchant Shipping Act.

REGULATIONS: While in the berth the vessel should provide a pilot ladder on the opposite side of the vessel to the gangway, secured at the rail and ready for use.

No boats of any kind shall be lowered without permission from the Customs, Immigration and Harbour Master, except in an emergency.

Tanzania Harbours Authority maintains vessels to assist in berthing. These vessels are under the direct supervision of the Mooring Master/Pilot. Any service or faciility provided by the Tanzania Harbours Authority, including the services of the Mooring Master/Pilot and boats are the vessel's risk. The furnishing of Mooring Master/Pilot and launches or other services and facilities shall not be construed to be or give rise to a personal contract.

AUTHORITY: Tanzania Harbours Authority, P.O.Box 1130, Dar-es-Salaam, Tanzania. *Tel:* 25839. *Telex:* 41346 Portreeve. *Cables:* Bandari Daressalaam. *Contact:* General Manager/Harbour Master.

MKOANI (Kohani): 05.21 S. 39.38 E.

DOCUMENTS, HEALTH: Refer to "Zanzibar".

PILOTAGE: Pilot available on request from Zanzibar.

RESTRICTIONS: Vessels passing through channel between Zanzibar and Pemba should inform Port Authorities 24 hours in advance.

Entrance through Mkoani leading marks, buoyed and well-lit channel, depth of 11 fathoms. Vessels may enter and sail any time night and day.

ANCHORAGES: No mooring buoys. Minimum depth 6 fathoms. Vessels work cargo to lighters. Sandy bottom with mud close inshore.

MAX. SIZE: Length 250 ft.

TUGS: 2 tugs available.

FRESH WATER: Not available.

FUEL: Not available.

STORING: Very limited facilities and it is recommended that where necessary all storing be done in Zanzibar.

AUTHORITY: Ministry of Ports and Shipping, Port and Marine Department, P.O.Box 263, Zanzibar. *Tel:* 30301, 30300. *Telex:* 57267 Shipcorp. *Contact:* Harbour Master.

MTWARA: 10.16 S. 40.12 E.

DOCUMENTS, HEALTH: Refer to "Dar-es-Salaam".

PILOTAGE: Compulsory. Pilot based at Dar-es-Salaam and flies to Mtwara when required. Flights once daily except Wednesdays. Early information concerning ETA to Harbour Master, Dar-es-Salaam. (Southbound vessels requested to divert to Dar-es-Salaam to embark Pilot).

Pilot boards 0.5 mile North of Shangani Reef Buoy from tug or available craft.

Signal Station can be contacted on VHF, Channels 12 and 16, between 0800 hrs. and 1800 hrs.

APPROACHES: The entrance is approached by a channel marked by buoys and leading beacons. At its narrowest point abreast of Msemo spit the channel is 1.5 cables wide. In spite of the sharp turn in this vicinity, vessels of up to 175.26 m. in length can enter the harbour at all stages of the tide. Once around the Msemo spit there is a very good natural harbour with room for two 500 ft. vessels and 1 coaster alongside. There are 6 marked anchorages to accommodate vessels of up to 9.5 m. draft.

ANCHORAGES: No safe anchorage outside port.

RESTRICTIONS: Port closed from 1800 hrs. to 0600 hrs. No tidal restrictions.

MAX. SIZE: Length 575 ft., draft 32 ft.

RADIO: Dar-es-Salaam or Mombasa Radio.

TUGS: Join vessel off Signal Station (No tug available mid-1984).

BERTHING: Deep-water Quay: 1,248 ft. length; 9.75 m. depth alongside at low water. 2 berths available at quay.

Sheds and Stacking Yards:

The port has 4 sheds for reception and storage of cargo with a total area of about 431.56 sq.m.

Transit shed No. 1 floor area is 3,121.4 sq.m.

Transit shed No. 2 floor area is 3,121 sq.m.

Transit shed No. 3 floor area is 1,189.12 sq.m. and at the B.P. shed the floor area of stacking yard is 929 sq.m.

Cargo Handling Appliances:

2 Jones mobile cranes.
11 Fork lift trucks.
3 Tractor trailers.
3 Tractors.
5 Coles cranes.

Marine Craft:

The port owns 3 floating craft. These include 1 berthing tug "Kongoni" (not on station) and 2 labour launches.

CARGO GEAR: Vessels load/discharge using ship's gear.

STEVEDORES: Stowage plan required preferably before ship's arrival. Small coasters use the port's mobile cranes.

MEDICAL: Doctor available. All crew require valid smallpox vaccination, cholera and yellow fever inoculation certificates.

DENSITY: 1025.

FRESH WATER: Not normally available.

FUEL: Not available.

GANGWAY/DECK WATCHMEN: Arranged by Agents.

IDENTIFICATION CARDS: Required.

REPATRIATION: Possible.

AIRPORT: 7 miles distant. Daily service to international airport.

TIME: GMT plus 3 hours.

HOLIDAYS: All holidays worked as Sunday except following days when no work done: Christmas Day and 1st May.

TELEPHONES: Direct connection on board not possible.

SHORE LEAVE: Crew allowed ashore.

SHIPMASTER'S REPORT: December 1981 (Updated 1984).

Vessel called at Mtwara on 1st December, 1981. The following facts were obtained from Port Manager and Pilot:

Documents/Health: Refer to Dar-es-Salaam.

Pilotage: Pilot is based at Dar-es-Salaam and flies to Mtwara when required. Early information concerning ETA to "Harbour Master – Dar-es-Salaam". He will then charter a small aircraft for Pilot. Pilot stays on board vessel until departure. Pilot boards 0.5 miles N.W. of Shangani Reef buoy from tug. Pilot ladder to be 6 ft. above water. Pilotage during daylight hours only. Signal station can be contacted on Channel 12 between 0600 hrs. and 1800 hrs. Channel 16 also available if required.

Approaches: Cape Delgado lighthouse unlit. The entrance is approached by a channel marked by buoys and leading beacons, all unlit. Buoys only weighted and liable to drift. There are six unmarked anchorages to accommodate vessels of up to 9.5 m. All buoys and leads unlit.

Radio: "Mombasa Radio".

Tugs: Available from Dar es Salaam.

Cargo Gear: Ship's cranes or derricks used. Shore facilities (not used for discharging) consist of: 12 Hyster fork lift trucks (max. 3 tons); 2 tractors and 10 trailers SWL 15 tons; 2 Jones mobile cranes × 15 tons each and 5 Coles mobile cranes × 7 tons each.

Stevedores: Stowage Plan required, preferably before ship's arrival.

Medical: Doctor available. Medicine and/or injections in short supply and may not be available. All crew require valid Yellow Fever Certificates and anti-Malaria tablets should be taken on arrival.

Density: 1025.

Fresh Water: Sometimes available from quay in small quantities. No water barge.

Provisions: Fresh fruit and vegetables available in market.

Fuel: Not available.

Repairs: No facilities.

Gangway/Deck Watchmen: Arranged by Agent.

Agent: Only one Agent – National Shipping Agencies. Cable address: "Navigation Mtwara".

Identification Passes: Made out by Immigration Officials on board. Collected by Agent prior to departure.

Repatriation: Daily internal flights to Dar es Salaam.

Airport: 7 miles distant by road.

Time: GMT plus 3 hours (permanent).

Holidays: All holidays normally worked except Christmas Day and 1st May when no work possible.

Working Hours: Seven days weekly 0700–1500; 1500–2200 with requested extension from 2200–0100 if to finish vessel (except Heavy Lifts).

Telephones: Direct connection on board not possible.

Telex: One machine in Post Office for general use. Otherwise Agent telephones Dar-es-Salaam Agent who forwards telexes.

Shore Leave: Crew allowed ashore.

Mail: Very slow.

Main Exports: Cashew nuts, sisal, timber. Casava in bags (not palletised) or bulk (bags slit).

Fenders: Tyre fenders alongside cemented quay. Additional fenders by ship recommended.

Cargo Security: Though adequate guards, security of cargo on quay is a problem as frequent blackouts due to power failures.

Aero (RC): Strong signal operational 0800–1530 LMT.

Restrictions: Cameras must not be used. Taking of any photographs whatever is strictly prohibited.

Customs Allowances: Officers: 8 cans beer, 1 part bottle spirits. Ratings: 8 cans beer.

Heavy Lifts: Not worked after 1800 hrs. due to darkness.

Notes: (a) All navigation lights in Tanzania (except Zanzibar Island and Pemba Island) are unreliable.

(b) If next port is Dar-es-Salaam, Pilot will remain on board and take vessel into Dar-es-Salaam.

SHIPMASTER'S REPORT: December 1983.

Documents/Customs Regulations:

Crew Declaration Form (Form C.8)
Declaration and Advice of Consumable Stores (Form C.7)
Passenger List or Nil List (Form C.6)
Parcels List or Nil List (Form C.3)

One copy of each of the above being required and 1 copy of the Manifest. (Company Manifest not acceptable, Form supplied locally.)

Dutiable goods allowance:

Each member of the crew including the Master is allowed 1 ounce of tobacco or 25 cigarettes per day. The Master and officers are also allowed ¼ pint of potable spirits and 1 quart of wine or beer. The other members of crew are allowed either 1/24 gallon of spirits or ⅙ gallon of beer or ⅙ gallon of wines. Dutiable stores are issued to a limit of 8 days (cigarettes) and 4 days (beer and spirits).

Quarantine Regulations:

1 copy of Maritime Declaration of Health.
1 Crew List with valid dates for Smallpox, Cholera and Yellow Fever.
Pratique not granted by radio.

Pilotage: Compulsory. Pilot is available between 0600 – 1800 hrs. and boards in an approximate position 1 to 2 miles North of Shangani Shoal.

Pilot boat (VHF Channels 12 and 16) – Pilots have hand set.

Anchorages: No recommended sea anchorage. If arriving off Mikindani Bay at night, it is prudent to cruise WELL OFF until daylight, currents are strong and set onshore.

A sheltered anchorage exists in the inner bay with reported good holding ground in about 12 fathoms.

Approaches to Berth(s): From the pilot station passing S.W. of Shoal Buoy into channel marked by an unlit buoy. The sharp bend around Msemo Spit requires very careful navigation and steering.

Radio: Standard instructions/communications.

VHF: Channels 12 and 16 available between 0800 – 1200 hrs. and 1400 – 1600 hrs. local time Mtwara Signal Station.

Tugs: Possibly available (on prior notice) from Dar es Salaam.

"Kongoni", a diesel tug of 1,100 h.p., equipped with fire pumps (water only) and VHF Channels 12 and 16. Stationed at Dar es Salaam.

Description of Berth(s): Berth No. 3 situated on the main wharf which is of stone construction with rubber tyre fendering. Owned by Tanzania Harbours Authority.

Berthing: Night berthing/unberthing is not permitted.

Vessels normally berth starboard side to, 1 tug meets vessel off the signal station.

Mooring wires are permitted: shore gangway is available.

Density: 1025.

Tankers: Shore Lines: 10 in. Connections: 8 in. flexible hose. Approximately 65 m. from Eastern end of quay. Grades: M.S., G.O., and K. Maximum Pressure: 75 p.s.i.

Ships' lifting gear required for 1.5 ton lift.

Fuel: Bunkers not available.

Fresh Water: Fresh water is always in short supply and during the dry seasons is unobtainable. It is reported to be of poor quality and should not be used for domestic purposes, unless boiled and filtered (See "Laundry and Stores").

Ballast: No ballast disposal or tank cleaning facilities available.

Port Regulations: Immobilisation of engines not permitted alongside.

Laundry and Stores Facilities: Reports indicate that fresh water and/or provisions obtained at Mtwara are of very poor quality and may have been the source of a severe infection which affected several ships' crews. Masters are, therefore, warned accordingly.

Repair Facilities: None available.

Crew Identification Cards: Crew require identity cards when proceeding ashore.

Medical: Medical facilities with government hospital available.

Precautions: Be careful of stowaways.

AUTHORITY: Tanzania Harbours Authority, P.O.Box 530, Mtwara. *Tel:* 2155, 2121. *Cables:* Navigation. *Contact:* Pilot and Port Manager.

TANGA: 05.04 S. 39.08 E.

PORT LIMITS: From high water mark at Ras Kwawa 090° to the meridian of 39° 15′ E., thence 180° to the parallel of Lat. 5° 05′ S., thence 270° to the mainland at high water mark. Time of anchorage within port limits to constitute an "arrived vessel".

DOCUMENTS, HEALTH: Refer to Dar-es-Salaam.

Shipmaster's Report: March 1981.

Same as Dar-es-Salaam "Shipmaster's Report" except: 7 Passenger Lists, 2 sets Vaccination Lists, Heavy Lift List.

PILOTAGE: ETA required via Mombasa Radio, if not given by Agents at previous port of call. Pilot embarks from white launch in vicinity of Ulenge Beacon on Ras Kazone leading line. Pilot ladder required on port side in N.E. monsoon, and on starboard side in S.W monsoon.

Vessels wishing to enter must await the arrival of the Pilot at the outer anchorage and, if anchored, must anchor well clear of the leading lines.

APPROACHES: Tanga is approached from the S.E. through channel in line with Ulenge leading marks bearing 319° (T). A 3 fathom bank to starboard is marked by ship channel buoy. Care should be taken in this vicinity as there is frequently a strong set to the N.E. On the port hand, Niule Reef is marked on Northern tip by a buoy. After passing Niule Reef Beacon it is necessary to turn to port on to Ras Kazone leading marks bearing 266° (T) until Ulenge Beacon is sighted.

A signal station is situated immediately below Ras Kazone High Light. Signals are exhibited to indicate if inner channel to harbour is clear. Morse lamp messages may be exchanged with incoming vessels.

Late afternoon arrivals to Tanga may encounter poor visibility of land marks due to haze from setting sun, but a chimney on the fertiliser factory site on Ras Kazone with 3 vertical red lights at a height of 100 m. is conspicuous.

ANCHORAGES: Tanga has no deep water berths. It is a lighterage port where ships are worked at anchor in the stream. Eleven safe anchorages have been marked by means of beacons. The inner harbour provides 7 anchorages for use by deep sea vessels with length of up to 213 m., and drafts of between 6.4 m. and 9.5 m.

The outer harbour has 3 anchorages with drafts well over 9.45 m.

Incoming vessels without Pilot should not anchor within 1 mile of Ras Kazone.

RADIO: Mombasa Radio. Ras Kazone Signal Station keeps 24 hour VHF watch on Channel 16, working on Channel 12.

TUGS: 2 small tugs available.

BERTHING: All except bulk cargo work is carried out at anchor. Vessels are not berthed in Inner Harbour during hours of darkness except by special request in cases of urgency.

Fertiliser Jetty: A Fertiliser Jetty with a single berth of 16 m. maximum draft is available in the harbour. The jetty has 2 cranes connected to a sophisticated hopper system for handling materials for the fertiliser factory only.

Also see "Cargo Handling Facilities".

Quays: The new Lighter Wharf, 240 m. long, is situated at the Eastern end of the port. It has a depth of 2.44 m. at low tide. The old wharf now under modernisation has a length of 140 m., and has similar depth of 2.44 m. at low tide.

Facilities for harbour dhows and schooners engaged in coastal wise cargo transportation are provided at the end of the old wharf where only 1 schooner or dhow can work at a time. The water alongside has a depth of 2.44 m. at low tide.

CARGO HANDLING FACILITIES: One 20 ton fixed crane is available on lighterage wharf for heavy lifts. 12 cranes of 5 tons capacity also available. A jetty on the Eastern side of Ras Kazone provides 1 berth for vessels of 20,000 d.w.t. equipped for the discharge of bulk cargoes and liquid ammonia. Two portal cranes of 7 tons capacity fitted with grabs. Jetty currently handling bulk products for fertiliser factory.

The port is able to handle 20 ft. containers.

The port has 33 fork lifts, 3 tractor, 1 shunter and 2 Coles cranes, 1 tug, 3×16 ton Scamel trailers, 6×8 ton Scamel trailers, 4 Hyster cranes and 4 Scamel hoses. The above equipment is maintained by the Authority's mechanical and electrical workshops at the port.

Sheds and Stacking Yard: There are 8 sheds for reception and storage of cargo.

The main stacking yard which is rail and road served covers a total area of 6,969 sq.m. There is also a new yard which covers an area of about 861 sq.m. Sheds Nos. 1, 2, 3, 4 and 8 are mainly for handling exports while Sheds Nos. 6 and 7 are for imports. Total floor space of the sheds is 22,020.79 sq.m.

Marine Craft: The transfer of cargo from vessels working at anchor to the wharves and vice-versa is done by means of lighters. There are 15 lighters in use. In addition there are 4 lighter towing tugs, 3 runboats, 4 labour launches and 2 landing pontoons.

PASSENGER FACILITIES: All passengers and visitors to ships pass through the Customs Passenger Terminal at the Eastern end of the new lighter wharf, and embark or disembark from the pontoon landing stage. Private hire launches available.

FRESH WATER: Not available.

FUEL: Not available.

GENERAL: Refer to "Dar-es-Salaam" for all general information.

AUTHORITY: Tanzania Harbours Authority, P.O.Box 443, Tanga. *Tel:* Tanga 2721. *Telex:* 45000 Harbor TZ. *Contact:* Harbour Master.

WETE (Pemba): 05.14 S. 39.43 E.

DOCUMENTS, HEALTH: Refer to Zanzibar.

PILOTAGE: Not compulsory, but restricted to daylight only. Vessels passing through channel between Zanzibar and Pemba should inform Port Authorities 24 hours in advance.

RESTRICTIONS: Entrance through Uvinje Cap, channel depth decreasing to 11 fathoms, with shallow patches to be avoided. Narrowest part of channel is 1.5 cables wide. Vessels may enter and leave at any state of tide but in daylight only.

ANCHORAGES: No mooring buoys. Vessels work cargo to lighters. Depth decreases to 2.5 fathoms. Mud bottom.

MAX. SIZE: 240 ft. length; 25 ft. draft.

TUGS: 2 tugs and 1 labour boat.

LIGHTERS: 3 lighters of 200 tons each.
6 lighters of 100 tons each.

FRESH WATER: Not available.

FUEL: Not available.

STORING: Very limited facilities and it is recommended that where necessary all storing be done in Zanzibar.

AUTHORITY: See "Zanzibar".

ZANZIBAR: 06.09 S. 39.11 E.

DOCUMENTS:

Bill of Health.
3 Crew Lists.
6 Passenger Lists.
3 Cargo Manifests.
3 Customs Manifests.

Also Required: Bills of Lading, Ship's Papers, Ship's Certificates, Health Certificates (Yellow Fever and Cholera).

PILOTAGE: Compulsory. Pilot requires ETA 24 hours before arrival. Contact can be made through pilot station (VHF Channel 16 – 24 hours a day). Pilot boat may be contacted on VHF when in operation – pilot boat is painted orange.

Vessels approaching from English Pass embark Pilot at Seagull Buoy, and vessels approaching from South Pass meet Pilot at Penford Buoys. Pilot takes vessel in an out, day and night. Vessels awaiting Pilot anchor at the boarding position.

Recommended time for entry and departure is between 0600 hrs. and 1800 hrs.

ANCHORAGES: 6 anchorages to accommodate vessels drawing up to 32 ft. Additional anchorage provided for vessels carrying explosives.

RESTRICTIONS: 2 entrances, English Pass and South Pass. The former is approximately 1 mile wide and has minimum depth of 6 fathoms 4 ft. and a very narrow angular turning corner of 1.7 cables width. South Pass wider and deeper than English Pass. Passes are well buoyed and lit. In English Pass, tidal stream runs North and is stronger on ebb than on rising tide. South Pass, tidal stream runs N.N.W. and stronger on flood than on ebb-tide. Vessel may enter or leave at any state of tide.

MAX. SIZE: (Anchorage) Length 1,100 ft., beam 110 ft., draft 32 ft.

HEALTH: Pratique given by Quarantine Officer who boards on arrival. All crew required to be in possession of valid smallpox vaccination, yellow fever and cholera inoculation certificates.

RADIO: No official call sign for the control station, but there is a new radio installation at the Agency on VHF Channel 16 with a call sign ZANSAC (Zanzibar National Shipping and Agency Corporation).

There is also a long-range radio on frequency 8297.3 kHz.

RADAR: No installation.

TUGS: No tugs are required as all vessels work in stream. Tugs are only used for towing barges to and from vessels, transporting labour and other stevedoring activities.

BERTHING: Concrete pile wharf 800 ft. long to North of Ras Shangani used mainly for lighterage purposes and for berthing Government coasters. Under special circumstances, upon prior request to Port Officer, vessels of less than 375 ft. length and drawing less than 20 ft. may be permitted to berth alongside, but due prevailing onshore winds this practice not encouraged.

CRANES: Four old cranes (1926) and 1 mobile crane of 7 tons at the Wharf. No heavy lift cranes, however if heavy lift crane required arrangements are easily made to put the load in a landing craft to be discharged at a point near the port, using lowloader to tow it to its destination. No objection to vessel using its own gear.

BULK CARGO FACILITIES: No berth for foreign vessels, all work carried out in stream.

Discharging Rate: 350 – 400 tons per gang per day in case of bagged stuff or pallets. No facilities for bulk cargo handling or containers, but one or two containers can be handled.

STEVEDORES: Normal working hours Monday to Thursday, 0700 to 1500 hrs. Friday 0700 to 1200 hrs.

Work can be extended on overtime for a second shift up till 2300 hrs.

Average rates: bagged cargoes 15 tons per gang hour, general cargo 8 tons per gang hour.

LIGHTERS:

2 lighters, open at the top for heavy equipment 280 tons each.
2 lighters for bag and general cargo, each with a capacity of 300 tons.
5 lighters for bag and general cargo, each with a capacity of 200 tons.
5 lighters for bag and general cargo, each with a capacity of 150 tons.
6 lighters for bag and general cargo, each with a capacity of 100 tons.

FRESH WATER: There is one water barge of 250 tons capacity. Water can be supplied at the wharf by hydrant or at the anchorage in the stream by water barge.

FUEL: Not available.

SURVEYORS: Department of Marine Transport, P.O.Box 263. Tel: 2857. Telex: 57267 Astaship. (This is the Agency telex by which Port Authorities can easily be contacted).

STORING: See "Prelims", page viii.

1. Storage done by barges.
2. There is no restriction in doing so, provided the Master can allow both operations to be done simultaneously.
3. Yes.
4. Yes.
5. Stores have to be checked by the Customs Authority.

GENERAL: Members of the crew who wish to fish around the harbour limits have to notify the Signal Station and the harbour police of direction they are going. If the crew wish to visit the offshore island, they have to contact the Agent who will obtain permission for them and advice.

AUTHORITY: Department of Marine Transport, P.O.Box 263, Zanzibar, Tanzania. *Tel:* 32857. *Telex:* 57267 Astaship (stating "for Port and Marine Dept."). *Cables:* Shipping. *Contact:* Captain Ramadham Saleh, Port Captain. Major H. Kh. U. Mlinde, Director, Department of Marine Transport.

NOTES

Please also advise Shipping Guides Ltd.

Thailand

GENERAL:

IMMIGRATION: The Thai Immigration Department has issued a Notification, dated March 15th, 1976 to the following effect:

"Chinese or Hong Kong crew members not in possession of Seamen's Discharge Books, but holding Certificates of Identity only are not recognised as bona fide crew members, and are liable to Immigration Guarantees at 50,000 Baht per person, to be filed upon arrival."

All concerned are kindly requested to check and ensure that all Chinese crew members are in possession of either Passports or valid Seamen's Discharge Books, and not Certificates of Identity, to avoid complicated Immigration procedures involving deposits, etc.

REGULATIONS: Thai Government Regulations: Thai laws relating to the production, possession, distribution and use of narcotic drugs are extremely severe. Penalties for infringement range from prison sentences and fines to life imprisonment and even execution.

The Thai Navigation Act requires Masters of all vessels calling at Thai ports to observe the following:

On preparing to depart Thai waters, vessels shall fly the International Code flag indicating that the vessel is about to proceed to sea (code flag P).

If the vessel is to depart in the morning this flag is to be flown in the afternoon of the previous day, if departure is in the afternoon code flag P is to be flown in the morning.

Departure shall be notified to the Harbour Master at least 6 hours before expected time of departure.

Documents required by Port Authorities (other than those required for specific ports) include:

Ship's Licence and Safety Equipment Certificate.
Certificate of Registration.
Certificates of Competency (including Radio Officers).
Radio Certificate.
Ship's Articles.
Last Port of Call Clearance.
Log Book.
Load Line Certificate.
Derat or Exemption Certificate.

BANGKOK: 13.42 N. 100.34 E. (See Plan Book)
KOHSICHANG: 13.10 N. 100.50 E.

PORT LIMITS: A vessel is normally considered to be an "arrived ship" on passing the Paknam Customs Station.

DOCUMENTS: Ship's forms: Crew List; Passenger List; Store List; List of Arms and Ammunition for ship's use; List of Arms and Ammunition in possession of passengers; List of opium and harmful habit-forming drugs; List of crew private belongings (cigarettes, radio, gramophone, camera, etc., including foreign currencies and liquors); Dangerous Cargo List; List of heavy lifts; Stowage plan; Inward cargo manifest; Transit cargo manifest; Through Cargo manifest; List of containers.

Documents to obtain from officials and Agents: Immigration forms No. 3, 4 and 35, obtainable from Agents. International Maritime Declaration, obtainable from Quarantine Officer.

For safety reasons, all dangerous goods such as calcium hypochlorite, butanox (methyl ethyl ketone peroxide), sodium hydrosulphide, nitrocellulose and potassium chlorate, are not allowed to be kept in a godown or dangerous goods warehouse. Such dangerous goods have to be discharged overside into a barge or cargo boat or truck.

APPROACHES: The entrance of the river Chao Phraya is marked by the Bangkok Bar light beacon situated at the Lat. 13° 26′ 24.3″ N., Long. 100° 35′ 48.1″ E. Sea-going vessels have to cross the bar at the mouth of the river through an 18 km. long bar channel, which is dredged to a depth of 8.5 m. from MSL (mean sea level), and a bottom width of 100 m. in the straight section and 250 m. in the curve.

The depth of the river within the port area varies from 8.5 m. to 11 m. from MSL.

The MSL at the Bangkok Bar and at Klongtoi is 2.3 m. and 1.63 m. above lowest low water respectively.

At present the limiting length of vessels entering the port is 172.2 m. (565 ft.). The limiting draft of vessels will be determined by the bar adder plus the depth of water (predicted in the Tide Table published yearly by the Hydrographic Department RTN) from LLW at the Bangkok Bar, but the max. draft of vessels allowed to cross the bar is not over 27 ft.

PILOTAGE: Compulsory at Bangkok; Kohsichang not required; Advance notice required 48 hours prior to arrival.

Location pilot station Bangkok: Lat. 13° 22.8′ N., Long. 100° 35.9′ E. Area waiting pick-up Pilot will be close to pilot station.

Also see "Shipmaster's Report" dated March 1984.

ANCHORAGES: See "Shipmaster's Report" dated March 1984.

RESTRICTIONS: *Bangkok:* No restrictions, able enter day and night, dependent tide at Bar Channel.

Kohsichang: No restrictions, able to enter day and night.

MAX. SIZE: Bangkok: Not exceeding 565 ft. LOA. Max. draft 27 ft.

Kohsichang: See "Berthing".

HEALTH: *Radio Pratique:* According to the Thai Ministry of Health's Regulations and International Health's Regulations Article 36:

Under the responsibility of ship's Master and shipping Agents, vessels from infected areas may apply for exemption of Quarantine through Radio Pratique by telegram sent to Quarantine Bangkok, stating name of ship, last port, number of passengers and health of crew and passengers.

(a) Vessels with passengers from infected areas proceeding to the berthing places in Bangkok must slow down at Paknam enabling Port Health Officer to board the ship for inspection.

(b) Vessels without passengers from infected areas go directly to berthing places in Bangkok where they will receive Port Health Officer for inspection.

Remarks: In case of suspected infectious disease on board any ship or anything suspect about health or ship sanitation, the ship's Master is requested, as early as possible, to inform the Port Health Officer at International Quarantine Office (Medical) Section, Immigration Division, North Sathorn Road, Bangkok, Tel. 39588.

Documents Required: 1 copy of Maritime Declaration of Health; 1 copy of Crew List; 1 copy of Passenger List; Derat or Derat Exemption Certificate.

Vaccination: Vaccination Certificates required: Cholera (only when leaving from infected areas); Yellow fever (only when leaving from infected areas).

However, vaccination may be done as deemed necessary by Port Health Officer even if the crew or passengers are from non-infected areas.

Vaccination certificates will be shown collectively for transit passengers/crew members and individually for disembarking passengers/crew members only.

Exemption from Vaccination: If the Port Health Officer is of the opinion that vaccination is contra-indicated on medical grounds, he shall provide the persons with reasons, written in English, underlying that opinion, which Health Authorities should take into account.

Death on Board: In the case of death on board after the ship arrived at the anchorage or at the port, permission to land the corpse must be obtained after the inspection of the Port Health Officer, if the cause of death was not quarantinable diseases.

Ship's Master or shipping Agent must inform the Port Health Officer if there are cadavers and/or remains on board of persons who died in a foreign port, in order to pass through the quarantine. The dead should be accompanied by a death certificate (or a true copy), signed by the medical officer and placed in a coffin hermetically sealed in a casket, which is air-tight and waterproof.

According to Immigration Law B.E. 2493 (1950): The traveller to Thailand must be free from diseases forbidden under section 14 (4) of the Immigration law such as: trachoma, leprosy, tuberculosis, venereal diseases, including persons having physical or mental defects who cannot earn their living.

RADIO:

Name of Station	*Frequencies*	*Remarks*
Bangkok Radio:		
HSA Long Wave	500 kHz (for calling) 512 kHz (for traffic)	operate 24 hours
HSA Short Wave	8686 kHz (for calling) 8573, 8686, 12800 kHz (for traffic)	operate 7 times a day every day beginning hours of 0000, 0200, 0500, 0800, 1100, 1400 and 1600 (GMT).

In addition to above, communication can be made through the Port Radio and Pilot Radio; these 2 stations can only be reached when less than 24 hours from Bangkok, their particulars as follows:

HSC 61 L.W. 500 kHz (for calling)
443 kHz (for traffic)
operate 2300 – 1700 hrs. GMT
Traffic Lists broadcast at 0450 hrs. GMT, and the beginning of every hour every day.
HSC 62 S.W. 8466 kHz.
Operate 5 times a day every day beginning hours of 0000, 0300, 0600, 0900 and 1300 hrs. GMT.
8292.5 (S.S.B./R.T.) also available.

Information to be supplied by incoming Vessel:

(1) Last port of departure.
(2) Estimated time of arrival pilot station.
(3) Draft (fresh water).
(4) General cargo tonnage for discharge.
(5) Dangerous cargo.
(6) Heavy lift required.
(7) Fresh water required.
(8) Number of passengers (landing and transit).
(9) Time of dropping anchor at pilot vessels.

VHF: VHF communication with port radio and pilot radio through Channel 16 (Calling – 24 hours service), Channel 14 (Working) and 157.5 (Interport – Special Channel). Also VHF communication with shore for International Maritime Mobile Service under following:

Channel 24
For ship transmitting frequencies 157.20 } (for calling)
For shore ,, ,, 161.80
Channel 26
For ship transmitting frequencies 157.30 } (for traffic) service 24 hours
For shore ,, ,, 161.90
Channel 28
For ship transmitting frequencies 157.40 } (for traffic)
For shore ,, ,, 162.00

TUGS: Will join when vessel approaches berth, using tug's line without extra charge. 8 tugs available, 1,000 h.p. – 1,200 h.p.

BERTHING: No difficulties in approaching berth. Agents will cable Master to inform when Pilot has been ordered to board vessel.

Midstream: 21 anchorage places and mooring buoys for sea-going vessels.

2 berths in front of Co-operative Salt wharf for 500 ft. vessels.
4 berths in front of Customs boarding station for 300 ft. vessels.
2 berths at Bangplakod for 565 ft. vessels.
1 berth at Bangplakod for 500 ft. vessels.
5 berths South Sathupradit (6 mooring buoys) for 450 ft. vessels.
3 berths North Sathupradit for 400 ft. vessels.
4 berths North of Krungthep bridge for 280 ft. vessels.

Berths: 87 wharves on both sides of the river for sea-going vessels:

16 berths for imported general cargo (km. 27 to km. 29) on the left bank of the river at Klongtoi operated by the Port Authority of Thailand for 565 ft. vessels.

1 berth for imported general cargo (km. 39.5) on the right bank of the river operated by Thai Maritime Company for 400 ft. and 280 ft. vessels.

2 berths for imported general cargo (km. 46) on the right bank of the river operated by Thai Maritime Company for 250 ft. vessels.

14 berths for imported petroleum products operated by private and government organisations for 150 ft., 350 ft. and 565 ft. vessels.

54 berths for export cargo operated by private companies for 280 ft. to 565 ft. vessels.

36 dolphins in front of Klongtoi wharf. A row of 36 dolphins along the river at a distance of 275 m. from the Klongtoi wharf, to accommodate 7 ocean-going freighters for exported cargo.

Kohsichang: 7 berths available, no limit on length, max. draft 35 ft. – 47 ft.

Also see "Shipmaster's Report" dated September 1982.

CRANES: 2 floating cranes of 125 tons capacity may be used for handling cargo in the ship's holds. Both are owned and operated by private companies.

2 mobile cranes for heavy lifts and full containers. S.W.L. 165 tons. Owned by Port Authority.

BRIDGES: Bangkok port has one bridge only. However, as bridge up river, vessel permitted to pass bridge with LOA not exceeding 280 ft.

STEVEDORES: Vessel to advise Agents 48 hours prior arrival, text required in this cable to be ETA, Drafts, Tonnage of cargo aboard for Bangkok, Number of crew/passengers, Dangerous cargo/Heavy lifts, Gangs required.

MEDICAL: Hospital facilities available, advance notice of ETA required.

TANKERS: Diameter of shore line various from 6 in. to 20 in. All terminals are able to provide reducers. No slop facilities available.

DENSITY: Bangkok: Minimum 1000, maximum 1011; Kohsichang: 1021.

FRESH WATER: Available, supply can be made through barges and shoreline. Capacity of barges from 120 to 250 tons, rate of supply approx. 30 t.p.h. Advance notice 24 hours.

FUEL: Available. Supply can be made by barge and alongside terminals, no delay on bunkering, advance notice 48 hours.

GANGWAY/DECK WATCHMEN: Necessary.

OPENING/CLOSING HATCHES: In general carried out by stevedores without extra charge. (Ordinary hatch covers, not new hatch cover system.)

CUSTOMS ALLOWANCES: 200 cigarettes for officers, while crew member only 100 for 3 days. Wine/Spirit; 1 bottle each, opened.

CARGO GEAR: Supplied by stevedores except cargo tent and forklift truck.

IDENTIFICATION CARDS: Required for all crew and officers.

CONSULS:

Argentina	36911 – 3
Australia	35970 – 9
Austria	58327, 59071, 517208
Belgium	30840
Brazil	59070, 5 – 6030
Burma	30237, 31698
Canada	3 – 2956 – 7, 3 – 0746, 3 – 8215
China	5 – 8051 – 4, 51 – 3912
Denmark	26 – 3930
Egypt	53358
Finland	33617
France	3 – 0957 – 9, 3 – 0950, 3 – 4644
Germany	86 – 1041
Great Britain	53291, 517952
Greece	52 – 1686
India	3 – 5065
Indonesia	5 – 8045 – 7, 51 – 8915
Iran	86 – 0950, 86 – 1350
Iraq	229353
Ireland	39454
Israel	5 – 3371 – 2, 51 – 8915
Italy	3 – 4508, 3 – 7230, 3 – 7819
Japan	5 – 3301 – 9
Korea	86 – 1074 – 5
Kampuchea	57650, 57709, 55223
Laos	86 – 1041
Malaysia	86 – 1390 – 1
Monaco	31437
Nepal	917240
Netherlands	5 – 3360, 5 – 3368 – 9
New Zealand	3 – 5936 – 7
Norway	3 – 0271
Pakistan	5 – 7006 – 8
Panama	911289
Philippines	910008, 910211
Portugal	30372
Saudi Arabia	37941 – 2
Sri Lanka	8291168
Singapore	30509, 33117, 38735, 38741
Spain	56502, 58368, 55167
Switzerland	58002 – 4
Sweden	863907 – 8
Turkey	73999
USSR	31824
United States of America	59800, 59801 – 9, 53101, 55981, 517986, 516939, 519914, 58478, 522723
Vatican	31804
Vietnam	517201 – 3

REPAIRS: Only minor repairs.

DRY DOCKS: 1 for vessels up to 360 ft. LOA.

REPATRIATION: Possible; however, no facilities for crew changes.

AIRPORT: About 25 km. from Bangkok, regular services by airlines.

TIME: GMT plus 7 hours. No change during the year.

HOLIDAYS: Able work all around the year except December 31st and January 1st.

POLICE/AMBULANCE/FIRE: Police (Highway) 816240, 816241, 816250. (C.I.D.) 219111, 225151; Ambulance 811544; Fire 816666, 811544.

TELEPHONE: Available when alongside PAT berths.

SERVICES: No tank cleaning equipment. No facilities for discharge of tank washings. Compass adjusting, but spare parts unavailable. Radar/VHF/radio repairs. Lloyd's/ABS/Veritas/Nippon Kaiji Kentei Kyokai Surveyors available.

SHORE LEAVE: Permitted.

DELAYS: Occasionally congestion, delay 1 to 2 days.

DEVELOPMENTS: *East Quay wall expansion at Klongtoi Wharf:* This project provides 6 more berths for ocean-going vessels, consisting of 2 berths for conventional freighters, 4 berths for feeder container ships and a 450 m. long wharf for lighter aboard ship (LASH). The construction work is now completed.

Laem Chabang deep sea port: The location of this deep sea port is at Laem Chabang on the Eastern side of the Gulf of Thailand near the town of Sriracha and about 120 km. S.E. of Bangkok. At present, the government has approved the construction of a deep sea port at Laem Chabang, which is expected to be completed in 1987.

SHIPMASTER'S REPORT: September 1980.

During S.W. monsoon Pilots appear to always require pilot ladder on starboard side and for vessel to leave pilot station platform to starboard when entering. Custom Officials board at Paknam on way up river to check documents. For repatriations, Immigration require 2 clear working days. After 30 days in Thailand must apply for extension from Immigration at a cost of U.S. $15.00 per man. Vessel must fly 'Blue Peter' 12 hours before sailing from Bangkok or liable to a fine of U.S. $5,000. Require 2 copies of Immigration Form 4 (crew list) for departure.

Telephone calls can be made via Bangkok Radio on Channels 25, 26, 27, after calling on Channel 26.

SHIPMASTER'S REPORT: September 1982.

Loading of tapioca products in bulk quantities of 25,000 tons and more at Kohsichang:

There are three ways of loading:

1. Vessel anchors off the N.E. coast of the main island. A number of mobile cranes, 12 to 15, are placed on deck by means of a floating crane. The cargo is brought alongside in barges, shovelled by stevedore-labour in canvas slings and dumped into the cargo holds. An average of approximately 3,500 tons per day can be reached, however, delays are experienced by rain and by too much swell for some of the barges alongside.

Stevedore Labour: An average of 300 persons (men, women, children) are onboard during the whole of the cargo operation. The cooking is done on deck. The daily fresh water consumption will increase by 20 tons to 25 tons. Fresh water is available by barge from the mainland.

This way of loading involves most ships; 7 to 9 ships can be handled simultaneously.

2. At the same anchorage as No. 1 above, the vessel will have alongside two floating elevators. A daily average of 13,000 tons can be reached, also depending on rain/swell. Many less people are involved. One ship at a time can be loaded.

3. Loading alongside a silo based on the mainland. The daily average here will be about 14,000 tons, however at a draft of about 40 ft. – 42 ft. the vessel will have to shift to the anchorage to complete loading as under 1 or 2 above, most probably No. 1. The silo belongs to 2 shippers of cargo only.

Trimming of cargo is done mainly by means of bulldozers but trimming by hand/shovel is often required additionally.

Holding ground at anchorage is good. Ships swing round on a rather strong tide. Wind/rain squalls are experienced.

SHIPMASTER'S REPORT: March 1984.

Pilotage: There is no longer a pilot vessel at the Bar. Instead, a peculiarly shaped red-painted lighthouse type beacon has been erected. This beacon has accommodation for the Pilots, who board vessels using a small grey pilot boat. Position of beacon Lat. 13° 22.8′ N., Long. 100° 35.9′ E. (BA Chart 1046).

Anchorages: Bangkok Bar Anchorage: Any ship with draft able to enter Bangkok Harbour, can anchor at this anchorage to wait its turn to enter. Limits of this anchorage are shown on BA Chart No. 1046. Ships proceed close to the beacon mentioned under "Pilotage", to pick up the Pilot.

Kohsichang Anchorage: There are no longer any N.E. or S.W. monsoon anchorages. Throughout the year Kohsichang Harbour limits are from the Island, East to Long. 101° 51.5′ E. and between Lat. 13° 08.9′ N. and Lat. 13° 11.3′ N. (Thai Chart No. 114).

AUTHORITY: Port Authority of Thailand, Klongtoi, Bangkok 11, Thailand. *Tel:* 2861021. *Telex:* Pat TH82171. *Cables:* Pat Bangkok. *Contact:* Verasakdi Dhanaphatana, Deputy Director-General (Operations).

AGENT: Jardine, Matheson (Thailand) Ltd., Shipping Agency Division, 1032/1–5 Rama IV Road, GPO Box 40, Bangkok. Tel: 286–9951. Telex: 2672 Jarthai. Cables: Jarocean.

KANTANG: 07.25 N. 99.31 E.

SHIPMASTER'S REPORT: April 1982.

PORT LIMITS: Vessels anchored in the bay between Ko Talibing and Ko Liang Hnua are considered to be "arrived ships".

DOCUMENTS:

6 Crew Lists.
4 Passenger Lists.
2 Store Lists (including dangerous drugs, explosives, bonded items, ship wireless sets, TV, radio, etc.).
2 Personal Property Declaration.
2 Cargo Manifests.

PILOTAGE: Not compulsory.

Due to shallow waters and absence of chart it is recommended to take the services of the local Pilot, though he speaks only local language. Pilotage distance is about 15 miles up the river.

Pilot boards at the anchorage and takes the vessel up to Kantang. Berthing is also done by him, but it is recommended that the Master does this himself.

ENTRANCE: No large scale chart is available. The only chart available is B.A. Chart No. 3942.

Keep well clear of Light Ko Liang and after passing Ko Liang Hnua on the starboard side keep equidistant from Ko Talibing and Ko Liang Hnua. Depth of water is about 10 m. up to Ko Liang Hnua Point (bearing 190°×4 miles approx.). This place is good for anchoring.

While going up and down river, there is a Customs check post at the mouth of the river and the vessel has to stop for Customs check and sign the register.

The maximum depth in the river at high water is about 5.5 m. at Springs and as low as 3.5 m. at Neaps.

The loading should be restricted as per the tidal conditions.

HEALTH: No Port Health Officer available. Hence Free Pratique not required.

RADIO: No way of communicating with the port from vessel. ETAs, etc. should be sent from the previous port by cable. On receipt of the ETA the local Agents will arrange berthing, etc.

VHF: Not available.

BERTHING: Berth is approximately 140 m. length. Hand leadline sounding at berth indicated depths minimum 10 ft. and maximum 16.5 ft. at low water and minimum 16 ft. and maximum 22.5 ft. at high water.

While the vessel is being loaded it sits on the bottom at low tide and again floats at high tide. The ground is soft sand. Since the vessel is not afloat at all times the cargo calculations and distribution should be accurate.

The main exports are cement in bags, fish meal and rubber in pellets which is mainly exported in LASH barges. The barges are loaded once a month. Generally half the wharf is occupied by LASH barges.

One oil berth also available. Small tankers with about 4 m. draft can go alongside.

CRANE: One mobile crane of 5 ton capacity is available. Priority given to loading LASH barges.

FRESH WATER: Available. Supplied by a small boat of 4 tons capacity.

FUEL: High speed diesel is available. Price is very high.

REPAIRS: Small repairs can be effected.

CONSULS: No consulates or embassies.

WATCHMAN: Recommended.

OPENING/CLOSING HATCHES: MacGregor Hatches opened and closed by Crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirits.

CARGO GEAR: Supplied by the Stevedores.

REPATRIATION: No crew changes possible.

TELEPHONES: Trunk calls can be made from the main Telephone Exchange. Sometimes delays up to 1 hour is normal.

STORES: No ship chandler. Market is very close to the berth where fresh vegetables, pork, fish, beef and chicken available. No mutton available but live goats can be purchased.

PHUKET: 07.50 N. 98.25 E.

DOCUMENTS:

Entry documents and advance information.

Customs and Immigration Entry forms as well as list of other documents required on *vessel's own forms* to be completed in advance for presentation on arrival Phuket will be sent in advance to the Agent at one of the previous ports together with request for the following information required 4 days in advance of vessel's arrival.

Confirmation of ETA and any subsequent revised ETA.
Master's name.
Last port of call before Phuket.
Next port of call after Phuket.
Net registered tonnage (n.r.t.).
Hatch distribution and gangs workable.
Cash advance of Master.

Flags: Vessels are required to fly the Thai flag and display the code flag "Q" on arrival.

PILOTAGE: There is no official Pilot available.

ANCHORAGES: The following anchorages are regularly used by ocean carriers of deep draft calling Phuket for loading or discharging cargo.

During the N.E. Monsoon Season: Prevailing wind from November through March, and periods of strong Easterly winds, vessels are recommended to anchor in position 7° 53′ N., 98° 27′ 15″ E. about 0.5 mile off Laom Mai Pai to pick up the boarding party and stevedores before proceeding to the actual anchorage for loading at position 7° 57′ N., 98° 33′ E., about one mile off Koh Yac Hyai, draft approx. 16 m. (50 ft.) at LWOS. However, during calm weather periods cargo operation will be carried out at the first mentioned anchorage.

During the S.W. Monsoon season: Prevailing from April through October, and any periods of strong Westerly winds, vessels are recommended to anchor at position 7° 53′ N., 98° 27′ 15″ E. about 0.5 nautical mile off Laom Mai Pai, draft approx. 14 m. or 45 ft. at LWOS.

To facilitate cargo operations during swell from South, vessels are requested to anchor as close as possible to the above anchorage positions according to the Master's judgement.

No Pilot is required on approaching the above anchorage; however, it should be noted *three ocean-going dredgers* are operating in the area between Koh Dok Mai and Kon Khai Nok which should be passed at a distance of about 1,500 ft. to keep clear of their anchor lines. The dredgers are lit up and clearly visible at night.

It should also be noted during the new moon period there are several small fishing craft in the area.

RESTRICTIONS: *Channel:* The channel around Koh Tapae Kyai is normally passed clockwise and is marked by a system of buoys, the position of which are shown on Thai charts. However, it is also possible to turn around by swinging on the anchor just after passing buoy No. 3 on a rising tide (South to North) just before high tide.

Width of Channel: Minimum 230 ft. at buoy No. 6 measured (chart datum at LLW) at 6 m. depth curve. Maximum 900 ft. at buoy No. 4 measured at 6 m. depth curve.

Restriction in Navigation: (1) Entering or leaving through the North channel involves a rather sharp turn with a radius of about 1,000 ft. and angle of about 115° between the axis of channel in a restricted area between buoy No. 6 and Koh Tapai Noi Island. Please also note the wreck buoy between buoy No. 6 and Koh Tapao Noi.

(2) The draft at buoy No. 6 is about 24 ft. 6 in. at Lowest HW.

(3) At buoy No. 5 are placed two pairs of mooring buoys parallel in the channel, occasionally used by tankers discharging petroleum products to Esso and Shell installations ashore. The width between the narrowest pair is about 150 ft. and vessels are required to pass between these mooring buoys.

HEALTH: All crew and passengers must have valid health certificates for cholera.

RADIO: Messages to and from vessels at sea on the West coast of the Malayan Peninsula are best transmitted via Penang Radio in time to allow retransmission to Phuket at about the following local times:

Weekdays at 0930 hrs., 1400 hrs. and 1630 hrs. Sundays at 1630 hrs.

For vessels outside this area, messages can be sent via Bangkok or Singapore as applicable. Cables via Bangkok Radio are normally transmitted every second hour from 0800 to 2100 hrs. local time, whereas cables via Singapore are sometimes retransmitted via Bangkok Radio and sometimes via Penang Radio.

There are no facilities for ship-to-shore communication in Phuket, but vessels are *not* required to close down their radio station or VHF set while in port.

There is long-distance telephone connection with Bangkok, Penang, Singapore and Kuala Lumpur from Phuket at all hours.

Despatch Cables: Agent will in all probability need to send cables via the ship's radio reloading results, etc., subject to the Master's approval. The cost of all such cables is to be borne by the vessel.

TUGS: No tugs available.

BERTHING: At Laen Klusi, Thailand Smelting and Refining Co. Ltd. have built a crossway connected by a short bridge to a pier which is parallel to the channel. The pier and channel are presently only suitable to accommodate vessels up to about 10,000 d.w.t. and approx. 430 ft. long, not exceeding 22 ft. draft. Vessels berthing at the pier are recommended to anchor at position 7° 48′ 24″ N., 98° 25′ 12″ E. to await loading and favourable tide.

Dimensions of the pier: Length 61 m. (200 ft.), width 12 m. (40 ft.). Depth about 24 ft. 6 in. at LLW.

Fenders: The pier is protected by a system of wooden fenders in addition to which there is one fender at each end of the pier with solid rubber buffers.

Mooring buoys: There are two mooring buoys about 700 ft. apart each at equal distance from the end of the pier.

MEDICAL: It is only possible to get a doctor on board in the most severe cases, but otherwise there are two hospitals in Phuket, one of which is managed by American Seventh Day Adventists Mission Doctors and the other is a General Hospital.

FRESH WATER: Limited and difficult to obtain.

FUEL: Limited and difficult to obtain.

CONSULS: None.

SURVEYORS: No marine surveyors in Phuket; however, a surveyor can be called from Bangkok.

REPAIRS: No facilities.

SATTAHIP: (Military port, Royal Thai Navy).

Chuk Samet Port: 12° 37′ 00″ N. 100° 55′ 00″ E.

(See Plan Book)

Tungprong Port: 12° 41′ 58″ N. 100° 50′ 21″ E.

PORT LIMITS: Extend to approximately 1,500 yards from the quay wall at Chuk Samet Port, and 1,000 yards from piers at Tungprong Port.

DOCUMENTS: See "Bangkok".

PILOTAGE: Recommended, working daily during the day time only. Advance notice required 4 hours prior to arrival on working day (on holiday notice required at 0830 – 1200 hrs.) Radio frequency used when handling the vessel is 27125 MHz.

RADIO: Radio telephone.

Name of Station	*Frequencies*	*Remarks*
MSC	2738 MHz	Day time
Portsat	2738 MHz	Day time
	8292.5 kHz	R/T – SSB

VHF: Calling Channel 16 (156.8 MHz)
Calling Channel 14 (156.7 MHz)
Interport use 157.5 MHz (Special Channel)

ANCHORAGES: Anchorage area for waiting berth and Pilot:

Chuk Samet Port; Capacity: eight deep-draft ships minimum depth 8 fathoms.

Tanker Berth (Pol Pier)	Commercial Berths (DWP 1 – 4)
Lat. 12° 37′ 03″ N.	Lat. 12° 37′ 25″ N.
Long. 100° 55′ 00″ E.	Long. 100° 55′ 00″ E.

Tungprong Port; Capacity: four deep-draft ships minimum depth 10 fathoms.

Lat. 12° 43′ N.	Lat. 12° 45′ N.
Long. 100° 49′ E.	Long. 100° 49′ 30″ E.

Map Pier:

Lat. 12° 41′ 47″ N.	Long. 100° 50′ 31″ E.

RESTRICTIONS: Berthing day time only.
MAX. SIZE: See "Berthing".
TUGS: 2 tugs available, 3,000 h.p. Join when vessel approaches berth, charge for use of tug's lines.

BERTHING:
Limitation of Draft:
Chuk Samet Port: Depth 32 ft. below LWOST or 36 ft. below MLW.
(1) For cruising in the channel
32 ft.
– 3 ft. for squat, tidal phenomena, etc.
– 2 ft. for under keel clearance
Draft = 27 ft. at LWOST
(2) For staying in port
32 ft.
2 ft. for under keel clearance
Draft=30 ft. at LWOST
(3) Draft of the vessel could be increased for the day alongside by adding the figure of the height of tide at low water of that day to the figure of draft in (2) above (30 ft.+Height of tide at LW).
Tungprong Port: Depth 29.8 ft. below LWOST or 33 ft. below MLW. Draft of the vessel to enter and berth 27.8 ft. at LWOS.

	No. of Berths	*Max. LOA (ft.)*	*Depth (ft.)*	*Length (ft.)*	*Remarks*
Chuk Samet*	4	600	36	2,400	General Cargo
	1	600	36	216	Tanker
Tungprong	3	600	—	—	Ammunition

*See "Shipmaster's Report".
Cruise passenger ships are permitted to berth at Sattahip.
Map Pier: 1 berth, length 443 ft. Depth at MLW 38.8 ft.

STEVEDORES: Vessel to advise Agent 7 days prior to arrival. Text required in this cable is: flag, ETA, draft, tonnage of cargo aboard for port, number of crew/passengers, dangerous cargo/heavy lifts, gangs required.
194 stevedoring contractors (both liner terms and chartered vessels under F.I.O. terms).
MEDICAL: Hospital facilities available.
TANKERS: Diameter of shore lines are 6 in., 12 in. and 20 in.
DENSITY: 1021.
FRESH WATER: Limited, 200 tons per trip, addition 100 tons for boiler. Supply can be made by water trucks, advance notice of ETA required.
FUEL: Available, supply can be made by barges, advance notice of ETA required.
GANGWAY/DECK WATCHMEN: Necessary.
OPENING/CLOSING HATCHES: Carried out by stevedores without extra charge.
CUSTOMS ALLOWANCES: 200 cigarettes for each officer, 100 for each crew member for 3 days. One bottle each, wines and spirits, opened.
CARGO GEAR: Supplied by stevedores.
IDENTIFICATION CARDS: Required for all crew and officers.
REPAIRS: Only for minor repairs.
TIME: GMT plus 7 hours throughout the year.
POLICE/AMBULANCE/FIRE: Security centre 2187; Duty officer 2102 (after duty hours); Police 3180; Ambulance 116; Fire 117.
TELEPHONES: Available (U.S. military circuits).
SHORE LEAVE: Permitted.

DEVELOPMENTS: *Sattahip Deep-Sea Port:* Since Laem Chabang deep-sea port (see "Bangkok") will take years to construct, the Cabinet approved the improvement of a part of Sattahip naval base, about 184 km. S.E. of Bangkok to be used commercially.

The expansion plans for Sattahip port include construction of new piers and dredging aimed at providing facilities for bulk carriers and container ships of up to 120,000 d.w.t. It is also intended to equip the port to handle general cargo carriers for the intermediary period until the deep sea port project at Laem Chabang is completed.

SHIPMASTER'S REPORT: July 1981.
CHUK SAMET PORT:
For details concerning navigation, currents, clearance and documents, etc., see "B.A. Pilot No. 30" and "Guide to Port Entry".

Vessels approach on the beacon line at 017.5° (T), along the fairway marked by buoys. The beacons are installed on the pier and are easily visible. When entering and leaving, the cross current should be watched. The fairway buoys appear to be displaced somewhat Westwards.

Entry and Leaving: Only permitted between 0600 hrs. and 1800 hrs.

The Pilot comes from Bangkok. Also Authorities come from Bangkok for clearance.

A local Agent's office is not yet available, but will shortly be installed. Wireless traffic from the port with Bangkok is permitted.

There are two tugs of 3,600 h.p. available.

Max. Draft: At present 32 ft. is allowed.

The pier running approximately North – South is 500 m. long, and the cross pier 365 m. long. Both are well equipped with rubber type fenders. The free area on the pier in front of the sheds is about 45 m. wide.

Cargo Handling: Both cranes and the tapioca conveyor can run on the crane rails both on the main and cross piers. The large crane lifts up to 40 tonnes at 35 ft. The small crane lifts 23.5 tonnes but is currently out of use, but should be back in service shortly. The port has 20 forklift trucks, 10 at 3.4 tonnes, and 10 at 2.3 tonnes. Also there are 10 lorries type HINO KL 340 at 7 tonnes.

A Sea Container Shifter is already available, capacity 30 tons. For containers there are three 40 ft. and three 20 ft. spreaders in the equipment store.

Water: Any quantity available. Water must be boiled prior to use.
Bunkers: Only by road tanker.
Ship Repairs: None.
Ships' Chandler: Should be available.
Hospital: Available.
VHF: Port Authority on Channel 16.
Weather Conditions: During S.W. monsoon there is a slight swell. From May to July is the rainy season, with storms and typhoons occurring in June and July. Currents are unimportant. The tide rises about 2 m.
General: S.W. from Sattahip, in the Thailand Gulf, natural gas is obtained. A gas pipe-line from there to Sattahip is under construction. The line will then be taken overland from Sattahip to Bangkok.

A railway connection is being built. A road to Bangkok (approx. 180 km = approx. 3 hours by car) is available.

Further Developments: Dredging and building of new piers will begin.

A large Gottwald crane (mobile at 40 tonnes) is stated to have been ordered, and will be delivered in about 6 months.

It is planned later on to install a IHI container bridge, and sheds 1 and 2 will be demolished to make room for container handling.

AUTHORITY: Port Authority of Thailand, Klongtoi, Bangkok II, Thailand. *Tel:* 2861021. *Telex:* Pat Th 2171. *Cables:* Pat Bangkok.
AGENT: See "Sriracha."

SRIRACHA: 13.07 N. 100.52 E.

DOCUMENTS:
Boarding of Immigration, Customs and Quarantine Officials: The Immigration and Customs Officials will board all incoming vessels, whereas the Quarantine Official will board on arrival at berth. If however a vessel comes from an infected port the Quarantine Doctor will board. The Officials demand that the main gangway is lowered.
Order of Clearance and Documentary Requirements:
Customs Authority: (Ship's forms)
12 copies Cargo Manifest (including port and Agent's requirements).
5 copies Transit Cargo Manifest.
10 copies Crew List.
6 copies Ship's Stores.
6 copies List of Ship's Provisions, Steward, Deck and Engine Departments.
6 copies Foreign Currency List.
6 copies List of Arms and Ammunition for Ship's Use.
6 copies List of Opium and Narcotics.
6 copies List of Ports called.
6 copies List of Passengers.
6 copies List of Mail.
6 copies List of Crew members' Personal Effects stating brands and serial numbers of watches, cameras, TV/radio sets, electronic calculators, refrigerators, typewriters, all sound and electrical equipment, etc.
6 copies List of Ship's Movable Properties, to declare brands and serial numbers as above.

When preparing the list of Crew members' Personal Effects and ship's stores' lists, particular care should be paid to the exact quantities. Crew are allowed 200 cigarettes each, during the vessel's stay in port.

Failure to provide correct quantities on various forms will entail heavy fine and confiscation.

NOTE: Pornographic magazines and materials are prohibited and will be confiscated if found onboard.

Immigration Authority: For vessel having Thai Immigration Forms onboard, please prepare them ready for arrival. Otherwise Agency clerks will bring forms onboard and assist in completing them.
5 copies each of Immigration Form No. 3 (separately for *Landing* passengers and *Transit* passengers).
5 copies of Immigration Form No. 4 (Crew List).
2 copies of Immigration Form No. 35. Make out in duplicate, and 1 line for each name. Leave signature columns blank, where each crew member shall sign in presence of Immigration Officers in port.
1 copy Disembarkation/Embarkation card for each passenger, to be supplied in port.

Repatriation Crew holding valid passports may be declared as passengers in order to facilitate Immigration Exit papers. Otherwise we need one full working day for preparation of Immigration papers (Sat/Sun/Holiday excepted).

Quarantine Authority:
1 copy of Maritime Declaration of Health (may be supplied in port).
2 copies of lists certifying the date of vaccination against Cholera and Smallpox, for each crew member.
1 copy of Derat Certificate.
International Certificates of Vaccination 'Cholera and Smallpox' for all passengers and crew members.

Important to Master: On first arrival at Roads or berth do not allow any unauthorised people to board the vessel or allow any officers/crew members to disembark before 'Checking In' formalities by Immigration Officers and Customs Searching Party. Offence in this respect is liable to a fine not exceeding Baht. 5,000.00.

Departure: The 'Blue Peter' flag should be hoisted at the foremast of all sea-going vessels about to leave the harbour and shall be kept hoisted until the voyage has begun. In the case of vessels leaving in the afternoon, the flag shall be hoisted in the morning, in case of those leaving in the morning, the flag shall hoisted on the previous afternoon. Failure to comply with the regulations is subject to a fine not exceeding Baht. 5,000.00.

PILOTAGE: Compulsory, and during daylight hours only. Harbour Department Pilot and TORC Marine Supervisor will board about 2 miles East of Ko Thai Ta Mun light which lies South of the island of Ko Sichang in position Lat. 13° 06.5′ N., Long. 100° 48.4′ E.

Sriracha Government Pilot can be contacted directly via VHF Channel 16 within 30 miles radius.

On receipt of an accurate ETA vessel will be advised by VHF regarding berthing time, whether to anchor and any likely delays. Flags indicating a request for a Pilot or Pilot on board should be flown. Accommodation ladder required (or in conjunction with pilot ladder).

APPROACHES: The recommended courses approaching seaberth through the Southern part of Ko-Sichang are as follows:

from Junction point named "B"	Lat. 12° 43′ 00″ N. Long. 100° 44′ 36″ E.	True Course =360°
to Junction point named "B"	Lat. 12° 62′ 14″ N. Long. 100° 44′ 36″ E.	
from Junction point named "B"	Lat. 12° 56′ 14″ N. Long. 100° 44′ 36″ E.	True Course =022°
to Junction point named "C"	Lat. 13° 00′ 00″ N. Long. 100° 46′ 12″ E.	
from Junction point named "C"	Lat. 13° 00′ 00″ N. Long. 100° 462 12″ E.	True Course =037°
to Junction point named "D"	Lat. 13° 06′ 20″ N. Long. 100° 51′ 00″ E.	
from Point "D" A/C to 000°(T) up to Anchorage Area or Point "E"		
Point "E"	Lat. 13° 07′ 00″ N. Long. 100° 51′ 00″ E.	

ANCHORAGES: Recommended anchorage for vessels awaiting berth is within 1 mile of the position: Lat. 11° 04.8′ N., Long. 100° 51.0′ E. Refer Admiralty Chart No. 3965 and 986.

RESTRICTIONS: Tankers berth in daytime only.

MAX. SIZE: Length 870 ft., max. draft 44 ft. plus height of tide above datum less 2 ft. U.K.C. Also see "Berthing".

MBK Bulk berth: 150,000 d.w.t. Draft 14.3 m.

HEALTH: See "Documents".

RADIO: *Commercial Radio Telegraphy:* (Tel: 588-0844)
"BANGKOK RADIO".

Medium wave: Call sign HSA (Hotel Sierra Alpha).
Operating time: 24 hour service.
Traffic: 0700, 0900, 1200, 1500, 1800, 2100 and 2300 hrs. local time.
Calling frequencies: 500 kHz and 512 kHz.

Short wave: Call sign HSA 2 and HSA 3.
Operating time: 24 hour service.
Traffic: 0700, 0900, 1200, 1500, 1800, 2100 and 2300 hrs. local time.
Calling frequencies: 8686 kHz, 8573 kHz and 12800 kHz.

Masters of all vessels proceeding to Sriracha are to notify their Agent by radio of their expected time of arrival at least 3 days prior to arrival. This notice shall be amended in the event of any change in the time of arrival.

In addition to the above, the ETA message shall be confirmed 48 and 24 hours before arrival.

The first notice of arrival is to contain the following information:
Last Port of Call.
ETA Pilot Sation.
Best trimmable arrival S.W. draft.
Number of crew including the Master and his name.
Number of passengers, landing and transit.
Cargo grade and quantities to be discharged.
Discharging rates, barrels per hour.
Bunkers and water on arrival.
Urgent stores to be delivered on arrival, if any.
Bunkers and water to be delivered, if any.
Laundry service, if any.
Nature of any extraordinary repairs to be effected.
Any other matter to be attended to on arrival such as electronic equipment repairs, medical attention or hospitalisation, crew repatriation (in this case advise name, age, nationality, passport number).
Cash required, if any.
Crew liberty launch service, if any.

TUGS: 2×2,500 h.p. in the area but are not always available at Sriracha. One for berthing and unberthing (sometimes standing-by only). Ordering of tug depends on Pilot and Master in light of prevailing conditions. Tugs are used for berthing/unberthing at the Esso CBM.

BERTHING: See "Shipmaster's Report".

TANKERS: *TORC:* A 6 buoy conventional mooring owned and operated by Thai Oil Refinery Co. Ltd.

Vessel berths heading in either direction depending on the tide at the time of arrival. The TORC Sea Berth is arranged to accommodate a tanker of max. LOA 870 ft., and the present draft restrictions for berthing vessels is 44 ft. plus tidal height above datum (LWL) minus 2 ft. under keel clearance. If arrival draft exceeds 44 ft. discharge should be commenced with minimum delay in order to maximise under keel clearance during initial low water period.

The Marine Supervisor will remain on board as a liaison between ship and shore until clear of berth.

TORC Crude Berthing/Discharge Requirements: Conventional buoy mooring (CBM).

2. Position of berth: Lat. 13° 07.5′ N., Long. 100° 52.5′ E.

3. Size of crude tankers: Minimum 30,000 d.w.t., maximum 120,000 d.w.t. with LOA not exceeding 870 ft.

4. Max. safe draft 44 ft. plus height of water above Lowest Low Water of the day minus 2 ft. under keel clearance.

5. Distance from bow to centre of manifold maximum 435 ft.

6. Mooring requirements: 2 ship's ropes are secured to each of 3 head and 3 stern buoys backed up by 2 ship's wires or ropes as available. 1 anchor is used depending on which side is offshore. It is to be ensured that the vessels mooring lines are suitable for securing her in all weather conditions, as agreed with TORC Marine Supervisor.

7. Discharge line 3×12 in. hoses for crude (connecting to 24 in. submarine pipe-line) can be connected to either port or starboard ship's manifold as vessels berth heading in either direction, depending on the tide at time of arrival. White oils handled through 1×12 in. line and 2×12 in. hoses. Derrick SWL 10 tons required for raising submarine hoses.

8. Discharge rate 3,600 cu.m./hr. and discharging back pressure restricted to maximum 10 kg. at ship's manifold. For MCP minimum back pressure of 9 kg. is required depending on crude type.

9. All vessels calling at Sriracha to discharge crude oil at TORC's CBM are required to comply with current ISGOTT, IMO and Marpol protocol recommendations, for instance:
(1) Be equipped with IGS where applicable.
(2) Tank cleaning machines for COW purpose.
(3) Dedicate clean ballast tanks where applicable.

10. Ships will be requested to take in ballast whilst occupying the berth in order to reduce as much as possible the light ship conditions at this weather-exposed CBM. In addition to clean ballast, vessels may be instructed to cease discharge during adverse weather conditions for ballasting into empty cargo tanks which have already been COW.

11. 3 tugs of 2,500 h.p. each are available in the area but utilisation depends on Master and Pilot in light of prevailing conditions. Mooring and unmooring of vessels are compulsorily carried out by Government Pilots.

12. Berthing and discharge operations of vessels are monitored as is normal international oil industry practice, the vessel's performance being recorded and agreed between Master and TORC Marine Supervisor against targets established before discharge commences.

Esso: 6 buoy conventional mooring owned and operated by Esso Standard Thailand Ltd. Vessels berth heading in either direction depending on the tide at the time of arrival.

2 ship's moorings required to each of 2 head and 2 stern buoys and one ship's mooring to each of 2 breast buoys. These are supplemented by 1 shore "preventer" wire from the 2 head and 2 stern buoys.

1×32 in. submarine line for crude oil with 2 strings of 12 in. hoses.

Ballasting is required during discharge to maintain 30% deadweight at all times. Additional ballast may be required during the S.W. monsoon period 1st June to 31st October. Technical test data for winches/wires required on arrival.

PTT: The PTT Sea Berth consists of a concrete platform with two breasting dolphins and mooring buoys for head and stern lines.

Vessels berth heading in either direction depending on current direction, using seaward anchor.

Mooring: 3 head/stern ropes, 3 forward and aft backsprings plus one buoy rope to seaward buoy aft.

Night berthing not recommended in view of unlit buoys and platform.

Vessels programmed to this sea island berth are advised that it is to be regarded as an offshore buoy berth as far as shore facilities are concerned. Access to/from the shore should be by accommodation ladder rigged on the offshore side of the vessel.

In common with offshore buoy berths and in the absence of any shore standby craft, the vessel's lifeboats to be used for emergency evacuation of personnel.

PTT Sea Island berth currently only handles high flash point products, i.e. fuel and gasoils.

General: Qatar Crude Discharge: Considerable delay can be encountered in the discharge of Qatar Crude.

In this connection your attention is particularly drawn to any advice given to you on arrival by the Thai Oil Refinery Representative.

Back Loading from Coasters: Occasionally vessels are required to load cargo from 2,000/4,000 ton coasters at Sriracha. Loading a full cargo could take 3 to 4 days and Masters should bear this in mind for bunker and fresh water calculations.

Lightening to coasters to make Bangkok Bar draft: On arrival there is no VHF contact with shore, as vessel does not take a Pilot, and so should proceed straight to an anchorage within about half a mile of position 13° 07.6′ N., 100° 50.9′ E. There may be other vessels in this area engaged in ship/ship transfer. Do not rig an accommodation ladder, as four Yokohama rubber fenders are brought straight out to the vessel, and 2 lashed each side midships. Shore officials will board via the pilot ladder to clear the vessel inwards. Accommodation is required for 2 Police Officers (one room) and 2 Supervisors with one Customs Officer (a second room) throughout the vessel's stay. 8 in. hoses are brought out on the first coasters, connected by a seven man hose handling gang, and left connected to the ship's manifold throughout the operations; the gang handles all hose connecting, and mooring, with a crane driver provided by the ship. This gang stays onboard most of the time and need to be allocated a smoking area. The coasters are programmed by Bangkok – copies of the programme being put onboard on arrival – and can be handled simultaneously one each side. If 2 products are involved usually one side is allocated for a particular product. The coasters moor with lightweight polypropylene lines and are well handled and efficient, capable of loading at about 1,250 tonnes/p.h. There are 4×2,000 d.w.tonnes, and 1×3,500 d.w.tonnes coasters with a round trip taking about 24 hours from departure to return alongside.

MEDICAL: Hospital facilities available, advance notice of ETA preferred.

DENSITY: About 1021.

FRESH WATER: Can be supplied by barge. 24 hours' notice required.

FUEL: Can be supplied by barge. 48 hours' notice required.

CUSTOMS ALLOWANCES: 200 cigarettes for each officer, 100 for each crew member for 3 days.

Each man allowed 1 opened bottle wine/spirits.

IDENTIFICATION CARDS: Required for all officers and crew.

CONSULS: See "Bangkok".

AIRPORT: Situated about 25 km. from Bangkok, regular international services.

TIME: GMT plus 7 hours. No changes during the year.

DEVELOPMENTS: A project for a new deep-sea port at Sriracha has been approved and is under survey.

Thai Oil Refinery Co. may build 2 new berths for 6,000 d.w.t. product carriers.

SHIPMASTER'S REPORT: March 1984.

Loading of Tapioca Pellets in bulk at MBK berth:

Vessel: LOA 243.6 m., beam 32.3 m., deck over keel 18.6 m., draft 13.51 m. = t.d.w. 74,010 tonnes, 8 holds.

Silo with a berth called MBK Berth (Mah Boon Krong), operated by Cargill Ltd., has been in existence for about 6 years.

The berth consists of 3 loading towers with sufficient mooring posts at both ends. Location of berth: Lat. 13° 08.2′ N., Long. 100° 53.1′ E. Distance from shore: 1.6 miles. Distance between towers: 50 m. Radius of loading booms: 32 m. Total loading range: 166 m. Depth of water alongside: 12.8 m. at LW. Loading capacity: Loading with 1 tower 350 t.p.h. Loading capacity with 2-3 towers 600 t.p.h.

A vessel of our size has to be shifted for loading the end holds.

The loading spouts are equipped with trimming machines. The only connection to the shore is a conveyor belt of 2.8 km. length which cannot be used for traffic. All traffic is carried out by boats. Therefore gangways on both sides to be used.

A Pilot/Berthing Master brings the vessel alongside. Berthing with 2 tugs, bow to the North and starboard alongside using the port anchor.

AUTHORITY: *Operators:* TORC Refinery, P.O.Box 2387, Bangkok, Thailand. *Telex:* 81802 Torkref Th.

Mah Boon Krong Drying and Silo Co. Ltd., (MBK), Haad Padaeng Surasak, Sriracha Cholburi, Bangkok. *Telex:* 85804, 85805 Mbsilo Th.

AGENT: Wallem Shipping (Thailand) Ltd., 295/29 Surawong Road, P.O.Box 2319, Bangkok, Thailand. Tel: 234-6415, 235-9274. Telex: 82605 and 87256. Cables: "Wallem".

NOTES

Please also advise Shipping Guides Ltd.

Togo Republic

KPEME: 06.12 N. 01.30 E. (See Plan Book)

PORT LIMITS: In accordance with the terms of Charter party a vessel is considered to be an "arrived ship" when she is anchored between 1 mile and 2 miles from the end of the jetty.

DOCUMENTS:
2 Crew Lists.
2 Stores Lists.
2 Private Property Declaration Lists.
2 Lists of last 2 Ports of Call.
2 Passenger Lists (if no passengers, 2 lists stating same).
2 Cargo Manifests (if no cargo for Kpeme, 2 lists stating same).

PILOTAGE: The limits of the port of Kpeme are fixed at 1 mile from all points of the jetty. Pilot boards out at the above limits. The Company Pilot remains on board while ship is berthed and disembarks when vessel cleared port limits. International code pilot signal used. At night, vessel should anchor between 110° and 180° at least 1 mile from the end of jetty.

VHF: Radio station, call "Kpeme pilot station" on Channel 16. Pilot boat grey motor boat without special signals.

APPROACHES: By day the extremity of the jetty (three artificial islands and two loading machines) forms an obvious landmark.

At night a white light (situated at the extremity of the jetty, 23 m. above the sea) all around horizon – light 3 sec., occulting 1 sec., light 1 sec., occulting 1 sec.

ANCHORAGE: Good holding ground (sand and mud) between 14 m. and 16 m.

RESTRICTIONS: Vessels should twice signal the date and probable time of her arrival. The first time 72 hours and the second time 24 hours prior arrival. Vessels berth in daylight only from 0530 hrs. – 1530 hrs. GMT. Unmooring can be effected day and night. Water approaches are clear. Any ship should have both fore anchor cables in perfect order and capable of being used in their entirety. Any ship should be able to leave immediately if she receives order to do so from Harbour Master. With this in mind, engines must be on standby. Ships are not authorised to cross port entrance without a Pilot on board. After winches to be in perfect order.

MAX. SIZE: Tankers up to 27 ft. draft on arrival. Bulk carriers up to 38 ft. draft on sailing. Max. length 220 m. Max. breadth 32 m. Height from waterline to hatch coaming 15.0 m.

HEALTH: Send message for Free Pratique within 24 hours of arrival to Port Health Officer, Kpeme.

RADIO: Until vessel within 600 miles, communicate through Portishead Radio, Senlis Radio and Dakar Radio. Within 500 to 300 miles via Abidjan Radio TUA 487 kHz. and within 300 miles via Lome Radio 5VA 472 kHz.

VHF: VHF radio station, call "Kpeme Port" on Channel 16. Also see "Pilotage".

TUGS: No tugs available. 2 mooring launches of 150 h.p. each are at vessel's disposal.

BERTHING: Loading facility comprised of 3 artificial islands carrying conveyor belts (2) for loading phosphate only. They are breasted by a row of 4 dolphins. Vessel moors using port anchor first and then the starboard anchor, and wires to 7 buoys which hold the ship parallel to the dolphins and about 20 m. off. Springs are run to the dolphins. Each loader delivers at a rate of 1,250 t.p.h. and 2 holds can be loaded at same time.

TANKERS: Moor at a special berth situated to the East at 0.4 miles away from the extremity of the phosphate pier. 1 submarine line 12 in. diameter, hose connection 8 in. diameter. At any time sufficient draft for securing and sailing, also fire hoses to be ready rigged on deck.

FRESH WATER: Not available. Vessel has to go to Lome.

FUEL: Not available. Gas oil available at Lome.

MEDICAL: Doctor of the Office Togolais des Phosphates at the Factory.

OPENING/CLOSING HATCHES: By ship's crew.

CONSULS: Nearest at Lome.

REPAIRS: No facilities available. Emergency repairs could be arranged in Lome.

CUSTOMS ALLOWANCES: 200 cigarettes or 2 oz. tobacco; 1 bottle of spirits. No Customs Authorities board the vessels or seal bonded stores.

REPATRIATION: No facilities exist for effecting crew changes. However, in emergencies repatriation can be arranged.

AIRPORT: Nearest Lome – 4 flights a week to Europe.

TIME: GMT.

TELEPHONES: Placed on board, charges included in stay-in-port tax.

SHORE LEAVE: Not allowed.

GENERAL: In the rainy season, high winds and swell may delay berthing operation.

Vessels do not berth with an Easterly current.

AUTHORITY: Office Togolais des Phosphates, B.P. 379, Lome, Togo. *Tel:* Lome 21.39.01 *Telex:* 5214 Fosfat To. *Contact:* Commandant Genest, Harbour Master.

LOME: 06.08 N. 01.17 E. (See Plan Book)

DOCUMENTS:
13 Crew Lists.
5 Kroo-boy Lists.
5 Passenger Lists.
4 Lists Previous Port of Call.
1 Maritime Declaration of Health.
1 List of vaccinations.
3 Crew effects Lists.
1 List of arms and ammunition.

APPROACHES: The approach to the port, by night, is assisted by 3 lights:

(1) *Baguida* (position: Lat. 06° 09.5′ N., Long. 01° 19.5′ E.) occulting white and red. Lt. 2.5 secs., occ. 0.5 sec. period 3 sec. Vis. 17 miles. Sector: red 042°, covers the breakwater as well as the old Lome Wharf (position: Lat. 06° 07′ N., Long. 01° 13.5′ E.).

(2) *Lome Togo-Port* situated on head of West breakwater (position: Lat. 06° 08′ N., Long. 01° 17.5′ E.). Qk. Fl. (4) white and red every 10 sec. Vis. 5 miles. Red light sector covers only old wharf and is not visible seawards.

(3) *Lome Light* situated near town of Lome (position: Lat. 06° 07′ N., Long. 01° 13′ E.). Group Fl. (2) white every 10 sec. Vis. 15 miles all around horizon.

By day, large, light-coloured transit sheds and a high, grey water tower (position: Lat. 06° 08.5′ N., Long. 01° 16.5′ E.) are the first indications of port from seawards.

PILOTAGE: Pilots available 7 days a week from 0600 hrs. to 2100 hrs. for vessels to enter. Sailing possible at anytime but if sailing after midnight Agent has to advise pilot station before 2200 hrs. Pilot station equipped radio and works 24 hours per day on Channel 16. Pilot boat green motorboat with orange superstructure and international flag "H". Pilot boards 0.5 mile to 1 mile S.E. of breakwater.

ANCHORAGE: Vessels which arrive during darkness should anchor about 0.5 to 1 mile South to S.E. of breakwater, in white sector of Baguida light in 8 fathoms, where good holding ground (sand) obtained. Northern boundary of anchorage is red sector of Baguida light.

RESTRICTIONS: Tankers may only berth during daylight hours but may unberth at anytime.

MAX. SIZE: Max. length 900 ft. (270 m.). Max. draft for tankers 39 ft. and bulk carriers 38 ft.

Also see "Berthing".

HEALTH: Health Inspector will board on arrival alongside and examine for cases of infectious diseases, after which will declare vessel Free or not. Vessels entering must fly international quarantine signal "Q". Large hospital situated in Lome with doctors in attendance.

RADIO: Port operations carried out on VHF Channel 16,14 and 12, with range of approximately 30 miles. Aero beacon (position: Lat. 06° 10.7′ N., Long. 01° 16.3′ E.) call sign "LME" on 379 kHz.

TUGS: 2 tugs, 960 and 3,200 h.p. available. For vessels of more than 500 g.r.t. tug is obligatory when berthing or unberthing.

BERTHING: Berth Nos. 1 – 4: Berthing length 366 m., depth 10 m. 9 electric cranes up to 10 tonnes capacity.

New Quay: Length 250 m., width 140 m., depth 11.0 m. Container and Ro-Ro vessels handled.

The port has a grain hopper and vacuvator in use.

See "Tankers" and "Shipmaster's Report".

STEVEDORES: Agent should be informed as soon as possible of ship's ETA, length, max. draft, tonnage to load and/or discharge and number of gangs required. Agents should advise pilot station of vessel's ETA.

TANKERS: Togo-Port has sea pipe-line belonging to the Societe Togolaise d'Entreposage. Tankers should moor at 3 large mooring buoys outside breakwater. Diameter of pipe-line 8 in. Discharging about 230 t.p.h. (depending on ship's-pumps). Max. length which can be handled at buoys is 720 ft. (220 m.) max. draft 31 ft. (9.5 m.).

Societe Togolaise des Hydrocarbures:
Max. Size: LOA – 250 m. Draft 39 ft.
Dirty Ballast: Capacity 4,000 tons. Discharge rate 800 t.p.h.
Fresh Water: Available, 30 t.p.h.
Shore Gangway: Available.
Current: None.
Tidal Range: 0.90 m. – 1.50 m.
Nature of bottom: Sand.
Restrictions: Berthing and unberthing at any stage of the tide. Berthing during daylight hours only, unberthing anytime.

Cargo facilities:

Grades handled	*Pipe-line Reference*	*Length (m.)*	*Load/ d'charge Rate t.p.h.*	*Max. Pressure*	*Hoses No.*	*Hoses Size (in.)*
Ballast		1200			1	6
Crude Oil	Brown	4200	1100	7/9 kg/ cu.m.	1	8
Fuel Oil	Black-Brown	4200	1000		1	8
Kerosine	Yellow-Ash	4200	600		1	6
Benzene	Blue-Yellow	4200	800		1	8
Diesel Oil	Yellow-Orange	4200	900		1	8

DENSITY: Density 1025. Harbour open to sea.

FRESH WATER: Available at every berth except tanker Sealine. Delivery rate 45 t.p.h. Fresh water examined monthly for purity by Sanitary Authority.

FIRE PRECAUTIONS: No extraordinary precautions are required. Vessels with hazardous cargo should declare this on ETA telegram to Agent. During time in port these vessels should take necessary precautions themselves, and all fire hoses should be ready rigged on deck. By day international code signal "B" should be displayed and by night a red light should be shown at masthead or at an all-round visible place.

Smoking on berths and within sheds *strictly* prohibited. Infringements of fire regulations punishable by fine.

FUEL: Diesel fuel available for small craft, such as fishing vessels, small motor-ships and tugs.

Gas oil available in any quantity.

GANGWAY/DECK WATCHMEN: Gangway watchmen and hatch security watchmen available; they wear a distinctive uniform.

OPENING/CLOSING HATCHES: Either ship's crew or dockworkers.

CERTIFICATES: All normal ship certificates should be available for inspection.

CUSTOMS ALLOWANCES: Because Togo-Port is a Free Port, no individual declaration by Crew members necessary.

CARGO GEAR: No extraordinary regulations. No cranes available and ships' own gear used for discharging and loading.

IDENTIFICATION CARDS: Shore landing passes issued by port police and should be supplemented by personal ID-Cards.

CONSULS: Ambassadors or Consuls from nearly all major maritime nations at Lome.

REPAIRS: Minor repairs only.

DRY DOCKS: Not available at present, but a slip for small vessels is included in future development.

AIRPORT: Lome airport with daily flights to Europe.

SEAMEN'S CLUB: A modern Seamen's Club with swimming pool, bar and library situated 0.5 mile from port.

TIME: GMT throughout year.

HOLIDAYS: New Year's Day (1st January); Independence Day (27th April); Labour Day (1st May); Christmas Day (25th December). All other holidays will be worked in port with supplementary labour charges.

POLICE/AMBULANCE/FIRE: Push-button fire alarms situated in every shed and on exterior South wall of shed "B". Telephone for contacting Police, Fire-Station or Hospital available day and night in Harbour Master's Office.

TELEPHONES: 3 public telephones within the port limits. No telephones on board.

SERVICES: No tank cleaning or compass adjusting available.

DELAYS: Ships berth in rotation of arrival at anchorage. Priority given to passenger ships as well as to vessels having less than 50 tons of cargo for discharge.

GENERAL: Distance from port to Lome city-centre is 4 miles. Taxis available at entrance of port.

SHIPMASTER'S REPORT: July 1978.

Documents: A mooring boat is available to Agents for the collection of documents on the Roads given prior notice.

Max. Size: Berth No. 1 depth 7.5 m. Berth No. 2, depth 10.5 m. Berth No. 3 depth 9.5 m. Berth No. 4, depth 9.5 m. Berth No. 5, depth 11.5 m. Berth No. 6 (New oil pier), depth 12.0 m.

Allowance is made for swell hence the max. draft at No. 6 is 39 ft.

Health: Free Pratique can be obtained from the roads if all documents are sent to Agents concerned with directions for distribution.

Radio: Lome Radio has been out of commision since May, 1978, and may continue thus until further notice unless spares are obtainable from France.

Tugs: There is an additional tug 3,000 h.p., 42 ton bollard pull, fully equipped for fire and salvage. The smaller tug of 17 tons bollard pull, is also equipped for fire-fighting.

Tankers: Berth No. 6 on Western side of East Mole with a depth of 13.5 m. and max. draft allowed of 39 ft.

Fuel: Gas Oil available ex-road tankers at all berths but full range of fuels to be provided at new tanker berth (No. 6) by August, 1978.

Cargo Gear: While no fixed cranes are available, there is a range of mobile cranes 5×10 tonnes, 1×25 tonnes, 1×45 tonnes and a container tower crane of 70 tonnes. All capacities are reduced by reach and angle while freeboard may limit use still further. A grain hopper and vacuvator gear will be in use shortly (July, 1978).

Airport: Flights are frequent, mainly indirect, to and from Europe, with 1 weekly direct to New York.

Consuls: At present there is no British representation in Togo but a Consulate may be re-established. Accra is 3/4 hours drive from Lome.

Seaman's Club: A large accommodation block offering various rooms and flatlets is part of the compound. Seamen have priority and at reduced rates. The Home is in the charge of a Dutch pastor and under German control and has a VHF set for communication with vessels in the Roads. It is open to non-seafarers.

Hotels: A wide range of hotels are available including luxury type catering for the expanding tourist traffic which takes advantage of the unique climate for this part of the Gulf of Benin.

Delays: While there is no registration as such, certain vessels on regular trade, plus those with cargoes qualified as important, do get priority and all are subject to the daily (except Sunday) Port Captain's Meeting at which all elements are represented. The results are not available until 1300 hrs. after which most Agencies communicate by VHF to their vessels in the Roads. Container ships have a priority.

Working Hours: Gangs work 0600 to 1400 hrs.; 1400 to 2200 hrs. and 2200 to 0600 hrs. daily except, there is no 2200 to 0600 hrs. shift on Sunday nights. Each has a half hour break after 4 hours working.

Surveyors: The Port Captain and Senior Pilot, represents Germanischer Lloyd. There is no Lloyd's representative.

General: Lome is the entry port for Niger and Upper Volta as well as Western Ghana so the road and rail traffic is considerable. The border with Ghana is on the Western side of Lome City. A re-entry visa is necessary when proceeding to Accra and takes 1 or 2 days to process. The Ghana Border Police can issue 1 day Visitors passes.

AUTHORITY: Port Autonome de Lome.

AGENT: Socopao Togo, B.P. 821, Lome. Tel. 21.55.88; Telex 5330 (Maritime) and 5205. Cables, "Freight Lome".

NOTES

Please also advise Shipping Guides Ltd.

Tonga (Friendly Islands)

NUKU'ALOFA: 21.08 S. 175.12 W. (See Plan Book)

DOCUMENTS:

Immigration Dept:
- 2 Crew Lists.
- 2 Passenger Lists.

Customs Dept:
- 2 Crew Lists.
- 2 Passenger Lists.
- 1 Bond List.
- 3 Cargo Manifests.

Agents:
- 1 Crew List.
- 1 Passenger List.
- 3 Cargo Manifests.

PILOTAGE: Order through Agents at least 24 hours prior to arrival. Pilot boat may be contacted on R/T 1 hour before arrival at pilot station. This position is indicated on B.A. Chart (Approaches to Nuku'alofa). There are 2 approaches, namely the Ava Lahi Passage and the Piha Passage. Vessels using Piha Passage are limited to a length of 500 ft.

Vessels may anchor in the vicinity of No. 1 Buoy if required to await Pilot, but this is not normally necessary as the Pilot is available as requested. Pilot boat carries usual signals.

ANCHORAGES: Vessels may anchor wherever they wish within the port, subject to the approval of the Harbour Master.

MAX. SIZE: Length unlimited, beam unlimited, draft 40 ft.

HEALTH: Radio Pratique may be requested from "Tongamed", Nuku'alofa. Any suspected disease or fever must be reported by radio.

TUGS: No tug is required for berthing, but a tug is available in case of breakdown.

BERTHING: Queen Salote Wharf, only wharf in use. Vuna Wharf damaged by an earthquake in 1977 and as yet has not been repaired.

Queen Salote Wharf is expected to be extended by 1984.

STEVEDORES: There is a Master Porter employed by the Queen Salote Wharf Administration, who will supply whatever gangs are required. The number of hatches to be worked and the tonnage of cargo must be passed by the Agent to the Harbour Master at least 24 hours before vessel arrives.

MEDICAL: It is advisable to inform Agent in advance should medical attention be required. Hospital facilities are available. Vaccination certificates are required for visitors who are staying. Ship's crew do not require them generally.

DENSITY: 1025 at all states of tide.

FRESH WATER: Available ex-Queen Salote Wharf at 25 t.p.h. delivery.

FUEL: A small quantity of light diesel fuel could be supplied, sufficient to enable a vessel to make the port of Suva.

GANGWAY/DECK WATCHMEN: Not necessary as entry to wharf is restricted.

OPENING/CLOSING HATCHES: This work is completely optional.

CERTIFICATES: Normal requirements. Harbour Master may require to inspect cargo gear record.

CUSTOMS ALLOWANCES: A reasonable quantity is allowed by Customs according to expected stay in port. There are heavy penalties for smuggling.

CARGO GEAR: Valid certificates issued by competent authorities are recognised.

IDENTIFICATION CARDS: Not necessary.

CONSULS: None.

REPAIRS: Repairs can be carried out in the marine workshop.

REPATRIATION: No facilities.

AIRPORT: 14 miles from town. Flights to and from Suva on Tuesdays, Thursdays, Fridays and Saturdays. There are also flights to New Zealand, same days as Suva.

TIME: The local time is 13 hours fast on GMT.

HOLIDAYS: *No work of any description is permitted on the Sabbath. This is strictly enforced.* Official Holidays are: Christmas Day; Boxing Day; Good Friday; New Year's Day; Easter Monday; Anzac Day; Emancipation Day (June 4th); Constitution Day (4th November); H.M. Queen Elizabeth's Birthday; King's Birthday (July 4th).

POLICE/AMBULANCE/FIRE: Telephone numbers not necessary. Just ask for the Department required.

OTHER PORTS: Pangai, Ha'apai Group; Neiafu, Vava'u Group; both these ports are suitable for any size of vessel at anchor. Service is by lighter. Vessels of 400 ft. in length with a max. draft of 22 ft. may berth at Neiafu.

DEVELOPMENTS: Queen Salote Wharf to be extended to at least 600 ft. On completion in 1984 a cruise ship, cargo vessel and an inland trader will be able to berth alongside at the same time. Land is to be reclaimed on the Eastern and Western sides of the Wharf.

AUTHORITY: Harbour Master, Nuku'alofa.

NOTES

Please also advise Shipping Guides Ltd.

Trinidad

BRIGHTON (Texaco Oil Terminal): 10.15 N. 61.38 W.

DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".
PILOTAGE: Compulsory.
ANCHORAGE: Good holding ground in roadstead. Loading pier situated Lat. 10° 15′ N., Long. 61° 38′ W., extending in a N.W. direction for 2,010 ft.
RESTRICTIONS/MAX. SIZE: Outer Berth East, 29 ft. 6 in. MLWST; Outer Berth West, 24 ft. 6 in. MLWST; Centre Berth East, 21 ft. 6 in. MLWST; Centre Berth West, 21 ft. 6 in. MLWST; Inner Berth West, 21 ft. 6 in. MLWST.
TUGS: Not used. Launch assists with lines.
STEVEDORES: Supplied by Agent if necessary for loading Asphalt in drums only.
MEDICAL: All facilities available.
FRESH WATER: Available only at berth. Pumping rate 15 – 20 t.p.h.
FUEL: All grades of fuel alongside or by barge.
GANGWAY/DECK WATCHMEN: Customs guard on 24 hours duty at ship's side.
CUSTOMS ALLOWANCES: 200 cigarettes and moderate amount of spirits.
IDENTIFICATION CARDS: Not required.
REPAIRS AND DRY DOCKS: At Chaguaramas.
REPATRIATION: Can be arranged.
AIRPORT: See "Port of Spain".
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: No restrictions.
DELAYS: Not usual.
AUTHORITY: Lake Asphalt of Trinidad & Tobago (1978) Ltd., Brighton, La Brea, Trinidad, W.I. *Tel:* 648-7556, 648-7477. *Telex:* 3374 Asphalt. *Cables:* Trinfalt. *Contact:* Ainsley Nichols, General Manager.
AGENT: See "Port of Spain".

CHAGUARAMAS: 10.40 N. 61.39 W.

DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".
PILOTAGE: Compulsory. Pilots board in Chaguaramas Bay – 10° 46′ N., 61° 43′ W.
ANCHORAGE: Safe anchorage in Chaguaramas Bay between mainland and Gaspar Grande Island about 0.5 miles off the dock.
RESTRICTIONS/MAX. SIZE: No restrictions on night operations. 2 docks – main wharf with overhead cranes for loading and discharging bauxite – 960 ft. long, max. draft 32 ft. Smaller wharf – 400 ft., draft 25 ft.
TUGS: Not used. Launch assists in mooring.
STEVEDORES: Not necessary. All loading/discharging done by Chaguaramas Terminals employees.
MEDICAL: All facilities available.
FRESH WATER: Available from dock, 40 t.p.h. Also supplied by barge.
FUEL: Can be delivered from dock or supplied by barge.
GANGWAY/DECK WATCHMEN: Customs guards on duty at ship's side.
CUSTOMS ALLOWANCES: 200 cigarettes and a moderate amount of spirits.
IDENTIFICATION CARDS: Not required.
CARGO GEAR: Loading by travelling tower, rate 1,000 t.p.h. Conveyor system. Discharging – carried out with travelling rig of 2×4 ton grabs. Conveyor system.
REPAIRS/FLOATING DOCK: Operated by Swan Hunter Docks. Displacing up to 11,380 tons, 560 ft. long vessels. Also good berthing alongside, draft to 35 ft., and a safe close anchorage, draft 50 ft. General extensive repairs undertaken.
REPATRIATION: Can be arranged.
AIRPORT: See "Port of Spain".
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: No restrictions.
AUTHORITY: Chaguaramas Terminals Limited, Pointe Gourde, Trinidad.

Mailing Address: P.O.Box 608, Port-of-Spain, Trinidad. *Tel:* 637-4494/5. *Telex:* (294) 3288 (Answerback 288 Chag Wg). *Cables:* Chagterms-Port-of-Spain-Trinidad. *Contact:* General Manager.
AGENT: See "Port of Spain".

CRONSTADT ISLAND: 10.39 N. 61.38 W. (See Plan Book)

Terminal owned and operated by Baroid Trinidad Services Ltd., handling bulk barytes and general oilfield supplies.

Vessels from abroad calling at Cronstadt are required to proceed first to Chaguaramas for clearance formalities.
DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".
PILOTAGE: Compulsory.
TUGS: One tug used for berthing if required.
RESTRICTIONS: Berthing/unberthing in daylight only.
MAX. SIZE: 350 ft. length. This size vessel would overhang wharf approx. 80 ft. fore and aft. Depth alongside 13.7 m. Longer vessels can be accommodated with special clearance.
BERTHING: Vessel moored with 2 springs, 3 head and stern lines to dock. Discharging carried out with 15 ton shore crane and grab bucket with 3 yards with capacity for bulk ore.
FRESH WATER: Available by barge.
FUEL: Available by barge.
AUTHORITY: Baroid Trinidad Services Ltd., 59 Sackville Street, P.O.Box 765, Port-of-Spain, Trinidad. *Tel:* 62-51691/2/3, 62-52584. *Telex:* 3446 Baroid WG. *Contact:* C. Fuller, Assistant General Manager.
AGENT: See "Port of Spain".

GALEOTA POINT: 10.05 N. 61.01 W. (See Plan Book)

LOCATION: Galeota Single Buoy Mooring Terminal is located 2.6 miles on a bearing of 208° from Galeota Point Lighthouse, and is an open unsheltered roadstead. Galeota Point is a narrow headland about 210 ft. high and located in Lat. 10° 08′ 00″ N., and Long. 60° 59′ 30″ W. The lighthouse, situated on top of the point, exhibits a light 240 ft. above sea level which flashes white every 5 seconds and is visible for 22 miles. The buoy itself exhibits a quick flashing, (1 flash per second), red light, 10 ft. high, and visible for 4 miles through 360°
DOCUMENTS:
- Health Declaration (International Health Form to be filled out by Master on arrival.)
- Derat or Exemption Certificate.
- Crew List (4).
- Crew Customs Declaration (2).
- Register.
- Store List (2) (Signed by Master).
- Passenger Manifest (2) (If any passengers are aboard).
- Bonded Store List.
- Clearance from last Port.
- Manifest (if no cargo, a statement that vessel is in ballast).

ESSENTIAL REQUIREMENTS: MOST ESSENTIAL REQUIREMENTS TO BE MET BY TANKERS LIFTING OIL AT GALEOTA TERMINAL.
1. *Disposal of Ballast:* No dirty ballast will be pumped overboard. A separate ballast disposal line (16 in.) is available at the Terminal to pump ballast to a pit onshore where oil and water can be separated and disposal made.
2. *Notice of Arrival:* Incoming tankers must send ETA via commercial radio at least 72 hours before arrival at Galeota. Local time is GMT minus 4 hours and daylight saving (Summer Time) is not applicable.
3. *Arrival:* Company Loading Master and a Government Pilot if requested by the Tanker's Master will contact all incoming tankers about 3 to 4 miles from Galeota Point on a bearing of 220°/230° from the lighthouse, and will advise the ship's personnel on mooring and unmooring. If the buoy is occupied, or if arriving at night, vessels should anchor at least 1 mile South-west of the buoy.
4. *Tankers to have ready:* (a) 2 nylon or manila messenger lines of not less than 6 in. circumference and at least 300 ft. long, placed at the bow. (b) at ship's manifold there must be equipment capable of lifting the floating hoses. Weight of hose is about 3 tons.
5. *Crew Duties:* The tanker's crew will raise, rig, and operate vessel's derrick and winch for the hoisting of the floating hose. The Terminal crew will connect and disconnect loading hoses.
6. *Tanker's Valves:* Tanker's valves must not be closed against incoming oil stream. At least 1 minute is required to shut down pumps and stop flow of oil from the Terminal storage.
7. *Communication-Emergency:* If ship-to-shore communications fail, a line launch is always alongside and has radio contact with the Terminal Control Centre.
8. *Responsibility:* The Tanker's Master is responsible at all times for the safety of all ship's operations. Galeota Terminal rules and regulations do not contravene International Safety rules such as SOLAS (Safety or Life at Sea) or other maritime regulations such as those of appropriate classification societies. In case of any conflict, the latter shall apply.

PILOTAGE: Vessels arriving should approach to within 3 to 4 miles of Galeota lighthouse on a bearing of 220°/230° and will be met by the Amoco Loading Master and a Trinidad and Tobago Pilot (if requested through vessel's Agent). The Pilot will be stationed on the bridge and will advise the vessel on the approach to the buoy. The Amoco representative will be positioned in a most advantageous position and will advise the ship's crew on picking up and making fast the floating nylon mooring lines.

Vessels are requested to make a proper lee and to have a pilot ladder safely and securely rigged, ready for immediate use, and long enough to reach the Loading Master's launch. At night, adequate lighting must be rigged overside for the Loading Master to approach the side of the ship and climb the ladder safely.

Raising, connecting, disconnecting and lowering of floating hoses will be performed by the Terminal's crew with the assistance of the ship's crew as advised by the Amoco Loading Master, who will remain on board while the ship is secured to the buoy. The Loading Master will be in direct charge of the portable VHF ship-to-shore radiotelephone communications.

If, in the opinion of the Loading Master, the vessel is not equipped with adequate mooring or hose lifting facilities, he will so inform the vessel's Master, and in such event the vessel shall not be brought into the moorings until facilities, lines, or gear are deemed satisfactory.
APPROACHES:
Port Limits: Approaching vessels should never anchor to the East or North-east of Galeota Point. A submarine pipeline from a platform in Lat. 10° 10′ 24″ N., and Long. 60° 39′ 56″ W., enters the Galeota Point area about half a mile Northward of the lighthouse. Vessels should approach from the South-westward and never anchor less than 1 mile from the SBM or between the buoy and the coastline.
Navigational Aids: Galeota Point lighthouse is located in 10° 08′ 00″ N., and 60° 59′ 30″ W., and exhibits a white flashing light every 5 seconds and is visible for 22 miles. The lighthouse is unattended and frequently does not operate. The SBM exhibits a quick flashing red light every second, and is located in Lat. 10° 05′ 47″ N., and Long. 61° 00′ 45″ W.

Landmarks: Galeota Point appears as an island when approaching from seaward, since it is connected to the island of Trinidad by lower land. Situated on this lower land about 0.5 mile Northward of the lighthouse is the tank farm and processing area.

There are 5 oil storage tanks and they are painted a grey colour.

A small boat harbour is located 0.5 mile due West of the lighthouse in Guayaguayare Bay. The sheet piling type jetty extends seawards, on a bearing of 245°, 1,900 ft. from a point at Lat. 10° 08′ 14″ N., and Long. 61° 00′ 00″ W. The seaward 300 ft. of this jetty has a controlling draft of 13 ft. at extreme low water.

Vessels approaching from a North through East direction will observe lighted drilling platforms with following locations:

1.	Teak "A"	Lat. 10° 10′ 24″ N.,	Long. 60° 39′ 56″ W.
2.	Teak "B"	Lat. 10° 11′ 41″ N.,	Long. 60° 39′ 55″ W.
3.	Teak "C"	Lat. 10° 10′ 29″ N.,	Long. 60° 40′ 36″ W.
4.	Teak "D"	Lat. 10° 02′ 12″ N.,	Long. 60° 38′ 54″ W.
5.	Teak "E"	Lat. 10° 10′ 26″ N.,	Long. 60° 39′ 55″ W.
6.	Samaan "A"	Lat. 10° 20′ 30″ N.,	Long. 60° 40′ 47″ W.
7.	Samaan "B"	Lat. 10° 19′ 46″ N.,	Long. 60° 41′ 04″ W.
8.	Samaan "C"	Lat. 10° 19′ 47″ N.,	Long. 60° 41′ 35″ W.
9.	Poui "A"	Lat. 10° 06′ 35″ N.,	Long. 60° 49′ 47″ W.
10.	Poui "B"	Lat. 10° 06′ 55″ N.,	Long. 60° 49′ 02″ W.
11.	Tesoro "A"	Lat. 10° 11′ 05″ N.,	Long. 60° 54′ 59″ W.

Vessels should exercise caution and keep well clear of these platforms because of unlighted buoys, small boat operations, submarine pipelines, and anchored test barges nearby.

The lighthouse 4 miles to the Southwestward of Manzanilla Point situated on Brigand Hill is an excellent landmark for vessels approaching from the Northward. The lighthouse is elevated 712 ft. and exhibits a group flashing (3) white light every 30 seconds and visible for 35 miles.

RESTRICTIONS: The Terminal operates 24 hours per day, 7 days a week. Ships are loaded and unmoored at any hour, weather and other circumstances permitting. Vessels are moored during daylight hours only, however an exception to this rule may be made at the discretion of the Terminal. The Terminal will never be closed due to holidays.

MAX. SIZE: 250,000 d.w.t. Depth of water 95 ft.

RADIO: *Long Range and Radio Communications:* Ships may send their cable(s) to the Amoco office through the commercial station, "North Post Radio/9YL", which is about 10 miles Northwest of Port of Spain. Upon receipt of such cable(s) North Post will immediately relay it to Amoco's office through their Telex system. Messages pertaining to oil liftings should be addressed to AMOCOTRI, Trinidad. If it is necessary to send messages through vessels' Agents or Owners via International Telex Service, then they may be sent to Amoco by using the Telex address "WG 287" (Amoco – Port of Spain).

Cable or Telex messages addressed to Galeota Terminal would undergo the same procedures, but upon receipt in Amoco's radio office in Port of Spain, they will immediately be relayed to Galeota Point by HF/SSB radio teletype channel.

Cables from Galeota Terminal to the ships would be given to Amoco, Port of Spain radio office on the SSB, which will be telephoned to North Post Radio Station.

The coast radio station transmits traffic lists at regular intervals listing the call signs of all ships for which they have traffic on hand. At the end of their traffic lists, the coast radio station starts searching for answers on the frequency bands listed below. Thus, any vessel hearing its call sign in the traffic list, will immediately start calling the coast station on its own working frequency in the same band on which the traffic list has been heard. The searching coast station radio operator would eventually pick up the signals from the calling ship and would pass her his traffic.

Listed below is information on "North Post Radio Station" – 9YL:

Station	*Call Sign*		*Frequency*	*Hours*
North	9YL	(H.F.)	17,184 kHz	1200 hrs. – 1530 hrs. (GMT)
Post		(H.F.)	12,885 kHz	1330 hrs. – 2050 hrs. (GMT)
Radio		(H.F.)	8,710 kHz	0100/0600/0900/1300 1500/1730 & 2130 hrs. (GMT)
		(H.F.)	6,470 kHz	2300 hrs.
		(M.F.)	476 kHz	0300 hrs. and every 4 hrs. thereafter.

Medium Short Distances: Ships may contact Galeota Terminal within 3 days before arrival on the marine HF frequencies. Galeota Point listens on 2182 kHz and operates with Amoco's marine units on 2398 kHz.

Ships equipped with FM/VHF radios may call Galeota Point on 156.8 MHz = Channel 16 and/or Channel 8.

Advice of Arrival: It is important that ships establish radio contact with Amoco when 3 days distant from Terminal and maintain this contact until just prior to arrival at the Terminal. All ships should send a 72 hours ETA message to Amoco giving the best estimates of ship's arrival time at the Terminal. This ETA message should also include a definite statement of the details of any equipment required from shore for connecting submarine hoses to ship's manifold. Further ETA messages should be sent to Amoco when the vessel is 24 hours and 12 hours distant from Galeota Point and at any other time any appreciable change occurs in the original ETA or those subsequent thereto. The 12 hours ETA should include a positive statement regarding ship's Readiness to Load on arrival, and the number of hours that will be required to discharge ballast after the ship is berthed in mooring (see "Ballast").

Ship-to-Shore Communication: Ship-to-shore communication, while ships are in moorings, will be by portable VHF radiotelephone units. The Loading Master will advise Masters and Officers regarding the emergency whistle signals set up for use in event VHF radiotelephone units become inoperative. The use of the ship's radio station and/or battery charging equipment is prohibited during cargo transfer operations.

Ship's Radio Stations: The use of ship's radio equipment while ship is on anchorage in Terminal waters is prohibited by law, unless transmission is made through the local commercial station.

BERTHING:

Single Buoy Mooring: Tankers are loaded by means of a 42 in. pipe-line from shore to the SBM which is 2.6 miles offshore. The ballast water is pumped ashore through a 16 in. submarine line. The buoy piping consists of 2×20 in. diameter pipes for crude and 1×16 in. diameter pipe for deballasting with 2 by-pass valves. The loading hoses from the buoy to the tanker consist of 2×20 in. floating hoses, 755 ft. and 790 ft. long ending in 3×12 in. hoses of 90 ft. length. Valves are fitted in the buoy connectors so that the flow in one 20 in. diameter floating hose string can be diverted to the 16 in. diameter underbuoy hose string.

The SBM is designed for maximum tanker size of 250,000 d.w.t. and is located in 95 ft. water depth. The buoy is 11 m. in diameter, 4.80 m. high, and equipped with a navigation light and radar reflector. There is a skirt at the bottom of about 15 m. in diameter.

Ship's Gear: Vessels calling at the Galeota Point must be equipped with 2 nylon messenger lines of a minimum 6 in. circumference and at least 300 ft. long. These lines should be laid out free for running at the bow of the vessel. Warping winch or windlass should be in good working order and adequate to handle 12 in. nylon floating rope under heavy strain. Efficient stoppers must be available to transfer floating nylon from winch to bitts.

Vessels must be equipped to fit flanges on floating hoses which are ASA standards.

Ships must be adequately equipped with blocks, tackle and booms to hoist the floating hoses, each weighing about 3 tons, from the sea surface over the ship's port rail to the manifold, in a safe, efficient and expeditious manner. Ships must also have an adequate supply of nuts, bolts, gaskets, and wrenches to connect cargo/deballast hoses.

Ship's Alertness: The Terminal is an open roadstead, therefore, during the time a ship is moored at the Terminal, the ship's engines and gear must be ready with full power for immediate use.

Vessel at the SBM must be able to clear and shall clear immediately upon advice of the Loading Master or as directed by Amoco's Terminal Superintendent.

Ship's personnel should be at their stations and alert at all times during mooring, unmooring and cargo transfer operations.

Mooring Launches: Amoco maintains launches to assist in mooring and unmooring vessels.

BALLAST: It is the Shipmaster's responsibility to see that no oil (crude, diesel, bunker C, or bilge) is pumped or spilled overboard from the ship. Galeota Terminal has 2 ballast water pits which are equipped with oil skimming equipment to accommodate any ballast water. The tanker may discharge ballast as desired into the proper line as soon as all arrangements have been made for this action.

All precautions shall be taken to prevent any loss of oil overboard; drip pans must be in place and used when disconnecting oil hoses from manifolds. The waters in and adjacent to the Galeota Terminal, and Amoco's offshore platforms must *never be polluted.*

As soon as practical after arrival, all vessel's tanks will be inspected. If during first inspection or during loading, it is revealed that ship's tanks are not oil-tight, tanker will be rejected and refused further loading. Ship will not be accepted later for loading unless satisfactory evidence, duly certified by Lloyd's, ABS Surveyors, or other authorised survey agency, of effective repair is submitted.

A vessel must have sufficient ballast for safe manoeuvring and usually one-third of its tonnage is adequate. However, by a careful watch of the weather information and berthing instructions and by a knowledge of the behaviour of his own vessel, a Master may desire to come to the Terminal with minimum ballast.

Shipmaster should be aware that at any time deballasting at sea occurs and has been reported or viewed by Amoco Trinidad Oil Company personnel, the offence will be documented, where possible, by Amoco personnel, and a report submitted to the proper Ministry of Trinidad and Tobago.

In addition to the lights usually displayed, vessels discharging ballast or loading cargo during darkness, will illuminate the area around the ship, to the satisfaction of the Loading Master, in order that any oil on the surface of the sea may be readily detected, and appropriate action taken. Vessels unable to illuminate the sea satisfactorily may not discharge ballast during darkness. Vessels should provide explosion proof flood lights for working on deck during night operations.

Loading and Deballasting Simultaneously: Vessels equipped with a separate system of ballast tanks will be allowed to discharge ballast and load oil simultaneously, providing approval is received from the Terminal Superintendent.

LOADING:

Rate of Loading: Maximum crude oil loading rate through 2×12 in. deck hoses is approximately 40,000 b.p.h. The flow is by pump and the line pressure will not exceed 100 p.s.i.

In order to save ship's time, it is requested that ballast water be pumped *as fast as possible* and that the tanker receives oil as fast as it can be delivered, both operations having due regard for safety. It is requested that any impediment (such as "Y's", strainers, or mud boxes) to the flow of oil be removed before arrival at the Terminal. Connections should be provided so that 12 in. ASA deck hoses may be used.

Berthing: Tenders to load crude oil cargo will normally be accepted and the berth will be assigned to vessels in order of arrival, provided vessels have nominations for cargo valid at the time and are in all respects equipped and ready to moor. In the event that the berthing is delayed on account of weather, vessels will keep their position in line. Vessels required to leave the port area on account of weather (port closed) should keep in contact with the Terminal via radio in order that they will be available when the weather moderates. Amoco reserves the right to load vessels "out of turn" following the return of good weather, to the extent that such loading "out of turn" does not materially delay the loading of other vessels in line. For example, in the event that weather makes it necessary for vessels awaiting berth to vacate the terminal and put to sea, Amoco may load another vessel which arrives first after the return of good weather, but before the return of the vessels waiting in line ahead of it. And further, Amoco reserves the right to decline to moor a specific vessel if its condition or facilities are unsafe for mooring or loading, even though the port may be open to other vessels.

Connecting Hoses: After the tanker is securely moored, the floating loading/deballasting hoses must be lifted to the rail with ship's equipment. The two 12 in. hose lifts weigh about 3 tons each. The flange connection on each hose is for a 12 in. manifold. Hoses are lifted individually by the ship's gear and are connected on the port side. The 12 in. hoses are connected direct to the manifold and tankers should have their manifold fittings available.

The Loading Master and the hose crew will sling and connect the hoses to the vessel's manifold. The ship's personnel are expected to operate the winch and assist where necessary. A deck officer should be present at all times.

Loading Readiness and Arrival Time: The Company will make every effort to load vessels upon arrival or as promptly as berth is available, weather permitting.

Notice of Readiness will not be accepted as at time of arrival, unless the vessel is in all respects ready to load. Arrival time will be considered as the time the Loading Master boards the vessel or the time that vessel anchors, whichever occurs first.

Responsibility: The vessel is responsible for the deballasting and loading. The Company Loading Master will advise the vessel in respect to loading pressures and hazards, but will not direct the loading except as may be necessary to protect the terminal facilities. Manipulation of ship's valves is the direct responsibility of the ship's personnel.

Deballasting Control: As soon as the vessel is ready to deballast and the line connections have been made, the manifold valves should be opened and the shore notified. Upon advice from the Terminal, ship may begin discharging ballast into shore line. Line pressures should not exceed 120 p.s.i. This corresponds to a flow rate of 800/1,000 t.p.h.

Oil Valve Control: Caution: The incoming oil stream is controlled onshore, and it is extremely dangerous to close a ship's valve against the incoming stream. Such a procedure creates excessive pressure, which may damage hose, ship's piping, or Terminal facilities. Vessels will be held responsible for damage resulting from failure to observe this precaution.

A reduction in loading rate before topping the final tank or tanks may be arranged through the Loading Master by the ship's officer in charge and a normal standby warning should be given about 15 minutes before the shut down of loading operations per normal tanker practice. On advice from the ship a minimum of 1 minute is required to stop the flow of crude oil.

Emergency Signal: A battery-operated emergency shut down signal is expected to be installed in the near future.

Code Flag: During loading or deballasting the International Code Flag "B" shall be displayed from a topmost signal halyard during daylight hours. During hours of darkness, a red light shall be displayed. This light should be of a character such as to be visible at a distance of at least 1 mile, and show an unbroken light all round the horizon.

Shore Stops: Requests for the Terminal to stop the flow of cargo at a pre-determined tonnage will be made verbally to the Loading Master, and Amoco will not be responsible for any error, and in the case of overloading excess cargo will not be pumped back ashore.

Some delays are always incurred when such a shore stop request is made.

MEDICAL: Vessels requiring emergency medical assistance should immediately contact the Terminal, by marine VHF radio, and supply the necessary pertinent information which will be passed on to the vessel's Agent.

Neither medical or hospital facilities are available at Galeota or provided by Amoco. Limited facilities are available in Mayaro, which is about 30 minutes drive and unlimited service is available in Port of Spain which is 2 hour's drive.

FRESH WATER: Only available by barge from Port of Spain.

FUEL: Only available by barge from Port of Spain.

REPAIRS: Masters of vessels loading or discharging at Galeota Terminal are advised that this port is considered an "Open Roadstead", and under no circumstances may engines be shut down for repairs while their ships are moored to the SBM system. There are no facilities at Galeota Terminal for making vessel repairs, but arrangements may be made through vessel's Agent, to utilise the Port of Spain facilities. It is emphasised that all vessels at the SBM must be in readiness to clear immediately on instructions to do so.

SURVEYORS: Amoco maintains an inspection laboratory at Galeota Terminal and will inspect cargo on specific request of off-tanker companies.

Classification agencies are represented in Port of Spain as follows:

American Bureau of Shipping
Grell and Company Ltd.,
60 St. Vincent Street,
Port of Spain

Lloyds Register of Shipping
Geo. F. Huggins and Co. Ltd.,
72 – 74 South Quay
Port of Spain

TIME: GMT minus 4 hours, and daylight saving (Summer time) is not applicable.

CONSULS: There are no consulates at Galeota; however, consular or diplomatic representatives for most nations maintain offices in Port of Spain.

CUSTOMS ALLOWANCES: Each Crew member is allowed to retain in his possession 200 cigarettes and 1 bottle of spirits. The balance must be listed and will be sealed in a locker by the Customs.

SHORE LEAVE: Shore leave for personnel of vessels loading or unloading at the Terminal is arranged through the vessel's Agent. All personnel going ashore must land at the Amoco small boat harbour. Sufficient crew must be aboard at all times for letting go lines in order to clear the mooring immediately if necessary.

SAFETY: The vessel's personnel are responsible for the safety of the vessel and must take all necessary precautions, whether or not so advised by the Loading Master, having in mind, the hazards of the operation because of the product being handled, weather conditions and any other circumstances requiring special care or caution.

It will be well to remember that Amoco *does not have* any tug or floating vessel in the area equipped with fire-fighting apparatus.

While the vessel is moored or within the vicinity of the moorings, all vessel's personnel and vessel's operations must comply or be in accord with the following safety rules:

1. The ship's engines must remain ready with full power for immediate use.
2. The Loading Master may request the Master to extend the ship's "No Smoking" areas as conditions warrant. Masters are also requested to instruct their crew not to throw lighted cigar or cigarette butts over the side or out of the portholes. All alleyway doors to passage ways leading to deck areas are to be kept closed during cargo transfer operations.
3. Not less than 1 deck officer and 3 seamen shall be available on deck at all times while vessel is in the mooring system.
4. Power must be available at all times on all deck winches and on the anchor windlass while vessel is in the mooring system.
5. Explosion proof deck lighting must be available for night mooring and loading. A good floodlight will be required to illuminate the area around the cargo hose connections during cargo transfer operations. During the discharge of ballast at night, the sea area around the vessel is to be adequately lighted.
6. All deck scuppers must be plugged tight before connecting the floating and deck hose and remain plugged until all hoses are disconnected.
7. The presence of unauthorised craft alongside is extremely hazardous. Ship's Masters are requested to require all non-Amoco craft to clear ship's side as soon as personnel have been embarked or disembarked.
8. No stores may be handled on the weather deck while ship is loading cargo, discharging dirty ballast, or while any ullage hatches, loading hose, or tank tops are open.
9. No cargo will be loaded while tank tops or ullage hatches are open.
10. During the time a vessel is moored in the Galeota Terminal, a continuous and efficient fire watch must be kept on deck and in the engine room. Fire hose (at least 2 pairs) shall be left out for immediate use at all times while in the berth.
11. In the event of fire breaking out in any part of the vessel, however minor it may be, the fire alarm must be given immediately. This will consist of a succession of long blasts on the ship's whistle, together with a rapid and continuous ringing on the ship's bell.
12. A safety check-off list and Terminal rules for safety will be delivered by the Loading Master.

WEATHER:

Climate: The climate around Trinidad is generally very good, and is strongly influenced by the North-east trade winds. Visibility is usually excellent except during passing thunderstorms and the percentage of days with less than one mile visibility is very small.

Weather Data and Summary:

Average rainfall	60.0 in.
Mean maximum temperature	87°F
Mean minimum temperature	69°F
Extreme maximum temperature	101°F
Extreme minimum temperature	52°F
Average relative humidity (0700 hrs.)	92%
Average relative humidity (1500 hrs.)	67%

Winds: Winds are predominantly from the North-east and East (about 90% of the time). The mean velocity is about 8/12 knots and infrequently 30 knot winds may be experienced.

Tides: A tidal range on the East coast of Trinidad is 4 ft. – 5 ft., and the tides occur 17 minutes later than Port of Spain.

Sea Conditions: As Trinidad is constantly under the influence of the North-east trade winds, the seas and swells are predominantly from the Eastern quadrant throughout the year. Wave heights average about 6 ft. – 8 ft. and during a 2-year observation period waves of 11 ft. and higher occurred for as many as 20 days per year.

Currents flow to the North-west 53%, North 24%, and N.N.W. 14%. The currents are not seasonable as currents of 2 to 3 knots are experienced during all months of the year. Average current velocity is about 1.5 knots.

Sea Temperatures: The surface temperature over coastal areas average about 75°F to 80°F in the Winter months and 80°F to 85°F in Summer.

General: Trinidad is an area where buildings have been damaged by earthquakes and the South-west tip has experienced mud volcanoes and disappearing islands. The rainy season occurs in late Summer and Autumn at which time as much as 15 in. per month may be experienced. Hurricanes are seldom felt in Trinidad and Tobago since these islands are to the South of the storm track.

GENERAL:

Government Officials: Trinidad and Tobago Customs officials will be stationed at Galeota and in most instances the Customs officer will also handle the duties of the Quarantine and Immigration officers. Should Customs guards be stationed on board vessels while in the moorings, it is expected that ships will provide food for these guards and other officials.

Quarantine Regulations: The rules governing quarantine of vessels are the same found in other ports of the world.

Visitors: Visitors must obtain a special pass from the Amoco Terminal Superintendent and it is strongly recommended they be restricted to a minimum due to the hazards involved.

Supplies: Commissary supplies, as well as steward's stores are not available at Galeota Point, but a limited amount of fresh fruits and vegetables may be purchased at the market in Mayaro, which is 30 minutes' drive from the shore terminal. Unlimited supplies may be purchased in Port of Spain and all arrangements must be made through the ship's Agent.

Bunkers, gas oil, marine lubricants or potable water are not available at Galeota.

Flag: All vessels are required to fly the Trinidad and Tobago ensign on the foremast during daylight hours. TT flags may be obtained from ship's Agent.

Contraband: Amoco prohibits unauthorised craft from coming alongside ships while in the moorings.

To avoid the possibility of undesirable items getting aboard vessels, it is recommended that Masters discourage "bumboats" or similar craft, coming alongside while vessel is in the Terminal vicinity.

Small Boat Harbour: A sheet piling type jetty is used for the harbouring of mooring launches and supply vessels. The entrance is defined, by night, with a red flashing light mounted on the seaward end of the jetty.

Company's Terminal: The Company's Terminal and marine administrative offices, storage tanks and laboratory for testing stock are located onshore at Galeota Terminal.

Agency: Amoco does not perform any vessel agency functions. Owners of vessels calling at Galeota Terminal must arrange for their own Agent.

OPERATOR: Amoco Trinidad Oil Company.

AGENT: See "Port of Spain".

POINTE-A-PIERRE (Texaco Oil Terminal and Refinery): 10.19 N. 61.29 W. (See Plan Book)

DOCUMENTS:

5 Copies Crew List.
4 Copies Stores List.
1 Copy Unmanifested Cargo.
2 Copies Crew Declaration.
1 Copy Declaration of Health.
1 Copy Arrival Report.
1 Copy Firearms & Ammunition List.
Derat Certificate.

Officials require accommodation ladder to be rigged, usually on port side, for boarding and clearance.

PILOTAGE: Compulsory. Pilot boards from tug. Pilot ordered by Agent after receipt of ETA. Pilot ladder conforming to International Safety Regulations to be supplied by vessel.

If vessel proceeding to SPM, Pilot boards 2 miles West of SPM. If vessel proceeding to berths Pilot boards 1.2 miles S.E. of SPM.

ANCHORAGE: Safe anchorage and good holding ground in the roadstead. On account of Pierre Shoal, a 21 ft. patch about 1.75 cables S.W. of the head of the main viaduct, vessels of moderate draft should approach with the main viaduct bearing more than 075°. The main viaduct consists of pipe-lines supported by reinforced concrete piling, located at Lat. 10° 20′ N., Long. 61° 30′ W. and extends in a W.S.W. direction for 6,190 ft.

RESTRICTIONS: Controlling depth in main channel 42 ft. No entry restrictions day or night. However, Free Pratique must be obtained, crew lists, stores lists, etc., to be presented to local Agents on arrival. Arriving vessels must contact Texmarine, Pointe-a-Pierre on VHF Channel 16 two hours prior to arrival for berthing instructions, traffic information, cargo nominations etc.

MAX. SIZE: Max. draft at SPM 73 ft. 6 in.

Also see "Shipmaster's Reports" and "Developments".

HEALTH: See "Port-of-Spain".

TUGS: Texaco Trinidad Inc. maintains 3 tugs to assist in berthing.

RADIO: Vessels to send ETA messages 72, 48 and 24 hours prior to arrival to "Texmarine San Fernando". Messages should be sent through one of the following: Chatham (USA), North Post (Trinidad), Barbados or Curacao.

VHF: Texaco Trinidad Inc. maintains their own radio station (24 hours). Call "Texmarine Pointe-a-Pierre" on Channel 16, working Channel 13. If at SPM – Channels 6 and 10.

BERTHING:

Berth No.	*Max. Permissible Draft* (ft.)	*LOA* (ft.)	*D.W.T.*	*Remarks*
1	37.5	720	50,000	
2 (North)	37.0	775	63,000	
2 (South)	22.0	—	—	Small vessels and barges only
3 (North)	35.0	640	35,000	
3 (South)	—	—	—	For barges only
4	23.0	360	—	
5 (Sea Island)	39.0	900	100,000	
6 (Sea Island)	54.0	950	120,000	
7	36.0	700	35,000	
7	36.0	700	35,000	
8 (General Cargo)	28.5	700 (pier length) 70 (pier width)	25,000	
SPM	73.5	—	286,000	

DISCHARGING:

Maximising Cargo Discharge (Squeeze Dry Operations): Due to the current high costs of crude oil the following guidelines have been compiled which should be followed by all Owned, Managed and Time Chartered vessels at every cargo discharge operation in order to maximise cargo outturn. Special importance should be attached to the discharge immediately preceeding shipyarding. A Representative from the Company will attend vessels periodically in order to advise and assist as required.

General Guidelines for Maximising Cargo Discharge:

1. Inerted vessels capable of Crude Oil Washing must strictly follow the routines set out in their Tank-cleaning Manuals. Owned, Managed and Time Chartered vessels should COW all cargo and slop tanks prior to shipyarding. TC vessels should also COW all cargo and slop tanks prior to re-delivery.
2. Stripping operation to be performed twice, first during normal discharge and the second time after all cargo (except partial contents in the aftermost (slop) tank) has been discharged ashore. The Inspector must ensure that vessel is adequately trimmed by the stern during all stripping operations.
3. On completion of normal discharge (except for partial contents in aftermost (slop) tank) and second stripping of all tanks, contents of main deck and drop lines and loading arm connections must be stripped to slop tank. (NB: Air or tank atmosphere must be used to break the vacuum).
4. Line content in all main suction lines must also be dropped into aftermost tanks and all main suction valves in tanks opened to drain suction elbows. On completion of dumping line contents, stripping system to be used to drain cargo remaining in the suction system and pumps back to the slop tank, with tank suction shut.

   This is best achieved by commoning up all main cargo pipe-lines on the suction side of the main cargo pumps, opening the suction valves to these pumps and cross connecting the suction side of the stripping system to the main cargo line.
5. Where available, open by-pass valves connecting discharge side with suction side of main cargo pumps.

   Note: When vacuum starts building up in the suction system, allow tank atmosphere to enter the pipe-lines by opening a suction valve in a forward tank.

   It is recommended that one hose or loading arm remains connected to the manifold to which the small diameter deck stripping line (where available) discharges into. This line discharges outboard of the vessel's manifold valve, which of course is left shut during final discharge ashore of slop tank contents using stripping system.
6. The reasons for stripping back line and final tank contents to the aftermost (slop) tank rather than direct to shore are that:
   (a) Operator has better idea when suction is lost (by seeing no increase in slop tank ullage).
   (b) Accurate measurements can be made of total quantity of cargo recovered by operation "Squeeze Dry".
7. On completion of final line and tank draining, discharge contents of aftermost (slop) tank ashore via small diameter deck stripping line, where fitted, or via main discharge line where not.

Check List for Line Draining – Operation "Squeeze Dry":

1. Are following design features available to improve line draining:
   (a) By-pass to connect discharge side with suction side of main cargo pumps?
   (b) Connections from stripping system to both suction and discharge lines of main cargo pumps?
   (c) Vent valves in deck lines near manifold?
   (d) Suction and discharge pressure gauges and stroke counters in stripping pumps?
   (e) Small diameter deck line, for final draining?
   (f) Block valves in stripping line system?
2. Is cargo discharge *completely* finished and all cargo tanks checked by dipping to be well drained?
3. Have contents of tank washing line that was used for COW been properly dropped into slop tank?
4. Are all manifold valves with shore connection (except one if no small diameter line available) open?
5. Are all valves in deck, pumproom and drop lines open?
6. Are all valves (except tank valves during line draining) in suction lines open?
7. Are all lines dropped in aftermost (slop) tanks?
8. Has air/inert gas been allowed to enter to vessel's line system both at forward end of bottom lines and in the manifold area?
9. Are stroke counters (where fitted), suction and delivery pressure gauges of drain pumps working correctly?
10. Has dropping operation been checked by measuring oil level in aftermost holding or slop tank/tanks?
11. Have all manifold valves been shut after dropping operation?
12. Has valve in small diameter deck line been opened, or where not fitted, has "final" manifold valve been opened?
13. Have stripping pumps been set correctly to drain holding or slop tank ashore through small diameter line (or deck line)?
14. Have all lines in cargo tanks, on deck and in pumproom been set correctly for line draining to holding or slop tank?
15. Has holding or slop tank been properly drained ashore and checked to be well drained by dipping?
16. Has vacuum been allowed to build-up before air/inert gas was let in and has this been done repeatedly?
17. In addition to checking holding or slop tank ullage, are drain pumps checked to see if actual delivery from line draining/tank draining has stopped?
18. Has shore been asked to check delivery of final holding or slop tank into shore system?
19. Have all valves been shut after line draining?

Note: During draining of discharge lines to holding or slop tank, open the non-return valves in the discharge lines (if movable from the outside).

List of Crudes unsuitable for Crude Oil Washing:

Due to their very high viscosity, the following crudes should not be used for Crude Oil Washing.

(a) Boscan Crude
(b) San Ardo Crude
(c) Corcorna Crude
(d) Laguna Crude
(e) Monagas Crude
(f) Tia Juana Pesado Crude

Vessels should contact FHQ for instructions if any COW problems are envisaged with *High Pour Point* crudes in areas where low air and sea temperatures are likely to be encountered.

Minas Crude (Waxy crude loaded at Sungai Pakning, Sumatra)

Pertinent properties of Minas Crude are:

A.P.I. Gravity	35.5
Flash	Ambient
Pour Point	95°F
Viscosity SSU at 100°F	87
Heat Requirements	100°F to 120°F

Based on information now available regarding the characteristics of Minas Crude, the procedure to be observed in handling of this crude should be as follows:

1. *Cargo Tanks* – Due to high wax content of Minas Crude, considerable wax may accumulate in tank bottoms. A regular tank cleaning routine should be established by vessels in this trade to assure reasonable cleanliness of tanks. Vessels should arrive at loading ports with a minimum amount of clean ballast.

2. *Heating* – Minas Crude is to be maintained at a temperature of 110°/120°F throughout a voyage. In order to facilitate the discharge of the cargo, the temperature should be raised to 120°F just prior to arrival. *Caution:* Light ends on this cargo will be lost if temperatures are maintained in excess of 120°F over an extended period of time; therefore heating above 120°F should be done only on instruction from the Marine Superintendent or Agent as the case may be at the receiving terminal. Experience has shown that on most vessels this temperature can only be obtained by controlled heating through the entire voyage, although the steam pressure required will vary on individual ships, weather conditions and temperature of the sea water encountered in transit. In addition to these requirements, the 72 hour ETA should include the average temperature of the cargo.

3. *Discharging* – Due to Minas Crude having a very high wax content and a pour point of 90°F, many unusual difficulties can be encountered. Major difficulties may be expected during stripping of tanks due to the oil congealing in the vessel's tank bottoms when the level of the oil is below the heating coils. It is therefore of the utmost importance that, in order to prevent large amounts of product remaining on board, tanks should be immediately stripped as the discharge progresses.

Recommended discharging procedure is to discharge one or two tanks simultaneously in each section of the vessel, maintaining a considerable drag to insure maximum flow of the oil into the cargo piping suctions. Heat should be maintained on the cargo tanks throughout the discharge. In the event tanks become foggy, as the level of the oil becomes progressively lower in individual tanks, a rod or sounding tape should be introduced to ascertain the amount of cargo remaining and it is highly recommended that the steam not be turned off the tank in order to prevent fogging. One of the characteristics of Minas Crude when it cools is not to remain on vertical surfaces, but rather lay in hills and valleys on horizontal surfaces. In many instances, a sounding rod will show only a few inches of oil remaining under the ullage plug and two or three feet could remain in the forward end of the tank if temperatures are allowed to drop.

4. Removal of solidified oil from tank bottoms upon completion of discharge. If necessary a sufficient quantity of hot water taken from a fire line over-all into individual tanks through the ullage holes to cover heating coils, will assist in heating the remaining portion of the cargo for discharge. In many cases, the introduction of a pyrate machine with hot water will assist in removing solidified oil from horizontal surfaces of internal members of the tanks. The vessel may also be listed slightly in one direction or another to facilitate the free flow of oil into the suctions in the wing tanks.

Duri Crude (Intermediate Gravity Crude)

Duri Crude, which is loaded at Dumai Terminal, is a high viscosity relatively heavy crude oil. No unusual handling problems are anticipated in the bulk carriage and discharge of this crude.

Pertinent properties of Duri Crude are:

API Gravity	About 22.0
Flash Point	94°F
Viscosity (Range of Tests)	1000–455 SSU at 100°F 400–220 SSU at 130°F
Heat Requirements	100°–120°

The high viscosity of this crude requires that it be heated in order to assure a satisfactory discharge rate. The actual viscosity of shipments may vary, but is believed to be nearer the low figures of the range quoted above. The recommended discharge temperature is 100°F at this time, subject to change if higher viscosities and/or discharging difficulties are experienced.

The recommended cargo heating procedures are:

1. Test heating coils and repair as necessary.
2. Commence heating cargo 96 hours before arrival at discharge port.
3. Raise cargo temperature gradually until it reaches the required 100°F.
4. Maintain cargo temperature at 100°F throughout the discharge.

Discharge procedures which have proved effective in the handling of heavy fuel oils should also be used when handling Duri Crude. Tanks should be stripped quickly on an "as you go" basis to take advantage of the faster flow of hot cargo and thereby minimise stripping and the accumulation of cargo residue below the heating coils.

TRANSHIPPING: *Instructions to VLCC Masters from Texaco Trinidad, Inc.:*

1. Anchor your vessel in designated anchorage with starboard anchor and rig gangway starboard side. Enter and clear vessel in normal manner, co-ordinating all activities via VHF with Texaco Marine Superintendent at Shipping Office.
2. Gauge all tanks, determine amount of cargo on board and advise Shipping Office along with A.P.I., temperature and other particulars. Re-secure all tanks. Advise Lightering Vessel A.P.I. and temperatures.
3. Barge will come alongside, port midships. Receive on board six 30 ft. lengths of 12 in. cargo hose along with necessary reducers, blanks, bridles, straps, etc. Ship's crew must rig 2 strings of 90 ft. long hose connected to your manifolds, and supported by your vessel's boom. Hoses will be tended by your vessel's crew throughout transhipment.
4. A string of 4 ft.×11 ft.×21 ft. Yokohama fenders, each separated by 100 ft. length wire will be brought alongside (port). Your forward and after main deck wire springs will be lowered down and secured to the ends of the fender string to secure same alongside. Four of the fender positioning wires will then be lowered from your deck and one secured to each of the fenders. The fender string must then be positioned and secured alongside centred on your manifold.
5. Two additional fenders will then be brought alongside and secured approximately 150 ft. forward and aft of the main fender string to provide additional protection to your vessel in mooring and unmooring the lightering vessel. Two positioning wires will be passed up to your deck from each of these fenders to secure them in place.
6. When lightering vessel comes alongside your crew must be stationed fore and aft on deck to handle lines. Your bridge should be manned with engines on standby in the event of emergency. During entire transhipment all fire fighting equipment must be rigged and at ready. Additional fire fighting equipment and anti-pollution devices will be on harbour tugs and available if needed.
7. A lightering vessel assisted by tugs will come abeam of your vessel and send out synthetic lines, one forward, one aft, by launch.

   Your crew must lower heaving lines or messenger lines to launch, then heave lines on board and secure fore and aft on your vessel. Lightering vessel will then be brought alongside and positioned with her manifold approximately 10 ft. – 40 ft. aft of yours. The lightering vessel will then pass her wires (all containing nylon straps) to your vessel and safely secure alongside.
8. After the lightering vessel is safely secured alongside, to your satisfaction, the two hose strings will be passed to her and secured to her manifolds. The lightering vessel will support the hose ends, however, the main support will remain your vessel's boom. Agreeable handling rates, procedures and signals must be agreed upon between the Masters of the vessels involved and the Textrin Co-ordinator of the transhipment. Portable VHF radios operating on Channels 16 and 10 will be supplied from ashore. VHF Channel 10 will be used for all ship-to-shore communication.

   Your control room must be manned at all times by a competent individual who must be monitoring Channel 10. Additionally a competent individual (Officer) and a full watch must be maintained on deck to tend hoses, fenders, etc. One man must be stationed at the manifold and in full view of the hoses and other vessel at all times.

   The Textrin Co-ordinator and Marine Staff will be available and will assist in all ways possible, however, the responsibility for a safe operation rests with you and your vessel.
9. Upon completion of loading the lightering vessel, your tanks must again be gauged and figures passed to Shipping Office. All tanks must then be secured prior to unmooring of lightering vessel. The Marine Office will co-ordinate handling of necessary cargo documents depending on the destination of the lightering vessel.
10. Hoses will be drained to the lightering vessel, then disconnected, blanked and taken back aboard the VLCC.

    Your crew must again be stationed fore and aft, your bridge manned and the lightering vessel unmoored.
11. The entire procedure will be repeated for the next lightering vessel.
12. It is anticipated ballast will be taken after the second lightering or as soon as one isolated section is stripped of cargo. Prior to ballasting Textrin Co-ordinator should certify tanks to be ballasted as dry.

ALTHOUGH IT IS IMPORTANT TO MINIMISE DELAYS THIS CONSIDERATION MUST TAKE SECOND PLACE TO PROPER SAFETY PRACTICES AND TO ANY STEPS NECESSARY TO AVOID POLLUTION.

Also see "Discharging".

DENSITY: 1025, (August to November approximately 1023).

FRESH WATER: Available alongside or by barge (if available and adequate notice given prior arrival). Limited in dry season (January-June).

FUEL: Fuel oil, diesel, gas oil and lubes supplied ex-pipeline or by barge. Also see "Shipmaster's Report" dated August 1979.

BALLAST: No facilities. Vessels to arrival with clean ballast.

REPAIRS: Almost all types of deck and engine repairs can be carried out.

DRYDOCK: Swan Hunter Shipyard located at Chaguaramas.

SURVEYORS: Lloyd's Register of Shipping, American Bureau of Shipping and Norske Veritas.

REPATRIATION: Facilities exist for effecting crew changes and arranging repatriation.

AIRPORT: Piarco International Airport is served by International Airlines and flights are regular, airport approximately 28 miles away from Pointe-a-Pierre.

TIME: GMT minus 4 hours.

SPECIAL PRECAUTIONS: *Emergency Alarm:* This safety device is conveniently placed on all docks and is under the control of the jetty personnel. This is used only in cases of emergency and has the effect of stopping all shore pumps immediately it is used. Loud-sounding horns are situated on the hose structures and are sounded by the jetty attendant when urgent attention from the ship is required.

Hose Pressure: The max. discharge pressure allowed on the jetty hose is 130 lbs. Pressure of jetty hose for loading shall not exceed 130 lbs.

GANGWAY/DECK WATCHMEN: An efficient watch must be maintained on deck and in the engine room of all ships in port, and a sufficient number of men must be on board at all times to move the vessel either for harbour operations or in emergency situations.
CUSTOMS ALLOWANCES: 200 cigarettes or 50 cigars or 0.5 lb. tobacco and 1 bottle of spirits.
IDENTIFICATION CARDS: Not required.
MEDICAL: Advance notice of medical attention preferred. Modern hospital facilities.
TELEPHONES: On dockside and at all sea berths.
SHORE LEAVE: Crew not allowed ashore at Pointe-a-Pierre. Regular launch service from ship to San Fernando, 3 miles away.
GENERAL:
Tidal Variation: Rise and fall is approximately 3 ft. 6 in.
Prevailing Winds: N.E. trade winds.
Flags Required: Republic of Trinidad & Tobago and International Code Flags "B", "G", "H" and "Q".
Launches: Launches to Pointe-a-Pierre for Officers only. Launch service to San Fernando for Officers and crew.
Laundry/Provisions: Available.

SHIPMASTER'S REPORT: August 1979.
Bunkering:
Approach: (From Passage Book). Trinidad and Tobago Islands observed on radar at 48 miles, although echo masked by clouds, islands observed visually at over 40 miles. Marked by towering Cumulus clouds. Numerous tide rips and abrupt change of colour of water (green) at the 200 m. sounding line.

Good position obtained at a distance 35 miles from Galera Point and Scarborough using visual bearings of Galera Point and Little Tobago and distance off Granby Point.

North coast Trinidad current approximately 1.5 knots West going.

Chupara Point Light not conspicuous during daylight and not seen at night.

Chacachacare Light (Admiralty List of Lights No. 5846) good, seen at 35 miles.

Gulf of Paria can, with moderate sized vessel, be approached through any of the channels of Bocas Dragon. We used Boca de Huevos which was safe, no problems. Parallel Indexing very useful on Point au Diable, Point Braba and Cape Cola.

Serpents Mouth not recommended at night.

Gulf of Paria not very busy, many vessels anchored off Port of Spain.

An intense white light (Fl. ev. Sec.) is located on Chimney just South of South Pier at Pointe-a-Pierre (position 10° 18′ 38″ N., 61° 27′ 36″ W.). BA Chart No. 482 seen at 12 miles.

No appreciable current in Gulf of Paria.

VHF: Called "Texaco Shipping Office Pointe-a-Pierre" on Channel 16 about 5 miles North of Boca de Huevos Strait, contact reasonable. Working on Channel 13, very prompt.
Anchorage: General anchorage along parallel of 10° 19′ North from 3 miles West of No. 1 Buoy (10° 19′ 06″ N., 61° 29′ 18″ W.) to 0.5 mile off buoy.

We anchored with No. 1 Buoy 072°×1.0′, good position in 17 m.

For bunkers, oil company like vessel as close as possible to No. 1 Buoy, but not closer than 0.5 mile.
Immigration/Customs: Came out very promptly. No difficulties, forms as per "Guide to Port Entry". Must have gangway rigged. Pratique message sent, no answer received, given on arrival.
Bunkering: Texaco: Dumb barge of 1,500 tonnes capacity. Delays caused by waiting for harbour tug to bring barge alongside vessel also delay waiting for tug on completion of bunkering. Contact 'Shipping Office' Channel 16 well before barge finishes in order that they may call tug. We waited for tug for one hour before bunkering and 2 hours on completion.

Diesel 6 in. line, 150 ASA, ship's derrick required.

Rate: Up to 200 tonnes p.h. for diesel.
Films: Walport Films and Vidpack can be changed on prior notice to Agents.

SHIPMASTER'S REPORT: September 1979.
Approaches: Deep drafted vessels use Boca Grande to enter Gulf of Paria in which is situated the Pointe-a-Pierre Terminal. An area marked by dotted lines on the chart has been surveyed and declared safe for large vessels and this route should be followed up to the anchorage off Pointe-a-Pierre.
Anchorage: Texaco Shipping advise vessel where to anchor when making the approach and on this occasion we used two anchorages whilst waiting, first with the "SBM" bearing 083°T×2.4 miles and the second with La Luc Lt. bearing 334° and Radio Mast bearing 110°. At both anchorages vessel used 6 shackles on starboard anchor in about 60 m. of water. Bottom, heavy glutinous mud which gives good holding ground. The deepest draft vessel which arrived in the port was drawing 73 ft. and appeared to have no difficulty anywhere.
Navigational Restriction: VLCCs are required to advise Harbour Master, Trinidad, of their time of arrival off Boca Grande, 24 hours before arrival so that other vessels can be advised to give a clear berth. On approach to Boca Grande vessel can contact North Post Radio on VHF to confirm transit time and receive information of other movements. Our ETA was broadcast 3 hours out.
Port Officials: Customs and Immigration board with Agent and clear vessel inwards. No special requirements. Bond is sealed but Customs will board to make crew issues after each 7 days if requested through Agent. Port Health work is carried out by Agent and we renewed Derat Certificate. Shore leave passes are issued by Immigration and are of two types, one for Officers which allows them to use the Pointe-a-Pierre jetty to land and also the Texaco Club and one for the crew which only allows them to land at San Fernando jetty.
Shore Leave: (Launch cost TT$8.00 per hour of stay). A fast launch calls at the ship every two hours, day and night, to take personnel to San Fernando. The launch can be contacted on VHF Channel 15 or 16. We found that by advising them of whether we had crew to go ashore before they arrived at the ship we received better service. Officers wishing to go to the club could get a separate launch arranged by Texaco Shipping (when available) direct to Pointe-a-Pierre.
Bunkers: Bunkers are supplied by barge of which there are two, one of 10,000 bbls. capacity and the other of 25,000 bbls. Pumping rate is very slow, we had 3 separate lifts and the average rate was about 120 t.p.h. The larger barge also has capacity to supply good fresh water if previously arranged through the Agent, which is more economical and better quality than in the official water barge.
Fresh Water: Normal source of supply is by barge from Port of Spain which requires about 4 days' advance notice. Cost of supply is $3,000 TT no matter what quantity you require and we found the water supplied was heavily polluted with sea water giving a reading of 500 p.p.m. salt and also tasted oily. It is better to take water when bunkering (See "Bunkers").
Ship Chandler: Stores were expensive and many items unobtainable. All stores have to come through Pointe-a-Pierre jetty and the chandler has to make arrangements with the launch supervisors for transport to the ship. If large quantities involved, a barge and tug are used. We tried to get everything at one time but this was impossible. No canned beer or minerals are available and all bottles are returnable which increases the price.
Cargo Handling: We lightened into two vessels and discharged the balance of cargo at the SBM. The discharge plan was changed frequently during the waiting time. Discharge into the ships was via a 12 in. hose and only one pump was required to achieve the required discharge pressure and gave rates of 2,075 t.p.h for the first and 2,933 t.p.h for the second. Discharge to the SBM was via one 16 in. hose with a second hose connected in case of difficulties with the first, although not actually used, and a rate of 2,224 t.p.h. was achieved. All discharging was carried out using the port side manifold and derrick.

Before lightening, three lengths of hose were placed on board to be connected together and attached to the ship's manifold, then a string of four "Yokohama" type fenders were made fast alongside using the spring wires from forward of No. 1 and from between Nos. 8 and 9 holds to secure. We were instructed to keep the wires slack at all times to prevent the joining wires breaking. All the moorings from the lightening ships have to be fed through "Panama type" fairleads and no open leads used to prevent the rope/wire jumping out of the lead when the lightening ship is completely deballasted. Communications between vessels is via walkie-talkies supplied by Texaco and a co-ordinator from Texaco attends the vessel for liaising operations. Bunkering cannot be carried out while lightening but is acceptable at the SBM, we managed to complete it before any cargo operations started. No gangways are used between ships.

Mooring at the SBM was carried out with the assistance of one tug made fast on the starboard side of No. 1. A ship's line is sent away to connect with the SBM port line, as usual, this starting line should be two ropes joined together to ensure adequate length. Once the connecting line is brought on board (a 16 in. nylon) in sufficient quantity it is made fast on the bitts and the starboard connecting line picked up and secured. When connecting hoses, we found that our manifold flanges were too thin to accept their patent clamps and we had to fit 12 in. reducers to our manifolds and also to their pipe-lines to get a good fit. Ship's crew carry out all operations although there are personnel placed on board for mooring to the SBM to advise and assist.

Mooring and unmooring are usually carried out during daylight but for some reason we unmoored during the night, much to the surprise of the Pilot and co-ordinators, being the first vessel to do it for 6 years.
Personnel Changes: We carried out several changes of personnel over the period and in general, the joining people arrived on time without much difficulty but the personnel leaving, unless previously booked in advance, met with delays getting flights. A vessel which arrived the day after us, had eight men delayed ten days before flights were available. Non-crew personnel, such as technicians, who arrived and stated they were coming to do work on the ship were not allowed entry into the country without obtaining a work permit.

SHIPMASTER'S REPORT: February, 1980.
Documents: 5 Crew Lists, 2 copies of Crew Personal Effects, 2 Arrival Reports, 1 unmanifested Cargo List, 2 Report of Ship's Stores. All these on local forms except Crew Lists.
Anchorages: Usually given an anchorage position by Texaco, Trinidad, and normally use starboard anchor and require starboard accommodation ladder.
Tankers: Advise Agents time of transiting Bocas del Dragon and then North Post Radio will advise all ships. If using SBM, require forward 2 ship's lines to bring aboard 2×16 in. nylon lines which have to be heaved around drum ends. Sometimes have tug to assist.

SHIPMASTER'S REPORT: November 1983.
Documents:
Agent: P&I 48 (Arrival Report)
Immigration: P&I 10 (Arrival Report), P&I 53 (Arrival Report form in triplicate)
Quarantine: P&I 31 (Maritime Declaration of Health)
Customs: C-1 (Ship's Stores in duplicate)
C-2 (Crew Declaration)
C-3 (List of Unmanifested Cargo)
5 copies of Crew List.
Anchorages: It is necessary to anchor in position given by Texmarine otherwise they request you to shift to correct position but also necessary to check there is not another vessel anchored there already.
Radio: We found it very difficult to communicate with North Post Radio from the bay. 'Shipping' or Texmarine are very helpful passing messages to agents, etc.

Shore Leave: Apparently the liberty boat rarely goes to San Fernando these days (apparently due to the unsafe state of the jetty).
Currency: Agents require at least 10 days' notice if vessel requires any foreign currency and, apart from this delay, Sterling and U.S. Dollars seemed readily available. 4 days' notice is required for local currency. This 4 days would probably be longer if not using Company Agents.
Mail: Mail took 4 days from arrival at airport to delivery on board.

AUTHORITY: Texaco Trinidad Inc., Pointe-a-Pierre, Trinidad, W.I. *Tel:* 65-84220. *Telex:* 3366/3367 Texmarine San Fernando. *Cables:* Textrin San Fernando. *Contact:* R. F. Goddard, Manager, Marine & Harbours Division. R. F. Jones, Assistant Manager. R. A. Kassie, Port Captain.
AGENT: See "Port of Spain".

POINT FORTIN: 10.12 N. 61.42 W. (See Plan Book)

DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".
PILOTAGE: Pilotage is compulsory. Pilots board 0.5 miles off main jetty (Lat. 10° 12′ N., Long. 61° 42′ W.).
ANCHORAGE: There is safe anchorage 0.5 miles off the head of the jetty.
MAX. SIZE: Jetty 2 miles long with "T" head providing two outer berths of 700 ft. length and a depth of 38 ft. 1 inner berth of 300 ft. length and a depth of 35 ft. and other inner berths of 300 ft. length with a depth of 15 ft. 6 in.

1 conventional buoy mooring (6-buoy mooring) of 850 ft. length and a depth of 53 ft. situated 4,819 ft. North off jetty head.
TUGS: Required for berthing at outer berths for vessels of 30,000 d.w.t. and over and for unberthing vessels with a draft of 36 ft. or deeper. Also required for berthing and unberthing at conventional buoy mooring. Launch assists in berthing and unberthing.
BERTHING: Bottom alongside, mud; back pressure (hose), 100 lb; Current, flood S.W., ebb N.E. 2 to 5 knots; rise and fall tide, 4 ft.
MEDICAL: All facilities available.
FRESH WATER: Not available at CBM.
FUEL: Not available at CBM.
DIRTY BALLAST: No facilities available. Only small amount (approx. 200 tons) of tank drainings acceptable on jetty and only if fluid at ambient temperature.
FIRE PRECAUTIONS: Normal oil terminal safety precautions applicable.
GANGWAY/DECK WATCHMEN: Customs guards on duty at ship's side.
CUSTOMS ALLOWANCES: 200 cigarettes, and a moderate amount of spirits.
IDENTIFICATION CARDS: Not required.
REPAIRS AND DRY DOCKS: At Chaguaramas.
REPATRIATION: Can be arranged.
AIRPORT: See "Port of Spain".
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: No restrictions.

SHIPMASTER'S REPORT: April 1977
The port of Point Fortin is situated in S.W. Trinidad. The light beacon on the "T" pier head is in position Lat. 10° 12′ 05″ N., Long. 61° 42′ 06″ W. The port is owned and operated by the Trinidad and Tobago Oil Company Ltd. (TRINTOC), to serve the 100,000 bbls. per day refinery at Point Fortin. A 24 hour communications service is provided, telex via international lines (TRINTOC Point Fortin) or VHF 16 (Call sign: Point Fortin Shipping) working on Channel 11.

Pilotage is compulsory with the boarding area 1 mile seaward from the jetty head. There is 1×1,000 h.p. tug normally available for berthing vessels over 30,000 Summer d.w.t.

Tides in the area of Point Fortin vary in strength throughout the year with a max. rate of 3 knots. Masters are advised to check sea water density for corrected loadline readings. Water density varies throughout the year from salt to fresh.

Engine repairs which entail immobilisation of engines are not permitted when moored at the berths.

Vessel must arrive with clean ballast consistent with safe manoeuvring of the ship. A ballast condition of 25% of the vessels Summer d.w.t. is recommended.

Only clean ballast may be pumped overboard.

Notice of Readiness is accepted when vessels' tanks are ready to receive cargo.

Bunkers and fresh water can be supplied at all berths except No. 5 (C.B.M.) Stores and laundry facilities are available on request. A diver is available. The only way of getting ashore is by means of a liberty launch. Walking the pipe-line bridge is strictly forbidden.

Inward Clearance is effected immediately on arrival by the Port Authorities; the following documents should be available for official use:

Clearance from Last Port.
Derat Certificate
International Health Certificate
Declaration and Crew Vaccination Certificate
Cargo Manifest, if any
Bill of Lading, if applicable
List of unmanifested packages, if applicable
3 Copies arrival Report
7 Copies Crew List
3 Copies Store List
3 Copies Personal Effects
Licence for Dangerous drugs, if any aboard.

In the interest of reducing tanker port time, vessels' Masters are advised to request Pratique by Radio prior to their arrival.

Berths:
No. 1 – Draft 37 ft. 6 in. (Loading over tide 39 ft.).
Max. length 700 ft. – Max. berthing displacement 45,000 tons.
Grades handled: Crude oil, Fuel oil, Gas oil, Diesel oil, Kero, LDF, JP4, Platformate. All via 10 in. hoses. Napthanic Oil Residue via 4 in. hose.
No. 2 – Draft 36 ft. (Loading over tide 38 ft.).
Max. length 700 ft. Max. berthing displacement 25,000 tons.
Grades handled: Crude oil, Fuel oil, Gas oil, Diesel oil, Platformate, Kero, LDF, JP4, Mogas. All via 10 in. hoses. (Napthanic Oil Residue via 1×4 in. hose).
No. 3 – Draft 34 ft. 6 in.
Max. length 300 ft. max. berthing displacement 5,500 tons.
Grades handled: Fuel oil, Diesel oil, Gas oil, Kero, Mogas, all of them through 6 in. hoses.
No. 4 – Draft 14 ft. 6 in.
Max. length 300 ft. Max. berthing displacement 3,000 tons.
Berth port side to. Berthing at slack water and flood tide, unberthing at slack water tide and flood tide.
Grades handled: Fuel oil, Diesel oil, Gas oil, LPG, Bitumen, Emulsion (COLAS).
No. 5 – C.B.M., 6 buoys, max. draft 51 ft. max. length 850 ft. Berth either side. Daylight berthing only.
Grades handled: Crude oil, Fuel Oil via 2×16 in. hoses.

AUTHORITY: Trinidad & Tobago Oil Co. Ltd.
AGENT: See "Port of Spain".

POINT LISAS (Fedchem): 10.22 N. 61.29 W.
(Plipdeco Marine): 10.24 N. 61.29 W.

(A) FEDERATION CHEMICALS LTD.
DOCUMENTS:
7 Copies Crew List.
2 Copies Ship's Stores List.
1 Copy Crew Stores List.
4 Copies Immigration arrival Report (supplied on arrival).
1 Declaration of Health (supplied on arrival).
Ship's Register.
Derat Certificate
Passports.

PILOTAGE: Pilots ordered through Agent; 48/24/12 hour ETA needed. Pilotage is compulsory. Pilots board at Head of Pt. Lisas Channel (Lat. 10° 22′ 37″ N., Long. 61° 39′ 38″ W.); Pilot ladder conforming to International Safety Regulations to be supplied by vessel.

Launch hire arranged by Dock Master to take out Pilot to vessels on arrival, and again take off Pilots from vessels on departure.
CLEARANCE: Point Lisas being a port of entry is equipped with resident Customs Officer and Guard. Ships arriving from abroad could proceed directly to Point Lisas as Customs Officer acts for Harbour Master/Port Health. Tel. 636-2020. Immigration Officer boards on arrival.
ANCHORAGE: Safe anchorage 0.25 miles off head of channel. On occasions, when port congested, vessels may be requested to anchor Port of Spain Roads (Lat. 10° 41′ N., Long. 61° 33′ W.) before proceeding Pt. Lisas.
RESTRICTIONS: No restrictions on night entry – departure.
MAX. SIZE: See "Berthing".
HEALTH: For quarantine if required, or authentication of vaccination certificate, Honorary Port Health Officer could be in attendance at short notice. Tel. 636-2311.
VHF: Pt. Lisas Dockmaster can be contacted on VHF Channels 16, 14 and 12.
TUGS: Molasses, bulk sugar and LPG carriers use a tug to assist in berthing and unberthing at Pt. Lisas "Liquid Pier". Tug will be ordered by the Agent.
BERTHING: Point Lisas "Liquid Pier" (vessels handling bulk sugar, molasses, caustic soda and Anhydrous Ammonia in Liquid form). Maximum LOA: 550 ft. Maximum draft: 28 ft. LW.

Point Lisas "Solids Pier" (vessels discharging plant equipment, and loading sulphuric acid in drums and bagged and bulk fertiliser). Maximum LOA: 250 ft. Maximum draft: 20 ft. LWOST.
STEVEDORES: If necessary will be ordered by Agents. No ETA to stevedores necessary.
MEDICAL: Advance notice of attention required will assist. Modern hospital facilities available.
FRESH WATER: Only by barge.
FUEL: All grades supplied by barge. At "Solids Pier" gas oil only can be supplied ex shore installation (Monday – Friday from 0800 – 1600 hrs.).
FIRE PRECAUTIONS: When loading LPG. No smoking on pier or on ship's deck.
GANGWAY/DECK WATCHMEN: Customs guards on 24 hours duty at ship's side.
OPENING/CLOSING HATCHES: Normally by crew.
CUSTOMS ALLOWANCES: 200 cigarettes and a moderate amount of spirits.
IDENTIFICATION CARDS: Not required.
CONSULS: At Port of Spain.
REPAIRS AND DRY DOCKS: At Chaguaramas 20 miles North of Pt. Lisas.
POLICE/FIRE/AMBULANCE: Accidents – Police – Help, 62999. Fire – First Aid, 62998.
REPATRIATION: Crew changes and repatriation can be arranged.
AIRPORT: Piarco International Airport – 30 miles from Point Lisas. Daily flights to world-wide destinations.

HOLIDAYS: New Year's Day (January 1st); Good Friday; Easter Monday; Whit Monday; Corpus Christi; Discovery Day (First Monday in August); Independence Day (August 31st); Diwali Day (late October/early November); Eid-ul-Fitr (December 21st – 22nd, approximately); Christmas Day (December 25th); Boxing Day (December 26th); Labour Day (June 19th); Republic Day (September 19th). Work is possible, except for Labour Day, Union Anniversary Day and Christmas Day, on these holidays.
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SERVICES: Efficient maintenance gang available for normal work, tank cleaning, painting, etc.
SHORE LEAVE: No restrictions.
DELAYS: Due to congestion, sometimes delays are unavoidable, usually not more than 24 hours.
DEVELOPMENTS: Present depth of channel 28 ft. at MLW.
AUTHORITY: Federation Chemicals Ltd., P.O.Box 952, Port of Spain, Trinidad, W.I. *Tel:* 636-2020. *Telex:* 3353 Fcl Wg. *Cables:* Fedchem.

(B) POINT LISAS INDUSTRIAL PORT DEVELOPMENT CORP. LTD.
LOCATION: Point Lisas lies on the Western side of Trinidad in the Gulf of Paria, in position Lat. 10° 24.2′ N., Long. 61° 29.6′ W.
DOCUMENTS:
7 Copies Crew List.
2 Copies Ship Stores List.
1 Copy Crew Stores List.
4 Copies Immigration Arrival Report (supplied on arrival).
1 Declaration of Health (supplied on arrival).
Ship's Register.
Derat Certificate.
Ship's Safety Certificate.
Passports.
PILOTAGE: Pilotage compulsory. Pilots ordered through Agents. Advice at 48/24/12 hours' necessary prior to ETA. Pilots board at entrance of Savonetta Channel Lat. 10° 22′ 57″ N., Long. 61° 31′ 11.2″ W. Pilot ladder must conform to International Safety Regulations. Launch hire arranged through Plipdeco Marine to take Pilot on or off vessels.
CLEARANCE: Point Lisas (Plipdeco) is a Port of Entry. On arrival ships may proceed directly alongside or to anchorage for clearance by resident officers.
ANCHORAGE: In-bound vessels may anchor in the anchorage bounded by:

Lat: 10° 23.5′ N.	Long: 61° 31.2′ W.
Lat: 10° 24′ N.	Long: 61° 32.2′ W.

Out-bound vessels may anchor in the anchorage bounded by:

Lat: 10° 22.5′ N.	Long: 61° 31.2′ W.
Lat: 10° 22′ N.	Long: 61° 30.2′ W.

RESTRICTIONS: Daylight manoeuvring only (between the hours of sunrise and sunset).
MAX. SIZE: See "Berthing".
HEALTH: Valid smallpox and yellow fever certificates if last Port of call was in an infected area. Quarantine on authentication of certificate available at short notice.
VHF: Plipdeco Marine Channel 16, working frequency Channel 9.
RADAR: Not installed at Plipdeco Marine.
TUGS: 4 Resident tugs available. 2×2,250 h.p. and 2×500 h.p. Towage services ordered by Agent.
BERTHING: The Channel is 1.75 nautical miles long and 152 m. wide. Turning basin 700 m. long and 500 m. wide. Both are dredged to 12.8 m. True course 052.25°. The Channel serves the following terminals:

Berth 1A:	Max. LOA:	100 m.
	Draft:	5.5 m.
	Facilities:	None.
	Dock Length:	24 m.
Berth 2:	Max. LOA:	130 m.
	Draft:	2.5 m.
	Facilities:	None.
	Dock Length:	170 m.×40 m. Ro-Ro ramp.
Berth 3:	Max. LOA:	120 m.
	Draft:	5.5 m.
	Facilities:	None.
	Dock Length:	32.3 m.
Savonetta Pier No. 1 (South) Fertrin Terminal:	Max. LOA:	220 m.
	Dock Length:	310 m.
	Max. Draft:	11.6 m.
	Facilities:	Specialised installation for loading Anhydrous Ammonia. Maximum rate 1,000 m/t.p.h. Facilities for loading Methanol and Urea in bulk.
Savonetta Pier No. 1 (North)	Max. LOA:	110 m.
	Dock Length:	164 m.
	Max. Draft:	6.1 m.
	Facilities:	None, however ideal for bulk liquids.
ISCOTT Terminal:	Max. LOA:	407 m.
	Draft:	11.6 m.
	Facilities:	Specialised installation for discharge of bulk Iron Ore – Loading Direct Reduced Iron (DRI). Maximum rate 1,200 t.p.h., connected to conveyor system. Two (2) Level Luffing Cranes – Capacity 25 tons.

STEVEDORES: If necessary, ordered by Agents through Port Authority of Trinidad and Tobago (P.A.T.T.). Longshoring available ex-Point Lisas Terminals Limited. (PLTL).
CRANES: Mobile and track cranes available up to 180 tonnes swl. Ordered through Agents.
MEDICAL: Advance notice required. Agent will arrange.
FRESH WATER: Available on all berths and ex-barge.
FUEL: Bunkers available ex-barge.
FIRE PRECAUTIONS: No smoking on the Fertrin Terminal or on the open decks of gas carriers.
GANGWAY/DECK WATCHMEN: 2 Customs guards on duty for 24 hours aboard all vessels.
OPENING/CLOSING HATCHES: Normally done by ship's crew.
CUSTOMS ALLOWANCES: 200 cigarettes and a moderate amount of spirits.
IDENTIFICATION CARDS: It is advisable to carry identification when proceeding on shore leave.
CONSULS: At Port of Spain.
REPAIRS/DRY DOCKS: A repair facility is available at Chaguaramas. However, competent technicians are available for shipboard repairs. Arrangements made through Agents.
SURVEYORS: (1) Cargo Surveyors: Caleb Brett, Saybolt and Redwood available.
(2) Surveyors such as Lloyd's, ABS, Bureau Veritas are available. Arrangements through Agents.
HOLIDAYS: Work is possible all year except on Labour Day (June 19th) and Union Anniversary Day (Last Saturday in November).
POLICE/FIRE/AMBULANCE: Accidents, Police help 62 999. Fire and First Aid 62 998. Fire assistance and ambulances also available on the estate by calling 2211, 2215 and 2205/7.
REPATRIATION: Crew changes and repatriation possible. Agent will arrange.
AIRPORT: Piarco International Airport, 60 km. from Point Lisas. Daily international flights available.
TIME: Local time is GMT minus 4 hours.
TELEPHONES: No facilities for telephone aboard. However international dialling to most countries possible.
SHORE LEAVE: No restrictions except, for persons not holding documents which grant entry to Trinidad and Tobago. Prior approval of Ministry of National Security must be arranged through Agents.
BANKS: National Commercial Bank of Trinidad and Tobago (NCB), Southern Main Road, Couva.
STORING: Vessels can be stored by barge or truck.
No storing of vessels while loading at the Fertrin Terminal.
All storing must be done with Customs approval.
Local riggers and forklifts are available for storing. These may be ordered through local chandlers.
DEVELOPMENTS: Extension of Berth No. 3 to 100 m. max. length.
Construction of Berth No. 5, a Ro/Ro dock. Max. draft 7 m.
Construction of leading light towers to enable 24 hour operations.
AUTHORITY: Point Lisas Industrial Port Development Corporation, P.O.Box 191, Goodrich Bay Road, Point Lisas, Couva. *Tel:* 636–2202, 636–4388. *Cables:* Phildeco, Couva. *Contact:* Captain Rawle Baddaloo, Port Manager.

AGENT: Melville Shipping and Trading Ltd., Steamship Operators and Agents, 18/20 London Street, Port of Spain. Tel. 62-54977, 52384, 54474. AO Tel. 662-5717, 62-54474, 676-7795. Telex 22265 and 22448. AB "Meltra". Cables "Meltra Trinidad W.1." Code: New Boe. Bankers: Royal Bank of Trinidad & Tobago Ltd.

PORT OF SPAIN: 10.39 N. 61.32 W. (See Plan Book)

DOCUMENTS:
For Immigration: On boarding, 3 Crew Lists and 3 Passengers Lists if passengers on board. Inspection of Derat Certificate. Health Declaration and arrival report forms supplied by Immigration on boarding to be made up.
For Customs: 2 Crew Lists and 1 Passengers List if passengers on board, 2 Customs Ship's Stores Lists, 1 Crew's Stores List. Forms supplied on boarding.
Port doctor will board if calling from quarantine port.
PILOTAGE: Not compulsory into Port of Spain anchorage but if required will attend from outside Bocas or where required through Agents in ETA message. Calling Pilot International Code Flag "H" by day and white light over red at night or International Code signal "G" on whistle.
Gangway or standard type pilot ladder with spreaders about 10 ft. apart. Ladder must be clean. It is desirable that 1 stanchion be securely fitted in the bulwalk at the top of the ladder.
Pilot station is situated on Port of Spain Wharf.
ANCHORAGE: Depends entirely on draft but should not be nearer than 0.5 miles from Grier Channel entrance, except in cases of vessels loaded with explosives; this anchorage is clearly defined on Chart.
Open roadstead in Gulf of Paria but can be considered as sheltered with choppy seas at times. Bottom shelves gradually from shoreline to 7 fathoms at Western end of harbour limits, increasing to 20 fathoms outside harbour limits Westward. Type of bottom, mud. Swinging area unlimited. No mooring buoy. Distance from anchorage to shore 2.25 miles at 5 fathoms to 5 miles at 7 fathoms, vessel will swing to the tide if loaded, and to the wind if light.
Currents 0.5 to 1.5 knots flood and ebb. Rise and fall of tides, variable minimum 1 ft. 5 in. maximum 4 ft. Rainy season June-December. Dry season December-June not always predictable. Rain squalls occur during months of July, August and September up to 30-40 knots unpredictable hurricane most unusual. Prevailing winds are mostly Easterly. Normally stronger during daylight.

RESTRICTIONS/MAX. SIZE: The Grier Channel, 350 ft. wide, leads to a dredged basin in which are the docks. No restrictions on length, but maximum draft in channel, in basin and alongside is 32 ft. MLWOST.
RADIO: Advise through North Post wireless or telephone, call sign 9 YL. ETA 48 hours and 24 hours with other requirements.
TUGS: There are 4 tugs in Port of Spain to assist in docking operations.
BERTHING: *Container Terminal:* The new Container Terminal at Berth 6A includes 1,085 ft. of deep water berth which links King's Wharf and King's Wharf Extension. The total paved back-up area covers 15 acres and is used exclusively for the handling of containers. The Container Terminal is serviced by the existing Sheds 9 and 10 with a total covered space of 162,000 sq. ft. In addition, there are 27 acres of paved space designated for the handling of containers.

The Container Terminal is equipped with two 40 ton Paceco gantry quay cranes. The outreach of the cranes is 115 ft. with a backreach of 50 ft. In addition, 2 rubber tyred yard gantry cranes manufactured by Diamond Manufacturing Co. are available. These cranes are capable of straddling 5 rows of containers plus a truck lane.

It is estimated that the Berth 6A Container Terminal with its full back-up facilities is capable of handling 80,000 t.e.u.'s per annum.

King's Wharf: Length 3,900 ft. Berthing for 6 vessels with max. draft of 30 ft. 5 transit sheds available (Nos. 1 – 5). Apron width 50 ft.

King's Wharf Extension: Length 1,200 ft. Berthing for 2 vessels with max. draft of 30 ft. 2 transit sheds available (Nos. 7 – 8). Apron width 75 ft.

Large cruiser vessels berth at No. 5, 6 and 7. Vessels with length in excess of 525 ft. are unable to berth at No. 1 berth as width of basin is 700 ft.
CARGO HANDLING: One berth on the Eastern side is an open wharf without a seafront warehouse. This berth is strictly used for containerised and passenger (cruise) vessels. The Eastern Wharf is 3,300 ft. with five seafront warehouses. On the Western side the wharf is 1,200 ft. long with two seafront warehouses for general cargo, but at these two berths there are also facilities for receiving bulk cargo, i.e. grain, liquid oil, fats and molasses. These cargoes are usually discharged by vessel's equipment, but grain can be discharged by shore equipment at a slower rate.

There is one floating crane, 60 tons capacity, one crawler crane of 160 tons capacity and also one 125 ton fork lift handling 20 ft. containers. 3 mobile cranes with capacity 200 tons, 75 tons and 75 tons. There is also a trailer service for 20 ft. containers from dock to consignee's warehouse.

24×20 ton and 6×40 ton trailers for handling Ro/Ro cargoes.
STEVEDORES: Labour on Docks and labour on ships: Controlled by Port Contractors Ltd. Ordered by Agents. Gang size on Docks: 14 to 18 men. Gang size on vessels: 13 men, 1 gangman, 2 winch drivers, 8 hold men, 1 cooper, and 1 hatch foreman.
MEDICAL: Advance notice of attention required will assist. Modern hospital facilities available.
FRESH WATER: Supplied alongside all berths. Also available by 3 barges, each capacity 300 tons, 24 hours' notice required.
FUEL: All grades supplied by barge.
GANGWAY/DECK WATCHMEN: Customs guards on 24 hours duty at ship's side.
OPENING/CLOSING HATCHES: This is handled by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes and a moderate amount of spirits.
CARGO GEAR: Vessels normally load and discharge with their own gear but shore cranes and heavy lift cranes available on the dock.
IDENTIFICATION CARDS: Not required.
EMBASSIES:

Argentina	6254069	India	6231276
Brazil	6225779	Jamaica	6224995
Great Britain	6252861	Netherlands	6251722
Canada	6234787	U.S.A.	6226471
France	6251437	Venezuela	6253872
Germany	6251898		

CONSULS:

Belgium	6238711	Italy	6236255
Bolivia	6254123	Japan	6232866
Colombia	6236601	Lebanon	6231652
Costa Rica	6254123	Liberia	6222322
Denmark	6251901	Mexico	6254040
Dominican Republic	6241217	Norway	6236871
El Salvador	6226247	Panama	6223497
Greece	6232186	Portugal	6234930
Guatemala	6252441	Spain	6238851
Haiti	6232876	Sweden	6232166

REPAIRS AND DRY DOCKS: See "Chaguaramas".
SURVEYORS: Lloyd's.
HOLIDAYS: New Year's Day (January 1st); Good Friday; Easter Monday; Labour Day (June 19th); Whit Monday; Corpus Christi; Caribbean Day (first Monday in August); Independence Day (August 31st); Diwali Day (late October/early November); Eid-ul-Fitr (December 21st/22nd, approximately); Christmas Day (December 25th); Boxing Day (December 26th).
POLICE/FIRE/AMBULANCE: Accidents – Police, 62999; Fire – First Aid, 62998.
REPATRIATIONS: Crew changes and repatriation can be arranged.
AIRPORT: Piarco International Airport – 17 miles from Port of Spain. Daily flights to world-wide destinations.
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SERVICES: Efficient maintenance gang available for normal work, tank cleaning, painting, etc.

Shipping Service: Two government-owned vessels, *Scarlet Ibis* and *Bird of Paradise* operate a regular cargo service between Trinidad and Tobago.

The "Gelting and" "Tobago" are Ro/Ro vessels operating a passenger/car ferry between the two islands.
SHORE LEAVE: No restrictions.
AUTHORITY: Port Authority of Trinidad and Tobago, 1d, Wrightso Road, P.O.Box 549, Port of Spain, Trinidad, W.I. *Tel:* 62/35719. *Tele* 3477-55 Patt Wg. *Cables:* Gateway. *Contact:* Edmund O. Mendez General Manager.
AGENT: Sprostons (Trinidad) Ltd., 29 Frederick Street, P.O.Box 8, Por of Spain. Tel: 62-34121-9 (9 lines). Telex: SPROS WG286 Cables "Sprostons", Port of Spain, Trinidad.

SOBO (Pitch Point): 10.15 N. 61.37 W.

Crude Oil Terminal operated by B.P. Trinidad Limited. Vessels from abroad calling at Sobo are required to proceed to Brighton for clearance formalities.
DOCUMENTS/HEALTH/CONSULS, etc.: Refer to "Port of Spain".
PILOTAGE: Compulsory.
TUGS: Not used. Launch assists berthing.
RESTRICTIONS: Berthing/unberthing only on flood tide.
MAX. SIZE: Controlled by depth alongside jetty — 29 ft.
BERTHING: Vessels moored with springs on jetty. Other lines to buoys.
FRESH WATER: Not available.
FUEL: Available by barge.
AGENT: See "Port of Spain".

TEMBLADORA (Alcoa Bauxite Terminal): 10.41 N. 61.35 W.

Also refer to "Port of Spain".
DOCUMENTS:
2 Crew Manifest/Stores List for Customs.
2 Ship's Stores List for Customs.
3 Immigration Arrival Report.
8 Crew Lists.
1 Declaration of Health.
1 Stowaway List (even if no stowaways on board).
PILOTAGE: Pilotage is compulsory. Pilots board 0.5 miles of installation.
ANCHORAGE: Safe anchorage 0.5 – 0.75 miles off head of jetty.
MAX. SIZE: No. 1 (Western berth) for discharging, length of berth 976 ft. Max draft 23 ft.

No. 2 (Eastern berth) for loading. Length of berth 675 ft. Max. draf 36 ft.
RADIO: ETA should be given at least 36 hours before arrival via North Post Radio " 9YL" or Barbados Radio "8PO" to Alcoa.
TUGS: Alcoa maintain their own tug to assist in docking operations.
BERTHING: There are two wharves: No. 1 with a length of 976 ft. and No. 2 with a length of 675 ft.
STEVEDORES: Not necessary.
FRESH WATER: Supplied at both piers, also by barge.
FUEL: All grades by barge and pipe-line.
GANGWAY/DECK WATCHMEN: Customs guards on duty at ship's side.
OPENING/CLOSING HATCHES: Handled by crew.
CUSTOMS ALLOWANCES: 200 cigarettes and a moderate amount of spirits per man.
CARGO GEAR: Loading: Carried out with travelling tower conveyor system, rate 1,000 t.p.h. Discharging: With travelling tower grab 5 tons capacity, rate 300 t.p.h.
IDENTIFICATION CARDS: Required. Vessel must issue I.D. cards to all onboard.
REPAIRS AND DRY DOCKS: At Chaguaramas.
MEDICAL: All facilities available. Advance notice of requirements should be given.
REPATRIATIONS: Can be arranged (Advance notice must be given for citizens from Eastern Bloc countries).
AIRPORT: See "Port of Spain".
TIME: GMT minus 4 hours.
TELEPHONES: No facilities for telephones on board.
SHORE LEAVE: No restrictions (except for citizens of Eastern Bloc countries who need visas or special permission).
AUTHORITY: Alcoa Steamship Company Inc., Tembladora Transfer Station, Carenage, Trinidad, W.I.

Alcoa Steamship Company Inc., P.O.Box 609, Port-of-Spain, Trinidad, W.I. *Tel:* 63-23308/13. *Telex:* 21221 (Alcoa Wg). *Cables:* Alcoaship, Port of Spain. *Contact:* General Manager.

Tunisia

ASHTART: 34.17 N. 11.23 E. (See Plan Book)

DOCUMENTS:
Customs: 1 Crew Declaration, 1 Ship's Stores List.
Immigration: 1 Crew List

PILOTAGE: Compulsory. To avoid a delay, Owner must report to SEREPT SFAX 24 hours in advance of ETA.
ANCHORAGE: 3 miles South of the storage barge.
HEALTH: Masters must declare on arrival, condition of health of all on board with details of any sickness.
VHF: Call "Ashtart Terminal" on VHF Channels 9 and 16.
TUGS: One tug required to be in attendance while loading.
BERTHING:
a) *Tanker Berths:*
One SBM for tankers up to a max. size of 150,000 d.w.t. Water depth 66 m. Loading Rate 3,000 cu.m.p.h. Max. quantity available 105,000 tons. 1×12 in. hose.
Vessels mooring use one line, and must be able to easily heave on board an anti-chafing chain whose links are 32 cm. wide.
b) *Storage Barge Berth:*
Starboard side alongside storage barge, tankers up to a max. size of 70,000 d.w.t. Depth 66 m., loading rate 4,500 cu.m.p.h. Max. quantity available 105,000 tons. 2×12 in. hoses.
MEDICAL: No facilities.
FRESH WATER: Not available.
FUEL: Not available.
CONSULS: France and Libya at Sfax.
REPAIRS: No facilities.
REPATRIATION: Not possible.
AIRPORT: At Sfax.
HOLIDAYS: None.
GENERAL: No dirty ballast facilities. No provisions available. Master supplied with booklet containing special port regulations on arrival.
AUTHORITY: Societe De Recherches Et D'exploitation Des Petroles en Tunisie – SEREPT, B.P. 246, SFAX, Tunisia. *Tel:* (04) 30 400. *Telex:* 40859, 40700.

BIZERTE: 37.17 N. 09.54 E. (See Plan Book)

PORT LIMITS: Commence 0.5 mile from the Port.
DOCUMENTS:
5 Crew Lists.
5 Passenger Lists.
4 Crew Personal Effects Lists.
4 Ship's Stores List.
3 Copies Bill of Lading.
3 Copies Manifest.
Health Declaration.

PILOTAGE: Vessels approaching the port applying for Pilot by day by flying the flag "G". Advise Pilot of ETA 48 hours before arrival. Pilot vessel and pilot station may be contacted by VHF Channel 16. The Pilot boat exhibits the letters "P" & "H". The Pilot boards half a mile from the Southern fairway, vessels have to slow down to enable the Pilot to board. The anchorage for vessels awaiting the Pilot is half a mile from the Southern fairway.
ANCHORAGE: See "Pilotage".
RESTRICTIONS: Entry at night is forbidden for tankers.
MAX. SIZE: See "Berthing".
HEALTH: Free Pratique normally given at the quays after mooring. Pratique is automatic for vessels coming from another Tunisian port. In case of suspected disease on board vessel will be ordered to quarantine anchorage.
RADIO: Bizerte Radio, call sign 3VWA. Frequencies: 2182, 1743, 1637, 2321 and 2506 kHz. Range 200 km.
VHF: Channels 16 and 14.
TUGS: The tugs join the vessel at half a mile from the fairway. The 2 tugs available are equipped with radar.
BERTHING: There are 10 alongside berths in the 3 docks at Bizerte and 3 alongside berths at Menzel Bourguiba. The water is salt. Length of the main quays: 500 m., depth 9.00 m.
Length of the oil handling berth "A": 200 m., depth: 8.50 m. Length of the oil handling berth "B": 150 m., depth: 8.50 m. Molasses handling berth, depth: 7.5 m. Berth in front of the silo: depth 8.50 m. Iron ore handling berth "Douaria": depth 8.50 m. Berth in front of the cement factory: depth 7.6 m. Wooden wharf No. 2 at Menzel Bourguiba: depth 8 m.
Load and discharge is carried out by ship's own gear.
CRANES: 1 travelling gantry crane, capacity 6 tons. 1 travelling gantry crane, capacity 3 tons. 1 crane car, capacity 6 tons. 1 fork lift, capacity 7 tons. 2 fork lifts, capacity 3.5 tons. 1 fork lift, capacity 4 tons. 1 fork lift, capacity 8 tons. 2 tractors with tipping wagons. 1 floating pontoon crane of 30 tons.
BULK HANDLING FACILITIES: Grain is handled on the main quay, if cargo in bulk it is loaded into bags. Fertiliser also handled in bags. Ore and coal is unloaded into lorries.
SPECIAL CARGO HANDLING FACILITIES: None.
BRIDGES: New bridge (mobile) in operation.
STEVEDORES: Minimum of 24 hours' advance notice of ETA to Agent is required.
MEDICAL: Doctor available to board vessel. Hospital, private clinics and all facilities available. 48 hours' notice required for Cholera and Yellow Fever inoculations. Advise Agent of requirements.
TANKERS: Crude oil load/discharge line 20 in. diameter. Fuel oil load/discharge line 14 in. diameter. No slop discharge facilities. Tugs stand-by during cargo operations.
FRESH WATER: Available from the quay at most berths. Rate 20 cu.m./hr.
FUEL: Not available.
FIRE PRECAUTIONS: The Petroleum Harbour is equipped with fire hydrants. A tug of 1,600 h.p. is required to be permanently standing by when tankers are moored alongside the quay.
GANGWAY/DECK WATCHMEN: It is recommended to employ shore watchmen.
OPENING/CLOSING HATCHES: Carried out by stevedores.
CUSTOMS ALLOWANCES: Each crew member is allowed 1 carton of cigarettes and 1 opened bottle of wine or spirits. In case of a prolonged stay in port, Customs may renew these quantities.
IDENTIFICATION CARDS: Crew members' identification cards will be collected by the Immigration service and exchanged for shore passes while vessel is in port.
CONSULS: Italy Tel: 02.31.747.
REPAIRS: Some types of deck and engine repairs can be effected.
DRY DOCKS: There are 4 dry docks which are located at Menzel Bourguiba.

Dry Dock No. 1 & 4	length	190.90 m.
	higher width	30.25 m.
	lower width	26.50 m.
	draft	8.80 m.
Dry Dock No. 2	length	247.50 m.
	higher width	40.60 m.
	lower width	36.00 m.
	draft	12.00 m.
Dry Dock No. 3	length	84.10 m.
	higher width	14.78 m.
	lower width	13.00 m.
	draft	4.15 m.

SURVEYORS: Bureau Veritas.
REPATRIATION: Can be arranged.
AIRPORT: Tunis/Carthage airport is situated 70 km. from Bizerte. Served by international airlines.
TIME: GMT plus 1 hour all year round.
HOLIDAYS: There are 17 days official holiday during the year. Work can be carried out on all holidays except 1st May on payment of 100% overtime.
POLICE/FIRE/AMBULANCE: Police Tel: (02)31.200; Fire (02)31.022; Ambulance (02)31.422.
TELEPHONES: No arrangements exist.
SHORE LEAVE: Allowed.

SHIPMASTER'S REPORT: January 1982.
Documents: It is essential that the various declarations re stores, bond etc., are accurate as heavy fines and confiscation can result when the officials discover any mistakes or inaccuracies.
Restrictions: Due to the lift bridge at the Eastern end of the Quai de Commerce there is no entry during a period in the morning and another in the evening when the main flow of traffic is expedited. These are about 0700 to 0800 hrs. and 1600 to 1700 hrs. Passage through this bridge is difficult for a deep draft vessel owing to the supporting piers being so close to the main channel.
Health: Free Pratique will be granted on application by radio.
Berthing: The Western end of the Quai de Commerce showed depths of 10.25 m. along the 600 ft. to the East, the discharging berth for grain vessels.
There is some 10 m. in the entrance channel and as far as the turning basin, but LESS in the basin hence the operation is difficult.
Bulk Handling Facilities: For grain there are portable vacuvators which discharge into hoppers from which some 8 bags can be filled at the same time.
Fresh Water: Using ship's hoses, some 23 tonnes per hour may be attained by overall watching, but pressure can drop at any time and care must be taken to make sure of a large quantity or if proceeding to La Goulette elevator where there is no water to be shipped.
Gangway/Nightwatchmen: Most helpful and able to get results when Agents not available.
Identification Cards: These are sighted by the Immigration Officer and crew passes issued which are valid for all Tunisian ports but which must be collected before the vessel sails from the last port.

AUTHORITY: Direction du Port de Bizerte, 6 Rue de Russie, Bizerte, Tunisia. *Tel:* 31.139 and 33.688. *Telex:* 13707 Bimpor. *Cables:* Direction du Port de Bizerte. *Contact:* Harbour Master or M. Ben Menna, Port Director.

GABES (Ghannouche): 33.57 N. 10.04 E. (See Plan Book)

LOCATION: The port is located in the Gulf of Gabes, 22 miles (approx.) South of the oil port of La Skhirra, 58 miles S.W. of Sfax and 32 miles to the West of Djerba.
APPROACHES: Landfall by day is easy by virtue of the landmarks and oases around the port.
One can distinguish:
To the South of the port: The Oasis of Sidi Abdeslem and a 30 m. high tank.
To the North, the Oasis of Ghennouch and the red and white chimney, 44 m. high, of the power station.
To the West, the mass of buildings and industrial installations with, at the rear, the grey mushroom of the water tower, 36 m. high, and the Oasis of Bouchemma.

Landfall by night is equally easy, the port approaches being indicated, for vessels coming from the:

Southeast: The lighthouse of Ras Turguness (white flashes, period 5 secs., range 24 miles) and then by the lighthouse of the Gabes fishing port (white with intervening dark sectors, period 12 secs., range 11 miles).

Northeast: And after coming round the belt of lights of the buoys of the Kerkennah Islands by the mooring buoy N.W. of the channel of the port of La Skhirra (flashing white light, period 10 secs., range 10 miles) and by the lighthouse of the fishing port of Gabes.

The Roads:

The roads are indicated by the mooring buoy N.W. of the port channel (isophase white light: on 3 secs. off 3 secs., range 12 miles) and by the lighthouse of the fishing port.

Access Channel:

The port is entered via an access channel 3,220 m. long and 130 m. wide, dredged to 13.5 m.

This channel runs S.W. – N.E. and is joined to the entry passage by a curve 1,200 m. long.

On its 2 banks, there are 4 pairs of fixed light buoys, except buoy No. 8 located in the curve of the channel.

At the breakwater entrance, there are lights placed on the heads of the North and South breakwaters.

ANCHORAGE: The Roads generally offer anchorage with good holding, and it is advisable to anchor to the South of the channel.

MAX. SIZE: "See Berthing".

TUGS: One tug of 1,200 h.p. and 2 fast pilot launches.

BERTHING:

The Basins:

The water area of the port, covering 80 hectares, is enclosed by 2 breakwaters (North breakwater 2,642 m., South breakwater 1,400 m.) leaving between them a passage 350 m. wide of which 200 m. is dredged to a depth of 13.5 m. This water area is divided into 2 basins:

An outer basin (50 ha.) dredged to 12.5 m., and having a manoeuvring circle 600 m. in diameter.

An inner basin (30 ha.) dredged to 10.5 m.

The Quays:

For berthing of vessels, the port has available:

A quay 375 m. long (Berth Nos. 3 and 4) running approximately E.N.E./W.S.W. and dredged to 10.5 m. This quay can take vessels up to 25,000 tons.

A quay 600 m. long (Berth Nos. 5, 6 and 7) running approximately N.N.W./S.S.E. and dredged to 10.5 m. This quay will take vessels up to 25,000 tons.

A quay 260 m. long (Berth No. 8) perpendicular to the first, and dredged to 12.5 m. This quay will take vessels up to 50,000 tons.

Port access is possible at all times to vessels with 33 ft. (10.06 m.) max. draft for berths Nos. 5, 6 and 7, and 39 ft. (11.86 m.) max. draft for berth No. 8.

Open storage areas:

The open areas for the storage of goods transiting through the port include in the public zone – a shed of 4,000 sq.m., open areas which are properly surfaced 70,000 sq.m., open areas of rolled earth: 100,000 sq.m.

CARGO HANDLING EQUIPMENT:

Public:

One gantry crane of 20 tons; Lift trucks from 4 tons – 10 tons; Crane on rails of 20 tons (on order); Crane on rubber tyres of 20 tons.

Private:

Cranes on rubber tyres of 10 tons – 25 tons; Lift trucks from 4 tons – 10 tons; Tractors and trailers.

FRESH WATER: Available.

FUEL: Not available.

REPAIRS: Possible.

WINDS/TIDES: The winds in the Gulf of Gabes present a seasonal variation with the character of a monsoon.

During the cold season (October – March) winds come from the land, from the West and North.

During the hot season (April – September) the winds come from the sea, from the East to S.E. The strength is then from force 3 to force 5, very infrequently reaching force 7.

Tidal currents are negligible and have no influence on navigation.

The characteristics of the tides are as follows:

High Spring Tide	2.45 m.
High Neap Tide	1.60 m.
Low Spring Tide	1.10 m.
Low Neap Tide	0.15 m.

DEVELOPMENTS: The port of Gabes has been essentially created to serve the chemical industries in the area which process the natural Tunisian phosphates coming from the S.W. of the country. There is some importation of sulphur for use in the various processes, likewise aluminium for production of aluminium fluoride. As the South of the country develops, traffic in various general cargoes, foodstuffs and capital equipment, is increasing.

The port is currently advanced in its fifth Development Plan. The new infrastructural works comprise:

1. Transformation of the current quay No. 8 into a much lengthened version.
2. Construction of a service quay.
3. Surfacing and equipping of 50,000 sq.m. of open area for storage of goods.
4. A second tug of 1,200 h.p. will be acquired.
5. Fertiliser bulk loading unit of 500 t.p.h. capacity will be installed.
6. An electric crane, on rails, of 20 tons will be acquired.
7. Cranes on tyres of 15 – 20 tons will be purchased.
8. Fork lifts from 4 – 10 tons will be acquired.

SHIPMASTER'S REPORT: The following reports are from the same vessel. Vessel discharged ammonia at Gabes – Ghannouche.

May 1980:

Approaches: BA. 3327 and 372.

Approaching from the East good positions were obtained off Ile Djerba, keeping outside the 9 fathom soundings as the bottom shoals quite steeply.

The 'Fairway' buoy "O" showed up well on the radar at 8 miles and the channel buoys themselves at 5 – 6 miles. Details of the breakwater were also visible on the radar at this range.

There is a Radio Beacon at Gabes but this is not marked on either chart. ALRS Vol. 2 refers to this.

Caution: The positions of the outer and channel buoys should not be relied upon. New positions as at 22nd/24th May, have been marked on chart 372 and a tracing made. The current sets quite strongly across the axis of the channel and care is required when rounding the bend in the channel immediately before the entrance. The Pilot reported that channel buoys frequently break adrift.

Pilotage: Reportedly there is a 24 hour watch kept on VHF Channel 16 but we did not succeed in making contact until after we had anchored; time of arrival 0330 hrs. Even then reception was poor.

Fluency of English fair.

Pilot boards from a black hulled launch of about 10.0 m. length with white upperworks. Pilot ladder about 1 m. from the water. Pilot boards outside the fairway buoy.

Vessels with draft in excess of 10.0 m. must berth head in, port side to, owing to existence of 10.5 m. shoal in the Southern corner of the harbour. No night time pilotage for vessels of this size.

Only 1 tug is available and only of moderate power; on berthing he pushes according to hand signals and whistles from Pilot (no VHF). When unberthing he takes a ship's line from the stern to swing ship to port clear of berth.

Berth: The berth is a concrete quay in the Southern corner of the harbour about 250 m. long with depths alongside of 11.3 m. (forward) 13.8 m. and 14.2 m. taken by ship's leadline. Communication with shore personnel was not very good with conflicting advice as to whether vessel was in position or not.

The quay is used for the export of fertiliser products which are loaded by means of a large travelling chute. Despite fears, the gangway when swung out should not foul the gantry.

Well fendered with round rubber fendering.

Mooring arrangements were reasonable but the bow lines have to be taken to the far wall to afford a good lead when in position.

The gangway is landed on the quay without any problems.

The berth is open to swells from the East through S.E and is not very well protected from winds, except from due South. Since the bow is close up to the quay, special care should be paid to backsprings and all moorings. Ensure that watchmen are warned.

Discharge: The shore plant has storage for about 10,000 tonnes and relies on these shipments to keep the fertiliser section in production. Should tanks be empty they will be warm and high back pressures may be expected – 9 bar. The facility uses about 7,500 tonnes per month.

They claim to be able to accept cargo at a maximum rate of 350 t.p.h. but is usually in the region of 200 – 250 t.p.h. Our overall rate this call was 220 t.p.h.

The discharge line consisted of an 8 in. pipe from which there was provision for up to 4×4 in. flexible hoses to be connected. Only 2 hoses were used at this call. The shore flange has 12 holes which do not match the pitch of our manifold and, despite cabling ahead, this was not apparent until berthing and some time was lost. Shore personnel connect and disconnect. Line taken on board using ship's derricks. Shore provided the converting spool piece. Ship blew through lines on completion.

No vapour return line.

No venting to atmosphere.

Surveyor: Redwood's Surveyor in attendance and all figures based on gauging of ship's tanks.

Surveyor used a strange vapour factor which was not familiar in any way and declined to give us copies or explain its origin.

General: Fresh water available. No fuel oil available, if required proceed to oil terminal at Sfax. Repatriation and relieving of personnel possible without difficulties. Good road and rail communication with Tunis, Sousse and Sfax. Good access to Gabes by taxi. Shore passes required – take Discharge Book to Immigration office and a pass will be issued. Collect Discharge Book inward.

Papers: 3 Crew Declarations.
3 Stores Lists, including Bonded Stores. Declarations on the contents of all Bars onboard. (This is most important, Tunisia is largely Moslem).
2 Lists of ports previously visited.
Port Health Form – normal Health Declaration.

The Officials were very fair but very thorough in checking bonded stores. Fresh provisions available.

July 1980:

Discharge: The discharge rate at this call was only in the region of 177 t.p.h. (perhaps due to Ramadan) with a very high back pressure throughout in excess of 9 Bar.

Total delays this call amounted to some 28 hours 20 minutes.

General: IMPORTANT: Since our last call the authorities have instituted strict currency control regulations and a number of the crew were caught on arrival during cabin searches. Personnel must therefore be warned before leaving that *ALL* Tunisian currency has to be handed back. The penalty for non-compliance being confiscation of the currency and a fine of at least twice the value of the money discovered. Before arrival personnel should be warned accordingly.

All authorities subjected the ship to a much more thorough scrutiny than at last call.

Repatriating personnel were subjected to baggage searches either on board or ashore.

Fresh stores were taken at this call and were of good quality.

Freon "R22" available in small quantities.

Fresh water taken and treated with "Stabochlor" as a precaution.

November 1980:

Approaches: BA. 3327 and 372.

When rounding Kerkennah Banks the buoys should not be relied upon.

On the flood tide the current from Kerkennah to Fairway Buoy sets in a S.S.W. direction. Fairway Buoy shows up at about 8 miles on radar and Channel Buoys at 5 to 6 miles.

A number of oil rigs are found between Kerkennah Banks and Ile Djerbe, these should not be relied on for navigation fixes. Ile Djerbe gives good positions. Approaching the Fairway Buoy a 'Minaret' marked on BA. 3327 to North of port is conspicuous and Beida Mt. (902) to N.W. of port is conspicuous.

Breakwater is visible on radar at 15 miles but difficult to make out visually until very close too on account of haze. A radio beacon not marked on BA. 3327 is listed and operating as per ALRS Vol. 2.

Fairway Buoy is number "O" and named "Ghannouche" it is a tall red pillar buoy, its permanent position as per the alterations on BA. 372.

Channel buoys have been altered and are best seen from the changes to BA. 372. Pilot reports that all have new moorings and should be considered reasonably reliable. They are lifted about every 4 months, one at a time, so the official numbers as changes to BA. 372 do not always correspond to the actual number.

Anchorage: For large vessels about 1.0 – 1.5 miles East of Fairway Buoy and for small vessels to East of No. 2 buoy. Good holding ground.

Wind: The prevailing wind is from the East and is strongest during Winter months. Due to the harbour being open to the East a swell carries into the harbour making berthing and working of small vessels impossible at times.

V.H.F.: Call 'Gabes Port' on Channel 16, range limited (12 miles). English reasonable.

Berthing: No berthing if wind force over 4 to 5 and no unberthing over 3 to 4. Largest ship to use port 'Galconda' (LPG) gross 34,893 tonnes and deepest draft ship 'Hampshire' (LPG) gross 32,060 tonnes draft 11.2 m.

Channel: Minimum depth Chart Datum found to be 11.0 m. (36 ft.) plus 0.8 m. MHWN and 2.2 m. MHWS.

Liable to silting. Official depth is 41 ft. (12.5 m.) but last dredged 1974.

Pilot reports little current in channel, but reports suggest cross current can be encountered particularly near breakwaters. Channel dredged in box shape.

Pilot: Two Pilots employed by National Port Authority. Only senior Pilot handles large vessels. Good English spoken.

No berthing/unberthing of large vessels at night. Sunrise to Sunset only. Boards from black hulled 10 m. launch with white upperworks. Pilot ladder about 1 m. above water. Prefers gangway if weather suitable. Boards outside fairway buoy.

Tugs: Only one Port Authority tug of 1,200 h.p. with suspect towing hook. In November 1980 this tug was under repair and a Greek Construction Co. tug was being hired for port use as necessary. This tug (800 h.p.) would not work on a Sunday. When berthing, tug pushes; when unberthing, tug takes ship's line from starboard quarter. Pilot reports second tug in design stage.

Berthing/Moorings: All berths port side to.

Fertiliser/Ammonia/Phosphoric Acid Berth – Berth head in.

Sulphur and Grain berths – berth head North.

Vessels on all berths moored close together. Three large and 1 small vessel can moor on Sulphur/Grain berths.

Good back springs essential at all berths.

Moorings: 3, 2, 2. Forward head lines go to quay ahead of Ammonia berth, mooring boat used. On Ammonia berth our bow was about 3 m. off stern of vessel immediately ahead and at right angles to us.

Berths: Ammonia berth of concrete trestle construction with bollards and fenders on concrete projections proud of quay face. All other berths solid concrete construction.

Ammonia berth about 250 m. in length and 13.2 m. C.D. minimum. Other berths reported to be 10.5 m. alongside.

Density: 1029. (3 visits) May, July and November. Good fendering on all berths.

Cargo: Anhydrous Ammonia: Intake for fertiliser plant about 10,000 tonnes per month.

Loading/Discharge: Discharge rate varies but maximum claimed to be 350 t.p.h., in practice this has been 220, 177 and 233 t.p.h. over three visits with back pressure of 8.5 to 9.5 bars. No vapour return line. Two×4 in. flexible pipes join onto common manifold union with 8 in. coupling of odd size. The plant has a spool piece to fit standard 150 ASA connection on ships. Shore labour assists with connection.

For large LPG/NH3 carriers it is necessary to berth as far up quay face as it is safe to do so in order to be able to connect pipes. On this vessel the after end of gangway must be past travelling shiploader stowage position on quay. Generally 2 ship pumps are required. Shore tank capacity 9,800 tonnes.

Same berth is used for loading Ammonia Phosphate for export at about 30,000 tonnes per year and Phosphoric acid in liquid form at 60,000 tonnes per year.

Travelling shiploader for Ammonia Phosphate loads at 800 t.p.h.

The Sulphur berths nearest to Ammonia berth have 2 discharge cranes/gantry. The Grain berth at the Northern end is worked by ship's gear. Both these are import berths. Sulphur berth direct into fertiliser plant. It is planned to export Nitric acid in the near future.

Gangway: Can be turned out on all berths prior to berthing even though it seems due to shiploaders vessel cannot.

Communications: At Ammonia berth after connection there is little English spoken by personnel ashore. Two watchmen always onboard.

N.O.R.: Tender on arrival to SAEP GABES, accepted alongside berth.

Surveyor: SGS/Redwood in attendance. Does not always appear on arrival.

General: Fresh water available from quay, but salty. If fuel required go to Sfax. Personnel reliefs quite easy through Djerba. Direct flights to Frankfurt 3 times per week. Baggage may go missing. Road and rail communication with Tunis, Sousse and Djerba. STD International telephones. Holiday resort at Djerba.

Authorities: Immigration board first to check International Health Declaration and Vaccination List. If all in order 'Q' flag is pulled down – Quarantine Pratique granted and Customs and Agent can board. Port Health/Immigration: require all Cholera Certificates up to date, if not Port Health will carry out inoculation on board the ship.

Customs currency control is rigid – all currencies must be declared and all Tunisian currency drawn and not used handed back on departure. Bars are particularly subject to inspection. Customs also very carefully check Bars stocks, if any discrepancies a fine is levied.

Customs conduct cabin searches for undeclared articles. Master's safe is checked together with dangerous drugs which must be properly declared, every single item and amount of each. Personnel going ashore take their Discharge Books to main gate where a shore pass is issued and Discharge Book collected on return.

Papers required: 3 Copies Personal Effects Declaration (Make sure Jewellery is declared).
3 Copies Personal Currency Lists.
2 Stores Lists.
2 Drugs Lists.
2 Bond Lists.
2 Vaccination Lists.
6 Cargo Declaration Lists.

Chandler: Fresh provisions available and seem good and prices reasonable. Cable ahead for chandler as normally does not work at weekends.

Agent: Societe Tunisiene De Transit D'Agencies Et De Transports. Cable: STTAT GABES.

Have office just outside main gate. Good English and generally helpful and obliging. Crew transfers conducted without difficulty. Can telephone STD from office.

Developments: On North side of Harbour general cargo berths are being constructed. The retaining breakwater has been completed and the berth concrete caissons are being placed in position.

AUTHORITY: Direction du Port de Gabes, Office des Ports Nationaux, Batiment Administratif, Port de la Goulette, Tunisia. *Tel:* 275300 (6 lines). *Telex:* 12-386 Oporna-Tunis. *Cables:* Ofpornatu. *Contact:* B. Karra, Harbour Manager, P.O.Box 65, Gabes, Tunisia. Tel: (5) 22.9.22.

LA GOULETTE (Including Tunis): 36.49 N. 10.18 E.
(See Plan Book)

DOCUMENTS:

Required by Police:
2 Crew Lists.
2 Passenger Lists.

Required by Customs:
1 Crew List.
2 Passenger Lists.
2 Crew Manifests.

Required by Port Health:
1 Crew List.
1 Passenger List.

PILOTAGE: To call Pilot contact Goulette Radio station, call sign 3VW, 24 hour watch on 2182 kHz or VHF Channel 16. Pilot boats are in permanent direct contact with Goulette Radio. International code visual and sound pilot signals may be used on arrival at the sea buoy.

Pilot launches are stationed inside the port, and proceed on call to meet vessels about 0.25 miles beyond the sea buoy, i.e. the buoy No. 1 in the entrance channel to the port.

ANCHORAGE: Anchorages in the port roads are safe except during strong winds and heavy seas from the North or N.E.; good holding ground.

Larger vessels anchor about 0.5 miles N.E. of the sea buoy in depths of 12 m. – 14 m. Small vessels may anchor either North or South of the approach channel in depths of 7 m. – 9 m. in the vicinity of buoys Nos. 4 and 5 provided that they do not obstruct navigation in the entrance channel.

RESTRICTIONS: Tankers and ore carriers are not allowed to enter and leave port during the hours of darkness. Depth of water at low water is 32 ft.

MAX. SIZE: *La Goulette:* Up to max. draft 32 ft. Max. length 185 m. *Tunis:* Up to max. draft 20 ft. 6 in.

HEALTH: Master is required to complete Declaration of Health on arrival. Vessels which have previously called at another Tunisian port are given automatic Free Pratique except in time of epidemic.

RADIO: Tunis Radio 24 hour watch on 2182 kHz, radio-telephone watch from 0600 to 2200 hrs. on 500 kHz Goulette Radio call sign 3VW 24 hour watch on 2182 kHz and VHF Channel 16.

TUGS: Available to assist berthing as directed by the Pilot. Tugs join vessels in the vicinity of buoys Nos. 4 and 6, that is 400 or 500 m. from the berths. Vessel's lines always used.

BERTHING: *La Goulette:* one ore berth, unloading rate 2,000 t.p.h. Also see "Shipmaster's Report".

STEVEDORES: Gangs are ordered before 0600 hrs. for morning work; before 1300 hrs. for the afternoon and before 2000 hrs. for night work.

MEDICAL: Preferable to advise Agent in advance if doctor required on board. Crew members should possess international vaccination certificates.
TANKERS: One berth is reserved for tankers with a max. draft of 27 ft. 6 in.
FRESH WATER: Hydrants are situated on the quays supplying fresh water at a rate of 12 – 15 cu.m.p.h. A water barge "El Ain" of 50 tons capacity can supply vessels berthing in "Basin Sud".
FIRE PRECAUTIONS: A watchman has to be permanently employed on board tankers when alongside. A tug equipped with fire-fighting equipment is required to stand by tankers discharging.
GANGWAY/DECK WATCHMEN: The employment of gangway watchmen is necessary.
OPENING/CLOSING HATCHES: Performed by ship's crew or by stevedores on payment of special premium.
CUSTOMS ALLOWANCES: Each crewman is allowed two packets of cigarettes or 4 cigars or 50 gm. of tobacco and one opened bottle of alcohol.
CONSULS: Following countries are represented in Tunisia:

Algeria
Australia
Denmark
France
Great Britain
Greece
Italy
Morocco
Norway
Panama
U.S.A.
Venezuela

REPAIRS: Machinery and boiler repairs can be effected on board. For large repairs it is necessary to send part to the Shipyards of Soconema at Menzel Bourguiba 70 miles away.
DRY DOCKS: At Menzel Bourguiba 4 dry docks, the largest of which is 253 m. long, 41 m. wide, 10.5 m. depth.
REPATRIATION: Can be arranged.
AIRPORT: Situated 10 km. from the port. Regular daily flights to Europe and N. Africa.
TIME: GMT plus 1 hour. No alterations during the year.
HOLIDAYS: 20th March (Independence Day); 1st May (Labour Day); 25th July (Republic Day); 15th October (Evacuation Day). In addition there are 13 other holidays on which work is carried out on payment of overtime.
POLICE/FIRE/AMBULANCE: Police, Tel: 197. Fire, Tel: 198. Ambulance (express), Tel: 141313. Ambulance (S.O.S.) 341269.
TELEPHONES: Telephones can be connected on board vessels and are compulsory for tankers.
SHORE LEAVE: Crew members are permitted to go ashore after obtaining a pass from the Port Police.
DEVELOPMENTS: A new commercial port and industrial complex, incorporating Roll-on/Roll-off facilities, quays, jetties, transit sheds and back-up services, is to be built on reclaimed land, covering approximately 100 ha, immediately inside the Lake of Tunis.

SHIPMASTER'S REPORT: January 1982.
Documents: It is essential to ensure that all arms and ammunition are declared at first port of entry in Tunisia and that the proper authority has them sealed inside the bond during the entire stay in Tunisia.

When coming from another Tunisian port all cash (Dinars) remaining from sums drawn in the previous port must be declared.
Pilotage: The VHF is the only viable communication for the pilot service, the sea buoy being too far for either visual or sound signals.

When required to enter, the vessel will be told to proceed inwards down the approach channel which has been dredged to 12.25 m. from Sea Buoy to the moles. This was completed on 20th December, 1981 as the first part of the work for the new port being constructed on the Southern side of the canal to Tunis and some 3 kilometres inside the present port of La Goulette.
Berths: The elevator/silo berth in Basin Sud has a depth of water of over 10 m. throughout its whole length and extending some 80 m. to the seaward end as the actual wharf is short (about 135 m.) and vessels have to warp along the face to ensure all hatches are serviced.

There is *no water* at this berth either drinking or boiler nor can it be taken at the adjacent tanker berth or the iron ore pier.
Developments: The port appears to be concentrating on the Ro-Ro berths and the new passenger terminal to the exclusion of the more mundane cargoes. The traffic is such that there is reluctance to allow a vessel from the silo that is short of water to take up a berth on the Northern quay. The harbour area is to be dredged in stages so as to give access, eventually, to the new port under active construction.
Telephones: There are no telephones available at the silo berth unless access can be had to the one in the office, while the Oil Berth unit is only available if there is a tanker in the berth.

AUTHORITY: Office des Ports Nationaux, Batiment Adminstratif, Port de la Goulette, C.P. 2060, La Goulette, Tunisia. *Tel:* 275300. *Telex:* 12386 Oporna. *Cables:* Of. Pornatu.

LA SKHIRRA (Terminal Platform): 34.18 N. 10.09 E.

(See Plan Book)

DOCUMENTS:

5 Crew Lists.
2 Lists of Crew Personal Effects.
2 Stores Lists.
5 Passenger Lists, if passengers carried.
Manifest of cargo on board.
Manifest of cargo in transit.

PILOTAGE: Compulsory for berthing alongside. Pilot employed by TRAPSA. ETA required 48 hours and 24 hours before arrival. Call Pilot by international code signals on arrival, or by VHF Channel 16. TRAPSA will advise if vessel required to anchor, or berth immediately. Pilot boards 2 miles off the terminal by black and white motor launch. If it is necessary (vessel without chart) Pilot will proceed outside the port limits.
ANCHORAGE: Vessels should anchor outside the prohibited zone which is limited to the South by the parallel of Buoy No. 5 and to the East by bearing 350° from the terminal platform light.
MAX. SIZE: Length 300 m. Draft 47 ft. 6 in. or up to 50 ft. at high water.
HEALTH: International Quarantine signals to be shown on arrival. Vessels normally receive Free Pratique at the quay after berthing. Suspect vessels must wait at anchor until Pratique is given.
RADIO: TRAPSA operate coastal station Laskhirra Radio (3VP), vessels to make contact 48 hours before arrival. Messages for TRAPSA passed by other stations should be addressed "Rapetrol Laskhirra".
VHF: The harbour office and loading terminal are equipped with VHF on the following channels: 156.8 MHz (calling), 156.6 MHz, 156.7 MHz, 156.55 MHz Contact with tugs can be made on all 4 channels.
TUGS: Two tugs 1,500 h.p. each, normally used for berthing. 3 tugs required if over 70,000 d.w.t. Lines provided by tugs.
BERTHING: Two loading berths situated one each side of terminal platform connected by a gangway from the shore. For safe manoeuvring tankers are recommended to arrive with ballast up to 30% of summer deadweight. Mooring may need to be doubled during months of December to April, when sudden violent squalls sometimes occur. A vessel alongside requiring tug assistance may sound one long blast at frequent short intervals.

Depth alongside loading berths is 15 m. – 16 m. Loading platform is served by 3×30 in. oil pipe-lines and 1×24 in. and 1×18 in. ballast lines. Each berth equipped with 4×12 in. flexible hoses. Max. loading rate 12,000 cu.m./hr.
MEDICAL: Advance notice required of any medical assistance needed. Hospital facilities available. Crew members require valid vaccination certificates.
BALLAST: All ballast, except permanent, to be pumped to shore installation. Heavy fines for water pollution. Max. rate 6,000 cu.m./hr.
FRESH WATER: Not available.
FUEL: Not available.
CUSTOMS ALLOWANCES: 2 packets cigarettes allowed each Crew member. No alcohol allowed.
CONSULS: Following countries are represented at Sfax: France, Sweden, Great Britain, Netherlands and Italy.
REPAIRS: There are no facilities for repairs. Nearest at Sfax.
REPATRIATION: Can be arranged.
AIRPORT: Airport at Tunis 350 km. away, or Sfax 80 km. away.
TIME: GMT plus 1 hour all year round.
SHORE LEAVE: Not allowed in Trapsa installation. Can be arranged through Agent.
AUTHORITY: Compagnie des Transports par Pipe-line au Sahara (T.R.A.P.S.A.), 3050 La Skhirra, Tunisia. *Tel:* 22353 and 22395. *Telex:* 40811 TN. *Cables:* Erapsk, La Skhirra. *Contact:* O. Conrad, Port Director.

SFAX: 34.44 N. 10.46 E.

DOCUMENTS: On arrival Masters must submit a written declaration giving the name of ship and of the Master, Owner or Charterer, vessel's tonnage, draft, cargo, port of origin and destination, number of crew on board. Also required:

Customs Manifest.
Crew List for Police.
List of Dangerous Cargo.
Health Declaration.

PILOTAGE: Compulsory for all vessels over 100 gross tons. Pilotage commences at the outer buoys of the entrance channel. Day signals for Pilot, International Code Signal "P.T" or Code flag "S" hoisted alone or below code pennant. Night signals according to International rules. For entry at night, vessels must radio Harbour Master at the latest 1 hour before sunset to confirm their intention. Before boarding, Pilot will check that vessel does not exceed the max. authorised draft. If the "Entry Prohibited" signal is not hoisted at the port signal mast, vessel may await Pilot in the channel axis about 1 mile off the outer buoys. Pilot boards from a launch 11 m. long, displaying international pilot signals. Pilot may be contacted by radio through Radio Port de Sfax. Agent must give advance notice of vessels arrival to Harbour Master 24 hours 48 hours beforehand.
ANCHORAGE: In immediate vicinity of the port, depths up to 15 m., good holding ground.
MAX. SIZE: Length 185 m., beam 26 m., draft 32 ft. – 33 ft.
HEALTH: To request Free Pratique, hoist "Q" flag on arrival, or radio to Port Health Service. Pratique normally given at the berth after mooring. Suspect vessels are required to wait at anchor until Pratique is given.
RADIO: Sfax. Port Call – call sign 3VW2, operating 24 hours on 2182 kHz and Channel 16 VHF.

Calling frequency 2182 kHz, working frequency 1743 kHz CR3. Used only for communications with port services. Meteorological information provided on request.
TUGS: Join vessel at outer buoys or according to circumstances in the outer port.
BERTHING: N.E. Quay 820 m. long, phosphate berth.

West Quay 150 m. long, phosphate berth.
Petrol Pier 105 m. long. Max. size: length 185 m., draft 33 ft.
Salicole Pier, salt loading berth.
Sulphur Quay 220 m. long, draft 33 ft.
Also see "Developments".

STEVEDORES: Available, arranged by Agent basis vessel's ETA.
MEDICAL: Advance notice preferred if medical attention required. Hospital facilities available. Vaccination certificates required for all crew.
DENSITY: 1028.
FRESH WATER: Hydrants fitted on all quays. Written request for replenishing water is required by Harbour Master.

FUEL: Available by barge.
GANGWAY/DECK WATCHMEN: Normally ship's crew. Available from shore if required.
OPENING/CLOSING HATCHES: Normally performed by crew.
DENTIFICATION CARDS: Required by all crew.
CONSULS: Local representatives for France, Great Britain, Netherlands, Norway, Sweden, Denmark, Spain, Italy, Greece, Portugal and Belgium.
REPAIRS: Small engine repairs can be effected. Floating dock for vessels less than 350 tons.
REPATRIATION: Can be arranged.
AIRPORT: There is an airfield 7 km. from the city. No regular services.
TIME: GMT plus 1 hour.
HOLIDAYS: 1st January; 18th January; Aid El Kebir; Hegirian New Year; 20th March; 9th April; 1st May; Mouled; 1st and 2nd June; 25th July; 3rd August; 13th August; 3rd September; 15th October; Aid Es Seghir.
POLICE: Tel. 21-700.
SHORE LEAVE: Allowed.
DEVELOPMENTS: Entrance channel to be widened to 60 m. Dredging to 12.50 m. of channel and principal quays. These projects are under study.

In July 1984 the port will be equipped with 3 new berths totalling 517 m. in length, depth 33 ft., max. LOA 185 m., max. draft 33 ft. Included is a Ro/Ro berth length 160 m., depth 33 ft.

SHIPMASTER'S REPORT: 1976.
Documents:
1 General Declaration.
2 Stores Lists.
3 Crew Lists.
1 List of Dangerous Cargo.
1 Health Declaration.

Pilotage: To be contacted on VHF Channel 16 throughout 24 hours. Also Harbour Master may be contacted at the same hours on Channel 16. At other times the same Authorities may be contacted by radio 2182 kHz.

My vessel had a draft of 26 ft. By the VHF the Harbour Master ordered me to enter the channel and continue up to the Outer Basin where a Pilot would embark on the Port side.

It was later confirmed both by the Pilot and Agent to be usual for ships up to 10,000 tons to enter the Outer Basin without Pilot. Also upon our departure, the Pilot disembarked at the Outer Harbour Basin (Authority state that this is rare and only if vessel visits port regularly).

The Agent told me the channel was 34 ft. deep, although no measurements have been taken for 10 years. Lately a ship with draft of 33 ft. has passed through the channel without any difficulties.

An unmarked wreck is situated in position Lat. 34° 37.5′ N., Long. 10° 49.5′ E. The best way to approach the outer channel from S.W. or South, would therefore be to navigate to a position 6.5 miles S.E. of Tina's Lt. Tr., then change course for the outer buoys of channel.

The only beacons illuminated around Kerkenah Banks were Beacon No. "1" and No. "8". All other buoys were in correct position, but extinguished.

Stevedores: Work in shifts from 0700 hrs. till 1300 hrs. and from 1400 hrs. till 2000 hrs. In case of sailing it is possible to arrange overtime up to 2100 hrs. It is also possible to have night gangs from 2100 hrs. till 0300 hrs.

AUTHORITY: Office des Ports Nationaux Tunisiens, 10 Avenue de la Republic, Tunis. *Tel:* (04) 21486.

SOUSSE (Suza): 35.50 N. 10.38 E.

DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
4 Crew Personal Effects Lists.
Health Declaration.
Manifest of Provisions on Board.
2 copies vessel's particular declaration.

PILOTAGE: Contact pilot station on VHF Channel 16 or Tel. 03.20.401.
RESTRICTIONS: Entrance to the port coming from the sea is East to West. Channel 820 m. long, dredged to 10.5 m. Depth in port area 8.70 m., height of tide 0.50 m.
MAX. SIZE: Max. LOA. 170 m.
HEALTH: Free Pratique normally given at the quays after mooring. Pratique is automatic for vessels coming from another Tunisian port. In case of suspected disease on board vessel will be ordered to quarantine anchorage.
RADIO: Sousse Control "3VW4" on 2182 kHz.
TUGS: One tug of 1,200 h.p.
BERTHING: One basin for ocean-going ships, yacht basin and fishing vessel harbour.

Length of quays 830 m. 8 berths.
South Basin Quay, length 140 m., dredged to 9.5 m.

CRANES: 1×18 tons and 2×10 tons.
STEVEDORES: Minimum of 24 hours' advance notice of ETA to Agent is required.
MEDICAL: Doctor available to board vessel. Hospital, private clinics and all facilities available.
REPAIRS: No facilities.
GANGWAY/DECK WATCHMEN: It is recommended to employ shore watchmen.
OPENING/CLOSING HATCHES: Carried out by stevedores at the request of Masters.
CUSTOMS ALLOWANCES: Each crew member is allowed 1 carton of cigarettes and 1 opened bottle of wine or spirits. In case of a prolonged stay in port, Customs may renew these quantities.
IDENTIFICATION CARDS: Crew member's identification cards will be collected by the Immigration service and exchanged for shore passes while vessel is in port.
TIME: GMT plus 1 hour all year round.
HOLIDAYS: There are 17 days official holiday during the year. Work can be carried out on all holidays except 1st May on payment of 100% overtime.
AIRPORT: Skanes Monastir – 13 km. from the port.
AUTHORITY: Direction du Port de Sousse, Rue Abdallah Ibn Zoubier, Sousse, Tunisia. *Contact:* T. Dhaou, Port Director.

TAZERKA: 36.36 N. 11.41 E.

DOCUMENTS:
4 Crew Lists.
1 Health Declaration.

PILOTAGE: A Berthing Master will board the visiting tanker at a location 2 nautical miles downwind of the Tazerka FPSU. He will remain on board the visiting tanker until after departure and will disembark when the visiting tanker is clear of Tazerka FPSU.

The Berthing Pilot/Loading Master will be familiar with pilot/berthing/unberthing vessels at Tazerka and will advise the Master of the visiting tanker accordingly. Throughout the operation, he will be the liaison between the Master of the visiting tanker and the Tazerka OIM (Offshore Installation Manager). He will advise the Master of the visiting tanker on documentation procedures and carry out any assistance.

ANCHORAGES: None.
APPROACHES: There are clear navigation approaches to and from the Tazerka FPSU. From time to time, special work barges and rigs will operate in the vicinity of the Tazerka FPSU. Information on such rigs will be broadcast through Normal Navigation Warnings and also by Tazerka Operations when visiting tankers first make communications contact.
RESTRICTIONS: Daylight mooring only.

Weather operating limits will be decided at the time of operation, but are approximately as follows:
(a) Maximum mean hourly wind speed = 25 knots.
(b) Maximum significant wave height = 2.5 m.
(c) Minimum visibility for berthing = 0.5 nautical miles.

MAX. SIZE: Minimum LOA 170 m. Maximum LOA 275 m. Under special circumstances LOA may be extended to 297 m.

No limit on beam and draft.

Minimum dead weight 20,000 tonnes (approx.). Maximum dead weight 140,000 tonnes (approx.).

Maximum displacement during berthing 150,000 tonnes.

RADIO: Vessels to send an initial ETA message to Agent via Tunis Radio on departure from the previous port and updated 72 hours, 48 hours and 24 hours prior to arrival at Tazerka. Thereafter changes greater than 3 hours should be reported. Where a ship departs from a port which is less than 72/48/24 hours' steaming distance away she shall advise her ETA as soon as possible.

ETA messages should include the following information:
(a) Location of cargo manifold in relation to the length overall of ship.
(b) Type of moorings (synthetic rope, wire, wire with synthetic tails, etc.)

VHF: Tazerka Floating Production Storage Unit is equipped with VHF Channels 16/6. Notice of Readiness may be issued when vessels are within 5 nautical miles radius of the Tazerka FPSU.
TUGS: None.
BERTHING:
Tanker's Draft: The tanker must be on a suitable draft and trim for the approach run. No hard and fast rules will be applied but Masters of visiting tankers must bear in mind the need for accurate steering with a minimum of speed coupled with good stern power ability.

As a guideline a suitable draft is provided by applying the following criteria:
(i) Moulded draft amidships (dm) in metres to be not less than:
$dm = 2.0 + 0.02L$
(ii) Trim by the stern not greater than 0.015L;
(iii) In any case draft at the after perpendicular not less than that which is necessary to obtain full immersion of the propeller(s).

This is in accordance with the requirements of the "International Conference on Marine Pollution, 1973" Regulation 13. In practice it has been found that ballast required to achieve these criteria typically approximates to 25% of Summer Deadweight.

Vessels berth port side to the starboard side of a Floating Production Storage Unit (a converted VLCC) which is moored to a SPM consisting of a yoke and rigid single anchor leg system. The FPSU is free to rotate through 360°. Vessels will berth against up to 5 inflatable Low Pressure Floating Fenders.

Wire moorings must have synthetic rope tails with a breaking strain at least 5% greater than the minimum breaking load of the wires to which they are attached.

Two long rope messengers to be ready forward and aft. Both anchors home and secured. (If reducers and/or tails are not available on board, advise Tazerka FPSU with initial ETA. Prepare to lift this equipment on board from the pilot boat).

Immobilisation of engines not permitted under any circumstances.

HOSE CONNECTION: Port side midships – 2×12 in. 150 ASA hoses. Port side derricks should be rigged for minimum 5 tonnes SWL.

Cargo manifolds must comply with OCIMF Standards for Tanker Manifolds, 1981 Edition.

LOADING/DISCHARGING: Typical VLCC pipe-line system with special manifold located 225 m. from stem.

2×12 in. hoses for Crude Oil discharge. Maximum loading rate – 7,000 tonnes/p.h.

1×8 in. hose for Fuel Oil receiving. Maximum receiving rate – 1,000 tonnes/p.h.

1×3 in. hose for Diesel Oil receiving. Maximum receiving rate – 50 tonnes/p.h.

Concurrent receipt of fuel oil and diesel oil with crude oil discharge is required.

BALLAST: No dirty ballast facilities. It is a condition of loading that vessel's ballast is clean and suitable for discharge to sea as defined in MARPOL 1973, Regulaion 13. All other ballast shall be retained on board.

MEDICAL: Emergency cases can be treated.

DENSITY: 1025.

FRESH WATER: Not available.

REPAIRS: Not available.

REPATRIATION: Not possible.

REGULATIONS: Access to FPSU not permitted.

The Authorities of all Arabic Ports subscribe to the Israeli boycott and administer checks on ships. Apart from the usual checks on Log Books, etc., store rooms, can be inspected for evidence of Israeli produce. If found, ships can be fined and/or blacklisted from all countries subscribing to the boycott.

It is recommended that stores be checked to ensure that there are no items which can be interpreted as being of Israeli origin. This includes items which bear trade marks incorporating Hebraic symbols such as the six point star, irrespective of the country of origin.

AUTHORITY: Shell Tunirex, B.P. 349, Tunis, Tunisia. *Tel:* 341.509, 341.510, 247.411. *Telex:* 13441 Shelgo Tn and Trex 13831 Tn.

NOTES

Please also advise Shipping Guides Ltd.

Turkey

GENERAL:

On arrival off Canakkale coming from the Aegean, or off Buyukdere coming from the Black Sea, ships must stop for sanitary inspection. However, tankers with a d.w.t. over 100,000 tons proceeding to the Gulf of Izmit to discharge or load petroleum products may obtain Pratique here without stopping at Canakkale, provided Agents are notified 48 hours in advance.

In the event of bad weather at Canak, vessels may be allowed to continue their voyage to Istanbul and undergo the sanitary inspection there. Permission to do so is notified to them by the Canakkale Sanitary Office with the signal "H.M." in daytime and three vertical lights (green, white, green) at night.

Pilotage through the Dardanelles and the Bosphorus is not compulsory but is advisable. Pilot stations, equipped with VHF operating on Channel 16, are located at Canakkale, Istanbul and Telli Tabia (Upper Bosphorus).

Turkish Flag: All foreign ships are required to fly Turkish flag during their stay in Turkish ports or when passing through the Straits (Dardanelles and Bosphorus).

Sanitary and Port Inspections: On arrival at a Turkish port, every ship is boarded by a Sanitary Officer for examination. Nobody may join or leave the ship before this inspection is completed.

The ship must produce the following documents:

Sanitary Declaration Form.
Derat Certificate.
Ship's Register.
Load-line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Cargo Ship Safety Construction Certificate.

Police Customs Controls: After obtaining Free Sanitary Pratique, the ship must likewise produce:

(1) 3 Crew Lists together with every member's passport, discharge book or Z-card.
(2) 1 List of Provisions, Stores and Bunkers.
(3) 1 Declaration of all Monies or cheques carried in the ship's safe.
(4) Manifests of all cargo on board, whether for discharge at Turkish or foreign ports.
(5) 1 List of Passengers landing in Istanbul showing nationality, number, date and source of entrance visa (if such visa is required) together with the passports.
(6) 1 List of Transit Passengers together with the passports.

Documents covered by items 1, 2, 3, 4 and 6 as well as a list of passengers embarking at Istanbul are also required on departure.

Police and Customs Controls are effected at Istanbul when arriving from the Aegean and at Buyukdere when arriving from the Black Sea. However, vessels under 500 n.r.t. have to undergo control formalities at Canakkale, both inwards and outwards, apart from those to be effected at Istanbul. It is recommended to prepare the accommodation ladder to facilitate the boarding of officials.

Excepting the case of tourist vessels, the Customs Officers will seal stocks of provisions and tobacco, spirits, as well as any other items in bond. Sufficient quantities of the foregoing will be left unsealed for the needs of the ship during the stay in port.

If stores left unsealed are exhausted while a ship is in port, a request to the Customs Officers will ensure further withdrawal.

The seals must not be broken before the ship's exit from territorial waters or if sailing from one Turkish port to another Turkish port.

Special Rules for the Passage of the Bosphorus: During their passage through the Bosphorus, ships must regulate their speed, without exceeding the 10 knot limit over the bottom, so that piers, landing stages, etc., or other craft (sailing and rowing boats, etc.) may not be damaged by their wash. Further, they must take care not to hinder fishing and diving operations or to damage submarine telephone, telegraph or electric cables.

Sound Signals, Wireless Sets: It is forbidden to make use of sirens or steam whistles in the harbour, except for manoeuvring purposes as laid down in the regulations for the avoidance of collisions.

Wireless transmitters are not sealed on arrival of a vessel but it is recommended that their use in Turkish territorial waters be restricted to cases of emergency.

Refuse: No refuse such as garbage, ashes, polluted oil and the like can be thrown or pumped overboard, nor any scraping, cleaning of tanks and/or bilges can be effected inside port limits.

RESTRICTIONS:

The Bosphorus – Height of Power Transmission Line: A transmission line with a vertical clearance of 70 m. (B.A. Chart 3930, 229 ft.) has been installed alongside the power transmission line in position Lat. 41° 10.4′ N., 29° 04.7′ E. (approx.)

Masters of vessels with a similar masthead height intending to pass beneath this cable must contact the Harbour Authority for permission to pass.

NOTICE:

New Traffic Regulations in Conformity with International Regulations for Preventing Collisions at Sea (IMO Colreg of 1972) is being established in the Strait of Istanbul.

A. It is decided that a new traffic regulation conforming to the international rules of navigation be established in the Strait of Istanbul. The new regulation which will be effective in the Strait of Istanbul as of 1st May 1982, 0900 hrs. GMT (1200 hrs. LMT) is as follows:

1. The existing left side navigation regulation in the Strait of Istanbul which is applicable between Kizkulesi-Ortakoy line in the South and Tarabya burnu-Umuryeri feneri line in the North will be abolished on 1st May 1982, at 0900 hrs. GMT (1200 hrs. LMT) and then the new regulation in conformity with Rule 9 of International Regulations Preventing Collision at Sea of 1972 will come into force.

2. Ships in their transit from the Sea of Marmara to the Black Sea or from the Black Sea to the Sea of Marmara will, in accordance with Rule 9 of IMO Colreg 72, navigate throughout the Strait of Istanbul on the right side of the median line (traffic separation line) and under no circumstances will they pass to the left of the said line.

3. Ships during their transit in the Strait of Istanbul will not overtake other vessels unless they are forced to do so and will navigate inside the designated traffic lane.

B. Pilotage Services:

1. The pilotage stations are providing pilotage services on 24 hour basis for ships navigating in the Strait of Istanbul. The location of these stations are given in the international pilotage books and marked in the Strait of Istanbul chart (TR.2921).

2. In view of the unique geographical configuration and the currents of the Strait of Istanbul which present difficulties to navigation, and in order to eliminate the likelihood of an accident that may occur due to mistakes of a Master who is not fully aware of the change in the order of traffic, vessels are strongly advised to make use of pilotage services.

C. Amendments to Charts:

"Caution I" on Chart TR.2921 will be cancelled with the coming into effect of the new traffic regulation.

D. Navigational Notices:

Explanatory information and navigational warnings regarding the new traffic regulation in the Strait of Istanbul are broadcast in English and Turkish by the following by Weekly Notices to Mariners and also will be mailed.

Istanbul	(TAH)	(Yesilkoy)	:	441 – 2670 kHz
Izmir	(TAN 2)		:	458 – 516 – 1850 kHz
Mersin	(TAM 5)		:	524 – 2820 kHz
Samsun	(TAN 6)		:	416 – 2760 kHz
Bandirma	(YMH)	(Meteoroloji)	:	478 – 3636 – 6965 kHz

SHIPMASTER'S REPORT: November 1979.
Dardanelles and Bosphorus:

Vessel bound for Odessa with a full cargo of corn. According to charterer's orders (Sovfracht Moscow), vessel had to encounter 4 to 5 weeks on anchor at Odessa Roads and for this reason had to take sufficient fresh water at Ahirkapi Roads on the West side of the Bosphorus.

The quantity (and quality) had to be ordered 3 days prior to arrival through Charterer's Agent (Bumeran) in Istanbul. 2 days' notice and 24 hour notice were required.

The vessel also wished to make crew changes at the same time as taking water and this was arranged by husbandry Agent (Rammoc, Istanbul).

Vessel took a Pilot all through the Dardanelles and Bosphorus and he boarded at Mehmetoik (Mehmetcek) Point.

When passing Canakkale, vessel slowed down and an Officer had to go down into the Sanitary Inspector's motorboat.

In addition to the sanitary boat another motorboat arrived, bringing the sub-Agent of the vessel's Istanbul husbandry Agent. The sub-Agent passed a message for Master with the latest information for Ahirkapi Roads to the ship's Officer after vessel having received Free Pratique from the Sanitary Officer. This sub-Agent is acting for several Istanbul Agents, the address is as following:

Denizciler Shipping Agents, Isfendiyar Anafarta & Co., Carsi Cad. 10, Canakkale. P.O.B. 5, Canakkale. Cables: 'Denizciler'. Tel: 1032-1878 after hours – 1055. Telex: 58128 dzck tr.

The information from the sub-Agent also included the kind and number of forms and lists required at Istanbul.

Immediately upon letting go anchor in Ahirkapi Roads the motor launch with the Turkish Authorities arrived, some minutes later the Agent's boat arrived with the new crew members and some spare parts.

The Authorities required the following forms and lists:

Certificate of Registry.
Tonnage Certificate.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Transit Cargo Manifest.
3 Currency Lists of vessel's safe.
2 Personnel Effects Lists (Not officially required, but taken because at hand).
3 Stores Lists/Provisions.
3 Crew Lists.

There was no report of inspection, etc., given to the vessel by the Authorities and *no* written outgoing clearance was issued. When asking for an outgoing clearance, the Officials stated it was *not* necessary in this case.

No special lists of crew changes were required.

The Pilot left at Ahirkapi Roads because the time for taking fresh water was expected to be 5 to 6 hours (60 m.t.p.h.)

One hour after arrival the waterboat arrived and the vessel took fresh water (drinkable quality) as per order.

Half an hour before finishing pumping, Istanbul Pilots were called on VHF Channel 16. The Pilot arrived on schedule and the vessel continued the voyage to Odessa.

On approaching Ahirkapi Roads from the West care has to be taken of numerous fishing boats and sand/gravel digging barges.

SHIPMASTER'S REPORT: October 1980.
Dardanelles and Bosphorus:
Dardanelles:

Pilotage: Optional, highly desirable Northbound due to the Sanitary Station at Canakkale. Southbound dependent on weather. Cable: 'Canakkale Pilot Station' 48 hours if possible in advance to be sure of obtaining Pilot. At present Pilots are in short supply due to an increase in traffic.

One Pilot for Dardanelles and Bosphorus.

Boards from grey hulled launch of about 8 knots speed from Sebbulbahir on Northern entrance.

VHF: Call 'Mehmetcik Pilots' on Channels 16 and 14.

Generally starboard side ladder or gangway.

Pilot gives Master form to fill in for Canakkale.

Control: Sanitary Control at Canakkale on Asian side of strait near narrows about 1 hour after Pilot boarding.

Two launches come out. One Agent, one Immigration.

Require: 2 Crew Lists, sight Ship's Register and Derat Certificate. Officer has to go down to Immigration launch, no one boards.

Immigration Officer gives ship yellow form which is required to be shown next port.

Control only Northbound whether coming from overseas or a Turkish port.

Navigation: Forecastle manned at Canakkale.

In fine weather, Straits present no problems, but in poor weather and visibility it can be more difficult especially at Canakkale with other ships around where the vessel is nearly stopped. Also the narrows can be dangerous.

Pilots like maximum sea speed which is not possible.

Vessel passed through the narrows on manoeuvring speed.

Current S.W. flowing at 1 – 2 knots.

Transit takes about 3 hours, dependent on weather and delay at Canakkale.

Pilot hands over 'Control' at Inceburun, and takes over Southbound at the same place.

Sea of Marmara: Good positions obtainable. Ship carries out navigation, no Pilot. Very busy but most traffic, apart from ferries and small craft, on straight course from Bosphorus through to Dardanelles and vice versa.

Keeping well to starboard is advisable.

Transit about 6 hours.

Bosphorus:

Pilotage: Optional. However overseas Masters should only attempt transit on their own in extreme cases.

If coming from the Dardanelles, Pilot takes over at 'Yesilkoy' or joins by launch at position South of Athirkapi Point. From the North (Black Sea) Pilot boards (and disembarks) at Tellitalya Point just below Kavak (about 4 miles South of Rumeli Point, the Western entrance to the Strait).

Wait North of Rumeli Point until Pilot available. By the Montreux Agreement governing international transit of Dardanelles and Bosphorus, which will be renegotiated in 1982, pilotage will become compulsory.

Cable: 'Kavak' Pilot Station minimum of 6 hours' notice. Generally boards starboard side (and disembarks). Pilot gives Master form to fill in for control.

Control: At Buyukdere North and South about 20 minutes from pilot station.

Control requires: 2 Crew Lists, sights Ship's Register and Derat.

Yellow Immigration form given to Master. An Officer has to go down into launch. Two launches. Agent and Sanitary Inspector.

Navigation: No transit in fog. Forecastle manned for anchoring all transit. As per BA 1198, International Rules change to port side of channel.

Probably the highest traffic density international waterway without compulsory pilotage and control in the world. Extreme vigilance is required on account of ferries, small boats, ships not under pilotage, strong currents, etc.

Transit time about 2 hours.

Signal Station: At Kavak on Asian bank just North of pilot station. Aldis lamp required.

Currents: Generally a 2 – 5 knot Southerly current, this can be pushed down by strong Southerly wind at Southern entrance at Istanbul.

Pilots advise that in these conditions transit for large bulk type ships is very hazardous on account of steering. Caution must be exercised in picking the Pilot up Southbound at Kavak due to Southerly current building up ship's speed.

SHIPMASTER'S REPORT: December 1983.

Earlier this year a pilot station was established at Gelibolu at the Eastern end of the Dardanelles. It is served by a 60 ft. fishing boat, painted white. The pilotage fee for Mehmetcik-Gelibolu and Harem-Kavak is 50% of the fee for Mehmetcik-Kavak.

If taking stores/spares when passing the Bosphorus, Agents should be instructed to arrange for the delivery at the Istanbul end as it is highly undesirable to have the Agent's launch alongside at Kavak before the Pilot boards.

ALANYA: 36.32 N. 32.03 E.

BERTHING: Jetty length 277 m., depths alongside 8 m. – 12 m. Can accommodate 4 vessels.

CRANES: No shore cranes available; vessels use their own gear for loading/discharging.

STEVEDORES: Loading/discharging carried out by hired stevedores. Average rate per shift/gang of 150 tons for cotton, bagged and general cargoes.

Working Hours: 0700 hrs – 1700 hrs. Lunch break 1200 hrs. Overtime/Night work optional.

FRESH WATER: Available.

AIRPORT: At Antalya (150 km.).

CHARGES: Light and sanitary dues.

OFFICIALS: Kerim Saygi, Harbour Master.

ALIAGA: 38.50 N. 26.57 E. (See Plan Book

Aliaga Refinery Terminal.

LOCATION: *Northern Point:* Lat. 38° 50′ N., Long. 26° 57′ 36″ E.
Southern Point: Lat. 38° 50′ 10″ N., Long. 26° 46′ 33″ E

DOCUMENTS: See "Izmir".

PILOTAGE: Pilot boards 2 to 3 miles West of Tasli Burnu Light.

ANCHORAGES: The port itself is situated about 40 miles N.N.W. of Izmir on the Southern arm of the Gulf of Candarli and the anchorage is considered safe for large ships.

RESTRICTIONS: Water depth at entrance about 14 fathoms. Water depth at crude oil wharf 17 m. – 18 m.

MAX. SIZE: Crude oil berth designed for up to 100,000 d.w.t. Products berth designed for up to 22,000 d.w.t.

HEALTH: *Customs:* Customs post at refinery.

Immigration: None locally. Incoming and outgoing personnel have to be processed at Izmir and escorted under guard to and fro.

Health: No office locally. Officials have to be brought from Izmir.

RADIO: Cable address of Aliaga Refinery: "Petrol Izmir".

Four days prior arrival, Agents require notice of ETA (time and date) followed by any subsequent change.

TUGS: Two 2,400 h.p. tugs are on order. Meanwhile tug can be obtained, if available, from Port Monopoly Izmir at additional cost. Mooring boat also on order, meanwhile local boat available for hire.

BERTHING: Incoming tankers discharge at a "T" type oil jetty just South of Tasli Burnu Light. The jetty runs parallel to the coastline and is situated Lat. 38° 49′ 30″ N., Long. 26° 57′ 30″ E. approximately. The outer arm of the jetty, 317 m. long, is designed for crude oil tankers of 75/100,000 d.w.t. on the outer side and for tankers of 25,000 d.w.t. on the inner. The outer S.E. arm is designed for products tankers of up to 22,000 d.w.t. and the inner berth for small tankers of up to 5,000 d.w.t.

The crude oil berth is roughly in the centre of the N.W. arm and has 4 loading arms. The jetty is protected by 4 pivotal concrete buffers.

The products berth is similarly in the centre of the arm and is equipped with flexible hoses. Crude oil pumping rate up to about 3,000 t.p.h.

FRESH WATER: Available.

FUEL: Available.

AIRPORT: Izmir is not an international airport.

DELAYS: Cargo is nearly always transhipped leading to unforeseen delays.

SUPPLIES: From local towns; adequate fresh fruit and vegetables and meat.

AUTHORITY: See "Izmir".

AGENT: See "Izmir".

ANTALYA: 36.52 N. 30.46 E. (See Plan Book)

PILOTAGE: Compulsory. 1 pilot boat and 1 service boat available.

TUGS: 3 tugs and 4 mooring boats available.

BERTHING: Outer breakwater is 1,540 m. long, inner breakwater is 860 m. long. Port area is 331,600 sq.m.

Vessels can enter port and anchor at any time with a Pilot aboard. Manoeuvring area has 400 m. diameter, depths 8 m. – 11 m.

7 operating quays, 1 passenger quay and a military quay available.

Quay No.	*Length* (m.)	*Depth* (m.)
1	150	10.00
2, 3	165	5.5 – 6.5
4	60	8.00
5, 6	290	8.00
7	170	10.00
8 (Passenger Quay)	170	10.00
9 (Military Quay)	270	5.50

Storage:

Open warehouse area is 34,000 sq.m. Closed warehouse area is 3,000 sq.m. Closed warehouse (for combustible cargo) is 400 sq.m.

PORT EQUIPMENT:

4 cranes (1×25 tons, 3×5 tons).
3 mobile cranes (1×6 tons, 1×16 tons, 1×20 tons).
2 forklifts (3 tons).
5 forklifts (2 tons).

BULK CARGO FACILITIES: 4 alumina silos each of 4,000 tons capacity which can load into vessel by conveyor belt at a rate of 250 t.p.h.

STEVEDORES: Gangs of 6 – 8 men each, load/discharge cotton at rate of 100 tons per shift, general cargoes 125 tons per shift.

Working Hours: From 0800 to 1700 hrs. Lunch break from 1200 to 1300 hrs. 3 hours' overtime is optional.

AIRPORT: Antalya airport is 22 km. from the port, 12 km. from Antalya city centre.

HOLIDAYS: Work is possible on Turkish holidays (at overtime rates) except the movable religious holidays of the first days of Kurban Bairam and Shaker Bairam.

DEVELOPMENTS: TMO and SEKA quays (3) are still under construction for passenger vessels, grain and lumber, completion mid-1985.

Following machinery and equipment will be installed in the near future:

2 shore cranes 10 tons each.
1 shore crane 5 tons.
1 mobile crane 25 tons.
8 mobile cranes 10 tons.
2 forklifts 10 tons
2 forklifts 5 tons.
10 forklifts 3 tons.

AUTHORITY: Denizcilik Bankasi TAO is in charge of loading/discharging.

Local Officials: Harbour Master: Ali Ozkan. Sanitary Authority: Yilmaz Ekmekcioglu. Customs Authority: General Directorate of Customs. Maritime Bank (Antalya) Manager: Osman Kucuk.

AGENT: Gulf Agency Co. Ltd., P.O.Box 116, Antalya, Turkey. Tel: 13342, 16054, 25685. Telex: 56218. Cables: "Gacship", Antalya.

BANDIRMA (including Bagfas): 40.22 N. 27.59 E.

(See Plan Book)

LOCATION: Bandirma is situated on Southern side of Marmara Sea about 63 nautical miles from Istanbul. Admiralty Chart No. 294.

PILOTAGE: Compulsory for vessels berthing/unberthing. 2 Pilots available; 24 hours a day.

ANCHORAGES: Good anchorage in roads a few cables off the entrance. Depths up to 7 fathoms.

BREAKWATERS: North Breakwater length 995 m. and West Breakwater length 250 m.

TUGS: 1 tug 1,025 h.p., 1 tug 970 h.p. and 1 tug 250 h.p. 2 mooring boats also available.

BERTHING:

No.	*Berth*	*Length* (m.)	*Depth* (m.)
1	Ferry Terminal	130.00	8.00
2	—	284.00	10.00
4 – 5	—	324.00	10.00
6	—	130.00	10.00
7 – 8	Deep Water Berth	379.00	10.30
9	Cevher Rihtimi	203.77	10.00
10	Etibank Rihtimi	100.00	8.0 – 9.0
11	Komur Rihtimi	190.00	

Additional facilities with depths of 4.0 m. are available.

Bagfas: Bagfas Iskur Fertilisers:

Location: Bagfas Iskur Fertilisers Jetty is situated on Southern side of the Marmara Sea about 5 nautical miles from Bandirma. (Admiralty Chart No. 294).

Pilotage: The jetty is private but pilotage/tug boat/mooring boat services are operated by TCDD (Turkish State Railways).

Anchorage: Port of Bagfas is an open port, but good anchorage in roads a few cables off the entrance in depths up to 7 fathoms.

Accommodation: Port of Bandirma/Bagfas fertilisers jetty, length 77 m., depths between 11 m. and 9.30 m.

NOTE: From jetty to each mooring dolphin 61 m.

Port Facilities: One moving crane available on the jetty with 10 tons lifting capacity which loads bulk cargoes into bunker which is connected to conveyor belt with discharging capacity up to 3,000 tons daily.

Receiving capacity of products (liquid Ammonia) is 350/400 tonnes per hour.

Working hours from 0800 to 0200 hrs.

Imports: Mainly Phosphate, Acid, Phosphoric Acid, Sulphur, Ammonia and various fertilisers.

STEVEDORES: Gangs of stevedores secured by the Agent through the Port Monopoly, 24 hours prior arrival.

The loading/discharging capacity per hold in 8 hours is 100/150 tons for bulk, 70/100 tons for baled and 40/60 tons for mixed cargo.

CARGO HANDLING:

Cranes: 10 × 5 ton capacity (on rail)
2 × 5 ton capacity
2 × 5 ton capacity (rubber wheeled – mobile)
1 × 25 ton capacity (fixed)

EQUIPMENT: 3 towing tractors, 2 trucks, 1 forklift × 5 ton capacity, 2 forklifts × 3 ton capacity.

Warehousing: 2 warehouses available at dockside where vessels can berth 20 m. to 30 m. away.

Measurements of warehouses: Length 100 m., width 35 m., height 8.6 m. minimum, 12.3 m. maximum.

Each gang for fertilisers discharging contains 9/10 men. Extra labour can be supplied from either Port Authority or outside which can be arranged by Agent in best possible way.

Exports: Colemanite, Ulexite, Tincal in bulk, Borax/Boric Acid and Byrites in bags, Tomato Paste in cartons.

Imports: Fertilisers and general.

FRESH WATER: Available. Rate 25 t.p.h.

FUEL: No bunkering facilities in Bandirma. Can only be supplied by barges from Istanbul which requires 7 days' advance notice.

SHIP'S OFFICER'S REPORT: August 1979.

Port Limits: From position Lat. 40° 21.8′ N., Long. 27° 56.9′ E., South to shore and East to shore.

Documents: 6 Crew Lists, remainder as for Istanbul.

Pilotage: Pilotage is carried out day and night. There are 2 Pilots at the port and one Pilot is always on duty. The standard of pilotage is good. The Pilot joins the vessel outside (0.5 mile) the breakwater from a boat which has a black hull with white superstructure. The approaches to Bandirma are clear and free from obstructions. The pilot station has no VHF and Pilots should be ordered through the Agent. If the Pilot does not meet the ship on arrival he can be called by sounding the ship's whistle. Vessels awaiting Pilots anchored 2.5 cables off the breakwater.

Anchorages: Good anchorage in 30 m. 0.5 miles North of North Breakwater Light.

Restrictions: The only restriction that is known is max. draft 12 m.

Max. Size: Max. depth alongside 12 m.

Health: See "Istanbul".

Radio: Contact made through Istanbul Radio, TAH.

VHF: None.

Radar: None.

Tugs: There are 2 tugs available of 1,000 h.p. and 300 h.p., no VHF. Ship's lines are used.

Berthing: Vessels usually use 1 anchor when going alongside.

Cranes: There are at present no shore cranes available but installation is being carried out and shore cranes should be available from March 1980.

Bulk Cargo Facilities: No specialised equipment available, bulk cargo is loaded using ship's gear from skips carried on trucks. The average loading rate is 250 tons per shift/gang.

Stevedores: Shippers or receivers order stevedores 1 day in advance through the local union. The number of gangs available depends on the number of ships in port. The normal working hours are from 0800 – 2200 hrs. with 1 hour for lunch. The average loading rate for all bulk cargoes is 250 tons gang/shift.

Medical: Advance notice for serious cases advisable. Hospital and doctors available.

Tankers: No facilities.

Density: 1016.

Fresh Water: At present only available by 5 ton road tanker at a cost of $5 per ton. Fresh water should be available by pipe-line to all berths by March 1980.

Fuel: Not available.

Consuls: None.

Repairs: Only small repairs carried out in local workshops.

Dry Docks: None.

Surveyors: Nearest in Istanbul.

Gangway/Deck Watchmen: Carried out by ship's crew, service of watchman not required.

Hatches: Opening and closing carried out by ship's crew.

Customs Allowances: 200 cigarettes and 1 bottle on arrival. If the ship is in port for any length of time Customs will open the bond and make a new issue, usually once a week.

Cargo Gear: All cargo work carried out by ship's gear.

Repatriation: Carried out without any problems, a daily ferry connects Bandirma with Istanbul, taking about 4 hours.

Airport: Nearest is Istanbul.

Time: GMT plus 3 hours.

Holidays: See "Istanbul".

Police/Ambulance/Fire: Police 3345. Ambulance 3536. Fire 1013.

Telephones: Not available.

Services: No special services are available.

Shore Leave: No restrictions.

Identification Cards: No shore passes issued, seaman's book is sufficient.

Regulations: No special regulations.

Delays: The only delays occur if the port is congested and ships have to wait at anchor. Ships are berthed on "first come first served" basis.

Developments: Bandirma is a new port and is not scheduled for official opening until March 1980, by this date all shore facilities should be available.

General: The prevailing wind is from the N.E. and sometimes blows very hard down Bandirma Korfezi, this should be considered when mooring.

AUTHORITY: TCDD (Turkish State Railways), Liman Mudurlugu, Bandirma.

Turkiye Cumhuriyeti Devlet Demir Yollari-Isletmesi Genel, MD, Talat Ps Bul, Ankara, Turkey. Telex: 42571.

AGENT: See "Istanbul".

CANAKKALE: 40.08 N. 26.24 E.

DOCUMENTS: Vessels in transit through the Dardanelles must stop at Canakkale and produce following documents to boarding Officer.

Certificate of Registry.
Derat Certificate.
Crew List.
Name of Agent in Istanbul.

Vessels proceeding to a Turkish port will require in addition:

4 Crew Lists.
2 Personal Effects Lists.
2 Currency Lists.
2 Stores Lists.

PILOTAGE: Not compulsory for vessels proceeding to Istanbul. Compulsory for vessels over 1,500 g.r.t. proceeding to Canakkale. Vessels requiring a Pilot use International Code signals, or signal "G" by light or whistle. No advance notice required. Telegraphic address of pilot station, Kilavuzluk Canakkale, via radio station TAM 7. Pilot boards off Khepez lighthouse, where vessel should slow down but no need to anchor. In bad weather pilot boat will anchor in Gulf of Kilya.

Also see "Shipmaster's Report".

ANCHORAGES: Vessels may anchor in position Lat. 40° 09′ 00″ N., Long. 26° 23′ 09″ E. in depths of 12 to 16 fathoms.

MAX. SIZE: Vessels of any size may navigate Canakkale Strait.

HEALTH: All vessels bound for a Turkish port must stop for Sanitary Clearance at Canakkale. Any suspected disease on board must be declared. Sick crew members may be landed for hospitalisation.

Also see "Shipmaster's Report".

RADIO: Radio station TAM 7 situated at local Post Office.

TUGS: One tug available, belonging to pilot station. Ship's tow lines always used.

BERTHING: Agents require at least 24 hours' notice to arrange berthing at Canakkale Pier. Vessel may be required to shift anchorage to give place to Turkish passenger vessels which have priority.

STEVEDORES: Arranged by Agent on basis of Master's ETA.

MEDICAL: 12 hours' notice required to arrange medical assistance. Hospital facilities available.

DENSITY: Salt water. No tide.
FRESH WATER: Only available from the pier, rate approx. 10 t.p.h.
FUEL: Marine grades not available.
GANGWAY/DECK WATCHMEN: Customs guard compulsory for vessels at the pier.
OPENING/CLOSING HATCHES: May be operated by crew or stevedores according to Charter Party.
CUSTOMS ALLOWANCES: Crew allowed to retain only quantities for personal consumption.
IDENTIFICATION CARDS: Required for crew members going ashore.
CONSULS: Italy, tel. 1008.
REPAIRS: Minor repairs can be effected.
REPATRIATION: Can be arranged if visa requirements are satisfactory.
AIRPORT: Situated 2 km. from Canakkale, internal services only.
TIME: GMT plus 3 hours.
HOLIDAYS: Cargo work can be arranged on all holidays by agreement.
POLICE/FIRE/AMBULANCE: Police Tel. 1181; Fire 00; Ambulance 1098.
SHORE LEAVE: Allowed at all times.
DEVELOPMENTS: New installations and berths under construction.

SHIPMASTER'S REPORT: *Dardanelles and Bosphorus:* A pilot station has been established at Mehmetcik Point (Cape Helles); if the weather is too bad to embark the Pilot here, vessels should proceed to Canakkale. If a Pilot is required for both Dardanelles and Bosphorus, give 24 hours' notice through Istanbul Agent. Same Pilot remains on board for full transit, Sea of Marmara included, and this applies for both North and Southbound traffic. Pilots at Dardanelles and Bosphorus work VHF Channel 16.

Sanitary Control: White launch. Officers do not board but require Chief or 2nd Officer to go down into boat. Canakkale required Ship's Register, Derat, Crew List and Quarantine Declaration of Health. It is also required to fill in a form giving details of ship, cargo, last port, number of crew and passengers, etc., also name of ship's Agent in Turkey.

AUTHORITY: Canakkale Liman Baskanligi.
AGENT: See "Istanbul".

DERINCE: 40.45 N. 29.50 E. (See Plan Book)

PORT LIMITS: A vessel that has arrived in Izmit anchorage is considered an "arrived ship".
DOCUMENTS:
Quarantine:
Declaration of Health.
Valid Derat Certificate.
International Vaccination Certificates.
Free Pratique Received from Canakkale or Buyukdere.
Customs:
Crew Declaration.
Ship's Stores List.
Cargo Manifest.
Customs Clearance from last port.
Immigration:
Crew List.
Passenger List.
Shore leave passes arranged by Agent. Passenger embarkation/disembarkation not possible.
PILOTAGE: Compulsory. 24 hours' service available. ETA must be confirmed 24 hours prior to arrival. Pilot boards 5 cables off the port entrance, Pilot on VHF Channel 16. Berth arranged by Agent through the Harbour Master. Berthing or anchoring permission must be received by Agent before arrival at Darica Pilot Station.
ANCHORAGES: Forbidden near the port. Waiting anchorage is at Izmit, 4 miles East of Derince. It is compulsory for vessels with explosives to anchor in Yarimca Anchorage.
VHF: See "Pilotage".
TUGS: Compulsory for vessels over 500 g.r.t.
500 g.r.t. – 5,000 g.r.t. One tug.
5,000 g.r.t. – 25,000 g.r.t. Two tugs.
25,000 g.r.t. – 50,000 g.r.t. Three tugs.
1×970 h.p. and 1×1,500 h.p. tug available. Mooring boat arranged by Pilot.
BERTHING:

Berth No.	*Length (m.)*	*Depth at LW (m.)*	*Remarks*
1	110	1.5 – 4.5	For small coasters
2	88	4.7 – 6.0	
3	117	8.0 – 8.5	
4	90	5.5 – 8.0	
5	55	3.5 – 12.5	For small coasters
6	220	12.5 – 10.5	
7	160	10.5 – 7.5	
8	110	7.5 – 3.0	

CRANES:

Berth No.	*No. of Cranes*	*Capacity (Tonnes)*	*Remarks*
1	2	5	
2-3	2	5	
4	2	5	
5	None	25	(Fixed crane, may be hired)
6	1	25	(Fixed)
	2	5	
	1	10	
7	2	5	
8	None	—	

22 mobile cranes with capacity 3 tonnes – 25 tonnes also available.

BULK HANDLING FACILITIES: Two silos with capacity 5,000 tons each. Loading capacity 160 t.p.h., discharging capacity 120 t.p.h. No vessels can berth alongside.
STEVEDORES: Normally working is in 2 shifts. First shift from 0800 hrs. – 1630 hrs. Second shift from 1630 hrs. – 2400 hrs. Labour provided by Port Authority on request from Agent.
FRESH WATER: Available at all berths.
FUEL: Fuel and diesel, also marine lubricants can be obtained by trucks through suppliers.
OPENING/CLOSING HATCHES: Stevedores or ship's crew, whichever is to the vessel's advantage.
CERTIFICATES:
Safety Construction.
Safety Equipment.
Safety Radio.
Load Line.
Tonnage.
CUSTOMS ALLOWANCES: 200 cigarettes and one bottle of spirits per week per crew member.
REPAIRS: Most deck and engine repairs can be carried out.
SURVEYORS: Available from Istanbul through Agent.
REPATRIATION: Crew changes and repatriation can be carried out with little difficulty.
AIRPORT: 130 km. to Istanbul Yesilkoy International Airport.
TIME: GMT plus 3 hours.
POLICE/AMBULANCE/FIRE: Emergency services available in the port.
SERVICES: Arranged by Agent, from Istanbul.
SHORE LEAVE: No restrictions. Also see "Documents".
HOLIDAYS: (1985) 1st January, 23rd April, 19th May, 19th-22nd June, 24th-28th August, 29th October.
AUTHORITY: TCDD Derince, Limani Isletme Mudurlugu (General Directorate of Turkish State Railways-Derince), Derince, Turkey. *Tel:* 31015. *Cables:* TCDD Derince Limani. *Contact:* Dundar Erkmen, Port Captain.

Turkiye Cumhuriyeti Devlet Demir Yollari – Isletmesi Genel, MD, Talat Ps Bul, Ankara, Turkey. Telex: 42571.

EDINCIK: 40.21 N. 27.51 E.

LOCATION: In the South of Erdek and on the West coast of Kapidag Peninsula. See BA Chart No. 884.
PILOTAGE: Pilotage compulsory. Pilot comes from Bandirma.
MAX. SIZE: 5,000 d.w.t.
BERTHING: This is a colemanite loading berth of Etibank, where loading is effected by conveyor.

Five dolphins exist in front of the conveyor house and in enough deep water for mooring and shifting of vessels. As there is little movement of the conveyor, vessels have to shift in order to load bulk cargo in all hatches.
DENSITY: 1025.
FRESH WATER: Available.
TIME: GMT plus 3 hours.
GENERAL: Formalities with the Harbour Master are carried out in Erdek but all others in Bandirma. All services to be supplied from Bandirma.

EREGLI (Karadeniz Eregli), including Usunkum: 41.18 N. 31.27 E. (See Plan Book)

DOCUMENTS:
5 Crew Lists.
5 Passenger Lists.
3 Provisions Lists, including Bonded Stores.
3 Cargo Manifests.
3 sets Bills of Lading.
PILOTAGE: Pilotage available night and day for use in port under all weather conditions. Pilotage is carried out by qualified and experienced Pilots.

Compulsory for ships over 500 tons to have pilot service, and for ships over 1,000 gross tons to have pilot and tug service.

Ships will take Pilots on board at a reasonable distance off the breakwater's red light. It is strongly advised that ships awaiting Pilot should avoid drifting South of the transit line of the green light on the breakwater ruin (Boshane Mendiregi) and the Citadel ruin which can be seen on top of the hill. (Transit direction is approximately 041° true) The distance from the entrance of the port to the dock is approximately 4.6 cables, and the depth gradually decreases from 10 fathoms to 5 fathoms at the dock side.

In stormy weather, if the Pilots are unable to board, ships will proceed to a point in the Inner Port enabling the Pilots to board.
ANCHORAGES: Vessel waiting for Pilot may anchor about 1 mile West of breakwater red light. The bottom of the port is muddy and sandy, and therefore ships can lay at anchor in any weather without fear of drifting.
RESTRICTIONS: *Eregli:* The depth of water in Outer Harbour is 15 m. (49.2 ft.) and Inner Harbour has 10 m. (35 ft.)

Usunkum: The length of Usunkum breakwater is 1,250 m. The depth of water is 42 ft. Under normal weather conditions ships up to 34 ft. (inclusive) can enter into the Inner Harbour and berth alongside the dock safely. Average tide is about 1 ft. The width of channel is 200 m. but safe lane is 144 m. wide.
MAX. SIZE: *Eregli:* Under normal weather conditions ships up to 35 ft. draft can enter Inner Harbour and dock safely.

Usunkum: Up to 34 ft. draft can be berthed.
Also see "Developments".

HEALTH: Pratique given after port doctor's visit on vessel's arrival. Crew vaccination certificates should be presented if required. Sanitary certificate required for any live animals on board.
RADIO: Istanbul Radio, TAH.
TUGS: Available. Normally join vessel outside the breakwater. Ship's lines always used. Towing is done by one or two 600 h.p. diesel tugs. Towage is required for entering, leaving, berthing and shifting according to the size of the ship. Ships having a draft of over 20 ft. shall not use their own propellers in the Inner Harbour except in case of danger or absolute necessity.

Vessels with a draft greater than 30 ft. may be asked by the Port Authority to use a second tug at a very high cost.
BERTHING: *Eregli:* Inner quay is about 400 m. long for general cargo and 135 m. for coal loading.

The docks have loading and unloading facilities, a railway track and open and closed warehouses at a very short distance. The railroad is a local system and is not connected to the Turkish railroad network. It has a length of approximately 16 km. for coal mine operations.

Buoys: There are four mooring buoys in the port 105 m. apart and at a distance of 170 m. from the breakwater at an average depth of 8 fathoms. Buoys anchored with 50 tons concrete blocks and marked I, II, III and IV starting from the main breakwater head.

It is possible and safe to moor to the buoys with or without anchor and to moor ship's stern to breakwater (if the ship's length is adequate).

Usunkum: Usunkum has one dock of about 280 m. length and one ore unloading dock about 220 m. length. Max. size 35,000 d.w.t. Max. draft 35 ft. Max. LOA 665 ft. Discharge rate 600 t.p.h. Coal also discharged, rate 600 t.p.h. also one small general-purpose quay for small ships.

See "Developments".
CRANES: 2 × 25 tonne electric cranes; 2 × 30 tonne cranes for coal; 1 × 160 tonne heavy lift derrick.
STEVEDORES: At least 24 hours' notice required to order gangs.
MEDICAL: All details of any medical assistance required to be given to Agent with one hour's notice. Hospital facilities available. Vaccinations can be arranged.
FRESH WATER: Can be delivered at 40 t.p.h.
REPAIRS: Small repairs such as lathing, levelling, welding, blacksmith work and woodwork can be effected ashore.
OPENING/CLOSING HATCHES: By either stevedores or crew according to Charter Party.
CUSTOMS ALLOWANCES: 200 grams tobacco and two bottles wine/spirits allowed each man per week.
IDENTIFICATION CARDS: Needed for crew going ashore.
CONSULS: No local representatives.
REPATRIATION: No facilities exist.
TIME: GMT plus 3 hours.
HOLIDAYS: Cargo work can be arranged on all holidays.
POLICE/FIRE/AMBULANCE: Police tel. 28; Fire tel. 00; Ambulance tel. 500.
TELEPHONES: Cannot be connected on board.
SHORE LEAVE: Crew permitted to go ashore at all times.
DEVELOPMENTS: The channel at Usunkum is being dredged to 14 m. and the inner harbour to 13 m. It will be possible to berth vessels up to 60,000 d.w.t. in the near future.
AUTHORITY: Karadeniz Eregli Liman Baskanligi.

FINIKE: 36.16 N. 30.13 E.

BERTHING: Jetty 80 m. long, depths alongside 4.5 m. – 5.5 m. Vessels of more than 3,000 g.r.t. cannot berth alongside, but anchor outside the port.
CARGO HANDLING: Vessels at anchor are worked by 4 lighters towed by a motor boat. Only 200 tonnes of cargo worked per day by lighters.

At the jetty, 300 – 500 tonnes of cargo are handled per day.
AIRPORT: At Antalya (280 km.).
GENERAL: Port is dangerous in Winter.
OFFICIALS: Halil Tarhan, Port Master.

GEMLIK: 40.25 N. 29.06 E. (See Plan Book)

SHIPMASTER'S REPORT: July 1980.
VESSEL: L.P.G. Carrier – 32,000 g.r.t. Vessel discharged ammonia.
FORMALITIES: Formalities were dealt with quickly. Bonded stores are sealed and remain sealed until clearing outward from last Turkish port. Application may be made to open under Customs control and these applications were granted.

Travelling manifests of cargo and ship's stores are made up and accompany the vessel from port to port.

Papers required:
2 Stores Lists.
6 Copies Cargo Manifest.
6 Crew Lists.
2 Vaccination Lists.
1 List of Monies in ship's safe.
2 Health Declarations (including the clearance from Canakkale).
2 Lists of Ports of Call.
2 Crew Declarations.
3 Crew Currency Declarations.
2 Ship Particulars.

APPROACHES: Chart BA 1005.

The inset on Chart BA 844 does not quite cover the area in which the berth is situated. (Position of Ammonia section of quay Lat. 40° 25′ N., Long. 29° 06.5′ E.).

The approach itself presents no difficulty since good fixes are available both by radar and visually. Similarly, although care is needed, an approach may be made in poor visibility with complete confidence.

Fishing vessels, inter-island ferries and local trading craft must be expected through the island passages and fishing vessels will be met within Gemlik Liman. Some of these craft are very small although sea conditions are invariably smooth and they should show up well on the radar. Not all carry lights.

An anchorage position as near as 4 cables from the berth may be used although this should be chosen to Eastwards of the berth to keep the departure path clear for any vessels leaving.

The Pilot obtained for the Dardanelles passage, who will leave here however short a stay, will be able to give advice on choosing a suitable anchorage, should this be necessary.
PILOTAGE: The Pilot may be summoned by whistle and will board from a small, open fishing craft. Gangway or pilot ladder must be lowered to the water's edge.

No night time berthing. Unberthing may be carried out at night at the Master's discretion and presents no difficulty. The starboard anchor may be used for berthing (not on this call) and is used to heave the vessel off when leaving.

Unberthing is a long manoeuvre; 2 forward back-springs are lead as far astern as possible, the vessel hove astern about 30 m. (to ensure that the bow does not fall inside the line of the quay and foul the 'bridge' to the forward mooring dolphin), everything let go aft, hard to port and dead slow ahead on the engine until the vessel is at an angle of 45°. The vessel is then backed out, after which the Pilot leaves.
VHF: Not available.
TUGS: None available.
BERTHING: Vessel always berths port side alongside.
REPAIRS: No facilities.
SURVEYORS: With sufficient notice Lloyd's Surveyor may be ordered from Istanbul.

SHIPMASTER'S REPORT: September 1980.
FORMALITIES: Customs Officer stays on board whilst vessel is in port.

Travelling manifests of cargo and ship's stores to be made up and accompany the vessel from port to port. For Cargo Manifests I use the U.S. Customs Declaration of Cargo Form with the U.S. Seal blanked out, Authorities had no objection.
PILOTAGE: If vessel requires an outward Pilot through the Dardanelles remember to order in good time, 12 hours minimum order time is required, especially when the vessel's stay in port is short.

There is 1 Pilot who is also the 'Lloyds' sub-Agent in Gemlik and is generally a useful person to know.

When unberthing make sure the Port anchor is home otherwise it will foul the quay.
BERTHING: Gangway may be turned out prior to berthing.

The quay consists of 2 berths, the Eastern Berth for loading bulk or bagged fertiliser has 2 loading booms. This berth, if it has another vessel on it, may well cause some problems on leaving the Western Berth which is the liquid ammonia facility. When the vessel is in position with the liquid chicksan, the bow overshoots the jetty and provision is made for the forward mooring ropes to be taken to a large dolphin, connected to the main quay by a catwalk with a *wooden* walkway.

Berths are very good being of large, substantial concrete structure with good fendering.

Minimum depth alongside 12.6 m.

There is an 8 m. patch at the Eastern end of the fertiliser berth which causes the Pilot problems.

Density varies: 1020 – December 1979, 1016 – July 1980, 1019 – September 1980.
DISCHARGING: 2 chicksans, liquid line 10 in., vapour line 10 in., both 150 ASA, both can be used for either liquid or vapour so be careful when connecting.

Discharge rates vary: December 1979 – 640 t.p.h.; July 1980 – 502 t.p.h.; September 1980 – 800 t.p.h., they can take it at over 1,000 t.p.h. depending on shore tank ullages.

Fertiliser plant usage of raw ammonia presently 400 tonnes per day increasing in January 1981 to 600 tonnes per day. The actual production of ammonia is expected to commence in about five years' time.

Shore surveyor attended and his figures taken as quantity discharged. Attends the vessel at subsequent Turkish ports by flying between ports, not allowed to stay with vessel. Very helpful. No gauging of shore tanks.
GENERAL: No fuel. Available at great expense if brought from Istanbul or Izmit by barge or tank lorry.

All communications are dealt with by head office in Istanbul and then passed to Izmit thence by car to Gemlik which has no Telex.

Telephone to U.K. about 2 hour wait for connection, line clear.

Cables: Watship Izmit or sub-Agent: 'Kinay' Gemlik. For urgent messages cable address should be prefixed by the Turkish word 'Yildirim' – all ports.

Personnel repatriation is a problem due to the distance from Istanbul and the fact that the Immigration post is not in Gemlik.
Chandler: Agent does the chandlering, good vegetables available September 1980, payment in cash only.
Doctor: Available at Bursa about 30 km. (30 minutes).
Dentist: In Gemlik, near Agent's office.
Shopping: Best in Bursa about 30 minutes South of Gemlik along new dual carriageway. Agent will arrange transport. An hourly bus service runs from the plant into Gemlik.

SHIPMASTER'S REPORT: November 1980.
BERTHING: If weather suitable berthing now undertaken at night. We eventually berthed at night in calm conditions with small coaster on fertiliser berth without any difficulties, proceed slowly. Unberthing at night.

DISCHARGE: Very keen on correct discharge temperature. Use forward liquid line, aft vapour line. Shore tanks hold 40,000 tonnes total (20,000 tonnes each).

FRESH WATER: Available but not potable. At L400 per tonne (1.90 pounds). A fire tender is used as a pump at chicksan. I believe it is well water.

AUTHORITY: Gemlik Directorate, Port of Gemlik, Liman Baskanligi, Gemlik, Turkey. *Tel:* 1133. Gemlik Customs House: *Tel:* 1411; Gemlik Police Station: *Tel:* 1628; Gemlik Hospital: *Tel:* 2329.

GIRESUN (Kerasunda): 40.56 N. 38.24 E.

(See Plan Book)

PORT LIMITS: The Port of Giresun is the sea area contained in the inner part of the imaginary lines which joins Lat. 40° 56′ 40″ N., Long. 38° 19′ 40″ E. and Lat. 40° 54′ 51″ N., Long. 38° 26′ 10″ E., Aksu River mouth and the point 2,778 m. (1.5 miles) away from this mouth in an 019° true direction with Lat. 40° 56′ 15″ N., Long. 38° 27′ 00″ E. and Lat. 40° 55′ 10″ N., Long. 38° 19′ 40″ E. Gure River mouth and the point 2,778 m. (1.5 miles) away in true North direction.

PILOTAGE: Pilot ordered by Agent who requires 24 hours' notice in advance of vessel's arrival. Compulsory for all foreign flag vessels.

Pilot service operates 24 hours a day and vessels may enter and leave at any hour on request.

ANCHORAGES: Good anchorage in Outer Harbour. Vessels should keep the entrance channel clear.

TUGS: Compulsory for all foreign flag vessels.

BERTHING: The port of Giresun is composed of 2 parts. These are the inner harbour and the outer harbour.

(a) The inner harbour is the sea area contained in the inner side of the line which joins the light at the end of the main breakwater with the light at the end of the auxiliary breakwater.

(b) The outer harbour is that part of the sea which remains between the port boundary and the inner harbour boundary.

The Inner Harbour

The berthing, tying-up and stern to shore anchoring places for the ships are given below:

A – The passenger berth has been converted to a general cargo berth and is equipped with a shore crane of 3 tons capacity. This quay is 150 m. long and the water depth is 8 m.

B – The cargo wharf: This is reserved for cargo ships. It is 250 m. long and the water depth is 7 m. The cargo wharf is equipped with shore cranes of 3 tons capacity.

C – The small craft quay is 135 m. long and the water depth is 3 m. Small tonnage ships are berthed here.

D – Service wharf: This is 88 m. long and the depth of the water is 4 m. The service craft of the Harbour Authority berth here.

E – Providing that they obtain the Harbour Authority's permission, ships waiting their turn to berth may tie-up stern to shore, at the bollards on the main breakwater in such a way as not to impede the traffic.

F – The outer harbour is an unrestricted anchoring area but it is strictly forbidden to anchor or wait at the mouth of the breakwater. Anchoring is unrestricted 315° true North of and 2.5 cables away from the centre of the main breakwater, North of the normal anchoring area.

STEVEDORES: Working hours normally 0800 to 1200 and from 1300 to 1700. Four gangs available.

CRANES: 4 cranes available, 3 tonnes – 6 tonnes.

FRESH WATER: Available.

FUEL: Not available.

REPAIRS: No repair facilities.

AUTHORITY: Giresun Port Authority, Denizcilik Bankasi T.A.O., Giresun Liman Isletmesi Mudurlugu, Giresun. *Tel:* 2447, 1490 (Port Director). *Telex:* 22188 Giresun. *Contact:* Port Manager.

GOLLUK: 37.14 N. 27.38 E.

DOCUMENTS: The following documents have to be prepared by Masters before arrival:

4 copies of Crew Lists.
2 copies of Store Lists.
1 copy Health Document.
4 copies of Passenger Lists.
3 copies of Customs Documents.
3 copies of Manifests for cargo destined to port.
1 copy of Manifest for all transit cargo aboard.

N.B. Ship's particulars Form is to be filled by Masters upon arrival and remitted to the Port Authorities.

RESTRICTIONS: Golluk is a well-protected natural harbour, not affected by winds from any direction. Deep water approaches to pier.

PILOTAGE: Pilot not available.

HEALTH: Vessels to show their Sanitary Certificate if available aboard and also their Registry. Presentation also of Vaccination Certificate of all the crew, if required by Sanitary Officials. Pratique is necessary on arrival even if vessel has called at another port in the same country. Sanitary Certificate is required for live animals aboard.

RADIO: Izmir Radio Station, call letters TAN2. Istanbul Radio Station, call letters TAH.

TUGS: Not available.

BERTHING: One pier 170 m. long used for handling emery ore in bulk. Depths alongside 39 ft. shelving to 20 ft. at 90 m. from seaward end.

CUSTOMS ALLOWANCES: 50 cigarettes for each member of crew going ashore. Aboard the vessel each member of the crew is permitted to have one carton out of Bond. One litre wine/spirits for each member of the crew in opened bottle is permitted out of Bond. However, this allowance is to be kept aboard the vessel.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day (from December 31st 1200 hrs. to January 1st 2400 hrs.); National Sovereignty Day (from April 22nd 1200 hrs. to April 23rd 2400 hrs.); Spring Day (1st May), Constitution Day (27th May); Sports Day (19th May); Victory Day (30th August); National Holiday (28th October 1200 hrs. to 30th October 2400 hrs.); Sheker Bayram (3 days movable); Kurban Bayram (4 days, movable).

GOLOVASI, Botas (Ceyhan) Terminal: 36.53 N. 35.56 E.

(See Plan Book)

PORT LIMITS: The Botas (Ceyhan) Harbour is operated under the Authority of Iskenderun Harbour Master's Office and the harbour area is bounded by the following points:

(a) Point (A) on the shore, Latitude 36° 52′ 12″ N. and Longitude 35° 55′ 07″ E., to point (B) on the sea, Latitude 36° 49′ 30″ N. and Longitude 35° 56′ 40″ E.;

(b) and from point (B) to point (C) Latitude 36° 50′ 30″ N. and Longitude 35° 59′ 30″ E.;

(c) and from point (C) to point (D) on the shore Latitude 36° 53′ 25″ N. and Longitude 35° 56′ 41″ E.;

(d) and the shore line between points (A) and (B).

DOCUMENTS:

7 Crew Lists
7 Passenger Lists
2 Store Lists
2 Crew Declaration Lists
1 Free Pratique
Last Port Clearance
Loadline, Ship Safety Construction, Safety Radio, Safety Equipment Certificate

Agent has to take the last four certificates to the port Authority at Iskenderun.

PILOTAGE: Pilotage is compulsory for mooring and unmooring. Pilot will meet the ship 1 mile South of the pier in the anchorage zone.

It is requested that pilot ladder be of an approved pattern and securely rigged.

After the ship has berthed, the Pilot and the Loading Master stay on the ship and require separate cabins.

ANCHORAGES: In the event of berth not being available on arrival, vessel must anchor in the anchorage zone (To the S.S.E. of the berth beyond the prohibited area). Terminal Shore Control will keep vessel advised of expected time of berthing, etc., by means of VHF on Channel 16.

Prohibited Anchorage: Vessels on arrival shall not anchor within a radius of 1 mile from the light at the end of the jetty.

RESTRICTIONS: Berthing and unberthing possible at any time day or night, weather conditions permitting.

MAX SIZE: 300,000 d.w.t. at outer berths and 150,000 d.w.t. at inner berths.

RADIO: It is essential that tankers bound for the Botas Terminal communicate with their Agent with at least 72 hrs., 48 hrs. and 24 hrs. before arrival and state ETA, cargo required, maximum loading rate, S.W.L. of derrick, manifold measurements and quantity of ballast on board. Vessel should request Agent to forward the information to Botas.

VHF: Botas Terminal Shore Control on VHF Channels 16 and 24.

Arriving vessels should make contact at least 4 hours before arrival at the anchorage in order to avoid delays.

Channels 16 and 24 always watched. Channel 10 is for the loading operations and manoeuvring. Not to be used for other purposes.

When the ship makes contact with Botas, the following information to be given to the Iraqi representative:

Ship's name, nationality, deadweight, cargo required, loading rate required, dirty, clean and permanent ballast quantity and deballasting time.

RADAR: There is no port Control Radar. The approach from the SW or South can be made without difficulty as the coast line provides very good fixes.

TUGS: There are 4 tugs available to assist in berthing and unberthing. Three are 2,600 h.p. each and the other 1,200 h.p. The tugs are all provided with fire fighting equipment.

For vessels of 1,000 g.r.t. up to 4,000 g.r.t., which are berthing/unberthing at the jetty, it is compulsory to take at least 1 tug. 2 tugs for vessels from 4,001 g.r.t. up to 50,000 g.r.t., 3 tugs for vessels from 50,001 g.r.t. and over.

Depending on weather and having regard for safety conditions, additional tugs may be assigned by Botas or Port Master's Office or requested by vessel.

BERTHING: Four loading berths available:

Berth No.	*Max. size*	*Depth Alongside*
1 (Outer East)	300,000 d.w.t.	72 ft. – 98 ft.
2 (Outer West)	300,000 d.w.t.	72 ft. – 98 ft.
3 (Inner East)	150,000 d.w.t.	66 ft. – 72 ft.
4 (Inner West)	150,000 d.w.t.	66 ft. – 72 ft.

LOADING:

Berth No.	*Max. Loading Rate cu.m.p.h*	*Loading Arms*	*Ballast Arms*
1	20,000	4×20 in.	20 in.
2	20,000	4×20 in.	20 in.
3	10,000	4×16 in.	16 in.
4	10,000	4×16 in.	16 in.

Maximum loading rates are dependent upon availability of loading lines on the ship.

Loading Master is the adviser for all mooring, unmooring operations and communications with shore, etc.

Derricks and Cranes: Derricks and cranes S.W.L. of 5 tons are recommended.

Loading operations and shore communication: Ship's tanks are inspected by Loading Master and passed as suitable for loading.

Responsible ship's officer must certify to the Loading Master that all ship's valves are closed or blanked except those required for loading and water circulation purposes, and that these Rules and Regulations are being and will be observed.

The Loading Master will not transmit any loading instructions to the shore until the responsible ship's officer is satisfied that the hoses are connected correctly and that all valves have been set for receiving cargo.

Loading rates requested by the vessel or quoted by the Terminal will be the peak or maximum rate at any time during the loading period.

The Loading Master will advise the Master of the ship as to shore communication and any signal needed for local requirements.

Ship's crew with an officer in charge will assist in all operations as advised by the Loading Master. This includes lifting, connecting, disconnecting, lowering of hoses and tending moorings.

Lighting: Manifold and mooring areas should be adequately lit to enable night mooring and loading operations to be carried out with safety. Sea area around the ship to be illuminated.

Notice of Readiness: Notice of Readiness will be received by the Loading Master. Provided the vessel is ready to load, lay time will commence 6 hours after receipt of Notice of Readiness.

Deck Watch: A responsible ship's officer shall be on watch on board at a point near the ship's tanks which are receiving oil during the process of loading and NOTICE IS HEREBY GIVEN that the Loading Master has received instructions to stop loading immediately this rule is disregarded.

Capable members of the ship's crew shall be stationed by the ship's tank valves which are receiving oil during the process of loading.

All pipe-lines and hoses shall, while rigged for loading crude oil, be directly and continuously under supervision. No crude oil shall be allowed to escape or overflow.

BALLAST: Vessels should arrive with sufficient ballast for safe handling of vessel under prevailing weather conditions.

Vessels shall not discharge into the waters of the port any part of the content of their cargo, slop, or ballast tanks or bilges which is liable to pollute these waters.

Ballast water must be declared and signed by the Master and delivered to the Terminal to this effect. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard.

It is an offence to discharge dirty ballast or pump out bilges.

MEDICAL: Master to inform Agent by cable if urgent medical assistance is required upon arrival, also indicating, if possible, seriousness of case in order that adequate steps may be taken. Hospital and doctor are available at Ceyhan 25 km., Adana 75 km., and Iskenderun 65 km., distance from Botas (Ceyhan) Terminal.

DENSITY: Salinity about 39 p.p.m.

FRESH WATER: Available at jetty. Rate 25 t.p.h. Arrangements to be made through Agent.

FUEL: Not available.

CONSULS: At Iskenderun.

REPAIRS: Not possible.

SURVEYORS: There are no Classification Societies at the port.

GANGWAY/DECK WATCHMEN: There is no watchmen service.

CUSTOMS ALLOWANCES: 40 cigarettes for each crew member going ashore. On board the vessel each crew member may hold 200 cigarettes and 1 open bottle wine/spirits out of bond.

AIRPORT: Adana Airport, served only by domestic lines with routes to Istanbul and Ankara. Airport is situated 75 km, from Botas (Ceyhan) Terminal. Twice daily service to international airport at Istanbul.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day (January 1st); Sports Day, (May 19th); Victory Day, (August 30th); National Holiday from October 28th (1200 hrs.) to October 29th (2400 hrs.); Shakear Bairam (3.5 days, movable); Kurban Bairam (4.5 days, movable).

The terminal works all year round.

POLICE/AMBULANCE/FIRE: All information given after berthing.

TELEPHONES: Cannot be connected on board.

SERVICES: There are no special services.

SHORE LEAVE: Crew permitted to go ashore with shore passes.

It is forbidden to walk on jetty and in terminal area. A vehicle is obtained by Botas for the needs (transportation) of ship's personnel on jetty and in terminal area. The vehicle goes only to the Golovasi (Ceyhan direction) and Incirlik (Iskenderun direction) gates. No fee will be paid.

IDENTIFICATION CARDS: Seamen's book is sufficient.

REGULATIONS: In addition to Harbour Regulations all ship Masters are at all times responsible for the application of all safety precautions as prescribed in the international oil tanker and terminal safety guide.

GENERAL: The main engines of all vessels while at the berth shall be kept ready for immediate use. Deck power (steam) is to be maintained at all times and water pressure shall be maintained on the fire fighting system.

Repairs which may prevent the working of the vessel's main engines may only be undertaken in the Port with the written permission of Botas Representative.

The Master shall at all times retain on board sufficient crew to work the vessel.

No craft, other than one having on board the Pilot or Port Health Officer, may approach any vessel entering the Port and no other person may board until Free Pratique has been granted.

Whistle or siren to be available at all times.

Boarding of Vessel: The control of persons boarding vessel is the ship's responsibility. Boarding should be restricted to Botas employees on duty and to persons authorised by the Port Authorities as advised by vessel's Agent.

Stores/Provisions: It is forbidden for provisions or other items to be received or discharged whilst loading is in progress. Launches, other than the Botas' mooring launch, should not lie alongside the vessel.

Tanker Safety: Masters are at all times responsible for the application of all safety precautions as prescribed in the International Oil Tanker and Terminal Safety Guide.

I.O.T.T.S.G. Safety Check List: The tanker safety check list must be completed after inspection of each item prior to commencement of and during loading. The berth operator is authorised to stop all loading operations should he consider that the safety of lives and property is endangered by the infringement of safety rules.

Signals: The following signals must be shown when vessel is in the Port.

By day: Flag "B" of the International Code of Signals. At night: 1 clear red light visible all around.

Fire Fighting Equipment: Vessels must be adequately manned for fire-fighting and vacating the berth in case of an emergency.

The following fire-fighting precautions must be taken.

(a) Fire hoses must be run out fore and aft or monitors ready for use.
(b) Fire-mains must be under pressure.
(c) 1 dry chemical extinguisher must be stationed on either side of the ship's manifold.

Fire Fighting Equipment on each Loading Berth: Equipment is provided for fire fighting on the platforms or exposure protection for the platforms, and the tankers being loaded as follows;

(a) 2 elevated foam/water monitors are mounted on each access tower on the platform capable of delivering 3,550 l.p.m. (800 g.p.m.) of water or foam solution, and has a throw of 60 m. Each monitor is remote controlled from the control room and has flexibility of full horizontal rotation and vertical reflection.
(b) 2 deck level manual water spray monitors of 450 l.p.m. and 2 foam branch pipes of a capacity of 450 l.p.m. of foam delivery used to extinguish fires on the manifolds.
(c) A number of portable dry chemical and CO_2 extinguishers are located in various locations.
(d) Numerous numbers of foam pourers and water spray facilities located under the deck for water surface foam blanketing and fire smothering.
(e) Water curtain facilities are provided on the loading towers to prevent fire spread to and from the berths.

Action in Case of Emergency: In the event of a fire, oil spillage or other emergency on the vessel.

The Emergency and Fire Signal is:

1 or more blasts of the ship's whistle, each blast of not less than 10 seconds duration supplemented by a continuous sounding of general alarm system.

SHIPMASTER'S REPORT: 1978.

Documents: Turkish health form (supplied when vessel boarded), 2 stores lists, 2 crew declarations, 8 crew lists.

Pilotage: Compulsory. Pilot meets ship 1 mile South of the pier at the anchorage zone.

Anchorages: At least 1 mile South of Southern end of jetty.

Restrictions: Max. drafts 72 ft. to 98 ft. at berths 1 and 2 and 66 ft. to 72 ft. at berths 3 and 4.

Max. Size: 300,000 d.w.t.

Health: Free Pratique granted at anchorage or when berthed.

Radio: Via Mersin.

VHF: Communicate with Botas Terminal Channel 16 at least 4 hours before arrival. Uses Channel 22 for talking.

Radar: None.

Tugs: 3 of 2,600 h.p. and 1 of 1,200 h.p. All provided with fire fighting equipment.

Berthing: Normally facing Southwards (bow to sea) for emergency purposes.

Cranes: 1 on each berth.

Medical: A doctor is available ashore but vaccinations not possible.

Density: 1025.

Fresh Water: Available at all berths, arranged through Agent.

Fuel: Not available.

Fire Precautions: I.O.T.T.S.G. safety check list is utilised.

Consuls: See "Iskenderun".

Repairs: Repairs to engines alongside may be permitted with written permission from Terminal Management.

Dry Docks: None.

Surveyors: None.

Gangway/Deck Watchmen: Not required.

Customs Allowances: 200 cigarettes and 1 bottle per man.

Repatriation: Possible via Iskenderun and Istanbul.

Time: GMT plus 3 hours in November 1978.

Services: Limited fresh stores available.

Shore Leave: Permitted.

Identification Cards: Shore passes issued.

Mail: To U.K. takes about 5 days. None received due late orders.

General: No large scale B.A. chart available but B.A. 2632 is adequate if radar working. A Turkish Chart No. 334 is available. The position we anchored (2.1 miles South of jetty in 35 m.) was thick mud on bottom and good holding ground with wind from North about Force 7. At present berthing only during daylight but sailing any time. Each berth is equipped with shore gangway. Dirty ballast can be accepted up to 40,000 tonnes and clean up to 60,000 tonnes at a rate of 4,500 t.p.h. Loading rates up to 20,000 cu.m.p.h. on berths 1 and 2 and up to 10,000 cu.m.p.h. on berths 3 and 4. S.G. about 0.8459 (API 35.78) at 60/60F. with a loading temperature (November) of about 80°F. The oil is Kirkuk blend crude from Iraq. There are facilities for storing about 1,000,000 tonnes. Berths 1 and 2 manifold 6×20 in. with reducers to 16, 18 or 20 in. if required. Berths 3 and 4 manifold sizes 16 in. with reducers to 12, 14 or 16 in. if required. Automatic couplings may be used. At berths 3 and 4, 4 hoses can be connected if distance between ship's manifold centres is more than 150 cm. There is a Doppler approach system on jetties but it has not been calibrated. All moorings on quick release hooks and usually 3 head, 2 breast and 2 back spring moorings for 140,000 d.w.t. tankers, same aft. For berthing 2 tugs make fast with their own lines, 1 tug at each end of main deck and 3rd tug stands by. For unberthing 1 tug makes fast to bow and stern with ship's rope (not wires) and 3rd tug stands by. Pilot will not use pilot hoist but requires accommodation ladder when in ballast and disembarks with pilot ladder. 7 Notices of Readiness and dry certificate required by Pilot, 1 of each and 1 ullage report required by Agent. Agent takes ashore certificates of Safety, Construction, Safety Equipment, Safety Radio, Loadline and Class. No early departure procedure available and ship stays on berth up to 2 hours after loading awaiting papers. N.O.R. is made out to I.N.O.C. – Bagdhad – Botas – Ceyhan. Pilot requires separate cabin as he acts as Loading Master, also cabin required for 1 Customs official and possibly Agent. Abnormal ship/shore differences appear to be usual as evidenced by the fact that when you handed them a letter of protest they hand you a reply at the same time.

Authority: Botas District Management.

SHIPMASTER'S REPORT: December 1980.

Botas and Toros Gubre Piers:

Approach: Situated in the Gulf of Iskenderun on the N.W. corner of the Gulf. The oil pier, which is the outlet from the "Kirkuk" oilfield in Iraq, is about 5 miles below the head of the Gulf on the Northern shore with the fertiliser pier 2 miles from the Gulf head.

The approach from the S.W. (Mersin direction) or South (Suez Canal) can be made without difficulty as the coast line provides very good fixes.

The lights marked on the piers do not exist. The oil pier light has been broken for six months and the Pilots say it will probably never be fixed, also the fertiliser pier light is not connected to the supply. The oil pier is visible at 24 miles (radar) and is well lighted at night by arc lamps. Generally there are a few anchored tankers lying off.

BA. 2632 is at present the only British chart available. There is a Turkish chart 334 which is considerably better.

VHF: The fertiliser pier has no VHF.

Botas oil pier uses Channels 16, 10, 24 (Duplex).

Channel 24 is used for intercommunication between various installations for transfer of figures. It can also be used to plug into the general telephone system to talk to the Toros fertiliser pier.

Call "Botas Terminal", 24 hour watch. In the early hours of morning no English spoken.

Anchorage: Toros Fertiliser: 1.0 – 1.5 miles S.E. of pier. Good holding.

Botas Oil Terminal: 1.5 – 2 miles S.E. of pier.

Both open to S.W. winds.

Pilot: Botas Pilot serves both terminals. Priority given to Botas.

A total of 6 Pilots are on 24 hour call.

Pilots board in anchorage area from black hulled and brown superstructure launch of about 10 knots.

They will also travel by car to Toros berth in about 15 minutes.

Berthing: Botas: 24 hours a day with wind speeds up to 25 knots.

Toros: Wind speeds up to 15 knots and then only if good forecast.

No berthing from 1 hour before sunset to sunrise. Unberthing throughout 24 hours.

Tugs: Botas fire fighting tugs on 24 hour stand-by, 4 available.

Kort Knozzles: 3 of 2,600 h.p. and 1 of 1,600 h.p.

When berthing push with bow line onboard. When unberthing use ship's line which is doubled up.

Botas: 300,000 d.w.t. – 4 tugs
150,000 d.w.t. – 3 tugs
Toros: – 1 or 2 tugs

Pilot reports that they will operate with wind speeds up to 35 knots with large swell to take vessels off piers. Botas Terminal has priority.

Botas Berths: Nos. 1 and 2 at outer end of pier, No. 1 (East) and No. 2 (West), depths 27 m., loading rate up to 20,000 cu.m.p.h.

Nos. 3 and 4 at inner end of pier, No. 3 (East) and No. 4 (West), depths 18 – 19 m., loading rate up to 10,000 cu.m.p.h.

Weather: By observations and Pilots advice a low pressure to the North causes a large S.W. swell which coupled with a S.W. wind makes the Toros berth very dangerous.

N.W. winds up to Force 6 cause no real problems as the berth is in the shelter of the hills and the swell is not apparent. With N.W. winds on the Botas berth, the Pilot says it can cause problems due to the berth not having much shelter.

During the Summer months, often strong S.W. winds are common between 1100 hrs. to 1500 hrs. each day, which in the Pilot's opinion could make the Toros berth untenable.

Forecast: The local television gives a weather report. Rome Nato, if on time, is the only area forecast in English. Watch the barometer.

Toros Berths: Discharge only at present.

Berth head out. Bulk – Port side to on West side. Liquid – Starboard side to on East side.

Extends about 0.5 miles from shore, the berthing section lying in a 194° – 014° direction. Liquid side in position 36° 54.60′ N., 35° 59.04′ E.

Both berths designed for max. of 30,000 d.w.t.

Bulk berth has 5 tonne grab crane. Liquid side Chicksan.

Depths each berth minimum 12.5 m.

Mooring/Fenders: Toros: This can be a problem, and is dependent on length of vessel, particularly aft as the mooring dolphins do not go far enough astern.

As far as possible a 4, 2, 3 arrangement is required. With a swell, expect to part moorings, we parted six lines. Two good mooring boats from Botas Terminal used.

Fenders are 4 large flat plastic/steel faces on sprung rubber compresses. Unfortunately for a long vessel they are set too close together and need to be another 10 m. in each direction to give good coverage.

Jetty Dimensions/Gangways: Toros: Liquid side: Jetty face is 18 m. long and 9 m. above MLW.

Bulk side: 120 m. face and 7.5 m. above MLW.

For gangway purposes this means that on the bulk side the gangway can be used as long as the ship is not small.

On the liquid side a straight "B.O.T." type gangway will be necessary to land on the small pipe platform.

Discharge: Toros: Bulk side: 5 tonne capacity travelling grab crane which discharges into conveyor belt to the plant.

3 shifts of 8 hours worked, total 24 hours.

Liquid Ammonia: 6 in. Chicksan into 6 in. main line and 2 in. cooling line. Connection 6 in. 150 ASA – spool piece 12 in. – 6 in. provided. Shore labour connects/disconnects.

Sulphuric Acid: Connection on jetty of 10 in. 300 ASA.

Phosphoric Acid: Connection on jetty of 8 in. 150 ASA.

Lines South to North: Ammonia, Sulphuric Acid, Phosphoric Acid.

Ammonia is discharged into a refrigerated tank of 7,332 cu.m. equal to about 5,000 tonnes at a rate of 140 t.p.h.

The 6 in. loading line cascades into the top of the tank NOT bottom, therefore pressure problems can result.

Tank served by two Malcon compressors and usual condensers.

Sulphuric Acid tank is 3,420 cu.m.

Phosphoric Acid tanks (2) total 8,500 cu.m.

Air draught Ammonia about 18 m. maximum.

Air draught Acids length of ship's hoses.

It is proposed to import about 10,000 tonnes Ammonia per month and 12,000 tonnes Phosphoric Acid per month, plus small quantities Sulphuric Acid.

Bulk commodities are Urea and Potassium Chloride.

Water: From metered pipe at about 10 t.p.h. Water hard but potable. Price $3.97 per tonne. Pipe on liquid platform. Ship's hoses.

Agent: Agent comes from Iskenderun about 30 miles away.

Communications: At the time of our visit to Toros Gubre there were no telephones. The nearest centre is the Botas Oil Terminal about 3 miles away.

Chandler: From Iskenderun, very good, low prices, obliging.

Local produce, vegetables, salads and fruit which is wide ranging in Spring. End of Summer, August and September not so good.

All in kg. Stores alongside, chandler provides labour.

December 1980: Vegetables $1 kg., fruit $2 kg., salad $1.50 kg., cheese (good) $3.00 kg. in tins of 25 kg.

To be paid for in cash drawn from Agent.

N.O.R.: Tendered in usual manner on anchoring, accepted at that time unless weather prevents berthing.

Customs: For Botas Terminal, reside in complex.

For Toros Terminal, Customs come from Iskenderun with Agent, which results in delay when clearing vessel outwards on completion.

Two Customs Officials reside on board – cabin required.

Money: If vessel coasting around Turkish ports money drawn at one Agency can not be deposited at another Agency in final port unless Customs clearance given from original port.

Personnel Changes: Nearest airport in Turkey is at Andana about 1 hour from Ceyhan Berths, but if waiting for ship have to stay in Iskenderun about 2 hours from airport.

Personnel travelling are advised to have Istanbul Agent's Office and home telephone numbers.

The Agent says it is easier to fly direct to Damascus about 3 hours taxi ride from Iskenderun but he cannot meet personnel and clearance at Syrian border has to be done on one's own.

Note: (December 1980): It is not expected that the plant will be in full production until mid-1981, the pier being used for material imports and production going to a wide area of S.E. Turkey and Iraq.

AUTHORITY: Botas Petroleum Pipeline Corporation, P.O.Box 73, Ceyhan, Turkey. *Tel:* 1431, 1388. *Telex:* 62115 Bhat Tr. *Cables:* Botas, Ceyhan. *Contact:* S. Arikan, District Manager. B. Uzbilen, Marine Terminal Manager.

AGENT: See "Iskenderun".

HEREKE: 40.42 N. 29.37 E.

DOCUMENTS: 5 Crew Lists, 2 Store Lists, 2 Crew Declarations, 4 Cargo Manifests, 2 copies Bills of Lading, 2 Stowage Plans, Clearance from Last Turkish Port, Bill of Health, 2 Lists of Money in Ship's Safe, Tonnage Certificate, Safety Equipment Certificate, Safety Radio Certificate, Safety Construction Certificate, Load Line Certificate, Derat Certificate.

PILOTAGE: Compulsory pilotage from Darica to Hereke and vice-versa; also for berthing and unberthing. (For all movements in Izmit Gulf Pilot is compulsory).

Vessels proceeding to Hereke port have to take Pilot when entering Izmit Gulf at Darica pilot station, located:

Approx. Lat. 40° 45′ 18″ N., Long. 29° 23′ 18″ E.

ANCHORAGES: Anchoring places at Izmit Gulf are as follows:

For Dry Cargo Vessels:

Darica/Eskihisar Anchorage: approx. Lat. 40° 46′ 05″ N., Long 29° 32′ 10″ E.

Izmit Anchorage: approx. Lat. 40° 44′ 00″ N., Long. 29° 52′ 48″ E.

For Tankers:

Yarimca Anchorage: approx. Lat. 40° 44′ 50″ N., Long. 29′ 44′ 30″ E.

RESTRICTIONS: Berthing at jetties at night time is at Pilot's discretion.
MAX. SIZE: No restrictions if vessel suitable to load/unload at Hereke berth where jetty length 140 m. and depth varying between 7.70 m. and 11.35 m.
HEALTH: For vessels proceeding to Hereke Free Pratique obtained at Canakkale-Dardanelles or at Buyukdere/Bosphorus. Crew List and Derat Certificate required.
RADIO: Istanbul Radio Station.
VHF: Available only at Darica and Yarimca pilot stations, Channel 16.
TUGS: Compulsory towage for berthing and unberthing. The following number of tugs must be used during operations in Izmit Gulf:

500 to 5,000 g.r.t.	– 1 tug
5,000 to 25,000 g.r.t.	– 2 tugs
25,000 to 50,000 g.r.t.	– 3 tugs
over 50,000 g.r.t.	– 4 tugs

BERTHING: Only one jetty available at Hereke which belongs to NUH Cement Factory where only one vessel can berth at a time.
CRANES: No shore cranes available on jetty.
BULK CARGO FACILITIES: As pier belongs to cement factory only cement cargo loaded. For bulk cement loading rate is 3,000/4,000 tonnes per day. 24 hours continuous work.
SPECIALISED CARGO HANDLING FACILITIES: None.
BRIDGES: None.
STEVEDORES: Private.
MEDICAL: Hospital and dental facilities are available at Izmit approx. 30 km. from Hereke.
TANKERS: No tanker facilities.
DENSITY: 1020-1022.
FRESH WATER: Available by barge and small quantities available from the jetty.
FUEL: Not available at Hereke, can be supplied by barge or coaster from Istanbul.
FIRE PRECAUTIONS: None.
CONSULS: None.
REPAIRS: No repair facilities.
DRY DOCKS: None.
SURVEYORS: (1) Cargo Inspectors available at Istanbul.
(2) Surveyors available at Istanbul.
Cargo Inspectors and Surveyors can be ordered from Istanbul to attend vessels at Hereke.
GANGWAY/DECK WATCHMEN: Not necessary. Ship's gangway used.
HATCHES: Opening/Closing hatches carried out by the crew.
CUSTOMS ALLOWANCES: Tobacco: 1 carton of cigarettes per week, each man. Spirits: 1 bottle of spirits per week, each man.
CARGO GEAR: Load/discharge effected by ship's gear as no cranes available on the jetty.
REPATRIATION: Main embarkation/disembarkation Customs and Immigration formalities done at Istanbul but permission/formalities also required from Izmit Immigration and Izmit/Derince Customs to assist repatriations.
AIRPORT: Nearest airport at Istanbul, approx. 100 km. from Hereke.
TIME: Local time GMT plus 3 hours.
HOLIDAYS: New Year's Day, Sugar Bayram for 3 days, Kurban Bayram for 4 days (both religious holidays and dates are changeable every year), 23rd April, 19th May, 30th August, 29th October are National Holidays. Saturdays and Sundays official holidays.
POLICE/AMBULANCE/FIRE: Police: 211-10945, Ambulance: 211-11030, Fire: 211-00.
EMERGENCY CO-ORDINATION CENTRE: Police Headquarters: 211-10945.
TELEPHONES: No arrangements exist.
SERVICES: None.
BANKS: Only local banks.
STORING: See "Prelims" page viii.
1. Vessel can be stored by barge and truck.
2. Vessels can be stored by barges during loading or discharging.
3. Trucks can proceed alongside at berth.
4. Fork lift trucks not available.
5. Customs formalities required for storing, Agent assists.

SHORE LEAVE: Crew members allowed ashore, no shore pass required.
IDENTIFICATION CARDS: Seaman's book is sufficient.
REGULATIONS: Nil. No visitors allowed aboard without permission.
DELAYS: No delays expected.
AUTHORITY: NUH Cement Factory of Hereke. *Tel:* 2161-1052, 2161-1053. *Telex:* 33227. *Cable:* Nuh-Hereke.

ISDEMIR: 36.43 N. 36.11 E. (See Plan Book)

LOCATION: The port is located inside the Western Breakwater within Lat. 36° 43′ 30″ N., Long. 36° 11′ 06″ E. and the South Breakwater within Lat. 36° 43′ 35″ N., Long. 36° 11′ 15″ E.
TUGS: 2 tugs available.
BERTHING:

Berth (See Plan Book)	*Length* (m.)	*Depth* (m.)	*Capacity*
Point E – F	300	10	1 × 15,000 d.w.t. 1 × 5,000 d.w.t.
Point E – D	200	10	1 × 15,000 d.w.t.
Point D – C	120	8	1 × 10,000 d.w.t. 1 × 5,000 d.w.t.
Point A – B	120	12	1 × 50,000 d.w.t.
Point A – I	500	14.0 – 18.5	1 × 80,000 d.w.t.
Fuel Wharf		14.0	Outside West Breakwater

CARGO HANDLING FACILITIES: 4 electric cranes × 10 tons. 5 Kangaroo cranes × 15 tons (300 t.p.h. each). 2 portal cranes × 25 tons (under construction). Forklifts also available.
2 conveyor belts × 1,000 t.p.h. each.
Handling Rates:

General cargo	800 – 1,000 tons per day
Iron ore	1,000 tons per day
Coal	7,000 tons per day
Fuel oil	5,000 tons per day

TANKERS: Facilities owned by the Port. 8×5,000 ton capacity fuel and oil tanks. Depth alongside fuel wharf 14.0 m.
FRESH WATER: Water tank available, but no potable water.
REPAIRS: No facilities.
DRY DOCKS: None.
AUTHORITY: Iskenderun Demir Ve Celik Fabrikalari, Directorate of Iskenderun Iron and Steel Plants, Isdemir, Turkey. *Tel:* 1164, 1881, 2794, 2796, 2777 and 3142. *Cables:* Isdemir, Iskenderun. *Contact:* Z. Kural, Trade Manager.

ISKENDERUN: 36.35 N. 36.10 E. (See Plan Book)

DOCUMENTS:
5 Crew Lists.
4 Passenger Lists.
2 copies Transit Cargo Manifest.
3 copies Inward Cargo Manifest, of which one must be legalised by Turkish Consulate at loading port. If no consulate existing same to be certified by local Customs Officer or Authorities.
1 set Bills of Lading.
2 copies Cargo Stowage Plans.
Health Documents.
2 Stores Lists.
Ship's Certificates.

PILOTAGE: Compulsory. Ordered by Agent on basis of Master's ETA. International Code signals used to call Pilot who boards at harbour entrance. 2 pilot boats available.
ANCHORAGES: Safe anchorage in open roadstead at 0.5 to 0.75 miles from shore. Vessels over 30,000 d.w.t. work cargo at anchorage only. Loading/discharging to lighters only occurs in the case of explosive cargo.
MAX. SIZE: At anchorage, no limitations. Alongside pier, length 166 m., draft up to 30 ft. Also see "Tankers".
HEALTH: Pratique obtained on arrival. Master required to show vessel's Health Declaration and Certificate of Registry. Crew Vaccination Certificates to be produced if required. Sanitary Certificate required if live animals on board.
RADIO: Istanbul Radio, call sign TAH. Izmir Radio, call sign TAN2.
TUGS: 6 tugs available 300 h.p. – 1,200 h.p.
BERTHING: Jetty 509 m. long can accommodate 2 large vessels and several small vessels simultaneously.
Berth No. 1 at jetty head, 48 m. length, 35 ft. depth.
Berth No. 2, South side, 166 m. length, 28 ft. – 32 ft. depth.
Berth Nos. 3 and 4, suitable only for tugs and small vessels.
Berth No. 5, North side, 166 m. length, 29 ft. – 34 ft. depth.

Due to shelving depths vessels of 20,000 to 30,000 d.w.t. berth partly alongside and lighten cargo then shift once or twice further in.

The T.M.O. have a silo of 20,000 tons capacity which can deliver up to 300 t.p.h. Loading capacity of ore, 200 t.p.h. Unloading capacity for coal, 150 t.p.h.

Inner Port, used only by pontoons, lighters and tugs.

Priority given to Army, food relief and passenger ships.

CRANES: 35 shore cranes with capacity 1.5 tonnes – 26 tonnes. 1 floating crane with capacity 90 tonnes.
STEVEDORES: 2 consecutive shifts of 8 hours each day. At anchor, approximately 100 tons can be handled each shift, for general cargo. Baled cargo, 125 tons per shift. Bagged cargo, 150 tons per shift.

Gangs secured by Agent through the Port Monopoly, 24 hours prior arrival.

MEDICAL: Master to inform Agent by cable if urgent medical assistance required on arrival, also indicating, if possible, seriousness of case in order to take adequate steps.
TANKERS: Two buoy mooring berths operated by Mobil Oil and Petrol Ofisi, suitable for vessels up to 50,000 d.w.t. Stern line connection required. No slop reception facilities.
Also see "Golovasi".
FRESH WATER: Supplied only by barge, 2 available each of 250 tons capacity.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Services of watchmen recommended. 3 shifts of 8 hours each. Extra tariff for Sundays and holidays.
OPENING/CLOSING HATCHES: May be opened/closed by ship's crew. May be performed by stevedores at tariff rates.
CUSTOMS ALLOWANCES: 50 cigarettes for each man going ashore. On board the vessel each man may hold 200 cigarettes and 1 open bottle wine/spirits out of bond.
IDENTIFICATION CARDS: Seamen's Book is sufficient.
CONSULS: Vice-consulates of France, Greece, Iran, Italy, Netherlands, Norway and Sweden.
REPAIRS: Welding and other minor types of repairs are possible.
REPATRIATION: Can be arranged.
AIRPORT: Adana Airport, served only by domestic lines with routes to Beirut and Istanbul. Airport situated 140 km. from Iskenderun. Twice daily service to international airport at Istanbul.

POLICE/AMBULANCE/FIRE: Police 1044; Ambulance 1443; Fire 1000.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day (commencing 1200 hrs. Dec. 31st); National Sovereignty Day (April 23rd, half day April 22nd); Sports Day (May 19th); Victory Day (August 30th); October 28th (half day); October 29th and 30th; Sheker Bayram (3 days, movable); Kurban Bayram (4 days, movable).

SHIPMASTER'S REPORT: Customs and Health Clearance is performed at anchor outside the port. Vessels should anchor about 0.5 miles North of the landing stage in the main part of the town. All Officials and Agents arrive by boat and when clearance is given the Pilot comes out. Vessels with cargo for the chemical works at Sariseki (3.5 miles North of the main port) the procedure is the same except that a Pilot is not required.

Customs, Immigration, and Health Officials require 4 Crew Lists on arrival. The Agent will require 2 more crew lists prior to the vessel's departure for clearance with the Harbour Master. On departure the vessel will anchor off again while outward clearance is obtained.

AUTHORITY: Turkiye Cumhuriyeti Devlet Demir Yollari – Isletmesi Genel, MD, Talat Ps Bul, Ankara, Turkey. Telex: 42571.

AGENT: Gulf Agency Co. Ltd., POB 277, Iskenderun. Tel: 13676, 13677, 13152. Telex: 68124. Cables: "Gacship" Iskenderun.

ISTANBUL: 41.01 N. 28.58 E. (See Plan Book)

DOCUMENTS: *Vessels bound for Istanbul:*

5 Crew Lists.
6 Passenger Lists.
3 Stores Lists.
1 Transit Cargo Manifest.
2 Inward Manifests of all cargo onboard.
Copies of relevant Bills of Lading for Inward Manifests.
3 Lists of money in the ship's safes (if there is no money on board, please issue 3 "nil" lists).
Harbour Master's Sailing Permit (which must be exchanged at each Turkish Port and kept on board).
Ship's Certificates (Derat, Ship Safety, Safety Radio, Class or Freeboard).

Transit Vessels: Master to present only Tonnage and Derat Certificates during Sanitary Control at both Straits (Canakkale and Buyukdere).

PILOTAGE: For both vessels bound for Istanbul and transit vessels, Pilot secured by the Agent through the Port Monopoly Administration. Master to wire ETA notices 48 and 24 hours prior to arrival. ETAs must be confirmed or corrected not less than 2 hours prior to ETA. Pilot boarding vessel, using service boat hoisting red and white flag, off Haydarpasa and Sarayburnu (entrance from Marmara Sea) or off Kavak (entrance from Black Sea). Pilotage for entering and berthing in harbour areas is compulsory. Pilotage through Bosphorus is optional. All Pilots can be contacted by VHF Channel 16.

Also see "Shipmaster's Report".

ANCHORAGES: Free and safe anchorage in roads off Marmara coast approach to Istanbul. It is however recommended to anchor as near as possible to the harbour. Anchoring at other anchorage areas is subject to special permission via Harbour Master. Good anchorage off Haydarpasa and off Yenikapi, Ahirkapi for large vessels. For smaller vessels there is a good anchorage between Dolmabahce and Kurucesme.

RESTRICTIONS: Ships carrying hazardous cargoes (flammable, explosives, corrosives, etc.) are not allowed to enter the harbours. Ships can anchor in roads outside the harbour at any time without Pilot. Ships to operate upon arrival at night can enter the harbours with Pilot and with special permission through the Port Monopoly Administration. 48 hours' notice has to be given to the Harbour Master of Istanbul for vessels calling at Istanbul and/or passing in transit through Bosphorus.

MAX. SIZE: No limitation of draft in open roadstead at anchor. Max. draft in port alongside quay: 10 m. for dry cargo ships. Tankers up to 48 ft. draft can berth at Haramidere oil port.

HEALTH: Sanitary control of both transiting and operating vessels performed at the Straits entrance (Canakkale and Buyukdere). Ships entering from South must slow down at Canakkale and ships arriving from North must slow down at Buyukdere for Sanitary Control. In case of non-performance of such control due to bad weather, Master has to inform Agent in time and have to stop and wait at South Entrance of the Bosphorus until Sanitary Control is performed otherwise heavy fine would be levied.

Also see "Shipmaster's Report".

RADIO: Wireless messages to be routed to Agent via Istanbul Radio. Call sign of Istanbul Radio Station is THA. Frequency MW 500 kHz. Ships can also communicate with Agent by radio telephone on frequency 2182 KHz. It is recommended that ships keep watch for any radio telephone call by Agent detailing any berthing and operation arrangement.

TUGS: Arranged by Agent. Vessels of 1,500 g.r.t. and over berthing at the quays or mooring to the buoys are compelled to take the services of at least one tug and vessels of 5,000 g.r.t. and over require at least two tugs. Charged per hour or fraction of each operation.

21 tugs ranging from 110 hp to 2,500 hp are available.

BERTHING: Priority to food and passenger ships. If no berth available then ships to wait for turn in roads at anchor.

Turkish Maritime Corporation Facilities:

Wharves:	*Length* m.	*Depth of Water* m.
Karakoy (ex Galata) exclusively for passenger vessels	520	7 – 10
Salipazari for cargo handling	600	10
Sarayburnu for passenger handling	240	6
Camialti and Haskoy (Golden Horn)	68	3 – 4
Kurucesme for coal handling	370	10

Equipment:

Electric Cranes along the quays:
2 of 5 tons
7 of 3 tons
3 of 4 tons (coal transporter)
Rubber wheeled mobile cranes:
1 of 25 tons
7 of 10 tons
8 of 5 tons
5 of 3.5 tons
Floating Cranes: 5 tons – 60 tons.

Turkish Railway Corporation Facilities:

Haydarpasa Port: This port, protected by 2 breakwaters of an overall length of 1,709 m., has quays of 1,988 m. total length, that may simultaneously accommodate 6 medium-sized vessels and where cargo operations may be made direct to and from wharves or railway trucks.

The depth of water at the quays varies between 6 m. and 10 m.

Silos: 4 grain silos are available:

Capacity	*Delivery per hour*	*Intake per hour*
34,500 tons	200 tons	100 tons
20,000 tons	120/150 tons	90/100 tons
10,800 tons	120/150 tons	90/100 tons
5,280 tons	120/150 tons	90/100 tons

Electric cranes along the quays: 1.5 ton – 25 ton.
Mobile cranes: 3 ton – 8 ton.

A container/Ro-Ro facility under construction. The facility will have 3 berths, 350 m. length and 10 m. depth, 295 m. length and 10 m. depth and 3rd berth 300 m. length and depth of 12 m. Completion expected late 1984. 2×40 ton gantry cranes on order.

BULK HANDLING: See "Berthing" – Haydarpasa.

TANKERS: The oil port called Haramidere is a small bay open to Southern winds and 60 km. distant from Istanbul in the Sea of Marmara. There are buoys and an oil pumping platform in this bay. Tankers can berth by dropping 2 anchors and mooring by stern at these buoys or at platform. Average sea depth is 48 ft.

Ambarli: Position Lat. 40° 58′ N., Long. 28° 42′ E. Max. size 250,000 d.w.t. Vessels moor by the stern to a dolphin platform (offshore).

BRIDGES: There are 2 bridges: Galata Bridge is between Eminonu and Karakoy: Ataturk Bridge is between Unkapani and Azapkapi. Both bridges are opened in the morning for vessels entering the Inner Harbour (Golden Horn). Vessels wanting to pass through the bridges have to give notice in due time to the Harbour Master of Istanbul.

STEVEDORES: Gangs of stevedores secured by the Agent through the Port Monopoly, 24 hours prior arrival. Average loading and discharging rates of about 150 – 200 tons per gang per shift depending also on the kind of goods. Discharging operations are generally performed alongside the wharves and loading operations at buoys; however, as stated above, can also be effected alongside simultaneously with discharging. Working hours: Monday to Friday 0800/1200 and 1300/1700 hrs; Saturday 0800/1200 hrs.

MEDICAL: Master to inform Agent by cable if urgent medical assistance is required upon arrival, also indicating, if possible, seriousness of case in order to take adequate steps.

DENSITY: Always variable due to strong currents, however, can be reckoned as 1015.

FRESH WATER: Supplied by barge and shore installation at the rate of 30 t.p.h. – 60 t.p.h.

FUEL: Diesel oil, gas oil and bunker fuel can be supplied by barge at transit cost, subject 48 hours' pre-advice. Fuel supplied only against advance payment in foreign exchange (dollars, sterling or Swiss francs).

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Owners or Master to decide whether this work should be underaken by the stevedores or by the crew.

CERTIFICATES: Safety, Safety Equipment, Safety Radio, Class and Freeboard documents.

CUSTOMS ALLOWANCES: 40 cigarettes and 1 bottle wine/spirits per crew member.

CARGO GEAR: Generally shore cranes operating. However, ship using own means when such cranes are not available. Full lights to be supplied by ship.

IDENTIFICATION CARDS: Seaman's book is sufficient.

CONSULS:

Albania
Austria
Belgium
Brazil
Bulgaria
Chile
Czechoslavakia
Denmark
Dominican Rep.
Egypt
Finland
France
West Germany
Great Britain
Greece
Hungary
Iceland
Iran
Iraq
Israel
Italy
Japan
Lebanon
Mexico
Netherlands
Pakistan
Poland
Portugal
Romania
Spain
Sweden
Switzerland
Syria
Thailand
U.S.S.R.
U.S.A.
Yugoslavia

REPAIRS/DRY DOCKS: At the Golden Horn are 3 graving-docks:
(1) 388 ft. length, 72 ft. width at entrance
(2) 279 ft. „ 62 ft. „
(3) 600 ft. „ 63 ft. „

At Istinye (in the Bosphorus):

1 floating dock 137.50 m. length, 21.25 m. width with 8,500 tons lifting capacity. 1 floating dock 67.82 m. length, 30.40 m. width with 5,000 tons lifting capacity. 1 floating dock 126.14 m. length, 34.0 m. width with 10,000 tons lifting capacity. In cases of necessity floating docks of 5,000 and 10,000 tons capacity can be united and be put in operation as single floating dock with 15,000 tons lifting capacity. Every kind of repair can be effected at Istinye docks.

At Fener (Golden Horn) is a dry dock for vessels up to 600 tons, and at Haskoy (Golden Horn) is a dry dock for vessels up to 176 tons. There are also some privately owned. All kinds of repairs can be effected.

SURVEYORS: American Bureau of Shipping, Bureau Veritas, Germanischer Lloyd, Lloyd's, Norske Veritas, Turkish Lloyd.

REPATRIATION: Crew exchange and repatriation is possible for citizens of Italy, Great Britain, Benelux Countries, Sweden, Norway, West Germany, Austria, Switzerland, France, Ireland, U.S.A., Iceland, Pakistan, Monaco, Australia, Canada, Japan, New Zealand, Spain, Cyprus, Portugal, Tunisia, Kenya, Iran, Yugoslavia, Romania, Morocco. Citizens of other states not specified above are subject to a Turkish visa.

AIRPORT: Yesilkoy Airport is an international airport with daily connection throughout world. Airport 15 km. from Istanbul.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day (Dec. 31st p.m. and January 1st); National Sovereignty (April 22nd p.m. and April 23rd); Sports and Youth Day (May 19th); Sheker Bayram (3 days) (movable); Courban Bayram (4 days) (movable); Victory Day (August 30th); Proclamation of the Republic (Oct. 28th p.m. to Oct. 30th). In the event of a holiday ending on a Friday, the Saturday that follows is considered also as a holiday in full, and normal working starts as of Monday morning 0800 hrs.

POLICE/AMBULANCE/FIRE: Fire Istanbul 521 42 22, Uskudar 333 20 30; Police 527 45 00; Ambulance Istanbul 521 15 95, Beyoglu 144 49 98, Uskudar 333 04 01.

TELEPHONES: No installation for connection facility on board.

SERVICES: Tank cleaning (gas-free service), derat, compass adjusting carried out by experts of shipyards or Turkish Maritime Lines.

SHORE LEAVE: Crew members are allowed ashore at all times.

SHIPMASTER'S REPORT: *Dardanelles and Bosphorus:* If a Pilot is required for both Dardanelles and Bosphorus, give 24 hours' notice through Istanbul Agent. Same Pilot remains on board for full transit, Sea of Marmara included, and this applies for both North and South-bound traffic. Pilots at Dardanelles and Bosphorus work VHF Channel 16.

Sanitary Control: Required at Buyukdere, Ship's register, Derat, Crew List and certificate issued at Canakkale North-bound.

AUTHORITY: Turkiye Denizcilik Kurumu (Turkish Maritime Corporation), Genel Mudurluk, Karakoy, Istanbul, Turkey. *Tel:* 1433500. *Telex:* 22221 Dzb Tr, 22339 Dzy Tr. *Cables:* Denizbank Istanbul. *Contact:* Y. Izzettin Sen, Director of Ports. Ozden Dumanli, Assistant to General Manager.

Haydarpasa operated by Turkish Railway Corporation.

AGENT: Gulf Agency Co. Ltd., P.O.B. 1230, Karakoy, Istanbul, Turkey. Tel. 438327, 438328. Telex 22213. Cables: "Gacshipping" – Istanbul.

IZMIR: 38.25 N. 27.09 E.

DOCUMENTS:

6 Crew Lists.
4 Passenger Lists.
2 Manifests of Transit Cargo.
3 Manifests of Inward Cargo, 1 of which must be legalised before arrival by Turkish Consulate at loading port.
1 set Bills of Lading.
1 set Cargo Stowage Plans.
2 Stores Lists.
Health Documents.
Ship's Certificates.

N.B. Ship's particulars form is to be filled in by Masters upon arrival at Izmir, and remitted to the Port Authorities.

PILOTAGE: Vessels are permitted to arrive and sail from Izmir by day and night. After entering the Gulf of Izmir, Masters who are not familiar with the waters, require a Pilot at Pelican Spit. The pilotage from Pelican Spit to Izmir is not compulsory and Masters must notify their Agents at least 12 hours in advance giving their ETA at Pelican Spit and ask for a Pilot.

Pilot can be contacted on VHF Channel 16.

ANCHORAGE: In the Outer Harbour, 300 m. outside Old Port breakwater, ample space for vessels to anchor. Cargo operations cannot be performed at anchor unless vessels have red label cargoes aboard for Izmir or in transit.

RESTRICTIONS: Docking of ships at the old port is not permitted during night, but ships can sail any time during night. At the new port, docking is permitted during night (weather permitting) also ships can sail any time during night. There are no tides at Izmir.

MAX. SIZE: Vessels of any size with a max. of 38 ft. draft can operate at Izmir. There is a pipe-line for oil-carriers in the Gulf of Izmir where tankers with a max. draft of 33 ft. can operate.

In Old Port, length restricted to 165 m., max. draft 8 m.

HEALTH: Vessels to show their Sanitary Certificate – if available aboard – also their Registry. Presentation also of Vaccination Certificate of all the crew, if required by sanitary officials. Pratique is necessary on arrival even if the vessel has called at another port in the same country. Sanitary Certificate is required for live animals aboard. If quarantine (fumigation) of the vessel is necessary, very considerable time is lost, and expense incurred because vessel must proceed to Fumigation Station at Klazomene, located at about 20 miles from Izmir (in the Gulf of Izmir) where fumigation can be effected and bad cases hospitalised.

RADIO: Izmir Radio Station: call letters TAN2. Istanbul Radio Station: call letters TAH.

TUGS: Tugs are compulsory for vessels of more than 2,000 g.r.t. At Harbour Master's estimation, 2 tugs will be used for vessels over 4,000 g.r.t. in case of bad weather. Dues will be collected for each tug.

2 × 800 h.p. and 1 × 2,500 h.p. tugs available.

BERTHING: *Old Port:* Location Lat. 38° 25′ N. Long. 27° 10′ E. Harbour entrance to port 130 ft. wide, depth 40 ft., harbour length 1,200 m., harbour width 700 m. (Pilots boards 0.25 mile off entrance).

Precautions to be taken against N.E. and South winds. Mooring stern to quay. Operations effected by means of lighters. Altogether 8 vessels can berth in Inner Harbour with a draft of 24 ft. to 30 ft.

Alsancak: Located at a distance of about 2 miles from the old port. Depth alongside berths 22 ft to 38 ft. Pilot's board vessels outside breakwater old port. Presently 12 cargo vessels of various sizes (mainly medium and small sizes) otherwise 9 to 10 large vessels can operate at the new port. There is also a berth for 2 large passenger vessels or 3 small size vessels. 95,000 sq.m. of open storage and 24,000 sq.m. of sheltered storage available. Storage for 2,000 TEUs within port area.

CRANES: 48 mobile cranes (5 – 35 tons). 1 × 50 ton and 1 × 200 ton floating cranes available when required.

BULK HANDLING FACILITIES: Grain silo has capacity 40,000 tons. The conveyor can deliver between 2,500 and 3,000 tons in 24 hours.

Bulk ore loaded by grabs. Daily loading capacity per shift of 8 hours is between 750 to 1,000 tons.

STEVEDORES: Straight time 0800 – 1200, 1300 – 1700 hrs. Overtime Saturdays, Sundays and public holidays 0800 – 1700 hrs., otherwise 1800 – 0200 hrs. Overtime charges 50% increase on S.T. charges.

For overtime discharging operations at the new port, handling charges (overtime) from ship's tackle to the Custom's warehouse, are for account of the ship.

9 men per gang aboard (6 labourers, 2 winchmen, 1 hatch tender) 3 lightermen or men on the Dock.

Extra men used to reinforce regular gangs and in hatches congested with cargo for discharge secures a quick despatch.

MEDICAL: Advance notice optional. There is a local English-speaking doctor for service on board vessels.

Hospitals: U.S. Military Hospital, French Hospital, Government Hospital (Memleket). Doctors available to board ships or patient to proceed to their clinics.

U.S. Military Hospital for emergency cases only.

TANKERS: Izmir is a discharge port for tankers. Socony Mobil Oil receives petroleum products in bulk through a pipe-line at a distance of about 1 mile from their shore installations. Depth at the end of the pipe-line is 33 ft. The pipe-line is of 12 in. and the pumping is effected through a flexible hose of 10 in. at an average of about 450/500 t.p.h.

British Petroleum receives petroleum products at jetty where the tankers berth stern to with a max. draft of 23 ft. Pumping is effected by the vessel from her stern with a 6 in. flexible hose.

Petrol Ofisi receives petroleum products at their jetty. Vessels berthed stern to with a draft of 17 ft. Same procedure for pumping as for British Petroleum. The above three installations are located in the Gulf of Izmir opposite the new port of Alsancak.

FRESH WATER: Fresh water is available for drinking. The water is given both from dock or by barge. Water is supplied by Port Monopoly. Delivery at the dock about 20 t.p.h. By barge about 40 t.p.h.

Two barges each of 200 tons capacity available.

FUEL: All kinds of fuel available subject to 24 hours' advance notice. Fuel supplied only against advance payment in free foreign exchange direct to Agent of the vessel.

GANGWAY/DECK WATCHMEN: Services of watchmen recommended. Three shifts of 8 hours per day.

OPENING/CLOSING HATCHES: This work can be carried out by crew. If carried out by stevedores the cost is charged to vessel.

CERTIFICATES:

Derat Certificate.
Registry.
Vaccination Certificates (if required).
Health Certificate.

CUSTOMS ALLOWANCES: 50 cigarettes for each member of the crew going ashore. Aboard the vessel each member of the crew is permitted to have one carton out of Bond. Wine and/or spirits: One litre for each member of the crew in an open bottle is permitted out of Bond. However, this allowance is to be kept aboard the vessel.

IDENTIFICATION CARDS: Seamen's Book is sufficient.

CONSULS:

Belgian Consulate (Honorary)	tel. 218847
Danish Consulate (Honorary)	" 124018
Finland Consulate (Honorary)	" 214782
French Consul General	" 214234
Greek Consulate	" 216992
Italian Consulate	" 211696
Luxemburg Consulate (Honorary)	" 214882
Netherlands Consulate (Honorary)	" 132064
Norwegian Consulate (Honorary)	" 215102
Spanish Consulate (Honorary)	" 145470
Swedish Consulate (Honorary)	" 124878
U.K. Consul General	" 211795
U.S. Consul General	" 217204
West Germany Consulate	" 216995

REPAIRS: Ship's repair shops available: Denizcilik Bankasi (Turkish State-owned). Deck and engine repairs are possible.

DRY DOCKS: Floating dock, capacity 7,000 d.w.t.

REPATRIATION: All facilities available for crew changes and arranging necessary repatriation.

AIRPORT: Airport from dock – distance 30 kilometres. Airport is served by Turkish Airlines with 5 flights per day (local flights in connection with Istanbul International flights). Also 2 direct flights per week to Europe.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day (from December 31st 1200 hrs. to January 1st, 2400 hrs.); National Sovereignty Day (from 22nd April, 1200 hrs. to April 23rd, 2400 hrs.); Spring Day (May 1st); Constitution Day (May 27th); Sports Day (May 19th); Victory Day (August 30th); National Holiday (October 28th, 1200 hrs. to October 30th, 2400 hrs.); Sheker Bayram (3 days) movable; Kurban Bayram (4 days) movable.

On these days offices are closed. Work in port is allowed by paying 75% overtime to the S.T. wages. The overtime for the National Holiday (Oct. 29th) is paid 100% on the total regular overtime, which makes 300%. On the first days of Sheker and Kurban Bayram work aboard is not carried out.

POLICE/AMBULANCE/FIRE: Police, tel. 255460; Ambulance, tel. 252405; Fire, tel. 00.

TELEPHONES: It is possible to place telephones aboard vessels at the new port of Alsancak.

SHORE LEAVE: Crew members are allowed to go ashore with landing card.

REGULATIONS: Berths at the new port of Alsancak are obtained on basis of the time and date of arrival of each vessel. If the port is congested, vessels wait for their turn at anchor.

DELAYS: During the active export season, some delays occur varying 1 or 2 days.

DEVELOPMENTS: New port of Alsancak to be extended during the next 2 years by the construction of a breakwater, docks, warehouses totalling a berthing capacity of additional 2 to 3 vessels, especially container vessels. 2 container cranes ordered.

AUTHORITY: Denizcilik Bankasi TAO.

AGENT: Gulf Agency Co. Ltd., POB 857, Izmir. Tel. 217270, 217287. Telex 52371. Cables: "Gacship" Izmir.

IZMIT: 40.46 N. 30.00 E.

DOCUMENTS: 5 Crew Lists, 2 Stores Lists, 2 Crew Declarations, 4 Cargo Manifests, 2 copies Bills of Lading, 2 Stowage Plans, Clearance from Last Turkish Port, Bill of Health, 2 Lists of Money in Ship's Safe, Tonnage Certificate, Safety Equipment Certificate, Safety Radio Certificate, Safety Construction Certificate, Load Line Certificate, Derat Certificate.

PILOTAGE: Compulsory pilotage from Darica to Izmit and vice-versa, also for berthing and unberthing. (For all movements in Izmit Gulf Pilot is compulsory).

Vessels proceeding to Izmit Port have to take Pilot when entering Izmit Gulf at Darica pilot station, located:

Approx. Lat. 40° 45′ 18″ N. Long. 29° 23′ 18″ E.

ANCHORAGES: Approximate position: Lat. 40° 44′ 00″ N. Long. 29° 52′ 48″ E.

RESTRICTIONS: Berthing at jetties at night time is at Pilot's discretion.

MAX.SIZE: No restrictions for vessels loading on roads, and no special restriction if vessel suitable to load/unload at the jetty of Seka Paper Mills where jetty length 70 m., depth varying between 24 ft. and 27 ft.

HEALTH: For vessels proceeding to Izmit Free Pratique obtained at Canakkale-Dardanelles or at Buyukdere-Bosphorus. Crew List and Derat Certificate required.

RADIO: Istanbul Radio Station.

VHF: Available only at Darica and Yarimca pilot stations, Channel 16.

TUGS: Compulsory towage for berthing and unberthing. The following number of tugs must be used during operations at Izmit Gulf:

500 to 5,000 g.r.t.	–	1 tug
5,000 to 25,000 g.r.t.	–	2 tugs
25,000 to 50,000 g.r.t.	–	3 tugs
over 50,000 g.r.t.	–	4 tugs

BERTHING: Only one jetty available at Izmit which belongs to Seka Paper Mills where two ships can berth at a time to each side of the jetty.

CRANES: No shore cranes available at the jetty.

BULK CARGO FACILITIES: No bulk cargo facilities. Vessels load minerals on roads, by ship's gear, brought alongside by barges with rate of 800/1,000 tonnes per day, working hours generally from 0800 to 2000.

At the jetty of Seka Paper Mills working hours from 0800 to 1700 and 1700 to 2400. Generally paper and wood-pulp in bales discharged at a rate of 125/150 tonnes per shift per gang by ship's gear.

SPECIALISED CARGO HANDLING FACILITIES: None.

BRIDGES: None.

STEVEDORES: Private. See also "Bulk Cargo Facilities".

MEDICAL: Hospital and dental facilities are available.

TANKERS: No tanker facilities.

DENSITY: 1020-1022.

FRESH WATER: Available by barge, and small quantities available from the jetty.

FUEL: Not available at Izmit, can be supplied by barge or coaster from Istanbul.

FIRE PRECAUTIONS: None.

CONSULS: None.

REPAIRS: No repair facilities.

DRY DOCKS: None.

SURVEYORS: Cargo Inspectors and Surveyors available from Istanbul and can be ordered to attend vessel at Izmit.

GANGWAY/DECK WATCHMEN: Not necessary. Ship's gangway used.

HATCHES: Opening/closing hatches to be carried out by the crew.

CUSTOMS ALLOWANCES: Tobacco: 1 carton of cigarettes per week, each man. Spirits: 1 bottle of spirits per week, each man.

CARGO GEAR: Load/discharge effected by ship's gear.

REPATRIATION: Main embarkation/disembarkation Customs and Immigration formalities done at Istanbul but permission/formalities also required from Izmit Customs and Immigration.

AIRPORT: Nearest airport at Istanbul, approx. 130 km. from Izmit.

TIME: Local time GMT plus 3 hours.

HOLIDAYS: New Year's Day, Sugar Bayram for 3 days, Kurban Bayram for 4 days (both religious holidays and dates are changeable every year), 23rd April, 19th May, 30th August, 29th October are National Holidays. Saturdays and Sundays official holidays.

POLICE/AMBULANCE/FIRE: Police: 211-10945, Ambulance: 211-11030, Fire: 211-00.

EMERGENCY CO-ORDINATION CENTRE: Police Headquarters: 211-10945.

TELEPHONES: No arrangements exist.

SERVICES: None.

BANKS: Only local banks.

STORING: See "Prelims" page viii.

1. Vessels can be stored by barge and truck.
2. Vessels can be stored by barges during loading or discharging.
3. Trucks can proceed alongside at berth.
4. Fork lift trucks not available.
5. Customs facilities required for storing. Agents assist.

SHORE LEAVE: Crew members allowed ashore, no shore pass required.

IDENTIFICATION CARDS: Seaman's book is sufficient.

REGULATIONS: Nil. No visitors allowed aboard without permission.

DELAYS: No delays expected.

AUTHORITY: Izmit Seka Paper Mills. *Tel:* 211-31630. *Telex:* 33124.

MERSIN: 36.47 N. 34.38 E. **(See Plan Book)**

DOCUMENTS:

5 Crew Lists.
4 Passenger Lists.
2 Transit Cargo Manifests.
3 Inward Cargo Manifests, one of which must be legalised prior arrival by Turkish Consulate at loading port; if no Turkish Consulate, same to be certified by local Customs Authorities.
1 each of the Bills of Lading accompanying Manifests.
2 Cargo Stowage Plans.
Health Documents.
Ship's Certificates (Safety Equipment, Safety Radio, Class and Freeboard Documents).
2 Store Lists.

PILOTAGE: Agent orders Pilot through Port Monopoly Administration. Master to wire ETA notices 48 and 24 hours prior to arrival. Pilot boards vessel with service boat hoisting red and white flag. Sound signals: 2 long and 1 short blast. Pilot boards vessel outside main breakwater. Shipmaster can use VHF station according existing international frequencies.

ANCHORAGES: Safe anchorage in open roads outside main breakwater.

RESTRICTIONS: No particular restrictions. Ships can anchor in roads outside main breakwater at any time without Pilot.

Vessels with more than 50 tons of explosives are not permitted to berth alongside.

MAX. SIZE: No limitation of draft in open roadstead at anchor. Maximum draft in port alongside quay: 11.6 m. for tankers, 9 m. for other ships.

HEALTH: Clearance is effected on arrival. Vaccination Certificates to be presented if required. If suspected disease on board radio Agents full details before arrival.

RADIO: Istanbul Radio, call sign TAH, Izmir Radio, call sign TAM2, Mersin Radio TAM5. Wireless messages to be routed to Agent, preferably via Istanbul Radio. Port VHF service in operation.

TUGS: Tug boat compulsory for vessels over 1,000 g.r.t. charged per hour or fraction of each operation. 6 tugs available up to 2,630 h.p.

BERTHING: Priority to Army, food relief and passenger ships. If no berth available then ships to wait for turn in roads at anchor.

	Length (m.)	*Depth* (m.)
Quay No. 1 (Passenger Quay)	175	10
Quay Nos. 2 and 3	274	10
Quay No. 4	150	10
Quay Nos. 5, 6 & 7	493	10
Quay Nos. 8 & 9	275 each side	10
Quay Nos. 10, 11, 12 & 13	577	6 to 8
Quay Nos. 18 & 19 (ore and coal)	67 and 76	10

BULK HANDLING FACILITIES: At Quay Nos. 8 and 9 there is conveyor system which can deliver 600 t.p.h. from each spout. Discharging rate 100 t.p.h. from each of the 2 suckers. Silo capacity 100,000 tonnes.

CRANES: 35 shore cranes, capacity 3 – 35 tonnes. 1 floating crane, capacity 60 tonnes.

STEVEDORES: Gangs of stevedores secured by the Agent through the Port Monopoly, to be ordered 24 hours prior to arrival.

Generally 2 consecutive shifts of 8 hours per day. Discharging/loading rates average:

100 tons per shift general cargo.
200 tons per shift bagged cargo.
150 tons per shift baled cargo
175 tons per shift bulk ore

Max. rate for ore 400 tons per shift if grab loading.

MEDICAL: Master to inform Agent by cable if urgent medical aid is required upon arrival, also indicating, if possible, seriousness of case in order that adequate steps can be taken.

TANKERS: Quays No. 20 and 21, 350 m. long, berths on each side with depth of 12.5 m.

ATAS Refinery Terminal: Depth in harbour channel, 11.2 m. and, in approaches to channel, 12.3 m. Turning basin 1,148 ft. diameter, depth 42 ft. 8 in. Depth alongside berths 48 ft. 6 in. Maximum length 229 m., draft 11.6 m. Tankers up to 12.19 m. draft have berthed.

Tankers in ballast up to 15,000 d.w.t. may berth/unberth at any time, day or night. Other vessels manoeuvre in daylight hours only.

One finger pier, berths for 2 tankers, 10 in. hose connections to 26 in. shore line. No facilities for slop disposal ashore.

Fresh water available from barge 100 tons each load.

DENSITY: Salt water 1025.

FRESH WATER: Fresh water supplied to tankers by barge but otherwise by shore installation at the rate of 30/35 t.p.h.

FUEL: Almost all kinds of fuel available in transit and facilities for delivery to ships.

GANGWAY/DECK WATCHMEN: Available and recommended.

OPENING/CLOSING HATCHES: Owners or Masters to decide whether this work should be undertaken by the stevedores or by the crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle wine/spirits per crew member.

CARGO GEAR: Generally shore cranes operated. However, ship using her own means when such cranes are not available. Full lights to be supplied by ship.

IDENTIFICATION CARDS: Seamen's Book is sufficient.

CONSULS: Italy, Lebanon, Norway and Sweden.

REPAIRS: Welding and other minor types of repairs are possible.

REPATRIATION: Repatriation can be arranged by air.

AIRPORT: Adana Airport served only by domestic line THY (Turkish Airlines) with routes to Cyprus (ERCAN), Ankara and Istanbul. Distance is 75 km. from Mersin. Twice per week to Cyprus (ERCAN), twice daily to Ankara and 3 times daily to Istanbul.

TIME: GMT plus 3 hours.

HOLIDAYS: New Year's Day, 1.5 days (31st December 0.5 day, 1st January 1 day); National Domination 1.5 days (22nd April 0.5 day, 23rd April one day); Youth and Sport Day, 1 day (19th May); Victory Day (30th August); Republic Day 1.5 days (28th October 0.5 day, 29th October); Ramazan Day 3.5 days; All Saturdays and Sundays.

POLICE/AMBULANCE/FIRE: Telephone numbers: Police 13439; Ambulance 13555; Fire 0000.

TELEPHONES: No installation for connection on board.

SHORE LEAVE: Crew allowed shore leave.

GENERAL: Two consecutive shifts every day, the first one starting 0800 - 1700 hrs. and the second one at 1700 – 2400 – 0100 hrs. Agent may provide extra men if necessary to help ship's despatch. Ships have to hoist a Turkish flag.

DEVELOPMENTS: 400 m. length container pier nearing completion. Ro-Ro ramp under construction at Berth No. 7. Expected to be ready mid-1985. 2×40 ton cranes to be purchased.

AUTHORITY: Turkiye Cumhuriyeti Devlet Demir Yollari – Isletmesi Genel, MD, Talat Ps Bul, Ankara, Turkey. *Telex:* 42571.

AGENT: Gulf Agency Col Ltd., P.O.Box 328, Mersin, Turkey. Cable Address: "Gacship" Mersin. Telex: 67141. Tel: 1080, 3730.

NEMRUT BAY (including Foca): 38.46 N. 26.55 E. (See Plan Book)

PORT LIMITS: Nemrut Bay is situated on the South side of the port of Aliaga (see Aliaga). It is the area between the mainland and a straight line drawn True North from Kizilburun which is situated in position: Lat. 38° 45′ 00″ N., Long. 26° 53′ 50″ E.

The Bay is divided into two areas, the inner port and outer port.

Inner Port: Is the area remaining between the imaginary line connecting the South end of the Petkim Petrochemical Complex's breakwater with Karacadogan Penisula situated in position: Lat. 38° 46′ 10″ N., Long. 26° 54′ 22″ E.

Outer Port: Is the area between interior port and Nemrut Bay boundaries.

DOCUMENTS: See "Izmir".

PILOTAGE: Pilotage is compulsory for all vessels arriving at Nemrut Harbour.

Notice of ETA must be reported 24 hours before arrival to the Harbour Master's office at Aliaga. Time must be in GMT.

Channel 16 VHF is continuously watched at Nemrut pilot station and ETA may be confirmed on this frequency.

The address of pilot station is as follows:

Petkim Petrokimya A.S.
Aliaga Kompleksi Grup Baskanligi,
Satinalma Mudurlugu,
Aliaga – Izmir – Turkey
Tel: Menemen (5421) 1550-54 (5 lines)
Aliaga (5431) 1240-44 (5 lines)
Telex: 52428 Epet Tr.
Cable: Petkim – Aliaga – Izmir.

In the ETA message, the following information must be indicated:

1. Name/call sign of vessel
2. Nationality
3. Agency
4. Length overall, max. draft and gross tonnage
5. Nature of Cargo (In IMO)

Rendezvous point with Pilot is: Lat. 38° 47′ N., Long. 26° 54′ E., in outer port. In the event of bad weather Pilot joins the vessel in inner port. A pilot boat of 210 h.p. is available. Call sign of the boat is "TCZJ".

ANCHORAGES: Anchorage in the inner and outer ports is possible. However, anchorage within the area of 5 cables diameter of middle of interior port boundary is prohibited for safety of sea traffic (See Charts).

RESTRICTIONS: See "Berthing".

MAX. SIZE: See "Berthing".

HEALTH: See "Izmir".

RADIO: Complete MF/SSB type radio, 1.6 – 4.2 MHz International Navigation Code with 31 Channels capacity, radio transmitter 150-350, 300-535, 700-1650, 1650-4250 kHz, and a 4 band SSB/AM receiver.

VHF: Communication within 20-25 miles with VHF – AM radio operating in 156 – 162 MHz band is possible. International navigational bands are used. Station listens on Channel 16. Call sign: "TAB".

RADAR: No radar facility.

TUGS: 2 tugs of 1,050 h.p. and 2,500 h.p. are available. Tugs normally join the vessel in the outer port.

BERTHING: Quays at port of Petkim Petrochemical Complex situated on the Northern side of Nemrut Bay (See "Plan Book").

Berth No.	*Name*	*Length (m.)*	*Depth (m.)*	*Remarks*
1	Tanker Quay	163	7	Load/discharge lines:
2	Tanker Quay	175	10	6 in., 8 in., 10 in., 12 in. Constructed for loading/discharging various chemicals such as ammonia, benzene, fuel oil, ethylene oxide, ethylene glycols, chloric hydrocarbons, wash oil.
3	Caustic Quay	60	6	Loading lines: 8 in. for caustic, 4 in. for hypochloride.
4	Naphtha Quay	90	14	Discharge lines: 28 in. for fuel oil, 24 in. for naphtha.
5	Salt Quay	190	6	Constructed for discharge of salt to be used at Chlorine Alkali Plant.
6	General Cargo Quay	338 (175+163)	10 – 7	Constructed for loading/discharging various petrochemical raw materials, products and equipment.
	Petrol Ofisi Quay			Still under construction for loading petroleum products.

Quays on the Eastern and Southern side of Nemrut Bay (See "Plan Book").

Ege Gubre Pier	122.90	12 – 14	Private jetty constructed for discharging/loading raw materials and products of fertiliser facility. Rate 1,000 tons/day.
Limas Pier	154	12	Private jetty constructed for discharging/loading iron scrap and iron products of Ironworks in Izmir.
Cukurova Pier	167	15	Private jetty constructed for discharging/loading iron scrap/iron products of Ironworks in the site.

CRANES: Fixed/mobile cranes are available at Petkim Petrochemical Complex.

Lifting capacity of 2 cranes at Salt Quay is 3 tonnes each. Salt is transferred by conveyor belt to the plant. One mobile crane of 270 tonnes lifting capacity, 2 mobile cranes of 150 tonnes, 2 mobile cranes of 110 tonnes and 55 mobile cranes of 12 – 30 tonnes lifting capacity are available.

BULK CARGO FACILITIES: See "Berthing" – Salt Quay and General Cargo Quay.

SPECIALISED CARGO HANDLING FACILITIES: Loading and discharging lines of liquid chemicals available at Port of Petrochemical Complex (See "Berthing").

MEDICAL: Hospital near Petrochemical Complex.

TANKERS: See "Berthing".

FRESH WATER: Available at Petkim Port. Order through Agent.

FUEL: May be available after completion of Petrol Ofisi Quay.

CARGO GEAR: Load/discharge can be effected by mobile cranes at General Cargo Quay (See "Cranes").

AIRPORT: Izmir-Cigli Airport is approximately 30 miles from Petkim Petrochemical Complex.

TIME: GMT plus 2 hours.

HOLIDAYS: *Official:* January 1st, April 23rd, May 19th, August 30th, October 29th.

Religious: "Bayram" days (Id-al-Fitr: 3 day, Id-al-Adha: 4 days) of Muslims (These dates are subject to visibility of new moon at Mecca).

POLICE/AMBULANCE/FIRE: Petkim has its own protection and medical units.

TELEPHONES: Facilities and connections under construction.

BANKS: T. C. Ziraat Bankasi, Turkiye Is Bankasi, Akbank, Emlak Kredi Bankasi in Petkim site.

SHORE LEAVE: Petkim's permission is needed.

IDENTIFICATION CARDS: The list of personnel leaving/joining the vessel should be announced to Petkim.

GENERAL: Piers and facilities at Nemrut Bay are owned by industrial companies located in this area. For loading/discharging the cargoes of other private and public companies permission from Ministry of Transportation of Turkish Republic is needed.

SHIPMASTER'S REPORT: July 1980.

Port of Foca: Vessel discharged ammonia.

Approach: Charts: BA 1087, 1618.

The approach presents no real difficulties since good positions may be obtained from the coast either by radar or visual bearings. There was some haze on our approach but it did not pose a serious problem.

Berth: Consists of an "L" shaped with the jetty being 125 m. in length. Distance to the foot of the jetty being about 300 m. The jetty is of concrete construction, standing on pilings and is fendered throughout with large tractor tyres. Ample mooring posts, although arrangements are not good for a vessel of this size.

There is a conveyor belt running the length of the jetty and to the shore plant. Two loading hoppers on the jetty. The chicksan consists of a tall crane-like structure which is swung into position.

Connection: 6 in. 300 ASA. Shore provides 10 in./6 in. 150/300 reducer. The gangway may be swung out prior to arrival.

Density: 1028.

Discharge: Co-operation with the shore personnel very good, especially with the senior operators and managers. At a lower level language is the only problem. Shore personnel connect lines.

General: Fresh Water: Not available. (A vessel that visited at a later date reported that fresh water of good quality was available (metered) from a line amidships).

Fuel: Not available.

Officials: Officials come from Izmir, some 80 km. by road; the Agent therefore has to "keep hold" of them throughout discharge. The shore plant has facilities for sleeping in a hostel ashore.

The same cargo surveyor attends the vessel at Gemlik, Foca and Mersin.

Since this was the second port of call in Turkey the vessel is issued with a travelling manifest to cover cargo and a carrier for ship's stores. The procedure differs from port to port but ship's bonded stores are sealed from arrival Turkey to departure, although visiting Customs enter on arrival at a port. We did not have any trouble requesting the bond to be opened prior to departure.

Doctor: Not available.
Repairs: Not possible.
Surveyor (Lloyd's): Not available.
Chandler: Not available.

SHIPMASTER'S REPORT: September 1980.

Port of Foca:

To be read in conjunction with report above.

Approach: From the North (Dardanelles). 10 miles can be saved by going down 'Muslim Kanali' and 'Stenon Mitilimis' to the East of Nicos Lesvos (BA 1665) instead of going to the West of Lesvos.

There is one narrow spot but in two transits during September 1980 presented no problems at full speed. There is little traffic.

Southbound: Keep to North side of Muslim Kanali about 0.5 miles off Turkish coast to avoid Muslim Kaya shoals (beware of Southerly set).

Northbound: Once past Muslim Kaya shoals, turn W.S.W. to avoid any Eastbound traffic round Baba Burnu then 3 miles off Baba Burnu as required.

A further 8 miles can be saved from Dardanelles to Foca by using the channel to the East of Boscadda Island (BA 1608). The problem here is the shallow bank which may require a speed reduction. Not yet tried but the Pilots say quite safe. Approaching Nemrut Liman plenty of fixes can be obtained. With a Northerly or North Easterly wind the bay acts as a funnel and a considerable indraught occurs so care should be exercised so that the vessel does not get set in.

BA Chart No. 1618 should be held.

Approaching Nemrut Liman the construction work and breakwater at 'Petkim' refinery on the North side of the bay is soon apparent although at present the earthworks and tanks tend to blend in with the rather barren landscape.

The whole peninsula between Nemrut Liman and Aliaga Liman is in the course of development for a very large Petrochemical complex.

On the South side of the bay is a general cargo berth to seawards and the fertiliser/ammonia facility at the head of the bay. This facility is marked by a silver-pressure vessel. The Ammonia facility remains hidden by high ground until near the berth.

The vessel can be turned round inside the bay with ease in winds up to N.E. Force 4.

Pilots: Available on 24 hour basis from Aliaga refinery. Boards either from tug or mooring boat. Gangway/pilot ladder should be 2 m. above water. Side depends on wind.

Pilot boards 1 N.W. of Karacadogan Burnu. He either drives across the peninsula to the new chemical berth and boards his boat there or comes by tug around the peninsula from Aliage refinery. On VHF Channel 16 when vessel expected. Reasonable English spoken. Pilotage one hour.

Tugs: Three tugs available. Two of 2,400 h.p. from Aliaga refinery and one of 1,200 h.p. at the new chemical berth.

If there is any wind at all in the bay, two tugs are required both for berthing and unberthing. These should be ordered well beforehand through the Agent.

In my opinion two tugs are required at all times. Ship's lines used.

Berthing: Although on a 24 hour basis, I would not be keen to berth at night especially in Winter months due to the strong Northerly wind pushing vessel onto the berth.

Can berth port or starboard side alongside. For this size vessel (32,000 g.r.t.) port side to is the most suitable as leaving the berth is not hazardous as possibly starboard side to would be.

Vessel headed into berth at 90° with bow onto the N.W. corner. When about 2 cables off starboard anchor let go and the stern pulled round by tug.

Make sure stern tug (when vessel parallel with quay) pulls on starboard side otherwise stern will strike quay (September 1980).

Moorings: (See Plan Book). Back spring first forward, starboard buoy line first aft. Mooring boat available.

Berth: The fendering arrangements are poor. Consisting of large tractor tyres. The main problem is at the corners or knuckles where the tyres are strung too low to stop the bow or counter flare hitting the concrete (September 1980).

Protest noted in September 1980 about fenders. Operators say they will raise fenders and offer protection at corners.

Maximum Air draft 14 m. in September 1980 call, we used the low loader, which was very beneficial.

Discharge: A discharge rate of 150 t.p.h quoted. Around the 200 t.p.h. is normal. July and September 1980.

On completion the shore personnel drain their line direct into the sea. All personnel engaged in uncoupling must wear full breathing sets. Cargo Engineeer and Officer of the Watch went through three bottles each. (September 1980).

The facility has a storage capacity of 2,800 tonnes and a monthly consumption of about 1,500 tonnes.

Phosphoric and Sulphuric acids are also handled.

General: If second or third port, vessel issued with travelling manifest from previous port to cover cargo and ship's stores.

Be careful to retain Turkish light certificate, if last port, for next Turkish call.

In addition to travelling manifests other papers required:

2 Crew Currency Lists.
2 Crew Declarations.
6 Crew Lists.
1 Vaccination List.
1 List of cash in ship's safe.
1 Health Declaration.
2 Lists of ship's particulars (Turkish Form).
2 Lists of previous ports.
6 Copies of Cargo Manifests (to be stamped at previous port i Foca second or subsequent port).

AUTHORITY: Harbour Master's Office: Aliaga – Izmir, Mr. Oktay Dedeoglu, Harbour Master.

SAMSUN: 41.19 N. 36.21 E.

PILOTAGE: Refer to "Canakkale" and "Istanbul".

Harbour Pilot compulsory for all foreign vessels. Ordered by Agent subject to vessel's advance notice of ETA.

ANCHORAGE: Good anchorage in the Outer Harbour.

TUGS: 4 tugs are available.

BERTHING: Harbour protected by two breakwaters, entrance width 300 m., depth 11.9 m.

Main quay, 956 m. long, depth alongside from 6.5 m. to 11 m., providing 4 deep-water berths.

BULK HANDLING FACILITIES: Coal and ore handled at the Main Quay. Coal unloading by electric quay cranes and ore by rail mounted shiploader. Grain silo with 34,000 tonnes capacity.

Also see "Developments".

CRANES: 30 cranes, capacity 3 – 30 tonnes.

FRESH WATER: Available from the quay.

FUEL: Not available.

STEVEDORES: Working hours for general cargo: From 0800 hrs. to 2400 hrs. in 2 shifts.

For bulk cargo: 24 hours operations in 3 shifts.

DEVELOPMENTS: New bulk cargo quay under construction. Length 500 m., depth 12 m.

SINOP: 42.01 N. 35.08 E.

DOCUMENTS: See "Izmir."
PILOTAGE: Not available.
ANCHORAGES: Good anchorage in front of pier in 9 m. – 18 m.
RADIO/VHF: No facilities.
BERTHING: One pier, length 180 m. Max. draft 7.5 m.
STEVEDORES: *Working Hours:* 0730 – 1700 hrs.
MEDICAL: Facilities available.
DENSITY: 1025.
FRESH WATER: Available.
REPAIRS: Possible.
CONSULS: None.
REPATRIATION: Not possible.
AIRPORT: At Samsun, distance 190 km.
TIME: GMT plus 2 hours.
AUTHORITY: Liman Baskanligi, Sinop, Turkey. *Tel:* 13. *Contact:* Mr. Hamdi Ersavas.

TRABZON: 41.01 N. 39.46 E.

PILOTAGE: Refer to "Canakkale" and "Istanbul".

Harbour Pilot compulsory for all foreign flag vessels. Arranged by Agent subject to vessel's notice of ETA in advance.

ANCHORAGE: In the Outer Harbour off the breakwater.

MAX. SIZE: Vessels up to 29 ft. draft.

TUGS: 2 tugs available. Towage compulsory for vessels over 550 tons.

BERTHING: Main wharf 410 m. long, depth alongside 10 m. Vessels may be loaded and discharged while moored stern to the breakwater.

BULK HANDLING FACILITIES: Grain handled at the Main Quay using 2 rail mounted loaders. One grain silo with capacity of 10,000 tonnes and 1 warehouse with capacity 10,000 tonnes.

Containers handled by 25 tonne fixed crane.

CRANES: 10 cranes, capacity 3 – 25 tonnes.

FRESH WATER: Obtainable from the quay.

FUEL: Fuel oil obtainable in limited quantities.

STEVEDORES: Working hours from 0800 to 1200 hrs. and from 1300 to 1700 hrs. Overtime can be arranged.

REPAIRS: There are no repair facilities.

DEVELOPMENTS: One quay of 400 m. length near completion. Depth alongside 10 m.

TUTUNCIFILIK: 40.45 N. 29.47 E. (See Plan Book)

SHIPMASTER'S REPORT: July 1981.

LOCATION: IPRAS berths are situated just South of the 'Petkim' chemical complex at Yarimca (See "Yarimca"), as before the railway seems to be the dividing line between IPRAS and PETKIM.

PILOTAGE/APPROACHES: See "Yarimca".

TUGS: Three tugs generally used. 1 Government and 2 IPRAS. All large and powerful but rarely use their full power.

As a rule tug's lines used for berthing and ship's lines departing.

BERTHING: For LPG carriers 2 berths are used. Also refined product carriers use same berths. Crude is imported to a sea island for VLCCs and on the original old jetty for smaller tankers.

The original jetty for all tankers is at the Southern corner of the refinery at Kilier Bar. This is not now used for LPG.

A new berth constructed in 1979/80 is now open 0.5 miles North of the old jetty. At present only the North side of the new jetty is used (No. 2) but soon the Southern side will be in use for all larger vessels for all grades.

The new berth is of modern concrete pile construction with a roadway out from the shore taking the pipes, with the berths leading off at 45° with 4 mooring/fender dolphins to seaward, connected by catwalks.

Draft alongside both berths is 18 m. with 3 m. clearance. Fenders and mooring arrangements are good.

Vessels generally berth head in, so can go either side alongside.

A small tug jetty is at the root of the main jetty.

See "Plans" for dimensions and general layout of all berths.

Mooring: Mooring boat used. 3, 2, 2, each end with line up very precise. Bow comes near the end of the jetty where it bends at 45° to a roadway.

CARGO HANDLING: *Discharge:* Valves shut against ship without warning, high back pressure – 7.5 to 8 bar., and line draining at completion non-existent. 8 in. rubber discharge hose 150 ASA.

No vapour return line as yet, and cannot see one on jetty, but one on old jetty suddenly appeared with IPRAS wanting to return benzene to the ship.

5×10 in. chicksans for refined products on North side.

5×12 in. chicksans plus 2×16 in. chicksans on South side.

Control hut at seaward end of roadway with telephone and a couple of operators.

Rate 250 – 300 t.p.h. when all shore valves open.

FRESH WATER: Available.

DENSITY: 1017.

SURVEYORS: Employed by Turkish Survey Bureau.

GENERAL:

Gangway: Can be a problem due to dolphins. We used accommodation ladder with half BOT gangway section between bottom platform and dolphin.

Customs/Immigration: Customs Officer on board requires room continuously.

Facilities: Agent very helpful. Personnel change through Istanbul Airport without too much difficulty.

Curfew in force from 2400 hrs. to 0500 hrs. for ship's crew, 0200 hrs. to 0500 hrs. for local population.

Overseas telephone calls delayed about 2 hours during weekdays and 30 minutes at weekends.

Lloyd's Surveyor from Istanbul – to be arranged 24 hours in advance. Medical facilities from IPRAS or local doctor through Agent. Izmit about 30 minutes by taxi/car.

General stores, apart from some fresh provisions, are difficult to obtain.

AUTHORITY: Tupras-Izmit Rafinerisi Bolge Mudurlugu, P.O.Box 43, Izmit, Turkey. *Tel:* 31660-31665, 20330-20333. *Telex:* 22285, 33152, 33153, 33154. *Cables:* Umipras, Izmit.

YAKACIK: 36.43 N. 36.11 E. (See Plan Book)

SHIPMASTER'S REPORT: June 1981.

LOCATION: 8 miles North of Iskenderun.

PILOTAGE: Pilotage is compulsory, but we arrived and sailed without Pilot. Permission must first be obtained via VHF Channel 16 through Iskenderun, usually the Agents. On no account must vessels enter and leave without permission.

ANCHORAGES: Good holding ground inside breakwaters, protected from all directions except Southwesterly swell. Permission must first be obtained before anchoring inside.

NAVIGATION: Good navigational entrance marks. No difficulties encountered on entering or leaving, plenty of water.

TUGS: Not available.

BERTHING: Longest wharf appears to be "D", which at present is being extended (see Plan). The smallest being "C", all wharves appear to have plenty of water. (See Plan). All wharves have good access, wharves B, C and D being serviced with rail. Berth "A" has a heavy lift crane of 100 tonnes, no rail.

Berth "D" has a conveyor for bulk cargoes. Most cargo being discharged into road transport.

Cargo Handling: Wharf "D" Bulk, "B" and "C" general cargo, wharf "A" heavy lifts.

CRANES:

Wharf A – 1 × 100 tonnes for heavy lifts
B – 2 × 10 tonnes
C – 2 × 10 tonnes
D – 4 × 10 tonnes

Small mobile cranes also available.

STEVEDORES: Working hours – 24 hours continuous. Shifts change at 1600 hrs. Meal breaks at 1200 hrs. – 1300 hrs., 1700 – 1800 hrs. and 2000 – 2100 hrs.

Rate of discharge good, labour force good. Majority of port handling equipment is new, cranes, rail, etc. No warehousing available.

FRESH WATER: Fresh water obtained by road tanker only, in quantities of 40 tonnes. Usually supplied at night as they supply the steel town during the day.

FUEL: No facilities observed.

MEDICAL: Facilities at Iskenderun.

CONSULS: At Iskenderun.

REPAIRS: No facilities observed.

GENERAL: *Communications:* Rail and road to Iskenderun, no local airfield. All instructions and information available through Iskenderun on VHF Channel 16, calling "Demicargo" which is local control, usually operating 0900 hrs. to 1700 hrs. and available only during working hours (Not meal hours).

Tonnage Handled: By observation only, it appears that relatively large vessels can be handled at the iron ore berth, up to 30,000 tonnes. A new berth is under construction (see Plan) which will be able to handle vessels up to 100,000 tonnes. Other berths are for smaller vessels (A, B and C), the largest being "B".

Principal activities, steel, iron ores, general cargo.

SERVICES: Tank cleaning services and ship chandlers available from Iskenderun.

AUTHORITY: Iskenderun Port Authority.

YARIMCA: 40.45 N. 29.45 E. (See Plan Book)

SHIPMASTER'S REPORT: November 1980.

PETKIM REFINERY:

Petkim is an Industrial complex at the entrance to the Gulf of Izmit, near Yarimca. It includes the refineries of Petkim to the North and IPRAS to the South (see "Tutuncifilik"). As far as can be gathered the railway line is the dividing line.

A wide range of oils, chemicals, gases bulk fertilisers and chemicals are handled. The Products Pier which includes ammonia is in position at Lat. 40° 45.4′ N., Long. 29° 45.1′ E., close by is a bulk handling berth with a solid quay face.

The area in general is one of the main trading areas for overseas shipping in Turkey.

To the North West of the Refinery at Yarimca is Hereke, another important shipping complex.

PILOTAGE: Compulsory Pilot inwards at Darica Point. VHF contact may be possible. Izmit Pilot Office which is the control centre works on Channels 14 and 12.

Proceed to position off Darica Point and sound 'G'. Pilot boards from small tug and the ladder should be about 1 m. from the water.

The Pilot berths all vessels at all Gulf of Izmit ports.

Pilot departs either off berth or at Darica depending on other pilotage requirements and curfew. Pilotage operates 24 hours.

APPROACHES: See BA Chart 467.

TUGS: Two Government tugs available, 1×2,000 h.p. and 1×2,500 h.p. If additional tugs are required they come from Istanbul. For IPRAS refinery only, there are 2 tugs of 2,500 h.p. Tugs generally use ship's line. Tugs rarely use all their power.

BERTHING: Berthing and unberthing throughout 24 hours. The berth is the usual type of tanker berth consisting of a 'T' shaped jetty at the end of a pipe-line roadway. There are dolphins connected by catwalk to main pier (Southern catwalk damaged in November 1980), plus further isolated mooring dolphins about 50 m. off inner dolphins.

Mooring arrangements are not very good with head lines virtually breast lines. (See Plan).

Dolphins have good fenders and ship's centre section stands off jetty face. After dolphin (if port side to) comes on counter. Generally port side to due to anchored vessels, making starboard approach difficult. But possible for starboard side alongside.

It is safe to swing gangway out before berthing. It should be on the end of a derrick as it has to be swung clear of lamp post on quay and landed at an angle of 45°.

DISCHARGE: There are lines for naphtha, benzene, butadiene vapour and liquid, and ammonia vapour and liquid. Butadiene 8 in., ammonia 10 in., both sets chicksans, naphtha and benzene use hoses. The ammonia connections are the Southerly set, ammonia coupling 10 in. 300 ASA to spool piece 12 in. 150 ASA. Shore personnel effect the connection. Vapour return line not used. Samples taken before discharge.

We used forward ship's crossover which gives forward mooring lines a slightly better lead.

Communication with shore personnel difficult due language problems. Hut on quay with telephone.

Refinery seems to have limited tank capacity judging from our 2 visits and has to transfer product to other plant at re-liquefaction rate of around 50 tonnes per hour. Not able to ascertain actual tank capacity.

Due to above, discharge rate varies from about 300 t.p.h. to 500 t.p.h. with back pressure varying from 2.5 to 7 bar.

Surveyors as normal, travel around Turkey following ships so can be late in boarding if ship early, then refinery representative notes temperatures and ullages.

GENERAL: Fresh water available from quay at 40 t.p.h. metered at L.750 (November 1980 £3.60) per tonne. By barge is cheaper at L.30,000 (November 1980 £145) per 50 tonnes minimum but not always available.

Fuel by barge. Istanbul is fairly close so may be cheaper to go to anchorage there for fuel as available by barge but costly.

In November 1980 a curfew still operated 2400 hrs. to 0500 hrs. Travel outside Izmit District not allowed. Difficult to get into either Yarimca or Izmit.

Strict anti-pollution laws in operation.

Over many voyages to this port and Gemlik, air freight items from North Europe always get through.

Lloyd's/Agent: Lloyd's Surveyor from Istanbul also covers all Turkey but travel is expensive.

ZONGULDAK: 41.28 N. 31.49 E.

PILOTAGE: Refer to "Canakkale" and "Istanbul".

Harbour Pilots obtainable from Coaling Company, Pilot boards off port entrance by launch. Ordered by Agent subject to vessel's ETA given at least 24 hours before arrival.

ANCHORAGES: Good anchorage off the harbour in depth of 13 fathoms, sand and mud bottom.

Anchorage prohibited South of a line drawn in direction 292.5° distance 7.5 cables from head of the Northern breakwater. The Southern limit of this area is a line drawn in direction 262° from the head of the Northern breakwater to the shore.

RESTRICTIONS: Harbour entrance between breakwaters. Entrance width 600 ft.

Traffic signals displayed from signal mast on Northern Breakwater, as follows:

2 black balls or 2 red lights, meaning "Harbour closed".

2 black cones or 2 green lights, meaning "Harbour open".

A black ball over black cone or red light over green light, meaning "Do not attempt to enter".

A black cone over a black ball or green light over a red light, meaning "No tug available".

A black ball between 2 black cones or red light between 2 green lights, meaning "Wait. You will be piloted into the harbour".

3 black balls, or 3 red lights, meaning "Because of unfavourable weather you cannot be piloted into the harbour".

TUGS: 5 tugs available.

BERTHING: Coal quays length 1,650 ft. depth alongside 10 m.

Cargo quay length 500 ft. depth alongside 10 m. Loading rate 350 – 450 t.p.h.

Northern Breakwater, 2 berths, at inner end with depth of 7 m. alongside.

CRANES: Shore cranes up to 15 tons capacity and floating crane 60 tons capacity.

FRESH WATER: Available from the quays.

FUEL: Only coal bunkers available.

NOTES

Please also advise Shipping Guides Ltd.

Tuvalu

FUNAFUTI: 08.31 S. 179.13 W.

DOCUMENTS:
Customs: Boarding of ships after Radio Pratique granted.
Clearance from the Last Port.
Crew List.
List of Passengers.
Stores' Lists.
Ship's Inward Report.
List of Unmanifested Cargo.
Crews' Stores.
Manifest and Bill of Lading.
Health: Radio Pratique to be granted within 24 hours before arrival.
Vaccinations against Cholera.
Immigration:
Crew List.
Passenger List.
Next Port of Call.
Final Destination.
Passport.

PILOTAGE: Local Master available on 1 month's prior notice.
Chart: See Chart BA. 2983. Fongafale Anchorage main anchorage.

RESTRICTIONS: None.

MAX. SIZE: See "Te Puapua Passage". Max. depth 15 m. 250 ft. wide at low water.

HEALTH: Radio Pratique available.

RADIO: Funafuti Radio (ZJU) on 6204 kHz.

TUGS: None.

BERTHS: Concrete on pile wharf. 2 berths, lengths are 50 m. and 40 m. respectively. LW depths of 8 m. and 5.5 m.

CRANE: Manual 3 ton crane on jetty.

STEVEDORES: Available on 24 hours' notice, discharge rate high.

MEDICAL: Hospital radio advice available.

TANKERS: Must provide own discharge lines. No residue discharge facilities. Light diesel only available. No tanker berth.

DENSITY: Sea Water.

FRESH WATER: Max. 60,000 gallons in wet season, little or none in dry season, by pipe-line on wharf to vessel.

FUEL: Light diesel only. Max. 5,000 gallons from 500 gallon tanks (hand pump).

FIRE PRECAUTIONS: No special precautions other than normal for tankers.

CONSULS: None.

REPAIRS: None.

SURVEYORS: None.

WATCHMEN: Not required.

HATCHES: By stevedores or crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirit.

REPATRIATION: Air service to Fiji and Tarawa.

AIRPORT: 1.25 miles from jetty, fortnightly service. Special charters by arrangement.

TIME: GMT plus 12 hours.

HOLIDAYS: New Year (1st January); Public Holiday (3rd January); Good Friday; Easter Friday; Easter Monday; Queen's Birthday; Public Holiday (13th June); Bank Holiday (1st August); Tuvalu Day (1st October); Public Holiday (3rd October); Prince of Wales Birthday (31st October); Christmas Day (25th December); Boxing Day (26th December); Public Holiday (27th December).

POLICE/AMBULANCE/FIRE: No telephone. By messenger. Fire engine available.

TELEPHONE: None.

SERVICES: None.

SHORE LEAVE: Allowed after clearance.

IDENTIFICATION CARDS: Not required.

REGULATIONS: No sullage, ballast, tank residue, etc., to be discharged in lagoon.

DELAYS: Unpredictable, depending on whether other ships in port.

AUTHORITY: Ministry of Works and Communications, Tuvalu Government, Vaiaka, Funafuti, Tuvalu. *Cables:* Wocom, Funafuti. *Contact:* M. Teikale, Secretary.

GENERAL: Fresh water available from quay at 40 t.p.h. metered at L.750 (November 1980 £3.60) per tonne. By barge is cheaper at L.30,000 (November 1980 £145) per 50 tonnes minimum but not always available.

Fuel by barge. Istanbul is fairly close so may be cheaper to go to anchorage there for fuel as available by barge but costly.

In November 1980 a curfew still operated 2400 hrs. to 0500 hrs. Travel outside Izmit District not allowed. Difficult to get into either Yarimca or Izmit.

Strict anti-pollution laws in operation.

Over many voyages to this port and Gemlik, air freight items from North Europe always get through.

Lloyd's Agent: Lloyd's Surveyor from Istanbul also covers all Turkey but travel is expensive.

ZONGULDAK: 41.28 N. 31.49 E.

PILOTAGE: Refer to "Canakkale" and "Istanbul".

Harbour Pilots obtainable from Coaling Company, Pilot boards off port entrance by launch. Ordered by Agent subject to vessel's ETA given at least 24 hours before arrival.

ANCHORAGES: Good anchorage off the harbour in depth of 13 fathoms, sand and mud bottom.

Anchorage prohibited South of a line drawn in direction 292.5° distance 7.5 cables from head of the Northern breakwater. The Southern limit of this area is a line drawn in direction 262° from the head of the Northern breakwater to the shore.

RESTRICTIONS: Harbour entrance between breakwaters. Entrance width 600 ft.

Traffic signals displayed from signal mast on Northern Breakwater, as follows:

2 black balls or 2 red lights, meaning "Harbour closed".

2 black cones or 2 green lights, meaning "Harbour open".

A black ball over black cone or red light over green light, meaning "Do not attempt to enter".

A black cone over a black ball or green light over a red light, meaning "No tug available".

A black ball between 2 black cones or red light between 2 green lights, meaning "Wait. You will be piloted into the harbour".

3 black balls, or 3 red lights, meaning "Because of unfavourable weather you cannot be piloted into the harbour".

TUGS: 5 tugs available.

BERTHING: Coal quays length 1,650 ft. depth alongside 10 m.

Cargo quay length 500 ft. depth alongside 10 m. Loading rate 350 – 450 t.p.h.

Northern Breakwater, 2 berths, at inner end with depth of 7 m. alongside.

CRANES: Shore cranes up to 15 tons capacity and floating crane 60 tons capacity.

FRESH WATER: Available from the quays.

FUEL: Only coal bunkers available.

NOTES

Please also advise Shipping Guides Ltd.

Tuvalu

FUNAFUTI: 08.31 S. 179.13 W.

DOCUMENTS:
Customs: Boarding of ships after Radio Pratique granted.
Clearance from the Last Port.
Crew List.
List of Passengers.
Stores' Lists.
Ship's Inward Report.
List of Unmanifested Cargo.
Crews' Stores.
Manifest and Bill of Lading.
Health: Radio Pratique to be granted within 24 hours before arrival.
Vaccinations against Cholera.
Immigration:
Crew List.
Passenger List.
Next Port of Call.
Final Destination.
Passport.

PILOTAGE: Local Master available on 1 month's prior notice.
Chart: See Chart BA. 2983. Fongafale Anchorage main anchorage.

RESTRICTIONS: None.

MAX. SIZE: See "Te Puapua Passage". Max. depth 15 m. 250 ft. wide at low water.

HEALTH: Radio Pratique available.

RADIO: Funafuti Radio (ZJU) on 6204 kHz.

TUGS: None.

BERTHS: Concrete on pile wharf. 2 berths, lengths are 50 m. and 40 m. respectively. LW depths of 8 m. and 5.5 m.

CRANE: Manual 3 ton crane on jetty.

STEVEDORES: Available on 24 hours' notice, discharge rate high.

MEDICAL: Hospital radio advice available.

TANKERS: Must provide own discharge lines. No residue discharge facilities. Light diesel only available. No tanker berth.

DENSITY: Sea Water.

FRESH WATER: Max. 60,000 gallons in wet season, little or none in dry season, by pipe-line on wharf to vessel.

FUEL: Light diesel only. Max. 5,000 gallons from 500 gallon tanks (hand pump).

FIRE PRECAUTIONS: No special precautions other than normal for tankers.

CONSULS: None.

REPAIRS: None.

SURVEYORS: None.

WATCHMEN: Not required.

HATCHES: By stevedores or crew.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of spirit.

REPATRIATION: Air service to Fiji and Tarawa.

AIRPORT: 1.25 miles from jetty, fortnightly service. Special charters by arrangement.

TIME: GMT plus 12 hours.

HOLIDAYS: New Year (1st January); Public Holiday (3rd January); Good Friday; Easter Friday; Easter Monday; Queen's Birthday; Public Holiday (13th June); Bank Holiday (1st August); Tuvalu Day (1st October); Public Holiday (3rd October); Prince of Wales Birthday (31st October); Christmas Day (25th December); Boxing Day (26th December); Public Holiday (27th December).

POLICE/AMBULANCE/FIRE: No telephone. By messenger. Fire engine available.

TELEPHONE: None.

SERVICES: None.

SHORE LEAVE: Allowed after clearance.

IDENTIFICATION CARDS: Not required.

REGULATIONS: No sullage, ballast, tank residue, etc., to be discharged in lagoon.

DELAYS: Unpredictable, depending on whether other ships in port.

AUTHORITY: Ministry of Works and Communications, Tuvalu Government, Vaiaka, Funafuti, Tuvalu. *Cables:* Wocom, Funafuti. *Contact:* M. Teikale, Secretary.

Union of Soviet Socialist Republics

GENERAL: ALL PORTS:

(a) List of Soviet ports and port roads open to foreign vessels:

I. Arctic Ocean Ports

1. Murmansk
2. Onega*
3. Archangel
4. Mezen
5. Naryan-Mar
6. Igarka

*The port of Onega is closed for foreign vessels from 1st September to 31st December yearly.

II. Baltic Sea Ports

1. Leningrad
2. Vysotsk
3. Vyborg
4. Tallinn
5. Pyranu
6. Riga
7. Ventspils
8. Klaipeda

III. Black Sea Ports

1. Reni
2. Izmail
3. Kilia
4. Belgorod-Dnestrovsky
5. Illyichevsk
6. Odessa
7. Kherson
8. Novorossiysk
9. Tuapse
10. Poti
11. Batumi
12. Yalta
13. Sochi
14. Sukhumi
15. Yuzhnyy (Grigorevsky)
16. Ust-Dunaysk

IV. Azov Sea Ports

1. Zhdanov
2. Berdyansk

V. Pacific Ocean Ports

1. Nakhodka
2. Aleksandrovsk-Sakhalinsky
3. Makarevsky (or Due) Roadstead
4. Octyabrsky
5. Shakhtersk
6. Uglegorsk
7. Kholmsk
8. Nevelsk
9. Makarov Roadstead
10. Poronaisk
11. Vostochniy
12. Korf
13. Okhotsk
14. Provideniya
15. Severo-Kurilsk

(b) Addresses and telephone numbers of V/O "Sovfracht", V/O "Soyuzvneshtrans", V/O "Morcontainer" and V/O "Sovbunker":

Vsesoyuznoe Obyedinenie (V/O) "Sovfracht" is the sole organisation in the U.S.S.R. rendering brokerage services to Soviet and foreign Shipowners. V/O "Sofracht" carries out chartering of foreign and Soviet tonnage and is the General Agent for foreign flag vessels in Soviet ports.

Postal address: V/O "Sovfracht" 1/4, Zhdanova Street, Moscow, 103759, U.S.S.R.
Cable: Sovfracht Moscow
Telephone: 926-11-18
Telex: 411168 a, b, 411170 a, b.

Vsesoyuznoe Obyedinenie (V/O) "Morcontainer" is a container and liner broker acting on behalf of Soviet Shipowners and Shippers.

V/O "Morcontainer" is responsible for the programming and arranging of container services and liner shipments, cargo bookings of Soviet and foreign shippers on Soviet and foreign liner tonnage including tracing, leasing of containers and various container equipment.

Postal address: V/O "Morcontainer", 1/4, Zhdanova Street, Moscow, 103759, U.S.S.R.
Cable: Morcontainer Moscow
Telex: 411341, 411168, 411171, 411369
Telephone: 926-91-29.

Vsesoyuznoe Obyedinenie (V/O) "Sovbunker" carries out ships' bunkering and port consignment stock operations.

Postal address: V/O "Sovbunker", 10/12, Kaloshin Lane, Moscow, 121002, U.S.S.R.
Cable: Sovbunker Moscow
Telex: 411170
Telephone: 248-23-52.

Vsesoyuznoe Obyedinenie (V/O) "Soyuzvneshtrans" carries out all transportation and forwarding of export and import cargoes as well as transit of goods via the U.S.S.R. and foreign territories.

Postal address: V/O "Soyuzvneshtrans", 17/16, Gogolevsky Boulevard, Moscow, 121019, U.S.S.R.
Cable: Soyuzneshtrans Moscow
Telex: 411441, 411442
Telephone: 203-11-79.

(c) Guiding principles to comply with when calling at U.S.S.R. ports: When calling at U.S.S.R. ports Masters of all foreign flag vessels are requested to comply with the Instructions and Provisions of the Government of the U.S.S.R. published annually in issue No. 1 of the U.S.S.R. Notices to Mariners. Special Instructions for vessels calling at U.S.S.R. in each particular sea basin published by the General Department of Navigation and Oceanography of the Ministry of Defence of the U.S.S.R. (GDNOMD).

All vessels calling at U.S.S.R. ports must also abide by the Customs and Obligatory Harbour Regulations of each particular port of call which are obtainable through the local Inflot agencies, viz. shipping Agents for foreign flag vessels at U.S.S.R. ports.

(d) Ship/shore radio link: Ships' communication with ports of call is usually maintained through the local port radio stations, some information of which is given in the respective entries for the ports.

Ships' radio stations and/or radio-telephones (excluding VHF), must not be operated when the vessel navigates or lies at anchor within the limits of the port boundaries as well as when calling at or leaving the port, except in emergency, e.g.

when giving distress signals;
when rendering assistance to other vessels in distress;
while making way through the ice;
after having obtained special permission of the Harbour Master.

Note: Superiority in use of radio communication means is given to an icebreaker when leading a convoy of ships through the ice; in case there are two or more icebreakers in a convoy – to a leading icebreaker.

Vessels equipped with VHF radio-telephones must keep them operated in the calling Channel stipulated by the Obligatory Harbour Regulations when navigating within a port limit.

(e) Notice of arrival: The Master of a vessel should send preliminary information to the Inflot Shipping Agency about the vessel and the cargo not later than 12 days prior to vessel's arrival at the port of destination (for tankers, gas carriers and vessels loaded with liquid chemicals, as a rule, 14 days prior to arrival).

In the preliminary Notice the Master should state the following information:

Name and nationality (flag) of the ship;

Port of departure (last port of call);

Draft fore and aft, cargo carrying capacity, volume of holds, measures of hatches, number and location of 'tweendecks, etc.;

Nature and total quantity of cargo and stowage plan; heavy lifts (over 3 tons) to be shown separately;

Amount and spacing of water ballast (for tankers only), as well as the name of cargo which was unloaded from the vessel before taking ballast;

Particulars of inoperative cargo handling gear as well as whether the vessel requires supply of electric power from the shore for lighting purposes during cargo handling operations (all possible damages which may occur either for lack of all relevant information mentioned above or due to untimely and/or incorrect data given by the Master to the Port Authorities when advising ETA, etc., are to be for the vessel's account).

Request for any kind of port services.

More precise information about a vessel's approach to the port (roadstead) of destination is to be given by the Master to the Inflot Shipping Agency. Masters of dry cargo vessels are to inform ports of destination about their ETA at first 96 hours and then 12 hours prior to arrival and as far as Masters of tankers, gas carriers and vessels loaded with liquid chemicals are concerned they are to inform Port Authorities 72 hours and 12 hours prior to their arrival at a port.

Masters of tankers bound for loading/unloading oil products are to inform ports of destination 72 hours prior to their arrival that they have in their possession International Certificate on Civil Liability for Oil Pollution Damage.

According to Charter Parties, Sale Contracts and other documents stipulating conditions of carriage of goods by sea, Masters should give necessary information to additional addresses at stipulated time.

The Port of destination Authorities should be immediately informed by the Master about all unforeseen delays during the voyage.

Vessels calling at ports for bunkers, fresh water, provisions, etc. only, should advise their ETA to the Port Administration in due time stipulated above.

The Port Administration should provide Masters of calling vessels with all necessary information regarding anchorage, berthing and handling of cargo not later than 2 hours prior to vessel's arrival.

Since for some ports time and terms of giving Notice of Arrival are different to that mentioned above, Masters are advised to look at the information for a particular port.

(f) Pilotage: Pilotage is compulsory for all vessels when calling or leaving U.S.S.R. sea ports, as well as when mooring and unmooring. In addition the Pilots perform shifting berths and other duties related to the harbour operations.

A Pilot having boarded a vessel shall be advised by the Master of the precise draft and other particulars necessary for safe pilotage of a vessel.

According to the Merchant Shipping Code of the U.S.S.R. the Master of a vessel shall be obliged to pay a fine in an amount of double the rate due as pilotage fee for incorrectly declaring the draft, length or breadth of a vessel or its net registered tonnage, irrespective of the liability established by law for the consequences which may occur as a result of the incorrect information.

A Pilot should be ordered through the local Inflot Agency 12 hours prior to vessel's arrival at the Pilot boarding place. More accurate information should be given 4 hours prior arrival unless otherwise stated in the Obligatory Harbour Regulations.

(g) Anchorages: A vessel approaching the Port of Call and not having been boarded by a Pilot immediately on arrival, or for any other reason, shall anchor in the anchorage area specially designed for this purpose and under no circumstances let its hull go across the boundaries of this area or prevent other vessels from using the leading lights, navigation marks or lights.

No anchorage is allowed in the prohibited zones shown on the charts, listed in special manuals for navigation and/or in the Obligatory Harbour Regulations as well as those announced in the appropriate Notices to Mariners.

No anchorage is allowed at a distance of less than 1.5 cables length off fairways and leading lines as well as in depths not providing a vessel with a safe anchorage while drifting on the anchor chain.

No vessel shall anchor within the water area of a shipbuilding yard after being refused permission to carry out repairs.

It is prohibited to change a vessel's anchorage by drifting.

Vessels carrying explosives or inflammable liquids must anchor in the areas recommended for them only.

All vessels when at anchor shall carry the lights or the marks in accordance with International Regulations for Prevention of Collisions at Sea. Apart from that every vessel by night, when at anchor, shall be illuminated from stem to stern with additional lights placed so that the hull be as far as possible visible from the surface of the water.

Vessels using a kedge anchor shall, in addition to the lights and the marks as to the International Regulations for Prevention Collisions at Sea, conspicuously display by night a white light and by day a red flag lowered from the stern by the anchor chain to the extent of half of the side's height.

In restricted visibility whether by day or night, every vessel when at anchor shall use sound signals conforming strictly with the International Regulations for Prevention of Collisions at Sea.

Masters of all vessels when at anchor are not allowed without the Harbour Master's consent, except in emergency, and/or in case of Port and Boarding officials, to give anybody permission to come alongside in a private launch or a small rowing boat whether under oars or sail and board a vessel.

Swimmers must not be allowed to come on board a ship.

Should, in case of emergency, swimmers have been taken on board or strangers have been discovered aboard a vessel, the Master of such ship shall forthwith without delay report the fact to the Harbour Master and shall later hand those people over to the Representatives of the Port Administration.

(h) **Regulations for entering and leaving U.S.S.R. ports:** When approaching U.S.S.R. ports all vessels must follow the recommended courses announced in issue No. 1 of the U.S.S.R. Notices to Mariners (GDNOMD).

All vessels when approaching a port or a Pilot's boarding place as well as when leaving a port during the daytime must keep their National flags hoisted. A vessel's National flag must be kept hoisted on the stern flagstaff from 0800 hrs. in the morning up to sunset, and the U.S.S.R. National flag on the fore mast. In Arctic ports during prolonged period of light National flags must be kept hoisted from 0800 till 2000 hrs.

Every vessel coming from abroad shall hoist Quarantine Signals of the International Code of Signals depending on health and sanitary conditions on board.

For entry permit a vessel must contact the Port Control service either by VHF radio-telephone or by means of visual signals, viz, by day, hoisting her call-sign, and by night, making call-sign signals in Morse Code by searchlight or by Morse-lamp.

No ship shall enter the Harbour until the proper signal has been hoisted at the signal station or by a pilot boat authorising such entry.

No vessel is allowed to enter the Harbour until the prohibition signals hoisted at the signal station shall have been lowered down.

If entry is refused a vessel must immediately slow down, alter course and if possible leave the fairway, and drift or drop her anchor in the recommended area.

Turn of entry to the Harbour is controlled by the Port Administration with regard to tonnage of vessel, nature of cargo, weather conditions in the port area, readiness of the port to start cargo operations and other circumstances.

Simultaneous entry of two or more vessels to the Harbour or vice versa is not allowed in the majority of ports.

In all cases a vessel entering the Harbour must give way to the outgoing one not preventing her manoeuvrability.

(i) **Sanitary and Quarantine requirements:** It is prohibited by law to contaminate inner and territorial waters of the U.S.S.R. with any kind of substances which are considered to be unhealthy for people or harmful to live resources of the sea. It is also prohibited to discharge into the sea oil contaminated, faecal, washing waters and oil residues; no rubbish, waste foodstuff shall be thrown into the water. The list of harmful substances is published annually in issue No. 1 of the U.S.S.R. Notices to Mariners.

Not later than 6 hours before arrival Masters of all vessels coming from foreign countries to the U.S.S.R. ports should advise Quarantine Authorities by radio through Inflot Agency giving full details of health conditions on board as well as sanitary conditions at the last port of call.

If medical assistance is required on board Master has to contact Inflot Agency.

No shore connection is allowed to a vessel until Free Pratique is obtained.

Masters are advised to ask a Sanitary Officer for inoculation, vaccination, fumigation, de-contamination, etc., if required, whilst he is on board a ship together with the other Boarding Officials.

Veterinary Certificates of Good Health are required for the livestock, all kinds of meat, animal food and raw meat stuff brought to the U.S.S.R. ports from abroad. Certificates should be issued by the proper authorities of the country from which the cargoes have been exported.

Masters should have a Phytoquarantine Certificate for the goods of vegetable nature.

It is prohibited to take ashore fruit, vegetables, grain seeds, plants, plant products, etc., without a certificate issued by a local branch of the U.S.S.R. Agricultural Quarantine Inspection; animals and birds are also not allowed to be brought ashore without getting pemission from the veterinary authorities.

Shipmaster's Report: March 1983.

Removal of garbage, food wastes, ballast, bilge and sewage waters at Soviet ports of the Baltic Sea is free of charge (excluding the port of Tallinn).

(j) **Regulations for the Clearance of Vessels on Arrivals and Departures:**

Upon arrival at a U.S.S.R. port the Master of a foreign flag vessel has to hand over to a representative of the Inflot Shipping Agency the following documents (filled in with full accordance of the IMO requirements) duly signed by the vessel's administration for further examination by:

(a) *Boarding Port of Call Officials:*

(1) Ship's Patent;

(2) Measurement Certificate;

(3) Load Line Certificate (or International Load Line Exemption Certificate);

(4) Passenger Ship Safety Certificate;

(5) International Certificate on Civil Liability for Oil Pollution Damage (for vessels carrying more than 2,000 tons of oil).

(b) *Health Authorities:*

(1) Ship's Health Certificate;

(2) Derat Certificate;

(3) International Certificate of Vaccination;

(4) Maritime Sanitary Declaration.

(c) *Customs Officials:*

(1) General Declaration;

(2) Cargo Declaration;

(3) Ship's Crew Personal Effects Declaration;

(4) Crew List;

(5) Passengers List.

The Master has to declare to the Customs:

(1) Cargo Manifest, Bills of Lading and other documents for the cargoes carried by the vessel.

(2) Other Ship's documents on request.

The Master fills in a form of Master's Declaration (Shipowner's address, cargo, cases of illnesses on board, if any, etc.) with the Agent's assistance.

In accordance with Article 38 of the Merchant Shipping Code of the U.S.S.R. in case a foreign flag ship which, on calling at the U.S.S.R. port, raises doubts as to her meeting the requirements of safe navigation may, irrespective of whether she possesses the necessary ship's papers mentioned above, be subjected to an examination by way of technical survey on the same basis as ships sailing under the State Flag of the U.S.S.R.

The Obligatory Harbour Regulations to be fully complied with during a vessel's stay at the U.S.S.R. ports are handed over to the Master either by Pilot or by representative of the Harbour Master's Office, or by Agent when arriving for the first time.

Upon sailing from a U.S.S.R. port: No other documents apart from those mentioned above are required in order to obtain the authorisation to leave the port.

No vessel is to get under way without having obtained the permission of the Harbour Master.

The authorisation to leave the port shall be given after a vessel herself and her draft shown in the Master's Statement have been checked by a Port Authorities' representative.

The Harbour Master may not allow a vessel to leave the port, if:

(1) The Cargo Loading Regulations have not been fulfilled, *i.e.* a vessel is considered overloaded or wrongly loaded in case:

a) a vessel's load lines corresponding to the maximum depth to which she should have been loaded are under water without any list;

b) the cargoes loaded in the holds and/or on deck have not been made fast in a proper manner or have not been made fast at all;

c) a vessel has a bad list* caused by faulty loading or her stability does not correspond with the ship's documents;

d) a vessel loaded with bulk or liquid cargoes has not used the necessary materials or accommodations to prevent cargoes from shifting or overflowing in case of vessel's pitching and rolling;

e) the deck cargo is considered as danger to the safety of a vessel and the safety or life on board caused by faulty loading;

f) the corresponding regulations for loading of dangerous cargoes or cattle to be carried by vessel have been broken;

g) other loading regulations have not been abided by in the course loading.

(2) Under other circumstances which may cause a danger to the safety of a vessel and the safety of life on board, as well as in case when the ship's documentation regulations have been infringed.

(3) When the port dues, tolls and fines have not been paid.

All expenses which may occur due to a vessel's possible delay in the port in connection with the reasons stated above are to be for the Owner's account.

Note: *According to the Harbour Regulations a vessel is not allowed to leave a port if her list exceeds 5° or she has trim by bow which was not specified by her construction.

ANNEX 2

The Memoranda for Masters of Foreign Vessels calling at Soviet Ports.

1. On arrival of the ship the Master is to submit to the representatives of the Port Authorities the following documents (IMO forms) duly signed by ship's administration:

General Declaration (Form I). Filling in of points 8 and 11 is not compulsory (5 copies).

Cargo Declaration (Form II). (4 copies). Filling in of point 6 is not compulsory; points 7, 8 and 9 are to be filled in only for:

a) cargoes for which Bills of Lading were not issued (names of Shippers and Consignees to be stated);

b) transit cargoes;

c) cargoes for other Soviet ports;

d) cargoes of agricultural origin;

Ship's Stores Declaration (Form III) – not required.

Crew's Effects Declaration (Form IV). Amount of Master's and Crew members' valuables (gold, silver, platinum, jewellery, bonds, travel checks, etc.), personal firearms and cartridges (ammunition), explosives and narcotics are to be stated in point 2 (2 copies).

Crew List (Form V) (4 copies).

Passenger List (Form VI) (4 copies).

2. The Master of a ship is to instruct all members of the ship's crew that in accordance with the Rules in force in Soviet ports:

Exportation and importation of Soviet currency is forbidden;

No articles are permitted to be taken ashore or brought on board the ship without permission of the Custom House Authorities;

Articles taken ashore or brought on board the ship and concealed from Customs control shall be regarded as smuggled goods liable to confiscation with a fine imposed;

Likewise, the sale of any articles of foreign origin on the territory of the U.S.S.R. will be regarded as smuggling;

No wastes shall be thrown into the water or on the quay; the discharge of oil contaminated water and/or oil residues is prohibited;

All mooring ropes must be fitted with rat-guard plates;

Only one gangway must be led ashore at night when loading or discharging is not carried out;

It is prohibited to take ashore grain, seeds, plants, plant products, soil, etc. as well as animals and birds;

Violation of the above-mentioned rules will entail penalty in accordance with the laws of the U.S.S.R.

(k) Customs Examination: Immediately after the clearance formalities have been accomplished, all the vessel's premises with cargoes and articles not destined for the port of call and not being allowed to be taken ashore are sealed by the Customs Officials. In case a part of cargo and/or articles, not for discharge at destination port, are stowed in the same area as articles for discharge at the destination port, the sealing is carried out after discharge of articles destined for the port.

Extracts from the U.S.S.R. Customs Regulations:

It is allowed to bring in on arrival to the U.S.S.R.:

1. Personal effects in quantities necessary for the trip.

2. Food-stuff, wine and/or alcohol, cigarettes/tobacco in quantities necessary for personal consumption during the trip, but duty free for 1 person not more than:

spirits-1 litre;

wine-2 litres;

250 cigarettes or 250 g. of tobacco/tobacco articles.

Fresh, salted or smoked meat, fat, dressed poultry, smoked and home-made sausages, eggs, honey, milk and fish-products, but not canned fish – unless permit of the U.S.S.R. Ministry of Agriculture is available.

3. Foreign currency without restrictions on quantity.

Bringing in Soviet currency from abroad (if not stipulated by special agreements), as well as U.S.S.R. State-loan bonds and Soviet lottery tickets is strictly prohibited.

4. Jewellery and every day necessities made of precious metals or jewels without restrictions in quantity (duty free.)

It is allowed to bring in not more than 2 jewellery articles for every day necessities made of pearl only or mixed with pearl having total weight not exceeding 100 gm.

It is prohibited to bring in natural pearl and seed-pearls.

5. Foreign currency, jewellery and every day necessities made of precious metals or jewels and pearl must be declared to the Customs.

6. It is *strictly prohibited* to bring in to the U.S.S.R.:

Fire-arms and ammunition of any military kind;

Narcotics and psychotropic substances as well as appliances for Smoking opium and hashish;

Printed matter cliche, negatives, developed films, photos, video-cassettes and video-discs with films recorded on them, manuscripts, gramophone records and any other type of sound recording, drawings, pictures and articles of fine arts containing data which may do harm to political and economic interests of the U.S.S.R., State security, public order, human health and morals of the people.

It is allowed to take out when leaving the U.S.S.R.:

7. Personal effects, foreign currency, jewellery and every day necessities made of precious metals, jewels and pearl that had been brought to the U.S.S.R. earlier.

(Taking abroad U.S.S.R. currency if not stipulated by special agreements, U.S.S.R. State-loan bonds and lottery tickets is strictly prohibited.)

8. Food-stuff, wine, spirits and cigarettes/tobacco in quantities necessary for personal consumption during the journey but not more for a single trip than:

spirits – 1 litre;

wine – 2 litres;

250 cigarettes or 250 g. of tobacco/tobacco articles;

black or red caviar – 150 g.;

ground or instant-coffee – 200 g.;

spices 200 g.

9. Articles bought for officially received Soviet currency for personal use only, not more than 5 pieces of jewellery and/or every day necessities made of precious metals, jewellery or any kind of pearl in total; articles and decorations made of silver having total weight not more than 400 g.

10. It is allowed to take out without quantity restrictions any articles (except forbidden ones) bought for foreign free currency in specialized shops on the U.S.S.R. territory on producing corresponding bills (receipts) given by shops.

11. It is *prohibited* to take out of the U.S.S.R.:

1. Fire-arms and ammunition of any military kind as well as military outfits.
2. Narcotics and psychotropic substances.
3. Nullified securities.
4. Works or art, antiquities (paintings, sculptures, china, articles made of crystal, ceramics, wood, leather, precious and non-precious stones and metals, bone, hand-work, carpets, gobelins, furniture, fancy clothes and footwear, numismatics, works of art, weapons, books, manuscripts, gramophone records, musical instruments, stamps, etc.) and other articles being a high artistic, history making, scientific or other cultural valuables.

Note.: Above mentioned articles may be taken out of the U.S.S.R. with special permission of the U.S.S.R. Ministry of Culture provided an export duty equal to 100% of the value stated in the Export Permit has been paid.

5. Antlers and hides of stags.

(l) Berthing: Berthing can only be effected with tug assistance and a State Pilot on board. Likewise, no vessel shall leave or shift berth without employing the services of a Pilot authorised by the Port Administration to make the voyage in question.

Vessels must take up the berths assigned to them and conform strictly to the Obligatory Harbour Regulations in force.

A Pilot or the Agent shall provide the Master with all necessary information as regard to depths, tugs, conditions in the Harbour, etc., before mooring and shifting berth starts.

The responsibility for the safety of a vessel during her manoeuvring and berthing as well as for possible damages to a berth or other port facilities shall always rest with the Master.

No vessel is allowed to change berth due to handling of cargo or for any other reason unless the main engines, the mooring winches, the steering gear, etc., are in good working order and there is sufficient number of the members of the crew to ensure shifting berth when required.

It is strictly prohibited to work with vessel's propellers when lying alongside berth. To avoid damage to the underwater parts of a berth while mooring or unmooring every vessel must have the main engines going "dead slow" until her stern is 10 m. from the quay.

When berthing, Masters should use strong and reliable mooring lines and make them fast over the quay pile-moorings and bollards only. It is strictly prohibited to make fast mooring lines over any part of the quay equipment which has not been intended for that purpose.

When lying alongside berth, every vessel must have a gangway or a gangway board with a lifeline secured, led ashore and made fast. There should be a net under the gangway platform and a lifebuoy nearby. Gangways must be sufficiently illuminated at night.

(m) Stay in port at berths: When lying alongside berths, all vessels to be moored by long safe ropes which are to be kept fast at all times, and constant watch should be kept by day and at night.

All mooring ropes must be fitted with rat-guard plates.

From sunset to sunrise all vessels' decks, cargo decks and gangways must be illuminated.

Every vessel, whether in the outer roads or in the harbour, must always have on board a sufficient number of crew to be able to ensure both the ship's safety and her everyday routine. Vessel's fire-fighting and life-saving equipment must always be ready for use on board or to render assistance to other vessels or shore objects in case of emergency.

When in port, no vessel is allowed, without having obtained the Harbour Master's permission, to make repairs to the main engines or to the ship's auxiliary equipment thus depriving her of the opportunity to shift berth at short notice in case of emergency.

It is not allowed, without the permission of the Port Administration, to use vessel's boats, underwater oxygen and any underwater apparatus of other types.

No vessel is allowed to clean boilers or discharge any sort of chemicals or organic products into the water, giving off smoke and sparking from vessels' funnels.

(n) Ship's movement in the harbour and shifting berths: No vessel shall leave or shift berths without the permission of the Port Authorities. In case there are no provisions in the Contract of Carriage of Goods by Sea or in the Bill of Lading, a vessel shall accomplish one shifting from berth to berth during the course of her loading and shifting upon unloading to the loading berth at the Owners' risk and expense. Any subsequent shifting shall be at the expense of the goods.

All shiftings in the port connected with a vessel's needs, viz. bunkering, loading supplies and/or provisions, making repairs, etc., shall be at the expense of the vessel.

All haulings both during the course of loading and unloading shall also be at vessel's expense.

(o) Tugs' assistance: Tugs, if necessary, are usually ordered by the Master according to a Pilot's advice.

In some ports use of tugs during mooring and shifting berths is compulsory due to the heavy conditions of navigation.

Ordering of tugs and payment for the assistance rendered is made in accordance with the tariffs in force. Masters of vessels shall order tugs through a local Inflot Shipping Agency.

A tug's detention time at a vessel's side while waiting for her readiness for the towage is considered to be as the working time and therefore is to be paid accordingly.

For cancellation of a tug, a vessel shall be charged full rate, including detention time and time of passage of a tug from the berth to the vessel and vice versa.

When ordering a tug for unmooring, Master should fill in and sign a special application form given by the Agent. The actual time of completing the towage shall be approved by the Master of a towed vessel.

In ports where the towage is compulsory when mooring and shifting berths, the Master shall be charged for the tugs' assistance whether used or not, and having refused tugs shall be held responsible for the consequences thereupon.

(p) Notice of Readiness: In case there are no special provisions in the Contract of Carriage of Goods by Sea, the Master shall, during the established office hours upon the accomplishment of Customs formalities and having obtained Free Pratique, deliver through his Agent in the port, viz. Inflot Agency, a notice of the ship's readiness for loading or unloading to the consignee or the shipper.

The notice of the vessel's readiness shall be considered accepted if she is actually ready to load the cargo into or unload it out of all the vessel's holds or tanks.

(q) Handling of cargo: All cargo handling areas in the ports are under control of the Port Administration which shall provide vessels with labour, tally staff, sheds and warehouses, employees, etc.

To ensure successful handling of cargo the vessel shall, when required by shippers or consignees, receive or discharge cargo day and night, as well as on Sundays and holidays, furnishing free of charge all necessary cargo handling gear. Though in most ports the cargo handling is done by port cranes both from the quays and lighters, a vessel shall, in some ports, use her own cargo handling equipment, which has to be in good working condition.

In the latter case, the Master shall produce to the Agent the Cargo Equipment Certificate which must be valid.

Loading or unloading time is calculated as to the rates stipulated in a Charter Party or according to the Customs of the Port in the absence of same.

Should the port labour participate in the opening or closing of hatches, a vessel's administration shall be responsible for the rules of safety engineering to be complied with.

Opening and closing of mechanised ship's hatches shall always be done by the ship's crew.

Should shore cranes be used for loading or unloading instead of a vessel's cargo-handling equipment, the Master shall beforehand remove aerials, aerial halyards, stay rods, wires, etc., crossing the air space over a ship's hatches and preventing the shore cranes' derricks from free circulation.

The vessel's derricks shall not project over the sides.

(r) **Agency:** All foreign vessels upon arrival at the U.S.S.R. ports are attended by the Maritime Agencies Inflot.

Inflot Agencies provide foreign vessels with the following services:

Inform the Port Authorities and other organisations about vessels' expected time of arrival (ETA), nature and quantity of cargo to be handled, expected time of loading or discharging, etc.;

Render assistance to the Masters in obtaining Pilots, tugs, berths, launches, etc.;

Perform all the necessary formalities connected with the vessels' arrival and departure;

Ensure that Masters are acquainted with the Port Rules, Obligatory Harbour Regulations as well as other documents and instructions issued by the Port Authorities;

Give advice to the Shipowners and other interested parties regarding vessels' movement and the prospects for the handling of cargo;

Render help in speeding up cargo handling operations;

Provide vessels with supervisors and tallymen;

Prepare time sheets and submit them to the Masters, Port Authorities and Shippers (Consignees) for their further approval;

Sign on Masters' behalf cargo and other documents;

Arrange bunkering, delivery of fresh water, provisions, technical supplies and all kinds of ship-repairs;

Render help to the members of the crews in obtaining medical assistance;

Make payment of dues, charges, fines (if any), etc., on behalf of the Shipowners and for their account;

Take all necessary measures for improvement of the handling of cargoes and ships' services;

Look after the Court (Arbitration) cases and cargo claims on behalf of the Shipowners;

Make Sea Protests as well as translation and duplicating of any documents on Masters' requests;

Repatriate members of the crews from the U.S.S.R. to their home ports;

Invite surveyors qualified by the U.S.S.R. Register of Shipping to conduct vessels' surveys;

Make extension of ships' documents;

Render help to the Shipowners in delivering and redelivering of their vessels on time charter;

Assist in arranging cargo fumigation on board;

Perform any commissions on the instructions of the Shipowners in regard to the ships' services and protection of their interests before any Authorities.

It is in the interest of the Master to advise Inflot Agency timely information as regard to a vessel's name and flag, ETA, gross register tonnage; draft fore and aft; position of cargo in hold (stowage plan); number, weights and location of heavy lifts, number and length of oversized (over 9 m.) pieces and Owners' cable address and telex number thus putting the Agent in a position to calculate the approximate sum of the disbursement expenses and ask the Shipowners to remit same (disbursement accounts are to be paid before vessel's departure).

Note: Bearing in mind the fact that most of the shore offices are closed on Sundays and holidays, the Master shall cable to Inflot Agency well in advance his order for bunkers, repairs, technical supplies and cash to enable the Agent to make necessary arrangements.

All branches of Inflot Agency work round the clock, including Sundays.

Cable address of any branch of Inflot Agency is "Inflot", e.g. "Inflot Leningrad".

(s) **Fire safety measures:** Fire safety measures at U.S.S.R ports must comply with the provisions of the International Code for the Carriage of Dangerous Goods by Sea. Every vessel upon arrival at a port must keep constant fire watch day and night and have fire-fighting and life-saving equipment always ready for action. Members of the crew must keep strictly to the Fire Safety Regulations especially during vessels' stay at oil and timber berths. Giving off smoke out of the funnels is strictly prohibited. In all the U.S.S.R. ports a fire brigade could be called over the phone by dialling 01 in case of fire.

(t) **Medical assistance:** Medical assistance, if required, is available, including vaccination and inoculation as well as dispensary and hospital treatment in all the U.S.S.R. ports. In case of emergency an ambulance or a doctor should be called for by telephone – 03 in all the ports.

(u) **Customs of the ports:** Customs of the ports should apply in case:

(1) there is no Contract of the Carriage of Goods by Sea at all;

(2) there are no provisions in a Charter Party or in the Bills of Lading in respect of items covered by these Customs;

(3) a Charter Party or a Sale contract and/or any other Contracts of the Carriage of Goods by Sea specially refer to these Customs of the Ports.

(v) **National and general holidays of the U.S.S.R.:** National and general holidays in the U.S.S.R. are fixed.

5 days working week with 2 holidays has been introduced for most of the industrial enterprises, government and commercial offices and other institutions. Saturdays and Sundays are weekly holidays in the U.S.S.R.

The other holidays are:

1st January (New Year's Day); 8th March (International Women's Day); 1st and 2nd May (Days of International Workers' Solidarity); 9th May (World War II Victory Day); 7th and 8th November (Anniversary of the Great October Socialist Revolution, 1917); 7th October (U.S.S.R. Constitution Day).

(w) Places of Recreation for foreign seamen: In the majority of the Soviet commercial sea ports foreign seamen can spend their spare time in the International Seamen's Clubs which can offer concerts by professional and amateur actors and singers, evenings of public hearing of recorded Russian and foreign music, Soviet and foreign films, etc. Sightseeing is usually organised by the local excursion bureaux.

(x) Summer Time: 1st April to 1st October – clocks advanced 1 hour at 0000 hrs.

ARCHANGEL: 64.34 N. 40.30 E.

LOCATION: A White Sea port. Archangel is situated at the mouth of the Severnaya Dvina river, in the S.E. corner of Dvina Bay. A part of the harbour is situated at the Northern end of the Povrakulsky Island, at the junction of the Maimax river and the Kuznechikha river, and is called the Economia Avant-port. The total length of the port area is about 30 miles.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Notices of ETA in accordance Soviet Wood Charter Party. Pilot boat located in area of the light buoy "Mudyugsky I". VHF Channel 16. Pilot boat is tug-boat with word "Pilot" on wheelhouse. Vessels awaiting Pilot may anchor at safe distance to North from pilot boat location. In event bad weather pilot boat goes to shelter, being available by VHF radio.

While waiting for a Pilot, vessels may lie at anchor at a safe distance to the North from the pilot boat location.

In the event of bad weather a Pilot shall board a vessel at a sheltered place shown by him.

When a Pilot is not able to board a vessel due to weather conditions, a pilot boat is usually situated on the Southern side of the Mudyug Island. In this event vessels should anchor at the entrance of the channel from seaward and wait for a Pilot's arrival.

ANCHORAGES: There are several places which can be used by foreign vessels for anchorage. They are:

(1) The outer roads with depths from 10.0 m. to the North and N.W. from the reception buoy "Mudyugsky I".

(2) The Chizhovsky roadstead with depths of 7.0 m. – 9.0 m. is used by all vessels while the Customs formalities are carried out both before entering and leaving the port.

(3) The Solombala roadstead with depths of 5.0 m. – 9.0 m. is used by vessels for anchorage while awaiting a berth for loading cargo.

(4) The roadstead of the Maimaksansky timber port with depths of 5.0 m. – 9.0 m. is used by vessels while awaiting a berth for loading cargo or when awaiting good weather for going to sea being fully loaded.

(5) The Lower-town roadstead with depths of up to 6.0 m. is used for anchorage by coastal traders.

(6) The Town roadstead with depths of 6.0 m. – 9.0 m. is used for anchorage by vessels while waiting for bunkering or time for passage under the railway bridge.

(7) The Krasnoflotsky roadstead with depths of 9.0 m. is used for anchorage by vessels awaiting a berth for loading or a passage time under the railway bridge. The ground at all roadsteads – mud and sand; anchoring is performed according to the Pilot's recommendations.

RESTRICTIONS: Ice breaks up in April. Port area open from end of April through to November.

During the time of high water vessels can enter the port through the approach channel Berezovy Bar if having length not more than 160 m. and draft not exceeding 7.9 m. Changes of passage drafts are published in the U.S.S.R. Notices to Mariners. Vessels going to Timber Mills No. 2 and No. 3 as well as to the cargo area Bacariza pass through the central draw span of the railway bridge once during 24 hours. During bad visibility (less than 5 cables) movement of vessels within the port is not allowed.

HEALTH: All vessels coming from foreign countries inspected by Sanitary Office. If no diseases vessel obtains Free Pratique. If vessels entering after calling at another U.S.S.R. port, Pratique automatic.

RADIO: All information from sea may be routed through Murmansk Radio (UMN) and Archangel Radio (UGE), A1 500 kHz, A3 2182 kHz.

All vessels when approaching the port of Archangel should establish radio contact through the coastal "Archangel Radio" station which operates 24 hours per day on the following frequencies:

	Frequencies (kHz)		*Type of trans-mission*		
Call Sign	*working*	*calling*		*Time*	*Remarks*
UGE	500/476	500/480	A1A	H24	
"Archangel-Radio"	2182	2182	H3E	H24	
"Archangel-Radio-1" (CPR)**	156.8*(16)	156.8*(16)	F3E	H24	
"Archangel-Radio-8" (Inflot Shipping Agency)	156.8*(16)	156.8*(16)	F3E	H24	Operates during period of navigation only
"Archangel-Radio-5"	156.8*(16)	156.8*(16)	F3E	H24	
Vessels' movement control (VMC)	156.45*(9)	156.45*(9)	F3E	H24	

*Frequencies are given in MHz.

**CPR – Central Port Radio station.

The storm signals station is situated in the Solombala area on the embankment of the Severnaya Dvina River named after George Sedov (Lat. 64° 35′ N., Long. 40° 30′ E.).

Storm signals are shown by the International Code of Signals by day and by Morse system at night.

Masters of vessels proceeding to the port of Archangel should advise ETA and all necessary information to the Inflot Agency as per conditions of the "Soviet Wood" Charter Party.

24 hours prior to arrival advise ETA to Inflot Agency. Four hours prior to approaching the "Mudyugsky I" Masters should advise more precise time of arrival.

TUGS: If necessary ordered 2 hours before arrival and normally join vessel near berth. Usually use ship's lines.

BERTHING: To certain extent depends upon tides. 37 berths available with depths alongside up to 9.6 m.

There are a large number of berths in the port along the river front, as well as at the Economia Avant-port.

Berths are equipped to handle timber, wood-pulp, paper, machinery and general cargo. There are enclosed warehouses and concrete floor sheds in the port.

CARGO HANDLING FACILITIES: Berths of the commercial port are equipped with mobile electric cranes of up to 32 tons capacity. Loading of timber from berths of timber mills is effected by shore cranes and vessels' cargo gear. There are also floating cranes from 5 to 100 tons capacity as well as other cargo handling equipment and interport transport means. Container crane of 30 tons capacity and back-up facilities.

BRIDGES: Vessels proceeding to load cargo at sawmills 2 and 3 have to pass under bridge which is opened once a day.

STEVEDORES: No particular ETA advices to stevedores/shippers required except those mentioned in Soviet Wood C/P. Loading rates, etc., also stipulated by Charter Party.

Mobile electric cranes of up to 20 tons capacity are operated on the quays. There are also floating cranes of up to 50 tons capacity, other cargo handling equipment and intra-port transport facilities. Sometimes, cargo handling is by vessels' gear.

MEDICAL: If any medical attention or prompt assistance required, Master has to contact Agent. No advance notice required. Clinic and hospital available.

DENSITY: Fresh water practically throughout port.

FRESH WATER: Usually delivered by self-propelled barges (minimum charge for 15 tons). A few berths equipped with shore water lines.

FUEL: Bunkers (gas oil and marine diesel fuel) can be taken from barges stationed in the Town roadstead or can be delivered by lighters.

FIRE PRECAUTIONS: While lying alongside timber berth vessel to take maximum fire precautions.

GANGWAY/DECK WATCHMEN: Not available from shore. Usual watch kept by ship's crew.

OPENING/CLOSING HATCHES: Normally carried out by ship's crew.

CERTIFICATES:
Seaworthiness.
Measurement.
Loading Line.
Cargo Equipment.
Safety Equipment Certificates.
Radio Telegraphy.
Radio Telephony.
Oil Pollution Prevention.
Sewage Pollution Prevention.
Derat Certificate.

CUSTOMS ALLOWANCES: Tobacco/wine: No quantity limits, but not allowed to be brought ashore.

IDENTIFICATION CARDS: Only Seamen's Books required.

CONSULS: No Consuls in Archangel.

REPAIRS: All types of repairs possible, also underwater surveys.

DRY DOCKS: There are floating docks with capacity up to 7,000 tons.

SURVEYORS: Register of Shipping of the U.S.S.R.

REPATRIATION: Repatriation and crew changes require visa formalities.

AIRPORT: Airport near town. Served by regular airlines.

TIME: GMT plus 3 hours, October 1st to April 1st. GMT plus 4 hours April 1st to October 1st.

HOLIDAYS: General holidays: all Sundays and Saturdays: January 1st (New Year's Day); March 8th (World Women's Day); May 1st, 2nd (World Labour Day); May 9th (Victory Day); October 7th (U.S.S.R. Constitution Day); November 7th, 8th (Great October Socialist Revolution Day). Cargo work on these days at shippers' discretion.

POLICE/AMBULANCE/FIRE: Police 02; Ambulance 03; Fire 01.

TELEPHONES: Can be arranged on board.

SERVICES: Compass adjusting, radar and radio repairs, etc.

SHORE LEAVE: Each crew member properly signed in Ship's Articles and having valid seamen's Book allowed ashore.

BANKS: None.

EMERGENCY CO-ORDINATION CENTRE: None.

STORING: See "Prelims" page viii.

1. Barge or truck.
2. Vessels can be stored during loading.
3. Trucks can proceed alongside.
4. No.
5. Customs permission required.
6. No.

NAVIGATION: Masters proceeding for loading timber should bear in mind that the swing bridge on their way to Timber Mills No. 2 and No. 3 is open once daily.

All vessels with drafts of less than 3.6 m. especially when engaged in towing timber rafts, should keep out of the way of deep-drafted vessels when passing through narrow places and approaching channels both at sea and in the river, and should not hamper their safe passage in such places. They should also safely pass vessels engaged in dredging of a channel.

When approaching a bend in a channel, every vessel should beforehand give a signal by 1 prolonged blast on her whistle or siren, reduce her speed and when it is safe and practicable, keep to that side of the channel which lies on the starboard side of such vessel.

Every Master when passing through a narrow channel, or approaching a bend in a channel should take positive early action prescribed by the International Regulations for Preventing Collisions at Sea to avoid a risk of collision with a vessel approaching from the other direction.

Deep draft vessels shall not overtake each other when navigating in the channel of the Beresovy Bar. A vessel proceeding to the port along the course of the channel must keep out of the way of another vessel leaving the port.

No vessel shall navigate in the port harbours in restricted visibility when navigational lights, marks, leading lights, buoys, etc. are not visible.

Ice: At the head of Dvina Bay drift-ice extends as far as 12 miles from the shore by the end of November. The Severnaya Dvina estuary usually gets frozen over at the beginning of November. At Dvina Bay the ice usually breaks up in April and at the Severnaya Dvina estuary – at the beginning of May. Thus, navigation in the port area lasts all year round for vessels with ice-class for White Sea.

Powerful ice-breakers, ice-strengthened vessels and tugs are maintained by the Port of Archangel Authorities to assist in navigation of the Dvina Bay waters and off the coast when ice conditions prevail.

Tide: The tidal range at the head of Dvina Bay reaches 0.8 m. – 1 m. and at Mudyug Island 0.1 m. – 0.5 m.

The in-going flood stream is usually stronger and about 1 hour longer in duration than the out-going ebb stream.

Sometimes the in-going stream at the bar of Severnaya Dvina may be hardly observed, being reduced to a few minutes of slack water. It may run steadily for some time then gradually attains its usual strength and goes on to set up to the time of high water.

The tidal streams in the Severnaya Dvina are considerably influenced by both strength and direction of the wind.

Moderate Northerly and Westerly winds increase the height of the tide and hold the fall of the water.

Only the in-going flood streams have been observed at the Severnaya Dvina estuary at springs. The extreme tidal range of the water level observed there is about 4 m.

DELAYS: On account of rain when loading timber.

DEVELOPMENTS: For the immediate future no draft increase expected. Some berths under reconstruction and cranes being installed to load timber.

AUTHORITY: Chief of the Port of Archangel, 163061 Naberezhnaya Lenina 36, Archangel, U.S.S.R. *Tel:* 37840. *Telex:* 242111. *Cables:* 163061 Morport Archangel. *Contact:* Via VHF.

AGENT: Shipping Agency "Inflot", Archangel. Tel. 35874, 38573, 34040. Telex: 242115, 242231.

BATUMI: 41.39 N. 41.38 E. (See Plan Book)

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Batumi situated in South of Black Sea Caucasian coast, at head of Batumi Bay. Navigation is year round. Navigational range marks to note when approaching port are: Batumi Beacon, Burun-Tabia Light, Batumi Light Buoy with siren and Batumi Leading Light Marks. When proceeding Batumi, Master should give 96 hours' notice prior arrival, advising Port Controller and "Inflot" Agency: time of arrival, description and quantity of cargo brought in, location, ship's draft and length, as well as declare services required. 4 hours' prior to approaching port, Master shall advise more precise time of arrival. Inflot will arrange Pilot. Pilot on VHF Channels 16 and 12.

Pilot boards vessel either at the Receiving Buoy or in the Outer Port Roads. Watch is kept by a pilot boat day and night.

ANCHORAGES: The port harbour is protected by a mole from the seaward and provides a safe anchorage except at times when S.W., West and N.W. winds blow and the "Tyagun", strong variable current with surge is formed.

At the time of "Tyagun" vessels are recommended to stop cargo handling operations and go out to sea.

During S.W. winds which are considered particularly dangerous and usually accompanied by heavy surge, Masters should observe special precautions and take all necessary measures to avoid impact with the mole.

The Outer Roads of the port with depths of about 9 m. – 20 m. and 0.5 cables in width, extend for a distance of about 1.5 miles to the E.N.E. from the Batumi Light Buoy along the edge of the shoal. The bottom is mud and sand.

The Inner Roads are situated between the Western coast of the Batumi Bay and the shoal extending from the Southern and S.E. coasts of the Bay. Depths in the Inner Roads are between 25 m. – 11.5 m.

The anchorage in the Inner Roads is exposed to North winds. However it is not safe during strong winds blowing from other directions.

Every vessel when in the inner roads must take necessary measures so as not to drag her anchors.

The recommended anchorage is in the Outer Roads at a distance of 7.8 cables to N.N.E. from the Eastern side of Batumi Point, depths 9 m. – 14.4 m.

In the Outer Roads vessels may anchor only after having obtained the Harbour Master's permission and according to Pilot's recommendation.

In the Inner Roads vessels may obtain anchorage only Eastward of the entrance leading line. It is strictly prohibited to lie at anchor both on the leading line and to the West of it.

BALLAST: In case of stormy weather, in Autumn and Winter particularly, vessels without cargo must enter the port with ballast water on board, having ensured fore draft not less then 1.5 m. – 1.8 m.

Ballast water should not be contaminated with oil residues.

RESTRICTIONS: Vessels may enter and leave the port at any time of day and night. All vessels when entering or leaving the port must have keel clearance of not less than 0.3 m. (1 ft.).

In the event of stormy weather vessels approaching the port at time of S.W. and N.W. winds particularly, should obtain Harbour Master's entry permit. Vessels coming to the port without cargo are obliged to enter the port with ballast water taken in such a way that bow draft should not be less than 1.5 m. – 1.8 m. Ballast water must be clean. If due to the "Tyagun" vessels are not allowed to enter the harbour, they should anchor either in the Outer or Inner Roads.

All necessary information as regard to changes of wind, possibility or turn of entry to the port for vessels at anchor in the Outer Roads, is given by the Harbour Master over the VHF radio-telephone or by the signal station by flags of the International Code of Signals, in Morse Code or by semaphore signals.

MAX. SIZE: For oil carriers: Berth No. 1, 175 m. LOA, 31.6 ft. draft; Berth No. 2, 165 m. LOA, 30.5 ft. draft; Berth No. 3 165 m. LOA, 30.5 ft. draft; Berth No. 4, 150 m. LOA, 29.5 ft. draft: Berth No. 5, 212 m. LOA, 29.5 ft. draft. For Cargo ships: Two berths where vessels may discharge. Maximum draft 32.5 ft.

RADIO: Send ETA to "Inflot Batumi" 96 hours and 48 hours in advance and confirm 4 hours in advance.

All vessels when approaching the port of Batumi should establish radio contact via Batumi Radio port radio station operating 24 hours per day on the following frequencies:

	Frequencies (kHz)		*Type of Trans-mission*	
Call Sign	*Working*	*Calling*		*Time*
UFA	500	500	A1A	H24
"Batumi-Radio"	2182	2182	H3E	H24
"Batumi-2" (Port Controller)	156.8*(16)	156.8*(16)	F3E	H24
"Batumi-1" (CPR)**	156.8*(16)	156.8*(16)	F3E	H24

Radio-telephone communication via VHF Channels is carried out in A1A type of transmission after preliminary arrangement.

*Frequencies are given in MHz.

**CPR – Central Port Radio Station.

Shore signal station is situated 1.6 cables W.N.W. from Batumi Point. International Code signals, and sometimes storm signals, are hoisted at the mast of the signal station.

VHF: Port Control on Channels 16, 13 and 14. Pilot on Channels 16 and 12. Tugs on Channel 9.

BERTHING: The berths of the port with depths alongside 8.0 m. – 13.0 m. are equipped to handle crude oil and oil products, bulks (coal, grain, ores) and general (machinery and mechanical equipment) as well as passenger shipping.

A vessel should lie at a berth with her bow directed to the port entrance and with her anchor dropped from the proper side. Berthing in the harbour may only be effected with tugs' assistance.

A vessel may be berthed at the outer side of the Oil Jetty after having obtained the Harbour Master's permission.

Vessels entering or leaving the harbour are not allowed to pass vessels loading at the outer (Northern) side of the Oil Jetty at a distance of less than 80 m.

The berths of the port are equipped with electric cranes of up to 20 tons capacity. There is also a floating crane of 100 tons capacity. Other cargo handling equipment, covered warehouses and concrete floor sheds are available. Rate of grain loaders 5 t.p.h. – 120 t.p.h.

TANKERS: Mooring buoys are placed to the North of the Oil Jetty and a pipe-line for loading tankers of up to 40,000 d.w.t. is led up to them. Mooring of such tankers is effected with tug assistance under control of the Senior Port Pilot. Vessels moored to these buoys should drop 2 anchors from the bow with 7 – 8 shackles of anchor chain and strong mooring lines should be lead to mooring buoys from the stern and made fast.

When lying at mooring buoys a vessel should keep a 24 hour VHF watch on receiving Channel and observe corresponding rules of the Port.

TIDE: The range of water level in the port area is small and is due to the effects of strong winds. The maximum range observed 0.6 m.

MEDICAL: Medical attendance in local seamen's hospital. Masters to advise by radio prior arrival of medical attendance required on board.

DENSITY: 1018.5.

FRESH WATER: Supplied ex-shore to ship directly. Maximum pressure 20 t.p.h. Also supplied ex-water barge. Maximum quantity delivered by barge is 650 tons. Rate about 60 – 80 t.p.h.

FUEL: Bunkers may be taken at the oil berths and can also be delivered by bunkering vessel to a ship handling non-dangerous cargo. In the latter case fire precautions must be strictly observed by the vessel taking bunkers.

FIRE PRECAUTIONS: No special precautions. There is 1 fire-fighting boat.

OPENING/CLOSING HATCHES: According to Charter Party and contract.

CUSTOMS ALLOWANCES: Tobacco: No restrictions. Wine and/or spirits: No restrictions.

IDENTIFICATION CARDS: Not required.

CONSULS: Turkey.

REPAIRS: Only minor repairs are possible.

AIRPORT: Batumi connected by airlines with different towns in Soviet Union. Airport situated about 5 km. from port.

TIME: GMT plus 4 hours. GMT plus 5 hours in Summer.

HOLIDAYS: New Year's Day; 8th March (Women's Day); 1st May; 7th October; 7th – 8th November; but port works on those days.

SHORE LEAVE: Crew members allowed ashore till midnight.

SHIPMASTER'S REPORT: There is now a sea-loading berth at this port immediately outside the harbour, the vessel lying to 2 anchors and stern on close to the breakwater and close Eastward of the harbour entrance.

The stern is secured to 2 buoys, using ship's ropes, 5 to a port quarter buoy and 3 to a starboard quarter buoy.

The bow is in about 60 ft. of water and the stern in about 42 ft., and vessels of up to about 40,000 tons d.w.t. are loaded there, this vessel loading safely to a draft of 37 ft. 6 in.

Two 10 in. pipe-lines are connected on the starboard side, 1 for discharging ballast ashore and 1 for loading at a rate of about 1,600 t.p.h. The charge for discharging ballast ashore is 7 kopeks per ton and it is not permitted to discharge any ballast into the harbour.

1 copy of a money list was required.

AUTHORITY: The Port of Batumi Authority, 20 Gogebashvili Street, 384500 Batumi. *Tel:* 3-29-59. *Cables:* Morport, Batumi.

AGENT: The Port of Batumi Main Maritime Agency "Inflot", Postal address: 20 Gogebashvili Street, Port of Batumi, U.S.S.R. Cables: Inflot Batumi. Tel: 9-24-15.

BELGOROD-DNESTROVSKY: 46.12 N. 30.21 E.
(See Plan Book)

GENERAL: The commercial sea port of Belgorod-Dnestrovsky is situated on the North-Western part of the Black Sea coast, on the right side of the Dnestrovsky Estuary (the Southern Basin), at a distance of 80-90 km. to the S.W. of the port of Odessa. Navigational season lasts all the year round, with powerful (600 h.p. – 1,200 h.p.) tug assistance during severe Winters. The Tsaregradsky Lighthouse and the Tsaregradsky Leading Line should be used as guiding points when approaching the port.

Vessels should approach the port along the channel of the Dnestrovsky Estuary which is provided with a good navigational marks system.

DOCUMENTS:

7 General Declaration, IMO FAL Form 1.
7 Crew Lists, IMO FAL Form 5.
2 Crew's Effects Declaration IMO F4.
2 Money Lists.
2 Cargo Declaration IMO Form 2.
Safety Certificates.

PILOTAGE: Pilotage compulsory for all vessels. A Pilot usually boards vessel at Reception Buoy No. 1 (Lat. 46° 04′ N. Long. 30° 30′ E.) situated 1.2 miles to the S.E. of the Tsaregradsky Lighthouse.

ANCHORAGE: The port outer roads with depths of up to 14 m. are situated 0.5 mile to the S.E. of the Reception buoy. The holding ground is good. There is an inner roadstead situated within the port area where usually two vessels can be anchored pending berthing.

RESTRICTIONS: Vessels are allowed to navigate along the channel during daytime only. The port can be entered by vessels with draft of up to 5.2 m. and the maximum height (from the water level) of 26.5 m. Vessels having draft more than 4.5 m. should follow the channel at a speed not more than 5 knots.

During bad visibility vessels which are not equipped with radar are not allowed to navigate along the channel. Vessels are piloted under the bridge 2-3 times daily (during daytime only).

RADIO: Communication is effected through the port radio station "Belgorod-Dnestrovsky-Radio"

Call sign	*Frequencies (MHz)*		*Kind of transmission*	*Time of work*
	working	*calling*		
"Belgorod-Dnestrovsky-Radio"	156.8	156.8	F3	H24

Harbour Master on VHF Channel 10.

Notice of Arrival: When approaching the port of Belgorod-Dnestrovsky Masters of vessels should not later than 48 hours prior to arrival advise the Harbour Master of ETA, draft, maximum height of a vessel in ballast (from the water level up to the top of a mast), kind and quantity of cargo, services required to the vessel. 24 and 4 hours prior to arrival the Master should advise more precise ETA.

TUGS: If necessary, are ordered by the Master after having consulted the Pilot.

BERTHING: The berths of the port have depths alongside of up to 6.5 m. and are equipped to handle timber, containers, generals (rubber, non-ferrous metals, pipes, tinned products, fresh vegetables, fruit and citrus fruit) and other cargoes. There are covered warehouses and open concrete floor sheds in the port.

A port area Bugas is situated 14 km. to the South of the port, at the mouth of the Estuary.

Vessels fully laden with ballast water are as a rule allowed to moor at berths if winds do not exceed force 6. A vessel of a smaller size may be turned broadside to a loaded vessel of a bigger size but not vice versa. It is strictly prohibited to turn a third vessel broadside on to another 2 vessels having been turned broadside earlier.

Opening and closing of mechanised hatches is usually performed by the vessel's crew. Opening and closing of ordinary hatches is carried out by the crew on arrival and departure of a vessel and by the dockers during cargo handling operations. On the berths and on the port territory there are cranes of 20 tons lifting capacity.

FRESH WATER: Available at berths.

FUEL: Diesel oil available.

REPAIRS: Only minor repairs possible.

CONSULS: None.

TIME: GMT plus 3 hours October to March. GMT plus 4 hours April–September.

AUTHORITY: The Port of Belgorod-Dnestrovsky Authority, 81 Shabskaya Street, 272300 Belgorod – Dnestrovsky, Odessa Region, U.S.S.R. *Tel:* 7-61-45.

AGENT: The Port of Belgorod-Dnestrovsky Maritime Agency "Inflot". Postal address: 81, Shabskaya Street, 272300 – Belgorod-Dnestrovsky, the City of Odessa Region, U.S.S.R. Cables: Inflot Belgorod-Dnestrovsky. Telephone: 2-22-01; 2-56-73. Telex: 232717.

BERDYANSK: 46.45 N. 36.48 E. (See Plan Book)

DOCUMENTS: Also refer to beginning of U.S.S.R. section.

5 Crew Lists.
5 General Declarations.
4 Cargo Declarations.
2 Crew's Effects Declarations.
1 Master's Declaration.
1 Master's Declaration about arrival at a Commercial Port of the U.S.S.R.
2 Stores Lists.
1 Maritime Declaration of Health.

For discharging vessels also: Manifests, Bills of Lading and Cargo Plan.

For all vessels, necessary to have all Ship's Papers and Ship's Certificates.

APPROACHES: The port of Berdyansk is situated in the N.E. part of Berdyansk Bay, on the Northern coast of the Azov Sea.

Inner roads and port facilities are protected from Southern and S.E. winds by a mole and a breakwater.

Navigation in the port is all year round, but in Winter ice-breaker assistance is necessary for about two months.

Vessels should proceed to the harbour through the approach channel, with a least depth of 7.0 m.

PILOTAGE: Pilotage is compulsory in Azov Sea. Kerch Pilot meets vessel near the entrance to the Kerch Strait and takes vessel to Berdyansk. Berdyansk Pilot meets vessel at Reception Buoy No. 14 (Lat. 46° 40′ N., Long. 36° 40′ E.). Telegraphic address of pilot station is: "Harbour Master Berdyansk". Vessels bound for Berdyansk should cable "Inflot Berdyansk U.S.S.R."/Ship's Agents/advance notice of ETA: ETA Berdyansk (date shown in group of four figures and if possible GMT of arrival); draft, flag, b.r.t., n.r.t., length, if for loading or for discharging, kind of cargo should also be advised. After which Inflot arranges pilotage through Kerch Channel. First notice of ETA to be sent after leaving last port and then 72, 48 and 24 hours' notice of ETA.

For contacting pilot station use VHF Channel 16. Pilot boat has a white hull with black writing on her side: "Pilot-29". Vessels wait for the Pilot at the outer road anchorage.

ANCHORAGES: Vessels may obtain good anchorage with depths up to 7.0 m. in the port of Berdyansk outer roads situated on both sides of the approach channel leading into the harbour.

The outer roads are well protected from Northerly winds, but during Southern and S.W. winds the anchorage is troublesome.

At time of strong S.W. swell ships in the outer roads are usually effected by heavy pitching and rolling, and plenty of cable should be paid out on both anchors. Holding ground in outer roads is shell and mud.

RESTRICTIONS: Vessels can enter and leave at any time of day and night.

MAX. SIZE: The max. permitted draft for entry to the port is 6.7 m. and max. length 160 m. Keel clearance of 1 ft. at LW is required for entering and leaving.

HEALTH: To obtain pratique it is necessary to complete 1 Maritime Declaration of Health and hand it in for doctor. In the event of any disease or fever contact Agents.

RADIO: *Notice of arrival:* 96 hours and then 12 hours prior to arrival at the port Masters should advise the Port Administration via the local Inflot Agency time of arrival and the maximum draft of a vessel. Not later than 2 hours prior to approaching reception Buoy No. 14, placed at the beginning of the approaching channel, Masters should advise more precise ETA to the Harbour Master.

Vessels should establish radio contact through "Berdyansk Radio" port radio station operating 24 hours daily on the following frequencies:

Call Sign	*Frequencies (kHz)*		*Type of trans-mission*	*Time*
	Working	*Calling*		
UBX	500/418	500	A1A	H24
"Berdyansk-Radio-2"	2182	2182	H3E	H24
"Berdyansk-Radio-1" (CPR)**	156.8*(16)	156.8*(16)	F3E	H24
"Berdyansk-Radio-5"	156.8*(16)	156.8*(16)	F3E	H24
(Harbour Master)	156.6*(12)	156.6*(12)	F3E	H24

*Frequencies are given in MHz.
**Central Port Radio Station.

RADAR/VHF: There is no port radar service in Berdyansk.

Use VHF Channel 16 initally and further communication on another Channel on agreement.

TUGS: Join vessels in inner roads. Vessel's lines usually used. No extra charge for tug lines. Vessels under 1,500 g.r.t. require 1 tug and vessels over 1,500 g.r.t. require 2 tugs.

BERTHING: Berth Nos. 1 – 2: Length 380 m. These berths are for general cargo. Berth Nos. 3 – 4: Length 270 m. These berths are for bulk cargoes (ores, minerals). Berth No. 5: Length 194 m. This berth for scrap iron. Max. permissible draft 22 ft. Load/discharge is by shore equipment. Berth Nos. 6 – 7: Under construction. Berth Nos. 8 – 9: Length 300 m. Depths alongside up to 8.25 m.

CRANES: All quays are equipped with electric cranes. Berth Nos. 1 – 2 are equipped with SOKOL type crane, of up to 32 tons capacity. Berth Nos. 3 – 4 – 5 are equipped with Albatros type crane, of up to 20 tons capacity. Berth No. 8 crane type SOKOL.

SPECIALISED CARGO-HANDLING FACILITIES: None.

BRIDGES: None.

STEVEDORES: Provided by the Port of Berdyansk. Tel. Manager: 392 – 565.

MEDICAL: Medical attendance possible. All members of the crew must have sanitary (yellow) book indicating vaccinations, fever, etc. One hospital available.

TANKERS: No facilities available.

DENSITY: Approximately 1008. Salinity is 11.9.

FRESH WATER: Supplied at berths. Price 0.45 Rbls. per ton.

FUEL: Available in limited quantities. Supplied by special tanker.

CONSULS: No consuls in Berdyansk.

REPAIRS: Only minor hull and machine repairs.

DRY DOCKS: No dry dock in Berdyansk.

SURVEYORS: Inspection of the Registry of the U.S.S.R. Branch Office; Tel. 393 – 452. No cargo inspectors.

GANGWAY/DECK WATCHMEN: Not compulsory or necessary.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: Tobacco, wine, spirits are free of Bond.

CARGO GEAR: There are cargo-handling equipment and intraport transport facilities. No heavy lift crane.

REPATRIATION: Possible.

AIRPORT: Distance 15 km. Internal Soviet airlines only.

TIME: GMT plus 3 hours October to April. GMT plus 4 hours April to October.

HOLIDAYS: New Year's Day (1st January); International Woman's Day (8th March); World Labour Days (1st – 2nd May); Victory Day (9th May); Constitution Day (7th October); Anniversary of the Great October Socialist Revolution (7th – 8th November). Cargo work can be arranged on above days.

POLICE/AMBULANCE/FIRE: Police 02; Ambulance 03; Fire 01.

TELEPHONES: Not possible to place telephones onboard.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

IDENTIFICATION CARDS: Not required. Only seaman's passport.

BANKS: State Bank of the U.S.S.R. only.

EMERGENCY CO-ORDINATION CENTRE: Contact Harbour Master's Office.

STORING: See "Prelims" page viii.

1. Barge or truck.
2. Vessels can be stored by barges during cargo operations.
3. Trucks can proceed alongside at the berth.
4. Fork lift trucks can be used.
5. Storing under Customs permission and control.
6. Local riggers can be employed.

AUTHORITY: The Port of Berdyansk Authority, 13/7 Gorky Street, Berdyansk, 332440, U.S.S.R. *Tel:* 3-22-10. *Cables:* Morport Ocean Berdyansk.

AGENT: Maritime Agency "Inflot" at the port of Berdyansk. Postal address: 9 Uritsky Street, 332440-Berdyansk. U.S.S.R. Cables: Inflot. Tel: 3-92-732, 3-92-639.

IGARKA: 67.27 N. 86.35 E. (See Plan Book)

GENERAL: A sea and river port, Igarka is situated about 344 miles Southward of the mouth of the Enisei river which flows into the Enisei Gulf of the Kara Sea.

The port is open for navigation about 130 – 135 days from July till mid-November. Ice first begins to form in the second half of October.

No tidal range is observed in the port waters.

The port of Igarka specialises in timber exports.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Pilotage is carried out round the clock. Master of a vessel approaching the port of Igarka from seaward has to order Pilots via the Chief of the Igarka Hydrobase and the Master of the pilot boat 48 hours prior to arrival to the Oshmarino Point where the River Pilots usually meet vessels. Confirm ETA 6 hours before arrival.

In case of bad weather, Pilot boards a vessel at a place as directed by the pilot boat. Since the distance of pilotage from the pilot station up to the port of Igarka is about 360 miles, 2 Pilots are usually required for the service.

The Master of a vessel should use VHF radio-telephone (calling frequency 156.8 MHz) or radio-telephone (calling frequency 500 kHz) for establishing the radio contact with a pilot boat in order to check the time and the place of boarding/unboarding of a Pilot.

ANCHORAGE: Information on best location of anchorage, if required, will be given by the pilot boat.

The anchorage in the outer roads is bounded on the East by the leading lines of Igarka and Northern Igarka leading marks, on the West by the left bank of the Enisei River, on the North by the beam line of the buoy of Igarka Oseryodok, on the South by the leading line of Port of Igarka entrance leading marks.

In the event of bad weather or main engine trouble a vessel should lie at anchor in a place as directed by a River Pilot, who shall advise a Master all necessary data about the anchorage.

RESTRICTIONS: Vessels can enter or leave the port 24 hours per day.

To ensure safe passage across the Lipatnikovsky and Turushinsky Bars of the Enisei River, vessels proceeding to the port of Igarka must have draft not exceeding 7.3 m. (see "Max. Size").

MAX. SIZE: Max. LOA 150 m. Also see "Restrictions".

HEALTH: Not later than 4 hours before arrival, Master to radio "Inflot" advising health condition on board. International code quarantine signals to be shown on arrival at port limits. No one, except Pilot and Port Authorities, may board or leave the ship until Free Pratique is given after port health inspection.

RADIO: Radio communication is effected through the "Igarka Radio" port radio station operating on the frequencies given below.

Call sign	Frequencies (kHz) working	Frequencies (kHz) calling	Type of trans-mission	Time of work	Remarks
UFR	500	500	A1	H24	Operates during navigation only
"Sever" (Port)	156.7*	156.7*	F3	H24	

*Frequencies are given in MHz.

Notice of arrival: As per conditions of the "Soviet Wood" Charter Party.

TUGS: Normally join vessel with Harbour Pilot on approaching port. Vessels at anchor order tugs through "Inflot". Ship's tow lines used.

BERTHING: Tug assistance for berthing is compulsory. A berthing Pilot boards a vessel from a tug either in the outer roads or in the port. Depths alongside berths are up to 7.5 m.

After having approached a berth at a safe distance, a vessel, in most cases, should cast 2 anchors and then with tug assistance, turn stern to the Island and moor with 3 mooring ropes led from the stern. When mooring, a vessel should have ready on board 4 mooring ropes each not less than 100 m. in length (3 ropes to be led ashore and 1 rope prepared for a tug.).

Vessels moored in the inner roads must have strong ropes which should be made fast over the pile moorings only.

If 3 or 4 vessels are moored at the quay, the outside ones should have a red light exhibited in the middle of each mooring rope led ashore.

Notice of readiness and other conditions of loading – as per the "Soviet Wood" Charter Party. Opening and closing of hatches by ship's crew.

When a vessel is moored in the inner roads, stern to the Island, loading is by floating cranes; when at berth – ship's derricks are used.

Loading is done by ship's wire strops, with a test label attached to every strop.

MEDICAL: Medical assistance is free, hospital facilities available – all arrangements made by "Inflot".

DENSITY: Fresh water.

FRESH WATER: May be taken from the river in places indicated by the Pilot, but not in the port area.

FUEL: Not always available.

GANGWAY/DECK WATCHMEN: Ship's crew to provide watchmen services.

OPENING/CLOSING HATCHES: By ship's crew.

IDENTIFICATION CARDS: Required for crewmen going ashore.

CUSTOMS ALLOWANCES: Only reasonable quantities for personal consumption may be taken ashore.

REPAIRS: Only minor repairs.

REPATRIATION: No facilities.

AIRPORT: Situated 1.5 km. away, 1 daily flight to Krasnogarsk.

TIME: GMT plus 7 hours (all the year round).

HOLIDAYS: No official holidays are observed during the navigation season.

POLICE/AMBULANCE/FIRE: Police, Tel: 0-02; Ambulance, Tel: 0-04; Fire, Tel: 0-01.

TELEPHONES: Telephones cannot be connected on board vessel.

SHORE LEAVE: Permitted during 0600 – 2400 hrs. subject to police control.

GENERAL: It is forbidden for crew to swim in the harbour.

AUTHORITY: The Port of Igarka Authority, 47 Gorky Street, 663200 – Port of Igarka, U.S.S.R. *Tel:* 4-10, 0-82. *Cables:* Morport Igarka.

AGENT: "Transflot". Cables: "Transflot" Igarka.

ILICHEVSK: 46.19 N. 30.40 E. (See Plan Book)

GENERAL: The port of Ilichevsk is situated on the N.W. coast of Black Sea, on the right bank of the Sukhoi Liman, about 15 miles S.W. from Odessa City.

The Sukhoi Liman is divided by dams into 3 parts called Basin No. 1, Basin No. 2 and Basin No. 3.

A part of Basin No. 1 bounded by the leading line of the Port of Ilichevsk leading lights, thence by the S.W. coast of the Liman, thence by the Southern Sand Headland, is called the Inner Roads of the port.

The berths for large sea-going vessels are along the Western side of the Southern Sand Headland, thence along Southern and S.W. sides of Basin No. 1.

The berths of the Western side of Basin No. 1 are used by fishing trawlers.

Navigation in the port is year round. Ice usually begins to form in the second half of December and finally disappears in February. Ice-breaker assistance is required in severe Winters for about a 30 day period.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: A Pilot usually boards a vessel in the outer roads at the approach light mid-channel buoy. (Lat. 46° 18′ N., Long. 30° 44′ E.). In the event of bad weather the place of embarkation or disembarkation of a Pilot can be changed with a Master's approval.

Vessels proceeding to ports of Kherson and Yuzhnyy take Pilot in the Outer Roads of Ilyichevsk (Lat. 46° 15′ 06″ N., Long. 30° 56′ 01″ E.).

APPROACHES: The approach channel leads from seaward into Basin No. 1. Depths in mid-channel are 13.5 m. Strong Easterly and Southerly winds may cause heavy surge in the channel influencing a vessel's manoeuvrability.

ANCHORAGES: Good anchorages can be obtained in the outer roads situated at a distance of 1 to 5 miles off the coast between the parallels of 46° 12′ N. and 46° 18′ N. The outer roads are open to all winds blowing from N.E. via S. up to S.W.

The anchorage (on charts marked as No. 352 and 351) are situated about 1.2 to 7 miles to the S.E. of the port entrance.

The holding ground is grey mud and clay. Depths in the roads are 19.2 – 25.5 m.

RESTRICTIONS: Entry to the port can be effected day and night.

In the night time movement of the vessels with length more than 200 m. is subject to special permission of the Harbour Master.

Vessel's speed should not exceed 6 knots when navigating along the channel.

MAX. SIZE: The maximum permitted draft is 11.8 m. length 260 m.

Vessels drawing over 11.8 m. must obtain the Harbour Master's permit for entry to the port.

HEALTH: Foreign vessels granted Free Pratique when berthed alongside and all arrival formalities accomplished by the boarding officials, irrespective whether day or night. If berthing delayed, under certain circumstances vessel may be granted Free Pratique at roads where anchored. Event suspected disease Master shall inform Agent by radio. When arriving from another Soviet Black Sea port, Free Pratique automatic.

RADIO: Channel 16 (156.80 MHz) for radio-telephone used for calling only, with subsequent switch to any other Channel. All information addressed to ship's Agent, Cable address "Inflot Ilichevsk", Telex No. 232448. Port Radio UEH.2.

Radio contact can be established through the port radio station "Ilichevsk Radio" operating 24 hours daily on the following frequencies:

Call sign	Frequencies (MHz) Working	Frequencies (MHz) Calling	Type of trans-mission	Time of Work
"Ilichevsk Radio-5" (Chief port controller)	156.675(73)	156.675(73)	F3E	H24
"Ilichevsk Radio-14" (Harbour Master)	156.8(12)	156.8(12)	F3E	H24
"Ilichevsk-Radio-15" (Vessels' movement control post)	156.8(16)	156.8(16)	F3E	H24

The port radar station gives all possible information to all vessels navigating in restricted visibility and in the absence of floating marks, from the point of a Pilot's embarkation up to the port.

Radar navigation is controlled by a Pilot.

A signal post for regulating the movement of vessels is situated at the Northern side of the entrance to the port.

RADAR: Port Radar Station gives all possible technical information to any vessel navigating within Station's broadcast zone, if requested. Navigation in channel controlled by Port Radar Station. Communication between Station and vessels established by radio-telephone on international frequencies.

TUGS: Normally join vessel when approaching mooring berth. Ship's lines used. Number of tugs required for berthing shall be ordered by the Pilot with the Master's consent. Tugs compulsory for vessels over 1,500 g.r.t.

In case Harbour Master grants permission for vessel to stay at anchorage in the Inner Roads to get bunkers, provisions, or for any other purpose a tug should be ordered by ship's Master for the whole period of stay in the Inner Roads to ensure safety of manoeuvring of the other vessels in the port. All expenses on ship's account.

BERTHING: Quays with depths alongside of up to 14.0 m. are equipped to handle oil, general, 20 ft. and 40 ft. containers, bulk and other cargoes. There are mechanised warehouses and open concrete floor sheds.

Electric cranes of up to 45 tons capacity are operated on the quays and by the warehouses. There are floating cranes with lifting capacity of up to 300 tons, other cargo-handling equipment and inter-port transport means.

Opening and closing of mechanised hatches is always done by the ship's crew.

In case vessel is moored at the Inner Road buoys the following requirements should be complied with:

1. Two towing ropes to be kept ready at bow and stern lowered 2 m. over the water surface.
2. To avoid picking up of mooring anchors ropes should be slacked with free board increase whilst discharging.
3. Vessel must be equipped with good pudding fenders to protect her boards and floating facilities alongside.

TIDE: The range of the water level caused by strong winds may reach 1 m. The rise of the water level is due to Northerly winds and the fall of the water level to Southerly winds.

The changes of the water level caused by variation in atmospheric pressure ("Seish" phenomena) are observed periodically. This phenomena can last from a few minutes up to several days and the range of the water level may reach 0.6 m.

STEVEDORES: 12 days' notice is required.

MEDICAL: Medical assistance rendered immediately when requested. Hospital facilities available. Particular inoculations required prescribed by International Sanitary Regulations.

DENSITY: Average density 1010.

FRESH WATER: Available at quays and by barge.

FUEL: Bunkers available.

GANGWAY/DECK WATCHMEN: Watch carried out by crew.

OPENING/CLOSING HATCHES: Mechanical hatches by crew.

CUSTOMS ALLOWANCES: No restrictions. Free use on board.

CARGO GEAR: No additional requirements. Cargo work usually carried out by means of shore cranes.

IDENTIFICATION CARDS: Required.

CONSULS: None.

REPAIRS: Good facilities. All kinds of repairs for vessels of up to 60,000 d.w.t. can be carried out.

DRY DOCKS: Docking arrangements settled with Black Sea Steamship Co. of Odessa, Lastochkina 1 Street. A floating dock, 250 m. length, 18 m. depth. There are new floating docks with a lifting capacity of 15,000 tons.

AIRPORT: The distance from Odessa Airport about 30 km.

TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.

HOLIDAYS: Official Holidays are Sundays and following Calendar dates: January 1st, March 8th, May 1st, 2nd, 9th, October 7th, November 7th, 8th.
POLICE/AMBULANCE/FIRE: All mentioned services easily obtained through Agent.
TELEPHONES: Can be placed on board.
GENERAL: Shipowners recommended deposit funds for disbursements prior to arrival. All bank operations carried out by Vneshtorgbank of Moscow.
SERVICES: Ship chandler's supplies, technical equipment supplies, laundry, car hire.
SHORE LEAVE: Permitted.
DELAYS: Vessels berthed at specialised berths depending upon cargo. Delays if berths occupied. Normally no delays in bunkering.
DEVELOPMENTS: At present port only partially constructed. Work of further development being carried out.
AUTHORITY: Port of Ilichevsk Authority, 2 Korabelnaya Street, 270901, Ilichevsk Odessa region, U.S.S.R. *Tel:* 628-605, 628-634, 628-758. *Cables:* Morport Ilichevsk.

AGENT: The Port of Ilichevsk, Maritime Agency "Inflot". Postal address: The Port of Ilichevsk, Odessa Region, U.S.S.R. Cables "Inflot Ilichevsk". Tel. 668087, 620214, 628661. Telex 232825, 232245.

IZMAIL: 45.20 N. 28.51 E. (See Plan Book)

GENERAL: A sea and river port, Izmail is situated on the left bank of the Kiliiskoe Ghirlo (Kilia Mouth) of the Danube River, between the 92nd and 94th km.

Navigation in the port lasts about 317 days per year. The Danube River usually becomes frozen over at the end of December or early January. In the more severe Winters navigation can be effected with ice-breaker assistance.
DOCUMENTS: Refer to beginning of U.S.S.R. section.
PILOTAGE: Compulsory. Pilot should be ordered through "Inflot" before leaving the port of Sulina giving vessel's ETA at Izmail. Alterations in ETA whilst vessel is navigating the Sulinsky Channel should be advised to "Inflot". Also refer to Sulina, Romania.

Navigation in the Kilia Mouth up to the port of Izmail is allowed with a Port of Izmail Pilot on board, who should be ordered through Inflot Agency after leaving the port of Sulina. ETA at the Chatal of Izmail should be stated in the message. Masters should keep the Port of Izmail Harbour Master informed of all delays in the Sulina Channel and, if necessary, advise alterations in ETA at the Chatal of Izmail.
ANCHORAGE: Vessels can obtain anchorage in the roads situated in the area between 92.6 km. and 95.7 m. and between 86.7 km. and 87.7 km. Depths in the roads from 5 m. – 15 m., the holding ground is soft mud.
RESTRICTIONS: Izmail port is situated on the left bank of the Kilia Channel, channel depths are 10 m. – 20 m. Reni Port is situated on the left bank of the Danube, channel depths are 10 m. – 20 m. Ice-breaker's assistance is available during periods when the Danube is frozen. Draft and length of the vessel entering the port of Izmail should be the same as of vessels navigating through the Sulina Channel.
HEALTH: International code quarantine signals are to be shown on arrival and Free Pratique is given by the quarantine doctor who will board the vessel to examine Master's Health Declaration.
RADIO: Vessels can establish radio contact via the port radio station Izmail Radio operating 24 hours per day on the following frequencies:

	Frequencies (kHz)		*Type of*	*Time of*
Call sign	*Working*	*Calling*	*transmission*	*work*
UJO-3	472	468	A1A	H24
"Ismail-1" (CPR)**	156.8*(16)	156.8*(16)	F3E	H24
	160.65*(1)	156.05*(17)	F3E	H24
"Izmail-2"	156.7*(14)	156.7*(14)	F3E	H24
"Izmail-Post" (Vessels' movement control post)	156.8*(16)	156.8*(16)	F3E	H24

*Frequencies are given in MHz.
**CPR – Central Port Radio Station.
TUGS: Tugs shall be ordered by the Master as directed by the Pilot.
BERTHING: Vessels drawing up to 8.25 m. can enter the port and moor at berths with same depths alongside.

Quays are equipped to handle general and bulk cargoes, metals, chemicals, timber and passenger shipping.

There are enclosed warehouses, open concrete floor sheds and a grain elevator.

Simultaneous berthing and shifting berth of 2 or more vessels at neighbouring berths is not allowed. On the quays there are electric cranes of up to 40 tons capacity. There are floating grain elevators, floating cranes with lifting capacity of 16 tons and other cargo handling equipment and machinery.
FRESH WATER: Available in unlimited quantity.
FUEL: Bunkers available.
GANGWAY/DECK WATCHMEN: Gangway watchmen compulsory, carried out by ship's crew.
OPENING/CLOSING HATCHES: According to the customs of the port opening and closing of hatches is usually by ship's crew but it can also be done by stevedores for vessel's account.
CUSTOMS ALLOWANCES: No restrictions on crew consumption tobacco and alcohol on board. It is prohibited to take these items ashore.
IDENTIFICATION CARDS: Required for crewmen going ashore.
REPAIRS: Hull and machine repairs can be effected.
REPATRIATION: Can be arranged.

AIRPORT: Regular connections with internal services.
TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.
TIDE: Changes of water level in the river are due to effects of the wind and seasonal increase and decrease of the amount of water brought down from the shore. In Winter; rise of water level is due to the ice piling up. Max. range of the water level is about 4.0 m. – 6.0 m.

Max. rise of water level is in April, May and June, usually caused by Easterly winds. The least water level is observed in August, September and October, due to Westerly winds.
HOLIDAYS: New Year's Day (1st January), National Women's Day (8th March); Worker's Day (1st and 2nd May); Victory Day (9th May); Anniversary of October Revolution (7th and 8th November); Soviet Constitution Day (5th December).
POLICE/FIRE/AMBULANCE: Izmail – Police, Tel: 316; Fire, Tel: 524; Ambulance, Tel: 600. Reni – Police, Tel: 205; Fire, Tel: 210; Ambulance, Tel: 203.
SHORE LEAVE: Allowed up to midnight.
AUTHORITY: The Port of Izmail Authority, 7 Port Street, 272630 – Izmail, U.S.S.R. *Tel:* 9-04-06. *Cables:* Morport Izmail.
AGENT: The Port of Izmail Maritime Agency "Inflot". Postal address: 14 Port Street, Izmail, U.S.S.R. Cables: "Inflot Izmail". Tel: 9-01-81, 9-05-29. Telex: 412699.

KHERSON: 46.37 N. 32.37 E. (See Plan Book)

GENERAL: The sea and river commercial port of Kherson is situated on the right bank of the Dnieper River and on the left bank of the Koshevaya River.

The port is open for navigation all the year round but in severe Winters ice-breaker assistance is required.

Ice at the estuary of the Dnieper finally disappears in the first half of March.
DOCUMENTS: Refer to beginning of U.S.S.R. section.
APPROACHES: The port is accessible for sea-going vessels. The approaching channel is very well marked by navigation marks; therefore, there are no difficulties in navigating a vessel along it when entering or leaving the port.
PILOTAGE: Compulsory. Navigational range marks, leading marks of Stanislov, Adjigolsky beacons, Verbchansky and Maliy Kasperovsky leading light buoys, and spar buoys. Master advises Port Controller and Inflot Agency ETA minimum of 96 hours prior notice.

Masters of vessels proceeding to the port of Kherson must advise ETA to the Harbour Master through Inflot Agency 48 hours, 24 hours and 6 hours prior to arrival at the point of Lat. 46° 15′ 06″ N., Long. 30° 56′ 01″ E.

Master shall order a Pilot via the Inflot Shipping Agency 8 hours and confirm the order 2 hours prior to leaving the port of Kherson.
ANCHORAGES: A part of the Dneiper river from the Northern border of the town of Kherson, nearly up to the Maly Potemkin Island, is considered as the Port of Kherson Roads.

The anchorage for foreign flag dry cargo vessels is situated in the area restricted by 2 imaginary lines of the leading marks located on the left bank of the Dnieper River, upwards from the mouth of the Konka River and lower of basin (creek) No. 2.

The recommended anchorage for foreign flag tankers is situated in the area stretching down the river from the oil piers towards leading line No. 7, S.W. of the upper leading marks clearing the place where a submarine cable is laid.
RESTRICTIONS: The permitted draft for passing through the channel is 7.6 m. but it may vary depending on weather conditions.

In the Summer the channel is open for navigation 24 hours a day.

Speed of vessels having draft over 5 m. should not exceed 10 knots whilst navigating through the channel.

The port receives vessels with length up to 200 m.

Navigation through the channel in restricted visibility is strictly prohibited.
HEALTH: No automatic Pratique.
RADIO: Ship-shore radio link can be established through the port radio station operating 24 hours on the following frequencies:

	Frequencies (kHz)		*Type of trans-mission*	*Time of work*
Call sign	*Working*	*Calling*		
UHZ	500/487	500/468	A1A	H24
"Kherson Radio"	2182	2182	P3E	H24
"Mesyats" (CPR)**	156.8*(16)	156.8*(16)	F3E	H24
"Mesyats-2" (Harbour Master)	156.45*(9)	156.45*(9)	F3E	HX

*Frequencies are given in MHz.
**CPR – Central Port Radio Station.
BERTHING: 9 berths, depths up to 8.25 m.

Mooring is effected with port Pilot assistance. Number of tugs required for mooring is determined by Pilot with Master's consent, ship's lines used.

Cranes of up to 10 tons capacity are operated on the quays and by the warehouses. There are floating cranes with lifting capacity of up to 100 tons and other cargo handling equipment, intra-port transport included.

Berths of the port, with depths of up to 8.25 m. alongside are equipped to handle general and bulk cargoes (ore, chemicals, building materials), metals, grain, timber, cotton, cement, food products, etc., as well as passenger traffic. There are enclosed warehouses, a grain elevator and open concrete floor storing spaces without roofs. There is a refrigerated warehouse at No. 4 berth. Cargo is generally loaded/unloaded by shore cranes but ship's derricks are always to be ready for use.

TIDE: Changes in the water level observed in the port are due to the effect of the wind and variation in atmospheric pressure. The maximum range of the water level caused by winds may reach 2 m.

The changes of the water level due to variation in atmospheric pressure ("Seish" effect) are observed at times. They may last from a few minutes up to several days and may reach 0.58 m.

MEDICAL: Hospital facilities available.

FRESH WATER: Available alongside and by barge.

FUEL: Available.

OPENING/CLOSING HATCHES: Opening and closing of hatches is usually done by the ship's crew. It may also be done by port workers for vessel's account.

REPAIRS: Only minor repairs can be carried out. There are no dry docks in the port.

TIME: GMT plus 3 hours. Daylight saving time, GMT plus 4 hours from April 1st until September 30th.

AUTHORITY: Port of Kherson Authority, 11 Petrenko Street, 325000, Kherson, U.S.S.R. *Tel:* 29-14-02, 2-38-48. *Cables:* Morport Kherson.

AGENT: The Port of Kherson Maritime Agency "Inflot". Postal address: U.S.S.R. 325004, Kherson-4, Petrenko St. 11, MA "Inflot". Cables "Inflot Kherson". Telex 232721. Tel: 29-13-51, 29-14-41, 2-36-95.

KHOLMSK: 47.03 N. 142.03 E. (See Plan Book)

GENERAL: The seaport of Kholmsk is situated on the Western coast of Sakhalin Island, in the Tartarsky Strait of the Japan Sea and at the head of Nevelskoy Bay.

The port is open for navigation all the year round.

The outer roads of the port are bounded by an arc of 7 cables length radius, the centre of which is marked with a light located on the Southern mole of the Commercial Harbour.

The port is divided into 3 parts: The Kovsh (a basin), The Commercial and Fishing Harbours. The Commercial Harbour is situated in the centre of the port area. It is protected by the Southern and Northern moles. The entrance to the Harbour 150 m. wide, is situated between these 2 moles. Due to shoal water along the coast, there is not much space for vessels manoeuvrability in the Commercial Harbour. Cargo berths are situated in a basin (The Kovsh) of the Southern part of the Harbour.

The Port of Kholmsk, due to its position, size and weather conditions in the area, cannot be used as a sheltering port.

During Westerly and N.W'ly gales, particularly in the Autumn and Winter (October — March) the heavy sea swell penetrates into the Kovsh (mainly from the N.W.) causing the variable current with surge (the "Tvagun"). Due to this phenomena the stay in port is not safe therefore Masters of all vessels are recommended to leave the port for sea after having received a storm warning of a gale coming from Westerly or N.W. directions.

All vessels proceeding to the port of Kholmsk in the Autumn and/or Winter must have available on board a sufficiency of fuel, fresh water, provisions and strong manila ropes, be seaworthy in all respects, thus ensuring vessel's safety during a possible stay in the open sea roadstead.

In case there are no vacant berths in the port, vessels are not allowed to enter the harbour without prior permission.

It is also prohibited to enter the harbour after a storm warning has been received by vessel despite the fact that there are vacant berths in the port.

PILOTAGE: Pilot meets a vessel in the outer roads. In the event of bad weather, when Pilot is unable to come on board, vessel should follow in the wake of pilot boat.

ANCHORAGES: There are no anchorages protected from the wind in the Nevelskoy Bay.

During off-shore winds vessels may anchor in the outer roads situated opposite the port entrance. The outer roads are open to Westerly winds.

Masters should bear in mind that during the period of navigation fish nets are usually laid in the outer roads. The seaward side of the border of the fish nets, situated about 8 cables length off-shore, is usually marked by wooden buoys with flags.

Anchorage in the outer roads may also be obtained at 4 – 6 cables length off shore. Depths are from 18 m. to 20 m. Holding ground sand and stone.

A vessel should proceed to the anchorage along the leading line of the port of Kholmsk leading lights. At a distance of half a mile off the port entrance, a vessel should steer off the leading line at 2 – 3 cables length and then drop anchor.

The holding ground is better in the Southern part of the outer roads than in the Northern part.

When at anchor, a vessel may not approach the leading line closer than 1.5 cables length.

RESTRICTIONS: Vessels may enter the port at any time of day or night.

MAX. SIZE: The maximum permissible draft for entry to the port is 6 m. length – 100 m. Since depths in the channel may vary at times, the Port Authorities shall undertake to advise the Masters of incoming vessels accordingly.

BERTHING: Berths with depths up to 7.3 m. alongside, are equipped to handle general and bulk cargoes, metals, timber, food products, etc., as well as passenger traffic.

Number of tugs required for assistance is usually agreed between Pilot and Master.

Cranes of up to 40 tons capacity are operated on the quays. There are also other cargo-handling equipment and inter-port transport facilities. There are enclosed warehouses and open concrete floor sheds.

RADIO: Ship-shore radio link can be established through the port radio-station Kholmsk Radio operating 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz)* *Working*	 *Calling*	*Type of trans-mission*	*Time of Work*
UFO	500	500	A1A	H24
"Kholmsk Radio"	2182	2182	H3E	H24
"Kholmsk Radio-4" (Port controller)	156.45*(9)	156.45*(9)	F3E	H24
"Kholmsk Radio-2"	156.8*(16)	156.8*(16)	F3E	H24
(Vessels' movement control post)	156.7*(14)	156.7*(14)	F3E	H24

*Frequencies are given in MHz.

The port signal station is situated at the Southern mole base. There is also a radar station in the port.

FUEL: Not available.

FRESH WATER: Available.

REPAIRS: Only minor repairs can be carried out. There are no dry docks in the port.

TIDE: Changes in the water level are of small account. They are mainly due to the irregular diurnal tides. The maximum range of the water level observed is 0.4 m.

TIME: GMT plus 11 hours. Summertime (April 1st-October 1st) GMT plus 12 hours.

AUTHORITY: The Port of Kholmsk Authority, 1 Katernaya Street, 694620 Kholmsk, Sakhalin Is., U.S.S.R. *Tel:* 3-04, 3-05 (Port Director). *Telex:* Via Inflot. *Cables:* Morport Kholmsk. *Contact:* Port Director.

AGENT: The Sakhalin Main Maritime Agency "Inflot". 6 Morskaya Street, Port of Kholmsk, Sakhalin Island 694620, U.S.S.R. Cables: "Inflot Kholmsk". Tel: 222-86; 220-80. Telex: 412613 SSC SU.

KILIA: 45.26 N. 29.17 E. (See Plan Book)

GENERAL: The port of Kilia is situated on the left bank of the Kilia inlet of the Danube River, 47 km. from the estuary. The depths of the water within the port area vary from 3 m. up to 22 m. The holding ground is clay and mud. The season of navigation in the port area lasts from March till December depending on time when the Danube River is frozen over.

PILOTAGE: Carried out by the Pilot service of the port of Izmail.

ANCHORAGES: Allowed in the port area, in 5 m. depths according to the Pilot's instructions.

RESTRICTIONS: Vessels can enter or leave the port at any time of day or night. Movement of vessels during fog is not allowed.

RADIO: Communication can be effected via the port radio station viz. "Kilia-Radio".

Call sign	*Frequencies (MHz)* *working*	 *calling*	*Type of trans-mission*	*Time of work*
Kilia-1	156.8(16)	156.8(16)	F3E	H24
(CPR)*	157.25(25)	157.25(25)	F3E	H24
Kilia-2	156.8(16)	156.8(16)	F3E	H24
(Harbour Master)	156.45(9)	156.45(9)	F3E	H24

*Central Port Radio Station.

Notice of Arrival: Masters of vessels going to the port from seaward via Kilia Inlet should advise port of Izmail Harbour Master their ETA 24 hours prior to arrival at the Reception Buoy area. More precise time of arrival should be advised at a later time.

TUGS: Approaching and shifting berth is performed without tug assistance.

BERTHING: Cargo vessels drawing up to 7 m. are handled with the use of buffer barges. Berths of the port are equipped to handle general cargoes, metals, timber, coal. Embarking/disembarking of passengers is also performed. There are portal cranes of up to 6 tons capacity, a warehouse and open storage areas covered with concrete. There are also floating cranes of up to 5 tons capacity which are used for handling cargo in the Outer Roads. The loading of grain is carried out at the grain elevator berth by its own equipment.

FRESH WATER: Not available.

FUEL: Not available.

REPAIRS: Not possible.

TIME: GMT plus 3 hours. GMT plus 4 hours in summer.

CONSULS: None.

AUTHORITY: Port of Kilia Authority. 4, Zheleznyakov Street, 272610, Port of Kilia, Odessa Region, U.S.S.R. *Cables:* Port Kilia.

KLAIPEDA: 55.43 N. 21.07 E. (See Plan Book)

GENERAL: A Baltic seaport, Klaipeda is situated in a narrow strait called the Morskoi Canal, which connects the Kursky Gulf with the Baltic Sea.

The port of Klaipeda comprises the Morskoi Canal consisting of 2 harbours: the Zimnyaya and Zavodskaya, the Fishing Port and the Dane river quays situated by the roadway-bridge.

The port is open for navigation all the year round.

During strong winds blowing from directions between the S.W. and N.W., lying in the port is dangerous due to strong waves and surge (called "Tyagun"). In this event vessels must proceed to sea.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

APPROACHES: The width of the approaching channel to the port is 100 m. and depth 11.5 m. Depths of the channel at a distance of 400 m. – 600 m. from the entrance to the Sea Canal are subject to changes due to lots of sand and mud brought down from the Kursky Gulf by the Spring floods, in particular. The entrance to the Sea Canal is protected by the Northern and Southern moles.

The length of the fairway of the Morskoi Canal from the entrance up to the Secluma-Kyaules-Nugara shoal at the entrance to the Kursky Gulf is 4 miles, width varies from 180 m. to 300 m. and the depths are from 6 m. to 9 m. at the mean water level.

The permissible drafts for vessels navigating along the Morskoi Canal are as follows: Up to 8.0 m. from the canal entrance up to the Zimnyaya (Winter) harbour, but further up to the Fishing Port situated 1.5 miles to the South of the Dane River estuary – not more than 7.5 m. From the Fishing Port up to the Timber Harbour – not more than 5.0 m.

PILOTAGE: A Pilot boat usually meets a vessel at light buoy No. 1 (Lat. 55° 44′ N., Long. 21° 00′ E.). It carries the Pilot flag by day and lights prescribed for a Pilot boat by night.

Pilot's watch is kept 24 hours a day except in periods of dense fog and strong S.W. – N.W. winds over Force 7 Beaufort Scale.

The Master of a vessel shall order a Pilot via the Inflot Shipping Agency in advance.

The port is equipped with a coastal radar vessels' movement control system.

Signals regulating vessels' entry to the port and leaving are hoisted at the signal mast of the Signal post located in the Northern mole area.

ANCHORAGE: Anchorage can be obtained in the outer roads at receiving light buoy No. 1 (Lat. 55° 44′ N., Long. 21° 00′ E.).

The outer roads anchorage for foreign vessels is situated at a distance 3.5 miles (N.W.) from receiving light buoy No. 1. Depths from 31 m. – 35 m.

The holding ground is sand and clay. Anchorage in the outer roads is not safe during heavy seas caused by Westerly winds.

RESTRICTIONS: There are no restrictions for the entry to the port.

The width of the approaching channel to the port is 100.0 m. and depth 12.0 m.

MAX. SIZE: Length not greater than 185 m. and breadth unlimited. Max. permissible draft for all vessels entering the port, 10.6 m.; and for tankers loading at installations outside main port area, 10.5 m.

RADIO: Vessels can establish radio contact through the port radio station Klaipeda Radio operating 24 hours per day on the following frequencies:

Call sign	Frequencies (kHz) or Channel Working	Frequencies (kHz) or Channel Calling	Type of transmission	Time of work
UNM-2	500	500	A1	H24
	455	454	A1	H24
	4229	4183	A1	HX
	6427	6275.25	A1	HX
	8701	8370	A1	HX
	12703	12552	A1	HX
Klaipeda Radio	2182	2182	A3	H24
Klaipeda Radio – 1 (ODIN) (CPR)**	16, 3, 26, 27		F3	H24
Klaipeda Radio – 2 (DWO) (Dispatcher of Port)	14		F3	H24
Klaipeda Radio – 15 (Piatnadcat) (Oil Harbour)	7		F3	H24
Klaipeda Radio – 5 (Piat) (Pilot Control)	16, 9		F3	H24
Klaipeda Radio – 17 (Semnadcat) (Shore Radar Service)	9, 67		F3	H24

**CPR – Central Port Radio station.

Vessels' traffic in the roads and harbours is controlled by the signals exhibited at the signal stations situated at the entrance to the port.

TUGS: Ordered by Pilot if necessary. Mooring and unmooring of large sea-going vessels can be effected with tugs' assistance only. Number of tugs to be ordered depends on the weather conditions and can be agreed upon between Master and Pilot. Master should order tugs by radio well in advance. Ship's lines to be used.

BERTHING: No specific requirements. Vessels allocated berth according kind of cargo to be loaded/discharged and their turn.

The quays of the port with depths alongside of up to 10.6 m. are equipped to handle general, bulk and liquid cargoes as well as passenger shipping. There are enclosed warehouses and concrete floor sheds.

Cranes of up to 40 tons capacity are operated along quayside and by warehouses. There are also other cargo handling facilities including floating cranes up to 50 ton capacity.

STEVEDORES: Report 12 days, 96 hours, 24 hours and then 12 hours prior arrival giving ETA, and 72 hours then 12 hours prior arrival advising perishable goods, characteristics of vessel, gross capacity, number and measurement of hatches, tween-decks, shelter-decks, description and quantity of cargo, stowage plan, heavy lifts, pieces of above 3 tons each especially indicated. Day and night loading/discharging operation, Sundays and holidays included.

MEDICAL: Master to advise by radio prior arrival if medical attendance required on board.

TANKERS: Three berths. Max. draft 10.5 m. Shore facilities for discharge of ballast.

FRESH WATER: Most berths supply by shore installations, otherwise barge.

FUEL: Deliveries only by bunker barge.

GANGWAY/DECK WATCHMEN: Compulsory for gangway checking. Guard net and life buoy required.

OPENING/CLOSING HATCHES: Normally by crew.

CONSULS: No Consuls at Klaipeda.

REPATRIATION: No facilities for crew changes. Arranging any necessary repatriation at Master's request effected by Immigration Authorities.

AIRPORT: At Palanga (25 km. from Klaipeda), served by regular lines; Palanga-Moscow, Palanga-Leningrad, Palanga-Riga. Airport at Klaipeda – some regular flights per day: Klaipeda-Vilnius, Klaipeda-Kaunas, Klaipeda-Kaliningrad.

POLICE/AMBULANCE/FIRE: Tel. Police, 02; Ambulance, 03; Fire, 4300, 901.

CERTIFICATES: All ship certificates required on every call.

CUSTOMS ALLOWANCES: Cigarettes and wine/spirits on board limited by personal requirements; take ashore max. 2 packets cigarettes, no wine/spirits.

REPAIRS: All kinds of repairs for vessels of 10,000 d.w.t. can be effected.

TIME: GMT plus 3 hours in Winter and GMT plus 4 hours in Summer (1st April – 1st October).

TIDE: There are periodical alterations in the water level, chiefly due to the effects of the wind. In general, strong Westerly, Northerly, N.W. and sometimes S.W. winds raise the water and Southerly and Easterly winds lower it.

The water level usually begins to rise suddenly. It rises very quickly but lasts for a very short period of time. The max. difference between high and low level is usually observed in Autumn and Winter.

Sometimes the changes in the water level can be caused by the considerable variation in atmospheric pressure ("Seish" effect).

TELEPHONES: May be arranged on board.

SHORE LEAVE: Crew members allowed ashore with shore-pass obtainable from Immigration Authorities.

GENERAL: In case of stormy weather or dense fog vessels are lying at Outer Roads until entering permitted by Harbour Master. In such cases vessels lying alongside berth to be shifted to Inner Road.

AUTHORITY: The Port of Klaipeda Authority, Ul. Plachioi 18, 235801 Klaipeda, U.S.S.R. *Tel:* 6-45-94. *Telex:* 278239. *Cables:* Morport, Klaipeda. *Contact:* The Harbour Master.

AGENT: "Inflot" Agency. Address: Klaipeda 235801, Ul. Geguzhes, 8. Tel. 64270, 63236, 94236. Cables: Inflot, Klaipeda. Telex: 278113 A and 278113 B.

LENINGRAD: 59.53 N. 30.13 E. (See Plan Book)

GENERAL: A Baltic Sea port, Leningrad is situated on the islands of the Neva Delta, at the head of the Nevskaya Guba (Neva Bay), in the Eastern extremity of the Gulf of Finland. Year-round navigation is possible with ice-breaker assistance from the end of November until middle of April. Ice first begins to form in the middle of November, when usual Winter frosts come, and in January (time varies with the season) all the area becomes completely covered with fast ice.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

APPROACHES: The Kronstadt Korabelny Farvater (Kronstadt Ship's Channel) which is about 12 miles in length, extends from the port of Leningrad Entrance light buoy to the Leningrad Morskoi Canal, which is about 15 miles in length, and leads to the entrance of the sea commercial port of Leningrad. The least bottom width of about 80 m. is in the part of the Canal which is protected by 2 dams (moles).

PILOTAGE: Pilots usually board and disembark vessels at the port of Leningrad approaching light buoy (Lat. 60° 02′ N., Long. 29° 26′ E.). In case of bad weather a vessel should follow the pilot boat up to the Kronstadt Roads where a Pilot will come aboard the ship.

Leningrad pilot boat on VHF Channel 16 and 9 throughout 24 hours. Call sign "Leningrad Pilot".

There is a port coastal radar vessels' movement control system ensuring vessels' radar pilotage along the Kronstadt Korabelny Fairway and the Leningrad Morskoi Canal in case of low visibility and during absence of floating navigational marks. Radar pilotage is carried out by a Pilot on board a vessel.

ANCHORAGES: Vessels approaching the port from seaward should take anchorage off the port of Leningrad Entrance light buoy. The depths in the Roads are between 20 m. – 25 m. and the holding ground is mud and sand.

Vessels anchored at Outer Roads and berthed in the port are requested not to operate VHF on Channels 6, 8, 9, 11, 12, 13, 14 or 26 for intership communications.

RESTRICTIONS: No restrictions on night entry, no tide in Leningrad. Vessels with drafts 8.5 m. and more, and length 170 m. and more, must be towed when proceeding in the Leningrad Morskoi Channel from the Lesnoi Mole Roads (Timber Mole Roads) up to the Neva Gates.

All vessels navigating within the port must keep strictly to the following regulations:

(a) Vessel's speed should not exceed 10 knots when navigating in the Kronstadt Korabelny Farvater and in the open part of the Leningrad Morskoi Canal (from the entrance up to the moles).

(b) When navigating in the channel between the moles of the Leningrad Morskoi Canal as well as in the Bolshaya Neva River from the Neva Gates up to Lieutenant Schmidt Bridge and also in the Ekateringofka River, vessels speed should not exceed 3 knots.

(c) In the Inner Roads and in the port harbours, Masters should navigate with a speed ensuring the safety of vessel but never exceeding 3 knots.

MAX. SIZE: Draft restriction 11.0 m. in fresh water under normal weather conditions. Length not over 260 m. Breadth up to 40 m.

HEALTH: Master coming from foreign port shall report every sick passenger or crewman; Health Authorities board together with Customs and Immigration and if find all in order grant Free Pratique. Each vessel shall produce Derat Certificate and Sanitary Patent.

RADIO: Cable Agent "Inflot" ETA, draft and other data, information required via Leningrad Radio Station. All vessels when approaching the port of Leningrad should establish radio contact via the Leningrad Coastal Radio Station operating 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz)* *Working*	*Calling*	*Type of trans-mission*	*Time of work*
"Leningrad-Radio"	2182	2182	J3E	H24
"Leningrad-Radio"	156.8*(16)	156.8*(16)	F3E	H24
(CPR)**	161.9*(26)	157.3*(26)	F3E	H24
"Leningrad-Radio"	156.8*(16)	156.8*(16)	F3E	H24
(Vessels' movement control post)	156.45*(9)	156.45*(9)	F3E	H24

*Frequencies are given in MHz.

**CPR – Central Port Radio Station.

Note: Emergency calls with regard to collisions, fire on board and dangers to human life may be given on VHF Channel 9. Call sign of traffic controller is "Leningrad Port Control".

Port radar station gives all possible information to any vessel navigating in the Kronstadt Korabelny Farvater and Leningradsky Morskoi Canal during restricted visibility, from the Leningrad entrance light buoy (Lat. 60° 02′ N., Long. 29° 26′ E.) up to the dams (moles) of the Leningrad Morskoi Canal. Navigation is usually controlled by a Pilot on board the vessel.

Signals for vessels approaching the entrance to the Commercial Port of Leningrad from seaward are hoisted at the pilot vessel.

Traffic prohibition signals, when the pilot vessel is absent from her usual position may be exhibited at a vessel specially designated for this purpose.

RADAR: Pilot in contact with radar service. Also see "Radio".

TUGS: Tugs up to 1,200 h.p. are available. Normally join incoming vessels at Inner Road. Ship's lines usually used.

The number of tugs a Master should order for inward and outward towage as well as for shifting berths in the harbour depends on Pilot's advice.

BERTHING: Berths of the port, with depths alongside of up to 11.5 m. are equipped to handle general and bulk cargoes (coal, ores, grain, building material), sugar, metals, timber products, etc. There is also a passenger and container terminal, warehouses, cold stores and concrete floor sheds.

Opening and closing of hatches is usually done by the ship's crew, otherwise according to the charter party conditions.

The port of Leningrad is equipped with modern cargo-handling facilities. There are floating cranes up to 300 tons, container handling, fixed and mobile shore cranes, fork lifts and other mechanical equipment.

TIDE: Considerable rises of water level may be caused by strong Westerly winds – and falls by Easterly winds. Usually the changes in water level are greater during the Autumn and Winter months. During Autumn and Winter the range of level may reach 1.2 m. from the MWL and sometimes even more.

During Spring and Summer it is never more than 0.5 m. The greatest rises in the water level are observed in the Neva Bay. The extreme difference in level between the maximum rise and the minimum fall of these seasonal changes observed is about 3.5 m. At the mouth of the Neva River the greatest changes in the water level are caused by the S.W. Autumn gales. The difference in level usually reaches 0.2 m. – 0.3 m. and only sometimes up to 1 m.

STEVEDORES: Ordered by Agent.

MEDICAL: Masters to advise Agent prior arrival if medical attendance required aboard.

DENSITY: Fresh water in port area.

FRESH WATER: Most berths supplied by shore installations, otherwise barges. Also available at Outer Roads Anchorage.

FUEL: Bunkers available, usually delivered by lighters.

FIRE PRECAUTIONS: No smoking allowed in port area, except in places specially allocated.

GANGWAY/DECK WATCHMEN: Not compulsory.

OPENING/CLOSING HATCHES: According to charter party.

CERTIFICATES:

Passenger Ship Safety.
Safety Equipment.
Safety Radiotelephony.
Safety Radiotelegraphy.
Exemption Certificate.

CUSTOMS ALLOWANCES: No restrictions on board.

IDENTIFICATION CARDS: Needed, will be given on arrival.

CONSULS: The Consulates of Czechoslovak Socialist Republic, German Democratic Republic, France, German Federal Republic, Hungarian People's Republic, Italy, Finland, Iran, Japan, Polish People's Republic, People's Republic of Bulgaria, Republic of Cuba, Sweden and United States of America are situated in Leningrad.

REPAIRS: All types of repairs for vessels of up to 10,000 d.w.t. can be carried out in the port.

DRY DOCKS: Available.

SURVEYORS: 1. Cargo inspectors not available.
2. Inspectors of the Shipping Register of the U.S.S.R. only.

TIME: GMT plus 3 hours. Summertime from 1st April – 30th September.

POLICE/FIRE/AMBULANCE: Police 9См; First-Aid from Port 503; from Town 03; Port Fire 8509, 8536, 8973; Town Fire 01.

EMERGENCY CO-ORDINATION CENTRE: Contact "Inflot" or Leningrad Radio Station on the VHF Channel 16 and 26.

STORING: See "Prelims", page viii.

1. Vessels may be stored by barge or truck.
2. No restrictions.
3. Trucks may proceed alongside.
4. Fork-lift trucks may be used.
5. No exceptions from U.S.S.R. laws.
6. As a rule riggers are available.

AUTHORITY: Port of Leningrad Authority, Mezhevoi Kanal 5, Leningrad 198035, U.S.S.R. *Tel:* 251-08-46, 216-97-61. Timber Port: 216-97-75. *Telex:* 121501-121504. *Cables:* Seaport Leningrad. *Contact:* Oleg A. Terekhov, General Manager, who may be contacted through "Inflot".

AGENT: Main Maritime Agency "Inflot".
Postal address: 10 Gapsalskaya Str., Leningrad 198035, U.S.S.R.
Tel: 251-12-38; 251-27-48; 251-27-71. Telex: 121 505, 121 505A, 121 506.

MEZEN: 65.50 N. 44.04 E.

GENERAL: A commercial seaport, Mezen is situated at a distance of 22 miles to the South of the mouth of the Mezen river flowing into the head of the Gulf of Mezen, in the White Sea.

The port area is bounded on the North by a line connecting the Ryabinov and the Nerpinsky points and on the South by the parallel of 65° 50′ N., Northward of the town of Mezen. The anchorage at the Kuloi river mouth is also included at the port of Mezen area.

Vessels drawing 3.9 m. – 4.2 m. are usually grounded when loading timber alongside a floating berth of the timber-mill at low water.

The port is open for navigation from the end of May until October.

Tidal streams are observed in the Mezen river. The tide is semi-diurnal with two high waters and two low waters a day.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. A Pilot meets a vessel at an anchorage buoy, at the Mezen river bar (Lat. 66° 12′ N., Long. 44° 04′ E.), at a distance of 22 miles off the port of Mezen. In the event of bad weather a Pilot at his discretion, may board a vessel in the outer roads.

Pilotage cannot be effected at night.

A Pilot cannot board a vessel earlier than 2 hours before the high water in the Semzha river, and a vessel may be piloted into the port not later than 1 hour before the water in the river reaches its high level.

Pilots do not board vessels in rough water (if the wind is over Force 6 Beaufort scale).

In case Pilot cannot embark a vessel in the outer roads, Master should follow in the wake of pilot boat up to Tolstic Point (Lat. 66° 04′ N., Long. 44° 05′ E.) where a Pilot will board ship. After leaving the port Master should disembark Pilot on to pilot boat at Tolstic Point and then follow it up to the outer roads of the port of Mezen.

ANCHORAGES: Anchorage can be obtained in the outer roads and in certain places of the Mezen river situated between the outer roads and the Kamenka settlement.

The outer roads are situated at the Mezen river mouth. They are bounded on the South by a line connecting the Ryabinov and the Maslyany Points.

Vessels in the outer roads are subject to effects of the N.W. and N.E. winds and heavy waves caused by them. The depths in the outer roads are about 7 m. The holding ground is sand, mud and rocks. Anchorage can be obtained in the inner roads with depths at low water of up to 4.5 m. – 5 m. (length of area is 1.5 mile and width up to 150 m.).

The inner roads are situated opposite the Kamenka settlement. A good anchorage can be obtained there by two vessels simultaneously. The anchorage at Burnovsky Point with depths from 4.5 m. – 5.5 m. can be used by two loaded vessels drawing up to 4.2 m.

RESTRICTIONS: Vessels may enter port only in daytime on high water. Masters have to pay full attention to Pilot's advice as river has varying bends.

MAX. SIZE: The permitted draft for the entry to the port is announced monthly by the Port Authorities. It should not exceed 3.9 m. – 4.2 m. The maximum permitted length is 70 m.

HEALTH: As for "Archangel".

RADIO: Vessels can establish radio contact through the port radio station Mezen Radio operating 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz)* *Working*	*Calling*	*Type of trans-mission*	*Time*
UZT	500	500	A1	HX
"Mezen-Radio"	2182	2182	P3E	H24
			J3E	H24
"Kamenka-2"	156.8*(16)	156.8*(16)	F3E	H24
(Port Controller)	156.45*(9)	156.45*(9)	F3E	H24
"Kamenka 5"	156.8*(16)	156.8*(16)	F3E	H24
(Harbour Master)	156.6*(12)	156.6*(12)	F3E	H24

*Frequencies given are in MHz.

Notice of Arrival: As per conditions of the "Soviet Wood" Charter Party.

BERTHING: The floating dams are used as mooring berths in the port. The depths alongside at low water are about 3.5 m. Vessels drawing 3.9 m. – 4.2 m. are usually grounded while loading at low water.

The port of Mezen specialises in timber exports but other cargoes are also handled at berths. Covered warehouses and open concrete floor sheds are available.

Tug assistance for mooring berths is not compulsory. Berthing is usually done in the daytime. Tugs, if necessary are ordered by Master according to the Pilot's instructions.

Rendering of Notice of Readiness and opening and closing of hatches are usually done in accordance with the "Soviet Wood" charter party.

Loading of timber is done by ship's winches and floating cranes with capacity 5 tons.

TIDE: The difference between two successive high waters and low waters is small but the range of the tide changes considerably. At the Kamenka settlement the mean range of the tide is 2.8 m. and the mean range of the spring tide is 3.1 m. At the Semzha river the mean range of the spring tide reaches 7.7 m. Everywhere in the Gulf of Mezen the differences in the duration of falling and of rising water are big and in some places of the Gulf of Mezen they may reach 5 hours.

Considerable changes in the water level are observed in the Spring. They are usually caused by the seasonal increase in the amount of water (due to melting snow) brought down by the rivers.

REPAIRS: Only minor repairs can be effected. There are no dry docks in the port.

FUEL: Supplies not guaranteed.

FRESH WATER: Fresh water can be supplied at the berths and by road tankers.

TIME: GMT plus 3 hours (all year round).

AUTHORITY: The Port of Mezen Authority, Morport, Kamenka Settlement, Mezen, Archangel Region, U.S.S.R. *Tel:* 9-43-41 (Chief of the Port), 9-40-81 (Harbour Master). *Cables:* Morport Mezen.

AGENT: A branch of the Port of Archangel Main Maritime Agency "Inflot" at the Port of Mezen.

Port – "Inflot", Kamenka Settlement, 164650 – Mezen, Archangel Region, U.S.S.R. Cables "Inflot Mezen-Kamenka". Tel: Exchange – 94391. Inflot – 94126.

MURMANSK: 69.00 N. 33.03 E. (See Plan Book)

GENERAL: A Barents Commercial Seaport and Fishing Port, Murmansk, is situated at the Eastern coast of the Southern elbow-shaped bend of the Gulf of Kolsky, between the Zeleny (Green) and Khaldeev Points. It is the last unfrozen port of the Northern seas route.

In very severe Winters the Southern and middle elbow-shaped bends of the Gulf get frozen over for a short period of time in February or March, during calm and frosty weather. In mild Winters drift ice is observed. The Northern part of the Gulf never gets frozen over. The port of Murmansk is open for navigation all the year round. In the event of ice conditions in the Gulf of Kolsky, ice-breaker assistance will be effected in compliance with the Harbour regulations in force.

The port area occupies nearly all Southern elbow-shaped bend of the Gulf of Kolsky. The port of Murmansk consists of 2 harbours: the Commercial and the Fishing Harbours.

DOCUMENTS: Also refer to beginning of U.S.S.R. section.

General Declaration, 5 copies (IMO form).
Crew List, 6 copies (IMO form).
Passenger List, 6 copies (IMO form).
Crew Effects Declaration, 2 copies (IMO form).
Cargo Declaration, 3 copies (IMO form).

PILOTAGE: Compulsory. Pilot station is situated at Kislaya Gooba (position Lat. 69° 11.5′ N., Long. 33° 31.6′ E.) in Kolsky Bay, 9 miles South of the entrance. ETA to be given to Agents before arrival (see "Radio"). Since Pilots are not available at the pilot station any time, it is vital that ETA is duly given to the Agent to arrange a Pilot by indicated time. Pilot launch is distinguished by word "Pilot" in black letters on boat's superstructure. Pilots can be contacted on VHF Channel 16. Every vessel should drift whilst waiting for Pilot since depths in the Pilot station are too big to permit anchorage.

During rough sea Pilot is not able to board a ship at the Pilot station area. In this event vessel should follow the Pilot boat in the wake of it up to the Salny Island and embark a Pilot Southward of the Island at a place indicated by Pilot boat.

ANCHORAGES: At the pilot station depths are too great to permit anchorage, but there is sufficient sea room for vessel to await Pilot with engines stopped. Anchorage with depths from 20 m. – 35 m. is situated in the Southern elbow-shaped bend of the Gulf of Kolsky, Westward of the Kievaraksky leading line (the port outer roads). The holding ground is good.

Every vessel waiting for mooring berth should anchor Westward of the Kievarasksky leading line but not obstructing other vessels' traffic.

It is strictly prohibited to lie at anchor Eastward of the Kievaraksky leading line. If, in case of emergency, a Master has to lie at anchor in the prohibited area, he should immediately report the fact to the Harbour Master of the Commercial port of Murmansk.

RESTRICTIONS: Vessels can enter the inner roads of the port at any time of day or night.

The speed of vessels navigating within the limits of the Gulf of Kolsky is restricted by the following limits:

(a) It shall not exceed 14 knots in the area bounded by the parallels of the Letinsky Point and the Northern side of the Salny Island.
(b) It shall not exceed 10 knots in the area bounded by the parallels of the Northern side of the Salny Island and Pinagory Point.
(c) It shall not exceed 6 knots in the area Southward of Pinagory Point.
(d) In case the wind is over Force 6 Beaufort Scale all movements of ships within the port basin and roads may be carried out with the Port Authorities' permission only.

MAX. SIZE: LOA 200 m.. draft 12.0 m.

HEALTH: International quarantine signals to be used on arrival. No later than 6 hours before arrival at the inner area Master should radio Agents giving full details of state of health on board, and requesting Pratique which will be given on arrival.

TUGS: 4 tugs 1,200 h.p. – 2,300 h.p. Normally join vessel in the inner area of the port. Ship's lines as well as tug's lines can be used, the latter being supplied free of expense to vessel.

BERTHING: Main berths, depth alongside 32 ft. at low water. Average height of tide about 3.9 m. Vessels berth port or starboard side alongside at Master's and Pilot's discretion. The berths of the Commercial Harbour with depths alongside of up to 10.0 m. are equipped to handle general and bulk cargoes, metals, machinery, chemicals, foodstuff, etc.

There are enclosed mechanised warehouses for apatite including open concrete floor sheds.

Berths of the port are equipped with mobile electric cranes of up to 40 tons capacity. There are floating cranes with lifting capacity of up to 90 tons, and other cargo handling equipment and intra-port transport. Since loading/unloading is usually done by the port cranes, there are no specific requirements to vessel's cargo gear.

RADIO/RADAR: Murmansk Radio operating 24 hours on 2182 kHz. Coastal radio station UMN operating 24 hours on 500 and 472 kHz. Coastal radio station UMV operating 24 hours on 13080 kHz.

Radio contact can be established through the port radio station Murmansk Radio, operating 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz)* *Working*	*Calling*	*Type of trans-mission*	*Time*
UMN	500	500	A1A	H24
"Murmansk Radio"	2182	2182	H3E	H24
"Murmansk-Radio 10"	156.8*(16)	156.8*(16)	F3E	H24
(CPR)**	160.95*(7)	156.35*(7)	F3E	H24
"Murmansk-Radio 11"	156.8*(16)	156.8*(16)	F3E	H24
(Vessels' movement control post "Raskat")	156.6*(12)	156.6*(12)	F3E	H24

*Frequencies given in MHz.
**CPR – Central Port Radio Station.

Radar/VHF link:

In the South circular bay, movement of all vessels is severely controlled by coastal radio station "RASCAT" (VHF Channels 13, 18 and 22). All vessels under way must make contact with Rascat and carry out the recommendations received.

All vessels when at anchor or navigating in the Gulf of Kolsky must keep constant radio watch.

The port radar station gives all possible information to any vessel navigating in the Gulf in the restricted visibility. Radar navigation is usually controlled by a Pilot on board a vessel.

Storm predictions are transmitted on Channel 16 VHF for vessels in the vicinity. Vessels at moorings are warned through the Agent "Inflot".

Notice of Arrival: Every foreign vessel on approaching the Gulf of Kolsky must ask for entry permission into the Gulf from the Toros Island signal station by exhibiting her International Code letters by day and at night her call sign should be made in Morse code by searchlight.

Advice to Agent: ETA first notice be given to "Inflot" by Shipowner 12 days prior to ship's arrival. Master has to inform Port via "Inflot" 48 hours and 12 hours before ship's arrival. 72 hours' and 12 hours' notice to be given by vessels with reefer cargoes.

VHF: Port VHF maintains contact between Pilots and ship within harbour limits, and between ship and shore. Calling on Channel 16 working channel will be according to instructions from shore.

STEVEDORES: Arranged by Agent on basis of Master's ETA. Loading and unloading is carried on throughout 24 hours a day including holidays.

MEDICAL: Hospital and medical facilities available. Vaccination can be arranged. If doctor required on board Master should inform Agents by radio or VHF.

DENSITY: At the berth varies between 1006 and 1025.

FRESH WATER: Available from most berths, otherwise supplied by barge. To avoid delay recommended to order before arrival.

FUEL: All grades available. Delivered by barge. Advance notice required.

GANGWAY/DECK WATCHMEN: Not obligatory.

OPENING/CLOSING HATCHES: Usually performed by ship's crew.

CERTIFICATES: At first Russian port of call certificates of tonnage and those required by International Convention will be required for examination.

CUSTOMS ALLOWANCES: No restrictions on crew's consumption of tobacco and alcohol on board. It is forbidden to take these items ashore.

CONSULS: There is no local representation.

REPAIRS: All kinds of repairs can be carried out for vessels of up to 30,000 dwt.

DRY DOCKS: Large dock; length 225 m., width 45 m. Small dock; length 141 m. width 30 m.

TIDE: Changes of the water level in the Gulf are due to the tides. The tide is semi-diurnal with two high waters and two low waters a day. The difference in time of high and low water is about 6 hours. The range of the tide at mean neap is about 2.4 m. and at mean spring 4.5 m. The extreme range of water level is usually observed during the Autumn months and the lowest during Spring.

TIME: GMT plus 3 hours in Winter. GMT plus 4 hours in Summer. (April 1st – October 1st).

TELEPHONES: Ambulance, Tel: 003, 2395 and 2422; Fire service, Tel: 2252 and 2524.

DEVELOPMENTS: Reconstruction is being carried out in order to speed up loading of iron-ore and other cargoes.

AUTHORITY: The Port of Murmansk Authority, 19 the Port Passage, 183038 – Murmansk, U.S.S.R. *Tel:* 2-22-60, 2-23-10, 2-55-65 (Harbour Master). *Telex:* Mortorgport Murmansk.

AGENT: The Port of Murmansk Main Maritime Agency "Inflot", 19 The Portovy Pr., Murmansk 24, 183038, U.S.S.R. Cables "Inflot Murmansk". Tel: 2-56-66; 2-51-97. Telex: 126116.

NAKHODKA: 42.48 N. 132.53 E. (See Plan Book)

GENERAL: A commercial port, Nakhodka is situated in Nakhodka Bay, in the N.W. part of the Japan Sea.

Sometimes America Bay is covered with sludge which is frequently driven out by winds into the sea.

From the beginning of January to March the Nakhodka Bay is usually covered with thin ice which can easily be broken by vessels and driven out into the sea by favourable winds.

The port is open for navigation all the year round.

Changes of the water level in the Nakhodka Bay are of small account but the rise of the water level caused by strong Southerly winds blowing for considerable periods of time, may reach quite a high level.

The Northern part of the Nakhodka Bay from the entrance up to the line connecting the Lindgolm and Basnin Points is occupied by the Commercial port. The fishing port is situated Southward of this line.

The most dangerous wind for vessels lying in the Nakhodka Bay is the strong Southern wind of long duration caused by typhoons. The wind usually gives rise to the water level and produces waves of up to 3 m. height in the Bay.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Pilotage in the port of Nakhodka is compulsory for all vessels irrespective of nationality and ownership with the exception of the local coasters.

Since 1981 the following Traffic Scheme has been established in the Nakhodka Bay (Navarea XIII No. 28 04.04.81).

1. All vessels arriving at Nakhodka Bay ports from sea are requested to proceed to Nakhodka Bay lighted pivot mid channel buoy No. 1 (Lat. 42° 43′ 31″ N., Long. 132° 56′ 26″ E.) which is the pilot boarding place.
2. Main ship channel No. 1 (740 m. wide) leads from lighted buoy No. 1 along Nakhodka Bay entrance range axis 180° – 000°.
3. Channel No. 2 (740 m. wide) 050° – 230° leads from lighted buoy No. 1 to Nakhodka Bay lighted pivot mid channel buoy No. 2 (Lat. 42° 46′ 00″ N., Long. 133° 00′ 06″ E.) to Vostochny Port Channel No. 3 (250 m. wide) leads along axis of Vrangel Bay entrance range 297° – 117°.
4. Channel No. 7 (740 m. wide) leads from lighted buoy No. 2 along axis of Vrangel Bay entrance range 297° – 117° up to crossing the main ship channel No. 1 to Nakhodka Bay.
5. Channel No. 4 (740 m. wide) leads from main ship channel No. 1 along axis of Novitsky Bay range 089.3° – 269.3° up to crossing the channel No. 7 to Vrangel Bay and channel No. 5 (250 m. wide) leads to Novitsky Bay.
6. Entrance channel No. 6 (250 m. wide) leads from main ship channel No. 1 along axis of Torgovy Port range 087.9° – 267.9° to Nakhodka Bay.
7. All vessels 50 m. and more in length are requested to proceed via above mentioned channels.

Channels No. 1, 2, 4, 7 have two-way traffic. Vessels are requested to proceed along the right side of channel axis.

Channels No. 3, 5, 6 have one-way traffic. Vessels to proceed along the channel axis, according to Traffic Centre instructions.

8. Vessels that proceed from sea are requested to contact Traffic Regulation Centre on Channel 12 call sign "Kamensky-17" not less than 2 miles before approaching Nakhodka Bay lighted pivot Buoy No. 1.

Vessels at berth or anchored within Nakhodka Bay water area are requested to seek permission of the Traffic Regulation Centre before unmooring or weighing the anchor.

Vessels anchored are requested to keep continuous watch on Channel 16.

To avoid damage to a vessel and/or any port installation, vessels should be moored/unmoored by the method of parallel mooring (unmooring) with tug assistance.

Being at 10 m. distance from a berth a vessel is allowed to use her main engine in case of emergency only.

ANCHORAGES: A safe anchorage can be obtained in Area Nos. 305, 306 and 307, with depths from 13.0 m. – 28.0 m. and in the anchorage "10" area with depths from 18.0 m. – 28.0 m. The holding ground in both anchorages is mud, sand, sand with mud, stone.

The "3" area is a quarantine anchorage which serves as the Pilots' boarding place and an anchorage for deep sea-going vessels over 3,000 d.w.t.

The "10" anchorage area is an anchorage for tankers proceeding to the oil port situated in the Novitsky Bay. Boundaries of the anchorages are shown on the chart.

To lie at anchor in the Nakhodka Bay, in the fairway and in the dredged harbours, except in emergency, is strictly prohibited.

RESTRICTIONS: Vessels can enter or leave the port at any time of day and night. There are no size restrictions for entry to the port, except for vessels having the maximum permitted draft.

Anchorage for tankers is allowed only in the "10" area.

MAX. SIZE: The permitted draft for vessels proceeding to the Commercial port is 9.10 m., the Fishing port 8.0 m. and the Passenger Terminal 8.6 m.

Vessels drawing over the permitted draft must obtain Harbour Master's permission prior to entry to the port.

RADIO: Radio communication can be effected via the radio station of the Primorsk Shipping Company – "Nakhodka-Radio" some data of which is given in the table below.

Call sign	*Frequencies (kHz)* *Working*	*Calling*	*Type of trans-mission*	*Time of work*
UKI	500	500	A1A	H24
"Nakhodka-4"(CPR)	160.65*(1)	156.05*(1)	F3E	HX
"Novitsky-2"	156.8*(16)	156.8*(16)	F3E	H24
(Oil Harbour controller)	157.7*(34)	157.7*(34)	F3E	H24
"Kamensky-17"	156.8*(16)	156.8*(16)	F3E	H24
" (Vessels' movement	156.7*(14)	156.7*(14)	F3E	H24
control post)	156.375*(67)	156.375*(67)	F3E	H24

*Frequencies are given in MHz.

HEALTH: Advise "Inflot" by radio in advance if there is any case of quarantine illness on board the ship. If vessel is arriving from a cholera area, then cholera inoculations are required.

TUGS: Tug and mooring launch assistance available. 2 tugs used. Tugs join the vessel in America Bay as directed by Master or Pilot. Ship's tow lines are used.

BERTHING: May be effected at any time of day or night. In daytime vessel's mooring position will be marked by a flag and at night by a red lantern. These signals mark the point where the ship's bow should be at the mooring.

The berths of cargo handling port area No. 1 have depths alongside from 8.6 m. up to 10.2 m. and are equipped to handle potassium salt, grain, equipment, cables, wire ropes, metals, phosphorus, etc.

The berths of cargo handling port area No. 2 have depths alongside from 9.1 m. up to 10.2 m. and are equipped to handle grain, coal, cement, foodstuff and general cargoes.

The berths of cargo handling port area No. 3 have depths alongside from 8.8 m. up to 11.8 m. and are equipped to handle timber, sawn timber, 20 ft. and 40 ft. ISO containers, equipment, machinery and other cargoes.

Passenger vessels are handled at two berths with depths alongside 8.8 m. and 6.1 m.

Electric cranes of up to 41 tons capacity are operated on the quays. There are also floating cranes with lifting capacity of up to 300 tons and other cargo handling equipment, intra-port transport included.

2 grain handles available, rate 300 tonnes/hr. each.

Loading and/or unloading is usually done in accordance with conditions and rates stipulated by Charter Parties and Sales Contracts.

STEVEDORES: Arranged through "Inflot".

MEDICAL: Medical service is free. All requirements should be ordered in advance through "Inflot".

FRESH WATER: Can be supplied at the berth or by barge.

FUEL: Available.

TANKERS: Slop reception facilities are available.

OPENING/CLOSING HATCHES: Can be carried out by stevedores.

CUSTOMS ALLOWANCES: No restrictions on tobacco and alcohol on board ship. Only tobacco required for personal consumption may be taken ashore.

CONSULS: North Korea, Tel: 55310. Japan, Tel: 56360.

WIND: The most dangerous wind for vessels lying in Nakhodka Bay is the strong Southern wind of long duration caused by typhoons. The wind usually gives rise to water level and sends heavy waves of up to 4 m. height into the Bay.

REPAIRS: All kinds of repairs for vessels of up to 25,000 dwt. can be carried out.

REPATRIATION: Can be arranged during the Summer months provided passport and documentation in order. During Winter months there are no facilities for foreigners to reach nearest international airport so repatriation is only possible via infrequent passenger ships to Japan.

AIRPORT: Nearest international airport is at Khabarovsk, 1,000 kilometres away. Vladivostok is now closed to foreigners or international traffic, though sometimes used for air freight.

TIME: GMT plus 10 hours. GMT plus 11 hours in Summer.

SHORE LEAVE: Permitted subject to police control.

SHIPMASTER'S REPORT: April, 1983.

The following is additional information received regarding this port.

Documents: 2 copies of Camera List on plain paper signed by the Master giving Make and Serial No. of cameras in possession of crew members.

Also see "Regulations".

Anchorage: All tankers must anchor, while awaiting berth, in the anchorage with the following co-ordinates:

	Lat.	Long.		Lat.	Long.
(a)	42° 45.80′ N.	132° 54.71′ E.	(b)	42° 45.80′ N.	132° 55.27′ E.
(c)	42° 55.57′ N.	132° 55.44′ E.	(d)	42° 44.37′ N.	132° 55.44′ E.
(e)	42° 44.39′ N.	132° 54.56′ E.	(f)	42° 44.73′ N.	132° 54.56′ E.
(g)	42° 45.16′ N.	132° 55.08′ E.	(h)	42° 45.39′ N.	132° 54.71′ E.

VHF: "Nakhodka Port Radio Control" maintains continuous watch on Channel 12. This station can be used for conveying messages to Agents. It is not possible to talk directly with Agents.

Medical: 10 Roubles per person for medical consultation.

Fuel: Owner must contact Morflot London (Telex No. 885371 Mrf Lnd) for supply of fuels.

Tankers: All ballast (including clean ballast) in cargo tanks must be pumped ashore. Installation can receive ballast at the rate of 300 t.p.h. to 400 t.p.h. Gas oil loading rate about 700 t.p.h. Interruptions in loading due to shortage of cargo ashore. Vessel took about seven days to load 20,700 tonnes of gas oil.

Surveyors: Soviet Register of Shipping Surveyor can carry out hull and machinery surveys on behalf of Lloyd's Register of Shipping.

Customs: All pornographic literature and films must be kept sealed during the vessel's stay in port.

Shore Leave: From 4 tanker berths, shore leave possible by boats only. Same arranged by Agents.

All seamen are welcomed in the local Seaman's Club.

Regulations: Photography strictly prohibited within port limits.

SHIPMASTER'S REPORT: May 1984.

See "Vostochny".

AUTHORITY: The Port Authority of Nakhodka, 22 Port Street, 692900 Nakhodka, Primorsky Krai, U.S.S.R. *Tel:* 5-77-02, 5-79-38, 5-78-15. *Cables:* Mortorgport Nakhodka Primorskogo.

AGENT: The Far Eastern Main Maritime Agency: "Inflot". Postal address: 692900 USSR Primorski Kray, Nakhodka, ul Leninskaia 2. Telegraphic address: Inflot Nakhodka. Telephone: 56155, 56233, 59773. Telex: 213826.

NARYAN-MAR: 67.38 N. 53.00 E.

GENERAL: A commercial port, Naryan-Mar is situated in the S.E. part of the Barents Sea, at a distance of 70 miles from the Pechora river mouth on the right bank of the Gorodetsky Shar Creek.

The port is open for navigation for a period of 120 – 130 days in the year.

In the Pechora river inlet first ice usually begins to form between 20th and 25th October, but sometimes appears at the beginning of the month.

The inlet becomes completely frozen over at the middle of December. Ice finally disappears at the end of June or sometimes beginning of July. Changes in the water level in the Pechora Inlet, due to melting of ice in Spring, have not been observed.

The formation of ice in the rivers flowing into the Pechora Inlet usually depends upon the time of the appearance of ice in the Inlet itself. Rivers, as a rule, become frozen over by the middle of October. The ice in the rivers usually breaks up earlier than it finally disappears in the Pechora Inlet.

The Pechora river at the Kuya settlement area becomes frozen over at the end of October, and the ice finally disappears by the end of May.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Besides information stipulated in Soviet Wood Charter Party, vessels approaching pilot buoy may contact Port Authorities or Pilot in first 15 minutes of any odd hour from 0700 till 2300 hrs. (Moscow time), frequency 2182 kHz. Signals for Pilot to be given in accordance with International Code. Pilot boat wooden, standard type, white painted, with word "Pilot" in black letters on wheel-house. Pilot usually boards vessel at the Pilot Anchorage light buoy (Lat. 68° 30′ N., Long. 54° 32′ E.). In case of bad weather, and in extraordinary circumstances Pilot shall embark vessel in the Srednevskie Islands area. In this event a vessel approaching the port from seaward should follow pilot boat in the wake of it, up to the Srednevskie Islands leading line where Pilot will be able to board ship.

Master of a vessel proceeding to the port of Naryan-Mar should order a Pilot through the Harbour Master 24 hours prior to arrival at the Pilot Anchorage light buoy and advise more precise ETA not later than 4 hours before approaching it.

Master should order Pilot not later than 2 hours prior to shifting berth and/or leaving the port.

ANCHORAGE: A recommended anchorage for foreign vessels is situated in the area with the central point Lat. 68° 30′ N., Long. 54° 33′ E. The depths in the anchorage are from 5.4 m. – 6.6 m. Also Inner Roads where anchorage will be indicated by Pilot.

An anchorage can be obtained at the right bank of the Pechora river off Urpinsky leading line No. 24. Depths are from 4 m. – 17 m. The bottom is sand and mud.

Good anchorages with depths from 5 m – 10 m. can also be obtained opposite Zakhrebetny Bay and N.E. of the town of Naryan-Mar.

All vessels arriving from abroad or leaving the port for abroad, must anchor opposite Zakhrebetny Bay for port formalities.

RESTRICTIONS: Vessels can enter or leave the port at any time of day or night.

The permitted draft for entry to the port is about 4.5 m. but it is usually advised by the Port Authorities at the beginning of navigation. The maximum permitted length of a vessel is 125 m.

The entrance to the port is by the fairway leading from the Pilot Anchorage light buoy across the Pechora river bar.

The bar itself is the extensive shoal water area extending Northward of the Bolvansky Nos. Point. Three channels are dredged across the bar: The Receiving Channel, the Bar Channel and the Povorotny Channel. The last one serves as turning-point from the Receiving Channel into the Bar Channel. Vessels drawing not more than 4.9 m. can pass across the bar only at high water level.

It is prohibited to enter or leave the port through the Bar Channel and/or Receiving Channel as well as to navigate in the port area during dense fog, heavy rain and snow falls, strong winds of over Force 6 and absence of floating marks.

With the appearance of ice in the Pechora Inlet and in the Pechora river, entry to the port is not allowed without Harbour Master's permission.

The speed of a vessel navigating from the Pilot Anchorage light buoy through the Receiving Bar Turning, Alekseevsky, Polovsky, Kuisky, Urpinsky and other Channels shall not exceed 6 knots, with the exception at the part of the Pechora river between the Zakhrebetny and Srednevsky Channels where it is allowed to navigate with speed not exceeding 12 knots.

When passing floating cranes nearby, lighters and vessels lying alongside the port quays, every ship should proceed at dead slow speed.

MAX. SIZE: Draft declared by Port Authorities after being checked in the beginning of the season, and is about 15 ft.

HEALTH: Vessels inspected by sanitary officer. If no diseases, vessel obtains Free Pratique. Pratique automatic when vessel arrives from another Russian port.

RADIO: Naryan-Mar Radio.

Call sign	*Frequencies (kHz) working*	*Frequencies (kHz) calling*	*Type of trans-mission*	*Time of work*	*Remarks*
UOY	500	500	A1	HX	
Naryan-Mar-Radio 1	156.8*	156.8*	F3E	H24	Operates during period of navigation only
Port Controller	156.7*	158.0*	F3E	H24	

*Frequencies are given in MHz.

Storm warnings for vessels' traffic in the Pechora Inlet area for the coming 24 hours are transmitted via both the Central Port Radio and VHF radio.

Notice of Arrival: Should be given in accordance with the "Soviet Wood" Charter Party conditions.

BERTHING: The port of Naryan-Mar specialises in timber exports. Depths at the berths are up to 6.5 m. There are enclosed warehouses and open concrete floor sheds.

The necessary number of tugs for entering or leaving the port as well as for shifting berth shall be agreed upon between Pilot and Master.

A mooring berth is usually indicated by a Pilot. Shifting berths without having obtained Harbour Master's permission is not allowed. Ship's tow lines are usually used during towage.

Diesel portable cranes of up to 6 tons capacity are operated on the quays. There are also track-laying cranes of up to 12 tons and floating cranes with lifting capacity from 35 tons – 40 tons.

STEVEDORES: As per "Soviet Wood" Charter Party.

MEDICAL: No advance notice required. Clinic and hospital available.

DENSITY: Fresh water irrespective of tide.

FRESH WATER: Available from shore.

FUEL: Not guaranteed.

GANGWAY/DECK WATCHMEN: To be provided by vessel.

OPENING/CLOSING HATCHES: According to "Soviet Wood" charter party.

CERTIFICATES:

Seaworthiness.
Measurement.
Load line.
Cargo Equipment.
Safety Equipment.
Radio Telegraphy.
Radio Telephony.
Oil Pollution Prevention.
Sewage Pollution Prevention.
Derat Certificates.

CUSTOMS ALLOWANCES: Tobacco/Wine – No quantity limits.

IDENTIFICATION CARDS: Only Seamen's Books.

CONSULS: No Consuls.

REPAIRS: Small repairs only.

DRY DOCKS: None.

SURVEYORS: State Register of Shipping.

REPATRIATION: Repatriation and crew changes require visa formalities.

AIRPORT: Airport served by regular lines and situated near town.

TIME: GMT plus 3 hours. No seasonal alterations.

TIDE: Changes in the water level in the port area depend upon tides and effects of the wind.

The tide is semi-diurnal with 2 HW and 2 LW a day. The range of the tide varies from 0.9 m. – 1.8 m. Changes in water level are caused by the effects of the wind and may reach 1 m. – 1.5 m.

HOLIDAYS: See "Archangel".

POLICE/AMBULANCE/FIRE: Police 02; Ambulance 03; Fire 01.

TELEPHONES: Can be arranged on board.

SHORE LEAVE: Each crew member properly signed in ship's Articles and having valid Seaman's Book is allowed ashore.

BANKS: None.

EMERGENCY CO-ORDINATION CENTRE: Not available.

STORING: See "Prelims" page viii.

1. By truck when alongside.
2. Vessels stored by truck only.
3. Yes.
4. No.
5. See "Archangel".
6. Normally carried out by ship's crew.

DELAYS: Caused by rains, when vessel loading cargo of sawn goods.

AUTHORITY: The Chief of The Port of Naryan-Mar, Ul. Naberezhnaya 11, 164700 Naryan-Mar, U.S.S.R. *Tel:* 26-95. *Telex:* 24211. *Cables:* Morport Naryan-Mar. *Contact:* Via VHF.

AGENT: A branch of the Port of Archangel Main Maritime Agency "Inflot" at the Port of Naryan-Mar. Pechora Timber Mill 164700, Khatanzeisky, the Port of Naryan-Mar, Archangel Region, U.S.S.R. Cable "Inflot Naryan-Mar". Tel. "Inflot" via the timber mill switchboard 30-70, 31-05.

NEVELSK: 46.40 N. 141.51 E. (See Plan Book)

GENERAL: The sea fishery port of Nevelsk is situated in the Tatarsky Strait, in the Southern part of the Nevelsky Bay. The port is open for navigation all the year round.

Changes of the water level are mainly caused by in and off-going tidal floods.

The port consists of two parts. The Outer part includes a part of the Nevelsky Bay water area with the imaginary boundaries drawn by an arc of 1.5 mile radius from the light mark installed on the Southern point of the Western breakwater. The Inner port consists of the harbour of the fishing port, the Small and the Northern Scoops. The boundary of the Inner is the line connecting the points of the Southern and the Western breakwaters.

The Master of a vessel when entering the port should keep on the leading line of the green leading light marks located at a distance of 5.5 cables to the North of the Southern point of the Naga reef. The true direction of the Leading line is 259° 2′ – 079° 2′.

The port of Nevelsk bearing in mind its position, size, weather and hydrological conditions is not and cannot serve as a sheltered port as it is only partially protected from the effects of the sea swell and winds blowing from South, West and N.W. directions and is not protected from S.W. winds at all. Therefore deep sea-going vessels cannot be allowed to enter the port during storm warnings. It is dangerous to stay in the port when heavy S.W. winds are expected.

PILOTAGE: Effected round the clock. The Master of a vessel should order a Pilot via the Harbour Master's office.

ANCHORAGE: Situated in the Outer port to the South of the leading line and to seaward of the 20 m. contour. The anchorage is not protected from West and North winds and waves. The bottom is sand. The anchorage in the inner area is dangerous as the ground there (stone plate) does not hold anchors well.

RESTRICTIONS: The permitted draft is determined by the Harbour Master. Vessels having draft over 5.8 m. are allowed to enter the port after having obtained the Harbour Master's permission.

TUGS: Tugs ordered by the Master for mooring and unmooring meet vessels within the boundaries of the Inner port.

RADIO: Communications can be effected through the port radio station "Nevelsk Radio-1".

Call sign	*Frequencies (kHz) Working*	*Calling*	*Type of trans-mission*	*Time of work*
UFM-2	500	500	A1A	H24
"Nevelsk-31"	156.8*(16)	156.8*(16)	F3E	H24
(Port Controller)	156.45*(9)	156.45*(9)	F3E	H24

*Frequencies are given in MHz.

BERTHING: All vessels entering the port are moored to the berths according to instructions of a port controller.

The berths of the port with depths alongside of up to 6.5 m. are equipped to handle general, bulk liquid and other cargoes.

There are closed warehouses, open concrete floor sheds and a cold store in the port.

It is recommended to use manila mooring ropes due to insufficient protection of the port from effects of winds, waves and strong variable current with surge (so called the "tyagun".).

Opening and closing of hatches is usually done by the crew. All deep draft vessels are loaded/unloaded in the roads.

The berths of the port are equipped with 5 ton portal cranes. There are other cargo handling facilities and intraport transport.

FRESH WATER: Available in limited quantities.

FUEL: Diesel oil available.

TIME: GMT plus 11 hours. Summertime (April 1st – October 1st), GMT plus 12 hours.

REPAIRS: Possible for vessels up to 4.0 m. draft.

CONSULS: None.

AUTHORITY: The Port of Nevelsk Authority, 32 Rybatskaya Street, 694740 Nevelsk, Sakhalin Island, U.S.S.R. *Tel:* 20-06 (Port Director). *Telex:* Via "Inflot", Kholmsk. *Cables:* Morport Nevelsk. *Contact:* Port Director.

AGENT: Sakhalin Main Maritime Agency, Inflot, at Kholmsk, Sakhalin Island, U.S.S.R.

NOVOROSSIYSK: (Including Sheskharis Oil Harbour)

44.43 N. 37.47 E. **(See Plan Book)**

GENERAL: The port of Novorossiysk is situated in the N.E. part of the Black Sea, in the Bay of Novorossiysk, 60 miles S.E. of the Kerch Strait.

The port is open for navigation all the year round. Ice very seldom appears in the port area. Sometimes, in very severe Winters particularly, a very narrow strip of thin ice (so called "Zabereghi") may be formed on the coast line.

In Winter, strong, gusty N.E. winds (called "Bora"), reaching hurricane force at times, blow from the coastal mountains. Due to these winds, vessels lying at anchor in Novorossiysk Bay may very quickly become covered with ice when the temperature of the air is cooled below freezing-point.

It is impossible to enter the port when "Bora" blows, therefore, all vessels are recommended to leave Novorossiysk Bay for the open sea beforehand or lay at anchor in the Yuzhnaya Ozereika Roads, at a distance of 8.5 miles Westward of the entrance to the port of Novorossiysk or in Anchorage area No. 77, to the South of the Doob Point, until the weather improves.

The range of water level in Novorossiysk Bay caused by the effect of the winds, does not exceed 0.6 m. The changes of water level, due to variation in atmospheric pressure ("Seish" effects), are observed at times. The "Seish" may last up to several days. The maximum range of water level, due to the "Seish", observed in Novorossiysk Bay is 0.6 m.

The port consists of 2 harbours – the Dry Cargo Harbour and Sheskharis Oil Harbour.

The inner roads are situated at the head of Novorossiysk Bay are divided from the outer roads by the Western and Eastern Moles. The outer roads are situated between the moles and the Southern border of the port.

The Dry Cargo Harbour situated inside the inner roads is protected by 2 (Western and Eastern) moles.

Two passages, the Western and Eastern, divided by Penaisky Shoals, lead to the inner roads through the port area. The Western passage is wider in comparison with the Eastern, and vessels may enter outer roads passing through it by one course.

HEALTH: Free Pratique automatic for vessels coming direct from U.S.S.R. port. From other countries, usual procedure of sanitary inspection applies.

DOCUMENTS: Refer to beginning of U.S.S.R. section

Shipmaster's Report: (1975) Notwithstanding the instructions for documentation for all U.S.S.R. ports referred to at the beginning of the section, the Novorossiysk Port Authorities require the following:

General Declaration (IMO FAL form 1)	3 copies
Cargo Declaration (IMO FAL form 2)	2 copies
Ship's Stores Declaration (IMO FAL form 3)	2 copies
Crew Effects Declaration (IMO FAL form 4)	2 copies
Crew List (IMO FAL form 5)	6 copies
Passenger List (IMO FAL form 6)	4 copies

PILOTAGE: Compulsory: 96 hours prior arrival cable Inflot giving ETA, name of vessel, gross tonnage, exact draft, type of engine. Flag, sound and Morse signal G. Pilot meets vessel at Lat. 44° 37′ N., Long. 37° 52′ E. Movement of vessel within inner harbour – only under Pilot guidance. If Pilot is not available vessel should anchor in area No. 52, opposite the Kabardinka settlement, recommended as an anchorage (No. 77), and wait until Pilot arrives.

ANCHORAGES: Anchorage in the outer roads of the port is allowed almost everywhere but most convenient places for the purpose are to be considered the following 3 areas. The first one is area No. 52 situated to the North of the Doob Point.

Depths there vary from 12 m. to 27 m., the holding ground is mud. In the event of winds blowing from seaward Masters of all vessels are recommended to leave this area for the open sea. Area No. 63 is the second anchorage place, situated 8 cable lengths Westward of the Penai Point. Depths there are from 13 m. to 27 m., the holding ground is mud and mud with shell. The third place is area No. 51 situated 6 cable lengths South-Eastward of the port entrance. Depths there are from 20 m. to 24 m.

Vessels approaching the port of Novorossiysk with N.E. gales ("Bora") blowing, or caught by the storm whilst lying in the outer or inner roads, or after having received storm warning, should use every opportunity to proceed to sea or lay at anchor in the Yuzhnaya Ozereika Roads (Anchorage Points No. 53 and 54), having the main engines ready and keeping constant anchor watch.

Under the circumstances, every vessel should keep regular radio contact with port radio station.

Masters of vessels lying at anchor in the outer roads and/or in the port, are usually warned beforehand about the forthcoming N.E. winds. Since these winds may reach hurricane force during a very short period of time, particularly in Winter, all Masters lying at anchor in Novorossiysk Bay are recommended to pay careful attention at every change of the weather, to watch position of vessel to be able to prevent her drifting about anchor and proceed to sea in due time.

RESTRICTIONS: No restrictions on night entry into the Inner Roads. Mooring and/or unmooring, both in the Dry Cargo Harbour and the Sheskharis Oil Harbour cannot be effected during Southerly or N.E. winds over Force 7.

MAX. SIZE: The permitted length for entry into port is 250 m., draft 11 m. for dry cargo vessel.

Tankers: 250,000 d.w.t., 19 m. max. draft.

RADIO: Vessels can establish radio contact through port radio station Novorossiysk Radio operating 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz) Working*	*Calling*	*Type of trans-mission*	*Time of work*
UDN	500	500	A1A	H24
"Novorossiysk Radio"	2182	2182	H3E	H24
"Novorossiysk Radio-1"	156.8*(16)	156.8*(16)	F3E	H24
(CPR)**	160.95*(7)	156.35*(7)	F3E	H24
	161.7*(22)	157.1*(22)	F3E	H24
"Novorossiysk Radio-3"	156.7*(14)	156.7*(14)	F3E	H24
(Main Controllers' office of the Novorossiysk Shipping Co.)	156.8*(16)	156.8*(16)	F3E	H24
"Novorossiysk-17"	156.8*(16)	156.8*(16)	F3E	H24
(Vessels' movement control post)	156.45*(9)	156.45*(9)	F3E	H24

*Frequencies are given in MHz.

**CPR – Central Port Radio Station.

All vessels passing through the traffic controlled zone and/or anchored there have to keep constant VHF radio watch on Channel 16.

The port signal station is equipped with radar which gives all possible information for ensuring safe pilotage, and also helps Pilots in shifting vessels within the port inner roads.

TUGS: A sufficient number of tugs of between 600 h.p. and 5,000 h.p. are available in the port.

While manoeuvring ships to the Sheskharis Berths two more tugs of 150 i.h.p. are engaged regardless of the ship's size in view of the constructive features of the berths.

BERTHING: When proceeding in inner harbour vessels must keep both anchors ready to let go; ships to be moored by safe ropes which to be kept tight at all times. Also be ready to use anchor chain over bollard according to Pilot's recommendation. Strictly prohibited to work with propellers lying alongside berth. All mooring ropes must be fitted with rat-guard plates.

The quays of the Dry Cargo Harbour with depths alongside of up to 11.5 m. are equipped to handle general, 20 ft. and 40 ft. containers and bulk cargoes (coal, ore), metals, timber, sugar, grain, cement, fruit and vegetables.

Berths of the port are equipped with modern cargo handling facilities. There are portal cranes of up to 40 tons capacity, floating cranes with lifting capacity of up to 100 tons, automatic and electric cargo lifters and other equipment.

Opening and closing of hatches is usually done by ship's crew with the help of portal cranes at dry cargo berths, if ordered by Master, grain berth excluded.

Ores are loaded in compliance with the Temporary Regulations for Carrying Ores handed over to the Shipmaster by Inflot Agents during inwards clearance.

Following are the basic requirements of above Regulations to the ores being loaded *(a)* moisture contents not higher than 12% (if other percentage is not stipulated by Charter Party); *(b)* angle of repose is not less than 35°.

Grain and other bulk cargoes are to be loaded in strict conformity with the International Convention.

STEVEDORES: All necessary services including stevedoring work available under Port Authority guidance. Port cargo-handling regions where ships berth managed by Port Authority and used for stevedoring, tallymen service, storage, etc. On the matters connected with services available, foreign vessels have to apply to Port Authority through Maritime Agency "Inflot".

MEDICAL: In case of accident (emergency), medical attendance rendered at any time. Hospital facilities available. Also inoculation, vaccination, etc.

TANKERS: Bearing in mind N.E. gales, oil carriers lying alongside oil pier must have boat-ropes lowered to water and illuminate them at night. All scupper holes on main deck must be closed tightly. Master responsible for overflow of oil in the vicinity of harbour and has to bear harbour cleaning costs. No repair work can be done on tankers lying alongside oil pier. No ballast water may be pumped out, no garbage or refuse thrown overboard. Ballast water to be pumped into shore slop tank.

The Sheskharis Oil Harbour is situated in the Eastern part of the outer roads, 2.2 miles N.W. of the Penai Point. It is protected by a mole from the South and oil jetty from the North. The base of the jetty is used as a berth for fire-fighting boats.

Since it is not safe to stay alongside berths in the Sheskharis Oil Harbour during strong winds blowing from any direction, all tankers, after having received a storm warning should take urgent measures to leave for sea.

Depths at the berths of the Sheskharis Oil Harbour are from 9.5 m. up to 20.0 m.

To ensure safe loading/unloading of oil products as well as to expedite the vessel's turn around time, every tanker should be equipped with cargo manifolds capable of fitting 8 in. – 16 in. shore-loading connections.

These manifolds should allow the upward connection with shore cargo flanges of not less than 1 m. in height and located on deck at 3 m. – 5 m. length from side of vessel.

Deepwater Berth No. 1: Accepts vessels of 80,000 to 250,000 d.w.t. Arrival and departure draft not to exceed 19.0 m.

DENSITY: About 1010 – 1014.

FRESH WATER: Available from shore; minimum quantity invoiced at 15 tons.

FUEL: Most grades available. Fuel for tankers can be supplied ex-shore. Bunkers for dry cargo vessels are usually delivered by lighters.

FIRE PRECAUTIONS: All operations involving open fire and sparks are prohibited on oil pier. Two fire extinguishers, thick felt and sand must be ready beside hose connection.

GANGWAY/DECK WATCHMEN: Gangway watch compulsory and carried out by crew.

OPENING/CLOSING HATCHES: Normally by crew, otherwise according Charter Party.

CUSTOMS ALLOWANCES: No quantity limits but nothing allowed to be taken ashore.

IDENTIFICATION CARDS: Crew members get shore passes.

CONSULS: No Consulates in port or its vicinities.

REPAIRS: All kinds of repairs for vessels of up to 60,000 d.w.t. can be carried out.

Cargo Superintendent's Report: 1975.

The Novorossiysk Shiprepair Yard is capable of carrying out any ship repairs, and is equipped with 3 floating docks. I was unable to obtain information on the size of these docks, but estimate they are capable of handling vessels in the 100,000 ton range.

REPATRIATION: No facilities exist for effecting crew changes. A crew member may be repatriated due to family reasons or sickness but repatriation requires visa formalities.

AIRPORT: Nearest airport (Krasnodar) served by regular internal lines is situated at 150 km. from port.

Cargo Superintendent's Report: 1975.

Novorossiysk has its own airport, connected to the regular inland line's service. There are daily services to and from Moscow via Kharkov.

TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.

HOLIDAYS: New Year's Day, 8th March (World's Women's Day); May 1st, 2nd (Labour Day); May 9th (Victory Day); October 7th (U.S.S.R. Constitution Day); November 7th, 8th (Great October Socialist Revolution Day). Cargo work can be arranged on those days.

POLICE/AMBULANCE/FIRE: Police, 02; Ambulance, 03; Fire, 01.

TELEPHONES: Can be arranged to be fitted on board.

SHORE LEAVE: Crew members are allowed ashore. Crew members of foreign vessels get shore passes which grant them permission to stay ashore till 2400 hrs. Crew members who lose their shore passes as well as those late from ashore, are not granted shore leave any longer in conformity with local regulations.

AUTHORITY: The Port of Novorossiysk Authority, 14 Port Street, 353911 – Novorossiysk, Krasnodarsky Krai, U.S.S.R. *Tel:* 6-21-31 (Chief of the Port), 6-22-41, 6-25-16, 5-46-44 (Harbour Master). *Telex:* 829. *Cables:* Morport Novorossiysk.

AGENT: Main Maritime Agency "Inflot", 13 Portovaja Str., Tel: 54014, 62260, 53086, 62678. Cables: "Inflot" Novorossiysk. Telex: 279114.

ODESSA: 46.30 N. 30.46 E. (See Plan Book

GENERAL: The port of Odessa is situated on the N.W. coast of th Black Sea in the S.W. part of Odessa Bay.

The port is open for navigation all the year round, but with ice-breake assistance in severe Winters about 30 days of the year. Ice first begin to form in the second half of December and finally disappears i February. After ice has formed it is often broken up by strong winds an stormy weather. In mild Winters ice has not been observed in Odess Bay.

Range of water level caused by winds depends on force and period they blow, and may reach 0.6 m. – 1.0 m.

Atmospheric pressure has also a direct influence on the water leve ("Seish" effect), but is weaker than effects of the wind. The "Seish" ma last from a few minutes up to several days causing change of water leve up to 0.58 m.

PORT LIMITS: The Odessa port waters are bound in the South b Lat. 46° 25° 00″ N. from the shoreline as far as its intersection with Long 30° 54′ 00″ E.; in the East by Long. 30° 54′ 00″ E.; in the North b Lat. 46° 32′ 00″ N. to its intersection with the shoreline and on the Wes by the shoreline itself.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Arranged through Inflot, but vessel to give 12 days', 96, 24 hours' and 6 hours' notice through Odessa Radio. Pilot boat recognised by international pilot flag. Vessel requiring Pilo shows international flag "G". Request for Pilot to shift a vessel within the port or to Pilot her into or out of port should be made by the Maste through the Inflot Agency at least 4 hours prior to service requirement.

The Pilot is brought on board and returned on shore by pilot launch 1.7 miles E.S.E. of the Vorontsovsky Lighthouse (Lat. 46° 29′ 00″ N. Long. 30° 48′ 00″ E.).

The ship's Master is responsible for the safety of the pilot launch and the Pilot when he boards and disembarks from the vessel as well as during his stay thereon.

The boarding Pilot shall be informed by the ship's Master of the vessel's draft, length, breadth and other particulars required for her safe pilotage and mooring.

Specialised vessels (LASH vessels, barge carriers, container ships, Ro/Ro vessels and the like) shall be piloted through port waters only by a Pilot authorised by the local Port Pilotage Service. The Pilot may be taken on board in advance in the swinging area in the port of Ilichevsk (Lat. 46° 10.2′ N., Long. 30° 56.2′ E.).

Pilotage for all specialised vessels is compulsory.

Masters of vessels proceeding from the port of Odessa to Kherson shall make request for a Pilot through the Inflot Agency from the Maritime Pilot Service based in Ilichevsk. Vessels approaching zone from the sea must communicate with "Odessa Port Control" on VHF, Channel 14 (156.7 MHz) and act in accordance with its instructions.

ANCHORAGES: Two anchorages are available at the Odessa Roadstead. They are Anchorage No. 355 and Anchorage No. 354.

Anchorage No. 355 is used by vessels clearing in or out of port and by those that are to take on water, supplies or fuel or are to undergo minor repairs, etc.

Anchorage No. 354 is for large-tonnage vessels as well as tankers or others carrying dangerous cargoes.

The boundaries of these anchorages are duly charted.

Vessels shall proceed to, and anchor at, Anchorage No. 354 without assistance. Upon anchoring, the vessel shall communicate to the Traffic Control Station her bearings and distance from the Vorontsovsky Lighthouse.

In case of unforeseen circumstances which may endanger navigation (sudden deterioration of visibility, failure of the main engine or steering gear, non-readiness of berth to receive vessel, etc.), vessels entering or leaving port shall, if possible, anchor at points 8 or 12 of Anchorage No. 355.

Anchoring in the Oil Harbour Channel, in the prescribed routes and harbour approaches as well as in the harbour gateway should be avoided.

RESTRICTIONS: Vessels enter only with Pilot and should have lights according to Pilot's instructions. Vessels berthed depending on kind of cargo carrying or loading.

Vessels can enter and leave the port at any time of day or night.

Medium size vessels when entering or leaving port must have keel clearance not less than 1 ft.; large vessels not less than 2 ft.

Vessels are allowed to moor at berth only after having obtained Harbour Master's permission.

The speed of a vessel shall not exceed 4 knots when passing through the channel and/or in the port water areas marked by navigational marks.

Large vessels laden with ballast water only, are allowed to moor to berth if winds do not exceed Force 6. A vessel of smaller size may be turned broadside on to a loaded vessel of a larger size, but not vice versa.

MAX. SIZE: *Inner Harbour:* LOA 230 m., beam 40 m. and draft 12 m.

TUGS: A ship's tugboat requirements are made known, subsequent to the Pilot's approval, to the Traffic Manager on VHF Channel 22, call signal "Odessa Radio 7", at least 1 hour prior to the ship's approaching the port gateway.

BERTHING: 38 berths available with depths alongside from 8 m. up to 12.0 m.

STEVEDORES: Portal electric cranes of up to 45 tons capacity are operated on the quays by the warehouses. There are grain-loaders and floating cranes with lifting capacity of up to 100 tons, other cargo handling equipment and intraport transport.

Opening and closing of mechanised hatches is always done by the ship's crew.

Opening of hatches on arrival and closing of non-mechanical hatches after loading of cargo has been completed, is done by ship's crew.

Opening and closing of non-mechanised hatches in the course of loading or unloading is done by port workers.

HEALTH: Free Pratique given on berthing or at the anchorage. In case of suspected disease Master must inform Inflot by cable. Free Pratique cannot be granted automatically.

RADIO: Vessels can establish radio contact through the port radio station Odessa Radio operating 24 hours a day on the following frequencies:

	Frequencies (kHz)		*Type of transmission*	
Call sign	*Working*	*Calling*		*Time*
UDE	500/447	500/454	A1A	H24
“Odessa-Radio”	2182	2182	H3E	H24
“Odessa-1” (CPR)**	156.8*(16)	156.8*(16)	F3E	H24
“Odessa-Radio-17”	156.8*(16)	156.8*(16)	F3E	H24
(Harbour Master)	156.45*(9)	156.45*(9)	F3E	H24
“Odessa-Radio-9” (Pilot Service)	156.45*(9)	156.45*(9)	F3E	H24
“Odessa-Radio-15” (Inflot Shipping Agency)	160.75*(3)	160.75*(3)	F3E	H24
“Odessa-Radio-8”	156.8*(16)	156.8*(16)	F3E	H24
(Vessels' movement control post)	156.375*(67)	156.375*(67)	F3E	H24

*Frequencies are given in MHz.
**CPR – Central Port Radio Station.

Traffic and storm signals are given by “Odessa Port Control” on VHF Channels 14 and 16.

VHF: Traffic in the harbour is controlled by the Traffic Control Station round the clock. The Traffic Control Station and the Signal Mast are situated on the roof of a building at Berth No. 2. The station telephone number is 37-30, its VHF call signal is “Odessa Radio 8”, and the operating Channels are 14, 9 and 67.

All vessels proceeding to the port of Odessa shall establish VHF communication on Channel 14 (156.7 MHz) with the Traffic Control Station 20 minutes prior to entering port waters, when entering port waters and after berthing or anchoring.

The vessel shall give the following particulars to the Pilot-Operator on duty:

(a) Ship's name, owner, length, breadth, draft.
(b) Last port of call and purpose of calling at the port of Odessa.
(c) Specialised vessels (LASH vessels, barge carriers, ro/ro and such like) and others concerned, also indicate the number of propellers, their pitch (variable or constant), engine power, availability of thruster and its power.

Thereafter, the ship will proceed according to the instructions of the Traffic Control Station.

Prior to moving any ship within the Traffic Control Zone, her Master shall request permission from the duty Pilot-Operator of the Traffic Control Station by VHF Channel 14, by telephone (37-30) or by visual communication means.

Such permission is valid only for 30 minutes after which it is automatically cancelled.

A special watch should be posted on all vessels and other craft navigating within Traffic Control Zone to listen in on VHF Channel 14 until they are berthed or anchored. Ships underway may change their VHF Channel only on instructions from the Traffic Control Station or the Pilot Service.

All vessels sailing in port waters shall have their VHF stations in good order and shall keep them operative on one of the channels used for communication in the port.

Vessels in port waters, at berth or anchorage, are strictly prohibited to use the VHF for private communication on Channels 16, 9, 14, 20, 22.

Failure to comply with this regulation will be regarded as a violation of safety rules prescribed for sailing in the Odessa port waters and all violators will be punished accordingly.

Also see “Radio.”

RADAR: When visibility is less than 2 miles in the roadstead or 0.5 miles in the port, vessels may be navigated only by shore-based radar.

The necessity for radar-assisted pilotage is determined by the Pilot-Operator on duty at the Traffic Control Station.

The decision to put a vessel into or out of port shall be taken jointly by her Master, the Port Pilot and the duty Pilot-Operator of the shore-based radar station. Ship-to-radar station communication shall be effected by the boarding Pilot.

The shore-based radar station provides:

(a) Pilotage of vessels from the limits of the Traffic Control Zone to the Karantinaya, Novaya and Kabotazhnay Harbours of the dry-cargo port through the Vorontsov Gateway.
(b) Pilotage of vessels from the limits of the Traffic Control Zone to Anchorage No. 355.
(c) Pilotage of vessels from the port through the Vorontsov Control Gateway and from Anchorage No. 355 to points beyond the Traffic Control Zone Limits.
(d) Remote pilotage of vessels with no Pilot on board by furnishing them with information on their position, with other data to help them orientate and to pass clear of other ships. Such information is supplied by the shore-based radar station at the Master's request.

Vessels may be brought to Anchorage No. 355 only with the assistance of shore-based radar pilotage whatever the visibility conditions may be.

Radar assisted pilotage and remote pilotage are effected throughout the 24 hours of the day, only 1 vessel being piloted at a time.

A ship to be piloted with the assistance of or by shore-based radar shall have her main engine, steering gear, anchor handling gear, communication facilities and sound signalling in good working conidtion and her radar shall be operative. Failure of any of above equipment is to be immediately reported by the ship's Master to the shore-based radar station through the Pilot.

In the event of failure of the shore-based radar or other means of ship-to-shore communication, the Master, whose ship is being assisted by such radar or is on remote pilotage, must take all the necessary measures to ensure the ship's safety.

The use of the shore-based radar does not relieve the Shipmaster of responsibility for ship control.

Radar assisted or remote pilotage dues are recovered according to established procedure on the basis of the extract from the log of the Odessa Port Traffic Control Station.

MEDICAL: Advance notice for medical attendance required. Notice should be given to Inflot. Hospital facilities available in case of emergency.

TANKERS: No reducing pieces necessary. Oil slop facilities available. The Oil Harbour is situated in the Northern part of the port (the inner roads), Northward of Rabochaya Harbour which is formed by a “T”-shaped mole extending E.S.E. off-shore. The bottom of the Eastern side of the mole is dangerous, therefore vessels are recommended not to approach it closer than 100 m.

DENSITY: Average density 1012 varying with season.

FRESH WATER: Fresh water may be supplied ex-shore or ex-water barge. Minimum quantity ex-barge 15 tons.

FUEL: Bunkers can be supplied by barge, and to be ordered 72 hours before arrival.

GANGWAY/DECK WATCHMEN: Not necessary.

OPENING/CLOSING HATCHES: See “Stevedores”.

CUSTOMS ALLOWANCES: Tobacco. No limits on board vessel, but when going ashore not more than 1 or 2 packs. Wine and/or spirits not to be taken ashore.

CARGO GEAR: All cargo gear must have certificates for maximum weight capacity.

IDENTIFICATION CARDS: Necessary.

CONSULS:

Bulgarian Consulate General Tel: 66-60-92.
Indian Consulate General Tel: 22-43-33.
Cuban Consulate General Tel: 25-14-69.

REPAIRS: All types of deck and engine repairs can be carried out.

DRY DOCKS: Available.

REPATRIATION: Can be arranged through “Intourist”.

AIRPORT: Distance to airport 10 miles. Direct airlines with several socialist countries and with the rest of the world through Moscow. Aircraft fly to Moscow 4 times a day.

TIME: GMT plus 3 hours. GMT plus 4 hour in Summer.

HOLIDAYS: Work can be arranged on below mentioned holidays through Sovfracht, Moscow, at special rates. Holidays: 1st January, 8th March, 1st and 2nd May, 9th May, 7th October, 7th and 8th November.

POLICE/AMBULANCE/FIRE: Police (Militia), 02 from town; 902 from port. Ambulance: 03 from town, 903 from port. Fire: 01 from town, 901 from port.

TELEPHONES: Telephones may be installed on board.

SERVICES: Tank-cleaning equipment available.

SHORE LEAVE: Crew members allowed to stay ashore till midnight. Master without limitation.

DELAYS: Vessels berthed in turn.

AUTHORITY: The Port of Odessa Authority, 1 Vakulenchuk Square, Odessa, U.S.S.R. *Tel:* 293-35-00, 293-34-91. *Cables:* Morport Odessa.

AGENT: The Port of Odessa, Main Maritime Agency “Inflot”. Postal address: 1 Vakulenchuk Square, Odessa, 270004 U.S.S.R. Cables “Inflot Odessa”. Tel: 22-39-02, 293-37-81, 293-38-01; Telex: 232824.

ONEGA: 63.54 N. 38.06 E. (See Plan Book)

GENERAL: The port of Onega is situated on the right bank of the Onega river (3 – 4 miles up from the mouth), flowing into Onezhsky Bay off the White Sea.

Port open for navigation for about 6 – 7 months per year, starting from May. The port is closed for foreign flag vessels from 1st of September to 31st of December annually. In Autumn, when the river is covered with ice, assistance of ice-breaker is required but may not be rendered regularly.

Opening and closing of the port for navigation as well as turn and order of entering the port is usually regulated by the Port Authorities.

Changes of water level in the river depend on tide, spring floods and effects of the wind.

The tide is semi-diurnal with two high and two low waters a day. At the Onega river mouth the range of the tide at mean springs may reach 2.7 m.

The rises of the water level are due to North-Westerly, Northern and North-Easterly winds. The falls of the water level are usually caused by South-Easterly, Southerly and South-Westerly winds.

The Onega river becomes frozen over at the beginning of November. Ice begins to form in October and usually breaks up at the end of April or early May.

A vast area of shoal waters is situated at the mouth of the Onega river.

Access into the Onega river is by the Karelsky Fairway. Vessels drawing up to 6.1 m. may pass through it at high water.

Since depths in the river vary, Masters are recommended to get in touch with the Harbour Master to make enquiries about the existing least depth in the fairway before entering the river.

The port specialises in timber exports.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. A Pilot should be ordered by the Master 24 hours' prior to arrival at the Letny Orlov pilot station. A Pilot meets a vessel at a distance of 0.7 mile Westward of the Letny Orlov Point.

ANCHORAGES: Vessels drawing up to 2.4 m. can obtain anchorage in the Town roadstead below the Severoles wharf. The roadstead situated opposite timber mill No. 32 – 33 can be used as anchorage by vessels drawing up to 3.55 m.

During winds blowing from the N.W. vessels are recommended to anchor in the Petchak area of the Solovetskie Islands, with depths of 10 m. at 1 mile distance offshore.

During Southerly winds of Force 5-6, a safe anchorage with depths of 10 m. can be obtained in the Konyukhov Inlet, 1 mile offshore.

In case of North-Westerly storms, vessels lying on the Karelsky roads should anchor in the Purnema area with depths from 6 m. to 10 m. where an anchorage light buoy is installed (Lat. 64° 20′ N., Long. 37° 27′ E.).

The recommended anchorages for vessels proceeding to the port of Onega along the fairway are situated in the following places:

1. On the line of the Town of Onega leading marks and on the beam line of the front mark of Pikhnemsky No. 2 leading line. Depths are from 3.7 m. – 4 m., the bottom – mud and small stone.

2. In the area of the Onega river, a short distance Northward of the town of Onega leading marks, opposite the Export quay. The least depth in the area is 4 m., its length – 700 m., the bottom is mud and small stone.

3. Southward of the Pristansky (Quays) leading line but not passing over the line of the Pristansky Sekushchy (Quays Crossing) leading marks to the Eastward of it. The depths are from 3 m. – 3.7 m., the holding ground – mud, small stone and stone.

RESTRICTIONS: Vessels having draft not more than 3 m. may enter port at any time, but with draft more than 3 m. only 1 hour before high water.

The speed of vessels having the maximum draft should not exceed 8 knots. The movement of vessels within the port area is not allowed during restricted visibility.

MAX. SIZE: The maximum permitted draft is usually announced at the beginning of the navigation season after sounding of the fairway has been accomplished. It varies from 5.1 m. – 6.4 m. Maximum permitted length is 124 m.

HEALTH: Alongside or on the Roads all vessels coming from abroad inspected by Sanitary Office representative. If no diseases, vessel obtains Free Pratique. If vessel enters directly after calling at another Russian port, Pratique automatic.

RADIO/VHF: Besides Murmansk and Archangel, Onega Radio (UZS), 500 kHz; VHF of pilot office at port of Onega (Channel 16).

Vessels can establish radio contact through the port radio station Onega Radio operating 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz)*		*Type of trans-mission*	*Time of Work*	*Remarks*
	Working	*Calling*			
UZS	500/441	500/425	A1A	H24	
"Onega-2" (Port controller)	156.8*(16)	156.8*(16)	F3E	H24	Operates during navigation
"Onega-5"	156.45*(9)	156.45*(9)	F3E	H24	Operates
(Harbour Master)	156.8*(16)	156.8*(16)	F3E	H24	during navigation

*Frequencies are given in MHz.

The Onega storm signals station is located on the roof of the Harbour Master's office. Day signals warning about forthcoming storms and strong winds in the Onega Bay area are exhibited at mast of the signal station.

TUGS: The number of tugs required for mooring/unmooring and shifting berths is determined by the Master after having consulted the Pilot. Tugs should be ordered 6 hours prior to leaving the port for sea.

BERTHING: Depths at the port berths are up to 6.5 m. There are enclosed warehouses and open concrete floor sheds. Loading of timber usually by ship's gear.

STEVEDORES: No particular ETA advices to stevedores/shippers. Loading of timber usually carried out by ship's winches at average rate of 24 stds. per hatch per working day.

MEDICAL: Doctor and hospital facilities available.

FRESH WATER: Available. Usually delivered by tug.

FUEL: Availability not guaranteed.

GANGWAY/DECK WATCHMEN: Usually by ship's crew.

OPENING/CLOSING HATCHES: In accordance with "Soviet Wood" charter-party conditions.

CUSTOMS ALLOWANCES: No restriction on quantity, but nothing to be taken ashore.

IDENTIFICATION CARDS: Only Seamen's Books required.

REPAIRS: Small repairs only.

REPATRIATION: Subject to visa formalities.

AIRPORT: Nearest at Archangel.

TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.

HOLIDAYS: See "Archangel".

SHORE LEAVE: Allowed up to midnight.

AUTHORITY: The Port of Onega Authority, 198 Oktyabrsky Prospekt, 164880 – The Port of Onega, Archangel Region, U.S.S.R. *Tel:* 21-33 (Harbour Master); 24-91 (Port Controller); 21-51 (Chief of the Port). *Cables:* Morport Onega.

AGENT: A branch of the port of Archangel, Main Maritime Agency "Inflot" at the port of Onega. Postal address: 164880 – The Port of Onega – Archangel Region, U.S.S.R. Cables: "Inflot Onega". Tel. Timber Mill Switchboard 33-33, "Inflot".

POTI: 42.09 N. 41.39 E. **(See Plan Book**

GENERAL: The port of Poti is situated 1.5 miles North of the Rioni rive mouth and on the S.E. coast of the Black Sea.

Port open for navigation all the year round.

Changes of the water level in the port area are caused by the winds and usually reach 0.6 m.

The max. range of the water level observed in the river is 0.9 m.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Radio 96, 48 hours prior arrival to Por Controller and Inflot Agency advising ETA, description and quantity o cargo, location and weight of heavy lifts, if any, number of passengers, ship's length and draft, as well as any services required. Confirmation o ETA required 4 hours prior arrival. Inflot will arrange Pilot basis above information.

Pilot will board vessel in the outer roads at 5 cables length from the Poti light buoy. (Lat. 42° 09′ N., Long. 41° 38′ E.).

The Harbour Master will give the Master of a vessel appropriate instructions if the Pilot is not able to disembark in the outer roads due to stormy weather or heavy waves.

ANCHORAGES: In outer port which is protected by Novy Severny, Yuzhny, and Zapadny Moles, and by Zapadny Breakwater. Safe anchorage for deep drafted vessels, except in periods when "Tyagun", a strong variable current with surge, occurs, with winds from N.W., W. and S.W.

The outer roads are bounded by 2 parallels – Lat. 42° 12′ N. and Lat. 42° 08′ N., and the meridian 41° 35′ E. and the coast line.

The roads are open to winds blowing from the sea. Therefore, in the event of stormy weather vessels are recommended to leave anchorage in the outer roads for sea.

Protected by the New Northern, Southern and Western moles the port ensures a good anchorage for deep-drafted vessels, except periods when N.W., West and S.W. winds form a strong, variable current with surge ("Tyagun"). Strong Westerly, S.W. and Easterly winds make the entry to the port more difficult.

A good anchorage with depths of 10 m. to 30 m. can be obtained at a distance of 1.3 miles N.W. and 1.1 mile West of the head of the Western mole.

Vessels are prohibited from anchoring in the S.W. part of the Southern Harbour and in the centre of the Inner Basin.

RESTRICTIONS: Vessels are prohibited from entering the port when the entrance and the leading lights are covered with fog.

Vessel's speed shall not exceed 4 knots in the port areas marked by navigation marks.

There are no restrictions for night entry.

Least depth in approaches 7.0 m.

MAX. SIZE: The max. permitted draft for entry to the port is 9.4 m. and the length 190 m.

HEALTH: Free Pratique automatic for vessels from another U.S.S.R. port. Other vessels are boarded on arrival.

RADIO: Vessels can establish radio contact through the port radio station Poti Radio operating 24 hours on the following frequencies:

Call sign	*Frequencies (kHz)*		*Type of trans-mission*	*Time*
	Working	*Calling*		
UFA	500/484	500/484	A1A	H24
"Poti-1" (CPR)**	156.8*(16)	156.8*(16)	F3E	H24
	156.05*(9)	156.05*(9)	F3E	H24
"Poti-2"	156.8*(16)	156.8*(16)	F3E	H24
Port (Controller)	156.6*(12)	156.6*(12)	F3E	H24
(Vessels' movement control post)	156.675*(73)	156.675*(73)	F3E	H24

*Frequencies are given in MHz.

**CPR – Central Port Radio Station.

Traffic signals for vessels entering and leaving the port are exhibited at the signal mast located at the head of the Northern mole.

BERTHING: Berthing in the port can be effected with tug assistance only.

The berths of the port, with depth alongside up to 12.5 m., are equipped to handle general and bulk (ore, coal) cargoes, mineral oil products, metals, fruits, vegetables, etc., as well as passenger traffic.

Portal electric cranes of up to 16 tons capacity are operated on the quays. There are also floating cranes with lifting capacity of up to 100 tons.

MEDICAL: Qualified medical service is available free of charge, including dispensary and hospital treatment.

STEVEDORES: Arranged by Inflot.

DENSITY: About 1015, variable with season.

FRESH WATER: Fresh water supplied ex-shore to ship directly or ex-water barge in boundaries of port.

FUEL: Bunkers in small quantities are available. Fuel in quantities over 500 tons will be supplied if an order is placed not less than 5 days prior to a vessel's bunkering. Bunkers are delivered by barges.

CUSTOMS ALLOWANCES: No restriction on quantities but nothing to be taken ashore.

CONSULS: See "Odessa".

REPAIRS: Only minor repairs can be effected. There are no dry docks in the port.

AIRPORT: Nearest at Odessa.

TIME: GMT plus 4 hours. GMT plus 5 hours in Summer.

HOLIDAYS: 1st January (New Year's Day); 8th March (International Women's Day); 1st, 2nd May (Workers' International Solidarity Day); 9th May (Victory Day); 7th, 8th November (Anniversary of October Revolution); 5th December (U.S.S.R. Constitution Day).

POLICE/FIRE/AMBULANCE: Police service, Tel: 0-2; Ambulance, Tel: 0-3; Fire Service, Tel: 0-1.

SHORE LEAVE: Crew members allowed ashore up to midnight.

AUTHORITY: The Port of Poti Authority, 52 Lenin Street, 384691 – Port of Poti, U.S.S.R. *Cables:* Morflot Poti. *Tel:* 9-32-01; 9-32-02; 9-32-08.

AGENT: Maritime Agency "Inflot". 50 Lenin Street. 384691 – Port of Poti, U.S.S.R. Cables: Inflot Poti. Tel: 54127, 57348. Telex: 412674.

PYARNU: 58.23 N. 24.29 E. (See Plan Book)

GENERAL: The port of Pyarnu, a sea fishing port, is situated in the N.E. part of the Riga Bay, at the estuary of the Pyarnu River falling into the Pyarnu Lakht.

Vessels, with a draft of 4.0 m. can reach the port by the channel about 2.5 mile long and about 60 m. wide.

At the estuary of the Pyarnu River the channel is protected by two moles extending S.W. from the shore. Depths at the berths are up to 5 m. Changes of the water level within the port aquatorium are due to tides caused by winds.

Vessels proceeding to the port by the channel are recommended to have sufficient keel clearance bearing in mind requirements of good sea practice. The pilotage is carried out with due regard to the existing water level compared usually with the mean water level at the Kronstadt tide-gauge. Data of the exact depth of the channel can be obtained from the Harbour Master's Office. The harbour of the port is usually frozen over from November till April.

PILOTAGE: Compulsory. The port of Pyarnu has no special Pilot service. In view of this, Pilots for entry or leaving should be ordered through maritime Agency "Inflot" at the port of Tallinn. Pilots embark at the port of Pyarnu roadstead.

ANCHORAGES: The port of Pyarnu roadstead occupies the whole of the middle part of the head of the Pyarnu Lakht limited by the 5 m. line.

When in the roadstead vessels may anchor on both sides of the Pyarnu-Morskoi leading line, beyond the boundaries of the fishing areas. The holding ground is good. The roadstead is sheltered from winds of all directions, except those blowing from the South and S.W.

Masters should bear in mind that there are a lot of fish nets laid in the Pyarnu Lakht. The boundaries of the fish net prohibited areas for navigation of merchant vessels are marked on the charts.

RESTRICTIONS: All traffic of vessels both in the harbour and in the approaches to the port is controlled by the Harbour Master's Office, by a Master on duty.

Navigation in the approaching channel is allowed day and night, in turn, but only in one direction at one time.

It is prohibited for vessels to pass by each other and pass by vessels keeping the leading marks of the approaching channel in line as well as to cross the channel.

The priority to navigate in the channel is given to vessels leaving the harbour. In this case vessels proceeding to the port must give way to outgoing vessel not preventing her manoeuvring. The turn of movement in the channel is stipulated by the Port Controller but the traffic of vessels itself is controlled by the Harbour Master's Office.

Vessels navigating both in the channel and in the harbour must proceed at a moderate speed to avoid the possibility of causing waves.

If winds over Force 6 Beaufort scale entry to the port, leaving the port and shifting berths is allowed by the Harbour Master or a person in charge only.

RADIO: Radio communication can be effected through the radio stations:

Call sign	Frequencies (kHz) Working	Frequencies (kHz) Calling	Type of Trans-mission	Remarks
RKD/F	487	500	AZJ	H24
"Pyarnu Radio-30"	156.8*(16)	156.8*(16)	F3E	H24
(Port Controller)	156.7*(14)	156.7*(14)	F3E	HX
"May" (Harbour Master)	156.7*(9)	156.7*(9)	F3E	HX (Operates during navigation)

*Frequencies in MHz

Notice of arrival: All vessels proceeding to the port from the seaward should advise their ETA to the Port Controller. Masters should also advise vessels' particulars and the purpose of visit.

VHF: Vessel in the Roads or within port area can contact Harbour Master's Office on Channel 12 by radio-telephone (call sign "May") all round the clock; Port Dispatcher (call sign Pyarnu-31) on Channel 16 from 0700 hrs. till 1900 hrs. (break from 1200 hrs. till 1300 hrs.).

TUGS: Tugs should be ordered through the Port Controller's service. Towage of vessels within the port is prohibited if wind over Force 6.

RADAR: Radar station not available.

BERTHING: Vessels having draft over 4.0 m. cannot berth. During S.W'ly and Westerly winds force 8 and over, when in the port, the Master or his Chief Officer must be on board and have sufficient number of the crew on board in order to secure the vessel safely.

Berths of the port are equipped to handle vessels loaded with fish and fish products, salt, timber, rod metal and some other cargoes. There is a portal crane with 5 tons capacity, closed warehouse and an open concrete floor shed for storage of salt. The Port Authority plans to build a new cold store with administrative buildings.

FRESH WATER: Available alongside.

FUEL: Available alongside and by barge.

OPENING/CLOSING HATCHES: By crew.

REPAIRS: Small repairs possible.

TIME: GMT plus 3 hours from October 1st – March 31st. GMT plus 4 hours from April 1st – September 30th.

AUTHORITY: The Port of Pyarnu Authority, 2 Kalda Street, 203600, Port of Pyarna, U.S.S.R. *Tel:* 55-893, 54-164, 54-442. *Telex:* 308629. *Cables:* Pyarnu Morrybport. *Contact:* Harbour Master, Tel: 55-893.

AGENT: Tallinn Maritime Agency "Inflot".

RENI: 45.26 N. 28.18 E. (See Plan Book)

GENERAL: The port of Reni is situated at a distance 25 miles up from the Izmail Chatal Point on the left bank of the Danube River.

The port is on average, open for navigation for about 317 days of the year. In severe winters ice-breaker assistance is required.

The Danube River and Kilia Mouth become completely frozen over only in severe winters, at the end of December or early January. Ice finally disappears in February or early March.

Changes of the water level are due to effects of the wind and spring floods.

Maximum rises of the water level are usually observed in April, May and June, maximum falls August, September and October.

Maximum range of the water level observed in the river is 4 m. – 6 m.

DOCUMENTS: Refer to beginning of U.S.S.R. Section.

PILOTAGE: Compulsory. All vessels proceeding from the Izmail Chatal Point up to Reni and vice versa must navigate under control of a State Commissioned Pilot.

ANCHORAGES: Vessels should anchor in the port roads with depths from 10 m. to 20 m. The holding ground is clay and mud.

RESTRICTIONS: There are no time restrictions for the entry to the port. Both draft and length of vessels are limited by depths and width of the Sulina channel.

RADIO: Vessels can establish radio contact through the port radio station Reni Radio operating 24 hours per day on the following frequencies:

Call sign	Frequencies (MHz) Working	Frequencies (MHz) Calling	Type of trans-mission	Time
"Reni-1"	156.8(16)	156.8(16)	F3E	H24
(Port Controller)	156.6(12)	156.6(12)	F3E	H24
"Reni-9" (Harbour Master)	156.45(9)	156.45(9)	F3E	H24
"Vessels' movement control post"	156.7(14)	156.7(14)	F3E	H24

BERTHING: Tug assistance is not compulsory. Tugs are available if requested by Master. Tugs shall be ordered by VHF at least 1 hour before required.

The port is accessible to large vessels. The berths with depths alongside of up to 7.5 m. are equipped to handle general and bulk cargoes, crude oil and oil products, grain and food products.

Cranes of up to 32 tons capacity are operated on the quays. Also there are floating cranes with lifting capacity of up to 100 tons and other cargo handling equipment.

FUEL: Available.

FRESH WATER: Can be supplied ex-shore and by barges.

OPENING/CLOSING HATCHES: According to the custom of the port, opening and closing of hatches is carried out by the crew. But it can be carried out by the port workers for vessel's account, if required by the Master.

REPAIRS: Only minor hull and engine repairs can be carried out. There are no dry docking facilities.

CONSULS: None.

TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.

BANKS: Bank for Foreign Trade of the U.S.S.R., Moscow, Telex: 411174.

STORING: See "Prelims" page viii.

1. Vessel can be stored by barge and truck.
2. Vessel can store from barges after loading/discharging or during operations if nothing interferes with cargo handling.
3. Trucks can proceed alongside at the berth.
4. Fork lift trucks can be used on the jetty to handle stores.
5. Vessel can be stored with various stores except prohibited items.
6. Local riggers can be employed to assist with storing.

SURVEYORS:

1. Cargo Inspector of the U.S.S.R. Chamber of Commerce and Industry available.
2. U.S.S.R. Register of Shipping. Surveyor available.

DEVELOPMENTS: 2 new berths to be constructed.

AUTHORITY: The Port of Reni Authority, 188 Dunai Street, The Port of Reni, U.S.S.R. *Tel:* 2-14-84, 2-10-57. *Cables:* Reni Port.

AGENT: The Port of Reni Maritime Agency "Inflot". Postal address: 192 Dunai Street, The Port of Reni, U.S.S.R. Cables "Inflot Reni". Tel: 21835, 26593. Telex: 232713.

RIGA: 56.58 N. 24.06 E. (See Plan Book)

GENERAL: A Baltic seaport, Riga is situated at the mouth of the Daugava (Western Dvina) River falling into the Gulf of Riga.

The water area of the port is formed by the lower part of the Daugava River from the mouth up to a railway bridge, thence by the Milgravis Channel and Sarcandaugava Creek.

The roadstead of the port is situated at the mouth of the Daugava River.

The entrance channel with depths of 12.0 m. leads across the river bar into the port.

The port is open for navigation all the year round, but ice-breaker assistance is required about 4 months of the year.

The Gulf of Riga is frozen over for quite a long time. On the coast of the Gulf, ice first appears in December and finally disappears in April. The middle part of the Gulf gets frozen over only in severe Winters and for a short period. Usually ice in this area is mostly drift ice.

Considerable changes of the water level may be caused by strong winds and variation in atmospheric pressure ("Seish" effects).

The range of the water level caused by winds depends on the force of the wind, direction and period of time it blows.

Most sharp rises and falls of the water level are observed at the mouth of the Daugava River. They may reach at times 1.3 m. – 1.8 m. higher and 0.9 m. – 1.1 m. lower than the datum at Kronshtadt.

The level of the water in the port usually depends on the ordinary water level in the Daugava River.

The max. rise of the water level caused by winds may reach 2 m. higher and fall – 1 m. lower than the mean water level observed over a period of many years.

The entrance channel is available for ships with maximum draft 12.5 m. from Light Buoy No. 1 "Daugavgriva" to the inner road situated 3 miles from the Daugava River.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Inflot will arrange Pilot on receipt of ETA at Daugavgriva Buoy, which to be given 96, 48, 24 and 4 hours prior arrival. Also advise with ETA details of cargo, last port of call, passengers if any, ship's draft and length.

Pilot meets vessel at Receiving Light Buoy No. 1 Daugavgriva (Lat. 57° 06′ N., Long. 23° 57′ E.). In case of bad weather, when Pilot is unable to come aboard, vessel should follow in the wake of a pilot boat, up to the mouth of the river, where Pilot will board vessel.

4 hours prior to arrival at this buoy the Master should advise his ETA by VHF, Channel 14, via CPR.

Vessels leaving the port should navigate under Pilot control to Receiving Buoy No. 1 Daugavgriva.

Ships going to the port of Riga may receive a Pilot for the passage of the Irben Strait at the roads of the port of Ventspils. ETA to Inflot-Riga 2 days prior to arrival at Ventspils Roads.

The order for the Pilot from Riga to Ventspils Roads must be given to Inflot-Riga 1 day prior to sailing.

Pilotage in the Irben Strait is not compulsory but it is recommended for the ships with a large draft.

The Pilot assistance will be particularly useful during Winter when navigation is effected as a rule with an icebreaker in the convoy.

ANCHORAGE: The best anchorage can be obtained in the port of Riga Roads, at a distance 4 miles off the Daugavgriva Lighthouse, bearing 310° Westward of Light Buoy "V". Depths in the anchorage are from 22 m. to 35 m. The bottom is mud and sand. It is not recommended to come closer to the shore without a Pilot on board.

The port of Riga Roads are situated N.W. of the entrance to the mouth of the Daugava River.

The roads are open to winds blowing between S.W. and N.E.; therefore, in Autumn, when these winds prevail, anchorage there is unsafe.

In periods when heavy waves in the roads are caused by fresh Northerly winds, vessels are recommended to leave the roads for shelter in the port or go to the open part of the Gulf of Riga.

The depths in the roads are from 15 m. to 30 m. Holding ground is good.

RESTRICTIONS: Permitted draft for the entry into port is about 10.0 m. at the mean water level.

Entry to the Daugava River and the port of Riga is accessible for vessels having drafts ensuring safe passage across the river bar.

As a rule, vessels passing along the channel are requested to have keel clearance not less than 0.45 m.

The speed of vessels navigating in the Daugava River should not exceed 6 knots.

There are no restrictions as to length of vessel and time of entry to the port.

Large vessels laid up with ballast water are not allowed to shift berth during winds force 6 Beaufort scale and over.

Passage of the Daugava River is prohibited for ships having anchors under water.

The speed of the Daugava water stream in a low-flow period is insignificant, but it may sharply rise at the time of discharge of water through the overflow weir of the Riga hydro-electric power station. The operational schedule of the station requires such discharges.

To avoid damages to the underwater parts of a berth while mooring or unmooring, every vessel must have the main engines going "dead slow" until her stern is not less than 15 m. from the quay.

MAX. SIZE: Max. permitted draft for vessels going to berths of the port for discharging is 10.0 m. in fresh water, if the water level is "O" datum at Kronstadt.

Vessels having draft more than 10.0 m. are discharged into barges in the inner road which has 3 mooring buoys, 3 miles from the mouth of the river. Max. permitted draft for vessels going to the inner road for lighterage is 12.50 m. in fresh water, if the water level is "O" datum at Kronstadt.

Also see "Shipmaster's Report".

HEALTH: Pratique obtainable after vessel's mooring when Health Officials visit vessel with Immigration and Customs Officers. Health Inspector to be informed of any medical assistance required.

RADIO: *Notice of Arrival:* In Winter when the Irben Strait and the Gulf of Riga are completely frozen over and ice-breaker assistance is required, vessels proceeding to the port of Riga should advise Harbour Master their ETA to the edge of the ice, vessel's ice classification and estimation in days for the expenditure of fresh water and fuel available on board to the moment of approaching the edge of the ice.

Vessels can established ship-shore radio contact via the port radio station Riga Radio, operating 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz)* *Working*	 *Calling*	*Type of trans-mission*	*Time of Work*
UKB	500	500	A1A	H24
"Riga-Radio"	2182	2182	H3E	H24
"Riga-Radio-1" (CPR)	156.8*(16)	156.8*(16)	F3E	H24
"Riga-Radio-5" (Harbour Master)	156.45*(9)	156.45*(9)	F3E	H24
"Riga-Radio-17" (Vessels' movement control post)	156.375*(67)	156.375*(67)	F3E	H24

*Frequencies are given in MHz.

TUGS: Use of tugs is obligatory. The number of tugs depends on length of the vessel and place of berthing.

BERTHING: Berths of the port with depths up to 10.0 m. alongside a equipped to handle general, containers and bulk (ore, coal) cargoe metals, timber, grain, food products and passenger traffic.

Number of tugs to be ordered for entry assistance or for shifting ber is decided by Master in accordance with Pilot's recommendation.

Cranes of up to 40 tons capacity are operated on the quays and by th warehouses. Also, there are floating cranes with lifting capacity of up 100 tons, other cargo handling equipment and intra-port transport.

Opening and closing of hatches is usually done in accordance wi conditions of Charter Party.

SPECIALISED CARGO HANDLING FACILITIES: Berth Nos. 16 – are suitable for handling of ships type Ro-12. Berth Nos. 32 – 33 a suitable for handling of ships type Ro-12, Ro-30 and Ro-60.

BRIDGES: Minimum height of electrotransmission line crossing th Daugava River is 51 m.

MEDICAL: All medical assistance available.

STEVEDORES: Arranged by Inflot who should be given necessa information in advance.

DENSITY: About 1002.

FRESH WATER: Only available ex-berth.

FUEL: Fuel is usually taken at the oil jetties. Bunkers may also delivered to the roads or supplied by lighters at a berth durin loading/unloading of non-inflammable cargoes.

GANGWAY/DECK WATCHMEN: Recommended. These duties norma performed by crew.

OPENING/CLOSING HATCHES: Normally by ship's crew.

CUSTOMS ALLOWANCES: No restriction on quantities, but nothi may be taken ashore.

IDENTIFICATION CARDS: Seaman's Book required.

CONSULS: None.

REPAIRS: Repairs possible for hull, machinery, radio and navigation equipment. Floating crane available, capacity 100 tons. All kinds repairs for vessels up to 30,000 d.w.t. can be carried out.

REPATRIATION: Only subject to visa restrictions.

AIRPORT: International airport not available. Internal communicatio between Riga and most cities of the USSR is possible.

TIME: GMT plus 3 hours. Summertime (GMT plus 4 hours.) fro 1st April till 30th September.

HOLIDAYS: 1st January, 8th March, 1st and 2nd May, 9th May, 7 October, 7th and 8th November.

POLICE/FIRE/AMBULANCE: Advise Inflot.

TELEPHONES: Installed on vessels alongside at Master's reques Installation charge Rbls. 8.0 and Rbls. 2.50 per day or part thereof.

SHORE LEAVE: Crew allowed ashore.

SHIPMASTER'S REPORT: 1976:

On approaching the area where Irbenskiy Light Vessel should hav been placed, it was found that the light vessel and buoys had bee removed for the Winter season and replaced by spar buoys, althoug these could not be observed on the radar or visually due to the advers weather.

Two other vessels were waiting for daylight transit of the channel also decided to wait for daylight due to a 5 fathom bank being recorde on the chart.

On entering the channel it appears to be very much wider tha indicated on the chart also where the chart has the channel buoys in straight line this was not so, although the alteration of the channel cou have been due to the use of the Winter buoys.

In Baltic Pilot Vol. II vessels are allowed to enter at 26 ft. 3 in. This incorrect as the maximum draft is now 32 ft. Vessels up to 37 ft. were the anchorage, where they are lightened up to 32 ft. before proceedi into the harbour.

Two berths were being used for the discharge of grain, by sho cranes into wagons.

In the early hours of Sunday morning, 4th January, the temperatu being −14°C, a thin film of ice formed in the harbour, this ha disappeared by mid-afternoon. Except for this occasion no ice was see at all in the Baltic, although the climate was very cold.

The Bond was not put under seal, but they were very strict currency list, 3 copies being required, also the total amounts of ea different currency is required.

SHIPMASTER'S REPORT: October 1979:

The buoyed channel is safe to use night and day as each headla has Raymarks on it.

We had 33,000 tonnes of wheat for Riga and our arrival draft wa 38 ft.

We were at anchor for 5 weeks and alongside for 9 days.

Our main problem at the anchorage was shortage of fresh water, th port can only supply small amounts brought by tug, charge 1.4 rouble per ton, no charge for the tug. In 5 weeks we were supplied with 90 ton so vessels should try to arrive with plenty of water if they expect lon periods at anchor.

During our stay there was always 18-20 grain ships waiting and th situation is expected to continue.

Each week (on Mondays if weather permits) the Ship Chandler w come out with supplies which must be ordered through Riga Radio.

Mail and Telexes can be sent ashore with the Chandler.

Sick crew members will be taken ashore when transport is availab but ship's boats are not allowed to be lowered.

When in port I found the Inflot Agency very helpful.

Telexes can be sent without delay but phone calls are difficult.

AUTHORITY: The Port of Riga Authority, 6 Vilis Latsis Street, 22618 Riga, U.S.S.R. *Tel:* 32-93-54, 32-92-54, 32-92-35. *Cables:* Morpo Riga. *Contact:* Harbour Master, Y. Silaev.

AGENT: The Port of Riga Main Maritime Agency "Inflot". Post address: 6 Vilis Latsis Street, 226180-Riga, U.S.S.R. Cables: "Infl Riga". Tel. 32-00-28, 33-97-03. Telex: 161118, 161119.

SOCHI: 43.34 N. 39.43 E. (See Plan Book)

GENERAL: The port of Sochi is an ice-free port, situated at the mouth of the Sochi River, S.E. of the Uch-Dere Point, in the Eastern part of the Black Sea.

The port is protected by the Caucasian chain of mountains from cold N.E. winds but it is open to winds blowing from Southerly and Westerly directions when heavy waves may roll over the port moles causing heavy swell in the harbour.

The port mostly handles passenger traffic.

There are passenger terminals, one of which serves hydrofoil ships only. About 3 million passengers visit the port yearly.

A cargo pier is equipped to handle fruit, building materials and cars. There are enclosed warehouses on the cargo pier and on one of the passenger terminals.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Pilot boat usually meets vessel at a distance of about 1 mile from the port. In the event of bad weather or restricted visibility, vessel should anchor or drift at a safe distance from the port until Pilot arrives.

ANCHORAGE: Deep drafted vessels may obtain anchorage in the Outer Roads Westward of the Northern mole. The depths in the roads are from 11 m. to 12 m.

Some distance Westward, in depths 20 m. – 23 m., there are mooring buoys which can be used during vessels' stay in the roads.

Anchorage can also be obtained at 1.3 – 1.5 miles distance S.S.W. of the Sochi Lighthouse. Depths there are about 29 m. The bottom is mud with sand, and small stone closer to the shore.

Anchorages are open to winds blowing from the sea.

RESTRICTIONS: There are no time restrictions for entry to the port.

In case of stormy weather entry to the port is difficult due to the swell caused by heavy waves in the approach and in the narrow entrance to the port.

In the event of heavy surf vessels must anchor in the outer roads since entry to the port is impossible.

Entry to the port is not allowed during heavy waves over force 4 and winds over force 6 as well as during bad visibility.

During the Autumn-Winter period the port of Sochi cannot be used as shelter port, because lying in the port is dangerous due to the strong variable current ("Tyagun") usually caused by gales blowing between S.E. and N.W.

Under these circumstances the Port Authorities cannot guarantee safety to a vessel which, after having received a storm warning, did not make for sea, and bear no responsibility for the consequences.

MAX. SIZE: The max. permitted draft is 8 m., length 190 m. and beam 25 m.

RADIO: Vessels can establish ship-shore radio contact through the port radio station Sochi Radio, operating 24 hours a day on the following frequencies:

	Frequencies (kHz)		*Type of trans-mission*	*Time of work*
Call sign	*Working*	*Calling*		
UZB	500	500	A1A	H24
"Sochi-Radio"	2310	2310	H3E	H24
"Smena" (Port Controller)	156.6*(12)	156.6*(12)	F3E	H24
"Sluzhba" (Harbour Master)	156.8*(16)	156.8*(16)	F3E	H24
	156.675*(73)	156.675*(73)	F3E	H24

*Frequencies are given in MHz.

A signal station is located at the Sochi Lighthouse from which visual signals are shown.

BERTHING: A vessel intending to enter port with tug assistance should keep the Sochi mid-channel leading marks in line ahead and stop the main engines in due time to allow vessel to come to the state of "no motion" at a distance of 1 mile from the port entrance. Only under these conditions is a tug allowed to approach a vessel and receive or cast off the tow rope.

Due to a small port area and heavy water streams caused by vessels' propellers Masters of vessels of 2,000 g.r.t. and over must order 1 tug for entering and leaving the port; for vessels of 4,000 g.r.t. and over 2 tugs are required. Shifting berth is allowed during winds not exceeding force 5 Beaufort scale. Opening and closing of hatches on dry cargo vessels is carried out by the crew; on passenger vessels cargo hatches are opened and closed by the port workers.

There are 2 portal cranes of up to 20 tons lifting capacity, 10 ton caterpillar cranes, fork-lifts and other cargo handling equipment.

FUEL: Not available.

FRESH WATER: Can be supplied by pipe-lines at nearly all berths.

REPAIRS: Not available.

TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.

AUTHORITY: The Port of Sochi Authority, 1 Voykov Street, 354000, Port of Sochi, U.S.S.R. *Tel:* 996-63-64, 996-63-63, 996-62-32. *Telex:* 128. *Cables:* Morport Sochi.

AGENT: A branch of the port of Novorossiysk Main Maritime Agency "Inflot" at the port of Sochi. Postal address: 1 Voykov Street, Sochi, 354000, U.S.S.R. Cables "Inflot Sochi". Tel: 99-05-86, 996-62-70.

All foreign vessels calling at Sochi are attended by Maritime Agency of Tuapse.

SUKHUMI: 42.57 N. 41.00 E. (See Plan Book)

GENERAL: A Black Sea passenger port, Sukhumi is situated at the head of the Sukhumi Bay, 2 miles E.N.E of the Sukhumi Point. The port is open for navigation all the year round. Both the port itself and the Gulf are open to winds blowing from the sea.

Several berths of the port are equipped to handle passenger traffic.

The port area is bounded by the shore line and the imaginary line connecting the Sakhumi Point and the mouth of the Kelasuri river.

The port is visited by regular and cruise passenger vessels.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: A Pilot meets vessel in the outer roads. Compulsory for foreign flag vessels.

ANCHORAGES: Anchorages are situated in the outer roads on the Northern coast of the Sukhumi Bay, opposite the mouth of the Beslet river. Depths are from 12 m. to 50 m. The bottom is mud.

RESTRICTIONS: Vessels may enter or leave the port at any time of day or night.

MAX. SIZE: The max. permitted draft is 7.6 m., length 190 m.

RADIO: Ship-shore radio contact can be established via the port radio station Sukhumi Radio operating 24 hours a day on the following frequencies:

	Frequencies (kHz)		*Type of trans-mission*	
Call sign	*Working*	*Calling*		*Time*
UFF	500/450	500/454	A1A	H24
"Sukhumi Radio"	2182	2182	H3E	H24
"Sukhumi-1"	156.8*(16)	156.8*(16)	F3E	H24
(Port Controller)	156.45*(9)	156.45*.(9)	F3E	H24

*Frequencies are given in MHz.

Storm signals are exhibited at a signal mast located on the roof of the Port Authority's office.

BERTHING: Vessels of up to 190.0 m. in length are allowed to moor at the new passenger pier. The permitted draft is restricted by the depth of water (7.8 m.). Vessels are not allowed to moor to berths during dense fog and in restricted visibility when navigational lights and the current indicator on the passenger berth are not visible. In this event vessel should anchor and disembark passengers in the outer roads.

When mooring, Master should bear in mind the direction of the current and the effect on the mooring angle of vessel.

By day, the direction of the current indicated by a sparbuoy located at the head of the passenger pier, and at night, by lights exhibited from the elevation of the front leading light.

A green light shown lower than the front leading light indicates Easterly current, and a red light, current of Westerly direction.

The rate of the current is usually determined by the Master himself.

Due to the constant influence of the current, mooring is usually effected without tug assistance.

Masters of vessels moored at the port berths should keep the main engines ready bearing in mind the fact that the outer roads of the port are not protected from the effect of winds.

There are no portal cranes on the passenger pier. Handling of cargo is done by 5 ton port cranes and caterpillar crane with lifting capacity of 12 tons.

FUEL: Can be supplied by lighters.

FRESH WATER: Supplied ex-shore.

REPAIRS: Not possible.

TIME: GMT plus 4 hours. GMT plus 5 hours in Summer.

AUTHORITY: The Port of Sukhumi Authority, 66 Rustaveli Street, 384900, Port of Sukhumi, U.S.S.R. *Tel:* 2-82-02, 2-34-03, 2-34-00. *Cables:* Morport Sukhumi.

AGENT: A branch of the Port of Batumi Main Maritime Agency "Inflot" at the Port of Sukhumi. Cables: "Inflot Sukhumi".

TALLINN: 59.27 N. 24.46 E. (See Plan Book)

GENERAL: A Baltic seaport situated in Tallinn Bay. Year-round navigation is possible. Tallinn Bay is usually frozen over in severe Winters only. In the Winter months (1st February – 31st March) the port of Tallinn is kept open for navigation by ice-breakers. The tidal range in Tallinn Bay is of very small account. The difference of the water level in the Bay is due solely to the effects of the wind. A rise of the water about ±0.8 m. from mean water level is observed during N.W. and Westerly winds. The fall of the water is caused by S.E. and Easterly winds. It usually reaches below the mean water level.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. 24 hour Pilot service is available. Pilots board vessels at Lat. 59° 37′ 05″ N., Long. 24° 38′ E. In case of stormy weather vessels should follow pilot boat to a sheltered position where Pilot is able to embark/disembark or use the assistance of the shore radar station. Pilot should be ordered by VHF through the "Inflot" Agency not later than 2 hours prior to arrival at the Pilots' boarding place.

ANCHORAGES: The anchorage area is situated in the port of Tallinn outer roads Westward of the Tallinn lights leading line, at the Palyasaar Peninsula. Depths in the area are from 14 m. up to 22 m.

RESTRICTIONS: Vessels can enter or leave the harbour through the Northern or Southern entrances. Entry to the port through the Northern entrance can be used by vessels having draft of up to 8.5 m. The Southern entrance can be used by vessels having draft of up to 7.0 m. Depths of water in the Southern entrance area can vary due to the movement of deposits. Vessels can enter or leave the port at any time of day and night.

MAX. SIZE: LOA 155 m., width 22.0 m. and draft 8.5 m.

HEALTH: International quarantine signals to be used on arrival. No later than 6 hours before arrival at the inner area Master should radio Agents giving full details of state of health on board, and requesting Pratique which will be given on arrival.

RADIO: All vessels when approaching the Port of Tallinn should establish radio contact via Tallinn Radio port radio station which operates 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz)* *Working*	 *Calling*	*Type of trans-mission*	*Time*
UNS	500	500	A1A	H24
"Tallinn-Radio"	2182	2182	H3E	H24
"Tallinn-Radio-1" (CPR)	156.8*(16)	156.8*(16)	F3E	H24
"Tallinn-Radio-5" (Harbour Master)	156.45*(9)	156.45*(9)	F3E	H24
"Tallinn-Radio-17" (Vessels' movement control post)	156.7*(14)	156.7*(14)	F3E	H24

*Frequencies are given in MHz.

The movement of vessels within the port and in the outer roads is controlled by the Traffic Control Post located at the Port of Tallinn Authority building.

TUGS: Tug's assistance available for berthing subject to Pilots advice. Tugs can be ordered through Agents. Ship's lines normally used. When tugs are ordered in advance the cost will be charged to the vessel whether tugs are used or not. For vessels with length over 120 m. tug assistance is obligatory.

BERTHING: Vessel will not be allowed to berth unless main engines and steering mechanism are in good working order. All vessels in port are required to fly their national flags between 0800 hrs. and sunset. On holidays and special occasions vessels may be expected to dress their ships if requested by Port Authorities.

The berths of the port with depths alongside up to 9.0 m. are equipped to handle general, 40 ft. containers, bulk and liquid (chemical products) cargoes, sugar, cement, metals, foodstuff, etc., as well as passenger traffic. Covered warehouses with mechanical equipment and concrete floor sheds are available.

STEVEDORES: Arranged by Agent on basis of Master's ETA. Loading and unloading is carried on throughout 24 hours a day including holidays.

CRANES: Loading and unloading is usually done by shore portal cranes of up to 40 tons capacity, by floating cranes of up to 100 tons capacity and by other cargo handling equipment.

TANKERS: Tankers moor at berth No. 17, length 130 m., depth alongside 9 m. No slop facilities available. Tankers are normally required by the charter party to reserve a slop tank on board.

FRESH WATER: Supplied by pipe-lines at all berths.

FUEL: Bunkers are available and can be taken from the quays or delivered by lighters.

FIRE PRECAUTIONS: Masters of tankers are presented with a copy of Safety Regulations by the Agent on arrival.

GANGWAY/DECK WATCHMEN: Compulsory to maintain a gangway watch by ship's crew.

OPENING/CLOSING HATCHES: Normally opened and closed by ship's crew.

CUSTOMS ALLOWANCES: No restrictions on crew's consumption of tobacco and alcohol on board. It is forbidden to take these items ashore.

CONSULS: No local representation.

REPAIRS: Only minor repairs may be effected at machine shop ashore.

TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.

HOLIDAYS: All holidays are worked by stevedores.

TELEPHONES: Connection on board vessels can be made at berths number 5, 12 and 17.

DEVELOPMENTS: New Port to be built in the Bay of Muuga 20 km. from Tallinn for handling grain cargoes in vessels of 100,000 d.w.t. The Port will also handle perishable cargo and Ro-Ro vessels. First stage to be completed in 1986.

AUTHORITY: The Port of Tallinn Authority, 25 Sadama Street, 293300-Tallinn, U.S.S.R. *Tel:* 42-58-30, 42-59-80. Telex: 173-106. *Cables:* Morport Tallinn.

AGENT: The Port of Tallinn Shipping Agency "Inflot". 54-a Tuukri Street, 200106 – Tallinn, U.S.S.R. Cables: "Inflot", Tallinn. Telephones: 2430518, 2432720, 2428339. Telex: 173273.

TUAPSE: 44.06 N. 39.04 E. (See Plan Book)

The port of Tuapse is situated between the mouths of rivers Tuapse and Pauk and the depths of 40 m. Year round navigation.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory in and out, possible at any time. Vessels await Pilot at anchorage. Pilots board and leave vessels in the Outer Roads behind the Pervomaisky Breakwater if the sea (swell) up to Force 4. When leaving harbour during bad weather Pilot leaves vessels in the Inner Roads. Communication with Pilots on VHF channel 12.

ANCHORAGES: Depths 13 m. – 22 m. Position of anchorage, bearing to the entrance red light and distance is radioed by Harbour Master through Agent to each vessel prior to arrival (unless berth available). When at anchor, vessel shall keep VHF watch on VHF Channel 16.

MAX. SIZE: See "Berthing".

HEALTH: Sanitary Officer boards on arrival or when berthed. No automatic Free Pratique. In the event of fever or any suspected epidemic disease onboard Masters shall inform the sanitary service immediately on arrival.

TUGS: Tugs are compulsory for berthing/unberthing or shifting, as well as when lying at inner anchorage. Tugs normally join vessels at the buoy marking the Pervomaisky breakwater. Ship's lines to be used.

RADIO: Radio communication can be effected through the port rad station "Tuapse-Radio".

Call sign	*Frequencies (kHz)* *working*	 *calling*	*Type of trans-mission*	*Time work*
UVW	500/430	500/425	A1A	H24
"Tuapse-1" (VHF CPR)**	156.05*(1)	160.65*(1)	F3E	H24
Vessels' movement	156.8*(16)	156.8*(16)	F3E	H24
control post	156.45*(9)	160.45*(9)	F3E	H24

*Frequencies in MHz.

**Central Port Radio Station.

Arrival Advice: Masters shall send 96/72/48 and 24 hours' ETA notic to "Inflot" agency, advising also quantity of ballast onboard and tin required for deballasting ashore. Masters shall also advise quantity a grade of cargo, stowage plan, LOA and maximum draft, number passengers, health condition of crew.

BERTHING: At any time with winds up to Force 7. The port consists o harbours, with 3 berths for dry-cargo ships (max. draft 12 m. (bracki water), LOA up to 220 m.) and 6 berths in the oil harbour for tanke (max. draft 12 m. (brackish water) LOA up to 235 m.). Oil harbour, sho cargo manifolds diameter 250/400 mm. All dry-cargo berths a equipped with portal cranes of 40 tons capacity. Loading/unloadi usually by shore cranes. The port is not sheltered for vessels duri strong S.E./S.W. winds. During strong gales from these directions lyi in port is dangerous due to strong swell, especially the one call "tyagun". In this event vessels must leave harbour when recommend by the Port Authority. When lying in port the main engines shall not immobilised without special permission by Harbour Master.

MEDICAL: First medical aid at any time; hospital facilities available.

DENSITY: 1011/1015.

FRESH WATER: Available from any berth, road delivery not possib

FUEL: Fuel oil and gasoil available at oil berths or ex-lighters. Maste giving 72 hours' notice.

FIRE PRECAUTIONS: Conventional rules for oil ports.

POLLUTION: Marine pollution shall be avoided by all means, specia due to proximity of health resort area. Any pollution is subject to hea fines.

OPENING/CLOSING HATCHES: Normally by crew.

GANGWAY/DECK WATCHMEN: Not required. Gangways shall lighted up and protected by nets.

CUSTOMS ALLOWANCES: No restrictions. Export/import of Sov currency is forbidden.

IDENTIFICATION CARDS: Seaman's books are sufficient.

CONSULS: None.

REPAIRS: Emergency repairs. Floating docks subject to spec arrangement.

REPATRIATION: Possible in emergency.

AIRPORT: Sochi – 120 km. Served by regular airlines.

TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.

HOLIDAYS: 1st January, 8th March, 1st, 2nd May, 9th May, 7th Octob 7th, 8th November. Work during holidays can be arranged.

TELEPHONES: Available for all vessels.

SURVEYORS: Leading world classification societies are represented the Register of the USSR.

GENERAL: Deballasting or discharge of tank-washings facilities (slop at a rate of up to 2,000 t.p.h., craft for discharge of bilge water. Fo waste and garbage, etc. shall be collected into special containers plac on board upon berthing. Laundry facilities. No boats, rafts, etc. shall launched from vessels without special permission. All mooring ropes be provided with rat-guards immediately upon mooring or shifti berths. Local representative of the Insurance Company of the USS (Ingosstrakh) Ltd., and experts of the USSR Chamber of Commerce a Industry.

SERVICES: Compass adjusting and radar repairs.

SHORE LEAVE: Crew allowed ashore until midnight.

FIRE/AMBULANCE/POLICE: Telephones: Fire – 301; Fire-boat – 23 Ambulance – 003; Militia (Police) – 002. *Office Hours:* 0800 1600 hrs. Saturday 0800 – 1400 hrs.

DEVELOPMENTS: Reconstruction works including dredging underwa

NOTICES:

Brief Information for Masters:

ETA: ETA messages shall also contain quantity of ballast and time deballasting ashore.

Anchorage: Anchorage position and bearing to the entrance Red Light being sent to each vessel prior to her arrival by Agent, if no berthing expected. No boats, rafts of other objects shall be launched fro vessels. No swimming is allowed.

Bad Weather: S.W. gales develop heavy swell in harbour and vesse may be recommended to leave berth. Main engine shall not immobilised when alongside berth without Harbour Master's permissio Such permission is subject to weather conditions, and a tug-boat sh be hired to stand-by.

Bunkers: Available, two grades only: Gasoil and IFO of appro 40/80 cSt.

Fresh Water: Available ex-cargo berths only.

Garbage and Wastes: Any garbage, food wastes, etc. should collected by crew into special containers placed on board each vess by a boat upon arrival.

Pollution: Oil spillage must be avoided. In case of a spill, all operatio must be stopped immediately and the accident reported to the Po Authority and your Agent at once. Any oil spot or slick noticed on the se surface near your vessel should also be immediately reported to yo Agent and entered in the log.

All outboard sea valves should be locked up upon arrival in U.S.S. territorial waters and kept securely closed until sailing. Port seals ma be placed on the said valves after docking.

Oil record book should be kept up to date and always ready inspection by Port Authority or Pollution Control.

Salinity: The sea water in harbour is brackish (salinity 1.011–1.014).

Sick Crew: Seamen with fever and symptoms of infectious disease should be reported to Port Sanitary Doctor on ship's arrival and without delay. Polyclinic is open 0900 – 1700 hrs., Monday to Friday. First aid is available at any time.

Duty Free: Shop is run by Shipchandler and is open 0800 – 1200 hrs., 1300 – 1700 hrs. (Tel: 398).

Smoke: Emission of smoke from funnel in harbour is prohibited.

Smoking: No smoking is allowed on all decks when alongside at oil berth or when bunkering from a barge.

Telephone: Shore telephone set will be placed on board for fire-safety and business only.

Useful Phone Nos.: "Inflot" – 322/832/836; "Nafta" – 357/282; Pilot – 338; Harbour Master – 323/235; Seamen's Club – 269.

Curfew: Shore leave to 2400 hrs.

Attention of Chief Officers: All mooring ropes and lines are to be equipped with *rat-guards* immediately upon completion of mooring or shifting.

Failure to comply with this regulation will incur a heavy fine by the Port Sanitary Service without further warning.

Fire Fighting and Emergency Procedures:

Instructions on fire fighting safety and emergency procedures at oil berths and on tankers lying at loading berths at the Port:

1. Smoking in the Oil Harbour is prohibited.
   Use of open fires and hot work without special permission of the Oil Harbour Fire Guard is not allowed.
2. In case of fire or emergency, inform Fire Guard (phone 301) immediately; at the same time start fire-fighting.
3. In case of oil spillage on the quay or on a tanker, cease all cargo operations immediately until the spilled oil is removed.
4. Stop loading during electrical storms.
5. Stop loading when another tanker is underway to an adjacent berth until her mooring is completed.
6. Connecting hoses and loading operations are prohibited when ship to shore bonding cable is missing.
7. The following fire-fighting equipment should be located near the ship's main cargo manifolds on deck:
   2 fire extinguishers; a felt sheet, a container with sand and shovel; foam and water hoses with jet nozzles laid out.
8. If a fault or a condition threatens to create a fire is discovered, stop loading immediately until the hazard is eliminated.
   Use of tools that may produce sparks is not allowed.

Principal Rules of Anti-fire Safety for Tankers Lying Alongside in the Oil Harbour:

In order to ensure the fire safety of the Oil Harbour and of vessels lying alongside, it is strictly forbidden:

(a) To pump out ballast and water with remains of oil products out of tanks/bilges;
(b) To carry out work with a naked flame;
(c) To throw overboard lighted cigarettes, matches, garbage, also to use signal rockets, fireworks, fire, etc.;
(d) To maintain fire in the galley, to use portable electric fire appliances, cabin ventilators and smoke on board during loading/discharging of oil cargoes. Smoking is allowed only in ship's smoking rooms;
(e) To perform steam scavenging of the smoke or exhaust pipes which may cause sparking;
(f) To use unprotected electric lights, pocket electric torches for lighting decks, tanks or ladders;
(g) To use on deck wire ropes while mooring, if the vessel is carrying 1st. category cargo;
(h) To load/discharge during thunderstorms;
(i) To use tools made of ferrous metal when connecting hoses to avoid sparking.

The vessel's administration are obliged to take all necessary measures to avoid any possible leakage of cargo from pipes and fittings onboard or pump out or spill on deck and in to the sea.

3. All scuppers on the loading/discharging deck section are to be plugged.

4. It is absolutely necessary that the vessel's hull should be connected to the shore earthing appliances if the vessel is loading/discharging a 1st. category cargo.

5. The manholes of the cargo tanks are to be closed and the sight holes to be covered with Davy's nets.

6. Before commencing loading/discharging all the anti-fire appliances are to be ready for immediate use.

7. In case of fire on board the fire brigades should be called without delay, the vessel's Administration organising the extinguishing of fire by crew also.

8. The vessel's Administration must acquaint the crew with the above rules.

9. Master is responsible for the observance of the above rules.

AUTHORITY: The Port of Tuapse Authority, 2 Maxim Gorky Street, Port of Tuapse, Krasnodarsky Krai, U.S.S.R. *Tel:* 7-15-15, 7-19-15. *Cables:* Morport Tuapse. *Contact:* The General Manager, Port Administration.

AGENT: "Inflot," Maritime Agency, 20, Gagarin Str., 352800, Tuapse. Cables: Inflot. Telex: 279116 Inf Su. Tel: 7-13-22, 7-18-36, 2-32-33.

UST DUNAYSK (Ustj Dunajsk): 45.30 N. 29.46 E.

(See Plan Book)

SHIPMASTER'S REPORT: April 1982.

GENERAL: Situated on the Northern side of the Danube Estuary, approached by a channel about 1 mile West of the Girlo Prorva (BA Chart 2213), with a depth of about 12 m. to a basin dredged to 12 m. – 14 m.

DOCUMENTS/ENTRY PROCEDURE: As per U.S.S.R. ports.

PILOTAGE: Pilot boards in position Lat. 45° 32′ N., Long. 29° 47′ E., or in outer anchorage if weather permits. A tug or orange and white pilot boat is used.

APPROACHES: From the W.N.W. to a good anchorage at the pilot boarding station, depth 17 m., soft mud. As the buoys marking isolated dangers are unlit daylight approach is recommended.

ANCHORAGES: As above or Harbour Authorities may recommend anchoring in position Lat. 45° 28′ N., Long. 29° 58′ E. Inner anchorage is used by river traffic.

HEALTH: See "General" before first U.S.S.R. port.

RADIO: Kooperatsia Ustj Dunajsk on Channel 13. Izmail on W/T or Channel 13.

Communications: Can only be carried out via the "Kooperatsia", which is an old passenger vessel and is used as the Harbour Office. All messages have to be relayed via this vessel and are either transmitted via VHF to Inflot, Izmail, or taken by river ferry to Izmail. As the Inflot Agent is the only one with a moderate command of English and is not in the office all the time, difficulties and delays occur.

TUGS: Assist in berthing and unberthing.

BERTHING: See "Plan Book".

East Berth, 2 anchors to 9 shackles, 3 ropes from each quarter to shore bollards about 180 – 200 m. from vessel.

West Berth, 2 anchors to about 8 shackles, 2 ropes from each quarter to mooring buoys about 80 m. away.

Cargo Operations: Cargo worked 24 hours per day, weather permitting. All cargo worked by one floating crane, with a grab of about 3 tons. Discharging into 1,000 ton lighters, which are taken elsewhere for off-loading. As the crane also has to remove and replace the 7 covers on each lighter, considerable delays occur between finishing one lighter and starting the next. Even in most favourable conditions (16 hours in 24) discharging time seems to be the best that can be achieved. Rain and strong winds delay cargo operations. Takes about 20 days to discharge 25,000 tons.

STEVEDORES: Provided by port.

DENSITY: 1004.

FRESH WATER: Very difficult to obtain. Requires about 15 days' notice as has to come from Izmail in 300 ton barge, cost (1982) 2 Roubles 50 copecs per ton plus 3 Roubles 58 copecs per ton for transportation charges.

FUEL: Supplied but notice required well in advance.

TIME: GMT plus 3 hours in Winter. GMT plus 4 hours in Summer.

POLICE/AMBULANCE/FIRE: None.

TELEPHONES: None.

MEDICAL: Hospital and doctors in Izmail. Non-urgent cases take several days to arrange, see "Shore Leave".

PROVISIONS: Usually only potatoes and onions available. Transport cost: 10% of bill.

SHORE LEAVE: Permitted, can only be arranged through the Agents, Inflot. Several days' notice required, all movements of crew closely monitored by Frontier Police.

Journey to Izmail takes 3 hours by hydrofoil and it is usually necessary to spend at least 1 night in hotel at a cost of 10 Roubles, this is arranged by Agent.

HATCHES: Opened and closed by ship's crew.

REPAIRS: No facilities.

NOTICE:

Extracts from the "Compulsory Regulations at the Sea Merchant Port of Ustj Dunajsk".

(For the Master of the ....to be informed)

1. All the mooring ropes to be supplied with rat guards.
2. In daytime to hoist anchor ball.
3. The National Flag of the U.S.S.R. should be hoisted from 0800 hrs. until sunset.
4. At night and when snowfall, rain, haze/mist anchor lights should be switched on.
5. The main gangway set for the men's movement should be equipped with handrails and life-saving net.
6. In order to prevent motor-launches fouling or colliding with the anchor chain or stern at night:
   a) Hang out 1 light in the forebody portion of the vessel – down from the stem.
   b) Hang another light down over the stern.
7. Categorically prohibited:
   a) Pumping out of all kinds of petroleum products.
   b) Pumping out of sewage.
   c) Throwing out rubbish, sweepings, refuse and other things, including cargo separation.
   d) No diving or bathing.
   e) Lowering of boats and dropping of other means of flotation.
   f) Work on vessel's radio station except VHF.
   g) Use of firearms for hunting birds.
   h) Giving sound signals.
8. In stormy weather stand by on Channel 16 VHF. Radiotelephone communication with the m.v. "Kooperatsia" by VHF Channel 13.

Signed:
V. Stoliarov, Harbour Master.

Accepted by the Master of the ....
(Presented to vessel 8th April, 1982).

SHIPMASTER'S REPORT: May 1983.

GENERAL: Situated on the Northern arm of the Danube Delta, the port consists of a basin in the marshes, and is approached by a buoyed channel 100 m. wide, approx. 3.5 miles long, dredged to a depth of 13 m. There are berths for two vessels lying to two anchors and with three lines to each quarter mooring buoy. There is a strong outflow from the river, and the port is open to all winds. LASH ships appear to have preference at one berth. All business, including protests, is transacted at Izmail, some 40 miles inland, and the Inflot Agent and Port Officials are based there.

DOCUMENTS: Refer to beginning of U.S.S.R. section. Nine crew lists and separate money list (attached to crew declaration) required.

PILOTAGE: Compulsory, but not for departure from Inner Roads. Pilot launch with orange hull and white superstructure with the word PILOT in black on the hull. This launch is used for all transport operations in the port.

ANCHORAGES: There are two anchorages "A" and "B" marked on B.A. Chart 2213. Vessel instructed to anchor in "A", and Pilot boarded there. Vessels lightening are anchored in the Inner Roads close by the outer fairway buoys. Good holding ground in mud and sand at all anchorages.

RESTRICTIONS: Least depth in channel 35 ft. – 38 ft.

RADIO/VHF: Pre-arrival notices to Inflot Izmail. Agent boards with Officials and Grain Inspectors either at Inner Roads Anchorage or at berths.

Pilot Channel 16; Inflot Agent Channel 13 – call "Kooperatsia". Use of main transmitter prohibited at Inner Roads and in the port.

TUGS: One conventional and 2 pusher tugs with adequate power assist with berthing. There is a mooring boat for running buoy lines.

BULK CARGO FACILITIES: There are 2 floating cranes, well fendered and with integral hopper/belt system for loading coasters. They also carry a wheeled digger/dumper, use of which is not allowed at the anchorage. Each crane capable of about 600 t.p.h.; average about 400 t.p.h. Coasters have a capacity of 3,000 tons; lighters 1,000 tons. Lightening at anchorage carried out by 1 crane towed out by tug; operation liable to interruption with wind force 4 – 5 when crane returns to port.

MEDICAL: In emergency Agent can arrange medical treatment at Izmail.

DENSITY: 1013.

SURVEYORS: *Grain Inspection:* Inspectors required *all* main hatches opened and two crew to assist with sampling, even for lightening two holds.

HATCHES: Opened/closed by crew.

CUSTOMS ALLOWANCES: No restrictions. Bond not sealed.

SERVICES: None.

SHORE LEAVE: Not permitted.

AGENT: Inflot Agent travels from Izmail and usually spends Monday to Friday on Kooperatsia, or if traffic expected. See "Izmail".

VENTSPILS: 57.24 N. 21.33 E. (See Plan Book)

GENERAL: A Baltic Sea port, Ventspils is situated at the mouth of the Venta River. Ventspils is ice free throughout the year.

There are periodical alterations in the water level of the Venta River, chiefly due to the effects of the wind. The rise of the water level is usually due to moderate Westerly winds, and the fall is caused by Easterly winds.

The maximum rise of the water level is observed in the Venta River at the time of Spring floods.

The port of Ventspils aquatorium includes the Avant-port and the Commercial port. A fairway, direction 323.7° – 143.7°, 130 m. wide leads to the port from seaward. The draft of vessels passing through the fairway should not exceed 10.6 m. It is dredged from time to time as depths at the port entrance decrease due to the sand drift caused by heavy gales.

Vessels with draft not exceeding 12.45 m. leave the port by another fairway, which leaves the approach fairway at a distance of 7.5 cables to the N.W. from the entrance to the Avant-port and extends in line bearing 290° up to principal channel receiving light-buoy No. "Ventspils A".

Vessels can enter the port by this fairway only after having obtained the Harbour Master's permission.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

RADIO: Radio contact should be established via the Ventspils Radio-1 port radio station which operates 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz)* working	calling	*Type of trans-mission*	*Time of work*
UNI	500/429	500/454	A1A	H24
"Ventspils-Radio"	2182	2182	H3E	H24
"Ventspils-Radio-1"	156.8*(16)	156.8*(16)	H3E	H24
(CPR)**	161.9*(26)	157.3*(26)	F3E	H24
"Ventspils-Radio" "Nadzor" (Harbour Master)	156.8*(16)	156.8*(16)	F3E	H24
"Ventspils-Radio-17" (Vessels' movement control)	156.8*(16)	156.8*(16)	F3E	H24

*Frequencies are given in MHz.

**Central Port Radio Station.

Working frequencies of VHF Radio-telephone:

Channel No. 7 – 160.95 MHz
Channel No. 20 – 161.60 MHz
Channel No. 22 – 161.70 MHz
Channel No. 26 – 161.90 MHz
Channel No. 27 – 161.95 MHz

RADAR: the port has a shore radar vessels' control system.

HEALTH: Pratique obtainable after mooring. Sanitary Inspector visits vessel after mooring together with Immigration and Custom House Officer. If medical care required the Sanitary Inspector has to be informed.

It is strictly forbidden to throw any type of garbage materials overboard from the ship into water areas of the port (bilge water, sanitary water and other infected pollutants). There are three barges for these services; one barge is self-propelled and two are non-self-propelled.

PILOTAGE: Pilotage is compulsory both for entering and leaving the port.

Pilots board and leave vessels in the areas of Reception Buoys "Ventspils-A" and "Ventspils-B". Pilot service is available round the clock when entering and leaving the port.

Pilot vessel on Channel 16.

ANCHORAGES: Anchorage in the outer port road for vessels loaded with chemical cargoes is allowed in area No. 50, co-ordinates:

Lat. 57° 29.75′ N.	Long. 21° 28.62′ E.
Lat. 57° 29.12′ N.	Long. 21° 29.90′ E.
Lat. 57° 30.82′ N.	Long. 21° 31.75′ E.
Lat. 57° 31.48′ N.	Long. 21° 30.40′ E.

Anchorage in outer port road for tankers, vessels loaded with explosive or inflammable cargoes and also for vessels holding up in quarantine is allowed in area No. 51, co-ordinates:

Lat. 57° 29.40′ N.	Long. 21° 28.82′ E.
Lat. 57° 28.08′ N.	Long. 21° 27.15′ E.
Lat. 57° 27.90′ N.	Long. 21° 30.80′ E.
Lat. 57° 27.02′ N.	Long. 21° 28.72′ E.

Anchorage in outer port road for all the other vessels is allowed in area No. 52, co-ordinates:

Lat. 57° 27.98′ N.	Long. 21° 26.40′ E.
Lat. 57° 26.65′ N.	Long. 21° 24.87′ E.
Lat. 57° 26.05′ N.	Long. 21° 27.10′ E.
Lat. 57° 26.21′ N.	Long. 21° 28.88′ E.

These areas are announced by the U.S.S.R. Notices to Mariners. Depths in the anchorage are from 10m. to 12 m. The bottom is sand; the holding ground is good.

The Master of a vessel has to inform the Port Administration through "Inflot" Agency of the exact position of the anchorage stating the bearing and the distance from the North breakwater lighthouse.

The anchorage in the outer road is not safe during strong Westerly winds therefore vessels are recommended to drift while awaiting entry to the port or to go to sheltered places situated in the areas of the Kolkasrags Point and the Gotland Islands.

MAX. SIZE: *Tankers:* Max. draft 12.45 m.

Cargo vessels: Max. LOA 210 m. – 220 m. Max. draft 11.70 m.

When proceeding along the fairway and passing through the Venta River channel, vessels should have speed not exceeding 5 knots.

TUGS: Use of tugs for tankers, gas-carriers exceeding 60 m. in length, vessels of 70 m. in length and over when mooring and unmooring at berths situated in the Venta River, as well as oil piers, is compulsory.

Normally tugs join vessels within the port area.

BERTHING: Berthing of vessels and shifting berths is carried out round the clock. Vessels having length over 155 m. and draft over 7.6 m. when approaching the port through the Venta River Channel are allowed to enter or leave the port, moor and shift berth during the day only and when winds do not exceed Force 5.

Cargo berths with depths alongside up to 10 m. situated on the right bank of the Venta River are equipped for handling general, bulk cargoes and metals. Berths of the Avantport are equipped for handling crude oil and oil products. They can receive vessels with the maximum permitted draft of up to 12.45 m. (at the datum at Kronshtadt). There are covered warehouses and open concrete floor sheds in the port.

There are enclosed warehouses and open concrete floor sheds. This is also a potash handling plant.

Quays are equipped with electric cranes of up to 45 tons capacity. There are floating cranes of up to 100 tons capacity, cargo handling equipment for bulk cargoes and machinery.

Opening and closing of hatches is normally done by the ship's crew. However, this will be done by stevedores at extra charge if requested by Master.

STEVEDORES: Master's and/or shipowner's information of cargo details, stowage – especially for ships with inward general cargoes – is required in proper time. Information has to be addressed to "Inflot" Agency Ventspils.

ETA notification 72, 48, 24 and 4 hours before arrival to "Inflot" Ventspils (Agents).

MEDICAL: Hospital facilities available. Advance notice desirable however, depends on kind of sickness. Master should place orders concerning inoculations, vaccination, fumigation, hospitalisation and etc., with representative of Sanitary Inspection. Veterinary Certificate is compulsory for all kinds of animals and cargoes of animal origin; phyto-certificate is compulsory for cargoes of vegetable origin.

TANKERS: All grades oil loaded by shore loading hoses in diameter of 200, 250, 280, 300 and 350 mm. Total 6 berths all fitted with deballasting installations for slops. Max. draft from 10.20 m. up to 12.45 m.

There are 2 new berths for gas/chemical carriers, max. draft Berth No. 34 – 8.2 m. and Berth No. 36 – 12.45 m.

GANGWAY/DECK WATCHMEN: Service of watchmen recommended however, Master's option.

CERTIFICATES: Required to be on board:

Crew List.
International Tonnage.
International Class.
Load-line.
Safety Equipment.
International Radio.
Derat Certificate.
Certificate of Financial Security in respect of civil liability for oil pollution damage, 1969.

DENSITY: In port about 1002.
FRESH WATER: Fresh water available, delivered from shore or by barge (capacity 450 tons).
FUEL: All grades available subject to prior inquiry. Bunkers can be taken from the oil jetty or supplied by lighters.
CUSTOMS ALLOWANCES: There is no restriction for crew use and bond locker is not sealed.
IDENTIFICATION CARDS: Seaman's Book required.
CONSULS: No Consulates.
REPAIRS: Small deck and engine repairs, diving inspections can be carried out.
DRY DOCKS: None.
REPATRIATION: Repatriation of crew left behind by a vessel in hospital is arranged by other tramp-ships with Master's consent. No facilities exist for effecting crew changes.
TIME: From 1st April till 1st October – GMT plus 2 hours. From 1st October till 1st April – GMT plus 3 hours.
HOLIDAYS: 1st January (New Year's Day); 8th March (International Women's Day); 1st and 2nd May (May Day Holidays); 9th May (Victory Day); 7th and 8th November (The Great October Socialist Revolution Day); 7th October (The U.S.S.R. Constitution Day). Cargo work never stopped on holidays.
POLICE/AMBULANCE/FIRE: If required have to be called through Maritime Agency "Inflot".
TELEPHONES: No arrangements exist for placing telephones on board.
SERVICES AVAILABLE: Tankers' deballasting installation for slops; service for radar and VHF repairs; compass adjusting; workshop for ordinary deck and engine repairs; ship chandler service; bunker, water, garbage removal, bilge cleaning, surveyors.
SHORE LEAVE: Crew members allowed ashore.

SHIPMASTER'S REPORT: 1976.
Anchorages:
Tanker: bounded by positions,

Lat. 57° 28.4′ N.	Long. 21° 27.3′ E.
Lat. 57° 29.7′ N.	Long. 21° 29.2′ E.
Lat. 57° 28.2′ N.	Long. 21° 31.2′ E.
Lat. 57° 27.2′ N.	Long. 21° 29.3′ E.

Cargo:

Lat. 57° 25.3′ N.	Long. 21° 26.8′ E.
Lat. 57° 28.0′ N.	Long. 21° 26.4′ E.
Lat. 57° 26.1′ N.	Long. 21° 29.0′ E.
Lat. 57° 26.7′ N.	Long. 21° 25.8′ E.

Buoyage:
No. 2 B.W. Conical Fl. 5 sec. (Approx. position Lat. 57° 25.7′ N. Long. 21° 29.85′ E. to be expunged.
New Buoys:
No. 2 Fl.W. 5 sec. in position Lat. 57° 25.6′ N., Long. 21° 28.3′ E.
No. 3 Fl.W. 3 sec. in position Lat. 57° 24.1′ N., Long. 21° 30.65′ E.
No. 4 Fl.R. 3 sec. in position Lat. 57° 25.16′ N., Long. 21° 30.82′ E.
In harbour, No. 4 Fl.R. Con. and Red Conical Buoy about 2 cables E×S to be expunged.
Oil Piers: 3 in number.
No. 1 pier, berths Nos. 28 and 29 – light outer end Qk. Fl.W.
No. 2 pier, berths Nos. 30 and 31 – light outer end Qk. Fl.Or.
No. 3 pier, berths Nos. 32 and 33 – light outer end Qk. Fl. Blue.

Depths alongside:		
	Berth 28:	10.10 m.
	Berth 29:	10.00 m.
	Berths 30/33:	12.00 m.

After dredging in channel is completed to 12.5 m., depth at berths 32 and 33 will be 12.5 m.
Oil Pier No. 3 (Bearings, distances and positions here not confirmed). Existing dock face continued 24.5° approx. 1,100 ft. to join Northern breakwater.
No. 3 runs 283° for 1,100 ft. from position 24.5°, 2,000 ft. from Fl. R.Lt. in Lat. 57° 01′ N., Long. 21° 33.5′ E.
Northern Breakwater: Inner extension from position Lat. 57° 24.69′ N., Long. 21° 32.2′ E. 012° for 890 ft. to join main breakwater.
Under Construction: 3 berths for Petro-chemical industry along inner face of Northern breakwater.
Small harbour beside pilot station, Southern side, completed and in use by small craft and fishing vessels. Small repairs in operation. Depth said to be 3.5 m. – 4 m.
Port operation in foggy weather said to be controlled by radio and millimetre (aircraft) type radar installation, one scanner of which is situated on tower near root of Southern breakwater.
Tugs: Alleged that 5 are available; 1 icebreaker type of 2,500 h.p., 2 medium size, and 2 small, 1 at least of which was propelled by Voith-Schnieder gear of about 750 h.p.
Pilots: To call Pilots, use Channel 16 and call Ventspils Radio who make arrangements with Harbour Office and Agents (Inflot).
During time vessel de-ballasting and loading; any problems can be resolved by call to Agents through Ventspils Radio.
Regulations: Fire Officers demand that suitable bonding wire be fitted (supplied by ship). No shore facility available.
Facilities: No. 1 pier has (building) tower crane for handling hoses. Nos. 2 and 3 berths are fitted with loading arms hoses and towers. Fresh water available. Bunker fuel available but not necessarily marine diesel.
Cargo Berths: There are believed to be 8 dry cargo berths, within the river port area, some with cranes, suitable for general cargo, together with storage buildings. Refrigerated/chilled cargoes have been handled regularly.
Max. Size: Pilot stated that tankers of up to 60,000 tonnes displacement were possible at present, and that after dredging it should be possible to take up to 100,000 tonnes displacement.
To contact Agents, call Ventspils Radio on Channel 27 and they make arrangements.

SHIPMASTER'S REPORT: May 1980.
Vessel: LPG carrier of 10,000 g.r.t.
Landfall/Approaches to Pilotage: Approaches clearly defined by radar, Decca coverage good. Vessels anchored in dry cargo anchorage provide a good guide. Two approach channels with tankers generally using the Southern channel. Pilot boarded close to Buoy A (fairway buoy for South channel).
Pilotage: ETA notification 96, 48, 24 and 4 hours before arrival to "Inflot Ventspils" (Agents), thence further communication by VHF calling Channel 16, then working Channel 9. Answered to "Ventspils Pilots" and not "Nadzor" as stated in Radio Signals Volume 6. Pilots will advise instructions, in this case, to proceed to Buoy A (fairway buoy for South approach channel). Pilot cutter/launch (speed 6 knots) proceeds from inner harbour. Pilot ladder on appropriate side for weather conditions rigged 1 m. above water. Pilotage time to berth approximately 40 minutes. On this visit, despite Pilot boarding at Buoy A, vessel entered using North channel.
Upon departure, Pilot arranged by Agent upon completion of documentation. Southerly channel used for departure with Pilot disembarking mid-channel.
NOTE: LPG vessels are not permitted to enter or leave port during the hours of darkness.
Anchorage: Tanker anchorage lies to N.E. of Northerly channel.
Tugs:
a. Inbound: Tugs join vessel close to breakwater entrance. Three tugs used for berthing (standard port cost for tugs whatever the number used – five tugs available). Made fast on port bow and quarter using ship's lines with one tug pushing. Vessel berths port side alongside – strong Northerly winds (off-shore) on this visit.
b. Outbound: Tugs join vessel at berth – one tug made fast on starboard bow using ship's line. Second tug in attendance. Tugs gone and clear before clearing breakwater.
Berth: (Ammonia only – see Plan Book). Modern fendered concrete quayside with depth alongside 13 m. to 14 m. No tidal range but atmospheric conditions affect Baltic water level – density alongside 1001 g/ml.
Vessel generally berths port side alongside. Berth equipped with 12 in. 150 ASA liquid and vapour chicksans. Ship's reducer used on vapour manifold. Ship's gangway used.
Cargo: Anhydrous ammonia received at −33° Celcius. Loading rate agreed before commencing loading (in this case requested 650 t.p.h.) and increased to over 1,000 t.p.h. after officially requesting for increased rate through Inflot agency. The rate agreed prior to loading is expected to be maintained throughout loading with usual reductions for topping off as required. Average rate for 10,230 tonnes loaded was 714 t.p.h.
Vapour return line connected but not required or used – high back pressure on line. Documentation slow – cargo documentation cannot commence until ship cleared and chicksans not connected until cargo documentation completed. Shippers "Sojuzchimexport" require quality certificate for cargo heel onboard – accepted ship's declaration of purity. Also require cargo plan showing 100% tank volume for each tank – to prevent overloading. Bill of Lading quantity = cargo as measured onboard by shore surveyor (accompanied by interpreter).
Bunkers/Water/Chandler: None required but all available.
Agents: Inflot, Ventspils. Tel. Nos. 61213, 51233, 51350. Cable address: "Inflot Ventspils". Telex No.: 122 INF VNT SU.
Efficient and friendly service. All representatives speak perfect English and very helpful in dealing with Authorities. Inflot require ship information, cable 24 hours prior to arrival with following information:
a. Ship's name, signal letters, nationality.
b. Last port.
c. Draft forward and aft, length, gross and nett tonnage.
d. Cargo requirements.
e. Owner's name and telex number.
f. Bunkers, water and provisions required.
g. Number of crew and health declaration.
h. ETA at pilot station.
If Agents are required in port, call "Ventspils Radio" on Channel 16 and ask for connection to Inflot Agency.
Authorities:
Customs: Usual Bond Declaration required but unconcerned with bonded items onboard and bond locker not sealed in port.
Currency Declaration most important. Customs are not interested in personal cash holdings but must have a "TOTAL Cash Onboard Declaration" and the currencies involved. This total to include personal cash, bar cash, safe cash, etc.
Persons going ashore MUST obtain receipts for all expenditure which are then compared with the total declaration prior to departure.
Immigration: Usual Crew Lists required plus Discharge Books or Passports of all onboard. These are taken ashore, stamped and returned onboard. Persons going ashore will then be required to exchange Discharge Book for shore pass with guard at bottom of gangway. Prior to departure, all personnel must report to Immigration onboard for an identification check.
There is a strict CURFEW after 2400 hrs. and all personnel must be onboard before that time.
Port Health: Doctor boarded on arrival but formality only. Cursory inspection of storerooms only.
General: Time in port was 26 hours 48 minutes. Time loading was 14 hours 20 minutes (documentation 10 hours). Total disbursement for visit was U.S.$9,630.

SHIPMASTER'S REPORT: November 1980.
Pilotage: Pilotage is compulsory. 12 Pilots available. Pilot boards at fairway buoy at the beginning of the old entrance channel and disembarks at Buoy No. "A" in the new deep water channel. Docking and undocking without the aid of a Pilot is not allowed.

Restrictions: Vessels can enter and leave port during hours of darkness at any stage of the tide, however, vessels are not allowed to manoeuvre in fog or at times when the wind is strong. Shore radar is used at night and in fog for berthing.
Max. Draft: Vessels max. draft on sailing was 11.6 m. (FW).
Tugs: 4 tugs available.
Radio: Ventspils Radio, call sign "UNI", on 500, 2182 and VHF Channel 16.
VHF: Pilot uses Channels 9 and 13 after initial call on Channel 16. Port Authority and Agent on Channels 16 and 27.
Documents: As per "Guide to Port Entry".
Facilities: The following are available: Fresh water, fresh provisions, small repairs, small machine shop, airport (with connection to Riga only), Lloyd's Surveyor, Salvage Surveyor (Lloyd's), laundry service, bunker fuel oil, diesel oil, small stock of lubricating oils, Doctor and hospital, groceries and meats, slop tanks – there is no slop storage – slops are segregated during discharge.
Tankers: There are 6 berths at the oil terminal at 3 piers (Berth Nos. 28 – 33).

Vessel berthed at No. 31. Ballast is required when arriving or sailing in a light condition (clean ballast may be discharged into the sea with permission from shore).

The tanker terminal exports crude oil, nafta and gas oil but no petrol. Fuel oil is exported from Klaipeda, 100 miles to the South. Ship's hoses are used. 2×12 in. lines are connected direct to the ship's manifold. No shore booster pump available. Max. pressure 5 kgs.
General Cargo Facilities: There are facilities for handling bulk cargo. Large number of cranes available.

Ro-Ro facilities are not yet ready. There is a floating crane with a 100 ton capacity. There is equipment for handling 20 ft. containers only, however, there is very little storage space available for containers.
Fuel: There are 2 barges, capacity 400 tons each for fuel and diesel oil.
Fresh Water: There is 1 water barge, capacity 100 tons.

AUTHORITY: The Port of Ventspils Authority, Dzintaru 22, 229910 Ventspils, U.S.S.R. *Tel:* 60222, 60430. *Contact:* Port Director.

AGENT: The Port of Ventspils Maritime Agency "Inflot". Postal address: 18 Dzintaru Street, Ventspils, U.S.S.R. Cables: "Inflot Ventspils". Tel. 61-213, 60-369, 60-233. Telex: 161822 Infl Su.

VOSTOCHNY: 42.44 N. 133.03 E.

New port being constructed. Log-loading berth understood to be in operation and a chip berth completed. Container berths to be constructed, depths up to 16.5 m. Vessels of 135,000 d.w.t. handled.

New quay for handling grain, cement and sand with automatic pipe loading system in operation. 2 shiploaders for coal, loading rate 3,000 tonnes per hour each.

SHIPMASTER'S REPORT: May 1983
The Port of Vostochny is a relatively new port, and lies in Nakhodka Bay, at the extreme N.E. end in a smaller Bay, known as Vrangel Bay.
Documents:

On Arrival	Prior Departure
5 General Declarations (IMO Form)	1 Cargo Time Sheet
4 Cargo Declarations (IMO Form)	1 General Declaration
2 Stores Lists	Cargo Declaration
2 Crew's Personal Effects Lists	Cargo Manifests,
6 Crew Lists	(Prepared by Agent)
4 Passenger Lists	
2 Money Lists	
2 Marine Declarations of Health	
1 Vaccination List	
1 List of Ports Visited	

Port Authorities board the ship at any time to effect clearance. They use the accommodation ladder. Frequently a moderate swell runs into Nakhodka Bay from the South, making boarding from even quite large launches very difficult. Immigration Authorities inspect all Crew Seamens' Books. Process of clearance takes about 1.5 hours.
Approaches: When about 4 hours from the port call "Nakhodka Port Control", on Channel 16, Working Channel 12. Nakhodka Port Control has the whole of Nakhodka Bay (Amerika Bay on some charts) under radar surveillance. All shipping movement within the Port Limits are controlled by them. They give direct steering and sailing orders over VHF Channel 12 to vessels under way after passing No. 1 Buoy (Lat. 42° 43.3′ N., Long. 132° 56.3′ E.) inward bound, also anchor berth given with bearing and distance from Mys Shvedova Lt. Ho. usually in the Quarantine Anchorage indicated on Chart BA. 3198 and Anchorage No. 3 on Chart BA. 3041 (Nakhodka Bay). Anchorage good in clay and mud in about 19 m. of water. After anchoring, report to Nakhodka Port Control, and revert to listening watch on Channel 16.
Berthing: Vessel proceeded to the Coal Berth at Vostochny under guidance from Nakhodka Port Control. Fairways well defined on BA Chart No. 3041. Pilot meets vessel off the entrance to Vrangel Bay, just after passing No. 2 Buoy. (Lat. 42° 46.0′ N., Long. 133° 00.6′ E.). Pilot normally boards by pilot ladder or accommodation ladder, port side. 2 tugs used for berthing, which is nearly always port side to.

Berth is new and very modern (Japanese construction). Very well fendered with large rubber fenders at regular intervals. Usable length of quay is about 275 m., bollards at regular intervals all the way along the quay. Although two berths are shown on the Coal Jetty on BA Chart No. 3041 (Nos. 49 and 50) only No. 49, is in fact, used. This is because the loaders (two in number) only serve No. 49 Berth. Depth of water alongside reported as 15 m. and 14 m. guaranteed. No restriction on air draft for loaders, ample clearance for vessel of this size (Panamax).

Departure presents few problems, as plenty of room and water immediately off the berth. Two tugs used as for berthing. These tugs are small, and not really big enough for a vessel of this size, and take a long time to get the ship moving off the berth. However, when clear of berth, vessel can be turned short round with engines and also with the aid of the tugs. Immediately vessel is turned and heading outwards Pilot disembarks. Vessel proceeds outwards to fairway buoy, listening out for Nakhodka Port Control on Channel 12 until passing No. 1 Buoy.
Bulk Cargo Facilities: There are 2 large loaders on the Berth, rated at 2,000 tonnes per hour, self trimming. We loaded Soviet bituminous steam coal, SF given as 42, but no real check possible on this figure. Vessel loaded 55,000 tonnes in 32 hours., and would have been even faster, but for plant breakdowns. Shore cargo personnel helpful as possible, but somewhat limited due to language problems. Informed by them that cargo delays are common due to availability of cargo lacking. All coal brought by rail to port from some considerable distance. Draft and deadweight survey carried out by shore foreman and ship's staff. Cargo documentation and port clearance by Authorities takes about 4 hours, from time of finishing loading.
Density: Density range of water from 1025 to 1028.
Regulations: Many regulations are in force as is common with most Russian ports, below are listed some of the most important ones.

1. Soviet currrency must not be brought in or out of the country.
2. No goods may be imported or exported without permission of Customs.
3. No goods may be taken ashore and sold or brought aboard concealed from Customs Control, as this will be construed as smuggling and heavy fines will be imposed.
4. No dumping of rubbish or pollution of any kind may take place into the harbour waters.
5. All moorings to be fitted with rat guards.
6. Only one gangway to the shore. No ladders to be put out on off side, and off side to be lit by lights at night.
7. No boats to be swung out or lowered.
8. No swimming or fishing allowed whilst alongside.
9. Ship's radio station not to be used in port and VHF not to be used for other than official messages with Shore Authorities or Marine Authorities.
10. Radar must not be used alongside. If radars are to have maintenance carried out by ship's staff, Inflot should be contacted for permission to be granted by Shore Authorities.
11. No photography is allowed.
12. No persons other than the ship's crew and fare paying passengers to be on board at any time. All shore personnel coming on board must be vetted by the Authorities.

SHIPMASTER'S REPORT: May 1984.
Port of Nakhodka and Vostochny (English translation of Vostochny is Eastern).
Chart: B.A. Chart No. 3041.
Arrival: Prior arrival Agents will instruct vessel to proceed to position Lat. 42° 27.2′ N., Long. 132° 56.3′ E. and steer a course of 000° true, which is the Southern entrance to Separation Zone. Also Agents require state of crew health.

As vessel passes Buoy No. 1 Master must report same to Nakhodka Port Control on Channel 16 transferring to Channel 12, at which point vessel will be radar controlled to anchorage, Port Control gives vessel course to steer and anchorage position, vessel remains on Channel 12 and instructions passed to vessel regularly. Even to number of cables to anchorage position, at which time vessel is instructed to drop anchor. If berth is available vessel proceeds to Buoy No. 2 as instructed and onto Fairway No. 3 along which the Pilot will board quite close to Entrance Buoys of the Bukhta Vrangelya (Vostochny Port).

Vessel berths port side alongside assisted by 2 tugs, head inwards, pier well fendered with large hard double rubber fenders (size 1 m. long by 0.5 m. deep and high). Normal securing to berth namely 4 lines and 1 spring each end. Rat guards are required and must be fitted prior to Quarantine Clearance.

On berthing 2 guards are placed at bottom of gangway and Agent boards with 2 Quarantine Officers, 2 Customs Officers and 2 Immigration Officers.

The following papers are required and best to give Agent all documents to sort out:

5 copies General Declaration (IMO Form 1).
5 copies Crew List (IMO Form).
3 copies Passenger List ("Nil" returns required if no passengers).
2 copies Vaccination List (Cholera and/or Yellow Fever).
*2 copies Crew Effects Declaration.
*2 copies Crew and Ship's Currency Declaration.
*2 copies List of Cameras with Type and Serial Nos.
2 copies Drugs in Master's Safe.
1 copy Ship's Stores List (Bond, etc.).
1 copy Parcel List ("Nil" return required).
1 copy Delivery Bill of Mail ("Nil" return required).
1 copy Declaration of Arms/Ammunition List ("Nil" return required).
1 copy Maritime Declaration of Health (Japanese form accepted).
4 copies Cargo Declaration (if cargo onboard).

*One of each taken ashore, other copies stamped and retained onboard for clearance check before sailing.

Ensure crew declare all goods, watches, radios, firearms, gold, jewelry, etc.

All Discharge Books checked by Immigration, Customs have random check on cabins. Quarantine only check Derat Certificate and Vaccination List. Note *all* types of "magazines" are forbidden and must be collected and sealed up before clearance.

When all paperwork is completed and Officials leave vessel taking Discharge Books ashore and clearance is given, cargo work can commence after draft survey. Discharge Books are returned to vessel after a few hours and are required to be handed to the gangway guards when any crew go ashore, even to read the draft.

Draft Surveyor checks everything and quite thorough, even with hold cleaning. Once surveyor has completed he arranges cargo operations to commence as per ship's instructions.

Vessel loaded two grades of coal:

1. Partizensky (J-6) 40,000 tonnes.
2. Nerjungrin (SS) 15,000 tonnes.

At consignee's request cargo was loaded with 20,000 along bottom, then 15,000 of SS and complete with 20,000 J-6 on top. Reason being the 15,000 SS was very powdery and mixed would be easier to discharge. This entailed a draft survey at the end of each layer of coal. Loading rate up to 1,200 tonnes/p.h. per loader.

Details of Berth, Loader Etc.:

Berth: A pier built out from shore with length of 400 m. and width 56 m. of which only 340 m. is used for mooring. Depth of water at forward end of vessel 16 m. and at pier end about 18 m. Max. draft allowed 15 m. Cement constructed at pier of 10 cement pontoons driven into sea bed on each side, with horn bollards on top of each pontoon (2 bollards). Then double horizontal rubber fenders on face.

Loader: Two units, travelling type with elevation boom, has outreach from fender face of 28.2 m. and airdraft of 18 m. Telescopic head Spoon or Fast Belt.

Belt Conveyor: Two belts from yard to pier at 180 m. per second.

Stocks: Two yards approx. area each 730 m. by 45 m. and plenty of stockpiles.

Max. Size Allowed: 110,000/120,000 d.w.t. (LOA 314 m., beam 43 m. and draft 15 m.).

Steam Line: On quay for ice melting.

Yearly Production: 5 million tons per year.

Future: Increase production by 5 million tons when other side of pier is developed as presently no loaders, although pier is complete in all respects.

Stowage Factor of Coal: About 42 cu.ft. per ton.

Bunkers: Available ex-coaster.

Fresh Water: Available ex-barge from Nakhodka (very expensive).

Stores: Not available.

Shore Leave: Allowed between 0800 hrs. and 2400 hrs. (Master not restricted). There is nothing to see at Vostochny but 1 hour by car/mini bus to Nakhodka where a Seaman's Mission and export shop are located.

Time: GMT plus 10 hours. Between 1st April and 1st October GMT plus 11 hours.

Radio Station: Nakhodka Radio used. 8510 kHz call sign "UKK3" and 500/435 kHz call sign "UK1" and answered first call. Other frequencies as per Radio Station Signals Vol. 1.

Tugs: Two tugs used of about 1,000 h.p. and 2,000 h.p. (Local Regulations require any vessel berthing to use 2 tugs).

Pilot: 24 hour berthing allowed.

Agents: "Inflot" are available on demand, visit the vessel at least once a day and are very helpful.

Cargo Weights: This is done by electronic weights scale ashore and on draft surveys. Weights in each hatch are not correct, as seen from our Facts Sheet vessel same quantities each run, yet time in each hatch varied from 40 minutes to 90 minutes for same quantity. Final draft survey agreed with ship's figures which were used for Bill of Lading (ship only signs "Mate's Receipt").

Other Berths: Across bay are 3 general cargo berths and 3 container berths with a maximum draft allowed of 9.7 m. Gantries are only suitable for the smaller container vessel of about 1,000 boxes.

Departure: Once cargo completed all paper work done on vessel, Agent attends to cargo papers after which Customs and Immigration board. Immigration check each crew member with Discharge Book photograph, Customs check bond seal and break it. Apart from papers given to Master they require a Cargo Declaration (IMO Form) completed. Ship has to request a Port Clearance, otherwise none is given.

Stevedores: Continuous working of cargo with meal breaks between 0700 – 0800 hrs., 1200 – 1300 hrs., 1900 – 2100 hrs. and 2300 – 2400 hrs.

Sailing: Once vessel clear of berth vessel is swung 90° to port and lined up between Entrance Buoys at which time Pilot disembarks and vessel reports to Nakhodka Port Control who advise course to steer and watch you on radar until passing Buoy No. 1. Then vessel steers 180° until clear of separation scheme.

SHIPMASTER'S REPORT: August 1984.

Vostochny Approach.

B.A. Chart Nos. 2511, 3198, 3041.

The main port of Nakhodka handles all traffic routing inside the bay. Contact Nakhodka Traffic Control on Channel 12 not less than 2 miles prior to arrival Buoy No. 1, Control will give you anchoring position and course to steer. When approaching anchoring position Control gives you run down and distance to go for dropping anchor.

Officials board at anchorage (6 people). When vessel is cleared listen on Channels 16 and 12 for berthing instructions. When berth is free, Control informs you to heave up and proceed towards berth.

Vostochny Pilot (Channel 16) boards at Fairway Buoys off berths. 2 tugs assist berthing. Buoys have no numbers but mark the entance to Vrangelya Bay, where coal berth is situated. We berthed Berth No. 49, port side to. Depth at berth is 16.5 m., max. draft 15 m., airdraft 18.4 m. Max. ships size 260,000 d.w.t. (100,000 tonnes), beam 38 m. Loading rate 3,000 t.p.h. by 2 loading booms. This rate depends on availability of coal. Most of cargo comes from Siberia and requires 10 days passage from mines.

Vostochny Facilities: Fresh water available on jetty, use you own hose and coupling. Fuel and diesel available by barge. Ship chandler if required, also hospital and dental treatment available. Shore leave is by mini-bus or launch to Nakhodka. The mini-bus can only carry 10 people and the journey by launch takes approximately 75 minutes. An International Seaman's Club, souvenir shop and 4 restaurants are available at Nakhodka.

Documents: We made out our own forms which included:

6 copies Crew List.
2 copies Stores List.
2 copies Crew Declaration.
2 copies Currency List.
2 copies Dangerous Drugs List.
2 copies Passenger List.
2 copies Arms and Ammunition List
6 copies Notice of Readiness.
1 copy Port Health.

Any health forms will do, score out country of origin, they provide you with "Inflot" Agency Information Form.

4 copies General Declaration (IMO Form 1).
2 copies Cargo Declaration (IMO Form 2).

On completion of loading, Officials board for documentation of cargo loaded. When this is finished the Agent arranges for the Pilot via VHF. The Pilot takes vessel out of berth, using 2 tugs. Vessel proceeds, assisted by Port Control towards Buoy No. 1 off Mys. Krylova.

AGENT: See "Nakhodka".

VYBORG: 60.42 N. 28.44 E. (See Plan Book)

For Saimaa Canal see Index.

GENERAL: A Baltic Sea port Vyborg is situated at the head of the Gulf of Vyborg in the N.E. part of the Gulf of Finland.

The port area consists of a harbour protected from the North by the Castle bridge passing over the strait nearby the Castle of Vyborg and by the Smolyanoy point – from the West.

The port is open for navigation all year round (from December till April with icebreaker assistance). Ice in the Gulf of Vyborg begins to form normally about the middle of November. The Gulf usually becomes frozen over by the middle of December and the last ice finally disappears in April.

Whilst tidal range in the Gulf of Vyborg is of small account, considerable changes in the water level may be caused by strong winds (up to 1.6 m.), variation in atmospheric pressure (up to 1 m.), and the seasonal increase of the amount of water brought down from the land. The rise of the water level is usually caused by South, S.W. and sometimes by North winds. The maximum range of the water level in the Gulf is about 2.0 m.

The Vyborg Fairway (least depth 7.3 m.) leads from the entrance to the Gulf of Vyborg across the Transund roadstead up to the entrance of the Inner Vysotsky Roads. The Vyborg Sea Channel (least depth 6.5 m.) leads from the Inner Vysotsky Roads into the port, situated at the head of the Gulf. Both of these and the Fairway and the Channel, are open for navigation any time of day or night.

PORT LIMITS: The sea waters of the port are the fairways and anchorages to the East from 28° 23′ E. and to the North from 60° 34′ N.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Pilotage in the port area is carried out round the clock. It is compulsory for all types of vessels. Pilots board and disembark vessels in the following places:

1. At the port of Vyborg;
2. At the Reception buoy, 5.1 cables Westward of the Northern point of the Mayachny Island (pilot station of the Vikhrevoy Island);
3. At the Brusnichnoe Lock berth or in the Lock itself.
4. At Kozliny Island (60° 26.7 N., 27° 43.0′ E.) for the vessels proceeding to or from Finland only.

In the case of rough weather when safe boarding or disembarkation of a Pilot at the Reception buoy of the Vikhrevoy Island pilot station is impossible, a vessel, with the Master's consent, may follow a pilot boat, in the wake of it from the Reception buoy up to the Large Transund Roadstead or as the case may be, from the Large Transund Roadstead up to the Reception Buoy.

The radio communication between pilot boat and vessel is effected through VHF radio, Channel 12.

In case the Master of a vessel does not agree to follow a pilot boat, he can:

(a) When approaching the port from the seaward lie at anchor at the Reception buoy area until the weather changes for the better;

(b) When leaving the port for sea, anchor at the Large Transund Roadstead at a place indicated by the Port Administration and wait until Pilot is able to disembark at the Reception buoy area.

Vessels approaching the port from seaward should order a Pilot at the same time as they notify the Port Administration of the time of their arrival at the point of meeting a pilot boat.

ANCHORAGES: There are 5 anchorages at Vyborg Fairway and at Vyborg Sea Channel areas.

Two are situated at the Large Transund Roadstead area, one – at the Small Transund Roadstead, one – S.E. and one – N.W. of the channel. Anchorage positions are shown on the chart.

The holding ground in the anchorages is sand, mud, stone and clay. The depths are from 11 m. to 17 m.

RESTRICTIONS: Vessels are allowed to enter or leave the port when winds do not exceed Force 6. During daytime, when a vessel's length is not more than 125 m. and her draft does not exceed 6.5 m. (at the Kronstadt datum);

At night time, when a vessel's length is not more than 105 m. and her draft does not exceed 6.1 m. (at the Kronstadt datum).

Before entering or leaving the port Masters of vessels having length and draft exceeding those indicated above must obtain the Harbour Master's permission.

HEALTH: International code quarantine signals to be shown on arrival. Vessels placed in quarantine will be instructed where to anchor by the pilot station.

RADIO: Radio contact can be established through the Vyborg Radio port radio station operating 24 hours daily on the following frequencies:

Call sign	*Frequencies (kHz) working*	*calling*	*Type of trans- mission*	*Time of work*
UNN	500	500	A1A	H24
"Vyborg Radio"	156.8*(16)	156.8*(16)	F3E	H24
(Harbour Master)	156.6*(12)	156.6*(12)	F3E	H24
"Ostrov Vikhrevoy"	156.8*(16)	156.8*(16)	F3E	H24
(Pilot Station)	156.6*(12)	156.6*(12)	F3E	H24
"Zaliv Novinskogo"	156.8*(16)	156.8*(16)	F3E	H24
(Pilot Station)	156.6*(12)	156.6*(12)	F3E	H24
"Vyborg Inflot"	156.8*(16)	156.8*(16)	F3E	H24
(Inflot Shipping Agency)	161.8*(24)	157.2*(24)	F3E	H24

*Frequencies are given in MHz.

Every vessel whilst proceeding along the Fairways and the Channel must have VHF radio-telephone in good working order, being able to ensure a reliable radio contact with the port of Vyborg and between vessels. If a vessel is not equipped with VHF radio, a Master can hire a VHF portable radio-set from a pilot station (via Pilot) for a fixed charge.

TUGS: Available, ordered through "Inflot". Compulsory for vessels over 80 m. LOA.

BERTHING: Can only be effected with Pilot on board. Berths of the port with depths alongside of up to 7.8 m. are equipped to handle general and bulk cargoes, timber, etc., as well as passenger traffic. There are enclosed warehouses and open concrete floor sheds.

Berths are equipped with electric cranes of up to 20 tons capacity. There are floating cranes of up to 15 tons capacity and other cargo-handling equipment and machinery.

Opening and closing of hatches is usually done by the ship's crew, but if required it can be done by port labour for vessel's account.

MEDICAL: "Inflot" to be advised in advance if any medical attention required.

DENSITY: Salinity 5%.

FRESH WATER: Available. Can be supplied by pipe-lines at all berths or delivered by barges.

FUEL: Available by barge only.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Usually opened and closed by crew. Can be operated by stevedores on request.

CUSTOMS ALLOWANCES: No control on board the vessel. All items taken off vessel subject to Customs control.

REPAIRS: Minor repairs can be effected.

SURVEYORS: Surveyors and Cargo Inspectors may be ordered through "Inflot" Agency or through Cargo Receivers' Agents V/O "Soyuzvneshtrans" (telex 121 541).

TIME: GMT plus 3 hours from 1st October until 31st March, GMT plus 4 hours from 1st April until 30th September.

HOLIDAYS: Cargo operations can be carried out on all holidays.

TELEPHONE: Connection to vessels is not possible.

SHORE LEAVE: Permitted subject to police control.

BANKS: Vneshtorgbank in Leningrad.

EMERGENCY CO-ORDINATION CENTRE: Salvage Division of the Baltic Steamship Co., Leningrad. Tel: 259-03-55, 216-99-65. Telex: 121 501.

STORING: Under Customs control from trucks alongside at the berth. Bunkers from a tanker or from trucks.

DEVELOPMENTS: Three berths at Vysotsk of total length of 360 m. and draft 7.5 m. are under construction.

Dredging and deepening to take place to allow vessels of 12,000 d.w.t. to enter.

AUTHORITY: The Port of Vyborg Authority, Ulitsa Yuzhny Val 1, 188900 Vyborg, U.S.S.R. *Tel:* 24750, 99677. Harbour Master *Tel:* 20477, 99650. *Contact:* Manager of Vyborg Sea Port.

AGENT: The Port of Vyborg Maritime Agency "Inflot". Postal address: Inflot, PO Box 40, Vyborg, U.S.S.R. Cables "Inflot Vyborg". Tel: 21400, 21735, 24818. Telex: 121521.

YALTA: 44.30 N. 34.12 E. (See Plan Book)

GENERAL: An ice-free Black Sea passenger and commercial port, Yalta is situated at the head of Yalta Bay and on the Southern coast of the Crimea Peninsula.

The port is open for navigation all the year round.

The port is formed by a harbour protected by a mole. Depths in the harbour are up to 10 m.

Yalta is mainly a passenger port, but it is equipped to handle dry cargo vessels.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Pilot meets vessel in the Outer Roads, at a distance of 1.6 miles S.E. of Yalta Lighthouse.

ANCHORAGES: The port Outer Roads are situated in Yalta Bay:

E.S.E. 6 cables off the head of the mole with depth of about 30 m. for large vessels and E.N.E. with depths, about 10 m. for small vessels (tugs, boats, etc.).

They are open to winds blowing between E.N.E. and S.W. At times vessels may be turned broadside to waves caused by Southerly winds.

The bottom is mud and sand.

RESTRICTIONS: Vessels may enter or leave the port at any time of day or night. Vessels entering or leaving the port must have keel clearance of not less than 0.6 m.

MAX. SIZE: Permissible draft is 9.0 m., length 215 m.

RADIO: Ship-shore radio contact can be established through the port radio station Yalta Radio operating 24 hours a day on the following frequencies:

Call sign	*Frequencies (kHz) Working*	*Calling*	*Type of trans- mission*	*Time of Work*
UZD-9	500	500	A1A	H24
"Yalta Radio"	2182	2182	H3E	H24
"Yalta 2"	156.8*(16)	156.8*(16)	F3E	H24
(CPR)**	161.9*(26)	161.9*(26)	F3E	H24

*Frequencies are given in MHz.

**CPR – Central Port Radio Station.

TUGS: Tug assistance for mooring is compulsory. Masters of vessels entering the port must order at least 1 tug when mooring.

Masters of deep-drafted vessels must order a tug-boat when unmooring from Berth Nos. 1 – 5 if it is impossible to leave berth by drifting with the assistance of off-shore blowing wind.

BERTHING: Cranes of up to 6 tons capacity are operated along cargo quays. Depth alongside 6.5 m.

Handling of cargo at the passenger terminal is usually done by ship's cargo gear.

FUEL: Not available.

FRESH WATER: Can be supplied by pipe-lines at all berths.

REPAIRS: Not available.

TIME: GMT plus 3 hours. GMT plus 4 hours in Summer.

AUTHORITY: The Port of Yalta Authority, 5 President F.D. Roosevelt Street, Port of Yalta, U.S.S.R. *Tel:* 32-42-42. *Telex:* 185. *Contact* General Manager.

AGENT: A branch of the Port of Odessa Main Maritime Agency "Inflot" at the Port of Yalta. Postal address: 5 President F. D. Roosevelt Street, 334200 Port of Yalta, U.S.S.R. Cables: "Inflot Yalta". Tel. 32-82-89. Telex: See "Odessa".

YUZHNYY (Grigorevsky): 46.39 N. 30.55 E. (See Plan Book)

PORT LIMITS: The water area of the port is the waters of Adzhalykskiy Liman and the sea area bounded by the arc of a circle with a radius of 2 miles from the coast radar station. (46° 36.04′ N., 31° 01′ 25″ E.) and anchorages No. 90, 91 and 92 on the Charts.

PILOTAGE: In order to reach the port of Yuzhnyy vessel first has to proceed to position Lat. 46° 08′ N., Long. 31° 06′ E. (near port Ilyichevsk), one hour before arrival at abovementioned position Master should communicate with "Port Control Ilyichevsk, on channel 16 or on R/T 2535 kHz and then follow the instructions of "Port Control" as further navigation is controlled by shore radar.

Gas-carriers and chemical-carriers shall follow a pilot boat when proceeding to and from the port. Master shall order a Pilot through the Port of Ilichevsk 48 hours before and confirm the order 6 hours prior to approaching the Port of Yuzhny.

The port is equipped by an automated vessels' movement control system (VMCS).

ANCHORAGES: It is prohibited for ships to anchor in the inner roadstead. Ships proceeding into Port Yuzhnyy wait in the anchorage for the port of Odessa. (Lat. 46° 29′ N., Long. 30° 51′ E.)

Anchorage Nos. 90 and 91: For gas carrying ships and are 3.4 miles S.S.W. and 1.7 miles South of the West entrance point of Adzhalykskiy Liman. The depth in anchorage No. 90 is 14 m. to 21 m., and in anchorage No. 91, 19 m. to 21 m. The seabed is sand, mud and shells.

The limits of the anchorages are shown on the charts.

RESTRICTIONS: The following vessels are allowed to enter port when conditions are as follows:

Gas and chemical carriers not over 150 m. in length are allowed to enter and leave the port in conditions of visibility of not less than 2 miles.

Vessels up to 180 m. in length – when conditions of visibility are not less than 3 miles.

Vessels having length over 180 m. – when the port's leading marks are visible from the crossing of the RK-1 and the imaginary line of the entering leading marks (bearing 13° – 193°).

MAX. SIZE: Ships up to 280 m. LOA 12 m. draft for gas- and chemical-carriers. 13 m. draft for other vessels.

HEALTH: The legislation of the USSR on protection of the surroundings and "Compulsory Rules of the port of Yuzhnyy" (now available only in Russian) to apply.

Prior to arrival Master should send cable to INFLOT Yuzhnyy advising last port of call, place drinking/ballast water taken, whether vessel is equipped with sewage tanks or sewage purifying system. Any infectious diseases among the crew during the voyage.

MEDICAL: Port surgery is open round the clock. Dentist and General Practitioner available from 0900 hrs. to 1500 hrs. except weekends holidays.

Other specialists available at Odessa.

RADIO: All cables to be sent through Odessa Radio.

VHF: Radio communication can be established through the port radio station "Yuzhnyy-Radio".

Call sign	*Frequencies (MHz) working*	*calling*	*Type of trans- mission*	*Time of work*
"Yuzhnyy Radio-5"	156.8(16)	156.8(16)	F3E	H24
(Port Controller)	156.725(74)	156.725(74)	F3E	H24
"Yuzhnyy Radio-2"	156.8(16)	156.8(16)	F3E	H24
(Harbour Master)	156.550(11)	156.550(11)	F3E	H24
"Yuzhnyy Radio-1"	156.8(16)	156.8(16)	F3E	H24
(Vessels' movement control post)	156.475(69)	156.475(69)	F3E	H24

RADAR: Vessels are piloted by Shore Radio In and Out.

TUGS: The use of tugs is compulsory when mooring/unmooring. The number of tugs and their horse-power is determined by the Pilot with Master's consent, depending on weather conditions, tonnage and type of vessel. 3 tug-boats must be used during gas-carrier's mooring/unmooring if over 35,000 d.w.t.

BERTHING: On the West coast of Adzhalykskiy Liman quay Nos. 1, 2 and 3 have been built, depth up to 14 m. The general length of the quays are about 600 m. Quay No. 3 is for loading liquid ammonia and pumping super-phosphorous acid.

A quay for auxiliary ships has been built on the North side of the East entrance point of the inlet. The length of the quay is 155 m. and the depth alongside it is 6.4 m.

FRESH WATER: Potable water available from berth and by barge.
FUEL: Delivered by barge. Longest possible notice is desirable.
REPATRIATION: In case of illness only.
AIRPORT: At Odessa.
TIME: Local time is GMT plus 3 hours. Summertime (GMT plus 4 hours) is used from the 1st April to 30th September.
HOLIDAYS: 1st January, 8th March, 1st, 2nd, 9th May, 7th October, 7th November.
SHORE LEAVE: Restricted for all crew members (except Master) till midnight. Shore passes are valid for port Yuzhnyy area only. For trips to Odessa special permission is required.
POLICE/AMBULANCE/FIRE: Through Agent.
TELEPHONES: For gas-carriers only.

GENERAL: Port Yuzhnyy is in Adzhalykskiy Liman, and is 4.2 miles E.N.E. of Mys. Dofinovskiy. At the present time the first stage of the port has been built on the West coast of the inlet. Three quays have been constructed. Further work is being carried out in the port with the construction of quays on the East coast of the inlet.

The water area of the port opposite the constructed quays has been deepened to 13.5 m.

From seaward an approach channel, 1.6 miles long has been cut through. Leading light beacons lead along it. The least depth in the channel is 12.5 m.

The entrance to the port is protected by 2 moles: The Western about 400 m. long and the Eastern about 540 m. long. The moles are 6 m. wide.

Areas with special navigation systems: Off the coast there are areas in which navigation is temporarily prohibited; an area dangerous for navigation; area No. 185, prohibited for anchoring and fishing, and area No. 14 for bombing.

The limits of the areas are shown on charts.

Mys. Dofinovskiy: (Lat. 46° 34′ N., Long. 30° 55′ E.) lies 4.3 miles E.N.E. of Mys. Severnyy Odesskiy. Mys. Dofinovskiy protrudes insignificantly into the sea. Four cables West of the headland stretches the village of Novodofinovka, in which there are conspicuous white buildings.

Spoil Grounds: 1.7 and 2.5 miles East of Mys. Dofinovskiy a former spoil ground and a spoil ground are situated respectively. In these areas depths may be less than shown on charts.

A wreck with a depth 9.8 m. over it is situated 2.7 miles E.S.E. of Mys. Dofinovskiy.

A light buoy marks the wreck with a depth of 9.6 m. over it.

Banks with depths of 7.6, 7.2, 8.4 and 9.4 m. are situated respectively 3.5, 3.8, 3.6, and 3.7 miles E.S.E. of Mys Dofinovskiy. They are marked by light buoys.

A bank with a depth of 9 m. is situated 3.3 miles E.S.E. of Mys. Dofinovskiy.

Conspicuous Points: On the West coast of the entrance to the inlet in the village of Grigor'yevka is a conspicuous smoke chimney, and on the West coast of the inlet opposite the quays can be seen large metal reservoirs and towers.

Navigational Aids: The entrance to the channel and its edges are marked by light buoys. On the moles stand lights and beacons; on the East coast of the inlet there are leading light beacons.

Station: On the East entrance point to Adzhalykskiy Liman stands a coastal radar station. Radar pilotage is carried out under the direction of a Pilot. The pilotage is of a consultative nature. Responsibility for manoeuvres, fulfilling requirements of MPPSS-72 (International Regulations for Prevention of Collisions at Sea) and the navigational regulations of the port, rests with the Master of the vessel.

There is a signal post on the building of the coastal radar station.

Caution: Bearing in mind the possibility of the destruction of the edges of the approach channel, depths in it may be less than shown on charts.

Underwater Pipe-line: Runs in a S.W. direction from the village of Grigor'yevska. The position of the pipe-line is shown on charts.

Roadsteads: There are 2 roadsteads in Port Yuzhnyy: outer and inner. The outer roadstead is situated in the approaches to Adzhalykskiy Liman. The seaward limits of the roadstead are coincidental with the outer limits of the port. The depths in the South part of the outer roadstead are up to 22 m. The inner roadstead occupies the water area of the South part of Adzhalykskiy Liman opposite the quays.

Grigor'yevska Light Beacon: Stands 3.8 miles E.N.E. of Mys. Dofinovskiy. Appearance of the beacon: white round concrete tower on the upper part of which stands a black cylinder, the lower part of the cylinder becomes a truncated cone. Height of the beacon is 14.8 m.: height of the light is 60.1 m.

Vkhodnoy Leading Light Beacons: Stands on the East coast of Adzhalykskiy Liman and lead along the approach channel to Port Yuzhnyy. Its direction is 193° – 013°.

The front beacon stands 2.7 miles N.N.E. of the entrance to the inlet. Appearance of the beacon: 4-sided metal framework tower on which has been erected a black rectangular target with a white vertical stripe in the centre. The height of the beacon is 17 m.; height of the light is 47 m.

The rear beacon stands 6 cables from the front one. Appearance of the beacon: 4-sided metal framework tower, on which has been erected a black rectangular target with a white vertical stripe in the middle. The height of the beacon is 29 m.; height of the light is 69 m.

REGULATIONS: The following are some of the port regulations. The numerals have no significant meaning.

1. Gas carrying ships proceed into port and leave it in company with a fire tug, which goes ahead of the gas carrying ship at 8 – 10 cables and will notify on VHF radio all ships of the necessary measures and precautions to be taken.

2. Requests for pilotage and tugs for mooring ships at the quays are made to the Port Director of Odessa not later than 48 hours before reaching the outer roadstead of the Port of Odessa, and requests for an accompanying fire tug, not later than 24 hours before.

3. In the port there is a control office for regulating ship movements. Ships entering the port, request permission for entry 2 hours before, and ships leaving the port, 30 minutes before.

5. Pilotage for all foreign ships is obligatory.

6. Pilotage for ships into Port Yuzhnyy begins at the anchorage (Lat. 46° 29′ N., Long. 30° 51′ E.) of Port Odessa.

7. Pilotage into Port Yuzhnyy is carried out only in daylight and when visibility is not less than 4 miles.

8. When a gas carrying ship is entering or leaving the port the entry or exit of other ships is prohibited.

(a.) 2 hours before entering or leaving the port the Master of a gas carrying ship must inform all ships on VHF radio on Channel 16 of the route he will be following. With the arrival on board of the Pilot such information will be given every 15 minutes and if the circumstances require it, more often.

(b.) The mooring of any kind of floating object to the side of a gas carrier while it is at quay No. 3 is prohibited.

9. The max. draft for ships proceeding into Port Yuzhnyy is 12.0 m.

10. The max. speed for ships in the channel is 6 knots, but in the inner roadstead it is 4 knots.

11. The movement of ships in the channel is only in one direction.

12. The mooring of gas carrying vessels and vessels carrying chemicals is carried out with the aid of not less than 3 tugs, the power of 2 of which must be 882 kV (1,200 l.s.) and one 1,692 kV (2,300 l.s.). Leaving the mooring is carried out with the aid of not less than 2 tugs of which one has a power of 1,692 kV (2,300 l.s.) and the other 882 kV (1,200 l.s.) The wind speed when mooring and leaving moorings must not exceed 7.0 m./sec.

The mooring of gas carriers with a length of more than 180 m. is carried out with the aid of 4 tugs; the power of each of them must not be less than 882 kV (1,200 l.s.). Unberthing will be carried out with not less than 3 tugs with the same power. The speed of the wind during mooring and leaving moorings must not exceed 10.0 m./sec.

13. Communication between tugs and ships will be carried out on VHF radio on Channel 6.

14. Communication with ships is carried out on VHF radio on Channel 11, call on Channel 16. The VHF call sign for Port Yuzhnyy is Port Control.

15. During the mooring and un-mooring of gas carriers from the quays, a representative of the Odessa Port Factory, military guard, office of the Harbour Master and also an inspector of the port will be present.

16. Mooring at the quay, moving on a quay or leaving the quay are to be carried out under the directions of a Pilot.

17. When the speed of the wind is above 12 m./sec., the moving of gas carriers along the quay is prohibited.

18. Navigation of ships along the channel, of not more than 20,000 tons displacement is permitted without tugs when the wind speed is less than 12 m./sec. and the cross current has a speed not more than 0.5 m./sec.

Entry to the channel when visibility is less than 2 miles is prohibited.

When there is a strong cross current or current along the channel, tugs will lead ships into the approach channel.

The mooring of ships at the quay will be carried out in the following manner, after the tugs have turned the bows towards the exit and parallel to the quay at a distance of 80 m. – 100 m. from the quay, the tugs, maintained the plane of the ship parallel to the quay, and will move the ship towards the quay. The speed of approach must not exceed 10 cm./sec.

The ship moorings will be carried ashore by launches. From the bows and stern 2 nylon mooring ropes of not less than 200 mm. (8 in. circumference) are to be used.

19. The main engines of gas carriers must be in constant readiness to move the ship during the whole period in the port.

When gas carriers are entering the port and also when leaving it, all other ships must observe precautions and not hinder its movement or its chosen route. These ships must not close a gas carrier within a distance of 10 cables.

The fire fighting tug on duty keeps a round the clock watch on VHF radio Channel 16.

The use of steel moorings on gas carriers is prohibited.

The Harbour Master of Port Yuzhnyy has the right to depart from the present position on questions connected with the safety of mariners.

Lack of knowledge of the requirements of the present temporary obligatory regulations established for the port will not absolve the Master of a vessel from responsibility for non-observance of these regulations.

SHIPMASTER'S REPORT: September 1979.
Vessel: 32,000 g.r.t. LPG Carrier.
General: This port is situated on the Western bank of what was once Lake Ajalik, about 0.5 miles from the entrance to the bay. The port has been created by dredging the barrier that separated the lake from Odessa Bay. On BA. chart 2212 this entrance is situated about Lat. 46° 35.6′ N., Long. 31° 00.4′ E. Breakwaters of prefabricated concrete sections extend about 500 m. into the bay, and the approach channel is marked by conical buoys and pillar buoys for a distance of about 2.5 miles beyond this. The approach channel lies on an axis of about 010°T – 190°T. Depth in this channel were not less than 16 m. by ship's echo sounder, both on entering and leaving.

The small town of Grigor'yevska is marked on BA. 2212, Lake Ajalik is not marked on this chart.

The port has been created to serve the massive and newly constructed chemical plant on the Western shore of the lake. At the time of this visit it consisted of dry bulk handling berths of about 700 m. in length, and a liquid handling facility for the discharge of superphosphoric acid and the export of anhydrous ammonia. The liquid handling berth lies to the North of the dry berths, about 0.8 miles from the breakwaters.

There are plans to create dry cargo berths on the Eastern shores of the lake, immediately inside the entrance. Some work is already in progress.

Vessels of up to 12 m. draft can be handled and there are 3 medium sized tugs available.

The chemical plant is not yet fully completed, a second stage has only been operating since the beginning of this year. In 1980 there are plans to export 2 million tons of ammonia.

Agents: "Inflot" may be reached on Channel 16, with a working Channel 8 available. Reception was not too good.

Berthing: Vessel berthed starboard side alongside, swinging immediately South of the berth with the aid of 2 tugs (the third was late in arriving) moored fore and aft, port side.

The berth itself consists of a concrete jetty projecting from the main jetty, some 110 m. in length and about 40 m. proud of the main jetty.

There are 5 chicksans, 2 for the discharge of acid, and a group of 3, 2 liquid 1 vapour return, for the loading of ammonia. The chicksans have hydraulic couplings and appear to be of an awkward size, about 325 to 330 mm.

On this visit there was only 1 liquid line available for use together with the vapour return line. Claimed loading rate is said to be some 2,000 tonnes p.h. With the 2 liquid lines in use, this would indeed be possible. Our overall load rate was 1,115 t.p.h., including initial and final slow rates. During loading hourly rates in excess of 1,500 t.p.h. were maintained.

Communications with the plant operators was quite good but obviously hampered by language. There were no problems with slowing down for topping off.

Samples: Were taken on arrival and at several times throughout the loading, sample cock on chicksans.

Fresh Water: Available from the jetty.

Fuel: May be supplied and arrives by barge. Bunkering cannot be undertaken whilst loading cargo and on this call the bunkering had to be completed before being allowed to load, despite this leading to a big delay.

Moorings: Three lines, 2 breast and 2 springs, fore and aft. Ratguards must be fitted. Mooring boat in attendance.

No problems with landing gangway on the quay and it may be turned out quite safely before arrival alongside.

Guards: On the quay, 1 at the gangway (discharge books required before being allowed to read drafts, etc.) and 1 each end. At night there was a 'guard' boat lying off our port side.

Officials: Polite and quite firm.

Papers required:

5 Copies General Declaration. (ship's particulars, etc.).
4 Copies Cargo Declaration.
2 Copies Crew's Effects.
4 Copies Crew's Lists.
4 Copies Passenger List.
2 Copies Crew Currency Declaration.
1 Copies 'Clean' Ballast Declaration.

No certificates were sighted.

Shore Leave: Granted until 2400 hrs. Masters allowed unlimited shore leave.

Toilets/Pollution: Vessels not fitted with sewage treatment plants must seal their toilets and use the shore facilities at the end of the quay. A statement to this effect must be signed.

A very strict control of pollution of all types is maintained and this includes ALL drainings from the maindeck. Scuppers must remain plugged right up to the moment of departure. Hoses used to de-ice the liquid line must NOT be allowed to drain overside.

Papers: Allow at least 3 hours for paperwork before and after working cargo.

Cargo Lines: Were blown through by the shore plant on completion of loading. Vapour return lines was used throughout and there is no charge for its use, vapour apparently being returned to the shore tanks.

Cargo loaded was at about −32°C.

SHIPMASTER'S REPORT: October 1980.

The following is an update of the September 1979 report above.

General: The port has been developed East of Odessa to handle overspill from Odessa and to develop bulk handling facilities.

In about 10 years in terms of tonnage handled, it is expected to be the largest in the Southern U.S.S.R. open to overseas vessels.

It has been in operation for 2 years and is 0.6 miles East of Grigoryeko light.

The port has been constructed from a fresh water lake. West breakwater head is in position Lat. 46° 35.80′ N., Long. 31° 00.70′ E. East breakwater head is in position Lat. 46° 35.80′ N., Long. 31° 01.03′ E. The port extends at present to the bulk liquid ammonia berth in position Lat. 46° 37.08′ N., Long. 31° 00.80′ E.

Port regulations are at present in Russian only, and English text should be available shortly (October 1980).

Approaching the Russian coast soundings once the 100 fathom bank has been crossed tend to be flat and give little indication of position.

The outer separation scheme buoy was observed on radar at 9 miles and visually at 7 miles.

The coast is identifiable on radar at 30 miles.

D/F beacons are generally reliable and as ALRS, out of 12 checked in September 1980 3 were not operating on the West coast of the Black Sea.

Notices:

		72 hours	*48 hours*	*24 hours*	*6 hou*
Agents:	Inflot Yuzhnyy		*	*	
Shippers:	Vneshtrans Yuzhnyy		*	*	
Charter:	Sovchart Moscow		*	*	
"	Sovchart Paris		*	*	
Pilot:	Inflot Ilyichevsk			*	*
"	Ilyichevsk Seapilot Station			*	*
Port:				*	*

Note: All through Odessa Radio.
* denotes send, but do not expect replies.
"Vneshtrans" is cable address for 'Sojuznestrans' shippers.

Pilot: Order Sea Pilot Ilyichevsk as notices.

Contact by VHF Channels 16 and 14 about 15 miles away from turning buoy.

Pilotage compulsory from port. Pilot speaks reasonable English and requires about 13 knots.

If anchoring at Yuzhnyy anchorage, he positions vessel under contro from Yuzhnyy Radar Station position Lat. 46° 36.05′ N., Long. 31° 01.3′ E.

The pilot cutter in the anchorage is a very bad sea boat and has grea difficulty in getting alongside. I believe the normal boat is undergoing repair.

On departure the Harbour Pilot leaves the vessel in the anchorage area and the sea pilot cutter 'Bravvy' guides vessel down channel to 'Ilyichevsk' turning buoy, his speed is 11 knots.

Anchorage: For large LPG ships anchorage No. 90 is used, centred on Lat. 46° 32.5′ N., Long. 30° 58.25′ E. with a radius of approximately 0.5 mile.

Depth 20 m., bottom mud and sand. Density 1024.

All anchoring is under control of Yuzhnyy radar station which gives the Pilot directions.

Berthing: There is no night berthing or unberthing, for gas carriers although the buoyage and leading lights are lighted, this seems to be for dredgers working. It would seem the hours are 0800 to 1700 hrs. (with possible extension in Summer months) with no vessels in the harbour or channel underway before or after these times. (We made it outwards in 12 minutes (Oct. 80)).

Visibility must be over 4 miles before berthing or unberthing operations take place. It may seem clear out at the anchorage but the weather in the harbour can be very different. This has been borne out from observations. We noted a temperature rise of 8° Celsius in 1 hour whilst moving out of port to anchorage.

Channel: The channel width is 118 m. and least depth of 14 m. (Checked by echo sounder). Pilots advise that there is a patch of 13.5 m. but this was not found. Bottom sand and mud. The shape is in the form of a 'V' so it is necessary to keep to centre of channel.

Buoys commencing seawards at Nos. 13 (starboard) and 14 (port) terminate in the harbour itself at Nos. 3 and 2.

The leading line is 013° to 193°.

Buoys (entering), black to starboard and red to port with Fl. W. & R lights respectively. Channel length 1.3 miles from breakwater heads.

South of the channel are two shoals one 1.6 miles S.S.W. marked by 2 white pillar buoys Fl. W. and isolated by 1 white pillar buoy about 1.5 miles S.W.

Confused cross currents from wind and the rivers emptying out nearby are apparent. Generally the surface current is Westward and sub-surface Eastward. Apart from causing navigation problems these currents cause much silting up.

Vessels enter the channel from the anchorage between the 2 shoal areas on an approximate course of 080° then turn hard to port when in line with the channel to bring leading lights in line before entering channel. On leaving much the same is done, except a more Easterly course is resulted.

In the harbour itself in calm conditions there is a noticeable Southerly current of 0.5 knots.

The dredged channel at present terminates just astern of the ammonia berth marked by 2 buoys.

Leading marks, white and orange in colour are situated on raised ground N.E. of the harbour, and at night exhibit fixed white lights under which are neon-like strip green lights.

Vessel is swung short round to port off ammonia berth, berthing starboard side to head out. On fertiliser berths there seems to be no accepted side to.

The breakwaters consist of concrete blocks piled haphazardly on top of one another. Immediately to the East are the ruins of 2 other small breakwaters. At the foot of the Eastern breakwater there is a large concrete radar and Port Radio Control Tower. This is conspicuous in good visibility but would benefit from being painted white or orange to assist identification in conditions of haze which seem to be prevalent.

Just below this tower on the harbour side is a small boat pier for use of Port Authority craft.

The harbour offices themselves are in a large concrete building at the Southern end of the fertiliser quay where Customs, Agents, police, doctor, chandler, etc., reside.

Tugs: Four tugs are available. All ship's lines. 2 of 1,200 h.p., 1 of 2,500 h.p. (Tigris) and 1 of 4,500 h.p.

The large tug of 4,500 h.p. painted orange hull is a large coastal tug normally stationed at Ilyichevsk and unsuited for harbour towage duties. All tugs have icebreaking capability.

It is essential that the larger tugs have double lines. They use the lines out of the centre lead bow and stern with the 1,200 h.p. tugs pushing.

Outwards (October 1980) we dispensed with 4,500 h.p. tug's services and used 1,200 h.p. tug to tow us.

1,200 h.p tugs accompany vessel down channel to No. 10 buoy with larger tugs to anchorage area.

Berths: Presently 4 berths in operation, 3 for bulk Urea and packaged goods, with 4 travelling loading gantries (manufactured by PHB of Germany) and liquid ammonia and phosphoric acid berth with minimum depth of 14.0 m. alongside. The fertiliser berths I believe range in depth from 13.5 m. to 16 m.

Gangway can be turned out beforehand.

The ammonia berth is 125 m. long and 43 m. (measured) proud of the main dock face, it leads in a 171° – 351° direction. The other berths are offset and leading in approximate 005° – 185° direction.

The fendering is excellent with long rubber tubes and corners well protected on all berths.

Bollards are plentiful.

Moorings: Ammonia berth 3, 2, 2, each end with bow/stern and breast lines leading to main dock face and springs to 'T' section.

Springs first out and last in.

As usual aft have to compromise. We put breast lines from main deck and springs from aft, both to 'T' section. Mooring boat in attendance, bow first docking and undocking.

Unberthing, vessel pulled laterally clear of berth, about 100 m., by tugs before moving ahead down harbour.

Loading: Ammonia: 2 loading and 1 Vapour Chicksan. Max. rate about 2,000 t.p.h. total (2×1,000 t.p.h.).

No charge for Vapour Return Line (VRL).

Shore personnel connect and disconnect.

Hydraulic couplings.

VRL ships 8 – 12 to shore 12 – 12 150ASA/300ASA.

Liquid shore spools 150ASA/300ASA.

No emergency stop except by watchmen in hut under chicksans, who speaks little to no English. Essential whistle signal agreed.

On visit (Sept./Oct.) 1980 shore tanks were low on product with max. rate at 700 t.p.h. Sometimes down to 200 t.p.h.

Samples frequently taken from cock on chicksan.

Temperature warm at −32° Celcius on all visits. Note protest.

Loading programme to be agreed before commencement.

Surveyor with interpreter, takes about 2 hours for figures. Plant has to be off whilst readings taken.

Acid: Forward (South) of ammonia chicksans – 2 arms.

Shippers: 'Sojuznestrans'.

Statement of fact is compiled by the Master during loading on official form which is an advantage.

Tank atmosphere tested prior to commencement.

No purging or cooling alongside, has to be done at anchor.

Plant: Total storage capacity 100,000 tonnes with about 18 tanks of 5,500 tonnes each. Four tanks can be seen from the ship, the remainder are behind.

The anhydrous ammonia plant was built by the Pullman Kellog company of U.S.A. and fertilizer section by PHB of Germany.

The tank pumps 'Carter' lose suction with 1,000 tonnes heel in tank. Approx. 2,000 tons per day of ammonia is produced at the plant with about 7,000 tons per day being pumped in by pipe-line from the Volga region.

The storage capacity of phosphoric acid was estimated to be 12,000 in 6 tanks just behind the berth.

All prime quality anhydrous ammonia is exported mainly to Italy and U.S.A. with the lower grades being used locally.

Pollution: VERY strict. Be VERY careful.

Scuppers to be plugged. Make sure decks washed down prior to arrival and that no lube oil is washed overside.

Make sure ballast and pumps clean.

Ships not fitted with sanitary tank system must have their toilets locked up and all crew use toilets astern of vessel. The sanitary system is checked.

No pumping of ballast in anchorage or in harbour without Port Authority permission. (A Greek ship was fined for pumping ballast at anchor).

Do not have fire hoses draining overside, we had them draining into ballast tanks.

Be very careful when disconnecting that no hose water drains overside.

Agent: State Agent 'Inflot'. Yuzhnyy office telephone 59-38-75. Yuzhnyy office has been in operation for about a year. Telex: 232 722.

Main office in Odessa.

Office is in port building at end (South) of fertiliser quay. Good English and very co-operative.

Night staff, 2000 hrs. – 0800 hrs., good.

Can be contacted by VHF at anchorage or alongside by Channel 16 and then talk direct on Channel 8.

Also telephone at bottom of gangway with guard but no success. Order money (which all unused must be handed back on departure) 24 hours beforehand. If shorter notice given Agent will give you what he has in office safe.

Accepts Notes of Protest on behalf of receiver.

Cable address 'Inflot Odessa' or 'Inflot Yuzhnyy'.

A minimum of 2 days is required for a telephone call to U.K. (Can also apply to parts of Russia, the Agent told me).

Medical: Through Agent.

Every day except Sunday a doctor attends the clinic in the port building, 0900 hrs. to 1300 hrs. We had 1 crew member with a fractured hand who was checked by doctor and taken immediately to Odessa for X-Ray, then brought back to the ship plastered up, all in 3 hours, with full English report.

Outside these hours a nurse is on duty.

Water: Fresh water available from quay. Agent will send waterman. Metered. Ship hoses international connection flange. $0.70 per tonne,.

Chandler: Two. Technical and produce.

Some local produce available, basically vegetables. No salads.

The produce chandler in port building deals in curios, champagne, vodka and caviar, only accepts dollars.

We obtained from Technical chandler a Russian chart of Odessa – 2 days' wait.

Suggest any requirements ordered well in advance.

Films: Walport films can be changed with suitable ships in port. Agent very co-operative in this respect, finding out for us if a Greek ship had Walport films which she did and like ourselves wanted a change. Agents and customs officer with one of our seamen changed the boxes – no difficulties encountered.

Fuel: In short supply and long waits. By barge to Odessa waiting anchorage. October 1980 – 3 day wait for diesel at $358 per tonne.

Repairs: Very difficult.

Radar/Wireless: Not sealed or checked. Bridge and radio room not inspected. Radar use seems to depend on Pilot and guards. From anchor to berth we had to turn off radar. On last visit guards made ship turn off before sailing.

This visit no problem, radars tested prior to sailing and left on.

Guards: At bottom of gangway and at bow and stern. One at bottom of gangway takes discharge book when person steps ashore, even for draft.

There is a tug anchored off vessel at all times but this is for fire duties.

Formalities: Very good and quick, as long as procedure followed. Everyone has to muster in front of Immigration Officer on arrival and departure, and is checked against discharge book.

Required:

1 Copy Personal Effects Declaration Form (very strict on this, require all jewellery to be declared).
1 Copy Currency List – crew. (Again very strict and check up frequently in port on amount drawn by individuals).
2 Copies Health Form.
2 Copies Vaccination List.
5 Copies Crew List.
5 Copies General Declaration (IMO Standard form).
2 Copies List of Drugs in Master's care.
1 Copy Clean Ballast Declaration and request to pump in port.
3 Copies Loading Instructions.
2 Copies Cargo Requirements.
1 Copy Statement to Port Captain, all Safety Equipment in good order.
1 Copy Statement of type of Sanitary System and in use.
No Stores List required.
Bond not sealed.

Port Captain boards vessel soon after arrival and fills in long safety questionnaire with Master. If certificates dates in doubt will want to sight.

Agent says Port Captain will allow ship to sail with Safety Certificate up to 2 days before expiry with clearance for Bosphorus.

Allow 2 hours for papers before cargo commences and after completion.

Seamen's Facilities: A seamen's club has been established just outside main gate. Roubles only taken.

AUTHORITY: The Port of Yuzhnyy Authority, 1 Grigoryevka, Port of Yuzhnyy, Odessa Region, U.S.S.R. *Tel:* 59-30-92; *Local Exchange:* 5-50, 5-52. *Telex:* 232722.

AGENT: Yuzhnyy "Inflot" Shipping Agency Grigoryevka-1, Kominternovsky Rayon, Odesskaya Obl., Port Yuzhnyy, U.S.S.R. Tel: 593780, 593777, 593875. Telex: 232722. Cables: Via "Inflot Odessa".

ZHDANOV: 47.06 N. 37.35 E. (See Plan Book)

GENERAL: A sea port of Azov port, Zhdanov is situated 14 miles Northward of the entry into the Taganrog Gulf, at the Western end of it and at the mouth of the Kalmius River.

All-year round navigation is possible but during 30 – 90 days period of ice conditions with ice-breaker assistance for ice-strengthened vessels only.

Ice usually begins to form at the end of November or the beginning of December, and 3 – 4 weeks later the Gulf becomes completely frozen over. The increase of fast ice usually lasts up to the first half of February. As a rule the ice usually breaks up in the middle of March. It finally disappears at the end of March or, as an exception, in the first half of April.

The port of Zhdanov consists of the Outer and Inner Roads, the Ugolnaya (or the Coal) Harbour, the Grain Harbour, the Ship-repairing Basin, the Schmidt Harbour at the mouth of the Kalmius River, and the port of Azovstal situated Eastward of the mouth of the river.

DOCUMENTS: Refer to beginning of U.S.S.R. section.

PILOTAGE: Compulsory. Inform Kerch Harbour Master ETA 24 hours and 6 hours, off Kerch Strait. On arrival Kerch Pilot Buoy No. 21 (Lat. 45° 13′ N., Long. 36° 27′ E.), drop anchor and await Pilot; also keep continuous radio watch.

Not later than 4 hours prior to arrival at the mouth of the Coal Harbour Approach Channel, Buoy No. 16, a Master should order a Harbour Pilot.

ANCHORAGES: A good anchorage can be obtained in the Outer Roads of the port of Zhdanov situated opposite the port entrance. The depths in the roads are from 5 m. – 7 m. the holding ground is mud mixed with sand and shell.

RESTRICTIONS: Vessels can enter or leave the port at any time of day and night. All vessels entering or leaving the port should have keel clearance not less than 0.5 ft. (15 cm).

The max. allowed speed in the approach channels is 4.5 knots and in the part of the Coal Harbour Approach Channel, protected by a wooden dam, only 3 knots.

The speed of a vessel may be increased in case of necessity to keep her course along the leading line or prevent her drifting off the channel due to the effect of current or wind.

MAX. SIZE: Draft 8 m., length/breadth no restrictions.

HEALTH: After presenting Vaccination Certificates Free Pratique obtained. After proceeding from one port of U.S.S.R. to another Free Pratique obtained automatically.

MEDICAL: Masters to advise by radio prior arrival of medical attendance required on board. Hospital facilities available. Vaccination Certificates to be presented.

RADIO: Vessels approaching the port of Zhdanov should establish radio contact through Zhdanov Radio port radio station operating 24 hours daily on the following frequencies:

	Frequencies (kHz)		*Type of transmission*	*Time of work*
Call sign	*Working*	*Calling*		
UDC	500/473	500/480	A1A	H24
"Zhdanov-Radio"	2182	2182	N3E	H24
"Zhdanov Radio-1"	156.8*(16)	156.8*(16)	F3E	H24
(Port Controller)	156.7*(14)	156.7*(14)		
"Zhdanov Radio-5"	156.45*(9)	156.45*(9)	F3E	H24
(Harbour Master)				

*Frequencies are given in MHz.

RADAR: The port of Zhdanov radar station gives all possible information to any vessel navigating along the Coal Harbour approach channels in the restricted visibility and during the absence of the floating navigation marks.

Radar navigation is controlled by a Pilot in charge.

Storm signals are exhibited at a signal mast located at the Dividing Pier.

TUGS: Available. Use ship's lines. Tug assistance for shifting berths is compulsory. Number of tugs to be ordered shall be advised by Pilot.

BERTHING: The berths of the port with depths of up to 10 m. are equipped to handle general, containers, bulk and liquid cargoes, timber, metals, food stuff, fruit, vegetables, etc., and passenger shipping as well. There are enclosed warehouses, open concrete floor sheds and a grain elevator.

On the quays there are electric cranes of up to 32 tons capacity, coal and grain loaders. There are floating cranes with lifting capacity of up to 100 tons and other cargo handling equipment.

The Grain Harbour is bounded by two piers – by the Dividing Pier from S.W. and by the Eastern Pier from N.E.

It is protected from S.E. winds by the Inner Roads Breakwater. There are numerous piles and dolphins along the Eastern Pier. The depths in the central part of the Grain Harbour are from 8.7 m. to 9.1 m.

The Schmidt Harbour is situated at the right bank of the mouth of the Kalmius River, at the S.E. outskirts of the town of Zhdanov. It is used by small vessels. The access to the Schmidt Harbour is by an approach channel dredged in the coastal shoal water. Navigation along the channel is ensured by leading lights.

Storm signals are shown at the station situated Southward of the entry to the Schmidt Harbour.

When proceeding to the Inner Roads through the shoal water vessels should use approaching channels leading to the Coal Harbour and the Avant-port.

The Coal Harbour approach channel is the main fairway for entry to the port of Zhdanov. It passes through a coastal shoal then enters the Southern part of the Coal Harbour.

Navigation along the Avant-port and the Coal Harbour approach channels is also ensured by leading lights, light buoys and spar buoys.

The access to the port of Azovstal is by a channel branching off N.E. of the Coal Harbour approach channel.

DENSITY: About 1005.

WEATHER: The changes in the water level is mainly caused by effects of the wind observed here all the year round. The fall of the water level is usually caused by Northerly and N.E'ly winds but rises of the water level are due to S.W'ly winds.

The range of the water level observed in the Gulf is about 1 m.

Changes of the water level can also be caused by variation in the atmospheric pressure, so called "Seish" effect. The "Seish" usually starts during calm weather and can last, on average, for about 24 hours.

The maximum range of the water level due to the "Seish" effect observed in August is about 0.6 m.

FRESH WATER: Delivered at berth. Also delivered by lighters.

FUEL: Available at berths. Also delivered by lighters.

OPENING/CLOSING HATCHES: Crew allowed open and close, stevedores placing beams.

CERTIFICATES: Registered Tonnage Certificates required.

CUSTOMS ALLOWANCES: No quantity restrictions. Nothing to be taken ashore.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS: The ship-repairing Basin is situated in the Northern part of the Inner Roads. It is bounded on the S.W. by the Eastern Pier and on the East by the Eastern Dam. The entrance to the Basin is situated between the heads of the Eastern Pier and the Eastern Dam. The depths in the Basin are from 6.1 m. to 6.5 m.

All kinds of repairs for vessels of up to 9,000 d.w.t. can be carried out.

DRY DOCKS: 2,500 and 5,000 tons.

REPATRIATION: All facilities for repatriation subject to visa formalities.

AIRPORT: 15 km. from port with regular airlines.

TIME: Local time GMT plus 3 hours, GMT plus 4 hours in Summer.

HOLIDAYS: 1st January; 1st, 2nd, 9th May; 7th October; 7th, 8th November.

AMBULANCE/FIRE: Ambulance 003; Fire 01.

TELEPHONES: Can be placed on board.

AUTHORITY: The Port of Zhdanov Authority, 99 Admiral Lunin Prospect, 344000, Port of Zhdanov, Donetsk Region, U.S.S.R. *Tel:* 5-92-34. *Cables:* Morport Zhdanov.

AGENT: Zhdanov Main Maritime Agency "Inflot", 89 Admiral Lunin Prospect, 341010, Zhdanov, Donetsk Region, U.S.S.R. Tel: 552415, 58198, 58579. Cables: Inflot Zhdanov. Telex: 115124.

NOTES

Please also advise Shipping Guides Ltd.

United Arab Emirates

ABU AL BU KHOOSH: 25.26 N. 53.08 E.

(See Plan Book)

LOCATION: The terminal is bounded by the following co-ordinates South of Sassan Oil Field.

(a) Lat. 25° 31′ N., Long. 53° 05′ E.
(b) Lat. 25° 29′ N., Long. 53° 12′ E.
(c) Lat. 25° 26′ N., Long. 53° 05′ E.
(d) Lat. 25° 26′ N., Long. 53° 12′ E.

Anchoring is prohibited within this area.

DOCUMENTS:

Early Departure Procedure: At the Master's option, he may, in order to expedite the turn-round of vessels and avoid undue delays caused by weather or other circumstances, use the Early Departure Procedure. In this case Masters are requested to sign blank cargo documents.

Normally completed cargo documents required by the Master will be placed on board prior to sailing. If this is not possible without incurring delays of undue nature, the relevant documents will be airmailed to the Master to await the vessel's arrival at discharge port.

The official cargo, quantity loaded, will be transmitted by radio whilst unmooring. In the event of a dispute, the receipt of a letter of protest will be acknowledged by the Mooring Master.

Any protests by the Master concerning the quality of cargo should be made before departure and any resulting investigation should be made before the vessel sails.

Outward Clearance: A tanker will be considered clear to depart Total ABK Terminal when the crude oil loading documents have been delivered to the Master, or in the case of E.D.P., clearance will be given through the Mooring Master.

Mail: Official ship's mail and the crew's personal mail will be handled by Total ABK and shipowners debited accordingly.

PILOTAGE: Compulsory within the Terminal limits. Vessels to be moored at Total ABK Terminal will be boarded by a Total ABK Mooring Master in the Anchorage Area. The Mooring Master will advise the ship's Master on approaches to the storage tanker, mooring and unmooring, connecting and disconnecting hoses and all other operations within the Terminal area including all manoeuvring of the vessel. A qualified Deck Officer must be on watch at all times while the vessel is alongside the storage tanker.

ANCHORAGES: An area immediately South of Terminal limits is designated as the Anchorage Area, centred on position: Lat. 25° 26′ N., Long. 53° 08′ E. This co-ordinate represents the centre of a circle with a radius of 0.5 miles which must be used by vessels requiring to wait at anchor. Anchoring within the Terminal limits is strictly prohibited.

NAVIGATION AIDS:

(a) FIXED STRUCTURES

Platforms and Jackets	*U.T.M. Co-ordinates*	*Obstruction*	*Light Fog Signal*
LQ 1	2 821 042,86 N. 715 614,83 E.	Platform Living Quarters 1	2 White – Code U 15 secs. – vis 6 n.m.
LQ 2	2 821 031,8 N. 715 652.6 E.	Platform Living Quarters 2	4 White – Code U 15 secs. – vis 6 n.m.
AK 2	2 821 124,26 N. 715 662,50 E.	Well head platform with WORKOVER NORTH PLATFORM (WON) and WORKOVER SOUTH PLATFORM (WOS)	4 White – Code U 15 secs. – vis 6 n.m.
P.P.	2 821 157 N. 715 711 E.	Production Platform	4 White – Code U 15 secs. – vis 6 n.m.
G.L.P.	2 821 227,85 N. 715 710,35 E.	Gas lift platform	2 White – Code U 15 secs. – vis 6 n.m.
H.P. FLARE	2 821 772 N. 715 900,7 E.	Tripode	—
L.P. FLARE	2 821 554,8 N. 716 164,7 E.	Tripode	Red Code U 15 secs. – vis 6 n.m. Fog: Code U 2 n.m.
AK 1	2 820 918 N. 716 193,5 E.	Well head platform	White – Code U vis 6 n.m. Fog: Code U 2 n.m.
AK W	2 821 740,14 N. 713 717,26 E.	Well head platform AK WEST	2 White – Code U 15 secs. – vis 6 n.m. Fog: Code U 2 n.m.
AK S	2 821 081 N. 713 710 E.	Well head platform AK SOUTH	4 White – Code U 15 secs. – vis 6 n.m. Fog: Code U 2 n.m.
AK 31	2 822 263,20 N. 712 674,67 E.	Well head tripode	White – Code U 15 secs. – vis 6 n.m. Fog: Code U 2 n.m.
AK 41	2 819 158,35 N. 712 290,5 E.	Well head tripode	White – Code U 15 secs. – vis 6 n.m. Fog: Code U 2 n.m.
AK 51	2 820 109,18 N. 715 781,79 E.	Well head tripode	2 White – Code U 15 secs. – vis 6 n.m. Fog: Code U 2 n.m.
Bridge GLP-PP		Bridge between GLP and PP	Red Code U 15 secs. – vis 6 n.m. Fog: Code U 2 n.m.

(b) BUOYS

SPM Buoy	2 820 102,8 N. 714 650,6 E.	Mooring and loading buoy tanker "Eiko Maru" 230,000 d.w.t.	White Code U 15 secs. – vis 6 n.m. Fog: Code U 2 n.m.

(c) RADIO BEACON/FOG SIGNALS

Radio Beacon	Bridge PP LP-Flare	Aeronautical	Code R.P. 248 kHz – 25 W.

MAX. SIZE: Max. 270,000 d.w.t. Max. draft 22.5 m. Depth of water 27 m.

READINESS: After arrival at the Anchorage Area and when the tanker is ready in every respect to load, the Master may tender his notice of readiness.

Notices of Readiness will be received provided one or other of the following events shall have transpired: (a) the Master shall have received the Mooring Master on board, or (b) the Master shall have dropped anchor in the Anchorage Area.

Port Closed: Notices of Readiness will not be accepted during periods when the port is closed. The port is closed when the weather is such that it is too rough for incoming tankers to berth. The decision regarding the opening and closing of the port will rest with the ABK Terminal Superintendent or his deputy.

MOORING: Weather permitting, Total Abu Al Bu Khoosh Terminal operates only from sunrise to sunset, 7 days a week. Vessels moor port side to the storage tanker "Eiko Maru" equipped with 5 Yokohama fenders on her starboard side, which is moored to the S.P.M. Launch may assist in berthing vessels under the direct control and supervision of the Mooring Master.

Preparation for Mooring: Vessels are requested to have, on their starboard side, a pilot ladder and/or pilot hoist or accommodation ladder safely and securely rigged for immediate use and long enough to reach the Mooring Master's launch. Vessel's platform is not more than 10 ft. from the water level and a short pilot ladder, rigged to cover the access to the platform. Tankers are requested to have ready on the forecastle, 2 head lines, polypropylene if possible.

Tankers are requested to have ready on the port side amidships a derrick rigged and ready to pick up the hoses (16 in. diameter).

Hoses: The hoses are hoisted by flow boom system, connection by storage tanker crew. The Mooring Master will advise the ship's Officer in charge concerning lifting techniques.

LOADING: All communications relative to the loading of the vessel shall be routed through the Mooring Master who will remain in contact with the storage tanker constantly via portable VHF units. In case of temporary breakdown of the portable VHF circuit, contact may be continued on International Marine Channels 15 or 17.

Failure of Communications: Should all communications with the storage tanker fail, loading will cease immediately.

Emergency Shut Down: An emergency cessation of loading may be effected by use of the ship's VHF Channel 16.

Loading Rates: Maximum loading rate will be 9,000 m.t.p.h.

Gases: ABK crude oil contains H_2S (sulphurated hydrogen). This gas quickly deadens the sense of smell so that a dangerous concentration cannot be detected by odour. During loading, gas should be vented off through the tanker's normal venting system. Personnel engaged in ullaging tanks should keep to windward and avoid breathing fumes as much as possible. Resuscitators, breathing apparatus and life-lines should be readily available.

Valve Closure Against High-Speed Loading: No valve which will stop or seriously impair or reduce the flow rate of oil from the storage tanker are to be operated without prior agreement with the Mooring Master. The practice of throttling back on the ship's cargo valves is to be avoided. If a lower rate is required, the storage tanker is to be advised and the pumping rate will be reduced to the required level. The Master will be held liable for any damage arising from the sudden cessation of flow caused by default of the ship. It cannot be over emphasised that to do so can be extremely dangerous and cause extensive damage to equipment.

RADIO: Initial communication between vessels and Total ABK should be via Bahrain Radio (call sign GOU) which operates on a 24 hour basis. ETA in GMT to be sent 72, 48 and 24 hours prior arrival, through Bahrain Radio.

Communications Within 60 Miles of Terminal: Once ships are within 60 miles of ABK Terminal, communication may be established by radio telephone on International Marine VHF Channel 15. This frequency is monitored continuously.

Once contact has been made on Channel 15, further conversation should be conducted on either Channel 14 (156.7 MHz), Channel 12 (156.60 MHz) or Channel 15 or 17.

Communications After Total ABK Mooring Master has Boarded: A Total ABK Mooring Master will board incoming tankers in the Anchorage Area and will bring with him portable VHF radio telephone units. From that time onwards, all and any communications between ship and the storage vessel will be conducted by the Mooring Master.

Radio Transmissions for Advice of Tanker Arrivals: Telegram to be sent by the storage tanker to the export tanker about 80 hours before her arrival:

Please advise your ETA in GMT 72, 48 and 24 hours before arrival to Total ABK Abu Dhabi, Telex AH 22347, via Bahrain Radio stop Cargo requirements stop Deballasting time if any stop Maximum loading rate acceptable stop Distance in metres from bow to manifold stop Flange dimensions of vessel's manifold connection stop 50 miles before arrival please contact terminal by VHF Channel 15 to receive berthing instructions stop Total ABK.

Mooring Instructions: If vessels are obliged or instructed to anchor, they should do so in the recommended area about 3 nautical miles from the storage vessel.

TUGS: Two tugs, each with 100 tons bollard pull are employed by the export tanker when berthing alongside the storage tanker.

BALLAST: Due to the exposed location of the crude oil loading berth, vessels are required to carry sufficient ballast for safe handling, having due regard to existing weather and sea conditions. A vessel found by the Mooring Master to be not adequately ballasted will be rejected.

Clean Ballast: As there are no ballast discharging facilities, vessels must arrive at the Terminal with clean ballast, ensuring that all pipelines, pumps and strainers have been flushed out prior to arriving. The Mooring Master will inspect ship's ballast on boarding and has the power to reject any vessel that he thinks would cause pollution of the sea area, in which case vessel must proceed to sea and return only when ballast is completely free of oil. Any vessel rejected because of dirty ballast will automatically nullify its Notice of Readiness and will lose any priority of position for loading. Ballast discharge should not be commenced without the prior agreement of the Mooring Master.

Inspection During Loading: At night the sea around the vessel shall be adequately lit, as frequent inspection by the Mooring Master will be made during the discharge of ballast. Any pollution whatsoever will be cause for rejection. Similarly, any hull leaks causing pollution during loading will be cause for rejection and the vessel will not be re-accepted unless satisfactory evidence of repairs has been certified by a qualified surveyor.

MEDICAL: Medical and dental services are not available at the Terminal. In emergencies requiring hospitalisation, the patient will be hoisted to the helideck on the storage tanker and flown by helicopter to Dubai or Abu Dhabi.

FRESH WATER, FUEL, ETC.: Bunkers, fresh water, stores, boats for hire, repair facilities, facilities for changing ship's crew are not available at the Terminal.

SHORE LEAVE: Not possible.

GENERAL:

Radio Equipment: Radio, radar or other electric equipment must not be energised while the vessel is alongside the SPM except VHF radios, telephone and communications equipment approved by the Terminal.

Repairs: While berthed at the Terminal, the ship's boilers, main engine, steering machinery and other equipment essential for manoeuvring shall be maintained in a condition to permit the ship to move away from storage vessel at short notice. Repairs or other work which may immobilise the ship should not be undertaken without prior arrangement with the Terminal.

Port Charges: Every vessel loading in the Abu Dhabi areas has to pay Abu Dhabi Government Port Dues. These are calculated according to Abu Dhabi Law.

Agency: Total ABK do not act as Agents. Vessels must have an Agent in Abu Dhabi in case of injuries or illness.

SHIPMASTER'S REPORT: 1977: The following information may be of value to other Masters:

(a) The holding ground in the anchorage is very bad, this vessel dragged her anchor (10 shackles out) in a Force 5 from the N.W.

(b) Only documents supplied on departure were Bills of Lading, *no* port clearance documents supplied.

(c) No Customs or Immigration Officials at terminal therefore no documents required.

SHIPMASTER'S REPORT: 1978: The storage tanker is 320 m. long. Centre of the manifold to bow is 140 m. We berthed with our bows level which meant our stern overhung the other vessel and we were not able to use our first ropes ashore leading from the after end of the poop. *Forward:* (SV=Storage Vessel). 2 headlines to SV. 1 spring to SV. 1 rope from SV with end to be turned up on own vessel's bits forecastle head. 2 more headlines to SV and 1 spring from SV.
Aft: 2 sternlines to SV. 1 backspring to SV. 1 backspring from SV, eye on bitts. 2 more stern lines to SV.

AUTHORITY: Total – Abu Al Bu Khoosh, P.O.Box 4058, Abu Dhabi, U.A.E. *Tel:* 33.55.66. *Telex:* 22347 Totabk Em. *Cables:* Totabk. *Contact:* T. Makerat, Head of Terminal and Marine.

AGENT: National Shipping Gulf Agency Co. (Abu Dhabi) Ltd. P.O.Box 377, Abu Dhabi, U.A.E. Cables: "Confidence", Abu Dhabi. Telex: 22248 ("Gacauh Em"). Tel: 334300 (10 lines). After office hours Tel: 325143, 366665, 341728, 326083. Radio: Marine VHF radio, stand-by on Channel 16 (156.8 mHz) and Marine HF, standing by on 3539 kHz. Call sign "Confidence, Abu Dhabi".

ARZANNAH ISLAND: 24.47 N. 52.33 E.
SBM: 24.46 N. 52.31 E. (See Plan Book)

PORT LIMITS: *Port Area:* Contained within the following co-ordinates:

"A"	Lat. 24° 50′ 12″ N.,	Long. 52° 29′ 24″ E.
"B"	Lat. 24° 50′ 12″ N.,	Long. 52° 37′ 12″ E.
"C"	Lat. 24° 43′ 48″ N.,	Long. 52° 37′ 12″ E.
"D"	Lat. 24° 36′ 48″ N.,	Long. 52° 34′ 36″ E.
"E"	Lat. 24° 37′ 00″ N.,	Long. 52° 29′ 24″ E.

LOCATION:

Port Area and Terminal: Arzannah Island is located at Lat. 24° 47′ N., Long. 52° 33′ E. and is the base for export of crude oil by the Company. The Port of Arzannah is the area defined above.

A tanker terminal and another berth on Arzannah Island for vessels destined to other than the tanker terminal, are located within the port area.

PILOTAGE: Conduct and movement of vessels within the port area are controlled by the Harbour Master. A Company designated Mooring Master is required for the berthing and unberthing of vessels at the Storage Tanker.

Mooring Master: Pilotage is compulsory within the "Port Area" and no vessel may enter or depart the port area, berth or unberth at the Storage Tanker or conduct any other manoeuvres of the vessel without prior notification to the Harbour Master and without the assistance of a Company designated Mooring Master unless otherwise ordered by the Harbour Master. The Company designated Mooring Master for vessels bound for the Storage Tanker will board the vessel at Khor Fakkan (Lat. 25° 22′ N., Long. 56° 22′ E.) or Jebel Dhanna Pilot Station as directed by Lamnalco Pilots Khor Fakkan. The Company designated Mooring Master for vessels bound for the Shore Berth will board the vessel at Khor Fakkan or such other location approved by the Harbour Master upon request of the vessel made in the first notification. (See "Radio").

The Mooring Master's function will be to advise the Master of the vessel for the above stated purposes. The Master of the vessel always remains responsible on behalf of the vessel's owner for the safety and proper navigation of the vessel. The vessel must remain at Khor Fakkan or such other location approved by the Harbour Master until the Mooring Master is aboard. Mooring Master stays onboard and leaves at Khor Fakkan outward bound.

ANCHORAGES: Anchoring of vessels is prohibited within the port area and terminal area. An area 3.5 miles West of the Storage Tanker in the vicinity of Lat. 24° 46′ N., Long. 52° 27′ E. is designated as the anchorage area.

RESTRICTIONS: See "Berthing".

MAX. SIZE: *S.B.M.:* Max. d.w.t. 280,000 (export tanker). Max. draft 43 ft. Depth of water at SBM 107 ft. Least depth in approaches 48 ft.

Sailing Draft: The draft of loaded vessels leaving the Storage Tanker is controlled by the water depth between Dalma Light Float and the No. 1 buoy in the outer channel. Minimum under keel clearances recommended by the Mooring Master are as follows:

D.W.T.	*Minimum Keel Clearance*
Up to 100,000	3 ft.
100,000 to 220,000	4 ft.
220,000 and over	5 ft.

Sailing drafts should always be agreed upon with the Mooring Master prior to starting to load.

RADIO: The Company cable address is "Amerhess – Abu Dhabi" and telex number is 949 – 22275. The Company also maintains radio watch on International Marine VHF Channels 16 and 67.

Notice of Arrival:

A. Vessels bound for the *STORAGE TANKER* must advise the Company as follows:

72 HOURS: Not less than 72 hours prior to arrival at Khor Fakkan vessels will send a cable or telex to the Company and cable to "Lamnalco Khor Fakkan" or telex to "Lamnalco" (telex number 89034 Pilotkf) providing the following information:

(a) Estimated time of arrival at Khor Fakkan.
(b) Estimated fore and aft draft upon arrival at the port area.
(c) Quantity of oil to be loaded.
(d) Distance from the bow to the cargo manifolds.
(e) Size, number and type of cargo connections.

48 HOURS: Not less than 48 hours prior to arrival at Khor Fakkan vessels will send a cable or telex to the Company and to Lamnalco reconfirming or giving any changes in the 72 hour notice.

24 HOURS: Not less than 24 hours prior to arrival at Khor Fakkan vessels will send a cable or telex to the Company and a cable or telex to Lamnalco reconfirming or giving any changes in the 24 hour notice. The 24 hour notice must be as accurate as possible and thereafter should there be any change in the ETA by more than 2 hours notice of such change must be given promptly to the Company and Lamnalco.

Not less than 24 hours prior to the vessel's ETA at Khor Fakkan the vessel must maintain a radio watch on R/T frequency 2182 and at least 12 hours prior to arrival at Khor Fakkan must maintain a radio watch on VHF Channel 16.

Other frequencies available are:
HF: 2638, 2738, 3270, 3710, 4136.3.
VHF: Channels 1 to 28, 60 to 74 and 77 to 88.
Call sign for Lamnalco base is "Gulf Pilot Khor Fakkan".

B. Vessels bound for the *SHORE BERTH* must advise the Company as follows:

48 HOURS: Not less than 48 hours prior to arrival at Khor Fakkan or such other location at which permission is requested of the Harbour Master for the Mooring Master to be on board, vessels will send a cable or telex to the Company and a cable to "Lamnalco Khor Fakkan" or telex to Lamnalco (telex number 89034 Pilotkf), providing the following information:

(a) Estimated time of arrival at Khor Fakkan or such other location where it is requested the Mooring Master board.
(b) Estimated fore and aft draft upon arrival at the port area.
(c) Cargo to be loaded or unloaded.
(d) Request for permission for Mooring Master to board at other than Khor Fakkan (if applicable).

24 HOURS: Not less than 24 hours prior to arrival at Khor Fakkan vessels or such other approved location, vessels will send a cable or telex to the Company and a cable or telex to Lamnalco reconfirming or giving any changes in the 48 hour notice. The 24 hour notice must be as accurate as possible and thereafter should there be any change in the ETA by more than 2 hours, notice of such change must be given promptly to the Company and Lamnalco.

Not less than 24 hours prior to the vessel's ETA at Khor Fakkan the vessel must maintain a radio watch on R/T frequency 2182 and at least 12 hours prior to arrival at Khor Fakkan must maintain a radio watch on VHF Channel 16.

Other frequencies available are:
HF: 2638, 2738, 3270, 3710, 4136.3.
VHF: Channels 1 to 28, 60 to 74 and 77 to 88.
Call sign for Lamnalco base is "Gulf Pilot Khor Fakkan".

TUGS: *Tugs and Launches:* The Company will have available a tug (3,600 h.p.) for berthing or unberthing and standing by a vessel at the Storage Tanker as may be required by the Master of the vessel or the Mooring Master for which a charge will be made by the Company, whether or not used. Should the Master of a vessel require more than 1 tug for the above purposes such must be separately arranged by the Master sufficiently in advance of the vessel's arrival at the port area to avoid delay in the berthing or unberthing of the vessel and any delay occasioned thereby will be charged to the vessel.

A line handling boat under the direct control and supervision of the Mooring Master will assist in berthing or unberthing of vessels.

BERTHS: The tanker terminal in the port area consists of the VLCC "Tropical Lion" ("Storage Tanker") connected to a single buoy mooring system located at Lat. 24° 46′ N., Long. 52° 31′ E., 1.25 miles West of Arzannah Island.

The berth at Arzannah Island ("Shore Berth") consists of a 700 ft. long earth filled pier with facilities required to load and unload diesel oil and desalinated water. Fire protection facilities on the pier include a firewater line and firewater monitors.

BERTHING:

Berthing–Unberthing: Berthing will normally take place only during daylight hours, weather permitting. Unberthing will take place at anytime (day or night), weather permitting. Manoeuvring power must be available on the main engine during berthing and unberthing operations. Mooring Masters will not berth vessels if not properly equipped with satisfactory mooring lines, or if deck equipment is inoperable or if steering gear, telegraphs or whistles are not in efficient condition or if insufficiently or improperly ballasted in the opinion of the Mooring Master. The vessel's Master is required to advise the Mooring Master if any such defects exist or any peculiarities of the vessel. The vessel will be responsible for the handling of lines and the connection and disconnection of the loading arms with the vessel's crew.

Mooring: Mooring arrangements shall be to the satisfaction of the Mooring Master. Vessels must at all times remain properly secured alongside the Storage Tanker or the Shore Berth. Moorings must at all times be attended by the vessel's crew, avoiding slack lines or varying tensions on the lines. The use of constant tension winches for automatic self-tensioning to attend mooring lines is prohibited. The Harbour Master may suspend loading or unloading should there be any failure by the vessel's crew to attend mooring lines as above stated.

Ballast Drafts: Vessels destined for the Storage Tanker should arrive with propeller completely submerged and 8 ft. to 10 ft. trim by the stern. The Mooring Master may refuse to permit berthing of vessels not in compliance with this requirement until the vessel takes on sufficient ballast or changes ballast to meet the requirement.

BALLAST: There are no facilities available for the off-loading of dirty ballast. Only clean or segregated ballast will be permitted to be discharged overboard. The vessel must keep a constant watch on the side of the vessel from which ballast is being discharged while clean or segregated ballast is being discharged overboard. Discharge of ballast must be immediately suspended should there be any indication of discoloration or sheen and immediately reported to the Harbour Master. An investigation shall be carried out by the vessel and the findings immediately reported to the Harbour Master. Deballasting shall not recommence without the permission of the Harbour Master.

LOADING: *Crude Oil Cargo Loading:* Loading operations cannot commence until permission has been granted by the Harbour Master. All operations after such permission is granted in connection with the starting of loading, switching of tanks and topping off on the vessel will be the responsibility of the vessel. At all times while the vessel is alongside the Storage Tanker there shall be a responsible licensed deck officer of the vessel on deck in charge of all operations on deck.

Prior to loading a pre-transfer conference will be conducted by the Harbour Master and a responsible deck officer of the vessel who will be in charge of the loading of the vessel. The purpose of the pre-transfer conference is to formulate a transfer plan and ensure that the Storage Tanker and the vessel are ready for safe loading and handling of the cargo.

The Harbour Master may suspend cargo operations if any of the applicable laws and safety regulations set forth herein are not complied with, the pre-transfer plan is not complied with or if the Harbour Master believes or becomes aware of the existence of any other danger which in his opinion requires suspension of loading.

The vessel's crew will be responsible for handling the loading arms on board the vessel, furnishing and making adaptor connections, removing blind flanges and guiding the loading arms (Chiksans) to the appropriate manifold connections. As a convenience to the vessel the Harbour Master will furnish advice and guidance in connecting the loading arms to the ship's manifolds.

Crude Oil Cargo: The crude oil to be loaded contains hydrogen sulphide. Breathing the vapours vented from this cargo could be hazardous. Vessel's crew should review the instructions issued by the vessel's Owner regarding this subject. The Company assumes no liability, with respect to loading crude oil bearing hydrogen sulphide.

Pumping Rate: Max. pumping rate using 2 arms. 60,000 b.p.h. Average pumping rate 55,000 b.p.h.

Storage tanker capacity: 1,400,000 bbls. Cargo Arzannah stabilized crude, API 43.0. Specific Gravity 0.8109. Reducers: In limited supply.

General Cargo Loading–Unloading: Loading or unloading operations cannot commence until permission has been granted by the Harbour Master. All operations after such permission is granted in connection with the loading and unloading of the vessel will be the responsibility of the vessel. At all times while the vessel is alongside the Shore Berth there shall be a responsible licensed deck officer of the vessel on deck in charge of all operations on deck.

The Harbour Master may suspend cargo operations if any of the applicable laws and safety regulations are not complied with or if the Harbour Master believes or becomes aware of the existence of any other danger which in his opinion requires suspension of loading.

POLLUTION: The Petroleum Ports Law prohibits the discharge into the water of oily water, garbage, waste or other objectionable materials. The Petroleum Ports Law also requires immediate reporting to the Harbour Master of any leakage or spillage by the vessel. The Law is strictly enforced and violators may be subject to fine and imprisonment.

The vessel's Master is responsible that no oil is pumped or spilled overboard from his vessel in the vicinity of the Port Area. In the event of any spillage or loss of oil from the vessel as the result of any act or omission of the vessel, such as, but not limited to, the pumping of oily water overside from ballast or bilges, or oil spilt during loading. The vessel shall be responsible for all costs and expenses of clean up, and for any damages to property or injury to persons resulting from such spillage or oil loss.

The Company reserves the right to take all reasonable measures to clean up any resulting pollution or contamination on land or sea, but only as a contractor acting on behalf of the vessel or its owner, and will charge the vessel for all costs and expenses incurred thereby.

SAFETY REGULATIONS:

Safety: The Petroleum Ports Law, recommendations contained in the I.C.S. International Safety Guide for Oil Tankers and Terminals covering the loading and discharging of tankers and the safety regulations set forth herein will be strictly enforced while the vessel is in the Port area.

Smoking: Smoking is strictly prohibited on the vessel or the Storage Tanker and Shore Berth except in places specified by the Master which shall not be outside of any of the accommodation areas. The Master is responsible for ensuring that all on board are informed of the selected areas for smoking and for posting suitable notices. Matches and lighters for personal use shall not be carried while outside designated smoking areas and personnel shall be so instructed.

Fire Fighting Equipment: The vessel's fire fighting equipment must be ready for instant use while the vessel is moored. Fire hoses of sufficient length to reach all parts of the vessel must be strung out and connected to hydrants. If the vessel's fire fighting equipment is rendered inoperative for any reason this must be reported to the Harbour Master immediately.

Fires: The only open flames allowed while the vessel is moored at the Storage Tanker or the Shore Berth are those in the vessel's boilers and galley equipment. All other open flames are prohibited. Sufficient fire extinguishers must always be provided near the galley.

Engine Room/Boiler Room Precautions:

a) Combustion equipment – burners, tubes, uptakes, exhaust manifolds, and spark arresters shall be maintained in good working order and kept clean.
b) Blowing tubes – funnel uptakes and boiler tubes will not be blown while a vessel is moored at the Storage Tanker.
c) Cleaning solvents – highly volatile cleaning solvents shall not be used in the engine room for any purpose whatsoever.

Doors, Ports: All doors and ports opening on to decks must be kept closed while the vessel is moored. Any doors open for access other than the pumproom doors must be closed immediately after use.

Cargo Tank Openings: All cargo tank hatch covers and ullage port covers are to be kept closed. If tanks must be hand sampled or ullaged the ullage openings must be kept closed except while sampling or ullaging cargo.

Sea Valves: All sea and overboard discharge valves are to be closed and sealed shut prior to the start of any cargo loading operation.

Inerting Tanker Cargo Tanks: All empty cargo tanks or tanks carrying cargo must be over pressured and fully inerted with gas having an oxygen content of less than 8% prior to the commencement of loading. The oxygen content of the tank blanket will be checked throughout the loading and loading will be stopped anytime the oxygen level rises above 8%.

Insurance (Towing) Wires: Towing wires of at least 50 m. long are to be secured to mooring fittings and run out at the bow and stern on the vessel's outboard side and held in place on short stoppers with the eye about 1.5 m. above the water so they are readily available to a tug in an emergency.

Bonding Cable: The bonding cable from the Storage Tanker or the Shore Berth must be attached to the vessel before the loading arms are connected and removed only after the loading arms are disconnected from the vessel.

Electrical Storms: All cargo or ballasting operations shall be suspended during electrical storms in the vicinity of the vessel.

Engine Status: The vessel's main engine, steering machinery and other essential manoeuvring equipment must be kept in readiness at all times to permit the vessel to unberth on short notice. No engine or propulsion machinery repairs may be carried out while the vessel is moored alongside the Storage Tanker. At all times while the vessel is alongside the Storage Tanker there shall be a responsible licensed engineer of the vessel on duty in charge of all operations in the engine room.

Radio–Radar: The vessel's main radio and radar equipment and radar set must not be energised while the vessel is handling cargo or ballast alongside the Storage Tanker or the Shore Berth. The use of intrinsically safe VHF radios for cargo handling and safety operations is permitted.

Scuppers and Drains: All main deck scuppers must be sealed shut and adequate drip pans provided where necessary on deck prior to the start of any cargo operations.

Tug and Small Craft: No tug or small craft are permitted to be alongside the vessel during cargo or ballasting operations without the express permission of the Harbour Master.

Portable Lamps Electrical Equipment: The use of portable lamps, naked lights or electrical equipment on extension cords is prohibited. Only approved intrinsically safe self-contained flash lights are permitted on deck.

Communications and Deck Watch: A deck watch under the direction of a responsible deck officer equipped with a VHF radio is to be on duty at the cargo manifold of the vessel at all times during the cargo and deballasting operations.

Fire and Emergency Signal: In case of fire or emergency on the Storage Tanker or the Shore Berth or the vessel, the vessel shall immediately suspend all cargo operations and blow a series of short, rapid blasts on the ship's whistle until aid arrives.

Rat Guards: Rat guards are required only if a vessel is coming from a plague infected area.

Safety Check List: A safety check list shall be completed and signed by the Master or Senior Deck Officer on duty on both the vessel and the Storage Tanker or the Shore Berth before deballasting and starting the transfer of cargo.

Responsibility for Safe Operations: While a vessel is berthed at the Storage Tanker the Master will ensure and be responsible for adherence to all safety regulations generally followed in the Marine Industry as well as those contained herein. It is the responsibility of the Master to maintain safe and efficient conditions aboard his vessel and to ensure that there is at all times on duty an adequate and proper crew under the supervision of licensed officers for the safe and effective operation of the vessel and compliance with these instructions and regulations.

FACILITIES: There are no facilities at Arzannah Island or the Storage Tanker for receiving or storing supplies for vessels, bunker or fresh water supply, launch service, etc., excepting vessels servicing the Company's operations in the port area.

TIME: GMT plus 4 hours.

GENERAL: *Regulations:* Shipping operations at Arzannah are governed by the Abu Dhabi Petroleum Ports Law No. 12 of 1973 (Petroleum Ports Law).

Agency: The Company does not provide any ship agency services and there are no ship agencies within the port area. Such services must be separately arranged for by the vessel.

AUTHORITY: Amerada Hess Oil Corporation of Abu Dhabi, P.O.Box 2046, Abu Dhabi, U.A.E. *Tel:* 829500. *Telex:* 22275 Amhess Em. *Cables:* Amerhess. *Contact:* R. F. Pool, General Manager.

AGENT: See "Mina Zayed".

DAS ISLAND, Abu Dhabi: 25.09 N. 52.52 E.

(See Plan Book)

Conduct and movement of vessels within the port are controlled by the Marine Superintendent, Das Island.

DESCRIPTION: Das Island lies some 100 miles N.W. of Abu Dhabi City, in the State of Abu Dhabi, largest of the United Arab Emirates. The Island is the base for the export of crude oil by Abu Dhabi Marine Operating Company (ADMA-OPCO), and liquefied gas and by-products by Abu Dhabi Gas Liquefaction Company Ltd. (ADGAS).

PORT LIMITS: The area of authority is encompassed by a line joining the following positions:

From (a) Lat. 25° 14.0′ N., Long. 52° 48′ E., due East
to (b) Lat. 25° 14.0′ N., Long. 52° 57′ E., then due South
to (c) Lat. 25° 07.7′ N., Long. 52° 57′ E., then S.E.
to (d) Lat. 25° 07.2′ N., Long. 52° 58.8′ E., then due South
to (e) Lat. 25° 04.5′ N., Long. 52° 58.8′ E., then due West
to (f) Lat. 25° 04.5′ N., Long. 52° 48′ E., then finally due North to position (a).

All marine orientated activities within this area, all waters, installations, facilities and structures which are, or may be, erected therein are governed by the Controlling Authority.

DOCUMENTS:

Bills of Health for Ports visited on voyage.
3 Crew Lists.
3 Manifests (1 original and 2 copies).
1 International Maritime Declaration of Health.

Documents and Specimen Forms: Before the ADMA-OPCO appointed Berthing Master commences any berthing operations certain initial documents must be tendered duly signed, timed and dated as applicable, by the Master. The Berthing Master will acknowledge receipt as necessary. These initial documents are:

019-MAR-1 Conditions of Use of the Port of Das Island.
019-MAR-2 Employment of Tugs.
019-MAR-3 Ballast Declaration.
019-MAR-4 Pre-Berthing Declaration.
Additionally vessels loading Condensate Blend Cargoes:
019-MAR-19 H_2S Content in Condensate Cargo.

A supply of these initial documents will be provided at the vessel's first visit to Das Island. On second and subsequent visits the Berthing Master will receive the documents, duly completed, on boarding thereby avoiding any delays to the vessel.

Also see "General".

NAVIGATION AIDS:

DEEP WATER CHANNEL: IALA System.

Buoy No. & Name	*Colour Daymark*	*Position*	*Light*
Das Channel Approach	RWVS Pillar Sph Topmark	25° 27.0′ N. 53° 20.0′ E.	L. Fl. W. 10 secs.
No. 1	Green Conical	25° 25.2′ N. 53° 12.4′ E.	Qk. Fl. G.
No. 2	Red Can	25° 24.7′ N. 53° 17.2′ E.	Gp. Fl. (2) R. 10 secs.
No. 3	Green Conical	25° 23.9′ N. 53° 10.6′ E.	Fl. G. 5 secs.
No. 4	Red Can	25° 24.2′ N. 53° 12.7′ E.	Fl. R. 2 secs.
No. 5	Green Conical	25° 20.6′ N. 53° 04.85′ E.	Qk. Fl. G.
No. 6	Red Can	25° 21.9′ N. 53° 10.0′ E.	Fl. R. 5 secs.
No. 7	Green Conical	25° 14.25′ N. 52° 56.8′ E.	Gp. Fl. (3) G. 8 secs.
No. 8	Red Can	25° 19.1′ N. 53° 06.0′ E.	Fl. R. 2 secs.
No. 9	Green Conical	25° 09.8′ N. 52° 54.1′ E.	Fl. G. 2 secs.
No. 10	Red Can	25° 14.8′ N. 52° 58.9′ E.	Fl. R. 3 secs.
No. 12	Red Can	25° 11.2′ N. 52° 55.1′ E.	Qk. Fl. R.

DAS SOUTH SHOAL BUOY:

Das South Shoal Buoy	Y. B. Pillar	25° 04.0′ N. 52° 53.0′ E.	Qk. Fl. (6) + L. Fl. W. 15 secs.

DAS OUTFALL BUOYS:

West Outfall Buoy No. 1	Y. Can	25° 08.9′ N. 52° 51.15′ E.	Fl. Y. 6 secs. Ra.
West Outfall Buoy No. 2	Y. Can	25° 08.7′ N. 52° 51.35′ E.	Fl. Y. 10 secs.
South Outfall Buoy	Y. Can	25° 07′ 49″ N. 52° 52′ 30″ E. (PA)	Fl. Y. (U) 12 secs.

TANKER BERTH LIGHTS:

Structure	*Location of Light*	*Light*
Tanker Berth No. 1	North Mooring Dolphin	F.R.
Lat. 25° 08′ 24″ N.	South Mooring Dolphin	F.R.
Long. 52° 53′ 19″ E.	Loading Platform North End	2 F.G. (vert.)
	Loading Platform South End	2 F.G. (vert.)

Note: Tanker Berth No. 1 is no longer in use. Structure and lights temporarily remain.

Tanker Berth No. 2	North Mooring Dolphin	F.R.
Lat. 25° 08′ 39″ N.	South Mooring Dolphin	F.R.
Long. 52° 53′ 14″ E.	Loading Platform North End	2 F.G. (vert.)
	Loading Platform South End	2 F.G. (vert.)
Tanker Berth No. 3	S.P.M.	Fl. R. 5 secs.
Lat. 25° 08.9′ N.		
Long. 52° 54.1′ E.		Ra.
LNG Berth No. 4	North Mooring Dolphin	F.R.
Lat. 25° 09′ 22″ N.	South Mooring Dolphin	F.R.
Long. 52° 53′ 08″ E.	Loading Platform North End	2 F.G. (vert.)
	Loading Platform South End	2 F.G. (vert.)

FLARE COMPLEX: A series of 6 flares are located in an arc approximately 4,500 ft. (1,370 m.) North of Das Island. The unlit flares may be brought into service without warning. The Northern perimeter of the Flare Zone is marked by a green conical light buoy, Fl. G. 5 secs., in position: Lat. 25° 11.5′ N., Long. 52° 52.2′ E.

An additional flare is situated on a small jetty extending approximately 400 ft. (120 m.) from shore approximately 2,500 ft. (760 m.) from LNG/LPG Berth No. 4.

Numerous flares are situated onshore on the North and N.W. coasts of Das Island.

All of the flares previously referred to are situated within the Restricted Area No. 1.

PIPE-LINE MARKER BUOY: A yellow can buoy fitted with flash (U) 12 secs. amber light, is situated between Berth No. 2 and Berth No. 4. This buoy marks the Southern extremity of pipe-lines running between the two berths. Approximate position of buoy: Lat. 25° 09.1′ N., Long. 52° 53.2′ E.

DAS ISLAND RADIO MAST: See "VHF".

APPROACHES: *Entering and Navigation within the Port:* Navigation/movement within the port area is permitted subject to prior permission being granted by the Controlling Authority. Vessels visiting the port area must have on board a sufficient range of current hydrographic charts relevant to the area. These charts must be kept up-to-date with regard to Notices to Mariners and other notices promulgated for the area.

CAUTION:

The Umm Shaif Oil Field is approximately 20 miles East of Das Island.
The Zakum Oil Field is approximately 48 miles S.E. of Das Island.
The Bunduq Oil Field is approximately 15 miles West of Das Island.

The Fields, together with their associated submarine oil and gas pipe-lines to Das Island are marked upon hydrographic charts pertaining to the area.

It is essential that vessels/craft approaching Das Island do not enter the Oil Field areas or anchor in the vicinity of submarine pipe-lines.

NOTE: Masters of vessels/craft are advised that actual depths over submarine pipe-lines are generally less than those charted and vessels passing over these pipe-lines may have the under-keel clearance substantially reduced.

Use of anchors in the vicinity of these pipe-lines is strictly prohibited. (See Note: "Pipe-lines" on BA and USHO Charts.)

Approaches to Das Island: Vessels approaching Das Island must navigate with due caution on account of numerous oil platforms and associated submarine pipe-lines within the waters of Abu Dhabi and neighbouring states. (See Cautions on BA and USHO Charts.)

Vessels passing to the East of Das Island must not pass closer than 2 miles from the Island, and then only with prior permission of the Controlling Authority and giving due care and attention to vessel movements within the port.

SOUTHERN ROUTE:

Vessels approaching from the South must pass not closer than 3 miles South of oil installations etc., in the Umm Shaif Field, thence towards the pilot/anchorage areas S.E. of Das Island (See "Pilotage" and "Anchorage").

Special attention shall be paid to the traffic routing system which passes between the Umm Shaif and Zakum Oil Fields, and vessels/craft shall navigate in accordance with the requirements of the International Rules and Regulations for the prevention of collisions at sea.

NORTHERN ROUTE:

Vessels approaching from the North should normally pass down the West side of Das Island and keep at least 4 miles to the West and at least 5 miles to the South of the Island. However, vessels may pass to the East of Das Island with permission of the Controlling Authority but see note above.

DEEP DRAFT VESSELS:

Deep drafted vessels may approach the port via the Deep Water Buoyed Channel (See "Navigation Aids"). The channel is intended primarily for the use of deep drafted vessels sailing from Das Island, but vessels intending to enter the port via this channel should advise 'Das Marine' by radio, of their intentions. Masters are advised that this channel is not for the exclusive use of Das Island traffic and are cautioned to proceed accordingly.

PILOTAGE: Company-appointed Berthing Masters are the designated representatives of the Controlling Authority and, as such, are responsible to the Controlling Authority for the observance and implementation of Standing Instructions for Marine Operations.

The Berthing Master will normally board the vessel approximately 2 miles E.S.E. from Tanker Berth No. 2. The pilot station is at Lat. 25° 08′ N., Long. 52° 55.4′ E.

For vessels entering from the North the Berthing Master may board in a different location. If so, he will advise the Master accordingly via VHF radio.

The Berthing Master will undertake the pilotage, berthing and unberthing of the vessel save that the Master of the vessel shall remain solely responsible on behalf of the Owners for the safety and safe navigation of the vessel at all times.

Tankers and Gas Carriers: Tankers and gas carriers are not permitted to berth at or unberth from any of the berths in Das Island without a Company-appointed Berthing Master on board.

General Cargo Vessels: General cargo vessels are not normally required to employ a Berthing Master, but may obtain pilotage assistance by prior application to the Controlling Authority. Vessels are required to use the anchorage area designated for cargo operations (See "Anchorage"), but may anchor in the main anchorage while awaiting weather conditions to improve, availability of lighters or if the designated anchorage is congested.

Small Craft: Craft entering the boat harbour are not required to hire pilotage services, but may do so by prior application to the Controlling Authority.

Movements of all craft into, within or out of the boat harbour is at the discretion of the Controlling Authority. Allocation of berths is the sole responsibility of the Controlling Authority. No craft are allowed to enter, manoeuvre within or sail from the boat harbour during the hours of darkness without the prior permission of the Controlling Authority.

ANCHORAGES: Designated anchorages are established for use by vessels/craft visiting the Port of Das Island. The use of anchors outside these areas must only be undertaken after obtaining permission from the Controlling Authority.

Main Anchorage Area: This anchorage area lies to the S.E. of Das Island and is for tankers, gas carriers and other large vessels. The area is encompassed by lines joining the following positions:

(a) Lat. 25° 08.0′ N., Long. 52° 55.4′ E. to
(b) Lat. 25° 07.2′ N., Long. 52° 58.8′ E. to
(c) Lat. 25° 04.5′ N., Long. 52° 58.8′ E. to
(d) Lat. 25° 04.5′ N., Long. 52° 55.4′ E. and finally to (a).

Optional Anchorage Area: An optional anchorage for deep draft vessels is located approximately 1 mile to 1.5 miles N.W. from No. 12 Deep Water Channel Buoy.

General Cargo Vessels: The offloading anchorage for general cargo vessels is situated approximately 6 cables South of Tanker Berth No. 2 in an area encompassed by a line joining the following positions:

(a) Lat. 25° 07.5′ N., Long. 52° 53.00′ E. to
(b) Lat. 25° 08.0′ N., Long. 52° 53.00′ E. to
(c) Lat. 25° 08.0′ N., Long. 52° 53.41′ E. to
(d) Lat. 25° 07.5′ N., Long. 52° 53.63′ E. and finally to (a).

Small Craft and Barges: This anchorage lies to the S.W. of Tanker Berth No. 2, in an area encompassed by a line joining the following positions:

(a) Lat. 25° 08.0′ N., Long. 52° 53.00′ E. to
(b) Lat. 25° 08.4′ N., Long. 52° 53.00′ E. to
(c) Lat. 25° 08.4′ N., Long. 52° 53.23′ E. to
(d) Lat. 25° 08.0′ N., Long. 52° 53.41′ E. and finally to (a).

CAUTION:

(a) Pipe-lines connecting the tanker berths to the shore lie close to the Northern boundary of this anchorage.

(b) Within the small craft anchorage area are mooring buoys, installed by the Company for their own usage. The number of buoys installed and their position are liable to be changed without promulgation of any notices.

The use of these buoys by any craft is subject to permission being granted by the Controlling Authority. Unauthorised occupancy of these buoys could result in strong action being taken against the craft, and any consequential damage/loss of earnings/incidental expenses etc. incurred by the Company will be for the account of the offending craft.

Holding Ground (Sea Bed): The sea bed around Das Island is rock, covered by a few inches of loose sand. Holding is poor and vessels are urged to exercise due care and pay out extra chain.

Wind and Tide: Prevailing winds are from the N.W. Rise of tide can be up to 2 m. but the usual variation is 1 m.

Also see "VHF".

PROHIBITED ANCHORAGES: Prohibited anchorage areas have been established at Das Island. The use of anchors within these areas is strictly prohibited.

Prohibited Anchorage – South of Das Island: A prohibited anchorage area is established to the South of Das Island in an area encompassed by a line joining the following position:

(a) Lat. 25° 08.38′ N., Long. 52° 52.50′ E. to
(b) Lat. 25° 08.00′ N., Long. 52° 52.50′ E. to
(c) Lat. 25° 08.00′ N., Long. 52° 53.00′ E. to
(d) Lat. 25° 08.50′ N., Long. 52° 53.00′ E. then to shore in
(e) Lat. 25° 08.50′ N., Long. 52° 52.78′ E.

Prohibited Anchorage – Tanker Berth No. 3: A prohibited anchorage area exists within a circular area of radius 1,500 ft. (460 m.) centred on Tanker Berth No. 3 in Lat. 25° 08′ 53″ N., Long. 52° 54′ 07″ E. This is also a RESTRICTED AREA.

RESTRICTED AREAS: Restricted areas have been established at Das Island. Vessels/craft are only allowed to enter these areas for duly authorised operational purposes.

Restricted Area No. 1: Enclosed by a line joining the following positions:

(a) Lat. 25° 09.35′ N., Long. 52° 52.77′ E. on shore to
(b) Lat. 25° 09.30′ N., Long. 52° 53.05′ E. to
(c) Lat. 25° 09.16′ N., Long. 52° 53.10′ E. to
(d) Lat. 25° 09.20′ N., Long. 52° 53.30′ E. to
(e) Lat. 25° 09.55′ N., Long. 52° 53.20′ E. to
(f) Lat. 25° 09.55′ N., Long. 52° 53.00′ E. to
(g) Lat. 25° 10.54′ N., Long. 52° 53.00′ E. to
(h) Lat. 25° 10.54′ N., Long. 52° 52.20′ E. to
(i) Lat. 25° 09.80′ N., Long. 52° 52.20′ E. to
(j) Lat. 25° 09.80′ N., Long. 52° 51.85′ E. to
(k) Lat. 25° 09.00′ N., Long. 52° 51.85′ E. the East to shore.

Restricted Area No. 2: Enclosing Tanker Berth by a line joining the following positions:

(a) Lat. 25° 08.80′ N., Long. 52° 53.10′ E. on shore to
(b) Lat. 25° 08.86′ N., Long. 52° 53.30′ E. to
(c) Lat. 25° 08.30′ N., Long. 52° 53.50′ E. to
(d) Lat. 25° 08.25′ N., Long. 52° 53.30′ E. then finally to (a).

Restricted Area No. 3: A circular area of radius 1,500 ft. (460 m.) centred on Tanker Berth No. 3 in position: Lat. 25° 08′ 53″ N., Long. 52° 54′ 07″ E. This is also a prohibited anchorage area.

MAX. SIZE: See "Berthing".

HEALTH: Vessels arriving at Das must carry the usual Bills of Health for ports visited on the voyage. Masters of vessels are required to inform Abu Dhabi Marine Operating Company (ADMA-OPCO) if there is any sick person on board or if there has been sickness on board within the week prior to arrival. Pratique is granted by the Port Medical Officer normally through the Berthing Master.

Health Certificate with valid cholera inoculation (if coming from cholera-infected areas) is compulsory.

RADIO: *Arrival Messages:* All vessels bound for Das Island should give 72 hours' notice of ETA with updates at 48 hours and 24 hours prior to arrival. When this is impractical, an estimated date of arrival must be given and this updated and confirmed as soon as possible.

Also see "Berthing" – Tanker Berth No. 3.

VHF: Das Marine maintains a 24 hour listening watch on VHF Channels 12 and 16 and works Channels 12 and 74.

All communications other than Terminal VHF should be sent through "Bahrain Radio".

Das Island radio mast is installed in position: Lat. 25° 08′ 30.396″ N., Long. 52° 52′ 43.903″ E. Red lights visible all round the horizon are established at the top of the mast, 268 ft. (81.8 m.) above chart datum.

Vessels Anchoring: Vessels anchoring to await berthing instructions must advise "Das Marine" via VHF Radio of:

(a) Anchoring time (Local Time is GMT plus 4 hours)
(b) Anchoring position (bearing and distance from Tanker Berth No. 2).

All vessels at anchor must keep a listening watch on VHF Channels 12 and 16.

When a vessel leaves the anchorage it must advise "Das Marine" via VHF Radio of:

(a) Time departed anchorage.
(b) Reason for departing.

RADAR: Not available.

TUGS: *Tugs and Mooring Launches:* Three Fire Fighting, Pollution Control and Salvage Tugs are generally available at Das Island to assist in berthing/unberthing vessels at the bulk petroleum and LNG/LPG facilities.

Minimum of 2 tugs used for berthing.

NOTE: Only tug's towing equipment shall be used for these operations and only in an emergency situation and in order to avert a potential disaster may ship's equipment be considered for use.

Mooring launches are available for berthing/unberthing operations and for the transportation of personnel.

BERTHING: Tanker Berth No. 1:

Platform position: Lat. 25° 08′ 24″ N., Long. 52° 53′ 19″ E.

Berth not in use. Structure and lights temporarily remain.

Tanker Berth No. 2:

Platform position: Lat. 25° 08′ 39″ N., Long. 52° 53′ 14″ E.

General: This is a fixed platform berth situated approx. 2,400 ft. (750 m.) East of Das Island. Vessels berth alongside 4 flexible dolphins, and 6 mooring dolphins are provided to receive moorings.

Berthing limitations: Capable of accepting vessels of between 16,000 and 265,000 L/T S.D.W. subject to the following limitations as to berthing:

(a) Ballasted or partially loaded tankers up to a maximum of 165,000 L/T displacement.

(b) Fully loaded tankers up to 130,000 L/T S.D.W. provided the displacement does not exceed 165,000 L/T.

(c) Vessels with a max. draft not exceeding 56 ft. (17 m.).

Minimum depth of water alongside is 67 ft. (20.4 m.) at datum.

Moorings: A minimum of 8 mooring lines must be available at each end of the vessel.

General mooring pattern for vessels up to 130,000 L/T S.D.W.:

Forward: 3 headlines, 2 breastlines, 1 spring.
Aft: 3 sternlines, 2 breastlines, 1 spring.

General mooring pattern for vessels in excess of 130,000 L/T S.D.W.:

Forward: 3 headlines, 3 breastlines, 1 spring.
Aft: 3 sternlines, 2 breastlines, 2 springs.

Loading/Discharge Rates: Maximum cargo loading rate is 32,000 bbls./hr. per 16 in. hose (4,200 t.p.h.), 4×16 in. hoses are available. Maximum fuel oil loading rate is 5,000 bbls./hr. per 10 in. hose (750 t.p.h.), 2×10 in. hoses are available. For fuel oil discharge the maximum pressure is 100 p.s.i. at ship's manifold (7.03 kg/sq.cm.).

Control of Loading /Discharge & Safety: Loading/discharge must proceed to a pre-declared plan. Co-ordination of loading/discharge will be undertaken by the Duty Berthing Master, who will also conduct the necessary safety checks at frequent intervals.

Tanker Berth No. 3 (SPM):
Buoy position: Lat. 25° 08′ 53″ N., Long. 52° 54′ 07″ E.

Additional pre-arrival message: The following message will be transmitted to vessels which are nominated to berth at Tanker Berth No. 3.

Quote:

Present indications that vessel will berth at No. 3 SPM. Ship's derrick/crane should be rigged on port side.

Ship's manifold suitable for connection of up to 2×16 in. crude and 1×10 in. bunker hoses. Mooring and hose connection by ship's crew. Mooring and hose connection equipment shipped on board after Berthing Masters board. Request accommodation be provided for 2 Berthing Masters whilst on board. Please confirm soonest SWL of hose handling crane/derrick and that suitable forward panama/fairlead aperture is minimum 24 in. horizontally and 18 in. vertically.

Unquote.

General: Tanker Berth No. 3 is a Single Point Mooring (SPM) situated approx. 7,500 ft. (2,285 m.) East of Das Island. The buoy is moored in 94 ft. (28.65 m.) of water at datum, and is served by a 48 in. crude oil submarine pipe-line and a 22 in. fuel oil (bunker) submarine pipe-line.

Vessels will be required to be fitted with a hose handling crane/derrick capable of plumbing at least 2 ft. outboard of the ship's side over the entire length of the portside manifold (including the bunker connection). Minimum SWL of the crane/derrick to be in accordance with the following requirements.

Less than 100,000 L/T S.D.W. 8 tons.
100,000 – 300,000 L/T S.D.W. 10 tons.
Over 300,000 L/T S.D.W. 12 tons.

Berthing Limitations: Capable of accepting vessels up to 410,000 L/T S.D.W. subject to the following limitations: Maximum berthing draft of 72 ft. (22 m.). Maximum sailing draft of 79 ft. (24 m.).

(See "Approaches" "Cautions" – Note: Actual depths over submarine pipe-lines).

Mooring at SPM: The fixed mooring at Tanker Berth No. 3 is a 21 in. circumference nylon braidline rope, 160 ft. (50 m.) long, terminating in a 3 in. diameter stud link chafing chain.

The vessel must have a suitable bow fairlead (24 in.×18 in.) to permit direct connection of the 3 in. diameter stud link chafing chain to a Schmit or similar bracket. If no bracket is available the Company will supply a 15 in. circumference nylon snotter and a 300 ton shackle for connection to the chafing chain. The Company will also supply a special pear shaped link to aid connection to Schmit bracket or when utilizing the nylon snotter.

Loading Rates: The crude oil loading installation comprises 2×10 in. floating hose strings each terminating in 16 in. tail hoses. The fuel oil (bunker) loading installation consists of 1×16 in. floating hose string terminating in a 10 in. tail hose. Flanges are to BS 1560.

Various reducers/spool pieces are available, with prior knowledge of vessel connections if different from shore fittings. Adequate ship crew and tools must be provided for the safe and efficient connection of hoses. There is no shore assistance for connecting/disconnecting of hoses.

Maximum cargo loading rate is 46,000 bbls./hr. per 16 in. hose (6,000 t.p.h.), 2×16 in. hoses are available. Maximum fuel oil loading rate is 7,000 bbls./hr. per 10 in. hose (1,000 t.p.h.), 1×10 in. hose available.

Control of Loading and Safety: Loading must proceed to a pre-declared plan. Co-ordination of loading will be undertaken by the Duty Berthing Master, who will also conduct the necessary safety checks at frequent intervals.

LNG/LPG Berth No. 4:
Platform position: Lat. 25° 09′ 22″ N., Long. 52° 53′ 08″ E.

General: This is an ADGAS installation for the transfer of LNG/LPG and related products. Movement of vessels to and from the berth are governed by the Controlling Authority.

The berth is a fixed platform type and is situated approx. 4,300 ft. (1,300 m.) N.N.W. from Tanker Berth No. 2 Platform. Vessels berth alongside flexible dolphins and 7 mooring dolphins are provided to receive moorings.

Berthing Limitations: Capable of accepting vessels up to 100,000 L/T displacement subject to a maximum draft alongside of 46 ft. (14 m.). Minimum depth of water alongside is 49 ft. (14.95 m.) at datum.

Moorings: A minimum of 8 mooring lines must be available at each end of the vessel.

General Mooring pattern is:
Forward: 3 headlines, 3 breastlines, 2 springs.
Aft: 3 sternlines, 3 breastlines, 2 springs.

Loading Rates: Loading LNG/LPG and associated products is the responsibility of ADGAS. Maximum LNG loading rate is 10,500 cu.m.p.h. Maximum LPG loading rate is 4,000 cu.m.p.h. Maximum Pentane Plus loading rate is 10,000 bbls./hr. (1,200 t.p.h.). Maximum fuel oil loading rate is 4,500 bbls./hr. per 8 in. flexible hose (650 t.p.h.).

Vessels must have crane/derrick rigged on port side to assist with connection of Fuel Oil (bunker) hose.

Control of Loading: Co-ordination of loading is the responsibility of ADGAS. Fuel Oil (Bunker) loading will be co-ordinated by the Duty Berthing Master, who will also conduct the necessary safety checks at frequent intervals. Masters of vessels are requested to provide accommodation for the Berthing Master for the duration of the vessel's berth occupancy.

Small Boat Harbour : Das Island Small Boat Harbour is situated at the South of Das Island. There are a total of 14 berths available at this time, usage of which is governed by the Controlling Authority.

Eastern Extension: Consists of 2 berths (No. 1 and 2) which are reserved for use by ADMA – OPCO and direct hire deep sea tugs, also for the importation of petroleum products. Maximum draft permitted is 15.5 ft. (4.7 m.).

Inner Harbour: Consists of 12 berths (No. 3 through No. 14). The facilities are reserved for ADMA – OPCO small craft, Government craft and contracted craft for the loading/discharge of materials and supplies.

GENERAL CARGO OPERATIONS: No loading/unloading facilities exist in the port area for cargo vessels and such vessels must provide all equipment and machinery to facilitate transfer of cargo to/from barges, lighters etc., at the designated anchorage area.

Cargo Manifests: One original and two copies of General Cargo Manifests are required to be supplied by the vessel.

Discharging/Loading: Vessels should arrive with all derricks etc., rigged and ready for cargo handling. Barges and associated craft must satisfy the mandatory requirements of the Controlling Authority, the Consignee being responsible for the provision and control of barges and associated craft. Cargo transfer will normally be carried out continuously dependent on weather conditions.

Dangerous Cargo: The Controlling Authority must be informed of any dangerous cargo carried in any vessel arriving within the port area whether it is intended for discharge at Das Island or not. Masters of vessels are requested to confirm that any dangerous cargo being carried is stored in accordance with the "Recommendations for the Carriage of Dangerous Goods in ships by the United Kingdom Department of Trade and Industry" or other recognised authority.

CRUDE OIL LOADING: 2 grades of crude are available on each berth. Zakum Crude average API 40° (approx.), and Umm Shaif Crude of 37° (approx.).

Associated product available at this time is Condensate Blend of API 60° (approx.).

All tankers of 70,000 long tons s.d.w.t. must comply with the IMO 1978 protocol and must employ inert gas system.

Masters of vessels arriving to load Condensate Blend cargoes must sign a Declaration (019-MAR-19) to signify that they realise they are loading a highly volatile cargo which contains dangerous quantities of Hydrogen Sulphide (H_2S) in the gas evolved from the cargo.

DENSITY: 1025.

BALLAST: There are no facilities for receiving vessel's ballast ashore for treatment. All vessels must have clean ballast for over-board discharge.

Masters of vessels arriving at Das Island will make a pre-berthing declaration regarding ballast (019-MAR-3).

MEDICAL: A Company Medical Officer and small hospital are available, subject to the Company's discretion, to vessel's crews. Charges for attention, treatment and associated facilities are for the vessel's account.

Masters of vessels must take precautions against heat exhaustion and heat stroke.

Requests for medical attention must be made to the Agency, or through the Duty Berthing Master.

Personnel allowed ashore for medical attention must carry with them Passports/Seaman's card and Health Documents and, if necessary, be accompanied by an interpreter (English or Arabic). An Agency representative will accompany them to the Hospital, but they will not be permitted to visit other Das Island facilities.

FRESH WATER: Not available.

FUEL: Fuel oil bunkers are available at all tanker and liquid gas berths. Type: Interfuel/1500 secs./180 CSD/Redwood. Enquiries should be directed to:

1. BP Trading Limited, London. Telegraphic Address: Bepebunker London EC2. International Telex: 888811.

or, 2. Total Trading International (S.A.), Geneva. Telegraphic Address: Totalintra Geneva. International Telex: 28822.

or, 3. ADNOC, P.O.Box 898, Abu Dhabi, U.A.E. Cables: ADNOC, Abu Dhabi. Telex: EM 22215.

Local enquiries for bunkers should be made to the above companies through ADMA-OPCO.

NOTE: There are no facilities available for the supply of diesel oil through the tanker/liquid gas berths.

Small craft on charter to ADMA-OPCO are able to obtain limited supplies of diesel oil, the facility is only available through prior contractual agreement and must be loaded at the small boat harbour.

FIRE PRECAUTIONS: Three fire-fighting tugs available.

GANGWAYS: Shore gangways are provided at Berth Nos. 2 and 4, vessel to provide access steps from gangway at ship's rail. At Berth No. 3 vessel must provide accommodation ladder on both sides of the vessel for access.

CUSTOMS ALLOWANCES: No restrictions for tobacco or liquor onboard. Conveyance of alcoholic liquor from any vessel to the shore or from the shore to any vessel, or from one vessel to another, is prohibited.

CONSULS: HBM Hon. Vice-Consul, Marine Department, Abu Dhabi Marine Operating Company (ADMA-OPCO), Das Island, Abu Dhabi. Ext. Tel: Das 3404. Cables: Admarine Das Abu Dhabi.

REPAIRS: No repair facilities are available at Das Island. No repairs are permitted within port limits without prior permission of the Controlling Authority.

DRY DOCKS: None.

SURVEYORS: Not available.

TELEPHONES: No onboard facilities – fixed berths are linked to Island telephone system. On LNG/LPG Berth No. 4 a ship/shore telephone connection is available.

BANKS: National Bank of Abu Dhabi and Bank of Credit & Commerce. Das Island, Abu Dhabi, U.A.E.

STORING: Not available.

REGULATIONS: No cameras allowed on the Island – high security area.

REPATRIATION: There are no facilities for crews of visiting vessels to join or leave vessels at Das Island. Repatriation for medical reasons may be arranged at Master's request with the consent of the Das Island resident medical officer.

AIRPORT: ADMA operated private airport.

TIME: GMT plus 4 hours.

POLICE/AMBULANCE/FIRE: All emergencies: No. 2 Tanker Berth Tel: 3333. No. 4 LNG/LPG Berth, Tel: 2222.

SHORE LEAVE: No shore leave is permitted at Das Island. Any crew member who comes ashore unauthorised will be considered as having entered the UAE illegally and as such will be liable to a heavy fine and/or imprisonment.

GENERAL: All vessels entering the port of Das Island must comply with the International Agreement on Safety of Life at Sea (SOLAS) and its amendments and all tankers with the IMO 1978 Protocol.

The Masters of tankers/gas carriers must comply with the following:

Pre-Berthing Declaration and Inspection: All vessels arriving at the Port of Das Island must be suitably ballasted and/or trimmed for berthing with regard to weather and existing circumstances.

All vessel's personnel must be familiar with the Das Island Safety Requirements and other applicable Standing Instructions.

Safe and adequate access to the vessel must be provided for the Berthing Master. If the Berthing Master considers the means of access unsafe or unsuitable, the vessel will be delayed until such time as proper access is provided. Any loss will be to the vessel's account.

The requisite initial documents must be completed in full, signed and handed to the Berthing Master prior to commencement of berthing operations. (See "Documents", 019-MAR-1, 019-MAR-2, 019-MAR-3, 019-MAR-4).

Permission to berth will not be granted unless the Berthing Master is satisfied that the vessel can safely complete all parts of the operation, including but not limited to, berthing, ballasting, deballasting, cargo transfer and sailing. If for any reason it is deemed necessary to refuse permission to berth, the Controlling Authority will be informed and a detailed inspection of the vessel will be undertaken. Shortcomings, etc. will be noted and the Master informed of them. If the vessel is unable to rectify the identified faults, it will be removed from the Port Area. Owners/Charterers will be notified accordingly.

Fire Wires (Emergency Towing Wires): Emergency towing/fire wires of sufficient strength and construction are to be provided and secured forward and aft, on the offshore side of the vessel, with the towing eye maintained at 6 ft. (2 m.) above the water level.

Access to Vessel: While at the loading berths all vessels must provide an accommodation/pilot ladder suitably positioned and maintained at 6 ft. (2 m.) above the water level on the offshore side of the vessel.

M.E.N.A.S.: ADMA-OPCO Agency Section is a collection agency for Middle East Navigation Aids Service (M.E.N.A.S.) dues and, on the authority of the Master, dues payable to M.E.N.A.S. are collected and remitted on behalf of the vessel.

Courtesy Flag: The correct courtesy flag for vessels visiting Das Island is the flag of the United Arab Emirates. This flag may be obtained from the Agents.

Notice of Readiness: Prior to commencement of any transfer operation within the Port of Das Island, the Master shall tender, to the Company, a written Notice of Readiness to load/discharge, duly timed, dated and signed by the Master. Receipt of such notice does not necessarily imply acceptance.

Early Departure Procedure: E.D.P. is available to all tankers at Das Island. Tankers not accepting E.D.P. are generally unberthed after completion of transfer and must proceed to the Anchorage Area to complete documentation.

Note: Vessels loading fuel oil (bunkers) are required to accept E.D.P. to minimise delays to other vessels.

Consular Business: The Controlling Authority is authorised by H.B.M. Ambassador in Abu Dhabi to conduct Consular business in relation to shipping documentation, Endorsement of Ship's Articles and Endorsement of Certificates of Registry and Seamen's Books.

OIL POLLUTION: Any incident of pollution from a vessel within the Port of Das Island is a contravention of Part VI of the Abu Dhabi Petroleum Ports Law No. 12 of 1973.

In the event of the escape of oil or oily water from any source, operations must be suspended immediately, and every effort made to identify, stop, contain and clean up the pollution. The Controlling Authority must be informed via the Duty Berthing Master, in order that the Pollution Contingency Plan can be initiated.

Transfer operations will not be resumed until such time as the Berthing Master and the Controlling Authority are satisfied that the cause of pollution no longer exists and that the affected area is sufficiently cleaned and safe. Oil Pollution incidents that occur within the Port of Das Island will be fully documented and the necessary documents (019-MAR-41) signed by the Master before transfer is resumed.

Masters of vessels/craft are warned that any breach of the provisions of Part VI of the Abu Dhabi Petroleum Ports Law No. 12 of 1973 will render themselves liable to prosecution.

Pollution: The dumping of waste, dangerous, toxic or other hazardous material within the Port of Das Island is strictly prohibited.

AUTHORITY: Abu Dhabi Marine Operating Company (ADMA-OPCO), Das Island, Abu Dhabi, U.A.E. *Tel:* 826600 (Das Ext. 3404). *Telex:* 22284 Adma EM. *Cables:* Admarine Das, Abu Dhabi. *Contact:* Captain C. A. Robins or Captain W. A. Whelpton, Marine Superintendents, Das.

AGENT: *Dry Cargo:* See "Mina Zayed".

Tankers: National Shipping Gulf Agency Co. (Abu Dhabi) Ltd. act as protecting Agent only.

DUBAI (Including Khor Dubai and Hamriya Port): 25.16 N. 55.18 E.

ALSO SEE "PORT RASHID".

COURTESY FLAG: UAE and Dubai.

PROHIBITED AREA: Work on the construction of the Dubai dry dock has commenced and all shipping is warned to keep clear of an area contained within a line drawn from Port Rashid Main Light (Lat. 25° 16.0′ N., Long. 55° 16.2′ E.) to a position (Lat. 25° 16.2′ N., Long. 55° 15.1′ E.) i.e. 272° – 1,850 m. from this light thence to the shore line on a Bearing of 180°. This has been declared a prohibited area.

Small craft, dredgers and hopper barges will be operating within this area. The main breakwater will consist initially of an island with the breakwater extending both seawards and shorewards from it.

White flashing beacons will be positioned at 400 m. intervals along the breakwater and in addition various construction lights will be exhibited.

Legal steps will be taken against any negligence whatsoever from Masters.

DOCUMENTS: Following should be airmailed to Agent prior ship's arrival: 6 copies Dangerous Cargo List, Stowage plan in duplicate, Hatch list in duplicate, 7 copies of cargo manifests, 1 copy of each Bill of Lading. On arrival, 3 crew Lists required.

APPROACHES: Open roadstead. Cargo discharged into barges.

ANCHORAGE: Marked by light buoy in position 310°, 1.06 miles from Nayif Tower. Recommended anchor to N.E. of light buoy in approx. position Lat. 25° 17′ 4″ N., Long. 55° 16′ 16″ E. Depth 36 ft. to 40 ft., holding ground considered poor, bottom sand and coral. The closer ships are able to anchor to the buoy, the faster turn-around on barges will be attained. *Warning:* Occasional strong N.W. winds, known as "Shamal" will make discharging impossible and *it is very important* that ships have engines on "stand-by" during such times. Ships allowed enter and leave anchorage at any time of day or night. Launch service through Agent's ship to shore from anchorage, and ship's own boats can also be used without Authorities' permission.

PILOTAGE: None.

RESTRICTIONS: All cargo discharged into barges at anchorage. Coasters with drafts of 11 ft. 6 in. or less can enter creek and discharge alongside. Such vessels usually require a tug boat to pilot them into the creek. Tugs available through Agent. Importation of artificial pearls is prohibited. Purchase of liquor forbidden except by permit.

HEALTH: Prior arrival, Masters are required to send a cable to the Port Health Dept. addressed "Quarantine-Municipality-Dubai" on the following lines:

(Vessel's name). . . ETA . . . Hour . . . Date . . .
Crew all healthy request free pratique
Master

Normally all vessels declared healthy by the Master are automatically allowed to berth immediately on arrival, and Health Dept. personnel will board vessels after berthing.

Arrival: Ships boarded immediately upon arrival weather permitting, and Masters then have to complete a short Arrival Report. No formalities of any kind with Port Authorities and ships allowed to arrive and sail at any time.

Departure: No port clearance is issued in Dubai. A letter will be issued by Agent which may be produced at next port of call instead of usual departure clearance.

RADIO: No port radio station. Cables from vessels outside Gulf may be routed through Muscat Radio, and from inside Gulf through Bahrain Radio. Vessels should advise Agent of ETA 72, 48 and 24 hours prior arrival. Some Agents also equipped with VHF calling Channel 16. Ship's radio station may be operated at anchorage.

Nearing Dubai and approximately 8-10 hours prior to arrival, vessel should switch on VHF Channel 16 and call Agent. On contact, change to one of Channels 14, 13, 12, 9 or 6 for further communication. Regular contact then maintained until departure from Dubai.

DISCHARGE TURN: Priority of discharge given to ships carrying mail and/or passengers for Dubai. Ships carrying less than 100 weight or measurement tons have priority and are supplied with one barge for discharge of cargo immediately on arrival, whether turn is in force or not. Should there be congestion, Agents require Stowage Plan showing clearly that all Dubai cargo is freely available and Master's signature on a request for discharge turn. Based on this, vessels will be registered for turn. Registration can only be performed during office hours.

After confirmed registration, at which will be given a deadline for turn, ships may proceed to other ports for discharge, but must return Dubai prior time and date given, otherwise turn is lost. Particular cargoes for H.H. The Ruler have priority, This should be evidenced by Manifests which will be produced to Customs Authorities in Dubai for approval. The cargoes must be accessible for immediate discharge, which should be verified by stowage plan.

BERTHING:

Khor Dubai: Khor Dubai Corniche Beacon 25° 16′ N., 55° 18′ E.

Approaches: Dredged to 5.5 m. The channel running parallel with Port Rashid lee breakwater.

Restrictions: Breakwaters will be lit shortly.

Draft at Berths: 4.5 m.

Tugs: May be arranged by Agent if required.

Fuel: Caltex supply fuel. Also Shell and BP.

Hamriya Port: Main Breakwater Light 25° 18′ N., 55° 20′ E.

Flag: UAE and Dubai Emirate.

Documents: The following should be airmailed to Agent prior to ship's arrival.

2 Dangerous Cargo Lists.
2 Stowage Plans.
2 Hatch Lists.
2 Freight Manifests.
7 Cargo Manifests.
1 Copy of Bill of Lading.
4 Crew Lists required (on arrival).

Approaches: Dredged to 6 m. between breakwaters. Breakwaters are lit.

Pilotage: Pilots can be obtained from Port Rashid by arrangement.

Restrictions: Vessels will not be allowed to remain alongside the quay when not working cargo if other vessels are waiting.

Draft at Berths: There are no berth numbers. However, there are 3 quays. One measuring 300 m. in length with a draft of 4.5 m., 1 – 160 m. and 1 – 900 m., the last 2 with draft of 6 m.

Tugs: May be arranged by Agent if required.

Radio: The Port Signal Station (call sign: "Khor Dubai") equipped with VHF and M/F SSB is situated near the entry to Dubai Creek. Vessels should contact the station by VHF Channel 16 or 12 or on RT 2182 kHz. Signal station is manned 24 hours.

Pratique: Not applicable.

Berthing: Berthing is reported to Khor Dubai Report Station.

Fresh Water: Presently available at one point only. The supply is made by Port & Customs Office and vessels may directly order their requirement or through Agents.

Fuel: Caltex supply fuel. Presently from one point only.

Cargo Handling: Port is not involved in the cargo discharge operation. There is no equipment available in the port such as cranes, forklifts etc. and if required, to be arranged by Agent.

Neither shed nor yard is available and therefore cargo is accepted on direct delivery basis only.

Stevedores: No stevedoring company in the port, labour is arranged by Agent.

Telephones: No connections at the quays. However, there are telephones in the adjacent Customs Office.

Lighterage: Available.

Shore Pass: After berthing, all passports and Seaman's books should be surrendered to the Customs Office situated in the port area with 3 copies of crew list against which shore passes issued. Before sailing of the vessel, a clearance should be obtained from the Port & Customs Office (Launch Section) and produced to the Customs Office for releasing the Seaman's Books/Passports.

Authority: Port and Customs, Dubai.

STEVEDORES: Loading/Discharging Rates: Stevedores, tally clerks, supervisors, etc., will be supplied from shore at the same time as ships are supplied with barges. These people working under vessels' supervision and responsibility.

First Shift: from 0800 hrs. to 1800 hrs. Second shift: from 1800 hrs. to 2400 hrs. Third Shift: from 0000 hrs. to 0800 hrs. Very difficult to get stevedores to work third shift unless ship will complete within a reasonable time into the third shift. First 2 shifts always worked.

Drinking water must be supplied by ship free of charge to all men from shore but food to supervisors, tally clerks, watchmen and foremen.

Expected outturn working three hooks:

Bagged cargo	400 – 500 tons
Cased cargo	150 – 200 tons
Timber on deck	300 – 350 tons
Timber in hatches	200 – 250 tons

Usually 5 ships can work at one time.

MEDICAL: Qualified doctors available ashore and also a hospital. Most medicines available at fairly low prices. Dentist also available. Walking cases should be brought ashore *in the morning* for treatment, but in emergency, a doctor will board the ship.

TANKERS: See "Port Rashid".

FRESH WATER: Can be supplied at Dubai anchorage in following quantities: 600 tons, 75 tons, or 25 tons at one time.

FUEL: See "Port Rashid".

FIRE FIGHTING: No facilities available at anchorage.

CUSTOMS ALLOWANCES: *Tobacco:* 1,000 cigarettes or 200 cigars or 1 kilo of tobacco. *Perfumes:* 1 litre of toilet water (Eau de Cologne) and not more than 150 grams of perfume. *Currency:* Unlimited.

CONSULS:

Egypt
Great Britain
India
Iran
Iraq
Italy
Kuwait
Netherlands
Norway
Pakistan
Qatar
Saudi Arabia
Sweden
Switzerland
USA

Additional Embassies/Consulates in Abu Dhabi.

REPAIRS: Fully equipped engineering workshops, radar and radio technicians capable of carrying out extensive repairs available. Underwater cleaning, repairs and other works connected with this also available. See also Dubai Dry Dock under "Port Rashid".

DRY DOCK: See "Port Rashid".

SURVEYORS: Lloyd's.

REPATRIATION: Visa is required for non-UAE citizens visiting Dubai for a period exceeding 7 days. Agent can assist provided complete passport details given well in advance. Excepted are British Subjects with right of abode in the UK who are permitted to remain in UAE without visas for a period of 1 month. For temporary visitors of other nationalities the Agent can arrange under its sponsorship transit visa valid for 7 days provided the person holds a ticket showing a confirmed flight out of UAE. However, person must leave UAE via airport through which he entered.

When advise arrival flight details also advise seaman's book number and nationality.

Seven days' transit visa:

From 1st February, 1985 a new form will be used by the Immigration Authorities in Dubai for persons entering Dubai on Transit Visa.

As the form has to be typed out in both English and Arabic it is essential that full details of arriving persons are in hand at least 48 hours prior to arrival.

The information required is as follows:

1. I, the undersigned wish to sponsor the undermentioned who wishes to enter the country for ....
2. Name of the sponsored .... Father's Name ....
3. Nationality .... Passport No. ....
Category: Normal/Diplomatic Service.
4. Place and Date of Issue .... Expiry Date ....
5. Place and Date of Birth .... Profession ....

AIRPORT: Regular international scheduled flights. Also domestic flights within Gulf area.

TIME: GMT plus 4 hours.

HOLIDAYS: 1st January; 10th February; 23rd June*; 6th August*; 25th August*; End of Ramadan 3 – 5 days holidays, End August. 1st November*; 21st November*; 2nd December; 25th December.
*Not fixed.

SHORE LEAVE: Officers and crew may come ashore during daylight hours for shopping and recreation. They shall then carry a valid passport, ID-card or Seaman Book, which will be placed at the Immigration Office when landing. The passport, ID-card or Seaman Book will be returned upon returning to ship. No alcoholic beverages allowed to be brought ashore.

LAUNDRY: Available but about 2 – 3 days required.

PROVISIONS: Fresh vegetables, frozen stuff, bonded stores, etc., available. Requirements should be given immediately on arrival. (The liquor and beer prices are high.).

GENERAL: Dunnage – not available. Heavy lifts – not available at anchorage. Shore cranes have lifting capacity up to 30 tons.

Weather: Summer months in the 40's Centigrade and humid. Winter months in the 20's Centigrade and dry.

Alcoholic Beverages: Allowed to be stored and consumed on board also in port, while sale of this and pornographic materials is strictly forbidden.

Accommodation: Construction of many hotels completed and rooms in all price ranges are now readily available in Dubai on both the Deira and Dubai side.

Business Office Hours: Normally 0800 to 1300 hrs. 1600 to 1800 hrs. Government offices: 0800 – 1200 hrs. Banks: 0800 – 1200 hrs.

Ship Spares in Transit: Agents in Dubai advise that spares arriving in Dubai even with valid invoice, certificates of origin and packing lists attached are now opened by the Dubai Airport Customs. All Owners and operators are thus warned not to include any items which are banned in boxes containing spare parts as if detected they will be confiscated.

Further to the above, Agents give below a list of prohibited articles:

(a) All pornographic literature, videos, films, pictures.
(b) Alcohol.
(c) Narcotic drugs.
(d) Wireless transmitters.
(e) Firearms and ammunition.
(f) Products of Israeli – blacklisted manufacturers.
(g) Exposed cinematographic (movie) films.
(h) Political and religious literature.

– need prior approval from the Ministry of Information. The Customs are particularly sensitive about video tapes and when found in luggage they are subject to check. The checking is taking time and passengers are kept waiting sometimes for hours. To avoid trouble and irritation strongly recommend that crew arriving Dubai should be advised by principals not to carry any video tapes.

AUTHORITY: Port and Customs Dept. Dubai Port Authority.

AGENT: Gulf Agency Co. (Dubai) Pvt. Ltd., P.O.B. 2404, Dubai, U.A.E. Cables: "Confidence", Dubai. Tel: 457555 (12 lines, 24 hour service). After hours: 480424, 445221, 441544, 443650, 443070. Telex: 45448, 45809 ("Gacdb EM"). Radio: Marine VHF radio, stand-by on Channel 16 (156.8 MHz) Callsign "Confidence, Dubai".

Operators of ship-servicing and supply organisation: Crew-changes, mail, spares and/or delivery of provisions undertaken at sea without deviation to serviced vessel.

FATEH TERMINAL (offshore Dubai): 25.35 N. 54.25 E.

(See Plan Book)

Oil Loading Terminal of the Dubai Petroleum Company.

Note: All tankers loading Fateh Terminal cleared by Dubai Petroleum Company, taking care of all necessary documentation concerning cargo. DPC does not charge owners/operators for this service (at the present time). However, for all other agency services DPC refers owners/operators to regular shipping Agents in Dubai.

According present oil company regulations vessels not allowed receive any deliveries or any launch alongside while loading at Terminal. Deliveries of mail, spare parts and performance of crew changes will, therefore, take place at Terminal anchorage, Dubai anchorage, or at a rendezvous point.

Weather permitting, Fateh Terminal operates 24 hours a day, 7 days a week and provided berth not occupied, tankers will be berthed upon arrival, day or night.

LOCATION: Fateh Terminal consists of the crude oil production and export facilities of the Fateh, S.W. Fateh, Falah and Rashid Fields. The terminal limits are bounded by the following co-ordinates:

(i)	Lat. 25° 38′ 00″ N.	Long. 54° 05′ 16″ E.
(ii)	Lat. 25° 40′ 00″ N.	Long. 54° 30′ 00″ E.
(iii)	Lat. 25° 15′ 00″ N.	Long. 54° 30′ 00″ E.

Within this area the anchoring of vessels is prohibited and the Terminal Safety Regulations have effect.

NAVIGATIONAL AIDS: All platforms, structures, SBMs and floating storage vessels are fitted with a white light Fl. "U" ev. 30 secs. vis 5 miles and horn every 30 secs. sounding "U" in Morse.

Numerous working lights are also fitted on platforms, etc.

Six flares in position:

(1)	Lat. 25° 35′ 50″ N.	Long. 54° 25′ 50″ E.
(2)	Lat. 25° 35′ 56″ N.	Long. 54° 25′ 20″ E.
(3)	Lat. 25° 35′ 48″ N.	Long. 54° 25′ 18″ E.
(4)	Lat. 25° 29′ 44″ N.	Long. 54° 18′ 29″ E.
(5)	Lat. 25° 33′ 30″ N.	Long. 54° 11′ 30″ E.
(6)	Lat. 25° 21′ 00″ N.	Long. 54° 29′ 00″ E.

The flares give an orange light which may be visible from the Terminal, depending on atmospheric conditions, in addition the flare structures show a white light flashing "U" in Morse every 30 seconds visible for 5 miles.

Numerous small unlit buoys for the use of working craft may be encountered within the Terminal area.

APPROACHES: On approaching Terminal, Masters of incoming tankers should head for Anchorage Area (see "Anchorage") where, under normal conditions, their vessel will be boarded by a DPC Mooring Master.

ANCHORAGE: An area immediately East of Terminal Limits is designated as the Anchorage Area, centred on position as follows:

Lat. 25° 36′ N. Long. 54° 31′ E.

This co-ordinate represents the centre of a circle with a radius of approximately 1 mile which must be used by vessels requiring to wait at anchor. Anchoring within the Terminal limits is strictly prohibited. For reference purposes, the anchorage area bearing from Port Rashid (Dubai) Light is 298° true, distance 44.6 miles and from Jazirat Sirri Light 187.5° true, distance 17.5 miles.

If a tanker is not scheduled to berth on arrival (e.g. another vessel is in the berth, or the port is closed on account of adverse weather conditions, etc.) Masters will be advised by radio and requested to anchor.

FACILITIES: For the export of crude oil 2 single point mooring buoys have been installed in positions:

SBM No. 1	Lat. 25° 35′ 11.5″ N.	Long. 54° 25′ 47.7″ E.
	Bearing 261° true 4.8 miles from anchorage.	
SBM No. 2	Lat. 25° 35′ 12.6″ N.	Long. 54° 24′ 36.6″ E.
	Bearing 262° true, 5.85 miles from anchorage.	

READINESS: After arrival at the Anchorage Area and when the tanker is ready in every respect to load, the Master may tender his Notice of Readiness.

Notices of Readiness will be accepted provided one or other of the following events shall have transpired:

(a) The Master shall have received the Mooring Master on board or;
(b) The Master shall have dropped the anchor in the Anchorage Area.

Port closed: Notices of Readiness will not be accepted during periods when the port is closed. The port is "closed" when the weather is such that it is too rough for incoming tankers to berth. The decision regarding the opening and closing of the port will rest with the Fateh Terminal Superintendent or his Deputy.

Order of Berthing: Vessels will normally berth in order of arrival.

DOCUMENTATION: *Documentation and ship's Agency:* In the normal course of events, DPC acts as tanker Agent and prepares all crude oil loading documents. For these services no charge is made.

Early Departure Procedure: At the Master's discretion. In order to expedite turn-round of vessels in this port and avoid undue delays caused by weather or other circumstances, Masters of vessels on arrival are requested to sign blank cargo documents.

Normally, completed cargo documents required by the Master will be placed on board prior to sailing. If this is not possible without incurring undue delays, the relevant documents will be airmailed to the Master to await the vessel's arrival at her discharge port.

The official cargo, i.e. quantity loaded, will be transmitted by radio whilst unmooring. In the event of a dispute, the receipt of a Letter of Protest will be acknowledged by the Mooring Master. Any protests by the Master concerning the quality of cargo should be made before departure and any resulting investigation should be made before the vessel sails.

Outward Clearance: A tanker will be considered clear to depart Fateh Terminal when the crude oil loading documents have been delivered to the Master, or in the case of early departure, clearance will be given through the Mooring Master.

Mail: Official ship's mail and crew's personal mail will be handled and shipowners debited accordingly.

PILOTAGE: Pilotage is compulsory within the Terminal limits. Vessels to be moored at Fateh Terminal will be boarded by a DPC Mooring Master in the Anchorage Area. The Mooring Master will advise the ship's Master on approaches to the SBM, mooring and unmooring, connecting and disconnecting hoses and all other operations within the Terminal area including all manoeuvring of the vessel. The Master or one of his qualified deck officers must be on the bridge at all times while the tanker is being manoeuvred.

The services of a Mooring Master are provided without charge, upon the express understanding and condition that when any Mooring Master furnished by DPC goes aboard a vessel for the purpose of assisting such a vessel, he becomes for such purposes the servant of the owners of the vessel and DPC shall not be liable for any damage or injury resulting from the advice or assistance given or made by such Mooring Master while aboard or in the vicinity of the assisted vessel.

MAX. SIZE: *SBM No. 1.* Max. d.w.t. 200,000. Max. draft, no restriction. Depth of water 130 ft.

Early in 1985, substantial alterations will be made to the position of SBM No. 1.

It is intended to relocate the SBM to position UTM co-ordinates 246000 Eastings 2831000 Northings, in order to comply with the latest OCIMF safe manoeuvring distances. The buoy and moorings will be upgraded to receive tankers of up to 300,000 d.w.t. and in 140 ft. of water, there will be no draft restrictions.

SBM No. 2. Max. d.w.t. 300,000. Max. draft, no restriction. Depth of water 150 ft.

MOORING: *Preparation for Mooring:* Vessels are requested to have pilot ladder, hoist and/or accommodation ladder safely and securely rigged for immediate use and long enough to meet the Mooring Master's launch. Vessels will provide a lee for the Mooring Master on the port side both when boarding and leaving.

For vessels with a freeboard of 40 ft. or more, the accommodation ladder shall be rigged out, lowered down so the platform is not more than 10 ft. from the water level and a short pilot ladder rigged to cover the access to the platform.

Tankers are requested to have ready on the forecastle head the following:

(a) 2 towing ropes, polypropylene or other man-made fibre.
(b) 2 messenger ropes, minimum lengths of 300 ft.
(c) Selection of shackles, wirestrops and tools.

When the approach to the terminal commences, the berthing tug will be secured to assist in berthing. The method and position in which the tug will be secured will be dependent upon the weather and tidal conditions prevailing, but will normally be on the hook from the starboard bow using a ship's rope. At this time, the mooring launch will prepare the mooring and standby at the SBM.

Approach to the SBMs necessarily involves passing, in close proximity, various platforms and other structures. It is therefore imperative that all measures are taken to ensure that there is no loss of power or steering during these manoeuvres.

The mooring launch will be situated about 600 ft. from the SBM with a 10 in. circumference polypropylene pick-up rope secured to the main mooring, which consists of 2×18 in. circumference nylon ropes, connected to a standard O.C.I.M.F. chafing chain and a 40 ft.×3.5 in. circumference pick-up wire rope.

During the approach of the tanker towards the SBM, ships crew, with the advice of the Mooring Masters Assistant (MMA) will prepare the forecastle for the mooring operation. This will include passing a messenger rope through the centre bow fairlead (or other fairlead designated by the MMA) taking the end to the after port corner of the forecastle and, from this point, lowering the end to the waters edge. The mooring attachment will also be prepared, and will be, in order of preference:

(a) Bow stopper (AKD).
(b) Towing bracket or futtoch (Smit).
(c) Bitts.

Vessels which, in the Mooring Master's opinion, do not have a suitable method of attaching the mooring, will be refused permission to berth. Should bitts have to be utilised, or should the towing bracket be located at a substantial distance from the fairlead, wire snotters of 2 in. diameter and various lengths are available from the berthing tug.

Upon the close approach of the tankers bow, the mooring launch will manoeuvre alongside the port shoulder and attach the mooring pick-up rope to the ship's messenger line. The tanker will then heave up the messenger and pick-up rope, carefully picking up the slack as the tanker approaches the SBM. The mooring launch will now be stationed at the end of the floating hose string in order to tow the hoses clear of the ship's side should this become necessary.

The pick-up rope should be continually hove in as the tanker nears the SBM. The distance between the bow and the SBM will be continuously relayed to the Mooring Master on the bridge by the MMA from the forecastle and by the berthing tug. When the pick-up wire has been brought inboard through the fairlead, it may be necessary to adjust the direction of pull and assist the chain through the fairlead. Action required by the tanker's crew in this respect will be advised by the Mooring Masters Assistant.

When the chain is inboard, depending upon the method of attachment available, the connection will be made. It should be noted that should a Smits bracket or bitts be utilised, the first triangular plate on the chain must only be connected on tankers of less than 100,000 d.w.t. and on vessels of greater size, the chain must be hove in and the connection made on the second, larger, triangular plate.

After the connection to the mooring is made, it may be necessary to run the engines astern to ensure the tanker does not contact the SBM. The Mooring Master will then advise "Finished with Engines", but at no time during the tankers stay in port shall the engines be immobilised.

Shortly after the mooring operation is completed, the berthing tug will be secured from the stern of the tanker on a long ships rope, polypropylene if possible.

LOADING: *Lifting Hoses:*

SBM 1: Two 16 in. diameter hoses will be lifted by ship's gear on the port side. Each lift is 9 tons.

SBM 2: Two 16 in. diameter hoses will be lifted by ship's gear on the port side. Each lift will be 9 tons.

The hoses shall be hoisted and connected by ship's crew. The Mooring Master will advise the ship's officer in charge concerning lifting techniques.

Sundry Hose Connecting Equipment: Tankers shall be equipped with the necessary blocks, tackle, wrenches, gaskets, bolts, nuts, etc., to efficiently effect the hose connection.

Flange sizes: 16 in. – 12 in. reducers will come on board the tankers with the mooring gear thus enabling tankers with either 16 in. or 12 in. ASA 150 lb. flanges to connect directly to the Terminal hoses. Flange size 16 in. – 12 in., 16 in. – 10 in. reducers with ASA 150 lb. flanges are available if required to enable tankers with 12 in. – 10 in. manifold connections to connect to the Terminal hoses.

Communications During Loading: (See "Radio"). All communications relative to the loading of the vessel shall be routed through the Mooring Master who will remain in contact with the Production Platform constantly via portable UHF units. In case of temporary breakdown of the portable UHF circuit, contact may be continued on International Marine Channels 16, 14 or 9 if the vessel is so fitted.

Failure of Communications: Should communication with the Production Platform fail, loading will cease.

Emergency Shut down: An emergency cessation of loading may be effected by the ship's VHF Channel 16.

Cargo: Oil loaded at Fateh is Dubai Stabilised Crude with an average API of 31.0. Loading temperature varies between 90°F in the Winter to 100°F in the Summer months. The oil is relatively free of sediment and low in wax and asphaltenes.

Loading rate: At SBM No. 1 the maximum loading rate is 30,000 barrels per hour. At SBM No. 2 the maximum loading rate is 75,000 barrels per hour.

BALLAST: *Precautions Regarding Pollution:* It is the responsibility of the ship's Master to see that no crude oil (or bunkers', diesel or bilge) or dirty ballast is pumped or spilled overboard from his ship whilst in the area. Drip pans should be used, especially when disconnecting hoses in order to prevent spillage overboard.

Scuppers to be Plugged: Before loading commences, all overside scuppers shall be made oil-tight.

No facilities for Receiving Dirty Ballast: At Fateh Terminal there are no slop tanks or facilities for receiving dirty ballast. Tankers must arrive with clean ballast. In the event a tanker does have dirty ballast it will not be allowed to be pumped overboard. The dirty ballast will be collected into one tank, measured and left aboard.

Discharging Ballast at Night: During the discharge of ballast in darkness, the sea shall be adequately lighted in the area of discharge.

RADIO: *Communications with DPC:* Cable Address: Dupetco, Dubai. Telex: 45557 or 45423 DPC EM.

Initial Communication: Initial communication between ships and DPC should be via Bahrain Radio (call sign GOU) which operates on a 24 hour basis.

Communications within 60 miles of Terminal: Once ships are within about 60 miles of Fateh Terminal communication may be established by radio telephone on International Marine VHF Channel 16 (156.8 MHz). This frequency is monitored continuously. Once contact has been made on Channel 16, further conversation should be conducted on either Channel 14 (156.7 MHz) or Channel 9 (156.45 MHz).

Communications after DPC Mooring Master has Boarded: A DPC Mooring Master will board incoming tankers in the anchorage area and will bring with him portable UHF radio telephone units. From that time onwards all communications between ship and platform will be conducted by the Mooring Master via the portable UHF units, unless owing to failure of portables it is necessary to revert to mains VHF Channels.

Advice of Tanker Arrivals:

Initial Estimated Time of Arrival (ETA): When a tanker bound for Fateh Terminal is within 72 hours of arrival at Fateh Terminal, the Master should notify DPC by cable via Bahrain Radio giving the following information:

(a) Name of tanker.
(b) ETA in GMT (Dubai time is GMT plus 4 throughout the year).
(c) Quantity of cargo required.
(d) Maximum loading rate.
(e) If the ship's hose connections are different from 16 in. or 12 in. standard ASA 150 lb. type, the size should be stated.
(f) Deballasting time (if any).
(g) If vessel proceeding to any port(s) prior to Fateh, and if so, any anticipated delays.
(h) If AKD stopper or SMIT towing bracket is fitted, and if so, distance from centre bow fairlead.

Subsequent ETAs: Sections *(a)* and *(b)* of the above message should be repeated via Bahrain Radio when the tanker is within 24 hours and again when within 12 hours of arrival at the Fateh Terminal.

Unreasonably insufficient or inaccurate ETA messages may alter the order of berthing of ships to the disadvantage of those ships giving sufficient and accurate ETA messages.

Radio Telephone Communication when Approaching Fateh Terminal: When about 60 miles off the Terminal contact may be made by radio telephone on International Marine VHF Channel 16, and communications should continue via this method until a DPC Mooring Master boards.

MEDICAL: At Fateh Terminal medical and dental services are not available. In emergencies requiring hospitalisation, the patient will be taken by boat from the tanker to the Production Platform, hoisted to the upper deck of the platform and flown by helicopter to Dubai. The shipowner will be charged for all expenses incurred.

FUEL: Bunker supply not available at Fateh.

Fuel oil (IFO 180 cSt) can be arranged at Mina Jebel Ali. Gas oil can also be arranged.

DENSITY: 1030.

GENERAL: The following are not available at Fateh Terminal: fresh water, stores, boats for hire; repair facilities; facilities for changing ship's crew.

There is no shore leave.

Charts: Charts covering the approach to and the area of Fateh Marine Terminal are:

British Admiralty Nos. 2837, 2887, 2888, 2889.
U.S. Hydrographic Office No. 3647.

AUTHORITY: Dubai Petroleum Company, P.O.Box 2222, Dubai, U.A.E. *Tel:* Dubai 442990. *Telex:* 45423 or 45557 Dpc EM. *Cables:* Dupetco, Dubai. *Contact:* Captain A. V. Carrington, Marine Superintendent.

AGENT: Gulf Agency Co. (Dubai) Pvt. Ltd., P.O.B.2404, Dubai, U.A.E. Cables: "Confidence", Dubai. Tel. 457555 (12 lines, 24 hours service). Telex 45448, 45809 ("Gacdb EM").

VHF Radio: standing by on Channel 16 (156.8 MHz) communicating on Channels 14, 12 or 6, call sign "Confidence Dubai".

SSB Radio: standing by on 6910 MHz lower side band, communicating on frequencies 3539, 6910 and 7010 MHz. Call sign "Confidence Dubai".

FUJAIRAH: 25.10 N. 56.21 E. (See Plan Book)

LOCATION: Lat. 25° 10.5′ N., 56° 21′ E., 3 km. North of Fujairah town and 20 km. South of Khor Fakkan.

PORT LIMITS: Within area bounded by a line drawn:–

Lat. 25° 09′ 35″ N., Long. 56° 21′ 00″ E. due North to Lat. 25° 10′ 05″ N., 56° 21′ 00″ E., thence due West for 65 m. to the West side of the old road and following the West side of the old road for Lat. 25° 11′ 30″ N., thence due East to Lat. 25° 11′ 30″ N., Long. 56° 22′ 30″ E., thence South to Lat. 25° 09′ 00″ N., Long. 56° 22′ 30″ E., thence due West to Lat. 25° 09′ 00″ N., Long. 56° 21′ 30″ E, thence due West to Lat. 25° 09′ 00″ N., Long. 56° 21′ 00″ E. and include all waters, land and installations contained within that area.

DOCUMENTS: The provisional requirements are:–

Immigration:	Crew List	3 copies
	Passenger List	3 copies
Customs:	Crew List	2 copies
	Passenger List	2 copies
	Cargo Manifests	2 copies
	Alcoholic Beverages/ Bonded Stores List	2 copies
Port Operations:	Cargo Manifests	2 copies
	Stow Plan/Hatch List	2 copies
	Dangerous Cargo List	2 copies
	Transhipment Cargo	2 copies
	Heavy Lift List	2 copies
	Ro/Ro Discharge List	2 copies
For Inspection:	Last Port Clearance, Ship's Log.	
Certificates:	Safety Equipment, Construction, Load Line, Radio, Oil Record Book.	

All documents relating to cargo should be forwarded prior to vessels' arrival.

PILOTAGE: Compulsory, except for 'Country Craft' and M.E.N.A.S. tender.

Notice of ETA and request for a Pilot must be made not less than 24 hours before ETA at Fairway Buoy via vessels' Agents. Pilot launch will keep listening watch on VHF Channel 16, 2 hours prior to ETA.

The Pilot boarding point is 1 mile S.E. of the Fairway Buoy. Pilot boarding arrangements must be according to IMCO rules. Vessels awaiting a Pilot must anchor East of Long. 56° 25′ E. approx. 3 miles offshore. There is good holding ground in 40 m. to 59 m. of water.

ANCHORAGE: Vessels wishing to anchor offshore must not anchor West of Long. 56° 25′ E. They should report their position to either the Harbour Master on VHF Channel 16 or through "Confidence Fujairah" on VHF Channel 16.

Also see "Pilotage".

Offshore Anchorage Fee: The Chairman of the Department of Industry and Economy of the Government of Fujairah has issued a regulation concerning vessels anchored in Fujairah waters. It states that effective 12th February, 1983, all vessels anchored off Fujairah coastline will be liable to pay an anchorage fee. The fee is Dirhams 400 per day. The fee will be collected by vessel's Agents and made payable to Department of Industry and Economy, Government of Fujairah and paid to the Harbour Master, Port of Fujairah, P.O.Box 787, Fujairah, who will issue receipts.

Vessels anchoring for less than 24 hours to lift bunkers/water/provisions etc. will not be liable to pay fee. Wet docking/hull cleaning will not be liable to pay fee when serviced by companies duly licensed in Fujairah.

RESTRICTIONS: *Draft Restrictions:*

1. Vessels with a draft of less than 9 m. can be moved at any state of the tide.
2. Vessels with a draft of between 9 m. and 10 m. can only be moved from 5 hours before to 4 hours after predicted HW.
3. Vessels with a draft between 10 m. and 10.5 m. can be moved 4 hours before to 3 hours after HW.

Any variances to the above restrictions will be agreed by the Harbour Master, Port of Fujairah.

MAX. SIZE: Provisionally ships up to 205 m. LOA and 11 m. draft can be accepted.

HEALTH: Normal quarantine regulations apply. Radio Pratique can be obtained, via the vessel's Agent, providing the Master can state that no serious illness has occurred on board during the preceding 30 days.

RADIO: *Notice of Arrival:* Vessels should advise their ETA, Fujairah, at least 72 hours prior to arrival, giving draft, LOA and details of cargo operations. Agents should re-confirm 24 hours prior to vessels' arrival.

Also see "Health".

VHF: Fujairah Port Authorities, call sign "Fujairah Port Control" equipped with Marine Band VHF Radio Telephone Transceiver maintains continuous watch on Channel 16.

Vessels should establish radio contact with Fujairah Port Control Station if they intend anchoring in Fujairah Waters or are proceeding to Fujairah Port.

Following Channels are used by the Fujairah Port Authorities:

Station	*Hours of Watch*	*Channel*	*Function*
Fujairah Port Control	24	16	Distress, Safety and Calling Frequency
Fujairah Port Operations	24	09	Pilot Services
Tugs	24	08	Berthing/Unberthing
Working Channels	24	10&11	

Vessels in the Fujairah area are reminded not to use the above Channels except for the purposes specified.

RADAR: When Port Control is operational it will be equipped with radar. The pilot launch is equipped. However, fog is almost unknown though visibility is restricted by dust mainly – July and August.

TUGS: The use of tugs will be compulsory except at discretion of the Harbour Master. 2 tugs of 16 tonnes bollard pull are in operation fitted with foam monitors.

BERTHING: There is one quay 380 m. long with a least depth of 12.5 m. for 200 m. and 11.5 m. for 180 m. This is a concrete capped steel piled quay with rubber fendering.

There is a transit shed with 12,000 sq.m. of floor space with LCL facility.

STEVEDORES: The port will work on a 24 hour 7 day week basis. Requirements for port labour must be submitted to Operations Department by 1200 hrs. prior to to day required.

MEDICAL: Hospital facilities are available.

FRESH WATER: Good potable water is available ex quay to vessels working general cargo.

FUEL: Not available.

REPAIRS: Routine maintenance of medium engineering type is available. Offshore hull cleaning and repairs available.

SURVEYORS: Classification Societies and Surveyors can be brought from Dubai at short notice.

HATCHES: Rigging ship's gear, opening and closing of hatches, are the responsibility of the vessel.

REPATRIATION: This is permissible via Dubai and Sharjah International Airports, about 1.5 hours by road. Valid seaman's book and passport required.

DRY DOCKS: None.

TIME: GMT plus 4 hours permanent.

SHORE LEAVE: Shore leave is permitted.

HOLIDAYS: 1st day Id Al Fitr, 1st day Id Al Adha.

TELEPHONES: This service will be available aboard ships at the quay by prior arrangement through Agents.

PORT EQUIPMENT: 2×Mobile tower cranes 6 tons at 18 m. 2 × container cranes capacity 40 tons, 4 × rubber-tyred gantries to container yard (2,800 TEU's).

Forklift trucks: 1×30 ton top lift 20 ft./40 ft. 2×12 ton side lift empties. 6×5 tons. 3×2.5 ton container ship stuff. Yard road-and -roll trailers up to 50 tonnes. 10 yard tractors elevating fifth wheel/gooseneck. 6 tow tractors 60 tonnes tow capacity.

SHIP SERVICING: Gulf Agency Co. operate ship servicing along Lat. 25° 10′ N.

Barwil Shipping Services, Fujairah. Tel: 24800. Telex: 89040.

BANKS: British Bank of the Middle East, P.O.Box 21, Fujairah, U.A.E. Tel: 22221.

GENERAL: Garbage disposal services will be provided and will be compulsory. De-rat Exemption Inspectors are available.

Ship Chandlers: Complete chandlering facilities will be available.

DEVELOPMENTS: An additional deep-water quay length 200 m. to be built.

AUTHORITY: Port of Fujairah, P.O.Box 787, Fujairah, U.A.E. *Tel:* Fujairah 24231. *Telex:* 89085 Fport Em. *Contact:* Captain F. Ravenscroft, General Manager. Captain R.A. Saunders, Harbour Master.

AGENT: Gulf Agency Co. (Fujairah) Ltd., P.O.Box 590, Fujairah, U.A.E. Cables: "Confidence", Fujairah. Telex: 89046 ("Gacfuj EM"). Tel: 23300, 23301. After hours 22597.

HAMRIYAH, Sharjah: 25.35 N. 55.24 E. (See Plan Book)

LOCATION: Hamriyah Oil Terminal is located in the Emirate of Sharjah, United Arab Emirates, and consists of a shore tank with related onshore facilities, an offshore loading berth composed primarily of one single point mooring buoy and a 30 in. submarine pipe-line which runs from the shore tank to the loading berth. The shore tank is located outside the village of Hamriyah on the coastline between Umm Al Qaiwain and Ajman in approximate position Lat. 25° 29.5′ N., Long. 55° 30.7′ E. The loading berth is located in 71 ft. of water and is situated in an open and unsheltered roadstead approximately 7.6 miles offshore on a bearing of approximately 308° (T) from the shore tank and in approximate position Lat. 25° 34′ 31.68″ N., Long. 55° 24′ 5.8″ E.

Hamriyah Oil Terminal is owned by Amoco Sharjah Oil Company and is operated 24 hours a day, 7 days a week, weather and other circumstances permitting. Vessels are loaded and unmoored at any hour, weather and other circumstances permitting. Vessels are moored during daylight hours only, weather and other circumstances permitting.

Company's Facilities: The Company's administrative offices are located in the town of Sharjah and the Company's terminal offices, storage tank and laboratory for testing stock are located onshore near the village of Hamriyah.

FLAG: Vessels are required to fly the flag of the United Arab Emirates on the foremast during daylight hours while in Sharjah waters. The Sharjah territorial waters extend 12 nautical miles seaward from the Sharjah coastline.

DOCUMENTS: The following documents are required when calling at Hamriyah Oil Terminal:

Health Declaration.
Crew List.

PILOTAGE: *Mooring Master:* Vessels to be moored at the loading berth will be boarded by a Mooring Master about 3 miles due North of the loading berth in appproximate position Lat. 25° 37.5′ N., Long. 55° 24.1′ E. The Mooring Master will be provided by the Company and vessels will not be allowed to approach or depart from the loading berth without the Company designated Mooring Master being on board. The Mooring Master will advise vessel personnel on the approaches to the loading berth; the operations of mooring and unmooring; the raising, connecting, disconnecting and lowering of the floating cargo hose and in all other operations within the loading berth area. All manoeuvring of vessels within the loading berth area shall be performed by vessel personnel as directed by the vessel's Officer in charge and in accordance with the procedure advised by the Mooring Master.

Vessels are required to have a clean and efficient pilot ladder fitted with spreaders and manropes, safely and securely rigged, ready for the Mooring Master to immediately embark and disembark on the port side of the vessel and of sufficient length to reach the Mooring Master's launch. At night, adequate lighting must be rigged overside for the Mooring Master to approach or depart from the port side of the vessel and to use the pilot ladder safely. A lifebuoy with safety line and self-igniting light together with a rope messenger for the Mooring Master's bag shall also be available at the pilot ladder head. Vessels shall afford a "Good Weather Lee" and shall reduce speed as directed by the Mooring Master in order to effect the safe embarking or disembarking of the Mooring Master.

Whenever, as in the case of large vessels in light condition, the height of the deck above the water exceeds 30 ft., the accommodation ladder shall also be used in conjunction with the pilot ladder and shall be lowered to about 12 ft. above the water with the pilot ladder rigged immediately adjacent to the bottom platform of the accommodation ladder. A mechanical hoist of an approved pattern shall be considered an acceptable alternative to a conventional pilot ladder for use in conjunction with the accommodation ladder, but a mechanical hoist whose operation relies upon a single wire shall not be considered of an approved pattern. The rigging of the pilot ladder for the embarkation and disembarkation of the Mooring Master shall be supervised by a responsible vessel Officer and shall be effected so that the ladder is well clear of any overboard discharge and so that each step of the ladder rests securely against the vessel's side. If, in the opinion of the Mooring Master, the pilot ladder is not safe, the Mooring Master may refuse to board the vessel and any delay caused by such refusal shall be for the vessel's account.

Vessels shall provide food for the Mooring Master while on board the vessel and shall accommodate the Mooring Master in the Pilot's Cabin. Should vessels not be equipped with a Pilot Cabin, the Mooring Master shall be accommodated in a cabin equivalent to that required for an officer on the vessel. The Mooring Master shall have access to the bridge and/or central area of the vessel and such areas shall not be locked or otherwise arranged to prevent immediate entry at any time by the Mooring Master.

ANCHORAGES: The customary anchorage area for vessels awaiting the loading berth at Hamriyah Oil Terminal is a circle 0.5 miles in diameter and with its centre located 3 miles due North of the loading berth in approximate position Lat. 25° 37.5′ N., Long. 55° 24.1′ E. Anchorage within 3 miles of the loading berth or of the 30 in. submarine pipe-line which runs from the shore tank to the loading berth is prohibited unless otherwise designated by the Company or the Mooring Master.

HEALTH: The rules governing the quarantine of vessels are the same as those found in other parts of the world.

MAX. SIZE: Max. draft 55 ft. Max. size 80,000 d.w.t.

Also see "Berthing".

RADIO/VHF: *Initial Radio Communications:* The radio station at Bahrain will handle the initial radio communications between vessels and the Company. The station call sign is "A9M" and the station operates on a 24 hour basis.

Advice of Arrival: It is important that vessels establish radio contact with the Company and with Lamnalco (Sharjah) Ltd. when 3 days distant from Hamriyah Oil Terminal and maintain such contact until just prior to arrival at Hamriyah Oil Terminal. Vessels should send an ETA telex to the Company (Telex: 68685 Amcosh EM) and Lamnalco (Sharjah) Ltd. (Telex: 68433 Lamshj EM) not less than 72 hours prior to arrival at Hamriyah Oil Terminal, providing the following information:

1. The ETA;
2. The estimated draft, fore and aft, upon arrival;
3. The quantity of crude oil to be loaded and the grade of such;
4. The estimated sailing draft;
5. The last port of call;
6. Whether the vessel has a clean Bill of Health, and;
7. The distance from the bow to the centre of the vessel's manifold.

This first ETA message should also include a definite statement of the details of any equipment required from shore for connecting the floating cargo hose to the vessel's manifold. Further ETA telexes should be sent to the Company and Lamnalco (Sharjah) Ltd. when the vessel is 48 hours and 24 hours distant from Hamriyah Oil Terminal confirming or giving notice of any change in the 72 hour ETA and at any other time after the 24 hour ETA telex when a change by more than 2 hours occurs in the ETA. The 24 hour ETA telex should include a positive statement regarding the vessel's readiness to load on arrival and the number of hours that will be required by the vessel to discharge clean ballast. Local time is GMT plus 4 hours and Daylight Saving Time (Summer time) is not applicable.

Ship-To-Shore Communications: The Company and Lamnalco (Sharjah) Ltd. are equipped with VHF radiotelephone using international frequencies and maintain a radio watch on the international VHF Marine Channel 16 and on Channel 74. Not less than 12 hours prior to the vessel's ETA at Hamriyah Oil Terminal, the vessel is required to maintain a radio watch on R/T frequency 2182 and on VHF Channel 16. Masters are recommended to use this facility as soon as the vessel is within range since such communications are the best means of avoiding delay in the mooring of the vessel. While a vessel is at the loading berth, the Mooring Master will be in direct charge of the portable VHF ship-to-shore radiotelephone and all ship-to-shore communications will be by portable VHF radiotelephone. The Mooring Master will advise the Master and Officers regarding the emergency whistle signals set up for use in the event the VHF radiotelephone units become inoperative. The use of the vessel's radio station and/or battery charging equipment is prohibited during cargo loading operations.

Radio Watches: While at the anchorage awaiting the loading berth, vessels should maintain a listening watch on R/T frequency 2182 and on VHF Channel 16 with the Company and Lamnalco (Sharjah) Ltd.

TUGS: *Mooring Launch:* The Company will provide a mooring launch which is owned by Lamnalco (Sharjah) Ltd. to assist in the mooring and unmooring of the vessel. The mooring launch will be harboured in the town of Sharjah at the boat pier used by Lamnalco (Sharjah) Ltd. and will operate under the direct control of the Mooring Master.

READINESS: *Loading Readiness and Arrival Time:* Upon arrival of the vessel at the customary anchorage for the loading berth, the Master or his Agent shall give the Company notice by letter, telegraph, wireless, or telephone that the vessel is ready to load. Laytime shall commence upon the expiration of 6 hours following the acceptance of such notice by the Company provided that the vessel has been nominated to load cargo and the terminal holds such cargo nomination and further provided that the Mooring Master has deemed the vessel to be in all respects ready to moor and load. The Notice of Readiness will be accepted only between the hours of 0600 and 1800 but will not be accepted at any time when Hamriyah Oil Terminal is closed or on a public holiday or a Friday (the Moslem Sabbath). If, however, the vessel is moved to the loading berth without delay after having arrived at any time and the vessel is in all respects ready to moor and load in the opinion of the Mooring Master, the Notice of Readiness will be accepted at the time the Mooring Master boards the vessel. Laytime shall continue until the floating cargo hose has been disconnected from the vessel's manifold.

BERTHING: Tenders to load crude oil will normally be accepted and the loading berth will be assigned to a vessel in the order of its arrival, provided the vessel has a nomination for crude oil valid at the time and is in all respects equipped and ready to moor. In the event that mooring is delayed on account of weather, the vessel will keep its position in line. Should the vessel be required to leave the area on account of weather, the vessel should keep in radio contact with Hamriyah Oil Terminal in order to make the vessel available as soon as the weather moderates. The Company reserves the right to load vessels "out of turn" following the return of good weather, to the extent that such loading "out of turn" does not materially delay the loading of other vessels in line. For example, should weather make it necessary for a specific vessel waiting at the loading berth or at the anchorage to vacate the area, the Company may load another vessel which arrived at the anchorage after the specific vessel but before the return of the specific vessel which was waiting in line ahead of the the other vessel.

When the vessel proceeds to within a reasonable distance from the loading berth and upon advice from the Mooring Master, the mooring lines of the vessel will be carried by the launch to the floating buoy lines, secured thereto, and brought on board the vessel. On the vessel's end of the mooring lines there is a steel chafing chain which can be observed when the floating buoy lines come out of the water. This chafing chain will be secured to the vessel's bitts by way of Company-supplied mooring strops in such a manner that the floating buoy lines shall remain outside the vessel thereby allowing the chafing effect at the fairleads to be taken by the chafing chain. All mooring details and the sequence of movements shall be directed by the vessel's Officer in charge following consultation with the Mooring Master. When the mooring operations have been completed, fire wires of at least 150 ft. in length will be secured to the vessel's bitts and run out at the bow and stern of the vessel's starboard side and held in place on short stoppers with the eyes approximately 6 ft. above the surface of the water so that they can be readily available to a tug in case of an emergency.

Loading Berth: Vessels are loaded by means of a 30 in. submarine pipeline which runs from the shore tank to the loading berth and by means of a floating cargo hose which runs from the loading berth to the moored vessel. The maximum draft allowed for vessels at the loading berth is 55 ft.

Mooring Facilities: The Single Point Mooring Buoy moors vessels from the bow and consists primarily of a cylindrical buoy which is secured to the seabed by 6 catenary anchor legs each of which are tethered to the seabed by a heavy duty anchor system. The cylindrical buoy is 5.3 m. in height, fitted with a skirt 16 m. in diameter, and equipped with a radar reflector and a racon beacon coded "Zulu", frequency 48 seconds. The cylindrical buoy will be able to accept vessels up to 80,000 d.w.t. and is also equipped with a navigational light, white flashing code "U", which has a range of 5.7 miles with transmission factor of 0.85 and is visible through 360°. The Mooring Master may allow vessels in excess of 80,000 d.w.t. to moor at the cylindrical buoy provided the vessel has first obtained the written permission of the Company to moor at the facility.

Vessel's Alertness: The loading berth is on an open and unsheltered roadstead; therefore, from the time the Mooring Master boards the vessel until the vessel has loaded her cargo and the Mooring Master has disembarked, full power must be available at all times on all deck winches and windlass and other gear of the vessel and the vessel's engines, steering machinery and other efficient manoeuvring equipment must likewise be maintained in constant readiness with full power for immediate use so as to allow the vessel to depart from the loading berth at any time following a request by the Mooring Master or the Company to do so.

The vessel's personnel should be at their stations and alert at all times during mooring, unmooring, hose handling and cargo loading operations. Where vessels are equipped with an electric clutch control to the propeller shaft, such vessels must disconnect the electrical clutch control and the manual clutch control so that there will be no possibility of the engine engaging the propeller shaft while the vessel is moored. Constant observation in the engine room, control room and deck control room shall be provided at all times while vessels are at or in the vicinity of the loading berth.

Also see "Loading".

LOADING: *Vessel's Gear:* Prior to the arrival of any vessel at the Mooring Master Boarding Area, the port derrick of the vessel should be up and ready to lift the mooring and hose connection gear on board the vessel from the mooring launch, and the vessel must be equipped on the forecastle head with at least 4 good quality mooring lines, each not less than 120 fathoms in length and of buoyant material if possible, together with an adequate supply of lashing ropes and shackles. The mooring lines should be laid out free for running adjacent to bitts and warping winches. The warping winches or windlass should be in good working order and must be adequate to handle mooring lines under heavy strain and efficient stoppers must be readily available to "hang off" the mooring lines and transfer same from the winch to the bitts.

On the port side opposite the vessel's manifold, there must be equipment capable of lifting the floating cargo hose safely and efficiently, a 7.5 ton lift, from the sea surface over the port rail to the vessel's manifold. Vessels must also have an adequate supply of nuts, bolts, gaskets and wrenches to connect the floating cargo hose. If, in the opinion of the Mooring Master, the vessel is not equipped with adequate mooring or loading facilities or lines or gear, the Mooring Master must so inform the vessel's Master and in such event the vessel will not be brought into the loading berth until the facilities or lines or gear are deemed satisfactory by the Mooring Master.

Connecting Hose: After the vessel has been securely moored, the floating cargo hose will be hoisted to the vessel's port side rail amidship by vessel's equipment. The floating cargo hose is a 20 in. (reducing to 16 in.) diameter floating hose, 920 ft. in length, fitted with a 150 ASA flat face flange for connection to the vessel's manifold. The vessel should have adapters and fittings on board so as to enable such floating cargo hose to be connected to the vessel's manifold. The raising, connecting, disconnecting and lowering of the floating cargo hose will be performed by the vessel's crew as directed by the vessel's Officer in charge who must be present at all times during such operation and in accordance with the procedure advised by the Mooring Master, who will remain on board the entire time the vessel is at the loading berth. Particular care should be taken during all such hose operations to avoid damage to the floating cargo hose and its fittings.

Rate of Loading: The crude oil flow is by pump and the maximum crude oil loading rate for vessels using one 16 in. deck hose and 150 p.s.i. at vessel's rail is approximately 23,000 barrels per hour. In order to save vessel time and make the loading berth available for other vessels, it is requested that ballast be pumped as fast as possible and that vessels receive oil as fast as it can be delivered, with both operations having due regard for safety. It is requested that any impediment (such as "Y's", strainers or mud boxes) to the flow of crude oil into the vessel, be removed before the arrival of the vessel at the loading berth.

Responsibility: Prior to the commencement of any cargo loading operation, the Mooring Master and the Officer in charge of the loading operations for the vessel shall engage in a pre-loading conference to formulate a loading plan and to ensure that the vessel is in all respects ready to load. No cargo loading shall take place without the permission of the Mooring Master whose permission shall not be given until the pre-loading conference has been completed. The vessel's Master shall remain responsible for the safety of the vessel and all operations on board the vessel at all times. The Mooring Master will advise the Officer in charge of the loading operations for the vessel with respect to the loading pressures and hazards but the Mooring Master will not direct any aspect of the loading except as may be necessary to protect the loading berth and related facilities and equipment. The manipulation of the vessel's valves is the direct responsibility of vessel's personnel. The Mooring Master shall have the right to suspend cargo loading operations or to require the vessel to unmoor and depart from the loading berth at any time when the mooring plan, pre-loading plan or the safety requirements and regulations set forth herein are not being followed by the vessel, or at anytime the Mooring Master believes or becomes aware of the existence of any other reason which in his opinion shall require the suspension of the mooring or the loading of the vessel.

Oil Valve Control: The incoming oil stream is controlled onshore and the vessel's valves must not be closed against the incoming oil stream. Such a procedure creates an excessive pressure which may damage the hose or other terminal facilities and could result in a pollution incident. Vessels will be held legally responsible for any damage resulting from the vessel's failure to observe this precaution. Frequent checks of the cargo loading must be made by vessel personnel during the loading operation so that a reduction in the loading rate, before topping of the final tank or tanks, may be arranged through the Mooring Master by the Officer in charge of the loading operations for the vessel. A normal standby warning should be given about 15 minutes before the shutdown of the loading operations. Upon the request from a vessel to shut down the loading operations, a minimum of 5 minutes will be normally required to stop the flow of crude oil. Vessel's personnel shall be responsible for the call to stop the loading of the vessel. When cargo has ceased to flow, the valves on the shore will be closed and the vessel's manifold valves may then be closed.

Emergency Signal: Should normal ship-to-shore communications fail, the emergency whistle signal will be a continuous blast on the vessel's whistle. Steam or air should never be shut off from the whistle during loading. Whenever the emergency whistle signal is used, all loading operations will be shut down until communications can be established with the vessel giving the signal. For this reason, it is requested that vessels in the area refrain from using their whistles for other than essential purposes and that the use of the "continuous blast" whistle signal be reserved for emergency purposes only. All crew members who stand a deck watch during the transfer of crude oil are expected to know the emergency shutdown signal.

Code Flag: During all cargo loading operations, the International Code Flag "B" shall be displayed from a topmast signal halyard during daylight hours and a red light shall be displayed during the hours of darkness. The red light should be of a character as to be visible at a distance of at least 1 mile and show an unbroken light around the horizon.

Shore Stops: Request for the terminal to stop the flow of crude oil at a predetermined tonnage must be made in writing to the Company and will be deemed to include the statement and understanding that the Company will not be responsible for (1) any errors, costs or claims arising from such request and (2) any crude oil loaded in excess of that requested will not be pumped back ashore. Some delays in stopping the flow of crude oil are always incurred when such a shore stop request is made.

BALLAST: There are no facilities for the offloading of dirty ballast but clean oil-free ballast may be discharged overboard from the vessel. It is the Master's responsibility to see that no oil (crude, bunker, diesel, bunker C, or oily bilge water) is pumped or spilled overboard from the vessel. All deck scuppers must be plugged tight and adequate drip pans with sand must be provided where necessary on deck for use at all times, especially when disconnecting hoses, in order to prevent any such loss of oil overboard. The waters in and adjacent to the loading berth must not be polluted and only clean oil-free ballast may be discharged inside of a line running 50 miles from and parallel to the coastline of the United Arab Emirates.

The discharge of oil mixtures from vessels while en-route to Hamriyah Oil Terminal is prohibited except when the following conditions are all satisfied:

1. The instantaneous rate of discharge of oil content of the oily mixture does not exceed 60 litres per mile.
2. The total quality of oil discharged on the ballast voyage does not exceed 1/15,000 of the total cargo carrying capacity of the vessel, and
3. The vessel is more than 50 miles from the nearest point on the coastline of the United Arab Emirates.

Masters are warned that when disposing of dirty ballast or bilge water, (50 miles or more from the coastline of the United Arab Emirates), all pipe-lines, sea suctions, strainers and pumps which are later to be used to discharge clean ballast, must be flushed clean, so that there will be no chance of even a small amount of pollution when the clean ballast is pumped overboard.

Vessels must have sufficient ballast for safe manoeuvring and, where practicable, should arrive at the loading berth with the propeller completely submerged and trimmed 8 ft. to 10 ft. by the stern. The Mooring Master may refuse to permit the mooring of any vessel not in compliance with these requirements until the vessel takes on sufficient ballast and/or alters her trim to meet these requirements.

As soon as practicable after arrival, vessel tanks will be inspected for evidence of oil in ballast and during the discharge of ballast a similar inspection will take place. If evidence of oil appears at either of these inspections, the vessel must return to a point not less than 50 miles from the coastline of the United Arab Emirates and discharge such dirty ballast.

Any vessel required to return to a position at least 50 miles offshore, for the purpose of discharging dirty ballast, cleaning tanks or for any similar reason, automatically nullifies any Notice of Readiness already tendered and at the same time loses any priority held for loading. Vessels must tender a new Notice of Readiness upon their return and the vessel will be entered for loading upon the Company's acceptance of the new Notice of Readiness.

Vessels must keep a constant watch on the side of the vessel from which clean ballast is being discharged for any indication of water discolouration or oil sheen. Discharge of ballast must be immediately suspended should there be any indication of discolouration or sheen and the Mooring Master shall be immediately informed of such. An investigation of any such discolouration or sheen shall be carried out by the vessel and the findings reported to the Mooring Master. Discharging shall not resume without permission of the Mooring Master.

If, during any inspection or during the process of loading, it is revealed that a vessel's tank is not oil-tight, the vessel will be rejected by the Mooring Master and refused further loading until satisfactory evidence of effective repairs is submitted and the vessel is duly certified by Lloyd's Register of Shipping, American Bureau of Shipping or another similarly recognised classification society.

In addition to the lights usually displayed, vessels are required to illuminate the vessel and the waters around the vessel with all available and suitable searchlights and floodlights during the discharge of clean ballast and the loading of crude oil during the hours of darkness. Such illumination must be to the satisfaction of the Mooring Master and must be undertaken so as to assist in the loading operations and in order that any oil on the surface of the sea may be readily detected and appropriate action taken. Vessels unable to illuminate the sea satisfactorily may not discharge ballast or engage in the loading of crude oil during the hours of darkness and any such delay shall be for the account of the vessel.

MEDICAL: Vessels requiring emergency medical assistance should contact Hamriyah Oil Terminal by VHF radio and supply the necessary pertinent information which will be passed on to the vessel's Agent. Neither medical or hospital facilities are available at Hamriyah Terminal, but private doctors and hospital facilities are available in the town of Sharjah.

CONSULS: There are no consulates in the village of Hamriyah; however, consular or diplomatic representatives for many nations maintain offices in the cities of Abu Dhabi and Dubai.

REPAIRS: The Masters of vessels loading at the loading berth are advised that the loading berth is considered an "open and unsheltered roadstead" and under no circumstances may engines be shut down for repairs while the vessel is at the loading berth. There are no facilities for making vessel repairs at Hamriyah Oil Terminal and no repairs will be allowed at the loading berth. However, arrangements can be made through the vessel's agent to utilise the repair facilities at other ports.

SURVEYORS: No cargo inspectors or marine surveyors are based at the village of Hamriyah but inspectors and surveyors who reside at other ports can be arranged through the vessel's Agent.

SHORE LEAVE/REPATRIATION: Vessel personnel (other than medical emergency cases) are not allowed to embark or disembark from the vessel at the loading berth. There are no facilities for crew change at the loading berth.

WEATHER: *Climate:* The climate along the coastline of Sharjah is characterised by cool Winters and very hot Summers. The annual mean rainfall is 4.2 in. and the relative humidity varies considerably according to the time of day with the highest relative humidity generally in the early morning and the lowest relative humidity generally in the early afternoon. The air temperature is generally moderate in the Winter, but is high in the Summer and can be extremely high in the interior on Summer afternoons.

Weather Data Summary:

Annual mean rainfall	4.2 in.
Lowest mean daily minimum air temperature	55°F.
Highest mean daily maximum air temperature	102°F.
Lowest average monthly sea surface temperature	72°F.
Highest average monthly sea surface temperature	90°F.

Winds: The winds in the Southern part of the Gulf are usually light and generally blow from the Western quadrant most of the year but are occasionally interrupted by winds from varying directions. The visibility along the Sharjah coastline is generally good but from June to September the Shamal blows over the Gulf area and frequently produces rough seas and stirs up dust clouds which can affect visibility at sea. The cold fronts which move down the Gulf from November to April frequently cause a North or N.W. wind of 20 knots or more along the Sharjah coastline with accompanying swells.

Tides: The tide for Sharjah can be predicted with reasonable accuracy through use of the tide tables for Shatt Al Arab with the appropriate correction factor for Sharjah applied.

Currents: The current along the Sharjah coastline has a predominantly counter-clockwise circulation throughout the year and is not generally strong. The strongest current is usually during the month of January (0.46 to 0.8 knots) and during the month of April (0.6 to 1.7 knots).

Seas: High waves generally do not occur along the Sharjah coastline since the winds are usually light in the vicinity of the coastline. On those occasions when the wind does become strong, the wave heights generally remain somewhat limited since the distance over which the wind can blow to generate waves is somewhat short from most directions due to the bend in the Gulf which tends to reduce the fetch of North winds at Sharjah (e.g., waves over 8 ft. occur 0.2 per cent of the time).

SAFETY: The vessel's personnel are responsible for the safety of the vessel and themselves and shall take all necessary precautions, whether or not so advised by the Company or the Mooring Master, having in mind the hazards of the loading operation, the cargo being handled, the weather condition and any other circumstances requiring special care or caution. The vessel's personnel shall also adhere to all safety precautions generally followed in the marine industry as well as all requirements and regulations imposed by the Company. Any safety precautions, requirements and regulations imposed by the Company and disregarded by the vessel's Master, Officers or crew will be considered a just cause for rejection of the vessel and all expenses related thereto shall be for the vessel's account. While the vessel is moored or within the vicinity of the loading berth, the vessel's personnel and the vessel's operations must comply or be in accordance with the following safety requirements:

(a) All ports opening onto the decks of the vessel are to be kept closed during cargo loading operations and all doors opened for access other than the pumproom doors must be closed immediately after use.

(b) Smoking is strictly prohibited on board the vessel and on the loading berth except in those areas designated by the Master as smoking areas. No areas outside of the accommodation areas shall be so designated. The Master is responsible for ensuring that all vessel personnel are informed of the designated smoking areas and shall post suitable notices regarding same. The Mooring Master may request the Master to further limit the vessel's "No Smoking" areas as conditions warrant. Matches and lighters for personal use shall not be carried while outside the designated smoking areas and personnel shall be so instructed. The Master shall instruct the Officers and crew of the vessel not to throw lighted cigars or cigarettes overside or out of port holes. There may be occasions when smoking will be entirely prohibited.

(c) The use of portable lamps, naked lights or electrical equipment on extension cords is prohibited and only approved intrinsically safe self-contained flashlights are permitted on deck.

(d) Ventilators must be so trimmed as to exclude flammable gases entering the area and if this cannot be done the ventilators must be completely closed.

(e) The vessel's engines, steering gear and other essential manoeuvring equipment and deck machinery must remain ready with full power for immediate use to permit the vessel to clear the area upon instruction from the Company or the Mooring Master to do so.

(f) Window type air conditioners must be disconnected from their power source and not used unless a certificate can be produced from a recognised authority to show that the unit is safe to operate in flammable gas areas.

(g) The vessel's main radio and radar equipment must not be energised while the vessel is handling cargo or ballast. The use of intrinsically safe VHF radios for cargo handling and safety operations are permitted.

(h) A continuous and efficient fire watch must be maintained on deck and in the engine room at all times. The vessel's fire fighting equipment shall be ready for instant use at all times throughout the vessel. Fire hoses of sufficient length to reach all parts of the vessel must be laid out and connected to hydrants and there must be full pressure on the deck line.

(i) Recommendations contained in the I.C.S. International Safety Guide for oil tankers and terminals covering the loading and discharge of tankers shall be strictly followed at all times.

(j) The only open flames allowed while the vessel is at the loading berth are those in the vessel's boilers and galley equipment. Sufficient fire extinguishers must always be provided near the galley and boilers.

(k) Burners, tubes, uptakes, exhaust manifolds and spark arrestors shall be maintained in good working order and kept clean. Funnel uptakes and boiler tubes shall not be blown while the vessel is at the loading berth. Highly volatile cleaning solvents shall not be used in the engine room for any purpose whatsoever while the vessel is at the loading berth.

(l) In the event of fire breaking out on any part of the vessel, however minor the fire may be, the fire alarm must be given immediately. The fire alarm will consist of a succession of long blasts on the vessel's whistle together with a rapid and continuous ringing of the vessel's bell.

(m) Not less than 1 deck Officer and 3 seamen shall be on duty, alert, available and in charge of the operations on deck at all times while the vessel is at the loading berth.

(n) Not less than 1 engineer shall be on duty, alert, available and in charge of the engine room at all times while the vessel is at the loading berth.

(o) A member of the vessel's crew, not one involved in any way with the loading operation, must be stationed on the bow of the vessel while the vessel is at the loading berth and a constant watch must be maintained on the moorings.

(p) During the discharge of clean ballast and the loading of crude oil, the vessel and the waters around the vessel must be illuminated during the hours of darkness with all available and suitable searchlights and floodlights.

(q) Before the floating cargo hose is brought on board the vessel, all deck scuppers must be plugged tight and adequate drip pans with sand must be provided where necessary on deck for use at all times. The deck scuppers must remain plugged until the floating cargo hose has been disconnected. All other materials necessary to clean up any oil spillage on deck must be on hand for immediate use.

(r) All unused bunker connections, cargo connections and vessel manifolds must be fitted with blank flanges including the stern discharge line if fitted.

(s) All cargo tank hatch covers and ullage port covers are to be kept closed except where tanks are to be hand sampled or hand ullaged in which case the ullage openings may be opened to sample or ullage the cargo.

(t) All cargo and ballasting operations shall be suspended during electrical storms in the vicinity of the vessel.

(u) Prior to the commencement of any loading operations, all empty vessel cargo tanks and tanks carrying cargo must be under positive pressure and fully inerted with gas having an oxygen content of less than 8 per cent.

(v) THE COMPANY DOES NOT HAVE A TUG OR VESSEL IN THE AREA EQUIPPED WITH FIRE FIGHTING APPARATUS.

GENERAL: *Government Officials:* Sharjah Officials such as the Customs Officer, Quarantine Officer, Immigration Officer, Captain of the Port and Police, are stationed in the town of Sharjah. Should Customs Guards be stationed on board the vessel while at the loading berth, it is expected that the vessel will provide food for these guards and other Sharjah Officials. Vessels calling at the loading berth must provide an accommodation ladder rigged on the port side for such Sharjah Officials.

Visitors: Visitors are not allowed to embark or disembark from the vessel at the loading berth.

Supplies: Commissary supplies, steward's stores, laundry services, fresh water, marine lubricants and bunkers are not available through the Company and may not be loaded at the loading berth. Any questions concerning the availability of such items from other sources and the loading of such items elsewhere should be handled through the vessel's Agent.

Contraband: The Company prohibits unauthorised craft from coming alongside vessels while at the loading berth without the permission of the Mooring Master. To avoid the possibility of undesirable items getting aboard vessels, it is recommended that Masters discourage any such craft from coming alongside while vessels are at or in the vicinity of the loading berth.

Garbage: The dumping of garbage and refuse overside is prohibited.

Agency: The Company does not perform any vessel Agency functions. Vessels calling at Hamriyah must arrange for their own Agents.

DEVELOPMENTS: Dredging underway of an approach channel (6 km. in length and 15 m. depth and harbour basin depth 14 m.) to new LPG plant presently under construction. Dredging to be completed mid-1986.

SHIPMASTER'S REPORT: July 1983.

Location: Hamriyah Oil Terminal is owned by Amoco Sharjah Oil Company. The terminal is located in the Emirate of Sharjah, United Arab Emirates. A 30 in. pipe-line runs from the shore tank to a S.P.M. located in position Lat. 25° 34′ 31.68″ N., Long.55° 24′ 05.8″ E. and is operated by Lamnalco.

Documents: Health Declaration and Crew Lists. Customs, Immigration and Quarantine officers have an office in Sharjah but usually do not come on board.

Pilotage: A pilot ladder to be prepared on vessel's Port side and lowered to about 12 ft. above the waterline. If the height of the deck exceeds 30 ft. a pilot ladder in conjunction with the accommodation ladder must be rigged.

Anchorages: The customary anchorage for vessels awaiting the loading berth of Hamriyah Oil Terminal is 3 miles due North of the S.P.M. Anchorage within 3 miles is strictly prohibited unless instructed by the Mooring Master.

Max. Size: Vessels up to 250,000 tons have been accepted.

Health: Rules are the same as found all over the world.

Radio/VHF: Amoco Sharjah and Lamnalco should be contacted by radio 3 days prior arrival via Bahrain Radio and maintain contact until prior arrival.

Telex addresses: 68685 Amcosh EM and 68433 Lamshj EM.

Following information is required by both parties:

1. ETA.
2. Arrival Draft.
3. Quantity to be loaded.
4. Estimated sailing draft.
5. Last port of call.
6. Whether vessel has clean bill of health.
7. Distance bow to manifold.

Both companies keep watch on international VHF Marine Channel 16.

Berthing: This cylindrical buoy is equipped with a navigational white flashing light code "U", range 5.7 miles, a radar reflector and a racon beacon coded "Zulu".

On forecastle, vessel should have 4 good quality mooring lines, minimum length of 120 fathoms and preferably of the floating type. Vessel's lines to be used to pick up the mooring lines of the buoy. The end of the buoy's mooring line consists of a steel chafing chain and will be secured onto vessel's bitts by mooring strops supplied by Lamnalco.

Port derrick should be up and ready for lifting moorings and cargo hose connecting gear and capable of lifting 7.5 tons safely.

Mooring Master and Cargo Oil Surveyor stay on board while vessel is on the berth and both to be accommodated in an officer's cabin and meals served in officer's messroom.

Notice of Readiness: Will only be accepted between 0600 and 1800 hrs. but will not be accepted at times when the Hamriyah Oil Terminal is closed on a public holiday or Friday (Moslem Sabbath). However, if the vessel is moved to the berth without delay after having arrived at any time and vessel is ready for mooring and loading the Mooring Master will accept the N.O.R. at the boarding time. Laytime shall commence upon expiration of 6 hours after accepting the N.O.R. and shall continue until hose has been disconnected from vessel's manifold.

Loading: The floating hose is 20 in. diameter with a 16 in. hose for connecting to the vessel's manifold. Loading rate approximately 23,000 bbls.p.h. Only one type of oil available, being crude oil condensate approximately API 50/60F and loading temperature approximately 95°F.

Ballast: There are no dirty ballast reception facilities and all vessels must arrive with sufficient clean ballast for manoeuvring with the propeller submerged and a trim of 8 – 10 ft. by the stern. Non-permanent clean ballast to be discharged prior to commencing of loading.

Medical: Neither medical nor hospital facilities are available at Hamriyah Oil Terminal. Requests for emergency medical assistance should be passed to Hamriyah Oil Terminal by VHF and the information will be passed to vessel's Agent. Private doctors and hospital are available in the town of Sharjah.

Supplies: Stores, fresh water, laundry services, bunkers and lubricant not available via Amoco and may not be loaded at the berth. Availability of items should be handled through vessel's Agent and loading carried out elsewhere.

Consuls: No consulates in Sharjah; however, many nations have consular or diplomatic representatives in Abu Dhabi and Dubai.

Repatriation/Shore Leave: Not permitted while at loading berth.

Currents: Predominantly counter-clockwise circulation throughout the year along the Sharjah coastline and is generally not strong. Strongest in January (0.4–0.8 knots) and in April (0.6–1.7 knots).

Weather: Winds are usually light from Western quadrant, except during June to September when the Shamal blows and from November to April during passing of cold fronts with winds up to 20 knots producing rough seas.

AUTHORITY: *Operator:* Amoco Sharjah Oil Company, P.O.Box 1191, Sharjah, United Arab Emirates. *Tel:* 355100. *Telex:* 68685 Amcosh EM.
Contact: Operations Manager.

AGENT: See "Sharjah".

HULAYLAH TERMINAL, Ras Al Khaimah:
25.58 N. 55.56 E.

LOCATION: The geographical location of the Hulaylah Terminal SPM is: Lat. 25° 58′ 26″ N., Long. 55° 56′ 11″ E.

Hulaylah Terminal is the export crude oil facility operated by Gulf Offshore Ras Al Khaimah Petroleum Limited located approximately 6 miles offshore from Mina Saqr, Ras Al Khaimah, United Arab Emirates.

Crude oil from the Saleh offshore field is transferred to export tankers at the offshore SPM from the storage tanker "Afran Zodiac" of 227,778 d.w.t. in a side-by-side ship-to-ship transfer operation.

The storage tanker "Afran Zodiac" is permanently moored to the SPM which is located in a minimum water depth of 100 ft.

The storage tanker receives crude oil through a forward loading line from the SPM which in turn is connected to a submarine pipe-line which runs to the Saleh Field Production Platform.

Saleh field production facilities are located at the following positions:

	Latitude	*Longitude*
Saleh 1 and Production Platform	26° 11′ 31″ N.	55° 42′ 27″ E.
Saleh 1 Flare	26° 11′ 44″ N.	55° 42′ 35″ E.
Saleh 2 Platform	26° 11′ 43″ N.	55° 42′ 16″ E.
Saleh 3 Platform	26° 10′ 11″ N.	55° 41′ 47″ E.
Saleh 4 Platform	26° 10′ 27″ N.	55° 45′ 37″ E.

DOCUMENTS: None required.

PILOTAGE: The Mooring Master Boarding Area for the Hulaylah Terminal is 3 miles Westward of the storage tanker "Afran Zodiac", or boarding will be at the anchorage as appropriate.

The GORAKP Mooring Master will remain on board throughout the export vessel's stay on the berth to co-ordinate the petroleum transfer operation; therefore, suitable and adequate accommodation shall be provided for him on board the export vessel.

Arrival at Pilot Station/Anchorage: Means of access to the vessel by the GORAKP Mooring Master shall be provided in accordance with the requirements of SOLAS, and early advice will be given by GORAKP as to the side of the vessel that access should be provided.

At night the access area shall be adequately illuminated to provide for the approach and boarding of the GORAKP Mooring Master, Government Officials and for GORAKP Representatives.

The Conditions of Entry into and Use of Hulaylah Terminal and Agreement for the Hiring of Tugs will be presented to the Master of the export tanker and shall be signed by him on behalf of himself, the vessel and its Owners prior to departure from the pilot station/anchorage and commencement of berthing operations.

The Notice of Readiness will be accepted only between the hours of 0600 and 1800 provided the GORAKP Mooring Master is satisfied that he export vessel is apparently in all respects ready to moor and load. Notice of Readiness will not be accepted during a period when the port s closed on account of adverse weather, or when an export vessel arrives prior to the date upon which it is nominated to load.

The foregoing paragraph notwithstanding, in no event shall a Notice of Readiness, whether previously accepted or not, be valid or binding on he Terminal unless and until such time as the export vessel, her tanks and equipment, are, in fact, in every respect whatsoever in the proper condition and operation to receive the cargo.

ANCHORAGES: Should it be necessary to anchor, then vessel should proceed to the recommended Tanker Anchorage Area which is within a circle 0.5 miles in diameter and with its centre located in position Lat. 25° 58′ N., Long. 55° 53′ E.

RESTRICTIONS: Berthing possible during daylight hours only.

MAX. SIZE: Max. deadweight of 150,000 tons permitted alongside the Afran Zodiac”. Partially loaded tankers acceptable. Water depth 100 ft.

HEALTH: No health clearance requirements currently in force.

RADIO: Following receipt of a nomination of an export vessel to load at he Hulaylah Terminal, GORAKP will cable to that vessel via Bahrain Radio (A9M) details of nomination, loading API and temperature, and berthing prospects.

On receipt of this cable, and in any case not later than 72 hours prior o arrival time at Hulaylah Terminal, the export vessel is required to able to GORAKP via Bahrain Radio the following information:

- (a) Name of vessel.
- (b) ETA in GMT (U.A.E. time is GMT plus 4 hours throughout the year).
- (c) Name of Master.
- (d) Estimated arrival draft, fore and aft, and displacement.
- (e) Time for discharging clean ballast, if any.
- (f) If vessel proceeding to any port(s) prior to Hulaylah, and if so, any delays anticipated.

Sections (a) and (b) of above message should be repeated via Bahrain Radio 48 hours, 24 hours and again 12 hours prior to the export vessel's arrival at the Hulaylah Terminal and at any other time when ETA changes more than 1 hour.

When approaching the Terminal, an export vessel should contact the torage vessel “Afran Zodiac” on VHF Channel 16 (156.8), establishing a working channel and confirming ETA.

VHF: *Export Tanker – Storage Tanker Communication:* When the export anker is at the anchorage, communication between the storage tanker and the export tanker will be established on VHF Channel 16 or on a mutually agreed VHF channel.

When alongside the storage tanker, communication between the two vessels will be maintained by VHF equipment. In those cases where the VHF equipment on board the export tanker is not compatible with the Zodiac” equipment, the GORAKP Mooring Master will arrange for the availability of compatible VHF sets for use during the transfer operation. These sets shall be returned to the GORAKP Mooring Master prior to his departure from the export tanker.

Approach to the Anchorage/Mooring Master Boarding Area: When within VHF communication range, Masters of export tankers should ascertain berthing prospects from the Terminal.

RADAR: There is a radar on the “Afran Zodiac” but is not normally in use.

TUGS: Suitable tugs and line boats are chartered for each lifting and are for export tanker's account.

BERTHING: *Mooring/Unmooring Arrangements:* The export tanker will be moored alongside the starboard side of the “Afran Zodiac” according to a mooring plan to be agreed between the Master of the “Afran Zodiac”, the GORAKP Mooring Master and the Master of the export tanker. Fendering between the two vessels consists of 4 large fenders each 10 ft. in diameter by 20 ft. length at water line level, and 8 secondary fenders positioned close to the freeboard deck. For mooring/unmooring operations the services of tugs will be necessary and a mooring line boat will be in attendance. Export vessels should provide either synthetic mooring lines or mooring wires with properly sized synthetic tails in order to ensure sufficient elasticity in the mooring arrangement to take account of any differential rolling periods of the two ships. Masters of export tankers are to be advised that the actual requirement of the mooring system may be subject to variation from time to time depending on the environmental conditions.

LOADING: *Transfer Operations:* The GORAKP Mooring Master will remain in the export tanker throughout the petroleum transfer operation and will co-ordinate all activities on board the export tanker with the storage tanker.

The maximum loading rate available for the transfer operation will be 20,000 bbls.p.h., but in no circumstances will the export tanker be requested to load at a rate faster than that required by her Master.

At all times during the transfer operation, a responsible deck officer shall be in charge of operations, either on deck or in the control room. On vessels with a central control room from which all operations are controlled, a deck watch in contact with the control room is required to continuously patrol the cargo deck, and monitor the manifold area of the export vessel.

When the responsible export tanker officer has declared the export tanker ready to load with all necessary valves open, the Mooring Master will instruct the storage tanker to commence the transfer at a slow rate. As soon as flow is confirmed and the integrity of the transfer hose connection is established, the export vessel may request an increase to the previously agreed loading rate.

At any time during the transfer operation, the rate can be reduced as requested by the Master or responsible officer of the export tanker.

The GORAKP Mooring Master shall be given advance notice by the Master or responsible officer on the export tanker when a reduction of loading rate is required preparatory to completion of transfer.

After completion of loading, both vessels will be ullaged. A Bill of Lading, Cargo Manifest, Ullage Report, Certificate of Quantity, Certificate of Quality, Certificate of Origin, and Port Time Log will be completed. All such documents will have been signed by the Master of the export tanker prior to that vessel's departure. If required or requested by the Master of the export tanker, the Agent for the export tanker may sign the cargo documents on behalf of the export tanker's Master. The official quantity and quality of the crude oil delivered to the export tanker shall be determined by GORAKP and shall be final and binding on the export tanker and her Owners and Charterers.

Hose Handling: The storage vessel will present a single 12 in. flexible hose line, and before berthing the export tanker's port side manifold is to be prepared to accept a 12 in., 150 lb. ASA flange. Hose connection/disconnection will be carried out by the export tanker's crew who are required to be at all times under the control of a responsible deck officer and undertake hose handling operations in co-operation with procedures advised by the GORAKP Mooring Master.

The export tanker will be required to have ready a derrick with a minimum SWL of 5 tons at the port manifold area for the handling of the flexible hose line from the storage vessel.

Cargo Information: Oil loaded at the Hulaylah Terminal is Saleh crude with an average API gravity of approximately 44° – 46°. The loading temperature will vary from 73°F in the winter to 85°F in the summer months. Some H_2S may be present in the crude oil.

Hydrogen Sulphide: Vessels nominated to load at the Hulaylah Terminal SPM should be advised that Saleh crude may contain H_2S. Continued exposure over long periods to even small concentrations of hydrogen sulphide can cause headache and nausea. Masters should ensure that personnel involved in the loading operation take the appropriate precautions as recommended by their Owners.

Deballasting Operations: Export vessels are required to arrive with sufficient ballast or cargo and be adequately trimmed for safe manoeuvring.

Hulaylah Terminal has no ballast reception or slop disposal facilities, and therefore, export vessels are required to arrive with sufficient clean ballast suitable for pumping directly to the sea. Export vessels arriving with ballast unsuitable for pumping to the sea may be rejected for loading, or will be required to keep that portion of their ballast unsuitable for discharge to the sea segregated on board. GORAKP will not accept any claims for vessels unable to meet such requirements.

It is strictly against the law to pollute the waters of the United Arab Emirates, and any Master, his vessel and Owners, may be subject to prosecution by the United Arab Emirates Authorities if such pollution does occur.

Simultaneous Deballasting and Loading of Cargo Tanks: This practice is not encouraged and in most circumstances will not be permitted. It is recognised, however, that under certain weather/sea conditions this practice may be necessary. In such circumstances, simultaneous deballasting and loading may be permitted by the GORAKP Mooring Master if, in his opinion, cargo quality and the environment are sufficiently protected.

If such operations are found necessary, it shall be done at the sole risk of the export vessel, its Master and Owners, and the most stringent care and attention shall be taken by the export tanker throughout, which, and whose Owners, shall remain fully responsible for, and indemnify and hold GORAKP, its parent companies, subsidiaries, and affiliates, harmless from, any and all claims, demands, damages, liabilities, costs, fines, and expenses, of every kind whatsoever, arising out of, on account of, or in any way connected with the simultaneous deballasting and loading of the export tanker.

Inert Gas Systems: All crude tankers of 20,000 d.w.t. or greater programmed to load should arrive with cargo tanks inerted to 8% oxygen or less by volume and pressurised as required by the SOLAS Convention. Normally cargo tanks under pressure will not be inspected by the Terminal Representative provided a declaration is signed by the Master prior to commencement of loading confirming that all compartments of the vessel have been prepared in all respects as required for the cargo to be loaded.

- (a) Tank Inspection, Gauging, Sampling, Water Dips and Temperatures: Should it be necessary for tanks to be inspected, then it should only be done on a tank-by-tank basis. The system shall be maintained at about 200 mm. water gauge except for the individual tank to be opened which, if possible, is to be isolated from the system and the sighting port opened with care. On completion of inspection the tank shall be secured and re-pressurised. The next tank is not to be isolated and opened until the preceding tank is secured and open to the IG system.

  All gauging, sampling, water dips and temperatures will be taken either through special fittings provided; or if it is necessary to open up tanks for this purpose, then this will be done one tank at a time as described above.
- (b) Failure of IGS: If at any time the IGS is not maintaining the prescribed conditions, the GORAKP Mooring Master shall order a suspension of transfer operations. The cost of any delays will be for the export vessel's account.

MEDICAL: Doctors and dentists available.

DENSITY: 1030.

FRESH WATER: Not available.

FUEL: It is not permitted to load bunkers while alongside the storage tanker. Bunkers can be arranged at anchorage by vessels' local Agents.

CONSULS: At Dubai.

REPAIRS: Repair facilities are not readily available.

Repairs will not be permitted when the export vessel is alongside the storage tanker.

SURVEYORS: At Dubai.

CUSTOMS ALLOWANCES: Most crew transit through Dubai where import allowances are:

1. 1,000 cigarettes or 200 cigars or 1 kilo of tobacco.
2. One litre toilet water and 150 gms. perfume.
3. No alcohol of more than 2% permitted without an import licence.
4. There are no restrictions outbound.

REPATRIATION: Launch and helicopter service available.

AIRPORT: Ras Al Khaimah has an international airport but Dubai airport has greater frequency of flights.

SHORE LEAVE: Permitted.

GENERAL: *Operating Procedures:* Procedures for cargo and ballast operations shall be agreed in writing between the GORAKP Mooring Master and the export tanker's Master and Chief Officer.

Flags: The national flags of the United Arab Emirates and Ras Al Khaimah shall be permanently displayed by vessels at the Hulaylah Terminal.

Alcohol: Masters are advised that drinking or sale of alcoholic beverages is strictly forbidden to U.A.E. National Citizens and are warned of the serious consequences of offering such drinks to the Terminal staff who may board the vessel.

Storing: It is not permitted to load stores while alongside the storage tanker.

Agency: GORAKP does not perform any vessel Agency functions. Vessels calling at the Hulaylah Terminal are required to arrange their own Agency representation from an Agency operating in Ras Al Khaimah.

WEATHER: The winds in the Southern part of the Gulf are usually light and generally blow from the Western quadrant most of the year but are occasionally interrupted by winds from varying directions. The visibility along the Ras Al Khaimah coastline is generally good, but from June to September the Shamal blows over the Gulf area and frequently produces rough seas and stirs up dust clouds which can affect visibility at sea. The cold fronts which move down the Gulf from November to April frequently cause a North or N.W. wind of 20 knots or more along the Ras Al Khaimah coastline with accompanying swells.

High waves generally do not occur along the Ras Al Khaimah coastline since the winds are usually light in this area. On those occasions when the wind does become strong, the wave heights generally remain limited since the distance over which the wind can blow to generate waves is relatively short from most directions. This is due to the bend in the Gulf which tends to reduce the fetch of North winds (e.g. waves over 8 ft. occur 0.2% of the time).

Currents are omnidirectional and variable in strength. During the month of January 1984, currents in excess of 1 knot were recorded.

SAFETY: *Safety Requirements:* Masters will be given the GORAKP Safety Requirement Letter by the GORAKP Mooring Master prior to commencement of berthing operations, and a signed acknowledgement will be required.

Safety Check List: On completion of berthing and prior to the commencement of deballasting or cargo loading, the Storage Ship/Export Ship Safety Check List will be completed following a joint inspection by the GORAKP Mooring Master and a responsible export tanker's officer. The GORAKP Safety Check List is based on the recommendations of the "International Safety Guide for Oil Tankers and Terminals" (ISGOTT).

AUTHORITY: Gulf Offshore Ras Al Khaimah Petroleum Limited, P.O.Box 540, Ras Al Khaimah, United Arab Emirates. *Telex:* 99255 Gulfk Em. *Contact:* Mr. F. E. Wisner, General Manager. Tel: 22755.

JEBEL DHANNA – RUWAIS: 24.11 N., 52.37 E.

(See Plan Book)

(A) GENERAL
(B) JEBEL DHANNA – SEA BERTHS TERMINAL
(C) RUWAIS – REFINERY TERMINAL
(D) RUWAIS – NGL TERMINAL
(E) RUWAIS FERTILISER INDUSTRIES (FERTIL)

(A) GENERAL

AUTHORITY: The port is operated by the Abu Dhabi Petroleum Ports Operating Company (ADPPOC) on behalf of:

(a) The Abu Dhabi National Oil Company (ADNOC) (the governing authority for oil ports).
(b) Abu Dhabi Company for onshore oil operations (ADCO).
(c) The Ruwais Refinery.
(d) Abu Dhabi Gas Industries Limited (GASCO).

Abu Dhabi Petroleum Ports Operating Company, P.O.Box 61, Abu Dhabi, United Arab Emirates. *Tel:* 336700. *Telex:* 22209 Adppoc EM. *Cables:* Adppoc. *Contact:* Captain J.A.S. Hawkins, Harbour Master, Jebel Dhanna-Ruwais.

PORT LIMITS: All waters Southward of Lat. 24° 26′ 48″ N., to the coast up to Spring High Water Mark, between meridians of Long. 52° 33′ 36″ E. and Long. 52° 46′ 36″ E., (that is, with reference to Chart 3780 B.A. & USHO, the whole waters of that Chart) and shall include all jetties, wharves, structures, sea-berths, reefs, rocks, sand-bars and islands, excluding Sir Bani Yas Island, within the said area.

PILOTAGE: Pilotage is compulsory for all ships navigating within port limits other than exempted ships (See "General"). Ships may, however, drop anchor or sail from Gasha Anchorage without a Pilot. This rule is not applicable to U.A.E. Naval, coast guard vessels or country craft who may, having ascertained channel clearance from Port Control, proceed without the service of a Pilot.

Pilot Station: Pilots will board and disembark at the main Gasha P Station as delineated on B.A. Chart No. 3780.

Use of North Channel: Masters of Exempted ships of suitable dr should use the North Channel and East Yabr Relief Channel wh entering or leaving the port.

Pilotage Exemption Certificate: Port Pilotage Exemption Certificate m be granted to Masters of regular trading vessels of less than 3000 n.r upon the Harbour Master's satisfaction of their competency. Su certificates shall be renewed annually.

Berthing and Unberthing at Oil and Gas Berths: Notwithstandin anything contained in these Rules berthing or unberthing at oil and ga berths at Jebel Dhanna or Ruwais shall be under the control of a Pil

N.B.: Berthing and unberthing of a small ship at the ADNOC Berth position Lat. 24° 11′ 55″ N., Long. 52° 38′ 59″ E., may b undertaken without a Pilot provided that the Master has Pilotag Exemption Certificate.

Pilot Ladder: A clean and efficient pilot ladder fitted with spreaders an manropes shall be made available for the Pilot to embark or disemba and at night the ladder shall be illuminated with an efficient and sa light.

Accommodation Ladder and Pilot Ladder: Whenever as in the case large vessels, the height of the deck above the water exceeds 30 ft., th accommodation ladder shall also be used in conjunction with the pil ladder, and shall be lowered to about 22 ft. (7.0 m.) above the water wi the pilot ladder immediately adjacent to the bottom platform of th accommodation ladder.

Mechanical Hoist: A mechanical hoist of an approved pattern shall b considered an acceptable alternative to a conventional pilot ladder to b used in conjunction with the accommodation ladder.

NOTE: Mechanical hoists whose operation relies upon a single wi are not of approved pattern under these rules.

Supervision of Pilot Ladders: The rigging of the pilot ladders for th embarkation and disembarkation of Pilots shall be supervised by responsible ship's officer, and shall be so effected that the ladder is we clear of any overboard discharge and so that each step of the ladd rests securely against the side of the ship.

Safe embarkation and disembarkation: A Master of any ship navigatin in the port, shall afford such suitable "weather lee" and speed reductio as may be directed by the assigned Authority Pilot in order to provide safe embarkation or disembarkation operation.

Pilot to Advise Course and Speed: Vessels navigating within Port Limi shall proceed on such a course and at such speed as the Pilot advises

Provided that when passing through the inner anchorage areas ever vessel whether under Pilotage charge, or navigated by her Master wi an Exemption Certificate, shall proceed with caution and at a moderat speed duly considering other vessels and cargo operations in the area

Small High Speed Vessels: High speed vessels as of "Crew Boat" typ shall proceed at a moderate speed to reduce the wave making wash the vicinity of vessels, working cargo, dredging or construction work diving operations, etc., until past and clear of these vessels operations.

Anchors Ready for Use: Every ship prior to any movement within th port shall have both Bower Anchors (if two fitted) prepared for immediat emergency use. Masters shall, however, consult with the assigned Pil (if any) before lowering an anchor to the sea surface.

Any Damage to Ship to be Notified: Before entry the Master shall infor the Port Authority of any damage to the vessel or any projection from th hull above or below water which may affect the vessel's draft, ship handling qualities or berthing capability.

TIDAL STREAMS: In the outer approaches to Jebel Dhanna-Ruwais tidal streams would appear to attain a maximum of 1 knot while 1.7 knot may be encountered in the channel N.E. of Jezirat Sir Bani Yas.

Tidal currents in the area of the berths seldom exceed 0.4 knots.

The tides are generally diurnal, winds from N.E. and N.W. may caus an increase up to 0.6 m. in the height of the tide.

The highest average, spring high tide is 2.0 m. above chart datum.

The highest average, neap high tide is 1.0 m. above chart datum.

AIDS TO NAVIGATION: Approaches to Jebel Dhanna-Ruwais (Se Admiralty Chart Nos. 3778, 3779 and 3780).

The outer channel for deep drafted vessels between Jezirat Zarakhu (Zarqu) and Gasha Anchorage is marked by 6 buoys and 2 light floats a follows:

Name/No.	*Description*	*Characteristic*	*Position*
Outer Fairway	Safe Water Mark	Iso 10 secs.	24° 45′ 48″ N. 52° 53′ 12″ E.
O1	Conical Green	Fl.G. 5 secs.	24° 46′ 20″ N. 52° 49′ 30″ E.
Creagh Shoal	Light Float	Fl. 10 secs. 14 M Racon "C" 72 secs.	24° 43′ 00″ N. 52° 42′ 15″ E.
Patch	Conical Green	Fl.G. 3 secs.	24° 40′ 00″ N. 52° 41′ 32″ E.
O5	South Cardinal	Qk.Fl.(6)+L.Fl. 15 secs.	24° 37′ 43″ N. 52° 38′ 13″ E.
Dalma	Light Float	Qk.Fl.(9) 15 secs. Racon "D" 72 secs.	24° 32′ 24″ N. 52° 27′ 48″ E.
O7	Conical Green	Gp.Fl.(3) G. 10 secs.	24° 29′ 27″ N. 52° 29′ 24″ E.
Gasha	West Cardinal	Qk.Fl.(9) 15 secs.	24° 25′ 46″ N. 52° 34′ 25″ E.

A relief route known as North Channel passes from the outer fairwa buoy S.E. of Creagh Shoal and enters the port East of Gasha Island. It i marked by:

Obstruction	Isolated Danger Mark	Gp.Fl.(2) 10 secs.	24° 37′ 50″ N. 52° 47′ 17″ E.
North Channel	Safe Water Mark	Iso. 10 secs.	24° 30′ 00″ N. 52° 41′ 36″ E.
West Kurkum	West Cardinal	Qk.Fl.(9) 15 secs.	24° 23′ 51″ N. 52° 41′ 31″ E.
East Gasha	Green Conical	Fl.G. 5 secs.	24° 23′ 54″ N. 52° 41′ 15″ E.

The least depth in this channel 7.5 m. (1980) occurs about 0.8 nautical miles North of the Gasha/Kurkum entrance.

A Beacon was established at Price Shoal (1980) consisting of a pile with a bottle chamber at the top and a gas lantern.

Price Shoal	Red Pile Structure	Fl. 5 secs. 12 m. 14 miles Racon "T" 48 secs.	24° 17′ 24″ N. 52° 42′ 09″ E.

CHANNELS:

Deep Water Channel: The channel marked at its outer end by:
Gasha Buoy in position Lat. 24° 25′ 46″ N., Long. 52° 34′ 25″ E.
marked on the West side by:

Buoy No. 1 in	Lat. 24° 24′ 28″ N.	Long. 52° 36′ 26″ E.
No. 3	Lat. 24° 23′ 50″ N.	Long. 52° 37′ 18″ E.
No. 5	Lat. 24° 23′ 02″ N.	Long. 52° 38′ 37″ E.
No. 7	Lat. 24° 21′ 33″ N.	Long. 52° 40′ 14″ E.
No. 9	Lat. 24° 20′ 33″ N.	Long. 52° 41′ 22″ E.
No. 11	Lat. 24° 19′ 49″ N.	Long. 52° 41′ 52″ E.
No. 13	Lat. 24° 17′ 42″ N.	Long. 52° 40′ 34″ E.

and marked on the East side by:

Buoy No. 2 in	Lat. 24° 25′ 18″ N.	Long. 52° 35′ 40″ E.
No. 4	Lat. 24° 24′ 18″ N.	Long. 52° 37′ 07″ E.
No. 6	Lat. 24° 23′ 57″ N.	Long. 52° 37′ 34″ E.
No. 8	Lat. 24° 22′ 46″ N.	Long. 52° 39′ 06″ E.
No. 10	Lat. 24° 21′ 37″ N.	Long. 52° 40′ 21″ E.
No. 12	Lat. 24° 20′ 58″ N.	Long. 52° 41′ 08″ E.
No. 14	Lat. 24° 20′ 29″ N.	Long. 52° 41′ 42″ E.
No. 16	Lat. 24° 19′ 49″ N.	Long. 52° 42′ 18″ E.
No. 18	Lat. 24° 18′ 42″ N.	Long. 52° 41′ 48″ E.
No. 20	Lat. 24° 17′ 45″ N.	Long. 52° 41′ 28″ E.

North Channel: The inward/outward route marked at its southern end by:

East Gasha Buoy	in	Lat. 24° 23′ 54″ N. Long. 52° 41′ 15″ E.
West Kurkum Buoy	in	Lat. 24° 23′ 51″ N. Long. 52° 41′ 31″ E.

Yabr Channel: The route East of Jazirat Yabr marked by:

North Yabr Buoy	in	Lat. 24° 20′ 54″ N. Long. 52° 43′ 18″ E.
Yabr Channel Buoy	in	Lat. 24° 18′ 20″ N. Long. 52° 45′ 09″ E.
South Yabr Channel Buoy	in	Lat. 24° 15′ 46″ N. Long. 53° 43′ 24″ E.

Ruwais Approach: The channel to N.E. of Ruwais middle marked by:

(i) Buoy No. 22	in	Lat. 24° 13′ 38″ N. Long. 52° 42′ 12″ E.
(ii) Buoy No. 24	in	Lat. 24° 12′ 24″ N. Long. 52° 44′ 42″ E.
(iii) Buoy North Middle	in	Lat. 24° 12′ 42″ N. Long. 52° 43′ 41″ E.
(iv) Buoy East Middle	in	Lat. 24° 12′ 08″ N. Long. 52° 44′ 26″ E.

Bulk Cargo Terminal (BCT): Turning basin marked by buoys:

(i) BCT 1	in	Lat. 24° 09′ 29″ N. Long. 52° 43′ 54″ E.
(ii) BCT 2	in	Lat. 24° 09′ 24″ N. Long. 52° 44′ 12″ E.
(iii) BCT 4	in	Lat. 24° 09′ 07″ N. Long. 52° 44′ 16″ E.
(iv) BCT 6	in	Lat. 24° 08′ 57″ N. Long. 54° 44′ 14″ E.

ANCHORAGES: The main anchorage positions are defined on Admiralty Chart No. 3780, and are identified by the letters of the alphabet.

Explosives Anchorage: Anchorage bounded by the following points:
(i) Lat. 24° 13′ 30″ N., Long. 52° 44′ 55″ E.
(ii) Lat. 24° 12′ 46″ N., Long. 52° 45′ 48″ E.
(iii) Lat. 24° 13′ 18″ N., Long. 52° 46′ 18″ E.
(iv) Lat. 24° 14′ 00″ N., Long. 52° 45′ 27″ E.

Explosives Buoy: Mooring buoy in position Lat. 24° 09′ 36″ N., Long. 52° 46′ 18″ E., for the purpose of temporary mooring of barges or pontoons carrying explosives.

PROHIBITED AREAS: Prohibited Areas exist for a distance of 2 cables (1,200 ft. – 365 m.) around any berth at which any ship is engaged in loading or discharging any petroleum cargo of whatever description including crude oils and refined products whether in bulk or containers, LNG or LPG and no vessels or craft may enter such restricted areas without instructions from the Port Authority or Oil Company.

RESTRICTED AREAS:

Sea Berths: A restricted area exists around ADCO's seaberths within an area bounded by a line from:
(a) Jebel Dhanna Jetty Light in Lat. 24° 11′ 20″ N., Long. 52° 37′ 51″ E., thence 359° to
(b) Light Beacon "T.13" in Lat. 24° 13′ 06″ N., Long. 52° 37′ 49″ E., thence 060° at
(c) in Lat. 24° 14′ 00″ N., Long. 52° 39′ 30″ E., thence to 139° to
(d) Buoy No. 17 in Lat. 24° 11′ 41″ N., Long. 52° 41′ 42″ E., thence 255.5° to the coast at
(e) in Lat. 24° 10′ 48″ N., Long. 52° 37′ 57″ E.

Navigation and anchorage within this area is strictly prohibited to all unauthorised vessels and those not under the control of a Pilot.

Refinery/GASCO/BCT: A restricted area exists around the Refinery, GASCO Jetties and BCT Jetty at Ruwais within an area bounded by a line from:
(a) in Lat. 24° 08′ 36″ N., Long. 52° 42′ 12″ E., thence 000° to
(b) in Lat. 24° 10′ 24″ N., Long. 52° 42′ 12″ E., thence 035.75° to
(c) in Lat. 24° 10′ 48″ N., Long. 52° 42′ 30″ E., thence 103.5° to
(d) in Lat. 24° 10′ 18″ N., Long. 52° 44′ 42″ E., thence 119.5° to
(e) in Lat. 24° 09′ 57″ N., Long. 52° 45′ 24″ E., thence 195° to
(f) Construction harbour jetty head in Lat. 24° 08′ 12″ N., Long. 52° 44′ 54″ E.

Navigation and anchorage is prohibited to all unauthorised vessels not under control of a Pilot. Within this area no vessel or craft may secure or make fast to the Petroleum Jetty without instruction from the Pilot, Port Authority or the Oil Company.

RESTRICTIONS:

Times of Entry or Leaving: Subject to limitations upon draft, under keel clearance and extreme adverse weather conditions, vessels may enter or leave at any time during the day or night.

Minimum Under Keel Clearance: To ensure safe channel passage, a minimum under keel clearance is required for all ships entering or leaving the port when deep loaded, as follows:
(a) 3 ft. (0.91 m.) for ships of less than 100,000 Summer d.w.t.
(b) 4 ft. (1.22 m.) for ships between 100,000 and 250,000 Summer d.w.t.
(c) 5 ft. (1.52 m.) for ships of over 250,000 Summer d.w.t.

And such under keel clearance may be increased at any time at the Port Authority's discretion having due regard to weather conditions.

NOTE: While observing the safety requirements of under keel clearance, tidal delays may be experienced as follows:
(a) Ships drawing 44 ft. (13.4 m.) may sail at any time.
(b) Ships drawing 45 ft. (13.7 m.) will rarely have to wait for the tide.
(c) Ships drawing 46 ft. (14.0 m.) will usually have to wait for the tide.
(d) Ships drawing 47 ft. (14.3 m.) will always have to wait for the tide.
(e) Ships drawing 48 ft. (14.6 m.) will occasionally be neaped.
(f) Ships drawing 49 ft. (14.9 m.) will be neaped 294± days per year.

The best months are June, July and August.

Meteorological conditions may reduce the height of the tide by up to 1 ft. (0.305 m.)

Movements Within the Port Limits: No vessel may enter, leave or move within the confines of the port unless permission for moving is first obtained from the Port Control Office.

Outward Priority: When one ship is ready to leave and another to enter simultaneously, a deep loaded outward bound ship which requires to transit the "Deep Water Channel" on account of draft in excess of 30 ft. (9.14 m.) shall have priority subject to the provisions of Rules mentioned above.

ARRIVAL/DEPARTURE NOTICES: *Notice of Arrival:* The Owner, Master or Agent of any ship which intends to call at the port shall inform Port Control 72 hours prior to arrival, the intended date and time of arrival of such ship, the nature and quantity of the cargo to be loaded or discharged and the estimated deepest draft upon arrival, and shall confirm or amend such information at 48 and 24 hours before arrival.

Vessels should also advise:

1. The date and final port and country of her last loading at an Arabian Gulf or Omani port.
2. A list of ports and countries at which the vessel has called between 1. above and her arrival at Jebel Dhanna.
3. Should the tanker not have loaded in the Gulf or an Omani port since building, then a list of ports and countries at which the vessel has called from the date of building to her arrival at Jebel Dhanna.

In order to expedite Pilot attendance, Masters should endeavour to confirm their final ETA to "Port Control" Jebel Dhanna/Ruwais on VHF radio, Channel 9, 6 hours prior to arrival at anchorage.

Notice by Agent: The Agent shall also supply the Port Health Officer, Customs and Immigration, the requisite ship information 48 hours prior to arrival.

Notice of Departure: The Master or Agent of any ship within the port shall inform Port Control giving at least 12 hours' notice of departure and shall further confirm the time of departure 2 hours before being ready to sail.

BERTHING FACILITIES: The Port of Jebel Dhanna-Ruwais consists of two main oil terminals, one petroleum gas terminal, one bulk cargo terminal and a small cargo harbour (see Admiralty Chart No. 3780).

The Crude Oil Terminal at Jebel Dhanna is operated by the Abu Dhabi Company for Onshore Oil Operations (ADCO) and consists of 4 C.B.M. Berths capable of accepting tankers up to 330,000 d.w.t. and 1,215 ft., (370.3 m.) in length. Minimum depths at the berths are:
No. 1 Berth: 51 ft. (15.54 m.) max. length of ship 950 ft. (289.6 m.).
No. 2 Berth: 52 ft. (15.85 m.) max. length of ship 1,100 ft. (335.3 m.).
No. 3 Berth: 55 ft. (16.76 m.) max. length of ship 1,200 ft. (365.76 m.).
No. 4 Berth: 55 ft. (16.76 m.) max. length of ship 1,215 ft. (370.3 m.).
Also see "Section B".

The Refinery Terminal at Ruwais about 2.5 miles S.E. of the Jebel Dhanna Terminal Berths is owned and operated by the Abu Dhabi National Oil Company Ruwais Refinery and consists of a 3 km. jetty with 2 deep water berths and 4 coastal tanker berths for the exportation of refined petroleum products and importation of crude oil.

Also see "Section C".

The Abu Dhabi Gas Industries Ltd. (GASCO) Terminal consisting of a trestle jetty and one berth lies about half a mile East of the Refinery Jetty and can accept LPG carriers in the range 30,000 cu.m. to 125,000 cu.m. There is a minimum depth alongside of 15.0 m.

Also see "Section D".

The Ruwais Fertiliser Industries (FERTIL) Jetty is designed for berthing combinations of vessels up to 2 fully laden 200 m. long, 25,000 d.w.t. bulk cargo vessels along its Eastern side. Provision is made at the Northern end of the jetty for the loading of liquid ammonia.

Also see "Section E".

Future development of the petrochemical industrial complex at Ruwais includes the construction of a bulk sulphur export jetty with 6 berthing face piles capable of handling cargo vessels up to 25,000 tons d.w.t. with a depth of 36 ft. alongside to be completed in 1984/85.

RUWAIS CARGO HANDLING SERVICE CONSTRUCTION JETTY:
General Information: ADPPOC, as the Port Operator, is providing a new cargo handling service for the prime purpose of serving the construction and commissioning of the ADNOC and GASCO Refineries and Petroleum Export Terminals.

This undertaking is provided on an independent basis as an additional port facility and may be utilised by any importer who wishes to route cargo through the port to destinations in the Western region of Abu Dhabi.

A harbour, known as the Construction Jetty, consisting of 4 small cargo ship berths and 1 Ro-Ro Berth, is situated to the East of the Ruwais Petroleum complex. Vessels and barges with a draft of less than 4.2 m. may enter and lie safely alongside to discharge cargo. Larger cargo ships with a draft in excess of 4.2 m. will anchor in the cargo ship anchorages located N.N.W. 2 miles (approximately) from the Construction Jetty and discharge onto barges.

There are full Customs and Clearance facilities available.

Extent of Service: Cargo will be worked in the cargo anchorages, weather permitting, during daylight hours only. The target minimum rate for discharge of general cargo will be 700 freight tons per day. In special circumstances these limitations may be modified to suit the dispatch and turn-round of the discharging freighter.

Weight Limitations: Normal discharge to barges will be to the maximum of ship's own lifting equipment. The heavy lift barge (reinforced deck) can receive a single weight to a maximum of 700 tons. The shore cranes can plumb to a distance of 3.2 m. from the quayside to lift 80 tons.

To discharge heavy lifts by a floating crane, the maximum possible notice is required. Similar notice is required for heavy lift cranage for parcels in excess of 80 tons over quayside and heavy lifts in excess of 55 tons which require special trailer transport.

Procedure:

1. Consignee or his Agent must sign a Cargo Handling Indemnity form before discharge and vessel's Master must sign Port's Conditions of Use receipt before entering port and berthing.

2. All Customs cargo documentation and clearance of vessels is the responsibility of the Shipping Agent/Consignee. Tally receipts will be supplied by the ADPPOC Cargo Representative on site.

3. The ship will normally be charged for port dues only as per 1981 Regulations and Tariff, except that, for working overstowed cargo, a charge per gang hour will be levied to the ship.

4. The consignee will normally pay the full handling charge per freight ton. The charge covers ship stevedoring, barge and towage, and either barge discharge to landed on quay, direct to trailer, or delivered to Custom's Pound.

5. Agents and/or consignees should advise their requirements, vessel ETAs and supply cargo manifests and stowage plans to: The Harbour Master, Jebel Dhanna-Ruwais Port, ADPPOC, Ruwais, P.O.Box 61, Abu Dhabi. Tel: Ruwais 75718 daytime or Port Control Ruwais 75700 ext. 2262 (24 hours). Telex: 52207 Apocru EM.

To ensure complete co-ordination and service and/or in event of communications breakdown at the port, vessels ETAs and general cargo information and requirements should also be sent to: ADPPOC, "ARCH" Division, P.O.Box 61, Abu Dhabi. Tel: 336700 Abu Dhabi. Telex: 22209 Adppoc EM.

PORT EQUIPMENT/CRAFT: The following craft and equipment are available in the port and subject to utilisation may be chartered or hired on application to the Harbour Master who will advise the current rates.

Vessels:

2×3,200 h.p. twin screw shiphandling tugs with a bollard pull of 40 tons.

Equipped for fire fighting and oil dispersant spraying, fitted with 2 centrifugal pumps producing 680 cu.m. water/foam per hour to a height of 120 m. through a horizontal distance of 85 m.

Each tug carries 45 metric tons of foam and 11 metric tons oil concentrate dispersant.

2×15 m. twin screw mooring launches, 480 h.p. with 2 live-on-board crew.

4×15 m. single screw mooring launches, 360 h.p. each, no accommodation.

1×12 m. twin screw 18 knot pilot launch.

1×16 m. twin screw pilot-cum-ambulance vessel 20 knots with 3 live-on-board accommodation.

1×32 m. self-propelled maintenance barge with 30 ton hydraulic 'Pettibone' crane.

1×19 m. single screw diving tender vessel.

1×12 m. single screw general purpose workboat.

2×46 m.×15 m. flat top barges.

1 barge with reinforced deck for heavy lifts and tank divided for oil pollution slops, 1,200 tons.

Shore Equipment:

1×150 ton Manitowoc mobile crane with 30 m. boom.

1×80 ton Grove Rough Terrain mobile crane with hydraulic extending booms, maximum normal extension 35 m.

1×10 ton fork lift.

2×5 ton fork lifts.

2×3 ton fork lifts for crane hold work.

Miscellaneous:

Fully equipped marine workshops for repairs, overhauls to tugs, launches, vehicles, mooring buoys, etc.

One double lock 2 man decompression diving chamber in air conditioned module.

HEALTH: *Quarantine and Medical Clearance:* The standard International Declaration of Health is required upon arrival. Free Pratique is obtained by radio.

There are no facilities for derat at Ruwais.

If Free Pratique has not been granted prior to the vessel's arrival, the Master may contact Port Control for advice/instruction as per Port Health instructions.

Every vessel within the port shall display the appropriate quarantine signals as prescribed in the International Code of Signals.

MEDICAL: If any person suffers a serious injury or sickness within th port limits and immediate medical attention becomes necessary th Master of the vessel concerned or the person in charge of the locatio shall notify the emergency to the Port Control on VHF Channel 16.

N.B. The Port "Casevac" system for such emergencies will be put int immediate effect by the Port Control.

Masters of all vessels are hereby advised that a brief but concis description of the injury or sickness must be stated at the time o reporting. In the event a crew member has to be landed fo hospitalisation the following items should accompany the casualty:

(a) Passport and/or Seaman's Discharge Book
(b) Vaccination Certificates
(c) Address of next of kin
(d) Brief report (if necessary pinned to an unconscious perso comprising:
  1. Time and cause of accident/sickness
  2. Time and description of medication administered, if any
  3. Further details of First Aid given, and/or symptoms noticed
(e) Masters of vessels which are not berthed alongside the Ruwai jetties should prepare invalid cases for landing in a fast launch o picking up by helicopter e.g. Niel Robertson stretcher; and affor a weather lee (if possible) in adverse weather conditions.

Medical/Police Assistance: The Master of any vessel within the Port fo which Medical or Police assistance is required shall make request fo such assistance through the Agent.

FRESH WATER: Fresh water is obtainable at the refinery berths an should be arranged through the ship's Agent.

FUEL: Bunkers are obtained at the refinery berths and should b arranged through the ship's Agent.

The following bunker fuels are available:

A. Marine Diesel Oil

Test and Spec. Limits	*Method*	*AST*
1. Viscosity Kin. at 33°C, CS, Max.	1.4	D445
2. Carbon Residue Conradson Wt. Pct. Max.	1.5	D189
3. Flash Point °C, Min.	66	D93
4. Water Cont. Pct. Vol. Max.	0.25	D95
5. Sediment Pct. Wt. Max.	0.02	D473
6. Ash Pct. Wt. Max.	0.02	D482
7. Sulphur Pct. Wt. Max.	1.80	D129
8. Pour Point °C Max.	12	D97

B. Marine Fuel Oil

1. Kin. Viscosity at 50°C. Max.	180	D445
2. Flash Point, °C. Min.	60	D93
3. Water Cont. Vol. Pct. Max.	1.0	D95
4. Sediment Pct. Wt. Max.	0.25	D478
5. Ash Pct. Wt. Max.	0.20	D482
6. Sulphur Point °C. Max.	4.0	D129
7. Pour Point °C. Max.	24	D97
8. Sp. Gravity at 60/60° F. Max.	0.990	D129

CUSTOMS: Customs Officials will board upon arrival and seal the bond

Alcoholic Liquor: No alcoholic liquor of any description may be carrie to or from any vessel or oil terminal within the port. This rule shall no apply in the case of a vessel taking in or landing such liquors as cargo o ship's stores under the supervision of Customs Officials.

Masters are reminded and warned that public consumption o alcoholic drinks is strictly prohibited in the U.A.E. and its territoria waters. Crew members must not be allowed to offer alcohol to an Moslem for any reason whatsoever.

The penalties imposed by the civil authorities for non-compliance o the above are heavy and include possible imprisonment.

CLIMATE: The cool winter season extends over November to Februar with mean daily maximum temperatures of 25° C. to 30° C. and nigh temperatures of 10° C. to 15° C. The lowest recorded temperature bein 4° C. Ground frost can occur inland.

The hot summer season extends over May to September wit maximum day temperatures between 40° C. to 45° C.: the highes recorded being 48° night temperatures are about 20° C. to 25° C.

Relative humidity is high throughout the year averaging betwee 50 and 60 per cent by day and 75 to 80 per cent by night. Heavy de may be experienced throughout the year.

Rainfall is usually associated with thunderstorms which are prevalen from November to May giving a total annual rainfall of 10 mm. to 50 mm Rain is rare during the remaining months while in some years there i none at all.

Throughout the year the prevailing winds are from the West to Nort North-East sector. They are strongest during November to April whe they occasionally reach gale force. Gusts of up to 50 knots have bee recorded (April) and a 24-hours mean wind speed of 32 knots from th North-West is on record (January) the Shamal or strong North-Wes wind may blow for periods up to three days and raise a rough sea wit waves up to 4.5 m. off Gasha buoy and up to 2 m. at the berths in Jebe Dhanna. 'Land and Sea' breezes are experienced throughout the year.

Visibility is 10 nautical miles for 70% of the time and less tha 2 nautical miles up to 5% of occasions due to dust haze or radiation fog Fog can occur during any month of the year but is most frequent i Winter: normally it develops during the night and early morning and clears by 1000 hrs. Usually the fog banks drift to seaward towards S Bani Yas Island.

Sea temperatures at 3 m. depth range from 20° C. (Winter) to 32° C (Summer). During the Summer the 15 m. depth temperature is only a degree or so lower than that at the surface.

GENERAL:
Stores: Emergency stores may be obtained by giving 48 hours' notice t the Ship's Agent. These stores are not permitted to be loaded at an oil o gas berth and must be taken on board in the anchorage.

Agency: Agency work is carried out by registered Shipping Agents wh are appointed by the vessel's owners, Charterers or Master.

In no instance will ADPPOC or any of the Oil Companies undertak the agency of a ship.

M.E.N.A.S. Light Dues: Masters are advised that the "M.E.N.A.S." Light Dues for the Arabian Gulf navigation aids, when applicable, are collected by the vessel's Agents for payment direct to "M.E.N.A.S.", Bahrain.

Flag: Every vessel within the port shall fly her own national flag and the flag of the United Arab Emirates from sunrise to sunset.

Inward Clearance: No person other than the Pilot, Police, Customs, Immigration and Port Health Officers shall be allowed on board any vessel before Inward Clearance has been granted by such officials.

Port Clearance: The Owner, Master or Agent of every vessel wishing to leave the Port shall obtain a Port Clearance.

Port Clearance may be withheld from any ship by the Port Authority for non-payment of dues or for any legal cause or restraint which has been duly ordered by the Court in Abu Dhabi.

Exempted Ship: To mean ships exempted from pilotage whose Master has been granted a Pilotage Exemption Certificate by the Harbour Master.

Excepted Ship: To mean vessels excepted from paying Port Dues. Excepted ships shall include the following vessels:–

(a) Vessels of the U.A.E. Defence Forces.

(b) Vessels belonging to U.A.E. Customs, Medical and Police Services.

(c) Dredgers, Survey Vessels and special ancillary non-cargo craft, on contract to the Port Authority, ADNOC.

(d) Light tenders belonging to or on contract to M.E.N.A.S.

(e) Vessels and Ships excepted from such charges by order of H.E. the Ruler.

Port Control: The offices, (currently situated at Jebel Dhanna in position Lat. 24° 11′ N., Long. 52° 37.5′ E.) are responsible for all Vessel Traffic movements within the Port Limits and the implementation of the Harbour Master's instructions pertaining to the management of the Port.

N.B. – Vessels should communicate with the Harbour Master or Port Control via VHF radio. Initial contact should be made on Channel 16 call sign "JEBEL DHANNA-RUWAIS PORT CONTROL".

Heavy Lift: Any piece of cargo inclusive of transportation cradle whose deadweight is in excess of 35 long tons (35.56 tonnes).

Country Craft: Mechanically propelled vessels less than 100 n.r.t. engaged in the coastal trade which may also rely upon sails for motive power.

Rat Guards: Rat guards must be fitted to all mooring ropes and wires immediately a vessel is secured alongside a berth on a jetty or wharf.

Mooring Launches: All ships berthing or unberthing at a main sea berth, oil jetty or cargo wharf will be provided with a suitable Port Authority mooring launch (if required) to assist with the running of moorings and the lifting of submarine loading pipe-lines in the case of ADCO's sea berths.

Main Engine Readiness: Every vessel berthed at an Oil Terminal or cargo wharf shall maintain her engines in a state of constant readiness to move at all times. No repairs which may immobilise the vessel shall be permitted to be carried out while vessels are in the berths.

A Master of any Ship securely anchored in an assigned anchorage area, may request permission from the Port Control to carry out routine engine repairs or overhaul. The granting of such permission will be subject to the respective Terminal approval that the berthing time factor is sufficient.

Sufficient Crew Onboard: Every vessel within the Port shall retain on board at all times a sufficient number of crew as may be necessary to perform any duties concerned with the safety and movement of the vessel.

Fire Wires: All Ships berthed at the GASCO and Refinery Terminals shall provide 2 Tug Fire Wires, 1 forward and 1 aft, throughout the period of occupying such berth. The wires shall be robust, with one end fitted with a spliced eye, which shall be maintained at a height of 2 ft. above the sea surface on the outboard side of the ship, (i.e. opposite side from jetty). The inboard end of the wire shall be made fast securely on deck.

Craft Alongside: No Craft shall attempt to make fast to or go alongside a ship manoeuvring in the port before such ship has anchored unless specially permitted by the Master and if there is a Pilot on board, the Pilot.

Dirty Ballast: Whenever a ship enters port with ballast which it is necessary to discharge before or during loading, such ballast, in the case of Water Ballast, shall be clean and not liable to cause pollution of the sea and a certificate to that effect shall be handed to the Port Authority's representative before deballasting commences.

Pollution: Ashes, oils, chemicals, bilge water and other refuse shall not be discharged to the sea or thrown overboard within Port Limits.

The discharge to the sea of any substance whether liquid or solid, other than clean Water Ballast shall be deemed to cause pollution to the harbour.

The Master of any vessel, the Person in charge of a Terminal or construction operation contravening this rule so as to cause pollution shall be charged with an offence against these Rules and upon conviction be liable to a fine and shall also pay any expenses which may be incurred in the removal of such pollution.

Diving/Swimming: No person shall swim or dive from or near any vessel, jetty, quay or pier for the purposes of trading, recreation or sport.

Diving: No person shall engage in diving with the assistance of breathing apparatus within the Restricted Areas mentioned in Section 4 of these Rules without the written permission or instruction from the Port Authority.

Commercial Diving: Notwithstanding anything contained above, any person or company wishing to operate a Diver for commercial reasons within the Port, shall inform the Harbour Master giving full information of the Diving Operations, and shall conform with such precautions as he may direct in Permission to Dive.

Use of Ship's Radio: The use of the ship's radio within Port Limits is prohibited for the transmission of private messages.

When a ship is secured to an oil or gas loading berth the use of the ship's main radio equipment is totally prohibited. Intrinsically safe VHF radio equipment may be used for necessary port communications.

Ship's Dangerous Stores: Ship's stores of an inflammable or explosive nature, including pyrotechnic distress signals carried in accordance with the Convention for the Safety of Life at Sea shall be kept in a safe place securely closed and sealed while the vessel is moored in a berth. This Rule shall also apply to the vessel's paint locker.

Explosives: No person may bring explosives or dangerous goods into the Port without the written permission of the Port Authority. Vessels importing "explosives" or dangerous goods of an inflammable or corrosive nature will normally be assigned the "Explosives" anchorage on arrival. A Port Authority Representative will inspect the cargo and consult with the Master and Agent before discharge.

The unauthorised handling and detonating of any explosive or pyrotechnic device within the Port Limits is strictly prohibited. Where explosives are required for construction purposes the Contractor concerned must apply to the Harbour Master for written permission. Blasting for commercial purposes shall be under the strict control of the Port Authority.

Pollution Emergency: In the event that pollution of the Port waters occurs, regardless of cause the Person in charge or responsible for the operation, works or location where the pollution was initiated should immediately report the incident to the Port Control.

Where the pollution is serious, particularly oily pollution, the incident must be treated as a full emergency situation, and the call for assistance to the Port Control should be prefixed by the words "MAYDAY, MAYDAY" in order to gain immediate attention.

The Master of the vessel concerned or the Person in charge, shall also take such steps as may stop further pollution and contain or clean up any spillage of oil, etc., on the vessel's deck or jetty surfaces to remove the fire hazard potential.

N.B. – All port Users and Operators are advised that failure to report a pollution incident is an offence against these Rules and Persons found contravening this requirement will be prosecuted in the Abu Dhabi Courts and liable to heavy fines.

Ship's Lifeboats: The lowering of ship's lifeboats within the Port, except in the course of a regulation Lifeboat Drill duly authorised by the Port Authority, is strictly prohibited and during such drill the lifeboats shall not land on any part of the shore.

The use of any boat carried on any vessel solely for the purpose of recreation, pleasure or fishing shall be allowed only at the discretion of the Port Authority subject to the current Security Regulations in force at any time.

Inert Gas System: As the Government of Abu Dhabi have now ratified the Solas Convention, with effect from 1st January, 1984, no tanker will be accepted for loading in this port unless an Inert Gas System has been fitted.

Cargo Discharge Certificates: Abu Dhabi National Oil Company require documentation for cargoes of Refined Products loaded at Ruwais as follows:

1. Discharge Certificate showing:
   (a) Port of discharge.
   (b) Discharge quantity in tonnes.
   (c) Date(s) of discharge.
   (d) Name and nationality of vessel.
   (e) Name of Master.
2. Copy of Bill of Lading.

Both documents must be signed by receiver and countersigned by Port Authorities and returned to:

A.D.N.O.C. Marketing Rpd Sl,
Post Box 898,
Abu Dhabi,
U.A.E.

In the event that cargoes of Refined Products are loaded at Umm al Nar the same procedure should be followed.

(B) JEBEL DHANNA – SEA BERTHS TERMINAL:

24.11 N., 52.38 E.

OPERATOR: Abu Dhabi Company for Onshore Oil Operations (ADCO).

APPROACHES: *(Inward Passage).*

Outer Route between Jazirat az Zarqa and Ghasha Tower Beacon marked by 2 light floats and 4 buoys. The 2 light floats are both port hand marks, and the buoys starboard hand, as indicated by shape, colour and light characteristics.

Inner Channel, from Ghasha Tower to berths at Jebel Dhanna marked by 21 light buoys. Least depth in this channel is 46 ft. and min. width of 800 ft. between Nos. 7 and 10 buoys.

(Outward Passage)

After clearing berth an outward bound vessel should steer to pass midway between Nos. 13 and 20 buoys, leaving Alaq Island to starboard. From Nos. 13 and 20 buoys the same track is followed as for inward passage.

Navigation in shallow waters: The navigation of deep drafted vessels at high speeds in shallow waters introduces certain hazards. Masters of ships should be guided by the following:

Due consideration should be given to the effect of squat at speed on vessel's draft in shallow water, bearing in mind vessel's trim.

If possible, confirm actual height of tide against predictions and if not, bear in mind that after strong winds the actual height of tide may be reduced and extra caution must be exercised for a few days during and after bad weather.

Ensure accuracy of vessel's draft reading, including the midship draft, having in mind the tendency of vessels to sag and the adverse effect of a small list.

Reduce to minimum safe speed to pass over and near shoal areas.

Reduce to a minimum safe speed when negotiating turns in order to reduce heel under helm.

Note that list can mean an appreciable increase in draft.

When strong tidal streams are running across a channel, extra vigilance is required, and allowance made for set, particularly at reduced speed, to ensure vessel proceeds along mid channel.

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
2 Manifests.
1 International Maritime Declaration of Health.

READINESS TO LOAD: If an accepted Tankship arrives at the Port of Jebel Dhanna and tenders Notice of Readiness to Load.

(i) Within its Set Range then running hours shall commence, berth or no berth, either six hours after such Notice of Readiness or at the time of connection of cargo loading hoses, whichever is the earlier.

(ii) Prior to the commencement of its Set Range then running hours shall commence at 1400 hrs. on the first day of its Set Range, berth or no berth, notwithstanding the fact that loading may have commenced for any reason prior to 1400 hrs. on the first day of its Set Range; or

(iii) After expiry of the Set Range, then running hours shall commence at the time of connection of cargo hoses.

Running hours shall finish at the time of disconnection of cargo loading hoses.

The Company will make every effort to load the tanker on arrival provided a berth is available and weather permitting.

ANCHORAGES: If berth not available, or if ships cannot sail immediately after loading, they can anchor in an area South of Buoys Nos. 13 and 20 and North of Berths. This area marked by No. 15 buoy to West, No. 22 buoy to East and by berths to South. Alaq Island lies in the middle of this area and is marked by 2 buoys No. 17 and N. Alaq and by S. Alaq Beacon.

MAX. SIZE: (Also see "Berthing"). Vessels up to 330,000 d.w.t. and max. LOA 1,215 ft. can berth at Jebel Dhanna.

Also see Section "A" – "Restrictions".

EQUIPMENT: Port and Starboard anchors to be fitted with anchor buoys and sufficient line to facilitate recovery of anchor in the event of loss.

4 good mooring lines of not less that 120 fathoms each and of a suitable size for the vessel. 2 additional 120 fathoms lines securely tailed to the first lines for occasions where 120 fathoms may not reach the stern buoys initially.

For vessels of 50,000 d.w.t. and larger, power mooring winches with 200 fathoms wire mooring rope are recommended.

Suitable new rope stoppers to be available forward and aft.

2 good stoppers for use on 40 mm. diameter wires. Preferably patent carpenter's stoppers.

2 good boat ropes 4.5 in. circumference of at least 200 ft. long.

A clean, safe pilot ladder of adequate length battened so as to prevent turning. A suitable line to be ready for hauling gear on board, such as hose clamps, reducers and elbows. A lifebuoy should be placed handy to this ladder.

Tankers of 40,000 d.w.t. and over should have rigged, when in ballast, an accommodation ladder lowered to about 12 ft. above water. This can be adjusted to suit the conditions. A pilot ladder should be rigged immediately abaft the accommodation ladder, to within 2 ft. of the water. This will enable the Pilot and others when the vessel is moored to ascend the pilot ladder clear of the launch and then step on to the lower platform of the accommodation ladder.

Deck machinery must be available at all times.

Whistle or siren must be available at all times.

Adequate deck lighting should be provided for night-time operations, with special emphasis on the following areas:

1. Overside at boarding position for Pilot.
2. Overside abreast of manifold, for hose lifting.
3. Working area around manifold.
4. Poop working area, for handling mooring ropes and wires.

Note: "Aldis" type signalling lamp to be available when mooring.

BERTHING: Berthing is by mooring to 2 anchors and stern buoys. Arrangements in advance by contacting Jebel Dhanna Pilots on Channel 16.

Berths are approached on W.S.W. course passing S.E. of Alaq Island. Leading lights have been established which will lead ships on the line of the 2 anchors when in berth. A small marker buoy has been established to assist the Mooring Master in placing starboard anchor in correct position. Vessels berth heading N.W. Holding ground good. Bottom consists of clayey silt.

Sea Line Loading Berths. 4 sea-line berths Nos. 1, 2, 3 and 4. Nos. 1 and 2 supplied by single 36-in. lines, and Nos. 3 and 4 supplied by 42-in. lines, each terminating in a header which passes under vessel in berth.

Berth	*Draft Acceptable* (ft.)	*Approx. d.w.t.* acceptable*	*Max. loading rate* (t.p.h.)	*Strings of flexible hoses*	*Length of sea line* (ft.)
No. 1	45	83,000	6,000	2×12 in., 2×16 in.	16,269
No. 2	46	85,000	6,000	2×12 in., 2×16 in.	16,427
No. 3	49	90,000	8,500	4×16 in.	19,000
No. 4	49	90,000	9,500	2×16 in.	17,200

*Deadweights shown for vessels loading full cargoes. Part Cargoes may be greater. Nos. 2, 3 and 4 Berths can accommodate VLCCs but No. 2 berth is restricted to vessels having a max. LOA of 1,100 ft.

Least depth of water available in berth, and swinging circle, after deducting 6 ft. for height above sea bed of sea line cradle is as follows: No. 1 Berth, 51 ft.; No. 2 Berth, 52 ft.; Nos. 3 & 4 Berths, 55 ft.

Swinging circle defined as one and a half ship's lengths from dropping position of ship's inshore anchor.

The approximate draft limits quoted above are based on an underkeel clearance in the berths of 6 ft. Rising tides permit deeper loading in berths.

Seawards ends of pipe-lines, terminate in 12 in. or 16 in. flexible hoses, there being 4 such strings of hoses at each berth. 2 taken up on one side of vessel.

Additional information obtainable from Jebel Dhanna Pilots on Channel 16 prior to vessel's arrival.

EARLY DEPARTURE PROCEDURE: Early Departure Procedure i available.

LOADING: *Flash Point:* The flash point of Murban Crude is below 3

Crude Oil Temperatures: While every effort will be made to keep loading temperatures of export crude below 150° F., there may be t when this temperature is exceeded.

Whenever possible Masters will be advised when this tempera increase is likely to occur, but in Jebel Dhanna the temperature as varies according to loading rate, production rate, changes in produ pattern from the field, tank levels, etc., and the temperature differ between shore and ship varies according to loading rate, quanti cargo taken, berth occupied and when last used, etc., thus the s temperature obtained on a previous voyage may be substan different to that obtained on the current voyage and the prev vessel's temperature can be taken as an approximate guide only.

ADCO will not accept any responsibility for the failure by the Mast any tanker loading at Jebel Dhanna to take appropriate action to rec hot oil, prevent any damage to his vessel and/or injury to his crew

H_2S Content: Murban crude contains concentrations of (Sulphuretted Hydrogen). Hydrogen sulphide has a disagreeable o characteristic of rotten eggs which quickly deadens the sense of s so that a dangerous concentration may be present which canno detected by odour. It is, therefore, important that when the presen the gas is detected the area or compartment concerned should be with all possible despatch until adequate ventilation can be carried The combustible gas indicator may not detect this type of gas. foregoing must be dealt with in the light of experience where l quantities of crudes of this type have been carried without accident we do not wish to exaggerate the dangers. However, the under-n precautions have been evolved as necessary to provide again possible accident and should be strictly observed.

During loading gas should only be allowed to escape via the ag venting arrangements.

When ullaging or sampling, personnel should stand facing at angles to the wind direction and so avoid inhaling gas. If H_2 inadvertently inhaled the man should leave the area and not return his sense of smell has been restored which means that at least people should attend the operation.

No one should enter any pump room or any compartment where could collect unless another person is standing by.

Life lines, breathing apparatus and resuscitator should be re available.

As a precautionary measure, the gas ejector for pump room shoul put into operation at any time entry is made into this space whilst possibility of H_2S gas entering pump room from cargo or empty ta exist.

Loading Operations: The advice from the vessel which states sh ready to receive cargo is considered as final, and as indicating every operation necessary aboard the vessel has been completed soon as possible after such a signal has been received, and wit further advice, loading will commence. Damage to hoses can occ ship's valves are not open at the start of loading. The Mooring Ma will not transmit any loading instructions to the shore until the office charge of the deck has satisfied him that the hoses are conne correctly and that all valves have been set for receiving cargo.

While in berth, ships should be ready to move under their own po in the event of their breaking adrift, catching fire, fire in adjacent be or other emergency. No repairs are to be carried out while in berth w would immobilise the ship or impair her fire-fighting efficiency.

The Mooring Master will instruct the Master of the Ship as to signals needed for local requirements.

The Mooring Master will bring a portable radio to the ship.

The radio may not be used for private conversation. Use of the sh radio while at the loading berth is strictly prohibited.

When loading, the cargo being received shall be frequently measu thereby preventing loss of oil through a leaking hose. This particul applies at night, as seepage of oil is practically invisible on the w during darkness.

Caution: The oil loading rates to ships are controlled on shore and extremely dangerous situation can arise if a ship's valves are clo against the flow of oil.

Particular care must be exercised by ship's personnel to ensure the Terminal is given timely advice should any reduction be require the loading rate and adequate "Stand-by" notice must be given be the Final "Stop". At all times the Terminal must be advised when increase in the loading pressure can be expected due to switch tanks, topping up, etc. To prevent excessive pressure from surge ship/shore connections, ship's valves should be closed slowly.

The Terminal facilities at Jebel Dhanna have been designed so tankers can be loaded by turbine driven loading pumps at max. rates to 6,000 t.p.h. in berths 1 and 2, 8,500 t.p.h. in berth 3, and 9,500 t.p. berth 4. Availability of max. loading rates is dependent on the numbe berths occupied and operational circumstances.

If vessel is unable to accept the max. loading rate available, t ADCO will be grateful if you will give a brief explanation of the reason the limitation and we suggest some of the reasons which may gov your restrictions:

(a) Inadequate venting system.
(b) Condition of ship's lines and valves.
(c) Inexperience of crew.

and there may be other reasons.

We are anxious to obtain this information in order to assist formulating plans for future development.

The quantity of cargo received on board is the responsibility of ship and no overage may be sent back ashore.

When loading is completed, hoses will be disconnected and lowe to the sea bed, under the supervision of the Mooring Master.

Ships will then proceed to an anchorage allocated by the F Authority or direct to sea.

HOSES: Derricks or cranes must be capable of lifting a string of hoses from the sea-bed to a height of 30 ft. above the deck. For lifting 16 in. diameter hoses, the lifting gear should have a SWL of not less than 10 tons and for 12 in. diameter hoses a SWL of not less than 5 tons.

Gear should be rigged on both sides of the vessel in order to lift hoses on either side or both sides simultaneously as required.

It may be convenient to handle blank flanges, reducers, etc., with the derrick or crane. Reducers or adaptors should be bolted to the ship's flanges, so as to take 12 in. or 16 in. hose as may be necessary.

Note: Where a vessel has 2 or more loading connections, those used should not be less than 7 ft. apart.

Hose Hang off bitts are required at about 10 ft. from the ship's rail at the loading manifold to secure the submarine hoses on both sides.

BALLAST: No facilities for disposal of slops or dirty ballast.

When a vessel enters port waters in ballast, the ballast water for overside discharge must be clean and a declaration signed by the Master and delivered to the representative of the Terminal to this effect. Ashes, oil, oily water or other refuse must not be discharged overboard in port waters. Vessel's scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard whilst in port waters.

It is essential that vessel is adequately ballasted to ensure safe handling and manoeuvring. Please comply with the Mooring Master's requests as to ballast quantity and disposition.

Jebel Dhanna is an open roadstead and subject to sudden changes in weather. On occasions it is of great advantage to commence loading whilst discharging ballast or prior to completely deballasting to avoid having the vessel in a flying light condition.

There must be no cleaning of boiler tubes whilst ship is in port.

DENSITY: 1031.

FRESH WATER: Not available.

FIRE PRECAUTIONS: As laid down in the Abu Dhabi (Petroleum Ports) Law No. 12 for 1973 and ISGOTT Safety Guide.

GANGWAY/DECK WATCHMEN: Not necessary.

CUSTOMS ALLOWANCES: Tobacco: No restrictions in quantity on board but must not be conveyed ashore or from one vessel to another without appropriate written permit from Customs Authorities and Port Officer. Wine and/or Spirit: Conveyance of alcoholic liquor from any vessel to the shore or from the shore to any vessel, or from one vessel to another, prohibited without appropriate written permits from Port Officer.

Shipmaster's Report: 1978

All alcoholic liquor must be under bond and sealed.

IDENTIFICATION CARDS: Not required.

CONSULS: None.

REPAIRS/DRY DOCKS: No facilities.

REPATRIATION: With sufficient notice Agents will assist in any repatriation. Landing permit is required for all sign on/sign off personnel for which Agent requires full name/nationality/seaman book/passport number and also 4 to 5 working days to process same. However, facilities are limited and if possible crew changes should be made at other ports.

Shipmaster's Report: 1978

Immigration Authorities require at least 4 days' notice and preferably 7 days' notice via Agent.

AIRPORT: One mile distant, air strip owned by ADCO for private use. Nearest International Airport is Abu Dhabi the capital of the State.

TIME: Local time GMT plus 4 hours. No alterations made to clocks during year.

MEDICAL: A hospital run by the Abu Dhabi National Oil Company (ADNOC) is situated adjacent to the Ruwais Industrial Complex. Ambulance facilities are available.

POLICE/AMBULANCE/FIRE: The Abu Dhabi Defence Force, Oilfield Security Section maintains a police post at Jebel Dhanna and Ruwais and is responsible to act in case of accident or other emergency, whether ashore or in territorial waters.

TELEPHONES: Jebel Dhanna is connected to the international telephone system.

SERVICES: None.

SHORE LEAVE: Crews not allowed ashore.

SHIPMASTER'S REPORT: December 1979.

Anchorage: Ghasha Anchorage apparently has good holding ground, bottom is sand with a little clay.

VHF: Call on Channel 16 or 9 (continuous watch). All operations carried out on Channel 9.

Medical: Any injury requiring treatment ashore necessitates having the following documents ready before the injured seaman can be transported to Abu Dhabi hospital.

1. Extract of Ship's log.
2. Master's report of the incident.
3. Two eye witness reports (if possible).
4. Pilot's report.
5. Letter from Master accepting responsibility for the injured man.

He must also take his Seaman's Book/Passport with him and all the above documents must be signed and ship's stamped by Master.

Gangway: Accommodation ladder usually port side but best to wait until vessel is nearly moored in order to determine best lee side.

Customs Allowances: Customs can be very strict. All alcohol must be locked up before arrival and they will then give an issue.

(C) RUWAIS – REFINERY TERMINAL:

OPERATOR: Abu Dhabi National Oil Co., (ADNOC).

GENERAL: The ADNOC Ruwais Refinery Terminal is situated about 2.5 miles SE of the Jebel Dhanna Sea Berths and consists of a trestle jetty 3 km. in length with two deep water berths and four coastal tanker berths. Vessels will berth port or starboard side at the discretion of the Pilot having regard for the tide and weather conditions.

BERTHING:

Berth "B"

"B" Berth is designed to accommodate tankers in the range 7,000 to 30,000 d.w.t. Length of ship 118.5 m. to 200 m. The minimum depth alongside the berth is 12.7 m.

The berth consists of the Loading Platform, four mooring dolphins and four breasting dolphins connected by walkways.

On the Loading Platform a bank of six cargo chicksan arms serve to load or discharge ships, namely:

2×12 in. dia.	Each arm is provided for Fuel Oil loading and ballast unloading.
2×12 in. dia.	Each arm is provided for Gasoline (Premium and Regular), Kerosene, Jet Fuel and Diesel Oil.
1×10 in. dia.	For Bunker 'C' and Marine Diesel Oil loading.
1×12 in. dia.	For Naphtha loading.

One 3 in. hose for drinking water is provided.

Products available for loading are Naphtha, Fuel Oil, Gasoline, Kerosene/Jet Fuel, Diesel Oil, Marine Diesel and Bunker 'C'.

Flow rates are as follows:

Naphtha	1,400 cu.m./h.
Reg. Gasoline	1,400 cu.m./h.
Prem. Gasoline	1,400 cu.m./h.
Kerosene	2,500 cu.m./h.
Diesel Oil	3,000 cu.m./h.
Fuel Oil	3,200 cu.m./h.
Crude Oil	6,000 cu.m./h.
Bunker 'C'	1,000 cu.m./h.
Marine Diesel Oil	300 cu.m./h.
Drinking Water	100/300 cu.m./h.
Ballast	1,500 cu.m./h.

The loading arms are provided with:

(i) Hydraulic quick coupling.
(ii) Automatic drain system (emergency condition).
(iii) Electro hydraulic operation.
(iv) Range control system.
(v) Remote Control.
(vi) Connecting flange mating device.
(vii) Vacuum Breaker.

Berth "C"

"C" Berth is designed to accommodate vessels with range 20,000 to 100,000 d.w.t. Length of ship 180 m. to 285 m. The minimum depth alongside the berth is 16.8 m.

The berth consists of the Loading Platform, six mooring dolphins and four breasting dolphins connected by walkways.

On the Loading Platform a bank of seven cargo chicksan arms serve to load or discharge the ship, namely:

3×12 in. dia.	Each arm is provided for Crude Oil, ballast unloading and Fuel Oil loading.
2×12 in. dia.	Each is provided for Gasoline, Kerosene, Diesel Oil loading.
1×10 in. dia.	For Bunker 'C' and Marine Diesel Oil loading.
1×12 in. dia.	For Naphtha loading.

One 3 in. hose for drinking water is provided.

Products available for loading are Naphtha, Gasoline, Kerosene/Jet Fuel, Diesel Oil, Fuel Oil, Marine Diesel and Bunker 'C'.

Flow rates are as follows:

Naphtha	1,400 cu.m./h.
Reg. Gasoline	1,400 cu.m./h.
Prem. Gasoline	1,400 cu.m./h.
Kerosene	2,500 cu.m./h.
Diesel Oil	3,000 cu.m./h.
Fuel Oil	3,200 cu.m./h.
Crude Oil	6,000 cu.m./h.
Bunker 'C'	1,000 cu.m./h.
Marine Diesel Oil	300 cu.m./h.
Drinking Water	100/300 cu.m./h.
Ballast	1,500 cu.m./h.

The loading arms are provided with:

(i) Hydraulic quick coupling.
(ii) Automatic drain system (emergency condition).
(iii) Electro hydraulic operation.
(iv) Range control system.
(v) Remote control.
(vi) Connecting flange mating device.
(vii) Vacuum Breaker.

Coastal Berth 1

Coastal Berth 1 is the Inner Berth on the North side of the Cabotage Jetty. The Berth consists of the loading platform, four mooring dolphins and four breasting dolphins. Length of ship 70 m. to 118.5 m. The loading platform has a bank of five chicksan loading arms with 8 in. diameter connections. The minimum depth alongside the berth is 9.1 m. Vessel size 2,000 to 7,000 d.w.t.

Products available are: Fuel Oil, Diesel, Kerosene/Jet Fuel, Gasoline, Bunker 'C' and Marine Diesel Oil. Ballast will be pumped ashore.

Flow rates are as follows:

Reg. Gasoline	1,000 cu.m./h.
Prem. Gasoline	1,000 cu.m./h.
Kerosene	900 cu.m./h.
Diesel Oil	900 cu.m./h.
Fuel Oil	800 cu.m./h.
Marine Diesel Oil	300 cu.m./h.
Bunker 'C'	900 cu.m./h.
Ballast	400 cu.m./h.
Drinking Water	100/300 cu.m./h.

One 3 in. flanged connection for fresh water.

The loading arms are provided with:

(i) Electro hydraulic operation.
(ii) Manual quick coupling and hydraulic emergency release.
(iii) Range control system.
(iv) Vacuum breaker.
(v) Remote control system.
(vi) Connecting flange mating device.

Coastal Berth 2

Coastal Berth 2 is the Inner Berth on the South side of the Cabotage Jetty and consists of the loading platform; four mooring dolphins and four breasting dolphins. Length of ship 70 m. to 118.5 m., size 2,000 to 7,000 d.w.t. The minimum depth alongside the berth is 8.7 m. The loading platform has a bank of two 8 in. diameter loading arms.

vis. 1×8 in. to discharge ballast.
1×8 in. to load Bunker 'C', Marine Diesel or Fuel Oil. TEL unloading facilities are available.

Flow rates are as follows:

Reg. Gasoline	1,000 cu.m./h.
Prem. Gasoline	1,000 cu.m./h.
Kerosene	900 cu.m./h.
Diesel Oil	900 cu.m./h.
Fuel Oil	800 cu.m./h.
Marine Diesel Oil	300 cu.m./h.
Bunker 'C'	900 cu.m./h.
Ballast	400 cu.m./h.
Drinking Water	100/300 cu.m./h.

One 3 in. flanged connection for fresh water.

The loading arms are provided with:

(i) Electro hydraulic operation.
(ii) Manual quick coupling and hydraulic emergency release.
(iii) Range control system.
(iv) Vacuum breaker.
(v) Remote control system.
(vi) Connecting flange mating device.

Coastal Berths 3 & 4

The Outer Berth North and South side of the Cabotage Jetty each consist of four breasting dolphins and three mooring dolphins with a fourth common mooring dolphin with berths 1 & 2. Length of ship 70 m. to 118.5 m., size 2,000 to 7,000 d.w.t.

The minimum depth alongside the berth is 9.4 m. (No. 3) and 9.2 m. (No. 4). The berths are equipped with four 8 in. loading arms and a 3 in. water connection.

Products available are: Diesel Oil, Kerosene/Jet Fuel, Gasoline, Marine Diesel Oil, Bunker 'C'.

Ballast water will be pumped ashore.

Flow rates are as follows:

Reg. Gasoline	1,000 cu.m./h.
Prem. Gasoline	1,000 cu.m./h.
Kerosene	900 cu.m./h.
Diesel Oil	900 cu.m./h.
Fuel Oil	800 cu.m./h.
Marine Diesel Oil	300 cu.m./h.
Bunker 'C'	900 cu.m./h.
Ballast	400 cu.m./h.
Drinking Water	100/300 cu.m./h.

The loading arms are provided with:

(i) Electro hydraulic operation.
(ii) Manual quick coupling and hydraulic emergency release.
(iii) Vacuum breaker.
(iv) Remote control system.
(v) Range control system.
(vi) Connecting flange mating device.

BERTHING AIDS:

Berths 'B' and 'C' are equipped with a radar operated safety berthing system indicating by means of coloured lights the forward and aft berthing velocity of the ship.

Two groups of coloured lights one forward and one aft indicate the safe/acceptable/dangerous lateral approach of the ship from a distance of 50 m. off the berth.

BALLASTING/DEBALLASTING: Ruwais Refinery has dirty ballast water treatment equipment and all dirty ballast shall be discharged ashore for treatment. (No dirty ballast may be discharged into the sea and pollution of the waters of the port is an offence against the Port Regulation and the laws of Abu Dhabi).

Accepting dirty ballast into the refinery storage is subject to approval by refinery, a sample of the dirty ballast may be required for analysis, a letter from Master requesting permission to discharge is to be made (letter is provided for Master's signature).

During loading/unloading all deck scuppers must be plugged. All precautions shall be taken to prevent oil or oily waters escaping into the sea during connection and disconnection of loading arms.

Normally the terminal Control Room will give a 10 minutes warning before deballasting may commence. Deballasting shall commence at slow speed to check systems and back pressure.

Simultaneous deballasting with loading of cargo is permitted only in the case of cargo of Bunker 'C'.

While encouraging quick turn around and the use of minimum balla upon arrival, sufficient ballast must be retained on board for the sa manoeuvring of the vessel at the Pilot's discretion.

LOADING AND UNLOADING:

(i) The Master should give the terminal a 'STAND BY' warnin 10 minutes before ready to commence loading or discharging.
(ii) Upon 'COMMENCE LOADING' from the Master only one pum will be used to ensure a slow flow rate until it is established that a systems are operating correctly and pressures are constant. Fu loading rate may then be ordered.
(iii) The vessel's cargo tanks shall be inspected prior to and durin loading and should it be found that the tanks are not tight a loading shall cease, the vessel be rejected and further loadin refused. The vessel will not be accepted later until satisfacto evidence of repair is produced duly certified by ABS, Lloyd's o other officially accredited classification society or surveyor.
(iv) During the hours of darkness vessels loading products o discharging crude oil or ballast shall rig overside lights t illuminate the surface of the sea around the ship to the Termina Operators satisfaction to ensure that any oily products on th surface may be detected quickly and early action taken a appropriate.

DERATISATION: There are no facilities for Deratisation at Ruwais.

RADIO: The Refinery Terminal maintains VHF watch on Channel 1 and 19 for ship/shore communications and once berthed, the vessel wi be connected to the terminal by land line telephone.

The Pilot will bring on board UHF Hand Set for manoeuvring purpose only.

Arrival Telegram Ship/Shore: After the Pilot boards the Ship/Shore Arrival Telegram will be passed by VHF Radio Channel 18/19 as follows

(1) Name of Vessel.
(2) Nationality and Port of Registry.
(3) a – Gross Registered Tonnage.
 b – Net Registered Tonnage.
 c – Summer Deadweight.
(4) Size of manifold.
(5) Are reducers to 12 in., 10 in. and 8 in. available on board?
(6) Are adequate nuts and bolts and gaskets available on board?
(7) Number of hours required to de-ballast and quantity.
(8) Vessel's maximum loading rate.
(9) Quantity and type of cargo.
 a –
 b –
 c –
(10) Last Port.
(11) Next Port.
(12) Master's Name.
(13) Date and time of arrival.
(14) Date and time of Pilot on Board.
(15) ETA at Berth.
(16) Arrival Draft.
(17) Estimated Departure Draft.
(18) Bunkers requirements (quantity and type).
(19) Drinking Water requirement quantity.
(20) Is the ballast lead free?

FUEL: Bunkers are obtainable at Refinery berths and should be arranged through the ship's Agent.

FRESH WATER: Fresh water is obtainable at Refinery berths and should be arranged through the ship's Agent.

STORES/PROVISIONS: Stores and provisions are not permitted to be loaded at Refinery berths and must be taken on board in the anchorage

(D) RUWAIS – NGL TERMINAL: 24° 09′ 49″ N., 52° 43′ 16″ E

OPERATOR: Abu Dhabi Gas Industries (GASCO).

GENERAL INFORMATION: The Terminal Regulations are issued for the information and guidance of Masters of vessels loading at the GASCO Jetty at Ruwais. After receipt of the first ETA advice from a gas carrier GASCO will cable the Master of the vessel instructions to carry out following tests and checks 24 hours prior to arrival:

1. Check condition (oxygen content) of atmosphere in void spaces around cargo tanks.
2. Check all reliquefaction units fully operational.
3. Check settings of cargo tank safety relief valves.
4. Test ESDS of cargo valves/pumps/boosters from all activating stations.
5. Check gas detecting unit with suitable spangas and have unit working continuously.
6. Test waterspray system deck area, flush all lines and check nozzles for proper operation and coverage.
7. Check ventilation of control room and compressor room and have ducts set for LPG.
8. Check over-pressurising and motor-trip system of motor room.
9. Check navigation equipment and steering gear fully operational.

The results of above tests should be cabled to GASCO not less than 18 hours prior to arrival.

On arrival at the terminal, the Terminal Representative will discuss with the Master the safety requirements. Attention is drawn to the International Safety Guide for Oil Tankers and Terminals (ISGOTT) and the Safety Inspection Guildelines and Terminal Safety Checklist for gas carriers as published by the International Chamber of Shipping and Oil Companies International Marine Forum (OCIMF). For efficient loading it is essential that the ship should be fitted with adequate equipment. Improvisations made after the ship has arrived alongside the jetty are not sound practice and result in delays and possible damage to the loading arms and other equipment.

Abu Dhabi Gas Industries Ltd. (GASCO) have equipped their terminal with loading machinery and mooring arrangements which will ensure tankers and gas carriers receiving their cargoes at a reasonable rate, thereby extending to the ship the benefit of a rapid turnaround.

Mooring, loading and unmooring are carried out by night as well as by day. Co-operation between the Ship's Officers and Terminal Representatives is essential to secure the full benefit of the facilities provided.

TUGS: Twin screw tugs (35 tons bollard pull) are used for both berthing and unberthing of vessels. The number of tugs to be used is to the discretion of the Pilot but will normally be two for berthing and one for unberthing. The tugs will use their own ropes and/or wires. The tugs are fitted with foam/water monitors, including one at approximately 19 m. above sea level, to assist in fire-fighting. Also fitted are spray booms to apply dispersants in case of oil spills.

BERTHING: *The Jetty:* The centreline of the GASCO-NGL Jetty Loading Platform is situated in 15 m. of water in position Lat. 24° 09′ 49″ N., Long. 52° 43′ 16″ E. with the berthing line in direction 305°/125°. Vessels are normally berthed heading 305°. A piping trestle and road, approximately 2,650 m. long, leads to the shore where the processing plant and storage tanks are located.

The jetty head comprises a loading platform (10 m. above chart datum), an utilities building, 4 breasting dolphins and 6 mooring dolphins. The dolphins are inter-connected by walkways. The distance between the 2 outermost dolphins is 340 m., between the 2 innermost breasting dolphins 42 m. and between the two outermost breasting dolphins 97 m.

On the loading platform there are 2×12 in. loading arms for loading Pentanes plus and discharge of dirty ballast/slops, 4×12 in. loading arms for loading/vapour return of Propane and Butane and 1×8 in. loading arm for bunkering. (For distance and disposition of loading arms see schematic layout). The LPG loading arms are fitted with an Emergency Release System (ERS). All loading arms except the bunker arms are fitted with an Emergency Shutdown System (ESD). Both ERS and ESD can be actuated automatically or manually. For detailed information about these systems you are referred to the separate letter on ESD/ERS handed over to you by the Terminal Representative. The Master is to ensure that the personnel responsible for cargo operations are fully familiar with these systems.

On the Western end of the loading platform is a gangway tower with a 1.5 ton crane forming a integral part of this tower. On the Eastern end of the platform there is a tower mounted firewater and foam monitor. This monitor can be controlled manually or remotely from the jetty head or from the foot of the jetty aided by a television monitor.

An additional manually controlled firewater monitor is situated on each of the 2 inner breasting dolphins. In addition to this, water spray deluge systems are covering the loading arms area, the gangway, the surge drum area and the utilities building. Gas detection equipment is strategically placed near the loading arms and will give alarm in case of inadvertent gas escape. The loading arms area and tanker manifold area are monitored by closed circuit television from the control room situated in the utilities building on the jetty and from the main control room.

On the Eastern side of the loading platform is a boat landing stage where the mooring boats can tie-up.

Draft: The minimum water depth alongside the jetty is 15 m. (49.2 ft.) below chart datum (C.D.). However, the Deep Water Channel imposes draft limitations on vessels departing from and entering the Port of Jebel Dhanna – Ruwais:

Also see Section "A" – "Restrictions".

Moorings: When at berth, vessels must be moored to the entire satisfaction of the Pilot. Vessels will normally berth port side alongside on a heading of 305°. The breasting dolphins are each equipped with 1,250 KN double quick release hooks and a power operated capstan. The mooring dolphins are each equipped with 1,250 KN triple quick release hooks and power operated capstan.

Vessels must be ready at all times to put out extra moorings as requested by Terminal Personnel or dictated by weather changes. It is the Master's responsibility to ensure that vessel's mooring lines are checked frequently to prevent excessive movement of the vessel in berth, which could activate the ESD/ERS systems and/or cause severe damage to the loading arms and other terminal equipment.

Experience has shown that wholly synthetic moorings have too much elasticity and allow the vessel to range or drift away from the berth during periods of adverse weather.

Therefore the moorings should preferably be all steel wires without use of nylon tails.

As it is recognised that some vessels are not fitted out with complete steel wire moorings, such vessels may use synthetic moorings for head or stern ropes, but breasting and spring moorings are to be steel wires. However, mooring lines leading to the same mooring dolphin should either be all steel wire or all synthetic fibre.

NOTE: (October 1982). With immediate effect all vessels calling at the GASCO NGL Jetty are to be fitted with wires, for spring lines. Vessels unable to comply will be subjected to an inspection of mooring ropes by the Pilot on arrival and will be berthed only if Pilot is satisfied with the mooring lines available. Pilot inspection of mooring lines will be carried out only during daylight hours.

The breasting dolphin's fender design criteria are based on providing for berthing energies acting in the horizontal plane for maximum displacement of 95,000 tonnes (70,000 tonnes until late 1985 when fender repairs completed) with an approach angle to the berthing line of 7° at a contact velocity of 15 cm. per second.

The "Seibu Unit Type" rubber dock fenders are 4.20 m. wide and 5.0 m. high, the face of which protrude approximately 2.9 m. from the face of the loading deck. They provide for 100% contact of fenders on the vessel's perpendicular mid-body at light and loaded drafts, for the full range of vessel sizes.

Tension Winches: Vessels equipped with automatic tension winches should not use the automatic device and set the manual brake on these winches.

BALLAST: The jetty is equipped with dirty ballast/slops reception facilities. Tankers discharging dirty ballast/slops ashore will use the Pentane plus loading arms from where a 24 in. pipe-line runs to tanks in the Refinery adjacent to the LPG plant. The maximum ballast reception rate is 5,000 cu.m./hr. Prior to arrival the Master is to advise GASCO how much dirty ballast/slops he expects to discharge to the shore facilities.

When the vessel arrives with clean ballast for overside discharge, the ballast water must be clean and a declaration to this effect needs to be signed by the Master and delivered to the Terminal Representative. There is a danger of violating pollution regulation if ballast taken on in polluted water is discharged in port. If it is necessary to take on ballast in polluted areas, this should be discharged during passage and replaced by cleaner ballast.

Ashes, oil, oily water, garbage or other refuse must not be discharged overboard in port waters. Scuppers must be effectively plugged and leakage or spillage of oil aboard ship must not be swept or washed overboard whilst in Port waters.

It is essential that the vessel is adequately ballasted to ensure safe handling and manoeuvring. Please comply with the Pilot's requests as to ballast quantity and disposition.

There must be no cleaning of boiler tubes whilst the ship is in port.

POLLUTION: Abu Dhabi Gas Industries Ltd. (GASCO) follows a clean seas policy and in this respect the Harbour Master is authorised by the Port Authority to inspect the vessel's "Oil Record Book" referred to in the International Convention for the Prevention of Pollution from Ships, 1973. Any vessel, the Master of which does not allow inspection of the "Oil Record Book," will be refused the use of the Company facilities at Ruwais.

If it is found that the information entered in the "Oil Record Book" is not in accordance with the requirements of the Convention the matter will be reported to the appropriate authority.

It is an offence to discharge dirty ballast, pump bilges or discharge refuse within the Port limits.

The Harbour Master, or his nominee, is authorised to take samples, in accordance with an approved procedure, of ballast water to be discharged, or being discharged at Ruwais. Should test carried out on these samples indicate an average oil in water content of more than 15 p.p.m. then this may be used in evidence in any proceedings against you brought by the Port Authority in accordance with the Law.

In the event of your vessel discharging dirty ballast or spilling oil, cost for cleaning the pollution, third party claims and other expenses and fines shall be borne by the vessel.

COOLDOWN OF GAS CARRIERS: Vessels, when presenting themselves to load at GASCO terminal should in all cases be ready to load in all aspects. For a gas carrier this means that the cargo tank atmosphere should be compatible with the product to be loaded and the cargo tank temperature close to the temperature of the product to be loaded (Propane −45°C, Butane −8°C).

Notwithstanding the above and providing notice is given well in advance, GASCO may, in exceptional cases, accept gas carriers not fully cooled-down. Each occasion will be considered separately giving due regard to the shipping programme and any other circumstances or restrictions.

GASCO will not accept any responsibility for the failure by the Master of any gas carrier loading at Ruwais to take appropriate action to receive cold liquefied gas, prevent any damage to his vessel and jetty installation and/or injury to his crew or Terminal personnel.

VENTING: During the loading of Pentanes plus, vessels should only allow vapours to escape via the agreed venting arrangement. If there is little wind movement, vapour may persist on deck. When there is a wind, it may, in crossing a deck house or structure, create a low pressure on the lee side thereby causing vapour to be carried towards the house or structure.

Either of these wind conditions may result in high local vapour concentration and, if so, it may be necessary to stop loading while the conditions persist.

Gas carriers are not allowed to have any vapours escape to atmosphere. During loading the pressure in the cargo tanks should be controlled by the use of their reliquefaction plant or by the use of the vapour return line to the shore. The control room should be notified prior to returning vapour ashore via the vapour return line and before stopping the return of vapour ashore.

Your attention is drawn to the information, as provided to you by the Terminal, on the properties and dangers of the cargo to be loaded on board your vessel, together with the actions required in case of an accident.

LOADING: *Loading Arms:* The LPG and Pentane plus loading arms presentation flanges are 12 in. ANSI – 150 – flat face spiral groove.

For centre to centre distances and disposition of the loading arms, see schematic layout. The LPG arms operating envelope parameters are as follows:

Vertical plane	: From 7.7 m. to 24.0 m. above chart datum.
Horizontal plane	: From 4.1 m. to 8.7 m. off the jetty face over the full vertical plane.
Safety Provision	: Horizontal plane drift of 4.6 m. on either side of the centre line. Lateral plane drift of 4.6 m. outside the normal operating box envelope.

All four LPG loading arms can be connected to ships' manifold with a centre to centre spacing range of 1.6 m. to 3.5 m. for the full envelope including the outer drift envelope box.

The Pentane – plus loading arms operating envelopes are as follows:

Vertical plane	: From 2.3 m. to 20.75 m. above chart datum.
Horizontal plane	: From 6.4 m. to 9.3 m. off the jetty face over the full vertical plane.
Safety Provision	: Horizontal plane drift of 4.6 m. on either side of the centre line. Lateral plane drift of 4.6 m. outside the normal operating box envelope.

The Pentane plus loading arms can be connected to ships' manifolds with a centre to centre spacing range of 0.6 m. to 2.1 m. for the full envelope including the outer drift envelope box.

Notwithstanding the above, the loading arms are fitted with ESD systems and additionally the LPG arms with ERS which is actuated before the loading arms reach the outer limits of their envelopes.

The LPG loading arms are linked to the shore system which provided the following flexibility:

Loading arms are numbered from the gangway tower to East.
No. 1 – Propane or Vapour return
No. 2 – Propane – Butane or Vapour Return
No. 3 – Propane – Butane or Vapour Return
No. 4 – Butane or Vapour Return

After berthing you are required to remove the blind flanges from the manifold connections to be used for loading and to indicate which product is to be loaded through them and which connections are to be used for the Vapour Return lines, if required. The connection/disconnection of the 12 in. ANSI 150 loading arms and 8 inch ANSI 150 bunker arm will be carried out by Terminal personnel. If your manifold sizes do not correspond with the loading/bunker arms, you are requested to provide and fit the appropriate reduction pieces accordingly. Masters of gas carriers are to ensure that the reduction pieces and gaskets used are suitable for loading of cryogenic cargoes.

Communications: To maintain necessary communications permanently during cargo operations and also in emergencies, you will be provided with a handie-talkie and a telephone.

We require that the handie-talkie is at all times attended to by the officer responsible for cargo operations. The handie-talkie enables the officer to communicate directly with the main control room and the jetty control room.

Furthermore, a telephone will be placed on your vessel. It is advisable that this telephone is located in such a way that it is guarded most of the time. Additionally a console for activating the ESD and ERS will be put on board.

A ship's crew member, able to converse in English, must be present near the ship's manifold at all times. The loading arm and ship's manifold area are covered by closed circuit televisions from the jetty control room and main control room.

Emergency Procedures: In case of an **emergency on board** your vessel, we require you to take the following action:

Raise the appropriate alarm and take the required action
Inform the Terminal via handie-talkie, telephone and jetty attendant or by activating the ESD or ERS system (see cautions on ESD/ERS information letter).
Cease all cargo operations immediately and shut-down cargo system completely.
Prepare to vacate the berth.

In case of an **emergency ashore,** we require you to take the following action:

Cease cargo operations immediately and shut-down cargo systems completely.
Be stand-by on handie-talkie and telephone and keep contact with jetty attendant.
Be stand-by to give any assistance.
Prepare to vacate the berth.

NOTE: The shore installation has been equipped with a range of safety devices and emergency shutdown systems, these could be activated automatically or manually from the jetty or on board the vessel as the situation will call. All shutdowns are preceded or accompanied by an alarm.

Loading Operations: The maximum loading rates for each product are as follows:

Product	*Tons/hr.*	*cu.m./hr.*
Propane	1,760	3,000
Butane	1,800	3,000
Pentanes plus	2,910	4,270

Propane and Butane can be loaded simultaneously. Loading rates can be adjusted either by stopping/starting one or more pumps or by opening/closing of the recirculation valves on the loading platform.

After berthing the terminal representative will discuss with you the loading operations and emergency procedures. You are reminded that the responsibility as to the quantity of cargo to be loaded, rests with you as Master of the vessel and no overage may be sent back ashore.

Whilst alongside the jetty, ships should be ready to move under their own power in the event of their breaking adrift, catching fire or emergencies. No repairs are to be carried out whilst alongside which would immobilise the ship or impair her fire-fighting efficiency.

CAUTION: The loading rates are controlled on shore and due to the long pipe-lines from the shore product tanks to the jetty head, and the high loading rates, an extremely dangerous situation can arise if ship's valves are closed against the flow of liquids, which could lead to pressure surges liable to cause the blowing out of pipe-line gaskets and/or severe damage to the loading arms.

Loading rates, loading rate reductions and stopping of cargo procedures will be discussed with you prior to commencement of loading.

While alongside the jetty, no craft are allowed alongside the vessel. The lowering of lifeboats whilst alongside the jetty is strictly prohibited except in emergencies.

Immediately after completion of loading the loading arms will be disconnected and the vessel must be ready to proceed to sea or anchorage as directed.

STORES: The taking-on and/or landing of stores and ship's spares over the jetty is not allowed.

SHORE LEAVE: Crew members are not permitted shore leave.

SIGNALS: Vessels, whilst alongside the GASCO NGL-jetty, shall, in addition to those described in the port regulations, display the following signals: by day: a red flag, by night: a red light visible from all directions.

SHIP OPERATOR'S REPORT: February 1982

The following criteria for gas carriers programmed to load propane butane at Ruwais Terminal.

1. Tanks' atmosphere compatible with product to be loaded.
2. Tanks' temperature close to temperature of product to be loaded (propane – 42°C, butane – 6°C).
3. Distance between ship's side and 12 in. manifold connections between 4.1 m. and 8.7 m.
4. Height of manifold above chart datum between 7.7 m. and 24.0 m.
5. Maximum height of railing i.w.c. manifold above chart datum 21.8 m.
6. Centre to centre distances between manifold connections between 1.1 m. and 3.5 m. if manifold connections centre to centre distances are between 1.1 m. and 1.6 m. only one grade can be loaded at the same time.
7. Vessel not to have carried ammonia on previous two voyages.
8. Vessel to inform GASCO Ruwais not less than 48 hours prior to arrival of disposition of manifold connections from bow to stern indicating which connections to be used for propane, butane, vapour and liquid and also the centre distances between them.

also

9. Master should confirm ETA at 72, 48 and 24 hours prior to arrival to Gasha Tower by telex/cable.
10. Master to call Jebel Dhanna Pilot and Agent Jebel Dhanna on VHF radio Channel 9 or 16 four hours prior to arrival. Gasha buoy is in position Lat. 24° 25′ 46″ N., Long. 52° 34′ 26″ E.
11. Please advise Agents vessel's call sign or telex no., d.w.t in long tons, g.r.t., n.r.t., arrival draft, loading rate, etc.

SHIPMASTER'S REPORT: December 1981 (Vessel loading propane/butane, g.r.t. 45,000, d.w.t. 56,000, draft 13.1 m., capacity 79,970 cu.m.).

Ruwais lies in the same general port area that encompasses Jebel Dhanna and at the moment consists of a petroleum products jetty and another to the S.E. which handles Pentanes and LPG.

Further again to the S.E. there is more port development for an ammonia/fertiliser berth and dry-cargo berths.

Ruwais is administered by ADDPOC, Abu Dhabi Petroleum Ports Operating Company, while the LPG berth comes under the immediate control of GASCO, Abu Dhabi Gas Industries Ltd.

The LPG loading platform is situated in position: Lat. 24° 09.8′ N. Long. 52° 43.3′ E., the trend of the platform and mooring dolphins being about 305° True, more or less in line with the current flow.

Approach: The vessel should have BA Charts L(D1) 3778, 3779, 3780 and the recommended track on these should be followed for arrival and departure since it provides adequate water for a vessel of this size and draft. The route is well marked with large buoys and light floats which show up well visually and on the radar. An approach in poor visibility should thus be possible and made with confidence.

See Pilot Books and "Guide to Port Entry".

A waiting anchorage is provided off Ghasha buoy.

Pilotage: Pilots board off 'Ghasha' buoy from launches of about 12 m. length; at the moment two launches are in commission with another undergoing trials. Two have black hulls and light blue upperworks, the other being orange hulled and white upperworks.

Pilot ladder required about 1 m. above the water.

The length of pilotage to the first line ashore is about 3.5 hours.

Communications: Through Bahrain Radio. There is considerable evidence pointing to huge delays in cables between this radio station and the eventual recipient.

Before arrival the Agents sent a comprehensive questionnaire requesting safety checks and ship information. This is a standard cable and originates from GASCO.

VHF contact originally made on Channel 16 with the Pilots and Port Control, but their usual working frequency is Channel 9.

On boarding the Pilot issues a copy of the Port Regulations which should be studied prior to berthing.

Berth: This consists of the loading platform and mooring dolphins at the end of a 3 km. trestle. Minimum reported depth alongside is 15 m. and this was borne out by echo sounder on arrival and departure.

The jetty head consists of the loading platform, 42 m. long with two breasting dolphins at each end. Beyond these are the mooring dolphins, three forward and aft, the total length of the mooring system being 340 m., thus providing adequate moorings for most vessels.

The loading platform carries seven Chicksans, two for Pentane, one for bunkers (yet to be commissioned) and four for LPG. There is a control building on the berth together with closed circuit TV, gas detecting equipment and fire fighting monitors.

The loading arms are all 12 in. 150 ASA although shore personnel boarded and fitted special pieces between our manifold/reducers and the Chicksan. All Chicksans are fitted with automatic quick release and this will operate if the vessel surges more than 4 m. (two for'd and two metres aft) from her moored position. An automatic shutdown system is also fitted and the vessel is provided with a control box for these together with comprehensive instructions. A time of 10 secs. is quoted from operation to complete shutdown and emergency release.

There is provision for two vapour return lines and two loading lines within the four Chicksan configuration and these are interchangeable to a degree.

Ship/shore communication is provided by the terminal who place on board a Stornophone for that purpose.

Mooring: Wires only are recommended but there were no objections to our all polypropylene supply. The normal 3.2.2 was recommended and there is a large mooring boat to assist. Dolphins are fitted with quick release hooks.

Springs must be on mooring winches and the use of self tensioning winches is not allowed.

There are powerful tugs (3,300 h.p.) available for berthing.

Cooldown: There exist rather loose requirements for cooling down but it was no problem to explain to the Superintendent that this vessel could load into 'warm' tanks. If a vessel were to arrive under inerted tanks the situation may be rather different and it appears that the vessel would then leave the berth to cooldown.

Gangway: Ship's gangway should be turned in for berthing, a shore gangway is provided.

N.O.R.: Agent advised me to tender Notice of Readiness at the time of passing the Ghasha buoy.

E.D.P.: There is no Early Departure Procedure, the Master must sign Bills of Lading before sailing. Allow three to four hours after completion of loading to complete all paperwork.

Load Rates: Invariably quoted in cu.m.p.h. Maximum for each product being quoted as Propane 3,000 cu.m.p.h., Butane 3,000 cu.m.p.h. The plant were able to supply at a very low initial rate at the commencement of loading.

Note: The Propane loaded at this call was very warm, −38°/−39.5°C. The Loading Superintendents did not find this amiss and the reported temperature in the shore tanks is about −40°C. There was a slight drop in temperature at the manifold after sunset.

Butane loading temperature was about 0°/−1°C.

Cargo Survey: Watson Gray attended on behalf of Charterers to gauge ship's tanks and their figures agreed closely with our own. However, there was a huge discrepancy (618 tonnes) between our figures and those from ullaging and flow meter readings ashore (Propane). Ship was in excess of the shore tonnage. Ship was under shore figures for Butane by about 35 tonnes.

Protest noted over cargo temperature and quantities. Vessel was given outward clearance only on issuing Agents with a letter of Authority to Sign Bills of Lading.

Density: Water density 1031.

General:

Stores: not available.

Shore Leave: Definitely not allowed under any circumstances other than extreme medical urgency.

Relief/Repatriation: Not possible.

Lloyd's Surveyor: A minimum of seven days' notice required.

Repairs: There are no repair facilities available. Whilst alongside main engines must be kept in immediate readiness.

Lifeboats: Permission *must* be sought from Port Authorities to carry out lifeboat drills.

Bonded Stores: No restrictions on tobacco. All alcohol should be collected and sealed. The Customs may allow a token issue (six cases of beer for the ship) but this is not to be relied upon. All cameras have to be collected and placed under seal.

Medical: Unless in cases of extreme urgency, totally unavailable.

Mail: Reported as being seven days to and from U.K.

Courtesy Flag: U.A.E.

Tapes: A very good selection of pre-recorded tapes is available at about 60p each. The Pilot will bring a selection on a sale or return basis.

Fishing: Reported to be good.

Rat Guards: Must be fitted to all moorings.

Fresh Water: Not available.

Walport Films: Exchanges readily available with usual notice.

Entering Inwards: After the vessel's cargo nomination has been accepted she is allowed an "acceptance period" of three days in which to arrive at the port. Apparently this runs from 24 hours, BEFORE the day of acceptance to 48 hours afterwards. Thus we arrived 7 hours 30 mins after the expiration of our acceptance period and a vessel arriving 20 hours later received priority. This should be brought to the notice of Owners or Charterers, before arrival.

Papers:

One Crew Declaration
One Bonded Stores List
Two Crew Lists
Health Declaration

Bonded stores' seal checked on sailing.

Customs checked both bars.

Note: Abu Dhabi operates a boycott against Israel, South Africa and Egypt. Suez Canal Transit is excepted.

The Master has to sign an undertaking to the effect that the cargo will not be discharged at a port under boycott and is given a form to be posted to Abu Dhabi from the discharge port as proof.

(E) RUWAIS FERTILISER INDUSTRIES (FERTIL)

The bulk cargo terminal at Ruwais comprises a 512 m. long jetty with in line berths to suit the export of bulk urea. Three mooring dolphins at the seaward end of the jetty serve a liquid ammonia berth. The bulk cargo terminal is bordered by intake and outfall channels provided for the cooling water system of the Ruwais Industrial Complex.

Provision has been made along the jetty for bag and bulk conveyors to load vessels with urea from a fertiliser plant 1 km. inshore.

The loading of ammonia is carried out from a loading arm at the North end of the jetty where vessels can berth using 3×100 ton capacity mooring dolphins.

LOCATION: The jetty alignment and conveyor main setting out line is 10° West of North. The seaward limit of the jetty works are defined by the Northernmost mooring dolphin.

The terminal is located in 12 m. of water, due East of the NGL Jetty, and West of the Construction Wharf and is approached from a deep water channel serving other Ruwais jetties.

A turning basin is located N.E. of the jetty and is of 500 m. diameter and has a minimum dredged depth of 12 m. below chart datum.

Vessels will normally be berthed against fender piles alongside the jetty on a heading of 350°.

BERTHING: *Jetty:* The jetty is designed for berthing combinations of vessels up to 2 fully laden 200 m. long (25,000 d.w.t.) bulk cargo vessels along its Eastern side. Provision is made at the Northern end of the jetty for the loading of liquid ammonia.

The jetty deck is of concrete construction and is supported by vertical 1 m. diameter tubular steel pipes.

Two turnround areas for jetty traffic are provided, one mid-way along the jetty, the other at the Northern end.

The jetty is designed to support up to 3 ship loaders with a backing conveyor system and up to 3×300 mm. diameter liquid ammonia lines.

The 3 mooring dolphins at the Northern end of the jetty serve the Ammonia Berth and each has a bollard capacity of 100 tonnes and is connected to the jetty by a system of concrete walkways.

The jetty and dolphins have a deck level 7.4 m. above Jebel Dhanna Chart Datum.

The minimum dredged depth at the berth is 12 m. below Chart Datum.

Fenders: The fender system has a design capacity of 55 tonne metres per fender pile and the recommended berthing angle is 5°. The fender system absorbs energy by deflection of single 1,300 mm. diameter tubular steel cantilever piles and twin Bridgestone Cell units which have a frontal frame 4.2 m. high by 1.7 m. wide.

The fender face is set 4 m. seaward of the jetty deck edge.

The fender spacing is generally 15 m. along the main length of jetty and this extends to 31 m. for the Northern fenders located East of the mooring dolphins.

The fenders are suitable for vessels between 5,000 d.w.t. and 25,000 d.w.t.

Mooring: Ship lines will be taken to 100 ton "Bean Type" mooring bollards located along the cope edge of the jetty. The general bollard spacing is 15 m. whilst at the shore end this extends to 30 m.

100 ton "Bean Type" bollards are positioned on the 3 mooring dolphins located at the seaward end of the jetty. Ships' lines may be taken to the dolphins by boat or via the concrete walkways provided from the jetty deck.

Landing Stage: A landing stage for small harbour craft is located adjacent to the jetty near Pile Bent 55, some 600 m. South of the outermost dolphin.

Access Ladders: Access ladders to water level are provided on the fender piles at a spacing of 60 m. All mooring dolphins are provided with access ladders.

Services: Provision has been made for future electrical and mechanical services in the jetty by ducts cast into the concrete deck or provision for hanger supports beneath the deck.

Loader Rails: A flat bottom loader rail having a gauge of 11 m. is secured to the concrete deck by Molyneaux clips. Buffer stops are provided at both the inshore and offshore limit of the rail. Provision has been made for the future extension shorewards of the loader rail.

Approach From Shore: The approach to the jetty is via a dual carriageway off the Corniche Road. The access road leading to the jetty is 600 m. long and 8 m. wide and bounded on one side by the export conveyor housing.

Breakwaters: Rubble mound breakwaters protect the cooling water intake channel located West of the jetty.

Rubble mound reclamation bunds built just landward of the reef define the land area.

A rock armoured cooling water outfall channel is located within the reclamation and located mid-way between the jetty and construction wharf.

LOADING: *Urea Loading Operation Procedure:* Firstly, the Jetty Supervisor, after the arrival of the vessel, and after getting Clearance Certificate, will discuss the necessary loading sequence for keeping the vessel trim with ship's Cargo Officer.

When the sequence of operation has been agreed, the Jetty Supervisor will inform operational group in Bagging Control Room and shiploaders of the sequence required.

On receipt of this information, Bagging Control Operators will pre-set the bag counters or scales and line up other conveyors and machines depending upon the method of shipping required (i.e. bagged or bulk product) to the quantity agreed with the ship Cargo Master. Meanwhile, the Shiploader Operator will have positioned his machine ready for loading into the appropriate cargo hold defined by the sequence of operation.

Jetty Supervisor/Shiploader Operator will then give signal as "Shiploader in Loading Position" and Bagging Control Room Operator will start sending bag or bulk urea to jetty.

The pre-set bag counters or belt weighers will trip the conveyor system (excluding the jetty conveyors) when the pre-set capacity has been realised. The signal to start again will be given by the "Shiploader Running" signal. On receipt of this signal in the Bagging Control Room, the shiploader will have traversed to its new loading position and will be ready for the next batch of product.

Photocells are provided at the end of telescopic conveyor to indicate actual quantity of the bags loaded in ship hold. A cumulative reading (in numbers) is recorded in ship-loader operator's cabin.

For bulk urea loading, urea going to jetty conveyor is measured by weighing scales inside the Bagging Building. The weighing scale has load cells and belt speed detector for measuring the flow rate. The feed rate is indicated and also totalised cumulatively at Bagging Control Room, and also at the local control panel of weighing scale.

Normal operational shut-down shall be sequential and initiated from Bagging Control Room.

AGENT: National Shipping Gulf Agency Co. (Abu Dhabi) Ltd., Jebel Dhanna, United Arab Emirates. Tel: 71026. Cables: "Confidence", Abu Dhabi. Tel: 41031 (Jebel Dhanna). Telex: Abu Dhabi 22248 ("Gacauh EM").

KHOR FAKKAN, Sharjah: 25.22 N. 56.22 E.

(See Plan Book)

PORT LIMITS: See Plan of Khor Fakkan on B.A. Chart No. 3518.

DOCUMENTS: The following documents must be in the possession of the ship's Master on arrival, or must be forwarded to ship's Agent prior to arrival:

Immigration: board on arrival
  Crew Lists (2 copies)
  Passenger Lists (2 copies)
  Passports/seamen's identity cards
Customs:
  Crew Lists (2 copies)
  Passenger Lists (2 copies)
  Cargo Manifests (2 copies)
  List of Alcoholic Beverages (2 copies)
Port Operator:
  Certificate of Registry (1 copy) on request
  Classification Certificates (1 copy) on request

The following documents should be handed to the Port Operator by the ship's Agent at least 24 hours prior to the vessel's arrival.
  Cargo Plan (1 copy)
  Discharge List (1 copy)
  Transhipment List (1 copy)
  Dangerous Cargo Manifest (1 copy)
  Refrigerated Container Manifest (1copy)

PILOTAGE: Pilotage is compulsory for all ships proceeding beyond the fairway buoy. Port Khor Fakkan will operate a 24 hour, 7 day a week pilotage service. Vessels approaching the Port should await Pilot to seaward of the fairway buoy. The extremity of the breakwater (Lat. 25° 21′ 28″ N., Long. 56° 22′ 43″ E.) is marked by a white occulting light visible 10 miles.

"Gulf Pilot Khor Fakkan" on VHF Channel 16. Also on 2182, 2638, 2738, 3270, 3710 and 4136.3 kHz.

ANCHORAGE: A limited number of vessels may anchor in Khor Fakkan Bay to the North of the fairway with the prior approval of the Port Operator. Otherwise, anchoring not permitted within 12 miles of Khor Fakkan as the area is a prime tourist area.

MAX. SIZE: Max. draft entering and leaving is 39 ft., range max. 3.0 m., height of wharf at HW 1.8 m.

No restrictions on LOA.

HEALTH: Normal quarantine regulations apply. Radio Pratique will be granted on receipt of radio message from Master via his Agent, stating that no serious illness has occurred during the preceding 30 days.

All crew members must be in possession of valid cholera certificate. The Health Officer will board when the vessel is alongside.

RADIO: Bahrain Radio A9M.

Notice of Arrival: Vessels should advise their Agent ETA Port Khor Fakkan, giving draft, LOA and intended cargo operations to be performed at least 72 hours prior to arrival and confirm 48 hours and 24 hours prior to arrival.

Agents should arrange berthing and labour with the Port Operator. Vessel should contact Port Khor Fakkan signal station on VHF Channel 16 when within range.

VHF: Khor Fakkan Harbour Office can be contacted on Channel 16. All movement in and out of the harbour shall be notified to the control and permission to proceed obtained for each movement.

TUGS: 1 tug, 800 h.p.

BERTHING: Length of berth 430 m. Depth alongside 12.0 m. at LW. Mooring gangs and berthing launches are provided.

Port Equipment: 2×40 ton Mitsubishi gantry cranes; 4×40 ton electric transtainers; yard tractors and trailers. Additional equipment such as forklifts, mobile cranes, pallets and barges available on request from the Port Authority.

Storage Facilities: The terminal comprises an area of 100,000 sq. m. and is capable of handling 150,000 t.e.u.s per year.

Container Freight Station: A container freight station is available at Port Khalid, Sharjah close to the main highway linking Sharjah with its West coast neighbours.

Priority: Given to Container and Ro-Ro vessels.

STEVEDORES: *Working Hours:* The port will work on a 24 hour, 7 day a week basis ashore and afloat. Additional charges will apply outside normal working hours which are defined as follows:

Saturday to Thursday except Public Holidays (0600 – 2200 hrs.).

Normal working hours are subject to change during Ramadan when working hours will be at the discretion of the Port Operator. Requirements for port labour must be submitted by ship's Agent to the Port Operator by 1600 hrs. previous day.

MEDICAL: Upon application to ship's Agent, medical examination of crew members can be arranged. Personnel will either be sent to private doctor or to Public Health Department as circumstances dictate. Serious cases will be referred to Government Hospital Doctor.

FRESH WATER: Fresh water is obtainable. Agents must notify the tonnage required 48 hours prior to ship's arrival.

FUEL: Limited gas oil facilities only at present.

REPAIRS: Marine engineering workshops capable of handling most repairs are available.

SURVEYORS: Services are available upon request.

REPATRIATION: Proximity of the new Sharjah International Airport will permit efficient crew changes and repatriation. Offshore crew changes facilities can be arranged.

Transit visas are not required for crew changes. Ship's passengers require a valid visa for transit or temporary stay.

AIRPORT: Sharjah and Dubai.

TIME: GMT plus 4 hours. Permanent.

SHORE LEAVE: Shore leave is permitted.

STORING: At anchorage – by off-shore crew change boats. Alongside – by truck alongside ship. Fork lift trucks and local labour available if required.

BANKS: British Bank of the Middle East, P.O.Box 10030, Khor Fakkan, U.A.E. *Telex*: 89011 Bbmefj EM (stating for Kfn.)

Grindlays Bank Ltd., P.O. Box 10149, Khor Fakkan, U.A.E. *Telex*: 89025 Grnly EM.

GENERAL: *Pollution:* The provisions of the Khor Fakkan Maritime Law shall apply with respect to the operation of vessels in Khor Fakkan coastal waters.

Garbage disposal services are provided by the Port Operator and are compulsory.

Ships' Chandlers: Complete chandlering facilities are available, handling provisions, laundry and bonded stores.

Water for Labour: A supply of potable water is to be made available to port labour working on board a vessel.

DEVELOPMENTS: A new Ro/Ro platform 60 m.×40 m. is positioned off the South end of the berth. It will enable two large Ro-Ro vessels to operate twin stem ramps at the same time, whilst the quay gantry cranes operate cargo from both upper decks. The pontoon will have a 12 m. wide shore connecting bridge S.W.L. 180 tonnes.

AUTHORITY: Khor Fakkan Port Authority. P.O.Box 10326, Khor Fakkan, Sharjah, U.A.E.. *Tel*: Khor Fakkan 85324/85027. *Telex*: 89023 Seagul EM. *Cables*: Mina Khor Fakkan. *Contact*: J. T. Peattie, Harbour Master.

AGENT: Gulf Agency Co. (Sharjah) Ltd., P.O.B. 10304, Khor Fakkan, U.A.E. Tel: 85095. Telex: 89048 ("Gac KFN EM"). Cables: "Confidence", Sharjah (stating for Khor Fakkan).

MINA JEBEL ALI, Dubai: 25.08 N., 54.55 E.

(See Plan Book)

FLAG: U.A.E. and Dubai Emirate.

LOCATION: The port of Jebel Ali is a major port situated some 35 km. S.W. of the city of Dubai.

The Port Control Tower is situated in position Lat. 24° 59.4′ N., Long. 55° 02.9′ E.

The Jebel Ali approach channel commences 17 km. off shore, the entrance to the channel being marked by a fairway buoy. The buoy is situated in Lat. 25° 06′ 54″ N., Long. 54° 56′ 33″ E.

The approach channel with a depth of 15 m. is buoyed and runs in a direction 315°T – 135°T towards the port. After 12.5 km. the channel takes a 25° bend and becomes the entrance channel which leads into the port on an alignment of 340°T – 160°T.

The approach channel has a width of 280 m. reducing to 235 m. In the bend the channel widens to 300 m. and in the entrance channel to 340 m.

The Outer Basin is 2.3 km. long and 600 m. wide with depth of 14 m. and the Inner Basin is 3.7 km. long and 425 m. wide with a depth of 11.5 m. The main axis of both basins is 340° – 160°.

All channel, basin and docks' bottoms are sandstone.

Tankers and LPG ships will use the dual purpose berth situated in the Outer Basin and will generally be berthed starboard side alongside.

A second tanker berth is situated at Berth No. 2 in the 14 m. basin for the import of fuel oil.

In all other berths ships can secure port or starboard side to.

DOCUMENTS: The following documentation should be forwarded to the ship's Agent, for delivery to the appropriate Terminal Manager, at least 48 hours prior to vessel's arrival.

(a) Discharging Vessels
  3 copies Cargo Stowage Plans
  7 copies Cargo Manifests
  3 copies Hazardous and Dangerous Cargo Declaration
  3 copies Hatch List
  3 copies Arrival/Cargo Advice
  1 copy Each Bill of Lading/Packing List.
(b) Loading Vessels:
  3 copies Cargo Stowage Plans
  3 copies Cargo Loading List
  3 copies Hazardous and Dangerous Cargo Declaration
  On completion of loading 3 copies of the Vessel Manifest endorsed by Customs must be provided

Immigration: Three Crew Lists are required on arrival.

Immigration Offices are established in the port. The service is available 24 hours a day. However, Masters should advise their Agent that the ship may leave outside normal office hours and that the Agent should check that Immigration Officials will be available to clear the vessel outward. This also applies to public holidays.

Masters are advised that "Immigration Clearance" must be on board and sighted by the Pilot before he can take the vessel to sea.

MINIMUM REQUIREMENTS:

In the interest of avoiding delays, all vessels programmed for Jebel Ali should comply with the following minima and be fitted with:

(i) Fully operational Radar.
(ii) Fully operational VHF Radio with Channels 11, 14, 16, 67, 69.
(iii) Sufficient crew to handle tugs' lines and moorings efficiently.
(iv) Efficient propulsion and deck machinery.
(v) Efficient and adequate moorings to secure vessel safely.
(vi) Efficient signalling equipment.
(vii) Fully operational Tachometer, Rudder and Helm indicators.
(viii) Efficient mooring stations communications systems.
(ix) An efficient anchor windlass and anchors.

If any of the above requirements cannot be complied with, the Harbour Master should be advised prior to arrival via "Jebel Ali Port Control".

APPROACHES: Ships should make for "Mina Jebel Ali" light float in position 25° 10′ 30″ N., 54° 52′ 15″ E. (Gp. Fl.3 every 15 secs. 15 miles). This float lies on the axis of the channel leading into Jebel Ali Port i.e. from this float vessel should steer 135° to approach Pilot Boarding Area.

Vessel should await Pilot in the area North of the seaward end of the buoyed channel, marked by a fairway buoy. This buoy is a safe water mark painted red and white vertical stripes. Light character is Fl. 10 sec. The centre of this waiting area, with a radius of 1 mile, is Lat. 25° 09′ N. and Long. 54° 54′ E.

PILOTAGE: Pilots are available on a 24-hour/day basis. Ships requiring a Pilot should call "Jebel Ali Port control" on VHF Channel 16 at least 2 hours before arrival at Pilot Boarding Area.

All ships other than excepted ships, navigating whether by entry, leaving or moving within Mina Jebel Ali shall be under the charge of a pilot.

The following ships will be excepted ships:

(i) Ships of War
(ii) Pleasure Craft
(iii) Ships of less than 150 n.r.t.
(iv) Tugs, dredgers, barges or similar vessels whose ordinary course of navigation does not exceed beyond the Arabian Gulf.
(v) Tenders of M.E.N.A.S.
(vi) Country Craft

Pilots board from launch "Murshid" or tugs "Namer" or "Asad", equipped with VHF, watch kept on Channel 16. Jebel Ali Port Control listens on Channel 16 and the working frequency is Channel 14. Additional Channels 11, 17, 67 and 69 are also available.

Vessels requiring a Pilot should give at least 2 hours notice of arrival in the Pilot Boarding Area.

Outbound ships should request Pilot at least one hour prior to departure. Masters should obtain "Masters Report" from the Inward Pilot and return it completed to the Outward Pilot.

Pilot Boarding Areas: The Pilot boarding area is located North of the channel entrance. The centre of this area is in position Lat. 25° 09′ N., Long. 54° 54′ E. with a radius of 1 mile.

Pilots will normally meet and embark incoming vessels at the above mentioned Pilot boarding area.

Masters are reminded to provide a safe lee.

Pilot Ladder Requirements: The following points are stressed:

(i) The rigging of pilot ladders and the embarkation and disembarkation of Pilots thereby shall be supervised by a responsible officer of the ship.
(ii) Every pilot ladder shall be secured in a position clear of any possible discharges from the ship, and so that each step rests firmly against the ship's side.
(iii) Every pilot ladder shall be secured in a positon where the Pilot can gain convenient access to the ship after climbing not less than 5 feet and not more than 30 feet.
(iv) Whenever the distance from the water to the point of access to the ship exceeds 30 feet, access from the pilot ladder to the ship shall be by means of an accommodation ladder or equally safe and convenient means.
(v) A light shall be provided at night so that the pilot ladder overside and also the position where the Pilot boards the ship shall be adequately lit.
(vi) Lifebuoy and heaving line should be available at the ladder.
(vii) When a pilot hoist is provided as the method of access, it must be of an "approved" type, complying with the recommendations of the "European Maritime Pilots Association".

ANCHORAGE: The holding ground is poor, ships are recommended to use more chain than usual.

The anchorage is an area enclosed by the following four positions:

1.	Lat. 25° 11′ 20″ N.	Long. 54° 49′ 45″ E.
2.	Lat. 25° 08′ 12″ N.	Long. 54° 53′ 12″ E.
3.	Lat. 25° 05′ 18″ N.	Long. 54° 49′ 45″ E.
4.	Lat. 25° 08′ 20″ N.	Long. 54° 46′ 12″ E.

Ships will anchor here in a depth of approximately 16 m. – 20 m. (9 – 11 fathoms).

Pipe-line: All ships are warned that an untrenched pipe-line lies East of the channel. This line comes ashore in position 25° 01′ N., 55° 04′ 30″ E. From this position it lies in a direction of 345° for approximately 10 miles, thence assumes a direction of 313° towards the "Fatah Field" i.e. it is from 2 to 5 miles East of the buoyed entrance channel. Ships should **not** anchor near this pipe-line, nor should they approach the area with anchors walked back or trailing.

MAX. SIZE: No limit on LOA except Tanker Berth. Max. LOA Tanker Berth 260 m.

Max. draft – 14 m. to Tanker Berth, 13.5 m. Outer Basin, 11.0 m. at other berths.

TUGS: Two tugs with bollard pull of approximately 30 tons are available in the port at all times, watch maintained on VHF Channel 16 and/or 17. Extra tugs can be made available if needed.

Mooring boats: Two mooring boats, the "Dina" and the "Wafa" are available at all times. These boats are also equipped with towing hooks and VHF.

BERTHING:

Berths Nos. 1 – 17: depth 14.0 m.
Berths Nos. 18 – 66: depth 11.5 m.
Tanker/LPG: depth 15 m.

Moorings: Bollards on Quays Nos. 1 – 2 and 3 are of 100 ton strength, spaced 27 m. apart, on Quays Nos. 4A – 4B, 5, 6, 7, 8, 9 are 70 ton strength 30 m. apart and on Quay No. 10 is 70 ton 20 m. apart. Tanker jetty equipped with mooring hooks 100 ton and electric capstans. Several berths fitted with 250 ton breasting bollards to cater for laid up VLCCs. These berths also have electric points and telephone points. Enquiries for further information and conditions to the harbour master.

It is essential that whilst alongside quays, moorings are tended carefully and regularly and conform with recommended mooring patterns appropriate for ship sizes. The average rise and fall is 1.14 m.

Storage: Transit sheds provide covered storage. There is a large amount of paved open storage. The 70 ft. wide general cargo aprons provide for easy direct delivery.

Refrigerated Cold Store: Fully operational and available for the storage of frozen and chilled products. Located at berth No. 31.

Located only 30 m. from the quayside and with a 42,000 cubic metre capacity (7,000 tons), the store has 8 separate rooms varying in size and in which the temperature can be separately controlled in the range of minus 29° C. to plus 13° C.

The refrigeration machinery is the most modern currently available in the world and is installed to the highest standards, including emergency standby generators. Cargo handling equipment includes 6 electric fork lift trucks and 12 atlet trucks and lifters. 5,000 pallet converters will be available for rapid transit of cargo from vessels direct to the cold store.

Equipment: The Port Authority provides a comprehensive stevedoring service from break bulk quay and warehouse area to a fully mechanised Ro-Ro – Container Terminal.

The general cargo areas are located on quays No. 6 and 10 with 21 m. of concrete apron, 5 transit warehouses of 80,000 sq. ft. and open storage areas and truck delivery and receiving docks. There are 2 berths for open storage cargo. A 20 ton fixed jib derrick is available for barge or shallow draft ship loading, and an adequate supply of supporting cargo handling equipment to complement a general cargo operation.

The container terminal situated at berths No. 15 to 17 is fully paved. The back up area serving these 3 berths can accommodate up to 6,000 TEUs.

The container terminal is equipped with three 3rd generation Mitsubishi container cranes with 100 ft. track gauge, 110 ft. outreach past the fender system and a 49 ft. backreach. Telescopic spreaders to accommodate 20 ft., 35 ft., and 40 ft. containers plus the appropriate fittings to handle over height and flat rack container units. The cranes have a S.W.L. of 30.5 tons under the spreader.

To service the vessel during a grounding operation, the back-up area has 5 Raygo Wagner container handling top loaders with a rated S.W.L. of 31 tons under their telescopic spreader which also can accommodate 20 ft., 35 ft. and 40 ft. as well as having the fittings to handle flat racks and over height units.

As well as the above container handling equipment, the terminal has to supplement any vessel operation: Flat bed trailers, low bed trailers, tractor units, mafi goose-necks and an assortment of forktrucks to handle general cargo from Ro-Ro vessel as well as handling cargo in the proposed L.T.L. warehouse.

The Port has experienced personnel to handle the various types of vessels which will come to this port. The complete operation from Pilots, Stevedoring, Documentation, Warehousing and Port Security, will be handled by the Port Authority.

The Port Authority also offers a trucking service on an optional basis.

Flat-top crane barge with 17 ton S.W.L. available within the limits of the port.

Ro-Ro Terminal: The Ro-Ro Terminal is situated at Berths 32-34, with two ramps specially designed for stern discharging vessels, and a water depth 11.5 m.

An 8,000 sq.m. warehouse provides covered storage while 105,000 sq.m. of paved open storage is available. Equipment includes 3 Douglas Tugmasters.

CONTAINER FACILITIES: Also see "Berthing".

The Terminal comprises of Berths Nos. 15, 16 ,17, totalling 900 m. with water depth of 14 m. The specifications of the container cranes are as follows:

Mitsubishi 41 ton electric container cranes. Distance from face of rubber fender to centre line of container at maximum outreach – 34 m. (112 ft.).

Top of container at maximum lift is above top of rail – 26 m. (85 ft. 4 in.).

Top of rail is 2 m. above highest tide and 4 m. above lowest tide.

Top of container at lowest position is below top of rail – 16.5 m., (54 ft. 6 in.).

Container crane travel – 900 m.
Container track gauge – 30.48 m. (100 ft.).
Container crane reach behind back rail – 15 m. (49 ft.)

Maximum weight of 20 ft., 35 ft. and 40 ft. container handled by spreader is 67,250 pounds.

Maximum heavy lift with spreader removed is 90,405 pounds.

100 ton bollards are spaced at 30 m.

Refrigerated container plugs: 60×380 volt Kheops, 60×380 Crouse Hinds, 40×220 volt Mipco.

Container freight station 100,000 sq. ft.
Depth of water alongside 14 m. (46 ft.).
Container cleaning available.
Track scale capacity 50 tons.

STEVEDORES: By Port Authority of Jebel Ali.

Normal Working Hours:

0700 – 1200 hrs, 1300 – 1600 hrs. Twenty-four hour working can be arranged.

DENSITY: 1032.

RADIO: *ETA requirements:*

Vessels arriving at the Port of Jebel Ali are required to provide the Harbour Authority with the following estimated times of arrival:

(i) At least 48 hours prior to arrival or on leaving the last port, whichever is later, via Bahrain Radio or via Jebel Ali SSB radio, listening on 2182 kHz.
(ii) Confirm the vessel's estimated time of arrival at least 24 hours before arrival at the designated pilotage area and thereafter notify any significant change in excess of 1 hour.
(iii) On coming within VHF range of "Jebel Ali Port Control" establish VHF contact for the purpose of updating the estimated time of arrival and at least 2 hours' notice of arrival in the Pilot Boarding Area. VHF watch is kept on Channel 16.

Communications: The Port radio station maintains continuous listening watch on VHF Channel 16. Working Channel is Channel 14. On Coming within VHF range of "Jebel Ali Port Control", vessels should establish VHF contact for the purpose of updating the estimated time of arrival, and at least two hours' notice of arrival in the Boarding Area should be given.

Continuous watch is maintained on radio frequency 2182 kHz.

The station also keeps listening watch on frequency 12429.2 kHz. or 16587.1 kHz. at 12.00 GMT for approximately 10 minutes daily. Vessels are urged to contact the Port on these frequencies as early as possible before arrival.

Vessels are warned that VHF Channels are monitored and taperecorded and any misuse of VHF Channels will be reported to the proper Authorities.

Notice of Arrival: Agents should arrange berthing and stevedoring with the Terminal Manager at least 48 hours prior to the vessel's arrival (Cargo Handling Manager Tel. 32242, Container Terminal Manager Tel. 56578).

Pre-Arrival Information: Prior to arrival, all vessels regardless of tonnage calling at the Port of Jebel Ali should provide "Jebel Ali Port Control" with the following information:

(i) Name of vessel
(ii) Port of Registry
(iii) Name of Master
(iv) Gross Tonnage
(v) LOA
(vi) Draft
(vii) Cargo to discharge or load
(viii) Pilot boarding arrangements
(ix) Number of crew, indicating the number of deck crew available for manoeuvring
(x) Health information
(xi) Last port of call.

VHF: See "Radio" and "Pilotage".

RADAR: VTS harbour radar in Port control tower in position 29° 59.4′ N., 55° 02.9′ E.

The control tower is equipped with a Sperry Radar Vessel Traffic System C.A.S. II. This equipment consists of a dual radar system combined with a data processor and computer. Traffic movements are monitored, and recorded within the Port limits and approaches. The Tower is continually manned by qualified Radar/Radio Operators.

MEDICAL: There are medical facilities provided in Dubai Hospitals – arrangements can be made through the Agent. In any emergency, medical services are available in Jebel Ali village, telephone No. 56489.

FRESH WATER: Supplied by Dubai Water Services (Tel: 39236/56749). Order through Agents. Water laid on at Berth No. 1 and Quays 3, 4A, 4B, 5, 6, 10 and tanker/L.P.G. Berth.

FUEL: Can be made available through prior arrangement with the Agent. Bunkers ex-barge are available within the Port. All bunkers supplied by E.B.B. Co., arrangements through Agents.

Lubricating Oils: Available in drums, transported by road.

TANKERS: This berth provides facilities for product tankers as well as L.P.G. and condensate carriers. 4 loading arms are available to handle Product tankers through 8 in. connections with reducers available. On the L.P.G. half of the jetty, there are 3 loading arms with 16 in. connections. Two vapour return lines are also fitted, 1 for propane and 1 for butane with 14 in. connections. Various reducers and straight pieces are also available. The depth of water in the berth is 15 m. but the controlling depth in the approach channel is 14.5 m.

No. 2 tanker berth is available for fuel oil import.

Vessels are warned that no dirty ballast discharge will be allowed within the limits of Mina Jebel Ali. There are no shore ballast reception facilities.

Also see "General".

REPAIRS: Berths are available for afloat repairs to be done by local contractors.

Lay-up Berths for long and short periods can be arranged for vessels up to 400,000 d.w.t. with draft up to 11.5 m. Special bollards are installed on Quays 4A and 4B to handle large vessels.

Marine engineering firms with specialised workshops in Dubai, undertake engineering repairs. Agents will make necessary arrangements.

Repairs to radar, radios, echo sounders and other electronic navigational and communication aids are available by major manufacturers' Agents, (i.e. Marconi, Decca, Kelvin-Hughes, Telefunken, etc.), being represented in Dubai and sets serviced by trained engineers. Agents will advise.

A Port Authority diver can be arranged through vessel's Agent.

SURVEYORS: Lloyd's, B.V., A.B.S., N.V. and N.K. as well as other private qualified cargo, hull and engine surveyors and consultants, i.e. Murray Fenton-Cullen Incorporated (telephone Dubai 441662) and Cleghorn, Wilton & Associates (telephone Dubai 435402).

Gas free certificates and hot work permits can be obtained through independent qualified surveyors.

Surveys: The following surveys and certification can be carried out in Jebel Ali: Loadline, Safety Equipment, Safety Construction, Radio.

TELEPHONES: Ship board telephones available on some berths by arrangement. Telephones on a temporary basis are available in the Port and Cargo Administration Supervision Offices.

Important Telephone Numbers at Jebel Ali:

Port Control	33226
Harbour Master & Port Control	35251
Police	56111
Port Health	56578
Customs	56374
Immigration	56844
Fire Service	56222
	56578 ext. 222
Ambulance	56666 ext. 555
Security	56578 ext. 218, 232

CONSULS: Embassies and Consulates in Dubai.

Embassies:

Federal Republic of Germany	Tel.: 231013
United Kingdom	Tel: 431070

Consulates:

Egypt	Tel.: 434417	Netherlands	Tel.: 225156
France	Tel.: 224250/224259	Norway	Tel.: 436833
India	Tel.: 220201/2	Pakistan	Tel.: 433163/431412
Iran	Tel.: 431150/431915	Qatar	Tel.: 221216/223568
Iraq	Tel.: 664650	Saudi Arabia	Tel.: 222163/4
Jordan	Tel.: 667735/667097	Sweden	Tel.: 473464
Kuwait	Tel.: 221900/221525	Switzerland	Tel.: 475542
Lebanon	Tel.: 451351	U.S.A.	Tel.: 471115

The foregoing are Embassies and Consulates situated in Dubai. Mos countries maintain diplomatic missions/embassies, etc., in Abu Dhabi-some 120 km. from Mina Jebel Ali.

SHORE LEAVE: The following is the standard procedure for shore leave as dictated by the Port Immigration Department.

1. The Master, Chief Officer or Purser is to hand over all seamen's books to the Port Immigration.

2. Crew members wishing to go ashore are to report to the Por Immigration Office (Agent to arrange) and collect a "Marine Landing Permit" which should be carried at all times. On returning to the ship, the permit should be handed back to the Port Police. The process is to be repeated on every subsequent shore leave.

WEATHER: *Weather and Currents:* Cross currentsof up to 1.75 knots may be experienced in the Approach Channel. These currents are windand tide induced.

Fresh winds are frequently experience at Mina Jebel Ali. However, during evening, night and morning hours, light southeasterly winds prevail veering to northwesterly by noon and freshening to Force 4-5.

On occasions, especially during November-March, fog may be prevalent during early A.M.

GENERAL: *Dirty Ballast and Refuse:* All vessels are warned that no dirty ballast, bilges, etc., should be pumped out in or in the vicinity of the Port of Jebel Ali. Offenders will be prosecuted and the U.A.E. and Dubai Police maintain maritime and helicopter patrols to ensure no dirty ballast is discharged and no refuse is thrown overboard.

These rules apply while vessels are alongside and the Harbour Master may instruct offending vessels to leave or bar them from returning to Mina Jebel Ali.

Rubbish skips supplied by the Port Authority at a charge and are compulsory.

Ballast Requirements: For the purpose of safe manoeuvring, the Harbour Master requires all vessels to maintain an acceptable ballasted condition.

Vessels should carry sufficient ballast so that the propellor can have maximum immersion whilst maintaining an acceptable stern trim.

Masters are reminded that no dirty ballast will be allowed to be discharged in Mina Jebel Ali.

Fumigation: Fumigation can be carried out by specialist firms.

Ships' Chandlers, Ship Supplies: All types of provisions – fresh and dry, and all types of fresh and frozen meat are available ex-Dubai. Arrangements through Agent and/or through direct VHF contacts with ship chandlers and provision merchants. Paints, ropes, etc., available as well as charts. Laundry services are also available.

Visitors Port Passes: Any Person entering the Port is required to have either a permanent or visitors temporary/day pass. Passes can be obtained from the Pass Office situated at the Container Terminal Entrance. The Pass Office operates daily from 0700 hours to 1900 hours.

Permanent passes cost Dhs. 25 each and are valid for 12 calendar months from date of issue. Applicants are required to produce a Sponsor's letter and complete an application for Pass Form. Documents such as Passports and Photographs are not required.

Temporary or Day passes which are free of charge are only issued to irregular visitors who have a confirmed appointment to visit the Port.

No more than one of these passes a month will be issued to any individual. Day Passes can be obtained from the Pass Office or any Terminal Checkpoint.

Shops: A small supermarket is open in the port. Hours of work are: 0800 – 1300 hrs. Saturday to Thursday inclusive.

Bank: The National Bank of Dubai maintains a branch in the port. Hours of work are: 0800 – 1200 hrs. Saturday to Thursday inclusive for counter staff.

Seamen's Recreational Facilities in Dubai:

International Seamen's Club (Tel: 435551)
Norwegian Seamen's Mission (Tel: 470561/3)

Transport: Arrangements for taxis can only be made through the Agent.

Charts and Publications:

Charts:

British Admiralty Chart 3237
British Admiralty Chart 2889
British Admiralty Chart 3737
British Admiralty Chart 3738
German Hydrographic Institute Chart 729.
U.S. Defense Mapping Agency No. 62499.

Pilot Books: Admiralty Sailing Directions Volume No. 63 and Sailing Direction for Persian Gulf, (Defence Mapping Agency) Publication No. 62.

Tidal Stream Atlas.

Lights: Admiralty List of Lights Volume F. United States List of Lights Publication No. 112 (Defence Mapping Agency).

Radio Aids:

British: Admiralty List of Radio Signals (B.A.) volume 8 and
American: Radio Navigational Aids (Defence Mapping Agency) Publication No. 117B (Pacific/Indian Ocean Area).

AUTHORITY: Port Authority of Jebel Ali, P.O. Box 3258, Dubai, U.A.E. *Tel:* Jebel Ali (084) 35251. *Telex:* 47398 Paja EM. *Cables:* Pajadub UAE. *Contact:* Captain G. Biro, Harbour Master. J. J. Scott, Jr., Executive Director.

AGENT: Gulf Agency Co. (Dubai) PVT. Ltd., P.O.B. 2404. Dubai, U.A.E. Cables: "Confidence", Dubai. Tel. 421300 (12 lines – 24 hour service). Telex: 45809 and 45448 ("Gacdb EM"). Marine Radio VHF, stand-by Channel 16. Call sign: "Confidence Dubai". RT: 2182 kHz. frequency.

MINA SAQR, Ras Al Khaimah: 25.59 N. 56.03 E. (See Plan Book)

PORT LIMITS: "Mina Saqr" and its limits include all waters, installations and the creek of Hanna bounded within 3 mile radius to seaward from the main breakwater light in position Lat. 25° 58′ 48.35″ N., Long. 56° 02′ 43.7″ E.

LOCATION: The Port of Mina Saqr is situated 15 miles by sea and 22 km. by road North of Ras Al Khaimah. On chart BA. 2888 it is 1 km. North of Hanna Creek in Lat. 25° 58′ N., Long. 56° 03.5′ E. Jubail Al Harim (6,843 ft.) overlooks the port, and is 10 miles East. The port is bounded by main and lee breakwater.

DOCUMENTS: Following documents to be forwarded to the Agents at least 7 days prior to the vessel's arrival:

3 copies Dangerous Cargo List.
2 copies Stowage Plans.
2 copies Hatch List.
6 copies Cargo Manifests.
1 copy each of Bills of Lading.

On vessels arrival, 4 copies of Crew Lists, 4 copies of Vaccination Lists, Crew Health Certificates, Ship's Certificates, etc. to be kept ready for inspection by the Officers.

PILOTAGE: Pilotage is compulsory. Pilot may board from launch or by tug at approach buoy (B and W pillar buoy Int. Qk. Fl.) in position Lat. 26° 00′ N., Long. 56° 02′ E. and in all cases a pilot ladder should be provided and a lee given. Pilot boards from 0600 hrs. to 2359 hrs., though generally vessels not wishing to work cargo immediately will not enter the port outside daylight hours. Vessels may leave up to 2359 hrs., or later by arrangement with the Harbour Master in special cases.

Master to contact "Ras Al Khaimah Port Control" on VHF Channel 16 at least 2 hours prior to arrival. ETA cables to be sent to the "Harbour Master MINASAQR Ras Al Khaimah" and also to Agents. Vessels to keep listening watch on VHF Channel 16 and await instructions from port.

ANCHORAGE: The area bounded by the port limits and to seaward of the main breakwater has been reputed as an area with good holding ground. Depths are from 11 m. to 14 m.

RESTRICTIONS: Vessels may enter or leave the port between 0600 hrs. and 2359 hrs. or later by arrangement with Harbour Master in special cases. No restrictions on entering during tides.

MAX. SIZE: No restrictions on breadth of a vessel but length not to exceed 800 ft. for easy berthing. Permissible draft in all the berths is 38 ft. Range of tide is maximum 1.6 m.

HEALTH: Normal quarantine regulations apply and Pratique is granted subject to Port Health Authorities' approval. The Health Officer boards the ship only when vessel alongside. Suspected disease or fever on board vessel to be reported to Harbour Master by cable prior arrival and await instructions.

RADIO: All cables to be routed through Bahrain Radio. Vessels should cable their Agent, at least 72 hours prior to arrival, the ETA, LOA, expected draft on arrival, cargo and hatchwise stowage.

VHF: Port equipped with VHF Radio standby Channel 16 with other working Channels, port working Channel 67. Port Signal Station is manned 24 hours a day and should be contacted at least 2 hours prior to vessel's arrival. Vessels should report the ETA, LOA, draft, details of cargo to be discharged, stowage, etc.

RADAR: Port not equipped with radar.

TUGS: Tugs join the vessel at anchorage, the practice being to secure alongside, using ship's lines. Derricks should be swung in and gangways hoisted. Tugs are fitted with VHF.

BERTHING: The harbour and entrance channel is 40 ft. MLWST. A draft limit is imposed of 38 ft. The harbour provides 165 acres of sheltered water and is enclosed by main and lee breakwaters. Deep water quays totalling 1,690 m. in length will provide berthing facilities for 8 ships. Included in this are 2 Ro/Ro ramps. Plans are now being developed for the installation of a container crane and supporting equipment.

The small boat harbour and fishing harbour provide a further 725 m. of quay, and offer a dredged depth of 15 ft.

All the 8 berths, including 2 Ro/Ro berths are now in operation.

Distance between quay and water level maximum 3.8 m. at LW and 2.2 m. at HW.

Discharging to be carried out using ship's gear. All berths are general cargo berths. Berth Nos. 3 and 5 have ramps for Ro/Ro vessels.

CRANES: No shore cranes available at berths therefore vessels calling should be self-sustaining. Mobile cranes of various capacities available locally for hire if required. No floating cranes available at present.

BULK CARGO FACILITIES: No special berth allocated for discharge of bulk cargo. Bulk cargoes handled at present are iron ore, gypsum, bauxite, clinker and aggregates, and vessels with these cargoes are allotted any of the general cargo berths subject to availability. No conveyor system or special equipment exist at present and as such cargo is discharged using vessel's derricks.

SPECIALISED CARGO HANDLING FACILITIES: 2 berths, Nos. 3 and 5 with ramps to accommodate Ro/Ro vessels. There is also one berth for bulk cement loading (Berth No.7). Length 200 m. Max. draft alongside 11.5 m.

BRIDGES: Nil.

STEVEDORES: Advance ETA cable to be sent by Master to the vessels' Agents to order required gangs to work on board vessels. Labour gangs are supplied by local contractors, (who can be contacted via the Signal Station) and the gangs work on board the vessel directly under the supervision of the vessel's Officers with the stevedoring companies accepting no responsibility whatsoever for any damage either to the vessel or its cargo.

Working Hours: 0700 – 1400 hrs. and 1500 – 2100 hrs.

MEDICAL: Advisable for Agents to receive at least 24 hours' advance notice of required medical attention but can also attend to this at short notice. Hospital facilities are available. Officers/Crew should have valid Cholera and Yellow Fever Certificates.

TANKERS: No tanker berth in port or offshore. Tankers will discharge at Berth Nos. 1, 2 and 3 through bunker line – this will be fuel and diesel oils only. Fuel line 12 in., diesel line 8 in. and 6 in. hose.

DENSITY: 1025 – 1027.

FRESH WATER: Fresh water available in Berth Nos. 1 to 6 with 2 points to service tanks fore and aft as required on a 24 hour basis. Cost of water will be Dh. 7/– per ton.

FUEL: Fuel oil, marine diesel oil, and gas oil can be supplied through RAK Refuelling (Shell) or E.G.P.C. Telephone and telex numbers are available through the Port Signal Station. All sizes of reducers are available and pumping rates are fuel oil 200 t.p.h. and gas oil 250 t.p.h. – 300 t.p.h., subject to vessel's receiving capacity. Presently there are 6 bunker points in Berth Nos. 1, 2 and 3.

Marine lubricants of all brands can also be supplied provided nomination through the suppliers is received sufficiently in advance.

FIRE PRECAUTIONS: The port has its own auxiliary fire brigade and, when required, the services of the Ras Al Khaimah Fire Brigade are available.

CONSULS: None at this port but most of the consulates can be contacted at Abu Dhabi or Dubai.

REPAIRS: Few facilities are available at present but planned for the future. Fully equipped engineering workshops capable of carrying out fairly extensive repairs operate a 24 hour maintenance or repair service and are available from Dubai.

DRY DOCK: No drydock in Mina Saqr. The nearest drydocks are at Ajman and Dubai.

SURVEYORS: Lloyd's, ABS, NV, Salvage Association and representatives of various classification bureaux and private surveyors reside in Dubai. Various cargo inspectors available in Dubai.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

HATCHES: Opening/closing of the hatches to be carried out by the crew with the assistance of the stevedores, if necessary.

CUSTOMS ALLOWANCES: Normally, bonded stores are not sealed by the Customs Authorities. However, only limited stock should be left with the Officers/crew for their consumption on board vessel and the rest should be kept locked under the custody of the Master. Sale of bonded stores is strictly prohibited and persons indulging in this will be punished according to local custom.

REPATRIATION: Efficient crew changes and repatriation can be carried out on receipt of advance information.

AIRPORT: Ras Al Khaimah International Airport, situated about 45 km. South of Mina Saqr, operate daily flights to various destinations.

TIME: Local time is GMT plus 4 hours.

HOLIDAYS: Normal Muslim holidays during which time port working hours will be restricted. Fridays are the weekly holidays.

POLICE/AMBULANCE/FIRE: All police, fire and ambulance emergencies should be notified on 999. General telephone numbers are: 29351 for Police, 26668 for Ambulance and 21212 for Fire.

TELEPHONES: No telephones available for placing on board vessels. However, a telephone is available in the Port Signal Station 24 hours a day.

For international calls, Agent's offices situated outside port area should be used. Ras Al Khaimah has excellent communication to most countries as it has its own earth satellite station.

SERVICES: Ship chandlers, laundry, exchange of films, etc. available in Ras Al Khaimah. Radio/radar repairs, tank cleaning equipment, scamping (underwater cleaning) facilities, etc. can be arranged from Sharjah/Dubai.

BANKS: British Bank of the Middle East, P.O. Box 9, Ras Al Khaimah. Tel: RAK 28214.

National Bank of Ras Al Khaimah (P.S.C.), P.O.Box 5300, Ras Al Khaimah. Tel: 21127.

STORING: See "Prelims" page viii.

1. By truck or barge.
2. No restrictions.
3. Yes.
4. Yes.
5. None.
6. Yes.

SHORE LEAVE: Can be granted and for this purpose the Agents should hand over a crew list to the Immigration Department who will issue shore passes in exchange for seaman's book or passport. Prior to vessel's departure, Master to ensure that all shore passes are handed over to the Agents who will surrender them to the Immigration Department, seaman's books/passports will then be returned. Agents should advise Immigration Department by letter if any crew changes to be effected.

REGULATIONS: None.

DELAYS: No berthing delays.

DEVELOPMENTS: An additional bulk cement faculty at Berth No. 9 will be constructed in 1984, to handle white cement.

AUTHORITY: Ras Al Khaimah Port Services, P.O.Box 5130, Ras Al Khaimah, U.A.E. *Tel:* RAK 66444/66250. *Telex:* 99280 EM. *Cables:* Minasaqr. *Contact:* Captain K. J. Radley, Port Manager.

AGENT: International Shipping Agencies (Ras Al Khaimah) Pvt. Ltd., P.O.Box 5162, Ras Al Khaimah, U.A.E. Cables: "Isaship", Ras Al Khaimah. Telex: 99226 ("Isarak EM"). Tel: 21266, 21966. After office hours 21929.

MINA ZAYED, Abu Dhabi: 24.32 N. 54.23 E.
(See Plan Book)

COURTESY FLAG: Vessels calling at ports in the State of Abu Dhabi should fly the flag of the United Arab Emirates as a courtesy flag.
DOCUMENTS: 10 copies of Cargo Manifest are required, with full cargo particulars, such as Bill of Lading number, marks/numbers, description, weight and measurement and IMO class if any. It is essential that all this information against consignee/notify parties name, full contact address is given on the manifest for each consignment. The manifests should reach the Agent prior to arrival of vessel in order to be submitted to the Port/Customs Authorities 48 hours before the ship's arrival.

Also stowage particulars should be submitted with the manifest in order that the Agent may advise the Port Authorities of the equipment and labour required for efficient handling of the vessel.

Customs Require:
1 Copy Crew List.
1 Copy Stores List.
Immigration Require:
2 Copies Crew List.
2 Copies Passenger List, if any.
Quarantine Require:
Crew List
International Health Certificate.
Vaccination List.
Other Requirements:
Last port clearance, ship's log must be kept in order, 1 passport size photograph of each crew member for gate pass.

PILOTAGE: Pilotage is compulsory for all vessels entering/leaving Mina Zayed. Pilots will board incoming vessels within a radius of 1 nautical mile seaward of the Fairway Buoy (Lat. 24° 36′ N., Long. 54° 18.4′ E.). Ships should wait for Pilots in the area stated above and not enter the channel unless instructions to the contrary are given. Pilotage 24 hours. Ship's Agent pays for the services of Pilots, mooring gangs and tugs, which are provided by the port.
ANCHORAGE: Recommended anchorage for ships over draft of 9.45 m. is approximately 1 mile N.E. of Abu Dhabi Racon and for ships up to 9.45 m. draft approximately 0.9 miles S.W. of Alpha Buoy in position Lat. 24° 35.5″ N., Long. 54° 18.93″ E.

Also see "Shipmaster's Report".

RESTRICTIONS: The old (152 m. wide and 9.45 m. deep) channel has been abandoned and the new channel is 250 m. wide, marked by red and green buoys in accordance with "IALA" Maritime Buoyage System "A" now in use. The channel has a depth of 13 m., the tides are diurnal. Tides ranges are maximum 2.04 m. (6.7 ft.) and minimum 0.09 m. (0.3 ft.). during Spring High and Low Waters respectively.

Also see "Shipmaster's Report".

MAX. SIZE: Max. LOA 750 ft. However, the Port Authorities may consider allowing entry to larger vessels if they are equipped with any of the following:
1. Bow thruster } Confirmation from Harbour Master will be
2. Twin screws } necessary prior to vessel's arrival.

Draft permitted without tide 9.75 m. (32 ft.). Draft permitted using high tide 10.36 m. (34 ft.) subject to vessel's speed, etc. Prior permission to be obtained from Harbour Master.

Note: Permissible draft may further increase after clearing the patches of the area of 6 km. between fairway buoy and delta buoy.
RADIO: Vessels are to give their ETAs by cable through Muscat or Bahrain Radio, addressed to "Port Authorities – Port Zayed, Harbour Office". Telex 22890 Portco Em, at least 72 hours prior arrival.
VHF: Port Zayed Port Control work 24 hours a day, information to be given on VHF Channels 9, 11 and 67, as required by Port Control after establishing contact on Channel 16.
TUGS: 4 harbour tugs available, 2×2,400 h.p. and 2×1,280 h.p. Tug requirements are at discretion of the Pilot.
BERTHING: Nos. 1, 2 and 3 for container vessels, depth 10.5 m. A.C.D.
No. 4 for general cargo vessels, depth 10.5 m. A.C.D.
Nos. 5 and 6 for general cargo vessels, depth 9.75 m. A.C.D.
No. 6 - W for small bitumen vessels, depth 9.75 m. A.C.D.
Nos. 7, 8 and 9 for general cargo vessels, depth 9.75 m. A.C.D.
Nos. 10 - 13, depths 3 m. to 5.8 m.
No. 14 open quay normally used for Ro-Ro car carriers, depth 11.5 m.
Nos. 15 - 18 for general cargo vessels, depth 11.5 m. A.C.D.
No. 19 for bulk grain vessels, depth 11.5 m. A.C.D.
(Nos. 4, 5, 6, 7, 8 and 15 - 18 with sheds.)
Nos. 20 – 24, depth 10.5 m. A.C.D.
Nos. 25 – 29, depth, 13.0 m. A.C.D. (To be constructed).
CRANES: Cranes for discharging available. Mobile cranes from 5 - 150 tons available. Berths 4 - 6 have 6 electric cranes (5×5 ton, 1×10 ton). Forklifts available on request.
CONTAINER HANDLING FACILITIES: The terminal has been constructed on two wharves 450 m. long. It includes large storing facilities and is equipped with the most modern machinery (2×40 tonnes gantry cranes with outreach of 30 m., 2×40 ton yard cranes, 4×40 tons, 2×15 tons, 2×8 ton fork lift trucks, 2×40 ton stradle carriers.
STEVEDORES: Arranged through Agent, labourers work under direct supervision of vessel and her officers. Normal working hours for stevedore labour are from 0700 hrs. to 2230 hrs. No floating cranes for heavy lifts but mobile crane of 150 tons capacity available for hire for shore work. Floating crane can be arranged with sufficient notice. Reasonable tariff for handling container, ro/ro, car-carrier also priority for berthing container, ro/ro, car-carrier vessels. Skilled manpower available for all kinds of cargo operations.

Container Terminal operates 24 hours.

MEDICAL: Fully equipped Government hospital. Qualified personnel, and most medicines available.
TANKERS: See "Das Island", "Umm Al Nar" and "Jebel Dhanna – Ruwais".
FRESH WATER: Available at all berths in moderate quantities.
FUEL: Diesel oil and gas oil is available by barges.
FIRE PRECAUTIONS: The harbour tugs are fitted with fire-fightin equipment and in addition Port Zayed Fire Brigade are availab 24 hours a day.
LAUNDRY: Reasonably good laundries available.
PROVISIONS: Can be arranged through ship's notice to Agent.
AIRPORT: Regular scheduled international flights, also domestic flight within Gulf area.
TIME: GMT plus 4 hours.
HOLIDAYS: Friday is weekly holiday. Otherwise usual Muslim holidays observed. Cargo work generally not affected by holidays.
SHORE LEAVE: Permitted. A permit can be obtained from Immigration Department. Absolutely necessary that every crew member be i possession of valid seaman's book.
GENERAL: *Vessels discharging cargo at anchorage:* Anchorage ETA required: The Port Authority should like to draw the attention of a shipping agencies in Abu Dhabi, to supply the Traffic Department wit the date of arrival of ships which are going to discharge their cargo a anchor.

To enable the Traffic Department to take the necessary action and t render the required facilities, it is necessary that manifests, documents relating to cargo and the date of arrival should be forwarded 48 hours before the actual arrival of ships.

CLEARANCE: Port clearance must be obtained prior to departure.
DEVELOPMENTS:

1. The new U/Nar refinery channel 11 m. (B.C.D.) is almost completed and major section of this from South of Sadiyat to the Refinery Basin has been buoyed.

2. The Musaffa channel from Ras Al Akhdar to Musaffa Bridge with 6 m. (B.C.D.) has been buoyed to permit safe night navigation for craft going to/from the Industrial Area of Musaffa.

3. Development of Dhow Harbour (2,000 nm. quay) with 6 m. (B.C.D.) has been completed and its approaches and entrance buoyed to permi night navigation.

4. Construction of 2 new container berths to cater to the needs o future container vessels up to 13 m. draft is envisaged to be taken i hand shortly.

SHIPMASTER'S REPORT: February 1984

A navigational change has taken place in the Port of Abu Dhabi. There is danger while approaching Abu Dhabi port, due to the fact that they have recently changed the position of Abu Dhabi light vessel. The change took place in January 1984, so the last edition of British Amiralty charts are not corrected.

We loaded in Europe for Abu Dhabi, Karachi and Bombay. During our stay in Europe we were provided with last edition British Admiralty charts for discharging ports including B.A. chart No.3752 titled "Jazirat Sir Abu Nu'Ayr to Abu Zabi". We arrived in Abu Dhabi on February 9th, 1984. The above chart had the following small corrections for 1982 -897-1315-1896-2555-2681 and for 1983 -1214-(5-5)-1684-1686-3049. The position of the Abu Dhabi Racon equipped light vessel on the chart was Lat. 24° 43.5′ N. and Long. 54° 16.2′ E. From that charted position they have shifted the light vessel 4 miles in S.W.'ly direction, thus the new valid position is as follws: Lat. 24° 40.0′ N. and Long. 54° 12.2 E.

Our Agent did not advise us of change, though Port Control does advise incoming vessels.

The land is very low and no position can be established by radar, the Racon equipped Abu Dhabi light vessel is the only reliable target. Therefore incoming vessels are exposed to the risk of grounding because of shallow waters and vessels with draft of 30 ft. and over can be berthed only by HW.

AUTHORITY: Government of Abu Dhabi, Abu Dhabi Sea Port Authority, P.O.Box 422, Mina Zayed, *Tel:* 823360. *Telex:* 22890 Portco Em. *Contact:* Sager Bin Seif El-Meheirbi, Under Secretary.

AGENT: National Shipping Gulf Agency Co. (Abu Dhabi) Ltd., P.O.B. 377, Abu Dhabi, U.A.E. Cables: "Confidence", Abu Dhabi. Tel. 334300 (10 lines). After office hours Tel. 828388, 326998, 326083. Radio: Marine VHF radio, stand-by on Channel 16 (156.8 MHz) and Marine HF, standing by on 3539 kHz. Call sign "Confidence, Abu Dhabi", Telex: 22248 ("Gacauh EM").

MUBAREK TERMINAL, Sharjah: 25.49 N. 55.11 E.
(See Plan Book)

LOCATION: The Mubarek Oil Terminal is situated off the island of Abu Musa, and is under the jurisdiction of the Emirate of Sharjah and operated by the Crescent Petroleum Company.
DOCUMENTS: One Crew List and valid Health Certificate.
EARLY DEPARTURE PROCEDURE: In force. Vessel's Agent signs all documents on behalf of the Master including Bills of Lading.
PILOTAGE: Vessels to be moored, anchored or manoeuvred at Mubarek Oil Terminal will be boarded by Company Mooring Master in the close vicinity of the suggested anchorage area. Vessels must not enter the restricted limits of the terminal unless a Company Mooring Master is on board.

Ships are requested to have a pilot ladder safely and securely rigged and ready for immediate use and long enough to reach the Company Mooring Master's launch. A combination of pilot ladder and ship's accommodation ladder so arranged that personnel can first use pilot ladder until part way up the vessel's side and then transfer to the accommodation ladder is recommended, especially on very large ships. There should be adequate lighting at night. Vessels will provide a lee for the Company Mooring Master's launch when boarding and leaving.

The Company Mooring Master may require the vessel to anchor at any time he deems it necessary for the safety of the vessel or moorings or both or for infringement of the terminal regulations.

The Company Terminal Superintendent shall be the sole authority as to when the terminal is open or closed for normal working due to weather conditions.

NAVIGATION AIDS: A floating barge named *Baraka 1* (82,000 d.w.t.) 546 ft. long, used for storage of crude oil and for accommodation and headquarters of terminal personnel lies permanently moored in position Lat. 25° 49′ 43″ N., Long. 55° 11′ 49″ E. approximately 065°×6,000 ft. from the terminal's single buoy mooring. *Baraka 1* is equipped with normal navigational warning lights and aids as required by convention and in addition, a Racon beacon in position 25° 49.7′ N., 55° 11.8′ E.

A fixed oil production platform, incorporating crude oil treating facilities, rises approximately 50 ft. above water at Lat. 25° 50′ 43″ N., Long. 55° 11′ 49″ E., approximately 000°×6,079 ft. from the aforementioned *Baraka 1*. Said structures are equipped with 1 clear light flashing "U" code on each corner and a fog horn operating 2 seconds on and 18 seconds off. A permanently fixed flare structure (tripod) rises 150 ft. (flare tip) above water at Lat. 25° 50′ 56″ N., Long. 55° 12′ 00″ E., approximately 037°, 1,716 ft. from the oil production platform.

READINESS: Notice of Readiness will not be accepted at time of arrival unless the vessel is in all respects ready to load. Arrival time will be considered the time the Company Mooring Master boards the vessel, or the time the vessel is within the approved anchorage area, whichever occurs first. Notice of Readiness is to be in English.

ANCHORAGE: An anchorage area diameter 6,000 ft. has been established with the centre in position Lat. 25° 46′ 45″ N., Long. 55° 13′ 13″ E.

When arriving by day display flag "Q"; by night display Red Light over White Light for Quarantine Service.

RESTRICTED AREA: A restricted area of approx. 38 sq. miles has been established with a boundary formed by an imaginary line from:

(*a*) 25° 54′ 26″ N. 55° 13′ 49″ E. in a W.S.W. direction to
(*b*) 25° 15′ 14″ N. 55° 07′ 19″ E. thence in a S.S.E. direction to
(*c*) 25° 46′ 33″ N. 55° 09′ 37″ E. thence in a E.N.E. direction to
(*d*) 25° 49′ 44″ N. 55° 16′ 08″ E. thence in a N.N.W. direction to the position above.

RESTRICTIONS: Max. distance bow to manifold 580 ft.

MAX. SIZE: 350,000 d.w.t.

HEALTH: When arriving fly "Q" flag by day, and red over white light at night.

RADIO: Initial communication by radio between ship and Crescent Petroleum Company should be via Bahrain Radio, call sign "A9M", which operates on a 24 hour basis or directly by telex to 68015 CRESPT EM.

Company Mooring Master will have sole control of radio installations during the period a vessel is manoeuvring or moored, and no radio transmissions will be permitted on board ship except by the express permission of the Mooring Master in each case, only the Mooring Master may transmit on Channels 71 and 17 during the period he is on board. He will have a VHF radio telephone with him.

Mubarek Oil Terminal Radio Station call sign "Crescent – 2" particulars are as follows:

Operated by Crescent Petroleum Company, Sharjah, position: Lat. 25° 49′ 43″ N., Long. 55° 11′ 49″ E.

Frequencies: Channels 71 and 17 on VHF.

Hours of operation: 24 hours per day.

Mubarek Oil Terminal Control Centre keeps continuous watch on VHF radio telephone Channel 71. Vessel approaching the terminal not having Channel 71 will be contacted on Channel 16 when the terminal will request her to switch to an alternate channel.

Channel 17 is reserved for communications between ships in moorings and Mubarek Oil Terminal Movements Control Centre. This is a safety measure since oil flow to ships is controlled through Channel 17, which therefore must be clear at all times in case of need to stop oil flow for any cause.

Channel 16 is for calling and safety use only.

In emergency failure of Radio and/or Radio Telephone communication daylight lamp signalling may be used with the Oil Movements Control Centre located on *"Baraka 1"*.

It is most important that ships establish communications with the terminal not less than 72 hours prior to arrival at the terminal giving ETA. Further ETA signals should be sent when the vessel is 24 hours, 12 hours and 4 hours distant, or any time a change of 1 hour in original ETA occurs. These messages should state specifically whether ETA is given in GMT or Local Time. The 72 hour signal should include the following:

ETA.
Last Port of Call.
If any Sickness on Board.
If vessel has Clean Bill of Health.
Cargo quantity and Grades expected to be lifted in long tons.

The 12 hour signal should include definite indication as to whether the vessel is ready to load or not and should also include information on the time she will require to discharge ballast after arrival. Precise time of arrival should be given when the ship is 4 hours distant from the terminal.

Unreasonable insufficiency or inaccuracy in ETA messages may alter the order of berthing of ships to the advantage of those ships giving sufficient and accurate ETA messages. Acceptance of Notice of Readiness will also be affected by such insufficiency or inaccuracy.

On receipt of first signal from a vessel, terminal will transmit a message to her giving preliminary requirements of terminal. Masters are urged to comply with this in all details in order to facilitate vessel turnaround and government formalities.

TUGS: The Company maintains launches to assist in mooring and unmooring vessels. These are under the direct supervision and control of the Company Mooring Master.

BERTHING: Vessels to load crude oil cargo will be normally accepted and berthed in chronological order of arrival provided such vessels have current nomination for cargo valid at the time of tender, carry clean ballast if any, and have cargo tanks in a fit condition to receive cargo. Also, they must be in all respects properly equipped and ready to moor. Should berthing be delayed on account of bad weather, vessels will keep their position in line.

Vessels required to leave the terminal area on account of bad weather should keep in contact with the terminal via the Company radio station at Mubarek Oil Terminal, call sign Crescent-2, in order that they may be available when the weather is fit for resumption of operations. The Company reserves the right to load vessels out of turn following the return of good weather, to the extent that such loading "out of turn" does not materially delay the loading of other vessels in line. Further the Company reserves the right to decline to moor a specific vessel if its condition or facilities are unsafe for mooring or loading even though the terminal may be open to other vessels.

The Company Terminal Superintendent's decision on this will be final.

S.P.M.: The single point buoy mooring berth (SBM), 11 m. in diameter and located in 163 ft. of water, is designed to handle tankships in the 350,000 d.w.t. class. ASA 150 pound flanged connections and one 20 in. floating hose, reduced to 12 in. Tanker Rail Hose for connection to export tanker's loading manifold, the length of hose being 965 ft.

Average loading rate is 16,000 b.p.h. The SBM is also provided with one permanently attached 21 in. circumference synthetic fibre floating mooring line.

EQUIPMENT: Vessels must have suitable winches or capstans in good operating condition on the forecastle deck. Constant tension type winches may not be used except when they can be solidly locked and the constant tension feature not used.

All vessels should have ready messenger lines on forecastle head for bringing the mooring line aboard from single point mooring (SBM).

Mooring winches on forecastle head for handling one 12 in. circumference synthetic fibre floating pick-up line from SBM.

Adequate chafing gear to prevent damage to mooring line.

Adequate mooring bitts to secure mooring line.

Hose lifting winch, derrick and gear rigged for 7.5 tons.

HOSES: After the vessel is securely moored the cargo hose will be hoisted on the port side. The hose is lifted by ship's gear and crew, and all connecting of the hose will be done by them. The lifting derrick, equipment tackle, etc., should be topped off and ready on arrival. Terminal loading hose is fitted with ANSI 150 pound flat face 12 in. "camlock" coupling and ships should have adapters and fittings to enable this hose to be connected to the ship's manifold. The Company Mooring Master advises the ship's personnel in hose lifting and connecting procedure; however, a deck officer must be present and must direct the ship's crew in all handling. The Company Mooring Master may reject a ship for unsatisfactory hose handling.

Do not close valves against crude flow.

Emergency flow stop signal if all communications fail will be a continuous sounding of the ship's whistle from either export tanker or *Baraka 1*.

CARGO SPECIFICATIONS:

Approx. Mubarek crude specifications:

Gravity	39° A.P.I. (approx.)
Sulphur	0.6%
B.S.&W.	Two tenths of one per cent or less by volume.
Metals	Not in excess of trace (100 PPM).
Viscosity	52 SSU at 120° F.
Flash Point	Below ambient temperature.
Pourpoint	30° F.
H_2S	Present

FRESH WATER: Not available.

FUEL: Not available.

CONSULS: Various consulates are located in Abu Dhabi and Dubai.

REPAIRS: No repairs, painting, etc., are to be made while berthing unberthing or in the berth.

CUSTOMS: Cigarettes, cigars, tobacco, matches, spirits, wines, beers, perfume, arms, ammunition and possibly other items have to be locked up under Customs seal from time of arrival of ship until time of leaving territorial waters.

TIME: Local time is GMT plus 4 hours throughout the year.

SERVICES: No supplies of any kind and no medical services (except in case of emergency and subject to a doctor being available), or other services are available at Mubarek Oil Terminal.

SHORE LEAVE: Not permitted.

GENERAL: *Light Dues:* The Middle East Navigation Aids Service (MENAS) charges light dues according to the size of the vessel and the number of visits to the Gulf during the year.

Positively no provision is made for dirty ballast: Any ship arriving with dirty ballast will be rejected and all costs accruing therefrom will be to the ship's account. Notice of Readiness shall not be accepted until vessel returns with clean ballast and tanks fit to receive cargo. She will on second arrival tender a new notice of readiness to load.

Fire towing wires required fore and aft.

No swimming permitted whilst vessel in berth.

No fishing permitted at the berth or within the restricted navigation area.

SHIPMASTER'S REPORT: December 1979.

Pilotage: Pilot flies out from Sharjah by helicopter and he carries out all entry procedures. He will also take mail ashore for delivery to vessel's Agents. Mail must be placed in one envelope, addressed to Agents and marked ship's mail.

Tankers: Loading rate commences at 1,000 t.p.h. and when everything satisfactory increased to max. 2,000 t.p.h. Normal parcel is 350,000 bbls. ±0.0%. If vessel requires a plus % then give a Note of Protest to the Pilot.

AUTHORITY: Crescent Petroleum Company, P.O.Box 211, Sharjah, U.A.E. *Tel:* Sharjah 22801. *Telex:* 68015 Crespt EM. *Cables:* "Crespt Sharjah". *Contact:* Port Captain.

AGENT: Gulf Agency Co. (Sharjah) Ltd., P.O.B. 435, Sharjah, U.A.E. Cables "Confidence", Sharjah. Telex 68019 ("Gacshj EM"). Telephone: 544446. After office hours 355676, 354249.

MUBARRAS ISLAND, Abu Dhabi: 24.26. N. 53.32 E (HALAT AL MUBARRAS) (See Plan Book)

FLAG: All vessels calling at Mubarras are required to fly the national flag of U.A.E. which are available from ship's Agent.

LOCATION: Mubarras Island is located approximately Lat. 24° 28′ N., Long. 53° 22′ E., some 55 miles West of Port of Abu Dhabi.

The island constitutes export terminal of crude oil produced by Abu Dhabi Oil Company Limited (Japan). Crude oil produced from the Company's Mubarras oilfield is transported to Central Facilities Platform (CFP) situated approximately 19 miles E.N.E. of Mubarras Island by 4 in. to 14 in. flowlines, thence relayed by a 18 in. transmission line to the Island. The Company has tank storage for 1,548,000 barrels of crude oil on the island.

Additional storage tanks for crude oil under construction, expected to be ready mid-1983. Capacity 660,000 bbls.

Tanker loading is accomplished by means of a single-buoy-mooring (SBM) system installed about 8 miles offshore East of the Island.

Average API Gravity of crude oil to be located is 36.5° and flash point is below 35° Fahrenheit.

PORT LIMITS: The port area of Mubarras and its approaches cover the area bounded by straight lines connecting the following points:

(a) Lat. 24° 30.0′ N., Long. 53° 36.0′ E.
(b) Lat. 24° 24.0′ N., Long. 53° 36.0′ E.
(c) Lat. 24° 24.0′ N., Long. 53° 27.0′ E.
(d) Lat. 24° 26.7′ N., Long. 53° 21.7′ E.
(e) Lat. 24° 30.0′ N., Long. 53° 21.7′ E.

Masters of all vessels entering the Port must follow instruction from the Company's Port Master as to approaches, anchoring, berthing and unberthing.

APPROACHES: *Approaches to Mubarras:* Japanese Charts No. 3173 and No. 3174 cover the approaches to Mubarras. For tankers arriving at Mubarras without necessary charts full information shall be given by telegram if a request is sent to "Confidence" Abu Dhabi via "GNV" Bahrain radio a few days before arrival.

Alternatively, if the vessel has VHF, the buoy positions shall be given to her upon request to "Mubarras Terminal" as she approaches but prior notice of requiring this service should be given in the vessel's arrival message.

Charts: The following charts are recommended for use in Abu Dhabi waters:

Japanese Chart Nos. 3173 and 3174
British Admiralty Chart Nos. 3733, 3734, 2889 and 3716.

Approaches to Mubarras – Navigational Aids:

Buoy Nos.	*Latitude North*	*Longitude East*	*Colour*	*Light Character*
Mubarras Approach	24° 57.00′	53° 18.39′	Red	Fl. R. ev. 5 sec.
Mubarras Entry	24° 52.34′	53° 18.42′	Red	Fl. R. ev. 10 sec.
1	24° 49.44′	53° 17.29′	Black	Fl. W. ev. 10 sec.
3	24° 43.89′	53° 21.60′	Green	Fl. G. ev. 5 sec.
4	24° 42.01′	53° 27.38′	Red	Fl. R. ev. 3 sec.
5	24° 38.56′	53° 31.68′	Green	Fl. G. ev. 3 sec.
6	24° 31.87′	53° 40.58′	Red	Fl. R. ev. 2 sec.
7	24° 33.93′	53° 40.12′	Green	Fl. G. ev. 5 sec.
8	24° 30.81′	53° 40.93′	Red	Fl. R. ev. 5 sec.
9	24° 31.93′	53° 40.20′	Black	Fl. W. ev. 2 sec.
10	24° 29.97′	53° 40.72′	Red	Fl. R. ev. 3 sec.
11	24° 30.33′	53° 40.43′	Black	Fl. W. ev. 3 sec.
12	24° 28.93′	53° 40.43′	Red	Fl. R. ev. 5 sec.
13	24° 27.33′	53° 38.17′	Black	Fl. W. ev. 5 sec.
14	24° 26.17′	53° 37.00′	Red	Fl. R. ev. 3 sec.
15	24° 26.38′	53° 36.63′	Black	Fl. W. ev. 3 sec.
17	24° 26.00′	53° 33.00′	Green	Fl. G. ev. 2 sec.

Note: Black coloured and white flashing buoys are showing the starboard side of the channel.
Red coloured and red flashing buoys are showing the port side of the channel.
"Mubarras Approach", Mubarras Entry, No. 1, No. 3, No. 4, No. 5 and No. 7 buoys are fitted with radar reflectors.

The following navigation buoys and well marking lights have been installed.

Navigation Buoys

W–1 Buoy	Latitude: 24° 28′ North Longitude: 53° 00′ East	Black with 2 white vertical stripes	Pillar Fl.W. 3 secs.
W–3 Buoy	Latitude: 24° 32.90′ North Longitude: 53° 13.70′ East	Black with 2 white vertical stripes	Pillar Fl.W. 5 secs.
WMD–1 Entry Buoy	Latitude: 24° 37.53′ North Longitude: 53° 19.30′ East	Black with 2 white vertical stripes	Pillar Fl.W. 5 secs.

Well Marking Lights

WMA 1	Latitude: 24° 32.07′ North Longitude: 52° 57.08′ East	Fl. Mo 'U' 20 secs.
WMC 1	Latitude: 24° 40.20′ North Longitude: 53° 12.20′ East	Fl. Mo 'U' 20 secs.
CD 7	Latitude: 24° 32.08′ North Longitude: 53° 49.23′ East	Fl. W., Morse 'U'.
WME 1	Latitude: 24° 32.07′ North Longitude: 53° 20.37′ East	Fl. W., Morse 'U'.

Charts affected: B.A. 2889, 3952, 3734, 3733
U.S.H.O. 62400

How to Steer in the Mubarras Channel: (Inward)

Point Nos.	*Position Lat. North*	*Long. East*	*Course (True)*	*Dist. (miles)*
1	24° 57.00′	53° 17.80′		
			180	7.45
2	24° 49.55′	53° 17.80′		
			144	6.55
3	24° 44.30′	53° 22.05′		
			120	10.55
4	24° 39.00′	53° 32.00′		
			123	8.90
5	24° 34.10′	53° 40.30′		
			176	4.00
6	24° 30.20′	53° 40.70′		
			214	3.50
7	24° 27.30′	53° 38.55′		
			240	2.20
8	24° 26.20′	53° 36.40′		
			261	3.10
9	24° 25.70′	53° 33.05′		
			Total Distance:	46.25

Anchorage Position	Lat. 24° 26.80′ N.	Long.53° 34.00′ E.
S.B.M. Position	Lat. 24° 25.98′ N.	Long.53° 31.54′ E.

Navigation in Shallow Waters: There are some shoals with depth of 14.9 m. (49 ft.) in the area between Buoy No. 14 and No. 15. Masters of outgoing vessels should pay due consideration to the effect of squat a speed on vessel's draft in the shallow water, bearing in mind vessel's trim.

Conspicuous Marks: Quick flash White navigation lights (visibility range 5 miles) are fixed on following platforms and the flare stacks adjacent to each platform are visible from distance:

MR-6 Platform	Lat. 24° 35′ 44″ N.	Long. 53° 43′ 53″ E.
CFP	Lat. 24° 30′ 09″ N.	Long. 53° 42′ 09″ E.
AA Platform	Lat. 24° 26′ 15″ N.	Long. 53° 39′ 53″ E.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
2 Manifests.
1 International Maritime Declaration of Health.

PILOTAGE: Pilot is provided by the Oil Company at the request of the vessel's Master based on express understanding and condition that he is aboard the vessel for the purpose of assisting the Master and becomes, for such purpose, the servant of the owners of the vessel.

It is recommended that the Master of the vessel calling at Mubarras for the first time requests Pilot to go aboard the vessel for both inward and outward passage of the channel. The Pilot will normally board the vessel in the vicinity of No. 5 Buoy and will advise the Master on approaches to the berth and he will remain on board to act as Mooring Master and direct loading operations.

Mooring Master: The Mooring Master provided by the Company will undertake pilotage, mooring and unmooring of the tankers.

The Mooring Master shall board vessels to be moored at SBM in the anchorage area or in the vicinity of No. 17 Buoy. The Mooring Master will advise the Master of vessel on approaches to the SBM, mooring, unmooring, connecting and disconnecting hoses and all other operations within the port area. All manoeuvring of vessels within the port area shall be done only in accordance with the advice of the Mooring Master, subject to the understanding that in all cases and circumstances the Master of the vessel shall remain solely responsible for the safety and proper manoeuvring of the tanker. Master or one of his qualified deck officers must be on the bridge at all times while the vessel is being manoeuvred.

ANCHORAGE: The tanker anchorage is within 0.5 miles radius of Lat. 24° 26.8′ N., Long. 53° 34′ E. Depth of water varies from 15.5 to 18 m. (50 ft.to 59 ft.) The sea bed all around the anchorage is coral with approximately 6 ft. of loose sand. Holding is poor and a vessel is advised to pay out at least six shackles of chain.

Vessels will be advised by radio of a suitable anchorage if both anchorage and the berth are not immediately available. Vessels should under no circumstances anchor or wait at the South area of Lat. 24° 57′ N. without obtaining prior approval of the Port Master.

Anchorage for Dry-cargo Ships: Anchorage for dry-cargo ships is directed by Port Master by VHF radio.

Prohibited Area for Navigation and Anchorage: The area within 1.15 miles radius from CFP is prohibited for navigation and anchorage. No vessels shall anchor within the range of 1.5 miles from submarine pipe-lines.

MAX. SIZE: See "Approaches" – depth over shoal areas; also see "Tides".

HEALTH: Vessels arriving at Mubarras Terminal must carry the usual Bills of Health for ports visited on the voyage. Masters of vessels are requested to inform the Company if there is any person ill on board or if there has been sickness within the week prior to arrival.

Pratique is usually granted by Port Medical Officer through the Mooring Master or Agency Clerk.

RADIO: *Notice of Arrival:* Vessels should advise their ETA Mubarras at least 72 hours and again 24 hours before arrival through normal radio service. As an alternative to the route through Bahrain Radio Station (GNV) vessels may send their first message through Singapore or Bombay.

Confirmation of ETA should be made a few hours before arrival at "Approach Buoy" by calling "Mubarras Terminal" on Channel 16 VHF. After anchoring, vessels should advise their time of anchoring through VHF and thereafter maintain a continuous listening watch on Channel 16 until the Company's Mooring Master boards.

Tankers bound for Mubarras should advise their ETA and other information 72, 48 and 24 hours before arrival.

Vessels may find it helpful to route their first message through Singapore, Bombay or Bahrain Radio Station. All cables should be addressed to the Company through ship's Agent.

The first message should be sent according to the following form, but any items which are the same with a recent previous voyage to this port may be omitted.

(1) ETA Mubarras.
(2) Last Port.
(3) Next Port.
(4) Deballasting time.
(5) Quantity of cargo required.
(6) Maximum loading rate.
(7) Diameter of cargo manifold.
(8) Distance from manifold to ship's side.
(9) Derrick capacity.
(10) Diameter of fairlead.
(11) Name of Master.
(12) Number of crew.
(13) Whether Pilot is required or not.

Radio Station in Mubarras Terminal Office.

Short-range communication to Mubarras Terminal Office can be made by calling "Mubarras Terminal" on VHF radio telephone. Vessels should inform the office with their ETA preferably when they pass the Strait of Hormuz. After anchoring, vessels should advise anchoring time and maintain a listening watch on Channel 16 until Mooring Master boards.

Call Sign: "Mubarras Terminal".

Frequency:	*Reception*	*Transmission*
F3	Channel 16	Channel 10, 12, 14

Operating Periods: Round the clock.

BALLAST: All vessels arriving at this port are required to have on board sufficient clean ballast to give a safe draft for manoeuvring purposes. Vessels arriving with insufficient ballast may be required to increase the quantity, should the Mooring Master consider that it would not be safe to berth the vessel for loading. As a general rule, vessels shall not start discharging ballast until mooring is completed.

Upon completion of deballasting the Mooring Master will inspect the tanks. If the tanks are not satisfactory, he may require further pumping until such time as they meet the required standard.

It is strictly prohibited to discharge oil, oily water or other refuse that may result in pollution of the sea. International oil pollution regulations must be strictly observed by all vessels. *The terminal does not have facilities to receive oily ballast.*

TUGS: Following vessels are always available for use for marine operations at this port.

Name of Vessel	*G.R.T.*	*B.H.P.*	*Spd. (kt)*
No. 1 Union (Tug/workboat)	499	1,120×2	12
No. 2 Union (Passenger boat)	50	480×2	14
No. 3 Union (Mooring boat)	25	195×2	11

BERTH: *Position of Buoy:* Lat. 24° 25.98′ N., Long. 53° 31.54′ E. *Depth of Water,* 15.5 m. (50.85 ft.).

The berth is a single-buoy-mooring system consisting of a buoy 44.32 ft. (13.5 m.) in diameter, moored to 6 pendant legs of 3 in. high strength chain shackled to anchor piles at a radius of 855 ft. (260 m.), and having a rotating deck carrying the pipe-line and mooring connections.

One 32 in. crude oil line has been laid approximately 52,500 ft. (16 km.) from the shore to a position close under the buoy. From the underwater manifold the crude oil goes to the buoy through a 20 in. underwater hose. The connection between turntable piping of SBM and tanker manifold consists of 1 hose string composed of 24 in. and 20 in. (Length 770 ft.) floating hoses and 2 hose strings composed of 16 in. (Length 120 ft.) tail hoses.

LOADING: The maximum loading rate of crude oil is 40,000 bbls./hr. or 6,400 kl./hr.

Notice of Readiness: The Master of each vessel should present a Notice of Readiness to load to the Company's Mooring Master who will sign it on behalf of the Company.

The Notice of Readiness should be tendered at the time of the vessel's arrival at the tanker anchorage area, which is, in principle, understood to be either the time of dropping the anchor in the anchorage, or, if the vessel does not anchor, the time that the Mooring Master boards to commence berthing.

The vessel, however, is prohibited from berthing unless she reaches No. 5 Buoy at least 5 hours before the sunset, and Notice of Readiness will not be accepted until the next sunrise even if the vessel has already anchored in the tanker anchorage area.

Notice of Readiness will not be accepted during periods when the port is closed. The port is "closed" when the weather is such that it is too rough for incoming tankers to berth. The decision regarding the opening and closing of the port will rest with Port Master.

When the vessel is ready in all respects for loading the ship's officer must inform the Mooring Master who will transmit the necessary messages to the control room on shore. Mooring Master is authorised to control all the loading operations.

All cargo documents and shore figures are usually prepared on board and the Mooring Master will sign the documents on behalf of the company.

MOORING: The Company reserves the right to refuse to accept for berthing or loading any vessels considered unsuitable by reason of inadequate or unsatisfactory mooring equipment, insufficient derrick capacity, unusual manifold connection, inability to comply with the Safety Regulations, or any circumstances which would create unusual risk to the Company's berth, facilities, personnel and equipment whatsoever.

Preparation: Before Mooring Master boards, vessels should have ready the following:

(a) Jacob's ladder on lee side.
(b) Hawser 1 each at fore and aft deck, polypropylene if possible.
(c) 1 steel crowbar.
(d) Port derrick with double wire rigged for minimum lift 5 tons.

After vessel is anchored, the Company's mooring and hose connection crew will board and pick up mooring and hose connection materials from tug/workboat. Vessel is requested to provide windlass and winch operators.

Mooring at Berth: Unless pilotage is required the Mooring Master will board the arriving vessels in the anchorage area. Vessels are requested to have pilot ladder safely and securely rigged ready for immediate useand long enough to meet the Mooring Master's launch. Vessels should have their crew standing by ready to receive mooring and hose connection materials and should maintain a lee until this is completed. Mooring Master will instruct the crew in the setting up of the forward mooring.

2 bollard ropes are made fast round the port bitts with their attached shackles about 5 ft. inboard from the fairleads as far forward as possible. The size of the fairlead opening should be at least 300 mm. (12 in.) to prevent chain from jamming in the fairleads.

Attached to the mooring connections on the buoy are two 18 in. nylon ropes (144 mm. dia., breaking strain 250 tons). These ropes are 50 m. long, and have at their free end a length of stud link chain which includes enlarged end link for receiving the shackles used on the deck of the tanker. From the outer end of this chain there are connected 2 mooring lines consisting of pick-up wires, pick-up ropes and a towing rope (port side only). The nylon rope is supported by "doughnut" floats and the chain is hung by large plastic buoys 5 ft. in diameter and coloured red and yellow.

Hose Connection: After completion of mooring the boat which has been holding the hoses clear during berthing will bring the floating hose to the ship's side and connect the derrick runner to the balance buoy. These are lifted aboard one by one and connected by distance piece which was already connected to vessel's manifold by hose connection crew during mooring operation.

Unmooring: After the hose disconnection is completed, mooring ropes are slacked off and then dropped into the water. Tug/work-boat will come alongside either before or after the vessel backs off the berth, whichever is convenient, and will receive mooring and hose connection materials.

TIDES: The maximum tidal range in this area is 6 ft., the average tidal range at the Spring tide 3 ft. and the Chart Datum is 0.7 ft. below ISLW. Tidal stream is variable according to the place and the lay of the land. But the flowing tide usually runs South-Eastwards and ebbing tide North-Westwards. Speed of a current is around 2 knots at the highest.

"Tide and Current Table" is published annually by the Company, applicable to Mubarras and the surrounding area, and will be obtained on application to the Company.

WEATHER: Local weather at Mubarras is almost similar to that of Jebel Dhanna and Abu Dhabi City, being extremely hot and humid in Summer. Temperature sometimes soars as high as 50° Centigrade with almost 100 per cent humidity in July and August.

MEDICAL: The Company operates a small clinic at Mubarras. Master may obtain medical attention for ship's personnel from the ship's Agent who may in the case of serious illness or injury recommend treatment at the Abu Dhabi government hospital. The ship owner will be charged for all expenses incurred.

FRESH WATER: Not available at Mubarras except in case of extreme emergency.

FUEL: Not available.

CONSULS: No consular business is available at Mubarras. However, various countries have representations in Abu Dhabi.

REPAIRS: There are no repair facilities at Mubarras. However, radar and electronics repairs are available in Abu Dhabi and technicians can be sent to Mubarras for repairs through notifying the ship's Agent.

SURVEYORS: Lloyd's, ABS, Veritas surveyors are available in Abu Dhabi and they can be brought in if ample notice is given to ship's Agent.

CUSTOMS: Under normal circumstances Customs Officers do not board tankers at this port but upon arrival the Master is required to submit to the Customs through the ship's Agent a manifest of any cargo to be landed at Mubarras.

After loading is completed the Mooring Master will sign on behalf of Customs an outward manifest and issue the port clearance. These will be handed to the Master by the Agent.

REPATRIATION: Not possible.

TIME: Local standard time at Abu Dhabi is GMT plus 4 hours throughout year.

FIRE-FIGHTING: Tug/workboat "No. 1 Union" stationed at Mubarras Island is equipped for fire fighting. She is capable of pumping 1,700 gallons of water per minute from 3 nozzles and is usually on emergency stand-by during tanker loading operations.

GENERAL: *Engine:* The main engines and all gear must be in an operable condition and in a state of immediate readiness whilst the vessel is on the berth.

Stores: Provisions and deck stores not available.

Divers: The services of the Company diver may be available to vessels where it is essential that a diver's services are required to enable a vessel to sail. All requests for such services should be routed through the ship's Agent to the Port Master.

Currency: All currencies approved except Israeli.

Mail: Mail can be received and sent through ship's Agent.

Dry Cargo Discharge: A "T" shaped jetty at Mubarras Island can accommodate a vessel with maximum 12 ft. draft. Discharge of dry cargo must be arranged well in advance through ship's Agent in Abu Dhabi who will supply labour and barges from Abu Dhabi. No gear whatsoever is available at Mubarras.

SAFETY:

No Smoking: Smoking on board the ship is strictly prohibited except in the smoking room situated in the aft accommodation and which has been jointly agreed between the Mooring Master and the Master.

The responsibility for the strict observance of the safety of these rooms rests with the ship, and the Company reserves the right to prohibit smoking in these rooms also should situation require at any time.

Accommodation: All accommodation doors, port holes and ventilators must be closed during loading operations, and doors and openings to machinery spaces in vicinity of ship's tanks are also to be closed.

Galley and Boiler Fires: As a general rule, the use of galley and boiler is not permitted. However, those appropriately equipped are considered safe for use, and their use will be mutually agreed between the Master and the Mooring Master.

Radio Equipment: Radio. radar or other electronic equipment must not be energized while the ship is on the berth.

Air-conditioning Units: For safety, it is preferable that these units recirculate the air within the accommodation but their use when drawing air from outside the accommodation may be permitted provided that the Master and the Mooring Master agree that no danger exists. Should any gas be detected within the accommodation or should there be any danger of gas within the accommodation these units must be stopped and the intakes closed. Window-type air-conditioners are forbidden at all times.

Ship's Fire-fighting Equipment: This equipment must be in constant readiness at all times with sufficient people on board for its efficient operation.

Fire Watches: While the vessel is within the port area a continuous and efficient fire watch shall be maintained on deck and in the engine room by the ship's crew. Fire-fighting equipment shall be in instant readiness throughout the vessel and additional extinguishers must be available at the loading manifold while hoses are being connected and disconnected. Water should be available on deck service lines at all times and fire hoses connected at all fire stations for immediate use.

Swimming: No swimming in the sea berth area is permitted while vessels are on berth.

AUTHORITY: Abu Dhabi Oil Co. Ltd. (Japan), P.O.Box 630, Abu Dhabi, United Arab Emirates. *Tel:* Abu Dhabi 361100. *Telex:* 22260 Adoco EM. *Cables:* "Oiljapan Abu Dhabi". *Contact:* Mr. S. Ageto, Manager – Marine & Transport.

AGENT: National Shipping Gulf Agency Co. (Abu Dhabi) Ltd. are appointed by Abu Dhabi Oil Co. Ltd. (Japan) as exclusive shipping Agents for all vessels calling at Halat Al Mubarras Terminal. The address particulars are as follows:

National Shipping Gulf Agency Co. (Abu Dhabi) Ltd., P.O.B. 377, Abu Dhabi, United Arab Emirates, Cables: "Confidence", Abu Dhabi. Telex: 22248 ("Gacauh EM"). Tel.: 334300 (10 lines). After office hours 325143, 366665, 341728, 326083.

ETA messages shall be sent to National Shipping Gulf Agency Co. (Abu Dhabi) Ltd., cable address: "Confidence", Abu Dhabi, via Bahrain Radio.

Vessels can otherwise communicate with NSGAC, Abu Dhabi, over Marine Radio HF, frequencies: standing by on 3539 kHz. and transmitting on 2170, 2301, 2368, 2738, and 3539 kHz., call sign "Confidence", Abu Dhabi.

Vessels equipped with SSB radios can also communicate with NSGAC, Abu Dhabi, on the frequencies, standing by on 6910 MHz lower side band and transmitting on 3539 and 6910 MHz, call sign "Confidence", Abu Dhabi.

Under favourable weather and transmitting conditions communication can also be performed over the VHF radio on the following frequencies: standing by on Channel 16 (156.8 MHz) and transmitting on Channel 9, 10, 12, 13 and 14, call sign "Confidence", Abu Dhabi.

PORT RASHID, Dubai: 25.16 N. 55.16 E.

(See Plan Book)

FLAG: U.A.E.

DOCUMENTS: The following should be airmailed to Agent prior to ship's arrival.

6 Dangerous Cargo Lists.
2 Stowage Plans.
2 Hatch Lists.
7 Cargo Manifests.
2 Freighted Manifests.
1 each Bill of Lading.
4 Crew Lists required (on arrival).

APPROACHES: Black and white Pillar Buoy, flashing every 10 secs. in position Lat. 25° 21′ N. Long. 55° 14′ E. Marked "Dubai Approach".

Main light in position Lat. 25° 13.5′ N. Long. 55° 17.3′ E. (Situated on top of the Dubai Trade Centre) Group Flash (W) 2 every 30 secs. 157 m. above MHWST. Visible 30 miles. Also Racon Beacon with signal "TC".

Main leading lights on main breakwater front Position Lat. 25° 16.3′ N. Long. 55° 16.0′ E. QK FL every 0.5 secs. Rear Lat. 25° 15.5′ N. Long. 55° 16.0′ E. Occ. Every 2 secs. Breakwater Entrance. LEE light FL (R) every 2.5 secs. Main light G.P. FL (G) 2 every 30 secs.

PILOTAGE: Compulsory. Pilot will board 24 hours a day, from a launch and a regulation Pilot ladder must be provided, with manropes, and a lee given. Large vessels calling should provide an accommodation ladder with its lower platform within about 12 ft. of the waterline and a pilot ladder rigged on ship's side adjacent to the accommodation ladder platform.

The Master must sign the indemnity form provided by the Pilot before entering the harbour.

ANCHORAGE: Vessels should contact Dubai Port Control VHF, Channel 16 shifting to a working Channel as instructed. Failing instructions they should anchor approximately 2 miles from the port entrance. Holding ground – Generally poor.

RESTRICTIONS: Minimum depth in channel 13 m. Max. rise and fall 2.0 m.

Vessels not working cargo immediately on arrival will not enter the port. Vessels may leave at any time.

MAX. SIZE: Depth alongside at Port Rashid container terminal is 13 m. and the tide is not expected to go as low as zero height on average more than 55 days in any one year. Therefore, Port Rashid Authority are prepared to berth vessels up to 42 ft. draft, at minimum speed at all times, provided vessels can discharge in such a manner as not to trim so as to cause an increase in maximum draft.

Maximum draft at general cargo berths is 37.7 ft. Depths of water at general cargo berths varies from 30.5 ft. – 37.7 ft.

Vessels in excess of 850 ft. length overall will be berthed at the Harbour Master's discretion.

Port Rashid Authority consider that keel clearance is at the Master's discretion, and are prepared to berth vessels with minimum keel clearance of six inches.

TUGS: Three tugs of 2,400 h.p. are available with fire-fighting, pollution and salvage facilities, the practice being to secure alongside with 2 tug ropes therefore, gangway and derricks should be secured in-board.

Tugs are fitted with VHF. Contact should be made via Dubai Port Control or the Harbour Master.

RADIO: The Port Signal Station (call sign 'Dubai Port Control') is fully equipped with VHF radio and watch is maintained 24 hours per day on Channel 16, switching to Channel 12 for port operations.

The Signal Station is situated at the seaward end of No. 1 berth at a height of 57 ft. above sea level.

Vessels should contact the signal station by VHF Channel 16 and request berthing instructions.

Vessels should advise their Agents the arrival time, LOA, draft and position of bunkering points should bunkers be required. Amended ETA should be advised by VHF. Vessels Agents will in turn pass on the above information to the Port Authority.

HEALTH: Normal quarantine regulations apply and Pratique can be given by the Pilot on cargo vessels, always subject to the Health Authorities approval. Health Authorities only board when the vessel is alongside, except in the case of a suspected ship.

BERTHING: Vessels should advise the port of their ETA, length overall and draft as early as possible. The port should also be advised of any explosives or hazardous cargo on board to determine if it should be offloaded before berthing or otherwise.

Berth Information: A restricted number of vessels may anchor within the harbour breakwaters under instructions from the Harbour Master if so required and may discharge/load ex-lighters.

Berth Nos.	*Length*	*Depth of Water (MLWS)*
1-4	4×573 ft. (2,294 ft.)	No. 1 33 ft.
		No. 2 32 ft.
3-4		30 ft. 6 in.
5	600 ft.	30 ft. 6 in.
6-10	5×601 ft. (3,008 ft.)	No. 6-8 30 ft. 6 in.
		No. 9-10 35 ft.
11-15	5×599 ft. (2,996 ft.)	30 ft. 6 in.
16	700 ft.	37.7 ft.
17-24	8×800 ft. (4,864 ft.)	37.7 ft.
25	490 ft.	37.7 ft.
26-27	2×515 ft. (1,031 ft.)	37.7 ft.
28-30	3×597 ft. (1,792 ft.)	37.7 ft.
31-32	2×717 ft. (1,434 ft.)	No. 31 37.7 ft.
		No. 32 42 ft.
33-35	3×993 ft. (2,981 ft.)	42 ft.
S.O.T.		37.7 ft.
Depth over pipeline		37.7 ft.

General Cargo: 30 deep water berths with 17 storage sheds (each 120 m. × 60 m.) adjacent are available plus a coastal berth for small craft and vessels with less than 6.10 m. (20 ft.) draft. All berths are backed by extensive hard surface yard storage area.

Container Terminal: Comprising of berths 31-35 with quay length of 1,350 m. served by 2×Tango 80 gantry and 2×Mitsubishi gantry cranes of 35 ton capacity and 1×Mitsubishi gantry of 50 tons capacity. Storage area of 45 hectares with 6×CFS sheds on terminal of 400×200 ft. each.

Depth alongside: 13 m.

Working hours: 0700 to 1830 and 1830 to 0700 daily.

16 straddle carriers radio linked to controller 24 terminal/Ro-Ro tractors.

3×25 ton forklifts (2 Ro-Ro masted)

120×roll trailers

Bunkers and water available alongside.

Computer controlled stacking areas and container tracking available to Agents/Owners.

FRESH WATER: Available at all berths. Rate 20 t.p.h. per hose.

FUEL: Shell Bunker Fuels are available at berths Nos. 1 to 4, 6 to 9 and 17 to 38 in addition to Tanker Berth and include fuel oil, thin fuel oils, diesel and gasoil, pumping rate 300 t.p.h.: 48 hours' notice should be given to local Agents or Shell Markets (M.E.) Ltd., P.O.Box 307, Dubai. Tel: 450451; Telex: 5478 DB; Cables: Shell Dubai. Marine Lubricants and chemicals are available for delivery to the ship.

Delivery of fuel oil and gas oil at the Petroleum Jetty via 12 in. loading line at up to 500 long t.p.h.

TANKERS: Berth operated by Shell Markets (M.E.) Ltd. Capable of taking vessels up to 260 m. long. Max. draft 11.3 m., vessels of 11.3 m. but not over 11.6 m. draft may be berthed by arrangement with the Harbour Master at HW.

Slop barge with capacity 2,500 tons available.

CARGO HANDLING: *General Cargo Working hours:* Saturday – Thursday, 1st shift: 0700 – 1400 hrs. Special shift: 1400 – 1600 hrs.; 2nd shift: 1830 – 0030 hrs. Special shift: 0030 – 0530 hrs.

Container Terminal: Shift arrangement. 0700-1830, 1830-0700 seven days a week, 365 days a year.

Working hours are at the discretion of the Port Operations Manager.

Cargo is handled on Fridays and most Public Holidays. The Port Operations Manager may require full night work or special shifts in the interest of the Port.

Refrigerated cargoes should be stowed consignment by consignment, to facilitate discharge and Direct Delivery to consignees.

Each general cargo berth is provided with fork-lift trucks and tractor units and trailers.

Pallets are provided free of charge to assist cargo handling.

Cargo is discharged direct to sheds or to storage areas where mobile cranes varying from 5 to 25 tons lift and F.L.T.'s of 3-7 tons capacity operate.

STEVEDORES: Ship's gangs are available for distribution to vessels through Agents, vessels should advise their requirements before arrival. The gangs board and operate under the supervision of ship's officers. No quay cranes are provided, so ship's derricks/cranes must be used, together with cargo handling equipment. A close liaison should be maintained with the Cargo Superintendent or shed supervisor at all times.

Lighterage: When berths are fully occupied, vessels may discharge/load ex-lighters at anchorage.

MEDICAL: A comprehensive range of medical and dental services are available at Dubai.

AIRPORT: International airport, 3.2 km.

SURVEYORS: Lloyd's Agents, Lloyd's Register of Shipping. American Bureau of Shipping. Germanischer Lloyd.

DRYDOCK: *Dubai Drydock:*. A complete ship repair facility East of Port Rashid. Vessels up to 1,000,000 d.w.t. can be docked. Approach areas dredged to 11.5 m. enclosed by breakwater.

Dock No. 1 370 m.×66 m. (350,000 tonnes)
No. 2 525 m.×100 m. (1,000,000 tonnes)
No. 3 415 m.×80 m. (500,000 tonnes)

Dockside Cranes:

2× 120 tonnes Safe working load at 65.5 m. radius.
1× 25 tonnes Safe working load at 80.0 m. radius.
2× 15 tonnes Safe working load at 70.0 m. radius.

Tank Cleaning: Facilities available.

REPAIRS: Galadari Engineering; P.O.Box 355, Dubai; Tel: 660803, Telex: Gabros DB 5443; Al Nasr Engineering Co. P.O.Box 1106, Dubai; Tel: 223624; Telex: 5638 DB; Cables: Alnasr – Dubai, and the services of the large Dry Dock Complex capable of accepting vessels up to 1,000,000 d.w.t. offer round the clock service which ranges from major boiler repairs to repair of main diesel engines and auxiliaries, underwater welding, shot blasting hull cleaning and diving services. Gulf Lux Marine Services Ltd., offer a wide range of in-water service including scraping, blasting and recoating. Technical Engineering and Marine Services (TEAMS) have 1 slipway which can accommodate vessels up to 1,000 tons. They are also able to handle all kinds of engine and hull repairs.

Container repair yard located near container terminal.

JOINING/REPATRIATION: Arriving crew holding valid seaman's book can be cleared from the airport and placed on board on the strength of a guarantee letter from the Agent to the Immigration Office.

Repatriating crew can be brought ashore with a similar guarantee tendering the air ticket to the Port Immigration Office. They must be picked up from the ship 24 hours prior to departure.

Persons with South African entry stamps on their travel documents will not be allowed to enter the United Arab Emirates.

TELEPHONES: Situated in sheds, no connection made to vessels.

SHORE LEAVE: Agents collect all passports on vessel's arrival, together with 3 copies of crew list. Temporary shore leave passes are issued by the Immigration Office against passports and Crew Lists.

EMERGENCY CO-ORDINATION CENTRE: Coastguard located adjacent port. Tel: 450520.

SHIP SUPPLY SERVICE: Crew changes, delivery of ship's mail, stores, spares, etc., can be effected by service boats off Dubai or Fujairah. This service is carried out by Gulf Agency Co. (Dubai) Pvt. Ltd. See "Agent".

STORING: Complete shipchandling facilities available at short notice (via Agent).

DEVELOPMENTS: Expansion of the Container Terminal Yard to incorporate areas of land presently outside the Terminal.

Implementation of roving Computer V.D.U.'s for staff and equipment drivers, to speed up the transmission of data from the Yard area to the Computer, both the above due late 1984/early 1985.

AUTHORITY: Port Rashid Authority, P.O.Box 2149, Dubai, U.A.E. *Tel:* 451545 (PABX all depts.) *Telex:* 47530 ("PRA EM"). *Cables:* "PortRashid". *Contact:* D.H. Taylor, General Manager.

AGENT: Gulf Agency Co. (Dubai) Pvt. Ltd. P.O.B. 2404, Dubai, U.A.E. Cables: "Confidence", Dubai. Tel: 457555 (12 lines – 24 hours service). After office hours 480424, 445221, 459147, 441544, 443650, 443070. Telex: 45448, 45809 ("Gacdb EM") Radio: Marine VHF radio, stand-by on Channel 16 (156.8 MHz) Call sign "Confidence, Dubai".

Operators of ship-servicing and supply organisation: Crew changes, mail, spares and/or delivery of provisions undertaken at sea without deviation to serviced vessel.

Owners and Masters should contact G.A.C. Dubai by cable or telex regarding servicing requirements. Rendezvous positions are selected by Shipmaster as follows: Off Dubai, at any Longitude along meridian 55 East, or off Fujairah at any Latitude along parallel 25.10 North.

RAS AL-KHAIMAH: 25.45 N. 56.01 E.

There is a jetty, length 100 m., suitable for berthing smaller vessels, which is protected by a breakwater, and dredged to a depth of 3 m.

This is a small port for very small vessels only. *All* cargo vessels with cargo for Ras Al Khaimah should assume discharge/loading will be carried out in Mina Saqr. For all other information, see entry for Mina Saqr.

AUTHORITY: See "Mina Saqr".

AGENT: See "Mina Saqr".

SHARJAH, Mina Khalid: 25.22 N. 55.24 E.

(See Plan Book)

DOCUMENTS: The following documents must be in the possession of the ship's Master on arrival or must be forwarded to ship's Agent prior to ship's arrival:

Immigration: The U.A.E. Immigration Department has opened a new office in Port Khalid, Sharjah operating 24 hours, 7 days per week. Master to submit Crew List, photographs of each crew member (photos not returned) and Passports/C.D.C. to Immigration Office on arrival. Passport/C.D.C. will be returned to vessel before sailing. Joining/leaving crew must report to the Immigration Office before proceeding to vessel/airport.

Customs:

2 Crew Lists.
2 Passenger Lists.
2 List of Alcoholic beverages.
2 Cargo manifests.

Port Operations:

2 Cargo Manifests.
2 Dangerous Goods List.
2 Stowage Plans.
Certificate of Registration.
Classification Certificates.

The originals of all the ship's Certificates shall be produced to any Port Official on demand. Where a ship is more than 15 years old, a valid Certificate of Condition issued by a recognised Surveyor shall be on board.

Where Certificates are found to be invalid, the ship may be removed from the Port Area, at ship's expense and re-entry permitted only after validity has been established.

Failure to produce any Certificate to a Port Official when demanded renders the Master liable to a fine of up to DH. 5000, and the removal of the ship from the Port Area.

PILOTAGE: Pilotage is compulsory for all ships entering and leaving the deep water harbour. On entry, Pilots will board to seaward of the fairway buoy; a pilot ladder should be provided. Port Khalid will operate a 24-hour, 7-day week pilotage service. Notice is required before 2200 hrs. for pilotage requirements between 2400 hrs. and 0600 hrs.

ANCHORAGE: The fairway buoy in position Lat. 25° 22.9′ N. Long. 55° 20.85′ E. is a red and white pillar isophase every 6 secs. Vessels approaching should await Pilot to seaward of fairway buoy, anchoring if necessary.

Protected Anchorage:

A limited number of vessels may anchor at moorings within the deep water harbour with prior approval of the Port Operator.

MAX. SIZE: Approach channel dredged to 12.0 m. MLLW.

RADIO: *Notice of Arrival:*

Vessels should advise their Agent ETA Port Khalid, giving draft, LOA, and intended cargo operations to be performed, at least 72 hours prior to arrival.

Agents should arrange berthing and labour with the Port Operator. Vessels should contact Port signal station on VHF Channel 16 (call sign "Sharjah Port Control") when within range. Working Channels 6, 9, 12, 13, 74 and 67.

TUGS: Tug services are available for all ships entering the deep water harbour. At the discretion of the Port Operator ships may be obliged to use the services of a tug or tugs.

Tugs are fitted with VHF.

The harbour tugs are fitted with fire fighting hoses and monitors and foam tanks.

BERTHING: Arrangements made with Harbour Master by ship's Agent for necessary berthing as required.

Berth No.	*Depth at MLLW*	*Usage*
1	11.0 m.	Containers
2	11.0 m.	Containers
3	9.0 m.	General Cargo
4	9.0 m.	General Cargo
5	9.0 m.	General Cargo/Ro-Ro
6	10.0 m.	General Cargo/Ro-Ro
7	10.0 m.	Ro-Ro
8	8.5 m.	Reefer
9	8.5 m.	General Cargo
10	8.5 m.	General Cargo
11	9.14 m.	General Cargo

Total length No. 1 and 2 berths 1,192 ft. (363 m.). Total length No. 3, 4, 5, and 6 berths 2362 ft. (720 m.).

Deep water berth No. 6 – 274 m. (900 ft.) No. 7 berth 220 m. (722 ft.). Total length berths 8 and 9 – 360 m. (1,181 ft.). Berth 10 – 210 m. (689 ft.). Berth 11 – 195 m. (640 ft.).

Equipment Available: The Sharjah Container Terminal (SCT) which comprises berths 1 & 2 in the deep water harbour is equipped with 2 × Tango 80 cranes and 1 Liebherr T115 crane (35 tonnes); a second Liebherr T115 (35 tonnes) to be erected late 1982; top lift container handlers and transtainers; LCL facilities available; 44 reefer points for containers. These berths are also equipped with specialized equipment to handle containers in the storage area. Each berth is provided with fork lift trucks, trailers and yard hustlers to facilitate the movement of cargo. Pallets are available to assist cargo handling. 2 heavy lift mobile cranes of 40 and 90-ton capacity are available on request from the Port Operator. Other equipment, including cranes, trailers, etc., will be made available upon request to the Port Operator with 24 hours' notice.

Lighterage; Lighterage services are available.

Storage Facilities: Storage facilities consists of 11 sheds (2 of which are located in the Container Terminal area) having an area under roof of 28,000 sq.m. (300,000 sq.ft.). In addition, hard surfaced yards and Sharjah Container Terminal Stacking/Packing area provide extensive storage capacity.

Cold Store: A 4,800 ton capacity cold store (frozen and chilled) is located at Berth 8 with mechanical handling from ship's hold to store.

STEVEDORES: The port will operate on a 24-hour, 7-day week basis ashore and afloat. Additional charges will apply outside normal working hours which are defined as follows:

Saturday to Thursday except public holidays.

First shift	0600 to 1400 hrs.
Second shift	1400 to 2200 hrs.
Third shift	2200 to 0600 hrs.

Overtime Rate Applicable:
General Cargo/Container Vessels: 3rd shift, Fridays and holidays.
Reefer Cargo Vessels: Fridays and holidays.
Car Carriers: Nil.

Normal working hours are subject to change during Ramadan, when working hours will be at the discretion of the Port Operator. Requirements for port labour must be submitted by ship's Agent to the Port Operator by 1600 hrs. for work during the first shift on the following day and by 1100 hrs. on the same day for work during the second and third shifts.

HEALTH: Normal quarantine regulations apply.

Radio Pratique will be granted on receipt of radio message from Master, via his Agent, stating that no serious illness has occured during the preceding thirty days. All crew members must be in possession of valid cholera certificates. The Health Officer will only board when the vessel is alongside.

MEDICAL: Upon application to ship's Agent, medical examination of crew members can be arranged. Personnel will either be sent to private Doctor or to Public Health Department, as circumstances dictate. Serious cases will be referred to Government Hospital Doctor.

TANKERS: Tanker jetty situated in harbour on main breakwater. Draft alongside 31 ft. Limited bunkering facilities.

DENSITY: 1025/1028.

FUEL: Deliveries of fuel oil, gas oil or blends may be arranged through vessel's Agents. Marine lubricants will be delivered to ship's side. Both services require 48 hours' notice divers available.

FRESH WATER: Fresh water is obtainable at all berths.

REPAIRS: Good facilities for repairs. Divers available.

DRY DOCKS: None.

SURVEYORS: Services are available upon request.

REPATRIATION: Proximity of the new Sharjah International Airport will permit efficient crew changes and repatriation. Off-shore crew changes facilities can be arranged.

Transit visas are not required for crew changes. Ship's passengers require a valid visa for transit or temporary stay.

AIRPORT: Dubai and Sharjah.

HOLIDAYS: The following are days that will be observed as public holidays. Premium tariff rates will apply on these days.

1st January	New Year's Day
8th February	Prophet's birthday (Mawlid al Nabi)
21st June	Ascension of Prophet (Lailat al Miraj)
*23rd August	Id al Fitr
*24th August	
*25th August	
*26th August	
*29th August	Waqfa
*30th October	Id al Adha
*31st October	
*1st November	
*19th November	Moslem New Year
2nd December	National Day
25th December	Christmas

*Dates approximate – may vary by 1 or 2 days from year to year.

TIME: GMT plus 4 hours. Permanent.

SHORE LEAVE: Shore leave is permitted for crew members (0800 hrs. – 2000 hrs.) provided identification card or seaman's papers are deposited with Immigration office situated in the port and collected upon return. Also see "Documents."

GENERAL: *Pollution:* The provisions of the Sharjah Maritime Law shall apply with respect to the operation of vessels in Sharjah Coastal Waters. Garbage disposal services are provided by the Port Operator and are compulsory.

Ship's Chandlers: Complete ship chandlering facilities are available, handling provisions, laundry and bonded stores.

DEVELOPMENTS: Container Terminal (Berth No. 1) will be extended by 200 m. towards breakwater with a draft alongside of 11.5 m. The third container berth will be equipped with 1×40 ton Liebheer T130 gantry crane. Four more berths for general cargo will be constructed towards breakwater from Berth No. 11. Approximate length will be 1,000 m.

AUTHORITY: Sharjah Port Authority, P.O.Box 510, Sharjah, U.A.E. *Tel:* 356000 (Ext. 51). *Telex:* Seagul EM 68138. *Cables:* Seagul. *Contact:* Captain M. Saleh, Harbour Master.

AGENT: Gulf Agency Co. (Sharjah) Ltd., P.O.B. 435, Sharjah, U.A.E. Cables: "Confidence" Sharjah. Tel.: 544446. After office hours 355676, 354249. Telex 68019 ("Gacshj EM"). Radio: Marine VHF radio, stand-by on Channel 16 (156.8 MHz). Call sign: "Confidence" Sharjah.

Air-freighted spare parts and ships' mail to Sharjah should be addressed to GAC Sharjah, but sent to Sharjah International Airport or Dubai Airport marked "Ship's Stores In Transit for M/S . . ." Certificates of Origin should follow the airwaybill or in cases of emergency be sent to GAC Sharjah, soonest after shipment. Cable "Confidence" Sharjah, of flight details and airwaybill number.

UMM AL NAR, Abu Dhabi: 24.27 N. 54.29 E.

(See Plan Book)

LOCATION: The Umm Al Nar Petroleum Port is situated at the South Eastern tip of Abu Dhabi Island and consists of 2 island type berths connected to the shore through a causeway. Vessels will use Mina Zayed and Khawer Al-Bhagl navigation channels to the Port. The total length of both channels is 16 nautical miles. Vessels will berth port or starboard side to, at the discretion of the Pilot.

APPROACHES: *Water Depths:*

The channel depths are as follows:
(a) 13.0 m. for Mina Zayed navigation channel.
(b) 11.0 m. for Khawer Al Bhagi navigation channel when the present dredging operations are completed. Keeping in mind that all levels are relative to C.D.

MAX. SIZE: The 2 jetties have been equipped with marine facilities to accommodate vessels having the following characteristics:

Max. size of vessel	20,000 d.w.t.
Min. Size of vessel	5,000 d.w.t.
Length overall	170 m.
Beam (max.)	26.50 m.
Draft (max.)	9.25 m.

HEALTH: Masters will be required to produce the standard International Bill of Health.

RADIO: *Arrival Telegram Ship/Shore:* On ship's arrival at the pilot station, a telegram shall be passed to the refinery through the ship's Agent with the following information:
ETA at berth.
Arrival draft.
Estimated departure draft.
Quantity and type of Cargo/Cargoes.
Vessel's maximum loading/discharging rate.
Quantity of dirty ballast and discharging rate.
Quantity of clean ballast to be discharged overboard and time required.
Size of manifold.
Are reducers to 6 in., 8 in. and 10 in. available on board?
Any vessel's requirements.
Master's name.

BERTHING: Umm Al Nar Refinery Jetty consists of 2 berths, each of which accommodates vessels in the range of 5,000 d.w.t. to 20,000 d.w.t. and is provided with the following facilities:
(a) Loading platform.
(b) 4 mooring dolphins.
(c) 5 breasting dolphins (with 2.16 m. berthing line).
(d) 4 × 60 ton quick release hooks with capstan.
(e) 2 × 30 ton bollards.
(f) Hydraulically operated gangway.
(g) 2 fire-fighting monitor towers.

Each platform is provided with 6 loading arms having the following flexibility:

*No.**	*Size of Flanges inches*	*Cargo Flexibility*	*Max. Rate cu.m./hr.*
1	6	Lub. oil	400
2	8	A.T.K.	1,000
3	6	Straight Run Residue	500
4	8	Mogas	1,000
5	10	Gas oil/Naphtha	1,500
6	10	Straight Run Residue/Ballast	1,000
7	3	Fresh water	13

*The loading arm numbers are from the gangway side.

Berthing Aids: Umm Al Nar Refinery Jetties are equipped with navigational aids to allow safe navigation during day and night, namely:
(a) 2 white coloured leading lights to affix navigation for channel's centre line, placed ashore at 5.0 m. and 11.0 m. above the ground level.
(b) 6 navigation lights with radar reflectors to define basin limits.
(c) Each jetty is provided with 4 red coloured lanterns, 2 at each end at 5.0 m. above deck level. This is in addition to the operational flood lights.
(d) Each mooring dolphin is provided with flood lighting.

Moorings: When at berth, vessels must be moored to the entire satisfaction of the Pilot. The breasting dolphins are each equipped with 60 ton quick release hooks and a power operated capstan. the mooring dolphins are each equipped with 60 ton quick release hook and a power operated capstan.

Vessels must be ready at all times to put out extra moorings as requested by terminal personnel, or as dictated by weather changes. It is the Master's responsibility to ensure that vessel's mooring lines are checked frequently to prevent excessive movement of the vessel in berth, which could activate the ESD/ERS systems and/or cause severe damage to the loading arms and other terminal equipment.

LOADING/UNLOADING: Also see "Berthing."

(i) The Master must give the Terminal a "Stand By" warning 10 minutes before being ready to commence loading or discharging.

(ii) Upon "Commence Loading" from the Master or his deputy only 1 pump will be used to ensure a slow flow rate until it is established that all systems are operating correctly and pressures are constant. Full loading rate may then be ordered.

(iii) The vessel's cargo tanks shall be inspected prior to and during loading and should it be found that tanks are not tight all loading shall cease, the vessel be rejected and further loading refused. The vessel will not be accepted later until satisfactory evidence of repair is produced duly certified by ABS, Lloyd's or other officially accredited classification society or surveyor.

(iv) During the hours of darkness vessels loading/discharging products, lub. oil or ballast shall rig overside lights to illuminate the surface of the sea around the ship to the Terminal Operators satisfaction to ensure that any oily products on the surface may be detected quickly and early action taken as appropriate.

Deballasting: The jetties are equipped with dirty ballast/slops receiving facilties. Vessel discharging dirty ballasts/slops ashore will use the deballasting arm. The maximum ballast reception rate is 1,000 cu.m./hr. Prior to arrival the Master is to advise Umm Al Nar Refinery (through the arrival telegram) how much dirty ballast/slops on board to be discharged to the shore facilities. (A "Declaration Letter" is provided for Master's signature) accepting clean ballast for overside discharge is subject to a declaration signed by the Master and delivered to the terminal representative.

Communications: To maintain the necessary continuous communications between refinery, vessels and shore control rooms during cargo operations and also in emergencies, the vessel will be provided with a walkie-talkie set. It is required that this set must remain at all times with the officer responsible for the cargo operation.

FRESH WATER: Fresh water is obtainable at Refinery berths and should be arranged through the Ship's Agent.

FUEL: No Bunker facilities in Umm Al Nar Refinery Terminal.

GENERAL: *Customs:* Custom's officers will board the ship on arrival and prior to sailing for necessary port clearance.

Stores and Provisions: Stores and provisions are not permitted to be loaded at Refinery berths and must be taken on board in the anchorage.

AUTHORITY: ADNOC Petroleum Ports Authority, Abu Dhabi National Oil Company, Abu Dhabi, U.A.E. *Telex:* 22215 Adnoc Em (Abu Dhabi); 22588 Radnoc Em. *Contact:* Mohamed Abdulla, Refinery Manager.

UMM AL QAIWAIN: 25.35 N. 55.35 E.

(See Plan Book)

LOCATION: Approx. 20 miles North of Sharjah.

PILOTAGE: Service not available at the present time.

RESTRICTIONS: Depth of channel is presently 10 m., width 100 m., tidal range +0.2 m. – +1.7 m.

MAX. SIZE:

Details of shipping able to berth at individual wharves:

Ship	*Size*	*Draft(m.)*	*Length (m.)*
Town Wharf:			
Passenger ship	500 gross tons	4.0	50
Freighter	700 d.w.t.	3.6	52
Freighter*	1,000 d.w.t.	4.1	60
Tanker	700 d.w.t.	3.8	54
Tanker*	1,000 d.w.t.	4.2	61
Deep Water Wharves No. 3 and No. 4:			
Passenger ship	30,000 gross tons	9.5	210
Freighters	17,000 d.w.t.	9.8	173
Container	16,900 d.w.t.	9.8	200
Tanker	20,000 d.w.t.	9.5	164
Ore Carrier	25,000 d.w.t.	9.8	176

*Dependent on state of tide.

BERTHING: *Town Wharf:* This wharf is 800 m. long providing berthing facilities for ships with a max. draft of 4 m. A guide to the size of ships able to berth at this wharf is given under "Max. Size". Bollards are located at 12 m. intervals and timber fenders and rubbing strips have been incorporated. The capping beam level is +2.66 m. above Admiralty Chart Datum and the minimum dredged level adjacent to the wharf is −4.0 m. Steps have been incorporated at the Western end of the wharf to enable loading of small local boats. The allowable surcharge loading adjacent to the wharf is 2.0 tonnes/sq.m.

The channel in front of the wharf is 100 m. wide and is dredged to a minimum depth of 4 m. The channel extends from the Eastern end of the wharf along its full length and for a distance of approximately 3 km. along the Western shore of the creek. At the Western end of the wharf the channel has been widened to form a turning circle. The channel has been marked with standard buoys and beacons in accordance with International Regulations.

The area behind the wharf is a minimum of 50 m. wide, the boundaries being the wharf and the existing road. This area has been reclaimed using dredged fill and surfaced with local materials. Other reclaimed areas exist along the Western bank of the channel and opposite the existing fish market. Both these areas have been reclaimed to a surface level of +3.0 m.

Deep Water Wharf:

This wharf is divided into four sections:

Wharf No. 1	130 m. long	Dredged depth – 5.5 m.
Wharf No. 2	115 m. long	Dredged depth – 7.5 m.
Wharf No. 3	200 m. long	Dredged depth – 9.5 m.
Wharf No. 4	400 m. long	Dredged depth – 10.0 m.

Wharves No. 1 and No. 2 are similar to the Town Wharf previously described but with increased dredged depths. Wharves No. 3 and No. 4 provide berthing facilities for ships with a max. draft of 9.5 m. and 10.0 m. respectively and a max. length of 200 m.

A guide to the size of ships able to berth at these wharves is given under "Max. Size". Bollards are located at 22.4 m. intervals and rubber "V" type fenders have been incorporated on Wharf No. 4. The capping beam level is +2.66 m. and the allowable surcharge adjacent to the wharf is 2.0 tonnes/sq.m.

A 30 m. wide concrete hard standing is provided behind all 4 wharves and the entire wharf area is lit by 400 watt H.P.S. High Mast Lighting. Potable water facilities have been installed together with provision for future fuel bunkering and connection to the local telephone exchange.

The entrance channel to Umm Al Qaiwain Port is a minimum of 100 m. wide increasing to 160 m. wide at the Northern end of Wharf No. 4 and connects with a 500 m. diameter turning circle at the Southern end of Wharf No. 3. The channel and turning circle are both dredged to a minimum depth of 10.0 m. and are marked with standard buoys and beacons in accordance with International Regulations.

Navigational information for entering the Port of Umm Al Qaiwain can be found on Admiralty Chart No. 3714.

AUTHORITY: Umm Al Qaiwain Municipality, P.O.Box 12, Umm Al Qaiwain, U.A.E. *Tel:* 9716-666144/5.

AGENT: See "Dubai".

ZIRKU ISLAND, Jazttzarakku Island, Abu Dhabi: 24.52 N. 53.04 E.

(See Plan Book)

LOCATION: Zirku Island is located at 24° 52′ N., 53° 04′ E. approximately 75 nautical miles W.N.W. of Abu Dhabi.

It is 5 km. long and 2.5 km. wide.

A zone of very rugged hills with ridges is located in the N.N.W. with an elevated point of 163 m. and a low flat sandy and dusty zone in the S.S.E. where the airport lies.

Section (A) – Service Harbour
Section (B) – Oil Terminal

SECTION (A) – SERVICE HARBOUR

PORT LIMITS:

(a) Lat. 25° 03.0′ N., Long. 52° 53.3′ E.
(b) Lat. 25° 00.0′ N., Long. 52° 53.3′ E.
(c) Lat. 24° 48.9′ N., Long. 53° 04.8′ E.
(d) Lat. 24° 48.9′ N., Long. 53° 11.0′ E.
(e) Lat. 24° 56.8′ N., Long. 53° 11.0′ E.
(f) Lat. 25° 03.0′ N., Long. 53° 04.4′ E.

Refer to British Admiralty Chart 3778.

NAVIGATION: *Manoeuvring and Navigation:* All vessels should manoeuvre and navigate within the port in accordance with the International Regulations for the prevention of collision at sea.

Lights and Shapes: All vessels should exhibit such lights and/or daytime marks as defined by International Regulations to prevent collision at sea.

Special attention should be paid by vessels, barges or tugs moored or anchored in the vicinity of the jetties which should show at night the lights defined in these regulations.

High Tide Manoeuvres: Deep draft vessels and barges will be berthed at high tide only.

Shallow Water: While proceeding to the jetties, Masters should pay sharp attention to navigation due to the presence of shallow water existing in the vicinity.

Caution: Masters should consider the possibility of having less water than predicted by tide tables after a long period of bad weather.

Harbour Facilities: No tugs or mooring launches are presently available, accordingly, vessels calling at Zirku harbour should have very good manoeuvrability.

Navigation Aids:

1. Flashing lighthouse (Zirku, Zarakuh or Zarqa) located at the top of the hill.
   Height 157, visible at 22 nautical miles.
   Lat. 24° 53.0′ N. Long. 53° 04.2′ E.
   One flash every 10 seconds.
   Visible 025° – 360° (335°)
   Obscured within 2 miles 223° – 264°
2. Flashing lighthouse at the end of the sea water intake.
   Lat. 24° 53.0′ N. Long. 53° 05.3′ E.
   Height=9 m.
   V.Q. (3) 5 secs.
3. Flashing lighthouse at the end of the main jetty.
   Lat. 24° 52.3′ N. Long. 53° 05.5′ E.
   Flash=Fixed and flashing (1) 10 secs.
   Height=11 m.
   Colour=Green.
   Obscured approximately 70° – 150° (80°).

4. *Aero Lights* (occasional).
Located on the airport control tower (green).
Lat. 24° 51.6′ N. Long. 53° 04.6′ E.
Located on the hill (red).
Lat. 24° 52.5′ N. Long. 53° 04.1′ E.
Height=67 m.

5. *Two Flares:*
Lat. 24° 52.5′ N. Long. 53° 04.3′ E.
Height=145 m.
Fixed red lights.

6. *Pylon on the hill top.*
Height=200 m.
Fixed red lights.

7. *Anchorage Buoy.*
Lat. 24° 51.3′ N. Long. 53° 06.9′ E.
Yellow cylindrical.
Flashing yellow (1) 5 secs.

ANCHORAGE:
Waiting Anchorage: Small vessels and barges waiting for a berth alongside the main jetty can anchor beyond 0.5 mile in the S.S.E. of the end of existing jetty in approximately 7 m. of water depth.

Three fixed mooring buoys without lights have been installed at around 0.7 mile in the South and S.E. of the main jetty.

Private mooring lines are located temporarily in the vicinity of temporary jetty "B".

Sharp lookout must be kept when navigating in these areas.

An anchoring buoy (yellow Fl. (1) 5 secs.) has been installed in position:
Lat. 24° 51.3′ N. Long. 53° 07.0′ E.
marking the N.E. corner of the waiting anchorage area (see Admiralty Chart 3778).

Prohibited Anchorage Areas: To avoid the underwater oil pipe-lines being damaged, prohibited anchorage areas are defined as follows:
0.5 nautical miles on each side of the M.O.L. (Main Oil Line) input line.
0.5 nautical miles on each side of the loading lines.

M.O.L. input line from Zakum field comes ashore on the middle of the East Coast.

Loading lines to the oil terminal SPMs leave the Island from the N.N.W. point of the island.

Anchorage Berths and Moorings: All vessels or barges entering the port should occupy such anchorage berth or mooring as may be directed by the Port Supervisor and shall move to any other anchorage, berth or mooring as and when required by this authority.

No vessel or barge shall shift or change the anchorage, berth or mooring allotted without Port Supervisor authorization except if instructed to do so.

No claim will be accepted by Company for berthing or mooring due to arrival priority.

RESTRICTIONS: No berthing will be allowed during night-time.

RADIO: International VHF Channels 6, 62, 64, 68 and 69 have been allotted to "Zirku Island Traffic". Permanent watch maintained by "Zirku Island" on Channel 62, semi-duplex for vessels to Zirku Island & vice versa.

When contact established, change to Channel 64.

Channel 68 is to be used for ship to ship calling and conversation.

ARRIVAL ADVICE: *Notice of Arrival:* Vessels and barges calling at Zirku harbour should advise their ETA at least 48 hours before their arrival by telex to Zirku Marine.

In case of change of the scheduled ETA by more than 6 hours Zirku Marine should be informed by the same way.

Confirmation of ETA should be sent a few hours before arrival at Zirku as soon as a radio link can be set up on VHF Channel 62 or 68 with "Zirku Island" radio room.

Berthing prospects will be given to incoming ships by "Zirku Marine" at this time. If the vessel is instructed to anchor, she must keep a permanent watch on VHF Channel 16, 62 or 68.

During berthing operations contact will be set up with "Zirku Marine" on VHF Channel 68 or 69.

Arrival Message: The first message should be sent according to the following form but any items which are the same as a recent previous voyage to this port may be omitted.
Name of vessel (tug or barge):
ETA Zirku.
Type of vessel.
Length.
Width.
Max. draft on arrival.
Cargo loaded (briefly).
Contractor charterer.
Name of Master.
Coming from and ETD.

BERTHING: Zirku Island Harbour is a private port, hence only vessels and barges chartered by the Company Zadco (Zakum Development Company), acting on behalf of ADNOC (Abu Dhabi National Oil Company) and its contractors are allowed to moor alongside the jetties.

Jetties: The main jetty located on the East coast of the Island is allotted to the general supplying of the Island and the transit of equipment for the Company.

Temporary jetty "A" (on the South of the Island) is now completely silted up.

Temporary jetty "B" (on the West of the Island) is now deteriorating and no longer in use.

Vessels: Contractors shall charter tugs, barges, landing crafts, supply boats, etc. . . . whose dimensions, weight and draft are suitable to the existing jetty.

Emergency use: Other craft may use this harbour only in emergency and must immediately report their arrival to the Port Supervisor.

All craft using the harbour are subject to the control of the port operating company representative. (Zirku Marine Superintendent or his deputy) and the Port Petroleum Administration (Port Officer)

Berth Occupancy: The Port Supervisor will define the allocation of berth in accordance with the Company's requirements of priority upon Manager's recommendations.

Contractors should start discharging as soon as vessel or barge is berthed and should unload until all the cargo has been discharged.

Contractors should not store their cargo on the jetty. They must remove it as unloading proceeds.

Vessels and barges should leave as soon as the handling of cargo is completed in order to free the quays. The Port Supervisor can order vessels and barges to leave the quay at any time (even though not completely unloaded), so they must be able to move, therefore barge shall keep a tug alongside during the whole time of unloading.

BERTHING FACILITIES: *Main Jetty:* The main jetty located on the East coast of the island is approximately 1,200 m. long and orientated N.W./S.E.

The quay at the end of the main jetty has a water depth of 2 m. and is 12.5 m. long (41 ft.) at the inward end; 2.3 m. × 40.5 m. long (132 ft.) in the centre and 3 m. × 57 m. long (187 ft.) at the seaward end (water depth is calculated under chart datum C.D.)

The quay is fitted with 8 × 30 ton bollards, 12 pairs of rubber fenders from a level of 1.50 below C.D. to top of quay level and 3 steel ladders running from a level of 1.50 m. below C.D. to the top of quay level.

The quay available for berthing is 110 m. long (360 ft.) orientated N.W./S.E. as is the main jetty breakwater.

At the inward end a 20 m. long quay orientated S.W./N.E. is available for small launches though badly equipped with mooring points.

Temporary Jetty "A": The Port Supervisor Office and Police ward room are located on the top part of the jetty. The jetty working area has been asphalted.

CRANES: *Fixed Crane:* There is no fixed crane on the jetty since the big derrick installed for the construction has been removed.

Contractors have to supply the Island with their own mobile equipment to discharge vessels and barges, if not previously arranged with Company.

As soon as the unloading is completed users should remove their mobile equipment to keep the jetty area clear.

Location of Cranes: The main quay can bear anywhere a 30 ton crane (up to 45 tons for exceptional cases). For heavy loads two locations are defined as follows:

100 tons crane: one rectangle of which axle is situated at 15 m. from the inward end of the quay.

300 tons crane: the centre of the crane must be situated at 15 m. from the edges of the jetty seaward end.

TANKERS: Fuel unloading.
Main Quay: Connection pipe and booster pump are extended to the outward end of the quay.

Due to shallow water existing alongside, ships unable to moor at this berth should be fitted with sufficient length of hoses to be connected to the Island pipe end from the seaward berth.

MEDICAL: A medical officer is resident on the Island for emergency cases only. The Company maintains a small hospital.

SAFETY: *Reporting of emergency:* Should any vessel be in danger through fire, explosion, collision or whatsoever cause, the Master should immediately report the fact to the Port Supervisor and Port Officer (Petroleum Port Administration) by VHF radio Channel 62.

When alongside the main jetty they can report through the shore telephone system located on the jetty. Grey for Island Network, Red for Safety.

Phone Numbers:
Day and Night: Safety 6333
Radio Room 6666/6403
Clinic 6222.
Day: Marine Superintendent 6400.
Port Officer (PPA) 6471

Fire fighting equipment: There are 2 monitors and 3 hydrants supplied by a 12 in. pipe able to reach any point of the main jetty on emergency call.

Ship's fire fighting equipment: This equipment must be in constant readiness at all times with sufficient skilful personnel on board for its efficient operation.

Particular safety requirements for vessels unloading inflammable products:
All cargo/bunker tank lids must be closed.

A fire fighting hose must be ready for use and supplied with water near the piping and connection on the deck.

In the same way extinguishers must be disposed on the deck.

Cargo/bunker hoses must be properly rigged without leakage.

Cargo tanks being discharged and open to atmosphere must be fitted with an agreed venting system.

Foam and/or dry powder monitors, if fitted, shall be ready for use.

Portable fire extinguishers, shall be conveniently placed for use near the ship's hoses' connection.

A checking will be performed by the Safety Supervisor jointly with the Port Supervisor and the vessel's Master, and a form will be signed by the same, after which offloading of said hazardous cargo will be authorized.

EMERGENCY: *Emergency moving of vessels:* In case of accident vessels shall be able to move quickly, so no repairs to engines are allowed when alongside for self propelled vessels. Barges shall keep a tug alongside during the whole time of unloading.

WEATHER: *Winds:* Four kinds of winds on the Island: The most frequent (54% of the time) are named Shamals they blow from W.N.W. to N. principally in Winter. From N.N.E. to E.N.E. come 20% of the time the Noshi. Local effects of Monsoon, the Kaus blows from E. to S. 17% of the time.

Finally, during the Winter only, and 9% of the time blows from W.S.W. to W. the Suhaili.

Tides: Around Zirku Island the tide is of mixed type with small diurnal predominance, however this semi diurnal effect is not of great significance and for all practical purposes it can be taken that there is only one high water and one low water per day.

The mean spring tide range is approximately 1.2 m. The maximal range would be of about 1.4 m. The mean usual range would be 0.9 m.

Zirku Island tide prediction supplied by operating company, copy can be obtained from Marine Zirku.

There is a tide recorder on the main jetty. Tidal information also available from Zirku Marine on VHF, Channel 8.

Tidal Currents: At Zirku Island tidal currents are semi diurnal roughly flow runs from West to East and Ebb runs from East to West. Eddies are created at vicinity of any obstacle, (breakwater, jetties etc.) especially close to the South sandy end of the island. Currents can reach a speed of 2 knots. It is expected that these data are profoundly changed by winds, especially Shamal.

SHORE LEAVE: No person may go on shore without authorisation from the Zirku Police Authority and only if handed a shore leave or permanent authorisation card.

GENERAL: *Marks:* Name or number and draft marks should be readable from the jetties.

Unsuitable Vessels: The Port Officer reserves the right to refuse berthing and unloading of any vessels considered unsuitable by reason of inadequate or unsatisfactory mooring equipment, insufficient derrick capacity, insufficient fender protection, overloading, inability to comply with the safety regulations or any circumstances which would create unusual risk to the Company's jetties, quays, facilities, personnel and equipment whatsoever.

Prevention of Sea Pollution: It is strictly prohibited to discharge or throw overboard oil, oily water, chemicals, ashes, bilge water or other refuse within the port limits that may result in pollution of the sea.

International oil pollution conventions must be strictly observed by all vessels or crafts.

The Master of any vessel contravening this rule so as to cause pollution shall be charged with an offence against these rules and upon conviction be liable to a fine and shall be incurred in the removal of such pollution.

The harbour users, Contractors and all vessel Masters, before leaving and/or sailing should make sure that jetty area is clean and all their refuse has been removed.

National Courtesy Flag: All vessels calling at Zirku are required to fly their national flag and the national flag of Abu Dhabi.

Swimming & Diving: No person shall swim or dive from or near any vessel or alongside quay or berth.

No person shall engage in diving with the assistance of breathing apparatus within the above mentioned areas without the permission or instruction from the Port Authority.

SECTION (B) – OIL TERMINAL

PORT LIMITS: The port area of Zirku Petroleum Port covers the area bounded by straight lines connecting the following points:

A:	Lat. 25° 03′ N. Long. 52° 53.3′ E.	B:	Lat. 25° 00′ N. Long. 52° 53.3′ E.
C:	Lat. 24° 48.9′ N. Long. 53° 04.8′ E.	D:	Lat. 24° 48.9′ N. Long. 53° 11′ E.
E:	Lat. 24° 56.8′ N. Long. 53° 11′ E.	F:	Lat. 25° 03′ N. Long. 53° 04.4′ E.

Masters of all vessels entering the port must follow instructions given by the Company's Marine Superintendent as to approach, anchoring, berthing and unberthing.

DOCUMENTS: On arrival the tanker should prepare the following documents to be handed over to the different authorities coming on board:

Tanker Enquiry Form (ZADCO Form).
Navigation Aids Dues Certificate (M.E.N.A.S. Form).
Notice of Readiness.
Crew List.
Certificate of Registry.
Load Line Certificate.
Safety Certificate (Equipment).
Derat Certificate.
Radio Certificate.
International Oil Pollution Prevention Certificate.
Suez Canal Tonnage Certificate.
Panama Canal Tonnage Certificate.

PILOTAGE:

1. *General:* On arrival and on departure the pilotage is compulsory within the Port Limits. The Company reserves the right to render the Pilotage compulsory through the departure route for any reason. Nevertheless, upon Masters request Zirku Pilots could assist any Tanker on Zirku Departure Route to and from Buoy No. 6 (Lat. 25° 13′ N., Long. 52° 59′ E.) Within Port Limits and on Zirku Departure Route the speed *shall not exceed 8 knots.*

2. *Direct Berthing:* Instructions for berthing having been received by voice communication the Tanker should proceed to the agreed Pilot boarding point.

3. *Waiting:* In case of a berth not being available, the approaching Tanker will be instructed to proceed to an anchorage area and anchor at the agreed location. The Tanker will wait at this allotted location until further instructions.

4. *On Departure:* A Pilot will assist loaded Tanker as stipulated in No. 1 above.

5. *Pilot Access:* The Pilot access should be in good condition, safe, clean and ready. Pilot ladders constructed of light material such as aluminium will not be accepted. Where the freeboard exceeds 10 m. the vessel should have a combination of accommodation ladder and pilot ladder rigged. The bottom of the accommodation ladder shall be at least 7 m. above the water line.

6. *Pilot Embarkation:* To embark the Pilot safely the incoming tanker should reduce speed (no more than 5 knots), make a good lee to minimise adverse weather conditions and take the way off. On the tanker's deck the boarding of the Mooring/Loading Master should be attended by at least one officer and one A.B.

7. *Pilot Boat:*

Name : Jarada
Engine : 2×955 h.p.
Speed : 20 knots
Marked : Zirku Pilot
Fibre Glass Hull

NAVIGATION AIDS:
Separation Scheme: A traffic separation scheme between Zakum Field and Umm Shaif Field crosses the port area.

This scheme includes:
(a) A separation zone, 0.75 nautical miles wide.
(b) A traffic lane for Westbound traffic, 1.25 nautical miles wide.
(c) A traffic lane for Eastbound traffic, 1.25 nautical miles wide.

The main traffic directions are: 050° – 230°
072° – 252°

This scheme is marked by the following two light buoys.

1. Zakum Middle
Lat. 25° 59.15′ N. Long. 53° 08.50′ E.
R.W.V.S. Pillar L.Fl. 10 sec.
2. Zakum West
Lat. 24° 56.60′ N. Long. 52° 59.85′ E.
R.W.V.S. ISO 6 sec.

Reference Charts: British Admiralty 3733, 3952, 2889, 3778.

Zirku Island:
Zirku, Zarakuh or Zarqa beacon:
Lat. 24° 53.0′ N. Long. 53° 04.2′ E.
Fl. 10 sec. 22 miles Height 157 m.
Main Jetty:
Lat. 24° 52.2′ N. Long. 53° 05.4′ E.
Fixed Green 7 miles and Flash 10 sec. Height 11 m. 9 M.
Sea Water Intake:
Lat. 24° 53′ N. Long. 53° 05.3′ E.
3 Fl. W. 5 sec. Height 9 m.
Radio Tower:
Lat. 24° 53′ N. Long. 53° 04.1′ E.
Fixed Red light – Height 198 m.
Flares:
Lat. 24° 52.5′ N. Long. 53° 04.3′ E.
Fixed Red light – Height 145 m.

Repeater Platform:
Lat. 25° 01.7′ N. Long. 52° 55.7′ E.
2 White flashing lights Morse "U" 15 sec. at level +18 m.
2 Red lights at level +34 m.
2 Red lights at level +51 m.
Horn Morse "U" every 30 sec.

Navigation Warning within Port Limits:

All vessels transiting through the Zarakkuh Port Limits are to follow the following procedures:

1. Vessels transiting along the Separation Zone may do so as normal.

2. Vessels intending to cross the Separation Zone Northwards must inform Zarakkuh Radio on Channels 16 or 62 of their intention and follow the instructions given.

3. Vessels Southbound, intending to cross the Northern Port Limits, must inform Zarakkuh Radio of their intention on Channels 16 or 62 and follow the instructions given.

4. No vessel is to pass between Buoy No. 1 (Lat. 25° 02′ N., Long. 53° 00.8′ E.) and the oil loading terminal or enter the no unauthorised entry limts around the oil loading terminal or the Repeater Tower (Lat. 25° 01′ 42″ N., Long. 52° 55′ 40″ E.).

ANCHORAGES: *Small Vessels Anchorage:* Located close to Zirku Main Jetty is designated for small vessels to service harbour.

1 Buoy orange Fl. yellow in N.E. corner.

Limits:	Lat. 24° 51.3′ N. Long. 53° 07.0′ E.	Lat. 24° 50.0′ N. Long. 53° 07.0′ E.
and		
	Lat. 24° 51.3′ N. Long. 53° 05.4′ E.	Lat. 24° 50.0′ N. Long. 53° 05.4′ E.

Tankers East Anchorage:

Limits:	Lat. 24° 56.8′ N. Long. 53° 11′ E.	Lat. 24° 54.8′ N. Long. 53° 11′ E.
and		
	Lat. 24° 56.8′ N. Long. 53° 07.8 E.	Lat. 24° 54.8′ N. Long. 53° 07.8 E.

where 2 buoys are installed at Eastern corners. Colour orange – Flash yellow.

This area is designated for incoming tankers waiting to berth.

Tankers North Anchorage:

Limits:	Lat. 25° 03′ N. Long. 53° 02.2′ E.	Lat. 25° 00′ N. Long. 53° 02.2′ E.
and		
	Lat. 25° 03′ N. Long. 53° 04.4′ E.	Lat. 25° 00′ N. Long. 53° 04.4′ E.

where 2 buoys are installed at Eastern corners. Colour orange – Flash yellow.

This area is designated for incoming and outgoing deep draft tankers.

Prohibited Anchorage Area: Anchorage within Port Limits, outside waiting anchorage areas is prohibited. Exceptional authorisation may be given by the Marine Superintendent.

Sea-bed: The sea-bed in the Terminal area is rock, covered by a few inches of loose sand. Some patches of coral can be found. Holding is poor and vessels are advised to pay out more cable than usual.

MAX. SIZE: The SPMs are suitable for berthing tankers from 30,000 d.w.t. up to 350,000 d.w.t. loaded at 80% of their capacity.

The max. draft allowed for departure is 21 m.

RADIO: Messages can be sent to the Company by the following means:

Telex or Telegram through Bahrain Radio addressed to ZADCO Marine. Telex No.: 22948 ZDCAUH EM. Cable: ZIR Marine.

Voice communication to "Zirku Marine" by SSB. Operation Mode A3J Upper Side Band within a range of approximately 250 km.

Permanent watch on carrier frequency: 2036.4 kHz.

Talking on standard Marine Duplex HF Channel: 405, 605, 828

Also see "VHF".

Notice of Arrival: Arrival Message shall be sent to ZADCO Marine 96 hours before arrival at the Port Limits.

Confirmation shall be given 48 hours and 24 hours from ETA.

Voice contact shall be made with "Zirku Marine" by SSB or VHF 6 hours prior to arrival.

Arrival Message: Arrival Message should contain the following:

Vessel's name and Master's Name/Abu Dhabi Agent's Name/Port of Registry/n.r.t.
ETA Port Limits
Arrival drafts/Departure draft F & A
Quantity of ballast
Estimated deballasting time
Possibility of simultaneous operation/permanent ballast
Cargo required
Maximum loading rate & IGS operative.
Part cargo and slops/to comingle
Derrick capacity/No. and size of manifolds/mooring brackets
Last Port of call and next Port/EDP accepted
Direction of approach

VHF: Voice communication to "Zirku Marine" by VHF Channels: 16, 62 and 64.

Permanent simultaneous watch maintained on these Channels.

Arrival: VHF contact should be made with Zirku Marine requesting instructions.

Once contact has been established through Channel 16 further conversation should be conducted on either Channel 64 or 62 upon operator's instructions.

Pilot/Loading Master on board: Although he will bring on board his own VHF communication units with private frequencies, the tanker VHF should remain operational at all times.

At Anchorage: Permanent watch should be kept on Channel 16 and on other Channels (62 or 64) as requested by the Zirku Marine operator.

Traffic Separation: North-bound vessels intending to cross the Separation Scheme, and South-bound vessels intending to cross the North port limit, should report their intention on Channels 16 or 62 and follow instructions.

SBMs: The terminal of Zirku Petroleum Port is located about 8 nautical miles N.N.W. of Zirku Island and consists of two single Point Mooring buoys whose exact coordinates are as follows:

SBM "Alpha"	Lat. 25° 00′ 32″ N.	Long. 52° 59′ 02″ E.
SBM "Bravo"	Lat. 25° 01′ 36″ N.	Long. 52° 59′ 30″ E.

A small mooring buoy for small craft is in position: 1.5 miles East of Alpha.

SBM Description: Both buoys are identical.

Buoy Body: The buoy is a circular steel structure with a diameter of approximately 12.5 m. It has a rotating assembly. The colour is orange.

Hoses: The buoy is equipped with 2×20 in. floating hoses with a 16 in. tail end hose connection. The outer hose string is 296 m. and the inner one 285 m. Each string is equipped with winker lights.

Hawser: The mooring systems consist of a single 18 in. circumference grommet hawser of double braided nylon, with an overall length of 53.4 m., ended by a short length of 76 mm. diameter chafe chain.

Light: The buoy is fitted with a navigation light emitting a Morse "U" flashing signal every 15 seconds visual on 360° up to a 5 nautical miles range.

Fog Horn: The fog horn fitted on the buoy emits a Morse "U" blast every 30 seconds and is activated when necessary by a remote control system.

Radar Reflector: A radar reflector is installed on the buoy structure.

Water Depth: The minimum water depth in the vicinity of the SBM Buoys is 27 m. above chart datum.

MOORING: All vessels arriving at this port are required to have adequate draft and trim for safe manoeuvring purposes. The propeller should be completely immersed. The recommended trim for manoeuvring in ballast is 3.0 m. List will not be tolerated.

Tanker Material Equipment: The tanker must have the port side derrick rigged for lifting the shore equipment on board, the minimum derrick capacity shall be 10 tons.

A good messenger line of approximately 4 in. circumference nylon line to be ready on the forecastle.

The forecastle should be fitted with Smit or Chain Stopper type brackets, strong mooring bitts and Panama Leads.

Terminal Material Equipment: One basket will be lifted on board with hose connection equipment and tanker mooring equipment if necessary.

Procedure: Full power must be available on tankers' main engine.

Once the optimum approach route has been selected the tug will pull away the hose strings and the tanker will proceed toward the buoy at a suitable speed.

When approximately 300 m. from the buoy the mooring launch will be instructed to bend on the messenger line from the Panama Lead to the mooring hawser pick up line.

The tanker will be brought to a dead stop at 60 m. from the buoy.

The chafe chain will then be winched aboard and secured.

Once the tanker is secured, the tug will pass its towline to the tanker's stern and then maintain tension on the towline throughout, to avoid any buoy kissing.

Emergency Fire Wire: All ships shall have a fire wire hanging from the bow and the stern to enable tugs to immediately connect in case of emergency – Circumference of wire to be at least 6 in.

Weather Limits: Mooring operation can be carried out in up to 25 knots wind speed and significant waves up to 5 ft.

TUGS: A tug of 2×1,500 h.p. and a mooring launch of 2×275 h.p. wi assist the berthing.

HOSE CONNECTION:

Terminal Connection Team: After mooring is completed, the hose connection team will board, to assist the crew.

Tanker Connection Team: An officer should attend the hoses with a least 3 deck hands and 1 boatswain. In addition one skilful winchma will be required.

Tanker Material Required: Miscellaneous tools, shackles, wires ropes plus fire hose and extinguisher should be ready close to the manifold. The area around the manifold should remain free of a equipment to enable safe hose handling.

Terminal Material Supplied: 16 in. to 16 in. Spool pieces. Chain hoists tirfors, gaskets, wrenches, flange bolt sets, butterfly valve handles, se of miscellaneous chains, ropes, slings, etc.

Flange size: The tail end hose flange size is a 16 in. camlock coupling Before berthing the tanker manifold should be ready for direc connection, blind flange removed, and 16 in. to 16 in. Spool Piece fitted

The two tanker manifold connections should be chosen in such a way that access to both flanges is possible.

Procedure: Having completed the mooring operation, the mooring launch will proceed to the end of the floating hoses to tow them to a position beneath the tanker's derrick hook.

The inner (or shorter) of the hoses will be lifted above deck level and the end swung inboard.

The hose will be lifted by such length to match the distance between the rail and the tanker manifold, then held with snubbing chains and the hose end lowered and connected to the manifold flanges.

The same operation will be performed on the outer (or longer) one.

LOADING: *Rate:* The maximum loading rate will be 12,500 cu.m.p.h using both hoses.

Care will be taken not to exceed the rated working pressure to be supported by the hoses which is 15.5 bars (225 p.s.i.).

Procedure: Once the hoses have been connected and checked, the butterfly valves opened and the tanker pipe network set up, the Loading Master can give the go-ahead upon request from the Chief Officer and pumping will commence at slow speed at the beginning (by gravity), approximately 7,000 bbls./p.h., then the rate increased up to the rate requested by the Chief Officer.

An inspection of the floating hose strings and the buoy, including waters around the terminal, should also be made during the first few minutes of cargo transfer to ensure there is no leakage.

Once reached, the flow rate will be maintained until further instruction is given by the Chief Officer to the Mooring/Loading Master.

Valve Closure: No valves which will stop or seriously impair or reduce the flow rate of oil from the shore pumps are to be operated without prior agreement with the shore control room (ZCC) through the Loading Master.

10 minutes' notice should be given to the Loading Master for reducing the loading rate or stopping.

The practice of throttling back on the ship's cargo valves is to be avoided. If a lower rate is required, the shore is to be advised and the pumping rate will be reduced to the required level.

The Master will be held liable for any damage arising from the sudden cessation of flow caused by default of the ship.

It cannot be over-emphasised that to do so can be extremely dangerous and cause extensive damage to equipment in addition to possible oil pollution.

Failure of Communication: In case of failure of communications between the Loading Master and Zirku Control Room (ZCC), the loading will be automatically stopped.

Accommodation: Cabins: Two single cabins on board the tanker must be allotted to the Mooring/Loading Master and his Assistant.

Terminal Team: A rest room must be allotted to the hose connection team (3/4 people) should they be required to stay on board by the Mooring/Loading Master. This will only be the case in adverse weather conditions.

Working Location: The working location of the Mooring/Loading Master is the cargo control room.

A portable unit of around 25 kgs. will be installed in this room and operate from either a 110/115 v. or 220/240 v., 50/60 kHz. supply, such a socket must be available in the cargo control room.

Terminal Personnel: As long as the tanker is secured to the Buoy a permanent watch will be performed by the Mooring/Loading Master and/or his assistant in the cargo control room with the portable unit.

Contact will be permanently kept with the Zirku Control Room (ZCC) private VHF Channel.

Tanker Personnel: A tanker officer speaking English should be permanently on duty with the Mooring/Loading Master. The Chief Officer must be available at any time during the deballasting and loading operations (room and telephone number).

In addition to the tanker officer at least two crew members will be in contact with control room through adequate W.T. and must be on duty permanently on the deck keeping watch on the tanker and terminal equipment.

Accommodation ladder will be continuously adjusted by the crewmen with regard to the sea state and tanker draft to provide safe access to the deck at any time of the operations.

Ullages: Ullage measurements shoud be taken by remote gauge while loading.

Opening the ullage tank lids should be avoided.

When necessity involves opening the lids the Mooring/Loading Master's approval must first be obtained.

The Mooring/Loading Master will check and approve the ullage report according to ullage measurements.

Characteristics:

API: around 34
S.G. around 0.85
Temperature 20° C. to 35° C.

More accurate characteristics will be transmitted to the tanker on arrival.

BALLAST: *Quantity:* Tankers arriving at Zirku Petroleum Port for berthing should keep onboard at least 30% of their d.w.t. as ballast until further instructions received from the Mooring/Loading Master.

Tankers capable of deballasting and loading simultaneously should have on board a total of not less than the 30% d.w.t. requested for berthing so that in normal circumstances they will not be flying light whilst moored at the buoy.

Vessels arriving with insufficient ballast may be required to increase the quantity, should the Mooring/Loading Master consider it necessary.

Quality: Vessels arriving with ballast on board to be discharged into the sea must ensure that the ballast, lines and pumps are clean and free from oil before commencing discharge. If necessary the initial quantity and the drainings should be pumped into the slop-tank. A permanent deck watch shall be kept during this operation with overside lights displayed at night on both sides of the vessel at the discharge points.

Deballasting Facilities: There are no deballasting facilities at Zirku Terminal for receiving dirty ballast.

UNMOORING/DEPARTURE: As soon as the loading operation is completed, the vessel will vacate the berth.

The tanker's cargo manifold valves and butterfly valves at the hose end will be closed. The hoses once disconnected will be swung outboard and lowered to the water with the derrick and released.

The tanker will leave the terminal by slipping the mooring. Once the mooring is slipped, the tanker will put the engines astern, drop back until clear of the floating hose, and then steam clear of the terminal.

The mooring launch will be positioned to tow the floating hoses clear, where necessary. The tug will help the tanker to clear the terminal if so required by the Mooring/Loading Master. The mooring connection team will disembark at this stage and the terminal equipment be lowered into the tug. It will be necessary to make a lee to perform these operations safely.

Waiting Area: In the case of no "Early Departure Procedure" arrangements having been made, the tanker will be anchored in one of the anchorage areas waiting for cargo, documents which will be sent by the pilot boat as soon as possible.

In case of the tanker being delayed from sailing for any reason (engine repairs, waiting order, etc) the Mooring/Loading Master will disembark once securely anchored.

When the tanker is ready to sail through the North Departure Route, 2 hours' notice will be given to the Mooring/Loading Master.

Departure Route: Any loaded tanker leaving Zirku Petroleum Port will proceed through the following departure route at a speed not exceeding 8 knots.

Buoy No. 1	Lat. 25° 02′ N. Long. 53° 00.8′ E.
East Mark	BYB VQ(3)5s.
Buoy No. 2	Lat. 25° 04.4′ N. Long. 53° 02.4′ E.
Safe Water	RW Oc 15s.
Buoy No. 3	Lat. 25° 06.4′ N. Long.53° 03.0′ E.
Safe Water	RW LFl 10s.
	Crossing Pipe 30 in.
Buoy No. 4	Lat. 25° 09.8′ N. Long. 53° 02.6′ E.
Safe Water	RW Oc 8s.
	Crossing 3 pipes 18 in. & 30 in.
Buoy No. 5	Lat. 25° 11.2′ N. Long 53° 00.2′ E.
Safe Water	RW MO(A) 10 s.
Buoy No. 6	Lat. 25° 13.0′ N. Long 52° 58.9′ E.
West Mark	YBY VQ(9) 10s.

To Das Channel Buoy No. 10. Leave to starboard.

MEDICAL: Although a medical officer is resident on Zirku Island, consultations will be possible only on an emergency basis.

SERVICES: Following services are NOT available at Zirku Petroleum Port:

Bunkers.
Fresh Water.
Food.
Engine Repairs.
Deratisation.
Shore leave for the crew.
Crew changes.

DENSITY: The salinities are high as a result of the high rate of evaporation.

At the terminal, the water density depending on the sea temperature ranges from 1030 to 1035.

WEATHER: *Seasons:* Two principal seasons can be distinguished in the Gulf. The cool "Winter" season extends from mid November to mid March and the hot "Summer" season from mid May to mid September. The two intermediate periods are transitional and the weather experienced may have either Summer or Winter characteristics.

Winds: The most frequent (54% of the time) is named 'Shamaal' and blows from W.N.W. to N. principally in Winter. The 'Noshi' blows from N.N.E. to E.N.E. for 20% of the time.

Local effects of Monsoon, called the 'Kaus' blows from E. to S. 17% of the time.

Finally, during Winter only, the 'Suhaili', blows for 9% of the time from W.S.W. to W.

The strength of these winds is approximately proportional to their probability of occurrence but at their strongest they can give rise to sandstorms and rough seas for several consecutive days.

Temperature: The extreme monthly mean values of air temperature are 20°C in February and 34°C in August with a lowest minimum of 9°C and a highest maximum of 44°C during the same months.

Tides: Around Zirku Island the tide is variable with small diurnal predominance. However this semi diurnal effect is not of great significance and for all practical purposes it can be said that there is only one high water and one low water per day.

The maximum range is about 1.5 m.

The mean usual range is 1.0 m.

Currents: At the terminal tidal currents are semi diurnal.

The current speed reaches 1 knot regularly at each tide.

Roughly the flood runs S.W. and the ebb N.E. but the turn of tide is very slow when the current directions are variable.

Predictions may be found to be considerably influenced by strong winds, especially the 'Shamaal'.

GENERAL: *Navigation Aids Dues:* The light dues for the Gulf navigational aids will be levied for the account of M.E.N.A.S.

These dues will be paid once per voyage at the first port of call in the Gulf.

Masters are requested to keep the receipt as a voucher if requested by any other Port authority within the Gulf.

Agency: Ship-owners must have their own representative Agency in Abu Dhabi.

Zadco will be acting as a sub-Agency to liaise with the main Agency in Abu Dhabi for all queries regarding mail, telexes, medical assistance, letters of Protest etc. . . .

OPERATORS: Zakum Development Company, P.O.Box 6808, Abu Dhabi, U.A.E. *Tel:* 367400, Ext. 6400. *Telex:* 22948 Zdcauh Em. *Cables:* Zirmarine. *Contact:* J. F. Poncet/G. Lederer, Zirhu Marine Superintendents.

AGENT: (Protecting only): National Shipping Gulf Agency Co. (Abu Dhabi) Ltd., P.O.Box 377, Abu Dhabi, U.A.E. Cables: "Confidence" Abu Dhabi. Telex: 22248 ("Gacauh Em"). Tel: 334300.

NOTES

Please also advise Shipping Guides Ltd.

United Kingdom

HEALTH – ALL PORTS:

PORT HEALTH (The Public Health (Ships) Regulations)

1. Simpler procedures for health clearance of ships arriving in the United Kingdom came into operation with effect from 1st April 1978.

2. Under these new rules the Master of a ship arriving from a foreign port must report to the port health authority†

(1) The occurrence on board during the voyage* of
- (a) death, other than by accident,
- (b) Illness where the person or persons concerned
  - (i) has or had a temperature of 38°C or greater which was accompanied by a rash, glandular swelling or jaundice, or persisting for more than 48 hours;
  - (ii) has or had diarrhoea severe enough to interfere with work or normal activities, or

(2) the presence on board of
- (a) a person suffering from an infectious disease or who has symptoms which may indicate the presence of infectious disease
- (b) any animal or captive bird of any species including rodents and poultry, or mortality or illness among such animals or birds.

(3) any other circumstances which are likely to cause the spread of infectious disease.

If there is nothing to report under any of these headings the Master has no need to obtain health clearance unless an authorised officer otherwise directs. A proportion of ships will be boarded and checked. If any of the conditions in (1)a (1)b and (2)a or (3) have occurred permission (Free Pratique) from an authorised officer will be necessary before disembarkation or commencing operation.

3. If the Master has something to report under 2 above he must:

(1) send a radio message not more than 12 hours and where practicable not less than 4 hours before arrival, giving the relevant information, to the port health authority† or, if the ship is not equipped with a radio transmitter, notify the port health authority†, wherever practicable before arrival and otherwise immediately on arrival;

(2) show or give the appropriate day or night signal when the ship enters the jurisdiction of the port health authority† (the codes are set out below);

(3) Until "Free Pratique" for health purposes has been given see to it that no person, other than Pilot, Customs officers, Immigration officer or authorised officer boards or leaves the ship without the permission of the medical officer;

(4) complete a Maritime Declaration of Health and arrange for it to be handed to the authorised officer.

In relation to the presence or illness of animals on board etc., the requirements at (2), (3) and (4) do not apply but where plague has occurred or is suspected amongst rats or mice or there has been abnormal mortality among them, a Maritime Declaration of Health should be completed.

The requirement at 3(4) above does not apply to a ship which has come directly from a port in the expected area of the Council of Europe i.e., Belgium, France, Greece, the Irish Republic, Italy, Netherlands, Spain and the United Kingdom.

4. Where it is necessary to obtain "Free Pratique" for health purposes the Master should have already to hand the authorised officer, a list of passengers and crew leaving the ship together with the addresses they are going to in the United Kingdom.

5. An authorised officer may, in circumstances other than those set out above, direct that the Master shall complete a Maritime Declaration of Health and that the Master shall apply restrictions on boarding or leaving the ship.

6. The Master of a ship that has met another ship, which has proceeded from a foreign port, or has met an off-shore installation, is required to comply with the rules in paragraphs 2-3 (but if the ship has proceeded from an excepted port a Maritime Declaration of Health need not be completed).

7. If the port health authority† is satisfied that the Master of a ship was aware, or should have been aware, of conditions and failed to report them then action may be taken under the Public Health legislation which may result, on summary conviction, to a maximum fine of £100 plus £50 per day.

† Or the local authority responsible for port health control.

* If more than 4 weeks have elapsed since the voyage began it will suffice to give particulars for the last 4 weeks.

INTERNATIONAL CODE OF SIGNALS PRATIQUE MESSAGES

ZS	My vessel is "healthy" and I request Free Pratique	Q
	*I require health clearance	QQ
ZT	My Maritime Declaration of Health has negative answers to the six health questions.	
ZU	My Maritime Declaration of Health has a positive answer to question(s)……… (indicated by appropriate number(s)).	
ZV	I believe I have been in an infected area during the last thirty days.	
ZW	I require Port Medical Officer.	
	ZW1 Port Medical Officer will be available at (time indicated).	
ZX	You should make the appropriate Pratique signal.	
ZY	You have Pratique.	
ZZ	You should proceed to anchorage for health clearance (at place indicated).	
	ZZ1 Where is the anchorage for health clearance?	
	I have a doctor on board.	AL
	Have you a doctor?	AM

*By night, a red light over a white light may be shown, where it can best be seen, by vessels requiring health clearance. These lights should *only* be about 2 m. (6 ft.) apart, should b exhibited within the precincts of a port, and should be visib all round the horizon *as nearly as possible*.

Health clearance may be given in three ways:
- a) Wholly in plain language.
- b) Partly in the above signal code, remainder in pla language.
- c) Wholly in the above signal code.

Issued by the Health Departments of the United Kingdo

GENERAL:

Regulations for tankers entering or leaving ports in the Unite Kingdom:

Application of the Regulations: The British Government have issued th following regulations, which came into force on 15th October, 198 applicable to tankers of 1,600 g.r.t. and over of any nationality which:

Have a cargo of chemicals, gas or oil in bulk, or;

Have not been declared gas free after having carried such a carg

Reports: Before entering the limits of any harbour a report must be mad to the Harbour Master of that harbour giving the following information

- (a) Name and call sign.
- (b) Country of register.
- (c) Length, draft and beam.
- (d) Destination. (This may not be the same as the harbour throug which the tanker is passing).
- (e) ETA at pilot station or harbour limits.
- (f) Brief description of cargo and quantity in tonnes.
- (g) Is vessel fitted with inert gas system?
- (h) If inert gas system is fitted, is it operational?
- (i) Have cargo tanks been rendered non-inflammable?
- (j) Has a certificate been issued that the vessel complies with th IMO Codes for the Construction and Equipment of Ship carrying:
  - (i) Dangerous chemicals in bulk, or;
  - (ii) Liquefied gases in bulk?
- (k) Any defect in the hull, machinery, or equipment which may:
  - (i) affect the safe manoeuvrability of the tanker or;
  - (ii) affect the safety of other vessels in the vicinity of th harbour, or;
  - (iii) constitute a hazard to the marine environment, or;
  - (iv) constitute a hazard to persons or property in the vicinity o the harbour.

Any changes to the above which occur before entering the harbou limits or while within those limits must be notified to the Harbour Maste

Check List: A check list is required by the Pilot and the Harbour Maste giving the following information:

Details and classification of the vessel.

State of machinery, anchor, fire-fighting, navigational and radi equipment.

State of safety certificates and other documents.

Details of officers' certificates of competence.

Check List Forms giving full details can be obtained from: Departme of Trade, Eileen House, 80-94 Newington Causeway, London SE1 6DD Tel: 01-407 8671.

Or from Department of Trade Marine Offices at the following ports:

Aberdeen	Glasgow	Middlesborough
Avonmouth	Hull	Plymouth
Belfast	Ipswich	Southampton
Cardiff	Leith	South Shields
Dover	Liverpool	Swansea
Falmouth	London	Tilbury

ABERDEEN: 57.09 N. 02.03 W. (See Plan Book)

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Light Certificate.
1 Port Dues Certificate.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate – for British ships only.
Load-line Certificate.
Safety Equipment Certificate.
Lloyd's Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.

In addition, Manifests and Bills of Lading are usually sent to Agent direc from loading port.

PILOTAGE: Aberdeen has a compulsory pilotage district and there ar 10 licensed Pilots. Boatage service, although not compulsory, i available. There are 10 licensed boatmen.

There is a Navigation Control Service equipped with harbou surveillance radar which is operated by Navigation Control Officers wh operate on a 24 hour basis.

RESTRICTIONS: Navigation Channel: Max. designed width 33.5 m max. designed depth at HWOST 10.25 m. Traffic signals regulate th movement of vessels in the Navigation Channel.

Entrance to Victoria Dock, depth at MLWS 6.6 m., clear width a entrance 43 m.

MAX. SIZE: The port can normally accommodate a vessel of up to 160 m. in length, 24.4 m. beam and drawing 9.3 m. of water, and at the various berths in tidal waters can handle expeditiously bulk containers and general cargoes. A vessel of length 166 m. has been handled.
HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an Officer of H.M. Customs depending on where the ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration in all cases; when there is sickness on board the Port Health Authority must be informed preferably not more than 12 hours and not less than 3 hours before arrival.

Also see "Health – All Ports" before first UK port.
RADIO: There is a VHF radio communications system which operates on Channels 6, 11, 12 and 16.
BERTHING: Tidal:

	Length	*Depth* MHWS
Tidal Harbour	732 m.	9.3 – 10.3 m.
Albert Basin	1,806 m.	8.7 – 13.6 m.
River Dee (Navigable)	913 m.	8.0 – 10.3 m.
River Dee Dock	417 m.	9.3 – 9.9 m.
Upper Dock	463 m.	9.0 – 10.3 m.
Victoria Dock	1,532 m.	10.3 – 13.6 m.

Deep-Water Berths:

No. 1 Atlantic Wharf: This is 146 m. long with 9.3 m. at MLWS. Two-storey transit shed. Excellent road and rail connection.

No. 2 Pacific Wharf: This is 160 m. long with 9.9 m. at MLWS. Open quay. 2×6 ton and 1×50 ton electric Portal cranes capable of handling heavy lifts and containers.

No. 3 Waterloo Quay: This is 180 m. long with 9.9 m. at MLWS. 1×20 ton crane at Waterloo Quay West. Ro-Ro service operated by P&O to Shetland.
FRESH WATER: This service is provided by the Grampian Region Water Services and is available at all quays.
REPAIRS: Ship repairing facilities and shipping supplies are offered by a number of private firms and individuals with premises beside the harbour.
DRY DOCKS: (Pontoon Docks).

	Overall Length (m.)	*Breadth at Entrance* (m.)	*Depth on Blocks* (m.)	*Lifting Capacity*
No. 1	55	8.8	4.9	700 tonnes
No. 4	55	11.6	5.5	1,000 tonnes

There are also 2 privately owned slipways and 1 drydock.
MEDICAL: Doctors and hospitals facilities available. Agents should be advised in advance of any medical attention required.
CUSTOMS ALLOWANCES: At the discretion of Local Customs Inspector. Normal allowances are equivalent to 8 oz. of tobacco per man and equivalent to 1 bottle of wine per man. Allowances may be halved for home trade vessels. Vessels in port for more than 3 or 4 days may receive extra allowances.
CONSULS:

Belgium	G. D. G. Mackinnon, 23 Market Street
Denmark	R. P. H. Pirie, 62 Marischal Street
Finland	D. G. R. Stroud, 62 Marischal Street
France	G. D. G. Mackinnon, 23 Market Street
Germany	A. H. S. Lewis, 186 Albert Quay
Iceland	D. G. R. Stroud, 62 Marischal Street
Netherlands	D. M. Grant, 21 Golden Square
Norway	D. G. R. Stroud, 62 Marischal Street
Spain	D. G. R. Stroud, 62 Marischal Street
Sweden	R. P. H. Pirie, 62 Marischal Street

AIRPORT: International airport nearby at Dyce. There are frequent daily jet services to London operated by British Airways, and in addition British Airways also operate services to Edinburgh, Glasgow, Prestwick, Wick, Orkney and Shetland. There are also services to Manchester and Birmingham.

Air U.K. operate direct services from Aberdeen to Amsterdam, Belfast, Bergen, Esbjerg, Copenhagen, London (Stansted), Paris, Stavanger, Edinburgh, Jersey, Leeds/Bradford, Humberside, Newcastle, Norwich, Isle of Man and Teesside.
TIME: BST is GMT plus 1 hour. GMT during Winter months.
HOLIDAYS: 1st and 2nd January; Spring Holiday (variable date); Summer Holiday (variable date); September Holiday (variable date); Christmas Day (25th December).
POLICE/AMBULANCE/FIRE: Dial 999 from any telephone and ask for service required.
TELEPHONES: There are berths at which GPO telephone service can be made available to vessels. All operational posts are linked by telephone network.
DEVELOPMENTS: Forest products terminal consisting of 2 deep water berths at Regent Quay to be built. The special sheds will be completed early 1986. One berth will be available November 1985 and the other in February 1986. Depth alongside 9.0 m.
AUTHORITY: Aberdeen Harbour Board, 16 Regent Quay, Aberdeen AB9 1SS, United Kingdom. *Tel:* (0224) 592571. *Telex:* 73324. *Contact:* J. R. Turner, General Manager.
AGENT: Denholm Port Services (Aberdeen) Ltd., Willowbank House, Willowbank Road, Aberdeen AB1 2YG. Tel: (0224) 580204 (24 hours), 581603. After hours 580204, 647170. Telex: 739403. Cables: Denport Aberdeen.

AMLWCH: 53.27 N. 04.20 W. (See Plan Book)

PILOTAGE: Compulsory. Pilot boards in the vicinity of the S.B.M.
ANCHORAGE: Good anchorage available 3 – 5 miles East of Point Lynas in 15 – 18 fathoms.
APPROACHES: Clear and unimpeded from East or West.
RESTRICTIONS: Berthing may be delayed because of strong tidal streams, particularly during period of Spring tides.
MAX. SIZE: No restriction on length, breadth or deadweight. Max. draft 92 ft. (28.04 m.).
HEALTH: See "Health – All Ports" before first UK port.
RADIO: Advise ETA 72 hours prior to arrival, and confirm again 24 hours before arrival.
VHF: Port operates on Channels 16, 10, 12, 19 and 46.
TUGS: Tugs not used for mooring, however 1 tug employed towing astern once mooring completed. Tugs wire used. 2 mooring launches each 1,150 h.p. One is in attendance throughout discharge. Launches equipped with VHF Channels 16, 6, 9, 10, 12, 13, 14, 25 and 26.
BERTHING: *SBM Location:* Lat. 53° 26.7′ N., Long. 4° 19.8′ W. Standard mooring connections using terminal equipment twin 20 in. nylon grommet moorings with 3 in. chafing chains. Vessels under 150,000 tonnes Summer deadweight will normally moor with only one mooring.

Water Depth: Approaches 32.80 m. Berth 31.15 m. (LLW). UKC: For 'B' Class 3.11 m.

Hose System: 1×24 in.×354 m. surface string, terminating with 1×20 in. rail hose with 150 ASA flange. For ships over 100,000 tonnes Summer deadweight, max. rate 10,000 cu.m./hr. or 1×24 in.×284 m. surface string terminating with 1×16 in. tail hose with 150 ASA flanges for ships under 100,000 tonnes Summer deadweight. Max. rate 7,500 cu.m./hr.

Line System: 2×40 in.×1.8 miles (sub-marine); 2×40 in.×3 miles (shore booster pumps to tankfarm).

Max. discharge rate: 15,000 cu.m./hr.

Position of Cargo Hose Connections: Amidships starboard-side.
DENSITY: 1025.
MEDICAL: Only in an emergency.
FRESH WATER: Not available.
FUEL: Not available.
BALLAST FACILITIES: None.
LIGHTERAGE FACILITIES: None.
REPAIRS: Repairs possible only in an emergency.
REPATRIATION: Not possible.
EMERGENCY CO-ORDINATION CENTRE: H.M. Coastguard, Holyhead. Telex: 61124. District Office: Tel: (0407) 2262. Lookout Station: Tel: (0407) 2051. Oil Pollution Control Room: Tel: (0407) 3755/7.

Also D.T.I. Liverpool Marine Division. Telex: 628474. Tel: (051) 236 6901.
BANKS: None.
SURVEYORS: None locally.
STORING: Not usually permitted.
SERVICES: Small quantities of fresh provisions only in an emergency. No tank cleaning or dirty ballast facilities available.
GENERAL: Responsible Crew member on watch on fo'c'stle head throughout period on the mooring.

Whilst on the berth, no immobilisation of main engines or steering gear is permitted as ship's main engines must be continuously available on short notice to avoid contact with the SBM. Engines used astern to keep clear of the buoy at each slack water period.

Five shore personnel, namely 2 berthing supervisors and a support group of 3 men will remain on board while the ship is moored at the SBM.

The most stringent precautions must be taken to ensure no spillage of oil occurs.
SHORE LEAVE: Not possible.
OPERATORS: Anglesey Marine Terminal, Harbour Building, Amlwch Port, Anglesey LL68 9DB, United Kingdom. Tel: (0407) 831065. *Telex:* 61603, stating for Amlwch Marine Terminal. *Contact:* Captain D. W. Bate, Harbour Master.

ARBROATH: 56.33 N. 02.35 W.

PILOTAGE: By arrangement with Perth Harbour Master.
APPROACHES: Arbroath, situated between Dundee and Montrose, has been recently downgraded from a commercial port to a fishing harbour.

There is a bar 400 m. S.E. of the Piers, depth 0.914 m. LWS, which is dangerous in heavy Easterly weather.
MAX. SIZE: Largest vessel, 65 m. length, 4 m. draft.
BERTHING: Outer harbour has an area of 1.5 ha., depth of 4.57 m. at HWST. Length of quayage 451 m.

Between the outer harbour and entrance jetty is a Wet Dock with a patent slipway (122 m. long).
FRESH WATER: Available.
FUEL: Diesel available.
AIRPORT: Dundee, 29 km.
REPAIRS: Can be carried out at repair yard.
DRY DOCKS: None. Patent Slipway 122 m. long. Length of cradle 32.6 m. Lifting power 250 tons.
POLICE/AMBULANCE/FIRE: Dial 999.

Arbroath Harbour is a station for a R.N.L.I. Lifeboat "Shoreline" and an inshore inflatable boat.
AUTHORITY: Tayside Regional Council, Harbour Master's Office, Arbroath Harbour, Tayside. *Tel:* Arbroath 72166. *Contact:* David Oram, Harbour Supervisor.

ARDROSSAN: 55.38 N. 04.49 W. (See Plan Book)

DOCUMENTS: Normal documents required:
Customs Documents.
Health Documents.
Crew List.
Passenger List.
Ship's Papers, etc.

PILOTAGE: Pilotage compulsory for vessels over 750 g.r.t. operated by Clyde Pilotage Authority. Pilot boards off Little Cumbrae Island. Pilot boat on VHF Channel 16 and 14.

24 hours notice required and amendment if ETA changes.

ANCHORAGE: In 12 to 15 fathoms 1 mile S.W. of breakwater.

RESTRICTIONS: 3 red lights vertically day and night above Port Control Tower (see "Plan Book") indicates "Port Closed".

MAX. SIZE: Eglinton Dock approx. 420 ft. by 57 ft. by 16 ft./18 ft. (depending on tide). North Montgomerie Pier Tanker Berth – max. length 575 ft., max. draft, up to 70 ft. beam, 23 ft./26 ft.; over 70 ft. beam, 22 ft./25 ft.

HEALTH: All vessels requiring attention of Medical Officer shall show flag signal ZW by day, or between sunset and sunrise, either morse signal ZW by lamp, or a red light over a white light, not more than 6 ft. apart. Other vessels shall show flag signal "Q" by day, or between sunset and sunrise either morse signal Q by lamp or a red over a white light, not more than 6 ft. apart.

Certificate of Pratique will be issued by Customs Boarding Officer on receiving a satisfactory and fully completed Maritime Declaration of Health. No further formalities required at subsequent ports of call in the U.K.

Also see "Health – All Ports" before first U.K. port.

RADIO: VHF Channels 12, 14, and 16. Radio telephone via Portpatrick.

TUGS: On application to Clyde Tug Owners.

BERTHING: No special requirements except with draft over 16 ft. when vessel may be delayed waiting for tide.

STEVEDORES: Orders to be given by 1130 hrs. previous day.

MEDICAL: No advance notice required unless medical attention is necessary immediately on vessel's arrival. No hospital facilities in Ardrossan, nearest hospital being at Irvine, 6 miles and Kilmarnock 16 miles.

TANKERS: Hoses 8 in. Berths (1) Up to 3,000 d.w.t. (2) Up to approximately 20,000 d.w.t. Max. draft 22 ft./26 ft. depending on beam and tide.

DENSITY: 1025.

FRESH WATER: Available continually at all berths.

FUEL: Marine oils available by road tanker.

FIRE PRECAUTIONS: Patrolman required for hazardous cargoes.

GANGWAY/DECK WATCHMEN: Recommended.

OPENING/CLOSING HATCHES: Opened and closed by crew.

CERTIFICATES: Following Certificates are requested: Load Line, Safety Radio, Safety Equipment, Safety Construction, Derat, and Current Trinity House Light Bills.

CUSTOMS ALLOWANCES: Standard U.K. allowances.

IDENTIFICATION CARDS: Not required.

CONSULS: Norwegian Vice Consulate, Danish Vice Consulate: R. L. Alpine & Co. Ltd., Winton Buildings, Ardrossan. Tel. Ardrossan 3065.

REPAIRS: Limited repair facilities.

REPATRIATION: Customs Boarding Officer acts for Immigration Dept. and arrangements for repatriation can be arranged in conjunction with ship's Agent.

AIRPORTS: Prestwick 18 miles. Glasgow 25 miles.

TIME: BST, that is GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: 1st and 2nd January; Easter Monday; Third Monday in July; First Monday in October; and Christmas Day. Cargo work may be available on certain holidays by special arrangement.

POLICE/AMBULANCE/FIRE: Police tel. Saltcoats 63966; Ambulance, Fire: Ask telephone operator.

SHORE LEAVE: No restriction.

DEVELOPMENTS: Roll-on/roll-off berth for specialised traffic.

AUTHORITY: Ardrossan Harbour Company Limited, Harbour Office, Ardrossan, Ayrshire, United Kingdom. *Tel:* (0294) 63972-4. *Telex:* 777954. *Contact:* G. Barclay, Managing Director. W. D. Gillespie, Harbour Master and Assistant Manager.

AGENT: Denholm Ship Agency Ltd., Chapelhill Mount, Dalry Road, Ardrossan, Ayrshire KA22 7JT. Tel: (0294) 6211. After Hours: (0292) 41865, (0475) 33241. Telex: 778852.

AYR: 55.28 N. 04.38 W. (See Plan Book)
TROON: 55.33 N. 04.40 W. (See Plan Book)

LOCATION: *Ayr:* On the West coast of Scotland, at the mouth of the River Ayr.
Troon: 14.5 km. (9 miles) North along the coast from Ayr.

DOCUMENTS:
Customs Require:
2 copies Form XS1.
Ship's Register.
Load-line Certificate.
Safety Radio Certificate.
Passenger List.
Crew List.
Port Health Require:
Derat Certificate.
Agents Require:
1 copy Form XS4.
Bills of Lading.
2 copies Manifest.

PILOTAGE: 24 hours' notice of ETA required for Pilot via Agent or Doc Authority. Ayr Pilots listen on Channel 16 and work on Channel 14 VHF.

ANCHORAGE: To Pilot's advice. E'ly winds Ayr Bay, W'ly gales ancho East side of Arran Island.

RESTRICTIONS: Draft restriction at LW. Enter on Pilot's advice.

MAX. SIZE: 300 ft. in length and 18 ft. draft – depending on berth. Rive berth – Max. draft 21 ft. 06 in. No length restriction.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Local station, call sign GPK on 2381 kHz. VHF radio only operating on Channel 14 and listening on Channel 16.

TUGS: 1 tug of 5 tonnes bollard pull.

RADAR: No radar station.

BERTHING:

Dock	*Quay Length (Total)* (m.)	*Depth of Water* (m.)	*Maximum Size of Vessel* *Length* (m.)	*Beam* (m.)	*Draft* (m.)
Ayr:					
Tidal	610	6.4	95	16.5	6.1
River (North)	549	6.4	No restriction	—	6.4
River (South)	488				
Troon:					
Tidal	366	8.0	—	12.2	—
Outer	1,372	7.3	146	No restriction	7.3

Storage and Warehousing Facilities: Open storage space totalling 2.7 hectares.

Cranage and Mechanical Handling: 1 mobile crane 1.5 tonnes, 1 mobile crane 3 tonnes; 2 mobile cranes 35 tonnes, 1 mobile crane 40 tonnes, 1 portal crane over 35 tonnes. 8 mechanical shovels from 0.5 to 4.6 cu.m. capacity. 2 conveyors loading speed 300 – 650 tonnes/p.h. There is also a fixed coaling appliance capable of loading 600 tonnes/p.h. 2 forklifts 2.7 tonnes, 1 forklift 8.2 tonnes.

STEVEDORES: 24 hours notice of ETA should be given to stevedores. *Port Working Hours:* Monday-Thursday 0800 – 1700 hrs., Friday 0800 - 1600 hrs. overtime 0600 – 0800 hrs., 1700 – 2100 hrs.

Saturday 0600 – 1200 hrs. Sunday 0800 – 1700 hrs. Any other hours by arrangement.

MEDICAL: Hospital facilities nearby in town.

DENSITY: Varies according to weather.

FRESH WATER: Available at all berths.

FUEL: All grades available, 24 hours notice.

GANGWAY/DECK WATCHMEN: Deck watchman required; may be supplied by arrangement with stevedores.

OPENING/CLOSING HATCHES: Performed by ship's crew.

CUSTOMS ALLOWANCES: 0.25 lb. of tobacco or equivalent cigarettes, and one-sixth of a gallon wine/spirits per man.

IDENTIFICATION CARDS: Seamen's identity cards should be carried.

REPAIRS: Most engine and deck repairs available.

DRY DOCKS: Two at Troon, Ferguson-Ailsa Ltd.

No. 1 Dock: 85.3 m. long, 11 m. wide, 3.5 m. depth over sill.
No. 2 Dock: 140.4 m. long, 17 m. wide, 4.7 m. depth over sill.

AIRPORT: Nearest at Prestwick, 7 miles away, mostly International flights.

Air UK flights from Edinburgh to Aberdeen, Amsterdam, Esbjerg, Humberside, Leeds/Bradford, London (Stansted), Norwich and Paris.

TIME: GMT plus 1 hour, reverting to GMT in Winter months.

HOLIDAYS: Christmas Day and Boxing Day.

POLICE/AMBULANCE/FIRE: Dial 999, and ask for service required.

TELEPHONES: No connection on board vessel.

SERVICES: Special arrangements can be made for tank washing and compass adjusting through Glasgow.

SHORE LEAVE: No restrictions on shore leave.

AUTHORITY: Associated British Ports – Ayr & Troon, Port Office, Ayr KA8 8AH, United Kingdom. *Tel:* (0292) 281687. *Telex:* 778853 Kenny G. *Cables:* Dainnex Ayr. *Contact:* T. L. Kenny, Port Manager.

AGENT: Denholm Ship Agency Ltd., 31 Miller Road, Ayr KA7 2BS. Tel: (0292) 289619. After Hours: (0292) 41865, 43095. Telex: 779363 Cables: Denholm Glasgow.

BANGOR: 54.39 N. 05.40 W.

PORT LIMITS: A line drawn from Wilson's Point to Luke's Point.

DOCUMENTS: Standard U.K. documentation.

PILOTAGE: Not compulsory but advisable if unfamiliar with the area. Pilot may be obtained from the pilot station at Carrickfergus after call on VHF Channel 16.

ANCHORAGES: 2 cables off North Breakwater or in Ballyholme Bay with offshore winds.

RESTRICTIONS: Due to limited amount of berthing facilities, permission should be sought from the Harbour Master before entering the Harbour.

MAX. SIZE: Vessels up to 70 m. LOA and 4 m. draft can be accepted at HWOST. No restriction on beam.

TUGS: Can be ordered from Belfast if required.

BERTHING: Main berth is at South side of Central Pier. This is of steel piles and concrete and is fendered with rubber tyres. North side is similar but unfendered. At South Pier vessels up to 40 m. and 2.8 m. draft can be accommodated. This berth is of stone and is also unfendered. Vessels will take the bottom at all berths.

A new North Pier runs in a N.W.'ly direction.

The seaward side is built of S.H.E.D. units and the sheltered Western side of concrete with corrugated steel piling faced with Neoprene rubbing strips.

The centre section of this West side provides safe berthing over a length of 95 m. with a depth of 4.2 m. LW.

BRIDGES: None.
STEVEDORES: None locally.
MEDICAL: Full hospital facilities available.
HEALTH: Standard regulations apply. Vessels should inform Port Health Officer Belfast of any sickness on board.
VHF: A listening watch is kept on VHF Channel 16 from about 1 hour before HW till HW when vessels are expected. Working frequency is Channel 11.
FRESH WATER: Available on Central Pier.
FUEL: Available by tank wagon.
TANKERS: No facilities.
CONSULS: Nearest at Belfast.
REPAIRS: Minor repairs only.
SURVEYORS: Available from Belfast.
GANGWAY/DECK WATCHMEN: Not usually available.
HATCHES: Opening/closing done by ship's crew.
CUSTOMS ALLOWANCES: U.K. Regulations apply.
CARGO GEAR: Ship's gear at 5 ton diesel crawler crane used.
REPATRIATION: Can be arranged by Agent.
AIRPORT: Aldergrove Airport.
TIME: GMT plus 1 hour from late March – late October. GMT for rest of year.
POLICE/AMBULANCE/FIRE: Dial 999.
TELEPHONES: Cannot be placed on board. Several in vicinity of berth.
SHORE LEAVE: No restrictions.
DELAYS: Local importers are shown preference. Vessels could be delayed if a local vessel is due.
DEVELOPMENTS: The North Breakwater is at present being extended in a North-Westerly direction in order to afford shelter to vessels in the Harbour.
AUTHORITY: North Down Borough Council, Town Hall, Castle Grounds, Bangor, Co. Down, Northern Ireland. *Tel:* 454371. *Contact:* Captain W. O. Burns, Harbour Master.

BARROW-IN-FURNESS: 54.07 N. 03.14 W. (See Plan Book)

PORT LIMITS: The seaward boundaries of the port are a line joining Westfield Point (Lat. 54° 05′ 33″ N., Long. 03° 11′ 10″ W.) with Scar End Point on Walney Island (Lat. 54° 03′ 31″ N., Long. 3° 12′ 17″ W.).
DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Health Declaration.
Ship's Certificates and Cargo Documents.
PILOTAGE: Pilot boards at Lune buoy, using Pilot cutter, usually 2 or 3 hours before high water.

The Heysham Lake Pilot vessel listens on 2182 kHz (MF) and is also equipped with VHF listening continuously on Channel 16. The working frequencies are 2241 kHz and 2246 kHz and Channels 6, 12 and 14 respectively. Ships which are suitably equipped should pass their ETA through any United Kingdom Post Office Coast Station to their Agent 24 hours before arrival.
ANCHORAGE: At Lightning Knoll Buoy, depth of 10 m. at LW. In adverse weather conditions vessels proceed to Ramsey Bay, 16 km. away, for shelter. Piel Harbour to North of Piel buoy.
RESTRICTIONS: No docking after HW. Tidal range 6.4 m. – 9.76 m. Deduct 0.5 m. from height of high water to allow for invert at dock entrance. Access to the port, which is protected from the prevailing Westerly winds by Walney Island, is gained from the Irish Sea through the harbour along the well-defined Walney Channel. The depth of water on the Ramsden Dock entrance sill can range from 10.06 m. at high water springs to 6.4 m. at high water neaps.
MAX. SIZE: Length 183 m. Beam 23 m. Draft according to tide.
HEALTH: Vessels arriving from abroad are given Pratique by Customs Boarding Officers. In case of suspected disease or fever on board notify Agent prior arrival. Agent will advise Port Health Authorities.

Also see "Health – All Ports" before first U.K. port.
RADIO: Local stations: Anglesey Radio, and/or Port Patrick Radio.
VHF: Port VHF service. Call sign 'Ramsden Radio'. Channel 16 (156.8 MHz) Calling and Safety. Channel 12 (156.6 MHz) Port Operations.
TUGS: Liverpool tugs available on request. Notice required.
BERTHING:

Docks	*Water area in Hectares*	*Width of entrance*
Ramsden	24.8	30.48 m.
Buccleuch	12.6	30.48 m.
Devonshire	12.0	24.4 m.

Walney Channel Deep-water Berth: 259.10 m.×30.48 m.×10.06 m. depth.

Ramsden includes: Ramsden Dock Basin with 3 berths with a total quayage of 378 m., taking vessels of up to 9.15 m. draft, and Anchor Line Basin with three berths 256 m., 152.4 m., and 274.3 m., long respectively, taking vessels of up to 7.3 m. draft. Anchor Line berth equipped for Ro/Ro traffic.
DENSITY: 1025.
FRESH WATER: Available from quayside hydrants.
FUEL: No stocks at Barrow. Can be supplied by road or coastal tanker.
GANGWAY/DECK WATCHMEN: Compulsory.
OPENING/CLOSING HATCHES: Handled by ship's crew.
IDENTIFICATION CARDS: Seaman's Book or Passport required by non-British crew.
CONSULS: Netherlands, Norway, Portugal, Spain. Tel. Barrow 22323.
AIRPORT: Nearest at Manchester, 100 miles distant. Flights to all parts. Local Airport facilities by arrangement.
TIME: As for other UK ports.
HOLIDAYS: As for other ports in England, plus New Year's Day (1st January).
POLICE/AMBULANCE/FIRE: Police: Tel. Barrow 24532; Ambulance: Tel. Barrow 24201, 21035 and 21363; Fire: Tel. Barrow 21363.
SHORE LEAVE: No restrictions.
DEVELOPMENTS: *Ramsden Dock:* New quay under construction (private). Length 245 m. Depth 7.0 m. (approx.). Heavy lift rail mounted crane to be installed.
AUTHORITY: British Transport Docks Board – Barrow and Silloth, Dock Office, Ramsden Dock Road, Barrow-in-Furness, Cumbria LA14 2TW. *Tel:* (0229) 22911. *Contact:* Captain K. H. Jackson, Docks Manager and Harbour Master.

BARRY: 51.24 N. 03.16 W. (See Plan Book)

DOCUMENTS: See "Cardiff".
PILOTAGE: Telegraphic address of pilot station: S.E.W.P.A. Pilots, Pier Head, Barry Docks. Amount of advance notice of ETA required: 24 hours. Final confirmation to be given by VHF or R/T when within 2 hours of pilot station. VHF channel or frequency to be used when contacting pilot boat or pilot station: VHF Channel 16 thence working Channels 6, 8, 10, 11, 22.

Pilot boat: Motor launch black hull with "S.E.W.P.A. Pilot" in white on same. White superstructure. Light or sound signals to be made by vessels requiring a Pilot: flag "G" over numeral "6" flown by day, or "6" sounded on whistle or siren; flashed by lamp at night.

Exact area where pilot boat is located normally between Nash Point and Breaksea Lanby Buoy. Smaller vessels may be boarded in Barry Roads.
ANCHORAGE: Barry Roads, 10 fathoms, safe anchorage. Large vessels should anchor West of Breaksea Lanby Buoy. Small vessels 0.75 mile S.E. of Barry Dock Entrance.
RESTRICTIONS: Entrance only 4 hours before HW to 4 hours after HW.
MAX. SIZE: 575 ft. × 75 ft. × 31 ft. draft. Also see "Berthing".
HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Barry Docks Radio, Channels 10 and 11.
VHF: Channels 16, 10, 11 and 22.
TUGS: Join vessel at Barry Roads. Tug's or ship's lines utilised.
BERTHING:

Dock	*Quay Length (Total)* (m.)	*Normal Depth of Water* (m.)	*Max. Size of Vessel Length* (m.)	*Beam* (m.)	*Draft* (m.)	*Max.* d.w.t.
No. 1 Dock	2,894	9.8	178	23	9.1	23,000
No. 2 Dock	(9,490 ft.)	9.8	178	23	9.1	23,000
No. 3 Dock Basin		Semi-tidal	178	23	9.1	23,000

Vessels up to 22.9 m. (75 ft.) beam can be accepted on favourable tides. Max. 23,000 d.w.t. with draft of 9.1 m. (31 ft.).

Storage and Warehousing Facilities: No. 2 Dock provides 2 quayside transit sheds totalling 7,413 sq.m. Additional covered storage within the port area comprises 4 sheds totalling 7,686 sq.m. (82,650 sq. ft.). Ample open storage space is also available.

Cranage and Mechanical Handling: 11 × 6 ton cranes at South Side No. 2 Dock. 5 × 10/11.5 ton grabbing cranes at 31 Berth, North Side No. 2 Dock.

Forklift Trucks: 35 of varying capacities up to 25 tonnes.

Pallet Trucks: 40 × 2 ton capacity.

Specialised Facilities:

i) One of the largest tank storage facilities in Britain with tank capacity of more than 260,000 tonnes suitable for oil, chemicals, and natural gas.

ii) 2 fixed Ro-Ro berths, located in No. 2 Dock and No. 3 Dock Basin. These are backed by 4 hectares (10 acres) of land for marshalling and storage of vehicles.

iii) The port is licensed to handle explosives both in dock and at specially approved anchorages.

iv) A bulk loading conveyor installed at No. 2 Dock is capable of handling coal and coke at a speed of 450 tonnes per hour and is served by road and rail, with stocking areas.
BRIDGES: Bridge swung to vessel's requirements.
STEVEDORES: An early ETA essential. Enables planning to be effected in conjunction with other work in port.

Port Working Hours: Mondays – Fridays 0700 – 1630 hrs. 3 shift working by arrangement 0600 – 1400 hrs., 1400 – 2200 hrs. and 2200 – 0600 hrs.

Daily and weekend overtime by arrangement.
MEDICAL: Hospital facilities available. Advance notice desirable.
TANKERS: 6 tanker berths, maximum draft 28 ft.
DENSITY: Density 1020.
FRESH WATER: 15/20 t.p.h. per hose.
FUEL: By barge or road transport.
GANGWAY/DECK WATCHMEN: The services of watchmen provided at discretion of Shipowner or Agent.
OPENING/CLOSING HATCHES: Work normally undertaken by ship's crew but the port will, if requested, provide a crane to assist in this work on completion of a "Hatch beam form". Riggers may be employed on this work at request of shipowner.
CUSTOMS ALLOWANCES: 1.5 oz. tobacco per day per man. 0.185 litre wine or spirits per day per man.
IDENTIFICATION CARDS: Not needed by Port Authority.
CONSULS: None. Many located at Cardiff 8 miles East of Barry.
REPAIRS: All types of repair undertaken by private ship repairers.
DRY DOCKS: One dry dock operated by Barry Dry Dock Co., length 286.5 m. and width 23.9 m.
REPATRIATION: All facilities available.
AIRPORT: Cardiff (Wales) Airport, 4 miles, served by regular airlines.

TIME: GMT, except late March – late October when British Summertime (GMT plus 1 hour) is in operation.

HOLIDAYS: Bank Holidays. Arrangements made to work if essential.

POLICE/AMBULANCE/FIRE: Call operator by dialling 999.

TELEPHONES: At main berths.

SHIP SUPPLY SERVICE: A Ship Supply Service could be provided by Cory Ship Towage with their tugs at Cardiff if required. Address: Cory Ship Towage Ltd., S.E. Wales Office, Alexandra Dock, Newport, Gwent. NP9 2NP. Tel: Newport 56835/6.

AUTHORITY: Associated British Ports, Dock Office, Barry Docks, Barry, South Glamorgan CF6 6US, United Kingdom. *Tel:* (0446) 732311. *Telex:* 498421 Abpby G. *Contact:* Mr. A. M. Whyte, Dock Superintendent.

AGENT: Lambert Brothers Ship Agencies Ltd., The Exchange, Cardiff CF1 6RX. Telex: 497701. Cables: Lambert Cardiff. Telephone: 0222 480751.

BELFAST: 54.36 N. 05.56 W. (See Plan Book)

DOCUMENTS:

1 Passenger and Crew List for Immigration.
1 Crew Declaration C142 (for H.M. Customs).
1 List of Ship's Stores (for H.M. Customs).
1 Maritime Declaration of Health.
1 Cargo Manifest.

PILOTAGE: Pilot station is situated on end of East Pier at Carrickfergus. It is manned continuously. Vessels requiring a Pilot should give as much advance notice as possible of ETA, but in any case not less than 1 hour. Pilots may be ordered through:

(i) Pilot Station Carrickfergus, tel. Carrickfergus 62329. VHF Channels 16, 9 and 12.
(ii) Port Operations Station, tel. Belfast 234422 Ext. 330, or Belfast 238506.
(iii) Belfast Harbour Office, tel. Belfast 234422 Ext. 225, 0900 – 1700 hrs. Monday-Friday.

There are two motor launches servicing Pilots. "Pilot Boat I" is 33 ft. long and "Mabel Helen" is 46 ft. 8 in. long. Both vessels are painted black with word Pilot in white letters on each side.

Pilot launches may be contacted on VHF Channel 16 and working frequency Channel 6, 8 and 12.

Usual international signals should be made for a Pilot. Pilots board from 1.5 to 2 miles S.E. of Carrickfergus. In poor visibility the pilot launch makes a sound signal of 4 short blasts. Vessels may be led into calm water before boarding.

ANCHORAGES: Safe anchorages, according to draft and size of vessel are available through Belfast Lough East of a line from Carrickfergus to Grey Point.

RESTRICTIONS:

Intended depths in the entrance channels: Victoria Channel, sea to Refinery berths – 30 ft. below datum. Refinery to Thomson Wharf – 26 ft. below datum.

Musgrave Channel, 24 ft. below datum.

Herdman Channel, 21 ft. below datum.

MAX. SIZE: Vessels' size is restricted only by depth of water available. See "Restrictions", "Berthing", and "Tankers".

RADIO: The best station for messages, cables, etc., is Port Patrick call signal GPK.

VHF: Belfast Port Operation and Information service is situated in the main harbour office building. A continuous watch is maintained on VHF on Channel 16. Working Channel is 12. Call sign is Belfast Harbour Radio.

TUGS: Tugs are owned by Cory Ship Towage Ltd., Tel. No. Belfast 743278. They are fitted with VHF Channels 16, 14, 12, 8 and 6. Tugs normally meet inward bound vessels in vicinity of No. 20 beacon. Use of tugs' lines is optional. Charge for use of each tug line is £15.

BERTHING: The following berths are equipped for handling containers or drive-on, drive-off traffic:

Berth	*Max. draft (ft.)*
Donegall Quay 2	18
(1×23 tonne derrick crane)	
Donegall Quay 4	18
(2×7.5 tonne portal crane) also Ro/Ro	
Donegall Quay 5	18
(No cranes)	
Donegall Quay 6	18
(No cranes)	
Ballast Quay	18
(1×25 tonne derrick crane) also Ro/Ro and 600 ton heavy Ro/Ro pad	
York Dock A	24
(No cranes)	
York Dock 1	24
(1×35 tonne derrick crane)	
Herdman Channel West	18
(2×30 tonne transporter cranes)	
Gotto Wharf	21
(2×30 tonne transporter cranes)	
Stormont Wharf 2	28
(200 tonne cantilever crane)	
Pollock Dock 7	18 – 34
(1×35 tonne derrick crane)	

Numerous general cargo berths and cranage from 3 – 10 tonnes.

Unitank Storage Co. Ltd. have constructed a bulk liquid terminal for the storage of petroleum, chemical products, etc. Special tankers ship liquid gas to the storage installation of Calor Kosangas (Northern Ireland) Ltd. at Musgrave Channel.

STEVEDORES: Two schooling times per day for stevedoring gangs. 0800 and 1300 hrs. Gangs for all week-end work are schooled at 1300 hrs. on Fridays.

HEALTH: Use International Code quarantine signals. Master of a ship approaching a port in Northern Ireland from a foreign port other than an excepted port must ascertain state of health of all persons on board, and must fill in and sign Declaration of Health. It should be completed and ready to deliver to the Customs Officer, or authorised officer of the Port Health Authority, whichever first boards the ship.

If any suspected diseases on board, Free Pratique will not be granted by Her Majesty's Customs until the ship has been visited by the Port Medical Officer. Therefore in these cases notify "Portelth Belfast" by radio in advance.

Also see "Health – All Ports" before first U.K. port.

MEDICAL: All kinds of medical treatment are available. Agent should be given as much notice as possible for arrangements to be made.

TANKERS: Tankers have to observe (i) Belfast Harbour Commissioners By-Laws for loading, discharging, etc., of petroleum spirit. (ii) Chamber of Shipping Tanker Safety Code. (iii) The Merchant Shipping (Tankers) (EEC requirements) Regulations 1981.

6,000 tons of tank washings can be processed at B.P. Refinery.

Tanker Berths: Oil Berth No. 4 – 35 ft. Oil Berth No. 1 – 28 ft. Oil Berth No. 2 – 28 ft. Oil Berth No. 3 – 28 ft.

DENSITY: Average density of water in Inner Harbour is about 1012, and Outer Harbour is about 1024.

FRESH WATER: Available at almost all berths. Delivery is by hose at a rate of approx. 30 t.p.h. Arrangements can be made through Dept. of Environment (Water Services Division). Tel. 746581.

FUEL: All grades of fuel oil are available. 48 hours' advance notice of requirements should be given.

FIRE PRECAUTIONS: Special precautions for vessels carrying petroleum, explosives, calcium carbide and dangerous goods are set out in the appropriate by-laws. A copy of general port fire notice, delivered to all ships on arrival.

Also see "Tankers".

GANGWAY/DECK WATCHMEN: Normally, a member of ship's company acts as watchman. Shore watchmen may be obtained through Agent.

OPENING/CLOSING HATCHES: Conventional beams and hatches and slab hatches are opened and closed by stevedores. McGregor or patent steel hatches are worked by ship's personnel. Ship's personnel required to work all types of hatches at grain silos.

CERTIFICATES:

Register. Radio Certificate. Load Line Certificate. Safety Equipment Certificate. Safety Construction Certificate. Light Bills. Passenger Certificate if applicable. Chain Register. Derat Certificate.

CUSTOMS ALLOWANCES: Tobacco: 8 oz. tobacco are permitted per man and issues are made at 8 day intervals. Wine and/or Spirits: Wine, beer and spirit issues are made, in moderation, at 4 day intervals.

IDENTIFICATION CARDS: Seamen's identity cards required.

CONSULS:

Belgium	Hillsborough 682671
Denmark	Belfast 230581
Dominican Republic	Belfast 230321
France	Belfast 660325
Germany	Ballymena 41412
Italy	Belfast 778353
Netherlands	Belfast 243126
Norway	Belfast 242242
Spain	Belfast 227571
Sweden	Belfast 230581
Switzerland	Carrickfergus 61195
U.S.A.	Belfast 228239

REPAIRS: All types of deck and engine repairs are possible.

DRY DOCKS: Belfast Dry Dock, length of floor 1,100 ft. breadth of floor 167 ft., breadth of entrance 165 ft., level of sill 26 ft. 6 in. below datum.

Harland and Wolff Building Dock, length of floor 1,825 ft., breadth of floor and entrance 305 ft., level of sill 16 ft. 10 in. below datum.

Two other dry docks available.

REPATRIATIONS: Crew may be changed and repatriations arranged. Immigration must be informed.

AIRPORT: Aldergrove Airport is approximately 17 miles from Belfast. There are daily flights to all parts of United Kingdom.

Air UK flights to Aberdeen and Leeds/Bradford.

TIME: British Standard Time is kept, that is GMT plus 1 hour. Reverting to GMT in Winter months.

HOLIDAYS: Stevedore holidays are 1st January, 17th March, Easter Monday and Easter Tuesday, 12th and 13th July and 25th and 26th December.

POLICE/AMBULANCE/FIRE: All can be contacted by telephoning 999 and ask for services required. Additionally: Fire Brigade Belfast 222222 Ambulance Belfast 241212; Harbour Police Belfast 232235; *or* through Belfast Harbour Radio on VHF Channels 16 and 12.

TELEPHONE: Telephone can be placed on board at certain berths.

SERVICES: All principal makes of radio, radar and gyro equipment can be serviced. Compass adjusting and D/F calibration can be carried out.

SHORE LEAVE: Normally no restrictions on shore leave.

DEVELOPMENTS: Future plans include the development of a container terminal at York Dock No. 1 (max. draft 7.3 m.) with one transporter crane of 30 tons and two 15 ton portal cranes to be erected at Stormont Wharf. Both projects due for completion mid-1985.

AUTHORITY: Belfast Harbour Commissioners, Corporation Square, Belfast BT1 3AL. *Tel:* (0232) 234422. *Telex:* 74204. *Contact:* Captain Hugh O'Byrne, Harbour Master. Mr. C. Nimmons, General Manager. Mr. G. Irwin, Chief Commercial Manager. Mr. J. F. McNamee, Chief Engineer.

AGENT: Michael F. Ewings (Shipping) Ltd., 72 High Street, Belfast BT1 1BE. Tel: (0232) 242242. After Hours: (0232) 613670, (0232) 778161. (0232) 624527. Telex: 74682. Cables: Ewingshipping.

BLYTH: 55.08 N. 01.30 W. (See Plan Book)

DOCUMENTS:
Certificate of Registry.
Load Line Certificate.
Wireless Telegraphy and/or Safety Radio Certificate.
Safety Equipment.
Ship Construction.
Light Dues Payments.
Bills of Lading, Manifest and Stowage Plan usually sent in advance of vessel.
List of Members of Crew (of ship arriving in U.K.) who are aliens or were engaged outside U.K. (Home Office Form I.B.6A). Passenger form to be completed when reporting vessel's arrival from foreign ports.

PILOTAGE: Call by R/T when within 50 miles of port, and VHF Channels 16, 6, 8 and 10), when approx. 1 hour off port. Pilot boats black hull with words "Pilot" on hull or superstructure. Letters in white. Fly International Pilot Flag at masthead and at night show International Light Signals for pilot boat on station.

Vessel requiring Pilot sounds 2 short and 3 long blasts or exhibits International Code Flag "G". By night flashes International Code Signal "G" or "PT". Pilot boats operate and will board within radius of 2 miles of East Pier Lighthouse, or further, weather permitting. Pilots board at Pier End area during adverse weather.

ANCHORAGES: No anchorages within harbour – in good weather vessels can anchor off port East of Fairway Buoy.

RESTRICTIONS: No night restrictions. Entry according to draft. Channel dredged to 7.7 m. LAT and approaches 8.6 m. LAT. Upper River and South Harbour 6.8 m. LAT. Rise of tide 4.3 m. springs, 2.1 m. neaps.

MAX. SIZE: Bulk carriers up to 22,500 d.w.t. discharge at Alcan (U.K.) Limited Terminal. Max. draft 9.8 m. LOA 200 m.

For other berths max. length 190.5 m., draft 8.5 m.

HEALTH: International quarantine signals to be used. Pratique will be granted by Customs or Port Health Officer if Maritime Health Declaration is clean. If suspected diseases on board radio "Portelth Blyth" in advance advising details.

Also see "Health – All Ports" before first U.K. port.

RADIO: Cullercoats Radio.

VHF: Details of movements within port given over VHF from Port Control Office (Tel: (06706)-2678). Calling Channel 16, working Channel 12.

TUGS: Normally join vessel at harbour entrance. Extra charge for use of tugs lines.

BERTHING: Alcan Bulk Alumina Terminal, depth alongside 10.4 m. LAT. Alcan is offering the use of its tip unloading terminal at Blyth Harbour to other firms requiring bulk cargo unloading facilities.

North Quay, South Harbour, depth alongside 8.5 m. LAT.

Coal-loading berths and waiting berths, 5.2 m. to 8.6 m. LAT. West Quay, dredged depth 7.0 m. LAT (Sto-Ro/Ro-Ro Terminal "Blyth Progress"). South Side Berths, dredged depth 8.6 m. LAT. Wimbourne Quay (Sto-Ro Terminal – "Link Blyth" – Pontoon) dredged depth 6.8 m. LAT.

STEVEDORES: Blyth Harbour Commission, Traffic Department, South Harbour, Blyth. Tel. Blyth 353611/2. ETA requested day before arrival.

MEDICAL: Notice not necessary but advisable. Hospital facilities available. Inoculation, vaccinations and/or certificates not specifically required.

DENSITY: Sea water. Fresh water effect negligible.

FRESH WATER: Obtainable from shore hydrants. Rate of delivery approximately 10 t.p.h.

FUEL: BHC operate a bunkering Agency on behalf of Shell UK Ltd. 24 hours notice usually required. Grade – gas oil.

GANGWAY/DECK WATCHMEN: Not usually employed as these duties are carried out by the crews.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CUSTOMS ALLOWANCES: Tobacco: 50/250 grammes. Wine/Spirit: Wine up to 0.75 litres. Spirits up to 0.375 litres.

IDENTIFICATION CARDS: Seaman's Book or Passport desirable.

CONSULS: Denmark, Norway, Netherlands.

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: 3 dry docks available.

	Length (m.)	*Breadth* (m.)
No. 1	94.8	14.0
No. 2	103.3	13.7
No. 3	142.6	18.3

REPATRIATION: Can be arranged by H.M. Immigration Office, Blyth.

AIRPORT: 24 km. Served by regular airlines.

TIME: BST is GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: Christmas Day; New Year's Day; Good Friday; Easter Monday; May Day (first Monday in May); Spring Bank Holiday (last Monday in May) and Late Summer Holiday. Cargo work can be arranged on these days by request.

POLICE/AMBULANCE/FIRE: Tel: 999.

TELEPHONES: Can be fixed aboard by arrangement.

AUTHORITY: Blyth Harbour Commission, Blyth, Northumberland NE24 2AW, United Kingdom. *Tel:* (0670) 352066. *Telex:* 537567. *Contact:* R. G. Elwen, Secretary.

BOSTON: 52.58 N. 00.02 W.

DOCUMENTS: Usual U.K. requirements.

PILOTAGE: Compulsory for all vessels greater than 50 g.r.t. Pilot boards from launch in the approaches to River Witham. Pilot Office Tel: 0205-62114.

ANCHORAGES: Vessels awaiting tide anchor to South of High Horn Buoy in depths of 7.3 m.

Anchorages available in Boston Deeps, depths 5.5 m. to 9.1 m.

RESTRICTIONS: Entrance to dock normally restricted to 2.5 hours before and 1.5 hours after HW.

Lock Dimensions: Length 91.4 m., width 13.7 m., depth on sill 5.4 m. MHWN; 7.5 m. MHWS.

Sill clearance of 1.5 m. normally required.

MAX. SIZE: Dock: Length 95 m. Riverside quays: Length 75 m.

HEALTH: Normal U.K. procedure. Port Health Officer, Tel: 0205-62114.

VHF: Port radio station maintains VHF watch (Channels 16 and 12) during office hours and from 3 hours before till 2 hours after HW.

TUGS: 1 tug available, 7 tons bollard pull.

BERTHING: *Boston Dock:*
North Quay: Length 253 m.
South Quay: Length 256 m. Transit shed 2,787 sq.m.
West Quay: Length 137 m. Transit shed 2,160 sq.m.
Two Ro/Ro ramps for small vessels available at East end of Boston Dock.

Riverside Quay: Length 750 m. Transit shed 1,765 sq.m. Berths dry out at LW.

CRANES: At Boston Dock:
4×6 tonnes electric portal cranes.
2×3 tonnes electric portal cranes.
1×50 tonnes crawler crane for bulk cargoes.
1×25 tonnes Scotch Derrick for containers.
11 mobile cranes.
At Riverside Quay: 1×75 tonnes electric portal crane.
Forklifts available at both Boston Dock and Riverside Quay.

BULK CARGO FACILITIES: Two silos for grain, each capable of storing 5,000 tonnes.
(i) King's Lynn Silos at Riverside Quay, with 2 loading towers.
(ii) Witham Wharf, opposite Riverside Quay. Privately owned.
Also see "Developments".

SPECIALISED CARGO-HANDLING FACILITIES: Containers are discharged at South Quay, using a 25 tonne Scotch Derrick. Both 20 ft. and 40 ft. containers are handled.

Container handling yard (1.2 ha.) with 30 tonne top lift truck situated near dock.

BRIDGES: A power cable with 150 ft. vertical clearance exists to East of lock.

STEVEDORES: Several local companies can supply stevedores.

MEDICAL: Doctors, dentists and hospital available locally.

FRESH WATER: Available.

FUEL: Available from road tankers. Contact Agents to make arrangements.

CONSULS: Denmark, Vice-Consul; Netherlands, Vice-Consul; and Norway, Vice-Consul.

REPAIRS: Can be undertaken by local companies. Divers available.

CUSTOMS ALLOWANCES: Usual U.K. regulations. H.M. Customs, Tel: 0205-63070.

TIME: GMT; Summertime kept from late March – late October (GMT plus 1 hour).

POLICE/AMBULANCE/FIRE: Dial 999 for emergency service.

DEVELOPMENTS: Construction of a 40,000 tonne grain silo adjacent to Dock and connected to North Quay is underway. 1×500 t.p.h. mobile shiploader on order.

AUTHORITY: Port of Boston Authority, Dock Office, Boston PE21 6BN. *Tel:* 0205-65571. *Telex:* 378114. *Contact:* Captain G. Hulland, Harbour Master. *Tel:* 0205-62328.

BRAEFOOT BAY: 56.02 N. 03.19 W. (See Plan Book)

Braefoot Bay Marine Terminal is a facility shared between Essochem Olefins Inc. and Shell U.K. Exploration and Production as the shipping point for the products of the Mossmorran gas fractionation complex situated approximately 7 km. inshore from the Terminal. The Terminal is located on the Fife Shore of the River Forth between the communities of Dalgety Bay and Aberdour and separated from the main shipping fairway by the Island of Inchcolm.

The Eastern jetty is operated by Essochem Olefins and exports ethylene in ships between 2,400 cu.m. and 12,000 cu.m. capacity.

The Western jetty is operated by Shell U.K. Exploration and Production for the export of propane, butane, and natural gasoline in ships of up to approximately 60,000 cu.m.

Each jetty carries out loading operations independently, while the coordination and administration of marine activities is the responsibility of the Terminal Supervisor who is the local senior representative for Braefoot Bay Marine Terminal appointed by Shell U.K. Exploration and Production and acting on behalf of itself and Essochem Olefins Inc. with direct responsibility for the Management of all ship related activities at Braefoot Bay.

DOCUMENTS: See "Leith".

PILOTAGE: Pilotage is compulsory for all vessels calling at or sailing from Braefoot Bay Marine Terminal.

Pilots are licensed by the Forth Pilotage Authority and must be ordered for both inward and outward passages.

Vessels bound for the Forth must confirm their ETA 2 hours before arrival at pilot station.

Pilots may be contacted by calling "Forth Pilots" on VHF Channel 16 and working on VHF Channel 14.

ANCHORAGE: Vessels requiring anchorage in the Forth Estuary (other than in emergency) should apply to the Forth Navigation Service (Harbour Master) for direction to a designated anchorage.

APPROACHES: "General Directions for Navigation in the River and Firth of Forth" are published by the Forth Ports Authority and administered by the Forth Navigation Service. Vessels entering or navigating the Forth must notify Forth Navigation Service 24 hours before entering and 1 hour before leaving a berth, of their proposed intentions and obtain subsequent clearance to carry out such intentions. Forth Navigation Service can be contacted on VHF Channels 16 and 12.

RESTRICTIONS:

(a) All movements are subject to the directions of the Forth Navigation Service.

Pilotage is compulsory for all ships arriving at, or departing from Braefoot Bay Marine Terminal.

(b) Vessels will not be accepted for berthing at Braefoot Bay, and departures will not be authorised unless visibility is at least 0.5 nautical miles at Braefoot Bay jetties, that is to say that by day, the Haystack Rock shall be visible; by night No. 3 or No. 4 buoys shall be visible from the jetties.

(c) (i) Tankers of or greater than 145 m. length (approx. 12,000 cu.m. capacity) shall berth port side to the jetties on slack water or flood tide only. It is a requirement of Shell Expro and the Forth Ports Authority that such tankers shall only approach the Terminal through the Western channel of Mortimers Deep.

(ii) Tankers bound for the Eastern (Ethylene) jetty of less than 145 m. overall length may (at the discretion of the Terminal Supervisor) be allowed to berth starboard side to the jetty on slack water or ebb tide only. It is agreed with the Forth Ports Authority that tankers of less than 145 m. berthing in this manner may approach the Terminal through the Eastern channel of Mortimers Deep.

(iii) It is a requirement of the Forth Ports Authority that all tankers departing from the Terminal shall do so through the Eastern channel from Mortimers Deep. Vessels which have berthed as in (ii) above will therefore be required to "swing" on departure and may only do so provided that they are assisted by at least 2 tugs unless the vessels can satisfy the Ports Authority and the Terminal Supervisor that in the particular circumstances 1 tug would be sufficient.

Also see "Regulations".

MAX. SIZE: Western jetty: Depth 15.0 m. Eastern jetty: Depth 10.0 m.

Eastern exit channel bar depth (Hawkcraig Point leading line) – least depth by sounding 9.5 m., swept depth 8.5 m. below chart datum.

HEALTH: See "Health – All Ports" before first U.K. Port.

RADIO: *Pre-arrival information:*

Masters must send ETAs at least 72 hours in advance of arrival and thereafter advise of any variation of more than 12 hours.

Confirmation ETA should be sent at least 24 hours in advance of arrival and thereafter advise of any variation of more than 4 hours. (When voyage duration is less than 72 hours, Masters should send ETA as soon as possible.)

A standard pre-arrival message will be sent to each gas carrier requesting the following information/confirmation. A similar message (excluding items (a) to (g)) will be sent to Natural Gasoline Tankers.

Quote:

(a) Remotely operated valves: through a complete open/closed cycle, ensure proper functioning and ascertain valve type (ball, gate, etc.) and actual valve closing times.

Remote valves must close within 30 seconds of operation but so that the final 20% of closure takes at least 6 seconds.

(b) Gas detection system operational and set (high or low sensors) and calibrated for the cargo to be loaded.

(c) Cargo transfer emergency stops tested from all locations to ensure correct operations of valves, alarms and interlocks.

(d) Ensure operation of the tank high level and pressure alarms and interlocks.

(e) Where adjustable setting safety valves are installed, confirm they are set for the cargo to be received.

(f) Confirm fire fighting equipment including water spray system fully operational and tested.

(g) Manifold Configuration and presentation (forward to aft) eg. LVVL. It is most important that the specific duty (ethylene, propane, etc., liquid or vapour return) of each presentation flange is known to the terminal at least 24 hours prior to the ship's arrival. Delays consequential on non compliance with this requirement will be for ship's account.

(h) Advice that only clean sea water ballast can be discharged at this terminal.

(i) *For first time callers – manifold configuration:*

- (i) Size rating and standard of connecting flanges, e.g. 12 in. Ansi 150/8 in. Ansi 300/6 in. Ansi 300
- (ii) Distance of manifold centre line from bow
- (iii) Height above uppermost continuous deck
- (iv) Distance of manifold from ship's side
- (v) Maximum loaded draft
- (vi) Minimum draft while at berth
- (vii) Distance from face to support (max. acceptable is 1,200 mm.)
- (viii) Height of manifold above keel
- (ix) Distance between manifold flange centres.

(j) Details of ANY DEFECTS IN VESSEL OR EQUIPMENT affecting cargo operations or manoeuverability or confirmation that there are no known defects.

Unquote.

Note: The foregoing information is required in addition to the pre-arrival information requirements of the Forth Ports Authority – SI.1077 Merchant Shipping (Tankers) (EEC Requirement) 1981 refers.

Telex: A telex machine is sited in the Braefoot Bay control room fo incoming messages only, the number is 728245 Moship G, and i operable 24 hours per day. This telex number may be used to receiv urgent information concerning ship movements and cargoes. Message should normally be transmitted through the ship's agent.

VHF: "Braefoot Terminal" maintains a listening watch on VHF from a least 2 hours before vessel's ETA on Channel 16 and may work o Channels 15, 44, 48, 69 or 73. (Channel 69 is normally reserved for jett mooring towing operations.)

RADAR: Port and Estuary Radar Service operated by Forth Navigatio Service. (See "Leith".)

MOORING:

(a) Vessels unable to make fast alongside the Braefoot Bay Termina jetties with an all wires, or wires with synthetic rope tails mooring syste may be required to provide additional restraint by doubling or using bot ends of certain mooring lines.

A minimum of 2 spring lines of the same material (preferably wire shall be used at each end of the vessel.

(b) Mooring lines used in any particular direction of servic (head/stern lines, breast lines, springs) shall be of similar breakin strength and material. Under no circumstances will a mixture of wire an synthetic ropes in the same direction of service and to the same dolphi be acceptable except where a synthetic rope has been used as "first line ashore" for positioning purposes, then this may be excluded in the consideration of the final mooring plan.

(c) If conditions as in (a) cannot be complied with, the loading arms will not be connected until alternative arrangements have been agree with the Terminal Supervisor.

(d) Once moored, ships' winches must be secured with the brakes hardened up. Winches must not be left on Automatic Tension.

(e) Masters of vessels are responsible for ensuring that:

- (i) their vessels are safely secured in accordance with the preceding paragraphs.
- (ii) a strict watch is kept on their vessel's moorings and that they are tended as required to prevent slack or overtaut lines an undue movement of the vessel.
- (iii) their vessel's mooring ropes or wires are secured only to the proper fixtures provided for that purpose.

BERTHING: *Pre-Operations Meeting and Inspection:*

Before any operations commence a meeting will take place betwee the Terminal Supervision and the Ship's Master (or his authorise deputy). They will:

(a) Complete/carry out the ship/shore Safety Check Lists and Safet Inspection in accordance with the O.C.I.M.F. Standards if required.

(b) Discuss any deficiencies shown up by (a) above and agree an additional precautions required. The terminal reserves the right to refuse to load or discharge a vessel if the required standards are not met.

(c) Complete a loading/discharge plan that includes:

Connecting/disconnecting procedures
Quantities and grades of cargo to be loaded/discharged
Loading/discharge rates (see "Loading" – Pressure Surges)
Deballasting procedure (see "Ballast")
Vapour return procedure
Cool down procedure (if required)
Maximum permitted pressure at ship's rail
Location of Emergency Stop Buttons/use of Umbilical Cord
Ensure that ship has on board data sheets for product bein handled
Emergency Procedures (see "Safety").

(d) Check the previous cargo record (last 3 cargoes) and agree tha ships' tanks are ready to receive product.

The Companies reserve the right to:

- (i) Sample and analyse the condition of ships' tanks or quality o cargo and ballast tanks before commencing to load o discharge.
- (ii) Instruct a third party independent surveyor for the samplin and measurement of cargo and/or tanks, the costs for whic will be for the account of the Jetty Operating Company.
- (iii) Place approved portable equipment on board as required fo sampling, testing or communication purposes during loadin discharging operations.
- (iv) Refuse to load product and/or accept return vapour when ships tanks are not within specification for product to be loaded.

Reasonable Notice of these requirements will be given.

BERTHING FACILITIES: Western Jetty:

Jetty Operating Company: Shell U.K. Exploration & Production.

Manifold Limitations: B.F.O. 8 in. and LPG/Gasoline 12 in. 150 AS flanged presentations arms.

	Max.	*Min.*
Manifold height above water line	19.65 m.	5.15 m.
Manifold set back from ship side	9.6 m.	3.00 m.

For multiple 12 in. arm connections the minimum centre to centr adjacent connection distance is 1.3 m.

L.P.G. 8 in. 300 ASA flanged presentation arms.

	Max.	*Min.*
Manifold height from water line	11.15 m.	1.95 m.
Manifold set back from ship side	8.6 m.	2.00 m.

For connection of 2×8 in. arms the minimum centre to centre adjace connection distance is 0.75 m.

N.B. For connection to any arm: Distance between ship's outboar presentation flange and first ship's manifold piping support must no exceed 1,200 mm. to prevent cantilever overstressing of ship's pipin

Product/Vapour Return: LPG: Vapour return arm will be connecte before loading operations commence to enable vessels to return vapou to storage tanks or to flare.

Vapour return may go to flare subject to the quality being acceptab to Shell Expro but always provided the oxygen content of such vapou return to flare does not exceed 4.0% vol. max. as may be establishe under the pre-operations meeting/inspection. (See "Berthing" (d)).

Shell Expro at its sole discretion may accept vapour return to storage always subject to the quality being acceptable to Shell Expro and normally provided the previous 3 cargoes were LPG and also that such vapour does not contain more than:

(i) 0.3% vol. oxygen
(ii) 0.5% vol. non condensible gas
(iii) 0.5% vol. propylene
(iv) 0.1% vol. butadiene
(v) 10 ppm ammonia
(vi) 10 ppm VCM
(vii) 5 ppm water vapour

However, Shell Expro at its sole discretion may accept vapour from any vessel to shore storage provided that the quality of such vapour is acceptable to Shell Expro. When appropriate ships returning vapour to shore storage will be automatically credited for such returns.

LPG Loading/Vapour return rates available to ships via each pair of loading arms are:

via 12 in. loading arms, up to 3,000 cu.m./hr. per product
8 in. loading arms, up to 1,100 cu.m./hr.

Simultaneous loading of propane and butane is available on 12 in. arms only.

NOTE: Propane/Butane is delivered to ships in fully refrigerated state, i.e. approx. −42°C/−5°C as appropriate. There are no cargo heating facilities at this terminal.

Natural Gasoline: Natural gasoline loading is via No. 4 12 in. loading arm with rate of up to 2,000 cu.m./hr. available.

Bunker Fuel Oil (when available): Bunker fuel oil is loaded/discharged through No. 7 8 in. flanged loading arm only at a rate of up to 350 cu.m./hr.

Marine Diesel (when available): Marine diesel is handled through a 3 in. flexible hose only, at a rate of up to 30 cu.m./hr.

Eastern Jetty:

Jetty Operating Company: Essochem Olefins Incorporated.

Manifold Limitations: Ethylene 6 in. 300 ASA flanged presentation arms.

	Max.	*Min.*
Manifold height above water line	11.2 m.	2.75 m.
Manifold set back from ship side	4.6 m.	0.85 m.

For connection of 2 arms the minimum centre to centre adjacent connection distance is 0.75 m. The maximum distance is 1.5 m.

Ethylene: Vapour return arm will be connected before loading operations commence to enable vessels to return vapour to storage tanks or flare. Vapour return may go to flare always provided the oxygen content of such vapour to flare does not exceed 4.0% vol. max. as may be established under the pre-operations meeting/inspection. (See "Berthing" (d)).

Essochem Olefins Inc. at its sole discretion may accept vapour return to storage always subject to the quality being acceptable to Essochem Olefins Inc. and provided that the last cargo was ethylene or that vessel has been purged with ethylene vapour to the satisfaction of Essochem Olefins Inc.

A loading rate of up to 250 tonnes/p.h. is available to vessels.

LOADING:

Marine Loading Arms: All products (with the exception of marine diesel) are delivered to ships via marine loading 'hard arm' units which are individually fitted with Emergency Release Systems (ERS).

The emergency release systems consist of two ball valves located above the presentation flange. Only after closure of the ball valves, the hydraulic clamp between the ball valve opens, leaving one ball valve closing off the ship's manifold and the other closing off the loading arm. The loading arm then returns to the parking position.

On hearing 'ERS' alarm (a flashing red beacon with oscillating tone) all staff should vacate the vicinity of the manifold/loading arms. The emergency release system may be manually initiated from onshore or AUTOMATICALLY in the case of over extension of the loading arms, e.g. if ship drifting outside the loading arm envelope.

Pressure Surge Precautions: Non-routine closing of the loading systems, automatic intervention or 'fail-safe' closure of shipboard Emergency Shut Down (ESD) valves can generate dangerous surge pressures. A careful check of ship's ESD system will be made prior to loading. The Master (or his deputy) may be asked to operate the system to enable timing of the valves and may be requested to have valves adjusted according to the provisions of the IMO Codes for Ships Carrying Liquified Gases in Bulk. The Terminal Operating Companies reserve the right to restrict loading rates if valve closing times are not compatible with rates otherwise agreed. Excess loading times caused by such a restriction will be charged to the ship if port time/lay time is exceeded.

The shore system is designed to withstand the high surge pressures which can be generated and safe emergency shut down will be accomplished by using the shore ESD pendant control provided to vessels.

In the event of an emergency the pendant 'ESD' must be activated which will immediately result in:

1. Shore pumps close
2. On shore delivery valves close.

ONLY THEN MAY THE VESSEL MANUALLY ACTIVATE ITS OWN ESD

SHIPS MUST NEVER CLOSE VALVES AGAINST THE SHORE LOADING PUMPS

Masters are referred to ICS Safety Guide (Liquified Gas) paras, 1.8.2 and 4.5.2 and the International Safety Guide for Oil Tankers and Terminals para 7.3

Operational Procedures: The Loading/Discharge Plan and operation must comply with the following procedures:

(a) The Company will be responsible for connecting/disconnecting loading arms/hoses to the agreed ship's presentation flanges as indicated by the responsible ship's officer.

(b) The Loading Arms are normally purged and remain under Nitrogen between loading operations. Vessels must, therefore, be prepared to receive a small volume of Nitrogen vapour at the commencement of loading operations. (0.5 cu.m. at the Eastern jetty, 10 cu.m. at the Western jetty.)

(c) The responsible terminal representative and ship's officer will agree that systems are correctly lined up before transfer operations begin.

The terminal staff will pressurise the loading arm with Nitrogen against the ship's manifold valve and the loading arm connection will be tested for leaks. When manifold has been proven 'tight' the loading arm will be depressurised and transfer commenced at the agreed starting rate.

Loading must be commenced slowly to avoid rapid pressure build up. When liquid flow is established the terminal will increase rate as requested by the ship up to the agreed maximum bulk rate.

(d) During transfer operations ship will confirm with the shore at suitable intervals that they are in agreement with the quantity of product actually transferred and the quantity/time estimated to complete the operation.

(e) EXCEPT IN EMERGENCY VENTING OF LPG OR ETHYLENE VAPOURS TO ATMOSPHERE IS PROHIBITED AT BRAEFOOT BAY.

All such displaced vapour must be reliquified on board by ship's systems or returned to shore via the vapour line.

During loading of liquified gas carriers the jetty operator must be advised of and log the ship's tank pressure every half hour.

The LPG/ethylene return vapour line will in any case be connected and available for pressure relief.

Displaced Natural Gasoline vapour shall only be vented to atmosphere via the ship's elevated or collective fixed vent system, as agreed in the ship/shore check list.

(f) During transfer operations

- (i) An Operator/Technician will remain on the jetty at all times.
- (ii) A responsible English speaking ship's officer equipped with an approved portable UHF radio tuned to the agreed ship/shore communication channel shall be on duty at all times.
- (iii) A responsible member of the ship's crew capable of understanding and relaying the jetty Operator/Technician's communications to the Responsible Ship's Officer shall be stationed on deck so that he can:
  - (a) observe the manifold connections
  - (b) observe the gangway
  - (c) exchange visual/vocal signals with the jetty Operator/Technician.
- (iv) The ship must inform the terminal and the terminal must advise the ship of any deviation from the agreed Loading/Discharge Plan.

(g) At least 15 minutes' notice must be given of transfer rate changes (including "topping off") being required except in emergency when the requirements of "Pressure Surge Precautions" (see above) must be observed.

(h) If for any reason there is an unusual evolution or accumulation of gas, loading shall be stopped or the loading rate into a particular tank reduced at the discretion of either the Terminal Supervision or responsible Ship's Officer.

(i) The vessel must by day fly Flag 'B' of the International Code, and by night exhibit an all round red light.

(j) Prior to, and on completion of loading/discharging an Operating Company representative will witness ship's dips/ullages and obtain from the Master the quantity loaded according to ship's figures.

(k) Operations shall be stopped during electrical storms in the vicinity of the ship and all cargo valves shall be closed. During periods of high winds (gusting to 40 knots or over), and/or on the instruction of either the Harbour Master or Terminal Supervision, operations shall be stopped and the loading arms disconnected. For ships with a presentation flange of 4 in. this will be 27 knot gusts and for 6 in. and above 40 knot gusts as maximum limits but which may be reduced according to prevailing circumstances.

At suitable intervals with regard to the estimated duration of cargo transfer the responsible Terminal Representative and Ship's Officer will carry out a repetitive check and confirm that:

The Safety Check List remains valid
Operational procedures are satisfactory
Jetty Regulations are not being contravened.

TUGS: Only tugs licensed by the Forth Ports Authority to do so, may operate at Braefoot Bay Marine Terminal.

Availability of tugs is assured by Forth Estuary Towage Ltd., provided at least 24 hours' notice of requirements is given in accordance with the agreed ordering and call out procedures set out in the published Tariff. Tug orders may be placed through ships' Agents, the terminal or direct to Forth Estuary Towage Ltd., Leith. 24 hours' notice of towage requirements is necessary for programming tug commitments and obtaining priority for service. In the event of ship delays within the 24 hours' notice period, cancellation or ETA adjustment for service previously ordered will not be subject to charge, provided that adjustment notice is received during normal working hours and that the tugs have not left their normal berths to attend on the vessel's original order.

The tugs available are as follows:

2×12 tonne bollard pull Voith Schneider.
2×19 tonne bollard pull Voith Schneider.
1×27 tonne bollard pull Voith Schneider.

As a guide to ordering in advance and to avoid delays it is strongly recommended that the following table is regarded as minimum requirements for tug assistance:

Size of Ship	*Tugs (tonnes-bollard pull)*
40-60,000 cu.m. berthing	1×27 tbp+2×19 tbp
40-60,000 cu.m. sailing	1×27 tbp+1×19 tbp
20-40,000 cu.m. berthing/sailing	2×19 tbp
6-20,000 cu.m. berthing/sailing	2×12 tbp

Masters of smaller vessels who do not anticipate requiring tug assistance for berthing/unberthing may order an escort/standby tug.

Tugs attending vessels will normally rendezvous with arriving ships in the area Inchkeith Island to Burntisland Roads and also escort departing ships to that area.

Out of hours and in emergency tugs may be contacted through the Forth Navigation Service Duty Officer on VHF Channel 16.

Boatmen: Only Boatmen approved by the Companies and licensed by the Forth Ports Authority to do so, may operate at Braefoot Bay Marine Terminal.

Availability of mooring boats is assured by C. & R. Briggs Ltd., providing at least 24 hours' notice is given, through ships' Agents, the terminal or direct to C. & R. Briggs, Burntisland. Telex: 727377 Crbcom G.

Pre-ordered mooring boats will be in attendance at the terminal 30 minutes in advance of the arranged berthing/departure time and can be contacted on VHF radio. In the event of the ship delay within the 24 hours' notice period, cancellation or adjustment for services previously ordered will be without charge provided that adjustment notice is received between 0900 hrs. and 1630 hrs. and that the mooring boats have not left their base to attend on the vessel's original order.

BALLAST: *Avoidance of Pollution:*

(a) No oil or mixture containing oil shall be discharged or allowed to escape from a vessel while at the terminal, the approaches or in the River and Firth of Forth.

No garbage, or other materials, either liquid or solid shall be discharged overboard from a vessel, but shall be retained in suitable receptacles on board or arrangements made for disposal ashore.

(b) Discharge overboard of the clean ballast contained in the cargo tanks of clean petroleum product tankers is permitted, but only after inspection has been carried out by the Terminal Supervisor, who shall also obtain the approval of the Harbour Master prior to commencement of such ballast discharge. Discharge of clean segregated ballast water overboard is permitted subject to approval and/or inspection by the Terminal Supervisor.

The Forth Ports Authority Harbour Master will be informed if inspection either before or during discharge shows ballast water is contaminated and such discharge shall immediately cease.

Except as herein specified, all ballast water other than that contained in segregated ballast tanks shall be retained on board.

DIRTY BALLAST CANNOT BE DISCHARGED AT THIS TERMINAL

(c) By arrangement with the Terminal Supervisor oily residues and bilge slops may be discharged ashore via flexible hose provided that such discharge is not concurrent with product transfer via hard arms and that delays so incurred are for ship's own account if port time/laytime is exceeded.

The onshore oily slops reception tank has a limited handling capacity and in no case will slops quantities in excess of 100 tonnes be accepted from any one vessel. Slops transfer to this facility for ships at the Eastern jetty is via a 20 cu.m. holding tank and transfer rates limited to 5 tonnes per hour.

(d) Prior to Oil (including Natural Gasoline) or slops transfer the Anti-Pollution Check List must be completed and no leakage or spillage shall be swept or allowed to leak overboard. Swabs or sawdust used for mopping up spillages must be brought ashore for destruction.

Any leakage or spillage must be reported immediately to the Terminal Supervisor and operations suspended until the leakage or spillage has been cleaned up to the satisfaction of the Terminal Supervisor and the Harbour Master. The Terminal Supervisor may mobilise resources to assist in the containment and cleaning of pollution caused by a ship, without the authority of the Master but in such action he shall be considered to be acting on behalf of the Master and with his approval.

It is statutory requirement that any pollution be immediately reported to the Harbour Master.

MEDICAL: Doctors and Hospitals in Kirkcaldy and Inverkeithing.

DENSITY: 1015 – 1025 (depending on rainfall).

FRESH WATER: Potable fresh water is normally available from hydrants at each jetty. Ships requiring water are responsible for supplying and connecting their own hoses to the jetty hydrant as indicated available by the jetty operator. A nominal charge may be made for water in which case a ship's officer may witness shore meter readings as the Master will be required to authorise water bill for payment of charges by the ship's Agent.

FUEL: B.F.O. and Marine Gas Oil (if and when available) can only be supplied to ships loading at the Western (LPG) jetty. Requests for bunkers must be notified as early as possible and confirmed in the ETA notices through ship's Agent.

CONSULS: See "Leith".

REPAIRS/DRYDOCKS: See "Grangemouth".

AIRPORT: Edinburgh Airport 30 miles.

POLICE/AMBULANCE/FIRE: Control have a direct line.

TELEPHONES: A public pay telephone is located at the jetty trestleway root.

Smoking is expressly prohibited in the telephone kiosk, infringements by individuals of this regulation will necessitate withdrawal of the facility.

STORING: *General cargo, bunkering and stores handling:*

(a) No general cargo including petroleum in drums or other containers, or liquified gas in cylinders shall be handled during:

(i) Loading or transfer of LPG, Ethylene or Natural Gasoline
(ii) Gas freeing, purging or tank cleaning

Note: Bunker services are not available to ships calling at the Eastern jetty.

(b) The handling of ship's stores and bunkers (if available) may be permitted during operations but only with the permission of both the Terminal Supervisor and the Master of the Vessel and provided that:

(i) the cargo operations remain adequately supervised.
(ii) any cargo operation which may allow vapours to escape on deck should be stopped whilst stores are being handled e.g. pumping of strippings to an after tank or sampling/ullaging gasoline tanks or disconnection of loading arms, etc.
(iii) Drums of oil paint, steel plates and any other heavy metal parts which may cause a spark, should be landed on rubber or other suitable matting and not directly onto vessel's steel deck. These items may not be dragged or rolled along the deck.

(c) Gas cylinders must not be rolled along the deck of a vessel or jetty.

(d) The jetty cranes are for hose-handling and other jetty purpose They may only be operated by Terminal Staff and may only assist i loading items of ship stores provided that Terminal Staff are available operate a crane without detriment to their other duties.

(e) Under no circumstances will stores delivery vehicles be allowe on the jetty head or approach beyond the designated points for settin down of ship stores. One vehicle only at a time is permitted to visit vessel. Other vehicles scheduled to deliver stores must queue outsid the main gate until given permission to enter. Waiting vehicles will par in such a manner that no obstruction for emergency vehicle entr through the main gate will result.

The size and weight of ship stores delivered by road vehicle are to b such as they can always be physically *manhandled* and carted betwee the set down point and ship by delivery staff or ship's crew. Large deliveries of stores and heavy items of equipment may be loaded from barge by an arrangement with Agents or chandlers and subject to safet regulations.

These services are readily available in the area, though of course delays due to storing or bunkering are for vessel's own account where laytime/port time is exceeded.

Note: Vessels at anchor may be stored by barge/boatmen of their own choice but vessels alongside must be stored by licensed boatme (C & R Briggs Ltd.) See "Tugs".

SAFETY: *Emergency Signals:*

(a) Fire and onshore emergency alarm.
1. At the Western jetty: Intermittent Siren.
2. At the Eastern jetty: Intermittent Siren.
In the event of siren failure alarm will be sounded by air horns.

(b) Onshore emergency (other than fire).
1. At the Western jetty: Air Horns.
2. At the Eastern jetty: Air Horns.

(c) Shipboard emergency (or reported from ship): At least 6 blasts each of not less than 10 seconds duration.

NOTE: Onshore, alarm may be raised by activating one of the "Brea Glass" fire alarms situated at numerous points throughout the terminal - this will also automatically activate the jetty spray systems.

Actions in Event of Emergency:

Ashore: Sound alarm signal.
Terminal staff will communicate with you via:
1. The UHF portable radio (supplied on arrival).
2. The jetty operator.
3. The jetty loudspeaker system.
4. The Marine VHF Channel 16.

In any emergency terminal staff will shut down loading operations may activate fixed water spray system and implement the Termina Emergency Plan as appropriate to the incident:

Aboard: Sound alarm signal.
Inform terminal by communications systems as listed above.
You must be prepared to:
1. Cease all cargo operations.
2. Close all cargo valves.
3. Disconnect ship to shore pipe-lines (shore hard loadin arms may be emergency disconnected by terminal staff).
4. Move your ship (engines to immediate readiness) subject t the overriding control of the Harbour Master.

Emergency Towing Wires: Emergency towing wires of adequate strength and condition must be positioned on both the offshore bow and quarter of the ship with the towing eyes maintained just above water level.

They must be properly made fast on the ship's bollards while having sufficient slack flaked out on deck for effective towing, the slack being secured from running free by rope yarns or other easily broken means.

Emergency Precautions: In order to meet emergencies ships must:

(a) Retain sufficient suitable crew members on board at all times to man emergency services and to move the ship if so directed by Termina or Port Authority personnel.

(b) Have adequate emergency equipment and fire fightin appliances, including main emergency fire pumps, ready for immediate use with pressure maintained on the fire main while alongside. The appliances will include at least:

(i) Two fire hoses, fitted with jet/fog nozzles, uncoiled and connected to the fire main on the main deck.
(ii) Portable fire extinguishers, of the dry chemical type conveniently placed near the ship's fire manifold.
(iii) An International Ship/Shore Connection available at an agreed position on the ship's fire main for ready connection to the shore main.
(iv) Where a vessel is equipped with a fixed dry powder system hoses should be run out and control boxes open for access.
(v) The ship's offshore lifeboat shall be rigged ready for lowerin and use as an emergency escape.
A pilot ladder or accommodation ladder shall be rigged o positioned on the outboard side of the vessel ready fo immediate lowering as a means of escape in the event of a emergency.

In the event of an emergency the Master must proceed as agreed i the "Pre-operations Meeting and Inspection".

State of Readiness and Engine Immobilisation:

(a) The ship must be able to move under its own power at shor notice.

(b) Repairs or other work which may immobilise the vessel shall no be commenced without the prior approval in writing of the Termina Supervisor who shall also obtain the approval of the Harbour Master.

Such approvals will not be granted except where unavoidable repair/breakdown occurs and may be conditional on the Master hirin sufficient standby tugs to move the vessel if so required.

(c) Should immobilisation as in (b) above occur and prior approva having been impossible, the respective jetty Operating Companie reserve the right to order tug or tugs as above on the Master's behal

Vehicle and Personnel Access and Security:

(a) Only authorised persons or those with entry permits issued by the Terminal Management will be allowed through the terminal security gates.

Ship's personnel must have a temporary pass signed by the Master or his deputy for clearance with the security guard at the entrance gate.

Masters will be provided with a supply of suitable pass forms by the Terminal Supervision. The Master or ship's Agent are required to furnish a list of chandlers, services, new crew and authorised visitors expected during the ship's stay at the terminal.

Persons who have not been authorised or notified as above will be refused entry to the terminal until the Security Guard has been given clearance from the Terminal Supervision.

(b) As pedestrians (other than plant employees and authorised personnel) are not normally allowed passage through the terminal, a limited fixed schedule transport service may be provided between the shore end of the jetty trestleways and a local destination after consultation and agreement between the Terminal Supervision and the Ship's Master. Extra journeys by the approved transport service must be ordered by direct arrangement with the contractor and the Terminal Supervision advised accordingly.

(c) Visiting vehicles are not normally allowed beyond the gatehouse parking area and must not proceed onto the jetty trestleways without the express permission of the Terminal Supervisor. No vehicle may proceed past any "NO ENTRY" sign indicating that Class A petroleum is being handled or that petroleum vapour may be present.

Vehicles and their contents which are permitted to enter the Marine Terminal do so at the owners' risk and drivers must obey all traffic signs, plant traffic regulations, or directions given by Terminal Staff. Such vehicles shall not be parked in position obstructing fire hydrants, roadside alarms or other traffic. If parked, keys will be left in ignition, the ignition switched off and the doors unlocked. If required, any unattended vehicle may be moved by Terminal Staff.

(d) In the interests of Safety and Security any vehicle or person entering or leaving the terminal is liable to be searched for contraband material or unauthorised persons. Acceptance of this requirement is a condition of entry. Persons who appear to be intoxicated will not be allowed access to or from ships at the terminal unless escorted by a responsible Ship's Officer.

Personnel Access to/from Ships:

(a) When available, access between jetty and vessel will be provided by the Company by means of a gangway tower structure. The operation of such gangway will be the responsibility of the jetty Operating Company, but Masters shall ensure that personnel can safely transfer between the ship's main deck and the gangway. When, for any reason, the gangway tower is not available, Masters of vessels shall provide a means of safe access between jetty and ship, which shall when necessary include an upper platform and bulwark ladder to provide safe access to the ship's deck. The means of access shall be provided with stanchions, guard ropes, securing lines and safety netting, shall be adequately illuminated and shall be maintained in a clean and well tended condition.

A lifebuoy with at least 25 m. of lifeline attached shall be positioned on the vessel near the gangway.

(b) No person other than HM Customs and Excise, Port Health Authorities, Pilots or other HM Customs Authorised personnel is allowed to board or disembark from a vessel berthing at the Marine Terminal from a foreign port until Clearance and the Master's permission has been obtained.

(c) Boarding and disembarking shall be by gangway only except in emergency.

Scuppers and Drip Trays: During transfer of bunker fuels, gas oil or natural gasoline, deck scuppers and drain holes must be suitably plugged and accumulated water drained off as required. Scuppers should otherwise remain open during LPG or ethylene loading operations.

Drip trays must be placed under connections and likewise drained of accumulated water.

Prior to transfer of any oil product the ANTI-POLLUTION CHECKLIST MUST BE COMPLETED.

Repair Work: Repair work involving either hot or cold work or the use of naked lights is prohibited unless the permission of the Terminal Supervisor has been requested and granted in writing and the conditions and precautions required by the Terminal Supervisor are rigidly observed.

Repair work includes but is not restricted to boiler tube clearing, chipping and scraping, hull painting, testing or servicing of electrical equipment (including radar and radio installations).

If permission is granted a list of shore workmen employed on the vessel must be given to the Terminal Supervisor before work commences.

(The Harbour Master's permission is also required in the case of hot work and certain repair work including test transmissions of radio or radar equipment.)

Tank Cleaning/Gas Freeing: Tank cleaning, inerting, purging or gas freeing may not be carried out at this terminal except under specific circumstances when approval in writing is granted in advance or under a repair work permit as in "Repair Work" above.

Movements of Tugs and Other Craft: During berthing, unberthing and cargo handling operations no vessel or small craft shall be allowed alongside the vessel unless authorised by the Terminal Supervisor and agreed by the Master.

When tugs or authorised craft are alongside or assisting a vessel, all cargo system openings must be closed unless tanks are gas free.

Portable R/T Sets, Hand Lamps and Electrical Equipment: Portable R/T sets, lamps and hand lamps, electric or otherwise shall not be used unless of an approved type (e.g. B.A.S.E.E.F.A.).

The use of portable electric lamps and equipment on wandering electric cables is prohibited in any cargo or adjacent ballast space, pumproom, cofferdam, bunker compartment, hold or anywhere over the cargo tanks.

Portable domestic radios, photographic flash equipment, electronic calculators, tape recorders or any other battery powered equipment of non-approved type shall not be used on the main deck nor in any other place where petroleum gases may be encountered.

Ship's Radio and Radar Equipment: Except for VHF telephone equipment, ship's main radio station transmission equipment, including emergency transmitters, shall not be used while the ship is within 400 m. of the terminal. While berthed at the terminal, the transmitting aerials shall be disconnected and earthed.

Ship's radar installation having a peak pulse in excess of 60 kW shall not be operated while the vessel is within 300 m. of the terminal and no radar installation shall be operated during cargo or ballast transfer operations while alongside the terminal berths, except as may be permitted under "Repair Work", see "Safety".

GENERAL:

Forth Ports Authority/Dockyard Port of Rosyth: The Forth Ports Authority is the controlling body for the waters of the Firth of Forth in conjunction with the Ministry of Defence through the Queen's Harbour Master Rosyth.

The Rules as to Navigating in the dockyard Port of Rosyth are published under the Dockyard Port of Rosyth Order 1975 and are summarised as a note to the "River of Firth of Forth Byelaws". As general information, the Rules impose a speed limit of 12 knots on vessels exceeding 120 m. in length and 15 knots on vessels less than 120 m. in length.

The Rules also detail the signals for prohibition of movement in the "Protected Channel" (being approximately the Main Fairway in a Westerly direction from Buoy No. 13, passing South of Inchcolm Island) to Rosyth Dockyard and the signals (3 red lights in a vertical line or black cylinder by day) denoting one of Her Majesty's vessels underway, and from which, other vessels shall keep clear (within the Dockyard Port).

Copies of the "River and Firth of Forth Byelaws" and "Directions for Navigation" may be obtained from the Forth Ports Authority, Shipping Agents or on request to the Terminal Supervision.

Tides: The predicted tides in the Forth Estuary may be significantly affected by weather conditions, e.g. strong winds from N.N.E. through E. to E.S.E., or heavy rainfall.

The range for Spring Tides is 5.0 m., the range for Neap Tides is 2.5 m. The Highest Astronomical Tide is 6.3 m. The Lowest Astronomical Tide is 0.0 m.

The breasting line of the jetties at Braefoot Bay is 075°/255° and the direction of tidal flow is approximately 260° on the Flood and 066° on the Ebb with maximum rates of 2.6 knots (Springs) and 1.3 knots (Neaps).

Shipping Agents: Masters are requested to confirm their Agents' name in any direct communication to the Terminal.

Communications:

UHF Radio: The terminal will supply an approved UHF hand set radio to the vessel Master or his deputy for use during the loading operation. A receipt will be required for the hand set radio. The radio will be used for contact with the Terminal Staff during normal loading operation and for notification of an emergency condition.

The hand set radio must be returned to the Terminal representative at the time the departure documents are delivered on board.

Acknowledgement of the return of the hand set radio will be noted on the vessel's copy of the "Master's Receipt for Shipping Documents".

Klaxon: Each jetty is equipped with air horns for audible alarm of fire, and an oscillating tone siren for imminent E.R.S. activation. One short blast may be sounded if required to gain attention of ship's deck personnel if there is an urgent need for communication.

REGULATIONS: *Rules for the Movement of Tankers using Braefoot LPG Terminal:*

1. Every tanker destined for the terminal shall regulate its approach so as not to arrive before the agreed berthing time.

2. When a tanker is turning from the channel for deep draft vessels into Mortimer's Deep to approach the terminal from S.W., no other vessel shall enter that section of the channel between No. 15 light-buoy and a line joining Hound Point and Hopeward Point; or when turning into Mortimer's Deep to approach the terminal from the East, no other vessel shall enter that section of the channel between Nos. 7 and 11 light-buoys.

3. When any tanker is leaving the terminal it shall do so, except in an emergency, in an Easterly direction.

4. When a tanker having left the terminal is entering the channel for deep draft vessels from Mortimer's Deep in an Easterly direction, no other vessel shall enter that section of the channel between Nos. 7 and 11 lightbuoys. In addition if such a tanker is loaded with liquified gas and is more than 145 m. in length, no other vessel, whether navigating within or without the channel for deep draft vessels, shall approach within 1 mile of the tanker while it is within that section of the channel between No. 13 light buoy and Fairway light buoy at 3° W.

5. When tankers are navigating within or without the channel for deep draft vessels between Fairway light buoy and a line joining Hound Point and Hopeward Point it may be necessary to hold or slow down other vessels. Inward bound vessels may be directed to a holding area North of No. 3 light buoy until an outward bound tanker is sufficiently far downstream.

6. No vessel shall enter Mortimer's Deep when the terminal is occupied or when a tanker is manoeuvring in the area, except that a second tanker may enter and berth when the first tanker is securely berthed.

7. Radio transmissions and the operation of radar are prohibited in the vicinity of the terminal, except that a vessel's normal equipment may be tested provided that a source of ignition is not present and that the Chief Harbour Master's permission has been obtained.

SHIPMASTER'S REPORT: November 1984.

Vessel called at Braefoot Bay Marine Terminal for the purpose of loading LPG (Butane).

The terminal is operated by Shell Expro and Essochem Olefins, and is located 3 miles East of the Forth Railway Bridge on the North side of the Firth.

Port Limits: Within the area of the Firth of Forth Navigation Authority.

Documents:

Register and Light dues.
All Safety Certificates.
Derat Certificate.
Health Declaration.
Cargo Documents.
Last Port Clearance or Coastwise Documents.
2 copies C.13 Customs General Declaration.
3 copies C.14 Customs Stores Declaration.
2 copies C.142 Customs Crew Declaration.
6 copies Crew Lists.
2 copies Ship's Store Lists.

Pilotage: Compulsory in the Firth of Forth. Pilot boards at Fairway Buoy in position 56° 03.5′ N., 03° 00′ W. VHF Channel 16. 24 hours' advance notice.

Anchorage: Allocated by Forth Navigation Service, usually Aberlady Bay.

Restrictions: Vessels enter Mortimer's Deep from the West, leave to the East, in what is called clockwise navigation.

Therefore berthing is done on the start of the flood, turning off No. 17 buoy, ensuring, especially in a Westerly wind, that the tide has really started to flood.

Sail an hour before high water to cross the bar at about the top of the flood.

The Esso jetty may, however, allow berthing/entry from the East for smaller vessels.

Berthing and unberthing during daylight hours only, but it is the intention to start unberthing at night shortly.

Max. Size: Shell jetty 60,000 cu.m. Esso jetty 12,000 cu.m.

Health: See 'Health – All Ports' before first UK port.

Radio: Wick GKR.

VHF: Forth Navigation Service Channel 71 (working on Channel 20) controls traffic and reporting in points.

Braefoot Terminal: Channels 69 and 73.

Tugs: Channel 69.

Public Channels: Forth Radio Channels 16 and 24.

Radar: Forth Navigation Service locates vessels at Port Limits, and checks identity by VHF.

Ships Radars are to be switched off within 300 m. of the terminal and must not be switched on whilst alongside, even for pre-sailing checks.

Tugs: Join the vessel off Inchkeith and make fast (tugs lines) before Oxcar. 5 tugs are available, 1×27 tonne, 2×19 tonne and 2×12 tonnes bollard pull. Larger vessels use 3 tugs for berthing (1×27 tonne, 2×19 tonnes) and 2 tugs for sailing (1×27 tonne, 1×19 tonne).

In an emergency tugs take 1.5 hours to reach the vessel.

Berth: Rate of loading Butane, 1,900 cu.m./p.h.

Shore gangway used.

Medical: Good facilities nearby at Leith.

Density: 1025.

Fresh Water: Available ex-mains for nominal fee.

Fuel: M.D.O. available, max. loading rate 40 cu.m./p.h. Fuel oil will soon be made available. Both only at the Shell jetty.

Fire Precautions: Normal for LPG – 3 allocated onboard smoking areas.

Consuls: Numerous in Edinburgh. If vessel bound for USA then Consulate requires 48 hours to visa 2 Crew Lists, thus these should be left behind with the Agent who will arrange for express delivery to the discharge port.

Gangway/Deck Watchmen: Not necessary, available or permitted.

Customs Allowances: Normal UK Regulations apply.

Repatriation/Airport: Edinburgh Airport nearby has shuttle flights at one to two hour intervals to London Heathrow.

Time: GMT plus 1 hour (BST) in Summer months.

Police/Ambulance/Fire: Telephone 999.

Emergency Co-ordination Centre: VHF Channel 16, Forth Navigation Service and/or Forth Coastguard.

Telephones: None onboard, Public Pay phone at jetty root.

Storing: Stores have to be manhandled/hand trucked along 200 m. of jetty before lifting onboard with jetty crane. Alternatively they can be delivered by barge, but not concurrent with cargo and liable to weather delays.

Only Diesel engined stores lorries are permitted in the terminal and Ship Chandlers and Laundries should be made well aware of this.

Shore Leave: Permitted, but personnel are not allowed to walk through the installation and so rely very much on the Marine Officer on duty for a lift, as only a very limited bus service (5 per day) is laid on which takes crew to Burntisland Station.

Identification Cards: Shore passes are issued.

If visitors for the ship's complement are expected, it is wise to leave a list with Security at the terminal gate, to expedite their boarding.

Regulations: 72 hours in advance of arrival send to Agents, asking them to relay same, questionnaire replies to Harbour Master Forth Ports and also to Braefoot Terminal. (See "Radio" – pre-arrival information and "General" before first UK port.)

General: Laundry facilities are available, good quality.

AUTHORITY: Shell U.K. Exploration and Production, P.O.Box 16, Mossmorran, Cowdenbeath, Fife. *Tel:* (0383) 892000. *Telex:* 728244 Moshell G. Shipping Department 728245 Moship G. *Contact:* Captain R. D. Izatt, Terminal Supervisor.

AGENT: John Denholm and Co. Ltd., Unit 20, Belleknowes Industrial Estate, Inverkeithing, Fife. Tel: (0383) 416285. After hours (050682) 3555, (031) 337 1920, (0324) 553769. Telex: 728212.

BRIDLINGTON: 54.05 N. 00.12 W.

DOCUMENTS:

Crew List.
Passengers List.
Ship's Register.
Customs Documents.
Manifests.
Bills of Lading.
Ship's papers.

PILOTAGE: Vessels approach within 0.25 mile, flying "G" Flag. Loc fishermen act as Pilots and board approx. 1 hour prior to berthing tim

ANCHORAGES: For small vessels of not more than 12 ft. draft, 1 mi S.E. of harbour. Deeper-drafted vessels 3 miles East of Harbour. Goo holding grounds except in heavy weather from East to South.

RESTRICTIONS: In accordance with state of tide and draft restriction

HEALTH: Pratique required from all vessels other than from a Briti port. "Q" Flag to be flown.

Also see "Health – All Ports" before first U.K. port.

RADIO: Humber Radio Station is the best for a vessel to route ETA, et

VHF: Call sign "Bridlington Harbour". Call on Channel 16. Working and 14.

TUGS: None available.

BERTHING: No cargo vessels. Fishing harbour handles fishing vesse and yachts.

MEDICAL: Agents require advance notice of required medical attentio Hospital facilities available. Relevant medical information, i.e. fever, etc required.

DENSITY: Sea water.

FRESH WATER: Unlimited quantity available. Delivery from shore pipe line at the rate of 3 t.p.h.

FUEL: All grades available. Delivery by road tankers.

IDENTIFICATION CARDS: Not required.

CONSULS: No local Consuls. Nearest port of availability, Hull, Yorks

REPAIRS: Limited engine and deck repairs.

REPATRIATION: No facilities exist for crew change.

AIRPORT: Yeadon, 45 miles, served by regular airlines.

HOLIDAYS: Normal Bank Holidays. Fish landings can be worked these days.

POLICE/AMBULANCE/FIRE: Police Bridlington 72222; Ambulanc 0482 – 881198; Fire 73585.

TELEPHONES: No arrangements exist for placing telephones aboar

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: Bridlington Piers and Harbour Commissioners, Harbo Office, Harbour Road, Bridlington, East Yorkshire, United Kingdom. *Te* 70148/9. *Contact:* G. W. Wallis, Harbour Master.

BRISTOL (Avonmouth): 51.30 N. 02.42 W.

(See Plan Boo

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office form I.B.6.
1 Stores List.
1 Certificate of Deck Cargo tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing Card for each passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate (British ships only).

In addition, Manifests and Bills of Lading are usually sent to Agent dire from loading port.

PILOTAGE: Compulsory. Telegraphic address, "Brispilot Avonmout Notice required, at least 12 hours prior to arrival at Breaksea Lighthous Buoy (may soon be increased to 16 hours). Pilots can also be embarke off Ilfracombe (24 hours advance notice required). Breaksea boardin and landing station is one mile North of Lighthouse Buoy. Pilots boa from 58 ft. motor pilot boat, black hull, "Bristol Pilot" in white lette amidships, operating from Barry Harbour.

VHF Channel calling 16, working 6.

Details of rates and other particulars including tonnage and coastwis exemptions from pilotage available from Haven Master, R. E. Doc Avonmouth Dock pilotage. Pilotage for locks to berth available but n compulsory.

ANCHORAGES: Barry Road affords good anchorage in modera weather for vessels awaiting a Pilot.

RESTRICTIONS: Royal Portbury and Royal Edward Locks are manne from 4.5 hours before to 3.5 hours after HW, Portishead Locks fro 2.5 hours before to 1.5 hours after HW.

MAX. SIZE: *Royal Portbury:* Max. length 950 ft., max. beam 130 ft., dra 40 ft.

Royal Edward: Max. length 690 ft., max. beam 95 ft., draft 34 ft.

Avonmouth Dock through Junction Cut from Royal Edward: Max. leng 560 ft., max. beam 75 ft., draft 26 ft. 6 in.

Portishead Dock: Max. length 415 ft., max. beam 60 ft., draft 24 ft.

Note: The above quoted drafts are for tides that reach below Mea High Water i.e. on many tides a greater draft could be accommodate on a few tides vessels of the quoted draft would be neaped.

RADIO: Lands End (HF, VHF), Ilfracombe (HF), Celtic (VHF), Seve (VHF).

RADAR/VHF: Port radar coverage of King Road in low visibi conditions. VHF coverage (Avonmouth Radio) from Breaksea to doc entrances.

HEALTH: Foreign arrivals are required to complete Maritime Declaration of Health and to report to Port Health Authority by radio, sickness, prior to arrival if possible, otherwise report on arrival at dock entrance.

Health clearance by Port Medical Officer must be obtained.

Foreign arrivals which have had no sickness aboard do not need to submit Maritime Declaration of Health or to obtain Health Clearance.

Onus of reporting sickness is the personal responsibility of the Master.

All vessels are required to report the presence of animals or birds aboard vessel and any disease amongst such animals or birds.

Vessels arriving from ports within the excepted area and coastal arrivals need not present Declaration, but when there is sickness on board Port Health Authority must be informed.

Also see "Health – All Ports" before first U.K. port.

TUGS: Ships for Royal Portbury Docks are normally met by tugs West of Portishead Point.

Other vessels docking on flood tide normally meet tugs at old oil jetty to Northward of the entrance lock. Vessels docking on ebb tide, tugs join between Firefly and Cockburn Buoys. Ship's line always used.

BERTHING: There are 12,320 ft. of operational quay at the Royal Edward Dock, Avonmouth, including dry and liquid bulk berths with a self contained oil basin containing 8 berths, 4 of which are equipped with common user pipe-line systems. The majority of berths, are equipped with shore cranes or, in the case of granary berths for example, suction elevators.

In general, conventional and combi vessels are handled at Avonmouth with Royal Portbury catering for unit load traffic and Ro/Ro.

Royal Portbury Dock: Currently, the Port of Bristol's new Royal Portbury Dock is equipped with a Lo-Lo/Ro-Ro berth and common user forest products terminal, both situated on the 2,000 ft. long Gordano Quay. Two 45 tonne gantry cranes and a 40 tonne mobile crane are available at this Quay which is backed by an area of paving covering 21 acres for container handling and a further 29 acres, including 250,000 sq.ft. of covered storage area, for forest products. United Molasses Company, a division of Tate & Lyle Ltd., operates a new import storage and distribution depot with a tankage capacity of 53,000 tonnes. This development is situated behind Berth 4, St. Georges Quay. This follows the opening in 1982 of a 47,000 cu.m. cold storage located on the Portbury Estate by Frigoscandia, the largest cold storage and refrigerated transport company in Europe. Both Nissan U.K. and the Abbey Hill Group have constructed vehicle handling terminals for import and export traffic with throughput in excess of 100,000 units per year.

CRANES: Various types up to 12.5 tonnes at Avonmouth together with one 150 tonne floating crane. At Royal Portbury, 2×45 tonne gantry container and 1×40 tonne mobile crane. In addition 6 shore grain elevators with a total capacity of 1,300 tonnes per hour and 1 gantry drag link, loading only at a rate between 160 tonnes and 300 tonnes per hour depending on source granary.

BRIDGES: Avonmouth Docks. Junction between Avonmouth Dock and Royal Edward available at all times if necessary by arrangement with Dock Master.

STEVEDORES: At least 24 hours notice required in order that necessary labour may be allocated.

MEDICAL: Absolutely necessary for Agent to have as much notice as possible of any medical attention required. All facilities available.

DENSITY: Avonmouth Docks: Average density 1012 to 1015; in the river fluctuates according to tides. Portishead Docks: The density is 1015.

FRESH WATER: Avonmouth and Portishead Docks: available at all berths, 24 hours a day from hoses connected to standpipe. Delivery rate 25 – 30 t.p.h.

FUEL: Most grades available – 24 hours notice required.

FIRE PRECAUTIONS: According to local laws, available on request.

GANGWAY/DECK WATCHMEN: Not absolutely necessary – Available if required.

OPENING/CLOSING HATCHES: If crew open hatches on the first day then they must continue to do so whilst vessel is discharging/loading, otherwise dockers attend to this.

CERTIFICATES:

Load Line Certificate.
Safety Equipment Certificate.
Lloyd's Construction Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.

CUSTOMS ALLOWANCES: Customs allowance for crew members of British and foreign ships in British waters at present are:

Tobacco: (incl. cigars and cigarettes) – 30 grammes (1 oz.)

Spirits: (incl. liqueurs, perfume and toilet water) – 0.185 litre (0.75 of a bottle) of which not more than half may be perfume

Wine: 1.5 litres (2 bottles)

IDENTIFICATION CARDS: Not necessary unless being repatriated.

CONSULS:

Belgian Consul
Chilean Consul
Danish Consul
French Consular Agent
Finnish Vice Consul
German Consul
Greek Consul
Icelandic Consul
Italian Consular Agent
Netherlands Vice Consul
Norwegian Vice Consul
Portuguese Vice Consul
Spanish Vice Consul
Swedish Vice Consul

REPAIRS: All types of repairs are carried out. Contact Bristol Ship Repairers Ltd., Graving Dock Works, Royal Edward Dock, Avonmouth, Bristol BS11 9AZ. Tel: Avonmouth (0272) 823422/5. Telex: 498477 Drydok G.

DRY DOCK:

	Total length	*Length over blocks*	*Width of Entrance*	*Depth of water on sill*
Avonmouth Docks	875 ft.	850 ft.	100 ft.	32 ft.

REPATRIATION: Repatriation can be effected to all parts of world.

AIRPORT: Local airport approximately 12 miles away. London can be reached in 1.5 hours by train.

TIME: BST is GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: New Year's Day; Easter (varies); May Day; Spring Bank Holiday (last Monday in May): Summer Bank Holiday (varies, usually last Monday in August); Christmas Day (25th December); Boxing Day (26th December). Work can be arranged on these holidays, except 25th/26th December.

POLICE/AMBULANCE/FIRE: *Royal Portbury and Avonmouth Docks:* Dock services can be contacted by dialling 222/333 on port's exchange or 822591 on British Telecom exchange.

Otherwise dial 999 on British Telecom. Exchange for national emergency services.

EMERGENCY CO-ORDINATION CENTRE: H.M. Coastguard, Mumbles, Swansea, West Glamorgan. Tel: (0792) 66534.

TELEPHONES: Can be put on board at most berths.

BANKS: National Westminster Bank Ltd., 1 Gloucester Road, Avonmouth. Tel: 823991.

Barclays Bank Ltd., Gloucester Road, Avonmouth. Tel: 822814.

Midland Bank Ltd., 7 Gloucester Road, Avonmouth. Tel: 822106, 828637.

Lloyds Bank Ltd., 265 Avonmouth Road, Avonmouth. Tel: 827191/2.

(Major international banks located in Bristol's finance sector centred mainly around the "Corn Street" locality).

SHIP SUPPLY SERVICE: At Avonmouth limited services could be provided by the tug company, Cory-King, Towage, Tel: (0272) 822021.

The Pilotage Authority occasionally assists with sick crew members, limited numbers of personnel and small packages. Tel: (0272) 822354.

AUTHORITY: Port of Bristol Authority, The Port Office, St. Andrews Road, Avonmouth, Bristol BS11 9DQ, United Kingdom. *Tel:* Avonmouth (0272) 823681. *Telex:* 44240. *Contact:* Gordon Scott Morris, General Manager.

AGENT: Lovell, Hodder, Whitwell Ltd., Junction Cut, Avonmouth Docks, Avonmouth, Bristol BS11 9BH. Cables: "James Avonmouth". Tel. (0272) 823671. After office hours: (0272) 822855. Telex 44168, 44718.

BRIXHAM: 50.24 N. 03.30 W.

PORT LIMITS: The area below the level of high water enclosed by:—

(a) An imaginary line drawn from Shoalstone Point in the Parish of Brixham, extending in a W.N.Westerly direction for a distance of 6,500 ft. or thereabouts, until it intersects the imaginary line next described:—

(b) An imaginary line drawn from the centre of the Old Quarry at O.S. Ref. SX91445723, in a N.Easterly direction for a distance of 3,000 ft., or thereabouts, until it intersects the imaginary line first described, and:—

(c) The land line of the coast from the centre of Old Quarry aforesaid to the said Shoalstone Point.

DOCUMENTS:

1 Crew List,
1 Passenger List,
2 General Declarations (Customs),
1 Health Document,
1 Manifest,
1 Each Bill of Lading,
1 Ship's Papers,
1 Ship's Certificates,
or
as for other small U.K. Ports.

PILOTAGE: Trinity House Pilot. Tel: Brixham (08045) 22144/4939. After hours (08045) 51649.

DEEP SEA AND COASTAL PILOTAGE: Pilots for all European and U.K. ports including the Baltic.

Ships requiring a Pilot at Brixham should cable at least 48 hours before arrival to either "Hutchinson, Gravesend" or the pilot station "Dencade Brixham", advising and updating ETA Brixham, and Port(s) of Destination.

2 hours before arrival Brixham – contact "Brixham Pilots" on VHF Channel 9. Pilots board by fast launch 1 mile N.E. Berry Head (or by arrangement). Pilot boats, length 40 ft. and 50 ft., black hull, orange wheelhouse, with "Pilot" in black on wheelhouse. Listening VHF Channel 9.

Also see "London" – Pilotage.

ANCHORAGES: In Torbay or outside port limits. Contact pilot station on VHF Channel 9 for advice.

MAX. SIZE: Unlimited at anchor. Also see "Berthing".

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Landsend Radio/Niton Radio/Portishead Radio.

VHF: Brixham Coastguard – Channel 16.

Harbour Office – "Brixham Port Radio" – Channels 16 and 14.

Pilots and/or Agents – "Brixham Pilots" – Channel 9.

TUGS: By arrangement.

BERTHING: Small coastal vessels in Inner Harbour by arrangement with Harbour Master. Vessels up to 500 ft. (draft 26 ft.), at Jetty, on Brixham Breakwater by arrangement with Brixham Bunkering and Devon Marine Ltd., (Telephone Brixham 2250), or with Harbour Master, Brixham.

MEDICAL: Contact Brixham and Torbay Shipping Agents.

DENSITY: 1025.

FRESH WATER/FUEL: Available from Brixham Bunkering and Devon Marine Jetty on Breakwater.

REPAIRS: Electronic, gyro, engine welding, plumbing by local firms.

SURVEYORS: West Marine Surveyors & Consultants Limited, Consulting Marine Surveyors, Engineers & Naval Architects, The Old Custom House, Brixham, South Devon. Tel: Brixham (Std 08045) 2604. After normal office hours Tel: (0803) 842925. Cables: Surveyor, Brixham. Telex: 42962 – Survey G.

REPATRIATION: See "Services".
AIRPORT: Exeter 35 miles away, Plymouth 34 miles away (daily flights to/from London).

Air UK flights from Exeter to Amsterdam, Brussels, Guernsey, Jersey and Southampton.
POLICE/AMBULANCE/FIRE: Brixham 2231 or 3065 or 999.
SERVICES: No tank cleaning.

Torbay and Brixham Shipping Agents Ltd. and Devon Star (off limits) Tel: (08045) 2214 and 4939. Telex: 42737. Cables: Dencade. VHF: Channel 9 and 16. Offer repatriation services, compass adjusting, radio and radar repairs, divers, chemist, charts, provisions, fresh water (by arrangement), fuel, bonded stores, doctor and medical services, crew changes (available underway and off port limits).
SHORE LEAVE: Allowed.
AUTHORITY: Borough of Torbay, Tor Hill House, Castle Circus, Torquay, TQ2 5QN, United Kingdom. *Tel:* (0803) 26244. *Telex:* 42929. *Contact:* D. G. Bent, Harbour's Administrator.

BUCKIE: 57.41 N. 02.57 W.

PILOTAGE: Pilots keep VHF watch (Channel 16) 1 hour prior to arrival of vessel.
ANCHORAGES: 0.5 miles West of West Mucks beacon.
RESTRICTIONS: Vessels with max. draft berth/sail at HW only.
MAX. SIZE: LOA 82 m., beam 12 m., draft 4.3 m.
FRESH WATER: Available.
FUEL: Available.
REPAIRS: Deck, engine, radio and radar repairs undertaken.
AIRPORT: Dyce (Aberdeen), 55 miles away.
AUTHORITY: Harbour Master – Buckie, Harbour Office, 28B Commercial Road, Buckie AB5 1UN. *Tel:* 0542 – 31700. *Telex:* 739148 (Ref-328) *Cables:* "Harbourmaster". *Contact:* Captain T. Garden, Harbour Master.

Grampian Regional Council, Woodhill House, Ashgrove Road West, Aberdeen AB9 2L4.

BUDE: 50.50 N. 04.33 W. (See Plan Book)

DOCUMENTS/HEALTH/CONSULS: Port not equipped to accept vessels from abroad.
PILOTAGE: Not normally available (special arrangements may be made).
ANCHORAGES: Outer Harbour dries out at half tide.

Inner Harbour (Canal) 8ft. draft maximum.
MAX. SIZE: Inner Harbour (Entry via Lock) length 90 ft. Beam 25 ft. Draft 8 ft.
RADIO: MF Ilfracombe Radio. VHF Severn & Celtic Radio.
VHF: Bude Harbour Office listens on VHF Channel 16 when a vessel is expected.
FRESH WATER: Available via 0.5 in. hose pipe.
TELEPHONE NUMBERS: Harbour Master Bude 3111 (Office), Bude 3531 (Home), Coastguard Harland 235*, Police Bude 2131.

*Nearest Coastguard.
GENERAL: Port little used by commercial shipping.
SPECIAL REGULATIONS: Entry to the Harbour is made by leaving Chapel Rock (linked to the Main Land by a Breakwater) to starboard. Head towards the Lock in the Channel marked by 2 pairs of Leading Beacons.

The outer pair of Beacons, bearing 075° 30′ (T) consist of a front mark – white Spar with Yellow Diamond Topmark, rear mark – white flag staff, both on cliff top on North side of Harbour.

The inner pair of Beacons, bearing 131° 30′ (T) consist of a front beacon – white Pile Beacon with Yellow Triangle Topmark, rear beacon – white spar with Yellow Triangle Topmark, placed 0.5 cable West of Lock Entrance.

The approach to Bude, either from the North or South, should be made from a S.W. direct direction in line with the first pair of Leading Marks.

Immediately on passing Barrel Rock (0.5 cable North of Chapel Rock and marked by a Beacon Barrel) turn to starboard and pick up the inner pair of Leading Marks from which the Lock is clearly visible.

Entry to the Harbour at night not recommended.

Heavy ground swell and breaking seas may prohibit entry and exit.

The Harbour dries out at each Tide and entry of vessels is normally restricted to 2 hours either side of High Water.

For Locking, 18 ft. minimum of water above Chart Datum is required to Lock. A heavy swell may also prohibit the operation of the Lock.

Prior notification of arrival should be made to the Harbour Master if possible.
AUTHORITY: North Cornwall District Council, The Castle, Bude, Cornwall EX23 8PB, United Kingdom. *Tel:* Bude 3111. *Contact:* W. Cloke, Harbour Master.

BURNTISLAND: 56.03 N. 03.14 W.

DOCUMENTS: See "Leith".
PILOTAGE: Compulsory. See "Leith".
RESTRICTIONS: Dock gates normally opened from 3 hours before H until HW.
MAX. SIZE: Width of dock gate 18.2 m. Max. width through ga 16.8 m. Max. depth 8.6 m. MHWS.
RADIO: See "Leith".
RADAR/VHF: Through Forth Navigation Service from Leith.
TUGS: Available from Leith.
BERTHING: 443 m. of quayage at East Dock. Depth 8.6 m. MHWS.
CRANES: 2×10 tonnes grabbing cranes.
BULK CARGO FACILITIES: Bauxite vessels discharge into 2×8,0 tonne barges at anchor. The barges are unloaded by shore cranes in th East Dock.
STEVEDORES: Local company supplies labour.
REPAIRS: Fabrication yard situated in West Dock. 2×300 ft.×85 bays, depth 19 ft.
AUTHORITY: Forth Ports Authority, Dock Office, Burntislan *Tel:* Burntisland 872236. *Contact:* Captain R. Taylor, Port Manag Captain I. C. Bayliss, Harbour Master.

CALEDONIAN CANAL: 57.27 N. 04.18 W.

PORT LIMITS: Craft are considered to be within the Canal when th have entered the sea lock structures.
DOCUMENTS: Masters of craft on through passage must report to th Sea Lock Office at Corpach with the ship's measurement certificates enable toll declaration to be made. Masters of craft on partial passag starting and returning to the East coast should report to th Clachnaharry Canal Office.
PILOTAGE: Approach pilotage compulsory at Inverness end. Conta Inverness Pilots by Link Call through Inverness 32845 or 35264 (Ship of NRT under 100 tons are exempted). Pilotage within the Canal an West approaches optional. For Pilotage into Corpach from the Wes contact Mr. H. McKinnon at Corpach by Link Call to Corpach 304 and f Canal Pilotage, by Link Call to Caledonian Canal Office, Invernes 33140.
RESTRICTIONS: Entrances to sea locks restricted for 2 hours eithe side of LW springs. There is generally no restriction at LW neaps. Th Canal is operated on normal manning from 0800 hrs. until 1700 hrs (Sundays excepted).
MAX. SIZE: 48.77 m. (160 ft.) length overall × 10.67 m. (35 ft.) beam 2.74 m. (9 ft.) draft fresh water or, alternatively, 45.72 m. (150 ft.) 10.67 m. (35 ft.) × 4.11 m. (13 ft. 6 in.) draft fresh water.

Corpach sea lock will admit craft to the Corpach Basin only of siz 61.87 m. (203 ft.) length overall × 10.67 m. (35 ft.) beam × 4.11 m (13 ft. 6 in.) draft fresh water.

All dimensions are overall and *NOT* moulded.
HEALTH: Vessels from foreign ports will be boarded by th Customs/Immigration/Health at the sea locks and they should fly th appropriate international flags on approach.

Also see "Health – All Ports" before first U.K. port.
RADIO: Western approaches via Oban Radio. Eastern approaches vi Wick or Stonehaven Radio.
VHF: None.
RADAR: None.
TUGS: A Canal tug is available if required. Service should not b required on normal passage.
BERTHING: At Corpach Old and New Wharves (limited Custom approval). At Inverness Glenmhor and Glen Albyn Wharves belo Muirton and Upper Muirton Wharf at the top of Muirton. Water dept available for craft having 4.110 m. (13 ft. 6 in.). Normally ships gear o road mobile cranes used. Corpach New Wharf equipped with 2 × 7 to Derrick Cranes owned and operated by Scottish Pulp and Paper Mills
BRIDGES: Road and rail swing bridges are operated to permit th passage of craft. Headroom restricted to 36.576 m. (120 ft.) by overhea electric cables near Inverness.

Kessock Bridge at Inverness: Headroom restricted to 28.96 m. (95 ft over HW springs.
STEVEDORES: Traffic to Scottish Pulp and Paper Mills at Corpac unloaded by Pulp Mill gangs. Elsewhere arranged through Shippin Agent.
MEDICAL: Normal General Practitioners service available at mai centres along the Canal. Full Hospital facilities at Inverness.
FRESH WATER: Fire hose supply available at Glen Albyn Whar Inverness. Small domestic supplies available at the main lock flights.
FUEL: Available by road tanker from principal oil companies b telephoning Shell, Inverness 238850 or Fort William 2404; Ess Inverness 237222 or Fort William 2903.
REPAIRS & DRY DOCK: Limited repairing facilities at the Thornbus Slipway and Engineering Company Limited, Inverness.
AIRPORT: Highlands and Islands domestic flights from Invernes (Dalcross).
POLICE/FIRE/AMBULANCE: Emergency calls to these services o 999.
GENERAL: The Caledonian Canal is part of the Customs Port o Inverness.
AUTHORITY: British Waterways Board. Caledonian Canal Offic Clachnaharry, Inverness.
Contact: At Corpach: Mr. N. Rix. At Inverness: G. Anderson, 046 233140.

CAMPBELTOWN: 55.25 N. 05.36 W. (See Plan Book)

DOCUMENTS: 2 Crew Lists; 2 Passenger Lists; 1 Store List; 1 Personal Effect List; Ship's Register; 1 Manifest or Bill of Lading.

PILOTAGE: Although *not* in Clyde Port Authority area, where large vessels are concerned, it is advisable to have the services of a qualified Clyde River Pilot or where applicable a Certificated Naval Pilot. As neither are based in Campbeltown, it is essential that at least 24 hours notice be given to Agent, when required.

ANCHORAGE: For large vessels in 6 to 10 fathoms in the area between the Orange leading lights and the Methe Bank Buoy, for smaller vessels a wider area can be used but South side of loch best holding.

HEALTH: Normal UK Port requirements. In event of disease or fever prior notice should be given to Agent.

Also see "Health – All Ports" before first U.K. port.

RADIO: All messages through normal coastal stations or by radio telephones via Portpatrick Radio when nearer port. Cables should be addressed to Agents.

RADAR/VHF: No port radar service. Direct contact with Harbour Authority on VHF Channels 12, 13 and 14. P.O.L. Depot, Campbeltown can be called on 30 – 40 mile radius on Channels 6, 12, 18. Same channels for tugs, lying off port, when arranged previously.

TUGS: Must be ordered at least 24 hours beforehand as they come from Glasgow area further North on River Clyde. Precise requirements concerning arrival/departure times requested owing to heavy costs entailed for waiting time.

BULK CARGO FACILITIES: Berth for vessel up to 230 ft. in length with maximum permissible draft 12 ft. (Salt water). Discharge by shore crane, Maximum lifting 5 tons.

SPECIALISED CARGO HANDLING FACILITIES: One berth for Roll-on/Roll-off ferry inside harbour, max. draft of vessel 12 ft. General cargo discharged.

STEVEDORES: Agents arrange all cargo discharges, including mechanical handling. Portable cranes only available. Ship's gear used when available to minimise costs.

MEDICAL: One casualty hospital available. Serious casualties transferred to Glasgow either by air or road, according to condition. Five local doctors.

TANKERS: All intended arrivals should be notified to Officer-in-Charge, P.O.L. Depot, Campbeltown (Tel. No. 0586/2226) at earliest.

P.O.L. Jetty, minimum depth, 40 ft. One discharging berth available.

FRESH WATER: Available at all times, delivery by hose.

FUEL: Marine gas oil supplied on commercial quay. Naval requirements by arrangement with P.O.L. depot.

REPAIRS: Minimal repairs only. Notify Agent as early as possible.

SURVEYORS: Arrange through shipping Agents.

GANGWAY/DECK WATCHMEN: Available but not compulsory.

OPENING/CLOSING HATCHES: Ship's option.

CARGO GEAR: See "Stevedores". Ship's gear preferred where possible.

REPATRIATION: Air service available once daily in forenoon, except Sunday.

AIRPORT: Machrihanish – 3 miles distant.

TIME: GMT. GMT plus 1 hour in Summer.

HOLIDAYS: New Years Day (1st January) Christmas Day, Boxing Day, 3 Statutory Local Holidays, Annual Holidays 1st fortnight in August.

Work can be carried out by arrangement with Stevedores.

POLICE/AMBULANCE/FIRE: Dial 999.

EMERGENCY CO-ORDINATION CENTRE: Coastguard, New Quay, Campbeltown, Tel: 2770.

TELEPHONES: By arrangement.

SERVICES: Laundry/Dry Cleaner, Minimal Radar/Radio, VHF Repairs. No tank-cleaning equipment available or compass adjusting.

IDENTIFICATION CARDS: Not required. P.O.L. Depot request production of Seamen's Cards.

BANKS: Bank of Scotland, 9 Longrow, Campbeltown Tel: 2274.

Royal Bank of Scotland, 11 Castlehill, Campbeltown Tel: 3617.

Clydesdale Bank, 19 Longrow, Campbeltown Tel: 2130.

SHORE LEAVE: After clearing inwards, crew members are allowed to go ashore without special permission.

GENERAL: Basin of the Clyde Lat. 55° 25′ 0″ N., Long. 5° 35′ 30″ W.

Tides: Spring rise 8.9 ft; Neap rise 7.5 ft.; depth at sea entrance, 12 ft. low water spring tide; there is a rise of 8 ft. in spring tide in harbour.

AUTHORITY: Strathclyde Regional Council, Area Engineer's Office, Old Quay Buildings, Campbeltown. *Tel:* Campbeltown (0586) 20365 or 52552. *Contact:* Mr. A. Stewart, Harbour Master, Campbeltown.

P.O.L. Depot, Campbeltown. Officer-in-Charge, Kilkerran Road, Campbeltown.

AGENT: Denholm Ship Agency Ltd., Nanthida, Low Askomil, Campbeltown, Argyll PA28 6EP. Tel: 0586 52710. After hours (0586) 52710, (0475) 33241. Telex: 777767. Cables: Denholm Greenock.

CARDIFF: 51.29 N. 03.10 W. (See Plan Book)

PORT LIMITS: A vessel is considered as "arrived" when it is in the lock.

DOCUMENTS:

1 Crew List.

1 Health Form.

1 Port Immigration, i.e. Crew List, and where applicable, a passenger list.

Pratique issued by Customs.

1 List of Consumable Stores (tobacco, snuff, alcohol, etc.).

3 Bills of Lading (1 original and 2 copies).

PILOTAGE: Channel pilotage and dock pilotage not compulsory except for vessels carrying passengers. Pilots embark from pilot cutters operating from Barry Harbour.

Pilot cutters are marked on each side "Pilots" and operate radio continuous watch on VHF. Signal for pilot cutter – numeral "7" on whistle or siren. Telegraphic address: Barry Sewpil (telex). Minimum of 24 hours notice required of ETA. VHF Channels 16, 9, 14 and 11.

ANCHORAGE: Barry Roads: Good anchorages in moderate weather in depths from 5 to 6 fathoms (9.1 m. to 11 m.) about 0.5 miles S.W. of the entrance to Barry Docks. Clay bottom.

RESTRICTIONS: Entry to docks restricted to a period of 4 hours before and 3 hours after high tide, according to size and draft of vessel.

Entrance lock 850 ft. length, 90 ft. wide.

MAX. SIZE:

Queen Alexandra Dock: LOA 650 ft., beam 88 ft. 3 in., max. draft 34 ft.

Roath Dock: LOA 650 ft., beam 85 ft. 6 in., max. draft 34 ft.

Vessels near maximum dimensions may be accepted on certain tides after consultation with the Dock Master.

HEALTH: Maritime Declaration of Health to be made to Port Authority or Customs Officer, whoever boards ship first. In event of contagious fever on board, Port Health Authority must be advised by radio before arrival. No Pratique necessary if vessel is entering port from another port in U.K.

Also see "Health – All Ports" before first U.K. port.

RADIO: Ilfracombe Radio and Portishead Radio.

VHF: A port operation VHF service maintained at dock entrance during tidal hours. Call sign "Cardiff Radio" calling on Channel 16 and operating on Channel 14 or Channel 11. There is also "Severn Radio".

TUGS: Tugs normally join vessel 0.5 mile to seaward of Outer Wrach Channel Buoy, and arrangements for attendance of tugs should be made through ship's Agent.

BERTHING: Arranged through Dockmaster, and berths within docks are flat quays. Rise and fall usually varies up to 1 ft.

Dock	*Quay Length (Total)* (m.)	*Normal Depth of Water* (m.)	*Max. Size of Vessel* *Length* (m.)	*Beam* (m.)	*Draft* (m.)	*Approx. d.w.t.*
Queen Alexandra	2,234	11.3	198.12	26.9	10.37	33,000
Roath Dock and	2,181	11.0	198.12	26.06	10.37	33,000
Roath Basin	1,174	11.0	158.00	21.30	8.50	18,000

Storage and Warehousing Facilities: Quayside: 5 transit sheds – 32,810 sq.m. (351,050 sq.ft.).

Back sheds: 13,870 sq.m. (149,280 sq.ft.).

Open storage: 8.7 hectares (21.5 acres) with a further 17.4 hectares (43 acres) managed by independent terminal operators.

Cranage and Mechanical Handling: Crane capacity: 2×15 tonnes; 8×7.5 tonnes; 5×5 tonnes; 9×3 tonnes.

2 additional 10 tonne grabbing cranes are provided by a terminal operator within the docks. The port provides a fleet of fork lift trucks for quayside cargo handling ranging from 4,000 lb. to 88,000 lb. capacity.

SPECIALISED CARGO HANDLING FACILITIES:

(i) Cold Storage: King's Wharf Cold Store, managed by the International Cold Storage Co. Ltd. has a capacity of approximately 12,000 tonnes and can operate with temperatures down to −23°C.

(ii) Cool Storage: Cool store with a capacity of approximately 60,000 cartons at any one time. The store is equipped with cooling machinery to maintain temperatures at 50°F – 55°F. (10°C – 13°C.).

(iii) Timber Terminals: Bulk carriers received at deep water berths, discharge of 2,000 cu.m. of timber in a single gang shift, large hardstanding storage areas plus covered accommodation for woodpulp and specialised timber products.

(iv) Combi Vessels: A modern front loading truck of 40 tonne capacity, capable of stowing containers three-high, available for handling.

(v) Bulk Cargoes: 1 grain loading appliance.

(vi) 2 Scrap Berths.

BRIDGES: Bridges throughout the port can be operated on tide times.

STEVEDORES: Arrangements for employment of stevedores undertaken by A.B.P. through ship's Agent.

Port Working Hours:

	Day Work	*Shift Work*
Monday – Friday	0700 – 1630	0600 – 1400 1400 – 2200
Saturday	0700 – 1130	0600 – 1000 1000 – 1400
Sunday	0600 – 1400	0600 – 1400 1400 – 2200

Vessels may also choose to work 0700 – 1630 (2 hours extra to finish if need be), Monday – Friday.

MEDICAL: All facilities available. Agents should be advised in advance if medical services required.

TANKERS: 4 tanker berths available, one in Queen Alexandra Dock, one in Roath Dock, one on South lay-by outside dock and one at Penarth on River Ely (Esso) length 500 ft. Special instructions are issued to Master on arrival at port. Average discharge approximately 448 cu.m.p.h.

DENSITY: 1018.

FRESH WATER: Available 24 hours daily from quayside, delivery 20 t.p.h. maximum.

FUEL: Fuel of all grades available.

FIRE PRECAUTIONS: For tankers, strict fire precautions required in accordance with latest safety procedures.

Emergency Action – Fire: In the event of an outbreak of fire (no matter how small) immediately dial 999 on the ship-to-shore telephone. When the operator answers, say "Fire", and wait until you are connected to the Fire Station Control. Then repeat: "Fire at Berth, (name of berth)". In event of the ship-to-shore telephone being inaccessible or out of order, use short blasts on ship's siren to alert Police and Port Authority. VHF can be used on tide times.

GANGWAY/DECK WATCHMEN: Performed by ship's crew and necessary for tankers.

OPENING/CLOSING HATCHES: Carried out by ship's crew.
CUSTOMS ALLOWANCES: Tobacco, 1 oz. per day per man, max. 8 days. Wine/Spirits, 0.25 pint spirits per man per day every 4 days.
IDENTIFICATION CARDS: Not needed.
REPAIRS: All types of repairs possible.
DRY DOCKS:

	Length	*Width at Entrance*
1. Channel Dry Dock	193 m. (633 ft.)	22.8 m. (75 ft.)
2. Commercial Dry Dock	183 m. (600 ft.)	18.3 m. (60 ft.)
3. Bute Dry Dock	182 m. (597 ft.)	21.7 m. (71 ft.)
4. Mount Stuart No. 3	165 m. (541 ft.)	20.1 m. (66 ft.)
5. Mount Stuart No. 2	131 m. (430 ft.)	16.0 m. (53 ft.)

Dry Dock Nos. 1, 3, 4 and 5 owned and operated by Bristol Channel Ship Repairs Ltd. (Nos. 1, 4 and 5 not in use at present). No. 2 operated by Commercial Dry Dock Enterprises Ltd.
REPATRIATION: Facilities exist to exchange crews and repatriate to any part of world.
AIRPORT: Airport 11 miles from Cardiff, serving other airports to all parts of world.
TIME: GMT. GMT plus 1 hour in Summer.
HOLIDAYS: New Year's Day; Good Friday; Easter Monday; Whit Monday (Spring Holiday); May Day (1st Monday in May); August (Summer Holiday) one day; Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Dial 999 on public telephone service and ask for service required, or short blasts on ship's siren to alert police and dockmaster.
TELEPHONES: Ship/Shore telephone supplied at certain berths – service organized through ship's Agent.
SHIP SUPPLY SERVICE: A Ship Supply Service could be provided by Cory Ship Towage with their tugs at Cardiff if required. Address: Cory Ship Towage Ltd., S.E. Wales Office, Alexandra Dock, Newport, Gwent. NP9 2NP. Tel: Newport 56835/6.
GENERAL: Cardiff is a port which has very big range of tides and important that accurate ETAs and max. drafts supplied by ship's Master in order that Agent may place orders for tugs and Pilots in sufficient time to be in attendance when required.
AUTHORITY: Associated British Ports – Cardiff and Barry, Britannia Road, Roath Basin, Cardiff, Glamorgan CF1 5TA, United Kingdom. *Tel:* (0222) 464544. *Telex:* 498542 ABPCB G. *Contact:* D. Dunn, Port Manager.

AGENT: Lambert Brothers Ship Agencies Ltd., Exchange Buildings, Cardiff. Tel. (0222) 480751. Telex: 497701. Cables: "Lambert Cardiff".

CARRICKFERGUS: 54.43 N. 05.48 W. (See Plan Book)

PORT LIMITS: No. 1 Buoy Belfast Lough.
DOCUMENTS:
2 Crew Lists,
2 Passenger Lists,
1 Store List,
1 Personal effects List,
Ships Register,
1 Manifest or Bill of Lading.
PILOTAGE: Port Pilotage not compulsory but advisable. Pilots based at Carrickfergus Harbour. All Pilotage carried out by Belfast Pilots. Pilots board at No. 1 Buoy, Belfast Lough. Pilots can be contacted by VHF Channel 16.

ETA Messages: Advise Agents at least 24 hours before arrival through any British Coast Station and Pilots not less than 1 hour before arrival. (A) ETA No. 1 Buoy (B) ETA GMT or BST (C) Draft SW.
ANCHORAGE: Midway between Harbour and Greypoint.
HEALTH: No Certificates required, in event of disease contact Agents.
Also see "Health – All Ports" before first U.K. port.
RADAR/VHF: No Port Radar Service. Harbour VHF Channels 14, 12 and 16 operated approximately 3 hours before HW to 1 hour after if ships are due.
TUGS: No tugs in Harbour but if required can be ordered from Belfast.
BERTHING: *Harbour Tidal:*

Depth alongside all berths MHWST	4.88 m.
Depth alongside all berths MLWST	1.83 m.
Max. draft of vessels	4.88 m.
Max. Beam of vessels	12.20 m.
Width at entrance	19.80 m.

Quays:

Length of Commercial Quay	278 m.
No. 1 Berth (Caustic Acid)	64 m.
No. 2 Berth (Tanker Berth)	74 m.
No. 3 Berth (Most bulk cargoes)	76 m.
No. 4 Berth (Coal,Sulphur, Meal, etc.)	64 m.

Vessels discharging take bottom on soft mud.
Average Discharge 2 Grabs 150 t.p.h. at No. 3 and 4 Berth.
STEVEDORES: Provided by Messrs. John Kelly Ltd., Tel. 63612. Telex 74210.
TANKERS: Discharge controlled by Texaco Ltd., as plant is owned by them privately. Rate of discharge approximately 200 t.p.h. 2×8 in. diameter pipes and 1×6 in. pipe.
Usual safety precautions prevail.
Tankers not to enter Port without permission of Harbour Master.
Max. draft MHWST 4.88 m.
MEDICAL: One hospital available.
DENSITY: 1024.
FRESH WATER: Supplied alongside Quay approximately 10 t.p.h.
FUEL: Supplied by road tankers. All grades available from major Oil Companies.
GANGWAY/DECK WATCHMEN: Not compulsory.
OPENING/CLOSING HATCHES: All vessels by crew.
CERTIFICATES: Ship's Register on arrival.
CUSTOMS ALLOWANCES: 200 cigarettes each crew member, spir wine, etc., at discretion of Water Guard.
CARGO GEAR: Two crawler mounted diesel grab cranes, 1×3,100 Kg and 1×3,045 Kg.
IDENTIFICATION CARDS: Not required.
CONSULS: None. Most countries are represented at Port of Belfas approximately 9 miles from Harbour.
REPAIRS: Light repairs and welding only major repairs can be arrange at Belfast.
DRY DOCKS: None. Nearest at Belfast.
SURVEYORS: Most Classification Societies based at Belfast.
REPATRIATION: Good facilities for crew changes. Good railway an bus services.
AIRPORT: Belfast Airport approximately 22 miles served by regula lines.
TIME: GMT, plus 1 hour in Summertime.
HOLIDAYS: New Years Day, Easter Monday and Tuesday. 12th an 13th July, Christmas Day and Boxing Day.
POLICE/FIRE/AMBULANCE: Carrickfergus 62021.
TELEPHONES: Not possible to place on board. Good phone servic convenient to ships.
SERVICES: All services readily available from Port of Belfast.
SHIP SUPPLY SERVICE: Off-shore service operated from the Port Carrickfergus by 2 tugs, the "Ceres" and "Cobh".
Lagan Marine Services, 2 Downhill Park, Newtownabbey, Co. Antrim BT36 6TX Northern Ireland. Tel: Glengormley 2353, Belfast 773858.
SHORE LEAVE: After clearing inwards no restriction on shore leave.
AUTHORITY: Carrickfergus Borough Council and Harbour Maste Town Hall, Carrickfergus, Co. Antrim. *Tel:* 63604 (Council) 6229 (Harbour Master). *Contact:* Captain R. S. Heddles, Harbour Master.

AGENT: Michael F. Ewings (Shipping) Ltd., 72 High Street, Belfast BT 2BE. Tel: (0232) 242242. After Hours: "See Belfast". Cables Ewingshipping.

CASTLETOWN, Isle of Man: 54.04 N. 04.40 W.

PORT LIMITS: Castletown Bay, North of line between Scarlet Point an Langness Lighthouse.
DOCUMENTS: Same as U.K.
PILOTAGE: If required, Pilot will board East of can buoy in bay.
ANCHORAGE: About 2 cables East of red can buoy. Exposed S.-S.W.'ly weather.
RESTRICTIONS: Berthing at HW only. Max. draft 11.5 ft. Springs, 9.5 Neaps.
MAX. SIZE: LOA 170 ft., beam 27.5 ft., draft subject to tides.
HEALTH: Same as U.K. ports.
VHF: Calling Channel 16, working Channel 12. Listening only whe vessels due.
TUGS: None.
BERTHING: 4 berths, 170 ft. max. length. All dry out.
CRANES: Mobile crane, SWL 7.5 tons available.
BRIDGES: At entrance to Inner Harbour. Opened on request.
STEVEDORES: 24 hours notice should be given to Agent.
MEDICAL: Full hospital facilities available.
TANKERS: No facilities.
DENSITY: 1025.
FRESH WATER: Available ex-hydrant at all berths.
FUEL: Diesel available.
FIRE PRECAUTIONS: Usual.
CONSULS: None.
REPAIRS: Minor repairs only.
DRY DOCKS: None.
SURVEYORS: Lloyd's.
HATCHES: Crew or stevedores to operate hatches.
CUSTOMS ALLOWANCES: Same as U.K.
CARGO GEAR: Ship's gear or mobile crane used.
AIRPORT: 2 miles away. Daily flights to U.K. and Eire.
TIME: GMT and BST.
HOLIDAYS: December 25th and 26th, January 1st, 2nd, Good Frida Easter Monday, Spring Bank Holiday, July 5th and August Bank Holida
POLICE/AMBULANCE/FIRE: Police – Tel: 0624-822222. Ambulanc Fire – Tel: 999.
SERVICES: Compass adjusting.
SHORE LEAVE: Permitted.
IDENTIFICATION CARDS: Seaman's book sufficient.
EMERGENCY CO-ORDINATION CENTRE: Ramsey Coastgua MRSC, Tel: (0624) 813255.
AUTHORITY: Isle of Man Harbour Board, Harbour Master's Office, Th Quay, Castletown, Isle of Man. *Tel:* 062-482-3549. *Contact:* Capt. Kaighin, Harbour Master.

AGENT: See "Douglas."

CLYDE PORT (Including Glasgow, Greenock, Finnart and Hunterston): 55.51 N. 04.16 W. (See Plan Book)

PORT LIMITS: For limits of jurisdiction see "Plan Book" – "Firth of Clyde and Sea Lochs".

DOCUMENTS: Following required on arrival:

3 Crew Lists on IMO Standard Form.
3 General Declarations. Customs Form C13.
3 Ships Stores Declarations. Customs Form C14.
2 Cargo Manifests. Customs Form C16.
1 Personal Effects Declaration. Customs Form C142.
1 Declaration of Health.
Bills of Lading.
Register.
Load Line Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Safety Construction Certificate.
Derat or Derat Exemption Certificate.

PILOTAGE: Compulsory pilotage.

Pilotage shall be compulsory in the portion of the Pilotage District within the area bounded on the West by that part of the line of Longitude 5° 06′ West commencing on the North shore of Loch Striven and then proceeding in a Southerly direction to the North shore of the Island of Bute and by the same line of longitude, from the South shore of the Island of Bute South to the latitude of Gull Point; thence by a line extending due East (T) to Gull Point; thence towards the S.E. by a line proceeding in a 143° (T) direction for 7 nautical miles; and thence on or towards the N.E. by a line proceeding in a 053° (T) direction to the North boundary of the Harbour of Saltcoats.

Within this area pilotage is compulsory for vessels exceeding 1,600 g.r.t. Pilots board off Little Cumbrae Island.

To the East and North of a straight line drawn from Kempock Point, Gourock, due West to the Cowal Shore, pilotage is compulsory for vessels exceeding 100 g.r.t. Pilots board West of Kempock Point.

Gourock Pilot Station, tel: Gourock 34631.

VHF Channels 14 and 16. Call "Clyde Pilots".

Vessel to advise Agent 72, 48 and 24 hours before arrival with subsequent advice of any changes to ETA, stating where Pilot required to board, ETA and draft.

Normal ladder, etc., for Pilot boarding.

Limits of Pilotage District:

(i) To the East of the Isle of Arran a line drawn due East and West across the river or Firth of Clyde from the coast of Ayrshire to Corrygills Point on the East Coast of the Isle of Arran; and

(ii) in Kilbrannan Sound a line drawn due East and West across the river or Firth of Clyde from the N.W. coast of the Isle of Arran to the coast of Kintyre being an extension of a line drawn due East and West from the Southernmost point of the island of Little Cumbrae to the N.W. of the Isle of Arran.

ANCHORAGES: Anchorages are available for vessels of all drafts in the Tail of the Bank area (off Greenock) and lower Firth of Clyde.

Anchorages are allocated by Clyde Port Estuary Radio. The anchorage positions are shown on Admiralty Charts Nos. 1907 and 1994.

RESTRICTIONS: Vessels entering the river channel are restricted to a maximum fresh water draft of 32 ft. Entry time for deeply laden vessels is dependent on the rise of tide.

Damaged vessels and vessels that are not in class must have a current Seaworthy Certificate and prior permission from the Harbour Master before entering the area of jurisdiction of the port.

MAX. SIZE: As agreed by Clyde Port Authority for berths in Glasgow and Greenock and subject to consideration of particular circumstances prevailing in each case.

HEALTH: Masters should report by radio to "Portelth Glasgow" any infectious illness which has occurred, or which has been suspected, during the voyage.

Also see "Health – All Ports" before first U.K. port.

RADIO: Traffic should be routed through any British coast station.

Clyde Pilot Vessel: Calling 2182 MHz. Working 2241 MHz. Hours: Listens each hour + 15 minutes.

VHF: Clyde Port Estuary Radio: Channels 16, 14, 12 and 11.

Gourock Pilots Radio: Channels 16 and 14.

RADAR: There is no port radar.

BERTHING: *General Cargo:* Discharged and loaded at Shieldhall Riverside Quay and King George V Dock, Glasgow.

Container Vessels: Handled at Greenock Container Terminal where 2 ships can work simultaneously. Berth is equipped with 1×40 ton and 2×35 ton transporter cranes with an outreach of 105 ft. beyond the line of the cope. The quay is 1,200 ft. long with a depth of 42 ft. at LWOST.

Ro-Ro Units: Can be handled at King George V Dock, Glasgow and at James Watt Dock and Garvel Basin, Greenock.

BULK HANDLING FACILITIES: Iron ore and coal are handled at Hunterston Terminal where discharging vessels up to 350,000 d.w. tonnes. and loading vessels up to 70,000 d.w.tonnes can be accommodated. Depth alongside up to 29 m. Max. draft 27.4 m. 2 unloaders, rates up to 3,000 tonnes per hour for ore and 1,000 tonnes per hour for coal.

Scrap iron and minerals are handled at Rothesay Dock (Clydebank) where vessels up to 535 ft. in length with a draft of 31 ft. in fresh water can be accommodated. With prior arrangement vessel in excess of 535 ft. may be accepted.

Sugar and molasses are handled at James Watt Dock, Greenock. Vessels using the dock are restricted to a salt water draft of 27 ft. 9 in. and a beam of 70 ft. The max. length accepted for sugar vessels is 550 ft. and for molasses vessels 500 ft.

Grain is discharged at Meadowside Quay (Glasgow) to the 176,000 tonne granary which is situated behind the dockside goods sheds. There are 6 grain elevators each with a capacity of 200 t.p.h. Max. draft for vessels using Meadowside Quay is 32 ft. in fresh water.

CRANES: Cranes presently in use by Clyde Port Authority at Glasgow and Clydebank are: 13×5 tons, 5×6 tons, 3×10 tons, 1×25 tons, 1×30 tons, 1×35 tons, 1×165 tons.

BRIDGES: Erskine Bridge which spans the navigable river channel has a 180 ft. working clearance above MHWS.

STEVEDORES: Arranged by ship's Agent in accordance with Master's advice of ETA.

TUGS: As required by Master and under advice of the Pilot. Tug's lines are always used.

MEDICAL: Full medical and hospital facilities available.

TANKERS: *Finnart (BP Oil Ltd.):* Privately operated crude oil terminal. Vessels up to 500,000 d.w.tonnes with a draft of 90 ft. in salt water can be accommodated.

Bowling (Esso Petroleum Co. Ltd.): Privately operated oil product terminal. Under suitable conditions of tide and weather vessels up to 550 ft. in length can be swung in the river off the installation.

DENSITY: Glasgow – Fresh; Greenock – Brackish; Hunterston – Salt.

FRESH WATER: Available by hose at all berths operated by the Clyde Port Authority.

FUEL: Most major oil companies are represented in Glasgow. All grades of bunker oil can be supplied by barge or road tanker and by pipeline at Bowling Terminal.

FIRE PRECAUTIONS: Masters of vessels at the Authority's berths are given, on arrival, a copy of the Port Fire Protection Regulations.

Oil tanker berths are privately owned and the operators issue their own Fire Regulations.

CONSULS:

Belgium
Brazil
Canada
Cyprus
Denmark
Domincan Republic
Ecuador
Finland
Gambia
Greece
Iceland
India
Italy
Netherlands
Norway
Panama
Peru
Philippines
Poland
Portugal
Spain
South Africa
Sweden
Thailand
Uruguay
West Germany

REPAIRS: All types of repairs can be effected in the area.

DRY DOCKS: Largest drydock is 1,000 ft. long with 145 ft. clear width at entrance.

In addition there are 10 other smaller drydocks in the Glasgow and Greenock area.

SURVEYORS: The following are represented in the area: Lloyd's Register of Shipping, Norske Veritas Register of Shipping, Bureau Veritas Register of Shipping, American Bureau of Shipping, The Salvage Association.

In addition, a number of independent marine and cargo surveyors are available.

GANGWAY/DECK WATCHMEN: Shore watchmen are available from private contractors but need only be engaged at the discretion of the Master.

HATCHES: Opening and closing of mechanical hatches may be carried out by ship's crew. Wooden hatches are handled by dock labour.

CUSTOMS ALLOWANCES: Standard United Kingdom allowances.

CARGO GEAR: Under normal circumstances, cargo is handled by shore equipment.

REPATRIATION: Repatriation can be arranged to all countries.

AIRPORT: Glasgow Airport (12 miles from city centre) and Prestwick Airport (30 miles from city centre) are both served by a number of major airlines.

Air UK have flights from Glasgow to Amsterdam.

TIME: GMT, but British Summer Time (1 hour ahead of GMT) in force during the Summer.

HOLIDAYS: Details of official dock holidays on which cargo work cannot be arranged can be obtained from the Marketing Department of the Port Authority, on request.

SERVICES: Facilities are available for repairs and service to radio equipment and navigation aids. A compass adjuster is based at Glasgow.

There are no facilities for cleaning oil tankers, but small quantities of oil/sludge may be removed by road vehicles.

SHORE LEAVE: Shore leave is at Master's discretion.

IDENTIFICATION CARDS: Not required to be carried.

REGULATIONS: Tankers having on board or having carried cargo with a flashpoint below 73°F are prohibited from proceeding East of Bowling.

Special regulations apply to the handling and transit of explosives.

There are special requirements in force regarding the production of a gas free certificate for OBO and ore/oil vessels calling at Hunterston Ore/Coal Terminal.

It is a requirement of the Clyde Port Authority that every vessel in excess of 1,600 g.r.t., constructed or adapted for the carriage of oil, chemicals or gas in bulk, complies with the reporting procedures as specified in Statutory Instrument 1981 No. 1077, entitled, The Merchant Shipping (Tankers) (EEC Requirements) Regulations 1981.

BANKS: All National and many European and International banks have branches in Glasgow.

SHIP SUPPLY SERVICE: *Surface Craft:* Clyde Marine Motoring Co. Ltd., Princes Pier, Greenock, Renfrewshire.

Clyde Shipping Tugs Ltd., Clydesdale Bank Building, Greenock, Renfrewshire.

Cory Ship Towage (Clyde) Ltd., Customs House Quay, Greenock, Renfrewshire.

Marine Craft Services (Clyde) Ltd., 87 Main Street, Fairlie, Ayrshire.

R. Ritchie, Esq., 1 Royal Street, Gourock, Renfrewshire.

Talisman Offshore Services, 46 Cambusdoon Place, Kilwinning, Ayrshire.

Helicopters: Air Charter (Scotland) Ltd., Glasgow Airport, Paisley.

Burnthills Aviation Ltd., Glasgow Airport, Paisley.

McAlpine Helicopters Ltd., Glasgow Airport, Paisley.

POLICE/AMBULANCE/FIRE: Can be called on the public telephone system by dialling 999 or by contacting Clyde Port Estuary Radio on VHF Channel 16.
EMERGENCY CO-ORDINATION CENTRE: H.M. Coast Guard (Marine Rescue and Co-Ordination Centre), Navy Buildings, Eldon Street, Greenock. Tel: (0475) 29988. Telex: 777006.
TELEPHONES: British Telecom can supply telephones at most berths. Agent will arrange and advise costs.
AUTHORITY: Clyde Port Authority, 16 Robertson Street, Glasgow G2 8DS. *Tel:* (041) 221-8733. *Telex:* 778446. *Contact:* J. Mather, Managing Director. Captain D. B. McMurray, Harbour Master.
AGENT: *Glasgow and Finnart Tanker Terminal:* Denholm Ship Agency Ltd., Inter City House, 80 Oswald Street, Glasgow, G1 4PX. (Head Office of Agency Division). Tel: (041) 221 4971. After hours: (041) 771 3408, (036089) 2647. Telex: 77396. Cables: Denholm, Glasgow.
Greenock and Hunterston: Denholm Ship Agency Ltd, Customhouse Quay, Greenock PA15 1EG. Tel: (0475) 22276. After hours: (0475) 33241. Telex: 777767. Cables: Denholm, Greenock.

COLCHESTER: 51.54 N. 00.55 E. (See Plan Book)

PORT LIMITS: Brightlingsea Anchorage.
DOCUMENTS: As normal British port.
PILOTAGE: Part of Trinity House London District. Sunk Pilot Cutter cruises near the Sunk Light Vessel. Give as much notice as possible by radio telephone or VHF Channel 16. River Pilots are ordered by local Agents and board vessels at Brightlingsea Anchorage.
ANCHORAGES: Off Brightlingsea, in 3 to 4 fathoms.
RESTRICTIONS: Vessels with deck cargoes of timber, and vessels which are large for the port not worked at night.
MAX. SIZE: Max. length at Colchester, 200 ft. Max. length at Rowhedge and Wivenhoe, 250 ft. Max. draft at Colchester, 12 ft. 06 in. Spring tides, 18 ft. 06 in. neap tides. Max. draft at Rowhedge and Wivenhoe, 14 ft. 06 in. Spring tides, 10 ft. Neap tides.
HEALTH: Normal procedure. Any abnormal conditions advise Harbour Master. Pratique automatic if from U.K. port.
Also see "Health – All Ports" before first U.K. port.
RADIO: North Foreland Radio, Humber Radio or Niton Radio. 2182 kHz.
VHF: "Colchester Harbour Radio", VHF Channel 14. Office hours watch plus tide time watch when ships expected. Vessels should call when approaching port anchorage, giving deepest draft, and keep listening watch on Channel 14 when manoeuvring.
RADAR: None.
TUGS: Small motor tug available through Harbour Master.
BERTHING: 1,000 ft. of private quays. 3,200 ft. of public (corporation) quays. All berths use shore equipment and handle all cargoes. Port dries at LW. (Berths at Wivenhoe 450 ft., at Rowhedge 500 ft. additional to above.)
CRANES: A number of 4 ton – 6 ton mobile cranes.
BULK CARGO FACILITIES: Bulk cargoes handled at most berths, 3 grain silos.
STEVEDORES: Arranged by Local Agents. Average rate for all cargoes 50 metric t.p.h.
MEDICAL: Advance notice if possible. Hospital available.
TANKERS: One oil depot for discharging only, light fuels handled. No slop facilities.
DENSITY: Density varies with tide, average 1015.
FRESH WATER: Fresh water points on quays, rate approximately 9 tonnes/p.h., cost approximately £2 per tonne.
FUEL: All fuel deliveries by road tanker.
FIRE PRECAUTIONS: None.
CONSULS: None.
REPAIRS: Repairs can be carried out. One shipyard (J. W. Cook) at Wivenhoe.
SURVEYORS: Lloyd's Agent (W. Fieldgate & Son) or ship's Agent can arrange.
GANGWAY/DECK WATCHMEN: Not normally required.
OPENING/CLOSING HATCHES: By crew.
CUSTOMS ALLOWANCES: British standard allowance.
CARGO GEAR: Shore gear, no heavy lifts.
REPATRIATION: Arranged by Agents.
AIRPORT: London 70 miles.
TIME: GMT. GMT plus 1 hour in Summer.
HOLIDAYS: Normal British holidays, work sometimes arranged.
POLICE/AMBULANCE/FIRE: Tel. 999.
EMERGENCY CO-ORDINATION CENTRE: U.K. Coastguard – Dial 999 or VHF Channel 16 or Tel: Walton-on-Naze 5518.
TELEPHONES: None.
SERVICES: Compass adjusting arranged by Agents.
BANKS: Barclays, Midland, Nat-West, Lloyd's and Williams & Glyn all have branches in the town.
STORING: See "Prelims" page viii.

1. By truck.
2. Not applicable.
3. Yes, subject to cargo handling.
4. Yes
5. Normal U.K. Requirements.
6. Yes.

SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Not required.
DELAYS: Normally tidal delays only.
AUTHORITY: Colchester Borough Council, Harbour Office, Hythe Quay, Colchester, Essex, United Kingdom. *Tel:* Colchester (0206) 575858. *Contact:* Captain K. Goody, Harbour Master.

COLERAINE: 55.10 N. 06.46 W.

PORT LIMITS: 5.5 mile tidal stretch of the River Bann to the riv entrance.
DOCUMENTS: Normal U.K. requirements.
PILOTAGE: Compulsory, order through Agents or direct from Harbo Office or Pilot. 24 hours notice preferred. Pilot Station, Portstewart Ba Pilot boat call sign "S. G. Martin", call on Channel 16, workin Channel 12.
ANCHORAGES: Vessels awaiting tide can anchor in Portstewart Bay offshore winds or in Skerry Roads, East of Portrush.
RESTRICTIONS: The port is tidal and deeper vessels are restricted high tides. Limited night working.
MAX. SIZE: The recommended maximums are 250 ft. length, 40 breadth, 14 ft. 6 in. draft.
HEALTH: Normal U.K. procedure.
TUGS: Not normally required, nearest available tug is at Londonder Harbour.
BERTHING: Main Quay 900 ft., Detached Wharf 140 ft. and separa Oil Jetty. Max. draft vessels may ground safely on mud at LW.
CRANES: Two Priestman Lion 35 grabbing cranes for bulk coal, et One NCK Pentland for bags, pallets, etc. Heavy lift cranes arrangement.
SPECIALISED CARGO HANDLING FACILITIES: No facilities container or Ro/Ro traffic.
BRIDGES: A railway bridge with 60 ft. lifting span crosses the rive 0.5 miles down stream from the Harbour.
STEVEDORES: Messrs Wm. Dalzell & Sons Ltd.
MEDICAL: Full hospital/medical facilities available.
DENSITY: Varies from salt to fresh with tide.
FRESH WATER: Fresh water is available from mains hydrants at a berths.
FUEL: All grades available, 48 hours notice advisable.
REPAIRS: Local engineers can carry out most repairs. Divers als available for underwater work.
DRY DOCKS: None.
HATCHES: Hatches normally opened or closed by the crew.
AIRPORT: Belfast (Aldergrove 40 miles).
HOLIDAYS: 1st January, Easter Monday/Tuesday, May Day, 12th/13t July, Last Monday in August, 25th/26th December.
POLICE/AMBULANCE/FIRE: Tel: 999 in emergencies.
DELAYS: Vessels may be delayed by swell at the river entrance in ver bad weather conditions.
AUTHORITY: Coleraine Harbour Commissioners, The Harbour Offic The Quay, Coleraine BT52 1BJ, Co. Londonderry. *Tel:* 0265-201 *Contact:* W. R. Dalzell, Harbour Manager.

COWES (including Newport, Isle of Wight): 50.46 N. 01.18 W.

DOCUMENTS: As for "Portsmouth".
PILOTAGE: See "Southampton" for sea pilotage. As Cowes is within th Isle of Wight Pilotage District, a Sea Pilot must be employed by a vessels subject to compulsory pilotage. Trinity House Cowes Pilo conduct vessels between the anchorage area and berths in Cowe Harbour and Newport, 5 miles further up the River Medina. Pilots boa from launches *Thosbro 1 and 2,* which are equipped with VH Channels 16, 12, 9 and 6. A Pilot can always be obtained by makin link-call to Cowes 293812 or 292501 (24 hours service) or vi Southampton Pilots VHF Channel 16.
ANCHORAGES: Vessels waiting to proceed to Cowes or Newpo should anchor within the area bounded by Old Castle Point, "Prin Consort" light-buoy and the harbour entrance light-buoy. The prohibite anchorage on either side of the leading line must be respected, an vessels must not obstruct the fairway into Cowes, nor the deep wate channel used by large vessels bound for Southampton. The moorin buoys are reserved for hovercraft and the Trinity House lighthous tender. Mooring chains run East and West for 500 ft. from each of thes mooring buoys. Tidal streams in the anchorage are strong. Cowes is a international yachting centre, and the anchorage is often crowded wit small craft, especially during July, August and September.

Cowes Roads anchorage, North of the deep water channel, is used b large vessels waiting to berth in Southampton Water, taking bunkers o changing crews.
MAX. SIZE: Cowes – 300 ft. long, 17 ft. draft at high water spring Vessels must expect to take the bottom in soft mud at low wate Newport – 150 ft. long, 8 ft. draft. Newport Harbour practically dries o at low water.
RESTRICTIONS: Tankers may load and discharge at all times, subje to the Petroleum Acts.

A channel marked by small orange buoys is reserved for the use o hovercraft. Other vessels using the area should do so with caution.
FLOATING BRIDGE: A chain ferry plies between East and Wes Cowes. An all-round amber light is shown from the leading end of th bridge when under way. Approaching vessels should sound 1 prolonge blast on the whistle when not less than 0.5 mile away. The bridge give way to all river traffic. The chains of the ferry are at least 2 ft. above th river bottom in mid-channel at all times.
HEALTH: See "Portsmouth".
RADIO: See "Southampton" for Sea Pilot communications. Se "Pilotage" for local communications.

Southampton Port Radio, the port operations and radar station for th port of Southampton, will often assist in cases of difficulty, althou there is no obligation for them to do so and they accept no responsibili Southampton Port Radio VHF Channels 16, 14, 12, 11, 10, 18, 20 an 22. Medium frequency through Niton Radio.

TUGS: Harbour tug (3.5 ton bollard pull) and tow-boat launches are available to assist vessels.

BERTHING: *Medina Wharf.* Vessels 17 ft., spring draft, length 270 ft. OAL. Loading and unloading bulk cargoes of stone, coal, fertilisers, grain, etc.

Kingston Wharf. As for Medina Wharf, above.

STEVEDORES: By arrangement with Agent and wharf owners. Normal working hours: 0800 – 1700 hrs. Monday to Friday. Overtime on Saturdays, etc., by arrangement. No work on public holidays.

MEDICAL: All medical facilities are available. Agent should be given advance notice of requirements. If call is solely to land sick personnel, see "Southampton" entry.

DENSITY: Cowes – 1025 salt water.

Newport – varies according to amount of recent rainfall and state of tide.

FRESH WATER: Available on all commercial wharves.

FUEL: Fuel and Diesel oil available by arrangement with Agent.

CRANES: Hammerhead crane at Elliot Turbo Machinery Ltd., 50 tons. Medina Wharf: 2 grabbing cranes of 4.5 tons for bulk cargoes.

OPENING/CLOSING HATCHES: By ship's crew.

REPAIRS: All hull and engine repairs undertaken to vessels capable of Cowes entry. Graving dock for ships up to 200 ft. in length and 14 ft. draft.

SERVICES: Compass adjuster, radar and radio mechanics available locally. Charts and general stores available locally.

SHIP SUPPLY SERVICE: *Thomas Bros.:* 2×40 ft. launches (20 knots) available throughout 24 hours for stores – 12 persons – liberty boats, surveys, etc., and marine contract work – U.K. and Northern France. Tel: (0983) 293812.

Solent Cruises: 2×45 ft. fast vessels with twin screw, D.O.T. loadline exemption, able to carry up to 89 persons (reduced number in Winter).

Solent Cruises are contractors to the local authorities for the transfer of sick persons from the Isle of Wight to the mainland.

Contact on VHF Channel 16, (Jenny Lee – 2 RAH) when afloat or Telephone Isle of Wight (0983) 64602.

A 24 hour service is offered for transport of personnel, stores and passengers.

Marine Support and Towage Limited: Tel: (0983) 295369, 296424, 297363 (24 hours). Office (0983) 296934.

Details of Vessels:

Name	Length	General Description and Capabilities
Roperunner	33 ft.	Heavily fendered steel work launch, used for running mooring ropes/wires for large vessels 6,000 tons – 250,000 tons. Large open after work space, forward wheelhouse. Fitted with radar and multi-channel VHF radio. 120 h.p. diesel, 1 ton bollard pull. Speed 8 knots.
A. Stopford	40 ft.	Keith Nelson twin screw diesel fast launch, for personnel transport and light storage duties, open after cockpit with towage facility. Licenced for 12 passengers. 2×145 h.p. diesels. Speed 16 knots – 18 knots. Fitted with radar, VHF radio and echo sounder.
MST Lock	64 ft.	Steel harbour and esturial motor tug. 300 h.p. Crossley diesel, 3 ton bollard pull. Fitted with radar, VHF radio and echo sounder.
Presstan	68 ft.	Steel coastal tug, full D.O.T. loadline. 545 h.p. diesel, 6.5 tons bollard pull. Fitted with radar, VHF radio and echo sounder.

Above vessels are available on hourly, daily or long term charter, U.K. coast or continent. Company is experienced in offshore back-up, ship supply, etc. A 24 hour office facility call out is maintained.

St. Helens Laundry Ltd.: Tel: (0983) 872250, 873731.

Able to supply laundry and dry cleaning services to any vessels at Southampton Docks, Fawley Terminal, Netley, The Solent, Portsmouth Harbour or Docks, and the St. Helens Roads and Nab Anchorages.

OIL POLLUTION: Cowes and the Solent are world-famous yachting centres. Pollution is dealt with severely.

AUTHORITY: Cowes Harbour Commissioners, Harbour Office, Town Quay, Cowes, Isle of Wight, PO31 7AS. *Tel:* (0983) 293952. *Contact:* Captain H. N. J. Wrigley, Harbour Master/Clerk.

CROMARTY FIRTH PORT (See Plan Book)

(A) INVERGORDON.
(B) NIGG OIL TERMINAL.

(A) INVERGORDON: 57.41 N. 04.10 W.

DOCUMENTS: *At Boarding on arrival:*

1 copy Maritime Health Declaration and Derat Exemption.

Form I.S.6 – List of members of the crew who are aliens or who were engaged outside the United Kingdom.

Form C.13 – General Declaration (in duplicate).

Form C.14 – Ship's Stores Declaration (in triplicate).

Form C.16 – Cargo Declaration (in duplicate).

Form C.142 – Crew Declaration (in duplicate).

List 142.A – Parcels list – small packages of merchandise and addressed packages not borne on the ship's report.

Account of cargo in unregistered spaces (deck cargo) if arriving from a port outside Home Trade limits.

For vessels carrying cargo on deck or in other unregistered spaces (e.g. oil fuel in double-bottom and other ballast tanks), the Master must also complete Form SUR.238 Declaration of Deck Cargo in duplicate.

Delivery of forms. When a vessel is not boarded by a Customs Officer on arrival, 1 copy of each of the forms listed must be delivered by the Master or his authorised agent to the proper place at the port of arrival. The Regulations require delivery of these forms within 3 hours of the vessel's arrival at the place of loading or unloading. The second copy of Forms C.14 and C.142 must be retained on board by the Master or other responsible officer for use by Customs Officers who may subsequently visit the vessel.

Certificate of Registry.

Certificate of British Tonnage.

Light Dues Certificate relating to the vessel.

To the Agent:

Bills of Lading.

Cargo Manifests.

PILOTAGE: Pilotage not compulsory for Cromarty Firth except West of 04° 09′ W. and to Admiralty Pier. Vessels under 300 g.r.t. are exempt. Cruising station of pilot boat is the Cromarty Lighthouse where Pilot will board. Pilot boat painted black hull, buff upper structure.

Pilot boards from tug at Fairway Buoy for large tankers.

Approaching vessels may give their ETA to pilot station via VHF Channel 16, when in the vicinity of 30 miles, but a 24 hour notice will be required. In the event of bad weather, vessels will be guided by Pilot launch to safety where Pilot will board. Watch kept on VHF Channels 16 and 11 (24 hours) by Cromarty Firth Port Authority. Call sign "Cromarty Firth Port Control". Local weather forecasts available.

ANCHORAGES: Large tankers anchor 1 mile South of Fairway Buoy (L. Fl. 10 secs. Racon). Main anchorage West of Cromarty Ness Light.

RESTRICTIONS: Vessels may enter between 0600 hrs. and 2200 hrs. when Pilot will be available.

MAX. SIZE: Max. permissible length 800 ft., draft 36 ft. Also see "Berthing".

Nigg Oil Terminal: See "Section B".

HEALTH: International quarantine signals to be used. Advise "Portelth Dingwall" in advance if any suspected diseases on board.

Also see "Health – All Ports" before first U.K. port.

RADIO: Vessels approaching from North should pass their ETA cable via Wick Radio GKR 431, and vessels approaching from East via Stonehaven Radio GND 458 to their Agents.

VHF: Link calls through Cromarty Radio (based at Wick) Channel 16 and working Channel 28. Also see "Pilotage".

TUGS: Caledonian Towage Co. Ltd. – Tel: Invergordon 852611 – suitable tugs stationed at the port which work in conjunction with Pilots. Tug's lines used.

BERTHING: *Admiralty Wharf:* The wharf is the property of M.O.D. (Navy), however the berths are used regularly by commercial vessels.

Berths 1 and 2 (Outer South): Lengths 443 ft. Max. draft 36 ft. Max. LOA 800 ft. Also see "Tankers".

Berth 3: Max. draft 18 ft. Max. LOA 220 ft.

Berth 6: Max. draft 18 ft. Max. LOA 180 ft.

British Alcan Pier: Outer Berth: Length 318 ft. Dredged depth 38 ft. MLWS (1974). Max. berthing length 750 ft. approx. using dolphins. (50,000 d.w.t.)

Inner Berth: Length 200 ft. Depth 20 ft. MLWS (1974).

Invergordon Oilfield Support Base, Invergordon: Front berth 150 m., side berth 60 m. Front dredged to 8.9 m. below C.D. Side 4.3 m. minimum. Bunkers diesel – see "Fuel".

CRANES: Mobile cranes up to a maximum 75 tonnes available from stevedoring firms, plus crane-barge of up to 200 tonnes capacity from Caledonian Towage.

STEVEDORES: F. Lyons (Stevedores and crane hirers) – Burghead STD (0343) 835360. James Jack (Stevedores and crane hirers) – Tel: Evanton STD (0349) 830388.

MEDICAL: Medical cases can be dealt with at short notice through local Agent. Hospital facilities available.

TANKERS: Vessels up to 800 ft. Max. draft 36 ft. may use Admiralty Wharf, Berths 1 and 2 combined. Also see "Section-B".

DENSITY: 1022.

FRESH WATER: Obtainable alongside quay. Rate of delivery 30 t.p.h., each hydrant.

FUEL: This can be ordered through local Agent, delivery by road tanker, small quantities, notice required.

GANGWAY/DECK WATCHMEN: Ship's gangway and safety net required. Watchmen from ship's personnel.

OPENING/CLOSING HATCHES: Normally carried out by crew.

CERTIFICATES: The following Certificates are required to be held on board for production when required:

International Load Line Certificate.
Safety Construction Certificate
Safety Equipment Certificate.
Safety Radio Certificate.

CUSTOMS ALLOWANCES: Following quantities are generally left out for use on board by each member of crew:

Ships arriving from foreign ports within Home Trade Limits: Tobacco 125 gm. (4 oz. or 100 cigarettes). Spirits 0.185 litre (0.25 bottle), wine 0.375 litre (0.5 bottle).

All other ships from foreign ports: Tobacco 250 gm. (8 oz. or 200 cigarettes). Spirits 0.375 litre (0.5 bottle), wine 0.75 litre (1 bottle).

IDENTIFICATION CARDS: Not required.

REPAIRS: General repairs undertaken by Cromarty Firth Engineering Co. Ltd. – Tel: Evanton 830551; MacKay & MacLeod – Tel: Evanton 830363 and Wm. Cook Engineering – Tel: Evanton 830484.

REPATRIATION: Can be arranged.

AIRPORT: Dalcross Airport at Inverness, operated by British Airways, distance from Invergordon 30 miles (via Kessock Bridge).

TIME: British Summer Time, 1 hour advanced on GMT. GMT in Winter months.

HOLIDAYS: 1st and 2nd January. Christmas Day.
POLICE/AMBULANCE/FIRE: Police, tel. Invergordon 852222 or dial 999; Ambulance, arrangements through local doctor, tel. Invergordon 852522; Fire Station, dial 999 and ask for their service.
TELEPHONES: H.M. ships only.
SHORE LEAVE: Allowed.
GENERAL: Permit must be obtained from Port Authority or Ministry of Defence when burning or welding is to be carried out at Admiralty Pier.
DEVELOPMENTS: Reclamation is taking place of 8 acres of land adjacent to the existing Oilfield Support Base on the Westward side, as additional lay-up area.

(B) NIGG OIL TERMINAL: 57.41 N. 04.02 W.

LOCATION: Nigg Oil Terminal operated by Britoil plc., provides shipping facilities for crude oil piped ashore from the Beatrice Field in the Moray Firth. The terminal is located on the North side of the Cromarty Firth in approximate position Lat. 57° 41.5′ N., Long. 4° 02.5′ W. and comprises a single berth jetty linked to the shore by a trestled roadway.
PILOTAGE: East of 4° 09′ W. the Cromarty Firth is a non-compulsory pilotage area. Vessels using Nigg Oil Terminal must however employ the Admiralty Pilot, who will board at the fairway buoy.
ANCHORAGE: The recommended anchorage for vessels awaiting a berth is 1 mile South of the fairway buoy in approximate position Lat. 57° 40′ N., Long. 3° 54′ W. An anchorage within the Cromarty Firth may be made available by the Port Authority.
RESTRICTIONS: *Depth alongside berth:* A minimum depth of water of 21 m. below chart datum is available alongside the berth.

Channel depths: The least depth in the approaches to the terminal in August 1980 was 15.1 m. below C.D. and occurred in the buoyed fairway approximately 0.5 nautical miles within the port limits.

Tidal range: Tides range at Springs from 0.8 m. at LW to 4.3 m. HW.

Tidal restrictions: Subject to draft, vessels will be able to berth and sail at any state of the tide, possibly excepting Spring ebbs. Berthing head Eastwards is to be preferred.

MAX. SIZE: *Length restrictions at berth:* Max. 290 m. LOA. Minimum 190 m. LOA.
Max. displacement: 157,500 tonnes.
VHF:

Communications:	Port Authority	Channel 11 & 16
	Port Emergency	Channel 11
	MOD Pilot	Channel 13
	Tugs	Channel 13
	Pollution Control	Channel 10
	Nigg Oil Terminal	Channels 49, 50

Portable VHF/UHF sets: These must not be used within the Terminal Area unless they are classed as "intrinsically safe". The Terminal will lend approved VHF equipment if necessary.
TUGS: Berthing and unberthing operations will be assisted by a minimum of 2 tugs of 50 tons and 38 tons bollard pull respectively. A relief tug of 40 tons bollard pull may be substituted for either of these tugs. A third tug of 19 tons bollard pull will also be available if required. The vessel's agent will arrange for tugs as required by the Master. A firefighting tug will remain on standby at all times when a tanker is at the Nigg Oil Terminal Jetty. Whilst underway within Port limits a 1 tug escort is required.
BERTHING: *Berthing velocity:* A Doppler speed of approach measuring instrument is installed on the jetty with a dual display atop the jetty gangway tower. This display gives digital information in ft./min. on the speed of approach of each end of a berthing vessel. The digital display is supplemented by coloured lights calibrated as follows:
Flashing green – speed of approach 0/10 ft./min.
Flashing amber – speed of approach 11/20 ft./min.
Flashing red – speed of approach greater than 20 ft./min.
A steady green light indicates a receding velocity.

Vessels must not exceed a berthing velocity of 20 ft./min., regardless of displacement, and should aim to achieve a berthing velocity of less than 10ft./min. (i.e. 2 flashing green lights.).

Mooring arrangements: The Plan (see "Plan Book") depicts a mooring arrangement for a typical 80,000 d.w.t. vessel. Similar configurations will be employed for all vessels in the range 40,000/120,000 d.w.t.

Seebeck quick release mooring hooks are fitted on all dolphins.

Each berthing dolphin is fitted with a 3-hook assembly; each hook of 100 tonnes capacity.

Each berthing dolphin is fitted with a 2-hook assembly; each hook of 100 tonnes capacity.

The 50 tonnes bollards at the corners of the jetty head are for use by small craft only.
LOADING: *Loading arms:* 3×16 in. Emco Wheaton loading arms, each designed to ANSI 150 lb. pressure rating, are installed on the jetty head. Each arm may be used either for deballasting or for loading and these operations can take place concurrently provided that the terminal approves the system of onboard separation.

The minimum acceptable ship's figure size is 12 in. Nominal Bore. The M.I.B. couplings can be adjusted to 12 in., 14 in. or 16 in. flange sizes. Vessels must present manifold flanges with a minimum clearance of 8 in. behind the flange and 3 ft. axial clearance around the centre of the flange face in order to provide adequate clearance for the coupling jaws. If necessary spool pieces must be fitted. Flanges of steel or nodular iron must be presented. Cast iron manifold materials are not acceptable. The vessel's manifold connections must remain within an envelope between 2.85 m. and 6.1 m. off the berthing face and between 4.6 m. and 25.6 m. above chart datum.

If ranging or drift-off exceeding 2.7 m. occurs the coupling ball valves will close and the couplings will automatically disconnect.

If sustained wind speeds exceed 35 knots loading operations will stop and arms will be drained. Arms will be disconnected if wind speeds exceed 40 knots.

Loading rates and pressures: Loading rates of 50,000 bbls./hour ar attainable utilising 2 loading arms. the maximum pressure permitted a the ship's rail is 128 p.s.i.

Ballast reception: Ballast water reception facilities are available at th Terminal. Ballast must not be discharged overboard within the por Vessels not having segregated ballast tanks must deballast ashore Vessels with segregated ballast must retain their ballast onboard fo inspection and analysis after berthing, and disposal of this ballast i subject to the results of this inspection and analysis. Permission will no be granted for the overboard discharge of segregated ballast with an o content in excess of 5 parts per million.
FRESH WATER: Fresh water is available on request from the Termina from a connection on the jetty head. Approximate maximum deliver rate is 30 t.p.h.
FUEL: Bunkers are not available at Nigg Oil Terminal.
REPAIRS: Repairs may only be commenced upon receipt of a wor permit signed by the Terminal Superintendent. Immobilisation of vessel alongside the jetty is only permitted with the written permission o the Terminal Superintendent and of the Port Authority.

Readiness to vacate berth: Engines and all other essential equipmen of vessels alongside the jetty must be maintained in a state of readines for vacating the berth at short notice.
STORING: Loading of stores onto a vessel alongside the jetty may b carried out only with the specific permission of the Termina Superintendent and in a manner and at a time approved by him.
SHORE LEAVE: A pass system will operate. Shore leave will normall be by launch from the jetty launch landing pontoon. Shore leav arrangements are the responsibility of the vessel's Master and wi normally be made by the ship's Agent. Details of the arrangements ar to be provided to the Terminal Superintendent.
GENERAL: *Permanent watch:* During operations a responsible membe of the ship's crew must be stationed in the vicinity of the manifold.

Smoking: No smoking is permitted in the Terminal Area or on th weather deck of any vessel in the Terminal Area. Smoking may b permitted at the Master's discretion in two onboard locations, to b approved by the Terminal Superintendent.

Emergency: In the event of an emergency any assistance require must be summoned via the Terminal Control Room.

Craft alongside: Craft may not lie alongside a vessel at the jett without the written permission of both the Master of the vessel and th Terminal Superintendent.

Refuse: No refuse or waste may be disposed of overboard from vessel within the Port.

I.S.G.O.T.T.: Vessels must be provided with a copy and be familia with the contents of the International Safety Guide for Oil Tankers an Terminals. Reference copies are available on temporary loan from th Terminal.

Important telephone numbers:
Nigg Oil Terminal: Nigg (086 285) 631.
Cromarty Firth Port Authority: Invergordon (0349) 852308.

AUTHORITY: Cromarty Firth Port Authority, Port Office, Shore Roa Invergordon, Ross-shire IV18 0HD. *Tel:* Invergordon 852308. *Tele* 75263. *Contact:* Captain D. R. F. Miller, Harbour Master. Captain A. S Black, Port Manager.
AGENT: Denholm Ship Agency Ltd., Clydesdale Bank Buildin P.O.Box 8, 64 High Street, Invergordon, Ross-shire. Tel: (0349) 85334 After Hours: (086 284) 2495, (0349) 853117. Telex: 75546.

DARTMOUTH (Including Totnes): 50.21 N. 03.34 W.

(See Plan Boo

PORT LIMITS: A line from Inner Froward Point to Combe Point.
DOCUMENTS: Normal documents for U.K. ports.
PILOTAGE: No direct radio contact with Pilots. Contact local Agent o Berry Head Coastguard Station who will telephone Pilot.
Pilot station 5 cables S.S.E. Castle Ledge Conical Buoy.
ANCHORAGE: Anchor at pilot station.
MAX. SIZE: Max. length 400 ft., max. draft 26 ft.
HEALTH: Pratique granted by Customs on arrival.
Also see "Health – All Ports" before first U.K. port.
RADIO: Route cables, etc., through Niton or Lands End Radio Station
VHF: Watch maintained on Channel 11, 0900 – 1700 hrs. durin weekdays. Call sign "Dartnav".
TUGS: Tugs are not normally available.
BERTHING: All berthing on midstream buoys.
Totnes: Max. Size: At Spring Tides coasters of about 1,000 tons up t 240 ft. LOA and drawing 12.5 ft. proceed up river to the Baltic Wha which lies half a mile below Totnes Bridge.
Berthing: 750 ft. quay. Dries out all tides.
MEDICAL: All medical services are available; if possible give notice o requirement.
DENSITY: Normally salt. 1025.
FRESH WATER: Available by barge.
FUEL: Diesel available by barge.
FIRE PRECAUTIONS: Normal.
GANGWAY/DECK WATCHMEN: It is advisable to have watchmen.
OPENING/CLOSING HATCHES: Crew open.
CARGO GEAR: Ship's gear.
REPAIRS: All repairs unless of a major or underwater type can b carried out.
SURVEYORS: West Marine Surveyors & Consultants Limite Consulting Marine Surveyors, Engineers & Naval Architects, The O Custom House, Brixham, South Devon. Tel: Brixham (STD 080 4 2604. After normal office hours tel: 0803 842925. Cables: Surveyo Brixham. Telex: 42962 – Survey G.
REPATRIATION: Facilities exist.

AIRPORT: 35 miles from Exeter airport. Internal and short range Continental flights.
TELEPHONES: Not normally available, except for H.M. ships.
HOLIDAYS: Not applicable.
POLICE/AMBULANCE/FIRE: Dial 999 for emergencies. Local hospital adjacent to Harbour Office.
SHORE LEAVE: Permitted. Seaman's book adequate.
GENERAL: Dartmouth does not now operate as a commercial port except for small vessels up to about 800 d.w.t. en route to Totnes, although the harbour is suitable for ships of 18,000 d.w.t., and mooring buoys are available for such vessels.

Lay-up facilities available for vessels up to 22,000 tons displacement.
AUTHORITY: Dart Harbour and Navigation Authority, The Old Post Office, South Embankment, Dartmouth, Devon. *Tel:* Dartmouth 2337/3767. *Cables:* "Harbour Master Dartmouth". *Contact:* Captain C. J. Moore, Harbour Master.

DOUGLAS: Isle of Man: 54.09 N. 04.28 W.

(See Plan Book)

PORT LIMITS: That part of the coast including all creeks, bays and headlands from HW mark Ordinary Spring Tides which extends from Port Soderick Landing Jetty (Lat. 54° 07′ 24″ N., Long. 04° 31′ 48″ W.) in a Northerly direction to the most Easterly point of Clay Head (Lat. 54° 11′ 42″ N., Long. 04° 23′ 05″ W.) thence in a straight line drawn in a 135° True (S.E.) direction for 3 nautical miles, thence in a straight line drawn to a position 3.5 nautical miles 135° True (S.E.) from Port Soderick Landing Jetty, thence in a straight line drawn to Port Soderick Landing Jetty.

All shipping entering the above defined area should contact Douglas Radio on Channel 16 VHF.
DOCUMENTS: Same as for all U.K. Ports.
PILOTAGE: Not compulsory. Arrangements usually made at least 24 hours before vessels' arrival, through Ships' Agent, or to Harbour Master, Douglas – Tel: 23813. Call Douglas Radio on Channel 16 and then transfer to Channel 12 for instructions 1 to 2 hours before ETA Douglas Bay.
ANCHORAGES: In Douglas Bay:
Douglas Head bearing 196° (T) 7 cables in 6 fathoms
„ „ „ 199° (T) 9.3 cables in 7 fathoms
„ „ „ 200° (T) 8 cables in 6.5 fathoms
„ „ „ 212° (T) 7.9 cables in 10 fathoms
RESTRICTIONS: Enter only on Harbour Master's instructions.
Traffic Signals: International Port Traffic Signals (see Admiralty Notice to Mariners 568/83) are exhibited when required, by day and night, from a mast at the head of Victoria Pier, visible from seaward and from inside the harbour, as follows:

Signal	*Meaning*
3 fixed red lights, disposed vertically	Vessels may not proceed
Fixed green, white, green lights, disposed vertically	A vessel having received specific permission by RT may proceed
3 fixed green lights disposed vertically	All vessels may proceed

Supplementary signals will be exhibited simultaneously in lights from a panel on the roof of a building near the head of Victoria Pier, visible from seaward and from inside the harbour, as follows:

Signal	*Meaning*
Red St. Andrew's Cross	Vessels unless specified may not proceed
White arrow	Vessels may proceed in the direction indicated

The panel will have a flashing orange light at each top corner.
MAX. SIZE: Max. size of cross channel vessels 350 ft. LOA, draft 13 ft.

Max. size of cargo vessels 190 ft. LOA, draft 12 ft. Spring tides 9 ft., Neaps to Inner Harbour, dries out at LW.

Max. size of tankers 230 ft. LOA, draft 13 ft. at LWOST.
HEALTH: See "Health – All ports" before first U.K. port.
RADIO: Port Patrick for vessels coming from North. Anglesey for vessels coming from South.
VHF: Douglas Radio manned at all times. Channel 16 and 12 only.
RADAR: Port Radar available for use in fog or when required. Used with Channel 12 VHF.
TUGS: 2 tugs with bollard pull of 4 tons operated by Laxey Towing Company Ltd. Tugs fitted with VHF.
BERTHING: Passenger vessels – 6 berths for vessels of 350 ft. in length, 13 ft. draft LWST at Victoria Pier and King Edward Pier.

Office Berth – vessels 225 ft. LOA draft 13 ft., dries out at LW.

Cargo Vessels – Battery Pier berth vessels 180 ft. LOA with draft 12 ft. aft, 8 ft. forward at LWST.

Coffee Palace Berth will accommodate vessels of 190 ft. LOA draft 12 ft. Springs, 9 ft. Neaps, dries out at LW.

Market Berth same as Coffee Palace Berth.

Battery Pier – Tankers up to 230 ft. LOA, draft 13 ft. at LWOST. Gas Tankers can berth at inner end of Battery Pier, vessels of up to 180 ft. LOA, draft 12 ft. aft, 8 ft. forward at LWOST. Discharging of cargo vessels and container vessels can be done by shore crane.

All berths at Douglas are salt water.
CRANES: The cranes are 5 ton mobile cranes, capable of lifting about 2 tons – 3 tons when working at full radius. One mobile grab crane.
BULK CARGO FACILITIES: Bulk cargoes of coal and scrap metal are handled at Coffee Palace and Market Berths described above.

Rate of discharge for coal about 60 t.p.h. – 70 t.p.h. by grab crane.
SPECIALISED CARGO HANDLING FACILITIES: Roll-on/Roll-off service operated to Victoria Pier by Manx Line Ltd.

Roll-on/Roll-off cargo service operated by Isle of Man Steam Packet Co. to King Edward VIII Pier.

LPG cargoes are handled at inner end of Battery Pier as described above.
BRIDGES: Swing Bridge only to Inner Harbour.
STEVEDORES: Advice required to Ship's Agent. Rate of discharge – cement 60 t.p.h.; coal 60 – 70 t.p.h.
MEDICAL: Advise Agent when possible, alternatively contact Harbour Master with advance warning. Hospital available.
TANKERS: Tankers pipe-lines 6 in. 2 Tanker berths at Battery Pier – Max. draft. 16 ft. to be taken in on flood tide only. 13 ft. only at LW Spring tides. Discharging rate 180 t.p.h. – 200 t.p.h.
DENSITY: Density of water salt (1025).
FRESH WATER: Fresh water available on request to Agent or Harbour Master.
FUEL: Fuel delivered by road tanker only. Contact Manx Petroleum or Esso.
FIRE PRECAUTIONS: Fire precautions as normal.
CONSULS: None.
REPAIRS: Limited facilities only.
DRY DOCKS: None.
SURVEYORS: None locally, can be arranged with D.T.I. and Lloyd's at Liverpool.
GANGWAY/DECK WATCHMEN: Could be arranged by Agent.
OPENING/CLOSING HATCHES: Handled by crew.
CUSTOMS ALLOWANCES: Same as U.K.
CARGO GEAR: Cargo can be discharged by ship's own gear or mobile cranes.
REPATRIATION: Repatriation only done through arrangement with Agents.
AIRPORT: Ronaldsway Airport 8 miles from Douglas and served by regular airlines.
TIME: Same as U.K.
HOLIDAYS: Good Friday, Easter Monday, Spring Holiday, T.T. Friday (1st week in June), Tynwald Day (5th July), August Holiday, Christmas Day, Boxing Day, New Year's Day.
TELEPHONES: Connections to ships can be arranged at passenger piers.
POLICE/AMBULANCE/FIRE: Police Tel: 26222; Ambulance Tel: 3661; Fire Brigade Tel: 3333.
EMERGENCY CO-ORDINATION CENTRE: H.M. Coastguard, Ramsey, Isle of Man.
SERVICES: None.
SHORE LEAVE: Allowed.
IDENTIFICATION CARDS: Identification cards not required for British Ships. Same as U.K.
STORING: See "Prelims" page viii.

1. By truck.
2. Not applicable.
3. Trucks can go alongside vessels except tankers when working cargo or ballasting.
4. Fork lift trucks could be permitted.
5. U.K. Customs regulations.
6. Storing usually done by crew.

SHIP SUPPLY SERVICE:

1. General Marine Services Limited (Tel: (0624) 22364 or 21160), who operate the pilot launch and ship to shore transfers of personnel, stores, etc. This launch is kept afloat and a 24 hour-service is available.

2. Laxey Towing Company Limited operate one tug of 420 h.p., and two dumb barges. This company carries out towing and lighterage operations in addition to the transport of cargoes by barge. Tel: (0624) 23556; after hours (0624) 781724.

There is no helicopter service on the Island.
REGULATIONS: No unusual regulations.
DELAYS: Delays can be expected due to tidal conditions, or awaiting a berth; also delays caused by N.E. gales, which make Douglas Outer Harbour untenable.
AUTHORITY: Isle of Man Harbour Board, Sea Terminal Building, Douglas, Isle of Man. *Tel:* (0624) 23813. *Contact:* Captain W. B. Kinley, Chief Harbour Master. H. G. Moore, Chief Executive.
AGENT: Denholm (IOM) Ltd., 12 Finch Road, Douglas, Isle of Man. Tel: (0624) 25682. Cables: Denman Douglasiom.

DOVER: 51.07 N. 01.18 E.

(See Plan Book)

PORT LIMITS: The seaward boundary of the Port extends 1 mile off both the Eastern and Western entrances.
DOCUMENTS: Required on arrival:
Crew List H.O. Form I.S.6. or IMO FAL Form 5 (in duplicate).
Crew Declaration Form C.142 (in duplicate).
Ship's General Declaration (in duplicate) C13.
Ship's Surplus Stores Declaration (in triplicate) C14.
Derat Certificate available for inspection.
It is required to report and clear a vessel at Customs House if remaining in port more than 24 hours for loading and discharging cargo or embarking and disembarking passengers, with following:
Passenger List. Cargo Manifests (2 copies). Ship's documents.
PILOTAGE: Requests for Pilot normally made by local Agent.

Dover bound vessels from Westward, subject to compulsory pilotage must embark their Pilots at a position 1.5 miles S.W. of Folkestone Harbour. Such vessels should inform the Folkestone Pilot Station of their ETA 6 and 2 hours in advance.

Folkestone Pilot Station is situated close Westward of the root of the Breakwater. Pilot launches have black hulls and white wheelhouses, and display the pilot flag by day and exhibit pilot lights by night. When embarking/disembarking a Pilot from these launches, headway should be maintained. The pilot station and launches are equipped with VHF. Vessels leaving Dover Westbound must be under pilotage to this same position.

Dover bound vessels from Eastwards, subject to compulsory pilotage and requiring a Pilot off Dover, should report their ETA 12, 6 and 2 hours in advance to Dover Port Control, giving g.r.t. and maximum draft. Such Pilots are embarked 1 mile S.E. of the Eastern Entrance, the pilot boats are operated by the Dover Motor Boat Company.

Dover Port Control maintain a 24 hour watch on Channels 74, 16 and 12.

DEEP SEA AND COASTAL PILOTS: For Channel, North Sea, British Coast and Baltic.

Contact agency 36 hours before arrival by radio, giving ETA Dover and destination port(s).

Agencies are: "Hutchinson Gravesend" and "Hammond Dover".

On approaching Dover contact Port Control by VHF for instructions and: For "Hutchinson" Pilot – hoist, flash or sound No. 1 For "Hammond" Pilot – hoist, flash or sound "B".

Pilots will also board at any UK or continental port as required.

ANCHORAGE: Limited space available in Outer Harbour. Contact Port Control in advance for instructions.

The Outer Harbour comprises an area of approximately 600 acres. The Northern extremity indicated by buoy 'B' Eastern end and buoy 'C' Western end and 4 intermediate marker buoys, the Southern extremity denoted by a line through the Southern most tip of the Prince of Wales Pier and the Southern most tip of the Eastern Arm. The Eastern boundary is formed by a S.E.'ly line drawn through buoy 'B' and the Western boundary is formed by a S.E.'ly line draw through buoy 'C'.

The maximum depth at MLWS is 7.3 m.

RESTRICTIONS: Attention is drawn to the strict requirement of obtaining permission from Port Control to enter or leave the harbour.

It will be noted that although the traffic control signal may be exhibited for entry/departure, every vessel manoeuvring to enter or leave the port is required to obtain specific permission to enter or leave, as the case may be.

Vessels awaiting permission to proceed should keep at a safe distance of at least 1.5 miles clear of the entrance until so authorised. Responsibility for entering or leaving with caution and the safe navigation of each vessel subsequent to the receipt of permission to proceed continues to remain the responsibility of the Master.

Explosives – Dangerous Cargo: Declaration is to be made and permission obtained prior to entering the harbour. Dover Harbour Board is not compellable to receive within the harbour any articles which in their opinion would endanger safety of harbour or vessels or goods.

HEALTH: Pratique, obtained by radio via Coastguard Station giving name of ship, ports of call during voyage, nature of cargo, number of crew and passengers, port of destination and Agent, condition and health of all on board with details of any sickness. Coastwise vessels from U.K. ports have automatic Pratique.

Also see "Health – All Ports" before first U.K. port.

RADIO: Vessels from East use North Foreland Radio call sign GNF and vessels from Westward use Niton Radio call sign GNI.

RADAR/VHF: Port Control and Admiralty Pier Signal Station are fitted with radar and VHF, vessels can make initial contact with "Dover Port Control" on VHF Channels 74, 16 and 12. Operational frequency is Channel 74. See "Pilotage".

TUGS: Two tugs of 2,900 h.p. each. Tug names 'Deft' and 'Dextrous'. Twin engined Voith Schneider. Tugs will normally join vessels inside harbour entrance, but may meet vessels outside by arrangement. Tug's rope used. Tug charges on hourly rate. Price on application from Dover Harbour Board.

BERTHING: All berths in Outer Harbour can be reached at all times. There are 3 berths available on the Eastern Arm fitted with Yokohama fenders, maximum depth MLWS is 8.3 m. Berths are used for lay-by, general cargo, regular coastal oil tankers and vessels taking water, stores and crew changes.

Those berths in the Wellington and Granville Docks can normally be reached from 1 hour before each high water. All berthing requirements are allocated by Port Control.

Western Docks: This comprises the International Hoverport, Jetfoil Terminal, the Admiralty Pier, and Train Ferry Dock, the Inner Harbour, Tidal Basin incorporating the tug haven, Granville and Wellington Docks.

Granville Dock: This dock is non-tidal and comprises an area of 4.5 acres with depths of water of 21 ft. (6.4 m.) at MHWS, 17 ft. (5.2 m.) at MHWN. The entrance is 65 ft. (19.8 m.) wide and depth on the sill at MHWS is 21 ft. (6.4 m.). Transit sheds and open storage space are available at the Dockside.

Berth No.	*Length (m.)*		
1/2	146	Fruit/Veg/General	Portal cranes
3	76	Fruit/Veg/General	Portal cranes
4	40	Lay-by/Ro-Ro	
5	73	For lay-by only (no hot work)	
6	137	Grain	No cranes
7	96	Coal/Limestone/Coke/Pumice (leased to P.D. Fuels)	

Wellington Dock: This dock is non-tidal and comprises an area of 8 acres with depth of water 15 ft. (4.6 m.) at MHWS, 11 ft. (3.4 m.) at MHWN. The entrance is 70 ft. (21.3 m.) wide and depth on the sill at MHWS is 15 ft. (4.6 m.). Transit sheds and open storage space are available. A slipway 567 ft. (173 m.) in length is capable of taking private and commercial vessels on its cradle, up to 53.3 m. in length.

Berth No.	*Length (m.)*		
8	93	Private	
9	51	Lay-by/Grain	
10	98	Lay-by/Grain	
11	38	Private	
12	116	Sand/Ballast	
13	79	Private	
14	103	Private	
15	110	Fruit/Veg/General	No cranes (mobile only)

Prince of Wales Pier: This separates the inner and outer harbours. Please note that berthing alongside the Prince of Wales Pier is only permitted by special arrangement with the Harbour Superintendent.

Hoverport: All hovercraft services operate from the Hoverport adjacent to and West of the Prince of Wales Pier. "Hoverspeed" operate daily services for passengers and accompanied cars to Boulogne and Calais.

Admiralty Pier: Length 4,140 ft. (1,260 m.), with depths alongside ranging from 6.0 m. to 9.1 m.

There is one single width, single deck, multi-purpose Ro-Ro berth, other berths are used for passenger only services and for lay-bys.

At 150 m. from the base of the Admiralty Pier a jetty 75 m. in length has been constructed, to provide a breakwater for the jetfoil terminal contained to the North of this jetty. The entrance to the jetfoil terminal has been dredged to a depth of 5.0 m. below chart datum. Jetfoils operate daily services to Ostend for foot passengers only.

Train Ferry Dock: Adjacent to the Admiralty Pier is the train ferry dock which is operated by British Rail. Trains run direct into the ferries which operate daily services of passengers and freight to Dunkirk throughout the year.

Tidal Basin: This forms the entrance to the Wellington and Granville Docks and is entered between the Admiralty and Prince of Wales Piers. It comprises an area of approximately 12 acres.

The entrance is 140 ft. (42.7 m.) wide, with a depth of 10.8 m. at MHWS. There are 2 berths in the Tidal Basin, Nos. 16 and 17. No. 16 has a length of 300 ft. (91 m.) and is used by private yachts. No. 17, length 360 ft. (110 m.) leased to P.D. Fuels and principally used for the discharge of stone, slag and aggregates.

A tug haven is under construction in the Tidal Basin adjacent to Clarence Quay. A jetty 45 m. in length will be positioned perpendicular and to the Southern end of Clarence Quay. To the North of the new breakwater will be positioned a pontoon 90 m. long parallel to Clarence Quay, providing berths for all harbour craft including the 2 tugs, dredger, patrol launch, work boats and RNLI Lifeboat. Private berth users will not be allowed to use the berth without express permission from the Harbour Superintendent or Duty Marine Officer.

Eastern Docks:

The docks comprise the Eastern Arm, the Camber and Car Ferry Berths.

The Camber: A tidal basin divided from the Outer Harbour by the South Jetty and Pier 'A'. It will comprise an area of 11 acres with a depth of water of 5.0 m. at MLWS. Extensive reclamation of the camber is underway and completion is expected in March 1985. Commercial vessels and ferries may lie along the Eastern wall of the new reclamation for lay-by when permission from Port Control has been obtained. A 2 deck "Roll-on/Roll-off" freight berth, operated by Townsend Car Ferries Ltd., provides daily freight services to Zeebrugge and Calais.

Car Ferry and Freight Terminal: Operated by Dover Harbour Board. Berths 1 and 2 are situated in the Camber, Berths 3 and 4 being situated to the Westward of Pier 'A' and Pier 'B', Berths 5 and 6 situated at Pier 'C', with double lane loading bridges of 23 m. plus covered passenger bridges. The car ferry/freight berths provide berthing for vessels up to 122 m. in length with depths of water of 5.8 m. at MLWS. Berths are connected with loading bridges to enable cars, coaches and freight to drive on direct on board the vessels, operating to Calais, Boulogne, Ostend and Zeebrugge. Shore facilities provide modern reception buildings, a new passenger handling complex – operational in the latter part of 1984 – Customs clearance halls, restaurant, banking facilities, shipping operators' offices, spacious assembly car parks.

BULK HANDLING FACILITIES: 2×550 t.p.h. shiploaders for grain operated by Dover Stevedoring Co. Ltd.

CRANES: *Enclosed Docks:* There are 5 electrical portal cranes of SWL 3 tonnes installed at Berths 1, 2 and 3 in the Granville Dock also 2 mobile cranes SWL 20 tonnes available for cargo handling. The 2 mobile cranes may be employed for other duties. Hire charges on application to Dover Harbour Board.

Eastern Docks: Two container gantries, 2×20 tonnes SWL are available for hire.

CARGO HANDLING FACILITIES: Seven berths equipped for handling scheduled Roll-on/Roll-off traffic.

STEVEDORES: No particular ETA required as ship's Agent makes all necessary arrangements.

MEDICAL: Medical assistance can be arranged by Agent to vessels passing Dover Harbour. Doctor will board a vessel in English Channel or on arrival at anchorage in Outer Harbour. Hospital facilities are available.

GANGWAY/DECK WATCHMEN: Supplied on request.

OPENING/CLOSING HATCHES: By crew.

CERTIFICATES: Certificates to be obtained for foreign clearance: Register, Load Line, Safety Construction, Passenger and Safety Equipment.

IDENTIFICATION CARDS: Are necessary, plus passes for ship's personnel at Eastern Arm berths having to pass through Eastern Docks Terminal. Passes obtainable from Patrolman's Office on the Eastern Arm.

CONSULS:

Belgium	01-235 5422
France	Folkestone 59616
Italy	Folkestone 53692
Denmark	Dover 201201 (office) Dover 203333 (night)
Finland	
Germany	
Netherlands	
Norway	
Portugal	
Spain	
Sweden	

REPAIRS: Facilities available for minor engine repairs. Radio and Radar repairs also possible.

DENSITY: 1020.
FRESH WATER: Available to all vessels by pipe-line 25 t.p.h.
FUEL: Gas oil available from Shell Mex & B.P. Ltd., and Esso. 24 hours notice required.
REPATRIATION: All facilities exist.
AIRPORT: Most repatriations by air through London/Gatwick and London/Heathrow.
TIME: Local time: BST (British Summer Time) 1 hour in advance of GMT. Reverting to GMT in Winter months (late March to late October).
HOLIDAYS: Official holidays: 1st January; Good Friday; Easter Monday; May Day Holiday; Spring Holiday (end May); August Bank Holiday; Christmas Day; Boxing Day.
POLICE/AMBULANCE/FIRE: Dial 999.
TELEPHONES: Not available.
BANKS:
Barclays Bank Ltd., Tel: Dover 202678.
Lloyds Bank Ltd., Tel: Dover 203919.
Midland Bank Ltd., Tel: Dover 206036.
National Westminster Bank Ltd., Tel: Dover 201308.
National Westminster Bank Ltd., (Car Ferry Terminal, Eastern Docks), Tel: Dover 201474 or 202744.
Trustee Savings Bank, Tel: Dover 202037.
SERVICES: Repairs to radar equipment, compass adjusting, supply of charts and crew changes can be arranged outside Dover Harbour through local Agents at all times.
SHORE LEAVE: Allowed, subject to Port Passes (see "Identification Cards").
AUTHORITY: Dover Harbour Board, Harbour House, Dover, Kent CT17 9BU, United Kingdom. *Tel:* Dover (0304) 206560. *Telex:* (Harbour House) 965619, (Eastern Docks – 24 hours) 965620. *Cables:* Harbour, Dover. *Contact:* J. Sloggett, Managing Director.

DUNBAR: 56.01 N. 02.31 W. **(See Plan Book)**

PORT LIMITS: A line drawn across seaward end of entrance channel.
DOCUMENTS: Standard U.K. documents.
PILOTAGE: Local pilotage may be obtained.
APPROACHES: Leading lights bearing 198°, occulting green 6 secs.
ANCHORAGES: Safe anchorage in Castle Bay except in Northerly gales.
RESTRICTIONS: No berthing if heavy swell entering harbour.
MAX. SIZE: LOA 50 m., draft 4 m. at HWS. Vessels lie aground on sandy bottom at LW.
HEALTH: Standard U.K. procedure.
RADIO: Forth Radio.
VHF: None.
RADAR: None.
TUGS: None.
BERTHING: Prior permission must be obtained for vessels of 20 m. LOA or greater.
Cargo unloaded by ship's own gear.
CRANES: None.
MEDICAL: No medical facilities at harbour.
FRESH WATER: Available on quayside by hose connection.
FUEL: From road tanker by prior arrangement.
CONSULS: None.
REPAIRS: Minor repairs possible.
SURVEYORS: Lloyd's at Leith Docks.
GANGWAY/DECK WATCHMEN: By arrangement with Harbour Master.
CARGO GEAR: By ship's gear or mobile crane (by arrangement with Harbour Master).
AIRPORT: Edinburgh (Turnhouse) 35 miles.
TIME: GMT. GMT plus 1 hour in Summer (late March – late October).
HOLIDAYS: None.
POLICE/AMBULANCE/FIRE: Dial 999 in an emergency. Police, Tel: Dunbar 62718; Ambulance, Tel: Haddington 3307.
BANKS: Local branches of Bank of Scotland and Royal Bank of Scotland only.
EMERGENCY CO-ORDINATION CENTRE: H.M. Coastguard, Maritime Rescue Sub-Centre, Forth District, Crail. Tel: Crail 666.
STORING: Small quantities of stores can be loaded from quay. Trucks can come alongside at quay.
AUTHORITY: Department of Water and Drainage, Lothian Regional Council, Alderston House, Haddington, East Lothian. *Tel:* Haddington 4131. *Telex:* 727 586. *Contact:* T. Brown, Harbour Master, *Tel:* Dunbar 63005.

DUNDEE: 56.28 N. 02.57 W. **(See Plan Book)**

PORT LIMITS: A vessel is considered to be an "arrived ship" when:
(a) For berthing turn-arrival at Fairway Buoy.
(b) For Laytime – usually "off or at the berth" and subject to Charter-Party terms.
DOCUMENTS:
3 Crew Lists.
3 Passenger Lists.
1 Tobacco Manifest.
1 Health Declaration.
Cargo Manifests.
Bills of Lading.
Derat Certificate.
Lights Certificate.
PILOTAGE: The port is approached by a well-defined main channel with up-to-date navigational aids. To provide information on navigation and safety the Authority operates a Port Control Service which maintains a 24 hour listening watch on VHF Channel 16 (156.8 MHz) and also operates on Channels 12 and 11 (156.6 MHz and 156.5 MHz).

Pilotage is compulsory in Dundee Pilotage District. Pilots board incoming vessels within a 3-mile radius seaward of Tay Fairway Buoy or as close to as weather permits. The pilot boat is only on sea station when shipping is expected and accurate ETAs are essential.

ETA should be given 6 hours before arrival either by radiotelephone link call to Dundee Port Control 24121 or by radiotelegram to "Dockyard Dundee" Dundee or by telex 76644 Dpa G. Amendments should be made up to 2 hours before the original ETA. When within VHF range (approx. 25 miles from Tay Fairway Buoy) ETAs may be confirmed by contacting "Dundee Harbour Radio" on Channel 16 and transferring to Channel 12 to pass messages.

Pilot boats, when on station, keep a listening watch on Channel 16 and transfer to Channel 6 (156.3 MHz) to pass messages.
ANCHORAGES: Pilots are instructed where to anchor vessels. There are 3 deep-water anchorages to accommodate vessels up to 28 ft. draft. Two anchorages for vessels up to 22 ft. draft, and other minor anchorages.
RESTRICTIONS: Tide and draft 28.5 ft. at MHWS. Vessels enter 2 hours before HW. 26 ft. at MHWN. Vessels enter 2 hours before HW.
MAX. SIZE: Length 600/700 ft., beam 90 ft., draft 28.5 ft.
HEALTH: Health declaration on arrival – if clean, automatic Pratique. Suspect disease as per international requirements. Pratique automatic if already called at another port.
Also see "Health – All ports" before first U.K. port.
RADIO: Any UK coast station. Nearest stations – Stonehaven and Forth.
VHF: Towage is operated by the Authority's tugs – 'Scotscraig' (1,100 h.p.) and 'Castlecraig' (750 h.p.). Tugs join vessels in the vicinity of West Ferry. Tug lines are optional. Tugs operate on Channels 16, 12 and 6. Also see "Pilotage".
TUGS: Tugs join vessel in vicinity of West Ferry. Tug lines optional, charge made if tugs lines used.
BERTHING: See Table overleaf.
CARGO HANDLING FACILITIES: All types of general cargo are handled, including packaged timber and side-loading of forest products. Grab facilities for bulk material. Conveyors are arranged for grain and suitable bulk materials.
Cold Storage: Private cold storage in the vicinity of the port is accessible on application.
Containers: Container handling with ship's gear or mobile cranes.
Cranage: Wide range of cranage, both mobile and portal, with grabbing facilities. Heavy lifts up to 100 tonnes can be arranged.
Grain Handling: Grab facilities. Conveyors are available.
Grain Storage: Temporary shed accommodation.
Minerals Handling: By grab facilities. Pressure discharge of cement and barytes.
Sheds: All riverside berths are equipped with transit sheds not less than 30.5 m. wide, fronted by broad concrete aprons. Total shed area is 37,075 sq.m. Within the harbour area there is extensive storage area and warehouse facilities.
Ro/Ro Berth: At Eastern Wharf. Accepts vessels up to 25 m. beam with stern ramps up to 12.5 m. wide. Linkspan single-lane carriageway. 4 m. wide. Road vehicles up to 42 tonnes. Trailer park adjacent.
Timber Yards: As a major East Scotland port for forest product imports, the port has extensive private yards and open-stacking areas for timber.
STEVEDORES: One ETA to Agent or port suffices for all services.
Full stevedoring facilities are arranged by: Dundee Stevedores and Porters Ltd., Victoria Lockway, The Harbour, Dundee. Tel: 0382 21571.
MEDICAL: Advance notice required for ordinary medication for arrivals week-ends. Hospitals and casualty stations available.
TANKERS: Diameter of hoses – 8 in. Slop discharge facilities not available. 2 tanker berths – 28 ft. draft. Discharge only at West Berth.
DENSITY: 1005 at MLWS. 1002 at MHWS.
FRESH WATER: Available, 24 hour service. Delivery, hose from quays. Rate, 30 t.p.h.
FUEL: Bunkering by direct pipe-line is readily available to vessels up to 300 ft. (92 m.) in length with 18 ft. (5.5 m.) draft or by road tanker to any vessel. Large quantities of any fuel type by coastal tanker, subject to 3 or 4 days' notice.
FIRE PRECAUTIONS: Regulations are handed to Master on arrival.
GANGWAY/DECK WATCHMEN: Recommended for large vessels.
OPENING/CLOSING HATCHES: Stevedores will give weather cover only.
CERTIFICATES: As required by Department of Transport (Lifesaving, Radio, Registry, Drugs, Crew Agreement, Load Line) also Derat.
CUSTOMS ALLOWANCES: Foreign-going: 25 cigarettes or 1 oz tobacco per day. 8 days allowance granted. Home trade: same as for foreign-going but only 4 days allowance granted. Spirits: quarter pint per day for 4 days, further issue granted after 4 days for foreign-going only.
CONSULS:

Denmark	23044	Netherlands	23111
Finland	23111	Norway	23044
France	21252	Sweden	21061
Italy	65222		

REPAIRS: Dundee can offer fitting-out wharves and heavy lift capacity. Various local firms undertake engine and electrical repairs to vessels. Construction, repair and maintenance services for the offshore oil industry are now well developed.
DRY DOCK: Dry dock available for vessels of up to 500 ft. length, 46 ft. beam, draft 13 ft. 6 in. Springs.
SURVEYORS: Lloyd's and DTI.
REPATRIATIONS: Facilities exist.
AIRPORT: Dundee Airport: Only U.K. flights available.
TIME: British Standard Time (GMT plus 1 hour). GMT in Winter months.

BERTHING: Deep-drafted vessels must arrive at the Fairway Buoy at least 2 hours before HW to berth on same tide.

Wharves	*Length*	*Depth MLWS*	*Cranes No.*	*Capacity*	*Type*	*Shed Accommodation*	*Other Facilities*
King George V	445 m. (1,459 ft.)	8.6 m. (28 ft.)	3 1	7 tonne 5 tonne	Grabbing/General Grabbing/General	15,873 sq.m. (19,000 sq.yds)	Road/Rail Connections Open Timber Area
Eastern	213 m. (700 ft.)	6.1 m. (20 ft.)	2 1	3 tonne 8 tonne	Mobile Mobile	11,946 sq.m. (14,300 sq.yds)	Road Connections Ro-Ro Berth (42 tons) Trailer Park
*Princess Alexandra	256 m. (840 ft.)	6.7 m. (22 ft.)	Mobiles up to 30 tonnes can be arranged			2,590 sq.m. (3,100 sq.yds.)	Back-up Warehouses Open Areas
*Queen Elizabeth	194 m. (636 ft.)	7.6 m. (25 ft.)	2	5 tonne	Grabbing/General	3,592 sq.m. (4,300 sq.yds)	Open Areas Road Access
*Caledon West	137 m. (450 ft.)	5.5 m. (18 ft.)	1	100 tonne	Heavy Lift	3,074 sq.m. (3,680 sq.yds.)	Open Areas
Caledon East	150 m. (492 ft.)	4.87 m. (16 ft.)	1	15 tonne	Portal		Open Areas
*West Quay (Tidal Harbour)	76 m. (250 ft.)	5.2 m. (17 ft.)	Mobiles up to 30 tonnes can be arranged				Open Areas
*Prince Charles	125 m. (410 ft.)	Kestral Marine Repair & Fabrication Berth					

*North Sea Oil Support Berths

Docks	*Water Area*	*Quay-age*	*Entrance*		*Cranes*	*Shed Accommodation*	*Other Facilities*
			Depth	*Width*			
Camperdown	3.04 ha. (7.5 acres)	739 m. (2,425 ft.)	5.5 m. (18 ft.)	16.5 m. (54 ft.)	2-3 tonne Mobile 1-8 tonne Mobile	5,430 sq.m. (6,500 sq.yds.)	Timber Berths
Victoria	4.33 ha. (10.7 acres)	1,176 m. (3,860 ft.)	4.9 m. (16 ft.)	16.5 m. (54 ft.)	2-3 tonne Mobile 1-8 tonne Mobile	6,934 sq.m. (8,300 sq.yds.)	Dry Docks Repair Berths

HOLIDAYS: 1st, 2nd and 3rd January; 2nd Monday April; 1st Monday in May; Last Monday July; 1st Monday October; Christmas Day and 26th December.
POLICE/AMBULANCE/FIRE: Tel: 999.
TELEPHONES: Quay telephones installed.
SHORE LEAVE: At the discretion of the Master.
IDENTIFICATION CARDS: Not required.
GENERAL:
Electric Power: Electric power to vessels available at repair berths.
Fire Fighting: Tayside Fire Brigade Services. One of the Port Authority's tugs is fitted with monitor.
Mooring: The Authority provide boatmen's services for the mooring and unmooring of ships, if required.
Motor Vehicle Compounds: An area of 1 acre which can be extended.
Navigation Lights: The main estuarial approach light is the Abertay Lightfloat supported by port and starboard buoys marking the main channel as detailed in Admiralty Chart 1481.
Passenger Cruise Liners: Dundee is a port of call for passenger cruise liners at riverside berths. The city has quick access to some of Scotland's finest scenery and places of historic interest.
Policing: Effective security is provided by Tayside Police.
Ships Stores: Ship supplies are offered by a number of private firms with premises adjacent to the harbour. These include the special requirements of the offshore oil industry.
Steelyards: The port has 2 road transport weighbridges and portable weighbridges in sheds for sampling, etc.
Tidal Reference: Tide heights are related to Lowest Astronomical Tide (Admiralty Chart Datum).
Range of tides at HWN – 4 m. (12 ft.).
Range of tides at HWS – 5.2 m. (17 ft.).
REGULATIONS: Absolutely no smoking, penalty £50.
AUTHORITY: Dundee Port Authority, Harbour Chambers, Dock Street, Dundee DD1 3HW, United Kingdom. *Tel:* (0382) 24121. *Telex:* 76644 DPA G. *Cables:* Dockyard, Dundee. *Contact:* William Gold, Chief Executive. Captain John J. Watson, Harbour Master.

DUNDRUM: 54.16 N. 05.51 W.

PILOTAGE: No official Pilots, but local Pilots available.
BERTHING: Tidal harbour. Depths from 3.3 m. (Neap tides) to 5.1 m. (Spring tides). Tides much affected by N.E. winds. No commercial activities take place in the port.
CRANES: One 2 tonne grab.
AUTHORITY: East Downshire Ltd., 3 The Quay, Dundrum, Co. Down, BT33 0LT, Northern Ireland. *Tel:* Dundrum 203. *Contact:* B. Heenan, Harbour Master or I. W. Graham, General Manager.

DUNOON: 55.56 N. 04.56 W. (See Plan Book)

Priority is given to the ferry services using this pier, although other shipping may use the facility.

The wharf has two access arms to shore and an adjustable Ro/Ro link span for side loading vessels. The main berth is 150 m. long with a depth of 4.3 m. below Chart Datum. Fresh water is available. VHF Channels 16, 12 and 31 are available, call sign "Dunoon Pier".
AUTHORITY: Strathclyde Regional Council (SRC), Department of Roads, Strathclyde House, 20 India Street, Glasgow G2 4PF. *Tel:* 041-227-2475. *Contact:* W. S. McAlonan, Director. Piermaster, *Tel:* 0369 2652.

AGENT: See "Clyde Port", Greenock Office attends.

FALMOUTH: 50.09 N. 05.04 W. (See Plan Book)

DOCUMENTS:
2 Crew's Effects Lists (C142).
1 Ship's Report by Master, or Authority (C74).
1 Home Office Form IMO FAL Form 5.
2 Stores Lists.
1 Certificate of Deck Cargo Tonnage.
1 Light Certificate.
1 Port Dues Certificate
Ship's Certificate of Register.
Mercantile Marine Office Certificate – for British ships only.
Load-line Certificate.
Safety Equipment and Construction Certificates, Radio Certificate.
Lloyd's Certificate.
Derat Certificate.
Agents to complete Health Arrival Report.
PILOTAGE: This is a compulsory pilotage district. The Pilot will board from a cutter 3 miles South of St. Anthony's Lighthouse. In poor visibility a ship requiring a Pilot uses the distinguishing signal of "G" to which Pilot Cutter will reply with "H". Pilots maintain VHF watch on Channel 16 throughout 24 hours – Call sign "Falmouth Pilot Radio"; preferred working frequency Channel 9.
ANCHORAGES: Vessels in excess of 665 ft. usually anchor in Falmouth Bay. Other vessels in outer harbour. Mooring Buoys available.
MAX. SIZE: See "Tankers".
HEALTH: See "Health – All ports" before first U.K. port.
VHF: Falmouth Harbour Radio (office hours) Channels 16, 14, 13 and 12.
TUGS: Available. On call during working hours and outside of hours when required if advance notice given. Tug's lines are to be used.

BERTHING: There is a large and 3 smaller dry docks and in addition, B.P. maintain a bulk storage plant. 13 deep-water berths. Combined frontage 8,000 ft. Vessels of 920 ft. have been accommodated. Draft LWOST 18 ft. – 27 ft. depending on berth.

Cross Roads Buoy and St. Just Moorings: Max. size of vessel normally permissable on the Cross Roads Buoy, except by special arrangement with the Harbour Master: Length overall: 183 m. (600.5 ft.) Draft: No limit. Anchor cable size: 77 mm. SQ (U2) steel.

Max. size of vessel on fore and aft St. Just Mooring normally permissable except by special arrangement with the Harbour Master: Length overall: 205 m. (672.5 ft.) Draft: No limit. Anchor cable size: 82 mm. SQ (U2) steel.

Caldy and Frigate Buoys: Max. size of vessel normally permissable on either of these buoys except by special arrangement with the Harbour Master: Length overall: 61 m. (200 ft.) Draft: 3.5 m. (11.5 ft.). Anchor cable size: 28 mm. SQ (U2) steel.

Offshore Exploration: Falmouth Docks and Engineering Co. operates an offshore supply base with all services and on an exclusive basis.

STEVEDORES: Employed through The Falmouth Docks and Engineering Co.

TANKERS: Tankers berth at Eastern Breakwater provided draft not more than 27 ft. berthing at H.W. Max. length 550 ft. There is a tank-cleaning installation available. Tankers of 840 ft. with draft 17 ft. forward and 23 ft. aft have been accommodated at Eastern wharf.

Coastal Tankers berth at Boyers Cellars, max. draft 16 ft.

FUEL AND FRESH WATER: Gas oil is available and water is piped on the Dock Company wharves. At the repair berths, or in Carrick Roads or Falmouth Bay. Bunkers and water must be delivered by barge. Water by tug in Carrick Roads or Falmouth Bay.

CONSULS: Belgium, Denmark, France, Germany F.R., Greece, Netherlands, Norway, Sweden and Spain.

GANGWAY/DECK WATCHMEN: Available in shipyard on request.

OPENING/CLOSING HATCHES: Normally carried out by crew.

AIRPORTS: London (Heathrow and Gatwick) 5.5 hours via Reading, or Bristol, St. Mawgan, 28 miles.

MEDICAL: Doctors and hospital facilities available. Agents should be advised in advance of any medical attention required.

CUSTOMS ALLOWANCES: Usual U.K. allowances.

REPAIRS: All ship repairs can be carried out by local repair yards.

DRY DOCKS: Falmouth Shiprepair Ltd. (Tel: (0326) 3114006).

Total wharf space: 2,438 m. Minimum depths alongside 6.10 m. to 8.53 m. LWOST. 24 hour access.

Cranage up to 60 tons.

Services: Electricity, water, steam and air.

Gas-freeing and tank cleaning facilities.

Bunkering.

Dry Docks	*Length* m.	*Breadth* m.	*Depth on sill at HWOST* m.
No. 1	169	22.9	7.9
Queen Elizabeth Dock	259	29.6	11.0
No. 3	229	26.8	8.5
No. 4	198	26.2	8.2

Drydocks can accommodate vessels up to 100,000 d.w.t.

Repairs can be carried out at 13 deep-water berths and in deep-water harbour.

Engineering, fabrication and electrical services; grit blasting and high pressure water-washing. Sea-going maintenance teams.

Personnel experienced in handling all types of cargo, including explosives. Rail links to berths. Open storage, warehousing and office accommodation. Diving services. Management and secretarial services. Helicopter Pad. Security – 24 hour patrol.

4 tugs from 9.5 tons to 19.5 tons maximum bollard pull.

REPATRIATION: Facilities available.

TIME: British Standard Time is GMT. British Summer Time – GMT plus 1 hour (Summer).

HOLIDAYS: 1st January; Good Friday (variable date); Easter Monday (variable date); Spring Bank Holiday (variable date); August Bank Holiday (variable date); Christmas Day (25th December); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Dial 999 from any telephone and ask for service required. Or County Police, Falmouth 72231; Dock Police, Falmouth 311400; County Fire Service, Falmouth 314274; Docks Fire Service, Falmouth 311400; Ambulance, Truro 2349.

EMERGENCY CO-ORDINATION CENTRE: Coastguard MRCC, dial 999 or Falmouth 317575 or VHF Channel 16 – Falmouth Coastguard.

TELEPHONES: Can be placed on board in dry dock and most repair berths but not at Eastern Oil Wharf.

SHORE LEAVE: Granted.

SHIP SUPPLY SERVICE: Contact: G.C. Fox and Co. Tel: (0326) 311300. Telex: 45237. VHF: Call sign "Fox Base."

AUTHORITY: Port of Falmouth, Falmouth Harbour Commissioners, 44 Arwenack Street, Falmouth TR11 3JQ. *Tel:* (0326) 312285 or 314379. *Contact:* Captain D. G. Banks, Harbour Master.

Falmouth Docks and Engineering Co., The Docks, Falmouth. *Tel:* (0326) 311400. *Telex:* 45536. *Contact:* D. W. Pascoe, Managing Director.

AGENT: Falmouth Docks Oil Exploration Base Ltd., The Docks, Falmouth, Cornwall. Tel: (0326) 6311400 (24 hours). Telex: 45175.

FELIXSTOWE: 51.57 N. 01.21 E. (See Plan Book)

DOCUMENTS:

Stores List.

Crew List.

Health Declaration.

Manifests.

Bills of Lading.

Ship's papers, including Register, Load-line Certificate, Safety Equipment Certificate, Radio Certificate, U.K. Light Dues, if any.

PILOTAGE: Pilots are normally shipped and landed from a pilot cutter in the vicinity of the Sunk Light Vessel. Vessels from or bound North using the Shipway Channel and whose normal course does not pass the Sunk, may use the Cork Pilot Station in the vicinity of the Cork Light Float which is run by launches. The cost of pilotage and boat service is the same for both stations.

Inwards: To obtain a Pilot an ETA must be sent at least 8 hours in advance and confirmed at least 2 hours in advance either to Harwich Pilots or the Sunk Pilot. Failure to do so will incur a surcharge and may result in delay.

Information Required: Ship's name, ETA, destination, max. draft, gross tonnage, and whether arriving at Sunk or Cork.

Communications: 8 hours ETA preferably through a coast radio station. 2 hours ETA by VHF.

Harwich Pilots: Telex: 98472, Tel: Harwich (02555) 3129 or 6300, VHF on Channel 16 or 9.

Sunk Pilot: Either through Harwich Pilots as above or MF Call 2182 working 2241 or other ship to ship frequency. VHF Channel 16.

Outwards: Pilot should be ordered through Harwich Pilots as above at least 2 hours in advance, except when sailing between midnight and 0800 hrs. when the order should be given by 2000 hrs. Order should specify landing at Sunk or Cork.

Sunk Pilot Station: The Sunk Pilot Cutter has a black hull, a buff funnel, the word "Pilots" painted on her sides and flies the Pilot flag. At night she exhibits the lights and signals in accordance with the International Rules for the Prevention of Collision at Sea, and cruises in the vicinity of the Sunk Light Vessel to provide Pilots for ships bound, making for Felixstowe, Harwich, Ipswich and Mistley as well as the ports on the rivers Colne, Blackwater, Crouch and other ports within the London Pilotage District and to disembark Pilots from outward bound ships. If through stress of weather she is unable to carry out her duties there she moves to smoother waters, usually in the vicinity of either the West Sunk or Gunfleet Spit buoys. In these circumstances shipping is warned by means of radio navigation warnings broadcast from North Foreland, Humber and Scheveningen Radios which give her position.

The attention of Masters is drawn to the requirement of stopping and giving a satisfactory lee for the Cutter's boarding boats. These 18 ft. boats have a maximum speed of 5 knots.

Contact procedures: Vessels wishing to contact the pilot vessel at the Sunk by radio telephony direct may:

(i) When within M/F range (approx. 50 miles) call the Cutter on 2182 kHz. The working frequency is 2241 kHz.

(ii) When within VHF range (approx. 25 miles) call the Cutter on Channel 16. The working frequency is Channel 6.

The Sunk Pilot Cutter may also be contacted by either W/T or R/T through any Post Office Coast Station addressed "Sunk Pilot" via North Foreland Radio. Alternatively messages to the Harwich Pilot Station, Tel: Harwich (02555) 3129 or 6300, or telex, Harwich Pilots 98472, will be passed direct to the Sunk Cutter.

Vessels bound for Felixstowe or Harwich may embark their Pilot at the previous port or at Brixham Pilot Station. Vessels requesting this facility should contact Harwich Pilots, Tel: Harwich (02555) 3129 or 6300, telex Pilots Harwich 98472, giving as much notice as possible, stating name and draft of vessel, port and terminal of embarkation, ETD, and whether or not deep sea pilotage is required.

Also see "Radar/VHF".

ANCHORAGES: At Cork Light Vessel; Quarantine anchorage off Harwich Road; "Northshelve" off Harwich; and in River Stour.

APPROACHES: Traffic Regulatory Systems in effect.

RESTRICTIONS: Dredging of approach channel to all quays is currently being considered. Deepest water alongside is 11.89 m. LWOST. At least 3 ft. keel clearance required at all times between channel bed and keel of vessel.

MAX. SIZE: General cargo vessels: Dock Basin 145 ft. wide entrance. Depth 7.1 m. LWOST. No lock gates. Suitable vessels able to leave on any state of tide.

North Quay: 195 m. in length.
South Quay: 186 m. in length.
East Quay: 131 m. in length.

Container Vessels: Landguard Container Terminal depth 11.9 m. below Chart Datum. At Dooley Container Terminal depth 11.5 m. LWOST. Walton Container Terminal depth 11.89 m. LWOST.

Ro/Ro vessels Ferry Terminal: Ro/Ro Bridge No. 1: Vessels up to 137.2 m. overall, depth 23.3 ft. LWOST. Ro/Ro Bridge No. 2: Vessels up to 152.4 m. length, depth 25.3 ft. LWOST. Ro/Ro Bridge No. 3: Vessels up to 137.2 m. length, depth 7.71 m. LWOST. Ro/Ro Bridge No. 4: Depth 10.15 m. LWOST. Vessels up to 213 m. overall.

Tanker Jetty: Vessels 180 m. overall, depth 9.1 m. LWOST.

HEALTH: Pratique flag in daylight and lighted signals in darkness to be displayed by vessel on arrival. Health Declaration to be given in writing or verbally by Master on arrival. If disease suspected, then report to pilot station who will advise Health Authorities.

Also see "Health – All ports" before first U.K. port.

RADIO/RADAR/VHF: See overleaf.

TUGS: 4 tugs (40 tons to 18 tons bollard pull) plus 1 reserve stationed at Felixstowe, join vessels in Harwich approaches or where ordered by Pilots. Vessels to use tug lines at additional cost. Tugs on VHF Channel 14 and 16 (24 hours) Channels 6, 8, 9 or 12 working. Also 2,182 kHz.

BERTHING: Regulated by Harbour Master through Pilot stations and tugs. Vessels able berth within restrictions of individual berths.

CONTAINER TERMINALS:

	Depth of Water at LWOST	*Length of Quay in metres (feet)*	*Quayside cranes*	*Park Gantry cranes*	*Forklift trucks*	*Towing units*	*Port trailers*	*Remarks*
Landguard Container Terminal	11.9 m. (dredged annually)	469.4 (1,540) 3 container berths	2×40 ton and 2×30 ton capacity Paceco Vickers Portainers	6 Paceco Transtainer cranes with a 35 ton capacity. (Rubber tyred with automatic lifting frame for containers.)	84 forklifts with a capacity of up to 40 tons, including 14 Short Mast Trucks, 50 paper clamp attachments. 14 pallet trucks, with a capacity of up to 2 tons.	91 elevating fifth wheel tug units. 29 tractor units two fifth wheel dolleys.	273 fifth wheel trailers with a capacity of up to 50 tons.	This equipment also in the Dock Basin and Northern Roll-on/Roll-off Terminals.
Dooley Container Terminal	11.5 m. (dredged annually)	244 m. (800 ft.) container quay	3 Conrad Stork container cranes with 40 ton capacity	5 Paceco Transtainer cranes with a 35 ton capacity. (Rubber tyred with automatic lifting frame for containers).				
Walton Container Terminal	11.89 m. (dredged annually)	305 m. (1,000 ft.) container quay	2 I.H.I. container cranes with 40 ton capacity	7 Paceco Transtainer cranes with a 35 ton capacity. (Rubber tyred with automatic lifting frame for containers).		16 elevating fifth wheel tug units.	24 fifth wheel trailers with a capacity of up to 50 tons.	

Rail Facilities: All berths are served by rail including 2 Freightliner Terminals, 1 of which serves the Landguard Container Terminal, the second the Walton and Dooley Container Terminals.

CARGO HANDLING FACILITIES: *General Cargo Division:* Mobile pneumatic grain discharger, discharge rate 30 t.p.h. into silo with capacity of 3,500 tons.

Mobile cranes, capacity 27.5 tons. Scotch derrick crane, capacity 32 tons at 90 ft. radius.

Roll-on/Roll-off Division: No. 1 Berth: Townsend Thoresen Ferry Terminal. Upper and Lower deck loading ramps. Electric travelling crane, capacity 32 tons at 110 ft., depth 23.3 ft.

No. 2 Berth: Townsend Thoresen Ferry Terminal: One hydraulic loading ramp designed to carry loads up to 140 tons. Upper loading ramp designed to carry loads up to 32 tons. Least depth 25.3 ft. LWOST.

No. 3 Berth: Hydraulic loading ramp designed to carry two lanes of traffic with loads up to 140 tons. Electric travelling crane with capacity of 35 tons at 95 ft. radius, least depth 25.3 ft.

No. 4 Berth: Allows a combination of Roll-on/Roll-off and container vessels to be accommodated. The hydraulic loading ramp is designed to carry two lanes of traffic with loads of up to 140 tons.

STEVEDORES: 24 hours notice required by Agent to advise stevedores of vessel's ETA, in order to arrange berthing and allocation of labour. All stevedoring arranged between Dock Company and vessel's Agent.

RADIO: Northforeland, Humber, Niton (or any other radio station convenient to vessel's position).

RADAR/VHF: To facilitate the arrival and departure of vessels trading to and from the Port of Felixstowe, a pilot station operates in the vicinity of the Cork Lanby in position Lat. 51° 56′ 42″ N., Long. 01° 27′ 06″ E. This station is additional to, but is not a substitute for, the Sunk Pilot Vessel. It is only for the use of vessels bound to or leaving the port, whose normal course does not take them past this vessel. Full service is provided at the Sunk Station.

Inward bound ships: Vessels requiring a Pilot at the Cork Station should apply to the Sunk Pilot Station, or Harwich Pilot Station (Telex: 98472) giving 24 hours' advance notice, and an 8-hour estimated time of arrival (ETA) at the Cork should be given through a G.P.O. Coast Station as should the gross tonnage, maximum draft and port of destination. Any adjustment to this time should be given at least two hours before arrival. Messages should be addressed to "Sunk Pilot Vessel Northforelandradio". As soon as *within MF range* (approximately 50 miles), they should call the Sunk Pilot Vessel on 2182 kHz. When contact has been established, the pilot vessel will transmit and listen on 2241 kHz or any other agreed licensed intership frequency for passing messages. The pilot vessel should be contacted again as soon as *within VHF range* (approximately 20 miles), calling on 156.8 MHz (VHF Channel 16) and then transferring to 156.3 MHz (VHF Channel 6) for further messages. It should be remembered that attempts to establish contact by radio at extreme ranges cause much interference.

Outward bound ships: Masters of vessels about to sail from Felixstowe proceeding Northbound, via Shipway, should order their Pilot to the Cork Pilot Station and vessels Southbound should order their Pilot to the Sunk Pilot Station. These requirements to be made known when order is given to the Harwich Pilot Station. Pilots for ships outward bound should be ordered by telephoning Harwich (code 02555) 3129, giving at least two hours notice.

Service is provided by 40 ft. fast pilot launches with black hulls, white wheelhouses and flying the pilot flag. The launches keep a constant listening watch on Channel 16 VHF (change to Channel 6 for working). It is recommended that the vessel about to ship or land her Pilot should keep in VHF communication with the launch. There is a shore VHF station with a duty Pilot; allocated frequencies are 156.8 MHz (Channel 16) for calling and 156.45 MHz (Channel 9) for working.

Harbour Operations Service and Port Signals: An operations service, jointly operated by the Harwich Harbour Conservancy Board and the Trinity House Pilotage Service, is provided from the Harbour Master's Office, Harbour House, Harwich.

This service is provided by Harbour Board officers and Trinity House Duty Pilots, co-operating mutually, on a continuous 24 hours a day basis to provide vessels using the port with information and advice. The following communication facilities are available:

1. VHF radio telephone; Channel 16, calling and safety; Channel 71, prime harbour working frequency; Channel 20, Harbour Board radar information frequency; Channel 11, harbour service frequency; Channel 9, pilotage service frequency; Channel 38, Trinity House frequency.

2. Land line communications: (i) Telephones; harbour operations: Harwich 6535/6; pilotage service: Harwich 3129 and 6300; (ii) Telex: Trinity House Pilotage service and Harwich harbour joint operations service; 98472.

3. Other equipment: the centre is provided with a standard harbour surveillance radar 2×16 in. conventional marine displays, and 1×16 in. ARPA Radar; also provided is an electronic tide gauge, wind direction and force instruments. All vessels should provide timely advice of their arrivals and departures to and from the port and report their movements through the harbour and its approaches as directed.

The dock closed signal will be exhibited at the seaward end of the South Pier at the entrance to the Dock Basin when vessels are manoeuvring within or leaving the tidal basin. The red revolving light, one second flashing 19 ft. above HWOST is visible over an arc of about 180° from Landguard Point to the River Orwell entrance.

(For further information see Admiralty Notice to Mariners No. 55 of 1979.)

MEDICAL: Prior notice desirable through Agent to arrange attention. All services available.

TANKERS: 4 in. and 6 in. connections. No slop facilities. No facilities for gas freeing alongside or in harbour.

One tanker berth available. Vessels up to 600 ft. overall, 25,000 d.w.t. Depth of water 30 ft. LWOST.

DENSITY: 1025 salt water.

FRESH WATER: Pipe-line connections to all quays. Delivery approx. 50 t.p.h. Barge service available for supplies to vessels at anchor.

FUEL: Marine diesel and gas oil available, pipe-line and barge delivery. 24 hours notice required.

FIRE PRECAUTIONS: Standard precautions at all berths.

GANGWAY/DECK WATCHMEN: Not compulsory. If required, cost negotiable.

OPENING/CLOSING HATCHES: Work undertaken by crew.

CERTIFICATES:

Valid Derrick and Rigging Certificates.
Ship's Register.
Load-line.
Safety Equipment.
Radio.
Derat.
Construction.
(Light Dues Receipts).

CUSTOMS ALLOWANCES: 100 cigarettes or equivalent in tobacco or cigars per man. 1 bottle spirits.

IDENTIFICATION CARDS: Not necessary if in possession of Seaman's Book or Passport.

CONSULS: Royal Norwegian Vice-Consul Ipswich (9) 59281; Royal Swedish Vice-Consul Felixstowe 278844; Icelandic Vice-Consul Felixstowe 285651/4; Netherlands and Germany F.R. Harwich 6666.

REPAIRS: Facilities exist for small repairs only.

DRY DOCKS: None available.

REPATRIATION: All facilities available.

AIRPORTS: Southend – 70 miles; Heathrow – 90 miles. International flights.

Air UK flights from Norwich to Aberdeen, Amsterdam, Edinburgh, Esbjerg, Humberside, Leeds/Bradford, London (Heathrow), Newcastle and Teesside.

TIME: GMT. In Summer months, April to October, time advanced 1 hour.

HOLIDAYS: All normal Bank Holidays, but official notification of port closures for such holidays is given well in advance of relevant dates.

POLICE/FIRE/AMBULANCE: Emergency points on all quays. Tel. 300 or, outside dock area, 999.

TELEPHONES: Shore connections available by prior arrangement for vessels on regular trades.

SERVICES: Most services available for dry cargo vessels, but no special tank cleaning or tank washing facilities for tankers.

SHORE LEAVE: No restrictions.

GENERAL: ETA to Agent required 72 hours, 48 hours, and 24 hours prior arrival.

DEVELOPMENTS: Dredging of the main approach channel to 11.00 m. (Chart Datum) underway.

Trinity Terminal: Terminal under construction to the North of Walton Container Terminal. On completion in mid-1986, the terminal will have a quay of 1,800 ft. and depth of 13.4 m. (Chart Datum). 4 gantry cranes and all back-up facilities will be available. The first 1,000 ft. of quay will be ready for use in January 1986.

AUTHORITY: Felixstowe Dock & Railway Co.. European House, The Dock, Felixstowe, Suffolk IP11 8TB. *Tel:* Felixstowe (0394) 604500. *Cables:* Dock, Felixstowe. *Telex:* 98277 or 98535 (Operations). *Contact:* G. Blackhall, General Manager. A. R. G. MacLeod, Operations Manager. P. D. Peters, Sales and Marketing Manager.

AGENT: Hargreaves Shipping Services Ltd., Unit 1 & 2, Walton Avenue, Felixstowe, Suffolk IP11 8HE. Tel: (0394) 286255. Telex: 98411.

FISHGUARD: 52.01 N. 04.58 W. (See Plan Book)

DOCUMENTS: See "Cardiff".
PILOTAGE: Local Pilot available on request. Pilotage compulsory.
ANCHORAGES: Eastward of a line joining Northern and Eastern breakwaters.
MAX. SIZE: Max. draft 18 ft.
HEALTH: See "Health – All ports" before first U.K. port.
RADIO/VHF: Fishguard Radio, VHF Channel 16 and 14.
TUGS: None.
FACILITIES: Stern loading, car and Roll-on/Roll-off Ferry Port. Also Lift-on/Lift-off crane of 22 tons.
CRANES: 1×6 tons and 1×22 tons.
STEVEDORES: No stevedores – vessels worked by British Railway staff.
MEDICAL: Doctors available. Hospital facilities 16 miles away.
DENSITY: 1025.
FRESH WATER: Available alongside quay.
FUEL: Available with prior warning.
GANGWAY/DECK WATCHMEN: Ship's crew.
OPENING/CLOSING HATCHES: Crew.
REPAIRS: Minor repairs by BR workshops and contractors.
SURVEYORS:

1. Cargo Surveyor: Captain D. Hughes, tel: Fishguard 873880.
2. Lloyd's Surveyor: Tel: Milford Haven (06462) 4811.

AIRPORT: Cardiff and Swansea.
CUSTOMS ALLOWANCES: (Crew allowance) 40 cigarettes. No wine or spirits unless proceeding on leave.
POLICE/FIRE/AMBULANCE: Dial 999. British Rail police on duty 24 hours.
EMERGENCY CO-ORDINATION CENTRE: Coastguard – Tel: Dale 218.
SHORE LEAVE: Allowed.
BANKS: Barclays Bank, The Square, Fishguard, Dyfed. Tel: Fishguard 873226. No telex.

Midland Bank, West Street, Fishguard, Dyfed. Tel: Fishguard 872232. No telex.

Lloyds Bank, West Street, Fishguard, Dyfed. Tel: Fishguard 872309. No telex.

STORING: See "Prelims" page viii.

1. Vessel can be stored by barge or truck, limited space of approximately 15 ft. width available for trucks.
2. Loading of stores can be carried out from barge with ships equipment.
3. Trucks of limited size can proceed alongside berth.
4. Fork lifts can be used to handle stores.
5. Prior notification to local customs,.
6. Sealink can assist with stores if given prior notification.

AUTHORITY: Sealink UK Ltd., Fishguard Harbour, Dyfed, SA64 0BU, Wales. *Tel:* Fishguard (0348) 872881. *Telex:* 48167. *Contact:* B. Fenemore, Shipping and Port Manager. Captain D. R. C. Lewis, Marine Superintendent.

FLEETWOOD: 53.55 N. 03.00 W. (See Plan Book)

LOCATION: The port of Fleetwood is situated on the Lancashire coast approximately 38 km. (24 miles) North West of Preston and 42 km. (26 miles) South West of Lancaster.
DOCUMENTS:

Manifests.
Bills of Lading.
Ship's papers.
Crew Lists.
Customs Documents.
Health Documents.

PILOTAGE: Pilot to be picked up off No. 1 Fairway Buoy. Ordered through ship's Agent giving 24 hours notice of ETA.
ANCHORAGES: Good anchorage in outer limits of harbour in Lune Deeps in 14 fathoms.
RESTRICTIONS: Vessels under power must not navigate any portion of this harbour above No. 11 Buoy at a greater rate of speed than is necessary to navigate safely, also on passing other vessels, either steam or sail, hopper barges, pontoons in tow, etc., in the channels outside the above mentioned No. 11 Buoy and within harbour limits due care must be taken to pass them at a rate of speed that will not cause risk from displacement or what is commonly called "backwash", and that all vessels must be navigated in this harbour strictly in conformity with Rule 9 (Narrow channels) contained in the Collision Regulations for Preventing Collisions at Sea, 1972.

Vessels bound into Fleetwood must not enter the river without being sure they have sufficient depth of water to ensure their getting to the quays or piers to which they are bound.

In the event of any vessel grounding on the "Tiger's Tail" or in any other part of the Fleetwood Harbour, the Master shall not attempt to refloat the vessel by reversing the engines, or by any other means whatsoever, until all incoming vessels following have passed the stranded vessel and the channel is clear of shipping.

Locks are normally open from 2 hours before HW to 1 hour after HW.
MAX. SIZE: (Within enclosed docks): 107 m. LOA: 14.1 m. beam.

So far as draft is concerned, allowances have to be made for clearing the lock invert. These allowances vary according to the beam of the ship and the following scale may be taken as a guide:

Beam of Vessel (m.)	*Clearance Required* (m.)
11.28	0.69
13.41	1.22
14.02	2.21
14.17 maximum	3.12

HEALTH: See "Health – All ports" before first U.K. port.
RADIO: VHF Port Operations and Information Service. Call sign: Fleetwood Harbour Radio Channel 16 (156.80 MHz): Calling and Safety. Channels 11 and 12: Port Operations.

All movements of vessels arriving for and sailing from the Harbour and Docks are controlled by the Harbour Master using the VHF Port Operations and Information Service located in the Harbour Master's Office on the West side of Fleetwood Harbour. (Lat. 53° 55′ 30″ N., Long 3° 00′ 12″ W.). This service is operated for the 24 hour period, and vessels must maintain a listening watch when approaching or leaving the Port. Messages must be restricted to matters appertaining to general navigation, berthing instructions and the safety of ships or persons within the Port Area. Messages of any other nature will not be accepted.
TUGS: No tug service at Fleetwood. Tugs available from Liverpool if required.
BERTHING: Under normal conditions the lock gates operate for 2 hours before to one hour after HW.

There are 3 quay cranes at the Wyre Dock, and 3 mobile cranes, 2 with 35 tonne capacity and one with 10 tonne capacity. The General Cargo berths can be used for handling liquid chemicals and bulk cargoes. Grain can be shipped direct into silo (rate 200 t.p.h.) at one of these berths. There is a Roll-on/Roll-off berth in the harbour. This is a daily service to Larne and Dublin for wheeled vehicles and trailer loads.

Dock	*Quay Length (Total)* (m.)	*Depth of Water (Absolute Min.)* (m.)	*Max. Size of Vessel* *Length* (m.)	*Beam* (m.)	*Draft* (m.)	*Approx. d.w.t.*
Wyre Dock	823	5.5	107	14.1	5.5	3,500
Fish Dock	800	5.5	107	14.1	5.5	3,500
Harbour/	To suit vessel					
Ro-Ro Berth	150	4.5	152	20.3	4.2	5,000
Isle of Man Berth	91	As required	107	—	4.2	—

Storage and Warehousing Facilities: One covered transit shed totalling 720 sq.m. (8,000 sq.ft.) is located on the Wyre Dock quayside. Ample open storage space is available within the docks estate.

Fish Dock: Modern facilities for fish handling, marketing and processing are available operated by Fish Handling (Fleetwood) Ltd. and a large number of wholesale fish merchants.

Ro-Ro Berths: Separate berths handling Irish Sea and Isle of Man freight and passenger ferry services are located within the port. Ample land is available for development of Ro-Ro business.

Offshore Supply Facilities: The port has been used as a supply base for oil exploration in the Irish Sea and facilities for offshore operations include a helicopter pad.
STEVEDORES: Arranged through ship's Agent.

Port Working Hours: Wyre Dock: Mondays to Thursdays 0800 – 1200, 1300 – 1700 hrs. Fridays 0800 – 1200, 1300 – 1600.

Overtime and weekend working by arrangement. Harbour berths worked to meet requirements of services.
MEDICAL: Ship's Agent will organise medical attention if required.
DENSITY: 1015 at half tide; 1025 at high water.
FRESH WATER: Fresh water available through stand pipes. Charge according to consumption (sliding scale).
FUEL: All grades of fuel available.
FIRE PRECAUTIONS: No specific requirement outside usual "No smoking" precautions.
GANGWAY/DECK WATCHMEN: Ship's watchmen required.
OPENING/CLOSING HATCHES: Normally carried out by crew.
REPAIRS: 2 slipways located in Fish Dock with lifting capacities of 1,050 tons and 150 tons respectively.
REPATRIATION: Arranged through ship's Agent.
AIRPORT: Squires Gate, Blackpool, 10 miles away.
TIME: GMT in Winter. GMT plus 1 hour in Summer months.
HOLIDAYS: Christmas Day and Boxing Day; New Years Day; Good Friday and Easter Monday; Spring Bank Holiday; May 1st; Autumn Bank Holiday.

Cargo working can be arranged on any of these days upon request.
POLICE/AMBULANCE/FIRE: British Transport Police available on Docks Estate. Ambulance 999; Fire 999.
TELEPHONES: Can be arranged through Post Office.
SERVICES: Compass adjusting.
SHORE LEAVE: Crew members are allowed ashore.
AUTHORITY: Associated British Ports – Fleetwood, Dock Office, Fleetwood, Lancs. FY7 6PP. *Tel:* (03917) 2323/6. *Telex:* 677296. *Contact:* D. Dixon, Port Manager.

FOSDYKE BRIDGE: 52.52 N. 00.02 W.

PILOTAGE: Service provided by Boston Pilots. Tel: 0205-62 114. VHF Channels 16, 12.
APPROACHES: Common approach channel shared with Port of Boston.
MAX. SIZE: Spring tides: Max. draft 4.50 m.; Max. LOA 56 m. Neap tides: Max. draft 2.80 m.; Max. LOA 46 m.
VHF: Fosdyke Port Radio operates on Channel 14. A listening watch is maintained during shipping movements on the River Welland.
TUGS: Service operated by wharfingers.
BERTHING: Private wharf 69.50 m. long giving 2 berths alongside, situated on North bank of river, operated by John Parsons Marketing Ltd., Fosdyke Bridge, Boston, Lincs. PE20 2DB. Tel: 0205-85 206. Telex: 37208.
FRESH WATER: Available.
AUTHORITY: No authority exists. For Berthing Master contact Fosdyke (0205-85) 240.
AGENT: Welland Ships' Agents, Fosdyke Bridge, Fosdyke, Boston, Lincs. PE20 2DB. Tel: (0205-85) 240. Telex: 37208. Contact: R. A. Waterfield, Manager. Tel: 0945-583181 (Home).

FOWEY: 50.20 N. 04.39 W. (See Plan Book)

PORT LIMITS: The whole of the Fowey River to a line across the entrance to the harbour. A vessel is considered to have arrived on entering the harbour unless she is anchored just outside by the Pilot to await suitable conditions for entering, in which case she is considered to have arrived on being so anchored.
DOCUMENTS:
Crew and Passenger Lists are essential, using IMO forms.
Aliens List is essential.
List of Bonded Stores, including beer.
List of Personal Dutiable Articles owned by Crew.
Bill of Health, if available.
Derat Certificate.
Manifest of all cargo on board.
Copies of Bills of Lading.
Stowage plan, if available.
Normal Ship's Papers.
PILOTAGE: Vessel requiring Pilot gives ETA as far in advance as possible to Agent. Vessel displays normal signals off port. VHF calling Channel 16, working Channel 9. Pilot cutter (LOA 55 ft.) has a dark blue hull and orange upperworks. The Pilot boards off entrance. Vessels can anchor South of entrance if necessary.
Pilots VHF station open for messages from arriving ships up to 2 hours before time of ETA received by Agent.
RESTRICTIONS: Vessels can enter at any time, if their draft is less than 18 ft. Otherwise according to tide. Depth of ship channel at LWOST – 20 ft.
MAX. SIZE: LOA 450 ft., beam 60 ft. Loaded draft of 28 ft. Vessels of this draft have to be handled at or near high water.
Vessels up to 486 ft. in length have been handled, but subject to prior consultation with the Harbour Master and owners of the loading berths.
HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Land's End Radio, Niton, or Portishead.
VHF: For arriving vessels see under "Pilotage".
Fowey Harbour Commissioners "Fowey Harbour Radio" calling Channel 16, working Channel 10, ECC Ports Ltd., loading berths operators, "Fowey Port Radio", calling Channel 16, working Channel 12.
TUGS: Two diesel tugs are available and normally join vessels on entering entrance. Ship's lines usually used. No tug required for vessels under 300 ft. in length under normal conditions. Only 1 tug required for vessels under 350 ft. length.
BERTHING: Vessels waiting for berths are normally moored, using their own anchor with their stern to a buoy. On the berth, vessels require long ropes.

Berth	*Max. LOA (approx.)* (m.)	*Depth of Water at LWOST* (m.)
Jetty No. 3	110	7.0
Jetty No. 4	120	7.3
Jetty No. 5/6	170	6.7
Jetty No. 8	140	8.5

CARGO FACILITIES: The port is specially equipped to handle china clay and ball clay in bulk and to a limited extent in bags. No other commodity passes through the port either inwards or outwards. There are 5 berths. Berth No. 4 has a bulk conveyor capable of handling up to 330 t.p.h., Berth No. 6 up to 500 t.p.h. and Berth No. 8 up to 1,000 t.p.h. Berth No. 3 for liquid slurry coal only. A 3 tonne mobile crane is available.
STEVEDORES: Earliest ETA possible is required, especially when a vessel arrives over week-end.
MEDICAL: If Medical Officer is required on arrival, advise Agent earliest opportunity. Hospital facilities are available.
DENSITY: River fully salt at all states of the tide.
FRESH WATER: Available at all jetties, delivered by hose and rate very variable.
FUEL: Gas/Oil only available. As much notice as possible is advisable.
GANGWAY/DECK WATCHMEN: Not normally employed.
OPENING/CLOSING HATCHES: Carried out by crew.
CUSTOMS ALLOWANCES: 200 cigarettes *or* 100 cigarillos *or* 50 cigars *or* 250 grams tobacco. Drink over 22% alcohol 0.5 litre *or* under 22% alcohol 1 litre *or* 1 litre fortified sparkling wine. 2 litres still wine. 50 grams perfume. 0.25 litre toilet water. Half this allowance for vessels arriving from home trade ports which for this purpose is from Elbe/Brest range of ports.
IDENTIFICATION CARDS: Not needed.
CONSULS:

Finland	J. A. Samuel, Albert Quay, Fowey.	Tel. 072683 – 3274
France	J. A. Samuel, Albert Quay, Fowey.	Tel. 072683 – 3274
Denmark	Ross Carter, Albert Quay, Fowey.	Tel. 072683 – 3274
Netherland	Ross Carter, Albert Quay, Fowey.	Tel. 072683 – 3274

REPAIRS: Not possible. Minor repairs only.
SURVEYORS: West Marine Surveyors & Consultants Ltd., Consulting Marine Surveyors, Engineers & Naval Architects, The Old Custom House, Brixham, South Devon. Tel: Brixham (080 45) 2604. After normal office hours: Tel: 0803 842925. Cables: Surveyor, Brixham. Telex: 42962 Survey G.
REPATRIATION: Facilities exist.
HOLIDAYS: Saturdays, Sundays, and all Public Holidays.
POLICE/AMBULANCE/FIRE: Telephone 999.
TELEPHONES: No arrangements made for connection on board.
SERVICES: Compass adjusting can be arranged.
SHORE LEAVE: Allowed.
DELAYS: There is a possibility of delay in heavy rain.
AUTHORITY: Fowey Harbour Commissioners, Albert Quay, Fowey, Cornwall PL23 1AJ. *Tel:* (072683) 2471. *Contact:* Captain J. G. Wilson, Harbour Master.
AGENT: South Coast UK Ltd., Albert Quay, Fowey, Cornwall PL23 1AL. Tel: Fowey (072683) 3274 or 3414. Telex: 45331 (AB Foyagt G). Cables: "Scuk Fowey". After Hours: Tel: Fowey 3428, 2370, 3629, 2525, 2346 or Par (072681) 2881. Ship's Agents and Shipbrokers.

GARSTON: 53.21 N. 02.54 W. (See Plan Book)

LOCATION: On the North bank of the River Mersey, 6 miles from Liverpool city centre.
DOCUMENTS, HEALTH: and all general information, refer to "Liverpool".
RESTRICTIONS: Locking into/out of Garston commences 3 hours before HW and ceases 3 hours after for vessels of 250 ft. in length or under. Vessels over this length must enter when the river and dock are level – about 1 hour before HW to half an hour after.
MAX. SIZE: Length 500 ft., beam 63 ft., draft 27 ft.
RADIO: As Liverpool.
VHF: Stalbridge Pierhead is linked to the Mersey Docks & Harbour Co. Port Operation Radio/Telephone system. Docking and berthing instructions may be obtained through Channel 20 (call sign "Garston Docks"). Information will also be conveyed through these Channels or through Anglesey Radio on MF R/T.
BERTHING:

Dock	*Quay Length (Total)* (m.)	*Depth of Water (Absolute Minimum)* (m.)	*Maximum Size of Vessel* *Length* (m.)	*Beam* (m.)	*Approx Draft* (m.)	*d.w.t.*
Stalbridge Dock	975	6.37	152	19.2	8.3	10,000
Old & North Docks	1405	5.6	Old 152	19.2	5.5	5,000
			North 122	16.2	5.5	5,000

Storage and Warehousing: Garston provides a covered transit shed 32,614 sq.ft. (3,031 sq.m.) in area, located on the North Dock and a warehouse 5,005 sq.ft. (465 sq.m.) at Stalbridge Dock.
Forklift Trucks: 2×12,000 lbs., 1×10,000 lbs., 3×4,000 lbs.
Dock Facilities:
Stalbridge Dock:

	No.	*Capacity*
Cranes	1 (Scotch Derrick)	32 tonnes
	2	10 tonnes
	2	7.5 tonnes
	5	6 tonnes

Two belt loading coal shipping appliances loading capacity 500 tonnes per hour.
High capacity fork and clamp lift trucks available.
Old & North Docks:

	No.	*Capacity*
Cranes	2	7.5 tonnes
	5	6 tonnes

32 tonne Scotch derrick.
CONTAINER FACILITIES: North Dock Container Berth in operation equipped with 3×35 tonne transporter cranes and back-up facilities.
Stalbridge Dock in operation equipped with 1×32 tonne transporter crane and back-up facilities.
STEVEDORES: *Port Working Hours:* Monday-Friday 0800 – 1700 hrs (overtime by arrangement). Saturday & Sunday 0800 – 1700 hrs. by arrangement.
DENSITY: 1025.
FRESH WATER: Available Monday to Friday 0800 to 1600 hrs. All watering required outside of these hours is by arrangement and must be paid for at overtime rates. Rate of delivery, 10 t.p.h.
OPENING/CLOSING HATCHES: Hatches to be opened and closed by the crew except on request.
AIRPORT: Liverpool Airport, 1 mile distant.
HOLIDAYS: Normal English Bank Holidays. Vessels can be worked on these days but this involves additional payment.
POLICE/FIRE/AMBULANCE: Dial 999 and ask for service required.
TELEPHONES: No connection can be made to vessels. Shore base facilities.
DEVELOPMENTS: Improvement to container back-up facilities and widening of the entrance passageway at North Dock has been undertaken.
AUTHORITY: Associated British Ports – Garston, Port Office, Dock Road, Garston, Liverpool L19 2JW. *Tel:* 051-427 5971. *Telex:* 628706
Contact: A. Winfield, Port Manager.

GIRVAN: 55.15 N. 04.51 W. (See Plan Book)

DOCUMENTS: Normal U.K. documentation. H.M. Customs attendance obtained by contacting Harbour Master.
PILOTAGE: By local fishermen only – contact Harbour Master.
ANCHORAGES: To seaward clear of channel approaches. This area is hazardous in gales, particularly from the N.W.
RESTRICTIONS: Draft currently very restricted at MLWS due to siltation. Harbour Master will advise on water depths available.
MAX. SIZE: LOA 50 m., beam 9 m., draft 3.5 m. Vessels with max. draft will only be moved at or near HW.
HEALTH: Under H.M. Customs control.
RADIO: ETA messages etc. via Portpatrick Radio Station, Call on 2182 kHz – VHF Channel 16 (British ships may call on 2381 kHz but listen on 1792 kHz).
VHF: Harbour VHF ship to shore available 0900 – 1700 hrs. daily, Monday to Friday inclusive. Calling: Channel 16; Working: Channel 12.
TUGS: None.
BERTHING: South Pier Quay: 107 m. long, depth 2.2 m. MLWS.

Ailsa Berth:	49 m. long,	depth 2.2 m. MLWS.
Fish Wharf:	42 m. long,	depth 2.1 m. MLWS.
Fish Quay:	62 m. long,	depth 2.2 m. MLWS.

Note: Fish Wharf and Fish Quay used only for fishing vessels.
CRANES: No port cranes available. Mobile cranes can be hired from local companies.
MEDICAL: Small local hospital, contact Harbour Master for assistance.
DENSITY: Water brackish, being sea water with fresh water river discharge.
FRESH WATER: Available.
FUEL: Diesel fuel only.
FIRE PRECAUTIONS: Normal safety procedures.
CONSULS: None, nearest at Glasgow.
REPAIRS: Small engine and deck gear repairs may be carried out alongside.
DRY DOCKS: None. 2 slipways, max. length of vessel which can be slipped, 21 m. – 33 m. overall.
SURVEYORS: Not available.
GANGWAY/DECK WATCHMEN: None. If desired would have to come from ship's crew.
HATCHES: Worked by crews.
CUSTOMS ALLOWANCES: Apply to H.M. Customs Officers.
CARGO GEAR: Hire-in mobile cranes or ship's own gear.
REPATRIATION: No arrangements.
AIRPORT: Prestwick, distance 38.4 km. North Atlantic services only. Glasgow, distance 91 km. Internal U.K./Europe/Scandinavian services.
TIME: Winter – GMT. Summer – March to October, British Summer Time i.e. 1 hour ahead of GMT (dates as announced).
HOLIDAYS: Cargo working unlikely on Christmas Day and New Year's Day.
POLICE/FIRE/AMBULANCE: In emergency dial 999 otherwise telephone numbers are: Police: Girvan (0465) 3587. Fire: Ayr (0292) 267471. Ambulance: Girvan (0465) 2571.
EMERGENCY CO-ORDINATION CENTRE: Marine Rescue Co-ordination Centre, (H.M. Coastguard), Greenock. Tel: Greenock (0475) 29014 or 29988. Telex: 777006.
TELEPHONES: No ship links.
SERVICES: No special services available locally. Compass adjuster available from Glasgow.
SHORE LEAVE: Unrestricted after Customs clearance.
IDENTIFICATION CARDS: Clear requirements with Customs.
REGULATIONS: No unusual regulations.
DELAYS: Normal breakdown/weather delays.
BANKS: Local banks only.
STORING: See "Prelims", page viii.
3. Yes.
4. Yes.
There is no accommodation for storage.
SHIP SUPPLY SERVICE: The units used for supply are small motor vessels approximately 10 m. long. They are licensed to carry up to 12 passengers under the D.O.T. regulations. they are limited to operating up to 3 miles off-shore, with an extension for operating supply services to Ailsa Crag.
The operators are:
1. Alexander Ingram, 5 Shalloch Square, Girvan. Tel: Girvan 2320.
2. John McCrindle, 7 Harbour Street, Girvan. Tel: Girvan 3219.

GENERAL: The harbour is formed at the mouth of the river known as "Water of Girvan". The water in the channel and basin is, therefore, a mixture of sea and fresh water.

A breakwater protects the inner part of the channel on the North side. A timber and steel sheet pile jetty protects the basin from river scour. Access is hazardous in N.W. gales.

In 1979 the harbour channel was deepened to give a minimum depth of water of 3 m. at MLWS. Siltation is a continuing problem and the depth available has been reduced as noted in previous sections.

The harbour is primarily a fishing port. However, it is used regularly by small tankers and cargo vessels of the coasting type, bringing in raw materials for local industry. As may be noted, berthing accommodation is very restricted.

AUTHORITY: Strathclyde Regional Council, Department of Roads, Ayr Division, Wellington Square, Ayr KA7 1DR. *Tel:* Ayr (0292) 266922. *Telex:* 777688. *Contact:* Mr. George Forbes, Harbour Master, Girvan. *Tel:* Girvan (0465) 3648.
AGENT: See "Ayr".

GOOLE: 53.42 N. 00.50 W. (See Plan Book)

PORT LIMITS: Goole is a river port with conservancy jurisdiction to the junction of rivers Humber, Ouse, Trent. However, laytime commences from commencement of next normal working shift after ship is on berth and ship's Agent has issued "Notice of Readiness". This may be 0800 hrs. or 1300 hrs. dependent on time of issue of notice.

Precedence of order of arrival of vessels is determined by arrival time at Ocean Lock Entrance, Goole Docks.

DOCUMENTS:
Bills of Lading/Manifests (prepared by Agents at port of origination).
"Imperfect" Customs Entry.
Request (to work vessel).
*Request for Immigration Officer to be in attendance – if carrying passengers.
*Crew List to Immigration Officer (for foreign personnel).
Ship's Register.
Ship's Agent will normally notify Immigration Officer.

PILOTAGE: Compulsory from Spurn to Goole, two stages.
1st stage: Spurn Light Vessel to Hull Roads.
See "Grimsby" Pilotage.
2nd stage: Hull Roads to Goole. Pilot will board vessel in Hull Roads.

ANCHORAGES: Bull Anchorage on chart of Humber Estuary, or in Hull Roads, otherwise only on advice of Pilot.
RESTRICTIONS: State of tide, Springs or Neaps. Port entered during tidal hours, 3 hours 15 minutes before HW to 30 minutes after HW, according to draft. Pilots will advise.
Locks: 3 entrance locks, largest being 110 m. long and 25 m. wide. Depth on sill 8.0 m. (MHWS) and 6.0 m. (MHWN).
MAX. SIZE: Subject to suitable tides, vessels of approximately 100 m. overall length, 5.5 m. draft, 24 m. beam and 3,000 d.w.t. can be accepted. It should be noted that vessels with a beam in excess of 13.4 m. will find certain berths in the port inaccessible due to bridgeway restrictions.
HEALTH: Pratique issued by H.M. Customs Waterguard (in absence of Port Health Official). Pratique accepted when entering after calling at another port in the U.K.

Also see "Health – All Ports" before first U.K. port.

RADIO: Via Humber Radio, call sign GKZ – call on Channel 16. Give ship's name and call sign and pass message.
VHF:

Station	*Call Sign*	*Channel Nos.*	*Operational Times*	*Remarks*
Humber Ports Operation and Information Service, Pilot Office, 50 Queen Street, Hull.	"V.T.S. Humber"	16 12 10 13	Continuous watch maintained	Calling and safety. Navigation and safety information etc. for Rivers Humber, Ouse and Trent.
Blacktoft Jetty	"Blacktoft Jetty Radio"	16 14	3 hours before HW Goole until 1 hour after HW Goole	Calling and safety. Port Operations and berthing instructions for Blacktoft.
Goole Docks	"Goole Docks Radio"	16 14	Continuous watch maintained	Calling and safety. Port operations and docking instructions for Goole.

Also see "Hull".

TUGS: Tugs available but not normally used. If required, to be arranged through Ship's Agent.
BERTHING: Berthing instructions given to vessel on arrival at entrance locks. No specific requirements.
SPECIALISED CARGO HANDLING FACILITIES: Three appliances for loading of rail-borne bulk cargoes, e.g. coal, coke, pitch, fluorspar, etc.

Two appliances for loading of canal-borne bulk cargoes (coal, coke, pitch, etc.).

12×7.5 tonne and 5×6 tonne quay cranes, equipped with suitable grabs for sand, ores, fertilisers, coal, grain, sulphur, scrap, etc.

8 mobile cranes up to 40 tonne capacity and fleet of forklift trucks with capacities up to 35 tonnes and capable of lifting 20 ft., 30 ft. and 40 ft. containers.

2×32 tonne Scotch derrick cranes for container handling.

50 tonne and 40 tonne electric travelling cranes for heavy lifts.

Ro-Ro: 1 ramp for abnormal loads of up to 450 tonnes – otherwise no special facilities needed as water is maintained at a constant level.

Some bulk liquids (creosote, tar), direct to or from road tanker vehicles.

STEVEDORES: Arrangements made by ship's Agent who should be given ample notice of time of arrival of vessel.

Port Working Hours:

	Monday to Thursday	0800 – 1200	1300 – 1700
	Friday	0800 – 1200	1300 – 1600
Overtime	Monday to Thursday	0600 – 0800	1700 – 1900
	Friday	0600 – 0800	1600 – 1800
	Saturday	0600 – 1200	
	Sunday	0600 – 1200	1300 – 1700

MEDICAL: Ship's Agent will arrange for attendance of doctor on notification. Doctor's, dentists and hospital services available. Ship's Agent can arrange service required.
DENSITY: Water in Goole Docks is fresh water and is maintained at constant level. Entry is by locks. Density 1000.
FRESH WATER: Delivery by water-boat through hose-pipes. Rate 30 t.p.h.
FUEL: All grades available on reasonable notice being given to Ship's Agent.
FIRE PRECAUTIONS: No specific precautions unless there are exceptional circumstances, when special arrangements can be made with local Fire Service.
GANGWAY/DECK WATCHMEN: Necessary. Usually provided from crew. Otherwise by negotiation locally.
OPENING/CLOSING HATCHES: Responsibility of crew.

SHIP CERTIFICATES:
Ship's Register (including load-line).
Radio Safety.
Life-Saving.
Light Dues.
Change of Articles.
Derat Certificates.

CARGO GEAR: Normally not required, as ample port facilities available.

IDENTIFICATION CARDS: May be required to be produced to Immigration Officer or H.M. Customs Offical, especially in the case of foreign flags.

CONSULS: France, Netherlands and Denmark.

REPAIRS: All types of deck and engine repairs possible by local ship repairers.

DRY DOCKS: No. 2 Dry Dock: 301 ft. length, 50 ft. width at entrance, 15 ft. depth on sill. Two other dry docks. The water in the wet docks at Goole is maintained at a constant level and all dry docks are entered direct from the wet docks.

REPATRIATION: Arranged by Ship's Agent.

AIRPORT: Humberside Airport. Daily services to Amsterdam, Aberdeen, Edinburgh, Esbjerg, Norwich and London.

TIME: GMT in Winter; GMT plus 1 hour in Summer months.

HOLIDAYS: Good Friday; Easter Monday; May Day; Spring Bank Holiday (last Monday in May); late Summer Bank Holiday (last Monday in August); Christmas Day; Boxing Day and New Years Day. No cargo working on these days.

POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required.

TELEPHONES: No arrangements for ship connection.

SHORE LEAVE: No restrictions.

REGULATIONS: Visitors to vessels require permits from Port Authority and Master or ship's Agent. Smoking not permitted ashore in dock area.

AUTHORITY: Associated British Ports – Goole, 6-8 Stanhope Street, Goole, North Humberside, DN14 5BB. *Tel:* (0405) 2691/6. *Telex:* 57626. *Contact:* B. J. Harding, Port Manager.

GRANGEMOUTH: 56.01 N. 03.43 W. (See Plan Book)

PORT LIMITS: At Grangemouth a vessel is not considered to be an "arrived vessel" until she is tied up at the allocated berth.

DOCUMENTS:
1 Crew List.
1 Passenger List.
1 List of all high duty goods in crew's possession.
1 Cargo Manifest.
All Valid Certificates.

PILOTAGE: Compulsory in river. Pilot boards at Inchkeith. Pilot boat on VHF, also see "Radio".

ANCHORAGES: North of Grangemouth West Buoy, 2 fathoms. Charleston Roads 5 fathoms. East of Inchkeith, up to 8 fathoms.

RESTRICTIONS: 24 hour locking system in operation depending on draft. The height of the tide must always be taken into account when dealing with larger vessels.

MAX. SIZE: Dry cargo vessels: Length 600 ft., beam 90 ft. Tankers: Length 575 ft., beam 90 ft. Draft according to state of tide. Vessels other than tankers max. draft 25 ft. 6 in. Tankers, up to 34 ft. max. draft.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Wick, Stonehaven and Cullercoats coastal stations. Forth Radio.

Port VHF (FM) Communications: Station: Lock Control Office, Lock Entrance, Grangemouth. This centre will maintain a continuous watch. Call sign: Grangemouth Docks.

156.8 MHz Channel 16 calling and safety. All vessels should maintain a listening watch on this Channel and use it to establish contact with Grangemouth Docks. Once contact is established the Duty Operator will request vessels to shift to the Port Operations Channel.

156.7 MHz Channel 14, Port Operations. A working Channel restricted to messages relating to the movement and safety of ships, and in emergency, to the safety of persons.

156.6 MHz Channel 10, Inter-ship. A working Channel for tug-to-tug and tug-to-bridge communications.

156.3 MHz Channel 6, Inter-ship. A working Channel for communication with other vessels.

156.5 MHz Channel 9. A working Channel for tug to tug and tow to tow communications.

No message of a personal character or messages of any other nature than those pertaining to the general navigation and safety of ships and persons within the Port Area can be accepted.

TUGS: Tugs can join vessel at Hen and Chicken Buoy or Lock Gates and should be pre-booked. Tugs' lines used. 2×25 ton bollard pull and 1×18 ton bollard pull.

BERTHING: The water in Grangemouth Docks is maintained at the same level by impounding pumps. On passing through the lock entrance berthing is allocated according to the nature of the cargo and draft of vessel.

The depth of water available at the berths varies in each dock, the max. depths being approx.: Grange Dock 26 ft.; Carron Dock 23 ft.; Old Dock 17 ft.

CARGO HANDLING FACILITIES: Bulk cargoes can be handled at most berths within the port. The East Wall berth has 4×10 ton grabbing cranes, 4×7.5 tonne mobile cranes are available. Other berths have 10 and 6 ton cranes. 1×35 tonne Scotch derrick. Container berth is 1,000 ft. long and has 2×32 ton transporter cranes.

A Ro-Ro berth in operation. Liquid chemicals and LPG Carriers are handled at the LPG berth and BP jetties. No. 1 North Jetty, which is a common user jetty handles chemicals.

STEVEDORES: No particular advice necessary to stevedores. Essential, however, advise Agent 24 hours prior arrival, who will advise stevedores.

MEDICAL: No advance notice necessary. Hospital facilities available in immediate district.

TANKERS: B.P. Refinery (Grangemouth) Limited. Private jetties in Eastern Channel. South Side Jetties "J2" and "J3" 34 ft. "J4" and "J5" 19 ft. 6 in. North Side Jetties "E1" and "E2" 34 ft. No. 1 North Side Jetty, pipe-lines connected to Ross Chemical and Storage Co. are 1.5 in. nitrogen line, 6 in. chemical line, 10 in. heavy fuel line, 2 in. fresh water supply, 8 in. motor spirit line, 8 in. gas oil line. Draft at No. 1 North 32 ft. 6 in.

DENSITY: 1019 average.

FRESH WATER: Available in most berths. Watermen supervise delivery on request. Delivery rate varies depending on berth.

FUEL: All grades available from oil installations.

GANGWAY/DECK WATCHMEN: Not necessary but can be done by ship's personnel.

OPENING/CLOSING HATCHES: Custom of port is crew open and close hatches but stevedores will do so if required.

CUSTOMS ALLOWANCES: At the discretion of Local Customs Inspector. Normal allowances are equivalent of 5 ounces tobacco per man and equivalent of 1 bottle of wine per man. Allowances may be halved for home trade vessels. Vessels in port more than 3 or 4 days may receive extra allowances.

CERTIFICATES: For Customs Clearance valid Certificates in respect of radio, load-line, construction, safety equipment, deratisation, necessary.

CONSULS: Norwegian, Danish and Swedish consuls available locally.

SURVEYORS:
(1) Macleod & McAllister Ltd., Old Granary Office, Meadowside Quay, Glasgow G11.
(2) Thomas Nicol and Son, 11 Bothwell Street, Glasgow G2.
(3) S. A. Greer & Co., 15 North Claremont Street, Glasgow G3.
(4) E. K. Wallace & Son Ltd., 11 Bothwell Street, Glasgow G2.
(5) Lloyd's Register of Shipping, 27 Thistle Street, Edinburgh.

REPAIRS: All types of repairs can be carried out afloat.

DRY DOCKS: Carron dry dock length 350 ft., breadth 50 ft., depth 22 ft. Middle dry dock length 335 ft., breadth 50 ft., depth 19 ft.

REPATRIATION: All facilities exist.

AIRPORT: 1 hour from Glasgow and Edinburgh airports where numerous connections for London thence world wide travel.

TIME: British Standard Time (1 hour ahead of GMT). GMT during Winter months.

HOLIDAYS: First 3 weekdays in January; 1st Monday May; 3rd Monday July; 2nd Monday September; Christmas Day and 26th December.

POLICE/AMBULANCE/FIRE: In public telephone dial 999 and ask for appropriate service. With dock circuit telephone dial 241 for Police or dial 222 and ask for Fire/Ambulance.

EMERGENCY CO-ORDINATION: Coastguard Fifeness Tel: 033 35 666. Major Port Emergencies are controlled by the Police dial 999 or contact through Harbourmaster Grangemouth Tel: 486839.

SERVICES: Compass adjusting, calibrating, etc., can be done in river. No equipment for tank cleaning but can accept tank washings ashore.

BANKS: Royal Bank of Scotland, La Porte Precinct, Grangemouth.
Bank of Scotland, La Porte Precinct, Grangemouth.

STORING: See "Prelims" page viii.

Vessels may be stored by trucks alongside dry cargo berths. There are no facilities for storing, by trucks, vessels berthed at jetties in Eastern Channel.

Trucks may, by prior arrangement, proceed alongside dry cargo berths to store vessels.

Stevedores fork lifts may be employed to handle ship's stores.

Customs regulations are in force for stores remaining on board. Details of stores, including bonded goods such as spirits, etc., must be supplied to Customs on arrival, and a constant check is kept whilst the ship is in Port. Regarding stores loaded aboard, any bonded goods must be presented to Customs for inspection and approval. Restricted amounts only are permitted.

Local riggers may be employed for storing.

SHORE LEAVE: Allowed.

AUTHORITY: Forth Ports Authority, Dock Office, Grangemouth, Stirlingshire FK3 8UE. *Tel:* (0324) 482591. *Telex:* 777432. *Contact:* J. W. Simpson, Port Manager.

AGENT: John Denholm & Co. Ltd., Old Dock Road, P.O.Box 13, Grangemouth FK3 8TZ. Tel: (0324) 482201. After Hours: (031) 337 1920, (050 682) 3555, (0324) 553 769. Telex: 77334. Cables: Denholm Grangemouth.

GRANTON: 55.59 N. 03.13 W. (See Plan Book)

DOCUMENTS: See "Leith".

PILOTAGE: Pilot station Firth of Forth located at Granton, boarding station West of fairway buoy at Longitude 3° West. Contact with pilot cutters can be made on VHF Channel 16 and R/T 2182 kHz. Pilotage not compulsory for vessels passing South of Inchkeith Island.

ANCHORAGES: Good holding ground at Inchkeith Island and Leith roadstead 8 m. – 19 m. at C.D. Request should be made to Forth Navigation Service.

RESTRICTIONS: The entrance between the breakwaters is 103 m. in width. The rise of tide, 5.182 m. at springs and 3.658 m. at neaps permits the entry or exit of vessels up to 7.07 m. draft at HW.

A red flag bearing St. George's Cross exhibited at the Middle Pier Head signifies that vessels should not enter the harbour until the flag is lowered.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Forth, Stonehaven and Cullercoats radio stations.
RADAR/VHF: Port and estuary radar service. VHF contact can be made with Leith Harbour Radio on Channel 16. Forth Navigation Service should be contacted on VHF Channel 16 by all vessels passing Forth Ports Authority seaward limit (line joining North and South Carr Beacons).
TUGS: Sound signal for vessels requiring tug services is four long blasts. Tugs, if required, join the vessel in the roads. Tugs towing gear available, and compulsory.
BERTHING: *Middle Pier:* Quayage 210 m. max. depth 5.1 m. LWOST. In addition, there is a 122 m. crosspiece at the end of the pier where depth of water is 7.6 m. LWOST.
West Pier: Quayage 140 m. max. depth 7.0 m. LWOST.
TANKERS: Tankers are accommodated at the end of the West Pier, adjoining port entrance.
MEDICAL: No advance notice of medical attention required. All hospital facilities available.
FRESH WATER: Available alongside at all berths.
FUEL: All grades available subject 24 hours notice in advance.
REPAIRS: Facilities available for all minor repairs.
AIRPORT: Edinburgh Airport, served by regular airlines, situated about 6 miles away.
CONSULS: See "Leith".
HOLIDAYS: Public holidays observed annually: Third Monday in April; third Monday in September; Christmas Day (25th December); 26th December; 1st, 2nd and 3rd January.
AUTHORITY: Forth Ports Authority, Tower Place, Leith, Edinburgh EH6 7DB. *Tel:* (031) 554 4343. *Telex:* 72681. *Cables:* "Harbour Leith". *Contact:* Mr. J. R. Grant, Port Manager, Leith and Granton.
AGENT: John Denholm & Co. Ltd., 55 Constitution Street, Leith EH6 7AY. Tel: (031) 554 0651. After Hours: (031) 337 1920, (0324) 553769. Telex: 72115.

GREAT YARMOUTH: 52.34 N. 01.44 E.

(See Plan Book)

DOCUMENTS: Usual U.K. requirements.
PILOTAGE: A 24-hour service is provided by Trinity House, subject to 1 hour's notice. Pilots can be contacted on VHF Channels 12 and 9. B.A. Chart 1536.
RESTRICTIONS: When large or awkward vessels are navigating within the port, it may be necessary to hold or slow down other vessels. This is normally done in consultation with the Pilots concerned.
SIGNALS – Control Tower – South Pier: Amber fixed light or all lights extinguished – DO NOT ENTER.
Harbour Office – Brush Bend: Two horizontal red fixed lights – VESSEL(S) ENTERING.
Vessels proceeding downriver must not come below the passenger slipway 132 m. from the North end of Brush Bend while lights are exhibited.
Entry Signals – Control Tower – South Pier:
Fl. amber 1 ev. 5 secs. Ebb less than 1 knot, height 4.2 m.
Fl. amber 2 ev. 5 secs. Ebb less than 1 knot, height 4.5 m.
Fl. amber 3 ev. 10 secs. Ebb less than 1 knot, height 4.8 m.
Fl. amber 4 ev. 10 secs. Flood.
Fl. mauve 1 ev. 5 secs. Ebb more than 1 knot, height 4.2 m.
Fl. mauve 2 ev. 5 secs. Ebb more than 1 knot, height 4.5 m.
Fl. mauve 3 ev. 10 secs. Ebb more than 1 knot, height 4.8 m.
Fl. mauve 4 ev. 10 secs. Flood.
MAX. SIZE: Max. length 138 m., max. draft 5.7 m. HWOST.
With a tidal range of only 1.8 m. and a minimum entrance depth of 4.3 m., Great Yarmouth can be used by vessels up to 4,000 d.w.t. and with a length of up to 120 m. at any time.
HEALTH: Usual U.K. procedure. Contact Port Health Officer for Derat, Fumigation, Quarantine or Livestock Quarantine.
VHF: Masters of vessels intending to enter the harbour must notify the Harbour Master at least 1 hour before arriving off South Pier, giving ETA, max. draft, gross tonnage and last port of call. Masters must also obtain clearance before starting to navigate through the entrance between the piers.
Where possible, VHF radio-telephone must be used for giving information and obtaining clearance to navigate from the Harbour Master. The following VHF Channels and frequencies are used: 9, 11, 12 and 16.
Yarmouth Radio keeps a continuous watch on Channels 12 and 16. The Haven Bridge operates on Channel 12.
Reporting: All vessels over 50 g.r.t. and any others fitted with VHF must report to Yarmouth Radio when passing Ocean Terminal, Atlas Berth and Turntide Jetty (Breydon Water), giving direction of travel.
TUGS: The port's 550 h.p. tug *Hector Read* has a bollard pull of nearly 7 tonnes and can be used for all harbour work, including salvage in the port and approaches. It is fully equipped with salvage and fire fighting pumps as well as other salvage equipment. Contact should be made through the Harbour Master.
BERTHING:
South Quay: Length 470 m.
ABC Wharf: Length 140 m., used for carrying out repairs afloat.
Fish Wharf: Used by Norfolk Line and offshore companies.
East Quay: Length 202 m. Great Yarmouth Warehousing Co. has its main depot on the East Quay, comprising 2,209 sq.m. of warehouses and 3,716 sq.m. of open storage.
Atlas Quay: Length 240 m., with Ro/Ro ramp.
Ocean Terminal: Ro/Ro berth with 70 m. quay. Max. loading 40 tonnes.
Bollard Quay: Length 297 m.
Southtown Wharf: Two berths, lengths 98 m. and 115 m. Can accommodate 2 vessels of length 100 m. simultaneously.
CRANES: The Port and Haven Commissioners have 3 mobile cranes, including 2 that can lift up to 24 tonnes. The third has a maximum lift of 3.5 tons. On the South Quay there are 2×5 ton electric luffing cranes mounted on rails. All are equipped with grabs and hooks. Cranes can also be hired from several local companies.
BRIDGES: *Signals – Haven Bridge:*
Northbound Vessels:
By Day: Blue flag hoisted S.E. Buttress.
By Night: Fixed blue light over fixed white light S.E. Buttress exhibited (5 minutes before bridge opening).
Southbound Vessels:
By Day: Red flag hoisted N.W. Buttress.
By Night: Fixed red light over fixed white light. N.W. Buttress exhibited (5 minutes before bridge opening).
Channel Lights: Exhibited when bascules raise for passage of shipping.
S.E. corner of West Buttress – 2 fixed red vertical.
N.E. corner of West Buttress – 2 fixed red vertical.
S.W. corner of East Buttress – 2 fixed green vertical.
N.W. corner of East Buttress – 2 fixed green vertical.
STEVEDORES: A pool of more than 80 dockers is available to the port's 3 stevedoring companies through Great Yarmouth Port Labour Company. Arrangements are made by Port Agents.
MEDICAL: Doctors and dentists can be arranged through Agents. Hospital facilities available.
FRESH WATER: Water, drinking or fresh, is available on the public quays. Those currently in use are East Quay, Bollard Quay, South Quay and Ocean Terminal.
FUEL: A bunkering station is operated by B.P. Gas Oil is delivered at up to 50 tonnes per hour to any vessel able to use the port.
Total storage capacity of all fuels is about 10,200 tonnes, of which about a third is available for marine use.
CONSULS: Belgium: Consul, Lowestoft. Tel: (0502) 69619.
Denmark: Vice-Consul, Great Yarmouth. Tel: 856831.
Finland: London Embassy. Tel: (01) 235 9531.
France: Consul, Lowestoft. Tel: (0502) 69619.
Italy: London Embassy. Tel: (01) 235 8643.
Netherlands: Vice-Consul, Great Yarmouth. Tel: 856831.
Norway: Vice-Consul, Great Yarmouth. Tel: 850431.
Spain: London Embassy. Tel: (01) 235 5555.
Sweden: Consul, Felixstowe. Tel: (03942) 78844.
REPAIRS: Several ship repair companies are located in Great Yarmouth and most types of repairs can be undertaken.
DRY DOCKS: Richards (Shipbuilders) repairs ships up to 80 m. long and 12.5 m. beam. Sill depth 4.45 m. at MST. Also a shipbuilding berth.
SURVEYORS: Both Marine and Cargo Surveyors can be arranged through the Agent.
AIRPORT: Flights are available by helicopter and light aircraft from North Denes Airfield, 5 km. from the North of the town.
Air U.K. and Genair operate scheduled daily flights from Norwich to British and Continental destinations.
An emergency helipad has been built on the Port Authority premises close to the harbour entrance.
TIME: GMT. Summertime (GMT plus 1 hour) kept from March to October.
POLICE/AMBULANCE/FIRE: Dial 999 in an emergency.
EMERGENCY CO-ORDINATION CENTRE: H.M. Coastguard, Gorleston Divisional H.Q. Tel: 63443.
SERVICES: Compass adjusting can be carried out.
As this port services the oil industry, many types of oil-related services are available from several companies.
BANKS: Barclays Bank plc. Tel: 857601.
Lloyds Bank plc. Tel: 855177.
Midland Bank plc. Tel: 843631.
National Westminster Bank PLC. Tel: 857521.
DEVELOPMENTS: Redevelopment of the Fish Wharf is under way to improve Ro/Ro facilities at Atlas Quay.
A further Ro/Ro facility is being considered, close to the mouth of the River Yare.
Passenger terminal to be constructed at Atlas Quay.
AUTHORITY: Great Yarmouth Port & Haven Commissioners, 21 South Quay, Great Yarmouth, Norfolk NR30 2RE. *Tel:* 0493-855151. *Telex:* 975102 (Gyport). *Contact:* M. C. M. Boon, Chief Executive. Captain R. W. Forbes, Harbour Master. Tel: 0493-863476.

GRIMSBY: 53.34 N. 00.04 W.

(See Plan Book)

VESSEL TRAFFIC SERVICES HUMBER: See "Hull".
NOTICES: See "Hull".
DOCUMENTS: See "Immingham".
PILOTAGE: See "Immingham".
ANCHORAGES: Hawke and Sunk Roads, Haile, Spurn and Bull Anchorages. See "Hull". The Pilots will advise where to proceed to anchor and also provide Pilot.
RESTRICTIONS: See "Berthing" – entrance locks.
MAX. SIZE: Maximum breadth 67 ft., maximum length of vessel that can be locked 268 ft. but vessels of greater length can enter docks on HW when all lock gates are open. 3 ft. clearance under the keel is required. Vessels having a draft of 19 ft. can normally enter the docks on any tide when the height of water is sufficient to allow 3 ft. clearance. Vessels with 21 ft. draft can be taken on spring tides. Vessels can enter usually approx. 3 hours before and 2.5 hours after high water.
Commercial Docks: Max. LOA 139 m., draft 5.8 m., beam 19.8 m.
Fish Docks: Max. LOA 73.2 m., draft 5.5 m., beam 12.2 m.
HEALTH: Master has to report any "Reportable" illness as detailed in Form "Port 38" to "Porthealth Grimsby". Also see "Health – All Ports" before first U.K. port.
RADIO: Humber Radio, 2182 kHz, or VHF Channel 16. Also see "Hull".
VHF: See "Hull" – Vessel Traffic Services Humber.

TUGS: Normally join in Grimsby roads. Optional whether use ship's or tug's lines. Tugs operate from Immingham so plenty of notice required.

BERTHING: *Grimsby Docks:*

	Commercial Docks	Fish Docks
Entrance Locks:		
Length	90.0 m.	43.6 m. & 21.4 m.
Width	21.4 m.	10.6 m. & 13.0 m.
Sill level MHWN	6.8 m.	5.7 m. & 6.8 m.
Quay cranes	11 electric – capacity 3 to 7.5 tonnes	1 electric – capacity 15 tonnes 1 electric – capacity 5 tonnes
	2 mobile cranes – capacity 20 tonnes for ship discharge	1 mobile – capacity 15 tonnes

There are 2 Roll-on/Roll-off berths in the Royal Dock, one to/from Esbjerg and a second to/from Norway. There is also one in the Alexandra Dock for motor vehicles.

2×500 t.p.h. Shiploaders available for Grain.

STEVEDORES: Vessels are allocated labour in order of arrival so it is only necessary to give the Agent the ETA preferably before noon on the previous day. Normal working hours 0800 – 1700 hrs., Friday 0800 – 1600 hrs. Overtime can be worked 1700 – 1900 hrs. Monday to Thursday. On Saturdays and Sundays as required.

MEDICAL: Hospitals and all other medical facilities are readily available. If immediate attention is required on arrival please advise Agent by radio or telegram.

FRESH WATER: Available at all quays. Rate approx. 20 t.p.h.

FUEL: Normal gas and diesel oils available by both road and barge with at least 24 hours notice. This is also quayside tankage in fish docks.

GANGWAY/DECK WATCHMEN: Not necessary, but the service is available if Master requires it.

OPENING/CLOSING HATCHES: Responsibility of the crew. The hatch beams can be removed and replaced by the shore cranes but there is an extra charge for this operation.

CUSTOMS ALLOWANCES: 200 cigarettes per 8 days. 1 bottle wine and 1 bottle spirits per 4 days. All seals to be broken.

CARGO GEAR: In accordance with the regulations laid down by H.M. Factories Inspector.

IDENTIFICATION CARDS: Some sort of identification whilst crew are ashore is advisable. (Seaman's Book or Passport).

CONSULS:

Belgium, Vice-Consul	Hull	27464
Denmark, Vice-Consul	Grimsby	57521
Dominican Republic	Grimsby	59101
Finland, Vice-Consul	Immingham	72387
France, Consular Agent	Grimsby	47221
Germany (F.R.) Consul	Hull	25781
Greece, Vice-Consul	Hull	224151
Iceland, Consul	Grimsby	57543
Netherlands, Vice-Consul	Grimsby	43177
Norway, Vice-Consul	Hull	224151
Sweden, Vice-Consul	Immingham	72387

REPAIRS: Facilities are available for all deck and engine repairs.

DRY DOCKS: Nearest at Immingham.

SURVEYORS: See "Immingham".

REPATRIATION: Can be arranged if required.

AIRPORT: Humberside, 15 miles from Grimsby, daily service to Amsterdam (3 flights daily), London, Edinburgh, Esbjerg, Norwich and Aberdeen. Easy access to all major airports via rail, etc.

Leeds Bradford Airport, 3 flights daily to Amsterdam, Aberdeen, Belfast, Norwich, London (Stansted), Paris and Edinburgh. One flight to Dublin.

HOLIDAYS: New Year's Day; Christmas Day; Boxing Day; Good Friday; Easter Sunday and Monday; May Day; Spring Bank Holiday (end May); Late Summer Bank Holiday (end August). All except Christmas Day, New Year's Day, Good Friday and May Day can be worked as overtime if sufficient staff are willing.

POLICE/AMBULANCE/FIRE: Docks Police – Grimsby 59181; Grimsby Police – Grimsby 59171. Emergency – Police/ Fire/Ambulance 999.

EMERGENCY CO-ORDINATION CENTRE: See "Immingham".

TELEPHONES: Not available for connection on board.

SERVICES: Compass adjusting, tank cleaning, etc., are available.

SHORE LEAVE: Crew are allowed ashore.

BANKS: See "Immingham".

STORING: See "Immingham".

GENERAL: The Grimsby Dock Master can be contacted on VHF Channel 16 and then change to Channel 18 or 9 for speaking.

AUTHORITY: Associated British Ports, Port Office, Cleethorpe Road, Grimsby, South Humberside DN31 3LL. *Tel:* (0472) 59181. *Telex:* 52250. *Contact:* J. M. Hughes, Port Manager.

HARTLEPOOL: 54.42 N. 01.12 W. (See Plan Book)

DOCUMENTS: *Ship's Official Papers Including:*

Ship's Register.
Ship's Construction Certificate.
Load Line Certificate.
Derat Certificate.
Safety Equipment Certificate.
Radio Equipment Certificate.
U.K. Light Dues Certificate.
Crew List.
Bills of Lading, Manifest and Stowage Plan (Usually sent in advance).
Ship's Stores List.

PILOTAGE: Call by VHF when 3 hours from port and again 30 minutes before arrival. 2 hours required for sailing. VHF Channel 16, 14, 12, 9, 8 and 6.

Pilotage not compulsory. Tel. No. Hartlepool 66030.

Pilots usually board in vicinity of Longscar Buoy from a cutter showing the usual international signals.

ANCHORAGE: N.E. of Longscar Buoy but special care must be exercised in vicinity of prohibited anchorages near Ekofisk Oil Pipe-line and River Tees Fairway.

RESTRICTIONS: Daylight entry only for vessels exceeding 24.4 m. beam. Entrance Channel 1.1 km. long., 61 m. wide. Nominal dredged depth 5.0 m. below LAT.

MAX. SIZE: Overall length 181.3 m. Beam 29.2 m. reduced draft of 7.92 m. Vessels approaching any of the max. sizes must consult Dock Master in advance.

HEALTH: New Regulations. The Public Health (Ships) Regulations in force.

Also see "Health – All Ports" before first U.K. port.

RADIO: Cullercoats Radio. VHF Hartlepool Port Radio Channel 16 and 12.

TUGS: Two twin screw diesel (1,200 h.p.) tugs available during tidal periods. Tugs ropes available at extra charge.

BERTHING: Victoria Harbour, Deep Water Berth. Length 295 m. Depth 9.5 LAT. Equipped with 10 tonne cranes.

Wood Quay: Length 300 m. Depth 4.5 m. LAT. No cranes (North Sea barges, repairs).

Entrance to the enclosed docks at Hartlepool is by 'The North' entrance, Victoria Harbour, which has a depth of water 8.18 m. on the sill at MHWST the entrance width is 21.33 m.

North Basin (Non-Tidal): Length of Dock 182.87 m. Depth on sill is 3.1 m. below LAT. No Cranes.

N.W. Corner: Roll-on/Roll-off berth. Max. LOA 135 m. Max. beam 20 m. Max. draft 6.25 m.

Central Dock (Non-Tidal): Length of Dock 301.73 m. Width of Entrance 21.33 m. Depth alongside is 2.5 m. below LAT. No Cranes.

West Quay – Conveyor: A dry cargo bulk loading appliance capable of loading any cargo of sizes up to 3 in. cube into vessels of 8,000 tonnes carrying capacity or less, according to tidal conditions prevailing at the entrance locks.

North-West Corner: Roll-on/Roll-off Berth. Max. length of vessel 135 m. Max. beam 20 m. Max. draft 6.25 m.

Union Dock (Non-Tidal): 11 Cranes 10 tonnes – 3 tonnes. Length of quayage 1,551.94 m. Width of Entrance 20.32 m. Depth of Water of 2.2 m. below LAT.

Roll-on/Roll-off berth to handle loads of up to 450 tonnes. Max. length of vessel 85.34 m. Max. beam 14.93 m. Max. draft 5.79 m. Bulk road vehicle chute.

Coal Dock (Non-Tidal): Length of Quayage 689.11 m. Width of Entrance 20.32 m. Depth of Water of 2.2 below LAT.

Jackson Dock (Non-Tidal): Length of Quayage 600 m. Width of Entrance 20.32 m. Depth of Water of 1.6 m. below LAT.

STEVEDORES: All stevedoring undertaken by Port Authority on day work basis with voluntary overtime available (including week-ends). Shift working can also be provided.

MEDICAL: Full hospital and emergency services available at all times. Shore Telephone No. 999 or call on VHF 16.

DENSITY: 1025.

FRESH WATER: Available from shore hydrants and tugs at 20 t.p.h.

FUEL: Available by road and bunkering vessels.

GANGWAY/DECK WATCHMEN: Available by private arrangement through Agents.

HATCHES: To be opened and closed by ship's crew.

IDENTIFICATION CARDS: Seaman's Book or Passport advisable.

CONSULS:

Belgium
Denmark
Finland
French Consular Agency
Netherlands
Norway
Portugal
Sweden
West Germany

REPAIRS: Deck and engine repairs available.

SURVEYORS: Hull and cargo surveyors available through Shipping Agent.

AIRPORT: Teeside Airport nearby with regular U.K. and Continental Services.

TIME: GMT and BST (GMT plus 1 hour) during Summer months.

HOLIDAYS: Normal Bank Holidays.

STORING: See "Prelims", page viii.

1. Yes.
2. Yes – no regulations concerning storing.
3. Yes.
4. Yes.
5. Normal standing regulations.
6. Yes.

EMERGENCY CO-ORDINATION CENTRE: Tees Harbour Office.

DEVELOPMENTS: New deep water Ro/Ro Berth under construction for vessels up to 10,000 d.w.t.

AUTHORITY: Tees and Hartlepool Port Authority – Hartlepool Docks, Middleton Road, Hartlepool, Cleveland TS24 0SE. *Tel:* Hartlepool 76771. *Telex:* 58669. *Contact:* N. Britton, Director. Captain A. Kirk, Dock Master.

HARWICH (Including Parkeston Quay and Navyard Wharf): 51.56 N. 01.15 E. **(See Plan Book)**

The Harbour Authority is the Harwich Harbour Board whose jurisdiction extends from the seaward area of the Deep Water Channel to the mouth of the River Orwell on one hand and as far up the River Stour as the tide flows on the other.

The Harbour Master's Office is at Harbour House, Angel Gate, Harwich (Tel: 4303. Telex: 98472), at which is based the Harwich Harbour Operations Service maintained on a 24 hour basis by a Duty Officer and a Trinity House Duty Pilot.

The Harbour Operations Service (Call sign "Harwich Harbour Radio") maintains a listening watch on Channel 16, and operates on Channel 71.

The service is equipped with surveillance radar, radar information is available on request.

British Rail, at Parkeston Quay, keep a 24 hour listening watch on Channel 16 and work on Channel 18.

DOCUMENTS:

1 Home Officer Form 1.B.6 may be obtained from H.M. Customs Boarding Officer.
1 C.142 Crew Declaration List.
1 Maritime Declaration of Health ("Q" Flag procedure).
2 Ship's report by Master.
1 Stores List.
1 Certificate of Deck Cargo Tonnage (if carried).
1 Grain Certificate (if carried).
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List required by vessels other than packet vessels.
1 Landing Card for each passenger.
1 Ship's Certificate of Registry.
1 Mercantile Marine Office Certificate – for British vessels only.
1 Load Line Certificate.
1 Safety Equipment Certificate.
1 Lloyd's Certificate.
1 Derat Exemption Certificate.
1 Ship's Register.
1 Lights Bill.
1 Radio Safety Certificate.

In addition Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Pilotage into harbour is compulsory for all ships of 50 tons and over, with the exception of vessels of not more than 3,500 tons gross regularly employed in the home and coasting trades and not carrying passengers.

Also see "Felixstowe".

CORK PILOT STATION

Boarding Point: To facilitate the arrival and departure of ships trading to and from the ports of Felixstowe, Harwich and Ipswich, a Pilot station operates in the vicinity of the Cork in a position Lat. 51° 56′ 42″ N., Long. 01° 27′ 06″ E. *This station is additional to, but is not a substitute for, the Sunk pilot vessel. It is for the use of ships bound to or leaving the above-mentioned ports whose normal course does not take them past the Sunk pilot vessel.* Full service is also provided at the Sunk station.

The Cork station is operated by a fast Pilot launch with black hull and white wheelhouse, flying the Pilot flag, and at night exhibiting lights and signals in accordance with Rule No. 29 of the International Rules for the Prevention of Collisions at Sea.

The attention of Masters is drawn to the requirement when being served by a fast pilot launch of maintaining headway throughout the operation of shipping or landing a Pilot.

ETAs and Amendments: Inward Bound Ships. Ships requiring a Pilot at the Cork station should apply to the Sunk pilot vessel in the same manner and giving the same information but stating their estimated time of arrival at the Cork.

Outward Bound Ships: Masters of ships about to sail from Harwich and Felixstowe and wishing to use the Cork pilot station should state this when ordering their Pilots for departure. However ships may carry their Pilots out to the Sunk pilot station should they so desire. Pilots for ships outward bound should be ordered by telephoning Harwich (code 02555) 3129 – see "Harwich Shore pilot station" below.

Contact Procedure: The Cork pilot launches keep a constant listening watch on Channel 16 (VHF).

Working Frequencies: Having made contact on Channel 16 (VHF) ships should transfer to the working frequency Channel 9 (VHF).

HARWICH SHORE PILOT STATION (OPERATIONS)

The Shore pilot station (Operations) is situated at Harbour House, Harwich and is part of the Port Operations Service jointly operated by the Harwich Harbour Board and Trinity House. It should be noted that Pilots' accommodation and administrative offices are situated at the main pilot station at Town Quay, Harwich.

The pilot station (Operations) is manned by a Duty Pilot and is equipped with VHF, telex and telephone.

All requests for the services of Pilots for ships bound into or out of Harwich and Felixstowe should be made to this station. Orders for Pilots for outward bound ships should state whether the Pilot will be landed at the Sunk or the Cork. Requests from inward bound ships for the services of the Ipswich Pilots and for the Pilots for the Rivers Colne, Blackwater, Crouch and Roach may also be passed through this station.

Contact Procedure: A 24-hour listening watch is maintained on Channel 16 (VHF). The call sign is "Harwich Pilots Radio".

Working Frequencies: Having made contact on Channel 16 (VHF) ships should transfer to the working frequencies, Channels 9 and 12 (VHF).

Ships not fitted with VHF may contact the pilot station (Operations) through the Sunk pilot vessel on MF.

Other communication details are:

Telephone number:	Harwich (code 02555) 3129 or 6300
Telex number:	98472, Pilots Harwich

APPROACHES: Traffic Regulatory System in effect.

ANCHORAGES:

Erwarton: Situated to the North and West of Parkeston Quay with an average depth of 5.5 m. at LW.

Parkeston: Situated to the North of Parkeston Quay, with an average depth of 5.5 m. at LW.

Shelf: Situated on the Western side of the main Channel between the North and South Shelf Buoys. Average depth of 3.7 m. at LW.

Inner: Situated at the Pitching Ground. Average depth 8.0 m. at LW.

Cork: Situated to the North of the Harwich Channel. Area approx. 2 miles × 1 mile. Average depth 6.5 m.

RESTRICTIONS: Normal max. draft allowed alongside the berths at Parkeston Quay is 20 ft.

Normal cargo working at Parkeston Quay ceases at 2200 hrs., but berthing and night work by arrangement at any time.

MAX. SIZE: Normal max. permissible length 500 ft. arrangements for larger vessels can be made. Normal max. permissible breadth for Roll-on/Roll-off is 75 ft. Normal max. permissible draft – 20 ft. The height of the tide does not restrict a vessel berthing alongside the quay if her draft is within 20 ft.

HEALTH: Maritime Declaration of Health required ("Q" Flag procedure). Obtain Pratique through H.M. Customs Boarding Officer if no sickness on board.

If there is sickness on board the Customs Official will notify the Duty Port Medical Officer.

If the vessel is from another port in the U.K. Pratique is automatic.

Also see "Health – All Ports" before first U.K. port.

RADIO: North Foreland Radio (call sign GNF) or Humber Radio (call sign GKZ) are the most convenient stations to pass ETA cables, etc., to Agents or receivers

TUGS: 5 tugs are available in Harwich Harbour for use in the area. M.T. "Alfred" and M.T. "Ganges", 40 ton bollard pull.; M.T.'s "Sauria", "Egerton" and "Langton", 18 tons bollard pull. Tugs' lines usually used.

24-hour service, 7 days per week. Constant watch on Channel 16 VHF. Additional tugs up to 2,250 h.p. can be obtained from London at 24 hours' notice.

BERTHING: There are 8 berths at Parkeston Quay, of which 2 are Portal Ro-Ro berths and 1 is a Pontoon Ro-Ro berth. Normally max. draft permissible alongside is 20 ft. A new berth is under construction.

Berthing, etc., by arrangement. Applications for berths must be made through the Shipping or Port Manager, British Rail, Parkeston Quay, giving as much advance notice as possible. Also see "Navyard, Harwich" before "Authority".

STEVEDORES: All labour at Parkeston Quay are members of National Union of Railwaymen, and arrangements for their use must be made through the Shipping and Port Manager, British Rail, Parkeston Quay.

MEDICAL: Prior notice through British Rail, Parkeston Quay, desirable to arrange attention. All services are available.

TANKERS: A berth is available for tankers for the purpose of discharging and loading to the local oil refinery.

DENSITY: 1025 (sea water).

FRESH WATER: Fresh water can be supplied from quayside hydrants.

FUEL: Can be arranged by either barge or road tanker.

GANGWAY/DECK WATCHMEN: Watchmen are not provided or required by the port, but ships may use their own watchmen.

OPENING/CLOSING HATCHES: To be carried out by ship's crew.

CARGO GEAR: There are 8 level luffing cranes, safe working load averaging from 3 tons to 10 tons, which can be used for discharging and loading. There are also 2 transporter cranes, 30 tons SWL and 4×30 ton Goliath rubber tyred gantries.

IDENTIFICATION CARDS: Seaman's Identity Cards sufficient.

CONSULS: Dutch, German, Danish, Belgian.

REPAIRS: Minor repairs can be carried out by British Rail workshops at Parkeston Quay. As much advance notice as possible required.

REPATRIATION: All facilities available.

AIRPORT: Nearest is Ipswich, 22 miles; Southend, 70 miles.

HOLIDAYS: All normal Bank Holidays. Only passengers and car travellers are dealt with at Parkeston Quay on these days. Freightliners sail only if loaded before the holiday. Train ferries operate normal services.

POLICE/FIRE/AMBULANCE: Dial 999 and ask for service required.

TELEPHONES: Arrangements can be made, with advance notice given.

SHIP SUPPLY SERVICE:

The Alexandra Towing Co. (Felixstowe) Ltd., The Dock Office, Felixstowe Dock, Felixstowe, Suffolk.

Felixarc Marine, Felixstowe Dock, Felixstowe, Suffolk.

Orwell & Harwich Navigation Co., The Quay, Harwich, Essex.

DEVELOPMENTS: Eastern end of Parkeston Quay to be lengthened in due course to provide more container berths.

Dredging of the Main Channel to 11.0 m. underway.

NAVYARD, HARWICH:

Operators: Harwich Dock Co. Ltd. Telephone: Harwich 8949. Telex: 98229. Listens on VHF Channel 16, working Channel 22.

Berths:

Berth No. 1: Length 42 m.
Berth No. 3: Length 160 m., depth 8.6 m.
Berth No. 4: Length 90 m., depth 4.5 m.
Berth No. 5: Length 160 m., depth 6.5 m.

(Berths 3, 4 and 5 equipped with Ro/Ro ramps).

Stevedores:

All labour at Navyard is employed by Harwich Dock Co. Ltd. Berths and labour must be booked through Operations Manager (24 hour service available).

Cargo Equipment:

2 Ransome Rapier NCK 60 mobile cranes – capacity 35 tonnes.

Other equipment includes 14 tugmasters, 10 forklifts to 25 tonnes.

Other Services:

Telephones, fresh water, bunkers, medical services can all be arranged. Harwich Dock Company Ltd., provides ships and goods agency services at this and other ports.

AUTHORITY: Harwich Harbour Board, Harbour House, Angel Gate, Harwich CO12 3EJ. *Tel:* Harwich 4303. *Telex:* 98472. *Contact:* V. A. Sutton, General Manager and Harbour Master. Captain R. W. Shaw, Assistant Harbour Master (Operations).

HEYSHAM: 54.02 N. 02.55 W. (See Plan Book)

DOCUMENTS: As for other British ports plus Walney Light Dues.
PILOTAGE: Trinity House Pilotage Service, Barrow District. Compulsory for all vessels of 50 tons gross tonnage and over with the exception of vessels of not more than 1,500 tons gross regularly employed in the home and coasting trades and not carrying passengers. Also see "Barrow-in-Furness".
ANCHORAGES: Heysham Lake. 0.5 mile N.W. of No. 1 Buoy. Position: Lat. 53° 59′.4 N., Long. 3° 00.0′ W. Depth: 40 ft. at LW.
RESTRICTIONS: Entry possible at all states of tide. Harbour maintained at 4.1 m. below Admiralty chart datum of chart No. 2010.
MAX. SIZE: 480 ft. (146 m.) length, draft 17 ft.
HEALTH: See "Health – All Ports" before first UK port.
RADIO: Heysham Harbour Radio, VHF Channels 16, 14 and 74.
TUGS: None available.
BERTHING: Vessels may be berthed at any time. 1 Ro/Ro ramp, 1 berth exclusively for gas base, 1 general cargo berth North Quay, 2 general cargo berths.
CRANES: 1×30 ton portal crane on North Quay; 1×23 tonne portal crane; 4×7.5 ton portal cranes on South Quay.
DENSITY: Salt water.
FRESH WATER: Available from the quays.
FUEL: Gas oil by road vehicle.
GANGWAY/DECK WATCHMEN: Ship's watchmen required.
AIRPORT: Nearest, Liverpool and Manchester; 60 miles.
REPAIRS: Small repairs possible, no docking facilities.
PROVISIONS: Available locally.
POLICE/AMBULANCE/FIRE: Telephone 999 in emergency.
SHORE LEAVE: No restrictions on landing.
AUTHORITY: Sealink UK Ltd., Sea Terminal, Heysham, Lancs. LA3 2XF. *Tel:* Heysham (0524) 52373. *Telex:* 65260. *Contact:* Captain P. A. Read, Port Manager.

HOLYHEAD: 53.19 N. 04.41 W. (See Plan Book)

DOCUMENTS:
1 Crew List and where applicable a Passenger List.
1 Pratique issued by Customs.
1 Crew Declaration (C.142 for H.M. Customs).
1 List of Consumable Stores (tobacco, snuff, alcohol).
1 Declaration of Health.
1 Cargo Manifest.
1 Ship's Report.

PILOTAGE: Pilotage compulsory under Trinity House Authority. Local Pilot available on request.
ANCHORAGES – PROHIBITED ANCHORAGE: The breakwater affords partial shelter to the outer anchorage and complete protection to New Harbour; there are depths of from 19 ft. to 42 ft. in the former and of from 17 ft. to 40 ft. in the latter.

The accommodation for vessels of deep draft in New Harbour is limited. Small vessels should always proceed into New Harbour and anchor in the S.W. part, leaving the outer part and the roadstead for large vessels. The bottom is hard, overlaid with mud but the holding ground is sufficiently good if an adequate amount of cable is veered. During Easterly winds an uncomfortable sea is raised; vessels may then obtain shelter in the Eastern part of outer anchorage. Anchorage is prohibited within 1.5 cables on either side of the track followed by Mail Steamers from the head of the breakwater to the entrance to Old Harbour; the limits of this area are shown on charts.

MAX. SIZE:
Inner Harbour: Restricted to vessels of 4.5 m. draft and vessels exceeding this draft will only be accepted after consultation with the Shipping and Port Manager.
Outer Harbour: Vessels of approximately 60,000 tons can be accepted alongside the Anglesey Aluminium Jetty where the berth is dredged to 46 ft. at MLWS.

HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Holyhead Radio, VHF Channel 16, No Port Radar.
TUGS: Available through Agents. Tugs up to 1,375 h.p.
BERTHING: By prior arrangement with Shipping and Port Manager.
STEVEDORES: No stevedores. Vessels loaded and discharged by Sealink dock porters. Outside vessels berthing at Public Quay can be discharged and loaded by making prior arrangements with Agent.
MEDICAL: Medical Officer available. Stanley Sailors Hospital situated in close proximity to Harbour.
DENSITY: Salt water (1025).
FRESH WATER: Available at all berths within the Inner Harbour and alongside Anglesey Aluminium Jetty.
FUEL: Fuel oil and diesel oil available provided that adequate warning is given to Agent. Only 1 berth available for bunkering of large vessels of deep draft alongside Anglesey Aluminium Jetty.

Prior arrangements must be made with Sealink UK Ltd. in conjunction with Anglesey Aluminium Metals Ltd., telephone Holyhead 3333.

No oiling barge available for bunkering vessels at anchor.

GANGWAY/DECK WATCHMEN: Required at all times when vessels are in port.
REPAIRS: Repairs can be carried out by Sealink UK Ltd. workshops.
DRY DOCK: Length 412 ft., breadth 70 ft. 3 in., depth on sill 20 ft. at Spring tides.
SURVEYORS: Cargo Inspectors can be contacted, if required.
Surveyors representing Lloyd's Register, Bureau Veritas, etc., can be contacted on request.
AIRPORT: RAF Station Valley, Anglesey (6 miles away).
HOLIDAYS: Saturdays, Sundays and all Public holidays.
POLICE/AMBULANCE/FIRE: Tel. 999.
EMERGENCY CO-ORDINATION CENTRE: Maritime Rescue Sub-Centre, Coastguard. Tel: 0407-2051.
TELEPHONES: No telephone connection for outside vessels. Public telephone within port limits.
SERVICES: Compass adjusting can be arranged.
BANKS: British banks only available in the Holyhead area, exchange facilities are provided.
STORING: See "Prelims", page viii.

1. Vessels can be stored by barge or truck, usually by truck.
2. Vessels can be stored during loading or discharging.
3. Trucks can proceed alongside at the berth.
4. Forklift trucks can be used to handle stores.
5. Customs Regulations, where applicable, in force.
6. Local riggers can be employed, if necessary.

SHORE LEAVE: Allowed.
AUTHORITY: Sealink U.K. Limited, Rail House, Turkey Shore Road, Holyhead, Gwynedd LL65 2DD. *Tel:* (0407) 2304. *Telex:* 61283. *Contact:* G. Imlah, Shipping and Port Manager. Captain R. Daley, Marine Superintendent/Harbour Master. Captain P. M. McOwan, Assistant Shipping and Port Manager. Mr. D. E. Ing, Superintendent Marine Engineer.

HOUND POINT: 56.00 N. 03.22 W. (See Plan Book)

LOCATION: The terminal is operated by B.P.
Position of terminal Lat. 56° 00′ 20″ N., Long. 03° 21′ 45″ W.
DOCUMENTS:
1 Crew List.
1 Passenger List.
1 Crew's Effects List.
1 Stores List.
All valid Certificates.

PILOTAGE: Pilotage in Firth of Forth is compulsory. Contact "Forth Pilot" VHF Channel 16. Pilot boards large vessels in vicinity of Fairway Buoy 56° 03.5′ N., 03° 00′ W. as there is limited depth and manoeuvring space at normal Pilot boarding ground East of Inchkeith. For large vessels in ballast, Pilots require gangway/pilot ladder combination rig.
ANCHORAGE: When vessel has to wait for Pilot, berth or tide, "Forth Navigation Service" will assign anchorage. These anchorages are in a line E.S.E. to S.W. of Fairway Buoy. Good holding ground at anchorages.
RESTRICTIONS: Vessels will be berthed at slack water – flood or ebb-only. The same in most cases for unberthing.
MAX. SIZE: Vessels up to 300,000 d.w.t. can berth at Hound Point Terminal with no defined restriction on LOA. Vessels berth starboard side alongside, heading East.

Max. permitted loading draft 20.72 m. (Neap tides) 21.64 m. (Spring tides). Minimum depth alongside terminal 25.0 m.

HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: *Arrival advice:* For advance notice refer to Charterer's instructions.
RADAR/VHF: Estuary radar service. VHF contact can be made with Forth Navigation Service Channel 16. Hound Point Terminal operates VHF Channel 9; B.P. Grangemouth VHF Channel 16 (calling) and Channel 19.
TUGS: 4 tugs of 35 tonnes bollard pull available. Tugs ropes are used.
BERTHING: Hound Point Terminal is a Sea Island in the Firth of Forth about 13 miles from Fairway Buoy. The approach channel from Fairway Buoy to berth is marked by buoys and has a guaranteed minimum depth of 66 ft. at LWST.

Maximum of 4 loading arms of 16 in. available for deballasting and/or loading. Loading rate about 8,000 t.p.h. by gravity and with 2 arms connected. This rate decreases as tank level drops.

When 4 arms are connected loading rate can be as high as 18,000 t.p.h. by means of booster pumps.

Facilities to receive any amount of dirty ballast are available. Discharge through 16 in. loading arms into 24 in. line with minimum of 5 kg./sq.cm. back pressure.

No need to prepare ship's derricks unless stores are taken on board.

API of cargo about 36.7.
DENSITY: 1020 – 1025.
FRESH WATER: Not available.
TIME: GMT in Winter. GMT plus 1 hour in Summer.
CONSULS: See "Leith".
GENERAL: Outside the Firth of Forth, clear of the land on the South side, streams are weak, spring rate up to 1 knot, but at spring tide the velocity at the terminal is up to 3.5 knots (Refer to Tidal Stream Atlas).
AUTHORITY: Forth Ports Authority, Tower Place, Leith, Edinburgh EH6 7DB. *Tel:* (031) 554 4343. *Telex:* 72681. *Cables:* "Harbour Leith". *Contact:* Mr. J. R. Grant, Port Manager, Leith & Granton.
AGENT: John Denholm & Co. Ltd., Old Dock Road, P.O.Box 13, Grangemouth FK3 8TZ. Tel: (0324) 482201. After Hours (031) 337 1920, (0324) 553769, (050 682) 3555. Telex: 77334. Cables: Denholm Grangemouth.

HULL: 53.44 N. 00.14 W. (See Plan Book)

VESSEL TRAFFIC SERVICES HUMBER:

The Humber Ports Operation and Information Service operates a VHF (FM) radio telephone service available to all vessels navigating the Rivers Humber, Ouse, and Trent from the Queen Elizabeth Dock.

A continuous watch is maintained on Channels 10, 12, 13, 14, 16 and 52. The call sign is "VEE TEE ESS" Humber. The Telephone Number is Hull 0482 – 701787. Telegraphic address "Humberops", telex 527656.

The Service provides information regarding the arrival, berthing, anchoring and departure of vessels and also information on navigational aids, navigation generally, visibility, and the safety of vessels and persons. Tidal information, including the height of tide at Bull Sand Fort, Immingham, Hull and Hessle, is also available on request. Messages of any other nature and messages of a personal character cannot and will not be accepted. Messages of this kind should be passed through the British Telecom Ships Telephone Service via "Humber Radio" on Channel 26.

Other VHF (FM) Stations situated on the River Humber and the Channels used are shown in the Appendix to this Notice. These Stations provide direct communication between a vessel and the Dock or Pier Master at the place of destination. In general, vessels should obtain their navigation and safety information from the Vessel Traffic Services Humber and their berthing, docking and other pre-arrival information from the Station serving their destination.

A general broadcast giving weather reports, tidal information and navigational warnings is made by the Vessel Traffic Services Humber on Channel 12 every 2 hours commencing at 0103 hrs., prior notification being given on Channel 16.

Procedure:

(i) Vessels fitted with appropriate VHF R/T equipment on approaching the Humber should set watch on Channel 16.

(ii) Vessels wishing to communicate with the pilot station should call "Spurn Pilot" on Channel 16 and shift to Channel 14 for exchange of traffic.

(iii) On entering and before sailing or moving in the Humber, vessels should call "VEE TEE ESS" Humber on Channel 16. When contact is established they will be requested to transfer to Channel 12 for exchange of arrival or departure information. Watch should then be resumed on Channel 16 and 12.

(iv) Vessels wishing to communicate with the Station serving their destination should do so at the appropriate time on the Channels shown in the Appendix, reporting their departure from Channel 12 to "VEE TEE ESS" Humber. Vessels are advised that, when communicating with these Stations, contact with the Vessel Traffic Services Humber can only be re-established through Channels 16 and 12 and it is particularly advisable to maintain a listening watch on Channel 16 whenever practicable in the event of unforeseen circumstances developing in the River.

All times in messages should be given in local time using the 24 hour notation.

To achieve the full advantage of efficient communication, strict telephone discipline and attention to procedure, particularly on the Calling Channel, is imperative. The operating procedure should be in accordance with that laid down in Chapters VI and VII of the G.P.O. Handbook for Radio Operators (1975 Edition, with Supplements).

These services will be offered and will be rendered on the condition that neither the Associated British Ports, nor any of its servants or Agents, shall be liable to any person for loss or damage of any kind howsoever caused or arising whether as a result of negligence or otherwise or as a result of the non-availability of the services.

NOTICES:

GENERAL DIRECTIONS FOR NAVIGATION IN THE HUMBER: PROCEDURE AND INSTRUCTIONS FOR SHIPS USING THE RIVER HUMBER

1. *Time of arrival. ETA:*

1.1 Ship Owners, Masters and Agents are required to inform the Associated British Ports of the Estimated Time of Arrival of their vessels as per the General Directions together with relevant information regarding draft, hazardous cargo, last port of call, nationality of vessel. In this context the Associated British Ports means the Dock Master at the particular port to which the vessel is bound, the Vessel Traffic Services Humber or the Pilot Office at Hull, Grimsby or Goole. Reference British Transport Docks Board Notice to Mariners Nos. 2 and 3 of 1974.

1.2 Ship Owners or Agents are requested to inform the Masters of their vessels of the importance of amending ETA's as necessary due to changing circumstances. Such amendments can be passed to the Associated British Ports by radio through Humber Radio either in the form of a link call or telegram.

Appendix:

Station	Call Sign	Channel Nos.	Operational Times	Remarks
ASSOCIATED BRITISH PORTS				
Vessel Traffic Services Humber, Queen Elizabeth Dock, HULL	"VEE TEE ESS" Humber	16	Continuous watch maintained	Calling and safety.
		12		Navigation and safety information etc., for the Rivers Humber, Ouse and Trent
		10, 13, 14 and 52		
Grimsby Docks	"Grimsby Docks Radio"	16	Continuous watch maintained	Calling and safety
		18		Docking instructions for Grimsby Docks.
		9		Short range berthing instructions.
Immingham Docks	"Immingham Docks Radio"	16	Continuous watch maintained	Calling and safety
		19		Berthing instructions for tankers.
		22		Docking instructions for Immingham Docks.
		9		Short range berthing instructions.
Saltend Jetties	"Saltend Radio"	16	Continuous watch maintained	Calling and safety.
		19		Berthing instructions for tankers.
King George Dock	"King George Dock Radio"	16	Continuous watch maintained	Calling and safety.
		20		Docking instructions for King George Dock.
		9		Short range berthing instructions.
		10		
Blacktoft Jetty	"Blacktoft Jetty Radio"	16	3.25 hours before HW Goole until 0.75 hour after HW Goole	Calling and safety.
		14		Port Operations and berthing instructions for Blacktoft.
Goole Docks	"Goole Docks Radio"	16	Continuous watch maintained	Calling and safety.
		14		Port Operations and docking instructions for Goole.
CRUDE OIL TERMINALS (HUMBER) LIMITED (Operated by Conoco, Ltd.)				
Tetney Oil Terminal	"Tetney Base"	16	Continuous watch maintained	Calling and safety.
		19		Berthing instructions for Mono-Mooring Buoy.
		48		
SPURN SHIPPING COMPANY LIMITED	"Oil Base"	9	Continuous watch maintained	Short range berthing instructions for Immingham Oil Terminal.
HULL CORPORATION				
River Hull Port Operational Service	"Drypool Radio"	16	2 hours before HW Hull until 1 hour after HW Hull, Mon. to Sat.	Calling and safety.
		14		Port Operations in River Hull.
		6	0900 – 1100 hrs. Sat. irrespective of tide.	Inter-ship use.

1.3 Within the Associated British Ports organisation Vessel Traffic Services Humber will disseminate relevant information received to all interested parties.

1.4 Within the river any message related to the movement and safety of vessels will be passed by Vessel Traffic Services Humber to the vessel concerned and Ship Owners and Agents may avail themselves of this service at any time.

2. *Time of departure. ETD:*

2.1 In order to maintain a complete and up to the minute picture of traffic movement Dock Masters are requested to notify the Vessel Traffic Services Humber of the intended time and actual time of departure of vessels from their docks. This information should be passed by land line. Exchange of information thus engendered should ensure that all Officers of the Associated British Ports are fully informed of traffic movements. In the case of berths not under the jurisdiction of a Dock Master (e.g. wharves on the River Trent), it is anticipated that the present system of communication through Vessel Traffic Services Humber and the Pilot Office will be sufficient.

3. *Navigation of the river:*

3.1 Vessels entering the river should communicate with the Vessel Traffic Services Humber (VHF Channels 16 and 12). A two way exchange of information is essential to ensure the smooth flow of traffic on the Humber necessary for the safety of vessels using the ports. In addition the Vessel Traffic Services Humber can fully advise Owners, Agents and Dock Masters etc., as to the movement on the river of the vessels in which they are interested. Vessels approaching their destinations desirous of communication with the station serving their destination should do so as per the instructions in Notice to Mariners No. 3 of 1974.

4. *Completion of passage or departure from river:*

4.1 Inward bound vessels should on completion of their passage report to Vessel Traffic Services Humber indicating the closing down of their station. VHF/RT should not be used whilst laid alongside in dock.

4.2 On departure from the river vessels are requested to report the disembarking of their Pilots and their intention of proceeding to sea.

4.3 All reported departures from normal traffic movement (e.g. engine failures, vessels weather bound at Spurn etc.), will be disseminated by the Vessel Traffic Services Humber to the appropriate authorities.

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing card for each passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate – for British Ships only.
Load Line Certificate.
Safety Equipment Certificate.
Lloyd's Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.

In addition Manifests and Bills of Lading are usually sent to Agents direct from the loading port.

PILOTAGE: Compulsory. *Humber Pilotage District – Spurn Pilot Station:* Mariners are advised that the Pilotage Control Station (Tel: 096 – 46 – 392; Telex: 527393) is established on the Spurn Peninsula in a position Lat. 53° 34′ 29″ N.; Long. 00° 06′ 48″ E.

The station is manned at all times with a Pilot Master in attendance and vessels bound to the Humber requiring the services of Humber Pilots must give advance notice by signal through a G.P.O. Coast Station to the Spurn Pilot Station giving ETA at the seaward limits of the Humber Pilotage District, draft, and destination at least 12 hours in advance. Any adjustment to the time should be given at least 2 hours before arrival.

Vessels wishing to communicate direct with the Spurn Pilot Station by VHF radio telephony may if within VHF range (approximately 20 miles) call "SPURN PILOT" on VHF Channel 16 and after contact transfer to Channel 14 for passing messages.

(Note: Attempts to establish communication on VHF at extreme range can cause unnecessary interference).

Inward vessels bound for ports up river of Hull desiring to pick up a Goole or Trent Pilot in Hull Roads should give at least 2 hours advance notice of their ETA in Hull Roads to the Vessel Traffic Services Humber on VHF Channels 16 or 12 or through a G.P.O. Coast Station (Telegraphic address "Humberops") or by Telex No. 527656.

Compliance with this procedure will ensure, as far as possible, the shipping of Pilots without delay.

ANCHORAGES: The undermentioned anchorages have been designated for the use of sea-going vessels. Masters are asked to co-operate by using these anchorages and to avoid anchoring in the Fairway or elsewhere.

Spurn anchorage for vessels awaiting Pilot, Bull anchorage for vessels awaiting berth and vessels outward (awaiting orders, etc.), Hawk anchorage for vessels sheltering and Haile anchorage for vessels carrying explosives.

Spurn Anchorage. From position "A" 121° distant 3.65 miles from Spurn Lighthouse, in a 125° direction 1.60 miles; thence in a 020° direction 0.60 mile; thence in a 077° direction 1.00 mile; thence in a 347° direction 0.70 mile; and thence in a 257° direction 2.40 miles to position "A".

Haile Anchorage: (Explosives): From position A, 216° distant 2.18 miles from Spurn High Lighthouse in a 284° direction 0.77 mile; thence in a 139° direction 0.80 mile; and thence in a 027° direction 0.46 mile to position A.

Bull Anchorage: From Position "A", 193° distance 2.1 miles from Spurn High Lighthouse, in a 090° direction 1.96 miles thence in a 294° direction 1.76 miles, thence in a 274° direction 0.93 miles, thence in a 206° direction 1.0 miles, thence in a 116° direction 0.88 miles, thence in a 026° direction 0.55 miles to Position "A".

Hawk Anchorage:

(1) Lat. 53° 35′ 00″ N., Long. 00° 04′ 14″ E.
(2) Lat. 53° 36′ 16″ N., Long. 00° 01′ 33″ E.
(3) Lat. 53° 36′ 09″ N., Long. 00° 00′ 52″ W.
(4) Lat. 53° 34′ 51″ N., Long. 00° 04′ 02″ E.

RESTRICTIONS: Vessels may be accepted through the day and night, the only restrictions on the larger vessels being influence of tides together with the undermentioned physical limitations. The larger deep drafted vessels are usually docked from 3 hours before HW until HW, with similar restrictions on vessels sailing. Ships drawing up to 19 ft. can have access to the docks over the full 24 hours on neap tides and can be docked/undocked over an 18 hour period on spring tides.

Locks	*Entrance lock*		*Depth of water on sill*			
	Length	*Width*	*at MHWS*		*at MHWN*	
	ft.	*ft.*	*ft.*	*in.*	*ft.*	*in.*
King George Dock	750	85	42	0	37	1
Albert and William Wright Docks	320	80	28	1	23	2
			at MLWS			
Salt End Jetty Number 1	tidal		35	0		
Salt End Jetty Number 3	tidal		35	0		

MAX. SIZE: The maximum permissible dimensions for a general cargo/bulk carrier vessel (excluding tankers) requiring a berth in the enclosed docks are as follows: King George & Queen Elizabeth Docks, length 635 ft., beam 83 ft., draft 31 ft. at neaps, up to 36 ft. at springs.

HEALTH: Pratique is normally automatic. In case of suspected illness, death on board or the presence of captive birds or animals on board, Master must radio the Hull and Goole Port Health Authority through the Post Office or Coastal Radio Stations not more than 12 hours or less than 4 hours before arrival using the following telegraphic address "Portealth Hull" or through the Vessel Traffic Services Humber using call sign "Vee Tee Ess" Humber on VHF Radio Channel 12. The usual flag or light signals should be shown except where only animals are present and Free Pratique should be obtained from the Hull and Goole Port Health Authority.

RADIO: Portishead Radio – call sign GKL but when within 200 miles of the Humber can go through Humber Radio – call sign GKZ.

VHF: See "Vessel Traffic Services Humber".

TUGS: Head boat normally joins vessel in vicinity of Salt End, about 2 miles from dock, and the other tug or tugs connect with vessel when approaching the dock. Where vessel supplies own ropes for towage these to be good stout hawsers. Wire ropes will not be accepted. There is a charge for use of tug's hawsers.

BERTHING: *Dock or Jetty*	*Length of Operational Quays (ft.)*	*Normal Depth (ft.)*
King George	11,229	37 ft. 07 in.
Queen Elizabeth	5,400	37 ft. 07 in.
Albert William Wright	11,329	as high water
Salt End Jetty No. 1	258	35 ft.
Salt End Jetty No. 2	396	35 ft.
Riverside Quay	1,065	18 ft. 06 in.

BULK HANDLING FACILITIES: Container terminal at Queen Elizabeth Dock equipped with 2 transporter cranes, one 40 tons and one 35 tons capacity and 12 straddle carriers.

Roll-on/Roll-off container services operated from King George and Queen Elizabeth Docks. Grain silos of 60,000 tons capacity. Edible oil storage available.

CRANES: 1 sheerlegs of 150 tons. 51 cranes with capacity up to 32 tons.

STEVEDORES: Enable Agent order gangs important receive accurate ETA. See "Holidays".

Working hours: 0800 – 1200 hrs. Monday to Friday. Overtime possible 1630 – 1830 hrs. Monday – Friday; 0800 – 1200 hrs. on Saturdays and 0800 – 1830 on Sundays.

MEDICAL: Necessary for Agents to be advised of any urgent cases of illness in order that they can arrange for a doctor or if necessary an ambulance to be available immediately on berthing. Hospital facilities available.

If vessel required to remain in river awaiting berth, arrangements can be made for any serious case to be taken from vessel by lifeboat and conveyed to Grimsby for immediate treatment.

TANKERS: The Oil terminal at Salt End handles refined or semi-refined chemical and petroleum products which are transferred from the vessel along the oil jetties through a series of chemical and service pipes which range from 4 in. for chemicals, 8 in. and 12 in. for spirit and 16 in. for fuel oils and molasses. Facilities available for the discharge of Slop residue.

There are 2 tanker berths at Salt End and maximum dimensions of vessels are length 670 ft., draft 34 ft.

DENSITY: 1013/1015.

FRESH WATER: King George and Queen Elizabeth Docks. Available at any time. Ex Quay. Rate of delivery – 15 t.p.h.

All other Docks. Available at any time. Ex Mains. Rate of delivery – 15 t.p.h.

If water required urgently after 1700 hrs. weekdays or on Saturdays or Sundays Agents must be notified in good time to enable them order men out.

FUEL: Fuel oil available, viscosity up to 3,500 secs. Redwood. Gas oil and diesel also available. At least 24 hours notice required.

FIRE PRECAUTIONS: Masters receive an emergency services dock plan with an explanatory leaflet.

GANGWAY/DECK WATCHMEN: Watchmen available if required by Master.

OPENING/CLOSING HATCHES: Can be carried out by stevedores when ordered. Ship charged with actual cost, but ship's crew may do so if required.

CUSTOMS ALLOWANCES: Foreign trade – max. allowance 0.5 lb. cigarettes or cigars or tobacco. Home Trade – (Elbe/Brest limits) half the above. Wine and/or Spirits. Foreign Trade – 1 pint – opened. Home Trade – (Elbe/Brest limits) half the above allowance.

CARGO GEAR: When working with ship's gear a Register of Machinery, Chains and Wire Ropes, etc., with all Test Certificates and record of inspections to be produced to the stevedores before work commences.

CONSULS:

	Tel.		*Tel.*
Belgium	0482 27464	Liberia	0482 26026
Bolivia	0482 27301	Luxembourg	0482 27464
Denmark	0482 659391	Netherlands	0482 224911
Finland	0482 25781	Norway	0482 224151
France	0432 27464	Portugal	0482 28052
Germany	0482 25781	Spain	0482 23096
Greece	0482 26026	Thailand	0482 29925
Iceland	0482 41325		

REPAIRS: Facilities available for all types of deck and engine repairs.

DRY DOCKS:

Largest Dock – King George No. 2.

Length at cope level.		568 ft. 3 in.
Length on blocks.		520 ft.
Width at cope level.		92 ft.
Width at entrance.		72 ft.
Depth of water on sill HMWS		27 ft. 11 in.
Depth of water on sill MHWN		23 ft.
Depth of water on block at entrance.	MHWS	29 ft. 2 in.
	MHWN	23 ft. 6 in.

One further dock in King George Dock. Two further docks in Alexandra Dock. One further dock in Wm. Wright Dock.

AIRPORT: Humberside Airport. Air UK operate flights to Aberdeen, Amsterdam, Edinburgh, Esbjerg, London (Heathrow) and Norwich.

REPATRIATION: Crew changes can be effected and repatriation arranged by sea or air.

TIME: BST (British Standard Time) GMT plus 1 hour, GMT during winter months.

HOLIDAYS: New Year's Day; Good Friday (movable Holiday); Easter Monday (movable Holiday); May Day (1st Monday after May 1st.); Spring Holiday (last Monday in May); Bank Holiday (last Monday in August); Christmas Day (25th December); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Emergency Calls – Police – Fire – Ambulance – Coastguard – Dial 999. Ask the operator for the service required.

TELEPHONES: Can be placed on board at the majority of berths in King George and Queen Elizabeth Docks.

SERVICES: Tank cleaning, facilities for discharge of tank washings slop (residue), compass adjusting, etc., available.

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: Associated British Ports, P.O.Box No. 1, Kingston House Tower, Bond Street, Hull, HU1 3ER. *Tel:* (0482) 27171. *Telex:* 52251. *Contact:* G. A. Cullington, Port Manager.

IMMINGHAM: 53.37 N. 00.12 W. (See Plan Book)

VESSEL TRAFFIC SERVICES HUMBER: See "Hull".

NOTICES: See "Hull".

DOCUMENTS:

2 Copies Immigration, Crew and Passenger List, H.O. Form I.S.6 Supplied by Agents.

Form C.13	General Declaration (In duplicate).
Form C.14	Ship's Stores (In triplicate).
Form C.142	Crew Declaration (In duplicate).
Form C.143	Small Parcels List. (1 Copy) if appropriate.
Form D.C.1	Self Declaration Deck Cargo (In duplicate).

1 Copy Cargo Manifest.

1 Copy Dangerous Cargo List.

PILOTAGE: Compulsory.

Humber Pilotage District – Spurn Pilot Station: A Pilotage Control Station (tel. No. 096–46–392; telex No. 527393) is established on the Spurn Peninsula in a position Lat. 53° 34′ 29″ N., Long. 00° 06′ 48″ E.

The station is manned at all times with a Pilot Master in attendance and vessels bound to the Humber requiring the services of Humber Pilots must give advance notice by signal through a G.P.O. Coast Station to the Spurn Pilot Station giving ETA at the seaward limits of the Humber Pilotage District, draft, and destination at least 12 hours in advance. Any adjustment to the time should be given at least 2 hours before arrival.

Vessels wishing to communicate direct with the Spurn Pilot Station by VHF radio telephony may if within VHF range (approximately 20 miles) call "Spurn Pilot" on VHF Channel 16 and after contact transfer to Channel 14 for passing messages.

(Note: Attempts to establish communication on VHF at extreme range can cause unnecessary interference).

Inward vessels bound for ports up river of Hull desiring to pick up a Goole or Trent Pilot in Hull Roads should give at least two hours advance notice of their ETA in Hull Roads to the Vessel Traffic Services Humber on VHF Channels 16 or 12 or through a G.P.O. Coast Station (telegraphic address "Humberops") or by telex No. 527656.

Compliance with this procedure will ensure, as far as possible, the shipping of Pilots without delay.

ANCHORAGES: "Hawk", "Bull" and "Haile Explosives anchorage". – The Pilot station will advise where to proceed to anchor and also provide Pilot. See "Hull".

RESTRICTIONS: No restrictions, vessels may enter the harbour day or night. Max. draft for entering harbour 34 ft. HW. Compulsory Pilots boarding Spurn Light-vessel, decide whether vessel shall proceed up river or anchor and await suitable state of tide.

MAX. SIZE: Also see "Tetney Terminal" and Immingham Oil Terminal under "Tankers".

Immingham Dock max. length 198 m., breadth 26.2 m., draft 10.4 m. on density 1010.

HEALTH: Master to report any "Reportable" illness as detailed in form "Port 38" to "Porthealth Immingham".

See "Health – All Ports" before first U.K. port.

RADIO: Humber Radio – 2182 kHz or VHF Channel 16. Dock Master VHF Channel 16. Tankers use Channel 19.

VHF: See "Hull" – Vessel Traffic Services Humber.

TUGS: Will join vessel off dock entrance, optional use of tow lines. If using tug's tow lines, charge for this service, depending on vessel's length.

BERTHING: Unless Master or Agent indicates preference, the Port Authorities will decide which side alongside. River Pilot deciding in conjunction with Dock Master most suitable berthing time for harbour and river installations.

Ro-Ro Terminals: The enclosed dock system incorporates 2 Ro-Ro freight terminals: 1×4 berth facility is operated by Tor Line while a second single berth terminal is available on a common user basis.

BULK HANDLING FACILITIES: *British Steel Corporation Ore Terminal:* Adjoins N.C.B. Terminal. Max. length 1,095 ft., max. draft subject to approach channel, 43 ft. – 46 ft. Two appliances for discharging, rate 2,000 tonnes per hour each.

National Coal Board Terminal: Adjoins B.S.C. Ore Terminal, length – no restriction up to 600 ft. thereafter dependent on vessel using ore berth. Draft average 40 ft.

One appliance for coal loading, rate 4,000 tonnes per hour.

Grain: 2×500 t.p.h. shiploaders available.

CRANES: 19 electric cranes 3 – 20 tonnes capacity and 1 electric derrick 32 tonnes capacity.

STEVEDORES: Firm ETA to Agent required if possible before noon on previous day before arrival.

Working Hours: Monday – Thursday, 0800 – 1700 hrs.; Friday, 0800 – 1700 hrs.; overtime by arrangement.

MEDICAL: No advance notice necessary for medical treatment as all hospital facilities available.

TANKERS: Also see "Tetney Terminal".

Immingham Oil Terminal. Up to 250,000 d.w.t. with part cargo conducive with Humber dredged channel. Length up to 1,100 ft., breadth, no restriction, draft depends on height of water in channel, average 43 ft. Three 12 in. lines for crude oil. Two lines 12 in. and 10 in. all other products. One 8 in. line for bunkers.

Eastern Jetty: Max. Length approx. 650 ft. breadth, no restriction, draft depends on low water, range 27 ft. to 36 ft. 10 in., 8 in., 6 in. lines, depends on Receivers. Bunker line available.

Western Jetty: Max. Length approx. 800 ft. breadth, no restriction, draft depends on low water, range 27 ft. to 36 ft.

Killingholme North: Length 580 ft. max., beam, no restriction, draft 30 ft. 6 in. One 8 in. line. One 4 in. bunker line.

Killingholme South: Length 565 ft. max., beam, no restriction, draft 31 ft. One 8 in. line. Bunker line available. No slop tanks available.

DENSITY: In harbour 1010.

FRESH WATER: Available all berths by hose. Rate of delivery 20 t.p.h.

FUEL: 24 hours notice required. All grades available.

FIRE PRECAUTIONS: Copy of these regulations handed to the Master on arrival.

GANGWAY/DECK WATCHMEN: Watchmen not usually employed, but left to the discretion of the Master.

OPENING/CLOSING HATCHES: See "Grimsby".

CERTIFICATES:

Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Safety Construction and any British Light Dues Receipts.
Derat Certificate.
Oil Pollution Certificate (Tankers).

CUSTOMS ALLOWANCES: 8 days – 200 cigarettes per person approx. Wine/spirits, 4 days – 0.25 pt. per day; this depends on the Customs Officer's discretion.

CARGO GEAR: This must comply with the Department of Employment and Productivity regulations. Normally discharge carried out by shore cranes, although overside berths available.

IDENTIFICATION CARDS: Seaman's book or passport sufficient for crew members going ashore.

CONSULS:

Finland	Immingham 72387	Netherlands	Grimsby 43177
Denmark	Grimsby 57521	Norway	Hull 224151
Greece	Hull 224151	Sweden	Immingham 72387

REPAIRS: All major repairs possible.

DRY DOCKS: 1. Length 225.6 m., width at entrance 17.1 m.
2. Length 182.9 m., width at entrance 27.4 m.

SURVEYORS: Classification/P&I and cargo surveyors available.

REPATRIATION: All facilities exist for dealing with crews and passengers.

AIRPORTS: Leeds Bradford Airport and Humberside Airport for Amsterdam (3 flights from each daily), Aberdeen and London for International destinations.

TIME: GMT. Summertime, GMT plus 1 hour.

HOLIDAYS: See "Grimsby".

POLICE/AMBULANCE/FIRE: Police; Docks – Immingham 72414, 72068, 72067; County – Immingham 76444. Ambulance; County – Cleethorpes 692912. Fire; 999 ask for Fire.
EMERGENCY CO-ORDINATION CENTRE: Humber Estuary, Humber Ports Operations and Information Service. Tel: Hull 35599 – Hull Radio on VHF Channels 16 and 12.
TELEPHONES: Public telephones available.
STORING: See "Prelims" page viii.

1, 2, 3. It is normal practice for such stores to be delivered to ships side at in-dock berths by road vehicles. At the Eastern and Western River Jetties at Immingham, however, vehicles are not permitted and the approximate distances fom the root of the Jetties to ships side is from 400 m. to 500 m.

4. Fork lift trucks could be used at in-dock berths, if necessary.

If proceeding to NCB/BSC or Immingham Oil Terminals – check with Terminal Authorities.
BANKS: All major U.K. Banks have branches in the area.
DEVELOPMENTS: Associated British Ports is to build a new deep water terminal at Immingham for handling bulk liquids.

The facility will be used primarily by tankers carrying North Sea liquefied petroleum gas from Flotta and Sullom Voe for Calor Gas Ltd. and Conoco Ltd.

The terminal will also be used for the export of LPG.

Completion is planned for mid-1985.

The terminal will be sited to the West of the port, and will accommodate fully laden gas carriers up to 75,000 cu.m. at any state of the tide.

As well as its primary purpose of handling liquid propane and butane, the terminal will have the potential to accept additional traffic from other companies.
AUTHORITY: Associated British Ports, Port Office, Cleethorpe Road, Grimsby, South Humberside DN31 3LL. *Tel:* (0472) 59181. *Telex:* 52250. *Contact:* J. M. Hughes, Port Manager.

INVERNESS: 57.29 N. 04.14 W. (See Plan Book)

DOCUMENTS:
2 Crew Lists.
2 Passenger Lists.
Customs and Excise and Health Documents.
Manifest.
Bills of Lading, etc.
PILOTAGE: Apply direct to Agent or to Pilot, telephone Inverness 232845. ETA 24 hours. Pilot equipped with VHF. Pilot cutter blue launch with letter "P". Pilot station Munlochy Buoy. Location of anchorage while awaiting Pilot – Munlochy Buoy.
ANCHORAGES: Munlochy Buoy in 5 – 8 fathoms. Beauly Basin in 15 fathoms.
RESTRICTIONS: Vessels may enter and leave from 2 hours before HW until 2 hours after HW.
MAX. SIZE: Ship max. 300 ft. length, 20 ft. draft, high water springs. 18ft. draft, high water neaps
HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Wick Radio.
VHF: Harbour Office on VHF Channels 16, 14 and 12 during office hours.
TUGS: None.
BRIDGES: Kessock Road Bridge, max. clearance 29 m. at MHWST.
STEVEDORES: Arrange through Agent. 24 hours notice required.
MEDICAL: Doctor available.
DENSITY: 1002.
FRESH WATER: Available on demand, 5 t.p.h., ex-hose on quay.
FUEL: Marine diesel and petroleum on request.
GANGWAY/DECK WATCHMEN: Supplied by ship.
OPENING/CLOSING HATCHES: Done by crew.
CUSTOMS ALLOWANCES: Tobacco/Wines/Spirits. Usual amount allowed by Customs and Excise.
IDENTIFICATION CARDS: None.
CONSULS: Netherlands, Tel: Inverness 31171.
REPAIRS: Thornbush Slipway Tel: 33813.
REPATRIATION: Facilities available.
AIRPORT: Dalcross, 7 miles from Inverness.
HOLIDAYS: 1st and 2nd January; Easter Monday; July Bank holiday; First Monday in October; and Christmas Day. All official holidays, cargo work can be arranged on these days.
POLICE/AMBULANCE/FIRE: Police Inverness 239191; Fire Brigade Inverness 222722; Ambulance Inverness 231511.
TELEPHONES: On quay.
SHORE LEAVE: Unrestricted.
DEVELOPMENTS: Dredging and reclamation underway. The new harbour will have extensive storage facilities and 2 berths, which will be capable of accommodating freighters, tankers, fishing vessels and North Sea supply boats. Transit/storage shed under construction.
AUTHORITY: Inverness Harbour Trust, Harbour Office, Shore Street, Inverness, Scotland. *Tel:* (0463) 233291. *Contact:* Captain D. S. Gilmour, Harbour Master.

AGENT: Denholm Ship Agency Ltd., Clydesdale Bank Building, P.O.Box 8, 64 High Street, Invergordon, Ross-shire. Tel: (0349) 853347. After Hours: (086 284) 2495, (0349) 853117. Telex: 75546.

IPSWICH: 52.02 N. 01.10 E. (See Plan Book)

DOCUMENTS: Masters can conclude all documentation in port. Ship's Agent will give the necessary advice.
PILOTAGE: See "Felixstowe".

A pilot station has been established in the Orwell Navigation Centre at Ipswich Dock Head, Tel: Ipswich 211347 (after hours Tel: 56011) who will receive orders, and requests for information, regarding the pilotage of vessels in the Ipswich pilotage district – Pilots should be ordered at least 2 hours prior to departure.
ANCHORAGES: No anchorages within port. All vessels will proceed direct to berth, otherwise anchorage provided in Harwich Harbour.

RESTRICTIONS: Up to 250 ft. (76 m.) in length the lowest permissible U.K.C. is 2 ft. 6 in. (0.76 m.). Over 250 ft. (76 m.) and up to 360 ft. (109.7 m.) in length the lowest permissible U.K.C. is 3 ft. 0 in. (0.91 m.) Over 360 ft. (109.7 m.) in length by special arrangement (U.K.C.=Under Keel Clearance).
Night Navigation: Vessel of up to 330 ft. (100.6 m.) in length can navigate at any time provided the U.K.C. is observed.

Certain vessels between 330 ft. (100.6 m.) and 360 ft. (109.7 m.) in length may be navigated at any time at the discretion of the Pilot provided that a request is received by the Ipswich Pilot Office, 48 hours in advance of the vessel's arrival/departure, so that the vessel's capabilities in relation to the river can be assessed by the Trinity House Pilots and the Ipswich Port Authority Harbour Master.
Petroleum Tankers – Daylight: There will be no special restrictions or requirements other than conforming with the U.K.C.
Petroleum Tankers – Night: Tankers up to 260 ft. (79.2 m.) in length can navigate at any time provided that U.K.C. requirement is observed. Tankers between 260 ft. (79.2 m.) and 330 ft. (100.6 m.) in length can navigate provided that:

(a) The U.K.C. requirement is observed.
(b) There will be no opposing traffic on the river above No. 5 Buoy.
(c) Visibility is at least 2.5 miles.

Chemical Tankers having on board Hazardous Cargo (i.e. Commodities specified in IMO Hazardous Codes): Will navigate in the river during daylight only.
N.B. Tankers in this category having discharged their cargo and having no hazardous cargo remaining on board will not be constrained by this provision.

Also see "Bridges".

MAX. SIZE: 460 ft. (140.2 m.) overall length and 25 ft. 6 in. (7.7 m.) draft.
HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Masters to contact ship's Agent through North Foreland, Humber, Niton or Portishead depending on position of vessel. All these radio stations hold cable addresses and staff telephone numbers of Agents.
VHF: A 24 hour VHF radio facility has been established. Vessels arriving should contact "Ipswich Port Radio" on VHF Channel 16 on entering the River Orwell and report and/or maintain a listening watch as instructed. Channels 14 and 12 will be used for the passing of messages which should be restricted to the safety of navigation or persons.
TUGS: Vessels of 360 ft. (109.7 m.) in length and up to 415 ft. (126.5 m.) will use 1 tug. Vessels of 415 ft. (126.5 m.) in length and up to 460 ft. (140.2 m.) will use 2 tugs. Vessels of less than 360 ft. (109.7 m.) in length but having a deadweight capacity of 5,000 tons or more will use 1 tug.

Special consideration may be given to vessels fitted with Bow Thrust facilities.

BERTHING: Vessels bound for berths in the Wet Dock should arrive off the lock 2 hours before HW.
Cliff Quay: Length: 3,250 ft (990 m.).

Depth of water alongside: 28 ft. (8.5 m.) below LWOST. Subject to silting.

Approach Channel: 19 ft. (5.8 m.) below LWOST.

Cranes: 12 portal jib cranes from 3.00 to 15.25 tonnes lifting capacity and 1 derrick crane capable of lifting 32.5 tonnes at 90 ft. (27.4 m.) radius, and 40 ft. (12.1 m.) outreach from the face of the quay. A Karrilift container gantry is also available.

Largest vessel which can be accommodated: 460 ft. (140.2 m.) overall in length, 25 ft. 6 in. (7.7 m.) draft inwards, 24 ft. 6 in. (7.4 m.) outwards.

The Quay handles containers and heavy lifts up to 32.5 tonnes and is particularly well equipped to handle cargoes direct to and from both road and rail transport. The South end has been developed as a modern terminal for handling all types of general cargo, including containers, flats and palletised units. Spacious modern transit sheds, together with a container park, are sited conveniently behind this part of the Quay. Vessels up to 25 ft. 6 in. (7.7 m.) draft can be handled at the terminal.

Roll-on/Roll-off cargo terminal to be established at the quay which is presently equipped for coal handling.
Grain Terminal: Located at Cliff Quay. Capable of handling vessels up to 10,000 tonnes capacity at a loading rate of 550 t.p.h. (malt) and 700 t.p.h. (other grain products). Grain silo capacity 11,000 tonnes.
Container Terminal: A new container terminal is under construction at Cliff Quay and will be operational by November, 1984. The terminal will have a 40 tonne ship to shore luffing crane and 2 shoreside gantries with 1-9-1 configuration.
West Bank Terminal: This Terminal provides 3 berths with a total quay frontage of 310 m. and is dredged to 20 ft. (6.1 m.). A container berth is backed up by 7 hectares of hardstanding, including a transit shed of 2,750 sq.m. floor area. The berth is served by 3 portal cranes of 37.5 tonnes, 35 tonnes and 10 tonnes capacity and is adjacent to a Freightliner Terminal offering daily services and incorporated into the Railfreight Speedlink network.

A Ro-Ro berth is backed up by 5 hectares of hardstanding. The bridge ramp is designed to carry a load of 180 tonnes with maximum axle loads of 45 tonnes. The ramp has a carriageway of 36.9 m. long×7 m. wide and can handle traffic at all states of the tide.

The Dock: The dock is situated within the town of Ipswich. It is some 26.25 acres (10.63 hectares) in extent and is approached by an entrance lock 300 ft. (91.4 m.) long by 50 ft. (15.2 m.) wide and ships up to 47 ft. 6 in. (14.4 m.) beam can be brought in.

The following are the depths on the outer sill: At HWOST, 23 ft. 6 in. (7.16 m.). At LWOST, 10 ft. (3.04 m.). At HWONT, 20 ft. 6 in. (6.25 m.). At LWONT, 12 ft. (3.65 m.).

Owing to the shape of the lock-pit modern vessels require the following clearances:

Beam	*Clearance*
40 ft. (12.19 m.)	3 ft. (0.91 m.)
42 ft. (12.80 m.)	4 ft. (1.22 m.)
45 ft. (13.71 m.)	5 ft. (1.52 m.)
48 ft. (14.63 m.)	5 ft. 6 in. (1.67 m.)

Inside, in addition to some 2,700 ft. (823 m.) of private quays owned by merchants having warehouses or mills adjoining, where small vessels can berth, there are the following quays owned by the Authority:

(i) *South West Quay:* This quay is 800 ft. (244 m.) in length with a depth of 19 ft. (5.79 m.) of water alongside at mean dock level. The quay is served by 3 modern 7.5 tonne portal electric travelling cranes and mobiles as required.

(ii) *Timber, Public Warehouse,* and *End Quays* total 940 ft. (286 m.) in length and have a depth of water alongside varying from 12 ft. (3.65 m.) to 20 ft. (6.09 m.). Public Warehouse Quay has transit shed and warehouse space behind the quay and is served by mobile cranes capable of lifting up to 5 tonnes.

(iii) *Tovell's Wharf* is a 600 ft. (183 m.) reinforced concrete quay with 22 ft. (6.70 m.) of water alongside. It is served by 2×4 tonne and 1×5 tonne electric travelling luffing cranes.

(iv) *Orwell Quay* is 775 ft. (236 m.) in length, with 18 ft. (5.48 m.) of water alongside and includes a combined container and Roll-on/Roll-off berth with a derrick capable of lifting 32.5 tonnes at 112 ft. (34.14 m.). Two transit sheds, with a floor area of 15,100 sq.m. are situated immediately behind the quay apron together with further extensive covered and open areas.

BRIDGES: The Western half of the River Orwell Bridge has a clearance of 38.8 m. above MHWOST.

Masters of larger vessels are advised to check their air drafts and if in any doubt contact their Agent or the Ipswich Port Authority before proceeding up the River Orwell.

STEVEDORES: Ship's Master normally advises his Agent of his ETA, disposal of cargo on board, and all relevant details. The Agent passes this information to Stevedores.

MEDICAL: All medical facilities available in port. Vessels requiring medical assistance on arrival should advise all details by radio telephone or on their ETA cables.

TANKERS: It is desirable that when Master of a tanker gives an ETA he also indicates the size of pipe-line, size of connection and discharging point in order that necessary arrangements can be made at discharging point of receiving oil terminal. There are no slop facilities at port of Ipswich, and all cleaning and gas-free operations must be carried out outside precincts of the Harwich Harbour Conservancy Board. Only one tanker berth at Ipswich but there are 6 intake points on quay and it is usual for 4 coastal tankers to be accommodated, depending on the overall length and berth availablity. A maximum draft on the berth of 23 ft. (7 m.) subject to silting.

DENSITY: Approx. 1020 oz. depending on the amount of fresh water in river due to heavy rain.

FRESH WATER: Available at all quays. Delivery by hose through meter at 10 t.p.h.

FUEL:

Gas oil 35 secs. Redwood.
Light fuel oil 200 secs. Redwood.
Medium fuel oil heated 950 secs. Redwood.
Heavy fuel oil heated 3,500 secs. Redwood.
At least 24 hours' notice required.

GANGWAY/DECK WATCHMEN: No watchmen required by Port Authority, but sufficient men available at all times to move vessels, if necessary.

OPENING/CLOSING HATCHES: Hatches opened by ship's crew.

CERTIFICATES: Following certificates are required by Agents in order to arrange Customs clearance:

Ship's Register.
Radio Certificate.
Load Line Certificate.
Safety Equipment Certificate.
Derat Certificate.
British Tonnage Certificate, if required.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes, or equivalent in tobacco, per man. Wine and/or Spirits, 1 bottle per man.

CARGO GEAR: Cargo working gear is supplied by stevedores. Normally, quayside cranes are used for discharging and loading. In event of cargo gear being used in port, Ship's Gear Certificate, duly certifying that all gear has been examined and is in every way workable and suitable for discharge and/or loading of cargo, is to be produced.

IDENTIFICATION CARDS: Not required as long as each crew member has in his possession a seaman's book and/or passport.

CONSULS: Vice-Consul for Sweden and Vice-Consul for Norway. Tel: 59281.

REPAIRS: Only small repairs on board.

SURVEYORS: Lloyd's Register, Tel: 52518.

REPATRIATION: Facilities exist at port for effecting crew changing and arranging repatriation.

AIRPORT: Ipswich Airport is 2 miles from the port. Charter flights available for ship's crew. Tel: 70111.

HOLIDAYS: Normal holidays for English ports.

TIME: GMT in Winter months. Summer time, GMT plus 1 hour.

POLICE/AMBULANCE/FIRE: In emergency dial 999. Otherwise Police – Ipswich 55811; Ambulance – Ipswich 56407; Fire – Ipswich 75345.

SHORE LEAVE: Allowed.

DEVELOPMENTS: See "Berthing".

Main channel at Harwich presently being dredged to 11.0 m.

AUTHORITY: Ipswich Port Authority, Old Custom House, Key Street, Ipswich IP4 1BY. *Tel:* (0473) 56011. *Telex:* 988787. *Contact:* A. J. Hanson, Commercial Manager. Captain J. M. Bain, Harbour Master.

KING'S LYNN: 52.45 N. 00.24 E. (See Plan Book)

DOCUMENTS:

Pilot Note to be filled in and signed by the Master on completion of pilotage services both inwards and outwards.

Cargo tonnage return to be completed by the ship's Agent.

PILOTAGE: Pilotage is compulsory between an East-to-West line through Bar Flat Buoy in the Wash and the Freebridge at King's Lynn.

Vessels may be boarded from pilot cutter in the Wash from approx. 2.5 hours before high water between Cork Hole, the Sunk Buoy and Roaring Middle Light Float. Unless prevented by weather or breakdown a pilot cutter cruises between King's Lynn No. 1 Light Buoy and the Sunk Light Buoy approx. 2.5 hours before high water until such time as it is too late for a vessel to transit the Approach Channel on that tide.

Requests for a Pilot sent at least 24 hours before the service is required (with amendments if necessary up to 14 hours before) to the Pilot Office, Common Staith, King's Lynn (Tel: King's Lynn 3411, telegrams "Conservator" King's Lynn) or through local Agent. The Pilot Office is at the Harbour Office and maintains VHF R/T watch on Channels 16 and 14 from 0900 – 1700 hrs. Monday to Friday and from 4 hours before high water until 1 hour after high water on each tide after 1700 hrs. and before 0900 hrs. The pilot cutter listens on Channel 16 when on station and is fitted with Channels 14, 12, 11 and 6 as working channels.

No. 3 and 4 pilot launches "Brackley" and "Denver" are 40 ft. fibre glass craft with blue hulls, white superstructure and orange tops to the wheelhouses. In the event of bad weather the pilot launch on duty will fore-run vessels into Cork Hole (Lat. 52° 53′ N., Long. 00° 24′ E.) before boarding Pilots.

Requests for Pilots for ships in port, should be made to the Pilot Office at least 2 hours before the Pilot is required to attend the ship. The signals to be used or displayed where the services of a Pilot are required in accordance with the provisions of the Merchant Shipping (Pilot Signals) Order, 1970.

ANCHORAGE: In the Wash vessels anchor within an area bounded by the Roaring Middle Light Float and the King's Lynn No. 1 Light Buoy and the Sunk Light Buoy. Anchoring close to No. 1 Buoy in sufficient depth of water assists early boarding of Pilots. Depth of water 20 ft. minimum.

RESTRICTIONS: King's Lynn Harbour is situated on the River Great Ouse about 2 miles inland from its mouth, at the S.E. corner of the Wash.

The shipping channel in the approaches to King's Lynn and its approaches in the Wash is subject to changes in depth and direction as published on Admiralty Charts.

Harbour Master will advise in advance upon the suitability of vessels and tides.

All ship movements are at high water, times in accordance with a position list maintained at the Harbour Office on the basis of information supplied in advance from Masters of vessels and their Agents.

At the Docks entrance lock docking signals are exhibited from a signal mast. Gale warnings are exhibited from a signal mast on Common Staith.

MAX. SIZE: Max. dimension for vessels entering the Harbour: length 300 ft. (No. 6 Berth, South Quay), beam 45 ft., draft 11 ft., on lowest neap tides, and 17 ft. on highest spring tides. Access over high tide only. Harbour Master to be consulted for vessels approaching these limits.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: The King's Lynn Conservancy Board operates in the River Great Ouse and its approaches in the Wash a VHF (FM) port operations and information radio-telephone service in the International Maritime Band, call signs: "King's Lynn Harbour Radio" (Channels 16, 14, 12 and 11); "King's Lynn Pilots" (Channels 16, 14, 12, 11 and 6).

Associated British Ports operates a docks operations and information service, call sign: "King's Lynn Docks Radio" (Channels 16, 14 and 11).

TUGS: Controlled by King's Lynn Conservancy Board and in attendance at the discretion of the Board's Harbour Master. Vessels joined in the Wash Approaches and/or lower reach of River Great Ouse (Marsh Cut). Vessels should provide own hawsers. If ordered, tug hawser available.

Harbour Master may require any vessel to use and employ a tugboat.

BERTHING: *Alexandra Dock:* Size 780 ft. × 310 ft. Approached from the River Great Ouse and King's Lynn Harbour by a lock. Vessels of length 88.0 m. and beam 13.5 m. can be accepted. The depth of water on sill is 22 ft. to 26 ft. (springs) and 18 ft. (neaps).

Bentinck Dock: Size 1,000 ft. × 400 ft. Connected with the Alexandra Dock by a passage and gates over which pass 2 swing bridges. Also double-sided jetty 235 ft. long.

The quays of the 2 docks have a water frontage of approximately 1 mile and provide a total of 16 berths.

3 quay cranes up to 20 tons capacity available.

STEVEDORES: Gangs usually can be provided at minimum notice. Main commodities and handling rates: timber (200 cbm pre-pack, pre-slung, per gang-hour), steel coils (250 tons per gang-hour), tinplate (90 tons per gang-hour), grain (200 t.p.h. per gang hour), also roll-on/roll-off and container handling.

TANKERS: 3 tanker berths in enclosed docks. Discharge from vessels is to 6 in. connecting pipes feeding 8 in. pipes to storage tanks.

MEDICAL: It is advisable to give advance notice of required medical attendance via Agent. In emergency the Harbour Office will pass on requests received over the VHF R/T Port Operations and Information Service. For other medical information, refer to the Port Medical Officer of Health and H.M. Customs.

FUEL: Available at berths alongside King's Lynn Harbour on 24 hours previous notice. Light-grade fuel oil, gas oil, petrol and paraffin only.
FRESH WATER: Available on all berths through 4 in. pipes off hydrants from public supply.
OPENING/CLOSING HATCHES: Done by crew. Cranes available for heavy beams.
GANGWAY/DECK WATCHMEN: Vessels responsible for providing own gangways at King's Lynn Harbour berths, where the Regulations require the Master or other person having the care of any ship or other craft to have a proper number of hands on board to attend moorings and to comply with all the requirements and directions of the Harbour Master or his Deputy or Assistants.
CONSULS: Vice-Consul for the Netherlands and Germany F.R.
REPAIRS: Limited facilities only available locally for hull and engine repairs.
AIRPORT: Charter flights and some regular flights, from Cambridge and Norwich airports about 45 miles from King's Lynn. Regular flights from London (Heathrow) about 100 miles from King's Lynn.
POLICE/AMBULANCE/FIRE: In emergency dial 999 and ask for the service required. Normal service: Police – King's Lynn 61311; Ambulance – King's Lynn 3503 or 3910; Fire Service – King's Lynn 5163.
HOLIDAYS: Cargo work usually available at overtime rates on Saturday and Sundays and on all public holidays.
DEVELOPMENTS: Container storage terminal to be built at the rear of Bentinck Dock. 42 ton container forklift already available. Terminal to be operational mid-1984.
AUTHORITY: The King's Lynn Conservancy Board, Harbour Office, Common Staith, King's Lynn, Norfolk PE30 1LL. *Tel:* (0553) 3411 and 3412. *Cables:* "Conservator" King's Lynn. *Contact:* M. J. Kiddle, General Manager. Captain D. W. Garside, Harbour Master and Pilot Master.

Associated British Ports, – King's Lynn, St. Ann's Fort, King's Lynn, Norfolk PE30 2EU. *Tel:* King's Lynn (0553) 2636, after June 1985 – (0553) 772636. *Telex:* 81368. *Contact:* A. S. Kent, Port Manager. D. J. Harrison, Assistant Port Manager.

KIRKCALDY: 56.07 N. 03.09 W.

DOCUMENTS/PILOTAGE: See "Leith".
RESTRICTIONS: Dock gates open for 2 hours before HW.
MAX. SIZE: Vessels of 1,500 d.w.t. regularly use the port. Width at dock gates 15.2 m. Depth 5.2 m. Max. width to enter 14.4 m.
RADIO: See "Leith".
VHF/RADAR: Forth Navigation Service from Leith or Methil Harbour Radio.
TUGS: None.
BERTHING: 494 m. of berthing space available in dock.
BULK CARGO FACILITIES: Privately owned grain discharge plant.
STEVEDORES: Available from Methil.
AUTHORITY: Forth Ports Authority, Dock Office, Kirkcaldy. *Tel:* Kirkcaldy 260176. *Contact:* Captain I. C. Bayliss, Harbour Master. Captain R. Taylor, Port Manager.

LARNE: 54.51 N. 05.48 W. (See Plan Book)

DOCUMENTS: See "Belfast".
PILOTAGE: Not compulsory, though private Pilots operate who, when required, are engaged by ship's Agent. Pilots board off Fairway Buoy. Port VHF. Channels 16 and 14.
ANCHORAGES: Inner anchorage in Larne depth up to 5 fathoms. Anchorage outside Fairway Buoy exposed in N.E. winds.
MAX. SIZE: Draft dependent on berth but max. 18 ft. at MLWS, and 19 ft. at MLWN. Oil tankers proceed to Ballylumford Power Station which lies across Larne Lough directly opposite Larne Harbour. Approach channel has depth of 30 ft. below datum and berth has 35 ft. below datum.
HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Portpatrick.
TUGS: 2 × 3.5 tons bollard pull tugs based at Larne, suitable for small vessels. As a rule tugs are not required for vessels using Larne Harbour. Tugs from Belfast serve oil tankers to Ballylumford.
BERTHING: 1 berth equipped with two 5-ton cranes for grabbing and general cargo work. 2 berths are equipped with cranes of 32 tons and 35 tons capacity for handling containers. 4 berths are equipped with ro/ro ramps, capable of taking loads up to 180 tons and ships up to 70 ft. beam.
STEVEDORES: Larne Harbour Ltd. carry out all the stevedoring. 24 hours' notice required for arrangements.
MEDICAL: No advance notice required for medical attention, a hospital being situated 1 mile from harbour. No special inoculations or certificates required.
TANKERS: 1 tanker berth in Larne Harbour. Depth alongside, 18 ft. below datum. Discharging only. LPG tankers max. LOA 171 ft., pipe diameter 4 in. For Ballylumford, see "Max. Size".
DENSITY: 1025.
FRESH WATER: Unlimited by shore hose. Rate 7 t.p.h. to 10 t.p.h.
FUEL: Fuelling carried out by road tanker. Arrangements to be made through ship's Agent.
GANGWAY/DECK WATCHMEN: Agents arrange watchmen.
OPENING/CLOSING HATCHES: Performed by crew.
CUSTOMS ALLOWANCES: Agents arrange with Customs.
IDENTIFICATION CARDS: Not required.
CONSULS: Consuls in Belfast can be contacted through ship's Agen
REPAIRS: Limited repairs by local firms. Major repairs by Belfast firms
REPATRIATION: Possible.
AIRPORT: 20 miles. Regular flights.
HOLIDAYS: 12th and 13th July, Easter Monday and Tuesday, 1st Ma Christmas Day, Boxing Day and New Year's Day. No cargo worked o these days.
POLICE/FIRE/AMBULANCE: Dial 999 and ask for Emergency servic required.
TELEPHONES: Only on Cross Channel vessels.
SHIP SUPPLY SERVICE: John McLoughlin & Son (Shipping) Ltd North End, The Harbour, Larne. Tel: Larne 3785 & 4085.

Ship supply and personnel transfer carried out by tugs and launches
DEVELOPMENTS: Common-user passenger terminal unde construction. Completion expected mid-1985.
AUTHORITY: Larne Harbour Ltd., 9, Olderfleet Road, Larne BT40 1AS County Antrim, Northern Ireland. *Tel:* (0574) 79221. *Contact:* Captai B. R. Dickinson, Harbour Master.

LEITH: 55.59 N. 03.10 W. (See Plan Boo

DOCUMENTS:
2 Report Forms (C. 13).
3 Stores Declarations (C. 14).
2 Crew Declarations (C. 142).
Crew Lists
Passenger Lists } As Required.

Also additional forms for specific circumstances, e.g. deck cargo livestock etc.

(Also see "Glasgow".)

PILOTAGE: Pilot station Firth of Forth located at Granton, boardin station West of Fairway Buoy at Long. 3° West. Contact with pilot cutters can be made on VHF Channels 16 and radio-telephone 2182. Pilotage not compulsory for vessels approaching South of Inchkeith Island.

Large vessels are normally docked 1.5 hours before HW. Vessels u to 20 ft. draft, dock at any time.
ANCHORAGES: Good holding ground at Inchkeith Island and Leit roadstead depths 8 m. – 19 m. at C.D. Request should be made to Fort Navigation Service.
RESTRICTIONS: None. Vessels can enter harbour day or night.
Lock: Entrance to the port is from the Firth of Forth through the entrance lock which is 259 m. long and 31.6 m. wide between fenders, depth over the outer sill MHWST 12.239 m.

The lock is operated 24 hours a day, 7 days a week.
MAX. SIZE: Governed by draft of vessels. Max. permissible draf alongside in Imperial Dock 9.1 m. and in Western Harbour 9.7 m., i dock water density is 1015.
HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Forth, Stonehaven and Cullercoats Radio Stations.
RADAR/VHF: Port and Estuary radar service. VHF contact can be made with Leith Harbour Radio on Channel 16. Forth Navigation Service must be contacted on VHF Channel 16 by vessels entering Forth Por Authority Seaward Limit (line joining North and South Carr Beacons).
TUGS: Attend inward-bound vessels in Leith roads. Tug's towline available and compulsory. Tugs on VHF Channels 16, 6, 8, 11, 1 and 14.
CRANES: 2×11 tonnes, 1×7.3 tonnes and 1×3 tonnes mobile diese cranes. Also see "Berthing".
BULK HANDLING FACILITIES: See "Berthing".
Grain Storage: Imperial Basin: 55,880 tonnes. Western Harbou (private) 53,848 tonnes.
STEVEDORES: ETA advices given by Master to ship's Agent an conveyed by them to stevedores.
MEDICAL: No advance notice of medical attention required. All hospita facilities available.
TANKERS: 1 tanker berth available – max. permissible draft 9.1 m. i dock water of density 1015. Discharge lines 6 in. and 8 in. No slo discharge facilities.
DENSITY: 1015.
FRESH WATER: Available alongside at all berths.
FUEL: All grades available subject to 24 hours notice in advance.
GANGWAY/DECK WATCHMEN: Usually supplied by ship but shor watchmen arrangeable by special agreement.
OPENING/CLOSING HATCHES: Custom of the port is that this work normally carried out by ship's crew.
CERTIFICATES:
Ship's Register.
Load-line.
Safety Radio.
Safety Equipment.
Cargo Construction.
Derat Certificates.
Light Dues receipt.
CUSTOMS ALLOWANCES: Usual amounts allowed by Customs an Excise.
CARGO GEAR: No additional requirements necessary to comply fu with local safety regulations as all gear supplied by stevedores.
IDENTIFICATION CARDS: Not required.
REPAIRS: Facilities available to carry out all types of deck and engin repairs.
DRY DOCKS: Largest dry dock "Imperial", length 167.6 m. width entrance 21.3 m. depth over blocks at 7.7 m. also 2 smaller dry docks

BERTHING:

Dock/Basin	Quayage (m.)	Maximum Depth (m.)	Entrance Width (m.)	Quayside Cranes No.	Capacity (tonnes)	Type	Remarks
Imperial Basin Common User Berth	200	9.6	31.6				Tanker Berth Oil bunkering facilities available.
Imperial Dock Roll-on/Roll-off Berth	1,100	9.5	31.6	1	120	Heavy lift	3 travelling grain elevators rated capacity 660 t.p.h. Road and rail access. Siwertell bulk unloader, rated capacity 355 t.p.h.
				3	7.5 – 10	Grabbing/General Cargo	
				2	6	General Cargo	
				4	3	General Cargo	
				2	7.5	Grabbing/General Cargo	
Edinburgh Dock	1,615	8	18.2	3	6	General Cargo	
Coal loading plant				5	3	General Cargo G.E.C. M.G.R. System	Rated capacity 3,000 t.p.h. Road and rail access.
Albert Dock	677	8	18.2	1	30	Container Crane	Container quayside handling equipment (privately owned) and break bulk sheds. Road and rail access.
Container Berth				1	20	Scotch Derrick	
Roll-on/Roll-off Berth				2	7.5	General Cargo	
				2	3	General Cargo	
Victoria Dock	558	7.4	18.2				Road and rail access.
Western Harbour	296	10.3	31.6				3 travelling grain elevators (privately owned).
Berth Nos. 8 and 10 Harbour	305	9.5	31.6				Grain outloading terminal. 2 Fyson Mobile Conveyors, rated capacity 680 t.p.h. each.
Berth No. 6 Harbour Roll-on/Roll-off Berth	149	8	31.6				Road and rail access.

CONSULS:

Australia: Miss J. Richardson, Consul, 4 Hanover Street, Edinburgh EH2 2HQ. Tel: (031) 226 6271.

Austria: I.D. Millar, Consul, 16 Heriot Row, Edinburgh EH3 5HR. Tel: (031) 556 2896.

Belgium: R. De Maere, Acting Consul, 3rd Floor, 13 Charlotte Square, Edinburgh. Tel: (031) 225 3490.

Denmark: R. S. Salvesen, Consul, 50 East Fettes Avenue, Edinburgh EH4 1EQ. Tel: (031) 552 7101. J. Ralph, Vice-Consul, Mandal House, South Shore Road, Grangemouth. Tel: (0324) 486721.

Federal Republic of Germany: Dr. W. A. Thönnes, Consul General, 16 Eglington Crescent, Edinburgh EH12 5DC. Tel: (031) 337 2323.

Finland: Hemming Renlund, Consul (for Scotland), 27 Abercromby Place, P.O. Box 69, Edinburgh EH3 6UD. Tel: (031) 557 2738. G. H. Elliot, Honorary Consul (for Edinburgh), 50 East Fettes Avenue, Edinburgh EH4 1EQ. Tel: (031) 552 7101.

France: Rene Gros, Consul General, 7 Wemyss Place, Edinburgh EH3 6EL. Tel: (031) 225 7954.

Greece: George Tombazis, Consul General, 9 Regent Terrace, Edinburgh EH7 5BW. Tel: (031) 556 1701. I. D. Ross, Consul, 1 Thistle Court, Edinburgh EH2 1DE. Tel: (031) 225 6744.

Iceland: S. Magnusson, Consul General, 2 Orchard Brae, Edinburgh EH4 1NY. Tel: (031) 332 5856. Snjolaug Thomson, Vice-Consul, 5 Abinger Gardens, Edinburgh EH12 6DE. Tel: (031) 337 2066.

Italy: Dr. Pietro Lonardo, Consul General, 6 Melville Crescent, Edinburgh EH3 7JA. Tel: (031) 226 3631.

Latvia: R. D. Cairns, Consul, 1 Royal Terrace, Edinburgh EH7 5AD. Tel: (031) 556 5362.

Monaco: F. J. Steward, Consul, 39 Castle Street, Edinburgh EH2 3BH. Tel: (031) 225 1200.

Netherlands: Mr. Souness, Consul, Life Association of Scotland Ltd., 8-12 George Street, Edinburgh 2. Tel: (031) 225 8494.

Nigeria: Dr. Onoh, Deputy High Commissioner, 3-11 North St. Andrew Street, Edinburgh EH12 1HJ. Tel: (031) 557 0275.

Norway: Knut Sagen, Royal Consul General (for Scotland), 86 George Street, Edinburgh EH2 3BU. Tel: (031) 226 5701. L. Kidd, Consul, J. T. Salvesen & Co. Ltd., Grangeburn Road, Grangemouth. Tel: (0324) 482801. L. M. Harper Gow, Honorary Consul (for Edinburgh), 50 East Fettes Avenue, Edinburgh EH4 1HQ. Tel: (031) 552 7101.

Portugal: J. F. Hall, Consul, Gogar Park, 167 Glasgow Road, Edinburgh EH12 9DJ. Tel: (031) 339 5345.

Sweden: John D. Bottomley, Consul, 6 John's Place, Edinburgh EH6 7FP. Tel: (031) 554 6631.

United States of America: Leonard Willems, Consul General, Miss N. C. Abell, Consul, 3 Regent Terrace, Edinburgh EH7 5BW. Tel: (031) 556 8315.

REPATRIATION: All facilities available for effecting crew changes and repatriation by sea, air and rail.

AIRPORT: Edinburgh Airport served by regular airlines and located approx. 9 miles from Leith.

TIME: British Standard Time, GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: Public holidays observed annually: 3rd Monday in April; 3rd Monday in September; Christmas Day (25th December); 26th December; 1st, 2nd, and 3rd January. Cargo work can be arranged on public holidays except 1st and 2nd January.

POLICE/AMBULANCE/FIRE: Tel. 999 and ask for service required or call Leith Harbour Radio on VHF Channels 16 and 12.

TELEPHONES: Can be arranged with G.P.O.

SERVICES: Compass adjusting facilities available.

SHORE LEAVE: No restrictions.

DELAYS: Minimal delays in berthing, loading and discharging.

AUTHORITY: Forth Ports Authority, Tower Place, Leith, Edinburgh EH6 7DB. *Tel:* (031) 554 4343. *Telex:* 72681. *Cables:* Harbour Leith. *Contact:* Mr. J. R. Grant, Port Manager, Leith & Granton. I. T. Whale, Business Development Officer.

AGENT: John Denholm & Co. Ltd., 55 Constitution Street, Leith EH6 7AY. Tel: (031) 554 0651. After Hours: (050 682) 3555, (031) 337 1920, (0324) 553769. Telex: 77334.

LERWICK: 60.09 N. 01.08 W. (See Plan Book)

PORT LIMITS: All waters contained within the following boundaries including Dales Voe and Aith Voe.

Straight line drawn from the N.E. extremity of Hawks Ness (Lat. 60° 13′ 27″ N., Long. 1° 10′ 00″ W. approx.) in an E.S.E.'ly direction to the N.E. extremity of Green Holm and thence in a S.E.'ly direction to the N.E. extremity of Score Head in the island of Bressay. Thence in a W.'ly and S.'ly direction along the high water mark of all foreshores to Whinna Skerry (Lat. 60° 07′ 45″ N., Long. 1° 07′ 17″ W. approx.). Thence in a straight line in a W.'ly direction to the S. extremity of Ness of Sound. Thence along high water mark of all foreshores in a generally N.'ly direction to Hawks Ness.

BUOYAGE: Buoyage in Lerwick Harbour is IALA System "A".

DOCUMENTS: See "London".

PILOTAGE: *Pilot Office:* At foot of Victoria Pier in Harbour Master's Office. Lat. 60° 09′ N., Long. 1° 08′ W. Limits of Pilotage District similar to Port limits given above. Licenced Pilots always available on 24 hour service subject to following correct procedure given below.

Call Sign: Lerwick Harbour Radio.

Frequencies: Calling: VHF Channel 16. Working: VHF Channel 12. Pilot Cutter: VHF Channels 6, 11, 12 and 16.

Port Control: Fitted with VHF Channels 11, 12 and 16. Continuous watch is maintained 24 hours per day, 7 days per week on Channel 16 except when working vessels on Channel 12.

Procedure: The Port Control Office controls the movement of all vessels arriving or departing by either entrance and all movement within the harbour from public or private quays or supply bases, whether such vessels are under the control of Pilots or not.

(a) Vessels requiring pilotage should arrange with Agent not less than 24 hours before arrival. Vessels without Agent should contact Lerwick Harbour Master through Coast Radio Stations not less than 24 hours before arrival. Vessels leaving ports less than 24 hours steaming away should advise time of sailing, projected speed and ETA at time of leaving last Port. Vessels inward from Continental Shelf should advise time of leaving location, projected speed and ETA at time of leaving last location. Amended ETAs should be advised 2 hours before the time given in the last transmitted ETA. VHF contact should be made with Lerwick Harbour Radio while still 1 hour away when final pilotage and berthing arrangements will be made. Port control cannot guarantee a Pilot on station unless 1 hour's notice is given.

(b) ETA messages should also contain information on which harbour entrance is to be used, draft and length overall. Vessels entering by the South entrance will be boarded West of Kirkabister Lighthouse or near Knab Point if weather conditions are unsuitable. Vessels entering by the North entrance will be boarded abeam of the Green Holm and 0.5 miles N.E. of Beosetter Holm. If boarding conditions in this area are unsuitable the South entrance must be used.

(c) "Knab", 18 m. Dark blue hull, white upperworks. Pilot boat and tug, can be used for towing, bollard pull 8 tons.

(d) Outward vessels should call the Port Control 1 hour before departure when information on traffic movement will be given and arrangements for pilotage will be made. When moving within the harbour all vessels should maintain a continuous listening watch on Channel 16. All vessels moving within the harbour should report to the Port Control immediately prior to leaving the berth or anchorage, whether a Pilot is on board or not.

(e) Pilotage within Lerwick Harbour is compulsory, but all vessels not carrying passengers are exempt.

(f) Telephone number of Lerwick Harbour Master and pilot station is Lerwick 3462.

ANCHORAGE: Ample anchorages in harbour roads.
Inner South Harbour depth up to 60 ft.
Breiwick Bay (Inner South Harbour) depth up to 90 ft.

MAX. SIZE: Vessels up to 20 ft. draft and 320 ft. long alongside berth as routine. Vessels of greater length and for draft may be accommodated alongside after discussion with Harbour Master. Anchorages available for any size of vessel subject to prior consultation with Harbour Master, if above 10,000 g.r.t. No mooring buoys available.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Nearest Coast Radio Station "Shetland Radio" Frequency and other details as for "Wick Radio" except for VHF working Channel which is Channel 27.

"Lerwick Harbour Radio" see "Pilotage".

TUGS: No tugs available but Pilot cutter will give towage assistance within her capabilities.

BERTHING: Berths are available for the handling of most cargoes including Roll-on/Roll-off and arrangement should be made through Agents well in advance of arrival. No berths available for handling liquid chemicals. Mobile cranes available from Harbour Authority up to 30 tons capacity or through private operators to 110 tons capacity.

	Length	*Depth*
South Harbour	3,000 ft.	10 ft. to 35ft.
Shell & BP Bases, Holmsgarth	1,000 ft.	15 ft. to 25 ft.
Holmsgarth, 5 berths, including 2 Ro/Ro	3,000 ft.	18 ft. to 35 ft.
Norscot Base	2,000 ft.	18 ft. to 21 ft.
Ocean Inchcape	656 ft.	20 ft. to 24 ft.

STEVEDORES: Arranged through Agent.

MEDICAL: Medical aid can be arranged through Agent or Coastguard at any time day or night.

TANKERS: BP Oil have their own discharging berth. Tankers are also able to discharge at various offshore oil industry supply berths

DENSITY: Density 1025 at all states of tide.

FRESH WATER: Available at most berths, 65 t.p.h. to 100 t.p.h. No water boat.

FUEL: Gas oil available on demand.

FIRE PRECAUTIONS: No-smoking regulations in operation inside all transit sheds. Usual tanker terminal regulations in operation. Handling of explosives covered by local Bye-Law.

GANGWAY/DECK WATCHMEN: Ships usually supply own watchmen. No fixed sum if shore watchman is employed.

OPENING/CLOSING HATCHES: Crew open hatches.

CUSTOMS ALLOWANCES: Tobacco, wine/spirits; at the discretion of the Customs and Excise.

IDENTIFICATION CARDS: Foreign seamen have to supply same if left behind, i.e. hospital, etc.

CONSULS:

Denmark (Vice)	3057	Iceland	4121
Finland (Vice)	3057	Netherlands(Vice)	3057
France (Vice)	3057	Norway	3057
W. Germany	2556	Sweden	2556

REPAIRS: Repairs to fishing vessels and other small craft in steel, wood and fibre glass. Also engine and machinery repairs. Comprehensive electronics repair facilities.

DRY DOCKS: No dry dock available, slip available to take small vessels up to 100 d.w.t.

REPATRIATION: Facilities exist.

AIRPORT: 25 miles to airport. 5 services per day to Aberdeen operated by British Airways. Charter flights by Dan Air and other airlines.

Tingwall, 7 miles from Lerwick, Loganair Twin Otter service to Edinburgh.

HOLIDAYS: Scottish holidays. Working can be arranged on these days if so desired.

POLICE/AMBULANCE/FIRE: Emergency telephone 999 or call Port Control VHF Channel 16. Harbour Master and Port Control 3462 night or day.

COASTGUARD: Lookout on top of Knab Point manned 24 hours a day. Fitted with MF and VHF Radio Channels 16, 13, 10 and Zero.

TELEPHONE: Ships telephones can be arranged.

SERVICES: No tank-cleaning equipment. Compass adjuster can be procured if necessary.

SHORE LEAVE: No restrictions.

AUTHORITY: Lerwick Harbour Trust, 1/2 Alexandra Buildings, Lerwick ZE1 0LL. *Tel:* (0595) 2991, 2828, 3462. *Telex:* 75496. *Contact:* A. B. Laurenson, General Manager. Captain D. I. Polson, Harbour Master.

LIVERPOOL: 53.28 N. 03.02 W. (See Plan Book)

DOCUMENTS: Required on arrival, Crew List Form I.B.6 to be completed; this list to include all passengers and any British subjects who joined vessel outside of U.K. If any person falling into this category should be on board they must not leave until permission to land is granted by Immigration Officer.

Customs Form C.142, Declaration of goods obtained abroad or during a voyage, must be completed and signed by Master, and each crew member. Health Declaration must be completed. Above forms should be obtained from Pilot.

Manifest and Bills of Lading should be forwarded to vessel's Agent so as to be available before vessels arrival.

Ship's Papers Required:
Ship's Register.
Certificate for British Tonnage (if issued).
Safety Equipment Certificate.
Safety Radio Certificate.
Safety Construction Certificate.
International Load-line Certificate.
Derat Exemption Certificate.

PILOTAGE: At least 48 hours before arrival, vessels should give ETA Lynas/Mersey Bar to Agents who will arrange docking and pilotage and advise the Master accordingly.

Pilot Stations: For vessels bound in from the South and West, Pilots board at Point Lynas, North Anglesey, using 40 ft. launches. Contact shore pilot station on VHF Channel 9 with call sign "Lynas Pilot".

For vessels bound in from the North, Pilots board in the vicinity of the Bar Lanby Buoy using launches. Contact shore pilot station on VHF Channel 11 (or 12) with call sign "Liverpool Pilot". It is essential to make this contact as early as possible.

Penalty charges operate for late arrivals, therefore Masters should keep ETA's updated and make contact by VHF as early as possible.

ANCHORAGE: In the event of berths not being readily available for vessels, normally they must wait at the Mersey Bar Anchorage which is in the open roadstead. There are river anchorages, but these are only usually for vessels about to enter the dock system.

RESTRICTIONS: No restrictions on night entry, except VLCCs, tidal restrictions depend on vessel's draft and to which berth vessel proceeding, larger vessels usually have to wait for HW.

MAX. SIZE: Tranmere: up to 41 ft. (12.5 m.) draft dependent on tide. Birkenhead: up to 28 ft. 6 in. (8.68 m.) draft. Liverpool Docks: up to 40 ft. (12.2 m.) draft.

Royal Seaforth Dock: 42 ft. (12.8 m.) of water depth, up to 75,000 d.w.t.

HEALTH: Maritime Declaration of Health Form must be completed and handed to Customs Officer or Port Health Officer, whoever first boards ship. This form is obtainable from Pilot. In event of any suspected disease or fever on board, or if ship has called during last 4 weeks at any port in Brazil, China, Indo-China, India, Pakistan, Burma, Colombia and the port of Dar-es-Salaam, West African ports between Lat. 20° North and 20° South, the Master should, prior to entering port, make radio contact with Liverpool Port Health Authority, via Anglesey Radio or Port Radar Station (Signal "Portelth Liverpool") giving them following information:

1. Name of Ship. 2. Date of departure from and name of last infected port. 3. Number, ages and sex of any cases of infectious diseases or other relevant information. 4. Expected time of arrival at Rock Light.

Before reaching the Rock Light if medical clearance has not been obtained the following signal must be displayed: by day – fly the flag signal "Z W". By night – show red light over white light.

When medical clearance is obtained Pratique will be issued at discretion of Customs Officer.

If there is no suspected disease on board and vessel has not called at any of the above ports listed, Master can radio for Free Pratique. Unless otherwise instructed, Customs Officer will again issue Pratique.

Vessels arriving from another U.K. port do not require Pratique or health clearance.

Also see "Health – All Ports" before first U.K. port.

RADIO: Portishead Radio, call sign: GKL; Landsend Radio, call sign GDL; Wick Radio, call sign: GKR; but on approaching Liverpool, the local radio station is Anglesey Radio, call sign: GLV.

RADAR/VHF: Vessels should establish contact by VHF/RT with the Port Radar Station call sign "Mersey Radio" before sailing and inward bound when within VHF/RT range and not later than when in the vicinity of the Bar Lighted Buoy.

Harbour Radar: The Liverpool Port Radar Station is situated at the N.W. corner of Royal Seaforth Dock 53° 27′ 56″ N., 03° 02′ 22″ W.

The radar coverage extends seaward over Liverpool Bay for a radius of 20 miles from the station and in the River Mersey as far South as the approaches to the Manchester Ship Canal.

Vessels entering or leaving the Port in conditions of low visibility can, on request, be supplied with continuous information of their position whilst navigating in the river or sea channels, providing such vessels can be identified.

A general situation and movement statement, giving all intended movements inwards and outwards for the Port of Liverpool, Eastham, Bromborough, Garston and Cammell Lairds and approximate times at the dock entrance or river berth, together with a list of Local Navigation warnings in force, latest weather reports and area forecast, is broadcast on Channel 9 at 3 hours before each high water. This full statement is repeated with any amendments and the disposition of the River Anchorages North and South at 2 hours before each high water.

Any local navigation warning is broadcast on receipt on Channel 12.

A full list of navigation warnings is broadcast on Channel 9 every 4 hours, commencing at 0001 hrs. No separate broadcast of this list is made during the period from 4 hours before high water to 1 hour before high water as such warnings are included in the General Situation and Movement Statement.

Docking Instructions: The VHF/RT Stations at the Dock Entrances and Stages are provided to facilitate docking and berthing operations and to provide direct communication between the Dock Master or Stage Master and a vessel. The Range of these stations is limited to a distance of 6 to 8 miles.

Tug Communications: Channels 8 and 10 are reserved for tug communications and should not be used for any other purpose. Due to the heavy working of these Channels, especially at tide time, and in order to minimise interference, vessels and their tugs when communicating to one another on VHF/RT, should, when possible transmit on reduced power.

Large Vessels Swinging: Vessels of 150 m. or over in length intending to swing in the river should give advance notice of at least 10 minutes to Mersey Radio of their intentions so that Mersey Radio can broadcast on Channel 12 a swinging warning to all ships.

Port VHF Radio Telephone Communications System:

Station	*Call Sign*	*Hague Channel Number*	*Remarks*
Liverpool Port Radar Station	Mersey Radio	16	Calling and safety
		12	Port Operations – Calling and navigation.
		9	Port Operations and routine broadcasts
		18, 22	Port Operations and Radar information
		19	Radar information and general, for tanker traffic for Tranmere only.
		4	Navigation Broadcasts. Transmitting Only.
			A continuous watch is kept on Channels 16 & 12 at Port Radar Station
Gladstone Dock Master's Office	Gladstone Dock	5	Port Operations and Docking Instructions.
Langton Dock Master's Office	Langton Dock	21	
Alfred Dock Master's Office	Alfred Dock	5	
Tranmere Stage Master's Office	Tranmere Stage	19	
British Transport Docks Board			
Garston Dock Master's Office	Garston Dock	20	Port Operations and Docking Instructions.
U.M.L. Ltd.			
Bromborough Dock Master's Office	Bromborough Dock	21	Port Operations and Docking Instructions.
Manchester Ship Canal			
Eastham Locks Office	Eastham Locks	7	Port Operations and Docking Instructions
M.D. & H.C. Pilot Stations			
Point Lynas Shore Station	Lynas Pilot	16	Calling and safety
		9	Ship to shore.
Liverpool Control Centre	Liverpool Pilot	16	Initial calling
		12	Initial calling
		11	Calling & ship to shore

Local Priority Messages: A vessel which has an urgent message to transmit to Mersey Radio concerning urgent navigation matters and which message should receive priority over normal Port Operations R/T Communications, should indicate the urgency of the message by prefixing the call sign of the Port Radar Station with the spoken word "PRIORITY" i.e. "PRIORITY MERSEY RADIO" repeated 3 times followed by normal procedure.

In special circumstances such as the launch of a vessel or in an emergency such as a wreck, it may be necessary temporarily to establish a patrol for the control of traffic. Vessels will be warned of the existence of any such patrol by "Mersey Radio" and any such patrol vessels or launches will maintain a listening watch on Channel 12 and communicate with other vessels on Channel 6.

R/T Procedure

Channels to be Used for Calling and for Preparatory Signals: Mersey Radio and ship stations will call on Channel 12. Channel 16 should only be used for distress, urgency or safety communications.

Channels for Reply: Calls received on Channel 12 should be replied to on the same Channel, but if calls are received on Channel 16, replies should be made on this Channel.

Indication of the Channel to be Used for Radio Telephone Traffic: When communication has been established on Channel 12 between a ship and "Mersey Radio", the shore station will indicate the number of the Channel to be used for passing and receiving information if Channel 12 is busy.

Times: All times in messages should be given in local time, i.e. BST or GMT, using the 24 hour notation.

R/T Discipline: To ensure that the full advantage of efficient communication is achieved, strict telephone discipline and attention to procedure, particularly on the calling Channel is imperative. Channel 16 must only be used for establishing contact between ship and shore or ship and ship, and must not be used for the passing of messages except in cases of distress within Port limits. Channel 12 should be used for establishing contact between ship and shore or ship and ship.

Sequence of R/T Communication for Vessels Entering the River Mersey: (i) Vessels wishing to communicate with the Liverpool Pilotage District Point Lynas Shore Station should call "Lynas Pilot" on Channel 9. Channel 16 shall only be used in case of difficulty in establishing initial contact.

(ii) Vessels wishing to communicate with the Liverpool Pilotage Control Centre should call "Liverpool Pilot" on Channel 11 as early as possible.

(iii) When within VHF R/T range and not later than when in the vicinity of the Bar Lighted Buoy the vessel should establish contact with Mersey Radio on Channel 12 and pass her arrival information on Channel 12 or other Channel indicated by Mersey Radio, watch should be kept on Channel 12 unless instructed to remain on another working Channel for Port Operational reasons. A vessel at anchor at the Bar anchorage should keep watch on Channel 16.

(iv) Vessels requiring radar information or assistance will be requested to shift to Channel 18 or 22, or if a tanker for Tranmere, Channel 19.

(v) Vessels should inform Mersey Radio when they are ceasing to keep a listening watch on Channel 12. If they are shifting to a tug or a dock entrance or Tranmere Oil Stage Channel they should inform Mersey Radio of such intention.

Vessels Sailing from the River Mersey: Vessels, on sailing from any Stage or Dock, should establish contact with Mersey Radio on Channel 12 and then maintain watch on that Channel unless instructed to remain on another working Channel for Port Operational reasons. Vessels requiring radar information or assistance will be requested to work on Channel 18 or 22, or if a tanker from Tranmere, Channel 19.

TUGS: Join vessel after passing Rock Light. Normally use tug's lines but optional. Charge for tug's hawsers.

BULK CARGO FACILITIES: *Grain Berths:* Royal Seaforth Grain Terminal accommodates ships of up to 75,000 d.w.t. up to 250 m. overall length and 13 m. draft. Discharge is by 2 marine towers at up to 2,000 tonnes p.h. into 133,000 tonnes capacity silo. 2×750 tonnes per hour dischargers (Buhler) for animal feedstuffs at Berth S.2 storage capacity 30,000 tonnes.

Other grain berths include Birkenhead East Tower Berth accommodating vessels up to 192 m., draft 8.8 m.; Buchanan's Mill, max. length 145 m. (152 m. by arrangement), draft 8.7 m.; Ranks/Ocean Mill, max. length 144.7 m. (152 m. by arrangement), draft 8.7 m.; Spillers Mill, max. length 137 m. (152 m. by arrangement) draft 8.7 m.

Grab Cargoes: (Minerals, ores, coal, meals, etc.).

N.3 Huskisson Branch Dock: 2 berths for vessels up to 9.3 m. draft, each equipped with 4 grab cranes.

S.E.2 Alexandra Dock: Vessels up to 8.84 m. draft, equipped with 3 grabbing cranes for handling animal feeding stuffs; discharge to road via hoppers and direct by conveyor to silo storage.

E. Bramley Moore: 2 × 5 tonnes grabbing cranes for handling vessels up to 3,000 tonnes d.w.t. and 5.8 m. draft. Discharge direct to road vehicles.

North Bidston Dock: Quay length 305 m., 8.7 m. draft, max. length 192 m., 3 transporters each with an hourly digging capacity of 350 tonnes discharging to road or rail via 175 tonnes hoppers or into coasters or barges.

Cavendish Quay: 2 × 20 tonnes level luffing jib cranes with a grabbing capacity of 15 tonnes. Each designed to handle up to 450 t.p.h. Loading to road or rail with 2 × 100 tonnes capacity mobile weigh hoppers.

Duke St. Wharf: Vessels up to 8.7 m. draft discharged by 2 × 7.5 tonnes electric level luffing cranes.

BULK LIQUID FACILITIES: *Tranmere:* Petroleum oils at Tranmere South Stage, accommodating tankers up to 115,000 tons displacement, max. draft 11.1 m. plus height of tide and Tranmere North Stage accommodating tankers after lightening up to 210,000 tons displacement, max. draft 12.0 m. plus height of tide.

Liverpool: N.2 Gladstone (edible oils, 2 berths total quay length 376 m., 12.8 m. draft).

S.1 Canada (edible oils and molasses, up to 213 m. length, 9.75 m. draft).

S.E. Nelson (wines and spirits for vessels up to 99.1 m. length, 6 m. draft).

S.E. Salisbury (edible oils for vessels up to 6 m. draft).

Birkenhead: N. Alfred (8.6 m draft, edible oils).

Ilchester Wharf (8.6 m. draft).

E. Lewis (edible oils and molasses for vessels up to 195 m. in length, 8.7 m. draft).

SPECIALISED CARGO HANDLING FACILITIES: *Containers:* The container terminal at Royal Seaforth Dock has a continuous quay 1,100 m. in length, served by 6 gantry cranes and a fleet of straddle carriers working to a 22 ha. container park supported by a 26 ha. back-up area. Tractor trailer units are used to feed the integral Freightliner Rail Terminal.

Containers can also be handled at all general cargo berths.

Timber and Forest Products: At the Royal Seaforth Timber Terminal, 610 m. of continuous quay are served by 4 × 10 tonnes cranes discharging packaged timber to a 20 ha. stacking and back-up area. Two sheds provide covered storage of 9,290 sq.m. for plywood, pulp-kiln-dried timber.

Roll-on/Roll-off: There are 13 berths in the port with Roll-on/Roll-off ramp facilities; Royal Seaforth, S.3, S.6 and S.10; Gladstone No. 3, North Hornby. S.W. and N.W. Alexandra, E. Langton, N.E. 3 Canada, S.E. Nelson, S.E. Trafalgar, S.W. Princes and S. Bidston (Birkenhead).

Heavy and Indivisible Loads: Good road access and specialised facilities include 3 berths strengthened to accept loads of up to 300, 400 and 1,000 tonnes respectively.

STEVEDORES: Earliest possible ETA to be given to arrange gangs.

TANKERS: See "Bulk Liquid Facilities".

DENSITY: River Mersey salt water. Docks approx. 1020.

FRESH WATER: Available at all berths, ex-quay. No water barges available. Rate of delivery 15-20 t.p.h.

FUEL: Most major oil companies are represented and can supply range of fuels of various viscosities. Notice required depends on the berth at which vessel is lying as bunkers are supplied ex-lighter at most berths. Notice required can vary depending on availability of barges, but generally at least 3 to 4 days notice is required.

FIRE PRECAUTIONS: Tankers may not carry out repairs whilst at discharging berth unless permission is obtained from Harbour Authorities. Fire precautions notice is placed on board by Harbour Authorities.

GANGWAY/DECK WATCHMEN: Watchmen not necessary but available if required.

OPENING/CLOSING HATCHES: Carried out by ship's crew for bulk cargoes and by stevedores for general cargoes.

CERTIFICATES:

Register/Certificate of Measurement.
Certificate of British Tonnage (if issued).
Safety Radio Certificate.
Safety Construction Certificate.
Safety Equipment Certificate.
Load-line Certificate.
Derat Certificate.
Cargo Gear Test Certificates.

CUSTOMS ALLOWANCES: Crew members who remain on vessel during vessel's stay in port may be allowed, under certain conditions, to keep for their own use on board small quantities of any tobacco, spirits and other goods declared on Customs Form C.142. The amount allowed depends on the number of days the vessel is in port.

CARGO GEAR: Cargo Gear Certificates must be produced with the necessary up-to-date endorsement.

IDENTIFICATION CARDS: Not required.

CONSULS: The following countries have representatives in Liverpool:

Australia
Belgium
Bolivia
Brazil
Chile
Colombia
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany (Fed. Rep.)
Greece
Haiti
Iceland
India
Japan
Lebanon
Liberia
Monaco
Netherlands
Nigeria
Norway
Panama
Paraguay
Peru
Philippines
Spain
Sweden
Thailand
Uruguay
Venezuela

SURVEYORS: (1) Caleb Brett and other companies available. (2) Lloyds, A.B.S. and B.V. are available.

REPAIRS: All types of deck and engine repairs can be carried out.

DRY DOCKS: Largest (Cammel Laird) – length 950 ft. × 140 ft. Also 7 smaller dry docks (M.D.H.C.).

REPATRIATION: Can be effected, but must be arranged through Agent, so that Immigration Clearance can be arranged.

AIRPORT: City Centre to Airport approximately 7 miles, regular service to London for international connections.

Regular Services from Liverpool Airport to:

Aberdeen	Air Ecosse
Amsterdam	Genair
Belfast	British Midland
Brussels	Jersey European Airways
Cork	Jersey European Airways
Dublin	Jersey European Airways
Dublin	Air Lingus
Isle of Man	British Midland
Jersey	British Midland
Gatwick	Genair
Heathrow	British Midland
Stansted	Jersey European Airways
Newquay (Cornwall)	Genair

(the above are all passenger services with the exception of Dublin which is mainly freight).

TIME: British Standard Time, which is 1 hour in advance of Greenwich Mean Time, reverting to GMT in Winter months.

HOLIDAYS: Good Friday; Easter Monday (movable); 1st Monday in May; last Monday in May; last Monday in August or first Monday in September, whichever may be closest to August 31st. December 25th-26th and New Year's Day. Weekly holidays Saturday, Sunday. Cargo can be worked on official holidays, other than 25th-26th December, also arrangements can be made for cargo to be worked on Sundays.

MEDICAL: If doctor is required to attend immediately on arrival of vessel, prior notice will be required, but generally doctor is arranged for most convenient time after vessel's arrival.

Hospitalisation is available, but seamen will only be admitted if immediate treatment is required. It is preferred for foreign seamen requiring hospital treatment to be repatriated, if able to travel.

Dentist available by appointment only.

POLICE/AMBULANCE/FIRE: Telephone 999, ask for service required.

EMERGENCY CO-ORDINATION CENTRE: "Formby Coast Guard" Tel: Formby 72903 – 72902 – 70724.

TELEPHONES: A temporary telephone can be placed on board a vessel, at most berths, whilst in port.

SERVICES: Compass adjusting, D.F. calibration can be arranged.

BANKS: Allied Irish Bank Ltd, 5/9 Renshaw Street, Liverpool 1; Banco Exterior C A, 6 Victoria Street, Liverpool 1; Bank of Credit & Commerce, International (Overseas Ltd), 41 Castle Street, Liverpool 2; Bank of Ireland, 25 Victoria Street, Liverpool 1; *Citibank Trust Ltd, Tower Buildings, 22 Water Street, Liverpool 2; *American Express International, Travel Agents, Lord Street, Liverpool 2.

*Not Banks as such but possibly undertake closely allied functions.

STORING: See "Prelims" page viii.

1. All vessels can be stored by either barge or truck.
2. Barge storing at Tranmere Oil Stages is restricted to "Approved" barges.
3. Trucks do not always have direct access to vessels by driving along quayside. Approach may be via sheds.
4. Forklift trucks can be used in most cases.
5. As per British Customs Regulations.
6. Riggers can be employed.

SHORE LEAVE: All bona fide crew members may be granted temporary shore leave during the vessel's stay in port, on condition that they leave in the same ship. This permission does not apply to any alien member of the crew who is refused leave to land by an Immigration Officer, or to whom an Immigration Officer has given notice prohibiting him from landing without leave.

SHIP SUPPLY SERVICE: Alexandra Towing Co. Ltd., Castle Chambers, 43 Castle Street, Liverpool 2. Tel: 051-227 2151.

Carmet Tug Co. Ltd., Lock Head, Bromborough, Wirral. Tel: 051-645 5579.

Manor Diving and Marine Services Ltd., Customs House, Four Bridges, Birkenhead, Merseyside. Tel: 051-647 8300.

Rea Towing Co. Ltd., Odyssey Works, Corporation Road, Birkenhead, Merseyside. Tel: 051-647 6263.

In addition the Port of Liverpool has the Buoyage Tender and Salvage vessel "Vigilant" which has fire fighting capability and is classed 100 A1 for River Mersey and Liverpool Bay Service.

AUTHORITY: The Mersey Docks and Harbour Company, Port o Liverpool Building, Pier Head, Liverpool L3 1BZ. *Tel:* (051) 200-2020 *Telex:* 627013 MDH G. *Contact:* Captain K. J. Lewis, Marine Operation Manager (*Tel:* (051) 200-2114).

AGENT: Lambert Brothers Ship Agencies Ltd., Peel Hous 5 Harrington Street, Liverpool, L2 9UG. Tel: 051-236 7206. Tele 629510. Cables "Lambert Liverpool".

LOCHMADDY: 57.36 N. 07.11 W.

PORT LIMITS: Lochmaddy Bay.

PILOTAGE: Pilot can be arranged if required. VHF Channels 16 and 12 Tel: 087 63 337/282/226.

ANCHORAGES: Available in Lochmaddy Bay.

RADIO: Skye Radio.

VHF: Lochmaddy Harbour on Channels 16 and 12.

RADAR: No radar service.

TUGS: None.

BERTHING: Length of berth 220 ft. Depths alongside at LWS: East en 20 ft., West end 8 ft.

CRANES: Available by arrangement. 10 ton lift.

BULK CARGO/SPECIALISED CARGO-HANDLING FACILITIES None.

BRIDGES: None.

MEDICAL: Doctor and hospital available.

TANKERS: No facilities.

DENSITY: Salt water.

FUEL: Gas oil available. Tel. 087 94 238.

FIRE PRECAUTIONS: None.

CONSULS: None.

REPAIRS/DRY DOCKS/SURVEYORS: None.

GANGWAY/DECK WATCHMEN: Available if required.

HATCHES: Opening/closing carried out by crew.

AIRPORT: 20 miles to Benbecula Airport.

POLICE/AMBULANCE/FIRE: Police Tel: 087-63-328. Ambulance Te 087-63-324. Fire Tel: 0463-2222722.

SERVICES: None.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Required.

REGULATIONS: None.

SHIP SUPPLY SERVICE: Crew members, and essential stores can b transported between ship and shore at Lochmaddy by launch. Ship requiring such service should contact Harbour Office. VHF Channel 1 or Telephone 087-63-337 or 282, and at night 087-63-226.

DEVELOPMENTS: Ro/Ro to be fitted by 1985.

AUTHORITY: Western Isles Islands Council, Harbour Offic Lochmaddy, N. Uist. *Tel:* Office 087-63-337 and 087-63-282. Afte Hours 087-63-226. *Telex:* 777273. *Contact:* J. M. Robertson, Harbou Master.

LONDON and Thames District: 51.30 N. 0.05 W.

(See Plan Book

PORT LIMITS: The seaward limit means lines drawn fro Lat. 51° 37′ 00″ N., Long. 00° 57′ 19″ E. (Foulness Point in the county o Essex) to Lat. 51° 46′ 05″ N., Long. 01° 20′ 32″ E. (Gunfleet o lighthouse) and thence to Lat. 51° 26′ 36″ N., Long. 01° 25′ 30″ E. an thence to Lat. 51° 24′ 55″ N., Long. 00° 54′ 21″ E. (Warden Point in th county of Kent).

An arrived ship is considered (subject to Charter Party terms) to hav arrived when vessel is instructed to anchor at a designated anchorage as ordered by the Port Authority, if berth where vessel's operations ar to be carried out is not available. Otherwise when vessel is alongside Usual anchorage for larger vessels is below Southend, which i allocated to vessels by the Port Authority.

DOCUMENTS:

1 copy of H.M. Customs and Excise form C.142 to be complete showing each crew members declaration as to the amount o cigarettes, tobacco, spirits, wine, radios, lighters, etc., belonging t them on board the ship to enable Customs to ascertain if i conformity or excess of requirements.

1 copy of IMO Crew List.

1 copy of List of Passengers on board, showing names, place o joining vessel, passport details.

Ship's Register to be available for inspection on arrival.

List of space occupied by cargo in unregistered spaces.

Chief Engineer's declaration as to the quantity of fuel carried in doub bottom tanks.

Details of any livestock on board.

Ship's Stores declaration arrival Form C.14 to be completed.

Details of previous ports of call.

PILOTAGE: Pilotage by licensed Pilots in London Pilotage District i compulsory unless previous exemption is granted.

Vessels approaching from South enter the pilotage area o Folkestone Harbour, position (Lat. 51° 04′ 37″ N., Long. 01° 11′ 21″ E.)

Vessels approaching from the North collect the Pilot at Sunk Pilo Cutter which operates in the vicinity of the Sunk Light Vessel o Harwich.

Radio Communication – General: The maximum range for radio messages is about 20 miles for VHF. The shore Pilot stations and shore based fast launches operate on VHF only.

Attempts to establish communication at extreme ranges cause much unnecessary interference. The first estimated time of arrival should be sent through a Post Office Coast Station giving at least 1 hours' notice of the ETA. Anything less than 1 hour's notice *must* involve ships in delay. The maximum range for MF radio messages is about 50 miles.

Ships should if possible remain in direct contact with the pilot launch or pilot vessel on their approach, as this facilitates shipping the Pilot.

SUNK PILOT STATION

The Sunk Pilot Cutter, painted black with a buff funnel and the word "Pilots" painted on her sides in white and at night exhibiting lights and signals in accordance with Rule 29 of the International Rules for the Prevention of Collision at Sea, cruises in the vicinity of the Sunk Light vessel to provide Pilots for ships heading for the Port of London and other ports in the London Pilotage District, and disembark Pilots from outward bound ships. In very severe weather the Cutter may move to smoother water, usually in the vicinity of the West Sunk or Gunfleet Spit Buoys. In these circumstances shipping is warned by means of radio navigation warnings from North Foreland, Humberside and Scheveningen radios, which gives the cutter's position.

The attention of Masters is drawn to the requirement of providing a satisfactory lee for the pilot cutter's boarding boats. These 18 ft. boats have a maximum speed of 5 knots.

Contact procedure:– Vessels wishing to contact the pilot vessel at the Sunk by radio telephony direct may:

(i) when within M/F range (approximately 50 miles) call the cutter on 2182 kHz (M/F). The working frequency is 2241 kHz.

(ii) when within VHF range (approximately 25 miles) call on Channel 16. The working frequency is Channel 6.

The Sunk Pilot Cutter may also be contacted by either W/T or R/T through any Post Office Coast Station addressed "Sunk Pilot" via North Foreland Radio. Alternatively messages to the Harwich Pilot Station, telephone Harwich (02555) 3129 or 6300, or telex, Pilots Harwich 98472, will be passed direct to the Sunk Cutter.

The attention of Masters of VLCCs is drawn to the special arrangements for Pilot boarding described below:–

VLCCs requiring a Pilot at the Sunk Station should give the Pilot vessel 12 hours' in advance and through a Post Office Station or the Harwich Pilot Station, their ETA, g.r.t. and Port of Destination. Confirmation of ETA should be given at least 2 hours before arrival. Anything less than 2 hours' notice will involve ships in delay.

Pilot Boarding Arrangements for VLCCs:–

The Masters of all VLCCs requiring a Pilot at the Sunk Pilot Station are requested to comply with the following directions so as to ensure that the boarding operation can be carried out with the minimum inconvenience to the ship and the optium safety.

The Master of the VLCC should establish voice contact with the Sunk Pilot Cutter at the earliest possible time.

The Sunk Pilot Cutter will advise the Master:–

(a) The position in which the Pilot will board and the time of boarding.

(b) The mode in which the Pilot will board, i.e. with the VLCC at anchor or under way. If under way then the speed ordered should be minimal consistent with maintaining steerage way.

In the interests of safe boarding of the Pilot, the VLCC should not proceed inwards of the agreed boarding position.

Vessels bound for the Thames from Rotterdam or ports North of Rotterdam may embark their Pilot at the previous port. Vessels requesting this facility should contact Harwich Pilots, telephone Harwich (02555) 3129 or 6300, telex Pilots Harwich 98472, giving as much notice as possible, stating name and draft of vessel, port and terminal of embarkation, ETD, and whether or not North Sea pilotage is required.

FOLKESTONE PILOT STATION

Pilot launches, with black hulls and white wheelhouses and flying the pilot flag, operate from a shore station at Folkestone to provide Pilots for ships making the port of London and other ports in the London Pilotage District and to disembark Pilots from outward bound ships. The conspicuous building is 77 ft. high and flies a pilot flag by day; by night it displays an illuminated sign with the word "Pilots". The launches normally ship and land Pilots in a position 225° distant 1 mile from Folkestone Pier Light in fine weather but farther off in bad weather.

A shore VHF station is maintained at Folkestone (Lat. 51° 04′ 37″ N., Long. 01° 11′ 26″ E.), and all requests to ship and land Pilots off Folkestone should be made to it.

Ships requiring a Pilot at the Folkestone Station should give the shore station, 12 hours in advance and through a Post Office Coast Station, their estimated time of arrival, gross tonnage, maximum draft and port of destination. Any adjustment to this time should be given at least 2 hours before arrival. The message should be addressed to "Pilots Folkestone".

The following Channels are in use by Folkestone Shore VHF station (call sign "Folkestone Pilots Radio"):

Channel 16 (Calling): A 24 hour listening watch is kept on this Channel, and ships should make contact on it.

Channel 9 (Working): After initial contact has been made on Channel 16, a transfer should be made to Channel 9 for the exchange of operational messages. It is stressed that the shore station has no other working frequency and that ships wishing to communicate with it must have Channel 9 fitted.

Masters of ships approaching Folkestone are advised to maintain a listening watch on Channel 16 so that they can receive any messages for their ships from the pilot station.

Masters are warned that it is difficult to receive VHF signals from Folkestone when their ships are to the Westward of Dungeness owing to the presence of very large buildings.

The station is manned by a duty Pilot and is equipped with telex, telephone, radar and a daylight signalling lamp. The communications details are:

Tel. Folkestone (code 0303) 56766.
Telex 96381, Pilots Folkestn.
Telegraphic address "Pilots Folkestone".

Ships without VHF should send any amendment of their ETA in sufficient time to allow its delivery through the Post Office telex network. Ships without VHF should also establish their identity by visual means during their final approach.

If requested Folkestone Station Pilots may also be embarked off Brixham 1.5 miles N.E. of Berry Head in position Lat. 50° 24′ N., Long. 03° 27′ W., or off Cherbourg at buoy "CH I" in position Lat. 49° 43′ N., Long. 01° 40′ W. 24 hours notice is required by Folkestone Pilot Station for picking up at Brixham, and 36 hours for Cherbourg.

Should a deep drafted vessel not wish to approach too closely to the Folkestone Pilot Station, then the pilot cutter will meet the vessel 1 mile to the S.E. of the East Road port red can lighted buoy, Gp. Fl. 4 red every 15 seconds, which is moored about 4.75 miles N.E. of Dungeness in position Lat. 50° 58′ 18″ N., Long. 01° 03′ 48″ E.

N.E. SPIT.

Ships bound to or from ports between Amsterdam and Dieppe inclusive may land or ship their Pilots by means of a pilot launch which operates as required, but does not cruise, in the vicinity of the N.E. Spit Buoy, but it is emphasised that ships from beyond these 2 ports or bound to ports beyond them are required to ship or land their Pilots at the Sunk or Folkestone Pilot Stations.

A shore VHF station operates from North Foreland Lighthouse (Lat. 51° 22′ 27″ N., Long. 01° 26′ 49″ E.) which is linked by land-line to the pilot station at Folkestone. The call sign is "North East Spit Pilots Radio" and the only Channel available is Channel 9. A 24 hour listening watch is kept on this Channel.

Advance notification of ships requiring services of a Pilot at the N.E. Spit should be given 6 hours beforehand through a Post Office Coast Station, addressed "Pilots Folkestone", or by telephone to Folkestone (code 0303) 56766 or telex 96381.

"North East Spit Pilots Radio" should then be contacted when within VHF range.

Communication with North East Spit pilot launch may be made on Channel 9 VHF. A ship about to ship or land her Pilot should keep in radio contact with the pilot launch.

Ships without VHF should send their ETA or any subsequent amendment in sufficient time to allow its delivery through the Post Office telex network.

The N.E. Spit Pilot will board vessels between the "Elbow Buoy" and the "N.E. Spit Buoy", depending on weather, from a fast launch which is based in Ramsgate Harbour.

RIVER MEDWAY

Messages for the Medway Pilots may be passed through the launches of the Medway Ports Authority, call sign "Medway Patrol". They keep a continuous watch on 2,182 kHz.

Ships bound for the River Medway are requested to call on 2,182 kHz., when 20 – 30 miles from Sheerness, stating their estimated time of arrival, requirements and draft. When contact has been made on 2,182 kHz ships should transfer to 2,241, 2,246 or 2,301 kHz or other licensed intership frequency for passing messages. Ships may also call the Medway Port Operations Service, call sign Medway Radio, when within 20 miles of Sheerness, on VHF Channel 16, transferring to Channel 14 for passing messages.

RIVER THAMES

Sea Pilot leaves vessel at Gravesend when River Pilot boards for final river passage.

PROCEDURE FOR OBTAINING THE SERVICES OF A LICENSED TRINITY HOUSE CHANNEL PILOT.

Ships outward bound from above Gravesend: Masters are requested to give advance notice of estimated time of arrival at Gravesend. Masters of ships fitted with VHF may pass this information direct to Gravesend Radio on the appropriate Port Operations Channel.

Channel Pilots for outward-bound ships are obtainable only from the Royal Terrace Pier, Gravesend, from where they board ships by means of black-painted pilot vessels flying the pilot flag, in response to the statutory signals or a VHF message to Gravesend Radio. In thick or foggy weather 1 prolonged blast followed by 4 short blasts should be sounded by means of a whistle or fog horn or a VHF message should be sent to Gravesend Radio.

In addition to the above, the following signals should be displayed:

	By day	*By night*
Ship's gross registered tonnage	*International Code pendant*	*White lights*
Not exceeding 2,000	—	1 over the starboard bow
Exceeding 2,000 but not exceeding 6,000	3	1 over the bridge
Exceeding 6,000 but not exceeding 12,000	2	1 over the starboard bow and 1 over the bridge
Exceeding 12,000	1	1 over the starboard bow

Ships outward bound from below Gravesend or shifting between the Nore or Sheerness and Gravesend: When the services of a Channel Pilot are required for shifting a ship inwards between the Nore and Sheerness and Gravesend, or for conducting a ship outwards from below Gravesend, a telephone message should be sent to the Channel Pilots, tel. Gravesend (0474) 3619, stating Name of ship. Time and place at which Pilot is required to join ship. Where bound, Ship's gross tonnage. Ship's draft.

It is particularly stressed that the Pilot must be given adequate time to travel from Gravesend to the ship for her time of sailing, and that allowance must be made for the slowness of night travel and the inaccessibility of some wharves and moorings.

PROCEDURE FOR OBTAINING THE SERVICES OF A LICENSED TRINITY HOUSE RIVER THAMES PILOT.

Duty Pilot: A Trinity House River Thames Duty Pilot is available in the Information Room at the Gravesend pilot station. He can be contacted by telex (Pilot Gravesend 96444) or by telephone Gravesend (0474) 67716/7. Among his duties is the provision of information to Shipowners and Agents, and the Duty Pilot will be pleased to give advice and guidance on the pilotage of ships in the River. The Duty Pilot is in continuous touch with the Duty Officer of the Thames Navigation Service.

Ships outward bound or shifting: When the services of a Trinity House River Thames Pilot are required for piloting a ship down river to Gravesend, or for shifting a ship in the river above Gravesend, a telex message should be sent to Pilot Gravesend 96444. If the message cannot be passed by telex the same information should be given by telephoning Gravesend (0474) 67716/7.

The telex message must start with the word "Pilot" to show that it is an order for a Pilot, and to be consistent with other information now received at the pilot station by telex, should be in the following form:

1. *Order for Pilot.* The word "Pilot" should be used to show that it is an order for a Trinity House Pilot rather than general information on expected movement. This should be on a separate line from the other information.

2. *Time Pilot required.* This should be expressed as a time on the 24-hour clock followed by a date, e.g. 1035/15 or 2215/16.

3. *Ship's Name.*

4. *Draft.* This should be given in feet.

5. *Berth where lying.* If a shift is required the shift should be shown as "FM Smiths WHF to Jones WHF". If one location is given this is the place where the ship is lying and where the Pilot is required. The abbreviation FM (From) should precede the place where the ship is lying in all messages.

6. *Route or where is bound.* This should state N., S., or E. to show where ship is bound, i.e. N. for ships outward bound to the North, S. for ships outward bound to the South, and E. for ships outward bound to near continental ports between Amsterdam and Dieppe. If an outward Channel pilot is required the letter "P" should be added so that it reads NP, SP or EP.

7. *Name of Owner or Agent.*

The message should start with the heading of "Pilot" and should continue as follows:

Time	*Ship*	*Draft*	*Berth*	*Route*	*Agent*
2030/15	*Tasman*	13	FM Robinsons WHF	S	E. Wright
0010/16	*British Isles*	18.5	FM Hightown Tier	NP	Despatch Co.
0830/17	*Nicola*	14	FM Black Bys to Spring WHF		Noel S.S. Co.

It is particularly stressed that the Pilot must be given adequate time to travel from Gravesend to the ship for her time of sailing, and that allowance must be made for the slowness of night travel and the inaccessibility of some wharves and moorings. Normally a minimum of 3 hours is required.

Inward bound ships: It is most important that all inward bound ships notify their estimated time of arrival at Gravesend and keep this information up to date. An estimated time of arrival should be given by using the Post Office public correspondence service through North Foreland Radio at least 3 hours before arrival at Gravesend and preferably immediately after the embarkation of the Sea Pilot. When in VHF range this information may be passed direct to Gravesend Radio on the appropriate port operations channel. In addition the following supplementary information should be communicated: draft, and, if known, berth and name of Agents.

Trinity House River Thames Pilots for inward-bound ships are obtainable only from the Royal Terrace Pier, Gravesend, from where they board ships, by means of black-painted pilot vessels flying the pilot flag, in response to the statutory signals or a VHF message to Gravesend Radio. In thick or foggy weather the letter "G" in Morse code should be sounded by means of a whistle or fog horn or a VHF message should be sent to Gravesend Radio.

Table of Abbreviations: Abbreviations used in this notice are:

FM=From. WHF=Wharf. N=The route of an outward ship is to the North. S=The route of an outward ship is to the South. E=The route of an outward ship is to near continental port between Amsterdam and Dieppe. NP=The route of an outward ship is to the North and she requires a Channel Pilot. SP=The route of an outward ship is to the South and she requires a Channel Pilot. EP=The route of an outward ship is to the East and she requires a Channel Pilot. Bys=Buoys.

Pilot Ladders: Instances of the use of unsatisfactory and unsafe pilot ladders continue to be reported by Trinity House Pilots.

Faulty ladders endanger the lives of Pilots.

Instructions have been issued to all Trinity House Pilots to report immediately any pilot ladders which do not comply strictly with the provisions of the Merchant Shipping (Pilot Ladders) Rules 1965, the Merchant Shipping (Pilot Ladders) (Amendment) Rules 1971 and the Merchant Shipping (Pilot Ladders) (Amendment) Rules 1972.

Masters of ships are reminded of their obligation to comply with the statutory rules and are requested also to comply with the following Trinity House recommendations, ensuring that:

1. The Officer responsible for the embarkation and disembarkation of the Pilot is a Watch-keeping Deck Officer.

2. The ladder is in one length and does not consist of two or more lengths shackled or lashed together.

3. The ladder is secure.

4. The ladder is used solely for embarking and disembarking Pilots.

5. A light is provided so that the pilot ladder overside and also the position where the Pilot boards the ship is adequately lit.

6. The ladder is clean and free from oil and grease.

7. Means are provided to enable the Pilot to pass safely and conveniently from the head of the ladder into the ship or on to the ship's deck. Where portable stanchions and accompanying bulwark step ladders are used for this purpose, the portable stanchions *must* be rigidly secured to the ship's structure against being unshipped and supported at not less than 2 points to prevent lateral movement, and the bulwark step ladder should also be independently attached and firmly secured. The stanchions should be of reasonable height and adequately capped to allow firm grip. *Under no circumstances should a stanchion or handrail be attached to the bulwark step ladder.*

8. The ladder is in good condition and its treads remain horizontal. The treads are to have a rough upper surface.

9. The length of the ladder does not exceed 30 ft. Whenever the distance from sea level to a point of access to the ship is more than 30 ft., access from the pilot ladder to the ship must be by means of an accommodation ladder or other equally safe and convenient means.

10. The ladder is rigged so that each step rests firmly against the ship's side.

11. Spreaders are provided not more than 10 ft. apart to prevent the ladder twisting.

12. 2 manropes and a safety line are provided; and a lifebuoy with self-igniting light is available.

13. The ladder is rigged well clear of discharges and water outlets, and at a place where most lee can be given to the Pilot Vessel.

14. Where a pilot hoist is used a ladder must be at hand ready for use in case the hoist fails.

The Masters of small, "all-aft" ships, in which the main deck is frequently awash when a Pilot is being shipped or landed, or of any type of ship in which the bulwark rails are below the deck of the pilot vessel coming alongside, are asked to provide a boarding platform on each side of the forward end of the raised quarter deck and on the same level as that deck.

The platform should be easily accessible from the quarter deck and should have adequate handrails, those on the outboard side being portable. Fittings should also be provided for the rigging of a pilot ladder. When a pilot ladder is rigged from a boarding platform the top rung of the ladder should not be less than 12 in. nor more than 15 in. below the level of the platform. The top of the ladder should be secured at least 3 ft. 6 in. above the platform in such a way as to make a safe handhold for the Pilot entering or leaving the platform.

If a pilot ladder is unsafe a Pilot may refuse to board, thus delaying the ship. If the ladder is unsatisfactory for boarding the Master of that ship renders himself liable to a fine of double the amount of the pilotage dues involved, for failure to comply with the Pilotage Act 1913; and if the ladder does not meet the statutory requirements, the Master renders himself liable to a fine not exceeding £50 in accordance with the Merchant Shipping Act 1984.

THAMES NAVIGATION SERVICE:

Traffic Co-ordination Centre, Gravesend: This centre programmes all movements within the port, including the docks. All information required by the Authority regarding ETA, ETD, etc., should be passed through this Centre. Also deals with all matters concerning provision of tugs in docks, dummy pontoons, or other services for vessels in dock, moorings in the river and any enquiry reference bye-laws, regulations, etc.

Gravesend Radio: VHF R/T Channel 16, Working Channels 12, 18 and 20.

Radar coverage – Erith to Tongue Anchorage. Information supplied on request.

All vessels to report to this station on entering the port or before leaving the berth and whilst manoeuvring in the River. Also report position at stated intervals at points laid down in Notice to Mariners and Way Points on Admiralty Charts.

Tidal heights – Tilbury to Estuary given on request and included in navigation broadcast given every 30 minutes on the hour and half-hour.

Woolwich Radio: VHF Channel 16; Working Channels 14 and 22. All vessels entering the area above Crayfordness leaving the berth, manoeuvring and whilst on passage, report to this station.

Navigation broadcast given every 30 minutes at 15 minutes and 45 minutes past the hour.

Receives advance warning of intention to pass through Thames Flood Barrier.

Tidal heights at North Woolwich given on request.

Radar coverage Greenwich to Erith: This station is situated adjacent to the Thames Barrier on the south side of Woolwich Reach. It exercises traffic control over ALL vessels and craft wishing to proceed through the Barrier Control Zone which extends from Margaretness to Blackwall Point. All vessels intending to navigate through the barrier must pass their ETA's to Woolwich Radio on VHF Channel 14 when:

(a) Passing Crayfordness Point inward bound.
(b) On leaving a berth which lies between Crayfordness Point and Margaretness Point inward bound.
(c) When clearing Tower Bridge outward bound.
(d) On leaving a berth or lock between Tower Bridge and Blackwall Point outward bound.

For full details regarding traffic control in the Thames Barrier Control Zone see Notices to Mariners. Vessels wishing to leave from a berth within the Barrier Control Zone should first obtain permission to proceed.

Patrol Service: 24-hour patrol by launches fitted VHF Channels 16, 14, 12, 6 and radar. Can be contacted through Gravesend or Woolwich Radio.

Liaison is maintained through the Thames Navigation Service with Owners, Agents, Pilots, Watermen and all emergency services.

For help, advice, assistance or any matter affecting ships and shipping, contact: Thames Navigation Service:– Telephone

Marine Traffic Co-ordinator — Gravesend 60311
Duty Officer — Gravesend 57724
Telex 262880

ANCHORAGES: Great Nore and Little Nore anchorages allocated by Medway Port Operations, all other anchorages allocated by the Thames Navigation Service dependent upon the size and draft of vessel, the length of stay required at the anchorage and the specific details of the vessel, i.e. explosives, petroleum, etc.

Explosives anchorage at Chapman Anchorage for discharging/loading to/ex barge to/from appointed river wharves.

RESTRICTIONS: Certain restrictions are placed on the navigation of vessels carrying petroleum, chemicals, explosives and other hazardous commodities.

Vessels which are carrying any of the above mentioned cargoes should call Gravesend for details of these restrictions and ascertain whether it is permitted for them to navigate.

Notwithstanding any of the aforementioned restrictions, all vessels should comply with the "General Directions for Navigation in the Port of London 1975". (Copies obtained from the Harbour Master, Port of London Authority, Thames House, Tilbury Docks, Essex RM18 7EH.)

The tides at London Bridge have a range of 4.6 m. at mean neaps and 6.6 m. at mean springs.

The sea approach to Shellhaven is dredged to allow the passage of vessels to 13.7 m. at mean neap tides. The depth to Gravesend Reach is about 7.9 m. to 8.1 m. below LAT.

MAX. SIZE: Tankers:

Berth	*Depth at low water*	*Length*
Coryton	14.0 m. maximum	1,100 ft.
Shellhaven	14.6 m. maximum	1,200 ft.
Holehaven	11.2 m. maximum	720 ft.
Purfleet	8.6 m. – 11.2 m. maximum	700 ft.
Grays	11.2 m. maximum	620-750 ft.

Other river and tanker berths restrictions apply according to tides and berth.

Deep-draft tankers for berthing at Shellhaven is sometimes over a period of 2 tides. Passage on the 1st tide to deep water anchorage, vessel to leave anchorage on make of 2nd tide and arrive off the installation half an hour before high water of this tide.

BERTHING:

Cargo Berths: The Port of London Authority operates one enclosed dock system at Tilbury Docks.

Specialist and general purpose facilities for handling general cargo, rolling cargo, forest products, latex, grain, unitised cargo/containers and passengers are provided at Tilbury Docks in Essex. Bulk wine and spirits are handled at Phoenix Wharf, Rainham, Essex.

Continued below and on page 1502.

(Berthing continued)

Port of London Authority:

PLA facilities are managed in three divisions: Containers, Conventional and Grain.

Depths of water shown for berths in the enclosed docks and on the river are the authorised depths to which the berths may be dredged. Actual depths may be less than the authorised depth and the advice of the PLA or tenants Operating Manager should be sought if necessary.

Berth	*No. of Berths*	*Length (ft.)*	*Depth (ft.)*	*Equipment*	*Remarks*
TILBURY DOCKS:					
Entrance lock dimensions: Length 1,000 ft. (305 m.). Width 110 ft. (33.5 m.). Depth 45.5 ft. (13.9 m.).					
Access to berths (except the Grain Terminal, Northfleet Hope Container Terminal, cargo and repair jetties, riverside Roll-on/Roll-off terminal and passenger landing stage) is gained through an entrance lock.					
Northfleet Hope Terminal	1 (in dock) 1 (in river)	850 1,000	35.0 41.0 (MLWS)	2 container cranes 45 tonnes (in dock), 2 container cranes 35 tonnes (riverside), straddle carriers, tractors and trailers.	OCL/ACT and partners. Container services. Accommodation for 5,500 containers at any one time (inc. 1,464 reefers). Operation: 24 hours per day, 7 days a week.
PLA Container Terminal	3	2,540	38.0	4 container cranes 30-45 tonnes, van carriers, tractors and trailers, forklift trucks.	(Container Division). Containers to and from cellular and purpose built lift-on/lift-off all container or semi-container vessels. Electrical reefer points. Floating cranes for uncontainerisable cargo. Operation: 24 hours per day, 7 days a week.
Brostrom Terminal	4	2,200	38.0		Ro-Ro and self sustaining container vessels.
42 Berth (Tilbury) Ltd.	1/2	700	38.0	1×30 tonne mobile. Heavy duty forklift trucks, tractors and 35 tonne trailers.	Forest products.
PLA General Purpose Berths	14	8,900	up to 38.0	60×5 tonne quay cranes, forklift trucks, mobile cranes, van carriers, tractor/trailer units, 1×80 tonne mobile, 1×36 tonne land based and up to 120 tonne floating heavy lift cranes, 1 container crane 30 tonnes.	(Conventional Division). Conventional, Ro-Ro and unitised general import and export cargoes. Containers to and from semi-container/Ro-Ro vessels. Forest products. Heavy lifts. Scrap metal.
PLA Riverside Ro-Ro Terminal	1	Ship length up to 500 ft.	20.0 (MLWS)	Tractors	(Conventional Division). Ro-Ro. Suitable for bow or stern ramp vessels.
Tilbury Passenger Landing Stage	1/2	Ship length up to 740 ft.	Dredged to 10 m. below datum	2 covered gangways.	(Conventional Division). Embarkation and disembarkation of passengers for ships, hovercraft, hydrofoils and launches and Tilbury/Gravesend local ferry.
Seaboard Pioneer Terminal Ltd.	1	870	38.0	Forklift trucks, tractors, trailers.	Forest products.
Svenska Terminal in London Ltd.	1	750	38.0	Straddle carriers, forklift trucks, trailers, tractors.	Forest products and Ro-Ro cargo.
West Africa Terminal Ltd.	5 (ship) 2 (barge)	2,700 100 ft. each	31.0	9 quay cranes 10 tonnes, 2 quay cranes 15 tonnes, 5 mobile cranes 15 tonnes, 2 mobile cranes 35 tonnes, light and heavy duty forklift trucks, tractors and trailers.	(Conventional Division). Cargo to and from West Africa and North America, conventional general cargo, forest products, including logs, containers and Ro-Ro.
PLA Tilbury Grain Terminal	1 Deep Sea 1 Short Sea 6 barge berths 1 Coaster discharge berth	900 230	42.0 (MLWS)	2×1,000 tonnes per hour marine leg elevator towers, coaster and barge loading points, 2×200 tonnes per hour pneumatic elevators (coastal jetty). Silo capacity 100,000 tons. Export vessels now handled. 30,000 tonnes on outer jetty and 10,000 tonnes on inner jetty.	(Grain Division). Terminal has direct feed by conveyor to 4 adjacent privately-owned mills: Allied Mills Ltd., Rank Hovis Ltd., Spillers French Milling Ltd., Cargill Albion Ltd. Laing National Ltd.

(Berthing continued)

Private Wharfingers:

Berth/Wharf Name	*No. of Berths*	*Length (ft.)*	*Depth (ft.)*	*Equipment*	*Remarks*
Bridge Wharf (Bow Creek)	6 (barges)	270-290	15.0 (MHWS)	Up to 5 tonnes, mobile.	Metals of all descriptions and bulk ore by grabs.
Bridges Wharf (Battersea)	1	225	13.0 (MHWS) Dries at LW	3 cranes up to 10 tons.	Handling and storage of inflammable and hazardous chemical products etc.
Bruce's Wharf	3	205-300	22.0 (MHWS)	4 cranes up to 35 tonnes.	Terminal for Seebee and Container Services. Terminal for Meyer International Plc. Timber Importers.
Convoys Wharf	1	800	18.0 (MLWS)	6×2 tonnes.	Newsprint, forestry products and general cargo. Operators of nationwide warehousing and transport interests.
	1	410	23.0 (MLWS)	Ro-Ro pontoon.	
Denton Wharf	3	260-600	34.0 (MHWS)	11×3 – 30 tonnes. 2×30 tonne container park gantries.	Discharge and loading of all types of conventional cargo and containers to and from ships and barges. Groupage service. Licensed for handling explosives.
Erith Deep Wharf	1 (ship) 2 (barges)	600 600	21.0 (MLWS)	5×6.5 – 7.5 tonnes. 2×4.5 tonnes.	Direct handling ship/road transport or ship/warehouse. Handling of forestry products. Lash/Seebee barges.
Imperial Wharf	1	300	26.0	3×5 tonnes.	Forest products.
The London Steel Terminal	2	295	16.4 (MHWS)	3 cranes up to 30 tonnes.	Handling of steel using electro-mechanical grabs for steel coils. All operations including shipwork carried out under cantilevered roof providing all weather working. Container services.
Lovells Wharf	1	280	18.0 (MHWS)	3 cranes up to 20 tonnes.	Steel and other metals (London Metal Exchange approved warehouse).
Mast Pond Wharf	1	220	16.5 (MHWS)	1×5 tonne, mobile.	Bulk handling, overside or direct delivery.
Mulberry Wharf	1	225	17.0 (MHWS)	1×5 tonne mobile, 1×2.5 tonne fixed.	Bulk handling, overseas and direct delivery.
Phoenix Wharf	2	625-800 (floating jetty)	20.0 (MLWS)	4 cranes up to 30 tonnes. (8 – 10 tonnes ex-ships hold).	Forest products in all forms, steel, fertilisers and bulk cargoes, empty containers. Bulk wine and spirits.
	(Ro-Ro Berth)	450	16.0 (MLWS)	3 tugmasters.	For continental ferry service and Import/Export of motor vehicles.
Pinns & Limmer Wharves	3-4	850	18.0 (MHWS)	4×50 tonnes. (30 tonnes on ships).	Bulk materials, heavy lifts and unitised cargoes.
Purfleet Deep Wharf	2	1,000	27.5 (MLWS)	7 (jetty)×5 – 6 tonnes. 2 (shoreside)×40 tonnes.	Equipped with modern floating Roll-on/Roll-off berth. Handling of forestry products.
Tower Wharf	3	300-650	36.0 (MLWS)	11 cranes up to 5 tonnes (Quay). 4 cranes up to 22 tonnes (Shore).	All cargo except bulk.
Victoria Deep Water Terminal	2	850 350	22.0 (MLWS)	3×5 – 32 tonnes. 2×30-40 tonne container gantries. 1×30 tonne transtainer container park gantry.	Container unit loads and groupage.
Victoria Wharf (Dartford Creek)	(8 barges)	—	Afloat at all times	3-12 tonnes mobile cranes.	Forest products and general cargoes.

The depths quoted are to be taken as approximate only. For detailed information contact the wharf operator or Thames Navigation Service.

TANKERS: (Also see "Notices"). There are about 40 berths for tankers in the Thames District, main terminals of which are listed below. Recommended that Masters cable terminal with discharge manifold size, enabling wharf have correct pipes ready. Slop tanks are available at most wharves.

Company	No. of Berths	Length **(ft.)	Depth **(ft.)	Remarks
BP (Northfleet)	1	170.0	—	Able to handle vessels 3,000 d.w.t. High and low flash point products. Storage capacity 20,000 tons.
BP (Fulham)	1	—	—	Lube oil, gas oil and spirits.
Esso (Purfleet) No. 1	1	Max. LOA 628	26.5 (LWS)	Max. size 28,000 d.w.t. Products handled: F.O., G.O., D.O., kero, gasoline. 4×10 in. (clean products); 2×10 in. (fuel oil). Max. pressure 150 psi.
Esso (Purfleet) No. 2	1	Max. LOA 628	26.5 (LWS)	Max. size 18,000 d.w.t. Products handled: F.O., lube oil, G.O., kero. 3×6 in. (lube oil); 2×6/8/10 in. (fuel oil); Max. pressure 150 psi. Total capacity (Berth Nos. 1-2): White oils 187,000 tons. Fuel oil 126,000 tons. Lube oil 39,000 tons.
Mobil* (Coryton) No. 1	1	Max. LOA 650	Max. draft 33 (MLW)	Max. displacement 40,000 tons. Products handled: L.P.G., gas oil, lube oil, fuel oil, gasoline.
Mobil* (Coryton) No. 2	1	—	Max. draft 18 (MLW)	Coaster berth, max. displacement 2,000 tons. Products handled: Same as No. 1 berth (excluding L.P.G.).
Mobil* (Coryton) No. 3	1	Max. LOA 900	Max. draft 44 (MLW)	Max. displacement 100,000 tons. Products handled: Crude and fuel oil (3,000 t.p.h.), gas oil (2,000 t.p.h.), gasoline (1,000 t.p.h.), products (350-500 t.p.h.). Other products handled: Diesel oil, naphtha and Av. Tur.
Mobil* (Coryton) No. 4	1	Max. LOA 1,200	Max. draft 45 (MLW)	Max. displacement 230,000 tons (320,000 d.w.t. with part load). Crude oil only handled. 4×16 in. steel arms. Rate 3,500 t.p.h. each arm.
Mobil* (Coryton) No. 5	1	Max. LOA 200 m. Max. draft 37 ft.	Depth 43 (MLW)	Max. displacement 40,000 tons. 4×10 in. arms for loading/discharging fuel oil, gasoline and gas oil (rate 2,000 t.p.h.). 1×10 in. arm for receiving refrigerated butane.
Conoco Ltd.	1	256 Max. LOA 625 ft.	44.0 (MHWS)	White oils, capacity 70,000 tonnes.
F.T. Everard & Sons Kent Ltd.	Globe Wharf Deep Water Jetty	450 300	14.0 (MHWS) 14.0 (MLWS)	Vegetable and edible oils. White oils including motor spirit. Chemicals and other low flash liquids. Fuel oils. Storage capacity: 40,735 water tons in 63 tanks.
London & Coastal Oil Wharves Ltd.	1	720	36.0 (average low water)	Hydrocarbon oils. Chemical and other low flash liquids. Vegetable and edible oils. Storage capacity: 303,600 cu.m. (45 cu.m. to 20,320 cu.m. capacity tanks).
Murco Petroleum Ltd.	2	730	37.0 (MLWS)	Motor spirit, distillates. Storage capacity: 52,000 tonnes motor spirit. 10,870 tonnes distillates. Shares Blue Circle Industries Ltd.'s Wouldham Jetties with Unitank Storage Company Ltd.
P.D. Oil & Chemical Storage Ltd.	7	840	34.0 (MLWS)	Hydrocarbon oils and all chemicals. Total storage capacity: 423,000 cu.m. Oil storage capacity: 365,000 cu.m. Chemical storage capacity: 58,000 cu.m. (50 cu.m. to 15,000 cu.m. capacity tanks).
Tate & Lyle Feeds Ltd.	1	100-200	25.0 (MHWS)	Hydrocarbon oils, some chemicals, molasses. Storage capacity: 21,000 water tons of bulk liquid storage tanks (260-3,700 tons water capacity).
Thames Matex	3	750	34.0 (MLWS)	Hydrocarbon oils, chemicals, vegetable oils. Storage capacity: 352,000 cu.m. (125 tanks-200 cu.m. to 10,000 cu.m. capacity).
Thames Terminal Ltd.	1 (ship) 2 (barge)	750	34.0 (MLWS)	High and low flash petro-chemicals, edible and mineral oils, fuel oils. Storage capacity: 160,000 cu.m. for fuel oil, gas oil, lubricating oil and kerosene. 40,000 cu.m. for chemicals, edible oils, etc.
Unitank Storage Co. Ltd.	2	750	34.0 (MLWS)	High and low flash petroleum, some chemicals. Storage capacity: 310,000 cu.m. in 52 mild steel tanks (1,700 cu.m.-20,800 cu.m. capacity). Shares Blue Circle Industries Ltd.'s Wouldham Jetties with Murco Petroleum Ltd.
Shell (Shell Haven) "A"	1	Max. LOA 259.1 m.	†12.5 m.	Deadweight unlimited. Size of vessel limited to 20,000 s.d.w.t. when height of HW exceeds 5.8 m. (due to strength of tide). When VLCC on "B" jetty, size of vessel not to exceed 40,000 s.d.w.t. When 100,000 d.w.t. vessel on "B" jetty, largest on "A" not to exceed 70,000 s.d.w.t. Berth to be vacant when VLCC berthing at "B". 1×6 in. (L.P.G.).
Shell (Shell Haven) "B"	1	Max. LOA 320.0 m.	†14.6 m.	Deadweight unlimited. VLCCs and other large crude carriers berth head down river at slack HW. Products handled: Crude oil, fuel oil, unleaded white oils, leaded white oils (discharge only), aviation spirit. 4×10 in. and 4×8 in. (white oils and fuel oil). 4×10 in. and 4×16 in. (crude).
Shell (Shell Haven) "C"	1	Max. LOA 237.7 m.	†10.4 m.	Max. d.w.t. 55,000 tons. Import/export white and black oils. 4×10 in.
Shell (Shell Haven) "E"	1	Max. LOA 182.9 m.	†8.8 m.	Max. displacement 25,000 tons. Chemical import/export, lube oil import. 5×6 in.
Shell (Shell Haven) "G"	5	No LOA restriction	(outer) †8.0 m. (inner) †4.0 m.	(Outside) No. 1 and 2 berth. Max. size 3,000 s.d.w.t. (Inside) Nos. 3, 4 and 5 berths. Max. size 1,000 s.d.w.t. Coastal jetty for export of white and black oils. (Outer) 6×8 in. (Inner) 5×6 in.
Texaco (Canvey Island)	1	Max. LOA 580 ft.	Depth (subject to dredging) 40 ft. Max. draft 32 ft.	Products handled: Gasoline, gas oil, diesel, kerosine, jet fuel. Pumping rates into barges, 200-250 t.p.h. with max. pressure 100 p.s.i. Discharge rate 400-1,500 t.p.h.

Other Wharves: In addition to the above some manufacturing and service industries have their own riverside premises with ship berths. Thames Navigation Service will assist with information. Otherwise contact Waterside Manufacturers and Associated Industries. Tel: 01-481 3681.

*Bunkers available at all berths. Fresh water not available. **Unless otherwise stated. †Design datum (All berths subject to siltation).

††Tank cleaning is permitted when back loading operations are to take place. Tank cleaning for other purposes may take place only after agreement from the Terminal.

Dirty ballast separator system allows a cumulative rate of 1,500 cu.m./hr. from all jetties. No waxy material, chemicals or chemical additive is accepted.

Vessels should arrive with minimum possible ballast commensurate with safe handling of vessel.

HEALTH: Port of London Health Authority:
Public Health (Ships) Regulations, 1979.
Notes for the guidance of Masters/ships Agents:

1. (1) It is the responsibility of the Master of a vessel due to arrive in the Port of London to report to the Port Health Authority the presence of sickness or animals on board, or of the occurrence, during the voyage, of the death, other than by accident, of a crew member or passenger.
2. (2) This information should be transmitted to North Foreland Radio Station for forwarding to "Portelth London", not more than 12 hours or less than 4 hours before vessel's arrival in the Port.
3. (3) Vessels already in the Port can contact the Port Health Authority directly by telephoning Tilbury (03752) 2663.
   At Public Holidays (and all times other than 0900 – 1700 hrs. Monday to Friday) an answering machine is connected to this number giving the telephone number of the Duty Officer who will give any advice or assistance required.
4. (4) The Port of London Health Authority District includes that part of the River Medway comprising Sheerness, Isle of Grain, Ridham Dock and Queenborough.

Also see "Health – All Ports" before first U.K. port.

RADIO: Outside UK waters from the South, call long range station "Portishead Radio"; approaching London, "Niton Radio" or Northforeland Radio giving Agents draft and ETA. "Gravesend Radio" when in the Thames and its estuary.

TUGS: Tugs usually pick up vessels for Shellhaven and Holehaven in reaches approaching berth, or Gravesend for berths/docks up river. Tugs and lines can be hired from Alexandra Towing Co. (London) Ltd., Alexandra House, Royal Pier Road, Gravesend, Kent. Tel: (0474) 534227.

P.L.A. provide a towage service within the enclosed docks.

CRANES: (See "Berthing").

BULK CARGO FACILITIES: (See "Berthing").

SPECIALISED CARGO HANDLING FACILITIES: (See "Berthing").

BRIDGES: No bridges below Tower Bridge which opens for shipping on request.

STEVEDORES: Ordered by the Agents; no ETA to stevedores from vessel necessary; labour to be ordered by 1200 hrs. day before required.

At PLA General Purpose Berths order by 1100 hrs. day before except for weekends/public holidays when 1600 hrs. 2 days before. PLA/TCS Container Terminals work 24 hours a day, including weekends.

MEDICAL: Not necessary to contact Agents once port health requirements satisfied unless urgent medical treatment required on board on arrival. All medical treatment, vaccinations available.

DENSITY: Varies according to position and tides.

FRESH WATER: Available at all berths either from shore or barge.

FUEL: All types, grades available by barge, or from terminals.

FIRE PRECAUTIONS: Tankers – no smoking on open decks, only cabins. Deck fire hoses to be connected. Explosive workings at Chapman anchorage, same precautions. Red flag to be flown by these vessels. Fire tug to be in attendance when explosives being worked. Smoking not permitted in the docks or berths.

GANGWAY/DECK WATCHMEN: Available but not compulsory, Master's discretion.

OPENING/CLOSING HATCHES: Liner vessels by crew, with stevedore assistance. Tramp vessels according to charter party.

CERTIFICATES: These certificates to be on board.
Ship's Register.
Load Line.
Safety Radio.
Safety Equipment.
Safety Construction.
Derat Exemption.
Previous U.K. Light Due Bills.
Cargo Gear and Chain Register complying to U.K. Factory Acts.
British Tonnage Certificate if available.

CUSTOMS ALLOWANCES: Customs usually permit 200 cigarettes or 0.25 lb. tobacco per person on board for 4 days. They can refuse to issue duty free or amount allowed at their discretion. Usually permit 1.3 pints or 1 bottle spirits per person for 4 days. They can issue less or refuse to allow as duty free at their discretion.

CARGO GEAR: To comply with U.K. Factory Acts, valid chain and Cargo Gear Register to be on board. Stevedores usually supply cargo slings, etc.

IDENTIFICATION CARDS: Seamen's identity book required to be retained on board in port.

BANKS: All British and most foreign banks represented in London. British banks have branches in Thameside towns.

CONSULS: All British Commonwealth countries are represented in London by a High Commissioner's Office.

Most foreign countries maintain embassies or a consular representative in London.

REPAIRS: All repairs, gas freeing possible; pre-advice recommended.

DRY DOCKS: Largest dry docks at Tilbury, 752 ft. length, 133 ft. breadth. There are smaller dry docks available on the river.

REPATRIATIONS: All facilities exist for changing crews, repatriations.

AIRPORTS: All flights serve London Heathrow and Gatwick Airports. Southend Airport serves domestic and Continental services.

TIME: British Summer Time which is 1 hour in advance of GMT. GMT during Winter months.

HOLIDAYS: *Public Holidays:* Work is available on official holidays if practical. New Year's Day, Good Friday; Easter Monday; May Day Monday; Spring Bank Holiday Monday; August Bank Holiday Monday; Christmas Day; Boxing Day.

POLICE/AMBULANCE/FIRE: Contact by public telephone; dial 999 and ask for service needed. PLA telephones dial 259 (fire) and 222 for others.

EMERGENCY CO-ORDINATION CENTRE: See "Thames Navigation Service" and "Notices".

TELEPHONES: Ship to shore connections available at most berths.

SERVICES: All types of service for navigational aids, radar, compass adjusting, nautical instruments repaired, slop discharge barges available. Tank-cleaning, gas-freeing services available.

SHORE LEAVE: Crew members allowed ashore but must rejoin on sailing.

REGULATIONS: No livestock allowed ashore without permission Customs and Port Health Authorities. Rabies regulations enforced.

NOTICES: *Emergency Procedures for Vessels on The River Thames.*

Report immediately by the quickest means available to either Thames Navigation Service on VHF radio, Gravesend Radio, VHF Channel 12, Woolwich Radio, VHF Channel 14, or public telephone Tel: 999.

Message: Vessel's name and present position together with details of emergency and assistance required.

Collision, Fire or Other Accident: If involved in or sighting a collision or accident report as above.

Human Injury or Man Overboard: In event of serious personal injury or recovery of a person from the river when vessel's crew require additional assistance report as above.

Machinery or Steering Failure: In event of machinery or steering failure report as above.

If necessary to anchor then endeavour to anchor clear of the fairway if size and draft permit.

Details of Port of London Authority Combined Accident Procedure Applicable to Vessels (POLACAP): In event of a major accident, the Thames Navigation Service will broadcast on appropriate VHF Channels an outline of the accident, including in the message:

Word	*Meaning*
"POLACAP"	Serious accident as specified has occurred - Combined Accident Procedure is in force.

Action by Vessels on Receipt of POLACAP Message: Maintain current communications watch, keeping requests for information to MINIMUM. If in vicinity of accident be prepared for traffic regulation, which, if required, will be operated by PLA Harbour Master's Launches.

If directly involved in or assisting with the accident, switch to VHF Channel 16 for inter-ship/craft communications, and report to Thames Navigation Service.

On scene control will be exercised from the forward control craft using call sign POLACHIEF. This craft will identify itself by a blue rotating light and in addition by day will hoist a red ball at the masthead.

When Combined Accident Procedure is no longer in force, Thames Navigation Service will pass:

Words	*Meaning*
"CANCEL POLACAP"	Combative measures to deal with the major accident are completed and no further action required.

June 1984.
H. Revell, Director of Port Services, Port of London Authority.

This Notice supersedes similar Notice dated February 1968.

Notice to Mariners – 41 of 1981.

Merchant Shipping (Tankers) Regulations 1981 (EEC Requirements):

In compliance with the above regulations, as from 15th October, 1981, the Master of any tanker of 1,600 g.r.t. or over, which is carrying or which has carried and has not been gas freed, a cargo of chemicals, gas or oil in bulk, before entering or navigating within the limits of the Port of London shall make a report to the Harbour Master.

Reporting: This report should be sent in sufficient time to ensure that it arrives at the Thames Navigation Service, Gravesend, prior to the tanker entering port limits. Masters of vessels bound for London from near Continental ports may send their report from the previous port if more convenient.

The report should be sent, *preferably by telegram or telex,* to the Thames Navigation Service. Telegraphic Address: Thames Nav Gravesend. VHF Radio: Gravesend Radio, Channel 12. Telex: 262880 PLATNS. Tel: 0474-57724.

The Report: The report must provide answers to the following questions in the order listed.

- (a) Tanker's name and call sign.
- (b) Country where registered.
- (c) Length, beam and arrival draft.
- (d) Destination and ETA.
- (e) Tankers bound for the Medway, ETA at No. 1 Medway Buoy.
- (f) Nature and type of cargo (together with Flash Point if known).
- (g) Is an inert gas system fitted?
- (h) If an inert gas system is fitted, is it fully operational?
- (i) Do any of the cargo tanks have an atmosphere which has been rendered non-flammable?
- (j) If the tanker has a cargo of chemicals or gas has it been issued with a certificate stating that it complies with:
  - (i) IMO Code for Ships carrying dangerous chemicals.
  - (ii) IMO Code for Existing Ships carrying Liquefied Gas.
  - (iii) IMO Code for Ships carrying Liquefied Gas.
- (k) Does the tanker have any hull, machinery or equipment defects which may materially affect:
  - (i) Its safe manoeuvrability.
  - (ii) The safety of other vessels.

  or constitute a hazard to
  - (iii) The marine environment.
  - (iv) Persons or property.

If the answer is 'Yes' to any of the 4 questions contained in (k), then details of the problem must also be provided.

Amendments to The Report: On entering port limits or before commencement of any movement within the port (i.e. shifting berth or sailing) the Master shall inform the Thames Navigation Service (Gravesend Radio) of any alterations that may apply to the existing report.

Check List: The Master of the above type of tanker is required under the regulations to make available to the Pilot a Standard Check List. The Master shall ensure that a copy of this Check List is provided to the Harbour Master after arrival at the berth.

Notice to Mariners – 50 of 1981.

Inert Gas Systems and Crude Oil Washing (COW): (Reference Statutory Instruments No. 541, 544 and 687 of 1980).

The attention of tanker Masters are drawn to the following conditions, which must be observed whenever crude oil washing of tanks is to be undertaken in the Port of London.

1. *Notification*

(a) At least 24 hours prior notification of the intention to COW is to be received by the Director of Marine Operations (through the Thames Navigation Service) together with written assurance that all systems have been checked and found satisfactory in accordance with the ship's COW Manual and IMO requirements.

(b) One hour before the actual commencement of COW, a further advice must be received by the Director of Marine Operations (through the Thames Navigation Service) that COW is about to commence and that all systems are fully operational.

2. *Terminal Approval*

No vessel is to undertake COW without the approval of the Terminal Management and having complied with IMO COW requirements applicable to that ship.

3. *Failure of Systems*

Following the failure of the inert gas system to supply either the correct quality or quantity of inert gas, or a failure of any other part of a COW system, all cargo discharge, de-ballasting and tank cleaning must cease forthwith, and the Authority is to be immediately advised. Operations are NOT to be resumed until after consultation has taken place and agreement reached between the Authority, the Terminal Management and the ship's Master.

4. *Tanker Drafts*

No tanker crude oil washing is to be accepted at any berth where the vessel cannot safely be afloat at any state of the tide.

Notice to Mariners – 3 of 1982

Precautions to be Observed by Vessels

All Vessels – Navigation Between Sea Reach No. 7 and West Blyth Buoys:

1. Shall proceed at a moderate speed when passing berths where specified vessels with cargoes of LNG, LPG, ammonia or explosives are present or manoeuvring in the vicinity. When specified vessels with these cargoes are present details will be included in the routine broadcasts by Gravesend Radio.
2. Shall communicate to Gravesend Radio the intention to overtake a specified vessel. Gravesend Radio will broadcast this information and overtaking should not take place until this has been promulgated, and all vessels navigating in the area are aware of the manoeuvre. It is essential that the overtaking vessel proceeds with engines on stand-by, ready for manoeuvring, and anchor stations manned, ready for immediate use in case of emergency. Where it is necessary for a deep drafted vessel to overtake a specified vessel of lighter draft, then, provided it is practical and navigationally safe to do so, the specified vessel should facilitate this manoeuvre by moving to the side of the fairway to give the deep draft vessel the deeper water.
3. Shall give specified vessels, and specfied vessels shall give all other vessels, whether underway, at anchor, or berthed, the widest practical clearance.
4. Shall take particular care when manoeuvering for, or preparing to leave a berth having due regard for vessels underway and passing through the area. It is to be noted that the special requirements of deep drafted, and certain other vessels manoeuvring for these berths may demand priority of movement.
5. Shall before leaving a berth obtain a situtation report of other vessels navigating in the area.
6. Shall ensure that anchor parties are immediately available and anchors ready for letting go.

Additional Instructions for Specified Vessels:

1. Before entering or navigating within port limits, the Master shall advise the Pilot, if carried, and the Thames Navigation Service of the condition of propelling, steering and anchoring machinery, navigation radar and VHF radio equipment and special fire detection and fire fighting equipment carried in connection with the special cargoes, stating whether or not they are fully operational. Attention is drawn to the Port of London General Directions for Navigation, 1975, No. 15, which refers to vessels with mechanical and equipment defects.
2. Shall when navigating above Sea Reach No. 7, at all times proceed at a 'moderate speed'.

Specified Vessels – Recognition Signals:

1. A specified vessel, except petroleum ships, and vessels carrying explosives (which are required to display the signals which follow under the PLA Petroleum and Explosives Byelaws) shall whether underway, at anchor or secured to a berth, indicate the hazardous nature of the vessel's cargo or cargo tanks by displaying:

   Between sunrise and sunset – International Code Flag "B"
   Between sunset and sunrise – a red light
2. These signals shall be displayed at the masthead or where they can best be seen, and shall be of such size and character as to be visible all round the horizon for a distance of at least 2 miles, and shall be in addition to any navigation lights or other signals which may be required by any other regulations, rules or byelaws.

Definitions: Specified vessel means any vessel laden with or having on board quantities of (IMO Codings in brackets):

(a) LNG, LPG, ammonia or non-gas free following discharge of these cargoes. (Class 2).

(b) Explosives. (Class 1).

(c) Low flash and toxic chemicals or non-gas free following discharge of these cargoes. (Classes 3.1, 3.2, 6.1 and 9.0).

(d) Petroleum ships and barges as defined in the PLA Petroleum Byelaws. (Classes 3.1 and 3.2).

Moderate Speed: Shall not be more than 8 knots through the water, or minimum speed necessary for adequate control and safe navigation, whichever is the greater.

Port of London Petroleum Byelaws – Definition of 'Petroleum Ship': Petroleum Ship: Shall mean any vessel other than a petroleum barge having on board or about to take on board petroleum spirit as cargo or having discharged petroleum spirit if the holds and tanks have not been rendered free from inflammable vapour to the satisfaction of the Harbour Master but it shall not include a ferry boat working Woolwich Free Ferry by reason only of the ferry boat's having on board or being about to take on board one or more road vehicles engaged in the conveyance of petroleum spirit.

Definition of 'Petroleum Barge': Petroleum Barge: Shall mean any barge approved and licensed by the Port Authority for the conveyance of petroleum spirit on the Thames except when the same is empty *and rendered free from inflammable vapour to the satisfaction of the Harbour Master.*

Notice to Mariners 3 of 1981 is hereby cancelled.

Notice to Mariners – 11 of 1982

Dangerous Goods – Notice to be Given by Owner or Master:

The Owner or Master of a vessel carrying dangerous goods shall, before the vessel enters the Port of London, give at least 24 hours notice to the Director of Marine Operations of the nature and quantity of the dangerous goods carried in the vessel as required by Section 150 of the Port of London Act 1968 (see below). The Master of a vessel whose duration of voyage is less than 24 hours may give notice within 1 hour of departure from the last port of call.

A similar notice is to be given to the Harbour Master by the Owner or Master of a vessel at least 24 hours before any dangerous goods are loaded on the vessel anywhere within the Port of London.

Both these notices should also include the following details:

(a) Whether the dangerous goods are in bulk, and if not, how they are packaged or carried, including details of the type and size of any drums, portable tanks or other portable containers.

(b) The flash point, if the dangerous goods are flammable.

(c) The vessel's proposed discharging or loading berth (even if the dangerous goods are to be retained on board).

(d) To which of the Classes 2 to 9 set out in the Merchant Shipping (Dangerous Goods) Regulations 1981 (S.I. 1981 No. 1747) the dangerous goods belong.

In this Notice to Mariners, the expression "dangerous goods" means all dangerous goods for which a list, manifest or stowage plan must be carried in the vessel carrying the goods pursuant to Regulations 7(5) and 13(1) of the Merchant Shipping (Dangerous Goods) Regulations 1981 (S.I. 1981 No. 1747) if, in relation to the classes of dangerous goods set out in Regulation 7(2) of those Regulations, the goods fall within:

Classes 2, 3, 4.1, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2, 7, 8 or 9

but does not include carbide of calcium, liquid methane or petroleum spirit the handling of which is subject to separate byelaws, as is also the case with explosives (Class 1).

Dangerous Goods Shipments: The Notice referred to above for shipments of all dangerous goods must be sent to:

Harbour Master, Thames House, Tilbury Docks, Essex. Tel: (03752) 3444. Telex: 99267.

Dangerous Goods Handled in Dock: All dangerous goods which are due for loading or discharging in the Port Authority's enclosed docks are subject to the terms and conditions set out in the Authority's published booklet "Schedule of Dangerous Goods" which is available from the Director of Tilbury, Tilbury Docks, Essex RM18 7EH.

Some descriptions of dangerous goods (designated Group 3) in the schedule require the prior approval of the PLA before entering the enclosed docks and the appropriate applications should be made to the Director of Tilbury (address as above). Tel: Tilbury 3444, Ext. 276. Telex: 99267.

Dangerous Goods Generally:

Movement of Vessels: In conditions of reduced visibility such as fog or falling snow, vessels carrying dangerous goods should not move without the permission of the Harbour Master.

Labelling of Containers: All dangerous goods which have been taken on board a ship at any port within the territorial waters of the United Kingdom must be packaged and marked in accordance with the provisions of Regulations 8 and 9 of the Merchant Shipping (Dangerous Goods) Regulations 1981 as should dangerous goods taken on board any British vessel registered in the United Kingdom.

Dangerous goods taken on board foreign registered vessels outside the territorial waters of the United Kingdom should, ideally, be similarly packaged and marked.

Flammable Liquids (Non-Petroleum) – (Flash Point Less Than 73°F – 22.7°C)

1. *Limitations of Quantities:*

   Masters of vessels are hereby informed of the following limitations in respect of the conveyance of flammable liquids (non-petroleum). These limitations take effect from the date of this notice.

   Masters of vessels carrying such liquids are further advised that they may be subject to further direction from the Harbour Master if they navigate between sunset and sunrise.

   To Barking Creek: Unrestricted as to quantity whether in bulk or in drums, portable tanks or other portable containers.

   To Bow Creek: Up to a maximum quantity of 1,000 tons (1,016 tonnes) whether in bulk or in drums, portable tanks or other portable containers.

   To Saundersness: Up to a maximum quantity of 500 tons (508 tonnes) in bulk or in drums, portable tanks or other portable containers, except that a maximum of 1,000 tons (1,016 tonnes) may be carried in a vessel previously approved for the purpose by the Port Authority.

Above Saundersness: Up to a maximum quantity of 150 tons (152 tonnes) in bulk or in drums, portable tanks or other portable containers, except that a maximum 1,000 tons (1,016 tonnes) may be carried in a vessel previously approved for the purpose by the Port Authority.

2. *General:*

(a) Flammable liquids may be carried in barges but should only be accepted for carriage in bulk in barges which have been approved for the purpose by the Port of London Authority.

(b) Drums should not be of a greater capacity than 450 litres each unless prior permission is given by the Port of London Authority.

(c) Vessels at river wharves when discharging flammable liquids overside into barges should only do so into barges on the outside or riverward side of the vessel. Such barges should not be left unattended and should be afloat at all times. Under no circumstances should a barge loaded with flammable liquids be left or moored between a vessel and a river wharf.

(d) Immediately after any tank vessel carrying bulk flammable liquids is discharged and before it is removed from the quay at which it has been discharged, all hatches and manholes to the cargo tanks and adjoining spaces shall be closed down and properly secured and kept so closed down and secured whilst the vessel is in transit.

(e) Day and night signals for vessels carrying flammable liquids in bulk to be as for vessels carrying petroleum spirit.

(f) The above mentioned requirements do not apply to shipments of flammable liquids of less than 450 litres provided that shipment is contained in suitable receptacles and is not merely the residue of a larger consignment.

(g) No other cargo should be discharged from or loaded onto a vessel while flammable liquids in bulk with a flash point not exceeding 141°F (61°C) are being discharged from or loaded into the vessel.

Port of London Act, 1968, Section 150 – Notice Concerning Dangerous Goods

1. Except in case of emergency, the Owner or Master of a vessel:

(a) which it is intended to bring into the limits carrying dangerous goods; or

(b) which is within the limits and on which it is intended to place dangerous goods;

shall before that vessel enters the limits of before the dangerous goods are placed on board, as the case may be, give notice to the Harbour Master of the Port Authority of the nature and quantity of the dangerous goods in question and, if such notice is not given, the Owner or Master of the vessel shall be guilty of an offence and liable to a fine not exceeding £100. Provided that:

(i) The notice required by this subsection shall, when practicable, be given not less than twenty-four hours before the vessel enters the limits or the dangerous goods are placed on board, as the case may be; and

(ii) nothing in this subsection shall, impose any obligation upon the Owner or Master of a vessel to give any notice to the Harbour Master in respect of the carriage of dangerous goods in that vessel by reason only that the vessel passes through any part of the limits on a voyage between places situated on the River Medway or on the Swale or on that part of the Kent coast between Warden Point and the North Foreland or on that part of the Essex coast between Foulness Point and the Naze and any other places not within the limits.

AUTHORITY: Port of London Authority, Leslie Ford House, Tilbury Docks, Tilbury, Essex RM18 7EH. *Tel:* Tilbury (03752) 3444. *Telex:* 99267. *Contact:* John N. Black, Chief Executive. John S. McNab, Director of Tilbury. Captain Gordon Varney, Harbour Master.

AGENT: Lambert Brothers Ship Agencies Limited, 450 High Road, Ilford, Essex. Telegrams: "Lambert Ilford" and "Lambert London EC3". Telex: 897147 and 897435. Tel: 01-553 3311.

LONDONDERRY (incl. Moville): 54.59 N. 07.19 W.

(See Plan Book)

The main port of Londonderry is situated about 21 miles from the sea on the River Foyle.

PORT LIMITS: Extend from Lifford Bridge to a line drawn from Greencastle Fort in the County of Donegal to the Tower on Magilligan Point in the City and County of Londonderry.

DOCUMENTS: For Londonderry see "Belfast". For "Moville" see "Dublin".

Since the Port of Londonderry falls within the Republic of Ireland and the United Kingdom, both Governments are concerned in regard to Customs documents. Moville, which is situated down river from Londonderry, is located in the Republic of Ireland and is the anchorage where deep-sea vessels lie prior to proceeding to Londonderry. Should vessels discharge cargo or load cargo at this anchorage, Irish documents are required. The port is under the control of the Londonderry Port and Harbour Commissioners who are recognised by both Governments.

PILOTAGE: The Londonderry Port and Harbour Commissioners are the Pilotage Authority for the Londonderry Pilotage District. For information regarding pilotage application should be made to The Secretary, Harbour Office, Londonderry, Northern Ireland. Tel: (0504) 262553.

Pilotage is compulsory, vessels normally taking the Pilot at Carrickarory Pier, Moville. A Pilot may be taken at the Fairway buoy by special arrangement.

The Pilot station is located at Carrickarory Pier, Moville, 55° 10′ 57″ N.; 07° 03′ 27″ W.

Deep-draft vessels usually take Pilot 2 hours before HW time Londonderry, so as to arrive at Londonderry on the top of HW.

Pilotage service may be obtained in response to following signals:

Inward-bound vessels: By day. 1. The International Code Signal G 2. The International Code Signal P.T.; 3. The Pilot Jack hoisted at the fore; 4. By daylight signalling lamp to the pilot station. If required after hours telephone Harbour Radio (Londonderry 263218)

By night. Pilot Station unattended at night. Vessels should contact harbour radio on VHF Channel 16 or Londonderry (0504) 263218.

By day or night. 1. By VHF (FM) radiotelephony to the pilot station at Carrickarory Pier. 2. By VHF (FM) radiotelephony to the pilot launch "James McDonald." 3. After hours and weekends VHF (FM) to Harbour Radio.

In poor visibility. By sounding the letter G in Morse Code on the steam whistle or siren.

As visibility to seaward from Carrickarory Pier is restricted it is important that Owners, Masters or Agents notify the Berthing Master (tel: Londonderry 263680) or outside Office hours Harbour Radio (tel: Londonderry 263218) of the name of vessel; estimated time of arrival at the Fairway Buoy; draft of water of the vessel. It is also important that VHF (FM) communication be established with pilot station, pilot launch "James McDonald", or Harbour Radio as early as possible before arrival in Lough Foyle. Call signs, frequencies and procedure are as follows:

VHF (FM) Communications:

1. Pilot Station at Carrickarory Pier, Moville: Call sign "Foyle Pilots". Equipment VHF (FM) R/T single frequency working. A continuous listening watch is kept during office hours on Channel 16 (156.80 MHz.) except when pilot launch is operating, when watch is transferred to the launch. When communication has been established on Channel 16 (calling and safety channel) operators should switch to Channel 14 (156.70 MHz.)

2. Harbour Radio: A continuous listening watch is kept on Channel 16 (156.80 MHz) outside of office hours. Once communication has been established switch to Channel 14 (156.70 MHz).

3. Pilot launch: Name of vessel "James McDonald". Equipment VHF (FM) R/T single frequency working. When launch is operating a listening watch is kept on Channel 16 (158.80 MHz). When communication has been established on Channel 16 (calling and safety channel) operators should switch to Channel 14 (156.70 MHz).

4. Harbour Office, Londonderry: Call sign "Harbour Office". Equipment VHF (FM) R/T single frequency working. All vessels fitted with VHF (FM) R/T while navigating in the river or at anchor in Moville Bay should keep a listening watch on Channel 16 (156.80 MHz). When communication has been established on Channel 16 (calling and safety channel) Operators should switch to Channel 14 (156.70 MHz).

Messages must be restricted to those related to the movement of vessels and safety of vessels and persons. Messages of any other nature and messages of a personal character cannot be accepted.

Outward-bound vessels and vessels shifting:

When the services of a Pilot are required for an outward-bound vessel or for shifting a vessel, 4 hours notification should be given to the Berthing Master (Tel: Londonderry 263680) during office hours, of name of vessel; time of departure; draft of water of vessel; where bound. Early notification should be given to enable Pilot to board vessel in good time.

ANCHORAGES: The only anchorage at Londonderry is located at Moville.

RESTRICTIONS: See "Max. Size".

MAX. SIZE: For vessels using main port of Londonderry, overall length 152.5 m. draft 7.2 m.

Due to new road bridge at Madam's Bank, height clearance 32 m. H.W.O.S.T.

For vessels using N.I.E.S. Oil Jetty, Coolkeeragh, Londonderry, overall length 183 m. draft (salt water) 7.2 m.

Maximum draft of vessels is increased on Spring tides at Coolkeeragh and Londonderry.

HEALTH: Pratique is automatic except in the case where the Master suspects one of the dangerous diseases on board when he should notify the Agent.

Also see "Health – All Ports" before first U.K. port.

RADIO: Malin Head Radio Station, Republic of Ireland, covers W/T and R/T transmissions and Portpatrick Radio Station, Scotland, covers R/T transmissions.

TUGS: One tug is available which is owned by the Londonderry Port and Harbour Commissioners.

BERTHING: Vessels of deep draft or large dimensions can only berth at Londonderry to arrive on top of high water. Decisions in this matter are taken by the Pilots in conjunction with the Harbour Master.

A total of 800 m. of ferro-concrete wharf is available. All berths dredged to 7.6 m. LWOST

CRANES: 3×5 tons electric grabbing cranes; 2×2 tons electric hook cranes; 1×1.5 tons mobile crane; 3×20 tonnes mobile cranes and 1×35 ton container crane..

STEVEDORES: ETA advices should be given before 1600 hrs. on week-days to arrange work for the next morning and before 1100 hrs. on Saturday to arrange work for Monday morning.

MEDICAL: Doctors and hospital facilities available. Agents should be advised in advance of any medical attention required.

TANKERS: No slop facilities available. Deep-sea tankers discharge heavy fuel oil for electricity power station at N.I.E.S. Jetty, depth 8.8 m. Coolkeeragh, diameter of pipes 8 in. Crew are required to connect and disconnect hoses under port conditions.

Shell Oil: Max. LOA 120 m. Depth 6.0 m.

Du Pont: Depth 8.5 m.

DENSITY: Water at Londonderry is brackish and average density 1005 to 1018.

FRESH WATER: Available at all berths direct from shore lines.

FUEL: Gas-oil and light marine diesel available by road tankers and from Shell Jetty at Pennyburn. Shell Mex and B.P. can supply light medium and heavy fuel oil by road tanker.

GANGWAY/DECK WATCHMEN: Can be covered by crew; shore watchmen available if required.
OPENING/CLOSING HATCHES: This is required to be carried out by ship's crew under local port labour conditions.
CARGO GEAR: Ship's winches and derricks should be in good working order and have DTI Certificates or equivalent. Cluster lighting is required for night work.
IDENTIFICATION CARDS: Not obligatory but should be carried.
CONSULS: Nearest at Belfast.
REPAIRS: Deck and engine repairs are carried out by a local engineering works. No major repairs available.
REPATRIATION: Can be arranged by ship's Agent on request.
AIRPORT: The nearest airport to Londonderry is Aldergrove (Belfast) Airport, which is 61 miles from Londonderry.
HOLIDAYS: Port Holidays at Londonderry are: St. Patricks Day (17th March); Easter Monday; 12th July; 1st Monday and Tuesday in August; 12th July; Christmas Day and Boxing Day.
POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required, or Police 265161; Ambulance 265171; Fire 261815.
TELEPHONES: No telephones available for connecting on board.
SERVICES: No tank cleaning available or facilities for discharging of tank-washings. Compass adjusters available from Glasgow.
REGULATIONS: Copies of Port Bye-Laws may be obtained through Agent.
AUTHORITY: Londonderry Port and Harbour Commissioners, Harbour Office, Londonderry BT48 6AF, Northern Ireland. *Tel:* (0504) 264884, 264885, 262553. *Contact:* Captain P. J. Collier, Chief Executive. G. S. Wilson, Secretary.

LOWESTOFT: 52.29 N. 01.45 E. (See Plan Book)

DOCUMENTS:
Crew List (at least 2 copies).
Passenger List (at least 2 copies).
Manifest (at least 3 copies).
Customs & Health Documents (normal U.K. regulations).
Ship's Papers (to be presented to Customs or Port Authorities).
PILOTAGE: Pilots on standby at all times. Pilot launch fitted with VHF and maintains listening watch on Channel 16. Pilots can also be ordered by RT via Humber and Northforeland Radio, hence by phone.

Pilot's private telephone No. Lowestoft 60277 or Lowestoft 61976, or at the Lowestoft Harbour Masters Office, tel. Lowestoft 2286 (this number manned 24 hours). Pilot boat, black hull, white upper work with "Pilot" painted on each side. Light and sound signals as laid down in the International Code of Signals.

Pilot boards vessel at West Holm Buoy or East Newcome Buoy. Vessel should not approach harbour closer than these limits when awaiting Pilot.
ANCHORAGES: Pilotage anchorage North of a line joining West Holm Buoy and Lowestoft Lighthouse.
RESTRICTIONS: No specific restrictions provided the height of tide is sufficient for draft of vessel. Large vessels normally enter on high water slack tide due to cross currents at entrance.

There are regulations governing the passage of vessels through the harbour entrance. Masters of vessels shall observe the Harbour Control Light which is a white flashing light situated below the fixed red light on the South Pier Lighthouse. This light is visible except between 232° to 286° true from the light. When this light is flashing vessels may proceed to sea, but no vessel shall enter the harbour. At all other times vessels may enter the harbour, but no vessel shall proceed to sea.

A green occulting light is shown on the North Pier Head and a red occulting light on the South Pier Head, from sunset to sunrise.

Two fixed vertical green lights are shown on the Inner North Pier Head. These Inner Pier lights will be clearly visible from a vessel upon entering the harbour but will also be visible from certain directions before entry.

A "horn" signal is fixed on the South Pier Head for use in foggy weather. 4 blasts of 2 seconds each will be given every minute.
MAX. SIZE: Max. length approx. 450 ft. Draft up to 21 ft. MHWS. (Check with Port Authority for current situation.)
HEALTH: See "Health – All Ports" before first U.K. port.
TUGS: 3 tugs are available; tug's lines normally used.
BERTHING: *Outer Harbour* (comprising Hamilton and Waveney Docks and Trawl and Yacht Basins). Used largely for fish traffic:

Width at entrance	150 ft.
Depth at entrance	23 ft. MHWS
Water area	40 acres
Length of quays	4,500 ft.
Depth of water at quays	18 ft. MHWS 12 ft. MLWS

Inner Harbour. Used for general cargo and grain traffic.

Water area	70 acres
Length of quay	6,500 ft.
Depth of water at quays up to	23 ft. MHWS 17 ft. MLWS

CRANES: 1×200 tonne crane, 1×35 tonne crane and 1×32 ton container crane. Mobile cranes also available.
CARGO HANDLING FACILITIES: *Grain Silo:* Grain silo has a capacity of 13,000 tonnes and discharging and loading rates of 90 tonnes and 150 tonnes per hour respectively.
Containers: Container vessels are accepted, along with the general cargo carriers, in the port's Inner Harbour.
STEVEDORES: Shipping Agent should be advised of ETA, etc., to enable gangs to be available. Working hours: 0800 – 1700 hrs. Overtime as required.
MEDICAL: Advance notice desirable of medical attention required on arrival. Hospital facilities available in Lowestoft.
FRESH WATER: Can be supplied at various points on quays from hydrants with waterman in attendance. Normal hours 0800 to 1700 hrs. Monday to Thursday and 0800 – 1600 hrs. Friday, outside those hours overtime rates payable. Approx. flow 15 t.p.h.
FUEL: Marine diesel available from road tankers or fuel barge within the harbour. 24 hours notice is normally required for supplying gas oil or boiler fuel; this comes from road tankers.
FIRE PRECAUTIONS: Local fire services available in an emergency. Special arrangements can be made for taking fire-fighting equipment to sea. Normal harbour fire-prevention regulations apply to all berths.
OPENING/CLOSING HATCHES: Carried out by crew.
CONSULS:

Belgium	Tel:	Lowestoft	2301
Denmark	„	„	„
France	„	„	„
Netherlands	„	„	„
Norway	„	„	„

REPAIRS: All types of deck and engine repairs are possible in the port.
DRY DOCKS: One dry dock. Length 248 ft. Width at entrance 48 ft. Depth of water on sill 14.5 ft. MHWS.
AIRPORTS: Nearest international airport served by regular airlines is London (Heathrow). Smaller airport at Norwich (27 miles) not served by regular airlines.
POLICE/AMBULANCE/FIRE: In an emergency dial 999 and ask for service required. For normal enquiries: Police Lowestoft 2121; Ambulance Lowestoft 2572; Fire Lowestoft 2227.
GENERAL:
Air/Sea Rescue Services at R.A.F. Cottishall (35 miles).
Royal National Lifeboat Institution, lifeboat berthed at Lowestoft.
Modern transit sheds.
SERVICES: Compass adjusting. VHF, Radar, radio repairs. All ships' provisions are available by arrangements with the shipping Agencies.
SHORE LEAVE: Leave is permitted.
AUTHORITY: Associated British Ports, Port House, Lowestoft, Suffolk, NR32 1BG. *Tel:* (0502) 2286/7. *Telex:* 97448 Apblow G. *Contact:* A. R. Klinck, Port Manager.

LYDNEY: 51.43 N. 02.33 W. (See Plan Book)

PILOTAGE: Available from Sharpness.
RESTRICTIONS: Entry and exit only possible at HW and for a very short period afterwards.
VHF: Not permanently manned. Used solely for directing vessels. Standard multi-channel. Channel 16 for call up.
BERTHING: *Tidal Basin:* 82.3 m.× 22.8 m. Width of entrance 10.5 m. Depth at HWST 7.3 m.
Inner Dock: 237.7 m.×32 m. Width of entrance 7.0 m. Depth 3.6 m.
FRESH WATER: Limited supply from small bore tap.
FUEL: Not available.
AIRPORT: Gloucester (Staverton) 24 miles, Bristol 24 miles, Cardiff 30 miles.
GENERAL: The port does not offer any cargo handling facilities and traders need to make use of the overhead crane owned by Mallinson-Denny Limited. This is situated upstream of the inner lock gates and therefore severely limits the size of vessel which can enter.
AUTHORITY: Severn-Trent Water Authority, Lower Severn Division, Southwick Park, Gloucester Road, Tewkesbury, Gloucestershire GL20 7DG. *Tel:* Tewkesbury (0684) 294516. *Telex:* 43520. *Contact:* Mr. R. J. Bishop, Water Amenity Officer. W. B. Price, Harbour Master, Tel: (0594) 562303 (part-time only – 48 hours notice required).

MANCHESTER: 53.29 N. 02.14 W. (See Plan Book)

GENERAL: The port of Manchester includes the whole of the Manchester Ship Canal and Queen Elizabeth II Dock. The Canal is approximately 36 miles long from its entrance at Eastham on River Mersey to the Manchester Docks.
DOCUMENTS:
1 Maritime Declaration of Health.
1 Crew Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing Card for each Passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate – for British ships only.
Load-Line Certificate.
Safety Equipment Certificate.
Lloyd's Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.
In addition, Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Non-compulsory. Orders for Pilots may be lodged with the Pilotage Office at Eastham (Tel. 051-327 1233). As much notice as possible should be given, particularly in the case of inward-bound vessels due to arrive at Eastham. Helmsmen can be obtained in same manner.

RESTRICTIONS: Eastham Locks. The main entrance to the Canal is at Eastham where there are two locks side by side, one 600 ft. by 80 ft., and the other 350 ft. by 50 ft. The outer or lower sill of each lock is 11.36 ft. below Chart Datum (1975). The levels of upper sills of the 80 ft. and 50 ft. locks are 32 ft. and 29 ft. respectively below statutory water level in Canal.

Both locks are operated for incoming and outgoing vessels of suitable draft during a period of 8 hours on each tide, i.e. from 4 hours before high water to 4 hours after high water.

The Canal is constructed to give an available depth of water of 30 ft. from Eastham to Ince Oil Berth (5.375 miles) and of 28 ft. from Ince to Manchester Docks.

The size of vessel which can navigate the Canal is governed by the dimensions of locks, the height of fixed bridges and limitations for the draft of vessel.

Maximum length: The greatest length measured between perpendiculars drawn at the foreside of the foremost extremity and at the afterside of the aftermost extremity of the hull or any attachments to the hull shall not exceed 560 ft. The acceptance of ships proceeding above Ince with overall length greater than 530 ft. is subject to approval of the Harbour Master.

The length measured between perpendiculars drawn at the foreside of the stern and at the afterside of the rudder post, or through centre of the rudder stock if there is no rudder post, on the Summer load waterline shall not exceed 535 ft.

The length measured between perpendiculars drawn at the afterside of the rudder plate and at the foreside of the foremost extremity of any part of the hull which is below a horizontal line drawn through the top of the rudder plate shall not exceed 544 ft.

Maximum beam: Vessels not proceeding beyond Ince Oil Berth: 72 ft. overall. Vessels proceeding beyond Ince Oil Berth: 63 ft. 6 in. overall.

Provided the height of masts and/or funnels or other structures is not more than 70 ft. 9 in. from water-line, vessels can pass under all fixed bridges under normal conditions. As, however, the headroom is less during periods of high-water levels, a vessel, in order to avoid possible detention, should reduce masts and funnels or other structures to 70 ft. above the water-line. The restriction as regards height does not apply to vessels proceeding only as far as Runcorn Bridge.

Facilities are available at Eastham for removing and replacing tops of masts and funnels.

MAX. SIZE: When vessels are loading inwards for the Canal, Masters should take these facts into their calculations and have regard to the following limitations, all of which are expressed as maximum draft in fresh water:

Vessels inward bound to a berth	*Arrival draft (in fresh water) at Eastham not to be such as would exceed:*
Between Eastham Locks and Ince Oil Berth	28 ft. 10 in.
Between Ince Oil Berth and Latchford Locks (Other than Runcorn Docks)	26 ft. 06 in.
Between Latchford Locks and Mode Wheel Locks	24 ft. 00 in.
In the Manchester Docks upstream of the Inner Gates of Mode Wheel Locks and downstream of the Railway Swingbridge.	22 ft. 00 in.
In the Manchester Docks upstream of the Railway Swingbridge to No. 3 Dock Pomona	14 ft. 00 in.

Vessels loading outward at any point between Eastham Locks and Ince Oil Berth should not have a draft exceeding 28 ft. 6 in. upon completion of their loading in this section.

Vessels loading outwards at any point between Ince Oil Berth and Latchford Locks (other than Runcorn Docks) should not have a draft exceeding 26 ft. 6 in. upon completion of their loading in this section. Vessels requiring to swing in the Manchester Dock Basin should not have a draft exceeding 22 ft. 00 in. upon completion of their loading in this section.

Vessels loading outward at any point between Latchford Locks and Mode Wheel Locks should not have a draft exceeding 24 ft. 00 in. upon completion of their loading in this section. Vessels requiring to swing in the Manchester Dock Basin should not have a draft exceeding 22 ft. upon completion of their loading in this section.

Vessels loading outward at any point in the Manchester Docks upstream of the Inner Gates at Mode Wheel Locks and downstream of the Railway Swingbridge should not have a draft exceeding 22 ft. 00 in. upon completion of their loading in this section.

Vessels loading outward in the Manchester Docks upstream of the Railway Swingbridge to No. 3 Dock Pomona should not have a draft exceeding 14 ft. 00 in. upon completion of their loading in this section.

Large vessels can swing in the basins at Stanlow and Manchester Docks. Small vessels can swing at certain other points on the Canal.

HEALTH: Foreign arrivals to complete Maritime Declaration of Health. They are cleared immediately on arrival by either a port doctor or an officer of H.M. Customs depending on where ship comes from and whether there is sickness on board.

Vessels arriving from ports within accepted area (N. European ports) and coastal arrivals need not present Declaration in all cases; when there is sickness on board the Port Health Authority must be informed preferably not more than 12 hours and not less than 3 hours before arrival.

Also see "Health – All Ports" before first U.K. port.

TUGS: The Canal Company maintains a fleet of high-powered tugs which may be hired to assist vessels, 12 hours notice required.

BERTHING:

Locality	*Miles above Eastham*	*Bank N–North S–South*	*Tot Leng in fe*
Queen Elizabeth II Dock	—	S	3,15
Eastham Laybyes	—	N	64
Eastham Laybyes	—	S	1,56
30-ton Crane Berth	0.50	S	60
Manisty Wharf	2.00	S	1,10
Ellesmere Port	2.875	S	2,25
Associated Octel Wharf	4.00	S	60
Stanlow Oil Docks Nos. 1 & 2	4.50	N	2,07
Stanlow Laybye	4.625	S	60
Shell Company of the United Kingdom Ltd., Ince Coaster Berth	5.25	S	35
Shell Company of the United Kingdom Ltd., Ince Oil Berth	5.375	S	60
Ince (C.E.G.B.) Berth	5.50	S	60
I.C.I. Salt Berth	11.25	S	50
Runcorn Docks	12.25	S	7,50
Du Pont Co. UK. Ltd., Acton Grange Wharf	17.50	N	30
Warrington Wharf	19.00	N	35
Partington	27.375	N	1,88
Partington	27.375	S	1,23
Iriam Wharf	27.75	N	60
Barton Oil Berth	31.875	S	50
Irwell Park Wharf	32.25	N	1,10
Eccles Oil Wharf	32.50	N	60
C.P.C. Wharf	32.75	S	70
Waste Oil Wharf	33.25	N	55
Southern Oil Wharf	33.625	N	50
Esso Petroleum Co. Ltd. Wharf, Mode Wheel	33.75	S	93
Manchester Docks (including Pomona Docks)	34.50	N & S	29,87

CARGO HANDLING FACILITIES: Heavy duty floating cranes wi capacity up to 120 tonnes. Roll-on/Roll-off berth with strengthening t take loads of 300 tonnes.

Grain elevators at private wharves. Transporter cranes for containe with capacity of 35 tonnes and 25 tonnes.

STEVEDORES: The stevedores require to sight a certificate coverin inspection and S.W.L. of slings used in pre-slung cargoes.

TANKERS: *Queen Elizabeth II Dock.* This dock is adjacent to the lock at Eastham which give access to the Canal, and is approached fro River Mersey through its own entrance lock. This lock is 807 ft. long b 100 ft. wide. The level of outer sill is 18.36 ft. below Chart Datum (1975 The dock covers an area of 19 acres in the form of a square and has fou berths designed to accommodate large tankers, the dimensions o berths being as follows:

Berth No. 1 800 ft.	Berth No. 3 900 ft.
Berth No. 2 725 ft.	Berth No. 4 730 ft.

The dock is directly connected to oil installations by pipe-lines.

Stanlow Oil Docks. No. 1 & 2 (5 berths) 4.5 miles above Eastha Lock. Length 560 ft., draft 28 ft., beam 72 ft.

Ince Oil Berth. 5.5 miles above Eastham Lock. Length 560 ft., dra 28 ft., beam 72 ft.

Ince Coaster Berth: Max. length 350 ft., beam 53 ft. draft approx 21 f dependent on current survey.

Barton. 32 miles above Eastham Lock. Length 508 ft., draft 24 f beam 63 ft. 6 in. Max. height above water-line 70 ft.

RADIO: FM VHF R/T equipment is installed at Eastham, Stanlow Latchford, Irlam, Barton and Mode Wheel Locks as an aid to navigatio on the Canal.

Ships which are equipped with the appropriate R/T channels ar requested to establish contact with the nearest shore station befor leaving a berth or lock within the harbour and thereafter to maintain a continuous listening watch on Channel 14.

Station	*Call sign*	*Channel*	
Eastham Locks	Eastham Locks	7	Docking instructions when approaching Eastham Locks from seaward.
Eastham Locks	Eastham	14	Port operations
Stanlow Oil Docks	Stanlow	14 20	Vessels moving within the harbour should maintain a listening watch on Channel 14. After contact has been established the shore station will request the ship to switch to the appropriate speech Channel.
Latchford Locks	Latchford	14 20	
Irlam Locks Lockmaster's Office	Irlam Locks	14 18	
Barton Locks Lockmaster's Office	Barton Locks	14 18	
Mode Wheel Locks Lockmaster's Office	Mode Wheel Locks	14 18	
Ship/tug communications	Name of ship/tug	8 10	Inward bound Outward bound

DENSITY: The water in lower section of the Canal between Easthar Locks and Latchford Locks is brackish. In all sections above Latchfor Locks the water is fresh.

MEDICAL: Doctors and hospital facilities available. Agent should be advised in advance of any medical attention required.

FRESH WATER: Available.

FUEL: Oil bunkers may be taken by arrangement with oil companies either from craft alongside or at various oil berths along the Canal.

CUSTOMS ALLOWANCES: At discretion of local Customs Inspector. Normal allowances are equivalent to 0.5 lb. tobacco per man and equivalent to 1 bottle of wine per man. Allowances may be halved for home trade vessels. Vessels in port for more than 3 or 4 days may receive extra allowances.

CONSULS:

Austria
Bangladesh
Belgium
Bolivia
Denmark
Dominican Republic
Finland
France
Germany
Greece
Iceland
Italy
Jamaica
Latvia
Lebanon
Liberia
Monaco
Netherlands
Norway
Portugal
Spain
Sweden
Switzerland
U.S.A.
Venezuela

TIME: British Standard Time is GMT plus 1 hour. Reverting to GMT during Winter months.

HOLIDAYS: New Years Day (January 1st); Good Friday (variable date); Easter Monday (variable date); May Day (variable date); Spring Bank Holiday (variable date); August Bank Holiday (variable date); Christmas Day (25th December); Boxing Day (26th December).

POLICE/AMBULANCE/FIRE: Dial 999 from any telephone and ask for service required.

AUTHORITY: Port of Manchester (The Manchester Ship Canal Company), Dock Office, Trafford Road, Manchester M5 2XB. *Tel:* (061) 872 2411. *Telex:* 669025. *Contact:* Mr. P. I. W. Mayne, Commercial Manager. Captain J. F. Scrivens, Harbour Master.

AGENT: Herbert Watson & Company Limited, Manchester Liners House, Port of Manchester, Manchester M5 2RJ, Tel: (061) 872-2300. Telex: 667218. Cables: Clutha Manchester.

MEDWAY PORTS

(A) MEDWAY
(B) SHEERNESS
(C) ISLE OF GRAIN
(D) CHATHAM DOCKYARD
(E) ROCHESTER
(F) OTHER FACILITIES
  1. BLOORS WHARF
  2. FAVERSHAM
  3. KINGSNORTH JETTY
  4. OAKHAM NESS JETTY
  5. OTTERHAM QUAY
  6. QUEENSBOROUGH
  7. RIDHAM DOCK

(A) MEDWAY (See Plan Book)

PILOTAGE: Sunk Pilot Station: The Sunk Pilot Cutter, painted black with a buff funnel and the word "Pilots" painted on her sides in white and at night exhibiting lights and signals in accordance with Rule 29 of the International Rules for the Prevention of Collision at Sea, cruises in the vicinity of the Sunk Light Vessel to provide Pilots for ships heading for the Medway and other ports in the London Pilotage District, and disembark Pilots from outward bound ships. In very severe weather the cutter may move to smoother water, usually in the vicinity of the West Sunk or Gunfleet Spit Buoys. In these circumstances shipping is warned by means of radio navigation warnings from North Foreland, Humberside and Scheveningen Radios, which gives the cutter's position.

The attention of Masters is drawn to the requirement of stopping a satisfactory lee for the pilot cutter's boarding boats. These 18 ft. boats have a maximum speed of 5 knots.

Contact Procedure: Vessels wishing to contact the pilot vessel at the Sunk by radio telephony direct may:

(i) When within M/F range (approximately 50 miles) call the cutter on 2182 kHz (M/F). The working frequency is 2241 kHz.

(ii) When within VHF range (approximately 25 miles) call on Channel 16. The working frequency is Channel 6.

The Sunk Pilot Cutter may also be contacted by either W/T or R/T through any Post Office Coast Station addressed "Sunk Pilot" via North Foreland Radio. Alternatively messages to the Harwich Pilot Station, Tel: Harwich (02555) 3129 or 6300, Telex: Pilots Harwich 98472, will be passed direct to the Sunk Cutter.

The attention of Masters of VLCCs is drawn to the special arrangements for Pilot boarding described below:

VLCCs requiring a Pilot at the Sunk Station should give the pilot vessel 12 hours' in advance and through a Post Office Coast Station or the Harwich Pilot Station, their estimated time of arrival, gross tonnage and port of destination. Confirmation of ETA should be given at least 2 hours before arrival. Anything less than 2 hours notice must involve ships in delay.

Pilot Boarding Arrangements for VLCCs: The Masters of all VLCCs requiring a Pilot at the Sunk Pilot Station are requested to comply with the following directions so as to ensure that the boarding operation can be carried out with the minimum inconvenience to the ship and the optimum safety.

The Master of the VLCC should establish voice contact with the Sunk Pilot Cutter at the earliest possible time.

The Sunk Pilot Cutter will advise the Master:

(a) The position in which the Pilot will board and the time of boarding.

(b) The mode in which the Pilot will board, i.e. with the VLCC at anchor or under way. If under way then the speed ordered should be minimal consistent with maintaining steerage way.

In the interests of safe boarding of the Pilot, the VLCC should not proceed inwards of the agreed boarding position.

Vessels bound for the Medway from Rotterdam or ports North of Rotterdam may embark their Pilot at the previous port. Vessels requesting this facility should contact Harwich Pilots, Tel: Harwich (02555) 3129 or 6300, Telex: Pilots Harwich 98472, giving as much notice as possible, stating name and draft of vessel, port and terminal of embarkation, ETD, and whether or not North Sea pilotage is required.

Folkestone. Vessels for River Medway that are approaching from the South obtain Inward Sea Pilot at Folkestone Pilot Station. Telex: 96381. Tel: Folkestone 56766. Telegraphic Address: "Pilots, Folkestone". Notice required: preferably 24 hours notice ETA, then confirmation 12 hours prior arrival with ETA, draft, gross tonnage and destination.

Pilot boards from launch 1 mile South of Folkestone Pier. Contact Pilots by VHF Channel 16, then Channel 9, two hours before arrival (call sign "Folkestone Pilots Radio").

Deep drafted vessels can be provided with Pilots in deeper water by arranging to be met by the Sunk Pilot Vessel in a suitable position about 3 miles East of the Sunk Light Vessel.

North East Spit: Vessels approaching within the range Dieppe/Amsterdam obtain inward ISP between the "Elbow Buoy" and "East Margate Buoy". Telegraphic address: "Pilots, Folkestone". Telex: 96381. Tel: Folkestone 56766. Advance notice essential as Pilots not always on station. Notice required: preferably 6 hours giving ETA, draft, gross tonnage and destination, confirming 2 hours prior to arrival. Contact Pilots on VHF Channel 16, changing to Channel 9 for working (call sign "North East Spit Pilot Radio"). Light or sound signals as per International Code. Pilot boards between the "Elbow Buoy" and the "East Margate Buoy", depending on weather, by fast launch which is stationed in Ramsgate Harbour. Contact Pilots on Channel 16, changing to Channel 9 for working.

Medway: Medway Pilots join ships at Little Nore Sheerness for all Medway ports, i.e. Isle of Grain, Sheerness, Oakham Ness, Otterham, Rochester, Queenborough and Ridham. Telegraphic Address: "Pilot Sheerness". Tel: Sheerness 662276. Notice required, minimum 2 hours. Pilots may be contacted through Medway Radio on VHF Channel 74 or pilot launch keeps watch on Channel 74 when in service. Lights and sound signals as per International Code.

VHF/RADAR: Medway Port Operations and Information Service (Medway Ports Authority) is situated at Garrison Point, Sheerness. Tel: Sheerness 663025. Telex: 96435 (call sign "Medway Radio"). Fitted with VHF, Channels 16, 74, 9 and 22. The station has radar service surveillance of Inner Estuary, Sea Reach, Medway Approach Channel and Lower Reaches of River Medway.

REGULATIONS: All vessels required to proceed in accordance with instructions of Port Authority. Vessels are requested to advise Medway Ports Authority – Medway Port Operations Service (call sign "Medway Radio") VHF Channels 16, 74, 9 and 22 of ETA, shifting of sailing movements.

Prior notification to the Medway Ports Authority is required, detailing the carriage of all explosives and "dangerous goods".

GENERAL:

Tidal Information:

Tidal streams in the River Medway vary between about 2.5 knots at Springs and 1.5 knots at Neap Tides, although velocities vary considerably from Reach to Reach, the areas of maximum encountered velocities are: off Garrison Point Sheerness and through Rochester Bridge.

Average Tidal Heights are as follows: (metres)

Sheerness	5.7 MHWS	4.8 MHWN
Chatham	6.0 MHWS	4.9 MHWN
Rochester	6.2 MHWS	5.0 MHWN

High Waters occur approximately:

Margate	45 minutes	before Sheerness
Herne Bay	20 minutes	before Sheerness
Whitstable	10 minutes	before Sheerness
Rochester	9 minutes	after Chatham
Wouldham	28 minutes	after Chatham
New Hythe	33 minutes	after Chatham
Allington Lock	41 minutes	after Chatham

Tide Tables may be obtained at the offices of the Medway Ports Authority.

(B) SHEERNESS: 51.27 N. 00.44 E. (See Plan Book)

Situated on Isle of Sheppey at junctions of Thames and Medway Rivers.

DOCUMENTS: See "London".

PILOTAGE: See "Medway".

ANCHORAGES: For vessels entering River Medway up to 107 m. length, Little Nore Anchorage, Sheerness. Over 107 m. length – as directed by Medway Port Authority (Medway Radio) or Thames Navigation to Great Nore, Sea Reach or Warps.

RESTRICTIONS: Subject to tidal conditions and under keel clearance appropriate size of vessel. Minimum depth of Medway Approach Channel 8.5 m. at Chart Datum.

Entry as directed by Medway Port Operations (Medway Radio). Station keeps watch on VHF Channels 16, 74, 9 and 22.

Occasional restriction for vessels over 130 m. overall length entering approach channel between sunset and sunrise when the Traffic Warning Lights are exhibited from Garrison Point.

MAX. SIZE: Five deep water terminals for vessels up to 230 m. in length and 11.0 m. in draft.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Portishead. Local Stations: From South – Lands End, Niton, Northforeland. From North, Cullercoats, Humber, Northforeland.

VHF/RADAR: See "Medway".

TUGS: River Medway – For Sheerness, Ridham Dock, Isle of Grain, Oakham Ness – Tugs usually meet vessels at Garrison Point Sheerness. Tug's lines used, no extra charge.

BERTHING: Sheerness, deep water berths and Ferry Terminal – as directed by Medway Port Operations and Information Service (Medway Radio).

Berths equipped for handling containers, forest products, motor vehicles and wine in bulk and for general cargo of all kinds, including fresh fruit and vegetables.

Storage facilities available for bulk wine, vehicles, forest products and the warehousing of general cargo.

Sheerness Deep Water Berths – No. 1 – suitable for vessels up to 230 m. length and 11.0 m. draft.

No. 2. Suitable for vessels up to 210 m. length and 11.0 m. draft.

No. 3. Suitable for vessels up to 230 m. length and 11.0 m. draft.

No. 4. Suitable for vessels up to 230 m. length and 9.0 m. draft.

Ferry Terminal – Berth 11. Suitable for either bow or stern door vessels of up to 165 m. in length and 7.0 m. in draft. Present service twice daily Sheerness/Flushing and vice versa.

STEVEDORES: All stevedoring at Sheerness is provided by the Port Authority.

CRANES:

Berth No.	*Remarks*
1	3 – 3 & 5 tonne Electric
	1 – 7.5 tonne Electric
	1 – 40 tonne Container Gantry
2	4 – 3 & 5 tonne Electric
3	5 – 3 & 5 tonne Electric
4	None (Car Terminal)
11	Ro-Ro/Ferry Terminal
12	10 tonne static (Launches)
12A	Mobile (Marine Services)
14	Mobiles (Launches)
15	Mobiles (Ship Repairs)
16	Mobiles (Ship Repairs)

MEDICAL: 24 hours notice to Agents so that Port Medical Officer can be advised. Normal boarding point – Garrison Point Sheerness. All usual hospital facilities available within 15 mile range of Sheerness.

DENSITY: Average density 1021/22.

FRESH WATER: Available alongside all berths at Sheerness.

FUEL: All grades available at BP Refinery Isle of Grain – or available by barge or lorry given 48 hours notice.

GANGWAY/DECK WATCHMEN: Gangway watchmen – services recommended as all berths at Sheerness are tidal with average rise and fall of 5 m.

OPENING/CLOSING HATCHES: Within Sheerness Docks rigging gangs are employed by the Authority for this purpose.

SURVEYORS: Cargo Surveyors available from London or Gravesend. Lloyd's Agent in docks.

REPAIRS: All types of deck and engine repairs can be carried out either in berth, in dry dock or at river buoys.

DRY DOCKS: Sheerness: 2 dry docks available. Largest for vessels up to 86 m., otherwise only small slipways available.

REPATRIATION: Usual facilities available for crew changes – repatriation can be arranged by various air/sea routes.

TELEPHONES: Police: Sheerness 661451; Fire: Sheerness 662382 or dial 999 and ask for Fire Service; Ambulance: Sheerness 664079. At Sheerness coin boxes are available for placing on board.

EMERGENCY CO-ORDINATION CENTRE: Medway Port Operations and Information Service, Garrison Point Fort, Sheerness Docks, Sheerness, Kent ME12 1RX. Tel: Sheerness 663025.

STORING: See "Prelims" page viii.

1. Yes.
2. No limitations except when loading dangerous goods or explosives.
3. Yes.
4. Yes.
5. Standard practice – 24 hour customs availability.
6. No.

GENERAL: All shipping movement co-ordinated by Medway Port Operations and Information Service, Tel: Sheerness 663025, all arrangements being made after notification of arrival or departure by vessel's Agent.

REGULATIONS: See "Medway".

AUTHORITY: Medway Ports Authority, Dockyard House, Sheerness Docks, Sheerness, Kent ME12 1RX. *Tel:* 0795-662211. *Telex:* 96435. *Telex* (commercial): 965503. *Contact:* Mr. K. Cooper O.B.E., Chief Executive. Captain R. L. Collins, Harbour Master. Mr. P. Vincent, Director of Operations.

AGENT: See "Rochester".

(C) ISLE OF GRAIN: 51.26 N. 00.43 E. (See Plan Book)

DOCUMENTS:

1 Maritime Declaration of Health.
2 Crew's Effects Lists.
2 Ships Report by Master.
2 IMO FAL. Form 5.
2 Stores Lists.
1 Port Dues Certificate.
Ship's Certificate of Registry.
Load-line Certificate.
Safety Equipment Certificate.
Lloyds Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.
Safety Construction Certificate.
2 Cargo Declarations.
1 Oil Pollution Certificate (OPIC).

PILOTAGE: See "Medway".

ANCHORAGES: *Estuary Passage and Anchorages:* Vesse proceeding to Isle of Grain will initially contact the Thames Navigatio Service (Gravesend Radio Channels 16-12) and comply with th 'General Directions for Navigation in the Port of London 1975' un entering the Medway Area. Prior contact should be made with th Medway Ports Operations Centre (Medway Radio, Channe 6-74-9-22). Anchorages are allocated according to size and draft vessel and if outside the Medway area are nominated by the T.N.S.

RESTRICTIONS: Tidal port. 24 hour movements, subject to tid conditions and under-keel clearance appropriate to size of vessel. Th declared depth in the Medway Approach Channel is 8.5 m. at cha datum.

MAX. SIZE: 40,000 tonnes Summer deadweight and 250 m. LOA.

HEALTH: Under new procedures which apply from April 1st, 1978 Health Clearance is only required if the vessel is "Suspect". In this cas the Port Health Authority should be advised by radio messa addressed to "Portelth London" not more than 12 hours and whe practicable not less than 4 hours before arrival.

See "Health – All Ports" before first U.K. port.

RADIO:

Notice of 72 hours and over – Portishead Radio.
Notice of 12-72 hours – Landsend Radio.
Notice up to 12 hours – from South, Northforeland Radio.
– from North, Humber Radio.

RADAR/VHF: See "Medway".

TUGS: 3 tugs available, one equipped for fire-fighting. Tugs join ar leave vessels at Garrison Point, Sheerness. Normally use tug lines, co included in tug hire.

BERTHING: There are 3 main jetties suitable for coastal and ocea going vessels (Nos. 3, 4 and 7). Jetties 1, 2, 5, 6, 8 and 9, No. 1 coast and No. 1 barge jetty are all closed. Jetties 3, 4 and 7 are of 'T' heade design and can accommodate vessels of various sizes up to a maximu of 70,000 tonnes Summer deadweight and 250 m. LOA. Maximum sa drafts for the Medway Approach Channel and on the berths can advised on request.

Ballast water containing Petroleum may normally be discharged in the Company's oily ballast system by arrangement.

DENSITY: Approx. 1020.

FRESH WATER: Available all jetties by pipe-line.

FUEL: Only gas oil is available from Nos. 3 and 4 jetties, pr arrangements can be made for the delivery of other fuel oils by barg

MEDICAL: Advance notice of medical attention and inoculatio required is advisable. Hospital facilities available in surrounding area

FIRE PRECAUTIONS: *Safety Regulations:* A copy of the BP Oil Ke Refinery Jetty Safety Regulations is put on board each vessel on arriva The booklet additionally contains various tear-out check lists, forms confirmation of bunker requirements and requests for immobilisatio and permitted repairs. These must be completed by ship and sho representatives before operations commence.

GANGWAY/DECK WATCHMEN: *Gangways:* Vessels provide the own gangway at all jetties and are responsible for maintaining it as safe means of access.

REPAIRS: Local marine repair company can undertake repairs general nature. No drilling or hot-work permitted alongside jetties.

REPATRIATION: All facilities for repatriation by land, sea and a through London and Dover. Attendance of British Ministry and Foreig Consulate Officials arranged through Agent.

POLICE/AMBULANCE/FIRE: The Refinery Fire Service (which als operates an ambulance) can be summoned by dialling 222 on th Refinery telephone system. This procedure should be followed in ar emergency – e.g., a major accident or hose failure, etc.

Refinery Security can be contacted by dialling 221. Any request f attendance by the County Police should be made through Refine Security Dept.

TELEPHONES: Public telephone kiosks on the foreshore road.

CUSTOMS ALLOWANCES: At the discretion of the local Custom Officer. Normal allowances are 200 cigarettes (F.G.) or 100 cigarette (H.T.) or equivalent and 1 bottle of spirits per man. Additionally 1.5 litre of wine per man per day. Separate arrangements apply when crew a leaving ship. Vessels in port more than 4 days may receive an addition allowance.

TIME: British Standard Time is GMT plus 1 hour. GMT in Winter month

SHORE LEAVE: A Security Warden will board each vessel on arrival collect from the Master a copy of the crew list. This should specify whic crew members are leaving the vessel, the names of wives or othe visitors expected and, if known, details of crew members joining. should also note if any crew members are not permitted to go ashore

The list will be retained at the Security Gate and passes will be issue when crew members pass out and collected from them on their retur Crew leaving should be issued with baggage passes by the ship.

GENERAL: Agents have difficulty in providing most services at wee ends, therefore, requests for Bond, cash, Consular Officials, etc., shoul be radioed as soon as possible.

OPERATOR: BP Oil Kent Refinery Ltd., Isle of Grain, Nr. Rocheste Kent. *Tel:* Medway (0634) 278000. *Telex:* 965584. *Contact:* C. B. Hoo Marine Officer.

AGENT: See "Rochester".

(D) CHATHAM DOCKYARD: 51.24 N. 00.33 E. (See Plan Book

Until 1984 the Naval Dockyard and now operated by the Medwa (Chatham) Dock Co. Ltd., under the control of the Medway Port Authority.

DOCUMENTS: See "London".

PILOTAGE: See "Medway".

ANCHORAGES: See "Sheerness".

RESTRICTIONS: Movement of vessels subject to tidal conditions and under keel clearance appropriate to the size of vessel. Entry as directed by Medway Port Operations (Medway Radio). There are occasional restrictions for vessels over 130 m. in length between sunset and sunrise.

Limiting Depths: Medway Approach Channel 8.5 m. at Chart Datum.
Long Reach 5.8 m. at Chart Datum.
North Lock 3.9 m. at Chart Datum.
South Lock 3.5 m. at Chart Datum.

MAX. SIZE: All working berths in No. 3 Basin can accommodate vessels drawing 8.5 m. Max. length for the locks 143 m. and 25 m. beam.

HEALTH: See "Medway (Rochester)".

RADIO: Portishead. From South: Lands End, Niton, North Foreland. From North: Cullercoats, Humber, North Foreland.

VHF/RADAR: See "Medway".

TUGS: 3 tugs available, operated by J. P. Knight Ltd., prior notice required via ship's Agent. Tug(s) join in Gillingham Reach.

BERTHING: Access to all 3 basins is via the North or South Lock situated at Bull Nose in Gillingham Reach. Dry Docking and repair facilities are available in No. 1 Basin. (Thames Ship Repairers Ltd. Tel: Medway 813041).

All 8 cargo handling berths are presently confined to No. 3 (Outer) Basin.

Berth No.	*Length (m.)*	*Cranes*	*Remarks*
1	168	None	Vehicle import/export terminal.
2	140	None	Ro-Ro ferry.
3	140	2×5 tonne	General cargo.
4	140	2×10 tonne	General cargo, Sto-Ro vehicles.
5	168	1×5 tonne	Ro-Ro, common user.
6.	122	2×5 tonne	General cargo, Sto-Ro vehicles.
7	122	1×40 tonne	Container, common users, heavy lift.
8	168	2×5 tonne	Forest products, Sto-Ro terminal.

Storage facilities are available.

For further details contact: Mr. J. Dixon, Tel: Medway 405397.

STEVEDORES: All stevedoring provided by the Dock Company.

MEDICAL: Advance notice of medical attention and inoculations required is advisable. Hospital facilties available in surrounding area.

DENSITY: 1020 (within No. 3 basin).

FRESH WATER: Metered supply available on all berths.

FUEL: No facility within the dockyard for the supply of fuel, although subject to weather conditions being suitable, bunkering from barges can take place in the anchorages.

GANGWAY/DECK WATCHMEN: Ship's responsibility.

SURVEYORS: Cargo surveyors available from London or Gravesend.

REPAIRS: All types of deck and engine repairs can be carried out either in berth, in dry dock or at river buoys.

DRY DOCKS: Sheerness: 2 dry docks available; the largest for vessels up to 86 m.

Basin No. 1 in Chatham Dockyard – 2 dry docks available operated by Thames Ship Repairers Ltd. Tel: Medway 813041. Max. size of vessel: 215 m.×26 m.×10m. 120 tonne heavy lift crane available.

REPATRIATION: Usual facilities available for crew changes. Repatriation can be arranged by various sea routes or by air through Heathrow or Gatwick.

TELEPHONES: No telephones are placed aboard vessels nor are public telephones available on the quay side other than in offices in close proximity. In an emergency contact Docks Security on Medway 827130 or Medway Port Operations and Information Service, call sign "Medway Radio" on Channel 16 or 74 or 11 (Tel: Sheerness 663025).

GENERAL: All shipping movements co-ordinated by Medway Port Operations and Information Service.

REGULATIONS: See "Medway".

AUTHORITY: *Contact:* Mr. J. C. Dixon. Medway (Chatham) Dock Co. Ltd., Tel: Medway 405397, 814936/7/8. Telex: 966642.

AGENT: See "Rochester".

(E) ROCHESTER: 51.23 N. 00.30 E. (including Chatham, Strood, Upnor, Gillingham, Snodland, Halling & New Hythe) (See Plan Book)

DOCUMENTS: See "London".

PILOTAGE: See "Medway".

ANCHORAGES: See "Sheerness".

RESTRICTIONS: No entry restrictions only as to state of tide and draft and as directed by Medway Radio (Medway Port Operations and Information Service, Garrison Point). Station keeps watch on Channel 16, 74, 22 and 9. Channel 14 is allocated for port operations generally. For vessels exceeding 106.67 m. (350 ft.) in length, daylight navigation.

MAX. SIZE:

Ship Berths: Max. Length: 114 m. (122 m. LOA with special dispensation obtained from the Harbour Master. Bow thruster, tug, etc., required). Max. draft 7.6 m.

River Berths: Length 49 m. – 122 m. Depth 4.3 m. – 7.6 m. MHWS 2.7 m. – 6.1 m. MHWN. Max. LOA 46 m. – 122 m.

HEALTH: Pratique obtained on arrival at Berth.

Also see "Health – All Ports" before first U.K. port.

RADIO: From South: Lands End, Niton, Northforeland. From North: Cullercoats, Humber, Northforeland.

TUGS: J. P. Knight (Rochester) Ltd., 348 High Street, Rochester (Tel. Medway STD 0634 – 42408 and Sheerness STD 0795 – 662821), cover the whole of the Medway Ports Area.

The following companies operate within the Medway Ports Area on a smaller scale with towing and recovery services:

Medway Towing & Light Recovery – Medway STD 0634 – 54300
N.E. Murray (Marine Contractors) – Sheerness STD 0795 – 663701
P. E. Woodger (Craft Hire) Ltd. – Sittingbourne 23874
Mr. J. Oliver – Medway STD 0634 – 406525

BERTHING:

Rochester: There are 5 dredged berths maintained by the Medway Ports Authority and mooring buoys to accommodate 118 lighters and 14 LASH barges situated between Chatham Reach and Rochester Bridge.

Size restrictions vary from 46 m. to 140 m., the latest minimum depths can be obtained from the Medway Ports Operations and Information Service situated at Sheerness (Garrison Point).

The facilities or riverside berths are operated by commercial interests:

Arco Shipping Ltd. at Neptun Wharf	Medway 34011
Transit Freights Ltd. at Crown Wharf	Medway 75686
Honigs (Rochester) Ltd. at Limehouse Wharf	Medway 46261
Wm. Cory & Sons Ltd. at Cory's Wharf	Medway 41022
Anglosped Ltd. at Stanley's Wharf	Medway 409365
Lynch and Sons Ltd. at Lynch's Wharves	Medway 77831
Crescent Shipping Ltd. at Barnetts Wharf	Medway 79541/8
John Howards Ltd. at Crown & Quarry Wharf and Howards Wharf	Medway 402040 (20 lines)

Details of alongside berths handling equipment, latest depths and relevant information can be obtained from the appropriate wharf concerned.

Current depths can be ascertained from Medway Port Operations Service.

Pier Wharf: (Lat. 51° 24′ North; Long. 0° 33′ East)

Situated at the Western Arm of Gillingham Dock and operated under a consortium of companies. Length of wharf 183 m. with varying depths from 3 m. to 5 m. at MHWS. Mobile crane of 4 tonnes and forklift of 4,000 lbs. Storage warehouses and storage capacity available.

Ship repair and boat builder – Medway Marine Structures – STD 0634 - 576600.

Tylers Wharf: (Lat. 51° 24.6′ North; Long. 0° 34′ East)

Situated at West Hoo Creek owned and operated by the Lifeline Moulding Co. Ltd. Length of wharf 73 m. with a depth of 3 m. at MHWS. Large sheerlegs of 30 tons and mobiles available. Boat builders and outfitters.

Mooring Facilities: Buoys are provided at points within the River Medway and Swale. Arrangements to use these buoys and current charges can be made through the Medway Ports Authority.

Kethole Reach: Buoys 20, 21, 22, 23 and 24: 4 fore and aft moorings to accommodate vessels up to 200 m. length and 16,000 tonnes displacement.

Saltpan Reach:

Buoy No.	*Class*	*Maximum Displacement*	*Remarks*
1	3rd	8,000 tons	
2	Super 1st	70,000 tons	
4	Super 1st	70,000 tons	
5	4th	3,500 tons	BACO
6	4th	3,500 tons	LASH
7	4th	3.500 tons	LASH
8	4th	3,500 tons	LASH
9	4th	3,500 tons	LASH
10	4th	3,500 tons	LASH
11	4th	3,500 tons	LASH

MEDICAL: Port Medical Officer available if necessary on arrival at Sheerness with 24 hours notice to Agents. Doctor and hospital facilities available at Rochester.

DENSITY: 1020 unless excessive land water coming down river.

FRESH WATER: Quantities up to 200 tons available for delivery by water barge.

FUEL: Oil bunkers may be obtained at the main installation at the Isle of Grain Oil Refinery or by barge or by road tanker. The last 2 methods require minimum 48 hours notice, similarly with supplying lubricating oil which is not available at the Isle of Grain.

OPENING/CLOSING HATCHES: To be carried out by crew.

CARGO GEAR: Discharge by ship's gear at ship berth and by mobile cranes up to 10 tons at all river berths.

CONSULS:

Vice-Consul Netherlands, Tel. Medway 43256.
Consul Sweden, Tel. Medway 44632.
Vice-Consul Finland, Tel Medway 44632.

REPAIRS: The Medway Dry Dock Co. Ltd. (Tel: Sheerness STD 0795 – 662241/662461) provide 2 Dry Docks of 87.84 m. and 65.58 m. respectively. A smaller slipway is available and alongside berths also.

The Medway Slipway Yard at Rochester High Street of Doust and Company Limited (Tel: Medway STD 0634 – 43087) provide ship repair facilities and operate 2 slipways. The larger can accommodate up to 600 tonnes and 55 m. in length. Afloat repair facilities and riverside berths also available.

Acorn Shipyard (ex New Medway), Gas House, Rochester, Kent ME1 1PJ (Tel: Medway STD 0634 – 41355/6/7), provide ship repair facilities at the Isle of Grain; Sheerness and River Medway, and operate 1 patent slipway of 85.0 m. working length and 1 grid situated at Rochester.

DRY DOCKS: All repair facilities available on river berths for vessels up to 60.96 m. (200 ft.) in length; on a grid for up to 76.19 m. (250 ft.), and a slipway for up to 42.67 m. (140 ft.).

AIRPORT: London Airport (Heathrow), Southend Airport and Gatwick.

POLICE/AMBULANCE/FIRE: Dial 999 and state service required and where vessel berthed, also contact Medway Radio in cases of emergency.

SERVICES: Compass adjustors available.

REGULATIONS: See "Medway".

DEVELOPMENTS: Continued expansion and reclamation at Sheerness: Development of Frindsbury Marshes (Rochester).

AUTHORITY: Medway Ports Authority.

AGENT: Norpark Shipping Co. Ltd., Bridge Wharf, Horse Wash Lane, The Common, Rochester, Kent ME1 1PV. Tel: (0634) 815761. After Hours (0634) 366988, (088332) 736. Telex: 966422.

(F) OTHER FACILITIES:

(1) BLOORS WHARF – RAINHAM CREEK: 51° 22′ 48″ N., 00° 36′ 42″ E.
Situated at the head of Rainham Creek a distance of 10.3 nautical miles from Rochester. Main wharf 183 m. long with 3.1 m. at MHWS. The Western arm is 61 m. long with a depth of 2.1 m. at MHWS.

The Wharf is owned and operated by Medway Secondary Metals Ltd. (A British Anzani Company). Telephone: STD 0634-34411. Mobile cranes, forklifts and crushing equipment available. Large storage capacity and warehouses also available. Shipbreaking and re-cycling of metals.

(2) FAVERSHAM: 51° 19′ N., 00° 54′ E.
DOCUMENTS: See "London".
PILOTAGE: Not compulsory. Advisable to engage local person by arrangement with Agent or contact Medway Port Operations and Information Service.
ANCHORAGE: The Swale (East) 1 mile (approx.) upstream of the Sand End buoy.
RESTRICTIONS: No night restrictions. Tidal creek – vessels enter from 1.5 hours before High Water according to draft.
MAX. SIZE: 43 m. LOA, 7.6 m. beam, 2.7 m. draft, on Spring tides only.
RADIO: North Foreland.
VHF/RADAR: See "Medway".
TUGS: None available.
BRIDGES: Maximum size of vessels proceeding to basin above Faversham Swing Bridge – 43 m. length, 7 m. beam. Draft – the minimum clearance for vessels up to 34 m. in length is 0.5 m. over the sill, and for longer vessels 0.6 m. over the sill.
MEDICAL: Notify Agent of any medical treatment required.
FRESH WATER: Available on some berths.
FUEL: No local installation. Bunkers may be obtained by road tanker – contact Agent.
REPAIRS: Minor repairs can be carried out locally. For nearest grid, slipway and dry dock facilities see "Rochester" and "Sheerness".

(3) KINGSNORTH: 51° 25′ N., 00° 36′ E.
DOCUMENTS: See "London".
PILOTAGE: See "Medway."
ANCHORAGES: Vessels proceeding to Kingsnorth must contact Medway Ports Operations Centre (VHF Channels 16 and 74) when a designated anchorage will be allocated appropriate to the size of the vessel.
RESTRICTIONS: Tidal port. 24 hour movements, subject to tidal conditions and underkeel clearance appropriate to size of vessel. Minimum depth of approach channel 8.5 m. at Chart Datum.
MAX. SIZE: Max. length: 229 m. No breadth restriction. Depth: 6.3 m. min. depth alongside at Chart Datum.
HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Notice of 72 hours and over, Portishead Radio. Notice of 12-72 hours. Landsend Radio. Notice of up to 12 hours, from South, Northforeland Radio, and from North, Humber Radio.
RADAR/VHF: See "Medway".
TUGS: Although tugs are not normally required for berthing at Kingsnorth 3 tugs are available, 1 of them equipped for fire fighting. Tugs join and leave vessels at Garrison Point, Sheerness. Normally use tug lines, cost included in tug hire.
BERTHING: *Kingsnorth Jetty:*
Lat. 51° 24′ 36″ N.
Long. 0° 36′ 18″ E.

The jetty is owned and operated by C.E.G.B. (Kingsnorth) and is situated at the Western end of Long Reach a distance of 6.3 nautical miles from Sheerness and 5.85 nautical miles from Rochester.

The jetty is of concrete construction and is 580 m. long and "L" shaped with a 306.3 m. face, there is a single upstream connected dolphin making an overall face of 330.7 m.

The size of vessels using the jetty are governed by draft.
Minimum depth at MLWS is 6.9 m.
MHWS is 12.8 m.

There is an inner spur situated on the approach arm 396 m. from the jetty face. It is primarily intended for stern Ro-Ro craft, and has 2 starboard berthing dolphins situated at 30.5 m. and 61.0 m. respectively.
Depth at MLWS is 0.6 m. above Chart Datum.
MHWS is 5.3 m.

The jetty is used for the import of coal for Kingsnorth Power Station.
Address: Kingsnorth Power Station
(South Eastern Region)
Hoo, Rochester,
Kent ME3 9NQ
Telephone: STD 0634 – 250088 Telex 965015

MEDICAL: Advance notice of medical attention and inoculations required is advisable. Hospital facilities available in surrounding areas.
TANKERS: Advisable radio Agents connection sizes required. No slop tank available. 1 large tanker berth only.
DENSITY: Approx. 1018.
FRESH WATER: Available by pipe-line on jetty.
FUEL: Bunkers not usually available on jetty, but may be delivered by barge. Advance notice essential.
FIRE PRECAUTIONS: No immobilisation or repairs allowed without prior authorisation. No hot-work allowed alongside jetty.
GANGWAY/DECK WATCHMEN: Services of shore watchmen not necessary. Shore gangway may be used.
REPAIRS: Local marine repair company can undertake repairs of general nature. No drilling or hot-work permitted alongside jetty.
REPATRIATION: All facilities for repatriation by land, sea and air, through London and Dover. Attendance of British Ministry and Foreign Consulate officials arranged through Agent.
POLICE/AMBULANCE/FIRE: Dial 999 from public call box. Medway Ports Operations Centre can be alerted on Channel 16 and 74 to call these services.
TELEPHONES: No facilities exist for placing telephones onboard.
GENERAL: Agents have difficulty in providing most services at weekends, therefore, requests for bond, cash, consular officials, etc., should be radioed as soon as possible.

(4) OAKHAM NESS JETTY: 51° 24′ 55″ N., 00° 38′ 45″ E.
The jetty is jointly owned and operated by C.E.G.B. and K.C.A International Ltd. and is situated in Kethole Reach a distance of 4.5 nautical miles from Sheerness (Garrison Point). The jetty is of concrete construction and is 1,960 m. long. The jetty head is 27.5 m. long with upstream and downstream attached dolphins making a 85.0 m. face. There are 2 further berthing dolphins unattached, both upstream and downstream. The max. size of vessel permitted on the jetty is restricted to 55,000 d.w.t. with a max. length of 229 m.
The depth at MLWS is 10.6 m.
at MHWS is 16.7 m.

C.E.G.B. have a separate storage capacity of 300,000 tons for crude oil primarily for Kingsnorth Power Station.

(5) OTTERHAM QUAY – RAINHAM: 51° 22′ 30″ N., 00° 37′ 42″ E.
Situated at the head of Otterham Creek a distance of 2.75 nautical miles from the junction of Long Reach and Kethole Reach and 10.25 nautical miles from Rochester.

There is 192 m. of quay space with a max. length restriction imposed on loaded vessels of 73 m. There is 3.3 m. at HWNT and 4.6 m. at HWST.

Dockside and mobile cranes up to 9 tonnes are available, fleet of fork lift trucks with 3 tonne capacity.

There is 8,984 sq.m. of wharf stacking area together with 15,217 sq.m. of warehousing available. Cold storage facilities of 1,003 sq.m. are also available.

The Quay is owned and operated by Crescent Shipping (sole proprietors London and Rochester Trading Co.). Telephone STD 0634-35121 Telex: 96312.

(6) QUEENBOROUGH: 51° 26′ N., 00° 44′ E.
Area of harbour extends from Queenborough Spit to Long Point in the West Swale. Queenborough Creek is landlocked and small commercial interests operate within the creek which is buoyed, all berths dry out but are safe berths.
MHWS 5.8 m. Weather – prev. S.W.

The ex-Coal Wharf known as the Washer Wharf, situated at Loder Hope is operated by Senorvic Ltd. (Tel: Sheerness 663065) and is primarily used for loading scrap metals.

(7) RIDHAM DOCK: 51° 23′ N., 00° 46′ E.
Situated 900 m. (0.5 nautical mile) S.E. of Kingsferry Bridge in the Swale. Restrictions on vessels governed by London Pilotage Committee in the light of water available in the Swale, Kingsferry Bridge and restricted bends in the navigational channel. Max. LOA 102 m. Beam 16.8 m. and draft 6.7 m.

Beam of vessels transitting Kingsferry Bridge restricted to 15.3 m maximum.

Vessels of 82 m. and over LOA require a tug in attendance.

Ridham dock is owned and operated by Independent Sea Terminals (Tel: STD 0795 – 70881). The terminal has 4 berths, 2 of 244 m. and 2 o 213 m. approximately. These are serviced by 8 electric cranes 2× tonnes and 6×5 tonnes. There is a fleet of forklift trucks 8,000 lbs. t 36,000 lbs. plus a 25 ton container handler. 5 hectares of marshalling area for containers including refrigerator points.

Vessels dock only on or near HW and take the ground at LW, the bottom being soft mud. Special facilities for reefer ships going aground.

The terminal covers approximately 26.7 hectares and 13,000 sq.m. warehousing are available.

Authority: Independent Sea Terminals Ltd., Ridham Dock Sittingbourne, Kent. *Tel:* 0759 70881. *Telex:* 96409. *Contact:* R. F Shortland, Managing Director.
AGENT: See "Rochester".

METHIL: 56.11 N. 03.01 W.

DOCUMENTS/PILOTAGE: See "Leith".
ANCHORAGES: Deep water anchorages available in Largo Bay.
RESTRICTIONS: Dock gates opened from 3 hours before HW until H
MAX. SIZE: Max. beam 14.4 m. to pass dock gates.
RADIO: See "Leith".
VHF: Methil Harbour Radio on Channel 16.
TUGS: Available from Leith.
BERTHING: No. 1 Dock has 340m. of berthing space, max. dep alongside 6.7 m. MHWS. No. 2 Dock has 500 m. of berthing space, ma depth alongside 8.2 m. MHWS. Transit shed with 1,120 sq.m.
CRANES: 4×4 tonne mobile cranes (with grabs) available.
BULK CARGO FACILITIES: 2×1,000 tonnes capacity grain silos a discharge plant at No. 1 Dock (private).
STEVEDORES: Local company supplies labour.
AUTHORITY: Forth Ports Authority, Dock Office, Methil. *Tel:* Lev 26725. *Contact:* Captain I. C. Bayliss, Harbour Master. Capt R. Taylor, Port Manager.

MILFORD HAVEN: 51.42 N. 05.10 W. (See Plan Book)

PORT LIMITS: The seaward boundary of the port is 3 miles from St. Ann's Head.

DOCUMENTS:

5 Crew Lists.
2 Crew Stores Declarations (C.142)
3 Ship Stores Declarations (C.14)
2 E.E.C. Safety Check Lists.
Agents will prepare other Customs papers.

Ship's Papers:

Register.
Load Line Certificate.
Safety Construction Certificate.
Safety Equipment Certificate.
Safety Radio Certificate.
Oil Pollution Insurance Certificate (tankers).
British Tonnage Certificate (if applicable).
U.K. Light Dues for Current Year (if applicable).

PILOTAGE: Pilots normally board incoming ships from a green-hulled pilot vessel, in a position S.W. of Mid-Channel Rock Light-tower, as close thereto, as weather, size of ship and circumstances permit. When the Western Channel is being used by very large ships other ships may be requested by the Port Signal Station, or by the pilot vessel, to use the Eastern channel, if draft, and length of ship permit, in which case the Pilot will board close to Sheep Buoy. Deep-draft ships should not approach too close whilst awaiting the pilot vessel. They should remain at least 3 miles S.W. of Mid-Channel Rock Light-tower. It is important, when manoeuvring at slow speeds to embark a Pilot to make proper allowance for the set of the tidal stream, which sets across the entrance.

Accurate times of arrival are requested so that the pilot vessel may be on station at the correct time. ETAs should be given at least 12 hours before arrival and amendments should be made 2 hours before the latest ETA.

ETAs and subsequent amendments should be passed by radio telegram or radio telephone through any United Kingdom Coast Station to Milford Haven Signal Station (Milford Haven 2343. Telex: 48575) or to the local Agent of the ship. Alternatively when within 30 miles of St. Ann's Head ETA's may be passed direct to Milford Haven Conservancy Board Signal Station calling on VHF Channel 16 then transferring to Channel 12 (the Port working frequency). In addition ships may call the pilot vessel on MF radio calling on 2,182 kHz and transfer to the working frequencies 2,241, 2,246 or 2,301 kHz.

ANCHORAGES: Anchorage normally available for vessels up to 40 ft. draft in Dale Roads. Anchorage for smaller vessels normally available in Dale Shelf or Stack anchorages. Signal Station will advise mariners on the availability of these anchorages.

RESTRICTIONS: The West Channel with minimum depth of 55 ft. at the entrance and 54 ft. inside is the channel used by the largest tankers. The East Channel with minimum depth of 32 ft. is available to all vessels of suitable size and vessels able to do so are requested to use it when the largest tankers are entering or leaving in the West Channel.

MAX. SIZE: Vessels of 65 ft. draft can be handled on virtually all high waters, but draft restriction always dependent on tide, 63 ft. at worst HW neaps, or up to 68 ft. in favourable conditions.

HEALTH: The Port Health Authority must be notified in advance if any animals on board or of any suspected disease or fever.

Also See "Health – All Ports" before first U.K. port.

RADIO: Lands End Radio, Ilfracombe Radio, Celtic Radio and Cardigan Bay Radio.

VHF: It is important to maintain continuous radio telephone contact with Signal Station when within one hour's steaming of St. Ann's Head, and at all times when in Haven and not safely moored to an alongside berth, including all times spent at anchor or at buoys.

All vessels equipped with VHF radio should adopt following procedures:

Entering the Harbour: Contact Signal Station on Channel 16 when within one hour's steaming of St. Ann's Head. After making contact ship will be requested to maintain watch on Channel 12 until vessel safely moored alongside or at anchor.

Going to anchor or to a buoy mooring: Report to Signal Station when secured and then maintain a continuous watch on Channel 16.

Berthing alongside: Report to Signal Station when safely moored and may then shut down.

Leaving the Haven: Maintain continuous listening watch on Channel 12 until Pilot has disembarked, when Signal Station should be informed and vessel should maintain a continuous watch on Channel 16 until one hour after passing St. Ann's Head.

Navigating within the Haven: Maintain a continuous watch on Channel 12. When radio telephone is used between vessel and tugs during berthing operation, Channel 6 or 8 will be used and Signal Station should be informed before vessel comes off Channel 12.

Signal Station will answer calls on Channel 16 for any ship in the port which has been instructed to move off international calling frequency.

RADAR: Harbour surveillance radar in operation.

TUGS: Tugs normally join vessels to Westward of Esso Jetty, but Master will be advised by Pilot. Tug's lines used, cost of lines inclusive of towage charge.

BERTHING: VLCCs enter at HW and normally berth heading East. Vessel will be required to swing after unloading and prior to departure.

Milford Docks: Enclosed dock, minimum depth on sill 26 ft., lock length 550 ft., width 69 ft., 5,033 ft. of quayage includes 1,050 ft. fish market and 600 ft. modern cargo handling berth. Vessels of up to 36 ft. draft may be handled on Spring tides.

Port Operators and Storage (Formerly Celtic Sea Supply Base): One cargo berth, depth 20 ft., for vessels up to 350 ft. length. Max. size approximately 6,500 d.w.t.

CRANES: In Milford Docks – 2×25 ton mobile, 1×15 ton mobile, 2×6 ton electric. Further mobile cranage available if required.

SPECIALISED CARGO HANDLING FACILITIES:

Containers: Container traffic is handled at Milford Docks although there is no specialised container handling equipment.

Ro-Ro: Pembroke Dock Ferry Terminal has one Ro-Ro berth, depth alongside 21 ft., and can accommodate ferries up to 425 ft. in length, max. size 6,000 g.r.t. (approx.).

LPG: LPG is handled at the Amoco, Esso, Gulf and Texaco oil terminals.

STEVEDORES: Ordered prior to arrival with at least 3 days notice.

MEDICAL: All oil terminals have well equipped medical centres. Local hospital facilities available.

TANKER TERMINALS:

Amoco:

No. 1 Berth: Depth 64 ft., 1×18 in., 4×16 in. crude lines, 2×12 in. and 3×8 in. product lines, max. size 275,000 d.w.t.

No. 2 Berth: Depth 38 ft., 1×18 in., 1×12 in., 2×10 in. and 2×8 in. product lines, 1×8 in. and 1×6 in. LPG lines, max. size 30,000 d.w.t.

No. 3 Berth: Depth 22 ft., 1×18 in., 1×8 in. and 2×6 in. product lines, 1×8 in. and 1×6 in. LPG lines, max. size 5,000 d.w.t.

B.P.:

No. 1 Berth: Out of commission.

No. 2 Berth: Depth 54 ft., 5×10 in. cargo lines, 1×8 in. fuel line, max. size 113,000 d.w.t.

No. 3 Berth: Depth 64 ft., 5×16 in. cargo lines, 1×10 in. fuel line, max. size 275,000 d.w.t.

No ballast facilities at B.P.

Esso:

No. 1 Berth: Depth 54.75 ft., 5×12 in. cargo lines, max. size 190,000 d.w.t.

No. 2 Berth: Out of commission.
No. 3 Berth: Out of commission.
No. 4 Berth: Out of commission.
No. 5 Berth: Out of commission.

Gulf Oil:

No. 1 Berth: Depth 45 ft., 3×10 in. and 2×12 in. cargo lines, max. size 65,000 d.w.t.

No. 2 Berth: Depth 52 ft., 6×12 in. cargo lines, max. size 135,000 d.w.t.

No. 3 Berth: Depth 32 ft., 6×8 in. product and 1×4 in. LPG cargo lines, max. size 6,000 d.w.t.

Texaco:

No. 1 Berth: Depth 68 ft., 4×16 in. crude, 4×10 in. black oil and 4×10 in. clean oil cargo lines, max. size 275,000 d.w.t.

No. 2 Berth: Depth 52 ft., 2×12 in. LPG ship discharge lines with 1×8 in. vapour return line, 4×10 in. black oil, 6×10 in. clean oil and 2×10 in. ballast/bunker lines, max. size 100,000 d.w.t. (75,000 cu.m. LPG).

No. 3 Berth: Depth 36 ft., 1×12 in. LPG ships discharge with 1×4 in. vapour return line, 2×12 in. black oil and 2×10 clean oil lines, max. size 35,000 d.w.t. (30,000 cu.m. LPG).

No. 4 Berth: Depth 20 ft., 1×6 in. black oil, 3×6 in. clean oil, 1×6 in. LPG and 1×6 in. ballast lines, max. size 2,000 d.w.t.

No. 5 Berth: Depth 20 ft., 1×6 in. black oil, 3×6 in. clean oil, 1×6 in. LPG and 1×6 in. ballast lines, max. size 4,500 d.w.t.

DENSITY: 1025.

FRESH WATER: Available at all berths.

FUEL: All oil terminals can supply all grades of bunkers, except that Esso can only supply gas oil grades. Fuel also available within Milford Docks and from bunkering barge elsewhere in the Haven.

FIRE PRECAUTIONS: Fire wires to be rigged fore and aft on all tankers.

GANGWAY/DECK WATCHMEN: Available if necessary – very rarely required.

CUSTOMS ALLOWANCES: Tobacco, 0.5. oz. per man per day. Spirits, 0.25 pint per man per day.

IDENTIFICATION CARDS: Not necessary.

CONSULS: The following countries are represented by Consuls at the port or elsewhere in South Wales:

Belgium
Brazil
Denmark
Finland
France
West Germany
Italy
Netherlands
Norway
Spain
Sweden
Turkey

REPAIRS: All types of deck and engine voyage repairs carried out.

DRY DOCKS: One dry dock at Milford Docks, 600 ft. × 63 ft. × 18 ft.

SURVEYORS: Lloyd's at Milford Haven, ABS and NV in South Wales. Cargo inspectors available – Saybolt, Moore, Barrat and Redwood have local offices.

REPATRIATION: Crew changes frequently carried out and repatriation arranged. Crew arriving by rail to join vessels at Amoco, Esso, Gulf and Milford Docks should be directed to Milford Haven station, joining vessels at BP or Texaco to Pembroke station and for vessels at Port Operators and Storage or Pembroke Dock Ferry Terminal, to Pembroke Dock station.

AIRPORT: Nearest airport is Cardiff (Wales) Airport, distance approximately 100 miles. Flights to London for onward connections.

TIME: GMT in Winter months, BST (GMT plus 1 hour) March to October.

HOLIDAYS: Oil Terminals operate 24 hours/365 days. Other berths observe standard U.K. holidays but cargo work can be arranged if required.

POLICE/AMBULANCE/FIRE: Police – Milford Haven 2351, Pembroke 682121; Ambulance – Haverfordwest 3347; Fire – Haverfordwest 2131.

EMERGENCY CO-ORDINATION CENTRE: Emergencies within the port are co-ordinated by the Milford Haven Conservency Board Signal Station. Emergencies outside the port and S.A.R. co-ordinated by H.M. Coastguard St. Ann's Head (Tel: Dale 218).

TELEPHONES: No telephones on board. Public call boxes exist on all oil jetties.

SERVICES: Ministry of Defence compass adjuster available subject to operational commitments.

SHORE LEAVE: Shore leave allowed.

STORING: Vessels can be stored by barge or truck and local riggers are available to assist. Storing can normally take place during cargo operations but, in the case of oil tankers, trucks cannot proceed alongside the ship and storing from a barge must be carried out near the stern of the ship. Fork lift trucks cannot be used to store oil tankers.
SHIP SUPPLY SERVICE: D.V. Howells and Sons Ltd., P.O. Box 14, Milford Haven, Dyfed SA73 3ER. Tel: Milford Haven (06462) 3091/2418/4733. Telex: 48575.

Marine & Port Services Ltd., The Dockyard, Pembroke Dock, Dyfed SA72 6TF. Tel: Pembroke (0646) 682271/5. Telex: 48303.

Additionally, there is a tug company operating in Milford Haven with a fleet of locally based tugs whose prime duty is the berthing and unberthing of tankers at oil terminals in the Haven and firefighting responsibilities, although occasionally a tug may be called offshore for salvage purposes. The tug company is Cory Ship Towage Ltd., Slip Hill, Milford Haven, Dyfed SA73 3BB. Tel: Milford Haven (06462) 2296/7.

There is a helicopter squadron based at RAF Brawdy, Haverfordwest, which provides a rescue service and, on occasions, airlifts seriously injured or sick personnel from ships in the area, usually on request through the local Coastguard Station.
AUTHORITY: Milford Haven Conservancy Board, P.O.Box 14, Milford Haven, Dyfed, SA73 3ER, U.K. *Tel:* Milford Haven (06462) 3091 office, Milford Haven (06462) 2342 or 2343. Signal Station – 24 hours. *Telex:* 48575 – 24 hours. *Contact:* Capt. G. Dudley, O.B.E., Harbour Master.
AGENT: G. S. Kelway Ltd., Murray Crescent House, The Rath, Milford Haven SA73 3JR, Dyfed. Tel: Milford Haven 2313/4. After hours: Milford Haven (06462) 5587, 2615, 2364. Telex: 48213. Cables: "Kelway Milford Haven".

MISTLEY: 51.57 N. 01.05 E.

LOCATION: Private port situated on the River Stour within Harwich Harbour. Seven tidal berths, vessels lay safe aground (also see "Harwich").
DOCUMENTS: Normal requirements – local Agents will advise.
PILOTAGE: Order via Agents or direct with Harwich Pilots.
Call sign: "Harwich Pilots".
VHF: Channel 16 and 9.
Telephone: Harwich (0255) 3129.
Telex: 98472.

Compulsory ETA 8 hours before arrival and 2 hours confirmation. Details required: Name of vessel, ETA, destination, max. draft., g.r.t.
ANCHORAGES: Safe anchorage in Harwich Harbour or Cork Pilot Station.
RESTRICTIONS: Vessels can enter/depart on HW according to state of tide and draft. Day and night navigation.
MAX. SIZE: No length or beam restrictions. Draft varies between 3.3 m. neap tides to 4.3 m. spring tides. Dredging work to channel and berths presently on hand will result in an increase in acceptable draft limits.
HEALTH: As per Port Health Regulations. See "Harwich".
RADIO: Northern Approach: Humber Radio, Tel: (0521) 73447.
Southern Approach: North Foreland Radio, Tel: (0843) 20592.
VHF: Harwich Harbour Radio, Channel 14.
TUGS: Available from Felixstowe and Mistley via ship's Agents.
BERTHING: Instructions given via Pilot or Agents. Loading/discharging via shore cranes/elevators.
CRANES: Mobile cranes up to 10 tons and Scotch Derrick up to 30 tons.
BULK HANDLING FACILITIES: Bulk cargo facilities available for discharge of grain, ores, fertilisers, etc., by grab. Loading elevators for grain, etc.
STEVEDORES: All cargo handling instructions and enquiries to: The Mistley Quay and Forwarding Co. Ltd., High Street, Mistley, Manningtree, Essex. Tel: 0206 394431. Telex: 98692.
MEDICAL: All requirements via Agents with advance notice.
DENSITY: 1026.
FRESH WATER: Available with notice. Up to 20 tons-charge £10 plus overtime charges if incurred.
FUEL: Bunkers available from major suppliers via Agents.
SURVEYORS: Cargo inspectors, superintendents and surveyors are available locally via Agents.
GANGWAY/DECK WATCHMEN: Ship's gangway, watchmen not necessary.
HATCHES: Opening and closing by crew.
CUSTOMS ALLOWANCES: Normal U.K. Regulations.
CARGO GEAR: All work by shore cranes, heavy lift up to 30 tons.
REPATRIATION: Facilities via Agents.
TIME: GMT. Summertime, GMT plus 1 hour.
HOLIDAYS: No work on public holidays unless overtime working is arranged in advance.
POLICE/AMBULANCE/FIRE: See "Harwich".
TELEPHONES: No onboard facilities available.
SHORE LEAVE: Possible.
IDENTIFICATION CARDS: Not necessary.
DELAYS: None.
DEVELOPMENTS: Dredging of the approach channel to Mistley and within the port to increase acceptability of larger vessels is presently in hand but at present it is not possible to indicate when such improvements will be completed. Please enquire to the Port Owners, The Mistley Quay & Forwarding Co. Ltd.
AUTHORITY: *Port Owners:* The Mistley Quay & Forwarding Co. Ltd., High Street, Mistley, Manningtree, Essex. *Tel:* 0206 394431. *Telex:* 98692.
Local Port Authority: The Harwich Conservancy Board.

MONTROSE: 56.42 N. 02.17 W. (See Plan Book)

PORT LIMITS: The port is bounded by a line drawn in a NW'ly direction from Scurdie Ness Lighthouse to the Annat Bank and thence by both banks of the river to the road bridge which completes the inner boundary.
DOCUMENTS:
1 Crew List,
1 Passenger List,
1 Store List,
1 Personal Effects List for baggage coming ashore,
1 Manifest or Bill of Lading.
Ships Register, Load Line Certificate, Radio Certificate and LSA and Safety Certificates to be sighted.
PILOTAGE: Pilotage is compulsory. Pilots are available throughout the 24 hours. International Code Flag "G" to be exhibited.

Vessels should approach the port to a position with Scurdie Ness Lighthouse bearing 250° distance 0.5 mile where Pilot will normally board.

Pilot cutter *"Celurca"* has a dark blue hull with white upper works and "Pilots" painted in black on each side of the wheelhouse. The normal red and white pilot flag is flown during daylight and regulation lights exhibited at night. VHF Channel 16 for calling with a working frequency on Channel 12.

In bad weather it may be necessary for a ship to proceed inwards at the radioed directions of a Pilot to a position on the outer leading marks and inside the lighthouse where the Pilot may board safely. This will only apply during periods of strong Easterly gales and very heavy seas and may be applicable for only a few times in a year. Similarly the port may be closed under severe weather conditions on average 2.5 days per year.
ETA Messages: Masters should cable Agent with 24 hours notice of arrival giving overall length and deepest draft and also call Montrose Harbour Radio within 2 hours of arrival at the pilot station.
ANCHORAGE: In position mentioned above with Scurdie Ness bearing 250° distance 0.5 mile, in about 13 m.
MAX. SIZE: Since the harbour was reconstructed and deepened ships of 450 ft. LOA and 5,500 tons have been handled on a max. draft of 24 ft.
HEALTH: "Q" flag to be flown when coming from a foreign country until cleared inwards. In event of disease or fever warn Agents by radio. Strict attention paid to quarantine regulations regarding dogs which are not allowed ashore.

Also see "Health – all ports" before first UK port.
RADIO: Messages to Agents may be sent through Stonehaven Radio. Harbour service is on Channel 12. Call Montrose Harbour Radio on Channel 16.
RADAR/VHF: No port radar service. Harbour service and pilot vessel work on VHF Channels 16 and 12.
TUGS: Pilot vessel is equipped with towing hook and pusher bow to assist in berthing and unberthing if necessary. Vessels lines used. Small charge made for such work.
BERTHING: North Riverside Quays: No. 6 – 112 m., No. 7 – 141 m. No. 8 – 87.5 m., No. 9 – 69 m. No., 10/11 – 152 m.

Depths vary from 6 ft. at No. 8 to 16 ft. at No. 10/11 at chart datum.

South Riverside Quays: Berth Nos. 12, 13, 14, 15, 16, 17 and 18. These are extensively used by oil related vessels and this area of the harbour has been leased to Sea Oil Services Ltd.

Total wharf length available is 1,600 ft. with depth alongside 20 ft. a MLWS.

Fixed Ro-Ro Ramp available between Berth Nos. 6 and 7. Vessel able to land bow or stern ramp of width 8 m. Depth alongside 18 ft.
STEVEDORES: Provided by J. M. Piggins & Co. Ltd., phone Montrose 72827. Telex 76251.
CARGO HANDLING FACILITIES: The stevedores are well equipped with mobile cranes, fork lifts, etc., and only rarely is ship's gear used unless it is of rapid, modern type. Grab discharge is used for bul cargoes and conveyor belt systems for loading same.

Rates of loading or discharge:— Bagged cargoes 250 tons per gang per day; Bulk 400 tons; Bulk grain loading 700 tons; Unitised pul 500 tons; Paper 500 ton; Timber 500 tons all per gang per day.

There is always available a large motor transport fleet at the port an the Agents also have their own road haulage company.
TANKERS: There is no oil berth in the harbour except the facilitie offered by Sea Oil Services for the receipt into their 3,000 ton storag depot of gas oil.
MEDICAL: Small hospital in Montrose. Several major units within eas reach by road.
DENSITY: At high water average 1024 but can be as low as 1005 at L during heavy river outflow.
FRESH WATER: Supplied from quayside hydrants at all berths.
CONSULS: None in Montrose.
GANGWAY/DECK WATCHMEN: Can be arranged. Owing to range tide on riverside berths mooring watch strongly recommended.
OPENING/CLOSING HATCHES: Normally done by ship's crew.
CERTIFICATES: On arrival ship's register may be asked for.
CUSTOMS ALLOWANCES: As arranged between Customs Offic and Master.
CARGO GEAR: The port is equipped with mobile cranes which can used at any berth. These are of various capacities and the maximum is 25 tons for which prior notice is required.
IDENTIFICATION CARDS: Not required.
REPAIRS: Minor deck and engine repairs can be carried out.
DRY DOCKS: None.
SURVEYORS: Cargo ship and engine surveyors Johnston & Sma Swan & Co., or Pirie & Smith available from Aberdeen at short no

Cargo Superintendents regularly working at the port on loading and discharging various bulk cargoes, include Cargo Superintend (London) Ltd., 50 Wellington Street, Glasgow; James Patterson, Old Granary Buildings, Meadowside Quay, Partick, Glasgow, Malcolm Main at same address.

FUEL: Obtainable from road tanker, gas oil and H.S.D. from more prominent oil companies. Rix Oils can supply gas oil from local stocks. Contact J. Piggins.
FIRE PRECAUTIONS: Normal rules to be observed.
REPATRIATION: Facilities available with excellent railway connections. Air connections from Aberdeen.
AIRPORT: Aberdeen 36 miles. Montrose has facilities for light aircraft and helicopter landing.
TIME: GMT with 1 hour advance for British Summer Time, approximately March to October.
HOLIDAYS: *Port Holidays:* Christmas Day; Boxing Day; 1st and 2nd January; One day Spring, Mid-Summer and Autumn Trades Holidays.
POLICE/AMBULANCE/FIRE: Report to Dock Office immediately. Dial 999 and ask for whichever emergency service required.
EMERGENCY CO-ORDINATION CENTRE: Maritime Rescue Sub Centre – Forth District Tel: Crail 666.
TELEPHONES: Not possible to place telephones aboard. Kiosk on Wharf near Agents office. Comprehensive connections to Continent and Telex services from Agent's office.
SERVICES: Laundry, Ship Chandlers and Lloyd's Agent immediate.

Compass Adjuster, Radio/Radar Mechanics can be called in from Aberdeen at short notice.
BANKS: Usual branches of Scottish banks all in High Street. No American or European banks.
STORING: Vessels can be stored by truck. Trucks can proceed alongside vessel. Fork lifts can be used if required. Customs notification required for all bonded stores.

Stevedores can be employed to assist with storing and also lashing and fastening deck cargo.
SHORE LEAVE: No restrictions on crew members after inward clearance.
AUTHORITY: Montrose Harbour Board, Harbour Office, 2 Meridian Street, Montrose, Tayside. *Tel:* (0674) 72302, 73153. *Contact:* A. G. Graham, Harbour Master.

NEWHAVEN: 50.47 N. 00.04 E. (See Plan Book)

PORT LIMITS: A line drawn from a position 300 ft. South of breakwater in a 075° direction to Seaford Bay.
DOCUMENTS: See "London".
PILOTAGE: Trinity House Pilots, Newhaven District: VHF "Newhaven Radio" Channels 16 and 12. Pilot boats are small fast launches painted orange. Light and sound signals for a Pilot is "G". Notice of ETA 12 hours before arrival, if possible. Anchorage for a vessel awaiting a Pilot is 0.5 to 1 mile S.W. of the breakwater, depending on weather conditions. Pilots normally board S. to S.W. of the breakwater, but in severe gale conditions they keep station 100 m. from breakwater end, and guide vessels in with VHF or lamp. Notice should also be given to the red and green signal lights at the West Pier end lighthouse, and on no account should vessels pass breakwater end if signal is at red. In normal weather, pilot ladder should be on lee side about 1 m. above water. In Southerly gales Pilots prefer a ladder on each side, if available.
RESTRICTIONS: 5.0 m. through entrance to port LWOST. Inner harbour then dredged depth of 4.0 m. in accordance with chart datum 3.5 m. below OD Newlyn (tide gauge readings are directly applicable to soundings).
MAX. SIZE: Max. LOA 520 ft. 25 ft. draft taking bottom on soft mud at low water. Vessels greater than 350 ft. LOA length must either be towed into or out of port. Vessels for North Quay must not exceed 250 ft. length, draft 17 ft.
HEALTH: See "Health-All Ports" before first UK port.
RADIO: Radio Station Newhaven Radio, call sign Newhaven Radio.
RADAR/VHF: No radar service. Ship's may contact West Pier control point on Channel 16, working on Channel 12.
TUGS: One tug available upon request, owned by Sealink U.K. Ltd.
BERTHING: Vessels may be berthed at any time, with prior notice given.
BRIDGES: Vessels requiring to berth at North Quay must arrive within 2 hours either side of high water in order to pass through swing bridge which governs access to this quay.
STEVEDORES: ETA should be given as far in advance as possible and not less than 24 hours before ETA.
DENSITY: Salt water.
FRESH WATER: Available on request. Supplied by shore hosepipe.
FUEL: Available by previous arrangement.
FIRE PRECAUTIONS: Usual no-smoking precautions on quayside in port area.
GANGWAY/DECK WATCHMEN: Not provided by Port Authorities but recommended at discretion of Ship's Master.
CONSULS: Norwegian Vice-Consul and French Consular Agency.
REPAIRS: Repairs of a temporary nature only may be carried out by Sealink U.K. Ltd. workshops, Ship & Industrial Repairs Ltd., Unit A3, Beach Road, Newhaven and C. R. Irving Ltd., Chapel Street, Newhaven.
AIRPORT: Nearest airport Gatwick, distance 30 miles. Served by regular airlines and Shoreham, distance 17 miles.
POLICE/AMBULANCE/FIRE: Police: Civil, Newhaven 515219; Port, Newhaven 514131 (extension: 229). Ambulance: 0830 – 1700 hrs., Lewes 515400; 1700 – 0830 hrs., Lewes 512819; Fire: 999.
SHORE LEAVE: Allowed.
AUTHORITY: Sealink U.K. Ltd., Beach Road, Newhaven Harbour, East Sussex. *Tel:* Newhaven 514131. *Telex:* 87151. *Cables:* Sealink, Newhaven. *Contact:* G. G. Burke, Shipping and Port Manager.

NEWPORT: 51.35 N. 02.59 W. (See Plan Book)

DOCUMENTS:

- Crew List.
- List of stores for individual crew members.
- Cargo Manifest.
- Cargo Plan.
- Ship's Register.
- Loading Certificate.
- Safety Equipment Certificate.
- Safety Construction Certificate.
- United Kingdom Light Bills.

PILOTAGE: Telegraphic address – "Sewpil G 498180". Advance notice required – 24 hours. VHF Channel – Channel 16 for contact, thence Channel 6 for conversation. Description of pilot boat – diesel launch, black hull, white superstructure. Particular light or sound signals to be made by vessels requiring a Pilot – Code Signal 8, i.e. 3 longs 2 shorts. Pilot boat is located in vicinity of Breaksea Lightvessel, or in vicinity of Merkur Buoy, for small vessels. Maintain VHF contact (if possible) with pilot cutter and obey instructions with reference to positioning of vessel to facilitate boarding of Pilots.
ANCHORAGES: Large vessel should anchor in deep water to North of one Fathom banks. Deeper water anchorage (10 – 14 fathoms) in area between Breaksea Lightvessel and East 1 Fathom Bank Buoys to the South, and shallow water off Barry Roads to the North. Small vessels will find safe anchorage in Barry Roads in varying depth, depending on weather conditions and draft.
RESTRICTIONS: Entrance to Newport Docks is by means of a sea lock 1,000 ft. long, 100 ft. wide.
MAX. SIZE: Max. size of vessels accepted at Newport is 800 ft. long, 96 ft. beam, 33.5 ft. draft.
HEALTH: Port Health Authority board vessel at entrance lock and Pratique is automatic.

See "Health – All Ports" before first U.K. port.
RADIO: At sea – Land's End radio station, call sign GIL. Within Bristol Channel radio station Portishead, call sign GK– last letter according to frequency).
VHF: Vessels requiring entry can contact port on VHF radio Channels 16, 9 and 11.
TUGS: Normally join at Newport Deeps. Ship's line used.
BERTHING: South Dock, normal depth of water 35 ft. North Dock, normal depth of water 27 ft. Junction passage connecting South and North Dock restricts vessels to a max. size of 56 ft. 6 in. beam and 25 ft. draft.
SPECIALISED CARGO HANDLING FACILITIES:

Combi Ship Operations: Heavy lift/containers for combi vessels are handled by the 25 tonne cranes at the same berth where breakbulk general cargo is handled.

Forest Products: The North side, South dock area extends to over 11 hectares with 1 hectare under cover.

Banana Imports: There is a terminal of 3 hectares for a weekly Jamaican service importing bananas and exporting general cargo. Included within the terminal is a transit shed of 3,716 sq.m.
CRANES: Heavy lift/container cranes: 2×25 tonne electro-hydraulic and 1×32 tonne Scotch Derrick cranes.

Bulk handling: 6×11.5 tonne electric grabbing cranes.

General cargo: 2×11.5 tonne, 2×10 tonne and 20×6 tonne electric cranes.

Handling equipment up to 27 tonnes capacity with a comprehensive range of attachments is available.
STEVEDORES: Labour is allocated to vessels on arrival.

Working Hours: Monday to Friday: 0730 – 1700 hrs., 0600 – 1400 hrs., 1400 – 2200 hrs.

Saturday: 0730 – 1200 hrs., 0600 – 1400 hrs., 1000 – 1400 hrs.

Sunday: 0600 – 1400 hrs., 1400 – 2200 hrs.
MEDICAL: No advance notice of medical attention for crew members is required and hospital facilities are available.
DENSITY: Average density of water in docks is 1016.
FRESH WATER: Available at all berths.
FUEL: All classes of fuel available.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: Normally carried out by crew.
CUSTOMS ALLOWANCES: Tobacco, 0.5 lb. per Crew member, reduced by 50% on coastal trade. 1 pint of spirit and 1 pint wine per Crew member, reduced by 50% on coastal trade.
IDENTIFICATION CARDS: Not required.
REPAIRS: All wet dock and engine repairs possible.
DRY DOCK: Bristol Channel Ship Repairers Ltd., 454 ft. × 64 ft.
REPATRIATION: All facilities for the changing of crew and repatriation are available.
AIRPORT: Glamorgan Rhoose Airport terminal 28 miles from Newport. Regular connection planes to London Airport.
TIME: BST, GMT plus 1 hour. GMT in Winter months.
HOLIDAYS: Work not undertaken on Christmas, Easter, Spring and Summer Bank holidays. With the exception of Christmas holiday (25th and 26th December) dates on other holidays vary.
POLICE/AMBULANCE/FIRE: Telephone number 999 stating which service is required.
TELEPHONES: Telephone facilities are available aboard vessels.
SERVICES: Tank cleaning equipment. Facilities for tank washing, compass adjusting are available.
SHORE LEAVE: No restrictions to crew members.
SHIP SUPPLY SERVICE: A Ship Supply Service could be provided by Cory Ship Towage with their tugs at Cardiff if required. Address: Cory Ship Towage Ltd., S.E. Wales Office, Alexandra Dock, Newport, Gwent NP9 2NP. Tel: Newport 56835/6.
AUTHORITY: Associated British Ports, Dock Office, Alexandra Dock, Newport, Gwent NP9 2UW. *Tel:* (0633) 65411. *Telex:* 498585. *Contact:* R. J. Nicholls, Port Manager.

AGENT: Lambert Brothers Ship Agencies Ltd., *Tel:* (0222) 480751 *Telex:* 497701 *Cables:* Lambert Cardiff.

PEEL, Isle of Man: 54.14 N. 04.40 W. (See Plan Book)

PILOTAGE: Not compulsory.
MAX. SIZE: See "Berthing".
VHF: Channels 16 and 12 available only when vessels expected.
BERTHING: Outer Harbour: Max. LOA 250 ft., although twin screw cross-channel vessels up to 350 ft. LOA can be accommodated under certain conditions. Max. draft 14 ft. to lie afloat over LWOST. Not tenable with strong Northerly winds.

Inner Harbour: Max. LOA 160 ft., draft 10 ft. on Neaps, 13 ft. on Springs. Dries out at LW. No quay space for storage.

AUTHORITY: Isle of Man Harbour Board, Sea Terminal Building, P.O.Box 11, Douglas, Isle of Man. *Tel:* 0624-23813. *Contact:* H. G. Moore, Chief Executive.

Harbour Master at Peel, Tel: (0624) 842338.

AGENT: See "Douglas".

PENZANCE: 50.07 N. 05.32 W.

PILOTAGE: Trinity House Pilots are available at all times. Call "Penzance Pilots" during normal working hours or when vessel is expected on VHF Channel 16. Working Channels 12 and 9 are also available. At all other times contact the Pilot through Land's End Radio.
MAX. SIZE: Largest vessel 1,660 n.r.t.
RADIO: Land's End Radio.
VHF: VHF Channel 16 and Working Channels 12 or 9 are manned from 0800 – 1200 hrs. and 1300 – 1630 hrs. local time plus from HW−2 until HW+1.

Also see "Pilotage".

BERTHING: Penzance Dock: Dock entrance 50 ft. wide. 5 berths, longest 450 ft. Vessels for discharging cargoes should have a max. length of 300 ft. and a max. draft of 5.49 m. springs or 4.4 m. neaps.

Penzance Harbour: 4 berths, 1×320 ft., 1×250 ft. and 2×200 ft. This dries at LW. There is one drying berth designed for Ro/Ro vessels with a max. draft of 4.72 m.

STEVEDORES: Available through the Port Agents.
MEDICAL: Facilities available by request through Port Medical Officer. Evacuations arranged through Port Medical Officer and Mount's Bay Boarding Service.
FRESH WATER: Available on all berths.
FUEL: Marine gas oil and lubricating oils available.
CONSULS: Vice-Consul for Netherlands and France available.
DRY DOCKS: Length 245 ft., breadth 40 ft., max. draft 12.5 ft.
SURVEYORS: Lloyd's, Germanischer Lloyd, Bureau Veritas and Det Norske Veritas.
REPATRIATION: This can be arranged through Mount's Bay Boarding Service and J. H. Bennetts Ltd. See "Ship Supply Service".
AIRPORT: There is an airport at Newquay with connecting flights to London Heathrow via Plymouth and/or Exeter. There is a heliport at Penzance which connects with the Isles of Scilly.
POLICE/AMBULANCE/FIRE/COASTGUARD: Services are available by dialling 999 for emergencies only. Police are available on 0736-2395, Fire Service on 0736-2918, Ambulance Service on 0872-78181 and Coastguard on 0326-317575.
SHIP SUPPLY SERVICE: *Mount's Bay Boarding Service:*

By helicopter: British Airways operate a regular service between Penzance and the Isles of Scilly (30 miles S.W. of Land's End). Mount's Bay Boarding Service (MBBS) can charter helicopters to rendezvous with ships at sea.

Parcels: MBBS collect and despatch stores, parts, charts, etc, via British Rail "Red Star" parcels service, T.N.T. "Overnite" and "Courier" services, or G.P.O. Datapost.

Charts: British Admiralty/Decca charts and publications are available within 12 hours.

Stores: Fresh, frozen and dry stores are obtainable within 6 hours. Bonded stores are available within 24 hours.

Spare parts: MBBS arrange clearance, forwarding and transport of spare parts to meet vessels on arrival. Undivided lifts of 1.5 tonnes can be handled (up to 10 tonnes by arrangement).

Crew transfer: MBBS can land and clear crew through Customs and Immigration, and arrange for their travel onward to worldwide destinations. MBBS can meet crew and either embark or accommodate them until the vessel's arrival.

Landing sick crew: Although in urgent cases, vessels are in direct contact with Coastguard Rescue Co-ordination Centre, Falmouth, MBBS arrange the landing of non-urgent cases. In both cases MBBS liaise with local Coastguards, Customs & Immigration Officers, Doctors and Hospitals, and can usually provide interpreters for non English-speaking crew. MBBS visit and look after the interests of hospitalised crew, and can report on their progress to your company. MBBS arrange travel and repatriation of crew members either with or without escort, according to Doctors' and company instructions.

Contact: J.H. Bennetts Ltd. (See "Agent".)

SERVICES: Compass adjusting, divers, engineering, welding, hydraulic and electronic repairs and servicing are available.
AUTHORITY: (a) Penwith District Council. *Tel:* 0736-2341.

(b) Harbour Office. *Tel:* 0736-66113. *Contact:* Captain M. Tregoning, Harbour Master. Address: Harbour Office, Wharf Road, Penzance, Cornwall TR18 4AB.

AGENT: J. H. Bennetts Ltd., 72-73 Market Jew Street, Penzance, Cornwall TR18 2LF. Tel: 0736-4345. Telex: 45530 (Jhb G).

PERTH: 56.24 N. 03.29 W. (See Plan Book)

LOCATION: On River Tay, 35.4 km. above Dundee and 48.3 km. from sea.
DOCUMENTS: Normal documentation for arrival and departure U.K.
PILOTAGE: Not compulsory but highly advisable. Approaching River Tay, vessels should call "Dundee Port Control" as per Dundee Port Information. Masters will be advised by Dundee Port Control when River Pilot will board for transit up river from Dundee to Perth. River Pilots board at Dundee 2 hours before high water Dundee.
ANCHORAGES: No anchorage above Dundee.
RESTRICTIONS: Clearance under bridges 78 ft. at MHWOS. Vessels normally accepted for transit with 0.1 m. clearance on draft in daylight and 0.2 m. clearance on draft in darkness, but this is at the sole discretion of the Harbour Master (Perth).

Longest vessel 260 ft. in daylight. Longest vessel 220 ft. in darkness, but this may be relaxed at the sole discretion of the Harbour Master (Perth).

MAX. SIZE: Length 77 m., draft 4.12 m.
RADIO: VHF for upper river transit. "Perth Harbour" Channel 9.
TUGS: By arrangement with Dundee tug owners. Small tug/push boat may be available at harbour.
BERTHING: Tidal harbour about 3 acres with total quayage of 2,400 ft. Depth at LW 9 ft. HWST 15 ft. At LW vessels sit evenly on soft muddy bottom.
CRANES: 14 mobile cranes available. SWL ranging from 5 to 40 tons. Ample fork lifts and elevators for loading bulk.
STEVEDORES: North Eastern Shipping and Warehousing Co. Ltd. Tel: 0738-33226. Telex: 76611.

Calport Ltd. Tel: 0738-26675/24372. Telex: 76458.

DENSITY: River Tay above bridges pure fresh water.
BRIDGES: See "Restrictions".
FRESH WATER: Available at all berths.
FUEL: Available by road tanker, arranged by Agent.
REPAIRS: Small repairs undertaken locally by good engineering firm. Major repairs undertaken at Dundee.
AIRPORT: Edinburgh (Turnhouse) 44 miles, Glasgow (Abbotsinch) 70 miles, Prestwick 90 miles. Motorway M90, connects Perth with airports. Dundee operates variety of daily air services.
HOLIDAYS: (1985): 1st and 2nd January, 8th April, 6th and 27th May, 9th September, 14th October, 25th and 26th December.
POLICE/AMBULANCE/FIRE: Police: 21141. Ambulance: 22123 Fire: 22226.
AUTHORITY: (a) Tayside Regional Council Transport Dept., Friarfield House, Barrack Street, Dundee. *Tel:* (0382) 23281. *Contact:* Mr. L Watson, Deputy Director of Public Transport.

(b) Harbour Office, Shore Road, Lower Harbour, Perth PH2 8BH *Tel:* Perth (0738) 24056. *Contact:* Captain N. H. Lawrance, Harbour Master.

PLYMOUTH: 50.22 N. 04.09 W. (See Plan Book)

DOCUMENTS: Importer to supply Agent with Customs documentation e.g. original B/L with cheque to cover various details; plus copies o Invoice and Forms C.105 with packing lists. Derat or Exemption Certificate required.
PILOTAGE: Compulsory for merchant vessels. Call sign FSG, or 4 short blasts on whistle. Vessels not subject to compulsory pilotage may obtain docking Pilot in Plymouth Sound otherwise pilot station off Penlee Point.

Pilot boat is motor boat with white upperworks, black hull. "Pilot" i black on wheelhouse.

ANCHORAGES: In Plymouth Sound.
MAX. SIZE: Maximum depth of water 9.0 m. Vessel drawing 8.0 m would leave anchorage 2 hours before HW. Also see "Berthing".

Ro-Ro Berth: Max. LOA 145 m. Max. beam 20 m. Max. draft 5.5 m
Outer Basin: Max. LOA 168 m. Max. draft 8.0 m.
Inner Basin: Max. LOA 130 m. Max. beam 22 m. Max. draft 5.0 m.

HEALTH: Pratique – Apply to Customs Waterguard. Pratique issued when requirements satisfied.

See "Health – All Ports" before first U.K. port.

RADIO: *Pilots:* The calling and listening frequency is 2182 kHz and th working frequencies are 2246 or 2301 kHz. A listening watch is kept o 2182 kHz at every even hour to 15 minutes past, local time and fo longer periods when a ship is expected.
VHF: The pilot vessel is equipped with VHF and should be called o Channel 16; the working Channels 6, 8 or 12 should be used for passi messages. Alternatively the shore-based Trinity House Pilot Station Plymouth, call sign "Cattewater Harbour Radio", maintains a continuou watch on Channel 16 (calling Channel) and is fitted with Channel 1 (first choice Port Operations Channel) and 18.

"Millbay Radio" operates 24 hours, on Channels 16, 14, 13, 12 and

TUGS: Available in Sound.
BERTHING: *Millbay Docks:* (Associated British Ports).

Inner Basin. (Entered through Outer Harbour). (Gates open 2 hou before HW. Shut at HW).

Water Area	3.98 Hectares
Length of Dock	265 m.
Width of Dock	150 m.
Width of Entrance	24.38 m.
Length of Quayage	628 m.
Length of North Quay	261 m.
Length of Clyde Quay	165 m.
Length of East Quay	120 m.
Length of South Quay	82 m.
Depths:	
MHWST	6.17 m. – 7.17 m.
MHWNT	5.07 m. – 6.07 m.

Outer Harbour:

Water Area	12.80 Hectares
Length of West Wharf	200 m.
Depth alongside MLWST	8.6 m.
Length of Millbay Pier	146 m.
Depth alongside MLWST	5.8 m.
Length of Trinity Pier	146 m.
Depth alongside Northside and Westend MLWST	5.8 m.

Roll-on/Roll-off Berth (3 Round dolphins)

Max. length of vessel	135 m.
Depth alongside MLWST	6.7 m.

Fresh Water available at all berths.
Cranage available up to 28 tons.
Large transit sheds on West Wharf and Trinity Pier.
Grain silo with 24,000 tonnes capacity.

Victoria Bulk Wharves: Pier No. 1. Length 475 ft. Depth 20 ft. LWOST. Pier No. 2. Length 350 ft. Depth 20 ft. LWOST. Max. beam 38 ft. (Larger with prior notice.) Max. d.w.t. 3,000 tons. Bulk products loaded by conveyor ex-railway trucks and lorry.

Cattedown Wharves: Length 712 ft. Depth 24 ft.–26 ft. LWOST. Max. LOA 560 ft. Max. draft 26 ft. Max. size 12,000 GRT. 1×5-ton and 2×3-ton cranes.

CRANES: 4 quayside cranes of 6 tonnes capacity. 3 mobile cranes up to 28 tonnes capacity.

STEVEDORES: Commodities regularly handled include fresh fruit and vegetables, timber, scrap metal and general cargoes.

Imports: Fertiliser, clinker, pumice and bulk cargoes.

Working Hours: Monday-Thursday 0800 – 1700 hrs. Friday 0800 – 1600 hrs. Overtime by arrangement.

Shift working is also regularly undertaken 7 days per week to meet specific requirements.

MEDICAL: No advance notice required; hospital facilities in Plymouth.

TANKERS: Vessels of the Shell "H" class can be handled at Cattedown Wharves. Max. draft 26 ft. 5 hose connections, diameter 10 in. 2 for black oil and 3 for white oil.

FRESH WATER: Available from shore at all berths.

FUEL: All normal grades available at short notice.

OPENING/CLOSING HATCHES: Performed by ship's crew or by stevedores at request of ship.

CERTIFICATES: Tonnage registration.

CONSULS:

Belgium	65154	Italy	63445
Dominican Rep.	63175	Netherlands	64846
France	65154	Norway	65154
Germany F.R.	66444	Spain	65154
Greece	60604	Sweden	65154

REPAIRS: Ship repairing facilities available.

HOLIDAYS: Cargo work can often be arranged on Public Holidays subject to prior notice.

POLICE/AMBULANCE/FIRE: Telephone 999.

TELEPHONES: By special arrangement with the GPO, can be placed on board.

SHIP SUPPLY SERVICE: Cory Ship Towage Ltd., 1-3 Buller Road, Torpoint, Cornwall PL11 2LD.

Bellamy & Co. (Plymouth) Ltd., Millbay Pier, Millbay Docks, Plymouth PL1 3DT. Tel: (0752) 665154. After hours 779586, 330338, 775957. Telex: 45225.

The Royal Navy maintain a helicopter service for landing sick crew men from ships beyond the port limits.

DEVELOPMENTS: Associated British Ports are to build a second Ro-Ro berth at West Wharf in Millbay Docks. The Facility is expected to be completed early 1986 and will accept vessels with LOA 180 m. and draft 8.0 m.

AUTHORITY: Associated British Ports, Port Office, Millbay Docks, Plymouth, Devon PL1 3EF. *Tel:* Plymouth (0752) 662191 *Telex:* 45219 Apply G. *Contact:* Captain J. R. Willan, Docks and Marine Superintendent.

Cattedown Wharves for Cattedown Wharves and Bethyi Gwynn for Victoria Wharves.

POOLE: 50.43 N. 01.59 W. (See Plan Book)

DOCUMENTS: As for other British ports.

PILOTAGE: Pilots board 0.5 mile South of Poole Bar Buoy from cutter. Prefer ladder 0.50 m. from water and a good lee. VHF watch kept on Channel 16 working Channels 9 and 14. As much notice as possible. Address: Pilots, Poole.

ANCHORAGE: Vessels can anchor anywhere in Poole Bay and Studland Bay. Good holding ground and protected in all but Easterly gale.

RESTRICTIONS: Vessels drawing up to 3.7 m. can enter at any state of tide. Drafts of 5.0 m. must wait to within 2 hours of HW.

MAX. SIZE: Max. length 111 m., beam – no limit, draft 5.0 m.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Vessels using the Port may call the Harbour Master direct on VHF Channel 16 – working frequency Channel 14 call-sign "Poole Harbour Radio".

TUGS: 2 tugs, 8 ton and 5 ton bollard pull. Join at Stakes Buoy, by special application arrangements can be made to join at North Haven Point. Ship's lines. No difference in charges.

Pilots will advise whether a tug is necessary or not. Any vessel in excess of 1,000 d.w.t. or 300 ft. LOA due to pass through the Poole Bridge is required to take a tug. The gap in the bridge is 60 ft.

BERTHING: Berthing time depends on draft at some private quays. No restriction at New Quay or Ro/Ro berths.

New Quay:
Length: 520 ft. (157 m.).
Depth alongside: 16 ft. (4.9 m.).
Equipment: 3 ton capacity level luffing rail-mounted crane and 35 tonne capacity crawler crane equipped for hook/bulk/grab/spider grab duties giving an operational capacity of 6 tonnes at 18 m.; warehouse facilities; open storage area 3,500 sq.m.; mobile crane capacity 200 tonnes.

Yard Quay:
Length: 200 ft. (61 m.).
Depth alongside: 10 ft. to 12 ft. 9 in. (3.0 to 3.9 m.).
Equipment: Warehousing facilities; limited open storage.

Ballast Quay:
Length: 270 ft. (82 m.).
Depth alongside: 14.6 ft. (4.4 m.).
Equipment: 6.5 ton capacity level luffing crane fitted with grab/hook for bulk handling/general cargo duties.

Poole Town Quay:
Length: 1,300 ft. (396 m.).
Depth alongside: 14 ft. to 16 ft. (4.3 to 4.9 m.).
Equipment: Pneumatic grain handling plant; average discharge rate of 54 t.p.h., with transit storage capacity of up to 200 tons; mobile crane capacity 40 tonnes.

Bulwark Quay:
Length: 382 ft. (116 m.).
Depth alongside: 14.6 ft. to 16 ft. (4.4 to 4.9 m.)
Equipment: 25 ton Scotch Derrick; warehousing facilities; limited open storage.

Private Quays:
J. T. Sydenham (Timber Wharf)
Length: 250 ft. (76 m.).
Depth alongside: 15.3 ft. (4.6 m.).
Equipment: Mobile crane capacity 45 tonnes.

Other Private Quays:
Corrals (Fuel)
J. Bolson & Son Ltd. (Marine Repair & Engineering).
South Coast Sand & Ballast (Sea Dredged Aggregates).
Southern Ocean Shipyard Ltd. (Yacht Builders).
Enoxy Chemicals Ltd.
Central Electricity Generating Board.

Oil Jetty:
Length: 270 ft. (82 m.).
Depth alongside: 16 ft. (4.9 m.).

BRIDGES: Poole Bridge at West end of Poole Quay. Will open at any time on request by commercial vessel.

STEVEDORES: Normal notice for gangs. No Sunday work.

MEDICAL: Advance notice required for ambulance services. Normal medical and hospital services available.

TANKERS: 3 oil berths. Diameter of load/discharge lines 6 in.

DENSITY: 1021.

FRESH WATER: Delivery 25 t.p.h. by 2 in. hose.

FUEL: Gas oil only.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Work carried out by crew.

IDENTITY CARDS: Not required.

CONSULS: At Southampton.

Belgium
Danish
Finnish
French
German
Greek
Italian
Netherlands
Norwegian
Spanish
Swedish

REPAIRS: All types deck and engine repairs can be carried out. Slipways (2) available for vessels up to 220 ft. LOA by 40 ft. beam and 120 ft. LOA by 30 ft. beam.

AIRPORT: Charter flights for crew changes can be carried out from Hurn Airport 9 miles away from port.

POLICE/AMBULANCE/FIRE: Call 999 and ask for service required.

SHIP SUPPLY SERVICE:

Poole Harbour Commissioners: 2 small tugs (448 kW and 320 kW) speed 10 and 11 knots.

Frank Pearce (Tugs) Ltd.: Deeway, West Quay Road, Poole. Tel: 678855. Tugs suitable for coastal towage.

J. Harvey & Sons (Poole) Ltd.: West Quay Road, Poole. Tel: 674063. Operators of small passenger boats.

Crosons Ltd.: New Cray Road, Hamworthy, Poole. Tel: 673201. Operators of passenger vessels carrying up to 200 persons.

Hurn Airport: Situated 7 miles from Poole. Full international facilities. Suitable for helicopter landing etc.

DEVELOPMENTS: New Ro-Ro Terminal completed November 1984. The Linkspan will be able to take vehicles up to 180 tons.

AUTHORITY: Poole Harbour Commissioners., Harbour Office, Town Quay, Poole BH15 1HG, Dorset. *Tel:* (0202) 685261. *Contact:* Captain W. C. Allinson, Harbour Master.

AGENT: John Carter (Poole) Ltd., C.F.F.T., New Harbour Road, Poole BH15 4AJ, Dorset. Tel: Poole 674102. Telex: 418282. Cables: Maritime Poole. Lloyd's Agents.

PORTLAND: 50.34 N. 02.26 W.

PILOTAGE: Available from Weymouth. Pilot boards in position 50° 36′ N. 02° 24′ W.

ANCHORAGE: Vessels seeking shelter from Westerly gales are likely to find more room and better shelter outside the breakwaters in Weymouth Bay.

VHF: All Harbour movements are controlled on VHF Channel 13.

TUGS: Admiralty tugs available.

BERTHING:

Castletown Pier: Castletown Pier is a commercial wharf and leased to Kingston Minerals Ltd. for the discharge of fertilisers. Max. LOA of vessel 82.3 m, beam 12 m. with max. draft 5.3 m.

CRANES: 1 mobile crane.

FUEL: Available by road tanker.

GENERAL: The Harbour and the immediate vicinity are classified as a Dockyard Port under the supervision of the Queen's Harbour Master, Portland. Attention is drawn to Chart 2268 which gives details of the Restricted Area around the Naval Base, of designated Anchor Berths for H.M. Ships, of Prohibited Anchorage areas and of the numerous Admiralty moorings and telephone cables. The Harbour, which is protected by breakwaters, is easily accessible by the North Ship Channel (12 m. LWS) or East Ship Channel (12.5 m. LWS). The South Ship Channel is blocked both above and below the surface and is only suitable for small boats.

AUTHORITY: Flag Officer Sea Training, H.M. Naval Base, Portland. *Contact:* Queen's Harbour Master, H.M. Naval Base, Portland, Dorset. DT5 1BQ. *Tel:* Portland (0305) 820311 Ext. 2106.

PORTSMOUTH: 50.48 N. 01.07 W. (See Plan Book)

DOCUMENTS: (Those marked* to be produced to H.M. Customs Boarding Officer.)

*1 Maritime Declaration of Health.
*1 Crew's Effects List C142.
2 Ship's Reports by Master.
*1 Home Office Form 1B6.
*1 Stores List.
*1 Certificate of Deck Cargo Tonnage.
*1 Grain Certificate.
1 Light Dues Certificate.
1 Port Dues Certificate.
*1 Passenger List.
*1 Landing Card for each non-British passenger.
*Ship's Certificate of Registry.
Mercantile Marine Office Certificate (British ships only).
*Load Line Certificate.
*Safety Equipment Certificate.
Lloyd's Certificate.
*Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.
*List C143 for packages not cargo or crew/passenger effects.
*Danish Tollpass for ships arriving from Denmark.

Form of Authority for Agent to make Report and clear vessel outwards for Master.

Note: Where cargo is to remain on board for unloading at another port after Portsmouth, 3 copies of Ship's Report are required by the Customs House.

PILOTAGE: Portsmouth is within the Southampton and Isle of Wight Trinity House Pilotage District (see "Southampton" entry for limits of District) and a vessel liable to compulsory pilotage must employ a Pilot from and to the limits of the District. Non-compulsory vessels may obtain a Pilot in the vicinity of the 'Outer Spit' buoy. (Note: All vessels carrying explosives or petroleum products are compulsory from the 'Outer Spit' buoy and within the Harbour area, by Order in Council. This also applies to regular Home Trade vessels.) Ministry of Defence Pilots must be employed in addition for vessels using Admiralty berths or being assisted by Admiralty-owned tugs.

In addition to 48 hours notice to local Agent, advise Nab, Needles or Portsmouth Pilot, as appropriate, ETA 48 hours and again 2 to 3 hours immediately prior to arrival. The Nab, Needles and Portsmouth pilot stations are maintained by fast launches under the control of the Duty Pilot at the Pilot Station, 37 Berth, Southampton Docks. The Duty Pilot keeps a continuous watch on VHF Channel 16; call sign 'Nabpilot', 'Needlespilot' or 'Portsmouthpilot' as appropriate. Working frequency, Channel 9 only, but can listen on Channels 14, 12 and 6. No medium frequency: M/F and R/T messages via NITONRADIO. Duty Pilot's telephone numbers: Southampton 32345 and 32346.

The launches only put to sea when required. Failure to send an accurate ETA 2 to 3 hours before arrival could cause delay to the offending vessel.

Strict compliance with the requirements of the Merchant Shipping (Pilot Ladders) Safety Rules is requested by the Pilots, who may refuse to board vessels with unsatisfactory and dangerous ladders. Manropes are not required. Ladders should reach to about 3 ft. from the water, each rung resting firmly against the ship's side; a good lee should be provided whilst making approximately 3 to 7 knots headway.

In most cases, vessels bound to and from the Westward will find it more convenient to use the Nab or Eastern approach to Portsmouth. For details of entrances and pilot launches, see "Southampton".

ANCHORAGES: Small vessels may anchor close Westward of th 'Outer Spit' buoy, unless prohibition signal flying – see "Restrictions" Larger vessels will be allocated a numbered anchor berth in th Spithead Man-of-War anchorage.

If anchorage is prohibited in Spithead, St. Helen's Roads, Ryde Roads or Cowes Roads are the nearest safe anchorages. Moorin Buoys 1, 2 and 3 off North Corner in the Harbour are sometimes used. Pilots will be fully informed before the vessel's arrival.

RESTRICTIONS: The following traffic signals are exhibited and must be complied with by all vessels. Shown by Central Signal Station (C), Blockhouse (B), Gilkicker (G), Dolphin Pier (D) and H.M. ships concerned (S).

Day	*Night*	*Meaning*	*Shown by*
Red flag with white diagonal.	Red Green Green	No vessel to enter or leave harbour or enter approach channel North of Outer Spit Buoy.	C B G
Red flag with white diagonal over black ball.		No vessel to enter harbour or approach channel. Outward shipping may proceed.	C B G
Black ball over red flag with white diagonal.		No vessel to leave harbour. Inward-bound shipping may proceed.	C B G
Black pendant.	White Red Red	No merchant or private vessel to anchor in man-of-war anchorage in Spithead.	G
Answg. Pendant over Pt 0.		All vessels North of Outer Spit keep clear of warship flying this signal.	S
Answg. Pendant over Pt. 9.	Green Green Green	All vessels and boats keep clear of H.M. ships under way.	C B G
Answg. Pendant over flags N E.	Green Red	Proceed with great caution, ships leaving Camber (Not ferries).	B
Answg. Pendant over flag A.	Red Red	Divers down, keep clear.	Diving boat
Flag E	Orange	Submarine entering or leaving Haslar Lake. At night, light flashes when sub. under way. All vessels keep clear of submarines.	B D

Speed limit of 10 knots in harbour and when within 1,000 yards o shore; 12 knots within 1,000 yards of any H.M. ships and anywhere within the Dockyard Port not covered by the 7 knots limit. Dockyard Por boundaries are shown on Admiralty charts.

Time of entry is restricted by the vessel's draft and state of tide. Ente Camber only at 4 hours before high water or at high water slack. Vesse do not berth at South Railway Jetty from 2 hours before high water un high water.

MAX. SIZE: Commercial berths: Camber – length 270 ft., draft 16 f Flathouse – length 457 ft., draft 22 ft. Albert Johnson Quay – lengt 470 ft. depth at MLWS, 12.5 ft. Continental Ferry Port Ro/Ro Link spa length of quay 460 ft. Depth 24 ft. LWS max. LOA: 330 ft.

Vessels at the Camber, Flathouse and Rudmore Wharves mus expect to take the bottom in soft mud at low water Springs.

HEALTH: Foreign arrivals to complete Maritime Declaration of Healt They are cleared immediately on arrival by either a Port Doctor or a officer of H.M. Customs, depending on where ship comes from an whether there is sickness on board.

Vessels arriving from ports within accepted area (North Europea ports) and coastal arrivals need not present Declaration in all case when there is sickness on board, Port Health Authority must b informed, preferably not more than 12 hours nor less than 3 hou before arrival.

See "Health – All Ports" before first U.K. port.

RADIO: See "Southampton" for pilotage communications.

Harbour Control is exercised through "Queen's Harbour Master' f commercial traffic on VHF Channels 16 and 11. Gilkicker Radio o Channels 16 and 14 is also available for commercial vessels, and t vessels entering the area bounded by the "Warner" buoy in the East a the "Sturbridge" buoy in the West must contact Gilkicker, even if o passing through the District. Channel 13 is the working channel for H. ships and the Q.H.M.'s office; call sign "Q.H.M.". H.M. ships are requir to keep a listening watch on Channel 16 when in the Portsmouth a Southampton control areas, and will 'shift' to working frequenc selected by mutual agreement. Gilkicker is also equipped for visu signalling. Medium frequency calls to Pilots and Port Authorities o available by link call through Nitonradio.

TUGS: 200 ton tug with bollard pull of 5 tons (must be ordered wel advance of arrival) and several tow-boat launches are available t commercial vessels at commercial berths. Two 1,600 h.p. diesel pad tugs, 5 screw tugs and 3 Voith-Schneider water tractors are available f larger vessels at Admiralty berths.

STEVEDORES: Registered dock workers and cranes must be orde by 1500 hrs. on the day previous to commencement of discharge loading, depending upon receipt of exact ETA from Master.

MEDICAL: All medical facilities available. Agent should be advised advance. (See "Southampton" entry if arrival is solely to land s personnel).

CUSTOMS ALLOWANCES: As for "Southampton".

DENSITY: 1025 salt water.

FRESH WATER: Available.

FUEL: Fuel and Diesel Oil available by road tanker or bunker barge fr Fawley.

FIRE PRECAUTIONS: Notices will be delivered to Master if berthing any jetty where special precautions apply.

OPENING/CLOSING HATCHES: By ship's crew.

CRANES: 3 derricks of 32 tons; 2 mobile cranes of 15 tons; 2 docks cranes of 10 tons; 3 mobile cranes of 5 tons; Provided by the P Authority.

CONSULS:
Belgium
Denmark
Finland
France
Netherlands
Norway
Sweden

REPAIRS: Minor deck and engine repairs can be carried out locally. Larger repairs and dry dock facilities at Southampton.
AIRPORT: Fast train service from Portsmouth to London Airport. Eastleigh Airport local, but mainly short flights to Channel Islands and feeder services.
SERVICES: All marine, radio and radar services can be obtained from Southampton.
REPATRIATION: All facilities exist.
TELEPHONES: None on board.
SHIP SUPPLY SERVICE: J. Butcher & Sons (Port Services) Ltd., 19 Pembroke Road, Old Portsmouth PO1 2NS. Tel: (0705) 822584. After hours 821347 and 821033.

The Company provides the majority of the towing services in the commercial port, operating in the Eastern Solent from Cowes to Nab Shoal including Spithead, The Mother Bank and St. Helen's Roads. A fleet of 11 vessels is operated, headed by the 525 b.h.p. Kort Nozzle Tugs "Janet James" and "Carol James" providing towing services (including towboats for smaller ships using Mile End and Camber Docks) and boats for mooring, rope running and berthing purposes. The passenger launch and workboat service transports ships' crews, Agents, technicians, store and equipment within the harbour area and Eastern Solent.

The Tugs and tow boats have been purpose built for berthing and unberthing ships up to 140 m. at the commercial port.
DEVELOPMENTS: With the opening of the Portsmouth section of the M27 and M275, there is immediate access to the Flathouse and Albert Johnson quays at the Rudmore Roundabout. At present, Thoresen operate daily services to Cherbourg and Le Havre, Brittany Ferries twice daily to St. Malo and Sealink daily to the Channel Islands.
AUTHORITY: Portsmouth City Council, Harbour Offices, Norman House, Kettering Terrace, Portsmouth PO2 7AE. *Tel:* Portsmouth 822251. (Ext. 4795). *Telex:* 86382 Cen Lib. *Contact:* Port Manager and Harbour Master (Ext. 4790).

PORT ASKAIG: 55.51 N. 06.07 W. (See Plan Book)

Operated mainly as a ferry port although other shipping may use the facilities available.

The wharf operated by Strathclyde Regional Council (SRC) is 60 m. long with a depth of 4.06 m. below Chart Datum. It has a Ro/Ro ramp suitable for use by end loading vessels. Fresh water is available. Western Ferries operate a second Ro/Ro berth at Port Askaig.
AUTHORITY: Strathclyde Regional Council (SRC), Department of Roads, Strathclyde House, 20 India Street, Glasgow G2 4PF. *Tel:* 041-204 2900. *Contact:* W. S. McAlonan, Director.

PORT ELLEN: 55.37 N. 06.13 W.

Operated by Caledonian MacBrayne Ltd., used mainly by ferries. Chart B.A. 2037 covers the area.
PILOTAGE: Not compulsory.
ANCHORAGE: Approach with Carraig Fhada Light bearing 332°(T) until 2 cables off light. Alter course to 026°(T) till lighthouse bears 270°(T) × 2.2 cables, then altering course to 353°(T). Anchorage position is reached when lighthouse bears 206°(T) × 3.6 cables, equidistant with Na Sglithean Beach, 3.6 cables. Depth at anchorage 5 fathoms.
APPROACHES: Harbour entrance 7 cables wide, depth 7 to 8 fathoms.
BERTHING: Car Ferry Berth can accommodate vessels up to 1,200 g.r.t. either side of the dolphin. Inner Berth can accommodate vessels up to 600 g.r.t. Depth at pier 12 ft. LWOST, range 3 ft. to 4 ft.
AUTHORITY: Caledonian MacBrayne Ltd., The Ferry Terminal, Gourock PA19 1QP. *Tel:* 0475-33755. *Telex:* 779318. *Cables:* "Calmac" Gourock.

PORT ST. MARY, Isle of Man: 54.04 N. 04.44 W. (See Plan Book)

PILOTAGE: Not compulsory.
MAX. SIZE: See "Berthing".
VHF: Channels 16 and 12 available only when vessels expected.
BERTHING: Outer Harbour (Alfred Pier): Max. LOA 170 ft., draft not to exceed 10.5 ft. to lie afloat over LWST.

Inner Harbour: Max. LOA 160 ft., draft 8.5 ft. at Neaps, 12 ft. at Springs. Harbour dries out at LW. No quay space for storage.
AUTHORITY: Isle of Man Harbour Board, Sea Terminal Building, Douglas, Isle of Man. *Tel:* 0624-23813. *Contact:* Harbour Master. Tel: 0624 833206.

PORT TALBOT: 51.35 N. 03.49 W. (See Plan Book)

DOCUMENTS:
Ship's Register.
Test Certificate for ship's gear.
Manifest.
Master's Report to be completed on arrival.
Customs and Health documents as required by H.M. Customs and Port Health Authorities, to be completed on arrival.

PILOTAGE: Compulsory. Station – Swansea Bay. Usual International signals. VHF Channels 16 and 12.
ANCHORAGES: Swansea Bay.
RESTRICTIONS: *Ore Terminal* in New Harbour, entrance channel 1.5 miles long, 550 ft. wide. Depth 60 ft. MHWS, 53 ft. MHWN.
MAX. SIZE:
Ore Terminal: 100,000 tons d.w.t. ore carriers. Draft 48 ft. 6 in.
HEALTH: See "Health – All Ports" before first U.K. port.
TUGS: Join off Breakwater.
BERTHING: *New Harbour:* British Steel Corporation provide 3 unloading appliances on the jetty and also a conveyor-belt system to carry the iron ore to the stocking ground close to harbour and steel works. Grabs on the unloading appliances weigh 22 tons each, and each have a pay-load of 22 tons. The 3 discharging appliances together have an unloading rate of 5,400 t.p.h. Average rate throughout discharge from start to finish of the 3 discharging appliances together is 2,700 t.p.h.
STEVEDORES: ETA advices sent by vessels to local Agent and then advised to British Steel Corp. as stevedores. Labour ordered by Agent from B.S.C.
DENSITY: Ore Terminal 1025.
FRESH WATER: By gravity 10 t.p.h. Harbour pumping 100 t.p.h.
FUEL: By barge or road tanker. Any grade available.
GANGWAY/DECK WATCHMEN: None, but bye-laws state that vessel must be manned.
OPENING/CLOSING HATCHES: Performed by crew.
CUSTOMS ALLOWANCES: Tobacco, 1 oz. per day per man, max. 8 days. Wine/Spirits, 0.25 pint per day per man, every 4 days.
IDENTIFICATION CARDS: Docks Police would require identification to be available.
CONSULS: None at Port Talbot, contact Swansea.
REPAIRS: Facilities exist.
SURVEYORS: Cargo Surveyors available locally.
Hull surveyors available from Swansea and Cardiff.
REPATRIATION: All facilities exist.
AIRPORT: Rhoose Airport 25 miles away. Mainly short trips connecting with main airports.
TIME: GMT plus 1 hour. GMT in Winter months.
HOLIDAYS: It is the custom, at the Tidal Harbour, to work on Bank Holidays.
POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required.
EMERGENCY CO-ORDINATION CENTRE: Search and Rescue Centre – Mumbles. Tel: Swansea 66534.
TELEPHONES: Can be connected on board.
BANKS: Lloyds Bank Ltd., Station Road. Tel: Port Talbot 891401.
Barclays Bank Ltd., Station Road. Tel: Port Talbot 887655.
STORING: See "Prelims" page viii.
1. Yes.
2. None.
3. Yes.
4. No.
5. Usual regulations.
6. Riggers not available.

SHIP SUPPLY SERVICE: It is the practice for pilot cutters of Swansea and Port Talbot to ferry personnel, stores etc. to vessels off shore and due to dock at the respective ports.
Contact: Swansea Pilotage Authority, 90 Exchange Buildings, Swansea SA1 1SY, W. Glam., S. Wales. Tel: Swansea (0792) 53631. Cables: Pilority.
AUTHORITY: Associated British Ports, Harbour Office, Adelaide Street, Swansea, West Glamorgan SA1 1QR. *Tel:* Swansea (0792) 50855. *Telex:* 48150. *Contact:* Mr. T. Wilkinson, Port Manager. Captain T. Boyd, Dock and Harbour Master.

RAMSEY, Isle of Man: 54.19 N. 04.21 W.

PORT LIMITS: Line joining Shellag Point (3.25 miles North of harbour entrance) and Cor Stack (2.75 miles S.E. of harbour entrance) defines the port limits.
DOCUMENTS: Same as other U.K. ports.
PILOTAGE: Service provided by Harbour Master and is not compulsory. There is no regular pilot boat. Pilot will board 0.5 miles East of harbour entrance.

Contact Harbour Master direct by telephone (0624) 812245 or by VHF Channels 16 and 12 at tide times only. In all cases as much notice as possible should be given.
ANCHORAGES: No specific anchorages, but anchoring not permitted within 4 cables of harbour entrance or within 4 cables of Queen's Pier (3.5 cables S.E. of harbour entrance). Moderately good holding ground in sand, often used by sheltering vessels in S.S.W. or N.W. gales.
RESTRICTIONS: Harbour dries out each LW.
MHWN: Max. available depth 3.80 m.
MHWS: Max. available depth 5.50 m.
MAX. SIZE: For East Quay and West Quay: Max. length 61 m., breadth 9.0 m. Draft 3.0 m. on Neap tide, 4.0 m. at Spring tides.
For Channel Berth: Max. length 70 m., breadth 13 m.
For all berths max. available depth will vary according to tide.

HEALTH: Standard U.K. procedure.
RADIO: R/T, W/T and VHF through Portpatrick Radio (GPK) or Anglesey Radio (GLV).
VHF: Coverage from Harbour Master's Office includes port and approaches, Channels 16 and 12 at tide times only.

Coverage of North Irish Sea from Snaefell Summit by Douglas Harbour Radio, continuous 24 hour watch on Channel 16. Messages may be passed through Douglas Harbour Radio to amend ETA Ramsey etc.
RADAR: No port radar.
TUGS: Two tugs (420 i.h.p. and 345 i.h.p.) based at Douglas. Can be made available with sufficient notice, if required.
BERTHING: All berths dry out each LW. Bottom is sand and shingle.

Name	*Length* (m.)	
Channel Berth	76	
East Quay	116	
West Quay	80	
North Quay	73	For lay-by only.

With exception of North Quay all berths readily accessible to road traffic.
CRANES: No cargo handling gear at any berth. Mobile cranes can be arranged through Agents with reasonable notice.
BULK CARGO FACILITIES: Bulk cement handling facility at East Quay with 2×500 ton silos. Privately owned.
SPECIALISED CARGO HANDLING FACILITIES: No Ro/Ro, container handling or bulk liquid handling facilities.
BRIDGES: Access to upper harbour through swing bridge, by arrangement with Harbour Master. Sufficient depth of water usually available 2 hours either side of HW. At least 24 hours notice required to swing the bridge outside normal working hours, weekends and holidays. Within normal working hours less notice is acceptable.
STEVEDORES: Arranged through Agent. A minimum of 24 hours notice required and all working hours are negotiable in advance. Main commodities discharged are grain and coal by mobile crane with grab – average discharge rate is approx. 60 t.p.h. Occasional grain cargo loaded by mobile elevator at approx. 40 t.p.h.
MEDICAL: Hospital facilities available without prior notice.
TANKERS: No tanker facilities or berths available.
DENSITY: 1025.
FRESH WATER: Available by hose at approx. 30 t.p.h. on East, West and North Quays.
FUEL: Delivery by road tanker from Douglas to all berths except North Quay. Gas oil and medium fuel oil available at 24 hours notice.
CONSULS: None.
REPAIRS: All types of deck and engine repairs possible by small shipyard in upper harbour.
DRY DOCKS: No dry docks but 2 slipways; one for vessels about 185 g.r.t. and one for about 50 g.r.t. Both slipways in upper harbour.

Also a grid in upper harbour which dries out at approx. half tide, length 40 m., breadth 7.5 m. This grid used occasionally by vessels of up to 500 g.r.t. for bottom plate inspection/repairs. At least 72 hours notice required, more if possible. Grid hire arrangement through Harbour Master.
SURVEYORS: All surveyors from Liverpool by arrangement.
GANGWAY/DECK WATCHMEN: Not required.
HATCHES: Normally handled by ship's crew.
CUSTOMS ALLOWANCES: Standard U.K. allowance.
CARGO GEAR: Loading/discharging of general by ship's gear or mobile crane. Discharge of bulk by grab equipped mobile cranes. A wide range of mobile cranes up to 25 tons available for hire at reasonable notice.
REPATRIATION: Facilities available for repatriation of crew members.

Daily scheduled aircraft connections to London and other U.K./Irish airports. Daily ferry services to Heysham and Liverpool. These services operate all year with supplementary air and sea services to other destinations during the Summer.
AIRPORT: 25 miles distant.
TIME: GMT and BST.
HOLIDAYS: New Year's Day, Good Friday, Easter Monday, May Day, Whit Monday, Senior TT Race Day (usually 1st or 2nd Friday in June), Tynwald Day (5th July), August Bank Holiday, Christmas Day, Boxing Day.

Cargo not normally worked on these days but all working hours are negotiable in advance.
POLICE/AMBULANCE/FIRE: All emergency services available by telephoning 999 on any telephone, no charge is made for this call. Assistance possible from H.M. Coastguard on VHF Channel 16.
EMERGENCY CO-ORDINATION CENTRE: H.M. Coastguard, Ramsey Marine Rescue Sub-Centre, Queens Promenade, Ramsey. Tel: (0624) 812322. Telex: 627382. VHF Channel 16.
TELEPHONES: There are no facilities for telephones to be placed on board.
SERVICES: Compass adjuster and Lloyd's Agent available.
SHORE LEAVE: When Immigration and Customs requirements satisfied (for vessels arriving from a port outside the U.K.), no restriction on crew shore leave provided that they rejoin prior to the vessel's departure.
IDENTIFICATION CARDS: Not required.
DELAYS: Berthing delays are not usual (disregarding awaiting tide) except when strong N.E. to S.E. winds make navigation in the harbour entrance hazardous. These conditions may cause 1-2 days delay if severe.
BANKS: Barclays Bank, 52 Parliament Street. Tel: (0624) 813124.
I.O.M. Bank, 20 Parliament Street. Tel: (0624) 812829.
Lloyd's Bank, 71 Parliament Street. Tel: (0624) 812225/814233.
Midland Bank, St. Paul's Square. Tel: (0624) 814000.
Nat. West. Bank, Peel Street. Tel: (0624) 812109.
Major banking facilities are available in Douglas.

STORING: See "Prelims", page viii.
1. Vessel may be stored by barge or truck.
2. No restrictions unless dangerous cargo being handled. dangerous cargo being handled as cargo or as part of the stores ther other cargo work/storing to cease.
3. Berths accessible to all road traffic.
4. Fork lift trucks may be used on quayside.
5. Bonded stores available through Local Agent, who will arra necessary clearance, etc. H.M. Customs may attend at their discret
6. Riggers may be arranged through Local Agent at reasona notice.

SHIP SUPPLY SERVICE: See "Douglas".
AUTHORITY: Isle of Man Harbour Board, Sea Terminal Buildi Douglas, Isle of Man. *Tel:* 0624-23813.

Harbour Office, East Quay, Ramsey, Isle of Man. *Tel:* 0624-8122
Contact: Harbour Master.

AGENT: See "Douglas."

RYE: 50.56 N., 00.47 E. (See Plan Boo

PILOTAGE: Call "Rye Pilots" 1 hour before to 1 hour after HW. Pil attend station when vessels expected – ETA 24 hours in advance.

Vessels fitted with VHF Radio should keep watch on Channel when arriving and sailing from Rye and call for instructions on tra movements.
NAVIGATION: *Leading Marks:* On West Bank inside West Groyne m be moved as channel alters.

Day – Beacons with triangular topmarks points together.

Inner Leading Light – Occulting Green 4 secs. with white sec 326°T to 331°T.

Tide Signals: Shown from harbour office 0.75 miles inside harbo entrance on East Bank.

Night – 7 ft. to 10 ft. on bar. Fixed Green.
Over 10 ft. on bar. Fixed Purple.

Day – None but horizontal timbers on tripod beacon at harbo entrance indicate plus 5 ft., plus 10 ft., plus 15 ft. above Ordnan Datum.

Traffic Signals: Day and Night: Qk. Fl. Yellow above Harbour Offi and at West end of Alsford's Wharf denote immediate shippi movement into or out of harbour.

Day – on Flagstaff yard arms behind Harbour Office denotes expect shipping movements on tide.

One Black Ball – ship arriving from sea.
Two Black Balls side by side – ship sailing.
Three Black Balls in a triangle – ships arriving and sailing.

Fog Signals: East Pierhead Horn every 7 secs.

Radio Direction Beacon: Call sign "RYE" position Lat. 50° 57.5′ N Long. 0° 43.5′ E. Frequency 321 kHz continuous.
RESTRICTIONS: See "Berthing".
MAX. SIZE: LOA 230 ft. Max. draft 13 ft. 06 in.
VHF: Call sign "Rye Harbour Radio" Channels 16 and 14. 0900 1700 hrs. daily. "Dover Coastguard" VHF Channels 16 and 67.
BERTHING: Cargo vessels entering Rye Bay should follow the coa from Dungeness coming from the East or Fairlight coming from the We keeping at least 2 miles offshore until Rye Fairway Buoy is reach (Spher. R.W. Fl. 10 secs.), position 149° T, 1.8 miles from the harbo entrance. Anchorage 5 fathoms. at MLWS.

The entrance is 42 m. (140 ft.) wide and is recognised by conspicuous tripod beacon (Fl. 5 secs. Red), 30 m. seaward of the We Groyne which is 240 m. seaward of the East Pier with the light po (Qk. Fl.(9) 15 secs.). The channel virtually dries and is liable to chan 2 leading marks with triangular top marks inside the entrance on t Western beach indicate the line of best water (October 1983). The E Pier submerges at HWS and is marked by starboard hand beaco There is a strong eddy inside the East Pier during the flood stream.

Inside the entrance the channel narrows to 30 m. and runs straight half a mile (329°T) to Rye Harbour Village where there is an in leading light (Occ. W.G. 4 secs.). Strict attention should be paid to R Hand Beacons (4 with Qk. Fl. Red) which mark a training wall on t West side of the channel (submerged at plus 8.3 O.D.N.)

The Rother has a strong flood stream and as the harbour dries ou should NOT be approached 3 hours either side of LW. In gales fr from the S.E. through to S.W. waves break across the entrance.

The best time for any vessel to enter or leave the port is 1 hour ei side of HW but care is needed because movement of cargo vess takes place during this period (see "Navigation" – "Traffic Signa Visiting yachts may berth at the Admiralty Jetty by the Harbour Of and in mud berths at Strand Quay in Rye by arrangement with t Harbour Master. Subject to weather conditions it is possible for vess drawing less than 1.5 m. to enter the harbour at HW minus 2.5 ho (before the flood tide flows at maximum rate) to plus 3 hours.

H.M. Customs clear craft entering from abroad at the Harbour Of

Alsford's Wharf is located 1 mile from the entrance on the West ba of the river.
GENERAL: *Tidal Information:* These tide tables are referred Ordnance Datum Newlyn and GMT.

Chart Datum equals O.D. Newlyn minus 4 m. (13 ft.)
O.D. Newlyn equals Chart Datum plus 4 m. (13 ft.)
Duration of Mean Rise at Rye Harbour:
Spring – 3 hours 15 minutes.
Neaps – 5 hours 00 minutes.

Latest Surveys (September 1982) indicates that the channel has been moving Eastwards with a sand bar extending 110 m. Eastward from the tripod beacon. Average depth in the channel at the entrance:

At MHWS – 5.5 m. (19.2 ft.)
At MHWN – 4.5 m. (15 ft.)

Depth over bar:

At MHWS – 4.2 m. (13.8 ft.)
At MHWN – 2.5 m. (8.2 ft.)

For depth at HW at Alsford's Quay add 1.52 m. (5 ft.) to predicted height given in tables.

For depth at HW at Strand Quay mud berths deduct 0.6 m. (2 ft.) from predicted height.

The following approximate corrections for level and time of HW should be added/subtracted to convert these tables for use at the undermentioned coastal areas:

Hastings	minus 0.8 ft.	minus 2 minutes
Dungeness	plus 0.9 ft.	minus 6 minutes
Folkestone	minus 1.6 ft.	minus 15 minutes

AUTHORITY: Southern Water, Kent Division, Luton House, Capstone Road, Chatham, Kent ME5 7QA. *Tel:* Medway (0634) 46655. *Telex:* 965134 Krw Me G. *Contact:* Mr. George Roberts, Rivers Controller. Tel: Rye 223256. Captain C. H. Marsh, Harbour Master. Tel: Rye 225225.

SCALLOWAY: 60.08 N. 01.16 W. (See Plan Book)

Scalloway is a small port on the Atlantic side of the Mainland of Shetland and is located only 7 miles by road from Lerwick.

The main trade is centred around the catching, processing and export of fish, but there has been a marked increase in general trade since the recent improvement of port facilities.

Most services are available and can be arranged through the local shipping Agents.

Communications: Listening watch is maintained on Channel 16 only during office hours. At other times contact to be made through Shetland Radio. Local shipping Agent Tel: Scalloway 636 (office), after hours: Scalloway 304. Pier Master Office, Scalloway 574, home Scalloway 324. Assistant Pier Master, Lerwick 3485.

PILOTAGE: Request for Pilot should be made via local Agent at least 12 hours in advance of ETA and confirmed 1 hour before arrival by calling Scalloway Harbour Radio on Channel 16 VHF. No particular light or sound signals required. Usual station off Fugla Ness lighthouse on the Island of Burra. Alternative station at entrance to North Channel. Vessels awaiting Pilot maintain position off Fugla Ness. Pilotage not compulsory.

ANCHORAGES: Good holding bottom in Scalloway Bay.

RESTRICTIONS: No night time or tidal restrictions. Largest scale and up to date charts essential.

MAX. SIZE: Only restriction, draft limit of 6.1 m.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Shetland Radio.

VHF: Vessels should listen to Channel 16 VHF when in VHF range.

BERTHING:

Berth No.	*Length (m.)*	*Least Depth (m.)*
1	66	7.5
2	53	4.0
3	77	4.2
4	75	6

No. 1 Berth can accommodate vessels up to 95 m. in length.

CRANES: Mobile cranes available. Ships normally employ their own cranes.

STEVEDORES: Should be arranged through Agents.

MEDICAL: Doctor based at Scalloway. Hospital at Lerwick.

FRESH WATER: Available from standpipe at all berths, rate 10 t.p.h.

FUEL: Marine gas oil by pipe or from road tanker. 1 hour advance notice through Agent.

REPAIRS: Most types deck and engine repairs.

SLIPWAYS: Slip accommodation for vessels up to 180 tons.

SURVEYORS: Lloyd's Agency at Lerwick: Hay and Company (Lerwick) Ltd., 106a Commercial Street. Tel: (0595) 3057. Telex: 75295.

CUSTOMS ALLOWANCES: See "Lerwick".

REPATRIATION: Facilities for effecting crew changes.

AIRPORT: Sumburgh Airport 25 miles. British Airways several times daily. Tingwall Airstrip 3 miles.

HOLIDAYS: Cargo or shipping operations not affected by holidays.

POLICE/AMBULANCE/FIRE: Dial 999.

TELEPHONES: No arrangement for placing telephones on board. The Port Authority provide a telephone box in the harbour area.

SERVICES: Compass adjusting. Provisions of all kinds can be obtained locally.

SHORE LEAVE: Crew members allowed ashore.

AUTHORITY: Shetland Islands Council, Ports and Harbours Department, Port Administration Building, Sella Ness, Graven, Shetland. *Tel:* Sullom Voe 242551. *Contact:* Captain C. J. Nicolson, Deputy Harbour Master/Deputy Port Director.

SCAPA FLOW, Orkney Isles (Flotta Terminal): 58.53 N. 03.05 W. (See Plan Book)

OPERATOR: Occidental of Britain Inc., Flotta Terminal, P.O.Box 14, Kirkwall, Orkney. Tel: Longhope 341.

DOCUMENTS:

Maritime Declaration of Health (Form supplied by Pilot or Agent).
Vaccination List.
Immigration Form H.O. Form IS6.
Crew Lists — 2 required.
Ship's Stores List.
Crew Personal Effects Declaration, Customs Form C.142.
Last Port Clearance.
Ship's Register.
Load Line Certificate.
Safety Construction Certificate.
Safety Radio and Safety Equipment Certificates.
Derat Certificate.
Previous British Light Dues Receipts.

Customs and Health: Weather permitting, Customs, Immigration, Health and Agent will embark with the Pilot.

Customs House: Customs clearance inward and outward will be the responsibility of ship's Agents.

Light dues will be paid by the vessel.

Cargo Documents: Bills of Lading; Cargo Manifest, Quantity and Quality Report; Tanker Time and Loading Report; Certificate of Origin; Ship's Cargo and Ullage Reports; Master's Receipt for Shipping Documents and Documentation Transmittal Reports will be prepared by Company Representative.

Ship's Agent: All ship's business other than Cargo and Customs documentation and the shipping documents under section above will be conducted by the ship's Agent.

EDP: Early departure procedures apply to most vessels. Blank Bills of Lading are signed by the Master on arrival, and the tonnages inserted on completion of loading.

PILOTAGE: Pilot vessels *Scapa Pathfinder, Scapa Pilot* and *Scapa Patrol* watch VHF Channel 16.

Inside pilot station (58° 46′ N., 03° 07′ W.) located 2.0 miles 180° from Cantick Head Lighthouse.

Unfamiliar vessels, VLCCs, also any vessel without full information about the unusually strong currents in Pentland Firth is recommended to embark the Pilot at the appropriate outside position (Refer to Tidal Stream Atlas, Admiralty Publication H.O. Number NP 209).

Port restrictions which may cause delays: Weather preventing embarkation of Pilot at either inside or outside positions.

Local wind conditions in Scapa Flow preventing a safe approach to the berth.

Remarks: In Scapa Flow the weather conditions, in particular the wind, can change suddenly and quickly deteriorate, not only in Winter but at any time of the year.

Mooring Masters: A Company Mooring Master will board vessels to the Northward of the Calf of Flotta or at her designated anchorage within Scapa Flow prior to berthing at any Terminal Facility. A Company Mooring Master will be on board during the time that a vessel is moored and he will liaise between the Terminal and ship personnel throughout any deballasting, loading or discharging operation.

The Company Mooring Master may ensure that Masters of vessels are familiar with, and strictly observe, all local regulations concerning the safety of operations and pollution of the sea by oil whilst laid at the Company's facilities.

Vessels using the Company's facilities are required to provide the Mooring Master with accommodation and messing of a standard equivalent to that enjoyed by the vessel's officers.

ANCHORAGE: Inside Scapa Flow several anchorages are available depending upon prevailing winds. Sea anchorage outside, in the approaches to the Pentland Firth, is not possible.

APPROACHES: The approach to the Terminal is through the Pentland Firth from East or West, and then Northward through Hoxa Sound, the main entrance to Scapa Flow. Consult Admiralty Sailing Directions Vol. 1, and Admiralty Tidal Stream Atlas for Orkney and Shetland, Publication No. 209. Principal charts are as follows and Decca coverage is available: Admiralty Chart Nos. 2162, 2581, 35.

MAX. SIZE/RESTRICTIONS: The current maximum sizes of crude tankers permissible at Flotta is 200,000 d.w.t. at the SPMs and 150,000 d.w.t. at the jetty.

Since the advent of segregated ballast tankers, an anomaly has arisen between the physical size of tankers, upon which these maximums are based and the deadweight capacity. In order to prevent confusion as to the size of tanker that is acceptable, the following guidelines will be enforced.

	Conventional Ballast Tankers	*Segregated Ballast Tankers*
SPMs	200,000 d.w.t.	170,000 d.w.t.
Jetty	150,000 d.w.t.	130,000 d.w.t.

Prior to accepting crude vessels it must be clarified whether the vessel is a segregated ballast tanker or a conventional ballast tanker. If a segregated ballast tanker then the deadweight must be indicated. If the tanker has been converted from a conventional ballast tanker to a segregated ballast tanker, then the original deadweight should also be indicated.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Arrival Notices.

Pilots: By coastal radio station 24 hours and 12 hours prior to arrival. VHF contact at least 3 hours prior to arrival at the pilot station.

Terminal: By coastal radio station 7 days, 72, 48 and 12 hours prior to arrival at the pilot station.

VHF contact should be established at least 3 hours prior to arrival at the pilot station.

The Terminal must be advised by VHF via the "Harbour Control", when the Pilot has boarded or when 6 miles from Stanger Head at the entrance to Hoxa Sound.

INFORMATION REQUIRED PRIOR TO ARRIVAL:
Radio advice prior to arrival: Terminal operated by Occidental of Britain, Flotta Terminal, telex 75212 (OXYOPS G), via Portishead Radio, of ETA with following details. Also advise Agent of ETA, drafts fore and aft for arrival, and any immediate requirements on arrival.

Standard Message to Crude Vessels (Initial Visit): Masters are advised that reception facilities are available for clean ballast only. All ballast must be discharged to reception facilities ashore. No ballast from either cargo or permanent ballast tanks is permitted to be discharged into Scapa Flow.

Please advise the following details:

AAA	Arriving and sailing drafts and ETA.
BBB	Cargo requirements in metric tonnes.
CCC	Grade of previous cargo.
DDD	Quantity of Cargo tank ballast and position uplifted.
EEE	Quantity of permanent ballast and position uplifted.
FFF	Quantity of ballast for discharge ashore.
GGG	Last port and destination.
HHH	Is inert gas system fully operational and cargo tanks inerted?
JJJ	Oxygen level in cargo tanks.
KKK	Gross nett and summer d.w.t. tonnages.
LLL	Maximum loading rate.
MMM	Total time for deballast.
NNN	Number and size of cargo manifolds.
OOO	Availability of reducers to adapt manifolds to suit 16 in. 150 ASA flanges three required.
PPP	Can vessel load and deballast simultaneously while maintaining a minimum of a two valve separation?
QQQ	Is vessel equipped with a patent A.K.D. stopper or similar capable of accepting an 80 mm. end link?

Vessels are required to load part cargo prior to discharging ballast.

Minimum 10 ton SWL derrick required on port side for SPMs. Derrick required at jetty if it is necessary to fit spool pieces to accept loading arms. Ballast manifold is aft of two crude connections on SPM.

Your attention is drawn to the serious view taken by port and terminal authorities of pollution. Heavy fines are imposed to which is added the cost of clean up operations. Please ensure all crew members are conversant with and comply with pollution requirements.

Principal pollution causes are leaking sea valves overboard discharge valves and cargo or bunker overflows. We recommend sea valves, overboard discharge and bilge discharges are checked tight. Prior arrival cargo and bunkering procedures should be reviewed with chief officer and chief engineer. All scuppers to be plugged.

NOTE: On subsequent visits vessels should only answer AAA to JJJ inclusive.

Standard Message to Liquid Gas Carriers (Initial Visit):
LIQUID GAS CARRIERS ARRIVING AT SCAPA.
LPG vessels arriving at Flotta Terminal with ballast for discharge to Scapa Flow will comply with the following instructions in respect of this ballast.

1. Ballast for discharge must have been taken on board within 24 hours of arrival and at a distance of at least 12 miles off shore.
2. The Master will provide the Terminal with signed advice stating date, time and positions between which ballasting operations were carried out, quantity of ballast for discharge and tanks in which it is contained.

Harbour Authority officials may board vessels to ascertain that these procedures have been adhered to and the quality of the ballast is suitable for discharge. The Authority's decision as to whether or not the ballast is acceptable for discharge will be final. Non compliance will result in delays being occasioned by the vessel.

Masters are advised that this concession for discharge of permanent ballast relates only to LPG carriers and your attention is drawn to the serious attitude adopted by Port and Terminal Authorities to pollution incidents of any kind.

To prevent problems arising due to surge pressures caused by too rapid closure of emergency shutdown valves (ship side) it is required that the minimum closure rate from fully open to completely closed be 9 seconds when loading LPG or 13 seconds for Ethane loading.

Please advise the following details:

AAA	Arriving and sailing draft and ETA.
BBB	Cargo requirements in metric tonnes.
CCC	Previous cargo and quality of tank atmospheres.
DDD	Tank temperature on arrival.
EEE	Time required for cooldown.
FFF	Height of manifold above water line at arrival draft.
GGG	Closure timed of emergency shutdown valves.
HHH	Quantity of ballast and amount to discharge.
JJJ	Last port and destination.
KKK	Gross, nett and summer deadweight tonnages.
LLL	Maximum and cooldown loading rates.
MMM	Availability of deck tanks to accept coolant and quantity required.
NNN	Size of cargo/vapour return manifold and position of vapour return manifold relative to cargo manifold.

Purging and/or coolant is not carried out alongside.

Vessel will require to load sufficient coolant for purging and/or coolant to be carried out at anchor.

NOTE: On subsequent visits vessels should only answer AAA to JJJ inclusive.

VHF: *Harbour Pilots and Harbour Control:*
VHF Listening: 16 Telex: 75475
Working: 9, 11 and 20
Mooring Masters/Terminal:
Mooring Masters 161.15
Terminal 161.30 } Private Frequencies Only
Loading Operations 161.15
,, ,, 161.30 } Private Frequencies Only
N.B. Launches are fitted with VHF Listening Channel 16
Working Channel 14, 12, 8, 6

TUGS: 3 tugs (2 × 37 ton bollard pull and 1 × 45 ton bollard pull) available, and compulsory, for berthing. They are fire fighting tugs equipped with Warren Springs pollution dispersent equipment.

Whenever a tanker is on a berth, 1 stand-by tug is anchored in close vicinity for safety and pollution purposes. Fire wires must be rig off-side forward and aft.

1 tug (standby tug) is towing aft whilst tanker is moored to SPM.

READINESS: *Notice of Readiness to load/discharge:*

Notice of Readiness will be accepted subject to the follow conditions;—

a. The Terminal is open (this decision shall be communicate the Master of the vessel by the Company).
b. i) The vessel has been boarded by the Company Mooring Ma prior to her proceeding towards the berth *or*
   ii) The vessel has anchored within the anchorage area awaitin berth.

N.B. Although vessels will be loaded in order of Acceptance of No of Readiness, it should be borne in mind that Acceptance of Notic Readiness is contingent upon complete compliance with all requirements of Port Conditions.

c. Acceptance of Notice of Readiness may be withdrawn by Company upon the occurrence of any of the following events
   The decision by the Mooring Master that the vessel's dra equipment and/or appurtenances are not suitable for berthin the Terminal. If this decision has not been taken, for reas within the Mooring Master's control, within 24 hours f Acceptance of Notice of Readiness, the Company shall deemed to have waived its right to withdraw acceptance un this sub-paragraph.
   Any supervening decision of the Harbour Authority wh prevents the vessel from berthing.

N.B. A derrick or crane with a safe working load of not less than 10 t is required for handling hoses at the SPM berths.

BERTHING:
Position:
SPM 1: Lat. 58° 52′ 11.86″ N. Long. 3° 07′ 20.68″ W.
SPM 2: Lat. 58° 52′ 17.72″ N. Long. 3° 05′ 47.79″ W.
Main Control Building (Radio Mast): Lat. 58° 50′ 31.05″ Long. 3° 07′ 08.01″ W.

SPM Particulars:
Pillar Type Single Buoy Mooring – 2.
Tanker Size – 35,000 d.w.t. – 200,000 d.w.t.
Minimum Water Depth – 75 ft.
Max. Draft – 72 ft.
Mooring System – 10 m.×3 in. chain, 40 m.×21 in. rope gromm 10 m.×3 in. chain and 6 m.×2⅝ in. chain.
Crude Manifolds – 2×16 in.
Ballast Manifolds – 1×16 in.
Maximum Loading Rate – 80,000 bbls.p.h.
Hose Weight – Minimum 7.5 tons
Ballast connection is positioned aft of the 2 crude connections.

A load monitoring system is fitted to each SPM giving constant str readings to the Terminal Control Room and the Mooring Master board the tanker. In adverse weather conditions strain gauge readin will indicate when vessel should prepare to vacate the berth.

LPG/Crude Oil Jetty:
Finger type jetty with breasting dolphins.
Tanker Size – 4,000 d.w.t. – 150,000 d.w.t.
Minimum Water Depth – 63 ft.
Maximum Draft – 62 ft.
LPG Manifolds – 1×10 in. loading plus 1×10 in. vapour return.
LPG Loading Rate – 10,000 bbls.p.h.
Crude Manifolds – 4×16 in.
Crude Loading Rate – 80,000 bbls.p.h. maximum.
Ballast Manifold – 1×16 in. (crude gantry only).
Maximum Deballasting Rate – 40,000 bbls.p.h.

Terminal Capacity:
1. Crude Oil:
There are 5 tanks, each of 500,000 bbls. nominal capacity for stor of stabilised crude oil, plus a further 2 of 1,000,000 bbls. each.
2. Liquid Petroleum Gas:
There are 2 tanks, each of 100,000 bbls. nominal capacity for stor of propane.
3. Ethane:
There are 5 ethane tanks, each of 500 cu.m. nominal capacity.

Remarks: Vessels moored to the SPMs are required under condit to maintain a tug towing astern to keep the mooring system unde tension of 15 tons – 20 tons.

When ship's piping does not permit the pumping of permanent bal through the manifold, the possibility to load some cargo prio deballasting the cargo tanks' clean ballast may be granted by p arrangement with the terminal. In all cases where ships inten deballast and load simultaneously there must be at least a 2 va separation.

DENSITY: 1025.
FRESH WATER: Not available.
FUEL: Bunkers not available at present, but lubricants in small qua available. Ships should cable requirements to Agent as soo possible.

MOORING AND HOSE HANDLING:

On SPMs: Ship's derrick and manifold connections will require to be prepared on the port side. An accommodation ladder will be rigged to starboard with a pilot ladder ready to port.

Securing equipment for single chain mooring forward and hose connecting gear will be hoisted on board from Company work launch by ship's derrick. A good mooring line will be required from forecastle head as a messenger for the buoy mooring.

Tanker Loading Pier: The loading pier is equipped with rigid articulated pipe arms mounted on gantries for loading liquid petroleum gas and also for loading crude oil. The crude oil gantry is also fitted with a ballast discharge arm.

There is an access roadway between the Pier head and the shore. Mooring lines are run to dolphins by terminal mooring boats. Vessels with tension winches when moored at the pier must have winches on 'Manual brake'.

Arrival Draft: Vessels must arrive at the Company's facility in an adequate ballast condition compatible with safe manoeuvring during handling. Excessive trim or insufficient ballast could incur delay until such time as an acceptable condition is reached.

BALLAST: All berths are equipped with water ballast discharge lines. There is a water ballast tank of 500,000 bbls. capacity and a ballast treating facility capable of handling 40,000 bbls.p.h. It is prohibited to discharge water ballast into Scapa Flow.

Bilge Ballast Discharge: Vessels should arrive in Scapa Flow with clean ballast only.

The discharge of bilges and/or ballast by vessels into Scapa Flow is strictly prohibited.

N.B. All ballast water including permanent ballast must be discharged through the Terminal ballast reception and cleaning facility.

Discharge of ballast and simultaneously lifting of cargo is not permitted unless approval has been given by the Mooring Master.

The salvage in ballast shall become the property of the Company, in consideration of the Company's operation of the Terminal ballast reception and cleaning facility.

MEDICAL: Medical and dental services are available by arrangement. Hospital facilities are available at Balfour Hospital, Kirkwall.

REPAIRS: There are no dry-docking facilities available, but local engineering firms undertake minor repairs to machinery and equipment.

Immobilisation of engines: Not allowed on any of the berths, and not recommended when at anchor. When at the anchorage, however, in special circumstances, and provided the Harbour Master's permission is first obtained, it may be possible.

TRAVEL: There are daily air services, during the week, to Aberdeen, Inverness, Glasgow and Edinburgh from Kirkwall Airport. There is no service on Sunday, There is a daily ferry service from Stromness to Scrabster to connect with British Rail. During the Winter months there is no service on Sunday.

CONSULS: Denmark, Netherlands, Norway and West Germany.

LAUNCH SERVICES: Launch services from Flotta and SPM berths are available by arrangement with local Agents to Scapa Pier.

SHORE LEAVE: There are no restrictions on shore leave for ships' personnel. For vessels moored at SPMs arrangements can be made with the Agent for a launch service to be operated to the shore. For safety reasons, the boat selected for this service must have good stability, to prevent accidents in cases of hazardous boarding due to weather conditions.

SAFETY: Should communications fail, the Mooring Master will authorise continuous soundings of the Ship's whistle or siren as a signal to stop loading (ships in the vicinity capable of so doing should inform the Terminal Control by VHF that this signal is being sounded in case it is inaudible ashore). Ships hearing the signal and unable to contact the Terminal should inform "Harbour Control".

SERVICES: Stores are of good quality, and the laundry facilities are good, but limited. Tank cleaning and dirty ballast facilities are not available.

GENERAL:

Accidental Spills and Leakage: All oil spills and leakages must be immediately reported to the Mooring Master, who will inform the Harbour Authority forthwith. All deballasting/loading/discharging operations will be immediately suspended until the cause of the spill/leakage has been determined, and rectified to the satisfaction of the Mooring Master, and the Harbour Authority.

Galley and Other Refuse: Dumping of all refuse into Scapa Flow and approaches is prohibited. Refuse must be retained on board in sealed containers. (Vessels in port over a long period may make arrangements with their local Agent for collection).

Lighting: Sufficient lighting must be provided in the way of all overboard discharge points to facilitate detection of leaks or spillage. Adequate lighting must also be provided at the loading manifold.

Lifting of Stores; When tankships are at SPMs, loading or off-loading of stores, provisions, drums or any other goods or articles on, to or from the main tank deck is prohibited while cargo is being lifted.

Under certain circumstances and with the approval of the Company's Mooring Master, stores may be worked on the poop during the cargo lifting.

When tankships are moored at the pier, vessels and boats are prohibited from coming alongside during cargo lifting, unless all cargo operations are shut down, all tank openings are closed and secured, and permission from the Mooring Master has been obtained.

Working of stores over the pier will not normally be allowed.

During Loading/Deballasting Operations at SPMs: Mooring Masters will carry Company communication equipment. Ship's VHF must also be available to the Mooring Master at all times. Ship's whistle must be available throughout the time a Mooring Master is on board.

Emergency signals in the event of complete communication failure will be as follows:—

By day: Continuous blasting of ship's whistle accompanied by the hoisting of 2 black balls in a position conspicuous to the Terminal Control Room.

By night: Continuous blasting of ship's whistle accompanied by continuous flashing on an Aldis type signal lamp aimed towards the Terminal Control Room.

In the event of such a communication failure all loading operations shall cease until an effective means of communications has been established.

AUTHORITY: Orkney Harbour Authority, Harbour Authority Building, Scapa, Kirkwall, Orkney. *Tel:* 0856 – 3636. *Telex:* 75475. *Contact:* Director of Harbours.

AGENT: John Jolly, 21 Bridge Street, Kirkwall, Orkney Isles. Telegraphic Address: "Jolly Kirkwall Telex", Telex 75253. Tel. Kirkwall 2268 (24 hours answering service) and 3462. VHF call sign (Private frequency 161.25 mHz): Jolly.

SCRABSTER: 58.37 N. 03.32 W. (See Plan Book)

PILOTAGE: Not compulsory. Pilotage available for Pentland Firth and locally. Pilots can be contacted on VHF Channel 16, working Channel 12.

MAX. SIZE: 5.2 m. draft, 2,500 d.w.t. can be accommodated at Ro/Ro berth.

VHF: See "Pilotage".

TUGS: None.

BERTHING: Ro/Ro Berth: Length 100 m., depth 5.5 m.

Inner Harbour: 2 wharves, length 30.5 m., depth 3 m.

Fishing Berths: Quay 300 m. long, depth 1 m.

CRANES: Mobile cranes up to 36 tons available.

SPECIALISED CARGO HANDLING FACILITIES: Ro/Ro Berth available. See "Berthing".

STEVEDORES: Cargo worked 24 hours.

TANKERS: Vessels up to 2,000 d.w.t. can use Tanker Terminal.

FRESH WATER: Available.

FUEL: By road from Tanker Terminal, 24 hours notice required.

REPAIRS: Engine and minor hull repairs can be undertaken.

AIRPORT: Nearest at Wick, 32 km. away.

HOLIDAYS: Usual UK holidays.

AUTHORITY: Scrabster Harbour Trust, Harbour Office, Scrabster. *Tel:* 0847-62779/64618. *Telex:* 75449. *Contact:* Captain R. G. McKay, Harbour Master.

AGENT: See "Cromarty Firth".

SHARPNESS and GLOUCESTER: 51.43 N. 02.29 W. (See Plan Book)

The Port of Gloucester comprises the wet docks at Sharpness and Gloucester which are connected by a ship canal named "The Gloucester and Sharpness Canal".

PORT LIMITS: Sharpness Dock entrance.

DOCUMENTS:

1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B.6.
3 Stores Lists.
1 Certificate of Deck Cargo Tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing Card for each passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate (British ships only).

In addition Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Pilotage is compulsory. Masters of vessels bound for the Ports of Gloucester, Sharpness, Chepstow and Lydney requiring the services of a Pilot at the Barry Roads Station must give at least 24 hours notice of their intended arrival at the Pilot Station. Failure to give this notice could lead to a vessel being delayed. Draft and g.r.t. are also required. Masters who expect their passage time to be less than 24 hours should send advice from their sailing port with gross tonnage, draft, speed and ETA. Masters of vessels bound for Chepstow should also state mast height above the appropriate water line and whether masts can be lowered. (Vertical clearance limited by Bridge to 52 ft. (15.8 m) above MHWS)

Vessels are boarded at Barry Roads by the Cardiff Pilot Cutter which is equipped with VHF Channels 16, 6, 8, 9, 11 and 14. Radio contact with the Cardiff Pilot Cutter should be made not later than 1 hour before arrival at Breaksea L.V. In fog ships sound "9" (4 longs, 1 short). Pilot replies the same. Masters can send ETAs direct to the Pilotage Agent, Sharpness. Tel: Dursley (0453) 811323.

Dock Pilots: Dock Pilots are available, not compulsory but advisable for berthing in Sharpness Dock, transit of the Sharpness Canal and in Gloucester Dock.

ANCHORAGES: Barry Roads afford good anchorage in moderate weather for vessels awaiting a Pilot.

RESTRICTIONS: 3 ft. water clearance over outer sill for vessels of maximum draft 21 ft. 6 in. Neap tides impose certain restrictions.

Beam	*Clearance Required*
Less than 10.36 m.	0.61 m.
10.36 m. – 13.71 m.	0.76 m.
13.72 m. – 16.76 m.	0.91 m.

Note: The River Severn at Sharpness dries out at low water.

MAX. SIZE: Maximum Length – no restriction. Maximum beam – 55 ft. (16.76 m.) Maximum draft – 21 ft. 6 in. (6.55 m.).
HEALTH: See "Health – All Ports" before first U.K. port.
RADIO: Niton Radio, Lands End Radio, Ilfracombe Radio.
VHF: Sharpness Radio Channels 16, 14 and 9. Range normally within pilotage waters only.
TUGS: *(River):* Larger vessels normally pick up tugs off Avonmouth if required by Pilot. *(Dock Tugs):* Not suitable for river work. 3 tugs available in Sharpness Dock and for use between Sharpness and Gloucester if required. All tugs take ships lines.
BERTHING: Max. draft 21 ft. 6 in. Fresh Water. Range of dock level 9 in.

Available Berths: 10 to 14 berths depending on ship length. This includes a Container berth and a scrap berth. Available length of Quay – 12,000 ft.

Cargo Equipment and Methods: Cranes 6×3 tons, 6×6 tons all Portal and 2 Scotch Derricks of 32 tons. Grabs, Slings and Pallets, etc. Load/discharge by shore gear.
BULK CARGO FACILITIES: 2 grain silos, 1 fixed suction plant.

Belt driven elevators provided as required.
BRIDGES: 16 swing bridges between Sharpness and Gloucester. No mast height restrictions.
STEVEDORES: British Waterways Board.
MEDICAL: Absolutely necessary for Agent to have as much notice as possible if any medical attention is required. All facilities available.
DENSITY: 1000/1003.
FRESH WATER: Available by stand pipe, 20 t.p.h.
FUEL: Through Agents, 12 hours notice, most grades available.
FIRE PRECAUTIONS: According to local laws available on request.
CONSULS: See "Bristol".
REPAIRS: All types of deck and engine repairs are possible.
DRY DOCK: 360 ft. by 47 ft. by 14 ft. over blocks.
SURVEYORS: Most Societies are available.
GANGWAY/DECK WATCHMEN: Ship's personnel, but watchmen can be arranged if necessary.
HATCHES: Opened by ship's crew.
CUSTOMS ALLOWANCES: As for other U.K. ports.
REPATRIATION: All arrangements through Agents.
AIRPORT: London or Birmingham within 2 hours. Local taxi service available.
TIME: BST is GMT plus 1 hour. GMT in Winter months.
HOLIDAYS: Easter (varies). May Day. Spring Bank Holiday (last Monday in May). August Bank Holiday (varies, usually last Monday in August). Christmas Day (25th December), Boxing Day (26th December). Work can usually be arranged on these holidays although unusual to work 25th/26th December.
POLICE/AMBULANCE/FIRE: Telephone 999 ask for service required.
TELEPHONE: No ship to shore connection. Public telephone kiosks available.
SERVICES: Taxi. Laundry. Ship chandlery.
SHORE LEAVE: Possible.
IDENTIFICATION CARDS: Not necessary unless being repatriated.
REGULATIONS: British Waterways Board Byelaws 1962.
GENERAL: *Gloucester and Sharpness Canal and Gloucester Dock:* Maximum size of Vessel: Length 205 ft. (62.5 m.), beam 31 ft. (9.45 m.), draft 11 ft. 6 in. (3.5 m.) fresh water. Vessels exceeding these dimensions may be considered subject to Harbour Master's approval.
AUTHORITY: British Waterways Board, Dock Office, Sharpness, Berkeley, Gloucestershire GL13 9UD. *Tel:* (0453) 811644. *Telex:* 43376. *Contact:* Mr. D. McNeill, Dock Manager. Captain G. A. Boyack, Harbour Master.

SHOREHAM: 50.50 N. 00.15 W. (See Plan Book)

DOCUMENTS and all general information, refer to "London". Distance from London, 80 km.
PILOTAGE: Pilotage is compulsory for all foreign-going vessels, all coastal vessels of over 1,500 g.r.t. and all passenger-carrying vessels. Send ETA 12 hours and 2 hours in advance, including max. draft. Pilot boards within 2 nautical miles of harbour entrance. Tel: Brighton (0273) 592455. Cables: Shoreham Pilots. VHF: Channels 16, 6, 9, 14. Hours: Pilot Station office hours and tidal hours.
ANCHORAGE: Off Harbour. Depths as per English Channel Charts.
RESTRICTIONS: No night restrictions. Locks manned 4 hours either side of high water. According to size and draft these times can be extended by prior arrangement.

Main entrance channel, 122 m. wide, leads into a 91.4 m. channel to the Eastern arm.

Dimensions of Prince Philip Lock: 113.9 m. length, 17.3 m. width.
MAX. SIZE: *Canal:* Length 105.9 m., beam 16.7 m., draft 6.7 m. (subject to tide).
Western Arm: Length 82.3 m., beam 14.3 m., draft subject to tide.
HEALTH: See "Health – All Ports" before first UK port.
RADIO: Niton Radio/Northforeland Radio. ETA to Shoreham Harbour Master 24 hours prior to arrival.

When within VHF range advise Harbour Master (via "Shoreham Harbour Radio"), ETA, draft, beam, LOA and of any circumstances which may affect seaworthiness or handling capacity of the vessel.

Port Operation and Information Service manned continuously, contact by VHF calling Channel 16, working Channel 14. Station is situated on the middle pier.
TUGS: One tug (Bollard Pull 10 tonnes). Tug lines used for which no extra charge. Communications between vessel and tug take place on VHF Channel 6.
BERTHING: See "Restrictions".

Heavy lift cranes, 35 tons, 45 tons and 90 tons. Capacity for contai handling.

A bulk wine terminal capable of handling 4,731,750 litres of wine available.

A grain silo terminal with a storage capacity of 13,000 tonnes h been constructed within the canal.

A Ro-Ro berth has been constructed at the East end of Aldringt Basin.
STEVEDORES: Reasonable ETA is sufficient for gangs to be calle
MEDICAL: All facilities available.
DENSITY: Approx. 1025.
FRESH WATER: Available at most berths.
CONSULS: Danish.
AUTHORITY: Shoreham Port Authority, Harbour Office, Albion Stre Southwick, Brighton BN4 4ED. *Tel:* Brighton 592613. *Telex:* 87817 *Contact:* Captain J. Robertson, Harbour Master. P. Lacey, Gene Manager.

SILLOTH: 54.52 N. 03.24 W (See Plan Boo

PORT LIMITS: A vessel is considered to be an "arrived vessel" for t purposes of stemming when she arrives at the pilot station Workington (see Admiralty Chart No. 1346). Laytime norma commences when the vessel berths in the New Dock, Silloth.
DOCUMENTS: Normal U.K. requirements.
PILOTAGE: Compulsory for all vessels except for those qualifying special exemption. Vessels should send their ETA to local Agents or the Dock Master, Silloth, at least 12 hours before arrival. Pilot bo "Medway Patrol" is stationed off Workington when vessels are expect and listens out on Channels 16, 14 or 12 VHF. Pilot boards vess between 2.5 hours and 1.5 hours before HW, Silloth.
ANCHORAGES: Vessels may anchor at the pilot station in goo weather, but are advised to seek shelter in Ramsey Bay, Isle of Man Wigtown Bay in adverse weather conditions.
RESTRICTIONS: The port lies in a relatively sheltered position in t Solway Firth, and in consequence, access during adverse weather mainly governed by the practicability of boarding and landing Pilots Workington. Vessels over 75 m. in length do not normally enter the po at night.
MAX. SIZE: *Neap Tides:* Length 90 m., beam 15 m., draft 4 m.
Spring Tides: Length 90 m., beam 15 m., draft 6 m.

Typically, the port is used by vessels of between 500 tonnes a 1,500 tonnes deadweight.
VHF: A "Port Operation" and Information Services operates Channels 16 and 12 from 2.5 hours before HW, Silloth, call sign, "Sill Harbour Radio".
TUGS: There are no tugs available at the port.
BERTHING: The port comprises two docks:

The outer, Marshall Dock is tidal and contains no berths.

The inner, New Dock is enclosed by dock gates which are ope from 1 hour before to 1 hour after HW. Minimum depths in the New Do are maintained at 4 m. on Neaps and 6 m. on Springs. The spec gravity of the water in the dock is normally about 1.022.
Cargo Berths: The New Dock contains 7 berths:

No. 1 Berth: A "single user" bulk grain import berth operated by Ca Flour Mills Ltd. Suction elevators, 60 tonnes per hour.

No. 2 Berth: A general cargo berth with limited quay space.

No. 3 Berth: A specialised bulk molasses import terminal operated Carr's Flour Mills Ltd.

No. 4 'A' Berth: A "common user" import terminal for bulk agricultu materials (mainly animal feeds) operated by D. A. Harrison & C Suction elevators and grabs; 100 tonnes per hour; automated handl and storage.

No. 4 'B' Berth: A specialised import/export bulk cement termi operated by D. A. Harrison & Co. 100 tonnes per hour, automa handling and storage of cement powders.

No. 5 Berth: Main general cargo berth. Mobile cranes and eleva covered storage.

No. 6 Berth: Specialised livestock import terminal operated by T.A Ltd., under the control and supervision of M.A.F.F. officials. Lairag facilities for 700 cattle. The berth can also be used for general carg

No. 7 Berth: General cargo berth for small vessels of up to 50 m length.
BULK CARGO FACILITIES: See "Berthing".
STEVEDORES: D. A. Harrison & Co., Anvil House, West Newt Aspatria, Cumbria. Tel: (0965) 20529. Telex: 64493. Working hours the port are unlimited 24 hours per day, 365 days per year.
CRANES: 2 × 30 tonne mobile cranes are permanently available in t port. Larger or additional cranes can be conveniently hired in. Sh gear is never used.
HATCHES: Always handled by ship's crews.
FRESH WATER: Available at all berths.
FUEL: Fuel oil can be loaded from road tanker.
POLICE/FIRE/AMBULANCE: Police: Tel. 31313 or 09002 Fire: Tel. 999; Ambulance: Tel. 31309 or 999. The nearest pu telephone is at the entrance to the docks.
REPAIRS: Any type of repair which does not require dry dock facil can be carried out by local contractors.
DRY DOCKS: None.
AIRPORT: Nearest airports are Carlisle, 39 km., Newcastle 140 k Prestwick 225 km. and Manchester 260 km.
BANKS: The Midland Bank, Station Road, Silloth. The Natio Westminster Bank, Eden Street, Silloth.
AUTHORITY: Associated British Ports Co. plc, Dock Office, Si Docks, Cumbria CA5 4JQ. *Tel:* (0965) 31358 or 31165. *Con* Captain J. R. W. Myers, Dock Master.

SOUTHAMPTON: 50.54 N. 01.24 W. (See Plan Book)

DOCUMENTS:
1 Maritime Declaration of Health.
1 Crew's Effects List.
2 Ship's Report by Master.
1 Home Office Form 1B6.
1 Stores List.
1 Certificate of Deck Cargo Tonnage.
1 Grain Certificate.
1 Light Certificate.
1 Port Dues Certificate.
1 Passenger List.
1 Landing Card for each Passenger.
Ship's Certificate of Registry.
Mercantile Marine Office Certificate – for British ships only.
Load-line Certificate.
Safety Equipment and Safety Construction Certificate.
Lloyd's Certificate.
Derat Certificate.
Ship's Register.
Light Bills.
Safety Radio Certificate.

In addition, Manifests and Bills of Lading are usually sent to Agent direct from loading port.

PILOTAGE: Compulsory, with usual regular Home Trade and other small exemptions. In addition to 48 hours' notice to local Agent, advise Nab or Needles Pilot as appropriate, ETA 48 hours and again 2 to 3 hours immediately prior to arrival. The Nab and Needles stations are maintained by fast launches under the control of the Duty Pilot at The Pilot Station, Berth 37, Southampton Docks. Duty Pilot keeps a continuous watch on VHF Channel 16; call sign Nabpilot or Needlespilot as appropriate. Working frequency; Channel 9 only, but can listen on Channels 6, 12 and 14. No medium frequency: M/F and R/T messages via Nitonradio. Duty Pilot's telephone numbers: Southampton 32345 and 32346.

The launches only put to sea when required. *Failure to send an accurate ETA 2 to 3 hours before arrival could cause delay to the offending vessel.*

The Nab and Needles stations also provide Pilots for vessels bound for Portsmouth, Cowes or other small ports within the Trinity House Southampton and Isle of Wight Pilotage District.

Strict compliance with the requirements of the Merchant Shipping (Pilot Ladders) Safety Rules is requested by the Pilots, who may refuse to board vessels with unsatisfactory and dangerous ladders. Manropes are not required. Ladders should reach to approximately 3 ft. from the water, each rung resting firmly against the ship's side; and a good lee provided whilst making approximately 5 to 7 knots headway.

Eastern Approaches or Nab Tower. The station is maintained by 40 ft. fast launches, black hulls, white wheelhouses, showing international signals. VHF Channels 6, 9, 12 and 16. Vessels under 40 ft. draft are normally boarded between the "New Grounds" and "Dean Tail" light buoys, approximately 2 miles N.N.W. of Nab Tower, although in bad weather, boarding at the "Warner" buoy or St. Helen's Roads might be advised by the Duty Pilot. Launches operate from Ryde Pier or from Portsmouth Harbour.

Vessels over 35 ft. draft are restricted by tide for time of entry, and will be advised by the Duty Pilot. Vessels of 40 ft. draft and over use the Nab Channel and a message advising Tanker Master of transit times will be sent by "Essoship Fawley" and confirmed prior to arrival by Duty Pilot by VHF.

The Nab Channel has a limiting depth of 39.7 ft. (although 43 ft. can be carried to West of centre line (1976)) below Chart Datum (April 1976). Pilot will board all vessels of 40 ft. draft and over in a position 2 to 3 miles South of the Nab Tower. Masters of such vessels are strongly recommended not to approach closer than 2 miles to the Nab Tower without a Pilot, owing to strong tidal streams. It is advisable for a deep-drafted ship to anchor 3 miles South of the Nab Tower if waiting for the tide. Advice will always be given on request to the Duty Pilot by VHF.

Pilot *will not* board vessels under 40 ft. draft outside the defined pilotage district unless specifically requested by the Master to do so. The additional "Out of District" charge for boarding beyond the normal limits will be debited to Owners.

Western Approach – Needles: Vessels drawing more than 31 ft. are advised to enter via the Nab. Masters are strongly urged not to proceed beyond the Fairway Buoy without a Pilot, especially on the flood tide. Safe anchorage in vicinity of "Fairway" Buoy.

Station maintained by 40 ft. fast launch, black hull and white wheelhouse, showing international signals. Launch operates from Yarmouth Harbour or Lymington. Needles pilot launch is fitted with VHF Channels 6, 9, 12 and 16. No medium frequency.

When it is considered that the weather is deteriorating to the extent that the boarding and landing of Pilots could in the near future become dangerous, a message will be sent to all ships through Nitonradio, as follows:

> "Needles Pilot operating bad weather routine. Vessels should ascertain at least 3 hours before their ETA Needles whether a Pilot will be available. This information can be obtained either through Niton Radio or direct from Needles Pilot on VHF".

If it is not safe to ship or land the Pilot at the Needles, Masters will be advised to proceed to the Nab.

In poor visibility a vessel requiring Pilot at either Nab or Needles uses a distinguishing signal of "G" to which the pilot launch will reply with "H".

Also see "Notices".

GENERAL NAVIGATION: A Duty Operations Officer, responsible to the Dock and Harbour Master Southampton maintains a continuous watch in the Port Signal and Radar Station (Berth 37): call sign "Southampton Port Radio". He is to be informed prior to any movement to, from or within the port area and will give information on the movement of other vessels. Harbour Radar Information and guidance will be given on request. The Radar reference line shown on the Admiralty Charts is superimposed on the Harbour Radar displays.

Particular attention should be paid by Masters to the designated "Reporting Points" marked on the Admiralty Charts. Reports should be made on VHF to Southampton Port Radio, to enable the proper identification and co-ordination of the ship movement, to be made to the benefit of all mariners navigating within the Solent area. This applies equally to naval and to non-compulsory vessels.

The following VHF Channels are operated within the port.
Southampton Port Radio: Channels 16, 14, 12, 18, 20 and 22.
Harbour Patrol Launch (Call sign Southampton Patrol) Channels 16, 14, 12, 10, 8 and 6.
Nab and Needles Pilot Launches: Channels 16, 14, 12, 9, 6 and 0.
Nab and Needles Pilot Stations: Channels 16 and 9. (Duty Pilot).
Southampton Pilot Launch (call sign Southampton Pilot) Channels 16, 14, 12, 9, 6 and 19.
Southampton Pilot Station (call sign Southampton Pilot) Channels 16 and 9 (Duty Pilot).
Tugs: When berthing vessels: Channels 71 or 74.
Esso Petroleum Terminal, Fawley: Channels 16, 14 and 19.
B.P. Oil Ltd., Hamble. Channels 16, 14, 19, 42, 44 and 46.

A patrol launch (Harbour Master flag by day, all-round blue light by night) is controlled by the Duty Operations Officer Southampton for pollution detection and keeping channels clear of pleasure craft for the passage of large vessels.

Vessels *(a)* drawing more than 10.5 m. *(b)* more than 288 m. in length *(c)* of more than 100,000 d.w.t. and *(d)* LPG vessels exhibit a large black cylinder by day and 3 vertical red lights by night. Vessels showing these signals are not to be passed or overtaken within channel limits between the "West Bramble" and "Hook" light buoys, these vessels are considered to be constrained by their draft or restricted in their ability to manoeuvre and may not be able to comply with the Collision Regulations at other times. Will indicate inability by 5 short blasts on the whistle. "Clear channel" control is exercised by the Duty Operations Officer at Port Signal and Radar Station, Berth 37, Southampton Docks. The Thorn Channel has a limiting depth of 12.6 m. (April 1976) at low water datum.

Up to 7 vessels other than LPG vessels (only 3 LPG) of under 91.4 m. in length are permitted with prior permission to anchor out of the channel to the East of the "Hook" Buoy in the designated Small Ships Anchorage, the limits of which must be strictly observed. Three numbered anchorages are available in an emergency for vessels not exceeding 168 m. in length in Fawley Reach, where vessels must moor to 2 anchors. Permission to anchor including within the small ships and numbered anchorages must be obtained from the Duty Operations Officer, Southampton Port Radio.

Also see "Notices".

MAX. SIZE: The largest passenger and container vessels call regularly at Southampton. Tankers: Fawley can accept partly loaded VLCCs up to 14.9 m. draft.

HEALTH: See "Health-All Ports" before first UK Port.

TUGS: 2 tugs are permanently stationed at Fawley; if more than 2 tugs are required it should be noted that week-end requirements have to be advised to the tug operators not later than 1530 hrs. on Friday of each week.

If a vessel required more than 2 tugs and is due to arrive at Fawley between 0001 hrs. Saturday and 0900 hrs. Monday, ETAs must be submitted well in advance of 1530 hrs. on the Friday prior to arrival. It is usual to use the wires provided by the tugs for towing.

BERTHING: The Pilot boarding the ship at the Sea Station or anchorage will also berth the ship. Non-compulsory vessels can obtain or disembark a Pilot in the vicinity of the "N.W. Netley" or "Hook" buoys by contacting "Southampton Pilot" on VHF.

Dock or Quay	*Berths Nos.*	*Nominal Dredged Depth * below Chart Datum †*		*Length of Quays*	
		m.	ft.	m.	ft.
Container Berths	204-5-6	12.8	42	930	3050
Cable ship Berth	203	9.1	30	274	900
Container Berths	202	12.2	40	274	900
	201	10.2	33.5	280	919
Western Docks	101 – 104	10.2	33.5	1118	3668
	105 – 106	11.7	38.5	525	1722
	107 – 109	10.2	33.5	620	2034
	Cross-Berth	11.7	38.5	60	197
Ocean Dock (Entrance 121.9 m., 400 ft. wide)	42	10.2	33.5	36	118
	43 – 44	11.7	38.5	450	1476
	45	10.2	33.5	189	620
	46 – 47	11.7	38.5	485	1592
Test Quays	51	—	—	205	673
	50	4.1	13.5	110	360
	48-49	7.1	23.3	226	743
	41	8.7	28.5	172	565
	40	9.3	30.5	192	630
	38-39	10.5	34.5	316	1038
Dock Head	37	7.8	25.5	143	470
Empress Dock (entrance 48.5 m., 159 ft. wide)	20-21	7.5	24.5	258	848
	22-23	6.8	22.3	234	770
	24-27	7.2	23.5	502	1647
Itchen Quays	28	2.0	6.5	213	700
	29	5.6	18.5	106	350
	31-33	9.1	29.8	263	879
	34-36	9.9	32.5	484	1590
Princess Alexandra Dock	2S-3	6.2	20.3	223	732
(entrance 99.1 m., 325 ft. wide)	1-2N	5.0	16.5	401	1316

Other berths are available. Lesser draft berths not shown. The depths of water are maintained as far as practicable, but are subject to variation and are not guaranteed.

* To find the depth of water in the berths add the tidal rise to the depths shown in the above table.

† Chart datum is approximately the lowest low water level.

BULK HANDLING FACILITIES: Grain handling at Berths No. 36, 47, 101, 102 and 109.

Ro-Ro facilities at Berths No. 105 and 201 – 202.

CRANES:

Type	*No.*	*Capacity in tonnes*
Container cranes	8	Up to 40
Quayside cranes	28	Up to 10
Floating crane	1	100
		(Replacement on order, 150-175 tons)
Dry dock cranes	7	Up to 51
Mobile cranes	3	10

TANKERS: Esso Marine Terminal, Fawley.

Approach: Terminal is approached by either the Nab or the Needles. The Nab with a dredged channel of 43 ft. below chart datum admits the larger vessel. Double high water with an average tidal range of 13.25 ft. (Springs) and 7.75 ft. (Neaps). Rate of Spring Tide 2 knots, Neap Tide 1 knot.

Anchoring in the fairway adjacent to the terminal requires permission from Southampton Harbour Authorities. Approval will only be given to vessels of 300 ft. or under. Usual practice is not to moor with both anchors. This applies to Controlled Anchorage only. Depth of 41 ft. LW is available. Anchorages in the Solent and Cowes Roads are more generally used. Good holding ground with depth of 50 ft. LW.

Accommodation: Terminal has 2 approach trestles, 1,900 ft. long leading seaward to the main pierhead trestle with its 9 berths. This trestle is 4,575 ft. long and lies parallel with the channel. 5 main ocean berths are on the seaward side and the 4 coastal berths on the landward side. Dimensions of the berths are as follows:

Berth	*Length of 'T' Head*	*Distance between centres*
No. 1	222 ft.	800 ft.
No. 2	222 ft.	800 ft.
No. 3	222 ft.	800 ft.
No. 4	222 ft.	800 ft.
No. 5	300 ft.	1,000 ft.
No. 6	80 ft.	395 ft.
No. 7	80 ft.	400 ft.
No. 8	80 ft.	400 ft.
No. 9	100 ft.	440 ft.

Equipment: Suitable cargo hose handling equipment is positioned at each of the 9 berths. To facilitate the handling of mooring lines, air powered hoists are available at each of the berths. Mooring boats are in attendance for running lines. VLCCs are required to meet minimum standards with regard to their mooring equipment. All water ballast containing oil or likely to contain oil must be pumped ashore. 2×67,000 barrel ballast tanks are provided on shore. With the approval of the Terminal Manager minor repairs can be undertaken whilst discharging/loading at the Terminal. Major repairs can be undertaken at anchor or at Southampton Docks. Working is continuous throughout. Facilities installed at the berths and available for use by tankers include fresh water, bunkers, steam, compressed air, nitrogen. Ship's stores of all kinds are available in any quantity at Southampton. All deliveries of stores must be made by water transport. For quarantine purposes vessels are either boarded prior to berthing or immediately after berthing. Two firefighting tugs of 2,530 h.p. are permanently stationed at the Marine Terminal. Additional tugs can be provided on notice from Southampton.* All tugs are equipped with Radio Telephone and operate on Channels 8 or 10 of the Port Operations Service. Provision of shore steam is made in exceptional circumstances.

*A standby charge is levied on vessels over 16,000 d.w.t.

Pilotage: Compulsory. Inward-bound vessels embark Pilots at the Nab or Needles entrances. Tankers up to 250,000 d.w.t. berthed at any time during the day or night subject to tidal conditions.

Rules for Berth Planning: The following limitations are now in force when planning berth movements.

1. Berth size restrictions:
Berth No. 1: Max. size of vessel 50,000 tonnes displacement.
Berth No. 2: Max. size of vessel 82,000 tonnes displacement.
Berth No. 3: Max. size of vessel 65,000 tonnes displacement.
Berth No. 4: Max. size of vessel 176,000 tonnes displacement.
Berth No. 5: Max. size of vessel 240,000 tonnes displacement.
Berth No. 6: Max. size of vessel 3,500 tonnes displacement.
Berth No. 7: Max. size of vessel 3,500 tonnes displacement.
Berth No. 8: Max. size of vessel 3,500 tonnes displacement.
Berth No. 9: Max. size of vessel 8,000 tonnes displacement.

2. Vessels on Berth 6 must not exceed 330 ft. (100.5 m.) in length.

3. Distance between vessels secured on any berths must be 100 ft. (28.7 m.) or more. (This is required under local by-laws for fire regulations.)

4. Distance allowed for berthing vessels must not be less than vessel's length +0.4 length. (Agreement with Pilots).

5. Maximum draft of vessels:
Berth No. 1 33 ft. 03 in. (10.2 m.)
Berth No. 2 41 ft. 00 in. (12.6 m.)
Berth No. 3 41 ft. 00 in. (12.6 m.)
Berth No. 4 49 ft. 00 in. (14.9 m.)
Berth No. 5 49 ft. 00 in. (14.9 m.)
Berth No. 6 18 ft. 06 in. (5.6 m.)
Berth No. 7 18 ft. 06 in. (5.6 m.)
Berth No. 8 18 ft. 06 in. (5.6 m.)
Berth No. 9 21 ft. 08 in. (6.6 m.)

These drafts are subject to change and are therefore updated quarterly.

6. Tide charts are to be prepared for Nab and Thorn Channels for vessels over 40 ft. (12.19 m.) draft.

7. Check product can be loaded on nominated berth.

8. Check product or ullage availability before berthing vessel.

9. Check that maintenance will not interfere with operation of berth.

10. No vessels to berth on Ocean Berths with mean wind speed above 30 knots from N.W. through to S.W. to S.E.

11. No vessels to berth on Coaster Berths with mean wind sp above 30 knots from N.W. through to S.W. to S.E.

12. Ensure liaison maintained with S.H.B. regarding sailings coinci with movement of vessels over 70 knots (hovercraft).

Fawley Coastal Berth Manoeuvring Requirements: Fawley coa berths comprise Berths 6, 7, 8 and 9 and are situated on the ins (Western Side) of the Marine Terminal complex.

Before any manoeuvring is undertaken on these Berths the follow requirements are to be followed:

1. Marine Controllers are to be informed of vessel manoeuvring p

2. Vessels without bow thruster capability should berth stemm the tide.

3. All vessels over 61 m. (200 ft.) LOA must have the assistance of Esso mooring boat when:
(a) berthing.
(b) sailing if berthed starboard side to.

4. Vessels over 85 m. (279 ft.) in length will not normally swing Wes a line between Fawley buoy and the S.E. of Fawley Jetty. Exceptio may be made only *after* consultation between Terminal and the Pilo Master of the vessel. Due account must be made of wind, tide, wea and time. Only then will vessels be permitted to swing West of that l referred to above.

5. Vessels over 85 m. (279 ft.) LOA without bow thruster capabili must have in attendance when berthing port side to or sailing after be starboard side to:
(a) Esso mooring boat, *and one tug.*

Such vessels when berthing starboard side to or sailing after be port side to must have in attendance:
(a) Esso mooring boat.

They may also be required to have a tug if prevailing conditio require it.

6. Vessels of 91.5 m. (300 ft.) LOA or more when berthing at Nos. 6 or 8 to have at least one adjacent berth vacant during the berth movement.

7. No vessel to berth when wind is from South to West with mean w speed above 30 knots, i.e. within S.W. quadrant.

8. The Esso mooring boat will be made available on request to ass with any vessel not covered in these instructions. Its communicat Channel is 71 (74 in an emergency).

THESE BOATS MUST NOT BE USED FOR TOWING.

Grade/Rates:

MAIN BERTHS:

Grade	*Line*	*Berths*	*Rate (t.p.h*
Plus Gasoline	321	1, 2, 3, 4	1,00
Regular Gasoline	322	1, 2, 3, 4	90
Extra Gasoline	4939	1, 2, 3, 4	80
Virgin Naphtha 100	328	1, 2, 3, 4	85
Virgin Naphtha 500	121	1, 2, 3, 4	70
Vaporising Oil	4921/337	1, 2, 4	23
White Spirit	326	1, 2	22
Premium Kero.	329	1, 2, 3, 4	85
Regular Kero.	337/4920	1, 2, 3, 4	22
ATF. 2494	324	1, 2	60
ATF. 2452	6401	(2 filters) 4	20
Diesel Fuel Oil	323	1, 2	1,00
Diesel Fuel Oil	323	3, 4	60
Gas Oil	325	1, 2	90
Gas Oil	325	3, 4	60
Marine Diesel Oil	330	1, 2, 3, 4	55
SWHO/SWADO	1053	1, 2	1,00
C.E. Fuel Oil	4903/332	1, 2, 3, 4, 5	1,50
F.O. Heavy	332	1, 2, 3, 4	1,30
F.O. Heavy	336	1, 2, 3, 4, 5	40
F.O. Medium	331	1, 2, 3, 4	1,00
F.O. Medium	376	1, 2, 3, 4, 5	40
F.O. Light	327	1, 2, 3, 4	85
F.O. Light	334	1, 2, 3, 4	40
Butane (Pressure)		1, 2	10
Propane (Pressure)		1, 2	5
Butane (Refrig.)		1	40
Propane (Refrig.)		1	40
M.E.K.		4	15
Toluene		4	30
Lubes	1, 2, 3, 4	3	80 – 1
Spent Caustic		4	25

COASTER BERTHS:

Plus Gasoline	321/4917	6, 7, 8	30
Regular Gasoline	322/4915	6, 7, 8	30
Extra Gasoline	4939	6, 7, 8	25
Virgin Naphtha 100	328	6	30
Premium Kero.	329	6, 7, 8	25
Regular Kero.	337	6, 7, 8	22
Vaporising Oil	4921	6, 7, 8	23
Diesel Fuel Oil	323/4916	6, 7, 8, 9	30
Gas Oil	325/4919	6, 7, 8, 9	22
Marine Diesel	335	6, 7, 8, 9	25
Bitumen	12/13	6	15
C.E. Fuel Oil	4903	6, 7, 9	1,10
F.O. Heavy	332	6, 7	1,00
F.O. Heavy	336	6, 7, 9	40
F.O. Medium	331	6, 7, 9	1,00
F.O. Medium	376	6, 7, 9	40
F.O. Light	334	6, 7, 8, 9	40
Paranox/P.I.B.	3711	7, 8	4
Heptene	4907	6, 7	15
Benzene	1032	7, 9	30
Toluene	1031	7, 9	30
M.E.K.		7, 9	15

Grade	Line	Berths	Rate (t.p.h.)
Nonene/Octene/Decene	7001	7, 8	100
A.T.F. 2452		7, 8	100
Chem. LPG (Rich C_4		8	40
(Spent C)		8	30
(Butadiene)			
(Isoprene)			
(Isobutylene)			
Ethylene		9	100
Spent Caustic		9	250

B.P. Terminal, Hamble. Situated immediately opposite Fawley; has two main berths on the outside faces and a small coastal berth (No. 3) on the inner face of No. 2 berth. Berth No. 1 is the Northerly berth, and is used for larger vessels (presently under reconstruction), having a depth of 31 ft. 6 in. below PLWD alongside and in the approaches. The berth face is 250 ft. long, so head or stern moorings are taken to 2 mooring buoys at the N.W. end of No. 1 berth. They are hook buoys; no lashings or mooring shackles are needed. No. 2 berth is similar in dimensions to No. 1 berth, the distance between centres being 530 ft. No. 3 berth is 250 ft. long, with 16 ft. 6 in. alongside at PLWD and 13 ft. in the approaches.

Facilities and services as for Fawley with the exception of transport, no transport being available within the depot. Ship's personnel are allowed to walk through the installation to Hamble Village where public transport to Southampton is frequent.

All grades of fuel and diesel bunkers and fresh water available on all berths.

Also see "Notices".

BUNKERS AND WATER: All grades of fuel oil and diesel oil are available and water is piped on all berths. Bunkers and stores can also be obtained by barge in Cowes Roads anchorage, but water is not readily obtainable there.

CONSULS:

Country	Status	Address/Telephone No.
Belgium	Consul	c/o W. Bates & Co. Ltd., Oxford House, College Street, SO9 1LN Tel: 22766/7
Denmark	Vice-Consul	c/o Benjn, Ackerley & Son Ltd., Canute Chambers, Canute Road, SO9 1FJ Tel: 27171
Dominican Republic	Consul	Mascot Ships Agents, c/o MacIntyre Scott & Co. Ltd., West Bay Road, SO9 4NW Tel: 34033
Finland	Vice-Consul	c/o Sandell Bros. Ltd., Ryde Terrace, SO9 2UL Tel: 30966
France	Consular Agent	R. H. Hammond Ltd., 236 Winchester Rd., SO1 2SB Tel: 772442
Germany (Federal Republic)	Consul	c/o Wainwright Bros. Bowling Green House, 1 Orchard Place, SO1 1BR Tel: 23671
Greece	Vice-Consul	c/o Keller Bryant & Co. Ltd., 21-22 Queens Terrace, SO9 3FD Tel: 28566
Italy	Consular Agent	c/o Herbert Ferryman Ltd., Galen House, 1-9 Oakley Road, SO9 7AT Tel: 788011
Netherlands	Consul	c/o Macship Agencies Ltd., 4th Floor Havelock Chambers, Queens Terrace, SO1 1BP Tel: 29051
Norway	Consul	c/o G. Haswell & Co. Ltd., 28 Queen's Terrace, SO9 2UJ Tel: 23555
Philippines	Consul	Mann & Son (London) Ltd., No. 201 Berth Offices, Prince Charles Container Port, SO1 0HH Tel: 772416
Spain	Consul-General	Richmond House, (First Floor) Terminus Terrace, College Street, SO1 1EJ Tel: 35835
Sweden	Consul	c/o Meadows Freight, 12-14 Queens Terrace Tel: 25033

REPAIRS/DRY DOCKS: All ship repairs can be effected. Largest dry-dock is 1,200 ft. long overall, 135 ft. wide and has 34 ft. over the blocks. One other dry dock maintained within the Port by Vosper Ship Repairers Ltd.

OIL POLLUTION: Southampton Water is an international yachting centre and has many holiday beaches on its shores. Consequently, oil pollution is treated very severely and heavy fines are imposed on offenders.

The Esso Refinery operates a clean-up service, the full economic cost of which is billed to the offending ship.

MEDICAL: Doctors and hospital facilities available. Agent should be advised in advance of any medical attention required.

An organisation exists for hospitalisation of sick seamen from vessels off Cowes, Isle of Wight. Arrange through Nitonradio, Nab, Needles or Southampton Pilot or through vessel's Agent. Minimum delay to vessel.

CUSTOMS ALLOWANCES: By statute, crews of vessels in port are allowed 25 cigarettes per day per man. 0.3 litres (0.5 pint) of spirits and 1 bottle of table wine per day per man.

TIME: British Standard Time is GMT plus 1 hour, reverting to GMT in Winter months.

AIRPORT: Eastleigh Airport. Air U.K. have flights to Amsterdam, Guernsey, Jersey, Brussels and Paris.

HOLIDAYS: Good Friday (variable date); Easter Monday (variable date); May Day; Spring Bank Holiday (variable date); Autumn Bank Holiday (variable date); Christmas Day (25th December); Boxing Day (26th December); New Year's Day (1st January).

POLICE/AMBULANCE/FIRE: Dial 999 from any telephone and ask for service required.

SHIP SUPPLY SERVICE: Williams Shipping Company (Fawley) Limited, Clyde Buildings, Town Quay, Southampton SO1 1LX. Tel: (0703) 25271. Telex: 47436.

Services Supplied: Fast launches for personnel ship to shore, essential small packages and/or sick crew members.

D.O.T. approved to operate; not more than 6 passengers, area Swansea to Selsey, not more than 5 miles offshore.

Motorised barges for all types of supplies, deck and engine, and stores. Also, vessel with UK loadline that can meet vessels passing in the English Channel with essential stores.

Mainly used for storing vessels in Oil Terminals, Cowes Roads and Motherbank.

Also see "Cowes".

NOTICES: *Notice to Mariners No. 2 of 1984.*

The Dockyard Port of Portsmouth,
the Port of Southampton
and the Isle of Wight Pilotage District
Movement of Gas Tankers in the Solent

1. Notice is hereby given that these directions have been jointly promulgated by the Queen's Harbour Master Portsmouth and the Dock and Harbour Master Southampton, in agreement with the Isle of Wight Pilotage Service, to ensure the safe navigation of gas tankers within the Isle of Wight Pilotage District.

2. This Notice applies to all gas tankers loaded or partly loaded and gas tankers which have not been rendered gas free.

3. Gas tankers in transit within the Isle of Wight Pilotage District may not enter an area in which the visibility is less than 0.5 miles.

4. Before navigating within the area between the North Sturbridge Buoy and the Warner Buoy, all gas tankers must establish communications with the Queen's Harbour Master Portsmouth on VHF R/T Channel 11 to advise of their transit and to ascertain movements into and out of Portsmouth Harbour.

5. Gas tankers when navigating between Hook Buoy and West Bramble Buoy in the Western Approach Channel shall be given the sole occupancy of that channel.

6. Gas tankers when navigating between East Bramble Buoy and Calshot Buoy in the North Channel shall be given the sole occupancy of that channel.

7. No vessel may anchor closer to a gas tanker than twice their combined lengths.

8. At no time will more than 3 gas tankers be permitted to anchor within the designated Small Ships Anchorage in Southampton Water.

9. No gas tanker exceeding either 8,000 cu.m. total capacity or 6,000 g.r.t. will be permitted to enter or leave the Port of Southampton via the West Solent.

Signed: Dock and Harbour Master.

Notice to Mariners No. 3 of 1984.

The Merchant Shipping (Tankers)
(EEC Requirements) Regulations 1981
Isle of Wight Pilotage District

1. Notice is hereby given that the Merchant Shipping (Tankers) (EEC Requirements) Regulations 1981 (SI 1981 No. 1077) came into operation on Thursday, 15th October, 1981.

2. Application.

These Regulations apply to all tankers of 1,600 g.r.t. or over which:

(a) are carrying a cargo of chemicals, gas or oil in bulk; or

(b) having previously carried such a cargo, have discharged that cargo, but whose tanks are not free of vapours given off by residues of such cargo, and have an atmosphere which has not been rendered non-flammable.

The Regulations do not apply to any ship belonging to Her Majesty or owned or operated by any State and used, for the time being, only on the non-commercial service of that State.

3. Reporting.

The Master of a tanker to which these Regulations apply shall at least 24 hours in advance of entering the Isle of Wight Pilotage District notify the Dock and Harbour Master Southampton the following information by telegram or telex using one of the following modes:

Telegraphic Address:	Dock and Harbour Master Southampton
Telex Number:	477410 – Btp Ds G
VHF Radio:	Southampton Port Radio Call Sign SPR, Channel 12, 14.
Telephone Number:	0703 – 23844 extn: 2440

(a) the name and call sign of tanker;

(b) the country in which the tanker is registered;

(c) the overall length, draft and beam of the tanker;

(d) the harbour where the Master intends first to berth the tanker;

(e) unless the Master does not propose to berth the tanker at the harbour which is being entered, the ETA at the pilot station or harbour limits of the harbour where the Master intends first to berth the tanker;

(f) the nature and quantity of any chemicals, gas or oil carried by the tanker;

(g) whether the tanker is fitted with an inert gas system;

(h) whether the inert gas system, if fitted, is fully operational;

(i) whether the cargo tanks have an atmosphere which has been rendered non-flammable;

(j) whether or not a certificate has been issued in respect of the tanker;

(i) if its cargo includes chemicals, that it complies with the IMO Code for Ships carrying Dangerous Chemicals; and

(ii) if its cargo includes gas, that it complies with the IMO Code for Existing Ships carrying Liquefied Gases or with the IMO Code for Ships carrying Liquefied Gases;

(k) any defect in the hull, machinery or equipment of the tanker, which may:

(i) affect materially the safe manoeuvrability of the tanker; or

(ii) affect materially the safety of other vessels in or in the vicinity of or in the approaches to the harbour; or

(iii) constitute a hazard to the marine environment; or

(iv) constitute a hazard to the persons or property on land or in the vicinity of the harbour.

4. The Master of a tanker to which the Regulations apply shall in advance of entering the Isle of Wight Pilotage District forthwith notify the Dock and Harbour Master Southampton of any change in the information notifiable under item 3 (k) above which occurs after such information was notified to the Dock and Harbour Master Southampton.

5. While a tanker to which these Regulations apply is within the Port of Southampton or the Dockyard Port of Portsmouth, the Master of that tanker shall notify the Dock and Harbour Master Southampton or through him the Queen's Harbour Master Portsmouth of any change which occurs in the information where appropriate notifiable under items 3 (k) and 4 above.

6. Check List.

The Master of a tanker to which these Regulations apply shall make available a check list in the form set out in the Schedule contained in the Regulations and completed in respect of the tanker to the Dock and Harbour Master Southampton or the Queen's Harbour Master Portsmouth if they so request.

7. Isle of Wight Pilotage District.

The Isle of Wight Pilotage District comprises that part of the sea with all harbours, docks and tidal waters within an imaginary line drawn from a point 1 mile true South from low water mark of ordinary spring tides at Selsey Bill to a position in Lat. 50° 40′ N., Long. 00° 57′ W., thence to a point 1 nautical mile true South from low water mark of ordinary spring tides at Whitehorse Culver Cliff in the Isle of Wight thence to a point 1 nautical mile true South from St. Catherine's Point and thence direct to Peverell Point but excluding any docks belonging to the Admiralty and any part of this area which lies within the Poole Pilotage District.

8. Authentication.

This Notice where applicable within the Port of Southampton is the direction of the Dock and Harbour Master as authorised pursuant to Section 52 of the Harbours, Docks and Piers Clauses Act 1847 and the Southampton Harbour Act 1939. The Port of Southampton is as defined in the Southampton Harbour Act 1887 as amended by the River Hamble Revision Order 1969 and extended by the British Transport Docks Act 1972. (The limits of the Port of Southampton are as shown on Admiralty Charts).

9. This Notice where applicable within the Dockyard Port of Portsmouth is the direction of the Queen's Harbour Master as authorised pursuant to the Dockyard Ports Regulation Act 1865, and the Dockyard Port of Portsmouth Order 1978.

(The limits of the Dockyard Port of Portsmouth are as shown on Admiralty Charts).

10. These Directions have been jointly promulgated by the Queen's Harbour Master Portsmouth and the Dock and Harbour Master Southampton.

Signed: Dock and Harbour Master.

Notice to Mariners No. 5 of 1984.

Port Operations. R/T Communications
and Radar Information

1. Notice is hereby given that the following Port Operations, VHF R/T communications and radar information procedures are effective in the Port of Southampton and its approaches.

2. There is no alternation to the availability of the existing services including the provision of Harbour Radar Information. Messages on Port Operations Channels must be restricted to the movement and safety of ships and the safety of life.

3. Marine Incidents and Accidents.

A vessel involved in a marine incident or accident must immediately report this to Southampton Port Radio and state whether or not assistance is required.

4. The Solent and Southampton Water Marine Emergency Plan.

This plan has been prepared to deal with any serious marine accident occuring in the Solent or in the Ports of Portsmouth or Southampton and is intended to ensure that adequate Service and Civilian resources are made available to deal with any emergency.

5. VHF R/T Communications.

(a) The Port Signal and Radar Station Southampton, call sign SPR, maintains a continuous watch on Channels 16, 14, 12, 18, 20 and 22 and monitors Channels 71 and 74.

(b) The Queen's Harbour Master Portsmouth, call sign QHM, maintains a continuous watch on Channels 11, 13 and 73.

(c) Vessels should maintain a continuous watch on VHF R/T Channel 12 or 14 and report to SPR as appropriate when passing the designated reporting points, and, in addition, if embarking a Pilot, when the Pilot has boarded.

(See "Appendix" on page 1529.)

6. Co-Ordination of Shipping Movements.

(a) The Duty Operations Officer responsible to the Dock and Harbour Master, Southampton maintains a continuous watch in the Port Signal and Radar Station. Tel: 0703 – 23844, extn: 2440.

(b) The movement of vessels and the general situation in the Port and its approaches is monitored continuously at Southampton Port Signal and Radar Station whence information will be passed to Masters and Pilots. The full exchange of information is essential to efficient operations and the need to maintain R/T communications with SPR cannot be over-emphasised.

(c) In co-ordinating the movement of vessels it may be necessary the Duty Operations Officer to require certain vessels to rema alongside or at anchor, or to regulate their time of entry into the Po their departure or progress.

7. Movement Reporting Procedure.

(a) All vessels in excess of 20 m. length, bound to or from or passi through the Port of Southampton, vessels bound to or from Portsmou or passing through the Dockyard Port of Portsmouth and vessels boun to or from anchorages or other locations in the Solent are required communicate by VHF R/T with SPR.

(b) Inward bound vessels should establish contact when approachi Nab or Needles.

(c) Vessels outward bound from the Port of Southampton shou establish contact at least 15 minutes prior to leaving the berth.

(d) Vessels clearing Portsmouth Harbour should establish conta when passing Southsea War Memorial.

(e) Vessels leaving an anchorage either inward or outward boun should first establish contact at least 15 minutes before gettin underway.

(f) Vessels bound to or from Portsmouth Harbour are also required report to QHM. See Dockyard Port of Portsmouth Local Notices Mariners.

8. Movement Reporting Points.

(a) Vessels bound to or from the Ports of Southampton an Portsmouth, or other destination in the Solent or passing through th Solent are required to report by VHF R/T when passing Movemen Reporting Points indicated on Admiralty Charts.

(b) The initial report by all inward bound vessels should include:

1. Ship's Name or IRCS.
2. Deepest draft.
3. Destination and Last Port of Call.
4. ETAs at various locations as requested.
5. Deficiencies of ship, navigation equipment, machinery and carg
6. Tankers in addition should report any change in the informatio notifiable under the Merchant Shipping (Tankers) (EE Requirements) Regulations 1981 and confirm that a check li has been completed.

(c) The initial report by outward bound vessels from the Port Southampton should include:

1. Ship's name or IRCS.
2. ETD.
3. Deepest draft.
4. Other information requested.
5. Where applicable, tug working Channel to be used.
6. ETAs at various locations as requested.
7. Next Port of Call.

(d) The initial report by vessels from anchorages and other locatio in the Solent should follow the procedure for inward or outward boun vessels as appropriate.

9. Harbour Patrol.

The Operations Officer is assisted by a Patrol Officer who maintains continuous harbour patrol. To assist Mariners in identifying the Harbou Patrol Launch at night, a blue all round light is exhibited at the mas head. The Harbour Patrol is fitted with VHF R/T call sign SP.

10. Height of Tide.

Automatic tide gauges are located at Calshot, Dock Head and Prin Charles Container Port. Tidal information is available on request and recorded.

11. Wind Speed and Direction.

Wind speed and direction information is available on request and recorded.

12. Harbour Radar.

(a) Remote controlled radar Stations are situated at Calshot Spit an Hythe and depicted on Admiralty Charts. Each station is fitted with 25 ft. horizonal aperture scanner 110 ft. above MHWS searching over 0.3° horizontal and 4° vertical beam width rotating at 20 rpm in winds to 80 knots.

(b) Vessels can be supplied with continuous information relating their progress, approach to navigation marks and other vessels, trans and turning marks, channel margins and the manner in which the vess is progressing round the West Bramble and Calshot turns. Manoeuvri instructions, however, will not be given unless specifically requested the Master or Pilot.

(c) Computer Assisted Measurement System.

This system employs a small digital computer and a variable mar which can be placed over any target on the display to provide following information:

1. The bearing and distance between the scanner and a select target.
2. The bearing and distance between any two targets.
3. The course made good by a selected target.

Facilities are available to store up to 24 targets such as Navigat Buoys, vessels at anchor, etc. The bearing and distance from a selected target to any one of the stored targets can be quickly obtai and the closest point of approach determined.

(d) Accuracy of Bearing and Distance Measurement.

Bearing accuracy from point A to point B is to 0.5° and distances are 25 m. or to 0.3% of the most distant echo from the scanner, whichev the greater.

(e) Radar Reference Line.

An alternative position fixing system indicates the position of a ves relative to a Reference Line electronically produced as points 1 ca apart on the radar display linked to the Calshot Radar only. The Ra Reference Line is shown on the Admiralty Charts of the area as a brok line with points at 1 cable and circles where the line changes directio

A vessel underway will, upon request, be given her position using the distance between the points of the Reference Line as a scale to estimate the position:

1. As a distance RIGHT or LEFT of the Reference Line relative to her direction of progress.
2. As a distance along the Reference Line to a navigational mark or marks in transit.

The position of another vessel will be given:

3. As a distance from the Reference Line ON THE SAME SIDE or ON THE OTHER SIDE.
4. As a distance along the Reference Line.

Note: In areas where a Reference Line is not shown progress will be indicated relative to navigational marks and other vessels.

(f) Bearings and Distances.

Bearings and distances will be related to the bow (stem) of the vessel concerned unless otherwise stated.

13. This Notice is issued in agreement with QHM Portsmouth.

Signed: Dock and Harbour Master.

AUTHORITY: Associated British Ports, Dock House, Canute Road, SO9 1PZ. *Tel:* (0703) 23844. *Telex:* 47334. *Contact:* W. D. Noddings, Port Director. A. Pidduck, Deputy Port Director.

AGENT: Keller Bryant & Co., Ltd., Havelock Chambers, 21/22 Queen's Terrace, Southampton. Telephone: (0703) 228566/7/8/9. Telex: 47568. Cables: Keller Southampton. After hours telephones: (0703) 734055, (0703) 557037, (0703) 225585.

APPENDIX:

VHF R/T COMMUNICATIONS SCHEDULE

Station	*Channel No.*	*Frequency MHz*	*Details*	
Southampton Port Signal and Radar Station	16	156.80	Calling, Safety and Distress	Continuous Watch
	10	156.50	Department of Transport	Marine Pollution Control
	12	156.60	Port Operations	Calling and Working
Call Sign SPR	14	156.70	All vessels are required to establish R/T Contact with SPR on one of these Channels when approaching the NAB or NEEDLES inward, when passing SOUTHSEA WAR MEMORIAL outward from PORTSMOUTH and at least 15 minutes before leaving a berth or anchorage.	
	18	156.90 161.50	Port Operations	Selected Working and Harbour Radar Information
	20	157.00 161.60	Port Operations	Selected Working and Harbour Radar Information
	22	157.10 161.70	Port Operations	Selected Working and Harbour Radar Information
	71	156.575	Port Operations	Manoeuvring – Ship/Tug – Pilot/Berthing Master
	74	156.525	Port Operations	Manoeuvring – Ship/Tug – Pilot/Berthing Master
Queen's Harbour Master Portsmouth	11	156.55	Port Operations	Calling and Working – Commercial Vessels
Call Sign QHM	13	156.65	Port Operations	Calling and Working – HM Vessels
	73	156.675	Port Operations	Calling and Working – Dockyard craft
			Note: Consult Dockyard Port of Portsmouth N to M	
Southampton Patrol	16	156.80	Calling, Safety and Distress	Continuous Watch
Call Sign SP	12	156.60	Port Operations	Continuous Watch
	All	All	Maritime International VHF Band All Channels available as applicable for Port Operations and Maritime use.	
Pilots	16	156.80	Calling, Safety and Distress	
	9	156.45	Working Channel	
Tugs	16	156.80	Calling, Safety and Distress	
	10	156.50	Department of Transport	Marine Pollution Control
	12	156.60	Port Operations	
	14	156.70	Port Operations	
	19	156.95 161.55	Working Channels	Esso Marine Terminal Fawley and BP Oils Ltd. Terminal Hamble
	71	156.575	Manoeuvring	Ship/Tug – Pilot/Berthing Master
	74	156.725	Manoeuvring	Ship/Tug – Pilot/Berthing Master
Esso Marine Terminal Fawley	16	156.80	Calling, Safety and Distress	
	14	156.70	Working Channel	
	19	156.95 161.55	Working Channel	
BP Oil Terminal Hamble	16	156.80	Calling, Safety and Distress	Non-continuous Watch
	19	156.95 161.55	Working Channel	Non-continuous Watch

STORNOWAY: 58.12 N. 06.22 W. (See Plan Book)

PORT LIMITS: Now extended to a line from Southern end of Holm Island on the East to Rugh A'Bhaigh Vaine on the West – approximately 7.5 cables to seaward of Arnish Point Light.

PILOTAGE: Pilotage not compulsory. Vessels requesting Pilot request same with ETA. Boarding off Arnish Point Lighthouse.

ANCHORAGES: Anchorage in harbour between Goat Island and mouth of Creed River, 8 fathoms.

RESTRICTIONS: Entry night or day and at any state of tide. No bar on entrance.

MAX. SIZE: 400 ft. by 60 ft. by 22 ft. draft to berth alongside, 600 ft. length by 35 ft. draft for anchorage in bay.

HEALTH: The customary flying of "Q" flag.

Also see "Health – All Ports" before first U.K. port.

RADIO: Wick Radio or alternatively Oban Radio.

RADAR/VHF: R/T-VHF established in harbour, Channels 16 and 12. Emergency messages may be passed through Stornoway Coastguard on 81.8 m.

TUGS: No tugs available at port. Fishing vessels have been used, when necessary, for this purpose.

BERTHING: Vessels can be berthed at any time, provided berth is free.

Roll-on/Roll-off ferry terminal for Stornoway/Ullapool service in operation.

Depth of Water at Low Water Spring Tides: West side No. 1 Pier: 24.5 ft. shallowing to 12 ft. at junction of North Beach Quay. East side No.1 Pier: 24.5 ft. shallowing to zero at inward end. West side No. 2 Pier: 17.5 ft. shallowing to zero at inward end. East side No. 2 Pier: 16.5 ft. shallowing to zero at inward end. Inner Harbour decreases from 12 ft. at junction of Esplanade Quay to 8 ft. at upper end of Cromwell Street Quay.

STEVEDORES: Arranged by Agents on receipt of ETA.

MEDICAL: Advance notice desirable, Hospital facilities available in the town.

TANKERS: Normal safety requirements. One tanker berth only 15 ft. mean draft, max. length 220 ft.

DENSITY: Pratically always dead salt; 1025 density.

FRESH WATER: Fresh water available by hose at 15 t.p.h.

FUEL: 24 hours notice required.

GANGWAY/DECK WATCHMEN: Service of watchmen not necessary. Watchmen from shore may be employed if required.

OPENING/CLOSING HATCHES: Normally crew.

IDENTIFICATION CARDS: Not required.

CONSULS: French, Swedish, Norwegian; tel. Stornoway 2012, 2054, 3173 respectively.
SURVEYORS: Marine & Engineer Surveys (Hebrides) Ltd., Stornoway.
REPAIRS: Minor deck and engine repairs can be carried out locally.
DRY DOCKS: No dry dock but one slipway of 750 tons displacement.
REPATRIATION: Facilities exist for this service.
AIRPORT: 3 miles from port, served regularly by British Airways from Glasgow, Aberdeen and Inverness.
HOLIDAYS: New Year's Day, Christmas Day and all other local Bank Holidays. Cargo work can be arranged except New Year's Day. (No Sunday work.)
POLICE/AMBULANCE/FIRE: Police, Stornoway 2222 (can deal with all three services).
EMERGENCY CO-ORDINATION CENTRE: Stornoway Coastguard Tel: 2013 or 2014.
TELEPHONES: Can be arranged by prior application through Aberdeen office.
STORING: See "Prelims" page viii.

1. By truck. 4. Yes.
2. – 5. Notice No. 69.
3. Yes. 6. Yes.

GENERAL: ETA to be sent 24 hours beforehand so that necessary arrangements can be made.
AUTHORITY: Stornoway Pier and Harbour Commission, Amity House, Esplanade Quay, Stornoway PA87 2XS. *Tel:* (0851) 2688. *Cables:* Harbour Commission. *Contact:* General Manager or Harbour Master.
AGENT: Duncan MacIver Ltd., 3 Maritime Buildings, Stornoway PA87 2XU. Tel: (0851) 2012. After Hours: (0851) 2682, (08503) 219. Telex: 75363.

STRANRAER: 54.55 N. 05.02 W. (See Plan Book)

DOCUMENTS: As for other British ports.
PILOTAGE: Not compulsory.
ANCHORAGE: Deep water anchorage at Lady Bay.
MAX. SIZE: Largest vessel handled 420 ft. long. Working draft 15 ft.
HEALTH: See "Health – All Ports" before first UK port.
TUGS: Not available.
RADIO: VHF watch kept on Channel 16 at Sealink Scotland Ferry Terminal. Working Channel is 14.
BERTHING: *East Pier:* 3 berths dredged to 15 ft. at L.A.T. One with vehicular ramp.

Ross Pier: Length 500 ft. Dredged to 16 ft. at L.A.T. Double tier vehicular ramp at this berth.
CARGO GEAR: Portable crane of 10 tons capacity.
MEDICAL: Medical Centre and hospital in town.
FRESH WATER: Available at East Pier.
FUEL OIL: Limited quantities of oil can be supplied from road tankers.
REPAIRS: Small repairs can be carried out by local engineering firm.
GENERAL: Inshore lifeboat based at Stranraer.
AUTHORITY: *East Pier:* Sealink (Scotland) Ltd., Ferry Terminal, Stranraer Harbour, Stranraer DG9 8EL. *Tel:* (0776) 3531. *Telex:* 778125. *Cables:* Marine Rail Stranraer. *Contact:* Captain R. W. Bathgate, Shipping and Port Manager.

West Pier: Regional Council Harbour Master.

AGENT: See "Clyde Port".

SULLOM VOE: 60.27 N., 01.17 W. (See Plan Book)

GENERAL: The Port of Sullom Voe is a major deep water harbour. It is owned and operated by the Shetland Islands Council as Harbour and Pilotage Authority.

The Port Administration Building, from which all marine operations are monitored and controlled, stands on Sella Ness in position: Lat. 60° 26.8′ N., Long. 01° 16.5′ W.

Services offered by the port and financed through conservancy charges include port radar, navigational advice to Shipmasters, intensity controlled navigational lighting to assist berthings in poor visibility, meteorological advice, shore access gangways and speed of approach docking equipment. Services offered and financed through separate charging structures include pilotage and mooring boat services. Boat hire can be arranged for vessels anchored or standing off. The towage service is operated by a separate towage company and financed directly through towage charges.

The harbour is presently designed to accept tankers up to 365 m. LOA, with a draft of up to 22.6 m. and LPG carriers up to 260 m. in length with a draft up to 15.9 m. In addition to liquid bulk and LPG cargo, the port is designed to handle general, dry bulk, Ro-Ro and containerised cargo.

There are 2 entrances to Yell Sound. The primary Northern route, suitable for oil and gas tankers, lies on the Western side of Yell Sound and is marked by leading lights situated on Gluss Isle. The South Eastern approach is considered suitable for coastal traffic and vessels up to 200 m. LOA and having a draft of not more than 11.6 m.

Both routes merge at the entrance to Sullom Voe; the lead into the Voe is indicated by a sectored light situated at Skaw Taing and leading markers located on Fugla Ness. In the case of vessels other than coastal vessels, all manoeuvres South of Lamba Island will be assisted by tugs.

Ships will generally be berthed starboard side alongside at the oil loading berths. This will involve a 180° swing within the Voe; in a turning area marked by sectored lights which are located on Sella Ness and Scatsta Ness. Vessels may berth port side alongside during adverse wind conditions.

The turning area has a diameter of 800 m., and depth of 15 m. at LAT. For the purpose of manoeuvring within the pilotage district a minimum under keel clearance of 2.0 m. is required.

Although current rates of up to 7 knots may be experienced in areas of Yell Sound, records indicate that the maximum current likely to be experienced within Sullom Voe, on the deep draft route, is unlikely to exceed 1 knot.

The tidal range within the Harbour Area is 2.3 m. at Springs and 0.6 m. at Neaps. The main tidal current flows to the South on the flood and to the North on the ebb.

Note: Strong winds are frequently experienced at Sullom Voe and may be accompanied by sudden gusts from any direction. The prevailing wind direction is S.W.

It is essential that whilst alongside the jetty, moorings are tended carefully and regularly and conform with the recommended mooring pattern. (See "Plan Book".)

The Sullom Voe Oil and Gas Complex is located within the port limits on Calback Ness in position: Lat. 60° 27.5′ N., Long. 01° 17.0′ W., and is operated by BP Petroleum Development Limited on behalf of several oil company participants.

The oil reaching Sullom Voe through the Brent and Ninian Pipe-lines is collected from a group of oilfields located in the East Shetland Basin.

CONDUCT OF VESSELS ENTERING YELL SOUND:

a) Masters of tankers and gas carriers entering the Port of Sullom Voe are advised to refer to Charts BA 3298 and 3297.
b) Navigation within the Pilotage District is prohibited unless the vessel is mechanically and navigationally sound, anchors have been cleared away and there is a responsible person who can speak and understand English on the bridge.
c) The berthing of tankers and gas carriers is suspended when wind speeds are consistently gusting in excess of 30 knots. Masters will be advised by Port Control in the event of such suspension.
d) Vessels should afford a safe lee for the pilot boat during boarding and landing operations at the Northern Station – Reporting Point A ('Alpha').
e) At Reporting Point B ('Bravo') the Master should order the crew to stations fore and aft in preparation for securing tugs, while speed is reduced accordingly.
f) The bow and stern tugs will be made fast in the area North of Reporting Point C ('Charlie').
g) The alongside tugs shall be secured by bow lines as soon as possible thereafter.
h) The vessel's speed must not exceed 5 knots South of a line joining Skaw Taing and Trumba Point.
i) Standard practice requires vessels to be swung on arrival (except when weather conditions dictate otherwise) and berthed starboard side alongside the jetty designated (see "plans" for mooring guidelines).

Note: Tugs will use their own lines for securing.

MINIMUM REQUIREMENTS: In order to avoid delays, all vessels programmed for Sullom Voe should comply with the recommendations of the Council of the European Committee for Vessels Transiting Community Seaports, and be fitted with:

(i) Fully operational radar.
(ii) Fully operational VHF radio with Channels 16, 14, 20 12, 10, and 9.
(iii) Sufficient crew to handle tugs' lines and moorings efficiently.
(iv) Efficient propulsion and deck machinery.
(v) Efficient and adequate moorings to secure vessels safely.
(vi) Efficient signalling equipment.
(vii) Fully operational tachometer, rudder and helm indicators.
(viii) Efficient mooring stations communications systems.
(ix) An efficient anchor windlass and anchors.
(x) A complete and valid set of Safety Certificates.
(xi) All officers to be properly qualified and carry recognised certificates of competency.

Note: If any vessel cannot comply with any of the above, Sullom Voe Port Control should be advised prior to arrival or departure.

DOCUMENTS:
General Declaration (C13). In duplicate.
Ship's Stores Declaration (C14). In triplicate.
Crew Declaration (C142). In duplicate.
Small Parcels List (C143). Single copy (if appropriate).
Self-Declaration Deck Cargo (DC1). In duplicate (if appropriate).

When the vessel is not boarded on arrival the Master must arrange for 1 copy of each form to be lodged within 3 hours of arrival at the Custom Office, located in the Port Administration Building at Sella Ness.

PILOTAGE: Pilotage is compulsory within the Sullom Voe Pilotage District. Masters of British registered vessels of less than 1,600 g.r.t. may be eligible to sit an examination to gain a Pilotage Exemption Certificate under the conditions laid down in Section 11 of the Sullom Voe Pilotage Byelaws.

Vessels of less than 300 g.r.t. are exempt from compulsory pilotage under the conditions laid down in Section 12 of the Sullom Voe Pilotage Byelaws.

The district takes in the waters of Yell Sound and Sullom Voe, including all creeks, voes and inlets bounded on the North by a line drawn from the Northern extremity of the Point of Fethaland to the Northwestern extremity of Fogla Lee and in the S.E. by a line drawn from the Northwestern extremity of the Ness of Sound to the Northern extremity of Ulynarey Island and thence to the Northern extremity of Mio Ness.

All vessels entering or leaving the Sullom Voe Pilotage District are requested to contact Sullom Voe Harbour Radio initially on VHF Channel 16, whereupon they will be asked to change to a working Channel.

The traffic situation will be broadcast daily at 4 hourly intervals, commencing at 0000 hrs. local time on VHF Channel 20. Any vessel may, however, receive the traffic situation at other times on request.

Brief local weather forecasts will be broadcast at 0800 hrs. and 2000 hrs. local time on VHF Channel 20. Gale warnings will be broadcast when received and in the traffic broadcasts.

Any vessel intending to use the deep water channels marked by the leading lights of Gluss Isle, the white sector of Queyfirth Light, the white sector of Skaw Taing Light, the Fugla Ness leading lights or the Sella Ness leading light, for the purpose of fishing must report such intentions to Sullom Voe Harbour Radio and report at intervals not exceeding 2 hours while fishing.

Sullom Voe Harbour Radio maintains a continuous listening watch on the following VHF Channels: 16, 9, 10, 12, 14 and 20. Vessels should, where possible, refrain from using Channel 16 except for initial calling and Channel 10, which is designated for emergency purposes.

Pilots: Licensed Pilots are available on a 24-hour basis. A continuous VHF watch is maintained. Call sign "Sullom Voe Harbour Radio".

Pilot Boarding Areas: All vessels approaching Sullom Voe by the North Entrance and which require a Pilot and all vessels of 200 m. LOA and over should rendezvous with the Pilot in a position with Point of Fethaland light bearing 260° T×1.6 miles. Vessels of less than 200 m. LOA approaching Sullom Voe by the S.E. channel should rendezvous with the Pilot in position Lat. 60° 28.5′ N., Long. 00° 56.5′ W. with Firths Voe lighthouse bearing 260° T×7 miles.

Pilot Boats: The Authority has 3 boats for use at the Port of Sullom Voe.

(i) "Sullom Mareel" LOA 16.2 m., service speed 16 knots.
(ii) "Sullom Spindrift" LOA 19.8 m., service speed 20 knots.
(iii) "Sullom Shoormal" LOA 19.8 m., service speed 20 knots.

The main construction of all boats is of G.R.P. They are fully equipped with modern navigational aids.

The freeboard of each boat is approximately 1.5 m.

Pilot Ladder Requirements: All vessels calling at the Port of Sullom Voe must comply with "The Merchant Shipping (Pilot Ladders) Rules 1975" (S.I. 1046) and (Pilot Ladders) Amendment Rules 1977.

The following points are stressed:

(i) The rigging of pilot ladders and the embarkation and disembarkation of Pilots thereby shall be supervised by a responsible officer of the ship.
(ii) Every pilot ladder shall be secured in a position clear of any possible discharges from the ship, and so that each step rests firmly against the ship's side.
(iii) Every pilot ladder shall be secured in a position where the Pilot can gain safe and convenient access to the ship after climbing not less than 1.5 m. and not more than 9.0 m.
(iv) Whenever the distance from the water to the point of access to the ship exceeds 9.0 m., access to the ship must be by means of a combination of a pilot ladder and an accommodation ladder, or an equally safe and convenient means.
(v) Adequate lighting shall be provided at night so that the pilot ladder overside and also the position where the Pilot boards the ship shall be properly illuminated.

Pilot Hoists: Pilots are not obliged to use pilot hoists. Any use of these devices must only be at the option of the Pilot, and in general, pilot hoists are not acceptable for the boarding and landing of Pilots at Sullom Voe.

Any pilot hoist offered must, in any case, comply fully with IMO recommendations on performance standards for mechanical pilot hoists and also with the recommendations of the European Maritime Pilots Association.

Note: Because of the low ambient air temperature combined with strong wind conditions, experience has shown that it is not uncommon for pilot hoists driven by compressed air to freeze. Careful attention should be paid to this equipment during the Winter months.

Pilot Boarding Arrangements: In all normal circumstances the boarding and landing of Pilots at Sullom Voe will be carried out by the Authority's, pilot vessels.

Sometimes sea conditions at the North boarding station prevent the boarding and landing of Pilots by boat even though wind speeds may be within operational limits. During such periods, helicopters are used at the discretion of the Authority, to carry out Pilot transfer by winching. Such operations have hitherto been carried out on an ad-hoc basis but arrangements have recently been formalised to increase their effectiveness.

Certain criteria are important in relation to the use of helicopters for Pilot transfer by winching and these are as follows:

1. The service is available only when weather conditions preclude the use of boats.

2. The service is available only during local airport opening hours which are generally 0730-2030 weekdays and 1045-1430 on Sundays.

3. The service is available only to crude carriers and combination carriers provided with approved helicopter operating areas. It is not available to LPG carriers.

4. All operations are carried out strictly in accordance with the International Chamber of Shipping Guide to Helicopter/Ship operations and all vessels served by this means are required to observe the provisions set out in that document.

5. Individual agreement of Owners and/or Masters of vessels is obtained on each occasion the service is used.

6. Vessels are not generally serviced on a single vessel basis but this may occur. Generally several sailing and arriving vessels will be serviced simultaneously by one helicopter for reasons of economy.

7. No extra charge accrues to the vessel when helicopters have to be used because of weather conditions. The regular and published boarding and landing fee is applied.

8. Helicopter operations are co-ordinated by Sullom Voe Harbour Control. Vessels served should follow instructions issued by Port Control to facilitate transfers when such operations are in progress.

9. Helicopters used are Sikorsky S61N aircraft operated by British Airways Helicopters.

10. Only experienced aircrew fully qualified in winching operations are used and Marine Pilots of this Authority are all experienced in this mode of transfer and trained in accordance with Section 8(h) of the ICS Guide to Helicopter/Ship operations.

APPROACHES: *Routeing and Aerial Surveillance in Shetland Waters.* Vessel routes in Shetland Waters:

Applicable to all tankers, combination carriers and LPG vessels calling at Sullom Voe.

Shetland Islands Council, conscious of the dangers to navigation around the Shetland coast, due largely to outdated surveys, offshore obstructions, strong tides, rapid weather changes and the presence of fishing vessels, vigorously discourages navigation within 10 miles of the coastline.

An agreed procedure has been reached between the Oil Industry and Shetland Islands Council of which the following is an extract:

1. Masters are strongly recommended to keep at least 10 miles off the Shetland Islands, including Foula and Ve Skerries, when approaching or leaving Yell Sound. Since Fair Isle is part of Shetland Islands it is recommended that vessels navigate the Fair Isle channels approximately midway between Fair Isle and either Mainland Shetland or North Ronaldsay, Orkney.
2. It is further recommended that passage between off-lying islands/skerries etc., including Foula and Mainland Shetland should not be attempted.
3. For the final approach to/departure from Yell Sound, vessels are strongly recommended to navigate on the offshore side of the boundaries joining the following co-ordinates:

When approaching from/proceeding to the West:

A.	Lat. 60° 42.5′ N.	Long. 01° 42′ W.
B.	Lat. 60° 42.5′ N.	Long. 01° 22′ W.
C.	Lat. 60° 40.0′ N.	Long. 01° 17′ W.

When approaching from/proceeding to the East:

D.	Lat. 60° 40.0′ N.	Long. 01° 14.0′ W.
E.	Lat. 60° 56.5′ N.	Long. 01° 14.5′ W.
F.	Lat. 61° 01.5′ N.	Long. 00° 59.5′ W.
G.	Lat. 61° 01.5′ N.	Long. 00° 48.0′ W.
H.	Lat. 60° 56.5′ N.	Long. 00° 27.0′ W.

4. Vessels which have permission to use the pilot station at the S.E. entrance to Yell Sound are requested to navigate as follows:

A. Vessels approaching the Shetland Islands from the South and making for the pilot station at the S.E. entrance to Yell Sound or wishing to anchor in Colgrave Sound are advised to navigate to a position 10 miles East of Out Skerries before altering course to the pilot station or to Colgrave Sound.

B. Vessels approaching from the North and making for the pilot station at the S.E. entrance to Yell Sound or wishing to anchor in Colgrave Sound are advised to navigate to a position 10 miles East of Fetlar before altering course to the pilot station or Colgrave Sound.

5. Where, for any reason of safety or emergency, it is not possible to comply with the foregoing, you are required to notify immediately your intentions with reasons, to Sullom Voe Port Control by VHF Channel 16 or via Agents. Charts should not be cleaned off until berthed at Sullom Voe to assist checking by Port Authority.

ANCHORAGES: There are no suitable anchorages available for large tankers in the Port of Sullom Voe.

However, LPG carriers of less than 180 m. LOA may be anchored in a designated area within the harbour at the discretion of the Harbour Master.

Where Masters are faced with an extending berthing delay they should be guided by Charts BA 3059 and 3293 in taking up a secure anchorage in Colgrave Sound, referred to in 'North Coast of Scotland Pilot' page 99. VHF communication between Sullom Voe and Colgrave Sound is good.

Masters should beware of 2 submarine oil pipe-lines on the East Side of Shetland shown on the latest charts and referrred to in 'North Coast of Scotland Pilot' pages 94 and 95.

Except when advised otherwise, Masters should proceed to a point 6 miles off Gruney Island (Lat. 60° 39′ 00″ N., Long. 01° 18′ 00″ W.). Thereafter, Masters should follow directions in 'North Coast of Scotland Pilot' page 54, noting, however, that there are areas of poor VHF reception with Sullom Voe to the West and North of Yell Sound.

MAX. SIZE: See "Berthing", "Loading/Discharging Facilities" and "Liquefied Petroleum Gas Facilities".

HEALTH: The following Port Health procedure applies at the Sullom Voe Terminal.

The Master has no need to obtain health clearance unless:

(i) An authorised officer otherwise directs.
(ii) A death or illness has occurred as defined in the Public Health (Ships) (Scotland) Regulations.
(iii) An abnormal mortality among rats or mice on board has occurred.

Where it is necessary to obtain "Free Pratique" for health purposes, the Master should provide the following documents:

(i) Maritime Declaration of Health.
(ii) A list of passengers and crew leaving the ship, together with the addresses they are going to in the United Kingdom.

Derat Exemption Certificates: The Sullom Voe Terminal is an "approved" Port, and Derat Exemption Certificates will be issued by the local Health Authority.

Also see "Health – All Ports" before first U.K. port.

RADIO:

ETA Requirements: Vessels bound for Sullom Voe are required to provide the Pilotage Authority with the following information.

(i) An estimated time of arrival at least 24 hours prior to arrival or on leaving the last port (whichever is later). In addition to this ETA Masters are to include the estimated time of crossing Lat. 58° 20′ N. and estimated longitude on crossing that latitude, and the intended inward courses and turnpoints to the Gruney Island pilot station. Vessels arriving from the North Atlantic or Northern North Sea should use a position 200 miles from the pilot station.

(ii) Confirm the vessel's ETA at least 6 hours before arrival at the seaward limit of the Pilotage District and thereafter notify any significant change in excess of 1 hour.
(iii) On coming within range of "Sullom Voe Harbour Radio", the ETA to be given by VHF.

Pre-Arrival Information: 24 hours prior to arrival, all vessels calling at Sullom Voe should cable "Portcontrol Sullomvoe" the following information:

(i) Ship's name and call sign.
(ii) Port of Registry.
(iii) Name of Master.
(iv) G.R.T.
(v) Summer deadweight (tonnes).
(vi) Length overall and beam (metres).
(vii) Draft fore and aft.
(viii) Whether to berth or in transit.
(ix) Whether loaded or in ballast. If loaded, nature and quantity of cargo.
(x) Whether vessel is carrying segregated ballast.
(xi) If so, quantity and where loaded.
(xii) Dirty ballast quantity (tonnes).
(xiii) Total ballast/bunkers/FW and stores as a percentage of the Summer d.w.t. (minimum acceptable 35%).
(xiv) Which pilot station on arrival.
(xv) Pilot boarding arrangements.
(xvi) Number of crew.
(xvii) Last Port of call.
(xviii) Does ship have a fully operational inert gas system?
(xix) Is there on board an IGS exemption certificate? (All vessels above 20,000 d.w.t., must have and use inert gas).
(xx) Are all cargo/slop tanks inerted to a maximum of 8% oxygen content (2% for LPG carriers).
(xxi) Is all navigation, safety, anchoring and mooring equipment fully operational and ready for use? If not, specify. All anchors to be cleared away on arrival at the pilot station.
(xxii) Confirmation to be given that vessels are complying in all respects with "The Merchant Shipping (Tankers) (EEC Requirements) Regulations 1981".
(xxiii) Details of inward courses (to be telexed 24 hours prior to arrival).

VHF: All shipping movements within the pilotage district are monitored from Port Control Room in the Port Administration Building at Sella Ness.

The Port Control Room is manned on a 24 hour basis by Marine Officers who are licensed Pilots.

These Marine Officers, in their capacity as Port Control Officers, maintain a continuous VHF and radar watch. They provide advice to Masters and Pilots on all navigational aspects (including weather forecasts) within the area, direct shipping movements within the port, and liaise with the Terminal Operator and emergency services.

The following VHF Channels are continuously monitored in the Port Control Room.

Channel 16	Calling, safety and distress.
Channel 9	Tanker pilotage, tugs and radar assistance.
Channel 10	Port emergency, fire or oil pollution.
Channel 12	Secondary Port Control working frequency.
Channel 14	Main Port Control working frequency.
Channel 20	Traffic and weather broadcasts.

The call-sign for Sullom Voe Pilots is "Sullom Voe Harbour Radio".

In addition, *Sullom Voe Oil Terminal* constantly monitors Channels 19 and 46 over which pre-arrival information concerning loading procedures will be given.

Since the Terminal has no direct access to Channel 16, initial contact should be made on Channel 19 using call sign "Sullom Voe Terminal".

It is emphasised that Masters should try to contact the Terminal as soon as possible prior to arrival at the pilot boarding area, so that loading information may be exchanged before commencing the inward passage through Yell Sound.

Control of Traffic: The Port Control Room directs the movements of all vessels within the Pilotage District and the Harbour Area. Overtaking and passing is prohibited in the deep water channel within an area bounded by a line joining Queyfirth Light and the Northern extremity of Lamba Island and a line joining Skaw Tang Light and the front leading light on Gluss Isle. With the introduction of LPG traffic, a further restriction on overtaking and passing has been included in the main tanker route as follows:

No vessel having an overall length in excess of 50 m. shall navigate so as to pass or overtake an LPG carrier underway anywhere within Yell Sound or Sullom Voe between lines drawn between the Northern extremity of Muckle Holm (Lat. 60° 35.1′ N., Long. 01° 15.8′ W. approximately) and the Northern extremity of the North Holm of Burravoe (Lat. 60° 35.4′ N., Long. 01° 18.2′ W. approximately) and between the Northern extremity of Lunna Holm (Lat. 60° 27.5′ N., Long. 01° 02.4′ W. approximately) and the Southern extremity of Heoga Ness (Lat. 60° 29.4′ N., Long. 01° 02.4′ W. approximately).

Reporting Positions: During the transit of Yell Sound, all vessels are required to report to Port Control when passing the following positions:

"A"	122.5°×1.5′ from Gruney Island Lt.	(60° 38.6′ N., 1° 15.3′ W.)
"B"	274°×0.5′ from Muckle Holm Lt.	(60° 34.9′ N., 1° 16.9′ W.)
"C"	094°×0.4′ from Queyfirth Lt.	(60° 31.5′ N., 1° 18.7′ W.)
"D"	270°×0.5′ from Skaw Taing Lt.	(60° 29.3′ N., 1° 16.7′ W.)
"X"	355°×1.25′ from Mossbank	(60° 28.5′ N., 1° 10.7′ W.)

The provision of additional reporting points in the S.E. entrance is under review.

RADAR: Full radar coverage exists for Yell Sound and Sullom Voe.

The main scanner is located on the hill of Vats Houllands (Lat. 60° 27′ 57″ N., Long. 01° 17′ 28″ W.) and is connected by microwave link to displays in the Port Control Room.

Port Control Officers maintain a continuous radar watch, and the transit of each vessel is monitored and recorded. Advice is available to vessels on request.

TUGS: At present a fleet of harbour tugs provide a towing service for vessels at the Port of Sullom Voe. These are stationed at the Sella Ness Jetty adjacent to the Port Administration Building.

The fleet is operated by Shetland Towage Ltd., a private company owned and operated by a joint venture between Shetland Islands Council, Clyde Shipping Company and Cory Ship Towage.

The fleet consists of 3 twin screw 3,800 h.p. vessels, each having a bollard pull of 55 tons. These vessels are fully equipped as fire-fighting tugs and pollution control vessels and were built by Hall Russell and Company Ltd., in Aberdeen, in 1978. Named after Shetland birds, they are:

"Stanechakker", "Swaabie", "Lyrie"

Two new additions to the fleet are Voith water tractors, built in 1983 by Ferguson Ailsa Ltd., at Port Glasgow. These vessels have twin 32G Voith units developing 4,000 b.h.p. and a bollard pull of 45 tons. Also given bird names, they are:

"Tirrick", "Shalder"

The use of tugs and their numbers will be as directed by the Harbour Master. Prior to arrival, vessels should ensure that heaving lines of adequate length and breaking strain are readily available to assist in securing the tugs.

Tugs will normally meet incoming vessels at a position North of Lamba Island. Officers and crew should be standing by to receive lines and all necessary tugs must be secured before the vessel's ability to manoeuvre becomes restricted.

When a vessel is berthing, tugs will be secured to the bow and stern of the vessel with towing lines and alongside in a push pull mode. Their mode of operation and disposition will be fully explained by the Pilot on arrival. Tug lines will normally be used throughout, either from towing hook or towing winch.

It is requested that wherever possible tug orders for movements before 0900 hrs. on a particular day shall be placed not later than 1700 hrs. on the preceding day.

BERTHING: Attention is drawn to the minimum under keel clearance of 1 m. required alongside and the minimum under keel clearance of 2.0 m. in the channel.

Ore/Oil and Ore/Bulk Oil vessels up to a maximum size of 300,000 tons Summer deadweight may berth at Sullom Voe. Oil tankers up to any extreme maximum of 350,000 tons Summer deadweight will be accepted.

Limiting Vessel Sizes:

No. 1 Jetty:	**Crude Oil Carriers**
LOA	170 m. to 280 m.
d.w.t.	18,000 tons to 120,000 tons
Berthing Displacement	100,000 tons (max.)
Depth alongside	16.9 m.(min.)
Max. allowed draft	15.9 m.
	LPG Carriers
LOA	140 m. to 260 m.
Capacity	10,000 cu.m. to 75,000 cu.m.

No. 2 Jetty:	**Crude Oil Carriers**
LOA	210 m. to 365 m.
d.w.t.	50,000 tons to 350,000 tons
Berthing Displacement	250,000 tons (max.)
Depth alongside	23.1m. (min.)
Max. allowed draft	22.1 m.

No. 3 Jetty:	**Crude Oil Carriers**
LOA	170 m. to 365 m.
d.w.t.	30,000 tons to 350,000 tons
Berthing Displacement	250,000 tons (max.)
Depth alongside	23.6 m. (min.)
Max. allowed draft	22.6 m.

No. 4 Jetty:	**Crude Oil Carriers**
LOA	170 m. to 365 m.
d.w.t.	30,000 tons to 350,000 tons
Berthing Displacement	250,000 tons (max.)
Depth alongside	23.6 m. (min.)
Max. allowed draft	22.6 m.

Note: (i) Vessels entering in ballast or partially loaded conditions should ensure that their draft does not exceed 13 m. as this is the draft normally allowed in the South Turning Area.

(ii) Where it is not possible for vessels to arrive with a draft of 13 m. or less, berthing will be carried out in accordance with the Harbour Master's directions.

Loading Systems:

No. 1	Crude	4×12 in.	Loading arms var. hydraulic connections.
	LPG	2×12 in. 1× 8 in.	Loading arms var. hydraulic connections.
No. 2	Crude	4×16 in.	Loading arms var. hydraulic connections.
No. 3	Crude	4×16 in.	Loading arms var. hydraulic connections.
		and 1×12 in.	Loading arm.
No. 4	Crude	4×16 in.	Loading arms var. hydraulic connections.

Manifold Heights:

	Heights above chart datum *Max.*	 *Min.*
No. 1 Crude	22.70 m.	1.80 m.
LPG	19.00 m.	3.50 m.
No. 2 Crude	31.30 m.	2.60 m.
No. 3 Crude (16 in. arms)	31.30 m.	4.23 m.
(12 in. arm)	19.90 m.	2.70 m.
No. 4 Crude	31.30 m.	4.23 m.

Maximum allowable pressure on lines and connections: 150 p.s.i.

Jetty Orientation:

No. 1	280°/100°
No. 2	135°/315°
No. 3	135°/315°
No. 4	145°/325°

Gangway: Shore tower type gangways are provided at all times. If for any reason, a shore gangway will not be available, ships will be advised in good time.

Maximum Loading Rate per Arm:

Crude:	12 in. loading arm	2,500 long t.p.h.
	16 in. loading arm	5,000 long t.p.h.
LPG:	8 in. loading arm	900 cu.m/hr.
LPG:	12 in. loading arm	2,100 cu.m/hr.

MOORING:

Oil Loading Berths: Four loading berths Nos. 1, 2, 3 and 4.

The loading berths are located in deep water on the Northern shores of Sullom Voe, adjacent to the Terminal complex at Calback Ness.

The berths are numbered 1 to 4 in sequence from East to West. Number 1 jetty has facilities for both crude and LPG carriers and can accommodate vessels up to 120,000 d.w.t. Numbers 2, 3 and 4 jetties have crude loading facilities only, catering for tankers up to an absolute maximum of 350,000 d.w.t. and bulk carriers (Obo's, Ore/Oil etc.) up to an absolute maximum of 300,000 d.w.t.

Each jetty is of conventional "T" shaped construction with 4 breasting dolphins in line with the jetty head. The mooring dolphins are offset from the line of breasting dolphins to provide an optimum lead for mooring lines. Vessels may land at a maximum angle of 8° to the jetty face. Quick release mooring hooks are fitted on all dolphins. For use with large vessels, quick release mooring pulleys have been fitted on No. 2, 3 and 4 berths. These pulleys, one at each end of the berth are designed to accept a ship's mooring wire in the form of a bight.

Large flexible rubber fenders are fitted to the outer faces of each breasting dolphin. Each has a generous energy absorbing capacity but the optimum speed of approach for the largest ship is indicated by a single green light on the speed approach indicator panel on the jetty head. This equipment shows by the following combination of coloured light signals the speed of approach of the ship toward the jetty measured separately at the two outer berthing dolphins:

GREEN
GREEN/ORANGE
ORANGE
ORANGE/RED
RED

Any colour combination except the red (i.e. any approach speed below 22 cm./sec.) is acceptable at berthing for vessels displacing up to 100,000 tons at jetty 1 and 250,000 tons at jetties 2, 3 and 4.

The 2 lateral "distance off" indicators each comprise of 20 fibre optic bars. Each bar element is switched separately at specified distances, all bars being illuminated at 99 m. In addition to indicating distance off, this system provides some indication of the vessel's angle of approach to the jetty face.

Each mooring operation will be assisted by two purpose-built mooring boats.

Special Direction 3/81 Tankers and Gas Carriers Mooring Requirements:

Note 1

Except with the permission of the Harbour Master, this Direction shall apply to all vessels in excess of 10,000 tons gross.

1. In vessels equipped with synthetic moorings or a mixture of synthetic moorings and wires, a minimum of 4 headlines/sternlines, 4 breastlines and 2 springs at each end should be used.

2. Under no circumstances should synthetic ropes and wires be used leading in the same direction, to the same dolphin.

3. Where wires are used they should be of a similar breaking load to that of the ropes.

4. If conditions 1, 2 and 3 cannot be complied with the loading arms must not be connected until alternative arrangements have been arranged with the Harbour Master and the Terminal Operator.

ACTIONS TO BE TAKEN IN SEVERE WEATHER CONDITIONS

5. At least 1 tug shall be called out to assist in keeping *any* vessel alongside when all the following conditions exist:

(a) Where the mean freeboard height of the vessel exceeds the mean draft,
(b) Where the wind is gusting to 50 knots or more and
(c) When the wind is from a direction in line with or inside the berthing line of the jetty.

6. At the time of suspending loading/deballasting operations because of deteriorating weather conditions, the Terminal Loading Supervisor will advise Port Control immediately of any vessels in the condition stated in 5(a) above.

7. When a tug is called out under the conditions stipulated in (5) above:

(a) The Terminal Loading Supervisor will notify the Master of the situation and request that the vessel be brought to a state of immediate readiness.
(b) With the exception of the Port Controller, such Pilots as are available will station themselves aboard those vessels which are considered to be most vulnerable.
(c) The Duty Harbour Master will be notified.

8. Notwithstanding anything contained in 1 – 7, the Duty Port Controller may, *after consultation with the Harbour Master*, call out such tugs as are required, at any time, if he feels the situation warrants this action. In the case of large vessels in light condition for example, it may be prudent in certain circumstances to call out the tugs when the wind off the berth is less than 50 knots. In such cases the Duty Port Controller should exercise his discretion.

General Mooring Requirements:

(i) Masters should ensure that mooring lines are in good condition, winch brakes or securing devices should be in efficient operating order and should have a holding power of at least 60% of the braking load of the vessel's mooring lines. (On vessels constructed before 1978 these conditions may be met by placing the winch in gear and applying power in addition to applying the brake).
(ii) Any known defects in the vessel's mooring system or limitation of mooring winch brakes should be reported to the Pilot and the Terminal before arrival in order that, if necessary, additional precautions may be agreed.
(iii) In order to avoid damage to loading arms and the serious consequences of oil pollution, the vessel should be kept close alongside at all times.
(iv) It is recommended that wires (or wires fitted with synthetic fibre rope tails of at least 25% greater breaking load to the wire), should be used for all mooring lines.
(v) Except with the permission of the Harbour Master, the following shall apply to all vessels in excess of 10,000 tons gross.
  (a) In vessels equipped with synthetic moorings or a mixture of synthetic moorings and wires, a minimum of 4 headlines/sternlines, 4 breastlines and 2 springs at each end should be used.
  (b) Under no circumstances should synthetic ropes and wires be used leading in the same direction, to the same dolphin.
  (c) Where wires are used they should be of a similar breaking load to that of the ropes.
  (d) If conditions a, b and c cannot be complied with the loading arms must not be connected until alternative arrangements have been agreed with the Harbour Master and the Terminal Operator.
(vi) Particular care should be taken to ensure sufficient transverse restraint from breast moorings. When synthetic fibre mooring lines are used, pre-tensioning of these lines on making fast will help prevent drift of the vessel away from the berth in "off the berth" wind conditions.
(vii) As soon as the vessel is secured, brakes on all mooring winches should be firmly applied. Winches must not be left on automatic tensioning. Full steam pressure or power to all mooring winches should be maintained at all times when alongside. On split drum mooring winches only one layer of rope shall be permitted on the working half of the drum.
(viii) An efficient watch must be maintained on the vessel's moorings at all times to ensure that all lines are properly tensioned and tended when required. The deck watch should make regular checks that mooring winch brakes are applied at the correct setting.
(ix) Masters should endeavour to ensure compliance with the mooring layout as advised by the Pilot. Large vessels should also use the "pulley" mooring hooks in the manner advised.
(x) Notwithstanding anything contained above, the Duty Port Controller may, after consultation with the Harbour Master, call out such tugs as are required, at any time, if he feels the situation warrants this action.

LOADING: *Connection of Loading Arms:* Crude: The connection of loading arms will be undertaken by shore personnel. Vessels should arrive with 12 in. or 16 in. ASA 150 manifolds, ready for connecting to the loading arms.

LPG: The connection of loading arms with be undertaken by shore personnel. The terminal carries a wide range of LPG reducers both ASA 150 and ASA 300, rating up to 12 in.

Masters should ensure that fire extinguishers are ready for use at the ship's manifold, in accordance with jetty regulations.

Crude Oil Storage: 16 conventional floating roof storage tanks are constructed, each with a capacity of 600,000 barrels. These provide storage facilities in the event of port closures and ensure sufficient stocks to enable tankers to load without delay.

The storage tanks have been constructed with bases as much as 30 m. above sea level, to allow gravity loading. However 5 oil loading pumps are installed to increase the loading rate as may be required by the vessel.

Loading Rates: A maximum loading rate of 30,000 t.p.h. can be provided by the Terminal with a maximum of 20,000 t.p.h. to any one berth.

The LPG loading system delivers up to 3,000 cu.m. per hour.

Cargo Measurement: Meters are installed for cargo measurement.

Early Departure Procedure: An early departure procedure is operated at the Sullom Voe Terminal.

LIQUEFIED PETROLEUM GAS FACILITIES: There is a single LPG insulated pipe-line from the LPG storage area to Jetty No. 1 for tanker loading. The LPG tankers using Jetty No. 1 will range in size from 10,000 to 75,000 cu.m. capacity and they will transport butane and propane under refrigerated conditions as in the onshore tankage.

Navigation, Mooring, Berthing: Except by permission obtained from the Harbour Master, no LPG ship shall at any time be navigated in, lie on, or be moored in any part of the harbour.

No LPG ship shall be anchored or moored except
(a) at a quay duly approved by the Harbour Authority
or
(b) in such position as the Harbour Master shall from time to time direct

and no LPG ship shall be removed from such last mentioned position except in accordance with the order or permission of the Harbour Master or for the purpose of leaving the harbour forthwith.

An LPG ship shall at all times lie safely afloat.

While an LPG ship is at a quay
(a) it shall be securely made fast as close alongside as possible in a manner approved by the Harbour Master.
(b) its moorings shall be adjusted from time to time to allow for the rise and fall of the tide and for the loading and discharging of cargo.

Except in accordance with such conditions as may from time to time be prescribed by the Harbour Master, no ship or harbour craft shall, when moored, unmoored or anchored, lie or pass within 30 m. of any LPG ship which is moored or anchored, without permission of the Harbour Master.

Loading and Discharging: All jetty LPG drains and ships' scuppers whereby LPG can in case of spillage escape to the Harbour shall be open before loading or discharging commence and shall be kept open during the whole period of such operations.

All vessels calling at Sullom Voe Terminal must be in possession of a certificate of fitness under the terms of the IMO code for the construction and equipment of ships carrying liquefied gases in bulk, or be in possession of an appropriate Classification Society's Certificate.

Also see "Report" dated October 1983.

DRY CARGO FACILITIES:

Construction Jetty: A concrete pier suitable for coastal traffic is located in Garths Voe, East of No. 1 jetty.

This pier, orientated on a 108°/288° axis is 100 m. long and can accept ships on both the North and South faces.

The North Berth is equipped with a fixed Ro/Ro ramp which has a width of 10.7 m., a total length of 23.7 m. and a fixed gradient of 1:22. The height of the sill is 1.67 m. above MHWS.

The pier is well fendered with patent fenders and tyres. The depths at the pier range from 9.9 m. at the Eastern extremity, rising to 3.9 m. at the Ro/Ro ramp.

Bunkers can be supplied by road tankers to vessels using this jetty.

There is no permanent dock labour force available on site at Sullom Voe. However, stevedoring services can be obtained as and when required from Lerwick, arrangements for which should be made through the local ships' Agents or receivers of cargo, as appropriate.

Garths Pier: This 2 finger jetty is situated adjacent to Sella Ness Industrial Estate.

The inside berths have a length of 41 m. and the outside berth a length of 65 m. Each finger is 7.3 m. wide. There is a depth of 4 m. alongside for the lengths stated; thereafter the depth decreases rapidly.

Graven Pier: A small concrete fishing pier is situated on the Southern shore of Garths Voe. The pier has been designated as an unsafe structure and must not be used. Vessels previously using Graven Pier should now use Garths Pier.

Tug Jetty: Harbour tugs and pilot boats are stationed at an "L" shaped jetty located on the Southern shore of Garths Voe adjacent to Sella Ness. This jetty, of cellular design is constructed of concrete and steel.

Fendering arrangements consist of used car tyres suspended at intervals along the jetty face. This pier is suitable for coastal traffic but is not used as such on a regular basis, except for discharge of fuel oils to the Graven storage facilities.

The present minimum depth off the North face of the jetty is approximately 6.9 m.

Duty paid gas oil available from bunkering points on this jetty.

BALLAST:

Ballast Requirements: For the purpose of manoeuvring, all vessels are required to maintain a reasonable ballasted condition, subject to the requirements specified in the section dealing with Oil Pollution Surveillance above.

Vessels should carry sufficient ballast so that the propellor remains immersed whilst maintaining a reasonable stern trim.

Masters are advised that the Port Authority requires, unless otherwise directed by the Harbour Master, that the propellor of any ship to be immersed at all times when vessels are alongside. When operations permit, the proportion of cargo loaded to ballast remaining onboard must be such as to ensure that the vessel can be safely manoeuvred at any time whilst in the harbour. It must be understood that shifts of wind and changes of wind force in Sullom Voe are at times violent and the adoption of an adverse trim in relation to the ship's optimum manoeuvring characteristics will not be accepted.

Ballast Reception Facilities: It is prohibited to discharge any ballast other than segregated clean ballast into the waters of Sullom Voe.

All dirty ballast or non-segregated ballast will be discharged ashore for treatment.

The Terminal can accept ballast whilst providing the vessel with cargo. Ballast will initially be pumped into settling tanks where excess oil will be skimmed off into recovered oil tanks. The remaining ballast will undergo further treatment before being discharged into Yell Sound. The ballast water will be monitored throughout the cleaning process.

Inert Gas: A random check of the quality of the inert gas in 3 of the vessels' tanks will be made on arrival longside to ensure the vessel complies with the statutory requirements regarding inert gas. If any of the tanks are found to have an oxygen content in excess of 8% the vessel will be required to vacate the berth and return to sea to complete inerting.

Discharge of Dirty Ballast Water: The discharge of ballast water from oil cargo tanks or any ballast water containing quantities of oil or high levels of mineral or chemical pollutant, into the waters of the harbour is prohibited.

The discharge of ballast water from segregated or permanent ballast tanks into the waters of the harbour will be permitted provided that:–

1. The Master of the vessel advises the Harbour Authority prior to arrival:
   - (a) The place at which the ballast was taken.
   - (b) The quantity and disposition of the ballast.
   - (c) That to his knowledge the ballast is free from oil contamination.
2. Samples have been taken and analysed by the Terminal Operator. Hydrocarbon level to be 5 p.p.m. or less.
3. The Master of the vessel advises the Harbour Authority:

On each occasion he intends to discharge the ballast and at least 30 minutes before commencing discharge.

- (i) The time at which he intends commencing deballasting, and
- (ii) The time at which he expects to complete deballasting.

The Oil Pollution Control Officer of the Harbour Authority will on occasions board vessels carrying segregated ballast to obtain samples. Analysis will be made of these samples to ascertain the quantity of hydrocarbon, colliforms and heavy metal pollutants within the ballast. The Harbour Authority may, as a result of information so obtained, refuse permission for the discharge of segregated ballast water taken on board in certain locations.

The discharge of segregated ballast is not to commence before permission has been received from the Loading Supervisor. He will have:

- (i) confirmed with the laboratory that the hydrocarbon level is 5 p.p.m. or less;
- (ii) advised Port Control that the discharge of segregated ballast is about to commence.

MASTERS ARE STRONGLY ADVISED TO CLOSELY MONITOR THE DISCHARGE OF SEGREGATED BALLAST AT REGULAR INTERVALS TO ENSURE THAT OIL IS NOT ENTRAINED IN THE BALLAST WATER.

OIL POLLUTION SURVEILLANCE: Only clean ballast contained in tanks completely segregated from main cargo tanks will be allowed to be discharged into the Harbour, but then only after testing by the Terminal Operator and approval by the Port Authority.

Recent pollution of beaches and serious damage to wildlife around the shores of Orkney and Shetland suggests that certain vessels have disregarded the IMO Conventions on Oil Pollution and discharging dirty ballast whilst approaching or immediately after sailing from Sullom Voe.

Such procedures cannot be condoned by the UK Department of Trade, Local Authorities or the Terminal Operator, and with the object of preventing this practice (which is contrary to internationally agreed rules) air surveillance of all shipping in waters around Orkney and Shetland has been introduced.

As detailed in the section entitled "ETA Requirements" (see "Radio"), Masters are requested to advise Sullom Voe Port Control (Telex: Sulvoe 75142. Telegraphic Address: Portcontrol Sullomvoe) of their ETA 24 hours in advance of arrival. In addition, this message is to include the estimated time of crossing Lat. 58° 20′ N., Longitude on crossing this Latitude, and the intended inward courses and turnpoints to the Gruney Island Pilot Station (Lat. 60° 38.6′ N., Long. 01° 15.3′ W.). Vessels arriving from the North Atlantic or Northern North Sea should use a position 200 miles from the pilot station.

Prior to sailing from Sullom Voe, all vessels are requested by the Port Authority to indicate intended outward bound courses and turnpoints until South of Lat. 58° 20′ N. or 200 miles from the pilot station as appropriate. This should be detailed on the Tanker Safety Checklist provided by your Agent.

Any vessel sighted discharging dirty ballast will be immediately reported to the UK Government Authorities for appropriate action to be taken. In such circumstances, vessels may be liable to extensive delay until investigations have been completed.

Prevention of Oil Pollution: Prior to arrival, vessels are requested to ensure that all crew members are conversant with the anti-pollution regulations, which must be complied with at all times.

Principal causes of pollution are leaking ship side valves, cargo/bunker overflows and pumping engine room bilges. Therefore it is recommended that sea valves, overboard discharges (which should be shut) and ballast/cargo/bunker/bilge operations are checked by the Chief Officer and the Chief Engineer before arrival. Scuppers must be plugged on main and poop decks in respect of vessels loading/discharging bulk oil.

On arrival the terminal will give all assistance necessary but are empowered to take action in the event of contravention of pollution prevention requirements.

Masters must advise if their vessel has sustained any damage which could cause oil pollution and confirm any known oil losses from hull or sea valves.

Vessels are required to arrive at the Sullom Voe Terminal with a total deadweight of net less than 35% of summer d.w.t including bunkers, fresh water and stores.

Vessels should confirm in advance the amount of ballast, indicating the quantities of segregated ballast, and cargo tank ballast, separately. (See "Radio" – Pre-arrival information).

MEDICAL: Medical attention for ship's crews is available on request through Agents. All specialist services including inoculation and vaccination are available.

FUEL: There are no bunkering facilities available for tankers calling at the Port of Sullom Voe.

FRESH WATER: Potable water can be supplied to tankers at Sullom Voe in an emergency.

CUSTOMS: A selective system of boarding commercial vessels arriving from a non-U.K. port, will apply at the Sullom Voe Terminal.

CONSULS: In Lerwick.

Denmark	(C. W. L. Aitken)	106a Commercial St.	Lerwick 3057
Finland	(F. Garriock)	106a Commercial St.	Lerwick 3057
France	(W. H. Stubbings)	106a Commercial St.	Lerwick 3057
Germany F.R.	(M. M. Shearer)	Garthspool	Lerwick 2556 Telex 75176
Iceland	(L. Robertson)	12 Commercial St.	Lerwick 4121
Netherlands	(A. G. Beattie)	106a Commercial St.	Lerwick 3057
Norway	(Mrs. A. E. Sinclair)	106a Commercial St.	Lerwick 3057
Sweden	(M. M. Shearer)	Garthspool	Lerwick 2556 Telex 75176

REPAIRS: Engineering facilities are available to carry out repairs afloat to hull and machinery. Drydock facilities do not exist for vessels over 120 ft.

Electronic Navigational Aids and Radio: All major companies have agencies in Shetland. Repair facilities exist for all types of electronic equipment.

Engine Readiness: Main engines must be maintained in a state of readiness for vacating the Terminal at short notice at all times except in the cases of approved repair work as detailed in Regulation 14 of "Jetty Safety Regulations".

REPATRIATION: Crew changes can normally be arranged. Air and sea connections are available to mainland destinations.

It should be borne in mind, however, that during the winter months delays to air traffic are not uncommon due to prevailing weather conditions whilst in summer delays can be experienced due to low visibility.

Ships will not be permitted to retain their berth awaiting the arrival of crew members.

AIRPORT: Shetland's airport network is within easy reach of Sullom Voe and scheduled flights are available daily to all major UK cities, with connections to worldwide destinations.

BANKS:

Bank of Scotland. Tel: Lerwick 2624. Telex: 75309.
Clydesdale Bank. Tel: Lerwick 5664.
The Royal Bank of Scotland. Tel: Lerwick 3540.

GENERAL:

The following services can be provided for vessels by the Shipping Agencies. Masters are requested to provide notice of requirements prior to arrival.

Compass Adjusting: A service is available for large vessels. Requests should be made in good time to ship's Agents in order that the adjuster may board with the Pilot on arrival.

Storing: Due to the high berth occupancy at Sullom Voe it is not possible to carry out major storings. However, a limited amount of fresh provisions for immediate voyage requirements can be supplied providing it can be easily handled by the ship's crew.

Fresh and frozen meat can be supplied in any quantity with Shetland lamb a speciality. Shetland knitwear goods of high quality are available at reasonable prices. Other local products include sheepskin rugs, traditional jewellery and handicrafts.

Bonded Stores: Bonded stores are available in any quantity.

Lubricating Oils: Most major oil companies have authorised dealers in Shetland. Lubricating oils of all grades are available at competitive prices.

Charts and Nautical Publications: Available on application to ship's Agents. Advance notice is required for the supply of large sets.

Lloyd's and Salvage Association: If service or survey is required, this may be obtained through their Shetland Agents, Hay & Co. (Lerwick) Ltd.

Sea Travel: P&O Ferries maintain a regular Ro-Ro and Passenger ferry service between Lerwick and Aberdeen.

Provisioning: This service is provided by ship's Agents on request.

Shore Leave/Taxis: All personnel proceeding ashore must be in possession of a shore pass, a supply of which is handed to Masters on the vessel's arrival.

Transport is provided free from the root of each jetty to Seafarers' Centre, and taxis can be arranged for those wishing to travel further afield in Shetland.

There is no public transport system serving the Sullom Voe area.

Telephones: This facility is provided at the Seafarers' Centre operated by the British Sailors' Society and situated outside the main gate.

Weather Routeing: This service is available to Shipmasters on application to Shetland Weather Centre.

British Sailors' Society: The British Sailors' Society has a Seafarers' Centre just beyond the Terminal Entrance. The facilities that are offered are as follows:

Chapel, Library, Telephone facilities, Lounge/Television Room, three Pool tables, darts, and a Beer Bar serving lunchtime snacks.

The resident manager, Mr. Ted Wilkins, has been appointed to run the Centre and a mini bus service is in operation to collect and return seafarers who desire to relax ashore for a time whilst their ship is at Sullom Voe.

Two Honorary Chaplains have kindly offered their services to the Centre. So any seafarer wishing practical, spiritual and welfare help, please contact the manager on Sullom Voe 242715.

CHARTS AND PUBLICATIONS:

Charts: British

BA. 1119	Orkney and Shetland Islands, Fair Isle Channel.
BA. 3297	Sullom Voe.
BA. 3298	Yell Sound.
BA. 3292	Eastern Approaches to Yell Sound, etc.
BA. 1233	Northern Approaches to Shetland Islands.

Also see "Publications".

Note: These new charts are metric.

Pilot Books: North Coast of Scotland Pilot N.P. 52.

Admiralty Tide Tables: Admiralty Tide Tables, Volume 1, N.P. 201-8.

Tidal Stream Atlas: Orkney and Shetland Islands N.P. 209.

Approaches to Sullom Voe (Shetland Islands Council Publication).

Lights: Admiralty List of Lights, Volume A.

Additional Charts and Publications relevant to Sullom Voe may be published in the near future.

Admiralty Agents for the supply of hydrographic charts and publications are Hay & Co. (Lerwick) Ltd.

Publications – Navigational: Masters and/or Agents are requested to ensure that the following publications are available on board any vessel bound for Sullom Voe, which intends to navigate under Sections 11 and 12 of the Pilotage Byelaws:

a. Sullom Voe Harbour Authority – General Directions for Navigation.
b. Sullom Voe Harbour Byelaws.
c. Sullom Voe Pilotage Byelaws (1979).
d. Notices to Mariners in force for the area, issued by the Director of Ports and Harbours.
e. Charts B.A. 3297, B.A. 3298 and B.A. 3292.
f. Approaches to Sullom Voe – Tidal Stream Atlas.
g. Guidebook – Port of Sullom Voe, which includes tide tables.

NOTICES:

Landing in Great Britain of Live Animals, Live Birds and Meat:

The attention of Masters is drawn to 'Notice to Masters of Vessels and Commanders of Aircraft (IM24 (Rev 79))' of which the following are extracts:

Diseases of Animals Acts 1950 and 1975, Rabies Act 1974, Destructive Imported Animals Act 1932 and Ponies Act 1969.

WARNING: Her Majesty's Government exercise strict controls at ports and airports to prevent the introduction of animal disease and destructive animals into Great Britain. Severe penalties may be applied to those who do not comply with the import regulations.

Dogs, cats and other mammals (including ship's pets) brought to Great Britain on board a vessel which are not intended to be landed do not need a licence, but must at all times be securely confined in an enclosed part of the ship so as to prevent their escape and must not come in contact with any other animals except those similarly confined. The authorities must be informed immediately if any animal should escape.

Notice to Mariners 4/82:

Spur Booms

Anti-Pollution Spur Booms have been established at several permanent sites around the shores of Sullom Voe, and mooring buoys have been laid to facilitate quick deployment at each location as follows:

		Buoy Position	
Location	*Boom Layout*	*Latitude*	*Longitude*
Tivaka Taing	Spur Boom	60° 28′ 41″ N.	01° 18′ 37″ W.
Fugla Ness	Spur Boom	60° 27′ 04″ N.	01° 18′ 50″ W.
Lang Ayre	Twin Boom	60° 26′ 53″ N.	01° 20′ 12″ W.
Voxter Voe	Twin Boom	60° 24′ 36″ N.	01° 20′ 40″ W.
Calna Taing	Spur Boom	60° 26′ 26″ N.	01° 19′ 21″ W.
Scatsta Voe	Twin Boom	60° 26′ 38″ N.	01° 16′ 50″ W.
RAF Jetty	Spur Boom	N/A	
Roe Clett	Spur Boom	60° 28′ 56″ N.	01° 17′ 19″ W.

Buoy Description: Body: Yellow Pillar; Character: GP. FL. 4 EV. 12 sec.; Daymark: Yellow St. George's Cross; Range: 3 miles; Light: Yellow.

Notice to Mariners 5/82:

Bight of Haggrister: Mooring buoy. A permanent barge mooring has been established in position: Lat. 60° 24′ 37″ N., Long. 1° 22′ 02″ W. Description: Yellow cylindrical; unlit.

Dumb barges will be permanently moored at the buoy.

Mariners are requested to exercise caution when navigating in the vicinity of these locations.

HYDROGRAPHIC NOTES:

Prohibited Anchorages

1. Owing to the existence of the tanker turning area within the vicinity of Sella Ness and Scatsta Ness, Mariners are advised that anchoring East of a line joining the following positions is prohibited, viz.:

From Position: Lat. 60° 26′ 57″ N., Long. 01° 19′ 17″ W.
To Position: Lat. 60° 26′ 32″ N., Long. 01° 18′ 10″ W.

2. Owing to the existence of an outfall pipe between Skaw Taing and Swarta Taing, all vessels are advised that fishing and anchoring is prohibited within the area bounded by Little Roe and lines produced seawards from two sets of day transit marks diamond in shape and yellow in colour which are established in the following positions:

A: Lat. 60° 29′ 15″ N., Long. 01° 16′ 42″ W.
Lat. 60° 29′ 10″ N., Long. 01° 16′ 44″ W.
B: Lat. 60° 29′ 10″ N., Long. 01° 16′ 17″ W.
Lat. 60° 29′ 06″ N., Long. 01° 16′ 21″ W.

Outfall Marker Buoy – Calback Ness: A yellow spherical navigational buoy with a yellow St. Andrews cross topmark and a radar reflector showing a light GP. FL.4(Y). EV. 12s. has been established in position:

Lat. 60° 29′ 29″ N., Long. 01° 16′ 08″ W.

This buoy marks the seaward end of the ballast water outfall pipe.

Permanent Navigation Marks Tanker Jetties – Sullom Voe

Permanent navigation marks have been established on the mooring dolphins at either extremity of the tanker jetty complex as follows:

No. 1 Jetty East end dolphin in position Lat. 60° 27′ 21″ N., Long. 01° 17′ 02″ W. two fixed red lights vertically disposed 2 m. apart, the lower of which is 5 m. above MHWS. Visible 3 miles.

No. 4 Jetty West end dolphin in position Lat. 60° 27′ 56″ N., Long. 01° 18′ 20″ W. two fixed red lights vertically disposed 2 m. apart, the lower of which is 5 m. above MHWS. Visible 3 miles.

Misuse of VHF Radio:

Owners, Masters and Skippers are reminded to read Merchant Shipping Notice No. M814, which refers to the misuse of VHF Radio.

The improper use of VHF is illegal and can cause serious disruption to communications concerned with the movement of shipping in the port area.

The co-operation of all port users is requested to ensure that such misuse does not occur.

SAFETY: *Smoking:* Smoking is prohibited on vessels during loading operations. Except in 2 or at most 3 smoking rooms allocated by the Master and approved by the Terminal Representative.

Matches and lighters shall not be carried by personnel outside the approved smoking areas, or on the jetties.

Fire Precautions: Every vessel's fire-fighting appliances, (including main and emergency fire pumps) must be kept ready for immediate use.

Before deballasting and loading/discharging operations commence, and during periods when permitted repair work is being carried out, fire hoses must be uncoiled and connected to the fire main with at least one fire pump maintaining pressure on the main.

Jetty Fire-Fighting Facilities: The oil loading jetties are each equipped with 2 independent hose supply systems, one for water alone and the second for either water or foam mixture.

These systems supply hydrants which are spaced out along the jetty access road and jetty head.

Monitors are installed to provide a water curtain in the area of the jetty head and between the access tower and manifold area. Elevated monitors are also positioned at the top of the access and monitor towers. A sprinkler system protects the access tower.

Hose couplings are 2.5 in. standard instantaneous female type and the fire main to the access tower can accept international connections.

The working pressure of the fire system is 250-260 p.s.i. A fire hose connection is situated on the construction jetty to allow fire-fighting tugs to link into the system.

POLLUTION: It will be appreciated that oil spillages are viewed seriously by Government, Local Authorities, Port Authorities and Terminal Operators. Spillages will be investigated by the appropriate authorities and the Master and/or Owner may be liable to prosecution. Delay to the vessel could well arise.

Masters are therefore requested to ensure that every precaution is taken to prevent oil spillages at the Sullom Voe Terminal.

COASTGUARD SERVICES: H.M. Coastguard is the authority responsible for initiating and co-ordinating all sea and coastal search and rescue operations in the Shetland sea area. They also keep in close touch with the S.A.R. organisations of all countries in adjoining sea areas.

Regular stations are maintained at Lerwick M.R.S.C. (Marine Rescue Sub Centre), with a sector office in the Port Administration Building at Sella Ness.

Rescue equipment is maintained and manned by auxiliary coastguards at Baltasound, Mid Yell, Fetlar, Out Skerries, Whalsay, Bressay, Noness, Sumburgh, Fair Isle, Burra Isle, Walls, Sandness, Hillswick and North Roe.

Safety and Weather Information is available through the remote controlled VHF radio sites at Saxavord (Unst), Collafirth, Lerwick and Sumburgh. A 24 hour radio watch is maintained by Lerwick M.R.S.C. (call sign SHETLAND COASTGUARD) on Channel 16 and 2182 kHz, and by Sullom Voe Coastguard (Channel 16) during normal office hours or as required.

This enables safety and distress calls from vessels, up to 40 miles out from Shetland, to be picked up on the Coastguard VHF network. On receiving a call for assistance or advice, the Coastguard can instantly alert the appropriate facility, which might be a military or civilian helicopter, RNLI lifeboat, shore rescue teams or vessels at sea.

Other VHF Channels are 0, 6, 10, 67 (working) and 73.

Civilian SEARCH AND RESCUE HELICOPTERS, based at Sumburgh, are contracted by the Department of Transport (H.M. Coastguard) for long range search and rescue purposes. These helicopters are fitted for winching, and carry comprehensive rescue equipment including a salvage pump and inflatable dinghy capable of being dropped to vessels in distress.

They have a speed of about 100 knots and a range of approximately 150 nautical miles from Sumburgh. Navigation equipment includes V.O.R., I.L.F., Decca A and D/F Console. Communications facilities are:

MF	2182, 3095 and 5693.5 kHz
VHF AM	118/135.95 MHz
VHF FM	Marine Frequencies

A VHF facility through (Compass Head) Sumburgh Aerial on Channels 0, 6, 10, 16, 67 and 73.

MEDICOS: Vessels requiring medical advice or medical assistance should adhere to the radio regulations and contact either Collafirth or Shetland Radio on Channel 16 VHF. If unable to contact the coast radio station, vessels can contact Shetland Coatguard direct on Channel 16 VHF.

R.N.L.I. STATIONS: The following lifeboats are on station:

Lerwick: 58 ft. Arun Lifeboat 'Soldian'.
Details: Speed 18 knots, range – 220 nautical miles.
Navigation – Radar, Decca, D/F etc.
Communications M/F 2182 kHz, 1647.5 kHz, 162.5 kHz.
1827 kHz, 2226 kHz, 2241 kHz.
2306 kHz, 2381 kHz, 2548 kHz.
VHF Channels 0, 6, 8, 9, 10, 12, 14, 16, 27, 67.

Aith: 52 ft. Barnett Class Lifeboat 'John and Frances Macfarlane'.
Details: Speed 9.4 knots, range – 195 nautical miles.
Navigation – Radar, D/F.
Communications M/F 2182 kHz, 1647.5 kHz, 2381 kHz.
2527 kHz.
VHF Channels 0, 6, 12, 14, 16, 27, 67.

All requests for lifeboat or helicopter assistance should be routed through Shetland Coastguard M.R.S.C.

EMERGENCY SERVICES AND PROCEDURES:

Fire	Phone Sullom Voe 242797	VHF Channel 10
Oil Pollution	Phone Sullom Voe 242797	VHF Channel 10
Ambulance	Phone Sullom Voe 242797	VHF Channel 10
Security	Phone Sullom Voe 242797	VHF Channel 10

All emergency services at the oil terminal are co-ordinated by the "Emergency Services Control" situated at the Terminal fire station.

On vessel's arrival at the Terminal, the responsible officer and the Loading Supervisor will discuss action to be taken in an emergency situation. The Master of the vessel should study and comply with the 'Jetty Safety Regulations', a copy of which will be supplied.

Safety inspections will be undertaken by the Loading Supervisor throughout the vessel's stay alongside. Spot checks will also be made by the Terminal emergency services department.

In the event of an emergency, vessels should immediately contact Sullom Voe Port Control 242494/242495/242551 or VHF Channel 10.

TELEPHONE NUMBERS: S.V.=Sullom Voe.

Sullom Voe Harbour Authority:

Sullom Voe Harbour Authority, main switchboard, 24-hours,	Sullom Voe (0806) 242551
Director of Ports & Harbours, Capt. A. M. Flett	ext. 201
Deputy Director of Ports & Harbours (Senior), Capt. G. H. Sutherland	ext. 202
Deputy Director/Deputy Harbourmaster, Capt. C. J. Nicolson	ext. 203
Deputy Director, Port Engineer, Mr. R. Jack	ext. 214
Oil Pollution Control Officer, Mr. J. T. Dickson	ext. 209
Assistant Oil Pollution Control Officers	ext. 210
Administrative Officer, Mr. A. Lovett	ext. 211
Port Control Room (Pilots)	ext. 280/1/2/3/4/5

Sullom Voe Harbour Authority (All Departments):

Telephone:	Sullom Voe (0806) 242551
Telex:	75142
Cables:	Portcontrol Sullomvoe
Telefax:	Sullom Voe (0806) 242551, ext. 211

Sullom Voe Terminal Control:

Main Switchboard (24 hours): Sullom Voe (0806) 242401

	Internal Telephone System	*External Lines*
Terminal Emergency Services	222	SV 242797
Fire	222	SV 242797
Ambulance	222	SV 242797
Oil Pollution	222	SV 242797
Terminal Security	222	SV 242797
Emergency Services – Administration		SV 242401
Terminal Control Centre (Shift Supervisor)		SV 242313

External Numbers:

Police	Lerwick 2110
Sullom Voe Coastguard	SV 242561
Lerwick Coastguard	Lerwick 2976/4600
Lifeboats	Lerwick 2556 (Night–Bressay 363) Bixter 207 (Night–346)
H.M. Customs & Excise (Headquarters)	Lerwick 2835
H.M. Customs & Excise (Port)	SV 242571
Shetland Weather Centre	SV 242069
D.O.T. (Marine Office)	SV 242090
British Sailors' Society	SV 242715
Sjomannstua "Havly"	Lerwick 4369

SHIPMASTER'S REPORT: December 1981.

It is necessary to provide access to the vessel on the offshore side in the form of accommodation ladder with vessels having high freeboard.

All crew members require passes for shore leave and must use transport from the jetty. This transport is arranged by the security guard in the hut at shore end of jetty.

Usually with moorings it is springs first then breast lines. The Terminal is not concerned with head or stern ropes. Some of the dolphins are fitted with shore based pulley systems and these count as 2 ropes for mooring purposes.

Telephone calls may be made from the Mission (U.K. and International) and paid for in pounds sterling.

REPORT: October 1983.

Gas Carriers: Gas carriers shall conform to the following requirements and the pipe-line operators concerned shall, at the time of nomination, confirm to the terminal operator that the carrier nominated so conforms throughout the time she will be within the port limits.

a. The tanker conforms to the standards required in the EEC memorandum of understanding or to state control.

b. The tanker complies with the Statutory Instrument 1981 No. 1077 Merchant Shipping, Merchant Shipping (Tankers) (EEC requirements) Regulations 1981.

c. The tanker can comply with the conditions of carriage as specified on her IMO Certificate of Fitness.

d. The tanker will during the loading and simultaneously handling of ballast follow the procedures as outlined in her approval trim and stability document.

e. The tanker can be adequately moored to equivalent OCIMF standards, i.e. resisting loads due to any of the following current conditions acting simultaneously with a 60 knot wind from any direction:
3 knots at 0° and 180°
2 knots at 10° and 170°
3/4 knots from direction of maximum beam current loading.

f. The tanker can accept a minimum bulk loading rate per hour of 3 per cent of her total cargo carrying capacity up to a maximum of 3,000 cu.m. per hour.

g. The tanker reliquefaction units are capable of handling a minimum bulk loading rate per hour of 3 per cent of her total cargo carrying capacity up to a maximum of 3,000 cu.m. per hour.
(a) without venting to atmosphere and:
(b) without the use of a vapour return line to shore.

h. All cargo tanks will be cooled down on arrival and the vessel ready to commence loading. Any vessel that cannot comply and requires to purge and/or cooldown prior to loading will only be accepted on the basis of prior agreement having been reached between the terminal operator and the pipe-line group nominating the vessel.

i. That the following tests will be carried out within 24 hours before arrival and any defect, and any change in the status of the systems thereafter, be reported to the Port Authorities:
(a) ventilation of compressor/pump/control room.
(b) gas detection system
(c) emergency shut down system
(d) pressure and temperature control units
(e) cargo tanks' safety relief valves setting.

SHIPMASTER'S REPORT: August 1984.
Vessel: 140,000 d.w.t.
Tugs: Normally 4 tugs for berthing and 2 tugs for sailing, tugs' lines. 2 tugs make fast and 2 push only. On arrival the forward tug requires a heaving line from the main deck for forward then he steams forward to pass his line up through the centre fairlead.
Moorings: Under normal conditions 1st 2 backsprings, then 2 to 3 breasts, then 2 to 3 head/sternlines.
Gangway: Shore gangway.
Departure: On departure Pilot normally boards 1 hour after completion of loading and EDP is used.
Surveyor: Lloyd's Surveyor comes from Aberdeen and requires 2 to 3 days' notice.

AUTHORITY: Shetland Islands Council, Ports and Harbours Department, Port Administration Building, Stella Ness, Mossbank, Graven, Shetland ZE2 9QR. *Tel:* Sullom Voe (0806) 242551. *Telex:* 75142. *Telefax:* Sullom Voe (0806) 242511, ext. 211. *Cables:* Portcontrol Sullomvoe. *Contact:* Director of Ports and Harbours.

SUNDERLAND: 54.55 N. 01.21 W. (See Plan Book)

DOCUMENTS:
Crew List. 1 form I.B.6A to be delivered to an Immigration Officer within 24 hours of arrival.
Passenger Lists. Form P.R.4. in duplicate and Form P.R.10 in duplicate.
Customs Documents. Crew Declaration Form C.142 in duplicate.
Cargo Manifests, triplicate.
Ship's Papers:
Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Derat Certificate.
Customs Light Bills.

PILOTAGE: Call Sunderland Harbour Radio, Channel 16, working Channel for port is 14. Pilotage not compulsory, but advisable for all but small vessels. Pilots maintaining continuous watch on VHF Sound signals for vessel requiring Pilot is Morse Code No. 6. Pilot boards 0.5 to 0.75 mile off piers. In bad weather pilot cutter leads vessel into inner harbour, and Pilot boards there.

ANCHORAGES: 0.5 to 0.75 miles N.E. of Roker Pier Lighthouse.

RESTRICTIONS: Vessels may enter South Dock from 2 hours before until half an hour after high-water. Vessels may lock in outside of these times depending on draft and state of tide. For North Dock and Corporation Quay restrictions depend on draft and state of tide.

MAX. SIZE: South Dock – length 142 m. beam 18.9 m., draft 8.08 m. with Spring tides, 7.16 m. with neap tides.

River – length 183 m., beam – no restriction, draft 8.38 m. subject to siltage.

HEALTH: Pratique procedure: Pratique granted by Port Health Authority on arrival.

Suspected disease or fever: All ships from suspected areas must radio Port Health Authority 24 hours in advance of arrival, stating general condition of crew members. Pratique is automatic when ships arrive from other U.K. ports.

Also see "Health – All Ports" before first U.K. port.

RADIO: Cullercoats.

TUGS: Join vessel at or outside harbour entrance. Tug's ropes normally used.

BERTHING: In South Dock vessel must arrive from 2 hours before up to 30 minutes after high water. Vessels may lock in as under "Restrictions". At Corporation Quay small vessels berth at any time. Large vessels usually berth at same time as mentioned for South Dock.

Bridge swung to allow vessels to pass through.

BRIDGES: In South Dock bridge swung to allow vessel to pass through. Railway Bridge clearance, 25.1 m. MHWS.

STEVEDORES: The Port of Sunderland Authority carry out all stevedoring. Agents should advise as early as possible in order to arrange berthing and gangs, 5 to 6 days notice if possible. ETA from ship 2-3 days in advance. Working rates of principal commodities are;

Bagged cargoes	15	t.p.h.	
Scrap – fragmented	100	,,	
Scrap – heavy	25	,,	
Chrome and heavy ores	40	,,	
Wood Pulp	30	,,	(loose bale)
Wood Pulp	80/90	,,	(unitised)
Limestone	325	,,	
Containers	15	units per hour	

MEDICAL: Well served with General practitioners and hospital facilities, and attention can be arranged at very short notice. However, unless urgent, 24 hours notice desirable.

TANKERS: 4 installations (lines either 0.16 or 0.2 m.) 3 installations in South Dock and 2 berths, the S.E oil berth 98 m., the S.W. oil berth 89 m. 1 vessel of maximum length 142 m. can use this berth, draft 8.08 m. Spring tides; 7.16 m. Neap tides. At Corporation Quay vessel 183 m. long, draft 8.58 m.

DENSITY: Usually 1025. May be less after heavy rain.

FRESH WATER: Available. Arrangements can be made to supply water at any time.

FUEL: Bunkers supplied at Corporation Quay pipe-line from Petrofina Ltd. All grades available – Corporation Quay and Hendon Dock. Viscosities range from 32 secs. to 3,500 secs., and can be blended to any requirement in this range. 12 hours notice necessary. Rate 250 t.p.h.

GANGWAY/DECK WATCHMEN: Services of watchmen recommended.

OPENING/CLOSING HATCHES: This work is normally carried out by ship's crew, otherwise shore riggers.

CERTIFICATES:
Register.
Load Line Certificate.
Safety Radio Certificate.
Safety Equipment Certificate.
Safety Construction Certificate.
Derat Certificate.

CUSTOMS ALLOWANCES: As per H.M. Customs and Excise Regulations.

IDENTIFICATION CARDS: Not required. Must possess valid Seaman's Book and/or Passport.

CONSULS:

Denmark	Tel. Sunderland		670811
Iceland	,,	,,	670811
Finland	,,	,,	672846
France	,,	,,	673694
Netherlands	,,	,,	75441
Norway	,,	,,	670101

REPAIRS: All repairs possible.

DRY DOCKS: One dry dock in use, length 112 m., breadth 16.5 m.
Floating dock, length 65.5 m., breadth 13.72 m.

REPATRIATION: Facilities available for effecting repatriations, with good rail, road and air communications.

AIRPORT: Approximately 20 miles. Newcastle Airport served by regular airlines, all the year round, to all parts of the world. Air UK operate flights to Aberdeen, Amsterdam, Bergen, Copenhagen, Norwich, Paris and Stavanger.

HOLIDAYS: Official Holidays for General Cargo ships: New Year's Day (no work except by special agreement); Good Friday; Easter Monday; May Day; Spring Bank Holiday; Summer Bank Holiday; Christmas Day (no work except by special agreement); Boxing Day (no work except by special agreement).

POLICE/AMBULANCE/FIRE: Police Station Tel. Sunderland 76155; Ambulance Control Tel. Sunderland 72875; Fire Station Tel. Sunderland 56456. Or call 999 from any telephone and ask for service required.

TELEPHONES: Permanent arrangements do not exist, but a temporary arrangement can be made at any time.

AUTHORITY: Port of Sunderland Authority, Barrack Street, Sunderland SR1 2BU. *Tel:* (0783) 40411. *Telex:* 537037. *Contact:* Harbour Master.

SWANSEA: 51.37 N. 03.56 W. (See Plan Book)

DOCUMENTS:
Light Bill receipt.
Crew List.
Manifests.
Bill of Lading copies.
Customs and Health.

PILOTAGE: Compulsory for vessels of 1,500 g.r.t. and above. Request for Swansea Bay Pilots by International Signal Code for Sea Pilots, by telephone call for Dock Pilots. Telegraphic address for Swansea Pilots is "Pilority, Swansea".

Advance notice of ETA required at least 12 hours. VHF Channels 16 and 6. Pilot boat has bright yellow hull with red boot-topping; superstructure painted white. Pilot cutter's sound signal is "SM", 3 short and 2 long blasts. The area of boarding is usually 1 mile S.E. of Mumbles Lighthouse in all weathers. Usual requirements for ladders are in force, and Pilots require ladder to be about 4 ft. to 5 ft. above water.

ANCHORAGE: About 1 mile S.E. of the Mumbles Lighthouse.

RESTRICTIONS: Berthing is in accordance with tide. King's Dock Lock operates for a minimum of 8 hours each tide. River-side berths and Swansea Ferryport Terminal operate over a greater period.

No night-time restriction of entry.

MAX. SIZE: Max. size for entry is 655 ft. long, 86 ft. beam, 32 ft. 6 in. draft.

These vessels are docked over high water period. Any vessel whose dimensions are approaching maximum, or slightly in excess, for port should advise Port Manager well in advance. A vessel with a beam of 87 ft. 04 in. has been accepted.

HEALTH: Usual international health regulations are to be observed. Any vessel which is suspect should inform Port Medical Officer of Health.

RADIO: All communications for ship movements through "Swansea Dock Radio" Channels 16 and 14 VHF. Agents, receivers, etc., can be called through usual coastal radio stations – this includes Ilfracombe Radio.

TUGS: Towage undertaken by private operators. The Alexandra Towing Co. Ltd., at present use a modern fleet of tugs at Swansea and Port Talbot. It is optional whose lines are used, but if tugs line is taken, an extra charge will be made.

BERTHING:

Dock	*Quay Length (Total)* (m.)	*Depth of Water (Absolute Min.)* (m.)	*Maximum Size of Vessel* *Length* (m.)	*Beam* (m.)	*Draft* (m.)	*Approx. d.w.t.*
Kings Dock	2,268	10.1	199	26.5	9.9	30,000
Prince of Wales Dock	1,219	8.1	122	20.7	7.3	—
Queen's Dock	Oil Jetties (Operated by BP Co.)	10.7	199	26.5	9.9	30,000

Roll-on/Roll-off Berth: Situated on the East bank of the River Tawe, this facility provides a 137 m. berth, hinged shore bridge 76 m. long, with a 6 m. roadway. Adequate vehicle marshalling areas and Customs/passenger facilities are available. The nose of the bridge can be lowered through 12.95 m. to allow for variation in tides and ship's flotation.

BULK HANDLING FACILITIES: *Petro Chemicals:* One jetty in Queen's Dock operated by BP Chemicals International Ltd.

Coal: Four coal hoists in the King's Dock, operated by Associated British Ports.

Bulk Cargoes (Sulphur, ores, etc.): Two berths in King's Dock equipped with 5×7.5 ton and 5×10 ton grabbing cranes. Operated by Associated British Ports.

Ferryport: On East bank of River Tawe.

CRANES: 2×25 ton and 9×11.5 ton, 5×7.5 ton and 23×6 ton electric cranes. 6×3 ton mobile cranes also available.

50 fork-lifts up to 11.5 ton and 1 heavy duty fork-lift of 35 tonnes capacity.

BRIDGES: One in dock bridge is under direction of duty Assistant Dock Master. A vessel which has to pass will be informed by the Assistant Dock Master as to the availablity.

STEVEDORES: Stevedoring services are provided wholly by Associated British Ports. Advice of labour requirements must be received by the following times:

General Cargo: By 0700 hrs. to start work at 0700 hrs. By 1030 hrs. to start work at 1130, 1400 or 2200 hrs. same day.

Coal Shipping: By 1530 hrs. for work at 0600 hrs. next day. By 1030 hrs. for work at 1400 hrs. same day.

MEDICAL: Port Medical Officer of Health has an office on King's Dock Lock. Medical attention can be obtained at short notice. In emergencies, the duty Assistant Dock Master can be communicated with, to obtain medical help. Hospital facilities available, and there is a first-class medical centre on the Prince of Wales Dock. Vaccination and fever certificates will be examined when receiving Pratique.

TANKERS: All tankers arriving, working cargo, and departing are required to observe port's Petroleum By-laws and Oil in Navigable Waters Act. British Petroleum Company has further private directives for oil tankers. 5 main tanker berths, 1 petrochemical berth, 2 coastal tanker berths and 2 layby berths in Queen's Dock. 1 tanker/general cargo berth in King's Dock. Deepest draft permitted is 32 ft. 6 in.

Tankers of 1,600 g.r.t. and over to observe Merchant Shipping (Tankers – E.E.C. Requirements) Regulations 1981.

DENSITY: King's Dock Lock density is 1025.

FRESH WATER: Fresh water supplied from hydrants on quays by watermen. Rate of delivery is 2,000 g.p.h., approx., depending on the demand.

FUEL: Various grades of gas oil and diesel can be supplied by barge or road vehicles, or it can be delivered ex-pipeline at Queen's Dock.

FIRE PRECAUTIONS: All matches and lighters must be declared at entrance to oil installation. There are arrangements at the Queen's Dock depot for shore cooking and eating. There is an oil boom between the King's Dock and Queen's Dock to serve as an oil fire break between two docks.

GANGWAY/DECK WATCHMEN: Under Port Regulations, there shall always be on board sufficient men to move or take care of the vessel. Some vessels employ watchmen.

OPENING/CLOSING HATCHES: Normally done by the ship's crew, but if riggers are employed by vessel for general duties they open up hatches.

CERTIFICATES:

Certificate of Freeboard.
Certificate of Registry.
Certificate of Pratique.
Light Bill.
Manifest.
Bill of Health.
Bills of Lading.
AA (1) Certificate.

CUSTOMS ALLOWANCES: At discretion of local H.M. Customs Inspectors.

IDENTIFICATION CARDS: Not compulsory, but they are helpful if a crew member has to identify himself to Authorities.

CONSULS:

France	Tel: Swansea 55274	Norway	Tel: Swansea 50564
Vice-Consuls:			
Belgium	Tel: Swansea 50021	Netherlands	Tel: Swansea 53921
Finland	„ „ 53921	Portugal	„ „ 57757
Greece	„ „ 50957	Spain	„ „ 25121
Italy	„ „ 55146	Sweden	„ „ 55146

SURVEYORS: Cargo Inspectors available locally.

Ship Surveyors located in Swansea and Cardiff.

REPAIRS: All types of deck and engine-room repairs are possible.

DRY DOCK: 2 Dry docks in port are entered from King's Dock. Dry docks: "Duke of Edinburgh" 670 ft. × 92 ft.; "Palmers" 560 ft. × 75 ft.

REPATRIATION: Mercantile Marine Office in Swansea where ship's crews are paid-off before Superintendent of Shipping. Necessary arrangements can be made for repatriation through the Consular Channels.

AIRPORT: Nearest airport at Swansea, 8 miles from Docks. Next are Rhoose (Cardiff) and Bristol Airports where regular scheduled flights are handled.

TIME: Local time is British Standard Time which is plus 1 hour to Greenwich Time. Reverting to GMT during Winter months.

HOLIDAYS: Christmas (25th December); Boxing Day (26th December); New Year's Day; Easter, Good Friday and Monday (movable dates); Spring Holiday, May Day, Summer Bank Holiday (both movable dates). No cargo is worked on these days.

POLICE/AMBULANCE/FIRE: Call 999 from any telephone, and ask for service required.

EMERGENCY CO-ORDINATION CENTRE: S.A.R. Centre based at Mumbles. Tel: Swansea 66534.

TELEPHONES: Arrangements at most berths for placing telephones on board ships in port.

BANKS: Lloyd's Bank Ltd., 25 Wind Street, Swansea. Tel: 42771.

Barclays Bank Ltd., 57 Wind Street, Swansea. Tel: 460991.

STORING: See "Prelims" page viii.

1. Yes
2. No interference with cargo work.
3. Yes
4. Yes
5. —
6. Yes.

SHIP SUPPLY SERVICE: It is the practice for pilot cutters of Swansea and Port Talbot to ferry personnel, stores, etc., to vessels offshore and due to dock at the respective ports.

Swansea Pilotage Authority, 90 Exchange Buildings, Swansea SA1 1SY, West Glamorgan, South Wales. Tel: Swansea (0792) 53631. Cables: Pilority.

GENERAL: Entrance lock is 875 ft. in length, 90 ft. across at cope level. The inner sill is 7 ft. higher than the outer sill. The outer sill is 2.8 m. below Admiralty Chart datum (Chart No. 1161).

Tugs are available at the port for in-dock as well as sea towage.

A diver can usually be obtained by enquiry to the A.B.P. Port Engineer, Swansea.

Port Manager: Tel: 50855/200. Port Engineer: Tel: 50855/275. Dock Master and Fire Officer: Tel. 50855/260.

AUTHORITY: Associated British Ports, Harbour Office, Adelaide Street, Swansea, Glamorgan SA1 1QR. *Tel:* (0792) – 50855. *Telex:* 48150. *Contact:* Mr. T. Wilkinson, Port Manager. Captain T. Boyd, Harbour Master.

TEES RIVER: 54.39 N. 01.08 W. (See Plan Book)

PORT LIMITS: The Port facilities extend from the river entrance to the I.C.I. Billingham Oil Jetty 16 km. up river.

Arrival in the port is accepted as time of passing South Gare Lighthouse inward, or time of anchoring in the Tees Bay.

DOCUMENTS: Ship's official papers including:

Register.
Load-line Certificate.
Derat Certificate.
Safety Equipment Certificate.
Radio Safety Certificate.
Construction Safety Certificate.
U.K. Light Dues.
Oil Pollution Certificate. (Tankers).
Crew List.
C14 Ship's Stores List.
C13 Arrival General Declaration.
C142 Crew Declaration.
Tanker Check List (Tankers over 1,600 g.r.t.)

PILOTAGE: The Tees Pilotage District extends from a radius of 5.6 km. seawards of the South Gare Lighthouse, as far up river as Victoria Bridge, Stockton, including Seaton Channel and is under the control of the Tees Pilotage Authority.

Official Address: Tees Pilotage Authority, 13-14 Bridge Street East, Middlesbrough, Cleveland TS2 1NS. Telephone: Middlesbrough 242924/5 (during office hours), Middlesbrough 590747/700829 (after hours). Telegraphic Address: "Tees Pilots, Middlesbrough".

Pilot station is situated at South Gare and pilot cutter on duty is moored there. Cutters are painted blue with white or orange upper structure and fly the pilot flag by day when on duty and International Regulation lights by night. The duty cutter is equipped with VHF Radio, call sign "Tees Pilots" on Channel 16. Radar is also fitted.

As much advance notice of a vessel's arrival as possible should be given to Pilots: minimum requirement for vessel arriving is 1 hour and for vessel sailing 1 hour 15 minutes.

Pilot boards in vicinity of Tees Fairway Buoy although smaller vessels are occasionally boarded off the South Gare lighthouse. During severe weather the duty cutter may move to Tees Dock and the Pilot will board as far seaward as the conditions permit.

Pilotage is not compulsory.

HEALTH: New Regulations. The Public Health (Ships') Regulations in force from 1.4.78.

See "Health – All Ports" before first U.K. port.

RADIO: Ships approaching from the North or at anchor in Tees Bay use Cullercoats Radio. Ships approaching from Southward use Humber Radio or Whitby Radio which is a slave-station to Cullercoats.

VHF Station	*Call sign*	*Channel Fitted (min.)*
Harbour Master's Office	TEES HARBOUR RADIO	22,16,14,12,11,8
Harbour Master's Launch	TEES HARBOUR LAUNCH	16,14,12,11,9,8,6
Tees & Hartlepool Port Authority Maintenance Craft	"NAME"	16,11,6, etc.
Tees Pilot Cutter	TEES PILOTS	16,14,12,9,8,6
Tees Pilot Station (South Gare)		16,14,9
Tees Tugs	NAME	16,14,12,8,6, etc.

Tees Harbour Radio is manned 24 hours per day and is also available to Hartlepool shipping for relaying port operational messages.

Channel	*Use*	*Channel*	*Use*
22	Port Operations	11	Domestic Port Operations
16	Calling and Safety	9	Pilot Port Operations
14	Port Operations	8	Intership
12	Port Operations		

RADAR: 3 scanner sites give full radar coverage from Smiths Dock to Fairway Buoy and up to 20 miles to seaward. Advice/information available to Masters/Pilots at any time. Advice in poor visibility in prescribed form. Call "Tees Harbour Radio". (See "VHF").

APPROACHES: Vessels are prohibited from anchoring:—

(i) inside the dredged channel.
(ii) within a radius of 1,113 m. of the Tees Fairway Buoy.
(iii) within the limits of 2 divergent lines starting and extending from the dredged channel limits 244 m. apart at the South Gare Light Station, to 550 m. apart between their respective points of intersection with the circumference of the circle defined in (ii).

Small vessels can anchor close N.E. of No. 4 Light Buoy: larger vessels at Fairway Buoy and in all cases outside the 20 m. contour. Vessels waiting Pilots anchor in these areas.

Anchoring in the vicinity of the Ekofisk Pipe-line is to be avoided. See Notice to Mariners (Trinity House) No. 2724 of 1977.

RESTRICTIONS: *Traffic Control:* This is operated by the Harbour Master when vessels over 200 m. in length are moving within the river limits. The primary purpose is to allow the subject vessel to negotiate the channel without embarrassment from other traffic. Overtaking/passing is decided by the Harbour Master when circumstances favour such actions.

Restricted Transit Control: This is imposed by the Harbour Master upon vessels carrying certain hazardous cargoes. The subject vessel is intended to proceed from sea to berth or from berth to sea without meeting other traffic. As a consequence such vessel must be restrained from entering the main channel until an 'all clear' route is available. Some regulated passing.

Port Safety Control: Masters of ALL vessels before committing their vessels to the River Tees Channel are required to satisfy the Harbour Master in respect of shipboard equipment by affirming to the following questionnaire:—

Question No. 1: Your vessel is in all respects seaworthy.
Question No. 2: All secondary power or mechanical systems are in operation and *immediately* available in the event of failure of any primary system.
Question No. 3: Steering is under direct manual control.
Question No. 4: Anchors are ready for use.

In view of the controls it is essential for contact to be made with the Harbour Master before considering entering the river, leaving the berth.

VHF Radio use Channels 22, 16 or 14 to contact. Telephone Eston Grange 45 2541. Telex: 58145.

MAX. SIZE: This matter is constantly under review. At present the largest dimensions acceptable are quoted as: Length 305 m. (1,000 ft.); Beam 46 m. (150 ft.); Draft 17 m. (55 ft.). This depends on the berth nominated, tidal influence and prevailing weather.

A vessel with unusual dimensions e.g. oil rig, or any vessel with dimensions approaching the port maxima must be the subject of consultation with the Harbour Master.

TUGS: Official Address: Tees Towing & Co. Ltd., Cleveland Buildings, Queen's Square, Middlesbrough, Cleveland TS2 1NX. Tel. Middlesbrough 247277 day and night.

Fleet of 8 tugs between 1,550 h.p. and 3,650 h.p. Tugs join vessel in Redcar Reach between No. 9 and No. 17 buoys depending on size, draft and destination. Tug's lines may be used at Master's discretion.

Tugs are on duty daily and only available on 6 hours notice for sailing and arriving after normal office hours.

BERTHING: Small vessels can usually berth at any stage of the tide. Deep drafted vessels enter in accordance with the tide.

T.H.P.A. General Cargo Facilities:

Tees Dock: No. 1 Quay. 3 conventional general cargo berths each of 183 m. length, 1 of 174 m. length and 1 of 213 m. length with flush faced quay. Road and rail access to all vessels. Ample cranage and spacious sheds/open ground. Nominal dredged depth 10.9 m. below LAT.

No. 2 quay: Two berths each 183 m. in length have been built and equipped with electric luffing cranes up to 25 tonnes capacity. Nominal dredged depth 10.9 m. below LAT.

BULK HANDLING FACILITIES: *Redcar Ore Terminal:* Handles iron ore imports for British Steel. Berth dredged to nominal 17.25 m. and able to accommodate vessels up to 305 m. in length, approx. 150,000 d.w.t. 3 ore dischargers capable of handling 2,000 t.p.h.

Potash Terminal: Built on the East side of Tees Dock, this terminal is for the export of Potash mined in North Yorkshire. Dredged to a nominal depth of 10.90 m., the quay is intended to accommodate vessels simultaneously. The main loader is capable of 2,000 t.p.h.: A silo on the site has a storage capacity for 56,900 tons.

ROLL-ON/ROLL-OFF FACILITIES: A link span Ro/Ro berth in Tees Dock can accommodate ships of up to 160 m. in length and 23.7 m. beam. Nominal dredged depth of 8.7 m.

Designed for loads up to 182 tonnes (when carried on 4 axles).

CONTAINER FACILITIES: A privately owned (Bell) purpose-built Container Berth utilising a 32 tonne gantry crane is established downstream of Tees Dock.

STEVEDORES: In order to prepare for loading/discharging, i.e. ordering of gangs, transport, etc., it is necessary to give ETA through their Agents not less than 24 hours before arrival.

In Tees berths, the port works 2 shifts daily, i.e. 0600 – 1400 hrs. and 1400 – 2200 hrs. Mondays to Fridays, with voluntary overtime at weekends.

DENSITY: The density of the river water fluctuates with the seasons and rain amount, being between 1015 and 1025 mainly. Below Smith's Docks the fresh water influence is minimal.

FRESH WATER: Plentiful from wharf and small quantities available from tug in emergency, approx. 20 t.p.h.

FUEL: All grades available by road or river delivery. 48 hours notice of requirements is requested for barge delivery.

MEDICAL: All medical facilities available. Vessels requiring doctor to board are advised to give maximum notice. Emergency medical attention can be arranged through VHF radio contact to Tees Harbour Radio on Channels 22, 16 or 14.

GANGWAY/DECK WATCHMEN: Recommended. Majority of berths are tidal with 5 m. range at Springs.

OPENING/CLOSING HATCHES: Always by crew. Riggers available.

TANKER BERTHS:

Name	*Vessel Length* (m.)	*LAT Nominal depth* (m.)	*Remarks*
No. 1 Jetty Riverside	295	18.2	Phillips North Sea Petroleum 150,000 d.w.t. (crude) 60,000 cu.m (gas tanker)
No. 2 Jetty Riverside	295	18.2	
No. 3 Jetty Inset Dock	216		
No. 4 Jetty Inset Dock	295	18.2	
No. 5 Jetty Inset Dock	295	18.2	
No. 6 Jetty Riverside	92		
No. 7 Jetty Inset Dock	67		
No. 8 Jetty Inset Dock	67		
Shell Crude Oil Jetty	265	13.32	100,000 d.w.t.
Tar Residual No. 1	197	10.4	
No. 2	78	9.72	
Tees Storage No. 1 Jetty	76	10.27	
No. 2 Jetty	179	10.27	30,000 d.w.t.
Monsanto No. 1 Jetty	152	5.1	
No. 2 Jetty		7.24	
Teesport Queen Elizabeth II Jetty	198	10.9	40,000 d.w.t.
Teesport West Byng Jetty	198	10.0	40,000 d.w.t.
Arthur Taylor Jetty	90	6.80	3,000 d.w.t.
North Tees I.C.I./P.I.P.			
No. 4 Jetty	271	12.72	80,000 d.w.t.
No. 3 Jetty	193	11.81	
No. 2 Jetty	201	10.69	
No. 1 Jetty	92	7.2	
"A" Jetty	107	7.0	1,000 d.w.t.
Middlesbrough Dock			
South Wharf	82	4.8	7,000 d.w.t.
Billingham Oil Wharf	80	4.5	2,500 d.w.t.

Clarence/Deep Water Wharves handle tankers also.

CUSTOMS ALLOWANCES: 0.5 lb. tobacco or 200 cigarettes. (0.25 lb. tobacco for coasters). 1 spirit and 1 wine bottle (0.5 bottle spirit and 0.5 bottle wine for coasters).

IDENTIFICATION CARDS: Not used in Tees.

CONSULS: Sweden, Norway, Denmark, Netherlands, West Germany, Finland. Also French Consular Agency.

REPAIRS: Facilities available for all deck or engine repairs.

DRY DOCKS: None.

SURVEYORS: 1. Moore Barrett & Redwood Ltd., and Caleb Brett cargo inspectors available.

2. Lloyd's Register, American Bureau, German Lloyd, Bureau Veritas, Salvage Association, U.S. Salvage, N.K.K., RIMA and Corporation of China available.

AIRPORT: Teesside Airport with regular flights to London, etc. is 12 miles from Middlesbrough Centre.

Air U.K. have flights to Aberdeen, Amsterdam, Bergen, Norwich and Stavanger.

REPATRIATION: All facilities exist.

TIME: GMT in Winter months. BST (GMT plus 1 hour) operates between late March and mid-October as decided by government.

HOLIDAYS: Normal English Bank Holidays. On certain holidays work can be arranged if suitable notice is given.

POLICE/AMBULANCE/FIRE: Telephone 999 in emergency. If no phone available contact the Harbour Master on VHF Radio Channel 16 or 14.

EMERGENCY CO-ORDINATION CENTRE: Maritime Rescue Sub-Centre, Tees. Tel: Redcar (0642) 474639. Telex: 58132.

TELEPHONES: Many berths can be connected to telephone system using coin boxes; a connection charge is made.

STORING: See "Prelims" page viii.

1. Both.
2. Tankers – No.

Storing may take place before or after cargo operations, while all tanks are battened down.

3. No. Distance varies from 100 yards to half mile depending on berth.
4. No.
5. Applicable to spirits, cigarettes, tobacco and bonded meat only.
6. Yes, but normally by suppliers/ship's crew.

AUTHORITY: Tees and Hartlepool Port Authority, Harbour Master's Office, Tees Dock, Grangetown, Middlesbrough, Cleveland TS6 6UD. *Tel:* (0642) 468127. *Telex:* 58145 HM Tees G. *Contact:* Captain P. J. Lewis, Harbour Master.

TETNEY MARINE TERMINAL: 53.32 N. 00.07 E.

LOCATION: *Tetney Marine Terminal* is the deep water crude oil terminal of Crude Oil Terminals (Humber) Limited, operated by Conoco Limited.

The position of the mono-buoy is 53° 32′ 18″ N., 00° 06′ 48″ E., lying in approx. 60 ft. of water at low water and about 2.5 miles offshore.

Tetney is an open roadstead in the entrance of the River Humber on the East coast of England. The tidal rates in the vicinity of the mono-buoy reach 3.5 knots during Spring tides and the direction of the ebb and flood tides is generally East and West respectively. The tidal range varies between 7 ft. and 22.5 ft.

DOCUMENTS: The following documents should be completed for arrival:

Crew Manifest, C142.
Health Declaration, PS1.
Crew List, IB6.
Stores on Board List.

These documents will be handed to the Master of the Conoco work boat who will take them to Immingham for perusal by H.M. Customs and Immigration. On the return trip of the work boat the Agent and Customs will board to clear the vessel and attend to ship's business. Pratique is granted by H.M. Customs when they visit the vessel.

Stores can be taken at the berth provided the Agents are given the order at least 72 hours before arrival.

The Master of the tanker shall notify to the Harbour Master prior to arrival the information required under S.I. 1981 No. 1077, The Merchant Shipping (Tankers) (EEC Requirements) Regulations 1981.

The Master shall hand to the Berthing Controller tanker check list, Logg 22.

PILOTAGE: Vessels are requested to send ETA and draft to Spurn Pilot 12 hours before arrival and any adjustment to that time at least 2 hours before arrival. Spurn Pilots listen continuously on VHF Channel 16 and use Channel 14 as a working frequency.

Additionally, Agents should be advised of ETA 72 hours before arrival and the following information should be included in the cable, arrival draft, size of forecastle centre mooring fairlead, bow to manifold distance and cargo manifold size.

Pilotage is by Humber Pilots who board in the vicinity of the Humber Light Vessel from a fast launch. Additional berthing information can be obtained from Tetney Base.

The Berthing Controller and his Assistant will board as the vessel approaches the mono-buoy and will assist the Pilot in the mooring operation. He will advise the ship's Officers during the mooring operation, hose connection and disconnection, and will act as Company representative throughout the vessel's stay in the berth.

Vessels must provide a pilot ladder with spreaders and grab lines for the Pilot and Berthing Controllers to board and whilst in the berth a suitable gangway with a pilot ladder near the end in order to board from a small boat.

HEALTH: See "Health – All Ports" before first U.K. port.

VHF: There is a VHF station at Tetney which is manned 24 hours a day and has the call sign, 'Tetney Base'. A continuous watch is kept on VHF Channels 16, 19 (161.55/156.95), and 48 (163.00/158.40). Channel allocation is as follows, 16 calling, 19 ship to shore, and 48 port operations. UHF (467.725 MHz) is allocated for use by the Conoco Berthing Controller, Tetney Terminal and the Conoco owned work boats.

The Pilot and Berthing Controllers carry portable VHF hand sets for use during berthing for inter-ship and ship to tug communications, Channel 9 (156.45 MHz).

Portable radios can be provided for vessels not having a VHF set and the Agents should be so informed in order to allow time to dispatch a set to the ship on arrival. A vessel arriving without suitable means of communication and not having informed the Agent of the fact could incur delays.

BERTHING: The following equipment is required to moor and is placed aboard the vessel when the Berthing Controller boards from the Conoco service craft, Spurn Haven:—

1×50 ton or 70 ton S.W.L. alloy steel shackle.
1×60 mm. diameter wire securing strop, overall length 8 m.

In addition to this mooring gear hose hang-off chains and securing equipment is placed aboard at the same time.

On vessels fitted with a SMIT towing bracket, AKD stopper or similar type patent mooring device, this method of mooring will be utilised.

Prior to arrival, size of centre mooring fairlead should be advised and type of mooring and bracket.

The vessel approaches the mono-buoy on a Westerly heading. A messenger (min. 40 mm. diameter) should be lowered to the water and this will be picked up by the Conoco mooring launch "Monogirl" when approx. 150 m. from the mono-buoy. This messenger will be made fast to a 80 mm. × 92 m. polypropylene pick up rope which should be heaved up as the vessel makes the final approach to the buoy. When the chafing chain is in the fairlead the open links are shackled to the wire strops which are turned up on a suitably sited set of bitts.

HOSES: Hoses are taken on the port side and the port derrick (minimum S.W.L. 10 tons) should be rigged and ready for use on arrival.

2×16 in. hoses are taken aboard, manifolds should be 16 in. 150 ASA and 10 in. and 12 in. 150 ASA can be accommodated by the provision of reducers. Should a vessel have any other size of manifold or be unable to provide adaptors to suit one of the sizes, Tetney Terminal will need to be notified at least 72 hours before arrival.

Hose connection and disconnection is carried out by the ships crew under the supervision of the Berthing Controller. Upon completion of discharge the hoses will be filled with sea water by the ship after which disconnection can commence. When the hoses are blanked off they will be hung off until just before sailing when they will be lowered to the Spurn Haven for towing clear.

POLLUTION: It is the Master's responsiblity to see that no oil of any kind is pumped or spilled overboard from his vessel. This includes oil water from the bilges, crude residues from previous voyages or any other matter that may result in the pollution of the sea. Owners and Masters should comply with any international regulations and recommendations concerning the prevention of pollution of the sea, especially in regard to the river Humber.

SHORE LEAVE: None of the officers or crew shall be allowed shore leave and no boats of any kind, except in an emergency, shall be lowered during the vessel's stay in the berth.

OPERATOR: Tetney Marine Terminal, Crude Oil Terminals (Humber) Ltd., Tetney Lock Road, Tetney, Nr. Grimsby, South Humberside DN36 5NX. *Tel:* (0472) 814101. *Telex:* 527055 Coth G. *Contact:* Captain B. R. Stephenson, Harbour Master & Terminal Superintendent.

TYNE DISTRICT: 55.01 N. 01.24 W. (See Plan Book)

(Including Newcastle, North and South Shields, Jarrow, Tynemouth, Wallsend and Gateshead).

PORT OPERATIONS AND INFORMATION SERVICE: VHF: Call sign "Tyne Harbour Radio" on Channel 16, frequency 156.80 MHz and on Channel 12, frequency 156.60 mHz. The control station is situated at the Harbour Master's Office, North Shields (Tel: 0632 – 572080, 570407), and is manned on a 24 hour basis. Vessels must obtain permission by VHF from the control station before entering the port, similar permisson must be obtained before movement within, or before sailing from the port. A service is provided for the passing of information to shipowners and Agents.

DOCUMENTS:

1 Crew List for H.M. Immigration Office.
1 Form C.142 (Tobacco List) supplied by H.M. Customs.
1 List of Private Addressed Packages not manifested (C.143) supplied by H.M. Customs.

Details of Oil in double bottom tanks, also measurement in cubic feet of cargo in non-registered spaces.

PILOTAGE: Pilots normally board outside Harbour entrance within 1 mile radius. In bad weather Pilots will advise concerning entering. 12 hours advance notice via Agent requested. Frequency medium wave 2182 kHz. Call "Tyne Pilots". VHF – Call on Channel 16, working Channel 9. Cutter – 55 ft. in length painted black with white lettering "Pilots" – displaying pilot's flag. Efficient pilot ladder required as per Board of Trade regulations.

ANCHORAGE: Off entrance River Tyne, recommended 1.5 mile N.E. of North Pier. Minimum 12 fathoms.

RESTRICTIONS: Depths below Chart Datum (L.A.T.) from piers to Jarrow Quay Corner 8.61 m. thence to West end of Jarrow Staith 6.0 m., thence to Swing Bridge 5.2 m. (except in main channels of Swing Bridge and High Level Bridge) thence to Redheugh Bridge 5.61 m. West of Redheugh Bridge there is no authorised dredged depth.

MAX. SIZE: Harbour entrance, length and breadth: no limit. Draft 8.0 m. any state of tide: up to 11.0 m. at high water.

Riverside Quay, draft up to 10.00 m.
Esso Oil Terminal, draft up to 9.00 m.
Newcastle Quay, 27 – 28 berths – 7.5 m.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Cullercoats Radio W/T "GCC." Cullercoats Radio On R/T.

TUGS: Normally join inside piers, tow ropes optional except manufactured of man-made fibres. Orders for week-end arrivals must be given before 1030 hrs. Saturday. Rates on application to Tyne Tugs Ltd. Tel: South Shields 553361.

BERTHING:

Albert Edward Dock:

Warehouse Quay: 356 m. long, depth of water 7.9 m.
East Dock Wall: 162 m. long, depth of water 7.9 m.
Ro-Ro Berth No. 1, East Dock Wall: depth of water 7.5 m.
Heavy Load Berth (Ro-Ro No. 2) for heavy unit loads on transporters up to 510 tonnes; depth of water 7.9 m.
Tyne Commission Quay: 335 m. long, depth of water 7.11 m.
Tyne Commission Quay Extension: 118 m. long, depth 6.21 m.

Car Ferry Terminal:

Ro-Ro No. 3: 180 m. long, depth of water 7.11 m.
Ro-Ro No. 4: 140 m. long, depth of water 7.5 m.
Whitehill Point Jetty: 90 m. long, depth of water 5.5 m.

Tyne Dock:

North West Quay: 243 m. long, depth of water 8.2 m.
Factory Quay: 196 m. long, depth of water 7.0 m.
Riverside Quay: 384 m. long, depth of water 10.5 m.
Tynegrain Ltd. (Extension of Riverside Quay): Terminal, 26,000 tonnes silo capacity. Loading rate 1,000 tonnes per hour. Max. size 40,000 d.w.t. Depth of water 10.51 m.

Newcastle Quay:

Spillers Tyne Mill: 237 m. long, depth of water 8.01 m., discharge rate 150 tonnes per hour. Silo capacity 34,000 tons.

Jarrow Staith: 2 berths, depth of water 7.11 m. Loading rate 500 tonnes per hour East berth, 250 tonnes per hour West berth.

Harton Staith: 1 berth, depth of water 6.4 m.

TANKERS:

Esso Petroleum Company Limited, Howdon:–
Ocean Jetty: 274 m. long, depth of water 9.51 m.
Coaster Jetty: 167 m. long, depth of water 6.0 m.
Shell U.K. Ltd. Jarrow Oil Jetty: Length 189 m. Depth 7.0 m.
Rohm & Haas Ltd. Jarrow: Chemical Berth, length 180 m. Depth 5.6 m.
Velva Liquids Limited, South Shields: 170 m. long, depth of water 8.0 m.
Velva Liquids Limited, North Shields: 248 m. long, depth of water 7.11 m.
Tanker Cleaning Berth Howdon: 248 m. long, depth of water 7.11 m.

Services: The tanker-cleaning berth at North Shields provides accommodation for vessels about 248 m. length, depth alongside 7.11 m. below Chart Datum. The shore installation, which is owned and operated by the Tyne Tanker Cleaning Co. Ltd., includes large reception capacity for tank washing and oily sludge, separators of the latest type which can deal with oily water at the rate of 1,000 t.p.h. and various treatment and storage tanks; together with boilers and steam pumping plant. Expert staff and modern equipment for carrying out tank washing, cleaning and gas-freeing of vessels at the berth, and for other essential duties are also available, making it possible for tanker crews to be paid off immediately on arrival. The whole installation is protected by a most complete system of fire precautions and fire-fighting equipment.

BRIDGES: At Newcastle 10 miles from entrance, Swing Bridge negotiated against tide; other bridges, max. mast height 24.7 m. above MHWS.

STEVEDORES: Principal Stevedores Port of Tyne Authority. All arrangements through Agent. Stowage plan required prior to arrival.

Plant pool as follows:–

Albert Edward Dock:

Warehouse Quay – 7 cranes, 6 tonnes – 30 tonnes.
East Dock Wall – 3 cranes, 5 tonnes.
Tyne Commission Quay – 5 cranes, 3 tonnes – 40 tonnes.
Tyne Commission Quay Extension – 2 cranes, 6 tonnes.
Ro-Ro Berths – 4 terminal tractors.

Tyne Dock:

Riverside Quay – 7 cranes, 6 tonnes – 12 tonnes.
North West Quay – 5 cranes, 5 tonnes – 10 tonnes.
Factory Quay – 2 cranes, 3 tonnes.

There is a pool of 40 fork lift trucks of 5,000 lbs. - 25 tonnes. capacity available for any location. These trucks can be fitted with attachments for handling paper, pulp, etc.

Also see "Dry Docks".

MEDICAL: Hospitals available, Advise Agent in advance if medical attention required on arrival.

DENSITY: Entrance/Tyne Dock – 1025; Tyne Dock/Jarrow 1020; Newcastle Quay 1005/1010.

FRESH WATER: Available ex-water boat, rate of delivery up to 150 t.p.h.

FUEL: All grades ex-installation, or by barge, 24 hours notice required.

GANGWAY/DECK WATCHMEN: Available if required.

OPENING/CLOSING HATCHES: Crew allowed open and close.

CERTIFICATES:

Register.
Load-line.
Safety Construction.
Safety Equipment.
Safety Radio.
Trinity Light Bills.

CUSTOMS ALLOWANCES: At the discretion of Local Customs Inspector. Normal allowances are equivalent of 0.5 lb. tobacco per man and equivalent to 1 bottle wine per man. Allowances may be halved for home trade vessels. Vessels in port more than 3 or 4 days may receive extra allowances.

IDENTIFICATION CARDS: Required by crews of passenger vessels at Terminal Berths at North Shields.

CONSULS:

Belgium	tel. Newcastle	612711
Chile	,, ,,	611661
Denmark	,, North Shields	584421
Finland	,, Newcastle	612711
France	,, North Shields	570225
Germany (Fed. Rep.)	,, Newcastle	611063
Greece	,, ,,	325414
Iceland	,, ,,	841112
Italy	,, ,,	328971
Liberia	,, ,,	612711
Luxemburg	,, ,,	612711
Netherlands	,, ,,	612471
Norway	,, North Shields	595490
Sweden	,, ,,	815934
Spain	,, Wideopen	364126/7

REPAIRS: All types of repairs possible at many building/repair yards.

DRY DOCKS:

Name of Owner or Occupier	*Dock*	*Length on Bottom (m.)*	*Breadth at Entrance (m.)*	*Depth on Sill at M.H.W.S (m.)*
NORTH SIDE OF RIVER				
*Wallsend Drydocks Ltd. Wallsend	No. 1	170.7	23.2	7.8
	No. 2	143.4	21.3	7.6
	No. 3	173.7	24.4	7.9
	No. 4	217.9	32.0	8.8
Smiths Shiprepairers (North Shields) Ltd., North Shields	No. 4	149.4	20.7	7.1
	No. 5	152.4	20.7	7.4
	No. 6	167.6	22.1	6.9
	No. 7	90.5	15.9	5.4
	No. 8	216.1	29.6	8.5
	No. 9	149.4	20.7	7.1
SOUTH SIDE OF RIVER				
Tyne Dock Engineering Co. Ltd., South Shields	No. 1	96.0	13.7	5.0
	No. 2	85.3	14.0	5.6
*Middle Docks & Engineering Co. Ltd. South Shields	No. 1	103.6	14.6	5.5
	No. 2	145.4	17.7	6.4
	No. 3	152.4	19.5	7.2
	No. 4	197.1	24.4	7.9
Redheads Shiprepairers Ltd., South Shields	No. 1	100.9	14.6	5.2
	No. 2	152.4	19.8	6.1

*The headquarters of the nationalised Tyne Shiprepair Yards is:–

TYNE SHIPREPAIR LTD.,
MIDDLE DOCKS, HILL STREET,
SOUTH SHIELDS.
Tel: 555401 and 540111.
Telex: 537759 and 53489.

Slipways:

Name of Owner or Occupier	*No. of Slipways*	*Length of Cradle*
SOUTH SIDE OF RIVER		
Powerport Eng. Ltd.	2	61 m. 27.4 m.
Robsons Boatbuilders Ltd.	1	20 m.

Heavy Lift Cranes:

Wallsend Slipway: 150 tonnes. Depth of water 7.6 m. C.D.
Clark Hawthorn Ltd.: 150 tonnes. Depth of water 5.5 m. C.D.
Swan Hunter Shipbuilders Ltd., Walker: 250 tonnes. Depth of water 6.9 m. C.D.
Titan III Floating Crane: 150 tonnes.

REPATRIATION: All facilities available.

AIRPORT: Newcastle Airport, served by regular airlines.

Air UK have flights to Aberdeen, Amsterdam, Bergen, Copenhagen, Norwich, Paris and Stavanger.

TIME: British Standard Time, GMT plus 1 hour. GMT in Winter months.

HOLIDAYS: New Year's Day; Good Friday; Easter Monday; May Day; Spring Holiday; Late Summer Holiday; Christmas Day; Boxing Day.

POLICE/AMBULANCE/FIRE: Dial 999, and ask for service required.

TELEPHONES: Can be arranged on board at certain berths.

SHORE LEAVE: Allowed.

SHIP SUPPLY SERVICE:

Ellefsen Marine Limited, 119 Jesmond Road, Newcastle Upon Tyne NE2 1NL.

Gillie & Blair Limited, Proctor House, Side, Newcastle Upon Tyne NE1 3JE.

DEVELOPMENTS: *Coal Handling Plant at Tyne Dock:* The Port of Tyne Authority is engaged in constructing a new coal handling and shipping terminal on a 20 acre site in the recently reclaimed Jarrow Slake, Tyne Dock. The terminal, in conjunction with the National Coal Board, has the capacity to handle 4 m. tonnes per annum and will provide ground stocking facilities for 150,000 tonnes of coal. The target date for the completion of the plant is the end of 1984.

Coal will be delivered by British Rail via the rail connection servicing Tyne Dock. Two new spur lines with head shunt will be constructed and all rail and ancillary works will be carried out to the standards and requirements of British Rail.

The wagon discharging point, consisting of a rail track running over a discharge hopper will be capable of accommodating the contents of a 46 tonne H.A.A. hopper mineral wagon. Coal trains will be marshalled through the wagon discharge point on a "Merry-Go-Round" principle using a locomotive and automatic line side wagon discharging equipment.

The coal will be discharged from the hopper onto wide flat belt feeder conveyors whence it will be delivered by succeeding conveyors to a travelling, slewing and luffing stacker which will form two parallel stockpiles.

Alternatively, the coal may by-pass the stockpiles and be directed through the stacker directly to the shiploading point. Reclamation from the stockpiles will be by a bucket wheel reclaimer capable of blending and homogenising the coal whilst reclaiming over the surface area of the stockpiles. The machine will reclaim coal to its own main line belt and the coal will be transported by succeeding conveyors to a wharfside shiploader mounted on a dolphin type berthing structure capable of accommodating vessels of approximately 25,000 tonnes d.w.t. in a berth dredged to 10.5 m. below Chart Datum. The three berthing dolphins have vertical steel piles with rubber cell fenders to the rear. The berth is designed for subsequent deepening to cater for 50,000 tonnes d.w.t. vessels.

The loading of the main conveyor and stock recovery conveyors will be controlled automatically to ensure the shiploader cannot be overloaded. Incorporated in the conveyor system will be 3 automatic belt weighers and an approved type of sampling equipment. In the event of the shiploader not being used the coal will be delivered to stock and the control of the plant will revert to a separate control room providing a vantage point from which each conveyor system can be directed.

The plant is designed to load vessels at 2,800 tonnes/p.h.

Length of berth, 210 m. Dredged width of berth 25 m. Depth of berth 10.5 m. below Chart Datum. Approaches to berth 8.6 m. below Chart Datum.

For stores, etc., access to vessel by motor is available from the centre of the berth.

AUTHORITY: Port of Tyne Authority, Bewick Street, Newcastle upon Tyne, NE1 5HS. *Tel:* 325541. *Telex:* 53595. *Contact:* Mr. E. W. Oakes, Commercial Director.

AGENT: Lambert Brothers Ship Agencies Ltd., 'D' Floor, Milburn House, Dean Street, Newcastle Upon Tyne, NE1 1LY. Tel: Newcastle (0632) 327341. Telex: 53405. Cable address: "Lambros."

WARRENPOINT: 54.06 N. 06.16 W. (See Plan Book)

PORT LIMITS: Seaward to a line from Ryland River (South Coast) to Ross Memorial (North Coast) approximately 3,000 m. from Warrenpoint.

DOCUMENTS:

2 Crew Lists.
2 Passenger Lists.
1 Store List.
Vessel's Papers and Certificates.
1 Manifest or Bill of Lading.

PILOTAGE: Not compulsory. Pilot station at Greencastle Pier at entrance (North side) to Carlingford Lough. VHF (Warrenpoint Pilot) radio, Channels 16 and 12. Notice to Agents of ETA at 48 hours and 24 hours.

ANCHORAGES: Safe anchorage at Fairmont Roads S.E. Greenore and also inside Carlingford Lough N.W. of No. 13 Buoy.

RESTRICTIONS: None except draft of vessel. Advise Agents.

HEALTH: No certificate necessary. In event of disease or fever contact Agent in advance. Hospitals available.

Also see "Health-All ports" before first UK port.

RADIO: All messages to Agents through Portpatrick Radio or Anglesea Radio.

VHF: Pilot station (Warrenpoint Pilot) and Port Radio (Warrenpoint Harbour) on Channels 16 and 12.

TUGS: None.

BERTHING: All berths except Town Dock have 17 ft. at LWOST.

STEVEDORES: Warrenpoint Harbour Authority. Telephone: Warrenpoint 3381. Telex: 74660

CARGO HANDLING FACILITIES:
2×35 tonne Liebherr Transporter Container Cranes;
2 Poclain HC300 Hydraulic Cranes;
1 Jones 971 HLB Dockside Crane;
2 Babcock Wilcox Luffing Grabbing Cranes.

BULK CARGO FACILITIES: Coal – 2 Luffing Grabbing Cranes at 150 t.p.h.

Grain discharged at up to 250 t.p.h. to Grain Silo of 8 bins, total capacity about 4,800 tonnes. Flat grain store capacity 4,000 tonnes also available.

SPECIALISED CARGO HANDLING FACILITIES: Roll-on/Roll-off berth with 15 ft. at LWOST. Bridge has HA loading. Ramp 6 m. wide Marshalling area about 8 acres.

FUEL: Available by road tankers. 48 hours notice usually required.

FRESH WATER: Available from pipes on quay.

CONSULS: None.

REPAIRS: Small repairs can be undertaken.

DRY DOCKS: None.

SURVEYORS: Lloyd's – Jos. Fisher & Sons, Ltd. Warrenpoint 3500.

GANGWAY/DECK WATCHMEN: Neither compulsory nor necessary.

HATCHES: Opening and closing by crew.

CUSTOMS ALLOWANCES: As permitted by UK Customs and Excise.

CARGO GEAR: Ship's gear only used if shore cranes not available.

REPATRIATION: Airports (Belfast and Dublin) 2 hours away. Transport available. By sea – Belfast 1 hour.

AIRPORTS: Belfast (Aldergrove) 60 miles. Dublin 75 miles. Schedule flights daily to London.

TIME: GMT. GMT plus 1 hour in Summer.

HOLIDAYS: New Year's Day; St. Patrick's Day (17th March); Easter Monday and Easter Tuesday; 1st Monday in May; 12th July; 13th July; 15th August; Christmas Day and Boxing Day.

POLICE/AMBULANCE/FIRE: Dial 999 and ask for service required.

TELEPHONES: Not possible to place telephones on board.

SERVICES: Check with Agents. Most services can be supplied given 24 hours' notice.

SHORE LEAVE: After clearance inwards, Crew members allowed ashore without restriction. No passes issued.

DELAYS: Delays in loading or discharging are minimal and infrequent.

AUTHORITY: Warrenpoint Harbour Authority, The Docks, Warrenpoint, Northern Ireland. *Tel:* 3381/3382. *Telex:* 74660. *Cables:* Harbour Authority. *Contact:* A. J. McGuffin, General Manager/Harbour Master.

AGENT: Samuel Stewart and Co. Ltd., The Docks, Warrenpoint. Tel: (069372) 2215. After hours: (0693) 5223, (069372) 793991, (069372) 669356. Telex: 747092.

WATCHET: 51.11 N. 03.20 W. (See Plan Book)

DOCUMENTS: Crew List, Store List, Ship's Register, Manifest or Bills of Lading.

PILOTAGE: Trinity House Outport District, Compulsory, ETA 24 hrs. before arrival to Harbour Master's Office, Watchet 31264, after hours Minehead 3430.

ANCHORAGE: Safe anchorage Blue Anchor Road.

RESTRICTIONS: Accordance with state of tide and draft. Vessels enter 2 hours before HW.

MAX. SIZE: Max. permissible length 97 m., breadth 16 m., draft restrictions according the height of tides, max. draft Neap tides 12 ft. and Spring tides 14 ft. – 16 ft.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: It is best for vessels to give ETA by R/T to Lands End or Ilfracombe Radio.

VHF: Watchet Radio Channels 16, 12, 14 and 9.

TUGS: None.

BERTHING: 2 quays, 1 of 150 m., 1 of 120 m.

CRANES: 3 cranes, 2×5 tons, 1×10 tons.

BULK CARGO: Cranes with grabs.

STEVEDORES: Watchet Marine Ltd.

MEDICAL: Port Doctor in Watchet.

DENSITY: Salt 90%.

FRESH WATER: Available on the quay.

FUEL: All grades, advance notice required.

FIRE PRECAUTIONS: Normal port precautions.

CONSULS: At Bristol.

REPAIRS: Normal repairs to ships possible notice required.

SURVEYORS: West Marine Surveyors & Consultants Limited, Consulting Marine Surveyors, Engineers & Naval Architects, The Old Custom House, Brixham, South Devon. Tel: Brixham (Std 080 45) 2604. After normal office hours Tel: 0803 842925. Cables: Surveyor, Brixham. Telex: 42962 – Survey G.

OPENING/CLOSING HATCHES: Carried out by crew.

CUSTOMS ALLOWANCES: Decided by the Customs Officer in charge.

CARGO GEAR: Shore gear, cranes and forklifts.

REPATRIATION: Facilities exist for crew changes.

AIRPORT: Nearest airport at Bristol.

TIME: GMT and British Summertime.

HOLIDAYS: Cargo work can be arranged.

POLICE/AMBULANCE/FIRE: Phone 999 for all three services.

TELEPHONES: None on quay.

SERVICES: Chandler available.

SHORE LEAVE: Allowed.

IDENTIFICATION CARDS: None required.

DEVELOPMENTS: New warehouse and lorry park.

AUTHORITY: West Somerset District Council, East Wharf, Watchet, Somerset. *Tel:* 31264. *Cables:* Port of Watchet. *Contact:* Captain C. Muller.

WHITEHAVEN: 54.33 N. 03.36 W. (See Plan Book)

DOCUMENTS: Usual required for clearing a vessel from foreign port, i.e. Crew list, Passenger list, Customs Documents, Ship's Register, Manifest and Bills of Lading.

PILOTAGE: Request for Pilot is made by International Code signal G, sound and visual. ETA should be sent 12 hours in advance either to ship's Agent or Harbour Master or both. Area for taking Pilot on board 4 to 5 cables West of Harbour. Pilot boats are Trinity House Pilot Boats – "Viking" and "Cumbria". VHF is installed.

ANCHORAGE: Same area as for boarding Pilot according to draft.

RESTRICTIONS: Vessels may dock from 1.5 hours before HW till 1 hour after HW according to draft.

MAX. SIZE: 270 ft. length, 40 ft. beam and 17 ft. draft (deepest) on Spring tides, 14 ft. draft (deepest) on Neap tides.

HEALTH: See "Health – All Ports" before first U.K. port.

RADIO: Port Patrick and Anglesey Radio Stations.

TUGS: No tugs.

CRANES:
2×10 tonnes lifting capacity.
1×15 tonnes lifting capacity.
2×5 tonnes lifting capacity.

MEDICAL: Agent should receive notice in advance of any medical treatment required. Hospital services are readily available.

DENSITY: Any state of tide density is 1025.

FRESH WATER: Fresh water is available on all berths, any quantity on request to ship's Agent.

FUEL: Most grades and types available.

FIRE PRECAUTIONS: Usual precautions are taken when inflammable cargo is being loaded or discharged.

GANGWAY/DECK WATCHMEN: Advisable to have a watchman but not absolutely necessary.

OPENING/CLOSING HATCHES: Always opened and closed by crew.

CERTIFICATES: Derat Certificate, Load Line Certificate, Radio R/T Certificate, etc.

CUSTOMS ALLOWANCES: 200 cigarettes, 1 bottle spirits.

IDENTIFICATION CARDS: None required.

CONSULS: Norway, Sweden, Denmark and the Netherlands.

REPAIRS: All types of deck and engine repairs carried out.

REPATRIATION: Facilities exist for effecting crew changes and arranging any necessary repatriations.

AIRPORTS: Nearest airports are at Manchester, Newcastle and Prestwick, all approx. 130 miles away.

HOLIDAYS: Cargo may be worked on following days: New Year's Day, Good Friday, Easter Monday, Whit Monday, August Monday, Christmas Day and Boxing Day.

POLICE/AMBULANCE/FIRE: Telephone numbers of these services in order are: Whitehaven 2616, 3181 and 2151.

TELEPHONES: No special arrangements exist for placing telephones on board vessels.

SHORE LEAVE: Crew members may come and go at all times.

DELAYS: There are very seldom any delays in berthing and none in loading, discharging or bunkering.

AUTHORITY: Whitehaven Harbour Commissioners, Harbour Office, Pears House, 1 Duke Street, Whitehaven, Cumbria. *Tel:* Whitehaven 2435. *Contact:* Captain J. A. Hogg, Harbour Master (*Tel:* 2436). R. W. Crosbie, General Manager.

WHITSTABLE: 51.21 N. 01.02 E. (See Plan Book)

PILOTAGE: Pilotage is available but Pilots must be ordered through the Lloyd's Agent. A minimum of 4 hours notice is required as Pilots are from Dover.

APPROACHES: Vessels are advised to arrive at the Whitstable Street Buoy not later than 1.5 hours before HW.

To ensure that vessel's approach on the correct heading, (122.5°), and to assist in identifying the entrance, the Whitstable Oyster Buoy has been established in a position bearing 310°×1,950 ft. from the light on the Dolphin on the Western side of the Harbour. This is a red can, flashing 2 red every 10 seconds.

The entrance to the Harbour is marked by a Sector Light fixed to the West Quay Dolphin and shows White, Green and Red. The outer end of the East Quay is marked by 2 fixed Vertical Red Lights. There are fixed Red Leading Lights on the South Quay bearing 122.5° from seaward. *Harbour Signals:* A fixed Red Light shown below the fixed Harbour White Light at night means entry of vessels is prohibited. A fixed White Light *only* means Port open for entry.

MAX. SIZE: The Harbour is tidal and dries out at LW with berths of soft mud capable of accepting vessels of up to 2,000 tonnes capacity. There are 4 quays having a total overall length of 2,205 ft. (679 m.), with accommodation for up to 8 vessels at drafts of 15 ft. 6 in. (4.72 m.) at Spring Tides and 12 ft. 0 in. (3.66 m.) at Neap Tides.

VHF: Ship to shore communication is maintained by VHF Radio, the call sign being "Whitstable Harbour Radio", listening on Channel 16 and working Channels 12 and 9. The station is manned for 3 hours before HW to 1 hour after HW and daily from 0800 hrs. – 1700 hrs.

In Event of VHF Breakdown: On Day Tides between the hours of sunrise to sunset (from 3 hours before until 1 hour after HW), a Docking Light Signal may be in operation, exhibited from the Light Tower in position Lat: 51° 21′ 48″ N., Long: 01° 01′ 39″ E. Character to indicate Port Closed: Fixed White. Character to indicate Port Open and Clear for Entry: One flash every 3 seconds.

TUGS: The services of a tug can be made available via Lloyd's Agent. 24 hours notice is required.

BERTHING:
East Quay: Length 900 ft. (274 m.). 3 berths.
Storage – Transit Shed 12,000 sq.ft. (1,115 sq.m.)
Warehouse 4,000 sq.ft. (371 sq.m.)
Bins – Stone, Slag and Ballast at Inner Berth.
South Quay: Length 500 ft. (152.4 m.). 2 berths.
Storage – 1. Warehouse 9,000 sq.ft. (836 sq.m.)
2. Warehouse 7,000 sq.ft. (650 sq.m.)
Open Storage – Bulk Stone etc. – 2,000 tonnes.
Open Storage and Trailer Park – 5,000 sq.ft. (464 sq.m.)
North Quay: Length 205 ft. (62.5 m.). 1 berth.
West Quay: Length 600 ft. (183 m.), width 130 ft. (40 m.).
Storage – Warehouse 19,000 sq.ft. (1,765 sq.m.)

Depth of Water:

Quay:	*HWS*	*HWN*
North	13 ft. 6 in. (4.11 m.)	10 ft. (3.05 m.)
South	15 ft. 6 in. (4.72 m.)	12 ft. (3.66 m.)
East	15 ft. 6 in. (4.72 m.)	12 ft. (3.66 m.)
West	15 ft. 6 in. (4.72 m.)	12 ft. (3.66 m.)

CRANES: Cranes are privately owned and consist of 4 mobile cranes on tracks. SWL up to 10 tonnes.
FRESH WATER: Available.
FUEL: Available.
AUTHORITY: Canterbury City Council, Harbour Office, Whitstable Harbour, Whitstable, Kent CT5 1AB. *Tel:* Whitstable 274086. *Contact:* Commander F. J. Bloom, Harbour Master.

WORKINGTON: 54.39 N. 03.34 W.

DOCUMENTS: Standard U.K. documents.
PILOTAGE: Compulsory. Minimum notice 12 hours via vessel's Agents. Pilot boards 1 mile West of entrance.
ANCHORAGES: 1.5 miles to 2 miles N.W. of the entrance.
MAX. SIZE: 10,000 d.w.t., length 137.2 m. beam 62 ft. and draft 25 ft.
HEALTH: Standard U.K. procedure.
VHF: Workington Harbour Radio operates on Channels 16, 14 and 11. A listening watch is maintained daily from 2.5 hours before HW until 2 hours after HW.
TUGS: Vessels over 92 m. LOA shall, if the Harbour Master requires, be assisted by a tug. A tug is permanently based at the port and is available at 24 hours' notice.
BERTHING: *Tidal Harbour:* 853 m. of quayage for fishing vessels and other small craft. Depths are from 4.1 m. Neap tides to 7.2 m. Spring tides.

Prince of Wales Dock: Enclosed dock, width of entrance 21.2 m. There is 772.7 m. of quay frontage with depths from 7.2 m. Neaps to 10.2 m. Springs. The dock is 97.8 m. wide at the West end, 76.2 m. at the East end. There is a transit shed situated at the general cargo berth.
CRANES: 3 × 7 tonnes and 2 × 10 tonnes cranes are available. There is a Scotch derrick of 28 tonnes capacity.
BULK CARGO FACILITIES: The new automated coal terminal is capable of handling 1,750 tonnes of coal per hour.
SPECIALISED CARGO HANDLING FACILITIES: Ro/Ro facility available.
STEVEDORES: Normal working 0800 – 1700 hrs. with 3 hours evening overtime if requested.
FRESH WATER: Available.
FUEL: Available.
TIME: GMT plus 1 hour (late March – late October), otherwise GMT.
AUTHORITY: Cumbria County Council, Port of Workington, Dock Office, Workington, Cumbria CA14 2JH. *Tel:* (0900) 2301. *Telex:* 64253. *Contact:* Captain D. C. Thomas, Harbour Master and General Manager.

NOTES

Please also advise Shipping Guides Ltd.

United States of America

GENERAL

AGRICULTURE: All ports.

Arrival Notification: The vessel's Master or port Agent must notify the U.S. Department of Agriculture (USDA) Inspector at each port of arrival of expected time and location of arrival.

Documents: The cargo, stores, and crews' effects lists or manifests must be available for review by the boarding USDA Inspector.

Inspection: The USDA Inspector will examine the galleys, storerooms, lockers, mess areas, and crew quarters in some instances for prohibited plant materials (fruits, vegetables, and plants) and meat products. Some categories of food materials may require being placed under seal. Also, inspections may be made of onboard cargo and cargo holds.

Garbage: All food wastes aboard vessels arriving from foreign or offshore areas (except Canada) must be handled in accordance with USDA regulations. Garbage must be held aboard vessels in leakproof, covered containers for later disposal or, it may be removed with permission and under supervision of a USDA Inspector for disposition in approved facilities. Dumping in territorial waters or unauthorised garbage removal is unlawful and may subject the vessel operator to civil *or* criminal penalties.

Treatments: If quarantine-significant pests are found aboard a vessel, an Emergency Action Notification may be issued to the Master. It will prescribe what treatments are required to the affected articles or area of the vessel and when this treatment must be accomplished.

Honeybees: Honeybees may not be brought into the United States. This is a precaution to keep out Africanised bees, which could gravely upset beekeeping in North America. Do not disturb any signs of bees on board, such as live swarms, dead bees, or hives. Contact the ship's Agent before entering U.S. ports for appropriate instructions regarding disposal and treatment from the USDA inspector.

Animals/birds: All live animals or birds aboard vessels must be retained onboard and reported to the USDA Inspector.

For additional information: Write to "Quarantines", U.S. Department of Agriculture, Federal Building, Hyattsville, MD 20782.

HEALTH: All ports.

The U.S. Public Health Service does not maintain Quarantine Stations at each port of entry. The smaller ports are under the jurisdiction of Quarantine Stations located at strategic ports of entry. Matters of public health significance occurring on vessels destined to ports not manned by Public Health Service personnel should be reported to the Quarantine Station having jurisdiction over that port.

U.S. PORTS

PORT	QUARANTINE STATION
Albany	New York
Alexandria	Washington, D.C.
Anacortes	Seattle
Anchorage	Anchorage
Ashtabula	Chicago
Astoria	Seattle
Atreco	Miami
Baltimore	Washington, D.C.
Bangor	Boston
Baton Rouge	Miami
Baytown	Miami
Beaumont	Miami
Bellingham	Seattle
Benicia	San Francisco
Boston	Boston
Brownsville	Miami
Brunswick	Miami
Buffalo	New York
Burnside	Miami
Cape Cod Canal	Boston
Castle Island	Anchorage
Charleston	Washington, D.C.
Chicago	Chicago
Cleveland	Chicago
Coos Bay	Seattle
Cordova	Anchorage
Corpus Christi	Miami
Deer Park	Miami
Destrehan	Miami
Detroit	Chicago
Duluth-Superior	Chicago
Erie	Chicago
Eureka	San Francisco
Everett	Seattle
Fall River	Boston
Ferndale	Seattle
Freeport	Miami
Galena Park	Miami
Galveston	Miami
Geismar	Miami
Good Hope	Miami
Gramercy	Miami
Grays Harbor	Seattle
Green Bay	Chicago
Gulfport	Miami
Haines	Anchorage
Hampton Roads	Washington, D.C.
Hilo	Honolulu
Homer	Anchorage
Honolulu	Honolulu
Houston	Miami
Hueneme	Los Angeles
Huron	Chicago
Jacksonville	Miami
Juneau	Anchorage
Kahului	Honolulu
Ketchikan	Anchorage
Kings Bay	Miami
Kodiak	Anchorage
Lake Charles	Miami
Long Beach	Los Angeles
Longview	Seattle
Los Angeles	Los Angeles
Magpetco	Miami
Metlakatla	Anchorage
Miami	Miami
Milwaukee	Chicago
Mobile	Miami
Morehead City	Washington, D.C.
Myrtle Grove	Miami
Nawiliwili	Honolulu
New Bedford	Boston
New Haven	Boston
New London	Boston
New Orleans	Miami
New York	New York
Nikiski	Anchorage
Oakland	San Francisco
Ogdensburg	New York
Olympia	Seattle
Orange	Miami
Ostrica	Miami
Palm Beach	Miami
Panama City	Miami
Pasadena	Miami
Pascagoula	Miami
Pensacola	Miami
Petersburg	Anchorage
Philadelphia	New York
Piney Point	Washington, D.C.
Port Adams	Miami
Port Angeles	Seattle
Port Arthur	Miami
Port Canaveral	Miami
Port Everglades	Miami
Port Huron	Chicago
Portland, Maine	Boston
Portland, Oregon	Seattle
Port Lavaca/ Point Comfort	Miami
Port Neches	Miami
Port St. Joe	Miami
Port San Luis	Los Angeles
Port Sulphur	Miami
Redwood City	San Francisco
Richmond, California	San Francisco
Richmond, Virginia	Washington, D.C.
Riverhead	New York
Rochester	New York
Sacramento	San Francisco
San Diego	San Diego
San Francisco	San Francisco
Savannah	Miami
Searsport	Boston
Seattle	Seattle
Seward	Anchorage
Sitka	Anchorage
Skagway	Anchorage
Smiths Bluff	Miami
Stockton	San Francisco
Tacoma	Seattle
Tampa	Miami
Texas City	Miami
Toledo	Chicago
Valdez	Anchorage
Vancouver	Seattle
Wilmington, Delaware	Washington, D.C.
Wilmington, North Carolina	Washington, D.C.
Wrangell	Anchorage

The U.S. Public Health Service Division of Quarantine is also responsible for Ports in Puerto Rico and the U.S. Virgin Islands.

Masters of Vessels arriving at United States ports

Effective July 1, 1973, Radio Pratique as a method of quarantine clearance was discontinued at all ports under control of the United States.

Vessels Subject to Public Health Inspection

Only vessels in the following categories will be subject to onboard public health inspection upon arrival or during stay at ports under control of the United States:

A. Crew or passengers having:

1. Temperature of 100° F (38° C) or greater (a) which persisted for 2 days or more; or (b) which was accompanied or followed by any one or all of the following: rash, jaundice, glandular swelling; or
2. Diarrhoea severe enough to interfere with work or normal activity; or
3. On board occurrence of death, regardless of the signs and symptoms above.

B. Vessels which have been in a plague infected Port in the 60 days prior to arrival in the United States.

Procedures. In accordance with regulations you must inform the quarantine station, through your vessel Agent, at or nearest the intended port of your vessel's first arrival in the United States of the occurrence of illness as specified in A above. Based on information you provide your Agent, or information your Agent already possesses regarding your vessel's itinerary, your Agent will notify the quarantine station if your itinerary included a plague infected country. Arriving vessels no longer need to complete a Maritime Public Health Declaration.

These changes reflect our confidence that you will continue to report, in advance of arrival in the United States, the on-board occurrence of: death; or illness compatible with the signs and symptoms specified above; or death or illness while in port if such occurs after arrival.

COMMUNIST FLAG VESSELS:

SHIPPING AGENT GUIDELINES
UNITED STATES
PORT ENTRY REQUIREMENTS
FOR
COMMUNIST FLAG, CHARTERED AND
CREWED VESSELS
REVISED NOVEMBER 1982
PREVIOUS EDITIONS OBSOLETE
Issued by Department of Transportation
U.S. Coast Guard (G-WPE-2/16)
2100 2nd Street S.W.
Washington, DC 20593

1. GENERAL PROVISIONS

A. *INTRODUCTION:*

The purpose of this document is to clarify and explain administrative procedures for affected vessels. This document is intended to provide primary assistance to shipping Agents in arranging entry into United States ports for vessels they represent.

This document provides guidance for entry by commercial maritime vessels of certain nations into United States ports. These nations are Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, Union of Soviet Socialist Republics, and the People's Republic of China. The requirements apply to the Owner, Master, Agent or person in charge of commercial maritime vessels of these nations. The requirements apply also to the commercial maritime vessels of other nations which are owned by, chartered to or employ citizens of these nations. Adherence to these requirements will facilitate legitimate entry of the vessels to which the requirements apply. The requirements do not apply to entry by public vessels of these nations. Public vessel entry applications are handled only on a government-to-government basis.

Access to U.S. ports by any foreign vessel is subject to compliance with applicable laws and regulations of the Federal Government and of state and local authorities in the areas wherein they have jurisdiction. United States port entry procedures and applicable Federal laws and regulations apply generally to all foreign vessels. Specific mention is made in this document of those limited instances where commercial maritime vessels of certain nations are treated differently from other foreign vessels.

National security interests require that the movement of any vessel within the territorial waters of the United States be subject to U.S. Government review. Authority for this is found in Title 50, United States Code, Section 191, Executive Order 10173 as amended, and Title 33, Code of Federal Regulations, Part 6. These authorities are exercised by the U.S. Coast Guard. The requirements herein are intended to expedite this review for vessels to which the requirements apply.

Additionally, these requirements implement and support provisions of treaties, conventions, agreements and similar instruments in force between the government of the United States and the governments of certain nations concerning maritime matters. Interested parties are advised that Title 1, United States Code, Section 112a directs the Secretary of State to compile a publication *"United States Treaties and Other International Agreements* (UST) which shall contain all treaties to which the United States is a party . . ." It also states that the UST "shall be legal evidence of the treaties, . . . in all courts of the United States, . . ." In some instances, these instruments and supporting documents state specific procedures for entry to United States ports, and should be consulted for a complete understanding of requirements applicable to affected vessels. This document addresses only those port entry requirements administered by the United States Coast Guard.

B. *DEFINITIONS:*

1. *4-Day Notice:* This period is *exactly* 96 hours. It commences at the precise hour and minute that the Agent's entry application message is received in Coast Guard Headquarters. Weekends and Federal holidays have no effect on 4-Day Notices. 4-Day Notices should not be submitted more than 2 weeks in advance of the first desired U.S. port call.

II. SPECIFIC REQUIREMENTS: COMMUNIST FLAG VESSELS

A. *PORT ENTRY APPLICATION REQUIREMENTS:*

1. *General:* All Port Entry Applications must be in writing. However, telephone inquiries are welcome during normal business hours (0730 to 1530 Eastern Time). The vessel entry desk, in the Port Security branch at U.S. Coast Guard Headquarters, can be reached by calling (202) 426-1927. For non-business hour emergencies, call U.S. Coast Guard Headquarters Flag Plot (Situation Room) at (202) 426-1830. Port Entry Applications (except Government-to-Government requests) should be submitted by the vessel's Agent direct to Coast Guard Headquarters. *Telex messages are preferred.* Port Entry Applications will *not* be accepted by local or regional Coast Guard Commands. Make application only to one of the following Coast Guard Headquarters addresses:

(a). Telex address: "Commandant (G-WPE), U.S. Coast Guard, Washington, D.C." Telex No. 89-2427. Answerback: "Coastguardwsh".

(b) TWX address: "Commandant (G-WPE), U.S. Coast Guard, Washington, D.C." TWX No. 710-822-1959. Answerback: "Cgdotwsh".

(c) Western Union address: "Commandant (G-WPE), U.S. Coast Guard, 2100 2nd Street S.W., Washington, D.C. 20593 (Prepaid)".

2. *Required Information:* All Port Entry Applications must provide certain information in an orderly manner. See example formats provided in Annex B of this document for additional information. Agents should *double check all information,* including spelling of foreign translations, since incorrectly submitted applications may lead to entry delays. All port entry applications should include the following:

(a) The Agent's complete address, commercial telephone number, and Telex/TWX number with answerback code or Western Union address.

(b) Appropriate message title identification: For example, 4-day notice, 4-working day request, 7-working day request, or 14-day request.

(c) Itinerary number: For example, Initial Itinerary, or Change 1, 2, 3, etc.

(d) Vessel type: This information must precede the vessel's name; however, in most cases you can use an abbreviation as follows:

Merchant Vessel	M/V
Passenger Vessel	P/V
Fishing Vessel	F/V
Fishing Support Vessel	F/V
Fishing Research Vessel	None authorised
Hydrographic Research Vessel	None authorised

(e) Vessel's name, call sign, and flag.

(f) Itinerary Information:
  i. Desired U.S. port of call.
  ii. Desired arrival *and* departure dates.

(g) Cargo information, although optional, is desired.

(h) Last foreign port of call, if known.

3. *Arrival and departure dates:*

(a) Only one day overlap is allowed for multiple port calls (i.e. New York 6/17-19, Philadelphia 6/19-21, Baltimore 6/21-6/27).

(b) Should any single port call exceed two weeks, your Port Entry Application must include an explanation of why.

(c) All approved itineraries *automatically* terminate upon the vessel's departure for a foreign port of call, except when the vessel departs for Canadian ports, which have been noted on the Port Entry Application message.

(d) The vessel's official notification period commences upon receipt of the Agent's request or notice at Coast Guard Headquarters. By return message, Coast Guard Headquarters will inform the Agent of the exact Greenwich Mean Time (GMT) his message was received. All entry and departure times are calculated and specified in GMT. Conversion to local time is the responsibility of the vessel and Agent.

(e) Vessels will be denied U.S. entry when there is insufficient information or insufficient advance notification in the Agent's application messages. *However, this does not prevent the Agent from submitting a new corrected entry application for the vessel.* In such cases, the official notification period commences upon receipt of the corrected entry application, not the original entry application which was denied. Occasionally, however, an Agent's initial entry application may request that a portion of the official notification period be waived. In the event the waiver is denied, the Coast Guard may recognise the receipt time of the waiver request as the time that the official notification period commenced. Only if the initial entry request specifically states that a waiver is requested, would this consideration be recognised.

4. *Early Arrival:* A vessel which holds an approved itinerary for a United States port entry may not enter U.S. territorial waters earlier than necessary to make a reasonably expeditious passage to the port for which the itinerary was approved. Deliberate slow steaming or anchoring within U.S. territorial waters to avoid early arrival will not be considered innocent passage and will result in cancellation of the vessel's itinerary.

5. *Advance Notice of Arrival:* None of the procedures outlined in this document relieves the Master or Agent of his legal requirement to provide 24-hour advance notice of arrival to each local Coast Guard Captain of the Port (33 CFR 161.7) and compliance with other applicable laws and regulations.

B. *ITINERARY CHANGE REQUESTS:*

1. *General:* Agents seek Itinerary Change Requests generally for three reasons: (i) to add ports, (ii) to change the prior Coast Guard approved port call sequence and/or dates, and (iii) to cancel planned port calls after receiving Coast Guard approval to enter. In each case, *the Agent's message request must list the vessel's full remaining itinerary, in addition to the desired change. Failure to list the vessel's entire desired U.S. calls will lead to automatic cancellation of the vessel's itinerary other than the requested change.* Use the same message procedures outlined in the prior section (Port Entry Application Requirements) for Itinerary Change Requests. Actions applicable to the three type of Itinerary Change Requests follow:

2. *Additional Port Calls:* Request for additional port calls are reviewed using the same criteria as for initial port calls. Details as follows:

(i) When the criteria calls for an initial government-to-government request, all requests for additional ports must be made at the Embassy level.

(ii) Agent message should be titled CHANGE 1, 2, 3, etc.

3. *Change Port Call Sequence/Dates:* Change requests to a vessel's approved port call sequence/dates are accepted by the Coast Guard, and in some cases approved, provided the following criteria are met:

(i) The initial port request was not government-to-government. (All others which are government-to-government must continue to be handled at the Embassy level).

(ii) Prior Coast Guard approval was given for the vessel to initially enter the port.

(iii) The itinerary change request was submitted far enough in advance. For example, the maximum processing time needed within the Government ranges from 14 days for a "14-Day Request Port" to 96 hours for a "4-Day Notice Port". However, the Coast Guard will try to expedite whenever possible. Normally 48 hours is the minimum processing time required by the Coast Guard to process an itinerary change request. Whenever possible, the Coast Guard will try to expedite the itinerary changes, however, requests made within the minimum processing time may be delayed.

REMEMBER – The vessel's entire U.S. itinerary must be contained in the message requesting port call sequence or date changes. When a port is not mentioned, the Coast Guard concludes that the port is no longer desired and will delete it from the approved itinerary.

4. *Cancelled Port Calls:* Occasionally cargo loading plans change and certain U.S. port calls may not be desired even though they have previously been requested. Agents should notify the Coast Guard of cancelled port calls as far in advance as possible. Failure to arrive at a port will lead to a vessel's remaining itinerary being cancelled, while, re-entry to a previously approved port will require the minimum entry requirement.

5. *Waivers:* The Coast Guard recognizes that unusual circumstances arise which require Agents to request waivers. Approval of waiver requests will tend to be the exception rather than the rule and all waiver requests should be well documented.

Waiver requests will normally be processed within 48 hours; however, do not consider this a guaranteed time frame.

6. LATE ARRIVAL NOTICES: Will, in most cases, be accepted by the Coast Guard in lieu of Itinerary Change Requests. While strictly optional, Late Arrival Notices do provide Agents with a simplified means to extend by 24 hours, the approved entry date. (see Example 3 of Annex B for additional details).

ANNEX A:
Specific Entry Requirements.

Specific entry requirements for vessels registered in Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, the Union of Soviet Socialist Republics and the Peoples' Republic of China are contained in Appendices 1 through 8 respectively. National security interests require that vessels registered in Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Romania and the Union of Soviet Socialist Republics be prohibited entry to selected U.S. ports. Additionally, personnel from these countries serving as crew members aboard "free flag" vessels may require removal prior to the vessel entering selected ports. A list of these ports is found in Appendix 9 of this Annex. All non-public vessels are subject to a U.S. Coast Guard boarding at anytime. This may be, but is not limited to, the first port of call. Questions concerning these and other port entry matters should be directed to the vessel entry desk at Coast Guard Headquarters at (202) 426-1927.

Appendix 1 – Bulgaria (BU).
Appendix 2 – Czechoslovakia (CZ).
Appendix 3 – German Democratic Republic (GC).
Appendix 4 – Hungary (HU).
Appendix 5 – Poland (PL).
Appendix 6 – Romania (RO).
Appendix 7 – Union of Soviet Socialist Republics (UR).
Appendix 8 – Peoples' Republic of China (CH).
Appendix 9 – Ports unavailable to Warsaw Pact vessels.

Appendix 1 to Annex A:
BULGARIA (BU)

A. *Merchant and Passenger Vessels.*

1. Requirements: 7-working day request for all U.S. ports. Vessel's Agent to submit port call applications to Commandant U.S. Coast Guard (G-WPE).

B. *Fishing Vessels.*

1. Fishing vessels (includes fishing support vessels) authorised by the Fisheries Conservation and Management Act of 1976 (PL 94-265) are permitted to enter selected ports upon providing notice to Commandant U.S.Coast Guard (G-WPE) at least 4 days in advance of the desired entry. Those ports include:

Astoria OR   Eureka CA
Baltimore MD   New York NY
Boston MA   Philadelphia PA
Coos Bay OR

2. Entry to all other U.S. ports are subject to requests submitted on a government-to-government basis at least 14 days in advance of the desired entry date.

C. *Research Vessels.*

1. All research vessels must submit requests for entry on a government-to-government basis at least 14 days in advance of the desired entry date.

D. *Public Vessels.*

1. All public vessel entry applications are handled on a government-to-government basis.

Appendix 2 to Annex A:
CZECHOSLOVAKIA (CZ)

A. *Merchant and Passenger Vessels.*

1. Requirements: 7-working day request for all U.S. ports. Vessel's Agent to submit port call applications to Commandant U.S. Coast Guard (G-WPE).

B. *Fishing Vessels.*

1. Entry to all U.S. ports for fishing vessels are subject to requests submitted on a government-to-government basis at least 14 days in advance of the desired entry date.

C. *Research Vessels.*

1. All research vessels must submit requests for entry on a government-to-government basis at least 14 days in advance of the desired entry date.

D. *Public Vessels.*

1. All public vessel entry applications are handled on a government-to-government basis.

Appendix 3 to Annex A:
GERMAN DEMOCRATIC REPUBLIC (GC)

A. *Merchant and Passenger Vessels.*

1. Requirements: 7-working day request for all U.S. ports. Vessel's Agent to submit port call applications to Commandant U.S. Coast Guard (G-WPE).

B. *Fishing Vessels.*

1. Fishing vessels (includes fishing support vessels) authorised by the Fisheries Conservation and Management Act of 1976 (PL 94-265) are permitted to enter selected ports upon providing notice to Commandant U.S.Coast Guard (G-WPE) at least 4 days in advance of the desired entry. Those ports include:

Baltimore MD   New York NY
Boston MA   Philadelphia PA

2. Entry to all other U.S. ports are subject to requests submitted on a government-to-government basis at least 14 days in advance of the desired entry date.

C. *Research Vessels.*

1. All research vessels (including fishing research vessels) must submit requests for entry on a government-to-government basis at least 14 days in advance of the desired entry date.

D. *Public Vessels.*

1. All public vessel entry applications are handled on a government-to-government basis.

Appendix 4 to Annex A:
HUNGARY (HU)

A. *Merchant and Passenger Vessels.*

1. Requirements: 4-Working day request for all U.S. ports. Vessel's Agent to submit port call applications to Commandant U.S. Coast Guard (G-WPE).

B. *Fishing Vessels.*

1. Entry to all U.S. ports for fishing vessels is subject to requests submitted on a government-to-government basis at least 14 days in advance of the desired entry date.

C. *Research Vessels.*

1. All research vessels must submit requests for entry on a government-to-government basis at least 14 days in advance of the desired entry date.

D. *Public Vessels.*

1. All public vessel entry applications are handled on a government-to-government basis.

Appendix 5 to Annex A:
POLAND (PL)

A. *Merchant and Passenger Vessels.*

1. Requirements: 4-Working day request for all U.S. ports. Vessel's Agent to submit port call applications to Commandant U.S. Coast Guard (G-WPE).

B. *Fishing Vessels.*

1. Fishing vessels (includes fishing support vessels) authorised by the Fisheries Conservation and Management Act of 1976 (PL 94-265) are permitted to enter selected ports upon providing notice to Commandant U.S. Coast Guard (G-WPE) at least 4 days in advance of the desired entry. Those ports include:

Baltimore MD   New York NJ   San Francisco CA
Boston MA   Philadelphia PA   Seward AK
Camden NJ   Portland OR

2. Entry to all other U.S. ports are subject to requests submitted on a government-to-government basis at least 14 days in advance of the desired entry date.

C. *Research Vessels.*

1. All research vessels must submit requests for entry on a government-to-government basis at least 14 days in advance of the desired entry date.

D. *Public Vessels.*

1. All public vessel entry applications are handled on a government-to-government basis.

Appendix 6 to Annex A:
ROMANIA (RO)

A. *Merchant and Passenger Vessels.*

1. Requirements: 4-Working day request for all U.S. ports. Vessel's Agent to submit port call applications to Commandant U.S. Coast Guard (G-WPE).

B. *Fishing Vessels.*

1. Fishing vessels (includes fishing support vessels) authorised by the Fisheries Conservation and Management Act of 1976 (PL 94-265) are permitted to enter selected ports upon providing notice to Commandant U.S. Coast Guard (G-WPE) at least 4 days in advance of the desired entry. Those ports include:

Baltimore MD   New York NY   Philadelphia PA

2. Entry to all other U.S. ports are subject to requests submitted on a government-to-government basis at least 14 days in advance of the desired entry date.

C. *Research Vessels.*

1. All research vessels must submit requests for entry on a government-to-government basis at least 14 days in advance of the desired entry date.

D. *Public Vessels.*

1. All public vessel entry applications are handled on a government-to-government basis.

Appendix 7 to Annex A:

UNION OF SOVIET SOCIALIST REPUBLICS (UR)

A. *Merchant and Passenger Vessels.*

1. Requirements: 14 day request for all U.S. ports. Vessel's Agent to submit port call applications to Commandant U.S. Coast Guard (G-WPE).

B. *Fishing Vessels.*

1. Fishing vessels (includes fishing support vessels) authorised by the Fisheries Conservation and Management Act of 1976 (PL 94-265) are permitted to enter selected ports upon providing notice to Commandant U.S. Coast Guard (G-WPE) at least 4 days in advance of the desired entry. Those ports include:

Astoria OR
Baltimore MD
Boston MA
Dutch Harbor AK
Hilo HI
New York NY
Philadelphia PA
Portland OR

2. Entry to all other U.S. ports are subject to requests submitted on a government-to-government basis at least 14 days in advance of the desired entry date.

C. *Research Vessels.*

1. All research vessels must submit requests for entry on a government-to-government basis at least 14 days in advance of the desired entry date.

D. *Public Vessels.*

1. All public vessel entry applications are handled on a government-to-government basis.

Appendix 8 to Annex A:

PEOPLE'S REPUBLIC OF CHINA (CH)

A. *Merchant and Passenger Vessels.*

1. Requirements: 4-Day Notice for 55 U.S. ports (see Annex C). Vessel's Agent to submit port call applications to Commandant U.S. Coast Guard (G-WPE).

2. Entry to all other ports requires notification to the Commandant, U.S. Coast Guard (G-WPE) by a 7-Working Day Advance Information Request, not less than 7 working days prior to intended entry into such ports. (It is understood that entry will ordinarily be granted but may be denied for reasons of national security.)

B. *Fishing Vessels.*

1. Entry to all other U.S. ports are subject to requests submitted on a government-to-government basis at least 14 days in advance of the desired entry date.

C. *Research Vessels.*

1. All research vessels must submit requests for entry on a government-to-government basis at least 14 days in advance of the desired entry date.

D. *Public Vessels.*

1. All public vessel entry applications are handled on a government-to-government basis.

Appendix 9 to Annex A:

PORTS UNAVAILABLE TO WARSAW PACT COUNTRIES

1. Portsmouth NH (includes Kittery ME, and Dover NH on Piscataqua River).
2. New London and Groton CT.
3. Hampton Roads VA (including Norfolk, Newport News, Jamestown, Yorktown, and Portsmouth VA, and access to the James River).
4. Charleston SC.
5. Port Canaveral FL.
6. Panama City FL.
7. Pensacola FL.
8. Port St. Joe FL.
9. San Diego CA.
10. Port Hueneme CA.
11. Honolulu HI.

ANNEX B

EXAMPLE MESSAGE FORMATS

EXAMPLE 1: This sample message format may be used by an Agent desiring entry of a People's Republic of China (CH) registered vessel into one of the designated 4-day Notice Ports outlined in Annex C.

FM AGENT NAME
COMPLETE ADDRESS
COMMERCIAL PHONE NUMBER
TELEX/TWX NO. (including Answer Back Code)
TO Commandant, U.S. Coast Guard (G-WPE)
Washington DC
Telex No. 892427

4 Day Notice
M/v. Dong Hai (CH) (Call Sign)
Initial Itinerary (or Change 1, 2, etc.)
New York 6/17-6/19, Philadelphia 6/20-6/21
Cargo: In Ballast. To Load Grain
Last Port of Call: Shanghai

EXAMPLE 2: This sample message format may be used by Agents for vessels desiring access to "request" ports.

FM AGENT NAME
COMPLETE ADDRESS
COMMERCIAL PHONE NUMBER
TELEX/TWX NO. (including Answer Back Code)
TO Commandant, U.S. Coast Guard (G-WPE)
Washington DC
Telex No. 892427

4-Working Day Request or 7-Working Day Request or 14-Day Request.
M/v. Polinski (PL) or m/v Czechlava (CZ) (Call Sign)
Initial Itinerary (or Change 1, 2, etc.)
Morehead City 6/30-7/4
Cargo: General
Last Port of Call: Gdynia

*NOTE: Bulgarian, Romanian, Hungarian also apply to Example 2.

EXAMPLE 3: Coast Guard port entry approval messages will provide the official entry time that the vessel is cleared to enter a particular port. This will either be the exact conclusion of the 96 hour official notification period for all four day notices, or at 0001 GMT of the day requested for all other cases. Actual vessel entry is expected to occur during the 24 hour period commencing from the official entry time. An additional 24 hour period may be requested (but is not guaranteed) by providing the Coast Guard Headquarters with a late arrival notice message.

1. Message format as follows:
FM: (Agent Name)
TO: Commandant (G-WPE) (See paragraph C.2. for various message addresses)
1. This is a Late Arrival Notice.
2. The (Type of vessel, name, flag and call sign) has received CG Headquarters approval to enter (Name of port) at (Date and time)
3. Revised ETA (Date and time. This must not be later than 48 hours after official entry approval time.).
END OF MESSAGE

2. In most cases, automatic late entry privileges will be extended to the vessel. Return message traffic will not be sent to the Agent unless late entry is denied. The following criteria apply:

(a) Late Arrival Notices may be submitted for any Communist vessel which has prior Coast Guard approval to enter the U.S. including those processed as government-to-government.

(b) Only one Late Arrival Notice may be submitted per vessel per port call.

(c) The Late Arrival Notice does not change the vessel's approved official entry or departure time. They do, however, delay by 24 hours a vessel's itinerary being cancelled lacking an approved Itinerary Change Request. Itinerary Change Requests and government-to-government requests remain the only means of changing the vessel's official entry or departure time.

(d) The Late Arrival Notice does not replace or eliminate the requirement of 33 CFR 161.7 for 24 hour advance notice of arrival to each local Coast Guard Office (i.e. Captain of the Port (COTP) or Marine Safety Office (MSO)). Agents may, however, desire to send an identical message to Coast Guard Headquarters in fulfillment of 33 CFR 161.7. In this case, change your first sentence to read:

THIS IS A LATE ARRIVAL NOTICE AND 24 HOUR ADVANCE NOTICE OF ARRIVAL.

ANNEX C

U.S. NOTICE PORTS FOR PRC FLAG MERCHANT VESSELS

The following geographical limits define the U.S. ports which have been established as 4-Day Notice Ports in the U.S./PRC Maritime Agreement.

WEST COAST

1. Skagway, Alaska: Taiya Point (in Taiya Inlet on Lynn Canal) to the town of Skagway, Alaska.
2. Ketchikan, Alaska: Tongas Narrows, N.W. of a line between Mountain Point and Gravina Point, and S.E. of a line between Point Higgins and Guard Island, and including Vallenar Bay.
3. Anchorage, Alaska: Waters of Cook Inlet Northward from a line drawn between Cape Douglas and Cape Elizabeth.
4. Bellingham, Washington: Bellingham Bay.
5. Everett, Washington: N.E. end of Possession Sound.
6. Seattle, Washington: Coincident with King County, Washington.
7. Tacoma, Washington: Coincident with Pierce County, Washington.
8. Olympia, Washington: Coincident with Thurston County, Washington.
9. Astoria, Oregon: Coincident with Clatsop County, Oregon.
10. Longview, Washington: Columbia River between mile 62 and mile 70.
11. Portland (including Vancouver, Washington), Oregon: Coincident with 3 Oregon counties: Multnomah, Clackamas, Washington. (Port of Vancouver, Washington considered to be part of Port of Portland).
12. Coos Bay (including North Bend), Oregon: All of Coos Bay to North of Coos River.
13. Eureka, California: Humboldt Bay.
14. Sacramento, California: Sacramento Harbour proper, Sacramento River to limits of navigation.
15. San Francisco (including Alameda, Oakland, Berkeley, Richmond), California: San Francisco Bay, South of Richmond/San Rafael Bridge.
16. Los Angeles (including San Pedro, Wilmington, and Western part of Terminal Island), California: The portion of San Pedro Bay and Cerritos Channel within the City of Los Angeles, California.
17. Stockton, California: Stockton Harbour Proper and San Joaquin River to limits of navigation.
18. Long Beach (including Eastern part of Terminal Island), California: That portion of San Pedro Bay and Cerritos Channel within the City of Long Beach, California.
19. Honolulu, Hawaii: Honolulu Harbour proper.

GULF OF MEXICO

1. Brownsville, Texas: The Brownsville Ship Channel from the Sea Buoy to the Brownsville Turning Basin.
2. Corpus Christi, Texas: The Corpus Christi Channel from the Sea Buoy to the Viola Turning Basin and the La Quinta Channel from its junction to the Corpus Christi Channel.

3. Galveston/Texas City, Texas: The Galveston and Texas City Channels from their intersections with the Houston Ship Channel to their respective turning basins.

4. Houston, Texas: The Houston Ship Channel from 5 Mile Cut to the Houston Turning Basin and the Bayport Turning Basin.

5. Port Arthur, Texas: The ICW from mile 276.5 to mile 288.5 including the East Basin, West Basin, and turning basin of Taylor Bayou.

6. Orange, Texas: The ICW from mile 276.5 to mile 265; the Sabine River from the intersection with the ICW, Northerly to the Navy Yard.

7. Beaumont, Texas: The Neches River from the ICW to Interstate 10 Bridge.

8. New Orleans, Louisiana: Sea Buoy to River mile 155.

9. Burnside, Louisiana: River mile 155 to mile 170.

10. Baton Rouge, Louisiana: River mile 170 to mile 255.2.

11. Mobile, Alabama: The Mobile Ship Channel from the Sea Buoy to the Cochran Bridge and the Hollinger's Island Channel from its junction with the Mobile Ship Channel.

12. Gulfport, Mississippi: Ship Island Pass and Gulfport Ship Channel from the Sea Buoy to the harbour basin.

13. Tampa, Florida: That portion of Tampa Bay contained within Hillsborough County.

14. Boca Grande, Florida: Boca Grande Channel from the Sea Buoy to Port Boca Grande on Gasparilla Island.

15. Port Everglades, Florida: Port Everglades coincident with Broward County.

EAST COAST

1. Portland, Maine: Hussey Sound and Fore River to combined fixed railroad and highway bridge (Route 1 Bridge).

2. Boston, Massachusetts: Boston Harbour proper including Mystic River and Chelsea River to limit of navigation.

3. Fall River, Massachusetts: Mt. Hope Bay, and Tauton River coincident with corporate limits of the City of Fall River.

4. New York (New York and New Jersey parts of the Port of New York Authority), New York: South – 74° West from Sandy Hook to Coney Island, North – George Washington Bridge, East – Throg's Neck Bridge.

5. Albany, New York: Hudson River bounded by Rensselaer County to the East and Albany County to the West.

6. Philadelphia (including Camden, New Jersey), Pennsylvania: Trenton, New Jersey to the Delaware State Line.

7. Wilmington, Delaware: Extending from the mouth of the Christina River Westward to the 3rd St. Bascule Bridge (Lat. 33° 44.06′ N., Long. 79° 33.16′ W.).

8. Baltimore, Maryland: North and West of a line from North Point to Botkin Point but including Annapolis anchorage area between the Chesapeake Bay Bridge and Kent Point.

9. Richmond, VA: James River from Benjamin Harrison Memorial Bridge, Hopewell, VA to limits of navigation.

10. Wilmington, North Carolina: The Cape Fear River from the Sea Buoy to Point Peter and thence the N.E. River to the turning basin at mile 2.

11. Morehead City, North Carolina: Morehead City Harbour including Radio Island from the Sea Buoy at Beaufort Inlet, NC.

12. Georgetown, South Carolina: Entrance Channel between Sand Island and North Island at South Island Bend through Wingah Bay, including all Georgetown and Sampit River, North to where Waccamaw River and Pee Dee River merge at U.S. Route 17 into Winyah Bay.

13. Savannah, Georgia: Savannah River from the Route 17 Bridge to sea.

14. Ponce, Puerto Rico: Playa de Ponce only.

GREAT LAKES

1. Duluth, Minnesota/Superior, Wisconsin: Duluth/Superior Harbour only.

2. Kenosha, Wisconsin: Kenosha Harbour proper.

3. Milwaukee, Wisconsin: Milwaukee Harbour, and rivers to limits of navigation within Milwaukee Breakwater.

4. Chicago, Illinois: Between Burns Harbour (including Burns Waterway Harbour) and Northern limits of Chicago Harbour including Lake Calumet and other waterways inland to the intersection of the Chicago Sanitary and Ship Canal with the Calumet Sag Channel.

5. Bay City, Michigan: Mouth of Saginaw River to limits of navigation.

6. Toledo, Ohio: Maumee River to limits of navigation.

7. Cleveland, Ohio: Cleveland Harbour including Cuyahoga River to limits of navigation.

8. Erie, Pennsylvania: Erie Harbour located within Presque Isle Bay.

PILOTAGE: North West Coast of U.S.A.
Columbia River Bar Pilots are "Sea Pilots" for all ports in Columbia and Willamette Rivers. Namely, Astoria and Portland (Oregon), Longview, Kalama and Vancouver (Washington) – when entering from sea and if providing above Astoria, Columbia River Pilots relieve Bar Pilots for balance of transit.

COLUMBIA RIVER BAR PILOTS
P.O.Box 81, Astoria, Oregon 97103
TWX 910-466-8014
Telephones (503) 325-2641 or 325-2642

RADIO FACILITIES

Pilot Boat Peacock	WS 7217
Pilot Boat Columbia	WYE 7344
Bar Pilots Office, Astoria (Ch. 16) (156.80)	KOK 360
Astoria Marinephone "KFX"	
Ship's Call on	2206 kHz
KFX Answers on	2598 kHz

Or call on and receive KFX on Channel 26.

Pilot boat now equipped with single sideband radios.

Pilot boat guards 2182 kHz and will switch to working frequency after contact.

In order there be no delays, vessels due to arrive at the Columbia River and desiring a Bar Pilot, must cable or telephone the Columbia River Bar Pilots. (Pilot normally not on station unless cable or telephone message received.) USE RADIO STATION KLB, EVERETT, WASHINGTON at least 12 hours before arrival at the lightship. Code address, "BAR PILOTS, STATING THE TIME OF ARRIVAL". If transmitted by any other radio station, delay may occur. If vessel is equipped with VHF, use Channel 16 (156.80 MHz) to call the pilot boat or Bar Pilots' Office, Astoria (KOK 360) and shift to Channel 13 (156.65 MHz).

PILOT LADDER INSTRUCTIONS

1. Please contact the pilot boat via voice radio (Channel 16 or frequency 2182) approximately 30 minutes prior to arrival for desired lee and boarding instructions.

2. The Columbia River Bar Pilots have 2 pilot vessels; the "Peacock" and the "Columbia". When the "Peacock" is on station, Masters will be instructed to rig their pilot ladder 4 ft. above the water's edge. When the "Columbia" is on station, the Master will be instructed to rig the ladder 10 ft. – 12 ft. above the water's edge. The above-mentioned distances above the water are of the utmost importance, particularly in the case of the "Columbia", as the pilot boat can and has pulled the ladder down when it becomes pinched between the pilot boat and the side of the vessel. Pilot ladders and boat ropes shall not be permitted to drag in the water. No tag lines, pull ropes or trailing lines shall be attached to the bottom of the ladder.

3. Pilot ladders shall be rigged amidships, over "draft marks" clear of all obstructions, such as accommodation ladders, and clear of overside discharges from the engine room and deck scuppers.

4. The pilot ladder should be kept clean and used for embarking and disembarking Pilots only. The ladder shall be made in one continuous length, not 2 sections shackled or lashed together. The ladder shall be equipped with spreaders approximately 10 ft. apart in accordance with SOLAS regulations. The ladder must be in good condition, the treads horizontal and the upper surface of rough non-skid quality.

5. The ladder must be adequately lit at night by means of a light shining well over the ship's side in the vicinity of the ladder. The area of the deck where the Pilot boards and leaves should be free of debris and well lighted. Where portable stanchions and bulwark steps are used, they shall be rigidly attached to the ship's structure. A life ring with water light and lifeline attached should be ready at hand. Rigging of the ladder and embarking and disembarking of the Pilot must be under the supervision of a licensed officer.

6. Boat ropes are not to be used, all pilot boats are power propelled.

7. Manropes shall be of manila 3 in. circumference. The manropes shall be free of any knots including the lower end. The manropes should be rigged 1 ft. – 2 ft. longer than the pilot ladder. Manropes are not to be rigged for boarding unless otherwise advised.

8. Should vessel be fitted with a mechanical ladder, the ladder should have a double fall. Also, a conventional ladder must be kept ready at hand, should it be required.

9. If vessel is to take a deck load of logs, please discuss with your Agent the building of a catwalk to provide safe passage to and from the pilot ladder.

AUTOMATIC RADAR PLOTTING AIDS: With effect as from July 1st, 1982, vessels carrying oil or hazardous materials in bulk must have automatic radar plotting aids.

A fine for failure to carry an ARPA could be multiplied by the number of days of the violation.

The United States Coast Guard has stressed, however, that its official policy is enforcement by denial of entry and restriction of operation and not primarily by the enforcement of fines.

While the Coast Guard recognises that the Public Law enables financial penalties to be incurred, it is believed that the terms of the Port and Tanker Safety Act under which the U.S. Coast Guard operates directs it to monitoring and identification of previous offenders and enforcement by prevention of entry into U.S. ports or subsequent restriction of trade and departure.

COAST GUARD REGULATIONS: The U.S. Coast Guard has announced its intention to develop the following regulations implementing sections of the 1978 U.S. Port and Tanker Safety Act requiring:

1. Existing crude oil carriers of 20,000 d.w.t. or above but less than 40,000 d.w.t. to have segregated ballast tanks (SBT) or a crude oil washing system (COW) by January 1st, 1986, or when they reach 15 years of age, which ever occurs later; and

2. Existing product carriers of 20,000 d.w.t. or above but less than 40,000 d.w.t. to have SBT or dedicated clean ballast tanks (CBT) by January 1st, 1986, or when they reach 15 years of age, whichever occurs later.

POLLUTION: Any vessel which does not have a valid I.O.P.P. Certificate on board will not be allowed to transit U.S. waters.

NOTICE: *B.A. Notice to Mariners No. 3013(T) of 1983:*
UNITED STATES OF AMERICA – Chart and Publication requirements.

A statement concerning the U.S. Navigation Safety Regulations relating to Navigation, charts and Publications has been issued in the U.S. Notices to Mariners Weekly 44/83. This is reproduced below. Admiralty Annual Notice to Mariners No. 22 will be amended as appropriate in the 1984 edition.

CHART AND PUBLICATION REQUIREMENTS

Sections 164.30 and 164.33 of Title 33 of the Code of Federal Regulations Part 164 (33 CFR 164), which detail requirements for the carriage of nautical charts and publications, are amended effective October 28, 1983. The regulations contained in these sections are applicable to each self-propelled vessel of 1,600 g.r.t. or more, operating on the navigable waters of the United States, except the Saint Lawrence Seaway, and are reprinted as follows:

§164.30 Charts, publications, and equipment: General.

No person may operate or cause the operation of a vessel unless the vessel has the marine charts, publications, and equipment as required by §§ 164.33 through 164.41 of this part.

§164.33 Charts and publications.

(a) Each vessel must have the following:

(1) Marine charts of the area to be transited, published by the National Ocean Service, U.S. Army Corp of Engineers, or a river authority that:
- (i) Are of a large enough scale and have enough detail to make safe navigation of the area possible; and
- (ii) Are currently corrected.

(2) For the area to be transited, a currently corrected copy of, or applicable currently corrected extract from, each of the following publications:
- (i) U.S. Coast Pilot.
- (ii) Coast Guard Light List.

(3) For the area to be transited, the current edition of, or applicable current extract from:
- (i) Tide tables published by the National Ocean Service.
- (ii) Tidal current tables published by the National Ocean Service, or river current publication issued by the U.S. Army Corps of Engineers, or a river authority.

(b) As an alternative to the requirements for paragraph (a) of this section, a marine chart or publication, or applicable extract, published by a foreign government may be substituted for a U.S. chart and publication required by this section. The chart must be of large enough scale and have enough detail to make safe navigation of the area possible, and must be currently corrected. The publication, or applicable extract, must singly or in combination contain similar information to the U.S. Government publication to make safe navigation of the area possible. The publication, or applicable extract must be currently corrected, with the exceptions of the tide and tidal current tables, which must be the current editions.

(c) As used in this section, "currently corrected" means corrected with changes contained in all Notices to Mariners published by Defense Mapping Agency Hydrographic/Topographic Centre, or an equivalent foreign government publication, reasonably available to the vessel, and that is applicable to the vessel's transit.

SHIP'S OFFICER'S REPORT: The information given for the port of New Orleans (U.S.A.) applies to all the ports in the U.S.A. in the event of the vessel arriving from abroad or from a previous U.S. port. All the documents such as Crew List, Passenger List (Form I-418), Deck, Engine, Stewards & Bonded Stores Lists (Form 1303), Crew's Effects Declaration (Form 1304), are required in duplicate at each port for entry inward.

ALBANY, New York: 42.40 N. 73.45 W. (See Plan Book)

DOCUMENTS: If first port of call in U.S., 2 complete Customs Manifests describing all cargo on board and ports of discharge. Also 1 Cargo List for Albany cargo, 3 Crew Lists, 3 Store Lists, 3 Curio Lists, Ship's Register, Load Line Certificate and Tonnage Tax Certificate.
PILOTAGE: Hudson River Pilot boards vessel off Yonkers, N.Y. Cable address: "Hudpilots, Yonkers, N.Y."
ANCHORAGES: Several anchorage areas in Hudson River en route to Albany if required due to weather. Vessels cannot anchor at Port of Albany.
RESTRICTIONS: Hudson River Channel to Albany has controlling depth of 32 ft. MLW. Vessels with draft in excess of 28 ft. will be required to transit river on favourable tide as directed by Pilot.
MAX. SIZE: Max. permissible length 750 ft., breadth 110 ft., draft 30 ft. Turning basin at Albany 1,100 ft. in width.
HEALTH: See "Health: All Ports" before first U.S.A. port. Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port.
TUGS: One 2,500 h.p. tug stationed at port at all times; additional tugs available upon advance request. Normally 1 tug is sufficient for turning and docking. Tug's lines are used.
BERTHING: 5,000 linear ft. of marginal wharf available at APDC terminal for general cargo, grain, lumber, etc., 32 ft. alongside wharf. Various privately operated deep-water petroleum terminals in port area.
Facilities: 13.5 million bushel grain elevator. 17 million gallon molasses storage – 3 terminals. Scrap Iron Terminal, Banana Terminal.
Equipment: Available at the Port of Albany:

2	Diesel-operated wharf cranes, 5 ton capacity each
1	Gasoline crawler crane, 15 ton capacity
3	Fork-type telescopic lift trucks, 15,000 lb. each (height of lift 17 ft.)
12	Fork-type telescopic lift trucks, 5000 lb. to 7000 lb. each
2	Clamp equipped telescopic lift trucks, 7000 lb. capacity each
9	Gasoline operated lumber carriers
2	Front-end loaders, 1.25 cu. yd. capacity each
1	180 ton capacity bulk car unloader
21	5/8 cu. yd. clamshell buckets
	Hoppers for shipside bulk materials handling
	Complete bagging equipment for all bulk materials

BRIDGES: Minimum vertical clearance of bridges on Hudson River en route to Albany is 135 ft.
STEVEDORES: Rates and information can be obtained from I.T.O. Corporation; 7 gangs available.
FRESH WATER: Supplied during regular working hours daily, except Saturdays, Sundays, and holidays, at $2.75 per 100 cu. ft. plus $22.00 service charge per daily delivery on straight time. Additional charge if supplied during other periods.
GANGWAY/DECK WATCHMEN: Available via ship chandler, not required but recommended.
CONSULS: Italian Vice-Consulate located at Albany, other consulates available at New York City.
REPAIRS: Minor deck and engine repairs can be handled.
AIRPORT: 7 miles distant from port: served by Allegheny, America, Altair and Executive Airlines.
TIME: Eastern Standard and Eastern Daylight Saving, GMT minus 5 hours.
HOLIDAYS: Standard U.S. holidays; cargo work can be arranged on all holidays at overtime rates, except July 4th, Labour Day and Christmas Day.
SHORE LEAVE: Crew members allowed ashore unless restricted by Customs or Immigration requirements.

SHIPMASTER'S REPORT: February 1980.
Pilotage: Compulsory. Pilot boards at Ambrose Light vessel and Hudson River Pilot boards at Yonkers.
Restrictions: Vessels able to enter and leave during darkness at any stage of the tide.
Max. Size: LOA 750 ft. (Approx). *Max. Draft:* 31 ft. to 32 ft. depending on height of river.
Tugs: One tug stationed at Albany (approx. 2,500 h.p.). Additional tugs come from New York.
VHF: Tug only listens out on VHF before vessel arrives.
Services: Following services available: Fresh water, fresh provisions, small repairs, machine shop, airport, Lloyd's surveyor (from New York), Salvage surveyor (from New York), lubricating oil, groceries and meats.
Berthing: Pier No. 2 Albany: Berth located 3 miles from Albany and 145 miles from the entrance. Vessel's size limited by draft and space available in swinging room in basin. Max. size approx. LOA 600 ft., draft 31 ft. Least depth of water in channel from sea to berth 33 ft. (approx). Vessels able to dock and undock at any stage of the tide, day or night.
Grain Loading Facilities: Available.
Ro/Ro Facilities: Available, port now being used to discharge cars from car carriers. No floating cranes available.

AUTHORITY: Albany Port District Commission, Administration Building, Port of Albany, Albany, N.Y. 12202. *Tel:* (518) 445-2595. *Contact:* The General Manager.

ALEXANDRIA, Virginia: 38.48 N. 77.03 W. (See Plan Book)

LOCATION: On the Potomac River 7 miles from Washington D.C.
DOCUMENTS/PILOTAGE: Refer to "Hampton Roads".
RESTRICTIONS: Anchoring necessary between 2200 to 0600 hrs. Berthing daylight only.
Channel: Width 200 ft. Depth 24 ft. Turning basin: length 6,700 ft. width 300 ft.
MAX. SIZE: Governed by draft only – max. 22 ft. 6 in. all times.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C. Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: WMH Baltimore, Md.
TUGS: None required.
BERTHING: 2 open piers. Berthing 0600 hrs. to 2200 hrs.
BRIDGES: 1 bridge, closed Monday through Friday 1600–1830 hrs. and 0630–0900 hrs.
STEVEDORES: Informally arranged through Receivers or Shipper's Agents.
MEDICAL: Hospital available.
FRESH WATER: Available at berth – 10 t.p.h.
FUEL: Not available.
GANGWAY/DECK WATCHMEN: Shore watchman provided.
OPENING/CLOSING HATCHES: Stevedores. Vessel – depending on understanding.
IDENTIFICATION CARDS: Required by Immigration.
REPAIRS: Minimal facilities.
REPATRIATION: Facilities exist.
AIRPORT: 3 miles. Washington National – multiple flights.
TIME: GMT minus 5 hours.
POLICE/AMBULANCE/FIRE: Agents arrange. Watchmen on duty.
SHORE LEAVE: Allowed.
DELAYS: No unusual delays.
SERVICES: Searle Consortium, Ltd. in Alexandria (Tel: (703) 768-6026) and their sister company, Seaward Marine Services can provide the following: Diving and general underwater inspection services; Underwater hull cleaning; Salvage survey and underwater repairs of a salvage nature; Assistance in the refloating of stranded vessels and Assistance in the arranging/engineering of towage.
AUTHORITY: Virginia Port Authority, Norfolk, Va.

ANACORTES, Washington: 48.31 N. 122.36 W.

(See Plan Book)

DOCUMENTS, PILOTAGE, etc: Refer to "Tacoma".
ANCHORAGES: East End Guemes Channel, 54 ft. minimum depth.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Join vessel in Guemes Channel at Anacortes – lines optional.
BERTHING: Pier No. 1, depth 30 ft.; Pier No. 2, depth 35 ft.
TANKERS: Shell Jetty: depth alongside 42 ft.
STEVEDORES: Request 24 hours' notice.
FRESH WATER: Available from city water system.
FUEL: Available from Shell and Texaco.
GANGWAY/DECK WATCHMEN: Not required by port.
OPENING/CLOSING HATCHES: Stevedores.
CUSTOMS ALLOWANCES: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.
CARGO GEAR: ILWU requirements.
IDENTIFICATION CARDS: Required.
REPAIRS: Minor repairs only.
AIRPORT: 75 miles Seattle International.
TIME: GMT minus 8 hours. From end April to end October, Pacific Daylight Saving Time, GMT minus 7 hours.
HOLIDAYS: See "Tacoma".
POLICE/AMBULANCE/FIRE: Police, Ambulance and Fire dial 911.
TELEPHONES: Available at Pier 2 and at Pier 1 by Phone Co.
SHORE LEAVE: Allowed.
AUTHORITY: Port of Anacortes, P.O.Box 297, Anacortes, Washington 98221. *Tel:* (206) 293 – 3134 (Scan System 576 – 6371). *Contact:* M. Hardy, Marine Terminal Supervisor.

ANCHORAGE, Alaska: 61.12 N. 150.00 W.

(See Plan Book)

DOCUMENTS:
3 copies Cargo Manifest (Form 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I-418).
2 copies Crew List (Form I-418).
Customs Boarding Officer will also examine Ship's Register and Loadline Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:
Master's Oath (Customs Form 1300).
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.
PILOTAGE: The pilot station for Anchorage is at Homer, Alaska. Vessels may contact Pilot by radio telephone. Telegraphic address "Almarrpilot", ETA notice requested 24 hours. Listens VHF Channel 10. Pilot boat green and white. Pilot flag by day, pilot light at night. Pilot boat 1 mile South of Homer Spit (Coal Point), Homer, Alaska. In bad weather, wait inside Homer Spit and advise via radio-telephone.
Also see "Homer".
ANCHORAGES: The best anchorage for deep-draft vessels is West of Anchorage in depth of 10 fathoms to 12 fathoms, silt bottom. Holding ground is good.
TIDE AND CURRENTS: The diurnal range of tide is 29.6 ft., currents from 1.7 knots to 6 knots or more in mid-channel.
RESTRICTIONS: Flow and pan ice is encountered in the Cook Inlet from approximately the end of November until the end of February. This ice does not freeze solid due to the tidal action. The port is in year-round use and expert information on Winter conditions may be obtained from any of the highly qualified licensed ship pilots available in the area.
MAX. SIZE: All berths 35 ft. MLLW.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Port of Anchorage "KBT-42" on HF-AM and SSB. "WHJ-82" on VHF-FM.
Radio Advice: Masters must notify Agents at Anchorage of ETA at Homer Spit, Alaska, as early as possible. Homer Spit position: 59° 35' N., 151° 40' W. To avoid confusion ETA message to Anchorage should indicate Time Zone used. Alaska Communication System Stations are located at Juneau – call sign AKM – Keeping watch on 500 kHz and working on 452 kHz. This station is reported to be very difficult to contact and is closed during weekends.

The fastest way to forward radio messages in the North Pacific is via San Francisco Radio KPH.

The U.S. Coast Guard Station Kodiak – call sign NOJ – keeps R/T watch on 500 kHz, working on 470 kHz.

Due to difficulties reported in contacting local Alaskan stations, Masters of vessels engaged on trans-Pacific crossings are advised to route radio messages to Alaska and Europe via Singapore Radio or Choshi Radio until the dateline, thereafter via San Francisco radio.
TUGS: Join vessel 1.5 miles S.W. of docks.
BERTHING: 600 ft. general cargo Terminal No. 1, apron width 47 ft., live road limit 600 lb. per sq. ft. General cargo Terminals No. 2 and 3, 610 ft. and 893 ft. respectively, apron width 69 ft. Depth alongside face at MLLW 35 ft.
CRANES: Shore Cranes: Level luffing gantry and Paceco container cranes. Capacity: Level luffing gantry 7.5 tons and 40 tons (5 ton high-speed whip lines). Container cranes 27.5 tons.

Outreach from fender face is 70 ft. for the gantries and 81 ft. on the Paceco. Clear height above MLLW is 132 ft.
TANKERS: The Petroleum Terminal at the port of Anchorage is contiguous to the general cargo docks. The POL Dock is 612 ft. long and contains multiple petroleum manifolds in addition to those on Terminal No. 1. Depth 35 ft. alongside.
STEVEDORES: *Working Hours:* Stevedores do not work on January 1st, September 6th, November 25th and December 25th. The first 6 hours of any shift between 0800 hrs. and 1500 hrs. is at the straight time rate. Work performed on Saturdays, Sundays, holidays and between 1700 hrs. and midnight is at overtime rate. Meal breaks are 1145 hrs. to 1300 hrs. and 1645 hrs. to 1800 hrs. Stevedores do not normally work between midnight and 0700 hrs.
SPECIALISED CARGO HANDLING FACILITIES: 2×27.5 ton Paceco container cranes servicing general cargo Terminal 2 and 3; private bulk cement pipe-lines to shore silos. Ro-Ro service available.
DENSITY: From 1.0098 to 1.0102.
MEDICAL: All facilities available. 3 local hospitals.
FUEL: All grades available.
FRESH WATER: Public Health Service certified water station.
GANGWAY/DECK WATCHMEN: Required shipside.
OPENING/CLOSING HATCHES: By stevedores.
SURVEYORS: B. J. Logan and Associates, (Lloyd's Agency; correspondence to AIMU; National Cargo Bureau), 237 E. Third Avenue, Anchorage, Alaska 99501. Phone: (907) 272-7724.
AIRPORT: 5 miles; served by regular foreign and domestic airlines.
CUSTOMS ALLOWANCES: At the discretion of Customs Officer. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.
IDENTIFICATION CARDS: Standard U.S. Immigration Forms I–95 to be made up for each crew member on arrival. Not necessary for crew men already holding Form I–95, issued for the same vessel.
HOLIDAYS: New Year's Day (January 1st); Lincoln's Birthday; Washington's Birthday; Seward's Day (March 30th); Memorial Day; Independence Day (July 4th); Labour Day; Columbus Day; Alaska Day (October 19th); Veterans' Day; Thanksgiving Day; Christmas Day (December 25th).
POLICE/FIRE/AMBULANCE: Police 272–1414; Ambulance/Fire 272–1515.
EMERGENCY CO-ORDINATION CENTRE: U.S. Coast Guard, Anchorage, Alaska 99513. Tel: (907) 271-5137.
TELEPHONES: Telephones available shipside.
BANKS: First Interstate Bank of Alaska, 716 Fourth Avenue, Anchorage, Alaska 99501. Telex: 090-25-243.

Alaska Mutual Bank, P.O.Box 1120, Anchorage, Alaska 99510. Telex: 090-26-414.

Alaska National Bank of the North, Pouch 6608, Anchorage, Alaska 99502. Telex: 090-25-396.

Alaska Pacific Bancorp, P.O.Box 420, Anchorage, Alaska 99510. Telex: 090-25-380.

Alaska Statebank, P.O.Box 240, Anchorage, Alaska 99510. Telex: 090-25-333.

First National Bank of Anchorage, P.O.Box 720, Anchorage, Alaska 99510. Telex: 090-25-190.

National Bank of Alaska, P.O.Box 600, Anchorage, Alaska 99510. Telex: 090-25-226.

Ranier Bank Alaska N.A., Pouch 7007, Anchorage, Alaska 99510. Telex: 090-26-473.

Security National Bank, Pouch 7-777, Anchorage, Alaska 99510. Telex: 090-26-379.

United Bank Alaska, 645 G Street, Anchorage, Alaska 99501. Telex: 090-26-549.
STORING: See "Prelims" page viii.
1. Yes.
2. No restrictive regulations.
3. Yes: Immediately adjacent to ship.
4. Yes.
5. No.
6. Yes.

AUTHORITY: Port of Anchorage, 2000 Anchorage Port Road, Anchorage, Alaska 99501. *Tel:* (907) 272-1531. *Telex:* 090-26-431. *Contact:* Port Director.

ASHTABULA, Ohio: 41.53 N. 80.48 W.

(See Plan Book)

Refer to "St. Lawrence Seaway" for important general information.
PILOTAGE: Nearest pilot station is the Welland Canal, Canada.
ANCHORAGES: No anchorage inside boundaries. Good anchorage outside to East of the entrance, depth approx. 20 fathoms.
MAX. SIZE: The Pinney Dock and Transport Company stevedoring dock handling overseas cargoes located just East of entrance to the port. Channel depth of 28 ft. 4 berths, 27 ft. alongside; length of facilities up to 700 ft. by 75 ft. beam. No facilities for oil carriers.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Contact Lorain, Ohio ship-to-shore station for local connections.
TUGS: Tugs normally join vessels just inside harbour entrance. Use ship's or tug's lines optional; if tug lines used an additional charge of 10% of the tonnage will be added. For tug service call ship-to-shore tug Idaho, FM Channel 51.

BERTHING: See "Developments".
STEVEDORES: Work gangs for loading and unloading provided by the Pinney Dock and Transport Company.
MEDICAL: Vessels requiring medical attention call U.S. Coast Guard station located in the main river by calling AM Channel 20. Ambulance and hospital service available. No inoculation, vaccinations, or fever certificates required.
DENSITY: Fresh water.
FRESH WATER: Available at stevedoring dock.
FUEL: Available on 24-hour notice.
FIRE PRECAUTIONS: City fire department. Also water line on face of the dock available.
GANGWAY/DECK WATCHMEN: Overseas stevedoring dock enclosed wire fence, watchmen on dock at all times, guard at main gate.
OPENING/CLOSING HATCHES: Optional by crew or stevedores.
CUSTOMS ALLOWANCES: Only allotments per person consumed aboard allowed.
IDENTIFICATION CARDS: Required.
CONSULS: Nearest at Cleveland.
REPAIRS: All types of deck and engine repairs available; also topside shell repairs.
REPATRIATION: Can be arranged.
AIRPORT: Nearest airport approx. 10 miles South with commuter services to Cleveland Hopkins Airport. Cleveland Hopkins Airport approx. 70 miles West.
TIME: Local Eastern Standard Time except from May to October – Daylight Saving Time.
HOLIDAYS: Stevedoring docks double time on holidays and time plus one-half on Saturdays and Sundays.
POLICE/AMBULANCE/FIRE: Police, 998-2221; Ambulance, 998-2345; Fire, 998-2121.
TELEPHONES: No provisions for placing telephones aboard vessels.
SHORE LEAVE: Crew allowed ashore.
DEVELOPMENTS: A second slip (length 2,000 ft.) and a third pier (length 2,000 ft., depth 28 ft.) have been completed.
AUTHORITY: Ashtabula Port Authority, P.O.Box 889, Ashtabula, Ohio 44044. *Tel:* (216) 992 8428. *Contact:* Robert Weiner, Chairman. Nicholas Paulchel, Harbour Master.

ASTORIA, Oregon: 46.11 N. 123.50 W.

(See Plan Book)

PILOTAGE: Columbia River Bar Pilots, P.O. Box 81, Astoria, Oregon, 97103. Tel 503-325-2641. Also see "General – Pilotage" before first U.S.A. port (Albany).
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
GENERAL: The Port of Astoria Terminals is located 10 miles up-stream from the mouth of the river and 86 miles downstream from the City of Portland, Oregon.

The channel in the Columbia River, from the ocean to Astoria, has a width of 500 ft. and project depth at low water of 40 ft.

At Astoria, the mean range of tide is 7.5 ft. with extreme tidal range of about 12 ft. On a flood tide a velocity of 2 knots is seldom exceeded, but the velocity sometimes attains 5 knots during the ebb tide. This variation is due largely to the strength of the river discharge, with maximum velocity during the freshets which occur during the months of May, June and July. These freshets, however, do not effect the height of water at Astoria. The Columbia River is navigable throughout the year.

A total of 9 berths at the Port of Astoria Terminals are periodically dredged to 35 ft. and 40 ft. at zero tide, but depths vary from time to time.
TUGS: Tugs are available for assisting ships at the option of the vessel.
BERTHING: The 3 piers, including Ro-Ro facilities and barge ramp, comprising the Port of Astoria Terminals are located in the Western part of the City of Astoria at the confluence of Youngs Bay and the Columbia River. Astoria is served by 1 railroad, 3 major highways and 6 barge lines. The piers extend to the main ship channel, allowing vessels to berth or sail at any time. The terminals are operated by the Port of Astoria Commission as a public property open to all carriers and shippers.

Pier No. 1:

Location: Foot of Portway Street, adjacent to Pier No. 2, and separated therefrom by a water slip 400 ft. in width.

Warehouse Shed: Mill type hollow tile wall construction. 167,000 sq.ft. floor area. Floor load of 600 lbs. per sq.ft.

Shed width 92 ft., slip side and face or end.

Shed length 1,150 ft. on slip side; 520 ft. face or end. Blacktop floor. Complete automatic sprinkler system.

Principal Commodities: General commodities, break bulk, plywood, frozen tuna, grain, sacked goods.

Berths: 2 vessels. 650 ft. face or Northerly end; 1,000 ft. slip or Westerly side, depth 40 ft.

Pier Apron: Width 24 ft., slip side; 16 ft., face or end. Dock is 16.1 ft. above MLW.

Equipment: Dock tractors, fork lift trucks, trailer trucks, hand trucks and other necessary miscellaneous cargo handling equipment.

Bagging Facilities: Bagging facilities for dry bulk commodities such as urea, pulses and dry beans. Usage and rates will be negotiated. (Contact Traffic Department).

Water Services: Portable meters and hose connections for vessel service. Rates of delivery, 10,000 g.p.h. Water pressure about 110 p.s.i.

Fire Protection: Complete automatic dry pipe sprinkler system and hose stand pipes.

Electric Current: Lighting 110 volt, 2 phase, 60 cycle, 35 amperes, alternating current. Portable meter and plug-in service available at all berths.

Grain Elevator: 1,100,000 bushel capacity. Unloading capacity, cars to elevator, 8,000 bushels bulk wheat per hour. 2 spouts at end of gallery from elevator for loading to vessels, capacity 20,000 bushels.

Pier No. 2:

Location: Between Pier Nos. 1 and 3. Separated from Pier No. 1 by a water slip, 400 ft. wide, and from Pier No. 3 by a water slip, 350 ft. wide.

Principal Commodities: Lumber, logs, general cargo, break bulk, bulky cargo in open storage.

Berths: 5 vessels; 425 ft. face or Northerly end; 1,307 ft., slip Easterly side, 40 ft. depth; 1,445 ft., slip Westerly side, 35 ft. depth.

Open Dock: 600,000 sq.ft. Dock level 16.1 ft. above MLW.

Equipment: Modern lighting. Tractors, fork trucks, etc. as listed under Pier No. 1, when required. Portable meters and hose connections. Pipe lines on pier for bunkering.

Water Service: City service. Portable meters and hose connections for service to vessels. Rate of delivery, 10,000 g.p.h. Water pressure about 110 p.s.i.

Electric Current: Lighting 110 volt, single phase, 60 cycle, 35 amperes, alternating current. Power 220 volts, 3 phase, 60 cycle, 35 amperes, alternating current. Portable meters and plug-in service at all berths.

Pier No. 3:

Location: Foot of Hamburg Avenue, (adjacent to and separated from Pier No. 2 by water slip 350 ft. wide).

Principal Commodities: Canned goods, wood pulp, paper products, general cargo, break bulk, dry bulk.

Berths: 2 vessels. 1,750 ft. slip on Easterly side; 35 ft. in depth.

Warehouse Transit Shed: Floor area 248,000 sq.ft. Floor load 600 lbs. East side; 1,000 lbs. West side, per sq.ft.

Shed width 160 ft. Shed length 1,550 ft. Mill type reinforced concrete walls and floor construction. Concrete and blacktop floor. Complete automatic sprinkler system.

Pier Apron: Width, slip side 24 ft. Dock level, 16.1 ft. above MLW.

Equipment: Tractors, trailers, fork trucks, etc., as listed under Pier No. 1, when required.

Barge Ramp: A barge ramp capable of handling loads up to 50 tons is now in operation at the outer berth of Pier No. 3. The ramp is utilised for transfer of cargo from barge or vice versa.

Water Supply: Portable meters and hose connections for service to vessels. Rate of delivery, 10,000 g.p.h. Water pressure about 110 p.s.i.

Fire Protection: Automatic dry sprinkler system. Hose stand pipes.

Electric Current: Lighting 110 volts, single phase, 60 cycle, 35 amperes, alternating current. Power 220 volts, 3 phase, 60 cycle, 35 amperes, alternating current. Portable meters and plug-in service available at all berths.

CONTAINER HANDLING: Container Yard (West of Pier No. 3) 11.5 acres paved, fenced and lighted.
CRANES: 30 ton crane on Pier No. 2.
STEVEDORES: Stevedore Services of America and Jones-Oregon.
FRESH WATER: Available, delivery to vessel through portable hose.
FUEL: Bunkering oil facilities for ocean vessels are maintained at Pier No. 2. The rate of delivery for heavy fuel oil is 1,500 b.p.h., and for diesel oil, 800 b.p.h.
DEVELOPMENTS: Proposed coal transhipment facilities (East Skipanon River and Tongue Point Development), also proposed Land Bridge Terminal at Tongue Point.
AUTHORITY: Port of Astoria, 1 Portway, Astoria, Oregon 97103. *Tel:* (503) 325 – 4521. *Contact:* Steve Felkins, Director.

BALTIMORE, Maryland: 39.17 N. 76.35 W.

(See Plan Book)

PORT LIMITS: North Point is the outer limit of Baltimore Harbour for arrival purposes. The anchorage off Annapolis at Thomas Point, for vessels assigned thereto, is considered arrived for charter purposes.
DOCUMENTS:

3 Copies Cargo Manifest (Form 1302).
Direct Arrival – 2 All Cargo on Board.
1 Cargo this Port.
Coast Wise Arrival – 1 All Cargo on Board.
2 Cargo this Port.
3 copies Crew Manifest (curio list) (Form 1304).
3 copies Stores Lists (Form 1303).
3 copies Passenger List (Form I-418).
3 copies Crew List (Form I-418).

Customs Boarding Officer will also examine Ship's Register and Loadline Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port.

Master's Oath (Customs Form 1300) 3 copies.
General Declaration (Customs Form 1301) 3 copies.
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certificate Crew List (Visa Crew List – U.S. Immigration).

PILOTAGE: Each vessel entering the Chesapeake Capes under foreign flag or carrying foreign cargo is required to employ a Pilot of the Association of Maryland Pilots. The Association maintains a pilot boat which is anchored at the entrance of the Chesapeake Capes. Pilots are furnished with a small transistorised portable radio unit, which provide ships' bridge to bridge communication system to ensure navigational safety while traversing the waters of Chesapeake Bay. It is a positive means of communication to ensure ship's position reporting, the safety and movement of vessels, as well as messages related to the operational needs of vessels proceeding to the port, and provide the Pilots' communications instructions expediting operations of vessels when they are aboard.

The pilot boat has a black hull and white superstructure and is located 2 miles North of Cape Henry Lighthouse.

The pilot ladder should be 2 ft. above the water – manropes not required.

Send ETA pilot station via WMH 48 hours before arrival and confirm 24 hours before arrival. Also advise if change in ETA is over 2 hours.

The ETA message should state whether arriving via Chesapeake and Delaware Ship Canal or Cape Henry, and deepest draft and speed of vessel.

Cable address of Pilot: "Marpilot, Baltimore", pilot vessel "Maryland" on VHF Channels 11, 13 and 16. Telex: 87-574.

Shipmaster's Report: June 1981. I had the services of 2 Pilots from the pilot station at the entrance to Chesapeake Bay to Sparrows Point, and back out. The Pilots themselves are trying to have 2 Pilots as law. To have 1 Pilot on a deep drafted vessel such as we were for over 12 hours, sometimes in thick fog, is unfair and whilst faster light drafted vessels can cover the same distance in less than 12 hours the pilotage time is still lengthy.

ANCHORAGES: Numerous anchorages located within harbour limits for ocean-going vessels. 6 such areas are available for vessels of light and deep draft. 4 of these anchorages are located on the East side of the main ship channel between the entrance channel to the Central Soya Company Grain Elevator and Fort Carroll. 2 are on the West side of the main ship channel. At Thomas Point, approximately 22 miles South of Baltimore, there is an emergency anchorage in natural deep water with depth of 50 ft. or more. The U.S. Coast Guard is responsible for the anchorages, but in practice, the Pilots make the assignments.

RESTRICTIONS: There are two different approaches and exits to the sea lanes. The principal route is by way of the Southerly course through the Chesapeake Bay and Cape Henry to the ocean. The distance by this route is approximately 150 nautical miles. There is a main ship channel 20 miles long from Baltimore to the Chesapeake Bay; this channel is 800 ft. wide and 42 ft. deep.

The other route to the sea lanes is via the Chesapeake and Delaware Ship Canal. This offers a short protected route between Baltimore and other leading North Atlantic ports by way of Delaware Bay and allows ships serving North Atlantic European ports to save about 115 miles sailing distance.

Entrance to the Chesapeake and Delaware Ship Canal is located about 50 miles North of Baltimore. The width of the channel is 450 ft. Max. draft 31 ft. (Temporary condition, normally 32 ft.). The canal itself is 15 miles in length, and from the Delaware Bay side the distance to sea lanes is about 60 miles. Navigation lights are maintained so the canal is open to navigation day and night. Mean range of tide is 1.1 ft. at Baltimore. Currents are 0.8 knot on flood and ebb tides.

MAX. SIZE: Length 1,250 ft., draft 42 ft. at Consolidated Coal Pier. No restriction on beam.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: The port has an efficient fleet of tugs in operation. The tugs usually take vessel in tow at Francis Scott Key Bridge. Tug's lines are used at no extra charge.

RADIO: Marine Radio Station WMH with a world wide range operates on 500 kHz., 8610 kHz. and 12952.9 kHz.

BERTHING: Major piers and terminals:

Abbreviations:
WC = Whirley Crane (Tower Gantry)
CC = Container Crane
M.T. = Marine Terminal
LT = Long Ton
T = Net Ton

Breakbulk – Container, General Cargo:

Name	*Berths* (ft.)	*Water Depth* (ft.)	*Cranes*	*Other Features*
Pennwood Wharf	1–870	32		
Dundalk M.T.	1–1050	38	10 CC at 40 LT	3 Ro-Ro ramps
	1–840	38		7 container berths
	1–800	34	2 WC at 50 T	
	3–750	38	2 WC at 60 T	
	7–600	34		
Sea-land M.T.	1–700	32	1 CC at 27.5 T	1 container berth
Rukert Terminals	1–575	34		
	1–870	36.5		
Clinton St. M.T.	4–550	32	1 WC at 15 T 1 WC at 18 T	
Locust Point, North Piers 3, 4 & 5	6–600	34	2 WC at 75 T	
Locust Point, South	2–850	36	2 CC at 40 LT 1 WC at 100 T 1 Stiffleg Derrick 350 T	2 container berths
Port Covington	2–600	33	2 WC at 10 T	
	1–850	33	2 WC at 10 T	
	1–1000	33		
	1–650	33		
Atlantic Terminal	1–730	28		
Produce Terminal	1–713	28	4 Banana Conveyor Cranes	

Dry Bulk:

Name	*Berths* (ft.)	*Water Depth* (ft.)	*Commodity*	*Cranes*
Sparrows Point	2–1020	45	Iron Ore	3×26 T Ore unloaders
Pier 6 Port	1–1434	30	Ore, coal	1×9 T Ore crane
Covington	1–1524	40		1×15 T, 1×9 T Ore cranes
Curtis Bay Ore Pier	1–800	42	Ore	2×15 T Ore cranes
Rukert Pier 5	1–870	36	Ore	1×21 T Ore crane
Hawkins Point	1–720	36	Ore (Alumina)	1×30 T Ore crane
CCSC Coal Pier	1–1253	50	Coal	1 Shiploader 7000 T per hour
Canton Coal Pier	1–939.5	32	Coal	2 loading towers 1000 T per hour
Bay Side Coal Pier	1–1000	42	Coal	1 Shiploader 6000 T per hour
Curtis Bay Coal Pier	1–900	42	Coal	1 Shiploader 6000 T per hour
Canton Grain	1–690	37	Grain	2 loaders & spouts
Elevator	1–1418	33		125,000 bushels per hour
Pier 7, Locust Point, North	1–1000	38	Grain	4 conveyor booms & spouts, 75,000 bushels per hour
Pier 2 Port Covington Grain Terminal	1–1340	45	Grain	6 loading spouts 70,000 bushels per hour
National Gypsum Pier (Gold Bond)	1–594	32	Gypsum	Receiving hopper & Belt, 500 T per hour
U.S. Gypsum Dock	1–740	30	Gypsum	Receiving hopper & belt, 900 T per hour
Amstar Raw Sugar Dock	1–1040	32	Sugar	2×12 T unloading towers, 600 T per hour
Atlantic Cement Pier	1–900	28	Cement (Receipt)	700 T per hour
Atlantic Cement Loadout Station-Penwood Wharf	1–680	30	Ground Slag	1 loading tower 2,000 T per hour

Liquid Bulk:

Name	*Berths* (ft.)	*Water Depth* (ft.)	*Commodity*
Pier 10, Locust Point North M.T.	1–610	34	Molasses, Caustic Soda Asphalt, Latex
ST Services Pier	1–900	36	Petroleum, edible and chemical
	1–900	35	Liquids
Olin Corp Main Wharf	1–800	28	Liquid Sulphur
Berths 5 & 6 Dundalk M.T.	1–600	34	Molasses
Agrico Pier	1–450	30	Liquid fertiliser
Pier 4 & 5, North Locust Pt. M.T.	1–600	34	Latex (Guthrie)
	1–600	34	Latex (Firestone)
Pier 3, North Locust Point M.T.	1–600	34	Latex (Firestone)
Hawkins Point Pier	1–720	36	Liquid Fertiliser, Hydrogen Peroxide
Apex Pier 2	1–733	30	Petroleum and petroleum products
Exxon Pier 1	1–830	37–39	Petroleum and petroleum products
	1–830	37–39	Petroleum and petroleum products
Continental Dock 188	1–585	32	Petroleum and petroleum products
Continental Pier 189	1–785	34	Petroleum and petroleum products
Shell Oil Wagner's Point Pier	1–840	35	Petroleum and petroleum products
Amoco Oil Dock No. 1	1–675	33	Petroleum and petroleum products
BP-Texaco Pier	1–700	33	Petroleum and petroleum products
Amerada Hess Pier	1–700	37	Petroleum and petroleum products
American Oil Dock No. 2	1–700	32	Petroleum and petroleum products

CRANES: *Floating:* 3×35 ton, 1×130 ton, 1×85 ton, 1×150 ton, 1×275 ton.

One stiff legged derrick, capacity 350 tons, located at South Locust Point Marine Terminal.

BRIDGES: The Chesapeake Bay Bridge-Tunnel is located across the entrance to the Bay, between Cape Henry and Cape Charles. This vehicular crossing consists of fixed causeways and bridges 15 miles in length, and 2 tunnels – one under the Chesapeake Channel and one under the Thimble Shoal Channel. A horizontal clearance of 1,400 ft. at 60 ft. water depth exists.

The Francis Scott Key Memorial Bridge crosses the main ship channel in Baltimore Harbour and is 8,640 ft. long, with main channel horizontal clearance of 800 ft. and vertical clearance of 185 ft. Vessels en route to the harbour from the ocean via the Chesapeake Bay pass under the Chesapeake Bay Bridge (2 parallel bridges), about 138 statute miles above the ocean entrance to the bay. This bridge is 3.7 miles long from shore to shore; its Western end is 0.5 miles S.W. of Sandy Point and its Eastern end is on Kent Island, 4 miles S.W. of Love Point. Least clearance width of 1,500 ft. and vertical clearance 186 ft.

By way of the Chesapeake and Delaware Canal the least horizontal clearance is 500 ft. and vertical clearance of 133 ft.

The Curtis Creek and Middle Branch sections of harbour are each crossed by highway and railroad bridges.

DENSITY: Fresh water.

TANKERS: See "Berthing".

MEDICAL: All facilities available.

FRESH WATER: Can be supplied at all berths. Water barges available.

FUEL: All grades supplied by numerous oil companies by barge or ex-wharf at the oil berths.

REPAIRS: *Bethlehem Steel Corporation.* At the Sparrows Point Shipyard vessels up to 300,000 d.w.t. are constructed, and the facilities include all the necessary equipment for the construction of large and small vessels.

2 other marine yards, 1 of which is located at Key Highway, while the second is located on the Eastern end of Locust Point adjacent to Fort McHenry. The facilities of these plants include 3 dry docks, 2 graving docks and 9 outfitting piers. These facilities handle all types of dry docking and ship repairs. These facilities are closed pending sale.

Maryland Shipbuilding and Drydock Company. This large marine shipyard is located on the water front at Fairfield. Plant facilities include 4 dry docks, 5 outfitting piers and 1 side launch way. All types of ship repairs are handled in this yard.

In addition to the above mentioned facilities there are numerous companies specialising in minor ship's repairs, tank cleaning, repair of all types navigational and optical instruments, fumigation.

Searle Consortium Ltd. and their sister company, Seaward Marine Services provide the following:

Diving and general underwater inspection services.

Underwater hull cleaning.

Salvage survey and underwater repairs of a salvage nature.

Assistance in the refloating of stranded vessels.

Assistance in the arranging/engineering of towage.

AIRPORT: BWI Airport, 8 – 10 miles or 20 minutes from harbour by vehicle with 35 regular scheduled airlines and 580 flights daily.

SURVEYORS:

Capt. Dieter E. Albers, 532 Anchor Dr., 21085. Tel: 679-5260.

American Bureau of Shipping and ABS Worldwide Technical Services, Inc. The World Trade Centre, Baltimore, Suite 331, 21202. Tel: 752-0828. Roger H. Edwards, Area Principal Surveyor. Tel. 296-1564. I. J. C. Owen, Senior Surveyor. Tel: 628-2728. TWX: 710-234-1070.

American Marine Services of Maryland, Inc., Dundalk Marine Terminal, Suite 117, Dunmar Bldg., 2700 Broening Hwy. 21222. Tel: 288-1080. Paul N. Trapani, Pres. Tel: 592-2692. Lawrence J. Nolan, Intermodal Manager. Tel: 426-7786. Larry T. English, Surveyor. Tel: 243-3230.

Atlantic Cargo Inspection Corp., 16 East Seminary Ave., 21093. Tel: 321-0690. Capt. E. H. Leigh. Tel: 321-7734.

Baltimore Cargo Surveyors, The World Trade Centre, Baltimore, Suite 2351, 21202. Tel: 727-3770. Capt. Joseph A. Arena, Marine Surveyor. Tel: 486-3816.

Carman & Co., 114 Chamber of Commerce Bldg., 21202. Tel: 752-2229. Morgan P. Bodie, Jr., Marine Surveyor, Prop. Tel: 235-1132.

Edward F. Carter & Associates, Inc., Dundalk Marine Terminal, 2700 Broening Hwy., 21222. Tel: 539-1346. Capt. Frederick A. Johnson, Marine Surveyor. Tel: 254-5668. Capt. Sumner R. Dolber, Marine Surveyor. Tel: 828-0946. Capt. Emmett G. McCarthy, Marine Surveyor. Tel: 1-439-5795.

James M. Fesmire Jr., 1210 Clearfield Circle, 21093. Tel: 828-1147.

Hull and Cargo Surveyors, Inc., 110 West Rd., 21204. Tel: 321-5968. Robert H. O'Loughlin, Principal Surveyor. Tel: 679-7088. A. Randall Jordan, Marine Surveyor. Tel: 676-3023. J. Withers Davis, Marine Surveyor. Tel: 1-357-4848.

Intermodal Transportation Services, Dundalk Professional Bldg., A-3, 40 S. Dundalk Ave., P.O. Box 3966, 21222. Tel: 282-6100. Samuel S. Lancelotta, Branch Mgr. Tel: 796-4993. Richard L. Schott, Marine Surveyor. Tel: 282-8341. Ronald L. Trott, Container Specialist. Tel: 781-4691.

Lloyd's Register of Shipping, Suite 1701, First National Bank Bldg., 21202. Tel: 547-1150. John D. Wallace Sr., Principal Surveyor. Tel: 252-6728. Peter J. Beare, Surveyor. Tel: 252-0236. Cable: Surveyor Baltimore.

Peter F. Luard & Co., Inc., 105 Terminal Office Bldg., Dundalk Marine Terminal, 21222. Tel: 633-6257. J. Robert Benjamin, Vice Pres. Tel: 1-734-4187. Andrew Mutch II, Marine Surveyor. Tel: 647-4583. Raymond A. Gercke, Jr., Marine Surveyor. Tel: 298-3387.

Marserv Inc., P.O. Box 19065, 21204. Tel: 337-4729. Alois F. Cherney, Pres. Tel: 828-7436. John J. Lambros, Vice Pres. Tel: 828-8249. E. Lee Insley, Vice Pres. Tel: 577-6981.

George E. Meese, Naval Architects & Marine Engineers, 194 Acton Rd., Annapolis, 21403. Tel: 1-263-4054. George E. Meese, Owner. Tel: 1-263-4054.

Mid Atlantic Cargo Services, Inc., 11 S. Gay St., 21202. Tel: 539-2841. James Gill. Tel: 747-3427.

John Mitchell & Son, Suite 811, 101 W. Read St., 21201. Tel: 752-1508. Alfred G. Mitchell, Surveyor. Tel: 485-2100/01. Charles G. Tolley, Surveyor. Tel: 465-4727.

National Cargo Bureau, Inc., Room 201, 33 S. Gay St., 21202. Tel: 685-5538. Capt. James J. McNamara, Surveyor-in-Charge. Tel: 296-6020. Capt. Harry Mehlsen, Surveyor. Tel: 653-2036. Capt. Robert Koning, Surveyor. Tel: 727-7291.

Capt. Heiner Popp, Inc., 172 Ritchie Hwy., 21146. Tel: 544-1422. Capt. Heiner Popp. Marine Surveyor. Tel: 544-1452. Capt. K. V. Cookson, Marine Surveyor. Tel: 768 6151. John C. Sturgeon, Marine Surveyor. Tel: 544-1436.

Vernon K. Spjut, 8402 Merrymount Drive, 21207. Tel: 922-8262.

Neil L. Stein Assoc. Inc., 13 Linstead Rd., 21146. Tel: 647-6416. Neil L. Stein, Pres. Tel: 647-1207.

Toplis and Harding, Inc., Dundalk Marine Terminal, 2700 Broening Hwy., Room 208, Dunmar Bldg., 21222. Tel: 288-1447. R. R. Wood, Asst. Vice Pres. Tel: 255-7636. J. L. Bauer, Surveyor. Tel: 321-9043. R. C. Boblitz, Surveyor. Tel: 653-9094. Telex: 908260 Toplis Bal.

John W. Treadwell, 8617 Chestnut Oak Road, 21234. Tel: 661-8336. J.W. Treadwell, Marine Surveyor.

CUSTOMS ALLOWANCES: At the discretion of Customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I–95 to be made up for each Crew member on arrival. Not necessary for crew man already holding Form I–95, issued for the same vessel.

REPATRIATION: Crew changes can be made and repatriation arranged at the port.

CONSULS:

Argentina
Belgium
Colombia
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Guatemala
Honduras
Italy
Netherlands
Norway
Panama
Senegal
Sweden
Tunisia
Turkey
Venezuela

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight saving time, GMT minus 4 hours from April to October.

POLICE/AMBULANCE/FIRE: Baltimore City: Police tel: 222-3333. Fire tel: 685-1313. Ambulance tel: 396-1111.

Baltimore County: 911.

Emergency matters relating to the Coast Guard – Tel: 962-5100. VHF Channel 81 (157.075 MHz).

EMERGENCY CO-ORDINATION CENTRE: No official Centre at Baltimore. In an emergency contact Captain of the Port – Coast Guard. Tel: 962-5100. VHF Channel 81 (157.075 MHz) is monitored.

BANKS: The Equitable Trust Company, Munsey Building, Calvert & Fayette Streets 21202. Tel: 547-4000. Cable: Equibalt. Telex: 087-889.

First National Bank of Maryland, International Banking Division, Light & Redwood Streets 21202. Tel: 244-4500. Cable: Firstbank. Telex: 87-600.

First National Bank of Chicago, The World Trade Centre, Baltimore, Suite 1600, 21202. Tel: 547-8700.

Maryland National Bank, International Banking Department, 10 Light Street, 21202. Tel: 244-6483. Cable: Baltobank. Telex: 87-705.

Mercantile Safe-Deposit & Trust Company, International Department, 2 Hopkins Plaza, 21201. Tel: 237-5304. Cable: Mersafe.

Union Trust Company of Maryland, Baltimore & St. Paul Streets, 21202. Tel: 332-5000.

STORING: See "Prelims" page viii.

1. Normally by truck. Possible by barge at anchorage.
2. Varies from terminal to terminal. Normally vessels can be stored during working hours. No specific port regulations.
3. In most cases truck can go alongside.
4. Yes. (Where apron size permits).
5. Customs regulations apply to bonded goods.
6. Yes.

SHIP SUPPLY SERVICE:

Launch Services:

Annapolis Launch Service, Inc., P.O.Box 44, Annapolis 21404. Tel: 269-0878.

Baltimore Launch and Marine Services, Inc., 2701 Boston St., 21224. Tel: 563-3411.

Bay Taxi Service, Inc., 2121 Aliceanna St., 21231. Tel: 675-3553.

Inner Harbor Transport Service, Inc., The World Trade Center Baltimore, Suite 723, 21202. Tel: 539-1440/41. Pier Office – 1000 Key Highway East. Tel: 727-7955

International Marine Transport Service, Inc., Passengers and Cargo Service, 653 Sherwood Forest, Annapolis 21405. Tel: 974-1179.

Marine Launch (Div. of Broadway Meat Co., Inc.), 2700 Lord Baltimore Dr., 21207. Tel: Office 944-6328, Dock: 327-0881.

Ralford Operating Co., 2701 Boston St., 21224. Tel: 675-0977.

Standard Marine Supply & Service Co., Inc., 911 S. Wolfe St., 21231. Tel: 276-5454/5756, Nights and Holidays 557-9117.

Ship Services:

American Ship Service Co., Inc., P.O.Box 5101, 1103 S. Highland Ave., 21224. Tel: 342-8810/11/12.

Arkay Steamship Corporation, 5935 Talbott Street, 21207. Tel: 788-0073. TWX: 710-236-9013 (ARKAY SS BAL) Cable: "ARKAY" Baltimore.

Davis Ship Service, Inc., 231 S. Exeter Street, 21202. Tel: 276-3131.

Inner Harbor Transport Services, Inc., The World Trade Center Baltimore, Suite 723, 21202. Tel: 727-7955.

Marine Service Company, Inc., 1601 Thames St., 21231. Tel: 522-4444/45.

Phillyship, 1508 Open Street, 21226. Tel: 962-1141. TWX: 83-4627. Cable: Phillyship.

Port Supervision, Inc., Rm. 801, 207 E. Redwood St., 21202. Tel: 539-5158. TWX: 87495.

DEVELOPMENTS: Maintenance dredging to 42 ft. underway.

AUTHORITY: Maryland Port Administration, World Trade Center Baltimore, Baltimore, Maryland, 21202, U.S.A. *Tel:* 659-4550. *Telex:* 710-234-1075. *Cables:* Marport. *Contact:* W. G. Halpin, Port Administrator.

AGENT: Rice, Unruh Co., Suite No. 2332, World Trade Center, Baltimore, Maryland 21202. Tel: (301) 385-2484 (10 lines). (Note: Answering service in attendance outside normal working hours) Telex: 87-839. TWX: 710-234-1618 and 710-234-1036, "Riceunruh Bal". Cables: "Riceunruh Baltimore".

BANGOR (including Brewer and Orrington), Maine: 44.49 N. 68.47 W. (See Plan Book)

LOCATION: Bangor is located on the West bank of the Penobscot River at the head of navigation. Brewer is on the East bank of the river opposite Bangor and Orrington is on the East bank of the river 2 miles below Brewer.

DOCUMENTS:

1 copy of Crew List.
1 copy of Passenger List.
2 copies of Stores Lists.
2 copies of Foreign Purchase Lists.
2 copies of Inward Foreign Manifest.
1 form 1300 (Master's Oath on entry of vessel).
2 forms 1374 outward foreign Manifest.

PILOTAGE: Pilotage is compulsory for all foreign vessels and U.S. vessels under register in the foreign trade, with a draft of 9 ft. or more, entering or departing from any port or harbour within the waters of Penobscot Bay and Penobscot River North of a line drawn from Marshall Point Livat Port Clyde, thence to Matinicus Rock Light, and thence to Western Head, Isle Au Haut. Pilotage is optional for vessels powered by sail.

Cable PENBAY via Chatham Radio. Ship's Agent usually notifies Pilot 48 hours and 24 hours before arrival at the pilot station. Pilot boat usually stands by on their radio 1 hour before ETA on RT 2182 and VHF Channel 16. Pilot boards at Monhegan Is., 43° 45′ N., 69° 22′ 5″ W. Pilot uses a white boat 36 ft. long and displays "H" by day and the Pilot signals at night. Vessels awaiting Pilot in bad weather must heave-to outside.

ANCHORAGES: The usual anchorage for vessels waiting at the river entrance for a towboat or favourable wind and tide is Northward of Fort Point on the West side of the channel.

Vessels bound up the river anchor anywhere in the channel where soft bottom is found. Vessels towing to Bangor, if the tide does not serve, often anchor off Winterport. On account of the strong ebb current, it is better for vessels going to Bangor, particularly large vessels, to anchor off Fort Point and start up the river about 3 hours after LW.

RESTRICTIONS: CHANNEL:– The controlling depth in the marked channel in Penobscot River from Bucksport to Bangor is 19 ft. to Winterport, thence 13 ft. to Bangor. The channel is marked by buoys to a point about 1.5 miles below South Brewer.

Caution: Deep-draft vessels should exercise caution above Fort Point as depths of 31 ft. to 32 ft. are in mid-channel, about 0.5 mile Eastward of Sandy Point, and rocky ledge, covered 34 ft., also in mid-channel, is reported about 0.2 miles S.W. of Odom Ledge Daybeacon.

The most difficult sections for vessels are off Lawrence and Luce Coves just North of Bucksport where it is difficult to mark the best water and off Frankfurt Flats where large vessels experience difficulty with the sharp turns.

The channel in Penobscot River is crooked and narrow in places, and frequent changes occur. Vessels should not attempt to carry drafts greater than 10 ft. to Bangor at LW. With a deeper draft a Pilot or towboat should be used; 14 ft. or 15 ft. is carried to Bangor and Brewer at HW, and deeper drafts occasionally to the oil berth at South Brewer. The safest time is on a rising tide. Navigation of the river at night is extremely dangerous due to lack of lighted navigation aids. After unusually high tides many logs, dangerous to small craft, are in the river. At times of maximum ebb currents, buoys are occasionally pulled under.

Tides: The mean range of tide varies from 10.3 ft. at Fort Point to 13.1 ft. at Bangor. Currents of 3 knots are not unusual from Odom Ledge to Orrington, and during Spring runoff currents approaching 5 knots may be encountered. Because of these currents, larger vessels should use caution navigating the river. Passage up the river is more advisable during flood current.

Ice impedes but usually does not prevent navigation above Winterport for nearly 5 months each year, beginning about December. During extreme Winters the river is closed to the mouth. The most difficult place below Winterport is abreast Fort Knox, where ice jams occur. If vessels can pass this point, they usually can go to Winterport. The river is kept open by an icebreaker, which prevents much of the damage that might otherwise be caused by ice and freshets. However, in recent years, according to local information, there has been very little ice and the river has seldom frozen over below Bangor. The brackish water formed by tidal action and the river current no doubt have contributed to this.

Freshets occur in the river during March and April; at times they are dangerous to vessels.

MAX. SIZE: At present ships of 560 ft. are taken up the river 2 hours before HW during daylight. Size and draft of ship depend on the berth.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Vessels arriving Bangor use radio station at Chatham Mass., or call on the R/T through station WOU at Boston, Mass.

TUGS: 4 tugs available up to 1,200 h.p. Tugs join at Belfast to assist in turning and berthing.

BERTHING:

Texaco Oil Co. Terminal: A timber pile, timber-decked pier, approximately 5,250 sq.ft., used for landing oil tankers. There are 8 storage tanks and 1 warehouse/office building with 1,920 sq.ft. of floor space.

Mobil Oil Co.: A timber crib pier approximately 8,500 sq.ft., used for landing tankers. There are 10 storage tanks and a garage at this facility.

Webber Terminal Inc.: A timber crib pier, approximately 2,340 sq.ft. used for landing tankers. Adjacent to this pier, there is another timber crib pier, approximately 5,280 sq.ft., also used for landing tankers. There are 2 storage tanks and a storage building with 480 sq.ft. of floor space.

Astroline Petroleum Corp. of Maine: There is a log filled bulkhead used for landing tankers. This facility includes 5 storage tanks and 1 tool shed.

Bangor Municipal Dock: A new wooden and steel float with gangway, 1,500 sq.ft. located just below the Joshua Chamberlain Bridge; also 4×4 ton guest moorings are available for recreational use.

Webber Tanks Inc. – Brewer: A rock and timber crib, timber decked pier, approximately 7,200 sq.ft., used for landing tankers. There are 5 storage tanks and a warehouse with approximately 3,850 sq.ft. of floor area.

C. H. Sprague – Brewer-Orrington: A timber pile wharf, approximately 1,600 sq.ft., used for landing tankers. The wharf is in Orrington and fuel is pumped to 3 storage tanks located in Brewer. There is one building, a pump house, approximately 600 sq.ft.

Hampden Recreational Boating Facility: 2 launch ramps with ground float; landing dock; 2 guest moorings, 8 ft. MLW to ramps, 80 ft. wide channel.

Town Launch Ramp – Orrington. This is a paved launch ramp; no docking facilities. There is a 40-space (30 car – 10 trailer) gravel parking area.

BRIDGES: 1 suspension bridge below Bucksport with a height of 135 ft. at high water. Horizontal clearance is 750 ft.

The overhead power cable that crosses the river just above Bucksport has a clearance of 145 ft.

MEDICAL: No advance notice required. There are 3 large hospitals.

TANKERS: 1 berth for ocean-going vessels. 1×8 in. hose with a 10 in. line. 22 ft. at low water. Also see "Berthing".

DENSITY: Nearly fresh water.

FRESH WATER: Supplied at ocean-going berth at the rate of 50 t.p.h.

FUEL: Only available at oil berth.

CERTIFICATES:

Load-line.
Foreign Clearance.
Safety Certificate.
Radio Operator's Licence.

CUSTOMS ALLOWANCES: 200 cigarettes per man, 1 bottle wine/spirits per man.

IDENTIFICATION CARDS: Form I–95 must be filled out upon arriving unless seaman has made one out before on a previous trip.

CONSULS: None.

REPAIRS: Only machinery repairs.

REPATRIATION: Arrangements must be made ahead of time by telegram.

TIME: GMT minus 5 hours in the Winter and minus 4 hours in the Summer.

AIRPORT: Bangor International is 2 miles from the city.

POLICE/AMBULANCE/FIRE: Police 9427377; Ambulance 9893311; Fire 9422293.

TELEPHONES: None put aboard. 1 pay phone on ocean-going berth.

SHORE LEAVE: Allowed subject to Immigration approval.

AUTHORITY: City of Bangor, Dept. of Harbour and Wharves, Harbour Master.

BATON ROUGE, Louisiana: 30.28 N. 91.12 W.

DOCUMENTS:

Original and 3 Crew Lists.
Original and 3 Passenger Lists.
Clearance from last foreign port.
Original and 3 copies Inward Manifest.
Derat Certificate.
Load-line Certificate.
Safety Certificate.
Ship's Register.
3 copies Curio List.

PILOTAGE: Advise Agents ETA sea-buoy 48 hours in advance. Agent then makes arrangements for Pilots. Seven 46 ft. pilot boats – red hulls white cabins, flying white and blue pilot flags. Suggest pilot ladder 6 ft. above water level, no life-line. Call Channel 2738 or VHF Channel 9, 30 miles to 40 miles out. Safe anchorage within 2 miles South Pass or S.W. Pass entrance.

ANCHORAGES: General anchorage Baton Rouge as directed by Pilots.

RESTRICTIONS: No night-time restriction for entry or clearance, docking or undocking.

MAX. SIZE: Exxon Oil Docks can accommodate 1,000 ft. vessels – unlimited breadth; draft governed by S.W. Pass – project depth 40 ft. usually restricted from 37 ft. to 30 ft. draft May through August, due to low water and silting.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: ETA cables can be routed through Tropical Radio WNU New Orleans.

TUGS: Available at Baton Rouge for docking and undocking. Ship's lines used.

BERTHING: No time restrictions on berthing. 2 general cargo docks with total 400,000 sq. ft. transit shed and 2,265 ft. long, 40 ft. wide apron with double marginal tracks; grain elevator and bulk terminal at Burnside, for handling ores, concentrates, etc.; container marshalling yard adjacent cargo docks; also 20-acre paved staging area for project cargo.

BULK HANDLING FACILITIES:
Grain: Cargill Grain Elevator: Max. draft 38 ft. Loading rate 1,000 t.p.h. Silo storage 160,000 tons.
Dry Bulk: Burnside Terminal: 2 unloading gantries for bauxite. Rate 2,000 t.p.h. Max. draft 39 ft.
Molasses: Molasses terminal, leased to Manard Molasses Company, has an 11 million gallon capacity.
Coal: Coal Monitor One: The ultimate in the midstream transfer of coal, Coal Monitor One is a joint venture of Ryan-Walsh Stevedores and P & C Bituminous Coal, Inc. The device has the ability to sample and blend as well as aerate and cool the coal as it is transferred from barge to vessel.

Coal has become a major commodity at the Port with the safe, convenient anchorage buoy facility for ocean going vessels and the connection through major rivers and waterways to the primary coal-producing states. Tonnage is expected to reach 2 to 3 million tons of coal per year at this facility.

Coal Monitor One can handle vessels with airdraft of 65 ft. and beam 135 ft. Loading rate 1,800 tonnes per hour.
Midstream Transfer: The Port's midstream anchorage buoy facility is located in the Mississippi River just opposite its docks for the transfer of cargo between barges and ships. Primarily for the transfer of export coal, the operation is capable of handling import or export steel, salt, coke, or other bulk, heavy lift and bargeborne commodities by the use of floating cranes.
BRIDGES: Sufficient clearance for all stages of river at all times; 2 bridges cross at New Orleans, 1 at Baton Rouge and 1 at Donaldsonville.
CRANES: 2×150 ton crawler; 2×70 ton crawler; 1×50 ton motor crane; 2×45 ton motor crane; 2×35 ton motor crane; 1×30 gantry and 5×100 ton rail car pushers.
STEVEDORES: May be obtained by Agent with 4 hours' notice.
MEDICAL: Agents should receive 24 hours' notice when medical attention is required. 2 excellent hospitals at Baton Rouge, U.S. Public Health Hospital at New Orleans.
TANKERS: Oil tankers load various petroleum and chemical products at Exxon Oil Docks with sufficient hose, reducers, etc., available. Oil residue slop facilities available.
DENSITY: No tide – fresh water at all times.
FRESH WATER: At public docks. At Exxon Oil Terminal simultaneous with loading or discharging at no cost. Ship's crew to make water connections.
FUEL: All grades subject inquiry. Barging essential.
FIRE PRECAUTIONS: Usual fire lines and sprinkler systems.
GANGWAY/DECK WATCHMEN: Only if Master requires.
OPENING/CLOSING HATCHES: Depending on terms of charter, usually by ship's crew.
CUSTOMS ALLOWANCES: Tobacco, each crew member allowed 300 cigarettes. Master allowed reasonable quantity. Wine and/or Spirit, each crew member allowed 1 bottle each of wine and spirits. Master allowed reasonable quantity.
CARGO GEAR: Safety certificate required for ship's gear.
IDENTIFICATION CARDS: Usual passports.
CONSULS: Norwegian only, all other consuls at New Orleans – 80 miles distant.
REPAIRS: All types of deck and engine repairs may be carried out.
SURVEYORS: *Testing, Sampling, Weighing and Cargo Certification:*
Caleb Brett USA Inc., P.O.Box 315, Baton Rouge 70821. Tel: 292-4410.
Chas. Martin, Inspectors of Petroleum, 2835 Plank Rd., Baton Rouge. Tel: 355-8833.
Pittsburgh Testing Lab., 2166 Monroe St., Baton Rouge. Tel: 355-2641.
Saybolt, E. W. Co., 10023 Mammoth Avenue, Baton Rouge. Tel: 925-1231.
Transport Management & Consulting, Inc., 4137 Sherwood Forest Blvd., Suite 110, Baton Rouge 70816. Tel: 293-3025.
USDA, FGIS, Port Allen. Tel: 389-0373.
USDA, FGIS Field Office, Lutcher. Tel: 536-2811.
Marine Surveyors:
Jorgensen, Capt., N.E. 865 E. Riveroaks, Baton Rouge. Tel: 926-6828.
McAnally Engineering Co., Box 66012, Baton Rouge 70809. Tel: 766-8992.
National Cargo Bureau, 7414 Perkins Rd., Suite 180, Baton Rouge. Tel: 769-6353.
REPATRIATION: Crew repatriation and crew changes may be made.
AIRPORT: 6 miles to Ryan Airport, served by regular airlines.
TIME: Local time is Central Standard Time – GMT minus 6 hours; from April through October local time is CS daylight saving time, GMT minus 5 hours.
POLICE/AMBULANCE/FIRE: Tel. Nos. Public Dock: Police 343 – 9234; Ambulance 343 – 6691; Fire 343 – 6691.
TELEPHONES: No arrangements for placing telephones aboard.
GENERAL: Tankers in ballast advised of drift wood conditions in river and ballast their vessels accordingly so as to avoid propeller damage.
SERVICES: Because of restricted river inadvisable adjust compasses. This is usually accomplished below New Orleans where river of sufficient width to permit large vessels to swing. 3 firms engaged in tank cleaning, namely, Watson Marine, Robin Hood Fleeting and Port Allen Marine Cleaning Plant. Slop facilities available at the Exxon Oil & Refining Co. dock.
SHORE LEAVE: Shore leave permitted except when detained aboard by U.S. Immigration.
SHIP SUPPLY SERVICE: *Launch Service:*
Capital Marine Supply, Inc., Box 3018, Baton Rouge. Tel: 343-8379.
Tri-G Marine Supply, Inc., Box 3808, Baton Rouge. Tel: 344-7664.
DELAYS: Normally no delays at Exxon Oil docks in berthing except when vessel's tanks unsuitable for loading. Normal delay at city wharf is 1 day awaiting berth.
NOTICE: To all Masters from a Ship's Agent:
Please be advised that the Agent will need a copy of the Notice of Readiness and Dry Tank Certificate. The Agent will pick these two certificates up from the Master on sailing of vessel. These are needed by the Agents to send out to the Owners and/or Charterers along with the other documents. We have been having problems receiving these documents from the terminal and/or Cargo Surveyor. The terminal will require, on the vessel's arrival at the berth, one copy of the Bill of Lading and/or Customs Manifest. It would be appreciated if you could make an additional copy of these documents when they are prepared by your vessel.
AUTHORITY: Greater Baton Rouge Port Commission, P.O.Box 380, Port Allen, Louisiana 70767. *Tel:* (504) 387-4207. *Contact:* John B. Dutton, Executive Director, T. Med Hogg, Port Sales Manager.

BAYTOWN, Texas: 29.44 N. 95.01 W. (See Plan Book)

DOCUMENTS, PILOTAGE, etc.: Refer to "Houston".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO/VHF: Exxon Dock "KNQ-Baytown" on VHF Channel 19.
TUGS: Available if required.
BERTHING: All berths at Baytown 38 ft. (salt water).
STEVEDORES: Available. Call L. S. Mitchell Co. Tel: 713-426-4575.
MEDICAL: All medical assistance available.
DENSITY: Brackish to fresh.
FRESH WATER: Available ex-wharf.
FUEL: Bunker C and MDO only, no intermediate fuels. No bunkering by barge.
GANGWAY/DECK WATCHMEN: Required only if crew detained by Immigration.
CUSTOMS ALLOWANCES: Each man 300 cigarettes or 100 cigars or 1 lb. tobacco; 1 quart wine/spirits.
STORING: Permissible with advance notice/approval.
REPAIRS: Sould be cleared with terminal before vessel arrives at dock.
SHORE LEAVE: No restrictions. Terminal bus transports crew from dock to refinery entrance.
AUTHORITY: Port of Houston Authority.
Operator: Exxon Shipping Company, U.S.A., P.O.Box 3251, Baytown, Texas 77520. *Tel:* 425-4452, 425-4453. *Telex:* 510-891-7885 Exxon Dock-Bton. *Contact:* Dock Co-ordinator.

BEAUMONT, Texas: 30.05 N. 94.05 W. (See Plan Book)

LOCATION: On Neches River, above Sabine Lake.
DOCUMENTS, PILOTAGE, RADIO, etc., Refer to "Port Arthur".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Meet vessel in Neches River before arriving at berth. Normally 2 tugs used for docking, 1 for undocking.
BERTHING:

Wharf No. or Name	*Length (ft.)*	*Depth (ft.)*	*Remarks*
1	580	30	
2, 3 and 4	1,373	38	60 ton gantry crane
5, 6 and 7	1,483	36	
Harbour Island Marine Terminal	1,200	40	220 ton mobile crane
Carroll St. Wharf	765	40	
Grain Wharf	543	40	3.5 million bushel grain elevator

CARGO HANDLING FACILITIES: For container ships, conventional break-bulk ships, heavy lift ships or side-loading Ro-Ro ships, the Harbour Island Marine Terminal – 1,200 linear ft. berthing space; 120,000 sq.ft. transit shed; 93 ft. wide apron facing transit shed; 240,000 sq.ft. open wharf space; 8 acres heavy duty hard stand adjacent to open wharf, backed up by 25 more acres for vehicle marshalling; twin marginal rail tracks for full length of wharf; 220 ton capacity truck-mounted mobile crane for containers and heavy lifts; 40 ton forklift machine with, expandable spreaders for container handling and 3-high container stacking or, blades for heavy cargo; 600 ft. undercover working track for all-weather rail car unloading inside transit shed; 200 linear ft. of truck height unloading platform along rear of open wharf; 20 ft. high × 18 ft. wide shed doors for high wide loads and entry for all-weather truck unloading or container stuffing; 40 ft. of water alongside; 1,200 lbs. per sq. ft. deck load capacity.

For stern loading Ro-Ro vessels, wharves 2 and 3 – 758 ft. in length with 75 ft. wide Ro-Ro platform at one end of the wharf. Ro-Ro platform deck elevation +15.89 ft. above mean low Gulf. (12 ft. 7 in. above average tide) 36 ft. of water alongside wharf; convenient roadway access to Ro-Ro platform from 15 acre storage area adjacent to the wharf; double marginal rail tracks for full length of wharf; 60 ton capacity gantry crane travels 700 ft. along face of wharf; 120,000 sq. ft. open wharf space; wharves 2 and 3 may also be used as an alternate to Harbour Island Wharf for containers, conventional break bulk, heavy lift or side loading Ro-Ro vessels. Covered wharf 4 is adjacent, extending total wharf length to 1,300 ft. and offering 57,000 sq. ft. covered area.

For security of cargo, all Port of Beaumont wharves are entirely within a chain link, barbed wire topped security fence, and all vehicular access is through the port's main gate, guarded 24 hours a day. The port is an approved outport of the Military Traffic Management Command, Eastern Areas, U.S. Army, is heavily used for shipments of military material, equipment and supplies, and is subjected to regular security inspections by Army personnel who have given the port high ratings.

For security of small, high value items that are considered especially subject to possible pilferage, the port will permit fencing and shelving of a limited designated security area within a transit shed.

For heavy lift requirements beyond the capacity of the 60 ton gantry or the 220 ton mobile crane, a 500 ton capacity derrick barge is available.

STEVEDORES: *Public Wharves:* Normal working hours 0800/1200 and 1300/1700 Monday to Friday.

TANKERS: Mobil Oil Co., distance from sea 49 miles, depth alongside 36 ft. Pan American Pet. Co., distance from sea 45 miles, depth alongside 38 ft.

Sun Oil Terminal:

Operators: Sunoco Terminals, Incorporated, P.O. Box 758, Nederland, Tx 77627. Tel: 713-727-2301.

Type of Terminal: Refinery. Handling Crude Oil & Lub.

Density: Fresh water.

Distance from sea: 37.4 miles.

Controlling Depth: From channel to berth – 39 ft. – 40 ft. Actual depth alongside – 40 ft.

Vertical clearance at High Water: 136 ft.

Max. length of berth facility: 150 ft.

Max. length of vessel to be moored safely: 900 ft. but that is absolute maximum and normally prefer not more than 850 ft.

Hoses: 4 × 12 in. (Crude). 6 × 6 in. (Lub).

Usual Loading Pumping Capacity: 60,000 bbls.p.h. (Crude). 2,000 bbls.p.h. (Lub).

Usual Discharge Pumping Capacity: 50,000 bbls.p.h.

Fresh Water: Available on 24 hour basis.

Fuel: Available ex-wharf.

Tugs: Per Pilot's requirements.

Anchorage: Max. draft 39 ft. (Two anchorages).

MEDICAL: All facilities available.

DENSITY: Fresh water.

FRESH WATER: Available at berths, or by barge.

FUEL: Available ex-wharf at Mobil terminal. All grades available by barge to other locations.

GANGWAY/DECK WATCHMEN: Not required unless crewmen detained by Immigration.

CUSTOMS ALLOWANCES: 300 cigarettes and 1 quart wine/spirits for each man.

IDENTIFICATION CARDS: Foreign crew require only Immigration landing permit.

CONSULS: Nearest at Houston.

REPAIRS, DRY DOCKS: Beaumont's Bethlehem Shipyard offers all types ship repair or reconditioning – plus vessel conversion and jumboizing. 2 side-launching ways over 800 ft. each. Floating dry dock with extreme length of 648 ft.; length on bottom 576 ft.; breadth at entrance, 87 ft.; and lifting capacity 17,500 tons. Active in design and construction of mobile drilling platforms and oil and gas production and storage facilities for service offshore.

HOLIDAYS: Longshore holidays are: New Year's Day: Martin Luther King's Birthday (January 15th); Lincoln's Birthday (February 12th); Washington's Birthday; Texas Independence Day (March 3rd); St. Patrick's Day (March 17th); Good Friday; Memorial Day (last Monday in May); Emancipation Day (June 20th); Fourth of July; Labour Day; Columbus Day; Veteran's Day (November 11th); Thanksgiving Day; Christmas Day.

AUTHORITY: Port of Beaumont, P.O.Drawer 2297, Beaumont, Texas 77704. *Tel:* (409) 835-5367. *Telex:* 779486. *Cables:* Portbomont. *Contact:* James W. Martin, Port Director.

AGENT: Strachan Shipping Company, P.O.Box 1309, Beaumont, Texas 777014. Tel: 409-898-8390 Telex: 910-884-5119 Cables: "Strachan".

BELLINGHAM, (Including Cherry Point), Washington: 48.45 N. 122.31 W. (See Plan Book)

DOCUMENTS, PILOTAGE, etc.: Refer to "Tacoma".

HEALTH: See "Health: All Ports" before first U.S.A. Port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, join vessel in Bellingham Bay.

ANCHORAGE: Deep water available, but poor holding ground.

BERTHING: North Terminal, Berth Nos. 1 & 2 length 1,500 ft., depth alongside 34 ft. MLLW. Berth No. 3 length 400 ft., depth alongside 25 ft. MLLW. Georgia Pacific Dock, Berthing length 600 ft., depth alongside 28 ft. MLLW.

CRANES: 2 × 35-ton capacity rail-mounted gantry cranes at No. 2 berth.

STEVEDORES: 8 local gangs. Additional gangs imported if required.

TANKERS: Cherry Point: 48° 52′ N., 122° 30′ W. 3 oil jetties.

Arco Jetty: Depth 70 ft. Intalco Jetty: Depth 37.5 ft. Mobil Jetty: Depth 43 ft.

Deadweight limit in Puget Sound is 125,000 tons.

HOLIDAYS: See "Tacoma".

MEDICAL: All medical facilities available. 2 local hospitals.

DENSITY: Salt water.

FRESH WATER: Available at all wharves.

FUEL: Available. Barge delivery only.

GANGWAY/DECK WATCHMEN: Required only if detainees aboard.

CUSTOMS ALLOWANCES: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.

AIRPORT: 3 miles from the city.

TELEPHONES: Available.

AUTHORITY: Port of Bellingham, P.O.Box 1737, Bellingham, Washington 98227. *Tel:* (206) 676-2500. *Contact:* D. C. Fleming, General Manager.

BENICIA, California: 38.03 N. 122.10 W. (See Plan Book)

DOCUMENTS: Health and all General Information: refer to "San Francisco".

PILOTAGE: Port located about 25 miles above Golden Gate Bridge. River Pilot joins at San Francisco, using VHF for traffic information. Passage includes passing under 2 bridges, Carquinez Strait Bridge having the least clearance, with 146 ft. (HW) and 151 ft. (LW) (using North Channel). River passage is timed to arrive at Benicia at the first of ebb tide; this is approximately 2.5 hours after HW at Fort Point (Golden Gate).

ANCHORAGE: At San Francisco.

RESTRICTIONS: Tankers must lighten to 36 ft. fresh-water draft. This is done at No. 7 anchorage, 1.5 miles East of Alcatraz Island. This cargo will later be pumped back to the tanker as barges cannot overcome shore back pressure. Turning basin off the berths, radius 1,800 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: 1 small tug assists berthing. Only 1 normally required for unberthing.

BERTHING: Continuous wharf 2,404 ft. long with berth for 3 vessels. The West berth is used for the loading of petroleum products, and the Centre and East berths are equipped for handling general and bulk cargoes. East of this facility is another berth that will accommodate one tanker for discharge of crude oil (Exxon), depth alongside – 38 ft.

MOORINGS: 2 head wires, 4 breasts and 2 springs forward. This is necessary because of current off the bank during ebb tide. 2 stern lines, 2 breast lines and 2 springs aft.

BULK HANDLING FACILITIES: Waterside silos' capacity 26,000 tons with loading conveyor belt capacity 1,000 t.p.h.

TANKERS: Crude oil discharge through 2×12 in. Chicksan arms and 36 in. shoreline, 2.5 miles long. Shore tanks are situated 164 ft. above sea level, initial back pressure 65/70 p.s.i.

FRESH WATER: Available from shore lines.

FUEL: Can only be delivered by barge. Averate rate 300 t.p.h.

DEVELOPMENTS: Current plans call for development of a complete container terminal.

AUTHORITY: Benicia Port Terminal Company, P.O.Box 315, Benicia, California 94510. *Tel:* (707) 745 – 2394. *Contact:* A. D. Vincent, Vice-President.

BOCA GRANDE, Florida: 26.43 N. 82.15 W.

SHIPMASTER'S REPORT: 1978.

LOCATION: On the Eastern side of the Southern end of Gasparilla Island, about 60 miles South of Tampa Bay.

DOCUMENTS: See "Tampa".

Government Officials must travel from Tampa to Boca Grande at vessel's expense.

PILOTAGE: Compulsory for all foreign-going merchant vessels. The Pilot boards vessel near the sea buoy. Pilotage available 24 hours a day.

Request should be made to ship's Agents via Tampa Marine Operator. VHF Channels 16, 12 and 13.

ANCHORAGE: Good holding ground near the sea buoy (Lat. 26° 39.8′ N., Long. 82° 19.6′ W.)

RESTRICTIONS: The channel is less than 300 ft. wide in some places. The traffic is one way and vessels enter only when the stream is half strength or less. Strong Westerly winds may cause a swell which prevents vessels using the channel.

MAX. SIZE: Beam: 80 ft. with 24 ft. max. distance from outside ship's hull to inside hatch coaming.

Draft: 31 ft. 6 in. (9.60 m.) recommended by Pilots. The channel is 32 ft. deep at MLW.

Length: 550 ft. should be a maximum because distance between end bollards is 475 ft.

HEALTH: Same procedure as for any other U.S. port.

A U.S. Public Health physician is located on the island.

RADIO: Tampa Radio – WPD.

TUGS: A small tug for light towing operations is available.

BERTHING: A "T" headed pier 325 ft. long; distance between end bollards: 475 ft. This pier is for loading phosphates in bulk. Max. draft 32 ft. (SW). An oil handling berth with 33 ft. depth is located close Southward of the phosphate pier.

BULK CARGO: Material loaded: Phosphate Rock, Diammonium Phosphate, Triple Super Phosphate (granulated or run of pile) and Defluorinated Phosphate.

The shiploader travel is only 270 ft. so large vessels must shift alongside.

Maximum height of vessel: 34 ft. (10.36 m.) from the water line (MLW) to the rail or the hatch-coaming.

Trimming: Spout trimming is done free of charge. Mechanical trimming (levelling and/or filling) will be performed by the railroad at additional charge.

Loading Rates: Phosphate Rock: about 800 t.p.h spout trimmed.
Diammonium phos.: about 400 t.p.h. spout trimmed.
Triple S. Phos.: about 550 t.p.h. spout trimmed (granulated).
Triple S. Phos.: about 300 – 500 t.p.h. spout trimmed (run of pile).
Defluor. Phos.: about 400 t.p.h. spout trimmed.
When levelling and/or filling is required, loading rates are much lower and extremely variable depending on the construction of the ship.

Work Schedule: Only one work crew is available; therefore, only about 16 hours working time per day and about 8 hours rest period for crew.

Work performed without overtime charge to the shipper 7 days a week except following, no work holidays: January 1st, July 4th, Labour Day, Christmas Day.

TIDES: Approximately 2 ft. variation.

DENSITY: Salt water.

FRESH WATER: Available at phosphate loading berth.

FUEL: No local facilities. Prior arrangements with ample notice must be made via the ship's Agent at Tampa.

CONSULS: See "Tampa".

REPAIRS: No local facilities. To be arranged via Agents with ample notice.

SURVEYORS: The nearest Lloyds' office is at Jacksonville. American Bureau available from Tampa.

STORES AND PROVISIONS: No facilities available for normal ship chandlering. Prior arrangements should be made via Tampa.

GENERAL: Boca Grande is the older of "Seaboard Coast Lines" (SCL) two existing loading facilities, the new one being at Tampa. All Agents are based at Tampa, about 110 miles by road.

BOSTON, Massachusetts: 42.21 N. 71.05 W.

(See Plan Book)

DOCUMENTS:

3 copies Cargo Manifest (Form 1302), 2 copies showing all cargo on board, and 1 copy showing only cargo for this port.
3 copies Crew Manifest (Form 1304).
3 copies Stores List (Form 1303).
3 copies Passenger List (Form I-418).
3 copies Crew List (Form I-418).

Customs boarding officer will also examine Ship's Register, Safety Equipment Certificate and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States Port:
General Declaration (Form 1301).
Health Pratique.
Master's Oath (Customs Form 1300).
All foreign clearances.
Certificate of Financial Responsibility (Oil Pollution).
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.

PILOTAGE: Compulsory. Pilots cruise in boats which are designated by numbers painted in black figures 4 ft. high on deckhouse. The outer boat cruises outside the Graves.

ANCHORAGES:

ANCHORAGE No. 1. *Upper Harbour Anchorage:* Steam and motor vessels permitted to anchor in this basin anchor within the following area: S.E. of a line bearing 205° True from N.E. corner of Boston and Albany Pier No. 5, East Boston; N.E. of a line bearing 122° True from S.E. corner of Lewis Wharf, North Pier; S.W. of a line bearing 292° True from N.E. corner of Southernmost Airport Approach Pier; N.W. of a line bearing 025° True from Buoy No. 12, Fl.R.6 sec.

ANCHORAGE No. 2. *President Roads Anchorage* (40 ft. anchorage): All vessels anchoring in this basin anchor within an area beginning at a point bearing 237°, 522 yards from Deer Island Light; thence to a point bearing 254°, 2,280 yards from Deer Island Light; thence to a point bearing 261°, 2,290 yards from Deer Island Light; thence to a point bearing 279°, 2,438 yards from Deer Island Light; thence to a point bearing 319°, 933 yards from Deer Island Light; thence to a point bearing 319°, 666 yards from Deer Island Light; and thence to point of beginning.

President Roads Anchorage (35 ft. anchorage): All vessels anchoring in this basin anchor within an area beginning at a point bearing 256°, 2,603 yards from Deer Island Light; thence to a point bearing 258°, 3,315 yards from Deer Island Light; thence to a point bearing 264°, 3,967 yards from Deer Island Light; thence to a point bearing 261°, 2,290 yards from Deer Island Light; and thence to point of beginning.

ANCHORAGE No. 3. *Nantasket Roads Anchorage:* Vessels anchoring in this anchorage basin anchor within following area: Westerly of a line bearing 143° from wharf at Gallups Island to Bell Buoy No. 2, S.W. of Georges Island; Northerly of a line bearing 260° from Bell Buoy No. 2, Georges Island, to the Northerly end of Rainsford Island; Northerly of a line bearing 273° from the Northerly end of Rainsford Island to Bass Point, Long Island; Southerly of a line bearing 270° from the wharf at Gallups Island to Long Island.

ANCHORAGE No. 5. *Peddocks Island and Explosive Anchorage:* Vessels anchoring in this anchorage basin anchor within following area; S.W. of a line bearing 122° True from the Easterly end of Rainsford Island to the N.E. end of Rainsford Island to the N.E. end of Peddocks Island, N.E. of a line bearing 165° True from the Westerly end of Rainsford Island to the S.E. end of Peddocks Island.

RESTRICTIONS: There are 3 main channels of entrance from sea to President Roads.

Broad Sound North Channel from Broad Sound to President Roads from N.E. Dredged 35 ft. deep and 1,500 ft. wide and is deepened to 40 ft. in a width of 900 ft. to 1,100 ft. This channel well marked by lighted buoys.

Broad Sound South Channel from Broad Sound S.W. and Westerly to President Roads. Dredged 30 ft. deep and 1,200 ft. wide. This channel is well marked by buoys and ranges but most aids to navigation are not lighted.

The Narrows is channel leading into Boston Harbour from S.E. between Boston Lighthouse and Lovells Island on the N.E. and Point Allerton, Georges Island and Gallups Island on S.W. Depth is 27 ft. Width is generally 1,000 ft. except in a section between Narrows Light and Georges Island where shoaling on N.E side limits it to 700 ft. Channel is well marked.

The Main Ship Channel of Boston Harbour extends from President Roads to the mouths of the Chelsea and Mystic Rivers and to Charlestown Bridge on the Charles River. Channel has been dredged 35 ft. deep and 1,200 ft. wide to the inner end where widths decrease near the river mouths. It has been deepened to 40 ft. for 600 ft. width from President Roads to the mouth of the Mystic River, with a widening to 1,200 ft. at the bend just Northerly of Commonwealth Pier No. 5, South Boston.

Charles River is approach by water to Cambridge and Watertown. About 0.5 mile above the lower bridge there is a dam with a lock 45 ft. by 350 ft. with depth of 17 ft. over the lower sill. Depths above dam decrease gradually to 9 ft., basin level, at head of navigation.

Mystic River is approach by water to Everett, Malden and Medford. Controlling depths are 35 ft., from Mystic River bridge to approximately 1 mile above, thence 20 ft. from the 35 ft. channel to 800 ft. above the Malden Bridge to a point abreast Monsanto Chemical Company plant.

Chelsea River is approach to city of Revere. Channel from entrance to a point opposite the Tenneco Oil Co. terminal has a controlling depth of 35 ft.

Weymouth Fore River is approach by water to Quincy and Weymouth. Controlling depth is 30 ft. to Fore River Bridge. Controlling depth for a distance of 2,800 ft. above Fore River Bridge is 30 ft.

Town River extends N.W. from Weymouth Fore River at Quincy Point. River has a controlling depth of 27 ft. from deep water in Weymouth Fore River to a point opposite the Quincy Oil Co. terminal. Opposite Quincy Oil Co. terminal there is a turning basin 18 ft. deep, 400 ft. wide and 1,000 ft. long.

MAX. SIZE: The primary entrance to Boston Harbour is via the North Channel and President Roads. Controlling depth is 35 ft. MLW. Average rise of the tide in Boston is 9.5 ft.

Generally speaking, vessels drawing 40 ft. are taken at the top of the tide to White Fuel and Exxon only. Vessels going to berths in the Mystic River above the Mystic River Bridge are limited by the bridge's vertical clearance of 135 ft. MHW.

Vessels consigned to berths in the Chelsea Creek are limited to a length of 669 ft., beam of 90 ft. and draft of 36 ft. high water docking. Furthermore, vessels which exceed 630 ft. going above the Chelsea Street Bridge are restricted to daylight docking. Daylight sailing is required from the berths above the McArdle Bridge if the vessel is over 585 ft. long.

As a rule, vessels are docked bow in at the Chelsea Creek berths. If docked between the bridges, departure is stern first through the McArdle Bridge. If docked above the Chelsea Street Bridge, then on sailing, the vessel is turned in the basin West of the Gibbs and Union terminals.

The controlling depth in the channel leading to Weymouth Fore River is 28 ft. MLW. Vessels with a max. draft of 33 ft. 6 in. will be taken at high water, but it should be noted that docking and undocking in Fore River are daylight operations – between sunrise and sunset – and no vessel longer than 628 ft. will be handled.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

BERTHING: There are 259 piers or wharves in the port of Boston providing 158,646 lineal ft. or 30 miles of berthing space measured along the sides and ends of piers and along bulkheads or shore wharves. Many of them have railroad connections. The depths of water available alongside these terminals range up to a maximum of 40 ft. at mean low water. Practically all terminals fronting on main ship channel are in close proximity to storage warehouses, both cold and dry which greatly facilitates transfer of cargo between vessel and warehouse.

Main Terminals:

Hoosac Pier, 3 berths	Depth alongside 35 ft.
Mystic Pier, 4 berths	Depth alongside 40 ft.
Commonwealth Pier, 5 berths	Depth alongside 40 ft.
South Boston, 10 berths	Depth alongside 35 ft.
Castle Island, 7 berths	Depth alongside 35 ft.
East Boston, 3 berths	Depth alongside 32 ft. to 35 ft.
Public Container Terminal, 2 berths	Depth alongside 40 ft.

Sea-land Container Terminal, South Boston (Berth 17, Castle Island):

Operator – Sea-Land Service, Inc. Tel. 268-9720.

Type of Pier – Single face, 500 ft. long. 1×27.5 ton container crane. 10 acre container storage area.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Starboard.

Line handling boat – not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Containers.

Castle Island Terminal, South Boston:

Operator – Massachusetts Port Authority. Tel. 482-2930

Type of Pier – Single face. 6 berths No. 16 (610 ft.) adjacent to and extending N.W. of No. 17 (see above); No. 15 to No. 11 (2,995 ft.) adjacent to and extending Westward of No. 16. 294,000 sq.ft. covered storage, 4 million sq.ft. open storage (including 32 acres fenced in automobile storage and 20 acres lumber storage), 50 ton crane, rail service. Berth No. 11 equipped with 2×40 ton gantry cranes.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side. Minimum 40 ft. apron.

Products handled – General cargo, containers, lumber, bulk salt and cement, automobiles, petroleum products (at Berth No. 11 for White Fuel).

White Fuel Company, South Boston:

Operator – Texaco, Inc. Tel. 269-2111.

Type of Pier – Single face.

Depth alongside at MLW – 40 ft.

Normal ship side to dock – Port (bow in).

Line handling boat – required.

Access to vessel (for stores and repairs) – limited, trucks can approach only to within 150 ft. of gangway or ship's side.

Products handled – Avjet, Heating Oil, No. 6 Oil, Molasses.

Size and number of pipe-lines – Numerous – 24 in., 20 in., 16 in., 12 in.

Bbls. per hour discharge capacity – 12,000 to 18,000.

Average distance to storage tanks – 1,000 ft.

Pollution control equipment – 1,600 ft. boom, 16 ft. boat, 300 absorbent pillows, 2,000 gallon pumpout truck.

Eastern Minerals, South Boston:

Operator – Eastern Minerals, Inc. Tel. 269-5857.

Type of Pier – Single face.

Depth alongside at MLW – 40 ft.

Normal ship side to dock – Starboard (bow out).

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – bulk salt, pumice. Discharge rate 5,000 tons per day with fixed grab requiring vessel to be shifted in berth.

Boston Army Base, South Boston:

Operator – Port Terminals, Inc. Tel. 542-7100.

Type of Pier – Single face, three sides: South 3,705 ft., East 351 ft., North 964 ft., 950,000 sq.ft. covered storage, rail service, 2×27.5 ton rail mounted cranes.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side. 50 ft. apron incorporates rail lines.

Products handled – General cargo, containers.

Commonwealth Pier, South Boston:

Operator – Massachusetts Port Authority. Tel. 482-2930.

Type of Pier – Single face, three sides: North and South 1,200 ft. East 400 ft. 500,000 sq.ft. covered storage, 1 million cu.ft. freezer, rail service, passenger lounge, upper level exhibition hall.

Depth alongside at MLW – 40 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side. 20 ft. apron incorporates rail lines.

Products handled – Passengers, general cargo, refrigerated cargo, bulk tallow.

Pier 1, East Boston:

Operator – Massachusetts Port Authority Tel. 482-2930.

Type of Pier – Single face, three sides: East and West 605 ft. South 390 ft. 196,0000 sq.ft. covered storage.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – General cargo, containers.

Metropolitan Petroleum Company, Chelsea:

Operator – Metropolitan Petroleum Company. Tel. 288-1111.

Type of Pier – Timber pile, offshore.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Starboard (bow in).

Line handling boat not required.

Access to vessel (for stores and repairs) – by hand cart only.

Products handled – Heating Oil, No. 6 Oil.

Size and number of pipe-lines – 2 × 8 in.

Bbls. per hour discharge capacity – 6,000 to 8,000.

Storage tanks adjacent to berth.

Pollution control equipment – 1,000 ft. boom, 18 ft. boat, 50 absorbent pillows, 150 gallons. Aqua-clene.

Note:– Bow to manifold 370 ft. No wire ropes used to moor vessel.

Exxon Company U.S.A., Everett:

Operator – Exxon Company U.S.A. Tel. Marine Department 387-1733, Marketing Terminal 389-7400.

Type of Pier – Timber pile wharf with caissons.

Depth alongside at MLW – 40 ft.

Normal ship side to dock – Starboard.

Line handling boat not required.

Access to vessel (for stores and repairs) – by rail-mounted hand cart.

Products handled – Asphalt, Chemicals, Diesel Oil, Jet Fuel, LPG, Kerosene, Gasoline, No. 2 and No. 6 Oil.

Size and number of pipe-lines – numerous.

Bbls. per hour discharge capacity – Up to 35,000.

Average distance to storage tanks – 5,000 ft.

Pollution control equipment – 1,500 ft. boom, skiff.

Prolerized New England, Everett:

Operator – Prolerized New England Company. Tel. 389-8300.

Type of Pier – Straight face.

Depth alongside at MLW – 37 ft.

Normal ship side to dock – Port (bow out).

Access to vessel (for stores and repairs) – trucks to ship's side, but access may be limited due to vessel's position at conveyor.

Products handled – Ferrous scrap (including Prolerized shredded-scrap).

General notes: Pier is equipped with 2×40-ton cranes. Shredded scrap is loaded from fixed conveyor requiring vessel to be shifted as each hatch is served.

This berth is also used by Distrigas Corp. and Union Carbide Corp.

American (Domino) Sugar Refinery, Charlestown:

Operator – Amstar Corporation. Tel. 242-3670.

Type of Pier – Single face.

Depth alongside at MLW – 33ft.

Normal ship side to dock – Port (bow in).

Line handling boat required.

Access to vessel (for stores and repairs) – trucks to ship's side, but may be limited depending on vessel's position at conveyor.

Products handled – raw sugar. Discharge facility consists of single grab with capacity of 200-250 t.p.h. Vessels limited to approximately 650 ft. overall length.

Revere Sugar Refinery, Charlestown:

Operator – Sucrest Corporation. Tel. 242-2750.

Type of Pier – Straight face.

Depth alongside at MLW – 33 ft.

Normal ship side to dock – Port (bow in).

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – raw sugar. Discharge facility consists of 23.5 ton grabs with total capacity of 350-400 t.p.h. Vessels limited to approximately 600 ft. overall length.

Mystic Scrap Terminal, Charlestown:

Operator – Schiavone Terminal, Inc. Tel. 242-5210.

Type of Pier – Single face.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Owner's preference.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Ferrous scrap.

General notes: Pier is equipped with 3×14-ton Clyde gantry cranes. Loading rate 2,500 tons per day. Rail service to pier.

J. F. Moran Container Terminal, Charlestown:

Operator – Massachusetts Port Authority. Tel. 482-2930.

Type of pier – Single face, 1,100 ft. long. 1×45-ton container crane, 1×70-ton container crane, 38,000 sq.ft. container stuffing shed, 30 acre container storage area, rail service.

Depth alongside at MLW – 40 ft.

Normal ship side to dock – Varies.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Containers.

U.S. Gypsum, Charlestown:

Operator – U.S. Gypsum Co. Tel. 241-9100.

Type of Pier – Single face.

Depth alongside at MLW – 23 ft.

Normal ship side to dock – Port.

Line handling boat not required.

Access to vessel (for stores and repairs – access to berth.

Products handled – Gypsum rock from Nova Scotia, carried in company's own vessels, specially fitted and adapted for discharge at this berth.

Mobil Oil, East Boston:

Operator – Mobil Oil Corporation. Tel. 567-9080.

Type of Pier – Straight face, with centre relieving platform.

Depth alongside at MLW – 30 ft.

Normal ship side to dock – Starboard.

Line handling boat required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Gasoline, Heating Oil.

Size and number of pipe-line – Various.

Bbls. per hour discharge capacity – 8,000.

Average distance to storage tanks – tank farm adjacent to berth.

Pollution control equipment – 950 ft. boom.

Gibbs Oil Company, Revere:

Operator – Gibbs Oil Company. Tel. 289-7700.

Type of Pier – Timber pile, wooden deck.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Starboard.

Line handling boat not required.

Access to vessel (for stores and repairs) – only by hand cart.

Products handled – Heating Oil, Gasoline.

Size and number of pipe-lines – 3×10 in., 2×12 in.

Bbls. per hour discharge capacity – 8,000 per line.

Average distance to storage tanks – 2,500 ft.

Pollution control equipment – 1,750 ft. boom, 16 ft. boat. (Shared with Union, Gulf, Northeast.)

Union Oil Company, Revere:

Operator – Union Oil Company. Tel. 284-4490.

Type of Pier – Timber pile, wooden deck.

Depth alongside at MLW – 33 ft.

Normal ship side to dock – Port.

Line handling boat required.

Access to vessel (for stores and repairs) – only by hand cart.

Products handled – Heating Oil, Mogas, No. 5 Oil, No. 6 Oil.

Size and number of pipe-lines – 5×12 in.

Bbls. per hour discharge capacity – 8,000 per line.

Average distance to storage tanks – 2,500 ft.

Pollution control equipment – 1,750 ft. boom, 16 ft. boat. (Shared with Gibbs, Gulf, Northeast.)

Gulf Oil Company, Chelsea:

Operator – Gulf Oil Company. Tel. 884-5980.

Type of Pier – Single face.

Depth alongside at MLW – 26 ft.

Normal ship side to dock – Port.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Heating Oil, Gasoline.

Size and number of pipe-lines – 5×12 in.

Bbls. per hour discharge capacity – 8,000 per line.

Average distance to storage tanks – 1,000 ft.

Pollution control equipment – 1,750 ft. boom, 16 ft. boat. (Shared with Gibbs, Northeast, Union.)

American Oil, Chelsea:

Operator – Northeast Petroleum Corp. Tel: Office – 884-7570; Terminal – 884-7577.

Type of Pier – Timber pile dolphins, wooden decked parallel to single face abutment.

Depth alongside at MLW – 35 ft.

Normal ship side to dock – Port (bow upstream).

Line handling boat required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Gasoline, Kerosene, Heating Oil, No. 6 Oil.

Size and number of pipe-lines – 8 in., 10 in., 14 in., depending on product.

Bbls. per hour discharge capacity – Up to 13,000 depending on product.

Average distance to storage tanks – 2,500 ft.

Pollution control equipment – 1,750 ft. boom, 16 ft. boat. (Shared with Union, Gibbs, Gulf.)

Texaco, Chelsea:

Operator – Texaco, Inc. Terminal Tel. 884-7000, Offices 269-2111.

Type of Pier – Single face.

Depth alongside at MLW – For 575 ft. vessels: 31 ft. fwd., 34 ft. aft. For 624 ft. vessels: 21 ft. fwd., 34 ft. aft.

Normal ship side to dock – Port.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Avjet, Diesel Oil, Gasoline.

Size and number of pipe-lines – 7×12 in.

Bbls. per hour discharge capacity – 5,000 to 10,000.

Average distance to storage tanks – Tank Farm adjacent to berth.

Pollution control equipment – Automatic boom being installed.

Quincy Oil, Quincy:

Operator – Quincy Oil Company. Tel. 773-2500.

Type of Pier – Timber pile, timber deck, offshore wharf.

Depth alongside at MLW – 29ft.

Normal ship side to dock – Port.

Line handling boat not required.

Access to vessel (for stores and repairs) – by hand cart only.

Products handled – Gasoline, Heating Oil.

Size and number of pipe-lines – 2×8 in.

Bbls. per hour discharge capacity – 6,000.

Average distance to storage tanks – Tank Farm adjacent to berth.

Pollution control equipment – 800 ft. boom, work boat.

Mobil Oil, Quincy:

Operator – Mobil Oil Corporation. Tel. 773-7080.

Type of Pier – T-head with dolphins.

Depth alongside at MLW – 30 ft.

Normal ship side to dock – Starboard.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Gasoline, Heating Oil.

Size and number of pipe-lines – Various.

Bbls. per hour discharge capacity – 8,000.

Average distance to storage tanks – Tank Farm adjacent to berth.

Pollution control equipment – shared with Sprague.

C.H. Sprague & Son Co., North Weymouth:

Operator – C.H. Sprague & Son Co. Tel: Terminal 337-2040, Offices 542-7807.

Type of Pier – Timber pile, concrete deck.

Depth alongside at MLW – 35 ft. 6 in.

Normal ship to side dock – Starboard.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – No. 6 Oil.

Size and number of pipe-lines – 2×12 in.

Bbls. per hour discharge capacity – 10,000 per line.

Average distance to storage tanks – 2,500 ft.

Pollution control equipment – 500 ft. boom, 16 ft. boat. (Shared with Mobil.)

Cities Service Oil Company, Braintree:

Operator – Cities Service Oil Company. Tel. 848-1100.

Type of Pier – 4 cylindrical caissons.

Depth alongside at MLW – 34 ft.

Normal ship side to dock – Starboard.

Line handling boat not required.

Access to vessel (for stores and repairs) – trucks to ship's side.

Products handled – Heating Oil, Gasoline.

Size and number of pipe-lines – 1×10 in., 4×12 in.

Bbls. per hour discharging capacity – 10,000.

Average distance to storage tanks – 2,500 ft.

Pollution Control Equipment – 1,500 ft. boom, work boat.

Bulk Cement Piers:

There are 2 berths in Boston used exclusively for the discharge of bulk cement from barges. Both are in the Mystic River.

No. 28: Allied Concrete Corp. Tel: 389-2800. This berth is leased to: Marquette Cement Manufacturing Co. Tel: 235-8006.

No. 33: Atlantic Cement Company, Inc. Tel: 241-9090.

Meat Inspection Station: The Massachusetts Port Authority operates a meat inspection station on Mystic Pier (No. 38) adjacent to the Moran Container Terminal.

Random incoming meat samples are cut, defrosted, weighed, inspected, and re-frozen at this new facility, enabling inspectors to use one central location instead of the 5 other waterfront stations previously utilised.

The chief component of the building is the large, well-lighted, well-ventilated, and sanitary inspection room. Walls are ceramic tile, the floor has quarry tile, and the ceiling is of acoustical tile.

Up to 50 containers of meat a day will be inspected at this modern facility.

SPECIALISED CARGO HANDLING FACILITIES: Also see "Berthing".

	Location	Depth at MLW
Bulk Cement		
Atlantic Cement Company	Charlestown	29 ft.
Marquette Cement Mfg. Company	Everett	20 ft.
Universal Atlas Cement Company	South Boston	25 ft.
Chemicals and Solvents		
Union Carbide Corp.	Everett	36 ft.
General Cargo Terminals		
East Boston Pier (3 berths)	E. Boston	35 ft.
Mystic Pier (4 berths)	Charlestown	40 ft.
Hoosac Pier (3 berths)	Charlestown	35 ft.
Commonwealth Pier (5 berths)	S. Boston	40 ft.
Boston Army Base Terminal (10 berths)	S. Boston	35 ft.
Castle Island Terminal (7 berths)	S. Boston	35 ft.
Container Terminals		
JF Moran Docks (2 berths)	Charlestown	40 ft.
Sea-Land Services Inc. (1 berth)	S. Boston	35 ft.
Gypsum Rock		
U.S. Gypsum Company	Charlestown	24 ft.
Sulphur		
Freeport Mineral Company	Everett	36 ft.
Iron and Steel Products		
Boston Army Base Terminal (1 berth)	S. Boston	35 ft.
Raw Sugar		
American Sugar Co.	Charlestown	30 ft.
Revere Sugar Refinery	Charlestown	30 ft.
Salt (Sodium Chloride) and Pumice		
Eastern Minerals Inc.	S. Boston	35 ft.
Castle Island Terminal, Berth II	S. Boston	35 ft.
Scrap Metal		
Prolerized N.E. Co.	Everett	36 ft.
Schiavone & Sons Inc.	Charlestown	34 ft.
Vegetable Oils, Liquid Caustic Soda, etc.		
Procter & Gamble Mfg Co.	Quincy	30 ft.
Animal Oils Greases and Fats (Tallow)		
Commonwealth Pier 5 (Corenco)	S. Boston	40 ft.
Automobiles		
Castle Island Terminal Berth 16	S. Boston	35 ft.
East Boston Pier I	E. Boston	35 ft.
Commonwealth Pier 5	S. Boston	40 ft.
Lumber		
Castle Island Terminal Berth II	S. Boston	35 ft.
LNG Terminals		
Distrigas	Everett	36 ft.

RADIO: *Advance Notice of Arrival:* 24 hours advance notice of arrival be given. This notice is made to the office of the Captain of the Port – 223-6979.

The information to be provided consists of: Vessel's Agent's name; Vessel's name, type, flag, and call sign; the ETA; Berth; Last port and next port; Dangerous cargo on board. In return the Captain of the Port will assign a consecutive log number to the vessel.

In event the vessel's ETA is changed by more than 24 hours from first notice, the Captain of the Port should be so notified, identifying the vessel by its assigned log number.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Vessels can proceed from the sea to Boston Upper Harbour under own power. They are usually met by tugs, for docking while in the stream. Barges usually left by the outside tugs at the anchorage grounds, to be docked later by harbour tugs.

TANKERS: Also see "Berthing".

Tanker Berths	*Location*	*Depth at MLW*
State Fuel Co. Inc.	E. Boston	29 ft.
Mobil Oil Corp.	Quincy	35 ft.
Mobil Oil Corp.	E. Boston	30 ft.
Gibbs Oil Company	Revere	35 ft.
Atlantic Richfield Company	Revere	35 ft.
Sun Oil Company	Revere	30 ft.
Northeast Petroleum Corp.	Chelsea	32 ft.
Northeast Petroleum Corp.	Revere	30 ft.
Union Oil Company of Boston	Revere	35 ft.
Gulf Oil Corp.	Chelsea	31 ft.
American Oil Company	Chelsea	32 ft.
Cities Service Oil Co.	Braintree	35 ft.
Cities Service Oil Co.	Chelsea	30 ft.
Texaco Oil Inc.	Chelsea	36 ft.
Quincy Oil Co.	Quincy	32 ft.
Metropolitan Petroleum Co.	Chelsea	35 ft.
Exxon	Everett	42 ft.
White Fuel Oil Co.	S. Boston	40 ft.

Berthing at all berths normally effected on a rising tide. It is the practice of the port for deep draft vessels to pump part cargo overtide in order to bring vessel to a safe draft by the next Low Water. Berthing at Sprague, North Weymouth is usually starboard side to, which involves swinging vessel.

LNG/LPG: There are 2 facilities in Boston Harbour which handle LNG (Liquid Natural Gas – methane). Boston Gas at Commercial Point, Dorchester, Mass., and Distrigas on the Mystic River, Everett, Mass., have storage capabilities for LNG.

The Exxon Everett facility receives and stores LPG (Liquefied Propane Gas).

The Captain of the Port (COPT) has issued very specific requirements for vessels transiting the harbour and transferring cryogenic cargoes. The Coast Guard team consisting of Port Safety Station, representing the Captain of the Port, and Marine Inspection Office boarding officers and the men assigned to the escort and monitoring details are charged with the responsibility for ensuring compliance with these regulations which are detailed in the 60-page LNG/LPG Contingency Plan issued by the Captain of the Port. Included in the plan are the following General Regulations:

The vessel must:

(1) Hold a current Letter of Compliance for the carriage of methane/propane issued by the Commandant and a Certificate of Financial Responsibility for Oil Pollution.

(2) Enter the harbour only during daylight hours. Additionally, vessels transiting Dorchester may only do so within 2 hours of high water. Weather permitting, the COTP may authorise night departures providing the vessel does not have a full or partial cargo.

(3) Enter the harbour only during periods of good visibility. If the visibility is less than 2 miles the vessel must:

(i) If at sea, not enter the port without the COTP's permission.

(ii) If in port, notify COTP of position and then proceed to berth or anchorage, whichever nearer.

(4) Maintain a radio watch on Channel 13 (156.65 MHz) while underway in the port area. Additionally, a watch should be maintained on Channel 16 (156.8 MHz).

(5) Not commence offloading cargo prior to the satisfactory completion of the arrival safety inspection by Coast Guard Marine Inspectors and the issuance of the Permit to Handle Explosives or Other Dangerous Cargo (CG Form 4260).

Additionally:

(1) The vessel must moor either bow to seaward and be prepared to get underway on short notice, should an emergency so require, or have a tug standing by during all cargo operations. A tug standby will be required on a vessel's first visit to this port.

(2) The vessel will normally be boarded while anchored in President Roads by COTP/OCMI Inspectors unless, prior to the vessel's arrival, the Master sends a message to COTP stating that:

"To the best of my knowledge and belief there are no known casualties to this vessel or its machinery which might affect the seaworthiness. I further state that all cryogenic handling and detection equipment is in proper operating condition."

If this message has been received, the inspection will be made at the dock unless it is the vessel's first visit to Boston. On a vessel's first visit to Boston the boarding will always be made in President Roads. If the vessel does not hold a Letter of Compliance the boarding will be made in Broadsound and the vessel will not be allowed to enter the port until a temporary Letter of Compliance is issued.

(3) Venting gas to the atmosphere is not permitted in port.

(4) All cargo operations must cease if electrical storms are present.

(5) If interpreters are not available, all ship's personnel directly involved in the transfer operation shall readily speak the English language.

(6) If the vessel is at anchorage a permanent bridge watch shall be maintained. A round of bearings fixing the vessel's position shall be taken hourly followed by a report, every 4 hours, to USCG Group Boston on Channel 16 FM reporting anchor holding and operations normal or any significant change in position or deviation from the normal.

Also, whenever an LNG/LPG vessel is transiting Boston Inner or Outer Harbour (to the seaward entrance of the Boston North Channel) no other vessel will be allowed to be underway in an area 2 nautical miles ahead and 1 nautical mile astern of the LNG/LPG vessel in transit. This concept can be thought of as a "moving restricted area" centred on the LNG/LPG vessel. For vessel movement in an area of the Port other than that described above, express permission from COTP Boston must be obtained.

Furthermore, the maximum allowable speed for any vessel movement during an LNG/LPG vessel transit will be 6 knots. A Coast Guard escort craft will always be present during an LNG/LPG vessel transit and will vigorously enforce these vessel movement restrictions. The maximum penalty for violation of any of the rules established under the above authority is imprisonment for not more than 10 years and a fine of not more than $10,000.

It should be noted that these rules establishing a restricted envelope around the LNG/LPG vessel and the 6 knot speed limit apply not only to other vessels but to the LNG/LPG vessel itself. Therefore, the LNG/LPG vessel may not approach any closer than 2 nautical miles to another vessel underway, thus eliminating a possible collision should another vessel lose steerage or suffer a casualty. These rules prohibit crossing, meeting or overtaking situations from occuring in Boston Harbour out to the seaward entrance to the North Channel. However, other vessel movements during an LNG/LPG vessel transit may be allowed with permission of the Captain of the Port.

LNG/LPG Vessel Inspections: Before an LNG/LPG vessel is allowed to conduct cargo operations in the Port of Boston, the vessel must undergo a joint COTP/MIO Boston inspection to determine if all cargo handling and detection systems are in proper working order. One of the tests involves the introduction of a properly certificated amount of test gas (span gas) into the vessel's gas detection system. This allows the Inspector to determine if the gas detection system is functioning properly and is able to detect the presence of LNG or LPG should an actual leak occur somewhere on the vessel. Until recently, if a vessel did not have on board a cylinder of the properly certificated span gas, the Coast Guard Inspectors would provide this service. However, due to the increasing costs of the gas (LNG over $40.00 and LPG over $63.00), the vessel will be required to provide the span gas with a valid certificate attesting to its composition before the inspection can begin. Also, for the inspection to continue, shipboard or civilian technicians must be available to rectify any problem that may develop.

STEVEDORES: Available at various rates.

FRESH WATER: Plentiful supply of excellent water in Boston. It is supplied by terminal at prevailing rates.

FUEL: All grades available in various viscosities. Normally supplied by barge subject to advance notice.

CUSTOMS ALLOWANCES: At the discretion of Customs officers. Normal allowance is 200 cigarettes or 2 lb. of tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95, issued for the same vessel.

GANGWAY/DECK WATCHMEN: Available at prevailing prices.

OPENING/CLOSING HATCHES: Performed by stevedores.

CONSULS:

Argentina
Australia
Austria
Belgium
Bolivia
Brazil
Canada
Chile
Colombia
Costa Rica
Cyprus
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
W. Germany
Great Britain
Greece
Guatemala
Haiti
Honduras
Iceland
Ireland
Israel
Italy
Japan
Korea
Lebanon
Mexico
Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
Portugal
Spain
Sweden
Switzerland
Taiwan
Thailand
Turkey
Venezuala

REPAIRS: Any type of repair undertaken.

DRY DOCKS:

Bethlehem Steel Co., Shipbuilding

Division, East Boston, Massachusetts	*Length*	*Capacity*
Floating Dry Dock No. 1	622 ft.	18,000 tons
Floating Dry Dock No. 2	479 ft.	20,000 tons
Graving Dry Dock No. 4	256 ft.	

Modern facilities for repair, overhaul, and conversion of vessels of all sizes:

(*a*) a 10,000 ton capacity floating dry dock serviced by 2×150 ton overhead cranes with a yoked capacity of 350 tons. The 5-section dock is 415 ft. long, 120 ft. wide, and has an inside dimension of 85 ft. 7 in.

(*b*) 3 building basins (actually a 3-positioned graving dock). 2 are 132 ft. wide, 867 ft. long; 1 is 150 ft. wide, 938 ft. long. Each basin serviced by 2 Whirley type cranes of 75 and 50 ton capacity.

(*c*) 4 outfitting piers capable of handling up to 10 ships simultaneously provide adequate space for dockside work and for mooring personnel or service barges.

(*d*) 3 conventional "sliding" ways capable of handling ships up to 1,000 ft. in length.

Major Shops: 2-bay fabricating shop served by 17 bridge cranes. Machine shop equipped with large vertical and horizontal mills planers, lathes and a complete small machine complement. Fully equipped sheet metal, joiner, boiler, blacksmith, pattern foundry, galvanizing, pipe and copper, and electrical shops. Complete facilities for inspection of all types including non-destructive testing such as radiography, magnetic particle, liquid penetrant and ultrasonic.

REPATRIATION: Good facilities exist.

HOLIDAYS: New Year's Day (1st January); Washington's Birthday (22nd February); Patriots' Day (19th April); Memorial Day (30th May); Bunker Hill Day (17th June); Independence Day (4th July); Labour Day (first Monday in September); Columbus Day (8th October); Veteran's Day (22nd November); Thanksgiving (fourth Thursday in November); Christmas Day (25th December).

Note: "Or any day celebrated in lieu thereof".

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight saving time, GMT minus 4 hours from April to October.
AUTHORITY: Massachusetts Port Authority, 99 High Street, Boston, Ma. 02110. *Tel:* (617) 482-2930. *Telex:* 94-0365. *Contact:* Martin C. Pilsch, Port Director.

AGENT: Rice, Unruh Co., Beebe Building 129 South Street, Boston, Massachusetts 02110. Tel: Area Code 617 482-7303 (4 lines) (Note: Answering service in attendance outside normal working hours) Telex: 940309, TWX: 710-321-6870 "Riceunruh Boston". Cables: "Riceunruh Boston".

BRIDGEPORT, Connecticut: 41.07 N. 73.11 W.

(See Plan Book)

DOCUMENTS: Refer to "New York".
PILOTAGE: Vessel usually notifies Agent 48 hours before arrival, who will arrange Pilot boarding. Pilot boards either at Brenton Reef in position Lat. 41° 25′ N., Long. 71° 23′ W. or Point Judith in position Lat. 41° 17′ N., Long. 71° 29′ W.
ANCHORAGE: 2 miles South of the entrance with depths in excess of 50 ft.
RESTRICTIONS: Entrance channel has a project depth of 35 ft. at MLW, is 400 ft. wide and 3 miles in length.

Normal time allowed for transit from outside to off the dock is 30 – 40 minutes. Docking time varies from 30 minutes to 1 hour, dependent on which terminal is the destination, and weather conditions.

The New Haven – Bridgeport Pilots Association believe 4 ft. of water in excess of the ship's draft is needed. As a rule of thumb, 31 ft. at low to 37 ft. at high. Any variations from this, a Pilot should be directly consulted. The range of tide is 6.7 ft. Wind strongly affects the tide in the main entrance channel. Flood and ebb cross the channel at a right angle, and velocities depend on the rise of tide for the day.

Vessels up to 70,000 d.w.t. and LOA 825 ft. call at the port.
MAX. SIZE: See "Berthing and Restrictions".
HEALTH: Vessel to cable Agent 24 hours prior to arrival of any illness on board, otherwise Radio Pratique not necessary.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Vessels arriving from North use Chatham Radio. Vessels from South use Amagansett Radio on Long Island.
TUGS: Tugs available from Red Star. The Despatcher monitors VHF and is available 24 hours a day through Channel 24 at Bridgeport.
BERTHING: *Cilco Terminal:* Cilco is a bulkhead dock, length approximately 1,100 ft. Vessels dock port or starboard side to. Two ships can moor at the same time. This is a dry cargo facility. Ships load or discharge all kinds of products. Several mobile cranes are available. Depth 33 ft. at MLW. Bunkers are only available by truck. Fresh water is available.
TANKERS: *Bridgeport Shell – Buckley Bros.:* The Shell berth is located on the East side at right angles to the main entrance, and ships must be turned 90° to approach the dock. The dock is approximately 200 ft. long with 2 main dolphins and catwalks to shore. Head lines and stern lines are run ashore by a messenger. The size of vessels is governed by manifold distance. Light oil products 300 ft. and heavy oil 350 ft. Vessels of length 700 ft. have been moored, 38 ft. at MLW in ship berth. Ships dock port side to.

Bunkers and fresh water are available.

United Illuminating: Berth is 0.6 miles inside the breakwater on the West side of the channel. A turn to port of 120° must be made into a dredged cut 140 ft. wide. The dock is concrete caissons on pilings with catwalks and centre platform. Depth 32 ft. to 37 ft. at MLW. Vessels of 70,000 d.w.t. call, but bow to manifold distance governs size of vessel. (350 ft. – 375 ft.). Vessels dock starboard side to.

Fresh water is available, but bunkers are not. Every tanker, when moored here, has an anti-pollution boom placed around it.
FRESH WATER: Available at all berths.
FUEL: No fuel barge service available. In emergency tank truck delivery can be arranged.
MEDICAL: All facilities available.
AIRPORT: Bridgeport Airport about 3 miles away. New York airports about 50 miles distant.
CONSULS: All countries represented in New York.
HOLIDAYS: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (18th February); Good Friday; Memorial Day; Independence Day (4th July); Labour Day; Columbus Day (14th October); Veterans' Day; Election Day (5th November); Thanksgiving Day (28th November); Christmas Day (25th December).
TIME: Daylight Saving Time, GMT minus 4 hours from April to October.
SERVICES: Ship's stores and launch service available from New Haven. Vessels must provide their own gangway at all docks.
AUTHORITY: City of Bridgeport, Office of the Harbour Master, City Hall, Room 223, 45 Lyon Terrace, Bridgeport, Connecticut 06604. *Tel:* 576 7288. *Contact:* Gilbert Zawadski, Harbour Master. *Tel:* 334-2585 (Home).

BROWNSVILLE, Texas: 25.54 N. 97.28 W.

(See Plan Book)

DOCUMENTS: See "Houston".
PILOTAGE: When a vessel is scheduled to arrive at Brownsville, the vessel's Agent notifies the Harbour Master's office of the approximate ETA. Later, when a firm ETA is received, the Harbour Master's office notifies the pilot office that the vessel is expected on the bar at a certain time and also gives the time which she would like to enter.

The telegraphic address of the pilot office is: Brazos-Santiago Pilots, 411 First National Bank Bldg., Brownsville, Texas.

If possible, it is desired that the Harbour Master's Office be notified 2 hours in advance of the ETA of any vessel.

The VHF Channel to be used when contacting the pilot boat and Harbour Master is 16. When contact is made, this will be switched to Channel 13.

The pilot boat is a steel hull length 43 ft., beam 16 ft. and draft 8 ft. 250 h.p. diesel. Gross tonnage 36 tons.

No light or sound signals are necessary from vessels requiring a Pilot, although light signals may sometimes be used at night – ordinarily a vessel is picked up by visual sighting.

The pilot boat is located on the South tip of Padre Island – the Pilot station is adjacent to the entrance to ship channel with a clear view of the approach to the jetties.

The Pilot is taken on board an incoming vessel at the sea buoy which is located 2 miles off shore.

The anchorage for a vessel awaiting Pilot is 1.5 miles North of sea buoy.

ANCHORAGES: Anchorages are marked on charts.
RESTRICTIONS: *Brazos Island Harbour:*

	Dredged Dimensions			Minimum depths in channel entering from seaward		
Name of Channel	*Feet Width*	*Miles Length*	*Feet Depth*	*Left Outside Quarter Feet*	*Middle Half of Channel Feet*	*Right Outside Quarter Feet*
Brazos Santiago Pass:						
Entrance Channel	300	1.9	38	40.0	39.0	37.0
Channel across Laguna Madre	200	2.9	36	38.0	38.0	38.0
Brownsville Channel:						
Junction Basin to Boca Chica Passing Basin	200	4.0	36	38.0	38.0	38.0
Boca Chica Passing Basin to Goose Island Passing Basin	200	5.4	36	38.0	38.0	38.0
Goose Island Passing Basin to Brownsville Turning Basin	200	2.8	36	37.0	38.0	37.0
Brownsville Turning Basin (extension)	500	1.4	36	37.0	38.0	37.5
Brownsville Turning Basin	500-1000	0.5	36	36.0	37.0	35.0

MAX. SIZE: The max. permissible length 850 – 900 ft., beam 160 ft., draft 34.5 ft.

RADIO: ETA cables to Agent, etc., should be addressed to the Agent via Mackay Radio at Galveston or RCA in Port Arthur. When within a 60 miles range of the port, calls may be made through the Harbour Master's office on VHF Channel 16 and the calls will then be transferred to land lines to any point. Also Brownsville Marine Operator, VHF Channel 26.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
MEDICAL: When medical attention is required, advance notice should be given the Agent by ship's radio.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
VHF: A vessel approaching the port of Brownsville may contact the Harbour Master's office on VHF Channel 16.
TUGS: Tugs normally join an incoming vessel 1.25 miles before she enters the turning basin. The tug's lines are used for which there is no charge.
BERTHING: Cargo facilities include over 7,500 ft. of modern, marginal dry cargo wharves, 14 deepsea docks and 10 barge berths, together with over 583,000 sq.ft. of transit shed space. In addition there is 242,000 sq.ft. of open storage space at the deep-draft docks and 271,000 sq.ft. of open storage at the shallow draft docks.
BULK HANDLING FACILITIES:

Public Grain Elevator: Located at the approach to the Turning Basin, the port-owned and operated elevator has a capacity of over 3,800,000 bushels. An adjacent bulk plant provides flat storage for all types of dry bulk commodities.

Two large gantry cranes handle the loading of vessels. The maximum spout clearance for loading vessels is 45 ft. above the water.

Equipped with two truck dumps and two hopper car dumps, the elevator has the rated loading capacity of 1,200 short tons per hour (1,000 L/T per hour on bulk carriers without wing tanks and 600 L/T per hour on tween deckers).

The 400 ft. wharf is 12 ft. above water and has an unlimited berth length. The draft at dockside is 34 ft. and the channel control depth is 36 ft.

The grain elevator also has the flexibility of unloading vessels (barge unloading capacity is 300 t.p.h.).

Liquid Bulk Handling: Liquid Terminals, Inc., is a new facility that was built to handle and store all types of liquid commodities in bulk. The large storage tanks vary from 5,000 to 20,000 barrels each, providing a total of more than 125,000 barrels capacity for the entire installation. The modern liquid dock adjacent to the facility accommodates vessels with a deep draft of up to 34 ft. Loading racks provide for the efficient transfer of liquids to either truck or rail.

Four oil and chemical docks are located on the North side of the ship channel and are utilised by companies such as Exxon, Texaco, Union Carbide, Petroleos Mexicanos, Line Service, Continental and Permian Oil to handle bulk petroleum and chemical products. Also see "Tankers".
CRANES: Two large floating cranes, rated at 150 metric tons each, are available for heavy lifts at any dockside location in the port area.

STEVEDORES: To arrange for gangs the vessel needs to notify the ship's Agent of ETA; the Agent will in turn notify the stevedores. It is necessary that the Agent be advised of an ETA before 1900 hrs. for an 0800 hrs. start.

Main commodities and average load discharge rates:

Grain	Bulk carrier 1,200 t.p.h.
Grain	tween deck 600 t.p.h.
Cotton	100 bales per hour per gang
Lead and zinc pigs	40 tons per hour per gang
Citrus in boxes	22 tons per hour per gang
Onions and carrots in bags	22 tons per hour per gang
General cargo	25 tons per hour per gang

TANKERS: Ballast facilities are available up to 6,000 barrels per hour. The port loads refined petroleum products. The port has 4 tanker berths, with 34 ft. 7 in. max. draft.

Vessels proceeding to Brownsville normally turn in the basin and berth Port side to. Berthing at Port Isabel Oil Wharf also generally Port side to. Mooring boat employed.

DENSITY: The average density is 32 parts per 1,000.

FRESH WATER: Fresh water is available and can be delivered to a vessel through hose or pipe-line at 150 gallons per minute.

FUEL: No fuel is available locally. It must be barged in from Corpus Christi – advance arrangements are necessary.

FIRE PRECAUTIONS: Tankers are required to berth head out.

GANGWAY/DECK WATCHMEN: Such services are necessary only when detainees are held on board.

OPENING/CLOSING HATCHES: This work is done by the stevedores.

IDENTIFICATION CARDS: Immigration requires form No. I-95 Landing permit.

CONSULS: Mexico: tel. 542-4431.

REPAIRS: Marathon, located at the port, is equipped to handle all normal temporary ship repairs.

DRY DOCKS: None available.

REPATRIATION: There are facilities for this service.

AIRPORT: The local airport is located 2 miles from the port. Ozark Airways operates 4 flights daily.

TIME: Local Time is 6 hours behind GMT.

HOLIDAYS: The following holidays are observed here: Veterans' Day (4th Monday of October); Thanksgiving; Christmas; New Year; Washington's Birthday (Feb. 22nd); Texas Independence Day (March 2nd); Emancipation Day (June 20th); July 4th; Labour Day (1st Monday in September); Decoration Day (last Monday in May).

No work shall be performed on Labour Day or Christmas Day except in case of fire or where property is in danger. When holidays fall on Sunday, the following day will be recognised as the holiday. Also, no work will be performed between 1600 and 1900 hrs. on election days.

POLICE/AMBULANCE/FIRE: Sherriff 546-2451; Brownsville Fire Dept. 542-4375; Ambulance Service 542-2121.

TELEPHONES: Telephones are not available for placing on ships.

SERVICES: Tank cleaning service is available at the port. Ballast facilities are available at Oil Docks 1, 2 and 3. P.I.B. can take care of compass adjusting, etc.

DELAYS: There are no delays unless an incoming ship has been assigned to a berth now occupied. Bunkers must be barged in; arrangements may be made ahead of time to avoid delay.

DEVELOPMENTS: The Federal Government has made an appropriation to initiate a study on deepening ship channel from 36 ft. to 42 ft. and to widen the channel from 200 ft. to 300 ft., bottom width. Plans are being made to build another grain elevator/bulk materials dock, and another chemicals dock in the future.

AUTHORITY: Brownsville Navigation District, Port of Brownsville, P.O.Box 3070, Brownsville, Texas 78520. *Tel:* (512) 831-4592. *Telex:* 766612. *Contact:* James M. Beaman, Director of Trade Development.

BRUNSWICK, Georgia: 31.09 N. 81.30 W.

(See Plan Book)

DOCUMENTS:

Crew Lists: 1 certified copy for Immigration; 2 copies uncertified for Customs.

1 copy Pratique.

3 copies Inward Customs Manifests.

3 copies each Stores, Curio & Narcotics List.

PILOTAGE: Compulsory. 24-hour Pilot service arranged by Agent with 48-24 hour prior notice from ship. Pilot station at Buoy "St. S." Pilot reached through VHF Channels 12, 14, 16 on voice radio. Pilot boat is 25 ft. white hull. Marking is "Pilot" on hull.

ANCHORAGES: 3 miles S.E. of buoy "St. S." sand and mud bottom. In event deep draft (30 ft.) and high winds, anchorage near Ocean Buoy "2B" and inform Pilot as in "Pilotage". Vessels in need or for other good reason, may anchor in St. Simon's Sound, depth 10 fathoms.

APPROACHES: The harbour is located about midway between Savannah and Jacksonville. The harbour is reached by a channel from the Atlantic Ocean, running between St. Simons and Jekyll Island. The channel has a minimum width of 500 ft. and a depth of 32 ft. to St. Simon's Sound, thence a width of 400 ft. and a depth of 30 ft. to Sidney Lanier Bridge, where the channel divides, 13 miles from sea. The Northern branch leads to Lanier Dock, State Dock and the city, 400 ft. wide and 30 ft. deep. The other branch leads N.W. to the pulp plant dock, chemical docks and electrical generating plant, 300 ft. wide and 30 ft. deep.

RESTRICTIONS: No restrictions unless vessel drawing 30 ft. or more, then must await high tide to cross bar.

MAX. SIZE: Max. permissible length 650 ft. Max. d.w.t. over 33,000 tons.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Prior arrival, use commercial Lantana, Chatham Radio for advices to Agent, 48-24 hours in advance.

TUGS: 3 Tugs, 500 h.p. each. Join vessel in St. Simon's Sound after passing lighthouse. Tug lines used.

BERTHING: 1,600 ft. continuous marginal wharf; steel and concrete construction, 57 ft. wide apron. Vessels normally turned to moor port side alongside unless deck cargo or other vessel obstruction means cargo may not be worked over port side. Gantry crane of 27 tons capacity available.

The Brunswick Port Authority operates a bulk commodity terminal at Lanier Dock. The facility is 500 ft. long and constructed of steel and concrete, with a project depth of 30 ft. MLW, equipped with a grab bucket, conveyors and marginal tracks for handling bulk cargoes at rates up to 600 t.p.h. It operates covered warehouses with a capacity of approx. 60,000 tons. A limited amount of open storage space is available equipped with a conveyor system and reclaim facilities. Lanier Dock lies directly adjacent to the Brunswick State Docks and warehouses. Both wharves have a turning basin of 1,000 ft. in length and 600 ft. wide with a project depth of 30 ft. MLW (mean low water) also Barge Dock facility 250 ft. long.

BRIDGES: 1: Lanier Bridge draw bridge; 250 ft. horizontal clearance, 139 ft. vertical clearance, up position, high water. Vessels under control of Pilot and tugs when passing through.

STEVEDORES: Wireless to Agent 48-24 hours prior arrival with number of gangs, working hatches and space in hatch, and special factors, e.g. pilferable cargo, autos, heavy-lifts, etc.

MEDICAL: Advance notice to Agent, or notify on arrival.

TANKERS: Liquid bulk cargo is pine oil distillates loading. Petroleum storage 310,000 barrels, 6 tanks.

DENSITY: Average 1.0166 (high) to 1.0141 (low). Water inside considered brackish.

FRESH WATER: From shore connections at 20 t.p.h.

FUEL: Bunker "C" available at piers. Distillate and blends by barge, if required. 72 hour advance notice to Agent, giving type and quantity.

GANGWAY/DECK WATCHMEN: Not required but available.

OPENING/CLOSING HATCHES: "McGregor" hatches must be opened by vessel prior working. All others may open at discretion to save turn-around time.

CERTIFICATES: Registry, U.S. tonnage tax, CFR Pollution, Load line, SOLAS, Derat.

CUSTOMS ALLOWANCES: Tobacco, 2 cartons. Customs will open bonded stores on request. Spirits, reasonable amount.

IDENTIFICATION CARDS: U.S. Immigration Landing Permits.

CONSULS: None. Consulates at Savannah, Ga., and Jacksonville, Fla., may be used as required by vessel.

REPAIRS: Limited to minor replacement parts to engine, radio, radar of standard makes. Major repairs may be arranged with shipyards of Savannah or Jacksonville.

DRY DOCKS: None.

SURVEYORS: American Bureau of Shipping (912) 232-3793. Atlantic Marine Surveying, Inc. (912) 354-9938. Coleman, Kenney & Silas, Inc. (912) 352-7420. International Adjusters Southern Ltd. (912) 352-7420. National Cargo Bureau, Inc. (912) 236-1527. SGS Control Services, Inc. (912) 232-1995. L. O. Smith, Inc. (912) 233-9876. Southeastern Marine Surveying Company (912) 233-4157. J. W. Tarver, Jr. (912) 233-6661. Charles T. Theus, Inc. (912) 233-3588.

REPATRIATION: Through Agent.

AIRPORT: 20 minutes' drive from quays; 4 flights daily.

TIME: GMT minus 5 hours. Daylight Saving Time, April through last Sunday October. April: advance; October: retard.

HOLIDAYS: 1st January, 15th January, 12th February, 22nd February, 30th May, 4th July, 1st Monday in September, 12th October, 11th November, 4th Thursday in November, 25th December.

POLICE/FIRE/AMBULANCE: Numbers given in Boarding Brochure.

TELEPHONES: None placed aboard. Public pay (coin) telephones on quay clearly marked.

GENERAL: Brunswick, Georgia, is a small port specialising in export of woodpulp in bales, pine-tree products in drums. Imports bulk salt, oil, fertiliser materials and gypsum, some break-bulk general cargo. Vessel requirements handled by Agent in residence, communication by wireless or R/T essential in advance.

AUTHORITY: Brunswick Port Authority, P.O.Box 1039, South Yards, Brunswick, Georgia 31521. *Tel:* (912) 265-3700. *Telex:* TWX 810-7825071. *Contact:* Robert W. Turner, General Manager.

BUFFALO, New York: 42.55 N. 78.55 W.

(See Plan Book)

DOCUMENTS: For vessels arriving from foreign ports:

3 Unfreighted copies of Complete Manifest covering all cargo to be discharged in the Great Lakes.

4 Personal Effects Lists.

4 Crew Lists.

4 Narcotics Lists.

Vessel's Registry and copies of Paid Tonnage Tax Certificates.

Health Pratique.

Clearance from previous port.

PILOTAGE: Not compulsory. Seaway Pilots will assist if required.

ANCHORAGE: Inside South Breakwater, depth 27 ft.

MAX. SIZE: Limited by Seaway Locks. 730 ft. length and Seaway draft.

RESTRICTIONS: St. Lawrence Seaway navigation season. Approximately from 1st April to 15th December. Controlling depth 27 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available, but not normally required.
RADIO: WBL – Buffalo.
BERTHING: Outer Harbour: Total berth space 2,400 ft.; depth alongside 27 ft. LW. 2 transit sheds – total of 184,000 ft. dry dock space; sprinkler system equipped, seaway piers for bulk cargoes. South and North Piers 3,506 ft. of berth space, 200 acres open storage area. Depth alongside 27 ft.
SPECIALISED CARGO HANDLING FACILITIES: A mobile gantry crane capable of handling lifts of 55 tons at 40 ft. and portable bulk conveyors. Crawler crane, capacity 230 tons. Conveyor, capacity 2,200 t.p.h. Additional heavy lift equipment available from the Port of Buffalo and commercial sources.
STEVEDORES: Gangs to be ordered by 1700 hrs. for 0800 hrs. start following day, ample gangs available.
DENSITY: Fresh water.
MEDICAL: U.S. Public Health Outpatient Clinic as well as numerous hospital facilities.
FRESH WATER: Available at most berths.
FUEL: All grades available by tank truck delivery or by harbour tank barge.
CONSULS: Canada, Costa Rica, Ecuador, France, Germany, Italy, Mexico, Netherlands and Sweden.
REPAIRS: Machinery and above-water repairs available.
AIRPORT: 5 miles, served by 4 regular airlines.
SHORE LEAVE: No restrictions when cleared by US Immigration Officials.
GENERAL: Refer to "Great Lakes Pilot".
AUTHORITY: Port of Buffalo, Niagara Frontier Transportation Authority, 901 Fuhrman Blvd., Buffalo, New York 14203. *Tel:* (716) 852 1921.

BURNS HARBOUR, Indiana: 41.38 N. 87.11 W. (See Plan Book)

The entrance to Burns Waterway Harbour is at Lat. 41° 38′ N., Long. 87° 11′ W., and is located on the South shore of Lake Michigan at Portage, Indiana, some 30 miles East of Chicago in an area known as the Indiana Dunes.
PILOTAGE: Available.
RESTRICTIONS: Average Navigation Season: Domestic cargo by lake freighters – March 15th to February 1st. Ocean going vessels via Seaway – April 1st to December 15th. Lake river barges – 12 months.
Approach to Harbour: Controlling depth of water at harbour entrance 30 ft., entry is from deeper water. Length and beam limitations – none. Approach open 24 hours per day.
Harbour: Controlling depth of water for outer harbour 28 ft.; East and West harbour arms 27 ft. Turning basin – 1,600 ft. radius with water depth of 28 ft. Accessible 24 hours a day. Length and beam limitations – none.
TUGS: Available if required.
BERTHING: The port provides 30 ft. depth at the entrance channel, 28 ft. at the inner harbour, and 27 ft. at berths. The harbour is protected by an all weather breakwater.

The port has 10 modern berths plus a mooring facilitiy specifically designed for self-unloader ships. Ultimately the port will have 15 ship berths. Recently completed are 2 modern, heated, sprinkler-equipped transit sheds providing 146,000 sq.ft. of space for general cargo, which are being operated by competent stevedores.

A refrigerated storage building is in operation.
CRANES: 3×150 ton crawler cranes; 3×75 ton crawler cranes; 3×60 ton crawler cranes.
FRESH WATER: Available.
AUTHORITY: Indiana Port Commission, 6600 U.S. Highway 12, Portage, Indiana 46368. *Tel:* (219) 787-8636. *Telex:* 725453. *Cables:* Indyport. *Contact:* James H. Hartung, Port Manager.

BURNSIDE, (including St. James), Louisiana: 30.08 N. 90.55 W.

East bank of Mississippi River, about 200 miles from sea.
DOCUMENTS/PILOTAGE: For all general information refer to "New Orleans".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made out to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Not normally required.
BERTHING: Bulk Marine Terminal: berth 800 ft. long, 40 ft. depth.

Ormet Corporation Berth 825 ft. long, 50 ft. depth. Situated at Mile Point 169. Max. LOA 305 m. Max. beam 41 m. Max. draft 12.19 m. (60,000 d.w.t. or 130,000 d.w.t. part load) 2 travelling gantry cranes and 1 shiploader. Height above LWL 27.5 m., outreach 19.2 m. Travel 198 m. Loading rate 600 – 1,000 t.p.h.
TANKERS: *St. James:* The facility is located on the West bank of the Mississippi River at Mile 180 above Head of Passes.

The operators are Shell Pipeline Corporation, Donaldsonville, Louisiana.

There are 2 berths, one of which is 800 ft. long and the other 1,100 ft. long. At the newer dock there are 2×16 in. arms and the berth is capable of unloading 28,000 bbls./p.h. The depth alongside these berths is 55 ft. to 60 ft. However, the draft of the vessel is limited to that available at Southwest Pass.

It is important to note that due to the design of this terminal it is impractical for vessels to receive stores at this location. Additionally there are no bunkers provided at this terminal nor is there any fresh water available from the terminal and there is no authorised anchorage in the immediate area of this facility. Vessels expecting less than 24 hours delay awaiting berth are generally anchored at New Orleans and then proceed to the terminal (which is a different port of entry for Customs) otherwise vessels would have to anchor at Burnside which is about 10 miles up river from St. James.

Because of an underwater pipe-line near the dock, the terminal management requires all vessels using their facility to have at least 1 tug of 1,800 h.p. to assist in docking and undocking.

As a point of reference it generally takes approximately 15 or 16 hours transit from Southwest Pass to St. James Terminal for most vessels.
FRESH WATER: Available ex-berth.
FUEL: Not available.
DENSITY: Fresh water, 1000.
NOTICE:
Agent to Shipmaster:
Vessels over 100,000 Summer Deadweight:

This is to advise you that the Pilots will not allow your vessel to transit outbound between Pilottown and Southwest Pass during darkness hours if your vessel is at a draft in excess of 35 ft. fresh water upon arrival at Pilottown outbound. The times involved are from 1600 hrs. until 0700 hrs. the next day.

We feel certain with various ballasting procedures you will be able to comply with this draft upon reaching Pilottown even though you may leave the *St. James Berth* at a greater draft. If you cannot comply, please advise your Agent boarding with this letter in order that he may inform all parties interested.

By anchoring at Pilottown you will be costing yourself an additional $3,500 minimum in tug and Pilot expense. Therefore, we sincerely require your utmost co-operation.

SHIPMASTER'S REPORT: February 1979.
Location: St. James – West Bank.
Documents: Ship's stamp on cash receipts.
Anchorage: Usually at Grandview in the Customs District of Gramercy, where launch service available and about 1 hour's drive to New Orleans.

From Capline (St. James) about 45 minutes' drive to Baton Rouge.
VHF: All berthing and river pilotage on Channel 13.
Tugs: 3 tugs recommended.
Berthing: Always port side to. No shore gangway, moorings 4, 2, 2 each end for tankers of 100,000 d.w.t. and upwards.
Cranes: Not available.
Tankers: Require ship's gangway at No. 2 berth.
Consuls: Honorary British Consul at New Orleans. (321 St. Charles Avenue). Open 1000 – 1200 hrs. and 1400 – 1600 hrs.

AUTHORITY: Greater Baton Rouge Port Commission, P.O.Box 380, Port Allen, Louisiana 70767. *Tel:* (504) 387-4207. *Contact:* John B. Dutton, Executive Director.

CAPE COD CANAL, (including Sandwich Oil Terminal), Massachusetts: (See Plan Book)

The Cape Cod Canal is a sea-level canal, extending from a point on Cape Cod Bay about 50 miles S.E. of Boston Harbour, Mass., to the head of Buzzards Bay, Mass. In general direction the Canal trends from Cape Cod Bay Westerly to Buzzards Bay.
PILOTAGE: The Corps of Engineers, Department of the Army , does not maintain pilot service but independent Pilots, licensed by the U.S. Coast Guard, are usually available at the canal. Messages will be transmitted to Pilots with the understanding that the Government will assume no responsibility in connection therewith.

Pilotage is compulsory and available 24 hours.

Pilot boards:

1. East Entrance: Position Lat. 41° 47.9′ N., Long. 70° 28.5′ W., midway between the Sea Buoy and the breakwaters.
2. West Entrance: Near West end of Cleveland Ledge.
3. By special request: Near Brenton Reef Light (Lat. 41° 25.6′ N., Long 71° 23.4′ W.) or 2 nautical miles South of Point Judith Light Buoy No. 2 in position Lat. 41° 19.2′ N., Long. 71° 28.5′ W.

Pilots are available from the following associations:

Northeast Marine Pilots Incorporated, Newport, Rhode Island (Tel: 401-847 9050 (HJ), 401-331 4824 (HN)).
Interport Pilots Associates. Tel: 201-291 1310.
Boston Pilots, East Boston. Tel: 617-569 4500.
Associated Coast Pilots. Tel: 201-887 7114.
Association of East Coast Pilots. Tel: 609-435 1239.

RESTRICTIONS:

	Width bottom Feet	*Length Miles*
Easterly Entrance to Station 430	480*	8.4
Station 430 to Wings Neck (Hog Island Channel)	500	4.3
Wings Neck to Cleveland Ledge (Cleveland Ledge Channel)	700	4.7

*Except narrows to 450 ft. opposite State Pier.

The canal and approach channels have been dredged to the project depth of 32 ft. below MLW.

RADIO: Direct communication with the Cape Cod Canal sub-office, New England Division, Corps of Engineers, is available at all hours by means of telegraph, telephone, or radio. The telephone number is 759-4431 or 789-4432.

The nearest ship to shore telephone stations are at Scituate, call letters (WOU) and Chatham, call letters (WCC). Bridge to bridge radio-telephone facilities are available on 156.65 MHz, 156.6 MHz, 156.7 MHz and 156.8 MHz. Vessels equipped for communications with the Cape Cod Canal are requested to keep their radio-telephone tuned to the above frequencies.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

VHF: Pilot Office and pilot vessel on Channels 16 and 13. Tugs on Channels 13 and 18A. Pilot listens 1 hour before vessel is expected.

BERTHING: Mooring basins are located at the East and West ends of the canal. The East Mooring Basin, located on the North side of the canal is 2,500 ft. in length, 350 ft. in width and is maintained at a depth of 25 ft. at MLW. The West Mooring Basin, located on the S.E. side of the Hog Island Channel is 3,300 ft. in length, 350 ft. in width and is maintained at a depth of 32 ft. at MLW. Mooring dolphins are provided in both mooring basins.

BRIDGES: 2 fixed span high-level highway bridges and 1 vertical lift railroad bridge cross the canal.

The minimum bridge clearance for the available width of channels are as follows:

	Horizontal Clearance	*Vertical Clearance (MHW)*
Highway Bridges	480 ft.	135 ft.
Railroad Bridge	466 ft.	135 ft. (open)
(vertical Lift)		7 ft. (closed)

TANKERS: See "Shipmaster's Report".

COASTGUARD STATION AND WEATHER SIGNALS: A U.S. Coastguard Station is located near the Eastern entrance.

TRAFFIC LIGHTS: Red, green and amber electric lights, visible for a distance of about 2 miles in clear weather, day or night, are located at the following points:

(a) Eastern or Cape Cod Bay entrance, on South side of entrance at an elevation of about 55 ft. above high water.

(b) Western or Buzzards Bay entrance, Wings Neck, near Wings Neck Light at an elevation of about 48 ft. above high water.

SHIPMASTER'S REPORT: September 1984.

Sandwich Oil Terminal: 41° 46.3′ N., 70° 30.9′ W. (See "Plan Book").

Location: 2,200 m. inside North Breakwater from Cape Cod Bay, South side of Cape Cod Canal.

Max. Draft: 40 ft. (salt water).

Salinity: 1025.

Anchorage: Good anchorage N.E. of Breakwater.

Berthing: Berthing and unberthing only when slack tide.

Berthing Port side alongside when arrival from Cape Cod Bay.

Berth must be approached with care.

Ship's gangway to shore.

Derrick rigged to take onboard two cargo hoses 10 in. diameter.

After discharging vessel to proceed through Cape Cod Canal as there is no turning basin. Max. draft 28 ft. Airdraft 135 ft. when passing 3 bridges.

Vessel can also enter from Buzzard Bay but draft according to Canal Control is 28 ft.

AUTHORITY: Department of The Army, Division Engineer, New England Division, Corp of Engineers, 424 Trapelo Road, Waltham, Massachusetts 02254-9149. *Contact:* Statistics Section.

CASTLE ISLAND, Alaska: 56.39 N. 133.11 W.

Located in Duncan Canal off Kupreanof Island between Wrangell and Petersburg. Open all year.

DOCUMENTS: See "Anchorage, Alaska".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PILOTAGE: From sea via Dixon Entrance up Clarence Strait to Guard Island. Under pilotage from Guard Island.

MAX. SIZE: Harbour depth 45 ft.

TIDES: Diurnal range 16 ft. Also see "Berthing".

ANCHORAGE: Fair weather anchorage only.

CUSTOMS: Quarantine and Immigration available from Guard Island. Customs available from Petersburg or Guard Island.

BERTHING: Alaska Barite facility: Dolphins and 2 floats. Present facilities limited to about 22,000 ton ships. Loading equipment consists of 1 loading spout for bulk cargo. Production average of 1,000 t.p.h.

TUGS: From Wrangell, 3 available 500 h.p. each.

STEVEDORES: Sufficient to work ore loading facility 24 hours a day when necessary.

REPAIRS/WATER/FUEL: None.

MEDICAL: Facilities available in Petersburg or Wrangell.

AIRPORT: Charter airplane only.

CHARLESTON, South Carolina: 32.47 N. 79.56 W.

(See Plan Book)

DOCUMENTS:

3 Crew Lists.

3 Curio Lists.

3 Stores Lists.

3 Manifests.

At least 1 copy of Bill of Lading, if provided by shipper, and 1 copy of Parting Crew List.

PILOTAGE: Shipmasters to notify Agent 48, 24 and 12 hours prior arrival at C-2 Buoy. Pilot may be contacted by VHF Channels 16 and 18. Pilot boards on lee side from black-painted launch with "Pilot" painted in white letters on the side. Normally vessel is berthed by Docking Master from tug company.

Charleston Branch Pilots Association: 2 North Adgers Wharf, Charleston. Tel: (803) 577-6695. Monitors VHF Channel 16 and 18A, Channel 14 also available.

Masters please advise ETA and deep draft and changes in ETA as soon as possible. If no contact is made please announce ETA and draft over the air. Savannah and Cape Fear Pilot Stations will also pass on this information for you.

Pilot vessels: Call sign WZF 7266 "Carolina" 55 ft. length; "Palmetto State" 55 ft. length; "Sis" 37 ft. length.

Pilot vessel when on station guards following frequencies: VHF Channel 16; VHF Channel 13; VHF Channel 18-A, 156.95 MHz.

Location of pilot station: Charleston Buoy "2C" Lat. 32° 40.7′ N., Long. 79° 42.9′ W., in 42 ft. of water.

Pilot ladder requirements: Have ladder in good repair, clean and approximately 6 ft. above water. Please provide escort to and from bridge. Personal VHF portables are carried by Pilots.

Distances from pilot station to all berths approximately:

	Nautical Miles
Union Pier	12
Columbus Street	12.5
Exxon Dock	14.5
Wando Terminal	14
Ship Yard River	15 – 16
Navy Yard	16 – 19
Other Oil Docks	19 – 20
State Port Terminals	21
Army Transportation Docks	22
Naval Weapons Station	25
Cainhoy	22.5

ANCHORAGES: Rarely required.

RESTRICTIONS: Only restriction affecting operation relates to channel depth of 35 ft. at low tide.

MAX. SIZE: Can handle vessels 930 ft. long. Present private tanker facilities measure 475 ft. from centre of discharge pipe-line to end of dock.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C. Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Normal procedure. No special or unusual procedures required.

RADAR/VHF: Services required are handled through Agent.

Tug Companies: Marine Contracting and Towing: 723-7442 Radio frequency Channel (7A).

White Stack Towing: 577-6556 Radio frequency Channel (19A).

Marine operator on Channel 26 VHF.

Weather Station on Channel 39 VHF.

TUGS: Tugs usually join tankers between Cooper River Bridge and Coal Pier, approximately 0.5 miles from dock. Tug lines used. No charge made for this service.

Tugs are required for any vessel docking at or sailing from any state port berth which has a crane.

BERTHING: *Union Pier:* State Pier No. 2: 4 berths. Break-bulk terminal, length 2,471 ft. Depth 35 ft. 1×30 ton gantry. LASH barge handling capabilities, and 87,453 sq. ft. of open storage area.

Columbus Street Terminal: State Pier No. 8. 6 berths. Length 3,875 ft. Depth 35 ft. Terminal handles break-bulk and containers. One 440 ft. banana berth. 1×75 ton gantry crane, 1×50 ton gantry crane and 1×125 ton gantry crane serve 1,940 ft. of berthing space along the South end of the pier. 1×400 ton capacity sheer-leg, 1×90 ton truck crane and 2×40 long ton container cranes.

North Charleston Terminal: State Pier 15: Total length 2,500 ft. One general cargo berth length 600 ft., one grain berth length 675 ft. 2 container berths each 930 ft. length. 4×50 ton container cranes, one grain elevator, capacity 1.5 million bushels. Additional 25 acres of container storage area under construction.

Wando Terminal: 3 container berths, each 809 ft. length. 4 container cranes each 40 tons capacity. Max. draft 35 ft. Paved container storage area being extended.

BULK HANDLING FACILITIES: *Shipyard River Coal Terminal:* Operator: Massey Coal Terminal Corp. Max. size: 50,000 d.w.t. Max. draft 38 ft.

Accommodation includes a single ship berth at the confluence of the Shipyard and Cooper Rivers. The pier is served by a travelling and shuttling shiploader with telescoping chute, which has a maximum capacity of 2,500 t.p.h. and loads at an average of 1,650 t.p.h.

CRANES: 1×40 ton, 1×90 ton, and 2×140 ton mobile cranes are available to work any Port Authority Terminal.

BRIDGES: *Cooper River Bridges Specifications:* Main Channel Span: 150 ft. above MHW at Centre Line, 750 ft. horizontal.

Town Creek Span: 135 ft. above MHW at Centre Line, 750 ft. horizontal.

STEVEDORES: *Working Hours:* Labour may be ordered for work to start at the following times: 0800, 1000, 1200 and 1900 hrs. Labour will usually work as long as necessary; shift system not used in this port.

MEDICAL: Advance notice when possible.

TANKERS: *Private Facilities:* Discharge lines all 8 in. dia. and 1 solvent line 8 in. Adapter to conform to ship's discharge lines supplied. Draft not to exceed 35 ft. low tide. Tanker berths operated by Humble Oil, Shell Oil, Hess Oil, BPT, and Phillips Petroleum, all suitable for 35 ft. draft. Gulf Oil Berth, max. draft 30 ft. Texaco Berth, max. draft 32 ft.
FRESH WATER: Available via 2.5 in. hose at a rate of 500 bbls.p.h.
FUEL: Bunker "C" at API of 14.4 to 16.6 (approx.) and blended Bonded Intermediate grades from 1 to 30.
FIRE PRECAUTIONS: Normal precautions.
GANGWAY/DECK WATCHMEN: Supplied by Agent upon request from Shipmaster only.
CERTIFICATES: Normal International Certificates.
CUSTOMS ALLOWANCES: Tobacco, Wine and/or Spirits, governed by length of time in port and existing Customs Regulations.
CONSULS:

Chile: Dr. Carlos Salianis, 948 Equestrian Dr., Mount Pleasant, S.C. 29464, Tel: (803) 792-2489, (803) 884-6224.

Denmark: G. L. Buist Rivers, Jr., 28 Broad St., P.O. Box 993, 29402, Tel: (803) 577-4000.

Ecuador: M. O. Salvador, Box 844, Lake City, S.C. 29560.

France: Ms. Jacqueline Dietrich, 2 Sylvan Court, Spartanburg, S.C. 29302.

Norway: James D. Lucas, III, 10 N. Adgers Wharf, Post Office Box 536, Charleston, S.C. 29402. Tel: (803) 577-5782.

Switzerland: Dr. Hans Kuhn, 176 West Park Drive, Spartanburg, S.C. 29301. Tel: (803) 585-3922.

REPAIRS: Available.
SURVEYORS:

American Bureau of Shipping, P.O.Box 1844, Summerville, S.C. 29483, Tel: 875-0073.

Associated Marine Surveyors, P.O.Box 5174, 29406, Tel: 747-8651, 899-6327.

Atlantic Marine Surveyors, 15 Briarcliff Dr., 29407, Tel: 571-4082, 572-7297 (pager).

William P. Cart, Jr., 1043 Fort Sumter Dr., 29412, Tel: 795-0233.

Charleston Marine Surveyors, Inc., 24 Vendue Range, P.O.Box 716, 29402, Tel: 723-8111.

Coastal Container Surveyors, P.O.Box 1305, 29402, Tel: 572-7167 (pager).

Capt. Arthur A. Fontaine, 1530 N. Pinebark Ln., 29407, Tel: 766-9383.

GAB Business Services, Inc., 1527 Hwy. 7, P.O.Box 33185, 29407, Tel: 571-5210.

Intermodal Transportation Services, P.O.Box 10091, 29411, Tel: 572-0620, 572-7252 (pager).

Law & Company of Charleston, 4736 Spruill Ave., 29406, Tel: 747-1589.

Lucas & Brown, Inc. (representing American Institute of Marine Underwriters, Lloyd's, National Cargo Bureau, Inc.),10 N. Adgers Wharf, P.O.Box 536, 29402, Tel: 577-5782.

Dana C. McLendon Co. (representing Institute of London Underwriters, International Adjusters-Southern-Ltd.), 18 Broad St., Suite 409, P.O.Box 1233, 29402, Tel: 723-9274.

Capt. Vincent J. Mitchell, 1005 E. Ashley Ave., Folly Beach, S.C., 29439, Tel: 766-9383, 588-9566.

George Shane, Tel: 766-1264, 899-6821.

L. O. Smith, Inc. P.O.Box 2401, 29403, Tel: 747-5728.

Alfred A. Sorensen & Associates, 619 Piedmont Ln., Ladson, S.C., 29456, Tel: 797-5555.

DRY DOCKS: 1×10,000 ton floating dock, 1×1,500 ton, and 2×1,000 ton floating docks.
REPATRIATION: Facilities available.
AIRPORT: 10 miles from Terminal, served by regular airlines.
HOLIDAYS: Work continues on holidays (except July 4th and December 25th).
EMERGENCY CO-ORDINATION CENTRE:
Marine & Air Emergency, Oil & Chemical Spills: 196 Tradd St., P.O.Box 724, 29402, Tel: 724-4382.

Captain of the Port, Marine Safety Office, 196 Tradd St., P.O.Box 724, 29402, Tel: 724-4218.

Georgetown: Belle Isle, P.O.Box 1440, 29440, Tel: 546-2742.

POLICE/AMBULANCE/FIRE: Emergency Medical Service, 577-7080; Hospital (Roper), 577-4710; Charleston Fire Dept., 577-7070; City Police, 577-7074; County Police, 747-5261.
TELEPHONES: No arrangements exist for placing phones aboard vessels. Phone facilities are situated within 100 ft. of vessel at dock.
SERVICES: No tank cleaning/washing facilities available at dock. Can be arranged and handled at local shipyard. Practically any other service available at dockside.
STORING: See "Prelims" page viii.

1. Yes
2. Yes
3. Yes
4. Yes
5. Standard U.S. Regulations
6. Yes

BANKS:

Bankers Trust of South Carolina, 1 Broad St., P.O.Box 610, 29402, Tel: 723-6800.

Citizens & Southern National Bank of South Carolina, 1-26 at Aviation Ave., P.O.Box 10608, 29411, Tel: 554-0860.

First National Bank of South Carolina, 18 Broad St., P.O.Box 959, 29402, Tel: 577-4400.

Liberty National Bank, 160 Meeting St., P.O.Box 935, 29402, Tel: 722-3333.

South Carolina National Bank, 16 Broad St., P.O.Box 700, 29402, Tel: 723-8311.

Southern Bank & Trust Co., 145 King St., P.O.Box 1041, 29402, Tel: 577-9100.

SHORE LEAVE: Subject to Shipmaster's permission and existing Immigration regulations.
DELAYS: Normally, no delays beyond normal time required to connect/disconnect hoses.

SHIP SUPPY SERVICE: *Tug and Launch Service:*

Harbor Launch & Line Service, P.O.Box 4D, Ravenel, S.C. 29470. Tel. 722-7781, 889-8937.

Marine Contracting & Towing Co., 50 Immigration St., P.O.Box 153, 29402. Tel. 723-7442.

Richards Launch & Towing Service, Inc., Hagood Ave., P.O.Box 666, 29402. Tel. 577-6449.

Skinner Marine Towing Co., 1505-A Harbour View Rd., 29412. Tel. 797-0893, 747-6505 (pager).

Stevens Towing Co., Post Office Bldg., Yonges Island, S.C. 29494. Tel. 889-2362.

White Stack Towing & Transportation Co., Inc., Foot of Laurens St., P.O.Box 627, 29402. Tel. 577-6556.

Georgetown: Marine Contracting & Towing Co, Foot of Meeting St. Tel. 546-0765.

DEVELOPMENTS: The main navigation channel is to be deepened to 40 ft.

Floating Ro/Ro ramp in operation December 1984.

AUTHORITY: South Carolina State Ports Authority, P.O.Box 817, Charleston, South Carolina 29402. *Tel:* (803) 723-8651. *Telex:* 810-881-1860. *Contact:* W. Don Welch, Executive Director. Fred D. Verner, Harbour Master. *Tel:* (803) 577-8192.

Berthing Office: Tel: (803) 577-8659, 24 hours/7 days a week, VHF call KPC 636 on Channels 16 and 14.

AGENT: Strachan Shipping Company, Post Office Drawer "F", Charleston, S.C. 29402. Tel: 803-722-0502. Telex: 810-881-1700. Cables: "Strachan".

CHICAGO, Illinois: 41.50 N. 87.45 W. **(See Plan Book)**

DOCUMENTS:
For Agent in Montreal:
3 unfreighted copies of Complete Manifest for Seaway Toll purposes covering all cargo to be discharged in the Great Lakes.
In first U.S. port: a "Traveller" is made up by the Customs Inspector with the following documents:
2 complete sets of U.S. Cargo Manifests, plus 6 copies for Agents.
1 set Manifest of Cargo for first U.S. port.
4 Stores Lists.
4 Personal Effects Lists.
4 Firearms and Ammunition Lists.
4 Crew Lists, Form I418.
4 Narcotics Lists.
4 Vessel's Itinerary Lists.
Vessel's Registry and copies of Paid Tonnage Tax Certificates.
Health Pratique.
Clearance from previous port.
2 sets Bills of Lading.
3 copies Stowage Plan.
In subsequent U.S. ports the following are required:
5 sets Manifest of Cargo for that port.
The "Traveller" and Permit to Proceed issued in previous port.
2 Stores Lists.
2 Personal Effects Lists.
2 Firearms and Ammunition Lists.
2 Crew Lists.
2 Narcotics Lists.
2 sets Bills of Lading.
3 copies Stowage Plan.

PILOTAGE: Compulsory unless Master holds exemption "B" license. 24 hours' notice of arrival required by Agents who arrange Pilot.
ANCHORAGES: In Chicago Harbour, anchorages A, B and F designated for merchant ships and marked on charts. In Calumet Harbour vessels should not anchor within 1,000 ft. of the breakwaters.
RESTRICTIONS: St. Lawrence Seaway navigation season approx. from April 1st to December 15th. Controlling depth 27 ft.
MAX. SIZE: Limited at Seaway Locks. 730 ft. length, 26 ft. draft. Depth alongside terminals 27 ft.
RADIO: Port can be contacted by Illinois telephone station WAY.

Notice of arrival; Master must give at least 24 hours' notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also at least 24 hours' notice of ETA at first U.S.A. discharge port is required.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
MEDICAL: Doctors, hospital and all facilities available.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available, not compulsory but recommended.
BERTHING: Two 100,000 sq. ft. terminal warehouse facilities. 90 acres of the 194 acre site has been set aside for maritime operations adjacent to the 3,000 ft. of berthing space alongside the Calumet River.

Calumet River Terminals: Iroquois Landing Lakefront Terminals. Operator: Ceres Marine Terminals. Facilities at the mouth of the Calumet River. Handles general cargoes, steel products and containers. The terminal has 3,000 ft. of berthing space. Heavy lift cranes run from 75 to 110 tons in capacity. Also numerous lift trucks, with capacities to 46,000 lb.

Federal Marine Terminals Inc. handles general cargo, steel products and containers. This facility has 730 ft. of berthing space, 34,000 sq. ft. of covered storage space and 11 acres of open storage space. Heavy lift cranes at Federal Marine range from 20 to 150 tons. Lift truck capacities range up to 52,000 lb.

The Rail to Water Transfer Corp. (RTW) on the Calumet River specialises in handling, storing and distributing raw materials or dry bulk commodities. RTW's twin bulk loading facilities offer 2 deep-water berths, each more than 700 ft. long. The facility has railroad yards that accommodate 2,200 rail cars adjacent to the dock. The twin loading towers provide fast handling at up to 2,500 t.p.h.

Lake Calumet Terminals: Bulk Terminals Co. in Lake Calumet transfers liquid bulk cargoes – animal fats, vegetable oils and chemicals. Bulk Terminals has 400 ft. of berthing space, with storage capacity of more than 550,000 barrels and 16,000 sq. ft. of drumming warehouse space. This facility has a transfer capacity of approximately 200 t.p.h. Bulk also has 5 miles of internal railroad trackage and a switch engine.

Ceres Terminals, Inc. at Lake Calumet handles steel, ores, pig iron, scrap and containers. The terminal was designed for easy interchange of cargoes to and from deep sea vessels. Mississippi River barges, Great Lakes vessels, railroads and trucks – both local and interstate. Truck and railcar weighing services are available also. Ceres has 1,500 ft. of berthing space; 45,000 sq. ft. of covered storage and 27 acres of open storage. Heavy lift equipment includes 5 cranes ranging from 125 to 150 tons. Lift truck capacities range up to 50,000 lb. per unit.

Ceres Marine Terminals facilities on Lake Calumet also have 176,000 sq. ft. of transit shed (60,000 heated); 100,000 sq. ft. of general storage, warehouse and distribution area (50,000 heated), and 50,000 sq. ft. of open storage. Equipment includes lift trucks, capacities up to 52,000 lb. North Pier services barge traffic to and from locations along the entire inland waterway system, and as far South as the Gulf, in addition to serving deep draft vessels.

Chicago Harbor Terminals (CHT) warehousing and marine terminal facilities on Lake Calumet are designed for efficient handling of steel, machinery, containers, scrap, pig iron, ferro-alloys and other metallic bulk commodities. CHT's 800 ft. of heavy duty bulkhead and 2×75 ton gantry mounted cranes operating over 3,700 ft. of tracks provide more than 1,000,000 sq. ft. of open storage under cranes. CHT has 100,000 sq. ft. of heated warehouse, with plans to expand that to 425,000 sq. ft. Other features are 25 acres of open storage, miscellaneous auxiliary cranes, an electronic truck and rail scale, 25,000 ft. of railroad track, ship to barge transfer, 100 intra-plant flat and gondola cars.

Trade Zone Distribution, Inc.: Operates Free Trade Zone No. 22 for warehousing, storage and distribution.

Buffington Harbour: Private harbour owned by Universal Atlas Cement. Located about 9.5 miles S.E. of Calumet Harbour. A concrete dock 1,755 ft. long, enclosed by a breakwater with entrance 880 ft. wide. Exposed to heavy N.E. swell. Depth alongside from 25 ft. to 31 ft.

BULK HANDLING FACILITIES: Continental Grain Company's Elevator "B" on the Calumet River has a storage capacity of 6,800,000 bushels. Elevator "B" has 5 loading spouts with a shipping capacity of 40,000 bushels per hour. Unloading capacity from barges is 15,000 bushels per hour. Receiving capacity from rail cars is 10,000 bushels per hour and from trucks 15,000 bushels per hour. The berthing space at elevator "B" is 1,025 ft.

The Cargill Inc. grain elevator on the Calumet River has a capacity of 23 million bushels. In addition to grain, this facility handles salt, molasses, and grain by-products. Cargill has 3,600 ft. of berthing space – 1,200 ft. of this for elevator use, and 20 acres of open storage. Loading capacity is 60,000 bushels per hour, while unloading is 12,500 bushels per hour. Cargill has 3 marine legs, and 5 loading spouts.

The Gateway Elevator of the Indiana Grain Co-Operative at Lake Calumet offers storage capacity of 6,500,000 bushels for bulk grains. The 8 loading spouts have a capacity of 20,000 bushels each per hour. Unloading speed is 10,000 bushels per hour. Berthing space is 1,000 ft.

Continental Grain's Elevator "C" at Lake Calumet has a capacity of 6,500,000 bushels of bulk grain and grain products. The 8 loading spouts have a capacity of 20,000 bushels each per hour. Unloading capacity is 10,000 bushels per hour. This facility has 1,000 ft. of berthing space.

DENSITY: Fresh water.

FRESH WATER: Available at most berths.

FUEL: All grades available, ex-wharf, or delivered by barge.

CONSULS:

Argentina
Australia
Austria
Barbados
Belgium
Bolivia
Brazil
Canada
Chile
China
Colombia
Costa Rica
Denmark
Dominican Republic
Ecuador
El Salvador
Finland
France
Germany
Great Britain
Greece
Guatemala
Honduras
Iceland
India
Iran
Ireland
Israel
Italy
Jamaica
Japan
Jordan
Korea
Lebanon
Liberia
Lithuania
Luxembourg
Malagasy Republic
Mexico
Monaco
Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Senegal
Spain
Sri Lanka
Sweden
Switzerland
Thailand
Turkey
Uruguay
Venezuela
Yugoslavia

REPAIRS: All marine repairs can be effected.

SHIP SUPPLY SERVICE: Services are available for ship to shore transfer of personnel. The U.S. Coast Guard is also available with boats as well as a helicopter for emergency situations.

Calumet Marine Towing Co., Chicago, IL 60617. Tel: (312) 721-1180.
Canonie Transportation Muskegon, MI 49443. Tel: (616) 722-6641.
North American Towing Co., Chicago, IL 60633. Tel: (312) 646-0101.
J.M.S. Towing Service, Inc., Sturgeon Bay, WI 54235. Tel: (414) 743-9611.
U.S. Coast Guard, Chicago, IL 60607. Tel: (312) 353-6601.

GENERAL: Refer to "St. Lawrence Seaway" for important general information.

AUTHORITY: Chicago Regional Port District, 12800 Butler Drive, Lake Calumet, Chicago, Illinois 60633. *Tel:* (312) 646-4400. *Contact:* Gilbert J. Cataldo, General Manager or Richard H. Van Derzee, Deputy General Manager/Maritime.

CLEVELAND, Ohio: 41.31 N. 81.43 W. (See Plan Book)

DOCUMENTS:

For Agent in Montreal:

3 unfreighted copies of Complete Manifest for Seaway Toll purposes covering all cargo to be discharged in the Great Lakes.

In first U.S. port: A "Traveller" is made up by the Customs Inspector with the following documents:

2 complete sets of U.S. Cargo Manifests, plus 6 copies for Agents.
1 set Manifest of Cargo for first U.S. port.
4 Stores Lists.
4 Personal Effects Lists.
4 Firearms and Ammunition Lists.
4 Crew Lists, Form I418.
4 Narcotics Lists.
4 Vessel's Itinerary Lists.
Vessel's Registry and copies of Paid Tonnage Tax Certificates.
Health Pratique.
Clearance from previous port.
2 sets Bills of Lading.
3 copies Stowage Plan.

In subsequent U.S. ports the following are required:

5 sets Manifest of Cargo for that port.
The "Traveller" and Permit to Proceed issued in previous port.
2 Stores Lists.
2 Personal Effects Lists.
2 Firearms and Ammunition Lists.
2 Crew Lists.
2 Narcotics Lists.
2 set Bills of Lading.
3 copies Stowage Plan.

It is especially important that vessels try to have their visaed Crew List on board which is required by U.S. Immigration at first U.S. port. Failure to have this visaed Crew List can result in all personnel being detained on board. Visa waivers are applied for and granted fairly regularly but Immigration has the discretion to refuse these at will.

PILOTAGE: Compulsory, unless Master has a "B" Certificate on board. Vessels are not permitted to transit the lakes from Port Colborne to Cleveland without either a "B" Certificate on board or a special Waiver from the U.S. Coastguard.

ANCHORAGE: In the outer harbour, 28 ft. depth, mud and sand bottom.

RESTRICTIONS: St. Lawrence Seaway navigation season approx. from April 15th to December 15th. Controlling depth 25 ft. to 27 ft. Access to berths in the River is limited by height restriction of 97 ft. above waterline.

MAX. SIZE: Limited at Seaway Locks, 730 ft. length, 26 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" first U.S.A. port (Albany).

TUGS: Available and use is compulsory in Cuyahoga River and Old River Channel.

RADIO: U.S. Coast Guard can be contacted by R/T on 2182 kHz.

Notice of Arrival: Master must give at least 24 hours' notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also at least 24 hours' notice of ETA at first U.S. discharge port is required.

BERTHING: General Cargo Docks: See page 1567.

BULK HANDLING FACILITIES: See pages 1567 and 1568.

DENSITY: Fresh water.

MEDICAL: Doctors, hospital and all facilities available.

TANKERS: See page 1567.

FRESH WATER: Available at most berths.

FUEL: Marine gas oil and diesel oil readily available, ex-wharf or delivered by barge.

CONSULS:

Austria
Belgium
Canada
Colombia
Denmark
Finland
France
Germany (Fed. Rep.)
Italy
Japan
Korea
Norway
Sweden
Switzerland
United Kingdom
Yugoslavia

REPAIRS: All marine repairs can be effected. Dry dock 730 ft. length at Lorain, Ohio.

GENERAL: Refer to "St. Lawrence Seaway" for important general information.

AUTHORITY: Cleveland-Cuyahoga County Port Authority, 101 Erieside Avenue, Cleveland, Ohio 44114. *Tel:* (216) 241-8004. *Contact:* C. Thomas Burke, Executive Director.

BERTHING: General Cargo Docks (Cleveland)

Pier	Owner/ Operator	Berth features	Depth (ft.)	Mechanical Equipment
Dock 24 West 9th St. Pier	Cleveland Stevedore Co.	East 670 ft. North 519 ft. West 640 ft.	27	8 Mobile Cranes 40 to 200 tons. Fork Trucks to 62,500 lbs. Complete container handling gear.
Dock 26 West 6th St. Pier	Cleveland Stevedore Co.	East 698 ft. North 297 ft. West 681 ft.	27	9 Mobile Cranes 40 to 200 tons. Fork Trucks to 62,500 lbs. Complete container handling gear.
Dock 28 West 3rd St. Pier	Cleveland Cuyahoga County Port Authority	West 710 ft.	27	One 150 ton Heavy Lift Stiff-Leg
Dock 30 Stadium Pier	Cleveland Stevedore Co.	North 1,606 ft.	27	9 Mobile Cranes 40 to 200 tons. Fork Trucks to 62,500 lbs. Complete container handling gear.
Dock 32 Stadium Pier	Cleveland Stevedore Co.	East 712 ft.	27	9 Mobile Cranes 40 to 200 tons. Fork Trucks to 62,500 lbs. Complete container handling gear.

TANKERS: (Cleveland)

Dock & Location	Operator	Type of Dock	Type of Cargo Handled	Size of Pipe-line	Storage Capacity (Barrels)	Distance from Dock to Storage Tanks	Length of Dock	Depth at Dock	Remarks
Allied Oil (Old River, Slip No. 2, Whiskey Island)	Allied Oil Co. Division of Ashland Oil, Inc.	Loading and Unloading	No. 6 Fuel Oil	8 in.	372,000	270 ft.	435 ft.	20 ft.	430 ft. max. O.A. Length
Byerlite-Koppers (Foot of Mary Street Cuyahoga River)	Byerlite Co. of Koppers Company, Inc.	Unloading	Asphalt	8 in.	47,620	1,100 ft.	210 ft.	19 ft.	
Jones and Laughlin (Otis Cleveland Works)	Jones and Laughlin Steel Corporation	Unloading	No. 6 Fuel Oil	10 in.	214,300	2,100 ft.	390 ft.	23 ft.	
Marine Fuelling (East Bank, Cuyahoga River, above Jefferson Avenue Bridge)	Marine Fuelling Incorporated	Loading and Unloading	No. 6 Fuel Oil No. 2 Diesel Oil Intermediate Fuels	8 in. 4 in.	73,000 38,000	30 ft.	520 ft.	22 ft.	
Republic-Lower East Side (East Bank Cuyahoga River, above Turning Basin)	Republic Steel Corporation	Unloading	No. 6 Fuel Oil	24 in.	261,900	2,000 ft.	967 ft.	19 ft.	631 ft.×65 ft. max. O.A. dimensions.

BULK HANDLING FACILITIES: (Cleveland)

Ore: *Unloading Docks:*

Dock and Location	Operator	Unloading Equipment	Total Tons/Hr. Discharge	Length-Width (in Feet)		Out-Board Reach	Storage Cap. Tons	Depth at Dock	Remarks
"C. & P." (Lakefront)	Ohio & Western Pennsylvania Dock Co.	4-17 ton Huletts	3,300	1,875	535	60 ft. 0 in.	1,000,000	27 ft.	
Corrigan-McKinney (Cuyahoga River) Note: Also receives limestone at this dock by self-unloader. Storage capacity: 30,000 tons.	Republic Steel Corp.	Upper 2-17 ton Huletts	1,000	1,250	360	57 ft. 1 in	785,000	23 ft.	633 ft.×72 ft. max. O.A. dimensions
Note: Also receives limestone at this dock by self-unloader. Storage capacity: 35,000 and ship's pig iron and steel. Storage capacity: 10,000 tons.		Lower 3-10 ton Huletts	900	3,340	360	44 ft. 4 in.	750,000	23 ft.	633 ft.×72 ft. max. O.A. dimensions
Otis (Cuyahoga River) Note: Also receives limestone at this dock. Storage capacity: 150,000 tons. Scrap received by crane vessel.	Jones & Laughlin Steel Corporation	Self-unloaders only	—	1,780	54	—	1,000,000	23 ft.	633 ft.×72 ft. max. O.A. dimensions

Grain:

Elevator	Depth at Dock	Depth in Channel	Unload Legs	Unload Speed	Load Spouts	Load Speed	Deepest Vessel Can Unload
CEREAL FOOD Operator: Cereal Food Processors, Inc.	20 ft.	23 ft.	1	4,500	None	None	30 ft.

Berthing Space – 350 ft.
545ft.×58ft. max. O.A. Dimensions
Con Rail
Storage capacity: 590,000 tons

This elevator is located on the Cuyahoga River directly beneath the Superior Avenue high level bridge.

CHANNELS

Cleveland Harbour entrance is maintained at 28ft. Cuyahoga River is maintained at 23 ft. throughout above the Con Rail Railroad Bridge just above the harbour entrance. Width of the channel is generally 250 ft. throughout the Cuyahoga River.

Stone, Sand and Dry Bulk Cargo Docks: (Cleveland)

Dock and Location	*Operator*	*Loading Equipment*	*Total Tons/Hr. Load Speed*	*Unloading Equipment*	*Total Tons/Hr. Unload Speed*	*Storage Capacity (Tons)*	*Dock Length (Feet)*	*Depth at Dock (Feet)*	*Remarks*
Akzona-International Salt (Whiskey Is., Old River)	Akzona, Incorporated	1 Shuttle Conveyor Belt	1,200	None		6,000 Salt (covered) 55,000 Salt open storage	602	21 ft.	617 ft.×64 ft. max. O.A. dimensions
	Note: Outboard reach from Face of Dock to end of pulley is 38ft. 6in. Underside of belt to L.W.D. is 37ft. Stationary. Vertical movement downward.								
CBS "Cuyahoga Plant" (Below West 3rd Street Bridge)	Cleveland Builders Supply Company	None	—	Self-unloaders only	—	20,000 Sand or Salt	750	20 ft.	631 ft. max O.A. Length
CBS No. 1 (Above Jefferson Street Bridge)	Cleveland Builders Supply Company	None	—	Self-unloaders only	—	45,000 Stone 25,000 Sand	480	20 ft.	561 ft. max. O.A. Length
CBS No. 2 (Between Nickel Plate Bridge & West 3rd Street Bridge)	Cleveland Builders Supply Company	None	—	Self-unloaders only	—	120,000 Stone 50,000 Sand 15,000 Salt	1,680	22 ft.	633 ft.×72 ft. max. O.A. dimensions
Clifton Concrete (Foot of Mahoning Avenue)	Clifton Concrete & Supply Company	None	—	Self-unloaders only	—	25,000 Stone 18,000 Sand	690	18 ft.	610 ft. max. O.A. Length
Dock 20 (Foot of Old River Road, River Mouth)	Cleveland-Cuyahoga County Port Authority	None	—	Self-unloaders only	—	200,000 Bulk Commodities	900	27 ft.	
Ford Motor (Above Lorain-Carnegie Viaduct)	Ford Motor Co.	None	—	Self-unloaders only	—	780,000 Sand and Stone Pig Iron and scrap direct to cars	630	21 ft.	633ft. max. O.A. Length
Huron Cement (Sycamore Slip)	Cement Division National Gypsum Co.	None	—	Unloading pipes	—	31,332 Cement	415	24 ft.	502 ft.×68 ft. max. O.A. dimensions
Jones & Laughlin (Just below Union Terminal Viaduct)	Jones & Laughlin Steel Corporation	None	—	Self-unloaders only	—	100,000 Iron Ore and Stone	620 & 300	23 ft.	633 ft.×72 ft. max. O.A. dimensions
Lower Republic East Pier (Above Turning Basin)	Republic Steel Corp.	None	—	Self-unloaders only	—	87,000 Stone 8,300 Fluorspar	2,565	23 ft.	633 ft.×72 ft. max. O.A. dimensions
	Note: Dock also receives ship's pig iron, steel products and scrap.								
M.C.C. (Above Eagle Street Bridge)	Mid-Continental Coal & Coke Co.	2 Shuttle Conveyors	500	None		30,000 Coke Breeze	1,550	23 ft.	633 ft. max. O.A. Length, 72 ft. Beam
Merwin Avenue Dock (Between Foot of British Street and Viaduct)	Cuyahoga Lime Co. Incorporated	None	—	Self-unloaders only	—	45,000 Stone 65,000 Marl	245	23 ft.	666 ft.×72 ft. max. O.A. dimensions
Ontario Stone No. 1 (Above Penn Central Bridge, Mouth Cuyahoga River)	Ontario Stone Corp.	None	—	Self-unloaders only	—	125,000 Stone	495	23 ft.	664 ft. max. O.A. Length
Ontario Stone No. 2 (Left Bank, above West 3rd Street Bridge)	Ontario Stone Corp.	None	—	Self-unloaders only	—	75,000 Stone	695	23ft.	633 ft.×72 ft. max. O.A. dimensions
Ontario Stone No. 3 (Old River Bed, on Whiskey Island)	Ontario Stone Corp.	None	—	Self-unloaders only	—	175,000 Bulk commodities	700	24 ft.	647 ft.×70 ft. max. O.A. dimensions
Sand Products (Whiskey Island, Old River)	Sand Products Corp.	None	—	Self-unloaders only	—	95,000 Sand	850	22 ft.	633 ft. max. O.A. Length, 72 ft. Beam

COOS BAY, Oregon: 43.22 N. 124.13 W.

(See Plan Book)

DOCUMENTS: Local Port Authority does not require any documents from merchant vessels entering this harbour. This does not preclude United States Customs requirements for documents.

PILOTAGE: No specified amount of advance notice of ETA required. Radio contact may be made on frequency 8182, also on frequency 2182. Most used frequency is VHF Channel 16. Pilot will be taken on board at entrance to Coos Bay Channel. No designated anchorages for vessels awaiting a Pilot.

ANCHORAGES: North of Entrance Buoy.

MAX. SIZE: Max. permissible length is 725 ft., breadth 110 ft. A 2 ft. clearance under keel is considered necessary for safe navigation. Vessels entering Coos Bay from sea draw down about 0.166 in. per foot of draft because of difference in density.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Pilots, Agents and stevedores monitor VHF Channel 16.

TUGS: Pilot vessel acts as Tug. Emergency small harbour tugs available and ship's lines generally used.

BRIDGES: 2 bridges cross the main ship channel. The Southern Pacific railway drawbridge 9 miles from the entrance and the Coast highway bridge 9.6 miles from the entrance. Clearance height of the highway bridge is 149 ft. in the centre of the span at MLW. Clearance width of swinging railway bridge 194 ft.

BERTHING: *Note:* All berths with the exception of oil berths dredged to 35 ft. in 1979.

Cape Arago Dock: Length 504 ft. Depth alongside at MLW 22 ft. 6 in. (West end) and 25 ft. (East end). No dock cranes available. Fresh water available. Distance from entrance 5 miles.

Roseburg Lumber Co. Dock: Length 635 ft. Depth alongside at MLW 35 ft. No fresh water available. Distance from entrance 8 miles.

Ocean Terminals Dock: Length 400 ft. Depth alongside at MLW 35 ft. No dock cranes available. Fresh water available. Distance from entrance 11 miles.

Weyerhaeuser Dock: Length: (Lumber Dock) 1,433 ft. (Wood Chip Dock) 694 ft. Depth alongside at MLW 35 ft. No dock cranes available. Fresh water available. Distance from entrance 12 miles.

Fibrex and Shipping Co. Dock: Length of floating walkway 700 ft. Depth alongside at MLW 35 ft. Wood chip loaded by pneumatic pipe. Fresh water available. Distance from entrance 12.5 miles.

Bayshore Dock: Length 504 ft. Depth alongside at MLW 35 ft. No dock cranes available. Fresh water available. Distance from entrance 13 miles.

Dolphin Terminals: Vessels moor to dolphins adjacent to apron 60 ft. long and 26 ft. wide which is joined to the shore by a causeway length 190 ft. and width 12 ft. Depth alongside at MLW 35 ft. Fresh water available. Distance from entrance 13 miles.

Central Dock: Length 1,348 ft. Depth alongside at MLW 35 ft. No dock cranes available. Fresh water available. Distance from entrance 13.5 miles.

Portland Dock: Length 576 ft. Depth alongside at MLW 35 ft. No dock cranes available. Fresh water available. Distance from entrance 15 miles.

Coos Bay Dock: Length 1,326 ft. Depth alongside at MLW 35 ft. No dock cranes available. Fresh water available. Distance from entrance 15 miles.

STEVEDORES: Should have minimum of 48 hours to arrange gangs. Also see "Radio".

MEDICAL: Advance notice of required medical attention is desirable, in order to expedite use of ambulance, if necessary.

TANKERS: 2 tanker berths, Standard Oil and Union Oil Co., draft 30 ft. Tankers discharge into tank farms. Union Oil Co. is the bunkering Agent.

FRESH WATER: Available. Cost per ton is negotiable.

FUEL: 24 hours advance notice desirable, both bunker and diesel fuel available.

GANGWAY/DECK WATCHMEN: Service of watchman at discretion of ship's Master.

OPENING/CLOSING HATCHES: Normally by stevedores.

IDENTIFICATION CARDS: Not required by local authorities.

CONSULS: None.

REPAIRS: Only minor deck and engine repairs possible.

DRY DOCKS: Largest dry dock handles vessels not exceeding 220 ft.

REPATRIATION: Repatriation through local Customs and Immigration Office.

AIRPORT: All docks within 5 miles of airport. Airport served by regular airlines.

TIME: GMT minus 8 hours, clocks advanced 1 hour in May, clocks retarded 1 hour in November.

HOLIDAYS: All legal holidays observed, plus state-wide elections. Cargo work through negotiations with stevedore contractors.

POLICE/AMBULANCE/FIRE: Police: Coos Bay 269-1181, North Bend 756-3161; Ambulance 756-3234; Fire Coos Bay 267-4123, North Bend 756-6111.

SHORE LEAVE: Crew members allowed ashore except when Federal Directives may be applied to a specific vessel.

SHIP SUPPLY SERVICE: For general ship stores: Day Ship Supply, 602 W. Hemlock St., Coos Bay, Oregon 97420. Tel. (503) 267-3813.

For transportation of personnel: The Coos Bay Pilots' Association, P.O.Box 254, Coos Bay, Oregon 97420. Tel. (503) 267-4186 would be the initial contact.

There are also numerous charter boat operators who provide charter services.

For emergency services the U.S. Coast Guard maintains a helicopter squadron in port. They bring sick crew members directly to the hospital. Their information phone number is (503) 756-4142, and their emergency number is 756-4141.

DELAYS: No delays in berthing, loading or discharging, or bunkering can normally be expected.

DEVELOPMENTS: Depth of channel at entrance 45 ft. MLLW. Inner channel, to head of channel 35 ft. MLLW. An additional anchorage (Turning Basin) will be installed, directly East of Beacon 17.

AUTHORITY: Oregon International Port of Coos Bay, Port Building, Front and Market Streets, Coos Bay, Oregon 97420. *Tel:* 267 – Port. *Telex:* 360315. *Contact:* Frank Martin, Jnr., General Manager.

CORDOVA, Alaska: 60.33 N. 145.46 W.

Located at S.E. side of Prince William Sound at the head of Orca Inlet. Open harbour year round.

APPROACHES: Via Prince William Sound.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: Pick-up point is Sheep's Point. Prior arrangements required.

ANCHORAGES: Good holding ground. Mud bottom between Spike Island and Municipal dock.

MAX. SIZE: Recommend max. draft 25 ft. Tidal variation: 18 ft. – 19 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Contact port on VHF Channels 19 and 26; Citizens Band, Channel 5 or SSB 2509.

TUGS: Limited availability. Prior arrangements need to be made.

BERTHING: Berthing Permit required. Advance notice of 48 hours requested.

Municipal Dock: 18 ft. deep, 400 ft. long, 72 ft. wide. Open storage of 10 acres. One 140 ton P & H mobile crane.

Container and Ro-Ro facilities: Movable ramp, 4.57 m. wide, available for Ro-Ro operations. 4 ha. container staging area.

STEVEDORES: ILWU No. 66, Box 416, Cordova, Alaska, 99574. Tel: (907) 424-7224.

Working hours – 24 hours.

REPAIRS: Radio, radar, welding, machining and light engine repairs can be effected.

FRESH WATER: Available at docks.

FUEL: No bunker "C" available. Fuel oil available.

MEDICAL: 22 bed hospital and a medical clinic, with 3 doctors, 1 dentist also public health nurse.

CUSTOMS: Quarantine – local. Immigration and Customs from Anchorage, Alaska.

AIRPORT: 13 miles from city centre. Small plane field near town, available for charter air service.

HOLIDAYS: None.

TIME: Yukon Standard time.

POLICE/FIRE/AMBULANCE: All available. Tel: (907) 424 7475.

AUTHORITY: City of Cordova, Box 1210, Cordova, Alaska 99574. *Tel:* (907) 424-3351. *Contact:* Joseph L. Graham, Harbour Master/Port Director.

CORPUS CHRISTI, Texas: 27.48 N. 97.23 W.

(See Plan Book)

PORT LIMITS: Corpus Christi's port limits include all of Nueces County, which has been officially designated as Port of Corpus Christi Authority of Nueces County, Texas. The Corpus Christi Turning Basin, Avery Point Turning Basin, Chemical Turning Basin, Tule Lake Turning Basin and the Viola Turning Basin are interconnected by the Industrial Canal; the Tule Lake Channel and the Viola Channel constitute the Corpus Christi Inner Harbour. Other Bay points included in the Port of Corpus Christi area are: Harbour Island, the North end of Mustang Island, near the inner end of the Aransas Pass Entrance, and Port Ingleside and La Quinta along the route of dredged deepwater channels on North side of Corpus Christi Bay; and the Rincon Barge Canal System. All of the ship channel has now been deepened from 40 ft. to 45 ft. except the 10 mile Inner Harbour, which will be deepened from 40 ft. to 45 ft. in late 1985/early 1986.

DOCUMENTS:

- 3 copies Cargo Manifest (Form 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.
- 2 copies Crew Manifest (Form 1304).
- 2 copies Stores List (Form 1303).
- 2 copies Passenger List (Form I–418).
- 2 copies Crew List (Form I–418).

Customs Boarding Officer will also examine Ship's Register and Load-Line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

- Health Pratique.
- Master's Oath (Customs, 2 copies Form 1300).
- General Declaration (2 copies Form 1301).
- All Foreign clearances.
- U.S. Certificates of payment of tonnage tax (Customs Form 1002).
- Certified Crew List.

PILOTAGE: Pilot boards off Port Aransas.

RESTRICTIONS: No restrictions, 24 hour service. The Port of Corpus Christi is situated on the West side of Corpus Christi Bay, in South-Western Texas. Port facilities at Inner Harbour lie along a 9.5 miles stretch of dredged channels and basins about 18 miles from Aransas Pass entrance at the Gulf of Mexico. Channel depth 40 ft., width 400 ft.

Turning Basins: 5 turning basins in the Inner Harbour are each minimum 1,000 ft. wide and more than 1,000 ft. in length.

MAX. SIZE: Cargo vessels: 39 ft. draft. Tankers: 40 ft. draft. Harbour Island has tanker docks with 45 ft. draft. Also see "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: KLC ITT-Radio-Arcadia, Texas. KLC RCA-Radio-Galveston, Texas.

VHF: KKQ 769 – Harbour Master – Channel 12 and 16. WR 8879 – Pilot Boat. KQU – Pilot Office – Aransas-Corpus-Christi Pilots Channels 12 and 16. KBP 384 – Harbour Tugs – Channel 12. U.S. Coast Guard – Channel 16.

TUGS: Tug assistance available. Tugs join vessels berthing at Harbour Island in jetty channel. Tugs accompany vessels entering Inner Harbour outside Corpus Christi Harbour Bridge.

BERTHING: The Corpus Christi Turning basin is over a mile long and 1,000 ft. wide. There are 4 additional basins in the Inner Harbour, which extends Westward from Corpus Christi Harbour Bridge for 9.5 miles. The water in all basins, channels and canals is 40 ft. deep.

Draft for public docks will be furnished upon request to the Harbour Master or steamship Agent. Draft for private docks will be furnished upon request to the dock owners or steamship Agents.

Also see "Port Limits" and "Developments".

Inner Harbour – Public Docks: The length limit indicator is not of necessity the max. length for a vessel as larger vessels can berth if adjacent berth is not occupied.

Cargo Docks No.	*Length Limit* ft.
1 – 2	700
3 – 6	1,300
8	600
9	750
10 – 11	700
12	700
14 – 15	1,000
Bulk Materials Dock	835
Public Grain Elevator Dock	900

Inner Harbour – Private Docks: (Other than oil docks).

PPG Industries Inc., Cargo Dock: Length of pier 450 ft. Length of Head 100 ft.

Producers Grain Port Terminal Elevator Dock; Lone Star Cement Corp. Dock; Berry Contracting Company; Centex Cement Company.

BULK CARGO FACILITIES: *Ore, Minerals, Coal, Petroleum Coke:* Bulk Materials Dock with travelling unloading tower capable of direct discharge from vessels to railcars or trucks at rate of 1,000 t.p.h.

A new Bulk Loading Terminal is planned for late 1985 to load vessels directly from trucks, railcars or stockpiles at rate of 1,500 t.p.h. The new dock will have a 45 ft. draft alongside, 63 ft. airdraft and 1,300 ft. slip length.

Grain: 2 export grain elevators are located in the Inner Harbour. The Corpus Christi Public Elevator has a 5,000,000 bushel capacity. Rated truck unloading capability is 1,000 t.p.h.; railcars can be unloaded simultaneously at 2,000 t.p.h. The Interstate Grain Port Terminal Elevator is privately owned and has a 6,400,000 bushel capacity.

TANKERS: Between Corpus Christi Turning Basin and Viola Basin are 11 public and 10 private Oil Docks, some capable of berthing tankers of 150,000 d.w.t. capacity. Also see "Berthing".

Inner Harbour – Public Docks:

Oil Dock	No. 1	Length Limit 965 ft.
	No. 2*	Length Limit 350 ft.
	No. 3**	Length Limit 430 ft.
	No. 4†	Length Limit 965 ft.
	No. 6*	—
	No. 7†	Length Limit 965 ft.
	No. 8	Length Limit 900 ft.
	No. 9	Contact Harbour Master
	No. 10*	—
	No. 11†	Length Limit 965 ft.
	No. 12*	—

*Limited to barge operations. **Exclusively for barges. †Larger vessels may be berthed when adjacent berth not occupied.

Inner Harbour – Private Docks:

Mobil Oil Dock.
Southwestern Refining Co., Oil Dock No. 1.
Southwestern Refining Co., Oil Dock No. 2.
Southwestern Refining Co., Oil Dock No. 3.
Champlin Petroleum Co., Oil Dock No. 1.
Champlin Petroleum Co., Oil Dock No. 2.
Champlin Petroleum Co., Oil Dock No. 3.
Saber Refining Co., Oil Dock No. 1.
Saber Refining Co., Oil Dock No. 2.
Saber Refining Co., Oil Dock No. 3.

Outside of Inner Harbour – Private Docks:

Harbour Island	American Petrofina Oil Dock.
Harbour Island	Exxon, Oil Dock No. 1.
Harbour Island	Exxon, Oil Dock No. 2.
Ingelside	Sun Pipe Line Co. Oil Dock.
La Quinta Channel	Du Pont Ship Liquid Chemicals Dock.
La Quinta Channel	Du Pont Ship Liquid Chemicals Barge Dock No. 1.
La Quinta Channel	Du Pont Ship Liquid Chemicals Barge Dock No. 2.
La Quinta Channel	Reynolds Metals Co. Bauxite Unloading Pier.
La Quinta Channel	Reynolds Metals Co. Alumina Loading Dock.

CARGO GEAR: 7 locomotive cranes including 4×30 tons, 1×25 ton, and 1×45 ton. Heavy lift facilities: Derrick at Cargo Dock 14 has 100 ton capacity, at 53 ft. radius, and can handle containers 40 ft. or larger; otherwise ship's gear used. Heavy lift facility also available at Bay, Inc.

Facilities are available for all types of liquid cargo, dry bulk and general cargo, but cannot handle restricted cargo such as ammunition and explosives.

BRIDGES: Corpus Christi Harbour Bridge: Vertical clearance at MHW is 138 ft.

Upper Harbour Lift Bridge: Vertical clearance at MHW when raised is 138 ft.

MEDICAL: Ample hospital and dental facilities available.

FRESH WATER: Water available at all public docks for 75¢ per 1,000 gallons; minimum charge of $25.00 for each connection.

FUEL: 1,500 Redwood, 1,000 Redwood – 24 hour notice.

Bunker C, Marine diesel, Light diesel – Pipe-line or Barge, Truck.

FIRE PRECAUTIONS: No working barges alongside (except bunkering barges) and normal precautions such as shut down cargo operations during lightning, storm, etc.

REPAIRS: See "Services".

SURVEYORS: American Bureau of Shipping; J. E. Orrell, Lloyd's Sub-Agency and National Cargo Bureau.

GANGWAY/DECK WATCHMEN: Not necessary. If recommended $6.00 per hour.

HATCHES: Hatches may be opened by crew before entering harbour, after the ship has entered harbour it is carried out by stevedores.

CUSTOMS ALLOWANCES: 300 cigarettes per man. 1 quart liquor per man.

POLICE/AMBULANCE/FIRE: Police 882-1911, Ambulance 882-5571, City Fire 884-5563, Refinery Terminal Fire Co. 882-7801.

EMERGENCY CO-ORDINATION CENTRE: U.S. Coast Guard Marine Emergency (512) 937-1898.

TELEPHONES: No arrangements exist.

SERVICES: Coastal Iron Works, Inc., 2,500 ton dry dock, 1,000 ton marine railway, machine shop Tel: (512) 882-8807 and (512) 884-5581.

Jay Bludworth, Inc., Ship Repairs. Tel: (512) 887-7981.

International Marine, Ship Repairs. Tel: (512) 884-2491.

SHIP SUPPLY SERVICE:

Helicopter Charter, Rental and Leasing:

Evergreen Helicopters, P.O.Box 7781, Corpus Christi, TX. 78415. Tel: 512/854-995.

Home Office (Evergreen Helicopters), Route 3, Box 198, Galveston, TX. 77553. Tel: 409/740-0231.

Omniflght Offshore, Inc., P.O.Box 7519, Corpus Christi, TX. 78415. Tel: 512/289-1181.

Pumpkin Air, Inc., P.O.Box 10264, Corpus Christi, TX. 78410. Tel: 512/289-6363.

Ship Chandlers:

Atlantic Steamers Supply Company, 1212 N. Tancahua, Corpus Christi, TX. 78401. Tel: 512/883-5187.

Gunderland Marine Supply, Inc., P.O.Box 9758, Corpus Christi, TX. 78469. Tel: 512/882-4231.

Moore's Ship Chandlery, Inc., P.O.Box 9541, Corpus Christi, TX. 78469. Tel: 512/883-5561.

Texas Marine & Industrial Supply, P.O.Box 9754, Corpus Christi, TX. 78408. Tel: 512/289-7375.

Tug Boat Rentals:

Loyd W. Richardson Corporation, P.O.Box HHH, Aransas Pass, TX. 78336. Tel: 512/882-8434.

CONSULS: Danish Consul, 4517 Baldwin. Tel: (512)884-6344.

German Consul, 5440 Old Brownsville Rd. Tel: (512)289-2416.

Mexican Consul, 1740 First City Tower I. Tel: (512)882-3375.

Spanish Consul, 19833 Melissa Lane. Tel: (512)887-7246.

AIRPORT: Approximately 7.75 miles from Port. Serviced by 5 regular airlines.

TIME: Daylight Saving Time from last Sunday in April to last Sunday in October (minus 5 hours GMT). Central time remainder of year (minus 6 hours GMT).

HOLIDAYS: New Year's Day (January 1st); Martin Luther King's Birthday (January 15th); Lincoln's Birthday (February 12th); Washington's Birthday (3rd Monday of February); Texas Independence Day (March 2nd); Good Friday (varies); Memorial Day (last Monday of May); June 20th; July 4th; Labour Day (First Monday of September); Columbus Day (2nd Monday of October); Veterans' Day (4th Monday of October); Thomas W. Gleason's Birthday (November 8th); Thanksgiving (4th Thursday of November); Christmas Day (December 25th).

Possible to work on any holiday, except Labour Day or Christmas, only in case of fire or danger to property. If holiday falls on Sunday, Monday is observed.

SHORE LEAVE: Possible.

IDENTIFICATION CARDS: Standard Immigration Forms I–95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I–95, issued for same vessel.

DEVELOPMENTS: Port plans for late 1985 include deepening the Inner Harbour to 45 ft. and constructing a radial bulk loader facility to load vessels (100,000 d.w.t.) directly from trucks, railcars or stockpiles at rate of 1,500 t.p.h.

Baker Marine is developing a site previously owned by National Steel Corporation for offshore service facilities at Port Ingleside.

AUTHORITY: Port of Corpus Christi Authority, P.O.Box 1541, Corpus Christi, Texas 78403. *Tel:* (512) 882-5633. *Telex:* 910-876-1446 Ccpe Coc. *Contact:* Harry G. Plomarity, Executive Director. Doug Marchand, Managing Director. Fred Bingham, Harbour Master.

DESTREHAN, Louisiana: 29.56 N. 90.21 W.

East bank of Mississippi River about 121 miles from sea.

DOCUMENTS/PILOTAGE: For all general information refer to "New Orleans."

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: At least 1 tug required for mooring/unmooring.

BERTHING: (a) St. Charles Elevator, berth 1,000 ft. length, Minimum 41 ft. depth. Loading rate, Max. 75,000 bushels per hour; 2 loading belts.

(b) Bunge Grain Elevator, berth 700 ft. length, Minimum 41 ft. depth. Loading rate, Max. 70,000 bushels per hour; 2 loading belts.

(c) ADM Midstream loading buoys – 2 mooring facilities.

FRESH WATER: Available ex-berth.

FUEL: Not available.

DENSITY: Fresh (1000).

OPERATOR: (a) St. Charles Grain Elevator Company, P.O.Box 267, Destrehan, Louisiana 70047. *Telex:* TWX 810-955-5525.

(b) Bunge Corp., P.O.Box 156, Destrehan, Louisiana 70047. *Telex:* 587386 Bunge Dstr.

(c) Artco, 104 Campus Drive, Suite 104, Destrhan, Louisiana 70047. *Telex:* TWX 810-951-5348.

DETROIT, Michigan: 42.19 N. 83.05 W. (See Plan Book)

Refer to "St. Lawrence Seaway" for important general information.

PILOTAGE: Compulsory unless Master holds exemption "B" licence. 24 hours' notice of arrival required by Agents who arrange Pilot.

ANCHORAGES: In depths from 29 ft. – 51 ft. in the Detroit River off the marine terminals and away from main channel.

RESTRICTIONS: St. Lawrence Seaway navigation season approx. from April 15th to December 15th. Controlling depth 27 ft. Minimum depth of 25 ft. in the Detroit River. The Amherstburg Channel has a depth of 27 ft. 6 in. for upbound traffic.

MAX. SIZE: Limited at Seaway Locks. 730 ft. length, 26 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, not compulsory but recommended for some terminals.

BERTHING: *Detroit Marine Terminals (Clark Street):*
2,325 ft. dock with 27 ft. LW depth.
4 berths.
Container Freight Station – U.S. Customs approved. 100,000 sq.ft. covered storage.
Total 25 acres of which 20 acres dedicated to container operation.
1×200 ton heavy lift crane with automatic container spreader.
3×85,000 lb. top-loading container handlers.
1×25,000 lb. empty container handler.
1×250 ton diesel crawler crane.
1×200 ton diesel crawler crane.
1×50 ton diesel electric travelling gantry crane.
1×25 ton diesel electric travelling gantry crane.
1×15 ton diesel electric travelling gantry crane.
1×150 ton rail scale.
Fork trucks up to 45,000 lb. capacity.
Lift trucks up to 80,000 lb. capacity.
1×80,000 lb. top loader for 20 ft. – 40 ft. containers.

Detroit Marine Terminals (River Rouge):
1,400 ft. dock with 27 ft. LW depth.
2 berths.
45,000 sq.ft. covered storage.
200,000 sq.ft. storage pads.
Total 45 acres.
2×250 ton crawler cranes.
1×150 ton crawler crane.
4×140 ton crawler cranes.
1×50 ton gantry crane.
3×40 ton railroad cranes.
1×25 ton gantry crane.
2×600 h.p. switch engines.
1 rail scale 212,000 lb. capacity.
1 truck scale 212,000 lb. capacity.
7 magnets.
8 clam buckets.
Yard and warehouse lift trucks up to 70,000 lb. capacity.

Nicholson Terminal & Dock Company (Ecorse Dock):
3,400 ft. dock with 27 ft. LW depth.
6 berths.
70,000 sq.ft. covered storage.
Total 34 acres.
2 cranes, 70 ton capacity at 40 ft. radius and 50 ton capacity at 60 ft. radius.
4×12 ton gantry cranes.
6×30 ton diesel locomotive cranes.
1×85 ton mobile crane.
1×200 ton crawler crane.
3×1,000 h.p. diesel yard engines.
1×290 h.p. diesel yard engine.
1×150 ton railroad scale.
1×72 ft. combination rail and truck scale 400,000 lb. capacity.
2×87 in. magnets.
11×65 in. magnets.
5×55 in. magnets.
12 buckets: 1.5 yds. to 15 yds. capacity.
1 forklift truck, 50,000 lb. capacity.
1 forklift truck, 40,000 lb. capacity.
25 forklift trucks, various capacities.
3×12 yd. bucket front end loaders.

Nicholson Terminal & Dock Company (Summit Street Dock):
1,530 ft. dock with 28 ft. LW depth.
2 berths.
250,000 sq.ft. covered storage.
Total 16 acres.
2 crawler cranes, 200 ton capacity.
12 forklift trucks; 12,000 lb. to 45,000 lb. capacity.
1×60 ft. truck scale 300,000 lb. capacity.

CONSULS:
Australia
Austria
Barbados
Belgium
Canada
Chile
Colombia
Costa Rica
Denmark
Dominican Republic
El Salvador
Finland
France
Germany F.R.
Guatemala
Haiti
Honduras
Iceland
Italy
Japan
Korea
Lebanon
Liberia
Malta
Mexico
Netherlands
Norway
Panama
Paraguay
San Marino
Spain
Sweden
Switzerland
Thailand
Yemen A.R.

REPAIRS: All marine repairs can be effected.

SURVEYORS:
Champness & Associates, 10573 W. Jefferson Avenue, River Rouge 48218. Tel: 849-2345.
Fisher Marine Surveys, Inc., 11772 Postlane, South Lyon 48178. Tel: 1-437-9655.
General Adjustment Bureau, 30100 Van Dyke, Suite 306, Warren 48093. Tel: 573-7600.
Robert Harris, 1812 Wiltshire, Berkley 48072. Tel: 544-8736.
Intermodal Technical Services Inc., 30100 Van Dyke, Suite 335, Warren 48093. Tel: 575-9311/2.
Intersurvey, Inc., 22519 Maxine, St. Clair Shores 48080. Tel: 779-8954.
John P. Kauserud, 262 Fowlerville Road, Fowlerville 48836. Tel: 517-223-9730.
Robert V. Ricard, 17372 Collinson, East Detroit 48021. Tel: 776-6220.
Lennon A. Thompson Marine Consultants, Ltd., 2936 Biddle, Wyandotte 48192. Tel: 282-0052.
Toplis and Harding, Inc., 1150 Griswold – Suite 1400, Detroit 48226. Tel: 965-3033.

BANKS: Banks with International Department:
Comerica Incorporated, P.O.Box 858, Fort at Washington, Detroit 48231. Tel: 222-6206.
First of America Bank – Detroit, N.A., P.O.Box 2659, Penobscot Bldg., Detroit 48226. Tel: 965-1900, ext. 342.
Manufacturers National Bank of Detroit, P.O.Box 659, Detroit 48231. Tel: 222-4000.
Michigan National Bank of Detroit, 1505 Woodward, Detroit 48226. Tel: 222-1900. P.O.Box 195, Trolley Station, Detroit 48231.
National Bank of Detroit, 611 Woodward Avenue, Detroit 48232. Tel: 225-2422.

DENSITY: Fresh water.

MEDICAL: Doctors, hospital and all facilities available.

FRESH WATER: Available at most berths.

FUEL: All grades available, ex-wharf, or delivered by barge.

AUTHORITY: Detroit-Wayne County Port Authority, Suite 1370, Tower 100, Renaissance Center, Detroit, Michigan 48243. *Tel:* (313) 259-8077. *Contact:* Joseph T. Auwers, Executive Director.

DONALDSONVILLE, Louisiana: 30.05 N. 91.00 W.

(See Plan Book)

SHIPMASTER'S REPORT: September 1980.

The report was compiled over 4 visits between August 1979 and August 1980.

APPROACHES: The coastline is low at the mouth of the river and consequently does not give a good radar return. The Racon on East jetty shows up between 12 to 17 miles. Fog and mist is a complication as it is very prevalent with the added problem of the oil rigs. These are located mainly on the East side of the safety fairway but in August 1980 construction was proceeding on a structure right on the Western boundary of the safety fairway about 4 miles S.W. of the East pier.

The sea buoy is difficult to locate, vessel should approach as per the leading line indicated.

A strong West flowing current across the entrance can be encountered.

Draft restriction varies throughout the year and should be ascertained in good time. August 1980 at 40 ft.(FW) but patches of 39 ft. 6 in. in places. (Mud, so no difficulty.)

Officially the Bar at the S.W. Pass is the limiting factor but in practice other areas of the river up to New Orleans are as much of draft restriction factor.

Above New Orleans to Baton Rouge a battle is being fought against silting up and a large dredging programme will have to be commenced soon otherwise the draft will be severely limited – still at 40 ft. officially.

A new road bridge about 15 miles above New Orleans is under construction called 'Ascension', clearance is likely to be 150 ft., the lowest on the river, at zero gauge or about 130 ft. at High River.

PILOTAGE: Pilot boards at Sea buoy from a fast cutter. Ladder/gangway arrangements 6 ft. from water, normal port gangway at S.W. Pass.

Change at Pilot Town about 1 hour 45 minutes above S.W. Pass and New Orleans about 6 hours above Pilot Town.

If at anchor and requiring a Pilot a minimum of 3 hours' notice is required. Normally order Pilot through Agent. The Baton Rouge-New Orleans Pilots may only berth ships at Donaldsonville about 3 times per year.

ANCHORAGES:

Belle Chase	Mile post 75	1 hour below New Orleans
12 Mile Pt.	Mile post 81	30 minutes below New Orleans
Bonte Carre	Mile post 128	2 hours above New Orleans
Burnside	Mile post 169	4 hours above New Orleans

All anchorages are standing moor operations, if proceeding down river 2 tugs will be required to swing vessel into current, this is *essential* in High River season.

In all, the bank is steep and mud, as long as vessel lies quietly onto bank little damage can result. In fact this is preferable to hanging out in midstream and getting hit by passing barge strings and shipping.

VHF: Public correspondence as per ALRS. Moving upriver-Venice, New Orleans, Convent (New – Channel 25) and Baton Rouge. Just about in coverage all the way up from Pilot Town to berthing, all stations very busy in working hours.

Pilot ordered through Agent and on Channel 16.

USCG: Follow VTS booklet.

Boat service: At 12 Mile Point anchorage a launch service operates on Channel 20. Pilots and Agent board by this service.

TUGS: Normally two low powered 'Watson' tugs of 1,200 h.p. (approximately). 1 forward (tug's line) and the other pushing.

'Crescent' tugs of around 2,000 h.p. are stationed at Burnside which are available if not handling larger vessels.

BERTHING: *Berth approach and depths:* This is the cause of most concern at Donaldsonville. The channel is at its narrowest off Triad Berth (The downstream berth 0.5 miles below C.F. Industries at Mile Post 173.5), having a minimum depth of 30 ft. (Zero Gauge at Donaldsonville) over a width of 140 ft. and is steep to, falling to 20 ft. over 180 ft. in width.

Gauge reading can vary from about + 5 ft. after a dry Summer to + 14 ft. or more at the end of the Winter season when the snows to the North are melting.

There is a set onto the Triad Berth varying with the main current. Again as the river height, the current varies from 0.5 knots in late Summer to upwards of 5 knots or more in late Winter. Effect is increased by a Northerly wind.

Berth Approach: Head upriver on berthing, unberth stern first until clear of shoal, approximately when bow is 50 ft. downriver of lower Dolphin on Triad Berth, then swing with aid of tugs. Actual depth alongside (Zero Gauge) C.F.I. Berth = 44 ft. (minimum) Triad Berth = 41 ft. (minimum).

Guidelines for berthing as follows:

C.F.I. Berth: No berthing or unberthing at night. No vessels to be on Triad, berthing or unberthing.

Triad Berth: Night movements dependent on wind, tug power, etc.

The question of taking bunkers thereby increasing the draft arises. If berthing at Triad only, can take before berthing. If also berthing at C.F.I. it is best left until clear of C.F.I. berth.

Berths: C.F.I. Berth: Reasonable condition. Short steel jetty with 2 dophins plus mooring buoy at either end, the nearest dolphins either side of the jetty are interconnected by a catwalk.

At 26 ft. the maindeck is level with dolphins so gangway must be turned in. B.O.T. type gangway by pilot ladder position to after dolphin. Port side alongside.

Berth also used for loading bulk fertiliser. Watch the bulk boom as it is left unsecured and can be fouled.

Triad: 0.5 miles downstream from C.F.I. (plants back onto each other).

Basically the same as C.F.I. but dolphins not connected to jetty. No mooring buoys, all dolphins, not as good condition as C.F.I. Bulk fertiliser also loaded. Port side alongside, B.O.T. type gangway amidships.

Moorings: Basically 3, 2, 2, crossed after springs each berth. Mooring boat which moors forward first then aft. Lets go aft first – very handy as propeller is clear quickly. (See Plan) – have moorings ready before arrival.

CARGO: Ammonia only at both berths plus bulk fertiliser. Labour on both berths assists in connecting up.

C.F.I.: Ship's 12 in. to 8 in. reducer plus shore 150 – 300 ASA spool piece.

No vapour return line, no venting. Loading at 450 t.p.h. but depends on pumps available, normally two. Emergency stop for ship operation.

Triad: Ship's 12 in. to 8 in. reducer. No VRL, no venting. Loading at 350 t.p.h. but again depends on available pumps. Shore tanks are set back further than C.F. Industries and line heating is apparent.

FRESH WATER: Not available at Triad berth. Available at C.F.I. Berth (Rate 1 t.p.h.). Barge from New Orleans cost about $1,500.

TELEPHONE: On both berths through the terminal operator. Local calls free, long distance calls collect.

GENERAL: Do not go ashore for draft readings as it involves going along river bank, plenty of snakes and alligators.

Donaldsonville Town nearby, about $5.00 in a taxi. Baton Rouge about 45 minutes away. The International Airport at New Orleans is about 1.5 hours away.

Stores: Lorries can back down jetty roadway to within a few feet of manifold area. A permit has to be obtained at both berths.

USCG: Usual pre-arrival hazardous ship reports to Coast Guard Captain, New Orleans.

Necessary to have a Coast Guard escort through New Orleans. Check must be made that the Pilot is advising the USCG of the vessel's position and that she requires an escort. Escort with blue flashing light (fast patrol launch) joins off Algies Point and goes through to Huey P. Long Bridge, and vice versa.

THE FOLLOWING REPORT (Dated November 1980) IS TO BE READ IN CONJUNCTION WITH THE REPORT ABOVE.

SW Pass: The West flowing current is very strong, about 5 knots across entrance and in region of Fairway Buoy. Steer well to the East.

9 Mile Anchorage: Boat charges $35.00 per boat, any number persons, 24 hour basis. Runs on hour every hour for shore leave purposes by arrangement. Call 'Port Ship Services Poydras' on Channel 20. Minibus to New Orleans at $5.00 per person can be arranged.

Tugs/Pilot: Minimum 2 hours' notice, order through Agent.

VHF: Agent: On Channel 16 and 73, Tricon (Trammo Agent) on Channel 16 and 73. Chandler: Sarussen Marine, on Channel 16 and 9.

Films: Sea View Films: Best to cable direct as per Walport Instructions. Also change Vidpack. Change from launch if required when passing New Orleans.

Burnside Anchorage: Boat Charges: $20 per boat plus $5 per person. Call "Webber Marine" Burnside on Channel 16 and 18A.

Agents: Call Tricon Burnside on Channel 16 and 73 (Trammo Agents).

Donaldsonville: Depths – See latest chart, shoaling alongside CF Industries and off Triad.

Berthing/Leaving scraped alongside Triad berth, maximum 30 ft. off. Turn when one ship's length below "Triad", lower dolphin.

Three "Parish" tugs used in and out.

To line up manifold at C.F.I., pilot ladder gate should be in line with gangway on lower dolphin.

Water rate is 5 t.p.h. from fire hydrant stand pipe, not hose.

Water by barge from Baton Rouge at $4.00 per tonne. Minimum 100 tonnes plus $85.00 per hour for tug. Minimum 4 hours =$740.00.

No bunkers officially allowed alongside, but can probably take diesel at night.

Agents: Tricon in Burnside are now Trammo Agents.

DULUTH-SUPERIOR, Minnesota: 46.49 N. 92.09 W.

Refer to "St. Lawrence Seaway" for important general information.

PILOTAGE: U.S. or Canadian Pilot compulsory except when Master or officer specially qualified to navigate waters concerned. Pilots obtained from Upper Great Lakes Pilots Inc., 802 Garfield Avenue, Duluth. Duluth entry – Pilots picked up at point 2 miles due East of pierhead lights. Superior entry – pick up Pilot 2 miles N.N.E. of lighthouse. Advise Agents 24 hours in advance of ETA for scheduling Pilot, Customs, Immigration, and Agricultural Inspection. Masters should hold to the South of convergence of shipping lanes at the Duluth Entry and to North of this convergence at Superior Entry when approaching to embark a Pilot.

ANCHORAGES: Anchorage areas near Duluth and Superior entries are South and Eastward and North and Eastward respectively of main channel through harbour. Marked by anchorage buoys. Vessels must only anchor clear of channels at all times.

RESTRICTIONS: Because of varying conditions of wind and current, no restriction placed on speed passing through entry piers at either Duluth or Superior entry. Speed throughout harbour limited to 7 knots. Speed through bridges other than the Aerial Bridge at Duluth entry limited under normal conditions to 6 miles per hour. Because of current conditions at inner end of Duluth entry, both inbound and outbound vessels must leave vertical black/white striped mid-channel or traffic buoy on starboard hand. This gives outbound ships maximum straight run.

MAX. SIZE: Draft 26 ft. Duluth Harbour Entry: Duluth ship's canal, minimum width 300 ft. Superior Entry: Minimum width 500 ft. minimum depth at inner end of 27 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Prior to entering harbour vessels must make "Security Call" on Channel 51 (2185 kHz) from 10 to 20 minutes in advance advising intended movement. All vessels should monitor Channel 51 at all times when under way to determine position and intent of other vessels moving in constricted areas within harbour and approaches.

TUGS: Available, not compulsory.

BRIDGES: Aerial Bridge spanning Duluth entry vertical clearance of 138 ft. Signal for opening bridge shall be given by vessels approaching from lakes, in all circumstances, when not less than 1 mile from bridge. A flashing amber light on harbour side of Aerial Bridge warns outbound vessel of approach of inbound vessel in lake.

BERTHING: *Clure Marine Terminal.* Also see "Developments".

Length of dock: 6,600 lineal ft., 9 ship berths, 5 for unloading/loading, 4 for fitting, cleaning, standby, etc. Water depth: 30 ft. 2×90-ton Clyde gantry cranes for container handling. 1×35-ton mobile crane.

13 grain loading berths.

Duluth Iron & Metal	– length of berth 1,586 ft.	– water depth 26 ft.
Meehan Seaway Services Ltd.:	– length of berth 1,059 ft.	– water depth 22 ft.
Hallet 3	– length of berth 2,080 ft.	– water depth 23 ft.
Hallet 5	– length of berth 2,373 ft.	– water depth 23 ft.
Hallet 6	– length of berth 2,060 ft.	– water depth 23 ft.
Northern Pacific No. 2	– length of berth 2,415 ft.	– water depth 22 ft.
Paper Calmenson-Duluth	– length of berth 853 ft.	– water depth 21 ft.
Paper Calmenson-Superior	– length of berth 700 ft.	– water depth 20 ft.

St. Lawrence Cement Co.: The unloader uses a series of high-speed screw conveyors to discharge at the rate of 675 tonnes per hour. The unloader can also travel the length of the ship berth, discharging the cement on to dockside conveyor belt systems. Length of berth 700 ft. Storage capacity 43,000 tons.

MEDICAL: All medical assistance available.

DENSITY: Fresh water.

FRESH WATER: Available at most docks in both ports.

FUEL: Available from dock or by barge.

FIRE PRECAUTIONS: No open fire permitted on deck of any vessel while in harbour. This restriction does not apply to a vessel at a shipyard which will be governed by this shipyard's local rules, nor to vessels in lay-up or fit-out status at ore docks.

Ocean vessels, upon docking, shall put on off-shore side of vessel, wire rope lines fore and aft as tow lines for use in pulling ship off dock face in case of fire. Such tow line shall be securely made fast to bitts with eye about 1 ft. above the water.

CERTIFICATES: Masters are required to present Safety Inspection Certificate of cargo handling equipment and gangways to stevedoring companies and other employers of harbour labour upon request.

IDENTIFICATION CARDS: Required by Immigration.

REPAIRS: All ship repairs can be effected.

DRY DOCKS: At Superior, one 831 ft. by 95 ft. and one 628 ft. by 76 ft.

SHORE LEAVE: Allowed.

DEVELOPMENTS: A new grain bagging facility under construction is a joint project of General Mills and the port authority. The facility is located at General Mills Elevator "A" on Rice Point and is expected to be operational early 1985.

A container terminal, together with all the back-up facilities located near the S.W. corner of Clure Terminal is now available. The container crane will be a Paceco Economy Portainer with a capacity of 30 tons, outreach 84 ft., back reach 22 ft. The Portainer is equipped to handle 20 ft., 35 ft., and 40 ft. containers.

AUTHORITY: Seaway Port Authority of Duluth, P.O.Box 6877, Duluth, Minnesota 55806. *Tel:* (218) 727-8525. *Telex:* 910-561-0052 Norcenter Dul. *Contact:* Davis Helberg, Port Director. Bill Cortes, Public Affairs Director.

EL SEGUNDO, California: 33.54 N. 118.27 W.

OPERATOR: El Segundo is a Chevron U.S.A. offshore multi-buoy marine terminal and refinery.

LOCATION: The terminal Sea Buoy is located approximately 600 yards W.S.W of Berth No. 3 in 102 ft. of water at Lat. 33° 54′ 28″ N., Long. 118° 27′ 29″ W. This lighted bell buoy is painted red with 6 in. high white letters reading, "2 ES". It exhibits a white flashing light every 4 seconds (flash 0.4 secs., eclipse 3.6 secs.). The lantern is 11 ft. above water.

In addition to the many tanks of the El Segundo Refinery, the chimneys of power plants adjacent to the Marine Terminal form prominent landmarks. Two 334 ft. chimneys painted with alternating red and white horizontal stripes mark the Los Angeles Department of Water and Power Scattergood Steam Plant located just North of the Terminal. Directly South of the Terminal is a set of 4 shorter chimneys at the Southern California Edison Co. Power Plant.

DOCUMENTS: Five copies each of the following documents are required for entry and clearance:

Crew List (I-418)
Crew's Effects Declaration (1304)
Ship's Stores Declaration (1303)
Inward Foreign Manifest (1302: If vessel is to discharge at more than one port, each port, with its cargo, must be listed on a separate manifest).

MAX. SIZE:

Berth No.	*Maximum Draft* (ft.)	*Maximum Length* (ft.)	*Vessel Tonnage* (d.w.t.)	*Water Depth at MLW* (ft.)
1	28	550	Up to 30,000	38
2	42	650	Up to 50,000	50
3	51	1,000	Up to 150,000	63
4	56	1,000	Up to 150,000	65

BERTHING: It is expected that the vessel will provide berthing and messing facilities for the 3 man launch crew as well as for the Mooring Master.

Mooring Gear: Each anchor shall be equipped with no less than 10 shackles of chain. Vessels over 50,000 d.w.t. shall have at least 12 shackles on each anchor. Wires on mooring winches should be at least 1,000 ft. (preferably 1,200 ft.) and should be 1.25 in. to 1.625 in. in diameter, depending upon the size of the vessel. Constant tension winches must be braked by means of manual brake.

Synthetic fibre lines of dacron or polyester must be at least 9 in. in circumference and 120 fathoms in length.

NOTE: Polyester/Dacron lines are the only lines acceptable. If vessel is not so equipped polyester mooring lines can be rented from the terminal.

Mooring lines should be located as follows:

1. At least three lines on the main deck forward
2. At least three lines on the main deck aft
3. At least four lines on the poop deck.

If vessel over 100,000 d.w.t. fittings must permit doubling of all lines. Each synthetic line requires a separate bitt.

Mooring Facilities: Berth No. 1 is a 6-point mooring and is used for transfer of refined stock, primarily lub oils and chemical. The unlighted spar buoys mark the offshore end of the pipe-lines and is located approximately 1 mile East of the sea buoy and 1,100 yards offshore. There are also 3 hose marker buoys, one for the end of the chemical hose string and one for the end of each lub oil strings. The chemical hose string consists of seven 8 in. diameter × 25 ft. lengths. The lube oil strings are a parallel set of seven 8 in. diameter × 25 ft. lengths which are connected at the ship-end by a piping manifold which the ship provides.

Berth No. 2 is a 6-point mooring and is used for transfer, of light oils (primarily gasoline and jet fuel). It is located approximately 700 yards N.W. of Berth No. 1 and 1,600 yards offshore.

Berth No. 3 is a 7-point mooring used for the transfer of fuel and crude products. It is located approximately 750 yards West of Berth No. 2, and 2,400 yards offshore.

Berths Nos. 2 and 3 are each equipped with 1 unlit spar buoy and a can buoy. The seaward spar buoy marks the location of the offshore end of the submarine hose when the hose is on the bottom. A can buoy, or hose marker buoy, is connected to the end of the submarine hose by a chain. The submarine hose string in Berth No. 2 consists of nine 12 in. diameter × 25 ft. lengths of which one is over-the-rail, connected to the seaward end of a 16 in. submarine pipe-line leading to the shore facility. The submarine hose string in Berth No. 3 is connected to the seaward end of a 26 in. submarine pipe-line and a 12 in. line for circulation, by seven 16 in. diameter × 25 ft. lengths of hose followed by one 12 in.×25 ft. length hose and one 12 in. diameter × 30 ft. long over-the-rail hose.

Berth No. 4 is equipped with 1 unlit spar buoy and 1 unlit can buoy. The inshore spar buoy marks the end of the 36 in. submarine line and 14 in. circulation line. One hose string comes off the main 36 in. submarine line. The hose string consists of 5×35 ft. long lengths of 20 in. hose, followed by a reducer and then 2×25 ft. long lengths and 1×30 ft. long over-the-rail length of 16 in. hose. The end of the hose string is connected to a can buoy by a chain.

NOTE: All berths are equipped with UHF direct dial radio telephones. VHF marine operator is also available, marine operators are located at Redondo Beach and San Pedro.

Hose Handling: The vessel will be expected to have suitable equipment on deck and ready for making the connection to the submarine hose.

Berths No. 1 and 2 require lifting capacity of at least 5 long tons.

Berth No. 3 requires a lifting capacity of at least 7 long tons for vessels up to 30,000 d.w.t. and at least 8 long tons for vessels over 30,000 d.w.t.

Berth No. 4 requires a lifting capacity (calculated load) of 10 long tons.

Procedure for Discharging: At the completion of most cargo discharges the vessel will be required to receive a 150 bbl. hose wash displacement of cutter stock or gas oil. This is to prevent the hose from plugging while not in use.

Product Transfer Rates, Pressure and Temperature: Lubricants and chemicals are transferred at Berth No. 1 at varying rates depending on the particular product, the maximum rate being approximately 2,100 bbls.p.h. Hoses are rated to 275 p.s.i.

Gasoline and jet fuel loaded at Berth No. 2 are usually transferred at 7,000 – 12,000 bbls.p.h. with a pressure at the ship's rail not to exceed 50 p.s.i. Gasoline and jet fuel are discharged at Berth No. 2 with a pressure not to exceed 125 p.s.i. at the ship's rail. Hoses are rated to 150 p.s.i.

Fuels and crude are loaded at Berth No. 3 at rates to 20,000 bbls.p.h. No. 3 Berth hoses are heavy duty 275 p.s.i. rated. Vessels are expected to maintain discharge pressure of at least 125 p.s.i. at the ship's rail and/or a flow rate of 20,000 – 25,000 bbls.p.h.

No. 4 Berth hoses are heavy duty 275 p.s.i. rated, and the system has a normal working pressure of 180 p.s.i. On this one hose system, vessels are expected to maintain flow rates of up to 50,000 b.p.h.

Sumatran crude cargo will not be accepted by the facility unless the ship's average tank temperature is at least 125°F. However, the average temperature for Sumatran crude should not exceed 130°F. in order to avoid excessive vaporization of the light fractions in the crude. Heavy viscous residue fuel cargo will not be accepted from a ship unless the ship's average tank temperature is at least 130°F.

RADIO: *Pre-arrival radio message to ship:*

The vessel's Agent will normally advise the vessel by radio of the following general information when the vessel is approximately 3 days out:

Mooring Master boards 2 miles S.W. sea buoy Lat. 33° 54.5′ N., Long. 118° 27.5′ W.

Have starboard hose boom derrick rigged (if so equipped) and 7 good strong mooring lines ready – 3 main deck forward, 3 main deck aft, 4 poop deck (polyester lines only).

Sumatran Crude average cargo temperature must be 125°F on arrival.

Anchor in anchorage "A" or "B" as directed by message from shore.

Have pilot ladder rigged on starboard side.

Assure 125 p.s.i. pressure on riser during discharge.

Any Customs, quarantine, etc., special information.

Advise if all cargo pumps are in good operating condition, and best average discharge rate.

Radio Communication Prior to Arrival:

Estimated time of arrival (ETA) and requirements for services should be directed to the ship's Agent. ETAs should be sent 7 days, and repeated 3 days and 24 hours, prior to arrival.

Within 2 hours of arrival, communications may be established with the mooring launch via VHF radio Channel 10.

Radio and Telephone Ship to Shore Communications:

UHF Radio. The Mooring Master is equipped with a UHF radio for direct communications with the Terminal Control room at all times from the start of mooring until the vessel has cleared the mooring on departure.

MEDICAL: Several hospitals are available in the area. US Coast Guard or local ambulance service may be expected to know what hospital is best suited to handle a particular emergency.

FRESH WATER: Potable water is not available at this mooring. Water barge service is not available in the area. Closest supply is the harbour at San Pedro.

FUEL: Bunker fuel for ship's use is not available in the moorings of the El Segundo Marine Terminal, but may be arranged through Chevron International, San Pedro.

BALLAST: No ballast can be accommodated at the Terminal.

CONSULS: Consulates of most of the maritime Nations are maintained in both the cities of Los Angeles and Long Beach.

AIRPORT: The Terminal is located approximately 2 miles South of Los Angeles International Airport.

TIME: Standard Time along the entire West Coast of the United States is GMT minus 8 hours. Daylight Saving Time is used all along the coast. Clocks are advanced 1 hour in Summer.

WINDS/TIDES/CURRENTS: *Winds:* Westerly, onshore winds usually prevail. Gales are very rare in Santa Monica Bay, but the local thermal winds blowing from a Northerly direction sometimes necessitate interruption of transfer operations and require moving a ship from the mooring to anchor.

Northerly winds occur during the period from October through May.

In the Autumn and Spring, duration averages 4 to 6 hours

In November, December and January, duration averages 10 hours.

Velocities up to 52 knots have been recorded.

Tides and Currents: Normal tides of approximately 6 ft. pose no significant problems in this open roadstead.

Currents run unpredictably North or South along the coast in the vicinity of the Terminal. The current is most commonly from North to South and is stronger in Summer than in Winter.

TELEPHONE: Each berth is equipped with telephone service. To call El Segundo Terminal, ask Mooring Master. To call local outside numbers within the Los Angeles area, ask Mooring Master.

GENERAL: *Supplies:* Modest quantities of supplies may be taken aboard while at the moorings if absolutely necessary, provided the Mooring Master gives prior approval. This practice is discouraged in view of the sea swell and wind conditions that can develop in the open roadstead of the moorings, as well as the long distances to normal marine supply facilities.

Launch service: A company operated launch may be chartered for vessel's use through the vessel's Agent at the option of the Owner's representative. This launch operates between the moorings and the Port-O-Fino Dock in King Harbour, Redondo Beach, on a published 4 hours' schedule which may be obtained from the Mooring Master. A one-way trip takes approximately 40 minutes. There is a waiting room for use by all tanker personnel awaiting the launch. The waiting room is in the second building facing the yacht moorings. Blue arrows are painted on the side walk between this waiting room and the launch ramp, to assist in identifying the waiting room.

Pilot Ladder: The vessel shall rig a safe and secure pilot ladder or pilot hoist (not accommodation ladder) for the Mooring Master and Government Officials to use in boarding and leaving the vessel.

Air Pollution: Any vessel showing visible smoke in excess of 3 minutes is in violation and may expect to be cited and required to pay substantial fines.

Dumping of Garbage: Dumping of rubbish or garbage overboard within 50 miles of the coastline is prohibited.

AUTHORITY: *Operator:* Chevron Shipping Co., P.O.Box 910, San Pedro, California 90733, U.S.A. *Tel:* (213) 832-6478. *Telex:* TWX 910-345-6396. *Contact:* Captain Gary R. Roberts, Port Superintendent/ Mooring Master.

U.S.C.G., Captain of the Port, Los Angeles/Long Beach, 165 N. Pico Avenue, Long Beach, CA 90802. Tel: (213) 590-2315.

El Segundo is an open roadstead marine terminal with no official Port Authority other than U.S.C.G.

ERIE, Pennsylvania: 42.10 N. 80.05 W. (See Plan Book)

Refer to "St. Lawrence Seaway" for important general information.

PILOTAGE: Not compulsory. Seaway Pilots will assist if required.

RESTRICTIONS: Navigation season from 14th April to 26th December approx. The port is connected to Lake Erie by an entrance channel, depth 28 ft. Vessel's size restricted by Seaway locks.

MAX. SIZE: 730 ft. length; 26 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Quarantine Station. Quarantine procedure undertaken at Quebec City for incoming vessels from foreign ports.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Master must give at least 24 hours' notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also, at least 24 hours' notice of ETA at first U.S. discharge port is required.

TUGS: Available. Not compulsory, but sometimes necessary in bad weather.

BERTHING:

City of Erie Grain Elevator: Owned by the Port Authority, leased by the Port Authority, berthing length 980 ft., depth of water alongside 24 ft., 2.5 million bushel capacity.

Erie Marine Inc. (subsidiary of Litton): New ship assembly yard with graving dock (largest on Great Lakes), available for dry dock repairs.

Ore Dock: 1,000 ft. long, 26 ft. – 27 ft. of water alongside. The ore dock has 400,000 ton storage pad available for lease.

Port Authority East Bay Industrial Site: 75 acres available for sale or lease.

Erie International Marine Terminal: Leased to Codan Corporation, stevedores for the Port of Erie; 1,400 ft. long, with 28 ft. of water. Terminal used for bulk and general cargo; 23 acres; 750,000 sq. ft. of warehousing and transit sheds with truck and rail loading facilities; 200, 140 and 125 ton mobile cranes equipped with magnets, buckets and gear for heavy lifts, also 300 ton stiff leg crane. Terminal served by ConRail with reciprocal switching for N&W and B&LE railroads. A total of more than 100 acres of waterfront property is available where an industrial complex may be constructed.

DENSITY: Fresh water.

MEDICAL: All facilities available.

FRESH WATER: Obtainable by pipe-line at all docks.

FUEL: All grades available by pipe-line at all docks.

REPAIRS: Local shipbuilding company can handle most repairs. Dry dock available.

AUTHORITY: Erie-Western Pennsylvania Port Authority, Room 507, Municipal Building, Erie, Pa. 16501. *Tel:* (814) 456-8561. *Contact:* Joseph G. Rosenthal, Port General Manager.

EUREKA, California: 40.48 N. 124.10 W. (See Plan Book)

DOCUMENTS: In addition to the documents detailed below, Agent will present to Master normal Customs forms to be signed, such as Master's Oath, Permit to Lade, Inward & Outward Manifest, etc. These forms will be filled out by local Agent and Customs Broker and presented to local Customs house when entering and clearing vessel:

Foreign Flag Vessels:

I. Entering from another U.S. port:
- 3 Crew Lists.
- 3 Passenger Lists (only if passengers on board).
- 3 Curio Lists.
- 3 Store Lists.
- Permit to Proceed (issued at last U.S. port).
- Travelling Manifest (only if there is foreign cargo on board).
- Ship's Register.

II. Entering from a foreign port:
- 3 Crew Lists.
- 3 Passenger Lists (only if passengers are on board).
- 3 Curio Lists.
- 3 Store Lists.
- Travelling Manifest.
- Permit to Proceed.
- Ship's Register.
- Ship's tonnage tax Certificate.
- Clearance from a foreign port.

PILOTAGE: Telegraphic address of Pilot station "Humbar". 24 hours advance notice of ETA; in case of change in ETA give minimum 4 hour notice. Contact pilot boat on VHF 156.8 (Channel 16) or radio watch on 2182. Radio watch is maintained 2 hours prior to arrival at sea buoy on Channel 16. Working Channels are 6, 13, 18A and 77.

No Pilot boat on station. Local Pilots use tug "Thor" length 65 ft. 800 h.p. Tug colours: black funnel, red and white superstructure and black hull. As no Pilot boat on station, sound signals not required. Visual international flag and light signals observed. Pilot will board vessel within 1 mile radius North, South and West of sea buoy. Sea-buoy located 1.4 miles from end of North jetty lined up with range lights bearing 105 degrees true.

Specific requirements: *(a)* Pilot ladder with spreaders in accordance with Solas regulations, and 9 ft. above water. *(b)* At night – brilliant light to illuminate ladder. *(c)* Recommended anchorage outside Humboldt Bay located 1 mile South of sea-buoy in 15 fathoms of water.

ANCHORAGES: Inside harbour, weather permitting. Light draft vessel (22 ft. or less) South of Fairhaven Dock (Crown Simpson) and West of Standard Oil Dock. Deep draft vessels (22 ft. to 32 ft.) will anchor North of Union Oil Terminal and South of Samoa Channel entrance buoys.

RESTRICTIONS: Humboldt Bay is a 24 hour port; restrictions if any would depend upon manoeuvrability and horsepower of vessel during peak tide. Range of tide normally 8 ft., extreme cases 10 ft.

MAX. SIZE: Max. LOA 740 ft., max. beam 115 ft. Max. draft 35 ft.

HEALTH: See "Health: All ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Send cables through one of the following stations:

ITT World Communications, Inc. – San Francisco Marine Radio Station KFS.

RCA Global Communications – San Francisco Marine Radio Station KPH.

TUGS: 3×800 h.p. tugs available, 1 tug acts as pilot boat, other tug joins vessel when in harbour. Tug's lines are normally used, occasionally a ship's line is used. No extra charge assessed for use of tug's line. Two tugs minimum are used.

BERTHING: No specific requirements relating to berthing; normal procedures prevail. Vessel normally docks stemming the tide.

Berths presently available at Eureka as follows:
- Crown-Simpson Pulp Co.
- Eureka Forest Products.
- Louisiana-Pacific Corporation.
- Humboldt Dock & Shipping Co.
- Olson Terminal.
- Standard Oil of California.
- Union Oil of California.
- North Coast Exporting Co.

Harbour channels maintained to 35 ft. zero tide except for South Bay Channel to Olson Terminal which is maintained at 26 ft. Most of berths at above-mentioned docks also maintained at 35 ft. zero tide; however, some occasionally fill in and recommended check with Agent as to depth available at specific dock where vessel intends moor and load.

Also see "Developments".

STEVEDORES: 6 local gangs available. Groups ordered at 0630 hrs. in the morning for both day and night gangs. Therefore essential that local Agent or stevedore company receives accurate ETA by 0600 hrs. in the morning. Normally, vessel will advise arrival sea-buoy with a 24-hour ETA and correct ETA at a later time if necessary. The basic commodities exported from Eureka are woodpulp, woodchips, logs and lumber.

Westfall Stevedore Co. Cable Address: Westfall, Eureka. Tel. (707) 443-5688.

MEDICAL: Not necessary for Agent to receive advance notice of required medical attention unless ambulance and doctor are required on arrival. 3 hospitals in immediate area. Inoculation and vaccination certificates should be up-dated.

TANKERS: 2 tanker berths available: Standard Oil of California – deepest draft 35 ft. at zero tide. Union Oil – deepest draft 35 ft. at zero tide. Normally only Company tankers use own facilities. Facilities privately owned and are not available for bunkering other vessels.

DENSITY: Salt water.

FRESH WATER: Available all berths. Delivery by hose. Rate of delivery: 10 t.p.h.

FUEL: If bunkers required, Agent must go through major contractors, who in turn will inform their local supplier of requirements. Generally speaking bunkers are only supplied to vessels on an emergency basis in limited quantities. The bunkers usually diesel grade and delivered by truck on a prearranged schedule.

GANGWAY/DECK WATCHMEN: Services of gangway guards available if required by ship.

OPENING/CLOSING HATCHES: Normally stevedores' work unless done prior to docking. Vessel's crew may assist in opening and closing hatches, if hatches require special attention.

CERTIFICATES:
- Ship's register.
- Load-line Certificate.
- Derat Certificate.
- Cargo Gear Certificate.
- Tonnage Tax Certificate and all other usual certificates required.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes and 1 lb. of tobacco. Wine and/or Spirit, 1 bottle (approx. 1 quart).

CARGO GEAR: Must be in good order and safe operating condition and all cargo gear certificates must be valid.

IDENTIFICATION CARDS: Alien seamen require Crewman Landing Pass (U.S. Form I-95).

CONSULS: None. Nearest consuls at San Francisco.

REPAIRS: Small welding jobs, and minor machine work only. Major repairs normally carried out in San Francisco.

DRY DOCKS: None.

REPATRIATION: Normally done in conjunction with San Francisco, Portland, Los Angeles or Seattle Agent.

AIRPORT: Airport located approximately 20 miles North of Eureka. Limousine service available. Major airline, Republic Air Lines. At present 3 flights per day to San Francisco and 1 flight per day to Portland.
TIME: Local time is Pacific Standard Time and is GMT minus 8 hours. However, from the last Sunday in April to the last Sunday in October, Eureka is on Daylight Saving Time.
HOLIDAYS: No work performed on following holidays: New Year's Day (January 1st); Thanksgiving Day; Christmas Day (December 25th).
POLICE/AMBULANCE/FIRE: Eureka City Police 442-4545; Eureka City Ambulance 442-4551; Eureka Fire Department 443-5656; Humboldt County Sheriff Department 443-5671; Arcata Fire District 822-2424; Humboldt Fire District No. 1 442-1212.
TELEPHONES: No arrangements for placing telephones on board; however, there are pay phones nearby at each dock as well as phones in nearby offices.
SERVICES: Specific services such as tank cleaning, compass adjusting, tank washing,etc., are not normally performed in the port of Eureka and are usually performed in one of the close major ports such as San Francisco; however, there are facilities available for minor repair.
SHORE LEAVE: Crew members allowed ashore unless restricted for Customs or Immigration reasons.
DELAYS: Berthing delays seldom incurred primarily due to the fact that the prime Agents are always in contact with the local Agent at Eureka informing them of vessel's ETA and prime Agent is always advised with regard to all arrivals and possible berth conflicts at this port.
DEVELOPMENTS: Deepen North Bay Channel to 35 ft. and widen bends in channel at Channel Miles 0.74 and 2.6. Deepen Samoa Channel and outer reach of the Eureka channel to 35 ft. Provide an anchorage area in North Bay, at a suitable location between jettied entrance channel and Gunther Island, 35 ft. deep, 1,200 ft. wide and 1,200 ft. long.
AUTHORITY: Humboldt Bay Harbor, P.O.Box 1030, Eureka, California 95502-1030. *Tel:* (707) 443-0801. *Contact:* Jack B. Alderson.

EVERETT, Washington: 47.59 N. 122.13 W.

(See Plan Book)

DOCUMENTS, PILOTAGE, etc.: Refer to "Tacoma".
PILOTAGE: Pilot boards off Port Angeles Pilot Station.
ANCHORAGE: Unlimited deep water anchorage in Possession Sound.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available, join vessel off berth. 17 tugs, 150 to 900 h.p.
BERTHING:
Weyerhaeuser Berth: Length 700 ft.
Pier No. 1 South: Usable berth length 520 ft.; Approach water depth 90 ft.; Water depth at pier 35 ft. MLLW; Plank and piling; 20 ft. Apron; Transit shed with 57,960 sq. ft. on pier; Access by road, barge and rail.
Pier No. 1 North: Usable berth length 600 ft.; Approach water depth 90 ft.; Water depth at pier 40 ft. MLLW; Multi-purpose 35-ton bridge crane (Containers – convertible for bulk cargo handling); Rail spur on dock; Plank and piling; 40 ft. Apron; Transit shed with 36,000 sq. ft. adjacent to pier; Access by road, barge and rail.
Pier "B": Usable length 450 ft.; Approach water depth 32 ft.; Water depth at pier 40 ft.; Plank and piling; 50 ft. Apron; Access by road and barge.
Pier "D": Usable length 500 ft.; Approach Water depth 32 ft.; Water depth at pier 40 ft.; Two 35-ton Whirley cranes; Plank and piling construction; 45 ft. Apron; Access by road and barge.
Pier "E": Usable length 450 ft.; Approach water depth 32 ft.; Water depth at pier 40 ft.; Plank and piling construction; 45 ft. Apron; Access by road and barge.
Norton Terminal: Usable length 703 ft.; Approach water depth 90 ft. Channel and berth depth 37 ft. 20 acres terminal (max. terminal development – 80 acres). Container cranes available. 36,000 sq. ft. warehouse. Rail spur on terminal.
STEVEDORES: 11 local gangs, additional gangs may be imported if required.
HOLIDAYS: See "Tacoma".
MEDICAL: Doctors and local hospital available.
DENSITY: Changes daily as port is at the mouth of a fresh water river.
FRESH WATER: Available at wharves.
FUEL: Available by barge from Seattle.
GANGWAY/DECK WATCHMEN: Required only if detainees aboard.
CUSTOMS ALLOWANCES: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.
AIRPORT: Seattle – Tacoma International Airport is 45 miles South of city of Everett on excellent highway. Driving time is approx. 45 minutes.
POLICE/AMBULANCE/FIRE: Port of Everett Security: 259 – 3164; Everett City Police: 259 – 8711; Everett City Fire Dept.: 252 – 1111; Ambulance Service: 252 – 1234.
TELEPHONES: Will be placed on board vessel on request. Charges are only for calls made. Arrangements should be made through ship's Agent.
SHORE LEAVE: Crew members are able to visit Everett at all times.
AUTHORITY: Port of Everett, 2928 Terminal Avenue, P.O.Box 538, Everett, Washington 98206. *Tel:* (206) 259 – 3164. *Telex:* 4740140-Poeui. *Contact:* John G. Belford, Executive Director.

FALL RIVER, Massachusetts: 41.42 N. 71.10 W.

DOCUMENTS: If first port of call in U.S., 2 complete Customs Manifests describing all cargo on board and ports of discharge. Also 1 Cargo List for Fall River cargo; 3 Crew's Lists; 3 Stores Lists; 3 Curios Lists; Ship's Register, Load-line Certificate and Tonnage Tax Certificate.
PILOTAGE: Vessel first contact ship's Agent for Pilot and tug arrangements. Northeast Pilots' Association radio call letters KDF-375 on frequency 156.9 kHz, Channel 18. Usual Pilot pick-up is at Brenton Reef Light Tower off Newport, R.I.
RADIO: Chatham Radio or Amagansett Radio.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Tugs for N.E. Power Station meet at Buoy 6; all other berths North, meet tugs at Buoy 10. Tugs provide own lines at no extra charge.
2 tug companies serve Narragansett Bay and Port of Fall River.
4 tug boats – 24 hour dispatching service. 2×3,000 h.p. boats.
BERTHING: *State Pier:* Principal maritime cargo terminal at State Pier. Berth 600 ft. long with depth of 35 ft. MLW alongside.
New Ro-Ro facility 80 ft. wide beam by 42 ft. inboard depth completed in 1979. (8° incline at water's edge – concrete deck on wood piling).
All utility services available. Further information telephone 617-674-5707 or ship Agents.
BRIDGES: All bridges have 135 ft. clearance with exception of Brightman Steel Bridge at approach to Montaup Electric Co. and Shell Oil docks. This bridge has a draw clearance of 97.5 ft. and passage allowed for vessels with less than 75 ft. beam. No unusual requirements. Practice is to depart on flood tide. (See "Developments".)
TANKERS: Berth at Shell Oil Docks. Depth alongside 35 ft.
FRESH WATER: Available at most berths. State Pier delivery is at 125 pounds pressure.
OPENING/CLOSING HATCHES: Usually performed by stevedores.
CERTIFICATES: All certification of vessel, safety conditions and radio facilities should be available for U.S. Coast Guard.
CARGO GEAR: No additional safety requirements.
TELEPHONES: Available at most berths. Contact Agents.
IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95 issued for the same vessel.
TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.
HOLIDAYS: New Year's Day (January 1st); Washington's Birthday (February 22nd); Patriots' Day (April 19th); Memorial Day (May 30th); Independence Day (July 4th); Labour Day (1st Monday in September); Columbus Day (October 12th); Veterans' Day (November 11th); Thanksgiving Day (last Thursday in November); Christmas Day (December 25th); or any day celebrated in lieu thereof.
SHORE LEAVE: Permitted, but consult Agents.
DEVELOPMENTS: Plans for construction of a new 150 ft. wide draw bridge to replace the existing Brightman Street Bridge. This will mean unobstructed use of the entire port area.
AUTHORITY: Fall River Port Authority, State Pier, Water Street, Fall River, Massachusetts 02726. *Tel:* (617) 674-5707. *Contact:* William J. Torpey, General Manager.

FERNDALE, Washington: 48.49 N. 122.43 W.

(See Plan Book)

Mobil Oil Tanker Terminal
DOCUMENTS/HEALTH/etc.: Refer to "Seattle".
PILOTAGE: Compulsory. Pilot boards at Port Angeles.
TUGS: Tug escort required if vessel is loaded and is larger than 40,000 d.w.t. Tug horsepower must be 5% of d.w.t. Available up to 3,000 h.p. Additional tugs ordered from Seattle if required.
RESTRICTIONS: Vessels enter any hour day or night.
Regulations prohibit tankers larger than 125,000 d.w.t. in U.S. waters East of a line from Discovery Island Light to New Dungeness Light.
MAX. SIZE: Length 1,000 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
BERTHING: Terminal used for crude and product discharging. Vessels berth alongside finger pier, lines to quick release hooks. Inner berth for barges only. Outer berth 900 ft. long, depth alongside 40 ft. at MLW. Dirty ballast water 3,000 long tons with prior notification.
OPERATOR: Mobil Oil Corporation, Ferndale Refinery, P.O.Box 8, Ferndale, Wa. 98248. *Tel:* (206) 384-1011. *Telex:* 910-449-2412. *Contact:* W. D. Robb, Refinery Manager.

FORT PIERCE, Florida: 27.27 N. 80.19 W.

PILOTAGE: Compulsory. Pilot boards at sea buoy. Send vessel's ETA to Agent 72 hours, 48 hours and 24 hours prior to arrival.
ANCHORAGE: Vessel anchors and awaits Pilot 0.5 miles seaward of sea buoy.
RESTRICTIONS: Vessel is able to berth and unberth during hours of darkness if the weather is clear. The leading lights are good but the channel is narrow and marked by unlit buoys. Diameter of turning basin 1,000 ft. Least depth of water in the channel from sea to berth 26 ft. (dredging in progress).
MAX. SIZE: Max. draft 25 ft. (1 ft. keel clearance in the turning basin required). Range of tide 1 ft. 3 in.
TUGS: One 500 h.p. tug and one 1,000 h.p. tug available. Not advisable to manoeuvre without use of tug.
RADIO: Lantana Radio.
VHF: Channels 16 and 13. Watch only maintained when vessel expected.
BERTHING: The berth is located in Fort Pierce inlet. Length of jetty 411 ft. At present only 1 berth available on the North side of the jetty. Dredging is under way on the South side. Distance from entrance to berth 3 miles.

All moorings placed on the jetty and vessels lay quietly alongside. However, with a S.E'ly wind it may be difficult to keep the after end of the vessel alongside. Vessels are able to dock and undock at any stage of the tide, however, if vessel's draft is over 25 ft. suggest vessel waits for HW.
CARGO HANDLING FACILITIES: There are no facilities for bulk cargoes. No quay cranes. Ro/Ro facilities available for island type trade. There is sufficient mechanical equipment for handling palletised cargoes. Equipment or storage space for containers is available. An insulated/refrigerated storage shed has been built at the jetty.
FRESH WATER: Available.
FUEL: Not available in the port but could be supplied by barge or tanker truck.
MEDICAL: Doctor and hospital available.
AIRPORT: Local airport 5 miles from port, nearest international airport is within 2 hours by car.
SERVICES: Fresh provisions, laundry services, groceries and meats available.
REPAIRS: No facilities available.
GENERAL: Fort Pierce harbour is at present in the early stage of development. For many years the port has been used only for barge traffic and small craft and the inlet allowed to silt up. Over the last year a company, DNE Sales International, has bought the jetty and the adjacent land for the initial purpose of exporting Florida citrus.

The stevedoring company packing sheds are all owned by DNE Sales International. Ship chandlery is available.

At present depths in the turning basin which is approximately 1,000 ft. are no more than 26 ft. and the basin is not marked at its extremities so care should be taken to swing as near as possible on the leading lights. Alongside the wharf depths are 27 ft. with soft sand bottom and in the channel the least depth is 26 ft. but there are no official surveys yet in print. The latest information on U.S. chart 11475, gives depths of 25.7 ft. in entrance range and 20.5 ft. to 22.3 ft. for inner range, latest information in British Notice to Mariners gives 26 ft. depth, which in fact has been confirmed.

The buoys marking the edge of channel are unlit, although U.S. chart shows lighted buoys.

It is early days for this port, dredging is in progress and if all the projected improvements are carried through, including the deepening of the channel Fort Pierce will be a safe and efficient port. The controlling factor for "fruit vessels" is the length of the jetty, however if exports increase as anticipated there is a proposal to lengthen the jetty by 100 ft.

Most vessels arrive or depart at any tide or hour.

Stevedores are good and excel in citrus loading.

All Agency and stevedoring personnel are keen, helpful and anxious to co-operate fully to promote good relations.
AUTHORITY: Fort Pierce Port & Airport Authority, 2300 Virginia Avenue, Fort Pierce, Fl. 33450. *Tel:* (305) 461-6400. *Contact:* W. B. Lewis, Manager.

FREEPORT, Texas: 28.57 N. 95.21 W. (See Plan Book)

DOCUMENTS: See "Houston".
PILOTAGE: VHF Channels 6, 8, 12, 13, 14, 16 at sea buoy. Pilot Office (tel. 233-1120), 200 West 2nd, Freeport, Texas; Pilot boards 0.25 mile North of sea buoy. Anchor 1 mile from sea buoy if awaiting Pilot.
ANCHORAGES: 1 to 2 miles from sea buoy.
RESTRICTIONS: Depth 36 ft. at bar.
MAX. SIZE: Length 670 ft., draft 36 ft. for ships from bar to within upper turning basin, 30 ft. from upper turning basin to Public Facilities. Tide governing these dimensions – plus or minus 3 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Galveston Marine Operator.
TUGS: Join vessel at shore line. Tug's lines to be used, and no charge for use of lines.
BERTHING: 1 hour to reach berth. Deep water terminals at Public Facilities consist of 1,250 linear ft. of deep water bulkhead wharf with 2 modern transit sheds consisting of 200,000 sq.ft. 1 berth of 250 linear feet of deep water bulkhead wharf with transit shed of 36,000 sq.ft. In addition a back-up warehouse is available consisting of 60,000 sq.ft. The large transit sheds and back-up warehouse have railroad tracks under cover, permitting all-weather work and preventing cargo damage.

Ro-Ro facility in operation.

A new public liquid barge dock and tank farm in operation (in connection with the Old River Co.).

The Navigation District owns a total of 9,700 acres of land for future Port and industrial development, 6,500 ft. of this land is situated on the Brazos River.
CRANES: Vessel is required to use own gear, shore cranes are available in area for hire.
STEVEDORES: Obtained through Agent.
MEDICAL: Obtained through Agent and advance notice required. Doctors, hospital available.
DENSITY: 1020.
FRESH WATER: Available ex-wharf at Brazos Harbor.
FUEL: All grades available by barge from Houston.
GANGWAY/DECK WATCHMEN: None required but available through Agent.
OPENING/CLOSING HATCHES: Stevedore contract.
CUSTOMS ALLOWANCES: Local Customs Agent control.
IDENTIFICATION CARDS: None needed.
CONSULS: None. Nearest at Port Arthur or Houston.
REPAIRS: Available.
DRY DOCKS: None.
REPATRIATION: Possible, through Agent.
AIRPORT: Houston Intercontinental Airport – Houston, Texas (80 road miles to Brazos Harbor; Metro Airlines – Shuttle to Angleton, Texas (15 miles from Brazos Harbor).
TIME: GMT minus 6 hours. Daylight saving time starts last Sunday in April and ends the last Sunday in October – GMT minus 5 hours.
HOLIDAYS: New Year's Day (January 1st); Martin Luther King's Birthday (January 15th); Lincoln's Birthday (February 12th); Washington's Birthday (Third Monday in February); Good Friday; Texas Independence Day (March 2nd); St. Patrick's Day (March 17th); Decoration Day (Last Monday in May); Emancipation Day (June 19th); Independence Day (July 4th); Labour Day (First Monday in September); Columbus Day (Second Monday in October); Veteran's Day (November 11th); Thomas W. Gleason's Birthday (November 8th); Thanksgiving Day (Fourth Thursday in November); Christmas Day (December 25th). No work on Christmas Day or Labour Day.

If any of the above holidays fall on Saturday or Sunday the following Monday will be recognised as the holiday.
POLICE/AMBULANCE/FIRE: Police 239-1211; Fire 233-2651; Ambulance Service 233-2651.
TELEPHONES: No arrangements exist for placing telephones on board.
BANKS: First Freeport National. Tel: (409) 233-4401.
SERVICES: Tank-cleaning facilities available locally. Compass adjusting available from Houston.
SHORE LEAVE: Crew members allowed ashore.
AUTHORITY: Brazos River Harbor Navigation District of Brazoria County, 1001 Pine Street, P.O.Box 615, Freeport, Texas 77541. *Tel:* (409) 233-2667. *Contact:* Peter R. Schaff, Port Director.

GALVESTON, Texas: 29.17 N. 94.50 W.

(See Plan Book)

DOCUMENTS:
1 visaed Crew List.
3 Passenger Lists.
3 or more copies of complete Manifests of Cargo for discharge at all United States ports.
2 or more copies of Manifest of Cargo for each United States port.
1 Souvenir List.
1 Stores List.
Ship's Register.
Tonnage Tax.
Load Line Certificate.
Nationality Certificate.
No health document required.
PILOTAGE: Radio to local Agent who arranges Pilot and specifies boarding time. United States Coast Guard require 24 hours' notice of arrival at Galveston Bar. Contact pilot boats and pilot station on VHF Channel 12. Pilot boats marked "HP No. 1", 53 ft. long; "HP No. 2", 61 ft. long; "HP No. 3", 106 ft. long. Pilot boats can be signalled by light in international code. Pilot taken on board at sea buoy No. 1 located 6.7 miles from Galveston.
ANCHORAGES: In Bolivar Roads, 6.7 miles inwards from sea buoy No. 1. Depths 32 ft. – 34 ft.
RESTRICTIONS: Prolonged North winds can reduce water level as much as 4 ft. in Winter. Channel depth 40 ft.
MAX. SIZE: No length restrictions. Draft according to berth depth.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: International Telephone and Telegraph station Galveston, cal sign KLC.
TUGS: Available if required.

BERTHING:

Grain elevators	Farmarco/Bunge Corp.	Depth alongside 40 ft.
Bulk loading	Pier 14 East	,, ,, 36 ft.
	Duval Sulphur Terminal	,, ,, 40 ft.
	Imperial Sugar Dock	,, ,, 36 ft.

Container terminal, wharf 1,346 ft. length, equipped with 4 container cranes handling 40 tons under the spreader or 60 tons with cargo hooks at 100 ft. outreach – depth alongside 40 ft.

Note: Water depths are based on MLW. Depths may be less due to siltation.

STEVEDORES: Order before 1700 for 0700 or 0800 hrs. following day. During day can be ordered at 2 hours' notice. Gangs must be ordered before 1900 hrs. on Saturday for Sunday or holiday.
MEDICAL: All medical assistance available.
FRESH WATER: At all wharves.
FUEL: All grades available. Delivery only by barge from Houston.
GANGWAY/DECK WATCHMEN: Required only if crewmen detained by Immigration.
OPENING/CLOSING HATCHES: By stevedores only.
CUSTOMS ALLOWANCES: Each man 300 cigarettes, or 100 cigars or 1 lb. tobacco; 1 quart wine/spirits.
IDENTIFICATION CARDS: Immigration form I-95 required.
CONSULS:

Chile
Dominican Rep.
Finland
Guatemala
Haiti
Iceland
Italy
Mexico
Netherlands
Norway
Sweden
Venezuela

DRYDOCKS: 1×18,000 tons capacity. 1×40,000 tons capacity (Todd Shipyards).
TIME: Central Standard Time. Daylight Saving Time effective from April to October.
HOLIDAYS: January 1st; January 15th; February 12th; February 22nd; March 2nd; Good Friday; May 30th; June 20th; July 4th; First Monday in September; Second Monday in October; November 11th; Fourth Thursday in November; December 25th; No work on Labour Day or Christmas Day.
POLICE/AMBULANCE/FIRE: All services provided.
SHORE LEAVE: No restrictions unless detained by Immigration.
AUTHORITY: Port of Galveston, P.O.Box 328, Galveston, Texas 77553. *Tel:* (409) 765-9321. *Telex:* 76-5436. *Contact:* C. S. Devoy, General Manager; M. J. Sunseri, Director of Operations, or Oscar Molina, Harbour Master.

AGENT: Strachan Shipping Company, Post Office Box 689, Galveston, Texas 77553. Tel: (713) 763-2351. Telex II: 910-885-5205. Telex I: 76-5412. Cables: "Strachan".

GEISMAR, Louisiana: 30.13 N. 91.01 W.

East bank of Mississippi River, about 187 miles from sea.
DOCUMENTS/PILOTAGE: For all general information, refer to "New Orleans".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available if required; normally not used.
BERTHING: BASF Wyandotte Corporation: Berth 620 ft. long, 32 ft. depth.
FRESH WATER: Available ex-wharf.
FUEL: Not available.
DENSITY: Fresh water (1000).
OPERATOR: BASF Wyandotte Corporation, P.O.Box 457, Geismar, Louisiana 70734. Tel: (504) 473-9871. Telex: 510-994-3112. Contact: Plant Security.

GOOD HOPE, Louisiana: 29.59 N. 90.24 W.

(See Plan Book)

East bank of Mississippi River, 126 miles above Head of Passes.
DOCUMENTS: For all general information, refer to "New Orleans".
ANCHORAGES: South of berth in river for unlimited number of ships.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: 1 tug used for mooring/unmooring.
BERTHING: General American Tank (GATX) storage terminal; 4 tanker berths, 40 ft. depth alongside. 2 × 12 in. arms or 8 in. hose. Loading 20,000 bbls.p.h. No ballast facilities.

Norco: Shell Oil Co. 2 tanker berths (80,000 d.w.t., 900 ft. LOA downstream, 55,000 d.w.t., 750 ft. LOA upstream) 16 in. and 8 in. loading arms for transfer, transfer rate variable, ballast line 12 in., capacity 20,000 bbls.

Berthing always starboard side to. Requires 2 tugs to assist in berthing. Forward and aft mooring lines handled simultaneously.
FRESH WATER: Available ex-wharf at Shell Oil Co. Berth.
FUEL: Bunker "C" not normally available ex-wharf at Shell Oil Co. Berth.
DENSITY: Fresh water, 1000.
SURVEYORS: Surveyors and Cargo Inspectors available.
STORING: See "Prelims" page viii.

1. Yes.
2. Not allowed when loading Grade A and B products.
3. Alongside ship at loading manifold.
4. Yes.
5. Yes.
6. Yes.

SHIPMASTER'S REPORT: February 1979.
Restrictions: Not allowed to take bunkers, lub oils or stores from dock while alongside. Large tankers often require 2 tugs pushing all the time to keep them alongside, especially when river is in flood. This at GATX No. 4.
VHF: Standby on Channel 13 during pilotage and when anchored. Agents normally place walkie-talkie aboard for their direct communication.
Berthing: Always starboard side to. Forward will have 2 backsprings to jetty, 4 headropes, 2 breasts to buoys, lashings not required, same aft. Only one boat used and secures the bow first.
Telephones: Not available at GATX No. 4 but there is one on next jetty upriver.

AUTHORITY: General American Tank.
Shell Oil – Shell Chemical, Norco Manufacturing Complex, P.O.Box 10, Norco, Louisiana 70079.

GRAMERCY (including Pauline), Louisiana: 30.03 N. 90.41 W.

East bank of Mississippi, about 144 miles from sea.
DOCUMENTS/PILOTAGE: For all general information, refer to "New Orleans".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Available if required; normally not used.
BERTHING: Colonial Sugar Refinery: Berth 600 ft. long, 40 ft. depth. Kaiser Aluminium and Chemical Corp: Berth, 40 ft. depth.
FRESH WATER: Available ex-wharf.
FUEL: Not available.
DENSITY: Fresh water, 1000.

SHIPMASTER'S REPORT: December 1979.
Port: Pauline.
Location: 3 miles up river from Gramercy at St. Elmo Point.
Anchorage: A waiting anchorage is situated 2 miles down river from the elevator at Grand View Reach.
Tugs: Available from Gramercy.
Berth: Peavey Grain Elevator. Depth of water alongside is 60 ft. Loading rate with one spout is 1,000 t.p.h.

The berth is a concrete pier on steel girders with 4 weak fenders. Spring lines are run to the pier, and head and stern lines to dolphins.
Fresh Water: Available from pier, rate 6 t.p.h. (approx.)
Fuel: Not available from quay.
Services: Provisions available from New Orleans, will be delivered by launch from Gramercy as pier can only be reached on foot over a catwalk 700 ft. long including stairs.

AUTHORITY: South Louisiana Port Commission, 152 Belle Terre Boulevarde, P.O.Box K, Laplace, Louisiana 70068. *Tel:* (504) 652-9278, 568-6269. *Telex:* 58364 Nln. *Contact:* Ray J. Matherne, Director.

GRAYS HARBOR, Washington: 46.55 N. 124.08 W.

(See Plan Book)

DOCUMENTS, etc.: Refer to "Tacoma".
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
PILOTAGE: A vessel approaching requested to give 24 hours advance notice of arrival to Grays and Willapa Pilots through Everett Radio, KLB which runs on a calling frequency of 500 kHz and VHF Channels 6, 8, 12 and 16. Pilot boat, "Mercury", 65 ft. long, with an 18 ft. beam, powered by a 330 h.p. GM diesel engine. "Mercury" moored at Westport Fishing Basin, and delivers Pilots to vessels outside Grays Harbor Bar.
ARRIVED VESSEL: Vessels must be inside Grays Harbor Bar to be considered an "arrived vessel".
ANCHORAGES: No specific areas in Grays Harbor have been designated as anchorage grounds. The best area is Southward of Sand Island Shoal in depths of 35 ft. to 40 ft.; the holding ground is good.
RESTRICTIONS: Bar Channel and Approach Channel, depth 30 ft. MLLW. Mean tidal range about 10 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
BERTHING: 6 wharves in port dock. Depths alongside from 15 ft. – 35 ft.
BULK CARGO FACILITIES: 1 bulk cargo berth, 1 Roll-on/Roll-off berth. No liquid chemical or LPG berths. One berth with container capability.
STEVEDORES: 20 local gangs. Additional gangs imported if required.
HOLIDAYS: See "Tacoma".
MEDICAL: All medical facilities available. Local hospital.
DENSITY: Salt water.
FRESH WATER: Available at all wharves.
GANGWAY/DECK WATCHMEN: Required only if detainees aboard.
CUSTOMS ALLOWANCES: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.
AUTHORITY: Port of Grays Harbor, P.O.Box 660, Aberdeen, Washington 98520. *Tel:* (206) 533–9530. *Contact:* Henry E. Soike, General Manager.

GREEN BAY, Wisconsin: 44.32 N. 88.02 W.

(See Plan Book)

For important general information refer to St. Lawrence Seaway.

DOCUMENTS: No special documents required. All necessary Customs and St. Lawrence Seaway documentation should be accomplished prior arrival.

PILOTAGE: Pilot not compulsory although some Masters prefer Pilot aboard. Pilot boards prior to arrival.

CHANNEL: From Grassy Island, outside mouth of Fox River, to C&NW Railway bridge, channel is maintained 24 ft. below low-water-datum (576.8 ft. above Father Point, Quebec) and 300 ft. width except through bridges. Above C&NW Railway bridge channel and turning basin is maintained at 20 ft. below low-water-datum. From Grassy Island lakeward channel maintained at 26 ft. below low-water-datum varying in width from 300 ft. to 500 ft. for approximately 8 miles. 24 ft. deep turning basin maintained at confluence of Fox River and East River opposite Leicht's North Dock. Currents will flow up and down river and will influence channel depths at times. Present high-water will add 2-4 ft. to channel depths.

RESTRICTIONS: Entry may be made at any time of day or night subject to Master's discretion.

MAX. SIZE: Subject water depths and width of bridge openings.

HEALTH: See "Health: all Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

Pratique may be obtained prior to entry of St. Lawrence Seaway. Suspected disease should be reported locally.

Rat guards required on all lines.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Ships' Agents located at Milwaukee and Chicago, ETA should be directed accordingly.

TUGS: Join vessel at any designated point. Charges should be obtained from tug operators. Use ship's lines.

BERTHING: General cargo at Leicht's North Dock, 1,500 ft. length, full channel depth. Discharge by ship's gear and shore based equipment. Bulk cargo handled at several docks.

CRANES: Shore based lifting devices to 20 tons. 100 ton stiff-legged derrick available for heavy cargo.

BULK CARGO FACILITIES: Available at several places for coal, salt, fertiliser, chemicals, liquid cargo, stone, pig-iron, etc.

BRIDGES: No bridge opening restrictions for railroad bridges. Highway bridges permit vessels of 300 tons or over to transit at any time. However, heavy land traffic occurs about 0730 – 0830 hrs., 1145 – 1315 hrs. and 1630 – 1730 hrs., and co-operation of Masters is urged during these times so that city bridges may remain closed.

STEVEDORES: Services performed by Leicht Transfer and Storage Co. and arrangements should be handled by ship's Agent or directly with Leicht's.

MEDICAL: Subject to regulations of U.S. Customs and Immigration and St. Lawrence Seaway Authorities. 3 excellent hospitals.

TANKERS: The major oil companies have facilities. Limited only by harbour dimensions.

DENSITY: Fresh water.

FRESH WATER: Available through ship's Agent and water company.

FUEL: Fuel oil available in any quantity. Normal fire precautions.

SURVEYORS: Available through ship's Agent.

GANGWAY/DECK WATCHMEN: Available at ship's option.

OPENING/CLOSING HATCHES: By stevedores.

REPATRIATION: Available through local Immigration officials.

CONSULS: No consuls. Nearest are at Milwaukee, Chicago, and Minneapolis.

REPAIRS: Topside and engine repairs available. Complete repair service available at Sturgeon Bay, 45 miles North.

DRY DOCKS: No local facilities. Available at Sturgeon Bay, Wisconsin.

AIRPORT: 8 miles from port. Served by regular airlines with over 30 flights daily.

TIME: Central standard time. Central daylight saving time in effect from the last Sunday in April to the last Sunday in October.

HOLIDAYS: January 1st (New Year's Day), May 31st (Memorial Day), July 4th (Independence Day), 1st Monday in September (Labor Day), Last Thursday in November (Thanksgiving Day), December 25th (Christmas).

POLICE/AMBULANCE/FIRE: Police: Green Bay – Administrative calls 497-3800, Emergency 911, Sheriff 911, Ambulance 432-0305, Fire Dept. Rescue – 911, Fire: 911.

TELEPHONES: On board service. Contact Wisconsin Telephone Co.

SERVICES: Tank cleaning, fumigation, waste disposal, chandler.

SHORE LEAVE: Permitted.

IDENTIFICATION CARDS: Proper identification should be carried.

DELAYS: Expect no delays for berthing or harbour movement.

AUTHORITY: The Port of Green Bay, Brown County Board of Harbor Commissioners, P.O.Box 1600, 305 E. Walnut Street, Green Bay, Wisconsin, 54305. *Tel:* (414) 497-3265. *Contact:* John A. Seefeldt, Port Director.

GULFPORT, Mississippi: 30.21 N. 89.05 W.

(See Plan Book)

DOCUMENTS: See "New Orleans".

PILOTAGE: Compulsory from Outer Sea Buoy to docks, provided by Gulfport Pilots Association, arranged through Agent. Pilot boards at Sea Buoy.

Pilot boat has red hull, white superstructure with "Pilot" in black lettering. When pilot boat is underway, contact can be made by VHF Channel 16.

RESTRICTIONS: The Gulfport Channel is 12 miles long running between Ship Island and Cat Island. Channel is 225 ft. wide and has a minimum depth throughout of 30 ft. at MLW. Harbour is dredged rectangular basin about a 0.25 mile wide and 0.5 mile long, this area being protected by piers. Depth in harbour and along wharves is 30 ft. with a 2.5 ft. tide variation. No entry restrictions as to time.

MAX. SIZE: Length of vessel is restricted to approximately 900 ft. by turning basin, no breadth restrictions.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Gulfport Radio KJC 768 – VHF Channel 16. Continuous service.

TUGS: 2 tugs available but not required unless requested to assist in berthing.

CARGO HANDLING: 4 gantry banana terminal capable of unloading 16,000 boxes per hour. 50,000 sq.ft. transit shed refrigerated facility.

Multi-purpose 35 tonne container crane in operation. Ship's gear usually used but mobile cranes available with 48 hours' notice.

STEVEDORES: Must have 12 hours' notice to arrange stevedore gangs. Normal work day 0800 – 1200 hrs., and then 1300 – 1700 hrs. Monday through Friday.

MEDICAL: No advance notice required for medical attention, doctor and hospital care readily available.

FRESH WATER: Fresh water is available. Rate 10 t.p.h.

FUEL: Bunker service available.

DENSITY: Brackish.

GANGWAY/DECK WATCHMEN: Port guards or Dubuisson Detective Agency.

CONSULS: Many countries have consuls within a 100 mile radius of Gulfport.

REPAIRS: Most deck and engine repairs could be arranged within port facilities.

SURVEYORS: Available from Mobile or New Orleans.

AIRPORT: Gulfport Municipal Airport is approximately 4 miles from the port and served by regularly scheduled airlines.

REPATRIATION: Can be arranged.

TIME: The Port of Gulfport is on Central Standard Time, GMT minus 6 hours; clocks are moved ahead 1 hour during Summer months.

HOLIDAYS: United States national holidays are observed, cargo work can be arranged on these days at a penalty time.

POLICE/FIRE/AMBULANCE: Telephone number for all emergency services is 911.

TELEPHONE: Can be placed aboard only by special arrangement; not normally available.

DEVELOPMENTS: A 30 ton gantry crane to be purchased and erected at the West Pier Container Terminal.

AUTHORITY: Mississippi State Port Authority at Gulfport, P.O.Box 40, Gulfport, Mississippi 39501. Street Address: Corner Highway 90 and 30th Avenue (Shipping). *Tel:* (601) 863–3851. *Contact:* Captain J. W. Clark, Port Director.

HAINES, Alaska: 59.15 N. 135.25 W.

(See Plan Book)

In Lutak Inlet. Located 5 miles N.W. of Haines. Open all year.

APPROACHES: Lynn Canal to Lutak Inlet.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: Pilot pick-up point located in vicinity of Point Retreat.

ANCHORAGE: Lutak Inlet.

MAX. SIZE: Harbour depth 36 ft. at zero tide. Tides: Diurnal range 16 ft. Also see "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

CUSTOMS: Quarantine, Immigration and Customs locally.

TUGS: 3 available.

BERTHING:

1. Haines dry cargo dock can be secured by request through City of Haines (Telephone: Area code 907 number 766-2231). Berthing length – 967 ft. and an open surface of over 300 ft. in width. Depth at face of dock – 36 ft. MLLW. No covered sheds, 6 acre open staging area. Crane may be available. Continuous to 300 ft. Alaska State Ferry facility.

Roll-on/Roll-off cargo facility at N.W. end of Dry Cargo Dock.

2. Schnabel Lumber Co. Dock: Berthing length – 640 ft. long and 80 ft. wide. Depth at face of dock – 45 ft. No covered storage. Open storage. 35,000-ton capacity for bulk cargo storage. Chip loader with 350 t.p.h. capacity. Crane available.

STEVEDORES: 4 gangs.

REPAIRS: None.

FRESH WATER: Available in small quantities in temperate seasons only.

FUEL: None.

MEDICAL: Doctor/dentist available.

TRANSPORTATION: Air, ferry. Haines Highway principal route connecting Southeast Alaska with the Alcan Highway leading to the interior of Alaska and Canada.

AUTHORITY: City of Haines, P.O.Box 576, Haines, Alaska 99827. *Tel:* (907) 766–2231, 766–2448. *Contact:* Larry Monroe, Harbour Master.

HAMPTON ROADS DISTRICT, Virginia:

(See Plan Book)

NORFOLK, 36.51 N. 76.19 W.
NEWPORT NEWS, 36.59 N. 76.26 W.
PORTSMOUTH, 36.50 N. 76.17 W.

DOCUMENTS:
3 copies Cargo Manifest (Forms 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I-418).
2 copies Crew List.

Customs Boarding Officer will also examine ship's Register and Load Line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours of arrival from a United States port:
Health Pratique.
Master's Oath (Customs Form 1300).
All foreign clearances.
U.S. Certificates of payment of Tonnage Tax (Customs Form 1002).
Certified Crew List.
F.M.C. Certificate of Financial Responsibility.

PILOTAGE: Compulsory; is generally arranged through port Agent. Vessels approaching port may use VHF telephone, Channel 16, radio telephone 2738 kHz. Advance notice of 24 hours is required of ETA. Pilot Lookout Tower located at Cape Henry, Virginia, the entrance to Chesapeake Bay.

The Virginia Pilot Association can be contacted by telephone at (804) 627-5435. Pilot boats monitor VHF-FM Channel 16 and work on VHF-FM Channel 13.

ANCHORAGES: In Hampton Roads, depth 45 ft.

Anchorage Regulations: A change in U.S. Coast Guard regulations permits colliers and other bulk carriers, such as grain ships, to use the Big Stone Anchorage in Delaware Bay. Previously, the anchorage was open only to oil tankers. The new rules are advantageous to super colliers that are able to carry up to 150,000 tons, taking advantage of the anchorage's minimum natural depth of 55 ft. The super colliers then can be partly loaded up to about 90,000 tons, at Hampton Roads, Virginia, and topped off at the Stone Anchorage by two 30,000 ton barges from the Port of Philadelphia.

RESTRICTIONS: Channels to Norfolk and Newport News – 45 ft. depth. Elizabeth River Channel – 40 ft. depth to Norfolk and Western Railway Bridge, then 35 ft. to Chesapeake.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C. Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Radio-telephone communications in the Hampton Roads area are furnished by the Chesapeake and Potomac Telephone Company of Virginia. A regular ship-to-shore channel transmits to ship on 2538 kHz and the ship returns the call on 2142 kHz. A "day-time" ship-to-shore channel transmits to ship on 2450 kHz and the ship returns the call on 2366 kHz. In the very high frequency band, "XY" ship-to-shore is available which transmits to the ship on 161.9 MHz and the ship returns the call on 157.3 MHz. A second "day-time" ship to shore channel transmits on Channel 20 and monitors Channel 16.

TUGS: Requirements vary from pier to pier.

BRIDGES: Sufficient clearance at all times.

BERTHING:
Public General Cargo Facilities:
Lambert Point Terminal:

		Length (ft.)	*Depth (ft.)*	*Cranes*
Pier L	Berth 1	575	32	Nil
	Berth 2	575	32	Nil
	Berth 3	575	32	Nil
	Berth 4	575	32	Nil
Pier N	Berth 1	525	32	Nil
	Berth 2	525	32	Nil
	Berth 3	525	32	2×15 ton gantries
	Berth 4	525	32	
Pier P	Berth 1	598	32	2×25 ton cranes serve all berths
	Berth 2	598	32	
	Berth 3	598	32	
	Berth 4	598	32	

Sewell's Point:

		Length (ft.)	*Depth (ft.)*	*Cranes*
Pier A	Berth 1	600	32	1×15 ton revolving crane 1×7.5 ton cantilever crane
	Berth 2	600	32	
Pier B	Berth 1	600	32	Nil
	Berth 2	600	32	Nil
Pier A and B	Berth 1	498	32	Nil

Norfolk International Terminals:

		Length (ft.)	*Depth (ft.)*	*Cranes*
Pier 1	Berth 1	664	35	Nil
	Berth 2	664	35	Nil
	Berth 3	664	35	Nil
	Berth 4	664	35	Nil
Pier 2	Berth 1	664	35	Nil
	Berth 2	664	35	Nil
	Berth 3	664	35	Nil
	Berth 4	664	35	Nil
Container Pier	Berth 1	740	35	2×50 ton, 1×30 ton Container and 1×40 ton twin lift Paceco Portainer crane
	Berth 2	849	35	
	Berth 3	1,100	35	

Newport News Marine Terminal:

		Length (ft.)	*Depth (ft.)*	*Cranes*
Pier B	Berth 1	600	35	1×50 ton CMI with 178 long ton heavy lift
	Berth 2	600	40	1×40 ton mobile crane serves Berth No. 2 and 3
	Berth 3	600	40	
Pier 2	Berth 1	605	32	Nil
	Berth 2	605	35	Nil
Pier 8	Berth 1	818	32	Nil
	Berth 2	818	32	Nil
Pier C	Berth 1	750	35	1×50 ton gantry crane
Container Berth		960	35	40 long ton crane with outreach of 115 ft. and a 200 ton combination container and heavy lift crane

Portsmouth Marine Terminal:

			Equipment
Berth 1 Berth 2 Berth 3	2,500	36	2×30 ton Paceco Portainer cranes and 1×110 Clyde gantry rail crane; 350 ton heavy lift derrick barge crane serves entire port area

Sealand handles container cargo at Portsmouth with 2×30 ton Paceco cranes. Facility has private cargo facilities: 1 berth, 600 ft. long, 38 ft. depth.

Port Area: Elizabeth River Terminal, berth 1,900 ft. long, 35 ft. depth; Metro Machine Works Nos. 2 and 3, 27 ft. depth; Former U.S. Coast Guard Base, 1 berth 500 ft. long, 25 ft. depth; N.B. & C Line Piers, 4 berths, 880 ft. long, 20 ft. depth; Koch Industries, 3 berths, 372 ft. long, 35 ft. depth.

Grain: Cargill Grain elevator: 1 berth 40 ft. depth, loading rate 60,000 bushels per hour. Continental Grain elevator: 1 berth 40 ft. depth, loading rate 80,000 bushels per hour.

Newport News: Coal: Pier No. 14, 2 berths, 1,090 ft. long, 38 ft. and 45 ft. depth; Pier No. 15, 2 berths, 1,000 ft. long and 38 ft. depth. Max. LOA 600 ft. Max. beam 85 ft.

Massey Coal Terminal (Dominion Terminal Associates) Pier 9: Two berths, length 1,200 ft., width 88 ft., airdraft 75 ft., depth 46 ft., max. size – LOA 1,000 ft., beam 164 ft., draft 45 ft. Shiploader: Travel 650 ft., max. outreach from fender face 103 ft. Loading rate 6,500 t.p.h. Also see "Plan Book".

Norfolk: Coal: Pier No. 5, 1 berth, 980 ft. long, 38 ft. depth; Pier No. 6, 2 berths, 1,800 ft. long, 46.5 ft. depth.

TANKERS: Sewell's Point: Exxon Co., 1 berth, 40 ft. depth.

Elizabeth River: American Oil Company, 1 berth, 28 ft. depth; Atlantic Energy Inc., 1 berth, 32 ft. depth; Gulf Oil 2 berths, 32 ft. depth; Mobil Oil, 1 berth, 36 ft. depth; Swann Oil Co., 1 berth, 35 ft. depth; Union Oil Company, 1 berth, 15 ft. – 20 ft. depth; Shell Oil Company, 1 berth, 38 ft. depth; Union Oil Co. of California, 1 berth, 20 ft. depth; Tenneco/Cities Service, 1 berth, 27 ft. depth; Texaco Inc.,1 berth, 32ft. depth; Crown Central, 1 berth depth 40 ft; Koch Fuels, 3 berths, depth 27 ft. – 35 ft.

Newport News: Exxon Co., 1 berth, 35 ft.; 2 berths 19 ft. – 27 ft. depth.

Portsmouth River: B.P. Oil Corp., 2 berths, 30 ft. depth.

STEVEDORES: Labour arranged through International Longshoremen's Association.

1. Straight Time – work between the hours of 0800 and 1200 and between the hours of 1300 and 1700 daily except Saturdays, Sundays and holidays.
2. Double Time – hours daily between 0600 to 0700 and 1200 to 1300, 1800 to 1900, 2400 to 0100 hrs. and all Sundays.
3. Time and one-half – shall be all those hours not included above, except holidays.

DENSITY: Average 40% fresh.

FRESH WATER: Available at all berths. Barge service available if required.

FUEL: All grades available at oil company berths. Delivery by barge to all other locations.

GANGWAY/DECK WATCHMEN: Not required unless crew members detained by Immigration.

CERTIFICATES: Cargo Gear Certificate, Derat, Radio, Safety Equipment, and Ship's Register.

CUSTOMS ALLOWANCES: At the discretion of Customs Officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1qt. wine/spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

IDENTIFICATION CARDS: Identification required by Immigration for shore passes.

CONSULS: The following countries are represented at Norfolk:
Belgium
Brazil
Denmark
Finland
France
Germany F.R.
Great Britain
Iceland
Italy
Mexico
Netherlands
Norway
Panama
Sweden

DRY DOCKS: Norfolk: 1 dry dock 450 ft. long, 57 ft. beam; floating dock 360 ft. long, 64 ft. beam. Berkley plant features the Titan Steel floating dock 950 ft. long, with lifting capacity of 54,250 long tons.

Newport News: Dry docks:

	Length inside gate	*Width of entrance*	*Depth of water over sill MHW*
No. 1	649 ft.	92 ft.	33 ft.
No. 2	862 ft.	118 ft.	31 ft. 3 in.
No. 3	459 ft.	72 ft.	33 ft.
No. 4	525 ft.	75 ft.	33 ft.
No. 10	961 ft. 6 in.	128 ft.	35 ft.
No. 11	1,101 ft.	137 ft.	40 ft.
No. 12	1,613 ft.	250 ft.	33 ft.

Slipways: The shipyard has 2 inclining slipways with lengths up to 650 ft.

REPAIRS: Newport News Ship Building and Dry Dock Company in James River; 5 outfitting piers up to 1,160 ft. length. Floating cranes up to 67 tons capacity. Gantry crane to 900 tons capacity. Other cranes also available.

Norfolk Ship Building and Dry Dock Corporation, situated on East Branch of Elizabeth River. Channel depth 25 ft.; 7 piers equipped for ship's repairs. 4×30 ton diesel locomotive cranes. Other repair companies in addition.

SURVEYORS: American Bureau of Shipping, P.O.Box 5189, Newport News 23605 and 65 Broadway, New York, New York 10006.

Eagleton, Henry, Co., Inc., (Lloyd's Agent) P.O.Box 1569 (01).

Fife, Alyn F, 38 Green Oaks Road, Newport News 23601.

Hull & Cargo Surveyors, Inc., Suite 209, Bldg. 20, Koger Executive Center (02).

Intemodal Transportation Service, P.O.Box 759 Portsmouth 23705.

National Cargo Bureau, Inc., 1128 W. Olney Road (07).

Nicholson, Alfred L., Ltd. (Correspondent-American Institute of Marine Underwriters), 201 Granbys 40 Mall (10).

Oulie, O.T., Inc., 2830 Shore Dr., Suite 813 Virginia Beach,VA 23451.

Salvage Association, 1504 United Va. Bank Bldg. (10).

Scott, Thomas, III, P.O.Box 351 (01).

Stott and Ogram, Inc. P.O.Box 232 (01).

United States Salvage Association, Inc., 11 Koger Executive Center, Suite 109, (02).

Williams, Rolf (Surveyor for Scandinavian Marine Claims Office, Inc. and Det Norske (Veritas)), 201 E. City Hall Ave. (10).

AIRPORT: Norfolk Airport, and Patrick Henry Airport at Newport News, over 100 flights daily.

TIME: Eastern standard time, GMT minus 5 hours. Daylight saving time, GMT minus 4 hours, from last Sunday in April to last Sunday in October.

HOLIDAYS: New Year's Day; Lee's Birthday (January 19th); Washington's Birthday (February 22nd); Good Friday; Memorial Day (May 30th); Jefferson Davis Day (June 3rd); Independence Day (July 4th); Labour Day; Election Day (1st Tuesday after 1st Monday in November); Armistice Day (November 11th); Thanksgiving Day; Christmas Day. No work can be arranged on New Year's Day, Labour Day or Christmas Day.

TELEPHONES: Onboard telephones only available at shipyards.

DEVELOPMENTS: *Portsmouth:* Coal terminal to be constructed to handle vessels up to 170,000 d.w.t., draft 55 ft. at one shiploader and 60,000 d.w.t. at a second shiploader. The respective rates of the loaders will be 10,000 t.p.h. and 4,000 t.p.h.

AUTHORITY: Virginia Port Authority, Virginia World Trade Centre, Norfolk, Virginia 23510. *Tel:* (804) 623-8000. *Telex:* 710-881-1231 *Contact:* J. Robert Bray, Executive Director.

AGENT: Rice, Unruh Co., Suite No. 500, 201 Granby Mall, Norfolk, Virginia 23510 Tel: (804) 625-4525 (6 lines). Telex: 82-3689. TWX 710-881-1293 (Riceunruk Nfk). Cables: "Riceunruh Norfolk".

HILO: Hawaii 19.46 N. 155.06 W. (including Kawaihae 20.02 N. 155.50 W.)

(See Plan Book)

DOCUMENTS:

4 Crew Lists.
4 Passenger Lists.
Customs Documents.
Clearance, Travelling Manifest.
Local Manifests.
Health Documents.
Bill of Health and Vaccination Certificates.
4 Manifests.
4 Bills of Lading.
Ship's Papers.
Certificate of Registration or Enrolment.
Annual Inspection Certificate.
Load-line Certificate.
Derat Certificate.
Drinking Water Certificate.
Radio Certificate and Licence.
4 Store Lists.

PILOTAGE: Pilots boats have VHF. Contact is made on VHF Channel 16, then switch to Channel 12. Pilot service is provided on a 24-hour basis upon suitable advance notice.

At Hilo, Pilot boards on starboard side in position 0.75 mile due East of Paukaa Light. In picking up Pilot, vessels should be on Southerly course with enough speed for steerageway. Special instructions will be given by radio telephone.

At Kawaihae, Pilot station in position 1 mile 287° true from No. 2 Buoy. Pilot usually boards on port side with vessel on course for the entrance at dead slow speed.

ANCHORAGES: No safe anchorages either Hilo or Kawaihae for vessels awaiting Pilot. In this situation, a vessel should heave to or steam. Under good weather conditions, safe anchorage can be had in Hilo Bay. Anchorage is inside pilotage waters and requires local knowledge for safety; vessels should not anchor without Pilot.

RESTRICTIONS: At Hilo, under good weather conditions, vessels with draft up to 32 ft. 6 in. can be handled at any time.

At Kawaihae, vessels with draft up to 33 ft. handled anytime.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Communicate through RCA or ITT stations in Honolulu.

TUGS: Tugs join vessels at entrance at Kawaihae and at Coconut Island at Hilo. Tug's lines are usually used at no extra charge.

BERTHING: There are many factors which affect berthing at Hawaii Island ports, the most important of which are surge and wind. Vessels should be well equipped with long mooring lines and sufficient additional line to make up 2×900 ft. buoy lines. In all instances, berthing instructions will be given after details concerning vessel and her cargo are received.

Pier No. 1 in Hilo handles bulk sugar vessels and container vessels, 1,220 ft. of berthing space.

Pier No. 3 in Hilo handles tankers, 575 ft. of berthing space.

Kawaihae has one overseas berth which handles both bulk sugar vessels and tankers, 605 ft. of berthing space.

CRANES: Shore cranes available, max. capacity 90 tons.

STEVEDORES: Hilo Transportation and Terminals Co. (Hilo) and Kawaihae Terminals Inc. (Kawaihae).

MEDICAL: All facilities available.

DENSITY: Variable in Hawaii area due to fresh water run-off.

FRESH WATER: Available from county of Hawaii by pipe-line.

FUEL: Can be supplied subject advance notice.

GANGWAY/DECK WATCHMEN: Required for tankers. Other ships as may be necessary due to special circumstances.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes, 50 cigars per man, and one U.S. quart bottle, wine or spirit.

IDENTIFICATION CARDS: Seamen's passports only required.

REPAIRS: Limited repair service available; almost any type of machine work, welding and ordinary electrical repairs can be handled.

REPATRIATION: Direct air service to Continental United States and to Honolulu International Airport.

AIRPORT: About 1 mile from Port of Hilo and is served by regular airlines.

POLICE/AMBULANCE/FIRE: *Hilo:* Police 9353311; Ambulance and Fire 961-6022.

Kawaihae: Police 8857334; Ambulance 885-7334; Fire 961-6022.

TIME: GMT minus 10 hours all year round.

TELEPHONES: Special arrangements may be made with Hawaiian Telephone Co.

SHORE LEAVE: Allowed.

AUTHORITY: State of Hawaii, Department of Transportation, Harbours Division, Port of Hilo, Hilo, Hawaii 96720. *Contact:* District Manager.

AGENT: See "Honolulu".

HOMER (including Kenai), Alaska: 59.36 N. 151.25 W.

(See Plan Book)

APPROACHES: Via Cook Inlet. Port located at mouth of Kachemak Bay on Kenai Peninsula.

DOCUMENTS: See "Port of Anchorage, Alaska".

PILOTAGE:

(1) Homer Pilots' Association, Radio KTE 21, Tel. 235-8526.

Pilot boards 1 mile South of Homer Spit Light on Coal Point.

(2) The Southwest Alaska Pilots' Association serves all ports in Cook Inlet, Prince William Sound, Resurrection Bay, Kodiak Island, the Aleutian Islands, Bristol Bay and Bering Sea. The pilot station for vessels entering Cook Inlet waters is Lat. 59° 36.2′ N., Long. 151° 24.5′ W., approximately 1 mile South of Homer Spit Light on Coal Point. The pilot station cable address is "Homerpilot". The pilot station stands by on VHF Channels 10 and 16, 24 hours a day; call sign "WAB-917 Southwest Pilots". The pilot station also stands by on single side band radio as follows:

8284.4 MHz between 0800 and 1200 hrs. Alaska time, weekdays.
4136.3 MHz between 1300 and 1700 hrs. Alaska time, weekdays.
Call sign "WAB-917 Southwest Pilots".

MAX. SIZE: Harbour depth 40 ft. MLLW. Tidal range 28 ft. (−6ft. to +22 ft.) Max. draft for berthing 30 ft. at MLLW.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

ANCHORAGES: Kachemak Bay is excellent anchorage for vessels of any size. Foreign vessels may enter bay to anchor, but must have a Pilot aboard to come to dock.

RADIO: Homer Port Radio monitor CB Channel 17. Callsign "KCN 7188 Port of Homer".

VHF: Homer Port Radio monitor Channel 16. Call sign "WAB 935".

TUGS: 1 tug available.

BERTHING: Homer City Dock, 410 ft. long and 50 ft. wide. Limited to draft of 30 ft. 3 privately owned mobile cranes available. Capacity 15, 35 and 70 tons.

410 ft. face with sloping bottom suitable for vessels with 20 ft. draft or less at chine. Inside and outside storage is available for holding and staging. Water, gasoline and diesel are available on dock.

TANKERS: Report: February, 1985.

Vessel to load ammonia at Kenai in position 60° 33′ N., 151° 16′ W.

Regulations:

1. Vessel must have on board 20-24 mooring lines, each a minimum of 400 ft. in length, depending on weather on arrival.

2. Fresh water and provisions cannot be obtained or loaded at the wharf.

3. No preventative engine maintenance can be allowed at the wharf and vessel's engines must be maintained in such a way as to permit immediate manoeuvring power at all times while vessel is alongside the berth.

4. Sufficient vessel personnel must remain on board during loading to handle any emergency situation and adequate deck watch must be maintained on a 24 hour basis.

5. For proper light ship survey vessel must arrive suitably trimmed and sufficiently submerged both fore and aft.

6. Ballast tanks must be either full or empty and all cargo holds must be totally devoid of any ballast.

7. Please also ensure vessel has all certificates in order, including Oil Pollution Certificate (Certificate of Financial Responsibility).

General:

Please obtain Master's acknowledgment and confirmation of all above. Advise Master that pilot station is located Lat. 59° 36.2′ N., Long. 151° 24.5′ W. Master should cable ETA Homer pilot station to Agent.

Master to monitor ITT KFS (San Francisco) while in transit. If ship has telex on board, please provide number.

Rental mooring lines available at US$300 each plus loading/unloading costs of US$1800. Advise how many lines onboard and Agent will request funds based on how many rental lines necessary.

Berth Operator sometimes makes exceptions to restrictions on a case by case basis.

IFO fuel is virtually unobtainable in Alaska. While there is one supplier at Kenai (and none elsewhere in Alaska), they have a long standing and firm 5,000 bbl. minimum requirement with no exceptions.

Vessel will vacate berth during purging and will either purge at anchor off berth or at Homer.

Load rate 400 tonnes/p.h., except during purging, when rate much slower.

Confirm vessel has Letter of Compliance issued by Coast Guard and that vessel has been licensed to carry propane/ammonia simultaneously.

FRESH WATER: Available from the berth.

FUEL: Available for small craft only.

REPAIRS: No facilities for repairs.

MEDICAL: Homer Hospital is a 17 bed hospital with 5 full-time doctors.

EMERGENCIES: Police department and a volunteer fire department are available plus a rescue truck.

AIRPORT: Daily air service.

AUTHORITY: City of Homer Harbour Master.

HONOLULU, Hawaii (including Barber's Point and Pearl Harbour): 21.19 N. 157.52 W. (See Plan Book)

DOCUMENTS:

4 Crew Lists.
4 Passenger Lists.
Customs Documents.
Clearance, Travelling Manifest.
Local Manifests.
Health Documents.
Bill of Health and Vaccination Certificates.
4 Manifests.
4 Bills of Lading.
Ship's Papers.
Certificate of Registry.
Annual Inspection Certificate.
Load-line Certificate.
Derat Certificate.
Radio Certificate and Licence.
4 Stores Lists.

Vessels scheduled to call at Pearl Harbour are required to furnish 6 copies of crew lists and passenger lists, if applicable, at least 1 working day prior to arrival, for Naval security requirement.

The United States Immigration Service requires that the Master of vessels manned by alien crew members arriving from a foreign port present the United States Immigration and Naturalisation Service's Officer with a current crew list (Form I-418) properly visaed in their possession. An I-94 should be prepared for each passenger prior to vessel's arrival.

U.S. Immigration Department representatives are not stationed at any Hawaiian outports. Customs Officials, however, are stationed at all entry ports and accomplish both Customs examination and Immigration.

The United States Agriculture Service examines and seals ship's stores from restricted ports. Special arrangements for garbage disposal may also be required by this Agency, if for example meat aboard has been purchased in a port where there is a high incidence of "hoof and mouth" disease. All garbage should be disposed of prior to arrival in port.

All regulatory bodies assess overtime charges for services of their personnel if rendered on Saturdays, Sundays, holidays or after hours on week-days.

PILOTAGE: Pilot requested by Agent. Channels 16, 12 and 9, call WXZ 456. Pilot boat, 37 ft. cabin cruiser, yellow with black striping. Only "H" flag necessary for vessel requiring Pilot. Pilot station, Lat. 21° 16′ 12″ N., Long. 157° 53′ 24″ W., no alternative.

RESTRICTIONS: Entry at any time subject to harbour control signals. 24 hours' notice of arrival is obligatory.

MAX. SIZE: *Entrance Channel:* Depth 45 ft. *Harbour:* Depth 40 ft. Some piers accept no draft greater than 33 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station.

RADIO: VHF Channel 16, call KFQ907, Aloha Tower Harbour Control Station.

TUGS: Tugs normally join vessel within harbour limits. Both ship's lines and tug's lines used depending on conditions.

BERTHING: Berthing given on a "first-come-first-served basis" according to type of vessel and particular requirements as to cargo, bunkering, etc. Must be arranged through a local shipping Agent.

STEVEDORES: Gangs must be ordered 24 hours in advance. General cargo, average load per hour: 15 long tons; average discharge per hour: 15 long tons.

MEDICAL: Agents would like as much advance notice as possible. Complete medical facilities available. Vaccinations in accordance with U.S. Public Health requirements.

TANKERS: 4 tanker berths, max. draft 36 ft. No slop discharge facilities.

Barber's Point: Tanker berths, tugs not normally required. Mooring Master attends berthing procedure. Fresh water not available. Fuel available ex-pipe-line. See "Shipmasters' Reports".

Pearl Harbour: U.S. Navy Terminal. Max. LOA 800 ft. Max. draft 38 ft. 6 in.

DENSITY: Pure salt water, no fresh water allowance.

FRESH WATER: Delivered via 2.5 in. fire hose with meter on pier. Rate of delivery between 30 t.p.h. and 60 t.p.h., depending on the berth.

FUEL: All U.S. grades available, no advance notice other than establishment of credit.

FIRE PRECAUTIONS: Fire wires required by tankers berthed alongside. Permit required for hot work whilst in port.

GANGWAY/DECK WATCHMEN: Services of watchman recommended, usually arranged by Agent.

OPENING/CLOSING HATCHES: Normally carried out by stevedores.

CUSTOMS ALLOWANCES: 200 cigarettes, 50 cigars per man, and 1 bottle, U.S. quart, wine or spirits.

IDENTIFICATION CARDS: Seamen's passports needed.

CONSULS: The following countries are represented in Honolulu:

American Samoa
Australia
Austria
Denmark
Finland
France
Germany
Great Britain
Guatemala
India
Indonesia
Italy
Japan
Korea
Mexico
Monaco
Nauru
Netherlands
New Zealand
Norway
Panama
Philippines
Portugal
Sweden
Switzerland
Thailand
Western Samoa

REPAIRS: All types of deck and engine repairs possible. Hull repairs below water-line in accordance with dry dock capacities.

DRY DOCKS: Commercial within Honolulu Harbour. Dry dock: 2,800 long ton lifting capacity, 385 ft. long, 56 ft. wide. Floating Dock: Lifting capacity 2,620 tons. Length 200 ft. Width 100 ft. Marine railway: 1,400 long ton lifting capacity, 223 ft. long, 65 ft. wide.

REPATRIATION: All facilities, crews generally leave State within 24 hour period.

AIRPORT: International airport, served by all major airlines, 5 miles from harbour.

HOLIDAYS:

New Year's Day	First or following Monday
President's Day	Third Monday in February
Kuhio Day	Third Monday in March
Good Friday	Friday before Easter
Memorial Day	May 30th or nearest Monday or Friday
Kamehameha Day	June 11th or nearest Monday or Friday
Admission Day	Third Friday in August
Labour Day	First Monday in September
Discoverer's Day	Second Monday in October
General Election Day	First Tuesday after First Monday in November (election year)
Veteran's Day	November 11th
Thanksgiving Day	Last Thursday in November
Christmas Day	December 25th

POLICE/FIRE/AMBULANCE: Police, Ambulance, Fire dial 911.

TIME: GMT minus 10 hours all year round.

TELEPHONES: Telephones can be placed on board at any dock.

SERVICES: All services found in major U.S. ports are available.

SHIP SUPPLY SERVICE:

Name & Address	*Vessels*	*Services*
Dillingham Tug & Barge Pier 21, Honolulu, HI 96817 (Tel: 5439325)	MOHA, HUKI, MA'A	Ship stores and fuel.
P & R Water Taxi, Pier 40, Honolulu, HI 96817 (Tel: 8412113)	HIKINO, KEOKI	Water taxi, ship stores, spare parts.
Sause Bros., Pier 20, Honolulu, HI 96817 (Tel: 5215082)	Fuel barge, HANALEI	Fuel only.
Uaukewai Diving Salvage & Fishing, Inc. 1750 Kalakaua Ave., #1205 Honolulu, HI 96826 (Tel: 9476881; 7374312)	HUKI NUI, NAHOA	Diving, mooring, ship support service.

Helicopters:

AG Helicopters Inc., Maui, Tel: 878-1202 or 879-1637.

Hawaii Pacific Helicopters Inc., 228 Lagoon Dr., Rm. 207, Tel: 836-1566.

Helicopters Hawaii, Tel: 836-3315.

Jetcopters Inc., 228 Lagoon Dr., Rm. 102, Tel: 839-3001.

Kenai Helicopters. 550 Paiea, Rm. 219, Tel: 836-2071.

M&H Helicopters Inc. (Based at Hotel Inter-Continental Maui Mau) Tel: 879-1601.

Moore's Hawaiian Helicopters Inc., Tel: 623-9862.

Papillon Helicopters Ltd., Hanalei, Kauai, Tel: 826-6591; Kapalua, Maui, Tel: 669-4884.

Paradise Helicopters Ltd., Tel: 847-2191.

Royal Helicopters Inc., Tel: 836-2868.

SHORE LEAVE: No restrictions if papers are in order.

DEVELOPMENTS: *Sand Island:* Pier 52 extended 120 ft. to the West, will also be paved by mid 1984.

New container yard at Pier 52/53. Approximate area of 36 acres.

Piers 52 and 53 consist of 1,400 linear ft., draft alongside is 40 ft.

Also see "Max. Size".

SHIPMASTER'S REPORT No. 1: August 1978. **(See Plan Book).**
HIRI Seaberth, Barber's Point: Position 21° 16′ 22″ N., 158° 05′ 27″ W.
Operators: Pacific Resources Inc., Honolulu.
Documents:
3 Crew Lists.
3 Store Declarations.
3 Cargo Declarations.
3 General Declarations.
3 Crew's Effects Declarations.
3 Master's Oath of Entry.

Pilotage: In case vessel has received order to berth on arrival, H.I.R.I. Mooring Master boards vessel in a position 3 miles due South of Barber's Point Lighthouse. In case vessel will not be berthed on arrival vessel is to proceed towards Honolulu. This will be advised by Agent in due time. When approaching Honolulu, vessel must remain South of a line Barber's Point Light/Diamond Head Light and await Pilot from Hawaii Port Pilots' Association. Pilot will then bring vessel to outside anchorage.

Restrictions: Vessels will be berthed during daytime only and at slack water only. Unberthing day and night and at any stage of tide. Vessels up to 100,000 d.w.t. and 830 ft. LOA have been handled at H.I.R.I. Seaberth.

Radio Pratique: Not required.
Advance Notice: Refer to Charterer's/Owner's instructions. ETA cables to be sent via San Francisco Radio KFS or KPH since Honolulu Radio Station has closed down.

Communication: H.I.R.I. controller is listening VHF Channel 16, working Channel is 9. Call sign is "KTD 466".

Aloha Tower, call sign "KFQ 907" is listening Channel 16, working Channel is 12.

Tugs: Tugs of various sizes up to 2,250 h.p. and work boats available from Honolulu. While vessel in berth a workboat is continuously standing by.

HIRI Seaberth/Mooring: Seaberth consists of 8 mooring buoys equipped with quick releasing hooks. Mean depth in the berth is about 40 m. The mooring is approached from the West. A tug from Honolulu is made fast with ship's line through centre lead. Two mooring boats are on hand, a second, smaller tug is used for pushing on the port quarter. Anchors are not used for mooring. The first line to be made fast is line No. 5, thereafter lines No. 2, 6, 1, 4, 3, 7, 8 in that order. Lines 1 and 2, 5 and 6 will be doubled, finally vessel is moored with 12 lines.

Nylon lines are preferred, but wires may be used. Lines and wires must be long enough to reach buoys 600 ft. from vessel.

It is important that all nylon lines go through roller fairleads in order to avoid chafing and eventually breaking. Refer to "Plan Book".

Hose Connection: Vessel's port derrick to be rigged before arrival with *single* whip able to reach hose 120 ft. down on sea bottom. A travelling block is not acceptable as diver connects hook directly to hose on sea bottom. Lift required is 8 tons. Hoses are connected/disconnected by ship's personnel. Shore personnel can be arranged, charges being billed to vessel. Normal discharge rate for crude oil is about 30,000 bbls.p.h. with maximum 125 lbs. pressure at rail.

Repairs: Minor repairs are possible through workshops in Honolulu.

Supplies/Services: Provisions, stores, laundry available. Stores, etc. cannot be loaded on the ship while in the berth, vessels usually receive same off Honolulu.

Fuel and marine diesel oil available and can be loaded in mooring berth after discharge operations are completed.

In this vessel's case, however, vessel was berthed in Honolulu at Piers 30/31 for the purpose of bunkering and storing. Fresh water is available alongside piers. Crew changes are possible, shore leave is possible. The launch from Barber's Point to Honolulu Pier 10 takes about 2.5 hours.

Weather/Wind: The Hawaiian Islands are dominated in all seasons by the N.E. Trade Winds, which are present about 75% of the time. The average velocity is 12.5 m.p.h. They rarely exceed 20 m.p.h., however, gusts of 100 m.p.h. are possible. October to April is the "Kona" season which refers to occasional storms from the South. During these storms heavy rainfall and cloudiness can be expected. The average temperature is between 24° – 28° Celsius.

Tides/Current: The predicted times and heights of high and low water are published for Honolulu. The rise of tide is only 1 – 2 ft. Strong winds may effect the tides. Velocity of current is 1 – 2 knots, mostly setting in Westerly direction, however, counter-currents have been observed.
References: B.A. Chart Nos. 1308, 1378. List of Lights Vol. G; Coast Pilot No. 62 Vol. 3.

SHIPMASTER'S REPORT No. 2: August 1977. **(See Plan Book).**
Barber's Point Sea Berths: There are 2 buoyed berths situated near the above, of which the larger is that owned by Hawaiian Independent Refinery Inc. (H.I.R.I.), 1.9 miles × 148° from the Barber's Point Lighthouse. The other, some 2 miles N.E. of H.I.R.I. moorings, is owned by Standard Oil of California (S.O.C.A.L.) and is used for the importation of crude fuel stock to their own refinery. H.I.R.I. Berth, however, is used for both crude imports and export/bunkering of products.

The H.I.R.I. Berth is based on a spread of mooring buoys to the hooks of which a ship's rope(s) are attached. It should be noted that these are NOT quick release hooks so that the weather conditions during operations are of paramount concern to all. Failure to leave the berth in sufficient time will preclude any help in unmooring by the tug boat in attendance, for letting go lines and will result in broken lines and/or buoy moorings. The 4 mooring tugs leave as soon as vessel is made fast.

The operation of mooring is governed by the wind and tidal stream. Most of the time the former is the N.E. Trade, while the tide *has* to be setting to the West for the vessel enters the berth on a course of 095° with Diamond Head Lighthouse ahead. The fact that there are some 17 to 18 fathoms in this berth, does not rule out the action of counter currents upon a deep draft vessel such as to make a mooring operation more difficult, if not impossible. Again, a Southerly wind will force the vessel down onto the lee buoys, and over the manifold hence a *minimum* working length of 100 fathoms per rope is necessary. The action of the Southerly wind is also to build up a considerable swell, making it necessary to begin ballast as soon as practical and *no later* than when *65%* of the cargo has been discharged and so arranged to allow sufficient empty and dry tanks to maintain the vessel's safe mooring at 25 ft. draft.

The berth was laid out for vessels up to some 65,000 tons, hence the position of the single 12 in. crude oil manifold is difficult for larger vessels, while the 8 in. bunker/product hose is even further aft from the cargo discharge point. With an overall length of 885 ft., and the manifold 425 ft. from the bow, it will be seen from the plan that the stern of the vessel will make No. 5 and 6 Buoys into breast lines, so that stern lines as such, have to be run from the after deck and any additional ropes to No. 4 and 7 Buoys will be breast lines.

These facts limited the vessel to 100,000 metric tonnes of cargo, as the Marine Adviser to the Receivers, Pacific Resources Ltd., (operators of H.I.R.I.) was convinced that a 140,000 tonne vessel at her draft of some 54 ft., would be too difficult to manage, whereas at 44 ft. the rudder would be of maximum value, the propeller fully immersed, but the slab-sided stern at its minimum resistance value. This was justified in that the scheduled berthing was delayed for 3 hours, due to a leaking fuel valve, resulting in a minimal West-going tidal stream, and a fresh Southerly wind with swell. Full use had to be made of all tugs, and double moorings run to windward buoys, before vessel could be placed in the correct position. It is not envisaged by Receivers that similar sized vessels will be regularly accepted in future.

The instructions call for an initial discharge rate of some 12,000 b.p.h., until pumphouse radios (VHF Channel 9) advise that the system is full, after which the rate can be increased to 125 lbs. per square inch on *their* gauge at ship's manifold, about 28,000 b.p.h. maximum. Connecting of hose is achieved by ship's staff, but the hose is surveyed by diver before vessel enters berth, a small buoy being attached as an aid for the Pilot. The vessel's runner and hook are lowered *to the bottom* where the diver attaches same to the hose sling, the operators having found that this method ensures a longer life for their hoses, and connections on the hard bottom of coral, overlaid with sand. The same procedure in reverse is carried out after discharge, using a tug to clear hose.
Entering Inwards: Hawaii being a full State, the entering documentation and procedures are as for any mainland USA port. It is important to note however, that under normal circumstances the vessel proceeds to a point 3 miles South of Barber's Point Lighthouse, where the Mooring Master and his Assistants join and tugs attend. The official boarding party will not, therefore, board until *AFTER* vessel is securely moored. This does not apply to a Coastguard Officer who comes with Mooring Master (or Pilot, off Honolulu) and who *MUST* be satisfied that his requirements have been met, before vessel is allowed to anchor, berth, enter port etc. (see Coastguard Regulations).

In the event that the vessel is unable to berth for a few hours due to the tidal stream, wind, etc., an anchorage can be obtained to the Eastward of the H.I.R.I. Berth and Southwest of S.O.C.A.L. Berth. If, however, there is to be a delay of some 24/48 hours, the vessel has to be anchored in the appropriate *recognised explosives anchorage* off Pearl Harbour. This will require the services of a Honolulu Pilot and possession of US Charts (B.A. Charts are small scale and do not show the anchorage areas with sufficient detail). This berth is but 7 cables from the surf line, though the new airport runway embankment acts as a perfect Radar distance guide at all times. It is preferred for inward clearance, being but 3.5 miles from the Customs Pier, whereas H.I.R.I. Berth is 13.5 miles along the coast and takes 1 hour in a normal launch. In view of the problem of Southerly winds (a 16,000 ton T2 tanker grounded recently, while trying to enter Honolulu Harbour), it is important that any vessel at anchor is kept ready to weigh anchor and sail to seaward, to avoid any danger of dragging ashore.

Note: Vessels must *not* cross the limits of Honolulu Harbour while awaiting the Pilot and are further delayed when the Coastguard boards to inspect vessel's emergency steering and power systems, log book entries and other items as required.
Communications: Honolulu has an excellent network of public and private radio communication stations. The US Coastguard (Channel 16, 14 and 12) have an excellent range, while the various Agent offices have their own units for direct contact, in normal hours. On Channel 27 there is the Marine Operator which is a local private organisation that can connect a vessel via satellite telephone to any part of the world, as well as to Agents out of hours. However, they will require the Agent's "BANKER NUMBER" i.e. the coded number that will settle accounts locally, hence it is best to obtain this first from Agent.

N.B. The misuse of Channel 16 will bring Coastguard Authority down on any vessel breaking the code of conduct.
Bunkers and Fresh Water: No fresh water is available at Barber's Point nor are there any barges for either water or bunkers at Honolulu. A tug boat can be chartered at $5,000 per day to bring 50 tons of diesel/gas oil to the Honolulu Anchorage, but it is not allowed to deliver while vessel is in H.I.R.I. moorings. The question of using the H.I.R.I. 8 in. product line for bunkers is dependent on the position of the vessel's connection and the type of product already in the line when the request is made, as any different grade is cleared and requires re-refining.

The alternative to the above is to request permission to bunker at one of the several deep water berths inside Honolulu Harbour, but apart from high cost, the attitude of the Harbour Master is negative to any entry by large tankers, inerted or not, hence delays can be anticipated even in an emergency.

Stores: A full range of provisions and dry stock is available and most deck or engineer's stores can be obtained from either the ship chandler or Dillingham Dockyard (which owns the tugs and is part of Oahu Railway & Land Co., Dillingham Corporation were Agents for the vessel).

When launches have to be used stevedores are employed to load the wire baskets at the pier and at least 2 to hook same to vessel's runner.

Repairs and Reconditioning: There would appear to be very little that cannot be handled or promoted in the mechanical, electrical and electronic fields and agencies exist for most major manufacturers, both U.S. and foreign.

Consuls: There is no longer a British Consul in Honolulu.

Launch service: This can be arranged through the Agents, the usual vessel being licensed for 28 persons only, while a substitute tug was allowed only 12 persons per trip. The cost is $130 per round trip, straight time to the Honolulu Anchorage (+$11.00 Port Fee minimum) and $263 per 2.5 hour round trip straight time to H.I.R.I. Berth at Barber's Point. If there are vessels at both S.O.C.A.L. & H.I.R.I. Berths, the schedule and costs are supposed to be shared and thus the number who can be ashore at any one time is even more limited. All costs are increased on overtime. While on mooring run, time in excess of 2.5 hours is charged out at $120 per hour in increments of 0.5 hour.

Medical Service: In common with most US ports no doctor will attend aboard unless under special circumstances, hence the medical list has to be divided to ensure sufficient fit men are at all times aboard the vessel in case of weather problems, which would cause the launch service to be suspended, or prevent men re-boarding the ship in swell.

Coastguard Regulations: Since the 17 tanker disasters of 1976 in US waters, the Coastguard have been empowered to conduct an off-limits inspection of all laden tankers requiring to enter a US anchorage or port area. This initial survey is to ensure that all the vessels' emergency gear has been tested within 12 hours of arrival and a log entry made of same. This includes steering, lighting, inert gas plant and any safety gear of electrical nature while radar, gyro compass and any such navigational gear must be working and in use together with up to date large scale charts and both International and US Inland Rules 1977 Edition.

He will also require to see the ship's manoeuvring data, squat and trim table and all information regarding draft together with engine movements in answer to telegraph plus internal communication systems. (A proposal is before Congress that all vessels be fitted with US made LORAN C equipment). Until he is satisfied the Pilot is not allowed to take the vessel inside official Port Limits.

After agreeing to allow vessel to enter, the Coastguard Officer remains on bridge to monitor all movements, responses, etc., and will thereafter conduct the anti-pollution survey as laid down in Federal Register Vol. 37 Number 246 Part II of December 21st, 1972. If, however, he is of the opinion that the standard of navigation in response to the Pilot's instructions are such as to constitute a potential hazard to navigation and therefore, to become a pollution risk, he has the authority to prevent the vessel from proceeding inwards and can cause the Pilot to take the vessel to sea or to an anchorage until the defects or bridge organisation plan or engine room responses are satisfactory to again proceed.

(*N.B.* The IYCS Bridge Procedures Guide is an invaluable help with the above in conjunction with the Trials Data).

SHIPMASTER'S REPORT No. 3: January 1984. **(See Plan Book)**

H.I.R.I. Sea Berth, Barber's Point: H.I.R.I. Sea Berth is situated on the S.W. corner of the island of Oahu, 1.9 miles from Barber's Point, some 20 miles from Honolulu.

The berth is composed of 8 buoys, fitted with tripping hooks, arranged in 2 parallel rows of 4 buoys in an alignment of 095° – 275°.

The berth is approximately 1,100 ft. long by 400 ft. wide and is in 125 ft. of water.

Currents off H.I.R.I. moorings are unpredictable, generally West-going, 1.5 to 2 knots. Vessels are only berthed at H.I.R.I. against a West-going current or with a light Easterly stern current not exceeding 0.5 knots. This East-going current sets towards Diamond Head.

Approach to the moorings is from the South on an East North Easterly course, the vessel turning into the moorings on the final approach course and mooring heading of 095° about 0.25 miles before reaching the buoys. (See Plan Book – Figure 1).

First lines ashore are 2 stern wires from the port and starboard quarters which are first run ahead of the vessel by 2 powerful lineboats to No. 5 and 6 stern buoys. These are followed by 2 head wires to No. 1 and 2 head buoys, thence for'd and after breasts are run from the port and starboard sides. The slack on the after 2 stern wires is taken in as the vessel enters the mooring but once the stern passes the after buoys care must be taken to keep these wires slack so as not to cant the vessel out of position.

1 tug is in attendance during mooring to push as required.

Vessels of this size (56,000 d.w.t. LOA 210 m.) are finally moored with 2 lines to each buoy, with a third line required to be available for sending to the weather buoys if necessary and also to act as a spare line in case of chafing. The length of ropes and wires is a most important consideration in the mooring operation. The minimum usable length is 700 ft. and this is barely adequate for ease of operation, in adverse wind or current situations could well be too short. In the case of this vessel the wires plus tails were only 690 ft. (211 m.) in length and, when allowance was made for turns remaining on the drums, they were barely adequate. Rental lines are available. The current charge is a handling charge of U.S.$990 regardless of the number of lines used plus U.S.$370 rental per line. Each line is 1,000 ft. to 1,200 ft. in length. In the event that lines are put onboard but not used the vessel is only charged the handling charge. The decision to place lines onboard is made by the Mooring Master, based upon the reported number and length of lines available, location onboard the ship and weather conditions at the time. In the case of marginal length lines, each lineboat has 3×150 ft.×10 in. polypropolene pennants with Mondel shackles and these are used at the discretion of the Mooring Master. There is no charge for the use of these pennants from the lineboats. The Mooring Master advised that if we return again we would be required to use the free 150 ft. extension pennants from the lineboats on the ends of our wires.

On completion of mooring all ropes had to be protected against chafing, the vessel rolling and surging continually. Anti-chafing arrangements in our case were in the form of old stranded ropes secured to our lines by West Country Whippings, and proved most effective. A continuous watch on moorings and chafing arrangements is most necessary.

The Berth has a capability to receive both clean and black products, but not simultaneously. All clean products are handled through an 8 in. submarine hose which requires a lifting capability of 4.5 tons. All black products are handled through 12 in. submarine hose which requires a lifting capability of 8 tons. Bunkers are available and these are loaded through the appropriate 8 in. or 12 in. line. *Where the strength of ship's equipment permits, a single whip and hook rig are preferred. In the event that the winch or other equipment is not capable of handling these weights then a doubling wire or multi-sheave block may be used.* The submarine pipe-line is to be lifted onboard and secured by ship's crew, the Mooring Master offering advice. All hose handling equipment is supplied, the vessel need only provide light line for frapping in a hose or constraining same upon disconnection. A chain block or rope luff tackle, to be provided by the ship, is an advantage in finally positioning the hose.

The refinery keeps its undersea clean pipe-line laid down in Gas Oil. This line contains approximately 5,500 barrels of product. When a vessel arrives with clean product other than Gas Oil to discharge, the vessel is requested to receive this 5,500 barrels of Gas Oil into an empty tank prior to commencing discharge of the vessel's actual cargo. On completion of cargo this Gas Oil is pumped ashore once more thereby filling the undersea line once again with Gas Oil. Maximum discharge rate for products is generally 5,000 – 6,000 bbls./p.h. or a maximum of 100 lb./sq.in. at the manifold. There are no facilities at the H.I.R.I. moorings for the receipt of dirty ballast. Slops may be accepted provided they do not contain more than 65% water. The H.I.R.I. sea berth is practically an open sea berth being too far from the low shore line to have any protection from the island. A ship lying in the berth is particularly vulnerable to winds from the North or South, i.e. cross winds beam on to the berth. Of the two, the Southerly winds are the more dangerous because the vessel is lying broadside on to a lee shore, in the trough of the swell, with only 7 cables of deep water available. As long as the winds are from East or Westerly quadrants there is little danger and ships are continually berthed and lie at the berth in the N.E. trades in wind speeds up to 20 to 25 knots. In such cases the windward lines will be augmented beyond the normal number. N.E. trade winds are common during most of the year, the islands lying in the N.E. trade wind belt. Winds from the South are associated with a low pressure system or front or a high pressure ridge. Except in the rare case of an intense high pressure system, Southerly winds from a high pressure ridge are not feared and ships will normally be berthed or kept in their berth. Low pressure centres and fronts are a different matter and are carefully monitored. Generally the Mooring Master will not berth a ship if a moderate or deep low is in the vicinity. If the vessel is already at her berth then the Mooring Master will advise leaving before the wind speed reached 15 knots. Above this wind speed tug's assistance is normally required with the unberthing. Such assistance takes about 1 hour from Honolulu and can be obtained if departure cannot be made before the wind reached 15 knots. If delay in leaving the berth is delayed too long then the line boats are unable to release lines from the buoys and all must be slipped onboard. A lineboat remains at the mooring at all times whilst a vessel is on the berth.

Refinery instructions require that the discharge is planned so that sufficient empty and dry tanks are available for ballast so that the vessel can maintain a sea-worthy draft and trim at all stages of the discharge operations in case she is required to vacate the berth with the onset of adverse weather.

Ships are unberthed during the hours of darkness provided that the current is not too strong.

NOTICE: Issued by Hawaiian Independent Refinery Inc., and dated May 1979.

Subject: General Instructions and Discharging Orders

1. A Mooring Master has been assigned to assist in the mooring of your vessel, the connecting of cargo hoses, discharge of cargo, disconnecting cargo hoses, unmooring and departing from the sea berth, and other activities for which his services may be required. His presence on board does not relieve you of your legal responsibilities. FINAL DECISIONS REMAIN YOUR PREROGATIVE. Charges for the service of the Mooring Master will be for the account of your vessel and/or Owners.

2. After your vessel is properly moored and secured in the sea berth, one cargo hose will be connected to the ship's manifold. The ship's crew will be required to perform this function, supervised by a qualified Deck Officer. When the vessel is ready in all respects to commence cargo operations, and the Hawaiian Independent Refinery, Inc. personnel have indicated their readiness to receive cargo, commence the discharge of cargo at the rate of approximately 12,000 U.S. b.p.h. This is for the purpose of displacing the pipeline. Upon receipt of instructions from the Mooring Master, increase to maximum pumping rate using *all main cargo pumps,* but do not exceed 150 p.s.i at the vessel's rail.

3. For the safety of your vessel and at your discretion based upon weather conditions, etc., the discharge of cargo should be arranged so that when approximately 65% of the total cargo has been discharged there will be sufficient empty and dry tanks to accommodate ballast as required to produce a mean draft of approximately 25 ft. and in a trim condition not to exceed 6 ft. by the stern upon the completion of discharging operations. The Mooring Master is responsible for the inspection of the tanks prior to the loading of ballast and again upon the completion of discharge of all cargo; however, normally this will be done by a third-party petroleum inspector.

4. It is unlawful to pollute the waters adjacent to the State of Hawaii. It is the responsibility of the vessel to assure that no oil (crude oil, bunker fuel, diesel, bilge oils, etc.) is spilled or pumped overboard. Drip pans must be provided at the flange connections. In the event of an oil spill, or any other occurrence which results in pollution of the sea, the U.S. Coastguard, the Mooring Master, and the vessel's "Agent" must be notified immediately. The Mooring Master will notify the U.S. Coastguard immediately if the ship's Master fails to do so. By Federal Order CFR 153.305, no dispersants will be applied to an oil spill without U.S. Coastguard approval.

Failure to report pollution, regardless of the extent thereof, will result in severe penalties being imposed by the State of Hawaii and the U.S. Coastguard.

5. A sufficient number of Officers and crew members must be on board at all times to disconnect the hoses, unmoor, and vacate the berth should such action become necessary, or deemed advisable. The main engine must be kept ready for use at all times. Under no circumstances are repairs to be undertaken while the vessel is moored in the sea berth.

6. It is hoped that the discharge of cargo will be expedient and successful, and that your stay in Hawaii will be pleasant. To this end, please do not hesitate to call upon us for any assistance we may be able to render.

7. You are requested to sign and return the attached copy of these instructions in acknowledgement of receipt thereof.

AUTHORITY: State of Hawaii, Department of Transportation, Harbours Division, Oahu District, P.O.Box 397, Honolulu, Hawaii 96809. *Contact:* Captain D. E. Gately, Harbour Master.

AGENT: Davies Marine Agencies, Inc., P.O.Box 3020, Honolulu, Hawaii 96802. Head Office: 608 Fort Street (Pier 10), Honolulu, Hawaii 96813. Tel: (808) 531-8531. Telex: ITT 743-0018 Steam, RCA 723-8305 Davs HR. Cables: Dracosteam.

HOUSTON, Texas: 29.45 N. 95.20 W. (See Plan Book)

DOCUMENTS:

1 Visaed Crew List.
3 Passenger Lists.
3 or more copies of complete Manifests of Cargo for discharge at all U.S. ports.
2 or more copies of Manifest of Cargo for each individual U.S. port.
1 Souvenir List.
1 Stores List.
Ship's Register.
Tonnage Tax.
Load-line Certificate.
Nationality Certificate.
No health document required.

PILOTAGE: Compulsory. Radio to local Agent who arranges Pilot and specifies boarding time. U.S. Coast Guard requires 24 hours' notice in advance of arrival Galveston Bar. Pilot boats and station on VHF Channel 12, Bridge to Bridge is Channel 13 and tugs for docking and off-docking on Channel 14. 3 Pilot boats marked "HP No. 1" – 53 ft., "HP No. 2" – 61 ft. and "HP No. 3" – 106 ft. in length. Pilot boats contacted by light in International Morse code; no sound signal. Pilot taken on board at Sea Buoy No. 1, located 6.7 miles from Galveston. Seldom, if ever, is water too rough for boarding at above location. Anchorage located in Bolivar Roads, 6.7 miles inward from Sea Buoy No. 1.

ANCHORAGES: Anchorage for Houston is only in Bolivar Roads in Galveston, Texas, which has ample space and depth for all Houston bound vessels.

RESTRICTIONS: None with respect to time of day or night, or with state of tide.

Houston Ship Channel Dimensions:

Section of Channel	*Miles*	*Width (ft.)*	*Depth (ft.)*
Bolivar Roads to Morgan Point	25.6	400	40
Morgan Point to Exxon Co. Slip	4.8	400	40
Exxon Co. Slip to Shell Oil Co. Slip	8.8	400	40
Shell Oil Slip to Hunting Bayou	4.6	300	40
Turning Point at Hunting Bayou	0.2	600	40
Hunting Bayou to Sims Bayou Turning Basin	2.8	300	40
Sims Bayou Turning Basin	0.2	1,000	40
Sims Bayou Turning Basin to Wharf No. 15	3.6	300	36
Turning Basin	0.8	250 to 970	36
Total miles	51.4		

MAX. SIZE: Max. 850 ft. long, 115 ft. breadth and 39 ft. draft. Tide minimal, affected primarily by wind only. Should a vessel's draft exceed 39 ft., permission to enter must be obtained from the U.S. Coast Guard.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: International Telephone and Telegraph – ITT – Galveston call letters KLC.

TUGS: Tugs come alongside just off dock or immediately prior to entering turning basin if vessel is to turn, or at Pilot's discretion.

STEVEDORES: Stevedore, on advice from representative of local Agent, must order labour prior to 1700 for 0700 or 0800 hrs. start the following day. Can order at 0800 for 1000, 1100 for 1300 and 1700 for 1900 hrs. start. Gangs must be ordered prior to 1700 hrs. on Saturday for Sunday or holiday.

BERTHING: No special requirements other than authority from terminal operator local Agent.

Public Wharves – Port of Houston Authority Facilities:

Wharves	*Berth Length Feet*	*Berthing Capacity No. of Ships*
No. 1	600	1
No. 2	525	1
No. 3	802	2
No. 4	779	2
No. 8	624	1
No. 9	581	1
No. 10	600	1
No. 11	530	1
No. 12 (2-storey)	530	1
No. 13 (2-storey)	460	1
No. 14	480	1
No. 15	480	1
No. 16	603	1
No. 17	600	1
No. 18	600	1
No. 19	577	1
No. 20	593	1
No. 21	600	1
No. 22	600	1
No. 23	600	1
No. 24	600	1
No. 25	600	1
No. 26	600	1
No. 27	600	1
No. 28	600	1
No. 29	600	1
No. 30	600	1
No. 31	576	1
Nos. 41-48	3,428	8
Manchester No. 1	296	1
Manchester No. 2	500	1
Manchester No. 3	500	1
Bulk Plant No. 1	650	1
Bulk Plant No. 2 (Lay Berth)	600	1
Barbours Cut LASH Ship Berth	900	1
Barbours Cut Container Berth No. 1	1,000	2
No. 2	1,000	2
No. 3	1,000	2
No. 4	1,000	2
Barbours Cut Ro/Ro Platform		2

Petty Terminal Corporation (PETCO) Dock:

Deepwater shipside terminal located on South side of channel. One ship berth 720 ft. long with water depth of 40 ft. One covered warehouse 100,000 sq. ft. with rail track inside warehouse and on outside concrete apron. Complete services available for discharging and shipping general cargo. Owned by Intercontinental Terminals Company and operated by Petty Terminal Corporation.

Manchester Terminal Company:

3 ship berths – 1,650 ft. in length (including 1 piling cluster).

Served by 1 marginal track and 2 outside tracks behind docks plus loading tracks to all other facilities. Special loading-unloading docks for motor trucks available.

Equipment: 62 Lift Machines; 7 Tractors; 1 Towmotor, 30,000 lbs. capacity; 4 Sweepers, 3 Scrubbing Machines.

Manchester Terminal Company also has 18,000 cargo pallets.

New Terminal Warehouse Corporation:

Capacity 3 ship berths. Wharf 1,400 ft. long. Open storage areas of 50,000 sq. ft. Covered storage areas of 200,000 sq. ft.

Other Wharf Facilities:

In addition to the for-hire terminals. Port of Houston has some 43 ship berths plus various barge facilities on the Ship Channel maintained and used exclusively by industries. Most of these facilities are tanker ship berths at the refineries. There are also 4 liquid-bulk terminals for hire: Amerada Hess Terminal and General American Tank Storage Terminals, the latter having 2 separate locations; South Coast Terminals; Robertson Terminals, Inc.

Barbours Cut Terminal: The Port of Houston Authority continues work on a $70 million container, Ro-Ro (Roll-on/Roll-off), and ship/barge (Lighter Aboard Ship – LASH) facility 25 miles downstream at Barbours Cut where the Ship Channel enters Galveston Bay. A "U" head pier and mooring dolphins provide for berthing LASH ships during loading of barges onto the ships and for off-loading containers (by ship's cranes) from LASH ships to truck trailers on the pier. A barge fleeting area and barge mooring dolphins are provided in the LASH ship facilities now in use. A Ro-Ro dock provides for ships equipped with ramps to load and unload wheeled vehicles. A Ro-Ro transit shed with 100,000 sq. ft. of covered storage is nearing completion. An eleven acre paved open storage area is in use: There are three 1,000 ft. container wharves; 42 ft. alongside; 33 acres open storage back-up area at each wharf. The 3 wharves are in use. Container Wharf No. 4 is complete and a 21 acre open storage back-up area is complete. There is a container freight station with 55,000 sq. ft. of covered storage and rail service available. A railroad yard or ramp point with 1 lead track, 1 storage track and 2 working tracks provides a facility to load and unload containers and trailers to and from flat cars. The car capacity on the working and storage tracks is approximately 138×55 ft. long cars.

Bayport Division: A 300 ft. wide by 42 ft. deep Bayport Ship Channel and its 1,600 ft. diameter turning basin connects with the Houston Ship Channel in Galveston Bay and extends approximately 2 miles inland to provide berths for deep-draft tankers and bulk freighters. Petro United Inc., Celanese Corporation, American-Hoechst Corporation and Hudson Oil Company have docks and facilities on the Bayport Ship Channel.

BULK HANDLING FACILITIES:

Public Grain Elevators: Back of Wharves 14 and 15. Capacity 6,000,000 bushels.

Equipped to unload from 110 to 120 cars in 10 hours, or deliver a combined total of 80,000 bushels per hour to 2 ships. 12 mechanical grain trimmers are in use at the Elevator as well as other major equipment including 2 car dumpers and 7 hopper scales of 150,000 lbs. capacity. 2 modern grain truck dumpers can unload up to 30 trucks per hour.

Public Bulk Materials Handling Plant: At Greens Bayou.

Loading/unloading capacity is 1,000 long. t.p.h. free digging rate. Fully automatic plant handles dry bulk commodities rapidly to and from ships and barges through the loading and unloading towers, conveyor systems, hoppers, pits, surge bins and scales; with rail and truck facilities and ample ground storage. Rail cars are rapidly moved with large rubber-tyre tractors. These tractors are equipped with two-way radios for instant communication with unloaders. Boom of unloading tower reaches 76 ft. from face of dock, bucket capacity is 10 tons; loading tower boom reaches out 61 ft. from dock face and is equipped with automatic trimmer. Both towers can travel the full length of the dock. Mooring facilities for a waiting vessel have been installed next to existing dock. Also available: a boxcar unloading system (Augermobile), 2 heavy-duty front-end loaders and 4 heavy-duty car shakers.

Elco Shipside Elevator Company:

Two million bushel capacity elevator which loads up to 25,000 bushels per hour to vessels berthing at Dock 2 of the Port Authority's Manchester Wharves.

Goodpasture, Inc. and Continental Grain Company:

Grain elevator with 12 million bushel capacity – 4 ship berths. Also general cargo handling. Max. draft 38 ft. Loading rate 1,000 t.p.h.

Union Equity Co-Operative Exchange:

Grain elevator with 6 million bushel capacity, 1 grain berth, 1 lay berth, each 980 ft. long, water depth of 40 ft. for all berths. Loading rate 1,200 t.p.h.

Adams Terminal: Phillips Terminal Company.

2,700 linear ft., capacity 5 vessels. Bulk cargo loading conveyor system rated at 400 t.p.h.; horizontal boom, hammerhead-type clamshell unloader equipped with five-yard ore bucket, rated at 150 to 250 t.p.h.; 2 gantry cranes, capacity 40 tons at 30 ft. radius; Robbins heavy-duty car shakeout; 20-ton truck mounted crane. One D & H gantry crane modified to handle five-yard bucket for bulk ore discharge. 100 t.p.h. Specialists in import and export bulk cargo. Covered storage – 73,000 sq. ft.

Jacintoport Terminal:

Deepwater shipside terminal located on the North side of the Ship channel some 15 miles downstream from the Turning Basin.

Three ship berths with water depth alongside the wharf at 32 ft. 24,000 sq. ft. of transit sheds; 60,000 sq. ft. of back covered storage warehouse space, and 300 acres available for open storage. Rail service by the PTRA and Missouri Pacific. 200 igloos provide storage with less than 4° change in temperature year around. 500 cargo pallets. Slip is 4,200 ft. long and 400 ft. wide. 3,600 ft. marginal trackage. Owned and operated by Bethlehem Steel Corporation.

Cargill, Inc.:

Grain elevator with a capacity of 3.5 million bushels. Two ship berths. Max. draft 38 ft. Loading rate 1,500 t.p.h.

CRANES: (Capacities 1 ton=2,000 lbs.)

Mobile Crane – Diesel: Capacity 80 tons

Gantry, American Revolver R-25 Electric: Capacity at 65 ft. radius – 50 tons

Gantry, Clyde Whirley, Diesel Electric: Capacity at 45 ft. radius – 30 tons

Gantry, Portainer, Electric: Capacity at 81 ft. reach – 27.5 tons

Gantry, Portainer, Diesel Electric: Capacity at 113 ft. reach – 44 tons

Gantry, Portainer, Electric: Capacity at 140 ft. reach – 30 tons

Stiff Leg Derrick, Electric: Capacity at 50 ft. reach – 75 tons

BRIDGES: Two bridges cross channel, one immediately East of Public Wharf 31, clearance of 135 ft. and the other immediately West of the Shell Terminal, clearance 175 ft.

MEDICAL: Give sufficient notice to order doctor or ambulance. Numerous hospitals available. Seaman's health certificate required.

TANKERS: No specific requirements for oil carriers with respect to load/discharge lines. Tankers must be gas free to enter turning basin area. Approximately 12 tanker berths, excluding Exxon Oil & Refining Co. in Baytown, Texas.

DENSITY: Classed as full fresh but varies with rainfall and tide, usually 4 in. to 5 in. allowance on full draft.

FRESH WATER: Available at all terminals through pipe and hose.

FUEL: All grades and viscosities available.

FIRE PRECAUTIONS: All standard precautions per code of Federal Regulations plus local ordinances. Tankers, unless gas free, not permitted at wharves in the immediate turning basin area.

IDENTIFICATION CARDS: Immigration Form I-95 card required.

CONSULS:

Australia
Austria
Argentina
Belgium
Bolivia
Brazil
Chile
China
Colombia
Costa Rica
Cyprus
Denmark
Dominican Republic
Ecuador
Egypt
El Salvador
Finland
France
Germany
Great Britain
Guatemala
Haiti
Honduras
Iceland
India
Israel
Japan
Jordan
Korea
Lebanon
Malawi
Mexico
Morocco
Netherlands
Nicaragua
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Portugal
Saudi Arabia
Senegal
South Africa
Spain
Sweden
Switzerland
Venezuela

GANGWAY/DECK WATCHMEN: Not required, but are available and can be arranged by local Agent at Master's request.

OPENING/CLOSING HATCHES: By stevedores only – vessel will be charged for this work if done by crew.

CUSTOMS ALLOWANCES: Tobacco, 300 cigarettes, 100 cigars, 1 lb. of tobacco or combination for each man. Wine and/or Spirit, 1 quart bottle for each crew member.

CARGO GEAR: Cargo gear safety certificate required.

REPAIRS: All types available.

DRY DOCKS: Todd Shipyard, 12,000 ton drydock at Greens Bayou and 14,000 ton capacity (length 400 ft.) drydock in the Houston Ship Canal.

REPATRIATION: Danner Guard Service can handle all phases.

AIRPORT: Approximately 0.5 hour by car; served by regular airlines.

TIME: Central Standard with daylight saving time effective from April to October.

HOLIDAYS: January 1st; February 22nd; March 2nd; May 30th; July 4th; First Monday in September; November 11th; December 25th. No work performed on first Monday in September and December 25th except in emergency.

POLICE/FIRE/AMBULANCE: All services provided or available.

TELEPHONES: Currently no arrangements for placing telephones aboard but easily accessible on wharves.

SERVICES: All services available.

SHORE LEAVE: Shore leave granted except when individual not qualified.

DEVELOPMENTS: Channel depths to be maintained at 40 ft. Bayport development East and South of Morgans Point to have deep draft berths for liquid bulk and general cargo.

Wharf No. 32 in the Upper Turning Basin area is under construction, completion expected in 1984.

A 24 acre concrete paved back-up area is under construction, also expected to be completed in 1984.

SHIPMASTER'S REPORT: 1975.

Customs:

Bond remained sealed.
2 Copies of Curio Lists.
2 Copies Store Lists.
1 Crew List.

Immigration:

No visit. 1 Crew List.

Agents:

Given Travelling copies of Clearance last port, Tax Tonnage receipt last port plus Cargo Manifests.

Agricultural Dept. Re-sealed meat and vegetable rooms. Inspected Galley, Messrooms, etc. Garbage cans to be covered.

Provisions and Stores. Satisfactory. Select own ship chandler.

Laundry. Facilities available but not used.

Coast Guard. No visit.

National Cargo Bureau: Same as New Orleans.

Watchmen: None placed on board. Security at gate strict.

Telephone: None placed on board. Use dock office.

Fresh Water: Available.

Fuel: Available by barge if required. Do not over stem.

Engineering and Repairs: Efficient and satisfactory. Price high compared to N.Z.

Radio Messages: Send ETA after departure New Orleans to Agents and Houston Pilots with draft. Notify Agents of any explosives.

Stevedores: Hours of work. 0800 to 1200 hrs., 1300 to 1800 hrs., 1900 to 2300 hrs. Weekday gangs will work through meal hours to finish. At weekend, day labour works right through to midnight if necessary on time and a half then double time for meal hours.

Crew must not clean hatches. Labour has claim on cleaning and has to be paid in addition to crew. Crew open and close hatches, but not until hatch foreman present. Not before labour working hours.

Working heavy lifts with ship's gear loading rate very slow, especially at end of shift. Due to nature of deck cargo; 11 ton lifts 52 ft. long.

Constant supervision needed for deck cargo.

Head stevedore checks Factory Act Book before starting.

No plan makers. Details sent back to New Orleans for redistribution to discharge ports.

General: Pilot boards from large grey metal cutter off fairway buoy. Flash every 2.5 seconds. Give good lee and have ladder 8/10 ft. above water with usual manropes, heaving line, etc.

If you have to anchor, most vessels use the Eastern anchorage about 1.5 miles East of fairway buoy and clear of fairway marked channel. Soft mud bottom. Use plenty of cable.

Berth: Ships spaced very close to each other. Rise and fall of tide about 1 ft.

Moorings: at least 4 head lines and stern lines plus 2 springs each end. Ships frequently passing and channel narrow consequently a good deal of surge. Lines to be frequently looked at and kept tight. Parted 3 springs in as many days!!! Gangway also to be watched. General rule is to use ship's gangway. Wide apron in front of sheds with rail lines but fork-lifts used most.

Agents have office on wharf with direct line to city office and outside lines.

Wooden piling which acts as fenders. Bollards of the large cleat type. Sufficient but not plentiful. Two linesmen each end when arriving and departing. No permanent cranes but mobile ones can be hired. Quay about 25 ft. above water.

Recommended not to walk about or up to bus especially at night. Better for 2 or more to get a taxi. Fairly good, 3–4 dollars to Houston.

Seaman's Mission near by. Very good, new and modern.

Tugs: Used for berthing and unberthing. Had 2 on arrival due to strong wind and close proximity of mast top to bridge.

Sailing had 1 tug lashed up alongside forward shoulder.

Tugs use own lines.

Bridge: There is a bridge above Upper Clinton Bend from Manchester on the South to Clinton Park on the North. This is a relatively new bridge to be passed under with a clearance of only 135 ft. Check the rise of tide on way up.

SHIPMASTER'S REPORT: August 1980.
Tenneco Terminal – Vessel discharged ammonia.

Approaches: BA Chart 975.

The safety fairway is usually very busy and it is advisable to ensure that you are in fact keeping to the starboard side.

At the entrance to the fairways there are many oil rigs. With the predominately low lying coast, radar positions are extremely difficult. Satellite navigator is highly useful in this respect. The first good check is off the buoys in the final safety fairway. These showed on radar at about 7 miles.

Some radar echoes are received from Galveston itself.

The charted rigs in anchorage 'A' are in fact in those positions.

Pilotage: If anchored, the pilot boat will call vessel into the "Whistle Buoy" for boarding.

The cutter is a large, fast launch and usually lies inside until working a vessel.

Pilot ladder about 8 ft. from the water to clear the boarding platform.

Contact can be made via Galveston Pilots initially on Channel 16 who will relay the messages. Houston Pilots themselves work on Channel 14.

One Pilot, the length of pilotage is about four hours to the first line ashore. Two tugs used.

No night time pilotage for a vessel of this size (32,000 g.r.t.) and type. There is a TV video surveillance system operating throughout the length of the channel.

Berth: About 4 miles below Warren Terminal.

Plant and terminal now owned by Occidental (Oxy) but Tenneco rent the berth.

Berth is far too small for this vessel, at least as far as the moorings are concerned. Typical American 'T' barge jetty, the head of which is only about 25 m. long, with walkways leading to 3 dolphins at each end. The bow and stern overlap these mooring dolphins and head and stern lines are taken to posts on the river bank. These are only breast lines and it is advisable to make advance preparations to put out as many as 4 springs at each end. There is a great deal of traffic passing continuously.

Gangway: The gangway should remain stowed until in position. Whether vessel can use the accommodation ladder will depend on draft. If vessel deeper than 26 ft. there will not be sufficient clearance from the fender so a "B.O.T." type gangway resting on accommodation turntable will have to be used.

When the accommodation ladder is used it has to be turned through 120° and landed on the aft dolphin immediately adjacent to the jetty head.

Discharge: 12 in. flexible hose 150 ASA used. 'T' piece, two shore hoses.

Max. back pressure allowed is 50 p.s.i. Vapour return line is 4 in.

The plant ashore is only equipped to export cargo and its reliquefaction plant is small.

A shore walkie-talkie is placed with the officer of the deck.

Discharge rate can vary (October 1979 – 260 t.p.h., August 1980 – 550 t.p.h.)

Shore surveyors figure taken for bill of lading. Density 1001.

USCG: No inspection prior to commencement, apparently this is normal. The port is far too busy for them to visit every ship. But be prepared, they are very particular on navigation equipment and Officers' Certificates and experience.

General: It is possible to load bunkers by barge alongside the terminal if prior arrangements and permission are obtained but it depends on Agent and Authorities.

Fresh water is available from the jetty, at a very low rate.

Storing can present difficulties as the after crane does not plumb the dolphin. By arrangement, vessel can use shore crane when the operation is not too difficult.

Public telephone on dock – minimum charge 25c.

Liferaft service available, 24 hours' service.

A considerable distance from the city, which rather complicates services and communications.

Agents leave a radio onboard for contact with Agent and office, but often outside range, office on maximum range.

No private transport (taxis) allowed into refinery area. Transport to the gate by their own minibus and then telephone for taxi. Crew transport service allowed into berth area with pass from Agent.

AUTHORITY: Port of Houston Authority, P.O.Box 2562, 1519 Capitol Avenue, Houston, Texas 77002. *Tel:* (713) 226–2100. *Telex:* 910–881–5787. *Contact:* Richard P. Leach, Executive Director.

AGENT: Strachan Shipping Company, Post Office Box 52490, Houston, Texas 77052. Tel: 713-683-3500. Telex I: 79-1837. Telex II: 910-881-6283. Cables: "Strachan".

HUENEME, California: 34.09 N. 119.12 W.

(See Plan Book)

DOCUMENTS: See "San Francisco".

PILOTAGE: It is requested that ships entering port stand by 1 mile off harbour entrance just seaward of the Port Hueneme seabuoy designated R"2" (Fl. R. 4 secs. Bell) and await port Pilot who will board from a tug. The U.S. Coast Guard Station at the Channel Islands Marina maintains a radio beacon.

All vessels 1,000 g.r.t. and over or carrying a foreign flag entering, leaving and shifting within the Port of Hueneme, including area of the Oxnard Harbour District, must be piloted by a port Pilot duly licensed to perform the services of piloting vessels within the Port of Hueneme. The Oxnard Harbour District does not maintain Pilots; licensed Pilots are available on a 24-hour-a-day basis from Port Hueneme Pilots' Association (Captain Carl Dingler at (805) 646-0469) or on a part-time basis from Hueneme Pilot Service (Captain R. E. Fosse at (805) 985-8071).

ANCHORAGES: If there is a wait for Pilot caused by weather, visibility, congestion in harbour, or any other reason, the best anchorage area is W.S.W. of the harbour entrance where there are no hazards and there is some protection afforded by the natural curve of the coastline.

RESTRICTIONS: The length of entrance channel is 2,300 ft. The narrowest width of harbour entrance channel is 330 ft. However, because of prevailing fresh winds, this is a one-way channel; thus, deep-draft ships not able to manoeuvre easily in a restricted channel have precedence over smaller craft.

RADIO: The U.S. Coast Guard Station, Channel Islands Marine, located at the entrance to harbour, guards the following frequencies: 2182 kHz, and VHF Channels 12, 16, 21, 22, 23 and 83. After initial call up the Coast Guard can shift to 2670 kHz, 2694 kHz, 5080 kHz. The "Port Hueneme Wharfinger" guards Channel 16 and will normally shift to Channel 6 for administrative purposes. The harbour tugs guard Channel 16 continuously. The harbour Pilots, when expecting a commercial merchant vessel guard Channel 16 voice circuit and voice call "Port Hueneme Pilot".

Tugboat working frequency is VHF Channel 65A (156.275 kHz).

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Los Angeles Quarantine Station.

Ships required to pass quarantine may enter port and moor. "Q" Flag is to be flown. Upon mooring, ship must post gangway watch until ship has passed quarantine. When Port of Hueneme is its port of first arrival in the United States from foreign ports or from States other than California, a ship must be inspected by the Department of Agriculture. There is a local representative in Oxnard. The Oxnard Harbour District will order officials if requested by ship or Agent.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Tug services for Port of Hueneme are furnished by the Oxnard Harbour District and Port Hueneme, California. Requests for tug services may be made to the General Manager of the Oxnard Harbour District, who will act as Agent for ship in forwarding them. 3 tugs are available on a 24 hour basis. The tugs are 3,000 s.h.p. twin screw vessels. The number of tugs to be used on any movement is determined by port Pilot in charge of the movement. Tugs are not available for deep-sea towing, except in case of emergency to save life or property. As a service to all vessels, the Oxnard Harbour District, acting as Agent for vessel, will pay all tug fees to United States Government when necessary, subject to reimbursement conditions as arranged between the vessel, her Owners, or Agents, and the General Manager, Oxnard Harbour District. Seldom are tug charges more than the minimum due to the short transit time to berths.

BERTHING: Berthing arrangements should be made with the General Manager by Agent as far in advance of arrival date as possible, specifying dates of arrival and sailing, and nature and quantity of cargo to be handled. The Oxnard Harbour District also has a licence agreement with the U.S. Naval Construction Battalion Center, Port Hueneme, for the use of additional berths and terminal facilities on an "as available" basis. Prior arrangements must be made, should use of these additional facilities be desired or necessary. The Port of Hueneme has 4×600 ft. berths with depth 35 ft. MLW and appropriate terminal facilities. At the present time there are 10 deep-draft berths within the entire port area.

Bottom is sand and mud. Mean low water is + 1.5 ft. Height of wharf above the MLLW is 13 ft.

STEVEDORES: All stevedore work is presently performed by resident stevedores, the Marine Terminals Corporation, who also have offices in San Francisco, Long Beach, etc. They maintain an office at 111 Ponoma Street, Port Hueneme. They provide modern handling equipment to suit cargo's need. There is no special fixed bulk handling equipment available as yet. Longshoremen are members of the International Longshoremen's and Warehousemen's Union and conform to the Pacific Coast Longshore Agreement. Hours of work are as outlined in this agreement. Longshoremen at this port do all covering and uncovering of hatches and rig the gear. There are 8 gangs available in the port. Day and night gangs for Tuesday through Saturday (except Monday through Saturday, 1900 hrs. initial start) must be ordered by 1500 hrs. the previous day. Night gangs required Monday for a 1900 hrs. initial start, and Sunday and Monday gangs must be ordered by 1100 hrs. Saturday. Cancellation time is same as ordering time, if gangs which have been ordered are cancelled after the aforementioned deadlines, the agreement's 4 hour minimum applies. Normal day shifts begin at 0800 hrs. and normal night shifts at 1800 hrs. Each shift consists of 8 hours and on sailing day 10 hours may be worked by the final shift. There are no obstructions on the wharf to keep all hatches from being worked concurrently.

MEDICAL: Patients are provided with medical attention at the Medical Center, Port Hueneme, or St. John's Hospital, Oxnard California. Temporary visa must be obtained from Department of Immigration and Transportation if a crew man or passenger must remain after the ship sails.

FRESH WATER: Fresh water is available. There are hydrants along the wharf and delivery to ship is effected by hose. Water is good to taste but is hard. It is not suitable for boilers. Contact wharfinger on duty for delivery of water. Boiler feed water is available by truck upon request.
FUEL: Diesel oil and bunker fuel is available by pipe-line at Wharf No. 1.
REPAIRS: Minor repairs may be made in port. Machine shops in Ventura and Oxnard are qualified for normal voyage repair work.
GANGWAY/DECK WATCHMEN: Gangway or special wharf watchmen are available upon request.
TELEPHONES: 4 pay-telephone booths are located at the West end of Wharf 2 adjacent to the wharfinger's office and 2 at the West end of warehouse No. 2 and maintained for the convenience of ships berthed at Wharf 1. The wharfinger's office has a telephone which may be used by people calling in to contact the ship. This telephone is manned 24 hours a day for convenience. Its number is (805) 488-4615. The Port of Hueneme office telephones are available to ship's officers and Agents for local calls or collect long distance calls. Wharf lines permit a telephone to be installed at a nominal charge if desired by Agent.
HOLIDAYS: U.S. Federal and State holidays are observed by the Port and Terminal management. If stevedoring is required on holiday it is performed in accordance with the International Longshoremen's and Warehousemen's Union-Pacific Coast Longshore Agreement.
AUTHORITY: The U.S. Navy (Commanding Officer, U.S. Naval Construction Battalion Center) exercises overall Port Control Authority; the Oxnard Harbour District is solely responsible for its commercial operations.

Port of Hueneme, Oxnard Harbour District, P.O.Box 608, 150 Port Hueneme Road, Port Hueneme, California 93041-0608. *Tel:* (805) 488-3677. *Contact:* Edward J. Millan, General Manager.

HURON, Ohio: 41.24 N. 82.35 W.

Refer to St Lawrence Seaway for important general information.
PILOTAGE: None required other than what is required for Great Lakes.
ANCHORAGES: Depth 3 to 10 fathoms.
MAX. SIZE: Length 716 ft., breadth 75 ft., draft 26 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: WMI Lorain.
TUGS: Meet vessel at the pier head. Use ship's lines.
BERTHING: Norfolk and Western Ore Dock, operated by the Lake Erie Dock Co., can handle 15,000 tons of ore in 8 hours. Ore slip is 1,400 ft. long with 26 ft. of water.

Limestone Dock, 700 ft. length with 26 ft. of water.

Grain loading facilities operated by the Pillsbury Company. Load speed, 20,000 bushels; unload speed, 15,000 bushels; berthing space, 832 ft.; max. length 610 ft.
STEVEDORES: None available.
FRESH WATER: Available.
FUEL: None available.
IDENTIFICATION CARDS: Required by Immigration.
CONSULS: Nearest at Cleveland.
REPAIRS: No facilities.
REPATRIATION: No facilities.
AIRPORT: 50 miles from port (Cleveland International Airport).
POLICE/AMBULANCE/FIRE: 433-4114.
SHORE LEAVE: Allowed.
AUTHORITY: The Huron Joint Port Authority.

JACKSONVILLE, Florida: 30.20 N. 81.40 W.

(See Plan Book)

DOCUMENTS:

Public Health:

Maritime Quarantine Declaration Form HSM 13.19.

Customs:

3 U.S. Customs Manifests for cargo to be discharged at first port of entry.
2 U.S. Customs Manifests covering all other cargo on board vessel for discharge at other than first port of entry.
3 Stores Lists.
3 Crew Lists.
3 Passenger Lists.
3 Curio and Crew Personal Items Lists.
Vessel's Clearance from last port.
Vessel's Register and Load Line Certificate.
Vessel Utilization and Performance Report.
Form MA.578 for dry cargo vessels.

Immigration:

1 Certified Crew List and Landing Permit form I-95A for each crew member.
Valid passport for each crew member.

PILOTAGE: Vessels approach Pilot Entrance Buoy STJ No. 2 (Red) approximately 6 miles at sea off jetty entrance to St. John's River. Pilot station located just inside jetty on river channel at Mayport Naval Station. Pilot station operates both VHF and UHF frequencies. VHF Channels 16 and 18 A. UHF Frequencies 2738 and 2182. Pilot cable address "Jaxpilot". Pilot boards from Pilot boat "Jaxpilot" just East of sea buoy STJ No. 2. Pilot boat does not maintain station at sea but answers call or is dispatched on information by vessels' Agents. Vessels anchoring awaiting Pilot should anchor as near entrance buoy as safely possible.
ANCHORAGES: 2 anchorages located inside harbour near dock sites with depth of about 31 ft.
RESTRICTIONS: For vessel drawing not more than 38 ft. water no restrictions and vessel can enter and clear harbour on 24 hour basis. Pilots and tug assistance available all hours day or night. Vessels drawing more than 38 ft. required to await tide.
MAX. SIZE: Draft should not exceed 38 ft. for dry cargo vessels and tankers.
Note: St. John's Bar Pilot Association advises max. draft 37 ft. (20th April, 1982).
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Tropical Radio, Miami, Fla. Call letters WAX. Lantana Radio, Boynton Beach, Fla. Call letters WOE.
TUGS: Under normal conditions with vessels able to proceed under own power, tugs approach vessel in vicinity of pier at which vessel is to dock. Tugs use own lines but no charge made.
BERTHING: Vessels can dock day or night. Transit time from pilot station to berths about 2 hours.
Blount Island Terminal: Operator: Jacksonville Port Authority. Length of berth, 4,700 ft. Depth alongside at MLW 38 ft. (11.5 m.). Containers, autos, paper and general cargo are handled. One 40 gross ton Alliance container crane, 1×40 gross ton IHI container crane, 1×100-ton Clyde revolving gantry crane and 1×50-ton Clyde revolving gantry crane are available. 1 bridge crane with a span of 600 ft. and lifting capacity of 900 m. tons is available over the graving dock of Offshore Power Systems at Blount Island.

2 Roll-on/Roll-off ramps are available. 1 measures 234 ft.×18 ft. and the other 212 ft.×18 ft. These ramps are designed for use with vessels having side ports. Concrete Roll-on/Roll-off "T" platform 166 ft. long with 153 ft. swing area at West end of marginal wharf.

Also see "Developments".

Tallyrand Docks and Terminals: Operator: Jacksonville Port Authority. Length of berth 2,880 ft. Depth alongside at MLW 38 ft. Cargo handled – General, Cars, Lumber, Containers, Steel, Coffee and Petroleum.

Also see "Developments".

Sealand Terminal: Operator: Sea-Land Service, Inc. Adjacent to Tallyrand Docks and Terminals (See Plan). Length 1,200 ft. Depth alongside at MLW 34 ft. 2 container cranes, capacity 27.5 tons and 30 tons.

8th Street Terminal: Operator Joyserv Ltd. Adjacent to Sealand Terminal (See Plan). Length of berth 707 ft. Depth alongside at MLW 34 ft. Cars are handled.

Commodore Point Terminal: Length of wharf 2,750 ft. Depth alongside 34 ft. Cargo handled: Oil, cement and liquid chemicals. Terminal also occupied by North Florida Shipyards. Storage facilities: Charter Oil; 340,000 barrels. Glidden – Durkee: 60,171 barrels for chemical storage. Atlantic Cement; 6 silos capacity 40,000 tons. Universal Atlas Cement; 6 silos capacity 32,000 tons.

Jacksonville Bulk Terminals: A subsidiary of Occidental Petroleum. Length of loading berth 1,000 ft. Depth at MLW maintained at 36 – 38 ft. 2 fixed loading towers capable of loading vessel at a rate of 2,850 long tons of phosphate per hour. Maximum outreach 81 ft., clearance above MLW of 40 ft. Terminal also capable of loading superphosphoric acid, phosphate rock, zircon sand (of sufficiently low moisture), granular fertilisers, tachonite, ilmenitite and mullite. Storage facilities: 6 concrete silos, each with a designed capacity of 5,000 tons of phosphate rock. Six tanks with capacities of 15,000 tonnes of superphosphoric acid each.

Dunns Terminal: Length of wharf 1,000 ft. Depth 38 ft. Leased for exclusive use by Military Sea Transportation Services.

Celotex Corp: Tel. (904) 751-4800. Berth: 635 ft. (205 m.) with dolphins. Depth: 32 ft. (9.8 m.). Terminal for receipt of gypsum rock by self-unloading vessels.

TANKERS: All petroleum terminals provide own hose ranging from 8 in. to 12 in. Prior to arrival, Master should request information from Terminal Company size of connection required.

Private Terminals:

Amerada Hess: Tel. (904) 765-4427. Berth: 200 ft. (60.1 m.) with dolphins. Depth: 30 ft. (9.2 m.). Tank storage capacity: 460,000 barrels. Receipt of petroleum products.

Alton Box Board Company: Tel. (904) 353-3611. Berth: 750 ft. (230 m.) with dolphins. Depth: 24 ft. (7.2 m.). Receipt of residual fuel oil.

Eastern Seaboard Petroleum Company: Tel. (904) 355-9676. Berths 250 ft. (80 m.) with dolphins (1); 160 ft. (48 m.) with dolphins (2). Depth: 18 ft. (5.5 m.). Tank storage capacity: 1,266,000 barrels.

Shipping of petroleum products by barge; loading of barges for bunkering vessels at berth in the harbour; fueling of tugs and small vessels.

Gulf Oil & American Oil: Berth: 200 ft. (60.1 m.) with dolphins. Depth: 33 ft. (11.5 m.). Tank storage capacity: 900,000 barrels.

Gulf: Tel. (904) 765-5541.
American: Tel. (904) 768-2583.
Receipt of petroleum products and loading of barges.

Phillips Petroleum Company: Tel. (904) 353-6740. Berth: 205 ft. (60.2 m.) with breasting dolphins. Depth: 34 ft. (10.5 m.). Tank storage capacity: 243,000 barrels. Receipt of petroleum products.

Shell Oil Company Wharf: Tel. (904) 355-5521. Berth: 230 ft. (98 m.) with dolphins. Depth: 33 ft. (10 m.). Tank storage capacity: 448,500 barrels. Receipt of petroleum products; occasionally fuels towboats and loads barges for bunkering vessels at berth in the harbour. Light marine diesel fuel only.

Standard Oil Company Terminal: Tel. (904) 353-1094. Berths: Barge–300 ft. (92 m.) with dolphins; Tanker–760 ft. (230 m.) with dolphins. Depth: Barge–10 ft. (3.1 m.); Tanker– 32 ft. (9.8 m.). Tank storage capacity: 595,000 barrels. Receipt and shipment of petroleum products. No bunkering of vessels.

Texaco Pier: Tel. (904) 356-6344. Berth: 550 ft. (167 m.) with dolphins. Depth: 32 ft. (9.8 m.). Tank storage capacity: 320,000 barrels. Receipt and shipment of petroleum products; fuels towboats.

BRIDGES: Only 1 bridge that vessel would have to negotiate and that only if docking at Commodore Point terminal.

STEVEDORES: Master should keep Agents closely advised by radio of ETA and any amendments to first ETA given. Recommended that Master give ETA 72 – 48 – 24 hours in advance to arrival. Enables ordering gangs or cancelling gangs ordered in event of delayed ETA.

MEDICAL: Hospital facilities available. International Vaccination Certificates required by all crew members.

DENSITY: Varies from fresh water 1.000 density to mixed salt water 1.0075 density. St. John's River is fed from fresh water sources and for most practical purposes may be considered fresh.

FRESH WATER: Potable water is available through hose connections at all berths operated by the Port Authority. No water barges.

FUEL: Most grades marine fuels available ranging from bunker "C" to light marine diesels with intermediate blends in between. Most major oil companies have bunkering facilities.

FIRE PRECAUTIONS: No smoking except in officers' lounge and crew's lounge. No open flames. No sparking from funnel.

GANGWAY/DECK WATCHMEN: Watchmen services available but not necessary.

OPENING/CLOSING HATCHES: Crew may open hatches prior to vessel's arrival at dock. After arrival at dockside this work reserved for longshoremen. Vessels equipped with McGregor type or other automatic opening devices, crew may open hatches at any time. Longshoremen do not open and close these type hatches.

CERTIFICATES: Vessel Register, Load Line, Gear Certificate, Derat.

CUSTOMS ALLOWANCES: Tobacco: 200 cigarettes per man. If vessel remains in port over extended period of time, sea stores can be opened under Customs supervision and additional allowances made. Wine/Spirits: No specific limits as to quantity allowed per man; Customs accept Masters' recommendations for allowances so long as they are reasonable. This applies to beers, wines and spirits.

IDENTIFICATION CARDS: Form I-95A only.

CONSULS: Denmark, Dominican Republic, Finland, France, Germany, Guatemala, Italy, Norway, Sweden, Uruguay.

SURVEYORS: *Hull Surveyors:*

American Bureau of Shipping, 2254 Gulf Life Tower, Jacksonville, FL 32207. Tel: (904) 396-4993.

John M. Bell, 814 East Coast Drive, Atlantic Beach, FL 32233. Tel: (904) 249-2741.

Caleb Brett U.S.A. Inc., P.O.Box 40232, Jacksonville, FL 32203. Tel: (904) 246-9686. Marine bulk oil surveyors, cargo superintendent, analytical and testing laboratory, tank calibrator, draft surveys, hull and machinery surveys.

Fortson Marine Surveyors, Inc., 3366 Lake Shore Blvd., Jacksonville, FL 32210. Tel: (904) 389-0904. Light commercial.

Hull & Cargo Surveyors, Inc., 4161 Carmichael Avenue, Suite 216, Jacksonville, FL 32207. Tel: (904) 399-4114.

Intramarine, Inc., 2130 East Adams Street, P.O.Box 53043, Jacksonville, FL 32201. Tel: (904) 353-0828. Telex: 56-8421. Answerback: Intramar Jax.

Lloyd's Register of Shipping, Brownett Building, Suite 200, 4080 Woodcock Drive, Jacksonville, FL 32207. Tel: (904) 396-6788.

Capt. J. Ole Markussen, 4987 San Pablo Road South, Jacksonville, FL 32224. Tel: (904) 246-1850.

H. E. (Harry) Martin, P.O.Box 5028, Jacksonville, FL 32207. Tel: (904) 396-0422.

Robert L. Martin, 11350 Beacon Drive, Jacksonville, FL 32225. Tel: (904) 641-9892, (904) 641-9018.

Rudolph F. Matzer & Associates, Inc., 13891 Atlantic Blvd., Jacksonville, FL 32225. Tel: (904) 246-6438. Twx: 810/828-6094. Answerback: Matzer Jax.

The Salvage Association, 1946 Gulf Life Tower, Jacksonville, FL 32207. Tel: (904) 396-1861. Telex: 5-6216. Answerback: Wreckage Jax.

Schmahl & Schmahl, Inc., 2121 Corporate Square Blvd., Jacksonville, FL 32216. Tel: (904) 721-1699, (800) 432-0656.

Soucy-St. George & Co. Inc., 2070 Talleyrand Avenue, P.O.Box 16593, Jacksonville, FL 32216. Tel: (904) 356-7171, (904) 354-2442.

Strocchi & Company, 1914 Beachway Road, P.O.Box 16541, Jacksonville, FL 32216. Tel: (904) 398-1862, (904) 724-1641. Only vessels under 300 gross tons.

Dave Swan, 3327 Olive Street, Jacksonville, FL 32207. Tel: (904) 398-0305.

Toplis & Harding, Inc., 1045 Riverside Avenue, Suite 165, Jacksonville, FL 32204. Tel: (904) 356-5871. Telex: 5-6568. Answerback: Toplis Jax. Cable: Lloydagent.

United States Salvage Association, Inc., 1919 Beachway Road, Suite 5C, Jacksonville, FL 32207. Tel: (904) 398-1174.

Wignall & Company, 1000 Riverside Ave., Suite 303, Jacksonville, FL 32204. Tel: (904) 354-6993.

Cargo Surveyors:

Horvath Associates, Inc., P.O.Box 52148, Jacksonville, FL 32201. Tel: (904) 356-7876, (904) 268-2812.

Intermodal Transportation SVCS. (Div., General Adjustment Bureau), 4057 Carmichael Avenue, Suite 127, Jacksonville, FL 32207. Tel: (904) 398-7526.

National Cargo Bureau, 2070 Talleyrand Avenue, P.O.Box 16593, Jacksonville, FL 32216. Tel: (904) 354-2442.

SGS Control Services, Inc., 4306 Plymouth Street, Suites 1 & 2, Jacksonville, FL 32205. Tel: (904) 384-9830.

Schmahl & Schmahl, Inc., 2121 Corporate Square Blvd., Jacksonville, FL 32216. Tel: (904) 721-1699 (800) 432-0656

Soucy-St. George & Co., Inc., 2070 Talleyrand Avenue, P.O.Box 16593, Jacksonville, FL 32216. Tel: (904) 356-7171, (904) 354-2442.

Toplis & Harding, Inc. 1045 Riverside Avenue, Suite 165, Jacksonville, FL 32204. Tel: (904) 356-5871. Telex: 5-6568. Answerback: Toplis Jax. Cable: Lloydagent.

Wignall & Company, 1000 Riverside Avenue, Suite 303, Jacksonville, FL 32204. Tel: (904) 354-6993.

REPAIRS: All types engine and deck repairs possible. 2 well-equipped shipyards.

DRY DOCKS: 3 large dry docks of 18,000 to 33,000 tons capacity and 6 smaller with capacity of 1,000 to 12,000 tons.

REPATRIATION: Facilities available to effect crew changes and repatriation.

AIRPORT: Airport 20 miles. Daily flights to all major U.S. cities.

TIME: Eastern Standard Time and Daylight Saving Time during Summer months late April through October.

HOLIDAYS: Holidays observed by Stevedores: New Year's Day (Jan. 1st); Martin Luther King's Birthday (Jan. 15th); Lincoln's Birthday (Feb. 12th); George Washington's Birthday (Feb. 22nd); Good Friday; Memorial Day (May 30th); Independence Day (July 4th); National Election Day; Labor Day (First Monday September); Columbus Day (October 12th); Armistice Day (Nov. 11th); Thanksgiving (Fourth Thursday November); Christmas Eve, Christmas Day; New Year's Eve.

When holidays fall on Sunday, the following Monday observed to the extent of paying overtime and 8 hour minimum pay period shall apply. No work performed on the following holidays: New Year's Day, Independence Day, Labor Day, Christmas Day.

POLICE/AMBULANCE/FIRE: Police 633-4111; Ambulance 633-2211; Fire 633-2211.

EMERGENCY CO-ORDINATION CENTRE: *U.S. Coast Guard:*

U.S. Coast Guard, Captain of the Port, Marine Inspection Office, 2831 Talleyrand Avenue, Room 200, Jacksonville, FL 32206. Tel: (904) 791-2648, (904) 246-7341, if no answer. Cable: CG Captain of the Port Jax. Contact: Captain Walter McDougal, Captain of the Port; Officer in Charge, Lt. Schmincke, Senior Investigating Officer.

Certification of U.S. merchant vessels, port safety and security; licensing and certificating of merchant vessel personnel, documentation, and marine environmental protection.

U.S. Coast Guard, Group Mayport, State Road A1A, P.O.Box 385, Mayport, FL 32267. Tel: (904) 246-7341 (No TWX. or Telex). Contact: Lt. Cmdr. H. Bruce Dickey, Commanding Officer.

Search and rescue, and law enforcement between Savannah, Georgia, and Cape Canaveral, Florida. 24 hour monitor; Channel 16, FM-UHF and 2182; HF-SSB emergency radio communications.

TELEPHONES: No facilities available for placing phones on board vessels except in shipyards.

SERVICES: Compass-adjusting, radar, navigational equipment. No tank-washing or tank-cleaning services available.

SHORE LEAVE: No restriction on shore leave if not detained by Immigration.

STORING: See "Prelims" page viii.

1. Vessel can be stored by barge or truck.
2. No regulations concerning barge storing except when vessel is loading or discharging dangerous cargo.
3. Trucks can proceed alongside at the berth.
4. Yes, fork lift trucks can be used on the jetty to handle stores.
5. Customs regulations in force regarding storing – ship's stores usually supplied free of U.S. excise taxes and supplies (such as alcoholic beverages and tobacco products) must be loaded under the supervision of the U.S. Customs Service for tax exemption to apply.
6. If possible, local Riggers can be employed to assist with storing but usually deliveries are made directly by the supplier.

REGULATIONS: No garbage to be disposed overside, no pumping of dirty ballast into river. Smoke emissions must be controlled to minimum.

BANKS: Atlantic National Bank of Florida, 200 West Forsysth Street, General Mail Center, Jacksonville, FL 32231. Tel: (904) 632-6767. Telex: 5-6311. Answerback: ATL/BK Intl Jax. Cables: Atlane.

Barnett Bank of Jacksonville N.A., Downtown Office, 100 Laura Street, P.O.Box 990, Jacksonville, FL 32231. Tel: (904) 791-7579. Telex: 5-6351. Answerback: Barbk N A Jax. Cables: Natbank.

Flagship Bank of Jacksonville, Prudential Building, P.O.Box 2494, Jacksonville, FL 32203. Tel: (904) 396-2861. Telex: 56-8410. Answerback: Flagbank Jax.

Florida National Bank of Jacksonville, 214 Hogan Street, General Mail Center, Jacksonville, FL 32231. Tel: (904) 359-5363. Telex: 5-6337. Answerback: Flanb Jax.

Jacksonville National Bank, 51 West Forsyth Street, P.O.Box 90 F, Jacksonville, FL 32231. Tel: (904) 359-7099.

Southeast Bank of Jacksonville, 231 East Forsyth Street, P.O.Box 2297, Jacksonville.FL 32203. Tel: (904) 350-1700.

DEVELOPMENTS: The entire river channel from the jetties on the Atlantic Ocean to Mile 20 has been dredged to a minimum depth of 38 ft. MLW.

At Blount Island Terminal an additional 1,200 ft. of berthing space and 25 acres of container storage area has been completed.

A 50 ton revolving gantry crane and 12×35 ton container straddle carrier are operational at Tallyrand Docks and Terminals.

A 100 ton multi-purpose crane is on order and will be delivered mid 1985.

AUTHORITY: Jacksonville Port Authority, P.O.Box 3005 (2831 Talleyrand Avenue), Jacksonville, Florida 32206. *Tel:* (904) 633-5240. *Telex:* 810-827-1323. *Cables:* Jaxport. *Contact:* Paul D. di Matiauna, Managing Director. Ed A. Shaw, Director of Traffic.

AGENT: Strachan Shipping Company, P.O.Box 4010, Jacksonville, Florida 32201. Tel: (904) 356-0711. Telex I: 80-3632. Telex II: 810-827-5504. Cables: "Strachan".

JUNEAU, Alaska: 58.18 N. 134.24 W.

Located at N.E. side of Gastineau Channel, 8 miles from Stephens Passage. Juneau is the capital of Alaska. Open all year.
APPROACHES: Via Chatham Straits, Lynn Canal and Stephens Passage.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pick-up point is Guard Island.
ANCHORAGE: 16 fathoms in centre of Juneau Harbour.
Restrictions: A Safety Zone has been established, comprising the area between the shore and a line extending 9 cables N.W. from No. 2A light-buoy. Within this zone, which is effective from June 1st to September 30th annually, no vessel other than passenger carrying vessels of 500 gross tons and over (including cruise ships and ferries) may anchor without the express consent of the Captain of the Port. There is no restriction on vessels navigating within the area.
MAX. SIZE: Harbour depth 15/19 fathoms. Tides: diurnal range 16.4 ft. Also see "Berthing".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
CUSTOMS: Quarantine, Immigration and Customs, locally.
BERTHING:

1. Foss Alaska Line Dock: berthing length 550 ft. 36 ft. LW. No cranes.
2. Juneau Cold storage: berthing length 250 ft., 36 ft. LW. Cranes, 2 electric hoists, 3 lift trucks, 40,000 sq. ft. covered shed space. Fresh water.
3. Juneau Ferry Terminal: berthing length 400 ft. 32 ft. LW. No cranes. This is a Roll-on/Roll-off facility for wheeled vehicles and self-propelled or towed. 35 tons capacity. No covered shed space. Fresh water.
4. Coast Guard Dock: 750 ft. long, 31 ft. deep at face. No storage. Restricted use.
5. Trucano Construction Co. Dock: Length 500 ft. Crane with 90 ft. boom available, capacity 50 tons.

STEVEDORES: 1 gang.
REPAIRS: Engine repairs possible.
WATER: Available.
FUEL: Available.
MEDICAL: Hospital available.
TRANSPORTATION: Air and ferry.
AUTHORITY: The City and Borough of Juneau, Harbor Department, 155 South Seward Street, Juneau, Alaska 99801. *Tel:* (907) 586-5255, 9425. *Contact:* Ron Raykowski, Harbour Master.

KAHULUI, Hawaii: 20.53 N. 156.28 W. (See Plan Book)

DOCUMENTS:
4 Crew Lists.
4 Passenger Lists.
Customs Documents.
Clearance, Travelling Manifest.
Local Manifests.
Health Documents.
Bill of Health and Vaccination Certificates.
4 Manifests.
4 Bills of Lading.
Certificate of Registry.
Annual Inspection Certificate.
Load-line Certificate.
Derat Certificate.
Radio Certificate and Licence.
4 Store Lists.

PILOTAGE: Request for Pilot normally made through Agent or through Captain K. Bohlin, Tel: 572-7343. Contact Pilot on VHF Channel 12. Pilot boards 0.25 mile East of Waihee Reef lighted Buoy No. 2. Anchorage 0.5 mile East of Buoy.
ANCHORAGES: No anchorage inside breakwaters. Only anchorage 0.5 mile East of Waihee Reef lighted Buoy No. 2 in 9 to 12 fathoms.
RESTRICTIONS: 24 hours' notice of arrival is obligatory. No tide restrictions.
MAX. SIZE: Max. length 700 ft. Max. draft 32 ft. 6 in.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station. (Health: Tel. 244-4273.)
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany). (Agriculture: Domestic Overseas Arrivals Tel. 877-7802. Foreign Arrivals Tel. 244-3882.)
RADIO: Communicate through RCA or ITT stations in Honolulu.
TUGS: 1 × 1,500 h.p. tug stationed at Kahului. Additional tugs dispatched from Honolulu, if necessary. Tug joins vessel between breakwater and Waihee Reef lighted Buoy No. 2. Tug's lines normally used. No extra charge.
CARGO HANDLING: Kahului has 1 berth specially equipped to load bulk sugar. Matson Navigation Company operates a straddler to move Matson containers. Ramps are in place at Pier No. 1 for Matson Roll-on/Roll-off vessels.

Young Brothers Ltd. operate a forklift to move containers.

Dock Load Limits: 500 lb./sq.ft. over the area supported by piles, cylinders or seawall. 1,000 lb./sq.ft. over the area supported by land or fill.
STEVEDORES: To be ordered by 1500 hrs. of day prior to operations.
MEDICAL: Hospital facilities available. Tel: 244–9056.
TANKERS: Discharge only. 12 in. line for molasses, 12 in. line for heavy fuel oil, 6 in. lines for light fuel oils. No slop discharge facilities. 2 berths available for tankers, max. draft 32 ft. 6 in.
FRESH WATER: Available from 2 in. water line at each berth. Rate of delivery about 200 gallons per minute.
FUEL: Small amount of diesel fuel and heavy fuel available in an emergency only.
GANGWAY/DECK WATCHMEN: Services of watchman recommended, usually arranged by Agent.
OPENING/CLOSING HATCHES: Normally carried out by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes, 50 cigars per man, and 1 bottle wine or spirits. (Customs Port Director Tel: 877-6013).
REPAIRS: Minor deck and engine repairs only.
AIRPORT: Distance to airport 1.5 miles. Served by Inter Island Airlines.
TELEPHONES: Arrangements made with Hawaiian Telephone Co. (Tel: 242-5211), to install on board.
DELAYS: Occasional delays due to limited berthing space and shortage of stevedore gangs.
POLICE/FIRE/AMBULANCE: Police 911; Ambulance 911; Fire 911.
EMERGENCY CO-ORDINATION CENTRE: U.S. Coast Guard: Tel. Honolulu 536-4336 or Locally Tel. 244-5256.
TIME: GMT minus 10 hours all year round.
STORING: 48 hours' free time for domestic cargo. 120 hours' free time for foreign cargo. Trucks allowed alongside to handle special cargoes; bulk and heavy lifts.
AUTHORITY: State of Hawaii, Dept. of Transportation, Harbors Division, P.O.Box 216, Kahului, Maui, Hawaii 96732. *Tel:* (808) 877-6051. *Contact:* Harold T. Campbell, District Manager and Harbour Master.
AGENT: See "Honolulu".

KETCHIKAN, Alaska: 55.20 N. 131.38 W.

DOCUMENTS: See "Anchorage, Alaska".
APPROACHES: Port located on Revillagigedo Island. Open all year round. Ships coming from Hecate Straits or outside Graham Island proceed into Dixon Entrance to vicinity of Guard Island where the Pilot will meet them.

Vessels coming up the inside passage from Vancouver, B.C., are met at Lucy Island Pilot Station.
PILOTAGE: South Eastern Alaska Pilots' Association, Box 1539, Ketchikan, Alaska 99901. Telegraphic address; Alaska Pilots Ketchikan.

The Alaska Pilot Service requires 5 days, 48 hours, and 12 hours advance notice of ETA and can be contacted on Channel 16 VHF or 2182 kHz.

The pilot boat "Magdalene" (WA 7513) normally rendezvous with the vessel 0.75 miles from Guard Island.
ANCHORAGE: Safe anchorage can be obtained in the area for deepdraft vessels; however there are no specified anchorage areas.
MAX. SIZE: The largest vessel to be berthed to date is a 26,000 ton freighter; however larger vessels could be accommodated.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Cables to Agent, Receivers, and Pilots can best be routed through AKM Juneau.
TUGS: Tugs can be arranged through the ship's Agent. Lines from tug are normally used with no additional charge.
BERTHING: Alaska Line Dock: berthing length 400 ft., depth 26 ft. at North end, 39 ft. at South end at low water, no cranes.

Talbots' Inc: private berth length 300 ft., depth 35 ft. low water.

Ketchikan Spruce Mill: berthing length 450 ft., depth 33 ft. low water. Height of pier at low water 22 ft.

Ketchikan Pulp Company (at Wards Cove, 6 miles North of Ketchikan): private dock, berthing length 800 ft., depth 33 ft. at low water. 50 ton crane on rails, also mobile units and fork lifts.

City Dock: Length 550 ft., depth 36 ft.
STEVEDORES: Stevedores obtained through shipping Agent. 24 hours' notice normally required.

4 or possibly 5 gangs available dependent on obtaining casual labour.
MEDICAL: Medical matters may be referred to shipping Agent. Excellent hospital and out-patient treatment facilities are available.
FRESH WATER: Ample fresh water available at no cost.
FUEL: Fuel available for deepdraft vessels: No. 2 Diesel and gasoline.
TANKERS: Tow lines (fire wires) required fore and aft.
GANGWAY/DECK WATCHMEN: Recommend security watch for passenger vessels. Watchmen can be arranged through the shipping Agent.
OPENING/CLOSING HATCHES: Done by longshoremen.
IDENTIFICATION CARDS: Crew identification cards are required by Immigration Officials.
CONSULS: The nearest Consul is in Anchorage, Alaska.
REPAIRS: Repair facilities are limited. Excellent welding and machine-shop services are available, however.
REPATRIATION: Repatriation matters can be handled through the shipping Agent and Immigration Officials.
AIRPORT: Daily flights to and from Seattle as well as points North may be obtained.
TIME: Ketchikan is on GMT minus 8 hours during the Winter and GMT minus 7 during the Summer. Time changes the third Sunday in April through the third Sunday in October.
AUTHORITY: Supervisor, U.S. Coast Guard, Marine Safety Detachment, c/o U.S. Coast Guard Base, Ketchikan, Alaska.

KINGS BAY (Naval Submarine Base), Georgia: 30.49 N. 81.31 W.

NO LONGER A PUBLIC PORT FACILITY.

DOCUMENTS:

Crew List, from foreign movements, 1 Crew List visaed by American Consul in or near foreign port of departure; Coastwise U.S.A. 3 copies, 1 for Customs, 1 for Immigration and 1 for the Agent's office.

Curio List, 3 copies, from both foreign and coastwise movements.

Stores List, 3 copies, from both foreign and coastwise movements.

5 copies of Foreign Manifest.

Permit to sail from foreign port.

International Vaccination Certificates and/or other health certificates.

PILOTAGE: Channel entrance is between Cumberland and Amelia Islands, and is approximately 14 miles in length, 400 ft. wide and 38 ft. deep at MLW. Cumberland Pilots usually boards vessels at the St. Mary's Entrance Sea Buoy No. 2. Cumberland Pilots may be reached by marine telephone (ship-to-shore) Fernandina Beach, Florida, Tel: 261-3158. Naval Submarine Base Kings Bay is in the Northwestern part of Cumberland Sound, about 6 miles above its Southern entrance.

HEALTH: See "Health: All Ports" before first U.S. port Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

VHF: Port Services: VHF Channels 13, 16 and 17, Tel: 912-673-2550.

BERTHING: Day or night. Naval Submarine Base has a 1,996 ft. concrete pile wharf with depths of 38 ft. reported alongside in January 1984; deck height is about 14 ft. A rail spur line connects the terminal with the Seaboard System Railroad; 2 transit sheds, 2×30 ton mobile and 1×70 ton mobile hoists are available. 2×70 ton YD-243 and YD-239, one ARDM, 3 YTB tugs and 3 Civil Service Pilots are on site. There is 1 turning basin, 1,996 ft. long by 800 ft. wide with project depth of 38 ft. at MLW.

STEVEDORES: Riggers and crane operation supplied by Civil Service.

FRESH WATER: Plenty of fresh water available, pumped into ship's tanks by hose, bilge water via hose.

FIRE PRECAUTIONS: Smoking in the warehouse, on wharf or on any unit while unloading or discharging any flammable or explosive cargo is strictly prohibited. In the event of a fire occurring on board any unit, Tel: 2263/3333.

EMS Dispatcher: 2222.
Safety Manager: 2525.
Emergency: 2222/3333.

GANGWAY/DECK WATCHMEN: Required.

TIME: Eastern Standard Time and Eastern Daylight Saving Time.

HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labour Day, Columbus Day, Veteran's Day, Thanksgiving Day, Christmas Day. In the event one of the above holidays falls on a Sunday, the following Monday will be observed.

POLICE/AMBULANCE/FIRE: Police Departments St. Mary's and Kingsland, Georgia, plus County Sheriffs and Naval Security. Ambulance, Kingsland. Fire, both Kings Bay and St. Mary's, Georgia.

TELEPHONES: Navsubase Operator Autovon and FTS lines, Commercial, 912-673-2000, Autovon, 860-2111, FTS, 970-2112.

SHORE LEAVE: Naval bus and taxi on base only.

GENERAL: *Recreational Services:* Theatre, swimming pool, bowling centre, library, Officer's Club Lounge, Chief Petty Officer's Club Lounge, Enlisted Club Lounge, Deli/Hungry Dolphin, Consolidated Package Store, Gymnasium.

AUTHORITY: United States Department of the Navy, Washington.

Naval Submarine Base, Kings Bay, Georgia 31547. Dock Master on site.

KODIAK, Alaska: 57.47 N. 152.24 W.

Located near the N.E. tip of Kodiak Island in the Gulf of Alaska, South of Anchorage and East of the Alaska Peninsula.

DOCUMENTS: See "Port of Anchorage".

PILOTAGE: Pilot can be contacted through South West Pilots' Association in Homer, Alaska, Tel: (907) 235-8783. 24 hours' notice should be given when requesting a Pilot. Pilot station: Lat. 57° 42′ 24″ N., Long. 152° 14′ 12″ W. (St. Paul Rocks Morris Alfa Buoy). Pilot boat is tug "Kodiak King". Tel: (907) 486-5503. VHF Channels 10, 13 and 16. Single Side Band 4125 kHz.

APPROACHES: North Entrance Buoy No. 4 off Spruce Cape.

Pickup Point: Hutchinson Reef Buoy.

East Channel Entrance: Humpback Rock off Cape Chiniak. Steer 280°T until reaching St. Paul Buoy.

ANCHORAGES: Safe anchorage between Puffin and Gull Islands East of shipping channel.

MAX. SIZE: Harbour depth in excess of 30 ft. Tides: Range approximately 10 ft.

HEALTH: See "Health": All Ports before first U.S.A. ports (Albany). Illness reports made to Anchorage Quarantine Station.

RADIO: Stevedoring Agent: Alaska Terminal and Stevedoring, Inc. Tel: (907) 486-4001 or 4002. Call Signs WAN46. City Dock VHF Channel 16.

Harbour Master's Office Tel: (907) 486-5438. Call sign WAB918. VHF Channels 12, 14 and 16.

TUGS: Alaska Tug and Salvage: Tel: (907) 486-5503. Radio Call Sign WYN6116. VHF Channel 10 and 16. SSB 4125 kHz.

BERTHING: Pier 1/Ferry Dock: 204 ft.×28 ft., 28 ft. at MLLW. Use: Mooring, loading and unloading and bunkering.

Pier 2/City Dock: 360 ft.×64 ft., 38 ft. at MLLW. Use: Loading and unloading commercial freight vessels, moorage for fishing vessels. Covered warehouse space available. 20 ton and 90 ton cranes available. Various size forklifts.

Pier 3/Container Terminal: 360 ft.×64 ft. (655 ft. bollard to bollard), 38 ft. at MLLW, container services/general cargo, 27.5 ton gantry crane available.

CRANES: See "Berthing".

STEVEDORES: Alaska Terminal and Stevedoring, Inc. Tel: (907) 486-4001 or 4002, 24 hours' notice for gang arrangements.

REPAIRS: Limited facilities. Divers available.

MEDICAL: Ample hospital facilities available. Also doctors, dentists and optometrists.

FRESH WATER: Available.

FUEL: Light fuels only. 2 fuel companies. 24 hour service available.

SURVEYORS: Norm Holm, Box 365, Kodiak. Tel: (907) 486-5616.

DRY DOCKS: None available for large vessels.

AIRPORT: 7 miles. Various flights available depending on time of year. Ferry service available March to December.

POLICE/FIRE/AMBULANCE: Emergency 911, Police (907) 486-3221, Fire & Ambulance (907) 486-5728.

EMERGENCY CO-ORDINATION CENTRE: Coast Guard, Search and Rescue (Kodiak Island) Zenith-5555 anywhere in Alaska. VHF Channel 16.

SERVICES: Gyro compass repairs, radar repairs, all types electronic equipment repairs. Divers available for surveys and underwater repairs.

AUTHORITY: City of Kodiak, P.O.Box 1397, Kodiak, Alaska 99615. *Contact:* George V. McCorkle, Harbour Master, Tel: (907) 486-5438.

LAKE CHARLES, Louisiana: 30.13 N. 93.15 W.

(See Plan Book)

PORT LIMITS: Buoy No. 26, In Calcasieu Ship Channel, 3 miles off Cameron, Louisiana.

DOCUMENTS:

U.S. Customs: If foreign cargo on board for discharge at any port:

3 copies of Cargo Manifest of all Cargo.
3 copies of Crew List.
3 copies of Store List.
3 copies of Curio List (crew personal effects).
3 copies of Passenger List if carrying passengers.

If vessel in ballast, only 2 copies of above documents required.

If vessel in ballast and carrying passengers, 3 copies of above documents required.

1 copy of Clearance from last port.
2 copies of Customs Form 1300 (Master's Oath).
2 copies of Customs Form 1301 (General Declaration).

U.S. Customs Boarding Officer must examine Load Line Certificate, Safety Equipment Certificate, Tonnage Tax Receipt, Certificate of Financial Responsibility (Oil Pollution), Ship's Register, an Ship's Certificate of Nationality (if any).

2 copies of Customs Form 721 (Inbound Utilization Report).
1 copy of Certified Crew List (If American Ship).

Bonded lockers will be sealed by Customs.

U.S. Immigration:

1 copy of Visaed Crew List from Amecican Consul at foreign port of clearance (if any).

1 I-95 (Identification Card) for each crew member on board.

All passports must be validated for each crew member.

U.S. Bureau of Etomolgy:

All meat lockers and freezers with restricted meat will be sealed. All fruit from prohibited countries will be confiscated. All animals or birds from foreign countries must remain on board.

PILOTAGE: Radio Agent ETA, who will arrange Pilot board at Calcasieu Bar.

ANCHORAGE: At Calcasieu Bar only.

RESTRICTIONS: Entrance channel 40 ft. depth. Distance 40 miles.

During LNG/LPG movements, special restrictions may be placed on the waterway by the local Coast Guard Captain of the Port.

MAX. SIZE: 1,000 ft. length, 38 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first USA port (Albany).

RADIO: Tropical – New Orleans, WNU.

VHF: Pilots may be contacted on Channel 12, 13, 65 and 66.

TUGS: Meet vessel 30 minutes away from berth. Use tugs' own lines. 2 for berthing, 2 for unberthing.

BERTHING: General Cargo Berths: 10 with total length: 5,675 ft. All have draft of 36 ft. (fresh water).

CRANES: Mobile pneumatic and track cranes available with lifts up to 50 tons.

BULK HANDLING FACILITIES: 3 bulk-loading berths: No. 1, West bank of Calcasieu River, 8 miles below main port facilities, 1,200 ft. length, 40 ft. depth, loading rate 1,600 t.p.h. Clam bucket type ship unloading crate, unloading rate of 600/800 short tons per hour.

No. 2, Contraband Bayou Section, main port, 920 ft. length, 35 ft. depth, loading 480 t.p.h. 16,000 long tons storage facilities.

No. 3, Contraband Bayou Section, main port, 320 ft. length, 35 ft. depth, loading rate (bulk rice) 180 t.p.h. from stationary tower. Twin 1,250 tons storage tanks adjacent.

No. 4, Bulk unloading facility, length 850 ft., depth 30 ft. Barite and petroleum coke unloaded, rate 250 t.p.h.

SPECIALISED CARGO HANDLING FACILITIES: 1 berth suitable for Roll-on/Roll-off traffic. 2 berths at main port for liquid chemicals, No. 5 for creosote oil import and No. 6 for import/export. Private berth for private company for receiving LNG.

BRIDGES: One bridge with vertical clearance of 135 ft.

STEVEDORES: Notice of firm ETA and request for gangs must be received prior to 1600 hrs. CST for work following day.

TANKERS: Citgo Petroleum Corp. B-Dock, 673 ft. length, 36 ft. depth; C-Dock, 660 ft. length, 34 ft. depth; D-Dock 665 ft. length, 36 ft. depth. Also see "Shipmasters Report No. 1".

Continental Oil Co. Berth 1, 1,000 ft. length, 40 ft. depth; Berth 3, 1,000 ft. length, 40 ft. depth.

PPG, 700 ft. length, 40 ft. depth.

Olin Mathieson Dock: 400 ft. length, 28 ft. depth. Also see "Shipmaster's Report No. 2".

MEDICAL: Hospital facilities available.

DENSITY: Salt water in Summer, fresh water in Winter. Allow density 1000 for drafts.

FRESH WATER: Available at all berths.

FUEL: Bunker "C" and diesel available at Cities Service berths; other berths served with bunkers by barge.

FIRE PRECAUTIONS: Usual precautions.

DRY DOCKS: None.

SURVEYORS:

1. Cargo inspectors are available.
2. Surveyors are available.

GANGWAY/DECK WATCHMEN: Not required.

HATCHES: Rigging performed by stevedores. McGregor-type hatches opened by crew, others by stevedores.

CARGO GEAR: Shore cranes available at ship's request.

CUSTOMS ALLOWANCES: At the discretion of Customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

REPAIRS: Small repairs carried out only; very limited facilities.

REPATRIATION: Facilities exist. Arrange through Agent.

AIRPORT: 7 miles from port. 2 lines (OQ, HY) 26 flights per day.

TIME: CST, that is GMT minus 6 hours.

HOLIDAYS: Only 2 days affected on which no work carried out – Labour Day and Christmas Day.

POLICE/AMBULANCE/FIRE: Police or Fire, 911. Fire only 491–1350. Police only 491–1311. Ambulance 433–1677, 433–1707 and 433–1668.

EMERGENCY CO-ORDINATION CENTRE: United States Coast Guard, Sabine, Texas. Tel: (713) 971–2361.

TELEPHONES: None on board ship.

SHORE LEAVE: Allowed if not detained by Immigration.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95, issued for the same vessel.

BANKS:

Calcasieu Marine National Bank, 844 Ryan Street, Lake Charles, Louisiana 70601.

First National Bank of Lake Charles, 3401 Ryan Street, Lake Charles, Louisiana 70605.

Gulf National Bank, 825 Ryan Street, Lake Charles, Louisiana 70601.

Lakeside National Bank, One Lakeside Plaza, Lake Charles, Louisiana 70601.

American Bank of Commerce, 1011 Lakeside Drive, Lake Charles, Louisiana 70605.

National Bank of Commerce, 535 Kirby Street, Lake Charles, Louisiana 70601.

STORING: See "Prelims" page viii.

1. Vessel can be stored by barge or truck.
2. Vessel can be stored during loading/discharging as long as it does not interfere.
3. Trucks can proceed alongside berth.
4. Forklifts can be used on docks.
5. No customs regulations for United States stores.
6. Longshoremen must be employed to assist in storing.

SHIP SUPPLY SERVICE: *Offshore Waters Personnel Transfer:*

Air: ERA Helicopters, Inc., P.O.Box 6566, Lake Charles, La. 70606. Tel: (318) 478-6131.

Boat: McCall Boat Service, P.O.Box 186, Cameron, La. 706431. Tel: (318) 775-5685.

Inland Waters Personnel Transfer:

Land and Water: Port Shuttle, Inc., P.O.Box 1772, Lake Charles, La. 70601. Tel: (318) 433-1613.

DELAYS: Very few delays encountered at any berth.

DEVELOPMENTS: Transit Shed No. 15 being enlarged.

SHIPMASTER'S REPORT No. 1: 1977.

Cities Services Oil Co., Clifton Ridge:

Location: Lat. 30° 09′ 32″ N., Long. 93° 19′ 30″ W.

Max. Size: Length 805 ft., beam 115 ft., draft 39 ft. (FW).

Density: 1005.

Restrictions: Vessels may berth and unberth at any stage of the tide day or night.

Anchorage: At Bar: 2 miles East of seabuoy in depth of 42 ft. For Bunkering: South of Clooney Island in Old Calcasieu River Channel in midstream.

Distance to Berth: Seabuoy to berth 45 miles.

Terminal Information: 2 × 10 in. Chiksan arms. Max. discharge pressure 150 p.s.i. Derricks not required. Accommodation ladder not required.

Services: Fresh water, provisions, fuel oil, diesel and lube, doctor, hospital, airport and laundry.

The following services are not available: Repairs, drydocks, Lloyd's Surveyor and slop tanks.

Telephone Numbers: Dock 318-583-2432. Terminal Supervisor 318-491-6121, 318-491-6437.

SHIPMASTER'S REPORT No. 2: 1979. Olin Chemical Berth.

Approach: If without Loran "C" or satellite navigator the approach at night can be awkward, best made in daylight.

Due to flat coastline, lack of European navigation aids (Decca and Racon) plus numerous oil rigs the entrance to Calcasieu River (like Sabine) is difficult to make.

Calcasieu and Sabine D/F good.

Numerous oil rigs South of buoyed channel which are either side of safety fairway. This corridor can be clearly seen on radar and provides a good longitude.

The soundings, in particular the 100 fathom line, give a good latitude.

The wreck buoy on chart 975 – (Approach to Calcasieu River) at Lat. 29° 19.5′ N., Long. 93° 12′ W. has been removed.

'CC' buoy was picked up at 6 miles.

Pilot/Channel: (B.A. chart 975). The channel is easy to follow as long as US system of buoyage is remembered. Vessels under 30 ft. can go out of the channel on their starboard side leaving starboard hand buoys to port. This is quite in order up to Pilot Area No. 1. Do not go on port side or West as this is spoil ground.

A Westerly current sets across channel 90% of the time and up to 1 knot. The boarding area is as Vol. No. 6 ALRS. If vessel takes a Pilot at Area No. 3 it costs $300 more than No. 1 (not necessary unless vessel restricted by draft – 24 hour service).

Pilot boat is an ex-fishing cutter. White, very fast and strong. Minimum notice for Pilots: Boarding at Area No. 1 four hours, Area No. 3 six hours. For sailing from Lake Charles 2 hours. From Area No. 1, one Pilot to Lake Charles, from Area No. 3, two Pilots. Pilot will *not* use hoist.

VHF: Calcasieu Pilots Channels 12, 13 and 16. Difficult to contact pilot station until well into channel North of 'CC' buoy.

Public Correspondence: Several stations in area – Port Arthur, Cameron, Erath, Lake Charles, a number, notably Erath and Lake Charles have the 80 Channels which they use in preference to 20 Channels. Very busy, but if you search around you can get through fairly quickly. As with all U.S. Marine Operators, overseas ships have difficulty if not calling 'Collect'.

Calcasieu Channel: About 35 miles to Lake Charles from breakwaters. 5 hours from Pilot Area No. 1 to 'Olin' Chemical Dock.

With Northerly wind and heavy rain on ebb, a current of up to 5 knots at Cameron at entrance just North of breakwater.

Bridge: Highway 102 gives 135 ft. clearance HW. 3.75 hours North of breakwater.

Draft: Max. transit draft of 38 ft. 6 in. (FW) from No. 30 buoy to Lake Charles Docks. We consistently had 39 ft. on echo sounder.

Tugs: 2 tugs of 2,500 h.p. and 3,200 h.p. secure in American style, port side, at bridge 102 and leave in same area.

Berthing: Olin Chemical.

Dock: At head of seagoing navigation at bridge interstate 10. In cut, so no traffic passing. New concrete pier upgraded from barge dock. Min. depth 30 ft. Head in, starboard side to. Vessel left at 0200 hrs. without difficulty.

Moorings: 3 headlines, 2 breast lines and 2 springs each end. Springs go on to bollards on the jetty and breast lines and stern lines on to hooks on the bank.

Cargo Hoses: 8 in. × 300 ASA and spool piece to 12 in. × 150 ASA. 3 lengths, ship connects. Takes about 1 hour to connect and disconnect.

VRL: No.

Venting: No, on shore there are detectors on the tanks for ammonia. Generally the wind is onto the works which makes the detection of venting immediate. Vessel has to wait for a change of wind from the North.

Samples: Taken by chemist of tank atmosphere before loading. Must have min. 97% NH_3 by volume before loading.

Rate: Max. 330 t.p.h. (15 minutes of notice if possible, to stop).

Nitrogen: Available but not for hose purge.

Fresh Water: Water on berth very acid. Difficult to get hold of fresh water barge.

Stores: Ship's crane can reach end of jetty. Also small crane on hose platform on jetty which can be used for stores. Lorry cannot get to ship's side.

Gangway: No difficulties. Some ships have to use pilot ladder.

Developments: LPG dock at Beacon 85/86 about half way up the canal owned by Citgo Petroleum Corp. Good mooring facilities. 1 Chicksan. Dredged area 1,000 ft. long, 45 ft. deep.

AUTHORITY: Lake Charles Harbor and Terminal District, Port of Lake Charles, 150 Marine Street, P.O.Box AAA, Lake Charles, Louisiana 70602. *Tel:* (318) 439–3661. *Telex:* 50–2449. *Contact:* James E. Sudduth, Port Director.

LONG BEACH, California: 33.45 N. 118.13 W.

(See Plan Book)

DOCUMENTS:

Certificate of Registry.

International Load Line Certificate – Tonnage Certificate (Admeasurement).

Inspection Certificate.

Derat Certificate.

Radio Safety Certificate.

Inbound cargo for discharge – United States must have a Travellers' Manifest (Form 7527), original manifest, and dock inspection copy covering cargo to be discharged at first U.S. port of entry, Custom's Utilization Form 1302 (Inbound), Form 1302A (Outbound) must be filed within 10 working days after vessel's entry at first U.S. port. Landing permits must be made out prior to arrival (Form I-95) for each crewman of alien origin for the U.S. Department of Immigration (and Form I-418 for each passenger of alien origin). 3 sets of crew lists (Form I-418) must be presented to U.S. Customs, plus 2 sets to the Immigration Inspector, and 1 for the U.S. Public Health Service (Quarantine), and 3 sets stores lists plus 3 sets curio purchases list for U.S. Customs.

American Ships from Foreign Ports:

Safety Equipment Certificate.

Cargo Ship Safety Construction Certificate.

Customs Form CF 226 Affidavit of Repairs Abroad.

Certified Crew List.

Foreign Ships:

1 copy of Visaed Crew List for Immigration (Form I-418 & 5 copies). Other forms may be necessary under certain circumstances, but normally can be taken care of after the vessel's arrival.

If a foreign vessel from a foreign port departs for a foreign port, 2 copies of (Form I-418) covering crew changes in the United States must be submitted to the Department of Immigration upon sailing of the vessel.

(a) Number of copies required: all single except as noted.

(b) The reports mentioned above are all government laws, requested by U.S. Customs, U.S. Immigration, Department of Agriculture, Public Health Service, and B.I.A.

(c) Purpose of documents: to record all vessel movements such as cargo, crew changes, health standards, etc.

(d) Procedure of presenting documents: documents must be presented to Quarantine Boarding Officer and Customs Broker and/or Agent, during or immediately after Quarantine.

PILOTAGE: Pilots ordered by local Agents. Order placed by telephone to 435-6354/5. Local tariff requires 1 to 2 hours notice prior to arrival. Pilot Station contacted on VHF radio Channel 12 (156.6 MHz) or Channel 16 (156.8 MHz). Call sign KMA – 372 Long Beach Pilots. Pilot boats motor cruisers, light grey, fly International Flag "H". Local whistle signal for a Pilot on ship's whistle, 1 short and 1 long blast. Pilot boat normally meets vessels in vicinity Long Beach Sea Buoy or approximately 1 mile South of breakwater entrance. Vessels should have a Pilot ladder on starboard side, weather permitting. In bad weather vessels may be required to proceed inside breakwater entrance prior to Pilot boarding. Pilot boat on VHF Channel 13.

ANCHORAGE: Preferably outside anchorage approximately 0.5 mile S.E. of Long Beach Sea Buoy in 66 ft. of water. Inside anchorage available N.E of channel in outer harbour at approximately 8 fathoms of water depth. Special explosive anchorages available by request, on both sides of entrance channel in 48 ft. of water.

U.S. Coast Guard Anchorage Regulations:

1. The Master of every vessel upon anchoring shall notify the Captain of the Port giving vessel name, anchorage number and time anchored.

2. The Master of every vessel upon departing anchorage shall notify the Captain of the Port giving vessel name, anchorage number, time underway and destination; i.e., bound for sea or for berth number.

RESTRICTIONS: Vessels with dangerous cargoes aboard or loading or discharging such cargo within port district shall obtain permit from U.S. Coast Guard, countersigned by Long Beach Fire Prevention Bureau and Long Beach Port Authority, subject to safety inspection prior entry to assigned anchorage or berth. (Application for entry or handling dangerous cargoes must be requested by Steamship Company or authorised Agent and approved prior entry.)

Also see "Tankers" last paragraph.

MAX. SIZE: (1) Designed depth of water at general cargo berths is 30 ft. – 36 ft. at MLLW.

The Entrance Channel is maintained at 60 ft. MLLW.

(2) No restriction as to length or breadth of vessel at general cargo berths.

(3) Dry bulk facility berths designed depth at MLLW is 40 ft. to 50 ft. No restriction on length. However, ships with over 130 ft. beam might experience some difficulty in loading without turning ship.

There are 5 bulk oil facilities, 2 with 55 ft. of water at MLLW and 3 with 37 ft. to 49 ft. of water at MLLW alongside berths. It is feasible that vessels over 1,000 ft. in length could use the deep-water oil facilities. There are no restrictions as to beam.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Los Angeles Quarantine Station.

QUARANTINE: Quarantine Station, U.S. Public Health Service, 200 World Way, L.A. International Airport, Los Angeles, CA 90045, Tel: 215-2365. Hours: 0600 – 1800 hrs. regular boarding hours. 1800 – 0600 hrs. overtime boarding hours.

STANDARD PROCEDURE FOR MARITIME BOARDING

Dockside Boarding: Vessels subject to Quarantine Inspection are normally boarded upon arrival in berth.

A vessel crewman should be stationed at the gangway to prevent any crew member from going ashore and shore personnel from coming aboard until the vessel has been passed by the Quarantine Boarding Officer.

Vessels are boarded at anchor.

Boarding in the Stream: Vessels are boarded at anchor:

Only if ship is to be at anchor for some time, such as waiting berth, etc. Or upon special request by the ship's Agent.

Effective July 1st, 1973, Radio Pratique as a method of quarantine clearance was discontinued at all ports under control of the United States. Changes in regulations, policies, and procedures concerning Maritime Public Health Clearance has been promulgated.

Vessels Subject to Routine Inspection: Only vessels in the following categories will be subject to on board Public Health Inspection upon arrival at ports under control of the United States:

A. Vessels which, during the 15 days prior to arrival in the United States, or since the last U.S. port (whichever period is shorter) have or have had on board among passengers or crew any of the following conditions or illness signs or symptoms:

1. Temperature of 100°F (38°C) or greater (a) which persisted for 2 days or more; or (b) which was accompanied or followed by any one or all of the following: rash, jaundice, glandular swelling; *or*

2. Diarrhoea severe enough to interfere with work or normal activity; *or*

3. On board occurrence of death, regardless of the signs and symptoms above.

B. Vessels which have been in a smallpox infected country during the 15 days prior to arrival in the United States.

C. Vessels which have been in plague infected country in the 60 days prior to arrival in the United States.

Procedures: Vessels in any of the categories A, B or C above will be granted Provisional Pratique and boarded upon arrival for inspection. In addition, vessels boarded for quality control may be boarded upon or subsequent to arrival. IN ACCORDANCE WITH REGULATIONS YOU MUST INFORM THE QUARANTINE STATION, THROUGH YOUR VESSEL AGENT, AT OR NEAREST THE INTENDED PORT OF YOUR VESSEL'S FIRST ARRIVAL IN THE UNITED STATES OF THE OCCURRENCE OF ILLNESS AS SPECIFIED IN A ABOVE. Based on information you provide your Agent, or information your Agent already possesses regarding your vessel's itinerary, your Agent will notify the Quarantine Station if your itinerary included a smallpox or plague infected country.

ARRIVING VESSELS NO LONGER NEED TO COMPLETE A MARITIME PUBLIC HEALTH DECLARATION UNLESS BOARDED FOR INSPECTION AS DESCRIBED ABOVE. THE BOARDING INSPECTOR WILL PROVIDE THE DECLARATION.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Station KOU Marine Operator, San Pedro.

Channel 1 — ship transmit on 2009 kHz
ship receive on 2566 kHz

Channel 4 — ship transmit on 2126 kHz
ship receive on 2522 kHz

Station KOU also monitors Channel 16 (156.8 MHz) and Channel 26 (157.3 MHz) for distress, safety and calling.

RADAR/VHF: Radar service provided to vessels only if Pilot aboard, in which case radar advisory information will be fed from shore-based radar at Pilot Station.

Station	*Channel*	*Frequency* (MHz)
Distress, Safety and Calling	16	156.8
Marine Exchange	12	156.6
	14	156.7
Long Beach Pilots	12	156.6
Los Angeles Pilots	14	156.7
Harbour Tugs	65	156.275
	77	156.875
Crowley Towing & Transportation "Red Stack Tugs" Company Office	10	156.5
Pacific Towboat	19A	156.95
U.S. Water Taxi	9	156.454
Universal Marine	10	156.5
Wilmington Transportation Co. Company Office	7A	156.35
H-10 Water Taxi	7A	156.35
San Pedro Telephone	26	157.3
Marine Operator	24	157.2
Station KOU	26	157.3
Mandatory Bridge to Bridge	13	156.65

TUGS: Tugs will meet vessel inside breakwater prior reaching inner harbour area. Pilot and tugs are in communication.

BRIDGES: No restrictions into Port of Long Beach. The Gerald Desmond Bridge over Back Channel has vertical clearance of 155 ft. Cerritos Channel which connects Long Beach through Back Channel to Port of Los Angeles has 2 bridges which must be opened for passage of vessels.

Signal for Opening: 3 long blasts on horn or whistle. During inclement weather, call through a megaphone or loud and distinct stroke of bell.

BERTHING: No requirements as to time of entry providing berthing arrangements have been made with Port Authority. Assignments classified as follows:

Preferential Assignments. Secondary Assignments, Subordinate Right granted for use of Preferential Assigned Berth. Temporary Assignment – temporary permission granted to use certain berth.

Note: All berth assignments shall be held by Assignee subject provisions of Port of Long Beach Tariff as to charges, rates, rules and regulations applicable thereto, and to all of terms, conditions and provisions contained in such assignment.

General Cargo:	*No. of berths*	*Total length* (ft.)	*Depth* (ft.)
Pier A	10	6,312	30 – 36
Pier D	2	1,229	36 – 42
Pier F	4	2,467	32 – 36
Piers 1 and 2	6	3,000	36

BULK HANDLING FACILITIES: *Berth 28 – 29:* Length 993 ft., depth alongside 43 ft. One fixed bulk loading tower with hinged cantilevered boom with 31.5 ft. (9.6 m.) outboard reach and telescopic gravity spout served by 36 in. (91 cm.) inclined, electric belt conveyor system extending from 4 under-track pits. Height of boom above MLLW is 50 ft. at 18° to bottom of boom at spout, 42 ft. at 18° from wharf face, 33 ft. at level position from base of concrete. Maximum loading rate 600 t.p.h. Cargo handled: Borax, coke (250 t.p.h. – 500 t.p.h.), pitch, potash (450 t.p.h. – 500 t.p.h.), soda ash, zinc ash, iron ore, coal, fertiliser and salt cake.

Berths 30 – 31: Length 992 ft., depth alongside 43 ft. Types of cargo handled: steel and iron scrap, pig iron, steel slabs, ore, urea, bauxite, rutile sand.

2×6 in. pipe-lines from Berth 30 to storage tanks. Storage capacity 6.7 million gallons.

Products handled: Tallow, vegetable oils (coconut oil, palm oil, cotton seed oil).

Berths 32 – 33: Length 824 ft., depth 36 ft. Screw type unloader unloads to conveyor system, direct to silos. Highest elevated vert screw – 42.5 ft., lowest elevated vert screw – 38 ft. Max. reach 94 ft. from face of wharf (concrete) 91.5 ft. from PHL. Unloading capacity 600 t.p.h. – 800 t.p.h. Storage capacity 50,000 tons. Cargo handled: Cement. 3×10 in. pipe-lines from Berth 32 to storage tanks.

Berths 210 – 211 (Grain Terminal): Length 1,100 ft., depth alongside 45 ft. (9ft. out). Travelling Gantry ship loader having a loading capacity of 65,000 b.p.h. (travel 432 ft., radius 105 ft.) connected to an overhead shipping gallery and belt conveyor system. This belt conveyor system connects to another transfer gallery extending from the grain elevator and silos (2,225,000 bushel storage capacity).

The grain terminal is equipped with the latest state-of-the-art dust collection system. There is an airveyor system for ship discharging.

Berths 212 – 215 (Bulkloader): Length 2,110 ft., depth alongside 34 ft. Depth 9 ft. off the berth is 40 ft. Breasting camels 20 ft. wide available. Stockpile area 85,682 sq. ft. (7,960 sq. m.). 2 electric, travelling, bulk shiploaders with retractable, straight-line bridge boom having 58 ft. outboard reach-height of 60 ft. above MLLW. Boom equipped with 48 in. electric belt conveyor and a telescopic loading spout with mechanical trimming head. Shiploader travels along rear of face. Bulk materials are handled by 48 in. and 60 in. (Berth 212 – 213 shiploader), electric belt conveyor system extending to shiploader through tunnel reclaim from car unloading sheds and storage areas. Types of cargo handled: iron ore, coke, coal and white products.

Open storage: 225,000 tons.

Covered storage: 270,000 tons.

	Berth 212 – 213	*Berth 214 – 215*
Depth	50 ft.	32 ft. (40 ft. with camels)
Shuttle Boom	Yes	Yes
Single Spout	Yes	Yes
Outboard Reach	58 ft.	77 ft.
Clearance Above MLLW to Spout	48 ft.	65 ft.
Shiploader Conveyor	60 in.	72 in. (2 speed)
Loading Rate (Coal/Coke)	3,500 t.p.h.	5,000 t.p.h.

CONTAINER HANDLING FACILITIES: *Piers B (Berths 12, 13, 17, 18 and 19) and C (Berths 20 – 27):* Length 6,790 ft., depth alongside 37-42 ft. 115 acre container and 4 ro-ro terminals. 4×40 ton container cranes. Storage space for 13,000 TEU containers, 1,000×40 ft. chassis, receptacles for 360 refrigerated units, 7 lane main gate and 6 scales. Terminal leased to California United Terminals.

Berths 227 – 228: Length 1,100 ft., depth alongside 42 ft. A 36.5 acre (26.3 hectares) container terminal leased to Sea-Land Service Inc. This terminal is complemented by a 16.3 acre, (6.6 hectares) container freight station, also leased to Sea-Land. The terminal includes a reinforced concrete wharf, 2 travelling 30 long ton container cranes with 100 ft. span and 115 ft. outreach, surfaced storage area. There is space for storing 3,670 TEU containers, including 242 spaces for refrigerated containers.

Berth 229: Length 750 ft., depth alongside 42 ft. 28.5 acre container terminal leased to Maersk Line. The terminal includes 2 travelling 30 long ton container cranes, plus surfaced area and 84 spaces for storing 2870 TEU containers including 84 spaces for refrigerated units.

Berth 230: Length 750 ft., depth alongside 42 ft. 2×30 long ton, travelling container cranes with 100 ft. span and 115 ft. outreach. Has space for storing 1,784 TEU containers, including 50 spaces for refrigerated containers. Terminal leased to United States Lines.

Berths 232 – 233 – 234: Length 2,300 ft., depth alongside 36 ft., 36 ft., 42 ft. respectively. 4×30 long ton electric, travelling Paceco container cranes, each with hinged cantilevered boom with 113 ft. outboard reach. 8 Paceco 30 – 40 ton capacity transtainers. Has space for storing 6,000 TEU on ground and 2,500 TEU containers on chassis, 264 spaces for refrigerated containers. Terminal leased to International Transportation Service, Inc.

Berths 243 – 244: Length 1,200 ft., depth 42 ft. 2 travelling 40 ton container cranes and 6 ton transtainers. Space for storing 3,600 TEU containers. Complete repair facilities and reefer container pre-trip facility. Terminal leased to Long Beach Container Terminal.

Berths 245 – 246 – 247: Length 2,100 ft., depth alongside 36 ft. (40 ft. at 8 ft. off berth). 3 travelling shore container cranes of 50 tons capacity and 3×40 ton transtainers. Expansion of container freight station provides 88,600 sq.ft. inside storage area. Has space for storing 8,000 TEU containers and 72 refrigerated units. Terminal leased to Pacific Container Terminal.

CRANES: Barge cranes available capacity 45 tons – 275 tons. A U.S. Navy floating crane capacity 385 tons available for hire.

SPECIALISED CARGO HANDLING FACILITIES: *Berths 32 – 33 (Tallow, Coconut Oil):* Length 824 ft., depth alongside 36 ft. 2×6 in. pipe-lines extend from Berth 32 to 9 coconut oil storage tanks, total capacity 7,750,000 lb.; 12 tallow storage tanks, total capacity 48,211,300 lbs. (24,105 short tons). These berths used primarily for handling bulk cement (see "Bulk Facilities").

Berth 34 (Steel, General Cargo): Length 750 ft. Depth alongside 36 ft.

Berths 82 – 83: Length 1,300 ft., depth alongside 38 ft. These berths are shared by Port Auto Terminal No. 1, operated by Toyota Motor Sales and covering 55 acres, and Port Auto Terminal No. 2, operated by the Pasha Group and covering 40 acres. Toyota's facility provides for offices, warehousing, dewaxing, painting, repairing and accessory installation, and storage for automobiles. Pasha's facility furnishes an automobile preparation centre, offices and dewaxing operation, with storage area for automobiles.

Berth 83 (Gypsum, Oil, Gasoline): Length 600 ft., depth alongside 38 ft. Vessels unload gypsum rock into an adjustable, elevated, receiving hopper at pier face, served by an elevated 36 in., electric belt-conveyor system extending to a 60,000 ton capacity dome-roof storage building in rear. Unloading rate 800 t.p.h. – 900 t.p.h. Open storage: 335,075 sq.ft.

Berth 122: Length 600 ft., depth alongside 40 ft. An adjacent 21 acre storage area is available for lumber.

Berth 208 (Bananas): Length 600 ft., depth alongside 40 ft. Max. beam without turning vessel 70 ft. 4 electric, travelling banana unloaders, total capacity 17,000 banana boxes per hour. Electric, belt-conveyor system transfers banana boxes from unloaders to 2 rail car and truck loading platforms and to interior of harbour banana warehouse. Banana warehouse is divided into cold storage and ripening areas. Truck loading platform along West side.

Berth 209 (Salt): Length 550 ft., depth alongside 40 ft. Vessels unload bulk salt into a receiving hopper at outer end of a movable, inclined, 48 in., electric belt conveyor. This conveyor serves an adjustable elevated receiving hopper at outer end of an elevated, 48 in., electric belt-conveyor system extending to a large open storage area in rear. Unloading rate: 800 t.p.h.

Berth 242 (Liquid Bulk): Length 700 ft., depth alongside 36 ft. Storage capacity: 12,920,800 gallons in tanks ranging in size from 6,000 to 3,000,000 gallons. Product handling equipment: the pumping and pipeline system is designed to load and unload products to and from barges, ships, rail cars and trucks. Large, heavy-duty pumps efficiently handle a variety of bulk liquids and bunker fuel.

MEDICAL: Advance notice preferable. Adequate hospital and medical facilities available for providing necessary or emergency care. From information available, Public Health Department may, if required, request certain information prior to granting Free Pratique for inoculations, Vaccination/Fever Certificates.

FIRE PRECAUTIONS: 2 fire boats and 1 fire station; in addition City fire service available.

Special fire precautions required at all berths handling petroleum products or dangerous cargoes. In addition to all applicable provisions of Long Beach Municipal Code, flammable and combustible liquids and flammable gases shall be handled and stored at Marine Petroleum Terminals in accordance with minimum fire safety requirements promulgated by Chief, Department of Fire, City of Long Beach.

TANKERS:
Pier A:
Terminal Operator: Exxon
Cargoes Handled: Petroleum products and bunker fuel
Special Facilities/Equipment: Storage tankage for bunker fuel: 400,000 bbls. Discharge rate: 1,700 to 3,500 bbls. per hour. The Long Beach Marine Terminal is the central pumping station for 55 valve box locations throughout the Harbour.

Berth 209:
Length of Berth: 550 ft. (167.6 m.)
Unloading Platform Height: 10.3 ft. (3.14 m.)
Design Depth of Water at berth: 40 ft. (12.2 m.)
Terminal Operator: Exxon
Cargoes Handled: Petroleum products and bunker fuel
Special Facilities/Equipment: Storage tankage for bunker fuel: 400,000 bbls. Discharge rate: 5,000 bbls. per hour.

Berths 209 – 210:
Length of Berths: 1,123 ft. (342.3 m.)
Wharf Height: 19.1 ft. (5.8 m.)
Design Depth of Water at Berth: 40 ft. (12.2 m.)
Terminal Operator: Namolco – Exxon
Cargoes Handled: Petroleum products and bunker fuel
Special Facilities/Equipment: Storage tankage for bunker fuel: 2,220,000 bbls for Exxon and 66,000 bbls. for Namolco. Discharge rate: 10,000 bbls. per hour.

Berth 211A:
Length of Berth: 240 ft. (73 m.)
Terminal Operator: Exxon
Cargoes Handled: Petroleum products and bunker fuel
Special Facilities/Equipment: Storage tankage for bunker fuel: 400,000 bbls. Discharge rate: 5,000 bbls. per hour. Bunker barge loading facility.

Pier E:

Berths 118 – 119:

Length of Berths:	1,210 ft. (368.8 m.)
Wharf Height:	21.6 ft. (6.6 m.)
Design Depth of Water at Berth:	55 ft. (18.6 m.)
Terminal Operator:	ARCO
Cargoes Handled:	Petroleum products and bunker fuel
Special Facilties/Equipment:	5×12 in. (30.5 cm.), hydraulic-operated, marine swivel-jointed loading arms mounted on elevated steel structure on centre wharf. Discharge capacity is 50,000 bbls. (7,950,00 litres) per hour.

Berth 121:

Length of Berth:	1,100 ft. (335 m.)
Wharf Height:	22 ft. (6.7 m.)
Design Depth of Water at Berth:	65 ft. (20 m.*)
Terminal Operator:	Four Corners Pipe Line Company
Cargoes Handled:	Crude oil and petroleum products
Special Facilities/Equipment:	4×16 in. diameter articulated crude unloading arms and 1×8 in. diameter articulated bunker/diesel loading arm; 275 p.s.i. maximum working pressure; design to accommodate tankers from 50,000 to 265,000 d.w.t. tankers; arms to be FCM Chiksan with hydraulic couplings. Storage tankage available at ARCO facilities in Carson and the inner harbour via 42 in. and 24 in. pipe-lines. *Toe of Slope Depth 76 ft. (23 m.) to allow future dredging of Berth to same.

Berths 82, 83:

Length of Berths:	
Wharf Height:	
Design Depth of Water at Berth:	
Other:	410,000 bbls.
Terminal Operator:	Long Beach Terminal Co.
Cargoes Handled:	Gasoline and Naphtha

Berths 84 – 87:

Length of Berths:	1,972 ft. (601.1 m.)
Wharf Height:	16.3 ft. (5.0 m.)
Open Storage Area:	471,300 sq. ft. (43,784 sq.m.)
Design Depth of Water at Berth:	52 ft. (15.8 m.)
Terminal Operator:	Texaco Inc.
Cargoes Handled:	Crude oil, petroleum products, bunker fuel
Special Facilities/Equipment:	Discharge capacity 32,000 bbls. per hour; 24 in. pipe-line to storage and tank farm. Storage capacity: 245,000 bbls.

The following is part of a letter sent by the Captain of the Port to a tanker operator:

The safety of the port and the VLCC tankers using the harbour for bunkering and provisioning is of paramount concern to the Coastguard. Consequently the following guidelines have been established for all such vessels 200,000 d.w.t. and larger when utilising the Outer Harbour (inside of the breakwater) of the ports of Los Angeles/Long Beach:

a. Vessels may enter or depart the harbour areas inside the breakwater only during daylight if over 56 ft. draft.
b. Minimum visibility of 1 mile is established for vessel movement.
c. Adequate tugboat assistance shall be provided when passing through the breakwater entrances upon entering or departure, and when navigating inside the breakwater to and from anchorages.
d. A qualified Pilot must be onboard when entering or departing the harbour. One way traffic is to be maintained during the VLCC's transit through the breakwater entrance.
e. Vessel must have a 10% draft clearance under the keel when crossing either the Los Angeles or Long Beach entrance.
f. No "dead ship" status will be permitted without prior approval of the Captain of the Port.
g. No vessel with a beam in excess of 200 ft. shall enter either harbour without the permission of the Captain of the Port.

DENSITY: Local water density 1.025 grams per millilitre or pure sea water at all stages of tide.

FRESH WATER: Potable fresh water available all Municipal berths through 2 in. lines. Rental charge for use of each 50 ft. length water hose when furnished.

FUEL: All grades (viscosities) of bunker fuels available in any amount through pipe-lines at most Municipal berths, and by barge at anchor or at berths if desired. Notify quantity and type desired to local Steamship Company or Agent.

GANGWAY/DECK WATCHMEN: Normally used, but only compulsory when detainees aboard.

OPENING/CLOSING HATCHES: Crew can open or close hatches at sea or at anchor. If closed or opened at dockside, the use of longshoremen compulsory.

CARGO GEAR: Employer shall not use ship's cargo handling gear until he has ascertained that vessel has a current and valid Cargo Gear Register and Certificate indicating that cargo gear has been tested, examined and annealed in accordance with requirements of International Labour Organization Convention No. 32.

CUSTOMS ALLOWANCES: Tobacco, each crew member entitled to 300 cigarettes, 50 cigars and 3 lb. of tobacco or combination of above. If the stay in port is such that additional tobacco is required, Customs will so issue. Wine and/or Spirit, not to exceed 1 quart of alcoholic beverage each adult non-resident. This exemption for alcoholic beverages may be applied to more than one kind but not to an aggregate volume of more than 1 quart for each adult crew member.

Note: Upon arrival of vessel from foreign port, or vessel engaged in foreign trade from a domestic port, sea stores and ship's stores not required for immediate use or consumption on board while vessel in port, and articles acquired abroad by officers and members of crew, for which no permit to land has been issued, shall be placed under seal, unless Customs Officer is of the opinion that circumstances do not require such action.

IDENTIFICATION CARDS: U.S. Department of Justice, Immigration and Naturalization Service Form I-95-A (Form I-94 for passengers) must be completed.

CONSULS: (Consul Generals, Consul or Vice-Consul). In Los Angeles. (Area code 213)

	Tel. No.		Tel. No.
Argentina	687-8884	Korea	931-1331
Australia	380-0980	Latvia	620-0300
Austria	380-7550	Lebanon	462-5384
Bangladesh	275-4024	Liberia	232-2535
Barbados	882-5227	Lithuania	496-5324
Belgium	385-8116	Luxembourg	394-2532
Bolivia	687-3141	Malawi	625-3545
Botswana	847-9614	Malaysia	621-2991
Brazil	937-4044	Malta	685-6365
Canada	627-9511	Mauritius	788-3720
Chile	624-6357	Mexico	624-3261
Colombia	382-1136	Monaco	382-4969
Costa Rica	662-6314	Morocco	550-3646
Denmark	387-4277	Netherlands	380-3440
Dominican Republic	627-3361	New Zealand	477-8241
Ecuador	628-3014	Nicaragua	629-4367
El Salvador	680-4343	Norway	626-0338
Estonia	463-5542	Panama	627-9139
Finland	203-9903	Paraguay	(714) 731-7685
France	653-3120	Peru	975-1153
Germany (F.R.)	852-0441	Philippines	387-5321
Great Britain	385-7381	Portugal	277-1491
Guatemala	621-2904	Saudi Arabia	208-6566
Guyana	666-3243	Senegal	938-3361
Honduras	623-2301	South Africa	858-0380
Iceland	981-6464	Spain	931-1284
Indonesia	383-5126	Sri Lanka	450-4449
Israel	651-5700	Sweden	473-0901
Italy	826-5998	Switzerland	388-4127
Ivory Coast	550-1288	Thailand	380-4400
Jamaica	735-4950	Turkey	855-1278
Japan	624-8305	Upper Volta	557-2322
Jordan	557-2243	Venezuela	977-0996
Kenya	274-6635	Western Samoa	666-2154

REPAIRS: Within greater port area facilities to accomplish all types of deck and engine repairs.

DRY DOCKS: Within greater port area 2 large private commercial dockyards, Bethlehem Shipbuilding and Repair, and Todd Shipyard Corporation with large floating dry docks and repair facilities. Also, 3 large capacity graving docks located at Naval Shipyard available for emergency use by merchant vessels when not occupied by naval vessels.

SURVEYORS:

1. Lloyd's Register (local office), 1328 N. Avalon Blvd., Wilmington, CA 90744, (P.O.Box 575) 90748. Tel: (213) 834 2334.

American Bureau of Shipping, 200 Pine Ave., Suite 415, Long Beach, CA 90802. Tel: (213) 437 6488.

2. Pacific Cargo Inspection Bureau, Pier A, Berth 4, Long Beach, CA 90802. Tel: 435-7861.

Jacobsen and Associates, Inc., 1324 N. Avalon Blvd., P.O.Box 248, Wilmington, CA 90748. Tel: 834-4553.

REPATRIATION: Through U.S. Department of Justice, Immigration and Naturalisation Service, and clearance of personal effects by U.S. Customs.

AIRPORT: Los Angeles International Airport approximately 18 miles from port, and provides regular scheduled and international airline service.

TIME: GMT minus 8 hours. United States observes Daylight Saving Time, begins at 0200 hrs. on last Sunday of April each year and ends at 0200 hrs. on last Sunday of October of each year.

HOLIDAYS: The subject Legal holidays are defined as follows: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (3rd Monday February); Memorial Day (Last Monday May); Independence Day (4th July); Labour Day (1st Monday September); Admission Day (9th September); Columbus Day (2nd Monday October); Veterans' Day (11th November); Thanksgiving Day (4th Thursday November); Christmas Day (25th December).

Notes: (1) Also, every Statewide Election is a holiday.
(2) Also, any other legal holiday that may be proclaimed by State or National authority is a holiday.
(3) When one of the above days falls on Sunday, the following Monday shall be observed as a holiday.

POLICE/AMBULANCE/FIRE: Port of Long Beach – Police 590-7320 (routine), 435-6711 (emergency); Fire Department and Paramedics 591-7631; Harbour Security Officer 437-0043; U.S. Customs 590-2457.

In an emergency and unable to dial direct – dial operator giving telephone number and exact location where emergency exists.

EMERGENCY CO-ORDINATION CENTRE: U.S. Coast Guard, Captain of the Port, 165 N. Pico Ave., Long Beach, CA 90802. Tel: (213) 590-2326.

TELEPHONE: Installation of telephone aboard ship at Municipal berths.
SERVICES: All services from tank cleaning to compass and instrument repair available at various locations within greater port area.
STORING: See "Prelims", page viii.

1. Vessel can be stored by barge or truck by prior arrangement.
2. No restriction on storing from barge while vessel is discharging or loading except when the vessel is handling hazardous cargo, petroleum products or bunkering.
3. Truck can proceed alongside the berth for the purpose of delivering or receiving stores and chandlery supplies.
4. Forklift trucks may be used on the berth to handle stores with approval of the stevedoring company.
5. Custom regulation regarding storing: Stores *not in bond* may be taken on board the vessel on an export declaration certified by the Customs' Inspector on duty. Stores *in bond* must be signed off by the bonded wharehouse on a vessel supply export document and received on board the vessel by the Customs' Inspector on duty.
6. Riggers employed to assist with storing, stevedores or longshoremen assist with the stores on the wharf but the storing on board vessel is done by the ship's crew.

SHIP SUPPLY SERVICE: See "Los Angeles".
SHORE LEAVE: Crewmen allowed shore leave providing necessary application presented to U.S. Immigration Officer is approved and crewmen's Landing Permit issued (Form 5129). Customs declaration required for articles to be landed by crew members (1 quart of alcoholic beverage with seal broken is allowed).
DELAYS: Arrival at berths are normally on time as scheduled. However, there are times of inclement weather or lack of cargo at a berth which create a short delay. Shortage of longshoremen can also cause a delay in discharging or loading cargo. No delay experienced in bunkering.
GENERAL: For information regarding various social organisations, call 436-9041. Long Beach Recreation Department, for information.
DEVELOPMENTS:

(1) The complete containerisation complex consists of 19 cranes, 18 berths and 415 acres.

(2) An Omni terminal – an ultra modern multi-purpose cargo facility handling containers, Roll-on/Roll-off and break bulk cargoes.

AUTHORITY: Board of Harbor Commissioners, Port of Long Beach, P.O.Box 570, (925 Harbor Plaza), Long Beach, California 90801 – 0570. *Tel:* (213) 437-0041. *Telex:* 656452. *Cables:* Portobeach. *Contact:* James H. McJunkin, Executive Director. Stan Westover, Acting Director of Operations.

AGENT: Beaufort Navigation Inc., 100 Oceangate, Long Beach, California 90802. Tel: (213) 437-7933. Telex: RCA 215332 (Int); 698698 (Dom).

LONGVIEW, Washington: 46.10 N. 122.55 W.

(See Plan Book)

DOCUMENTS:

3 Complete Cargo Manifests.
3 Stores Lists.
3 Possessions Lists.
3 Crew Lists on Immigration forms.
Vessel's Documents.
Tonnage Tax Statement.
Quarantine Form completed.

At first port of arrival, ship is boarded and inspected by Customs, Immigration, Public Health and Agriculture officials. At each subsequent port only Customs Agent will board prior to docking.
PILOTAGE: See "General – Pilotage" before first U.S.A. port.
ANCHORAGE: Safe anchorages indicated by Columbia River Pilots.
RESTRICTIONS: None in regard to arrival time or state of tide. Channel depth 40 ft. at mean low water and tidal range varies between 2.5 ft. and 4 ft.
MAX. SIZE: No limitation on length or breadth. Depth alongside 40 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Columbia River Pilots have knowledge of tug positions and other knowledge pertaining to tugs aiding a vessel.
BRIDGES: One bridge crossing Columbia River at Longview has sufficient clearance so as not to present a problem. Clearance 169 ft. – 185 ft. depending on season.
BERTHING: 7 berthing facilities are available at Port Longview, starting adjacent to the Lewis & Clark Bridge and extending upstream for a distance of nearly a mile.

Berths 1 through 4 are located on one continuous wharf 2,350 ft. long. Berths 1, 2 and 3 are equipped to handle general cargo, bulk feed grains, bulk ores, chemicals and petroleum products. 2 gantry cranes serve Berths 1 and 2 and a 600-ton capacity heavy lift is located at Berth 3. These berths are also served by a system of pipe-lines through which petroleum can be received or pumped to vessels. A paved 2.8 acre assembly area fronting Berth 2 is suitable for handling lumber or multi-commodity project shipments. Both gantry cranes can be used at this facility. 3 transit sheds and 1 gear locker are located near the three berths which are also served by 1,500 ft. of surface track on the wharf apron plus 2 spur tracks under the gantry cranes.

Berth 4 is used for receiving and shipping grain and is served by a 5 million bushel grain elevator operated by the Continental Grain Company. The overhead grain gallery extending along the wharf is served by 6 gravity-fed loading spouts. A marine leg located at the inland side of the wharf is used for unloading grain barges.

Berth 5 is a 515 ft. wharf being converted to an exporting facility for the shipment of bulk chemicals. It is also available for the loading of logs using ship's gear from the water side of the vessel, and handling barges.

Berths 6 and 7 form a continuous wharf 1,500 ft. long. The ship-side container crane is located at Berth 7, with a 50 ton gantry crane at Berth 6. Both cranes are rail mounted. An open cargo handling area of 54 acres is located adjacent to the 2 berths. On the dock is one large transit shed (100,666 sq.ft.) and a gear locker. 3 rail tracks are located along the length of the apron. There is a rail spur on the inland side of the transit shed.

With the exception of the grain elevator facility, Port Longview operates its own facilities and performs all terminal services between ship's tackle and consignees or inland carriers.

In addition to these facilities operated by the Port, there are 9 other berths operated privately in the Longview Port District. Weyerhaeuser Company owns 6 berths and Reynolds Metals Company, International Paper Company and Longview Fibre Company each operate 1 berth apiece. 6 of the 9 berths are used primarily for export while the other 3 are used mainly for receiving raw materials used by the mills.

BULK HANDLING FACILITIES:

Containers: Port Longview's container facility centres around a 30 long ton, electrically operated, rail mounted crane.

The crane has a rated lifting capacity of 30 long tons below the spreader and 37 long tons below the cargo beam. The telescopic spreader can be adjusted to handle 20 ft., 27 ft., 35 ft. and 40 ft. ISO/Sealand containers. It is designed to handle 20 load/discharge containers per hour.

The boom can be raised and lowered to provide clearance of ship superstructure and is designed for through-leg rapid load-handling.

With an outreach of 124 ft. from the waterside rail and a vertical reach of 110 ft., the crane can service Panamax size vessels.

Utilizing a unique "trailer-train" system, a continuous flow of containers can be maintained between storage and staging areas to sustain loading/unloading operations.

A 40-acre area located behind Berth 6 – 7 is being improved for use as a container storage yard.

Containers received from the vessel can be immediately inspected and rerouted either to warehouses for devanning or to rail or truck for ongoing movement. Export containers are staged to the vessel in loading sequence in the adjacent cargo assembly area.

Grain: The Continental Grain Company operates the 5,165,000 bushel capacity grain elevator at the Port of Longview Terminal.

Pellets/Coke/Fertilizer: Port Longview has three dry bulk shipping facilities. Sugar beet pulp pellets are loaded at Berth No. 1 through a 600 t.p.h. loader.

A "portable" belt conveyor and loader for handling bulk dry products (200 t.p.h.) is available at Berth No. 3.

Atlantic Richfield Co. uses a calcined coke storage/loading facility at Berth No. 5.

Two portable hoppers with belt conveyors are available to handle inbound free flowing dry bulks unloaded by ship's gear or dock Whirley cranes equipped with clams.

Roll-on/Roll-off: A 240 ft. extension to the upstream end of Berth 7 to accommodate Roll-on/Roll-off vessels is available at the Port of Longview. 96 ft. of the extension are constructed at a level 8 ft. lower than the remainder of the dock and serves as the loading/unloading area to accommodate a Ro-Ro vessel's stern ramp.

CRANES: 2 electric-powered gantry cranes serve Berths 1 and 2 on 550 ft. of track. They are readily adaptable for handling various types of bulk cargoes, containers, logs, machinery and large equipment. 1 crane is equipped with a 130 ft. boom and has a capacity of 60 tons at a 45 ft. radius. The other crane has a 120 ft. boom with a 50 ton capacity at a 45 ft. radius. Both cranes are served by two 400 ft. railroad tracks permitting direct handling between rail cars and vessels.

A third gantry crane serves Berth 6 on 500 ft. of track. This crane has a 165 ft. boom with a capacity of 50 tons at a 45 ft. radius. 2 × 1,000 ft. rail tracks are located between the crane tracks for handling rail cars at shipside.

The 'Columbia Giant', a 600-ton capacity shore-based crane located at the port, is one of the largest capacity lifting facilities on the West Coast. The twin booms of the derrick reach 130 ft. above the dock and have a tested lifting capacity of 660 tons. The blocks can be hoisted separately or in tandem. The lifting system is certified by Federal and State agencies and has passed for safety requirements for heavy lifting of AEC controlled projects. The 'Columbia Giant' is available for single lifts ranging from 65 short tons up to its rated capacity of 600 short tons.

Also see "Berthing" – Berth Nos. 6 and 7.

STEVEDORES: At least 24 hours notice necessary to arrange gangs before ETA. Arrange through Port Office via Ship's Agent.
MEDICAL: Hospital facilities available.
TANKERS: Petroleum discharge lines consist of 1 × 12 in. and 3 × 8 in. pipe-lines. 1 tanker berth available.
DENSITY: Columbia River is fresh water at Longview.
FRESH WATER: Available through 8 in. line with 2.5 in. connections. Rate of delivery approx. 14.5 t.p.h.
FUEL: Bunker C fuel available through 12 in. line at 850 b.p.h., and light diesel fuel through 8 in. line at 1,200 b.p.h.
GANGWAY/DECK WATCHMEN: Not needed, but arrangements can be made if necessary.
OPENING/CLOSING HATCHES: Work carried out normally by stevedores.
CUSTOMS ALLOWANCES: See "Portland, Oregon".
IDENTIFICATION CARDS: Advisable but not necessary.
CONSULS: At Portland, Oregon.
REPAIRS: Some deck and minor engine repairs are possible at Longview.
REPATRIATION: No facilities for effecting crew changes or repatriations.
AIRPORT: Nearest airport served by regular airlines is in Portland. Charter flights may be arranged from a small local airport.
TIME: GMT minus 8 hours. In addition, clocks are moved ahead 1 hour on the last Sunday in April and returned back 1 hour on the last Sunday in October, at 0200 hrs. local time on those 2 days.

HOLIDAYS: New Year's Day (January 1st); Washington's Birthday (February 22nd); Memorial Day (May 30th); Independence Day (July 4th); Labour Day (first Monday in September); Veteran's Day (November 11th); Thanksgiving Day (fourth Thursday in November); Christmas Day (December 25th). Cargo work can be arranged on most of these holidays.

POLICE/FIRE/AMBULANCE: Police 911; Fire 911; Ambulance 636-3120.

TELEPHONES: Available at dockside.

SHORE LEAVE: Crews allowed ashore if papers are in order.

BANKS: Rainier National Bank and Seattle First National Bank.

STORING: See "Prelims" page viii.

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. —.
6. Yes.

SHIP SUPPLY SERVICE: The only firm currently engaged in the ferrying of personnel from ship to shoreside in the Columbia River in the Port Longview area is Knappton Towboat Co. Their address is: Knappton Corporation, 611 East "A" Street, Rainier, Oregon 97048, U.S.A.

AUTHORITY: Port Longview, P.O.Box 1258, Longview, Washington 98632-0126. *Tel:* (206) 425-3305. *Telex:* 910-473-8615. *Contact:* R. E. McNannay, Port Manager.

L.O.O.P. TERMINAL (Louisiana Offshore Oil Port), Louisiana: 28.53 N. 90.01 W. (See Plan Book)

OPERATOR:

Official Address: LOOP Inc., One Seine Court, Box 6638, New Orleans, Louisiana 70174-6638.

Requests for Port Information: LOOP Inc., One Seine Court, Box 6638, New Orleans, Louisiana 70174-6638. Attention: Vice-President, Operations.

TWX Address: LOOP Inc. (810) 950-5875 (LOOP M.T. GALO) (810) 951-5165.

Cable Address: LOOP Inc. (Radio messages via WNU Slidell, WLO Mobile or WPA Port Arthur).

Telephone Number:

Harvey Office (504) 368-5667. Contact: W. E. Corley, Jr., Marine Manager
Operations Centre (504) 632-6970
Marine Terminal (504) 396-2351

Radio Contact Frequencies: Call sign WXZ 596. High frequency S.S.B., A3J Emission.

2096.5 kHz, Simplex 8291.1 kHz, Simplex
4125.0 kHz, Simplex 12429.2 kHz, Simplex
6218.6 kHz, Simplex

Call sign KR – 7808 VHF-FM.

U.S. Channel 10 156.500 MHz (Simplex only)
U.S. Channel 16 156.800 MHz (Simplex only)
U.S. Channel 74 156.725 MHz (Simplex only)

Time Belt: Local-Central Standard Time (CST). Minus 6 hrs. Greenwich Mean Time (GMT) or Zone plus 6.

Note: From the last Sunday in April to the last Sunday in October, this is modified by use of Daylight Time to minus 5 hrs. GMT or Zone plus 5.

Official Language: English.

U.S. Coastguard TWX Address: USCG NLN 58-4197.

The LOOP Inc. deepwater port and associated facilities are designed for unloading crude oil cargoes from deep draft tankers. The marine terminal is located in open waters of the Gulf of Mexico approximately 29 km. (18 statute miles) offshore from the State of Louisiana.

The port is owned and operated by LOOP Inc. under licenses granted by the Government of the United States of America and the State of Louisiana. The port is governed by the laws of the United States in the same manner as if the port were an area of exclusive federal jurisdiction located within a state.

LOOP shall not permit a tanker registered in a foreign state or flying the flag of a foreign state to utilize its facilities unless the foreign state involved, by specific agreement with the United States, has agreed to recognize the jurisdiction of the United States over the tanker and its personnel while the tanker is located within the safety zone of the port, and unless the tanker owner or operator has designated an agent in the United States for receipt of service of process in the event of any claim or legal proceeding resulting from activities of the tanker or its personnel while located within the port safety zone, and unless the tanker owner carries insurance or demonstrates financial responsibility as required by Title 33, United States Code Annotated, Section 1517.

LOOP shall also maintain a list, as provided by the Office of the Secretary of Transportation, of such foreign states that have executed agreements of U.S. jurisdiction.

At the time of nomination of a tanker, LOOP shall require the person nominating the tanker, or his authorised agent nominating the tanker, to provide LOOP with the name and address of the tanker's designated agent in the United States and to present evidence of compliance with the financial liability requirement, as defined by Title 33, United States Code Annotated, Section 1517.

The U.S. Coast Guard's Captain of the Port, whose office is in New Orleans, has governmental authority over all ports in the area, including LOOP.

LOOP's Port Superintendent has overall authority over the marine terminal and port. This encompasses all personnel at the port, including contract personnel, and all vessel and aircraft operations at the port. During emergency conditions all response activities at the port are directed by the Port Superintendent. This includes the shutdown of tanker cargo discharge. Emergency conditions are those that, in the Port Superintendent's judgment, involve or could involve safety, environmental protection, personnel injury or property damage. Examples of these emergencies include, but are not limited to, the following, if they occur at the marine terminal, or on a tanker, or other vessel or aircraft, or at any other location anywhere in that portion of the deepwater port that lies within the safety zone:

(a) Oil spill.
(b) Fire or explosion.
(c) Tanker collision, actual or potential, with another vessel or with the pumping platform complex.
(d) Tanker grounding.
(e) Electrical power failure on the platform.
(f) Disruption of communications between shore and the port.
(g) Aircraft disaster.
(h) Serious illness, injury or death.
(i) Presence of poisonous gas.
(j) Evacuation operation of the platform (usually due to impending hurricane).

The Port Superintendent is present at the port at all times.

ABBREVIATIONS:

AMM	Assistant Mooring Master
ANSI	American National Standards Institute
AST	Atlantic Standard Time (ZD + 4)
CFR	Code of (U.S.) Federal Regulations
CST	Central Standard Time (ZD + 6)
EST	Eastern Standard Time (ZD + 5)
FERC	Federal Energy Regulatory Commission
GCLW	Gulf Coast Low Water (Datum)
GPM	Gallons Per Minute
M	Thousands (used with barrels of oil)
MBH	Thousands of barrels per hour
mi	Miles
MM	Mooring Master
n	Nautical (used with the word *miles*)
NOAA	National Oceanographic and Atmospheric Administration
PLEM	Pipe-Line End Manifold (at the SPM)

PLATFORMS:

Pumping Platform Complex:

The marine terminal pumping platform complex consists of the pumping platform and the control platform. The two platforms are connected by a walkway bridge between the lower decks. The top of the lower deck of each platform is 21.3 m. (70 ft.) above MHW.

The pumping platform measures 61 m. × 65.5 m. (200 ft. × 215 ft.) and contains equipment for receiving, measuring, sampling, controlling and pumping oil to assist in cargo unloading.

The control platform contains a control room manned 24 hours a day for communications, traffic control, monitoring and surveillance purposes. Also, a supervisory control and monitoring system provides the capability for the control room personnel, when so directed, to assume control of all marine terminal processes otherwise normally initiated from the Operations Centre located near Galliano, Louisiana. The control platform is a two-deck structure measuring approximately 21.3 m. × 21.3 m. (70 ft. × 70 ft.). The lower deck contains platform utility equipment and supporting facilities. The upper deck supports a two-level control building.

DOCUMENTS: See "New Orleans".

PILOTAGE: See "Tanker Arrival".

MAX. SIZE: See "Berthing".

TANKER ARRIVAL:

Arriving from Seaward: There is a 63 mile Safety Fairway leading to the safety zone. *Note:* A tanker in LOOP's safety zone shall keep at least 5 nautical miles (9.3 km.) behind any other tanker ahead of her in the safety zone. The Mooring Master and Assistant Mooring Master will normally board and the Mooring Master will be on the bridge prior to the vessel entering the safety zone. The arrival time for a tanker is recorded as the time and date the inbound tanker arrives at the boundary between the safety zone and the safety fairway. *Tankers are not to enter the safety zone or proceed to the anchorage unless a Mooring Master is on board and the tanker is cleared by the Vessel Traffic Controller.*

Weather permitting, the tanker should have on her port side a pilot ladder and, when so instructed, an accommodation ladder properly prepared for use by the Mooring Master and Assistant Mooring Master. The mooring and connecting equipment supplied by LOOP is normally handled on the port side, so the tanker's port derrick should be topped and rigged in preparation for lifting the equipment aboard and for handling the hose after mooring. The derrick block should be plumb with the tanker's rail at the manifold centreline. Tankers are asked to turn and make a lee in order to allow for a safer boarding and an easier equipment-handling operation.

Speed:

(a) Specific tanker speeds will be recommended by the Mooring Master to the vessel.
(b) Tankers should not exceed the minimum speed necessary to maintain steerage. Inbound tankers shall not enter or be underway in the terminal section of the safety zone at speeds exceeding 3 knots through the water.
(c) Tankers departing in ballast shall not exceed 10 knots through the water anywhere in the safety zone, and shall not exceed such lesser speed as what may be determined prudent by the Mooring Master because of other vessel traffic or prevailing sea or weather conditions.

Proceeding into the Safety Zone: After the Mooring Master is aboard, the tanker may proceed under his guidance into the safety zone, either to the designated anchorage or to the assigned berth for mooring. The shipper and tanker owner shall be responsible and liable to LOOP for any damage or injury done by his tanker to any LOOP facility, equipment or personnel. Services of the Mooring Master, Assistant Mooring Master, mooring launches and their crews, and such other LOOP personnel as may be required aboard the tanker are provided with the express understanding that the Master of the tanker has and accepts the ultimate responsibility for the tanker and crew.

If it becomes necessary for the Master of a tanker to disregard a Mooring Master's advice in order to ensure the safety of his ship, it is requested that a written report from the Master be submitted promptly to LOOP.

Tanker Boarding by Mooring Master and Assistant Mooring Master: Specific instructions are communicated to each arriving tanker for bringing aboard the Mooring Master, Assistant Mooring Master, port-furnished equipment. Basic procedures for proceeding to a mooring, are as follows:

(a) The Vessel Traffic Controller advises the tanker of the Mooring Master's boarding point and of equipment to be made ready prior to arrival of the tanker at the boarding area. Included is advice for preparation of an accommodation ladder and/or pilot ladder and equipment hoist.

(b) The Mooring Master and Assistant Mooring Master will board the tanker, and port furnished equipment is picked up by the tanker prior to arrival at the boundary between the safety zone and the safety fairway. The boarding area is usually at the North end of the safety fairway where it turns and joins the approach section of the safety zone. The entrance to the safety zone is marked at the lateral boundaries by buoys 1 and 2.

Also see "General" – Helicopter Transfer.

(c) Equipment brought aboard the tanker for use in the mooring arrangement is transported to the tanker's bow by the tanker's personnel. Supervised by the tanker's designated officer, and advised by the Assistant Mooring Master, tanker personnel prepare and arrange the tanker's mooring equipment and fittings for the mooring operation to the satisfaction of the Assistant Mooring Master and tanker's Master.

Navigational Assistance: During the mooring operation the Mooring Master and the Assistant Mooring Master perform the following functions:

(a) The Mooring Master advises the tanker's Master on operational and ship control matters and regulations that are peculiar to the port, such as navigational aids, location of crude oil and gas lines in the area, depth and current characteristics of the manoeuvring area during existing conditions, mooring equipment and procedures, and the port's vessel control procedures. The Mooring Master will maintain communications with the Vessel Traffic Controller, mooring launches and the Assistant Mooring Master until the mooring operation has been completed.

(b) The Assistant Mooring Master is stationed on the forecastle of the tanker during mooring operations to assist the Mooring Master by reporting position approach data relative to the SPM and to advise the tanker's personnel in the handling of mooring equipment peculiar to the port.

Vessel Routeing and Approach to Moor: Tankers enter and depart the port via the approach section of the Safety Zone with the assistance of the Mooring Master aboard the tanker. *Prior to entry into the safety zone, anchors must be housed and windlass brakes must be checked for absolute tightness in order to prevent the anchors from being accidentally dropped, with resultant damage to submarine pipe-lines.*

Transiting the Approach Section and Anchorage Section: The Master of the tanker, a competent deck watch officer and a competent helmsman must be on the bridge at all times while the ship is manoeuvring in the approach section and anchorage. A competent deck officer is to be on the bow along with one seaman as lookout, who is capable on command of letting go the anchor, if necessary. A watch engineer and sufficient crew to operate the power plant shall be in the engine room.

Transiting the Terminal Section and Approach to Moor: The Master of the tanker, a competent deck watch officer and a competent helmsman must be on the bridge at all times while the tanker is transiting the terminal section of the Safety Zone and approaching an SPM to moor.

A competent deck officer is to be on the bow along with one seaman as lookout. Sufficient qualified engineers should be in the engine room to operate the plant properly and safely.

Anchor Watch: While the tanker is at anchor in the anchorage section of the Safety Zone, a competent deck officer shall be stationed at all times on the bridge to watch for any dragging of the anchor which can be detected by taking radar ranges or rounds of bearings as necessary on the pumping platform or on any other fixed object.

Manoeuvring Capabilities: LOOP SPM buoys are located on a radius of 2,438 m. (8,000 ft.) from the Marine Terminal Pumping Platform Complex, with spacing between buoys of 1981.2 m. (6,500 ft.). Tankers must have the capability to perform the manoeuvring required to approach and depart from an SPM within an area not greater than 1,524 m. (5,000 ft.) radius from the buoy at speeds not exceeding 5.5 km/hr. (3 knots). LOOP may require evidence of a tanker's capability to approach and enter the safety zone. The Mooring Master may determine this by pre-berthing checks of a tanker's manoeuvring characteristics.

Berthing Order: LOOP reserves the right to take tankers in an order that will meet operational and crude oil compatibility requirements at LOOP's storage, although normally tankers are taken in the order of their position in the queue. Generally, positions in the queue are determined by LOOP based on an arrival window. If LOOP takes a tanker out of the queue for operational reasons, it will be done in accordance with LOOP's published Rules and Regulations, which are available on request from LOOP.

VESSEL REQUIREMENTS:

Navigation Equipment: Any vessel calling at LOOP must meet the U.S. Coast Guard navigational equipment requirements for a vessel entering U.S. waters; i.e. Part 164.35, Title 33, of the United States Code of Federal Regulations. Coast Guard personnel will board selected arriving vessels to ensure compliance with Federal Regulations.

Pre-arrival, Connection and Transfer:

Preparations, procedures, tests and inspections to be followed both by the tanker and by the LOOP platform during the pre-arrival time, connection and transfer must meet the requirements of Part 155, Chapter 33, Section 150, Sub-part D, of the United States Code of Federal Regulations, and the recommendations of the OCIMF Safety Guide.

The Mooring Master will have a LOOP check list, which includes a Declaration of Inspection, that shows all the items to be tested or inspected in order to comply with the Federal Regulations and with current OCIMF recommendations. This check list is to be signed both by the tanker's Master and by LOOP's Mooring Master.

Oil Transfer Equipment:

All tankers must meet the requirements of Part 155, Title 33, of the United States Code of Federal Regulations with regard to oil transfer equipment. *Cargo hoses must be connected by the tanker's personnel, under the guidance of the Mooring Master or the Assistant Mooring Master.*

Physical Parameters of Vessel:

Tankers to be accepted by LOOP must:

(a) Have oil transfer equipment that conforms to the technical recommendations of the Oil Companies' International Marine Forum (OCIMF). (Any OCIMF recommendations that change after issuance of this manual are overriding to LOOP's requirements).

(b) Be equipped with shipboard mooring fittings installed and located for safe and effective mooring to an SPM.

(c) Be equipped with a derrick, located near the cargo manifold for hose handling, capable of lifting and sustaining a safe working load of 10 tons to a height of 13.7 m. (45 ft.) above deck level. (ULCCs should have a 15 ton crane because of the extra hose weight due to their greater freeboard).

(d) Not exceed maximum mooring load limitations of SPMs. See "Berthing".

(e) Have serviceable pumping equipment.

(f) Be capable of delivering a cargo size or quantity that is in accordance with LOOP's published Rules and Regulations.

Deck Floodlighting:

Illuminated Locations:

In addition to the light usually displayed, tankers are required to furnish adequate additional lighting for night operations including:

(a) Proper safety lighting of the accommodation ladder for personnel embarkation and debarkation. This is particularly essential for arriving and departing tankers when the Mooring Master and Assistant Mooring Master board or depart the tanker. A deck officer is required to supervise these procedures.

(b) Lighting of the forecastle area.

(c) Lighting of areas encompassing the derricks, deck and water during equipment and hose handling operations.

(d) Lighting to illuminate the cargo manifold.

(e) Proper safety lighting for any bunkering or transfer of supplies or equipment.

(f) Portable or hand-held safety lanterns for inspections and other deck activities that may require particular attention.

Type of Equipment: Only explosion-proof lighting equipment and electrical apparatus certified intrinsically safe for use in a hazardous area is permitted to be used on deck while a tanker is at an SPM. Portable electric lamps or other apparatus with flexible cable shall not be used without permission from the ship's officer-in-charge and from the responsible LOOP representative aboard the tanker. In this regard, the recommendations of ISGOTT paragraph 2.4.2 should be followed.

Accommodation:

Tankers discharging at LOOP must provide meals and accommodation for the Mooring Master and the Assistant Mooring Master during their time on board and for an independent Petroleum Inspector during his required time on board. In addition to these men there is at times a United States Coast Guard Inspector, who also may need accommodation.

NAVIGATION AIDS:

SPM Buoys: In addition to the port name "LOOP" and an SPM number, each SPM buoy is painted white on top with yellow sides and is equipped with the following navigational aids:

(a) A quick flashing (0.3 seconds "on", 0.7 seconds "off") white light installed on the buoy 5.5 m. (18 ft.) above MHW. The light can normally be seen through 360° of arc at a range of 7.4 km. (4 n. miles). It is actuated by a solar photo-electric switch.

(b) A 406.4 mm. (16 in.) diameter all-directional radar reflector mounted on the highest point of the buoy.

(c) Buoy number daymarks at 90° intervals around the buoy hull.

Platform Complex Beacon Light: A rotating beacon which shows a flashing white light (6 flashes per minute) is mounted above the pumping platform atop the communications tower at an elevation of 64 m. (210 ft.) above MHW and it is visible all around the horizon. It is actuated from the control platform. The light is 47,000 candela and is visible for at least 18 miles.

Platform Complex Obstruction Lights: Obstruction lights are installed at each corner of both platforms and one on the bridge connecting the structures. The lights on the pumping platform are 25 m. (82 ft.) above MHW and on the control platform are 23 m. (76 ft.) above MHW. They are quick flashing white (0.3 seconds "on", 0.7 seconds "off") (60 flashes per minute). They flash in unison and are placed so that at least one light can be seen for a minimum of 5 n.miles from any approach angle to the platform complex. They are actuated from the Control Platform at night and in periods of low visibility.

Platform Complex Fog Signals: 2 fog horns are installed at the platform complex. One is hung below the lower deck near the middle of the Northwest edge of the pumping platform about 21.3 m. (70 ft.) above MHW, and the other is hung below the lower deck on the Southern edge of the control platform. The signals are synchronized to sound a 650-800 Hz 2 second blast every 20 seconds and can be heard for at least 3.7 km. (2.0 n.miles). They are actuated from the control platform.

Buoys: The following table lists the characteristics of the buoys marking the approach section of the safety zone:

Buoy Daymark	*Buoy Colour*	*Water Depth Meters*	*Feet*	*Lantern Colour*	*Radar Reflector*	*Fog Signal*
No. 1	Black	47.5	156	Green	X	X
No. 2	Red	46.3	152	Red	X	None
No. 3	Black	37.5	123	Green	X	None
No. 4	Red	36.9	121	Red	X	None

From seaward, buoys No. 1 and 3 define the port (left) lateral limits of the approach section and buoys 2 and 4 the starboard (right) lateral boundary. Buoys No. 1 and 2 are located at the entry to the approach section when proceeding from seaward. *It is mandatory that a Mooring Master be aboard before a tanker may enter or be underway in the safety zone.* The boarding and debarking point for the Mooring Master is determined in accordance with weather, traffic and safety conditions existing at the time of each tanker's arrival. Instructions as to the boarding point are given to tankers during the intitial VHF radio contact when 20 miles out (see "Radio")"

Safety Zone Boundary Marker Buoys: The safety zone is shown in "Plan Section" together with the location of floating aids to navigation and marine terminal components. International Rules of the Road apply in the safety zone. The purpose of a deepwater port safety zone is to define an area in which any activity that may directly or indirectly increase the environmental and safety risks associated with port operation may be minimized or prohibited. The Inter-Governmental Maritime Organization (IMO) vessel routing measure known as a precautionary area; i.e. a routing measure comprising an area within definite limits where ships must navigate with particular caution and within which the direction of traffic flow may be recommended, has been adopted as the concept for U.S. deepwater port safety zones. The safety zone is made up of 3 parts; the approach section, the anchorage section, and the terminal section. Inside the terminal section there are 4 "areas to be avoided"; 1 is 600 m. in radius around the pumping platform complex and 3 are 500 m. in radius around each of the SPMs. "Areas to be avoided" conform to IMO measures to keep ships or certain classes of ships outside a delineated area. 4 navigational marker buoys define the boundaries of the approach section of the safety zone. Proceeding from seaward, the 3.7 km. (2.0 n.miles) wide approach section extends 9.3 km. (5 n.miles) from the safety fairway to the terminal section. The buoys have the following characteristics:

Daymarks:	Reflective, located at 90° intervals around buoy superstructures; visible range 3.7 km. (2 n.miles) minimum.
Lights:	Installed at 4 m. (13 ft.) above the water; slow flashing (0.6 seconds "on", 5.4 seconds "off"); light intensity 116 candela, actuated by solar photoelectric switches.
Radar Reflectors:	All-directional; detectable from at least 14.8 km. (8.0 n.miles) by typical shipboard radar systems.
Fog Signal:	(Buoy 1 only) minimum audible range approximately 1 km. (0.5 n.miles); programmed to send Morse code "L" at 20 second intervals. This buoy's for signal operates continuously.

Safety Fairway: The LOOP safety fairway, shown in NAV 3A, "Plan Section", has no marker buoys. To lessen the chance of accidents, ships enter and leave U.S. Gulf Coast ports via safety fairways. The fairways are 2 miles wide. No offshore drilling rigs or structures are permitted in them. LOOP recommends that tankers enter or leave the LOOP Safety Fairway at its Southernmost point or at least South of 28° 18′ N. Federal Regulations require that tankers do not enter or depart the safety zone except via the safety fairway, unless under force majeure (33 CFR 150.337 (a)). NOAA Chart 11359 has details of the LOOP Deepwater Port including pipe-lines within the safety fairway and safety zone.

Service Vessel Mooring Buoys: The 2 buoys provided for mooring port service vessels at the marine terminal are white. Centered midway between the top of each buoy and the waterline is a horizontal blue band. The buoy identification is reflective. Battery powered, slow flashing (0.4 seconds "on", 3.6 seconds "off") white lights are installed 2.4 m. (8 ft.) above the water, and are actuated by solar photoelectric switches.

Also see "Anchorage".

ANCHORAGE: *Anchorage Section Marker Buoys:*

The designated anchorage section of the safety zone is a 3.7 km. (2.0 n. miles) wide area beginning at safety zone Buoy No. 2 and extending 7.4 km. (4.0 n. miles) along and next to the Eastward boundary of the safety zone. Buoys "L-B" and "L-A" mark the corners and define the outer boundaries of the anchorage section. The anchorage section buoys have characteristics as follows:

Daymarks:	Reflective, located at 90° intervals around buoy superstructures; visible range 3.7 km. (2.0 n. miles) minimum.
Lights:	Installed at 4 m. (13 ft.) above the water; slow flashing (0.6 seconds "on", 5.4 seconds "off"), actuated by solar photoelectric switches.
Radar Reflectors:	All-directional; detectable at 15 km. (8.0 n. miles) by typical shipboard radar systems.

Buoy Daymark	*Buoy Colour*	*Water Depth Metres*	*Feet*	*Lantern Colour*	*Radar Reflector*	*Fog Signal*
L-B	White	45.7	(150)	White	X	None
L-A	White	37.1	(122)	White	X	None

Also see "Tanker Arrival".

RADIO/VHF: *Notices of Arrival:*

The Master of a tanker bound for LOOP should send his first arrival advice message as nearly as possible to 7 days before his expected date of arrival, even if he is in port at the time. If his trip to LOOP is less than 7 days he should also send another arrival advice as soon as possible after leaving his loading port. His next arrival advice should be sent 72 hours before the estimated time of arrival. The arrival advices should be transmitted and updated again at 48 hours and again not later than 24 hours before the estimated time of arrival. An arrival advice message can and should be sent at any time when there is a significant change in a previously estimated arrival time. These arrival advice messages should be sent to LOOP INC. The first message should contain, at a minimum, the following:

1. Tanker's name and call sign.
2. Estimated time of arrival at LOOP.
3. Draft fore and aft.
4. Type(s) and amount(s) of cargo on board.
5. Preferred order of cargo discharge by type.
6. Cargo manifold size and type, if 16 in. not available.
7. Type of mooring equipment installed.
8. Expected discharge rate.
9. Expected number of ballast hours upon completion.
10. Any special requirements which need early actions.

These messages can be sent by Western Union International TWX (810) 950-5875 LOOP M. T. GALO or by radio to coast stations WNU Slidell, WLO Mobile or WPA Port Arthur. It is suggested that ETA advices also be sent to tanker's Agents, with logistics requirements.

Single Side Band: LOOP maintains a high frequency single side band (HF-SSB) radio system for long range communications with tankers up to a range of approximately 1,000 n. miles from LOOP's port.

In addition to sending the official arrival message, the Master of a tanker bound for LOOP should also establish direct contact with the Port on the single side band radio. This is so that any misunderstandings in the official messages or any equipment problems needing advance action can be discussed. The SSB system operates on assigned frequencies in the HF band, call sign WXZ-596.

LOOP maintains the following schedules on the HF-SSB at its Control Platform and at its Harvey office (all times local).

0930 – 0945 and 1430 – 1445 — 4125.0 kHz (USB 4126.4)
0945 – 1000 and 1445 – 1500 — 6218.0 kHz (USB 6220.0)

24 Hour Message: By regulation, the 24 hour arrival message shall be addressed both to the Coast Guard Captain of the Port (NOLA) and to LOOP INC. This message should contain the following:

1. Name, gross tonnage, and draft of the tanker.
2. Type and amounts of cargo on board.
3. Any condition on the tanker that may impair its navigation, such as fire, malfunctioning propulsion machinery or steering equipment, or limitations on navigational or radiotelephone capabilities because of equipment or material malfunctions.
4. Any leaks, structural damage, or machinery malfunctions that may impair cargo transfer operations or cause a discharge of oil.
5. ETA at the safety zone. If the information reported changes at any time before entering the safety zone, or while the tanker is in the safety zone, the Master of the tanker shall report the changes to the Coast Guard Captain of the Port and to LOOP INC. as soon as possible, by cable and single side band.

Radio Frequencies for Berthing: In addition to the above notices, radio communication on the International VHF Maritime Band (Channel 74, 156.725 MHz.) should be started at a distance of 20 n. miles from the safety zone, or more, if possible. This Channel should be used for a "twenty-mile", final arrival notice, and for communications with the terminal and with the Mooring Master, until he boards the tanker.

Radio Communications at the Port: While in the safety fairway, or safety zone, tankers must stand by on primary VHF Maritime Channel 74 and/or on secondary Channel 10, using equipment that is in good working order. The LOOP platform always guards the international distress, safety and calling frequency 156.800 MHz, Channel 16 and guards Channel 10 as well. Use of shipboard radar and HF radio is forbidden while moored to an SPM. While in port, LOOP communicates with the tankers via the Mooring Master's UHF portable radio.

LOOP's Communications Facilities: LOOP has the ability to use the following communications for vessels trying to contact the Port:

Type of Communications	*Frequencies*	*Call Sign*
HF-SSB Maritime Mobile (Upper Side Band)	(Carrier (assigned) in kHz) 2182.0 (USB 2183.4) 2096.5 (USB 2097.9) 4125.0 (USB 4126.4) 6218.6 (USB 6220.0) 8291.1 (USB 8292.5) 12429.2 (USB 12430.6)	WXZ596
VHF-FM Maritime Mobile	(Carrier assigned in MHz) 156.500 Channel 10, Commercial Working. 156.800 Channel 16, Distress, Safety and Calling. 156.725 Channel 74, Port Operations.	KR-7808

Transit Traffic: LOOP maintains a VHF Maritime radio system and a Citizens' Band radio capable of communicating with vessels other than tankers or LOOP support vessels if such vessels are equipped with comparable equipment. When necessary to communicate with vessels of unknown communications capabilities, the vessel traffic controller will attempt to contact such vessel on VHF Channel 16 or CB Channel 9. If such efforts at radio communication are unsuccessful, a LOOP mooring launch or personnel boat will be dispatched to advise the vessel of any potential danger to the vessel as observed by the Vessel Traffic Controller's surveillance and also to advise the vessel operator of the port's precautionary areas and areas to be avoided.

When requested by a Master of a vessel other than a LOOP support vessel or tanker, the Vessel Traffic Controller shall furnish information concerning tankers, support vessels, and other vessels underway or moored in the safety zone.

Weather Advisory System: Coast Guard radio stations make two types of marine information broadcasts: radiotelephone (voice) for all seagoing users, and radiotelegraph (CW) for vessels carrying trained radio operators. Scheduled radiotelephone broadcasts include routine weather reports, small craft warnings, storm warnings, navigational information and other advisories on working frequencies, following a preliminary call on the voice international distress and calling frequencies. Urgent and safety broadcasts are made upon receipt of the information, urgent information is repeated 15 minutes later, and both are included in the next schedule broadcast unless cancelled before that time. Additional broadcasts may be made at the discretion of the originator. Urgent broadcasts are preceded by the signal: "PAN" for radiotelephone and "XXX" for radiotelegraph. Both the urgent signal and message are transmitted on 2182 kHz and 156.80 MHz (Channel 16). Safety broadcasts are preceded by the signal: "SECURITE" for radiotelephone and "TTT" for radiotelegraph. After a preliminary call on 2182 kHz, or 156.80 MHz, the station shifts to its assigned working frequency for the broadcast.

The following Coast Guard Radio stations in the Gulf of Mexico area and its approaches make urgent, safety and scheduled marine information broadcasts preceded by a preliminary call on 2182 kHz or 156.8 MHz, at the times and on the working frequencies indicated:

Station	*Working Frequency*	*Time(s)*
NCF, Miami Beach, Florida	2670 kHz.	0400, 0600, 0800, 1050, 1300, 1900 and 2250 EST
	157.10 MHz (Channel 22)	0630, 1200 and 1730 EST
NOK, Key West, Florida	157.10 MHz (Channel 22)	0600, 1200 and 1700 EST
NMA-21, St. Petersburg, Florida	2670 kHz	0920 and 2320 EST
	157.10 MHz (Channel 22)	0650, 1250 and 1750 EST
NMG, New Orleans, Louisiana	2670 kHz	0430, 0630, 1030 and 1630 CST
	157.20 MHz (Channel 22)	0450, 1050 and 1650 CST
NMG-15, Grand Isle, Louisiana	157.10 MHz (Channel 22)	0445, 1045 and 1645 CST
NOY, Galveston, Texas	2670 kHz	0450, 0650, 1050 and 1650 CST
NOY-3, Port Aransas, Texas	157.10 MHz (Channel 22)	0440, 1045 and 1645 CST
NCH, Port Isabel, Texas	2670 kHz	0440, 0640, 1040 and 1640 CST
	157.10 MHz (Channel 22)	0435, 1035 and 1635 CST
NMR, San Juan, Puerto Rico	2670 kHz	1100 and 2300 AST
	157.10 MHz (Channel 22)	0710, 1310 and 1810 AST

Scheduled radiotelegraph broadcasts include routine weather reports, small craft warnings, storm warnings, navigational information and other advisories on working frequencies following a preliminary call on the radiotelegraph international distress and calling frequency 500 kHz. Urgent and safety broadcasts are made as follows:

(a) Safety broadcasts are made upon receipt of the information; urgent broadcasts are also made upon receipt of the information except within 10 minutes of the next silent period.

(b) Safety and urgent messages are made during the last 15 seconds of the first silent period after receipt, and are repeated at the end of the first silent period which occurs during the working hours of one-operator ships, unless the warning has been cancelled or superseded by a later warning message. Urgent broadcasts are preceded by the signal "XXX". Both the urgent signal and the message are transmitted on 500 kHz. Safety broadcasts are preceded by the signal "TTT". After the preliminary call on 500 kHz, the station shifts to its assigned working frequency to transmit the broadcast. The following Coast Guard radio stations in the Gulf of Mexico area and its approaches make urgent, safety and scheduled marine information broadcasts preceded by a preliminary call on 500 kHz, at the times and on the working frequencies indicated:

Station	*Working Frequency*	*Time(s)*
NMA, Miami, Florida	440 kHz	1100 and 2000 EST
NMG, New Orleans, Louisiana	428 kHz	1120 and 1820 CST
NMR, San Juan, Puerto Rico	466 kHz	1220 and 2120 AST

LOOP also has weather and sea monitoring equipment installed at the Marine Terminal and receives private and government weather advisories. Upon request, weather information will be transmitted to tankers in the vicinity. In addition, NOAA gives continuous weather information, forecasts and warnings on the following frequencies:

WX1 162.500 MHz WX2 162.400 MHz.

RADAR: *Navigation Advisory System (Surveillance Radar):* 2 radar surveillance systems, X-band and S-band frequencies, are installed at the marine terminal. The systems provide coverage from the platform complex to a range of about 50 km. (27 n. miles) for tankers, and include, among other things, a collision avoidance system. After an incoming tanker makes radio contact on the VHF system about 20 miles from the safety zone, the Vessel Traffic Controller will advise of the location of navigational hazards as well as relative positions and estimated courses and speeds of other vessels within radar range of the platform.

Radar Beacon: The LOOP radar beacon (RACON) operates 24 hours daily on the X-band frequency from 9300 to 9500 MHz. The transponder is mounted on top of the communications tower 64 m. (210 ft.) above MHW. The RACON will respond to incoming signals by transmitting Morse coded letter "O" as the identifying signal for the marine terminal platform complex. The RACON has a range of about 40 km. to 48 km. (22 n. miles to 26 n. miles), depending on the height of shipboard radar antennas.

BERTHING: LOOP single point moorings (SPM) are the single anchor leg mooring (SALM) type, designed for tankers up to 700,000 d.w.t. The SPMs are numbered clockwise and are described as follows:

SPM 102:

Water Depth	35.1 m. (115 ft.)
Maximum Tanker Draft*	28.7 m. (94.3 ft.)
Maximum Tanker Length	427 m. (1,400 ft.)
Minimum Tanker Length	230 m. (755 ft.)
Maximum Mooring Load	650 long tons
Tail/Rail Hose Diameter	406 millimetres (16 in.)
Maximum Discharge Rate	15,900 cu.m. per hour (100 MBH)

SPM 103:

Water Depth	35.7 m. (117 ft.)
Maximum Tanker Draft*	29.4 m. (96.3 ft.)
Maximum Tanker Length	427 m. (1,400 ft.)
Maximum Tanker Length	230 m. (755 ft.)
Maximum Mooring Load	650 long tons
Tail/Rail Hose Size	406 millimetres (16 in.)
Maximum Discharge Rate	15,900 cu.m. per hour (100 MBH)

SPM 104:

Water Depth	35.1 m. (115 ft.)
Maximum Tanker Draft*	28.7 m. (94.3 ft.)
Maximum Tanker Length	427 m. (1,400 ft.)
Minimum Tanker Length	230 m. (755 ft.)
Maximum Mooring Load	650 long tons
Tail/Rail Hose Diameter	406 millimetres (16 in.)
Maximum Discharge Rate	15,900 cu.m. per hour (100 MBH)

* The maximum drafts shown here allow for a gross underkeel clearance of 6 m. (19.7 ft.) during gulf coast low water and calm seas. The maximum drafts result in a clearance of 2.9 m. (9.4 ft.) above the SPM base U-joints, since the U-joints are 3.4 m. (11.3 ft.) above the ocean bottom. Gross underkeel clearance means the distance between the keel of a tanker and the ocean bottom when the tanker is moored in calm seas. Net underkeel clearance means the distance between the ocean bottom and the keel of a tanker that is anchored, considering ship motion in response to wind, wave, tide and current conditions. It is required that there be a net underkeel clearance of 4.7 m. (15.3 ft.) during bad weather. Underkeel clearance during bad weather when a tanker may be pitching or rolling must be taken into consideration.

MOORING:

Mooring Equipment: In accordance with OCIMF recommendations LOOP will provide, in addition to the mooring hawser assemblies, the supporting equipment needed to connect the mooring lines to the tanker. Such equipment includes snotters, shackles, and devices for holding the mooring while connection is made. This equipment will include such items as special mooring gear and a hawser load monitoring device to be used at the bow, gaskets, bolts, tools, elbows, and adapter spool pieces (when required). Mooring equipment and other associated gear supplied by LOOP is lifted aboard the tanker from the mooring launch which transports the Mooring Master and Assistant Mooring Master. *Prior to arrival the ship should notify LOOP of the type of mooring equipment installed on the ship in order for required port-furnished equipment to be readied to be put aboard the tanker.* As recommended by the Oil Companies' International Marine Forum (OCIMF) the shipowner, depending on tanker mooring equipment, should supply as a means of securing the mooring chafe chain:

(a) Bow chain stoppers, designed to accept the 76.2 mm. (3 in.) section of the chafe chain; or

(b) Smit type brackets built to specified dimensions; or

(c) Mooring bitts, suitably positioned and of adequate strength; and

(d) Bow fairleads spaced near the tanker's bow and capable of accepting two 76.2 mm. (3 in.) chafe chains;

(e) Pedestal roller fairleads and winch drums or capstans to provide proper leads and clearances (drum end of anchor windlass is acceptable). Tankers are requested to remove the blank flanges from their discharge manifolds before mooring so as to expedite the connecting of the floating hoses.

Mooring Hawser System: Before a tanker is accepted for offloading, LOOP may require information necessary to determine whether the mooring equipment installed on the tanker is capable of sustaining the safe working load that will be imposed on it when the tanker is moored at a LOOP SPM. It is recommended that tankers calling at LOOP be fitted with properly installed and positioned bow chain stoppers or Smit type towing brackets and bow fairleads for mooring at SPMs. Other arrangements are acceptable when evidence is provided that such arrangements will not be below the required safe working load for the tanker. The exact arrangement will be determined by the Assistant Mooring Master after inspection of ship's fittings and equipment. *Mooring and unmooring is to be done by the crew of the tanker with the advice of the Assistant Mooring Master.*

Two launches will normally assist in mooring. One launch will tend the hawser systems. Successively for each of the two hawser systems, the launch personnel will secure the tanker's messenger line to a pick-up line in order for the hawser system chafing chains to be winched aboard the tanker and secured to the shipboard mooring fittings. The second launch tends the floating hose strings during the tanker mooring, drawing the hoses aside from the tanker's track during the approach and mooring. LOOP has no tugs to assist in mooring.

Hawser Monitoring: Each SPM is provided with a hawser load monitoring system, with strain gauges mounted in pins in mooring couplers on the mooring buoy.

TUGS: Support Vessels: *List of Characteristics by Vessel Name:* The following 2 launches are operated by LOOP for the primary purpose of assisting in mooring operations:

Names: "Loop Line" and Loop Loader".
Length overall: 26 m. (85 ft.).
Beam: 7.9 m. (26 ft.).
Draft: 2.1 m. (7 ft.).
Propulsion: 2 model 16V-92 GM diesel engines, twin screw, 1,200 h.p. total.
Maximum speed: 14 knots.
Bollard pull: 3,629 Kg. (8,000 lb.) line pull.
Navigation and Communications: Sitex 48 mile radar, digital fathometer, SSB and VHF radios (Channel 10, 16 and 74 plus an 8 Channel LOOP UHF radio.)
Construction material: Steel.
Fuel Capacity: 75,708 litres (20,000 gallons).

The LOOP maintenance vessel functions primarily for inspection, servicing, and maintenance of marine terminal components.

Name: "Loop Lifter".
Length overall: 61 m. (200 ft.).
Beam: 15.2 m. (50 ft.).
Draft: 3.7 m. (12 ft.).
Propulsion: 2 D-399 Caterpillar engines, twin screw, 3,000 h.p. total.
Maximum speed: 11 knots.
Navigation and communication: Auto pilot, Sitex 48 mile radar, fathometer, SSB and VHF radios (Channels 10, 16, and 74), plus an 8-Channel LOOP UHF radio.
Construction material: Steel.
Fuel Capacity: 80,000 gallons.
Fire pump: 302,832 litres per minute (2,500 GPM).
Pollution control equipment: 610 m. (2,000 ft.) of oil containment boom.

LOOP will also employ a crew boat for transporting LOOP personnel between the small boat harbour and the marine terminal.

HOSES:

Floating Hoses: The floating hoses, which extend approximately 1,100 ft. from each buoy, consist of 2×24 in. inside-diameter crude oil discharge hoses with 16 in. inside-diameter tails, each with 150 ANSI flanges for connection to the tanker's manifold. Each hose has a one-candela yellow light on a pick-up buoy at its end, along with a pick-up wire. In order to avoid delays in connecting hoses, tankers should have an adequate number of reducing spools to fit 16 in. standard ANSI flanges.

Connecting and disconnecting of the cargo hoses is to be performed by the crew of the tanker under the advice of the Assistant Mooring Master.

Hose Handling: Mooring launches tow each floating hose into position beneath the tanker's lifting derrick. The derrick runner is lowered to the launch and secured to the hose pick-up wire. After the hose is lifted above the level of the tanker's rail, it is swung inboard. Snubber wires connected on each side of the hose at the connection between the first and second hose-lengths are then used to control its angle; i.e., to guide it towards its proper place on the cargo manifold. When the hose has been raised enough to span the distance between the tanker's rail and the cargo manifold, the snubbers can be made fast. The hose end is then lowered to the manifold and connected to it. Upon completion of discharge, each hose is disconnected from the manifold after its weight is borne up by the derrick runner. It is then swung outboard, lowered to the water, and released.

Care in Raising and Lowering the Hose: Care is necessary in raising the hoses before discharge and particularly in lowering them after discharge. At these times they are especially vulnerable to kinking.

Damaging Configurations for the Hose: While the cargo transfer hose is connected to the tanker, certain positions that the tanker might take relative to the SPM could cause the hose to bend excessively and thus could damage it.

For exampie, if a tanker overrides the buoy, it could damage both the hose and the buoy. This condition can be corrected by the tanker's going astern or being pulled astern.

Another damaging position could happen if the SPM seabed swivel does not turn as the tanker swings around it. In such a case the Mooring Master will seek LOOP's assistance. If this situation is not immediately resolved, the Port Superintendent or the Mooring Master should issue the order to stop pumping cargo.

CARGO OPERATIONS: *Discharge Operation:*

The discharge operation will be controlled and personally supervised by a ship's officer, to the satisfaction of the Mooring Master or the Assistant Mooring Master. Upon being informed by the ship's officer on watch that the tanker is ready to begin discharging, the Mooring Master will request the discharge operation to proceed according to a previously agreed upon plan regarding start-up rates and maximum discharge rates. *In the event of any emergency, either on board the tanker or on the operating platform, or anywhere in the LOOP system, all oil transfer must be stopped and all oil transfer valves closed.* These emergencies are:

(a) Fire or explosion of a tanker, on the platform, or anywhere on the LOOP system.
(b) Loss of power or steering on a tanker underway in the safety zone.
(c) Breakage of a hawser.
(d) Rupture of a floating hose.
(e) Any confirmed pipe-line rupture in the LOOP system.
(f) Total loss of the computerised supervisory control and monitoring system for the LOOP complex.
(g) Power failure at any LOOP pipe-line facility.
(h) Severe electrical storm in the area of the port. (Ballast receipt must also be stopped during such electrical storms.)
(i) Failure of the UHF radio communication system.

In the event of failure of the UHF radio communication system, the tanker will sound 5 long blasts on her whistle. Cargo discharge is then stopped until communications are re-established.

Oil Transfer Watch: One crew member will be stationed at the bow and an additional crew member stationed at the cargo manifold area. A licensed officer and pumpman will be based in the cargo control room, with the pumpman moving onto the deck as necessary. During the cargo transfer, the watch organisation must provide the capability to shut down pumping on short notice and to stay in constant communication with LOOP personnel both on board the tanker and on board the pumping platform. Communications for cargo handling will be directly with the Mooring Master through the LOOP UHF portable radio system. (NOTE: Each Tanker shall have an officer who is fluent in English on duty at all times.).

Crude Oil Washing (COW): Crude oil washing of cargo tanks is allowed after LOOP is assured that the operation will be done safely. In order for crude oil washing to be undertaken, the tanker and the tanker's personnel must satisfy the following requirements:

(a) Strict compliance with USCG Regulations 33 CFR 157. A copy of this regulation must be aboard the tanker and readily available to key shipboard personnel.
(b) Strict adherence to "Guidelines for Tanker washing with Crude Oil", published by OCIMF. A copy must be aboard the tanker and readily available to key shipboard personnel.
(c) Notwithstanding the above regulations and guidelines, no COW will be permitted until the Mooring Master is satisfied that:
1. All cargo tanks have discharged at least 1 m. of cargo depth in order to eliminate any water that may have accumulated on the bottoms of cargo tanks.
2. The Chief Officer or the person in charge of the COW operation has participated at least twice in crude oil wash operations aboard the tanker making the request or aboard a tanker similarly equipped.
3. There is a sufficient number of adequately trained personnel onboard to assist in the dual operations of transferring cargo and crude oil washing, in order to ensure that:
    (i) Gun nozzles are rotating in proper sequence.
    (ii) Enough source product remains in the tank supplying the cleaning oil.
    (iii) The on-deck piping system carrying the cleaning oil is continuously watched.

Departure Readiness: Vessels at moorings or anchorage must maintain engines and propulsion machinery in readiness to clear the marine terminal area under full power on short notice. No repairs are permitted which would interfere with this requirement. Masters of tankers are advised to have sufficient personnel aboard to enable them to depart upon advice from the Vessel Traffic Controller. The Master of a tanker may, in an emergency, for the protection of life or property, depart without clearance from the Vessel Traffic Controller if the Master advises the Vessel Traffic Controller of the circumstances, by radio, at the earliest possible moment.

DEPARTURE: *Normal Departure Procedure:* Upon completion of the cargo discharge, the tanker's Master or Chief Officer and the Mooring Master together estimate the time needed to prepare the tanker for departure. This time will be given to the Vessel Traffic Controller on the control platform, so that clearance for departure can be planned and so that a mooring launch can be summoned to assist the tanker in the operations of unmooring.

When the tanker is ready to leave the SPM, the Assistant Mooring Master on the bow recommends the use of the tanker's engines in order to ease the load on the mooring lines. When the load is eased enough, the tanker's crew can then disengage the mooring hawser and lower the mooring lines to the water.

Departure time is the time when the last mooring line is cast off. After the tanker is unmoored, she manoeuvres to go clear of the SPM buoy and to take a course for departure through the safety fairway.

Departure from the SPM to the disembarking point of the Mooring Master is done under the Mooring Master's guidance and the Vessel Traffic Controller's surveillance.

Emergency Departure Procedures: An emergency departure can be initiated either from the control platform or from the tanker. If initiated from the platform, the Mooring Master is so notified. The tanker's engines must then be made ready for immediate service, and if cargo is being discharged, the tanker's pumps must be shutdown in accordance with the seriousness of the emergency. *If an abrupt shutdown of the platform's booster pumps is necessary, it is essential that the tanker's pumps either be immediately shutdown or else immediately shifted to a recirculation mode.* In accordance with the nature of the emergency, cargo hoses may be lowered by line-slipping to the water. All other procedures are the same as those for a normal departure. An emergency departure may also be initiated from the ship. The Master of a tanker may, in an emergency, for the protection of life or property, depart from an SPM without clearance from the control platform.

Emergency Shutdown: Following are the procedures to be followed in case the offload pumping must be quickly stopped because of some emergency.

(a) LOOP's Pumping Platform Supervisor notifies the tanker's watch officer and the Mooring Master of the emergency shutdown, or for some shutdowns a taped voice is triggered to announce it automatically by UHF radio.
(b) The LOOP system automatically goes into a pumping rate reduction, and shuts down the pumps and meters as the flow rate dictates.
(c) The tanker's manifold valves and the hose end butterfly valves are closed as soon as LOOP's pumps and the tanker's pumps are shut off.
(d) The Pumping Platform Supervisor shuts LOOP's PLEM valves.
(e) If the emergency is one that makes a quick departure of the tanker necessary, the emergency departure procedures of the preceding paragraph will then be followed.

MEDICAL: Agents can arrange medical and dental treatment as well as consultation and hospitalisation at short notice.

FIRE PRECAUTIONS: As per the "International Safety Guide for Tankers and Terminals".

FRESH WATER: Not available.

FUEL: LOOP does not provide any bunkering services or facilities to tankers operating in the LOOP deepwater port area. Such bunkering will be conducted by private concerns under arrangements made with the owners or operators of tankers. Bunkering will be allowed only when at anchor or when moored to an SPM. Bunkering will not be allowed to interfere with the safe and expeditious unloading of crude oil from tankers. All companies, craft, equipment and personnel involved in bunkering inside LOOP's deepwater port area *must* have LOOP's prior approval and must also follow LOOP's Bunkering Guidelines and Regulations, which are available upon request from LOOP.

REPAIRS: Skilled craftsmen are available for all on-board repairs through Agent.

SURVEYORS:

Petroleum Inspectors: LOOP shall make all necessary arrangements for independent inspection of all custody transfer measurement of Crude Petroleum off-loaded at LOOP. Shipper shall have the right to have representatives present to view the independent inspection of any of its custody transfer measurement of Crude Petroleum off-loaded at LOOP.

AIRPORT: New Orleans International Airport is serviced by major airlines with world wide connections. The airport is located 90 miles from LOOP.

REPATRIATION: Crew changes and repatriation of crew members can be arranged through Agent.

WEATHER: *Waves and Currents:* At the port, significant wave height is less than 1.8 m. (6 ft.) for 72% of the time, and greater than 3 m. (10 ft.) for 5.4% of the time. Waves usually arrive from an Easterly direction. Currents take generally Westerly direction 56% of the time, and a generally Easterly direction 25% of the time. Average current speed is 0.72 knots, but 3% of the time the current can reach a speed of 2 knots.

Weather at the Port: LOOP's marine terminal is located in a semi-tropical zone. Average Summer temperature is 29°C (84°F), and average Winter temperature is 14°C (57°F). Lowest temperature recorded is −12°C (10°F) and highest is 38°C (100°F).

Thunderstorms in Summer and cold fronts in Winter develop quickly and can be quite severe, with storm winds (up to force 10) developing for short periods. The Terminal is in a hurricane zone, and although such storms are an infrequent occurrence at the port, the area is often affected adversely between the months of June and November by hurricanes passing East or West of the port. Poor visibility occurs most often in January when visibility of 2 nautical miles or less occurs 2% of the time.

Weather Operating Rules: As a general rule, the LOOP Port Superintendent will use the following guidelines in deciding whether various port activities will be allowed to begin or continue, or whether they will be terminated:

(a) Bunkering is generally allowed in significant seas of up to 1.5 m. (5 ft.)

(b) Tanker mooring and hose hook-up generally are allowed in significant seas of up to 2 m. (6 ft.)

(c) Operation of the mooring launches and work boat, as well as cargo discharge, are generally considered safe in significant seas of up to 4 m. (12 ft.)

(d) In seas of 4 m. (12 ft.) or more, cargo discharge may be stopped and cargo hoses disconnected, especially if a storm is building up.

(e) Tankers may be required to depart:
  (1) if seas become greater than 5 m. (15 ft.);
  (2) if winds become greater than 22 m. per second (44 knots);
  (3) if current becomes greater than 1 m. per second (1.8 knots) and is aligned with winds of 20 m. per second (40 knots) or more;
  (4) if current becomes 0.6 m. per second (1.2 knots) and is perpendicular to 20 m. per second (40 knot) winds.

(f) The complete shut-in of all systems and the evacuation of the port will be ordered when it is predicted that the centre of a hurricane will pass within 290 kilometers (180 statute miles) of the port. Normally evacuation orders will be issued 36 hours before the storm's expected arrival.

(g) A hurricane alert is issued 72 hours ahead of an approaching hurricane. No incoming tankers will be berthed after a hurricane alert, and berthed tankers will complete discharging as soon as possible and depart the port.

(h) A tanker may not be cleared to enter the Safety Zone or to be underway in the safety zone or to depart from a mooring or anchorage in the safety zone if the visibility is reduced to 4 km. (2 nautical miles).

Also see "Radio".

GENERAL:

Charts: The following official charts of the National Oceanographic and Atmospheric Administration (NOAA) are recommended for use when approaching LOOP's marine terminal:

11340 (U.S. Gulf Coast – Mississippi River to Galveston).
11358 (U.S. Gulf Coast – Barataria Bay and Approaches).
11359 (U.S. Gulf Coast – Louisiana, LOOP Deepwater Port).

The latest editions of NOAA charts are listed in NOAA's publication "Dates of Latest Editions", which is issued quarterly and available free from National Ocean Survey, Division C44, Riverdale, Maryland 20840, U.S.A.

Support Vessel Base: National Oceanographic and Atmospheric (NOAA) Administration Chart No. 11358 shows the navigable route from the marine terminal to the small boat harbour located on the East shore of Bayou Lafourche near Belle Pass where the support vessels are based.

Onshore Components: Major onshore components are: the Clovelly Dome Storage Terminal for receiving and storing the oil coming from the marine terminal and for delivering it to connecting facilities; the Operations Centre for controlling and monitoring system operations; and the Fourchon Booster Station for helping to pump the crude oil from the marine terminal to Clovelly Dome Storage Terminal.

Services: LOOP does not provide facilities for logistic services to tankers using the port. The company is not an "Agent", but does render to all tankers calling at its terminal the services necessary to effect a prompt, efficient turnaround. LOOP provides those services and facilities necessary for scheduling, receiving, mooring, unloading of cargo and departure of tankers calling at the port. Arrangements for logistic services must be made through each tanker's agent. Lists of logistic services can be obtained from the Agents. Messages concerning such requirements, except in an emergency, will not be accepted by LOOP.

Vessel used to deliver bunkers and tanker supplies will have to be approved by LOOP. Such vessels must apply for approval in accordance with the LOOP Guidelines and Regulations covering logistical service. Lists of currently approved vessels are available from LOOP on request. No telephone service is available to the ships.

Included in tanker services that need to be arranged through tankers' agents are mail services and medical services. There are no facilities for handling mail. *It is important that mail for tankers not be addressed to LOOP Inc.* There is no medical service on LOOP's offshore platforms. Medical service ashore, as well as helicopter service for medical evacuation, is available through the Agents.

Helicopter Transfer of Personnel and Supplies: Helicopter operations are sanctioned on tankers, subject to the Master's and the Port Superintendent's approval, for the following situations:

(a) Medical evacuation, personnel transfer and replenishment of supplies by helicopter is permitted on an individual basis. The Port Superintendent has authority to determine when conditions are not safe for such helicopter operations. Shoreside treatment for medically evacuated patients must be arranged by the tanker through the tankers' agent. LOOP will assist with communication relays for emergency medical purposes but will not act as agent.

(b) When weather conditions dictate, helicopters may be used for transfer of Mooring Masters and other port personnel at the discretion of the tanker's Master. The Mooring Master and the Port Superintendent jointly decide when such a condition exists.

(c) In order to facilitate decisions about the safety or feasibility of helicopter operations on tankers, LOOP sends in advance to tanker Masters the characteristics of any helicopters that LOOP itself dispatches.

Personnel Transportation: LOOP provides no boats for transportation of tankers' personnel to shore. When transportation is required, it must be arranged through tanker's agents. There is almost no public transportation on land from towns near the LOOP platform. Any such land transportation should also be arranged in advance through tanker's agents.

Small Boats and Visitors: No boats are permitted or authorised to come alongside tankers calling at the port except those required by LOOP or by the ship to furnish services or carry out official business, and then only after clearance from the Vessel Traffic Controller and Mooring Master.

It is strongly recommended to Masters of tankers that visitors to the ship be restricted to a minimum, because of the hazards involved. Visitors to the ship are not allowed to embark or disembark by the way of LOOP's platforms or launches.

Masters of vessels are advised that decks and the ship's ladders should be well lighted and ladders should be kept well clear of the water during unloading to prohibit unauthorised persons from boarding the ship.

Cargo Documentation: The cargo quantity and quality report, which is a LOOP document, will be filled in as much as possible by LOOP personnel before each tanker's arrival. After the tanker finishes discharging, the Mooring Master receives the necessary figures by radio from the control platform so that the document can be completed before sailing. Cargo quantity is measured by representatives of LOOP by using turbine meters and provers on the pumping platform. Cargo quality is monitored by automatic sampling devices on the platform, and for accounting purposes manual tests are done on samples taken from the automatic sampler on the platform. LOOP furnishes United States Customs authorities with the necessary documentation.

Quality Bank: A quality bank, administered by LOOP, makes just and non-discriminatory adjustments among shippers. These adjustments are for differences in density, sulphur and residum content between each shipper's crude oil that is offloaded into the LOOP system and delivered out of it. All shippers who ship through LOOP must be members of the Quality Bank.

Pollution: Discharge of oil or oily slops into the sea is strictly forbidden. LOOP has no facilities for receiving any oil residues or oily ballast water. Tankers wishing to offload such substances must do so elsewhere. Tankers that release oil or oily ballast water either at the SPMs or in the anchorage area will be held responsible for all cleanup costs. The U.S. Coast Guard Regulations concerning water discharges at sea are contained in Parts 157.25 through 157.49 Title 33, of the United States Code of Federal Regulations. Regulations in 33CFR 159.7 require an operable marine sanitation device aboard all vessels in U.S. waters. For purposes of these regulations the LOOP safety zone is considered U.S. waters.

NOTE: All ballast and bilge overboard discharge valves are to be shut and sealed and all deck scuppers plugged while at a LOOP SPM or anchorage, although scuppers can be temporarily opened to drain off rainwater.

Safety: LOOP maintains a vigorous safety programme. The Mooring Master, as LOOP's safety representative on board, will discuss and review LOOP's safety requirements and procedures with tanker's Master and Chief Officer before cargo discharge begins. Coast Guard Inspectors will board all foreign vessels, at least annually, to ensure compliance with federal regulations, including Part 164, Title 33 of the United States Code of Federal Regulations, Navigation Safety.

Customs: LOOP furnishes customs authorities with documentation of volumes and evidence of quality of cargoes received into the system based on measurements at the marine terminal pumping platform. Arrangement for the posting of such sureties and payment of fees or duties, and for other documentation that may be required, is the responsibility of the importer and/or operator of the tanker. The importer's customs broker, or his other authorised representative, will advise the importer regarding procedures and the amount of duty or fees levied on oil shipped through the port complex.

Tariffs: Tariffs governing rates, charges rules and regulations and supplements thereto, effective or proposed to become effective, on file with the Federal Energy Regulatory Commission (FERC) are available upon request to LOOP. Questions about tariffs can be directed to LOOP's Administration Department.

Federal Liability Fee: LOOP is required by law to charge cargo owners 2 cents per barrel offloaded for a liability fund whose purpose is to pay for cleanup costs and uncompensated damages that are due to oil spills at the port. Each tanker calling at LOOP must have on board a certificate of financial responsibility for water pollution, in accordance with Subpart D., Title 33, of the United States Code of Federal Regulations.

Storage: Procedures and charges for storage of crude oil by shippers in excess of normal residence time are covered in the rules and regulations tariff of the Federal Energy Regulatory Commission.

State Fees: There are presently no usage fees directly assessed by Louisiana to shippers and tankers at the deepwater port. If Louisiana imposes fees in the future, tankers will be responsible to pay them.

Regulated Vessels Activities: Vessel activities permitted and prohibited at the port, controls on those activities, and the specific safety zone areas in which the controls apply are set forth in Part 150.345, Chapter 33, of the United States Code of Federal Regulations.

Provisions: All deck and engine room stores are available in quantity. High quality fresh and frozen provisions available through Agent.

AUTHORITY: LOOP Inc. (See "Operator").

LOS ANGELES, California: 33.43 N. 118.17 W.

(See Plan Book)

PORT LIMITS: The seaward boundary of the port of Los Angeles is, for most purposes, the breakwater through which arriving vessels pass at Angels Gate Light.

DOCUMENTS: First Port of Arrival.

1 Complete Manifest deposited with Customs, original and traveller.
1 Complete Manifest returned to vessel.
1 Manifest of first port cargo deposited with Customs broker.
2 Quarantine Declarations (Form PHS 43).
2 Agriculture Declarations (Form AIQ 43).
1 Visaed Crew List (Form I-418) 5 additional copies.
1 Crewman's Landing Permit (Form I-95A) for each crew member and (Form I-94) for each passenger.
1 Dangerous Cargo Manifest deposited with Captain of the Port.
1 copy in hands of Chief Officer for review by the Fire Department.

The Coast Guard Captain of the Port must be informed of vessel's ETA 24 hours prior to vessel's arrival.

Second and each subsequent Port of call in U.S.

2 Manifests of Cargo for second U.S. port left with Customs.
1 Travelling Manifest returned to Master.

(*Note:* Travelling Manifest is carried and deposited with Customs at final port of discharge in U.S. – in addition to above required documents 4 additional copies should be available.)

PILOTAGE: Request made through Agent. Contact can be made through VHF Channels 14 (156.7 MHz) or 16 (156.8 MHz). Call: KMB 466 Los Angeles Pilots. Tel: 519-3805. Not less than 1 hour's notice of arrival or departure. 1 long and 1 short blast on ship's whistle or siren, or international signal. Pilot will board in vicinity of sea-buoy ("LA" entrance buoy, lighted bell buoy "L.A." black and white vertical stripes. Radar reflector).

Under normal weather conditions, the pilot ladder should be on the starboard side 1 m. above water.

Arriving vessels should keep to Eastward of Los Angeles Sea-Buoy.

Departing vessels should keep to Westward of Los Angeles Sea-Buoy.

Masters or Agents are requested to advise the pilot station whenever there is a change in the arrival or sailing time.

Note: Ships arriving can usually make good VHF radio contact except between Point Vicente and Point Fermin.

ANCHORAGES: Anchorages defined on charts. No permit required to anchor less than 10 days. Permit for over 10 days obtained from Captain of the Port, USCG and Harbour Department Port Warden. Permit is required for Explosives anchorage.

RESTRICTIONS: Vessels entering the Port of Los Angeles are advised that a major dredging project is currently underway. The dredge location will vary as the deepening progresses. Refer to the weekly Notice to Mariners issued by the U.S. Coast Guard for approximate locations.

Care is recommended while navigating near the large floating equipment, barges and cables used in the project.

MAX. SIZE: Restrictions on draft only. Supertanker terminal in outer harbour has fairway of 51 ft.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: International Telephone and Telegraph, call letters "KOK" Los Angeles Radio.

RADAR/VHF: The Los Angeles Harbour Pilot's station equipped with radar for use of Pilot. The Pilots also monitor VHF Channels 14 (156.7 MHz) and 16 (156.8 MHz). Also see "Long Beach" and "Services".

TUGS: On stand-by 24 hours a day. However, should be ordered prior to arrival. Tugs join vessel in main channel, tug lines used, except when towing astern.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Los Angeles Quarantine Station.

Quarantine: U.S. Quarantine Station, P.O. Box 90834, Los Angeles, California 90009. Tel: (213) 642-5966.

1982 Standard Procedure: Radio Free Pratique clears vessel to enter harbour without inspection provided there is no illness on board.

Inspection officer boards ships in the following categories:

A. 15 days prior to entering a U.S. port any crew member or passenger exhibits these symptoms.
  1. Temperature of 100° or higher for 2 days or is accompanied by:
    a. rash
    b. jaundice or
    c. glandular swelling.
  2. Diarrhoea severe enough to prevent performing duties.
  3. Death aboard ship.
B. Any ship visiting a plague-infested country within 60 days prior to entering a U.S. port.

If subject to inspection, boarding hours are 0600 – 1800 Monday – Saturday regular; 1800 – 0600 overtime including Sundays and holidays.

BERTHING: Generally arranged through Agent. Berthing under control of Port of Los Angeles' Chief Wharfinger. There are 32 general cargo berths with depth alongside 45 ft. (See "Max. Size".)

Berth No.	*Elevation (ft.)*	*Depth (ft.)*		*Berth No.*	*Elevation (ft.)*	*Depth (ft.)*
37–40	14	35		177–179	10.5	45
45–47	16	50		180–181	10	45
49–50	14.5	51		187	10.5	45
51–55	14	35		188–190	10.5	45
56	14	35		191	10.5	45
57–60	14	30–35		195–199	15.5	45
70–71	15	35		200 A	15.5	45
72	13.5	14		207	15.5	45
73 A–E	13.5	20		208-209	15.5	45
73 W–Z	11	25		210–211	13.5	45
87–89	15	45		215	13	45
90–92	15	35		216–217	13	45
93 A	15	37		218–225	15	45
93 B	15	45		227	15	45
97–98	11	45		228 A & B	15	45
100–102	13	45	Ro/Ro	228 D & E	15	45
118–119	13	45		229	15	45
120	13	45		230	15	45
126–131	15	45		231	15	45
134–135	13	45		232	15	45
136–139	15.5	45		233	15	45
142–144	15.5	45	Ro/Ro	234	15	45
145–146	13.5	45		235	15	45
147	14	45		238	14	45
148–149	15.5	45		239	14	45
150–151	14	45		240 A	14	45
153–155	12.5	45		240 B	14	45
156–160	11.5	45		259	12	18
163–164	12	45		261–264	12	15–20
165	12	45		265–267	12	12–20
167–169	12	45				
172–173	12	45				
174–176	11	45				

BRIDGES: Highway suspension bridge (Vincent Thomas) crosses main channel between Berth 95 and Berth 225; overhead clearance of 185 ft. in centre. 2 bridges on Cerritos Channel separating Los Angeles and Long Beach harbours, 1 double leaf-bascule (Badger Avenue Bridge) the other is a lift bridge (Schuyler F. Heim), as these bridges are less than 50 ft. apart they will be treated as one, overhead clearance 155 ft. at centre of Heim Bridge.

CONTAINER HANDLING FACILITIES:

See Tables on pages 1603 and 1604.

SPECIALISED CARGO HANDLING: Bulk loading facility, especially designed to handle coal and other dry bulk materials. Wharf length 800 ft. Depth alongside 51 ft. Loading rates up to 3,000 t.p.h., and unloading 500 t.p.h.

The grain and tallow terminals at Berth 174 have 13 silos that hold 410,000 bushels. Vessels can be loaded at a rate of up to 400 t.p.h. Accommodating vessels up to 35 ft. draft, any length. (See "Max. Size".)

Other specialised facilities include the GATX Petro Chemical Terminal, designed especially to receive petro chemicals; the Hugo Neu Corporation installation, where old automobiles are reduced to scrap metal for export; Coos Head and Louisiana Pacific Terminals; United Brands Company's Banana Terminals; and the processing and shipping plant of the U.S. Boron Company.

STEVEDORES: Agents make necessary arrangements.

MEDICAL: Necessary to notify Agents of required medical attention: this can be done when final ETA is determined. Hospital facilities available (private).

Vaccinations/fever certificates, etc., shall conform with rules and models prescribed by the International Sanitary Regulations.

TANKERS: Load and discharge lines have 6 in. and 8 in. standard flanges (super-tanker terminal has 12 in. lines with standard flanges). If not so equipped ship must furnish its own "C" clamps. Recommend ship have reducers on board to handle 6 in. and 8 in. flanges. Residue discharge facilities available for limited quantities. All types and grades of petroleum available. 19 tanker berths available in inner harbour, 35 ft. draft at MLLW. (See "Max. Size"), 2 are available in outer harbour 51 ft. draft at MLLW. Also see Long Beach – "Tankers".

DENSITY: Average density 1026 (exception during or after heavy rain).

FRESH WATER: Availability unlimited, delivery universal, rate of delivery 100 t.p.h.

FUEL: Unlimited fuel, all grades at attractive rates. 48 hours' advance notice generally required.

FIRE PRECAUTIONS: Whenever vessel bunkering, sufficient serviceable fire hose with suitable nozzles attached to reach all parts of vessel shall be connected to fire main on vessel and made ready for instant use at all times during bunkering operations. If no adequate water pressure available on board, connections shall be made to shore lines to obtain adequate pressure. All Tankships shall be moored bow seaward and have wire towing pendants rigged fore and aft readily available for emergency use, fire hoses shall be connected as above at all times while vessel in port.

International fire signals will be used in case of fire (5 prolonged blasts of ship's whistle or siren of 4 to 6 seconds duration).

GANGWAY/DECK WATCHMEN: Gangway watch recommended. Tankships and vessels handling dangerous cargo required to have gangway and deck watch.

OPENING/CLOSING HATCHES: Automatic hatches may be opened and closed by crew, manual hatches opened and closed by stevedores.

CUSTOMS ALLOWANCES: Tobacco, either 300 cigarettes, 50 cigars, or 3 lb. of smoking tobacco, for the personal use of crew member. Wine and/or spirit, 1 quart for personal use of crew member.

CERTIFICATES: *Passenger Vessels:*
- Safety Certificate, with 50 or more passengers.
- Load-Line Certificate.
- Radio Certificate.
- Radio Telephone Certificate, if aboard.

Cargo Vessels:
- Safety Equipment Certificate.
- Load-Line Certificate.
- Certificate of Inspection/Home Certificate.
- Trading Certificate.
- Cargo Gear Certificate.
- Radio Certificate, Radio Telephone Certificate, if aboard.
- If carrying passengers from U.S. ports, vessels must have PAC (Persons in Addition to Crew) Certificate issued by USCG.

Tanker Vessels:

Same as cargo. Exception: if carrying exotic cargo, required to have cargo facilities plan reviewed and approved by USCG, Washington, D.C. On vessel's first visit it will be inspected and receive a letter of compliance.

CONTAINER HANDLING FACILITIES:

Terminal name and location	*Korea Shipping Terminal Berths 87 – 93 ABC*	*APL Terminal Berths 121 – 126*	*Los Angeles Container Terminal Berths 127–129*	*Matson Terminal Berths 206 – 209*
Terminal Operator	K.S.A.	American President Lines, P.O. Box 1551, San Pedro, CA 90733 (213) 548-8700	Los Angeles Container Co. Inc. 1830 John S. Gibson Blvd., San Pedro, CA 90731 (213) 831-0645	Matson Terminals, Inc. 1001 New Dock St. Terminal Is., CA 90731 (213) 547-5531
Stevedore Company		Eagle Marine	L.A. Container	Matson Terminal
Used by (Shipping Lines)	KS Line	American President Lines	L.A. Container Mitsui-OSK Yamashita-Shinnihon Japan Line K-Line	Matson Line NYK Line Showa Line KMTC Line
No. of Operational Berths	1 (for containers)	2	1	2
Length of berths	3,922 ft.	960 ft. and 1,040 ft.	1,000 ft.	1,572 ft.
Elevation of Wharf Deck (nearest 0.5 ft.)	15 ft.		15 ft.	15.5 ft.
Depth of water	40 ft – 45 ft.	43 ft.	45 ft. MLLW	45 ft. MLLW
Total land area	26 acres	116 acres	42 acres	85 acres
Container storage area	25 acres	—	30 acres	34 acres Chassis: 800 spaces
Number of container spaces (stacked one high)	1,329 – 40 ft. chassis stalls 21 – 27 ft. chassis stalls	3,960	2,500 TEUs	4,000
Number of reefer outlets	64	428	200	791
Container Cranes				
Number	2	4	1-twin lift	4
Lifting capacity	40 long tons,	40 long tons	40 long tons	3 – 33.5 tons, 1 – 25 tons
Outreach offshore	107 ft., 115 ft.,		106 ft. 5 in.	102 ft., 96 ft.
Outreach inshore	88 ft., 90 ft.,		91 ft.	73 ft., 74 ft. 6 in.
Wheelspan	50 ft.		50 ft.	34 ft., 34 ft.
Container capacity	30 – 20 ft./hr. 35 – 20 ft./hr.		70 – 20 ft./hr.	56 – 20 ft./hr. 40 – 20 ft./hr.
Built by	Star Iron Paceco		Paceco	Star Iron Paceco
Owner	American President Line		Port of Los Angeles	Matson Terminal
Date installed	1972, 1977		1968	1960, 1973, 1975, 1979
Container handling equipment (additional handling equipment is available from stevedoring co. on an "as needed" basis)		(numerals in parenthesis indicate the number of containers that can be stacked vertically by type of equipment)		
Travel crane and Straddle carrier			5-Drott, 40 ton/cap. (3)	4-bridge cranes, Morgan Eng. 37.5 tons./capacity (4) 4 Transtainers 1 Paceco 25 ton/capacity (2) 4-Clark, 25 ton/capacity (2) 2-Clark, 30 ton/capacity (3)
Fork lifts			3-Hyster, 7 ton/capacity (3)	2-Raygo Wagner 35 ton/capacity (3)
Container freight station	200 ft. × 1,008 ft. 201,600 sq. ft.	154,033 sq. ft.		776 ft. × 80 ft. 62,080 sq. ft.
Railroad and truck service	Yes		Yes	Yes
Route of service	U.S./Japan/Hong Kong/Taiwan/ S.E. Asia/S. Pacific Is./ Indonesia/India/Pakistan/ Australia/New Zealand/Sri Lanka		U.S./West Coast/ Japan	U.S./Hawaii/Japan/Guam
Frequency of calls	6-8 monthly		6 monthly	8 monthly

CONTAINER HANDLING FACILITIES:

Terminal name and location	*Indies Terminal* *Berths 216 – 225*	*Overseas Terminal* *Berths 228 – 230 ABC*	*Marine Terminal* *Berths 231 – 233*	*Evergreen Terminal* *Berths 234 – 238*
Terminal Operator	Indies Terminal Co. P.O.Box 3188, Terminal Island, CA 90731. (213) 547-3351	Overseas Shipping Co. P.O.Box 3128, Terminal Is., CA 90731	Marine Terminals Inc. P.O.Box 1068, Long Beach, CA 9081 (213) 432-5904	Evergreen Marine Corp., Calif, Ltd. 400 Oceangate, Suite 12A, Long Beach CA 90802 (213) 437-0081
Stevedore Company	Marine Terminals and Trans Pacific	Metropolitan Stevedore	Marine Terminals	Metropolitan Stevedore
Used by (Shipping Lines)	—	Johnson Scan Star Barber Blue Sea Blue Star Line Farrell Lines East Asiatic Co. Lines	Yangming Marine Lines d'Amico Lines Karlander Kangaroo Line	Evergreen Lines
No. of Operational Berths	—	3	1	2
Length of berths		1,495 ft.	1,125 ft.	856 ft.
Elevation of Wharf Deck (nearest 0.5 ft.)		15 ft.	15 ft.	15 ft.
Depth of water	45 ft.	45 ft.	45 ft. MLLW	45 ft. MLLW
Total land area	99 acres	45 acres	32 acres	19 acres
Container storage area		25 acres	19 acres	15 acres
Number of container spaces (stacked one high)		926 TEUs	1,638 TEUs	726 TEUs 134 – 8 ft. × 40 ft. chassis stalls
Number of reefer outlets	220	20	Portable generators only	Portable generators only
Container Cranes				
Number	3	2	2	2
Lifting capacity	40 long tons	35, 40 long tons	40 long tons	40 long tons
Outreach offshore		81 ft., 133 ft. 6 in.	115 ft., 120 ft.	115 ft.,120 ft.
Outreach inshore		20 ft., 61 ft.	90 ft.	90 ft.
Wheelspan		70 ft., 50 ft.	50 ft.	50 ft.
Container capacity		30 – 20 ft./hr. 40 – 20 ft./hr.	60 – 40 ft./hr.	30 – 20 ft./hr.
Built by		Houben Industries	Paceco	Paceco
Owner		Overseas Shipping Co.	IHI Port of Los Angeles	IHI Port of Los Angeles
Date installed		1969, 1971	1976, 1980	1976, 1980
Container handling equipment (additional handling equipment is available from stevedoring company on an "as needed" basis)		(numerals in parentheses below indicate the number of containers that can be stacked vertically by type of equipment)		
Travel crane and Straddle carrier		2-Paceco, Drott 30 ton/cap. (3) Various types 20-ton/capacity (2)	2-Raygo Wagner Top handler (Port Packers) 3-Paceco transtainers 30 ton/capacity (3)	2-Raygo Wagner (Port Packers) 35 ton/cap. (3) 4-Drott travellers 22.8 ton/cap. (2 + pass over) 35.5 ton/capacity
Fork lifts		2-Raygo Wagner 35 ton/capacity (3)	Side Picker (forklift with attach.) 20 ton/capacity	
Container freight station	154,033 sq.ft.	880 ft. × 160 ft. 137,200 sq. ft. Main use is for break-bulk cargo		
Railroad and truck service		Yes	No	
Route of service		U.S./Europe/Japan/ Taiwan/Hong Kong/ S.E. Asia/Panama/ Venezuela/New Zealand	U.S./Far East/ Australia/Mediterranean	U.S./Japan/Korea/ Hong Kong/Taiwan
Frequency of calls		13 monthly	5 monthly	3 monthly

CARGO GEAR: Gangway net attached between ship and dock; extending 5 ft. beyond turntable in one direction and 5 ft. beyond point of intersection of gangway and stringpiece in the other direction. Preventer guy must be rigged separately to head of boom from working guy. Exception if cast head of boom is capable of withstanding the stress of all the lines attached thereto. (This is a West-Coast requirement.)

IDENTIFICATION CARDS: 1 crewman's landing permit (Form I-95A) or Immigration card (Form D-1).

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: Largest dry dock 659 ft. by 97 ft., 22,000 displacement tons. 3 smaller dry docks (17,500, 15,000, 10,000 tons).

Todd Shipyards Corp. have a 48,000 tonnes deadweight capacity synchrolift. Capacity – LOA 780 ft.×beam 105 ft.×39 ft. draft.

REPATRIATION: Arrangements can be made through Immigration on request of Agent to have crewman change ship or return to home port.

AIRPORT: Approximately 20 miles to International Airport which serves all major airlines.

TIME: Standard Time, GMT minus 8 hours. Daylight saving time GMT minus 7 hours (April through October).

HOLIDAYS: Cargo may be worked on holidays with holiday pay scale.

POLICE/AMBULANCE/FIRE: The telephone numbers are Fire (213) 832-4241, Police (213) 832-7211, Ambulance (213) 832-4243. Fire Alarm boxes adjacent to all cargo sheds.

EMERGENCY CO-ORDINATION CENTRE: Coast Guard Rescue Co-ordination Centre. Tel: 590-2225.

TELEPHONES: Connections for passenger vessels at passenger terminals only.

SERVICES: A ship-reporting service "The Marine Exchange" located at entrance to main channel, Los Angeles harbour. They monitor Channels 14 (156.7 MHz) and 16 (156.8 MHz) VHF and have Channel 9 (156.45 MHz) VHF as their own. Primary duties are reporting arrivals, departures and locations of vessels.

SHORE LEAVE: Crew members are allowed ashore.

CONSULS:

Argentina – Consul
Australia – Consul General
Austria – Consul General
Belgium – Consul General
Bolivia – Consul General
Botswana – Consul
Brazil – Consul General
Canada – Consul General
Chile – Consul
China – Consul General
Colombia – Consul General
Costa Rica – Consul General
Denmark – Consul General
Dominican Republic – Consul General
Ecuador – Consul General
El Salvador – Consul General
Estonia – Vice-Consul
Finland – Consul
France – Consul General
Germany – Consul General
Great Britain – Consul General
Guatemala – Consul General
Haiti – Consul
Honduras – Consul General
Israel – Consul General
Italy – Consul General
Ivory Coast – Consul General
Japan – Consul General
Jordan – Consul
Korea – Consul General
Latvia – Consul
Liberia – Consul
Lithuania – Consul General
Luxembourg – Consul
Lebanon – Consul General
Malawi – Consul
Malaysia – Consul
Malta – Vice-Consul
Mexico – Consul General
Monaco – Consul
Netherlands – Consul General
New Zealand – Consul General
Nicaragua – Consul General
Norway – Consul General
Panama – Consul General
Paraguay – Consul
Peru – Consul General
Philippines – Consul General
Portugal – Consul
Senegal – Consul
South Africa – Consul
Spain – Consul General
Sri Lanka – Consul
Sweden – Consul General
Switzerland – Consul General
Thailand – Consul General
Turkey – Consul General
Uruguay – Consul
Venezuela – Consul
Western Samoa – Consul

Commercial Representatives of Foreign Governments:

Australia – Trade Commissioner
Austria – Trade Delegate
Belgium – Commercial Officer
Brazil – Trade Commissioner
Canada – Trade Commissioner
Denmark – Consul Attache
France – Commercial Counsellor
Finland – Trade Commissioner
Germany – Deputy Consul General
Great Britain – Commercial Consul
Hong Kong – Trade Development Council
Israel – Consul
Italy – Trade Commissioner
Japan – Consul
Korea – Consul
Mexico – Commercial Attache
Netherland – Vice-Consul
Nicaragua – Commercial Attache
Philippines – Trade Representative
Portugal – Trade Office
Sweden – Trade Commissioner
Switzerland – Vice Consul
Yugoslavia – Trade Commissioner

SHIP SUPPLY SERVICE:

Far East Marine Supplies, 804 W. 14th Street, Long Beach, Ca. 90802, U.S.A.

Griffith Ship Supply, 1365 Daisy Ave., Long Beach, Ca. 90802, U.S.A.

L.A. Harbor Supply Co., 601 W. 14th Street, Long Beach, Ca. 90802, U.S.A.

Trans Intermodal Transport Inc., 530 E. Wardlow Rd., Long Beach, Ca. 90802, U.S.A.

Unitor Ship Service Inc., 1416 W. 15th Street, Long Beach, Ca. 90802, U.S.A.

REGULATIONS: Permits required for hot work (welding, cutting, etc.). Permit required for any dangerous cargo. Permit to discharge ballast (clean water) required. Restrictions on bunkering operations (scuppers plugged, valves closed).

DELAYS: No delays in berthing, load or discharge or bunkering can be expected.

DEVELOPMENTS: Depths at Los Angeles will be increased from 51 ft. to 65 ft. in the Outer Harbour.

Berth 135 – 139: Container terminal under construction. Length of berth 1,850 ft. Berth to be equipped with 3 gantry cranes. Completion expected mid-1986. The berth will probably be leased to Mitsui OSK Line.

Berth 174 – 181: Container terminal under construction on Morman Island. Length of berth 1,000 ft. Completion expected early 1987.

AUTHORITY: Port of Los Angeles, P.O.Box 151, (425 S. Palos Verdes Street), San Pedro, California 90733-0151. *Tel:* 519-3456. *Telex:* LTX 18-2387. *Contact:* Ernest L. Perry, Executive Director.

AGENT: See "Long Beach".

MANITOWOC, Wisconsin: 44.06 N. 87.38 W.

LOCATION: Situated on the Western shore of Lake Michigan, 70 miles North of Milwaukee. Port open all year round.

DOCUMENTS: Vessels cleared by Quarantine Officials at Quebec. Customs Officer stationed at Green Bay.

PILOTAGE: Not locally required or available. Pilots should be taken on board prior to entering harbour.

MAX. SIZE: Max. draft 21 ft., vessels up to 600 ft. LOA can berth.

HEALTH: See "Documents".

TUGS: Available.

BERTHING: 2 breakwaters protect the harbour. Entrance dredged to 25 ft. Outer harbour from pier heads to inner red light dredged to 23 ft. Inner harbour up to Medusa Cement Company dredged to 21 ft. Maximum depth alongside docks, 19 ft. Turning basin, 600 ft. radius.

All berths owned by private industry and located as follows from harbour entrance:

1. Manitowoc Public Utilities: 2 slips capable of handling 400 ft. car-ferries which handle railroad freight cars or Ro/Ro vehicles. Located port side at a right angle to river channel South side of harbour.
2. C. Reiss Coal Company, 509 Jay Street: A 900 ft. slip just inside car-ferry docks, at a right angle to river channel, South side of river.
3. Manitowoc Company Inc. 500 South 16th Street: 800 ft. long. South side of channel, parallel docking.
4. Busch Agricultural Resources Inc., 605 Washington Street: 490 ft., South side, has marine leg for unloading grain.
5. McMullen & Pitz Construction Company, 901 Commercial Street: 300 ft. North side of river between 8th and 10th Street bridges.
6. Soo Line Railroad Company, 923 Commercial Street: 300 ft. North side of river just above 10th Street bridge. This includes an unused car-ferry slip capable of handling a 400 ft. car-ferry. Also, 600 ft. North side just above car-ferry dock but is unimproved.
7. Manitowoc Company Inc., 500 South 16th Street: Approximately 8 berths varying in length from 180 ft. to 850 ft., port side bordering the peninsula.
8. Medusa Cement Company, 1801 Spring Street: Final large dock upriver, 1,200 ft. starboard side.
9. Consumers Steel & Dock, 1311 Spring Street: 330 ft. starboard side just prior to Medusa dock.
10. Burger Boat Company, 1811 Spring Street: 300 ft., starboard side, just beyond Soo Line Railroad swing bridge.

CRANES: Manitowoc Company Inc.: One fixed crane max. 80 tons lift. Travelling crane max. 70 tons lift.

Burger Boat Company: One stiff leg derrick, 40 tons max.

BRIDGES: Operating regulations in effect. Contact City Police or the Harbour Master in advance.

DENSITY: 1000.

FRESH WATER: Available.

FUEL: Available.

REPAIRS: Can be undertaken by Bay Shipbuilding Co.

DRY DOCKS: Floating dock available. Length 604 ft., width 70 ft., depth over blocks 13 ft., max. LOA 640 ft. – Bay Shipbuilding Co., Sturgeon Bay, Wis.

Bay Shipbuilding Co. expect to have 1 drydock which will accept vessels of 1,000 ft. LOA and 35,500 gross tons. Depth over sill 17 ft.

SURVEYORS: Lloyd's surveyor available from Cleveland.

TIME: GMT minus 6 hours.

AIRPORT: Manitowoc County. N.W. side of City off Monasha Avenue. Simmons Airlines, commercial feeder line, passenger and freight.

AUTHORITY: Harbour Commission, Office of the Mayor, City of Manitowoc, Wisconsin 54220. *Tel:* (414) 683-4440. *Contact:* B. M. Brennan, Harbour Master.

METLAKATLA, Alaska: 55.08 N. 131.35 W.

LOCATION: Located on Annette Island. Open all year.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: Ships coming up from the Hecate Straits or outside of Graham Island proceed into Dixon Entrance to the vicinity of Point McCartey where the Pilot will meet them. Vessels coming up the inside passage from Vancouver, B.C. are met at Lucy Island Pilot Station.

ANCHORAGES: Good anchorage in gravel and mud.

MAX. SIZE: Depths in harbour 120 ft. Tides: diurnal range – 14.7 ft. Also see "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

CUSTOMS: Quarantine, Immigration and Customs, from Ketchikan.

TUGS: Available in Ketchikan.

BERTHING: 2 berths: 1. City Dock: 400 ft. long and 60 ft. wide. More than 35 ft. deep. Due to shallow water at East end, a starboard landing is usually made. No covered storage, temporary open storage. 4 fork lifts, 2 of 20,000 lb. capacity.

2. Annette Island Canning Co.; 200 ft. long and 23 ft. deep. 15 ton crane and 2 fork-lifts. 1×25 ton fork lift.

STEVEDORES: 4 gangs available.

REPAIRS: Facilities at Ketchikan.

SURVEYORS: Cargo Inspectors and Surveyors available in Ketchikan.

SUPPLIES: Bonded and unbonded stores from Ketchikan.

WATER: Available.

FUEL: Not available.

MEDICAL: Hospital available in Ketchikan; small clinic in Metlakatla.

AIRPORT: Small charter plane only. Jet to Juneau and Seattle via Ketchikan Airport only.

BANKS: National Bank of Alaska.

EMERGENCY CO-ORDINATION CENTRE: At Ketchikan.

STORING: See "Prelims" page viii.

1. By truck.
2. Yes.
3. Yes.
4. Yes.
5. None.
6. Yes.

DEVELOPMENTS: Large breakwater under construction

AUTHORITY: Port of Metlakatla, P.O.Box 8, Metlakatla, Alaska 99926. *Tel:* 886 – 4646. *Contact:* Freeman McGilton, Harbour Master, P.O.Box 515. *Tel:* 886 – 4151 (Residence).

MIAMI, Florida: 25.46 N. 80.10 W. (See Plan Book)

PORT LIMITS: The Miami harbour embraces the artificial basins, slips and channels that have been dredged along the bay front of Miami and in the bay and through the shoal water of Biscayne Bay to the ocean, and is located generally at Lat. 25° 46′ N., Long. 80° 10′ W.

Administration: The Port of Miami is a "non-operating" port, taxpayer-owned and administered by the Seaport Department, a function of Metropolitan Dade County government. Permanent facilities are leased to port users and operators. All equipment (except the gantry cranes) is owned and operated by private companies. The gantries are lease-operated under Seaport Control. Berth space is authorised by the Port Director, and scheduled by Seaport Operations. The U.S. Coast Guard serves as Captain of the Harbour.

Physical:

Total port land area: 525 acres (212.47 hectares)
  (under development: additional 75 acres [30.35 hectares])
Dodge Island: 300 acres (121.41 hectares)
Lummus Island: 225 acres (91.06 hectares) (180 acres [72.85 hectares] developed)
Total lineal dimension: 30,000 ft. (9.144 km.)
Bulkhead berth space: 11,510 ft. (2.18 miles) (3.51 km.)
Container berth: 840 ft. (256.03 m.) piling-supported concrete
  (second container berth under development)
Lineal balance 17,635 ft. (3.34 miles) (5.38 km.) under development
Dodge and Lummus Islands connected by two-lane partial, temporary connecting causeway.

DOCUMENTS:

Customs: All foreign and "in bond" goods entering the Port/Country are subject to Customs examination and duty. Manifest of foreign cargo inbound must be presented to the customs boarding officer prior to commencing discharge.

Ship's Agent must notify Customs 48 hours prior to the ship's arrival. Regular working hours, Monday through Friday 0800 – 1700, telephone 350 – 5261. Outside normal working hours, telephone contact 526 – 2875; overtime is charged.

Forms required:

2 Master's Oath on Entry of Vessel in Foreign Trade	Form 1300
2 General Declaration	Form 1301
2 Ships Manifests	Form 1302
2 Ship's Store Declaration	Form 1303
2 Crews' Effects Declaration	Form 1304
Crew Members' Declaration (1 Declaration for each Crew member)	Form 5129
1 Application – Permit – Special License (Unloading, loading, overtime services)	Form 3171
2 Passenger Lists	I – 418
2 Crew Lists	I – 48
Customs Declaration (Passengers) (1 Declaration for each family)	6059 – B
2 Declarations of foreign repair to vessels (U.S. flag vessels only)	3415

Immigration: An Immigration Inspector will meet all ships entering port. Valid travel documents/passport/visa/entry permit are required in some cases.

Ship's Agent must notify Immigration at least 1 hour prior to ship's arrival. Regular working hours, Monday through Friday 0800 – 1630, telephone 350 – 5739. Outside normal working hours, telephone contact 526 – 2626; overtime is charged.

Forms required:

Crewmen's Landing Permit	Form I – 95
Alien Passengers' Landing Permit	Form I – 94
Passenger List	I – 418
Crew List	I – 418

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

Ship's Agent must request quick clearance, "Pratique", from United States Public Health Department.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

An Agriculture inspector will board all foreign, coastwise and domestic ships on arrival.

Ship's Agent must notify Agriculture at least 1 hour prior to ship's arrival. Regular working hours, Monday through Friday 0800 – 1630, telephone contact 350 – 4758. Outside normal working hours, telephone contact 526 – 2821; overtime is charged.

Forms required:

1 Copy of Cargo Manifest.
1 Report of Ship's Stores and Port of Origin.

Forms provided by and filled out by the inspector:

Cargo Form 210
Boarding Report 288

RADIO/VHF: The Coast Guard and pilot station can be raised on VHF Channel 16. Telephone contact to Agents, receivers, etc., can be made via Miami Marine Operator.

Port of Miami maintains a guard on VHF Channel 16, call letters "KCE 254".

PILOTAGE: All foreign vessels are required to take a Pilot who boards near the outer sea buoy, 2.5 miles offshore.

Request Pilot through Biscayne Bay Pilots Association, 24 hours in advance, call sign KGW 303, VHF Channel 16, direct from ship or through vessel's steamship Agent accompanied by particulars of draft and berthing assignment. Ship to confirm on VHF Channel 16 one hour prior to arrival. Channel 16 is monitored 24 hours and station can monitor VHF Channels 10, 12 and 14. Ship may cable Pilot station direct through RCA Radio Lantana, Florida, call sign, MIAMI PILOTS. Estimated time of departure should be made when ship docks and must be confirmed by phone (672 – 7643 or 672 – 7644) 1 hour prior to the Pilot boarding.

ANCHORAGES: The prescribed anchorage area for vessels anchoring outside the harbour is located Eastward of a line about 1.5 nautical miles offshore and Northward of a line about 0.2 miles nautical miles North of the sea buoy at the entrance to the ship channel. The entire anchorage area lies North of the entrance channel to Miami. The Northern and Southern extremities of this area are marked by spar buoys. Vessels desiring to anchor off the entrance to the Harbour of Miami are required to do so within this area, to avoid possible damage to cables laid on the ocean bottom in the vicinity. Refer to anchorage area 202.188 on Coast and Geodetic Survey Chart No. 547.

RESTRICTIONS: *Locations:* Main turning basin: Lat. 25° 47 N., Long. 80° 11′ W. Sea buoy and channel entrance: Lat. 25° 46′ N., Long. 80° 06′ W. (approx.).

Channels, turning basins: The main channel is marked by 2 sea buoys about 2 miles (3.38 km.) East of the port, at the Western fringe of Gulf Stream shipping lanes. From that point, at which the depth is 40 ft. (12.19 m.), the channel runs 1.02 miles (1.65 km.) at 256° magnetic to a bend, changing to a control depth of 36 ft. (10.96 m.) and turning to 296° for 3.64 miles (5.82 km.), terminating in a 1,700 ft. (518.16 m.) (along North-South axis) by 1,650 ft. (502.92 m.) (East-West) turning basin. Mean low water depth in the main channel, at Northside berths and in the turning basin, is 36 ft. (10.96 m.). At a distance of 1.3 miles (2.08 km.) from the entrance channel bend at the outer bar cut, the Fisherman's Channel (South Channel) branches off due West for 1.01 miles (2.69 km.), then turns parallel to the main channel for another 1.01 miles, then turns to 247° for 1,500 ft. (467 m.) to intersect the Intracoastal Waterway. Depth along the entire Fisherman's Channel is 25 ft. (7.62 m.), except for the Easternmost 2,000 ft. (609.6 m.), where it is 36 ft. deep. Width of the main channel is 400 ft. (121.92 m.) from the sea buoys, for 3.65 miles (5.84 km.), and 900 ft. (247.32 m.) wide along Dodge Island and into the main turning basin. Width of Fisherman's Channel is 500 ft. (152.4 m.) along its entire length.

MAX. SIZE: Present recommended draft restriction of 33 ft. (10.06 m.) at MLW, is based upon size of turning basin of 1,700 ft. (518 m.) North and South; 1,650 ft. (503 m.) East and West, with a 3 ft. (1 m.) safety factor under hull of ship. Port has plans to widen this in conjunction with large expansion programme. Vessels more than 1,000 ft. (305 m.) in length and with a draft of over 33 ft. (10 m.) should contact Port Director, Port of Miami, and Biscayne Bay Pilots for latest data. No limit to length at port complex which has 23,300 ft. (7,100 m.) at 36 ft. (10.97 m.) MLW including new South Channel, and 6,800 ft. (2,073 m.) at 25 ft. (7.62 m) MLW.

TUGS: Large tugs up to 3,000 h.p. available 24 hours per day. Request tug service via pilot station. Big tugs privately owned by Belcher Towing Company who work closely with Pilots. Smaller tugs available on Miami River and operated by Backus Towing Inc.

BERTHING: Berths are all marginal berths, no piers or slips. 7,530 linear ft. (2,292 m.) of berthing at 11 m. depth, also 1,040 ft. (317 m.) at 9.5 m. and 4,031 ft. (1,228 m.) at 25 ft. (7.6 m.) depth. Dock aprons are up to 21 m. wide. Large ships can turn at berthside in the 270 m. wide approach channel, or may continue into the 518 m.×503 m. turning basin. The new (Fisherman's Channel) South channel is 500 ft. (152 m.) wide and 25 ft. (7.6 m.) deep, with three turning basins: one at the confluence of the South channel with the main channel, one midway along the 13,000 ft. (4 km.) length, and one (under construction) at the Western junction of the South channel with the Intracoastal Waterway. There are 10 berths for bow and stern-loading Ro/Ro vessels, and 4,000 ft. (1.2 km.) of marginal berthing for side and articulated-ramp vessels in addition.

Gear and Heavy Lift Equipment: 20 shipside cranes, all truck-mounted, rubber-tyred with outriggers, capacity 40 to 90 tons; 2×140 tons; 2×150 tons, 1×165 tons, 1×180 tons and 2×200 tons; 6 container movers ("port packers") to 85 tons, 2×35 ton forklifts, 7 forklifts from 15 to 31 ton capacities, and about 125 smaller forklifts from 3,000 lb. to 30,000 lb. capacities.

Cruise Ship Piers: Marginal berthing for 9 cruise ships, each with modern air-conditioned passenger lounge and Custom Inspection areas.

Container Handling: 2 new 40 long ton (with rotating or telescoping spreader; 45 L/T w/hook and beam) gantry cranes which service an 840 ft. (256 m.) concrete container berth along the new South channel at the Easternmost end of the port's new 225 acre (91h.) expansion area/container terminal, just 2.3 miles (3.7 km.) from ocean shipping lanes, went into operation in 1982. Each container crane has duty cycle of 20 load-on, 20 load-off cycles/hr. Cranes have an outreach from the face of the bulkhead to load of 110 ft. (33.5 m.) and a backreach of 204 ft. (62.2 m.). Containers clear 100 ft. (30.5 m.) above MLW and cranes place containers inside ship to 48.5 ft. (14.8 m.) below apron level. Plans call for up to four more such cranes at new container terminal.

Cold Storage Cargo: Not in port but ample on the mainland by commercial companies.

Commercial Warehouses: Ample on the mainland. On Port, 81,754 sq.m. in 7 modern transit cargo buildings.

STEVEDORES: All receiving, recording, moving, loading and discharge of cargo is performed by the stevedoring companies. They employ longshoremen members of the International Longshoremen's Association (I.L.A.). Normal working hours 0800 – 1700. Overtime is charged for Saturdays, Sundays, and holidays. Port open 24 hours per day.

BRIDGES: There are no bridges between the open sea and the port, or the Miami River. The new South channel provides direct access from shipping lanes and the river, as well as all berthing on the seaport's South side. A highway and rail bridge spans the Intracoastal Waterway between the island seaport and the mainland, and is manned 24 hours per day. It is primarily used for pleasure craft. The bridge maintains a guard on VHF Channel 16, call letters KCE 254. Only smaller ships enter the Miami River, which is dredged to 15 ft. at HW and is 150 ft. wide for a distance of 3 miles above entrance. A bridge about a half mile from entrance is closed from 0700 hrs. to 0900 hrs. and 1600 hrs. to 1800 hrs. local time.

MEDICAL: Clinic available.
TANKERS: No slop (residue) discharge facilities in the Port.

Private facility: Belcher Oil Company, Fisher Island – No slop (residue) discharge facilities. One tanker berth available, 760 ft. Max. draft of 34 ft. at MLW. No special fittings required. Telephone contact 672-1065.

FRESH WATER: Available every 240 ft. at Port of Miami, Dodge Island. Delivered via hose.
FUEL: All grades; bunker, intermediate and marine gas oil, Diesel, bunker C. Ships fuelled at dockside from Belcher Oil Co. barges.

FIRE PRECAUTIONS: Usual safety precautions on smoking, flying "B", mooring pendant available, ample persons aboard to fight fires, fire hose led out, etc.

Belcher Oil Company tugs equipped with fire fighting equipment.
GANGWAY/DECK WATCHMEN: Usual shipboard watches to tend lines. Special guards (security) through Wackenhut, Burns Security, etc.
OPENING/CLOSING HATCHES: Work normally done by longshoremen.
CUSTOMS ALLOWANCES: See "Jacksonville".
IDENTIFICATION CARDS: Definitely needed in order to return to ship at night. A security guard at Port of Miami will check.

CONSULS: (Area Code 305).

Argentina	Tel.	373 – 7794	*Italy	,,	371 – 5393
*Austria	,,	325 – 1561	Jamaica	,,	373 – 8431
*Belgium	,,	223 – 6972	*Japan	,,	445 – 1477
Bahamas	,,	373 – 6295	*Lebanon	,,	422 – 0004
Bolivia	,,	358 – 3450	Mexico	,,	371 – 5444
Brazil	,,	377 – 1734	Netherlands	,,	371 – 2000
Chile	,,	373 – 8623	Nicaragua	,,	373 – 6996
Costa Rica	,,	377 – 4242	Norway	,,	358 – 4386
*Denmark	,,	373 – 7768	Panama	,,	379 – 7280
Ecuador	,,	371 – 8366	*Paraguay	,,	444 – 8250
El Salvador	,,	371 – 8850	Peru	,,	373 – 5061
*Finland	,,	448 – 4343	Spain	,,	446 – 5511
*France	,,	374 – 2626	*Sweden	,,	551 – 7444
Germany (F.R.)	,,	358 – 0290	*Thailand	,,	445 – 1477
Haiti	,,	377 – 3547	Venezuela	,,	373 – 4311

*Indicates Honorary Consuls.
REPAIRS: All deck and engine dockside repairs available.
DRY DOCKS: 2 small drydocks, max. size 600 tons.

SURVEYORS:

American Nautical Services Inc., (Hull, Cargo & Intermodal Eqpt.), 530 Biscayne Blvd., Suite 200, 11231 S.W. 164th Terrace, Miami, Fl. 33157. Tel: (305) 252-0293, (305) 358-1414. Hull, cargo and intermodal equipment.

E. R. Ascher, Inc., (Hull and Cargo), 2001 N.E. 180th Street, North Miami Beach, Fl. 33162. Tel: (305) 944-0544. Audio-gauging and consulting, representing National Cargo Bureau Inc.; Marine safety inspectors for Liberia and Panama.

Caleb Brett U.S.A., Inc., 10748 S.W. 24th Street, P.O.Box 651010, Miami, Fl. 33165. Tel: (305) 552-5905. Marine bulk oil surveyors, cargo superintendent, analytical and testing laboratory, tank calibration, draft surveys, hull and machinery surveys.

Jones & Handy (Hull & Cargo), 615 S.W. Second Avenue, Miami, Fl. 33130. Tel: (305) 371-0506. Representing P&I clubs.

Donald J. Mahoney & Co. Inc., (Hull & Cargo), 8776 S.W. 8th Street, P.O.Box 340805, Miami, Fl. 33134. Tel: (305) 553-7066. Telex: 52-2268. Answerback: Donmahoney. Representing Lloyd's of London, American Institute of Marine Underwriters, Institute of London Underwriters, and other domestic and foreign underwriters.

Marine Surveyors Inc., (Hull & Cargo), 1500 Bay Road, Suite 317, P.O.Box 012314, Miami, Fl. 33101. Tel: (305) 885-9989.

Uhlig & Associates, Inc., Umco Div. of Uhlig & Associates, Inc., (Hull & Cargo), 8295 S.W. 188th Street, Miami, Fl. 9157. Tel: (305) 251-2451. Telex: 51-2479. Answerback: Uhlig Amia. Telex: 52-2510. Answerback: Uhlig Bmia. Consulting, designing, technical and management services, and troubleshooting on all types of ships. Engineer and design department offers complete technical planning services, technical and inspection equipment. On call 24 hours for repairs at dockside or at sea. Sells and services Contrology, UK brand of solid state digital meters and control devices. Repair facility is fully equipped, including fabrication machine shop.

John R. Wheeldon Marine Surveyor (Hull & Cargo), P.O.Box 557331, Miami, Fl. 33155. Tel: (305) 446-1288, Office; (305) 264-8449, Home.

Nelson & Associates, Inc., (Hull & Cargo) 1405 N.W. 167th Street, Miami, Fl. 33169. Tel: (305) 625-1043, Telex: 51-5704. Answerback: Nelsurvey Mia.

Thornton Laboratories, Inc., (Hull & Cargo), 1145 E. Cass Street, Tampa, Fl. 33601. Tel: (813) 223-9702. TWX: 810/876-9145. Answerback: Thornt Lab Tpa. Independent marine samplers, inspectors and surveyors. Quality and quantity surveys of petroleum and chemicals (bulk, solids, gases, liquids). Cargo and vessel documentation.

Capt. Tom Smith Associates, (Hull & Cargo), 11320 S.W. 108th Court, Miami, Fl. 33176. Tel: (305) 238-0202. General Surveyors.
AIRPORT: Miami International Airport is located 8 miles, or 15 minutes by expressway, from downtown Miami and the Port of Miami. It is serviced by 46 foreign (12 cargo only) and 32 U.S. (9 cargo only) scheduled air carriers.

HOLIDAYS: *Port Legal Holidays:* New Year's Day, January 1st; Washington's Birthday, 3rd Monday in February; Memorial Day, Last Monday in May; Independence Day, July 4th; Labour Day, 1st Monday in September; Columbus Day, 2nd Monday in October; Veteran's Day, November 11th; Thanksgiving Day, 4th Thursday in November; Christmas Day, December 25th.

In the event a legal holiday falls on a Saturday, it is celebrated on the preceding Friday, and in the event a legal holiday falls on a Sunday, it is celebrated on the succeeding Monday.

TIME: Eastern Standard Time, GMT minus 4 hours. Daylight Saving Time in effect from last Sunday in April to last Sunday in October and adds 1 hour to Eastern Standard Time.
POLICE/AMBULANCE/FIRE: Emergency only "911", City of Miami Police 579 – 6640, Dade County Police 547 – 7911. City of Miami Fire Department 579 – 6300.
TELEPHONES: Telephone available by order to telephone company.
BANKS: *Foreign Banks:* (Unless otherwise stated, the telephone Area Code for all listings is 305).

Algemene Bank Nederland NV, 201 S.W. 13th Street, Miami, Fl. 33129. Tel: 854-4132.

Banco Colpatria, 848 Brickell Avenue, Miami, Fl. 33131. Tel: 374-5491.

Banco de Bilbao, 1 Biscayne Tower, Miami, Fl. 33131. Tel: 371-7544.

Banco de Vizcaya, 1 Biscayne Tower, Miami, Fl. 33131. Tel: 358-9882.

Banco de la Nacion Argentina, 777 Brickell Avenue, Miami, Fl. 33131. Tel: 371-7500.

Banco de la Provincia de Buenos Aires, 1 Biscayne Tower, Miami, Fl. 33131. Tel: 358-4898.

Banco do Brasil, 1 Biscayne Tower, Miami, Fl. 33131. Tel: 538-3586.

Banco do Estado de Sao Paolo, 1 Biscayne Tower, Miami, Fl. 33131.Tel: 358-9167.

Banco Exterior de Espana, 777 Brickell Avenue, Miami, Fl. 33131. Tel: 371-5008.

Banco Industrial de Venezuela, 848 Brickell Avenue, Miami, Fl. 33131. Tel: 374-5060.

Banco Internacional de Costa Rica, 1 Biscayne Tower, Miami, Fl. 33131. Tel: 374-0855.

Banco Nacional S.A., 444 Brickell Avenue, Miami, Fl. 33131. Tel: 374-8052.

Banco Real, 1 Biscayne Tower, Miami, Fl. 33131. Tel: 358-2433.

Bank Hapoalim, 407 Lincoln Road, Miami Beach, Fl. 33139. Tel: 532-4476.

Bank Leumi Le Israel, 407 Lincoln Road, Miami Beach, Fl. 33139. Tel: 531-3378.

Bank of Nova Scotia, 1 Biscayne Tower, Miami, Fl. 33131. Tel: 358-4920.

Bank of Tokyo Ltd., 2121 Ponce de Leon Blvd., Coral Gables, Fl. 33134. Tel: 445-2627.

Barclays Bank International Ltd., 848 Brickell Avenue, Miami, Fl. 33131. Tel: 374-1043.

Credit Suisse, 1438 Brickell Avenue, Miami, Fl. 33131. Tel: 374-1144.

Credit Lyonnais, 1201 Brickell Avenue, Miami, Fl. 33131. Tel: 374-0900.

Deutsch Sudamerikanische Bank, 999 Brickell Avenue, Miami, Fl. 33131. Tel: 374-6181.

Israel Discount Bank, 420 Lincoln Road, Suite 2B, Miami Beach, Fl. 33139. Tel: 579-5260.

Lloyd's Bank International Ltd., 1 Biscayne Tower, Miami, Fl. 33131. Tel: 579-8900.

Royal Bank of Canada, 2199 Ponce de Leon Blvd., Coral Gables, Fl. 33134. Tel: 442-1242.

Standard Chartered Bank Ltd., 1 Biscayne Tower, Miami, Fl. 33131. Tel: 358-7766.

Many American banks also available.
SERVICES: All types of special services such as tank cleaning, compass adjusting, admeasurement, radar/radio repairs, rathometer repairs, etc., available.
SHORE LEAVE: Crew members are allowed ashore after clearance by Customs, Immigration and Quarantine.
AUTHORITY: Port of Miami, 1015 North America Way, Miami, Florida 33132. *Tel:* (305) 579-5252. *Telex:* 52-2745 Port Mia. *Contact:* Carmen J. Lunetta, Port Director.

MILWAUKEE, Wisconsin: 43.01 N. 87.53 W.

(See Plan Book)

PORT LIMITS: The Port of Milwaukee limits are generally considered to be the harbour breakwall housing the harbour entrance lighthouse. However, unless specifically declared to the contrary in the covering charter party, a vessel will be considered an "arrived ship" upon anchoring outside the harbour breakwall, in the event that a proper berth and/or anchoring space inside the harbour breakwall is not available.
DOCUMENTS:

Vessels from Canadian ports:
Dominion clearance and Public Health Pratique (both issued at Montreal).
Vessels from all other nations:
Inward Foreign Manifest(s)
Stores Lists, over Master's oath.
Curio Lists, over Master's oath.
Permit to Lade and Unlade.
Discharge Manifest.
Inspection by U.S. Dept. of Immigration (Crew List).
Inspection by U.S. Dept of Agriculture.
Receipt of Entrance fee.
Receipt of Tonnage Tax.

Additional documents may be required, dependent on commodity involved in the carriage, point of origin, flag or any unusual circumstances existing.
PILOTAGE: Pilot boards at Montreal and at several other stations along St. Lawrence Seaway route.

ANCHORAGES: The chart does delineate anchorage area for large vessels and shows the 28 ft. depth just East of South Piers 1, 2, and Liquid Cargo Pier. This deep area, about 2,400 ft.×5,400 ft., used by large vessels for anchorage.
MAX. SIZE: 739 ft. × 75 ft. with 27 ft. draft. No tidal effect, although lake levels vary seasonally. Minimum depth above low water level 27 ft.
HEALTH: See "Health: All Ports" before first U.S. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Radio station at City Heavy Lift Dock. Harbour Master and Dock Superintendent can be reached at this facility Monday through Friday between 0800 and 1630 hrs.; 156.8, 156.6 and 156.5 MHz.
TUGS: Normally pick up vessel inside breakwater. Tugs optional at discretion of ship's Master. Fee for use of tug's lines.
BERTHING: The time of passing harbour entrance lighthouse establishes order of berthing, provided vessel is ready to work.
BRIDGES: (Inner Harbour only) Bridges closed between 0730 and 0830 hrs. and 1630 and 1730 hrs. except on Sundays and 8 legal holidays. In addition, 2 hours' notice required for opening bridges across Milwaukee River North of and including Buffalo Street.
SPECIALISED CARGO HANDLING FACILITIES: In addition to the 3 general cargo terminals of approx. 340,000 sq. ft. covered area (9 berths), and dry bulk terminal of 60,000 sq. ft. covered area (2 berths), the port is served by a refrigerated warehouse of 10,000 sq. ft.; 1 open dock area (2 berths) for handling bulk commodities such as pig iron; 1 open dock (3 berths) for heavy lifts and equipped with a 220-ton stiff leg crane and 2 gantry cranes of 70 and 50 tons; 1 liquid cargo pier for edible and inedible fats, greases and tallow; 2 grain elevators of 3.5 million and 2.5 million bushel capacity and 2 scrap iron loading facilities. The port is also equipped with 2 mobile heavy lift/container cranes, 300 tons and 200 tons capacity, capable of serving all berths.
STEVEDORES: Vessel should provide a stowage plan, manifest of inbound cargo and exceptions list (unusual vessel or cargo characteristics affecting facilitation of cargoes). Vessel should comply with the U.S. Dept. of Labor's safety regulations.
MEDICAL: Advance notice desirable. Hospitalisation available.
TANKERS: Diameter of load lines and discharge lines 8 in. and 10 in. Slop residue facilities. 4 berths available, with draft to seaway depth.
FRESH WATER: Potable water available at most berthing areas.
FUEL: All grades of fuel oil available by truck delivery at shipside, also 24 hour refueling berths available for bunkering.
GANGWAY/DECK WATCHMEN: Not necessary, but available on request.
OPENING/CLOSING HATCHES: At the option of ship.
CERTIFICATES:
Registry of Ship.
Master's Licence.
1st, 2nd and 3rd Officer's Licences.
Radio Licence.
Wireless Operator's Licence.
Derat Certificate (done each year).
(Additional certificates may be required, dependent upon Registry, cargo, trade route engaged in, nationality of crew, etc.).
CUSTOMS ALLOWANCES: Tobacco, 10 packages or 200 cigarettes in possession at any time. Wine and/or Spirits, 1 bottle per officer.
IDENTIFICATION CARDS: U.S. Immigration rules.
CONSULS: The following countries are represented:
Belgium
Costa Rica
Denmark
Dominican Republic
France
Nicaragua
Norway
Sweden
Yugoslavia
REPAIRS: Full service repairs, except large vessel dry docking.
REPATRIATION: Local Agents effect repatriation.
AIRPORT: 5 miles distant.
TIME: U.S.A. Central Time. Central Daylight Time from late April to late October – 5 hours behind GMT. Central Standard Time from late October to late April – 6 hours behind GMT.
HOLIDAYS: Memorial Day, Columbus Day, Veterans Day, July 4th (if on a Sunday, Monday is a holiday); First Monday in September; Fourth Thursday in November; Christmas Day; New Year's Day. Cargo can be worked on these days at holiday pay.
POLICE/AMBULANCE/FIRE: Police — non-emergencies 273-8660; Emergency, including emergency ambulance service 765-2323; Fire, including rescue squad service 347-2323.
TELEPHONES: Can be arranged, but unnecessary because sufficient phones available in dockside offices.
SHORE LEAVE: Crew allowed ashore.
DELAYS: No delay.
GENERAL: Chandlery services for foodstuffs, ship complements and laundry services available. Garbage and waste disposal are available through private operators, chandler usually making the arrangements.
The Liquid Cargo Pier is also available for non-petroleum liquid cargoes and vessel bunkering.
DEVELOPMENTS: Full service Seamen's Club operational in Port. Milwaukee inner harbour berth for maximum size bulk vessels undergoing comprehensive site enhancement. Dry bulk materials handling and warehousing capabilities scheduled expansion for the near future.
AUTHORITY: Port of Milwaukee, 500 North Harbor Drive, Milwaukee, Wisconsin 53202. *Tel:* (414) 278 – 3511. *Telex:* TWX 910 – 262 – 3042. *Cables:* Milharco. *Contact:* Rear Admiral Roy F. Hoffmann USN (Ret.), Port Director.

MOBILE, Alabama: 30.40 N. 88.02 W. (See Plan Book)

DOCUMENTS:
3 copies Cargo Manifest (Form 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I.418).
2 copies Crew List (Form I.418).
Customs boarding Officer will also examine Ship's Register and Loadline Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:
Health Pratique.
Master's Oath (Form 1300).
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.
PILOTAGE: Pilotage is compulsory.
ANCHORAGES: If berth is congested, vessel may anchor at the bar (35 miles from harbour).
RESTRICTIONS: Controlling depth: 40 ft. for entrance, channel and anchorages. Mean tidal range 1.5 ft. Nature of bottom: soft mud. Vessel can dock and sail at any hour at any stage of the tide.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: There are 7 tugs, available 24 hours, with max. 2,600 h.p.
BERTHING: There are 34 berths at most of which, direct loading or unloading can be effected from quayside tracks.Ro/Ro berth available.
Public Grain Elevator: Depth alongside 42 ft. 2 berths, each with 5 loading spouts. Unloading rate for grain 40,000 bushels/hour at each berth. Loading rate 115,000 bushels/hour for grain.
McDuffie Terminals: 2 berths. No. 1 with dolphins, total length 320 m., No. 2 length 170 m. Bulk coal handling plant, depth alongside the berth is 40 ft. Shiploaders can load over 4,000 t.p.h. or 7,000 t.p.h. combined. The stacker/reclaimer can handle 4,000 t.p.h., a rail car tipple rated at 4,000 t.p.h. and barge unloaders that work 3,500 t.p.h. each. A conveyor belt system connects the entire complex.
Bulk Handling Plant: 3 berths, depth alongside 40 ft. Total quay length 1,600 ft. 2 unloading towers which can unload 3,000 t.p.h. and 2 loading conveyors, rate 2,000 t.p.h.
Depth alongside other public berths as follows:

Pier 2	38 ft. MLW	Pier River End B	38 ft. MLW
Pier 3	38 ft. MLW	North Pier B 1	40 ft. MLW
Pier 4	38 ft. MLW	Pier North B 2	40 ft. MLW
Pier 5	38 ft. MLW	Pier North B 3	40 ft. MLW
Pier 6	38 ft. MLW	Pier South C1	41 ft. MLW
Pier 7	38 ft. MLW	Pier South C 2	41 ft. MLW
Pier 8	38 ft. MLW	Pier South C 3	41 ft. MLW
Pier South A	37 ft. MLW	Pier River End C	38 ft. MLW
Pier River End A	30 ft. MLW	Pier North C 1	39 ft. MLW
Pier North A 1	38 ft. MLW	Pier North C 2	37 ft. MLW
Pier North A 2	38 ft. MLW	Pier D Cold Storage	37 ft. MLW
Pier North A 33	38 ft. MLW	Berth 1 tipple	Under repair
Pier South B 1	41 ft. MLW		
Pier South B 2	41 ft. MLW	Berth 2 tipple	44 ft. MLW
Pier South B 3	41 ft. MLW	Berth 3 tipple	40 ft. MLW

CRANES: 1,600 ton capacity (1,200 tons at 208 ft.) crane, 75 ton stationary crane, 50 ton mobile crane, 80 ton floating crane and 45 ton container crane available.
TANKERS: Max. length 950 ft. restricted by turning basin. American Bituminals & Asphalt Co. – Jetty berth dredged to 38 ft.
Magazine Point: Hess Terminal: Jetty berth dredged to 43 ft.
FRESH WATER: Available ex wharf at all berths.
FUEL: Most grades fuel/diesel available via pipe-line, barge or truck.
STEVEDORES: Normal working hours for the port are 0800/1700 hrs. Monday through Friday.
DENSITY: 1,000 (Fresh Water).
REPAIRS: *Alabama Dry Dock & Shipbuilding Company* – Dry Docks ranging from 5,000 to 18,000 tons displacement all serviced by 51 ton gantries. Dock length range from 380 ft. to 620 ft. Also available is a 70 ton floating crane. Any type of repair can be effected.
Bender Ship Repair. 1 dry dock of 2,500 tons displacement. Majority of repair work is top-side. 100 ton floating crane available.
CUSTOMS ALLOWANCES: At the discretion of customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.
IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95, issued for the same vessel.
HOLIDAYS: Absolutely no work is performed on New Year's Day, Easter, July 4th, Labour Day and Christmas Day. Working holidays are Mardi Gras Day, Veteran's Day and Thanksgiving Day.
DEVELOPMENTS: A 15 million dollar expansion programme, improving the present bulk materials handling plant, construction of the container facility, widening the turning basin and various updating projects.
AUTHORITY: Port of Mobile, Alabama State Docks Department, P.O.Box 1588, Mobile, Alabama 36601. *Telex:* TWX 810 – 741 – 7748. *Contact:* E. G. Browning, Jr., General Traffic Manager.

AGENT: Strachan Shipping Company, P.O.Box 2127, Mobile, Alabama 36652. Tel: 205-433-5401. Telex I: 50-5423. Telex II: 810-741-1221. Cables: "Strachan".

MOREHEAD CITY, N. Carolina: 34.43 N. 76.42 W. (See Plan Book)

DOCUMENTS:

3 copies Cargo Manifest (Form 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.

2 copies Crew Manifest (curio list).

2 copies Passenger List (Form I-418).

2 copies Crew List (Form I-418).

Customs Boarding Officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

Health Pratique.

Master's Oath (Form 1300).

All Foreign Clearances.

U.S. Certificates of Payment of Tonnage Tax (Customs Form 1022).

Certified Crew List.

PILOTAGE: Pilots obtained from Morehead City Pilots' Association, Morehead City, North Carolina 28557. Tel: 726-6134.

The Port Terminal at Morehead City is 3.5 miles from the Sea Buoy. The port is located on the Intracoastal Waterway and is situated 75 miles S.W. of Cape Hatteras and 14 miles West of Cape Lookout.

Pilots should be given 24 hours notice and then contacted by VHF Channel 16 about 2 hours before arrival at Sea Buoy R "2BI".

Pilot boat is about 40 ft. long, with white hull and superstructure; the hull is marked with "PILOT" in black letters on both sides.

RESTRICTIONS: The channel and basin at Morehead City are maintained at a controlled depth of 40 ft. – MLW.

The wharf is constructed of concrete and steel and has marginal tracks and crossovers for full length. Truck ramps are located at various points for easy Roll-on/Roll-off access.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C. Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available. Service provided by Carteret Towing Co. Inc., Radio Island, Morehead City, North Carolina 28557. Tel: 919-726-5440.

BERTHING: The wharf is 5,300 ft. long. This length enables the port to provide berths for 10 × 500 ft. general cargo ships and 1 petroleum tanker at any given time.

Adjacent to the general cargo dock area is a 1,000 ft. deep water berth for out-loading through the bulk handling facility.

Morehead City also provides a barge terminal with 1,200 ft. of modern berths. This terminal was developed as a part of the bulk handling facilities, but is also used for the loading or off-loading of a variety of cargoes.

The bulk handling facilities of the port terminal at Morehead City are designed to out-load bulk and aggregate cargoes at a rate of 3,000 t.p.h. *Wharf:* 5,300 ft. of continuous concrete wharf. 1,000 ft. deep-water berth for bulk-handling facility.

Bulk Handling Facilities: 3,000,000 ton annual capacity bulk facility for receipt, conveyance, storage and shipment of bulk cargoes. Loading capacity 3,000 t.p.h.

CRANES: 2×115 ton capacity gantry cranes.

FUEL: Available from Colonial Oil and Texaco Inc.

CONSULS: Finnish Vice-Consul, Wilmington, North Carolina 28401. Tel: 763-5451.

Royal Norwegian Consulate, Wilmington, North Carolina 28401. Tel: 763-8271

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95, issued for the same vessel.

REPATRIATION: This is possible but should be avoided as there is no Immigration Office. Closest airport is about 1 hour's drive from the town.

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.

SERVICES: There are no shipyards in the port. Service on any kind of electronic equipment is not available.

AUTHORITY: North Carolina State Ports Authority, P.O.Drawer 829, Morehead City, North Carolina 28557. *Tel:* (919) 726-3158. *Telex:* 510 924-2983. *Contact:* R. F. Goins, Port Manager.

MYRTLE GROVE (incl. Davant), Louisiana: 29.38 N. 89.57 W.

LOCATION: West Bank of Mississippi River, about 82 miles (via Southwest Pass) from sea (at mile 61.5 above Head of Passes).

DOCUMENTS/PILOTAGE: For all general information refer to "New Orleans".

BERTHING: *Mississippi River Grain Elevator, Inc.:* Distance between bollards 1,000 ft., alongside 500 ft. dock, depth 40 ft. (consistent with Southwest Pass). Loading rates, 80,000 to 120,000 bushels per hour. Loading Spouts: 3 spouts in use with 2 additional planned. Total distance between 5 spouts after completion (pivot to pivot) 500 ft.

International Marine Terminal: Max. LOA 290 m. Max. draft 12.2 m. Max. beam 48 m. Berth length 312 m. Length of travel of loader 244 m. One loading spout. Max. loading rate for coal 9,000 tonnes per hour.

Davant:

Electro Coal Transfer Corporation: Terminal located 55 miles above Head of Passes opposite Myrtle Grove. Total length of dock 3,000 ft. Channel depth 12.19 m. Depth alongside 18.0 m. One fixed loader, rate 4,840 tonnes per hour and one travelling loader, rate 6,000 tonnes per hour.

There is to be a Topping-Off operation 2 miles from the S.W. Pass entrance using 4×600 t.p.h. cranes mounted on barges.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Minimum of 2 tugs required for berthing and unberthing. Additional tugs at Elevator Management's discretion.

FRESH WATER: Not available.

FUEL: Not available.

DENSITY: Fresh Water (1000).

AUTHORITY: Plaquemines Port, Harbour and Terminal District, Woodlawn Building, Rt.1, Box 53A, Braithwaite, Louisiana 70040. *Tel:* (504) 682-0081.

Mississippi River Grain Elevator, Inc., P.O.Box "N", Belle Chasse, Louisiana 70037. *Tel:* (504) 656-2212. *Telex:* 58305, TWX 810-950-6621. *Cables:* Mirigrain. *Contact:* A. Maggioni, Chairman. A Di. Benedetto, Vice-Chairman. J. T. Dugas, Traffic Manager.

NAWILIWILI, Hawaii (including Port Allen): 21.57 N. 159.21 W. (See Plan Book)

DOCUMENTS:

4 Crew Lists.

4 Passenger Lists.

Customs Documents.

Clearance, Travelling Manifest.

Local Manifests.

Health Documents.

Bill of Health and Vaccination Certificates.

4 Manifests.

4 Bills of Lading.

Ship's Papers.

Certificate of Registration or Enrolment.

Annual Inspection Certificate.

Load-line Certificate.

Derat Certificate.

Drinking Water Certificate.

Radio Certificate and Licence.

4 Store Lists.

PILOTAGE: Vessel's Agent orders Pilot 48 hours in advance by telephone, correcting ETA as necessary with 4 hours final notice if a last minute change occurs. Tug-boat *"H. A. Walker"* serves as pilot boat for Nawiliwili and Port Allen, 75 ft. long, black hull, white house, topsides red. Radio telephone within 1 hour of arrival and while tug is working. Channels 12, 16 and 18. "WYB 8343". Pilot boards 1 mile East of Nawiliwili and 0.5 miles South of Port Allen. Signals in accordance with International Code.

ANCHORAGES: Nawiliwili: Between Nawiliwili Light and Carters Point in 5 – 9 fathoms. Not good in strong trade-wind weather. Fair holding ground. Not recommended.

Port Allen: 0.5 miles South of Port Allen Breakwater Light in 5 – 10 fathoms. Fair holding ground. Untenable in Kona or S.W. storms which occur from November to March.

RESTRICTIONS: 24 hours notice of arrival is obligatory. Nawiliwili: Arrivals sunrise, departures sunset time. From October 21 to March 21 Pilot boards at 0630 hrs. Balance of year 0600 hrs. Port Allen: No time restrictions.

MAX. SIZE: Nawiliwili: Length 687 ft., draft 32 ft. 6 in.

Port Allen: Length 687 ft., draft 32 ft. on North side and 28 ft. on South side. Pier is 600 ft. long, so larger vessels overhang.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Honolulu Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Communicate through RCA or ITT stations in Honolulu. Also KQM marine operator for radio telephone and telephone to Kauai.

TUGS: One 1,500 h.p. tug meets vessels off port and in outer harbour. Both ship's lines and/or tug's line may be used. Has radio telephone, "WBY 8343" and Channel 12 is usually used. Extra tugs available from Honolulu.

BERTHING: Limited to 1 large vessel at Nawiliwili and 1 at Port Allen. Considerable barge traffic. Prior reservations by Agent necessary with District Manager. Berth conflicts usually solved in Honolulu by rerouting of Island ports.

New Ro/Ro barge facility at Pier 1.

CARGO HANDLING FACILITIES: Nawiliwili has 2 sugar loading gantries on Pier 2; no equipment or storage to handle grain, ore, coal, sulphur. Fertiliser is discharged by self-unloading barge, and the bulk hauled away via truck. There is a container yard but no facilities to off-load containers. Weekly service is by a self-unloader. Roll-on/Roll-off cargo is moved on ramps furnished by barges. LPG and petroleum product lines are privately owned.

STEVEDORES: All stevedoring by McCabe Hamilton and Renny Co. Ltd., with headquarters in Honolulu and branches in outports. 48 hours notice by Agent for labour and equipment. Inward cargo is containers, general, bulk fertiliser, petroleum products, and building and construction materials. Outward is raw sugar, general and molasses. Foreign vessels are subject to heavy fines for carrying stevedore gear inter-island without Customs clearance.

MEDICAL: 2 hospitals on Kauai with 2 doctors under contract to United States Public Health Service. Standard international inoculations and vaccination required. Advance notice by Agent desirable but not necessary.

TANKERS: All piers have pipe-line connections for incoming cargo and outgoing molasses. Fuel oil 10 in., molasses 10 in., water line 6 in., gasoline, kerosene and diesel 8 in. These are the main lines under the wharves. Hose connections to ships vary with the type of riser and hose so size of fittings should be checked with Agent. No slop discharge facilities available. 4 tanker berths available.

DENSITY: Varies from full salt to brackish in periods of heavy rainfall with freshets in the streams. No specifics available.

FRESH WATER: Available from 2 in. dock hydrants via ship's hose. About 100 gallons per minute.

FUEL: Bunker C not available for large vessels. Diesel fuel available via tank truck with 6 hours notice. Weekend and holidays order previous day.

GANGWAY/DECK WATCHMEN: Tankers discharging gasoline required to have uniformed dock watchman. Usually off duty policeman. All ships provide own gangway and deck watch.

OPENING/CLOSING HATCHES: Normally done by stevedores. A few foreign ships prefer doing it with own crew.

CUSTOMS ALLOWANCES: 200 cigarettes, 50 cigars per man, and one bottle, U.S. quart, wine or spirits.

IDENTIFICATION CARDS: Desirable but not required by law.

CONSULS: All in Honolulu.

REPAIRS: Light machine shop, welding and burning and pipe work available. Plantations may do some heavy repairs if part can be sent to their shop. Their engineers are helpful in emergencies. Heavy or technical repairs must be done in Honolulu.

REPATRIATION: Agent can arrange by air via Honolulu. Immigration clearance necessary.

AIRPORT: Lihue is 3 miles from Nawiliwili and 20 miles from Port Allen; served by inter-island regular carriers. Numerous lines, and charter flights available.

TIME: GMT minus 10 hours, all year round.

HOLIDAYS: National: New Year's Day (January 1st); President's Day (February 22nd); Memorial Day (May 30th); July 4th; Labour Day (first Monday in September); Election Day (first Tuesday in November); Veteran's Day (November 11th); Thanksgiving Day and Christmas Day (December 25th). Cargo can be worked but at penalty rates.

POLICE/AMBULANCE/FIRE: Emergency calls – Dial 911 for all services, or call "O" for operator.

EMERGENCY CO-ORDINATION CENTRE: Coast Guard Search/Rescue Centre, Tel: 245-4521.

TELEPHONES: Arrangements by Agent.

SHORE LEAVE: Permitted after Immigration check. Iron Curtain or Communist visitors may be restricted.

DEVELOPMENTS: Turning basin may be enlarged to handle liners and large bulkers. Project depth 35 ft.

AUTHORITY: State of Hawaii, Department of Transport, Harbours Division, P.O.Box 946, Lihue, Kauai, Hawaii 96766. *Tel:* (808) 245-6996. *Contact:* Carl A. Forsen, Kauai District Manager.

AGENT: See "Honolulu".

NEW BEDFORD, Massachusetts: 41.38 N. 70.55 W.

(See Plan Book)

DOCUMENTS: See "Boston".

PILOTAGE: Compulsory. 3 Massachusetts State Pilots available, ordered through Agent. VHF Channel 16 monitored. Pilot on station only after 12 hours notice. Small pilot vessel with basic communication equipment. Pilots board all vessels at Buzzards Bay Buoy at the entrance to New Bedford Outer Harbour situated at Lat. 41° 30′ 42″ N., Long. 70° 50′ 07″ W.

ANCHORAGE: It is recommended that vessels delayed due to weather, etc., anchor 0.5 mile South of Buzzard's Bay Bell Buoy.

RESTRICTIONS: A modern harbour approach begins at Buzzard's Bay Buoy and runs a straight course of 7.5 miles direct to the pier facilities. The channel is 350 ft. wide and has a depth of 30 ft. MLW. The channel leads into a moderate size (1,000 yd.) turning basin.

MAX. SIZE: 700 ft. length. Vessels over 30 ft. draft restricted by tides.

HEALTH: See "Health: All Ports" before first U.S. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: RCA Chatham Radio, New Bedford Marine Operator for VHF, and Boston Marine Operator for ship to shore frequencies.

VHF: Pilot vessel on Channels 16 and 13. Pilot office on Channels 16 and 18A.

TUGS: Tugs join vessel in inner harbour. Tug lines used. 2 tugs available. Tugs are not normally used at the State Pier in docking and undocking of deep-water vessels. The large turning harbour basin, the wind-sheltered position of the pier and lack of tidal current minimise use of tugs. In extreme weather conditions tugs are used.

BERTHING: At State Pier, berthing space for 3 ships:
North side 600 ft. length, South side 775 ft. length, East side 450 ft. length.
Depth of water at all berths is 30 ft. MLW.
Maritime Terminal, depth 27 ft.

BRIDGES: Passage to upper reaches of harbour to Maritime Terminal requires navigation through the New Bedford and Fairhaven Bridge only in daylight for larger vessels over 250 ft. length.

STEVEDORES: 24 hour notice required for New Bedford Stevedoring Corporation to prepare gear. 25 tons discharged or loaded per hour as average production per gang. Nearly all cargoes handled.

MEDICAL: 24 hours notice required. Excellent hospital facilities available.

TANKERS: Hurricane dyke barrier gate 150 ft. wide with depth of 30 ft. MLW.

DENSITY: Static, since tidal variations light. Density same as ocean water.

FRESH WATER: Fresh water available.

FUEL: All types available, to be ordered in advance.

GANGWAY/DECK WATCHMEN: Watchmen available. Non police or police.

OPENING/CLOSING HATCHES: Depends on negotiated contract and cargo handled.

CUSTOMS ALLOWANCES: Designated by U.S. Customs with regard to particular circumstances.

CONSULS: Most Consuls available in Boston, 50 miles or 1 hour away.

REPAIRS: All types of minor ship repairs available.

REPATRIATION: Agent can handle formalities.

AIRPORT: 3 airports within 1 hour's drive. All international services.

TIME: Shift from Standard to Eastern Daylight Saving Time. Local time GMT minus 6 hours.

HOLIDAYS: New Year's Day (January 1st); Washington's Birthday (February 22nd); Patriot's Day (April 19th); Memorial Day (May 30th); Independence Day (July 4th); Labor Day (first Monday in September); Columbus Day (October 12th); Veterans' Day (November 11th); Thanksgiving Day (last Thursday in November); Christmas Day (December 25th).

TELEPHONES: No telephones on board, but exist adjacent to pier.

SERVICES: All services can be obtained if required.

SHORE LEAVE: If U.S. Immigration has cleared crew member, he is allowed ashore.

SHIPMASTER'S REPORT: December 1982.
Documents: See "Boston".
Pilotage: Compulsory. Pilot boards at "BB" in Buzzards Bay. Advise agent 6 hours prior to arrival.
Restrictions: Vessels enter and leave on rising tide during daylight hours. The approach is hazardous as vessel has to pass through hurricane barrier (width 150 ft.) and swing bridge (width 94 ft.).
Max. Size: LOA. 600 ft. Beam 85 ft. Draft 25 ft. Underkeel clearance of 5 ft. required in channel. Mean tidal range 3 ft.
Radio: Chatham Radio.
Tugs: 3 tugs available (2,000 hp.). 2 tugs are normally sufficient for berthing/unberthing.
VHF: Pilot on VHF Channel 16.
Berthing: Maritime Terminal Wharf: Distance from "BB" Buoy to Berth is 9 miles. U.S. and U.K. pilot books indicate 30 ft. to 31 ft. at berth. Least depth in Channel from sea to berth 30 ft. Nature of bottom at berth – very soft mud. Density 1025. Good security. Palletised cargo and 20 ft. and 40 ft. containers handled. Ample storage space for containers.
Services: Fresh Water, Fresh Provisions, Limited Repair Facilities, Lloyd's Surveyors (at Boston), Salvage Surveyor (New York), Laundry Service, (Boston). Bunker Fuel Oil, Diesel Oil, Lubricating Oil, Doctor, Hospital, Groceries and Meats (Boston).

AUTHORITY: City of New Bedford Harbor Development Commission, 1204 Purchase Street, New Bedford, Massachusetts 02740. *Tel:* (617) 997 – 9441. *Contact:* Henry Z. Horn, Director.

NEW HAVEN, Connecticut: 41.14 N. 72.55 W.

(See Plan Book)

DOCUMENTS: Refer to "New York".

PILOTAGE: Compulsory. State Pilots are available on a 24 hour basis and are usually arranged through the ship's Agent or directly by shipping companies. Pilot will board vessel in vicinity of New Haven Sea Buoy, marked "N.H." – short and long flash; black and white vertical stripes. Boarding will be from a 44 ft. steel launch named *New Haven Pilot* – blue hull with "Pilot" marked on both sides in white letters, or from a tug-boat. Contact can be made via VHF telephone, Channel 13 (156.65 MHz), Channel 16 (156.80 MHz), or Channel 19A (156.95 MHz).

Pilotage Association Report: The New Haven – Bridgeport Pilots maintain a tide gauge, from where they depart to meet vessels. The normal tidal range is 6 ft. They believe that 4 ft. of water in excess of the ship's deep draft is necessary for a safe transit. A rule of thumb, used by them, is 31 ft. on LW, and 37 ft. on HW. (For any variation of this, a Pilot should be consulted.) A normal transit time from the entrance buoy to any of the berths in the inner harbour is 45 minutes to 1 hour. Docking time of 30 minutes to 1 hour should be added to this average, dependent on where the ship is berthing, as well as possible weather conditions.

There was a maintenance dredging of New Haven Harbour, completed in 1983. The after-dredging survey submitted to them by the US Army Corps of Engineers shows a controlling depth, with rock bottom of 35 ft. at MLW. This rock is located at South West Ledge Light at a point where a 35° turn is executed by the ship.

Prevailing winds are Westerly, and have a decided effect on the rise of tide. The tide gauge is the determining factor as to the time of entry when wind conditions do exist.

ANCHORAGES: Vessels awaiting berth, and or tides, will find good anchorage up to 40 ft. draft within 1 mile S. – S.E. of the "N.H." Buoy.

RESTRICTIONS: Vessels can proceed to and from berths in New Haven Harbour at any hour during the day or night, weather and tide permitting. Entrance channel dredged to 35 ft. MLW and width 400 ft.

MAX. SIZE: Draft up to 38 ft. subject weather and tides. Vessels of 50,000 d.w.t. with part cargo, do call occasionally, but should consult with the Pilot and terminal concerned.

HEALTH: See "Health: All Ports", before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Vessels arriving from North use Chatham Radio. Vessels from South use Amagansett Radio on Long Island.

Bridgeport Marine Operator on VHF Channels 24 and 27.

TUGS: Red Star Towing Company operates tugs based in New Haven and serves Long Island Sound Ports. The office is on Channel 19A. Tugs monitor 19A, 16 and 13. Dispatchers can be reached 24 hours a day on Channel 19A. The number for Red Star is area code (212) 536-3841 or (800) 225-5470.

BERTHING:

Wyatt Inc.: Ships are not docked on the West side at ebb tide, though ships in ballast can sail whenever ready, regardless of flood or ebb tide. The East berth docking is done on flood or ebb, with draft to be considered. In the Spring of 1983, this terminal was dredged to 37 ft. on the West side, and 32 ft. on the East side. Fresh water and bunkers are available, with steam on the East side available through a 2 in. line, with 125 lb. pressure.

Ships of 715 ft. are regularly docked here. Vessels are docked port side to on the West side, and would be delayed if the East berth is occupied by a ship.

Gulf Terminal: The Gulf Dock is located parallel to the channel on the East side of the inner harbour, and ships of 35,000 d.w.t. with draft of 35 ft. and LOA of 675 ft. are considered to be maximum size. (350 ft. from bow to manifold.)

The dock parallels the channel and consists of 2 main caissons, a centre platform and dolphins connected by a catwalk. Ships consigned for T.A.D. Jones Terminal use this facility.

T.A.D. Jones: This dock is on the East side of the harbour, a 500 ft. finger pier at a 90° angle to the channel. The North side has 27 ft. of water and the South side is used for barges. Tankers, or dry cargo ships no longer call at this pier.

Arco Terminal: Arco Dock parallels the main channel, and is 750 ft. long, with 2 main caissons, dolphins, and platform, connected by catwalks. Ships up to 50,000 d.w.t., and 35 ft. draft use this berth arriving on the rising tide, and 35 ft. on LW in berth. Ships are docked starboard side to.

Bunkers are not available, though fresh water is, but only in mild weather.

New Haven Terminal, Inc.: This facility has 3 ship berths on a 90° heading from the channel, dredged in 1983. The Scrap Dock, as it is called, is a continuous pier, with a wearing strip cushioned by a rubber backing. The pier is 650 ft. long, with 35 ft. at MLW. Scrap is loaded from here and all types of dry cargo handled. Two gantry cranes are on the dock and additional mobile cranes are available. Railroad cars can be brought on to the dock. Ships berth port side to.

The Finger Pier on the North side is a continuous pier, 650 ft. long, and is mainly used as a tanker berth. Bow to manifold is 350 ft. (additional hoses can be added to increase this distance.) The slip is 196 ft. in width, and 2 ships may be accommodated at the same time, as long as 30 ft. is allowed for a tug boat between the ships. Depth 35 ft. at MLW.

The South side is a tanker or general cargo berth, with 40 ft. at MLW. Bow to manifold is 350 ft. and additional hoses may be used. Ships of 700 ft. may be secured at all 3 of these berths.

Bunkers can be trucked in, and fresh water is available at all berths.

Exxon Terminal: Exxon Dock parallels the main channel. The dock is 750 ft. long with 2 main caissons, dolphins, and platform connected by a catwalk.

Ships of 50,000 d.w.t. call at this dock, with a draft of 36 ft., docking on the rising tide. Ships are docked starboard side to. Bunkers are not available, though fresh water is.

TANKERS: See "Berthing".

BALLAST: There are no slop lines available.

FUEL: Available from oil terminals or delivered by barge.

FRESH WATER: Available at all terminals.

MEDICAL: All facilities available.

CUSTOMS ALLOWANCES: At the discretion of Customs Officers. Normal allowance is 200 cigarettes or 2 lb. of tobacco and 1 quart wine/spirits per man. Additional allowances may be given if considered necessary, due length of vessel's stay in port.

AIRPORT: New Haven Airport 1 mile distant. New York International Airport 70 miles distant.

CONSULS: All countries represented in New York.

HOLIDAYS: New Year's Day (1st January); Washington's Birthday (22nd February); Memorial Day (30th May); Independence Day (4th July); Labor Day (first Monday in September); Columbus Day (12th October); Veteran's Day (11th November); Thanksgiving (fourth Thursday in November); Christmas Day (25th December).

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.

SERVICES: Professional Sea Services (monitor Channels 16 and 19A) of New Haven offers launch service to ships at anchor, movement of stores, and skin divers. Tel: (203) 932-2159.

GENERAL: Through a co-operative agreement, all the terminals have a slick boom, skimmers and absorbent available at all times.

There are no slop tanks available in this port for pumping ballast.

None of the terminals supply gangways; ships must use their own.

AUTHORITY: U.S. Coast Guard, Captain of the Port, New Haven. *Contact:* Captain D. V. Monks, New Haven-Bridgeport Pilots' Association Inc., 23, Highland Drive, Wallingford, Connecticut 06492. *Tel:* (203) 878-8667.

NEW LONDON: Connecticut: 41.21 N. 72.06 W.

(See Plan Book)

DOCUMENTS: Refer to "New York".

PILOTAGE: Vessel usually notifies Agent 48 hours before arrival, who will arrange Pilot boarding. Pilot boards at Sarah's Ledge, which is close to anchorage at harbour entrance.

ANCHORAGES: In Thames River, and in Long Island Sound, approx. 2 miles W.S.W. of New London Ledge Light bounded by lines connecting points which are following bearings and distances from New London Ledge Light: 246°, 2.6 miles; 247°, 2.1 miles; 233°, 2.1 miles; and 235°, 2.6 miles.

RESTRICTIONS: Pilots recommend daylight docking but can dock at night if necessary. Entrance channel 40 ft. deep.

MAX. SIZE: Dry cargo vessels and tankers 700 ft. long are using the harbour.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Vessels arriving from North use Chatham Radio on Cape Cod. Vessels from South use Amagansett Radio on Long Island. However, either one may serve the purpose.

TUGS: Usually join vessel at Ledge Light if a dry cargo vessel, and off Sarah's Ledge if a tanker. Tugs use ship's lines; if tug's lines are used this is part of charge.

BERTHING: Advance ETA must be made for berthing, and it is suggested to dock during daylight hours when possible.

State Pier No. 1: depth, 28 to 36 ft. MLW.
Dow Chemical Co. Wharf: depth, 22 ft. MLW.
City Wharf Ferry Terminal: depth, 22 ft. MLW.

BRIDGES: There are no bridges across Main Ship Channel. However, at New London, at the head of the Main Harbour, the Thames River is crossed by 1 drawbridge and a twin fixed bridge: the New York, New Haven and Hartford Railroad bascule bridge with a horizontal clearance of 151.5 ft. and a vertical clearance of 30.9 ft. at high water and a fixed highway bridge with a horizontal clearance of 200 ft. and a vertical clearance of 135 ft. at high water.

STEVEDORES: ETA of 72, 48 and 24 hours is required, as gangs must be requested by 1500 hrs. on weekdays. Average discharge, about 20 tons per gang per hour.

TANKERS: Discharge at Hess Oil Co. berth, 12 in. and 10 in. lines.

Hess Oil Dock: depth alongside 36 ft.
Texaco Wharf: depth alongside 18 ft.
Pfizer Wharf: depth alongside 18 ft.

MEDICAL: All facilities available.

FRESH WATER: Available at pier side through 2.5 in. and 1.5 in. hoses.

FUEL: Available at tanker berths or by barge.

GANGWAY/DECK WATCHMEN: Not required and not recommended.

OPENING/CLOSING HATCHES: Performed by stevedores.

IDENTIFICATION CARDS: Not required.

CONSULS: Nearest at New York.

REPAIRS: 3 waterfront marine repair plants are equipped to repair vessels at the port. The Nelseco Navigation Co. and Thames Shipyard Inc. each owns and operates a plant at New London on the right bank of the Thames River; the General Dynamics Corp., Electric Boat Division owns and operates a shipyard and marine repair plant at Groton on the left bank of the river.

DRY DOCKS: 1 floating dry dock, 1 graving dock and 3 marine railways are available to the public at 2 of the marine repair plants.

1 floating dry dock, steel construction, with a lifting capacity of 6,500 tons, located on the West side of the pier E, has an overall length of 448 ft. length of 435 ft. 6 in. on the keel blocks, overall width of 97 ft. inside clear width of 70 ft. and depth of 26 ft. of water over the keel block when submerged.

1 graving dock, located South of Piers A, B, C, and E, has length of 515 ft., width of 70 ft., and 35.5 ft. depth of water over the sill and 34.5 ft. over the keel blocks at MHW.

REPATRIATION: Facilities exist.

AIRPORT: Nearest airport is Trumbull Airport, situated about 3 miles East of Groton, Connecticut. There are scheduled commercial airlines serving this field. Allegheny Airlines and Pilgrim Airlines run frequent connecting flights to Bradley and Kennedy International Airports.

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours, from April to October.

HOLIDAYS: New Year's Day (1st January); Lincoln's Birthday (12th February); Washington's Birthday (22nd February); Good Friday; Memorial Day (30th May); Independence Day (4th July); Labour Day; Columbus Day (12th October); Veteran's Day; Thanksgiving Day; Christmas Day (25th December). Cargo work can be arranged on holidays.

POLICE/AMBULANCE/FIRE: Police, 443 – 4315; Ambulance, 443 – 4388; Fire, 443 – 4381.

TELEPHONES: Available if required.

SHORE LEAVE: Allowed.

DELAYS: Availability of berthing might cause some delay.

AUTHORITY: State of Connecticut, Dept. of Transportation, Bureau of Waterways, State Pier, New London, Connecticut 06320. *Tel:* (203) 443-3856. *Contact:* Alan F. Ferran, Maritime Operations Bureau.

NEW ORLEANS, Louisiana: 29.56 N. 90.04 W.

(See Plan Book)

DOCUMENTS:

3 copies Cargo Manifest (Form 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I-418).
2 copies Crew List (Form I-418).

Customs boarding officer will also examine Ship's Register and Load Line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States Port:

Master's Oath (Customs Form 1300).
All foreign clearances.
Certified Crew List.

The Bureau of Customs at New Orleans, Louisiana, will not, regardless of the circumstances, accept Customs Entry Papers from vessels unless they are on the proper U.S. Customs Forms and properly prepared.

Specially referred to are Customs Forms 1303 (Ship's Stores Declaration), 1304 (Crew Effects Declaration) and 1302 (Inward Foreign Manifest).

U.S. Customs at New Orleans require that the 1303 be completed, that is all stores (deck, engine, etc.) be listed on the form; it must also include firearms and medicines. They will not accept "as per attached list".

Form 1304, Crew Effects List, must likewise be properly completed. All effects and curios will have to be listed on the form. The term "souvenirs" is not sufficient and may not be used. All values have to be listed. Attachments to the 1304 are not permitted. (This does not apply to American Flag vessels using the Form I-418 Crew List with Crew Declaration numbers listed for their souvenir list.)

Also see "Berthing – Ama (Shipmaster's Report) – General" regarding Customs' areas of jurisdiction.

PILOTAGE: Advise Agents ETA at sea buoy 48 hours in advance. Agent will arrange for Pilot. Pilot boat 46 ft. long, red hull, white cabin, flying blue and white Pilot flag. Pilot boards at sea buoy, requires Pilot ladder 6 ft. above water level. Pilot boats can be contacted by VHF, Channel 9 when 30 to 40 miles off, or ship-to-ship Channel 2738. Bar Pilot is exchanged for River Pilot at Pilot town, Head of Passes.

Following advice received from Crescent River Port Pilots' Association:

Cable: Crespilots, New Orleans.

Vessels bound to any destination on the Mississippi River and Mississippi River Gulf Outlet are requested to supply the following information via Coastal Radio Telegraph addressed to Crespilots, New Orleans:

(1) ETA – 24 hours before expected arrival at pilot station (Sea Buoys), and any change of ETA in excess of 2 hours.

(2) Indicate if vessel is arriving Mississippi River or Mississippi River Gulf Outlet.

(3) Deepest fresh water draft and speed of vessel.

(4) Please contact pilot station at entrances via VHF Radio Phone on Channel 16 (156.80 MHz), Channel 9 (156.45 MHz), or, Channel 13 (156.65 MHz) at least 2 hours prior to arrival for boarding instructions.

Your co-operation will greatly assist in expediting the dispatching of Pilots and avoid costly delays to your vessels.

ANCHORAGES: Safe anchorage within 2 miles of South Pass or S.W. Pass entrance. At the Point, below New Orleans, vessels may anchor without tug assistance.

RESTRICTIONS: Draft governed by S.W. Pass, project depth 40 ft. Entrance day and night. New Orleans is 115 miles upriver.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

TUGS: Available, and join vessel off berth if required. One tug normally used for berthing/unberthing at New Orleans.

BRIDGES: 4 bridges. 2 bridges cross river at New Orleans, 1 at Baton Rouge and 1 at Donaldsonville. Sufficient clearance at all times.

New bridge under construction in New Orleans.

BERTHING: *Public Grain Elevator.* No. 2 berth, 670 ft. long, 40 ft. depth; No. 3 berth, 650 ft. long, 40 ft. depth; No. 4 berth, 635 ft. long, 40 ft. depth.

Loading Rates 20,000 bushels per hour per belt, in berths 2 and 3; up to 40,000 bushels per hour per belt, in berth 4. Each berth has 2 loading belts.

Southern Scrap Material Co: Berth 550 ft. long, 32 ft. depth. Loading 200 t.p.h. with cranes.

Chalmette: Humble Oil Terminal: tanker berth 30 ft. depth; Tenneco Oil Terminal: tanker berth 35 ft. depth.

Kaiser: Chalmette Wharf: Aluminium discharge facilities, max. draft 38 ft.

Terminals on West Bank of Mississippi:

Amesville: Texaco tanker loading berth, 34 ft. alongside. 2×8 in. hoses loading up to 12,000 b.p.h. No ballast facilities.

Avondale: American Liberty Tank Terminals berth, 60 ft. alongside. 4 × 6 in. hoses loading up to 18,000 b.p.h. No ballast facilities. International Tank Terminals berth, 45 ft. alongside. 12 in. hoses loading 150 t.p.h.

Gretna: Publicker Chemical Corp.: berth 30 ft. alongside. Southern Pacific Company: berth 600 ft. long, 35 ft. depth; dry cargo discharging only. Industrial Molasses Corp: berth 27 ft. depth; 2 × 10 in. pipe-lines, loading 200 t.p.h.

Marrero: Hess Terminal Corp: tanker berth 38 ft. depth; 6 × 12 in. hoses loading 500 t.p.h. Texaco: tanker berth 35 ft. depth; 6 × 16 in. lines loading 250 t.p.h. No ballast facilities.

St. Rose: Cities Service: tanker berth 35 ft. depth; International Tank Terminals: berth 35 ft. depth; no fresh water available.

Westwego: Continental Grain Elevator: berth 600 ft. long, 40 ft. depth; loading 3,000 t.p.h., 2 loading belts. Louisiana Dock: 28 ft. alongside, bulk oil products loaded 200 t.p.h. Pacific Molasses Co: berth 35 ft. alongside.

Ama: Shipmaster's Report: February 1985.

Berth: Farmers Export Elevator Co.

Location: Lat. 29° 56.4′ N.,Long. 90° 18.5′ W. On the S.W. bank of the Mississippi about 122 miles from the S.W. Pass (New Orleans Customs Zone).

Health/Agriculture: See "U.S.A. – General" before first Port.

Tugs: Tugs normally used.

Berth: Length of berthing face about 550 ft.

Port side to, head up. Head, stern, breast lines to dolphins. Springs to wharf or dolphins according to size. Strong current along berth. River traffic passes close by. Substantial moorings required, with regular adjustment. Poop gangways generally do not reach wharf. A contractor's gangway normally on wharf but is charged for delivery, collection in addition to rental. Access road very narrow, no vehicles allowed on wharf. Road deliveries must be collected manually from levee 300 yards away. Otherwise delivery by boat from Fairview Wharf. All provisions, laundry, etc., from New Orleans. Public telephones on wharf.

Loading: Loading rate about 1,500 t.p.h. – 2,000 t.p.h. Using 4 "Buhler" arms simultaneously. Sometimes there is a delay in back weighing cargo for preparation of documents.

Fuel: By barge at anchorage only.

Density: 1000.

General: The River is divided into 3 Customs divisions, namely Baton Rouge, Gramercy and New Orleans. To pass from one to another requires a new port entry with fresh copies of Crew Lists, Store Lists, Crew Personal Manifests, etc. Additional copies should be prepared at the same time as those for the first entry, as the Agents can then go ahead with the formalities.

It is a common practice for ships to anchor below New Orleans for clearance by Customs, N.C.B. and U.S.D.A. before going on towards the loading terminal. Bunkers are generally taken during this period as the grain elevators normally refuse permission to do this alongside.

Authority: Farmers Export Company, P.O.Box 97, Ama, La 70031.

CONTAINER HANDLING FACILITIES: Handled at most docks. Full container facilities at Morrison Yard wharf, length 430 ft. France Road berth No. with 830 ft. leased to Sea-Land. Napoleon Avenue wharf 1,520 ft. Nashville/Henry Clay wharf 2,820 ft.

. France Road Berth No. 4, wharf 700 ft. France Road Berth No. 5, wharf 900 ft. Berth No. 6, 800 ft. Berth No. 4 leased to Navieras de Puerto Rico and Berths No. 5 and 6 leased to New Orleans Marine Contractors, Inc.

France Road Berth 6, with Ro/Ro pier.

STEVEDORES: Working hours 0800 – 1200 and 1300 – 1700, Monday to Friday.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

MEDICAL: All facilities available.

DENSITY: Fresh water (1000).

FRESH WATER: Available ex-wharf.

FUEL: Only available by barge. Oil companies can supply Bunker "C" ex-terminals at Amesville and Marrero.

GANGWAY/DECK WATCHMEN: Recommended if any crew detained by Immigration.

CONSULS:

Argentina	523-2823	India	581-6641
Austria	581-5141	Italy	524-2271
Belgium	522-0298	Japan	529-2101
Bolivia	523-7488	Korea	586-8300
Brazil	588-9187	Liberia	568-1717
Canada	525-2136	Mexico	522-3596
Chile	523-4368	Netherlands	586-0666
Colombia	525-5580	Norway	522-3526
Costa Rica	525-5445	Panama	525-3458
	and 288-5495	Paraguay	522-7424
Denmark	525-1018	Peru	529-2707
Dominican Republic	522-1843	Philippines	524-2755
Ecuador	523-3229	Portugal	486-6101
El Salvador	522-4266	Senegal	529-7561
Finland	523-6451	South Africa	
France	897-6387	Spain	525-4951
	and 522-9767	Sri Lanka	362-3232
Federal Republic of Germany		Sweden	827-8608
	524-0356 or 524-6560	Switzerland	525-0164
Great Britain	586-9300	Thailand	522-3656
Greece	523-1167	Upper Volta	891-9963
Guatemala	525-0013	Uruguay	525-8354
	or 525-4364	Venezuela	522-3284
Haiti	586-8309		and 524-6700
Honduras	522-3118	Yugoslavia	288-6202

REPAIRS: 7 berths available.

CUSTOMS ALLOWANCES: At the discretion of Customs Officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95, issued for the same vessel.

AIRPORT: New Orleans International Airport, served by most airlines.

TIME: Central Standard Time. Daylight Saving Time from May to October.

HOLIDAYS: New Year's Day (1st January); Martin L. King's Birthday (15th January); Good Friday; Memorial Day (30th May); Independence Day (4th July); First Monday in September (Labour Day); Veteran's Day (Last Monday in October); Fourth Thursday in November (Thanksgiving); Christmas Day (25th December). No work on New Year's Day, Independence Day, Labour Day and Christmas Day.

POLICE: Harbour Police Department has jurisdiction over harbour area. Tel: 528-3371 or 3372.

BANKS:

American Bank and Trust Co., International Branch – ITM Building, New Orleans, LA 70130. 504/525-7761.

Banque de L'Union Europeenne, New Orleans Representative Office, 408 Magazine St., Suite 201, New Orleans, LA 70130. 504/523-6077.

Barclays Bank International Ltd., 365 Canal St., Canal Place One, Suite 2040, New Orleans, LA 70130. 504/529-4343.

Citizens and Southern Intl. Bank of New Orleans, ITM Building, New Orleans, LA 70130. 504/581-1586. Telex: 58-7409

First National Bank of Commerce, 210 Baronne Street, New Orleans, LA 70112. 504/561-1371.

Hibernia National Bank of New Orleans, P.O.Box 61540, New Orleans, LA 70161. 504/586-5353.

Whitney National Bank of New Orleans, 228 St. Charles Avenue, New Orleans, LA 70130. 504/586-7272.

SHORE LEAVE: Allowed for any crew member not detained by Immigration.

DEVELOPMENTS: Jourdan Road Terminal Complex comprising of a two berth facility with 290,000 sq.ft. of open space, 144,000 sq.ft. transit shed complete with crane rails and marginal track, plus 440,000 sq.ft. marshalling area. Marshalling area adjoining the terminal complex consisting of 10 acres with an additional 34 acres of preload area to be developed in fiscal year 1987.

SHIPMASTER'S REPORT: 1975.
Customs: Stores List. Curio List. 1 Crew List. Sealed High Duty Bond, Unchecked.
Immigration: Visaed Crew List. Seaman's Red I.D. Card or Passport along with American Crew Pass. Typed. Question asked by Officials "How long at sea?" I.D. Card handed back to seaman with American Pass stamped. Department very thorough and efficient.

No mail or money to be distributed until Immigration completed, also no persons permitted ashore or onboard until formalities completed except for Agents and Officials.

If no visaed crew list Master signs official form. Cost US$10.0 for whole ship's company.
Port Health: Radio Pratique not granted as seamens' cards not completed. No representative visited vessel. Report any death through Agents.
Agriculture Dept.: Inspected vessel. Galley, Messrooms, Store-rooms, etc. Meat and Vegetable rooms sealed.

Garbage bins to be covered (Collection expensive, retain on board until sail if possible).

Rat guards to be used.
Provisions and Stores: Select own supplier. Prices comparable U.K. with good quality expensive. Stores and Medicines ordered through providore.
Laundry: Satisfactory. Billed by weight. 24 hour service.
Watchmen: None placed on board but security police at section openings.
Telephone: None placed on board. Use office on quay side.
Water: Plenty available. Shore connections used.
Bunkers: Delivered by barge. Charged for what is ordered. Do not over stem. Barge hired from private firm. Any bunkers not taken paid for and revert to barge owners.
Walport Films: Exchanged.
Coast Guard: Require number of Oil Pollution Certificate (Certificate of Financial Responsibility). Whether AMVER participant. Require ship's particulars including horsepower. Displacement tonnage on sailing. Name of Master and Chief Officer. Dangerous cargo particulars and stowage.
National Cargo Bureau: Representative from National Cargo Bureau comes onboard and requests ship's particulars also ports of call to and from. Inspector looked at hatches where cargo to be loaded. He then issues a Certificate of Readiness. Loading can then commence.
Code of Federal Regulations: Each ship should have a copy. Difficult to come by. Acquired 1970 copy from Agents. Equivalent to our 'Blue Book'.
Repairs: Select own firm. Anxious to please. Unable to judge as little work contracted out.
Money: Delivered by separate security firm. Satisfactory.
Radio Messages: Send ETA at least 48 hours before arrival to Agents and Branch Pilots with draft. Notify Captain of the Port of any explosives for discharge or in transit. If all healthy and documentation correct ask for Radio Pratique. Confirm ETA at 24 and 10 hours. Inwards send ETA to Agents after passing Pilot Town. Agent will notify if Radio Pratique granted. Not necessary to fly "Q" flag going up river.
Stevedores: Hours of work 0800 to 1200 hrs., 1300 to 1700 hrs. Straight time. Weekday gangs will work until 1800 or 1900 hrs. to finish. Night: 1800 hrs. to midnight, 0100 to 0600 hrs. Head Stevedore checks Factory Act Book. Gangs will work continuously except for 3 hours in any 24 hours. 4 different Union Contracts. Plan maker makes own plan then airmails same to ports of discharge. Crew open hatches also close same. Crew not to do any cleaning.
General: Use S.W. Pass at all times. South Pass has only 18 ft. of water and shoaling all the time.

Pilot boards on lee side at Sea Buoy – Flash "A" (· –) from fast launch painted black. Ladder about 6 ft. from water level. Branch Pilot takes vessel to Pilot Town where River Pilot takes over. Ladder usually starboard side inward and port side outward 8 ft. above water. First come first served at sea buoy. About 1.5 to 2 hours from Sea Buoy to Pilot Town and about another 6 hours to berth. Proceed up river at harbour full speed. Reduce speed occasionally for long tows, dredgers and ships on loading berths.

River Pilot docks vessel.

Signals by day "H" flag. By night nothing.

Inland waterways rule of road applies.

We had clear daylight run up river and down at night. Mid December. Start of fog. Low fog experienced on water also some patches, fairly thick. If fog does develop it is worth remembering that once past Pilot Town Southbound, few if any places to anchor and one has to continue on.

Racon at entrance useful. Anchorages as per charts. When arriving contact Pilot on VHF Channels 9, 12, 13.
Berth: Satisfactory. 24/29 Market Street. Just past bridge. Quite a long walk to open section to get out of docks. Recommend at night get taxi back and if walking into town by day at least 2 persons.

Sufficient bollards. No cranes. Berth head up. Usually starboard side to.

Moorings. 4 headlines, 4 sternlines plus 2 springs each end. Passing traffic fairly heavy with considerable wash. Rat guards a requirement.

Ship's gangway. Quay about 25 ft. above water level. Wooden pile fenders very effective.
Tugs: Used for berthing and unberthing. 1 only alongside port forward shoulder. 2 tug's lines. When making fast tug passes portable Walkie Talkie on board to send up to Pilot on bridge. Pilot left by tug which used own ladder.
Radar: Satisfactory repairs carried out.

SHIPMASTER'S REPORT: 1979.
South West Passage:

Pilotage: Pilots prefer accommodation ladder together with pilot ladder but will sometimes use pilot hoists, on larger vessels.

Restrictions: For 100,000 d.w.t. vessel max. draft for S.W. passage is 35 ft., (fresh water) to sail out at any time.

SHIPMASTER'S REPORT: 1979.
Mississippi Lightening Area:
Port Limits: Centred at Lat. 28° 00′ N., Long. 89° 30′ W. and within 15 nautical miles radius.
Documents: Officials take photostat copies of Bill of Lading and give receipt for cargo, and take one copy of Notice of Readiness.
Pilotage: They are equipped with Loran "C".
Anchorages: Very deep. Vessel drifted 7 nautical miles N.N.E. in 11 hours (February) with wind N.E. – 3. Checked with satellite navigator.
Health: No formalities.
Radio: Initial contact on W/T via "WLO" Mobile then by R/T 12427.5 kHz A3J. When close enough Channel 16 VHF; then Channel 11 for all operations. If vessel fitted with bridge wing VHF extension then best to give all engine room orders over Channel 11 so that lightening vessel can also hear.
Berthing: As per OCIMF/ICS SSTG (P). Require 2 headlines and 1 stern line from STBL after putting aboard their lines which are all polypropylene except springs which are wires with nylon tails. Steamed at about 3.5 knots. They throw across heaving lines and carry all necessary equipment. Do not require derrick, they have gangway and 4 'Yokohama' fenders.
Tankers: STBL can load at up to 10,000 t.p.h. They prefer to use 2 centre manifolds with reducers down to 16 in.
Identification Cards: Required.

DISTANCE TABLE No. 1: (Supplied by New Orleans/Baton Rouge Steamship Pilots' Association).

Location	*Nautical Miles*
South Pass – to Above Head of Pass	13.9
South West Pass – to Above Head of Pass	20.0
Pilot Town	0
Point Anchorage – N.O.	78.8
Avondale – Int. Tank	94.2
Ama Elevator & Anchorage	102.2
St. Rose – Int. Tank	103.1
Destrehan – Bunge – St. Charles	104.3
Good Hope – G.A.T.X.	109.8
Norco – Shell	110.2
Union Carbide – Taft	111.1
Bonne Carre Anchorage	111.2
Hooker, Becker – Taft	112.0
La Place – Anchorage	117.0
Reserve – Anchorage	119.1
Godcheaux Sugar – Reserve	120.0
Bayside Elevator – Reserve	120.6
Cargill Elevator – Reserve	121.1
Marathon – Ecole	121.8
Kaiser – Gramercy	126.1
Colonial – Gramercy	127.0
Grandview Anchorage	127.7
Peavy Elevator Pauline	130.5
Pauline Mooring	130.7
Capline St. James	138.0
Freeport Convent	139.4
Burnside Anchorage	144.5
Agrico Burnside	145.1
Texaco Burnside	145.9
Ormet – Terminal Burnside	147.5
Getco – Burnside	149.5
Triad – Donaldsonville	150.7
Central Farmers – Donaldsonville	150.9
Mile – 175 – Mooring	151.3
Mile – 180 – Mooring	156.4
Shell – Geismar	159.4
Wyondotte Geismar	159.8
Allied – Geismar	162.3
Cos-Mar – Marbon Geismar	163.3
Stauffer Chem – St. Gabriel	173.6
Gulf States Util. St. Gabriel	175.2
Nordex	177.1
Hercules Plaquemine	178.0
Georgia Pacific – Plaquemine	178.5
Dow Plaquemine	182.4
Dow – Missouri-Bend	192.7
General Anchorage B.R.	196.6
Cargill Elevator – B.R.	198.9
General Cargo – 1 B.R.	199.1
Apex (Gen-Cargo 2) B.R.	199.4
Exxon – Baton Rouge	201.8
Solvey – Baton Rouge	202.5
Kaiser – Baton Rouge	203.1

DISTANCE TABLE No. 2: (Supplied by Port of New Orleans)

Distance Table Mississippi River
Gulf to Upper Boundary of the Port of New Orleans

PLAQUEMINES PORT, HARBOUR AND TERMINAL DISTRICT

BHP = Below Head of Pass

(R) West Bank Terminal/Wharf	*Mile Number*	*(L) East Bank Terminal/Wharf*
Shell Oil Company (South Pass) BHP	11.4	
California Co. (Southwest Pass) BHP	4.8	
	7.2	Shell Oil Co. (Southwest Pass) BHP
	8.6	Shell Oil Co. (Southwest Pass) BHP
	8.8	Gulf Oil Co. (Southwest Pass) BHP
	8.9	California Co. (Southwest Pass) BHP
California Co. (Southwest Pass) BHP	8.9	
	9.0	California Co. (Southwest Pass) BHP
Shell Oil Co. BHP	16.1	
	2.3	Texas Pipe Line Co.
U.S. Engineers	10.6	
Texaco Inc.	10.9	
Tidewater Oil Co.	11.6	
Getty Oil Co.	11.9	
	16.5	California Co.
Chevron Oil Co.	16.8	
Texaco Co.	18.6	
Gulf Refining Co.	24.6	
Exxon Co.	25.1	
	25.7	Gulf Refining Co.
	26.6	Cal-Ky Pipe Line Co.
	35.1	Richardson and Bass
John W. Mecom	38.8	
Freeport Sulphur Co.	39.0	
	40.4	Exxon Co.
Exxon Co.	41.2	
Jefferson Lake Sulphur	49.0	
Rock Island Oil	49.3	S. W. Richardson
	51.7	Texas Pipe Line Co.
Gulf Refining Co.	54.3	
	55.3	Electro Coal Transfer Corp.
International Marine Terminals	57.0	
Mississippi River Grain Elevator	61.5	
Gulf Oil Co.	62.0	
Gulf Oil Co.	63.0	
Chevron Chemical Co.	72.3	
Jayred Oil & Gas Co.	72.8	
Ayers Materials Co.	73.0	
Red Star Yeast & Products Co.	76.0	
	76.3	Amax Nickel Refining Co.
	76.6	Freeport Nickel Co.

BOARD OF COMMISSIONER PORT OF NEW ORLEANS
DISTANCES FROM HEAD OF PASSES
(Add 20 miles via S.W. Pass for distance to Gulf of Mexico)

(R) West Bank Terminal/Wharf	*Mile Number*	*(L) East Bank Terminal/Wharf*
	86.9	Murphy Oil Co.
	87.8	Mobil Oil Corp.
	88.2	Tenneco Oil Co.
	88.5	Exxon Co.
	88.6	Tenneco Oil Co.
	89.3	Kaiser Aluminium
	91.6	St. Maurice St. Wharf
	91.7	Alabo St. Wharf
	91.9	Charbonney St. Wharf
Todd Shipyards and Dry Dock	92.0	Andry St. Wharf
Todd Shipyards and Dry Dock	92.6	Industrial Canal Entrance
U.S. Navy	92.7	New Orleans Army Terminal
U.S. Navy	92.9	Poland St. Wharf
U.S. Navy	92.9	Pauline St. Wharf
U.S. Navy	93.0	Congress St. Wharf
U.S. Navy	93.1	Congree St. Wharf
U.S. Navy	93.2	Desire St. Wharf
	93.3	Piety St. Wharf
	93.4	Louisa St. Wharf
	93.7	Press St. Wharf
Crescent Towing Co.	93.8	Mandeville St. Wharf
Bermuda St. Wharf	93.9	Esplanade Ave. Wharf
	94.0	Gov. Nicholls St. Wharf
	94.3	Toulouse St. Wharf
	94.6	Bienville St. Wharf
Algiers Iron Works	94.8	Canal St. Wharf
	95.0	Poydras St. Wharf
Eastern Associated Terminal	95.3	Julia St. Wharf
	95.4	Erato St. Wharf
	95.6	Thalia St. Wharf
Perry St. Wharf	95.9	Robin St. Wharf
	96.1	Orange St. Wharf
	96.3	Market St. Wharf
	96.5	Celeste St. Wharf
Williams Mollasses Co.	96.6	
	96.8	St. Andrew St. Wharf
Gulf Oil Co.	97.2	First St. Wharf
	97.3	Third St. Wharf
	97.4	Washington Ave. Wharf
	97.6	Seventh St. Wharf
Witco Chemical Co.	97.7	
Publicker Chemical Co.	97.8	Harmony St. Wharf
Sonneborn Chemical Co.	98.0	Louisiana Ave. Wharf "G"
Swift & Co.	98.2	Louisiana Ave. Wharf "F"
Delta Commodities	98.4	Louisiana Ave. Wharf "E"
	98.5	Louisiana Ave. Wharf "D"
Penick & Ford Ltd.	98.6	Louisiana Ave. Wharf "C"
Commercial Solvents	98.8	Louisiana Ave. Wharves "A – B"
Texaco Inc.	99.0	Milan St. Wharf
Hess Terminal Corp.	99.1	Napoleon Ave. Wharf "C"
	99.2	Napoleon Ave. Wharf "B"
Clark Oil Corp.	99.7	Napoleon Ave. Wharf "A"
	99.9	Public Grain Elevator
Johns-Manville Corp.	100.3	Public Grain Elevator
Valley Lines Fleeting	100.4	Public Grain Elevator
Lykes Seebee Fleeting	100.4	Nashville Ave. Wharf
Celotex Corp.	100.5	Henry Clay Ave. Wharf
Pacific Molasses Co.	100.9	
U.S. Industrial Chemicals	101.0	
Publicker Chemical Co.	101.0	
Gulf States Asphalt Co.	101.3	
National Gypsum Co.	101.5	
Publicker Chemical Co.	102.0	
	102.1	U.S. Industrial Chemicals Co.
Ayers Materials Co.	102.2	
Atlantic Richfield	102.3	
Continental Grain	103.5	
	103.7	International Lubricant
	103.8	American Creosote Works
	104.0	Bertucci Bros. Construction
Koch-Ellis Marine Contractors	105.0	
	106.0	W. P. Villere Co.
Exxon Co.	108.2	
American Liberty Tank Terminal	108.2	
Permain Corp.	108.2	
American Cyanamid Co.	114.4	Exxon Co.
	115.0	Humble Pipe Line Co.

AUTHORITY: Board of Commissioners, Port of New Orleans, P.O.Box 60046, New Orleans, Louisiana 70160. *Tel:* (504) 522-2551. *Telex:* 58-7496. *Contact:* Denis B. Grace, Trade Development. Kenneth Parker, Docks.

AGENT: Strachan Shipping Company, 2640 Canal Street, New Orleans, Louisiana 70119. Tel: 504-827 8600. Telex I: 5-8210. Telex II: 810-951-5070. Cables: "Strachan".

NEW YORK, New York and New Jersey:
40.43 N. 74.00 W. **(See Plan Book)**

DOCUMENTS:

3 copies Cargo Manifest (Form 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (Curio List).
2 copies Stores List.
2 copies Passenger List (Form I – 418).
2 copies Crew List (Form I – 418).

Customs boarding officer will also examine Ship's Register and Load Line Certificate.

In addition the following documents will be required for formal entry, to be made within 48 hours of arrival from abroad:

Health Pratique.
Master's Oath (Form 1300).
All Foreign Clearances.
U.S. Certificates of payment of Tonnage Tax (Customs Form 1002).
Certified Crew List.

PILOTAGE: Compulsory for foreign flag ships, and U.S. ships bound to and from foreign ports.

24 hours notice of ETA required. Pilot boat should be contacted on VHF Channel 16, call "Ambrose Pilot", pilot vessel also on Channels 13, 8 and 18A or ship-to-ship Channel 2638 or 2738. Vessels requiring Pilot should hoist signal letter "G" in daytime. In foggy weather the letter "X" should be sounded on whistle.

Pilot boat is generally found about 1.5 miles West of Ambrose Light Tower. In bad weather Pilot tries to stay windward of normal pilot station.

In poor visibility an inbound ship should make Ambrose Tower and then proceed at slow speed to the Ambrose Channel Sea Buoy while blowing the letter "X" on her whistle. If no Pilot is obtained by the time she is in the vicinity of the sea buoy she should then anchor about 0.5 mile to 1 mile North of the line from Ambrose Tower to the sea buoy and await Pilot.

ANCHORAGES: For ships entering from Sandy Hook there are anchorages in Lower New York Bay, Gravesend Bay, Raritan Bay, and Arthur Kill off Perth Amboy. In the Upper Bay, anchorages available off Bay Ridge for 30 days, off Jersey City for 72 hours, and off Stapleton for 48 hours. For vessels entering via Long Island Sound there are anchorages in the Western end of the Sound and in the East River.

Vessels must notify the Captain of the Port when it anchors, of the vessel's name, length and draft and its position in the anchorage.

Regulations for anchorages may be found in the 33 Code of Federal Regulations, Part 110.155.

Vessels entering New York Harbour are required to have 2 working anchors, by U.S.C.G. regulations.

RESTRICTIONS: Ambrose Channel, 10 miles long, maintained to a width of 2,000 ft. and a depth of 45 ft. MLW. The Northern approach to the harbour is through Long Island Sound into the East River. Main channels in the port are maintained to a depth of 45 ft. MLW.

MAX. SIZE: Restricted only by berth depth and location.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

VHF: All vessels over 100 tons gross are required to keep continuous watch on VHF Channel 13 when in areas where U.S. Inland Water Regulations apply.

V.T.S. in operation. Channels used are 16, 13, 11, 12 and 14.

TUGS: Over 50 private towing and transportation companies registered in the port.

BERTHING:

Brooklyn: 36 berths. 8 berths at South Brooklyn Marine Terminal, including 2 container berths; 4 berths at 23rd Street Pier; 24 berths at BPAMT, including 2 container berths.

Hudson River: New Passenger Ship Terminal on Manhattan Shore between 48th and 52nd Streets provide 6 ship berths. 3 berth passenger ship facility at Houston St.

Hoboken Port Authority Marine Terminal: 2 piers, 4 general cargo berths.

Weehawken: 2 berth container facility at Port Seatrain.

Jersey City: 2 berth container facility at Port Jersey (Global Terminal).

Newark, N.J.: Port Newark (22 general cargo, 5 specialised, and 4 container berths). Depth range alongside 30-34 ft. Berth Nos. 10 and 12 handle coal with 3 floating cranes, rate 10,000 tonnes per day.

Elizabeth, N.J.: Elizabeth Port Authority Marine Terminal, 22 full container berths, channel depth 35 ft.

Department of Ports and Terminals: The Department of Ports and Terminals of the City of New York is responsible for maintaining, leasing, and developing City-owned waterfront property. One of the principle maritime agencies in the nation's busiest port, the Department is actively involved in harbour affairs. As part of its commitment to the economic vitality of the Port, the Department plays a leading role in pressing for streamlined dredging operations, improved transportation connections, development of coal and grain export facilities, and a foreign trade zone within the harbour.

Terminals: The Department is the sole lessor for five major cargo facilities in the port. Additionally, Ports and Terminals is a participant in a joint venture operation on the Brooklyn waterfront.

Howland Hook Container Terminal – Staten Island:

Operator: Howland Hook Marine Terminal Corporation.

Shipping Lines: Farrell Lines, United States Lines.

Situated on 187 acres in N.W. Staten Island, this facility offers 2,500 ft. of berthing space with a depth of 35 ft. 4×40 long-ton and 1×50 long-ton capacity container cranes on rail tracks move the entire length of the wharf so that vessels may be worked simultaneously by any combination of cranes. Special features include 360 reefer outlets, 22,000 sq.ft. of refrigerated warehouse space, plus 21,000 sq.ft. of hazardous cargo storage area. Shedded space of 280,000 sq.ft. is exclusively devoted to LCL shipments. The terminal handled 1,370,535 long-tons of cargo in 1980.

Expansion over the next decade by 300 acres will increase the facility's cargo capacity from 182,000 to 500,000 containers, extend the wharf by 800 ft., and include a foreign trade zone 60 to 70 acres in size. Channel depth will be dredged to 45 ft., and an additional 50 long-ton crane and Ro/Ro ramp will be installed.

A Chessie System rail turnout directly links Howland Hook with Conrail track at Staten Island Junction in New Jersey. The terminal's location offers excellent access to the New Jersey Turnpike and Metropolitan New York.

South Brooklyn Marine Terminal:

Operator: International Terminal Operating Co., Inc.

Shipping Lines: Compagnie Maritime Zairoise – CMZ; Costa Line Cargo Services; Saudi National Lines; Galleon Shipping Corporation; Hellenic Lines, Ltd.; Jugolinija; Medafrica Line; Prudential Line, Inc.; Royal Netherlands Steamship Company.

Sugar Refiners: Amstar Corporation, Revere Sugar Corporation.

Located directly off the Buttermilk Channel, this multi-purpose terminal can service as many as 9 vessels – container, LASH, Ro/Ro and breakbulk – simultaneously. Special features on this 110 acre site include a 90 ft., 75 ton capacity Ro/Ro ramp and 137 outlets for refrigerated containers. The terminal has a 70 short-ton, 2×50 long-ton capacity container cranes and a 140 long-ton P&H mobile crane. Also available is 705,000 sq.ft. of shedded space.

This terminal handled approximately 306,353 long-tons of breakbulk exports and 574,310 long-tons of container exports in 1980. The Terminal is adjacent to the New York Dock Railway, an intermodal rail yard, providing carfloat/bridge and overland service connecting the terminal and Bayridge rail line with Oak Point Yard in the Bronx to points throughout the U.S., Canada and Mexico. Connections via Interstate 278 provide direct access to the region's major truck routes and airports.

Expansion plans for the Terminal include 130 additional acres between 39th and 51st Streets, from 1st Avenue to U.S. Pierhead Line. This addition to the terminal will involve a landfill as well as the laying of a crane rail along the North and West side of the site. As a result of the expansion, the facility will be able to handle about 2 million long-tons of both breakbulk and containerised cargo. The projected completion date of this development programme is 1985.

23rd and 25th Streets Terminal – Brooklyn:

Operator: International Terminal Operating Co., Inc.

Shipping Lines: American Atlantic Lines, Mexican Lines, Moore-McCormack Lines.

Located on the Buttermilk Channel, this 11 acre terminal handles both general and container cargo (1980 figures: 237,100 long-tons general cargo, 70,358 long- tons container cargo). A 50 long-ton capacity barge mounted crane and 280,000 sq.ft. of transit shed space with continuous cargo doors allows for quick loading/unloading at dockside. Up to 3 vessels may be berthed at a time, with a dockside depth of 34 ft. on the South side, 30 ft. on the North side. This terminal offers one of the harbour's few on-site container repair shops.

Rail access is by New York Dock Railroad, with track originating at 28th Street and 2nd Avenue, a point adjacent to the terminal. Connections via Interstate 278 provide direct access to the region's major truck routes.

Red Hook Container Terminal – Brooklyn:

Operator: Universal Maritime Service Corporation.

Shipping Lines: Elma-Empresa Lineas Maritimas-Argentinas-Elma, Portuguese Lines, CTM, Ivaran Lines.

The newest cargo terminal in the harbour, Red Hook, is a joint venture between the City of New York, New York State and the Port Authority of New York and New Jersey. Situated on the 40 ft. deep Buttermilk Channel, this 31 acre facility offers 1,000 ft. of container berthing space serviced by 2×40 long-ton capacity container cranes, 660 ft. of Ro/Ro berthing space, and 1,390 ft. of breakbulk berthing space. Water depth alongside the container berth is 40 ft. (MLW) and 35 ft. (MLW) by the Ro/Ro and breakbulk berths. Approximately 200,000 sq.ft. of cargo consolidation and breakbulk handling space is available at dockside. A computerised inventory control system provides maximum efficiency and security.

Red Hook's convenient location saves 3 hours sailing time over most New Jersey terminals and saves in tugboat costs. Direct rail access to the New York Dock floatbridge is available, allowing for direct delivery of boxcars and flatcars. Connections via Interstate 278 provide direct access to the region's major truck routes.

Expansion plans will include an additional 10 acres of container handling area, an additional container crane on rails and the extension of the multi-gate truck complex. Completion mid-1985.

Pier 36 Terminal – Manhattan:

Operator: Sea-Land Services, Inc.

Shipping Lines: Netumar Lines, North American West African Lines.

Situated on 10 acres off the East River, Pier 36 is the sole marine terminal in Manhattan capable of handling breakbulk, Ro/Ro and containerised cargo. In 1980, 80,799 long-tons were handled. The facility offers 1,300 ft. of berthing space with a dockside depth of 32 ft. and 175,000 sq.ft. of covered transit shed space. Its location offers direct access to the lucrative Manhattan market, as well as convenient access to major truck routes in the Metropolitan area.

Pier 42 Terminal – Manhattan:

Operator: Sea-Land Services, Inc.

Shipping Lines: Standard Fruit and Steamship Company.

Devoted exclusively to handling imported bananas, pineapples and coconuts, Pier 42 is located on the East side of Lower Manhattan. 4 specialised gantry cranes and a highly mechanised operation enable this terminal to move 150,000 boxes of fruit per day. The facility handled 267,142 long-tons of fruit over the course of calendar year 1980. The terminal contains over 120,000 sq.ft. of warehouse space including an air-conditioned storage area. Water depth at dockside is 32 ft. 48 truck loading bays ensure that goods move quickly from dockside to the road.

CONTAINER FACILITIES: *Newark and Elizabeth, N.J.:* Port Newark and Elizabeth Marine Terminal on the Western shore of Newark Bay, most intensively developed container terminal area in the world with almost 4 miles of berthing space, over 1,265 acres of container marshalling area, 28 berths, 24 container gantry cranes with capacity range of 30 – 70 tons. An international railroad container transfer yard serves both terminals.

Jersey City: A 2 berth, 84 acre container facility (Global Marine Terminal, Port Jersey) with 1,800 ft. of berthing space and 3 container cranes of 40 ton capacity.

Weehawken: A 2 berth container facility at Port Seatrain of 87 acres and 1,885 ft. of berthing space equipped with 3×45 ton gantry cranes.

Also see "Berthing".

CRANES: Mobile floating cranes with capacity up to 500 tons available.

STEVEDORES: 13 stevedoring firms are active in the port, many of whom are also terminal operators. Normal working hours 0800 – 1700 hrs. Bulk Cargo work usually continues through 24 hours.

TANKERS: *Brooklyn:* Paragon Oil Terminal, 2 berths, depth 37 ft.; Patchoque Oil Terminal, 2 berths, depth 29 ft. and 35 ft.; Whale Oil Terminal, 1 berth, depth 36 ft.

Hudson River: Tappan Oil Co., 1 berth, 35 ft. depth.

Bayonne, N.J.: Public Oil Terminal, 3 berths, 32 ft. depth; Humble Oil Terminal, Constable Hook, up to 38 ft. depth; Ross Oil Co., 3 tanker berths up to 38 ft. depth; Texas Oil Co., 4 tanker berths, up to 32 ft. depth; Texaco, 4 berths up to 32 ft. depth. Constable Terminal: 1 berth for handling caustic soda, chemicals, vegetable oil and molasses. 27 tanks (9 million gallons). Max. draft 31 ft. MLW.

Kill Van Kull: Lehigh Tanker Terminal, chemicals, 35 ft. depth; Humble Oil Co., 3 tanker berths, up to 38 ft. depth; Texas Oil Co., 4 tanker berths up to 32 ft. depth; Ross Oil Co., 1 berth up to 32 ft. depth.

Newark, N.J.: 4 berths, 31 ft. and 32 ft. depth.

Elizabeth N.J.: Chevron Oil Company, 1 tanker berth, 26 ft. depth; Crown Central, 1 tanker berth, 30 ft. depth.

Arthur Kill: **Perth Amboy,** Chevron Oil Co. (tanker berth, 26 ft. depth); Hess Oil Co. (tanker berth 30 ft. depth); Cities Service (tanker berth, 34 ft. depth). **Sewaren,** Royal Petroleum Co. (tanker berth, 32 ft. depth); Public Service Co. (tanker berth, 35 ft. depth); Shell Oil Co. (tanker berth 35 ft. depth). **Port Socony,** Mobil Oil Co. (2 tanker berths, 27 ft. and 30 ft. depths). **Carteret,** American Oil Co. (tanker berth M, 25 ft. depth); General American (2 tanker berths, 25 ft. and 35 ft. depth). **Linden,** Cities Service (tanker berth, 32 ft. depth); Humble Oil Co. (tanker berth, 35 ft. depth); Sinclair Oil Co. (tanker berth 31 ft. depth). **Gulfport,** Gulf Oil Co. (tanker berth, 32 ft. depth).

Shipmaster's Report: 1976.
Greater New York Terminal, Astoria, Long Island:
Location of Berth: Lat. 40° 47′ N., Long. 73° 53.7′ W.
Distance from Entrance to Berth: 28 miles.
Max. Size at Berth: LOA, 900 ft. Draft, Pilot stated 34 ft.
Restrictions: Vessel should be ballasted sufficiently to pass under Brooklyn Bridge, clearance 127 ft.

Vessels may berth and unberth day and night but only at certain stages of the tide.

Anchorage: At Stapleton as designated by USCG.

Terminal Information: Starboard side manifold to barge at Stapleton Anchorage, use 6 in. hoses. Port side manifold used at the berth, ship's hoses not required. The connection is 12 in. running into 18 in. Nearest shore tank 1,000 ft. from berth. Line fitted with steam jacket but not efficient. Max. pressure allowed 125 p.s.i. Shore gantry used at berth. Derrick used at anchorage for discharging into barge. Product handled: Fuel Oil (Heating Oil). No slop tanks available.

General: Pilotage compulsory. Ambrose Pilot requires 24 hours' notice of arrival. Radio station handling traffic is Chatham. Most services are available at the berth, however it is advisable to take stores and send laundry from Stapleton Anchorage as there is no means of delivery at the berth other than carrying by hand. Stapleton Launch Service, tel. 981-8333/8384. Fresh water may have to be taken by barge in very severe weather as shore lines become frozen.

Approaching: From a Line from Rockaway Inlet to Ambrose thence Highlands Light, vessel must remain on VHF Channel 13 for ship-to-ship communication. When Pilot on board he maintains this Channel and ship can use own VHF other Channels. Marine operator on VHF 26 (call). For the passage of East River (Remember Brooklyn Bridge Clearance 127 ft.) one tug each bow alongside. After Hell's Gate and passing Port Morris to port, vessel cants to starboard to pass between North and South Brothers to starboard and Rikers Island to port through 500 ft. wide buoyed channel (some unlit) South to berth (inwards). It is preferable to come through Hell's Gate at HW or LW slack, thus avoiding cross currents between Brothers at other times.

Report: August 1984.
Exxon LPG Berth at Bayway:

United States Coast Guard requires all vessels with cargo on board (other than heel) to both enter and depart via Southern Channel, regardless of length. If vessel discharges completely (only heel remaining), then vessel is considered non-dangerous by U.S.C.G., and may depart via North Channel (without turning). (If completely discharged, other gas carrier restrictions – daylight only, 2 mile visibility, etc. – also do not apply.)

There are obstructions to South of Exxon berth which limits distance between manifold and bow or stern to 330 ft. (May be stretched to 335 ft. by Exxon on case by case basis.)

Other limitations given by Exxon for berth:
Draft: 31 ft.
Beam: 100 ft. (may be stretched)
Manifold Position: 13 ft. to 68 ft. above water line, 6 ft. to 15 ft. from deck edge.

Therefore any vessel which sails with part cargo must be turned for departure to comply with U.S.C.G. although it is physically possible to turn vessels up to 725 ft. – 730 ft. LOA off Exxon Berth provided there is no vessel berthed opposite Exxon at Gulfport (it has been done). Exxon is afraid that vessel might damage sea water intake structure for refinery while turning, and therefore says vessels longer than 660 ft. (may be stretched to 680 ft.), cannot be turned.

Other possibilities for turning are:

Continue North about 1 mile to Elizabethport Container Terminal where channel is wider.

Back ship anywhere between a few ship lengths to 0.5 miles South of Exxon, and then turn. We were advised by East Coast Pilots that it is possible to turn ship up to 730 ft. LOA at that location, with draft limit 25 ft. forward, 30 ft. aft. However, others advise that although oil tankers customarily turn at that location, it involves touching bottom (mud) at bow, and is therefore inadvisable for gas tankers.

Shipmaster's Report: September 1984.
Sun Oil Jetty (3C) at Marcus Hook.
Vessel: 140,000 d.w.t. LOA 270 m.

This is the only berth at Marcus Hook suitable for tankers of this size. Usually berth starboard side alongside, arriving off berth about 2 hours before HW. 1 tug each end, tugs' lines and usually made fast on main deck. 2 back springs first then 2 to 3 breasts and 2 to 3 head/stern lines. With this size of vessel it is better to have forward back springs from forecastle and use main deck moorings as head lines. Aft normally have back springs and stern lines from poop and breast lines from main deck.

Shore gangway and with an accommodation ladder about 20 m. abaft after manifold it is best to remove platform and land shore gangway there.

If bunkering then usual to pull off berth and anchor in Marcus Hook Anchorage.

Berthing Pilot boards off berth and normally uses accommodation ladder.

FRESH WATER: Available at most piers in the port district at a nominal rate. Water barge available to serve vessels at anchor in emergency but this is expensive.

FUEL: All grades of fuel readily available. Except for tankers loading or discharging, bunkers are normally delivered by barge. It may be economical to shift vessel to refuelling berth.

GANGWAY/DECK WATCHMEN: Available and recommended if any crew detained by Immigration.

CUSTOMS ALLOWANCES: 200 cigarettes or 2 lb. tobacco, 1 quart wine/spirits per man.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I – 95 to be made up for each crew member on arrival.

CONSULS:
Argentina
Bangladesh
Belgium
Bolivia
Bulgaria
Burma
Cameroons
Canada
Chile
Costa Rica
Czechoslovakia
Denmark
Ecuador
Finland
France
Germany (Fed. Rep.)
Great Britain
Greece
Guatemala
Guyana
Honduras
Hungary
Iceland
Indonesia
Iran
Liberia
Luxemburg
Madagascar
Malaysia
Malta
Morocco
Netherlands
New Zealand
Nicaragua
Nigeria
Pakistan
Poland
Romania
Sierra Leone
Somalia
South Africa
Suriname
Switzerland
Thailand
Turkey
Venezuela
Yugoslavia

REPAIRS: All facilities available for any size vessels.

DRY DOCKS: 4 docks with lifting capacities up to 25,000 tons (Bethlehem) and 1 dry dock capable of handling vessels of up to 1,100 ft. LOA, 140 ft. beam and 120,000 d.w.t.

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.

AIRPORT: Kennedy International Airport, Newark International Airport, La Guardia Airport.

HOLIDAYS: New Year's Day (January 1st); Lincoln's Birthday (February 12th); Washington's Birthday (February 22nd); Good Friday, Memorial Day (May 30th); Independence Day (July 4th); Labour Day (first Monday in September); Columbus Day (October 12th); Armistice Day (November 11th); Thanksgiving (fourth Thursday in November); Christmas Day (December 25th). No work on New Year's Day, Independence Day, Labour Day and Christmas Day.

SHORE LEAVE: Allowed except for crew members detained by Immigration.

DEVELOPMENTS: *Coal Project:* The Department of Ports and Terminals is proposing the development of a coal export terminal in the Stapleton-Tomkinsville area of the Borough of Staten Island, New York. The basic design of the system consists of unit train operations to an industrial area in Western Staten Island, an 8 mile coarse coal slurry pipe-line from the industrial area to a dewatering facility at the Stapleton waterfront. There the coal will be loaded directly onto a vessel.

The City of New York proposes to dredge the Ambrose Channel (the entrance channel to the New York Harbour) and access to the Stapleton waterfront to 68 ft. This would allow ships up to 260,000 d.w.t. to enter the New York Harbour. The port's advantages are: (1) shorter sailing time to major European ports, and (2) economics of scale that other ports cannot match in ocean transport, i.e., 68 ft. depth versus 55 ft. depth channels maximum in other U.S. East and Gulf ports. The proposed project is scheduled to open 1985-1987.

AUTHORITY: Port Authority of New York and New Jersey, One World Trade Center, New York, N.Y. 10048. *Tel:* (212) 466-7000, (201) 622-6600. *Telex:* ITT 424747 Panynj; WUI 620518 Panynj 620518 UW; TWX 710-581-5057 Pa Nynj Nyk. *Contact:* Port Promotion Representative.

U.S. Coast Guard, Governors Island, New York, N.Y. 10004. *Contact* Captain Benjamin E. Joyce, Captain of the Port.

Department of Ports and Terminals, Battery Maritime Building, New York, N.Y. 10004. *Tel:* (212) 248-8209. *Contact:* Sherry L. Sizemore, Director of Port Promotion.

AGENT: Rice Unruh Co., 29 Broadway, Suite 1312, New York NY 10004. Tel: (212) 943-2350. Telex: 6720325/6 Ruconyuw. Cables Riceunruh NY.

NIKISKI, Alaska: 60.41 N. 151.24 W.

Located on West side of Kenai Peninsula between Homer and Anchorage. Pan and brash ice in Inlet from November to March. Never freezes solid. Open all year.

APPROACHES: Via Cook Inlet.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: Pilot pick-up point 1 mile South of Homer Split light. Also see "Homer" Pilotage.

ANCHORAGES: Good anchorage.

MAX. SIZE: Harbour depth in excess 40 ft. Max. size 80,000 d.w.t. Tides diurnal range 28 ft. Also "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

CUSTOMS: Quarantine, local. Immigration and Customs from Anchorage, Alaska.

TUGS: From Anchorage.

BERTHING:
1. Port Nikiski Dock: 3 sided, 550 ft. long, 200 ft. on each side, 1,000 ft. wide, 12 feet at MLLW. 400 ft. by 75 ft. covered storage.
2. Three finger piers for tankers and bulk carriers. All exceed 40 ft. depth.

All 3 berths are dolphin berths ideal for rapid bulk loading. Main products:
- *(a)* Collier Chemical Dock: Bulk area and ammonia gas.
- *(b)* Phillips Petroleum Dock: Petroleum products and liquid natural gas.
- *(c)* Kenai Pipe-line Dock: Refined and crude Petroleum products.

STEVEDORES: Two gangs.
REPAIRS: Some at Kenai.
FRESH WATER: Limited.
FUEL: Not available.
MEDICAL: Health Centre, 3 doctors, 3 dentists.
TRANSPORTATION: Highway to Anchorage and Homer. Air transport available.

OAKLAND, California: 37.50 N. 122.18 W.

(See Plan Book)

Also See "San Francisco" *for Documents, Pilotage, etc.*

HEALTH: See "Health: all Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
BERTHING: *NOL Terminal:* Berth No. 5 (outer harbour), *Public Container Terminal:* Berth No. 6; Operator: Crescent Wharf and Warehouse, 1195 Maritime Street, Oakland, Ca. 94607. Tel. (415) 763-7470.

Berths: 2, length 1,839 ft., water depth 42 ft. MLLW (in 1981).

Container handling facilities: 1 Paceco 30 ton container crane (and 2 Krupp 40 ton container cranes); 6 Raygo Wagner Port Packers; 2 rubber tyred transtainers; 72 refrigerated container outlets; 4 truck scales; additional equipment as required. Combination, port packer/transtainer operation.

Bay Bridge Terminal: Berths 10, 11, 12: Operator: Maritime Services International, 1625 Maritime Street, Oakland, Ca. 94607. Tel. (415) 456-5669.

Berths: 3, length 3,039 ft., water depth 35 ft. Multi-purpose cargo terminal designed to handle break bulk, heavy lift cargoes, automobiles, and roll-on/roll-off operations.

Sea-land Container Terminal: Operator: Sea-land services, Inc., 1425 Maritime Street, Oakland, Ca. 94607. Tel. (415) 271-1000.

Berths: 2, Length 1,355 ft., water depth 40 ft. MLLW.

Container handling facilities: 3 Paceco, 30 ton cranes; 3 truck scales; 250 refrigerated container outlets. Chassis operation.

Matson Container Terminal: Operator: Matson Terminals, Inc., 3050 7th Street, Oakland, Ca. 94607. Tel. (415) 893-2456.

Berths: 3, including 1 for roll-on/roll-off operations. Length 2,220 ft., depth 35 ft. MLLW.

Container handling facilities: 3 container cranes – 27.5 ton Star; 30 ton Paceco; 33 ton Star. 1 truck scale; 200 refrigerated container outlets. Container yard is straddle carrier-type operation (containers stored 2 or more high).

Oakland Container Terminal: Operator: Oakland Container Terminal Co., 707 Ferry Street, Oakland, Ca. 94607. Tel. (415) 834-5822.

Berths: 2, length 309 m. depth 35 ft. MLLW.

Container handling facilities: 1 Modified "A" frame Paceco 40 ton container crane; 1 truck scale; 150 refrigerated container outlets. Container yard utilises a wheeled Paceco transtainer. Containers are stored 5 abreast and 2 or more high.

7th Street Public Container Terminal: Operator: Marine Terminals Corporation, 5190 7th Street, Oakland, Ca. 94607. Tel. (415) 839-6490.

Berths: Five. 3 container, 2 roll-on/roll-off and/or Combination break-bulk/container. Length 2,963 ft., water depth 35 ft. MLLW.

Container handling facilities: 3 Paceco low-profile, 40 ton container cranes; 4 truck scales; 96 refrigerated container outlets.

United States Lines Container Terminal: Operator: United States Lines, 1579 Middle Harbor Road, Oakland, Ca. 94607. Tel. (415) 465-4010.

Berths: 2, Length 1,443 ft., water depth 35 ft. MLLW.

Container-handling facilities: 2 Alliance low-profile, 51 ton container cranes, 1 crane modified for 125ft. outreach at 39 tons; 7 truck scales and outlets for 100 refrigerated containers. Container yard is chassis-type operation.

Maersk Line Terminal: Berth 4: Operator: Marine Terminals Corporation, 909 Ferry Street, Oakland, Ca. 94607. Tel. (415) 763-4289.

Berths: 1. Length 750 ft., water depth 35 ft. MLLW. 190 Refrigerated container outlets, 2 truck scales, 140 ton Paceco container crane.

American President Lines Container Terminal: Operator: American President Lines, Inc., 1395 Middle Harbor Road, Oakland, Ca. 94607. tel. (415) 271-8000.

Berths: 2. Length 1,300 ft., water depth 35 ft. MLLW.

Container handling facilities: 2 Alliance low-profile, 55 ton container cranes, 1 crane modified for 125 ft. outreach at 47 tons, one 40 ton Paceco modified "A" frame crane, with articulated boom and 1 Paceco Portainer with 40 tons capacity and 128ft. outreach; 3 truck scales; 108 refrigerated container outlets. Container yard is chassis-type operation.

Charles P. Howard Terminal: Operator: Indies Terminal Company, 35 Grove Street (Foot of Grove Street), Oakland, CA. 94607.

Berths: 3. Length 2,278 ft., depth 37 ft. MLLW.

Facility: This 49 acre facility will handle full containership, combination Roll-on/Roll-off and conventional cargo ships. There are two 40 ton Hitachi modified "A" frame container gantry cranes with articulated booms.

9th Avenue Terminal: Operator: Marine Terminals Corporation, foot of 9th Avenue, Oakland, Ca. 94606. Tel. (415) 452-3742,.

Berths: 3. Length 2,052 ft., depth 35 ft. at MLLW.

Facilities: Import steel and bulk cargo-handling centre. 4 Manitowac crawler truck cranes (capacity 100 tons). Bulk-loading facilities with 10 steel storage silos capable of holding 9,750 cu.ft. each. Rail track alongside berth.

AUTHORITY: Port of Oakland., P.O.Box 2064, 66 Jack London Square, Oakland, California 94604. *Tel:* (415) 444-3188. *Telex:* 336334. *Contact:* General Manager, Marine Terminals Dept.

OGDENSBURG, New York: 44.42 N. 75.30 W.

(See Plan Book)

Refer to "St. Lawrence Seaway" for important general information.
PILOTAGE: Seaway Pilot boards at Cape Vincent or Snell Lock and acts as docking Pilot.
ANCHORAGES: Anchorage area West of city at open roadstead area.
RESTRICTIONS: No tide. No restrictions other than Pilots' discretion as to wind and visibility.
MAX. SIZE: Largest vessel to enter 730 ft. long. Draft 27 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Western Union to OCN Corp. VHF Seaway Channel via Maria Radio Cardinal.
TUGS: No tugs necessary.
BRIDGES: Ogdensburg/Prescott International Bridge – 126 ft. clearance MWD.
BERTHING: By prior notice only. Port Authority Terminal, length 600 ft., depth 27 ft. One Grain Elevator capacity 500,000 bushels.
CRANES: Available, up to 82 tons capacity.
STEVEDORES: Order by 1800 hrs. day preceding arrival. Advise any change of ETA.
MEDICAL: Excellent medical service and availability of doctors. No vaccination necessary.
DENSITY: Fresh water.
FRESH WATER: Available by pipeline at Port Authority Terminal.
FUEL: One day's notice, all grades. Diesel, Bunker "C", Kerosene.
GANGWAY/DECK WATCHMEN: Normally not used.
OPENING/CLOSING HATCHES: By stevedores.
CUSTOMS ALLOWANCES: Tobacco, wine/spirits, normal Customs allowance U.S. Ports.
CARGO GEAR: 25 ton mobile crane, fork trucks to 13 tons capacity. Ship's gear to be in good working order.
IDENTIFICATION CARDS: Needed as per Immigration Department requirements.
REPAIRS: Limited dockside repairs available.
REPATRIATION: Can be arranged.
AIRPORT: (0.5 mile from city). Allegheny Airline – 3 flights daily to Syracuse, New York, etc.
TIME: 5 hours difference Eastern Standard Time. Daylight Saving time in Summer.
HOLIDAYS: New Year; Washington and Lincoln's Birthdays; Memorial Day; 4th July. Labour Day, Veteran's Day.
POLICE/AMBULANCE/FIRE: Police, 393-1551; Ambulance, 393-1221; Fire, 393-1010.
TELEPHONES: Available at Pierside (315) 393-7580.
SHORE LEAVE: Crew members allowed ashore.
AUTHORITY: Ogdensburg Bridge and Port Authority, Bridge Plaza, Ogdensburg, New York 13669. *Tel:* (315) 393-4080. *Telex:* WUT 937486. *Cables:* Ogdenport. *Contact:* Salvatore L. Pisani, Port Director.

OLYMPIA, Washington: 47.00 N. 122.53 W.

(See Plan Book)

PORT LIMITS: Vessel is to be considered an "arrived ship" at the Port of Olympia, Washington, when anchor is dropped in Budd Inlet or when the vessel is all fast at the dockside.
DOCUMENTS: See "Tacoma".
PILOTAGE: The vessel picks up Puget Sound Pilot at the Port Angeles Pilot Station located at the entrance to Puget Sound on the Straits of Juan de Fuca, and it is normal for the vessel's Agent to provide the pilot station with a 48-hour, 24-hour, 12-hour and 8-hour ETA. The pilot station monitors VHF Channel 13.
ANCHORAGE: Safe anchorage is located North of Olympia Shoal in 24 – 30 fathoms of water. The bottom is sandy and area is a sheltered inlet.

RESTRICTIONS: Channel depth 30 ft. MLW with a high tidal range of 14.4 ft. Also restricted turning basin of 800 ft. Vessels max. size would be governed by the turning basin of 800 ft. and draft of 30 ft. at MLW.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: "KPH" San Francisco or Mackay Radio, Everett "KLB".
VHF: No VHF other than Pilot to tug or ship to tug available at Olympia.
TUGS: Tugs are dispatched from Tacoma, Washington, 30 miles to the North, and generally join the vessel at the outer channel limits. They use ship's lines to assist the vessel in turning at the turning basin and to moor.
BERTHING: Olympia has 4 deepwater berths, numbered 1 to 4 proceeding from South to North. Berth No. 1 has a maintained depth of 40 ft. Berth No. 2 is a concrete dock with 40 ft. depth MLW. Berth No. 3, 40 ft. MLW and supported by 2×50 ton gantry-type cranes. Berth No. 4, 35 ft., primarily used as lay-by berth or loading waterborne cargoes.
CRANES: 2 Washington whirley-type cranes available at Berth No. 3 with max. capacity of 50 tons. Presently rigged for 12 tons and primarily used in bulk unloading with clams.
BULK CARGO FACILITIES: Presently discharged with ship's gear at Berth No. 2 or shore cranes and clams at Berth No. 3. Primary backup cargo yard of approximately 12 acres handling coke, coal, pig iron and other bulk-type cargoes.
SPECIALISED CARGO HANDLING FACILITIES: Olympia is generally an open cargo yard; however, it can be adapted for Ro-Ro traffic and is presently engaged in handling bulk cargoes such as coal, coke, etc.
BRIDGES: None pertinent to this area.
STEVEDORES: 2 stevedoring companies available in the Olympia area. 9 local gangs available for loading or discharging.
MEDICAL: Medical and hospital facilities are available without prior notification for emergencies; otherwise all medical and dental requirements can be taken care of by appointment.
TANKERS: No shore facilities for loading or unloading of tankers.
DENSITY: Salinity is on an average 29 parts per thousand.
FRESH WATER: Delivered to vessel by shoreside hose.
FUEL: Most grades available by barge from Seattle for fueling at dockside.
FIRE PRECAUTIONS: Standard for U.S. ports.
CONSULS: Most located at Seattle 60 miles to the North.
REPAIRS: All types of repairs possible.
DRY DOCKS: None available in Olympia. Nearest 60 miles to North at Seattle.
SURVEYORS: Lloyd's, A.B.S., N.V. available out of Seattle area.
GANGWAY/DECK WATCHMEN: Not required at Olympia under most circumstances unless crew members detained.
CUSTOMS ALLOWANCES: Sufficient quantities of tobacco, wine and spirits are permitted out of bond for each crew member sufficient to cover length of stay anticipated at the time of arrival. Actual quantities are at the discretion of the boarding customs officer.
CARGO GEAR: Generally vessels are loaded and/or discharged using ship's gear. However, 2 max. 50 ton capacity Whirley cranes are available for use for specific commodities and in the event of gear failure.
REPATRIATION: Facilities exist for repatriation of crew members.
AIRPORT: Local airport service by commuter airlines only and major international airport located 40 miles to the North.
TIME: GMT minus 8 hours. Daylight saving time in effect during Summer months, hours from 0001 27th April to 0001 26th October.
HOLIDAYS: Official holidays observed by the State of Washington for 1980 were: January 1st, February 12th, February 18th, May 26th, July 4th, September 1st, November 11th, November 27th, November 28th and December 25th.

Work is available on an overtime basis on all days except Christmas, December 25th; January 1st, New Years Day; and July 4th and 5th.
POLICE/AMBULANCE/FIRE: Telephone dispatch for emergency services, the numbers 911 dialled on any public telephone.
TELEPHONES: Public telephones are located within 100 ft. of any berth and are not provided on board the vessel.
SERVICES: Tank-cleaning, tank-washings, compass adjusting, etc., are all available from the Seattle area, located 60 miles to the North, and most services provide travelling repairs.
SHORE LEAVE: Crew are allowed shore leave by U.S. Immigration, depending on individual case.
IDENTIFICATION CARDS: Not issued by the Port of Olympia, and seaman's book is generally sufficient to allow Immigration, to determine whether shore leave should be granted.
REGULATIONS: Similar to all North American ports; no special rules or regulations applied to vessels by the Port of Olympia. Rules are set forth in Tariff No. 6.
DELAYS: Only delays that should be encountered at the Port of Olympia would be in the event of berth congestion.
DEVELOPMENTS: Fill area of 50 acres in progress.
AUTHORITY: Port of Olympia, P.O.Box 827, Olympia, Washington 98507. *Tel:* (206) 754-1650. *Telex:* 152689. *Contact:* James J. Jackson, Director of Operations.

ORANGE, Texas: 30.06 N. 93.44 W. **(See Plan Book)**

DOCUMENTS: Crew Lists, Passenger List and Customs Documents.
PILOTAGE: Radio to Agent, 12 hours and Pilots 2.5 hours in advance of ETA. Pilots contacted by VHF Channel 12 and 13. Pilots board at Sabine Pass, Sea Buoy position 29° 36′ N., 93° 48′ W. or upon request board at 29° 25′ N., 93° 40′ W. Pilot boats FM (VHF) Channel 65 – 156.275 mc/s.
ANCHORAGE: Off Sabine Bar – 40 ft.
RESTRICTIONS: Sabine River Channel: Project depth 30 ft.; bottom width 200 ft., including slip at port; marked and lighted for 24-hour navigation. Turning basin, 1,000 ft.×3,000 ft.
MAX. SIZE: Length – no limit, breadth – no limit, draft – 30 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: RCA – Global Communications.
TUGS: Join vessel in port turning basin. Tug's line used, no charge.
BERTHING: 2,308 ft. mooring space to accommodate 4 deep-sea vessels; all concrete docks; additional berthing space in slip for laying-up 4 vessels. Layberth facilities also available. 9 finger piers ranging in length from 480 ft. to 900 ft.
STEVEDORES: 5 stevedore companies – handled through Agent.
MEDICAL: Local facilities – complete.
TANKERS: Limited to 30 ft. draft.
DENSITY: Brackish.
FRESH WATER: Ample fresh water, through 2.5 in. connection, rate of delivery about 500 gallons per minute.
FUEL: All grades available; 8 hours advance notice required.
FIRE PRECAUTIONS: No welding or burning without U.S. Coastguard welding permit; also special authority required for ships loading explosives.
CONSULS: None available locally.
REPAIRS: Facilities available.
DRY DOCKS:

Levingston Shipyard – Orange.
400 ft.×126 ft. 11,000 tons, 17 ft. draft over blocks.
350 ft.×60 ft. 3,000 tons, 15 ft. draft over blocks.
250 ft.×72 ft. 3,000 tons, 11 ft. draft over blocks.

SURVEYORS: National Cargo Bureau, Inc., 550 Fannin, Petroleum Building, Suite 821, Beaumont, Telex: 77701.

American Bureau of Shipping, 398 Pearl Street, Goodhue Building, Suite 806, Beaumont, Telex: 77701.
REPATRIATION: Can be arranged through area Immigration.
AIRPORT: Local, no scheduled airlines. Mid County Airport with scheduled airline service – 30 miles.
HOLIDAYS: New Year's Day; Martin Luther King's Birthday; Lincoln's Birthday; Washington's Birthday; Texas Independence Day; St. Patrick's Day; Good Friday; Memorial Day; Emancipation Day; Independence Day; Labour Day; Columbus Day; Veterans Day; Ted Gleason's Birthday; Thanksgiving Day; Christmas Day; Any holiday which falls on Saturday or Sunday will be recognized on the following Monday. No work performed on Labour Day or Christmas Day.
POLICE/AMBULANCE/FIRE: Police 883-5654; Ambulance 883-6414; Fire 886-7431.
EMERGENCY CO-ORDINATION CENTRE: U.S. Coast Guard tel: (713) 983 8230.
TELEPHONE: Can be connected on board.
BANKS:

First City National Bank of Orange, P.O.Box 848, Orange, Texas 77630.
County National Bank, P.O.Box 1029, Orange, Texas 77630.
Unitedbank, Orange, P.O.Drawer 969, Orange, Texas 77630.

STORING:

1. Yes.
2. Yes.
3. Yes.

GENERAL: No strong tidal currents at the berths, excellent shelter during tropical storms.
DEVELOPMENTS: Additional 37 acre tract on Sabine River for future development.
AUTHORITY: Orange County Navigation and Port District, P.O.Box 516, Orange, Texas 77630. *Tel:* (409) 883-4363. *Telex:* 779325 *Contact:* Stephen E. Pomeroy, Chief Executive Officer.

OSTRICA, Louisiana: 29.22 N. 89.32 W.

LOCATION: East Bank of Mississippi river about 42 miles above S.W. Pass entrance.
DOCUMENTS/PILOTAGE: For all general information refer to "New Orleans".
ANCHORAGES: Available in river downstream of docks.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New Orleans Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Not normally required.
BERTHING: Gulf Refining Co. Terminal, tanker berth 45 ft. depth 2×8 in. hoses loading 34,000 bbls.p.h. Ballast line 18 in. for slop discharge.
FRESH WATER: Not available.
FUEL: Bunker "C" available ex-wharf.
DENSITY: Fresh water (1000).

OSWEGO, New York: 43.28 N. 76.30 W.

(See Plan Book)

LOCATION: Oswego harbour is located on the South shore of Lake Ontario about 15 miles from its East end at the outlet to the Oswego River. It is the first major port on the Great Lakes off the seaway. It is also the Great Lakes entrance to the Great Lakes – Hudson River Waterway which connects with the Hudson River at Troy.

PILOTAGE: No requirements.

RESTRICTIONS: Average navigation season – April 1st to December 15th.

Approaches: Through entrance between the Arrowhead Breakwater pier heads and detached breakwater.

Entrance is 750 ft. wide with a depth of 25 ft. at LW datum.
Controlling depth of water 25 ft. at datum.
No vessel length and beam limitations.
Approach open 24 hours a day.
Navigation lights available.

Harbour: Controlling depth – front of each terminal open for public use. 21 ft. on West side. 28 ft. on East side.

Turning Basin – 115 acres.
Accessible 24 hours per day.
No vessel length and beam limitations.

HEALTH/AGRICULTURE: See "Health" and "Agriculture" before first U.S.A. port (Albany).

TUGS: Towage facilities available on request.

BERTHING: The general cargo facilities are operated by the Port of Oswego Authority. The West Side Facility is a finger pier 1,000 ft. long providing 4 berths and has 21 ft. of water alongside at LW datum. 28,000 sq. ft. of covered storage is available with limited open storage. A million bushel grain elevator is situated on this pier. The East Side Facility is a marginal wharf 1,900 ft. long, providing 3 berths and has 27 ft. of water alongside at LW datum. 134,000 sq.ft. of covered storage is available with unlimited open storage.

Oswego exports general cargo. It imports grain, cement, wood pulp, petroleum and general cargo.

New Marginal Wharf: Length of berth 1,750 ft. Depth 25 ft. at LW datum.

BRIDGES: None.

CRANES: Mobile heavy lift equipment available.

BULK HANDLING FACILITIES: One 1,000,000 bushel capacity elevator equipped with 3 loading spouts, 2 Marine legs and 2 car pits.

FRESH WATER: Available at all general cargo docks.

FUEL: Seaway Terminal of Metropolitan Petroleum Corporation, 4 tanks – Capacity 327,000 barrels of No. 2 and No. 6 oil. Coal bunkerage available by truck delivery.

CONSULS: None.

REPAIRS: Above waterline repairs available.

AUTHORITY: Port of Oswego Authority, Foot of East First Street, Oswego, N.Y. 13126. *Tel:* (315) 343-4503. *Contact:* Sherwood L. Hamilton, Executive Director.

PALM BEACH, Florida: 26.46 N. 80.03 W.

(See Plan Book)

LOCATION: Port is located on a salt water sound known as Lake Worth and lies 1.3 miles from the 37 ft. contour of the Atlantic Ocean to which it is connected by an artificial cut at the North end of Lake Worth known as Lake Worth Inlet. The Inlet is located within the boundaries of the City of Riviera Beach, Florida.

PORT LIMITS: Sea Buoy at channel entrance. Dockage charges commence when vessel is made fast to wharf, and are on a 24 hour basis or fraction thereof.

DOCUMENTS: Basic Customs Documents for Entry: 2 copies Master's Oath, Form CF-1300; 2 copies General Declaration, Form CF-1301; 1 copy Clearance from Last Foreign Port (if available); 2 copies Arrival Crew Lists, Form I-418; 2 copies Passenger List, Form I-418; 2 copies Store Lists, Form CF-1303; 2 copies Crew's Effects Declaration, Form CF-1304; 1 copy Manifest of *All* Foreign Cargo onboard; 1 copy Manifest of Cargo for Discharge; 1 copy Form CF-3171 for formal entrance at Customs House. Valid original vessel documents.

All vessels shall, upon arrival, report to Port Director all cargo to be discharged. Such report shall be in form of copies of Ship's Manifest, or certified statements, and shall show number of units, commodity, weight, destination, consignee, and all other information which Port of Palm Beach deems necessary for compilation of commercial statistics, for reserving of necessary warehouse or wharf space, or other purposes. (Also see "Jacksonville").

PILOTAGE: Compulsory. Provided by Pilots' Association of the Port of Palm Beach, 58 East Port Road, Riviera Beach, Florida, 33404. Tel: (305) 844-1619.

Pilot's communicate with vessel on VHF Channel 16; if no answer contact Marine Operator to call Pilots on land line. Tel: (305) 845-2628.

Notice of ETA and request for Pilot must be made to the Pilots at least 24 hours in advance. There is no telex facility.

CHANNEL: Entrance to the harbour is by a dog-leg channel running due West through the jetties and then turning South-westerly to the terminals. The channel is 400 ft. wide, narrowing to 300 ft. in width as it continues across the lake another 3,000 ft., leading into a trapezoidal turning basin, 1,400 ft. by 1,310 ft. adjacent to the port terminals on the West shore, with an extension of 672 ft. at 25 ft. depth to the New North Wharf and Loading Ramps. Present depth of entrance channel is 35 ft. at MLW.

ANCHORAGES: Anchorage is designated by the Bar Pilots, which in most instances is at sea. Port has no established anchorage.

MAX. SIZE: Vessels up to 620 ft. in length with draft of 33 ft. have used facilities.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Port has no communication equipment. U.S. Coast Guard Station, Peanut Island, Riviera Beach, Florida, can be reached on 2182 kHz – 2678 kHz – 156.8 MHz. Pilots VHF Channel 16.

TUGS: Available to assist berthing. Service is provided by the Port Towing Corporation, P.O.Box 12425, Lake Park, Florida 33403. Office Tel: 622-6422 and 622-8688, nights and holidays 844-4244.

Tugs normally join vessel at jetty entrance. Tug's lines normally used.

BERTHING: 2 slips and 4 marginal wharves with 6 ramps including a 14 acre container facility.

Berth		*Length* (ft.)	*Depth* (ft.)
No. 1	South Marginal	210	25
No. 2	East Half, South Side of Slip 2	310	35
No. 3	West Half, South Side of Slip 2	310	35
No. 4	West End of Slip 2	220	25
No. 5	West Half, North Side of Slip 2	320	35
No. 6	East Half, North Side of Slip 2	320	35
No. 7	Middle Marginal	215	25
No. 8	East Half, South Side of Slip 1	350	25
No. 9	West Half, South Side of Slip 1	350	25
No. 10	South Ramp, West End of Slip 1	70	25
No. 11	Middle Ramp, West End of Slip 1	70	25
No. 12	North Ramp, West End of Slip 1	70	25
No. 13	West Half, North Side of Slip 1	350	25
No. 14	East Half, North Side of Slip 1	350	25
No. 15	South Section, North Marginal	204	27
No. 16	Mid-Section, North Marginal	203	27
No. 17	North Section, North Marginal	203	27
No. 18	East Section, South Side	150	25
No. 19	West Section, South Side	150	25
No. 20	South Ramp	67	25
No. 21	Middle Ramp	67	25
No. 22	North Ramp	67	25
No. 23	North Side Container Wharf	80	25
No. 24	South Half Container Wharf	225	25
No. 25	North Half Container Wharf	225	25

Supplementing the berths are 183,775 sq.ft. of transit shed storage space. Open storage areas consist of approximately 40 acres. 17 acres dedicated to container handling.

All vessels, their Owners or Agents, desiring a berth at wharves, shall, as far in advance of date of docking as possible, make application to port specifying date of docking, sailing, nature and quantity of cargo to be handled, and name of the vessel.

SPECIALISED CARGO HANDLING FACILITIES: Ramps for Roll-on/Roll-off cargo and wharfside accommodation for equipment to handle containerised cargo only.

CRANES: See "Cargo Gear".

STEVEDORES: The recognised working hours of port are from 0800 until 1200 hrs. and from 1300 until 1700 hrs., Monday through Friday, holidays excepted. During the recognised working hours services will be charged for on a straight time basis.

When vessels are loading or discharging cargo the port may furnish checker-foremen to supervise release of cargo being loaded and/or check cargo being discharged. The charge for each man furnished will be based on labour-furnished rates for foremen, with the Port reserving right to furnish as many men as they deem necessary to protect their interests. Charges for this service will be rendered against the vessels, their Owners, or Agents.

MEDICAL: Full hospital facilities available without prior notice. Dentists available during normal work hours.

TANKERS: The port receives tankers each month in the 15,000 to 18,000 gross ton range. Petroleum tankers are handled in Slip Two, Berths 2/3 or 5/6. All petroleum tankers are boomed during pumping operations. No slop facilities at port.

FUEL: Private firms with trucks or barges available by prior arrangement through vessel's Agent.

FRESH WATER: Fresh water delivered to vessels at wharves or docks by pipe-line. Hoses can be supplied by port per tariff charges. Fittings on pipe-line are 2.5 in. Minimum charge of U.S.$10.00. Water $0.72 per ton of 240 gallons.

DRY DOCK/REPAIRS: No major facilities at port. Mobile repair companies available. No berths dedicated for repair work.

SURVEYORS: Marine surveyors representing Lloyd's, A.B.S., N.V., operate at the port or nearby ports.

C. L. Marine Inc., 825 Oleander Street, Boca Raton, FL 33432. Tel: (305) 391-8932.

Palm Beach Marine Survey, 2108 Ascott Road, Juno Isles, FL 33408. Tel: (305) 626-3424.

GANGWAY/DECK WATCHMEN: No requirement for watchmen required except for special vessel conditions or security reasons as determined by Port Director.

HATCHES: Normally opened and closed by ship's crew.

CUSTOMS ALLOWANCES: United States Customs Regulations.

REPATRIATION: Facilities exist for changes of crews and repatriation of seamen. Scheduled aircraft service Palm Beach area daily with additional flights from two nearby airports. Airports are 5 miles, 35 miles and 70 miles from port.

POLICE/AMBULANCE/FIRE: Police (305) 845-4123 or 911; Fire Department (305) 845-4111; Sheriff (305) 833-7471; Ambulance (305) 844-6577; Hospital (305) 844-6300.

CARGO GEAR: Crane capacity can accommodate single lifts up to 300 tons. Also available are 2×150 ton cranes, 1×200 ton crane, 1×65 ton crane and 1×40 ton crane also 1×23 ton fork lift. Load/discharge operations can be performed by ship's gear or shore gear.

FIRE PRECAUTIONS: Smoking is strictly prohibited in transit sheds, warehouses, or on apron of wharves and on vessels, handling dangerous, hazardous, or inflammable cargo. Smoking is also prohibited in any areas where gasoline or like materials are being handled or serviced to equipment.

Explosives and hazardous or highly inflammable commodities or materials may be handled over, or received on, the wharves or other facilities of Port of Palm Beach by special arrangements with and at the option of the Port Director, and the receiving, handling, or storage of such commodities shall be subject to Federal and State laws, rules and regulations.

In all cases where explosives and hazardous or highly inflammable commodities or materials are to be handled, prior consent by the U.S. Coast Guard must be received and a copy of the consent filed with the Port Director. Responsibility for safeguarding of life and property will be the duty of the shipper. Proof of sufficient liability insurance must be presented to Port Director prior to arrival of such materials.

CONSULS: Jordan, Consulate of, 3381 Royal Poinciana Plaza, Palm Beach, FL 33480. Tel: (305) 655-1844.

HOLIDAYS: New Year's Day; Washington's Birthday; Columbus Day; Decoration (Memorial) Day; Independence Day; Labour Day; Veteran's (Armistice) Day; Thanksgiving Day; Christmas Day. When any one of these falls on Sunday, the following Monday is observed as a holiday. When any one of these falls on Saturday, the preceding Friday is observed.

BANKS: *Banks with Foreign Departments:*

Atlantic National Bank, 302 Datura Street, West Palm Beach, FL 33402. Tel: (305) 655-8833.

Barnett Bank, 46 West 20th Street, Riviera Beach, FL 33404. Tel: (305) 844-4351.

First National Bank in Palm Beach, The Maritime Office Building, 4 East Port Road, Suite 130, Riviera Beach, FL 33404. Tel: (305) 863-1511.

First National Bank in Palm Beach, 255 South County Road, Palm Beach, FL 33480. Tel: (305) 655-7111.

Southeast Bank, 3700 Broadway, Riviera Beach, FL 33404. Tel: (305) 848-7232.

Royal Trust Bank of Palm Beach, N.A., 411 South County Road, Palm Beach, FL 33480. Tel: (305) 655-3900.

GENERAL: Marine terminal 1.3 miles from the open sea, served by U.S. Highway 1 and is directly connected by port-owned belt-line railroad to the Florida Coast Railway.

Broad aprons (80 ft.) with ship-side rail, and warehouses backed by open storage areas. The slips and wharves are located on a salt water sound, fully protected from the sea by barrier islands; departures from the slips average only 15 minutes through inlet to open sea.

DEVELOPMENTS: New 14 acre container marshalling area has been recently completed. Raw sugar storage facility at Slip 2 capacity 20,000 tons, loading rate 600 t.p.h. Acquisition of additional land for port expansion underway. Port Administration Building completed offering Government Services and office space for Maritime companies located at the port.

AUTHORITY: Port of Palm Beach, 4 East Port Road, Riviera Beach, Florida 33404. *Tel:* (305) 842-4201. *Contact:* Colonel F. W. Donahue, Executive Director. Martin A. Mets, Operations Manager.

PANAMA CITY, Florida: 30.10 N. 85.40 W.

(See Plan Book)

DOCUMENTS:

3 Passenger Lists.
3 Crew Lists.
3 Curio Lists.
3 Stores Lists.
Register.
Load-line Certificate.
Tonnage Tax Certificate.
Certificate of Financial Responsibility (Oil Pollution).

PILOTAGE: Compulsory. Pilots board at sea-buoy. Guard Channel 16 VHF. Safe anchorage at sea-buoy if waiting for Pilot. Pilot boat black hull with white lettering. Panama City Pilots' Association. Tel: (904) 769-0058.

ANCHORAGES: Several safe anchorages inside bay with 32 ft. or more depth.

RESTRICTIONS: Maximum safe draft over bar is 32 ft. No other restrictions except in case of bad weather.

TUGS: 2 tugs available. Tug is used only to assist in berthing. Always uses ship's lines.

BERTHING: Any time, except for unusual weather. Good safe port. Berths are about 1 hour from Pilot station.

Deepwater Terminal in St. Andrew's Bay:

1. 2,090 ft. of deepwater berthing:
   (a) 4 berths
   (b) Mean depth of water 32 ft.
   (c) Concrete apron 60 ft.
   (d) Construction steel sheet piling.
2. 4 Transit sheds totalling 237,060 sq.ft.
3. Bulk Warehouse (28,800 sq.ft.). Storage Silos (6,500 ton capacity) with scale weight in and out.
4. Depress rail serving each warehouse.
5. Truck dock serving each warehouse.
6. Marginal track capability.
7. Heavy lift capability by prior arrangement.
8. Security: 24 hour service.
9. Paved open storage – 75,000 sq.ft.

Barge Terminal in St. Andrew's Bay and Gulf Intracoastal Waterway:

1. 600 ft. of shallow draft:
   (a) Mean depth of water 12 ft.
   (b) Concrete apron
   (c) Construction steel sheet piling.
2. Transit shed totalling 30,000 sq.ft.
3. Bulk transfer capability.
4. Service for:
   (a) Rail loading and unloading.
   (b) Truck loading and unloading.
5. Paved open storage – 90,000 sq.ft.
6. Heavy lift capability by special arrangement.

Port Equipment:

1. 8 lift trucks, 5,000 lb. capacity.
2. 6 paper roll clamp machines, 7,000 lb. capacity.
3. 2 trackmobile switchers.
4. 1 diesel switch engine.
5. Rail tracks owned by Panama City Port Authority and capable of accommodating approximately 80 rail cars.
6. Sweepers.
   (a) Tennant.
   (b) Tractor with brush and front end loader.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Preferably WLO Radio, Mobile, Alabama, U.S.A. Also good service from RCA. Vessel should radio ETA and cash requirements.

STEVEDORES: 4 companies. Must have ETA by 1500 hrs. local time in order commence loading 0800 hrs. next day. Normal work day 0800 - 1200 hrs., then from 1300 – 1700 hrs., Monday through Friday.

MEDICAL: Medical and hospital service available.

TANKERS: No slop discharge facilities. 1 tanker berth – 29 ft. max. draft.

DENSITY: Salt water. 1.5 ft. tide range.

FRESH WATER: Available all berths but ships must supply hose.

FUEL: Limited amount of diesel oil available. No heavy fuel.

GANGWAY/DECK WATCHMEN: Only if required by ship's Owners or Master.

OPENING/CLOSING HATCHES: Only McGregor hatches may be opened by the crew.

CUSTOMS ALLOWANCES: Tobacco, 1 carton 200 cigarettes. Wine/Spirits, reasonable quantity – 1 or 2 bottles.

CARGO GEAR: Must show safety inspection if requested.

IDENTIFICATION CARDS: All crew must have U.S. Immigration Landing Permit.

CONSULS: None.

REPAIRS: Limited deck and engine repairs can be effected.

REPATRIATION: Available.

AIRPORT: Approximately 4 miles from port. Served by 2 scheduled air lines (Republic Airlines and Air New Orleans).

TIME: Central Standard Time (GMT minus 6 hours or 90° Meridian). Central Daylight time in Summer (minus 5 hours or 75° Meridian time).

HOLIDAYS: *No work holidays:* New Year's Day; Easter; 4th July; Labour Day; Christmas Day.

Working holidays: Lincoln's Birthday (February 12); George Washington's Birthday (Third Monday in February); Memorial Day (Last Monday in May); Veteran's Day (Fourth Monday in October); Fall Festival Day, Thanksgiving Day (Fourth Thursday in November).

POLICE/AMBULANCE/FIRE: Dial operator, or 785-6161.

TELEPHONES: Placed aboard only by very special arrangement – not normally available.

SERVICES: Most repairs to radio, radar and other such equipment. Advance notice required.

SHORE LEAVE: Any time – any berth.

DELAYS: Normally, delays infrequent and for short durations.

DEVELOPMENTS: The West Wharf is to be extended by 350 ft.

An existing bulkhead of 500 ft. being re-built, depth alongside 32 ft.

AUTHORITY: Panama City Port Authority and Foreign Trade Zone 65, P.O.Box 15095, 5321 West Highway 98, Panama City, FL 32406. *Tel:* (904) 763-8471. *Contact:* H.R. Etheridge, Port Director. T. L. Berry, Assistant Port Director.

PASADENA, Texas: 29.43 N. 95.13 W.

Refer to "Houston" for all general information.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PASCAGOULA, Mississippi: 30.21 N. 88.34 W.

(See Plan Book)

PORT LIMITS: Subject to Charter-Party Terms, an "arrived ship", subject to jurisdiction of the Port Authority, occurs when a ship arrives at Horn Island Sea Buoy.

DOCUMENTS: See "New Orleans".

PILOTAGE: Compulsory. Pascagoula Bar Pilots' Association ((601) – 762 – 1151). Pilot boat to be contacted on VHF Channel 16, pilot boat has black hull with white house, International light and sound signals to be made by vessel requiring a Pilot. Pilot to be taken aboard vessel in vicinity of Horn Island sea buoy. Usual safety measures are required, with respect to boarding. Vessels may anchor in this area while awaiting Pilot, there is a 35 ft. to 50 ft. depth with good holding bottom.

ANCHORAGES: Only anchorages permitted are in vicinity of Horn Island Sea Buoy or seaward.

RESTRICTIONS: Under normal conditions there are no entry restrictions as to time or state of tide.

From Horn Island Sea Buoy to Horn Island Pass the channel is 350 ft. wide by 40 ft. deep; from Horn Island Pass to Pascagoula River Turning Basin the channel is 350 ft. wide and 38 ft. deep; the Pascagoula River Turning Basin is 950 ft. wide and 38 ft. deep.

Channel into Bayou Casotte (East Harbour) from Junction Buoy to mouth of Bayou Casotte Harbour is 225 ft. by 38 ft. deep; thence at inner harbour channel is 300 ft. wide and 38 ft. deep into the Bayou Casotte Turning Basin; the Bayou Casotte Turning Basin is 940 ft. wide and 38 ft. deep. All dimensions listed are project dimensions; depths refer to MLW datum.

No vessel or tow shall enter Bayou Casotte Channel outbound after a seagoing vessel or tow has passed Buoy 30 inbound, and; no vessel or tow shall enter Bayou Casotte Channel inbound after a seagoing vessel or tow has passed Buoy 11 outbound. Vessels or tows which are at a dock should remain at the dock until the inbound seagoing vessel or tow has passed, or until it has reached its berth, whichever occurs first.

MAX. SIZE: Length of vessel is restricted to approx. 900 ft. by turning basin, no breadth restriction, draft 38 ft. at MLW. Normal tidal range 1.6 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Use of Pascagoula Marine Radio (KLU-775) is advisable for ETA cables to Agent. Stands by on VHF Channel 16 and operates on Channel 27 throughout 24 hours.

RADAR/VHF: Radar and VHF radio on pilot boat, Channel 16.

Every vessel shall, when entering the Horn Island Pass Channel, and the Bayou Casotte Channel, or when getting underway from a berth, or when approaching the Pascagoula Channel while transiting the Intracoastal Waterway:

(a) Maintain a radio watch on VHF – FM Channels 13 and 16 in accordance with Vessel Bridge to Bridge Telephone Regulations of January 1st, 1973.

(b) Check on other traffic operating in the area by transmitting on Channel 16:

> "SECURITY, SECURITY, SECURITY
> THIS IS .... (Vessel Calling)
> ENTERING..
> CHANNEL PROCEEDING FROM
> ....TO ....
> CHECKING FOR TRAFFIC, STANDING
> BY ON CHANNELS 13 and 16,...........................
> .... (Vessel Calling) OUT"

If other traffic replies, utilize Channel 13 for exchange of information relative to safe navigation.

TUGS: Tugs will join vessels in harbour or off docks. No escort required. Tugs lines normally are used.

BRIDGES: None affecting 38 ft. channels.

Two bridges across the Pascagoula River above the turning basin, not passed through between channel and harbour.

BERTHING: Private and public berths are available, by prior arrangement, in both the Pascagoula River Harbour (West Harbour) and the Bayou Casotte Harbour (East Harbour).

West Harbour – Public: Grain Elevator, 3,100,000 bushel capacity, 900 ft. berth at 780 ft. wharf and 38 ft. deep.

Terminal 'A' with transit shed, 500 ft. wharf and 38 ft. deep.

Terminal 'B' with transit shed, 544 ft. wharf and 38 ft. deep.

Terminal 'C' with bulk cold storage, 718 ft. wharf and 38 ft. deep.

South Clusters, 1 ship berth approximately 600 ft. by 24 ft. deep.

West Harbour – Private – Ingalls Shipbuilding: Note. These berths are normally occupied with ships being fitted out and are not normally available.

West Bank Shipyard, 4,410 ft. bulkhead, 5 berths by 38 ft. deep.

East Bank Shipyard, three 600 ft. piers, one 800 ft. pier, each 32 ft. deep.

East Harbour – Public:

Terminal 'E' with transit shed, 517 ft. wharf by 38 ft. deep;

Terminal 'F' with transit shed, 737 ft. wharf by 38 ft. deep;

Terminal 'G' with transit shed, 516 ft. wharf by 38 ft. deep;

Terminal 'H' with transit shed, 556 ft. wharf by 38 ft. deep.

East Harbour – Private:

Chevron U.S.A. Inc., Wharf No. 1, 5 berths by 38 ft. deep;

Chevron U.S.A. Inc., Wharf No. 2, 1 berth by 38 ft. deep; (crude and coke dock).

Chevron U.S.A. Inc., Wharf No. 3, 1 berth by 38 ft.;

Mississippi Chemical Company, 2 loading docks each 475 ft. by 34 ft. depth;

Chicago Bridge & Iron Company, slip 900 ft. by 16 ft. deep.

CRANES: The Port has a heavy lift capability of 400 tons by an arrangement with Ingalls West Bank Facility. Truck cranes with capacity up to 110 tons also available in the port area.

SPECIALISED CARGO HANDLING: Chevron U.S.A. Inc., Wharf No. 1 has facilities for handling acid, caustic, ammonia, and LPG, in addition to petroleum products. Chevron U.S.A. Inc., No. 2 has facilities for handling coke and crude. Chevron U.S.A. Inc., No. 3 has facilities for handling crude.

Mississippi Chemical Company loading docks are equipped for handling phosphate rock and other bulk materials, liquid and dry.

Terminals E & F are equipped for exporting bulk ores.

Gulf Cold Storage Inc.:

Freezer Area: 1.5 million cu.ft. of –10°F. storage.

Cooler Area: 500,000 cu.ft. of +40°F. storage.

Blast Freezers: 2× –50°F. Capacity 160,000 lbs. per day.

Location: Approx. 3 miles South of 1 – 10 of the West Bank area of the port. Adjacent to dock on a 38 ft. channel.

STEVEDORES: 12 hours notice requested to arrange stevedore gangs. *Straight Time:* 0800 hrs. – 1200 hrs. and 1300 hrs. – 1700 hrs. Mondays through Fridays except Holidays. All other hours and days are overtime.

MEDICAL: Agents to be advised if immediate medical attention is required. Free Pratique granted except in case of communicable diseases aboard, inoculations required by Public Health Service, etc. Doctors and hospital services readily available.

TANKERS: Chevron U.S.A. Inc. owns and operates 3 wharves on East side of Bayou Cosotte harbour. Facilities have 6 in., 8 in. and 12 in. lines with adaptors, discharge tanks with a capacity of 60,000 tons, 3 tanker berths with a 38 ft. draft. Wharf No. 2 for receiving crude oil from large tankers. Wharf designed and built for 50 ft. draft, but presently limited to 38 ft. draft on account of channel and seaward. Wharf No. 2 also handles coke ships.

Also see "Shipmaster's Report" and "Specialised Cargo Handling".

DENSITY: Density varies with the state of tide and wind, from fresh to salt water.

FRESH WATER: Potable water is available at most berths. Water at public terminals can be delivered at flow rate of 50 g.p.m.

FUEL: Large vessels are bunkered at berth in the harbour by 2 tank barges, operated by Fuel Services, Inc. All grades of fuel are available.

FIRE PRECAUTIONS: Usual safety precautions required. Verify unusual procedures for approval of U.S. Coast Guard.

GANGWAY/DECK WATCHMEN: Port guards are furnished for the general cargo terminals at the port's expense. At least 1 person must be on duty aboard vessel.

HATCHES: Opening/closing hatches by the crew is at the discretion of the ship.

CUSTOMS ALLOWANCES: Each crew member is allowed either 300 cigarettes or 50 cigars or 3 lbs. of tobacco. In addition, each member is allowed 1 quart of alcoholic spirits as regulated by provisions of the Mississippi Alcoholic Beverage Commission rules.

CARGO GEAR: No requirements for cargo gear other than it be certified by a recognised International organisation.

CONSULS: Many countries have consuls within a 100 mile radius of Pascagoula. (Mobile and New Orleans).

REPAIRS: Most deck and engine repairs could be arranged within port facilities.

DRY DOCKS: Ingalls Shipbuilding Corporation, West Bank Shipyard, has 1 launch pontoon (dry dock) with 38,000 ton capacity.

Ingalls Shipbuilding Corporation, East Bank Shipyard, has 1 graving dock, 485 ft. inside length, 75 ft. wide gate, 34 ft. deep, with loading capacity of 1 ton per sq. ft.

Flechas Shipyard has one 600 ton dry dock.

There are several marineways in vicinity, capacities 50 – 100 tons.

SURVEYORS: Licensed Marine Surveyors are available in Port.

REPATRIATION: The City of Pascagoula is served by regularly scheduled transportation. Vessel's Agent to arrange clearance with Customs and Immigration officials.

AIRPORT: An airport is available approx. 35 miles from the city and is served by regularly scheduled airlines.

TIME: The port of Pascagoula is on Central Standard Time, GMT minus 6 hours; clocks are moved ahead 1 hour during Summer months. (Last Sunday in April to last Sunday in October).

HOLIDAYS: New Year's Day (January 1st); King's Birthday (January 15th); Washington's Birthday (3rd Monday in February); Mardi Gras (41 days before Easter – Tuesday); *Easter Sunday/Easter Monday (1st Sunday after 1st full moon after March 21st); King's Memorial Day (April 4th); Memorial Day (Last Monday in May); *Independence Day (July 4th); *Labour Day (1st Monday in September); Veterans' Day (November 11th); Thanksgiving Day (Last Thursday in November); *Christmas Eve (December 24th); *Christmas Day (December 25th); *New Year's Eve (December 31st).

(*Non-working). Non-working holidays are observed from midnight of the holiday through to 0700 hrs. of the following day with the exception of Christmas Eve and New Year's Eve when the non-working portion of the holiday commences at noon.

Should any of the above holidays except Easter, Christmas Eve, and New Year's Eve fall on a Sunday the following Monday will be observed.

Elevator employees observe Martin Luther King's Memorial Day instead of Birthday.

Saturday shall not be considered as a layday in determining time ships are in berth in this harbour.

POLICE/FIRE/AMBULANCE: Telephone numbers for emergency services are: Fire 762-1133; Police 762-2211; Ambulance 762-6266 or 762-4848. Universal emergency No. 911.

TELEPHONES: Not available.

SERVICES: Facilities are available for compass adjusting. Tank cleaning and receipt of tank washings can be arranged by contract services available in the area.

SHORE LEAVE: Allowed for any crew member not detained by Immigration Office.

IDENTIFICATION CARDS: Standard Immigration Form I-95 to be made up for each crew member on arrival. Not necessary for crewmen already holding Form I-95 issued for the same vessel.

DELAYS: Berths at Public Terminals and the South Clusters are assigned by the Harbour Master of the Jackson County Port Authority. Berths at private docks are assigned by the respective owners. No exceptions to this are allowed. Berth at grain elevator is assigned by the Lessee-Operator, the Louis Dreyfus Corporation. No delays are encountered by following this procedure, emergencies excepted.

GENERAL: Some difficulty encountered by unscheduled tows who use harbour for shelter in inclement weather. Pilot Association aware of current situations. Study of traffic control system is being undertaken by the Port Authority, particularly considering hazards of tankers in Bayou Casotte 225 ft. wide channel. Ample barge storage is available in Barge Fleeting Area South of Ingalls Westbank Shipyard – capacity is 96 barges, operated by Colle Towing Company who may be contacted on VHF Channel 16 (KKV-933).

SHIPMASTER'S REPORT: June 1980.

Vessel: 32,000 g.r.t., loading ammonia at Chevron Refinery.

Approaches: Charts BA. 3981 and 3380.

Approach made from the South East along the Safety Fairway using "Satnav" positions for the approach to the fairway entrance. Failing this the echo sounder may be used to good effect in conjunction with sights.

Two large oil rigs were sighted at the South East entrance to the fairway, but their positions were not plotted.

On the final approach visibility is often reduced due to industrial smog and the outlying islands are low and give no reliable positions until about 8 miles off. There are 4 conspicuous flares beside the Chevron Refinery which will give a good lead to the "HIP" buoy. These flares are not marked on either chart, but their approximate position is Lat. 30° 20.2′ N., Long. 88° 29.3′ W.

Petit Bois Island is the first to show but with no distinguishcng features until close to it. "HIP" buoy is easily identified at least 8 miles away and shortly afterwards the channel buoys may be identified on radar. These buoys are not marked on BA. 3380, but help indentify "HIP" buoys should there be fishing boats in the vincinity. There are numerous fishing vessels in the approaches but they do seem to keep the fairway clear. Many tugs and tows also in the area.

Pilotage: There is no berthing at night for vessels of this size (32,000 g.r.t.) due to having to turn in the turning area above the berth. Vessels may sail at night but careful consideration should be given to weather conditions before agreeing to do so.

Contacted Pilot Office on VHF Channel 16, thereafter working on Channel 13.

Pilot boards from a fast, black hulled launch off "HIP" buoy, ladder on lee side about 1 m. above water.

CAUTION: The outer channel is well marked with conspicuous buoys but the configuration of the channel is liable to change. The approach may be swept with strong conflicting cross currents and, since the widest section is only 350 ft., very careful attention must be paid to steering.

Once inside Petit Bois Island the channel narrows to 225 ft. in places; the Pilots do have an unofficial 'one way traffic scheme' in progress but this is not always adhered to by tows and fishing vessels.

Proceeding inwards, the vessel is turned at the very head of the harbour with the assistance of 2 tugs; vessel is turned to starboard and the head tug then shifts from the port bow to the starboard bow for berthing. Berthing is always port side alongside.

There is not a great deal of room in the turning basin, although the Pilots say that vessels over 800 ft. are turned there regularly.

On sailing, with a deep draft (32 ft. maximum) special care must be paid to steering within the channel. With a width of just over 200 ft. there is no room for error. I would advise that the watchkeeping officer be in attendance on the helmsman throughout the passage.

Time from Pilot aboard to 1st line ashore is about 2 hours.

Berth: Chevron Refinery: Least depth sounded 12.2 m. Very good, with a substantial chicksan area and fairly good mooring arrangements.

Once made fast and loading a very careful watch must be kept on the moorings since large tankers pass up and down the harbour to the tanker berth close ahead; the shore personnel will not hesitate to stop loading if they think the moorings will allow the vessel to surge.

No motor access to the gate some 200 m. distant.

Telephone on the quay.

Loading: No difficulties were experienced. The facility is very keen on pollution and will watch the discharge of ballast very closely.

The refinery do require ballast to be discharged ashore but that is out of the question. A disclaimer will be presented for the ship to sign.

Since the upreach of the chicksan is not sufficient, the low extension or flexible hoses will have to be rigged prior to arrival. Shore connection is 8 in. 150 ASA and was done on this occasion by ship's personnel.

No vapour return line.

There is a recirculating system and there was no need to blow through lines on completion.

Product was cold at this call but 'warm' product has been experienced here in the past. Overall load rate was 343 t.p.h. which the shore personnel were extremely happy with. Hourly rates frequently over 500 t.p.h.

Shore Surveyor attended and all figures were based on ship's gauges.

Personnel generally helpful.

General: Fresh water available on the quay but reported as *not potable.*

Bunkers available.

Stores have to be manhandled along the jetty but there are small trolleys available.

Gangway: Best left turned in until in position thence no problem, being clear of obstructions.

No objection made to ship's crew "touching up" ship's side from quay.

U.S.C.G.: No inspection this call but they are known to carry out both cargo and navigational inspections.

Films: Exchanged by ship chandler: Bow and Stern Marine.

Consul: The nearest British Consul is at Houston or Atlanta, should any surveys be required.

AUTHORITY: Jackson County Port Authority, 3033 Pascagoula Street, P.O.Box 70, Pascagoula, Mississippi 39567. *Tel:* (601) 762-4041. *Telex:* 510-990-3405. *Contact:* Paul D. Pella, Port Director. Michael C. Torjusen, Harbour Master.

AGENT: Strachan Shipping Company. P.O.Box 1304, Pascagoula, Mississippi 39567. Tel: 601-762-0531 (Direct enquiries to Mobile). Cables: "Strachan".

PENSACOLA, Florida: 30.25 N. 87.13 W.

(See Plan Book)

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

BERTHING:

Berth Number	*Length (ft.)*	*Depth at MLW* (ft.)*	*Use*
No. 1	640	35	General Cargo and Bulk Handling Faciliites
No. 2	400	35	General Cargo
No. 3	425	35	General Cargo and Lumber
No. 5	425	35	General Cargo
No. 6	580	35	General Cargo

*While the Port of Pensacola has 35 ft. depth at MLW in berths, the Corps of Engineers project draft of 33 ft. is the controlling draft for the Port.

Transit Sheds:

Warehouse	
No. 1	72,000 sq.ft.
No. 5	72,000 sq.ft.
No. 6	90,000 sq.ft.
No. 8	83,000 sq.ft.
Total	317,000 sq.ft.

BULK HANDLING FACILITIES: *Dry bulk handling:* Bulk warehousing capacity is 88,100 sq.ft. in 2 buildings. Each building with rail and truck loading capability. Bagging services provided on the port premises through arrangements with private stevedoring companies.

TANKERS: *Private:* Belcher Oil Co. of Pensacola. J.R. Sauls, Manager, Mid Gulf Area, Port of Pensacola P.O.Box 12626. Pensacola, FL 32574. Tel: 904-432-2471. Facilities: Industrial, Marine Fuels. 6 bulk oil tanks of 662,000 barrels capacity connecting by pipeline to berths 1, 2 and 3. 5 positions for loading and unloading. 5 bunkering stations and a truck loading facility.

CRANES: Mobile cranes up to 85 tons.

EQUIPMENT: Leased Equipment: 18×6,000 lb. fork lift trucks, 8×9,000 lb. fork lift trucks, 2×5,000 lb. fork lift trucks, 1 front end loader, 2 motorised driven sweeper, 1 motorised driven scrubber, 1 paper clamp and stevedoring equipment: Fork lift trucks have individual heights of 10, 14, 15, 16 & 17 ft. Attachments permit conversion for handling paper rolls and bales.

FRESH WATER: Available.

AIRPORT: Pensacola Regional Airport is served by both domestic and international air carriers in addition to intrastate airline service.

AUTHORITY: Port of Pensacola, Marine Operations Department, City of Pensacola, P.O.Box 889, Pensacola, Florida 32594. *Tel:* (904) 436-4270. *Telex:* 702435. *Contact:* David A. Schaller, Port Director.

AGENT: Strachan Shipping Company, P.O.Box 951, Pensacola, Florida 32576. Tel: 904-423-8453. (Direct enquiries to Mobile). Cables: "Strachan".

PETERSBURG, Alaska: 56.49 N. 132.57 W.

Located on Mitkof Island, Northern end of Wrangell Narrows. Open all year.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: (From sea via Dixon Entrance up Clarence Strait to Guard Island.) Under pilotage from Guard Island.

ANCHORAGE: Good anchorage in Scow Bay, mud bottom.

MAX. SIZE: Harbour depth 24 ft. MLLW. Tides: Diurnal range 15.7 ft. Also see "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

CUSTOMS: Immigration, Guard Island. Quarantine and Customs, local.

TUGS: 1×320 h.p.

BERTHING: Pacific American Fisheries Inc.: 75 ft. long, 65 ft. wide. Should dock at slack water. Strong current.

STEVEDORES: 1 gang.

REPAIRS: Marine Ways to 35 tons.

WATER: State approved water available.

FUEL: Diesel and gasoline available.

MEDICAL: 21 bed hospital.

TRANSPORTATION: Scheduled and charter airlines and ferry.

AUTHORITY: City of Petersburg.

PHILADELPHIA, Pennsylvania: 39.57 N. 75.10 W.

(See Plan Book)

DOCUMENTS:

3 Crew Lists Form I-418 (suggest 6 be made).
3 Passenger Lists Form I-418 (suggest 6 be made).
3 Customs Stores Lists (suggest 6 be made).
3 Curio Lists (own ship Form) (suggest 6 be made).
3 Narcotics Lists (own ship Form) (suggest 6 be made).

Manifest (Ship Cargo List). If Philadelphia first port of call, require 1 copy for Customs and 1 copy to be used as "traveller" surrendered last port of call. If Philadelphia not first port of call, 2 copies required, all cargo to be discharged at Philadelphia.

For Immigration Service:
Visaed Crew List.
Valid passport or Seaman's Book for each person on board.
Crewman's landing card (Form I-95) for each crew member.

PILOTAGE: Pilotage is provided by members of the Pilots' Association for the Bay and River Delaware who maintain a shore station and operations tower at Cape Henlopen. The pilot station is in operation on a 24 hour basis and guards VHF Channels 16 and 14. Telegraphic address is: Delpilots, 214 S. Eleventh Street, Philadelphia, Pa. 19107. Arrangements for Pilot may be made by the local Agent although an ETA and draft either by cable or VHF radio will be greatly appreciated and will facilitate prompt boarding on arrival. The pilot boarding area is inside a line between Entrance Buoys No. 5 and 6, or approximately 2 to 2.5 miles S.E. of Harbour of Refuge Lighthouse. Pilots may board further off-shore upon special request.

ANCHORAGES: Large and deep draft vessels awaiting berth are encouraged to avail themselves of the deep water anchorage adjacent to the Breakwater near the pilot station. There are 13 anchorage areas available along the Delaware for moderate size vessels of lesser draft.

Shipmaster's Report: Good holding ground at Big Stone Anchorage. There is a launch service from Big Stone Anchorage to the shore, call VHF Channel 14.

RESTRICTIONS: There are no restrictions imposed upon entry except those dictated by vessel draft. Throughout most of its length, the Delaware river is dredged to 40 ft. at MLW. In addition there is a mean tidal range of about 5.7 ft. Vessels of 39 ft. salt water draft can safely transit the river on a rising tide.

MAX. SIZE: Deep-draft oil carriers are lightered in a special anchorage approximately 10 miles N.W. of the pilot station. Vessels are restricted to a max. draft of 55 ft. by Federal Law.

Chesapeake/Delaware Canal: See "Wilmington" – Delaware.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

VHF: A port radio service operated by The Philadelphia Maritime Exchange on a 24 hour basis is also available to all vessels while transiting the Delaware River. VHF Channels 16 and 14 guarded for purposes of this service.

Ship reporting service in operation.

TUGS: Tugs normally join vessels adjacent to berth. Ship's lines are used.

BERTHING:

Northern Metal Co. Terminal	9 berths, depth 25 ft. to 32 ft.
Tioga Terminal	7 ,, ,, 40 ft.
Delaware River Terminal	4 ,, ,, 29 ft. to 32 ft.
Port Richmond	10 piers, depth alongside 26 ft. to 36 ft.
Delaware River	21 ,, ,, ,, 26 ft. to 35 ft.
Packer Avenue Terminal,	5 berths, depth alongside 35 ft.
Greenwich Point Tidewater Ore Terminal	2 berths 850 ft. length, depth 37 ft. to 42 ft.
Girard Point	3 piers, depth alongside 28 ft. to 36 ft.
Camden	3 ,, ,, ,, 30 ft. to 40 ft.
Gloucester	Ore Pier, depth alongside 25 ft. and 31 ft.

Port of Wilmington, 5 berths, depth alongside 35 ft.

CONTAINER HANDLING FACILITIES: *Tioga Marine Terminal:* Handles containerised and Roll-on/Roll-off cargoes. The terminal is equipped with 2 container cranes and a 300-ton mobile crane. Length of the marginal wharf is 3,300 ft., upper slip berth 725 ft. and lower slip berth 625 ft.

Packer Avenue Marine Terminal: Handles containerised and Roll-on/Roll-off cargoes. The terminal is equipped with 3 container cranes, one has a heavy lift capacity of up to 375 tons. The marginal wharf is 3,200 ft. in length and the Roll-on/Roll-off slip berth is 825 ft. in length.

BULK HANDLING FACILITIES:

Berth No.	Location	Operator	Berth Length (m.)	Berth Depth (m.)	Loading Rate (tonnes/p.h.)
Pier No. 124	Greenwich	Conrail	310	12.19	5,000 (coal)
Pier No. 122 South	Greenwich	Pennsylvania Tidewater Co.	260	12.19	3,000 (ore)
Pier E	Port Richmond	Energy Terminals Ltd.	260	12.19	2,000 (coal)
Camden-Becket Bulk Terminal	Camden	South Jersey Port Corp.	200	11.5	500 (coal)

STEVEDORES: Ship's Agents make arrangements for stevedore gangs. Agents should be kept advised of any change in ETA.

MEDICAL: Advance notice of requirements desirable to the extent possible. Hospital facilities are available.

FRESH WATER: Fresh water normally not available directly at berth. Fresh water available by tank truck or through fire department. Water by barge available.

River Associates, Inc. of Philadelphia, Tel: (215) 922 – 6027, provides wash water in Philadelphia and Delaware Bay with two barges, 220 tonnes and 1,000 tonnes capacity.

FUEL: Bunker C and diesel fuel available most oil terminals. Vessel's Agent should confirm berthing space at least 24 hours in advance.

TANKERS: There are 83 petroleum handling berths along the Delaware River. All terminals are equipped with reducers. There are slop (residue) facilities at most terminals. Some main terminals listed below:

Fort Mifflin	Arco Marine, Inc.	40 ft. depth
Point Breeze	Arco Marine, Inc.	32 ,, ,,
	Ballast Wharf	32 ,, ,,
Hog Island	Gulf Oil Terminal	40 ,, ,,
Paulsboro	Mobil Oil Terminal	30 ft. and 40 ft. depth
	Patterson Oil Terminal	36 ft. depth
Marcus Hook	B.P. Oil Corp.	35 ,, ,,
	Sun Oil Co.	33 ,, ,,
Westville (Eagle Point)	Texaco Inc.	40 ,, ,,
Pennsauken	Greater Valley Oil Co.	34 ,, ,,
Girard Point	Gulf Oil Co.	33 ,, ,,
Delair	Hess Oil Co.	31 ,, ,,
Delaware City	Getty Refinery	37 ,, ,,

Dirty ballast facilities:

Marcus Hook (Sun): Line 8 in. Max. quantity acceptable 1,800 tons. Rate 250 t.p.h. Clean ballast may be pumped overboard.

Marcus Hook (Sinclair): Line 8 in. Max. quantity acceptable 2,000 tons. Rate 250 t.p.h. Clean ballast may be pumped overboard.

Paulsboro (Socony): Line 6 in. Max. quantity acceptable 2,000 tons. Rate 150 t.p.h. Clean ballast may be pumped overboard.

Paulsboro (Esso): Line 10 in. Max. quantity acceptable 4,000 tons. Rate 800 t.p.h. Clean ballast may be pumped overboard.

Point Breeze (Atlantic): Line 6 in. Max. quantity acceptable, no limit. Rate 300 t.p.h. Clean ballast may be pumped overboard.

Eagle Point (Texas): Line 10 in. Max. quantity acceptable, no limit. Rate 1,000 t.p.h. Clean ballast may be pumped overboard.

Girard Point (Gulf): Line 8 in. Max. quantity acceptable, no limit. Rate 500 t.p.h. Clean ballast may be pumped overboard.

General: Lighterage of deep drafted tankers effected at anchorage inside the Capes and before entering the main Ship Channel, i.e. at Big Stone Reach Anchorage, etc.

The holding ground in the upper river anchorages, such as Reedy Point, Marcus Hook, Mantua Creek, etc. is reported to be poor, whilst considerable siltation is also reported in these areas. Masters are therefore advised to take suitable precautions when having to use these anchorages.

Loading Fresh Water: This is effected at Mantua Creek anchorage only.

LNG/LPG: COAST GUARD REGULATIONS:
REQUIREMENTS FOR THE TRANSPORT AND TRANSFER OF LNG/LPG:

The following requirements are issued in the interest of port safety to supplement existing local, State, and Federal Regulations.

A. GENERAL REQUIREMENTS.

1. *Pre-arrival Conference:* Prior to a vessel's initial port call, or when such a vessel has not been to the port within six months, and is laden with LNG or LPG enroute to a facility in the Captain of the Port, Philadelphia zone, as defined in 33 CFR 3.15-25, a pre-arrival conference shall be held with all personnel concerned in the delivery and operation of the facility. The purpose of this conference is to disseminate and explain Captain of the Port requirements, local regulations, and establish emergency procedures for that vessel during the initial and subsequent port calls. The conference will include representatives of the Coast Guard, the vessel's Agent and charterer or operator, terminal owner/operator, and local authorities including the fire department.

2. *Notification:* The Captain of the Port must be notified:

a. At least 72 hours in advance of a vessel's arrival at the Delaware Breakwater with confirmation 12 hours in advance, and certification upon arrival.

b. Of the vessel's ETA at Ship John Shoal Light.

c. Of the intended length of port call and estimated time of departure.

d. Of any changes in the intinerary.

B. VESSEL DOCUMENTS: Prior to proceeding past the Delaware Breakwater at Cape Henlopen, the Master of the vessel shall ensure the following documents are valid and can be produced on demand:

1. A Certificate of Financial Responsibility issued by the Federal Maritime Commission.

2. If U.S. Flag, a Certificate of Inspection endorsed for the product(s) carried.

3. If foreign flag, a Letter of Compliance (LOC) for the carriage of the product(s) carried.

a. Vessels not holding a valid LOC shall be boarded by a joint COTP/OCMI inspection party at the Breakwater Anchorage prior to proceeding upriver. The vessel shall be examined in accordance with 46 CFR, part 154. If the examination is satisfactory, the vessel will be permitted to proceed upriver to the facility. Compliance with part C of this chapter will be strictly observed.

C. TRANSIT RESTRICTIONS FOR VESSELS LADEN WITH LNG/LPG CARGO:

1. *Vessel Movement:* Vessel movement will be conducted only with prior approval of the Captain of the Port.

2. *Propulsion and Machinery Status Report:* No vessel may proceed past the Delaware Breakwater unless the Master sends a message to the Captain of the Port within 12 hours before arrival stating that "To the best of my knowledge and belief there are no known casualties to this vessel or its machinery and all cargo handling and gas detection equipment is in proper operating condition". Should any condition be present that precludes the sending of this message, the vessel shall be boarded by the Coast Guard at the Breakwater Anchorage so that a determination can be made as to the vessel's seaworthiness and repairs necessary prior to transiting the river.

3. *Daylight Transits:* LNG/LPG laden vessels may only transit the Delaware Bay/River past Ship John Shoal Light during the hours of daylight and only then if the visibility is two miles or greater. After discharging, a vessel empty of LNG/LPG cargo may depart at any time.

4. *Intra-Harbour Movement:* An LNG/LPG carrier should submit 24 hours' advance notice of intra harbour movement to the Captain of the Port, and in any event, except in case of emergency, at least 2 hours' advance notice must be given.

5. *Radio Guards:* Continuous radio guard must be maintained on Channel 13 (156.65 MHz) and Channel 16 (156.8 MHz) during transit.

6. *Tug Escort:* No LNG/LPG laden vessels shall transit the Delaware River above Ship John Shoal Light without at least one commercial tug escorting.

7. *Coast Guard Escort:* Unless specifically authorised by the Captain of the Port, no vessel may transit the Delaware River above Ship John Shoal Light without a Coast Guard escort vessel.

8. *Meeting and Overtaking:* While transiting the river, the vessel will not overtake river traffic; nor will river traffic be allowed to overtake the vessel. The vessel shall be navigated so as not to meet other vessels at bends in the river channel. During meeting situations, neither vessel shall proceed in such a manner that they will meet at a relative speed greater than 12 knots. Under normal conditions, each vessel should proceed at 6 knots. However, circumstances may require that 1 vessel travel faster than 6 knots. For example, under some tidal current conditions a vessel may find it necessary to proceed up to 8 knots in order to maintain steerage way. In this situation and in any other situation requiring increased speed by one vessel, the second vessel must reduce its speed. In no case should the relative speed exceed 12 knots.

9. *Emergency Situations:* In the event of an emergency situation, the Captain of the Port must be promptly notified of the vessel's position, draft, nature of emergency, time required to restore normal operations and future intentions. The vessel's Master or Agent shall have the authority to immediately enlist commercial assistance in an emergency situation or when the COTP deems that commercial assistance is required to prevent an emergency.

10. *Speed Restriction Under Bridges:* Vessels laden with LNG/LPG cargoes shall not proceed at a speed greater than 6 knots through the water under bridges of the Delaware River when proceeding with the current, nor at a speed greater than 6 knots over the bottom when stemming the current.

D. ANCHORAGE RESTRICTIONS AND REGULATIONS:

1. Transfer of product at anchorage is not permitted except in the event of an emergency such as to warrant, in the opinion of the Captain of the Port, specific authorisation.

2. A live bridge watch shall be maintained by a qualified watch officer. A round of bearings and/or ranges fixing the vessel's position shall be taken hourly followed by a report on the hour to COTP Philadelphia on Channel 16 FM reporting anchor holding and operations normal or any significant change in position or deviation from the norm. In addition to these requirements, during periods of sustained winds in excess of 25 knots, but less than 40 knots, the vessel must maintain the capacity of having engines on line within 30 minutes; if sustained winds are 40 knots or over, the main propulsion plant must be on line.

3. A continuous radio guard shall be maintained on Channel 16 FM while at anchor.

4. Vessels anchored in Mantua and Marcus Hook Anchorages may be required by the Captain of the Port to have tug assistance during the change of tide.

E. VESSEL TRANSFER OPERATIONS: (The Master shall be responsible for compliance with this section): Prior to the commencement of transfer operations, a Coast Guard boarding party will examine the vessel. Cargo transfer shall commence only after satisfactory completion of the inspection and issuance of Coast Guard Form 4260, Permit to Handle Dangerous Cargo.

1. The following is a partial list of items inspected by the Coast Guard boarding party:
   a. Relief valve records and data.
   b. Gas detection system/alarms operation and records.
   c. Remote shutdown operation.
   d. Firefighting equipment.
   e. Boiler burn off system (if installed).
   f. Condition of piping, flanges, expansion joints, relief valves, cargo valves, and gauges.
   g. Intrinsically safe equipment.
   h. Automatic controls.

2. In addition to the above, the inspection party will ensure the following requirements are complied with:

a. Person-in-Charge: The Master shall ensure a licensed officer or qualified supervisor is aboard the vessel throughout the entire cargo discharge/loading operation.

b. Other Vessel Activities: Only such activities as bunkering, loading of stores, repairs i.e., normal ship maintenance and support activities as approved by the Captain of the Port at the pre-arrival conference, will be permitted – under such conditions as stipulated – while vessels are transferring LNG/LPG. No cutting, burning, welding or other hot work is allowed on the vessel without specific approval from the Captain of the Port.

c. Smoking Areas: Smoking areas shall be designated by the Master and posted at the gangway.

d. Bonding: The terminal manager shall ensure the vessel is electrically bonded to the shore ground prior to commencing transfer operations. The connection shall be maintained until transfer operations are secured. An approved connection shall be used for securing, i.e., alligator clamps are not acceptable. "C" clamps would meet minimum requirements, bolted connections are recommended. The Master shall not commence hookup until this action is taken.

e. Mooring Requirements: The vessel shall, when possible, moor bow to seaward, and be prepared to get underway on short notice. It may be required to have a live tug standing by during operations. A wire rope towing hawser shall be made ready forward, amidships, and aft with the bight at water's edge.

f. Operations During Storms: Cargo transfer operations shall cease if an electric storm occurs and at any time lightning is observed or thunder heard; cargo transfer connections may be maintained.

g. Language Requirements: Ship's supervisory personnel directly involved in supervision of cargo transfer operations must be able to read, speak and understand the English Language.

h. Transfer Connections: Each flange in the overall transfer operation will be secured with all bolts and properly gasketed, or with a Coast Guard approved quick disconnect device.

i. Venting: Venting of boil off vapours is prohibited. LNG vessels must demonstrate the ability to contain or consume boil off vapours for a minimum of 21 days.

j. Fire System: The Master shall ensure the vessel's fire main is linked to the waterfront facility fire fighting system so that the vessel will maintain a firefighting capability, even if its fire pumps are inoperative. The bonding hose shall never be charged unless in use during a fire.

k. Personnel Aboard: A minimum number of personnel to be retained aboard the vessel shall be established during the pre-arrival conference or dockside inspection.

l. Barge Personnel: In operations involving barges. a tankerman possessing an appropriate certificate for the product being handled shall be present during cargo operations.

F. FACILITY OPERATIONS: (The Terminal Manager shall be responsible for compliance with this section).

A pre-arrival conference shall be held in accordance with para A so that the following regulations may be explained and disseminated prior to the initial operation of a facility. Drawings indicating cargo routing from the dock to all storage tanks shall be provided to Coast Guard representatives. A current list of qualified cryogenic supervisors shall be maintained with copies provided to the COTP. The following regulations shall be complied with during all transfer operations.

1. *Facility Security:* All facility/terminal security zone areas are to be posted and restricted to personnel authorised by the terminal manager. Adequate physical security shall be provided, including a guard force to allow on authorised personnel, i.e., those persons who have an official need for presence on the facility, during operations.

2. *Equipment Inspections:* Immediately prior to handling cargo, the shore piping which is to be used in the operation shall be inspected for proper operation of automatic controls, gas detection, and instrumentation. If any of the system contains air, it shall be purged prior to handling the product by an inert gas, in special circumstances, by using low pressure LNG/LPG vapour. Care shall be taken in purging to minimise the volume of flammable mixtures present at *anytime*. Following the purging, piping shall be so cooled as to prevent excessive thermal stress.

3. *Supervisor and Personnel:* A designated cryogenics supervisor shall be in attendance at the waterfront facility in the proximity of and during all cargo operations. During all periods of cargo transfer, the terminal shall have one man on board the vessel and one man at the tank car or storage tank loading stations who shall be able to communicate with each other at all times with intrinsically safe equipment.

4. *Language Requirements:* All shore supervisory personnel directly involved in supervision of cargo operations must be able to readily read, speak and understand the English language.

5. *Smoking:* No smoking shall be permitted except in designated areas determined by the facility operator, subject to the approval of the COTP.

6. *Hot Work:* Hot Work will not be permitted without prior authority of the COTP.

7. *Notification:* The COTP shall be notified one hour in advance of the commencement and termination of the cargo transfer operations at the waterfront facility.

8. *Fire Equipment:* The terminal manager will ensure currently tested and inspected fire hoses are laid out and connected to hydrants in tank car and storage tank loading areas unless otherwise provided with approved, permanently installed facilities. The international shore connection shall be connected in accordance with para. E, Vessel Transfer Operations. Hydrants shall be tested for satisfactory flow prior to connecting hoses. In addition to portable equipment, the offshore mooring area or waterfront facility area shall have any combination of semi-portable dry chemical extinguishers totalling 600 pounds. A fire main water source and spray equipment must be available as well. It will be the terminal manager's responsibility to have his fire marshall and fire equipment present at the connecting and disconnecting stages of the operation.

9. *Lighting:* Adequate shoreside lighting in conformance with the National Electric Code shall be provided.

10. *Hoses:* Each hose used to handle cargo shall have been designed for handling such products and shall be tested at 1 – 1.5 times its maximum allowable working pressure or 250 psi, whichever is greater, prior to commencing the transfer operation.

11. *Vessel Protection:* Vessels moored to existing facilities and marginally to a channel, or when otherwise deemed necessary by the COTP, must be afforded protection through the use of barges or camels. Any such protection shall have specific approval of the COTP.

12. *Inspection of Reception Facilities:* All tank cars, tank trucks, barges and storage tanks shall be inspected prior to loading. Time of their last test shall be verified. Operability of overpressure protection devices shall be verified by a person designated by the terminal manager.

13. *Remote Shutdowns:* Remote cargo shutdowns shall be certified satisfactory by a person designated by the terminal manager.

14. *Transfer Completion:* Upon completion of all cargo transfers, the product line from pier head to tank car and/or storage loading stations in the type of operations where this applies, shall be unloaded into closed containers and not vented into the atmosphere. Where the operation of the LNG/LPG terminal is such that the product will be circulated continuously, it need not be unloaded – thus there will be no delay at the start of each cargo transfer operation while bringing the piping down to

operating temperature, and a resultant reduction in cycling of thermal stresses. However, the unloading arms shall be drained, using nitrogen purge and left in a nitrogen atmosphere with the shipboard end of the unloading arm blanked off until ready for the next transfer operation.

15. *Bonding:* The terminal manager shall ensure the vessel is electrically bonded to the shore ground prior to commencing transfer operations. The connection shall be maintained until transfer operations are secured. An approved connection shall be used for securing, i.e., alligator clamps are not acceptable. "C" clamps would meet minimum requirements, bolted connections are recommended.

DENSITY: Philadelphia ports are fresh-water ports.

GANGWAY/DECK WATCHMEN: These services are left to the discretion of the Master. It is often recommended by ship's P & I club that watchmen be engaged when seamen are detained by U.S. Immigration. Ship is subject to fines by U.S. Government if any detained seaman deserts vessel.

OPENING/CLOSING HATCHES: Normally by stevedores.

CERTIFICATES: Ship's Register and Load-Line Certificate are mandatory. If vessel is carrying passengers from the U.S. they will require a U.S. Coast Guard Certificate. This can easily be obtained in about 1 or 2 days subject to meeting the requirement for life-saving equipment.

CUSTOMS ALLOWANCES: No set rule. Reasonable amount allowed for personal use.

CARGO GEAR: For exceptionally heavy lifts, Sun Shipbuilding and Dry Dock Co. has a floating derrick with 800 tons lifting capacity.

CONSULS: The following countries are represented in Philadelphia:

- Austria
- Canada
- Colombia
- Costa Rica
- Denmark
- Dominican Republic
- Ecuador
- El Salvador
- Finland
- France
- Germany F.R.
- Great Britain
- Guatemala
- Haiti
- Honduras
- Israel
- Italy
- Japan
- Lesotho
- Mexico
- Monaco
- Netherlands
- Norway
- Panama
- Portugal
- Spain
- Sweden
- Switzerland
- Venezuela

REPAIRS: All types of ship repairs can be effected.

SURVEYORS: American Bureau of Shipping, Tel: WA 5-2693 (after hours: 896-7586).
Caleb Brett, Tel: 521-1725.
National Cargo Bureau, Tel: WA 5-3546.
W. Saybolt, Tel: 727-1050.
Bureau Veritas, Tel: KI 3-5884.
China Corp. Register of Shipping, Tel: KI 3-5884.
Lloyd's Register, Tel: 836-7296.
Panama Bureau of Shipping, Tel: 543-5884.
U.S. Salvage Association, Tel: 544-4588.

AIRPORT: Philadelphia International Airport is located approximately 6 miles from central harbour area.

TIME: Standard time GMT minus 5. Daylight Saving Time (minus 4) is usually implemented about the last week-end in April.

HOLIDAYS: New Year's Day (1st January); Martin Luther King, Jr. Birthday (15th January); Lincoln's Birthday (12th February); Washington's Birthday (22nd February); Richard L. Askew Birthday (6th April); Good Friday; Memorial Day (Decoration Day); Flag Day (14th June); Independence Day (4th July); Labour Day (1st Monday in September); Columbus Day (12th October); November Election Day (1st Tuesday in November); Thomas Gleason Birthday (6th November); Armistice or Veteran's Day (11th November); Thanksgiving Day; Christmas Eve; Christmas Day; and any other national holiday as may be provided by executive authority.

POLICE/FIRE/AMBULANCE: Fire LO 3-6700; Police 231-3131; Port Disaster 609-WO 3-6420, WA 5-8780.

SHIP SUPPLY SERVICE:
Fleet Helicopter Service. Tel: 282-4100.
Keystone Helicopter Corp. Tel: 644-4430.
Seaboard Air Charter, Inc. Tel: 563-1564, (302) 856-6545.
Baker, Carver & Morrell of Phila., Inc. Tel: 336-2700.
Delaware Bay Ship Chandlers. Tel: (302) 422-8088.
Delaware Ship Supply Co. Inc. Tel: HO.3 – 1700.
Delaware Bay Launch Service Inc. Tel: (302) 422-8088.
Delaware River Harbour Service. Tel: 365-9777.
Hueber Launch Service. Tel: (215) 872-3544, (215) 425-3155.

GENERAL: If garbage removal is required while in port, it must be done under supervision of the plant quarantine service.

DEVELOPMENTS: Cibro to build coal terminal at Port Richmond.

AUTHORITY: Philadelphia Port Corporation, 1020 Public Ledger Building, 6th and Chestnut Streets, Philadelphia, Pennsylvania 19106. *Tel:* (215) 928 – 9100. *Telex:* WUT 834 – 652.

AGENT: Rice, Unruh Co., 232 South Fourth Street, Philadelphia, Pennsylvania 19106. Tel: 215-629-1711 (11 lines) (Note: Answering service in attendance outside normal working hours). Telex: TWX 710-670-0171, TWX 710-670-0172. "Riceunruh Ph". Cables: "Riceunruh Philadelphia".

PINEY POINT, Maryland: 38.08 N. 76.32 W.

(See Plan Book)

Steuart Petroleum Company Terminal on East bank of Potomac River, 82 miles from sea.

DOCUMENTS/PILOTAGE: Refer to "Baltimore".

ANCHORAGE: Unlimited, available in Chesapeake Bay.

RESTRICTIONS: Berthing 24 hours a day with max. draft of 37 ft. Vessels exceeding 725 ft. or 36 ft. draft, 2 tugs required docking and 1 sailing. Vessels under, 1 tug docking, none sailing.

MAX. SIZE: Limited by depth at berth, 37 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C. Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: WMH Baltimore Radio. VHF channel 26.

TUGS: 2 tugs available for berthing, join vessel off berth. Tugs despatched from Baltimore.

BERTHING: 1 tanker berth only operated by Steuart Petroleum Company. Long lines required for first ashore.

FRESH WATER: Available at berth.

FUEL: Bunker "C" only, available at berth.

AIRPORT: Washington National (80 miles) or Baltimore-Washington (100 miles).

TIME: GMT minus 6 hours.

SHORE LEAVE: Allowed.

GENERAL: Nearest city with full services is Washington, 65 miles distance and Baltimore 110 miles.

AUTHORITY: Maryland Ports Administration, The World Trade Centre Baltimore, Baltimore, Maryland 21202.
Operator: Steuart Petroleum Co., Piney Point, Maryland 20674.

PORT ADAMS, Texas: 29.45 N. 95.11 W.

Refer to "Houston" for all general information.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

PORT ANGELES, Washington: 48.08 N. 123.25 W.

(See Plan Book)

DOCUMENTS, etc.: Refer to "Tacoma".

PILOTAGE: Compulsory for all vessels except those in coasting trade. Pilot station at Ediz Hook serves all vessels bound for Puget Sound ports. Pilot boards off Port Angeles.

APPROACHES: Depth at entrance 100 ft. – 160 ft. No bar.

ANCHORAGE: In harbour, depth at least 42 ft. MLLW.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available from Foss Launch and Tug Co.

BERTHING: 3 pier berths and 2 dolphin berths, depth up to 45 ft. MLLW. One electric gantry crane, capacity 5 tons. Forklifts with capacity to 10 tons.

STEVEDORES: 8 local gangs, additional gangs may be imported if required.

MEDICAL: All medical facilities available. Local hospital.

DENSITY: Salt water.

FRESH WATER: Available at all wharves.

FUEL: Barge delivery only.

REPAIRS: Minor repairs only.

HOLIDAYS: See "Tacoma".

GANGWAY/DECK WATCHMEN: Required only if detainees aboard.

CUSTOMS ALLOWANCES: No definite quantities specified; reasonable allowance at discretion of Custom's Inspector.

AIRPORT: William R. Fairchild International Airport 3.5 miles from the harbour.

AUTHORITY: Port of Port Angeles, P.O.Box 1350, Port Angeles, Washington 98362. *Tel:* (206) 457-8527. *Telex:* 469230. *Contact:* D. G. Hendricks, Executive Director.

PORT ARTHUR, Texas: 29.52 N. 93.56 W.

(See Plan Book)

DOCUMENTS:

Entrance Direct from a Foreign Port:
Master's Oath on entry on vessel in Foreign trade, Customs Form 1300 (2 copies).
General Declaration, Customs Form 1301 (2 copies).
Ship's Stores Declaration, Customs Form 1303 (2 copies).
Crew Effects Declaration, Customs Form 1304 (2 copies).
Clearance from last Port.
Inward Foreign Manifest, Customs Form 1302 (2 copies)
Passenger/Crew List. Form I-418 (3 copies).

In event import cargo is onboard, an additional copy of each of the above Forms is required for travelling Manifest. A copy of the Manifest for each port is also required.

Entrance from Domestic Port:
Clearance from Last Port.
Crew Effect Declaration, Customs Form 1304 (2 copies).
Stores List, Customs Form 1303 (2 copies).
Crew List, Customs Form I-418 (2 copies).
Master's Oath, Customs Form 1300 (2 copies).
General Declaration, Customs Form 1301 (2 copies).

RADIO: For a vessel in the Gulf of Mexico, and en route to Port Arthur, the best way to route an ETA message is to radio "Port Arthur Radio" (Radio Marine Corporation of America) whose call sign is WPA. Port Arthur Radio will then either send the message through Western Union via its telefax machine or via telex if the receiver of the message has a telex machine. There are also radio stations located in Galveston, Texas (Mackay Radio, call sign KLC) and in Mobile, Alabama (call sign WLO).

PILOTAGE: Come up in vicinity of the sea buoy. 24 hours notice of ETA should be given and revised if ship is delayed 1 hour or more. Telegraphic address is "Sabine Pilots, Port Arthur, Texas". Pilot station keeps 24 hour continuous watch on VHF Channel 12 – 156.6 MHz and on 2738 kHz. Pilot boat is motor vessel with black hull, white housing flying Pilot insignia by day and Pilot light by night. Location of Pilot boat is in general vicinity of Sabine Pass sea buoy. Pilot ladder only on lee side of vessel.

Pilot will, upon request and at extra cost, board incoming vessels at buoy marked "SB" in position Lat. 29° 25′ N., Long. 93° 40′ W.

RESTRICTIONS: The Port Arthur ship channel is in operation 24 hours per day. The only restrictions that might hamper vessel traffic would be the draft of the vessel (Port will be able to handle vessels taking up to 40 ft. of water) or extremely bad weather conditions such as fog or high winds. Also, vessels of the 85,000 ton or more class can only be moved during daylight hours.

MAX. SIZE: Port Arthur ship channel will be authorised to 40 ft. in depth and will vary from 400 to 800 ft. in width. Turning basin, which is located at mile 19 (only about 0.5 miles upstream from existing port facility) is 900 ft. in width. Bulk carriers going to grain elevator at Port Arthur or to one of the oil refineries would only be restricted by draft which would vary from 30 ft. to 40 ft. depending on load/discharge berth the vessel is en route to. See "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: The exact position that the tug meets the vessel varies with each vessel but usually they meet just below Texaco Island. In some cases they meet as far up as Great Lakes Carbon (usually when vessel is in ballast and going to Gulf Oil Docks). Whether or not the tug uses the vessel's lines or its own lines depends entirely on the circumstances involved but the tugs usually use the ships lines. Port Arthur is served by 2 towing companies, (1) Moran Towing of Texas and (2) Sabine Towing & Transportation Company, Inc.

VHF: Pilot office on Channel 20. Pilot boat on Channels 12, 13, 16 and 65A.

BERTHING: The first procedure for obtaining a berth at Port Arthur is to submit a Berth Request Form. The Berth Request will contain the following information and will be submitted, in duplicate, to P.O. Box 1428, Port Arthur, Texas: Date of request; type and name of vessel; loading ports; registry or flag; where vessel is to arrive from; ETA; where vessel is to sail for; estimated date of departure; what inbound cargo, if any, consists of; what outbound cargo, if any, consists of; date you expect to begin receiving outbound cargo. The Form must be signed by the Agent or Owner of the vessel. (Berth Request Form will be made available by the Port.) Upon receipt of a Berth Request from the Agent or Owner, the Port will then, upon determining availability of berth, return one copy of the initial Berth Request to the Owner or Agent as an assignment of berth. Berths are assigned on a first come first served basis at all times. All changes in vessel's ETA must be given to the Terminal Office immediately. All mooring and unmooring will be done by the Port. Procedure may differ at the various private terminals which are not under the jurisdiction of the Port Arthur Navigation District.

Also see "Developments".

BULK HANDLING FACILITIES: *Texas Oklahoma Port Company:* Bulk Marine Terminal in the Port's deepwater industrial park is located at Mile 26, handles dry bulk commodities from rail cars to storage to vessels at rates up to 3,000 t.p.h. and has space available for shipper storage tanks on pads, with open storage for 300,000 tons. The terminal also includes a 750 ft. wharf and is located directly on the Sabine-Neches Waterway which presently offers an authorized channel depth of 40 ft. All terminals described above are served by subject waterway and limitations of depth will vary at the face of dock at individual terminals. The Texas-Oklahoma Bulk Terminal maintains 40 ft. depth at the face of their facility.

Great Lakes Carbon Co.: Length of berth 300 m. Max. LOA 210 m. Max. draft 10.5 m. 2 loaders with total loading capacity 500 tonnes/p.h. Petroleum, coke and coal handled.

CRANES: 1×75 ton Diesel electrical crane services berths No. 1 – 3.

BRIDGES: There are no bridges that would require a vessel to arrive at any certain time at Port Arthur, however, the first bridge approached involves a vertical clearance of 136 ft. MHW.

STEVEDORES: Advance order for longshore gangs varies as to contract held by ILA (International Longshoremen's Association). In Port Arthur, gangs have to be ordered as follows: Order by 1900 hrs. for the next morning (either 0700 or 0800 hrs.); order by 1100 hrs. for 1300 hrs.; order by 1600 hrs. for 1900 hrs. Must order by 1900 hrs. day before for any starting time Sunday or Holiday.

MEDICAL: It is not usually required that the Agent be given advanced notice of required medical attention but in some instances it is helpful in arranging transportation to a hospital and in obtaining a bed in the event the hospitals are near full. Port Arthur is served by 2 hospitals; (1) St. Mary's Hospital and (2) Park Place Hospital, both of which are very well staffed and have adequate facilities for almost any emergency. Also, advance notice is helpful when vessel is scheduled to dock late in evening or during night, as doctors are not in their offices and have to be located.

Particular inoculations required by the Public Health Department vary as to the vessel's last foreign port of call. Any crew members who have not had the required inoculations can usually be given these inoculations on board either by the Public Health Officer or a Physician. This is usually arranged by the Agent or Owner.

DENSITY: Varies from fresh water (1000) to pure salt water (1025) depending on amount of rainfall and tide variations. According to figures obtained from the National Cargo Bureau, average density is 50% salt water or (1012.5).

FRESH WATER: The Port has 4 ships service outlets for fresh water, each of which is served by a 4 in. water line. Watering barges are available in the area for facilities which are not equipped to provide watering services.

TANKERS: There are 3 major Oil Companies: Gulf Oil Corporation; Texaco Oil Company, Inc.; and Petrofina Company. Gulf Oil Corporation and Texaco Oil Co., Inc. are 2 of the largest oil refineries in the country. The diameter of load/discharge lines range anywhere from 4 in. to 12 in. depending on the grade of the petroleum product being loaded. As far as slop discharge facilities are concerned, ballast tanks at all major oil companies. Gulf Oil has 3,400 linear feet of berth accommodations and Texaco Oil Co. has 5,299 linear feet of berth accommodations together enough to accommodate 11 supertankers plus barges. Petrofina Co., being the smaller of the 3 oil companies, has berth accommodations for 3 vessels.

FUEL: Almost any grade of fuel or marine diesel is available. In some instances there are fuel lines running directly to docks, but if not, bunkering barge is available. An advance notice is usually required by bunkering barge depending on number of vessels awaiting bunkering.

FIRE PRECAUTIONS: The Port has, in each of 4 equally spaced indentations along the front of its transit shed, a fire hose outlet fed by an 8 in. water line and there are numerous fire hose boxes throughout the transit shed. In addition to this a 24 hour guard service is constantly on the watch and is in direct communication with the Port Arthur Fire Department which is only seconds away. Authorized on-dock smoking areas are clearly defined for proper safety controls.

GANGWAY/DECK WATCHMEN: Under normal conditions a watchman is not necessary on most vessels. Under certain conditions such as a communicable disease or a malafide crewman a watchman would be feasible but the decision is left up to Master or owner of the vessel. There is a $1,000 fine if a malafide crewman disembarks from the vessel.

OPENING/CLOSING HATCHES: Paragraph 2, Rule No. 1 of the Deep Sea Longshore and Cotton Agreement for Texas ports and Port of Lake Charles, Louisiana, states as follows: "When vessel is in loading or unloading berth, loading and laying of dunnage and the opening and closing of hatches, when in connection with the handling of general cargo and/or cotton, is longshore work and will not be done by ship's crew." This agreement, however expired in 1978.

CUSTOMS ALLOWANCES: Tobacco: Each crewman is allowed to keep 300 cigarettes out of bond while in port. Wine and/or Spirits; Each crewman is allowed to keep 1 quart of spirits out of bond while in port.

CARGO GEAR: A current certified Gear Certificate is required to be on board at all times and is to be kept up to date.

IDENTIFICATION CARDS: American crewman do not need any identification card. Foreign crewman need only the landing permit from Immigration Department in order to go ashore.

CONSULS: The nearest Consul-Generals are in Houston, Texas. Port Arthur has only 2 honorary Vice-Consuls, which are: Norwegian and Spanish. Houston is approximately 90 miles from Port Arthur.

REPAIRS: All types of deck and engine repairs can be accomplished. Main ship repairers are: Gulfport Shipbuilding Corp., Burton Ship Yards, Inc., Sabine Propeller Company and Sabine Neches Shipbuilding Corporation, Coastal Marine Service, all of which are located in Port Arthur.

SURVEYORS: American Bureau of Shipping, Goodhue Building, Beaumont, Texas.

Captain Van. Inc., 550 Fifth Street, Port Arthur, Texas 77640. Tel: (713) 982-2911

E.W. McCarthy & Associates, 3912 Lakeshore Dr., Port Arthur, Texas 77640. Tel: (713) 985-5467

National Cargo Bureau, 821 Petroleum Bldg., Beaumont, Texas 77701. Tel: (713) 839-4581

Sabine Surveyors. Inc., 6477 39th Street, Groves. Texas 77619. Tel: (713) 962-3500

Soutex Surveyors, Inc., 3727 Doctors Drive, Port Arthur, Texas 77640. Tel: (713) 983-2004

Triangle Marine, Inc., 8700 Ninth Avenue, Port Arthur, Texas 77640. Tel: (713) 722-1922

Underhill Adjustment Agency, 1335 Proctor Street, Port Arthur, Texas 77640. Tel: (713) 985-9329

World Marine Associates, Inc., 580 Fannin, Suite 718, Beaumont, Texas 77701. Tel: (713) 838-9980.

DRY DOCKS: 2 dry docks, largest being Gulfport Shipbuilding Co., which occupies 50 acres with 3,300 ft. of frontage on The Port Arthur Ship Channel. Yard designs, constructs and repairs barges, tugs and other vessels. It has fully equipped shops and 4 floating dry docks with lifting capacities of 500, 1,800, 4,000 and 4,200 tons. The smaller dry dock is Burton Shipyards, Inc., which occupies 60 acres with 3,200 linear ft. of frontage on Port Arthur Ship Channel. This yard also designs, constructs and repairs barges, tugs and other vessels. It has fully equipped shops, 2 marine railways with haul-out capacities of 1,000 and 1,500 tons and 1 floating dry dock of 3,000 ton capacity.

REPATRIATION: There are facilities for effecting crew changes and repatriation.

AIRPORT: Port Arthur is served by Mid-Jefferson County Airport which is located approximately 10 miles North of Port Arthur on Highway 69. The Mid-Jefferson County Airport is served by TIA (Texas International Airlines) and Delta Airlines.

TIME: Central Standard Time during Winter. Beginning April 28th until October 27th Central Daylight Time (clocks are moved ahead 1 hour). Central Standard Time is GMT minus 6 hours.

SHORE LEAVE: The question of whether shore leave is allowed is entirely up to the ship's Master. The only requirements being; each crewman on shore leave must have a landing permit issued by the Immigration Department and no malafide crewman may be granted shore leave. Port Arthur has no restrictions pertaining to shore leave.

POLICE/AMBULANCE/FIRE: Police Department 983 – 5101; Fire Department 985 – 5511; Ambulance Service 985 – 5504 or 983 – 5666.

EMERGENCY CO-ORDINATION CENTRE: Coast Guard Captain of the Port, Federal Building, Port Arthur, Texas 77640. Tel: (713) 983-8278.

TELEPHONES: Facilities for placing a telephone on a vessel by request. There is a coin-operated telephone on the dock for anyone's use.

SERVICES: Tank cleaning done in port must be done by longshore labour. All major oil companies have facilities for removing tank washings.

HOLIDAYS: Longshore Holidays are: Columbus Day (Second Monday in Oct.), Veterans Day (Nov. 13th), Thanksgiving Day (Fourth Thursday in Nov.), Christmas Day (Dec. 25th), New Year's Day (Jan. 1st), Martin Luther King's Birthday (Jan. 15th), Lincoln's Birthday (Feb. 12th), Washington's Birthday (Third Monday in Feb.), Texas Independence Day (March 2nd), Good Friday, Memorial Day (Last Monday in May), June 19th, July 4th, Labour Day (First Monday in September). At Lake Charles, LA., Mardi Gras Day to be substituted for Texas Independence Day. No work shall be performed on Labour Day or Christmas Day, except in case of fire or where property is in danger.

When holidays come on Saturday or Sunday, the following Monday to be recognized as the holiday. No work to be performed between 1600 hrs. and 1900 hrs. on election days. When Christmas falls on Saturday or Sunday, Monday will be an overtime day and gangs will work as ordered.

BANKS: Allied Merchants Bank, 441 Austin Avenue, Port Arthur, Texas 77640. Tel: (713) 985-8851.

First Bank & Trust, 4000 Twin City Highway, Groves, Texas 77619. Tel: (713) 963-1141.

First National Bank of Port Arthur, 700 Procter Street, Port Arthur, Texas 77640. Tel: (713) 983-5601.

First National Bank of Port Neches, 1025 Port Neches Avenue, Port Neches, Texas 77651. Tel: (713) 722-4365.

Mid County Bank & Trust, 800 Magnolia, Port Neches, Texas 77651. Tel: (713) 727-2361.

Nederland State Bank, 1308 Boston, Nederland, Texas 77627. Tel: (713) 727-3161.

Sabine Bank, 3723 Gulfway Drive, Port Arthur, Texas 77640. Tel: (713) 982-5741.

STORING: See "Prelims", page viii.

1. Vessels are generally stored by truck in the area but barge storing does occur on rare occasions.
2. There are no specific regulations covering barge storing while vessel is working other than what the individual terminal may deem proper.
3. Trucks normally deliver at shipside at the Ports' facilities but this will vary from terminal to terminal.
4. Fork lift trucks are never used on the jetty to handle stores.
5. None other than Bonded Warehouse products.
6. Can but are seldom used. Generally handled by ships crew or other less costly labour that is available in the area.

DELAYS: Delays in berthing usually arise from vessels ETA being delayed and thereby causing a berth conflict. The port is on a first come, first serve basis.

GENERAL: On vessels arriving directly from a foreign port there are 3 Government Agency Representatives that must board. Already mentioned and explained are Customs and Immigrations. The remaining one, Animal and Plant Inspection Services. The Meat Quarantine representative boards the vessel to seal up all meat with the exception of what will be needed while in port. In the event a vessel is detained in port for some reason and more meat is needed the Meat Quarantine Rep. must return to the vessel and personally break the seal and then re-seal the remaining meats. This representative boards all vessels entering the port whether from foreign or coastwise.

The Plant Quarantine Rep. boards all vessels entering from a foreign port to check all fresh fruits and vegetables for any foreign insects such as the Khapra Beetle.

NOTICE:

Notice from U.S. Coast Guard (dated May, 1983).

Liquified Gas Vessels.

This is to clarify U.S. Coast Guard policy regarding liquified gas vessels operating in the Calcasieu waterway that seems to be causing some confusion. Synopsis of each is as follows:

(1) The Captain of the Port (COTP), Port Arthur, Texas, needs to be informed of the arrivals and departures of all liquified gas vessels, whether loaded or in ballast, a minimum of 4 hours advance notice is required to ensure that a Notice to Mariners is broadcast. The vessel is reminded to have a Calcasieu River Pilot's confirmation of movements prior to notifying the COTP at (409) 724-4330.

(2) The COTP has determined that it is an unsafe practice to bunker a loaded or partially loaded liquified gas vessel at anchor from a barge alongside. If you have a loaded vessel arriving that needs bunkering, make your arrangements so that the vessel is offloaded prior to bunkering. If an empty vessel arrives, make arrangements to have the vessel bunkered prior to loading.

If there are any questions concerning these guidelines, please contact Port Arthur (Tel: (409) 724-4337 or 724-4339) or Lake Charles, La (Tel: (318) 433-3765).

Signed: Captain, U.S. Coast Guard, Capt. of the Port, Port Arthur, Texas.

DEVELOPMENTS: Located only 19 miles from sea, the new Public Ocean Terminal of the Port is located on the Sabine-Neches Waterway, presently 40 ft. deep with a minimum bottom width of 400 ft. The initial facility encompasses 360,000 sq.ft. including 1 transit shed 180 ft. × 600 ft. or 108,000 sq.ft. Rail trackage totals 120 car-spots at dockside with a 150-car storage yard behind the wharves. The facility includes a Gantry Crane (handling dry bulk, magnet, container and heavy lift cargoes) which straddles 2 of the 3 marginal tracks, travelling the entire 1,200 ft. length of dock. Crane will lift 75 tons a distance of 75 ft. off the face of docks, with all areas brilliantly lighted for 24 hour cargo operations. In addition to the 25 acre facilities described above, the District owns a total of 73 acres or 1 mile of frontage for future development. The master plan calls for a total of 4 Transit Sheds, additional open-dock wharves and Roll-on/Roll-off facilities.

AUTHORITY: Port of Port Arthur Navigation District of Jefferson County, Texas, 430 Austin Avenue, P.O. Box 1428, Port Arthur, Texas 77640. *Tel:* (713) 983-2011. *Telex:* 779-421. *Contact:* Dow Wynn, Port Director.

PORT CANAVERAL, Florida: 28.25 N. 80.35 W.

(See Plan Book)

DOCUMENTS: Vessels arriving in the Customs Territory of the United States, Bureau of Customs Documentary Requirements:

1. The vessel's Register, Load-line International Certificate, Tonnage Tax Certificates, Clearance from last Foreign Port, and Certificate of Financial Responsibility (Oil Pollution).

2. Additional Documents required:

(a) Original Manifest (lists) of:
All Cargo on Board – Customs Form 1302.
All Passengers on Board.
Stores List.
Crew Purchase List.
Crew List.
Narcotic List.

(b) All items listed in Nos. 1 and 2 *(a)* must be presented to the boarding Customs Inspector and later at the Customhouse for entry. In addition a Customs Form 1300 (Master's Oath) and Customs Form 1301 (General Declaration) must be presented at the Customhouse.

(c) Duplicate Manifest (lists) of:
1. All Cargo for discharge at this port.
2. All Passengers for discharge at this port.
3. Stores List.
4. Crew Purchase List.
5. Crew List.
6. Narcotic List.
7. CF3171 – Permit to Lade or Unlade (this will usually be furnished by the vessel's Agent prior to the arrival of the vessel).

(d) If vessel is proceeding coastwise from Port Canaveral with residue foreign cargo on board, prepare a Traveling Manifest which is a true copy of everything listed in the Original Manifest (2*(a)*). This must be presented to the boarding Customs Inspector and later at the Customhouse.

3. Other Documentary requirements: The Immigration Officer will require the original certificate crew list on Form I-418. The same for passengers. He will also require the presentation of all passports and documents of seamen and passengers as to their immigration status for entry into the United States. A supply of Seaman's Landing Permit Form No. I-95A and passenger Permit No. I-94 should be maintained and they should be typed and ready for landing.

The Immigration Officer will want to inspect the entire crew. The Customs and Agriculture Officers will want to inspect the food storage areas and the quarters of the crew. The Agriculture Officer will also require a stores list. The Customs Officer will place a seal on the Bonded Stores Locker.

PILOTAGE: Pilotage is compulsory for all foreign vessels and for United States vessels under register in the foreign trade. Pilotage is optional for United States coastwise vessels who have on board a Pilot licensed by the Federal Government. Vessel applies for Pilot through Agent or Port Authority. May also call Pilot Office direct, 305 – 783 – 4645. Pilot will board at Buoys 7 and 8 (Lat. 28° 23.8′ N., Long. 80° 33.4′ W.). Pilot boat is 37 ft. long with black hull, white house and buff deck, has "Pilot" painted on sides. Standard day/night pilot signals are displayed. Pilot boat stations itself 1 mile S.E. of Buoys 7 and 8, 0.5 hour before ETA of vessel. Vessels may anchor anywhere in area. Pilot boat is equipped with VHF Channels 12 (156.60 MHz) and 16 (156.80 MHz), but no continuous radio watch is maintained. Advance notice of at least 24 hours should be given.

ANCHORAGES: Within the harbour itself, none. Vessels may anchor anywhere in the area of the Pilot Station, Buoys 7 and 8.

RESTRICTIONS: Docking and undocking carried on day and night. Draft restrictions – if draft exceeds 34.6 ft. vessel must await rising tide to enter port.

MAX. SIZE: Length and draft at Tanker Berth No. 1 and No. 2, 600 ft., with 35 ft. draft. Cargo dock, length unlimited – 35 ft. draft.

HEALTH: See "Health: All Ports" before first U.S.A. ports (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Pilot boat is equipped with VHF Channels 12 (156.60 MHz) and 16 (156.80 MHz) but no continuous radio watch is maintained. Advance notice of at least 24 hours should be given. Best to route ETA cables through Western Union Telegraph. Port Canaveral is equipped with VHF Port Operations frequency 156.6

TUGS: There are 2×1,800 h.p. tugs at Port Canaveral; most ships use the tugs for docking and undocking. Tugs normally join vessel inside jetties and tugs lines are used.

BERTHING: All vessels unless prevented by conditions will be turned around upon entering turning basin and will be berthed headed seaward. No berthing permitted without Port Pilot aboard.

Northside:

Cruise terminal No. 1: 35 ft. draft, cruise ships, water available.

N-2: 35 ft. draft, bulk cement, general cargo, water available.

N-3: 35 ft. draft, general cargo, scrap, water available.

Southside:

East Marginal Wharf: 660 ft. length, 35 ft. draft, general cargo, bunkers, water available.

West Marginal Wharf: 440 ft. length, 35 ft. draft, general cargo, bunkers, water available.

Ro/Ro Ramp No. 1: 30 ft. width, el. + 3 ft. MLW.

Tanker Berth No. 1: Dolphin Type, 35 ft. draft, petroleum products, cement, bunkers, water available.

Tanker Berth No. 2: Dolphin type, 35 ft. draft, petroleum products.

Cruise Terminals Nos. 2 & 3: Combined length 1,200 ft.

Also see "Tankers".

STEVEDORES: Important vessel gives accurate ETA at least 24 hours in advance to enable Agent to order gangs.

MEDICAL: Advance notice for Agents not required, but if available is appreciated. No Public Health Clinic in area, but there are good hospital facilities available. A contract physician's office of the U.S. Public Health Service is in Cocoa Beach, just South of the port.

TANKERS: Tanker Berth Nos. 1 and 2 available at present for discharge operations, with 35 ft. draft limit. No oil to be pumped overboard. Heavy fines imposed for oil pollution, however slight. The ship or ship's Agent will immediately report any spillage of oil on the wharf or on the water and the extent of the spill to the Port Manager and the Harbour Master. If spillage is considerable all cargo operations must stop and vessel prepare to undock.

FRESH WATER: All wharves have facilities for supplying fresh water, delivered by 4 in. water line.

FUEL: The general cargo wharf and Tanker Berth No. 1 have facilities for supplying fuel. 24 hours' notice requested. Fuelling by truck available at other berths.

FIRE: Ships discovering fire on board or close by on shore will sound repeated long whistle blast signals and use every other available means to report the fire.

Gasoline Tankers: All deck scuppers must be plugged before starting to discharge cargo. Supply of sand or sawdust must be on hand near the discharge headers. Static cable must be connected to wharf. Minimum 100 lb. pressure must be on water main and fire hose connected. Discharging must be stopped during severe lightning. Deck Officers must keep close check on hose connections for gasket leaks. Emergency Ship Movement Policy of Port Canaveral must be observed.

GANGWAY/DECK WATCHMEN: Not usually employed, this service left to discretion of Master.

OPENING/CLOSING HATCHES: Usually done by stevedores.

CERTIFICATES:
Ship's Register.
Load Line Certificate.
Tonnage Tax Certificate.
Derat Certificate or Derat Exemption Certificate.

CUSTOMS ALLOWANCES: 300 cigarettes per crew member. Wine and/or spirits: 1 quart per crew member.

IDENTIFICATION CARDS: Required.

CONSULS: None.

REPAIRS: None – nearest port would be Jacksonville.

SURVEYORS: Surveyors are available on request.

REPATRIATION: All facilities available for effecting crew changes and arranging any necessary repatriations.

AIRPORT: Two airports available, serviced by regular airlines, Orlando International Airport, Orlando, Florida, approximately 50 miles from the Port, Melbourne Regional Airport at Melbourne, Florida, approximately 35 miles from Port. Also Ti-Co Airport approximately 25 miles from the Port, but this airport has only limited service.

TIME: GMT minus 5 hours normal, GMT minus 4 hours Daylight Saving Time.

HOLIDAYS: Numerous holidays do not effect operation of port, which operates 24 hours a day, 7 days a week.

POLICE/AMBULANCE/FIRE: Police/Fire, Tel. 783 – 7800; Ambulance, Tel. 452 – 1444.

EMERGENCY CO-ORDINATION CENTRE: United States Coast Guard Station, Port Canaveral. Tel: (305) 853-7601.

TELEPHONES: Arrangements are not available for placing on board.

GENERAL: All vessels, civilian and military, will provide wire ropes from the bow and stern with eyes that can be reached by tugs coming alongside. Pilots will make sure wires are in proper position before leaving vessel. All vessels will undock and proceed to outer anchorage when so ordered by Port Manager and/or Harbour Master in the event of: *(a)* a severe oil spillage; *(b)* fire is discovered on board a vessel laden with petroleum, explosives or a quantity of dangerous cargo; *(c)* vessel is in jeopardy due to conditions on shore. Emergency movement of ships will be made with an able sea watch without awaiting for return of other ships personnel.

SHORE LEAVE: Crew allowed ashore.

BANKS: The American Bank, 326 E. Merritt Island Causeway, Merritt Island, Florida.

Barnett Bank, 430 Brevard Avenue, Cocoa, Florida.

The First Bankers of Florida, N.A., 111 George King Boulevard, Port Canaveral, Florida 32920.

The First National Bank of Brevard, 15 E. Merritt Island Causeway, Merritt Island, Florida.

United National Bank, 82 N. Atlantic Avenue, Cocoa Beach, Florida 32931.

Numerous other banks are available in this area.

STORING: See "Prelims", page viii.
1. Vessels stored by truck only.
2. N/A.
3. Yes.
4. No.
5. Usual.
6. Yes, if required.

SHIP SUPPLY SERVICE: No ship supply services operate at the port.

In times of emergency, launch or tug service could be arranged through the Port Authority, and helicopter evacuation provided through the United States Coast Guard.

REGULATIONS: All radio frequency radiations from ships in Port Canaveral must be scheduled to prevent any possible interference to missile tests conducted on the Cape Canaveral Missile Test Annex. The only exception is standard ship/shore HF harbour control frequencies. Vessels desiring to radiate will request permission from the Port Manager and/or Harbour Master.

DEVELOPMENTS: Beginning in 1984, to meet the future shipping needs of Central Florida, Port Canaveral will embark upon an expansion programme which will effectively triple the deepwater berth capacity. The Western Turning Basin Project includes additional Ro/Ro berths, general cargo wharves, passenger terminals, increased warehousing, storage and marshalling areas.

Facts:
16 berths to be constructed over 10 years.
Accommodation for container, Ro/Ro, passenger and general cargo operations.
Land and pier areas for container operations.
Basin designed for maximum ship manoeuvrability.
800 ft. floating dry dock in planning stages.
West Basin and connecting channel dredged to 31 ft. MLW.

AUTHORITY: Canaveral Port Authority, P.O.Box 267, Cape Canaveral, Florida 32920. *Tel:* (305) 783-7831. *Contact:* Charles M. Rowland, Port Director.

PORT EVERGLADES (including Fort Lauderdale), Florida: 26.05 N. 80.05 W. (See Plan Book)

DOCUMENTS:
3 copies Cargo Manifest (Form 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (Curio list).
2 copies Stores List.
2 copies Passenger List (Form I-418).
2 copies Crew List (Form I-418).

Customs Boarding Officer will also examine Ship's Register and Loadline Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:
Health Pratique.
Master's Oath (Form 1300).
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.

PILOTAGE: Pilot boards at Port Everglades sea buoy, located Lat. 26° 05′ 30″ N., Long. 80° 04′ 45″ W. Pilot available 24 hours a day.

ANCHORAGE: The prescribed anchorage area at Port Everglades is outside the harbour and North of the channel. Vessels desiring to anchor off harbour of Port Everglades are required to do so in this area to avoid possible damage to cables laid on ocean floor South of the channel.

South of the channel, immediately offshore, there is a Government Restricted Area.

North of the channel, immediately offshore, there is a spoil bank visible at low water.

RESTRICTIONS: Entrance to Port Everglades is by a straight channel running in a due Westerly direction for a distance of 1.7 miles from the 50 ft. contour of the ocean to the turning basin. The channel is 500 ft. wide to turning basin. The water depth is 42 ft. including the turning basin. All depths are at Mean Low Water.

BASIN: The main turning basin is 1,200 ft. East and West and 2,450 ft. North and South with a depth of 42 ft. The North extension of turning basin is 620 ft. wide East and West on the North limits and 900 ft. wide East and West on the South limits and 1,150 ft. North and South, with a depth of 31 ft. The South extension of turning basin is 1,300 ft. wide East and West by 1,300 ft. North and South, with a depth of 37 ft. All depths are at Mean Low Water.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: The following radio channels are available to communicate with facilities at Port Everglades:
Ship calling and safety: Channel 16, 156.8 MHz.
Harbour Master and operations: Channel 14, 156.7 MHz.; 7A, 156.35 MHz.; 18A; 156.9 MHz.
Port Everglades Bar Pilot: Channels 16, 13, 14, 18A, 19A, 77.
Port Everglades Towing Co.: Channels 16, 13, 77.

TUGS: 3 tugs available to assist berthing with up to 4,200 h.p. Available 24 hours a day.

BERTHING:

Berth	*Length in feet*	*31 ft. depth*	*37 ft. depth*	*38 ft. depth*	*42 ft. depth*
1 – 2 – 3	1,601	1,300	301		
4	900				900
4A	290				290
5	900				900
6	378		378		
7 – 8	1,200		1,200		
8A	300		300		
9 – 10	1,200		1,200		
11	500		500		
12 – 13	1,225		1,225		
14 – 15	1,225		1,225		
16 – 17 – 18	1,648		1,648		
19 – 20	1,300		1,300		
21 – 22			1,325		
23	240			240	
24 – 25	1,369			1,369	
26 – 27	1,337			1,337	

Ro-Ro facilities at Berth Nos. 4 and 5.

CRANES: Paceco, modified A and Kone modified A, 30 long ton container cranes located at berths 16, 17 and 18 adjacent to marshalling facility. Up to 260 ton mobile cranes available for hire.

STEVEDORES: These services are provided by licensed stevedoring firms. Arranged by Agent.

FRESH WATER: Available.

FUEL: Fuel oil and diesel oil available.

REPAIRS: Shipyard equipped with a 350 ft. Syncrolift dry dock with a capacity of 4,200 tons, 1×1,000 ton floating dry dock, complete machine-shop and all supporting facilities.
IDENTIFICATION CARDS: Standard U.S. Immigration Form I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95 if issued for the same vessel.
CUSTOMS ALLOWANCE: At the discretion of Customs officers. Normal allowance is 200 cigarettes or 2 lb. tobacco and 1 quart wine or spirits per man. Additional allowances may be given if considered necessary, due to length of vessel's stay in port.
HOLIDAYS: New Year's Day (January 1st); Martin Luther King's Birthday (January 15th); Lincoln's Birthday (February 12th); Washington's Birthday (February 22nd); Good Friday; Memorial Day (May 30th); Independence Day (July 4th); Labour Day; Columbus Day (October 12th); Veteran's Day (November 11th); Thanksgiving Day; Christmas Day (December 25th).

When any of the above holidays fall on a Sunday, they will be observed on the Monday following. Work on these holidays is by special arrangement only.
TIME: Eastern Standard Time, GMT minus 5 hours. Daylight saving time, GMT minus 4 hours, from April to October.
DEVELOPMENTS: Berth No. 29 under construction.
AUTHORITY: Port Everglades Authority, P.O.Box 13136, Fort Lauderdale, Florida 33316. *Tel:* (305) 523 – 3404. *Telex:* 514 – 462. *Cables:* Portglades. *Contact:* J. J. Connolly, Port Director.
AGENT: Strachan Shipping Company, P.O.Box 13131, Port Everglades, Florida 33316. Tel: 305-523-6563. Telex II: 510-955-9861. Cables: "Strachan".

PORT HURON, Michigan: 42.59 N. 82.26 W.

Refer to St. Lawrence Seaway for important general information.
PILOTAGE: Compulsory, by Seaway Pilots.
ANCHORAGES: Near head of St. Clair River at Sarnia. Vessels should anchor as close to shore as safely possible to keep channel clear for passing vessels.
RESTRICTIONS: Navigation season from mid-March to end-December approx. Dock channel depth – 25 ft. Vessel's size restricted by Seaway locks.
MAX. SIZE: 730 ft. length; 26 ft. draft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Master must give at least 24 hours notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also, at least 24 hours notice of ETA at first U.S. discharge port is required. Port can be contacted through Marine Operator, Sarnia.
TUGS: Available. Not compulsory, but sometimes necessary in bad weather.
BERTHING: Port Terminal Co. Dock: 700 ft. long 26 ft. – 31 ft. depth.
DENSITY: Fresh water.
MEDICAL: All facilities available.
FRESH WATER: Obtainable by pipe-line at all docks.
FUEL: All grades available by pipe-line at all docks.
REPAIRS: Machine shops available for limited deck and machinery repairs.
AUTHORITY: *Managers:* Port Huron Seaway Terminal Co., 2336 Military Street, Port Huron, Michigan 48060. *Contact:* W. R. Neal, President.

PORTLAND, Maine: 43.39 N. 70.14 W. **(See Plan Book)**

DOCUMENTS:
1 Crew List.
1 Passenger List.
2 Stores Lists.
2 Foreign Purchases Lists.
2 Inward Foreign Manifests uniform cargo.
Original Bill of Lading.
1 Form 1300 Master's Oath on entry of vessel.
2 Form 1374 Outward Foreign Manifest.
PILOTAGE: Ship's Agents usually notify Pilot approximately 48 hours in advance of arrival then changes are made at 24 and 12 hours. Pilot boat usually called on Channel 16 and then switched to Channel 11 to continue conversation. Pilot goes aboard ship in vicinity of lightship using ladder on lee side. When weather bad, suggest vessel anchors approximately 1 mile North of lightship.

Portland Pilots Inc. Tel: 774-5623. Docking Pilots: McDuffie Pilots Inc. Tel: 781-3954.

ANCHORAGES:
Anchorage A (General)

Beginning at Eastern corner of Grand Trunk Railway Company Pier No. 3; thence approximately 90°, 1,700 yd. to Brooklyn Ledge Buoy 16; thence 330°, 350 yd.; thence 25°, 780 yd.; thence 303°, 750 yd.; thence 254°, 560 yd.; thence 186°, 750 yd.; and thence to the point of beginning.
Anchorage B (General and Quarantine)

Beginning at Brooklyn Ledge Buoy 16, thence 58° to Little Diamond Island thence along the S.W. shore to the pier on the Southern end of Little Diamond Island; thence 143°, 1,200 yd.; thence 270.25° to House Island Light; thence along the Western shore of House Island to Fort Scammel Point Light; and thence 329°, 1,620 yd. to the point of beginning. Anchorage B is intended for general purposes, but especially for use by oil tankers and other deep-draft ships entering the harbour at night and intending to proceed to the dock allotted at daylight the following morning, or as soon as practicable. This area also is to be used for quarantine anchorage. Any vessel anchored in this area shall be ready to move on short notice.
Anchorage C

Bounded on the N.W. by House Island; on the North by a line running 90° from House Island Light to Peaks Island; on the East by the Western shore of Peaks Island, by a line running 198° from the Westernmost point on Peaks Island to Cushing Island, and by the shore of Cushing Island to its Westernmost point; and on the Southwest by a line running from the Westernmost point on Cushing Island to Fort Scammel Point Light. Anchorage C is intended for use only by small vessels and for temporary anchorage.
Anchorage D

Southerly and Westerly of a line beginning at Lighthouse Channel Buoy 1; thence 35° to Anchorage Buoy E; and thence 145° to the mainland. Anchorage D is for use only by small yachts and pleasure craft, and small, light draft coastwise freighters.
RESTRICTIONS: No entry restrictions at night. Deep draft vessels brought in on high water only.
MAX. SIZE: Size of vessel restricted to 45 ft. draft in harbour area. No outside installations at port at present.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Tugs in Portland Harbour use Channel 07. Vessels arriving at Portland go through radio station in Chatham, Mass., RCA installations, or call station WOU via radio-telephone. VHF Harbour Control at Portland.
VHF: Voluntary reporting system in effect on Channel 13.
TUGS: Tugs join vessel at Spring Point in Portland Harbour. Tugs use own lines at no additional charge. Docking Pilots not supplied by Company but are available.
BERTHING: Tidal conditions govern arrivals and departures. Depth alongside up to 35 ft.
BRIDGES: No undocking on ebb tide through bridge.
STEVEDORES: 4 hours notice on ordering gangs.
MEDICAL: No advance notice required by Agent. 2 hospitals, Maine Medical Center and Mercy Hospital, who take bed patients.
TANKERS: Tankers arriving at Portland Pipe Line, Pier 2, make preparations for 2×10 in. and 12 in. hoses.

Berth	*Depth Alongside*
American Oil Terminal	30 ft. MLW
Chevron Terminal	32 ft. MLW
Portland Pipe-line Pier No. 1	35 ft. MLW
Portland Pipe-line Pier No. 2	48 ft. MLW
Texaco Terminal	30 ft. MLW

Shore Storage: Due to shore storage difficulties the Portland Pipe-line Authorities have requested vessels leaving Venezuelan ports for discharge at Portland to provide the following information in order to avoid ship delays at this terminal:
(a) Vessel's expected time of arrival at Portland.
(b) Quantity and grade of cargo loaded.
(c) In case of split cargoes, intended order of discharge.

The above mentioned information should be radioed to Portland Agent for forwarding to Pipe-line Authorities immediately on sailing from the final Venezuelan loading port.
DENSITY: Average density 1024.
FRESH WATER: Available by tug for boilers only at rate of tug hire. Drinking water available at piers.
FUEL: No. 6 diesel oil and blended intermediate fuel oils. Delivery is via barge only and 24 hours notice required.
FIRE PRECAUTIONS: None – except at certain oil piers where information given to Shipmaster upon arrival at pier. Ample fire protection, salt water lines, sprinkler system on pier, local fire department.
GANGWAY/DECK WATCHMEN: Not required.
OPENING/CLOSING HATCHES: Ship's crew open hatches.
CERTIFICATES:
Load-line certificate.
Certificate of Foreign Clearance.
Ship's Safety Certificate.
U.S. Tonnage Tax Certificate of previous trip if available.
Radio Operator's Licence.
CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per man. Wine and/or Spirits, 1 bottle per person.
CARGO GEAR: No additional cargo gear necessary.
IDENTIFICATION CARDS: Form I-95 must be filled-out on arriving unless seaman has had a prior one made out for a previous arrival on same ship.
SURVEYORS: National Cargo Bureau, Tel: 781-4467.
REPATRIATION: Arrangements must be made with Agent in advance by telegram.

CONSULS:

Norwegian: Allan Kjos-Hanse, 30 Mayer Road, Portland, Maine, Vice-Consul.

French: Dr. Paul O. Proudian, 776 Main Street, Westbrook, Maine.

Finnish: Frank W. Bjorklund, 163 Main Street, Norway, Maine.

Italian: Dr. Domenico A. Santoro, 43 Deering Street, Portland, Maine.

Panamanian: Mary Navarro de Cerrillo, Lafayette Town House, Portland.

Swedish: Martin Johnson, Vice Consul, 443 Congress Street, Portland.

REPAIRS: Repair facilities for all types of machinery available.

DRY DOCKS: 3 basins divided into 7 berths which can handle a vessel up to 455 ft. long and 62 ft. wide (not currently activated). Also 3 other smaller marine slipways.

80,000 ton lift floating dock. Depth over keel blocks 14 m. Length 257 m. Clear width 40.7 m.

New Bath Ironworks: New dry dock in operation.

Specifications:	Clear Width:	134 ft.
	Draft:	46 ft. over 4 ft. keel blocks
	Max. Lift:	90,000 long tons
	Dock Length:	747 ft. without outriggers 797 ft. with one outrigger.

AIRPORT: Portland Municipal Airport 3.5 to 4 miles distant.

HOLIDAYS: New Year's Day; Washington's Birthday; Patriots Day; Memorial Day; Independence Day; Labour Day; Thanksgiving Day; Christmas and Veterans' Day. Possible to get gangs to work all days except Labour Day and Christmas.

POLICE/AMBULANCE/FIRE: Police 773 – 5651; Ambulance 772 – 5463; Fire 772 – 6531.

TELEPHONE: Arrangements can be made to have phone put on ship, but most docks have pay phones.

GENERAL: Discussions underway with Coast Guard and other officials to install fixed lighthouse stations to replace lightships at entrance.

DEVELOPMENTS: Plans under way for redevelopment of waterfront. Plans call for deepening Fore River from 35 ft. to 45 ft. and studies also under-way to provide offshore unloading of giant super-tankers. Plans to construct a $140 million oil transfer facility. In order to complete project, existing 40 ft. ledge will be removed to 90 ft. and dredging in the inner harbour of Hussey Sound will be done. No date set for final completion.

AUTHORITY: State of Maine, Department of Transportation, Ports and Marine Transportation Division, Station No. 16, Augusta, Maine 04333. *Tel:* (207) 289-2841. *Contact:* R. Elder, Director.

Port of Portland, City Hall, Portland, Maine 04101. *Tel:* (207) 775-5451. *Contact:* The Waterfront Director.

PORTLAND, Oregon: 45.30 N. 122.40 W.

PORT LIMITS: The seaward boundary of the Port of Portland is Astoria, 96 miles N.W. of Portland.

DOCUMENTS:

- 3 Cargo Manifests.
- 3 Store Lists.
- 3 Crew Curio Lists.
- 3 Crew Lists.
- 1 Clearance from Last Port.
- 1 Tonnage Tax Certificate.
- 1 Copy of Vessel's Register.
- 1 Itinerary of Vessel, port by port.

PILOTAGE: Compulsory. ETA Bar Pilot Astoria at least 12 hours before arrival giving deepest draft. Bar pilotage covers from sea to the Port of Astoria, river pilotage covers from Astoria to Portland. They change from launch while steaming in channel off Astoria buoy No. 37.

Warning: Due to heavy swells on bar during stormy Winter conditions, crossings may be temporarily suspended, therefore Masters should attempt earliest VHF radio contact on Channel 16 with Pilots or coastguard station "Cape Disappointment" for latest bar conditions.

During Summer months Masters should use extreme caution in poor visibility as many small fishing craft will be encountered near mouth of Columbia River.

Also see "General – Pilotage" before first U.S.A. port (Albany).

ANCHORAGES: Vessels may anchor to await berths at various locations on the Columbia River. Usual spots are at Tongue Point Astoria, Longview and at Vancouver, Washington.

RESTRICTIONS: All vessels Masters or their Agents to obtain Coast Guard clearance at least 24 hours before arrival. Captain of Port may impose movement restrictions if any hazardous cargo. Under 36 ft. draft no movement restrictions, 36 ft. and over up to maximum permissible draft of 38 ft. on Pilot's recommendations.

No size restrictions length and beam, however, Corps of Engineers maintain only 600 ft. wide channel, therefore, deep laden vessels over 600 ft. in length to use extreme caution when turning.

Columbia River Navigation Advisory: (Dated September 1980).

Dredging activity at the Mt. St. Helens Shoal Area of the Columbia River is progressing on schedule.

Phase 4: The dredging of the North half of the channel to 300 ft. wide by 40 ft. deep at the mouth of the Cowlitz River will be completed by 30th September, 1980.

Phase 5: The completion of the dredging of the South Channel to at least 40 ft. by 300 ft. will then get underway. This removal of the last 2 ft. of shoaling (from 38 ft. to 40 ft.) to the dimensions of at least 40 ft. by 300 ft. will be completed by at least 30th November, 1980.

Thus by 30th November the river in that area will be 600 ft. wide with a minimum depth of 40 ft.

Necessary maintenance dredging in other parts of the river between Portland and the sea is being performed by the Corps of Engineers Hopper Dredge Fleet and will continue on an as needed basis, to maintain the published 40 ft. channel.

Dredging projects in the Cowlitz and Toutle river areas are underway as safeguards to prevent future impact of any Winter run off on the Columbia River Channel. This will be intensified on completion of Phase 4 as dredge equipment is released from Columbia River work. Starting immediately night navigation for inbound vessels will be automatically sanctioned by U.S. Coast Guard, subject only to vessel peculiarities as determined by the River Pilots. Outbound vessels will continue to be restricted to daylight (1 hour before sunrise to 1 hour after sunset) navigation. Requests for a variance will be handled on a case by case basis by Columbia River Pilots.

Agent's Note:

(Columbia River Navigation Advisory). The above is the latest information put out by the Corps of Engineers & Coast Guard. They are constantly monitoring situation so things change from day to day. We have been notifying vessel's Masters to arrive at pilot station at given time so that they can come right on through. Some waiting will be encountered in case of deep draft ships so it is best to adjust speed and conserve fuel.

MAX. SIZE: No restrictions length and breadth. Depth at Columbia River entry 48 ft. River channel to Portland/Vancouver maintained at 40 ft. by 600 ft. Seasonal tidal effect up to 3 ft. at Portland.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

Master to radio with ETA state of crew health noting any sickness. Agent will report sickness to Seattle Quarantine Station for clearance instructions.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Route ETA cables through KLBITT Seattle, Washington.

Marine Exchange of the Columbia River District (Merchants Exchange): 24 hour marine reporting. Call sign "KDO 759". Call on Channel 16 VHF. Working (Astoria – Longview and 50 miles out to sea) on Channel 9 and (Longview – Portland) on Channel 11 and 18A.

Marine Exchange (Tel: 503 – 228 – 4361) pass messages to vessels from Agents and vice-versa. Coverage is good in river and 50 miles to seaward.

TUGS: Tugs normally join vessel at designated berth. Tugs' lines used at no charge.

BERTHING: The port operates 5 public ocean cargo terminals containing 28 deepwater berths, including 5 container berths with 6 high-speed container cranes. Present depths alongside berths is 40 ft. min. at MLLW.

There are general cargo berths and berths for commodities which require special handling. Port facilities include 21 transit sheds, and 5 warehouses with 2.2 million sq.ft. of sprinkler protected storage area.

BRIDGES: No arrival times designated if coming from sea and in excess of 750 tons gross. Departures regulated, with bridge closures during peak traffic flow (0700 to 0900 hrs. and 1615 to 1815 hrs.) unless permission granted by Harbour Master.

SPECIALISED CARGO HANDLING FACILITIES: As well as the 6 container cranes, there are 6 Whirley cranes, a 150 ton shear leg crane and a 175 ton mobile crane, largest of its kind on the Pacific Coast.

At Terminal Two is a 1,341 ft. container/general cargo pier with a 40 ton and a 50 ton straight line crane and 2×65 ton gantry cranes. Terminal Two contains a Roll-on/Roll-off berth. Pier has a 25 acre open storage yard with rail and truck service. 4 straddle carriers, capable of stacking 20 ft. containers 3 high, or 40 ft. 2 high, serve the yard. Pierside warehouse and container freight station 90,000 sq.ft.

At Terminal Four there is an 8.1 million bushel capacity grain elevator, with box car tipper, truck dumper and barge unloading facility. Log dock is equipped with 2 Whirley cranes. There is a Dravo bulk unloader with digging capacity of 900 t.p.h. Tanks are available for special cargoes such as petroleum, molassses, tallow and ore concentrates. Also available is a 120 acre open storage area and floating dock for import of automobiles. Ro/Ro ramp to be built in order to accommodate large vessels.

The Terminal 5 elevator is the most modern grain outloading facility in the lower Columbia River and is operated under sub-lease by Columbia Grain Inc.

The elevator has a storage capacity of 1.5 million bushels and is the fastest on the river, with an outloading capability of 2,100 tonnes/p.h. The facility can receive grain by rail, truck and barge. The barge leg operates at 1,000 t.p.h., trucks are unloaded at 225 t.p.h. and about 65 railcars can be unloaded in an 8-hour shift.

Terminal Six has a container pier, length 1,800 ft., with 3×50 ton straight line cranes and a 60,000 sq.ft. container freight station. Also a 60 acre open storage area and floating dock for import of automobiles.

STEVEDORES: Allocation for gangs Monday to Saturday must be confirmed at 1100 hrs. to longshore hiring hall. Allocation for gangs Sunday and Monday made at 1100 hrs. Saturday for both day and night gangs. Same procedure applies to allocation of night gangs, but night gangs may be cancelled by 1400 hrs. in afternoon if night gangs are to work.

MEDICAL: Any type medical treatment provided and hospital facilities available.

TANKERS:

	Max. Size Vessel	
Berth	*Length*	*Draft*
Shell Oil Company	575 ft.	32 ft.
Standard Oil	660 ft. – 700 ft.	35 ft.
Texaco Inc.	650 ft.	30 ft.
Phillips Petroleum Co.	No maximum	30 ft.
Time Oil Co.	600 ft.	38 ft.
Mobil Oil Corp.	550 ft.	31 ft.
Richfield	600 ft.	30 ft.
Union Oil Co.	550 ft.	30 ft.

DENSITY: Fresh water at all times.
FRESH WATER: Available at all berths delivered through pier-side connections.
FUEL: Viscosity grades of B and lower. No advance notice required. Barging essential. Also see "Notice" No. 2.
FIRE PRECAUTIONS: Fire precautions respecting tankers administered by U.S. Coast Guard, which enforces shipboard regulations under the Code of Federal Regulations, Part 46, Sub-Part D, Sections 20 to 40; the Police Harbour Patrol, which controls port movements, boards vessels to warn Master regarding harbour regulations, including spilling of oil, etc.; Fire Marshal exercises jurisdiction regarding fire regulations at shoreside facilities serving tankers.

All vessels to have towing cables rigged fore and aft on the offshore side. Cables to be made fast with the eye 1 m. above the water.
GANGWAY/DECK WATCHMEN: Option of vessel Owner/Agent and available through private firms.
OPENING/CLOSING HATCHES: While ship at dock, opening and closing is work of longshoremen. Ship may open or close own hatches while underway.
CERTIFICATES: Registered tonnage certificates. Certificate of Financial Responsibility (all details must agree with vessel's register).
CARGO GEAR: Valid cargo gear certificate required, acceptable to U.S. Bureau of Labor Standards.
IDENTIFICATION CARDS: Immigration Dept. requires form No. I-95A and No. 31 (Repatriation). Changes can be effected at any U.S. Immigration Office.
CONSULS: The following countries are represented in Portland:

Austria
Belgium
Costa Rica
Denmark
El Salvador
Finland
France
Germany
Ghana
Great Britain
Iceland
Italy
Japan
Korea
Lebanon
Mexico
Netherlands
Nicaragua
Norway
Panama
Peru
Senegal
Sweden
Venezuela

REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: 4 floating docks, largest 982 ft.×188 ft. clear width, with lift capacity of 81,000 long tons.
REPATRIATION: Arrangements possible for crew changes or other repatriation.
AIRPORT: Airport 10 miles distant, served by 17 regularly scheduled passenger airlines with direct service and/or connections domestically and world wide. 13 cargo carriers also serve the area.
TIME: GMT minus eight hours. Daylight Saving Time becomes effective annually on the last Sunday in April through the last Saturday in October.
HOLIDAYS: *New Year's Day; President's Day (Feb. 21st); Memorial Day (May 30th); *Independence Day (July 4th); *Labor Day (first Monday in September); Veterans' Day (Nov. 11th); Thanksgiving Day, *Christmas Day (Dec. 25th), State-wide Election Days. Other legal holidays may be proclaimed by state or national authority. When holiday falls on Sunday, the following Monday is observed as holiday. Longshore work performed on any of above listed days is overtime, which is one and a half time rate. Days marked (*) are stop-work days, i.e. no ships will be worked. This also applies to July 5th, which observed locally on unilateral basis.
POLICE/AMBULANCE/FIRE: Police 226–7551; Fire 232–2111; Ambulance: provided by several private firms, but can be obtained through police or fire number.
TELEPHONES: Available by order from terminal superintendents at $5.00 connection charge.
SERVICES: All services available such as compass adjusting, major or minor repairs either with work barges or at ship repair berths; lay berths available; charts available from private companies; all chandlery supplies available.
SHORE LEAVE: Crew members permitted ashore except where vessel has made first arrival from Communist-controlled port.

NOTICE No. 1:
Custom of the Port Rules and Regulations:

Pertaining to bulk grain and other bulk commodities customarily handled through regular grain elevators, recognised as the practice in the Columbia River District by the Merchants Exchange. It is not the intent of the Rules and Regulations to supersede the contractural relationship between vessel and shipper or charterers, but rather state customary trade practices for the purpose of facilitating commerce under conditions where the contractural arrangements do not cover specific local conditions, in which case these "Custom of the Port" rules and regulations will apply. These rules are applicable to vessels loading in the Columbia River District, which shall be considered as one port and includes grain berths from Astoria, Oregon, to Portland, Oregon, including Longview, Kalama and Vancouver, Washington. Loading berth(s) to be declared during regular business hours at least 24 hours before arrival at the Columbia River.

Rule 1: Subject to the exceptions enumerated below, vessels shall be assigned to a berth(s) in the order in which they file with the elevator(s) as ready to load. A vessel shall be considered ready when it has obtained Certificate of Readiness issued by the National Cargo Bureau, Inc., and an official certificate of stowage examination from the U.S. Department of Agriculture, Federal Grain Inspection Service, Inspection Division, stating the vessel is completely fit in all compartments in which it is intended to receive cargo.

EXCEPTIONS:

(a) In assigning berth to vessels at any elevator, liners shall be given preference over other vessels, except that any tramp vessel whose allowed loading laytime has expired shall assume the status of a liner vessel for purposes of berth assignment. (For the purpose of these rules, the term "Liner" is defined as a vessel sailing under an advertised Pacific Coast schedule and operated by a line maintaining regular sailings from any Pacific Coast port to named ports, and on which the total quantity of all grain to be loaded shall not exceed one-half of the total deadweight tonnage of the vessel.) A vessel which arrives and presents Notice of Readiness to load in accordance with this rule, but which cannot attain "Liner" status because the allowed loading laytime is not defined in the contract of affreightment, will not lose its berthing priority to a tramp vessel with later Notice of Readiness, that has gone on demurrage.

(b) The elevator may alter the turn of the vessels whenever confronted with the urgent necessity of receiving or loading any particular grade of grain, or to facilitate conditions at the elevator. When requested, elevator operator to supply written confirmation of such loading alteration as authorised under this rule and/or applicable tariff to owner's or charterer's representative.

Rule 2

Normal working days are Monday through Saturday from 0800 hrs. to 1700 hrs. (exceptions are Sundays, legal holidays, and July 5th). Refer to notes below.

(a) July 5th – while not a legal or longshore holiday, has not been worked by Pacific Coast Longshoremen since 1935, and is considered a holiday.
(b) Overtime – is all work over 6 hours in one day, and work between 1700 hrs. and 0800 hrs., Monday through Friday, and all work on Saturdays, Sundays, legal holidays, and overtime days as defined in the Pacific Coast Longshore Contract.
(c) Awaiting vessel – where the same holiday is observed on different days in adjoining states, a waiting vessel not knowing where it could work will observe (for laytime purposes) the holiday in the state that it first works.

Rule 3

Should the vessel refuse to work during a normal working day, or beyond a normal working day when so required in writing by the elevator in accordance with its published tariff, it shall lose its turn and vacate the berth in favour of the next vessel that is willing to work overtime. The vessel so losing its turn shall be entitled to berth as soon as the berth is next available thereafter. Should any vessel refuse to vacate its berth when ordered to do so under the above circumstances, the elevator may effect the removal of such vessel at the vessel's risk and expense.

Rule 4

The Board of Directors of the Merchants Exchange will, on an annual basis, select an abitrator for the purpose of arbitration or interpretation of the Rules and Regulations set forth herein.

Requests for arbitration or interpretation of these rules shall be submitted in writing stating the parties involved and outlining the facts in brief detail to the Manager of the Merchants Exchange. The Manager of the Merchants Exchange and the arbitrator will select the time and place for the arbitration. Failure of the parties named in the abitration to respond or acknowledge the request for arbitration will require the arbitrator to rule on the facts as presented by the requesting party.

Any requests for revisions of these rules must be submitted in writing to the Chairman of the Custom of the Port Rules and Regulations Committee with a copy to the Manager of the Merchants Exchange.

Arbitration fees payable to the Merchants Exchange shall be $50 plus any extra ordinary charges in connection therewith. The above fee shall be paid by the party requesting the arbitration or interpretation.

NOTICE No.2: Issued by the Harbour Master in August, 1980.
SUBJECT: Discontinuing Ship Repairs at Grain and Oil Docks, and Refueling at Grain Docks.

We feel after considerable deliberation that ship repair at Oil and Grain Docks is an unnecessary hazard and should be discontinued at once.

The practice of refueling ships at Grain Docks also would be considered taking an unnecessary risk, and as such, will be stopped.

After surveying numerous longshoremen and Grain Operators who reaffirmed this position, we are hereby notifying the concerned contractors that this will be our policy from now on.

DEVELOPMENTS: New coal export terminal under construction. It is expected to handle a 50,000 d.w.t. vessel in 12 hours.
AUTHORITY: Port of Portland, P.O.Box 3529, 700 Northeast Multnomah Street, Portland, Oregon 97208. *Tel:* (503) 231-5000. *Telex:* 910-464-5105. *Cables:* Portofport. *Contact:* Lloyd Anderson, Executive Director.

PORT LAVACA/POINT COMFORT, Texas: 28.40 N. 96.35 W. (See Plan Book)

DOCUMENTS:

2 Cargo Manifests.
2 Stores Lists, Form CF1303.
2 Crew's Effects Declaration, Form CF1304.
1 Clearance from last Port.
Vessel's Register, tonnage, tax receipts, etc.
2 Copies Crew List.
2 Copies Passenger List.

PILOTAGE: Ship's Agents usually notify Matagorda Bay Pilots as to vessel's ETA. Pilot boat can be contacted on VHF Channel 16, then switch to Channel 26 to continue conversation. Pilot boards at buoy 1-A at position Lat. 28° 23′ N., Long. 96° 17′ W.
ANCHORAGES: Marked on chart of Matagorda Bay and approaches.
RESTRICTIONS: Vessels may enter any time day or night. Entrance channel depth 38 ft. Bay Channel depth 36 ft.
MAX. SIZE: Public Dock – max. length approximately 750 ft. Draft controlled by channel depth of 38 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Galveston Radio (ITT Mackay Marine) and Port Lavaca Marine operator can be contacted on VHF Channel 16, then switch to Channel 26 for continued conversation.
TUGS: 1 tug available joining vessel shortly before arriving at berth.
BERTHING: Vessels berth at Public Dock.
STEVEDORES: Richard Bugg & Co. Inc.; Boyd-Campbell & Co. and Dix Shipping Company of Corpus Christi, Texas. At Alcoa's Dock all plant labour is used.
MEDICAL: No advance notice required. Several clinics and 1 hospital available in Port Lavaca.
DENSITY: Average density is 1010/1012.
FRESH WATER: Fresh water available alongside berth.
FUEL: Fuel is available from VAL-CAP located in Port Lavaca. Can be delivered by barge or truck.
OPENING/CLOSING HATCHES: At Public Dock this is done by stevedores. At Alcoa Dock this is done by ship's crew.
CERTIFICATES: Load line, foreign clearance, safety equipment, financial responsibility (oil pollution), tonnage tax receipts, will be required.
IDENTIFICATION CARDS: Immigration Crew Landing Permit I-95 required for each man.
CONSULS: Only Norwegian Vice-Consul Tel: 512-987-2311.
REPAIRS: Only minor repairs possible. No dry docks.
REPATRIATION: Arrangements are possible but preferably should be accomplished in larger ports.
AIRPORT: Nearest airport 20 miles at Victoria, Texas, served by Texas International only, Corpus Christi Airport about 90 miles; Houston Airport about 150 miles.
TIME: Central Standard Time during Winter. Beginning last Sunday in April until last Sunday in October, Daylight Saving time (clocks are moved ahead 1 hour).
HOLIDAYS: All holidays observed by contract with ILA. See "Houston".
POLICE/AMBULANCE/FIRE: Police Department, Tel: 552-6767; Fire Department, Tel: 552-2222; Ambulance Service, Tel: 552-2988.
TELEPHONES: Telephones are available ashore only. Telephone booth on Public Dock.
DEVELOPMENTS: Plans for lengthening dock and another warehouse are now being considered.
AUTHORITY: The Port of Port Lavaca/Point Comfort, The Calhoun County Navigation District, P.O.Box 397, Point Comfort, Texas 77978. *Tel:* (512) 987-2631. *Contact:* L. L. Froelich, Port Manager.

Private Dock owned by Aluminium Company of America with its Agent being Alcoa Steamship Company Inc., Point Comfort.

PORT NECHES, Texas: 30.00 N. 93.57 W.

DOCUMENTS, PILOTAGE, RADIO, etc.: Refer to "Port Arthur".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Meet vessel in Neches River before arriving at berth. Normally 2 tugs used for docking, 1 for undocking.
BERTHING: Jefferson Chemical Co.: Distance from sea 30 miles, depth at berth 36 ft. Max. LOA 800 ft.

Texaco Terminal: Distance from sea 34 miles, depth at berth 38 ft. Max. LOA 810 ft.

MEDICAL: All facilities available.
DENSITY: Fresh water.
FRESH WATER: Available by barge.
FUEL: Bunker C not available ex-wharf at Texaco Terminal, only by barge from Port Arthur or Beaumont.
GANGWAY/DECK WATCHMEN: Not required unless crewmen detained by Immigration.
CUSTOMS ALLOWANCES: 300 cigarettes and 1 quart wine or spirits for each man.
IDENTIFICATION CARDS: Foreign crew only require Immigration Landing Permit.
CONSULS: Nearest at Houston.
REPAIRS, DRY DOCKS: See "Port Arthur".
AIRPORT: 15 minutes from docks. Several flights a day 0600 hrs. – 2200 hrs. to Houston International Airport.
AUTHORITY: *Operators:* Texaco Inc., P.O.Box 1028, Port Arthur, Texas 77640.

Jefferson Chemical Company.

PORT ST. JOE, Florida: 29.49 N. 85.19 W.

DOCUMENTS:

All documentation must be on United States forms.
At least: 3 Passenger Lists.
3 Crew Lists (1 for visa crew list).
3 Curio Lists.
3 Stores Lists.
2 Complete Manifests.
Clearance Papers from last port.

PILOTAGE: Apply for Pilot through ship's Agent – address is "Port St. Joe, Pilots" and advance ETA 18 hours. "VHF – Channel 16". Pilot boat station is at Sea Buoy, Port St. Joe only and location of anchorage for vessel awaiting a Pilot is 1 mile West of Sea Buoy.
ANCHORAGES: Local harbour charts indicate safe anchorage.
MAX. SIZE: Draft 32 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Call sign WLO, Mobile, Alabama.
TUGS: None presently available.
STEVEDORES: ETA must be received by 1800 hrs. in order to have gangs at 0800 hrs. following day.
MEDICAL: No notice required. Hospital facilities available. Inoculations required same as public health U.S. Government requirements.
TANKERS: Discharge lines 8 in. No residue discharge allowed. 2 tanker berths 32 ft. draft.
DENSITY: Salt water – heavy concentration.
FRESH WATER: Available in unlimited quantities by hose connection from dock to ship, 1.5 in. to 2.5 in. size at 60 p.s.i.
GANGWAY/DECK WATCHMEN: Only when requested by ship.
OPENING/CLOSING HATCHES: Work can be performed by either stevedores or crew.
CUSTOMS ALLOWANCES: 1 carton of cigarettes per week per crew member permitted. Further allowances would depend on circumstances. Wine and/or Spirits 1 bottle per crew member as allocated by Customs.
CARGO GEAR: Must be in compliance with "U.S. Government Longshoremen Safety Codes".
CONSULS: None.
REPAIRS: None.
DRY DOCKS: None.
REPATRIATION: Can be accomplished by Agent and Immigration but should be accomplished in larger ports if possible.
AIRPORT: Served by regular airlines. (Southern Airways, National Airways). 6 combined flights a day. Distance 40 miles.
TIME: Saving time from first Sunday in May to last Sunday in October. GMT minus 5 hours Standard Time. GMT minus 4 hours daylight saving time.
HOLIDAYS: *No Work Holidays:* No work performed New Year's Day, Fourth of July, Labour Day, Christmas Day, or December 24th & December 26th, and Easter Sunday, except handling of mail, baggage and perishables (except bananas) or unless a ship is in distress, such as fire or leaking bottom, or, other causes that would damage cargo or vessel. In event work done on New Year's Day, Fourth of July, Labour Day, Christmas Day, December 24th & December 26th, or Easter Sunday, rate of pay for such ship work shall be double the normal time rate. Should above holidays fall on Sunday, double time will be paid. Following Monday will be paid at time and one-half.
Working Holidays: Armistice Day, Thanksgiving Day and Memorial Day are to be paid for at overtime rate – one and one-half times straight-time rate. Should any of above holidays, except Sunday fall on Sunday, the following Monday will be observed.
POLICE/AMBULANCE/FIRE: Police 229-8265; 227-4526; Ambulance 227-1115 (Comforter), 277-1818 (St. Clair), 229-8111; Fire 227-1115.
TELEPHONES: Available for placing aboard.
GENERAL: In sending ETA when ship is going to arrive over weekends (Saturday and Sunday), an ETA notice should arrive prior to 1700 hrs. Friday.
SHORE LEAVE: Shore leave allowed when cleared by Immigration.
REGULATIONS: Normal working hours of longshoremen from 0800 to 2230 hrs. only, 7 days a week.
DELAYS: Only when due to port congestion.
AUTHORITY: Port St. Joe Port Authority, P.O.Box 280, Port St. Joe, Florida 32456. *Tel:* (904) 227-1111. *Contact:* George Tapper.

PORT SAN LUIS, California: 35.10 N. 120.45 W.

ANCHORAGE: The best anchorage in the Harbour is in the starboard side, coming from the sea, being the area between No. 3 Pier and the second, Union Oil Terminal, pier. Anchorage be outside of the existing mooring area and the holding ground is primarily sandy bottom.
APPROACHES: The approach channel, directly off the end of the Harbour District's Pier is an entrance channel, which is unlit and identified by large green or red buoys.

The tanker channel runs North/South to Pier No. 2 (Union Oil) and small vessels using Pier No. 3 (Harford) run a course of approx. SE-NW.

MAX. SIZE: Tankers up to 750 ft. length and 26ft. draft.

48,000 d.w.t. tankers may not use Pier No. 3 (Harford). Vessels wishing to use Pier No. 3 must give prior notice in writing, except commercial fishing vessels.

HEALTH: See "Health: All Ports„ before first U.S.A. port (Albany). Illness reports made to Los Angeles Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Vessels should contact Union Oil Company through Marine Operator. "Walkie-talkie" sets used for communication with terminal. VHF station KTD 411, Channels 10 and 16.
VHF: Harbour Office, call sign "KYZ 664", on VHF Channel 16 throughout 24 hours, working Channels 10 and 12.
TANKERS: Tanker berths only at Union Oil Company Pier. Vessels tie off pier at berth No. 4. Depth alongside 32 ft. MLW.

1×12 in. and 1×16 in. load/discharge lines. No ballast discharge allowed.

DENSITY: Salt water, 1025.
MEDICAL: Services available.
FRESH WATER: Available.
FUEL: The Harbour District maintains and operates a diesel fuel facility, capacity 12,000 gallons. The facility is at the end of the District's 1,400 ft. pier. Limited use restricted to small vessels up to 300 d.w.t.
CONSULS: Nearest consuls situated at Los Angeles and San Francisco.

REPAIRS: Facilities available for all vessels.
AIRPORT: County Airport, San Luis Obispo, situated 12 miles distant. 6 flights daily to Los Angeles and to San Francisco.
HOLIDAYS: Christmas and New Year.
GENERAL: Port San Luis is an official Port of Entry with U.S. Customs. The Port Director is on duty Monday to Friday from 0900 hrs. to 1600 hrs.

There is a boat yard with a 50 ton mobile hoist.

WEATHER: The mean tidal range in San Luis Obispo Bay is 3.6 ft., the Spring range is 5.3 ft. and the maximum range is approximately 9.8 ft. The highest observed tide was 7.5 ft. above MLLW mark in January, 1948. The lowest tide of −2.3 ft. MLLW mark occured on January 7th, 1951. Tidal level above the MHHW or MLLW will occur approximately 20% of the time during severe storms. The existing breakwater gives partial protection from waves approaching from the Western part of the San Luis Bay. The bay is exposed to open sea from the South to Southwest. Northwesterly winds are predominant, except during the Winter months, October through April, when these storms from the South generate waves that approach from the Southwest to Southeast. The magnitude of the surge is usually less than 0.5 ft. However, 1.0 ft. waves are common.

The prevailing wind is from the Northwest and averages 5 to 15 knots and, during a Southerly storm, can go up to 60 knots.

The climate and weather are typically mild and favourable. The rainy season, including the storm season, is generally from November 15th to April 15th. Occasionally, brisk winds or fog make it temporarily difficult to navigate within the Port. Rain and heavy winds are not usually experienced at other times of the year. Normally, the temperature is from the low 50's to the high 70's.

AUTHORITY: Port San Luis Harbour District, Pier No. 3, P.O.Box 249, Avila Beach, California 93424. *Tel:* (805) 595-2381 *Contact:* William S. King, Harbour Master. J. K. Elder, Marine Coordinator.

PORTSMOUTH, New Hampshire: 43.03 N. 70.45 W. (See Plan Book)

PILOTAGE: Pilot boards at entrance.
TUGS: The Port of Portsmouth is serviced by 3 regular tugs, one of 1,200 h.p. and two of 1,600 h.p. operated by the Portsmouth Navigation Division of the Central Wharf Towboat Company, Inc. Tel: 1-603-436 1209 (radio frequency 1316). Additional tugs are available in the area if needed.

The rates for moving vessels from the anchorage (1 mile South of Sea Buoy KR2) to berths in the harbour vary according to distance, conditions and tonnage of vessels. Tonnage referred to is s.d.w.t. or Coastwise, whichever greater.

BERTHING:

New Hampshire Port Authority:

Operator:	J. T. Clark & Son of N.H. Inc. Tel: (603) 431-8500.
Location:	3 miles from Outer Anchorage (Buoy KR2).
Depth at Dock:	35 ft. (MLW).
Type of Pier:	Length 600 ft. Concrete and steel pile with precast concrete deck.
Products Handled:	General cargo, bulk and containerised.
Dry Storage:	50,000 sq.ft. in two sheds.
Dockside:	Potable water, power, telephone and marine bunkers. Modern fork-lift trucks, bucket loaders, tractors and heavy lift cranes are permanently stationed at the facility to prevent any delays in servicing all types of vessels. The 4 cranes range in size from 35 tons to a 165 ton mobile container crane. Additional mobile cranes of 150 ton capacity are readily available. A certified weighing system is located in the centre of the freight marshalling area for easy access to trucks and containers entering or leaving the terminal.

Fuel Storage Inc.:

Operator:	Dorchester Sea-3.
Address Terminal:	Avery Road, Newington, N.H. 03801. Tel: (603) 431-5990.
Office:	144 Washington Street, Portsmouth, N.H. 03801. Tel: (603) 436-6225.
Type of Pier:	Steel piled cells offshore 125 ft.
Depth Alongside:	38 ft. (MLW).
Normal ship side to dock:	Port.
Line Handling boat required:	Motorised shore bollards.
Access to vessel (for stores and repairs):	Trucks to shoreside, cart or hand to shipyard.
Product handled:	LPG.
Size and number of pipe-lines:	16 in. liquid line, 8 in. vapour return.
Bbls. per hour Discharge capacity:	12,420 bbls.p.hr.
Maximum vessel dimensions:	59,000 c.b.m.
Storage capacity:	400,000 bbls.
Other dock users:	Belcher Oil, Dorchester Sea – 3 Products Inc., U.S. Government, Global, Trimont International, Cyro.

Also see "Shipmaster's Report".

Public Service Co. of N.H. Schiller Station:

Operator:	Mobil Oil Corp.
Address:	Gosling Road, Newington, N.H. 03801.
Depth Alongside:	34 ft. (MLW).
Normal ship side to dock:	Port.
Access to Vessels (for stores and repairs):	Limited.
Products handled:	Gasoline and distillates.
Size and number of pipe-lines:	Various.
Discharge capability of bbls.:	6,000 bbls.p.hr.
Average distance to storage tanks:	Tank farm adjacent to dock.

Simplex Wire & Cable:

Operator:	Simplex Wire & Cable.
Address:	Old Dover Road, Newington, N.H. 03801. Tel: 436-6100.
Type of Pier:	T-Shape (permanent).
Depth Alongside:	28 ft. (MLW).
Normal ship side to dock:	Port (bow upstream).
Line handling boat required:	Yes.
Access to vessel (for stores and repairs):	Yes.
Product handled:	Ocean cables.

Public Service Co. of N.H. Schiller Station:

Operator:	C. H. Sprague & Son.
Location:	1.5 miles above the Interstate Bridge.
Distance seabuoy to dock:	7.1 miles.
Controlling depth in approaches:	35 ft.
Controlling depth at dock – MLW:	37 ft., ledge bottom.
Rise and fall of tide:	8 ft.
Docking and undocking conditions:	Docking is restricted to a high water operation – Pilot starting ship in from anchorage area at high water only. Undocking: Low water slack at the dock or 1 hour before high water slack at the dock.
Length of dock and construction:	700 ft. with dolphins. Concrete pile, concrete decked T-head wharf with a 100×20 ft. approach.
Tugs and linehandlers:	2 or 3 tugs used to dock and undock. Terminal personnel used as linesmen.
Bunkers:	Available through 6 in. line at 2,000 bbls./hr.
Water:	Supplied through 2.5 in. line.

C. H. Sprague & Son Co., Newington Terminal:

Operator:	C. H. Sprague & Son Co.
Address Terminal:	Old Dover Road, Newington, N.H. 03801. Tel: (603) 431-5131.
Office:	One Parade Mall, Portsmouth, N.H. 03801. Tel: (603) 431-1000.
Type of Pier:	Steel piled cells (2) and mooring dolphins (3) Offshore 300 ft.
Depth Alongside:	36 ft. 6 in. (MLW).
Normal ship side to dock:	Port.
Line handling:	Motorised capstans on all dolphins. Lines handled by Sprague personnel.
Lines:	6-18 depending on size of vessel.
Access to vessel (for stores and repairs):	5 ton vehicle or less to ship side, 5 ton vehicle or more, cart or hand to ship side.
Products handled:	Kerosene, diesel fuel, No. 2 home heating oil.
Size and number of pipe-lines:	1×16 in., 1×14 in., 3×10 in., 1×8 in., 1×6 in.
Discharge Rate:	7,000-20,000 bbls./hr. (varies on product and tank size).
Max. vessel size:	700 ft. overall length.
Storage capacity:	1,200,000 bbls.
Dockside:	Potable water, pay telephone, marine bunkers (light oil only).

Gold Bond Building Products Division of National Gypsum Company:

Operator:	Gold Bond Building Products.
Address Plant:	Freeman's Point, Portsmouth, N.H. 03801. Tel: (603) 436-4840.
Mailing:	P.O.Box 270, Portsmouth, N.H. 03801.
Type of Pier:	2 circular marine cells, 40 ft. dia. at shore side.
Depth alongside:	40 ft. (MLW).
Normal ship side to dock:	Port.
Line handling boat required:	Motorised shore bollards.
Access to vessel (for stores and repairs):	Trucks to shoreside.
Product handled:	Gypsum ore through a conveyor system designed for self-unloading ships.
Other Dock Users:	Northeast Petroleum Corp. N.H. Trading Corp.

BRIDGES: *Bridge Clearances:*
Memorial Bridge (lift): Horizontal 260 ft., vertical 150 ft.
ME.-N.H Bridge (lift): Horizontal 200 ft., vertical 135 ft.
1-95 Highway Bridge (fixed): Horizontal 440 ft., vertical 135 ft.
General Sullivan Bridge (fixed): Horizontal 100 ft., vertical 46 ft.
New Castle Highway Bridge (Bascule): Horizontal 29 ft., vertical 12 ft.

TANKERS: See "Berthing".

FRESH WATER: Available.

FUEL: Available.

REPAIRS: Facilities available.

BANKS: First National Bank of Boston. Tel: (617) 434-3770.
First National Bank of Portsmouth. Tel: (603) 436-7700.
Maine National Bank. Tel: (207) 439-0451.
State Street Bank. Tel: (617) 786-3839.

GENERAL:

VESSEL ARRIVALS AND DEPARTURES

Marine Section, Federal Building, Room 103, Portsmouth. Tel: (603) 436-7620, ext. 737.

District Office (Portland, ME): Tel: (207) 780-3328.

COMMERCIAL VESSELS, ARRIVALS & ENTRY

Report of Arrival: These vessels must report arrival to a U.S. Customs Officer within 24 hours (19 U.S.C. 1433):

A. Vessels arriving at any port or place in the U.S. from any foreign port or place (refers to domestic and foreign vessels);

B. Domestic vessels arriving at any port or place in the U.S. from another U.S. location with bonded merchandise or foreign merchandise for which entry has not been made. Failure to report results in penalties.

Entrance: Within 48 hours of arrival from a foreign port, the Master is required to make entry of his vessel, even though the vessel may be at anchor awaiting berth. Foreign flag vessels arriving in ballast from another U.S. port must also make entry within 48 hours of arrival. When vessels which have residue foreign cargo and/or passengers on board arrive from another U.S. port, entry should be made within 24 hours.

Vessels arriving from a foreign port must have made either Preliminary or Formal entry prior to transacting any type of business or permitting anyone on board other than Customs, Immigration, Agriculture, Public Health, and Agent's personnel. Vessels arriving from another U.S. port to discharge cargo must make Preliminary or Formal entry prior to discharging cargo.

Foreign non-commercial vessels are also required to make entry. In Portsmouth this will be done on board at the time of boarding by Customs. The Officer will provide necessary forms and assistance. Non-commercial vessels may contact the New Castle Coast Guard Station for assistance in obtaining a Customs Officer.

WARNING REGARDING SEA STORES

(U.S. Dept. of Agriculture, Animal & Plant Health Inspection Service)

You are hereby warned that WHILE YOUR VESSEL IS IN THE TERRITORIAL WATERS OF THE U.S., regulations of the Department of Agriculture **prohibit** the unloading for any purpose of:

1. Fresh, chilled or frozen meats;
2. Undrawn poultry carcasses;
3. Plants or plant products, including fruits or vegetables;
4. Garbage, consisting or contaminated with scraps, parts or other waste of meats, plants, fruits, and vegetables.

DEVELOPMENTS: The Port Authority has developed a comprehensive plan for maximum utilisation of existing space on a phased basis. An integral part of that plan is another docking facility, 600 ft. long with a depth of 35 ft. alongside at MLW. This new docking facility will provide additional berthing space for new users as well as prevent costly delays due to terminal congestion. The Port Authority is also planning to develop approximately 10 acres of new land from a tidal basin adjacent to the present facility. This area will be used for open as well as enclosed throughput storage.

SHIPMASTER'S REPORT: February 1983.

Dorchester Sea-3 Terminal:

The vessel arrived off Portsmouth N.H. on the 2nd February, at the entrance to which port the Pilot boards, to take vessels up river to Newington. At the arrival time a S.E. gale was in force, so the passage was ended at 2400 hrs. and the vessel stood some 20 miles off the coast waiting for the weather to abate, as I considered it unwise to proceed to the waiting area to anchor; as the holding ground is not good, and in S.E'ly winds there is no shelter. The vessel cruised around at reduced speed until the following day.

At 1450 hrs. on the 3rd February, with the weather, and sea conditions much improved, the vessel anchored 1 mile South of Kitts Rock No. 2 buoy (KR2). Two U.S. Coast Guard officers boarded from a local harbour tug after some difficulty in coming alongside, due to the ground swell that was still running. The Officers carried out an inspection of all cargo handling equipment, and shut down systems. The Coast Guard officers then granted permission for the vessel to enter the port of Newington, and disembarked at 1715 hrs.

As there is a port regulation that no LPG carrier can move during the hours of darkness, and that large vessels can only dock, and undock during slack water periods, it was necessary to wait until the following morning before docking.

At 1020 hrs. on the 4th February the Pilot boarded. At 1040 hrs. anchor aweigh, and the vessel proceeded up river. At the mouth of the river there is a shallow patch with only 35 ft. over it at low water. This left only 5 ft. clearance under the keel, and the vessel had to proceed very slowly over it. Four tugs were made fast, 2 for'd and 2 aft, and a U.S. Coast Guard cutter escorted the vessel up-river. The river is narrow, with some very sharp bends. There are 3 bridges, with the port limitations governed by the Noble Island Bridge. The vertical clearance on this bridge is 135 ft., and the horizontal distance is 200 ft. Maximum draft loaded, and on high water is 36 ft. On approaching this bridge it was necessary to let go the 2 for'd tugs, and allow them to pass through the bridge first, making them fast again when the vessel has passed through.

The vessel docked at Dorchester Sea 3 Terminal, at 1315 hrs. 4th February. The berth constructed from 3 cement and steel dolphins, joined together by a steel platform. It stands about 150 ft. out in the river, and is connected to the shore by a narrow footbridge. The mooring arrangements for a vessel of this size are poor. There is not sufficient leads on the head lines or stern lines due to the way the mooring bollards are placed on the shore, and all the weight is taken on the spring lines. Recommended mooring arrangements as supplied by the Port Authority (see "Plan Book"). On the full run of the tide the water runs at up to 4 knots alongside, and because of this there is a port regulation that a tug must stand-by at all times while the vessel is alongside. The cost of this tug, on this call was U.S.$300 per hour, which can add a considerable amount to the overall cost of calling at Newington.

Before loading commenced, a liquid and vapour return line were connected. At 1530 hrs. on the 4th February loading commenced. The vapour return line proved very important as it appeared there was a large percentage of impurities in the product received judging by the performance of the vessel's reliquification plant. It was necessary to return a considerable amount of vapour to the shore tank during loading operations. I issued a Letter of Protest, to the Terminal Manager, protesting the quality of the product.

On docking, the vessel was again boarded by the U.S. Coast Guard, and further inspections were carried out. The Coast Guard personnel remained on board throughout the loading operation; sometimes as many as 6 Officers, but never less than 3 at any one time. It was explained to me by their Commanding Officer that some of the personnel had no experience of LPG vessels, and were on board to learn. In this respect the ship's Officers gave all assistance possible in showing them around. The loading rate was slow, only reaching an average of 400 tonnes/p.h. on full rate, and the shore installations could not supply the product any faster. Loading was completed at 0730 hrs. on Monday, 7th February when the cargo loaded was estimated as follows:

Ship's figure:	23,965.127 tonnes
Surveyor's figure:	23,901.602 tonnes
Shore figure:	23,828.614 tonnes (taken from shore tank gauge reading)

The draft on completion was 33 ft. 00 in. for'd., 34 ft. 08 in. aft.

Owing to port regulations the vessel had to remain alongside until the next daylight high water which was at 0800 hrs. on the 8th February. The vapour return line remained connected during this time, as regulations prohibit releasing uncondensables to the atmosphere, and in view of the impurities in the product it was found necessary to use this vapour return line.

At 0745 hrs. on the 8th February while the vessel was preparing to sail, a Coast Guard Officer boarded and informed me that the visibility in the river was less than 2 miles, and the U.S. Coast Guard would not grant permisson for the vessel to sail. Heavy snow had fallen throughout the previous day, but had cleared during the night, and the visibility at the vessel was over 2 miles. Evidently further down river it was still snowing, and visibility was restricted. The vessel had to remain alongside until the next daylight high water which was 0900 hrs. on the 9th February.

At 0715 hrs on the 9th February while preparing the vesel to sail, the vapour return line was disconnected, and a further survey of the product on board carried out. The result was as follows:

Loss of product as found by ship:	50.283 tonnes
Loss of product as found by Surveyor:	52.568 tonnes

At 0855 hrs. on the 9th February the vessel sailed for the Panama Canal. She was assisted by 5 tugs, as both the Pilot and the U.S. Coast Guard insisted on an additional tug being employed for the down-river passage as the vessel was deep loaded. There was no difficulty in leaving the berth. All stern lines were let go, and the vessel's stern allowed to swing out into the river, while still made fast for'd, with all weight coming on the for'd spring lines. When the vessel was at right angles to the dock all lines were let go, and the tugs pushed her around until she was heading down river. The river passage went without incident, and the Pilot disembarked at 1037 hrs. when approaching Kitts Rock No. 2 (KR2) buoy. The passage commenced at 1100 hrs on the 9th February, 1983.

AUTHORITY: New Hampshire State Port Authority, 555 Market Street, Box 506, Portsmouth, New Hampshire 03801. *Tel:* (603) 436 8500. *Contact:* The Director.
Harbour Master: *Tel:* (603) 436-6421.

PORT SULPHUR, Louisiana: 29.28 N. 89.41 W.

(See Plan Book)

DOCUMENTS, etc: Refer to "New Orleans".

PILOTAGE: A vessel coming into port from sea can arrange to pick up a Bar Pilot (Associated Branch Pilots) by furnishing ETA to the ship's Agents, radio contact by VHF Channel 9 and AM Channels 2738 and 2182. Bar Pilot is exchanged for river Pilot at Head of Passes, Pilot town, Louisiana. River Pilot (Crescent River Port Pilot's Association) can be arranged through ship's Agent in New Orleans and radio contact as above. Vessel awaiting Pilot for departure may remain at dock until Pilot arrives. Advance notice of 3 hours is required for departing Pilots. This can be arranged by the ship's Master with the shipping foreman.

ANCHORAGES: Anchorage is available on East bank of river opposite to Freeport Sulphur Company dock. Depth of water at anchorage is 40 ft., the controlling depth in the river.

RESTRICTIONS: No restrictions for entry because of time of day, nor conditions of tide or draft except the controlling depth of Mississippi River to Port Sulphur (35 ft. – 40 ft. as published in reports by U.S. Army Corps of Engineers).
MAX. SIZE: Max. permissible length – 750 ft., breadth not limited, draft equal to controlling depth of river.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Tropical Radio WNU New Orleans.
TUGS: Tugs not normally required. Shore crews usually handle ship's lines. Tug may join the vessel opposite the dock. Charges for handling ship's lines.
STEVEDORES: Not normally required. When requested, stevedoring services can be obtained from Port of New Orleans; contact ship's Agents for particulars.
MEDICAL: Advance notice for personnel requiring medical service is required through ship's Agents. Hospital facilities are available.
TANKERS: 1 tanker berth, permitted draft equal to or greater than controlling depth of Mississippi River. Diameter of loading/discharge lines are 12 in. and 16 in. respectively.
DENSITY: Density in port not affected by tide. Fresh water.
FRESH WATER: Not available.
FUEL: Fuel may be loaded by barge with vessel at anchor. Fuel transfer is not permitted at dock.
FIRE PRECAUTIONS: No welding repair permitted at dockside. Fuel transfer is not permitted. No other specific precautions observed except for "no smoking" precautions, etc.
GANGWAY/DECK WATCHMEN: Services of watchmen desirable but not required. Port does not furnish this service.
CERTIFICATES: Certificate of condition of cargo handling gear required when use of gear is necessary.
IDENTIFICATION CARDS: Immigration Form I-95.
CONSULS: Consuls offices are located in New Orleans, Louisiana.
REPAIRS: Engine and deck repairs are possible when the dock is not otherwise occupied.
AIRPORT: New Orleans International Airport, served by most major airlines. 55 miles from Port Sulphur.
TIME: Local time is Central Standard Time, except from May/October, Daylight Saving Time is in effect.
HOLIDAYS: Vessels are loaded on all holidays except Christmas Day.
POLICE/AMBULANCE/FIRE: Port Sulphur, Louisiana, 564 – 2525; 564 – 2525; 564 – 3231, respectively.
TELEPHONES: Jacks for telephones are provided at no additional cost to tankers loading at port.
SHORE LEAVE: Crew members are allowed ashore.
DELAYS: Loading will not commence until all holds are clean of scale and other foreign matter.
AUTHORITY: Freeport Sulphur Company, P.O.Box 1025, Port Sulphur, Louisiana 70083. *Contact:* A. J. P. Launey, Operations Manager.

Freeport Sulphur Company, P.O.Box 925, Port Sulphur, LA 70083. *Tel:* (504) 568-4393.

PORT WENTWORTH, Georgia: 32.09 N. 81.08 W.

PILOTAGE: Compulsory. Pilot boards at Savannah Sea Buoy. 48, 24 and 12 hours notice required through Agent.
RESTRICTIONS: Vessels can enter and leave port during hours of darkness and at any stage of the tide, however, depth of water at River Bends controls draft.
MAX. SIZE: See "Berthing".
VHF: Pilot on Channels 16, 14 and 13.
TUGS: Tugs from Savannah assist with berthing and unberthing.
BERTHING: *Continental Can & Paper Co.:* Port Wentworth is the most inland berth up the Savannah River and is 29 miles from the entrance. Max. size of vessel so far to berth was LOA 628 ft. Pilots would accept vessels of 700 ft. LOA but would be unable to swing with this length. The berth is dredged to approximately 40 ft. for a length of 700 ft. Least depth of water in channel from sea to berth 28 ft.

Mean tidal range at berth 8 ft. to 9 ft. Nature of bottom – mud.

Vessel is able to dock at any stage of the tide, however, vessels undock on the flood to swing off berth. (Approximately one hour's flood tide required). The berth is a timber faced concrete wharf of length 240 ft.

Facilities: There are no bulk handling facilities or quay cranes. Three mobile cranes used. There are no Ro-Ro facilities or floating cranes available. Fork lifts are available for handling reels of linerboard. There are no facilities for handling containers as berth is only used by Paper Mill.
DENSITY: 1001.
STEVEDORES: Savannah labour used (Experts on loading paper reels).
FRESH WATER: Not available.
FUEL: Bunker fuel oil available by barge. Diesel oil and lubricating oils also available.
MEDICAL: Doctor and hospital available.
SERVICES: (Available locally or from Savannah). Fresh provisions, repairs, dry dock, airport, surveyors and laundry service.
AUTHORITY: Continental Forest Industries, P.O.Box 4068, Port Wentworth, Georgia 31407. *Tel:* (912) 964-1271. *Telex:* TWX 810-784-5635. *Contact:* J. R. Knight, Traffic Dept.

PROVIDENCE, Rhode Island: 41.48 N. 71.23 W.

PILOTAGE: Compulsory. Pilot boards 1 mile South of Brenton Reef Light Tower (position: Lat. 41° 25′ N., Long. 71° 23′ W.). Send ETA to Agent 24 hours prior to arrival. Pilots (call sign "Rhode Island Pilots") on Channels 16, 12 and 18A.
ANCHORAGES: There is no port anchorage for dry cargo vessels. It was reported that tankers can discharge into barges off Newport.
RESTRICTIONS: Vessels can enter and leave at any stage of the tide, day or night.
MAX. SIZE: Pilot advised max. draft is 38 ft., however, Agent recommends 35 ft. No keel clearance was stated.
TUGS: 9 tugs available 1,600 h.p. – 3,200 h.p. Vessels may dock and undock without tugs, however, they are required for turning in the harbour.

Providence Steamboat Company serving Ports of Providence, Narragansett Bay, Fall River and New England Electric at Brayton Point. 4 tugboats – 24 hour dispatching service. 2×3,000 h.p. tugboats.
RADIO: Station WCC.
VHF: Port Authority on Channels 16 and 18A. Agent on 16, 18A, 13 and 9. Also see "Pilotage".
BERTHING: *No. 6 Municipal Pier:* The berth is the first port hand berth when entering Providence. Distance from entrance to berth 25 miles. Length and beam no limit. Max. draft 35 ft. Least depth of water in channel from sea to berth reported to be 40 ft. Mean tidal range at berth 4.5 ft. Also see "General".
Cargo Handling Facilities: Mobile cranes only available for handling bulk steel and scrap cargoes. 6 mobile cranes, capacity 100 tons to 250 tons. No Ro-Ro facilities. No floating cranes. There are facilities for handling 20 ft. and 40 ft. containers, also sufficient storage space. There is also adequate storage space for breakbulk and palletised cargoes.
DENSITY: 1016.
FRESH WATER: Available, rate 15 t.p.h. – 30 t.p.h.
FUEL: Bunker fuel oil available if vessel has contract. Diesel oil not available. Lubricating oils available.
MEDICAL: Doctor and hospital available.
TANKERS: LPG/LNG carriers – see "Shipmaster's Report" dated February 1985.
REPAIRS: Minor repairs possible, machine shop available.
AIRPORT: At Boston and Green Airport, Providence, R.I.
SURVEYORS: At Boston.
GENERAL: *Quay:* Granite slab construction with a wooden pile facing. A large number of the piles are missing but there are still sufficient to land on. Surface of quay looks very rough and covered in sand and earth but it is metaled under this and will take heavy mobile crawler cranes.
Ship Chandler: Satisfactory, prices reasonable.
Laundry: Satisfactory and prices reasonable. Laundry collected Saturday 1430 hrs. and returned Sunday morning.

SHIPMASTER'S REPORT: September 1982.
Documents: The same as for other U.S. ports.
Pilotage: (Serving all ports in the Narraganset Bay area).

Pilot boards near Brenton Reef Light structure. There is a 24 hour service. Cable address for Pilots is "Rispilot Providence". Pilot launch as well as their shore establishment have VHF and operate on Channels 16 and 10.

Anchorages: There are a number en-route to Providence. Our vessel anchored off Jamestown for 3 days in a well sheltered place and good holding. Max. draft allowed I was informed is about 36 ft.
Berths: There are a number of isolated tanker berths in and around Providence, details of which are found in the Sailing Directions.

A total of 6 berths comprise the Municipal Docks. Most of these are in a poor state of repair although some major work is in progress on repairs. There are 2 cargo storage sheds one of recent construction. There are no quayside cranes but mobile cranes can be hired through the stevedores. These are only suitable for small vessels because of their outreach.

Fresh Water: Fresh water is laid on to the quay.
Stevedores: Normal cargo working is from 0800 hrs. – 1700 hrs. (Monday to Friday), overtime can be worked until 1900 hrs. and also weekends.
Cargo-Imports: Mainly automobiles from Europe and Japan, containers from feeder vessels, steel from Europe by regular liner trade.
Cargo-Exports: Scrap steel, logs, timber and latterly wastepaper.

Our vessel loaded a full cargo of wastepaper (cardboard) of almost 12,000 tons. Stowage factor was 135 C.F./metric ton. 1,400 tons were stowed on deck suitably lashed and covered. The whole cargo was loaded in 27 working days using ship's cranes. Sizes of paper bales varied immensely with weights ranging from 500 kg. to 800 kg.

Bunkers: Not available.
Repairs: Main repair facilities are at Boston (e.g. Bethlehem Steel).
General: It was found difficult to bring the vessel alongside the quay nearer than 4 ft. during the whole stay in port. This was due to strong water outlets on the quay face from the adjacent sewage works.

Vessel should be amply moored to compensate for strong off-shore winds which are quite common even in Summer.

Do not forget the rat guards as huge rats were seen prowling the quay at night!

SHIPMASTER'S REPORT: February 1985.
Port Limits: Entrance to Narraganset Bay, Brenton Tower.
Documents: Standard for U.S.A. Customs & Immigration. Coastwise Documents are sufficient if coming from a U.S. port, no others are asked for.
Pilotage: Rhode Island Pilots, arranged via Agents, require 8 hours' notice. Board off Brenton Tower, listen VHF 16.
Anchorage: Can be obtained 1.5 miles S.E. of Brenton Tower but bottom is rock hard and holding will be doubtful in bad weather. There are allocated anchorages within Narragansett Bay.

Restrictions: Vessels can enter/leave at any time except for LNG/LPG Tankers. These must transit in/out in daylight only, whether they have cargo onboard or just cooldown 'heel' remaining. LPG Tankers are provided with a Coastguard escort vessel, which creates a Safety Zone 2 miles ahead and 1 mile astern, keeping all other traffic clear.
Max. Size: 35 ft. draft was quoted; this vessel went in at 30 ft. comfortably.
Health: Standard U.S.A. requirements.
Radio: WCC Chatham.
VHF: All Channels used as necessary, no special allocation. "Securite" messages for LPG Tanker transit are broadcast on Channels 13 and 16.
Radar: No radar surveillance or Vessel Traffic Scheme (VTS) Control.
Tugs: Join off berth, using their own lines.
Berthing: LPG (Propane) is discharged at Municipal Wharf No. 5, with empty oil drums providing a safety area around the shore manifold, as this is a Public Wharf with free access.

Moorings were adequate, 2 headlines, 1 breast line, 2 springs forward and similar aft, the berth being a continuous quay with rubber tyre fenders.
Bridges: One vertical bridge, clearance 194 ft.
Medical: All facilities available.
Tankers: LPG discharged at No. 5. Municipal wharf at a bulk rate of 750 tonnes per hour, through a 10 in. chicksan. This chicksan is a mobile one connected temporarily into an underground line, and jacked up off its wheels; thus it is rather fragile and demands precise positioning during berthing, and careful control of the list during the discharge as it is at its maximum reach when a 60,000 cu.m. vessel is in ballast.
Density: Salt.
Fire Precautions: LPG Tanker, only those imposed by the ship.
Surveyors: Saybolt attended this LPG vessel on behalf of receivers.
Gangway/Deck Watchmen: None. Ship's accommodation ladder was used to the wharf.
Customs Allowances: Usual U.S.A. allowances but no check of bond made on this visit.
Repatriation: Local Airport with services to Philadelphia for International flights, or by bus – approximately 1 hour ($7.00) to Boston International.
Airport: See above.
Time: GMT minus 5 hours. Eastern Daylight Saving Time GMT minus 4 hours in the Summer.
Emergency: U.S.C.G. "Castle Hill" on Channel 16 VHF, working 22A or 12.
Telephone: At No. 5 Municipal Wharf there is a public telephone booth within 250 ft. of the foot of the gangway, against the wall of a warehouse.
Storing: No known restrictions.
Shore Leave: Bus route into town (2 miles) about 100 yards from No. 5 Wharf.
Identification Cards: Standard U.S.A. Immigration requirements.
Regulations: All LNG/LPG Tankers have to anchor off Brenton Tower for U.S.C.G. inspection (2 – 3 hours), even those with valid letters of compliance and if no LOC then the inspection could take about 6 – 7 hours. During the discharge of LPG, 2 U.S.C.G. personnel are permanently stationed by the shore manifold, and do occasional spot checks onboard.
Delays: See above.

AUTHORITY: Port of Providence, Marine Terminal Building, Municipal Wharf, Providence, Rhode Island 02905. *Tel:* 401-781-4717/8. *Contact:* Eugene G. Neary, Port Director.

REDWOOD CITY, California: 37.50 N. 122.28 W.

(See Plan Book)

DOCUMENTS, PILOTAGE and all general information refer to "San Francisco".
RESTRICTIONS: Though a natural deep water channel extends down the bay to Redwood City there is controlled depth channel 500 ft. wide and 30 ft. deep across San Bruno Shoal. The entrance channel to the port is 2 miles long and 30 ft. deep (all depths are at MLLW) and 300 ft. to 350 ft. wide. There are 2 large turning basins at either end of the port harbour channel.
HEALTH: See "Health: All ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
BRIDGES: The San Mateo Hayward Highway Bridge with a vertical clearance of 138.5 ft. and horizontal of 500 ft. crosses the ship channel.
BERTHING:
Port of Redwood City:

Berth	*Length* (ft.)	*Depth* (ft.)	*Remarks*
No. 1	500	35	General cargo and bulk cement through pneumatic pipelines.
No. 2	355	35	
No. 3	450	35	General cargo, heavy lifts and scrap metal.
No. 4 (New Berth)	450	35	General cargo USGS facility.
No. 5	500	36	Designed to accommodate large tankers, general cargo and heavy lift cargoes.

Private Facilities:

Berth	*Length* (ft.)	*Depth* (ft.)	*Remarks*
Ideal Cement Co.	649	12	Barge unloading dock. Used for storage (not in use).
Lone Star Industries	496	18	Barge dock for loading cement.
Lone Star Industries	20	16	Oil berth. Not in use.
Leslie Salt Co.	200	33	Elevator berth used for loading crude bulk salt.

Capabilities include complete facilities to handle LASH (Lighter Aboard Ship) system.
DEVELOPMENTS: See "Plan Book".
AUTHORITY: Port of Redwood City, 475 Seaport Boulevard, Redwood City, California 94063. *Tel:* (415) 365-1613. *Telex:* WUT 172251 Portrdcy. *Contact:* Fred J. Di Pietro, Port Manager.

RICHMOND, California: 37.56 N. 122.25 W.

(See Plan Book)

(A) STANDARD OIL COMPANY OF CALIFORNIA TERMINAL.
(B) OTHER TERMINALS AT RICHMOND.

(A) STANDARD OIL COMPANY OF CALIFORNIA TERMINAL.

DOCUMENTS and all general information, refer to "San Francisco".
LOCATION: Richmond Long Wharf and Point Orient Wharf are situated on N.E. side of San Francisco Bay, a protected harbour. The refinery and storage tanks are near the wharves.

The exact position of the Long Wharf is Lat. 37° 55′ 20″ N. Long. 122° 24′ 35″ W. Wharf heading is 324° to 144°.

The exact position of the Point Orient Wharf is Lat. 37° 57′ 20″ N., Long. 122° 25′ 39″ W. Wharf heading is 356° to 176°.

There is adequate anchorage and room for manoeuvring in the bay.
DOCUMENTS: To clear vessel for entry, the Custom House requires the following documents:

Last Foreign Port Clearance.
Vessel's Register.
Vessel's Tonnage Tax Receipts.
Master's Oath of Entry.
Certificate of Financial Responsibility.
General Declaration.

If vessel is arriving from (or departing for) a foreign port, Master must also furnish:

6 Copies Crew List.
3 Copies Store List.
3 Copies Passenger List.
3 Copies Curio List.
4 Copies Cargo Manifest.

The Boarding Inspectors may require additional information.
PILOTAGE: Federal and/or State Regulations require licensed pilotage in and out of San Francisco Bay. Make arrangements for this ahead of time with the Ship's Agent.

Pilots may be picked up near the Light Buoy, 9 miles W.S.W. of the entrance to San Francisco Bay: Lat. 37° 45.0′ N., Long. 122° 41.5′ W.

To signal for Pilots:
In Fog – Approach, San Francisco approach Lighted Horn Buoy "SF", lay to, and blow four long blasts.
When Clear – By day, hoist International Code Flag "G".
By night, make four long flashes on signal light.

When necessary, Pilots may be contacted on 2182 kHz or VHF Channels 10 (156.5 MHz) and 16 (156.8 MHz). The Pilot boats may also be contacted by radio telephone.

The Pilot will serve as the Mooring Master until the ship is berthed.

If vessel goes to anchorage, a licensed Bay Pilot will be required before vessel can proceed to berths.
MAX. SIZE: The main ship channel into San Francisco has a project depth of 50 ft. However, the 35 ft. depth of the Southampton Shoal channel restricts the size of ships to wharves.
LIGHTENING: When a lightening operation is necessary the terminal management will direct the ship to Anchorage No. 9. The ship to be lightened will install fenders before the lighter ties alongside. The terminal will provide the fenders. The lightening Supervisor and ship's officer will hold a meeting to discuss the cargo transfer. During transfer, follow the same precautions and safety regulations that apply to cargo transfer at the wharf. The transfer rate will be regulated by the lightening vessel. The lightening Supervisor will observe all the lightening operations. The terminal will provide oil spill recovery equipment during lightening.
HEALTH: See "Health: All Ports" before first U.S.A port (Albany). Illness reports made to San Francisco Quarantine Station.
Quarantine and Pratique: Vessels are not required to pass a quarantine inspection. It is necessary that vessels notify their Agents at least 2 days in advance of arrival in San Francisco Bay if sickness or disease is on board. The Agent shall notify Public Health for further action if necessary.

All vessels arriving from foreign ports will require clearance by the following U.S. Government Agencies: Customs House, Immigration Service, Department of Agriculture.

The vessel's Agent should make arrangements for the inspectors to board dockside or at anchorage.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO/VHF: The official language of the terminal is English. Therefore, vessel must have personnel on duty at all times who can communicate in English with the wharf personnel.

San Francisco Harbour Advisory Radar System, designated bridge-to-bridge frequency: VHF Channel 13 (156.65 MHz).

Federal communication regulations require that at any time VHF radio is in operation, Channel 16 must be monitored (156.8 MHz distress and calling frequency).

The U.S. Coast Guard requires all vessels anchored in San Francisco Bay to maintain a radio listening watch on VHF-FM Channel 13 (156.65 MHz) when the wind is 20 knots or greater. Any ship not equipped with Channel 13 shall maintain the listening watch on Channel 16 (156.8 MHz).

The 2-3 MHz radio telephone call letters for the San Francisco Bay area are KLH.

Richmond Long Wharf (radio call KCE 373 – Chevron Shipping) is equipped with VHF radio, manned 24 hours per day. Channel 10 (156.5 MHz) is the operating frequency. While at anchor, in San Francisco Bay, vessels should maintain normal listening watches on VHF Channel 10.

ETA Requirements:

The Master of a vessel bound for San Francisco Bay is requested to advise Chevron Shipping (Cables address: Chevronship Richmond Sanfrancisco) of ETA, 7 days, 3 days and again 1 day (24 hours) before arrival at the wharf. First ETA message should include:

Estimated time of arrival at the wharf (local time).
Last port of call.
Estimated deep draft on arrival.
Quantity of ballast to be discharged.
Quantity and grade of cargo to be transferred.
Distance from bow to cargo and bunker manifolds.
Size and type of cargo and bunker connections.
Quantity and grade of bunkers and lubes required.
Quantity of fresh water required.
Number of crew replacements expected.
Amount of provisions and stores to be loaded.
Repair work anticipated.
Make 24 hour ETA as accurate as possible and whenever arrival time changes, by 1 hour or more, send a correcting message promptly.

BERTHING: At least 1 hour before docking contact Chevron Shipping, in Richmond, by VHF radio (Channel 10, 156.5 MHz) and request a berth assignment. They will try to berth vessel as soon as it arrives. However, if no berth is available, anchor in the prescribed anchorage (as directed by the Captain of the Port) and maintain radio contact with Chevron Shipping, Richmond.

Recommended Docking Practices: The terminal require the use of adequately powered tugboats when docking at the wharves. Chevron Shipping Company has two tugs that can be hired, provided arrangements are made prior to vessel's arrival.

(a) In order to ensure maximum safety while berthing and unberthing ships at Long Wharf and Point Orient Wharf, the following minimum tug assistance is required:

			Minimum Total Horsepower Required	
Vessel Size		*No. of Tugs*	*Mooring*	*Unmooring*
Up to	20,000 d.w.t.	1 or more	1,000 h.p.	1,000 h.p.
20,001 to	50,000 d.w.t.	2 or more	2,000 h.p.	1,500 h.p.
50,001 to	80,000 d.w.t.	2 or more	3,000 h.p.	2,000 h.p.
80,001 to	100,000 d.w.t.	2 or more	3,500 h.p.	2,500 h.p.
Over	100,000 d.w.t.	2 or more	4,000 h.p.	3,000 h.p.

(b) Bow thrusters are acceptable provided the horse power rating equals or exceeds the minimum requirements.

(c) Always stem the tide when docking.

(d) If possible, avoid steep-angle approaches.

(e) In view of the strong tidal currents at both wharves, make sure vessel is moored securely. Check on the number of lines and their strength. Pay special attention to the fore and aft leads.

Gangway: Rig gangway properly and safely, with handrails and adequate illumination, suspend a safety net under gangway. If vessel does not have a gangway, the pier has some available in limited sizes. However, the Company cannot be liable for the manner in which the ship's crew rigs the gangway. Berths 1 and 4 have permanent gangways installed.

There are 2 piers that accommodate oil transfers. They are referred to as Richmond Long Wharf and Point Orient Wharf.

Long Wharf: Richmond Long Wharf, a "T"-head pier, has an overall length of 3,396 ft. It consists of concrete and wooden piles and a concrete superstructure connected to the shore, 4,200 ft. away by a piled causeway. The fender-to-fender width is 132.5 ft.

Berths 1, 2 and 3 deck level is 15.5 ft. above MLLW. Berth No. 4 deck level is 25 ft. above MLLW.

There are four deep water berths on the West side. Berth No. 1 is 950 ft. long, Berth No. 2 is 650 ft. long, Berth No. 3 is 700 ft. long and Berth No. 4 is 1,050 ft. long. They are numbered 1 through 4 from South to North. Water depth is maintained at 38 ft. at MLLW. There are two inner Berths No. 9 and No. 11 that are used primarily for barge loading or discharging. Water depth is maintained at 18 ft. at MLLW.

Point Orient: The Point Orient Wharf, an "L"-head pier, is 2.25 miles North of the Long Wharf. It is 504 ft. long and 60 ft. wide. It is supported on wooden piles and has a causeway that extends 1,200 ft. to the shore.

There is one ship berth, No. 1 where the water depth is 32 ft. at MLLW. There is also one barge berth No.2. Deck level is 14.5 ft. above MLLW.

LOADING AND UNLOADING: Berth No. 2 is fitted with 4 in., 6 in, and 8 in. hoses for cargo transfer. Berth No. 1 has two 12 in. and two 16 in. Chicksan loading arms. Berths No. 3 has two 8 in. and four 12 in. Berth No. 4 has two 12 in. and four 16 in. arms.

NOTE: All terminal flange facings are carbon steel ANSI 150 lbs. rating.

No cast iron is allowed outside of (and including) the first valve on the vessel's cargo or bunker system.

Berth vessel so that its manifold is positioned within the horizontal and vertical limits of the hoses or Chicksan arms.

Cargo Transfer:

(a) Pre-Transfer Declaration of Inspection – Before cargo transfer begins, the Wharfmaster and Vessel Co-Ordinator will board vessel. They will discuss the safe transferral of your cargo. They will also review the Declaration of Inspection and sign it with you when all items are understood and agreed upon.

(b) Inspection During Cargo Transfer – These representatives will also visit the ship during cargo transfer. With the approval of Deck Watch, they will check to ensure that safe working practices are being observed by both ship and wharf.

(c) Minimum Cargo-Handling Crew – When transferring cargo or ballast, the officer in charge of cargo transfer must have at least two assistants: one to maintain watch on the open-deck cargo transfer manifolds; the other to assist in handling valves, tank gauging, or shutdowns of transfer pumps in case of emergency. Other crew members may be needed depending on the size and complexity of ship transfer system. These requirements will be developed at the pre-cargo-transfer conference. When loading ship's bunkers and lubes, the Master and Chief Engineer will assure the terminal that this transfer will be handled in a similar manner.

Loading Rates: Several products can be loaded at each berth. Loading rates depend on a multitude of situations. These will be discussed at the pre-cargo-transfer conference.

Unloading Rates: Unloading rates also depend on many things – vessel's pumps, the size and availability of terminal lines and tanks, refinery operations, etc. The pre-cargo-transfer conference will develop the estimated unloading and deballasting rates and procedures.

To expedite cargo transfer, it may be necessary to use booster pumps. To eliminate hazards to this equipment, notify the Berth Operator 15 minutes ahead of time whenever you are going to: Stop or change any cargo transfer rate, strip any tanks, switch tanks.

Maximum Temperature and Pressure Limits: The terminal cargo-handling system is designed to comply with the 150 lbs. ANSI flange rating. For example: 275 psig at 100°F, 240 psig at 200°F, etc. Special restrictions apply for aromatic and other hazardous stocks. These will be explained during the pre-cargo-transfer conference.

Tank Gauges: To ensure proper handling of each cargo, the terminal requires U.S. flag company vessels to be gauged every *two* hours and matched with shore-tank gauges. Non-company vessels are not required to gauge, but may wish to compare their gauges against the shore gauges. Transfer operations will shut down immediately if:

— the transfer rate is over 1,000 b.p.h. and there is a discrepancy in the tank's gauges that amounts to more than 20% of that transfer rate.

OR

— the transfer rate is under 1,000 b.p.h. and there is a discrepancy in the tank's gauges that amounts to more than 30% of that transfer rate.

For example: Vessel arrived with 120,000 bbls. of crude. First 2 hour gauge at 1000 hrs. Estimated rate 7,000 b.p.h.

	Ship	*Shore*	*Difference*
1000 hrs.	14,241	13,996	245
1200 hrs.	28,435	25,643	2,792

As the estimated transfer rate is 7,000 b.p.h., the allowable difference would be 1,400 bbls. The 245 bbls. difference at 1000 hrs. is OK and transfer should continue. The 1200 hrs. gauge of 2,792 bbls. difference is out of tolerance and the transfer should be discontinued until discrepancy can be resolved.

BALLAST: Ballast facilities at Richmond Long Wharf only (max. capacity 25,000 bbls. – normal capacity 15,000 bbls.). None available at Point Orient. However, arrangements for this to be made through Agent before arriving at the wharf. All ballast to be discharged must be pumped to shore while berthed at wharves.

POLLUTION: The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste in the waters of San Francisco Bay which causes a film or sheen on the water or discolours it or causes a sludge or emulsion beneath the surface of the water.

Regulations enforced by the Bay Area Pollution Control District also prohibit the emission of smoke and soot. Vessel can be fined if it emits visible smoke (Ringelmann 1) for more than 3 minutes in one hour, or blows its boiler tubes enough to create a soot nuisance on shore.

In addition, the terminal has certain regulations designed to eliminate obnoxious odours. Vessel may, therefore, be required to follow special procedures before tank cleaning, loading or ballasting. If, in spite of precautions, vessel does cause such odours, loading or unloading operations may be stopped.

OIL INSPECTIONS: To control product quality, the terminal has several requirements for sampling and gauging the oil as it is being transferred. These requirements will be explained during pre-cargo transfer conferences. Outside inspection service is provided by the following independent companies:

Charles Martin & Company, 488 Wright Avenue, Richmond, California 94802. Tel. (415) 232-5270.

E. W. Saybolt Company, 889 Ensenada Avenue, Berkeley, California 94710. Tel. (415) 525-0417.

Caleb Brett U.S.A. Inc., P.O.Box 673, Station A, 310 29th Street, Richmond, California 94808. Tel: (415) 236-1733. Telex: 171-330.

S. G. S. Control Services Inc., 2917 MacDonald Avenue, Richmond, California 94804. Tel: (415) 236-3007.

MEDICAL: No facilities at wharves. Local ambulance may be reached at: Cadillac Ambulance Service (415) 234-3242; Alhambra Air-ground Ambulance Service (air) (415) 228-1096; California Aviation Service Inc. (air) (415) 569-3855.

TIME: Local time: Pacific Standard Time GMT minus 8 hours or Zone plus 8 hours.

(Note: From the last Sunday in April to the last Sunday in October, this is modified by use of Daylight Time to GMT minus 7 hours or Zone plus 7 hours)

All communications should refer to local time.

FRESH WATER: Potable water available. Make arrangements through Agent.

FUEL: Many grades of bunkers, diesel and lubricating oils are available in bulk or drum quantities. Agents order them from Supply and Distribution or Chevron International at least 48 hours before vessel arrives, otherwise, vessel may be delayed.

To take on bunkers and diesel, vessels must be able to connect to terminal's 4 in., 6 in. and 8 in. hoses in Berth 2, connect to 8 in. Chiksan in Berth 3, to 12 in. Chiksans in Berths 1 and 4.

PROVISIONS: Provisions and stores are available through ship's Agent. However, they will be loaded only at the Richmond Long Wharf, and only when the loading does not interfere with cargo or ballast transfer. No hydrocarbons, paints, detergents or other polluting materials will be allowed to go aboard the vessel by means of slings or cargo nets. If the vessel is large and is not equipped with booms, the Agent may need to supply a spark-proof crane for the loading. Stores will not be handled by wharf personnel. Contact Wharf Master for weight restriction of equipment on the wharf.

REPAIRS: There are many major repair facilities located in the San Francisco Bay Area. The Agent can probably make arrangements for use of their services.

Repairs at the terminals are not normally permitted on non-company vessels, unless it is absolutely necessary in order to move the vessel. Any repair work that would necessitate hot work must have approval from refinery management. No repairs will be allowed that would delay cargo transfer or lengthen the transfer time.

REPATRIATION: Facilities exist for repatriating of crew by sea or air. Make the arrangements through ship's Agent, and notify the terminal management.

STORING: See "Prelims", page viii.

1. Vessels cannot be stored by barge while at docks; however, they can be stored by small trucks.
2. Storing by truck requires the truck to be cleared by operations and towed into location. No paint or hydrocarbon may be lifted by net over local waters. This is described in the "Provisions".
3. Trucks can come alongside vessel (within 50 ft. of vessel).
4. There are no forklifts available at the terminal and the rental of one requires the rental of a "spark approved" forklift. Arrangements must be made with the Wharf Master.
5. All customs rules and regulations are enforced.
6. Local riggers can be employed to help get stores aboard vessel, but the vessel must make arrangements with ships Agents, and all storing of vessels must be approved by Wharf Master.

Also see "Provisions".

SHORE LEAVE: Chevron Shipping Co. provides bus service from the Long Wharf to shore and from there ship's personnel can connect with local taxi or bus service nearby. For transit – system information, call (415) 232-5665.

No ship's commercial passengers are ever allowed to board or leave a ship at the wharves.

GENERAL:

Tides and Currents: The maximum tidal range is approximately 9 ft. and the mean range is 4.2 ft.

Tidal currents in the wharf area can be very strong. They generally run in a North'ly and South'ly direction.

Winds: Winds of varying strength may come from any quarter. The normal wind, however, is from the N.W. in Summer, and S.W. in Winter.

Visibility: The visibility in this area of San Francisco Bay is generally fair to excellent, with occasional late evening fog in the Summer lasting until noon the following day. In the Winter, morning or tule fogs frequently occur. The Winter fogs are generally more dense than those of Summer.

Weather: The local weather is usually moderate, with average temperatures ranging between 40°F and 85°F.

The U.S. Coast Guard radio stations make scheduled weather broadcasts (preceded by a preliminary call on 500 kHz and 2182 kHz) at the times and on frequencies shown below:

Radio Telegraph – NMC San Francisco, Calif. 420 kHz, 2000 hrs. and 0900 hrs. PST.

Radio Telephone – NMC San Francisco, Calif. 2670 kHz, 1800 hrs. and 0600 hrs. PST.

VHF Radio – KHB 49 San Francisco, California 162.55 MHz.

Navigation: Master is required to notify the U.S. Coast Guard Captain of the Port at least 24 hours before arriving in the Bay. Master will satisfy this requirement automatically if he reports in accordance with the U.S. Coast Guard's voluntary Automated Merchant Vessel Report (AMVER) System.

On entering the Bay, follow the traffic-separation scheme shown on United States Coast and Geodetic Survey Chart 5072.

Charts and Publications: The following official charts and publications are recommended for use when entering San Francisco Bay:

United States Coast & Geodetic Survey Charts:
No. 5002 – San Diego to Point St. George.
No. 5072 – Gulf of the Farallones.
No. 5532 – San Francisco Entrance.

West Coast of North and South America Tide Tables, published by U.S. Coast and Geodetic Survey.

Tidal Current Charts – San Francisco Bay, published by U.S. Coast and Geodetic Survey.

Coastal Pilot No. 7 for West Coast of United States, published by U.S. Coastal and Geodetic Survey.

U.S. Coast Guard Regulations 33 CFR 154, 155 and 156, published by U.S. Coast Guard.

Current Edition of Operating Manual, S.F. Harbor Advisory Radar, published by U.S. Coast Guard.

Light Lists for United States and Possessions, published by U.S. Coast Guard.

Radio Navigational Aid, Pacific and Indian Oceans (Publication No. 117113), published by U.S. Hydrographic Office.

Wharf Communication: The Richmond Wharves are equipped with a positive and dedicated ship-to-terminal radio communication system. On arrival, vessel will be provided with one radio (walkie-talkie). It must be with an English-speaking person on duty at all times. Vessel will be instructed in the proper use of this radio during the pre-cargo transfer conference. If the radio is not returned, a charge of $2,500 will be levied.

Telephone: A telephone will be placed on the open deck of the ship near the gangway. It is to be used for the local calls only. the following is a partial list of commonly used numbers:

Wharf Master	4388
Vessel Co-Ordinator	4620
Head Operator (PAD) Long Wharf	4494
Terminal Superintendent	2314

There are two public telephones on the Long Wharf for outside calls, one between Berths 1 and 2 and one at Berth 3. There is also a public telephone at Point Orient Wharf.

SAFETY REGULATIONS:

A. General – Observe the following regulations AT ALL TIMES while berthed at the wharves:

1. Boiler-Tube Blowing – Do not blow boiler tubes and take every precaution to prevent sparks from escaping from the funnel. If vessel safety is at stake, stop transfer operations and move the ship to anchorage before blowing the tubes. In case vessel has boiler trouble, notify Chevron Shipping Co. who in turn will notify the Air Pollution District Control.
2. Cargo Tank Tops:
   (a) Before berthing, all tank tops, ullage plugs, and gauge tapes must be closed and dogged down unless the Master certifies that the tanks are gas free.
   (b) Cargo and bunker tank tops must be kept closed. This also applies to permanent ballast tanks.
3. Cargo Connections, Unused – blank unused cargo and bunker connections. A proper-sized bolt in *every other hole* is the minimum requirement. Offshore risers on systems being used are to be fully bolted.
4. Engines – Keep the engines ready and the vessel trimmed so it can leave the piers under short notice. If the vessel becomes unable to get underway 2 tugs of adequate size will be standing by at all times.
5. Fire Fighting – Keep fire and emergency equipment in readiness. At least 2 fire hoses to be uncoiled and laid out at the vessel's manifold area. Place two portable fire extinguishers near the manifold.
6. Gas Venting:
   (a) Ullage Holes – Keep all ullage or gauge tapes completely closed (not secured) except for intermittent periods needed to ullage or gauge ship's tanks.
   (b) Flame Screens – When open, all ullage ports must be protected by clean, well-fitted flame arrestors of wire-gauge screens: these must be of an approved type and have no defects.
7. Gas Freeing and Tank Cleaning – Do not gas-free or clean any tanks at berth without prior approval of terminal management.
8. Gangways – Tend the gangway and keep it safely rigged, secured and lighted.
9. Mooring Lines – Tend mooring lines to keep them taut and keep the vessel in position. See that tension winches are on manual brake. During ebb tide and East winds, when the ship has a tendency to drift away from the pier, tend the mooring lines with special care.
10. Portholes – Portholes and passageway hatches facing the cargo transfer area must remain closed. Portholes facing the wharf must also remain closed or be suitably screened.
11. Repairs – While at berth, do not perform any repair work, hot work, or maintenance work without prior approval from the terminal management. Hot work will require *written* approval by terminal management.
12. Radio – At all times in port, keep the radio transmitter and aerials switched off and grounded. Portable radios (walkie-talkies) that are certified intrinsically safe may be used.
13. Sea Suctions and Bilge Valves – See that all ship's sea, bilge, and overboard discharge valves connected to the cargo system are tightly closed, lashed and sealed in accordance with U.S. Coast Guard Regulation 33 CFR 155.
    The seals are *not* to be broken while berthed except in the presence of the Vessel Co-Ordinator or in case of emergency.
14. Sewage Discharge – Install deflection plate over the sewage discharge if it is capable of discharging on the wharf.
15. Smoking – Allow smoking on board only in places which the Master has personally approved. There is to be NO SMOKING ON THE WHARF OR WEATHER DECK OF THE VESSEL AT ANY TIME.
16. Stern Discharge Line – Keep the stern discharge line, if any, blanked at all times.
17. Towing Wires – Keep the towing wires (fire wires) for emergency use, lowered to the water's edge from the offshore bow and stern. Tend them to keep the "eye" near the water's edge, where they can be reached by tugs in case of emergency.

B. Cargo Transfer – Observe the following additional regulations DURING CARGO TRANSFER:

1. Air Intakes and Air Conditioning Units – Close any central air-conditioning or fresh-air intakes which might take in gas. Close all intakes within a combined total of 100 ft. vertically and horizontally of cargo tank openings and venting points. External window-type air-conditioning units that face the cargo transfer area must be kept disconnected.

2. Communication – Ship/Shore – Station a responsible member of the crew on the loading deck by the transfer connections to maintain communications or remain in visual contact with the Berth Operator. He is to advise the Operator when changes in rates are required, using radio pack sets or voice contact.
3. Passageway hatches to open weather decks facing the cargo area and wharf must be kept secured except for momentary passage.
4. Electric Lights and Cables – Use only vapour-proof electric lights of an approved type, on the open deck. Disconnect portable electrical equipment on the open deck unless certified for use in hazardous areas.
5. Galley Fires – Light no galley fires unless you can first assure the terminal that they present no hazard to the cargo transfer.
6. Hand Torches (Flashlights) – See that hand torches used during cargo transfer are of an approved type, certified as safe in hazardous locations.
7. Hoses:
   (a) Before transfer, inspect cargo-loading hoses or arms to see that they are in good condition, *fully bolted,* and properly connected.
   (b) The hoses must be supported at not more than 12 ft. intervals with a bridle or mat to minimise kinks or chafing. They must not be bent to a radius less than 12 times their diameter. Do not use single slings when taking aboard or supporting during transfer.
   (c) The hose or arm-to-riser connections must have drip pans of adequate size installed under them.
   (d) When cargo transfer has concluded, each hose/arm is to be drained via the drain valve and blank-flanged *before* being removed from the vessel. The Terminal Head Operator is to be aboard the vessel to oversee the connecting and disconnecting of the loading arms and, also, to alert crew members when passing the arms.
8. Scuppers – All deck scuppers must be plugged and cemented oil tight or sealed with a Coast Guard approved device. Do not remove the plugs until ship has departed, except when necessary to drain off rain water. In such cases, supervise the draining closely and replace the plugs immediately. Install splash boards (on dock side) over scuppers. Cement is to be supplied by the ship.
9. Special Stock Hazards:
   (a) Static-Ignition Hazards – Some kinds of stock require special precautions because of the static they accumulate. Their handling will also be fully discussed during pre-cargo transfer inspection. Lube oils may be loaded through ship's risers or connections to butterworth plates. No overall loading is permitted.
   (b) Hydrogen-Sulfide Hazards – Some kinds of crude may contain dissolved hydrogen-sulfide or mercaptans in concentrations which would cause the gases vented during tanker ballasting to be hazardous or odorous. Do not ballast or load into cargo tanks that might contain H_2S or mercaptan vapours, unless the tanks have been passed for loading by the wharfmaster. The vessel must proceed to sea for clean-up prior to loadback if the wharfmaster deems the tanks unsuitable for loadback.
   (c) Aromatic-Stock Hazards – Special precautions are required for toxic cargoes such as aromatics. It is recommended that Masters review the instructions by Owners/Charterers about toxic chemical hazards.
10. Valve Shut-off – Many new tankers have motor-operated valves, operated from a central location. Never operate these valves to close off against full oil-delivery rates unless the valve closure action takes at least 60 secs. Closure times less than 60 secs. may result in surge and hammer of sufficient force to rupture the loading arm/hoses.
11. Ventilators – Keep ventilators suitably trimmed with regard to tank vents and prevailing wind conditions to prevent entry of flammable vapours.

AUTHORITY: Standard Oil Co. of California, Richmond, California.

(B) OTHER TERMINALS AT RICHMOND

BERTHING: *Levin-Richmond Bulk Commodity Wharf:*
Owners: Levin-Richmond Terminal Co.
Operated by: Levin-Richmond Terminal Co.
Use: Receipt and shipment of various dry-bulk commodities.
Water Depth: 35 ft. - 36 ft.
Mechanical handling facilities: On wharf; 4×50 ton electric, travelling full portal gantry cranes, each with 100 ft. boom and 2×45 ton electric travelling full portal gantry cranes, each with 118 ft. boom.
Dimensions: Length of face 600 ft.
Remarks: 50,000 sq.ft. warehouse. Railroad on premises.

Santa Fe Sugar Dock:
Owned and operated by: Atchison, Topeka and Santa Fe Railway Co.
Use: Receipt of sacked sugar by inland waterway vessels for transfer to railroad cars.
Dimensions: Length of face 545 ft., lower end 51 ft.; depth alongside at MLLW 24 ft.

Levin Metals Corporation:
Owner: City of Richmond Port Commission.
Operated by: Levin Metals Corporation.
Use: Scrapping of ships, consideration of scrap and export loading of cargo.
Dimensions: Length of face 555 ft. each; Pier 1 depth 35 ft. – 38 ft., Pier 2, 17 ft.

Richmond Container Terminal No. 3:
Owners: City of Richmond.
Operated by: Matson Terminals Inc.
Use: Receipt and shipment of containerised cargo in foreign and domestic trade.
Dimensions: Length of face 1,009 ft.; depth alongside at MLLW 41 ft.
Mechanical handling facilities: Two rail-mounted dock cranes, two transfer devices and two bridge cranes. Semi-automated operation.
Remarks: Face of wharf is in line with the face of adjacent wharf, providing 1,550 ft. of continuous berthing. Area of container terminal – 16 acres plus back-up area.

Richmond Terminal No. 4 Wharf:
Owners: City of Richmond.
Operated by: Richmond Terminal Agency, Pacific Molasses Co. Ltd., & Dorward & Sons Co.
Use: Bulk Liquids.
Dimensions: Length of face 1,047 ft.; South side 175 ft.; North side 100 ft.; depth alongside at MLLW 32 ft. - 50 ft.

Canal Industrial Park:
Owner: City of Richmond Port Commission.
Operated by: Canal Industrial Park (Pasha Truckway).
Use: Import service and delivery of foreign automobiles; ship repairs.
Dimensions: Length of face 700 ft.; depth alongside at MLLW 35ft.; usable berthing space with dolphin 900 ft.
Mechanical handling facilities: Mobile handling equipment available. Complete range of crane and ship facilities for major ship repair.

TANKERS: *Atlantic Richfield Tanker Dock:*
Owned and operated by: Atlantic Richfield Co.
Use: Receipt and occasional shipment of petroleum products; bunkering vessels.
Dimensions: Length of face approx. 250 ft.; lower and upper sides 40 ft. each; depth alongside at MLLW 35 ft.

Atlantic Richfield Barge Dock:
Owned and operated by: Atlantic Richfield Co.
Use: Receipt and shipment of petroleum products by barge; bunkering vessels.
Dimensions: Length of face 150 ft.; depth alongside at MLLW 34 ft.

Richmond Terminal No. 1 Wharf:
Owners: City of Richmond.
Operated by: Richmond Terminal Agency.
Use: Receipt and shipment of petroleum products, chemicals and petrochemicals.
Dimensions: Length of face 557 ft.; depth alongside at MLLW 35 ft.

Richmond Terminal No. 2 Liquid Cargo Wharf:
Owners: City of Richmond.
Operated by: Richmond Terminal Agency.
Use: Receipt and shipment of vegetable oils, chemicals and petrochemicals.
Dimensions: Berthing length 720 ft.; depth alongside at MLLW 35 ft.

Texaco Wharf:
Owners: Texaco Inc.
Operated by: Texaco Inc.
Use: Receipt and shipment of petroleum products.
Number of Berths: 1.
Water Depth: 35 ft.
Dimensions: Length of face 600 ft.

Time Oil Company Wharf:
*Owned and operated by:*Time Oil Co.
Use: Receipt and shipment of petroleum products.
Number of Berths: 1.
Water Depth: 35 ft.
Special Remarks: 3×10 in. pipe-lines extend to 25 steel storage tanks in rear; total capacity of 618,000 barrels.

Union Oil Co. Tanker Dock:
Owned and operated by: Union Oil Co. of California (also services GATX Terminal).
Use: Receipt and occasional shipment of petroleum products; bunkering vessels.
Dimensions: Length of face 225 ft.; lower end 45 ft.; upper end 45 ft.; depth alongside at MLLW 35 ft.
Mechanical Handling Facilities: Hose handling at wharf is by ship's gear and small tractor crane.

Union Oil Co. Barge Dock:
Owned and operated by: Union Oil Company of California.
Use: Shipment and occasional receipt of petroleum products; bunkering vessels.
Dimensions: Length of face 150 ft. (approx.); lower end 45 ft.; depth alongside at MLLW 35 ft.
Mechanical Handling Facilities: Hose handling at wharf is by ship's gear and small tractor crane.
Remarks: Wharf and Tanker Docks are spaced about 230 ft. apart; together they provide 1 large tanker berth.

BANKS:

Bank of America, Richmond Main Office, 261 Harbour Way South, Richmond, California. Tel: 415-231-1729. Telex: TWX (San Francisco) 910 372 7720.

Central Bank, Civic Center Office, 2705 Macdonald Avenue, Richmond, California. Tel: 415-233-5710. Telex: TWX (Oakland) TLX 17-1329.

Crocker National Bank, 3900 Macdonald Avenue, Richmond, California. Tel: 415-235-6458.

The Mechanics Bank, Civic Center Office, 22nd and Macdonald Avenue, Richmond, California. Tel: 415-222-0340. Telex: TWX 910 382 8167.

Wells Fargo Bank, 1221 Macdonald Avenue, Richmond, California, Tel: 415-232-3435. Telex: TLX 34-0284 (San Francisco-International).

EMERGENCY CO-ORDINATION CENTRE: The Emergency Co-ordination Center for the Port of Richmond is the U.S. Coast Guard, San Francisco, California. CA. Tel: (415) 556-2103.

SURVEYORS: Surveyors are available from various San Francisco Bay Area companies and organisations.

STORING: See "Prelims", page viii.

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. Normal U.S. Customs Regulations apply.
6. Yes.

AUTHORITY: City of Richmond, Port of Richmond, City Hall – Room 301, 27th Street and Barrett, Richmond, California 94804. *Tel:* (415) 231-2110. *Telex:* TWX 910-382-6016. *Contact:* Sal N. Bose, Port Director.

RICHMOND, Virginia: 37.32 N. 77.25 W.

(See Plan Book)

LOCATION: On the James River, 90 miles from Chesapeake Bay.

DOCUMENTS: See "Hampton Roads".

PILOTAGE: Entrance through Hampton Roads. Virginia Pilots Assn. original contact same as for Norfolk, Virginia. Pilots will arrange for change of Pilots to proceed up the James River.

ANCHORAGE: Hampton Roads anchorage, also river anchorage approximately 40 miles up river, shown as "Upper Brandon" on charts.

RESTRICTIONS: Navigation of river above Upper Brandon recommended in daylight hours, except vessels under 250 ft. length.

MAX. SIZE: Max. length recommended by Pilots 550 ft., draft 21 ft. 6 in. any tide, depth of channel 25 ft. MLW tide, change 3 ft. 5 in.

HEALTH: See "Health: All ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C. Quarantine Station

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: See "Hampton Roads".

TUGS: Not needed for berthing unless vessel is to be turned around on arrival. Tug available at Terminal on reasonable notice.

BERTHING: Vessels berth alongside wharf 1,250 ft. long. Depth 25 ft. at MLW.

Turning Basin: 700 ft. × 1,600 ft.

CRANES: 1×10 ton electric crane, 3 additional cranes (65 ton, 35 ton and 15 ton).

BRIDGES: 2 bridges across river between Hampton Roads and Richmond. No specific time or notice required.

STEVEDORES: Arrangements to be made through Agents. 48 hours notice requested.

MEDICAL: Vessels cleared by U.S. Health Officials at Hampton Roads before proceeding up river.

DENSITY: Water considered as 100% fresh.

FRESH WATER: Available at pier.

FUEL: Bunkers only available at Hampton Roads.

GANGWAY/DECK WATCHMEN: None required, unless crew detained by U.S. Immigration.

OPENING/CLOSING HATCHES: On bulk cargo vessels, usually opened and closed by ship's crew, also steel hatches handled by ship's crew, sometimes determined by terms of Charter.

CERTIFICATES:

Ship's Register.
Load-line Certificate.
Safety Certificate.
Tonnage tax receipts.
Certificate of nationality.
Passenger Certificate.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes (1 carton for 2/3 days) if further allowance is needed Customs Officer will return on request of Master. Wine and Spirit, 1 bottle per officer, Customs Officer will return on request of Master.

IDENTIFICATION CARDS: Immigration landing permit required.

CONSULS: No consuls in Richmond, handled through Hampton Roads if needed.

REPAIRS: Only minor repairs, no shipyards.

REPATRIATION: Handled through Norfolk, Virginia.

AIRPORT: Approximately 10 miles from port, regular airline service.

TIME: Eastern time GMT minus 5 hours. Daylight saving time from first Sunday in May to last Sunday in October.

HOLIDAYS: January 1st, January 15th (Martin Luther King Day), May 30th, July 4th, Labour Day (1st Monday in September), Thanksgiving Day, Christmas Day.

POLICE/AMBULANCE/FIRE: Police 780-9461; Ambulance 780-9404; Fire 780-9191.

TELEPHONES: No arrangements for placing aboard vessels.

SHORE LEAVE: Allowed. Proper papers should be available.

AUTHORITY: Port of Richmond.

Operator: Richmond Waterfront Terminals Inc., 5000 Deepwater Terminal Road, Richmond, Virginia 23234. *Contact:* J. N. Collins, Terminal Manager (*Tel:* 275-9248).

RIVERHEAD, Long Is., New York: 41.00 N. 72.39 W.

(See Plan Book)

LOCATION: The fixed Offshore Tanker Berth is situated 1.2 miles offshore from the North shore of Long Island in Long Island Sound, 4 miles 257° true from the beacon on Mattituck Inlet breakwater and 12.7 miles 178.5° true from Falkner Island Lighthouse. The geographic position of the centre point of the Operating Platform is in Lat. 41° 00′ 01″ N., Long. 72° 38′ 50″ W. The platform has 4 navigation lights situated on each corner of the structure flashing every second. A similar navigation light is also situated on each of the East and West mooring dolphins.

DOCUMENTS: See "New York".

Terminal will provide "Declaration of Inspection" form which must be completed before cargo transfer begins.

PILOTAGE: Pilot is arranged for by ship's Agent. Vessels will pick up Pilot South of Point Judith Buoy No. "2". Pilot boarding position is Lat. 41° 18′ N., Long. 71° 29′ W. Ships with draft exceeding 50 ft. should keep Point Judith 4 miles distant to keep clear of charted wreck and shoals. Pilot boats "Northeast Pilot" or "Rhode Island Pilot" watch Channels 16, 13 and 18A. Distance to platform is approximately 65 miles. The Pilot will also perform the duties of Docking Master while vessel is at the Offshore Platform. It is required that the Pilot remain on board on standby while the vessel is moored at the Offshore Platform. Vessels with 50 ft. or deeper draft require a Pilot's assistant to assist regular Pilot in navigating the vessel into Long Island Sound and to the Offshore Platform.

ANCHORAGES: Vessels awaiting berth shall anchor to 1.5 miles North of the platform facility. Holding ground is good and 90 fathoms (6 shackles) in the water is considered safe.

Platform crew under the supervision of the Marine Supervisor will board about 1 hour prior to scheduled mooring time. Generally launch does not arrive before this time, except for emergencies.

The Marine Supervisor will board the vessel with the boarding party to provide communications and information.

RESTRICTIONS: Generally, vessels are moored on any stage of the tide and at night when weather conditions permit.

MAX. SIZE: Length in North Berth 1,150 ft. LOA and draft not to exceed 60 ft. Length in South Berth 700 ft. LOA and draft not to exceed 42 ft.

COMMUNICATIONS: Telephone at Riverhead 727-5600. (Code for station to station: Dial 516 727-5600). Cable Address "Northville Riverhead New York". Radio I.T.T. Amagansett. TWX No. 96-1415 Northville Melville and TWX No. 510-224-6443 or 510-226-7837 Northville Melville.

VHF: Communication with shore and launch via portable VHF radiophone. This equipment on continuously during vessel's stay. The Platform crew maintains radio watch and constant communication with shore for general purposes and emergencies. Shore and Platform monitor Channels 16 and 13.

VHF Marine Operators use VHF Channels: Riverhead (N.Y.) Marine Operator 28; New London Marine Operator 25 & 26; Providence Marine Operator 28; to place land calls.

BERTHING: North Berth (1): Vessels berthed during flood tide will moor starboard side to and during the ebb tide current will moor port side to. Forward and stern spring lines are secured to the breasting dolphins and bow and stern lines are made fast to mooring dolphins located to the East and to the West of the platform structure. Terminal Foreman boards vessel to provide communications and assistance during the mooring operation.

South Berth (2): Vessels berthed during flood tide current will moor port side to and during the ebb tide current will moor starboard side to. Forward and stern spring lines are secured to the breasting dolphins in the South Berth. Bow and stern lines are made fast to the mooring dolphins located to the East and West of the platform structure. Breast lines are secured to the North breasting dolphins.

Two mooring buoys are situated South of the mooring facility which were formerly used for mooring vessels in the North Berth. Mooring buoys will be used at the discretion of the Docking Master (Pilot) and/or Northville's Marine Supervisor.

Masters will note that platform is situated in an open roadstead and that all mooring equipment must be in proper working order and in good condition. If, in the opinion of the Pilot (Docking Master) or Northville's Marine Supervisor, the vessel's mooring equipment is inadequate, the vessel will not be permitted to remain in the berth.

Vessels must be equipped with 12 manilla or better mooring lines of not less than 8 in. circumference and not less than 90 fathoms length.

Vessels having wire moorings secured on warping winches with brake are acceptable. Warping winches must be adequate to handle mooring lines under heavy strain. Efficient stopper lines must be readily available to "stop off" mooring lines for transfer from winch to bitts without loss of tension.

The Docking Master (Pilot) will assist the Master in the berthing of the vessel and supervise the mooring and unmooring operations.

No gangways are used at this terminal. Crew must use ship's ladder for launch service. Crew are forbidden to go onto the Platform, except on ship's business.

OIL TRANSFER CONNECTIONS: The Marine Supervisor and/or his crew will supervise the connecting and disconnecting of the hydraulically operated steel loading arms.

In the North Berth there are 2×16 in. and 2×12 in. steel loading arms, and in the South Berth there are 2×12 in. steel loading arms, all with appropriate reducers. The 12 in. L/U arms will connect to 8 in., 10 in., and 12 in. 150 lb. ASA flanges. When connecting 2×12 in. L/U arms the centre line of the ship's flanges must be at least 6 ft. (72 in.) apart.

The 16 in. L/U arms will connect to 10 in., 12 in., 14 in., and 16 in. 150 lb. ASA flanges. When connecting 2×16 in. L/U arms the centre line of the ship's flanges must be a minimum of 15 ft. (180 in.) apart.

The L/U arms cannot be connected directly to valve flanges. Flanged spools or reducers must be provided. Provisions must be made available for quick draining of the L/U arms.

LOADING AND DISCHARGE OF CARGO: Oil transfer operations are entirely in accord with the Rules and Regulations of the United States Coast Guard. Declaration of Inspection by the Dock person in charge and the Vessel person in charge must be completed prior to commencement of any oil transfer operations.

Discharge rates usually vary between 7,000 bbls.p.h. and 20,000 bbls.p.h. per shore line, depending on the gravity of the cargo and ability of the vessel. Wharfage is charged to vessels which discharge at less than 10,000 bbls.p.h.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Tugs are arranged by ship's Agent. Tug boats generally come from New Haven. Tug orders must be placed 24 hours in advance of docking time. Tel: (212) 840-4600. Tug horsepower requirements are determined by vessel displacement.

A tug is required for undocking all vessels.

BALLAST: No ballast disposal facilities. Long Island Sound is inland water and United States Anti-Pollution Regulations rigidly enforced. No bilge water, oil-contaminated water, garbage or any waste matter which may pollute sea water is to be discharged overboard while vessel within Long Island Sound and approaches.

Ballast suction valves must be sealed with a numbered seal on arrival. Terminal personnel will inspect seals before and after cargo transfer.
STORES/FRESH WATER: No fresh water facilities. Small quantities provisions may be purchased at local stores in Riverhead, 4 miles inland. Stores may be delivered by prior arrangement with Miller launch (Tel: (516) 654-4900).
QUARANTINE, CUSTOMS AND IMMIGRATION: New York City is port of entry for Northville. Entry and clearance must be arranged by ship's Agent. Boarding Officers board in the anchorage or upon arrival. Pertinent Government Officials should be advised in sufficient time, usually not less than 24 hours, Monday through Friday and 48 hours on Saturday and Sunday. Generally, entry and clearance can be arranged by Agent who should advise Customs well in advance of vessel's arrival, thus saving necessity of having Master go to Customs House in New York.

MEDICAL: Hospital in Riverhead equipped with all medical facilities. Medical attention must be arranged by ship's Agent. U.S. Public Health Service not available locally.
WEATHER AND TIDE: Strong winds from North and N.W. experienced during Winter and Spring. Tide during maximum ebb and flood often reaches 3.5 to 4 knots velocity.
DENSITY: Flood tide density 1025. Ebb tide density 1020.
CUSTOMS ALLOWANCES: Tobacco, wine and/or spirit allowance: Same as permitted in New York Harbour.
IDENTIFICATION CARDS: Issued by Immigration Officer.
CONSULS: All Consuls Offices located in New York City.
REPAIRS: No repair facilities are available. Vessel must remain in sailing readiness at all times while moored at the platform facilities.
DRY DOCKS: At New York Harbour.
SURVEYORS: *Inspection Companies:*
Caleb Brett – New Jersey. Tel: (201) 925-8282.
Independent Petro. Insp. Tel: (201) 925-4960.
Chas. Martin Tel: (201) 245-8750.
J. J. Mullins – NY City. Tel: (212) 338-4135.
S.G.S. Control Services. Tel: (201) 541-7200.
Saybolt. Tel: (201) 245-3100.
Surveyors:
American Bureau of Shipping, 65 Broadway, NY, NY 10006. Tel: (212) 440-0300.
Bureau Veritas, 17 Battery Pl. N., NY, NY 10004. Tel: (212) 442-2317.
Det Norske Veritas, 616 Palisade Avenue, Englewood Cliffs, NJ. Tel: (212) 868-6595.
Lloyd's Register of Shipping, 17 Battery Pl., NY, NY 10004. Tel: (212) 425-8050.
Panama Bureau of Shipping, 104 E. 40 St., NY, NY 10016. Tel: (212) 867-4760.

REPATRIATION: Agent arranges all crew repatriation via New York.
AIRPORT: New York Airports 80 miles distant.
TIME: Standard time GMT minus 5 hours. Daylight Saving Time first Sunday of May to last Sunday of October, GMT minus 4 hours.
POLICE/AMBULANCE/FIRE: Terminal attends Police/Ambulance and Fire services.

State Police – 727-2727, Police – 911 (Emergencies only). Fire – 0 (to report fire, otherwise 727-2750). Ambulance – 911 or 298-4016.
EMERGENCY CO-ORDINATION CENTRE: United States Coast Guard at New Haven, Connecticut. Tel: (203) 773-2464; and the United States Coast Guard National Response Centre. Tel: (800) 424-8802 (toll free number).
BANKS: European American Bank, located at 209 West Main Street, Riverhead, New York, NY 11901. Tel: (516) 727-7082.

TELEPHONES: A coin telephone is located in the platform office.
SHORE LEAVE: Shore leave permissible by arrangement with local launch service.
SHIP SUPPLY SERVICE: James Miller Marine Services operate Coast Guard inspected crew boats on a charter service to vessels in the Long Island Sound area. They also have available LCMs with a 25 ton capacity for stores and equipment. These vessels are based in Port Jefferson, Long Island, New York and are on call 24 hours a day, 7 days a week. Tel: 516-654-4900.

James Miller Marine Services also operates inspected crew boats for passenger service on a per head basis in New York Harbour. The operations centre is at Pier 13, Staten Island. They can be reached on Channel 16 VHF "Miller's Launch" or call 212-727-7303 or 516-654-4900. Also available at this location are similar LCMs with 25 ton capacity for stores and equipment.

STORING: Bunkers must be taken at anchor. Stores can be loaded during transfer.

Trucks cannot proceed alongside the berth, but by launch only.
Fork lift trucks cannot be used to handle stores.
Customs Regulations regarding storing are not known by this terminal.
Local Riggers can be employed to assist with storing.
AUTHORITY: Northville Industries Corp., P.O.Box 111, Riverhead, NY 11901. *Tel:* (516) 727-5600. *Telex:* 96-1415. *Cables:* Northville, Melville. *Contact:* Captain J. R. Dudley, Director of Terminal and Marine Operations. A. Golz, Marine Supervisor.

ROCHESTER, New York: 43.17 N. 77.36 W.

(See Plan Book)

Refer to "St. Lawrence Seaway" for important general information.
See "General" below.
PILOTAGE: Not necessary.
ANCHORAGE: No anchorage available within harbour limits.
MAX. SIZE: Channel depth 23 ft. (LW). All depths in channel or alongside wharves should be checked carefully against the latest recorded elevated or lake level. This may vary from month to month. Entrance width 300 ft., turning basin depth 23 ft., 600 ft. in width.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to New York Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
TUGS: Not available.
BERTHING: Entrance piers are parallel to each other, and about 450 ft. apart. The West Pier is 3,036 ft. long and the East Pier 2,699 ft. long. Fog horn and beacon on West Pier, East pierhead lighted. Radio beacon. Port Authority Terminal located on West bank of Genesee River at end of Lake Pier. Has a quay wall of about 1,400 ft. in length. Depth of water alongside quay wall uncertain, estimated at between 15 ft. and 20 ft. Charlotte Docks located about 2 miles upstream from mouth of river on West bank.
CRANES: Not available, except through private arrangements.
BRIDGES: New York Central Railroad swing bridge near mouth of the river and upstream from Port Authority Terminal. Traffic lift bridge about 0.25 mile upstream from railroad bridge.
STEVEDORES: Vessel to make own arrangements.
DENSITY: Fresh water.
FRESH WATER: Available at both docks.
FUEL: Vessel to make own arrangements.
IDENTIFICATION CARDS: Required.
CONSULS: None.
REPAIRS: Minor only.
REPATRIATION: Can be arranged.
AIRPORT: Approximately 10 miles from port.
POLICE/AMBULANCE/FIRE: Police, 428-6666; Ambulance, 454-6210; Fire, 232-2121.
SHORE LEAVE: Allowed.
GENERAL: Rochester, New York, no longer operates a commercial port. The facilities are available only for tour and cruise boats to take on and discharge passengers, and by commercial vessels in the case of an extreme emergency.

It should be stressed that emergency docking is completely the Master's responsibility. The City of Rochester and the Department of Recreation and Community Services assume no liability for any vessel docking under emergency conditions at the former Port of Rochester.
AUTHORITY: City of Rochester, Department of Recreation and Community Services, Office of the Commissioner, 222B City Hall, Rochester, New York 14614.

SACRAMENTO, California: 38.32 N. 121.30 W.

(See Plan Book)

DOCUMENTS: See "San Francisco".
PILOTAGE: Pilots board vessel in San Francisco Bay.
RESTRICTIONS: *Ship Channel:* Distance Fort Point to Sacramento, 79 nautical miles (146 km.). Bottom width in river reach 300 ft. (91.4 m.). Bottom width in channel reach 200 ft. (61.0 m.). Min. depth at MLLW 30 ft. (9.1 m.).

Harbour: Area 60 acres (24.3 hectare). Min. depth at MLLW 30 ft. (9.1 m.). Tidal variation 5 ft. (1.5 m.) average.
MAX. SIZE: 800 ft. LOA and 106 ft. beam, 30 ft. deep at MLLW.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.
MEDICAL: All normal medical facilities available.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: KBA 386, 156.9 MHz (24 hours).
TUGS: Join vessel at Light 76 (turning basin).
BERTHING: Anchor – ships will have at least 1 anchor ready to let go in case of emergency, when docking or undocking. Anchor will be raised immediately upon ship being made fast to wharf.

Insurance lines are required on off-shore side, fore and aft, immediately after ship is made fast to wharf.

A cargo net shall be securely placed under gangways. Save-all nets shall be rigged abreast of holds at which general cargo is being handled.

Rat guards, at least 3 ft. in diameter, shall be placed on all mooring lines immediately after docking, and shall be maintained in place until ship's departure.

Pier 1:

Owned and operated by: Port of Sacramento.

Use: Bulk-loading rice facility.

Construction: Concrete with timber fender piles, length 600 ft. (182.9 m.).

Water depth: 32 ft. (9.8 m).

Storage capacity: 22,000 tons; 8 silos at 2,200 tons each; 6 silos at 470 tons each; 6 silos at 270 tons each.

Mechanical handling facilities: 3 loading spouts dockside, conveyor system to storage facility.

Loading rate: 600 t.p.h.

Wharf 2:

Owned and operated by: Port of Sacramento.

Use: General cargo.

Construction: Concrete with timber fender piles; apron width 60 ft. (18.3 m.); length 600 ft. (182.9).

Water depth: 30 ft. (9.1 m.).

Transit sheds: One, 86,400 sq. ft.

Pier 5:

Owned by: Port of Sacramento.

Operated by: Cargill of California, Inc., as a public utility.

Use: Bulk-grain facility.

Construction: Concrete and steel silos; concrete with timber fender piles; length 600 ft. (182.9 m.).

Water depth: 32 ft. (9.8 m.).

Storage capacity; 1,250,000 bushels (30,000 tons); 17 concrete silos; total capacity 500,000 bushels; 6 steel silos; total capacity 750,000 bushels.

Mechanical handling facilities: Bulk ship loader, conveyor belt system connects bulk storage/rail/truck.

Wharf 6:

Owned and operated by: Port of Sacramento.

Use: General cargo and containers.

Construction: Concrete with timber fender piles; length 600 ft. (182.9 m.)., apron 60 ft. (18.3 m.).

Water depth: 30 ft. (9.1 m.).

Mechanical handling facilities: 2 gantry cranes, 45 tons each.

Remarks: 6 acres of open wharf; 70,000 sq. ft. off dock warehouse.

Wharves 7-8:

Owned and operated by : Port of Sacramento.

Use: Bulk-material facility and general cargo.

Construction: Concrete with timber fender piles; apron 60 ft. (18.3 m.), length 600 ft. (182.9 m.).

Water depth: 30 ft. (9.1 m.).

Storage capacity: Covered 200,000 tons, open 750,000 tons.

Mechanical handling facilities: Conveyor-belt system from truck to storage, from ship to storage; from storage to ship, or from storage to truck; 2 gantry cranes, 45 tons each.

Loading rate: 600 t.p.h.

Transit shed: 86,400 sq. ft. Bagging facilities for bulk cargoes.

STEVEDORES: Same as San Francisco.

DENSITY: Full fresh.

FRESH WATER: Available at all berths.

FUEL: All grades available with 24 hours notice. Delivered by barge.

GANGWAY/DECK WATCHMEN: Each ship shall have a security detail in readiness on board at all times it is in port. The security detail shall perform tasks of an emergency nature and shall have information concerning cargoes aboard in case of need for fire fighting purposes.

OPENING/CLOSING HATCHES: Opening/closing hatches is stevedore work while docked in port.

IDENTIFICATION CARDS: A pass signed by the Master or his designated officer will be required for crew members, passengers and their personal property to leave the port's fenced area. Property may be subject to physical inspection before leaving the fenced area.

CONSULS: Nearest at San Francisco.

REPAIRS: Limited repair facilities available.

REPATRIATION: Can be arranged through local Agent.

AIRPORT: 16 miles from port and served by regular airlines.

TIME: GMT minus 8 hours.

HOLIDAYS: Only days not worked are 4th and 5th July, Christmas Eve and Day, New Year's Eve and Day.

POLICE/AMBULANCE/FIRE: Tel: 371-8000. Extensions 252 and 228.

TELEPHONES: Telephones are available.

SHORE LEAVE: Crew members allowed ashore subject to Immigration clearance.

REGULATIONS: Ships will not blow boiler tubes while in port. Bilge water or oil will not be discharged into harbour. Accidents will be reported immediately to the Terminal Superintendent. Splash boards will be placed over disposal vent-pipe openings on inboard side of vessel.

Garbage – United States and California State laws make it unlawful to dispose of ship's garbage except in approved ways. Port makes approved garbage disposal available – contact the Terminal Superintendent. Garbage retained on board must be kept in tightly closed containers.

Smoking – Smoking prohibited in and around cargo compartments, and on open decks except that it may be permitted in marked areas under sheltered portion of weather decks on offshore side. Smoking prohibited on wharfs and piers except in marked areas. Smoking prohibited on or near ship while it is bunkering.

Welding/Burning – Welding or burning will not be done until written approval is obtained from the Terminal Superintendent and the Fire Marshal. All requirements of both the Superintendent and Marshal will be strictly adhered to.

Fire Signal – Upon detection of a fire, regardless of location or size, the alarm of fire will be sounded. The alarm shall be sounded by telephone and/or whistle or siren blasts. 5 each, 5 second blasts repeated as necessary.

AUTHORITY: Port of Sacramento, P.O.Box 815, World Trade Centre, West Sacramento, California 95691. *Tel:* (916) 371-8000. *Telex:* TWX 910-367-3581. *Contact:* Melvin Shore, Director.

SAN DIEGO, California: 32.41 N. 117.07 W.

(See Plan Book)

PORT LIMITS: The seaward boundaries of the port of San Diego at which a vessel is considered to be an "arrived vessel" is that time when the vessel is boarded by a Port Pilot at Sea buoy No. 1 and (subject to charter party terms) lay time commences when Notification of Readiness is tendered at berth.

DOCUMENTS:

Crew Lists.
Passenger Lists.
Customs Documents.
Manifests.
Stores Lists.
Crew Curio Declaration List.

If the vessel arrives from foreign direct, 3 copies each of the above documents are required.

If the vessel movements are between U.S. ports, 2 copies each of the above documents are required.

Health Documents. Arrival from foreign direct, 1 copy only. All crew members should be in possession of valid vaccination certificates.

Manifests. Arrival from foreign direct, 1 copy of travellers manifest which remains with vessel, and 3 copies each of U.S. Customs inward foreign manifest. Bills of lading, ship's papers carried aboard vessel varies with steamship companies.

PILOTAGE: Compulsory. The San Diego Pilots do not maintain Pilots on station. Service is rendered according to ETA received from vessel. If any vessel's arrival or departure is delayed over 1 hour, an additional charge will be made. Telegraphic address of pilot station – radio ETA to "Pilots", San Diego. Advance notice of ETA required – 24 hours prior to arrival of vessel with amendments 2 hours prior to arrival. Pilot boat is 54 ft. in length, painted white. The exact area where Pilot boards the vessel is No. 1 sea buoy. Pilot on VHF Channels 16 and 12 (Tel: (714) 233-7814).

ANCHORAGE: 3 miles S.E. of Point Loma Light.

MAX. SIZE: Length, breadth – no restrictions. Max. draft alongside face of terminal, 36 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Diego Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: All radio messages go through the Los Angeles station for relay.

VHF: The Port of San Diego Harbour Police maintains a listening watch on Channels 12 and 16. Channel 11 is available after initial call-up on Channel 16.

TUGS: Tugs normally join vessel approximately 1 mile before berth. 5 available ranging from 200 h.p. – 1,700 h.p. There is no charge for the use of tug's lines.

CONTAINER FACILITY: A new generation, high-speed, all-electric container crane capable of handling 20 ft. and 40 ft. units, or single hook lifts of 40 long tons at National City Marine Terminal. This 17.4 acre facility includes 32,500 sq. ft. for a container freight station, a container steam-cleaning facility, office, maintenance shop, truck scales, railroad spur, and paved storage for 2,280 containers including electrical outlets for 45 refrigerated containers. Depth 35 ft.

SPECIALISED CARGO HANDLING FACILITIES: High-speed bulk-loading facilities exist with 800 ft. of 37 ft. deep water berthing space and bulk storage, plus a bulk loader boom that travels 500 ft. laterally and can be extended or raised enough to load nearly any size or type of ship.

High-speed bagging of bulk commodities is available for bagging of bulk materials from powder to pellets at the rate of 1,000 tons per hour.

STEVEDORES: Advance notice of 24 hours desired in order to arrange gangs.

MEDICAL: Agents should receive notification of medical attention required 24 hours prior to ETA of vessel. Complete hospital facilities available.

TANKERS: Diameter of load/discharge line 6 in. to 8 in. Slop (residue) discharge facilities available upon request. 2 tanker berths – max. draft 30 ft. There are also 2 new Tanker Berths at National City Marine Terminal with 12 in. discharge lines.

DENSITY: Salt water in bay.

FRESH WATER: Fresh water available, delivery via pipeline.

FUEL: Diesel and bunker fuel available.

GANGWAY/DECK WATCHMEN: Available if considered necessary.

OPENING/CLOSING HATCHES: Carried out by stevedores.

CERTIFICATES: Registered Load-line Certificate, Certificate of Inspection, Safety Certificate.

CUSTOMS ALLOWANCES: Tobacco: Per each crew member U.S. Customs allowed 2 cartons of cigarettes and 1 box of cigars. Wine and/or Spirits: Quantity allowed per each crew member – 1 quart.

CARGO GEAR: Up-to-date certification of all cargo gear required in order to comply with Pacific Coast Marine Safety Code.

IDENTIFICATION CARDS: U.S. Immigration requires completion of Form I-95, U.S. Coast Guard requires landing permits.

CONSULS:

Chile
Costa Rica
Denmark
Dominican Rep.
Ecuador
El Salvador
Finland
France
Honduras
Italy
Mexico
Netherlands
Norway
Panama
Peru
Sweden
West Germany

REPAIRS: All types of deck and engine repairs are available.

DRY DOCKS: Largest dry dock 700 ft. length, 104 ft. width. Capability can accommodate C – 2 Mariner type or San Diego type hulls (600 ft. length, 85 ft. width) and up to and including 28,000 displacement tons. 4 additional floating dry docks with capabilities up to and including 3,500 displacement tons.

SURVEYORS: A full complement of cargo inspectors and surveyors are available locally.

AIRPORT: Distance from marine terminal approximately 5 miles. Airport is serviced by major airlines.
TIME: Local time GMT minus 8 hours. Daylight Saving Time becomes effective the last Sunday in April and continues to the last Sunday in October.
HOLIDAYS: Recognised holidays are: New Year's Day; Lincoln's Birthday; Washington's Birthday; Memorial Day, Independence Day, Labour Day, Columbus Day, Veteran's Day, Thanksgiving Day, Statewide Election Day, Christmas Day, or any other legal holiday that may be proclaimed by State or National Authority; when a holiday falls on a Sunday, the following Monday shall be observed as a holiday.
POLICE/AMBULANCE/FIRE: Police Tel: 236 – 5911; Emergency Ambulance (Paramedic) Tel: 238 – 1212; Fire Tel: 238 – 1212.
EMERGENCY CO-ORDINATION CENTRE: Local maritime emergency co-ordination is handled by the U.S. Coast Guard, San Diego Region, 2710 North Harbor Drive, San Diego, CA 92101. Tel: (714) 293-5860.
TELEPHONES: Arrangements exist for placing telephones on board. No charge for hooking up.
SERVICES: Tank-cleaning equipment. Facilities for tank washings Compass and radar adjustments, etc.
SHORE LEAVE: Permitted.
BANKS: Full banking services for both domestic and international transactions are available locally.
STORING: Storing and provisioning may be accomplished at dockside or via barge by prior arrangement. Trucks and forklifts may be used alongside and riggers are available by arrangement with the representative Agent. U.S. Customs Agents will board on arrival and seal all bonded items. Otherwise, normal procedures concerning controlled items will be observed by the vendor.
DEVELOPMENTS: Broadway and 'B' Street Piers have been reconstructed for use as a passenger vessel facility, public park, for berthing of public visit Naval vessels, and for berthing and clearance of fishing vessels. U.S. Customs has an office at the end of Broadway Pier.
AUTHORITY: Port of San Diego, P.O. Box 488, 3165 Pacific Highway, San Diego, California 92112. *Tel:* (619) 291-3900. *Telex:* 695-456. *Cables:* Sun Harbor San Diego. *Contact:* Don L. Nay, Port Director.

SAN FRANCISCO, California: 37.48 N. 122.25 W.

(See Plan Book)

DOCUMENTS:
General Declaration (arrival) on Customs Form 1301.
Cargo Manifest (Customs Form 1302). One original copy indicating all the cargo on board, used for making formal entry. One copy listing all cargo on board, to be used by the Customs Inspector. One copy indicating cargo for this port only.
2 copies of Crew's Effects Declaration on Customs Form 1304.
2 copies of Ship's Stores Declaration on Customs Form 1303.
2 copies Passenger List (Form I-418).
2 copies Crew List (Form I-418).
1 Copy "Oil Pollution Certificate", issued in Washington D.C.

Customs Boarding Officer will also examine Ship's Register and Load-Line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours of arrival from abroad, or 24 hours of arrival from a U.S. port:
(a) Health Pratique.
(b) Master's Oath (Customs Form 1300).
(c) U.S. Certificates of Payment of Tonnage Tax (Customs Form 1002).
(d) Certified Crew List (U.S. vessels only).

PILOTAGE: Pilotage in and around Golden Gate Region is provided by 3 groups of experienced, licensed ship Pilots. California Inland Pilot Association, Redstack Tugs and Independent Pilots.

The San Francisco Bar Pilots' Association, maintains a sea station 12 miles outside the Golden Gate, in the vicinity of the large navigation buoy for vessels arriving and leaving the area.

On station around-the-clock. Pilot boats are equipped with VHF radio-telephone, and maintain continuous watch for ship traffic and operate co-operatively with the Marine Exchange communication centre and lookout station. The Bar Pilots also carry portable VHF radios.

Some 8,500 ships are piloted annually into and out of the port complex, through the Golden Gate and the 2,000 ft. wide, 55 ft. deep main ship channel across the sand bar about 9 miles outside the Gate.

Considerable Summer fog is experienced on the pilot grounds. In Winter months radiation or tule fogs frequently occur. The tidal prism of hundreds of square miles of inland waters cause unusually swift and changing currents in the area. Pilotage for San Francisco Bar and entrance is compulsory and available 24 hours a day. The pilot boat is at a station 3 miles outside Main ship Bar channel about 14 miles from San Francisco, VHF Channels 18A and 10 for radio contact. Vessels with a draft of 42 ft. or more are requested to arrive at the pilot station for the inward passage about one hour before high water at the Golden Gate Bridge.

ANCHORAGES: Several anchorages available in San Francisco Bay for any type of vessel up to 50 ft. draft.

The well-protected bay affords excellent shelter and anchorage in all weather. The Captain of the Port (Coast Guard) will assign an anchorage to a vessel upon request. In San Francisco and San Pablo Bays, there are a large number of anchorages available for naval, quarantine, general and explosives.

The specific anchorages available include:
1. *General Anchorage*
(a) No. 5 – found just South of the Richmond-San Rafael Bridge, has no limitations.
(b) No. 9 – found in the South Bay, also has no limitations.
2. *Temporary Anchorage*
(a) No. 7 – found off Treasure Island, has a 12 hour limit. A ship cannot lighter nor bunker at this mooring.
No. 8 – same as No. 7 but has a 6 hour limit.
3. *Explosive Anchorage*
No. 12 – is normally not activated.
No. 13 – found off Larkspur, this mooring is activated only as the need arises.
No. 14 – found in the South Bay, this mooring is always activated.
4. *Naval Anchorage*
No. 10 and No. 21 are the most frequently utilised.

RESTRICTIONS: The San Francisco Bay region is the first on the West Coast to have sea lanes established by the Coast Guard for greater safety in its ocean approaches. Use of the lanes is not mandatory, but is strongly recommended to reduce chance of ship collisions in congested approach and departure areas. The lanes are not intended to supersede or alter applicable rules of the road.

The lanes begin within 6 miles of the San Francisco Lightship, with each lane inbound and outbound separated by a buffer zone. The headings are: North lane outbound, 305°; North lane inbound 120°, main line outbound, 247°; main line inbound, 058.5°; Southern lane outbound, 169°; Southern lane inbound 343°.

The size of the bay and the narrowness of the Golden Gate cause tricky and sometimes difficult tidal and current conditions. The flood current sets into all parts of the bay and causes swirls as far East as Alcatraz and Angel Islands. At the San Francisco-Oakland Bay Bridge there are large current eddies near the foundation piers which may require care to maintain proper course.

The bar channel is dredged to 55 ft. MLLW by the U.S. Army Corps of Engineers. Entrance channels to the various ports are dredged to 35 ft., with the exceptions of Sacramento, Stockton and Redwood City, which are 30 ft. Stockton, however, is approved for a 5 ft. deepening, and study of similar deepening for Redwood City is being completed.

MAX. SIZE: The max. permissible draft for tankers at the oil installation is 35 ft., for regular freighters and passenger ships at the San Francisco piers is 30 ft. No restrictions on length or berth. The best time to dock with max. draft is at a rising tide.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: Radio station via RCA – Radio Corporation of America – Station KPH ITT – World Communications – Station KFS.

Safe and efficient navigation for all bay vessel traffic is maintained through a Ship Location and Reporting Service operated by the Marine Exchange. U.S. Coast Guard Vessel Traffic Service on Yerba Buena Island and at Port Bonita maintains 24 hour radar surveillance of all traffic from Golden Gate on the West (with 32 mile capacity beyond) to Oakland on the East, Dumbarton Bridge on the South and Port San Pablo on the North. Vessel Movement Reporting System (VMRS) extends beyond Port San Pablo all the way to the Ports of Stockton and Sacramento. Coast Guard urgently requests that all vessels as specified below, moving anywhere within the VMRS (including all area under radar surveillance), tune to Channel 13 (156.65 MHz., VHF FM): All ships of 300 gross tons and over, passenger ferries for hire over 100 gross tons, and tugs with tows of barges or dredging rigs of over 26 ft. length.

Coastguard Regulations: Foreign tankers should give 72 hours' advance notice of arrival to ensure that U.S.C.G. has enough time to check the vessel's records for compliance or outstanding violations and to arrange for any onboard inspections required. Failure to provide 72 hours' notice may delay the commencement of cargo transfer while awaiting the required U.S.C.G. inspections. Letter of Compliance inspections must still be arranged through Washington D.C. The statutory notification remains at 24 hours. This notice applies only to the San Francisco Bay area. Any vessel required to have an inert gas system must have its tanks inerted at all times unless they are gas free.
VHF: VTS in operation. Call sign "San Francisco Vessel Traffic Centre", operates on Channels 16, 13, 12 and 18A.
TUGS: Tugs available and normally join the vessel when approaching their pier. Tug's lines are always used, with no extra charge.

BERTHING: No restriction on berthing other than draft limitation and preferable at slack water.

Pier	*No. of Berths*	*Length* (ft.)	*Depth* (ft.)	*Remarks*
9	2	154 Face 800 North 800 South	35	Mooring for tugboats
15-17	3	490 F 800 N 800 S	35	Importing newsprint
19	2	160 F 800 N 800 S	35	Foreign trade Zone No. 3
23	2	160 F 800 N 800 S	35	Foreign trade Zone No. 3
26	2	200 F 620 N 635 S	50 35 35	Ship repair and tug boat mooring
27 and 29	3	206 F 750 N 1,340 S	35	General and project cargo

Pier	*No. of Berths*	*Length (ft.)*	*Depth (ft.)*	*Remarks*
28	2	150 F	35	Ship repair
		541 N		
		675 S		
30 and 32	3	622 F	35	General cargo (some containers)
		845 N	35	
		932 S	35	
34	2	139 F	30	Ship repair
		634 N	35	
		652 S	35	
35	2	200 F	38	Passenger lines
		802 N		
		1,053 S		
36	2	588 S	35	Ship repair
		713 S	35	Ship repair
38/40	2	905 S	35	Ship repair
		888 N	35	Ship repair
45 A-C	2	1,314 S	35	Ceremonial pier
46 B	2	1,035 F	35	Lay-up berth
48 A	1	216 F	35	Newsprint and lumber
		610 N	35	
48 B	1	155 F	35	Newsprint and lumber
		636 S	35	
50 A-C	2	1,480 N	35	General cargo
50 B-D	2	1,682 S	35	Ship repair
	2	1,000 F	35	Ship repair
52				Ferry slip
54	2	700 S	35	Ship repair
		700 N	35	Ship repair
64 North	2	48 & 130 F	30	Barge mooring
		408 & 240 N	25	
		719 S	25	
64 South	2	126 F	25	Barge mooring
		588 N	25	
		852 S	20	Todd Shipyard
70	2	723 F	38	Importing automobiles and petroleum transfer
		1,100 F	38	
80	5	5,041	40	Container and general cargo
84	1	428	35	Coconut oil imports
92	1	702 F	35	Receiving automobiles, bulk animal and vegetable oils
		166	35	
94 and 96	3	2,400	40	Containers, LASH

Alameda: (See Plan Book). (Not part of the Port of San Francisco). Alameda, an island and city across the Inner Harbour channel from Oakland, is the home of Encinal Terminals, the largest privately owned and operated steamship terminal in the United States. There are 6 berths for vessels at Encinal.

Berths 1, 2, 3 and 4: Used for general cargo and bulk liquids. Total berthing length 2,125 ft. Depth 31 ft. to 33 ft.

Berth 5: Used for general cargo. Length 750 ft. Depth 35 ft. Berth equipped with Paceco crane.

Berth 6: Used for receipt and shipment of bulk liquids. Depth 30 ft. Facility has tank storage of 12 million gallons.

Operator: Encinal Terminals, 1521 Buena Vista Avenue, P.O.Box 2453, Alameda, CA. 94501. Tel: (415) 523-8800. Telex: TWX (910) 366-7174.

BULK HANDLING FACILITIES: *Liquid Bulk Terminal, Pier 84:* Pier assigned to Granex Company. Berthing for 1 vessel. Length of face 185 ft. and 430 ft. North side 120 ft. Depth alongside face 35 ft. Facilities include 4 portable pneumatic unloaders, total capacity 180 t.p.h.

Port of San Francisco Grain Terminal, Pier 90: Berthing for 2 vessels. Length 1,285 ft. Depth alongside 40 ft. The terminal is used for receiving, storing and loading of grain, feeds, chemicals, fertilisers and storing automobiles. Facilities consist of a 2 million bushel grain elevator. Rail holding yard for 100 cars. 6 marine loading spouts with capacity of up to 1,500 tons of bulk material per hour (no shifting required).

CONTAINER HANDLING FACILITIES: *Pier 80:* Berthing for 7 vessels. Length of face 1,296 ft. North side 1,138 ft. South side 2,657 ft. Depth alongside 40 ft. Pier equipped with 3 rail-mounted container cranes (each having a 30/40 ton capacity); refrigeration outlets; container freight station and flexibilities to handle Ro-Ro, container and breakbulk cargoes.

Pier 94: One-berth (716 ft. apron) container facility with 40 ft. alongside depth, 2×30 long ton container cranes, and 16.5 acre container yard, with at least 50 acres available for expansion. Apron and crane rails are extensions of Pier 96 immediately to the South.

Pier 96: Berthing for 2 vessels. Depth alongside 40 ft. The facility is used by container ships. It also has flexibilities to handle Ro-Ro and general cargo ships. Lifting equipment consists of 2×30 ton, rail-mounted, Paceco container cranes, forklifts, straddle carriers and a mobile crane. Other features include refrigeration outlets; elevated control tower with radio and P.A. communications system; computerised container inventory control and a container freight station.

STEVEDORES: Stevedores orders must be placed 1000 hrs. for night gangs and day gangs. 2×8 hour shifts 7 days a week. Sunday and Sunday night gangs must also be ordered on Saturday 1000 hrs.

MEDICAL: Medical, and all hospital facilities available. No advance notice required.

DENSITY: Average density in the bay is 1016.

FRESH WATER: Available at all piers rate between 25 t.p.h. and 50 t.p.h.

FUEL: Fuel available by barge or at the oil companies own pier. Special blends require some advance notice.

TANKERS: All major oil companies have their own oil discharging piers which are outside the jurisdiction of the Port Authority. Reducing pieces are available. The max. drafts are 35 ft. Tankers arriving with a greater draft are partly discharged in the bay before docking.

Davis Point: Union Oil Co. Oleum Refinery Wharf, depth up to 38 ft. MLW.

Martinez: Shell Oil Co. Wharf, depth alongside 30 ft. – 42 ft. MLW. Phillips Petroleum Co. Amorco Wharf, 2 berths, depth 30 ft. – 42 ft. MLW. Phillips Petroleum Co. Avon Wharf, depth alongside 35 ft. MLW. Urich Oil Co. depth alongside 35 ft.

Ozol: Oil Wharf, depth alongside 39 ft. MLW.

Hercules; Sequoia Ref. Corp. Terminals, depth 35 ft. MLW.

FIRE PRECAUTIONS: Any special instructions are given to the Master upon docking.

GANGWAY/DECK WATCHMEN: Not required but this service available at Master's request.

OPENING/CLOSING HATCHES: Normally done by stevedores. But crew may open and close before arrival at the dock or after departure.

CUSTOMS ALLOWANCES: Each crew member may land free of duty and/or taxes articles acquired abroad not exceeding $10 in value, plus 50 cigars or 300 cigarettes or 3 lb. of smoking tobacco, and not over 1 quart of alcoholic beverages.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95, issued for the same vessel.

CONSULS: All Maritime countries represented at San Francisco.

REPAIRS: The major yards in the Golden Gate region have fully equipped machine-shop facilities capable of handling virtually any job; welding, heavy plate construction, turning, boring, facing, grinding, milling and rolling.

The larger yards also have facilities for pipe, sheet metal, electrical, carpentry, painting, rigging, machining and boiler work.

Southwest Marine, Westwinds, Service Engineering, SFW Corp., Todd and Triple "A" Repair are all located in San Francisco and provide berth space for all types of ship repairs at plant and at any location in the San Francisco Bay area.

DRY DOCKS: Todd Shipyards San Francisco shipyard has 3 floating dry docks, 1 with 22,000 tons capacity and 654 ft. long, 1 of 11,400 tons capacity and 542 ft. long, and 1 of 6,500 tons capacity and 450 ft. long. With a recently completed pier, its tie-up and outfitting space totals 4,271 ft.

Williamette Iron and Steel Company's yard in Richmond has 5 concrete graving docks. 4 of these docks can each accommodate a vessel 600 ft. long with 83 ft. beam, and 1 dock can handle a vessel 750 ft. long by 83 ft.

Tonnage capacity is limited only by the above dimensions. Williamette's facilities include 1,500 ft. of concrete outfitting pier for in-the-water repairs. The graving docks are served by 4 gantry cranes of 60 ton capacity and 2 of 45 ton capacity, and the outfitting pier by 3×45 ton cranes. Williamette has fully equipped shops for repair and conversion work, and mobile units for out-of-yard work at all Bay Area piers.

Hunters Point Naval Shipyard: (Triple A Machine Shop) Under lease from the US Navy, graving docks and repair facilities available to all types of ships. Triple A operates 3 graving docks: (No. 4) 200 ft. beam×1,100 ft. length and 50 ft. depth; (No. 3) 150 ft.×1,000 ft. and 39 ft. depth; (No. 2) 100 ft.×800 ft. and 27 ft. depth, 17 repair berths can serve ships of any length. 12 gantry cranes of 50 ton capacity serve graving docks and repair berths. 50 ft. depth channel from Golden Gate to Hunters Point; unique to West side of San Francisco Bay.

REPATRIATION: All facilities available for crew changes by sea, air or land.

AIRPORT: Distance about 10 miles South of San Francisco and is served by most domestic and international passenger airlines plus 20 international air cargo carriers.

TIME: GMT minus 8 hours. Summertime from last Saturday in April till last Saturday in October – GMT minus 7 hours.

HOLIDAYS: New Year's Day; Lincoln's Birthday (February 12th); Washington's Birthday (February 22nd); Good Friday (afternoon); Memorial Day (May 30th); Independence Day (July 4th); Labour Day (1st Monday in September); Admission Day (Calif. only Sept. 9th); Columbus Day (October 12th); Veteran's Day (November 11th); Election Day (1st Tuesday after the first Monday in November); Thanksgiving Day (last Thursday in November); Christmas Day.

When any of the holidays fall on Sunday, the holiday will be observed on Monday.

On a holiday the longshoremen are working at the overtime rate (time and a half) except on the following days when no work will be performed:

1. New Year's Day;
2. Bloody Thursday (July 5th, memory of 3 longshoremen killed during the 1936 strike);
3. Labour Day;
4. Thanksgiving Day;
5. Christmas Day.

POLICE/FIRE/AMBULANCE: Police, tel. 533-0123; Fire, tel. 861-8020; Ambulance, tel. 431-2800.

TELEPHONES: On some piers telephone connections to ships are available, no extra cost for this service.

SHORE LEAVE: Crew members are allowed to go ashore after passing U.S. Immigration at first U.S. Port.

GENERAL: Vessels arrival has to be reported to the U.S. Coast Guard 24 hours prior arrival by Agent.

DEVELOPMENTS: The channel over the bar has been deepened to 55 ft. A new channel will be cut 600 ft. wide and 45 ft. deep (at low water), through the upper bay and the channel through San Pablo and Suisun Bays will be deepened to 45 ft. Manoeuvring areas near Richmond and the refinery terminals will be widened. The Stockton Deep Water Channel will be deepened to 35 ft. and the channel alignment improved.

Improvements to Pier 35 – Passenger Terminal: Improvements to the passenger boarding and unloading facilities at Pier 35, including a new Customs area have been completed.

Pier 35 is the major steamship passenger facility in the Bay Area and the point of disembarkation for tens of thousands of cruise passengers who look forward to San Francisco as a port of call or destination. An improved passenger terminal will be beneficial to our city and its tourist industry.

The area involved contains a 200,000 square foot passenger processing facility on the first floor with a 10,000 square foot visitor waiting area on the second floor.

The cost of the initial phase of the improvement is estimated at $1 million.

Expansion of Rail Capabilities to Pier 94-96: New track construction, as well as reconstruction of existing track, from the Terminal to Southern Pacific's mainline track has been designed to allow unit train access onto the Container Terminal.

The Container Terminal is composed of Piers 94-96. This 65 acre three-berth facility is serviced by 4 rail-mounted cranes and represents a $45 million capital investment. An additional 75 acres of expansion area lies adjacent to the Pier.

Direct rail access to this terminal will position San Francisco as a competitive intermodal port offering direct land-bridge and mini-bridge services through Port facilities. By being able to move containers directly from ship to rail, carriers will have the advantages of reduced costs, better control of containers and less damage.

San Francisco will be the first port in California with this capability.

This project is scheduled for completion in 1984.

AUTHORITY: Port of San Francisco, Ferry Building, San Francisco, California 94111. *Tel:* (415) 391-8000. *Telex:* 467560 Port of SF Cl. *Cables:* Sfportcomm. *Contact:* Eugene L. Gartland, Executive Director. Roger Peters, Traffic Manager.

AGENT: Beaufort Navigation Inc., 50 California Street, Suite 3100, San Francisco, California 94111. Tel: (415) 433 6955. Telex: ITT 47-0243 (Int); RCA 278541 (Int); 33 0420 (Dom).

SAVANNAH, Georgia: 32.02 N. 81.07 W.

(See Plan Book)

DOCUMENTS:

3 Crew Lists.
3 Store Lists.
3 Curio Lists.
3 Manifests.
3 Passenger Lists.

These documents required in order to enter vessel at U.S. Customs.

Direct Foreign Arrival – Quarantine Pratique issued by Public Health Service representative; Cargo on Customs Form 1302, in duplicate with abstract manifest of Savannah only cargo; Crew list on Form I – 418, in triplicate; Passenger List on Form I – 418, or other acceptable form, in triplicate; Crew curio list, in triplicate, with crew declaration on Customs Form 1304, or crew list on Form I–418, in triplicate, with numbers of attached Forms 5129 endorsed thereon for American vessels, List of sea stores and ship's stores Customs Form 1303, in triplicate; for American vessels, repair declaration on Customs Form 226; for American vessels, certified crew list; Clearance from last foreign port, if one issued.

Coastwise arrival with Residue Foreign Cargo or Passengers – Form 1301, "Permit to Proceed", in duplicate; Travelling Manifest; Abstract Manifest, in duplicate, of cargo to be discharged in Savannah; Stores list, in duplicate; Crew list, in duplicate; Crew purchase list, in duplicate, and any crew declarations on Customs form 5123 for Savannah for American vessels; Passenger list, in duplicate.

PILOTAGE: Savannah Pilots' Association, 550 E. York, Savannah, Georgia, 31401 (telegraphic); Pilot required all vessels; ETA 24 hours advance notice, change ETA 8 hours; VHF Channel 16 (monitored at all times), 18, 12, 13 – Radio telephone 2182 and 2738. Pilot boards vessel 1 mile outside fairway buoy.

SHIP CHANNEL: *Project depth and widths are as follows:* Sea buoy to jetties 40 ft. depth×600 ft. width; New Channel Range through Upper Flats Range 38 ft. depth×500 ft. width; The Bight Channel 38 ft. depth×600 ft. width; Fort Jackson Range to Wreck Channel 38 ft. depth×500 ft. width; City Front Channel to Kings Island Channel 38 ft. depth×400 ft. width; Whitehall Channel 36 ft. depth×400 ft. width.

ANCHORAGES: Outside fairway buoy North and N.E. of fairway buoy; no anchorages in river.

RESTRICTIONS: 31 ft. at any time; over 31 ft. on incoming tide, no restrictions day or night.

MAX. SIZE: Abbreviation OT: Ocean Terminal. Vessels berthing at OT 14 – 15 – 16 – 17. Vessels 550 to 600 ft. on slack water; vessels less than 550 ft. any time to berths 14 and 17; vessels docking or undocking at OT 15 – 16, with vessels in OT berths 14 and 17, can be docked or undocked during slack water. Vessels entering Georgia Kaolin International should not exceed 525 ft. Vessels over 500 ft. undocking from berths 35 – 37 – 41 – 42, Georgia Kaolin International, should not be undocked during strength of ebb or flood tide, but may be undocked at or near high or low water slack.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Vessels route ETA cables to Agents, etc., via Radio Lantana.

TUGS: Tugs join vessels at city front for berths above city; for berths below city, tugs usually meet vessel in vicinity of Fort Jackson or well below berth. Tugs' lines used at all times.

BERTHING: The Georgia Ports Authority operates 13 general cargo berths, 2 tanker berths, 4 container berths and 2 dry bulk cargo berths.

CRANES: Ocean Terminal – One 175 short ton gantry crane, one 100 short ton gantry crane, two 50 short ton gantry cranes, one 30 short ton gantry crane, one 100 ton mobile crane, one 30 ton mobile crane. Garden City Terminal – Two 35 short ton gantry cranes, one 100 ton mobile crane, one 30 ton mobile crane. Garden City Terminal (container port) – six 45 short ton container cranes, six 45 short ton rubber tyred bridge cranes. Other cranes, floating and mobile, are available from various private contractors.

BULK CARGO FACILITIES: Located at the Georgia Ports Authority's Garden City Terminal are 1 dry bulk cargo berth (loading). This facility is suited for the handling of various ores, grains, peanuts, meals and fertiliser materials. The storage at this facility consists of silos for the storage of grain and grain type products as well as flat floor storage for these various other materials.

SPECIALISED CARGO HANDLING FACILITIES: Located at Container Central, on the up-river end of Berth 60, is a stern Ro-Ro ramp which is situated as to allow a vessel to utilise the Ro-Ro ramp and container cranes at the same time. Accommodating side and quarter ramps also available. At the Garden City Terminal there is a modern cold storage facility. The refrigerated space consists of 3 rooms of approximately 68,000 sq. ft.

BRIDGES: *Eugene Talmadge Memorial Bridge:* 135 ft. vertical clearance for 400 ft. at MHW. Distance between fender uprights – 600 ft.

MEDICAL: Agent should be advised as far in advance as practicable for required medical attention. U.S. Public Health Clinic in Savannah, also other extensive medical facilities. Standard information required as to inoculations, vaccinations, etc.

TANKERS: Standard requirements on diameters of load/discharge lines. No facilities for slop (residue) discharge facilities except American Oil Company. A.P.I. of local types of oil is 36 gravity marine diesel fuel. 8 tanker berths in port, max. drafts range from 32 ft. – 38 ft.

DENSITY: Average density of water at 20° Centigrade in channels of Savannah Harbour are:

Savannah River Entrance	*High Water*	*Low Water*
Surface	1.0196	1.0090
Bottom	1.0196	1.0181
Port Area		
Surface	1.0022	0.99915
Bottom	1.0120	1.0075

FRESH WATER: Available at all terminals.

FUEL: Marine gas oil (No. 2 Fuel). Marine diesel oil (No. 4 Fuel Oil). All Intermediate grades from Intermediate 30 (=30 centistokes at 50°C) to Intermediate 420 (=420 centistokes at 50°C) Bunker fuel oil (No. 6 Fuel). Advance notice of 24 hours required.

FIRE PRECAUTIONS: No special fire precautions. All tanker berths have water and fire extinguishers on dock. Fire fighting equipment on dock. Fire fighting equipment on tugs.

GANGWAY/DECK WATCHMEN: Garden City and Ocean Terminals of Georgia Ports Authority, East Coast Terminal Company and Georgia Kaolin International require that a watchman, or someone in authority, will be aboard any vessel tied to their facilities at all times.

CERTIFICATES: See "Documents". Current Registry Papers, Load Line Certificates, Certificates of Inspection, etc., are required.

CUSTOMS ALLOWANCES: Tobacco, a crew member may take ashore 50 cigars, 300 cigarettes, or 2 kilos of smoking tobacco, or a proportionate amount of each. An appropriate amount of tobacco products may be held out of bond for use of passengers and crew members while aboard ship when in port. Wine and/or Spirit, a crew member may take ashore one litre of alcoholic beverages for his own use. Container should be opened, that is the seal should be broken. An appropriate amount of wine and/or spirits may be held out of bond for consumption by passengers and crew while aboard ship when in port.

CARGO GEAR: Certified in accordance with U.S. Department of Labor Regulations. Supplied by stevedores.

IDENTIFICATION CARDS: Identification required by crew members coming ashore. U.S. Immigration & Naturalisation Service issues landing permit, I-94, to any passenger; and I-95, to any crew member of a foreign vessel who is not considered a security risk. This form must be in man's possession any time he is ashore.

CONSULS:

Savannah: Brazil (912) 234-2266. Denmark (912) 234-6671. Dominican Republic (912) 234-2266. France (912) 236-2491. Germany (912) 232-5581. Italy (912) 232-5581. Norway (912) 234-6671. Sweden (912) 234-6671.

Atlanta: Consulate of Austria (404) 252-7920. Consulate General of Belgium (404) 659-2150. Consulate of Bolivia (404) 320-9312. Consulate of Brazil (404) 659-0660. Consulate General of Canada (404) 577-6810. Consulate of Chile (404) 266-1650. Consulate of Colombia (404) 634-7748. Consulate of Costa Rica (404) 457-5656. Royal Danish Consulate (404) 522-8811. Consulate General of Ecuador (404) 475-4751. Consulate of El Salvador (404) 252-8425. Consulate of Finland (404) 446-1400. Consulate of France (404) 525-1100. Consulate General of Federal Republic of Germany (404) 659-4760. British Consulate General (404) 524-5856. Consulate of Greece (404) 261-3313. Consulate of Guatemala (404) 255-7019. Consulate of Haiti (404) 455-3434. Consulate of Iceland (404) 321-0777. Consulate General of Israel (404) 875-7851. Consulate of Italy (404) 875-6177. Consulate General of Japan (404) 892-2700. Consulate General of Korea (404) 522-1611. Consulate of Luxembourg (404) 952-1157. Consulate of Mexico (404) 688-3258. Consulate of The Netherlands (404) 525-4513. Consulate of Nigeria (404) 577-4800. Consulate of Norway (404) 256-2217. Consulate General of Panama (404) 521-0221. Consulate of Sweden (404) 223-0374. Consulate of Switzerland (404) 577-2727. Consulate of Turkey (404) 399-5331.

REPAIRS: All types of deck and engine repairs possible at Savannah Machine and Shipyard Company. Deck repairs from Diamond Manufacturing Company.

Radar/VHF Repairs: Coastal Electronic Maintenance has qualified radar and RDF, also VHF men available. They can be contacted through ship's Agents or through the Pilots or Atlantic Towing if vessels should require service on arrival.

DRY DOCKS: Savannah Machine & Shipyard Drydock 540×72×21 ft.

SURVEYORS:

Savannah: American Bureau of Shipping (912) 232-3793. Atlantic Marine Surveying, Inc. (912) 354-9938. Caleb Brett USA, Inc. (912) 897-5399. Coleman Kenney & Silas, Inc. (912) 352-7420. Georgia Adjustment Co. (912) 927-4515. Intermodal Transportation Services (912) 236-2045. International Adjusters Southern Ltd. (912) 352-7420. Marine Vessels & Material Handling Surveyors (912) 355-9561. National Cargo Bureau, Inc. (912) 236-1527. SGS Control Services, Inc. (912) 355-4429. E.W. Saybolt & Company (912) 355-6131. Sea Tech USA (912) 234-8345. L.O. Smith, Inc. (912) 233-9876. Southeastern Marine Surveying Co. (912) 233-4157. J.W. Tarver Jr. (912) 233-6661. Charles T. Theus, Inc. (912) 233-3588.

Atlanta: East Coast Maritime Services, Inc. (404) 261-4184. Marine Associates, Inc. (404) 448-2593.

REPATRIATION: Responsibility of Owner's Agents. Can be arranged to all points.

AIRPORT: Savannah Municipal Airport regularly served by American Airlines with 3 scheduled flights daily; Delta Airlines, Inc. with 7 scheduled flights daily; Eastern Airlines with 5 flights daily; Piedmont Air with 4 flights daily; and New York Air with 3 flights daily.

TIME: Savannah maintains Romeo or Eastern Standard Time GMT minus 5 hours, from 0200 hrs. the last Sunday in October, to 0200 hrs. the last Sunday in April. Quebec or Eastern Daylight Saving Time GMT minus 4 hours maintained from April to October.

HOLIDAYS: New Year's Day (January 1st); Martin Luther King's Birthday (January 15th); Lincoln's Birthday (February 12th); George Washington's Birthday (third Monday in February); Teddy Gleason's Birthday (March 17th); Memorial Day (Last Monday in May); Independence Day (July 4th); Labour Day (First Monday in September); Columbus Day (second Monday in October); Armistice Day (November 11th); Thanksgiving Day (Fourth Thursday in November); Christmas Eve (December 24th); Christmas Day (December 25th); New Years Eve (December 31st); Good Friday; one National Election Day annually.

No work will be performed on New Year's Day, Independence Day, Labor Day, and Christmas Day.

POLICE/AMBULANCE/FIRE: Police, City: 232 – 4141 and 233 – 9321, County: Police: 352 – 7780; Ambulance: Chatham County Emergency Medical Service: 352-8122; Fields and Sons Ambulance Service, 233 – 0191, Fire: City: 232 – 5121.

TELEPHONES: G.P.A., Garden City and G.P.A., Ocean Terminals: telephones on board can be provided through local Agents. Georgia Kaolin International – not available to ship (telephones on dock). S.C.L. Terminal – not available to ship (phones on dock).

SHORE LEAVE: Crew members are allowed ashore provided they are not detainees.

STORING: See "Prelims", page viii.

1. Yes
2. Yes
3. Yes
4. Yes
5. Usual U.S. Customs Regulations
6. Yes

DELAYS: With reasonable advanced notice of ETA no delay anticipated in berthing, loading, discharging or bunkering.

BANKS:

Savannah:

Bank South, P.O.Box 9208, 31412. Tel: (912) 236-5521.

Carver State Bank, P.O.Box 2769, 31402. Tel: (912) 233-9971.

Citizens & Southern National Bank, P.O.Box 9586, 31412. Tel: (912) 944-3000.

First Bank of Savannah, P.O.Box 8759, 31412. Tel: (912) 944-6000.

First South, 117 Oglethorpe Professional Court, Suite 2, 31406. Tel: (912) 354-7191.

Georgia Federal, P.O.Box 9209, 31412. Tel: (912) 236-8212.

Great Southern Federal, P.O.Box 8206, 31412. Tel: (912) 944-6200.

Savannah Bank & Trust Company, P.O.Box 9947, 31412. Tel: (912) 234-3441.

Southern Bank & Trust Company, P.O.Box 9747, 31412. Tel: (912) 236-4796.

Trust Company Bank, P.O.Box 8668, 31402. Tel: (912) 944-1000.

Atlanta:

Citicorp (U.S.A.), Inc. 211 Perimeter Ctr Pkwy, Suite 800, 30346. Tel: (404) 391-8500. Telex: 804832.

Citizens & Southern National Bank, 35 Broad Street, N.W., 30303. Tel: (404) 581)-2121. Telex: 542346.

First National Bank of Atlanta, 2 Peachtree Street, N.W., 30383. Tel: (404) 588-5000. Telex: 542309.

Bank of America, P.O.Box 56567, 30343. Tel: (404) 656-1000. Telex: 804345.

Bank of the South, P.O. Box 4387, 30302. Tel: (404) 529-4111. TWX: 810-751-3120.

Chase Bank International, 5775-F Peachtree Dunwoody Road, 30342. Tel: (404) 255-7717. Telex: 549541.

Manufacturers Hanover International, Banking Corp., 230 Peachtree St. NW, Suite 1800, 30303. Tel: (404) 223-5400. Telex: 804697.

National Bank of Georgia, 34 Peachtree Street, N.W., 30301. Tel: (404) 586-8000. Telex: 542318.

Trust Company Bank, P.O. Box 4418, 30302. Tel: (404) 588-7711. Telex: 542491.

Foreign Bank Representative Offices in Atlanta:

Algemene Bank Nederland, N.V., Atlanta Agency, 233 Peachtree Street, N.E., Suite 401 - 30303. Tel: (404) 688-4060. Telex: 542568.

Banca Nazionale Del Lavoro, Atlanta Representative Office, Peachtree Center Gaslight Tower, Suite 2000, 235 Peachtree Street, N.E., 30303. Tel: (404) 581-0143. Telex: 542194.

Banco Do Brasil, 230 Peachtree Street, N.W., Suite 800. 30303. Tel: (404) 577-4050. Telex: 804299.

Bank of Nova Scotia, 2 Peachtree Street, N.W., Suite 909. 30383. Tel: (404) 581-0807. Telex: 542319.

Bank of Tokyo, Ltd., 235 Peachtree Street, N.E., Suite 1001. 30303. Tel: (404) 577-2960. Telex: 542462.

Barclays Bank, 1801 First National Bank Tower, 30383. Tel: (404) 588-0437. Telex: 542575.

Bayerische Verrinsbank, 230 Peachtree St. NW, Suite 600, 30303. Tel: (404) 522-2636. Telex: 804688.

Canadian Imperial Bank of Commerce, 1400 First Atlanta Tower, 30383. Tel: (404) 577-1628. Telex: 542413.

Commerzbank, 2 Peachtree Street, N.W., Suite 1010. 30383. Tel: (404) 524-0665. Telex: 542103.

Credit Suisse Bank, 1601 First Atlanta Tower, 2 Peachtree St. NW, 30383. Tel: (404) 577-6100. Telex: 542835.

Credit Lyonnais, 235 Peachtree St. NE, Suite 2210, 30303. Tel: (404) 524-3700. Telex: 804567.

Kredietbank N.V., First Atlanta Tower, Suite 2936, 2 Peachtree Street, N.W., 30383. Tel: (404) 688-3470.Telex: 804376.

Lloyd's Bank International, 235 Peachtree Street, N.E., Suite 1400. 30303. Tel: (404) 524-6544. Telex: 804270.

Swiss Bank Corporation, 235 Peachtree Street, N.E., Suite 1700. 30303. Tel: (404) 522-1600. Telex: 542356.

Toronto Dominion Bank, 225 Peachtree Street, N.E., Suite 1600. 30303. Tel: (404) 522-9360. Telex: 542434.

Union Bank of Bavaria, 230 Peachtree Street, N.W., Suite 600. 30303. Tel: (404) 522-2636.

DEVELOPMENTS: Ocean Terminal rehabilitation underway will provide one 1,000 ft. berth, 800,000 sq.ft. transit space, two 200,000 sq.ft. warehouses.

Container Berth No. 5 under design, to be completed late 1985. Facilities include a 1,000 ft. berth, 60 acres of paved storage and 3×45 ton cranes.

SHIPMASTER'S REPORT: August, 1980.

Pilotage: Because of difficulties with the port crane and large storing programme we elected to berth starboard side alongside this call.

The Pilot will only undertake this on the flood (since vessel is invariably deep, berthing will only be done on the flood in any case) but because of a delay we were off the berth very nearly at slack water. The Pilot carried out the manoeuvre in the most reassuringly competent manner and I would not hesistate to do the same again if necesary; only with a Pilot prepared to carry out the manoeuvre.

Vessel is swung downriver off the container berth, about 4 cables below the berth.

When landed on starboard side to, it is just possible to plumb the berth with the crane by making the connection to the after crossover.

Discharge: Straightforward; some slight initial delay. Capable of receiving cargo at over 1,000 t.p.h. Our rate 810 t.p.h. overall.

Connection 12 in. 150 ASA. No VRL.

Density 1000 this call.

Storage capacity about 50,000 cu.m. Storage plant only for filling road and rail tankers.

U.S.C.G.: Deck inspection before commencing. Vessel was congratulated on her 'very high standard of equipment and personnel'. Monitoring detail on board throughout. Scuppers unplugged, please.

They are aware of the draft problem at LW and boarded immediately on berthing.

General: Lloyd's surveyor easily available.

Bunkered lube oils whilst discharging with U.S.C.G. approval.

Can touch up ship's side from quay.

Movements allowed at night, dependent on draft/tide.

Chandler: Southern Marine: Poor service this time despite our cables. This is in contrast to excellent service last time. These services are entirely at the mercy of ship representative.

SHIPMASTER'S REPORT: October, 1980 (updated 1984).

Approach: From East: The coast between Sandy Point to Isle of Palms near Charleston shows up at 40 miles and South of Hunting Island near Port Royal Sound at 35 miles, on radar. Port Royal channel gives a good radar echo at 15 miles. Soundings give little indication of position until fairly close inshore. Savannah light was observed at 28 miles.

DF stations at Tybee and Charleston are useful if nothing else is available.

Anchorage: Pilots advise anchoring to N.E. of Savannah Light Beacon. Good holding ground without obstructing arriving and departing traffic.

Arrival Procedure: ETA through Agents.

For deep draft ships proceeding to Ammonia Berth No. 61 about 5 miles above town, Pilot will board between 3 hours to 1.5 hours before HW.

Under 31 ft. can berth/sail any state of tide day or night. Berthing day or night.

Can berth either side to, the generally accepted side to is port side. However, if taking stores try for starboard side as the crane plumbs better, plus the Chiksan arm is in the way of trucks.

For starboard side to, arrive well in time for earliest Pilot boarding time.

The problem is the berth has a reported 36 ft. at LW (actually by lead line we found (Oct. '80) a minimum of 33 ft. 9 in. reduced to datum along the dock face). Therefore before LW you have to pump out about 2,000 tonnes, any delay can be important.

Pilots: Boards from large fast cutter between Savannah Light and whistle buoy.

Give plenty of notice as cutter might be lying up-river at pilot station. Based at Cockspur Island in the ship channel. Call "Savannah Pilots".

Pilot ladder must be 8 ft. above water. Side dependent on wind. Berthing Pilot joins from tug using own ladder at Kings Island.

On departure from berth, Pilot requires 1.5 hours notice.

VHF: "Alpha" Channels used frequently.

U.S.C.G. uses 22A, Pilots use 18A, tugs use 19A. Otherwise use 16, 12 and 13.

Channel: The maximum draft of vessels has been 39 ft. with a 6 ft. tide. Normal maximum 37 ft. This can only take place on the flood so as to be on the berth at slack water.

Channel is narrow, less than Houston Ship Canal. Constant dredging is required. From Whistle Buoy to berth is about 3 hours.

Vessel is swung in Argyll Turning basin off the container quay. 24 hour navigation is undertaken.

From soundings from Savannah Light beacon to Berth No. 61 proceeding inwards 3 hours before Savannah HW (2.5 m.) a minimum of 1.6 m. under keel was found with draft 11.15 m.

Berth: Depth: "See plan". Minimum depth reduced to datum found to be 33 ft. 9 in. along jetty face.

Berth No. 61: Owned by Georgia Ports Authority and leased to Occidental.

Concrete jetty on piles with centre section connected by roadway to shore, and mooring dolphins either end connected to jetty by catwalk. Length of centre section 266 m. Good fendering.

The upriver dolphin is not used due to damage. Can turn gangway out before arrival.

Pilot with the aid of powerful tugs swings vessel in very competent manner at Argyll Turning Basin.

Density: 1001 to 1002.

Moorings: Basic 3, 2, 2, each end. Forward headlines (3) go to Ro-Ro dock and breastlines to dolphin with springs to main jetty. Due to damage the upriver dolphin cannot be used so all stern and breast lines go to Grain Berth No. 62.

Springs out first, last in. Mooring boat used. Port Authority mooring gang require 4 hours notice.

Tugs: Atlantic Towing Company based along town water front. Several large and powerful tugs. Two used, one each end, American style, tie up with own lines alongside. One and a half hours notice required.

U.S.C.G.: Very co-operative. Although Agent will try to get them to board in river for pre-inspecton, they board at dock. Carry out check list and inspection before cargo allowed to be worked. Takes about 30 minutes.

One U.S.C.G. rating on board at all times (8 hour shifts). Strict on pollution.

The U.S.C.G. do not seem to mind which way round the ship is berthed. Scuppers to be plugged.

Discharge: Into mobile Chiksan (as berth only leased). After manifold if starboard side too. Maximum rate about 1,200 t.p.h. but generally nearer 900 t.p.h. to 1,000 t.p.h. Connection 12 in. 150 ASA. No vapour return line. Shore tank capacity 45,000 tonnes, which fills rail and road tankers. Takes about 45 minutes to connect/disconnect. Shore labour assist. Shore personnel always in attendance. Manager very helpful.

In light ship condition we had 18 m. air draft which did not create any difficulties.

General: Lloyds Surveyor easily obtainable from Jacksonville. Fresh water from jetty, require 6 hours notice, especially at weekends.

Lube oils whilst discharging with U.S.C.G. permission. Stores lorry able to get close alongside ship.

Ship's crane (if starboard side to) will just plumb after end of jetty.

Liferaft service (Beaufort) at Southern Ship Supply – 24 hour service.

Shoreline infested with rats, snakes and big spiders.

Chandler: Southern Ship Service, good fresh produce.

Town: About 5 miles away. Can telephone for taxi – free of charge local calls, from hut at grain berth about 100 yards from gangway.

Airport 6 miles South of town centre with regular flights to Atlanta International, etc

AUTHORITY: Georgia Ports Authority. Georgia Kaolin International and East Coast Terminal. Savannah Port Authority.

The Savannah Port Authority does not operate terminals; however, is engaged in port and industrial development for the City of Savannah and Chatham County, Georgia. Harbour regulations pier and bulkhead lines, etc., come under the jurisdiction of this organisation.

Georgia Ports Authority, P.O.Box 2406, Savannah, Georgia 31402. *Tel:* (912) 964-3811. *Telex:* 804782 and TWX 810-784-5634. *Cables:* Gaports. *Contact:* John J. Powers, Jr.

AGENT: Strachan Shipping Company, P.O.Box 9667, Savannah, Georgia 31412. Tel: 912-234-6671. Telex I: 54-6415. Telex II: 810-784-5630. Cables: "Strachan".

SEARSPORT, Maine: 44.28 N. 68.56 W.

(See Plan Book)

LOCATION: The Port of Searsport is located on Penobscot Bay, approximately 112 road miles East of Portland, and 20 miles from Bangor.

DOCUMENTS:

Clearance from Last Port.

2 copies of Form 1300 (Master's Oath).

2 copies of Form 1301 (General Declaration).

3 copies of Form 1302 (Inward Foreign Cargo Manifest).

NOTE: Form 1302 will only be accepted.

2 copies of Form 1303 (Ship's Stores Declaration)
(Including Narcotic Medicines).

Form 1374 outward foreign Manifest.

2 copies of Form 1304 (Crew Effects Declaration).

2 copies of I-418 (Crew List).

Also available: Vessel Register, Safety Equipment Certificate, Load Line Certificate, Certificate of Financial Responsibility, (Oil Pollution), and U.S. Tonnage Tax Receipts.

PILOTAGE: Ship's agent notifies Pilot approximately 48 hours in advance of arrival, correcting at 24 hours. Pilot's boat called on Channel 16.

Vessels from South and West, Pilot boards at Monhegan Island (Buoy 14M). Vessels from East, Pilot boards at Matinicus (Buoy 2WB). The pilot station is located on Matinicus Rock Island. Pilot boards at Wooden Ball Light Bell Buoy "2WB." Lat. 43° 49′ N., Long. 68° 50′ W.

The pilot boat is a fishing boat with a white hull showing the international signals.

Pilot signal: 3 long and 2 short on ship's whistle.

Radio contact: VHF Channel 16 (156.8 MHz).

36 and 24 hours ETA requested, cable "Penbay – Belfast/Maine", via Chatham Radio.

ANCHORAGES: No restrictions on anchoring.

RESTRICTIONS: No restrictions at night. Deep draft vessels brought in only on high water. Draft in concurrence with docks, 32 ft. low water. 10 ft. rise in tide – approach to Searsport 35 ft. – Bay 60 ft. limit.

MAX. SIZE: Size of vessel restricted to 38 ft. draft in harbour area. No outside installations at the port yet.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Boston Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Tugs in Searsport Harbour use Channels 16 and 13. Vessels arriving Searsport go through radio station at Chatham, Mass., RCA installation, SSB station or a VHF public correspondence station.

TUGS: Penobscot Bay Towing Co., Marshall Wharf, Belfast, Maine 04915. Tel. (207) 338-3000. 24-hour service. Requested that orders for tugboat service be given during normal business hours, 24 hours in advance.

Tugs: "Patrick McAllister", 1,200 h.p.
"Brian F", diesel 1,200 h.p.
"Roderick McAllister", diesel 1,200 h.p.
"Bronx", diesel 1,800 h.p.

Radio: Ship to ship, VHF Channels 16-13-10.

Sea Pilots dock ship with tug's assistance.

BERTHING: Draft conditions govern arrival and departures.

Bangor and Aroostock Pier: Length 800 ft., width 100 ft. Depth alongside (East side) 34 ft., (West side) 30 ft.

This pier handles a wide variety of cargoes including petroleum, forest and agricultural products, such as newsprint, tapioca, long logs, dimension lumber, potatoes, etc.

Cargoes can be off-loaded or loaded directly from or to railroad cars or trucks. There are 4 warehouses on the facility available for import or export cargoes.

C.H. Sprague Dock: Length 614 ft., depth alongside East side 33.6 ft.

This facility has and can handle many bulk cargoes, including salt, coal, gypsum, potash, bauxite, liquid chemicals, and Bunker C petroleum. There are 3 towers for discharge of bulk cargoes.

Turning basin off docks, depth 34.5 ft. and 1,200 ft. width.

STEVEDORES:

Weekdays:

Order gangs by 1700 hrs. for following day 0800 start.
Order gangs by 0900 hrs. for same day 1300 start.
Order gangs by 1300 hrs. for same day 1800 start.

Weekends:

Order gangs by Saturday 1200 hrs. for a Sunday 0800 start.
Order gangs by Saturday 1200 hrs. for a Monday 0800 start.

MEDICAL: No advance notice required by Agent. 1 hospital, Waldo County, which takes bed patients.

TANKERS: 2 berths at Searsport – 2 for No. 6 oil and 1 for light oil and gas. 2×8 in. hoses. 34 ft. low water.

DENSITY: Average density 1024.

FRESH WATER: Available by tug for boilers only at rate of tug hire at anchorage. Drinking water available at piers.

FUEL: No. 6 oil at C. H. Sprague dock. Light oils delivered by tank truck at dock.

FIRE PRECAUTIONS: At certain oil piers information given to Shipmaster upon arrival at pier. Ample fire protection, salt-water lines, sprinkler system on pier, local fire department.

GANGWAY/DECK WATCHMEN: Not required.

OPENING/CLOSING HATCHES: Ship's crew may open hatch after longshoremen boarded ship.

CERTIFICATES:

Load-line Certificate.
Certificate of Foreign Clearance.
Ship's Safety Certificate.
U.S. tonnage Tax Certificate of previous trip if have them.
Radio Operator Licence.

CUSTOMS ALLOWANCES: Tobacco, 200 cigarettes per man. Wine and/or Spirit allowance 1 bottle per person.

CARGO GEAR: No additional cargo gear necessary.

IDENTIFICATION CARDS: Form I-95 must be filled out on arriving unless seamen has had a prior one made out for a previous arrival on same ship (on plastic card).

CONSULS:

Norwegian: Allan Kjos-Hansen, 30 Mayer Road, Portland, Maine, Vice-Consul.

French: Dr. Paul O. Proudian, 776 Main Street, Westbrook, Maine.

Finnish; Frank W. Bjorklund, 163 Main Street, Norway, Maine.

Italian: Dr. Domenica A. Santoro, 43 Deering Street, Portland, Maine.

Panamanian: Mary Navarro de Carrillo, Lafayette Town House, Portland, Maine.

Swedish: Martin Johnson, Vice Consul, 443 Congress St., Portland, Maine.

REPAIRS: All types of machinery repairs.

DRY DOCKS: None.

REPATRIATION: Arrangements must be made with Agent in advance by telegram.

AIRPORT: Bangor International Airport, 30 miles, Northeast Airlines.

HOLIDAYS: New Year's Day; Washington's Birthday; Patriot's Day; Memorial Day; Independence Day; Labour Day; Thanksgiving Day; Christmas Day and Veteran's Day. Possible to get gangs to work all days except on Labor Day and Christmas.

POLICE/AMBULANCE/FIRE: Police 548-6372; Ambulance 548-2900; Fire 548-2900.

TELEPHONE: Arrangements can be made to have phone put on ship, but most docks have pay phones.

DEVELOPMENTS: Directly across from the Port of Searsport lies Sears Island. A major new cargo facility and industrial park will be constructed. Emphasis will be directed toward potential user groups of heavy machinery and equipment assembly and manufacturing, plus a full spectrum of forest products storage and shipment.

This development will feature modern container-handling facilities and breakbulk handling capability. The completion date for this new facility is early 1985.

AUTHORITY: None.

Contact: Searsport Port Committee, Searsport, Maine 04974, or Maine Department of Transportation, Division of Ports & Marine Transportation, Augusta, Maine 04333. *Tel:* (207) 289-2841.

SEATTLE, Washington: 47.36 N. 122.20 W

(See Plan Book)

PORT LIMITS: Port of Seattle limits are co-extensive with the boundaries of King County in which Seattle is situated. A vessel has "arrived" when it has tied-up to a berth.

DOCUMENTS (on arrival from foreign):

Clearance from Last Foreign Port.

2 Crew Lists on Form. I-418.

2 Passenger Lists on Form I-418 (if applicable).

Passenger Declarations if applicable.

2 Store Lists.

2 Crew Purchase (curio) Lists.

2 Manifests of Cargo for discharge on CF1302.

If first arrival port on an inward voyage, must also have 2 sets of Manifests of complete cargo on 1302, one for Customs at this port and the other for use as a "Travelling Manifest" to go forward to other discharge ports.

A – For U.S. Public Health Quarantine Boarding Officer: "Quarantine Declaration" on Form PHS.43. (Only required if boarding on arrival is necessary) see "Health" before first U.S.A. port.

B – For U.S. Dept. of Agriculture Boarding Officer: "Shipmaster's Declaration and Warning Notice" on Form AIQ.43.

C – For U.S. Immigration Boarding Officer:

Crew List on Form I-418 visaed by U.S. Consul abroad.

Passenger List on Form I-418.

Attachment to Passenger List on Form I-92.

Form I-94 for each passenger.

Form I-95 or ID Card (Form 184) for each crewman. (These are re-usable for multiple entries, but for seamen on first trip to United States a new Form. I-95 must be ready for presentation on arrival.)

D – For U.S. Customs Boarding Officer and Agent or Broker:

3 copies Crew List (Form I-418).

3 copies Cargo Manifest on Form 1302.*

3 copies Store List – Form 1303.*

3 copies Crew Purchases or Curio List (Form 1304).*

3 Passenger Lists on Form I-418.

For U.S. Ships – Declaration re foreign repairs on Form 3415.

For U.S. Ships – Certified Crew List from last U.S. port before going foreign.

*At subsequent U.S. ports of call 2 copies required of extracts Cargo Manifests of cargo for the port concerned, and 2 copies of lists of stores and curios remaining on board.

PILOTAGE: Compulsory for all vessels except those on coasting trade. Pilots may be obtained from Port Angeles Pilots' Association, Seattle, at short notice. Inward, Pilot boards vessel at pilot station off Port Angeles.

Port Angeles Pilots: Pilotage service furnished to any port or place on Puget Sound and its adjacent inland waters.

Pilot stations are located on Ediz Hook, Port Angeles and Seattle Washington.

Vessels desiring a Pilot should proceed to a position 0.25 miles East of Ediz Hook, where Pilot will board the vessel. If a Northwest wind, sea, or swell exists, vessels are requested to proceed to a position inside and South of Ediz Hook to obtain a lee and facilitate boarding.

In clear weather, vessels should indicate their desire for a Pilot by hoisting the International Code Flag "G" and by blowing the whistle signal of one long, one short and one long blasts.

In fog or thick weather, the blowing of this whistle signal will attract the attention of the pilot station and repetition of this signal will assist the pilot boat to locate the vessel.

The pilot station is located 1,200 yards, 277° from Ediz Hook Light. At night, the station will show from a mast, 3 vertical lights, the highest and lowest being red and the middle one green, to indicate that the pilot boat is en route to the ship. The pilot station is equipped with radar to locate and track vessels. The pilot boats, 'Juan de Fuca' and 'Puget Sound' are equipped with radar.

Communications: Vessels may ensure prompt service by advising their ETA, Port Angeles, 24 hrs. in advance, via radio to station KLB, addressed to Port Angeles Pilots, Seattle, Washington. A vessel may also advise the pilot station, Port Angeles, Washington, addressed to "Pilots Port Angeles" of their ETA, and amended ETA, when subsequent conditions make it necessary. The message is transmitted immediately from KLB to Port Angeles via telephone. The pilot station, Port Angeles, monitors VHF Channels 14 and 16 continuously and transmits on Channel 13.

At the time of passing Cape Flattery, inbound vessels are requested to re-affirm their ETA by calling the pilot station directly, using VHF calling Channel 16 and transmitting on Channel 13.

Channel 14 is for vessel traffic system only.

Pilot Ladder Requirements:

1. Please contact pilot boat via voice radio (Channel 13) approximately 30 minutes prior to arrival for desired lee.
2. The ladder must be kept clean and used solely for embarking and disembarking Pilots.
3. Rigging of the ladder, along with embarking and disembarking Pilot, must be under supervision of a licensed officer.
4. The ladder must be made in 1 length and not consist of 2 lengths shackled or lashed together, and should be equipped with spreaders about 10 ft. apart to comply with SOLAS Regulation 17, Chapter 5.
5. The pilot boats have their own lights to illuminate the pilot ladder, but a standby light should be ready for an emergency.
6. The area of the deck where the Pilot boards and leaves must be well lighted and the area must be clear of all obstacles to ensure a safe passage for the Pilot.
7. *No tag lines, pull-up ropes, or trailing lines may be attached to the lower ends of the ladder.*
8. Ladders must be rigged well clear of discharge and water outlets and at a place near midship which affords the best lee for the Pilot. At no time should the ladder be rigged near the stern of the vessel.
9. Means must be provided to allow the Pilot to pass safely onto the ship's deck. Where portable stanchions and bulwark steps are used for this, the portable stanchions must be rigidly attached to the ship's structure and not the steps. The bulwark steps must also be securely fastened.
10. The ladder must be in good condition, the treads must remain horizontal when used and the upper surface must have a rough nonskid quality.
11. Manropes approximately 3 in. manila in circumference, a heaving line and a ring buoy with a self-igniting light must be provided.
12. If your vessel is to take a load of logs, make sure the Agent makes arrangements to have a cat-walk to provide safe passage to and from the ladder.

Accommodation Ladders for embarking or disembarking of Pilots:

1. All vessels where the distance from sea level to the point of access of the ship exceeds 9 m. (30 ft.) at any time, should carry on each side an accommodation ladder. The ladder is to be so sited that when in use the lower end of the ladder shall rest firmly against the ship's side under all conditions of roll and heel, clear of all discharges, and within the parallel length of the ship.
2. A conventional pilot ladder should be rigged just abaft the lower platform of the accommodation ladder. The pilot ladder should be secured firmly to the lower platform to allow access between the pilot ladder and accommodation ladder. The pilot ladder should extend at least 2 m. (6 ft.) above the lower platform of the accommodation ladder. Manropes to be provided and rigged alongside the pilot ladder.

ANCHORAGES: Extensive anchorage in Eliott Bay, depths of 90 ft.

RESTRICTIONS: Overhead power cables at Burlington Northern Railroad Bridge with a vertical clearance of 155 ft.

MAX. SIZE: Controlled by depth at berth.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, 2nd tug normally used.

BERTHING: Over 46 berths for ocean-going vessels. Depths alongside, 30 ft. to 73 ft. MLLW.

SPECIALISED HANDLING FACILITIES: Terminals 18 and 20 combined and now designated as Terminal 18. Pipe-lines are available to carry molasses, tallow or other non-petroleum liquid cargo, and has a tank farm for storage.

Terminal 115 – 2 berths, capacity, import steel.

Terminal 115 – Foss Alaska Barges, has specialised finger piers, to handle container-to-barge operations.

Terminal 128 – A barge terminal.

Terminals 5, 18, 25, 37, 42 and 46 – Container Terminals, equipped with large container cranes and yards to handle van shipments. Depth alongside, Terminals 18 and 25 – 50 ft. Terminals 5, 37 and 46 – 40 ft.

Pier 86 – fully automated, deep water, Grain Terminal. 1 berth, length 600 ft. (Max. LOA 1,400 ft. using dolphins). Depth of water 73 ft. at MLLW. Grain Terminal: capacity 4.2 million bushels, loading rate 3,000 t.p.h. via twin conveyor belts.

CRANES: *Terminal 5:* 4×33 ton container cranes.

Terminal 18: 9×45 ton and 2×33 ton container cranes.

Terminal 20: 2×50 ton revolving cranes and 1×200 ton sheer leg.

Terminal 25: 2×45 ton container cranes.

Pier 28: 1×50 ton gantry.

Terminals 37, 42 and 46: 5×45 ton container cranes.

Terminal 115: 1×50 ton and 1×40 ton gantry crane.

STEVEDORES: 40 local gangs available. Gang requirements must be made known to the contracting stevedore prior to 1100 hrs. on day before vessel plans to dock. Order before 1030 hrs. on Saturday for Saturday afternoon, Sunday, and Monday.
DENSITY: Salt water in Outer Port. Fresh water inside Canal Locks.
FRESH WATER: Available at all wharves.
FUEL: Available.
GANGWAY/DECK WATCHMEN: Watchmen required if detainees aboard.
OPENING/CLOSING HATCHES: Normally carried out by stevedores while in port.
CERTIFICATES:
Certificate of Registry.
Certificates for any previous U.S. tonnage tax payments within the past year.
International Load Line Certificate.
Safety Radio Certificate.
Derat Certificate.
Cargo Gear Inspection Certificate.
Certificate of Inspection (for U.S. vessels).
CUSTOMS ALLOWANCES: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.
IDENTIFICATION CARDS: Required.
CONSULS:
Austria
Belgium
Canada
Chile
China
Costa Rica
Denmark
Ecuador
El Salvador
Finland
France
Germany
Guatemala
Honduras
Iceland
Italy
Japan
Mexico
Netherlands
Nicaragua
Norway
Panama
Paraguay
Peru
Philippines
Sweden
Switzerland
United Kingdom
REPAIRS: All types of repairs possible.
DRY DOCKS: 10 dry docks for vessels up to 20,000 tons.
REPATRIATION: All facilities exist.
AIRPORT: Sea-Tac International Airport.
TIME: Pacific Standard Time, GMT minus 8 hours; Pacific Daylight-saving Time, from end April to end October, is GMT minus 7 hours.
HOLIDAYS: January 1st, New Year's Day (no work); January 15th, Martin Luther King Day, normal working day; February 12th, Lincoln's Birthday (work); Third Monday in February, Washington's Birthday (work); Last Monday in May, Memorial Day (work); July 4th, Independence Day (work); July 28th, Harry Bridges Birthday, normal working day; First Monday in September, Labour Day (no work); Second Monday in October, Columbus Day (work); November 11th, Veteran's Day (work); First Tuesday in November, Statewide Election Day (work); Fourth Thursday in November, Thanksgiving Day (no work); December 24th, Christmas Eve, paid holiday, work until 1500 hrs.; December 25th, Christmas Day (no work); December 31st, New Year's Eve, paid holiday, work until 1500 hrs. In addition July 5th, known as "Bloody Thursday", while not a holiday, is a no work day for longshoremen.
SHIP SUPPLY SERVICE: Helicopter pickup of sick crew members provided by the United States Coast Guard. All other services provided by privately operated businesses.
SHORE LEAVE: Allowed, except for crewmen detained by Immigration.
DEVELOPMENTS: Pier 66 to be re-developed as a cruise ship terminal. Completion expected Spring-1986. Length of berth 900 ft., depth alongside 35 ft.
AUTHORITY: Port of Seattle, P.O. Box 1209, Seattle, Washington 98111, *Tel:* (206) 382-3257. *Telex:* 703433 Port Sea. *Contact:* Jack H. Fox, Director-Marine Services.

AGENT: Beaufort Navigation Inc., The Bank of California Center, Suite 901, Seattle, Washington 98164. Tel: (206) 623 4930. Telex: 32 8713.

SEWARD, Alaska: 60.06 N. 149.27 W. (See Plan Book)

DOCUMENTS:
3 copies Cargo Manifest (Form 1302) the original showing all cargo on board, and 2 copies showing only cargo for this port.
2 copies Crew Manifest (curio list).
2 copies Stores List.
2 copies Passenger List (Form I-418).
2 copies Crew List (Form I-418).
Customs boarding Officer will also examine Ship's Register and Load-line Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:
Health Pratique.
Master's Oath (Form 1300).
All Foreign clearances.
U.S. Certificates of payment to tonnage tax (Customs Form 1002).
Certified Crew List.
PILOTAGE: Alaska Marine Pilot's Association, Box 273, Homer, Alaska 99603. 48 hours advance notice. 2182 calling frequency KC – KTE – 21. Anchorages as noted on chart. C. & G. S. 8529 Resurrection Bay.
Pilot boards at Cains Heads in Resurrection Bay.
MAX. SIZE: Harbour depth 35 ft. MLLW.
ANCHORAGE: Suitable anchorage in 30 fathoms depth available for deep draft vessels at the head of the Bay, South of marked buoy.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
RADIO: KWA 346 (AM) Alaska Railroad Dock, frequency monitored 2182 kHz. KWA 364 (SSB) Alaska Railroad Dock frequency monitored 4-6-8-12 Megs.
TUGS: Regular tug service available. Anderson Tug & Barge (907) 224-5506.
BERTHING: 24 hour berthing. Berthing permit required. Advance notice of 48 hours requested.
200 ft. by 735 ft. steel and concrete finger pier.
East Side — 600 ft. long with 35 ft. depth of water. (10 ft. out from dock face).
West Side — 600 ft. long with 35 ft. depth of water.
South End — 200 ft. long with 35 ft. depth of water.
(East and West Berths serviced by railroad spurs).
CRANES: East Berth – 2 gantry cranes. Maximum capacity – 45 short tons, maximum radius – 105 ft. Forklifts ranging up to 35 ton capacity.
STEVEDORES: Northern Stevedoring and Handling Corporation supply labour force.
MEDICAL: Fully staffed 30 bed hospital. All medical facilities available.
DENSITY: 1.0248 at Mean High Water.
FRESH WATER: Available at East and West berths. 4 in. water line; 67 lb. pressure.
FUEL: Marine Gas Oil available from pipe-line at South & West Berth. Marine Diesel Oil available from same pipe-line during Summer months only (Maritime Oil, Vancouver, B.C.).
OPENING/CLOSING HATCHES: Handled by crew, if done before berthing ship. By stevedores if tied to dock.
IDENTIFICATION CARDS: U.S.C.G. Port Security Card or Seaman's Card required.
REPAIRS: Radio, radar, welding, machining and light engine repairs can be effected.
AIRPORT: 1 mile. 1 flight daily to Anchorage.
TIME: Alaska Standard Time.
HOLIDAYS: All holidays are time and one half. Cargo can be worked on all except Christmas, New Year's and Labour Day.
POLICE/FIRE/AMBULANCE: Tel: 911.
AUTHORITY: The Alaska Railroad, P.O.Box 95, Seward, Alaska 99664. *Tel:* (907) 224-5550. *Contact:* Dock Agent.

SITKA, Alaska: 57.03 N. 135.20 W. (See Plan Book)

Located on the Western side of Sitka Sound, Baranof Island. Open all year.
APPROACHES: 3 natural channels: Western, Middle and Eastern.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pilot pick-up point – close aboard vicinity Eckholm Light.
ANCHORAGE: Jamestown Bay.
MAX. SIZE: Harbour depth 22 ft. MLLW. Tides: diurnal range – 9.9 ft.
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
CUSTOMS: Quarantine, Immigration and Customs, local.
TUGS: 7 tugs 300 h.p. to 1,200 h.p.
BERTHING: 3 wharves.
1. Conway Dock: Berthing length 160 ft., depth 30 ft. MLLW. No cranes, 3 lift-trucks; 10,000 sq. ft. covered shed space; fresh water.
2. Japonski Dock: Government dock only for limited commercial use.
3. Alaska Lumber & Pulp Co.: (Private) Berthing length 700 ft., depth 35 ft. LW. Walking cranes only. Not less than 12 lift-trucks, 30,000 sq. ft. covered shed space; fresh water. (Located at Silver Bay, Sawmill Cove, 4 miles South of Sitka). 30,000 sq. ft. open storage.
STEVEDORES: 3 gangs.
DRY DOCKS: 1×400 ton floating dock at Jamestown Bay, approximately 3 miles East of Central Sitka.
REPAIRS: Light repairs only.
FRESH WATER: Available.
FUEL: Not available.
MEDICAL: Sitka Community Hospital and U.S. Public Health Service Hospital on Japonski Island.
TRANSPORTATION: Air and ferry.
AUTHORITY: City and Borough of Sitka, 304 Lake Street, Sitka, Alaska 99835. *Tel:* (907) 747-3439, 747-3294, 747-3245. *Contact:* Richard J. Guhl, Harbour Master.

SKAGWAY, Alaska: 59.27 N. 135.18 W.

Located at the Northern end of Lynn Canal, 14 miles North of Haines.
APPROACHES: Via Lynn Canal.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pick-up point located in vicinity of Point Retreat.
MAX. SIZE: Harbour depth 30 ft. running out to 300 ft. Tides diurnal range 16.7 ft. Also see "Berthing".
ANCHORAGE: In Lutak Inlet, 14 miles South of Skagway.
HEALTH: See "Health: All ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
CUSTOMS: Quarantine, Customs and Immigration available in Skagway.
TUGS: 2 tugs available at Skagway.

BERTHING: 1. White Pass and Yukon Railroad Dock: Containerised cargo to Vancouver and Whitehorse is the principal use, also used for tankers and cruise ships. 1,240 ft. long, 100 ft. wide; depth at face varies from 20 ft. to 43 ft. Southern 400 ft. in poor condition. No covered storage. Open storage 80,000 sq.ft. 1 fork-lift is available. Containers presently loaded and unloaded with ship's gear. 2 straddle cranes for containers on dock. Deck for 400 lbs. per sq. ft. loading.

2. Skagway Terminal Co.: Ore loading facility. 1,000 ft. berth, fender dolphins, and walkway. 42.5 ft. deep at face. Sole use for bulk cargo ships. Adjacent to the berth is a warehouse of 108,000 sq.ft. Also available are 50 acres for open storage. Loading equipment consists of 1 fixed loading spout with a capacity of 1,500 t.p.h.

3. State: City joint use ferry pier – barge off-loading facility.

4. City of Skagway: Small boat harbour, approx. 100 stalls. Fuel available. Water available in temperate seasons.

STEVEDORES: 3 gangs.

REPAIRS: None.

SURVEYORS: Not available locally.

WATER: Available in small quantities in temperate seasons only.

FUEL: Available at Chevron Dock.

MEDICAL: Medical clinic and one nurse.

AIRPORT: One mile from harbour. Scheduled and charter flights available daily.

TELEPHONE: Pay phone at top of small boat harbour ramp.

POLICE/AMBULANCE/FIRE: Police 983-2301. Ambulance 983-2300. Fire 983-2300.

BANKS: National Bank of Alaska, Skagway.

EMERGENCY CO-ORDINATON CENTRE: Skagway Fire Hall, Tel: 983-2300

STORING: See "Prelims", page viii.

Storing at White Pass Railroad Dock:

1. By truck.
2. No barge storing.
3. Trucks can proceed alongside, except south 400 ft. of dock.
4. Fork lift trucks can be used.
5. Customs perform supervision of loading/unloading of all bonded stores. Customs/Immigration Tel: 983-2325
6. Local riggers are available.

GENERAL: Highways: Klondike highway open approx. May 15th to October 15th.

AUTHORITY: City of Skagway, P.O.Box 415, Skagway, Alaska. *Tel:* Harbour Master 983-2386 or 983-2555.

SMITHS BLUFF, Texas: 30.00 N. 93.59 W.

DOCUMENTS, PILOTAGE, RADIO, etc.: Refer to "Port Arthur".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Meet vessel in Neches River before arriving at berth. Normally 2 tugs required berthing/unberthing.

BERTHING:

Pure Oil Co.: Distance from sea 38 miles, depth at berth 37 ft.

Sun Oil Co.: Distance from sea 38 miles, depth at berth 39 ft. 6 in. (Also see "Beaumont" – Nederland)

MEDICAL: All facilities available.

DENSITY: Fresh water.

FRESH WATER: Available ex-wharf at Sun Oil Terminal.

FUEL: Available ex-wharf at Sun Oil Terminal.

GANGWAY/DECK WATCHMEN: Not required unless crewmen detained by Immigration.

CUSTOMS ALLOWANCES: 300 cigarettes and 1 quart wine or spirits for each man.

IDENTIFICATION CARDS: Foreign crew only require Immigration Landing Permit.

CONSULS: Nearest at Houston.

REPAIRS/DRY DOCKS: See "Port Arthur".

AUTHORITY: Port of Beaumont, Navigation District of Jefferson County, P.O.Drawer 2297, 1255 Main Street, Beaumont, Texas 77704. *Tel:* 835-5367. *Telex:* 779486. *Cables:* Portbomont. *Contact:* Mr. J. W. Martin.

STOCKTON, California: 37.57 N. 121.19 W.

(See Plan Book)

DOCUMENTS: See "San Francisco".

PILOTAGE: Pilots commissioned by Stockton Port District. Pilots obtained by contacting Secretary of California Inland Pilots' Association, located at Marine Exchange, World Trade Center, San Francisco, California (KBP 386).

ANCHORAGE: Emergency anchorage only permitted in Turning Basin, 32 ft. depth.

RESTRICTIONS: Restrictions only in effect if water at flood stage. See "San Francisco".

MAX. SIZE: Draft restrictions of 30 ft. at low tide, 32 ft. at high tide. (Also see "Developments").

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to San Francisco Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Ship to shore Radio (KBP 376) enables constant contact with Pilots who therefore aware of any problem that may develop up or down river. Arrangements also may be made for readiness of ordered gangs within 15 minutes of ship's arrival.

TUGS: Tugs join vessel 0.5 mile up river from Main Channel; generally, ship's lines used, however, tug lines may also be utillised.

BERTHING: *Port Stockton Bulk Material Wharf, Berths 12-13:*

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Shipment of dry-bulk commodities, both systems handle the following: coal, petroleum coke, clay, copper concentrates, fertiliser, soda ash, sulphur, and other dry bulk commodities; receipt of molasses and petroleum products.

Dimensions: Length of face 566 ft.; lower side 13.5 ft., upper side 13.5 ft.; depth alongside at MLLW 35 ft.; usable berthing space 566 ft.

Mechanical handling facilities: Two bulk handling systems. *One:* Max. vessel loading rate 600 short tons/p.h. Equipped with shiploader, belt conveyor, 360 degree spout trimmer, bottom drop car dump (Max. 7.5 cars per hr.) and truck unloader hopper (Max. 24 trucks per hr.) *Two:* Max. vessel loading rate 4,000 short tons/p.h. Conveyor system equipped with a 54 in. belt, rotary car dump, loop railroad for unit train.

Port Stockton Wharf, Berths 10-11:

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Container-handling dock; receipt of molasses, petroleum products, bulk dry cargo, container cargo and general cargo. Delivery of scrap steel, container cargo and general cargo.

Dimensions: Length of face 810.5 ft., lower side 102 ft.; depth alongside at MLLW 32 ft.; usable berthing space 810.5 ft.

Remarks: Face of wharf is in line and continuous with face of Berth 9 providing a total of 1,455.5 ft, of berthing. This dock has 5.5 acres of open marshalling area.

Port Stockton General cargo Wharf, Berth 9:

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Receipt and shipment of general cargo.

Dimensions: Length of face 645 ft., upper side 75 ft.; depth alongside at MLLW: Face 37-34 ft., upper side 35 ft.; usable berthing space: Face 645 ft. upper side 110 ft. with dolphin; width of apron: Face 41.25 ft.

Mechanical handling facilities: Forklift trucks and other types of cargo-handling equipment, owned by the Port District and by stevedoring companies, are available as needed.

Port Stockton Wharf No. 8:

Owned by: Stockton Port District.

Operated by : Stockton Port District.

Use: Receipt and shipment of general cargo; Liquid sugar facility and receipt of molasses. Anhydrous Ammonia also unloaded at this dock through refrigerated pipelines.

Dimensions: Length of 396 ft.×88 ft.; depth alongside MLLW 37-36 ft.; usable berthing space 484 ft. with trestle.

Port Stockton Wharf No. 7:

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Receipt and shipment of general cargo.

Dimensions: Length 516 ft. depth alongside MLLW 37-36 ft.: usable berthing space 516 ft.; width of apron 31 ft.

Port Stockton Wharf No. 6:

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Receipt and shipment of general cargo.

Dimensions: Length 418 ft.; depth alongside MLLW 37-36 ft.; usable berthing space 418 ft.; width of apron 31 ft.

Port Stockton Wharf No. 5:

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Receipt and shipment of general cargo.

Dimensions: Length of face 428 ft.; depth alongside MLLW 34-32 ft.; usable berthing space 429 ft.; width of apron 31 ft.

Port Stockton Grain Wharf No. 4:

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Receipt and shipment of general cargo, receipt of bulk phosphate rock by self-discharging vessel; and shipment of bulk fertilisers.

Dimensions: Length of face 461 ft.; depth alongside MLLW 32-35 ft.; usable space 462 ft.; width of apron 31 ft.

Port Stockton Wharf No. 3:

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Receipt and shipment of general cargo.

Dimensions: Length of face 461 ft.; depth alongside MLLW 32-36 ft.; usable berthing space 461 ft.; width of apron 81 ft.

Port Stockton Open Wharf No. 2:

Owned by: Stockton Port District.

Operated by: Stockton Port District.

Use: Receipt and shipment of general cargo; shipment of logs, and handling of heavy-lift cargo. Also bulk cargo.

Dimensions: Length of face 506 ft.; depth alongside MLLW 32-36 ft.; usable berthing space 506 ft.; width of apron: open.

Remarks: Wharf has 39,000 sq. ft. of open storage area and 5 bulk cone shaped buildings for handling inbound dry bulk cargo, 2 cone shaped buildings for handling inbound cement bulk cargo, with direct belt conveyor from dock to cone buildings, with a capacity of 70,000 short tons to the rear of the dock area. At the Industrial Park approx. 104 acres of open storage area are located South of W. Washington Street: over 50 acres of this area can be used for storing logs awaiting shipment. An additional 56 acres of open storage are located North of W. Washington Street. There is a total of other warehousing with a capacity of 2.7 million sq. ft. of covered storage area comprised of 33 separate units.

Logs may be transferred to wharf by trucks and by tractors equipped with log clamps.

This dock also has two Whirley type gantry cranes with a 30 short tons capacity each at 36 ft. offshore reach. Equipped to handle bulk dry materials, containers, heavy lifts, etc. Cranes may be geared double to accommodate lifts up to 60 short tons.

Stockton Elevators Grain Elevator Main Wharf No. 1:

Owned by: Stockton Elevators Inc.

Operated by: Continental Grain Co.

Use: Shipment of grain by vessels and by ocean going and inland waterway barges; receipt of grain by self-unloading barges.

Dimensions: Length of face 564 ft., West side 20 ft., East side 20 ft.; depth alongside at MLLW 35-37 ft.; usable berthing space 564 ft.; width of apron, open end 20 ft.

Mechanical Handling Facilities: 2 towers on wharf, each with 13-in. diameter, telescopic, mechanically operated, grain-loading spout; loading rate, 900 short t.p.h. (29,877 bu.) at East tower; 800 (26,557 bu.) at West tower; combined rate, 900 short tons.

Remarks: Grain gallery connecting towers on wharf has a 30-in., electric-belt conveyor; and gallery extending from East tower to grain elevator has two 30-in. belt conveyors.

BRIDGES: Fixed-span high-level toll bridge across Carquinez Strait, with minimum clearance of 134 ft. above MHHW. Southern Pacific Railroad lift span bridge crosses Suisun Bay 6.5 miles upstream from Carquinez Bridge, with minimum clearance above MHHW of 70 ft. when closed and 135 ft. when open. Horizontal clearance on lift span 291 ft. A third bridge, 22 miles above Southern Pacific bridge, is near Antioch. It has a fixed span bridge with minimum clearance above MHW 135 ft.

STEVEDORES: *General Cargo* – For gang start at 0800 hrs., orders must be placed at 1600 hrs. of previous day; night gangs must be ordered by 1100 hrs. These times pertain to week-day gangs. For weekend gangs, 1100 hrs. Saturday for Saturday night, Saturday morning, Sunday night and Monday morning. Day shifts from 0800 to 1700 hrs. Night shifts 1700 to 0300 hrs. Arrangements can be made for a special third shift from 0300 to 0800 hrs. Rates quoted on request.

Bulk Ore and Grain Cargoes – Orders for gangs must be placed at same time as for general cargo. This operation on 24 hour basis; day shift, 0800 to 1600 hrs., night shift 1600 hrs. to midnight, swing shift, midnight to 0800 hrs. Stop work meeting first Tuesday of each month.

Also see "Radio".

MEDICAL: Arrangements with San Joaquin Medical Society for physicians, surgeons and dentists. 5 hospitals within radius of 6 miles from port. Ambulance service readily available. Telephone number for this service is 466-9535 (day or night).

TANKERS: 2 berths, 32 ft. depth available.

FRESH WATER: Available through pipelines.

FUEL: All grades of fuel available with 1 day's advance notice.

GANGWAY/DECK WATCHMEN: Services of watchmen not necessary. Available if requested.

OPENING/CLOSING HATCHES: Hatches may be opened prior arrival and closed after ship sailed from port; any opening or closing of hatches at dockside must be performed by stevedores.

CERTIFICATES: See "San Francisco".

CUSTOMS ALLOWANCES: Tobacco, Wine and/or Spirit, see "San Francisco".

CARGO GEAR: Safety regulations require strict adherence to max. loading or unloading weight capacity of ship's gear.

IDENTIFICATION CARDS: Not required.

CONSULS: See "San Francisco".

REPAIRS: Minor types of repairs carried out.

DRY DOCKS: Nearest dry docks, San Francisco.

REPATRIATION: No facilities in Stockton for effecting crew changes and arranging any necessary repatriations. Special arrangements may be made through Customs.

AIRPORT: Stockton Metropolitan Airport located approx. 6 miles from port. Serviced by Frontier and Air West.

TIME: Pacific Standard Time in effect from last Sunday in October to last Sunday in April; Pacific Daylight Time goes into effect on last Sunday of April until last Sunday in October, when clocks are advanced 1 hour.

HOLIDAYS: New Year's Day; Martin Luther King's Birthday; Lincoln's Birthday; Washington's Birthday; Memorial Day; Independence Day; Harry Bridge's Birthday; Labour Day; Admission Day; Columbus Day; Veteran's Day; Thanksgiving Day; Christmas Eve Day; Christmas Day and New Year's Eve Day are all holidays. In addition to above, General Election Day, both State and National, as well as any day proclaimed by Governor of California or President of United States shall be observed as holiday. Work can be arranged for all holidays except New Year's Day, Labour Day, Thanksgiving Day and Christmas Day.

POLICE/AMBULANCE/FIRE: Security Force on duty 24 hours a day and can be reached by dialling extension 528 for any emergency that might arise. Stockton Police Department's emergency telephone number (209) 943-9111. Stockton Fire Department (209) 464-4646. Ambulances may be secured by telephoning (209) 466-6869; 464-4846; 464-4611; 466-0223; 948-6056 and 948-5117.

TELEPHONES: Telephones placed aboard on request.

ELECTRIC CURRENT: At wharves where current available for ship's use, it is 110 volt, single phase, 60 cycle for lighting and 440 volt, 3 phase, 60 cycle for power.

SHORE LEAVE: Permitted.

REGULATIONS: Port of Stockton requests notice of ship's intent to come into port at least 7 days prior to arrival; vessels, who have made prior arrangements, will have precedence over vessels who sail into port without previous notice.

GENERAL: *Railroad Service:* Three transcontinental railroads serve the Port – Santa Fe, Southern Pacific, and Union Pacific (Western Pacific Division) with reciprocal switching privileges.

Truck Scales: Public truck scale available, operated by the Port.

DEVELOPMENTS: Deepening of channel to 35 ft. Completion expected late 1985.

AUTHORITY: Port of Stockton, 2201 West Washington Street, Stockton, California 95202. *Tel:* (209) 946-0246. Toll free outside State of California (800) 344-3213 or 344-3214. *Telex:* 35-9467 and TWX 510-765-6661. *Contact:* Alexander Krygsman, Port Director, or A.G. Beckman, Director of Operations.

TACOMA, Washington: 47.14 N. 122.28 W.

(See Plan Book)

DOCUMENTS (on arrival from foreign port):

Ship's document.
Clearance from Last Foreign Port.
2 Crew Lists on Form I-418
2 Passenger lists on Form I-418 (if applicable)
Passenger declarations if applicable.
2 Store Lists.
2 Crew Purchase (curio) Lists.
2 Manifests of cargo for discharge on C.F. 1302.

If first arrival port on an inward voyage, must also have 2 sets of Manifests of complete cargo on C.F. 1302, one for Customs at this port and other for use as a "Travelling Manifest" to go forward to other discharge ports.

A – For U.S. Public Health Quarantine Boarding Officer: "Quarantine Declaration" on Form PHS.43.

B – For U.S. Department of Agriculture Boarding Officer: "Shipmaster's Declaration and Warning Notice" on Form A1Q.43.

C – For U.S. Immigration Boarding Officer:
  Crew List of Form I-418 visaed by U.S. Consul abroad.
  Passenger List on Form I-418.
  Attachment to Passenger List on Form I-92.
  Form I-94 for each passenger.
  Form I-95 of ID Card (Form 184) for each crewmen. (These are re-usable for multiple entries, but for seamen on first trip to United States a new Form. I-95 must be ready for presentation on arrival.)

D – For U.S. Customs Boarding Officer and Agent or Broker:
  3 copies Crew List (Form I-418).
  3 copies Cargo Manifest on Form 1302.
  3 copies Store List – Form 1303.
  3 copies Crew Purchases or Curio List – Form 1304.
  3 Passenger Lists on Form I-418.
  For U.S. Ships – Declaration re foreign repairs on form 3415.
  For U.S. Ships – Certified Crew List for last U.S. port before going foreign.

* At subsequent U.S. ports of call 2 copies required of extracts Cargo Manifests of cargo for the port concerned, and 2 copies of lists of stores and curios remaining on board.

PILOTAGE: Compulsory for all vessels except those under coasting trade on West coast of the United States, including Alaska and British Columbia. Pilots board off Port Angeles Pilot Station.

ANCHORAGE: The depths as a rule are too great for convenient anchorage, but vessels occasionally anchor under the Northern shore about 1 mile Eastward of Brown's Point. Vessels may anchor in about 18.29 m., 450 yards N.N.W. of the outer end of Puyallup Waterway West Jetty.

City regulations permit anchorage in any part of the bay outside harbour lines so as not to interfere with vessels arriving or departing from their docks.

MAX. SIZE: Length over 305 m. (centre to centre dimensions of mooring dolphins), draft subject to berth depth.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available, join vessel in Commencement Bay, approx. half way between Brown's Point and the designated Dock. Tug's lines are used and there is a charge for tug's lines.

BERTHING: 32 deep water berths. Water depths: 9.15 m. to 21.34 m. below MLLW.

General Cargo: 161,000 sq.m. warehouse space, 91 hectares of open storage paved, lighted, fenced, serving all piers.

BULK HANDLING FACILITIES: 550 m. pier with 12 m. to 15 m. water depth. 5 heavy lift whirley cranes and bulk unloading crane with 750 to 1,500 t.p.h. capacity; 150,000 tons capacity alumina storage structure with load-out facility; 12.14 hectare stockpile area including holding area for 300 rail cars.

2 Bulk grain elevators: United Grain: Pier 1, 4.5 million bushel capacity; loading rate: 1,000 t.p.h.; 271.34 m. dock; 15.24 m. water depth.

Continental Grain: 3 million bushel capacity: loading rate: 2,400 t.p.h.; 137 m. dock with dolphins to 244 m.; 21.34 m. water depth.

Bulk Liquid Facility: 3.5 million gallon capacity; heated tanks and piping for both rail and truck shipping and receiving; serves vessels at Pier 1, 676 m., 10.67 m. water depth, and Pier 5, 174 m., 10.06 m. water depth.

CONTAINER HANDLING FACILITIES: *Terminal 4:* Container handling and general cargo. Container handling capability – 5,000 units per month. 2 berths, total length 378.6 m., width 42.7 m., Depth 13.7 m. MLLW. 1 warehouse 14,536 sq.m., 2×40-ton IHI container cranes, 10.12 hectares paved, lighted, fenced, back-up storage. 200 Reefer container outlets (240-480 volts). Direct rail access to pier. Intermodal yard for containers loading to rail cars.

Terminal 7: Containers and General cargo. 4 berths, total length 823 m., width 41 m., depth 13.7 m. MLLW. 2 warehouses each 9,290 sq.m. 3×40-ton Whirley cranes, 1×40-ton IHI multi-purpose crane, 1×50-ton Peiner multi-purpose crane (Containers, dry bulk). 1×40-ton IHF container crane, 17 hectares paved, lighted, fenced, back-up storage. 24 Reefer container hook-ups (240–480 volts). Direct rail access to pier.

BRIDGES: The 11th Street Bridge: All ships are required to notify for opening 2 hours in advance. The Puyallup River Bridge on 11th Street has been deactivated. The Blair and Hylebos Bridges have no restrictions. Closed periods apply to the 11th Street Bridge and the hours are as follows: 0645 – 0745 hrs., 1530 – 1730 hrs.

STEVEDORES: Jones-Washington Stevedore Company and Eagle Marine Services Ltd., and Stevedoring Services of America (SS of A).

Gang requirements must be made known to contracting stevedore prior to 1100 hrs. on day before the vessel plans to dock. (1030 hrs. on Saturdays for gangs on Saturday p.m., Sunday and Monday.)

Stowage of cargo for discharge or load determines the gang size requirements. Sufficient information for intelligent gang orders is a necessity – i.e. advance cargo plans, unusual size and/or weight, etc.

TANKERS: Loading/discharge lines 8 in. and 10 in. 150 ASA flanged connections. Slop discharge facilities not available. Fresh water available. Coast Guard regulations strictly enforced.

DENSITY: The average density in the port is 16.8 at 15° C.

FRESH WATER: Available. Delivers to vessel through portable meter hose.

FUEL: Available. Advance notice required.

Grade	*Viscosity at 122°SSF*
Bunker "C"	165 – 175
PS – 400	112 – 116
Bunker Special	50 – 60
PS – 300	32 – 35

FIRE PRECAUTIONS: Very strict precautions in force.

GANGWAY/DECK WATCHMEN: Watchmen required if detainees are aboard.

OPENING/CLOSING HATCHES: Normally carried out by stevedores. In practice, however, the crew can perform this task while in transit.

CERTIFICATES:

- Certificate of Registry.
- Certificates for any previous U.S. tonnage tax payments within the past year.
- International Load-line Certificate.
- Safety Radio Certificate.
- Derat Certificate.
- Cargo Gear Inspection Certificate.
- Certificate of Inspection (U.S. vessels).

CUSTOMS ALLOWANCES: Tobacco: Wine/Spirit: No definite quantities prescribed; reasonable allowance at discretion of Customs Inspector.

IDENTIFICATION CARDS: Required.

REPAIRS: The largest repair yard in Tacoma can haul out vessels up to 1,000 tons for all kinds of repairs, including electronics, welding, painting and machining; shafts up to 30 ft. in length are machined here. Another plant does shipbuilding exclusively, but will perform topside repairs if needed. Wreckage and salvage facilities are available. Larger vessels go to Seattle for dry-docking. Minor repairs and services for small craft are available at marinas on the City Waterway and the N.E. shore of Commencement Bay.

AIRPORT: Seattle – Tacoma International Airport is 16 miles North from Port and Tacoma Industrial Airport 8 miles West.

TIME: Local time reference is GMT minus 8 hours. In Summertime it is GMT minus 7, or Pacific Daylight Saving Time, started the last week-end in April and finished the last week-end in October.

HOLIDAYS: New Year's Day (January 1st) no work; Lincoln's Birthday (February 12th); Washington's Birthday (February 22nd); Memorial Day (May 30th); Independence Day (July 4th) no work; Bloody Thursday (July 5th); no work; Labour Day (September 1st) no work; Columbus Day (Friday after Thanksgiving); Veterans' Day (November 11th); Thanksgiving Day (November 27th) no work; Christmas Day (December 25th) no work.

POLICE/AMBULANCE/FIRE: Emergency tel. numbers: Police 593-4911; Fire MA 7-0151; Ambulance 473-1611.

TELEPHONES: Pay telephones available at Piers 1, 2, 4, 7, Blair Terminal, Pierce County Terminal, Grain Docks 23 and 24. There is no charge for this service.

SHIP SUPPLY SERVICE: Contact: Foss Launch and Tug, 225 East F Street, Tacoma, WA. 98421. Tel: (206) 272-0362.

SHORE LEAVE: Allowed.

AUTHORITY: Port of Tacoma, P.O.Box 1837, Tacoma, Washington 98401. *Tel:* (206) 383-5841 or Seattle (206) 838-0142. *Telex:* 32-7473 A/B Port of Tac. *Contact:* Director, Marine Terminals.

TAMPA, Florida: 27.57 N. 82.28 W. (See Plan Book)

DOCUMENTS:

- Passports and Seamen's Books.
- Vaccination Certificate for each Seaman.
- Certified Crew List: must be on American form and certified by American Consular office at foreign country from which departed.
- Crew List.
- Ship's Register.
- Load Line Certificate.
- Certificate of Financial Responsibility (Oil Pollution Certificate).
- U.S. Customs requires Inward Foreign Manifest (original and 3 copies). This must describe cargo which is to be discharged this port and/or any other port in vessel's itinerary. It must show:
  - Vessel's name and flag.
  - Master's name.
  - Last foreign port of departure.
  - Net registered tons of vessel.
  - When and where vessel built.
  - Consigned to Agent.
  - Bill of Lading Number.
  - Marks and numbers (on cargo).
  - Complete description of merchandise.
  - Weight in kilos or pounds.
  - Port of loading.
  - Port of discharge.
  - Stores Lists (original and 3 copies).
  - Crew Curio List (original and 3 copies).
  - Narcotic List (original and 3 copies).
  - *Dangerous Cargo List (original and 3 copies).
  - *This should be filled out even if nothing dangerous aboard.

Health officials will board vessel first. Bills of Lading not needed for Customs purposes.

PILOTAGE: Compulsory for all foreign vessels and U.S. vessels under register in the foreign trade. Pilotage is optional for U.S. coastwise vessels drawing over 7 ft. that have on board a Pilot licensed by the Federal government. Pilots board vessels day or night. Vessels entering by Egmont Channel are boarded between the Tampa Bay Lighted Whistle Buoy "T" (Lat. 27° 35.3′ N., Long. 83° 00.7′ W.) and Egmont Channel Lighted Bell Buoy No. 2 (Lat. 27° 35.4′ N., Long. 82° 59.0′ W.). Vessels entering by S.W. Channel are usually boarded between S.W. Channel Buoy No. 2 and Lighted Bell Buoy No. 3, or if desired, at the lighted bell buoy off the entrance to the channel.

Two pilot organisations, Tampa Bay Pilots and Tampa Tri-County Pilots (Trico Pilots), serve Tampa Bay. Tampa Bay Pilots have 4 launches, *"Egmont"*, *"Manatee"*, *"Tampa"* and *"Tampa Bay Pilot"*, each with a black hull and white deckhouse with the word "Pilot" on either side. Tampa Tri-County Pilots (Trico Pilots) have 2 launches, *"Trico Pilot"* and *"Trico II"* each with a red hull and white deckhouse with the word "Pilot" on front of the deckhouse in red. Both Pilot Associations monitor VHF-FM Channels 10 (156.50 MHz), 12 (156.60 MHz), and 16 (156.80 MHz) continuously; call-signs, Tampa Bay Pilots and Tampa Trico Pilots. The Tampa Tri-County Pilots also monitor VHF-FM Channels 11 (156.55 MHz) and 13 (156.65 MHz). Both Pilot Associations' boats are equipped with VHF-FM Channels 10, 12 and 16 and use Channel 10, 12 and 11 as working frequency. All pilot boats fly the International Code flag "H". For boarding, Pilots request that vessels maintain a speed of 6 knots or less and have the pilot ladder rigged 6 ft. above the water. Vessels are requested to give a 24-hour and a 3-hour advance notice of their time of arrival. Length, beam and max. draft of the vessel should be provided with the first notification. Vessels are normally not moved in dense fog, and during strong North/South winds vessels are boarded inside Egmont Key. In March 1984, the deepest draft entering Tampa Bay was 33 ft. 6 in. Pilots can be obtained by radiotelegraph (cable address: "Tampilot" for Tampa Bay Pilots and "Trico Pilots" for Tampa Tri-County Pilots), by telephone (813-248 3732 for Tampa Bay Pilots and 813-251-1669 for Tampa Tri-County Pilots) through the Tampa Marine Operator, or through ships' Agents.

Pilots for St. Petersburg and Port Manatee can be obtained through the Tampa Bay Pilots or Tampa Tri-County Pilots (Trico Pilots).

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Radio station "WPD" should be used by vessel to route ETA cables to Agents, receivers, etc. Station KUZ 383 on Channel 25 VHF, available for public messages.

ANCHORAGES: Vessels with good ground tackle can anchor anywhere outside Egmont Bar in depths of 35 ft. to 50 ft. Inside anchorages Southward of Mullet Key in depths of 30 ft. to 35 ft.; and S.W. of Gadsden Point in depths of 29 ft. to 36 ft.

Explosives and quarantine anchorages East of Mullet Key and South of Interbay Peninsula.

(1) Explosives anchorage East of Mullet Key. A rectangular area in Tampa Bay, approximately 4,459 yd. long and 1,419 yd. wide, beginning at Lat. 27° 38′ 30″ N., Long. 82° 39′ 09″ W., and extending N.E. to Lat. 27° 39′ 48″ N., Long. 82° 37′ 15″ W.; thence S.E. to Lat. 27° 39′ 17″ N., Long. 82° 36′ 46″ W.; thence S.E. to Lat. 27° 37′ 52″ N., Long. 82° 38′ 38″ W.; thence N.W. to point of beginning. Anchorage is used by vessels awaiting loading or unloading at Port Tampa where duration of anchorage will exceed 72 hours.

(2) Temporary explosives anchorage South of Interbay Peninsula. Beginning at a point bearing 107°, 1,750 yd. from Cut F Range Front Light; thence to a point bearing 125°, 2,050 yd., from Cut F Range Front Light; thence to a point bearing 180°, 1,725 yd., from Cut F Range Front Light; thence to a point bearing 222°, 2,180 yd., from Cut F Range Front Light; thence to a point bearing 251°, 1,540 yd., from Cut F Range Front Light; and thence to the point of beginning. Anchorage is used for vessels engaged in loading explosives when duration of the anchorage is less than 72 hours.

(3) Temporary explosives anchorage off Port Tampa. A circular area with a radius of 200 yd. with the point at Lat. 27° 50′ 22″ N., Long. 82° 34′ 15″ W.

(4) Quarantine anchorage. S.E. of the temporary explosives anchorage, beginning at a point bearing 97° true, 4,370 yd., from Cut F Range Front Light; thence to a point bearing 113° 30′, 5,370 yd., from Cut F Range Front Light; thence to a point bearing 161° 30′, 3,770 yd., from Cut F Range Front Light; thence to a point bearing 163° 30′, 2,070 yd., from Cut F Range Front Light; thence to the point of beginning.

RESTRICTIONS: Draft recommendation is 33 ft. 6 in. No tidal restrictions with exception of loaded vessels into Port Tampa.

43 ft. harbour deepening project underway. Scheduled for completion in 1986.

Existing Channels:

Name of Channel	*Width* (ft.)	*Length* (naut. miles)	*Depth MLW* (ft.)
Egmont Channel	700	3.9	45
Mullet Key Channel	600	2.9	43
Tampa Bay Channel Cuts A-F	500	13.6	43
Gadsden Point Cut	500	3.1	43
Hillsborough Bay Cut A & C	500	6.6	43
Hillsborough Bay Cut D	400	1.0	34
Seddon Channel	300	1.1	28
Garrison Channel	275	0.4	30
Ybor Channel	400	0.9	34
Sparkman Channel	400	1.2	34
East Bay Channel and Turning Basin	2,700	1.5	43
Port Tampa Channel	400	7.3	34
Port Sutton Channel	280	1.0	34
Alafia River Channel	200	3.4	32

MAX. SIZE: Max. draft 33 ft. 6 in. MLW. No limit on length and breadth. Air draft 149 ft. MHW. Skyway Bridge clearance.

TUGS: Positions are:

Main port area – right past Beacon No. 35
Port Sutton & East Bay – Beacon No. 29
Port Tampa – Cut "K"
East Tampa – Beacon No. 16

Tug's lines only.

BRIDGES: The Sunshine Skyway Bridge spans lower Tampa Bay. The twin central cantilevered span has a navigation clearance of 800 ft. and a maximum vertical clearance of 151 ft. at MLW.

STEVEDORES: Stevedoring gangs must be ordered approximately 24 hours in advance (before 1700 hrs. on day before needed).

MEDICAL: Advance notice for medical attention not required, but is preferable.

DENSITY: Density is affected by local rains due to Hillsborough River. Seasonal variances too great to allow advance prediction.

FRESH WATER: Available all over port and delivered through hoses and meters. Rates of delivery various.

FUEL: All grades and types available, including all types of blended fuel and Bunker "C". 24 hour notice required. All types of lube-oil available with delivery in bulk or drums – 24 hours' notice is required. Major oil companies (i.e. Shell, Amoco Oil, Texaco, Gulf, Chevron, Western Fuels, etc.) represented in Tampa. Delivery ex-pipe-line, barge or truck.

BERTHING: See below and page 1654. Also see "Developments".

GENERAL CARGO FACILITIES:

Operator	*Location*	*Length*	*Depth*	*Remarks and Equipment*
Eller & Co. Inc. (Port Authority Berth No. 209)	Verger Boulevard, Holland Terminal	600 ft. Marginal Wharf	34ft.	Fork Lifts: 1×10 tons, 4×8 tons, 5×2.5 tons, 11×4 tons. Mobile shore cranes available 70 – 300 tons
Garrison Terminals Inc.	13th and Beatrice St.	1,759 ft. Marginal Wharf	30 ft.	Crawler Cranes: 4 ranging from 37 to 72 tons. Fork Lifts: ranging from 1,000 to 20,000 lb. capacity. Bulk handling: 5 hoppers, clamshell buckets, shipside conveyor. Bagging: openmouth and valve baggers for bulk fertiliser materials.
Garrison West	Foot of Franklin St.	543 ft. Marginal Wharf	27 ft.	Crawler Cranes: 4 ranging from 37 to 72 tons. Fork Lifts: ranging from 1,000 to 20,000 lb. capacity. Bulk handling: 5 hoppers, clamshell buckets, portable shipside conveyor. Stationary under hopper bulk receiving system.
Spessard L. Holland Terminal (Port Authority Berth No. 202)	Verger Boulevard	2,400 ft. Marginal	34 ft.	Back land leased to Pate Stevedoring with preferential berthing rights. 15 acres Storage. The 100 ft. apron on all berths is public. Cruise Ship Terminal location.
Kreher Terminal Berths No. 223, 224	Carbide Avenue, Hookers Point	1,120 ft. Marginal Wharf	34 ft. (for 800 ft.) 14/16 ft. (for 320 ft.)	Back land leased to South State Terminals and Standard Gypsum. Wharf apron and docking area is public and subject to preferential berthing rights of one tenant.
S.E.L. Maduro (Florida), Inc.	13th and York St.	1,200 ft. Marginal Wharf	30 ft.	All sizes fork lifts including specialised newsprint handling and 52,000 lb. capacity for handling of containers; mobile shore cranes. Modern banana unloading conveyor system.
Metroport Terminals Berths 263, 264, 265, 266.	601 N. 13th Street	2,255 ft. Marginal Wharf 6 berths	30/27/25 ft.	Banana unloading conveyor system, 20 ton gasoline crane with 45 ft. – 100 ft. boom, 4 lift trucks. Mobile shore cranes available up to 70 tons. Lift truck and crane restrictions, check with Port Authority.
Southport Stevedores Inc. (Port Authority Berths Nos. 251, 252)	Foot of Grant St.	1,200 ft. Marginal Wharf	34 ft.	Cranes: 4×40 tons gantries. Fork Lifts: up to 20,000 lb., conveyor system
Harborside Refrigerated Services, Inc. (Port Authority Berths Nos. 210, 211)	Verger Boulevard	1,200 ft. Marginal Wharf	34 ft.	Fork Lifts. Mobile shore cranes available 70 – 300 tons.
Spessard L. Holland Ro/Ro	Verger Boulevard	—	34 ft.	Public facility.

SPECIALISED GENERAL CARGO FACILITIES:

Operator	*Location*	*Length*	*Depth*	*Remarks and Equipment*
Commercial Metals Transport Co.	West end of Port Sutton, East side of turning basin	530 ft. Marginal Wharf	30 ft.	Scrap metal loading facility. 4 diesel cranes 3×80 ft. boom, 1×70 ft. boom, each equipped with electric magnets.
Tampa Bay Terminal Inc.	Foot of Grant St.	700 ft. Marginal Wharf	34 ft.	Scrap metal loading facility. 2 diesel electric travelling, revolving, full-portal shipside cranes with 130 ft. boom and capacity of 40 tons. Equipped with electric magnets.
Hardaway	Port Tampa	330 ft.	6 ft.	Pre-stressed concrete products. 1×30 ton crane with 120 ft. boom.

DRY BULK FACILITIES:

Operator	Location	Depth	Max. L.O.A.	Max. Beam	Height of Vessel Waterline to bulwark	Chute Travel	Loading Rate (N)=Net (L)=Long t.p.h.
Agrico Chemical Co.	Big Bend	34 ft.	1,500 ft.	120 ft.	47 ft.	1,500 ft.	3,000 (N)
CF Industries Inc. (Port Authority Berth No. 204)	Holland Terminal	34 ft.	600 ft.	85 ft.	47 ft.	Stationary	1,100 (N)
Detsco Terminals Inc.	14th St. and Harbor	32 ft.	380 ft.*	80 ft.	40 ft.	350 ft.	1,250 (N)
Eastern Associated Terminals Co.	22nd St. Causeway Boulevard	34 ft.	850 ft.*	120 ft.	50 ft.	400 ft.	3,500 (N)
Gardinier Inc.	Highway 41 South	30 ft.	600 ft.*	80 ft.	51 ft.	335 ft.	400–900 (L)
IMC Phosphate Terminal Co.	Port Sutton	34 ft.	800 ft.*	104 ft.	43 ft.	378 ft.	1,800 (L)
Rockport	22nd St. Causeway Boulevard	34 ft.	1,450 ft.*	120 ft.	53 ft.	1,450 ft.	3,000 (N)

*Can load longer vessels by shifting during operation.

Shipmaster's Report: Bulk phosphates are loaded in Port Sutton (one berth) and in the East Bay (two berths: Rockport owned by SCL Seaboard Coast Line and Eastern Associated Terminal).

Loading rates: about 1,000 t.p.h. at Port Sutton;
about 3,000 t.p.h. at the two berths
in East Bay area.

Trimming: the loading elevators are not equipped with trimming devices. Most cargoes can be trimmed by bulldozers. The bulldozer weighs 5 long tons, and is placed on board with ship's gear. The IMC elevators at Port Sutton and the SCL elevator (Rockport) use shore gear to place the bulldozer on board. A minimum of 8 to 7.5 ft. headroom under the coaming is required for bulldozer trimming.

DRY BULK FACILITIES: Others:

Operator	Location	Depth	Berthing Space	Handling Equipment	Storage Area	Product Handled
Cargill Inc. (Port Authority Berth No. 258)	North 19th St.	32 ft.	700 ft.	Marine leg for unloading 30,000 bushels/p.h., and spout loader-rate of 600 tons	Capacity of elevator is 1,000,000 bushels; 8,000 ton bulk warehouse; 4,800 ton bulk warehouse.	Grain and dry bulk agriculture products
Detsco Terminals, Inc.	14th St. and Harbor	32 ft.	540 ft.	None.	Storage area leased out.	Cement and caustic soda
Florida Portland Cement Division	Hookers Point	34 ft.	820 ft.	Belt material handling system capable of receiving 4,000 short t.p.h. of aragonite or 1,500 short t.p.h. of gypsum 3 electric, travelling bridge cranes equipped with 2.5 and 3 cu.yd. grab buckets.	800×100 gypsum storage shed; 215,000 barrel holding tanks for fuel storage (for plant consumption) 220,000 ton capacity open storage.	Gypsum rock, aragonite
Ideal Basic Industries, Inc.	Port Sutton	34 ft.	1,038 ft.	2×8 in. pipelines to storage. 4×12 in. pipelines to storage.	8 silos with 190,000 barrel capacity. 3 bins with 5,640 ton capacity.	Cement
I.S. Joseph, Co.	Port Tampa	34 ft.	700 ft.	Belt elevator from storage to loading spout. Rate of discharge 500 t.p.h. Direct transfer from rail cars to vessels at 200 net t.p.h.	Silo capacity of 10,000 net tons.	Citrus pellets and other dry bulk products.
National Gypsum Co.	Port Tampa	34 ft.	950 ft.	Receiving hopper and conveyor–unloading rate of 2,000 net t.p.h.	Open area approx. 10 acres.	Gypsum rock
Paktank Florida, Inc.	Pendola Pt., Port Sutton	34 ft.	700 ft.	Dock crane with 80 ft. boom with unloading rate of 400 t.p.h. Loading tower with rate of 1,200 t.p.h.	Building 125 ft.×700 ft. with storage capacity of 50,000 tons. 4 silos with 8,000 ton capacity.	Potash, phosphatic products.
Standard Gypsum Corp. (Port Authority Berth No. 223)	Hooker Point	33 ft.	600 ft.	Evacuator and conveyor system; radial stacker.	4.62 acres	Gypsum and salt
Tampa Electric Co.	Big Bend	35 ft.	788 ft.	200 ft. high travelling tower-conveyors system with unloading rate of 4,000 t.p.h.	24 acres	Coal
Tampa Electric Co.	Port Sutton	30 ft.	450 ft.	2 electric travelling unloading towers equipped with straight-line boom, and receiving hopper-combined unloading capacity of 1,600 t.p.h.	Exact size unknown	Coal

Facilities available for smaller vessels.

Operator	Depth	Berthing Space	Product Handled
Morton Salt Co.	14 ft.	600 ft.	Salt
Paktank Florida, Inc.	12 ft.	500 ft.	Grain fertiliser, materials, potash, caustic soda, salt.

TANKERS: Also see "Developments".

Company	*Pipe lines*	*Berthing space*	*Depth*
U.S. Government	(2) 8″	550 ft.	32 ft.
Amoco Oil Co.	(1) 12″ (2) 10″	275 ft.	30 ft.
American Petrofina	(2) 10″ (5) 8″	370 ft., with dolphins	31 ft.
Brimstone Terminals	(1) 14″ (Liquid Sulphur)	700 ft.	34 ft.
Chevron	(2) 8″ (Asphalt)	355 ft.	16 ft.
Citgo Petroleum	(3) 10″	563 ft.	28 ft.
Florida Power Corp.	(3) 8″ (2) 6″	500/700 ft.	30 ft.
W. R. Grace	(1) 10″ (Ammonia)	200 ft.	34 ft.
Gulf Oil Co.	(2) 14″ (2) 10″ (1) 8″ (2) 6″		
	(2) 6″	650 ft.	32 ft.
Exxon Co. U.S.A.	(1) 10″	300 ft.	18 ft.
Marathon Oil Co.	(5) 8″	250 ft., with dolphins	32 ft.
Murphy Oil Co.	(1) 12″ (1) 8″ (1) 6″	Berth 226 – 850 ft.	34 ft.
Petroleum Packers	(1) 6″	Berth 227 – 850 ft.	34 ft.
Phillips Petroleum	(2) 12″	300 ft.	34 ft.
Union Oil Co.	(5) 10″	850 ft.	34 ft.
Shell Oil Co.	(1) 12″ (1) 10″ (4) 8″	850 ft.	34 ft.
Sulphur Terminal Co.	(2) 10″ (1) 4″ (Liquid Sulphur)	700 ft.	34 ft.
South State Terminals	(3) 10″ (1) 12″	800 ft.	34 ft.
	(2) 6″ (Phosphoric Acid)	2560 ft.	34 ft.
	(1) 6″ (Caustic Soda)	850 ft.	
		600 ft.	
Chevron U.S.A.	(3) 12″ (5) 8″ (6) 6″	950 ft.	32 ft.
Tampa Electric Co.	(2) 10″	550 ft.	28 ft.
Texasgulf Inc.	(1) 16″ (Liquid Sulphur)	1,000 ft.	32-34 ft.
Pasco Terminals Inc.	(1) 10″ (Liquid Sulphur)	525 ft.	30 ft.
Texaco Inc.	(5) 8″ (4) 6″ (7) 4″	280 ft.	33 ft.
Gardinier Inc.	(1) 12″ (Sulphur) (1) 10″ (Phosphoric acid)	600 ft.	31 ft.
Warren Petroleum Co.	(1) 4″ (Propane) (1) 6″	325 ft.	12 ft.
Royster Co.	(1) 16″ (Anhydrous Ammonia)	1,760 ft. (2)850 ft.	34 ft.
Western Fuels	(1) 12″ (1) 14″	750 ft.	34 ft.
Intercontinental Terminals	(1) 12″ (Phosphoric acid)	1500 ft.	34 ft.
Union Chemicals Div.	(10) 6″ (Pipe)	880 ft.	32 ft.
COMCO	(1) 10″	300 ft.	18 ft.
IMC	(1) 6″ Anhydrous Ammonia	414 ft.	34 ft.
Trans Florida Terminal	(1) 8″ Liquid Nitrogen	700 ft.	34 ft.

Note that part of above terminals use same piers. Most terminals have residue discharge facilities.

FIRE PRECAUTIONS: No specific precautions other than usual.

GANGWAY/DECK WATCHMEN: Watchmen not necessary, but available when required.

OPENING/CLOSING HATCHES: Longshoremen open and close hatches.

CERTIFICATES:

Documentation Papers.
Load-line Certificate.
Certificate of Safety at Sea (when carrying passengers).
Certificate of Safety Equipment.

CUSTOMS ALLOWANCES: Tobacco, 2 packs of cigarettes per day per man, wine and/or Spirit, no set amount. Each boarding officer has different views (i.e. German and Scandinavian vessels allowed 2 bottles of beer per day per man). Allowances made within reasonable bounds at Master's discretion subject to boarding officer's approval.

CARGO GEAR: No local special safety requirements. Longshoremen and U.S. Department of Labor requirements are uniform over the U.S.

IDENTIFICATION CARDS: Passports required.

CONSULS: The following countries are represented in Tampa:

Belgium
Colombia
Denmark
Finland
France
Germany
Honduras
Italy
Korea
Mexico
Netherlands
Norway
Panama
Sweden

REPAIRS: All types are possible.

DRY DOCKS: Graving dock: 900 ft. long × 150 ft. wide, 21 ft. from MLW to top of keel blocks; 525 ft. long on bottom × 80 ft. wide, and depth over keel blocks 16-18 ft. at MHW.

Dry dock: 200 ft. long × 65 ft. wide. There are 2 other dry docks besides those listed above.

Also see "Developments".

REPATRIATION: No foreign crew pools in Tampa (located in New Orleans, San Francisco and New York), but crew changes can be made when Master radios requirements to Agent who arranges with local Consul or through crew pool in nearest city named above for applicable country (if no Consul is available in Tampa). American crew pools for all unions in Tampa.

Repatriation available at Tampa International Airport and is handled by Consul or Master.

AIRPORT: Tampa International Airport served by regular airlines and located approximately 15 miles from main port area; 5 miles from Port Tampa and 16 miles from East Tampa.

TIME: Tampa normally on Eastern Standard time with Daylight Saving Time in effect from last Sunday in April to last Sunday in October.

HOLIDAYS: New Year's Day, January 1st; Martin Luther King's Birthday, January 15th; Gasparilla Day 2nd Monday in February (local); Lincoln's Birthday, February 12th; Washington's Birthday, 3rd Monday in February; Good Friday; Memorial Day, Last Monday in May; Independence Day, July 4th; Labour Day, 1st Monday in September; Columbus Day, 2nd Monday in October; Armistice Day, November 11th; National Election Day, November; Ted Gleason Birthday, November 8th; Thanksgiving Day, 4th Thursday in November; Christmas Eve, December 24th; Christmas Day, December 25th; New Year's Eve, December 31st.

When any of above holidays fall on Sunday, they will be observed on Monday following. Work on these holidays is by special arrangement only.

POLICE/AMBULANCE/FIRE: Police 223-1112; Ambulance 681-4422; Fire 223-4211.

TELEPHONES: Installation of telephone aboard can be arranged.

SERVICES: Compass adjustments available; radio direction finder; radar repairs; tank cleaning.

SHIP SUPPLY SERVICE: Captain Riley F. Bryan, Sea Taxi, P.O.Box 46618, Pass-A-Grille, Florida. Tel: (813) 381-3999.

Smith Launch Service, 241 E. Davis Blvd., Tampa, Florida 33606. Tel: (813) 251-0390.

Suncoast Helicopters, 4111 W. Columbus Drive, Tampa, Florida 33607. Tel: (813) 872-6625.

A. P. St. Philip, Inc., 1305 Shoreline Drive, Tampa, Florida 33605. Tel: (813) 248-1123.

SHORE LEAVE: Immigration authorities grant clearance after examination of passport or bona fide seaman's papers.

DELAYS: Delay can be expected in loading phosphate rock (1 or 2 days), and same delay applicable for berthing at elevators. Some delay possible in general cargo loading or unloading.

DEVELOPMENTS: The Tampa Port Authority has three new projects recently completed: a Roll-on/Roll-off dock capable of handling the largest vessels in the trade; a liquid bulk dock to accommodate vessels up to 900 ft. in length with 43 ft. drafts; and a dry dock to accommodate vessels up to 900 ft. in length.

Dredging operations are underway by: the U.S. Corps of Engineers to deepen the main harbour channels from 34 to 43 ft. Completion of the project is scheduled for 1986.

AUTHORITY: Tampa Port Authority, P.O.Box 2192, Tampa, Florida 33601. *Tel:* (813) 248-1924. *Telex:* 52441 – Port Auth Tpa. *Contact:* Emmett C. Lee, Jr., Port Director.

AGENT: Strachan Shipping Company, P.O.Box 2441, Tampa, Florida 33601. Tel: 813-228-7563. Telex II: 810-876-4149. Cables: "Strachan".

TEXAS CITY, Texas: 29.22 N. 94.53 W.

(See Plan Book)

DOCUMENTS, PILOTAGE, etc., refer to "Galveston".

RESTRICTIONS: Controlling depth in entrance channel 40 ft. Otherwise restricted by depth available at berth. Vessels enter day and night.

Industrial canal deepened from 34 ft. to 40 ft., in 1981.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Miami Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: Available if required.

BERTHING:

American Oil Tanker Docks	depth	36 ft.
Monsanto Tanker Dock	„	36 ft.
Texas City Oil Docks	„	36 ft.
Union Carbide Terminal	„	34 ft.
Import Crude Terminals:		
Docks 40 – 41	depth	40 ft.
Arco Docks No. 11 – 12	„	40 ft.

MEDICAL: All medical assistance available.

DENSITY: Brackish.

FRESH WATER: Available at all wharves except Union Carbide Terminal.

FUEL: Bunker "C" available to tankers loading/discharging. All grades available by barge from Houston.

GANGWAY/DECK WATCHMEN: Required only if crewmen detained by Immigration.

CUSTOMS ALLOWANCES: Each man 300 cigarettes or 100 cigars or 1 lb. tobacco. 1 qt. wine/spirits.

CONSULS: See "Houston".

TIME: Central Standard Time. Daylight saving time effective from April to October.

SHORE LEAVE: No restrictions unless detained by Immigration.

SHIPMASTER'S REPORT: February, 1979.

Restrictions: Vessels on maximum draft must be clear of Texas City Channel before dark. There is no sailing or berthing during darkness for maximum draft vessels.

For large vessels it is necessary to ballast during discharge otherwise shore connections become too high.

VHF: Channel 13 from sea and Channel 14 for berthing.

Tugs: Usually 4-6 tugs for vessels on maximum draft.

Tankers: Large tankers dock at Docks 40 & 41 usually starboard side to. On either dock it is not easy loading stores from the dock. 2×12 in. connections.

Consuls: British Consul at Houston.

Customs Allowance: All souvenirs to be collected (items intended as presents) and sealed.

Repatriation: As with all U.S. ports must make out Form I-408 – application to pay off or discharge alien crewman.

Airport: At Houston.

Telephone: Pay telephone at bottom of gangway.

General: Will require ship's gangway abaft of manifold if bottom of gangway is more than 115.5 ft. (35.20 m.) abaft after manifold with a freeboard of 23 ft. or more.

AUTHORITY: Texas City Terminal Railway Co., P.O.Box 591, Texas City, Texas 77590. *Tel:* (713) 945-4461. *Contact:* K. L. De Maet, Vice-President. D. Holbrook, Harbour Master.

TOLEDO, Ohio: 41.42 N. 83.28 W. **(See Plan Book)**

Refer to "St Lawrence Seaway" for important general information.

PILOTAGE: By Seaway Pilots.

RESTRICTIONS: Navigation season from mid-March to end-December, approx. The port is connected to Lake Erie by an entrance channel, depth 27 ft. Vessel's size restricted by Seaway locks.

MAX. SIZE: 730 ft. length; 26 ft. draft. Height restriction of 104 ft. above water-line which applies to grain berths only.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Chicago Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Master must give at least 24 hours' notice to Commander 9th Coast Guard District, Cleveland, Ohio, of the vessel's ETA at Snell Lock. Also, at least 24 hours' notice of ETA at first U.S. discharge port is required. Toledo Port can be contacted through Lorain, Ohio or Port Colborne, Ontario.

TUGS: Available. Not compulsory, but sometimes necessary in bad weather.

BERTHING:

C & O Railway Dock: 2,000 ft. long, 26 ft. depth alongside.
Torco Dock: 1,200 ft. long, 26 ft. depth alongside.
Interlake Steel Corporation: 23 ft. depth alongside.
Mid States Terminals: 27 ft. depth alongside.
Cargill, Inc. Elevator: 27 ft. depth alongside.
Port Authority Facility: 4,100 ft. long, 27 ft. depth alongside.
Anderson Elevator: 27 ft. depth alongside.

CARGO HANDLING FACILITIES: 3 grain elevators at Toledo load vessels at 50,000 b.p.h. There are 3 coal-loading machines, each of which can dump 1×100-ton car per minute, also 1 machine which dumps 2 cars simultaneously, for a max. of 6,000 t.p.h.

Iron pellets are received at new Torco Dock from self-unloading lake vessels. Storage Capacity 800,000 tons.

Liquids handled include petroleum products, industrial molasses, trichlorethylene and perchlorethylene.

CRANES: Located at Port Authority Facility No. 1 – electric gantry cranes 72.5 and 110 tons. Four 25-ton gantry cranes.

BRIDGES:

Bridges crossing Maumee River:

Miles above Mouth	*Draw Openings – Clear Width* (1)			*Clear Height above LWD*
	Right (ft.)	*Centre* (ft.)	*Left* (ft.)	(ft.)
Toledo Terminal Railroad (Swing – Railroad)				
1.3	145	—	143	22.2(2)
Norfolk and Western Railway (Swing – Railroad)				
2.1	136	—	145	20.1(2)
Craig Memorial Bridge (Bascule(3) – Highway)				
3.6	—	200	—	48.0(4)
Conrail Bridge (Swing – Railroad)				
4.2	115	—	115	17.7(2)
Cherry Street (Bascule(3) – Highway)				
4.6	—	200	—	31.3(5)
Anthony Wayne (Fixed(6) – Highway)				
5.2	—	747	—	108.2(7)
Conrail Bridge (Swing – Railroad)				
6.0	115	—	115	17.3(2)
M.V. DiSalle (Fixed – Highway)				
7.0(8)	110	—	110	45.0

(1) Right and left sides proceeding upstream.
(2) Closed position.
(3) Double leaf.
(4) Clearance in centre in closed position, reducing to 39.5 ft. at sides of span.
(5) Clearance in centre in closed position, reducing to 17 ft. at sides of span.
(6) High-level.
(7) Clearance on centre line of 400 ft. channel, reducing to 104 ft. at channel lines.
(8) Upstream limit of deep-draft navigation.

STEVEDORES: Provided by Toledo World Terminal, Inc. and Consolidated Dock, Inc.

TANKERS:

Hocking Valley Pier: 22 ft. depth alongside.
Ashland Oil Company: 22 ft. depth alongside.
Standard Oil Company: 23 ft. depth alongside.
Gulf Refining Co.: 21 ft. depth alongside.

DENSITY: Fresh water.

MEDICAL: All facilities available.

FRESH WATER: Obtainable by pipe-line at all general cargo docks.

FUEL: All grades available at oil piers, and by harbour fuel barge.

REPAIRS: Major repair facilities available.

DRY DOCKS: No. 1: 510 ft.×72 ft. 6 in.; No. 2: 641 ft.×78 ft.

SURVEYORS: American Bureau of Shipping and Salvage Association.

Surveyors: Capt. Ray Fulshaw, Marine Surveyor & Consultant, 3445 Woodley Road, Toledo, Ohio 43606. Tel: 537-0053 (office), 531-8176 (residence).

Rex Shaw & Associates, 3645 Grantley Road, Toledo, Ohio 43613. Tel: 475-3225.

Grain Inspection: Federal Grain Inspection Service, 234 Summit Street, Toledo, Ohio 43604. Tel: 259-6221.

STORING: See "Prelims", page viii.

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. No special restrictions.
6. Yes.

BANKS:

The First National Bank of Toledo, P.O.Box 1868, Toledo, Ohio 43603. Tel: 259-6894.

Ohio Citizens Bank, P.O.Box 1688, Toledo, Ohio 43603. Tel: 259-6566.

The Toledo Trust Company, 245 Summit Street, Toledo, Ohio 43603. Tel: 259-8150.

DEVELOPMENTS: Major construction projects by the three riverfront grain operators has increased grain handling capacity from 10.2 million bushels to over 18 million bushels. A new 6 million gallon facility for storage of liquid fertiliser is planned and an additional ship loading dock is under construction.

AUTHORITY: Toledo – Lucas County Port Authority, 241 Superior Street, Toledo, Ohio 43604. *Tel:* (419) 243-8251. *Telex:* 286434. *Cables:* Portol. *Contact:* G. L. Failor, Port Director.

UNALASKA (Dutch Harbor), Alaska: 53.54 N. 166.30 W.

DOCUMENTS:

Customs:

Masters Oath (1300).
General Declaration (1301).
Cargo Declaration (1302).
Ship's Stores Declaration (1303).
Crew Effects Declaration (1304).
Clearance from Last Port.

Immigration:

Immigration Documentation (I-418).
Crew/Passenger List.
Landing Permit (I-95).
Visa Crew List for Shore Leave (Supplied by Immigration).
Passport and (or) Seamens' Book.

PILOTAGE: Compulsory. To avoid a delay in obtaining a Pilot, the Owner, Master or Agent of a ship bound for Unalaska/Dutch Harbor must make prior arrangements at least 12 hours before entering port. The following information must be included:

1. Name/Call Sign of vessel.
2. Nationality.
3. Length, draft and g.r.t.

Pilot Boarding Station:

Lat. 53′ 55′ 00″ N., Long. 166° 29′ 00″ W. 1 mile (1.61 km.) East of Ulakta Head. Pilots, tugboats, Harbour Master and shipping Agents standby on VHF Channel 16 (156.8 MHz).

Berthing:

(a) Pilot – Compulsory. Shifting of and EDT requires 1 hour advance notification.
(b) Berths arranged by Agent in advance.
(c) 1 small tug available annually. Circumstances may arise when other tugs are available for ship assistance.
(d) Lineman – Arranged through ship's Agent.
(e) Boatmen – Arranged through ship's Agent.

ANCHORAGE:

Outer Anchorage: Lat. 53° 54′ 00″ N. to Lat. 53° 55′ 00″ N. at Long. 166° 27′ 00″ W., Rocky, Depth 12 fathoms.

Inner Anchorages: Domestic and other vessels which have cleared customs.

1. Dutch Harbor: Lat. 53° 54′ 00″ N., Long. 166° 31′ 20″ W., mud, depth 18 fathoms.
2. Iliuliuk Bay: Lat. 53° 52′ 40″ N., Long. 166° 31′ 10″ W., mud, depth 14 fathoms.
3. Captians Bay: Lat. 53° 52′ 00″ N., Long. 166° 33′ 33″ W., mud, depth 15 fathoms.
4. Nateekin Bay: Lat. 53° 53′ 00″ N., Long. 166° 37′ 00″ W., mud, depth 17 fathoms.
5. Broad Bay:
   (a) Preferred Oil Rig Anchorage Lat. 53° 55′ 05″ N., Long. 166° 36′ 30″ W.
   (b) Alternate Oil Rig Anchorage Lat. 53° 56′ 05″ N., Long. 166° 36′ 30″ W.

Must check with the U.S. Coast Guard and the Alaska Department of Fish and Game prior to anchoring or placing an oil rig at these locations. More locations may be forthcoming.

Note: When anchoring in Dutch Harbor, no vessel may anchor in the glide path to the airport.

MAX. SIZE: No restrictions except draft at various facilities and through the East Channel 17 ft., Rocky Bottom at MLLW.

RADIO: (a) Department of Public Safety, Harbour Master, Pilots, Tugs, Shipping Agents and National Marine Fisheries Observer Transfer Station standby on Marine VHF Channel 16. 4125 A kHz.

(b) Alaska Department of Fish and Game and the Alaska Department of Fish and Wildlife, (State Troopers) standby on Marine VHF Channels 6 and 16. 4125 A kHz.

(c) Marine Operator calls vessels on Marine VHF Channel 16 and receives all radio traffic on VHF Channel 28.

(d) All other traffic stands by on Marine VHF Channel 6.

TUGS: Unimac Pacific Towing – 55 ft., 800 h.p. vessel.

Boatmen:

Victory Services – VHF Channel 16.
Ballyhoo Services – VHF Channel 16.

CRANES: 100,000 lb container lift at American President Lines. Mobile cranes at the other facilities up to 150,000 lb. at request through Shipping Agent.

BERTHING:

Berth No.	*Wharf Length (ft.)*	*Depth at MLLW (ft.)*	*Remarks*
1	450	30	City Dock – Warehouse available.
2	300	40	APL – 208, 3 ph., 60 cycle power. 100,000 lb. gantry crane.
3	300	50	Chevron Fuel Pier.
4	160	30	Magone Marine (repairs).
5	234	36	Sea Alaska Products.
6	250	26	Sea Alaska Products (barge Resoff).
7	200	26	Sea Alaska Products.
8	35	22	MarCenCo (Exxon).
9	35	22	MarCenCo (Exxon).
10	995	35	City Boat Harbor, Fishing Vessels – 30 berths.
11	300	24	Pan Alaska Fisheries North Dock.
12	300	36	Pan Alaska Fisheries West Dock.
13	350	30	East Point Seafoods.
14	250	30	Whitney Fidalgo Seafoods Inc. barge.
15	250	36	Pacific Pearl Fisheries – Warehouse available.
16	250	30	Universal Seafoods (barge Unisea).
17	250	30	Universal Seafoods (barge Vita).
18	90	30	Universal Seafoods (Galaxy Dock).
19	40	30	Universal Seafoods (Viceroy Dock).
22	800	18 (var.)	City Small Boat Harbor, Fishing/Pleasure.
23	78	20	Panama Marine (Repair, 300 ton haulout).
24	160	31	Pan Alaska Fisheries, Captians Bay.
25	300	70	Crowley Maritime (1st April – 30th October).
26	200	70	Off Shore Systems Inc.

FRESH WATER: Fresh water is available at most berths. Order through Agent or Dock Operator.
FUEL: Available at Chevron Fuel Pier No. 2 Diesel as well as marine lubricants.
GANGWAY/DECK WATCHMEN: Usually ship's crew. Ship's gangway used.
OPENING/CLOSING HATCHES: Stevedores or ship's crew whichever to ship's advantage.
REPAIRS/SERVICES: Most deck, hull, engine, radar, RT, gyro, hydraulic, refrigeration and almost all types of marine electronic and electric repairs. Divers available for underwater surveys and repairs.
DRY DOCKS: Panama Marine 300 ton haulout facility.
SURVEYORS:

1. Kodiak Marine Surveyors, P.O.Box 356, Kodiak, Alaska 99615. Tel: (907) 486-5616.
2. Rocky Point Enterprizes, Inc., P.O.Box 1047, Homer, Alaska 99603. Tel: (907) 235-8967.
3. Alaska Marine Surveyors, SRA-2 Box 9312, Eagle River, Alaska 99577. Tel: (907) 694-3055.
4. The Salvage Association, 2200 6th Avenue, Suite 1110, Seattle, WA 98121. Tel: (206) 623-1578.
5. United States Salvage Association. Inc., 2256 152nd Street, N.E., Suite 1, Redmond, WA 98052. Tel: (206) 747-5398.
6. Capt. Wolslenholm, P.O.Box 3313, Anchorage, Alaska 99510. Tel: (907) 277-5109.

REPATRIATION: Crew changes and repatriation can be carried out with little difficulty.
AIRPORT: Distance 4.5 miles from any facilities. 2 flights daily (except on Sunday and on holidays 1 flight) to Anchorage with domestic and international connections. Reeve Aleutian Airways and Air Pacific, Aleutian Aire Ltd., Air charter service state wide.
TIME: GMT minus 9 hours in Winter, and GMT minus 8 hours in Summer. Last Sunday in April clocks advanced 1 hour. Last Sunday in October clocks retarded 1 hour.
POLICE/FIRE/AMBULANCE: (907) 581-1233; Emergency 911; VHF Channel 16, 24 hours a day.
EMERGENCY CO-ORDINATION CENTER: U.S. Coast Guard. Dial 0 – Ask operator for Zenith 5555 or 2182 kHz.
GENERAL: Fishing vessel's wide lights and search lights must be turned out prior to vessel entering port.
HOLIDAYS: New Year's Day, Lincoln's Birthday, Washington's Birthday (3rd Monday in February), Seward's Day (last Monday in March), Memorial Day (last Monday in May), Independence Day, Labor Day, Alaska Day (18th day in October), Veteran's Day (November 11th), Thanksgiving Day and Christmas Day and every Sunday and every day designated by public proclamation by the President of the United States or the governor of the state as a legal holiday.
AUTHORITY: City of Unalaska, P.O.Box 89, Unalaska, Alaska 99685. *Contact:* Harbour Master, Bryson M. Riordan, USN, Ret. *Tel:* (907) 581-1251 or Marine VHF Channel 16.

VALDEZ, Alaska: 61.07 N. 146.21 W.

Also see "Valdez Marine Terminal".

Located at head of Valdez Arm in Prince William Sound.
APPROACHES: Via Prince William Sound to the Valdez Pilot Station.
DOCUMENTS: See "Anchorage, Alaska".
PILOTAGE: Pilots board approx. 2 miles North of Busby Light.
MAX. SIZE: Harbour depth over 300 ft. Tides: diurnal range 12 ft. Also see "Berthing" and also see "Valdez Marine Terminal".
HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.
AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).
ANCHORAGE: Excellent, close by dock. Bay is too deep.
CUSTOMS: Quarantine, local. Immigration and Customs from Anchorage.
TUGS: Limited availability.
BERTHING: Valdez City Dock: 36 ft. MLLW. 600 ft. long by 40 ft. wide. 2 warehouses, 1 heated, 1 unheated. Stevedore provides equipment which includes fork-lifts and 2×100 ton mobile cranes and 1×150 ton mobile crane. Dock operated by North Star Stevedoring Co.
Floating Quay: Length 700 ft., width 100 ft. Mobile cranes available. Facilities for Lo/Lo and Ro/Ro.
STEVEDORES: 3 gangs.
TANKERS: *Valdez Dock Co., Petroleum Dock:* Length 200 ft., width 40 ft., depth 36 ft. at MLLW.
Also see "Valdez Marine Terminal".
REPAIRS: Minor repairs only.
FRESH WATER: Available in temperate seasons.
FUEL: Not available.
MEDICAL: 150-bed mental patient hospital; 15 beds for local use; 1 doctor, 1 dentist regularly from Anchorage.
TRANSPORTATION: Air; highway to Fairbanks and Anchorage.
AUTHORITY: Valdez Dock Co., P.O.Box 85, Valdez, Alaska 99686.

VALDEZ MARINE TERMINAL, Alaska: 61.05 N. 146.24 W. **(See Plan Book)**

OPERATORS: Alyeska Pipeline Service Company.
The terminal does not provide any tug, launch or pilotage assistance for the berthing or unberthing of tankers calling at the terminal. These services, as well as any other tanker services, must be arranged separately by tanker owners.
LOCATION: The Trans-Alaska Pipeline Valdez Marine Terminal is situated on the Southern shore of Port Valdez.

Port Valdez is a natural deep-water fjord located at the N.E. part of Prince William Sound which provides access from the Gulf of Alaska. Port Valdez is about 12 miles long and 2.5 miles wide, is surrounded by steeply rising mountains, and remains ice free throughout the year. The approach to Port Valdez is by way of Valdez Arm, a deep-water channel with a minimum width of approximately 3,000 ft.

The overland approach to the site, which is close to the mouth of the Lowe river, is by road about 6 miles long connecting the terminal with the Richardson Highway. The town of Valdez is 14 miles from the terminal by this route. The distance by boat across to Port Valdez is approx. 2.5 miles.

The terminal operates 24 hours per day, 7 days per week, throughout the year.

The administrative offices will normally be open between 0800 and 1630 hrs., Monday through Friday. The office telephone number is (907) 835-2261.
DOCUMENTS:
Certificate of Financial Responsibility.
SOLAS Safety Equipment.
SOLAS Safety Construction, or for U.S. documented vessels: U.S. Coast Guard Certificate of Inspection.
SOLAS Radiotelegraphy Certificate.
Crew Lists.
Derat Certificate.
Clearance from Last Port.
PILOTAGE: The Pilot boards off Rocky Point. Arrangements to be made by vessel's Agent.
ARRIVAL ADVICE: Masters of vessels bound for the terminal must advise the terminal as follows:
Last Port ETA: Tankers en route to the terminal, upon departure from their last port of call prior to Valdez, will send a telegram or telex to Alyeska Pipeline Service Company, Valdez, Alaska, Telex No. 090-26-564 (Answerback: Alyeska Valz) advising the estimated Alaskan local time and date of arrival.
72-hour ETA: Not less than 72 hours, unless transit time is less than 72 hours, prior to arrival at Cape Hinchinbrook, tankers will send a telex or telegram to Alyeska Pipeline Service Company providing the terminal with the following information:

a. ETA at Cape Hinchinbrook.
b. Quantity of ballast to be pumped ashore and grade of last cargo.
c. Quantity of oil to be loaded.
d. Distance from the bow to cargo manifolds.
e. Size, number and type of cargo connections.
} At first call to Terminal. Not necessary on subsequent voyages.
f. Amount of provisions and stores to be loaded.

Final ETA: Tankers will send a final ETA, 24 hours in advance of their arrival. This 24 hour ETA shall be as accurate as possible and tankers will notify the terminal whenever the arrival time changes by more than 3 hours.
Notice of Arrival: After entering the Coast Guard's Prince William Sound Vessel Traffic Service, vessels ready to commence loading or deballasting should give immediate notice to the terminal. This notice is extremely important as it can affect berthing priority.
Coast Guard Notification: Terminal will advise USCG at Valdez of all ETAs received.
AMVER Participation: The notice of arrival requirement to be given to the U.S. Coast Guard Captain of the Port in Valdez, Alaska, can be met if vessels participate in the Automated Mutual-assistance Vessel Rescue System (AMVER). Participation in AMVER will also make the Coast Guard's Prince William Sound Vessel Traffic Service aware of the tankers that will be entering the service.
Initial Radio Contact: Ship-to-shore radio telephone calls can be made to the terminal, (907)-835-2261, 24 hours a day by normal commercial Channels.

RADIO: All times are GMT – following information produced as a "guide" and subject to change.

Weather Broadcasts:

Weather Service Offices:

Announcement: 2182 kHz.
Broadcast: 2382 kHz AM/SSB
Alternate: 2512 kHz AM/SSB

Station		*Times (GMT)*
Annette	(KGD 58)	0400, 0600, 0800, 1500, 2100.
Juneau	(KC 197)	0325, 0525, 0925, 1225, 1525, 2125.
Yakutat	(KGD 91)	0200, 0300, 0500, 1400, 1700, 1800, 2000.

Coast Guard Stations

Announcement: 2182 kHz
Broadcast: 2670 Kodiak also on 6521.8 kHz (SSB) upper side band

Station		*Times (GMT)*
Biorka	(NMJ 18)	0100, 0800, 1300, 2000.
Ketchikan	(NMJ)	0115, 0815, 1315, 2015.
Ocean Cape	(NMJ 19)	0145, 0845, 1345, 2045.
Kodiak	(NOJ)	0200, 0445, 0900, 1415, 1645, 2100.

Radiotelegraph (CW) Broadcasts of marine weather forecasts Coast Guard Stations.

		Frequency	*Times (GMT)*
Ketchikan	(NMJ)	416	0530 hrs., 1730 hrs.
Kodiak	(NOJ)	470	0630 hrs., 1930 hrs.

Broadcast Notice to Mariners: Broadcast Notice to Mariners are disseminated on the following schedules:

Safety Broadcast:

(1) RADSTA Ketchikan (NMJ). (a) Code (CW) — Last 15 seconds of 1st Silent Period after receipt, next on operator schedule and repeat text only on next scheduled broadcast unless message cancelled. Additional broadcasts as directed, preliminary call on 500 kHz, broadcast on 416 kHz.

(2) COMMSTA Kodiak (NOJ). Voice (AM) — Upon receipt, repeat text only on next scheduled broadcast. Additional broadcasts made as directed with preliminary call on 2182 kHz, broadcast on 2670 kHz.

(3) RADSTA Adak (NOX). Code (CW) — Last 15 seconds of 1st Silent Period after receipt, next on operator schedule and repeat text only on next schedule broadcast unless message cancelled. Additional broadcasts as directed, preliminary call on 500 kHz, broadcast on 450 kHz.

(4) RCA — Alascom Ketchikan (WGG 58). Voice (AM) — On 2400 kHz upon receipt and as directed in broadcast instructions.

(5) RCA — Alascom Ketchikan (WGG 56). Voice (AM) — On 2400 kHz upon receipt and as directed in broadcast instructions.

Note: Watch hours (GMT) for single operator ships:

West Coast	*Central Pacific*
0001 – 0200 hrs.	0001 – 0200 hrs.
0400 – 0600 hrs.	0400 – 0600 hrs.
1600 – 1800 hrs.	0800 – 1000 hrs.
2000 – 2200 hrs.	2000 – 2200 hrs.

Scheduled Broadcasts: (Routine Precedence)

(1) RADSTA Ketchikan (NMJ)
(a) Code (CW) – 416 kHz – 0530Z and 1730Z
(b) Voice (AM) – 2670 kHz – 0630Z and 1800Z
(2) COMMSTA Kodiak (NOJ).
(a) Code (CW) – 2670 kHz – 0630Z and 1930Z
(b) Voice (AM) – 2670 kHz – 0445Z and 1645Z
(3) RADSTA Adak (NOX). Code (CW) – 450 kHz – 0430Z and 2130Z
(4) RCA – Alascom Juneau (WGG 58). Voice (AM) – 2400 kHz — 0830 hrs., 1300 hrs. and 1830 hrs. (local time).
(5) RCA – Alascom Ketchikan (WGG 56). Voice (AM) – 2400 kHz — 0830 hrs., 1300 hrs. and 1830 hrs. (local time).

TUGS: 2×7,000 h.p. and 1×9,000 h.p. twin-screw tugs and 2×300 h.p., single-screw mooring launches are on standby at the terminal to provide oil spill containment, cleanup and contingency services and fire fighting services as required by the terminal. The tugs are equipped with telescoping fire monitors and will be capable of providing 3,500 g.p.m. of foam or firewater at 150 p.s.i.g. at an elevation 70 ft. above the tug's waterline. The tugs are equipped with VHF-FM radio-telephone communication equipment. Should tankers desire to contact the tugs, the tugs may be reached by calling on Channel 16 (156.80 mHz).

The tugs and mooring launches are available to provide berthing and unberthing services to tankers calling at the terminal.

VHF: The Alyeska Pipeline Service Company operates a VHF – FM base station in Valdez, Alaska under the call sign "WAB – 952". This base station is maintained for the purpose of transacting company business with either inbound or outbound vessels and is open 24 hours a day. (Transmit/receive range of this station is limited to Port Valdez.) The official language for all communications shall be English.

Channel	*Frequency*	*Use*	*At*
10	156.500 MHz	Intership and Ship to Coast Guard	A – B – C
16	156.800 MHz	Distress – Safety and Calling	A – B – C
	A –	Contingency Management Centre	
	B –	Oil Contingency Warehouse	
	C –	Operational Control Centre	

The VHF – FM marine radio system utilized by the terminal is compatible with the Prince William Sound Vessel Traffic Service which is operated by the U.S. Coast Guard in Valdez, Alaska. The USCG Vessel Traffic Service will have VHF – FM radio-telephone coverage extending beyond Cape Hinchinbrook and including Prince William Sound, Valdez Arm, and Port Valdez. The tugs available at the terminal will also be equipped with VHF – FM transceivers.

TANKER REQUIREMENTS: *General:* Certain requirements of governmental agencies are in effect at the terminal in order to minimize the chances for a pollution incident. These requirements apply to all tankers calling at the terminal.

Operations at the terminal are primarily aimed toward the safe loading of tankers and the prevention of collisions and groundings of vessels that call at the terminal. These aims will be met by insisting upon and utilizing conventionally constructed tank vessels manned by skilled crews, use of positive vessel traffic control within Prince William Sound and Port Valdez, and use of all traffic advisory and communications services in West Coast ports. The purpose of the following requirements for tankers calling at the terminal is to materially enhance tanker loading and discharge operations and to increase the safety of navigation so that the danger of pollution from oil spills is substantially reduced.

Safe Navigation: Tankers will observe the rules and directions issued by the U.S. Coast Guard as operator of the Prince William Sound Vessel Traffic Service. These rules and directions will pertain to communications check points, ETAs, traffic lane separation, anchorages, one-way traffic, speed, etc.

In addition to the normal instruments used in celestial navigation and piloting (sextant, pelorus, etc.), the following electronic devices must be aboard and in good working order:

a. Fathometer/Depth Sounder.
b. Loran C Receiver.
c. Two Independent Radar Systems. (10 cm. and 3 cm.).
d. Radio Direction Finder.

All vessels must have a qualified Pilot aboard for the transit of Prince William Sound and Port Valdez.

Communications: Tankers calling at the terminal will be required to have the following communications equipment aboard and in good operating condition:

a. VHF – FM radio-telephone with sufficient Channels and speakers to comply with the Prince William Sound Vessel Traffic Service operating rules and the Bridge-to-Bridge Radiotelephone Act.
b. Radiotelegraph.
c. Portable UHF transceiver will be supplied by the terminal.
d. Single sideband radio.

The portable UHF transceiver shall have at least five Channels which are tuned to the berth frequencies listed.

Additional Equipment: Tankers calling at the terminal will be required to have the following additional equipment:

a. Tankers must carry standard 6 in. hose sufficient to make at least 50 ft. in length for emergency lightering purposes.

b. Accommodation ladders and Jacob's ladders must be of sufficient integrity and free from ice and snow to permit safe embarking and disembarking by the Pilot.

c. Mooring lines must be of sufficient size, strength, and quantity to permit safe mooring of the vessel.

d. Manifold reducers, connectors, and extensions must be made of steel. Cast iron reducers will not be permitted.

e. Tankers which call at the terminal will be required to retain all solid waste refuse aboard the vessel, or use a suitable sewage treatment plant before discharge.

f. All ullage caps will remain closed during loading except during gauging or sampling.

g. Prince William Sound emergency towing cable package.

Operational Requirements: The following procedural and operational requirements are listed in order to make tanker Owners and Masters aware of some additional safety and anti-pollution measures in effect at the terminal. These requirements will be restated in the sections pertaining to the pre-loading inspection and cargo loading.

a. No repairs to radars shall be made while a vessel is moored to the loading berth unless authorised by the Terminal Marine Supervisor.

b. The tanker's main CW wireless set must be de-energized and switched off while alongside the loading berth.

c. Tank tops shall remain closed during loading operations. Petroleum vapours shall be vented through mast risers or stand pipes at an appropriate height above the main deck.

d. Ship's crew will assist with connecting and disconnecting loading arms to and from the vessel's cargo transfer manifold. Assurance that the arms are secured properly without damage shall be observed during pre-loading inspection. However, as a convenience the shore crew will aid the ship's crew in connecting loading arms to the ship's manifold as the shore crew will be more familiar with the shoreside facility connection.

e. All sea valves connected to the cargo piping system shall be sealed in the closed position prior to loading oil.

f. Prior to commencement of loading operations, a joint inspection of the vessel and a pre-transfer conference will be held by the Terminal Marine Supervisor and the tanker officer in charge.

g. No repairs that would result in immobilization of the vessel shall be carried out while alongside of the loading berths unless the Terminal Marine Supervisor specifically authorises such work.

BERTHING: *Berth Priority:* Berth priority and berthing order will be determined by the Terminal Marine Superintendent who will use the general guideline of assigning tankers and berths in the order by which tankers enter the Prince William Sound Vessel Traffic Service and are in all respects ready to discharge ballast or load.

Procedures: Tugs will be dispatched by the Marine Shift Supervisor to meet inbound tankers and to assist in berthing at the nominated berth. The Master shall remain solely reponsible, on behalf of his owners, for the safety and the proper navigation of his vessel. Manoeuvring power must be available on the main engines during berthing operations. The positioning of the tanker's loading manifold in relation to the metal loading arms has to be carried out to a proper alignment, as required by the berth operator.

Maximum Allowable Berthing Velocities: The following table gives the designed maximum allowable berthing velocities for Berth Nos. 1, 3, 4, and 5. The velocities are given in inches per second for the various size tankers in the 40% ballast condition:

	Berth No. 1	Berth Nos. 3, 4 and 5
85,000 d.w.t.	9 in./sec.	12 in./sec.
120,000 d.w.t.	8 in./sec.	11 in./sec.
265,000 d.w.t.	—	7 in./sec.

Note:

(a) 1 knot=20.2 in./sec.

(b) Velocities are given for a line normal (perpendicular) to the axis of the dock or the berthing dolphins.

Mooring Hooks and Mooring Capstans: Each berthing dolphin and each mooring dolphin will be equipped with a mooring capstan and either 2 or 3 quick-release mooring hooks. Berthing dolphins will have double quick-release hooks, and the mooring dolphins will have triple hooks.

The recommended mooring line arrangement diagrams included in the "Plan Book" show the location of these double and triple hooks. Since Berth No. 1 has no berthing dolphins, the 4 double quick-release hooks are located on the loading dock.

These mooring hooks are designed to service 1 mooring line per hook. Thus, no more than 3 lines should be led to any mooring dolphin nor should more than 2 lines be led to any berthing dolphin. These mooring hooks may be released locally.

Each mooring capstan will be mounted on, and form an integral part of, the associated double or triple quick-release mooring hook. This will provide a mooring capstan to assist in securing mooring lines at every berthing dolphin, mooring dolphin, and on the floating berth loading dock.

These mooring capstans are designed to give a minimum running pull of 2,000 kg. (4400 lb.) at a rate of 30 m. (98.4 ft.) per minute. The capstan will be positioned at a height sufficient to prevent mooring lines and messengers from becoming snarled on the quick-release hooks.

Mooring launches will be used to assist the tanker in running mooring lines to the mooring dolphins at each berth.

The terminal will provide suitable messengers for heaving in mooring lines from the launches.

Mooring Lines: Mooring arrangements shall be satisfactory to the Marine Superintendent. All critical moorings shall be of similar size and elasticity. Ropes of different material from those used to moor the ship may be used for positioning the vessel but shall not count as part of the final moorings. It is required that in ships of 90,000 d.w.t. and greater all final moorings shall be wire rope. Nylon tails may be used if fitted to all moorings. Ships should be outfitted with sufficient moorings of similar material for normal moorings. Ropes of different material may be used in emergency.

Moorings While Alongside Berth: Tankers must at all times remain adequately secured alongside the berth. Moorings must be kept at an even tension, avoiding a slack line or varying tensioning situation. Should such a situation arise and not be immediately rectified by the ship's crew after communication with the deck officer, the berth operator will suspend any transfer operation. All vessels fitted with tension winches should apply brakes once the tanker is moored and shall not leave winches in the self-tensioning position.

Emergency Towing Wires: While at a loading berth, tankers will provide emergency towing wires positioned at both the offshore bow and stern. The wires shall be in good condition, have an eye in each end, and be of adequate strength to move the vessel off the dock. The outboard eye shall be maintained at water level, and slack aboard ship shall be secured with small pieces of fibre line.

Mooring Line Arrangement Diagrams: (See "Plan Book"). The recommended mooring line arrangement diagrams are provided in the "Plan Book" as guidelines to acquaint the tanker Master with the general mooring line arrangement for the loading berths at the terminal. These arrangements are indicative of the minimum suggested number of lines and do not preclude the Master from using additional lines.

BERTHING FACILITIES: The major ship loading facilities include four independent loading berths, numbered 1, 3, 4 and 5. Berth No. 1 is a floating berth whereas Berth Nos. 3, 4 and 5 are fixed structures.

	Berth No. 1	*Berth No. 3*	*Berth No. 4*	*Berth No. 5*
	See Note 1	See Notes 1 and 2	See Notes 1 and 2	See Notes 1 and 2
Vessel Size (Design) d.w.t.	16,000 – 120,000	16,000 – 250,000	16,000 – 265,000	16,000 – 265,000
Type of Berth	Floating dock	Fixed loading platform	Fixed loading platform	Fixed loading platform
Deck Level of Berth above MLLW	32 ft. 8 in.	36 ft. 7 in.	36 ft. 7 in.	36 ft. 7 in.
Depth Alongside at MLLW (ft.)	125	85	85	80
Loading Arms (Number × Size)	4 × 12 in.	4 × 16 in.	4 × 16 in.	4 × 16 in.
Max. rate Per Loading Arm (bbls.p.h.)	20,000	27,500	27,500	27,500
Max. Design Flow Rate (per berth) (bbls.p.h.)	80,000	110,000	110,000	110,000
Loading Arm Spacing on Operating Dock (ft.)	11	11	11	11
Maximum Ship Manifold Pressure	Pressure alarm points will be set, based upon information given by ship's officers.	See Berth No. 1	See Berth No. 1	See Berth No. 1
Emergency Shutdown	Can be initiated by berth operator or by OCC shutdown complete within 6.5 seconds after initiation.	See Berth No. 1	See Berth No. 1	See Berth No. 1
Access to Ship	42 ft. aluminium gangway	49 ft. 6 in. aluminium gangway	Telescopic Gantry	Telescopic Gantry
No. of Mooring Dolphins	4	4	6	6
No. of Berthing Dolphins	0	4	4	4
Mooring Hooks (One line per hook)	One triple hook per mooring dolphin Four double hooks on the operating dock	One triple hook per mooring dolphin One double hook per berthing dolphin	One triple hook per mooring dolphin One double hook per berthing dolphin	One triple hook per mooring dolphin One double hook per berthing dolphin
Potable Water	None	None	None	None
Bunker Facilities	None	None	None	None
Public Telephone	Available ashore in vicinity of berth	See Berth No. 1	See Berth No. 1	See Berth No. 1
Minimum Ship Manifold Spacing 1	—	—	—	—
2	—	6 ft. 9 in.	6 ft. 9 in.	6 ft. 9 in.
3	—	6 ft. 9 in.	6 ft. 9 in.	6 ft. 9 in.
4	—	6 ft. 9 in.	6 ft. 9 in.	6 ft. 9 in.
Quick Disconnect Coupling (QDC) Size (in.)	12	16	16	16
Manifold Size Range Acceptable to QDC (in.)	10 to 16	12 to 16	12 to 16	12 to 16

Note: (1) Although all berths are designed to handle vessels in the 16,000 d.w.t. size, loading arm size requires ship's manifolds to be a minimum of 10 in. in diameter. Normally, vessels less than 45,000 d.w.t. will be handled at Berth No. 1.

(2) Because of mooring dolphin limitations, vessels of more than 180,000 d.w.t. would be acceptable only if their deck machinery and mooring leads allowed an efficient bow and stern mooring line pattern. In addition to this requirement, distance from bow to manifold and prevailing weather conditions would have to be considered before berthing of such vessels would be authorised.

PRE-LOADING INSPECTION: *Pre-transfer conference and joint safety inspection:* Prior to the discharging of ballast from cargo tanks or loading of oil, a pre-transfer conference and a joint safety inspection will be conducted by the Terminal Marine Supervisor and a responsible deck officer aboard the tanker who will be in charge of bulk liquid transfers aboard the tanker.

The purpose of the pre-transfer conference and the joint safety inspection is to insure that both the terminal and the tanker are suitable and ready for safe loading and handling of oil.

The checklist is designed to meet the following requirements:

a. Section 4.4 of the International Oil Tanker and Terminal Safety Guide which relates to the agreed procedures and safety checks prior to the commencement of cargo loading.

b. Title 46, U.S. Code of Federal Regulations, Section 35.35-30 relating to a Declaration of Inspection for Tank Vessels.

c. Title 33, U.S. Code of Federal Regulations, Section 156.150, relating to a Declaration of Inspection prior to the transfer of bulk liquid cargo from a shore facility to a large vessel.

The checklist is to be taken aboard the tanker by the Terminal Marine Supervisor and shall be used during the pre-transfer conference and the joint safety inspection of the tank vessel to insure compliance with applicable regulations and safety standards. Columns are provided on the checklist for the Terminal Marine Supervisor and the tanker person-in-charge to initial, indicating that the requirements have been met. The original of the checklist shall remain aboard the tanker, and a copy shall be returned to the Terminal Marine Supervisor for subsequent delivery to the berth operator.

Terminal personnel are authorised to suspend oil transfer operations if any of the safety rules listed or on the checklist are not observed, or if any other danger is believed to exist.

The Master of the tanker or his representative has the right to shut down loading operations in the event he feels shore operations are unsafe.

During the pre-transfer conference, the Terminal Marine Supervisor shall provide the responsible ship's officer with a printed sheet detailing description and location of the fire-fighting system and the other emergency systems at the terminal in general and at the berth to which the tanker is moored in particular. The Terminal Marine Supervisor shall also advise the vessel if any unusual or dangerous weather conditions are forecast or expected.

As the shifts on the berth change, the relieving Terminal Marine Supervisor and berth operator shall assure themselves that all conditions pertinent to their responsibilities are as previously agreed to, and shall sign the copy of the Declaration of Inspection. The relieving officer aboard the tanker shall assure himself that the original conditions still exist and shall sign the original of the Declaration of Inspection aboard the tanker. These relieving personnel will then become the person-in-charge of the transfer operation for the terminal and the tanker respectively.

BALLAST: *Ballast Quantities:* The terminal is to be informed of the approximate quantities of segregated clean and dirty ballast in the Master's pre-arrival message. This message should also state where the ballast was shipped and the grade of last cargo.

Ballast Reception Facilities: The terminal facilities will include three 430,000-barrel ballast reception tanks. Discharge of dirty ballast will be by way of the four 12 in. loading arms (Chiksans) on Berth No. 1 and the four 16 in. loading arms on Berth Nos. 3, 4 and 5. These loading arms connect to 20 in. lines at the berths and lead into a 42 in. line connecting each berth to the ballast reception tanks. Although the shore lines are insulated, they are not heat traced and there are no booster pumps to assist in the discharge of dirty ballast.

No. 5 berth is situated approx. 1.25 miles from the reception tanks and has a possible head of 150 ft. Max. pressure 40 p.s.i. (approx.).

In the event of any stripping problems, it is recommended that tanks containing unpumpable ballast be stripped internally to the slop tank and that the Load-on-top procedures be adopted.

Segregated Ballast: Only segregated ballast will be permitted to be discharged overboard. Segregated ballast is defined as ballast water that is introduced into a tank which is completely separated from the cargo oil and the oil fuel system and which is permanently allocated to the carriage of ballast. The deck log book must record all times of ballast discharge and when pumps are started or stopped. This log must also indicate whether or not the segregated ballast is being dropped in the initial stages to sea level. A close watch must be maintained on the overside discharge, with a deck floodlight or portable explosion-proof light being trained on the discharge during hours of darkness. If there are any indications of discolouration or sheen, discharge must be suspended and an investigation must be carried out. If there is any doubt as to the quality of the segregated ballast, all discharge will be made into the shore reception facilities.

Dirty Ballast: All ballast contained in any compartment or tank used for the carriage of oil will be classed as dirty no matter how clean the ballast may appear to be. No ballast carried in cargo tanks may be discharged at sea or in port.

After the connection of the loading arms has been completed and the suitable valves between the arms and the ballast reception have been opened, permission to commence discharge will be given to the responsible tanker officer by the berth operator who will have received approval from the Operations Control Centre (OCC).

Contact between the tanker and the terminal will be by means of the UHF radio that will be placed on board by the Supervisor. As during all transfer operations, there will be a continuous watch near the ship's manifold. In the event of an emergency on the berth, pressing of the emergency alarm will activate the valve closing mechanism.

On hearing this signal, the Crew member at the manifold must stop the ship's ballast pumps to avoid damage by pumping against a closed valve system ashore. (See Emergency Procedures.) On commencing discharge of dirty ballast and at frequent intervals during the discharge, a watch will be kept on the area around the sea valves even though the sea valves have been inspected during the initial safety checks and a seal has been placed on them by the inspecting Terminal Marine Supervisor. Any indications of any oily sheen will necessitate a shutdown of the discharge pumps and an investigation to be carried out before any further ballast can be discharged. Thirty minutes before completion of discharge, the responsible tanker officer will inform the berth operator who will in turn advise the OCC and the duty Terminal Marine Supervisor.

On completion of the discharge and after pumps have been stopped, the loading arm(s) used for dirty ballast discharge must be drained back into the slop tank. On vessels with an inert gas system, gauging will be taken by way of the deck purge pipes to determine that tanks are empty. It is not intended that vessels will depressure cargo tanks for visual inspections, nor should tank lids be opened on any compartment that is not gas free.

All safety regulations applicable during the loading of oil will also apply during the discharge of ballast.

Governmental Ballast Discharge Requirements:

State of Alaska: The State of Alaska requires that the Master of a vessel scheduled to take on any petroleum product or cargo, complete and sign the State of Alaska Department of Environmental Conservation Ballast Water Discharge Certificate Affidavit. To support this affidavit, the Master must be prepared to produce both deck and engine room log books and a legible copy of that portion of the Oil Record Book relevant to the sea passage from last discharge port to the terminal.

Federal Requirements: Prior to loading oil on any vessel, the terminal is required by the United States Department of the Interior to obtain from the Master of the vessel a legible copy of that part of the Oil Record Book that pertains to the voyage of the vessel to the terminal from the vessel's last oil discharge port. This legible copy shall be certified under oath by the Master as being true and correct. If the vessel is not required to maintain an Oil Record Book or similar records, the Master of the vessel is required to provide the terminal with an affidavit, duly sworn to and signed, stating any and all facts bearing upon any discharge of oil or oily water from the vessel during its voyage to the terminal from its last oil discharge port.

Should the Master be unable to comply with the preceding requirement or if it appears from the Oil Record Book or other documentation that a vessel has discharged oil or oily water during its voyage to the terminal, the terminal is required to promptly notify the Department of the Interior's representative, the Authorised Officer. Tankers discharging ballast water or other oily mixtures may be subject to penalties.

OIL CHARACTERISTICS: The predominent oil to be available at the terminal is currently North Slope crude oil. The following preliminary characteristics of North Slope crude oil are given to acquaint the Master and the cargo officers of tankers that will call at the terminal with the general properties of the cargo they will load.

Specific Gravity: 0.8933 at 60° F.

API Gravity: 27.0° API.

Pour Point: + 15° F.

Viscosity: 73.5 SSU at 100° F., 169 SSU at 60° F.

Reid Vapour Pressure: 4.0-4.5 lbs.

Sulphur Content: 0.94 per cent by weight.

Waxing: 85-117° F. (begins to precipitate). 50-55° F. (bulk of wax begins to come out of solution).

Mercaptan Sulphur: approx. 14 parts per million.

Loading temperature: approx. 100° F.

Dissolved H_2S: less than 0.2 parts per million.

LOADING FACILITIES: *General:* All loading operations will be accomplished in accordance with the joint inspection pre-transfer conference. Loading operations cannot commence until the vessel has complied with all State of Alaska and Federal Requirements and all required documentation has been provided.

Crew Responsibilities: Ship's crews will be responsible for assisting with handling the loading arms on board the tanker, furnishing and making the adaptor connections, removing blind flanges, and guiding the loading arms (Chiksans) to the appropriate manifold connections. However, as a convenience, the shore crew will aid the ship's crew in connecting loading arms to the ship's manifold as the shore crew will be more familiar with the shoreside facility connection. The Chiksan loading arms and couplings are hydraulically controlled by the berth operator who will be in constant voice communication with the individual responsible for the connection by means of the UHF portable radio that will be supplied to all vessels by the Supervisor.

If required, the terminal will supply 10 in. – 16 in. reducers at Berth No. 1 and 12 in. – 16 in. at Berths Nos. 3, 4 and 5.

Checklist Requirements: After the Terminal Marine Supervisor is satisfied that all the safety requirements have been complied with, permission will be given to commence loading. All operations in connection with starting of loading, switching of tanks, and topping off will be the responsibility of the responsible ship's officers.

Before the maximum pressure or loading rates agreed to at the pre-transfer conference are reached, slow loading will be started and the responsible ship's officer will ensure that the cargo is flowing to designated tanks, thus ensuring that all block valves separating lines are open. On completion of this check and after advising the berth operator, the pressure/rate will be increased to the maximum previously agreed by the Master, or the officer in charge.

A responsible member of the crew will remain near the manifold within sight of the berth operator. This is in addition to the officer on cargo watch who, at frequent intervals, will check the state of loading with the berth operator by means of the UHF radio. This officer will also advise the berth operator when changes in the loading rate are required.

The rate of flow into the tanker can be observed on the large digital readout situated by the berth operator's control position.

Loading Suspension: Terminal: Terminal personnel will suspend loading operations if any of the safety rules are not followed, or if terminal personnel supervising loading operations believe any other danger exists, providing adequate notice is given to the responsible ship's officer.

Tanker: The master is required to shut down loading if he feels that shore operations are unsafe, provided adequate advance notice is given to berth personnel.

Emergency Shutdown: In the event of an emergency (See "Emergency Procedures") the following types of shutdown could occur:

(1) "Dangerous" shutdown.
  (a) All berth block valves close.
  (b) Metering upstream block valves close.
  (c) Berth control valves close – one for each loading arm (in 5, 5.5, 6.0, and 6.5 seconds, respectively, to prevent surge to line).
(2) Fire shutdown
  (a) The preceding valve closures plus fire alarm and start fire pumps.
(3) Emergency shutdown, one per arm, closes control valve only.
(4) Low vapour pressure on any crude tank – initiates (1) preceding.

Pushbuttons for (1) preceding are located in berth area plus one on berth operator's alarm panel.

Pushbuttons for (2) 1 on roadway; 1 on roadway at land; 1 in Power Distribution Cabinet (PDC); 1 in Berth Operator Control (BOC) alarm panel; 1 in loading arm area.

Pushbutton for (3) 1 local at each valve.

Topping Off: Near the end of loading when topping off, the responsible ship's officer will request the gradual reduction of loading rate for topping off operations. This reduction will be achieved by the berth operator slowly closing the berth loading valves. The berth operator will progressively reduce the opening of the berth control valves and will take loading arms out of service, until the point when all berth control valves and block valves are finally closed, when advised by the ship's officer "Shut Down" or "Finished Loading". The loading arms will then be drained into a ship's tank.

Disconnecting: On being satisfied that loading arms and ship's manifold are empty, the order will be given from the responsible ship's officer to the berth operator to uncouple the quick release couplings.

During the period of disconnecting, the USCG Vessel Traffic control Centre at Valdez will have been advised. Tugs will be on standby, and providing that there are no other ship movements that would interfere with sailing, the "Early Departure System" will be carried out. The actual Bill of Lading figures will be sent to the master by W/T or Telex after departure.

COMPLETION/DEPARTURE PROCEDURE: *Topping Off:* As the tanker begins the topping off stage, the responsible ship's officer shall notify the berth operator who will in turn keep the OCC informed as the cargo loading rate is reduced. When the ship's officer estimates approximately one hour remains in the loading process, he shall notify the berth operator.

Tug Assistance: After being notified by the tanker that one hour remains in the loading sequence, the berth operator shall notify the OCC and the Terminal Marine Supervisor. The OCC shall continue to monitor the topping off process and the Terminal Marine Supervisor shall place the vessel's pre-arranged tugs on standby. The tugs shall be alongside the vessel after all loading arms have been disconnected and before any mooring lines are let go.

U.S. Coastguard Vessel Traffic Service: The departure of tankers from the terminal shall be in accordance with the published standard operating procedures for the Prince William Sound Vessel Traffic Service. The Coastguard Operations Centre located in Valdez shall be the directing authority for the operation of the vessel traffic service. The Terminal Marine Supervisor will notify the USCG-VTS one hour prior to the completion of loading and again when loading is complete. When the Terminal Marine Supervisor notifies the USCG-VTS that loading is complete, he will verify the tanker's status to enter the Vessel Traffic Service and will check on any inbound vessel traffic.

SAFETY: After the tanker is secured, the Terminal Marine Supervisor will board the tanker to contact the Master or his representative to:

- provide information on terminal safety regulations.
- agree on designated smoking areas
- advise ship's personnel on "Work Permit" and "Hot Work Permit" procedures.
- present ship/shore Safety Check List.
- present printed sheet describing terminal emergency procedures and fire fighting capabilities.

The following are **some** of the safety requirements.

Warning Signs, Lights, and Signals – Upon arrival at the terminal, a tanker shall display the following notice at the gangway:

WARNING	NO SMOKING
NO OPEN LIGHTS	NO VISITORS

During transfer of oil, and when in the non-gas free condition a red signal (flag by day and electric lantern at night) shall be displayed so that it is visible from all sides.

Blowing tubes – Funnel uptakes and boiler tubes will not be blown while a tanker is berthed at the terminal.

Use of Tools – No chipping or other operation likely to produce sparks will be allowed in any designated hazardous area. The Terminal Marine Supervisor and the responsible ship's officer shall both be satisfied that there is no such activity on the vessel or on the facility.

Flashlights, Hand Torches, Lanterns – Only self-contained battery powered flashlights, hand torches, lamps and lanterns, approved by USCG will be permitted to be used aboard the vessel or on the berths.

Main Engine – While berthed at the terminal, the tanker's main engines, steering machinery, and other essential manoeuvring equipment shall be maintained on standby status to permit the tanker to move from the berth on short notice.

Communications Equipment – A tanker's main transmitter shall be turned off and the main transmitting aerials shall be grounded whenever a tanker is alongside a loading berth at the terminal.

VHF-FM radiotelephone equipment, both portable and fixed, may be used as long as the equipment is permanently installed or intrinsically safe, conforms to FCC marine requirements, USCG requirements, and operates with a power and output of 1 watt or less.

The preceding requirements do not mean that essential servicing of ship's radio equipment cannot take place while alongside a berth. However, suitable arrangements for insuring safety during this work shall be made between the tanker and the terminal, including the securing of an appropriate work permit.

Operating and servicing of radar equipment aboard a tanker berthed at the terminal shall be agreed to by the Terminal Marine Superintendent or Marine Supervisor and shall be the subject of an appropriate work permit.

Vessels Alongside – Unauthorised craft shall be prohibited from securing to a berth at which a tanker is moored.

No craft shall come alongside a tanker while the tanker is handling crude oil or deballasting without the permission of the Terminal Marine Superintendent who shall instruct personnel aboard the craft that smoking, naked light, and galley fire regulations must be observed.

Designated Smoking Areas: Smoking shall be strictly prohibited within an area enclosing all tanker berths and loading docks and on board any tanker while at a berth, except.

(a) in buildings or other shore locations specifically approved for smoking and with such approval notices posted.
(b) on board a tanker in places specified by the Master, and agreed to by the Terminal Marine Supervisor.

Places designated for smoking shall not be outside of any of the accommodation areas. Special precautions shall be taken during conditions that may suggest danger; in particular, conditions of no wind or any indication of unusually high gas concentrations.

The Master is responsible for insuring that all on board are informed of the selected places for smoking and for posting suitable notices.

Only safety matches are permitted in approved smoking areas. The use of lighters is prohibited.

Galley Fires and Cooking Appliances – Galley burners are to be adjusted to insure efficient combustion and to prevent galley stack fires and sparks from incandescent soot. Flues are to be cleaned at regular intervals. When bottled gas equipment is used, the gas shall contain an additive which will give it a distinctive odour. Sufficient fire extinguishers shall always be provided near the galley. Oily rags and fat shall not be allowed to accumulate, and the exhaust fan ventilators shall be kept clean.

While a tanker is at a berth, the use of galley stoves and other cooking appliances with non-immersed elements such as electric hot-plates and toasters shall be permitted provided that the Terminal Marine Supervisor agrees that no hazard exists and that such use is in the galley, in the pantry, or in designated smoking areas.

Work Permits – If repairs are to be carried out on a tanker alongside a berth at the terminal, the responsible ship's officer must discuss and obtain agreement from the Terminal Marine Supervisor on the details of the work to be done. Certain types of repairs will be the subject of written work permits which shall be completed by the responsible ship's officer and authorised by the Terminal Marine Supervisor at the time of the pre-loading inspection check list. These types of repairs include but are not limited to:

(a) Repairs to main engine, steering machinery, or other manoeuvring equipment which might immobilise the tanker.
(b) Repairs to tanker's radiotelephone or communications equipment.
(c) Repairs to radar equipment.
(d) Repairs to galley equipment and cooking appliances.

Hot Work Permits – Any hot work done at the terminal, either on the berth or aboard a tanker moored to a berth must be approved by the U.S. Coastguard Captain of the Port, Western Alaska. This approval will be in the form of a signed Hot Work Permit, issued by the U.S. Coastguard.

EMERGENCY PROCEDURES: Fire: The signal for a fire aboard a tanker moored at the terminal shall be 5 prolonged blasts of the ship's whistle or siren supplemented by a continuous sounding of the ship's general alarm. In the event of a fire within the terminal, the tanker shall be notified by the berth operator and, in addition, the terminal fire alarm will also be sounded.

The initial action required of tankers in the event of a fire within the terminal is to prepare for a shutdown of all loading and ballast water discharge arms. This shutdown will be initiated by the terminal and not by the tanker. In case a shutdown does occur, loading and ballast discharge will not be commenced again until the all clear notification has been received from the Terminal Marine Supervisor.

In the event of a fire aboard the tanker or on the loading berth, the initial actions will consist of shutting down all transfer operations. The standby tug, followed by the other tugs, will be dispatched by the OCC to the appropriate berth and the fire water pump shall be started. If necessary, the tanker will be towed off the berth by tugs, using the emergency tow wires. Each berth is equipped with an independent fire water system which includes a 2,000-gallon-per-minute pump and a liquid foam system. Each berth is also equipped with the following fire-fighting equipment:

(a) 2 fixed foam monitors.
(b) 2 fixed firewater monitors.
(c) 5 fire hydrants.
(d) 3 hose reels.
(e) 1 shore to ship firewater connection including 75 ft. of 2.5 in. hose.

Each berth also has the capability to be interconnected with the tugs or with fire trucks to provide increased fire-fighting capacity. The foam system is designed for coverage of fire on the berths only and is not normally interconnected for use by shipboard firefighters in the event of a fire.

Note: Regardless of any assistance the terminal may render, vessels at the berth are expected to put their own emergency procedures into effect whenever required.

Man Overboard: In the event of a man overboard from a tanker moored at the berth, rescue efforts will be implemented immediately, and the berth operator shall be advised by UHF radio. The Terminal Marine Supervisor shall also be notified by the berth operator. The standby tug and mooring boat shall be advised by the berth operator and shall get underway immediately to attempt the rescue.

Life rings will be in position around the loading berth and also on the berthing and mooring dolphins. In case of a man overboard, the medical authorities will also be alerted by the berth operator.

Oil Spills: The notification requirements for an oil spill are delineated by Federal Law. The Federal Water Pollution Control Act (FWPCA) requires persons in charge of vessels (among others) to notify the appropriate federal agency whenever an oil spill enters navigable waters or the adjoining shoreline. The appropriate agency designated to receive these reports is the U.S. Coastguard which can be contacted on Channel 16, VHF-FM.

Notification of an oil spill shall be passed by the tanker to the berth operator who in turn shall inform the Terminal Marine Supervisor.

The terminal will call other agencies that are required to be notified.

The terminal will provide any available containment and cleanup assistance for any oil spill at the terminal. The terminal will activate its oil spill response procedures upon notification of an oil spill and shall utilise all available personnel, equipment, and resources to limit and minimise pollution.

CHARTS/PUBLICATIONS: The following official charts and publications are recommended for study when planning a voyage to Valdez, Alaska and the terminal:

(a) National Ocean Survey Charts:

Chart Number		*Title*
Old System	*New System*	
8500	531	Gulf of Alaska – Strait of Juan de Fuca to Kodiak Island
8502	16013	Cape St. Elias to Shumagain Islands
8551	16700	Prince William Sound
8520	16709	Prince William Sound – Eastern Entrance
8519	16708	Prince William Sound – Port Fidalgo & Valdez Arm, Valdez.

(b) Nautical Chart Catalogue No. 3 – Alaska

(c) United States Coast Pilot No. 9, Cape Spencer to Beaufort Sea (1964) with current supplement.

(d) Tides Tables, West Coast, North and South America (current year).

(e) Tidal Current Tables, Pacific Coast of North America and Asia (current year).

(f) United States Coastguard Light List, Vol. III, Pacific Coast and Pacific Islands (current year).

(g) Weekly Notice to Mariners published by Defense Mapping Agency Hydrographic Center (DMAHC).

(h) Local Notice to Mariners issued by Commander, Seventeenth Coastguard District, Juneau, Alaska.

(i) Radio Navigational Aids, Pacific and Indian Oceans (Publication No. 117B), published by U.S. Hydrographic Office.

WEATHER: *Wind:* The mountains which surround Port Valdez tend to constrain the flow of air to either an Easterly or Westerly direction. At Valdez Narrows, the predominant directions are Northerly and Southerly.

Jackson Point experiences stronger winds than Valdez Airport; however, light winds (less than 13 m.p.h.) occur about 85 per cent of the time. The prevailing wind directions are S.W. from May through September and N.E. from October through April. The N.E. Winter winds reach gale force but usually do not prevail for long periods. The site is well protected from Southwesterly winds but is fully exposed to the Northeasterlies and to winds coming off Mineral Creek, directly North of the facility, approx. 2.5 miles away across Port Valdez.

The occurrence of winds with speed greater than 19 m.p.h. from any direction is less than 7 per cent throughout the year.

A wind chill factor chart is presented for use in conducting operations during Winter seasons. As indicated, combinations of low temperatures and high winds combine to provide extremely low equivalent temperatures. Outdoor operations under these conditions should be closely supervised to insure that personnel and crewmen do not suffer from exposure or frostbite.

Precipitation: Precipitation is abundant during all seasons with the majority falling during the months July through November. Valdez has an average annual precipitation of 62.37 in. with a mean total of 244.5 in. of snow per year. Greatest snowfall in a 24-hour period was 43 in. in February 1928. Precipitation of an amount in excess of 0.01 in. occurs an average of 170 days per year. Estimate 1 in. rain = 12-15 in. snow.

Temperature: The mean monthly annual temperature is 35.7° F. with recorded extremes of +87° F. (June 1953) and −28° F. (February 1947). The month of January is the coldest with a mean daily minimum of 11° F. and a mean daily maximum of 26° F. The month of July is the warmest with a mean daily minimum and maximum of 45.2° F. and 60.1° F., respectively.

Visibility: Snow or snow with fog are the major causes of reduced visibility during Winter months. At the Valdez Airport, visibilities of 1 mile or less occur 3.7 per cent of the time, annually. Visibilities greater than 5 miles occur 85 per cent of the time.

Tides: The tide at Port Valdez has a diurnal range of 12 ft. and a mean range of 9.7 ft.

Waves: The port is surrounded by mountains and is well protected from the open sea and the wave action within the port is limited to wind-generated waves which are constrained by the fetch available. The maximum calculated wave height is 9.4 ft. from the East with a period of 4.3 seconds. Waves in the order of 6 ft. could occur from the N.W. quarter. An important exception to this is a tsunami or seismically generated wave which can be far in excess of the heights quoted above. Investigations in 1968 showed mean wave heights 3 to 6 ft. in Winter (independent occurence 0.7 per cent of time) and 2 to 3 ft. in Summer (0.1 per cent of time). Berths at the terminal are designed to withstand waves of 12 ft. with a vessel alongside and 20 ft. when vacant.

Ice: Valdez is an ice-free port as far as tanker operation is concerned. Light ice forms along the banks and in the small boat harbour at Valdez, but this has not interfered with small-boat operations.

Currents: It appears that surface currents measured during calm wind conditions in Port Valdez often oscillate with the tide, moving generally in and out of the port with maximum speeds of 0.5 knot. The Easterly (flooding) surface current during a falling tide may or may not persist throughout the year. Although Volume 9 of the U.S. Coast Pilot for Alaskan waters describes the current in Port Valdez as "too weak and variable to be predicted", measurements of surface current speeds typically show maximums of 0.5 to 1.0 knot.

It is requested that inbound tankers keep the OCC advised of weather conditions in the Gulf of Alaska, Prince William Sound, Valdez Arm, and Valdez Narrows in order that accurate information may be passed to outbound tankers.

VISITORS: Access to the terminal is limited to terminal personnel, authorised governmental personnel and authorised visitors with valid reasons for entry onto the terminal site.

Visitors to the Valdez Marine Terminal are requested to make arrangements through the Administrative Office in advance of their arrival at the terminal. Authorised visitors shall be met at the main gate, which provides the only land access to the terminal and is located at the East end of the terminal site, and shall be escorted through the terminal area. All persons passing through the main gate shall sign in and out with the guard. Any visitor who arrives at the main gate outside normal working hours of the Administrative Office and who has not made prior arrangements shall be turned away and requested to contact the Administrative Office during normal working hours.

The guard at the main gate shall ask any visitor desiring to meet a tanker crewman to wait at the gate until the vessel is called and arrangements have been made to meet the visitor.

Small boats and other vessel traffic will not be permitted to dock at the terminal site without the approval of the Terminal Marine Supervisor. Only taxicabs with valid passes will be permitted to enter the terminal site, and any private or commercial vehicles that are permitted in the terminal area will be subject to inspection on entering and departing the area.

SHORE LEAVE: If tanker personnel return to the Valdez Marine Terminal site in such a condition that they might require assistance to insure their safe return to the ship, they shall remain at the main gate until the guard grants them admittance. Should an escort be required, it will be provided by vessel personnel.

All tanker personnel transiting the terminal area will be required to carry their United States Merchant Mariner's Document (USMMD) and company identification of tanker owner for identification. These documents shall be presented to the guard at the main gate whenever tanker personnel enter or leave the terminal site. Should a crewman present himself without these documents, he will be detained and the Master will be called to resolve the matter.

TIME: Alaska Standard Time (150th West meridian) for a zone description of +9(ZD=+9). Local time is modified from the last Sunday in April to the last Sunday in October by the use of Daylight Saving Time for a zone description of +8 (ZD = +8) for Alaska Daylight Saving Time. This time is 1 hour behind that in Seattle and California and 4 hours behind New York.

To avoid confusion, all communications regarding sailing times, sailing dates, arrival times, arrival dates, etc. are to be quoted in Alaska Local Time.

FRESH WATER: Only in cases of extreme emergency can potable water be supplied and in a very limited quantity.

FUEL: Not available.

POLLUTION: U.S. Federal Pollution Prevention Regulations and Federal Water Pollution Control Act to be strictly observed.

TELEPHONES: Pay telephones will be located in the vicinity of each loading berth for the use of ship's personnel.

Telephones will not be placed aboard tankships calling at the terminal.

AGENCY: Alyeska Pipeline Service Company will not act as Agent for tankers calling at the Valdez Marine Terminal. Any requirements for such services as ship chandler, etc. must be obtained through the Owner's appointed ship's Agent. For security, the Valdez Marine Terminal must be notified of the appointed Agent.

AUTHORITY: Alyeska Pipeline Service Company, Valdez Terminal, P.O.Box 300, Valdez, Alaska 99686. *Tel:* (907) 835-2261. *Telex:* 26564. *Contact:* Captain James K. Woodle, Marine Superintendent/Port Captain. *Tel:* (907) 835-6526 or after hours (907) 835-2606.

VANCOUVER, Washington: 45.36 N. 122.40 W.

(See Plan Book)

DOCUMENTS: 3 copies of following:
Cargo Manifest.
Store List.
Crew Cargo List.
Crew List.
One copy of following:
Clearance from last Port.
Tonnage Tax Certificate.
Copy of Vessel register and itinerary of vessel port by port.

PILOTAGE: See "General-Pilotage" before first U.S.A. port (Albany).

ANCHORAGES: Only designated anchorages on U.S. Coast and Geodetic Charts are at Tongue Point (Astoria), Oreg. 2 in number and designated on Chart 6151 Columbia River, Pacific Ocean to Harrington Point, as 1 Lower Tongue Point and 2 Upper Tongue Point. Additional locations on Columbia and Willamette Rivers where safe anchorages can be made upon advice of Columbia River Pilots. Anchorage in Vancouver harbour by permission of Harbour Master.

RESTRICTIONS: No restrictions on night entry. State of tide and draft restrictions not applicable to vessels drawing less than 40 ft.

MAX. SIZE: No restrictions length and breadth. Depth at Columbia River entry 48 ft. River channel to Vancouver maintained at 45 ft. by 600 ft. Seasonal tidal effect up to 3 ft. at Vancouver.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Seattle Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: Route ETA cables through KBLITT Seattle, Wash.

TUGS: Normally join vessel at designated berth. Tug lines used at no charge.

BERTHING: No special requirements for berthing and no special arrival times required except under particular circumstances.

4 berths. Total length 2,535 ft. Ro/Ro facilities available.

BULK HANDLING FACILITIES: The grain terminal, owned by the Port and operated by the United Grain Corporation, has about 1,000 ft. (305 m.) of dock available. The 7 vessel spouts load 1 vessel at a time at a combined loading rate of 40,000 bushels per hour. The grain terminal can off-load at 18,000 bushels per hour, and they have a storage capacity for 4,500,000 bushels.

EQUIPMENT: The Port of Vancouver has 3 whirley cranes, 1 of which is rated at 50 short tons at 60 ft. (18 m.) and 15 short tons at 130 ft. (40 m.) the other 2 whirley cranes have a capacity of 34 short tons at 60 ft. (18 m.) and 10 short tons at 130 ft. (40 m.). These 3 travelling gantry or whirley cranes operate on parallel tracks on the face of the dock in conjunction with the double direct transfer tracks.

Bulk materials make up a sizeable portion of the Port's traffic, and consequently, large crane buckets are available for handling these cargoes. In addition, the Port has a special crane bucket for the successful handling of zirconium – a very fine sand material considered a "problem" commodity for efficient and waste-free handling.

The Port maintains a full complement of support equipment. They have 42 lift trucks with 2 – 3.5 ton capacities, 9 lift trucks with 7.5 – 15 ton capacities, 1 lift truck with a 26 ton capacity, along with various straddle-carriers, conveyors, front-end loaders, jitneys – and a range of special attachments and gear for all their equipment (such as prong-lifts for steel coils, grabs and squeezers for paper rolls, push-pull slip sheets for bag goods, cartons and boxes) to handle any special situations or problem with which they might be confronted.

STEVEDORES: Allocation for gangs Mondays through Saturday must be confirmed at 1100 hrs. to the longshore hiring hall. Allocation for gangs Sunday and Monday are made at 1100 hrs. Saturday for both day and night gangs. Same procedure applies to allocation of night gangs, but night gangs may be cancelled by 1400 hrs. afternoon of night gangs are to work.

MEDICAL: Any type of medical treatment can be provided and hospital facilities available.

TANKERS: 1 berth. 3 × 6 in. pipe-lines to 21 tanks. Storage capacity 85,800 bbls.

DENSITY: Fresh water at all times.

FRESH WATER: Available at all berths delivered through pier-side connections.

FUEL: Viscosity grades of B and lower. No advance notice required. Barging essential.

FIRE PRECAUTIONS: Port fire precautions respecting tankers are administered by U.S. Coast Guard, which enforces shipboard regulations under Code of Federal Regulations, Part 46, Sub-part D, Sections 20 to 40; Police Harbour Patrol, which controls port movements, boards vessels to warn Master regarding harbour regulations, including spilling of oil, etc.; and Fire Marshal, who exercises jurisdiction regarding fire regulations at shoreside facilities serving tankers.

CERTIFICATES: Registered tonnage certificate.

CUSTOMS ALLOWANCES: Tobacco, reasonable quantity. Wine and/or Spirit, reasonable quantity.

CARGO GEAR: Valid cargo gear certificate required, acceptable to U.S. Bureau of Labor Standards.

IDENTIFICATION CARDS: Immigration Dept. requires forms No. 595 and No. 31 (Repatriation). Changes can be effected at any U.S. Consulate and are honoured here.

CONSULS:

Austria
Belgium
Costa Rica
Denmark
Dominican Republic
El Salvador
Finland
France
Federal Republic of Germany
Great Britain
Iceland
Italy
Japan
Lebanon
Mexico
The Netherlands
Norway
Republic of Panama
Peru
Sweden
Venezuela

GANGWAY/DECK WATCHMEN: Services at option of vessel Owner/Agent and available through private firms.

OPENING/CLOSING HATCHES: While ship is at dock, opening and closing hatches is work of longshoremen. Ship may open or close own hatches while under way.

REPAIRS: All types of deck and engine repairs possible.

DRY DOCKS: See "Portland, Oregon".

REPATRIATION: Any arrangements possible for crew changes or other repatriation.

AIRPORT: Airport 10 miles from town, served by 7 regularly scheduled airlines with direct service and/or connections domestically and world-wide.

TIME: GMT minus 8 hours. Daylight saving time becomes effective annually on last Sunday in April through last Saturday in October.

HOLIDAYS: Following holidays are recognised: *New Year's Day; Lincoln's Birthday (Feb. 12th); Washington's Birthday (Feb. 22nd); Memorial Day (May 30th); *Independence Day (July 4th); *Labor Day (1st Monday in September); Columbus Day (Oct. 12th); Veteran's Day (Nov. 11th); Thanksgiving Day; *Christmas Day (Dec. 25th); Statewide Election Days. Other legal holidays may be proclaimed by State or national authority. When holiday falls on Sunday, following Monday observed as holiday. Longshore work performed on any of above-listed days is at overtime, which is one-and-a-half time rate. Days marked(*) are stop-work days, viz., no ships will be worked. This also applies to July 5th, which observed locally on unilateral basis.

POLICE/AMBULANCE/FIRE: Police 693-2555; Fire 693-1441; Ambulance provided by several private firms, but can be obtained through police or fire number.

SERVICES: All services available such as compass adjusting, major or minor repairs either with work barges or at ship repair berths; lay berths available; charts available from private companies; all chandlery supplies available.

SHORE LEAVE: Crew members permitted ashore except where vessel has made first arrival from Communist-controlled port.

AUTHORITY: Port of Vancouver, P.O.Box 1180, 3103, Lower River Road, Vancouver, Washington 98666. *Tel:* (206) 693-3611. *Telex:* TWX 910-474-8673. *Contact:* Bewson Murphy, Executive Director.

WHITTIER, Alaska: 60.47 N. 148.40 W.

SHIPMASTER'S REPORT: October 1980. (Updated 1984).

GENERAL: Whittier is a small port in position Lat. 60° 47′ N., Long.148° 40′ W. The population in October 1984 was 250. There are two hotels, 3 grocery stores, a school and a post office. The port was constructed between 1941 to 1943. It was developed as a main supply depot for the storage of oil for the Anchorage area and also as a transhipment port for produce from other areas in the United States. There is regular barge traffic from Seattle and other West coast ports with ammunition, food, merchandise and motor cars. All these are carried aboard flat top railway wagons which can be loaded or discharged at any state of the tide. The port is operated by the Alaska Railroad system and there is no shore gear of any kind. Whittier is surrounded by very high mountains and there is no road or footpath in or out. There is a very short landing strip suitable for small aircraft but the normal communication is by rail which goes under the mountains in two long tunnels. The journey takes about 1.5 hours and the timetable is frequent in the Summer when a lot of people visit Whittier for boating and fishing or to get the ferry to Valdez. During Winter however the service is about four times a week, weather permitting.

APPROACHES: *Recommended Route to Whittier Pilot:* British Charts BA. 3363 and 3364.

When Smith Island bears 256° × 8 miles, vessels should leave the traffic zone and steer 277° passing 1.5 miles South of Naked Island and 1.2 miles North of Point Eleanor. Then alter course to 281° passing 1 mile South of Mears Point. After passing Mears Point, steer 350° through Ferry Passage and alter to 280° off Point Culrose Light to the pilot station. It is not locally recommended to pass North of Perry Island through the Dutch Group.

PILOTAGE: Pilotage is operated by the Southwest Alaska Pilots' Association who have an office in Valdez, telephone number (907) 835 – 2134. They also have an office in Homer, telephone (907) 235 – 8783. Both stations maintain a continuous watch on Channels 10 and 16.

In theory, Pilots embark at Hinchinbrook Entrance. This has not been the practice however, for the last year or so, due to the long sea passage for the small pilot boat and the severe weather sometimes encountered in this area. Pilots normally embark at Blight Reef near Glacier Island. The pilot boat is stationed at Rocky Point some 10 miles away. The normal pilot boat is "Bering" which is a 63 ft. long trawler, capable of 10 knots, with a blue hull and white house. A newer boat is also in attendance. This is a 43 ft. glass fibre boat called "Bernhof" capable of 20 knots. She has a white hull.

No vessel may enter Prince William Sound through the Hinchinbrook Entrance without permission from the Coast Guard at the Valdez Traffic Control Centre on Channel 13 or 16. Large vessels may only transit Prince William Sound in daylight hours.

If permission is obtained, vessels may proceed direct to the pilot station at Whittier, 1 mile South of Point Pigot. See "Approaches".

ANCHORAGE: Anchorage off Whittier may be obtained in 12 fathoms at Pigot Bay (Lat. 60° 50.4′ N., Long. 148° 22.0′ E.).

BERTHS/FACILITIES: The two railway berths are only for barges carrying flat top railway cars on which all cargo is carried. The Delong Pier is used for oil tankers. The length of the wharf is 140 m. and the maximum length of ship is about 170 m. The minimum depth alongside is 48 ft. at the West end and 80 ft. at the East end.

Tankers normally berth port side alongside. In October 1980 there was one tug "Avenger" in attendance being 2,000 h.p. A shore gangway is supplied. All manifold connections are 6 in. The ship must supply all reducers. Two lines are used for kerosene. Jet fuel, Mogas and diesel are imported. The distance to the shore tanks is 1.5 miles. All products are pumped from the storage area to Anchorage. Bunkers are not available for large ships. Provisions and supplies can be purchased in Anchorage and shipped down by rail. There is a small clinic with a physician's assistant. The nearest doctor or dentist is in Anchorage. In an emergency there is an ambulance which can run on the road or rails.

GENERAL:

Weather: The winds are very strong and variable. It is very wet in Summer and has an extremely high snowfall in the Winter months. The port is completely ice free the whole year round.

Formalities: All the usual American forms apply. Customs, Immigration and Coastguard all come from Anchorage as there are no officials at Whittier.

Joining/Leaving: Crew may sign on and off at all times. During Winter Whittier is often cut off by snow.

Accommodation: Pilot and Agent stayed aboard throughout our 36 hour stay which proved very convenient for clearance and paperwork.

Agent: North Star Terminal & Stevedoring Company, Anchorage, Alaska 95510. Cable: "Norstevco Anchorage". Telex: 26471.

AUTHORITY: Whittier Harbour, P.O.Box 608, Whittier, Alaska 99693. *Tel:* (907) 472-2330. *Contact:* Patrick Johnson, Harbour Master.

WILMINGTON, Delaware: 39.44 N. 75.32 W.

DOCUMENTS: Handled through local Agents.

PILOTAGE: See "Philadelphia".

ANCHORAGE: At Cherry Island.

MAX. SIZE: Length unlimited, breadth unlimited, draft 35 ft. MLW tide range 5.5 ft.

Chesapeake/Delaware Canal: Max. LOA 760 ft. Max. draft 29 ft. (FW). Height of mast 133 ft. Max. beam 170 ft.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C. Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

RADIO: U.S. Coast Guard, Gloucester, N.J.

TUGS: Available through Wilmington Launch Service.

BERTHING: 3,260 ft. marginal wharf. 20-100 ton crane capacity. 400-600 t.p.h. bulk unloader. Covered bulk storage of 472,000 sq.ft. Dockside freezer capacity of 1,050,000 cu.ft. at present.

Multi-purpose bulk/container crane available, capacity 40 tons, outreach 115 ft.

DENSITY: Fresh water port. Normal 12 hour tides.

FRESH WATER: Hose connection from dock.

FUEL: Available.

GANGWAY/DECK WATCHMEN: Required.

OPENING/CLOSING HATCHES: Optional.

IDENTIFICATION CARDS: See "New York".

CONSULS: All Consuls are located in Philadelphia, Pa.

REPAIRS: Possible.

DRY DOCKS: Major repairs and dry dock facilities – Sun Ship Yard, Chester, Pa.

REPATRIATION: Facilities are available and arranged by Agent.

AIRPORT: Philadelphia International Airport, regular service.

TIME: U.S. Eastern Standard and Daylight Time.

POLICE/AMBULANCE/FIRE: Police, Ambulance, Fire, Tel: 302-654-5151.

TELEPHONES: Dock-side pay phones.

SERVICES: All services available.

SHORE LEAVE: Allowed unless restricted by Immigration.

AUTHORITY: Port of Wilmington, P.O.Box 1191, Wilmington, Delaware 19899. *Tel:* (302) 571-4600. *Telex:* TWX 510-666-2181. *Contact:* P. L. Chaples, Port Director.

WILMINGTON, N. Carolina: 34.14 N. 77.57 W.

(See Plan Book)

PORT LIMITS: A ship is considered an "arrived vessel" upon arrival at Buoy 2CF.

DOCUMENTS:

3 copies Cargo Manifest (Forms 1302), the original showing all cargo on board, and 2 copies showing only cargo for this port.
3 copies Crew Manifest (curio list) (Customs Form 1304).
3 copies Stores List (Customs Form 1303).
3 copies Passenger List (Form I-418).
3 copies Crew List (Form, I-418).

Customs Boarding Officer will also examine ship's Register and Loadline Certificate. In addition, the following documents will be required for formal entry to be made within 48 hours of arrival from abroad, or 24 hours from arrival from a United States port:

Master's oath (Customs Form 1300).
All foreign clearances.
U.S. Certificates of payment of tonnage tax (Customs Form 1002).
Certified Crew List.
Oil-Pollution Certificate.
General Declaration (Customs Form 1301).
Load Line Certificate.
Safety Equipment Certificate.

PILOTAGE: Pilots board vessels at Buoy "2CF" off the mouth of the Cape Fear River. Masters should notify local Agents by radio of their ETA at Buoy "2CF" in order that the Pilots may be on station in advance of arrival. Additionally, Masters may communicate with Pilots by radio telephone on 2738 frequency and by VHF Channel 18A. Pilots remain on board until harbour limits of Wilmington, where docking Masters normally board vessels for purposes of docking.

APPROACHES: The port terminal at Wilmington is located on the East bank of Cape Fear River, approximately 26 miles from the sea buoy at the mouth of the river. Wilmington is 150 miles S.W. of Cape Hatteras and 26 miles North of Cape Fear.

RESTRICTIONS: The approach channel and basins adjacent to the port are maintained at a depth of 38 ft. MLW.

ANCHORAGE: Vessels awaiting Pilots normally anchor in area off Buoy "2CF". There is no safe anchorage in the port of Wilmington for large vessels to be accommodated. Small vessels can be accommodated for brief periods in anchorage basin, although it is necessary to swing with the tide in order to avoid blocking channel.

MAX. SIZE: No limits on length, breadth, and draft limit is present channel project depth of 38 ft. Master should communicate with local Agent regarding stage of tide for passage of vessels drawing 34 ft. or above.

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Washington, D.C. Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

TUGS: 2 towing companies operate at Wilmington.

BERTHING: A continuous marginal wharf, 6,000 ft. long. Docking at any hour, day and night.

SPECIALISED CARGO HANDLING FACILITIES: State Port Terminal: Fully equipped to serve cellular type container ships, for bulk handling; equipped with 6 yard rehandler buckets, receiving hoppers, and paved open storage areas, 2×45 ton, 1×115 ton, 2×40 ton container cranes, 1×140 ton mobile crane and 1×225-ton gantry crane; 1 berth with tank farm for handling liquid chemicals.

Almont Shipping Company: 3 berths, open and covered bulk storage, 2×25 ton cranes and 1×85 ton derrick. No facilities for LPG carriers.

TANKERS: 10 tanker berths with drafts from 30 ft. to 40 ft. MLW. Night berthing at all berths. Fresh water available.

FRESH WATER: Available from shore connections at rates up to 50 t.p.h.

FUEL: Bunker "C" and diesel fuels available locally.

FIRE PRECAUTIONS: Normal precautions observed.

REPAIRS: Minor ship repairs available.

DRY DOCKS: 1×1,000 ton lift floating dry dock.

AIRPORT: New Hanover Country Airport, 7 miles from N.C. State Port Terminal. Served by Piedmont Airlines.

IDENTIFICATION CARDS: Standard U.S. Immigration Forms I-95 to be made up for each crew member on arrival. Not necessary for crew man already holding Form I-95, issued for the same vessel.

TIME: Eastern Standard Time, GMT minus 5 hours. Daylight Saving Time, GMT minus 4 hours from April to October.

DEVELOPMENTS: A 900 ft. extension to the South end of the wharf is under design for an addition to the container terminal. Completion of construction is anticipated by 1986.

AUTHORITY: North Carolina State Port Authority, 2202 Burnett Boulevard, P.O.Box 9002, Wilmington, North Carolina 28406. *Tel:* (919) 763-1621. *Telex:* 510-937-0330. *Contact:* William Edwards, Port Manager.

WRANGELL, Alaska: 56.28 N. 132.22 W.

(See Plan Book)

Located on Wrangell Island. Open all year.

DOCUMENTS: See "Anchorage, Alaska".

PILOTAGE: (From sea via Dixon Entrance up Clarence Strait to Guard Island.) Under pilotage from Guard Island.

ANCHORAGE: Good anchorage N.E. of Woronofski Island in 22 fathoms of water.

MAX. SIZE: Harbour depth 32 ft. MLLW. Tides: mean range 13.7 ft., diurnal range 16.1 ft. Also see "Berthing".

HEALTH: See "Health: All Ports" before first U.S.A. port (Albany). Illness reports made to Anchorage Quarantine Station.

AGRICULTURE: See "Agriculture" before first U.S.A. port (Albany).

CUSTOMS: Immigration, Guard Island or local Customs Office. Quarantine and Customs, local.

TUGS: 9 tugs up to 1,800 h.p. available with sufficient notice.

BERTHING: 4 wharves.

1. Wrangell Lumber Co. Dock: Berthing length 320 ft., 150 ft. wide, depth South end 32 ft. North end 40 ft. LW. Height of pier from zero tide 23.5 ft. Crane – 1 mobile, 8 ton, 6 lift-trucks. No shed space. 3 acres open storage.

2. Alaska Wood Products: Berthing length 300 ft., 50 ft. wide. Depth at LW 32 ft. Height of pier from zero tide 23 ft. No shed space.

3. Port of Wrangell Wharf: 35 ft. depth at both ends. Fresh water available. Lift trucks on rental from local private firms. Dock face 400 ft. with additional mooring dolphins for a total overall length of 700 ft.

4. Barge: Transfer bridge facilities, 17 ft. wide, capable of up to 70 tons (140,000 lbs.).

STEVEDORES: 4 gangs available.

REPAIRS: None.

WATER: Available.

FUEL: Small quantities available.

MEDICAL: Small but new hospital.

TRANSPORTATION: Air and ferry.

AUTHORITY: City of Wrangell, P.O.Box 531, Wrangell, Alaska 99929. *Tel:* 907-874-3624. *Contact:* Ronald O. Phillips.

NOTES

Please also advise Shipping Guides Ltd.

Uruguay

GENERAL:

REGULATIONS: Increased fines became effective in June 1973 in respect of infringements of the Uruguayan Marine Code. There are approximately 119 Articles to the Marine Code, and Owners and Masters of vessels proceeding to Uruguayan ports are recommended to obtain a copy of the Code (which lists port regulations and amounts of fines for infringements, maximum fine being 760 U.R.) prior to arrival. We understand that copies of the Code, entitled "Reglamento Preventivo y Represivo de Infracciones Maritimas, Fluviales y Portuarias", may be obtained from Centro Navegacion Transatlantica, Colon 1486 p. 3, Montevideo.

Freely translated, we give below some extracts of Port Regulations as specifically applicable to Montevideo, but also to all Uruguayan ports in general:

Articles 1 to 8 cover respectively the reasons for setting up this preventive set of regulations; the definition of what a vessel is in terms of the legislation; the establishment and amount of fines (they may be tripled in the event of repeated offences); the fact that very small vessels may only have imposed 10 per cent of the full fine; the jurisdiction for the regulations covering the whole of the Uruguayan coast and river frontage; the stipulation whereby the General Marine Prefecture must send to the Master of the vessel a statement of the offence immediately it is observed and this in triplicate and to the local Agent for the vessel.

The actual information which the form must contain is delineated. Notification of offences can be made after a vessel has sailed, this being to the local ship's Agent by phone and confirmed within 24 hours in writing. All Masters must give written consent to their local Agent, and the Agent must accept this in writing, empowering the Agent to act in the Master's name in all cases of fine payment. The Authorities may delay the sailing of a vessel if they see fit in connection with any offence. Finally, article 8 deals with the right to appeal to the General Marine Prefecture against any fine imposed, this having to be done within 10 days dating from day following personal notification of the offence.

Articles 9 to 119 cover the specific offences subject to fine and indicate individually the full fine imposable in local pesos.

An abridged summary of each of the articles is as follows: No anchoring within 900 m. of the illuminated buoy in the port access channel.

Vessels carrying hazardous cargo must hoist flags according to the International Code of Signals.

Vessels with anyone on board with contagious diseases must hoist appropriate flag (letters QL).

Flag Q must be hoisted and maintained in position until Health Authority has given free pratique.

All vessels anchoring in the roads, bay or ante-port must take due precautions not to harm or cause damage to other vessels; the fine will be imposed notwithstanding claims for damages from third parties.

Agents of vessels which may wish to anchor in the Roads must obtain prior permission from the Marine Authority, specifying vessel's measurements and the reason. If authorised, the anchorage to be used will be notified.

No anchoring at the docks unless justified, and anchors must be raised immediately the reason for dropping them has gone. There must be no delay on the part of vessels in complying with the Marine Authorities instructions to change berth or anchorage.

No tying up to other vessels without Marine Authority permission; no attachment to berths which have not been allocated and no changing of berth without authorisation.

No anchoring in places not authorised by the Marine Authority, the maximum fine being applied should this have caused damage to third parties.

No small craft to be tied up obstructing gangway or quays. Where this is necessary for embarking crew members, passengers, provisions, etc., the small craft must be removed immediately the operation has been completed.

Small craft must not be tied up to buoys or beacons. Vessels must not tie up at buoys or beacons.

Maximum speed of vessels in docks is 4 knots.

Navigation in channels of access to ports is governed as follows:

Maximum speed 8 knots.

Vessels must always keep to starboard.

Vessels must not overtake each other, but where this is necessary they must conform to the International Signal Code.

No anchorage in channels.

No fishing in channels.

Vessels navigating in channels must keep a distance of 1,000 m. from each other.

Vessels must not cross in front of each other in the fore-ports.

All vessels entering or leaving the ante-port or docks, changing berths or anchorages must be assisted by a Pilot and tug, unless specifically given exception to this rule by the Marine Authority.

No vessel must enter port with damage to hull, machinery or rudder unless prior inspected by the Technical Commission of the Mercantile Marine Directorate.

Any vessel springing a leak whilst navigating in the access channel, and which the bilge pumps cannot overcome, must go aground as quickly as possible off the channel so as to leave the channel open.

In case of fire on board whilst navigating in the access channel, Masters must observe usual procedure and give signals accordingly.

The strict use of semaphore signals within port must be observed.

When vessels enter the docks or remain in them, Masters, owners or Agents must request permission from the Marine Traffic Office, and report to the Office of Pilotage, and proceed in whatever form they may instruct. On leaving the same procedure must be followed.

Masters and owners of vessels must see that their vessels do not obstruct or cause harm to port works, beacons, buoys, or semaphores and once tied up they must not slacken ropes without permission of the Marine Authority except under conditions covered by items 1, 2 and 3 of Article 64 of the Port of Montevideo Marine Regulations.

No vessel to have badly stowed cargo, excess weight, or evidence of lists due to bad trim of cargo.

Only those lines necessary for tying up to be used. When 2 or more vessels tie up alongside to load or discharge they are all obligated to ensure that the handling of their respective cargoes does not prejudice the working of the others.

Vessels must take proper precautions when loading or discharging raw material, i.e. sand, bones, ash, coal, etc., by placing suitable planks of wood close together to prevent any such material falling into the water.

No vessel to enter docks with the gangway already rigged.

During unloading operations, no goods to be thrown on to the quay. This must be done manually or mechanically.

During discharge operations, cargo must be so positioned on the quay as to leave adequate passage for vehicular traffic, i.e. Police, Fire Brigade, Health Authorities, Customs and Port Officials.

Planks of wood — when planks are used for any operation, they must not be placed in contact with mooring bitts or cables. When work ceases all pieces of wood, ladders, small trucks, etc, must be removed from quay, and those belonging to the ship must be taken on board, this so as not to obstruct the public path along the quay.

When cleaning or washing ships tied up at quays, no rubbish, water or cleaning material must be allowed to fall on the quay.

A very serious offence is the throwing into the water of any rubbish, sewage or other material susceptible to polluting the water.

Very serious offences are the lightening of ships carrying petrol, crude oil, or the like, likewise the washing-out of tanks, except in authorised zones. The fine is based on the area spoiled by the wrongful discharge.

All ships should have local Agents, otherwise in the case of offences the Master is held responsible and vessels may be detained.

Vessels are responsible to ensure that no damage is made to quay installations by the cargo they load or discharge, and must always leave berths in a tidy and clean state.

Vessels' auxiliary small craft, launches and the like must not hang over the side of the vessel in port, except during operations of launching and reshipping on board, where such operations are conducted at points indicated by the Marine Authority. Such small craft may only be used for the purpose and at the times authorised by the Marine Authority.

Usual regulations concerning carriage of passengers in vessels and heavy fines are imposable for the carriage of passengers or crew members not listed.

Vessels exceeding their navigation limits shown in their Certificate of Navigability are subject to fine.

All vessels must be cleared to sail by the Marine Authority.

Vessels must use their proper name and this must be painted on in letters of minimum of 15 centimetres height and 8 centimetres wide. Letters must be white on black or black on light colour.

Masters, Owners and Agents must report any crew offence or irregularity on board to the Marine Authority.

Vessels in port must hoist the Uruguayan flag.

N.B. It is recommended that Masters correctly establish the prescribed times for raising and lowering the Uruguayan flag, in order to avoid fines.

Vessels must have their gangway equipped with handrails, and the gangway must be clearly lit at night.

All lines to shore must have rat-guards fitted.

When there are hazardous goods on board or when such goods are being worked, the vessel must hoist the International Signal Code letter B, and at night show a red light on the bow masthead, must always have engines in a state of readiness in case of danger, keep two-thirds of the crew on board, keep watchmen and firemen available (the number of whom will be determined by the number of holds containing the hazardous material), must only work with incandescent lights, and keep a Port Pilot on board if the Marine Authority so directs.

Vessels moored at quays must not move propellers, except under the direction of the Marine Authority.

Vessels must not moor in the port access channel. There must be no improper use of the International Signal Code. Signal flags must not be interspersed with flags of nationality.

If a vessel wishes to dress flags over all, or fly a flag at halfmast due to a bereavement on board, the Marine Authority's permission must be first obtained.

The use of whistles, sirens or any other audible signal within the area of the roads, bay, ante-port or docks, for any reason other than justifiable for navigation is prohibited.

Any vessel anchored, tied up to other vessels or to the shore or quays, must show a white light from sunset to sunrise which can be seen at a distance of 500 m.

In the access channel to Montevideo, no more than 4 vessels may navigate at one time — 2 entering, 2 leaving.

Maximum speed in the Montevideo ante-port is 6 knots. There must be no anchoring in the Free Zone, reserved for the manoeuvring of vessels entering and leaving.

At Montevideo there must be no anchoring along the route leading from the Free Zone to Channel "A", between the quay and the pier of the same letter. Also on the route leading from Pier "A" along a line to 100 m. to the North of the end of the West Jetty.

No anchoring in any area less than 200 m. from Pier "A" in a semi-circular coverage, taking as middle point a position half way between Quay "A" and Pier "A".

All vessels must keep to the right or to the middle when there are no other vessels in the vicinity.

International Regulations for the Prevention of Collisions apply, plus the following:

Vessels navigating along the routes established in the anteport or which have to pass directly through the passage between Jetties "A" and "B", must keep to the right when another vessel is coming in the opposite direction.

Vessels which have to cross the North, the South route or directly between Jetties "A" and "B", must ensure that they pass any other vessel at a distance not less than 50 m.

Any vessel navigating under her own power must give way to a vessel under tow by a tug.

Vessels with tugs following routes which cross one another, thereby creating a collision risk, the one passing to the starboard of the other is the vessel which must take the precautionary measures to avoid collision. If, however, the risk persists, the vessel passing to port of the other must also take measures to increase the distance between the two vessels.

No vessels to pass in pairs or in opposite direction between Jetties "A" and "B"; the semaphore signals transmitted by Quay "A" must be observed. If the signal is "vessel entering from the ante-port to the docks", the vessel in the docks, ready to sail, must wait until the incoming vessel has entered.

If the signal is "vessel leaving the docks for the ante-port" the vessel in the foreport, moving towards Jetty "A" to enter the docks, must wait in the free zone, stop engines, keeping to the right, and drop anchor if necessary, until the outgoing vessel is outside and well clear of Jetty "A".

The same regulation applies to vessels leaving the River Dock. In this case, the vessel leaving Jetty "A" has priority, coming from Docks I and II the first will wait for the second before starting engines.

All vessels navigating in the same direction in the ante-port must keep a distance of not less than 300 m. from each other stern to bow. They must not pass each other or navigate in pairs.

In the event of offences being incurred whilst an Uruguayan Pilot is on board, at the request of the local ship's Agent, the Marine Authority will determine whether the Pilot is responsible for the offence having occurred, and take measures accordingly.

Vessels which load beyond the appropriate load line will be subject to a fine of 1,000,000 pesos.

DOCUMENTS:

Consular Documents: The Consulate in a foreign port from which merchandise is to be shipped to a Uruguayan port must be presented with the following documents:

(a) Cargo Manifest, original and 3 copies.
(b) Crew List, original and 1 copy.
(c) Passenger List (or no-passenger declaration), original and 1 copy.
(d) Bills of Lading, original and 3 copies.
(e) Commercial Invoice, original and 3 copies.
(f) In the event that the vessel is cleared in-ballast, an in-ballast declaration, original and 1 copy.

One copy of each document is filed at the Consulate, and the following are returned, duly visaed:

1 original manifest, 1 copy of each bill of lading, and 1 copy of the commercial invoice, in an envelope addressed to the Customs Administrator of the port of destination.

1 copy of the manifest, and 1 copy of the bills of lading, in an envelope addressed to the National Ports Administration.

1 copy of the manifest, the original and 2 copies of the bills of lading, the original commercial invoice, the original crew list, and the original passenger list (or no-passenger declaration).

Prior to Arrival:

Notification of Arrival – by Ships' Agents.

(a) Container vessels (minimum load 30 FCL and minimum discharge 30 FCL stipulated) and passenger vessels have berthing priority. Agents must notify the arrival of the vessel 10 days in advance to the National Port Administration (ANP) and confirm ETA 2 days ahead of arrival.
(b) For arrival in Uruguayan ports of all other vessels, agents must notify the ANP 48 hours in advance.

All notifications must be made on special forms from the ANP on request for a berth, presenting original and 6 copies, accompanied by a complete set of cargo manifests in Spanish.

For container vessels, Agents must present lists with details of a complete nature covering the containers to be unloaded in Montevideo (prefix, number, contents, gross weight and tare), whether to be discharged to store or to quay, and final destination in the case of transit.

Request for Port Services:

As has been said in the previous section, the berthing request must be presented to the ANP and acts as advice of arrival.

Each morning at 1000 hrs. the ANP designates berthing crews for vessels for the next 24 hours. In the event of there being no berthing staff available, the ANP appoints a place for waiting berthing in turn in accordance with the order of arrival at the port of Montevideo.

On Arrival:

Type of Document	*Number and distribution of documents*						
Basic forms	*Prefectura*	*Customs*	*Im'gration*	*Police*	*Health*	*Agency*	*Total*
1. General Declaration	1	–	–	–	–	1	2
2. Cargo Manifest	1	1(a)	–	–	–	1	3
3. Crew List	3(a)	–	1	1	1	1(a)	7
4. Passenger List	1(a)	–	1	1	1	1(a)	5
5. Ship's Store List	–	2	–	–	–	1	3
6. Crew Effects Declaration	–	2	–	–	–	1	3
7. Maritime Declaration of Health	–	–	–	–	–	1	1
8. Mail List	–	–	–	–	–	1(b)	1
Complete Transit Manifest	1	1	–	–	–	1	3

Additional Documents	*Number and distribution of documents*						
Basic forms	*Prefectura*	*Customs*	*Im'gration*	*Police*	*Health*	*Agency*	*Total*
9. Consular Manifest(c)	–	3(a)	–	–	–	1(a)	4
10. Bills of Lading(c)	–	3(a)	–	–	–	3(a)	6
11. In-ballast Declaration(c)	–	1(a)	–	–	–	1(a)	2
12. Commercial Invoice(c)	–	3(a)	–	–	–	1(a)	4
13. No-Passenger List	1(a)	–	1	1	1	1(a)	5
14. In-Transit Passenger List	1	–	1	1	1	1	5
15. Declaration of Bonded Stores	–	2	–	–	–	–	2
16. List of Dangerous Goods	1	–	–	–	–	1	2
17. Vaccination List	–	–	–	–	1	1	2

a. Visaed by the Uruguayan Consulate.
b. For the Postal Service.
c. The Consulate returns 1 envelope to the Customs Administrator, another to the National Ports Administration (with a copy of Manifests and Bills of Lading), and a third to the agency, with the required visaed documents.

Other Requirements:

The agency must provide a cargo book (tally book) for each port to the National Ports Administration.

Prior to Departure:

24 hours prior to sailing, the vessel must notify the Maritime Prefecture and Migration. Representatives of these agencies must receive a crew list and check any changes. If the vessel carries passengers, the Inspector of the National Migration Administration must prepare a record of a sailing inspection, similar to that required upon the vessel's arrival.

The Maritime Prefecture authorises the clearance of the vessel.

PILOTAGE: Also see "Control". Pilotage is compulsory in all river and port zones, except for vessels coming from the East to ports between La Paloma and Montevideo Roads, or entering Montevideo Roads for no commercial reason. All coastal vessels either Uruguayan or foreign are also exempt.

Pilotage Zones:

1. RIVER PLATE – Comprises zone between imaginary lines in the East from Punta del Este (Uruguay) and Punta Rasa, on Cape San Antonio (Argentina) and on the West between Colonia and San Isidro (Argentina).
2. RIVER URUGUAY – From 56.5 km. of Farallon Channel to Uruguayan ports on the River Uruguay.
3. PORTS – Pilotage zones, comprises limits of each port including its Roads.
4. SBM at Jose Ignacio.

In the River Plate, Pilots presently board to the South of the wreck of the *Calpean Star*, approximately 4.5 km. South and lying 70 m. West of the dredged access channel.

Several of the pairs of buoys are missing, and only the Mid Channel Buoy indicating the entrance to the Access Channel, 5 miles South from the port, and the 2 pairs nearest to the breakwaters are operating.

When taking tankers, the port Pilot usually goes out to the 5-mile mark.

There is no more than 30 ft. in the Access Channel at the moment; dredging is being carried on, but there are only 2 dredgers operating between the channel and the port of Montevideo itself.

The current is across the channel, running at about 1 knot, and changes direction more with the wind than the tide.

Vessels awaiting Pilot should anchor on the West of the channel and South of the *Calpean Star;* there is 24 ft. up to 500 m. West of the channel. The zone to the East of the Access Channel has submarine cables and must therefore be avoided.

Pilots are ordered through the Agent, and have an up to date communications system installed in their office on the 11th floor of Custom Building.

Permanent watch is kept on Channel 16 VHF, and operator speaks English. It is possible to call "Practicos Montevideo" and ask to be connected by phone to the vessel's Agent's office for last minute instructions, etc.

Channel	Frequency	Channel	Frequency
9	154.50	11	155.50
16	158.00		

The port is closed when wind force exceeds 43 knots or, at night 37 knots, or if visibility is less than 1 km., but otherwise vessels can enter or sail at any time.

There is also a Telex machine with 24 hour watch, over which messages can be transmitted to Agents out of office hours, over a weekend, for example. Call sign is DGT 843 Pilot CX. This is particularly useful for vessels sailing late from Buenos Aires, and the Office will pass on the message to the corresponding Agency by phone.

All Pilots carry a "walkie-talkie" and can communicate either with their office, the Port Authority or the Semaphore Station, using Channel 9 for the Port Offices and 11 for the Pilot's Office, 16 being kept for use with vessels.

Ordering of River Pilots for Sailings from Uruguayan River Ports: Although Masters can apply directly for Pilots such applications must be made by telegram addressed to the Practico Mayor Montevideo, it is preferable for them to keep their Montevideo Agent fully informed and leave the latter to order the Pilot.

The opportunity of ordering Pilots at any hour having been discontinued makes it more essential than ever that Montevideo Agents are kept accurately informed regarding expected readiness to sail. Failure to do so will result in unnecessary demurrage being paid to Pilots or delay to the ship concerned.

Pilots for Vessels Proceeding from Sea to a Uruguayan Port on the River Uruguay: A Uruguayan Pilot must be employed to conduct ships from sea to a Uruguayan Port on the River Uruguay.

Vessels must call at Montevideo Roads to embark Pilot and pay the cost of tug to take out Pilot. They can also, alternatively, take an Argentine Pilot at Recalada who will take the vessel to Intersection, where in either case an Argentine River Pilot will board to take the vessel to the Roads of port of destination, where a Uruguayan Port Pilot will come aboard, this being a simpler procedure and all handled by Agents in Buenos Aires (one radio advice).

Vessels from an Argentine Port Bound for Uruguayan River Port: Such vessels are normally taken to immediately off port of destination by an Argentine Pilot, but they must be berthed by a Uruguayan Pilot who has to be sent from Montevideo, thus Montevideo Agents must be kept promptly informed of vessel's position to enable them to order a Pilot to berth ship without delay.

Vessels Leaving Uruguayan Port for Argentine Ports on the River Parana: Uruguayan River Pilot supplied from Montevideo must be employed for unberthing, and this Pilot takes vessel to the Bravo Channel off Nueva Palmira, where the Argentine River Parana Pilot, who is normally already aboard, takes over.

The Uruguayan Pilot is paid in accordance with tariff to Nueva Palmira plus an unberthing fee and travelling expenses.

HEALTH: In order to be able to enter port and berth without delay, the Authorities accept a radio, cable or telex request, couched in the following terms (messages must be sent in Spanish).

Vessels Arriving from Elsewhere:

Capitan...solicita libre platica
(here the name of the vessel)
informando proceder de Buenos Aires, siendo su escala anterior
....
(here a port in another previous country which could be Santos, Valparaiso, Capetown, etc.)
ondicion sanitaria buena .... Capitan
(here the name of the Master)

Vessels Arriving from Buenos Aires:

Capitan...solicita libres platica
(here the name of the vessel)
informando proceder de ....
(here a port of origin, say London – Liverpool – San Francisco – Rijeka – Kotka – Tokyo – Oslo, etc.)
siendo su ultimo puerto ....
(here say Santos – Valparaiso – Capetown, etc.)
condicion sanitaria buena...Capitan
(here the name of the Master)

There have been cases of delay in delivery of radio messages, even though passed on by phone, but the original message must accompany Agent's request for Free Pratique, hence it is advisable to use cable or telex services if possible. Messages must be sent at least 24 hours ahead, and changes in ETA advised.

Although it is possible to take Pratique in Uruguayan River ports, there is frequently delay there, and since vessels must enter Montevideo to pick up the river port Pilot also, it is advisable in these cases to ask for Pratique at Montevideo as above, and the order from Sanitary Authorities granting Free Pratique will be handed to the Pilot to take on board with him.

In no case, however, does the granting of Pratique by radio modify the inspection in port, where the usual commission must be the first to go on board.

Illness On Board: Any private doctor attending a patient on board must immediately inform the Sanitary Inspector should the disease be contagious.

No patient can be landed without the consent of the doctor of the Health Department with the exception of accident cases that require immediate medical attention, and even in those cases the Health Department Doctor must be informed in order to issue a Sanitary Pass for the Hospital where the man was taken to.

If a Master does not report the existence of illness on board he is liable to fines which are double if patients land without the consent of the Sanitary Authorities.

RADIO:

Notice to Mariners:

Official Uruguayan Notices to Mariners are transmitted in Spanish only preceded by the signal TTT, the number of the Notice, letter R, then contents and are repeated for 15 days. Should there be no Notices to transmit, the wording "no hay avisos para navegantes" will be radioed.

Punta Carreta CWF 2768.5 kHz. A3 0.4 kW. at 0003, 1403 and 1903 hrs. (after the weather forecast).

Cerrito CWA on 4346, 8602,12750, 17208.8 A1, 1.5 kW., also on 421.5 kHz. A1 and A2 5 kW. at 0000, 1400 and 1900 hrs. (after the weather forecast).

Montevideo CX 16850 kHz. A3 10 kW. at 1302 hrs. and 1602 hrs. on working days, at 1700 hrs. on Sundays.

Montevideo	CX 6	659 kHz	A3 2.5 kW.
	CX 26	1050	A3 all transmit Notices to Mariners at 1600 hrs.
	CX 38	1290	A3 5 kW.
	CXA 4	6125	A3 10 kW.
	CXA 6	9620	A3 20 kW.
	CXA10	11900	A3 20 kW.

Weather Forecast: A weather forecast is transmitted in Spanish to cover 3 zones.

Reference AAA 830 is the Coastal area from Lat. 30° S., Long. 50° W. out to Lat. 30° S., Long. 46° W. and down to Lat. 33° 30′ S., Long. 53° W. and Lat. 35° S., Long. 49° W.

AAA 860, River Plate zone from Lat. 33° 30′ S., Long. 57° W. to Lat. 35° S., Long. 49° W. and down to Lat. 35° 30′ S., Long. 57° W. to Lat. 39° S., Long. 53° W.

AAA 870 Coast of Argentina from Lat. 35° 30′ S., Long. 57° W. to Lat. 39° S., Long. 53° W. and down to Lat. 41° S., Long. 62° W.

Details of all 3 zones are transmitted as follows, valid for 24 hours.

CWA on 421.5 A1 5 kW. at 0001, 1400 and 1900 hrs.

CWF on 2768.5 A3 0.4 kW. at 0005, 1405 and 1905 hrs. and in A1 over 4346 kHz, 8602 kHz, 12750 kHz and 17208 kHz.

Time Signals: Are transmitted from 2 stations in Montevideo at 1500 and 2000 hrs. The hour is indicated by 6 dots preceded by a 10 second dash and a 5 second silence. The last dot indicates the hour.

CX 6 on 650 kHz. A3 25 kW.
CXA 6 9620 kHz. A3 20 kW.

Standard time is GMT minus 3 hours.

Direction Finding: There are 2 radio beacons specially for maritime navigation. Both operating on circular sweep from the lighthouses at Cape Polonio and Isla de Lobos.

Cape Polonio: Lat. 34° 24′ 00″ S., Long. 53° 47′ 45″ W. frequency 295 kHz. A2 range 380 miles, and 500 kHz. A1 A2.

The signal is "P" repeated 3 times in 10 seconds followed by 18 dashes in 30 seconds, repeat "P" 3 times and 10 seconds silence total period 1 minute. This is repeated 4 times after 5 minutes silence, total 10 minutes.

In good weather transmission must be requested from CWM 21 on 500 kHz. A1 A2. In fog, there is continuous transmission from the hour.

Isla de Lobos: Lat. 35° 01′ 33″ S., Long. 54° 53′ 17″ W. frequency 300 kHz. A2 range 380 miles. The signal "L" is repeated 3 times in 10 seconds, followed by 18 dashes in 30 seconds, repeat "L" 3 times, silence 10 seconds. Total period 1 minute, repeated 4 times, then 5 minutes silence total period 10 minutes.

In good weather this transmission must be requested from CWM 26 on 500 kHz. A1 and A2.

In fog transmission is continuous from 05 minutes in each hour.

There are also the following airbeacons which can be used.

		S.	W.	kHz	
Colonia	COL	34° 27′ 33″	57° 45′ 49″	203	A2 0.075 kW. cont.
Montevideo	CAR	34° 46′ 15″	56° 01′ 28″	380	A2 0.05 kW. cont.
	CRO	34° 48′ 55″	56° 01′ 45″	305	A2 0.05 kW. cont.
	CRR	34° 49′ 50″	56° 00′ 15″	280	A2 0.05 kW. cont.
Gral. Artigas	GA	34° 45′ 00″	55° 58′ 00″	260	A2 0.05 kW. cont.
Punta del Este	CB	34° 55′ 00″	54° 55′ 00″	325	A2 occasional only.

GENERAL INFORMATION:

River Uruguay

Rises in Brazil, and later separates Argentina and Uruguay. Its right bank is generally low, wooded and swampy, the left bank high and hilly. Preparatory work has commenced on a large hydro-electric dam to be built at 332 km., above Concordia, which will take some years but will contribute to a regularisation of the river, which at present rises and falls twice every year, with the varying rainfall seasons in its basin, so that approximately half the year the water is low, usually from January to April and again in August. However, the wind also affects the depth of the water as in the River Plate, so that any seasonal forecast is impossible. A safe year round draft to Concepcion del Uruguay can be taken at 20 ft. 6 in., though vessels from time to time load to 22 ft. 6 in.

The Ministry of Marine publishes fortnightly a bulletin with all information on depths of water in the channels, as well as of changes in buoys, lights, etc.

Two new bridges communicating with Argentina now span the Uruguay River at Fray Bentos and Paysandu. The bridge at Fray Bentos has a clearance of 36 m. over zero, and a main span of 220 m.

CARGO

Movement of Cargo

Once stevedores have come aboard, no cargo, either for the port or in transit, may be handled by the crew, as otherwise the vessel will be called on for high extra wages to stevedores. This also affects the lashing of transit cargo on deck.

Stevedores will not work in the rain, except when loading meat, earning double wages while doing so. They can also be persuaded to handle baggage or mail.

When handling dusty cargo in general, or which gives off ammoniacal, nicotine, or organic emanations, masks must be provided for stevedores' use.

Overcarried Cargo

Cargo for Montevideo is often overcarried to Buenos Aires with the consequent delays in delivery and expenses for the vessel. Holds should be carefully inspected as soon as discharge is said to have been finished to avoid possible overcarrying.

Clean Receipt

Agents will advise if they wish to receive any cargo for which a clean receipt cannot clearly be given, otherwise the cargo should be rejected. Mate's receipts cannot be claused to cover any damage from rain, wetting or other causes which might be sustained after the cargo is received on ship's tackle.

Bulk cargoes falling or drifting into water or on dock

When handling bulk cargoes vessels must place between the vessel and the dock side a wooden scaffolding, with lateral boards, or strong canvas to collect all material which is liable to fall into the water or on to the Dock during handling. There is a heavy fine for non-compliance.

This should be remembered when writing charter parties, especially under FIO conditions, as this should be for account of shippers or receivers.

Delivery of cargo from vessels

The cargo is discharged direct to Fiscal Warehouses, to lorries, lighters or wagons. When the cargo is delivered to Fiscal Warehouses, receipt for this is given to the vessel's Agents by the Custom House official in charge of the Warehouse. If discharged to lighters the lighterman obtains receipt from the Custom House official once the cargo is received in warehouse. When the cargo is delivered direct to Consignees' lorries, the receipt is given by special Custom House officials called "Cargo Receivers".

The goods are delivered by the Custom House officials to the Consignees against the presentation of the "transferencia" (transfer ticket) signed by the Agents of the vessel. The Agents sign the "transferencia", extended on stamped paper, against the Original Bill of Lading, which must be legalised by the Uruguayan Consul at the port of loading.

The steamship Agents must keep a special register of all "transferencias", and are responsible to the Authorities for keeping this register. Agents must retain Original Bill of Lading for cargo discharged, as it must be shown to the Customs Authorities immediately if demanded.

When the Consignees have not received the original documents and they wish to take delivery of the goods from the Custom House they must present a Bank guarantee, drawn up in accordance with the form approved by the Shipagents Association.

Cargo manifested to this country in transit to other countries without documents for Uruguay may not be re-shipped to other countries without government permission.

Marks on goods imported to Uruguay

By a Decree dated 30th January 1939, the Uruguayan Government decided that:

"Packages entering Bonded Warehouse, excepting those containing provisions or beverages, and excepting also 'Barraca' articles, shall be marked with the gross weight, the nett weight and corresponding measurement, in a clear and legible manner. These marks may be either 'fire-branded or printed'.

"The 9th August 1939, the Customs Authorities requested that marks and numbers of cases entering Montevideo warehouses should be placed on the extreme ends".

The Customs Authorities have also made known that it is necessary for the packages entering the warehouse to show their weight and measurement in the decimal-metric system.

The inspection of potato cargoes can be effected on board the carrying vessel, and if found in good sanitary condition, can be discharged direct to shore.

Opening and Closing of Hatches

This can be carried out by either crew or stevedores, and hatches must be kept closed when not in use.

Shipments of Meat

These are controlled by the Ministry of Agriculture, whose inspectors check ships' holds before shipment can commence. Holds must be clean and disinfected and temperature controlled to minus 1° to a maximum of plus 1° Celsius for chilled meat, or minus 10° for frozen meat.

Chilled is to be hung on hooks adjustable for height and space and stow of frozen must give a uniform distribution of weight. Alternatively, special cuts are packed and shipped in cartons.

Containers

Use of containers is very limited, since these must be opened up and emptied on the dock alongside, or even on board the vessel. The container itself is considered as part of the vessel's gear, and must be re-shipped without delay.

On rare occasions the Armed Forces have had containers moved out to their barracks.

The Port Authority is buying a crane to handle containers of 8 ft. × 8 ft. × 20 ft. and a maximum loaded weight of 44,800 lbs.

Consular Dues

All ships arriving at Montevideo must pay Consular dues, with the following exceptions:

Ships that due to a change en route, or by special call of their Agents in Uruguay, during passage, arrive at Montevideo with the sole purpose of receiving orders, as long as no commercial operations are effected.

Ships arriving in distress and which leave port without effecting operations.

Ships arriving for the sole purpose of landing or embarking Pilot.

The Ministry of Foreign Affairs consider bunkering as an operation, therefore ships calling at Montevideo for bunkers must pay Consular dues.

Consular value of the Uruguayan Peso – For the payment of fees abroad, the Executive Power will fix periodically the respective values of the peso, in accordance with exchange fluctuations.

Hours of Attendance at the Uruguayan Consulates – The Office hours of the Consulates will be those fixed by the Government in agreement with the Consuls in each country, endeavouring in each case to have the same working hours as those of the Custom House and other Public Offices of each City. Outside these hours, overtime is charged.

Consular dues on Bills of Lading – When vessels load cargo for Uruguay at ports where there is no Uruguayan Consulate, these dues are collected when the vessel arrives at Montevideo or at any other Uruguayan port. The Agent then recovers these charges from the Consignees.

CREW:

Deserters – Masters and/or Agents must report any deserters when the vessel sails. The Maritime Authorities give intervention to the Police Department, and if the men are located, the Agents must hand them over to the respective Consuls. However, the Agents continue to be responsible before the Authorities for the ultimate repatriation of the men, which must be done at first opportunity.

Vessels are subject to a fine per man. The Agents have also to pay repatriation expenses, in cases where the respective Consuls will not do so.

They must also deposit a guarantee which can be used for repatriation expenses in case the deserter stays in the country for more than 15 days.

Upkeep of men left in hospital or temporarily disembarked and traced deserters – The Agents are responsible for the maintenance of men disembarked for medical treatment, or temporarily with a special Immigration permit, and for deserters, until they leave the Country.

Stowaways – Masters of vessels having stowaways on board must report them to the Authorities, stating their name and port of embarkation. The stowaways must be kept on board. If they escape and are found after the vessel sails, Agents will be responsible for their repatriation and upkeep charges until they leave the Country. As with deserters, vessels with stowaways on board are liable to a fine per man if this regulation is not complied with.

Agents must also deposit a guarantee per man, amount to be used for repatriating the stowaway or for conveyance to the port of embarkation.

Time limit for getting crew members left behind out of the country – According to law, Agents must arrange that such crew members leave the country within 15 days. This period of grace commences as from the date of vessel's departure in respect of deserters and for those disembarked for medical treatment as from date on which they are medically certified as fit for travel.

Landing members of crew – Paying off crew for other than medical assistance is not permitted, but exceptions are granted in special cases. An application must be presented by the Agents to the Immigration Department, and if the permit is granted, a formal declaration is signed by the Master of the vessel, the Agents, the Immigration Inspector and the person wishing to disembark, setting forth length of time he is going to remain in the Country and conditions of departure. The personal documents of the person allowed to land, remain in charge of the Immigration Board.

If any member of the crew is landed for medical treatment or paid off without the corresponding permit, the vessel will be fined.

Gangways and Rat-Guards

A gangway must be placed and ready after a vessel comes alongside the quay, but this must not be presented before coming in to the quay. Authorities will only come aboard by the gangways.

Gangways must also have a lifebuoy with suitable line attached and handy, and a safety net must be placed under the gangway, otherwise shore labour will not board vessels, with consequent delay.

The gangway must also be brightly illuminated at night; an oil lamp is not sufficient.

As soon as vessel is securely moored, regulation size (not less than 80 cm.) rat-guards must be placed on all ropes, wires, fenders, lines and hoses.

Heavy fines are imposed for non-compliance with any of these or other regulations.

Overside Discharges

All overside discharges from latrines, bathrooms, gallery, scuppers, engine room, etc. must be screened or covered when vessel is alongside the quay, as vessels will be fined if the discharge falls on the dock or gangway.

Adjustment of Compasses

Vessels proceeding through Magellan Straits – The disposition issued by the Chilean Shipping Authorities on 13th April 1953, states:

"When a foreign ship arrives at the Magellan Straits and applies for a Pilot, official or private, for navigating the Channels, the Pilot must first check the compass for deviations of more than 5°, and if such deviation has been determined more than 6 months ago, especially in a place with great difference of latitude or different hemisphere, compensation of compass is obligatory when not in true order, and a written declaration to this effect will be made in the pilotage agreement. The Authorities will also send an officer to verify that the compass is in satisfactory condition before entering the Straits".

To avoid probable delays, ships heading for the Straits can make the necessary compensation in the Port of Montevideo or in the ante port whilst waiting for orders for departure. This port is most convenient for this class of compensation because at the present moment there is no magnetic variation and also because it is a quiet harbour with sufficient depth for turning. A compass adjuster may be obtained at any time.

200 Mile Limit and Fishing

Uruguay has declared sovereignty over 200 miles off shore, reserving all fishing and undersea exploitation rights. A number of foreign flag vessels fishing without permits have been seized and heavily fined, their catch and gear being confiscated.

Permits are obtainable, but in no case for vessels over 500 tons gross, to operate within 60 miles from shore, while all activity in territorial waters (200 miles) is forbidden in the months of May and June.

Garbage

Garbage is collected every morning by truck. There is a strict prohibition of dumping anything into the port, and oil tanks must not be cleaned within 30 miles of the coast, and on a falling tide.

Old dunnage should not be dumped or sold, without permission from the Authorities, through Agents.

Ships' Boats

Use of ship's boats is forbidden within the port, unless they are being lowered, with prior permission, for maintenance or exercises.

Fenders

All vessels must have at least 2 large fenders, to keep them 5 ft. or more off the quay. If the vessel has no fenders, or due to deck cargo cannot use them Agents should be warned in advance to rent the necessary equipment and have it ready on arrival.

Dropping Anchor when Berthing

If an anchor is dropped when approaching a dock to berth, to control the vessel as she moves in, it is essential that the anchor should be hove in again once the ship is moored. Port regulations require this and any damage to other craft, real or imaginary, through fouling anchor or chain, would cause considerable trouble.

SYSTEM OF CONTROL CENTRES AND MARITIME INFORMATION (COASTAL STATIONS FP-FT-FW, VHF-FM):

Legal Basis

- (a) System of Control and Information of Movement of the Port of Montevideo and its zone of influence made operative on 9/4/75. (Maritime Regulation No. 1).
- (b) Control Centre and Information of the Maritime Movement of the Port of Colonia and its zone of influence made operative on 23/9/76. (Maritime Regulation No. 3).
- (c) Control Centre and Information of the Maritime Movement of the Port of Nueva Palmira and its zone of influence made operative on 1/10/76. (Maritime Regulation No. 4).
- (d) Control Centre and Information of the Maritime Movement of the Port of Punta del Este and its zone of influence made operative on 2/1/77. (Maritime Regulation No. 5).

(e) Control Centre and Information of the Maritime Movement of the Western Coast and its zone of influence made operative on 27/4/78. (Maritime Regulation No. 11).

(f) Control Centre and Information of the Maritime Movement of the Port of La Paloma and its zone of influence made operative on 1/11/78. (Maritime Regulation No. 12).
Note: In all the creations of the Control Centres, due account was taken of Programmes 1.09 and 3.08 corresponding to Law 14.106 and Sub-Programmes: "Maritime Police" and "Direction of Mercantile Marine".

(g) Control and surveillance of fishing vessels in the various fishing areas within the waters in the jurisdiction of the P.N.N. – Sources: Laws Nos. 14.145, 14.521 and 14.106 of the P.N.N. – Programme 1.09. (Maritime Regulation No. 2).

(h) Equipment which fishing vessels under the Uruguayan flag must possess when they operate in the common fishing zone between the Eastern Republic of Uruguay and in the Uruguayan fishing areas proper.
Sources: Maritime Regulation No. 2 of the 23/7/76. Decree of Co-ordination of Punta del Este of 27/1/76 (P.N.N. – P.N.A.). (Maritime Regulation No. 6).

(i) Equipment which vessels and/or craft in the coasting trade, pleasure craft, passenger vessels and working boats must carry where they operate in the Ports of the Republic and Navigate in the River Uruguay. (The zone between International Bridges and the Salto Grande).
Sources: Appendix 18 MAR 2 of the Radio communications regulation of the UIT and the Agreement arising from the meeting between Uruguay and Argentina (Buenos Aires 9/76) in respect of the use of VHF and FM channels and Maritime Regulations Nos. 1 to 6 of the P.N.N. – (Maritime Regulation No. 7).

(j) Law covering the control of pollution: Sources: Law No. 13.833 of the 29/12/69 and in particular articles 2 and 12 of the said Law. Chapter IX Pollution – (Articles 47 to 52) of the Treaty of the River Plate and its Maritime Frontage and Regulation of 28/10/74 of the Prefecture of the Port of Montevideo (Maritime Regulation No. 8).

(k) Zones for lightening ships and complement of cargo: Sources: Resolutions Nos. 2 and 4 of the Administrative Commission of the River Plate of dates 30/9/77 and 26/10/77 as laid down in Article 28 of the Treaty of the River Plate and its River Frontage and established transitorially in the Article 88 of the said treaty (Maritime Regulation No. 9).

(l) "LASH" – Type Operations: Sources: Resolution No. 1/2/78 of the Administrative Commission of the River Plate, Chapter IV. Articles 24 and 27 (Port Facilities, lightening operations and complements of cargo) of the Treaty of the River Plate and its maritime frontage (Maritime Regulation No. 10.).

(m) Agreement on the International Regulation for preventing unauthorised boarding.

(n) The Treaty of the River Plate and its Maritime Frontage.

(o) The Statutes of the River Uruguay.

(p) The International Agreement for the Safety of Human Life at Sea – 1974.

(q) Regulation of Radio-communications of the International Union of Telecommunications (UIT) and nomenclatures.

Particulars of the System

1. AIMS OF THE SYSTEM OF CONTROL CENTRES

(a) To effect positive sovereignty over the Area of the System:
  1. Territorial Sea
  2. River Plate
  3. River Uruguay
  4. Merin Lagoon

(b) To offer support to the National Mercantile Navigation and of third parties, complying with the objectives as propounded by the International Maritime Organisation (OMI) and by the International Telecommunications Union (UIT).

(c) To serve as a chain of Control Towers, effecting control and information of Movement of vessels and Port Operations.

(d) To co-ordinate with Public and Private Institutions who operate within the Ports of the Republic, to facilitate and activate port operations, avoiding delays and inconvenience.

2. GENERAL FUNCTIONS

The General functions of the Centre are:

(a) To maintain real and efficient control of the movement of vessels, in the area of application of the system in order:
  1. To prevent collisions between vessels.
  2. To alert the systems of Search and Rescue and/or Salvage in the event of vessels requiring assistance.
  3. To facilitate BYR operations.

(b) To maintain real and orderly control of the operations in the ports to:
  1. To prevent groundings and collisions with obstacles in port works:
  2. To have prepared emergency plans for cases of disasters and maritime accidents within the Ports and International Bridges (River Uruguay).

(c) To maintain up-to-date information concerning the state of the weather, lighting and all other matters contributing to the safety of navigation and operations in the area.

(d) To maintain up-to-date information for Maritime Agencies and/or Owners, providing such information to facilitate and activate port operations to be effected by vessels, obviating delays and inconvenience at all times.

(e) To serve Public and/or Private Institutions who operate in the Ports, collecting, classifying, analysing, evaluating and disseminating all the necessary information for the better fulfilment of port service.

(f) To comply with all other functions which are specified by the Mandate and to co-operate with Public Authorities and organisations in all matters relating to its functions.

3. CONTROL AND INFORMATION FROM THE CENTRES

The system belongs to the National Navy and is controlled by the National Navy Prefecture. It is directed from the Montevideo Control Centre.

(a) Control of Movement of Vessels – Control of vessels navigating within the Vessel Movement Areas.

(b) Control of Port Operations – Control of vessels manoeuvring within the ports of the Republic, including roads and access channels.

(c) Control of International Bridges – Control of vessels navigating in the International Bridges Zone – Gral. Jose Artigas Bridge at Paysandu, and Gral. San Martin Bridge at Fray Bentos.

(d) Vessel Movement Service – Maritime Mobile Safety Service, between coastal stations and vessels or between vessels, where the messages refer solely to vessel movement.

(e) Port Operation Service – Maritime Mobile Service in a port or in its district, between coastal stations and vessels, where the messages refer solely to vessel operations, movement and safety and, in the event of emergency, to safeguarding persons.

4. ZONES OF CONTROL AND INFORMATION OF THE CONTROL CENTRE SYSTEM

(a) Port of Montevideo (Deep Sea – Coasting – Fishing).
  1. "Alpha" – Control and information of vessel movement.
  2. "Bravo" – Control and information of port operations.

(b) Port of Buceo (Pleasure Craft).
  1. "Oscar" – Control and information of port operations.

(c) Port of Santiago Vazquez (Pleasure Craft – Coasting).
  1. "Papa" – Control and information of port operations.

(d) Port of La Paloma (Fishing Centre).
  1. "Kilo" – Control and information of movement of vessels.
  2. "Lima" – Control and information of port operations.

(e) Port of Punta del Este (Fishing – Pleasure Craft).
  1. "Golf" – Control and information of vessel movement.
  2. "Hotel" – Control and information of port operations.

(f) Port of Piriapolis.
  1. "Tango" – Control and information of port operations.

(g) Port of Colonia (Passage port to Buenos Aires).
  1. "Charlie" – Control and information of vessel movement.
  2. "Delta" – Control and information of port operations.

(h) Port of Sauce (Coasting).
  1. "Uniform" – Control and information of vessel movement and of port operations.

(i) Port of Nueva Palmira (Deep Sea).
  1. "Echo" – Control and information of movement of vessels.
  2. "Foxtrot" Control and information of port operations.

(j) Port of Carmelo (Pleasure Craft – Coasting).
  1. "Quebec" – Control and information of port operations.

(k) Port of Fray Bentos (Overseas – Navigation – International Bridges).
  1. "India" – Control and information of the movement of vessels.
  2. "Juliet" – Control and information of port operations.

(l) Puerto Paysandu (Overseas – Navigation – International Bridges).
  1. "Mike" – Control and information of the movement of vessels.
  2. "November" – Control and information of port operations.

(m) Puerto Salto (Coasting – Pleasure Craft – Passages).
  1. "Romeo" – Control and information of the movement of vessels.
  2. "Sierra" – Control and information of port operations.

5. COMMUNICATIONS

All Centres maintain permanent listening on Channel 16 (VHF – FM).

(a) *Language:* The language used in communication is Spanish. Vessels who have difficulty in communicating in Spanish may do so in English, and if there are problems in hearing properly they may use the groups of the International Signals Code, Tables of Spelling equivalents and Numbers, or Code Q.

(b) *Channels – Frequencies and Usages:* There will be those as defined by Appendix 18 Mar 2, of the Radiocommunications Regulations of the International Telecommunications Union, published by the General Secretary of the UIT in Geneva 1976 and the points agreed in the Uruguay – Argentina Meeting, carried out in the City of Buenos Aires 9/76, use of the VHF Channels (Band 156 – 174 MHz.).

Channel	*Frequencies*	*Usage*
6	156.300 MHz.	Bridge to Bridge.
8	156.400 MHz.	Port Operations.
9	156.450 MHz.	Port Operations.
11	156.550 MHz.	Transmission from the Centres in fulfilment of objectives.
13	156.650 MHz.	Transmission from the Centres in fulfilment of objectives.
15	156.750 MHz.	Meteorological Bulletins and Warnings to Navigators.
16	156.800 MHz.	Calling up and Security.
18	156.900 MHz. Reception	Jose Ignacio Oil Terminal.
	161.500 MHz. Transmission	Jose Ignacio Oil Terminal.

Should problems arise with VHF equipment on vessels (the range of same, out of service, etc.) communications should be effected on MF or on HF with the Safety Coastal Stations of the P.N.N.

The services and frequencies of the Coastal Stations are described in the tables at the end of "Uruguay General" Section.

Vessels who, for some reason or other cannot effect communications by radiotelephone (VHF, HF, MF), should do so by radiotelegraphy through the intermediary of the Coastal Station (open to public correspondence) Cerrito Radio CWA.

Radiotelegrams should be sent in time to the telegraphic address Comopre.

(c) *Listening Out by Vessels:*

1. *All vessels* in Uruguayan judicial waters must maintain permanent listening out service on Channel 16 (VHF – FM) except when they are moored in port. If there are problems on VHF they should listen out on 2182 or 4125 KHz.
2. When a vessel cannot, due to any fault of whatever nature, maintain listening on Channel 16, she should pass to Channel 11 or 13, but advise the Control Centre first.
3. In the various zones, the vessels must use as a working channel to communicate with the Zone Centre, the frequency which the Control Centre will indicate to them on Channel 16.
4. In all the ports of the Republic, vessels and/or craft in the coasting trade, pleasure craft (Categories A and B), passenger craft and traffic units (tugs, dredgers, launches, lighters, etc.) must be equipped with a VHF – FM transmitter and receiver for local communications with Port Controls, Appendix 18 Mar 2 of the Radiocommunications Regulations of the International Telecommunications Union.
5. *All vessels or craft* navigating or carrying out operations within 25 miles or more of the coast, must be equipped with a BLU transmitter and receiver (with corresponding frequencies) of 150 watts effective power and A3A and A3J type transmission.

(d) *Services and Frequencies of the FP, FC and FW Dependent on the P.N.N.*

Coastal Station (FC), Station for Port Operation (FP), Station for Service of Vessel Movement (FT), Station which is both for Port Operations and for Service of Vessel Movement (FW).

(e) If in fulfilment of the regulations set out by this System, vessels on calling up the Control Centre cannot obtain a reply, they should immediately make the communication in question to the Director of the System (telegraphic address: Comopre) by radiotelegraphy or radiotelephony via Cerrito Radio (CWA) or Punta Carretas Radio (CWF) respectively.

Communications to Centres:

1. From Vessels in the Zone.
   - (a) Position on entering and leaving each Zone of Vessel Movement (Flag, Name, International Call Sign, Where From, Where Bound, Latitude, Longitude, Force, Speed and Maximum Draft).
   - (b) ETA at next port.
   - (c) Problems with characteristic aspects during navigation.
   - (d) If anchoring or raising anchor at any point in the Control Zone of Vessel Movement, it is necessary to ask for authorisation when this is done within Port Operation Zones, and also whenever any manoeuvre is intended to be carried out, and this authorisation expiring within twenty (20) minutes from its request.
   - (e) Any damage suffered by the vessel.
   - (f) Assistance given to damaged vessels or those in difficulty.
   - (g) Any indications of dangerous obstacles to navigation which are not duly indicated by buoys and lights.
   - (h) Any serious reduction in visibility.
2. Pilotage:
   - (a) Whatever is specified in the General Pilotage Regulations.
   - (b) Time of embarkation and/or of disembarkation.
   - (c) Request of Master concerning change, mooring, etc.
   - (d) Difficulties in pilotage.
3. Concerning the Owner or Agent:
   - (a) Monthly list of expected vessels.
   - (b) Confirmation of arrival of vessels 24 hours in advance.
   - (c) News concerning vessels being delayed or arriving early.
   - (d) Information if the vessels are carrying hazardous cargo (explosives or inflammables) 24 hours in advance of arrival, including any such cargo in transit, mentioning:
     - (i) The amount and location of such cargo.
     - (ii) The correct technical name of the substance (the designation used for transportation purposes), the UNO number (if this is given), classification in the IMDG Code (if this is given), the flash point (if applicable) and quantity.
     - (iii) The presence or otherwise on board of a Certificate which is valid showing the ability of the vessel in respect of the cargo which it is carrying (only for hazardous substances carried in bulk);
     - (iv) The stowage of hazardous cargo on board, indicating those which have to be unloaded and those which have to remain on board;
     - (v) The condition in which the hazardous cargo is and any defect which is known in respect of packages or drums, together with the system of containing and handling of the cargo, of the equipment and instruments used (when hazardous bulk cargo is involved), which may engender excessive risk.
     - (vi) Any known defect which may effect considerably the safety of navigation.

(f) *Communications from the Centres:*

1. To vessels (navigating towards Uruguayan Ports).
   - (a) The quay at which they will berth.
   - (b) The Pilot who will assist the vessel.
   - (c) Any information from the Maritime Agent with regard to future operation.
2. To the Pilot:
   - (a) Tugs and cable launches who will assist him.
   - (b) Defences on the sea wall.
   - (c) Bitts which the vessel will use.
3. To the Owner or Agent:
   - (a) Position of their vessel.
   - (b) ETA.
   - (c) Conditions of cargo.
   - (d) Time at which the Pilot will go on board.
   - (e) Time of berthing.
4. To the Centre Director of the System (Control Centre and Information of the Maritime Movement of the Port of Montevideo) immediately any information is obtained with regard to:
   - (a) A BYR incident or any difficulty which is presented to a vessel.
   - (b) A deep sea or coasting vessel (data concerning Naval Messages in accordance with the Abbreviated Code).
   - (c) A fishing vessel, with the Naval Message data being as follows:
     - – Where from, Flag, Name, International Call Sign, Month, Day and Hour of sailing, Position (for Customs Clearance), Month, Day and Hour of Position, Activity (fishing or bound for Port).
     - – Arrival, Flag, Name, International Call Sign, Month, Day and Hour of Arrival, Port of Arrival.
     - – Fishing or within the Zone, or the Port, Flag, Name, International Call Sign, Position, Month, Day and Hour of Position ETA (if it is within the Zone or the Port).

(5) To the adjacent Control Centre:

When a deep sea or coasting vessel sails from a port controlled by the Control Centre, or when this vessel effects a passage to the Vessel Movement Zone controlled by that Centre, this must be informed to the adjacent Control Centre (according to the course of the vessel) stating ETA and the Zone of Vessel Movement of this adjacent Centre.

Note: The Control Centres will effect communications by Naval Message. These Naval Messages must be sent immediately after receipt from vessels or when such information comes to hand from other sources.

(Naval Messages in this context will have Priority Precedence).

(6) Command of to the Naval Control of Maritime Traffic in Uruguay (Contramu). Immediately on receipt all information specified in item (f) – Number (4).

(g) *Communications from Coastal Stations (Vessel Movements – FT, MF-HF)*

1. To the Centre Director of the System (Control Centre and Information of the Maritime Movement of the Port of Montevideo). Immediately on receipt all information specified in Item (f) Number (4).
2. To the Control Centre with responsibility over the zone to which a message refers.

   The same as those quoted in the preceding Number 1.

6. FISHING VESSELS:

(a) All fishing vessels clearing entry or departure from any national port towards the different Fishing Areas must communicate to the Maritime Authority the following:

1. On Sailing:
   - a. Flag (FL)
   - b. Name of Ship (SHP).
   - c. International Call Sign (IND).
   - d. Port of Departure (DEP)
   - e. Month, day and hour of departure (TOD).
   - f. Destination (Indicate Fishing Zone and Position) (DST).
   - g. Month, day and hour estimated at arriving at the Fishing Zone (ETA Z/P).
2. On Arrival:
   - a. Flag (FL).
   - b. Name of Ship (SHP).
   - c. International Call Sign (IND).
   - d. Port of Arrival (PORT).
   - e. Month, day and hour of arrival (ARR).

(b) All fishing vessels *navigating* must communicate every 6 hours with the Safety Coastal Station of the National Naval Prefecture of the Eastern Republic of Uruguay which is nearest to them (or to which they are listening) giving the following information:

1. International Call Sign (IND).
2. Position in Latitude and Longitude (POS).
3. Month, day and hour of the position (DHPOS).
4. Port of Destination (DET).
5. Activity: (Fishing – Coming to Port – Going to Zone) (ACT).

(c) *Normal Fishing Zones:*

1. High Seas Zone (Altamar): Zone which is outside the judical waters and within the Common Fishing Area.
2. Common Fishing Area (ZOCOPES): Art. 73 of the River Plate and Territorial Sea Treaty.
3. The Zone of the River Plate (RIPLATA).
4. The coastal Zone of the Atlantic Ocean (COSATLAN): Zone included between our coast on the Atlantic Ocean and a Line 12 miles out.
5. Zone of the River Uruguay (RIURU).
6. Zone of the Merin Lagoon (LAMERIN).

(d) Uruguayan Fishing Vessels which are *navigating* in the Common Fishing Area (Uruguay – Argentine) within the Sector of Argentine Jurisdiction are obliged to communicate its position to the Argentine Maritime Authority. Communications will be made on frequency 3860.6 kHz. to the Coastal Safety Station of the Prefecture of the Mar del Plata.

(e) *Note:* Information to be communicated: All the communications as specified in (b).

All fishing vessels must *listen out permanently* on Channel 16 (VHF – FM), except when they are moored in port. If they are at a distance from the coast which prevents a safe communication on

VHF, listening must be effected on 2721.5 kHz. Those effecting operations 25 miles or more from the coast, must be equipped with a BLU transmitter and receiver (with the corresponding frequencies) with 150 watts effective power and type of transmission A3A and A3J, and also fishing vessels must be equipped with a receiver on 2721.5 kHz.

(f) Vessels, after prior request to the Control Centre covering them, may pass to Channel 6 or 8, and keep on those *only for the necessary time* for Fishing Manoeuvres, after which they must return to Channel 16, and advise the Centre accordingly.

7. HYDROCARBONS: It is prohibited to pour hydrocarbons or residual matter arising from the washing of tanks, clearing of bilges and ballast in general or any other action capable of having contaminary effects in waters within the territorial sea of Uruguay with the exception of the zone which is:
   (a) Outside the limits of the River Plate.
   (b) Outside 100 miles of the Uruguayan Territorial Waters, i.e. 100 miles out from the Atlantic Ocean coast.
   (c) Outside the Prohibition area for contaminatory action (Article 78 of the River Plate Treaty).

8. ZONES OF OPERATION FOR LIGHTENING AND COMPLEMENT OF CARGO:
   The zones of operation for lightening and complement of cargo are as follows:
   Zone "A": Between the Parallels of Lat. South 35° 04′ and 35° 08′ and between the Meridians of Long. West 56° 00′ and 56° 02′.
   Zone "B": Between the Parallels of Lat. South 35° 30′ and 35° 33′ and between the Meridians of Long. West 56° 30′ and 56° 38′.
   Zone "C": Between the Parallels of Lat. South 35° 35′ and 36° 06′ and between the Meridians of Long. West 56° 30′ and 56° 38′.
   Zone "D": Between the Parallels of Lat. South 35° 04′ and 35° 06′ and between the Meridians of Long. West 56° 11′ and 56° 16′.

9. OPERATIONS OF LOADING AND UNLOADING "LASH" TYPE VESSELS:
   The operation of loading and unloading "LASH" type vessels for the national territory, on the one hand may be effected apart from within the lightening and complement of cargo areas in ports, also in the corresponding roads.

10. TRANSFER OF VESSELS:
   The transfer of vessels between roads and lightening areas and for complement of cargo purposes, will be effected under pilotage and tug control using the Port Services from which the barges in question have come.

CONTROL CENTRES:

Control Centre and Information of Maritime Movement of the Port of Colonia.

LOCATION, INTERNATIONAL CALL SIGN, ADDRESS.

(a) The Centre is controlled from the Prefecture of the Port of Colonia, within the free zone of the Port, located in the main building of the free Port zone of Colonia (Latitude: 34° 28′ 28″ S., Longitude: 57° 57′ 38″ W.).

(b) The call sign of the Control Centre is CWC 23, and for calling up purposes it is possible to use CONTROL COLONIA PREFECTURE.

(c) The Control Centre of the Port of Colonia is located in the Prefecture of the Port of Colonia.
The Prefecture of the Port of Colonia is a dependency of the National Naval Prefecture (2nd Circumscription).
Telephone No. of the Control Centre – 688.
Address – Boulevard Espana 2054 (Department of Colonia).

AREAS OF CONTROL.

(a) The Control Centre and Information of Maritime Movement, covers:
   1. Zone "CHARLIE". The area of the River Plate marked by the Meridians which pass through Martin Chico Point (Longitude: 58° 12′ 30″ W.) and Punta Rosario (Longitude: 57° 21′ W.) and the middle line equidistant from both coasts (Law 14.145/74 – "Treaty covering the Limits of the River Plate"), with the exception of the area of water included between the imaginary line which joins San Carlos Point; Lopez West Island; Farallon Island; the Green Buoy of Vienna, Parallel 34° 30′ S., the Meridian which passes through Riachuelo Point Longitude: 57° 43′ 18″ W., and the coast ("DELTA" AREA).
   2. "DELTA" area. Area of the River Plate, limited by the imaginary line which joins San Carlos Point; Lopez West Island, Farallon Island; the Green Buoy of Vienna, Parallel 34° 30′ S., the Meridian which passes through Riachuelo Point Longitude: 57° 43′ 18″ W., and the coast.

(b) The Control Centre and Information of Maritime Movement of the Port of Sauce covers:
   1. "UNIFORM" zone. The area of the River Plate included between Meridians 57° 25′ 48″ W. and 57° 33′ W., the coast and the parallel Latitude: 34° 29′ 18″ S.

COMMUNICATIONS TO THE CENTRE.

(a) From vessels.
   1. In zone "CHARLIE". The Control Centre must be informed when the following points have been passed:
   Punta Rosario
   Puerto Sauce
   Roca Barriles
   Puerto Colonia
   Km. 56.5 (Farallon Island)
   Km. 71.3 (San Pedro Bar)
   Km. 101 (Martin Chico Point)
   In both Zones of Control the communications as designated in following tables, must be effected.

(b) From the Director of Hydrographic Studies of the MTOP.
   1. The place assigned for berthing or mooring.
   2. Guard and order tugs (when these exist).

Control Centre and Information of the Maritime Movement of the Port of Fray Bentos

LOCATION, INTERNATIONAL CALL SIGN, ADDRESS.

(a) The Centre is controlled from the Prefecture of the Port of Fray Bentos (Latitude: 30° 06′ 50″ S., Longitude 58° 18′ 27″ W.).

(b) The International Call Sign of the Control Centre and Information of the Maritime Movement of the Port of Fray Bentos is CWC 25. When calling up it is possible to use CONTROL FRAY BENTOS PREFECTURA.

(c) The Control Centre of the Port of Fray Bentos is located in the Prefecture of Fray Bentos (5th Circumscription P.N.N.).
Telephone No. of the Control Centre is 321.
Address: Luis A. de Herrera 1249 on the corner with 25 de Agosto, Fray Bentos Department of Rio Negro.

CONTROL AREAS.

(a) The Control Centre Information of the Maritime Movement of the Port of Fray Bentos covers:
   1. Zone "INDIA" The area of the River Uruguay marked by the parallel 33° 30′ S. (Punta Amarilla Km. 46) and the parallel 32° 50′ S. (Roman Island) navigable areas of the Rio Negro and San Salvador and the middle line equidistant from both coasts; with the exception of the Port of Fray Bentos and the area of water marked by the port and maritime constructions (zone "JULIET").
   2. Zone "JULIET". The port of Fray Bentos and the areas of water marked by the port and maritime constructions.

COMMUNICATIONS TO THE CENTRE.

(a) From vessels:
   1. In zone "INDIA". The Control Centre must be notified during navigation when the following crossings are made:
   Km. 46 (Punta Amarilla)
   Km. 61 (Riacho Yaguari)
   Km. 83 (Paso Barrizal)
   Puerto Fray Bentos
   International Bridge "General San Martin"
   Km. 122 (Nuevo Berlin)
   Km. 140 (Roman Island)
   In both Areas of Control the designated frequencies are shown in following tables.

THE BRIDGE ZONE

All vessels of 100 tons or more gross registered weight must comply with the following instructions:

(a) Navigation day and night in both directions will be made under the bridges by the marked channel, in the central arch, between piles 10 and 11 in the Bridge "Libertador General San Martin".

(b) It is prohibited to cross or overtake between Km. 100 and Km. 102.5 and for this purpose the following passage priorities are established:
   1. Those navigating downstream over those navigating upstream.
   2. Convoys with a tug either pulling or pushing have priority over all vessels which include those that are navigating downstream.

(c) The vessel or convoy which has to give way will wait outside the limits indicated in point (b). Between those limits it is prohibited to anchor for any cause, even though the channel is left free.

(d) Between the limits indicated in point (b), speed must be reduced to the minimum compatible with good steering and manoeuvring.

(e) In the zones included between the limits indicated in point (b), it is prohibited to effect any form of dredging operation across the whole width of the river.

Control Centre and Information of the Maritime Movement of the Port of La Paloma

LOCATION, INTERNATIONAL CALL SIGN, ADDRESS.

(a) The Centre is controlled from the Prefecture of the Port of La Paloma (Position: Latitude 34° 39′ 30″ S. and Longitude 54° 08′ 28″ W.).

(b) The International Call Sign of the Control Centre and Information of the Maritime Movement of the Port of La Paloma is CWC 30. For calling up purposes "CONTROL LA PALOMA PREFECTURA" may be used.

(c) The Control Centre La Paloma is located in the Prefecture of the Port of La Paloma (8th Circumscription P.N.N.)
Telephone No. of the Control Centre – 16.
Address – Avenida del Navio (Puerto de La Paloma) – Rocha.

CONTROL ZONES.

(a) The Control Centre and Information of the Maritime Movement of the Port of La Paloma comprises:
(1) Zone "KILO". Zone of the Atlantic Ocean (Territorial Sea) situated between the meridians 50° 50′ and 54° 15′ W., limited by the straight line 128° of the Chuy Lighthouse (lateral maritime limit with the Federal Republic of Brazil – Law 14.163) and to the South by the lateral maritime Argentine–Uruguay limit (Law 14.145/974). – "Treaty of Limits of the River Plate". Art. 70), with exception of the Port of La Paloma, between the coast and an imaginary line which goes between the end of the breakwater towards the Eastern point of the Costa Azul (Zone "LIMA"). Zone "LIMA".
(2) Zone "LIMA". Port of La Paloma, zone situated between the coasts and an imaginary line which goes from the end of the breakwater to the Eastern point of Costa Azul.

COMMUNICATIONS TO THE CENTRE.

(a) From vessels to:
   (1) In Zone "KILO" – The Control Centre must be informed during navigation when the following points are crossed:
   The Lighthouse Chuy
   The Lighthouse Cabo Polonio
   The Lighthouse Santa Maria

(2) In Zone "LIMA"
During navigation in the Access Channel and within the Port when the Port jetty small light is passed.

Also, in both control zones the communications shown in the following tables must be effected.

(b) From the Hydrographic MTOP Directorate:
(1) Place assigned for berthing or mooring.
(2) Guard or order tugs (when they exist).

Control Centre and Information of the Maritime Movement of the Port of Montevideo.

LOCATION, INTERNATIONAL CALL SIGN, ADDRESS

(a) The Centre is controlled from the National Naval Prefecture, located on the Floors 11, 12 and 13 of the General Command Tower of the Navy (Customs Building Lat. 34° 54′ 03″ S., Long. 56° 12′ 44″ W.).
(b) The International Call Sign of the Control Centre and Information of the Maritime Movement of the Port of Montevideo is CWC 39. In calling up it is possible to use "CONTROL MONTEVIDEO PREFECTURA".
(c) The Call Sign of the Control Centre of the Port of Buceo is "CONTROL BUCE PREFECTURA".
(d) The Call Sign of the Control Centre of the Port of Santiago Vazquez is CWC 38.
In calling up it is possible to use "CONTROL SANTIAGO VAZQUEZ PREFECTURA".
(e) The Control Centre of the Port of Montevideo is located in the building of the Navy General Command.
Telegraphic Address – "Comopre" (Control Montevideo Prefectura).
Telephones – 95.51.01 – 95.24.77 – 95.62.53.
Telex UY 929
Address – Rambla 25 de Agosto de 1825.

ZONES OF CONTROL.

(a) The Control Centre and Information of the Maritime Movement of the port of Montevideo covers:
(1) Zone "ALFA". Zone of the River Plate situated between the Uruguyan coast and the meridians 55° 30′ and 57° 21′ W., and to the South to the limit of the River Plate with the Argentine Republic (Law 14.145/74 "Treaty of Limits of the River Plate").
With the exception of the areas of water included:
(a) Between the meridians which pass through Punta Sayago and Punta Brava, the coast and the parallel of Latitude 35° 01′ South (Zone "BRAVO").
(b) Between the meridians 56° 00′ and 56° 09′ W. and the parallel 34° 57′ S. (Zone "OSCAR").
(c) Between the meridians 56° 20′ and 56° 40′ W. and the parallel 34° 56′ S. and the coast (Zone "PAPA").
(2) Zone "BRAVO". Zone of the River Plate included between the meridians which pass through Punta Sayago and Punta Brava, the coast and the parallel of Latitude 35° 01′ S., including the Access Channel to the Port of Montevideo, Foreport, Docks, Channel or Inflammable Cargo Docks (ANCAP).
(b) The Control Centre and Information of the Port of Buceo includes:
(1) Zone "OSCAR". Zone included between the meridians 56° 00′ and 56° 09′ West and the parallel 34° 57′ South.
(c) The Control Centre and Information of the Maritime Movement of the Port of Santiago Vazquez includes:
(1) Zone "PAPA". Zone included between the meridians 56° 20′ and 56° 40′ West and the parallel 34° 56′ South and the coast. It includes the Port, Anchorages and all areas of water.

COMMUNICATIONS FROM THE CENTRE

(a) To the National Administration of Ports (A.N.P.).
(1) Time of arrival of each vessel (ahead of time or delayed).
(2) Movement of tugs.
(3) Information from Masters of vessels on his cargo or changes in his berth.
(b) To the Argentine Naval Prefecture:
(1) ETA of vessels which are going to Argentine Ports or to Coastal Ports.

COMMUNICATIONS TO THE CENTRE.

(a) From the National Ports Administration (A.N.P.)
(1) Designation of berths prior to 1700 hrs. on the previous day.
(2) Tugs and launches for guard and order purposes.
(3) Departures for Deep Sea and Coasting vessels.
(b) From the vessels:
(1) In Zone "ALFA". The Control Centre must be informed during navigation when the following points are passed:
(a) To the West of the Access Channel to the Port of Montevideo.
1. By Middle Channel:
The *Graf Spee*
The Panela Lighthouse
The Uruguayan Banco Ortiz Buoy
The Argentinian Banco Ortiz Buoy
2. By North Channel:
The *Graf Spee*
The Panela Lighthouse
The Jesus Maria Buoy
The Arazati Point
The Puerto Rosario.
(b) To the East of the Access Channel to the Port of Montevideo.
Punta Brava
Isla de Flores
(2) In Zone "BRAVO".
During navigation in the Access Channel:
The Eje Buoy
The Jetty

In both areas of control the communications as designated on the following tables should be effected.

Control Centre and Information of the Maritime Movement of the Port of Nueva Palmira.

LOCATION, INTERNATIONAL CALL SIGN, ADDRESS.

(a) The Control Centre is controlled from the Sub-Prefecture of Nueva Palmira (Position Lat. 33° 52.7′ S., Long. 58° 25.3′ W.).
(b) The International Call Sign of the Control Centre and Information of the Maritime Movement of the Port of Nueva Palmira is CWC 31 and when calling up it is permitted to use "CONTROL NUEVA PALMIRA PREFECTURA".
(c) The Control Centre of the Port of Nueva Palmira is located in the Sub-Prefecture of Nueva Palmira.
The Sub-Prefecture of Nueva Palmira is a dependency of the Prefecture of Colonia (2nd Circumscription P.N.N.).
Telephone No. of the Control Centre – 139.
Address – Port Area – Nueva Palmira – Department of Colonia.

AREAS OF CONTROL

(a) The Control Centre and Information of the Maritime Movement of the Port of Nueva Palmira cover:
(1) Zone "ECHO". Zone of the River Plate and the River Uruguay is marked by the meridian 58° 12.5′ W., (Punta Martin Chico Km. 101) and the parallel 33° 30′ S., (Punta Amarillo Km. 46) and the middle line equidistant from both coasts with the exception of the Port of Nueva Palmira and the area of water limited by the port constructions (zone "FOX-TROT").
(2) Zone "FOX-TROT". The Port of Nueva Palmira and the areas of water limited by the port constructions (official quay, the Bed of the Company Navigen and the Higueritas Dock).

COMMUNICATIONS TO THE CENTRE:

(a) From Vessels:
(1) In zone "ECHO", the Control Centre must be informed during navigation of the following crossings:
Km. 101 (Punta Martin Chico),
Km. 121 (Sola Island).
Puerto Nueva Palmira.
Km. 22 (Punta Arenal Grande).
Km. 46 (Punta Amarilla).
In both Areas of Control, the communications as shown in following tables must be effected.

Control Centre and Information of the Maritime Movement of the Port of Paysandu.

LOCATION, INTERNATIONAL CALL SIGN, ADDRESS:

(a) The Centre is controlled from the Prefecture of the Port of Paysandu, located in the main Customs building (32° 18′ 06″ S., 58° 05′ 08″ W.).
(b) The International Call Sign of the Control Centre and Information of the Maritime Movement of the Port of Paysandu is CWC 32, and when calling up it is possible to use "CONTROL PAYSANDU PREFECTURA".
(c) The Control Centre and Information of the Maritime Movement of the Port of Paysandu is a dependency of the Prefecture of the Port of Paysandu (6th Circumscription P.N.N.).
Telephone No. of the Control Centre – 3099.
Address – Presidente Viera and Avenida Brasil – Paysandu (City).

CONTROL AREAS:

(a) The Control Centre and Information of the Maritime Movement of the Port of Paysandu covers:
(1) Zone "MIKE". The area of the river Uruguay marked by the parallel 32° 50′ S. (Roman Island) and parallel 31° 53′ S. (the mouth of the Malo Stream Km. 257 approximately) and the middle line equidistant from both sides with the exception of the zone included between the parallel 32° 20′ S. (the mouth of the Stream "Sacra") and the parallel 32° 14′ S. and the mouth of the Stream "San Francisco". (Zone "NOVEMBER").
(2) Zone "NOVEMBER". The area of the River Uruguay limited by the parallel 32° 20′ S. which passes through the mouth of the Stream "Sacra" up to parallel 32° 14′ S. which passes through the mouth of the Stream "San Francisco".

COMMUNICATIONS AT THE CENTRE:

(a) From vessels:
(1) In zone "MIKE" – The Control Centre must be notified during navigation when the following crossings are made:
Km. 140 (Roman Island)
Km. 160 (San Javier)
Km. 183 (Concepcion del Uruguay)
Punta "N" Almiron Island
Puerto Paysandu
International Bridge "General Artigas"
Punta Piedras
Arroyo Malo
In both Areas of Control the communications are shown in the following tables.

THE BRIDGE ZONE.

All vessels of 100 tons or more gross registered weight must comply with the following instructions:
(a) Navigation both by day and night in both directions will be made under the bridges by the marked channel, in the central arch, between piles 11 and 12 in the bridge "General Artigas".
(b) It is prohibited to cross or overtake between Kms. 208 and 211. For this purpose the following passage priorities are established:
(1) Those navigating downstream over those navigating upstream.
(2) Convoys with a tug either pulling or pushing have priority over all vessels which include those that are navigating downstream.
(c) The vessel or convoy which has to give way will wait outside the limits indicated in point (b). Between those limits it is prohibited to anchor for any cause, even though the channel is left free.

(d) Between the limits indicated in point (b) – speed must be reduced to the minimum compatible with good steering and manoeuvring.

(e) In the zones included between the limits indicated in point (b) – it is prohibited to effect any form of dredging operation across the whole width of the river.

Control Centre and Information of the Maritime Movement of the Port of Punta del Este and Piriapolis.

LOCATION, INTERNATIONAL CALL SIGN, ADDRESS:

(a) The Centre is controlled from the Prefecture of the Port of Punta del Este (Lat. 34° 57′ 48″ S., Long. 54° 57′ 06″ W.).

(b) The International Call Sign of the Control Centre and Information of the Maritime Movement of the Port of Punta del Este is CWC 34. For calling up purposes it is possible to use "CONTROL PUNTA DEL ESTE PREFECTURA".

(c) The Call Sign of the Control Centre of the Port of Piriapolis is CWC 33.
For calling up purposes it is possible to use "CONTROL PIRIAPOLIS PREFECTURA".

(d) The Control Centre of the Punta del Este is located in the Prefectura of the Port of Maldonado (3rd Circumscription P.N.N.).
Telephone No. of the Control Centre – 4.18.84.
Address – Calle 8 and 13 (Department of Maldonado).

(e) The Control Centre of the Port of Piriapolis is located in Sub-Prefecture of the Port of Piriapolis (3rd Circumscription P.N.N.).
The Sub-Prefecture of Piriapolis is controlled by the Prefecture of Maldonado.
Telephone No. – 18.
Address – Avenida Piria and Calle Maipu (Piriapolis).

ZONES OF CONTROL

(a) The Control Centre and Information of the Maritime Movement of the Port of Punta del Este covers:
- (1) Zone "GOLF". Zone of the River Plate, Atlantic Ocean (Territorial Sea) situated between the meridians 55° 30′ and 54° 15′ Longitude West, the imaginary line which joins the Punta del Este with Punta Ballena and in the South by the continuation of the limit of the River Plate with the Argentine Republic and the Territorial Sea (Law 14.185/974 "Treaty of the Limits of the River Plate"), with the exception of the extent of water included between meridians which pass through Punta Iman (55° 16′ 08″ W.) and Punta Raza (55° 14′ 00″ W.) and the meridian of 34° 56′ 30″ South (Zone "TANGO") – Piriapolis.
- (2) Zone "HOTEL". The Bay of Maldonado and the Port of Punta del Este.
  - (a) The Bay of Maldonado: Zone situated between the coast and the imaginary line which joins Punta del Este with Punta Ballena, includes also "Boca Grande" and "Boca Chica".
  - (b) The Port of Punta del Este: Zone situated between the coast and an imaginary line which goes from the end of the jetty to a point which limits to the North of the Mansa Beach. It includes all the mooring areas.

(b) The Control Centre and Information of Maritime Movement of the Port of Piriapolis comprises:
- (1) Zone "TANGO". Zone of the River Plate included between the parallels which pass through Punta Iman (55° 16′ 08″ W.) and Punta Raza (55° 14′ 00″ W.) and the meridian 34° 56′ 30″ South.

COMMUNICATIONS TO THE CENTRE

(a) From Vessels
- (1) In zone "GOLF". The Control Centre must be informed during navigation when the following points are passed:
  The Isla de Lobos (Wolf Island)
  The Punta del Este Lighthouse.
- (2) In zone "HOTEL". During navigation in the Access Channel and within the Port:
  When the Bajo del Monarco Buoy is passed, and
  When the Isla de Gorriti Small Lighthouse is passed.
  Also within both Control areas the communications indicated in the following tables must be effected.

(b) From the Hydrographic Directorate of MTOP.
- (1) The place assigned for berthing or mooring.
- (2) Guard and order tugs (when they are present).

COASTAL STATION NOMENCLATURE
(See key at end of tables)

Name of Station	*Symbol*	*Identity of Station*	*Transmission Frequencies*	*Transmission Receiving Frequencies*	*Type of Transmission*	*Power in Kw.*	*Kind of Service*	*Hrs. of Service GMT*	*Rates*	*Co-ordinates of Transmitting Aerial*	*Observations*
Atlantida Radio	FT	CWC 43	156.45 C.9 156.55 C.11 156.65 C.13 10) 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO a) b)/ d) e) f)/ m)	HX	—	34° 46′ 48″ S. 55° 45′ 26″ W.	TF 2604 Teledisced 0372
Carmelo Radio	FP	CWC 22	156.45 C.9 156.55 C.11 11) 156.65 C.13 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO a) b)/ d) e) f)	HX	—	34° 00′ 33″ S. 59° 17′ 42″ W.	TF 315
Colonia Radio	FC	CWC 23	2182 2040.5 2638 2721.5 2) 3) 4) 4125 4143.6 9) 5680 5) 6218.6 9) 6221.6 9)	2182 1)	A3J A3J A3A A3H	0.15 0.15	CO CR a) b) c) d) e) f) h) i)	H24	—	34° 28′ 12″ S. 57° 51′ 05″ W.	TF 0522 2020 2037 2109 Teledisced 0522
	FW	Control Colonia Prefectura CWC 23	156.45 C.9 12) 156.55 C.11 11) 4) 156.65 C.13 10) 4) 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO CR a)/ b) c) d) e) f) h) i) n) o)	H24	—	34° 28′ 28″ S. 57° 50′ 38″ W.	TF 2680 Radar Teledisced 0522
Fray Bentos Radio	FC	CWC 25	2182 2040.5 2638 2721.5 4125 4143.6 5680 6218.6 6221.6		A3J	0.15	CO CR e)/ f) d)	HX	—	33° 06′ 50″ S. 58° 18′ 27″ W.	TF 321 Teledisced 05352
	FW	Control Fray Bentos Prefectura CWC 25	156.45 C.9 12) 156.55 C.11 11) 156.65 C.13 10) 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO CR a) b) d) e) f) h) i) n) o)	H24	—	33° 06′ 50″ S. 58° 18′ 27″ W.	TF 321 Teledisced 05352
La Floresta Radio	FT	CWC 29	156.45 C.9 156.55 C.11 156.65 C.13 10) 156.75 C.15 156.80 C.16	C.16 1)	F3	0.025	CO e) f) m)	HX	—	34° 45′ 30″ S. 55° 40′ 32″ W.	TF 209

COASTAL STATION NOMENCLATURE
(See key at end of tables)

Name of Station	Symbol	Identity of Station	Transmission Frequencies	Transmission Receiving Frequencies	Type of Transmission	Power in Kw.	Kind of Service	Hrs. of Service GMT	Rates	Co-ordinates of Transmitting Aerial	Observations
La Paloma	FC	CWC 30	2182	2182 1)	A3	1	CO CR a) b)	H24	—		TF 16
Radio			2040.5		A3J	1	c) d) e) f)			34° 39′ 30″ S.	
			2638	2721.5 1)	A3A		h) i) m) n)			54° 08′ 28″ W.	
			2721.5 2) 3) 4) 6) 7)		A3H						
			3023 5)	3860.6 1)							
			3860.6 8)	4125 1)							
			4125	C.421 1)							
			4419.4								
			4143.6 2) 3) 9)								
			5680 5)								
			6518.8 13)	C.606 1)							
			6521.9 13)								
			6218.6 2) 3) 9)								
			6221.6 9)	C.821 1)							
			8780.9 13)								
			8291.1 9)								
			8294.2 9)								
			13128.7 13)	C.1221 1)							
			13162.8 13)								
			12429.2 9)								
			12432.3 9)								
			17294.9 13)								
			17260.8 13)	C.1621 1)							
			16587.1 9)								
			16590.2 9)								
			22636.3 13)								
			22658 13)	C.2221 1)							
			22124 9)								
			22127.1 9)								
	FW	Control	156.45 C.9 13)		F3	0.1	CO CR a) b)	H24	—	34° 39′ 30″ S.	TF 16
		La Paloma	156.55 C.11 11) 4)				c) d) e) f)			54° 08′ 28″ W.	
		Prefectura	156.65 C.13 6) 10) 4)				h) i) m) n)				
		CWC 30	156.75 C.15 2) 3)				o)				
			156.80 C.16	C.16 1)							
Montevideo	FC	CWC 39	2182	2182 1)	A3	1	CO CR a) b)	H24	—	PTA. TIGRE	TF 70 35 05
Trouville							c) d) e) f)			34° 52′ 00″ S.	TF 70 32 59
Radio			2040.5 7) 4)		A3J	1	h) i) m)			56° 18′ 40″ W.	TF 70 08 45
			2638		A3A						
			2721.5 2) 3) 4) 6) 7)	2721.5 1)	A3H						
			3023 5)		A3J	1		H24	—	—	—
			3860.6 8)	3860.6 1)	A3A						
			4125	4125 1)	A3H						
			4419.4 13)	C. 421 1)							
			4143.6 2) 3) 9)								
			5680 5)								
			6518.8								
			6521.9 13)	C. 606 1)							
			6218.6 2) 3) 9)								
			6221.6 9)								
			8780.9 13)	C. 821 1)							
			8291.1 9)								
			8294.2 9)								
			13162.8 13)	C. 1221 1)							
			13128.7 13)								
			12429.2 9)								
			12432.3 9)								
			17294.9 13)								
			17260.8 13)	C. 1621 1)							
			16587.1 9)								
			22658 13)	C. 2221 1)							
			22636.3 13)								
			22124 9)								
			22127.1 9)								
Montevideo	FW	Control	156.45 C.9 12)	C. 9 1)	F3	0.1	CO CR a) b)	H24	—	34° 54′ 18″ S.	TF 95 51 01
Centro de		Montevideo	156.55 C.11 11) 4)	C. 11 1)			c) d) e) f)			56° 12′ 44″ W.	95 62 53
Control		Prefectura					g) h) i) m)				95 24 77
Radio			156.65 C.13 6) 10)	C. 13 1)	F3	0.1	n) o) p) q)				TLX UY 929
			156.75 C.15 2) 3)	C. 13 1)	F3	0.1					Comopre
			156.80 C.16	C. 16 1)	F3	0.1					Radar
Nueva Palmira	FC	CWC 31	2182		A3J	0.15	CO CR e) f)	HX	—		TF 139
Radio			2040.5				d)				
			2638								
			2721.5								
			4125								
			4143.6								
			5680								
			6218.6								
			6221.6								
	FW	Control	156.45 C.9 12)		F3	0.025	CO CR a) b)	H24	—	33° 52′ 42″ S.	TF 139
		Palmira	156.55 C.11 11)				c) d) e) f)			58° 25′ 12″ W.	
		Prefect.	156.65 C.13 10)								
		CWC 31	156.75 C.15 2) 3)								
			156.80 C.16	C.16 1)							
Paysandu	FC	CWC 32	2182		A3J	0.15	CO CR e) f)	HX	—	32° 18′ 06″ S.	TF 3099
Radio			2040.5				d)			58° 05′ 08″ W.	Teledisced
			2638								0722
			2721.5								
			4125								
			4143.6								
			5680								
			6218.6								
			6221.6								

COASTAL STATION NOMENCLATURE

(See key at end of tables)

Name of Station	*Symbol*	*Identity of Station*	*Transmission Frequencies*	*Transmission Receiving Frequencies*	*Type of Transmission*	*Power in Kw.*	*Kind of Service*	*Hrs. of Service GMT*	*Rates*	*Co-ordinates of Transmitting Aerial*	*Observations*
Paysandu Radio	FW	Control Paysandu Prefect. CWC 32	156.45 C.9 12) 156.55 C.11 11) 156.65 C.13 10) 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO CR a) b) c) d) e) f) i) n) o)	H24	—	32° 18′ 06″ S. 58° 05′ 08″ W.	TF 3099 Teledisced 0722
Piriapolis Radio	FP	Control Piriapolis Prefect. CWC 33	156.45 C.9 12) 156.55 C.11 11) 156.65 C.13 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO CR a) b) c) d) e) f) h) i) m) o)	H24	—	34° 52′ 50″ S. 55° 16′ 10″ W.	TF 518 – 236
Puente Fray Bentos (Gral. San Martin) Radio	FT	CWC 42	156.45 C.9 156.55 C.11 156.65 C.13 10) 156.75 C.15 156.80 C.16	C.16 1)	F3	0.025	CO e) f) i)	HX	—	33° 06′ 27″ S. 58° 14′ 46″ W.	
Puente Paysandu (Gral. Artigas) Radio	FT	CWC 41	156.45 C.9 156.55 C.11 156.65 C.13 10) 156.75 C.15 156.80 C.16	C.16 1)	F3	0.025	CO e) f) i)	HX	—	32° 17′ 00″ S. 58° 07′ 00″ W.	
Puerto Sauce Radio	FC	CWC 27	2182 2040.5 2638 2721.5 4125 4143.6 5680 6218.6 6221.6		A3J	0.15	CO CR e) f) d)	HX	—	34° 26′ 20″ S. 57° 26′ 21″ W.	TF 33
	FW	CWC 27	156.45 C.9 12) 156.55 C.11 11) 156.65 C.13 10) 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO CR a) b) d) e) f) h) i) n) o)	H24	—	34° 26′ 20″ S. 57° 26′ 21″ W.	TF 33
Puerto Buceo Radio	FP		156.45 C.9 12) 156.55 C.11 11) 156.65 C.13 156.80 C.16	C.16 1)	F3	0.025	CO d) e) f) i)	HX	—	34° 54′ 37″ S. 56° 07′ 00″ W.	TF 78 32 90
Punta del Este Radio	FC	CWC 34	2182	2182 1)	A31	0.2	CO CR a) b) c) d) e) f) h) m)	H24	—	34° 57′ 48″ S. 54° 57′ 06″ W.	TF 41884 – 41967 Teledisced 042
			2040.5 2721.5 2) 3) 4) 6) 7) 3860.6 8) 4125 4143.6 9) 6218.6 9) 6221.6 9)		A3J A3A A3H	0.15					
	FW	Control Punta del Este Perfectura	156.45 C.9 12) 156.55 C.11 11)		F3	0.025	CO CR a) b) c) d) e) f)	H24	—	34° 57′ 48″ S. 54° 57′ 06″ W.	TF 41884 – 41967 Teledisced 042
			156.65 C.13 10)	C.13 1	F3	0.1	h) i) m) n)				
			156.75 C.15 2) 3)		F3	0.025					
			156.80 C.16	C.16 1)	F3	0.1	o)				
Rio Branco Radio	FC	CWC 36	2182	2182 1)	A3	0.2	CO a) b) d)	HX	—	32° 34′ 25″ S. 53° 22′ 20″ W.	TF 86
			2638 2721.5 2) 3) 6) 7)		A3J	0.2	e) f) i) m)				
	FW	CWC 36	156.45 C.9 156.55 C.11 11) 156.65 C.13 10) 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO a) b) d) e) f) i) m) n)	H24	—	32° 34′ 25″ S. 53° 22′ 20″ W.	TF 86
Salto Grande Radio	FT	CWC 40	156.45 C.9 156.55 C.11 156.65 C.13 10) 156.75 C.15 156.80 C.16	C.16 1)	F3	0.025	CO e) f) i)	HX	—	31° 17′ 00″ S. 57° 56′ 00″ W.	
Salto Radio	FC	CWC 37	2182 2040.5 2638 2721.5 4125 4143.6 5680 6218.6 6221.6		A3J	0.15	CO CR e) f) d)	HX	—	31° 23′ 00″ S. 57° 59′ 00″ W.	TF 5275 Teledisced 0732
	FW	CWC 37	156.45 C.9 12) 156.55 C.11 11) 156.65 C.13 10) 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO a) b) d) e) f) i) n) o)	HX	—	31° 23′ 00″ S. 57° 59′ 00″ W.	TF 5275 Teledisced 0732
Santiago Vazquez Radio	FP	CWC 38	156.45 C.9 12) 156.55 C.11 11) 156.65 C.13 6) 156.75 C.15 2) 3) 156.80 C.16	C.16 1)	F3	0.025	CO a) b) d) e) f) i) m) o)	H24	—	34° 47′ 24″ S. 56° 21′ 05″ W.	TF 32 00 8

KEY TO LITERAL AND NUMERICAL REFERENCES USED IN THE COASTAL STATION NOMENCLATURE

(a) To transmit meteorological bulletins in accordance with the requirements of List VI of RR of the UIT. Special services which are offered by the FC, FP, FT and FW of the P.N.N.
(b) To transmit Notices to Mariners in accordance with requirements of List VI of the RR of the UIT. Special services which are offered by the FC, FP, FT and FW of the P.N.N.
(c) To transmit medical advice on request of navigators.
(d) To transmit urgent messages to Mariners immediately on receipt and to repeat them 3 minutes past every hour and at the normal times of transmission of messages to navigators.
(e) To participate in operations of Search and Salvage.
(f) To alert the Centre's Co-ordinator of Search and Salvage.
(g) To direct the system of Control Centres and Information of Maritime Movement and Port Operations. (FP, FT and FW).
(h) Receive meteorological observations (SHIP) made on the high seas by Masters of vessels.
(i) To effect special transmissions relating to hydrographic and mareographic Information.
(m) To receive reports from fishing vessels (National, Argentine and third nations who are authorised to operate within the area) and to remit them to the Director of the Control Centre System (CONDI) obligatorily in accordance with Maritime Legislation No. 6 P.N.N.
(n) To effect control and facilitate information within the area, receiving reports from vessels navigating within it (obligatory for vessels in accordance with IMP Uruguay).
(o) Effect control and facilitate the supply of information from the port.
(p) Receive by telex or radio requests for pilotage service.
(q) Radiogoniometric Service on VHF (RG).

1. Call up and listening service on a permanent basis and for announcing in advance the intention to transmit.
2. Frequency used for the transmission of meteorological bulletins and Notices to Mariners in accordance with requirements of List VI of the RR of the UIT. Special services offered by FC, FP, FT and FW of the P.N.N. with prior announcement on frequency 156.800 MHz (Channel 16).
3. Frequency used for the transmission of meteorological bulletins and Notices to Mariners in accordance with requirements of List VI of the RR of the UIT. Special services offered by the FC, FP, FT and FW of the P.N.N. with prior announcement on frequency 2182 kHz (Simplex) and 4419.4 kHz (Duplex C.421).
4. Frequency used for the transmission of radiomedical advice on request.
5. Frequency used for operations of Search and Salvage.
6. Frequency used for reports from national fishing vessels.
7. Frequency for Coastal working purposes.
8. Frequency used in common with the Argentine Republic (Naval Prefecture) for the control of fishing vessels of both nations.
9. Provisional working frequency.
10. Working frequency for control and zonal information (Vessel Movement Service).
11. Working frequency for control and Port information (Port Operation Service).
12. Port operation frequency (tugs, traffic launches, tugs and control centres).
13. Duplex frequency Band from 4 to 23 MHz of the Mobile Maritime Service Section 17 REV. RR of the UIT.

CO – Station open exclusively to official correspondence.
CR – Station open to restricted public correspondence.
H24 – Continuous service, day and night.
HX – Intermittent service, day and night or station which has no fixed operating timetable.

SPECIAL SERVICES

Nomenclature of Radiodetermination Stations and Stations which offer Special Services with the P.N.N.

Name of the Station	Symbol	Identity of the Station	Trans-mission frequencies (KHz – MHz)	Type of Trans-mission	(GMT) Hours of Transmission	Service (See key below)
Atlantida Radio	FT	CWC 43	156.75 M	F3	0533 – 1303 – 1933	1, 3, 4, 6, 7
Carmelo Radio	FP	CWC 22	156.75 M	F3	0303 – 1503 – 2133	1, 3, 4, 6, 7
Colonia Radio	FC	CWC 23	2721.5	A3J	0330 – 1330 – 2100	1, 2, 3, 4, 5, 6, 7
	FW	Control Colonia Prefectura	156.75 M	F3		
Fray Bentos Radio	FW	Control Fray Bentos Prefectura CWC 25	156.75 M	F3	0933 – 1703 – 2333	1, 2, 3, 4, 6, 7
La Paloma Radio	FC	CWC 30	2721.5 4143.6 6218.6	A3J	0303 – 1533 – 2303	1, 2, 3, 4, 5, 6, 7
	FW	Control La Paloma Prefectura	156.75 M	F3		
Montevideo Trouville Radio	FC	CWC 39	2721.5 4143.6 6218.6	A3J	0103 – 1133 – 1903	1, 2, 3, 4, 5, 7
Montevideo Centro de Control	FW	Control/ Montevideo Prefectura CWC 39	156.75 M	F3	0103 – 1133 – 1903	1, 2, 3, 4, 6, 7, 8
Nueva Palmira Radio	FW	Control Palmira Prefec. CWC 31	156.75 M	F3	0903 – 1533 – 2303	1, 2, 3, 4, 6, 7
Paysandu Radio	FW	Control Paysandu Prefec. CWC 32	156.75 M	F3	0103 – 1103 – 1733	1, 2, 3, 4, 6, 7
Piriapolis Radio	FP	Control Piriapolis Prefectura CWC 33	156.75 M	F3	0703 – 1333 – 2103	1, 2, 3, 4, 6, 7
Puerto Sauce Radio	FW	CWC 27	156.75 M	F3	0133 – 1303 – 1933	1, 2, 3, 4, 6, 7
Punta del Este Radio	FC	CWC 34	2721.5	A3J	0133 – 1503 – 2133	1, 2, 3, 4, 5, 6, 7, 8
	FW	Control Pta. del Este Pref.	156.75 M	F3		
Rio Branco Radio	FC	CWC 36	2721.5	A3J	0933 – 1703 – 2333	1, 2, 3, 4, 5, 6, 7
			156.75 M	F3		
Salto Radio	FW	CWC 37	156.75 M	F3	0133 – 1133 – 1903	1, 2, 3, 4, 6, 7

Key:

Key to numerical references used in the nomenclature of radiodetermination stations and stations which offer special services.

METEOROLOGICAL BULLETIN
(Forecast of weather within the 4 Maritime Areas)

1. SYNOPIS: Inform in clear Spanish text for the 4 Maritime Areas No. 1, 2, 3 and 4 stating:
   (a) General
      1. Name of Station
      2. Validity
      3. Significant Phenomena
      4. Weather Notices
      5. Synoptic Situation
   (b) By Area
      1. General Conditions (Phenomena or general character of the current weather)
      2. Winds (direction and speed)
      3. Sky
      4. Horizontal visibility
      5. Air temperature
      6. Strength of the sea
      7. Wave height
   (c) Reading of radio messages for Coastal Traffic and Radio Messages for local purposes (Notices to Mariners) per area.
2. Messages concerning water height.
3. Offer on request of a vessel, a weather forecast, height of water and local radio messages (Messages to Mariners).
4. The station transmits at any time meteorological safety messages preceded by the Safety signal (SECURITE) and repeat them after periods of silence and during normal transmission periods.
5. Meteorological bulletins, radio notices for coastal traffic (Notices to Mariners) and local Radio notices (Notices to Mariners), announcing the fact previously on frequency 2182 kHz, 4125 kHz Simplex and 4419.4 kHz (C.421) Duplex.
6. Meteorological bulletins, radio messages for coastal traffic (Notices to Mariners) and local Radio messages (Notices to Mariners) announcing the fact previously on Channel 16 (156.800 kHz).
7. For services being offered, listening and working frequencies see Nomenclature of Coastal Stations.
8. Radiogoniometric station on VHF.
   (Station of Radiodetermination which uses the receipt of radioelectric waves to determine the direction of a station or of an object).

COLONIA: 34.28 S. 57.51 W. (See Plan Book)

LOCATION: Lat. 34° 28′ 28″ S., Long. 57° 50′ 38″ W.

On the River Plate 92 miles from Montevideo and 27 miles in a straight line E.N.E. of the City of Buenos Aires.

DOCUMENTS: Vessels entering the port must provide the following: Machinery, Hull, Safety, Freeboard and Derat Certificates, Stores List, Crew List, List of Passengers or Negative, Cargo Manifest, Declaration of Transport of inflammables or explosives, or where not carried a certificate to that effect.

PILOTAGE: No port or river Pilot is required for coasting vessels.

ANCHORAGES: In the Roads with a depth of 10 ft.

In the foreport with a depth of 8 ft., for shallow draft vessels.

RESTRICTIONS: The port will be closed for all vessels when the wind intensity is 70 knots or more. Also all operations are prohibited in the port shelter area.

The port will be closed for vessels of all kinds when the visibility is 500 m. or less due to fog, squalls, etc. Under these conditions vessels are prohibited to carry out any kind of operation within the shelter area.

HEALTH: Inspection is by a Health Doctor, and is carried out jointly with Immigration, Police, Customs, and Naval Prefecture officials.

RADIO: VHF equipment. Operates permanently on Channel 16.

VHF: All communications are carried out by VHF, the call sign being CWC 23 and that for working Control Colonia Prefecture. Channels used are 6, 8, 9, 11, 12, 14, 15, 16, 25, 26, 68, 69.

The Control Centre listens out permanently on Channel 16, whose frequency is 156.800 MHz.

RADAR: Range 16 miles. Does not give service to vessels.

TUGS: There is no tug service.

BERTHING: Union Quay: Running East to West with a length of 178 m., equipped at its two ends with ramps for landing and shipment of cars and lorries.

Coastal Quay: Running North to South, with a length of 111 m.

Ultramar Quay: Running North to South, with a length of 142 m.

These quays are provided with water hydrants and electricity supply points, the Coastal Quay also having a fuel point for operation of tankers.

Warehouses: For general cargo, the National Port Administration has warehouses within the port area.

CRANES: On the Overseas Quay there are two mobile cranes on rails, with 3 tons and 5 tons capacity.

STEVEDORES: There is no permanent service of stevedores, and such requirements must be applied for in advance by the ships' agents at Nueva Palmira.

MEDICAL: 300 m. from the port is the local hospital with a First Aid room and ambulances.

FRESH WATER: Supplied by the National Port Administration.

FUEL: Supplied by road tankers.

FIRE PRECAUTIONS: There is a fire fighting pump with a pressure of 8 kg./sq.m.

TANKERS: Operate at the Coasting Quay with a watchman and a fireman on board.

CONSULS: Argentina and Italy.

REPAIRS: Not possible.

GANGWAY/DECK WATCHMEN: There is a watchmen service administered by the Prefecture of Colonia.

CUSTOMS ALLOWANCES: Tourists from neighbouring countries may bring in: 5 kilos of food, 1 carton of cigarettes, 1 litre of alcoholic drink.

No products derived from meat can be brought into the country (cold meats, susages, etc.), nor any plants or seeds.

REPATRIATION: Only to Buenos Aires.

AIRPORT: Located on Highway 1 linking Colonia with Montevideo, 7 km. from Colonia.

TIME: Local time is GMT minus 3 hours.

HOLIDAYS: 1st and 6th January, Carnival, Touriso, 19th April, 1st May, 18th May, 19th June, 18th July, 25th August, 12th October, 2nd November, 25th December.

POLICE/AMBULANCE/FIRE: Police Tel: 2962; Hospital Tel: 2994; Fire Brigade Tel: 2577; Prefecture 2020.

TELEPHONES: No arrangements for connecting the telephones on board vessels, but there are telephone boxes for communications within and outside the country.

SERVICES: Bureau de Change via a branch of the Banco Republica. There is a bus service with international service, working in conjunction with arriving and departing vessels, connecting Colonia with the rest of the country.

Post Office: 200 m. from the port.

Mooring Gangs: Provided at the request of the ships' Agents by the National Port Administration.

AUTHORITY: Prefectura del Puerto de Colonia.

FRAY BENTOS: 33.06 S. 58.18 W. (See Plan Book)

LOCATION: Km. 95 River Uruguay. On the right bank of the River Uruguay from seaward 213 miles by river from Montevideo or 145 miles from Buenos Aires.

PORT LIMITS: A vessel is considered to have arrived when she leaves the channel and goes to the berth.

DOCUMENTS: Same requirements as for the port of Montevideo.

PILOTAGE: Obligatory, except where bilateral national agreements exist concerning navigation of the River Uruguay, and the Pilot must be taken on board in Montevideo.

ANCHORAGE: Between the channel and the port.

RESTRICTIONS: When the port is closed due to bad weather, also the draft depends upon the depths of water in the "El Marques" and "Punta Caballo" passages.

MAX. SIZE: Controlled only by the draft of the vessel and the length of the berth. Max. draft 26 ft. (FW), water depends upon the river conditions.

HEALTH: Same requirements as for Montevideo.

RADIO: The call sign is CWC 25 "Control Fray Bentos Prefectura".

VHF: Port works on the following frequencies:

a) Channel 16: frequency 156.800 MHz; Usage: Calling-up and safety.
b) Channel 9: frequency 156.450 MHz; Usage: Port operations.
c) Channel 11: frequency 156.550 MHz; Usage: Central Control broadcasts in fulfilment of objectives (Safety PNN).
d) Channel 13: Frequency: 156.650 MHz; Usage: Same as Channel 11.
e) Channel 15: frequency: 156.750 MHz; Usage: Meteorological bulletins and Notices to Mariners.
f) Channel 17: Usage: P.N.N.: Maritime Safety.
g) Channel 68: Usage: P.N.N.: Maritime Safety.

Furthermore, on entering the area between Km. 6 and Km. 165 of the River Uruguay, the vessel must communicate to the Fray Bentos Prefecture Control:

a) flag.
b) name.
c) destination.
d) position.
e) course and speed.
f) max. draft.

And on leaving this area:

a) accident or fire occurred on board the vessel.
b) whether vessel has given assistance to another vessel which is damaged or in difficulties.
c) whether she has sighted any dangerous object to navigation and which is not marked.
d) any serious reduction in visibility.

RADAR: None.

TUGS: None.

BERTHING: There are two types, quays for deep-sea vessels and for coasters, both being of cement and wood.

Type	Deep-sea	Coasting
Length	125 m.	250 m.
Direction	East – West	N.W. – S.E.
Average depth	7 m. – 8 m.	5 m. – 6 m.
Signalling lights	Green light – West side Red light – East side	
Fresh water	2 connections	3 connections
Electricity	1 point A.C., 3-phase 220 V. South side quay in shed 3 points 220 V. D.C. (cranes)	3 points 220 V. D.C. (cranes)

Also there is the Anglo Quay with a maximum depth of 26 ft., normally used for meat.

CRANES: There are in the port 3 cranes of 3 tons each and 1 of 5 tons which can move about the port. It is possible to use ship's derricks and shore cranes at the same time.

BULK HANDLING FACILITIES: There is a silo with a conveyor belt, having a storage capacity currently of 14,500 tons, and the conveyor has a loading or discharge rate of 100 t.p.h. See "Developments".

SPECIALISED CARGO HANDLING FACILITIES: None.

BRIDGES: None.

STEVEDORES: Can be requested in advance or when the vessel arrives in port. The work is controlled by the following time table: order 0630 hrs., commence work 0700 hrs.; order 1230 hrs., commence work 1300 hrs.; order 1830 hrs., commence work 1900 hrs.

MEDICAL: Doctors and hospital facilities available.

DENSITY: 1000.

FRESH WATER: On the Deep Sea Berth there are 2 connections and on the Coasting Quay there are 3 connections controlled by the ANP. Cost of U.S. $1.20 per 1,000 litres.

FUEL: Not available.

FIRE PRECAUTIONS: Fire Brigade present.

CONSULS: Argentina, others at Montevideo.

REPAIRS: Only minor repairs can be carried out.

DRY DOCKS: None.

SURVEYORS: None.

GANGWAY/DECK WATCHMEN: Same as for the port of Montevideo.

HATCHES: If steel, handled by vessel's crew. If wooden, handled by stevedores.

REPATRIATION: See "Montevideo".

AIRPORT: None, only Montevideo.

TIME: See "Montevideo".

HOLIDAYS: The following dates will be used as national holidays of a traditional character:

1st January; 6th January; Monday and Tuesday of Carnival Week; the 6th week following Carnival, which will be called Tourism Week; 1st May; 2nd November; 25th December.

The following dates will be celebrated as national holidays as they are linked with patriotic exaltation and commemoration.

19th April; 18th May; 19th June; 18th July; 25th August; 12th October.

With regard to the holidays of 1st May, 19th April, 18th May, and 12th October, these will follow the undermentioned plan:

(a) If they occur on Saturday, Sunday or Monday, they will be observed on those dates.

(b) If they occur on Tuesday or Wednesday they will be transferred to the immediately preceding Monday.

(c) If they fall on Thursday or Friday, they will be transferred to the Monday immediately following.

POLICE/AMBULANCE/FIRE: *National Prefecture:* Tel: 321. *Police:* Tel: 201. *Fire Brigade:* Tel. 35. *Hospital:* Tel: 533.

TELEPHONES: Not possible.

SERVICES: None.

SHORE LEAVE: See "Montevideo".

IDENTIFICATION: Seaman's Book sufficient.

DELAYS: Normally there is no delay.

DEVELOPMENTS: Increase in the storage capacity of the silos of the Ministry of Agriculture and Fisheries by 5,500 tons, and increase of the capacity of the conveyor belt to 400 t.p.h.

AUTHORITY: National Port Administration, Herrera and 25 de Mayo, Fray Bentos, Uruguay. *Tel:* 284.

JOSE IGNACIO: 34.54 S. 54.43 W.

SBM: Position Lat. 34° 53′ 43″ S., Long. 54° 42′ 45″ W.

PILOTAGE: Compulsory. Pilot boards at the Fairway Buoy in position Lat. 34° 57′ 14″ S., Long. 54° 40′ 06″ W.

RADIO/VHF: Call sign "Control Punta del Este", Continuous watch on VHF Channel 16. Intership working on Channel 6.

GENERAL: ANCAP have installed a Single Buoy Mooring, 3,600 m. from the shore in 16.8 m. (55 ft.) depth of water. Vessels of 150,000 d.w.t. can be handled and the average rate of discharge of crude oil is 5,000 cu.m./hr.

The shore terminal receives, stores and pumps the crude to the refinery at Montevideo.

A River Pilot must be ordered from Montevideo for securing to the buoy, and he remains aboard until the vessel sails.

Five days before arrival, Agents must request Free Pratique from the Health Authorities in Montevideo, and the Customs, Prefecture and Immigration Officials, from Punta del Este.

AUTHORITY: Prefectura del Puerto de Maldonado, Calle 8 y 13, Punta del Este (Maldonado), Uruguay. *Tel:* 41884, 41967. *Contact:* Port Captain.

MONTEVIDEO: 34.55 S. 56.13 W. (See Plan Book)

Also see beginning of Uruguay section.

APPROACHES: The Roads of Montevideo consist of the Outer Roads situated to the South of the bay and Inner Roads situated outside the Western breakwater.

Both anchorages are very exposed and vessels are recommended to enter the anteport.

The entrance channel has 30 ft.; the channel to Ancap's wharf (La Teja) 30 ft. 6 in. Basins 1 and 2 have a depth of 28 ft. to 31 ft., and the River Traffic Basin, 15 ft. These depths depend on dredging being maintained, but even so vessels often "drag" when on the higher marks; the bottom is fine soft silt.

DOCUMENTS:

Health:

Maritime Declaration of Health.
1 List of Passengers Disembarking.
1 List of Crew Members.
1 Derat Certificate.
1 List of Crew International Vaccinations.

Immigration:

1 Copy of Crew List.
2 Lists of Passengers Disembarking.
2 Copies of List of Passengers in Transit.

Police:

2 Copies of List of Passengers Disembarking.
1 Copy of Crew List.
2 Lists of Passengers in Transit.

Prefecture:

2 Lists of Passengers in Transit.
1 Visaed Copy of List of Passengers with Port of Origin.
2 Non-visaed Copies of List of Passengers.
1 Passenger List – or Negative – from all ports visited.
1 Non-visaed Crew List.
1 Cargo Manifest for Montevideo.
1 Manifest for Cargo in Transit.
1 List of Inflammable Cargo or Hazardous Goods – visaed or straight.
1 List of Vessel's Data.

Customs:

1 Visaed Manifest
1 Copy of Ballast loaded at each port.
1 Negative discharge statement for each port.

If there is no Consul in previous ports, the last port where there was one.

2 Stores Lists.
2 Lists of Cigarettes and Whisky.
2 Lists of Personal Effects.
3 Lists of Bunkers on Arrival.
1 copy of Passenger List for those disembarking, or negative, and their baggage in the same list (drawn up and signed by the passengers themselves).

Agents:

2 Lists of Passengers Disembarking.
2 Lists of Passengers in Transit.
2 Crew Lists.
2 Stores Lists.
2 Manifests, including Inflammable Cargo.
2 Cargo Plans.

NOTE: The manifest must have a special section with all effects in transit or otherwise, for the free zones of Colonia and Nueva Palmira.

Crew Lists, amended Crew Lists and Inflammable Cargo Lists must be visaed at ports of sailing or loading.

ANTEPORT: The Anteport is to the North of the entrance, between the breakwaters, and has 30 ft. – 31 ft. Sufficient room for 10 vessels, depending on size.

PORT: The port is formed by the North side of the Montevideo Peninsula and the "Dique de Cintura", a breakwater running parallel to the coast, about 840 m. distant.

It consists of 3 basins, 2 of which are for ocean-going vessels and 1 for river traffic.

Basins 1 and 2 have a depth of 30 ft., and the basin for river traffic 15 ft.

PILOTAGE:

1. The Pilot must be requested via the Agent 24 hours in advance, giving ETA in the roads by W/T (Cerrito Radio – CWA on frequency of 500 kHz). It is not possible to elect a Pilot for the area of the port of Montevideo, except where the vessel exceeds 10,000 tons.
2. On entering into the system of the Control Centres, communication must be made with them, giving the information laid out in the "Basic Rules of the System of Control and Information of Maritime Movements". See "Control" in General Section before first Uruguay port.
3. By VHF on the Channels stipulated in "Basic Rules of the System of Control and Information of Maritime Movements".
4. Channel 11 must be used to communicate with the pilot vessel. The vessel is a powered craft painted reddish orange, with white deckhouse with the inscription "Practicos". During daylight hours, it flies the pilot flag, HOTEL (white and red), and at night it is necessary to have white and red lights indicating "I have a Pilot on board". Where a vessel does not have VHF, light signals must be used to communicate with the pilots' launch.

Should this launch be out of service, Pilots are transported by tugs of A.N.P. and/or REYLA.

5. The Pilot will await the vessel near the Axis Buoy located at Lat. 35° 00′ S., Long. 56° 14′ W.
6. In the event of bad weather the vessel must anchor near the Axis Buoy.
7. To take the Pilot on board, the gangway must be positioned on the side which gives most advantage *vis-a-vis* wind and sea.

ANCHORAGE: Vessels may anchor near the Axis Buoy with a draft of 30 ft. at zero tide. The sheltered anchorage is located in the foreport inside the shelter of the breakwaters. To gain access to it, the Pilot must be on board and the permitted draft will be that specified previously.

RESTRICTIONS:

1. The port is closed when winds are up to 70 km. per hour. However, up to 80 km. per hour the Prefecture may authorise manoeuvres. The port is also closed when there is fog, channel obstruction or any other problem which may make manoeuvring difficult.
2. Vessels will not be handled when there is serious damage to engines, hull or rudder.

MAX. SIZE:

1. The largest vessels operating in the port, are of the LASH type, with dimensions approx. as follows:

Overall length 272.22 m.; Beam 30.48 m.; Draft 28 ft.

2. Tankers which berth at the inflammable dock A.N.C.A.P.:

Overall length: 241.50 m.; Beam 32.33 m.; Draft 28 ft.

With regard to the dimensions of the vessel, the state of the tide and time will be considered, the Pilot will advise the Master of the best measures to adopt.

Report: March 1982.

Max. draft to reach Montevideo safely is 31 ft.

HEALTH: The procedure is as follows:

1. Request the Owner or Agent to obtain Free Pratique which will be done via Cerrito Radio Station – call sign CWA.

In the event of there being any suspected illness or fever on board, the vessel must anchor in the roads to await instructions, at the same time communicating this to her Agent/Owner.

RADIO: Cerrito Radio Station CWA operating on 500 kHz, 421.5 kHz, 4346 kHz, 6434.5 kHz, 8602 kHz, 12750 kHz, 17208.8 kHz and 22563 kHz.

Timetable for broadcasting information to Mariners:

	Frequency	*Times*
Cerrito	4,346 kHz	1100 hrs.
CWA	8,602 kHz	1600 hrs.
	12,750 kHz	2100 hrs.
	16,871 kHz	
Sodre (CX 6)	650 kHz	0900 hrs.
Coastal Station		
Punta Carreta	2,768 kHz	1103 hrs.
CWD		1603 hrs.
		2103 hrs.

RADAR: Port Radar Control available. Additional coastal radar stations to be installed.

VHF: The Control Centre has a range of 60 miles on VHF. It also effects communications by "Phone-Patch" between the vessel and or Agent or Owner; this, from their office or private address.

All the operations of the Centre of Control and Information of Marine Movement of the Port of Montevideo are set out in the booklet "Basic Rules of the System of Control and Information of Maritime Movements".

On entering waters of port jurisdiction, communication must be made with La Paloma Control, then Punta del Este Control and the Centre of Maritime Control of the National Naval Prefecture.

TUGS: Tugs come alongside in the foreport. Lines are to be supplied by the vessel, and this is not optional. In the event that the vessel has no tug cable, this will be supplied by the tug at a cost of approx. US $47.

BERTHING: The berth will be allocated by A.N.P. and is to be requested by the Agent. Vessels may berth or unberth at any time of the day or night, except when the port is closed or due to lack of available berths. Generally, there are fenders placed along the berths. In the event that the vessel requires this service, it must be requested in advance via the Agent.

When berthing or unberthing, the gangway must not be in position due to the proximity of the cranes.

Anteport: 7 anchorage berths in 28 ft. depth. However in practice there is rarely room for more than 5 vessels to anchor. Basin No. 1: 7 berths, 28 ft. to 33 ft. depth alongside. Basin No. 2: 4 berths, 28 ft. to 33 ft. depth alongside. La Teja: Ancap basin with berths for 2 tankers 30 ft. depth in basin and entrance channel.

Berths are allotted by the Port Authorities in the order of arrival of the vessels and according to their category, as follows:

1. Mail vessels.
2. Regular Line vessels carrying immigrants.
3. Cargo vessels.
4. Sailing vessels.

The Authorities allocate the deposit at which vessel must discharge or load.

Port Authorities give preference at Deposit No. 10 to ships operating with refrigerated cargo from this Deposit; and at Deposit No. 11 (Florida Wharf) to tankers discharging to the pipe-line situated there. Conditional that they vacate the berth within 2 hours' notice, to permit berthing a preference vessel, other ships may operate at either berth.

Muelle de Escala – On the pier head, formed by the Southern side of the River Traffic Basin, and running Westwards, a quay has been built, known as "Muelle de Escala", 288 m. long, originally constructed for berthing passenger liners and war vessels, but now only used by cargo vessels, loading and discharging, when there is port congestion. There are no shore cranes and work is very slow, nor are there shore deposits. A fixed heavy lift boom capacity 200 tons is placed at the East end.

The berth is very exposed to wind and swell, and Masters are recommended to take every precaution to ensure their vessels are strongly moored and a lookout kept for changes of weather which, locally, are very sudden.

The depth of water alongside depends on dredging, but generally is over 28 ft.

Also see "Developments".

River Traffic Basin – This basin is situated on the Western side of Pier "A". It is 400 m. long and has a passenger landing station on one side. The opposite side of the basin is used for coastal vessels, but mainly by the Navy.

2 warehouses, called Warehouse "A" and Warehouse "B", have been built on the East side of this basin and are serviced by 3 electric cranes. In addition, there are on the quay a 1.5 and 6 ton steam crane, which are employed when necessary.

These berths can only be used by light-drafted vessels, as depth of water is around 16 ft.

Basin No. 1 – This basin is situated between piers "A" and "B". Its entrance between the "Dique de Cintura" and the pier head "A" is about 150 m. wide. It encircles a total mooring space of 1,093 linear metres and 7 vessels can comfortably berth along the quay walls.

Pier "A" is 501 m. long on the West side; 306 m. on the East side, and 50 m. wide at the Northern pier-head.

On this pier 2 brick and concrete warehouses, Nos. 1 and 2, have been constructed, consisting of a ground floor, 3 storeys and a basement.

On the City side of Basin 1, there are 3 brick warehouses, numbered 3, 4 and 5, consisting of a ground floor of between 17,800 cu.m. and 19,600 cu.m. capacity.

On the Western side of Pier "B" facing Basin No. 1, there are 2 brick and concrete warehouses, Nos. 6 and 7, with a ground floor and 1 storey having a capacity of 30,174 and 33,140 cu. m. respectively.

In Basin No. 1, berths Nos. 1, 2, 3, 4 and 5 are generally used for the discharge and/or loading of liners running to timetable.

Depths alongside vary, as it depends upon dredging, but generally are 26 ft. to 30 ft.

Basin No. 2 – This basin is situated between Pier "B" and the foot of Florida Street. The entrance to this basin is also about 150 m. wide. It has a total mooring space of 722 m. and it can accommodate 4 vessels.

Pier "B" is 294 m. long on the Western side, 328 m. long on the Eastern side, 148 m. at the Northern pier-head and 13 m. wide on the bend at the Western corner of the pier-head.

At the Northern end of pier-head "B", livestock is embarked. This berth is also used for general cargo operations in times of congestion. Moorings must be strong and carefully watched as the berth is very exposed to wash of passing vessels.

There are 2 warehouses on this pier, numbered 8 and 9, facing Basin No. 2, built of brick and concrete, with a ground floor and 1 storey and with a capacity of 33,320 cu.m. each. On the city side, there are 2 warehouses, built of brick, numbered 10 and 11, consisting of a ground floor with a capacity of 15,362 cu.m. each. Warehouse No. 10 carries an additional storey, and is being used for refrigerated cargo. Vegetable oils can also be loaded at Warehouse 11 berth ex-pipe-line from 4 storage tanks each of a capacity around 1,250 tons, in the vicinity.

Depths of water alongside vary, depending upon intensity of dredging but are generally 28 ft. to 30 ft.

Coasting Quay Wall – From Florida Street to Mole F, which is the end of the Port, and over a distance of 1,900 m., there is a quay used for coastal craft, and on part of which a fish-receiving and industrialising plant is being opened; depth in this zone is 15 ft.

A floating dock is also anchored in the N.E. part of this section.

Basin For Inflammables "La Teja". (Also see "Tankers".)

On the North side of the Bay, the National Administration of Alcohol, Cement and Fuels, known as A.N.C.A.P., has a basin with concrete walls for the discharge of tankers arriving with oil to their consignment. This basin is known as the "Darsena de Inflamables", and has 1 berth for tankers on the North side in 30 ft. 6 in. and for liquid gas discharge on the Southern side, max. draft 22 ft., while on the West or land side there is a berth for coastal vessels. Width of the basin here is 147 m., which is the same as the entrance, while the South berth is 248.75 m. long. On the North berth the jetty protrudes 34 m., and is 96 m. long.

Vessels berth bows to shore, and on leaving turn immediately outside the basin, if draft is less than 22 ft., otherwise they must reverse back down the narrow access channel.

The North berth has separate lines for Crude, 10 in. and 12 in. maximum pressure 105 lbs. Fuel oil, 8 in. and 10 in. with a pumping rate of 300 t.p.h. at temperatures between 40°C and 70°C. Diesel/Gas Oil/Kerosene 6 in. connections and pumping rate of 300 t.p.h. Naptha 8 in. Lube oils 6 in. lines, 150 t.p.h. and a line for Alcohol 6 in. There is no line for Gas. There are 3×5 ton electric cranes and 1×12 ton diesel crane. Coal and Cement are also discharged at this berth, the coal to Decauville cars and the Cement to trucks, handling 750 tons per 8 hour day, with 5 gangs.

At the South berth the oil lines are identical, and there is also a 6 in. connection for loading or discharging Super Gas, at 200 t.p.h. There are no cranes at this berth.

The Western berth has the same installations except for Super Gas and Alcohol.

There are 3 in. water lines at each berth, and use of 2 tugs is essential for berthing or unberthing. At the North berth, vessels fully loaded often lie up to 15 m. out from the quay, owing to accumulation of mud, and will gradually close in as the vessel lightens. Access gangways are placed by the Port.

Railway Connections – Basins 1 and 2, River Traffic Basin and also Deposits "A" and "B" have railway lines on all sides, belonging to the Port Administration, which are connected with the main lines of the Uruguayan State Railways.

The Port Administration has 2 electric locomotives used exclusively in the port.

Cranes – The Port Administration has 1 heavy-lift floating crane of 80,000 kilos, a mobile crane of 20,000 kilos, also 46 movable electric cranes of 5,000 kilos each; 5 movable electric cranes of 1,500 kilos each; 1 fixed electric crane of 4,000 kilos; 33 of the aforementioned 5,000 kilos cranes, are placed alongside the quay walls for vessel's operations.

There are also 24 electric trolleys of 1,500 kilos, and one of 1,000 kilos. There is a fixed crane for 200 tons on Muelle Escala.

Fiscal Lorries – The Port Administration has purchased special lorries and 12 auto cranes for receiving cargo, as the railway wagons available are not sufficient to carry all the cargo that is at present being handled at this port.

Loading Operations – Loading is effected from carts, lorries and/or wagons and the cargo is hoisted on board with the cranes. Cargo is also loaded from lighters.

Grain Loading – There are 2 Mobile grain vacuvators, each of which can load bulk grain at around 35/50 t.p.h, also 10 smaller machines that can each load around 20 t.p.h.

Fumigation – Montevideo is the only port in Uruguay at which vessels can fumigate, using the Cyanide method. The tariff is per cubic metre fumigated over a basic charge which varies according to n.r.t. There are surcharges for overtime.

Disinfection of Mail Bags – To avoid delay through disinfection mail bags can be fumigated on board in a 10% formalin solution and kept in a closed space for 4 hours before vessel gets into port. The closed space will be opened in the presence of a Health Officer who will verify the use of formalin. When in doubt, fumigation will be carried out again and exposed for 2 hours.

Height of Quay above water – Tide being very small, the height of quay above water only varies from 8 ft. – 10 ft. at LW to 10 ft. – 12 ft. at HW. Wind influence is felt even in the bay, as a South wind will raise water as much as 5 ft., or a Northerly wind reduce it 2 ft. or 3 ft.

PORT EQUIPMENT: In process of supply or installed.

Fork-lift trucks – 3 of 5 tons and 1 of 6 tons, to lift to 3 m.
Container lifter – 1 to lift to 22.4 short tons, size 8 ft.×8 ft.×20 ft.
Fork extensions for fork-lift trucks in use – 25 pairs.
Mobile cranes (diesel) – 2 capacity 7.5 tons with telescopic arm up to 10 m., turning through 360°; 8, capacity 7.5 tons, fixed arm; 1 capacity 10 tons with telescopic arm up to 12 m., 360°; 1 truck-mounted crane no less than 60 tons, with arm not less than 21.5 m.
18 electric cranes (installed) × 6 tons capacity.
2 mobile cranes (installed) × 20 tons for containers.
Tender out for 250 ton capacity floating crane.
Pallets – material for making 15,000 pallets, in 2 sizes.
Slings for these pallets, also for heavy-lift cargo for use with the mobile cranes.
Lighters – 7 new lighters, ranging from 100 tons to 400 tons.
2 container cranes "Bellotti" 40 – 60 tons each (installed).
2 container cranes "Kalmar" 24 tons each, with spreader (installed).
1 container crane "Kalmar" 24 tons, with lifter (installed).

STEVEDORES: Working hours: 1st shift, 0700 to 1300 hrs.; 2nd shift, 1300 to 1900 hrs.; 3rd shift, 1900 to 0100 hrs.; 4th shift, 0100 to 0700 hrs.

Normal capacity per gang per hour: *(a)* Rice – about 80/90 tons per gang/hour. *(b)* Meat – about 60/100 tons per gang/hour.

Overtime is compulsory if port is congested.

Lavatory Conveniences for Shore Labour – Each vessel must furnish conveniences for all shore labour employed on board. Work has been stopped until such conveniences are installed. It is advisable, therefore, for vessels calling at Montevideo to be equipped with 2 spare lavatories, 1 for tally clerks and 1 for stevedores, etc.

DENSITY: This varies according to wind and tide (1006 – 1002). The degree of salinity (max. 10 gm. per litre) is broadcast daily in the weather reports by radio, and varies from fresh to brackish to sea water. Steady South winds give the highest degree of salinity.

FUEL: This can be taken on board whilst anchored in the foreport via two barges, one of 595 tons delivering at the rate of 250 to 350 cu.m./hr., the other of 310 tons at the rate of 200 to 250 cu.m./hr.

Also available from the Uruguayan tanker "Valiente" (capacity 1,337 cu.m. of fuel, rate of 700 cu.m./hr.) or 196 tons of water at the rate of 70 cu.m./hr. This service can be effected outside the port.

A.N.C.A.P. Information: All grades subject to confirmation, the request being made via the Agent 15 days in advance.

TANKERS: Dirty ballast can be discharged depending on whether or not there is a berth at La Teja, Inflammable Materials Dock. A.N.C.A.P. have the necessary reducers for any type of operation.

Diameter of pipes: Crude – 12 in.
Fuel oil – 8 in.
Dirty ballast – 8 in.
Berth depths: North quay – 29.6 ft.
South quay – 22 ft.
West quay – 14 ft.

GANGWAY/DECK WATCHMEN: Shore watchmen are compulsory. Arranged by Agents. 1 required on deck and 1 for each gangway. Vessels carrying dangerous cargo must also employ a guard of the Prefectura.

Vessels calling for supplies only, for orders, in distress or to land sick crew members or to enter dry dock, need not employ Watchmen. Repairs afloat require a watchman, if they do not carry out commercial operations.

Shifts are of 8 hours, commencing at 0700 hrs. Vessels under repair, and those at ANCAP moles may fix 12-hour shifts, paying a shift and a half.

If special watchmen are required for goods or working equipment, application must also be made to the Union.

If watchmen are needed in the holds, same applies.

Regulations also require a watchmen in the holds wherever the ship has a crew member, cadet or officer permanently on watch to prevent pilferage. However, where ship's personnel are in the hold to watch the stowage of the cargo, no extra watchman is required. Masters should therefore, advise Agents if they intend to place crew members permanently in the holds during discharge, so that Agents can advise the Association before they make their claims.

Care must also be taken on arrival, since the watchman is on duty from 0700 hrs. on, whereas it may be necessary to place the gangway safety net, etc., before that time, so that Pilot may disembark.

Only those involved in this operation should go ashore. The Receiving Commission may ask for the gangway to be opened before 0700 hrs., which is in order, but no one else should use the gangway to avoid claims from the Union.

Vessels lying in the anteport must provide launches for the transport of watchmen employed.

IDENTIFICATION CARDS: The prefecture issues identity cards. Crew not allowed ashore without card.

MEDICAL: Any urgent case must be advised in advance. In normal cases, the Health Service doctor in the port will visit. For this purpose there are Clinics and Hospitals with optional assistance. Vaccination certificates are issued by the Port Health Service. There are also private health and medical services which give on-board treatment.

FRESH WATER: Fresh water is supplied by the Port Authorities at all quay berths. Request must be made through the Agents, vessels supplying their own hoses where possible. It is important that the water meter should be read together with the Port official both at connecting and disconnecting to verify the exact quantity. The cost of water is high. Loading rate 20 cu.m./hr. Water also available by barge (capacity 170 tons) loading rate 18 t.p.h. – 20 t.p.h.

CONSULS:	*Address*	*Telephone No.*
Argentina	Rio Branco 1412	900897
Austria	Sarandi 693	914000
Belgium	L. Patria 2880	701265/70
Bolivia	Rio Branco 1320	912394
Brazil	18 de Julio 984	911145/46
Czechoslovakia	L.B. Cavia 2996	787808
Chile	Canelones 1165	910696
Colombia	Soriano 791	902606
Denmark	Rio Branco 1389	915238
Ecuador	21 de Setiembre 2816	700727
Egypt	A. D. Costa 3469	799904
El Salvador	Piedras 434	900852
Finland	Solis 1533	914386
France	Uruguay 853	912791
W. Germany	La Cumparsita	900841/904958
E. Germany	Echavarria 3452	788010
Great Britain	Cerrito 420	912501
Greece	Misiones 1481	912148
Guatemala	Fco. Soca 1379	782104
Honduras	Misiones	900894
Hungary	P. de Pena 2469	786173
Iceland	J. Benito Blanco 715	702565
Israel	Bvar. Artigas	404164/66
Italy	J. Benito Lamas 2859	785316
Japan	Rincon 487	913936
Korea	Avda Brazil 2385	787679
Lebanon	Fco. Solano Antuna 1882	701834
Mexico	Juncal 1305	916890
Netherlands	Leyenda Patria 2880	701631
Norway	Colon 1580	987121
Panama	J. Benito Blanco 715	703620
Paraguay	Rio Negro 1370	984775
Peru	Juan Gomez 1492	984743
Portugal	P. de Pena 2486	781915
South Africa	Rincon 487	986956
Spain	Libertad 2750	780048
Sweden	Avda. Brasil 3079	780088
Taiwan	Fco. Soca 1128	790577/790312
U.S.A.	H. A. Santos 808	409126/409051
Venezuela	Avda. Artigas 1253	493005
Yugoslavia	Avda. Espana 2697	788129

REPAIRS: All kinds of repairs can be effected, either afloat or in drydock.

DRY DOCKS:

Nacional	Length between perpendiculars	141.30 m.
	Width	28.50 m.
	Height	10.46 m.
	Depth of water	14.11 ft. at zero
Tsakos	Lifting power	12,000 tons
	Length	165.99 m.
	Width	28.50 m.
	Height	4.41 m.
	Max. height of stocks	23.16 m.
A.N.P.	Length	67.06 m.
	Width	13.72 m.
	Height of water at the stocks	4.75 m.
Maua	Length	79.25 m.
	Length on stocks	74.42 m.
	Depth of water	12 ft.
	Width of pontoon	15.25 m.
	Capacity of operation	2,000 tons

REPATRIATION: There are facilities for exchanging crews.
AIRPORT: Located 30 minutes away by car. There are various regular services to all parts of the world.
TIME: GMT minus 3 hours. (However changes are possible).
HOLIDAYS: 1st January (New Year); 6th January (Epiphany); 3 days in February (Carnival); 7 days in March or April (Tourist Week); 1st May (Labour Day); 18th May (Battle of the Stones); 19th June (Artigas' Birthday); 18th July (Swearing of the Constitution); 25th August (Declaration of Independence); 12th October (Day of the Race); 2nd November (All Souls'); 25th December (Christmas Day).

On these days, work will always proceed when the Agent or Owner requires it or also if the Port Authority requires it, should there be a number of vessels anchored in the Roads awaiting a berth.

POLICE/AMBULANCE/FIRE: Port Police (Immigration): 95.21.51; Fire Brigade: 91.51.51 to 56 – extensions 139/337. Ambulance: 91.51.51 – extensions 272/382.

Prefecture of the Port of Montevideo: 95.21.27 – 95.21.77, 95.54.05, 95.52.01, 95.22.27, 95.24.27 ext. 07, 91.51.51 ext. 199, 91.93.03, 91.53.71 ext. 199.

TELEPHONES: There are services on all quays. Telephones can be requested by the Agent from the Port Authority.
SHORE LEAVE: Allowed.

DEVELOPMENTS: A container park and fish quay will be built alongside the Eastern Quay and in the Mantaras Zone respectively.

A battery of silos will be constructed at C.M.B. (between Warehouses 7 and 8) which will facilitate the loading and unloading of grain. Sheds 10 and 11 will be equipped with modern refrigeration machinery.

There is a large plan for improvements in equipment, tugs, dredging, etc., for which the A.N.P. (Administracion Nacional de Puertos) (National Port Administration) has received a loan granted by the World Bank.

Report: 1981.

The National Port Administration (Administracion Nacional de Puertos) is building a containers terminal with an area of 7 hectares close to the Muelle de Escala.

This berth is at present dredged to 10 m. Its length will be increased from the present 288 m. to 400 m. and the draft increased to 12 m.

The storage capacity will be a maximum 5,000 containers.

The berth will be equipped with 2 container cranes of 40 – 45 tons. Also all necessary equipment ashore for handling containers will be available.

A fishing berth of 320 m. has also been built with 6 m. draft.

SHIPMASTER'S REPORT: July 1983.
Documents: As per "Guide to Port Entry".
Pilotage: Compulsory. Pilot boards at Sea Buoy. 24 hours' notice required.
Anchorages: As per B.A. Chart 2001.
Restrictions: Max. draft 28 ft. Possible to depart/enter 24 hours a day.
Max. Size: Largest vessels using the port are LASH vessels, length 272 m., beam 30 m. – 40 m., max. draft 28 ft.
Health: Inform Agents of vessel's state of health and request Free Pratique.
Radio: Cerrito Radio Station.
VHF: Vessels must abide by Uruguay Regulations as per Radio Signals Volume 6, Part 2, Page 266 otherwise will be subject to very heavy fines.

As soon as vessel is inside Territorial Waters, i.e., S.W. of a line bearing 128° from Chui Lt. and West of 50° 50′ W., they must report to the appropriate station on VHF.

Pilots and Port operate on Channel 16.

Tugs: Available.
Berthing: Vessel berthed at Darsena/Muella A. Least depth in channel from sea to berth was 30 ft., distance between sea and berth being 6 miles. Mean tidal range at berth is 2 ft. Nature of bottom at berth – mud.
Cranes: Sufficient quay cranes of 4 tons capacity available. One floating crane of 80 tons capacity available.

Equipment and storage available for breakbulk/palletised cargoes.

Stevedores: Government controlled stevedores. Very helpful.
Medical: Doctor and hospital available.
Density: 1002.
Fresh Water: Available.
Fuel: Bunker fuel and diesel oil available.
Repairs: Can be undertaken.
Dry Docks: Available.
Surveyors: Lloyds' Surveyor based at the port.
Airport: Available.
General: Fresh provisions, meats, groceries and laundry services available.

AUTHORITY: Administracion Nacional de Puertos.

NUEVA PALMIRA: 33.53 S. 58.25 W. (See Plan Book)

LOCATION: Situated on East bank of Uruguay River, 155 miles above Montevideo. Km. 0 on River Uruguay.
DOCUMENTS: The documentation required is as follows:

Cargo or Ballast Manifest.
Negative Passenger List or list of passengers visaed by the Consul.
Crew List.
Stores List.
List of Personal Effects.
Tonnage Register.
Consular Clearance.
Maritime Declaration of Health.

PILOTAGE: The information required from vessels navigating within the area of the Port Control are:

Time of entry and leaving the area.
International call sign.
Name of vessel.
Flag.
Estimated course.
Latitude.
Longitude.
Port of destination.
Estimated time at port of destination or other point of call.

The area appointed for effecting change of Pilots is the Port Roads. The Pilots arrive at the vessel in a launch 5.53 m. overall length, with cabin, painted orange, owned by the Pilots' Corporation of Uruguay.

ANCHORAGE: The area designated for anchoring is located within the roads and fore-port, depth being between 20 ft. and 24 ft.
RESTRICTIONS: There are no restrictions for berthing in the port, except those imposed by weather conditions (winds, etc.). Vessels berth without the aid of tugs.
MAX. SIZE: With regard to length and capacity of vessels, there is no stipulated limit but due account should be taken of the fact that the depth of water in the port is 24 ft.

HEALTH: The Health Authorities will require a Crew List and Maritime Declaration of Health. In the event of disease being detected on board, the Health Official will proceed to inform the Aid Centre who will arrange for a doctor to attend on board, with the vessel placed in quarantine or the patient will be transferred to hospital, depending upon the illness discovered. To date, no such occurrence has arisen in the port.

RADIO: VHF equipment with permanent listening out on Channel 16.

RADAR: There is no radar equipment.

VHF: All communications are effected by means of VHF equipment. The call sign is CWC 31 – "Control Palmira Prefecture", and the following Channels are used: 6, 8, 9, 11, 12, 13, 14, 16, 25, 26, 68 and 69. The station operates permanently on Channel 16, the frequency being 156.800 mHz.

TUGS: The service of a tug is not necessary for berthing vessels.

BERTHING: The port has the Official Quay and the quay owned by Cia. Navigen.

Official Quay: Length 240 m., length of the head 80 m., width in the centre 40 m.

Navigen Co. Quay: Length 234 m. It has a conveyor belt system 500 m. long, running 15 m. above the level of the water. Electrical operating system with a loading and discharge capacity of between 300 t.p.h. and 700 t.p.h., dependent upon whether cereals or ore is being handled.

CRANES: The Official Quay is equipped with 3 cranes of the National Port Administration. They are mobile cranes on rails. Two are for 3,000 kg., and the third is for 5,000 kg.

STEVEDORES: As soon as the vessel communicates the ETA at the port, the Agent will make all necessary arrangements for stevedoring services to commence work as soon as the vessel has obtained Free Pratique. These services will be made available dependent upon the tasks required to be fulfilled.

MEDICAL: The local Public Health Aid Centre is entrusted with furnishing any medical aid which may be necessary on board.

BULK HANDLING FACILITIES: There are no tanks, but there are warehouses for storing grain and general cargo. These warehouses belong to the National Port Administration and to the Free Zone, and are located within the port area.

FRESH WATER: Fresh water is supplied by the National Port Administration.

FUEL: There is a fuel storage depot within the port area, and should it be necessary to supply bunkers to a vessel, application has to be made to ANCAP who will supply via tanker trucks.

FIRE PRECAUTIONS: There are none, other than those of a routine nature.

CONSULS: There are none at local level. In the town of Carmelo, 21 km. from Nueva Palmira, there is the Consulate of the Argentinian Republic.

REPAIRS: Minor repairs possible.

SURVEYORS: None available.

GANGWAY/DECK WATCHMEN: The service of watchmen is not necessary, unless the vessel is carrying flammable cargo.

HATCHES: Opening and closing of hatches is normally carried out by stevedores.

CUSTOMS ALLOWANCE: Each crew member is permitted to carry out of the bonded ship's store, 5 kg. tobacco, 2 cartons of cigarettes and 2 bottles of wine.

CARGO GEAR: Normally, loading and discharge are effected by means of land-based equipment.

REPATRIATION: There are facilities for changing crews, and to effect any repatriation necessary. In both cases, the arrangements are carried out with the participation of the Immigration Authorities and the Maritime Agency concerned.

AIRPORT: There is the airport of Zagarzazu located between Nueva Palmira and Carmelo, approximately 15 km. from this town.

TIME: Local time is GMT minus 2 hours.

HOLIDAYS: 1st January, 19th April, 1st May, 19th June, 18th July, 25th August, 12th October, 8th December, 25th December. Holidays do not interrupt operations on vessels.

POLICE/AMBULANCE/FIRE: Police: Tel. 42, Ambulance: Tel. 82. No fire brigade.

TELEPHONES: It is not possible to have telephones installed on board vessels.

SERVICES: There are stevedoring services, Maritime Agents and Customs Clearance Agents.

SHORE LEAVE: Once Free Pratique is granted, there are no prohibitions for crew members going ashore.

DEVELOPMENTS: The lengthening of the head of the Official Quay by 200 m. to the North is planned. Grain Silo with capacity of 25,000 tons to be built.

AUTHORITY: El Sub-Prefectura de Nueva Palmira.

PAYSANDU: 32.18 S. 58.06 W. (See Plan Book)

LOCATION: Situated on the East bank of Uruguay River, 380 km. above Montevideo. Km. 204 on River Uruguay.

DOCUMENTS/PILOTAGE/HEALTH/RADIO: See beginning of Uruguay section.

RESTRICTIONS: River navigation controlled by depth in the passes at Almiron, Vera and Urquiza. Since river conditions vary from season to season, Agents should be consulted beforehand regarding available draft at any particular time.

ANCHORAGE: Off Montevideo.

MAX. SIZE: Up to 15 ft. draft fresh water, depending on river conditions.

TUGS: Available.

BERTHING: Grain Elevator Berth; 20 ft. depth alongside at zero tide. Coastal Berth: Length 300 m. Depth 11 ft. at zero tide. Ancap Pier: 1 berth for tankers, 30 ft. depth at zero tide.

There is 1×5 ton crane on the grain quay and 3×3 ton cranes on the coastal berth. Loading on the ANCAP berth is by lorry.

STEVEDORES: Working hours: 0800 – 1200 and 1430 – 1800 hrs. Saturdays: 0800 – 1230 hrs.

MEDICAL: All assistance available.

FRESH WATER: Available at all berths.

FUEL: By negotiating through the intermediary of the Customs Clearance Agent the required quantity is delivered.

REPAIRS: Minor repairs can be effected.

CONSULS: Local representation for Argentina, Brazil, Italy and Paraguay. All other Consuls at Montevideo.

GENERAL: Refer to "Montevideo" for all general information.

NOTES

Please also advise Shipping Guides Ltd.

Republic of Vanuatu

PORT VILA: 17.45 S. 168.18 E.

PORT LIMITS: A line drawn between Pango Point and Devil's Point.

DOCUMENTS:

Last Port Clearance.
2 Crew Lists.
2 Passenger Lists.
2 Cargo Manifests.
2 Stores Lists.
2 Drugs Lists.
2 Firearms Lists.
2 Animal Lists.
2 Crew's Search Lists.

Log Book, Derat and usual Ship's Certificates to be available for inspection.

PILOTAGE: Compulsory for all vessels over 60 m. in length. Pilot boards 2 miles West of the fairway buoys, on the leading lights. Pilot launch displays the Pilot (H) flag by day; by night, a red flashing light. 24 hours' notice of ETA to be given.

ANCHORAGES: When a vessel has to await a berth or tide, the Master may anchor in the main bay North of the leading lights (1,200 m. from lower lead); or as directed by the Harbour Master.

HEALTH: Vessels are to request Pratique when giving their ETA.

RADIO: Radio Vila.

VHF: Vessels to maintain VHF watch, Channel 16 for 2 hours prior to arrival. Pilot and Port Authority equipped with VHF sets.

TUGS: One tug available for berthing/unberthing. 780 h.p., 14 tons bollard pull.

BERTHING:

Main Government Wharf: Steel pile and concrete decking construction; with bollards 30 m. from each end of the wharf. Length of wharf 212 m, width 9 m. and depth 10.7 m. alongside.

Transit storage 2,000 sq.m.; open storage 1,000 sq.m. Can take Ro/Ro traffic.

Arammadi Wharf: Privately owned. Length 55 m., depth 8.2 m. alongside. Vessels of 150 m. length can berth safely. Ample open storage, but no closed storage.

Town Wharves: 2 small wharves on town waterfront, depth 2.5 m. alongside. Also see "Tankers".

STEVEDORES: *Working Hours:* Monday to Friday: 0700 – 1100, 1300 – 1700, 1800 – 2300. Saturday: 0700 – 1100, 1300 – 1500. Sunday: No cargo work.

MEDICAL: Government hospital with full facilities. Private doctors and dentists available.

TANKERS: Berth is situated in Paray Bay. It is a timber pontoon with a small T-head catwalk. Due to bar at entrance to bay, entry is made at HW only with controlling draft of 7 ft. plus height of tide.

There is an overhead power cable between Iririki Island and the mainland with a vertical clearance of 18 m.

FRESH WATER: Good quality potable water is available at all wharves except tanker berth. Delivery rate 80 t.p.h. at Main Government wharf.

FUEL: Limited supplies of diesel, etc., delivered by road tanker. No boiler fuel available.

CONSULS: Australia, France and U.K. are represented.

REPAIRS: Small repairs can be undertaken. No foundry available.

DRY DOCKS: None. 1×40 ton slipway available.

SURVEYORS: Lloyd's representative available. Other Classification Societies' Surveyors can be brought from Fiji and New Caledonia at short notice.

CARGO GEAR: Ship's gear used for loading/discharging. 11 forklifts from 2 – 20 tons, 1×22 ton flat-bed truck, 1 flat-bed truck with 19 ton crane, 1×8 ton tipper truck, 1 prime mover, 1×20 ton semi-trailer, 1×10 ton tilt trailer, 3×3 ton trucks and 1×20 ton container top lift frame (20 ft. containers) available.

REPATRIATION: See "Airport".

AIRPORT: Daily services to Noumea. Regular services to Fiji, Auckland, Sydney, Brisbane, Honiara and Naura.

TIME: GMT plus 11 hours.

POLICE/AMBULANCE/FIRE: Police tel: 2222; Ambulance tel: 2100; Fire tel: 2555.

TELEPHONES: Available on board at Main Government Wharf through Agent.

SERVICES: Diver available. Tinned, frozen meat and vegetables available, also bonded stores.

SHIP SUPPLY SERVICE: Tug "Roimata" and pilot boat "Tekoni" can be used in an emergency for transport of personnel/essential stores. There are various charter boat operators who can be mobilised through the Department for Emergency Operations.

GENERAL: *Charts:* BA 1493 and 1494 cover this port.

AUTHORITY: Director of Ports and Marine, P.O.Box 198, Port Vila, Vanuatu. *Tel:* 2339. *Telex:* NH 2040. *Cable:* Vangov. *Contact:* Captain J. Walls, Director of Ports and Marine, *Tel:* 2860 (home); Captain D. J. Enever, Principal Marine Officer, *Tel:* 2269 (home); Captain Norris Hamish, Assistant Harbour Master.

SANTO: 15.31 S. 167.11 E.

The Port of Santo is sometimes referred to by the name of the old town 'Luganville', but nowadays the port and the town are usually called 'Santo'.

PORT LIMITS: The Port of Santo includes that area of the Segond Channel bounded in the East by a line running due North from Black Rock Point on Aore Island (from the 'Black Rock' on Chart BA 1736). This is known as Pointe Chapuis on French charts. It is bounded in the West by a line running due East from the Renee River on the island of Espiritu Santo.

DOCUMENTS:

Last Port Clearance.
2 Cargo Manifests.
1 Crew Declaration.
2 Animals List (Nil if none aboard).
2 Prohibited and Restricted Goods (Arms and Ammunition).
2 Lists of Ship's Stores (Cigarettes, Tobacco, Alcohol, etc.).
6 Crew Lists.

All the above can be provided on ship's paper.

The following is a Vanuatu form which can be filled in on arrival:

Ship's Report and Arrival Declaration (Vessel's Details).

PILOTAGE: Telegrams for the Pilot should be addressed 'Harbour Master Santo' or advice passed through Agents. ETA messages for night-time and week-ends must arrive during office hours Monday to Friday.

Ships calling at Port Vila first may pass ETA Santo through the Harbour Master at Vila.

VHF watch is kept during office hours on Channel 16 and for 2 hours prior to all advised arrivals. Pilot boat also watches Channel 16.

The pilot boat is a 12 m. boat with white hull and superstructure. She has 'Pilot' in black letters on the cabin and exhibits a pilot jack. She carries a red flashing light with her pilot lights at night.

The pilot station is 1 mile East of Black Rock Point at the Eastern entrance to the Segond Channel. By day and in good visibility the Pilot may board or disembark at the South-Western end of the Segond Channel South of Georges Philippar Pass, though this is not normal and should be by prior arrangement.

Pilot ladder should be rigged in accordance with the S.O.L.A.S. convention.

ANCHORAGES: Vessels may anchor anywhere in the Segond Channel except in the 'Prohibited Anchorage' close off the Main Wharf (which is shown as 'Dock No. 3' on Chart BA 1736). There is a patch with a least depth of 14 fathoms 1 mile S.S.W. of the main wharf which is recommended for anchoring, especially for smaller vessels seeking shelter from the S.E. trades. A strong tidal current, normally up to 3 knots, runs in the channel and vessels should give plenty of scope.

RESTRICTIONS: There are no restrictions on entry. However, as stevedores do not work from 2300 hrs. to 0700 hrs., vessels due to arrive between these times are *recommended* to slow down, save fuel and arrive at the pilot station at 0530 hrs. or 0600 hrs. to berth in daylight.

MAX. SIZE: Governed by berth size only.

HEALTH: Pratique messages should be addressed to Harbour Master with ETA message. If vessel is *not* healthy Harbour Master will advise action to take. Pratique messages will not normally be responded to if vessel is healthy. Vessels arriving from Port Vila do not require Pratique.

RADIO: Message should be sent via Port Vila radio, call sign YJM.

VHF: A port watch is kept on Channel 16 during office hours Monday to Friday and from 2 hours prior to advised ETAs. Call 'Harbour Master Santo'. The pilot vessel also watches Channel 16 VHF when on pilotage duty.

RADAR: No radar service.

TUGS: None, but one may be obtained in emergency from Port Vila.

BERTHING: Saltwater Berth 140 m. long with a depth of 10.5 m. at LWS, and this is the maximum draft. Vessels can, and usually do, overhang the ends of the wharf with lines on dolphins or bollards on the shore. Dolphins are situated 22.5 m. East and 35 m. West of the Wharf.

Also see "General".

CRANES: None.

BULK CARGO FACILITIES: Stevedores are currently interested in experimenting with bulk loading of copra (rather than from bags) and various methods are used to suit different ships. All methods, however, require lifting by ship's gear. There is interest in the construction of a small coconut oil mill, storage tanks for which are already constructed.

BRIDGES: None.

STEVEDORES: Stevedores work 0700 hrs. to 1100 hrs., 1300 hrs. to 1700 hrs. and 1800 hrs. to 2200 hrs. Advice given at least the previous day by Agents should be sufficient. Stevedores do not work on Sundays, or if avoidable on public holidays.

MEDICAL: Medical attention can be arranged after arrival and there is a hospital in Santo. However, medical treatment that is not of an emergency nature should be sought elsewhere.

TANKERS: Tankers berth at the main cargo wharf. The discharge line is 8 in. and the rate of discharge is 150 tonnes per hour.

DENSITY: 1025.

FRESH WATER: Vessels can take up to 500 tonnes if 2 working days' notice are given. Otherwise the maximum amount may be as little as 50 tonnes. Water is good though a little hard.

FUEL: Small quantities can be arranged by truck. Large quantities can be delivered by the 8 in. tanker discharge line, but must be by prior arrangement with Shell or Mobil. Santo is not normally a bunkering port.

FIRE PRECAUTIONS: All normal precautions only.

CONSULS: None.

REPAIRS: No shore facilities suitable for larger vessels.

DRY DOCKS: None. Slipway for vessels up to 50 m. length.

SURVEYORS: None.

GANGWAY/DECK WATCHMEN: Not considered necessary.

HATCHES: Hatches are opened and closed by either crew or stevedores. Recommended that crew carry out this operation on copra loading ships.

CUSTOMS ALLOWANCES: (Per crew member) 200 cigarettes or 100 cigarillos or 50 cigars or 250 grammes tobacco. 2 litres of wine and 1.5 litres spirits.
CARGO GEAR: Ship's gear only. Ashore: 5 forklifts (from 2.5 to 22 tonnes), 2×3 tonnes flat trucks, 1×6 tonnes dump truck, 8 tractors, 100×2 tonnes trailers and 1×22 tonnes container carrier are available. No lighters available.
STORAGE: General cargo sheds of 6,000 cu.m.; 9,000 cu.m. of copra storage. Container yard for 200 TEUs. There is a minimum of 1,600 cu.m. of open storage.
REPATRIATION: Possible from Santo Airport via Port Vila.
AIRPORT: Santo International Airport is about 6 km. from town.
TIME: GMT plus 11 hours. GMT plus 12 hours from 24th September to 24th March.
HOLIDAYS: Holidays vary from year to year. It is recommended to seek advice of local Agents. It is not normally possible to work cargo on public holidays or Sundays.
POLICE/AMBULANCE/FIRE: Police tel: 222; Fire tel: 316; Health Officer tel: 419.

Police station is close to the wharf. There is no ambulance service. The fire service consists of a fire tender operated by Public Works Department. The Harbour Master has some hoses and a small foam generating machine stationed on the wharf.
TELEPHONES: There is a public telephone in the Post Office near the wharf.
SERVICES: None.
SHORE LEAVE: No restrictions.
REGULATIONS: No special regulations.
IDENTIFICATION CARDS: Not required.
DELAYS: Only for stevedores non-working times or when there is more than 1 ship present in the port.
GENERAL: Tidal stream in the Segond Channel can reach as much as 4 knots, the Westerly flood stream being predominant and the East going ebb stream occasionally absent. The flood stream can set in a North-Westerly direction at the main wharf, thus setting a vessel down onto the wharf and making an apparently simple berthing manoeuvre a little difficult. It is recommended that when S.E. trades are blowing, and a vessel has to berth port side to in order to stem the tide, the starboard anchor should be laid off whilst berthing with about 5 or 6 shackles leading 2 points for'd of the beam. This is to heave the bow away from the wharf on departure.
DEVELOPMENTS: A main wharf replacement is sought and overseas aid funds are being sought. No dates are fixed.
AUTHORITY: Department of Ports and Marine, Box 148, Santo, Vanuatu. *Tel:* 739 (office); 454 (home). *Contact:* Captain M. Toa, Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Venezuela

GENERAL:

BERTHING PRIORITY: The Venezuelan Ministry of Communications has decreed, through the Directorate General for Transport and the Port Captaincies, the following new docking priority system:

1. Vessels owned by the C.A. Venezolana de Navegacion or chartered by that company.
2. Venezuelan vessels belonging to private companies.
3. Vessels of other countries.

Previously, vessels chartered by the C.A. Venezolana de Navegacion did not get priority treatment and it is understood that, with these new priorities, the number of vessels with docking privileges has been tripled, thus resulting in greater delays for vessels operated by foreign companies.

SHIPMASTER'S REPORT: July, 1982.

You may wish to caution all seafarers who may in the future trade to Caripito, and the other similar jungle areas. The problem in this area used to be mosquitoes, but although they are still around, the problem that we have recently experienced is a moth locally known as 'Palometas'. One doctor referred to it as an insect 'Hylesia Canitia'.

My information is limited, due to language difficulties, but the problem is very real, and I cannot caution the unaware strongly enough to take precautions. The vessel has traded to Caripito frequently over the past two years, and this would appear to be the first experience as I can find nothing about these moths in writing and our first warning was given when an Agent saw some of these moths onboard. This type of moth appears suddenly from the jungle with no regular cycle, and like other moths is attracted at night by lights, be they from vessels, homes or berth installations. They are about *one inch* in length, their bodies about pencil thickness and filled with eggs. They flutter in vast numbers around the lights, and it would appear that the dust, pollen, hair or whatever comes off them, falls onto the ship's structure or persons nearby. They do not bite and therefore I assume the dust, breathed in or landing on the skin causes a red pimply rash which gradually spreads over the whole body. It affects everyone differently, some crew were covered in a very heavy bumpy red rash within a few hours of exposure, others only in small patches on the arms which spread over the body taking several days, but in all cases causing extreme discomfort due to the itching and constant desire to scratch. At first it was only crew who were on deck that were affected, but as I assume the dust was brought into the accommodation by clothing, fans and the moths which got past the doors, the engine and catering crew were similarly affected.

Over two thirds of the crew were treated locally within 24 hours, with injections, tablets, lotions & creams but this only brought temporary relief. Rashes picked up 10 days ago with the first incident are now clearing up, but fresh rash areas appeared when we visited the Caripito area 3 days ago. We are on a weekly schedule, and one would hope we will build up a resistance to this problem. The local people also suffer from this rash, but the ones I met only had a very light rash on arms, neck and body. They cannot say how long the moths will be present, varied reports of two weeks to months. However, we are now adopting the following anti-moth measures:

1. Put the air conditioning on recirculation, ensure all openings are closed.
2. At night when underway, blackout the vessel as much as possible. During the San Juan River passage to Caripito, navigation lights only situation if possible.
3. When you anchor in San Juan River to wait for the tide or berth at Caripito, blackout the vessel and allow no one outside if possible at night, anchoring or picking up by torchlight. Having anchor lights on at night is debatable, the local dredger does not.
4. Wash the vessel down completely at daybreak, and sweep all dead moths off the deck.
5. For night mooring/deck operations, have as few lights on as safely possible, all exposed crew should cover themselves completely, particularly around the neck area.
6. After clearing the Maturin Bar (river entrance) wash down the whole ship. The dust off the moths is still active days after leaving the area. Wash all filters of air conditioning units.

Knowing about this problem could have reduced exposure to what is an extremely unpleasant experience, and I have urged the local installation to include a warning in their Port Information Guide.

DOCUMENTS: *Prior to Arrival:*

Arrival Notice: The Agent must submit 24 hours in advance of the vessel's arrival, a letter-notification indicating date and time of arrival, name and nationality, name of Master, length, gross and net registered tonnage of cargo for the port, origin, destination, shipper and agency, in 16 copies, with the following distribution:

Captain of the Port, Customs (2), The National Institute of Ports-INP (3), Armed Forces of Cooperation, National Guard, Police Intelligence Service Bureau-DISIP, National Bureau of Identification and Alien-Immigration, Interpol, Ministry of Health and Social Welfare-Public Health Unit, Ministry of Agriculture and Livestock-Animal and Plant Health, Post Office and Chamber of Commerce.

Information on Cargo and Passengers for the Port: The agency must receive by airmail, sufficiently in advance, the following documents to be submitted to the authorities at least 24 hours before the vessel's arrival:

Documents	*Captain of Port*	*Customs*	*INP*	*Agency*	*Total*
Cargo Manifests(a)	–	1	3	3	7
Correction Letter to Manifest	–	1	–	1	2
Bills of Lading	–	–	2	1	3
Stowage Plan(b)	–	–	1	2	3
Cargo List	–	–	10	–	10
Container List	–	–	12	–	12
Dangerous Cargo List	2	–	1	1	4
Passenger List	–	–	–	1	1
Mail List	–	–	1	–	1

(a) As of January 29, 1979, the Cargo Manifest may be submitted on LAFTA/OAS Form 2, instead of on the Venezuelan Freight List (Sobordo).

(b) The Venezuelan Shipping Association is negotiating to have the stowage plan submitted to the National Institute of Ports on the vessel's arrival, instead of 24 hours in advance.

Request for Port Services: 24 hours before the vessel's arrival, the agency must submit to the Captain of the Port the request for pilotage, towage and berthing.

At the same time, it must request permission to disembark and embark passengers and cargo and unload merchandise, on a form addressed to the Customs Administrator, with copies to the INP and the National Guard.

Additional Requests: The agency must draw up and submit to the National Institute of Ports, 24 hours before the vessel's arrival, 12 copies of the cargo index, a document corresponding to tally books.

On Arrival:

Type of Document	*Number and distribution of documents*						
Basic forms	*Captain of Port*	*Customs*	*INP*	*National Guard*	*Public Health*	*Others*	*Total*
General Declaration	1	1	1	1	1	2(a)	7
Cargo Manifest	1	3	–	–	–	–	4
Crew List	2	2	–	2	–	5(b)	11
Passenger List	1	2	3	2	–	5(b)	13
Ship's Store List(c)	–	–	–	–	–	–	–
Crew Effects Declaration(c)	–	–	–	–	–	–	–
Maritime Health Declaration	–	–	–	–	1	–	1
Mail List	–	–	–	–	–	1(d)	1
Additional Documents							
Clearance from last port	1	–	–	–	–	–	1
List of in-transit passengers	1	2	3	2	–	5(e)	13
Freighted Bills of Lading	1	1	–	–	–	–	2
Return Cargo Manifest(f)	–	3	–	–	–	–	3
Cargo Indices	–	2	–	–	–	–	2
Baggage Declarations(g)	–	–	–	–	–	–	–
Vaccination List	–	–	–	–	1	–	1
Narcotics List	–	2	2	1	–	–	5
Firearms List	–	2	2	1	–	–	5

(a) DISIP and Identification.

(b) DISIP, Bureau of Military Intelligence, Interpol, Identification and Tourism.

(c) Eliminated by the new Organic Law of Customs, March 5, 1979.

(d) Postal Service.

(e) DISIP, Bureau of Military Intelligence, Interpol, Identification and Tourism.

(f) When a vessel returns to the country goods missing in unloading other vessels, it shall submit, in addition to the cargo manifest a return cargo manifest containing the data required for the manifest and the name of the vessels on which the goods were originally manifested (Organic Law of Customs).

(g) Eliminated by the Organic Law of Customs.

Prior to Departure:

Clearance Documents: At least 6 hours in advance, the request for the clearance permit must be submitted to the Captain of the Port.

Request for Pilotage: Also 6 hours in advance, or more, the request for pilotage must be submitted to the Captain of the Port.

AMUAY BAY: 11.46 N. 70.15 W. (See Plan Book)

OPERATORS: Lagoven, S.A.

ESSENTIAL REQUIREMENTS:

1. Incoming vessels must send ETA at least 3 days before arrival at Amuay Bay. During hours of darkness all vessels must identify themselves on arrival either by radio-telephone or aldis, preferably the former.
2. If a ship originally cleared for another port (including some other Venezuelan port) is diverted at sea to Amuay Bay, certain information must be radioed prior to arrival to avoid heavy fine and/or delays. See "Radio".
3. No dirty ballast may be pumped overside in port or in Venezuelan coastal waters. Ballast disposal facilities are available at Amuay Terminal.
4. The use of Venezuelan Government Pilots is compulsory for docking and for movements inside the bay.
5. The Venezuelan flag should be displayed at the mast-head during daylight hours by ships anchored and berthed in Venezuelan waters.
6. In addition to other clearance documents, 2 copies of an itemised list of articles in the ship's chest must be presented to Authorities on arrival.
7. Emergency fire signal is 5 long blasts on ship's whistle or siren. No other signal is to be given in the case of emergency.
8. Ratguards must be in place on all mooring lines.

LOCATION: The port of Amuay Bay is located on the Gulf of Venezuela, on the West Coast of the Paraguana Peninsula, Venezuela. The sea buoy marking the entrance to the bay is located in Lat. 11° 44′ 25″ N., Long. 70° 14′ 50″ W.

DOCUMENTS: Inward clearance is effected on board immediately after docking by Government Port Officials and a representative of the Marine Department. It is necessary that the following documents be ready on arrival:

Clearance from last port (Consul Mail).
Ballast Certificate from last port.
Crew Lists (5 copies).
Passenger Lists (5 copies).
Baggage List (3 copies).
Lists of Personnel Effects (3 copies).
Store Lists (3 copies).
Lists of Slop Chest (3 copies).
Sailing permit (Zarpe).

Vessels arriving with cargo to discharge, will also require:

Manifest (Sobordo) (1 original and 2 copies from each loading port).
Consular Mail (1 sealed envelope from each loading port).
Bills of Lading, 1 original and 5 copies from each loading port.
Tally Books (6 from each loading port).
Consular Invoice (3 originals and 3 copies from each loading port).
Commercial Invoices (3 from each loading port).

Although vessels proceed directly to Amuay Bay, clearance documents should be prepared showing the port as Las Piedras, Paraguana (Amuay Bay). Failure to observe this requirement may result in penalties up to a maximum of Bs.2,000.

Admeasurement Certificate: All ships calling at a Venezuelan port for the first time must be measured for tonnage by the Captain of the Port. It is the usual practice to take ashore the ship's Panama Canal or Suez Canal Certificate, or any other certificate with which Venezuela is in agreement, which is used as a basis for recalculating tonnage under the Venezuelan Regulations, and is returned before sailing. The Venezuelan Admeasurement Certificate, when later issued, is forwarded to the owners. A fee is charged for this certificate, which is payable only on the ship's first call. Vessels registered in the following countries are excluded from the above regulations: Netherlands, Germany, France, Portugal, United Kingdom, Denmark, Sweden, U.S.A, Ireland and Norway.

Vessels that were originally cleared for another foreign port, or another Venezuelan port, and were subsequently diverted at sea, should radio the following information to "Lagomar-Judibana" prior to arrival:

Vessel's name
Master's name
Vessel's flag
Number of crew
Estimated time of arrival.

Last port of call
Port for which originally cleared
Grade and quantity of cargo to be lifted.

This information is required in order to make in advance special arrangements for inward clearance, to avoid payment of fine.

Outward clearance and cargo documents are delivered on board by the Marine Dispatcher. However, in order to obtain the sailing permit, a special form, delivered on board on arrival, must be completed, not later than 2 hours before sailing time. This form gives cargo and freeboard information by the Captain of the Port.

In the event the berth is required by another vessel, a vessel having completed loading may be required to vacate the berth promptly and proceed to anchorage to await cargo documents.

PILOTAGE: Pilots are employees of the Venezuelan Government and pilotage is compulsory for vessels entering or leaving the harbour. The Marine Department will arrange for Pilots to board all vessels as necessary.

The Pilot acts in an advisory capacity; the Master retains responsibility for the ship at all times. In the event it becomes necessary to disregard the Pilot's instructions in order to ensure the safety of the ship, the Master must forward through the Marine Department a full written report of the circumstances, for delivery to the Captain of the Port.

TUGS: Tug assistance is considered essential and is afforded all vessels entering, leaving or shifting in the harbour by 2 × 1,600 h.p. tugs. Disposition and manoeuvres of tug-boat are directed by the Pilot, who uses a "walkie-talkie" to convey orders to the tugs.

BERTHING: 4 finger piers provide 8 berths, numbered 1 to 8, from South to North.

	1	2	3	4	5	6	7	8
Max. Arrival d.w.t. (m.t.)	70	92	24	44	16	30	16	30
Max. departure d.w.t. (m.t.)	112	112	48	48	38	38	94	94
Max. Draft (S.W.)	43′	43′	*37.6′	*37.6′	*37.6′	*37.6′	*37.6′	43′
Max. Length Ship	1000′	1000′	650′	700′	700′	700′	856′	856′
Max. Beam	Unl.	Unl.	Unl.	†	†	†	†	Unl.
Bow to manifold distance	495′	495′	300′	320′	330′	330′	340′	340′

Ballast line, fresh water and all grades bunkers at all berths.

*The max. draft will be increased to 40 ft.

†Max. beam permissible varies dependent upon the beam of vessel berthed on other side of the slip.

The use of an anchor when docking is permitted at all berths. It is considered prudent to have the outboard anchor hove-out prior to entering the harbour in order to facilitate speedy release if necessary while docking. The Pilot will advise whether the ship is to be berthed port or starboard side to the dock.

Products handled:

Berth No. 1 & 2: F.O., heating, heavy distillates, TJ-102, topped crudes, all crudes.

Berth No. 3 & 4: Lubes, F.O., LCT asphalts (penetration).

Berth No. 5 & 6: Naphtha, jet fuel, crudes, F.O., heating, MC/RC asphalts, kerosene, TJ-102, topped crudes, LCT (pref.).

Berth No. 7 & 8: Naphtha, kerosene, heating, F.O., jet fuel, MC/RC asphalts, all crudes except TJ-102.

ANCHORAGES: For vessels awaiting berth, there is a good anchorage about 1 mile N.W. of the sea buoy in 8 to 12 fathoms with a sand and mud bottom. Ship Masters are requested not to anchor at a distance greater than 3 miles from the sea buoy.

RESTRICTED AREA: A restricted fishing area has been established by the Venezuelan Government which is prohibited for mechanically propelled vessels drawing more than 5 ft. This zone lies within the area off the Paraguana Peninsula from Punta Macolla, Lat. 12° 5′ 32″ N., Long. 70° 12′ 55″ W., to Punta Estanques (Los Taques), Lat. 11° 48′ 45″ N., Long. 70° 16′ 45″ W., and a line connecting the positions below indicated: Lat. 12° 07′ 40″ N., Long. 70° 14′ 25″ W.; Lat. 12° 03′ 15″ N. Long. 70° 19′ 23″ W.; Lat. 11° 49′ 25″ N., Long. 70° 21′ 50″ W.

HEALTH: *Sanitary Inspections:* A close control of veneral diseases has been put into effect by the Government Sanitary Office.

Immediately after docking a Sanitary Inspector will board the vessel and all Crew members will be checked before going ashore.

Those persons found with infection must be sent to the Government Anti-venereal Clinic for proper medical attention and return to vessel before sailing. 20 Bolivares per ship.

Shore passes will be granted to all healthy persons.

Masters are required to co-operate in this campaign.

MAX. SIZE: Length 1,000 ft.; draft 43 ft. Also see "Berthing".

RADIO: The cable and telegraphic address for the Lagoven S.A. at Amuay is "Lagomar Judibana". Radio messages to and from ships at sea are routed through "Shipward 2 New York" for retransmittal through Aircon system to Judibana (Amuay Bay).

Radio notice of arrival should be sent 72 hours prior to arrival at Amuay.

Ship-to-shore telephone: Radio-telephone listening watches are maintained on a 24-hour basis in the Marine Office on the following frequencies: 2182 kHz.; 156.8 MHz.

International telephone: International telephone calls are routed through Caracas, Venezuela. Telephone number is Punto Fijo area 069-51557. (It is usually difficult if not impossible to complete a call.) Telex: 54193 Lagoven.

Also see "Documents".

LOADING: Loading rates particulary for low-flash products loaded during the hours of darkness or when topping-off cargo tanks, will be reduced by the terminal to meet existing conditions.

All loading and discharging will be stopped during the passage of an electric storm, and ullage covers must be closed and dogged down. During periods of calm, loading of gasoline or other similar low-flash products may be loaded at reduced rates or loading stopped if the heavy vapours are not being dispersed quickly enough to prevent hazards from accumulated gas pockets. Ship's officers are cautioned to be on their guard during such conditions.

Loading rates will be reduced when topping-off, if requested by the ship's officer.

Some of the fuel cargoes are loaded from fuel reservoirs through certified positive displacement meters, and shipping documents are prepared on the metered figures. All reconstituted crudes are line blended with conditions recording of component rates and quantities. Actual loading rates of both this crude and metered fuel cargoes are available at any time upon request of the standby.

Instructions as to grade or grades of cargo, and the approximate loading rate anticipated, will be given to the Master on completion of inward clearance. Supplementary information including number and size of lines and hoses will be furnished to the Chief Officer before loading commences.

If vessel's loading orders from owners or charterers do not agree with the terminal's orders, either as to grades or quantity, the marine representative should be advised immediately. The terminal is authorised to load 10% more or less than the quantity nominated; if the cargo to be lifted will be more or less than this 10% limitation it is necessary to cable New York for confirmation.

A terminal employee is stationed at each pier during the entire time the ship is discharging ballast, bunkering, or loading cargo. Fifteen minutes "stand-by" notice should be given to this man prior to completion of ballast, bunkers, or cargo.

Vessels loading liquid and flaked sulphur: *For vessels loading liquid sulphur, the following applies:*

Location: Pier 2, berth 3 at Amuay Bay.

Draft – 40 ft., length overall – 700 ft., beam – no limitation.

Loading will be at the rate of 400 long tons per hour through a 6 in. line and rubber hose.

Maximum cargo size – 25,000 long tons.

Normal loading temperature is 275° F. (Minimum – 265° F. Maximum – 295° F.). Density at normal loading temperature is 112 pounds per cu. ft. Viscosity at same temperature is 8.5 centipoises.

Safety precautions/provisions: Molten sulphur classified as "Grade E Liquid" by U.S. Coast Guard. No naked light, open flames or sparks should be permitted near any tank openings. Molten sulphur is combustible but is handled at temperatures below its flash point (325-370° F) and ignition temperatures (476-502° F).

For vessels loading flaked sulphur, the following applies: Physical characteristics of the loading facilities:

(a) Location: Lat. 11° 44′ N., Long. 70° 14′ W. Anchorage approximately 2,000 ft. South Punta Adaro with a depth of 33 ft. 400 yards offshore and dropping off to 50 ft. 1,000 yards offshore. In the rare event that the wind is Westerly vessel would anchor further offshore.

(b) No draft, length or beam limitation. (Vessels loading up to 24 ft. draft may be anchored inside the bay).

(c) Loaded barges whose overall dimensions are 200 × 42 × 17 ft. will be brought alongside with the aid of tugs and removed when required, barges will be equipped with fenders. The hoppers are 160 × 37 × 14 ft. Loading from barges to ship will be done using ship's gear and clam shells of 1.25 ton capacity. Clam shells will be furnished by Lagoven free of charge. Personnel (stevedores) to carry out the loading operation will be supplied by Lagoven or the ship's crew can be used if this is set forth in the charter party. Loading rate 1,000 long tons per day.

(d) The anchorage is sheltered in the lee of the Adaro Peninsula. Wave heights vary between 1 ft. and 2 ft.

(e) Normal Maximum parcel size – 10,000 tons loaded at a rate of 1,000 tons per day, however, an additional 2,500 tons can be supplied at a loading rate of 500 tons per day.

(f) Flaked sulphur when stored in large quantities varies in density from 55 to 90 pounds per cu.ft. Average density is anticipated to be 70 lbs./cu.ft. Individual flakes are of irregular shape and are less than 0.5 sq.in. in area and less than 0.0625 in. thick. This size data is not a specification nor guarantee and is provided only to indicate the order of magnitude dimensions.

General:

Fee of Bs. 200 will be charged for trips between the Terminal and the anchorage by launch or tug for delivering personnel.

Method of cargo quantity determination: Barge drafts are marked to the nearest inch and capacity tables prepared by Charles Martin. The draft prior to commencement of and upon completion of discharging are noted. The amount transferred is obtained by consulting the tables. The quantity arrived at by totalling the amounts from the barges used is compared to the ships figures and reconciliation reasoned.

BALLAST: Vessels should arrive with sufficient ballast to permit safe handling. The Pilots require a draft of minimum 8 ft. forward, 18 ft. aft, on a T-2 or similar size tanker, 11 ft. forward and 20 ft. aft on a 26,000 d.w.t. or larger vessel. Ballast should be carried in a minimum number of tanks, and all other tanks stripped, so as to minimise deballasting time.

A relatively small amount of salt water remaining in ship's tanks or lines can contaminate crude and cause operating problems for the refiners. It is important therefore to strip tanks and lines as dry as possible.

Vessels provided with completely segregated ballast system are permitted to discharge ballast and load cargo simultaneously.

Absolutely oil-free ballast may be discharged overside. All dirty ballast must be pumped ashore. A 30 in. ballast line, 2×60,000 and 1×120,000 barrel slop tanks and separator system are available.

A considerable number of vessels are now participating in the programme to eliminate pollution of the seas. Under this programme, vessels may arrive carrying quantities of oil/water emulsion. If it is desired to follow the "load-on-top" procedure in such instances, it is requested that the Marine Representative be informed on arrival.

MEDICAL: Medical treatment and hospitalisation, if required, is provided at a hospital located in the Lagoven concession, operated by the Society of Catholic Medical Missionaries. Several dentists are located in the area.

Italian Crew members covered by Casa Maritime insurance receive medical attention from the appointed medical representative in Punto Fijo.

Authorisation forms for medical and dental treatment are provided, which require Master's signature. Transportation is available at the Marine Office. Please note that if the patient does not speak Spanish or English, an interpreter should accompany him.

FUEL: Ship's requirements specifying grade and quantity desired are to be given to the Marine Representative boarding the vessel on arrival. All grades of bunker fuel, intermediate fuels and Diesels are available except Esso diesel. Bunker delivery rates average 2,500/3,500 barrels per hour. Bunkers are loaded through meters which automatically register quantities on bunker receipts.

It is the responsibility of ship's engineer to give "standby" notice to the terminal employee and advise him when to shut down.

FRESH WATER: Fresh water can be supplied if necessary; however, supplies are limited to essential requirements. All fresh water is piped from distant sources. Loading rate is about 10 t.p.h.

CUSTOMS: Venezuelan laws are strict in regard to contraband and Masters are requested to instruct their crews not to take cigarettes or other articles ashore. Cigarettes in carton lots, cigars, tobacco, souvenirs, gifts (particularly items of women's apparel) should be collected prior to arrival in port, listed with the items in the slop chest and placed in the custody of the Master for deposit in the slop chest or closet which will then be sealed for the duration of the vessel's stay in port.

Firearms on board any merchant vessel calling at Venezuelan ports must not exceed one per officer, nor can the ammunition exceed 18 cartridges per officer. All firearms and ammunition must be noted on the stores list. Officers must not carry firearms while the ship is in Venezuelan waters and these sidearms and ammunition should be collected and held in the Master's safe custody. Crew members should be warned against taking knives or other weapons ashore.

While the vessel is in port, Venezuelan National Guard Officials are assigned on board to ensure compliance with Customs regulations. The law requires that meals be supplied to these officials during regular meal hours. Masters are requested to give them the privilege of eating in the officers' mess-room, to avoid difficulties.

DENSITY: The usual specific gravity of sea water at the berth is 1025, temperature ranges from 78°F. to 85°F.

CONSULS: Brazil, Great Britain, Italy, the Netherlands, and Norway have consular representatives in the area.

TIME: GMT minus 4 hours.

SHORE LEAVE: Also see "Health". Shore passes will be granted to all healthy persons. A representative of the Captain of the Port boards on arrival and issues the required number of passes. Shore passes are to be collected prior to sailing and given to the Pilot undocking the vessel. Vessels are not permitted to sail until all Crew members are on board, unless hospitalised or prior arrangements made for disembarking. A letter to this effect is required from the Master.

REGULATIONS: (i) *Pollution:* The laws of Venezuela are very strict in regard to the pollution of harbour and coastal waters by oil, and heavy fines are imposed for violations. No dirty ballast, oil or bilge slops are to be pumped or allowed to escape overboard. All overboard discharge valves from cargo tanks and bilges are to be secured before loading or discharging commences. Loading is to be conducted with the greatest care and vigilance in order that errors or delays in handling cargo valves may not result in overflows. All deck scuppers should be plugged before loading to avoid harbour contamination should an overflow occur. The Authorities require that a written report be submitted by the ship involved in the event of an oil spill.

(ii) *Gangways:* All vessels using the port of Amuay must provide a safe gangway. The use of rung ladders, pilot ladders, etc., is contrary to Port Regulations, and Port Authorities will not board except by means of a safe gangway or accommodation ladder.

(ii) *Passengers:* Passengers will not be permitted to disembark unless in possession of the required visa and documents. To facilitate clearance, if passengers are carried, the Master should include advice to this effect in his radio ETA.

(iv) *Visitors:* All visitors to ships are prohibited except those company employees, petroleum inspectors, etc., whose duties require their presence aboard.

(v) *Rats:* Rat guards required at all times.

GENERAL: *(a) Weather Conditions:* There is little rainfall at Amuay Bay; annual precipitation averages 12 in. The so-called rainy season usually coincides with the Caribbean hurricane season, from August to November, although Amuay lies South of the usual hurricane track. During these months calms are often experienced and winds from a Westerly direction may be expected. Normal winds are steady from the N.E., average force 4, Beaufort Scale, with a max. of force 8. Temperatures average about 85°F., with little variation from day to night or season to season.

(b) Tides: The normal range of the tide is about 12 in.; however, a 28 in. range has been observed during spring tides.

(c) Lubricating oil: Supplies of Essomarine lubricating oils are available. Requirements should be given in vessel's radio notice of arrival.

(d) Bonded Stores: Cigarettes or other stores in bond are not obtainable in Amuay Bay.

(e) Cash Advances: The local currency is the Venezuelan Bolivar and cash advances are made only in this currency. It is requested that any requirement for cash advances be included in the vessel's ETA radio, to permit delivery on board on arrival.

(f) Charts: No supplies of charts or sailing directions are available at Amuay Bay.

(g) Laundry: A 6 hour laundry service is available throughout each working day. Such service should be requested in the vessel's ETA message.

(h) Mail: Itemised lists are required for ship's mail, to be signed by the Master. Unless other instructions are given, ship's mail received after sailing, or for vessels on which no advice has been received, will be held for 30 days and then returned to Owners or Operators at ship's expense.

(i) Inspection – Petroleum Products: Chas. Martin & Co. and E. W. Saybolt, petroleum inspectors, are available if specified. Telephone numbers, Chas. Martin 44665, 44650 and 44211; Saybolt 44639, 44645 and 44227.

(j) Norwegian Government Seamen Service: A field representative of the above service is stationed at Amuay providing Norwegian and Swedish film exchange and other usual services. His telephone number is 51459.

(k) Personnel – Seamen Left Ashore: In the case of seamen left ashore for hospitalisation, repatriation or other reason, all documents and personal effects are to be delivered to the Marine Office before sailing. A letter is required from the Master advising the maximum advances to be made to the seamen, if any, and instructions concerning his repatriation. All expenses incurred by seamen left ashore, including cost of repatriation, are for ship's account.

It is important that Masters bear in mind that the Venezuelan law will at all times hold the vessel, her Master, Agent or owner, responsible for any seamen left behind in Venezuela.

(l) Provisions and Stores: Provisions and stores in limited quantities are available, the prices and quality of some items, such as fresh fruit, fish, shrimps, vegetables, etc. are competitive; dry stores are considerably higher than in most ports. The Port Steward will assist in filling requisitions.

(m) Radar and Radio: Radar and radio repairs can be effected in Amuay. A service repair man is available, but spare parts are limited.

(n) Repairs: Shore facilities are available only for emergency repairs of a minor nature. The nearest dry docks are those at Puerto Cabello and Curacao, N.A. Several contractors in the area provide labour for hull painting and for tank cleaning. Contracts for these services are made by the ship's Master directly with the contractor.

(o) Surveyors: There are no appointed surveyors to American Bureau of Shipping or Lloyd's in the area. However, with sufficient advance notice, arrangements can be made to have their nearest representatives come to Amuay to attend surveys.

(p) Walport Film Exchange: Subscribers to the Walport Service may exchange films at the Marine Office.

(q) Plimsoll Marks: The Captain of the port requires that the Plimsoll Marks of all vessels using the port be clearly visible. Vessels will be checked on completion of loading, and if the Plimsoll Marks are not readily legible, permission to sail may be withheld.

(r) Landmarks: Three conspicuous radio towers, 350 ft., painted alternate red and white bands, with red flashing aircraft warning lights, are located in the refinery area, 1 mile East of the docks.

ATTENDANCE: Representatives of the Marine Department board vessels immediately on arrival, and it is particularly requested that Masters indicate at that time all ship's requirements. The Marine Office Building is located at the Pierhead Trestle and personnel are available for assistance at all hours. Telephones are located on all docks and the Marine Shift Supervisor can be called on telephone No. 444475 or 444465.

CARIPITO: 10.09 N. 63.02 W.

Also see "General – Shipmaster's Report, July 1982".

OPERATORS: Lagoven, S.A.

LOCATION: Caripito is located on the West bank of the San Juan River in Lat. 10° 09′ 25″ N., Long. 63° 02′ 01″ W. Also see "General" before first port.

ESSENTIAL REQUIREMENTS:

1. Incoming vessels must send to Caripito their ETA Guiria at least 3 days in advance followed by confirmation 48 and 24 hours before arrival.

2. If a ship originally cleared for another port (including some other Venezuelan port) is diverted at sea to Caripito, certain information must be radioed to Caripito prior to arrival to avoid a heavy fine and/or delays. See "Radio".

3. No dirty ballast may be pumped overside in port or in Venezuelan coastal waters. Limited ballast facilities are available at Caripito Terminal.

4. Vessels calling at Caripito must obtain Government Pilots at Guiria.

5. The Venezuelan flag must be displayed during daylight hours while vessel is within port limits.

6. The emergency fire signal in Caripito dock area is 6 short blasts and 1 long blasts on ship's whistle or siren. No other signal is to be given in the case of emergency.

APPROACHES: The traffic in San Juan River is restricted to one-way from Marieta Point to Caripito. Therefore, instructions are issued at Guiria to incoming vessels relative to what action to take on arrival at Marieta Point. Outbound traffic is controlled so as not to conflict with these instructions.

1. Guiria: The town of Guiria is located on South coast of Paria Peninsula on N.W. shore of Gulf of Paria. When approaching from East a signal tower will be observed on a bluff slightly to North of town.

2. Maturin Bar: Buoy E-1, marks the entrance to Maturin Bar Channel. At Punta Gorda there is a light tower located in approximate Lat. 10° 09′ 50″ N., Long. 62° 37′ 52″ W. displays a flashing red light.

3. Channel: Maturin Bar Channel is 14 miles in length and 400 ft. in width. The tidal range over the bar varies from 4.6 ft. to 5.7 ft. with currents up 3 knots. The average salinity of water is 1.009; however, this may vary considerably between wet and dry seasons and spring and neap tides dredging of channel to 32 ft. (MLWS) has recently been concluded. Maximum draft permitted by Venezuelan regulations is 34 ft. in fresh water. There is a restriction of 6 in. less for all motor tankers. On leaving Maturin Bar Channel the San Juan River narrows from approximately 1.25 miles in width to about 0.7 miles with slight variations in width up to Marieta Point where it narrows to about 1,200 ft. and varies between 800 ft. and 2,000 ft. up to Caripito. Marieta Point marks intersection of Cano Frances and the San Juan River. It is also at this point that course of San Juan River changes approximately 100° to starboard and it is the beginning of one-way traffic. Frequently, incoming vessels are requested to anchor below this point to await outbound traffic. There are 32 lights marking strategic points in San Juan River between Maturin Bar and Caripito Terminal. These light towers are painted aluminium and are easily visible during daylight hours.

DOCUMENTS: (also see "Radio").

1. *Clearance (inward and outward).* Inward clearance is effected at Caripito. The sanitary inspector boards vessel at anchor or at berth depending on tidal conditions and/or the availability of a berth. The Customs and other Government officials usually board at the berth. However, should there be a delay awaiting berth or tide, the entry will be granted while vessel is at anchor, in which case accommodation ladder must be rigged.

It is necessary that the following documents be ready on arrival:

Ballast List (1 original).
Passenger List (5 copies).
Baggage List (5 copies).
Crew List (7 copies).
Sailing Permit from Last Port (1 original).
Stores List (5 copies).
List of Personal Effects (3 copies).
List of Contents of Slop Chest (3 copies).
List of Passengers in Transit (5 copies).

Cargo documents. The Port of Caripito has in force a system of cargo documentation for expediting the sailing of vessel. It is as follows:

a. Certain documentation with approximate cargo figures of unofficial nature are placed on board and official cargo documents are airmailed to discharge port.

b. Blank signed documents are placed on board to vessel's departure from Caripito and thence correct figures are radioed to sub-agency at Guiria who delivers them in writing to Master, who acknowledges its receipt by signing carbon copies of transmittal sheet.

PILOTAGE: Pilots are employees of Venezuelan Government and act in an advisory capacity. The Master retains responsibility for ship at all times. In the event it becomes necessary to disregard the Pilot's instructions in order to ensure the safety of the ship, the Master must forward through the Marine Department a full written report of the circumstances, for delivery to the Captain of the Port.

Pilots are compulsory and are embarked and disembarked at port of Guiria through a sub-Agent. Vessels should proceed to the Guiria Sea Buoy (position Lat. 10° 33′ 12″ N., Long. 62° 15′ 00″ W.) and await instructions. If arriving during the hours of darkness, certain instructions are usually transmitted by light signals from the signal tower. Voice radio communications can be established at any time with Guiria or Lagoven Caripito on frequencies 2182 kHz, 2638 kHz and 2738 kHz. The launch which embarks the Pilot will also deliver instructions to the Master relative to the movements of his vessel en route to Caripito, port regulations, facilities, etc. The regular pilotage fees cover the area from the entrance to Maturin channel to and from Caripito. The Pilot is to be provided sleeping quarters and food equal to that provided the officers aboard ship.

Note: Complaints or observations concerning the Pilot's handling of vessel should be noted on back of pilotage ticket.

TIDES: The normal range of tide in the dock area is about 12 ft. with currents up to 3 knots during the flood and 4 knots during the ebb in rainy season (May-December). The normal current is 2.5 knots during the flood and 3 knots during the ebb.

ANCHORAGE: For vessels awaiting berth, there is an anchorage about 1,000 m. up-stream from the Caripito Terminal. Vessels awaiting clear channel may at times be requested to anchor at Punta Marieta. Vessels awaiting high tide anchor at Punta Marieta or off Punta Gorda.

MAX. SIZE: Vessels up to 745 ft., 52,000 d.w.t. and max. draft *33 ft. (FW) at No. 2 berth and LOA 630 ft., 32,000 d.w.t. and max. draft *33 ft. (FW) at No. 3 berth.

*Safe draft per tide tables.

RADIO: The cable and telegraphic address for Lagoven at Caripito is "Lagomar – Caripito". Messages to and from ships at sea are routed through the Government Radio Station at Maiquetia (La Guaira), call letters "YVG". This station operates on a 24-hour continuous watch, on the following frequencies:

Listening Frequencies: low frequency, 500 kHz; high frequency, 4178, 6267, 8356, 12534, 16712, 22225 kHz. Transmitting Frequencies: low frequency, 500, 472, 464, 417 kHz; high frequency, 4322, 4352, 6505.5, 6519.5, 8722, 8730, 12817.5, 17141.6 kHz. Radio notice of arrival should be sent 72 hours prior to arrival at Guiria and corrected if weather or other conditions delay the vessel.

Radio telephone listening watches are maintained on a 24-hour basis at Guiria and at Caripito on 2182 kHz. The following frequencies are available for communications after contact: 2638 kHz and 2738 kHz.

All vessels en route to Caripito may also communicate with Amuay or La Salina Marine offices and request that message dealing with corrected ETAs, Pilots and other business be relayed to the Caripito Marine Office.

Vessels that were originally cleared for another foreign port, or another Venezuelan port, and were subsequently diverted at sea, should radio the following information to Lagomar Caripito prior to arrival:

Vessel's name
Master's name
Vessel's flag
Number of crew
Estimated time of arrival at Caripito
Last port of call
Port for which originally cleared
Grade and quantity of cargo to be lifted

This information is required in order to make in advance special arrangements for inward clearance, to avoid payment of a fine. It is necessary in such a case that the following documents be ready on arrival:

Crew List (original and 6 copies).
List of Personal Effects (original and 2 copies).
List of Contents of Slop Chest (3 copies).
Stores List (original and 1 copy).

Also required are the original and 2 copies of the radiogram instructing Master to proceed to Caripito. Outward clearance documents are placed on board the vessel prior to departure from the Caripito terminal.

Masters should bear in mind that while vessels are within Venezuelan territorial waters, Government Authorities do not permit the use of ship's radio equipment. Cables and radiograms should be handed to the company representative for transmittal via shore radio communication system. Caripito has also radio telephone communication with North and South America and Europe. For further information contact Port Services Section in the terminal building, telephone C-335.

BALLAST: Ballast is not required when mooring. Any ballast carried should be in a minimum number of tanks, and all other tanks stripped, so as to minimise deballasting time.

A relatively small amount of salt water remaining in ship's tanks or lines can contaminate crude and cause operating problems for the refiners. It is important therefore to strip tanks and lines as dry as possible.

Vessels provided with completely segregated ballast system are permitted to discharge ballast and load cargo simultaneously. All ballast clean or dirty must be pumped ashore. Contaminated residues may be pumped ashore, where facilities are available for receiving up to a max. of 20,000 barrels.

A considerable number of vessels are now participating in the programme to eliminate pollution of the seas. Under this programme, vessels may arrive carrying quantities of oil/water emulsion. If it is desired to follow the "load-on-top" procedure in such instances, it is requested that the Marine Representative be informed on arrival.

BERTHING: The Marine Office Building is located on the West bank of the San Juan River upstream from the berths. Representatives of the Marine Department board vessel immediately upon arrival and it is particularly requested that Masters indicate at that time all ship's requirements. Personnel are available for assistance at all hours.

Lagoven maintains a deep water terminal, consisting of 2 ocean tanker berths, Nos. 2 and 3. These are T-type piers with breasting dolphins located approximately 10 ft. off the face of each pier.

All terminal facilities are under the control of Lagoven, S.A. The port is open for navigation during day and night. All ocean tankers are moored at berths No. 2 and 3 on the flood tide only. Vessels may sail from berth No. 3 at any stage of the tide. Sailings from berth No. 2 are restricted to flood tide only when berth No. 3 is occupied.

A vessel entering or leaving port must be assisted by the same Government Pilot taken aboard at Guiria. A Custom guard will board at the same time and remain with the vessel. A Lagoven Representative will deliver to the Master his loading and docking instructions together with any other information pertinent to the vessel's call. He will also sign the Notice of Readiness if requested. The vessel will proceed to anchor to await flood tide to dock, to await berth, or will swing to the flood tide in the turning basin and proceed directly to the berth depending on circumstances.

LOADING: Loading rates, particularly for low-flash products loaded during the hours of darkness or when topping off cargo tanks, will be reduced by terminal to meet existing conditions.

All loading and discharging will be stopped during passage of an electric storm, and ullage covers must be closed and dogged down. During periods of calms, loading of gasoline or other similar low-flash products may be loaded at reduced rates or loading stopped if the heavy vapours are not being dispersed quickly enough to prevent hazard from accumulated gas pockets. Ship's officers are cautioned to be on their guard during such conditions.

Loading rates will be reduced when topping off, if requested by the ship's officer.

Instructions as to grade or grades of cargo, and the approximate loading rate anticipated, will be given to the Master. Supplementary information including number and size of lines and hoses will be furnished to the Chief Officer before loading commences.

If vessel's loading orders from Owners or charterers do not agree with terminal's orders, either as to grades or quantity, the marine representative should be advised immediately. The terminal is authorised to load 10% more or less than the quantity nominated; if the cargo to be lifted will be more or less than 10% limitation consultation is necessary.

A terminal employee is stationed at each pier during the entire time the ship is discharging ballast, bunkering, or loading cargo. Fifteen minutes "standby" notice should be given to this man prior to completion of ballast, bunkers, or cargo.

MEDICAL: Medical treatment and hospitalisation, if required, is provided at a hospital located in the concession. Several dentists are located in the town of Caripito. Authorisation forms for medical and dental treatment are provided, which require Master's signature. Transportation is available at the Marine Office. Please note that if the patient does not speak Spanish or English, an interpreter should accompany him.

FRESH WATER: Fresh water is available in any quantity. Delivery is made through 2.5 in. national standard fire hose thread hydrants. Ship's personnel must provide hoses and connect up.

FUEL: Bunker "C" fuel oil, marine diesel and intermediate fuels are available. It is the responsibility of ship's engineer to give "stand-by" notice to the terminal employee and advise him when to shut down.

CONSULS: There are no consular representatives in the area. Vessels bound for U.S.A. or British Caribbean ports will be provided with a letter stating this fact.

CERTIFICATES: All ships calling at a Venezuelan port for the first time must be measured for tonnage by Captain of the Port. It is the usual practice to take ashore the ship's Panama Canal or Suez Canal Certificate, which is used as a basis for recalculating tonnage under the Venezuelan regulations, and is returned before sailing. The Venezuelan Admeasurement Certificate, when later issued is forwarded to the Owners. A fee is charged for this certificate, which is payable only on ship's first call. Vessels registered in following countries are excluded from above regulations: Netherlands, Germany, France, Portugal, United Kingdom, Denmark, Sweden, U.S.A., Ireland and Norway.

CUSTOMS: While the vessel is in port, Venezuelan National Guard officials are assigned on board to ensure compliance with Customs regulations. The law requires that meals be supplied to these offícals during regular meal hours. Masters are requested to give them the privilege of eating in the officers' messroom, to avoid difficulties.

Venezuelan laws are strict in regard to contraband and Masters are requested to instruct their crews not to take cigarettes or other articles ashore. Cigarettes in carton lots, cigars, tobacco, souvenirs, gifts (particularly items of women's apparel) should be collected prior to arrival in port, listed with the items in the slop chest and placed in the custody of the Master for deposit in the slop chest or closet which will then be sealed for the duration of the vessel's stay in port.

Firearms on board any merchant vessel calling at Venezuelan ports must not exceed 1 per officer, nor can ammunition exceed 18 cartridges per officer. All firearms and ammunition must be noted on the stores list. Officers must not carry firearms while ship is in Venezuelan waters and these side-arms and ammunition should be collected and held in the Master's safe custody. Crew members should be warned against taking knives or other weapons ashore.

REPAIRS: Only minor repairs of an emergency nature can be made. There are no electronic repair services available in the area.

SHORE LEAVE: Shore leave is permitted and a representative of the Captain of the Port boards on arrival and issues the required number of passes. Shore passes are to be collected prior to sailing, and given to the Lagoven Despatcher undocking the vessel. Vessels are not permitted to sail until all crew members are on board, unless hospitalised or prior arrangements made for disembarking.

TIME: Local time is GMT minus 4 hours.

GENERAL:

Gangways: Gangways at berths No. 2 and 3 are provided by the terminal.

Plimsoll Marks: The Captain of the Port requires that the Plimsoll Marks of all vessels using the port be clearly visible. Vessels will be checked on completion of loading, and if the Plimsoll Marks are not readily legible, permission to sail may be withheld.

Surveyors: There are no appointed surveyors to the American Bureau of Shipping or Lloyd's in the area. With 48 hours' notice, non-exclusive surveyors can be obtained from Caracas, or at times from Puerto La Cruz, or qualified Masters or chief engineers may be available for appointment as surveyors when required.

Bonded Stores: Cigarettes or other stores in bond are not obtainable at Caripito.

Cash Advances: The local currency is the Venezuelan Bolivar and cash advances are made only in this currency. It is requested that any requirement for cash advances be included in the vessel's radio ETA, to permit delivery on board on arrival. Cash returns can be accepted only during the normal working day – 0700 to 1600 hrs. Sundays and holidays excluded.

Provisions and Stores: Provisions and stores in extremely limited varieties and quantities are available at prices considerably higher than in most other ports.

Charts: No supplies of charts or sailing directions are available at Caripito.

Personnel – Seamen Left Ashore: In the case of seamen left ashore for hospitalisation, repatriation or other reason all documents and personal effects are to be delivered to the Marine Office before sailing. A letter is required from the Master advising the maximum advances to be made to the seaman, if any, and instructions concerning his repatriation. All expenses incurred by seamen left ashore, including cost of repatriation, are for ship's account. It is important that Masters bear in mind that the Venezuelan law will at all times hold the vessel, her Master, Agent or owner, responsible for any seamen left behind in Venezuela.

Laundry; Laundry service is available.

Lubricating Oil: Supplies of marine lubricating oils are available from Puerto La Cruz. Quantities required should be included in the ETA cable.

Mail: Any pending ship's mail will be delivered on board by the marine dispatcher on arrival at Caripito. At the same time he will receive any ship's mail to be dispatched. The marine dispatcher will accept personal mail only if it carries the proper amount of Venezuelan postage, or if Master authorises postage by signing 7 copies of the Company Post Transmittal form. Masters interested in knowing the individual postage amounts to be paid by each crew member, should provide a list, in duplicate, of the senders, and number of letters sent by each one identified by a number written on each letter. Copy of this will be returned aboard vessel when leaving this port outward bound. If not ready on time, it will be air-mailed to the vessel's next port of call.

Inspection – Petroleum Products and Crude Oil: Charles Martin & Co. and E. W. Saybolt, petroleum inspectors, are available from Puerto La Cruz if specified.

Visitors: All visitors to ships are prohibited except those company employees, petroleum inspectors, etc., whose duties require their presence aboard.

Passengers: Passengers will not be permitted to disembark unless in possession of the required visa and documents. To facilitate clearance, if passengers are carried, the Master should include advice to this effect in his radio ETA.

Pollution of Harbour and Coastal Waters: The laws of Venezuela are strict in regard to pollution of harbour and coastal waters by oil, and heavy fines are imposed for violations. No dirty ballast, oil or bilge slops are to be pumped or allowed to escape overboard. All overboard discharge valves from cargo tanks and bilges are to be secured before loading or discharging commences. Loading is to be conducted with greatest care and vigilance in order that errors or delays in handling cargo valves may not result in overflows. All deck scuppers should be plugged before loading to avoid harbour contamination should an overflow occur. The authorities require that a written report be submitted by the ship involved in the event of an oil spill.

EL CHAURE: 10.15 N. 64.37 W. (See Plan Book)

OPERATORS: S.A. Meneven.

LOCATION: El Chaure Marine Terminal is located on the South shore of the head of Bergantin Bay. 1.8 miles N.E. of Puerto La Cruz: Lat. 10° 14′ 50″ N. Long. 64° 36′ 57″ W.

This terminal is also considered to be Berth No. 6 of 'Puerto La Cruz' which also see.

DOCUMENTS: To avoid penalties, ships clearing for Venezuelan Ports must present certain papers herein set forth for arrival and clearance after docking. The Clearance is made by Government officials accompanied by a company representative.

The following documents must be presented:

1 copy of Ship's register
Clearance from last port
1 copy of Ballast Certificate
6 copies of Crew list
5 copies of Passenger and baggage list
2 copies of List of passengers in transit
4 copies of List of personal effects
4 copies of Stores list
2 copies of List of slop chest
Sailing permit issued by Marine Authority of last port of call
Dispatch issued by Venezuelan Consul at last port.

PILOTAGE: Pilots are employees of the Venezuelan Government and pilotage is compulsory for vessels entering or leaving the harbour. The Company will arrange for Pilots to board all vessels as necessary. Whenever it might be deemed necessary for the Master to disregard the Pilot's advice in order to ensure the safety of the vessel, a written report must be submitted by the Master to the Venezuelan Port Captain, explaining the reason for such action.

ANCHORAGE: The crossed line portion on the plan is the anchorage zone for all ships after arrival at Pozuelos Bay. The Company will dispatch the Pilot, by launch, to all ships when they are ready to be docked. On entering the Pilot Zone, the Venezuelan flag must be flown from the foremast; it must be flown at all times between sunrise and sunset.

MAX. SIZE: Max. draft 39 ft. 6 in.

RADIO: El Chaure Terminal Office may be contacted on radio-telephone SSB or AM frequencies of 2738, 2638, 2182 and 2120 KHz. Frequency 2182 kHz should be used for initial contact.

Arrival advice: Masters are required to advise by cable their ETA. Such notice should reach El Chaure at least 48 hours ahead of vessel. In cases of ships being diverted at sea to a Venezuelan Port, or to another Venezuelan Port, Venezuelan regulations require, by cable, prior to arrival, name of Master, number in crew, port of departure, port to which originally cleared, flag of ship and net registered tonnage.

VHF: Channel 16 can be used after arrival at Pozuelos Bay.

TUGS: Tug assistance to moor and unmoor is compulsory at El Chaure installations. Ships over 145 m. long must use 2 tugs having not less than 1,600 h.p. each for mooring and unmooring at El Chaure. 1 launch is required for handling the lines.

BERTHING: The wharf has a length of 100 ft. with dolphins established on each side. The dock accommodates vessels drawing up to 39 ft. Sea conditions are usually very good in the entire area. Waves are almost nil and out of the hurricane path. A chain of small islands makes El Chaure a natural port. Only 1 vessel at a time can be moored for loading or unloading. The normal range of the tide is 1 ft.

BALLAST: Vessels arriving in El Chaure must carry sufficient ballast to ensure safe handling. By Venezuelan Law, all dirty ballast must be pumped ashore into ballast pits. Vessels having separate clean tanks for ballast may pump overboard, after first being inspected and passed by Port Authorities. The Company Terminal facilities include a 16 in. ballast line, which empties into ballast pits about 3,500 ft. from the dock. These pits have an elevation of 32 ft. above the dock and will hold 50,000 bbls. The ballast line will stand a pressure of 100 p.s.i.g. The pressure is recorded at the dock. The vessel will be held responsible for damages to the shore ballast line and spills that maybe occur because of line rupture.

LOADING: Before tying up, blind flanges on the ship's manifold should be removed, hose derrick to be topped and rigged to lift shore hoses along with dock booms. All vessels must dock with starboard side to dock. The Company dock supervisor will inform the Master of the vessel as to characteristics of cargo to be loaded, loading rates and all other information necessary for safe and efficient loading operations. During the ship's stay at the dock, company employees are available at all hours to assist in any manner. After loading is completed, if the dock space is required for another vessel the ship must vacate the berth and wait at anchorage until cargo and sailing papers are completed.

FRESH WATER: Available, rate 10 t.p.h.

REPAIRS: Facilities are limited; any repair work must be requested by Master in writing.

CONSULS: The following are in Puerto La Cruz: Belgium, Brazil, Denmark, France, Great Britain, Netherlands, Italy, Panama, Norway, Colombia, Spain, Sweden and West Germany.

SURVEYORS: Aivepet, Charles Martin & Company and E. W. Saybolt maintain offices in Puerto La Cruz for inspection of cargo if required.

TIME: Local time is 4 hours slow on GMT, year round.

POLLUTION: Pollution of coastal waters is strictly forbidden by Venezuelan Law. The escape of dirty ballast or of cargo either at the dock or in the harbour or in territorial waters will result in heavy fines by Venezuelan authorities. If oil is spilled an estimation of quantity should be made by the Master of the vessel, Venezuelan Authorities and Company personnel, acting jointly. Their joint report must be submitted to the Venezuelan Petroleum Inspector from the Energy and Mines Office, and also the National Guard Headquarters in Puerto La Cruz. The Ministry of Energy and Mines will assess a fine based on the quantity of oil that was spilled. Also the ship is held responsible for the spill and cleaning. Chemicals, equipment, boat and labour used for this purpose are for the ship Owner's and/or operator's account. Each ship must maintain strict supervision on discharging of ballast as well as loading cargo in order to avoid spillage.

CUSTOMS: Venezuelan laws are strict in regard to contraband and Masters are requested to instruct crews not to take cigarettes or other articles ashore.

GENERAL: *Crew:* Passes for shore leave for ship's crew will be given to Master by Company Representative on docking or at anchorage. These passes must be filled out for each Crew member prior to Venezuelan authorities' visit. Passes may be used during the ship's stay but must be returned to the National Guard at the dock prior to departure. Before ship's departure a report must be made to the Dock Master if any Crew member is missing. Crew members left behind will be placed in custody by Venezuelan authorities until deported at vessel's expense. A Crew member requiring medical or dental treatment must submit his request for such aid through the Master to the Dock Master. Arrangements for seamen arriving from other ports, transferring to other ships or being repatriated are handled by the vessel's Agency.

Under the Venezuelan law the vessel is responsible for all seamen in the country during their entire stay. Masters are requested to leave written instructions with the Dock Master for handling seamen left ashore. The Master of the ship must indicate his acceptance of the responsibility for all costs incurred in handling a seaman.

Seaman Left Ashore: A letter from the Master is required advising the amount of cash advance and any other instructions concerning the seaman's repatriation. All expenses incurred by the seaman, including the cost of repatriation are for the vessel's account. The documents and personal effects of seamen left ashore for hospitalisation, repatriation or any other reason, must be delivered to the Terminal Office before sailing. Venezuelan Law holds the Master, ship's representatives and Owners responsible for any seaman left behind in this country.

In Dock: Masters are requested to observe the following regulations while alongside the Company Terminal:

1. – Sufficient number of Crew members must be on board at all times, during discharge of ballast and loading of cargo to ensure proper handling of mooring lines.
2. – Rat guards are to be on all mooring lines during entire stay.
3. – Venezuelan authorities do not permit blowing of heavy smoke from vessel's funnel, while in port. Breaking of this rule may result in Government fine and/or removal of ship from the dock.
4. – Venezuelan National Guard personnel are assigned to guard duty for each ship while it is at the dock. Meals must be furnished for these guards in the Officers' Messroom.

Visitors: All visitors to vessels are prohibited, without written permission of the Port Authorities. Dock Master, Petroleum Inspectors, Dispatchers and Terminal employees handling hoses may board ship in performance of their duties.

Charts: Not available at El Chaure.

AGENCY: All incoming vessels must have a local Agent to render all services required for a prompt and efficient tanker turnaround and to cancel all vessel disbursements.

EL GUAMACHE: 10.52 N. 64.04 W. (See Plan Book)

SHIPMASTER'S REPORT: October 1978.

LOCATION: The Port of El Guamache is a new developing port, located about 1000 feet northward of Pta. Mangle on the Isla De Margarita (see B.A. Chart 230).

DOCUMENTS:

Clearance from last port.
Sealed envelope for Customs
Visaed B/L and Sobordos.
Despatch from last Venezuelan port, if any.
Consular Documents from last foreign port.
6 Crew Lists.
Vaccination Certificates of Crew.
4 Store Lists (Deck, Engine, Provisions, Bonded store).
4 Personal Effects Lists.
4 Arms & Ammunition Lists.
4 Passengers Lists.
4 Mail Lists.

ANCHORAGE: On the Western side of the Pta. Mangle in Bahia Guamache, depth 8–11 fathoms.

PILOTAGE: Pilotage is compulsory. Pilot boards on arrival or at anchorage. Vessels arriving at the anchorage must keep engines on stand-by and wait for shifting or berthing instructions.

Note: As at other Venezuelan ports, vessels must fly the Venezuelan flag at masthead and lower gangway for boarding party – Agents, Customs Officers, Quarantine Officers, Immigration Officers, Pilot and representative of Port Captain, etc.

RADIO: As a new developing port, no radio service at Margarita Island, all ETA wireless messages must be sent via ITT or YVG – 72, 48, and 24 hours prior to arrival

The port office is equipped with radio telephone installation, operating 0600-2000 hours, transmitting on VHF frequencies 156.8 MHz (Channel 16.) Vessels calling in Spanish language will be answered promptly; if calling in English will be answered by English speaking person when on duty.

TUGS: Not available.

BERTHING: Length 126 m. with 3 dolphins installed at each end with catwalk to dolphins. Depths of water, 36 ft. at LW and 42 ft. at HW.

STEVEDORES: Arranged by Agents, normal working hours 0700-2100, cargo discharged into warehouse.

GANGWAY/DECK WATCHMAN: Necessary, normally engaged by Customs or Police.

OPENING/CLOSING HATCHES: Normally by crew.

FRESH WATER: Not available.

FUEL: Not available.

TIME: Local time is GMT minus 4 hours.

AIRPORT: Distance about 15 km. from port. Connections to other cities.

MEDICAL: Available at Polamar City about 31 km. from the berth.

PROVISIONS: Fresh and dry provisions supplied through ship chandlers from Polamar City and delivered on board.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle of wine or spirit.

REPAIRS: No repair facility available.

TELEPHONE: No telephone connection to vessel at present but provided inside warehouse and port office.

DENSITY: 1025

HOLIDAYS: As other Venezuela ports.

SHORE LEAVE: Shore leave permitted. Passes issued by representative of the "Direccion De Marina Mercante" on arrival. Shore passes to be collected prior to sailing and given to Agent.

DEVELOPMENTS: El Guamache has a development programme to construct new wharves Northward from present pier to accommodate 6 ocean-going vessels and expected to complete within 3 years.

All port facilities will be available. Margarita Island is the only free port in Venezuela. Tourism from the mainland and overseas is increasing day by day as Margarita Island has very good weather and beaches.

EL PALITO: 10.29 N. 68.07 W. (See Plan Book)

OPERATORS: Corpoven S.A.

LOCATION (of El Palito Terminal): The terminal facilities operated by Corpoven S.A. at the port of Puerto Cabello (Punta Chavez), are situated on the Venezuelan coast, 7 miles West of Puerto Cabello. The terminal has a 2,475 ft. pier, part causeway and part trestle, extending out from Punta Chavez along a shallow reef then angling into water 48 ft. deep. 2 tankers can tie up simultaneously at the berths.

WEATHER: Winds are normally from the N.E. with an average Beaufort scale force of 2-3. Average temperature about 85°F. The months of January, February and March have the roughest sea and swell, and vessels may not be able to dock due to the weather.

TIDE: The normal range of the tide is 1 ft.

ESSENTIAL REQUIREMENTS:

1. Incoming vessels must send ETA 72 hours before arrival at El Palito Terminal and another 24 hours before arrival advising any change of ETA.
2. If a vessel originally cleared for another port (including some other Venezuelan port) is diverted at sea to El Palito, certain information must be received prior to arrival, to avoid heavy fine and/or delays.
3. *No Ballast* may be pumped overside in port. Ballast disposal facilities are available at the El Palito Terminal.
4. The use of Venezuelan Government Pilots is compulsory for docking and undocking.
5. The Venezuelan flag should be displayed at the mast-head during daylight hours by vessels anchored and berthed in Venezuelan waters.
6. In addition to other clearance documents, 2 copies of an itemised list of articles in the ship's slop chest must be presented to the authorities on arrival.
7. The emergency fire signal is 5 long blasts on the vessel's whistle or siren. No other signal is to be given in case of emergency.
8. Rat guards must be in place on all mooring lines.

APPROACHES: The terminal pier is marked by the following lights: One occulting red light at the top of No. 1 (N.W.) Hose Rack, 80 ft. above sea level. Lat. 10° 29′ 51″ N., Long. 68° 07′ 13″ W., and one green light, flashing every 3 seconds at the top of No. 2 (S.E.) Hose Rack, 80 ft. above sea level, located 275 ft. S.E. of No. 1 Hose Rack. A group of 5 crude storage tanks, painted aluminium, visible 20 miles on a clear day, are located 1.25 miles 200° from the head of the pier.

DOCUMENTS:

A. Admeasurement Certificates. All vessels calling at Venezuelan ports for the first time must be measured for tonnage by the Captain of the Port. It is the usual practice to take the Ship's Panama Canal or Suez Canal Certificate, which is used as a basis of recalculating the tonnage under the Venezuelan Regulations and is returned before sailing. The Venezuelan Admeasurement Certificate is forwarded to the owners at a later date. A fee is charged for the certificate which is payable only on the vessel's first call. Vessels registered in the following countries are excluded from the above regulations: Denmark, France, Germany, Ireland, Netherlands, Norway, Portugal, Sweden, United Kingdom and U.S.A.

B. Inward clearance is effected on board immediately after docking by Government Port Officials and a representative of the Marine Department. It is necessary that the following documents be ready on arrival:

- Clearance from last port (1 copy).
- Ballast Manifest from last port (1 copy).
- Crew List (9 copies).
- Passenger and Baggage Lists (7 copies).
- List of Personal Effects (5 copies).
- Store List (3 copies).
- List of Slop Chest (3 copies).
- Sailing Permit (issued by maritime authority of last port).

Vessels arriving with cargo to discharge, will also require:

- Consular Mail (one sealed envelope from each loading port).
- Manifest (Sobordo), 1 original and 2 copies from each loading port.
- Bills of Lading, 1 original and 5 copies from each loading port.
- Tally books; 6 from each loading port.
- Consular invoice: 3 originals and 3 copies, from each loading port.
- Commercial invoices: 3 from each loading port.

Vessels originally cleared for another port, and diverted at sea to El Palito, should radio Corpoven Puerto Cabello the following information as soon as the change of sailing orders are received:

- Advise diverted.
- Name and class of vessel.
- Number of crew.
- Flag of vessel.
- Last port of call.
- Port from which originally cleared.
- Estimated time of arrival at Pilot station.
- Type and amount of cargo vessel will load.
- Time required to discharge ballast.
- Master's name in full as signature (John Jones, Master).

This information is required in order to make in advance special arrangements for inward clearance to avoid payment of fines.

Outward clearance and cargo documents are delivered on board by the Marine Dispatcher. However, in order to obtain the sailing permit, a special form which is delivered on board on arrival must be completed, not later than 2 hours before sailing time. This form gives cargo and freeboard information required by the Captain of the Port. In addition, one of the 9 copies of the crew list specified above, corrected to show any changes made while in port, should be attached to the form.

HEALTH: No Radio Pratique. Health Officers board vessel at berth.

RADIO: Puerto Cabello, Venezuela, Coastal Station call sign YVL, makes radio contact with all vessels "CQ" on 8722 kHz at the following hours: 1130, 1330, 1530, 1830, 2130, 0030, 0200 GMT. Also "CQ" on 17141 kHz at 1630 GMT and "CQ" on 4322 kHz at 0430 and 0630 GMT.

VHF: Master should call El Palito Marine Terminal 3 hours before arrival on Channel 16.

PILOTAGE: The Pilot's working hours are from 0600 to 1800 hrs. There are no special charges for their assistance during those hours on workdays. On Sundays and holidays they charge overtime. There is also a charge when ship has anchored in the bay as according to the pilotage law each movement (and entering the bay is one movement) requires a Pilot. By special agreement only Pilot's overtime will be charged for anchorage, as anchorage and docking is considered as one movement with respect to Government Pilotage Fee.

Pilotage is a compulsory government service. The government charges the Pilot's assistance according to ship's net tonnage. Vessels under flags of Panama and Liberia are required to have their Venezuelan Tonnage Certificate. The government charges for docking and sailing.

Pilots are employees of the Venezuelan Government and pilotage is compulsory for vessels entering or leaving the harbour. The terminal will arrange for Pilots to board all vessels as necessary. Pilots meet the vessel via launch provided by the terminal. The Pilot may decline to moor the vessel if it is not equipped with satisfactory mooring equipment, lines, gear, etc., or if it is not sufficiently ballasted. It is the responsibility of the Master to notify the Pilot of any special conditions or peculiarities, such as defective navigation equipment, mooring lines, tackle, gear or lack of necessary equipment, which might impose hazards in connection with the handling, mooring, discharging or loading of vessels.

At the berths, vessels must be moored to the entire satisfaction of the Pilot and the terminal operators' Mooring Master.

The Pilot acts in an advisory capacity. The Master retains responsibility for the vessel at all times. In the event it becomes necessary to disregard the Pilot's advice in order to ensure the safety of the vessel, the Master must forward a full written report of the circumstances through the terminal for delivery to the Captain of the Port.

ANCHORAGE: Notice of Readiness can be tendered at anchorage. The suggested anchorage for El Palito Terminal is located 0.5 to 1 mile North or West of the seaward end of the pier. The area to the East of the pier is not recommended as an anchorage.

RESTRICTIONS: None. Vessels enter day or night and at any state of tide.

MAX. SIZE: East berth draft 38 ft. West berth draft 40 ft. Length 730 ft.

BALLAST: Due to the exposed location of the oil piers, vessels are required to be ballasted to the following minimum drafts for safe manoeuvring to and from the berths:

Overall Length of Vessel	*Minimum Draft Required*
400 ft. – 480 ft.	Forward 9 ft., Aft 17 ft.
481 ft. – 700 ft.	Forward 12 ft., Aft 20 ft.
701 ft. – 730 ft.	Forward 14 ft., Aft 23 ft.

A total capacity of 65,000 barrel tank and a 20 in. ballast line are available to receive all ballast.

Vessels with separate ballast tanks, lines and pumps may discharge ballast overside. Ballast for entering the harbour should be carried in the minimum number of tanks, and all other tanks stripped dry so as to minimise the time required for discharging ballast alongside berths.

All ships in ballast from abroad are charged for Consular Ballast Certificate.

BERTHING:

The use of both anchors is required for docking at both berths. It is considered prudent to have both anchors hove-out prior to entering the harbour in order to facilitate speedy release while mooring. The Pilot will advise whether the vessel is to be moored port or starboard side to the dock.

In the event the berth is required by another vessel, a vessel having completed loading may be required to vacate the berth promptly and proceed to anchorage to await cargo documents.

East Berth: Approach at very dead slow speed along a line parallel to a line formed by the East and the West berth at a distance from it equal to the distance of the North buoy. Drop the starboard anchor at the point of intersection of the ship's fore with a line formed by the two East shore range markers. Continue along same path at very dead slow speed until reaching with the ship's fore the East berth. Drop the port anchor. Allow the ship to drift into position alongside berth. This will be done by tying mooring lines as required by Pilot and with the help of the ship's engines.

West Berth: Approach at very dead slow speed along a line parallel to a line formed by the East and West berths and at a distance from it equal to the distance of the North buoy. Drop the port anchor at the point of intersection of the ship's fore with a line formed by the two West shore range markers. Continue along same path at very dead slow speed until reaching with the ship's fore the West berth. Drop the starboard anchor. Allow the ship to drift into position alongside berth. This will be done by tying mooring lines as required by the Pilot and with the help of the ship's engines.

General: Available hose connections, all 8 in., are as follows: 3 for Fuel oil, 1 for diesel products and 1 for leaded or unleaded gasolines. All dirty ballast to be pumped ashore through the fuel oil loading hoses.

LOADING:

Cargo: On completion of inward clearance, information regarding the number of hoses and loading rate will be given to the Master and Chief Officer. During ballast discharge supplementary information will be given to the Chief Officer. A 15 minute standby is required prior to finishing any grade.

Contamination of Crude: It has been established that one of the major causes of contamination of crude oil is the small amount of salt water remaining in the ship's tanks, pumps and ballast lines after discharging ballast. This small amount of salt water frequently results in costly damage and downtime to refining equipment and also presents many other problems. Therefore all tanks and lines must be pumped as dry as possible.

Draining of Hoses: Hoses are drained by gravity on all products and crude. Ship personnel must co-operate with terminal personnel in this operation to ensure complete draining of hoses into ship tanks and adequate drip cans must be placed to catch the remaining oil in line. Sand or equivalent must be on standby to clean up any oil leaks.

Loading Rates:

Commodity	*Available at berths*	*Size of line (in.)*	*Estimated max. barrels per hour*	*Hoses Pier 1 (in.)*	*Hoses Pier 2 (in.)*
Crude oil	1 – 2	24	27,000	3×8	2×8
Bunker C	1 – 2	24	17,500	3×8	2×8
Diesel	1 – 2	16	8,000	1×8	1×8
Unleaded gasoline	1 – 2	16	8,000	1×8	1×8
Leaded gasoline	1 – 2	16	8,000	1×8	1×8
Ship's bunkers	1 – 2	24/16/8	6,000	1×8	1×4
Lube	1 – 2	8	2,000	1×8	1×4

Loading rates will be reduced by the terminal when topping off tanks at the vessel's request.

Scuppers: Loading will not be started till all deck scuppers are properly sealed to the satisfaction of the terminal.

Simultaneous Deballasting and Loading: Vessels equipped with separate and completely segregated ballast tanks, and lines and pumps never used for oil may be permitted to discharge ballast and load simultaneously providing approval has been obtained from the terminal.

TUGS: Use of tugs compulsory. Usually 2 tugs, from 1,500 h.p. to 2,800 h.p. approximately, assist during docking and 1 (1,600 h.p.) during undocking.

MEDICAL: Medical treatment and hospitalisation, if required, are available at the Seguros Sociales in Puerto Cabello. Several dentists are located in Puerto Cabello. Authorisation for any medical and/or dental treatment must be made by the Master. Transportation is available at the Terminal Office. If the patient does not speak Spanish an interpreter should accompany him.

FRESH WATER: Not available.

FUEL: Bunkers are available only for vessels loading cargo. Disputes as to quantity should be registered by signing the bunker receipt under protest and noting the ship's quantities thereon.

CUSTOMS: While the vessel is in port, Venezuelan National Guard officials are assigned on board to ensure compliance with Customs regulations. The law requires that meals be supplied to these officials during regular meal hours.

Venezuelan laws are strict in regard to contraband and Masters are requested to instruct their crews not to take cigarettes or other articles ashore.

Cigarettes in cartons, cigars, tobacco, souvenirs, gifts (particularly items of women's apparel), should be collected prior to arrival in port, listed with the items in the slop chest and placed in the custody of the Master for deposit in the slop chest which will be sealed for the duration of the vessel's stay in port.

CONSULS: French, Norwegian, Danish, Italian and Panama Consulates are represented in Puerto Cabello. There is no American Consulate. It is necessary for Masters of Panamanian flag vessels to visit the Panamanian Consulate at Puerto Cabello to present documents and receive dispatch as required by law. Regular office hours are from 0800 to 1200 hrs. and from 1400 to 1700 hrs. Mondays through Fridays; any dispatch issued outside of regular office hours is billed at double fees. Terminal Office will arrange transportation to Puerto Cabello upon request.

REPAIRS: Only emergency repairs of a minor nature can be made. Prices are very high.

REPATRIATION: The documents and personal effects of seamen left ashore for hospitalisation, repatriation or other reason, must be delivered to the Terminal Office before sailing. A letter from the Master is required advising the maximum amount of advances to the seaman and any other instructions concerning his repatriation. All expenses incurred by the seaman, including the cost of repatriation, are for the vessel's account. Venezuelan law at all times holds the Master, Agent or Owner responsible for any seaman left behind in Venezuela.

REGULATIONS:

Engines: No engine repairs will be made while the ship is in dock. Engines are to be kept at standby at all times while the ship is in port.

Rat-guards: Vessels must use rat-guards on all mooring lines.

Visitors: All visitors to vessels are prohibited, without written permission in each case by the Port Captain or his assistant. Mooring Master, petroleum inspectors, dispatchers, and terminal employees handling hoses may board ship in performance of their duties.

Pollution: The laws of Venezuela are very strict in regard to the pollution of harbour and coastal waters by oil, and heavy fines are imposed for violations. No dirty ballast or oil is to be pumped or allowed to escape over the side. No engine-room or pump-room bilges may be pumped overboard. All pump-room sea suctions and overboard discharge valves must be secured prior to loading or discharging cargo. Loading must be conducted with the utmost care and vigilance so that errors or delays may not result in spills. All deck scuppers must be plugged tight before loading so that in the event of a spill pollution of the harbour may not result.

Garbage: No garbage is to be thrown over the side while the vessel is in port.

Passengers: Passengers will not be permitted to disembark unless in possession of the required visa and documents. To facilitate clearance, if passengers are carried, the Master should include this information in his ETA.

Firearms: Firearms on board any merchant vessel calling at Venezuelan ports must not exceed one per officer, nor can the ammunition exceed 18 cartridges per officer. All firearms and ammunition must be noted on the store list. Officers must not carry firearms while the vessel is in Venezuelan waters and these sidearms and ammunition should be collected and held in the Master's safe custody.

AIRPORT: Distant about 4 miles.

TIME: Local time is about GMT minus 4 hours.

SHORE LEAVE: Shore leave is permitted and a representative of the Captain of the Port boards on arrival and issues the required number of passes. Shore passes are to be collected prior to sailing and given to the National Guard watchmen on board.

Vessels are not permitted to sail until all crew members are on board, or special permission has been obtained to sail without a crew member.

GENERAL:

Bonded Stores: No cigarettes or bonded stores are available at El Palito.

Cash Advances: Cash advances are available in Venezuelan Bolivares only and should be included in the vessel's radio ETA, to permit delivery on board on arrival.

Charts: No charts or sailing directions are available at El Palito.

U.S.S. Club: There is no U.S.S. Club available at El Palito or film exchange service.

Inspection of Cargoes: According to prior arrangements between Owners/Charterers/Suppliers.

Laundry: Laundry facilities are available at El Palito.

Lubricating Oil: Certain types of Corpoven lube-oils only are available in small quantities. Requirements should be sent by radio with ETA.

Mail: Mail service posted from El Palito has been found to be fair.

Provisions: Provisions are available at El Palito.

Radio and Radar: Arrangements to be made with port Agents prior to arrival.

Gangways: Gangways are provided by El Palito Terminal.

AUTHORITY: Corpoven, S.A., – Refineria, El Palito, P.O.Box 102, Puerto Cabello 2023A, Edo Carabobo, Venezuela. *Tel:* (041) 422627, 421110, 421005, 423111 and 423115. *Telex:* 28013, 23571. *Cables:* Corpoven Pto. Cabello. *Contact:* El Palito Marine Terminal.

AGENT: See "Puerto Cabello".

GUANTA: 10.15 N. 64.35 W. **(See Plan Book)**

SHIPMASTER'S REPORT: 1978.

LOCATION: Lat. 10° 15′ N., Long. 64° 35.5′ W. About 5 miles East of Puerto La Cruz.

DOCUMENTS:

6 Crew Lists.
6 Passenger Lists (or negative).
6 Ship's Stores Lists.
6 Crew Personal Effects Lists (well detailed).
1 Declaration of Health.
Clearance from last port.
Cargo Manifests.
Full set of Manifests and B/Ls.

Entry Formalities: Normally carried out after docking unless there are no berths available; then vessel can be cleared at anchorage in Bahia Pozuelos, during daytime. At night only in case of emergency.

Accommodation ladder must be rigged.

Hours of entry: From 0700 till 1100 hrs. and from 1300 till 1700 hrs. Overtime outside these hours.

APPROACHES/PILOTAGE: A vessel bound for Guanta has to enter Bahia Pozuelos as she must first call at Puerto La Cruz to embark a Pilot. The anchorage area for waiting berth turn is also in Bahia Pozuelos. This anchorage is in depths of 48 ft. to 80 ft. and is well protected from swell by surrounding islands. No size limitation.

Bahia Pozuelos is the anchorage and Pilot embarking area for 3 ports: Puerto La Cruz, Guanta and Pertigalete.

The use of government Pilot is compulsory for all vessels docking or undocking. ETA: 48 and 24 hours in advance via the vessel's Agent.

Pilot boarding hours: From 0530 till 1700 hrs. every day. Vessel cannot dock after sunset. Sailing may be arranged at any time.

HEALTH: All vessels boarded by Port Doctor. No automatic Pratique.

RADIO: Curacao Radio PJC. No local station.

VHF: All Agencies maintain radio watch on Channel 16 during office hours. Tugs and launches also equipped with VHF (call: "Ramrey").

TUGS: 3 tugs available: 1 of 1,700 h.p. and 2 of 1,200 h.p. All privately owned. Sometimes vessels bound for Guanta or Pertigalete have to wait for 2 or 3 hours as these private tugs have contracts with oil companies in Puerto La Cruz and are available only when no tanker is docking or undocking. Tug's lines used. Normally tugs join the vessel inside Guanta Bay.

BERTHING: One concrete pier on piles, 763 ft. in length where vessels normally dock starboard side to. The apron is 20 ft. wide in centre, 42 ft. at ends.

One modern concrete pier on piles, 1,056 ft. in length where vessels normally dock port side to. The apron is 115 ft. wide in centre and 85 ft. at ends. The piers are well fendered with rubber hoses and used tyres.

Height of piers above HW: 10 ft. Mean tidal range: 1 ft. 6 in. Max. draft alongside small pier: 23 ft. 08 in. Minimum draft alongside long pier: 26 ft. 08 in. Depths varies from a minimum of 27 ft. to a max. of 34 ft. at the Western end of the long pier.

BULK CARGO FACILITIES: On the Eastern side of the Guanta Bay, there is a berth for loading coal by means of a fixed chute. Depth alongside 30 ft.

Grain Cargo: Receivers supply suction machines. There are 2 machines available, capacity 1,000 tons per machine during 24 hours. Grain vessels work round the clock.

Liquid Cargo: Sometimes tallow and liquefied gas are handled. Discharged by vessel's pump into tank trucks. Hoses normally supplied by vessel.

CARGO HANDLING FACILITIES: All cargo normally discharged by vessel's own gear, directly on to truck or trolleys. The piers are not connected to the railroad. No floating crane.

The following mobile cranes are available in the port area: 1 crane max. 120 tons; 1 crane max. 30 tons, with telescopic extension boom, max. 60 ft.; 2 small cranes max. 6 tons with a boom length of 30 ft.

Forklifts: 15 forklifts capacity 3.5 tons; weight 5.2 tons with fixed counterweight. To use these forklifts on board, the hoisting gear should lift over 6 tons.

2 forklifts capacity 5 tons, weight 12 tons; 1 forklift capacity 20 tons, weight 25 tons, specially for containers.

Flatbed trolleys: 30 trolleys capacity 8 tons; 1 trolley capacity 70 tons.

No lighters available.

All discharging gear normally supplied by Agency. For heavy lifts, it is recommended to have special slings on board.

CONTAINER HANDLING FACILITIES: No container berth. No crane. 1 forklift capacity 20 tons. There is a small container stacking area.

STEVEDORES: Normal working hours: 0700 – 1100 hrs. 1300 – 1700 hrs. (Monday to Friday); 0700 – 1100 hrs. (Saturdays).

Overtime: Monday to Friday, 1800 – 2300 hrs. (night shift); Saturday, 1300 – 1700 hrs.

Normally port does not work after 1700 hrs. on Saturdays or Sundays.

Ordering of gangs: For 0700 hrs. requested previous day before 1500 hrs. For 0900 hrs. requested same day at 0700 hrs.

Overtime rates: 50% for the night shift (Monday to Friday); 100% for Saturday afternoon shift.

The gangs consist of 12 longshoremen and 12 stevedores, including 2 winchmen, 1 signalman and 1 checker.

Capable supervision only available from Agency.

Rigging or cleaning gangs are available.

MEDICAL: Private hospitals at Puerto La Cruz. Private doctors generally do not visit ships. If medical attention is required on board, the Port Doctor will attend patient, unless he authorises another doctor to make the visit.

In case of emergency, when the vessel is anchored in Bahia Pozuelos, a launch can be arranged to pick up the sick crew member.

DENSITY: Salt water all the year round.

FRESH WATER: Available at 5 Bolivares per ton at the main pier only. Hoses supplied by ship. Rate: about 5 t.p.h.

Presently there is no water available at Berth No. 3 (Western end of pier).

FUEL: No Bunker "C".

Diesel: Delivered by trucks; arrangement must be made at least 24 hours in advance.

Gas Oil: Delivered by trucks under previous arrangement.

GARBAGE DISPOSAL: No facilities.

CONSULS: See "Puerto La Cruz".

REPAIRS: Only minor engine or electric motors can be repaired.

GANGWAY/DECK WATCHMEN: Not available. No shore gangway available.

DRY DOCK: Not available.

SURVEYORS: None.

CUSTOMS ALLOWANCES: 200 cigarettes and one open bottle spirits.

REPATRIATION: Can be arranged. No special requirements.

IDENTIFICATION CARDS: Passes for shore leave are issued by officials of the Port Captain's Office, when boarding the vessel for clearance. These passes should be filled out on board. They are valid for the duration of the vessel's stay in port only and have to be returned before sailing.

In order to comply with Immigration Regulations, crew should be carefully checked before departure and any missing seaman reported to the Agent. The same applies to passengers in transit.

AIRPORT: At Barcelona, about 15 miles by road. 3 flights daily to Caracas.

TIME: 4 hours slow of GMT, all the year round.

HOLIDAYS: New Year's Day, Holy Thursday, Good Friday, Holy Saturday, April 19th, May 1st, June 24th, July 5th, July 24th, October 12th, November 24th, Christmas. No labour available on these days.

TELEPHONES: No facilities at Guanta. Private calls can be made from the central office at Puerto La Cruz (5 miles) during the following hours: 0700–2100. Long distance calls dispatched quicker from the Hotel Melia at Puerto La Cruz.

SHORE LEAVE: From a ship anchored in Bahia Pozuelos: Allowed if the vessel has been cleared and if every crew member has shore pass. One private launch available but very expensive.

From Guanta berths: Allowed with shore passes.

DELAYS: Presently, Guanta is somewhat congested and the waiting time varies from a few days to 15 days, especially during the rainy season.

GENERAL: Venezuelan regulations strictly prohibit the pumping overboard of dirty ballast or throwing garbage or dunnage in territorial waters. Heavy fines are imposed for pollution of waters and sometimes fishermen are quick to report any infringement.

Berthing Turn: On the basis "first come, first served" but Venezuelan vessels have some priority.

Supplies and laundry: Several private firms based at Pto. La Cruz. Nearly all kinds of fresh provisions are available.

Laundry service available; may be completed in 8 to 10 hours.

General: Guanta is a natural harbour surrounded by mountains which protect the bay completely in bad weather. The port has never been closed for bad weather.

Venezuelan Flag: Upon arrival at Pozuelos Bay ship should display the flag from the foremast at all times. When anchored or docked, the flag should be displayed only between sunrise and sunset.

Warehouses and Cargo Sheds: No transit cargo shed. No refrigerated storage available.

There are 5 warehouses with a total floor space of 75,000 sq.ft.

Open Space: A total of 5.7 acres, mostly covered with asphalt or concrete.

Weather: The rainy season starts in mid-May and ends in November or December. During the rainy season it is usually calm in the early hours of the day followed before mid-day by light Westerly or variable breezes. In the afternoon the breezes change to North-Easterly at about 12 knots until midnight. During the dry season the cycle is similar but the North-Easterly wind may reach 25 knots. This can prevent all communications between anchored vessels and the shore.

AUTHORITY: "INP" Instituto Nacional de Puertos.

SHIPMASTER'S REPORT: 1975.

LOCATION: Lat. 10° 14.7′ N., Long. 64° 35.5′ W.

Guanta is located in the Bay of Guanta. It is a well protected port against currents and winds.

The port is entered between 2 well lighted islets.

DOCUMENTS:

Maritime Declaration of Health (together with inoculation list of crew).
10 Passenger – (or non-passenger) Lists.
10 Transit passenger – (or non-transit passenger) Lists.
10 Crew Lists.
4 Personal Effects Lists. (new clothes, etc., to be mentioned).
4 Ship's Stores Manifests.
Clearance last Port.

PILOTAGE: Government pilotage is compulsory. Pilot is embarked and disembarked near the sea buoy of Puerto La Cruz, in position: 10° 15.5′ N., 64° 41′ W.

ANCHORAGE: On the Pto. La Cruz roads.

RESTRICTIONS: Entering: In daylight hours only: 0600 – 1800.

Sailing: Day and night.

TUGS: One powerful tug available, compulsory to use when ship's length more than 90 m.

BERTHING: *New Pier:* Length 322 m. *Old Pier:* Length 233 m.

Water Depth: According to Pilots information: *Old Pier:* 29 ft. *New Pier:* 34 ft.

STEVEDORES: *Working Times:* Monday to Friday: 0700 – 1100 hrs., 1300 – 1700 hrs., 1800 – 2300 hrs. Saturday: 0700 – 1100 hrs., 1300 – 1700 hrs. Sunday: No work is done.

Gangs have to be ordered by 1500 hrs. the day before required.

FRESH WATER: Ships can replenish their fresh water tanks without charge (Included in port charges). Own hoses to be used.

OPENING/CLOSING HATCHES: Opening/Closing hatches, setting derricks: Special Rigger gangs take care of this. It is absolutely forbidden for ship's crew to touch these kind of jobs.

GENERAL: *Waste Water:* Special care should be taken to prevent waste water, from sanitary or engine-room systems fouling the jetty. Heavy fines are made in case this happens and a special shore gang might be ordered to clean same.

Customs: 2 Customs Officers have to be provided with food.

OPERATORS: Servicio Portuario de Guanta.

GUARANAO: 11.40 N. 70.13 W.

SHIPMASTER'S REPORT: January 1983.

LOCATION: The port of Guaranao is located on the Gulf of Venezuela on S.W. coast of the Peninsula de Paraguana, Venezuela. It lies between Amuay Bay to the North and Punta Cardon to the South.

DOCUMENTS: Inward clearance is effected on board immediately after docking by Government Port Officials and a representative of the Marine Department.

The following documents must be ready on arrival:

Clearance from last port (Consul mail) 1 visaed.
Crew lists (7 copies).
Passenger lists if any (5 visaed copies).
Baggage lists if any (3 visaed copies).
List of Personal Effects (4 copies).
Store lists (2 copies).
Sailing Permit (Zarpe).

PILOTAGE: Compulsory. Vessels have to wait for Pilot about 0.5 miles offshore at anchorage. Ship's can make contact with pilot station by VHF on Channel 16 or 12.

ANCHORAGE: Generally ships must anchor about 0.5 miles offshore to wait for Pilot. Good anchorage is obtained in depths of 28 ft. (8.5 m.), muddy bottom and depths of less than 18 ft. (5.5 m.) extend up to about 0.25 miles offshore in this bay, and depths of less than 36 ft. (11 m.) extend about 7 cables NNW from Punta Zarobon (Guaranao).

APPROACHES: Masters when approaching the coast should keep a sharp lookout for fishing boats, nets, small craft or sunken wrecks. From Punta Zarobon the coast, which is bordered by cliffs from 85 ft. to 65 ft. (25.9 m. to 19.8 m.) high, trends about 2 miles SSW to Punta Gorda.

RADIO: Arrival notices and radio messages to and from ships at sea are usually transmitted through Curacao (PJC) and routed through Agent's head offices at Caracas, Venezuela. The port radio control is Las Piedras Paranagua.

TUGS: One tug is available to assist with berthing/unberthing.

BERTHING: A pier extends about 3 cables Westward from ship at Salinas, Guaranao, and the Southern half of this pier is for Ro-Ro vessels stern to. A floating pier about 1 cable distance South of and parallel to the former, extends Westward from shore about 810 ft. (247 m.) and is 164 ft. (50 m.) wide.

CARGO HANDLING FACILITIES: There are fork lift trucks of all sizes, 6 mobile cranes at the floating pier, and some towing vehicles.

MEDICAL: Services available.

FRESH WATER: Not available.

FUEL: Available if advance notice is given. Fuel/diesel oil and lubricating oil can be obtained from either Amuay Bay or Punta Cardon.

FIRE PRECAUTIONS: This port is used for discharging general cargo, especially waste paper and timber. Waste paper is considered as dangerous cargo, therefore Masters are called to pay attention to their fire-fighting equipment and to have it ready during discharging waste paper.

WATCHMEN: Not available.

SHORE LEAVE: Permitted, but shore passes must be carried and passes returned before the vessel sails.

GENERAL: *Stores:* Provisions, deck and engine stores available but not bonded stores.

Garbage Disposal: No facilities.

LA GUAIRA: 10.36 N. 66.56 W. (See Plan Book)

PORT LIMITS: Between the points 10° 37′ 40″ N., 66° 48′ 30″ W. and 10° 37′ 40″ N., 67° 07′ 07″ W. and the coast line.

DOCUMENTS:

- Sealed envelopes for Customs.
- Visaed B/L and Sobordos not in envelopes.
- Consular Despatch for all Venezuelan ports.
- Despatch from last Venezuelan port, if any, or
- Zarpe from last foreign port, if arriving directly from abroad.
- Fumigation Certificate.
- Bill of Health.
- Vaccination Certificates of Crew.
- 4 Store Lists (with arms and narcotics).
- 4 Lists of Personal Effects.
- 6 Crew Lists.
- 12 Lists of Passengers for La Guaira, or negative Passenger List.
- 8 Lists of Passengers in Transit.
- 2 Lists of Luggage (only for passenger luggage).
- 1 Master's Declaration.
- 1 List of Vagrants, if any.
- 8 Cargo Lists.

PILOTAGE: Compulsory and vessels have to wait for Pilot in the pilotage zone N.W. of the entrance. Ships can make contact with the pilot station by VHF Channel 16 or 12.

ANCHORAGES: Generally ships must anchor in the N.E. area of the entrance, the depth varies from 8 to 20 fathoms. The bottom is sand and occasionally rocks.

RESTRICTIONS: There are no restrictions imposed upon entry.

MAX. SIZE:

Berth	*Length (m.)*	*Depth (m.)*	*Remarks*
01-E	176	10.95	Roll-on/Roll-off
01-D	176	10.95	General Cargo
01-C	176	9.55	12 ton electrical cranes
01-B	176	8.55	12 ton electrical cranes
01-A	176	8.80	12 ton electrical cranes
01	155	9.15	12 ton electrical cranes
02	155	9.75	12 ton electrical cranes
03	160	9.45	Grain Berth
04	136	5.50	General Cargo
05	161	8.50	General Cargo
06	161	8.80	General Cargo
07	136	8.50	General Cargo
08	136	8.50	General Cargo
09	133	5.50	General Cargo
10	168	8.50	6 ton electrical cranes
11	144	8.80	6 ton electrical cranes
12	144	8.50	6 ton electrical cranes
13	144	9.45	6 ton electrical cranes
14	144	8.80	6 ton electrical cranes
15	168	8.80	6 ton electrical cranes
16	160	8.20	Passenger Berth
17	160	9.15	Passenger Berth
18	171	9.75	Passenger Berth
19	171	9.75	Passenger Berth
19-A	72	4.55	Passenger Berth
20	150	3.00	Fishing Berth
21	290	6.10	Warship Berth

TUGS: The use of tugboats within the port is compulsory, both for entering and leaving port, as well as for manoeuvres in the port area. Ships longer than 139 m. must be assisted by 2 tugboats.

Ship's lines are used in the manoeuvre. The Port of La Guaira has 2 tugboats of 1,800 h.p. each. Normally they join the vessel at the entrance of the port.

BERTHING: Normally a minimum of 24 ocean-going vessels can berth at one time. Berth Nos. 01-E, 01-D, 01-C, 01-B, 01-A, 01, 02 and 03 are along the breakwater pier East-West, parallel to the coast. At piers Nos. 01-C, 01-B, 01-A, there are 12 electrical cranes of 12 tons. At pier No. 03 ships discharge grain directly to a silo by 2 grain towers, average daily rate 2,000 tons. Silo capacity 12,000 tons.

Within the port is a finger pier, parallel to the breakwater pier, with 2 Customs warehouses alongside, with berths North and South, 2 each. The main pier is parallel to the coastline, East-West, with berths Nos. 10, 11, 12, 13, 14 and 15,, along which piers there is ample Customs warehouse space, including outdoor space on the roofs as well as ample uncovered storage area. There are 15 × 6 ton electrical cranes at this pier.

The Passenger Terminal is on a finger pier, in direction North-East with its land end in the corner of berth No. 15. There are 2 berths each side, namely Nos. 16 and 17 in the inner basin and Nos. 18 and 19 in the outer basin.

Passenger vessels have priority for berthing and they have to leave port within 24 hours.

BULK CARGO FACILITIES: Bulk carriers only discharge, at piers 01-D, 01-C and 03. There are no facilities for cargo.

SPECIALISED CARGO HANDLING FACILITIES: The only berth specially equipped for Roll-on/Roll-off traffic is pier 01-E but pier Nos. 04, 09 and 16 are also used for this kind of cargo.

There is no fixed equipment for handling containers but the Instituto Nacional de Puerto has some mechanical equipment for handling containers.

This port does not have any other facilities for specialised cargo handling.

HEALTH: Ships from Venezuelan ports obtain Free Pratique. Ships from abroad must send a cable to Health Authorities requesting Free Pratique, or advising illness.

RADIO: In order to enable Agents arrange for quick entry and berthing, Masters should give their ETA message at following intervals, via Curacao Radio (ITT): 72, 48 and 24 hours prior to arrival, indicating in the 48-hour message, the quantity of parcels (or tonnage if bulk cargo) per hatch. This is imperative for applying for the necessary personnel of the Instituto Nacional de Puerto (I.N.P.). Also, draft, passengers, requirements for bunkers, fresh water, provisions, repairs, medical assistance, etc. This telegram the Master to sign with his full name.

VHF: Communication with the Port Authorities and the pilot station are possible by VHF. Ship must make contact on Channel 16 and change after to some Channel between 1 and 70, Channel 12 is normally used for this manoeuvre.

BRIDGES: There are no bridges.

STEVEDORES: Supplied exclusively by Instituto Nacional de Puerto at costs per weight of cargo in accordance with governmental decrees.

The Port Agent applies for the necessary number of gangs per ship. Each gang consists of 11 stevedoremen (estiba) and 11 longshoremen (caleta).

Switching of gangs from one hatch to another is not permitted.

There are no longshoremen costs for cargo handled during straight time, but only for that handled during overtime.

(a) *Straight time*
Monday – Friday 0700 – 1100 hrs.
1230 – 1630 hrs.
Saturday 0700 – 1200 hrs.

(b) *Overtime*
Monday – Friday 1800 – 2300 hrs.

(c) *Saturday afternoon* work is not permitted, but if a vessel could terminate operation and sail within a maximum of 3 additional working hours, a special permit would be granted by Customs and Port Authorities. In such a case, the additional working hours are considered as overtime.

(d) *Work on Sunday* is not permitted except for passenger vessels (officially those carrying 69 passengers, but exceptionally vessels with fewer passengers might occasionally obtain same consideration by authorities).

EQUIPMENT:

(a) *Electric Shore Cranes:* Berths 01-C to 01-A have 12 electrical cranes on rails of 12 tons capacity each. Berths 10 to 15 have 15 on rails of 6 tons capacity each. The Instituto Nacional de Puerto allow 2 × 12 tons cranes to lift pieces up to 20 tons or 9 tons weight. At pier 10 the arms of the cranes reach the roofing of the warehouses. Use of shore cranes is not compulsory, unless the Technical Board of the Instituto Nacional de Puerto rules to use them. Other piers have no shore cranes.

(b) *Diesel-Driven Rolling Cranes:* There are a considerable number of these cranes which can lift heavy pieces of about 17 tons.

(c) *Floating Cranes:* Not available.

(d) Special lumber carriers of about 20 tons capacity.

(e) Tow trucks, fork-lifts, trucks and trailers up to 10 tons capacity.

LOADING/DISCHARGING: Cargo is discharged on the pier, when free it is taken away by fork-lifts and/or other mechanical equipment supplied by Instituto Nacional de Puerto. The use of such equipment is included in the handling fee for weight.

There are 2 grain towers on berth No. 3 leading via conveyor belts to storage silos of 12,000 tons capacity. Average daily discharge rate 2,000 tons approximately.

At berth Nos. 10 to 15 discharge to the roof of the warehouse or on the pier is possible.

OPENING/CLOSING HATCHES: Not performed by the Instituto Nacional de Puertos but by either the ship's crew, or the assistance labour of the Agent.

FRESH WATER: Available through pipe-line on the pier, day or night, by water trucks of up to 10 tons capacity in day time only.

GANGWAY/DECK WATCHMEN: The watchmen service is not necessary. It is recommended to use a seaman as watchman.

MEDICAL: There are several hospitals in the town and all the medical attention necessary. Should medical assistance be needed on board, contact the Agent.

DENSITY: The average salinity of water in the port is 1.025.

CONSULS: The following countries have consuls in La Guaira; West Germany, Belgium, Mexico, Norway, Panama and Sweden. The following countries have Vice-consulates; Denmark, Spain, Italy and Portugal.

REPAIRS: All kinds of deck and engine repairs are possible.

DRY DOCKS: There are no dry docks in this port. (The nearest is at Puerto Cabello).

SURVEYORS: All Classification Societies and P&I Clubs are represented in the port.

POLICE/AMBULANCE/FIRE: *Police:* 26148, 26347 and 27098. *Ambulance:* 22165. *Fire:* 22165 and 22587.

REPATRIATION: There are all kinds of facilities for making crew changes and arranging any necessary repatriation.

AIRPORT: The distance to the International Airport at Maiquetia is 10 km., this is served by different regular airlines.

TIME: GMT minus 4 hours. No change.

HOLIDAYS: January 1st, (New Year); February 18th/19th, (Carnival); April 3rd/4th (Easter); April 19th, (Independence Day); May 1st, (Labour Day); June 24th, (Carabobo Battle); July 5th, (Independence Day Declaration); July 24th, (Simon Bolivar's Birthday); September 4th, (Public Funcionary Day); October 12th, (America Discovery); December 25th, (Christmas).

TELEPHONES: It is not possible to place telephones on board, however calls can be made in the "CANTV" office.

SERVICES: There are no special services available. Radar repairs possible.

SHORE LEAVE: Crew members can go ashore with shore passes issued by the Port Authorities.

IDENTIFICATION: Shore passes are sufficient to go ashore.

REGULATIONS: *Dangerous Goods:*

1. Dangerous goods should be discharged directly to trucks.
2. When goods are grain or powder in bags, these should not exceed 50 kg.
3. Cargo with damaged packing will not be discharged and it should be repacked on board.
4. Cargo should be duly identified and with their dangerous goods labels.
5. Cleaning of the piers after loading or unloading should be done by the importer or exporter, otherwise they should cover the expenses if the INP has to do this cleaning.

OFFICIALS: Once the vessel is anchored at La Guaira, Representatives of Customs, Port Captain, National Guard, Health Service, Immigration and Agency board the vessel.

DEVELOPMENTS: Increase in draft to 35 ft. expected.

AUTHORITY: Harbour Master, Capitania de Puerto, Terminal de Pasajeros de La Guaira.

AGENT: Head Office (Control), Management/Brokers, Chartering and Tramp Agents, Victor H. Selinger S.A., P.O.Box 1632, Caracas 1010-A. Cables: "Selvic" or "Seltank" Tel: (02) 81.02.71, Telex: 21402, 21934, 22859, 21631. Local Office: P.O.Box 304, La Guaira. Tel: (031) 27092, 27566, 27340. Cables: "Selvic LaGuaira" or "Seltank LaGuaira". Telex: 31143.

MARACAIBO LAKE (See Plan Book)

Including Section A – BAJO GRANDE
Section B – LA ESTACADA
Section C – LA SALINA
Section D – MARACAIBO
Section E – EL TABLAZO
PUERTO MIRANDA
Section F – PUNTA DE PALMAS
Section G – SAN LORENZO
LA CEIBA

GENERAL: The following "Depth Bulletin", dated June 1978, was received from a Shipmaster in February 1979.

REPUBLIC OF VENEZUELA
NATIONAL INSTITUTE OF CANALIZATIONS
ZULIA ZONE

Depth Bulletin No. BP – 6-78 Dated: 13-06-78

The following data represents the latest information reported and refer to the date shown for each section of the channel. Depths are expressed in metres and are related to the same level of the local Navigation Charts 1001, 1002, 1003 and 1004 of the M.M.M. Mean Monthly Lowest Low Water.

The controlling depths refer to the centre area of the channel demarked by parallel lines on either side at a distance of 60 m. in the outer channel and 45 m. in the rest of the channel. The Puerto Miranda Channel is of 30 m. The theoretical position of the buoys in the aforementioned navigation charts are located at a distance of 30 m. from the edge of the channel.

Main Channel

Channel	*From*	*To*	*Date*	*Depth (m.)*	*Remarks*
Outer Section	B – 1	B – 28	19-05-78	12.8	
Inner Section	B – 28	T – 56	10-05-78	12.8	
SOUTH PROLONGATION	T – 56	B – 59	28-04-78	12.8	Entrance to Puerto Miranda (B – 59)
	B – 59	B – 66	26-04-78	12.8	Entrance to La Estacada (B – 66)
	B – 66	B – 76	10-03-78	12.8	Entrance to the Port of Maracaibo
	B – 76	B – 86	24-05-78	13.1	Entrance to Bajo Grande (B – 86)
	B – 86	B – 96	07-02-78	13.1	Entrance to La Ensenada
	B – 96	Parallel 10° 22′ N	14-02-78	12.8	Entrance to La Salina Channel (B – 97 and 10° 22′ N)
	Parallel 10° 22′ N	M – 1	14-02-78	13.1	Entrance to Lake Main Channel (M – 1 and M – 1)
Puerto Miranda Channel		AP – 2	11-05-78	11.6	

Signed............................. The Port Captain

Signed............................. The Director N.I. of Can. Zulia Zone

(N.B. Certain information common to all Vessels entering Maracaibo Lake is given below. For specific details of ports/terminals within the Lake, see relative Section as indicated above).

FLAG: Local authorities require that the Venezuelan ensign be flown at vessel's masthead, from the time of entering the outer channel until clear of the outer channel outbound.

DOCUMENTS: *(a) Inward Clearance for Scheduled Vessels:* Vessels arriving in ballast or with cargo in transit require following documents:

1 copy Sailing Permit from Last Port.
2 copies Ballast Certificate.
1 or more letters Consular Mail (in sealed envelope).
4 copies Passenger Lists.
4 copies Baggage Lists.
4 copies List of Passengers in Transit.
4 copies List of Slop Chest.
4 copies List of Personal Effects.
4 copies Store Lists.
5 copies Crew Lists.

Vessels arriving with cargo should have, in addition to the foregoing:

4 copies Sobordos (Venezuelan Inward Manifests).
6 copies Bill of Lading.
2 copies Inward Manifests.

(b) Inward Clearance for Diverted Vessels: Vessels diverted to Maracaibo Lake Ports to load cargo, should submit all documents indicated above, except consular mail, which they will not have.

Vessels diverted at sea to Maracaibo Lake Ports which do not have a Venezuelan clearance on board, must advise loading port via radio to arrival, the name of vessel, Master's name, vessel's flag, Venezuelan net tonnage (if available, if not, the registered net tonnage), last port of call, destination port for which originally cleared, ETA San Carlos Pilot station and grade and quantity of cargo to be lifted. This information is required in order that Inward Clearance may be arranged with government officials in ample time prior to vessel's arrival. Also 3 copies of the diversion telegram received by vessel and signed by Master, together with copies of those documents listed under *(a)* should be presented to the Port Authorities upon arrival at Maracaibo. In the absence of this information, or of presentation of each of these documents to the Port Authorities the vessel will be subject to a fine. Please note, that the documents covered under *(a)* have to be presented upon arrival, regardless, if the vessel is not arriving with consular clearance or arriving after being diverted at sea.

(c) In Maracaibo 2 clearances from Custom's authorities are needed: One for proceeding from Maracaibo to loading berth, and another after loading for proceeding from Maracaibo to destination. For this reason Custom Dispatch charges may be incurred twice.

(d) American Crew List. All non-American vessels loading for a U.S.A. port should have the American Crew List ready on arrival in Maracaibo to be visaed by the American Consulate in Maracaibo and placed aboard ship before departure. The crew list should be prepared on Immigration and Naturalization Service form No. I. – 418 (Crew List Manifest) and should contain 2 sections:

Section 1 should list those crew members who are American or who possess individual visa documentation to the United States.

Section 2 should list, in the alphabetical order of their last names, those alien crew men who lack United States visa documentation and therefore require inclusion in the visa of the crew list.

Only one name may be placed on each line of the crew list. Two names should not be placed in the space of one line, nor should a full line between two names be left vacant. All copies of the crew list presented must be legible. Occasionally the names of the crew men included on the carbon copies of some crew lists presented at the consulate are blurred beyond recognition.

The information requested under columns 1, 2 and 3 should be filled in completely. Column 1 should always contain the complete first name and middle initial of the crew man. Column 2 should show the nationality of each crew member and the number of his travel Document. Column 3 should always include the name of the port where the crew man was shipped, not simply the country.

At the time of vessel's first application for a crew list, the crew list must be presented in four copies: Original and 1 copy should contain only information requested under Columns 1, 2 and 3. 2 copies must include following information of those crew men to be included on crew list visa. Column 4 should list date, city and country of each crew man's birth. Column 5 should show place of issuance of seaman's travel document and name of Government which issued travel document. (It is not necessary to list date of issuance of travel document).

Below is a sample line correctly entered on the Master crew list.

(1)	(2)	(3)	(4)	(5)
Bello, Tomas E.	Z.23455 Venezuelan	Maracaibo Venezuela	December 8, 33 Caracas, Venez.	Cabimas, Venez

Upon subsequent crew list applications by same vessel within same year, the crew list need be presented in duplicate only, and the information in Columns 4 and 5 need be provided only concerning any new crew members who require visa documentation. When twelve months have elapsed since presentation of Original crew list, a crew list should again be prepared in 4 copies and should contain all the information required in columns 1 – 5. Such a Master crew list is required after each 12 months' period.

APPROACHES: Also see "General" above. The channels leading to the Lake of Maracaibo are called the Outer Channel, the Inner Channel and the Lake Channel. The controlling depths of the Outer Channel, Inner Channel and the channel Southward to buoys M1 and M2 are normally 45 ft. At certain times the controlling depth may be less. At such times suitable notices are published advising mariners of these temporary reductions of controlling depth.

Outer Channel. The Outer Channel starts at the E.M. Buoy in position 11° 13′ 47″ North and 71° 33′ 31″ West. The light characteristics of E.M. Buoy are: flashing white every 5 seconds, visibility approximately 5 miles. The distance from E.M. buoy to the Southern end of the Outer Channel, marked by buoys B – 27 and B – 28, is approximately 15.75 miles. The channel is 1,000 ft. wide and has a normal controlling depth of 42 ft. minimum monthly observed lowest water (MMOLW) with tidal range varying about 2 ft. 3 in. This depth is maintained by periodical dredging. Tankers are required to have a keel clearance of at least 2 ft. and dry-cargo vessels a keel clearance of at least 3 ft. Vessels navigating the channel at the maximum allowable draft are confined from 2 hours before to 2 hours after high water. There are no turns in the channel and the course is 189°.

There is a breakwater 0.5 mile East of, and parallel to, the Outer Channel and extending 1.6 miles Northward from the North side of Zapara Island. The end of this breakwater is marked with a skeleton steel tower with a light 27 ft. above sea-level. Light characteristics – flashing white light every 8 seconds; visibility about 3 miles.

On Zapara Island there is a skeleton iron tower with a height of 136 ft. above sea-level.

Cross currents are sometimes encountered near Zapara, San Carlos and Pescadero Islands, especially at low water when the cross currents are strong. Overtaking at these points should be avoided.

There is one anchorage zone in the Outer Channel which is a trapezoid on the port side when navigating inbound near the Buoys B – 14, B – 15, B – 16 and B – 18. All buoys in the Outer Channel are equipped with radar reflectors.

Caution: Masters are warned to keep adequate speed in the Outer Channel even when embarking the Pilot as strong cross currents are encountered near San Carlos and Zapara Island. Pilot boats are fast and fitted with a flying bridge.

Inner Channel. The Inner Channel continues on the same course as the Outer Channel for about 10 miles, whereafter the direction changes to 150°. Entire length of the Inner Channel is about 12 miles.

The beginning of the Inner Dredged Channel is marked by buoys B – 29 and B – 30. Channel is marked by beacons, and terminates at beacons T – 55 and T – 56. The channel is 800 ft. wide and the normal controlling depth is 43 ft. MMOLW with tidal range varying from 1.5 ft. to 2.5 ft.

The channel from beacons T – 56 to Maracaibo Harbour is a dredged channel, the end of which is marked by buoys Nos. B – 73 and B – 74.

About 0.2 mile South of buoys B – 29 and B – 30, there are located 2 towers – 1 on each side of the channel, and about 1 mile further South are 2 more towers. These 4 towers are marked E – 31 and E – 32 (North) and E – 33 and E – 34 (South). Towers No. E – 31 and E – 32 are of single steel pipe construction on a concrete pile base. Towers No. E – 33 and E – 34 are of skeleton steel construction (former oil-well derricks) each mounted on 4 concrete piles. The characteristics of these towers are:

Tower No.	*Height above LWS (ft.)*	*Light*
E – 31	43′	Green – Fl.
E – 32	43′	Red – Fl.
E – 33	123′	Green – Fl.
E – 34	128′	Red – Fl.

Vessels are not allowed to overtake each other in the Inner Channel between buoys B – 29 and B – 30 and light beacons T – 25 and T – 26. Vessels may overtake each other in the Inner Channel between light beacons T – 39 and T – 40 after having exchanged prescribed signals with the vessels to be passed. This manoeuvre is, of course, allowed only if conditions are favourable and no vessel navigating in the opposite direction is in sight.

Lake Channel. The channel starting at light beacons T – 39 and T – 40 and leading to Maracaibo Roads is called the Lake Channel. This is a natural channel 3,000 ft. wide and 11 miles long.

The Main Channel through Maracaibo Lake is approximately 83 miles long, not less than 244 m. wide and with a greater depth than the outer channels.

The access channels to the various ports and terminals branch off from the main channel as described under Section for each port.

CHANNEL NAVIGATION:

(a) Inbound vessels leave to starboard side the buoys and beacons marked with even numbers and to port side the buoys and beacons marked with odd numbers.

(b) Outbound vessels shall leave to port side the buoys and beacons marked with even numbers and to starboard side the buoys and beacons marked with odd numbers.

(c) Vessels should pass as close as possible to the channel's edge on starboard side. Loaded vessels have preference.

(d) Approaching vessels are to reduce speed in order to minimise the suction force of the displacing waters.

(e) Vessels must maintain a distance of 5 ship's lengths by day and 8 ship's lengths by night from other vessels navigating in the same direction.

(f) No vessel should start to manoeuvre to overtake another vessel before having received clearly the affirmative signal from the ship to be passed.

(g) A grounded vessel is not allowed to start any manoeuvre when another vessel is passing.

(h) Dredgers are frequently at work in the channels and caution should be exercised in passing them. Signals used by the dredgers are as follows:

Daytime

Black cylinder hoisted on side of yardarm: You can overtake me on the side on which the cylinder is shown.

Two black balls over the bridge: The channel is blocked.

Night

Green light on side of yardarm (a white light on mast-head helps to show on which side the green light is placed): You can overtake me on the side on which the green light is shown.

2 red lights over the bridge: The channel is blocked.

The tidal range is 4 ft. at neaps.

(i) Maximum speed for vessels navigating in lake channels has been limited to 10 knots. Masters should exercise the utmost care in complying with this regulation as heavy fines may be imposed to offending vessels.

PILOTAGE: (N.B. Maracaibo Pilotage Regulations require that inbound tankers, in ballast, while crossing the Bar, shall not have greater than 8 ft. difference between fore and aft draft. The Government Pilot will not take the vessel if this requirement is not met, unless he is satisfied that the actual draft of the vessel will permit safe navigation through the Outer and Inner Channels).

Every Master of a vessel navigating in Lake Maracaibo who desires to enter the main ship channel in Pilotage Zones No. 1 or No. 2 must first ensure that said Channel is free of traffic.

The limits of the Main Ship Channel in Pilotage Zone No. 1 are from buoys B1/B2 located at the entrance to the Outer Bar Channel and buoys B73/B74, of the city of Maracaibo. Pilotage Zone No. 2 begins approximately 1 mile below Maracaibo and extends Southward to lightfloats M36/M37. All other channels are considered as access channels to their respective port zones and subject to special local rules. Every vessel navigating to or from any port in Lake Maracaibo must follow the prescribed routes through the main and access channels leading to or from such ports, (unless special permission has been granted to do otherwise).

(a) Pilots are employees of the Venezuelan Government and act in an advisory capacity; the Master retains responsibility for the ship at all times. In the event it becomes necessary to disregard the Pilot's instructions in order to ensure the safety of the ship, the Master must prepare a full written report of the circumstances, for delivery to the Captain of the port.

(b) Inbound vessels have the option at present to embark government Pilot at the following areas:

(i) In the channel off San Carlos Pilot Station between buoys B – 24 and B – 26.

(ii) Anchorage area approximately 5.5 miles N.E. of Pilot station, San Carlos Island. Position 11° 04′ 22″ N., 71° 33′ 48″ W. East of buoy B – 17. This area is demarcated with green light buoy equipment with radar reflector.

(iii) At the E.M. Buoy.

(iv) At Punta Cardon. See "Note" and "Shipmasters' Reports" – August 1979, July 1981 and August 1981.

(c) The Port Captaincy of Maracaibo is unable to guarantee embarking or disembarking Pilots at the E.M. buoy or at anchorage area position. For this reason Masters should communicate with San Carlos Pilot Station for necessary instructions as to where to pick up Pilot, who usually embarks between buoys B – 24 and B – 26. The communication system between San Carlos Pilot Station and vessels will be by Morse lamp and radio-telephone. The stand-by frequency at San Carlos is 2182 kHz. Other existing frequencies are 2120 kHz and 2080 kHz; 156.6 and 156.8 MHz. Each pilot launch has a radio-telephone with 2182 kHz. frequency. The launch that leaves San Carlos Pilot Station with Pilot for ship, takes approximately 20 to 30 minutes to cover distance, and distance between buoys and San Carlos is approximately 6 miles or 10 km.

(d) Pilot Permit to navigate the Outer Channel without aid of a Government Pilot will be granted to those Masters who desire to obtain same. In order to fill the application required, a blank sealed paper and 3 copies should be signed by Master on arrival. Copy of this solicitude duly endorsed by Port Captain of Maracaibo, will serve the Master as temporary permit until the official one has been received. Masters in possession of permits to cross the Outer Channel without a Pilot, have the option to enter channel either at the E.M. buoy or between any other buoy, taking into consideration the heavy traffic of the channel. Government pilotage through the Inner Channel is compulsory at all times.

(e) Outbound vessels will receive Pilot in Maracaibo, who will Pilot vessel up to San Carlos area approximately between Towers E – 31 and E – 33, where he will disembark. The Port Captain of Maracaibo has instructed that all Masters should always in ample time identify themselves with the San Carlos Pilot Station by radio-telephone regardless of time of day. While inbound – between buoys B – 17 and B – 19 and sailing outbound – between markers T – 42 and T – 40. These instructions are obligatory and are required in order for the Pilot service to be aware, at any moment, of any emergencies which may arise, and also to avoid, especially during the night, the launch departing with an official Pilot aboard believing that the ship in sight needs his services, in which case, even though the launch or Pilot services are not rendered, the same will be charged to the company owning the ship, or its representative.

Note: A Master approaching the port for the first time must pick up a Pilot in Punta Cardon before entering Maracaibo Lake Channel. In the case of contravention the vessel will be intercepted by San Carlos Pilot Station and returned to Punta Cardon with a resulting loss of at least 1 day and the Master may also run the risk of a possible fine.

Furthermore, the Master should cable ETA via Curacao Radio 72, 48 and 24 hours before arrival in order to allow sufficient time for Agents at Maracaibo to send a Pilot to Punta Cardon.

TONNAGE: Venezuelan Port Authorities base part of their pilotage charges on the size of the vessel, i.e.:

(a) On Registered Net Tonnage. Venezuela will accept the tonnage of ships registered in countries with which they have a reciprocal tonnage agreement. As of this date, such countries are:

Norway
Great Britain
France
Sweden
Ireland
Germany
U.S.A.
Denmark
Netherlands
Portugal

(b) On Venezuelan Nett Tonnage. Ships not registered in countries listed above, when calling at Venezuelan ports for the first time, must be measured for Venezuelan tonnage by the Captain of the Port. It is the usual practice to take ashore the ship's Panama Canal or Suez Canal Certificate, which is used as a basis for recalculating tonnage under the Venezuelan regulations, and return it before sailing. The Venezuelan admeasurement certificate, when later issued, is forwarded to the Owners. A fee is charged for this certificate, which is payable only on the ship's first call.

(c) In practice, the procedure for stating the tonnage of all ships entering the Lake of Maracaibo is as follows: The inward Pilot boarding the ship presents Master a form on which among others the Master should fill in the tonnage of ship. Pilotage charges are based on this tonnage given by the Master. Master's attention is drawn to the fact that the Venezuelan nett tonnage is usually higher than the International nett tonnage. Care should be taken if an old Venezuelan nett tonnage certificate is on board, because the country in which the ship is registered might later have signed the reciprocal tonnage agreement with Venezuela. If the pilotage charges are made on basis of a higher tonnage than the one that should be applied, it is later very difficult, if not impossible, to get a refund.

CUSTOMS: *(a) Customs Watch.* While vessel is in port, Venezuelan National Guard Officials are assigned on board to ensure compliance with customs regulations. The Law requires meals be supplied to these officials during regular meal hours. Masters are requested to give them the privilege of eating in officers' messroom, to avoid difficulties.

(b) Firearms and Ammunition. Firearms must not exceed one per officer nor may the ammunition exceed 18 cartridges per officer. All firearms and ammunition must be carefully declared on Store List and should be collected and held in Master's safe custody while vessel is in Venezuelan waters.

(c) Contraband. Strict compliance with the customs law of the country is enforced by the authorities, and Masters are strongly advised to caution crew members against attempting to smuggle cigarettes. 1 open package per person is allowed to be carried ashore, but greater quantity will result in fine and imprisonment of the offender as well as lost ship's time. Due to very strict enforcement of the customs regulations, it is recommended that no goods be carried which are not shown on Store List. Any new articles (clothes, shoes, etc.) should be included in Store List and marked as personal belongings. If during a check-up by Customs, articles considered as contraband are found, this will not only mean confiscation of these articles, but also hours or days of lost ship's time, while the case is handled at court.

CONSULS: The following nations maintain consular representative in Maracaibo:

Belgium
Chile
Colombia
Costa Rica
Denmark
Ecuador
El Salvador
France
Germany (West)
Great Britain
Guatemala
Italy
Netherlands
Norway
Nicaragua
Panama
Peru
Portugal
Spain
Sweden
Switzerland
United States of America

TIME: Local time is GMT minus 4 hours.

VISITORS: All visitors to ships are prohibited except those company employees, petroleum inspectors, etc., whose duties require their presence aboard.

PASSENGERS: Passengers will not be permitted to disembark unless in possession of the required visa and documents. To facilitate clearance, if passengers are carried, the Master should include advice to this effect in his radio ETA.

POLLUTION: The Laws of Venezuela are very strict in regard to the pollution of harbour and coastal waters by oil, and heavy fines are imposed for violations. No dirty ballast, oil or bilge slops are to be pumped or allowed to escape overboard. All overboard discharge valves from cargo tanks and bilges are to be secured before loading or discharging commences. Loading is to be conducted with greatest care and vigilance in order that errors or delays in handling cargo valves may not result in overflows. All deck scuppers should be plugged before loading to avoid harbour contamination should an overflow occur. The Authorities require a written report to be submitted by the ship involved in the event of an oil spill.

SEAMAN LEFT BEHIND: Sailing may be withheld until all crew members are aboard with exception of those ashore for justified reasons. It is important that Masters bear in mind that the Venezuelan Law will at all times hold the vessel's Master, Agent, or Owner responsible for any seamen left behind in Venezuela.

SHIPMASTER'S REPORT: August 1979.

MARACAIBO/EL TABLAZO AND APPROACHES

Approaches: If making for the "EM" buoy direct, positions can be a bit vague due to the low lying coast.

A distance off the coast can be obtained before the "EM" buoy but no real firm position.

Often there is a strong N.E. wind.

Pilot: In the 'Pilot Book', etc., mention is made of picking up the Pilot at Punta Cardon.

From the Pilots and Agent I have a clearer idea of the official viewpoint and requirements.

There is NO compulsion to take a Pilot before San Carlos.

If you are unsure of the area and the visibility is poor from all sources and in my personal viewpoint it is advisable to take a Pilot at Punta Cardon, giving ETA 12 hours in advance.

If vessel is to pick Pilot up at San Carlos send cable 24 hours beforehand through Curacao "PJC" to 'Piloto San Carlos' requesting permission to use Canal Exterior, ETA at "EM" buoy and at San Carlos. Reconfirm 12 hours before "EM" buoy and by VHF an hour before arrival on Channel 12.

The difficulty lies in language, although there is meant to be a traffic control system in Canal Exterior it is only in Spanish and the Co-ordinator speaks little English. Little information is required or given if you only speak English.

The Punta Cardon Pilot costs about U.S.$150 extra plus transport charges and entails extra distance of 70 miles from the West and 15 miles from the East.

The San Carlos Pilot boards from a fast launch at "B28" buoy and usually leaves just before the buoy. He will use hoist, in spite of official regulations which require gangway ladder arrangement, and leaves on port side outward (boards on starboard side inward). This is nearly always the case with situation of pilot station and wind, but may change.

Communications: Venezuelan station La Guaria (YVG – ALRS 6225). Most vessels use Curacao "PJC", very good. Agents reply through "PJC". Telex very good.

VHF: Call 'Piloto San Carlos' on Channel 16 (working Channel 12). Agent at Maracaibo on Channel 16 (works Channel 14, only during office hours). Agent at La Salina on Channel 16 (works Channel 14, 24 hour service but very distorted at El Tablazo).

Canal Exterior: Leads from "EM" buoy to San Carlos pilot station. A speed of 10 to 12 knots essential to keep vessel in channel on account of strong N.E. winds and currents across channel. Takes about 1 hour 10 minutes from "EM" buoy to San Carlos.

The least advertised depth at LW is 12.8 m. but shoals quickly at sides of channel. We found 11.0 m. LW to West side of channel at "B18" buoy.

Buoys "B14", "16" and "18" had shifted about 200 m. to West (August 1979). On the outer section of channel between "B4" to "B8" buoys a Westerly set right across channel very apparent and near Malecon Breakwater. At "B22" buoy an Easterly set experienced. Wind N.E. 4 – 5 tide 1 hour before and 1 hour after HW Malecon both cases.

The "E 34" pylon light off Pta. Diablo is very conspicuous. A new dredger 'Wado' works this section with North end Canal Interior. A large suction dredger, pulls to side of channel to let vessel pass. Only Spanish and German spoken. The old 'Zulia' dredger has stopped working. Another dredger is being completed for the Government.

Canal Interior: About 1.5 hours pilotage to Puerto Miranda, speed above manoeuvring. This channel is generally deeper than Canal Exterior. The advertised depth of 12.8 m. seems reliable. Pilot told me they hope to get both channel Interior and Exterior deepened to 15 m. LW in the near future.

Pile light beacons "T46" and "T40" have been replaced by buoys.

Pratique: Given on berth.

Notice of Readiness: Can be tendered on arrival at berth. It is finally brought down with Bill of Lading on completion. This is normal practice. As we were cooling down it was received at completion of cooldown. Normally on berthing with lines connected.

EL TABLAZO:

Pilot: A Docking Pilot boards just before berthing and unberthing of vessel.

Tugs: 2 tugs of 1,800 h.p. Secure in "American" style using their lines.

Situation: For all intents and purposes part of Puerto Miranda but operated by different company.

Located just S.E. of Puerto Miranda berths. El Tablazo consists of 3 piers. Bulk, liquid and a small soda pier.

Anchorage: At El Tablazo – off berth, just East of main Maracaibo channel. Good holding – 3 shackles.

Pier: The bulk pier handles bulk and bagged urea fertiliser through 4 shiploaders fed from a conveyor. Three on the South side and 1 on the North side. Two of the loaders on the South side handle bagged urea down corkscrew chutes.

The liquid pier is to the South of bulk pier – berth both sides and handles ammonia, butane, propane, propylene.

Two Chicksans each side. The inshore being of 10 in. both sides and seaward being of 8 in. but fed by 10 in. line. Couplings are 300 ASA but 150 ASA spool pieces generally fitted.

Vapour lines are flexible stainless braided with rubber covering – ship's derrick required, 300 ASA coupling with 150 ASA spool piece. All berths – head IN. On the South side the outer edge of the dredged channel is marked by buoys.

All berths have good rubber fenders. Liquid pier outer end has two full faced mooring dolphins connected to main pier by catwalk. The least depth at all berths at LW is 6 fathoms, except small soda berth which has 2 fathoms at LW.

Moorings: 2-3-1 each end. Ship put alongside pier before moorings out. Plenty of mooring gangs. Very particular on position to within 0.5 m. Gangway no problem.

Fresh Water: At 15 t.p.h. from pipe at manifold amidships. There is a pumped supply at 70 t.p.h. used for loading small tankers to take to outports where supply is limited.

Operations: Language problems. There is one Loading Master who speaks good English. Surveyor on arrival and departure. Very co-operative. Venting allowed up riser.

Vapour return line goes to flare at ship's expense and can only be used if 100% product.

Max. rate ammonia 500 t.p.h., but initially can get plenty of stops. S.G. given at 15°C. The control of the rate is not very fine. You can get down to 20 t.p.h. but increase very broad. Usual notice for completion.

Dock Density: 1003.

Documentation: Carried out at berth inward, sometimes vessel taken off berth outward to local anchorage and clearance given there. Sometimes in the past inward clearance done at Maracaibo, NOT NOW.

There is much written in publications and passed around about visaed crew lists and deviation cables. I have tried, in talking to the Agent and to the Authorities to clarify the situation.

Visaed crew lists are NOT required now. But there is still a requirement that because the ship has no visaed crew list she must have deviated on passage.

Basically what is required is that the ship should be cleared on sailing for Venezuela to say, Trinidad, for orders or Curacao not Maracaibo, then on passage receive a message deviating her to Maracaibo. If she does not have deviation message a fine could be imposed but the Agent says all ships have required cable so do not know of fine being imposed.

Required:

7 Crew Lists.
3 Store Lists. Victualling only, can include bond.
3 Slop Lists. Could probably combine with above.
2 Ballast Lists. To give amount and cleanliness.
1 Vaccination List.
3 Crew Manifests.
1 Health Declaration.

I cabled in a pratique message as a matter of practice.

Shore Passes: Given by Agent for each crew member, no photos needed. Not required to be handed back on departure. Valid 3 days. After completion there seems to be a normal documentation delay to obtain clearance of up to 12 hours.

Shore Leave: The Agent will lay on a launch, but not really necessary as at El Tablazo liquid berth vessel is near the boat pier and fast launches run frequently to Maracaibo (takes 15 minutes). Arrange through Loading Master.

Can change sterling or dollars in local hotels, rate Bolivars to $, 4.30.

Films: Change Walport films at Puerto Miranda. Agent will send launch. Crew member has to go with films to change.

Agent: Only Agent on departure – no officials. Bill of Lading given by Terminal before Agent arrives.

SHIPMASTER'S REPORT: July, 1981.

Experienced following when entered Maracaibo Lake, mid-July, 1981.

Arrived EM buoy and obtained permission from San Carlos Pilot Station via VHF to enter outer channel and pick up Pilot at Buoy No. 26. During the piloting the Pilot asked asked me whether I had previously entered outer channel, which I confirmed with the remark *many years ago*.

After berthed my Agent informed me that a new regulation required Ship Masters to pick up Pilot at Punta Cardon inward bound, unless the Master with said vessel had actually entered Maracaibo Lake *within the past 6 months*, for which he was automatically permitted to enter outer channel and pick up Pilot at Buoy No. 26.

Fines might be enforced upon Masters neglecting this new regulation.

SHIPMASTER'S REPORT: August, 1981.

If the Master of a vessel enters the channel for the first time, or even if *more than six months* since the last visit, he must embark the Pilot close to Punta Cardon. The distance between Punta Cardon and "EM" buoy is approximately 80 miles.

If less *than six months* since the last visit, Master is authorised to pick up the Pilot when passing Buoy No. 26.

In the first case 24 hours prior notice should be given to the Pilot, and when approaching Punta Cardon vessel should call "Marina Cardon" on VHF Channel 16.

Section A

BAJO GRANDE: 10.29 N. 71.38 W. (See Plan Book)

(1) OPERATOR: Corpoven, S.A. Oil Terminal.

(2) OPERATOR: Corpoven, S.A. Natural gas liquids processing facilities.

(N.B. For important details of Documentation, Pilotage, etc., see "Maracaibo Lake").

(1) **OPERATORS:** Corpoven, S.A.

LOCATION:

Maracaibo: On the North-Western shore of the Lake Maracaibo: Position: Lat. 10° 40′ N., Long. 71° 38′ W.

Maracaibo is the capital of the State of Zulia and seat of all Government and Consular Offices, as well as the port of entry for all vessels loading at terminals in the Lake of Maracaibo. Upon arrival to Maracaibo, a representative of the appointed Agency will go on board to assist vessel.

Bajo Grande: Loading Pier: Position: 10° 30′ 50″ N., 71° 36′ 8″ W., about 8 miles (12.8 km.) South of Maracaibo on the Western shore of the Lake and about 9,000 ft. (2,743 m.) offshore with its centre line North-South. Two vessels can berth simultaneously, one outside at Berth No. 1 and one inside at Berth No. 2.

The wharf is constructed as a pile-supported concrete island. It consists of 3 breasting platforms plus bow and stern mooring platforms. Pier Heads are 860 ft. apart.

DOCUMENTS: The following documents should be presented by the Master:

Clearance from Sailing Port with the following attached:

Store List.
Crew List.
Slop Chest Inventory.
Ballast Certificate.

Special ballast report made up by Master.

The Maracaibo Port Captaincy, requires that the Masters of all vessels entering this jurisdiction, deliver to the Maracaibo Port Captain's representative, during his visit to ships in the port of Maracaibo, a report which must answer the following questions concerning ballast:

(1) Port or place where ballast was taken.
(2) Quantity taken.
(3) Type of ballast and condition of same.
(4) Where deballasting operation was or is to be carried out.
(5) Approximate deballasting time.
(6) Any other pertinent information that may be required.

Crew List	6 copies
Store List.	6 copies
Slop Chest Inventory (Deck, engine and cabin stores listed separately)	6 copies
List of Personal effects.	6 copies
Derat Exemption Certificate	Original
Venezuelan Net Tonnage Certificate	Original
American Crew List.	4 or 2 carbon copies.

(If required: See under "American Crew List").

Boarding Party: The boarding party usually consists of the following persons:

One Quarantine Official
Two Customs Officials.
One Sanitation Department Official.
One Port Captain's Representative.
One Foreign Service Department Official.
One Vessel's Agent.

American Crew List: All non-American vessels loading for USA port should have the American Crew List ready on arrival in Maracaibo to be visaed by the American Consulate in Maracaibo and placed aboard ship before departure. The crew list should be prepared on Immigration and Naturalization Service Form No. 1–418 (Crew List Manifest) and should contain two sections:

Section 1 – Should list those crew members who are American or who possess individual visa documentation to the United States.

Section 2 – Should list, in the alphabetical order of their last names, those alien crewmen who lack United States visa documentation and therefore require inclusion in the visa of the crew list.

Only one name may be placed on each line of the crew list. Two names should not be placed in the space of one line, nor should a full line between two names be left vacant. All copies of the crew list presented must be legible (Occasionally the names of the crewmen included on the carbon copies of some crew lists presented at the consulate are blurred beyond recognition).

The information requested under column 1, 2 and 3 should be filled in completely.

Column 1 – Should always contain the complete first name and middle initial of the crewman.

Column 2 – Should show the nationality of each crew member and the number of his travel document.

Column 3 – Should always include the name of the port where the crewman was shipped, not simply the country.

At the time of the vessel's first application for a crew list, the crew list must be presented in 4 copies:

Original and 1 copy – Should contain only the information requested under Columns 1, 2, and 3.

Two Copies – Must include the following information of those crewmen to be included on the crew list visa.

Column 4 – Should list the date, city and country of each crew member's birth.

Column 5 – Should show the place of issuance of the seaman's travel document and the name of the Government which issued the travel document. (It is not necessary to list the date of issuance of the travel document).

Cargo documents:

1. *Master's copy of Bill of Lading* – The Bill of Lading form used is the usual Warshipoilvoy form. Masters wishing to use another form should furnish 20 blanks on arrival in Bajo Grande. Master is requested to sign 3 negotiable Bills of Lading (Originals).
2. *One copy of the Certificate of Quantity and Quality (Q. & Q.).*
3. *One copy of the Ullage Report.*

Outward Clearance:

Following documents are delivered on board by the local Agent before sailing:

1. *Customs Clearance* – Duplicate of "Conocimiento de Embarque" and Duplicate of "Manifiesto de Carga". (Both stamped and signed by Customs) or any other document specifically requested by the consignee or nominating source.
2. *Communication* – A letter from Maracaibo Customs Authorities to Authorities in port of destination.
3. *Zarpe* – Permission to sail signed by Maracaibo Port Captain. This is brought on board in Bajo Grande by the outbound Pilot.

Customs Guard: The Customs Guard will request Master to countersign his time on board the vessel. This is counted from the time the first hose was connected until all hoses were disconnected, regardless of whether the vessel was receiving cargo or not.

Accommodation Ladder: Vessels must provide an accommodation ladder. The use of rung ladders, pilot ladders, etc., is contrary to Port Regulations. Port authorities will board only by means of an *accommodation* ladder. it is recommended to rig this in advance in order to avoid unnecessary delays.

In order to guarantee the security and safeguard the lives of the officers that board the vessel inbound in Maracaibo, it is imperative that Masters strictly comply with the following precautionary measures:

(1) Each of the components and functional parts that holds together or supports the gangway ladder must be maintained in excellent condition.

Therefore, wire ropes, guide blocks and bolts etc., found to be defective or in bad condition must be immediately replaced.

(2) For maximum security, each time that your vessel arrives in this jurisdiction, the above mentioned mechanisms should be thoroughly checked and tested by the personnel aboard vessel before the gangway ladder is used by the boarding party.

APPROACHES:

Channels leading to Lake Maracaibo: The channels leading to the Lake Maracaibo are called the Outer Channel, the Inner Channel and the Lake Channel.

Outer Channel: The Outer Channel starts at the E.M. Buoy position: Lat. 11° 13′ 47″ N., Long. 71° 33′ 31″ W. and ends at the Zapara Island, a distance of about 14 miles. (About 22 km.).

The light characteristics of E.M. Buoy are: flashing white every 5 seconds, visibility approximately 5 miles.

There are no turns in the channel and the course is 189°. The channel is 100 ft. wide and has a normal controlling depth of 44 ft. LWS with tidal range varying about 2 ft. 3 in. Cross currents are sometimes encountered near Zapara, San Carlos and Pescadero Islands, especially at LW when the cross currents are strong. Overtaking at these points is forbidden. There is one anchorage zone in the Outer Channel which is a trapezoid on the port side when navigating inbound near the buoys B – 14, B – 15, B – 16 and B – 18. All buoys in the Outer Channel are equipped with radar reflectors.

The Southern end of the Outer Channel is marked by buoys B – 27 and B – 28.

Inner Channel: The beginning of the Inner Channel is marked by buoys B – 29 and B – 30. The Inner Channel continues on the same course as the Outer Channel for about 10 miles, whereafter the direction changes to 150°. The entire length of the Inner Channel is about 12 miles. Beacons T – 55 and T – 56 mark its Southern end. The normal controlling depth is 44 ft. LWS. The channel is 800 ft. wide. Vessels are not allowed to overtake each other in the Inner Channel between buoys B – 29 and B – 30 and light beacons T – 25 and T – 26.

Vessels may overtake each other in the Inner Channel between light beacons T – 39 and T – 40 after having exchanged prescribed signals with the vessels to be passed. This manoeuvre is, of course, allowed only if conditions are favourable and no vessel navigating in the opposite direction is in sight. From beacon T – 56 to Maracaibo harbour the channel is 800 ft. wide, depth 44 ft., its end is marked by buoys B – 73 and B – 74.

Navigation through Channels:

Inbound vessels leave to starboard side the buoys and beacons marked with even numbers and to port side the buoys and beacons marked with odd numbers.

Outbound vessels shall leave to port side the buoys and beacons marked with even numbers and to starboard side the buoys and beacons marked with odd numbers.

Vessels should pass as close as possible to the channel's edge on starboard side. Loaded vessels have preference.

Approaching vessels are to reduce speed in order to minimize the suction force of the displacing waters.

Vessels must maintain a distance of 1 nautical mile (1,852 m.) by day, or night from other vessels navigating in the same direction.

No vessel should start to manoeuvre to overtake another vessel before having received clearly the affirmative signal from the ship to be passed.

A grounded vessel is not allowed to start any manoeuvre when another vessel is passing. Dredgers are frequently at work in the channels and caution should be exercised in passing them. Signals used by the dredgers are as follows:

Daytime: Black cylinder hoisted on side of yardarm:

You may overtake me on the side on which the cylinder is shown.

Two black balls over the bridge:

The channel is blocked.

Night:

Green light on side of yardarm (A white light on mast head helps to show on which side the green light is placed).

You can overtake me on the side on which the green light is shown.

Two red lights over the bridge:

The channel is blocked.

The tidal range is 4 ft. at neaps. Observed squat in the channels is about 1 ft.

Maracaibo Lake Channel Guard Service Corps have had evidence of vessels travelling out of the navigation channel in the vicinity of buoys B – 3, B – 5 and B – 7; this risky procedure is considered very dangerous to the safety of the channel buoys and its installations.

Captain of all ships are reminded that all vessels inbound or outbound *must* pass the EM Buoy on the port side. This operation will be registered and controlled by their electronic devices installed at San Carlos Pilot Station.

Violators of this regulation, in addition to being economically responsible for damages to the buoys and related accessories, will be prosecuted in accordance with Article 118 Section I of the Venezuelan Law of Navigation.

In view of the above, and keeping in mind the protection of the interests of your owners, we ask that you comply at all times with this regulation emanated from the Port Captaincy.

PILOTAGE: Compulsory. Vessels proceeding direct to the Bajo Grande Terminal must enter outer channel and embark Pilot between buoys 25 and 27. After vessel arrives in vicinity of channel entrance, Master must contact *San Carlos Pilot Station* by radio telephone on Channel 16 requesting Pilot at buoys 25 – 27. The launch that leaves San Carlos Pilot Station with Pilot for ship, takes approximately 20 to 30 minutes to cover distance, and distance, between Buoys and San Carlos is approximately 6 miles (10 km.).

Master must advise Corpoven, S.A. and Agent ETA buoys 25 – 27, 72, 48 and 24 hours prior to arrival there.

Masters of Vessels entering Lake Maracaibo for the first time must cable their Local Agent notifying this fact, in order that the Agent may comply with the Port Regulations. This security measure makes it necessary for the ship to pick up a Pilot at Punta Cardon.

The Master should notify Agent or contact Maraven, Punta Cardon by radio on Channel 16. As no Pilots are available at Punta Cardon, the Local Agent for the vessel requires 48 hours' notice in advance to facilitate making arrangements to fly a Pilot to Cardon and then have Maraven place the Pilot on board the ship.

The co-ordinates of Punta Cardon are approximately Lat. 11° 36′ N., Long. 70° 15′ W. Maraven will charge approximately Bolivares 220.00 for this service. In addition, the ship will have to pay air fare, hotel expenses, and a higher Pilotage fee for this service. However, if the Master of a ship has previously entered the channel as an officer of a ship, he is not required to pick up a Pilot at Punta Cardon.

We remind you that Pilots are authorised to leave the Jurisdiction, only when they are disembarked in Venezuelan ports. With this understanding, when special circumstances arise in which the Pilot cannot be disembarked at San Carlos and the ship is unable to enter the nearest Venezuelan port to disembark the Pilot, in this case the port of "Las Piedras", it is required that the Agent as well as the Master of the vessel, forward to the Port Captaincy at the earliest opportunity a detailed report giving the reasons that compelled the Master to take the Pilot abroad.

Pilots act in an advisory capacity only, and therefore the Master of the vessel retains full responsibility at all times. In the event it becomes necessary to disregard the Pilot's instruction in order to ensure the safety of the ship, Master must forward to Local Agent a full written report on the circumstances for delivery of same to port authorities.

The Venezuelan Pilotage Law stipulates that Pilots must be provided with the same lodging as is given an officer. In case no extra officer's cabin is available, suggest the hospital be used by the Pilot. Also, Pilot should be seated at the officers' mess for his meals.

In case of accident to Pilot while performing his duty on board, it is the responsibility of the Master to furnish the Pilot with a full written report on the accident before the Pilot leaves the vessel. The Pilot must be able to present such a report in case of a legal claim.

As a result of accidents that caused the loss of lives, the Maracaibo Port Captaincy issued a Regulation with the view of safeguarding human life at sea and other navigable waters; Official Pilots that must embark on or disembark from undocked ships, must use an automatic-inflated type life vest. This procedure is also compulsory for all persons from private or public entities that are required to go aboard vessels that are anchored, stopped or navigating in the waters of Lake Maracaibo. Likewise, at the side of the boarding ladder where the Pilot boards or disembarks, a hoist or boatswain's chair shall be placed there, and within it a life line and a gas light ready to be used in case it becomes necessary. The Port Captaincy will see to it that this Regulation is strictly complied with.

Docking Pilot: The Government's Pilot will assist in docking operations. It should be borne in mind that Pilot acts as adviser only. The Master retains full responsibility at all times. Any damage incurred to vessel or loading platform which may be deemed to have been caused by the Mooring Pilot's fault or negligence, may be held against the ship.

Undocking: Government's Pilot will assist in undocking. Two tugs will be used as for docking and undocking.

ANCHORAGE: The Pilot will not manoeuvre the ship into anchorage, but will indicate the proper location to anchor. Care should be taken because of small boat traffic.

MAX. SIZE: The following restrictions in size and draft upon loading exists for vessels docking at Bajo Grande:

	Maximum Loading Draft	*Maximum Vessel Size*	*Max. displacement upon Berthing (tons)*
Outside Berth (No. 1)	40 ft. 00 in.	55,000 d.w.t.	34,000
Inside Berth (No. 2)	34 ft. 06 in.	36,000 d.w.t.	20,000

RADIO: *Information to be cabled to Local Agents 3 days prior to arrival:*

1. *Flag:* If the vessel has loaded in Bajo Grande before or is listed in the Tanker Register published by H. Clarkson & Company Ltd., London, the nationality of the vessel need not be cabled.
2. *Sailing port and at which other port vessel will call in this area:* For clearing the vessel in and out of Maracaibo, local ship Agents must know beforehand from where the ship comes and which other port it will call in this area. Therefore, it is of importance to inform Agents whether the vessel will load part cargo or bunker, at which terminal, and whether inbound or outbound.
3. *Port for which vessel is cleared:* In case the vessel was diverted *en route* and consequently is not cleared for Maracaibo or one of the terminals in the Lake of Maracaibo, the Local Agents must obtain from authorities special permit for the vessel to enter the Lake of Maracaibo.
4. *Ballast Certificate:* If the vessel arrives in ballast a "Ballast Certificate" is mandatory. A fine against the vessel will issued by the Port Authorities if vessel does not have this certificate.
5. *Estimated Time of Arrival:* Cable ETA San Carlos Pilot Station Buoys 25 – 27 (See "Pilotage") or, if the vessel is taking part cargo or bunkering inbound, cable ETA, bunker or first loading port. Please use local time if possible (4 hours behind GMT).
6. *Tonnage:* If the vessel has not loaded at Bajo Grande before, also cable the Gross and Net Tonnages. To determine whether the International or the Venezuelan tonnage should be mentioned, see General – "Tonnage Applicable".
7. *Master's Full Name:* Please sign your first message with Master's name and surname, which is also needed to clear the vessel in Maracaibo.
8. *Changed ETA:* An additional cable should be sent about 48 hours and 24 hours prior to arrival at pilot station Buoys 25 – 27 stating ETA.

Proper use of Radio Frequencies: We have received several circulars from the Maracaibo Port Captaincy, requesting Terminal Operators to caution all Masters of vessels calling at Bajo Grande Terminal on the improper use of the International Distress Frequency of (2182 kHz) for personal conversations. This procedure is contrary to the security of vessels.

A letter containing such caution will be delivered to the Master of each vessel loading at Bajo Grande by the Agent, requesting that the Master sign a copy signifying his acknowledgement of said letter of notice.

The International Distress Frequency was established specifically and exclusively for emergency calls such as shipwreck, fire and accidents. It is also used by ships and shore stations to make first contact (VHF Channel 16) but immediately after contact is made, the operator should switch to one of the 52 Channels available.

9. *Compulsory use of Single Side Band Radio:* A circular letter from the Venezuelan Ministry of Communications, states that no licence will be granted for the installation of radiotelephone stations of modulated amplitude (A3). The installation and use of Single Side Band radiotelephone equipment is obligatory.

In consequence, the Ministry has requested that the terminal inform all users of Double Side Band (A3) radiotelephone equipment in order that they proceed immediately to install in their ships, launches and all other marine vessels Single Side Band equipment with the same frequencies that are presently in authorised use, which is VHF Channel 16.

The listening and Safety Station YXW – 3 installed at the Venezuelan Nautical School is equipped to answer any calls on the International Distress Frequency with their transmitter of 1 kW.

As a result of the foregoing, a letter containing the above information has been prepared by the Terminal which will be delivered to the Masters of all vessels calling at the Bajo Grande loading terminal. The Masters of all vessels are required to sign a copy of this letter in acknowledgement of receipt.

TUGS: The Venezuelan Government has ruled mandatory the use of 2 tugs for docking and undocking. Vessels over 60,000 d.w.t. will use 3 tugs for docking and undocking.

NOTICE OF READINESS: Masters are free to tender their ships as being ready to load at any place and time which, in their opinion, conforms with the terms of the charter party. Terminal personnel authorised to countersign the Notice of Readiness have been instructed to indicate the time vessel was all fast. This does not imperil in any way the rights of the shipowner in his negotiations with the charterer and it limits the Terminal's liability to the consignee.

CARGO OPERATIONS:

Deballasting Facilities: A recent Circular letter from the Venezuelan Ministry of Communications, Maracaibo's Port Captaincy, states that as of October 1976, no ballast (either clean or dirty) can be discharged into Lake Maracaibo waters. Therefore, all ballast must be pumped ashore to the petroleum terminal on which vessel is to take cargo. Heavy fines are assessed for vessels violating this law and therefore we strongly recommend Masters to be particularly careful in this regard.

Shore deballasting facilities are available at Bajo Grande and are subject to no special regulations and procedures as yet. Tanker ballast water is pumped through two 8 in. hose connections into a 24 in. line of about 9,000 ft. in length to a 120,000 bbls. receiving basin situated on shore.

The deballasting basin is limited to receiving *only* petroleum hydrocarbons and petroleum hydrocarbons derivates. Emulsifiers, caustics, acids and chemical slops are absolutely unacceptable. Contamination of Lake Maracaibo waters with oily or chemical materials of any nature is strictly prohibited by Venezuelan Laws. The terminal is required to report to the Authorities any such contamination by vessels docked at Bajo Grande. HEAVY FINES ARE THEN ASSESSED AGAINST THE SHIPS. Vessel's cooperation is requested to prevent contamination from tank overflows, bilge oil, line leaks or from any other source.

Tank Cleaning and Drying: Precautions as are common for any heavy oil should be taken to ensure that no ballast is left in any tank. If the cargo is contaminated with water, the water will not separate from the oil. The salt content of the oil will be raised approximately 10 lbs. per 1,000 bbls. for every 0.10% contamination by sea water. All cargo compartments must be stripped extremely dry.

Cargo pipe-line should be drained and or purged of water. On standard T – 2 type vessels, this can be done by draining the fore and aft main cargo lines, both suction and discharge sides, into the pump room bilges followed by opening of main suction valves on each individual compartment, thereby releasing water retained in dead and transverse lines. After this procedure is completed, each compartment should be restripped with stripping pumps and lines, followed by draining the stripping line to pump room bilges. On other ships equipped with looped systems it is possible to blow the system with air and drain water into the bilges. In other situations, fresh water might be used to flush cargo piping systems of salt water and in turn strip salt water and fresh water as outlined for T – 2 vessels. All deck scuppers should be securely plugged and all precautions should be taken to avoid pollution of lake waters.

Inspection of Tanks: Before loading can commence, tanks and loading system must be inspected and passed. This is usually done by the Terminal's own Cargo Inspector but, if consignee so requests, third party inspection can be arranged.

Inspection Companies available in Maracaibo are the following:

Chas. Martin Venezolana de Inspecciones	(CHAS MARTIN)
E. W. Saybolt & Co., S.A.	(SAYBOLT)
Redwood Petroleum and Petrochemical Division	(REDWOOD)
Analistas e Inspectores Venezolanos de Petroleo C.A. Inspecciones, S.A.	(AIVEPET)

Line Displacement: When a vessel is loading crude and products, it is usually necessary to displace lines once or twice during loading. Masters will be advised of necessary line displacements before loading starts and are required to take note because NOTICE HAS TO BE GIVEN BY VESSEL when pumping should be stopped and tanks changed. Once shore tanks have been changed, it will not be possible to change the quantity of the product already in the ship, as shore lines will then contain a product different from the one already loaded. *Ship's gauges and/or draft should be carefully checked when calculating required quantities.*

Spillage: In case spillage occurs, the Terminal Port Supervisor must be advised immediately, as any spillage must be reported to the Authorities without delay.

There has been considerable discussion in Venezuela concerning oil spillages resulting in contamination of Lake Maracaibo. Considerable pressure is being exerted by Government agencies to eliminate all spillage, and the Terminal is making every effort to avoid contamination of Lake Maracaibo.

While vessel is at Bajo Grande take special precautions to avoid dirty ballast, bilge water or any other contaminant entering the Lake.

If a spill should occur and Terminal representative, the Government's representative of the National Guard observes that the waters of the Lake are being contaminated by any substance from the vessel the Terminal will request that vessel suspends deballasting, loading or discharging operations immediately and all consequences that might arise from this operation such as short loading, the unmooring of your vessel, fines, damages to fishermen, clean up costs, etc., *will be strictly, for vessel's account.*

We strongly recommend to Masters to emphasise to the officers on deck to endeavour to avoid spillages and to make certain that the scupper plugs are installed prior to commencement of loading operations in order to withhold on deck any spillage that might occur.

After Loading: All Butterworth plates, tanks tops and ullage plugs should be inspected to ensure against entry of water. Inspection of ullage plugs should follow on completion of temperature readings because of the necessity of taking temperatures en route. Sea suction valves should be secured by positive means until all cargo has been discharged. This may be accomplished by numbered seals, chains and padlocks. The method of securing should be noted on the inspection documents. Regardless of which method is used, appropriate log entries should be made indicating the date, time and method used and under whose supervision, both vessel officer and/or Cargo Inspector, such method was applied.

About 1 hour is required for the preparation of the cargo documents which are normally delivered on board before sailing.

Temperature of Boscan Crude and Boscan Products at Sea: On short voyages, as for instance to the U.S.A., it has proved most practical to maintain the loading temperature. On longer voyages, as for instance to Europe, the temperature may be dropped to 130°F., which does no harm as long as sufficient time is given to bring the temperature up again to that required for discharging. Masters should, however, not expect a temperature rise of more than 5°F. per day, especially if the sea temperature is low. The heat transfer properties of Boscan Crude are very poor as are those of the heavy products made from this crude. Many ships have been delayed in the discharge port due to too low cargo temperature. A temperature of 160°F. is suggested for discharging Boscan Crude, Topped Boscan and cutback asphalts.

Discharge Cargo: Boscan Crude has a flash point of 110 – 160°F. and a maximum viscosity of 1400 SSF at 140°F. The viscosity at other temperatures follows the pattern of other petroleum products. Boscan Crude has been successfully handled in ships fitted with both reciprocating and centrifugal type pumps with forward and after pumprooms respectively. It is generally found that this crude can best be handled at a temperature which brings its viscosity to about 600 SSF – 160°F. Vessels with forward pumproom should control stern trim so that it does not exceed about 4 ft. while stripping the after tanks. Also a 5° list is very helpful when stripping. Once the cargo gets below heating coils, tanks must be pumped empty as fast as possible. At times it has been found helpful to gather tanks strippings into a single tank for discharge ashore, as it is very difficult to strip against heavy back pressures. Watch reciprocating pumps for vapourlock. Because of high viscosity, proper care should be taken that no oil is left in vessel discharge lines at low temperature.

Tank Cleaning After Discharge Cargo: Many Masters have expressed concern over tank cleaning after discharge. Assuming that the ship proceeds to sea for this operation and has sufficient time for proper execution, vessel may be cleaned quite thoroughly using the Butterworth system. However, it is of vital importance that the system be used at maximum pressure and temperature (not below 160 p.s.i. and 170°F respectively). At these conditions and with 2 machines, it has been found that about 4 hours are required for each tank. It is of importance to keep the tanks well stripped during the Butterworthing. Some prefer to steam out the tanks before Butterworthing. If this course is adopted care should be taken that the steaming does not last more that 1 hour as the heat will drive off the light ends of the oil and leave a rubbery residue that is very difficult to remove.

It has been found helpful to keep the machines in LOW position for about 1 hour and the HIGH – MIDDLE and LOW in order, in the usual manner.

Boscan Crude and Products/Light Products:

Loading Product	*API Gravity*	*Temperature °F*	*Loading Lines used*	*Normal Loading Rate B/H*
Boscan Crude	10.0 – 11.0	160	2×18 in.	10,000
Boscan Crude Blends	13.0 – 19.0	140	2×18 in.	10,000
Topped Boscan Crude	9.5 – 10.0	160	2×18 in.	10,000
Topped Boscan Crude Asph. Grade	8.0 – 10.0	160	2×18 in.	10,000
Cutback Asphalt	11.0 – 15.0	170	2×12 in.	5,000
Asphalt Cement (Pas)	5.0 – 8.0	300	1×14 in.	5,000
Gasoil	35.0 – 42.5	90	1×12 in.	6,000
Fuel Oil No. 2	38.0 – 40.0	90	1×12 in.	6,000
Fuel Oil No. 5	21.0 – 22.0	120	1×12 in.	5,000
Fuel Oil No. 6	16.0 – 18.0	160	1×18 in.	12,000
Light Naphtha (LSR)	70.0 – 73.0	85	1×12 in.	6,200*
Heavy Naphtha (HSR)	52.0 – 53.5	85	1×12 in.	6,200*
JP – 4	45.0 – 51.9	80	1×12 in.	6,200*

*Maximum rate due to Bajo Grande Terminal security regulations.

FUEL:

Advance Notice of Requirement: Should a vessel arriving at Bajo Grande require any bunkers, Owner or Operator must place their nomination with Corpoven, S.A. via Telex as much in advance of the delivery date as possible. Telex should indicate name of vessel, ETA at Bajo Grande and quantity and quality of Marine Fuels required. A cash deposit in U.S. Dollars covering the nomination must be made prior to the delivery date into the following account:

First National City Bank
339 Park Avenue
New York, N.Y.
U.S.A. 10022
Current Account No. 36990309
(Corpoven, S.A. Petroleum Income Account)

Owner or Operator must also request F.N.C.B. to confirm via Telex to Corpoven, S.A. that such deposit has been made in order to cover the cost of bunkers to be delivered to vessel arriving at Bajo Grande at the current ETA. Only after this Telex has been received will delivery actually proceed.

Bunker Facilities: Bunkers are available from pipe-line at Bajo Grande Terminal for vessels loading and unloading cargo at Berth Nos. 1 and 2. Bunkering rate is about 2,500 bbls.p.h. for Bunker "C", intermediate bunker fuels, marine diesel and marine gas oil.

Marine Fuels and Lubricants Available: Bunker fuel (sometimes called Bunker "C"), Intermediate Bunker Fuels, Marine Diesel and Marine Gas Oil.

Lubricants are generally available in the Maracaibo area. Should you require any, we recommend to contact vessel's local Agent.

Lighterage: Bunker fuel, intermediate bunker fuels, marine diesel and gas oil are also available for ships in the Maracaibo area. 72 hours' advance notice is required for barge deliveries of all products.

FRESH WATER: Delivery of boiler and potable water is made by barge, *minimum quantity 100 tons.* The barge holds about 160 tons and the pumping rate is about 25 t.p.h. Requirements should be cabled in advance to the Agent of the vessel in Maracaibo.

REPAIRS: No major repair facilities are available in Maracaibo but small repairs can be undertaken by local machine and electric shops. Shore labour can be furnished if required. Technicians are available for minor radio repairs. Nearest dry docks are at Curacao for vessels up to 30,000 d.w.t. and at Puerto Cabello, Venezuela for vessels up to 18,000 d.w.t.

CUSTOMS: *Contraband:* Strict compliance with the Customs Law of the Country is enforced by the Authorities and Masters are strongly advised to caution crew members against attempting to smuggle cigarettes. 1 open package per person is allowed to be carried ashore, but a greater quantity will result in fine and imprisonment of the offender as well as lost ship's time. Due to the very strict enforcement of the Customs Regulations, it is recommended that no goods be carried which are not shown on the store list. Any new articles (clothes, shoes, etc.) should be included in the store list and marked as personal belongings. If during a checkup by Customs, articles considered as contraband are found, this will not only mean confiscation of these articles, but also hours or days of lost ship's time, while the case is handled at court.

CONSULS:

Following countries have consular representation in Maracaibo.

Argentina
Austria
Belgium
Bolivia
Colombia
Costa Rica
Denmark
Dominican Rep.
Ecuador
El Salvador
France
Germany (West)
Great Britain
Guatemala
Italy
Mexico
Netherlands
Nicaragua
Norway
Panama
Puerto Rico
Peru
Spain
Sweden
U.S.A.

SURVEYORS: American Bureau of Shipping and Lloyd's Register have Agents in Maracaibo. Their services may be procured by cabling requests to the local Agent at Maracaibo.

HOLIDAYS: The Terminal office will be closed on the following days. New Year's Day (January 1st); Easter Thursday/Friday (March/April); Declaration of Independence (April 19th); Labour Day (May 1st); Battle of Carabobo (June 24th); Independence Day (July 5th); Birthdate of Simon Bolivar (July 24th); Columbus Day (October 12th); Chiquinquira's Day (November 18th); Christmas Day (December 25th); All Saturdays; All Sundays.

SHORE LEAVE: Shore Leave is permitted at the discretion of the Port Authorities; required number of shore passes will be brought on board on arrival in Maracaibo and have to be returned to the Customs Guard again before the vessel leaves Bajo Grande.

GENERAL:

Tonnage Applicable on Fees: On ships registered in countries which have a reciprocal tonnage agreement with Venezuela, the gross tonnage registered in such countries will be applied for calculating pilotage fees. Such countries are:

Denmark
France
Germany
Ireland
Netherlands
Norway
Portugal
Sweden
United Kingdom
U.S.A.

On ships registered in countries not listed above, such ships calling at Venezuelan ports for the first time must be measured for Venezuelan tonnage by the Port Captain. It is usual practice to take ashore the ship's Panama Canal or Suez Canal International Gross Registered Tonnage Certificate, which is used as a basis for recalculating tonnage under the Venezuelan regulations, and return it before sailing. The Venezuelan Admeasurement Certificate, when later issued, is forwarded to the Owners. A fee is charged for this certificate, which is payable only on the ship's first call.

Firearms and Ammunition: Firearms must not exceed 1 per Officer nor may the ammunition exceed 18 cartridges per Officer. All firearms and ammunition must be carefully declared on the store list and should be collected and held in Master's safe custody while vessel is in Venezuelan waters.

Guards: Customs Guards are stationed on the platform at Bajo Grande. They must be provided with sleeping quarters on the ship and seated in the Officers' mess for their meals. Non-compliance may cause cargo stoppage and fines. Masters are reminded that these guards are representatives of the Venezuelan Government and any uncourteous action on the part of the crew or passenger will be regarded as a slight against the Country itself.

Gangways: The ship is to supply a safe gangway, which allows easy access to the vessel. The Terminal has a gangway which may be used on request with the understanding that any damage to the gangway or ship or shore personnel through its use may be held against the ship.

Safety: Vessel must be in readiness to move at all times. The attention of Masters of turbine steamers are called to this regulation.

Ship's fire fighting equipment must be ready for instant use while vessel is alongside. Shore personnel will render assistance in an emergency but, since no fireboats are stationed in the immediate area, vessels should be prepared to combat fire without outside assistance. It is necessary to obtain Terminal's approval for repairs of propelling machinery.

Normal safety precautions apply. Smoking is not allowed on the pier. No hotwork is permitted on vessels alongside without *written* permission from the Port Supervisor. *Swimming alongside pier is dangerous and absolutely prohibited.*

Launch Service: The launch is primarily for the use of the port staff.

Taxi: Taxi service will be generally available upon request to vessel's Agent.

Visitors: According to Port Regulations concerning access to ships and loading terminals and in the interest of industrial safety, only persons directly concerned with loading operations will be permitted to board vessel or visit the loading platform at Bajo Grande.

Plimsoll Marks: The Port Captaincy requires that Plimsoll Marks be readily visible. If they are not clearly legible, permission to sail may be withheld and a fine imposed. This is applicable to inbound and outbound vessels.

We therefore, request your full compliance with this Regulation from the Maracaibo Port Captaincy.

Marine Stores/Charts: Marine stores are available in limited supply. Marine charts are not available.

Compass Adjusters: There are no compass adjusters in Maracaibo.

Seamen Left Behind: Sailing may be withheld until all crew members are aboard with exception of those ashore for justified reasons. It is important that Masters bear in mind that the Venezuelan Law will at all times hold the vessel's Master, Agent, or Owner responsible for any seamen left behind in Venezuela.

Crew in Transit: In case a crew member is left ashore for a justified cause, such as hospitalisation, repatriation, etc., his documents and personal effects are to be delivered to the vessel's Agent before sailing. A letter is required from the Master with detailed instructions as to maximum cash advance, etc. All expenses incurred by such members are for vessel's account.

Port Supervisor: Masters or their representatives are invited to call at the Port Supervisor's Office on shore in Bajo Grande or over the telephone on the pier, for any further help, information or complaints.

Terminal: Cable Address: Corpoven, S.A., Maracaibo.

NOTICE: Issued by Corpoven, S.A., Bajo Grande Refinery, Maracaibo.

PROCEDURE FOR BERTHING AND UNBERTHING MANOEUVRES

To the Masters of all the tanker ships arriving to Corpoven's Refinery, Bajo Grande Marine Oil Loading Terminal, Lake Maracaibo, Venezuela.

Instructions concerning approaching and manoeuvres for berthing/unberthing at this Terminal.

With a view to prevent any possibility that your ship may cause damage to our installations, we shall highly appreciate if the Masters pay attention and respect the following procedures:

1. Entrance Bajo Grande Refinery Terminal (Lat. 10° 30′ 50″ N., Long. 07° 36′ 08″ W.) is done between the Main Navigation Channel Marker Buoys B86 – B88 and leaving between the Buoys BG2, BG1 and B86.

2. On ship's arrival to the Terminal Entrance Buoys, a Marine Officer, acting as a Liaison Officer of Corpoven, will board the ship in order to assist her Master and the Official Pilot in all matters concerning inter-communications and co-ordination with the Terminal and on basis of his technical and local knowledge and experience give advice relative with the vessel's safe berthing/unberthing and safe mooring/unmooring to/from the pier.

The Liaison Officer will have with him charts, drawings and information on the Terminal, which will be available to the Master and to the Official Pilot for consulting purposes.

It is understood that the Liaison Officer only acts as a consultant or technical advisor to the ship's Master and to the Official Pilot appointed for conducting the ship to the Terminal and only on the matters hereinbefore already described. The vessel's Master and the Official Pilot retain their duties and responsibility of commanding the ship and of safely piloting her to the Terminal, respectively.

3. For best manoeuvrability ships arriving on ballast or partially laden, must arrive with a draft forward which should not be less than given in the following table and a trim by the stern of about 0.75% of ship's length on ships of 400 ft. length or more.

Length	*Draft Forward*	*Trim by Stern*
400 ft.	10 ft.	3 ft. 00 in.
500 ft.	12 ft.	3 ft. 09 in.
600 ft.	14 ft.	4 ft. 06 in.
700 ft. ideal	16 ft. (nor less than 14 ft.)	5 ft. 03 in.
750 ft. ideal	17 ft. (nor less than 14 ft.)	5 ft. 08 in.

The ship's total displacement in any case should not exceed 34,000 tons for ships mooring at Berth No. 1 and 20,000 tons for ships berthing at Berth No. 2.

4. For more information please consult the instructions and information for the port which will be issued to you opportunely on your arrival for first time to this Terminal, please comply with them, and see that they are complied with.

5. *Mooring Lines:* Prior to arrival at the Terminal, the vessel shall have all the necessary mooring lines ready for use together with a sufficient number of heaving lines and the equipment and the personnel required for mooring. All the lines used for securing the ship to the berth should be of the same material, construction and of approved characteristics.

6. *Tugboats:* Minimum 2 twin-screw tugboats of adequate horsepower for the size of ships ordinarily berthing at this Terminal will assist the vessel in the berthing/unberthing manoeuvres. If the Master so request or in the case of the size of vessel and wind and/or current conditions so require, the Terminal may order the use of 3 tugboats for the manoeuvres. The tugboats, on arrival, will come alongside the ship before entering in the Terminal.

The first communication with the tugs is via VHF Channel 16 as first contact and then changed as per instructions.

7. *Berthing:* At Bajo Grande ships berth bow to North.

On approaching the berth it is to be avoided approaching bow to or at any angle with the berth.

No. 1 Berth (Outer Berth): The ship will be put in a position parallel and abeam to the berth at a minimum distance of about 50 m. or more, depending upon the prevailing conditions of wind and current.

Once in this position and with the ship motionless or almost motionless, the Liaison Officer will assist you and the Official Pilot in the manoeuvres to nurse the ship alongside sideways with the tugs which, generally, will be alongside the ship's side opposite to the side the ship will berth, already made fast and ready to push.

When the manoeuvre is carried out for berthing to No. 1 or Outer Berth, the starboard anchor will be in cockbill position ready for use in case needs arise and in such case the aft tugs or both immediately ordered to pull on reverse.

It will be avoided to haul the mooring ropes secured to the North platform bollards in order to pull the vessel forward. If need arises the ship's engines may be used to move the ship.

8. *Unberthing:* The use of spring lines must be avoided in order to veer the ship on the mooring platform for clearing the vessel's bow or stern while unberthing. These spring lines will be only used in case of extreme emergency.

After all the mooring lines have been cast off, the ship will be towed sideways away from the berth to a distance where she can safely proceed under own power.

The Liaison Officer will disembark when the ship is safely free away and offering no risk to the dock.

Corpoven will not permit berthing or unberthing without a Corpoven Liaison Officer being onboard.

9. *No. 2 Berth* (Inner Berth): The same procedure hereinbefore described for berthing at No. 1 Berth will be followed for berthing at No. 2 Berth. The ship will be put first parallel to the berth and then the vessel nursed alongside with the tugs. For unberthing, manoeuvres will be the inverse. During berthing and unberthing manoeuvres, ship's engine(s) will be used only when it becomes necessary.

At this berth anchors must not be used because of submarine pipelines laid there. In this berth the distance from it must not be more than 50 m.

10. *Emergency Towing-Off Wire:* Whilst berthed alongside the platform, emergency towing-off wire-ropes should be rigged both on the offshore bow and quarter of the ship, with their loops kept near the waterline at all times where the tugs can easily and quickly pick them up.

The wire-ropes should be in good condition and of suitable strength for the ship's size. The wires should be properly led outboard through the nearest fairleads leaving sufficient wire-rope coiled on deck and free to go when the tug hauls and of adequate length to tow her safely off the Terminal.

The overboard length of rope should be adjusted as the drafts decrease or increase.

11. *Mooring Lines Whilst at Berth:* Mooring lines should be periodically inspected and attended to ensure that they are kept taut in order to minimize and movement of the ship along or away from the berth.

In the case of ships equipped with automatic tension winches, the brakes of the winches should be applied and the mooring lines handled on manual operation when required to take up slack or pull them taut.

12. *Safety Practices:* While the ship is lying at the Terminal the Master will ensure that all the safe practices in loading or discharging oil products and related operations are complied with on his ship and also ensure the maximum co-operation between the vessel's crew and the Terminal personnel in their mutual interests of safe and efficient operations.

AUTHORITY: Corpoven, S.A. – Bajo Grande Refinery, Carretera a la Canada, P.O.Box 93, Maracaibo, Venezuela 4001A. *Tel:* (061) 202673. *Telex:* 61254, 61161. *Contact:* Mr. Adriel Fernandez, Terminal Supervisor.

(2) **OPERATORS:** Corpoven, S.A.

LOCATION: S.W. of channel buoys B – 87 and B – 88.

The installations for processing natural gas liquids at Bajo Grande processes liquids for Corpoven, S.A., and they are known as Product Owners. The Plant is situated in Bajo Grande, approximately 10 miles to the South of the Port of Maracaibo, on the West bank of Maracaibo Lake.

FLAG: The local authorities require the Venezuelan flag to be hoisted to the top of the vessel's mast from the time it enters the outer channel on arrival, until it leaves the outer channel on departure.

DOCUMENTS: *Customs Clearance for Programmed Vessels:*

Vessels which arrive in ballast or with cargo in transit, require the following documents (with additional file copies if these are required):

(A) Clearance from the last port
2 copies – 1 visaed Ballast Certificate
1 or more letters Consular Correspondence (in sealed envelope)
4 copies – 2 visaed Passenger List
4 copies – 2 visaed Lists of Equipment
4 copies – 2 visaed List of Passengers in Transit
4 copies – 2 visaed List of Mess Equipment and Spares
4 copies List of Personal Effects
4 copies – 2 visaed List of Stores
5 copies Crew Lists.

Vessels which arrive with cargo must have, apart from the foregoing:

(B) 4 copies – 2 visaed Venezuelan Entry Manifests
6 copies – 2 visaed Bill of Lading
2 copies visaed Entrance Manifests.

In the absence of a Venezuelan Consul at the last port, the Customs clearance documents must be signed by the Consul of a friendly nation, one of the Port Authorities, Notary Public, the Chamber of Commerce, or by two recognised signatories.

Clearance through Customs of diverted vessels:

Vessels diverted on the high seas to Maracaibo to load at Bajo Grande must present all the documents indicated in (A) above, except the consular correspondence, which they will not have.

Vessels diverted on the high seas to Maracaibo (Bajo Grande) which do not have a Venezuelan Customs Clearance on board, must advise their Agents by radio prior to their arrival, the name of the vessel, the name of the Master, nationality of the vessel, net Venezuelan tonnage (if available, if not, the net registered tonnage), last port of discharge, port to which it was originally sailing and the ETA at the Pilot station at San Carlos. This information is required to obtain the Entry Permit prior to the arrival of the vessel. Three copies of the diversion telegram received by the vessel, signed by the Master, together with those documents detailed above, must be presented to the Port Authorities on arrival at Maracaibo. Non-presentation to the Port Authorities of the documents or the information mentioned will occasion a fine to the vessel.

Inspection by Customs: All vessels arriving from foreign ports destined for the dock at Bajo Grande must anchor in the Port of Maracaibo for Customs inspection by the Port Authorities before proceeding to Bajo Grande. The vessel's gangway must be in position prior to arrival at Maracaibo.

A member of the National Guard of Venezuela will come on board every vessel at Bajo Grande to observe the activities in connection with the operations of loading and unloading. This official is authorised as representative of Customs and is known as the "Vigilante de Aduana". He must be fed and lodged at the same standard as ship's officers.

Loading Documentation: The loading and Customs papers will be delivered to the Master by the Agent of the ship on his arrival at the Port of Maracaibo, on his voyage outwards.

PILOTAGE: Vessels entering currently have the option of taking on the official Pilot at:

(a) The channel in front of the pilot station at San Carlos, between the Buoys B – 24 and B – 26.

(b) In front of Amuay Bay or Punta Cardon. However, to arrange this service, Agents must be advised at least 48 hours in advance of this requirement.

The Pilot who boards the vessel in front of San Carlos will take it to Maracaibo, where he will disembark.

Due to weather conditions, the Port Captaincy of Maracaibo cannot guarantee the embarkation or disembarkation of the Pilots at the "EM" buoy. For this reason, Masters must communicate with the pilot station of San Carlos to receive necessary instructions as to where the Pilot will be embarked, the latter usually coming on board between Buoys B – 24 and B – 26. The system of communication between the pilot station of San Carlos and the vessels will be via radio-telephone. The San Carlos frequencies are: 2182 kHz. and 156.6 MHz. (VHF Channel 16). Other frequencies are: 2122 and 2080 kHz. and 156.8 MHz.

Pilotage to navigate through the inner and outer channels is compulsory at all times. The maximum speed of navigation in the dredged channels is 10 knots.

Vessels leaving will take the Lake Pilot on board at Bajo Grande and on reaching the port of Maracaibo the Pilot will be changed for another to take the vessel through the channel. The channel Pilot will pilot the vessel up to the San Carlos bank, generally between Towers E – 31 and E – 33, where he will disembark. The Port Captain of Maracaibo has issued instructions to all ships' Agents so that they may inform the Master and/or Owners of the vessels that all vessels must identify themselves with the pilot station of San Carlos by radio-telephone, regardless of the time of day, when they are entering between Buoys B – 17 and B – 19 and when they are leaving between Buoys T – 42 and T – 40.

Every time a launch with an official Pilot on board leaves to attend to a vessel in sight, the costs will be charged to the company which owns the vessel or to its representative, even when service has not been given.

A government Pilot will assist each vessel from Maracaibo to Bajo Grande and on the outbound trip to Maracaibo. The government Pilot will also assist in the berthing and unberthing operations. The ship's Agent will inform the Master of each vessel, as well as the government Pilot, the schedule for berthing the vessel.

The Plant Mooring Supervisor will board each vessel prior to approaching the dock. Mooring Supervisor will assist in the mooring and unmooring operations. It should be understood that the Mooring Supervisor acts only in an advisory capacity to the Master. The vessel's Master retains full responsibility at all times. The Plant assumes no responsibility in connection with any acts or advice given by the Mooring Supervisor.

APPROACHES: The buoy which marks the entrance to the outer channel (buoy "EM") is situated in approximately position 11° 13′ 47″ N., 71° 33′ 31″ W. The characteristics of the light of the "EM" buoy are: white flash every ten seconds, visibility approximately 5 miles. The distance between the "EM" buoy to the Southern extremity of the outer channel, marked by the Buoys B – 27 and B – 28, is approximately 15.75 miles. The channel is 1,000 ft. wide and normally has a depth of 42 ft. minimum at low tide observed at the time of neap tides with a tidal amplitude varying 2 ft. 3 in.

There is a breakwater 0.5 miles to the East of and parallel to the outer channel which extends 1.6 miles to the North from the Northern side of the Island of Zupara. The end of this breakwater is marked by a steel frame tower with a light 25 ft. above sea level. Characteristics of the light are: white flash every 8 seconds, visibility about 3 miles.

Commencement of the inner dredged channel is marked by the Buoys B – 29 and B – 30. The length of this channel, which is marked by buoys, is approximately 12 miles, and ends at Buoys T – 55 and T – 56. The channel is 800 ft. wide and the normal checked depth is 43 ft. neap tides with a tidal amplitude varying between 1.5 ft. to 2.5 ft.

The channel from the Buoys T – 56 as far as the port of Maracaibo is a dredged channel, whose end is marked by Buoys B – 73 and B – 74. It is some 800 ft. wide and has a depth of at least 43 ft. The distance is about 11 miles and the tidal amplitude range is insignificant.

RESTRICTIONS: Bridge clearance at MHHW 146 ft.

MAX. SIZE: The maximum permissible fresh water draft at the dock is 36 ft. and the maximum overall length vessel the dock will accept is 700 ft. Vessels with a berthing displacement up to 20,000 long tons will be accepted, providing the approach velocity can be controlled to 0.3 ft. per second or less.

Vessels with an overall length greater than 700 ft. or with a fresh water draft of more than 26 ft. or a displacement greater than 20,000 long tons will not be accepted for loading at Bajo Grande, unless they have obtained the prior authorisation of Corpoven, S.A. If the vessel is not equipped to moor, load and unmoor in a safe manner, the vessel will not be loaded. In such cases, there will be no responsibility on the part of Corpoven, S.A.

RADIO: Corpoven, S.A. Export Department also has radio-telephones with the following frequencies: 2080, 2120, 2182 (stand-by), 2638 and 2738 kHz and 156.6 (stand-by) and 156.8 MHz. operated in accordance with the following schedule:

Monday through Friday:	From 0730 until 1130
	From 1300 until 1700
Saturday, Sunday and Holidays:	From 0730 until 1030 approx.

Any tanker or vessel bound for Bajo Grande shall cable Corpoven, at least 5 days in advance of its scheduled arrival time in Maracaibo, giving notice of its estimated time of arrival, loading capacity, amount and type of product to be lifted and condition of ship's tanks.

At least 48 hours in advance of arrival at the San Carlos Pilot Station, the vessel's estimated time of arrival, nationality, Venezuelan net tonnage (if available, otherwise its registered tonnage), quantity and type of cargo required, condition of ship's tanks, name of Agent, last port, Master's name and all requirements of the vessel while in port should be cabled to "Corpoven, Maracaibo" and to the ship's Agent. As the cable office in Maracaibo is not able to communicate directly with vessels at sea, messages to "Corpoven, Maracaibo" and to Agent should be routed via PJC Curacao, and should be prefixed "Via AAC" (All America Cables and Radio Inc.). Failure to give such proper notices shall absolve the Plant from any claim for delays or demurrage.

TUGS: 2 tugs, each 1,600 h.p.; will be used for mooring and unmooring operations.

BERTHING: The dock proper may be identified by the overwater pipeline trestle that connects the dock with shore.

The dock is located approximately Lat. 10° 30′ N., Long. 71° 36′ W., which is 2 miles off shore from the Bajo Grande Natural Gas Liquids Processing Plant and S.W. of channel buoys B – 87 and B – 88 on the Maracaibo channel. The dock is single sided and consists of 4 breasting pilings, 4 mooring dolphins and a loading platform.

The dock is equipped with a compressor and auxiliary equipment to assist the ship in compressing and re-condensing the ship's vapours. No liability will be assumed by the Plant Operator for unavailability of the Dock's vapour compressor. The dock is also equipped with a vent system to dispose of contaminated vapours.

A tie-up crew will handle all mooring or pick-up lines before and after loading.

The Plant tie-up crew will assist the ship's crew in positioning and connecting the cargo loading arms and in removing same on completion of loading. The dock loading arms are equipped with 10 in. ASA 300 lb. RF flanges. It shall be the responsibility of the ship to furnish its own fittings to mate with the dock's 10 in. ASA 300 lb. FR flanges.

Mooring procedure: Any vessels calling at Bajo Grande must be equipped with mooring hawsers of sufficient length and strength to run a line to each of the 2 bow and 2 stern mooring dolphins and shall use such equipment while at the dock. Vessels equipped with tension winches and cables shall utilise these in addition to the mooring hawsers or alone if the vessel has sufficient cables to meet the minimum requirements of running a cable to each of the bow and each of the stern mooring dolphins. For added security of those vessels not equipped with tension and/or cables, 1 steel cable will be furnished for a bow and another for a stern mooring dolphin by the Plant. It should be recognised by all parties that while the use of these cables is strongly recommended, the Plant accepts no responsibilities for loss or damage to any vessel or to any facility or to any person that may result from the failure of this equipment.

For the convenience and safety of all personnel boarding or disembarking while at Bajo Grande it is recommended that the vessel's accommodation ladder be rigged on the port side, this being the side normally laying against the dock. The ladder should be suspended after the Mooring Master boards and during docking operations to avoid being fouled.

BALLAST: There are installations for unloading dirty ballast. Vessels which arrive at Bajo Grande with dirty ballast must advise 48 hrs. in advance with regard to any emulsifiers, detergents or chemicals which may be present in the ballast and which are going to be unloaded. If these emulsifiers, detergents and chemicals are not acceptable, Corpoven, will advise the ship and the latter must arrive at Bajo Grande with clean ballast.

The ballast will be unloaded at a rate of approximately 5,000 bbls.p.h., nevertheless in the case of unexpected damage or malfunction of the system at Bajo Grande, Corpoven, will give instructions to the Master of the vessel so that he may arrive with clean ballast and Corpoven, will not be responsible for the delays which may be suffered by vessels in cleaning their tanks prior to arrival.

It is strictly prohibited to discharge into the lake any liquid or solid waste resulting from tank cleaning. Therefore it is recommended that the Master gives instructions to all personnel so that they avoid any possible leak or contamination in the lake.

In the event that the representative of the Plant or the National Guard observe that dirty ballast is being discharged into the lake, or even residues or other contaminatory organisms whilst clean ballast is being unloaded, such operations will immediately be suspended and the consequences will be strictly for the account of the ship.

LOADING: *Notice of Readiness:* On arrival at Bajo Grande and after inspection by the Customs Authorities, and having obtained any other official approval required before loading, the Master of the vessel will notify Corpoven in writing that the vessel is ready to load. This notification must include a report of the conditions of the tanks of the vessel, specifying in detail the temperature, pressure, last loading, list of vessel and trim, possibility of contaminatory organisms and any other conditions which may affect the loading.

The Master of the vessel may request any equipment and/or service which he considers necessary for the safe and efficient loading of his vessel and Corpoven will make every effort to fulfil this request.

It will be the responsibility of the vessel to provide its own connections to join up with the RF 10 in. 300 ASA flanges of the dock.

It will be the responsibility of the ship's Master to ensure that prior to commencement of loading, the atmosphere inside the tanks, which are to receive products are within the safety limits stipulated. Nevertheless, Corpoven reserves the right to inspect at any time, to verify the fulfilment of these safety precautions and to refuse to load any vessel which in the opinion of Corpoven does not fulfil the safety requirements stipulated.

LPG refrigerated vessels will not be considered ready to load at Bajo Grande unless all the LPG tanks contain LPG vapours and are sufficiently cooled to permit shipment of the nominated products.

Vessels which receive completely refrigerated products must be capable of receiving at their boiling point from 0.5 to 2.5 p.s.i.g. Such vessels must have a refrigeration system capable of liquefying all the vapours resulting from the shipment at the rate specified and including those vapours which form as a result of the heat gained by the vessels' tanks.

Loading Procedure: The positioning and connection of the loading arm must be effected to the satisfaction of the personnel in charge of the vessel. After approval of the personnel in charge of the vessel, the loading valves may be opened to check that the connections do not have leaks and loading may commence.

The maximum loading rate is 8,000 bbls.p.h. (750 – 775 metric t.p.h for completely refrigerated products and petrol) and a minimum loading rate of 250 bbls.p.h. (23 metric t.p.h.).

The pumps are designed to supply a minimum flow of 250 bbls.p.h. at a pressure of 225 p.s.i.g. and, since the installations at the Bajo Grande Dock do not have facilities for controlling the pressure of LPG which is being loaded, they are not responsible for any damage or delay which may occur due to the request for reduction in flow and pressure of LPG in order to cool or purge the vessel's tanks.

There are no installations for generation of inert gases. LPG vessels which require cooling, purging or any other assistance in Bajo Grande can be accepted after prior request in writing from the Master of the vessel; however, these services will be charged to the vessel. The responsibility for helping to effect purging and/or cooling is charged at 733 Bolivares per hour, during the time that such operation of purging or cooling causes the vessel to exceed the permitted period of stay.

The quantity of products used in such purging or cooling will be for the account of the vessel.

In the event that the dock vapour compressor is operated at the request of the vessel's Master for a purpose other than for purging or cooling, this will be charged at the rate of 500 Bolivares per hour to the ship.

All loading and unloading operations must be suspended whilst there is bad weather and the tank covers of the vessel must be closed and secured. During periods of calm, petrol or other products with a low flash point can be loaded at reduced rates or the loading operation can be interrupted if the heavy vapours are not being dispersed with sufficient speed to avoid dangers of gas accumulation. Officers on the vessel must be alerted so that they may be on watch whilst such conditions apply.

Under normal operational conditions it may be necessary to displace the loading line. This will require the person in charge of the vessel advising the representative of the Plant when the loading is nearing completion in order to complete an equal quantity to the capacity of the loading line.

Permitted Period of Stay: (a) The permitted period of stay, as is defined hereunder, shall commence to be counted from 6 hours after arrival of the vessel at Bajo Grande. The permitted period of stay will be terminated when the final mooring cable has been withdrawn from the quay.

For the purpose of these instructions, the Notice of Readiness, may be delivered after the vessel has tied up at the dock; nevertheless, the arrival at Bajo Grande shall be defined as the time when the vessel passes between Buoys B – 87 and B – 88, which mark the Maracaibo navigational channel and are situated approximately 1,000 m. in front of the Bajo Grande Dock.

(b) In the event that a vessel arrives at a different time to that confirmed in the shipping programme, and unless Corpoven has approved a different arrival time, vessel must await mooring of other programmed vessels before arriving and which vessels may have arrived at that time and the permitted period of stay will commence when the loading operation commences, or 6 hours after receiving Notice of Readiness, whichever is the later. It is agreed that a vessel shall be included in the loading programme if it arrives at Bajo Grande between the hours of 12.01 hrs. on the accepted date and 0600 hrs. of the following day.

(c) Except for the provisions in (b) above, all vessels arriving at Bajo Grande will have the right to moor in the order in which they appear in the shipping programme. Corpoven at their discretion, may change the order of shipment when it may be necessary for reasons of safety or for the purpose of obviating a closure of the Plant or reduction in production.

(d) The waiting time permitted shall be 24 hours, plus one (1) hour for each 6,000 bbls. of product loaded in excess of 114,000 bbls. This waiting time shall be that permitted to load the complete cargo or part of the cargo of the vessel, it being understood that any time spent in deballasting operations will not be taken as waiting time. If the loading operations are delayed or interrupted by *force majeure*, which shall include the closure of the shipping terminal due to bad weather, the time thus lost will not be counted as permitted waiting time.

(e) The loading operations shall be considered as terminated when the loading hoses are disconnected. Every vessel will leave the quay as quickly as may be practically possible after having completed shipment of the cargo and the personnel of the vessel and those on land have arrived at an agreement as to the quantity of products shipped.

(f) In the event that a vessel is moored at the quay for 6 consecutive hours after Corpoven has notified the Master of the ship that the installations are ready to deliver the product, if the vessel on completion of this time is not in a position to receive products, then at the discretion of Corpoven the vessel may be withdrawn from the quay, to prevent the products burning or a reduction in production.

A vessel may be withdrawn from the quay at any time for reasons of safety.

Verification and Measurement: Determining factors to arrive at the official figures of a shipment:

(A) Petrol and Butane:

(1) Correction factors of the individual meters less than 1%. In this event the terminal shall always use the figures of the meters as official (and not take into account the absolute difference in barrels) taking always the precaution of carrying out a comparison between the figures of the ship and those of the land.

(2) Factor of correction in any of the meters greater than 1%. In this event the vessel's figures will be used, comparing them in all aspects with the figure of the meters without applying the correction factor and with the land tanks.

In those cases in which the vessel's figures are used, it is appropriate to suggest that they check their figures.

(3) In the event of the measuring system not operating, and the vessel cannot give its own figures, as a last recourse the figures of the shore tanks will be used.

(B) Propane:

(1) The vessel's figures will be taken proceeding in exactly the same way as in point (2) of sub-section (a) above.

(2) In the event that the vessel cannot supply figures, the figures of the shore tanks will be used.

All volumes will be adjusted to the volume equivalent to 60° F in accordance with the applicable sections of Standard API 2534 and the corresponding tables of the Measurement Tables of Oil ASTM (latest edition) or other methods or standards selected by Corpoven.

If the product delivered is LPG, the content of the ship's tanks will include the quantity of the product in the form of vapour.

All volumes will be calculated in U.S. liquid barrels at 60° F and the adjustments at this temperature will be made in accordance with the Oil Measurement Tables ASTM – 1P, American Edition 1952 (or the ruling tables which may replace these).

In the event of the products being loaded in a vessel whose tanks, pipes and equipment are empty when loading commences, the gross volume of products which may remain in the pipes and equipment on completion of shipment and at the time of final measurement, shall be calculated on the basis of the volumetric capacity of those pipes and equipment, adding the calculated volume loaded in the vessel's tanks and including in the total volume delivered to and received by the vessel at that time. In the event that the procedure described is used to determine the volume of products delivered and if during the time of this delivery vapours from the vessel's tanks be vented then the quantity of vapours vented shall be determined as shall also be the liquid volume equivalent to these vapours in normal conditions and this will be added to the quantity determined in (a) and (b) above.

Permissible Composition of the Atmosphere of the Tank for purging: Maximum percentage per volume of air or oxygen permissible for the safe shipment of the product when the vessel's tanks are purged with CO_2 or N_2:

	Air		*Oxygen*	
Product	(CO_2)	(N_2)	(CO_2)	(N_2)*
LPG	50	40	8	7
Petrol	50	40	8	7

*The percentages of nitrogen do not include the nitrogen of the air in the mixtures.

Example: If a vessel is going to load LPG and it is going to be purged with N_2, it must add sufficient N_2 to ensure that the mixture does not contain more than 40% by volume of air. The other 60% will be N_2.

Ref. Principles & Practices of Purging, 1954. American Gas Assoc. – Chapter 2, page 28.

FUEL: Heavy and medium marine diesel, intermediate fuel, and bunker "C" fuel oil are available in the area. Lubricating oils in limited quantities are also available from local contractors. All bunker, lubricating oils, water and other requirements should be cabled to the ship's Agent. For reasons of safety, no bunkers may be taken on the vessel while berthed at Bajo Grande.

FRESH WATER: Available at Maracaibo Harbour.

MEDICAL: Complete medical services are available in Maracaibo.

REPAIRS: Maracaibo: No major repair facilities are available, minor repair jobs can be taken care of through local machine and electrical shops. Shore labour can be furnished if required. Radio, radar and gyro compass technicians are available upon request.

Bajo Grande: No repair facilities are available, but when required, personnel from shops in Maracaibo will travel to Bajo Grande to effect repairs.

CONSULS: The following nations have Consular representation in Maracaibo:

Belgium
Chile
Colombia
Costa Rica
Denmark
Ecuador
El Salvador
France
West Germany
Great Britain
Guatemala
Italy
Netherlands
Norway
Panama
Peru
Spain
Sweden
Switzerland
U.S.A.

SHORE LEAVE: Launch service for official business purposes and emergencies is readily available in Maracaibo. Launch service for shore leave can be arranged through contact marine service and will be the responsibility of ship's personnel. Arrangements for shore leave transportation can be made through the ship's Agent. No shore leave facilities are available at Bajo Grande.

CLASSIFICATION SOCIETIES: American Bureau of Shipping and Lloyd's Register of Shipping, U.S. Salvage Association, Salvage Association of London, Det Norske Veritas, Bureau Veritas, Registro Italiano Navale, and Germanischer Lloyd have Agents in Maracaibo. Surveyors are available by appointment from any of these Agents.

CURRENCY: The Venezuelan unit of currency is the Bolivar (Bs) and is the only currency recognised as legal tender within the country. Masters desiring a cash advance should make the request to their Agent when advising ETA.

MAIL: Outgoing mail for ship's account may be given to the Agent's representative who boards the vessel on arrival at Maracaibo inbound. Personal mail will be accepted only if carrying the correct amount of Venezuelan postage, or if postage is authorised by the Master for the vessel's account.

GENERAL: *Maracaibo Port Captaincy:* Directive which must be observed by vessels entering and leaving Maracaibo Lake:

OBJECTIVES:

To increase the safety of Human Life at Sea, to take all necessary measures to avoid marine accidents in general and to ensure that vessels are navigated with safety in the navigable channels and waters of Maracaibo Lake.

1. All radio-telephone communications between the Control Offices of Maritime Transit under the control of the Port Captaincy of Maracaibo and vessels, shall be made, for the first contact, via Channel 16 (156.8 MHz) and immediately it shall be agreed that for the transmission of required information they will change to Channels 12 or 14. Also this procedure will be adopted in communication from ship to ship.

2. Any vessel which navigates in the vicinity of the buoy "EM" of the outer channel being 10 miles from the latter shall call the pilot station at San Carlos, requesting permission to enter the zone and will supply the following information:

(a) Name and type of the vessel.
(b) Nationality.
(c) Draft.
(d) Last port of call
(e) ETA at the "EM" and "B – 26" buoys.

3. The Port Captaincy will authorise by radio, via the pilot station of San Carlos, to Masters of vessels who have reported to that station request to cross the outer channel, or part of it, with the assistance of the Official Pilot, in accordance with the sequence of arrival.

4. Every 5 miles, the Master of the vessel will call up San Carlos, indicating any information which he may have and giving his position within the channel, by reference to the buoys which are on his starboard side.

5. When communication in item 1 has occurred, San Carlos will inform the vessel as follows:

(a) The location of any dredger (mobile or stationary) which is operating in the outer channel, buoys whose lights are out, changes in buoys' positions or where buoys have disappeared, vessels which have sunk, etc.

(b) If there are vessels leaving the port, to give the position of these by reference to the odd numbered buoys.

6. Vessels shall establish radio-telephone communications with the dredger when they are 5 miles from it. In this communication, they will indicate the place they estimate that the vessel will meet the dredger and any other information which they consider necessary for the safety of navigation of both.

7. San Carlos will keep vessels informed of all the circumstances mentioned above, especially the time and place that each of them estimate to pass close to any dredger which is operating in the outer channel, and in order that they do not meet the dredger simultaneously.

8. Masters of vessels will inform the pilot station at San Carlos of any other information which the latter may request.

9. Masters of vessels will keep a watch on Channel 16, on the order of the Official Pilot, until their arrival at port of destination in Maracaibo Lake and on leaving until the Pilot has left the vessel.

10. Pilots, when they are bringing a vessel into the port, at the level of the parallel of Palmas del Norte Point (Buoys T – 55 and T – 56), will call up the Port Captaincy and transmit the following information:

(a) Name of vessel
(b) Time
(c) Port where operations will be effected
(d) Name of Pilot calling.

11. When the vessel continues to navigate to the South of General Rafael Urdaneta Bridge, the Pilot will inform the Control Office of Maritime Transit in Maracaibo, the time at which the vessel will pass Buoy "B – 79".

12. The average speed of vessel in the navigable channels will be ten (10) knots, Masters being authorised as are also Official Pilots, to alter this, when the safety of navigation may require it.

13. San Carlos will check by radio-telephone the transit of vessels from the entrance buoy "EM" to the level of the parallel which passes in front of Palmas del Norte Point (Buoys T – 55 and T – 56 and vice versa).

14. Loaded vessels navigating outwards, and being in the outer channel, will have priority over vessels coming in to the same channel, provided that these do not meet with those coming out in the critical zone, included between Buoys B – 21 and B – 22 and E – 33 and E – 34. For this purpose, the San Carlos Pilot Station will inform entering vessels the situation of leaving vessels so that they may take necessary measures to avoid meeting those vessels coming out in the referred zone.

15. The Port Captaincy will check via the office of Control of Maritime Transit, the Navigation of vessels, from the parallel passing Palmas del Norte Point (Buoys T – 55 and T – 56), as far as the terminals and ports to the South of General Rafael Urdaneta Bridge and vice versa.

16. Every Official Pilot navigating outwards when passing the Buoy B – 72, will call up San Carlos by radio-telephone and will supply the following information:
(a) The time that he is passing Buoy B – 72.
(b) The time that he is arriving at San Carlos.

17. When the dredger receives any call from a vessel it will give information as follows:
(a) Location where it is at that time.
(b) Direction of dredging (South North or North South).
(c) The side on which the vessel must pass.
(d) Time necessary to make the manoeuvre indicating on which side of the channel dredging will continue after the manoeuvre.

18. The pilot station at San Carlos will be attentive to all communications made and will take note of them, in the event that their intervention may be required by dredgers or by vessels.

19. Any vessel sailing from any port in the No. 2 pilotage area of Maracaibo, will inform the Port Captain as follows:
(a) Type and name of vessel.
(b) Where from and time of leaving the port.
(c) Speed and port of destination.
(d) Estimated time of passing Buoy B – 72.
Signed – Port Captain.

Section B

LA ESTACADA: 10.42 N. 71.32 W.

(N.B. For important details of Documentation, Pilotage, etc., see "Maracaibo Lake").

OPERATOR: Corpoven, S.A.

LOCATION: Loading Terminal in the Lake of Maracaibo at La Estacada, located at Lat. 10° 42′ 30″ N., Long. 71° 31′ 40″ W. Entrance to and leaving this terminal is made between Buoys B-65 and B-66.

DOCUMENTS: As soon as vessel is safely moored Agents' representative will board the ship together with Port Authorities. The following documents are needed on arrival:

1. Clearance from last port with the following attached:
   Store List
   Crew List
   Slop Chest Inventory
   Ballast Certificate
   All visaed by Venezuelan Consul in sailing port.
2. Crew List (6 copies).
3. Store List (6 copies).
4. Slop Chest Inventory (Deck, engines and cabin store listed separately) (6 copies).
5. List of Personal Effects (6 copies).
6. Derat Exemption Certificate (original).
7. Venezuelan Net Tonnage Certificate (original).

See "Tonnage applicable".

The Health Officer sometimes requests to see the Vaccination Certificates of crew members.

RADIO: *Information to be cabled to Agent, Maracaibo.*

Upon vessel's departure from the last port bound for La Estacada cable 72, 48 and 24 hours ETA at San Carlos Pilot Station, including in this message last port, Master's name, if A.C. current on board and any requirements. If diverted, cable original destination, also have 5 copies of diversion cable ready on arrival. If the vessel is nominated to load a part cargo only at La Estacada, indicate at which port cargo will be completed. All cables should be sent via PJC (Curacao Radio) and via ITT All American Cables.

A separate cable should be sent to Corpoven, S.A. Maracaibo indicating ETA at San Carlos only.

PILOTAGE: (See "Maracaibo Lake"). Pilotage Compulsory.

1. All vessels must call Corpoven, S.A. and Agent on VHF Channel 16, when passing the E.M. Buoy and when embarking the Pilot at San Carlos.

2. Reduce speed approaching Inner Channel Buoy B-63; rig accommodation ladder starboard side properly illuminated. Company Cargo Co-ordinator will board between B-63 and B-65.

3. Listen during transit on 2182 kHz and VHF Channel 16.

4. In event of unforeseen circumstances requiring vessels to anchor, area West of Estacada Northern Buoy mooring outside of channel limits will be used.

Vessels proceeding to La Estacada Terminal must enter the Outer Channel and embark the Government Pilot between Buoys B-25 and B-27. After vessel arrives in the vicinity of the E.M. Buoy, Master must contact San Carlos Pilot Station by radio-telephone on frequency 2182 kHz or VHF Channel 16 requesting Pilot between Buoys B-25 and B-27.

Caution: Masters are warned to keep adequate speed in the Outer Channel even when embarking the Pilot as strong cross currents are encountered near San Carlos and Zapara Island. Pilot boats are fast and fitted with a flying bridge. Once the Pilot is on board the vessel will proceed to La Estacada, reducing speed in the vicinity of Inner Channel Buoys B-63 and B-65 where Corpoven, S.A. Cargo Co-ordinator will board. Accommodation ladder must be rigged up on starboard side.

MAX. SIZE: Water depth in both buoy moorings is 40 ft. mean monthly observed lowest water (MMOLW). Because of the depth of the surrounding approaches, 39 ft. (MMOLW), admissible mid-ships maximum draft in both moorings is 37 ft. (No. 1) and 36 ft. (No. 2) freshwater. Under certain tidal conditions, however, with vessels over 60,000 d.w.t. and LOA exceeding 750 ft., it may be necessary to restrict loading to 36 ft. 6 in. Masters are requested to be guided by the Cargo Co-ordinator in appropriate draft to be loaded.

Berth No. 2 will accommodate vessels up to 850 ft. LOA, and Berth No. 1 up to 720 ft. LOA. Beam in both berths is unlimited.

TUGS: Use of 2 tugs of at least 1,600 h.p. is compulsory for mooring and unmooring at La Estacada (Government Decree). Use of 2 mooring launches with crew including a diver, who inspects the submarine loading hoses, is compulsory at La Estacada. These mooring launches remain alongside ship during stay in berth order act in any emergency.

BERTHING: *(a) Description:* Marine Oil Loading Terminal, is an off-shore installation and consists of two permanent buoy moorings, No. 1 to the South, and No. 2 to the North.

Berths No. 1 and No. 2 consist of 4×14 ft. cylindrical steel buoys, each fitted with a pelican hook to which ship's mooring lines are attached by contractor's mooring launches. On each buoy there are 2×1.625 in. improved plow steel wirelines to supplement mooring lines in order to provide additional security during strong winds. In Berth No. 1 the plow steel wires are 520 ft. long and in Berth No. 2 585 ft. long.

Both berths are two directional; ships moored heading North or South according to prevailing current.

(b) Deballasting: There are no facilities at La Estacada to receive and treat dirty ballast therefore *same must be clean.* All ballast is discharged ashore through a 16 in. line.

(c) Mooring: All ships should have an adequate supply of stoppers or other special equipment necessary to handle wires attached on mooring buoys. Vessels mooring in berths must be equipped with 4 ropes forward and 4 ropes aft. Vessels are cautioned that good quality ropes are essential and that they will be held liable for any damage occurring through improper or poor mooring ropes or inability to properly handle same.

Vessels in buoy moorings must have deck winches in readiness for use at all times. Method of berthing will be at discretion of the Government Pilot, as weather and other conditions permit.

During berthing and unberthing, ship's engines, tackle and all other gear must be in operative condition and in a state of readiness for use on immediate notice.

Weather permitting, and berths being available, vessels may be berthed at any hour of the day or night. Mooring buoys are properly lighted.

Government Pilots will assist in mooring the vessel in Berths No. 1 or 2. Loading hoses can be connected both port and starboard side, according to ship's position. The Company Cargo Co-ordinator will remain on board ship to advise on connecting and disconnecting loading hoses, and loading of cargo.

The Government Pilot will later unmoor the vessel and take her out to the channel for departure.

Please keep in mind that he acts as adviser only and the Master retains full responsibility at all times. When ship is in position and mooring wires tautened, mooring winches such as tension winches must have their manual brakes put on securely, and should not rely on automatic rendering devices.

During time vessel is at the berth, frequent and regular inspection of mooring essential to ensure that mooring lines are kept taut and that movement of ship is kept to a minimum. When tugs are alongside or assisting a tanker, all cargo openings, permanent ballast tanks, lids and pump-room doors must be closed no matter what grade oil is being or has been carried, unless these spaces are gas-free.

The mooring operations are carried out by 2 mooring launches and 2 tugs.

TANK INSPECTION: As soon as all ballast is discharged and hoses connected, production supervisor or cargo co-ordinator will inspect ship's tanks. If same are dry and clean he will sign corresponding certificate.

LOADING: Berth No. 1 has 1×24 in. loading line with the corresponding manifold and Berth No. 2 also has 1×24 in. line. 12 in. – 150 lb. marine loading hoses are used. Each berth capable of a max. loading rate of 22,500 bbls.p.h., with an appropriate reduction for topping-off.

However, maximum loading rate entirely at Company's option and will vary according to circumstances and type of tanker concerned. When completing loading, stoppage of cargo will be determined on board, and Masters are requested to inform Cargo Co-ordinator at least 30 minutes in advance in order reduce pumping rate for topping-off. Cargo Co-ordinator will be in continuous contact with pumping station by means of portable radio. Should this means of communication fail, the following signals on ship's whistle will apply:

One long blast	Stand by
Two long blasts	Commence pumping
Three long blasts	Stop pumping

Upon completion of loading, Cargo Co-ordinator, together with ship's officer, will gauge ship's tanks and later prepare cargo documentation.

FUEL: Bunkers and marine fuels supplied by barge before or after loading operation at anchorage. Agent should be given prior notice.

FRESH WATER: Must be ordered with first ETA cable to Agents so that arrangement can be made with supplier. A water barge and a tug must be hired.

DENSITY: 997 – 1003.

REPAIRS: Only smaller repairs can be effected locally; however, technicians available for radio and radar repairs. Contact Agent.

SURVEYORS: American Bureau of Shipping and Lloyd's Register have Agents in Maracaibo.

SHORE LEAVE: Launch is primarily for use of authorities and company staff, but will effect trips for crew if required by Master. Contact Agent who will make necessary arrangements.

CONSULS:
The following have consular representatives in Maracaibo:

- Belgium
- Chile
- Colombia
- Costa Rica
- Denmark
- Ecuador
- El Salvador
- France
- Germany (West)
- Great Britain
- Guatemala
- Italy
- Mexico
- Netherlands
- Nicaragua
- Norway
- Panama
- Peru
- Spain
- Sweden
- Switzerland
- U.S.A.

GUARDS: One National Guard stationed on board. He must be provided with sleeping quarters and seated in officers' mess for meals.

He is the representative of the Venezuelan Government and therefore any courtesy extended to him will be appreciated.

CLEARANCE: Immediately after termination of loading operations, hoses are disconnected and Government Pilot will proceed to unmoor vessel. In the meantime, cargo documents are prepared by Terminal personnel, and as soon as vessel is cleared, she will proceed to her destination.

CURRENT/TIDE: Current velocity max. 4 knots. Nature of bottom, mud. The tidal range in feet for the Estacada Terminal is Springs 1.5, Neaps 0.5.

GENERAL: *(a) Cash Advance:* Cash advance will be in local currency (Bolivares). Cable in advance any such requirements to Agents.

(b) Mail: Outgoing correspondence may be given to the marine dispatcher. For personal mail (crew) a list should be made, indicating name of crew member, quantity of letters and destinations, and handed to Agents.

(c) Ship Chandlers: 2 ship chandlers in Maracaibo who can supply vessels with fresh meat, fish, vegetables, fruits, etc. Requirements should be transmitted in first ETA cable to Agents.

TONNAGE APPLICABLE:
The Venezuelan Port Authorities base part of their pilotage charges on the size of the vessel, i.e. on registered net tonnage or on Venezuelan net tonnage.

On Registered Net Tonnage:
Venezuela will accept the tonnage of ships registered in countries with which they have a reciprocal tonnage agreement.

As of this date, such countries are:

- Denmark
- France
- Germany
- Ireland
- Netherlands
- Norway
- Sweden
- Portugal
- United Kingdom
- U.S.A.

On Venezuelan Net Tonnage:
Ships not registered in countries listed above, when calling at Venezuelan ports for the first time, must be measured for Venezuelan tonnage by the Captain of the Port. It is the usual practice to take ashore the ship's Panama Canal or Suez Canal Certificate, which is used as a basis for recalculating tonnage under the Venezuelan regulations, and return it before sailing. The Venezuelan admeasurement certificate, when later issued, is forwarded to the owners. A fee is charged for this certificate, which is payable only on the ship's first call.

AUTHORITY: Capitania De Puerto, La Ciega – Maracaibo, Venezuela. *Tel:* 226480, 226880. *Cables:* Caripuerto.

Section C

LA SALINA (Lacustre): 10.22 N. 71.28 W.

(See Plan Book)

(N.B. For important details of Documentation, Pilotage, etc., see "Maracaibo Lake").

OPERATORS: All terminal facilities are under the control of Lagoven, S.A.

APPROACH: Entrance and leaving this terminal is made between buoys B – 97 and B – 98.

LOCATION: La Salina located on Eastern shore of Lake Maracaibo, in Lat. 10° 22′ 18″ N., Long. 71° 27′ 49″ W. about 60 miles from the entrance buoy "EM".

DOCUMENTS: These are generally placed on board prior to departure. Vessels whose Master accepts the early departure procedure may sail with documents in blank. Figures are then radioed for inclusion in blank documents. Outward clearance documents are placed on board the vessel prior to departure.

PILOTAGE: In the event that no contact can be made with San Carlos Pilotage Station, or if there is a language problem, contact should be made with Vensport, at La Salina by voice radio on VHF Channel 16 (156.6 MHz).

The Docking Master boards by tug or launch at the waiting anchorage or in the outer part of the navigation channel leading to the terminal.

ANCHORAGE: The waiting anchorage off La Salina is located immediately Eastward of buoys B – 97, AS – 1 and AS – 3 (Old numbers M – 1, M – 1a and S – 1); it has a depth of between 40 ft. and 41 ft. and fair to poor holding ground in soft mud.

RESTRICTIONS: None. The port is open for navigation during the day and night, allowing ships to enter and sail at any hour.

MAX. SIZE: Up to 112,000 d.w.t. LOA 900 ft. and max. draft 39 ft. (brackish water) at Berth Nos. 6N, 6S, 7N and 7S. Max. distance bow to manifold 450 ft.

Pier No. 3 (West Side) LOA 690 ft., draft 26 ft. and 36,000 d.w.t.

Pier No. 3 (East side) LOA 575 ft., draft 26 ft. Max. 18,000 d.w.t.

No restrictions on vessel's beam at any of the berths.

The access channel to La Salina has a least depth of 41 ft.

Special Note: Maximum draft for loading vessels at La Salina Lacustre Terminal is actually restricted to 39 ft. Vessels loading at this maximum draft of 39 ft. must cross the outer bar channel at HW.

RADIO: The cable and telegraphic address for the Lagoven, at La Salina is "Lagoven La Salina". Radio messages to and from ships at sea are routed through the Government radio station at Maiquetia (La Guaira) call letters YVG. This station operates on a 24 hour continuous watch on 500 kHz and 2182 kHz.

Listening frequencies: long wave: 500 kHz; medium wave 2182 kHz; short wave Channels 5 and 6.

Working frequencies: long wave 417 kHz and 464 kHz; medium wave 2120 kHz; short wave 4222 kHz, 6351.5 kHz, 8461 kHz and 17141.5 kHz.

Answering frequencies: long wave 500 kHz.; medium wave 2182 kHz.

Hours of watch:

4222, 6531.5 kHz	0100 – 1300 hrs. GMT
8461, 17141.5 kHz	1300 – 0100 hrs. GMT

Cables for vessels may also be routed via Curacao Radio, call sign PJC.

Radio notice of arrival should be sent 72 hours prior to arrival at La Salina and corrected if weather or other conditions delay the vessel.

Vensport La Salina handle all communications between vessels and Lagoven terminal control tower. VHF radio-telephone Channel 16 (156.6 MHz) may be used for initial contact. Channels 6, 10, 13 and 14 are also available on a 24 hour basis.

All vessels en route to La Salina may also communicate with Lagoven Amuay or Caripito Marine Offices and request that messages dealing with corrected ETAs, Pilots and other business be relayed to Vensport La Salina.

VHF: Transmit on VHF when passing Aruba or Amuay Bay updated ETA messages to either Lago Marine or Amuay Marine for relay to La Salina. Contact Vensport La Salina on VHF when within reach (normally after passing General Urdaneta Bridge) for latest berthing instructions.

TUGS: Lagoven S.A. maintains one 3,000 h.p. diesel tug and one 1,300 h.p. diesel tug. Tug-boat assistance is considered essential and is afforded to all vessels entering, leaving or shifting in the harbour.

Additional tugs can, in an emergency, be ordered from Maracaibo. The tugs are usually employed in the alongside mode and are made fast using their own ropes (2.5 in. diameter nylon).

BERTHING: At La Salina, Lagoven maintains a deep-water terminal (Lacustre) consisting of an island where are located 2 finger piers, each 1,100 ft. in length and 500 ft. between piers, providing 4 berths to accommodate tankers up to 112,000 d.w.t. Berths are numbered 6N, 6S, 7N and 7S, from North to South. At these berths various products can be loaded simultaneously namely – 6N and 6S – Crude, Naphtha and Butane; 7N and 7S – Crude; Pier No. 3 (West side), Propane and Butane; Pier No. 3 (East side), same as West side but not concurrently with West side. In addition there is an offshore platform (Pier No. 3) where liquefied petroleum gases (Butane and Propane) can be loaded.

Instructions concerning berthing are given by Vensport La Salina by means of radio-telephone.

The use of an anchor when docking is permitted at all berths. It is considered prudent to have the outboard anchor hove-out prior to entering the harbour in order to facilitate speedy release if necessary while docking. The Pilot will advise whether the ship is to be berthed port or starboard side to the dock.

The tugs are made fast on the seaward side, one forward and one aft. Vessels berth under normal circumstances always with head in, which is a relatively simple manoeuvre. Vessels are berthed starboard side alongside berths 6 North and 7 North; portside alongside at berths 6 South and 7 South.

When the vessel's bow is between two and three ships' lengths from the head of the pier, the engines are stopped or reversed. The vessel then slowly enters the berth parallel to and about 40 ft. from the continuous fender face. When the vessel's bow is just past the berth's manifold area, the forward spring line is sent in by heaving line. The vessel is then positioned by using its ropes and is pushed alongside by tugs. The current sets mostly in a general Northwesterly direction with a velocity between 0 and 2 knots. This should be taken into account, particularly when berthing at the South facing berths where the vessel may be set onto the pier.

Moorings: Mooring bollards spaced with 80 ft. intervals are located on both sides of the pier, and provide the basis for a potentially excellent mooring configuration consisting of:

3 Headlines
3 Sternlines
2 Breastlines
1 Forward, Spring line and
1 Aft Spring line.

BALLAST: Vessel should arrive at La Salina with sufficient ballast to permit safe handling. Government Pilot requirements in this connection under normal weather conditions are interpreted as drawing approximately 8 ft. forward, 18 ft. aft, on a T – 2 or similar type tanker, and 11 ft. forward, 20 ft. aft on a 26,000 d.w.t., on larger type vessels the minimum draft required is 14 ft. forward and 22 ft. aft.

Ballast should be carried in a minimum number of tanks, and all other tanks stripped, so as to minimise deballasting time.

It has been established that one of the major causes of contamination of crude oil is the relatively small amount of salt water remaining in the ship's tanks, pumps, and ballast lines after ballast discharge. This very small amount of salt, nevertheless, frequently results in costly damage and downtime to refining equipment, besides presenting many other processing problems.

It is therefore requested that the full co-operation of the Master and Officers of ships loading for Aruba, be given to ensure that all ballast tanks and lines are flushed with lake water and stripped as dry as possible.

Vessels equipped with a separate and completely segregated system of ballast tanks, lines and pumps, will be permitted to discharge ballast and load cargo simultaneously, providing approval of both the pier foreman and Petroleum Inspector is secured.

A pier supervisor who is in direct communication with the loading pumphouse is stationed at each pier during the entire time the vessel is discharging ballast or cargo or receiving cargo.

All dirty ballast must be discharged ashore. The terminal has a 100,000 bbl. reservoir connected to two high capacity separator units. Max. ballast discharge is 40,000 bbls./hr. with max. 130 p.s.i. at rail. One or two hard arms (12 in.) are usually connected for ballast discharge.

If it is desired to follow the "load-on-top" procedure it is requested that the marine representative be informed on arrival.

LOADING: Instructions as to grade or grades of cargo, and the approximate loading rate anticipated, will be given to the Master on arrival. Supplementary information including number and size of lines and Chiksan arms will be furnished to the Chief Officer before loading commences. Loading rates will be reduced as required when topping off.

If vessel's loading orders from owners or charterers do not agree with the terminal's orders, either as to grades or quantity, the marine representative should be advised immediately. The terminal is authorised to load 10% more or less than the quantity nominated.

A terminal employee is stationed at each pier during the entire time the ship is discharging ballast, bunkering, or loading cargo. Fifteen minutes "standby" notice should be given to this man prior to completion of ballast, bunkers, or cargo.

Shut-down controls for all crude oil pumps are available at each loading berth at ship's rail of loading vessels for use in case of emergency only.

LOADING RATES: Loading operations at La Salina Terminal are normally carried out at relatively high pumping rates; up to an average of 40,000 bbls.p.h. Ship's officer will be advised by the pier supervisor at what rate the cargo will be loaded. LPG is loaded up to an average max. rate of 7,500 bbls.p.h. at Platform No. 3.

During periods of calm, loading of gasoline or other similar low flash products may be at lower rates or loading stopped if the heavy vapours are not being dispersed quickly enough to prevent hazards from accumulated gas pockets. Ships' officers are cautioned to be on their guard during such conditions.

Loading rates will be reduced when topping off, if requested by the ship's officer.

Cargo Handling: The terminal is mainly a crude exporting facility, but also LPG, bunkers, condensate and gasoline are handled.

The cargo transfer facilities are:

Berth 6 North and South:

3 × 12 in. Chiksan arms for crude loading.

1 × 8 in. Chiksan arm for bunkers (located aft of manifold).

Berth 7 North:

4 × 12 in. Chiksan arms for crude loading.

1 × 8 in. Chiksan arm for bunkers (located aft of manifold).

Berth 7 South:

4 × 12 in. Chiksan arms for crude loading.

3 × 12 in. Chiksan arms for pressurised gas loading (located forward of crude loading manifold)

1 × 8 in. Chiksan arm for bunker (located aft of manifold).

Gasoline, condensate and pressurised butane are handled at Berth 6 at both sides of the manifold.

All connections are standard 150 ASA bolt hole flanges.

The emergency cargo stop button is located in the operators' shelter on both piers.

Crude loading rates up to 50,000 bbls./hr. can be provided.

The loading and discharging of all crude petroleum and its products will be stopped during the passage of an electric storm and ullage covers must be closed and dogged down.

Cautionary Advice: Whenever non-matching flange sizes necessitate the use of reducers (spool pieces), Masters should insist that the reducer or hard arm be adequately supported by a proper jack, and should refuse to let cargo transfer operations commence before a satisfactory vessel manifold and hard arm connection has been provided.

FIRE PRECAUTIONS: The recognised fire alarm signal is 4 long blasts with ship's or tug's whistle. An 8 in. fire water main line runs alongside all 4 berths with numerous double 2.5 in. outlets for connection to ship's hoses. Four elevated water/foam monitors are located on each pier providing relatively good fire fighting protection for the main deck area.

The 2 tugs are also equipped with elevated fire water/foam monitors, though on board foam storage capacity is relatively limited.

POLLUTION: There are no shore facilities to recover an oil spill. The Venezuelan authorities take a very serious view of oil pollution and heavy fines are imposed for violations of the strict pollution rules. A government representative is stationed at the terminal. It is therefore important that all precautionary measures be taken and spills avoided. In case of a spill, the port services section should be informed immediately by VHF or telephone, which is located on the pier. The use of dispersants or detergents on the water is not permitted

MEDICAL: Complete medical, dental and hospitalisation facilities are available at La Salina. Medical treatment is provided at a private clinic.

Authorisation forms for medical treatment are provided which require the Master's signature. Transportation will be supplied by Vensport La Salina.

If the patient does not speak Spanish or English, an interpreter should accompany him.

FUEL: Bunker C fuel oil, marine diesel and intermediate fuels are available at La Salina Terminal Lacustre. Delivery is made alongside Piers 6 or 7 by 8 in. diameter Chiksan hose, located about midships.

Loading Rates: Bunker "C" and intermediate – 3,000 bbls.p.h. Diesel – 2,000 bbls.p.h.

It is the responsibility of the ship's engineer to give "stand-by" notice to the terminal employee and advise him when to shut down.

Supplies of lubricating oils in drums are available. Delivery will be effected while loading and requirements should be incorporated in the radio ETA.

FRESH WATER: A limited supply of fresh and boiler water is available at La Salina Lacustre Terminal. Delivery is made through 2.5 in. National Standard Fire Hose Thread hydrants. Ship's personnel must provide hoses and connect up.

DENSITY: The average density at the berth is 1002 but varies dependent upon amount of rainfall. The temperature ranges from 82°F. to 86°F.

REPAIRS: Vensport's Port Staff will assist with emergency repairs as may be required in each case depending upon availability of competent personnel and equipment. The company's shop facilities while not equipped for extensive ship repairs, may be made available to fabricate or repair items that are urgently required.

The nearest dry docks are those at Puerto Cabello and Curacao, N.A. Several contractors in the area provide labour for hull painting and for tank cleaning. Contracts for these services are made by the ship's Master directly with the contractor.

Radio technicians are available for minor repairs. With sufficient advance notice a radar specialist can be arranged to board the ship at La Salina.

CONSULS: The following countries have consular representatives in the area:

Belgium
Chile
Colombia
Costa Rica
Denmark
Dominican Rep.
Ecuador
El Salvador
France
Germany (West)
Great Britain
Guatemala
Italy
Netherlands
Norway
Nicaragua
Panama
Peru
Spain
Sweden
Switzerland
U.S.A.

TIME: GMT minus 4 hours.

SHORE LEAVE: Shore leave is permitted and a representative of the Captain of the Port boards on arrival and issues the required number of passes. Shore passes are to be collected prior to sailing, and given to Pilot undocking the vessel. Vessels are not permitted to sail until all crew members are on board, unless hospitalised or prior arrangements made for disembarking. No launch service for liberty parties is available while vessel is anchored off La Salina awaiting berth.

GENERAL: Representatives of Vensport La Salina board vessels immediately on arrival, and it is particularly requested that Masters indicate at that time all ships' requirements. The office building is located at the Pier Head Trestle and personnel are available for assistance at all hours.

(a) Bonded Stores. Cigarettes or other stores in bond are not obtainable in La Salina.

(b) Cash Advances. Cash advances are made in local currency, the Venezuelan Bolivare. Cash requirements should be included in the radio ETA.

(c) Charts. On first arrival of each tanker, the Agency Dispatcher will furnish a set of local charts if required. No supplies of U.S. Hydrographic or British Admiralty charts, or sailing directions, are available.

(d) Classification Societies. American Bureau and Lloyd's Register have non-exclusive Agents in Maracaibo, and qualified Masters and Chief Engineers are available for appointment as Surveyors when required.

(e) Gangways. All vessels using the port of La Salina must provide a safe gangway. The use of rung ladders, pilot ladders, etc., is contrary to Port Regulations and Port Authorities will not board except by means of a safe gangway or accommodation ladder.

(f) Plimsoll Marks. The Captain of the Port requires that the Plimsoll Marks of all vessels using the port be clearly visible. Vessels may be checked on completion of loading, and if the Plimsoll Marks are not readily legible, permission to sail may be withheld.

(g) Port Services. On arrival at La Salina Terminal, a company representative boards vessels, so it is particularly requested that Masters make known to him all ship's requirements. Master should bear in mind that while vessels are within Venezuelan territorial waters, Government Authorities do not permit the use of ship's radio equipment. Cables and radiograms should be handed to the company representative for transmittal via shore radio communication system. La Salina also has radio telephone communication with North and South America and Europe. For further information contact Vensport in the terminal building, tel. 88491 and 88492.

(h) Rat-guards. By order of the Port Authorities, vessels are required to use ratguards on all mooring lines.

(i) Personnel – Seamen left ashore. In the case of seaman left ashore for hospitalisation, repatriation or other reason, his documents and personal effects are to be delivered to the Vensport Office in La Salina before sailing. A letter is required from the Master advising maximum advances to be made to seaman if any, and instructions concerning his repatriation. All expenses incurred by seamen left ashore, including cost of repatriation, are for ship's account.

It is important that Masters bear in mind that the Venezuelan law will at all times hold the vessel, her Master, Agent or Owner, responsible for any seamen left behind in Venezuela.

(j) Provisions and stores. Fresh and dry provisions are supplied by various Ship Chandlers in Maracaibo and Cabimas (La Salina). Master should deliver his signed requisition to the Vensport Office representative who boards on arrival. Provisions would then be delivered to the vessel while loading. The prices and quality of some items, such as fresh fruit, fish, shrimps, vegetables, etc., are competitive; dry stores are considerably higher than in most ports. The Fleet Steward will assist in filling requisitions. It is important that the Master sign the Ship Chandlers invoice as authorisation for the Marine Department to make settlement.

(k) Mail. Any pending ship's mail will be delivered on board by the Vensport Dispatcher on arrival at La Salina. At same time he will receive ship's mail to be dispatched. The Vensport Dispatcher will accept personal mail only if it carries the proper amount of Venezuelan postage, or if Master authorises the postage by signing 7 copies of the Company Postal Transmittal form. Masters interested in knowing the individual postage amounts to be paid by each crew member, should provide a list, in duplicate, of the senders, and number of letters sent by each one identified by a number written on each letter.

Copy of this list will be returned aboard the vessel when leaving this port outward bound. If not ready on time, it will be airmailed to the vessel's next port of call.

(l) Inspection of Petroleum Products and Crude Oil. Chas. Martin & Company and E. W. Saybolt petroleum inspectors are available if specified.

(m) Laundry. Laundry service is available between 0700 hrs. and 1700 hrs. on week-days. No guarantee can be given on time of delivery.

Section D

MARACAIBO: 10.42 N. 71.39 W.

On the N.W. shore of the Lake Maracaibo.

Maracaibo is the capital of the State of Zulia and seat of all Government and Consular Offices, as well as the port of entry for all vessels loading at one of the Terminals in the Lake of Maracaibo. (N.B. For information details of Documentation, Pilotage etc., see "Maracaibo Lake").

Also see "Shipmaster's Report" before Bajo Grande.

ANCHORAGE: The Pilot will not con the ship into the anchorage, but will indicate the proper location to anchor. Care should be taken because of small boats and ferry traffic.

ACCOMMODATION LADDER: Vessels must provide an accommodation ladder. The use of trunk ladders, pilot ladders, etc., is contrary to port regulations. Port Authorities will board only by means of an accommodation ladder. It is recommended to rig this in advance to avoid unnecessary delays.

BOARDING PARTY: The boarding party usually consists of the following persons: One Quarantine Official, Two Customs Officials, One Port Captain's Representative, Two representatives (Agent and Mooring Master).

RADIO: "Radio Marina" transmits information of interest to navigation every day from Monday to Friday from 1000 hrs. to 1015 hrs. and from 1600 hrs. to 1615 hrs. on frequency of 4,420.7 kHz in the 60 m. band, output 1 kW. All bunker, lubricating oils, water and other requirements should be included in the cable giving ETA of the vessel.

TUGS: Service not compulsory, assistance is rendered if required by the Harbour Master.

BERTHING: The manoeuvring area within Maracaibo harbour has a depth of 26 ft.

	Length	*Depth alongside*
Wharf No. 1	106 m.	15 ft.
„ „ 2	106 m.	15 ft.
„ „ 3	159 m.	15 ft.
„ „ 4	159 m.	22 ft.
„ „ 5	135 m.	25 ft.
„ „ 6	135 m.	26 ft.
„ „ 7	135 m.	26 ft.
„ „ 8	135 m.	26 ft.
„ „ 9	120 m.	25 ft.
„ „ 10	120 m.	22 ft.
„ „ 11	120 m.	22 ft.
National Brewery Wharf	125 m.	19 ft.
Regional „ „	120 m.	21 ft.
New Pier (2 berths)	—	30 ft. – 33 ft.

FUEL: Heavy and medium marine diesel, intermediate fuel, and bunker "C" fuel oil are available at Maracaibo from local contractors with barges. Supplied only by barge at the wharves or anchorage. Lubricating oils are also available.

FRESH WATER: All wharves supplied with fresh water by 2 in. hoses. Rate 15/20 t.p.h. Fresh water also available from local contractors with barges.

MEDICAL: Complete medical services are available.

CONSULS:

	Telephone		Telephone
Belgium	3235	Italy	
Colombia	72232	Mexico	6781
Costa Rica	6511	Netherlands	4621
Denmark	6531	Nicaragua	76703
Dominican Rep.	6511	Norway	78911
Ecuador	74055	Panama	78110
El Salvador	74241	Peru	4545
France	5297	Portugal	80870
Germany	76061	Spain	71118
Great Britain	6169	Sweden	6511
Guatemala	71193	United States	2123

STEVEDORES: Normal working hours 0700 – 1100; 1300 – 1700 and 1800 – 2300 hrs.

TELEPHONES: There is no service for connecting telephones on board vessels. Public telephones are situated in the warehouses adjacent to all wharves.

HOLIDAYS: All Sundays; 1st January; Good Thursday and Friday; 19th April; 1st May; 24th June; 5th July; 24th July; 12th October; 24th October; 18th November; 17th December; 25th December.

AIRPORT: International Airport "Granode Oro" situated N.W. of Maracaibo City served by many national and international airlines. A second airport with cargo and passenger services is situated at Santa Barbara del Zulia, on the banks of the Escalante River.

POLICE/FIRE/AMBULANCE: Police tel. 3821; Fire tel. 6585; Ambulance tel. 2209.

REPAIRS: No major repairs facilities are available; however, repair work can be done through local machine and electrical shops, and shore labour can be furnished if required. Radio and radar technicians are also available.

PROVISIONS: Fresh and dry provisions are available through ship chandlers in Maracaibo for delivery at Maracaibo Harbour or at the terminal.

SHORE LEAVE: Launch service in the Maracaibo harbour is readily available for official ship business. For personnel shore leave, depends on launch availabilities on arrival.

SHIPMASTER'S REPORT: 1976

Communication: Considerable difficulty was experienced raising La Guaira radio station (YVG) for transmitting the necessary ETAs. Our messages were transmitted via Portishead (GKR). Agents, however, advised that messages are normally transmitted through Curacao (PJC).

Pilotage: Masters making their first visit to the port are to embark the Pilot at Punta Cardon (Paraguana Peninsula). Ample notice must be given to the Agents as the Pilot has to be flown there from Maracaibo. Masters making their first visit to Maracaibo must also disembark the Pilot at Punta Cardon on departure. Masters may thereafter proceed directly to San Carlos pilot station.

Communications can be made through the Harbour Master's Office Punta Cardon.

Delays experienced off Punta Cardon did not occur on this particular occasion. Pilot boards and normally rests in the pilot's cabin until 30 minutes from the "EM" buoy.

Berthing: 2 tugs are compulsory for vessels berthing/unberthing when the vessel's length exceeds 476 ft. All other vessels 1 tug compulsory.

Stevedoring:

Normal working hours	
(Monday – Friday)	0700 to 1100 hrs.
	1300 to 1700 hrs.
	1800 to 2300 hrs. (Overtime)
(Saturday)	0700 to 1200 hrs.
(Sundays & Public Holidays)	*No work.*

Vessels must be fully rigged and hatches open and ready in all respects to load or discharge at least 15 minutes before stevedores arrive. If necessary shore labour is available to assist.

SHIPMASTER'S REPORT: 1975.

Arrival Messages: Cable Agent – Maracaibo via La Guaira Radio on departure Cristobal with ETA Punta Cardon, draft, cargo stowage, gangs required and requirements. (For subsequent calls vessel will be permitted to proceed to San Carlos pilot station to embark Pilot).

24 hours prior to arrival repeat ETA Punta Cardon, to be sent as described above.

2 hours before arrival at pilot station – Punta Cardon call on Channel 12 VHF to update time of arrival.

Pilotage: Pilot boards at Punta Cardon about 1 mile off the tanker berths from a launch with a "roof landing", therefore the pilot ladder must be about 6 ft. from the water. This Pilot travels from Maracaibo to meet the vessel at Punta Cardon and takes the vessel all the way to Maracaibo. Punta Cardon to "EM" Fairway Buoy – 78 miles. "EM" Buoy to Maracaibo – 35 miles.

Once the vessel has made a call at Maracaibo the Master is then exempt and may take his vessel direct to the "EM" Buoy and negotiate the buoyed channel for 12 miles to San Carlos Pilot Station. The channel is straight, wide and the buoys are well lit and marked. A Westerly set is said to prevail across this channel from the "EM" Buoy to San Carlos Pilot Station but it was not evident on our passage in or out. However, a strong ebb tide was noticed running out to sea off San Carlos Pilot Station. The channel from the "EM" Buoy to Maracaibo is dredged to 41 ft. but off the berths at Maracaibo the maximum draft is 26 ft. There had been a lot of unseasonal rain prior to our call and we noted that the density of the dock water was 1001.

Documents:

1 Health Declaration.
8 Stores Lists.
8 Crew Lists.
6 Passenger Lists (If no passengers these papers have to be entered as "Nil" passengers).
8 Crew Declaration Lists.
2 Venezuelan Manifests (Sent from N.Z.)
2 Sets Bills of Lading (Sent from N.Z.)
12 Sets Tally Books (Sent from N.Z.)

Stevedores: "Servicios Portuarios De Maracaibo".

They have 24 gangs in the port and mechanical equipment to support 16 gangs. Normal working hours are 0700 – 1130 and 1300 – 1630 hrs. Overtime 1800 – 2230 hrs. Saturday 0700 – 1200 hrs. No work on Sunday.

The labour works well but is not accustomed to working refrigerated ships and when the gangs work into the wings the Agent had to supply the men with warm clothing and hot coffee. Their discharge rate for cartons of frozen cream was 18 t.p.h. In hindsight I would suggest that it would be advisable to stow frozen cream for Maracaibo in a hatch square if possible to obviate the need for the labour to go into the wings as the complaint about the "cold" does not arise until this happens. They had 14 open trucks laid on to take the cartons of cream direct to the butter works and they had an unbroken flow so the "hook" was not held up on this account.

Berthing: There are berths for 6 ocean going ships and they say they can berth these ships up to 26 ft. Tugs are available and because of berthing starboard side to we used 2 tugs. The berths are concrete with rubber fenders and there is plenty of working space for the mechanical vehicles. The Pilots speak a little English but sufficient to make themselves understood and are capable. Fresh water is available alongside but I understand if bunkers are required they have to be brought by barge and there is a minimum charge of $1,000 irrespective of the amount of fuel required. They have a repair facility which is in the hands of a local engineering company. Fresh vegetables are available and can be recommended, supplied by the only providore. He maintains a listening watch on Channel 16 VHF and has a liaison with Agents for any messages sent prior to arrival at the berth. His station is called Automercado Venezia.

AGENT: Head Office, (Management and Control), Brokers, Chartering and Tramp Agents, Victor H. Selinger S.A., PO Box 1632, Caracas 1010–A Venezuela. Cables "Selvic" or "Seltank". Tel. (02) 81.02.71 Telex: 21402, 21631, 21934 and 22859.

Local Office: PO Box 496, Maracaibo. Tel. (061) 224960. (061) 224962. Cables: "Seltank Maracaibo", or "Selvic Maracaibo". Telex: 62166.

Section E

EL TABLAZO: 10.45 N. 71.32 W. (See Plan Book)

(N.B. for important details of Documentation, Pilotage, etc., see "Maracaibo Lake".)

Also see "Shipmaster's Report" before Bajo Grande.

LOCATION: S.E. part of Puerto Miranda. Entrance by buoys 63 and 64. Distance from San Carlos Pilot Station 16.5 miles.

MAX. SIZE:

	Depth alongside MMOLW ft. in.	*Depth approach channel ft. in.*	*Max. recommended Draft ft. in.*	*Max. d.w.t.*	*Max. LOA ft.*	*Limiting Factor*
Solids Dock:						
North Berth (Urea in bulk)	30 00	31 00	30 00	50,000	656	Draft
South Berth (Urea in bags)	31 06	32 00	31 06	50,000	820	Draft
South Berth (General Cargo) Not operational at time of report				50,000	656	Draft
Liquids Dock:						
North Berth	32 00	32 00		50,000	787	Draft
South Berth	29 09	31 06		50,000	787	Draft
Salt Dock:	20 06	21 00	20 06	3,000	270	d.w.t.
Heavy Cargo Dock:	14 00	12 00	14 00	No limit	196	Draft

Remarks: Ships willing to wait for tide may add height of tide to maximum recommended draft.

BERTHING:

	Length of Berth ft.	*Width of Pier ft.*	*Height of Pier above MMOLW ft.*	*Mooring Lines Bow*	*Mooring Lines Stern*	*Products Handled*
Solids Dock:						
North Berth (Urea in bulk)	735	34	11.5	2 head 1 breast 1 spring	2 stern 1 breast 1 spring	8, 14, 18
South Berth (Urea in bags)	974	34	11.5			7, 14, 18
South Berth (General Cargo)	738	34	11.5			14, 18
Liquids Dock:						
North Berth	856	14.7	11.8	2 head 2 breast 1 spring	2 stern 2 breast 1 spring	6, 5, 12, 17
South Berth	856	14.7	11.8			6, 5, 12, 17
Salt Dock:	364	43	10.5	2 head 1 breast 1 spring	2 stern 1 breast 1 spring	11, 12
Heavy Cargo Dock:	196.8	295	—	—		18

Products Handled: 1. Ethylene; 2. Propylene; 3. Propane; 4. Butane; 5. Nat. Gasoline; 6. Anhydrous Ammonia; 7. Urea in Bags; 8. Urea in Bulk; 9. Chlorine; 10. Caustic Soda; 11. Salt; 12. Styrene Monomer; 13. Monovinyl Chloride; 14. Potable Water; 15. Inert Gas; 16. Ballast Water; 17. Methanol; 18. General Cargo.

Products to be handled:

Natural Gasoline at	687	t.p.h.	
Estirene	160	,,	
Methanol	687	,,	
Isobutane	687	,,	
Ammonia	525	,,	temp. −33.3°C
Propylene	40	,,	40°/6°C
Butane	160	,,	7.8°C
Monovinyl Chloride	420	,,	37.8°C
Ethylene	80	,,	−104°/−70°C

Cargo Equipment:

North Berth:	One urea in bulk loader Cargo capacity 650/700 t.p.h.
South Berth:	Three urea in sacks conveyors. Cargo capacity 2,400 sacks of 50 kg. each per hour.

FRESH WATER: Available, 8 t.p.h., but expensive.

DENSITY: 997 – 1003.

OPERATOR: Pequiven, S.A., Calle Caliz, Las Mercedes, Venezuela. *Telex:* 23206.

PUERTO MIRANDA: 10.46 N. 71.34 W. (See Plan Book)

(N.B. For important details of documentation, Pilotage, etc., see "Maracaibo Lake").

LOCATION: Situated at Eastern shore of entrance to Lake of Maracaibo, in position Lat. 10° 46′ N., Long. 71° 34′ W.

OPERATOR: Maraven, S.A.

CLEARANCE: Pratique and Customs clearance will be granted on arrival either at the anchorage or after the vessel has been berthed. Masters therefore requested to have the accommodation ladder ready on arrival to avoid delays, since the Government Officials do not board the vessels by pilot ladder.

On arrival when Pratique is requested, all vessels should fly international flag signal "Q", or show a yellow light during hours of darkness.

PILOTAGE: On arrival Puerto Miranda under Government Pilot's advice the vessel will be boarded by Government Berthing Master, who will assist Master in docking vessel. He will also assist in undocking.

CHANNEL: Channel has a leading mark formed by the towers "P" and "M" and is marked by buoys.

(1) Incoming traffic bound for Puerto Miranda must leave the main channel between the buoys B – 57 and B – 59 towards the anchorage.

(2) Vessels coming from the Lake in ballast or to complete cargo at Puerto Miranda must leave the main channel when passing the buoy B – 65 on their starboard side and proceed in the direction of Jetty 3 towards the anchorage.

(3) All vessels on leaving Puerto Miranda should enter the main channel by the buoyed exit channel marked by the buoys numbered AP3, AP2, AP1 and B – 59.

Once the ship is unmoored, the Berthing Master on duty at Puerto Miranda will emphasise to the Official Pilots the route to be followed in each case.

MAX. SIZE: See "Berthing".

RADIO: Port Services Office equipped with radio-telephone installation operating on 24 hours basis, transmitting on following frequencies (simplex press to talk system).

		VHF Channel
Approach calling and safety	156.8 MHz	No. 16
CSV and other tankers port operations	156.6 ,,	No. 12
Emergency calling	2182 kHz	

ARRIVAL ADVICE: Vessels equipped with radio-telephone installation operating on above frequencies are requested call Puerto Miranda about 3 hours before arrival at port. Calls made in Spanish language will be answered promptly, since there is always a Spanish-speaking clerk on duty. Calls in English will be answered by Berthing Master on duty, except when he is occupied, in which case the call should be repeated later on, as an alternative, the Master could ask Government Pilot to report in Spanish his vessel to Puerto Miranda. During hours of darkness all vessels must identify themselves on arrival, either by radio-telephone or Aldis lamp.

TUGS: 2 motor tugs of 2,800 h.p. assist all vessels in docking and undocking. Also one or two mooring launches will be standing by to take ropes.

BALLAST: Discharge of oil or water polluted by oil into lake waters is prohibited and will incur heavy fines and compensation to beach owners and fishermen for cleaning nets.

All dirty ballast must be discharged ashore. Clean ballast in cargo tanks may only be pumped overboard after prior consultation with Port Services Dept. Deballasting line pressure must not exceed 100 p.s.i. Vessels equipped with a special separate and clean ballast system are to discharge their ballast into lake.

Ocean vessels should be ballasted on arrival E.M. Buoy for inward passage with minimum ballast necessary for safe handling, taking into consideration Article 31 of Maracaibo Pilotage Zone Regulations, which states all vessels entering lake Maracaibo shall have a trim of no more than 8 ft., to permit safe navigation through channels.

One of the major causes of contamination of crude oil is relatively small amount of salt water remaining in ship's tanks, pumps and ballast lines after ballast discharge. This very small amount of salt, nevertheless, frequently results in costly damage and down-time to refining equipment, besides presenting many other processing problems. It is therefore requested that full co-operation of Master and officers be given to ensure that all ballast tanks and lines are stripped as dry as possible.

BERTHING:

Jetties/Berths	*Depth M.M.O.L.W. ft.*	*Maximum Permissible Draft ft.*	*Maximum Permissible Length ft.*	*Maximum Permissible Displacement tons*
Jetty No. 2				
1 (North Outer)	38	36	720	90,000
2 (South Outer)	38	36	720	90,000
3 (North Inner)	35	34	†575	62,000
4 (South Inner)	35	34	‡575	62,000
Jetty No. 3				
5 Inshore (North Seaward)	38 38 38	36 36 36	910 910 910	90,000 90,000 90,000
6 Inshore (South Seaward)	38 38 38	36 36 36	910 910 910	90,000 90,000 90,000

(†) (‡) See "Remarks" overleaf.

The port is being dredged at the present time and when finished the new sailing drafts from the terminal will be 39 ft.

Maximum size acceptable based on particulars on page 1709.

Jetties/Berth	*Type of vessel S. d.w.t.*	*Governing Factor Draft*	*Length*	*Displ.*	*Mooring Lines to be used Forward*	*Aft.*
Jetty No. 2						
1 (North Outer)	44,000	x	x		9 (7)*	7 (5)*
2 (South Outer)	44,000	x	x		9 (7)*	7 (5)*
3 (North Inner)	22,000		x		7	7
4 (South Inner)	22,000		x		7	7
Jetty No. 3						
5 Inshore (North Seaward)	115,000	x	x	x	7 (5)*	7 (5)*
	90,000	x		x	7 (5)*	7 (5)*
	70,000	x			7 (5)*	7 (5)*
6 Inshore (South Seaward)	115,000	x	x	x	7 (5)*	7 (5)*
	90,000	x		x	7 (5)*	7 (5)*
	70,000	x			7 (5)*	7 (5)*

Remarks: Alongside UKC for ships up to 700 ft. O.A.L. = 1 ft. Alongside UKC for ships over 700 ft. O.A.L. = 2 ft.

(*) When vessels are fitted with tension winches – Forward and Aft.

(†) O.A.L. in Berth No. 3: This can be increased up to 620 ft. whenever vessels of Berth No. 1 have O.A.L. up to 665 ft.

(‡) O.A.L. in Berth No. 4: This can be increased only for LPG vessels up to 610 ft. if Berth No. 2 or 5 are empty when vessel arrives, then Berth No. 2 has to be temporarily restricted to vessels up to 665 ft. O.A.L.

General: Nature of bottom soft mud, but near buoys B – 59 and AP – 1 is partly hard.

Density of Water at Berths 997 – 1003.

Density of Water outer channel 1015 – 1025.

These alongside drafts are subject to reduction owing to depth in inner and outer channels.

Recommended under keel clearance (UKC) in Exit Channel 2 ft.

Vessels drawing 37 ft. and over will proceed according to monthly sailing draft table issued by Maraven, S.A.

MOORING: Vessels are to be moored to satisfaction of Pier Master. A suitable gangway will be provided by shore installation. When it is out of order vessel's gangway has to be used, which will be notified on VHF telephone before arrival at E.M. buoy.

Vessels of any deadweight must secure with at least: *Forward:* 4 headlines; 4 breasting fibre ropes in berths 1 and 2; 1 spring. *Aft:* 2 sternlines; 4 breasting fibre ropes and one spring in berths, 1 and 2. In berths 3, 4 and 5, *Forward:* 2 headlines; 4 breasting lines; 1 spring. *Aft:* 2 sternlines; 4 breasting lines; 1 spring.

When vessel is fitted with tension winches (forward and aft) the following ropes are required:

Forward: 2 headlines; 2 wires from tension winches as breasting lines in berths numbered 1, 2, 5 or 6; 1 spring. *Aft:* 2 sternlines; 2 wires from tension winches as breasting lines in berths numbered 1, 2, 5 or 6; 1 spring.

When vessels are nominated to load at berth 1 or 2 of Jetty 2 one extra headline and a second spring is required. Vessel's best ropes or wires should be used as breasting lines.

LOADING: Vessels should load in accordance with International Load Lines Regulations taking into account maximum permissible draft at this Terminal and also at Maracaibo Bar Channel.

The Captain of the Port requires that the load-line marks of all vessels using the port be clearly visible. If Harbour Authorities should refuse to pilot an out-going vessel due to being overloaded, Master will be held responsible for all delays and expenses, in connection with discharging any overloaded cargo and all further losses.

Vessels' maximum permitted loading rate should always be required. Maximum shore loading rate is 7,000 tonnes per hour, using 2 shore lines and 4 hoses.

Following ship's whistle signals should be used for loading: 2 blasts = Stand by (15 minutes prior to completion of cargo and or part cargo). 1 blast = Stop (2 minutes prior to complete cargo and or part cargo).

BALLAST: *Tank cleaning and dirty ballast facilities:* Maximum quantity acceptable, no limit. Rate 4,000 t.p.h. Owing to the closeness of the fishing industry to this terminal, Masters are warned that heavy fines will be imposed for polluting the Lake waters. Cargo-tank ballast whether clean or dirty has to be discharged ashore. Segregated ballast might be discharged into the Lake.

The terminal only accepts ships' ballast up to a maximum of 25% of vessel's deadweight. Masters are therefore advised to deballast at sea to the appropriate level.

EMERGENCIES: In order to deal quickly and efficiently with any emergency during loading/deballasting operations, the following equipment is available:

(a) Control for quick closing of shore manifold valves. This is a red-painted hydraulic valve situated on the ship/shore gangway. In the event of a spillage aboard, this valve must be opened. Within 90 seconds the shore manifold valves will close against the loading pumps.

(b) Direct ship/shore telephone. This is a red telephone and in order to obtain instant communication with the Loading Supervisor in the Control Room it is only necessary to lift the receiver. An Alarm Bell will alert the Supervisor and a light will advise him from which berth the call originated.

FUEL: Available ex-wharf: Bunker "C", thin fuels from 200 to 3,500 seconds Redwood 1 at 100°F., and marine diesel. Delivery rate 400 and 80 tons respectively. Gas oil, fuel oil and thin fuels may be supplied by barge ex-Maracaibo delivered at anchor, at a max. rate of 110 and 140 tons.

FRESH WATER: Available on all jetties with a loading rate between 20 t.p.h. and 30 t.p.h. This depends on number of vessels at the same time.

MEDICAL: Ship's personnel may visit local doctor on week-days between 0700 and 1130 hrs., or 1400 and 1700 hrs. Outside these hours, or in cases which require special treatment, patients receive attention in Maracaibo. Written request for medical attendance, as well as a shore pass, is always required.

CUSTOMS: 1 opened packet of cigarettes allowed to be taken from vessel by each crew member when going ashore. Masters advised to strongly caution crew against attempted smuggling.

SHORE LEAVE: Not granted until shore passes are stamped and signed by Authorities. Passes must be shown to guards at gangway and gates. Crew members must be properly dressed (long trousers and shirt) before proceeding ashore. Master must collect all passes and return them to Agent before vessel's departure.

GENERAL: *(a) Tides:* In view of the available depth in the channels which allow navigation to vessels up to about 70,000 d.w.t. fully laden at high water, permanent predictions of sailing draft tables have been prepared by Maraven S.A., and they will send these on board ships of over 47,000 d.w.t.

(b) Currents: The tidal current (Lunar tide) at this port can at times be very strong and subject to changes. Usually outgoing tide runs for 7 to 8 hours against 4 to 5 hours for incoming tide. Direction approx. at right angles to jetty.

(c) Movement of Passengers: Embarkation or disembarkation of passengers through this port is not allowed by Venezuelan Law, as this Terminal is only authorised by the Treasury Ministry (Ministerio de Hacienda) exclusively for exporting crude oil.

(d) Short Dispatch Procedure: This procedure is available for ships loading cargoes consigned to Shell Companies.

(e) Failure to Rejoin Vessel: If any member of crew is not aboard at sailing time, Authorities will not clear vessel although permission may be given to proceed to anchorage if the berth is required. If sailing permission is granted, Master is required to sign letter accepting all costs in connection with missing crew member to be for Owner's account.

(f) Launch Service: A charge will be made for a round trip to Maracaibo, but launches are only available on written request by Master. Masters who have to go on business to Maracaibo (Agency or Consulates) can make use of public service launches.

(g) Proceeding to Cardon: Vessels proceeding to Cardon to load or to take bunkers, are required to have ready on arrival at Cardon:

4 Lists of Deck and Engine Stores and Spares.
4 Lists of Stewards Stores.
6 Lists of Personal Effects.
6 Crew Lists.

In order to prevent delays it is imperative that these documents are presented to the Port Officials when they board to clear the vessel.

(h) Loading for Curacao: Unless Master requests otherwise, arrangements will be made for Goverment Pilot to board ship 1 hour after vessel has signalled "Stand-by".

(i) Guards: Custom Guards (Guardia Nacional) will be posted on all vessels and Masters are reminded that these guards must be accommodated and treated in the same manner as ships' officers. Non-compliance entails not only a fine but will result in delays in clearance and cargo operations.

(j) Visitors: Only persons on business allowed on piers. Visitors, as guest of Master, allowed board vessels provided a written and signed request presented by Master to Port Services Department. Further particulars covering procedure for obtaining permits for visitors can be obtained from Port Services Office.

(k) Cables and mail: Crew mail list forms put on board all vessels when entering Puerto Miranda. Crew's private mail accepted for posting provided all letters bear the sender's name and a list in duplicate is prepared showing addresses and sender. 1 copy of list will be forwarded to Master showing individual charges. Cables can be dispatched at all times.

(l) Norwegian Government Seamen Service: A field representative of the above service is stationed at Puerto Miranda providing Norwegian and Swedish film exchange and other usual services.

(m) Charts – Nautical Publications: On arrival of each tanker the Agency Representative will furnish a set of lake charts if required. No supplies of U.S. Hydrographic or British Admiralty charts or Sailing Directions, Nautical Almanac, etc., are available at this port.

(n) American Crew List: Vessels sailing for U.S. ports requested have American Crew List ready on arrival, so it can be forwarded to U.S. Consulate without delay.

(o) Films Exchange: Films may be exchanged at this Terminal.

(p) Fire Alarm: Each Friday morning at 1000 hrs. there will be a test of fire alarms including sirens at the wharves. Before the test will be a warning message in English and Spanish.

(q) Cash Advances: Local currency is Venezuelan Bolivar and cash advances are made only in this currency. It is requested that any requirement for cash advances be included in vessel's ETA radio, to permit delivery on board on arrival.

REGULATIONS: Following regulations should be strictly observed by Master of vessels alongside jetties. Non-compliance with these instructions entails not only a fine but delays in cargo operations.

Use of rafts for painting the ship's sides is strictly prohibited.

Lifeboats should not be lowered without the special permission of the Government Port Captaincy (obtainable on request).

Swimming in the harbour is strictly prohibited.

Waste water, sanitary or other must not be discharged on jetty.

It is strictly prohibited to paint ship's name or others on jetties. When this occurs the vessel will be charged for the cleaning.

Painting in ships alongside is strictly prohibited.

Before commencing loading, all dock scuppers should be securely plugged.

It is necessary to keep a close and constant watch on moorings and to adjust when necessary. When adjusting, call for assistance of harbour tugs before slackening off any mooring lines.

TELEPHONES:
Head Port Services Operations Office 228 during day.
Head PRDP Operations Office 222/310/323 during day.
Operations Supervisor (PRDP) Office 353/343/350 during day and night.
Berthing Master's Office 238 during day and night.
Ship's Services Office 338/275 during day and night.
Dispatch Clerk Office 274 during day and night.
Wharf Supervisor (SP-2) Office 244 during day and night.

Jetty No. 2	Berth	Tankers	Wharf Master
	1	213	214
	2	223	224
	3	233	234
	4	243	244
Jetty No. 3	5	253	254
	6	263	264

Jetties Gate 374	National Guard 276
Main Gate 364	Customs Officer 268
Policlinic 348	Port Captaincy 271

AUTHORITY: Maraven, S.A. Port Services Department, Estado Zulia – Venezuela.

Section F

PUNTA DE PALMAS: 10.24 N. 71.34 W.

(See Plan Book)

(N.B. For important details of Documentation, Pilotage, etc., see "Maracaibo Lake".)

OPERATORS: Corpoven, S.A.

FLAG: The Authorities require the Venezuelan flag to be flown from the mast head from the time the vessel enters the outer channel to come into the port until it leaves again by the same channel.

LOCATION: The terminal is located at Punta de Palmas del Sur, approximately 13 miles South of the port of Maracaibo on the West shore of Lake Maracaibo. The terminal proper may be identified by a 300 ft. radio tower, having 2 small red lights 200 ft. from the base, and 1 large red light on top of tower. The top light flashes every 2 seconds.

PILOTAGE: Vessels which arrive have the option of taking on the Official Pilot at the following places:

(a) In the outer channel of the Lake of Maracaibo, between buoys B-24 and B-26.

(b) In the anchorage area, located approximately 5.5 miles to the N.E. of the Island of San Carlos and to the East of the buoy B-17. This area is identified by a green light buoy, equipped with a radar reflector (position: Lat. 11° 04′ 22″ N., Long. 71° 33′ 48″ W.).

(c) On the "EM" buoy (i.e. Entrance to Maracaibo), there is also a radar reflector (position: Lat. 11° 13′ 47″ N., Long. 71° 33′ 31″ W.).

The Official Pilot who comes on board at San Carlos will take the vessel to Maracaibo. At times, due to bad weather, the Maracaibo Port Captaincy cannot guarantee the embarkation or disembarkation of Pilots at the "EM" buoy or in the anchorage at Lat. 11° 04′ 22″ N., Long. 71° 33′ 48″ W. For this reason, Masters must contact the pilots station at San Carlos so that they may give him appropriate instructions as to the place of boarding or disembarkation of the Official Pilot, who, generally speaking embarks between buoys B-24 and B-26.

The system of communications which vessels use with the pilots station of San Carlos will be the morse lamp, radio-telephone or radio.

The frequencies on which San Carlos listens out are: Radio 2182 kHz. Radio-telephone 156.6 MHz. It also operates with frequencies 2080, 2120, 2638, 2738 kHz R/T and 156.8 MHz VHF.

Vessels sailing from Punta de Palmas will take on the Official Pilot at the mooring where they are located after having terminated their loading operations. This Pilot must be requested one hour and forty-five minutes before the estimated time of being ready to sail. Vessels which embark their Official Pilot at Punta de Palmas to sail to Maracaibo will change their Pilot again on arriving at that port. The Pilot who embarks will guide the vessel to the proximities of the Island of San Carlos, between the towers E-31 and E-33, where he will disembark onto a pilot launch. The Port Captaincy of Maracaibo has given instructions to shipping Agents for the purpose of informing Masters and Owners of vessels that every Master must identify himself in advance to the pilot station at San Carlos at any time of the day, when they are arriving at buoys B-17 and B-19, and when they are sailing at T-42 and T-40. These instructions are of an obligatory nature in order to keep the Pilots' service informed at all times of any emergency that may arise. Also to avoid an Official Pilot going out unnecessarily from his base, especially during the night in the belief that the vessel which is in sight requires his services; in this case both the service of the launch and that of the Pilotage not given will be charged to the ship's Agent or Representative.

Lake Pilotage: An Official Government Pilot will assist every ship in crossing from Maracaibo to Punta de Palmas and in its exit voyage from Punta de Palmas to Maracaibo. This Pilot will also assist in the operations of mooring and unmooring. The Agent will inform the Master and the Official Pilot of the time determined for berthing the vessel when it arrives at Maracaibo. Vessels which load in Punta de Palmas must request a Pilot for their exit journey at least 1 hour 45 minutes in advance of the time at which they consider the vessel will sail.

CARGO DOCUMENTS: Vessel's clearance and cargo papers will be delivered to the Master on arrival in Maracaibo Harbour outbound. Corpoven S.A. will accept no responsibility for delay in clearing a vessel due to unavailability of personnel from offices of the Port Authorities.

APPROACHES: The buoy which indicates the entrance to the outer channel ("EM" buoy) is located in the geographical position: Lat. 11° 13′ 47″ N., Long. 71° 33′ 31″ W. The light of the "EM" buoy has the following characteristics: white light, with 1 flash every 10 seconds, visibility approximately 5 miles. The distance between the "EM" buoy and the inner extremity (South) of the inner channel, marked with buoys B-27 and B-28 is approximately 15.75 miles. The outer channel has a width of 300 m. between the limit on both sides. The navigable portion for loaded vessels is 240 m. wide. The average depth which has been checked at low tide is 13.72 m. (45 ft.) and the tidal amplitude is up to a maximum of 1.49 m. (4.9 ft.). There is a breakwater located a half a mile to the East and parallel to the external channel which extends for 2,574 m. (1.6 miles) to the North from the Northern coast of the Island of Zapara. In its outer extremity there is installed the lighthouse of the steel lattice type construction, with a height of 7.62 m. (25 ft.). The characteristics of its light are: white, with 1 flash every 8 seconds, visibility approximately 5,556 m. (3 miles).

The commencement of the internal dredged channel is marked by buoys B-29 and B-30. The extension of this channel is 19.31 km. approximately (12 miles) and ends at towers T-55 and T-56. The channel is 244 m. wide (800 ft.) and its normal checked depth is 13.72 m. (45 ft.) at average low tide, with a tidal amplitude which varies between 0.49 m. and 0.89 m. (1.5 ft. and 3 ft.), at tower T-66, and from 0.82 m. to 1.46 m. (4.5 ft.) at buoy B-29.

The channel from tower T-56 as far as the Port of Maracaibo is dredged and its termination is marked by buoys B-73 and B-74. It is 244 m. wide (800 ft.) and has a depth of 13.72 m. (45 ft.). Its distance is 17 km. (11 miles).

The depth in all the channels may vary in accordance with the sedimentation to which they are subjected and the formation of sand banks. The Port Captaincy at Maracaibo issues Notices to Mariners keeping them informed as to changes in depths in the channels. Navigators are advised to keep themselves up-to-date with these notices of variations of depth when they calculate their exit draft of their respective vessels.

MAX. SIZE:	*Berth*	*Max. LOA*	*Max. Draft*	*Max. d.w.t.*
	No. 1	835 ft.	38 ft.	80,000 tons
	No. 2	835 ft.	37 ft. 6 in.	80,000 tons
	No. 3	890 ft.	42 ft.	100,000 tons

Also see "Berthing".

RADIO: *Time of Arrival (ETA):* When a vessel leaves its previous port destined for the Terminal of Punta de Palmas, it must inform both its Agent and Corpoven S.A. in Maracaibo as to its best estimate of the date and time of arrival in Maracaibo. Then at least 24 hours prior to arrival at the San Carlos pilots' station, it must send another message to confirm the time of arrival at Maracaibo. The nationality of the vessel, name, nett Venezuelan tonnage (if it does not have this, its registered tonnage), last port, name of Master, permanent ballast or cargo in tanks or both, and any other information which is pertinent must be included in this message. The cable address of Corpoven S.A. is as follows: Corpoven, Maracaibo, Telex 61126. By virtue of the circumstances that the Cable Office in Maracaibo is not equipped to communicate with vessels on the high seas directly, messages sent to Corpoven S.A. and to the Agent of the vessel must be transmitted through "PJC" (Curacao), with the prefix "Via ACC" (All American Cables and Radio, Inc.).

We wish to emphasise that by virtue of the fact that our undertaking rents a part of its equipment which it uses for mooring vessels in accordance with the last message of arrival of the vessel, this message must be compiled with the greatest accuracy possible. Any alteration in the time and date of arrival affecting the vessel before or after the time indicated in its message, will be for the account of the vessel as will be the cost of rental of the equipment used.

Corpoven S.A. is in no way obligated to carry out the mooring of any vessel, except at the estimated time of its arrival at Punta de Palmas, although exception is made where the vessel may have been delayed in Maracaibo by virture of reasons beyond the control of the Master.

TUGS: Tug service consisting of 2 tugs of not less than 1,600 h.p. each is provided by the terminal operator for all vessels. Both tugs will assist all vessels in mooring and unmooring operations. Should it be deemed necessary by the terminal operator to require a tug in addition to the 2 terminal tugs for mooring or unmooring vessels exceeding 750 ft. in length, charges for this additional service will be for the account of vessel.

Vessels which exceed 835 ft. overall length, and destined for Berth No. 3, require the assistance of at least an additional tug. This additional tug will remain at the convenience of the Terminal for the time that the vessel remains at the berth.

In all cases where there are adverse weather conditions, without taking into account the size of the vessel, the Operator of the Terminal, at his convenience, may request the services of an additional tug to protect the installations of the Terminal and the ship, which will be for the account of the vessel.

The Terminal Department will make the necessary arrangements through the intermediary of the ship's Agent, for contracting additional tugs. These services will be charged to the ship's Agent by the tug operator who is contracted.

MOORING: *Berth No. 1:* Located approximately 8.85 km. (5.5 miles) from the Terminal and 2 km. (1.25 miles) to the West of buoys D-95 and D-96 in the Maracaibo Channel. Distance between the bow and stern buoys is 364.90 m. (1,200 ft.).

This berth is equipped, apart from the mooring buoys, with a transversal mooring pile on its Eastern side, submerged, with chain and cable the same as those of the buoys. This does not interfere with the operations of mooring and unmooring.

Berth No. 2: Located approximately 8.85 km. (5.5 miles) from the Terminal and 2 km. (1.25 miles) to the East of the buoys D-95 and D-96 and to the N.E. of berth No. 1. Distance between the bow and stern buoys is 350.50 m. (1,150 ft.).

This berth is equipped, apart from the mooring buoys with a transversal submerged mooring pile equal to that of berth No. 1.

Berth No. 3: Located approximately 9.65 km. (6 miles) from the Terminal, 1.2 km. (0.75 mile) to the West of the buoys D-95 and D-96 and approximately 914 m. (3,000 ft.) to the East of berth No. 2. Distance between the bow and stern buoys is 365.76 m. (1,200 ft.).

This berth is equipped similarly to berths Nos. 1 & 2 with a transversal submerged pile on the Western side of the berth.

Conditions applicable to all berths: (a) Vessels which have a total overall length of 239.26 m. (785 ft.) or more must be equipped with 2 tension capstans at the bow and on the after deck, with sufficient cable to reach the stern and bow buoys respectively.

(b) Every vessel loading at any of the berths must take into consideration that due to Government regulations, the vessel must have a minimum clearance of 0.984 m. (3 ft.) below the keel at any point during its transit through the Maracaibo Channel, without taking into account the limitations of the channel assigned to the 3 berths by the Terminal Operator. In view of this regulation and the constant variations of the depths of the channel, Masters must be guided by the most recent "Depth Bulletins" which are issued by the National Channel Institute, and by the tide tables when they are planning their transit time through the channel, and the maximum draft to which they may load their vessel.

Mooring procedures and rules applicable to mooring points: Every vessel carrying out mooring operations at any of the 3 berths must arrive with a minimum draft of 3.65 m. (12 ft.) forward and respect the following procedure and rules for berthing:

(a) Anchor: Vessels approaching the berths from the East, in the most convenient manner and safely as possible they must drop their starboard anchor in its location once the vessel has been berthed, the chain facing East, with a length of not less than 137.16 m. (450 ft.).

(b) Mooring cables: One of the following alternatives for mooring cables at each side of the vessel must be fulfilled:

1. Two cables of synthetic fibre (Nylon or Polypropylene) with 9 in. circumference and 1 steel cable which has a minimum diameter of 1.25 in.
2. One cable of synthetic fibre (Nylon or Polypropylene) with 9 in. circumference and 2 steel cables also supplied by the vessel and which have a minimum diameter of 1.25 in.
3. One cable of synthetic fibre with a 9 in. circumference and a safety cable of 1.5 in. diameter which will be supplied by the Terminal.

(c) Countertension cables: A countertension cable will be attached to the stern or fore deck. Vessels which have a length exceeding 800 ft. must use countertension cables on both sides of the deck simultaneously.

(d) Transversal cable: The transversal cable which will be supplied by the Terminal will be attached to the after deck on the starboard side. Vessels mooring at berth No. 3 must also attach an additional transversal cable to the after deck on the port side.

(e) All cables which are attached to vessels must have 6 turns around the bitts, and these must be secured so as to prevent them from unwinding.

(f) The pressure capstans must be secured in the braked position, once all other cables for mooring the vessel have been secured. These mooring cables must be maintained tight as the vessel goes down in the water whilst it is being loaded.

(g) Vessels must be supplied with sufficient cables as spares which can be used as the Terminal may require. All cables must be maintained in good condition and are subject to acceptance by the representative of the Terminal. Vessels must maintain sufficient personnel on deck during the whole time that the vessel is at the berth to attend to the cables for mooring purposes whenever this may be required by the Terminal.

It is understood by both parties that, when the Terminal may require safety cables to be used, and where such are required, Corpoven S.A. accepts no responsibility for damages or losses occasioned to any vessel, installation or person due to the use or failure of this equipment.

The vessel's gangway must be in position so that the mooring supervisor or other personnel from the Terminal can come on board the vessel when it arrives at Punta de Palmas.

This gangway must be suspended whilst manoeuvres are being carried out, this for the purpose of obviating any damage to it occasioned by tugs or launches.

Berthing Supervisor: The Berthing Supervisor of Corpoven S.A. will come on board every vessel prior to its entrance to the berth to establish radio contact between the vessel, the Marine equipment and the Office at the Terminal.

Mooring gangs and equipment: The mooring equipment will be handled by the launches employed in the manoeuvres. The tug service will be available 24 hours of the day through the intermediary of the Terminal Port.

The mooring gangs will assist the vessel personnel in the operations of hoisting, connecting and disconnecting the 2×12 in. diameter loading hoses. The approximate weight of the loading hoses is 4 tons.

The launches used for the manoeuvres will place on board equipment to facilitate the work of connecting the hoses. This equipment will be at the disposal of the vessel's personnel when required as are also the launches to transport personnel.

Responsibility: The Master may request any equipment or service which he may consider necessary for a safe and efficient operation of his vessel and the Terminal Operator will do everything within his power to fulfil this requirement. Therefore all owners and operators of vessels arriving at Punta de Palmas will accept the responsibility of the safety inherent in the manoeuvring of their vessels and their movements to and from the Terminal. Corpoven S.A. will accept no responsibility for losses or damages occasioned to the ship, its installations and others unless such loss and damage be occasioned due to the faults in the installations belonging to the Terminal or operated by the Terminal with the exception of the security equipment.

Operational checklist: At the time when the vessel is moored and the hoses are connected, prior to the commencement of the operations of loading, the representative of Corpoven S.A. on board will deliver to the Master an operational checklist. The Master is required or whomsoever he may appoint to carry out this work together with Terminal representative, to check very carefully that all the safety regulations have been fulfilled.

Berthing Supervisor: The Berthing Supervisor will have charts and plans which will be at the disposal of the Master and his advice if he should require it. The representative will also be available to inspect the vessel's tanks and to act as liaison between the Master of the vessel and the Agent or with the Terminal of Punta de Palmas, to transmit any information relative to the ship. This supervisor must receive lodging and treatment at the same level as the ship's officers.

Unmooring procedure: When the loading operations are completed, the launches will proceed to remove all mooring cables from the buoys under the supervision of the official entrusted with the vessel or the Official Pilot, assisted by the Berthing Supervisor of Corpoven S.A.

Documentation: The departure and loading documents will be delivered to the Master by his Agent or his representative, when he passes through the Port of Maracaibo.

BALLAST: *Deballasting:* It is understood that it is not permitted to discharge ballast in the lake, even though this may come from tanks used solely for ballast. Ballast will be discharged with the pumps of the vessel to the deballasting system which exists at the Terminal. As soon as the loading hoses are connected, the personnel of the Terminal will align the system with its respective valves. Once these operations are completed the Berthing Supervisor on board will inform the Master that he may commence deballasting and in turn will keep him informed as to the pressures which will be used in the operation. Once the deballasting operation has been completed, the personnel of the Terminal will align the system again and its valves so that the vessel can receive cargo through the same hoses which are used for unloading ballast and simultaneously the personnel of the vessel will align their systems on board to receive cargo. The personnel of the vessel responsible for receiving the cargo will inform the Representative of Corpoven S.A.(Berthing Supervisor) when the vessel is in a condition to receive and he in turn will inform the personnel of the Terminal that they may commence pumping.

LOADING: *Oil leakage:* In order to obviate contamination of Maracaibo Lake and possible legal actions, we recommend strongly that Masters of vessels emphasise to their deck officers in order to obviate leakage that they make sure that all necessary measures have been taken on board to this end prior to commencing the loading operations. The purpose of this is to maintain on deck any leak or wastage which may occur in the vessel.

Guarantee of responsibility: In the event of an oil leakage or any other contamination or any other damages to installations caused by a vessel, the operator of the Terminal, prior to the vessel sailing, will require the Agent to deposit bond in favour of Corpoven S.A. to cover the fine or other charges which may be incurred in collecting, cleaning, repairing the installations of the Terminal and also to cover any claims from third parties.

Loading procedure and pumping rates: The position of the loading hoses, supports and connections must be to the satisfaction of the personnel on board. The valves of the hoses for loading purposes will be opened in order to test the connections, detect leaks and then ultimately to commence operations.

The responsibility and custody of the cargo passes to the personnel of the ship from the moment when the cargo arrives at the connection which is the property of the ship.

The minimum loading rate at berths Nos. 1 and 2 is 4,000 b.p.h. The average pumping rate, under normal conditions is 13,000 b.p.h. Sudden stoppages in loading will not be permitted during loading except in cases of emergency.

Personnel on board, responsible for the loading operations, must notify the Terminal representative, not less than 30 minutes in advance of the completion of loading. This will enable the representative to instruct the operator to reduce the rate of pumping or to continue loading by gravity as he sees fit.

For reasons of security, loading may be suspended and the hoses disconnected from the vessel's manifold when weather conditions are not favourable or at any time that the Terminal considers it convenient to do so due to *force majeure* or other reasons.

Displacement of the line: Sometimes it will be necessary to displace the submarine line in combination with the loading operation. To carry out this operation it is required that the personnel responsible for receiving the cargo notify sufficiently in advance the Berthing Supervisor when the amount of cargo lacking is equal to the capacity of the line.

The capacity of the line is a fixed quantity. Therefore it must not be considered with shortcomings or excesses.

Therefore when it is necessary to effect a displacement, the loading must be calculated carefully by the vessel personnel responsible for this operation.

It is understood that any error or negligence on the part of the vessel personnel in calculating the initiation point of the displacement of the line, will require a land pump to correct the displacement. Due to the submerged manifold it will be necessary to employ a diver to operate the valves and this operation may result in a fairly costly procedure and involve a lot of time. All costs involved in fulfilling this operation, together with the time lost will be for the account of the vessel.

Increase in pumping rates: At the request of the Master and subject to the approval of Corpoven S.A., it is possible to suppy a pumping rate of 17,000 b.p.h. up to a maximum of 30,000 b.p.h., provided the operations of the Terminal permit this to be done.

MEDICAL: *Maracaibo:* Complete services are available.

Punta de Palmas: Emergency cases only will be transferred to Maracaibo for treatment, at the request of the official in charge of the vessel.

FUEL: Heavy and medium marine diesel, intermediate fuel, and bunker "C" fuel oil available. Lubricating oils also available. Pumping will be affected during daylight hours and with prior permission of the Terminal.
FRESH WATER: Available from local contractors with barges. Pumping will be affected during daylight hours and with prior permission of the Terminal.
STORES: Fresh and dry provisions procurable through ship chandlers in Maracaibo for delivery at the Terminal.
REPAIRS: *Maracaibo:* There are no facilities available for carrying out major repairs. Nevertheless, repair work may be carried out through local workshops and labour can be supplied if this is required. Technicians in radio, radar, gyro compass repairs are also available.

Punta de Palmas: No type of repair will be effected here, which may prevent the unmooring of the vessel without the authority of the Marine Supervisor. Neither may boiler tubes be "blown" whilst the vessel is moored.
SHORE LEAVE: Launch service for business purposes and emergencies is readily available. Launch service for shore leave can be arranged through contract marine service and will be responsibility of ship's personnel. Arrangements for shore leave transportation can be made through Loading Master on board.
CUSTOMS: All vessels entering from foreign ports and bound for Punta de Palmas Terminal are required to anchor in Maracaibo Harbour for formal customs clearance and visit of government port authorities prior to proceeding to destination.

The vessel's accommodation ladder should be rigged prior to the vessel's arrival at Maracaibo. A member of the National Guard will board each vessel at Punta de Palmas to observe all activities connected with loading or unloading operations. This official is authorised as the customs representative, and is referred to as Customs Watch. Food and accommodation similar to officers should be made available to him by vessel.
CONSULS: See "Maracaibo".
GENERAL:

Transportation: Transportation will be supplied by launch between vessel and Punta de Palmas to the following persons, without exception:

1. Master of the vessel or the Chief Engineer, to attend to matters relating to the ship.
2. Sick personnel who require emergency medical attention.
3. Official Pilot.
4. Members of the National Guard and other Government Officials whose services relate to the tanker.
5. Doctors, when these may be required by Master, in the event of emergency only.
6. Inspectors of the oil industry.

Consular representatives, ship's suppliers, engineers, naval experts, representatives of the oil companies, suppliers of fuel and water and any other person who requires to come on board tankers when they are in Punta de Palmas must make their own arrangements for transportation to and from the ship through the intermediary of the ship's Agent. Also Agents must make their own arrangements for their own transportation.

Personnel of the ship with licence to disembark: The transportation of personnel with licence, when this is required by the Master, must be arranged through the intermediary of the Agent. Also passengers must embark and disembark at the Port of Maracaibo.

Personnel with licence are not permitted to go ashore at the Terminal of Punta de Palmas.

Classification Societies: American Bureau of Shipping, Lloyd's Register of Shipping, Salvage Association of London, Det Norske Veritas, Bureau Veritas, Registro Italiano Navale and Germanischer Lloyd have Agents in Maracaibo or in Caracas. There are experts available through the intermediary of the Agents mentioned above.

Monetary System: The monetary system of Venezuela is the Bolivar (Bs.), and is the only money legally recognised in the country. A Master who requires a cash advance must request same from his Agent when he notifies his ETA. Payment of all invoices for Terminal charges must be made in Bolivares at the Office of Corpoven S.A. in Maracaibo, unless other instructions are given.

Mail: Mail for the vessel can be delivered to the representative of the Agent who comes on board the vessel at the time of its arrival or sailing from Maracaibo.
AUTHORITY: Corpoven S.A.

Capitania de Puerto, La Ciega – Maracaibo, Venezuela. *Tel:* 226488.
AGENT: Head Office. (Management and Control), Brokers, chartering and tramp Agents, Victor H. Selinger S.A., PO Box 1632, Caracas 1010-A. Venezuela. Cables: "Selvic" or "Seltank". Tel. (02) 81.02.71. Telex: 22859, 21402, 21934 or 21631. New Boe Code.

Local Office: P.O.Box 496, Maracaibo. Tel. (061) 224960, (061) 224962. Cables: "Seltank Maracaibo" or "Selvic Maracaibo". Telex: 62166.

Section G

SAN LORENZO: 09.47 N. 71.05 W.

OPERATOR: Maraven, S.A.
LOCATION: S.E. side of Lake Maracaibo.
APPROACHES: Vessels have to arrive at Maracaibo Roads through a dredged channel with controlling depths of 45 ft. in outer bar, inner channel and Punta Palmas area. In vicinity of terminal the controlling depth is 36 ft.
PILOTAGE: It is compulsory from San Carlos to Maracaibo. Pilot normally boards vessel at buoy B–26 (Position Lat. 11° 01′ N. Long. 71° 35′ W.). It is also compulsory for all vessels which have to load at any terminal located South of the bridge Rafael General Urdaneta. This bridge has a horizontal clearance of 656 ft. and a vertical one of 148 ft. at 45 ft. MMOLW level. Pilots have to embark and disembark at Maracaibo.

When Masters have no Pilot exemption Certificate for crossing outer bar, permission has to be requested by VHF or 2182 kHz prior to arrival, which is being granted on request.
ANCHORAGES: Masters may use the following:

(a) Near E.M. Buoy, (not recommended because of the distance from San Carlos. The pilot launch never reaches this point).

(b) At Maracaibo Roads.

(c) At terminal approaches, in accordance with depths available in the area, and ship's draft.
LIGHTENING POSITION: In the Southern lake Area, arrangements have to be made in advance. Also at Maracaibo.
HEALTH: Quarantine officials board vessels at Maracaibo Roads. Pratique cannot be granted by radio.
RADIO: San Carlos Pilot Station has VHF Channels 12 & 16. Emergency call 2182 kHz. Terminal has VHF Channel 12.
TUGS: Compulsory. When vessel is over 25,000 d.w.t. a second tug is required, which is available in the area, 1,200 h.p. each. There is also a launch to assist the vessel during manoeuvring.
BERTHING: Continuous wharf 2,340 ft. in length with dolphins. This terminal is only for handling crude and its products. Maximum berthing displacement: 20,000 tons.

	Berth No. 1	*Berth No. 2*	*Berth No. 4*
Max. LOA	560 ft. 00 in.	665 ft. 00 in.	
Max. Depth	24 ft. 06 in.	35 ft. 06 in.	Out of Service
Max. Draft	23 ft. 06 in.	34 ft. 06 in.	
Loading Rate	1,450 t.p.h.	2,000 t.p.h.	

These depths are referred to the minimum monthly observed lowest water level (MMOLW).
DENSITY: At berths 998 and at outer bar between 1020 and 1025.
FRESH WATER: Available ex-barge at Maracaibo Roads.
FUEL: Any grade. In case vessels require grade not available at berth it may be supplied ex-barge at Maracaibo, which has mixing equipment able to supply the grade involved. Rate 20 – 140 t.p.h.
MOORING-UNMOORING: Carried out by Official Pilots. Mooring is Head-out to facilitate departure.
DEBALLASTING: Installations have ballast pit with capacity 650 cu.m. Max. discharge rate 600 t.p.h.
TANK CLEANING FACILITIES: Carried out by outside contractor.
REPAIRS: Minor repairs only, including electronics.

LA CEIBA: 09.28 N. 71.04 W.

SHIPMASTER'S REPORT: 1979.

BERTHING: There is a cement loading installation about 2 cables South of the 160 m. long pier at La Ceiba suitable for vessels up to 120 m. in length.

The approach channel is dredged to 9 m.

END OF MARACAIBO SECTION.

MORON: 10.32 N. 68.11 W.

This Terminal finished operations in 1981. All installations are being dismantled.

Vessels loading/discharging operations are now performed at El Palito Marine Terminal operated by Corpoven, S.A.

ORINOCO RIVER

Including Section A – MATANZAS
Section B – PALUA
Section C – PUERTO ORDAZ
(CVG Ferrominera Orinoco)
Section D – PUNTA CUCHILLO
(Lagoven S.A.)
Section E – VENALUM TERMINAL

IMPORTANT: VHF compulsory. Vessels without at least a VHF radio aboard will not be attended to by the Pilots at the Barima pilot station and so will not be allowed to enter the Orinoco River.

GENERAL:

1. As early as possible, advise Puerto Ordaz Radio Station, call letters YVM, giving ETA at Buoy EO of North (natural) channel, or at Buoy 0.1 of South (dredged) channel.

Shipmaster's Report: October 1982.

Contact with YVM was made 48 hours before arrival buoy 0.1; accordingly, 72 hours ETA sent via Curacao Radio.

2. 24 hours prior to arrival, send another ETA to YVM.
3. Upon arrival, depending on whether Master intends to enter Orinoco waterway through North or South channel, adhere to following procedure:
   - *(a)* *North Channel.* Notify Port Captain, Ciudad Bolivar, via YVM, of time of arrival at Buoy EO and give ETA at Buoy 27.
   - *(b)* *South Channel.* Request permission to enter from "Amacuro Pilot", via Channel 16. *Do not enter* until granted permission; while awaiting, lay to or anchor at least 1 mile outside of Buoy 0.1.
   - *(c)* All vessels must also communicate with the Point Barima pilot station, call sign "Amacuro Pilot" 2182 kHz HF or 43.18 VHF to be informed of traffic.
4. While navigating waterway, inbound or outbound, report position to YVM hourly on the hour.
5. No Pilot required nor available for navigation along North or South channel at the Boca Grande of the Orinoco River.
6. The International Rules for Preventing Collisions at Sea apply outside of Buoy 27.
7. Given the case of 2 vessels navigating North and South channels respectively the one navigating the South channel is the privileged vessel.
8. Anchoring either in North or South channels is forbidden.
9. Throughout Orinoco waterway, the down-bound loaded vessel is the privileged vessel.
10. It is compulsory to fly Venezuelan ensign inside of Buoy EO or Buoy 0.1.
11. Vessels can only carry clean ballast within Orinoco Waterway.
12. Pilotage compulsory within Pilotage Zone No. 1 of the Orinoco. Pilots board at outer boundary of said pilotage zone in upstreamward vicinities of Buoy 27.
13. Regulations for the Pilotage Zone No. 1 of the Orinoco apply inside of Buoy 27.

APPROACHES: (Also see "Radio" – paragraphs *(b)* and *(c)*).

1. *The Waterway*

A Radio Direction Finder (non-operational October 1982), located at Lat. 08° 03′ 45″ N., Long. 60° 28′ 28″ W., transmits following signal continuously: YV – AYV. The transmitter has an output of 500 watts with a range of about 200 miles and operates on a frequency of 305 kHz. While navigating the waterway, ships should favour the shore on their starboard side to the extent possible, giving preference of manoeuvre to loaded vessels in all cases. Ships navigating upstreamward (inbound), upon approaching narrow channels should await the passing and give way to downbound vessels. It follows, therefore, that downbound loaded vessels are the privileged vessels.

2. *The Boca Grande (Barima Bar) Channels*

There are 2 navigable channels across the Boca Grande (Barima Bar), identified as follows: North channel (or natural channel), and South channel (or dredged channel). The 2 channels have converging courses and meet at mile 27.7 in the vicinity of Buoy 27. Vessels navigating the South channel are privileged, regardless of the direction in which they travel.

(a) The North (Natural) Channel

This channel has a min. depth of 12 ft., referred to Mean Low Water. The approach from the sea is marked by a battery-operated electric flashing black buoy, identified with the letters EO. This buoy is located in 46 ft. of water at Lat. 09° 00′ 10″ N., Long. 60° 18′ 20″ W. Its characteristics are: colour of light, white; flash, 1.0 seconds; eclipse. 6.0 seconds; height above water, 10.7 ft., visibility, 7 miles. From seabuoy EO, the channel develops for 7.3 miles to Buoy EOA on a course of 213° 40′ True, then for 2.8 miles to Buoy EOB on a course of 198° 57′ True. From this point the channel follows an approximate straight course of about 205° True for a distance of 17 miles to Buoy 27. Starting from EOB distances between successive navigation aids are as follows: G1 at 1.9 miles; G1A at 1.5 miles; G3 at 2.1 miles; G3A at 2.3 miles; G5 at 3 miles; EL 24 at 2.6 miles; Buoy 27 at 3.7 miles. All navigation aids are black buoys fitted with white lights, except Buoy 27 and EL 24 which is a range structure indicating the West side limit alignment of the South (dredged) channel. This structure has been fitted with a white flashing light to mark the North (natural) channel.

(b) The South (Dredged) Channel

The South channel is a 400 ft. wide dredged channel. Depths therein accommodate the maximum draft authorised by the Port Captain. The approach from the sea is marked by a battery-operated electric flashing black buoy, identified with the number 0.1. This buoy is located in 45 ft. of water at Lat. 08° 55′ 52″ N., Long. 60° 11′ 17″ W. Its characteristics are: colour of light, white; flash, 0.5 seconds; eclipse, 11.5 seconds; height above water, 25 ft.; visibility, 11 miles. From seabuoy 0.1, the channel develops along 4 different courses over a total distance of 27.7 miles to Buoy 27. The course reduces by about 7° True at each of 3 turning points, located at miles 9, 15 and 21 respectively. The initial course of 234° 18′ True continues to mile 9 where it changes to 227° 07′ True. Upon reaching mile 15, the course again changes to 219° 51′ True to mile 21. At mile 21, the course changes to 212° 45′ True to Buoy 27 at mile 27.7. The centreline of the channel on all courses is visually marked by range structures fitted with green flashing, directionally beamed lights. The West (right ascending) side limit of the channel through mile 21 is also visually marked by range structures fitted with amber flashing, directionally beamed lights; the alignment given by the side ranges develops 200 ft. to the West and parallel to the centreline of the channel. Battery operated electric flashing navigation aids are located along both sides of the channel. All navigation aids along the East (left ascending) side of the channel are located 325 ft. from centreline or 125 ft. outside of the channel lateral limit. White flashing navigation aids are located at 1 mile intervals through mile 25.1; all aids along this side are black buoys, except beacons 8.1, 9.1, 14.1, 15.1, 20.1, 21.1, 22.1, 23.1, 24.1, 25.1, 27.1 and 27.7 (Buoy 27). All navigation aids along the West (right ascending) side of the channel are located 200 ft. from centreline or on the exact lateral limit of the channel. Red flashing buoys painted red are located at 1 mile intervals from mile 1.6 to mile 11.6. From mile 11.6 to mile 27.7, there are only 2 aids; red buoys 13.6 and 26.0.

3. *The River Channel*

From mile 27.7, the navigable channel develops upstream. The river channel is generally deep and wide, except for the following 12 reaches which require periodic dredging: miles 27.7 to 36.5; miles 37.3 to 38.6; miles 53.1 to 54.2; miles 99.0 to 106.5; miles 109.1 to 111.0; miles 131.7 to 131.9; miles 136.6 to 139.0; miles 141.2 to 145.8; miles 146.2 to 149.4; miles 167.6 to 170.8; miles 178.4 to 182.4; miles 183.5 to 184.1. Dredged channels are normally 300 ft. in width, but occasionally can be restricted to a minimum of 250 ft. The depth maintained therein can accommodate the maximum draft authorised by the Port Captain. By Notice to Mariners, the Port Captain has instructed all Masters and Pilots to reduce speed and to proceed with caution while navigating the aforesaid reaches, especially during the low water season.

4. *River Stages*

In response to the cycle of wet and dry seasons, the flow of the Orinoco River follows a relatively regular pattern of rise and fall each year. The river normally begins rising in late March or early April and continues to rise until it peaks at crest in late August. In September, the river begins a fairly steady recession until the extreme low-water stage is reached, generally in March. The amplitude of stage variation above the low water plane of reference (0.0 ft.) at Palua (Mile 181.7) averages about 35 ft. with min. variations of 31 ft. and max. variations of 39 ft. The effects of the flood rise decrease progressively below Palua and practically vanish in the upstreamward vicinities of the Boca Grande.

5. *Tides and Currents*

- *(a)* The indicated mean tidal range is 5.4 ft. Tidal influence is not experienced above mile 60 during high river stages. At low river stages, a tidal effect can be observed throughout the waterway, although it progressively diminishes, moving upstreamward. However, the tidal effect is still significant at Puerto Ordaz, mile 184, where a max. semidiurnal change of 1.7 ft. has been recorded.
- *(b)* The strength of river currents is generally commensurate with flow, the strongest currents occurring at high river stages. The velocity of currents at any one time generally decreases moving downstreamward. However, in certain locations, this pattern is affected by particular characteristics of river width and shape as well as by bottom gradient. Max. velocities of about 6 knots have been recorded.

6. *Navigation Aids*

- *(a)* The navigation aids installed along the waterway consist of buoys, beacon and ranges. All aids are lighted. Identification is provided by means of numbers representing the approximate mileage of each aid, to the nearest one-tenth of a mile. The last digit of numbers identifying white lighted aids is odd, while the last digit of numbers identifying red lighted aids is even. White lighted aids mark the left ascending limit of the navigable channel, while red lighted aids mark the right ascending limit. Aids are placed as to be intervisible, to the extent that — when abreast of any one aid — the preceding and following ones can be sighted. Consecutive aids always carry different light characteristics. Buoys are normally placed on the exact lateral limit of the channel (except for black buoys along the South channel at the Boca Grande); beacons, instead, are located at variable distances outside of the channel.
- *(b)* During the execution of dredging along any of the reaches which require periodic maintenance, buoys are generally moved 100 ft. outside of the channel lateral limits. This information is made available to ships by YVM.
- *(c)* The Ministerio de Comunicaciones, Direccion de Marina Mercante, publishes semi-annually a complete list of navigation aids. Monthly lists of changes are also published so that the complete current list can be maintained up to date.
- *(d)* Upon encountering damaged, inoperative, or misplaced navigation aids, vessels should immediately notify YVM.
- *(e)* Vessels are forbidden to make fast to any navigation aid.

7. *Dredging Aids*

Range structures, generally located close to shore or over the bank, are normally used to mark the lateral alignments of the channel along the reaches which require periodic dredging. These ranges are generally fitted with amber flashing, directionally beamed lights. The lights are extinguished except during execution of dredging. Dredging ranges *are not* to be used for navigation.

8. *Navigation Charts*
Navigation charts of the Orinoco Waterway should be aboard vessels for use by the Master. These charts are sold by the Instituto Nacional de Canalizaciones and are also available for purchase from the Orinoco Mining Company. If requested, CVG will, if possible, arrange to make the charts and latest revisions available through the Pilot who boards at Punta Barima, provided such request is received by radio (YVM) at least 48 hours in advance of the Pilot's boarding. A set of navigation charts, corrected to latest revisions, is maintained in the office of the Traffic and Ships' Agency of CVG in Puerto Ordaz. Masters may use this facility to keep their charts up to date.

DOCUMENTS: (Clearance, documentation and other requirements).
1. *Consignment of Inbound Vessels*
The official documents of all vessels proceeding to Puerto Ordaz should show the following consignment: to: CVG Ferrominera Orinoco, Ciudad Bolivar, Zona de Puerto Ordaz. The proper consignment of vessels proceeding to Palua, on official documents, is as follows: Iron Mines Company of Venezuela, Ciudad Bolivar, Zona de San Felix.
2. *Customs Requirements*
Vessels bound for Venezuela in ballast, without passengers, from foreign ports outside the West Indies or Guianas, require the following documentation:

The vessel must have a clearance certificate (Certificade de Zarpe) or sailing authorisation issued by the Customs Authorities of the port of departure, representing the government of the country the vessel is departing from. No consular certification need be placed upon this document.

Spare Parts List (Lista de Repuestos). It must contain a note of all the spare parts and objects for the service of the vessel, including fuel. To be signed by the Master and to be current as of the day of entering the Venezuelan port.

List of Effects for use of Captain and Crewmen (Lista de efectos personales de la dotacion). To be signed by the Master and to be current as of the day of entering the Venezuelan port. The Customs are very strict and will confiscate any article that appears new.
3. *Health, Immigration, and Police Requirements*
Vessels bound for Venezuela in ballast, without passengers, from foreign ports outside the West Indies or Guianas, require following documentation.
(a) Current individual International Vaccination Certificates for each member of the crew.
(b) Derat Exemption Certificate.
(c) Crew Lists (original and seven copies).
(d) Panama or Suez Canal or any comparable type measurement certificate.

Contraband: The Venezuelan law is very strict on this subject. It cannot be emphasised too strongly that all new articles, clothing, cigarettes, liquor, etc., must be declared and sealed-up upon arrival.

Meals for Pilots and Government Officials. It is requested these men be granted the privilege of eating in the officers' dining salon.

N.B. Masters of vessels calling at Trinidad for bunkers before proceeding to Venezuela must also have the documents stamped by the Venezuelan Consulate at Port of Spain.

PILOTAGE: In order to expedite the movement of shipping in the waterways, Masters are requested to establish contact with YVM station as soon as possible, giving ETA Seabuoy 0.1. At the same time a radio-telegraph message must be sent to Agents giving ETA Barima and cargo required. When vessels is 24 hours from pilot station, send another ETA via YVM.

After reporting the ETA in advance of arrival, try to contact directly, by VHF, "Amacuro Pilot" when the ship approaches Seabuoy 0.1 off the bar entrance (about 2 hours before arrival at the pilot station). (It is possible to contact Pilots 100 miles before arrival Seabuoy 0.1.)

After taking the Pilots aboard, report to Radio Marina and continue giving the ship's position according to the mile, up-river, at exactly every hour on the hour, and receive from Radio Marina the pertinent information concerning the traffic in the river waterway. If no communication can be established by voice radio aboard, comply by radio-telegraph by way of the YVM station. See "Ship's Officer's Reports" in 1st Section – "General".

Ship's Officer's Report: July, 1980.

Hourly position reports are made on W/T to YVM when the Pilot is aboard (He writes the telegrams in Spanish).

Pilots are the employees of the Venezuelan Government and act in an advisory capacity. The Master retains responsibility for the ship at all times.

(1) Pilotage is not required and Pilots are not available for navigation outside the pilotage zone. Masters will take charge of inbound and outbound navigation on the North or South channel outside Buoy 27 at the Boca Grande, without Pilot's assistance.
(2) Pilotage is mandatory within the Pilotage Zone No. 1 of the Orinoco. Inbound vessels will embark the government River Pilot in the upstreamward vicinities of Buoy 27. It is important that vessels pass Buoy 27 and be in sight of the pilot station at Barima in order to avoid any delay, as Pilots may not proceed until vessel is sighted. The government River Pilot will pilot the vessel while navigating the waterway; a special government Docking Pilot will generally take the vessel into and out of the Puerto Ordaz harbour.

Signals
(1) All signals used outside of the pilotage zone (that is to say. seaward of Buoy 27 – mile 27.7) shall conform to the International Rules for Prevention of Collisions at Sea.
(2) Within the pilotage zone (that is to say, inside of Buoy 27 – mile 27.7) the signals used shall be in accordance with the "Regulations for the Pilotage Zone No.1 of the Orinoco". It should be noted that these signals are peculiar to the Orinoco Waterway, and are not necessarily in conformance with the International Rules.
(3) Within the pilotage zone, special signals are used for passing dredgers at work along the waterway.

Speed
The Captain of the Port has the authority to impose speed restrictions. By means of "Notices to Mariners", the Port Captain has ordered that all vessels reduce speed while navigating by the following locations: San Felix Dock, mile 179.8; El Toro, miles 95.4 to 96.6. It is recommended that speed be also reduced while navigating by the Palua Dock (mile 181.8), Barrancas (mile 143.2), and Curiapo (mile 60.4). At the inception of the low water season each year (generally in early January), the Port Captain has in the past issued a "Notice to Mariners" instructing all vessels to reduce speed and proceed with caution while navigating the following river reaches: (1) miles 184 to 178, (2) miles 171 to 167, (3) miles 150 to 141, (4) miles 140 to 137, (5) miles 133 to 131, (6) miles 112 to 109, (7) miles 106 to 98, (8) miles 55 to 53, (9) miles 39 to 36.

ANCHORAGES:
(1) No ships are permitted to anchor either in the North or South channel at the Boca Grande. Vessels are to anchor at least 1 mile outside of Buoy EO or Buoy 0.1.
(2) Within the pilotage zone, no vessel is allowed to anchor in narrow channels, nor close to a turn.
(3) Between Buoy 27 — mile 27.7 and mile 137, vessels which need anchoring may do so by coming as close as possible to shore on the ship's starboard side.
(4) Between mile 137 and mile 184, the Pilotage Regulations provide for 3 permanent anchorages and 1 seasonal anchorage, as follows: Area No. 5 (permanent); miles 139.3 to 140.4. Area No. 6 (permanent): miles 150.1 to 151.7. Area No. 7 (permanent): miles 178.0 to 179.0. Area No. 8 (seasonal): at the junction of the Caroni and the Orinoco. It should be observed that Area No. 7, as determined in the Pilotage Regulations, partially encroaches on the narrow (dredged) channel and on shore. Vessels are to anchor in the naturally deep and wide part of the area.
(5) The low-water anchorage (for 1 ship only) previously established by the Port Captain between miles 182 and 183 is no longer in use. This area is currently used as the turning basin for vessels exiting the Palua Channel, upon sailing from the new Palua dock at mile 181.8.
(6) If due to emergency a ship is required to anchor in places other than the designated areas, it should do so in such a way as not to obstruct the channel and by taking the necessary precautions to avoid swinging around.
(7) Upon anchoring vessels should notify YVM.

MAX. SIZE:
(1) *Max. permissible draft.* The Port Captain of Ciudad Bolivar can establish the permissible draft for the Orinoco waterway to a max. of about 43 ft.

(2) *Controlling Depths and Authorised Draft*
The draft authorised by the Port Captain for the Orinoco Waterway is made public by means of a "Daily Bulletin of Depths and Draft" (Boletin Diario de Profundidades y Calado). Each daily bulletin issued by the Port Captain carries the following information, in Spanish and English:
(a) Controlling (minimum) depth between miles 184 and 133, and corresponding location.
(b) Controlling (minimum) depth between miles 133 and 42, and corresponding location.
(c) Controlling (minimum) depth between miles 42 and 0, and corresponding location.
(d) Predicted high tides (height and times) at mile 13.5.
(e) River stage (height of river level above low water plane) at Puerto Ordaz and Palua.
(f) Authorised draft, in feet and inches.

The controlling depths given for locations comprised between miles 184 and 42 are actual depths, and reflect depth conditions as of the date of the bulletin. The controlling depth given for locations comprised between miles 42 and 0 is referred to mean low water springs and does not include the height of tide at high water.

The authorised draft may be predicted either on the controlling depth existent between miles 184 and 42 or between miles 42 and 0, dependent upon whichever is the least.

When the controlling depth between miles 184 and 42 is the significant factor, the permitted draft authorised is at least 2 ft. less than the controlling depth in this sector.

When the controlling depth between miles 42 and 0 is the significant factor, the permitted draft authorised is generally less than the mean low water springs controlling depth but occasionally can be equal to the mean low springs controlling depth.

Whenever the MLWS controlling depth existing between miles 42 and 0 does not provide sufficient clearance under the keel of the vessel at low water, the Master is expected to navigate by the site where the controlling depth is located only at times when the height of tide will assure a safe passage.

(3) *Variations in authorised draft:*

(a) The authorised draft is generally increased or decreased by multiples of 6 inches.

(b) Throughout the year the authorised draft is susceptible to variations, according to the conditions of the depth and width existing in the channel at any one time. On the basis of average river stages it is estimated that the authorised draft should be about 33 ft. in the dry season from December to May.

During the rainy season, from June to November, the max. permissible draft may be as high as 43 ft.

HEALTH: Radio Pratique may be obtained by sending a message, after picking up Pilot, to the Port Health Officer, advising that there is no sickness on board, name of last port, ETA, number of crew and nationality of vessel and name and nationality of Master (This does not apply at Palua).

RADIO:

(a) Communications: Communications are generally handled through the radio-telegraph station at Puerto Ordaz, call letter YVM. This station is operated on a 24 hour basis. The operating frequencies are: 440 kHz; 472 kHz; 4322 kHz; 6505.5 kHz. The GMT — CQ times and frequencies are: 0900 hrs., 4322 kHz; 1200 hrs. 6505.5 kHz; 1430 hrs. 8722 kHz; 2000 hrs. 8722 kHz; 0030 hrs. 8722 kHz; 0300 hrs. 4322 kHz.

There is no charge for messages from ship to shore or from shore to ship handled directly through YVM. A VHF frequency modulated radio system provides voice communications along the Orinoco Waterway. Master sets for the system are installed in the Puerto Ordaz Radio-telegraph Station (voice call: "Master Radio"); Marine Radio handles shipping matters exclusively, The system consists of a high-band VHF frequency modulated voice radio network. To ensure a more efficient and satisfactory coverage, this system operates on dual frequencies alternating according to location, so that ships can either transmit on 161.700 MHz receiving on 159.000 MHz, or transmit on 161.150 MHz receiving on 159.850 MHz. For best results, ships should select frequencies according to the following: From sea to mile 50: transmit on 161.700 MHz, receiving on 159.000 MHz; From mile 50 to mile 112: transmit on 161.150 MHz, receiving on 159.850 MHz; From mile 112 to mile 159: transmit on 161.700 MHz, receiving on 159.000 MHz; From mile 159 to mile 184: transmit on 161.150 MHz, receiving on 159.850 MHz.

Pilot station at Barima Bar, Palua and Matanzas are equipped with this system. For the Puerto Ordaz area, ships will transmit to Marine Radio on a frequency of 43.02 MHz and to others on a frequency of 43.18 MHz, receiving in both cases on a frequency of 43.18 MHz.

Ship's Officer's Report: July, 1980.

The VHF Channels listed are not available on standard marine sets. All VHF work is done on Channel 16 (Pilot to Pilot), and reporting on W/T to Radio Marina.

(b) Control of Navigation:

(i) Navigation on the North (natural) channel at Boca Grande is free. However, vessels are requested to notify the Port Captain, Ciudad Bolivar, via "Amacuro Pilots" on Channel 16, upon arrival at Buoy EO, giving ETA at Buoy 27, mile 27.7.

(ii) Simultaneous navigation in opposite directions by 2 or more vessels is not permitted on the South (dredged) channel at the Boca Grande. The restriction is placed on inbound traffic, to the extent that any vessel wishing to enter the South channel requires prior authorisation from the Port Captaincy of Ciudad Bolivar. The request for permission to enter the South channel is to be addressed to the Port Captain, Ciudad Bolivar, via "Amacuro Pilots" on Channel 16. and is to be transmitted before the vessel reaches Buoy 0.1. Upon receipt of the request, the Port Captain will notify the vessel via "Amacuro Pilots" on Channel 16, whether permission is or is not granted, indicating, in the latter case, the approximate waiting time. Until permitted to enter, vessels are to anchor at least 1 mile outside of Buoy 0.1. Once that authorisation has been granted, vessels are to enter the South channel at the earliest opportunity. Any vessel which has been notified to wait may elect to proceed and enter through the North (natural) channel; in this case, the vessel will have to satisfy the requirements outlined in paragraph (1) above.

(iii) While navigating the Orinoco Waterway inbound or outbound vessels are to report their position to YVM hourly on the hour. Seaward of Punta Barima, to "Amacuro Pilots".

(c) Accident, Stranding, etc.

(i) Should a collision, stranding or other accident occur in the waterway, or should it be found necessary to take control of the vessel away from the Pilot for any reason, the Venezuelan law requires that a written report be made to the Captain of the Port by the Master of the vessel involved within 24 hours. The report is to be addressed to the Captain of the Port and may be handed to the Pilot or the ship's Agent for delivery. The Master need not appear in person before the Captain of the Port unless specifically ordered to do so.

(ii) Slight groundings or touching of banks and bottom may simply be noted on the reverse side of the receipt for pilotage signed by the Master.

(iii) In case of collision, stranding, slight grounding, touching of banks and bottom, or other accidents, vessels should immediately notify YVM.

Section A

MATANZAS: 08.17 N. 62.52 W. (See Plan Book)

N.B. See "Orinoco River" for all important entry requirements.

LOCATION: At Mile 195 from sea on Orinoco River.

ANCHORAGES: Between miles Nos. 195 and 197, Orinoco River.

MAX. SIZE: Length 600 ft., breadth 74 ft., distance between rail and hatch coaming 23 ft., max. draft 41 ft. in rainy season May to November, and 28 ft. in dry season.

RADIO: See "Orinoco River". Cables address of Matanzas terminal operators is "Sidor Matanzas – Telex 86366" and cables may be routed through Caracas, Curacao or Trinidad Radio.

TUGS: Every vessel over 2,000 registered tons is required to use a tug when berthing. Tug is 1,600 h.p.

BERTHING: Reinforced concrete structure consisting of 3 different sections running in a straight line, bearing 065°.

From West to East, 3 sections should be pointed out:

The first section, some 320 m. long, is used mainly for unloading bulk cargoes. Depth 10 m. below MSL.

The second section, 400 m. long, is for handling steel products. Depth 11 m. below MSL.

The third part, some 280 m. long, is for general cargo. Depth 11 m. below MSL.

The level of the river fluctuates from 0.6 m. over MSL at low river water in the dry season (February – March) to 14 m. over MSL at high river water in the rainy season (July – August).

The river bed drops sharply from the edge of the pier to the navigation channel where the depth reaches 30 m. below MSL.

Berth No. 1: Runs from bollard No. 1 to No. 7, length 155.30 m.
Berth No. 2: Runs from bollard No. 7 to No. 14, length 176.38 m.
Berth No. 3: Runs from bollard No. 14 to No. 24, length 204.25 m.
Berth No. 4: Runs from bollard No. 24 to No. 33, length 182.75 m.
Berth No. 5: Runs from bollard No. 33 to No. 39, length 160.45 m.
Berth No. 6: Runs from bollard No. 39 to No. 44, length 158.85 m.

In addition there is another berth, length 149 m., South of No. 6, with 24 ft. of water under MSL, that runs from bollard No. 38 to No. 44.

The reinforced concrete platform is 25 m. wide at the first section and 20 m. at the second and third sections. The surface of the pier is 15.5 m. over MSL.

CRANES: Berths No. 1 and No. 2 are served by 2 "Ceretti Tanfani" bulk unloaders of 22 tonnes capacity, able to handle clamshells of 4.5 cu.m., for iron ore, lime stone and other heavy bulk, 10 cu.m. clamshells for coke and other light bulk and orange peeler and magnets for unloading scrap iron.

The reach of these cranes is 10 m. from the pier edge. The working field is from bollard No. 2 to bollard No. 13.

Berths No. 3 and No. 4 are served by 6 "CMI" gantry/trolley cranes fitted with 2 hoists of 15 tonnes each, with a total capacity of 30 tonnes with the 2 hoists in tandem. The working field is from bollards No. 15 to No. 31.

Berths No. 5 and No. 6 are served by 3 "Ansaldo" gantry/trolley cranes of 16 tonnes capacity. The working area is from bollards No. 35 to No. 44.

At bollard No. 34 there is a stationary rotary derrick of 400 tonnes capacity and a reach of 18 m.

In addition, there are 3 "Grove" auxiliary moving cranes, of the telescopic type, with a rated capacity of 80 tonnes able to work at any part of the pier.

WAREHOUSES: From bollard No. 14 to bollard No. 29, running along the South edge of the pier, there are 10 adjoining warehouses, 30×100 m. each, 3 of them open at either end and the four in the middle roofed. All of them are provided with 1 gantry crane of 25 tonnes each.

STEVEDORES: Operations are round the clock, 7 days a week.

MEDICAL: Private hospital and several doctors available.

FRESH WATER: Available at rate of 12 t.p.h.

FUEL: Available ex-barge.

CUSTOMS ALLOWANCES: 200 cigarettes and 1 bottle spirits allowed per crew member for personal consumption.

IDENTIFICATION CARDS: Provided by authorities, and necessary if crew going ashore.

REPAIRS: Local workshops undertake minor repairs.

AIRPORT: Matanzas is served by Puerto Ordaz Airport with several daily flights from Caracas.

POLICE/AMBULANCE/FIRE: The entire length of the pier is fitted with fire hydrants and at the steel mill, about 6 km. away, there is a well equipped fire brigade with firetrucks, ambulances and rescue vehicles.

A first aid centre is located close to the fire station.

TELEPHONES: No telephones or telex services are available at Matanzas for the use of vessel's personnel. Local telephones only available at the pier and dock supervisor's office. Recommend vessels use their VHF to communicate with their Agents while at anchorage and when alongside.

REGULATIONS:

Pollution: Venezuelan law and Sidor's port regulations are very strict on air and river water pollution, the following restrictions being in force:

1. No smoke to be ejected from vessels' funnels while moored at Sidor's pier.

2. No waste, refuse or garbage to be dumped in the river while in the river channel, at Matanzas roads or laying alongside the pier.

3. All waste, refuse or garbage kept on deck, to be sprayed with anti-vermin and kept covered.

4. No salt water ballast, bilge water, oils, refuse water from galleys and lavatories, etc., to be pumped into the river.

In addition to whatever penalty the vessel shall incur under Venezuelan law, Sidor reserves its right to place the offending vessel "off hire" until she has complied with the regulations.

Safety: Under Sidor's security norms, every person which, for whatsoever the reason or business, has to transit or stand on the pier's platform is bound to use a hard hat. People doing any kind of work on the pier have also to use safety shoes.

GENERAL: Sidor's pier will discharge and/or load cargoes for other industries of the area provided a berth is available and no Sidor vessels are waiting. Permission for such operations must be requested prior to vessel's arrival.

Sidor require Agents to provide stowage plan and cargo documents prior to vessel's arrival otherwise Notice of Readiness will not be accepted.

OPERATOR: C.V.G. Siderurgica del Orinoco C.A., Codigo Postal 8016, Matanzas, Ciudad Guayana, Estado Bolivar, Venezuela. *Tel:* 991111 and 991118. *Telex:* 86366 and 86229 (Sidor). *Cables:* Sidor Matanzas. *Contact:* Superintendent, Port Services.

Section B

PALUA: 08.21 N. 62.41 W.

N.B. See "Orinoco River" for all important entry requirements. Specific details, relevant to Palua only, are as follows:

SUPPLIER: The ore supplier is CVG Ferrominera Orinoco C.A., cable address "Ferrominera". Their Palua office is fitted with VHF radiotelephone on 161.150/159.850 MHz and 2182 (call) kHz.

CLEARANCE: Agent will secure the Clearance dispatch.

Note: The Palua dock and facilities are the private property of CVG Ferrominera Orinoco C.A. All Company regulations must be obeyed by vessels and vessels' personnel.

The Bill of lading will be prepared by CVG Ferrominera Orinoco C.A., also the Commercial Invoice on the Consular Invoice form 138. The Inward Foreign Manifest, U.S. Customs form 7527–B, should be prepared by Master after sailing from Palua.

MAX. SIZE: Max. Draft 43 ft. Max. d.w.t. 70,000 tons.

HEALTH: The vessel will be boarded by the Public Health Doctor after docking at Palua; unless instructions to the contrary.

In the event that the Authorities have to board the vessel anchored out in the stream, an accommodation ladder should be rigged, preferably on the starboard side, to keep the port side clear for docking. Venezuelan authorities and workmen will not use Pilot ladders.

RADIO: Should a vessel receive radio advice at sea to proceed to Palua, and the clearance is to another port, it is requested to send following information to "Ferrominera" at earliest convenience. i.e. Master's full name and nationality, vessel's nationality, port and number of register, net and gross tonnage, type of vessel M/V or S/S, vessel's overall length and width, last port of call, original port of destination. This is necessary in order to comply with the Venezuelan Custom Law.

BALLAST: To provide the best manoeuvring trim on docking, it will be at the discretion of the Master to properly ballast the vessel. But in order to lose no time on loading operations, as well as to prevent short loading, the ballast should be pumped out as soon as possible, using utmost caution not to pump oil or sludge overboard in the port area.

APPROACH AND DOCKING IN PALUA: After passing the village of San Felix, and before reaching the turn off from the main channel, a tug and a Docking Pilot will meet the vessel and will assist in the docking manoeuvre. Although the Master will always be responsible for the vessel's movements either in the case of docking or undocking, the Docking Pilot will actually pilot the vessel to, and dock the ship at Palua.

At mile 180.5 the ship should leave the main channel, turning to the left to follow the new dredged entrance channel of approach which is marked by 2 flashing buoys: white on the port and red on the starboard side. Diamond-shape range marks of 6 ft. side, painted white with black diagonal cross, indicate the centre line of the approach channel. The front range, fastened on the ore loading pier, shows flashing green light, and the rear range, set on a tower shows flashing green light, and the rear range, set on a tower approximately 2,000 ft. away, has fixed green light.

The docking shall be port side to in all events; and please stow all hatch boards, or pontoons, or steel battens, etc., on the starboard side of the hatch as this will keep the gear cleaner and lessen the work of the ore handling gang.

Vessel's accommodation ladder is used. Nothing should overhang the port side of the vessel on docking.

If the loading berth is not available the arriving vessel would be instructed to anchor at an anchorage just below the entrance to Palua approach channel at mile 179.

LOADING DOCK: The ore loading port is located at mile 181.5 of the Orinoco waterway, along the left bank going up-river. The new steel dock here is aligned up and down stream in the general direction of the current. It is 907 ft. long between its pointed heads, with 791 ft. of boarding side along, the deck fixed at about 6 ft. over the maximum rise of the river in the flood season. It has a strong fender system of steel structure covered with timber overhanging the side, down to near the lower river stage; and is fitted with 14 bollards plus 2 more, one on each head, for proper docking and securing the vessel.

Once the vessel is moored alongside the new ore loading dock, there shall be no further shifting necessary to load, as the loading tower moves along the dock on rails to facilitate the loading through the various hatches.

LOADING: The ore handling and loading equipment for Palua has a capacity to load 3,000 metric tons of ore per hour, for the time being. With this capacity, the vessel's mooring lines should be tended during the operation.

The boom of the loading tower is so designed as to allow free movement in any direction, fore and aft. The gantry and boom travel along the dock for a distance of 518 ft., and can place the ore at a distance horizontally out from the dock fenderline of 23 ft. minimum and 62 ft. maximum at the highest water stage, and from minimum 29 ft. to maximum 67 ft. horizontally out at the lowest stage.

Care must be taken during the course of loading to avoid piling the ore too high in the holds, as this necessitates hand trimming before the hatch covers can be properly secured, and incurs unnecessary trouble.

UNDOCKING: The Master, assisted by a Docking Pilot, if required, will handle the vessel on leaving the dock, going upstream from the dock not less than 0.75 miles distance to the turning basin in the same heading as when the ship moored alongside. One tug (or 2 tugs if required), will go alongside the ship prior to undocking and will assist the vessel until it is headed downstream in the main Orinoco channel. The amber lights at the heads of the dock form a range to mark the shoreside boundary of the local dredged channel. A red light high up on the loading gantry will come in the same range as the 2 amber lights. In the turning basin a tugboat will assist the vessel swinging downstream.

When the ship is in the main channel, properly headed downstream, the Docking Pilot will leave on the tug, and the River Pilots (2 of them) will assume the navigational direction. Report to Radio Marina by voice radio and give ETA at mile 31.

Report again to Radio Marina giving position every hour, and try to contact Barima Pilot station sometime before arrival at mile 31, where the Pilots will disembark.

If voice radio communication is not possible, comply by radiotelegraph by way of the YVM station.

REGULATIONS: The Venezuelan law is very strict on the subject of contraband. It cannot be stressed strongly enough that all *new* articles, clothing, cigarettes, liquor, etc., must be declared and sealed up on arrival.

Concerning passes, the regulation states that "members of the crew who are not officers of the vessel, in order to go ashore and return aboard, have to be supplied with an identification card to be issued by the Purser of the vessel or his substitute, which card will contain the name of the vessel, the name of the crew member and the date of issue. This card will have to be signed by the person issuing same and has to be authorised by the respective officer of the Port Captain's office for the district".

GAS-FREE CERTIFICATE: Vessels reporting to Palua to load ore should have the holds and cargo compartments swept clean and ready to receive cargo. Also, any combination ore/tanker vessel tendering to load iron ore at Palua shall present, along with the notice of readiness, a Gas-free Certificate if said vessel has in the past been employed in the carriage of petroleum products. Such certificate shall be dated subsequent to the discharge of the vessel's last petroleum cargo. But they are advised that around Palua in Venezuela there is no chemist available for granting such a Gas-free Certificate. It may be secured before arriving at Venezuela by calling at Trinidad, reporting to cable address: Harriman, Port of Spain.

In case of necessity, or for convenience, it could be arranged for the chemist to travel to Venezuela to meet the ship in Palua, advising Harriman (Port of Spain) at least 3 days before arrival at Palua.

If the vessel is equipped with a gas-indicating meter (explosimeter), CVG Ferrominera Orinoco C.A. will accept the Master's certification in writing that the vessel is gas-free. However, they reserve the right to check the vessel with their own equipment prior to acceptance.

CONSULS: At the present time there are no Consular Agents located around Palua, the nearest being in Ciudad Bolivar or Caracas.

FLOOD SEASON: The port experiences a yearly flood season from the middle of June to the middle of November, to a max. of about 38 ft. at the last days of August, above the lowest stage (during the first days of April) in the dry season that occurs from the middle of November to the middle of June.

TIDE: The wind in the locality blows generally upstream, and on exceptional occasions during the dry or low-river season, when the current is weak, does overcome the current and cause the anchored ships to tend with stern upstream.

REPAIRS: Minor emergency repairs of mechanical, electrical and electronic types may be carried out in the shops by the personnel of the Iron Mines Company of Venezuela. The American Bureau of Shipping has a surveyor at Puerto Ordaz, near Palua.

MEDICAL: There is a medical dispensary at Palua, and a hospital of the Company at El Pao, where seamen may be admitted when requiring hospitalisation in emergency cases.

FUEL: All grades of bunker fuel are available at Palua, delivered by barge.

FRESH WATER: Drinking water is available at the dockside in limited quantity of about 100 tons every 24 hours. Small amounts of fresh provisions may be obtained in the locality.

Section C

PUERTO ORDAZ: 08.21 N. 62.43 W.

OPERATORS: CVG Ferrominera Orinoco.

LOCATION: The operations of the CVG Ferrominera Orinoco are centred in the State of Bolivar in Eastern Venezuela and iron ore is loaded into ocean-going vessels at Puerto Ordaz 08° 21′ N., 62° 43′ W., at the junction of the Caroni and Orinoco Rivers, approximately 184 nautical miles from the open sea.

GAS-FREE CERTIFICATE: Any combination ore-tanker vessel tendering to load iron ore at Puerto Ordaz shall present, along with the notice of readiness, a gas-free certificate if said vessel has in the past been employed in the transportation of petroleum products. Such certificate shall be dated subsequent to the discharge of the vessel's last petroleum cargo. Gas-free certificates can be obtained through an approved surveyor in Puerto Ordaz.

HEALTH: Vessels will be boarded by the Public Health Doctor in the stream off Puerto Ordaz. He will not come up a Pilot ladder and will insist on an accommodation ladder which should be rigged and ready when he approaches. In order not to delay docking, this accommodation ladder should be rigged on the port side during low river stage, and starboard side during high river stage.

RADIO: Should a vessel receive radio advice at sea to proceed to Puerto Ordaz, and the clearance is to another port, the Master must radio station YVM Puerto Ordaz, and advise the name of the vessel, flag, port of embarkation, original port of destination, Master's name and number of members in the ship's crew. This is necessary in order to comply with article 17 of the Venezuelan Customs Law.

TUGS: All vessels touching at Puerto Ordaz will be assisted by a tug in docking and undocking manoeuvres. Line-handlers are available on the dock to secure mooring lines on vessel's arrival, and to release them on vessel's departure.

BERTHING:

1. **The Harbour:** The Puerto Ordaz Harbour extends from mile 183.5 to mile 184.1 of the waterway. The harbour consists of a natural basin formed by the mouth of the Caroni as it flows into the Orinoco. The width of the turning area within the basin varies from a min. of about 1,600 ft. at low water to a max. of about 2,000 ft. at high water. The lighted buoys marking the navigable limits on either side of the harbour are moved to different positions according to river stages in order to achieve full utilisation of navigable waters. The bottom of the harbour is generally rock, with scattered layers of sand overburden deposited as sediment by the river. This sand is regularly removed by dredging in order to maintain depths which will accommodate the maximum draft authorised by the Port Captain. The bottom configuration across the harbour consists of a rocky shelf extending about 900 ft. from the face of the dock. Beyond this shelf the bottom slopes steeply into a deep gorge, then rises to form a sandy beach along the opposite shore. The velocity of river currents at this site varies according to stage levels. A slower current is generally experienced over the rocky shelf adjacent to the dock, with velocities averaging about 1.5 knots at flood stages and about 0.5 knots or less at reduced river stages. The velocity of the current over and along the deep gorge averages about 3.5 knots at flood stages and 1.5 knots or less at reduced river stages. During extreme low water, the basin is subject to tidal influence and the velocity of currents is minimal, although there is no reversal of flow. The direction of the current is aimed slightly toward the face of the dock at its S.E. end but deflects away from the pier about 500 ft. downstreamward. Access to the harbour is by way of a naturally deep and wide fairway which is the continuation of the gorge as it enters the Orinoco River.

2. **The Dock:** The Puerto Ordaz dock is located along the right ascending side of the harbour and extends outward from shore on a S.E. by East alignment. The all-steel fixed-height dock is 1,885 ft. long; its elevation is 41 ft. above low water plane (0.0 ft. stage). This dock is fitted with a strong fender system and with a sufficient number of accessible bollards for proper docking and securing.

3. **Arrival:**

(a) Notice of Readiness: When completely ready to receive cargo, vessels will submit "Notice of Readiness" to CVG Ferrominera Orinoco. Vessels will be loaded in the order in which Notices of Readiness are accepted by CVG Ferrominera Orinoco. The Company will advise when the vessel may proceed alongside the dock.

(b) Docking: Special Docking Pilots are provided for the docking and undocking of vessels at Puerto Ordaz. These Pilots are qualified River Pilots, thoroughly familiar with local conditions. All vessels will dock starboard side to. During the low water stage, which is from the middle of November to the middle of June, no gangway should be rigged and nothing should overhang the starboard side of the vessel. When the river is sufficiently high which is from the middle of June to the middle of November vessels are requested to have starboard gangway or accommodation ladder rigged and ready to lower immediately after docking in order to expedite the commencement of loading. Venezuelan authorities and workmen will not use Pilot ladders. Vessels reporting to Puerto Ordaz to load ore should have holds and cargo compartments broom clean and ready to receive cargo. Considerable time will be gained if this requirement is met prior to reporting.

(c) Hatches: On arrival at Puerto Ordaz all hatch boards or pontoons, beams, tarpaulins, steel battens, wedges, etc., should be stowed on the port side of the hatch. This will keep the hatch gear cleaner and lessen the work of the ore handling clean-up gang.

(d) Ballast: In order to lose no time with the loading operations, as well as preventing short-lifting, all ballast should be pumped out before arrival at the dock. Use utmost caution not to pump oil or sludge overboard in the port area. CVG Ferrominera Orinoco Ships' Agency Representative will contact vessel on arrival and will assist in every way possible.

4. **Departure:** All vessels which have completed loading at Puerto Ordaz and have received the latest river information from the port offices, and are ready for their river transit in every respect, will proceed outward via the Orinoco Waterway, disembarking the Pilot at mile 31. Once the Pilot has disembarked, vessels shall proceed over the South (dredged) channel to mile 0, and exit the waterway.

TANKERS: See "Punta Cuchillo".

MEDICAL: There is a hospital at Puerto Ordaz which will admit seamen requiring hospitalisation.

FRESH WATER: Drinking water is available alongside the dock.

FUEL: Bunker "C" and diesel oil is available.

CONSULS: An Italian consulate Agent at Puerto Ordaz, nearest consuls for other countries at Cuidad Bolivar or Caracas.

REPAIRS: Minor emergency repairs may be carried out in the shops of CVG Ferrominera Orinoco.

TIME: The legal time of Venezuela, which is 4 hours behind GMT, shall be used in Pilotage Zone No. 1 of the Orinoco river.

SHORE LEAVE: Permitted, but it is mandatory that all crew members should report back to their respective ships before sailing time.

GENERAL: 1. *Ore Loading Equipment:* The ore handling and loading equipment installed on the pier has a speed ratio of 6,000 long tons of ore loaded per hour. Due to this great loading capacity the vessel's mooring lines must be tended at all times.

2. *Handling Facilities:* A movable 110-ton, rail mounted stiff-leg derrick is installed on the dock for the handling of general cargo.

3. *Provisions:* Small amounts of fresh provisions are available.

4. *Surveyor:* The American Bureau of Shipping has a non-exclusive surveyor in Puerto Ordaz. Lloyd's has an Agency in Ciudad Bolivar with a branch office in Puerto Ordaz, and will appoint surveyors upon request.

AGENT: Mailing Address: CVG Ferrominera Orinoco C.A., Agencia de Barques, Puerto Ordaz. Telex No. 86249 (ORINADM).

CVG Ferrominera Orinoco acts as ship's Agent for all vessels consigned to load iron ore at Puerto Ordaz. This function is performed by the Superintendent, Traffic & Ship's Agency and his staff, whose offices are located adjacent to the loading dock at Puerto Ordaz.

PUNTA CUCHILLO, (Puerto Ordaz Terminal):
08.20 N. 62.47 W. (See Plan Book)

N.B. See "Orinoco River" for all important entry requirements. Specific details relevant to Punta Cuchillo only are as follows:

OPERATORS: Lagoven S.A.

LOCATION: The terminal and dock is located near Mile Post 192 on the South side of the river.

PILOTAGE: Government Pilot will pilot vessel to Puerto Ordaz. In some cases this same Pilot will act as Mooring Pilot and dock vessel at the terminal. If River Pilot does not also act as Docking Pilot, the River Pilot will disembark at mile 178 during low water, and mile 183, in high water, and a Docking Pilot will embark and take the vessel to mooring.

Pilots are obtained at Buoy 27 of the old channel, which is the same as Buoy 27.7 of the new channel and is located 5 miles West of the old lighthouse at Punta Barima at Lat. 08° 36′ 00″ N., Long. 60° 30′ 40″ W. It is important that vessels pass this buoy and be in sight of the Pilot Station (1 mile E.S.E. of Punta Barima Lighthouse), as Pilots will not proceed to the vessel until it has been sighted.

MAX. SIZE:

Gauge Reading	*Maximum Draft*	*Tide Required at Bar*
12 ft. – 14 ft.	33 ft.	None
14 ft. – 17 ft.	34 ft.	None
17 ft. – 20 ft.	35 ft.	None
20 ft. – 23 ft.	36 ft.	None
23 ft. – 26 ft.	37 ft.	None
26 ft. – 29 ft.	38 ft.	None
29 ft. – 32 ft.	39 ft.	None
32 ft. – 35 ft.	40 ft.	None
35 ft. – 38 ft.	41 ft.	half of high tide
38 ft. – 41 ft.	43 ft.	half of high tide

TUGS: The use of tugs is necessary in docking and undocking manoeuvres of boats at this Marine Terminal. Alcoa has a 2,100 h.p. tug available for this service. A tie-up launch will be provided to assist in the mooring of the vessel, and will handle all the mooring lines before and after loading.

BERTHING: The dock at the terminal consists of a docking platform, 2 breasting dolphins and 2 mooring dolphins. The docking platform is connected to shore by a 10 ft. causeway capable of carrying a light truck.

At mean low river stage, water depth at the face of breasting structures is 40 ft. The bank rises sharply from face of dolphins toward shore. The 40 ft. depth contour extends parallel to shore for a considerable distance upstream and down stream from the dock, allowing a flat approach angle.

Current is negligible during low river stage and is approximately 6 knots at midstream at high river stage. Current runs generally parallel to the face of the dock at the dock site.

Top of dock elevation is 45 ft. above low water stage. Buffering system extends from a point below low water stage to a point immediately below top of dock. Nothing should overhang the shoreward side of the vessel when docking during the lower stages of the river. The buffering system is designed to accommodate forces exerted by a vessel of 47,000 tons displacement, approaching the dock with a velocity component perpendicular to the dockface, of 0.5 ft. per second.

Bollards for vessel's lines are provided at the mooring dolphins and at the breasting structures. Mooring dolphins will safely withstand 200,000 lbs. of mooring line tension.

The facilities include a 24 in. diameter submarine pipe-line which crosses the river a short distance down-stream of the dock. The crossing is marked by triangular-shaped signs on both banks of the river. Masters are cautioned against use of vessel anchors in this area.

The terminal pumps are capable of loading oil aboard ship at the rate of approximately 14,000 bbls.p.h.

INWARD CLEARANCE FOR DIVERTED VESSELS: Vessels diverted to Puerto Ordaz to load cargo should submit all documents, except consular mail, which they will not have. In lieu of this, they should submit 4 copies of the cable to divert, leaving enough space for the translation in Spanish. Vessels diverted at sea to Puerto Ordaz (Lagoven Terminal) which do not have a Venezuelan clearance on board must advise Lagoven at Puerto Ordaz, by radio as soon as they receive their orders to change destination. The following information must be given: Master's name, vessel's flag, net tonnage, last port of call, port to which originally cleared and ETA. This information is required in order that inward clearance may be arranged with government officials in ample time prior to vessel's arrival. In absence of this information, vessels will be subject to a fine.

SAFETY: The following is a condensation of the safety precautions that should be observed when the vessel is alongside the dock:

(i) All passageway doors leading to the cargo deck areas are to be kept closed during cargo-loading operations.

(ii) Ship's firefighting equipment must be kept ready at all times while berthed at Lagoven dock.

(iii) Smoking or carrying lighted or unlighted pipes, cigars or cigarettes on the weather decks of the vessel, or on the dock, is strictly prohibited under all circumstances. Masters are requested to instruct their crew not to throw lighted cigars or cigarettes over the side or out of the portholes.

(iv) An efficient watch must be maintained on deck and in the engine-room on the vessel, and a sufficient number of men must be on board at all times to move the vessel any time, in case such is required.

(v) If the galley is located near oil-handling operations of any nature, the skylight lids should be kept down and secured to prevent the galley being sprayed with oil in the event of a burst hose.

(vi) Ventilators in the vicinity should be turned away from the scene of operation.

LOADING: Monagas crude is the only cargo available at the Puerto Ordaz Terminal. This crude has an API gravity of 11.9° to 12.5° F. (6.490 – 6.517) U.S. barrels per long ton. This cargo must be heated to approximately 140° F. in order to attain normal discharge rates.

Loading is accomplished through 3×10 in. hoses provided with 10 in., 150 lb. ASA flanges. Hoisting gear is provided for handling the hoses. A dock crew will connect the cargo hoses and disconnect them on completion of loading. Some adapters and other tools are available on dock. The oil will be loaded at an elevated temperature.

Precautions, as are common for any heavy oil, should be taken to ensure that no ballast water is left in any tank to be filled with this oil. If the cargo is contaminated with water, the water will not separate from the oil. The salt content of the oil will be raised approximately 10 lb. per 1,000 barrels for every 0.10% contamination by sea water.

All cargo compartments must be stripped dry. Cargo pipe-lines should be drained and/or purged of water.

There is no provision at the Puerto Ordaz Terminal for disposal of dirty ballast or tank washings. Tankers bound for Puerto Ordaz for loading must dispose of all dirty ballast and tank washings before entering the Orinoco River.

Prior to proceeding to sea, all Butterworth plates, cargo tank hatch covers and ullage plugs should be inspected to ensure against entry of salt water.

HEALTH: Vessel will be boarded by the Public Health Doctor in the stream off San Felix or Puerto Ordaz or occasionally at the Terminal. If he boards before docking, an accommodation ladder should be rigged and ready when he approaches, as he will not come up a pilot ladder.

RADIO: Vessels diverted at sea to Punta Cuchillo which do not have a Venezuelan clearance on board, must advise Lagoven by radio as soon as they receive their orders to change destination. The following information must be given: Master's name, vessels flag, net tonnage, last port of call, port to which originally cleared and ETA. This information is required in order that inward clearance may be arranged with government officials in ample time prior to vessel's arrival. In absence of this information, vessel will be subject to a fine.

FRESH WATER: Fresh water is available ex-barge; cable advice of 24 hours is required. Dry provisions may be obtained in very limited quantities.

FUEL: Bunker fuels are available at all hours from Astilleros Orinoco C.A., who operate a floating storage and blending facility in the Orinoco River. Bunker fuels may be received at Lagoven dry dock while loading crude. Full cargoes can be made available.

TIME: GMT minus 4 hours.

MEDICAL: Medical assistance can usually be arranged, particularly in the case of an emergency.

REPAIRS: No major repair facilities are available. However, small repairs can be taken care of through local machine and electrical shops, and shore labour can be obtained if required.

AGENCY: Lagoven handles all papers and documentation connected with the ship's business. Lagoven will also help the ship's Master in providing required land transportation, limited provisions, or any other assistance that may be required for the operation of the ship's normal business. Alcoa will also assure that the ship's requirements are met in regard to Sanitary Inspection, Customs Inspection and Guardia Nacional.

Section E

VENALUM TERMINAL: 08.18 N. 62.50 W.

SHIPMASTER'S REPORT: February, 1981.

LOCATION: Mile 194 on Orinoco River. See "Matanzas – San Felix" in "Plan Book".

ENTRY: See "General, etc." under Orinoco River.

TUGS: Are summoned by Pilot when required.

BERTHING: Modern quay built on piles parallel to the bank with access by two piers, one at either end of the general cargo quay, allowing a one way system to be operated.

Length of general cargo quay – 215 m.
Length of bulk cargo quay – 85 m.
Depth alongside at lowest state of river – 12 m.

CRANES: The general cargo quay has two container cranes of 35 tonnes S.W.L. each. Aluminium ingots are the main cargo but other cargoes are handled. Container spreaders are available and also electro-magnets for use with the cranes.

BULK CARGO FACILITIES: Also see "Berthing".

The bulk cargo quay is served by an elevator with two suckers and is used exclusively for the discharge of alumina. An average rate of 200 tonnes/p.h. is claimed.

STEVEDORES: Working hours – 24 hours a day, 7 days a week.

AUTHORITY: Industria Venezolana de Aliminio C.A., Zona Industrial Matanzas, Puerto Ordaz – Edo Bolivar. *Tel:* 27177 (ext. 359 – 530). *Telex:* 86302, 86437. *Contact:* L. Rene Siampon, Traffic Chief.

END OF ORINOCO RIVER SECTION

PERTIGALETE: 10.15 N. 64.34 W.

LOCATION: Situated in a sheltered bay about 2 miles East of the port of Guanta, or about 4 miles from the pilotage zone situated in the North.

PILOTAGE: The pilotage zone in Pozuelos Bay is the same as for Guanta, i.e. an area situated between the islands of Borracha and Chimana, in the Bay of Pozuelos (formerly called Bergantin Bay).

From the pilotage zone for the port of Guanta/Puerto La Cruz, the private pier Pertigalete is to be approached by sailing between the Isla de Plata and the island of Cachicamo. Pilotage is compulsory in and out and is performed by well-trained government Pilots. The navigation is considered very safe.

MAX. SIZE: The depth of water for ocean-going vessels alongside the Pier is 20 ft. (shore side) to 40 ft. (sea side).

TUGS: Available from inward clearance port at Guanta/Puerto la Cruz.

BERTHING: The private pier in Pertigalete for berthing ocean-going vessels is up to 150 m. (492 ft.) long. The apron is ample and allows easy manoeuvre of trucks with cement. On the same pier the cement factory is regularly receiving raw material and machinery, but the berthing is along the West side of the pier for coastwise trade, so does not interfere with operations for ocean-going vessels. There are chutes, conveyor belts from the nearby silos, and a heavy crane.

TANKERS: Berth at private wharf at Pamatacualito, operated by Baroid de Venezuela SA. Length of berth 113.60 m., depth alongside 10 m.

LOADING: The cement factory is able to deliver to the pier 2,000 to 2,300 bags per hour, to be loaded simultaneously into arrived vessels. According to experience load rate is about 300 bags per hour and gang by steam winches, and about 400 bags per hour and gang by electric or hydraulic winches.

STEVEDORES: Loading operations are performed exclusively by the personnel of the cement factory. Winchmen are also supplied by the cement factory. All costs, including overtime, are for account of the cement factory, inclusive of stowing and trimming the vessel.

Under normal conditions on Saturday afternoon there is no work, but almost without exception the cement factory works overtime on Saturdays if by doing so the vessel can be despatched that day. On holidays, if circumstances call for urgent operation, the cement factory has the option to work overtime. Work on Sunday is prohibited.

AUTHORITY: Private pier of C. A. Venezolana de Cementos and is under the jurisdiction of Customs and Harbour Master of Guanta/Puerto la Cruz, Eastern Venezuela. All charter business and general administration is covered by Caracas Headquarters of C. A. Venezolana de Cementos.

AGENT: Head Office (Management and Control), Brokers Chartering and Tramp Agents, Victor H. Selinger, S.A., PO Box 1632, Caracas. 1010-A. Cables: "Selvic" or "Seltank". Tel. (02) 81.02.71. Telex: 21402, 21934, 22859, 21631. Local Office: PO Box 4194 Puerto La Cruz. Tel. (081) 662107, 662665. Telex: 81340. Cables: Selvic Puertolacruz, Seltank Puertolacruz.

PUERTO CABELLO (inc. Borburata): 10.29 N. 68.01 W.

(See Plan Book and Late Plans)

DOCUMENTS:

Last Port Clearance.
6 Crew Lists.
6 Passenger Lists.
3 Stores Lists.
3 Narcotics Drugs Lists.
2 Lists of Personal Effects.
1 Vaccination List.
Derat Certificate.

PILOTAGE: Pilotage is compulsory, but vessels must first anchor in roads 1 mile North of Punta Brava to await entry formalities and berthing orders.

MAX. SIZE: Bulk Cargo Pier: up to 32 ft. draft.
Inner Port: up to 28 ft. draft. Also see "Tankers".

TUGS: The use of tug-boats within the port is compulsory both for entering and leaving port, as well as for manoeuvres in the port basin, for foreign flag ships over 300 tons.

BERTHING: The port entrance is 100 m. wide in direction West to East. Berth No. 1 and half of Berth No. 2 are along the same entrance channel, where ships are berthed only as an exception or when the port is rather congested. The total length of the North (main) Pier for the berthing of ocean-going vessels is 1,025 m., room enough for 6 to 8 vessels. For administrative reasons the pier is divided into 8 berths of about 128 m. each. Between Berths No. 2 and 3, the pier is bent Southwards. Along the pier there are warehouses which under normal circumstances provide sufficient indoor space.

Along the East Pier, of 350 m. length, there are no warehouses. This pier gives berthing facilities to 3 or 4 middle-sized vessels.

Along the South Pier, of 500 m. length, there are 2 warehouses. This pier is exclusively used for coastwise shipping, fishery and small craft in general.

The dredged channel along the East Pier is only 80 m. wide. This is the only channel which connects the main basin of the port with the South basin of the port, the latter served through the South Pier.

Ro-Ro facilities available.

BULK HANDLING FACILITIES: 400 m. long new pier, designed exclusively for the handling of bulk cargoes.

This bulk cargo pier has an apron of about 25 m. and allows ships with a draft of 10 m. at any time.

Ships moored along this new pier are not able to take water there, but have to be shifted to the general cargo piers in the port of Puerto Cabello.

There is no telephone installation on the new pier.

Tug-boat service and assistance of Pilots is compulsory to negotiate the distance to and from the bulk cargo pier.

General cargo is not allowed to be handled at this pier. There are no cargo handling facilities whatsoever and no kind of rolling equipment either. All the vessels, unless they have up-to-date discharging equipment of their own, have to provide derricks of minimum 5 tons capacity to support the SKT discharging equipment of receivers. The cargo is discharged in bulk cargo trucks, fully closed and with only rather narrow manholes for the SKT arm.

The new grain terminal has been opened. The wharf is 400 m. long and allows 2 vessels to berth. Max. depth 30 ft. Average discharge rate 1,500 tons per day.

TANKERS: *Borburata:* The Maraven Terminal lies about 2 miles East of the port entrance.

Berth No.	*Max. length*	*Max. beam*	*Max. draft*
1	400 ft.	—	20 ft.
2	575 ft.	72 ft.	31 ft.

No. 1 berth is used for bunkering only.

No. 2 berth is used for the discharge of refined products and bulk chemicals. It is fitted with 4×8 in. Chicksans and a range of hoses from 4 in. to 8 in.

A Pilot is compulsory, and boards at Puerto Cabello. If the vessel is cleared outwards at Borburata, the Pilot may return to the pilot station by road.

Berthing and unberthing in daylight only.

Also see "Shipmaster's Report".

Lagoven Terminal: The buoy mooring is used for the discharge of petroleum products. Max. length 198 m. Max. beam 28 m. Max. draft 34 ft., will be increased to 38 ft. Max. Tonnage 40,000 d.w.t. Vessels berth using 5 shackles on the port anchor, and 6 stern lines to 3 mooring buoys.

Terminal Marino Holanda: Consists of 3 buoys situated in a depth of 45 ft. near Guaguaza Lighthouse. Used for loading/discharge of Chemicals.

STEVEDORES: *Straight time:* Monday to Friday: 0700 – 1100 hrs. and 1300 – 1700 hrs.

Overtime: Monday to Friday: 1800 – 2300 hrs. Normally overtime beyond 2300 hours is not permitted.

Relief Gangs: Obtainable, if there are not too many ships working in the port at a time, for the hours from 1100 – 1300 and 1700 – 1800.

Work on Sunday: Not permitted except for passenger vessels, and considered as such are those carrying more than 60 passengers, and with a medical doctor on board.

Saturday afternoon work: Not permitted. But if a vessel can terminate operation and sail with a maximum of 3 additional hours' work, a special permit can be obtained from Customs and Port Authorities. In such case, the additional working hours are considered straight time work.

FRESH WATER: Water is supplied through pipe-line on the pier, day or night. Ship's hoses used.

For night work, a special gratuity to watermen is customary.

The drinking water in Puerto Cabello is tropical treated, well-filtered and wholesome.

Every vessel of over 600 net tons calling at Puerto Cabello, and other ports in Venezuela, should arrange to take water only at Puerto Cabello in order to avoid double water dues.

OPENING/CLOSING HATCHES: Is not performed by the National Port Services, but instead either the ship's crew or hired assistance labour must be used. Recommended that ship's crew open and close hatches.

WATCHMEN: A very careful watch must be maintained in and around the accommodation as ships' safes and cabins have been broken into.

REPAIRS: The adjacent Naval Yard, the entrance to which is within the main port, opposite the North Pier, is equipped for minor repairs both on engine and hull. For emergency purposes, the dry dock could be used. Its capacity is for ships up to 30,000 to 35,000 tons. All repairs on the hull are effected by a special crew transferred from the Naval Yard.

At the dry dock there is 1 crane of 15 tons capacity. Within the Naval Yard there are 2 slipways for ships of 125 ft. max. and 210 ft. length max. respectively.

Venezuelan Navy ships always have priority.

REGULATIONS: Port regulations referring to contamination of the port waters will be strictly applied and fines for contravention will be imposed.

No maintenance to bridgehouse, hull or deck should be carried out whilst in port unless special permit issued by the Port Captain has been obtained.

SHIPMASTER'S REPORT: November 1984 (see "Late Plans").

Vessel: LOA 170 m., beam 26 m.

Berth: Maraven Berth at Borburata.

Pilot: Pilot boards off Puerto Cabello during daylight hours only.

Max. Draft: 32 ft.

Tugs: When berthing, 2 tugs are made fast on the Main Deck fore and aft.

When unberthing 2 tugs are used, 1 tug tows aft and the other stands by forward.

Charts: BA 1523 and 1966.

AGENT: Head Office (Direction and Control). Brokers, Chartering and Tramp Agents, Victor H. Selinger, S.A., PO Box 1632, Caracas, 1010–A Venezuela. Cables: "Selvic" or "Seltank". Tel. (02) 810271. Telex: 21402, 22859, 21631, 21934. Local Office: PO Box 174 Puerto Cabello. Tel. (042) 63750, (042) 63549. Cables: "Selvic Puertocabello" or "Seltank Puertocabello". Telex: 42479.

PUERTO DE HIERRO: 10.38 N. 62.05 W.

DOCUMENTS:

Last Port Clearance.

6 Crew Lists.

6 Passenger Lists.

6 Stores Lists.

6 Narcotic Drugs Lists.

2 Health Declarations (forms provided and filled by doctor on arrival).

Derat Certificate.

PILOTAGE: Pilot boards at Sea Buoy Lat. 10° 37′ N., Long. 62° 06′ W. If no pilot boat meets vessel on arrival, ship must anchor to wait orders. Send 7 day, 48 and 24 hour ETAs to cable address "Transterm Guiria". Vessels should anchor in the vicinity of Sea Buoy. No radio-telephone available.

ANCHORAGE: Vicinity of Sea Buoy. Good holding ground.

RESTRICTIONS: Vessels may have to wait at anchorage until slack water for docking when tide/current is strong.

MAX. SIZE: Dock, East berth: 30 ft. at LW; 33 ft. at HW; 690 ft. length, 90 ft. beam. Dock, West berth: 19 ft. at LW; 32 ft. at HW; 600 ft. length, 60 ft. beam. Also see "Berthing".

HEALTH: Doctor boards at berth and grants Pratique. Any suspected disease or fever to be reported at that time. Vessels arriving from a Venezuelan port do not require Pratique.

RADIO: La Guaira, Venezuela.

TUGS: None available.

BERTHING: Berthing at times limited to slack water period depending on strength of tides. Pilot will advise.

Bauxite Terminal: Max. draft 37 ft. Depth alongside 40 ft. Max. d.w.t. 40,000 tons. Loading rate 3,000 t.p.h.

STEVEDORES: Bulk cargoes: discharging rate 700/800 t.p.h., loading rate 800/1,000 t.p.h. No facilities available for handling general cargo.

MEDICAL: No notice required. Venezuelan Navy Hospital with limited medical assistance.

TANKERS: No oil carriers.

DENSITY: LW – 1020. HW – 1023.

FRESH WATER: Available in limited quantities at berth. Rate of delivery 30 t.p.h.

FUEL: In an emergency. Diesel fuel medium, specific gravity at 60° F. 0.85, API gravity at 60° F. 35, viscosity SSU at 100° F. 37, viscosity engler at 20° C. 1.40.

CUSTOMS ALLOWANCES: Two cartons of 200 cigarettes each or equivalent in tobacco. Two 0.75 litre bottles.

IDENTIFICATION CARDS: Issued locally by Navy on arrival.

REPAIRS: None. Small company workshop.

CONSULS: None.

AIRPORT: Nearest airport (1 hour voyage on launch) is Guiria with 2 weekly flights to Caracas and the same number to Port of Spain, Trinidad. Next nearest (1 hour launch plus 2 hours car) is Carupano with 4 daily flights to Caracas.

TIME: GMT minus 4 hours. Permanent.

HOLIDAYS: Cargo worked 24 hours a day, 365 days a year.

GENERAL: The whole of Puerto de Hierro is a Venezuelan Navy Supply Base. The dock and cargo installations are operated by Puerto de Hierro, S.A., a subsidiary of Caribbean Steamship Company, S.A. Only bulk cargoes transhipped by Caribbean Steamship are handled.

DEVELOPMENTS: Possibility of increasing draft to 42 ft. at loading berth, and to 30 ft. at discharging berth.

AUTHORITY: Puerto de Hierro, S.A.

PUERTO LA CRUZ, (Puerto La Cruz Terminal): 10.13 N. 64.38 W. **(See Plan Book)**

OPERATORS: S. A. Meneven. Postal Address, Apartado 4064, Puerto La Cruz, Venezuela. Radio Address, Meneven, Puerto La Cruz. (Venezuela). Telex: 81147 Meneven.

FLAG: Venezuelan flag must be displayed from the foremast when entering zone as well as in docking operations regardless of the hour. At all other times the Venezuelan flag must be displayed between sunrise and sunset.

LOCATION: Puerto La Cruz located on Pozuelos Bay on the N.E. coast of Venezuela. Its harbour is well protected by numerous islands against sea currents. The hurricane path is several hundred miles to the North and has never affected the flow of navigation in the Puerto La Cruz area.

The lighthouse marking the entrance to Pozuelos Bay is located: Lat. 10° 18′ 18″ N., Long. 64° 41′ 07″ W. Visibility is 20 miles.

DOCUMENTS: Arrival clearance is effected on board vessel shortly after docking by Government Officials and a representative of the Company. The following documents are required:

1. Ship's Register.
2. Dispatch issued by Venezuelan Consul at last port (1 copy).
3. Ballast Manifest (1 copy).
4. Crew List (6 copies).
5. Passenger and Baggage List, if any (5 copies).
6. List of Passengers in Transit, if any (5 copies).
7. List of Personal Effects (4 copies).
8. Store List (5 copies).
9. List of Slop Chests (4 copies).
10. Sailing Permit issued by Marine Authority at last port of call.

*Store List should indicate separately all deck, engine and cabin stores.

PILOTAGE: The use of Government Pilots is compulsory for all vessels entering or leaving territorial waters. The Company will arrange for this service at all times. If it becomes necessary for the Master of the vessel to disregard Pilot's orders in order to ensure safety of the ship a written report from the Master shall be submitted promptly to the Government Port Captain in Spanish. Meneven will assist in translation, when necessary.

The zone for Pilot to board or to anchor awaiting Pilot is delineated by the following 3 lines: South by parallel 10° 15′ N., East by meridian 64° 40′ W., and West by an imaginary line from Punta Puinare on Isla Chimana del Oeste to the North point of Morro de Barcelona.

When ready to dock, a Pilot will be despatched by launch to ship.

MAX. SIZE: No limitation is placed on width of tankers. Ships up to 1,000 ft. in length can be turned around in the inner harbour area. Max. safe draft alongside (Berth No. 5) is 55 ft. (Also see "Berthing".)

HEALTH: In theory the Government Port Doctor is to board each incoming vessel and board only outgoing vessels which carry passengers. In practice, however, the doctor boards at his discretion.

Ships cleared between the hours of 1700 – 0800. Mondays through Fridays and all day Saturday, Sundays and holidays are charged by Immigration Service for the issuance of shore leave passes. There is no charge for this service from 0800 – 1700 hrs. Mondays through Fridays. Transportation and immigration clearance fees on movement of seamen are billed at cost.

TUGS: 2-tug service is compulsory by law in this port. The Company has available a first-class diesel-electric tug of 1,600 h.p. and a contract tug of 2,100 h.p.

BERTHING: The loading facilities consist of 6 berths. Products available and safe draft are as follows:

	Berth 1	*2*	*3*	*4*	*5*	*6**
Crudes	×	×	×	×	×	×
Heavy fuel oil					×	×
Refined products			×	×		
LPG		×	×			
Bunker "C" fuel	×	×	×	×	×	
Diesel fuel	×	×	×	×	×	×
Intermediate fuels	×	×	×	×	×	
Fresh water	×	×	×	×	×	×
Max. safe draft (ft.)	38	38	38	55	55	39.5
Max. d.w.t. (thous.)	45	45	45	110	110	55

*El Chaure Terminal – Now Pier No. 6. Also see "El Chaure".

Upon arrival at dock the following rules must be observed:

(a) Masters must ensure that mooring lines are properly tended during the discharge of ballast and loading of cargo, and that sufficient personnel is on board at all times to handle same. Discharging or loading will be temporarily suspended upon infringement of this regulation.

(b) Masters are requested to remove the blank flanges from their vessel's loading manifold before docking, so as to expedite the connecting of the shore hoses by company personnel. Vessels using berth No. 5 are also requested to have their derrick and gangway ready for use.

Note: Vessels normally dock with starboard side to dock, unless otherwise advised.

(c) While docked, discharge of sea water, hot water or steam on dockside of ship is prohibited. Hot water or steam may activate the automatic sprinkler system as well as damage piping located under the dock surface.

(d) Rat-guards must be placed on all ropes connected with the shore.

(e) Heavy exhaust smoke from vessel's funnel is not permitted. Any infringement of this rule will result in Government fine and/or removal of ship from dock.

(f) Meals must be provided in officers' mess-room for Venezuelan National Guard personnel who may be assigned to the vessel during stay in port.

LOADING: After the vessel has been cleared, the Company Dock Supervisor on watch will give the Master of the vessel written instructions as to grade or grades of cargo, loading rates, information on size of hoses and lines, and other information pertinent to the loading of the vessel.

During loading operations, company employees are on watch to administer to the needs of each vessel.

Upon termination of loading cargo, hoses are normally displaced with air at controlled rates prior to disconnecting. If the ship's officers request that the alternate procedure of draining hoses be effected, shore personnel will be happy to comply provided the following steps are observed by ship's officers:

1. Advice be received prior to termination of loading cargo.
2. Ship's receptacles be situated to receive oil drained on board. It should be noted that heavy fines are imposed for spills or overflows which contaminate the bay.

Shortly after completion of loading company personnel will take ship's ullages and, later, deliver cargo and sailing papers to an officer of the vessel.

Ships must vacate berth upon completion of loading and await papers at anchorage if the berth is needed for another vessel. The Dock Supervisor on duty will advise ship's officer of this matter.

BALLAST: Although climatic conditions in Puerto La Cruz are relatively mild, vessels should arrive with sufficient ballast to permit safe handling. Venezuelan regulations strictly prohibit the pumping overboard of dirty ballast in territorial waters. All ballast must be pumped ashore with the exception of vessels especially equipped with clean segregated systems which are reserved for ballast only. Vessels so equipped will be permitted to pump overboard after first being inspected and approved by shore personnel. Heavy fines are imposed for pollution of waters and industrial fishermen are quick to report any infringement. Max. discharge pressure to shore installations is 90 p.s.i. through the 16 in. line which dumps into ballast lakes approximately 300 m. South of dock.

No vessel will be allowed to discharge ballast if last previous cargo was sour crude and/or could result in unpleasantness to area inhabitants.

RADIO: Masters are requested to advise Meneven Puerto La Cruz by radio 48 hours in advance of estimated arrival giving vessel's name, date and hour of arrival, bunkers, name of Master, port of departure, draft (arrival), Venezuelan gross tonnage, flag of ship. Vessels may contact the terminal by radio-telephone on 2182 kHz and VHF Channel 16. There is standby attention 24 hours a day. The terminal also has the frequencies 2080, 2120, 2638, 2738 and VHF Channel 13.

Ship-to-shore radios are installed on the oil dock and on both tugs. A 350-watt AM transmitter-receiver is monitored 24 hours a day.

FRESH WATER: Fresh chlorinated water is available at an average rate of approximately 10 t.p.h. Total volume of water that can be supplied during the normal period alongside averages about 150 tons. As water is not held in special reserve for vessels' requirements but supplied from terminal water system, availability may be limited dependent on time of year and other conditions.

FUEL: The terminal is not a general bunker station. Only ships loading petroleum may take bunkers.

Bunker "C", heavy diesel fuel and complete range of intermediate fuels are available in quantity. Delivery rates to the ships are approximately as follows: Bunker "C", 200 t.p.h.; heavy diesel, 150 t.p.h.; intermediate fuels, 150 t.p.h.

Bunkers are delivered concurrent with the cargo and should be taken as soon as clearance is granted.

Meters are installed on all bunker systems and are calibrated in net barrels.

The dock valves on the bunker lines will only be opened and closed upon advice from the ship's personnel.

Lubricants and gasoil are available through the vessel's Agent.

CUSTOMS: Crew members should be warned against taking knives or other lethal weapons ashore, as this is strictly prohibited. All firearms and ammunition must be noted on stores list. They cannot exceed 1 per officer and 18 cartridges per gun. No arms may be carried while ship is in Venezuelan waters or tied up at dock. Contraband of any description will be confiscated. Each man is allowed 1 package of cigarettes on his person and this package must be opened. No liquor is to be taken ashore. It is prohibited to carry liquor from shore to ship without authorisation from Master of vessel. It is further strictly prohibited to consume liquor in dock area.

It is normally forbidden to take photographic cameras ashore. However, upon written request to the National Guard contingent on the oil dock, special permission may be obtained. This is subject to 2 limitations: (1) that the camera is returned to the ship; (2) that no photographs are taken of the petroleum installations.

IDENTITY CARDS: Passes for shore leave are issued by the officials of the "Capitania de Puerto", who board with the Customs authorities upon the vessel's arrival at dock. These passes are valid for the duration of the vessel's stay in port and must be returned before sailing to the guard assigned to the vessel.

In order to comply with Immigration Regulations, crews should be carefully checked before sailing, and any missing seamen reported to the vessel's Agent. Crew members left behind when the vessel sails will be held in custody until deported at the vessel's expense.

CONSULS: The following foreign countries have consular offices in the vicinity of Puerto La Cruz:

Belgium
Brazil
Colombia
Denmark
Dominican Rep.
France
Great Britain
Italy
Netherlands
Norway
Sweden

Vessel's Agent should be appraised of vessel's consular requirements promptly upon docking.

REPATRIATION: Seamen discharged from hospital for transfer to another port, seamen arriving from another port or those being repatriated are handled by the vessel's Agent, who must comply with all Venezuelan Regulations.

In the case of seamen left ashore for any reason, Masters are requested to furnish a letter accepting responsibility for all expenses incurred, advances if any, and instructions for repatriation. Venezuelan regulations, at all times hold the vessel responsible for a seaman during his stay in the country. Close contact is maintained by radio with ship owners regarding disposition of their seamen.

TIME: GMT minus 4 hours. Permanent.

REGULATIONS:

Excessive Smoke. It is absolutely prohibited to exhaust heavy smoke through a ship's funnel while tied up at the Company's docks. It is also prohibited to blow boiler tubes. Failure to comply with this regulation will result in any or all of the following actions:

1. Vessel's discharge of ballast or loading of crude or products will be immediately shut down.
2. Vessel will be subject to fine from authorities.
3. Vessel may be removed from dock.
4. Owners will be advised of infractions of this regulation.
5. Fines, time lost, and other related expenses will be charged against the vessel.

Pollution. Venezuelan laws are very strict on this subject and local authorities quickly enforce existing statutes. For this reason each Master is handed a circular that emphasises the necessity of complying with federal and local laws and customs.

The spilling or discharge of dirty ballast, crude oil or petroleum products into coastal waters is defined as pollution, as is also the throwing overboard of garbage, trash or other unwanted objects while the vessel is at anchor or dockside. Prior to the start of loading operations all discharge valves, bilges and scuppers must be closed and strict vigilance exercised during deballasting and loading operations.

When a spill does occur, the Master, Government officials and a company representative evaluate the quantity and submit a report to the Government Petroleum Inspector. This report becomes the basis for a federal fine that is practically incontestable. An additional expense occurs when local authorities require assistance in cleaning beaches and shorelines after a major spill and can pinpoint the responsible vessel or source.

REPAIRS: Request for repair work by local contractors must be accompanied by a written request from the Master of the vessel.

TONNAGE CERTIFICATE: Due to reciprocal agreements between Venezuela and the following countries, ships flying the flag of any of the below-named countries are exempted from Arqueo compliance and payment of fees: Denmark, Great Britain, France, Germany, Netherlands, Ireland, Norway, Portugal, Sweden, United States.

Ships bearing the flag of any other nation shall require a Venezuelan Arqueo Certificate. The cost of measuring is contingent on the size and tonnage of vessel. The certificate is usually issued after the ship sails from port. It is then sent to the marine department of the Owners of the vessel by airmail.

GENERAL:

Charts. No charts or sailing documents are available in the terminal. Same should be forwarded by airmail to the vessel's Agent for delivery to the ship.

All ship requirements such as chandlery supplies, mail, cash advances, medical, dental, consular requirements, repair work, laundry service, bonded stores, transportation etc. should be obtained through the vessel's Agent.

BANKS: Banco Royal Venezolano. Tel: (081) 691921.

EMERGENCY CO-ORDINATION CENTRE: Seccion de Seguridad, Busqueda y Salvamento Maritimo. Telex: 31154. Tel: (02) 513395, 512156.

STORING: See "Prelims" page.

1. Vessel can be stored by truck.
2. No need for barge storing while ship is alongside.
3. Trucks can proceed to the berth gate only. Distance from gate to ships berth 200 ft.
4. Fork lift trucks cannot be permitted inside the berth while the ship is either deballasting or loading.
   No fork lift trucks whatsoever permitted alongside LPG ships.
5. No Customs regulations in force regarding storing.
6. Local riggers can be employed to assist with storing through ship's local Agent.

SURVEYORS: 1. Saybolt, Caleb Brett, Chass Martin, Aivepet cargo inspectors available at the Terminal Office.

2. Lloyd's Register, American Bureau, Bureau Veritas, P & I available locally or from Caracas via the ship's agent.

TELEPHONES: There is a telephone booth on each dock. The supervisor on duty may be contacted by calling number 308 or 906.

SHIPMASTER'S REPORT: February 1979.

Documents:

3 Copies of list of passengers or nil passengers.

3 copies of a letter by Master stating that vessel was diverted after sailing from previous port and explaining why clearance destination is wrong.

3 copies of cable ordering diversion.

Anchorages: Good holding ground in N.W. part of anchorage area, thick mud.

Restrictions: Maximum height of manifold about 18.95 m. so necessary for vessels of 140,000 d.w.t. to load some cargo before completion of ballast.

Max. Size: If draft less than 30 ft. on arrival vessel can approach berth direct from West, and use 2 tugs. If more than 30 ft. draft then vessel must use channel to the North of berth and use 3 or 4 tugs. This for vessels of 140,000 d.w.t.

VHF: Tankers call "Meneven" on Channel 16, then change to Channel 12 or 13. Also call Agents on Channel 16.

Berthing: Back springs to bollards on jetty. Breasts and heads and stern lines to hooks on dolphins. These hooks are secured to bollards by wire of circumference 19 cm. or diameter 6 cm.

Consuls: No U.S. Consul available and Agents will give Master letter to this effect for U.S. Immigration.

General: Ballast, if clean, may be pumped overside. If dirty, advise Meneven prior to arrival of quantities to be pumped ashore. They will also accept slops if not sour crude or smelling too badly.

Notice to Shipmasters:

We wish to advise the Masters of all vessels calling at this port that it is strictly prohibited to take photographs.

It is likewise contrary to regulations to carry ashore a camera. Same is liable to be confiscated by the Government Authorities.

Signed S. A. Meneven.

AUTHORITY: Capitan de Puerto, Capitania de Puerto, Guanta, Puerto La Cruz. *Tel:* 081-660534, 081-660367. *Telex:* Capipuerto 81386.

AGENCY:

All incoming ships to lift cargoes at this Terminal must have a local Agent to render all services required for a prompt and efficient tanker turnaround and to cancel all ships disbursements during the port stay.

S.A. Meneven as operator of the Terminal charges a fixed fee for General Services such as supervising the docking and undocking manoeuvres, hose connections, loading and documents required by the cargo buyers or consignee. Handling of Telexes, documents and air postage will be charged at cost.

Offices of Meneven loading and marine personnel are located on the first floor of the building between berths Nos. 1 and 2. Any matter concerning loading, bunkering, is handled through this office, which is open 24 hours of every day. On the ground floor of this same building is located the Documentation Section.

PUERTO SUCRE (Cumana): 10.28 N. 64.12 W.

(See Plan Book)

SHIPMASTER'S REPORT: August 1980.

DOCUMENTS: As for Guanta. Entry formalities, normally after berthing but if at anchor will board about 0900 hrs.

PILOTAGE: Pilotage is compulsory for berthing and unberthing. Pilot will anchor vessel if required.

APPROACHES: Approaching Puerto Sucre at night, the lights of the city are visible for many miles, but the light indicated at the end of the pier is non-existent, also the water tower marked on the chart with red lights is non-existent.

Two vessels were alongside when this vessel approached so the pier was clearly visible with the lights of the ships, otherwise there are no lights on the pier.

The pier indicated on the chart just North of the main pier is no longer there although at low water parts of the supports are still visible. Further North there are 3 piers, approximately half cable long, used by fishing boats. They start approximately 1 cable North and 1 cable between each, also there are car ferry terminals before the mouth of the river South of Pta. Carenero. This river mouth is undergoing extensive work which is apparently to be a fishing harbour.

A tall white building is situated in approximate position Lat. 10° 27.8′ N., Long. 64° 11.1′ W., it has a fixed red light and an occulting red light at night. A silo is situated in approximate position Lat. 10° 26.7′ N., Long. 64° 11.25′ W., this has 3 red lights in a horizontal line at night. There is an air light on the control tower at the airport, alternating white and green every 5 seconds, but this is only lit when an aircraft is due.

ANCHORAGE: Anchorage is limited in pilotage area "A". This vessel anchored 3 cables off the shore line and 3 cables off the pier in 30 fathoms of water, vessels also anchor 2.5 to 3 miles S.W. of pier in 25 fathoms, however Pilots prefer vessels to use nearer anchorage.

VHF: Pilots occasionally on Channel 16, but very little English spoken, the ship's chandler has a VHF set and can be very helpful as he speaks very good English.

TUGS: One tug is available to assist with berthing/unberthing.

BERTHING: Vessels use both sides of the pier and ro-ro vessels tie up stern to the head of the pier. Soundings were taken around the pier (See Plan).

CARGO HANDLING FACILITIES: There are numerous fork lift trucks of all sizes, 4 mobile cranes and some small towing vehicles. This vessel had a cargo of bagged fertiliser which was discharged onto lorries and there was no shortage of these, even when working 2 ships with 10 gangs no delays were caused due to lack of transport. Ship's gear is used at all times but the mobile cranes can be hired if required.

MEDICAL: Services available.

FRESH WATER: Available using ship's hoses.

FUEL: Diesel oil is available but difficult to obtain as it has to be brought from Puerto la Cruz by road tankers.

WATCHMEN: Not available, one member of National Guard on board, requires a cabin if one available. This vessel had no spare accommodation but the guard must still be fed.

SHORE LEAVE: Permitted, but shore passes must be carried and passes returned when vessel leaves.

GENERAL: *Provisions and Laundry:* Available.

Garbage Disposal: No facilities.

PUNTA CARDON: 11.38 N. 70.14 W.

OPERATORS: Maraven, S.A.

PORT LIMITS: The area enclosed by the parallels of Lat. 11° 38′ 00″ N. and Lat. 11° 36′ 38″ N. and the meridian of Long. 70° 14′ 25″ W.

FLAG: It is compulsory to display the Venezuelan flag at the foremast starboard yardarm during daylight hours for ships anchored or berthed in Venezuelan waters. The ship's Services will provide a Venezuelan flag at any time for ship's account.

LOCATION: The port of Punta Cardon is located on the Gulf of Venezuela, on S.W. coast of Paraguana Peninsula, Venezuela. Punta Cardon is an open sea port with practically no swell, due to the Easterly winds prevailing almost all year from the shore side.

ESSENTIAL REQUIREMENTS:

1. Incoming vessels must send ETA at least 3 days before arrival at Punta Cardon.

2. If a ship, originally cleared for another port (including any other Venezuelan port) is diverted at sea to Punta Cardon, certain information must be radioed prior to arrival in order to avoid heavy fine(s) and/or delays.

3. No dirty ballast may be pumped overside in port in Venezuelan coastal waters. Ballast disposal facilities are available at Punta Cardon Terminal.

4. The use of Venezuelan Government Pilots is compulsory for berthing and unberthing.

5. In addition to other clearance documents, 5 copies of an itemised list of articles in the ship's slop chest must be presented to the authorities on arrival.

6. The emergency fire signal is 5 long blasts on the ship's whistle or siren. No other signal is to be given in cases of emergency.

7. Rat-guards must be placed on all mooring lines.

DOCUMENTS: Clearance (inward pratique). Inward clearance is effected on board by Government Port and Customs Officials and a representative of the Oil Movements Department immediately after berthing. The following documents must be ready on arrival:

(1) In ballast:
- *(a)* Clearance from Last Port (1 copy).
- *(b)* Ballast Manifest from Last Port (1 copy).
- *(c)* Crew List (7 copies).
- *(d)* Steward's Store List (all foodstuff, liquors, tobacco, etc.), to be declared on a separate and independent sheet (5 copies, see note (2)).
- *(e)* Deck and Engine Stores and Spare Parts List (paints, varnishes, chains, ropes, etc.), to be declared on a separate and independent sheet (5 copies, see note (2)).
- *(f)* Medicine Chest Lists (including narcotics accurately itemised) (5 copies).
- *(g)* Slop Chest Lists (5 copies).
- *(h)* Personal Effects Lists (4 copies).
- *(i)* Sailing Permit (issued by Maritime Authority at Last Port of call) (1 copy).
- *(j)* Passenger and Baggage Lists (if any) (2 copies).
- *(k)* List of Passengers in transit (if any) (4 copies).

(2) Both the Steward's Store List, the Deck and Engine Stores and Spare Parts List may be prepared on board prior to the vessel's arrival. The Steward's Stores List must be comprehensive and accurate, especially with regard to cigarettes and liquor. All new clothing, gifts, souvenirs, etc. are to be clearly marked. All personal effects of the crew are to be collected and placed in the Bonded Stores Locker, ready for sealing by the Customs Authorities on arrival.

Although vessels proceed directly to Punta Cardon, clearance documents should be made out showing the port as "Las Piedras, Paraguana (Punta Cardon)". Failure to comply with this requirement may result in fines up to a max. of U.S. $600.00.

(3) Clearance documents out-bound: Outward clearance and cargo documents are delivered on board by the Ship's Services Representative.

In the event that the berth is required by another vessel, a vessel having completed loading may be required to vacate the berth promptly and proceed to anchorage to await cargo documents and clearance.

PILOTAGE: Pilots are employees of Venezuelan Government and pilotage is compulsory for vessels entering or leaving harbour. The Ship's Services Office will arrange for this service at any time. If it becomes necessary for Master of the vessel to disregard Pilot's orders in order to ensure safety to the ship, the Master must promptly submit a written report to the Harbour Master on the matter, via the Ship's Services Representative, stating reason for this action.

Pilots sustaining injuries: It is compulsory to submit a full report in cases where a Pilot is injured while performing duties on board vessels.

ANCHORAGE: The anchorage at Cardon roads within a radius of 2 miles from end of jetties has depths varying from 54 ft. to 100 ft. (LWS) and a bottom consisting of mud with some patches of small stones, sand and shells. There are no known obstructions from West to N.W. of the Piers and there is ample water for a clear approach when coming from West and N.W., but the anchorage is limited on the South by a sandspit projecting 1 mile S.W. off Punta Cardon Cape. A beacon is located on this Sandspit in position: Lat. 11° 36′ 03.4″ N., Long. 70° 14′ 15.6″ W. Fl.R. ev. 1 sec. 17 ft. 5 miles (U).

APPROACHES: Restricted Fishing Area. Masters when approaching coast should keep a particularly sharp lookout for fishing boats, nets and small craft.

Mechanically propelled vessels drawing more than 5 ft. are prohibited from navigating in the restricted fishing area that extends off Paraguana Peninsular from Punta Macolla, Lat. 12° 05′ 32″ N., Long. 70° 12′ 55″ W. to Punta Estanques (Los Taques), Lat. 11° 48′ 45″ N., Long. 70° 16′ 45″ W., and a line connecting the position indicated below:
- *(a)* Lat. 12° 07′ 40″ N., Long. 70° 14′ 25″ W.
- *(b)* Lat. 12° 03′ 15″ N., Long. 70° 19′ 23″ W.
- *(c)* Lat. 11° 49′ 25″ N., Long. 70° 21′ 50″ W.

Leading Lines

	Position			*Height in Metres*
Jetty	*Latitude* N.	*Longitude* W.	*Colour*	*(LWS)*
I	11° 37′ 19.2″	70° 13′ 54.6″	Green	4.70
	11° 37′ 23.1″	70° 13′ 47.6″	Green	14.20
II	11° 37′ 32.0″	70° 14′ 02.0″	Red	4.83
	11° 37′ 35.9″	70° 13′ 55.1″	Red	14.30
III	11° 37′ 08.1″	70° 13′ 53.5″	White	3.06
	11° 37′ 09.1″	70° 13′ 50.6″	White	14.94
IV	11° 37′ 41.9″	70° 14′ 12.0″	Blue	5.10
	11° 37′ 42.4″	70° 14′ 09.4″	Blue	21.54

Land Marks

2 radio towers, very conspicuous, with micro-wave antenna at the middle painted in aluminium white, in position, Lat. 11° 38′ 03″ N., Long. 70° 13′ 56.2″ W. Height 205 ft. (62.5 m.).

Navigation aids

A light is located on the outer radio tower.

Position: Lat. 11° 38′ 03″ N., Long. 70° 13′ 56.2″ W.

Characteristics: Fl. White and Red, ev. 10 sec. Height 205 ft. (62.5 m.) 21 miles (U).

Sectors: Red 340° – 009°, White 009° – 202°, Eclipsed 202° – 340°. (All bearings are true from seaward).

Beacon: Located on sandspit of Punta Cardon.

Position: Lat. 11° 36′ 03.4″ N., Long. 70° 14′ 15.6″ W.

Characteristics: Fl. Red. ev. 1 sec. Height 17 ft. (5.2 m.) 5 miles (U).

2 large chimneys are very conspicuous in the Refinery Area. The North chimney is situated Lat. 11° 37′ 54.6″ N., Long. 70° 13′ 10.8″ W. Height above MLWS 399.6 ft. (121.8 m). The South chimney is situated Lat. 11° 37′ 52.9″ N., Long. 70° 13′ 09.8″ W. Height above MLWS 396.3 ft. (120.8 m.). For daylight distinguishing marks, both are painted with broad red and white bands and at night both have a string of all round fixed red lights at the top and the same at the middle height.

A steel tower. A commercial radio tower is situated outside the Refinery Area in position: Lat. 11° 36′ 29″ N., Long. 70° 13′ 42″ W. Height above MLWS 164.7 ft. (50.2 m.). This is not very visible during the day, but at night it has at the top, flashing every second, an all round Red Light, visible at 12 miles.

MAX. SIZE:

	Jetty/Berth		*Depth LWS*	*Draft*	*Length in feet*	*Displac. in tons*
No. 1	North Outer	(3)	42′ 00″	39′ 06″	710	25,000
	South Outer	(4)	42′ 06″	40′ 00″	710	25,000
	North Inner	(1)	31′ 06″	30′ 00″	575	25,000
	South Inner	(2)	32′ 06″	31′ 00″	575	25,000
No. 2	North Outer	(3)	43′ 00″	40′ 06″	710	25,000
	South Outer	(4)	41′ 06″	39′ 00″	710	25,000
	North Inner	(1)	21′ 00″	19′ 06″	424	25,000
	South Inner	(2)	23′ 00″	21′ 06″	424	25,000
No. 3	North Outer	(3)	47′ 00″	44′ 06″	900	62,000
	South Outer	(4)	48′ 00″	45′ 06″	900	62,000
No. 4	North Outer	(3)	47′ 06″	45′ 00″	900	54,000
	South Outer	(4)	47′ 06″	45′ 00″	900	54,000

TUGS: 2 tugs of 1,200 h.p. and 1,600 h.p. respectively are available, and their assistance is compulsory for berthing. Number, disposition and manoeuvres of tugboats are directed by the Pilot. The following tug signals in practice in this port are listed below for Master's guidance:

Short blasts are used to give orders to the tug situated ahead.

Long blasts are used to give orders to the tug situated aft.

1 blast means *push* tug engine, ahead (if it is stopped); *stop* tug engine, stop (if it is moving).

2 blasts, *pull* tug engine, astern.

1 long, 1 short, 1 long and 1 short whistle, "Calling tugs".

2 long and 2 short whistles, "Tugs Dismissed".

RADIO: Arrival messages (ETA). Master of vessels bound for or diverted to Cardon are requested to radio the following information to "Maraven. Caracas" via "La Guaira Radio", call sign YVG, 72 hours in advance of estimated arrival, or as soon as possible.
- *(a)* Name of vessel
- *(b)* Flag
- *(c)* ETA
- *(d)* Last Port.
- *(e)* Master's name
- *(f)* Number of crew and passengers
- *(g)* Port for which the vessel is cleared
- *(h)* Quantity of clean ballast on board
- *(i)* All requirements

This information is of the utmost importance to the Harbour Authorities in facilitating the entry of vessels in general, and in case of diversion.

VHF Radio Telephony. The radio and communication centre is located in the Oil Movements Office Building situated at the foot of No. 2 Pier at a height of 50 ft. above sea level. The roof of the building is painted black and the word "Marine" painted across in large white letters.

There is an RT set operating 24 hours a day on the following frequencies, and manned by English speaking operators:

156.6 MHz	FM	VHF	(Channel 12)	Range limit	25 miles
156.8 MHz	FM	VHF	(Channel 16)	,, ,,	25 ,,
2120 kHz	AM	HF		,, ,,	150 ,,
2182 kHz	AM	HF	(Channel 1)	,, ,,	150 ,,
7620 kHz	(SSB)	HF	(Channel 3)	,, ,,	300 ,,

Call sign: "Marine Cardon".

Vessels not equipped with radio telephone may call the installation by signal lamp (Aldis lamp) whereupon the service launch will be sent out to vessel to pick up any message it may have.

BERTHING: Without exception ships always moor head-in on all berths. It is considered prudent to have the outboard anchor hove out prior to approaching piers to facilitate speedy release while docking if necessary. Vessels are to be moored to satisfaction of the Port Services Superintendent or his deputy; mooring lines must be tended regularly and kept hove taut to prevent surging and possible damage to ships, docks or hoses. When adjusting mooring lines, the assistance of harbour tugs should be requested before slackening off any mooring line.

BALLAST: It is suggested that vessels nominated to load at this installation arrive with the minimum of ballast on board, necessary for the safe handling of the vessel under normal conditions. In this connection experience has shown that, under normal weather conditions, vessels can be safely berthed and unberthed with a quantity of ballast of approximately 20% of their respective Summer deadweights. Clean ballast can be pumped into the sea, but Masters are reminded that pollution of the sea incurs heavy fines. Dirty ballast can be received ashore. Maximum discharge pressure to shore installation is 150 p.s.i. in the 20 in. ballast line of Jetty No. 2; Jetties Nos. 4 and 1 have a 24 in. ballast line, and Jetty No. 3 has a 16 in. line. Masters are requested to endeavour to arrive at this port with 20% SDW ballast.

MEDICAL: Facilities are available for medical and dental treatment, vaccination and hospitalisation in a private clinic.

The doctor's working hours for out-patient treatment are as follows: Monday to Friday, 0900 to 1100 hrs., 1400 to 1700 hrs. Saturdays, Sundays and holidays, only urgent cases will be attended to.

Emergency cases will be attended to at all times.

Masters requiring medical or dental service or vaccination for their crew members should call Ship's Services by dialling 2105. Our representative will make the necessary arrangements with the clinic and arrange for transportation to pick up the crew members on the pier and to take them to the clinic and back. Any crew member who is sent ashore for medical or dental treatment, and who does not speak English or Spanish, must be accompanied by a crew member who speaks one of these languages.

Doctors do not attend patients on board. In serious cases where the patient is unable to walk an ambulance will be provided to take him to the hospital.

FRESH WATER: Fresh water is available at all berths. Loading rate is 30 t.p.h.

FUEL: Available if advance notice given. Funds at to be remitted to Chase Manhattan Bank, One Chase Manhattan Plaza, New York, 24 hours in advance to Maraven S.A. (Account No. 001-1-992773).

CUSTOMS: Venezuelan National Guards are stationed at the piers to ensure that vessels in port comply with regulations.

1. *Smuggling.* Strict compliance with the Customs laws of the country is enforced by the Authorities and Masters are strongly advised to caution crew members against attempting to smuggle ashore cigarettes in carton lots, cigars, tobacco, souvenirs, gifts (particularly items of women's apparel) or other articles. A maximum of twenty cigarettes per person for personal use is allowed to be carried but a greater quantity will result in the imprisonment of the offender with possible heavy fines and delay to the vessel.

2. *Bar.* On Customs Authorities instructions vessels maintaining a "Bar Service" on board for the use of officers, crew, passengers and visitors, must keep the bar closed during the vessel's stay in port.

3. *Firearms.* Firearms on board any merchant vessel calling at Venezuelan ports must not exceed one per officer, nor can the ammunition exceed 18 cartridges per officer. All firearms and ammunition must be declared on stores list. Officers must not carry firearms while ship is in Venezuelan waters. Said arms should be collected together with the ammunition and held in the Master's safe custody. Crew members should be warned against taking knives or other weapons ashore as these will be confiscated and the bearer fined.

CONSULS: Brazil, Great Britain, Italy, Netherlands and Norway have Consular representatives in this area.

TIME: Local time is GMT minus 4 hours.

CERTIFICATES: All ships arriving in Venezuelan ports for the first time must be measured by the Maritime Authorities for issuance of a Venezuelan Tonnage Certificate, known as "Certificado de Arqueo". This document gives the measurements and weight of the vessel in accordance with existing laws. The cost of measuring and issuing of the Certificate is contingent on size and tonnage of vessel.

It is usual practice to take ashore the ship's "General Arrangement" and "Capacity" plans, which are used as a basis for calculations. These plans and the Venezuelan Tonnage Certificate are later forwarded to ship's Owners.

Vessels registered in following countries are exempt from above regulations, due to existing reciprocal agreement with Venezuela: U.S.A., Great Britain, Denmark, France, Germany, Netherlands, Ireland, Sweden, Norway, Portugal.

The Venezuelan Tonnage Certificate is used in calculating Venezuelan Government Port charges, such as Port Captain Habilitation for entry and despatch of vessels and Pilotage Dues, for all vessels except those registered in the countries mentioned above, in which case the Lloyd's Registered Tonnage is used.

HOLIDAYS: By order of the local Port Authorities it is requested that all ships in port be fully dressed on the following national holidays: January 1st, April 19th, July 5th, July 24th, October 12th, December 25th.

REPAIRS: Shore facilities are available for emergency repairs of a minor nature. The nearest dry docks are located at Puerto Cabello and Curacao, N.A. Request for repairs should be mentioned in the ship's ETA message.

SHORE LEAVE: Shore leave is permitted and Harbour Master's representative who boards vessel on arrival issues the required number of shore passes. These passes must be shown when proceeding ashore to the Government and Company Guards at the gangway and refinery gates. They are to be collected by Master prior to sailing and handed to Pilot unberthing the vessel. Masters are reminded that in accordance with the instructions of local police, crew members be properly dressed before leaving the vessel, i.e. long trousers and shirts.

Masters are requested to have shore leave expire at least 2 hours before expected departure. Men then found missing should be reported to the Ship's Services Office, tel. 2105, who will endeavour to locate them. An officer must accompany shore personnel in order to identify the missing crew member.

Vessels are not permitted to sail until all crew members are on board, unless said crew members are hospitalised or previously signed off by the Master through the Ship's Services representative. If any crew member is missing at sailing time and cannot be found, his passport and other personal documents must be handed to the Ship's Service representative, as well as written instructions as to his repatriation, when found. All costs and expenses of a crew member so left behind will be for ship's account.

GENERAL:

1. *Animals:* The importation and transit of all birds belonging to the genus parrot or parakeet is prohibited. For other birds a valid health certificate is required. For so-called "small animals" e.g. dogs, cats, monkeys, rabbits, etc. a valid health certificate and a valid rabies vaccination certificate are required.

2. *Bonded Stores:* Stores in bond are not obtainable in Punta Cardon. The nearest port with bonded stores facilities is Curacao.

3. *Board of Trade Gangway:* A safe gangway must be provided by the vessel and should be rigged as soon as possible after mooring to allow the Port Authorities to board, and should not be taken in until Pilot has boarded to unmoor vessel. The use of rung ladders, pilot ladders, etc. is contrary to Port Regulations and Port Authorities will not board except by means of a safe gangway or accommodation ladder.

4. *Damage during Manoeuvres:* When a vessel or the pier sustains damage during manoeuvres with an official Pilot on board, it is the responsibility of the Master to submit to the Ship's Services representatives, immediately after the accident, a report in quintuplicate, for presentation to the Harbour Master. Such reports should give full details of the accident and of all engine movements as ordered by the Pilot, as well as a sketch in triplicate of the ship's manoeuvring position at the time. These will be translated by the Agents into Spanish and forwarded to the Harbour Master.

5. *Cash Advance to Masters:* Cash advances to Masters are made only in Venezuelan currency, which is the Bolivar. Cash requirements should be included in the vessel's ETA message. Foreign currencies are accepted in the United Seamen's Service Club.

6. *Rat-guards:* By order of the Port Authorities rat-guards must be fitted to all mooring lines. Non compliance entails a fine of 200 Bolivares for each unguarded line.

7. *Kerosene, Motor Gasoline, Gas-Oil, Solvents:* Supplies for ship's purposes are available in drums. The return of empty drums ashore is prohibited by Customs regulations. Therefore the cost of each drum will be billed to the vessel in the Port Disbursement Account.

8. *Lubricants, Oils and Greases:* Supplies of products are available. Vessels arriving at Punta Cardon on Saturday or Sunday or on a holiday should give ample notice of their requirements by cable in order that the necessary labour arrangements for delivery can be made. This procedure also applies to the delivery of white oils mentioned under 7 above, when required outside working days.

9. *Laundry Service:* Laundry service is available throughout each working day. Such service should be requested in the vessel's ETA message.

10. *Wireless Transmitters in Port:* It is strictly prohibited to use vessel's wireless transmitters in the Port of Cardon. Non-compliance with this regulation may result in a fine being imposed on the vessel by the authorities.

11. *Mail:* On vessels' arrival, blank Mail List Forms will be handed to the Master to be completed in sextuplicate and duly signed by him, when sending ship's and crew mail ashore for posting. Ship's mail received after ship has sailed, or for vessels on which no advice has been received, will be held for 15 days and then returned by airmail to the owners or operators or senders, at ship's expense unless specific instructions have been received beforehand.

12. *Marine Surveyors:* Both the Lloyd's Agents at Maracaibo and Norske Veritas at Caracas have a representative in Punta Cardon who acts on their behalf when a surveyor is requested. However, in the case of continuous or classification surveys, advance notice of 4 days should be given in order to arrange for an appointed surveyor to come from Caracas. There is also a representative of the American Bureau of Shipping in this area (Caracas).

13. *Miramar Club:* Masters, chief engineers and their wives can visit the Miramar Club. For this purpose entrance passes should be requested from the Ship's Services Office, tel. 2105.

14. *Manaure Bathing Beach:* The above mentioned bathing beach is open to all ship's staff and crew members.

15. *Norwegian Government Seamen Service:* A Norwegian Vice Consul and Welfare Officer is stationed at Punta Cardon, and provides the usual services to seamen of this nationality. His telephone number is 4359.

16. *Navigation Charts:* Navigation charts are not available at this port.

17. *Passengers:* Movement of passengers over Cardon Piers is subject to restriction under terms of agreement with the government. Passengers will not be permitted to disembark unless in possession of the required Venezuelan visa and travel documents. If passengers are carried, Master should so advise in his radio ETA so that arrangements can be made for Immigration Authorities to visit vessel on arrival and thus facilitate clearance.

18. *Petroleum Inspection:* Charles Martin & Co., and E. W. Saybolt, petroleum inspectors, are available in this area. Contact can be made through the Loading Supervisor (tel. 2821).

19. *Personnel – Seamen Left Ashore:* In the case of seamen left ashore for hospitalisation, repatriation, desertion or other reasons, all documents and personal effects are to be handed to the Oil Movement Department's representative before sailing. A letter is required from the Master advising the maximum advances, if any, to be made to the seaman, and instructions concerning his repatriation. All expenses incurred by seamen left ashore, including cost of repatriation, are for ship's account. It is important that Masters bear in mind that the Venezuelan law will at all times hold the vessel, her Master, or Owner responsible for any seaman left behind in Venezuela.

20. *Photographing:* The taking of photographs within the boundary fence of the Cardon Refinery is prohibited. Taking cameras ashore is likewise prohibited.

21. *Provision and Stores:* Provisions and stores are available. Requisitions should be conducted through the Ship's Services Office. Telephone number 2105 or the Ship's Services representative when he calls on board with the authorities on arrival. Ships' chandlers are not permitted to visit ships, unless specifically instructed to do so by the Agents.

22. *Radar and Radio Repairs:* Repair and maintenance services for radar, radio, gyro compass, radio direction finder, echo sounder, etc. are available. The repair man should be contacted through the Ship's Services Office, telephone number 2105.

23. *Safety of Personnel:* It will be appreciated that persons intoxicated by alcoholic drinks can create risks of accidents; therefore we ask the Master's co-operation to ensure that these persons do not enter the refinery gates and/or board their vessel unless accompanied by sober members of their crew. In this connection we will advise the Master or one of his officers, so that measures can be taken to ensure the safety of the forementioned person(s) e.g. by sending one or more of the crew to the gate to accompany him (or them) to the ship.

24. *Visitors:* Visits to ships are prohibited except from those company employees, petroleum inspectors, etc., whose duties require their presence on board.

25. *Walport Film Exchange:* Subscribers to the Walport service may exchange films at the U.S. Seamen's Club situated at the foot of No. 2 Pier, from 0730 to 2200 hrs. every day, by telephoning 2803.

26. *Staff and Crew Changes:* No staff and/or crew should be engaged or discharged without consulting Ship's Services (telephone 2105). In case of discharge, identification documents must be handed to the Ship's Services representative or the Norwegian Consular Officer in the case of Norwegian vessels.

27. *Tank Cleaning and Mopping:* Several contractors in the area provide labour for tank cleaning and mopping. Masters in need of this service should submit their requirements to the Ship's Services Office (telephone 2105), who will contact and request a contractor to go on board to discuss details and estimate costs of work to be effected. It must be pointed out that the Master of the vessel is solely responsible for the proper fitness of the ship's tanks for loading his next cargo, and will therefore be held liable for any contamination of the cargo after loading, due to inadequate tank cleaning. Therefore it is up to him to decide the degree of tank cleaning necessary. He may, of course, seek advice from the installation representative in this respect, whenever there is any doubt.

28. *Turnaround:* To promote the economical operation of their vessel, Masters are requested to co-operate with installation representatives in minimising their in-port time. Any delays which are considered unnecessary or extensive should be reported to the loading Supervisor (tel. 2133) so that corrective measures can be taken.

29. *U.S.S. Club:* All seamen are welcome to the club operated by United Seamen's Service which is located at the shore end of Pier No. 2. Shore passes are required to reach this Club. Beer, soft drinks, ice-cream, candies and various souvenirs and presents can be purchased at reasonable prices. Free cinema shows are usually held twice weekly. A letter-posting service is available as well as recreational facilities, e.g. billiards, table tennis, darts, etc. A barber shop operates during daytime.

TELEPHONES:

Communications Office (General and Port Information, 24 hours service), 2604. Ship's Service Office (All services to ships: mail, doctor, taxi, papers, etc., 24 hours service), 2105. Agents' Office (Weekdays) (0700 to 1200 – 1300 to 1600 hrs.), 2125. Loading Supervisor (Re cargo and bunkers), day, 0700 to 1600 hrs., 2821/2133; at night, after 1600 hrs., 2133. U.S.S. Seamen's Club, 2803.

AUTHORITY: Maraven, S.A.

NOTES

Please also advise Shipping Guides Ltd.

Vietnam, Socialist Republic of

BEN THUY: 18.39 N. 105.42 E.

SHIPMASTER'S REPORT: July 1982.

LOCATION: 10 miles upstream from the entrance of the Song Ca river. Vessels exceeding 4.5 m. draft discharge cargo at anchor off the entrance to the river into self propelled barges which transport the cargo to Ben Thuy.

PILOTAGE/ANCHORAGE: Vessels anchor in position Lat. 18° 47′ N., Long. 105° 47′ E. 1.5 miles S.E. of Hon Niem Island in 14 m., soft grey mud and sand. Pilot and officials board at this position. After clearance granted vessel shifts to discharge anchorage in position Lat. 18° 49′ N., Long. 105° 45′ E. 1 mile N.W. of Hon Niem Island in 10 m. This anchorage was approached by rounding Hon Niem Island to the Eastward, not less than 0.5 miles off, there is a dangerous rock awash at LW in position Lat. 18° 50.7′ N., Long. 105° 46′ E. It is prudent to approach the port in daylight due to the large amount of unlit fishing craft in the vicinity.

DOCUMENTS/OFFICIALS:

Officials boarding with Pilot on arrival:

3 Security Officers.
2 Customs Officers.
2 Immigration Officers.
2 Quarantine Inspectors.
1 Agricultural Inspector.
1 Agent.
1 Harbour Master.

To be accommodated and victualled during stay of vessel in port:

3 Security Officers.
2 Customs Officers.
1 Agent.

Agent is the only person who speaks/understands a limited amount of English.

Documents required:

6 Crew Lists.
2 Store Lists (deck, engine and cabin).
1 Health Declaration.
2 Stores Lists (provisions).
2 Crew Customs Declaration Lists.
2 Currency Lists (foreign monies in crew's possession).
2 Bonded Stores Lists.
4 copies Cargo Manifests.
4 copies of Bills of Lading.
2 Cargo Stowage Plans.
3 Forms (supplied) for Sextants, Binoculars, Cameras, etc.
3 Forms (supplied) for Arrival details and times.
1 Form (supplied) Report concerning where water taken during the voyage, drinking and ballast in tons and tank being used at present for drinking water.

Certificates of Registry, Radio, Load Line, Safety Equipment and Derat sighted also Clearance from last port.

All Passports/Seamen's Identity cards collected and taken ashore, require to see each crew member and compare with passport photo. Discharge Books were not required. All Vaccination Certificates sighted and returned. Inspection of all crew cabins and each crew member's foreign money counted at the same time.

RESTRICTIONS: Main switch for Radio Transmitter/Receiver sealed.

All Cameras sealed. Bond and beer lockers sealed. (Release of bonded stores available at any time from Customs Officers on board).

GENERAL: There is no Radio or VHF contact with Ben Thuy. ETA/Health messages, etc, via Haiphong Radio XVG to VOSA Haiphong.

No fresh water or oil fuels are available at the anchorages off Ben Thuy.

Limited quantities of fruit and vegetables are available when in season.

There are no facilities for sending or receiving mail.

Draft survey is carried out at commencement and completion of cargo, 3 surveyors attend from Hanoi, a journey of approximately 10 hours by road.

Bulk cargoes are discharged by ship's gear using shore grabs (which are in poor condition) each grab capacity approximately 1.5 tons (bulk wheat) also burlap savealls, sewn on to cargo nets are used.

Cargo loaded into self propelled barges, each carrying 40/50 tons bulk grain, approximately 20 barges are available when none are under repair, which is quite frequent, journey to discharge wharf takes 3 hours, 6 hours to discharge and 3 hours to return to the ship.

Stevedores work two shifts 0600 – 1800 hrs. and 1800 – 0600 hrs. with one meal interval between 1130 – 1230 hrs.

1 gang's average discharge per day (24 hours) 250/350 tons.

DANANG: (Tourane): 16.04 N. 108.13 E.

(See Plan Book)

SHIPMASTER'S REPORT: 1976.

DOCUMENTS: On arrival usually dealt with immediately by the Immigration Service, Police Service, Customs Service, Agency and Health Service.

Ship's Documents: Certificate of Registry, Radio Certificate, Load Line Certificate, Safety Equipment Certificate, Port Clearance from last port.

Cargo Documents: Bill of Lading (8 copies), Cargo Manifest (8 copies), Stowage Plan (5 copies), In Transit Cargo Manifest (if any).

Immigration: Crew List (7 copies), Store List (7 copies), Crew's Effect Declaration (2 copies), Passports of the Crew.

Health: Vaccination List (2 copies), Provision List (2 copies), International Vaccination Certificates.

All documents to be ready on arrival. Cameras and binoculars to be collected and placed in a locker, to be sealed. Bonded stores not sealed.

PILOTAGE: Pilot station at a position Lat. 16° 10′ N., Long. 108° 11′ E. Pilot boards from a tugboat and moves the ship to a position about 1 mile West of Phare de l'observatoire. Pilot boarding during daytime only. Ships arriving at night should anchor in a position close to the pilot station. Pilot will board the ship at 0600 hrs. in the morning. ETA should be given 48 hours and 24 hours prior to arrival at the pilot station.

RESTRICTIONS: There are no restrictions for entering the bay.

HEALTH: A 24 hours cable should be sent to the Agent, stating that all crew are fit and healthy. If any sickness on board cable 48 hours in advance.

RADIO:

Callsign	*Frequency*	*Working hours GMT*
XVT	500 kHz	0001 – 1200 hrs.
XVT 2	417.5 kHz	0001 – 1200 hrs.
XVT 2	8,570 kHz	0130 – 0145 hrs.
		0830 – 0845 hrs.
		1200 – 1315 hrs.

VHF: There is no VHF station.

RADAR: There is no radar post.

TUGS: There are 3 tugboats available, 1×1,200 h.p., 2×800 h.p. each. Tug's lines are used if necessary.

BERTHING: There is one finger pier of 250 m. and another under construction. The latter to be ready towards the end of 1976. A tanker berth is situated in position Lat. 16° 04′ N., Long. 108° 15′ E. called My Khe. Tankers proceed to this position, after clearance, with Pilot rounding by the peninsula. (See Plan). At the cargo pier all discharging is done by ship's gear.

CRANES: There are no cranes available. There is 1 heavy lift floating crane of 100 tons capacity.

BULK HANDLING FACILITIES: Bulk cargoes are sometimes handled at the port (i.e. maize) but there are no special facilities.

BRIDGES: No bridges.

STEVEDORES: Ordered by the Agent. No ETA necessary. Working hours 0001 – 0400 hrs., 0800 – 2400 hrs. Approx. discharging rate general cargo 400 tons/gang.

MEDICAL: Six hours' notice required for medical assistance. There is a hospital in town. Inoculations required for cholera, smallpox and yellow fever.

TANKERS: Two submarine hoses of 8 in., all kinds of white spirits discharged through both lines. Maximum back pressure 8 kg. at ship's manifold. Average discharging rate 200 t.p.h. per line.

DENSITY: Cargo pier brackish depending on the season. At the tanker berth salt.

FRESH WATER: Available by barge, rate of delivery 50 t.p.h.

REPAIRS: Repairs taking longer than 2 hours are not permitted unless permission is granted by the Port Master. Small repair facilities can be carried out ashore. There are no drydocks at this port.

DECK WATCHMEN: Cargo ships alongside the pier are provided with a gangway watch. Tankers discharging at My Khe will have two security guards on board during the stay in port.

HATCHES: Old type hatches opened and closed by shore labour. Special patent hatches by crew.

CUSTOMS ALLOWANCES: The bonded stores are not sealed. There are no restrictions for quantity of spirits, cigarettes, beer, etc. It is strictly prohibited to supply any bonded stores to shore personnel.

CARGO GEAR: There is 1 floating heavy lift crane of 100 tons.

REPATRIATION: Possible, but takes some time and can be very difficult. Haiphong is a better place for crew changes.

AIRPORT: There is an airport about 7 km. from the town. Air services to Ho Chi Min City and Haiphong, local flights only, twice a week.

TIME: GMT plus 7 hours (no Summertime) is kept along the whole coast.

HOLIDAYS: There are no special holidays.

POLICE/AMBULANCE/FIRE: Via local Agent, telephone number 21161.

SERVICES: There are laundry facilities (2 days ashore) with a 24 hour service. Shipchandler available at all times. Good fresh vegetables and fruits, depending on the season. Also good sea food.

SHORE LEAVE: Permitted via local Agent with 6 hours' notice. Persons with invalid passport are not allowed to go ashore.

REGULATIONS: It is strictly prohibited to throw any garbage into the bay, heavy fines. Garbage collected by barge.

DELAYS: Remittance has to be granted by Owners or Charterers before sailing. Without a sufficient remittance the vessel does not receive a clearance.

Alongside the pier berthing and unberthing only between sunrise and 1400 hrs. due to strong winds in the afternoon. At any other time when strong winds are experienced berthing and unberthing not allowed. The fore mentioned also for the tanker berth at My Khe, here berthing is normally carried out during the morning hours, when there are weak winds. During a strong monsoon it is sometimes necessary to stop discharging operations and unberth the ship.

GENERAL: Ships calling for the first time at Danang port should give their ETA and call sign, nationality, all other necessary particulars so that the ship can be identified by the Navy. Ships, chartered by the Vietnamese Government should state this also and whether time or voyage charter. Ships carrying general cargo should also give all particulars about the stowage of the cargo, whether any deck cargo, heavy lifts etc.

AGENT: Ocean Shipping Agency, 1a Quang Trung, Danang. Cable: OSA Danang, telephone 21161.

SHIPMASTERS' REPORT: September 1980.

DOCUMENTS: See "General".

PILOTAGE: Compulsory. Pilot boards in position Lat. 16° 10′ N., Long. 108° 11′ E. Notice required 24 hours. Daylight only for berthing except in cases of emergency.

ANCHORAGE: In the Bay of Tourane; depth up to 19.0 m.

RESTRICTIONS: No restrictions in the bay and anchorage, depth of water up to 19.0 m.

RADIO: Danang Radio.

VHF: Pilot on Channel 16.

TUGS: Two tugs available; 1 of 1,200 h.p., the other being used for barge work only.

BERTHING: Location Lat. 16° 07.1′ N., Long. 108° 12.6′ E. Two piers available. Distance from sea to berth 4 miles. Max. size permissible: LOA 190 m., beam 26 m. and deepest draft 11 m. Least depth of water in channel from sea to berth 13.0 m. Mean tidal range at berth 0.5 m. Nature of bottom at berth – mud and sand. Average density 1016.

Cargo Handling Facilities: No bulk handling facilities or quay cranes available. There is a quarter ramp for Ro/Ro vessels and a 50 ton floating crane. Security is good as armed police are on duty throughout the vessel's stay. There is adequate storage space for break bulk and palletised cargoes. No container handling facilities. Stevedore gangs are available as required and work throughout 24 hours except for meal breaks.

BARGES: There are steel barges of various sizes which are towed by tugs.

SERVICES: The following are available: Fresh water; fresh provisions; minor repairs facilities; airport with internal flights only; laundry services; bunker fuel oil; diesel oil; lubricating oil; doctor and hospital; groceries and meats.

GENERAL:

Officials Boarding on Arrival with Pilots:

Two armed police who remain aboard during vessel's stay at anchor.

Officials Boarding when Vessel Anchored:

Agent and assistant.
1 Customs Officer.
1 Immigration Officer.
1 Agriculture Inspector.
2 Quarantine Inspectors.
2 Security Officers.

Documentation:

8 Crew Lists.
2 Stores Lists – Deck, Engine and Provisions.
2 Crew Customs Declaration Lists.
2 Currency Lists for foreign money in Crew's possession.
2 Bonded Stores Lists.
1 Health Declaration.
2 Crew Vaccination Lists.
All Vaccination Certificates.
4 Copies of Bills of Lading.
7 Copies of Cargo Manifest.
2 Copies of Cargo Manifest – Cargo in Transit.
1 Form (Supplied) for Ship's Sextants, Binoculars, Cameras, etc.
1 Form (Supplied) for Arrival Details and Times.
All discharge books (passports of Officers' wives collected for safe keeping ashore).

Restrictions:

Main and Emergency Transmitters sealed.
Stornos (Walkie Talkies) sealed.
Cameras sealed.
Bond sealed.
Inspection of all cabins on arrival.

General:

Vessel on 4 hours' notice at all times for sailing or shifting berth. Although bond sealed release of spirits available at any time from Customs.

Very strict on cigarettes with issue of only 200 per week per person. Shore passes issued to all personnel. Shore leave very restricted but bus service available to Seaman's Club nightly from 1800 – 2130 hrs. accompanied by a guard.

Maximum of 20 cigarettes per person for shore leave.

Seaman's Club takes sterling (£5 notes and above only) and U.S. dollars.

One sight seeing tour was to have been arranged this call but cancelled due to adverse weather conditions. (Limited number of cameras would have been available on this occasion).

Remittances from Owners take at least 1 month before any cash is made available.

One typoon warning received this call when vessel had to vacate berth and proceed to anchorage.

One emergency vacation of berth at 0300 hrs. this call when heavy swell built up alongside pier.

On departure full inspection of cabins and personnel, discharge books (passports of Officers' wives returned). Shore passes collected. No mail received this call due 1 month delivery time. No restriction on bond for coastal passage Danang to Haiphong.

HAIPHONG: 20.52 N. 106.41 E.

SHIPMASTER'S REPORT: 1976.

DOCUMENTS:

8 Crew Lists.
2 Ship's Stores Manifests.
2 Crew Personal Effects Declaration (especially: cameras, binoculars, and Foreign Currency).
2 Vaccination Lists: smallpox and cholera. All International Vaccination Certificates. All Passports (are taken into custody by Security Officials).

Special Documents: Special forms which are handed to vessel on arrival.

Health Dept:

1 Declaration of Health on arrival.
1 List of Provision Store (incl. vegetables, fruits, fish, shellfish, meats etc. and where taken).
1 Report of water taken on board: (Drinking — or Ballast water, tons, ports where taken) — tank now being used to supply drinking water.

State Security Dept.:

4 Copies List of Articles forbidden to be used in port: ie. radio transmitter/receiver — Numbers and power; radar; VHF; radio direction finder; echo sounder; sextant, signal gun, signal rockets, flare signals, arms, ammunitions, cameras, binoculars, tape recorders, band recorders.

Note: The radio transmitter, VHF, radar, binoculars, cameras are sealed.

2 Copies Declaration of Arrival.

Note: Cameras, binoculars of the crew have to be collected and placed in a locker which is sealed. Bond is *not* sealed, and consumption is free.

PILOT: Boards at Zero buoy.

Note: There is no VHF radio contact possible and there is no signal station available, ETA should be given as exact as possible.

RESTRICTIONS: Max. draft to enter: 25 ft. (HW).

If ship's draft is more than 25 ft. ship has to lighten into lighters. This is done in Baie d'Halong. The procedure is that after embarking the pilot at Zero buoy, the ship is brought to this bay (in daylight hours only) via: Bai de Lan Ha – Entree Profonde – Rade du Crapaud – Chenal du Volta – Chenal de la Cathedrale.

In our case we anchored in Chenal de la Cathedrale; Lat. 20° 52′ N. Long. 107° 03′ 06″ E. and discharged our gas oil cargo into tanker barges varying in size from 125 – 400 long tons. Some coastal tankers (1,500 – 2,000 long tons) are also available for accepting the cargo.

When discharging into lighters ship should provide suitable hoses.

GENERAL:

1. Ship was cleared by Authorities at this anchorage. In view of the distance to Haiphong – 5 hours by motorboat – this clearance is only given in daylight hours. Often the ship's Agent stays on board during cargo operations.

2. Because the radio transmitter is sealed, no direct contact with the outside world is possible. All messages for the Agents at Haiphong should be given to the lighters going there.

3. Medical assistance: A doctor and Hospital is available in Hongay – on the other side of the Baie d'Halong. The doctor inspects the patient first on board before permission to go ashore is given.

4. Outward clearance: Same procedure as inward clearance. Authorities come by motorboat from Haiphong (boat leaves there at about 0600 hrs. and arrives in Halong Bay at about 1100 hrs.). Passports are handed back to crew.

5. On inward as well as on outward clearing, crew has to stay in their cabins for inspection by Customs and security officials.

AGENT: Vietnam Ocean Shipping Agency, 11 Dai 1ô Tran Phu, Haiphong. Phone: 166-245-513. Telegrams: VOSA Haiphong.

SHIPMASTER'S REPORT: April 1979.

PILOTAGE: Boarding position: Lat. 20° 41′ N., Long. 106° 58′ E.

The pilot boat is a 25 m. long steel vessel with white hull and superstructure. A Vietmanese flag is printed on the white funnel.

The Pilot boarded without notice, also the Agent (VOSA) did not reply to any cables requesting information. Pilotage carried out during night time only in the Winter.

Two soldiers board with the Pilot and if vessel is to anchor for lightering the Pilot and soldiers remain onboard.

BUOYS: The marking of the channel by buoys is good, but for day time only. At night the lights are poor and vessels have to keep a good lookout for them.

CUSTOMS: Bond is sealed when the vessel is alongside. Very strict allowance for cigarettes.

SHIPMASTER'S REPORT: October 1980.

DOCUMENTS: See "Shipmaster's Report" for Danang dated September, 1980.

PILOTAGE: Compulsory. Pilot boards in position Lat. 20° 41′ N., Long. 106° 58′ E. 24 hours' notice required.

ANCHORAGE: The inner anchorage is between the outer bar and the channel cut, depth at LW 8 m.

RESTRICTIONS: It is not advisable to enter or leave during hours of darkness as there are only a limited number of lights and buoys.

MAX. SIZE: Max. LOA 200 m., beam 26 m., draft 7.5 m. Lightening facilities are available at Baie D'Halong for vessels with draft of up to 10 m.

HEALTH: Quarantine Authority require 24 hours' notice of arrival.

RADIO: Haiphong Radio handles vessel's traffic.

TUGS: Available. 1×600 h.p., 1×500 h.p.

VHF: The Agency (Vietnamese Ocean Shipping Agency – VOSA) on Channels 6 and 16. They will forward messages to the Pilot.

BERTHING: Berth situated in position Lat. 20° 52′ N., Long. 106° 43′ E. The berth was built in 1976 and is down river from the town berths. In all there are 12 berths available. Our berth was 18 miles from the entrance. Max. size acceptable at the berth, LOA 200 m., beam 26 m. and deepest draft 7.4 m.

Cargo Facilities: No bulk handling facilities; no cranes at this berth but some were sighted at the town berths; no Ro-Ro facilities visible. There is a floating crane with a capacity of 60 tons (approx.). Security is good as armed guards stay aboard the vessel throughout. No container facilities of any kind sighted. Labour works around the clock in 3 shifts.

BARGES: Wood and steel barges available, some have engines.

CONSULS: None, nearest are in Hanoi.

SERVICES: The following are available: Fresh water; fresh provisions (depending on time of year); minor repair facilities; airport; laundry service; diesel oil; lubricating oil; doctor and hospital; small amounts of groceries and meats.

GENERAL: Any vessel intending to remain at the port for a long period of time should have onboard sufficient stores and fresh water prior to arrival, as if vessel at anchor, stores and fresh water can take up to one week to arrive.

SHIPMASTER'S REPORT: November 1981.

PILOT STATION: The Pilot boards the vessel at the anchorage which is about 2 to 3 miles S.S.E. from Zero Buoy. Pilot boat is a metal boat about 20 m. length. The funnel is painted buff with a red stripe and a yellow star.

RESTRICTIONS: There are 2 mud banks up river. One after the buoyed channel and one after the ship-canal about 1.5 miles before the berths. River draft depends on the tide which varies from 6.4 m. to 7.2 m. at HW. Haiphong port draft about 6.9 m.

PILOTAGE: The channel from Zero Buoy to Haiphong has buoys but no lights visible and the buoys are often out of position. The channel is very narrow having few cm. bottom clearance. Pilots are good.

ANCHORAGE: For deeper draft than 6.9 m., ships are lightened at Halong Anchorage. Pilots, Security Officers and Customs Officer board at Zero Buoy and the vessel proceeds to the anchorage via Passe Henriette. Depths are 18 m. to 21 m. and good holding ground. The place is sheltered from all winds except North.

DOCUMENTS: 1 more copy of Crew List and Money Declaration necessary than stated in "Shipmaster's Report", September 1980 for Danang.

Also see "General".

SECURITY POLICE: At Halong Anchorage 2 security policemen remain on board, requesting accommodation and food.

AGENCY: During the vessel's lightening, Agent's clerk remains continuously on board requesting accommodation and food. Any communication with the Agency at Haiphong is done by telegram. Ship's transmitter is unsealed by Security Officer, message sent, and then resealed. Whilst alongside, Agent visits every day and they are quite efficient.

STEVEDORES: At Halong Anchorage, a barge with quarters for the stevedores comes alongside the vessel. Chief Stevedore is always available speaking efficient English. Discharging performed by vessel's derricks with shore grabs. Rate about 1,500 metric tons per day. At Haiphong berth discharging performed by shore cranes with a rate of about 1,800 – 2,000 metric tons per day. Haiphong port has a berth accommodating ten large ships. There are about 25 shore cranes from 10 to 15 tons capacity and we have seen 1 floating crane of about 200 tons.

SHIP CHANDLER: Fresh provisions are poor quality and only small quantities available. Low prices. Also ship chandler takes care of sick crew members for hospital and doctors.

SHORE LEAVE: From Halong Anchorage crew are not allowed to go ashore. At Haiphong berth shore leave allowed from 0700 – 2300 hrs. All foreign currency, rings, watches, must be declared at the gate.

REPATRIATION: Agent assures Master that repatriation is very easy, however the need of formalities and permissions will take a long time.

HEALTH: Quarantine doctor will revaccinate any crew member with expired certificate.

COMMUNICATIONS: VOSA Agency has VHF Channel 16 and it is possible to contact them from Zero Buoy. Communication with Owners is very slow and the cable needs 2 to 3 days to reach the destination. Crew mail requires more than 40 days to reach the vessel.

DENSITY: Halong anchorage 1020. Haiphong port 1000.

GENERAL: A lot of people visit the vessel claiming that they are Harbour Officers, Chief Stevedores, Receivers, Surveyors, Stevedores, Customs Officers, Security Officers.

IMPORTANT: Stevedore's barge which is alongside the vessel at Halong Anchorage is full of rats, which come on board via ladders and other ropes, with result that the vessel becomes infested with rats.

Ships must have on board, from their previous port of call, sufficient quantity of rat poison to kill them after sailing from Vietnam.

DEVELOPMENTS: *1st Phase:* Construction of graving dock (150 m. ×25 m.×6.3 m.) and 200 m. length berth with depth 6.5 m.

2nd Phase: Construction of Dry Dock (180 m.×30 m.×7 m.) and small piers length 100 m. and 150 m.

HO CHI MIN CITY: 10.45 N. 106.45 E.

DOCUMENTS: On arrival at Nha-be or at the Port. As usual, the examination is executed immediately by the Officers representatives of: Sanitary Service, Immigration Service, Customs Service, Police Service, Stevedoring Agencies.

	Customs		*Immigration*	*Quarantine*		
Documents	*Vung-tau*	*Ho Chi Min City*	*Ho Chi*	*Min City*	*Agent*	*Total*
Health Declaration (form issued by local authority)				×		
International Certificate of Vaccination for Passengers and Crew				×		
Ship's Derat Certificate				×		
Immigration Declaration (form issued by local authority)			×			
Passengers' Passports (if any)			×			
Crew Lists	2	3	2	1	2	10
Passenger List in Transit (if any)	2	3	2	1	1	9
Passenger Disembarking Lists (if any)	2	3	2	1	1	9
Mail List	1	3			1	5
Arms and Ammunitions List	2	3	2		1	8
Explosive List	2	3	2		1	8
Narcotic List	2	3			1	6
Store List (including engine store)	2	3			1	6
Foreign Currency List (including crew and ship's cash)	2	3			1	6
Crew Dutiable Goods List or Personal Belonging List	2	3			1	6
Inward Cargo Manifests for Tankers	2	3			2	7
Inward Cargo Manifests for Dry Cargo Vessels	2	6			1	9
Transit Manifests	2	2			1	5

Stevedoring Agencies:

8 Ho Chi Min City Inward Cargo Manifests or In-transit Cargo Manifests at Ho Chi Min City.
2 Crew Lists.
All Original Cargo Manifests.
3 Landing or In-transit Passenger Lists.
2 Landing Passengers Luggage Lists.
2 Free of Tax Goods Lists.

Ho Chi Min City Port Authority:

Following Documents are to be presented to the Ho Chi Min City Port Authority by the Stevedores:

1 Report, informing the arrival of the ship.
2 Cargo Plans on board.
3 Cargo Manifests.
3 Cargo Unloading Plans.
1 General Cargo Unloading Permit.
6 Requests to Sanitary Officer for sanitary examination operation.

Important Notices:

(1) Manifests of Ho Chi Min City Inward Cargo are to be compiled by complete set, each set comprising original port's manifests; a recapitulation table will be added to each set indicating the total amount of parcels, tonnage or volume loaded on board for each port. This total amount will be repeated in all letters, stating: "This total amount has been visaed by the Customs Office."

(2) On arrival at Vung-Tau, (Cape St. Jacques), the Master of the ship should collect all required documents and get them ready to be presented. The Quarantine Officials may possibly come unawares on board for prior examination.

PILOTAGE: Upon arrival at pilot station the pilot service should be informed by cable of the exact position of anchorage, draft of the vessel, and the maximum speed the ship can do in the river.

Every evening from 2000 hrs. to 2200 hrs. (local time) radio watch should be kept with Ho Chi Min City XVS on the frequency of 500 kHz. In case the vessel is to proceed up the river the next morning the pilot service will cable the Captain the exact hour of departure from Cape St. Jacques (Vung Tau).

The pilot service will not send any Pilot to ships that do not give the information as to draft, speed of vessel, and exact position at the anchorage station at Cape St. Jacques (Vung Tau).

Pilot station at Vung Tau, Tel: 6. Pilot station at Ho Chi Min City, Tel: 21222 and 90503. Pilot boards at Vinh Dua (Gulf of Coco Trees).

ANCHORAGE: In depths of about 30 ft.

RESTRICTIONS: River transits, berthing and unberthing are effected in daylight hours only. Vessels should arrive 2 hours before daylight HW. At least 1 ft. keel clearance required. Least depth in channel, 27 ft. below chart datum.

MAX. SIZE: Length 673 ft. Vessels can proceed with draft 27 ft. depending on daily tide.

HEALTH: Port officials board at Vung-Tau if vessels call at Vung-Tau. Free Pratique will be obtained from local Authorities. For vessel calling at Ho Chi Min City, Port Officials will board upon docking alongside at Ho Chi Min City. Port and Free Pratique will be granted at Ho Chi Min City.

RADIO: Ho Chi Min City Radio, call sign XVS.

TUGS: Available up to 2,600 h.p. Tankers usually berth without tug assistance.

BERTHING: Depth at quays 26 ft. to 36 ft.

TANKERS: Discharge at Nha-Be: Ex-Caltex Terminal, narrow pier with mooring buoys, depth in berth 27 ft. Ex-Shell Terminal, "T" jetty with mooring buoys, depth in berth 31 ft. Ex-Stouvae Terminal, pier with mooring buoys, depth in berth 30 ft. No slop disposal facilities.

DENSITY: About 1005 at berths.

MEDICAL: Doctors and hospital facilities available.

FRESH WATER: Can be supplied by barge subject to advance notice of 24 hours.

FUEL: Diesel oil can be supplied.

REPAIRS: Machine shop facilities only.

AIRPORT: Situated about 5 miles from the city. International services.

Virgin Islands

FREDERIKSTED, St. Croix: 17.43 N. 64.53 W.

DOCUMENTS: All forms are standard U.S. Government Forms:
Passenger List (I-418) – 3 copies.
Crew List (I-418) – 3 copies.
Clearance from Last Port.
Inward Customs Manifest (1302) – 4 copies.
Ship's Stores Declaration – Customs Form 1303 – 2 copies.
Crew Effects Declaration – Customs Form 1304 – 1 copy.
(Also see separate headings – "Health" – "Customs" – "Immigration").

PILOTAGE: Services available day or night. Payment for Pilot services is mandatory whether Master uses Pilot or not. (Vessels commissioned by the U.S. or foreign government, yachts and vessels under 100 gross tons are exempt from pilotage fees, except when the services of a Pilot are requested).

ANCHORAGE: Open roadstead on the lee (West) side of St. Croix, providing a good anchorage with no significant tide.

HEALTH: See "Health Regulations" before first U.S.A. Port (Albany).

Garbage should be disposed of beyond the 3-mile limit. On passing the 3-mile limit all garbage disposal units which open to the sea should be closed. All garbage should then be placed in covered cans and retained on board until the ship is again beyond the 3-mile limit.

RADIO: *(a)* Vessels may communicate with Island via:

Mackay Radio, Amagansett, New York	Call Letters WSL
Chatham, Massachusetts Radio	Call Letters WCC
Lantana Radio, Florida	Call Letters WOE
Barbados Radio, Barbados	Call Letters VPO
Destrellan Radio, Guadeloupe	Call Letters FFO
Fort de France Radio, Martinique	Call Letters FFP

All stations maintaining 24-hour service. These radio stations then relay the messages by cablegram to Frederiksted via either ITT World Communications Inc. or Cable and Wireless, Western Union International.

(b) Master of every vessel arriving Frederiksted is required to give at least 24 hours advance notice of arrival to Captain of the Port, U.S. Coast Guard – San Juan, Puerto Rico, by wireless on 500 kHz or by radio telephone 2182 kHz. Call Letters for U.S. Coast Guard, San Juan, Puerto Rico – NMR.

(c) Masters are requested to advise Agent their expected time of arrival as far in advance as is possible, vessels arriving from ports other than U.S. or Caribbean Islands should give at least 7 days' notice, and vessels arriving from U.S. ports should give at least 4 days' notice. In addition, a message should be sent verifying arrival at least 48 hours in advance, with delays reported as necessary. Arrival messages should include information regarding repairs, stores, number of crew and passengers on board. If cash is required, a minimum of 7 days' (prior to date of arrival) notice is mandatory.

(d) While vessels are in Frederiksted the Authorities do not permit the use of the ship's radio transmitters.

(e) Vessels equipped with VHF equipment should commence radio watch on Channel 16 when vessel is 100 miles from St. Croix. Contact with Agents and shore facilities can be made direct or via Virgin Islands Marine Operator – Station WAH – Call Letters WAH.

TUGS: None readily available – tugs can be arranged with 48 hours advance notice.

BERTHING: A government-owned pier with a 1,400 ft. long approachway, bridging Maritime Zone to a pier-head 240 ft. long by 60 ft. wide. Vessels 600 ft. and over with a max. forward draft of 25 ft. have been accommodated.

FRESH WATER: Very limited, delivered by truck.

TIME: GMT minus 4 hours. Atlantic Standard Time.

HOLIDAYS: The following are legal holidays: Sundays; January 1st (New Year's Day); January 30th (Roosevelt's Birthday); February 12th (Lincoln's Birthday); The third Monday in February (Washington's Birthday); March 31st (Transfer Day); Holy Thursday; Good Friday; Easter Monday; Whit Monday; Last Monday in May (Memorial Day); June 22nd (Organic Act Day); July 4th (Independence Day); July 2nd (Supplication Day); The first Monday in September (Labour Day); The second Monday in October (Columbus Day); The fourth Monday in October (Veterans' Day); November 1st (Liberty Day); The fourth Thursday in November (Thanksgiving Day); December 25th (Christmas Day); December 26th (Christmas Second Day), and such other days as the President or the Government may by proclamation declare as holidays.

The following are legal half-day holidays, commencing at Noon, viz: Every Thursday during the months from April to November, inclusive, except Thursdays in those weeks where there already is a legal holiday other than Sunday. Whenever any holiday falls upon a Sunday, the Monday following is a legal holiday.

REGULATIONS: The U.S. Coast Guard strictly enforces the Harbour Pollution Act of 1924, prohibiting discharge of refuse and oil in navigable waters of the U.S. Virgin Islands. Local Port Regulations are similar to those applying in U.S. Mainland Ports.

CUSTOMS: Customs Officers will board at anchorage or wharf berths, and will require an accommodation ladder.

Vessels required to enter and clear through Customs House:
Vessels loading or unloading cargo;
Vessels embarking or disembarking passengers;
Vessels remaining in port over 24 hours;
Vessels requesting permission for their passengers to go ashore during the stay of the vessel in port.

Vessels in above categories must present following documents:
Clearance from Last Port;
3 copies of Crew List (Form I-418) or substantially similar form – see note *
3 copies Passenger List (Form I-418) or substantially similar form – see note *
4 copies Inward Foreign Manifest covering all cargo for discharge at St. Croix, V.I., showing weights or measurements (of basis of how cargo is freighted) on all items (Customs Form 1302).
2 copies Stores List (Engine-Deck-Commissary-Narcotics).
1 copy Crew Effects Declaration (Custom's Form 1304).

* List of passengers and crew shall be on Customs and Immigration Form I-418 or on a substantially similar form, except that where no steerage passengers are aboard upon arrival, the listing of the passengers may be in the form of a vessel "Souvenir List" or similar list, in which the names of the passengers are listed alphabetically by class.

Sealing of Stores: Upon arrival of a vessel from a foreign port, or a vessel engaged in foreign trade from a domestic port, sea stores and ship's stores not required for immediate use of consumption on board while vessel is in port and articles acquired abroad by officers and members of crew, for which no permit to land has been issued, shall be placed under seal, unless Customs Officer is of the opinion that circumstances do not require such action. Customs Inspectors in charge of vessel, from time to time, may issue stores from under seal for consumption on board by passengers and crew.

Passengers disembarking must present personal baggage declaration if from foreign.

IMMIGRATION: Recommended that Masters who are unfamiliar with U.S. Immigration Procedure should seek clarification from Agents as far in advance as is possible.

If a vessel arrives direct from a United States mainland port or from Puerto Rico no Immigration inspection will be performed. If a vessel arrives direct from a foreign port the vessel shall undergo Immigration inspection.

Vessels arriving without a visaed crew list, may be able to obtain a waiver from Officer in Charge of U.S. Immigration & Naturalisation Service, by making application on Form I-193. A fee of $10.00 is required to obtain a waiver.

In order to expedite the clearing of the vessel, it is suggested that prior to arrival all passengers subject to inspection should be assembled where the inspection is to be performed.

Stowaways must be reported in ETA Message and listed on a Passenger Manifest (Form I-418) and on Form I-94, and must be reported to the U.S. Immigration Officer as soon as he boards.

All non-resident alien crew members, whether shore leave is required or not, are required to have in their possession valid Passports, Seamen's Book or Identification Card (with photo) and Form I-95 (crewman's Landing Permit) or Form I-184 (Alien Crewman's Permit and Identification Card) on arrival. All resident alien crew members are required to have in their possession Alien Registration Receipt Card (Form I-151) on arrival.

SHORE GANGWAYS: Available.

LAUNCHES/TENDERS: Not available.

AIRPORT: Distant 8.5 miles.

AUTHORITY: Virgin Islands Port Authority.

LIMETREE BAY, St. Croix: 17.41 N. 64.44 W.

(See Plan Book)

LOCATION: The facilities of Hess Oil Virgin Islands Corp. (HOVIC) are located in Limetree Bay on the South coast of the island of St. Croix, U.S. Virgin Islands. St. Croix is 32 miles South of St. Thomas and St. John Islands and 50 miles S.E. of the island of Puerto Rico. It is the largest of the U.S. Virgin Islands being 19 miles long and averages 3.5 miles in width.

The sea buoy "ELB" No. 2 marking the entrance to Limetree Bay channel is located in 60 ft. of water on the Westerly side of the channel: Lat. 17° 40′ 42″ N., Long. 64° 44′ 18″ W.

The sea buoy is painted red and is equipped with a flashing white light having a 1 second flash, 9 second eclipse with a visibility of 7 miles.

DOCUMENTS: Clearance (U.S. – Foreign). Inward clearance is effected on board immediately after docking. Clearance should be made for Christiansted, St. Croix, via Limetree Bay.

The following documents are required by the Customs and Immigration Authorities for entry and clearance:
Master's Certificate on Preliminary Entry.
Master's Oath.
Stores List.
Crew Purchase List (Curio List).
Inward Foreign Manifest.
Quarantine Free Pratique.
Derat Certificate.
Crew List (Certified).
Clearance from Last Port.
Crew Landing Permits.
Passenger List (if any passengers).

PILOTAGE: Service is available 24 hours a day and is compulsory for all vessels using HOVIC facilities in Limetree Bay. The HOVIC Harbour Master acts as Pilot and will assist the Master in docking and undocking vessels using Hess Oil facilities; however, the Master of the vessel retains full responsibility for the ship at all times. The Pilot can be contacted by VHF Channel 16. Pilot boards at the sea buoy, position 17° 40.7′ N., 64° 44.3′ W. Vessels over 45,000 d.w.t. are subject to movements in daylight only. Vessels should remain outside the sea buoy until boarded by the Pilot. The Pilot will be placed aboard by a company tug.

The tug "Hovic 1" is equipped with a radio-telephone having the following crystals: 2182 kHz U.S.C.G., 2638 kHz Ship to ship. 2738 kHz Ship to ship, 2134 kHz San Juan, Puerto Rico and Galveston, Texas. Ships having the above crystals should call the "Hovic 1" three hours before their arrival at the sea buoy, and advise of any change in their ETA.

ANCHORAGE: There is no suitable anchorage for deep draft vessels off the port. Normal practice is to stop engines and wait 6 to 8 miles from the sea buoy if required to wait instructions. In bad weather vessels should proceed to Frederiksted and anchor in the vicinity of the long pier in depths of 30 ft. to 60 ft. Vessels shall have their anchors ready to let go upon entering the channel into Limetree Bay.

APPROACHES: Entrance to channel marked by a black sea buoy, equipped with a white flashing light, visible 7 miles. The buoy (ELB No. 2) (flashing every 10 seconds) is at the West side of the channel (Lat. 17° 40′ 42″ N., Long. 64° 44′ 18″ W.). At sea buoy there is 60 ft. of water and the channel has a depth of 60 ft. to Nos. 3 and 4 berths.

The turning basin opens up Eastward from the channel line and is approximately 1,200 ft. long and 1,000 ft. wide. The West turning basin is 1,500 ft. by 1,200 ft. with a max. depth of 35 ft.

RESTRICTIONS: Navigation permitted 24 hours a day except for ships over 50,000 d.w.t.

The Harbour Master will check and report on each vessel's draft before piloting them inbound or outbound.

HEALTH: National quarantine laws are enforced in the U.S. Virgin Islands by officers of the U.S. Public Health Service. All vessels are subject to inspection.

RADIO: Masters are requested to advise both HOVIC – St. Croix and their Agents by radio 48 hours and 24 hours in advance of their ETA giving the vessel's name, date and hour of arrival (local time), bunkers and water required.

TUGS: Tug assistance in the channel, docking and undocking is mandatory and is provided by 3×1,800 h.p. diesel tugs stationed in the port to provide this service. All tugs are under the orders of the HOVIC Harbour Master and are equipped with fire pumps and monitors to assist in fire fighting.

There are also 2 tugs of 7,000 h.p. available for the mooring of large tankers.

NOTICE OF READINESS: Notice of Readiness to load or discharge is a warranty that the vessel is in all respects ready to load or discharge, and that all of the ship's equipment (including, but not limited to tanks, pumps, valves, and pipe-lines) is ready and fit to load or discharge petroleum and/or petrochemical products. Notice of Readiness will not be accepted unless the vessel is in all respects ready to load or discharge as appropriate. Vessel will not be deemed ready to load or discharge and pumping will not commence until the senior deck officer shall have executed and delivered to HOVIC a "Declaration of inspection prior to bulk cargo transfer" as required by U.S. Coast Guard Regulations.

BERTHING:

Hess Hovic Terminal: A shore gangway is provided.

There are at present, 7 berths on finger pier, 3 on East side and 4 on West side.

Deepest berths are No. 3 and No. 4 each with 60 ft. depth of water alongside.

Port Alucroix: Situated to the West of Hess Oil Terminal. The port is entered via the Krause Lagoon Channel with a controlling depth of 35 ft. at MLW, and width of 300 ft. At the head of the lagoon is the Martin Marietta Alumina Terminal.

Pilot boards approximately 2.5 miles South of Martin Marietta Alumina sea buoys Nos. 1 and 2.

Container Port: Situated close West of the Hess Oil Terminal. The port is entered via the Krause Lagoon channel and the container port channel. Length of pier 1,200 ft. Depth in channel and turning basin 35 ft.

1×30 ton "Paceco" portainer with telescopic spreader to handle 20 ft., 35 ft. and 40 ft. containers.

BALLAST: United States laws prohibit the pumping overboard of dirty ballast while a vessel is within U.S. coastal waters. All ballast must be pumped to facilities available ashore. However, if a vessel is especially equipped with clean segregated systems which are reserved for ballast use only, it is permissible to pump overboard at the dock after first being inspected and approved by the Dock Master.

In pumping dirty ballast ashore, the ballast is received through 1×12 in. shore line at a max. discharge pressure to shore installations of 125 p.s.i. The ballast is pumped into a ballast facility about 1 mile North of the dock. Due to the limited facilities and to the possibility of 2 vessels deballasting at the same time, it is requested that vessels arrive with the minimum possible ballast.

The U.S. Oil Pollution Act of 1924 applies to the Pollution of Coastal Waters. Violators are subject to fines and a year's imprisonment for offence.

LOADING: Loading operations are normally carried out at relatively high pumping rates. Loading rates may be reduced by request. Loading cargo overall will not be permitted without specific written authorisation from HOVIC's General Manager.

Hose pressures should not exceed 125 p.s.i. during loading or discharging.

Oil Dock is serviced by: 1×24 in. diameter crude line, 1×24 in. diameter No. 6 oil line. 1×20 in. diameter gasoline line, 1×20 in. No. 2 oil line, 1×10 in. diameter kerosene line, 1×12 in. diameter ballast line, 1×8 in. diameter fresh water line.

4×10 in. hoses are available for connecting up to each of the 20 in. and 24 in. shore lines – single 10 in. hoses are available for the kerosene and ballast lines.

Oil Dock 2 serviced by: 1×24 in. diameter crude line, 1×24 in. diameter No. 6 oil line.

MEDICAL: Medical attention is generally available from the public hospital at any hour of the day or night to crew members of all vessels. The representative of the ship's Agent should be contacted by the Master with any requests for medical attention for the crew. For each man needing medical or dental attention, a form should be completed in duplicate and signed by the Master, or in his absence, by the Chief Officer. The form should provide the date, patient's name, rating, and the name of the vessel. In case of emergency, or when a patient cannot be moved from the vessel, the Master should advise the ship's Agent by radio if at sea, or on the telephone if in port.

DENSITY: 1025.

FRESH WATER: The island of St. Croix is dependent almost entirely on rainfall for its supply of fresh water. There are wells but many of them are rather saline in nature. As a result fresh water is scarce and expensive. In conjunction with its refinery operation HOVIC operates a desalination plant and limited quantities of fresh water are available providing at least 48 hours' notice of these requirements is given prior to the ship's arrival. All fresh water is metered aboard ship.

FUEL: Both No. 6 fuel oil (Bunker C) and light marine diesel are available by prior arrangement. Advice concerning quantities should be given in the vessel's arrival message (ETA) sent 48 hours prior to arrival.

AIRPORT: Situated 5 miles from port facilities.

SHORE LEAVE: Under normal circumstances, no restrictions are imposed by the Immigration Authorities on shore liberty. Masters are requested to have all crew members on board at least 1 hour prior to departure time, to avoid delay "awaiting crew members". If crew members of foreign vessels are to be given shore leave, Form I-95 must be prepared for each member of the crew.

TIME: The U.S. Virgin Islands use Atlantic Standard Time, which is 4 hours slow of Greenwich Mean Time.

GENERAL: *(a) Immigration:* The United States Immigration laws apply in the U.S. Virgin Islands. Passports and visas are required.

(b) Customs: The Customs collection district of the U.S. Virgin Islands is under the jurisdiction of the U.S. Treasury Department but has its own Customs laws.

(c) Liquors: The transportation of alcoholic beverages inside HOVIC's property is strictly prohibited; consequently, no liquor or beer may be removed from vessels. The only exception to the foregoing is in the case of bonded stores ordered by Masters.

(d) Visitors: No visitors are permitted in the dock area. Only persons on official ship's business are permitted on the piers.

(e) Laundry: Only limited facilities are available to handle ship's laundry.

(f) Surveyors: Representatives of the American Bureau of Shipping, Lloyd's Register and other maritime classification societies are available in San Juan, Puerto Rico on 12 to 24 hours' notice. The ship's Agent will assist Masters in soliciting their services.

(g) Mail: Official and personal mail will be delivered on board by the ship's Agent when vessels are being cleared inwards. Mail received for vessels while in port will be delivered on board prior to sailing. Outgoing mail is accepted from Masters, provided it is accompanied by a mail transmittal slip to support disbursements.

(h) Transportation: Walking through the refinery is not permitted. Arrangements for transportation will have to be made through the ship's Agent or the Refinery General Manager's Office.

(i) Supplies and Repairs: Limited supplies of provisions and marine hardware are available on the island. There are no facilities for major repairs closer than San Juan, Puerto Rico. Machine shops in Christiansted and Fredriksted can assist in making minor repairs.

(j) Overloading: Masters are advised that the international laws are strictly enforced with regard to overloading and should be guided accordingly. In cases where overloaded cargo has to be discharged, all expenses incurred, including ship delay, will be for the vessel's account.

(k) Weather Conditions: The loading and discharge of all crude petroleum and its products will be stopped during any electrical storm. Ullage screens or ullage plugs must be in place. Loading gasoline or other similar low-flash products will be stopped during periods of calms when the heavy vapours cannot be dispersed quickly enough to prevent hazards from accumulated gas pockets. Ship's officers are cautioned to be on their guard during such conditions. In the event of abnormal weather conditions in the area, such as a hurricane, vessels will be notified that additional moorings are required. If the situation so demands, Masters will be told to suspend all operations and proceed to sea until normal weather conditions again prevail.

(l) Demurrage: Vessels are required to vacate berth promptly upon completion of cargo handling operation (loading or discharging operations, as the case may be). Permission to lay alongside at any time the vessel is not engaged in cargo handling operations must be granted in writing by the Dock Master. The Harbour Master will keep vessels advised of other vessels awaiting berth. If any vessel fails to vacate its berth upon completion of cargo handling operations and expiration of free laytime for dock usage as outlined below, the vessel will be responsible for penalties and demurrage as follows:

- *(a)* To pay dock demurrage.
- *(b)* To hold HOVIC blameless for any demurrage and damages incurred as a result of other vessels awaiting berth.

The following rules shall govern the determination of demurrage:

- *(a)* One hour free laytime will be allowed after completion of cargo handling operations. This free time will start at the time cargo hoses are disconnected from the ship's manifold on completion of loading or discharge of cargo. Vessels awaiting cargo papers and/or Customs clearance must vacate the berth within 1 hour of such completion and move outside to wait for their papers.
- *(b)* Three hours free laytime will be allowed for ballasting after discharge operations.

SHIPMASTER'S REPORT: October 1984.

Vessel: 140,000 d.w.t.

The Pilot boards from one of the large tugs. He can normally step straight on to the accommodation ladder. On departure he uses a pilot ladder only, on the starboard side. 2 large tugs put up 2 lines each forward and after end of main deck. 1 smaller tug puts up 1 line starboard side main deck aft and a fourth tug pushes. Moorings were 2 back springs, then 3 breasts, then 3 head/stern lines. Original I-418 (Crew List) to Immigration and 3 copies for Agent. 1 each of Customs Forms 1300, 1301, 1302 and 1303. The minimum draft requirements apply to departure and arrival.

AUTHORITY: Hess Oil Virgin Islands Corp.

Virgin Islands Port Authority, P.O.Box 597, St. Thomas, Virgin Islands, U.S.A. 00801.

ROAD HARBOUR & PORT PURCELL, Tortola, British Virgin Islands: 18.25 N. 64.37 W.

PORT LIMITS: All the area of water North of an imaginary line drawn from Burt Point to Hog Point (see BA Chart 2020).

DOCUMENTS:

Clearance from last port;
1 Declaration of Health Certificate;
4 Crew Lists;
2 Crew Store Lists;
2 Ship's Stores Lists;
2 Passenger Lists.

PILOTAGE: Only compulsory for vessels of 200 n.r.t. and over, when proceeding alongside or leaving Port Purcell unless a vessel is in possession of a valid Exemption Certificate issued by the Ports Manager. Pilot boards at Port limits after receiving advice from Agents preferably 12 hours prior to arrival. Link calls made through Tortola Radio, Channel 27 daytime and Channel 16 at night.

Vessels arriving ahead of ETA sound "G" on whistle if unable to advise Agent.

No inward pilotage at night, unless emergency, night Pilotage outwards by special arrangement.

ANCHORAGES: Between Buck Island and Beef Island or immediately South of Port limits, approximately 12 fathoms.

Tanker anchorages independent of Port Authority and maintained by Shell and Esso, for small vessels only, little tidal influence.

RESTRICTIONS: Anchorage within Port limits prohibited unless authorised by Ports Manager. Max. draft alongside Port Purcell 22 ft.

HEALTH: Customs issue Pratique for vessels with clear bill of health, otherwise request doctor to board on arrival alongside or at anchor.

RADIO: Call sign "Port Purcell" – can be reached by VHF Channel 16. Cable and Wireless maintain a Public Coast Station on Tortola, call sign "Tortola Radio", with an approximate range of 50 miles and provides linked telephone calls between ships and any shore based telephone subscriber. From 0700 – 1900 hrs. watch is kept on Channel 16, at night for emergencies only.

For distances in excess of 50 miles any other convenient shore station, (eg. Barbados, St. Thomas) that will accept messages for onward cabling or telephoning to Tortola.

TUGS: None available.

BERTHING: Port Purcell quay is 800 ft. long, max. draft 21 ft. at any state of tide, salt water. Ships discharge with own gear.

CRANES: Port Purcell has 1 mobile shore crane, max. lift 8 tons. Prior advice required for use.

MEDICAL: Hospital facilities available, no routine inoculations, etc., required unless specially notified.

DENSITY: Entirely salt water within port limits.

FRESH WATER: Available in limited quantities at Port Purcell, approx. delivery 20 t.p.h. and costs US$5.00 per 1,000 gallons.

FUEL: Diesel only for small vessels delivered by road tanker to Port Purcell, 2 hours' notice.

REPAIRS: Minor repairs only.

SURVEYORS: Available.

HATCHES: Opened and closed by crew.

CUSTOMS ALLOWANCES: No sealing of tobacco, wine or spirits.

AIRPORT: Beef Island, 7 miles, regular local flights to St. Thomas, Puerto Rico, Antigua which connect with several main lines to Europe and the Americas.

TIME: GMT minus 4 hours.

HOLIDAYS: Port Purcell closed Christmas Day, Good Friday and August Monday (1st in month).

POLICE/AMBULANCE/FIRE: Dial 999 (emergency). Police station 43422.

TELEPHONES: Telephones available for use on board ship, cost for connecting US $25.00 and 8 cents for local calls.

SHORE LEAVE: No restrictions for crews.

IDENTIFICATION CARDS: None required.

DELAYS: None should be expected. Cargo working is geared to ship's arrival, irrespective of time and 24 hours continuous working if required.

AUTHORITY: Ports Manager and Harbour Master, Road Town, Tortola.

ST. THOMAS: 18.20 N. 64.56 W. (See Plan Book)

Harbour of St. Thomas, U.S.V.I. situated on South side of Island of St. Thomas. It is 1,434 miles from port of New York. Northern side of Island borders on Atlantic Ocean, and Southern side on Caribbean Sea. The Harbour is one of the best in the West Indies, being almost landlocked.

WEATHER: The weather is usually mild with little wind. Squalls when they occur, usually come from the N.E.

DOCUMENTS: *Quarantine, Customs and Immigration* – see "Frederiksted".

Agent:
1 Copy Crew List (Form I-418).
1 Copy Passenger List (Form I-418).

PILOTAGE: Compulsory and available day and night. Pilot Boat has letter "P" on deck house and flies International Code flag "P". Pilots will meet vessels 1 to 3 miles outside harbour, boarding via Jacob's ladder.

ANCHORAGE: Outer Harbour Anchorage located beginning at Scorpion Rock Lighted Buoy No. 1 (Lat. 18° 19′ 25.6″ N., Long. 64° 55′ 08″ W.) thence 180° 1,580 yards; thence 263°, 2,490 yards; thence due North 1,255 yards; thence due East to the Southerly tip of Sprat Point, Water Island; thence to Cowell Point, Hassel Island, and thence to point of beginning. This anchorage is considered good and is about 8 fathoms with sand bottom.

RADIO: The St. Thomas Marine Operator will guard the following from 0600 to 2100 hrs.: Channel 26, 16 VHF, 2009 – 2506 and 2182 AM, and the upper side band (2010.4 – 2507.4) of the same frequency. The Harbour Master's Office maintain a 24 hour watch on VHF Channel 16 (working on Channel 12).

(b) Master of every vessel arriving at St. Thomas is required to give at least 24 hours advance notice of arrival to Captain of the Port U.S. Coast Guard – San Juan, Puerto Rico by wireless on 500 kHz or by radio telephone 2182 kHz.

(c) Masters are requested to advise Agents their ETA, at least 36 hours in advance. Arrival messages should include cash requirements (local currency U.S. Dollar) and advice regarding repairs, stores, etc. This information is particularly necessary in the cases of vessel arriving on weekends or holidays. For cruise vessels the arrival messages should also include the number of passengers and crew on board.

(d) While vessels are in St. Thomas Harbour, the Authorities do not permit the use of the ship's radio transmitters.

(e) U.S. Coast Guards: This organisation maintains a small Marine Safety Detachment in St. Thomas to observe, service and effect repairs to navigation aids in vicinity of St. Thomas. An 82 ft. Coast Guard Patrol Boat "Point Whitehorn" (82364) is attached to the station for primary purpose of search and rescue work. Maintains watch on VHF Channel 16. Radio telephone marine information broadcasts, including Notices to Mariners, will be made on 2670 kHz, after first making a preliminary announcement on 2182 kHz. Radio telephone urgent and safety broadcasts or Marine Information will continue to be made on 2182 kHz.

TUGS: Normally not considered necessary for docking, however tugs are available for docking and undocking ships.

BERTHING: Wharf of the West Indian Company Limited, located on Eastern shore of harbour basin. Wharf is bulkhead type, 2,234 ft. long, running N.E./S.W., and is well protected to seaward. Mooring bits are spaced at intervals of 50 ft. There is a "cut out" in the wharf 950 ft. from N.E. corner, which is 22 ft. wide and approximately 3.5 ft. above low water. This ramp is slanting from 8.3 ft. to 3.5 ft. over a distance of 20 ft. Similar type of ramp located on West Corner of wharf. Safe depth alongside from 27 ft. near N.E. end to 30 ft. on S.W. end. Bulwark is 8.3 ft. above mean tide. Average difference between high and low tide is 11 in.

Dockages dues are payable to the West Indian Company Limited, as per tariff.

In the Crown Bay area (access via East or West Gregerie Channels) the V.I. Port Authority maintains facilities which include a "T"-head pier extending 500 ft. from shore, where ships up to 25,000 g.t. can moor to breasting dolphins 200 ft. on centres, and mooring dolphins 200 ft. fore and aft from them. Controlling depth presently 30 ft. This pier is used for berthing tourist and tanker vessels only. A curved bulkhead at top of Crown Bay, approximately 900 ft. long, is used for Roll-on/Roll-off, container and break bulk cargo. Controlling depth 15 ft. 24-hour arrival notice is required.

CARGO HANDLING: Containers are handled at the West Indian Company and the Crown Bay area (V.I. Port Authority), but no special gantry cranes are available. Roll-on/Roll-off cargo handled at these facilities as well. No liquid chemicals facilities exist here but there is a small privately-owned LPG plant limited to 20 ft. draft and 250 ft. length. Shell uses this facility for gasoline and light diesel. The "T"-pier in Crown Bay is used for the V.I. Water and Power Authority for movement of fuel and water, and Texaco has its own pipe-line on the same pier for their products.

STEVEDORES: Discharging and/or loading arranged by the West Indian Company Limited for account and risk of vessels.

Rates of discharging and/or loading dependent on vessel's equipment and stowage. However, following may be considered average:

General Cargo 6 weight tons per gang hour.
Bagged Goods 8/10 weight tons per gang hour.
Lumber 10/12 weight tons per gang hour.

Each stevedore gang normally consists of 12 stevedores (10 on board and 2 ashore), 2 winchmen, 1 signalman, 1 foreman.

FUEL: Bunkers are not available except for small craft.

FRESH WATER: Mostly rain water which when available is supplied by the West Indian Company Limited. This supply is limited and is on an emergency basis only. Water may also be requested from the Government of the Virgin Islands in cases of emergency only. Delivery effected by pipe alongside wharf. Water by barge can be delivered in St. Thomas.

MEDICAL: Local hospital is the Knud-Hansen Memorial Hospital, which is equipped with facilities for operations, etc.

TIME: Official St. Thomas time is Atlantic Standard Time, which is 4 hours behind GMT.

HOLIDAYS: The following are legal holidays in St. Thomas: Sundays; January 1st (New Year's Day); January 15th (Martin Luther King); January 30th (Roosevelt's Birthday); February 12th (Lincoln's Birthday); The third Monday in February (Washington's Birthday); March 31st (Transfer Day); Holy Thursday; Good Friday; Easter Monday; Whit Monday; The last Monday in May (Memorial Day); June 22nd (Organic Act Day); July 4th (Independence Day); July 25th (Supplication Day); The first Monday in September (Labour Day); The second Monday in October (Columbus Day); The fourth Monday in October (Veterans' Day); November 1st (Liberty Day); The fourth Thursday in November (Thanksgiving Day); December 25th (Christmas Day); December 26th (Christmas Second Day), and such other days as the President of the Government may by proclamation declare as holidays.

Whenever any holiday falls upon Sunday, the Monday following is a legal holiday.

REGULATIONS: The U.S. Coast Guard strictly enforces the Harbour Pollution Act of 1924, prohibiting discharge of refuse and oil in navigable waters of the U.S. Virgin Islands.

Local Port Regulations are similar to those applying in U.S. Mainland Ports.

HEALTH, CUSTOMS, IMMIGRATION: Refer to Frederiksted.

CONSULS: Following countries have consular representatives in St. Thomas.

Belgium
Denmark
Dominican Republic
El Salvador
France
Great Britain
Haiti
Netherlands
Norway
Panama
Sweden

AIRPORT: Distance 2 miles. Connections with International flights from Puerto Rico and direct flights from New York and Miami.

GENERAL: *Gangway.* One aluminium gangway available which is 34 ft. long and 2 ft. 6 in. wide – made with skidding prevention strips only and therefore not recommended for use as a passenger gangway. There is a similar gangway that is owned and used on V.I. Port Authority facilities. Since these are the only gangways; they are made available to vessels on first-come-first-served basis.

Stores. St. Thomas should not be depended upon for large quantities of provisions or deck and engine stores, as practically all commodities are imported making prices higher than United States mainland ports and Puerto Rico. No regular Ship's Chandlers established in St. Thomas, V.I.

Storage Facilities. The West Indian Company Limited undertakes ordinary storage for a limited period of time in 8 transit warehouses, all 14 ft. high with a total floor area of 80,000 sq. ft., plus an additional 9,600 sq. ft. roof covered area. There is also a large uncovered area available for outside storage. Only limited cold storage facilities are available on The West Indian Company's Dock.

Ice. Small quantities may be obtained.

Laundry. Modern laundry service is available.

POLICE/AMBULANCE/FIRE: Police 915; Ambulance 774-1212; Fire 921. Port Authority 774-2250, 774-2333.

AUTHORITY: Virgin Islands Port Authority, Office of the Assistant Executive Director, Marine Division, P.O.Box 36, St. Thomas, Virgin Islands, U.S.A. 00801. *Contact:* Austin M. Monsanto, Marine Manager.

NOTES

Please also advise Shipping Guides Ltd.

Western Samoa

APIA: 13.50 S. 171.45 W. (See Plan Book)

PORT LIMITS: The Customs Act defines the port of Apia as follows: The limits of the said port of Apia shall be a circle of two miles radius from the Custom house now existing in Apia and the said port shall include all land, river, and sea included within that circle. The Shipping Act defines the limits of the port in similar terms using the Export Wharf as the centre of the two mile radius circle. Both of these features are shown on Chart 2211.

DOCUMENTS:
1 Clearance from previous port of call.
3 Crew Lists.
3 Passenger Lists.
2 Health Documents.
1 Manifest.
Bills of Lading.
Ship's Papers (stores and poisons).
List of Dangerous Goods.

PILOTAGE: 72 hours ETA is required, confirm 24 hours before arrival. Pilotage is compulsory for merchant vessels. Pilot boards 1.5 miles outside harbour on line of leading beacons. Pilot boards from harbour tug.

By night, in addition to usual navigation lights, Pilot boat carries standard identification, i.e. a red light on foremast with all-round visibility. Exemption from pilotage may be granted to Masters of vessels trading regularly to Apia, but pilotage dues are still payable.

ANCHORAGES: In 20 fathoms outside a line drawn between the 2 reefs and preferably on line of leading beacons. Bottom is coral.

RESTRICTIONS: No night-time or tide restrictions. Turning basin dredged to 36 ft. in 1972, extending to 1,200 ft. from each end of the wharf. Arrivals preferred during daylight hours.

MAX. SIZE: Shore bollards to take stern and bow lines for vessels up to 800 ft. in length. Max. draft 35 ft.

Buoy mooring for tankers up to 32,000 d.w.t. consists of 3 buoys with black and red vertical stripes, 1 ahead and 2 astern. Vessel also uses starboard anchor.

HEALTH: Doctor boards vessel on arrival alongside.

RADIO: ETAs should be sent 72 hours before arrival, and confirmed 24 hours before. Signals to incoming ships by radio or radio-telephone from Apia radio station 5WA. For radio, ships should call on 500 kHz and operate on 483 kHz. For radio-telephone, ships should call on 2182 and operate on 2162 or other available frequency as may be arranged once contact has been established. Apia maintains continuous service. Call sign "Apia Radio" repeated.

Apia Radio maintains continuous service, and the Harbour Master can be called on Channel 16 during normal working hours. The tug and pilot launch also operate on Channel 16 .

TUGS: 2 tugs available, *Pualale*, 425 b.h.p. (7 ton pull) and *Savaii*, 175 b.h.p.

BERTHING: Export Wharf – reinforced concrete wharf 604 ft. in length on the East side of inner harbour. Max. depth alongside 36 ft. All loading and discharging is carried out with ship's gear. No wharf cranes available. This wharf and all surrounding areas enclosed by fence is Customs area and all vessels trading to or from places outside Western Samoa must depart from or arrive at this wharf.

New wharf 604 ft. long, vessels up to 800 ft. may be berthed.

There is 250 ft. of berthing alongside the inner face of the Southern arm of the wharf for small ships in deep water.

There are no special Ro/Ro facilities.

Shore equipment: One 15 ton mobile crane. Two×20 ton forklifts. About 10×3 to 5 ton forklifts.

STEVEDORES: Arranged by ship's Agents.

MEDICAL: Advance notice to Agents preferable. Doctors and good general hospital where seamen may be admitted.

There is a private medical clinic and a private dental clinic. Both high standard.

TANKERS: Shell, Mobil, and B.P. operating in Samoa, and have own discharging facilities. Tanker terminal situated on West Reef. Discharge line is 6 in. diameter. Launch service may be provided between ship and shore at a small charge.

DENSITY: 1025 – but may alter considerably during rainy season.

TIDES: Mean high water intervals 6 hours 27 minutes, Spring range 3.8 ft., mean range 2.6 ft. Tidal stream normally slight, but after heavy rain outflow from rivers and streams can cause it to become quite strong.

The current across the harbour entrance about 600 m. off the reef can be variable, but is predominantly Westerly and velocities up to 4 knots have been reported but this is not normal.

FRESH WATER: Available at wharf from shore installation.

FUEL: Only light diesel fuel available.

FIRE PRECAUTIONS: Fire services available on wharf, station is 0.5 miles distant.

GANGWAY/DECK WATCHMEN: Recommended and available.

OPENING/CLOSING HATCHES: Opened and closed by stevedores.

CUSTOMS ALLOWANCES: No enforcements.

IDENTIFICATION CARDS: Not needed.

CONSULS: The New Zealand High Commissioner represents all British subjects; French Consul, Australian High Commissioner, Embassy of the Chinese People's Republic, South Korean Consul, West German Consul, United States of America Consul.

REPAIRS: Minor repairs only.

SURVEYORS: None.

TIME: GMT minus 11 hours. No alteration to clocks.

HOLIDAYS: No cargo on Sundays between 0300 and 2100 hrs. The recognised holidays are Christmas, New Year, Boxing Day, Good Friday, Easter Monday, Whit Monday, Anzac Day and Independence holidays from 1st June to 3rd June.

AIRPORT: 25 miles from Apia on Western side of Island. Regular and frequent mail and passenger services. Direct to Auckland or USA via American Samoa.

TELEPHONES: Police and public telephones near wharf and provisions are available for telephone connection to tourist vessels berthed at the wharf.

POLICE/AMBULANCE/FIRE: Hospital 21.212; Police 22.222; Fire 999 emergency or 20.404.

EMERGENCY CO-ORDINATION CENTRE: U.S Coast Guard, Pago Pago, American Samoa, 80 miles East of Western Samoa.

SHORE LEAVE: No restrictions.

BANKS: Bank of Western Samoa, P.O.Box 189, Apia, Western Samoa. Tel: 22 422. Telex: 258.

Pacific Commercial Bank (Affiliate Bank of New South Wales and Hawaii), P.O.Box 192, Apia, Western Samoa. Tel: 22 781. Telex: PCB 231.

STORING: See "Prelims" page viii.

1. Truck only.
2. N/A.
3. Yes.
4. Yes.
5. No regulations.
6. Yes.

SHIP SUPPLY SERVICE: The Marine & Shipping Division of the Ministry of Transport provides tug-boat services which are available for ship-to-shore transport of personnel and/or essential ship stores, sick crew members, etc., on application to the Secretary, Ministry of Transport.

GENERAL: *Supplies:* Provisions available. Deck and engine room supplies can be obtained in limited quantities.

Divers: No divers other than scuba divers are available, and skin divers may be recruited for up to 50 ft. diving.

Oil Pollution: The pumping of bilges, etc., within harbour limits is not permitted and *heavy penalties will be imposed for any breach.*

Garbage Disposal: The dumping of refuse of any kind within harbour limits is strictly prohibited. Properly covered receptacles will be made available and rubbish disposal vans will clear them as necessary. A small charge will be made for this service.

Charts: BA 1730 – Samoa or Navigation Islands.
BA 1339 – Plans in Samoa.
BA 2211 – Apia Harbour.

AUTHORITY: Government of Western Samoa, Ministry of Transport, P.O.Box 1607, Apia, Western Samoa. *Tel:* 23 700 and 23 701. *VHF:* Channel 16. *Telex:* 21 Malo Sx. *Contact:* The Secretary, Ministry of Transport. Peter Smith, Assistant Secretary Marine and Shipping, and Acting Harbour Master.

NOTES

Please also advise Shipping Guides Ltd.

Yemen Arab Republic

GENERAL:

CIRCULAR: Extract from the Circular dated 21st June, 1975 from the Hodeidah Port General Corporation, Hodeidah, Y.A.R.

Information and General Condition:

1. *Payment of Tolls and Dues:*

All charges imposed herein are payable in cash, in advance except in the circumstances in which the General Manager of the Hodeidah Port General Corporation exceptionally agrees otherwise.

2. *Definition to Certain Terms:*

(a) "Vessels" shall deem to refer in the Regulations to every floating craft made to sail on water by its or without its own means, whether or not fit for navigation.

(b) "Working Day": Commences at 0600 hrs. and ends at 1800 hrs. Night: Commences 1800 hrs. ends 0600 hrs. following day. Weekend: Commences Thursday 1200 hrs. and ends Saturday 0600 hrs.

3. *Public Holidays:*

The following occasions are observed as Public Holidays, which commence from 1200 hrs. on the preceding day and end at 0600 hrs. following the holiday:–

1. Weekly Holiday: Friday.
2. Al-Hijra (Moslem New Year): *1st Muharram.
3. Maulid-El-Nabi (Prophet's Birthday): *12th Rabia Awal.
4. Al-Meiraj (Prophet's Ascension Night): *27th Rajab.
5. Al-Shaabania: *15th Shaaban.
6. Idd-El-Fitr (4 days): *1st to 4th Shawal.
7. Idd-El-Adha (5 days): *9th to 13th Dulhijja.
8. Revolution Anniversary: 26th September.
9. 13th June (National Holiday).
10. Labour Day (1st May).
11. Revolution Day (14th October).

*N.B.: For Hijra Calendar dates, the corresponding Georgian Calendar dates will be those proclaimed by the Government of the Yemen Arab Republic.

CIRCULAR: To Owners/Masters.

We quote below text of a circular dated 21st January, 1979, issued by the General Corporation for Ports and Marine Affairs, Hodeidah, for your information and necessary compliance:

"No vessel, having no workable derricks or winches of her own, shall be received or accepted.

Agents shall be responsible for said obligations and without any liability to the Port General Corporation, in all Yemen Ports.

Due to non-availability of discharging means of floating cranes at anchorage and non-guarantee of available shore cranes, advisable you ensure that all ships calling under your Agency should be fully equipped as required."

PILOTAGE: Pilotage is compulsory on all vessels irrespective of their size, on entry and departure.

FINES:

1. A minimum fine of Rials 500/– and not exceeding Rials 2,000/– for failing to hoist the flag of the Yemen Arab Republic on the highest mast of the vessel.

2. Rials 160/– for arrival at outer harbour without prior notification (at least 24 hours' prior notice is required).

3. Vessels attempting to enter the Inner Harbour without prior permit and without Pilot will bear all responsibilities against that in addition to a fine of between Rials 5,000/– and 10,000/–. This is also applicable on sailing.

4. Rials 500/– to 1,000/– for draining water onto the quays in addition to the responsibility for whatever may be caused against that.

5. Rials 500/– to 1,000/– for throwing garbage overboard.

6. Rials 500/– to 1,000/– for immobilising/repairing engines without prior permission from the Authorities.

7. In case a Pilot is called to take the vessel out but she fails to sail for reasons of her own or her Agents, the following expenses will be charged in addition to Pilotage fees:

(a) Pilot detention.
(b) Tugs' assistance.
(c) Unmooring fees.
(d) Any other expenses.

8. The Corporation also reserves the right to impose any fine considered for violating its rules and regulations.

HODEIDAH: 14.48 N. 42.55 E.

Also see "General" before first port.

FLAG: It is essential that from the time they enter Yemen territorial waters all vessels fly the Yemen Arab Republic flag and this should be flown continuously until they leave these waters on sailing. Failure to observe this courtesy may result in a heavy penalty. The design of the flag is red, white and black horizontal stripes of equal size with green star in centre of white stripe.

DOCUMENTS: On arrival 16 copies of Manifests of cargo for discharge are required and each must be endorsed with the word *Correct* by the *Customs Authorities* at the Port of Loading. It is imperative that at least 2 of the 16 copies of manifests on board the ship should be freighted copies, otherwise 2 additional copies, showing freight details should be airmailed to Hodeidah separately to arrive in advance of the vessel. The Master should also be in possession of 1 copy of each Bill of Lading and certificate to show vessel is not blacklisted.

PILOTAGE: Pilotage is compulsory and as the entrance of the Channel giving access to the Port cannot be observed from the port area itself it is essential that accurate ETAs be given to the Agent in order to avoid delays waiting for a Pilot.

Vessels will be piloted down a dredged channel of about 8 miles in length. The channel, which is buoyed with black starboard and red port buoys, is 7.5 m. deep and 100 m. wide.

Pilot boarding position: Lat. 14° 56′ N., Long. 42° 54′ E.

ANCHORAGE: Masters are also recommended to ensure that on arrival they anchor off the entrance to the new port to await the Pilot and do not anchor off the old port opposite the town some 5 miles to the South and which is still shown as being the Port of Hodeidah on some charts. Vessels anchoring in the wrong area may suffer some delay before they can be contacted and asked to proceed to the correct area. Masters should be advised to anchor at the outer anchorage in the following position: Lat. 14° 55′ N., Long. 42° 54′ E. Also see "Shipmaster's Report – May 1982".

RESTRICTIONS: The approach channel is dredged to 9.5 m.

MAX. SIZE: Max. draft 30 ft. Also see "Shipmaster's Report", dated May 1982.

HEALTH: All members of the crew must be vaccinated against yellow fever and cholera otherwise permission will not be given to disembark.

RADIO: Masters should also ensure that a radio watch is kept to receive calls from the Port Authorities. The Hodeidah Radio station is operative between 0600 and 1800 hrs. daily, the call sign is: 4WD or 4WD3 (short).

TUGS: 6 tugs, 375 h.p. – 1,800 h.p. Pilot launch 250 h.p. also available to assist.

BERTHING: The quay is 540 m. in length with 4 berths, the first 70 m. long, depth 6 m., the second, third and fourth are of 150 m. length and 8.5 m. depth. *Officially, ships berthing are restricted in length to 180 m. and to a max. draft of 26 ft.*

The quay is of concrete construction and is well founded, vessels being secured to bollards in the normal manner. Use of rat-guards is recommended. The quay is equipped with 4 electric cranes described as having a max. capacity of 5 tons. Floating crane of 75 tons capacity available.

There is also a dolphin berth for discharging of petroleum products, which is connected by submarine pipes to storage tanks near the port area. The depth alongside is 6 m.

STEVEDORES: All labour is provided by Agent's representative including winchmen and tally clerks, but winchmen are provided entirely at ships' risk.

Rates of discharge vary but are quite satisfactory and with bagged cargo the average obtained is 30 tons per hatch per hour. Night work is possible.

Vessels are expected to supply food on board to cargo supervisors, foreman, and tally clerks. It may be left to Master's discretion whether this is supplied, but if not the Agency will have to supply same and the cost will be debited to the vessels.

Working Hours: Normally from 0600 hrs. to 1100 hrs. and again from 1300 hrs. to midnight. Additional work outside these hours, including after midnight can usually be arranged if necessary, although this cannot be guaranteed. Any work after midnight is overtime.

MEDICAL: Hospitals at Hodeidah and Sanaa-Taiz.

FRESH WATER: Available; pumping rate 10 t.p.h.– 15 t.p.h.

FUEL: Small quantities of diesel oil available from Yemen Petroleum.

CONSULS: (and Embassies):

Algeria
China
Egypt
E. Germany
Ethiopia
France
Italy
Iraq
Korea
Kuwait
Lebanon
Libya
Saudi Arabia
Syria
U.S.S.R.
United Kingdom
U.S.A.
W. Germany
Yugoslavia

REPAIRS: Light repairs can be carried out.

SURVEYORS: Lloyd's Agency available.

AIRPORT: Flights to Sanaa. Also flights from the new Hodeidah International Airport.

TIME: GMT plus 3 hours.

HOLIDAYS: Friday is the weekly day of rest, Sunday being a normal working day. There are also a number of Moslem holidays. Work is usually possible on such days but cannot be guaranteed. Holidays for special occasions are also liable to be declared at short notice. Friday if worked 50% and public holidays 100% surcharge. During the Moslem fast period of Ramadhan lasting about twenty nine days, which again varies from year to year, work is slower.

Also see "General" before first port.

SHORE LEAVE: Allowed. The Master should prepare a list of persons wishing to go ashore as Agent has to issue I.D. cards.

REGULATIONS: It is strictly forbidden for crew and passengers on board to take photographs while a vessel is in the harbour approaches or secured to the jetty in harbour.

Any vessel which permits oil and/or water to be discharged into the harbour will be liable to a minimum penalty of US $500.

DEVELOPMENTS: A container-Ro/Ro quay is under construction. Also see "Report" below.

REPORT: Received August 1979.

Hodeidah Port is situated 5 km. away from the old town, built in 1961, the population of which is about 200,000. It was built on the Red Sea Coast, S.E. of Khour Ras Alkatheeb, 4 km. away from the town of Hodeidah.

Hodeidah port is built at a location safe from storms and strong winds. The port is under the administration of the Ministry of Public Works, managed by the Hodeidah Port General Corporation. It has a direct connection with the capital city of Yemen, Sana'a, by a modern highway and another connecting the twin capital Taiz.

The official characteristics of the port are given as an external pool, 10 m. in depth, where ships can anchor. A channel, minimum 45 m. wide, about one km. long and 7.9m. to 8.3 m. deep, enters into the inner pool. Maximum draft allowed is 25 ft. at HW. Buoy markings and signals for safe entry and departure are available The dimension of the inner pool is irregular, about 500 m.×400 m. Overall depth is 7.6 m. at LLW, except for 100 m. wide strip along the 300 m. berth where the depth is 8.5 m.

The port consists of a quay for loading and discharging and one special jetty for tankers. The total length of the quay is 570 m. forming 4 berths of 120 m., 150 m., 150 m. and 150 m. respectively. The quay can receive vessels up to 180 m. in length with a draft of 25 ft. at HW. The quay is equipped with 4 electric shore cranes of 5 tons maximum lifting capacity each and two mobile cranes each of 30 tons capacity.

Discharging speed for bagged cargo is between 250 tons and 300 tons per hatch per day. For general cargo the discharging speed is about 150 tons per hatch per day.

At present, there are 21,660 sq.m. of cargo storage floor space:

Shed No. 1	45 m.×60 m.	2,700 sq.m.
2	96 m.×60 m.	5,760 sq.m.
3	50 m.×60 m.	3,000 sq.m.
4	50 m.×60 m.	3,000 sq.m.
5	25 m.×60 m.	1,500 sq.m.
6	45 m.×60 m.	2,700 sq.m.
7	50 m.×60 m.	3,000 sq.m.

and several open storage yards for heavy machinery and equipment. There are fuel tanks with a storage capacity of 16,000 cu.m. connected to the oil jetty by means of a pipe-line system. A wireless station for communications, from ship to shore and vice versa, is also available.

Future Development: The development of Hodeidah Port includes:

1. Dredging:
   a. Deepening of the approach channel to 9.0 m. below MLW (Mean Low Water) with the provisions of a passing bay and deepening of the port basin to 9.0 m. below MLW.
   b. Deepening to a depth of 9.5 m. MLW alongside Berth No. 2 and No. 6 (completed).
   c. An area to the West of Berth No. 1 to a depth of 4.0 m. MLW.
   d. Reclamation of land to construct Berth No. 6.

At the end of 1980 Hodeidah port will have:

Berth No. 1, length 110 m., dredged to 8.0 m.
Berth No. 2, length 150 m., dredged to 9.5 m.
Berth No. 3, length 150 m., dredged to 9.5 m.
Berth No. 4, length 166 m., dredged to 10.0 m.
Berth No. 5, length 195 m., dredged to 10.0 m.
Berth No. 6, length 195 m., dredged to 10.0 m.
Oil berth for 15,000 d.w.t tankers dredged to 10 m.

2. Berth No. 6: 195 m. long berth with a 40 m. wide apron. The corner between Berth No. 5 and 6 could be used to handle Ro/Ro vessels. Berth No. 6 is designed for container ships of: 22,500 d.w.t., length 204.0 m., breadth 31.0 m., draft 9.2 m., container capacity 1,522 units.

One container crane of 30.5 tons capacity will be installed on Berth No. 6 and will be able to load and unload between 30/40 containers per hour.

Ro/Ro Corner: Ro/Ro ship 22,750 d.w.t., length 210 m., breadth 33.0 m., draft 9.1 m.

3. Slipway: Provision of a 500 ton slipway next to the mechanical workshop. Slipway will be able to handle vessels 32 m. in length, 10 m. wide and 3.2 m. draft.

4. Paved Storage Areas: The concrete paving of open storage areas behind the 40 m. wide apron will amount to approximately 80,000 sq. m.

5. Buildings and Other Services: Construction of service buildings will include offices of the Port Corporation, Customs, Labour, First-aid with canteens, wash places and toilets.

6. Oil Terminal: 2 new breasting dolphins and 2 mooring buoys for handling tankers up to 15,000 d.w.t. (completed).

7. Floating Craft: A new 75 ton self-propelled floating crane has been provided.

8. Cargo Handling Equipment: 8 high level boom cranes, 1 port type mobile crane, 10 forklifts, 10 tonne trailers with tractors, 3 Ro/Ro tractors with goosenecks and Ro/Ro trailers.

9. Grain Silo Complex: The project under construction in Hodeidah port consists of a 20,000 ton Silo and a 14 stall bagging plant which has a bagging capacity of 200 per hour. The whole installation has a through put of 160,000 tons per year.

10. Water Mains: These will be extended to Berth No. 6 and fire mains will be from sea water and maintained with a 70 m. head by hydraulic accumulator.

Special Uses:

Berth No. 4 – grain unloading (40% berth occupancy).
Berth No. 6 – containers (with 30.5 ton container crane).

Container capacity will exceed 300,000 tons per year but will depend on the capability to empty containers and create an equivalent to that of the shipping.

Ultimate capacity of Hodeidah port in 1980 with 6 berths will be as follows:

Berth No. 1	150,000 tons
Berth No. 2	200,000 tons
Berth No. 3	200,000 tons
Berth No. 4	200,000 tons
Berth No. 5	200,000 tons
Berth No. 6	300,000 tons
Ro/Ro	200,000 tons
Total	1,450,000 tons

Cargo must be carried by ships with a draft less than 9.2 m.

Arrival at Hodeidah/Ras Alkatheeb Ports:

Vessels arriving at Hodeidah Roads should anchor in the following positions inside Buoy No. 2.

Lat. 14° 55′ 58″ N., Long. 42° 53′ 53″ E.

Masters should radio or cable Agent the following information at least 24 hours in advance:

(i) Exact ETA.
(ii) Draft – fore and aft.
(iii) Quantity of cargo on board and distribution.
(iv) GRT, NRT and LOA (When vessel is calling for the first time).

Through Hodeidah Radio Station, Calling Sign: 4WD 500 kHz. (Frequency from 0500 hrs. up to 1700 hrs. GMT). 72 and 48 hours prior notice of arrival can also be given through Aden Radio.

Pilotage on entry and departure is compulsory. Normally, no pilotage is allowed after 1630 hrs., or before 0600 hrs. Hence vessels arriving in Hodeidah Roads after 1630 hrs. may not be piloted in until 0700 hrs. the following morning. Likewise, vessels which do not sail before 1630 hrs. may not be piloted out until 0600 hrs. the following day.

Supply of fresh water and shipchandlering is available.

Documents:

4 Copies of Cargo Manifest.
2 Copies of Freight Manifest.
1 Copy of Bill of Lading.

(These should be airmailed to Agent after departure of vessel from port of loading.)

11 Copies of Cargo Manifest.
1 Copy of Freight Manifest.

(To be handed over to Agent by Master on arrival of vessel.)

Port Formalities:

1. Doctor.
2. Immigration.
3. Customs.

FOLLOWING TO BE STRONGLY OBSERVED BY ALL MASTER/CREWS OF VESSELS CALLING AT HODEIDAH:

1. Sale of wines and spirits prohibited.
2. Discharging water onto quay and dismantling ships' engines at berth not allowed.

In addition to above, Masters/Crews should be advised to take serious note of all prohibitions stipulated in the Port Tariff, see "General" before first port – "Fines".

SHIPMASTER'S REPORT: May 1982.

I came in and berthed at No. 6 Berth at 8.5 m. draft and discharged via vacuvators direct into lorries and managing a rate of 3,000 t.p.d. Pilot reckoned 29 ft. maximum can be taken in.

Other points in "Guide" seem accurate, but with the chart BA 3050 being too small I cannot see many Masters bringing a large ship into the recommended anchorage position. I anchored 3 cables N.N.E. of the No. 2 Buoy in better water.

PURSER'S REPORT: August 1982.

Requirements:

1 Maritime Declaration of Health. (Any country's (preferably Arab) is accepted suitably amended).
1 Vaccination List (ship's form).
10 Crew Lists (ship's form).
2 Bonded Stores Lists (ship's form).
1 Crew Effects List (ship's form).

Sundry Customs and Agent's forms were brought aboard on arrival. These required the usual information regarding draft, fuel, water, and tonnages, etc.

Customs and Port Authorities were very particular that cargo tonnages were accurate as per manifest when completing forms.

Customs sealed both bond and beer rooms, but placed no restriction on quantities in bars and cabins with the proviso that alcohol was not sold or given to locals. An additional quantity of bonded items was allowed to be removed before sailing.

Courtesy Ensign: Supplied in the U.S.A. and not marked to show which was top. It should be flown with the red stripe uppermost.

Mail: The Agent advised that mail both in and out of the country was slow and unreliable.

Laundry and Chandlery: Both services available but not used.

Navigation: The Master advises that navigational marks could well change due to berth extensions and port improvements. A container crane is at present under construction.

SHIPMASTER'S REPORT: April 1984.

Pilotage: Ships can enter or sail out of harbour at anytime, if Agent makes strong request. All the buoys in the channel as well as the approaches including the Sea Buoy are lit.

Berthing: Observed a ship entering with 30 ft. draft and Pilot confirmed that vessels can enter up to 30 ft. draft.

Stevedores: Bagged cargo discharging rate increased to up to 30 t.p.h. provided that receivers are able to supply sufficient trucks in time.

The stevedores no longer request drinking water from the ship, as they drink bottled water supplied from shore.

AUTHORITY: Hodeidah Port Authority.

AGENT: The Hodeidah Shipping & Transport Co. Ltd., P.O.Box 3337, Hodeidah, Yemen Arab Republic. Tel: 2403/4/5. Cables: "Hodship". Telex: 5510 (Hodeidah) and 2218 (Sana'a). Answerback: "Hodship". Branches at Mocha, Saleef, Taiz and Sana'a.

MOCKA: 13.17 N. 43.10 E.

Mocka new port opened in June 1979, with equipment for loading and unloading.

BERTHING: 150 m. of quay for vessels of up to 26 ft. draft (Depth 27 ft). Vessels may berth simultaneously. Cargo is discharged direct onto trucks or onto open area. New sheds are under construction.

TUGS: 2 available.

FUEL: Not available.

TIME: GMT plus 3 hrs.

REPORT: Received August 1979.

The project of constructing Mocka Port has been in execution since April 1978. The construction was completed during April 1979 and the port was officially opened to International traffic in June 1979.

Location: Mocka is connected to Hodeidah by a road of 240 km. out of which 45 km. is gravel and will be surfaced during 1979 as programmed by the government. Mocka is also connected to the twin capital of the Republic, Taiz, by a road of 110 km.

Jetty: The port consists of a jetty of 150 m. in length and 35 m. wide with a draft of 8.5 m. during low tide. This jetty can accommodate 2 vessels at a time, each of 150 m. length, on both sides and a Ro/Ro vessel at the head. A protecting jetty for breakwaters is also constructed for controlling the force of strong waves. It is 750 m. in length and 15 m. wide with various depths from 5 m. to 3.5 m. This jetty is constructed for the purpose of protecting the main jetty and can receive coasters and lighters of aforesaid drafts.

Anchorage: The dimension of the manoeuvring area, for vessels securing at berth and departing from the main jetty, is 420 m. The length of the channel leading to the manoeuvring area is 2,000 m. with a draft of 28 ft. 5 in. during low tide, whereas the draft during high tide is about 30 ft. Vessels calling at Mocka should anchor at the following position: Lat. 13° 20′ 01″ N., Long. 43° 13′ 02″ E.

Storage of Cargo: The reclaimed area for storage of discharged goods consists of 300,000 sq.m.

Future Developments: There are plans for building other jetties together with protecting jetties in the near future.

Bunkers: Bunkers, at present, are not available at this port. Any vessel calling at this port is required to supply fresh water for drinking purposes to all labourers during stevedoring operations.

Radio: Vessels calling at Mocka are advised to contact Agent through Hodeidah Radio Station, call sign, 4WD, 500 kHz (frequency from 0500 hrs. up to 1700 hrs. GMT), as, at present, this port is not equipped with a wireless station. It is proposed to establish one during 1979.

SHIPMASTER'S REPORT: August 1980.

Vessel: 6,000 d.w.t., 104.0 m. LOA. Discharged 2,000 tons of RBD palm oil.

Port Limits: None defined, however vessel is in port limits and 'arrived' once anchored within the anchorage marked on BA Chart 1955.

Documents: 1 copy personal effects declaration, 1 copy stores list, 1 copy inoculations and vaccinations and at least 10 copies of cargo manifests, 3 copies of crew list.

Anchorages: Vessel anchored safely in a position with the North Fort Barge 103° True −1.74 miles. Vessel's max. draft was 20 ft. and there was 30 ft. of water below the keel at 1 hour before low water. It is inadvisable to proceed further South, especially at night due to the placing of unlit channel marking buoys by the port.

Pilotage: There are presently two berths, one on either side of a finger wharf. The Pilot boards at the anchorage and brings the ship alongside one of these berths. There are 3 Pilots in Hodeidah and 1 in Mocka.

Max. Size and Restrictions: Max. permissible draft is 26 ft. salt water and max. LOA permissible is 500 ft.

Radio: None. The port operates VHF on Channels 16 and 14. There are no fixed hours and the port radio is in operation only when the port wishes to communicate with the vessels.

Radar: None.

Tugs: 2 tugs assist vessels for berthing and unberthing. We were assisted by the 'Markaron' (2,000 h.p.).

Cranes: None. There are mobile cranes available with the prior arrangements of the ship's Agents. Otherwise ship's gear is mainly used.

Stevedores: None in the strictest sense. Labour is recruited by the Agents and made available on board.

Tankers: There is no facility for discharging petroleum cargo.

Density: 1025.

Fresh Water: Not available.

Fuel: Not available.

Fire Precautions: None.

Consuls: None.

Repairs: Not available.

Dry Docks: None.

Surveyors: None.

Watchmen: None.

Customs Allowances: Bonded stores are not sealed. Master is verbally informed not to make any issue from the bonded stores without the Customs permission. All officers and crew who declared their quota were allowed to keep same.

Repatriation: Possible, but local Agent has no knowledge of how to effect it.

Airport: None.

Time: GMT plus 3 hours.

Shore Leave: Allowed. The town is situated about 4 km. from the jetty. There is no entertainment that seamen can find in this town and it is not advisable to be ashore after dusk.

ID Cards: None are issued but ship's personnel going ashore have to carry their seaman's book or passport.

AGENT: See "Hodeidah".

RAS ALKATHEEB: 14.55 N. 42.53 E.

The Port of Ras Alkatheeb is situated 14 km. from the main city of Hodeidah and connected by a gravel road which is in the process of being resurfaced and broadened with two traffic lanes on the same alignment, thus providing a first class road transport link between Hodeidah and Ras Alkatheeb. Also see "Hodeidah".

BERTHING: The port has a berth 180 m. in length and 6 m. wide, pontoon type, with ships berthing on either side. This port can receive vessels with a max. draft of 26 ft. at high tide. The port also has a pontoon comprising of 60 m. in length and 16 m. wide with a draft of 14 ft. Vessels can be secured to barges and coasters with a draft of 14 ft. which can be connected to the shore, thus enabling ships to discharge directly onto waiting trucks. Said pontoon is mainly used for bagged cargo on direct delivery basis.

Presently, this port does not have shore crane facilities and all unloading is done with ship's own gear.

Storage and Delivery: Due to lack of storage facilities at this port, delivery at present is given directly under the hook.

SHIPMASTER'S REPORT: November 1980.

1. Port does not accept Vessel's Registration until vessel is anchored between Buoy No. 1 and No. 2. This as per the Port Radio VHF station.
2. Buoy No. 2 is placed about 6 cables N.N.W. of charted position.
3. Do not attempt entry at night since Buoys are unlit and there are many uncharted stranded wrecks visible only during daytime.
4. Tugs available: 4×700 b.h.p. and 3×1,800 b.h.p. Pilotage only during daytime.
5. Vessel berthed at Ras Khatib pontoon. Max. draft 8.0 m., total effective length of pontoon 270 m.
6. Port issues a directive to Agents giving estimated time to discharge. If not completed, port charges at the rate of 4 Rials/per metre/per hour of stay extended.
7. Distance from Ras Khatib berth to town 15 km. Only 10 to 15 shore leave passes given to vessel regardless of number of crew.
8. No chipping and scraping permitted but painting is allowed.
9. Fresh water inside port is $4/– per ton, at Ras Khatib $20/– per ton by barge.
10. Provisions available but expensive.
11. Repatriation possible but very difficult due to having to obtain permission from Saana (Capital).
12. Cargo work is fast, 260 tonnes of cement per gang per day. Normal shift 0730 – 1200 hrs. and 1500 – 2330 hrs.
13. As per "Pilot", there will be dredging carried out soon and also lighted buoys will be placed.
14. Ras Khatib light Fl. 3 sec. of very low power.
15. Yellow fever inoculation not compulsory unless coming from infected area.

SALEEF (Salif): 15.18 N. 42.41 E.

Saleef port is a natural port on the Red Sea, approximately 80 km. North of Hodeidah port. Two routes, one round the North end of Kamaran Island and the other around the South end provide suitable access to the harbour.

As prevailing winds are generally Southerly or Northerly, vessels are able to approach the berth from downwind. This is important as vessels will probably have to berth without tug asistance. Initially, mooring facilities are designed for 50,000 d.w.t. vessels and consists of a wharf head 20 m. wide, 93 m. long with two dolphins. A 10 m. wide trestle connects the wharf head to the shore. Facilities are designed to absorb the berthing impact of a ship approaching with a velocity component of 15 cm. per second perpendicular to the berth face and for a 50 tons mooring line pull.

Future developments: For further developments of Saleef port, a French consulting firm has been awarded the contract, as consultants only, to submit a report on future developments of this port.

SHIPMASTER'S REPORT: December 1979.

Acknowledgements: Most of the information has been gleaned from local Agency representatives and Capt. A. Saeed, Harbour Master.

Reference has been made to Red Sea Pilot and various BA Charts. Local written information is unavailable for the area concerned.

General: Salif lies some 60 km. North of Hodeidah, it is a natural deepwater harbour sheltered by Kamaran Island.

Since 1976 the port has enjoyed moderate expansion and can now boast a modern jetty capable of berthing ocean going vessels; other pontoon type berths are available, these being linked to the shore by small stone jetties. At present the port can accommodate two vessels of up to 200 m. length with a draft of 12 m.

Salif is geared for the export of bulk salt and the import of grain and some general cargo. In the near future a further pontoon type berth is due to come into operation to be used solely for the import of bulk cement. A bagging plant and silo have been constructed to handle the additional cargo.

This report is mainly directed to the facilities associated with the import of grain, however where possible relevant information has been included which could prove useful to other vessels trading in the area.

Documents:

6 Crew Lists with passport numbers.
2 Bonded Stores Lists.
2 Personal Manifests.
2 Vaccination Lists.
3 Copies Cargo Manifest.
Local inward forms made out on arrival.

Approaches: (BA Charts: 543 and 548). Recommend approaching around the North end of Kamaran Island, as mentioned in Red Sea and Gulf of Aden Pilot, page 390.

The lighthouses stand out well, but at night they are not lit (December 1979). The only difficulty in making Salif, in daylight, is passing to the South of N.W. shoal light, the channel at this point being about one mile wide. At night the lighthouses prove quite good radar targets, and the various islands etc. show up quite well. Once around the top of Kamaran Island course can be set down Kamaran Passage to the anchorage area off Ras el Salif. Charterers frequently advise that passage is possible South of Kamaran Island, however this is not advisable; the leads mentioned on the chart are very difficult to see and there is no room for error.

Anchorage: No specific area designated but anywhere in the vicinity of Salif Jetty. For vessels waiting for the wheat berth it is best to anchor about 0.75 miles West of Ras el Salif. Good holding ground in about 14 fathoms of water. For vessels with poor radar it would be best to anchor outside Kamaran Island until daylight, when passage can be made in safety.

Weather: See "Red Sea Pilot" for information. At Salif the wind usually picks up during the day and this can delay berthing if the strength is above Force 4.

Pilotage: Pilot boards in anchorage area from medium sized launch. Yemenese Pilot with limited English.

Daylight pilotage only.

Berthing: Vessels berth, at the bagging plant pontoon, head to wind. The pontoon consists of a flat topped barge made fast to a small stone jetty; it is well fendered with car tyres. The offshore anchor is used whilst coming alongside and a launch runs various ropes ashore to posts set on the land. Five ropes are required either end and it is necessary to join the first few together as considerable lengths are initially run. The bagging pontoon can only accommodate one vessel at a time. See "Shipmaster's Report – May 1982".

The general cargo and salt exporting jetty lies some distance to the South of the bagging plant. This pier can take one vessel of up to 200 m. in length. Facilities at this berth are an improvement over the pontoon, however for the import of grain type cargoes, it is not so efficient, it being necessary to bag the cargo by hand. Both berths can take vessels with up to 39 ft. draft.

Buoys are at present being laid to the North of the bagging pontoon and these could prove an obstacle for vessels berthing. The moorings are being laid to assist vessels making fast to the new cement pontoon (see "Projects").

Quarantine/Health Regulations: Doctor boards on arrival, either at anchorage or alongside. No health forms as such. Smallpox only vaccination certificates required unless vessel from infected area when Yellow Fever and Cholera certificates are needed. No derat facilities.

Customs: Usual Islamic laws in force. Bond not sealed and apparently no objection for crew to consume spirits/beer on board. On no account must alcohol be given/sold to local Yemenese.

Immigration: Passports are inspected on arrival. (Harbour Master acts as translator for Immigration Authorities.) Shore leave granted with passes for Salif area only. Special permission has to be given to proceed outside local area, i.e. Hodeidah.

For crew repatriation, passports are taken to Sanaa by Agent for necessary visas to be arranged.

Medical Facilities: One doctor resides in Salif, Yemenese and speaks English. He will attend the ship rather than the patient visiting him. The nearest hospital is in Hodeidah.

Port Operations (Bagging Plant): Foremen and workers are hard working. The foremen reside in caravans close to the bagging plant whilst most of the stevedores come from Salif.

The method of discharge is to load a number of diesel driven evacuators on deck and by various pipelines, these are connected to a storage hopper situated on the pontoon/barge. The hopper is connected to a small bagging plant and by means of conveyors the sacks are loaded onto road transport.

Discharge rates per 24 hours worked between 1,600 tonnes and 1,850 tonnes. Charter Party rate indicated about 750 tonnes per day. The takeaway rate from the hopper appears to be adequate with plenty of road trucks available. The grain is shipped immediately to different parts of the Yemen.

It is usual to carry sufficient bags to enable the complete discharge of the grain to go unhindered. The bags are baled and discharged onto the pontoon at regular intervals.

Ship's gear is required at each hold to sling the pipes that lead from the evacuators into the hatch. It is also required for discharging the gunnies and for loading the evacuators (1.5 tonnes). The evacuators appear reliable but spillage of diesel results during re-filling etc.

Fresh Water: Available but expensive. Supplied by road tanker at 15 tonnes a time, it is necessary to use ship's pump for pumping the water aboard. Agents require ample notice prior to supplying water.

Fuel: Heavy oil and diesel oil not available unless barged from Hodeidah.

Stores: Not readily available; fresh stores difficult to obtain.

Agency: The main Agency lies some 60 km. away by track, and the ship is attended by a runner who commutes between Hodeidah and Salif. Considerable delays result before ship's business can be completed and it is necessary for everything to be in writing; repatriation, in particular, is difficult for the organiser as well as the traveller.

Communications between Salif and Hodeidah are non-existent, a telephone line exists, but this is out of order, it is however possible to communicate directly through Portishead Radio and sometimes the only way to get messages out.

Local currency and American Dollars are obtainable from the Agents. It is difficult to obtain the money from the Agents and generally it is best to arrive with sufficient cash on board to cover any expenditure.

To arrange repatriation it is necessary to allow at least six days. Visas have to be obtained from Sanaa and tickets arranged. If pre-paid tickets have been sent from U.K., then they must arrive in ample time. The airport at Hodeidah has regular connections with Sanaa which in turn is linked into most air routes via Paris. Transportation from the ship to Hodeidah is by Land Rover or similar four wheel drive vehicle.

Port Regulations: Nothing in writing. The Harbour Master, Capt. Saeed, is the person to approach if anything required. Apparently Salif is designated a military zone and this is the reason no written information is available.

Gangway: The vessel only lies alongside for a distance of about 80 ft. amidships and consequently a pilot ladder is used instead of a gangway or brow. If this causes any difficulty, ship's lifeboat can be used as a ferry between gangway and shore.

Watchmen: Supplied by local Police/Army. They remain aboard during vessel's stay and keep pilferage to a minimum. They also keep close watch on any alcohol that may be obtained by local Yemenese.

Shore Leave: See "Immigration".

Garbage: No facilities for taking garbage away from the ship; best to dump waste food etc., whilst retaining cardboard boxes, and plastic containers.

Repairs: Possible to immobilise main engines, as once on the berth it is unlikely to shift. No repair facilities ashore.

Time: GMT plus 3 hours (no change).

Flag: Yemen Arab Republic Flag must be flown at all times. Red, white, black horizontal stripes with a black star in the white section.

Consuls: Situated in Hodeidah or Sanaa. Harbour Master available for Noting Protest, etc.

Tugs: None available for berthing though frequently tugs operate in the area towing barges, pontoons, etc.

VHF: Situated in port office but hours of working very flexible. The Harbour Master normally calls any vessel up shortly after anchoring.

Fire/Ambulance: None available.

Projects: A new pontoon berth, similar to the grain berth, is being constructed about 0.25 miles to the North. Silos have been erected close to the shore and are capable of storing 9,000 tonnes of finished cement. A bagging plant has also been constructed next to the silos. It is intended that cement be shipped, in bulk, and with evacuators discharged into the silos. This project is due for completion sometime in 1980.

SHIPMASTER'S REPORT: May 1982.

I was in Saleef recently with 39,127 tonnes wheat – ship 182.08 m. long. The following are changes to information in the Guide.

The barge – pontoon berth with bagging plant no longer exists and apart from cement boats all ships now berth at jetty by Salt terminal.

Minimum water I found there in 18 days' stay was 18.5 m.

Ship's gear must be used and grain is dumped on wharf and bagged in situ, being taken away by lorries. Rate erratic, between 900 t.p.d. and 2,000 t.p.d.

Vessel has to vacate berth for car carriers and salt loaders.

No shore leave permitted.

Bond is now sealed. No restrictions on what is kept out.

BANKS: National Bank of Yemen. Local currency: Dinar.

On presentation of passport-receipt, US$ (and only this currency) can be exchanged for Dinars (approximately US$3 for 1 Dinar).

It is very difficult to obtain US dollars in exchange for Dinars.

SHORE LEAVE: In Mukalla (as well as in Aden) when passing Customs Gate, passport is exchanged for receipt by the Immigration Officer on duty. When returning from shore leave this receipt is again exchanged for passport.

Note: It is difficult to make Officials understand that crew members and/or visitors from abroad are not in possession of a receipt, which makes a crew change extra time consuming (Charterer had to wait 3 hours before he was allowed to proceed to the ship).

SHIP SUPPLY SERVICE: See "Aden".

DELAYS: At present congestion may occur during the S.W. monsoon period.

In future congestion may occur as infrastructure of the new port leaves much to be desired (Roads to/in/from the port, direct delivery etc.).

GENERAL: *Transit Time Airmail Post:*

Mukalla-Europe: Minimum 2 weeks, maximum 3 weeks.

Europe-Mukalla: Minimum 2 weeks, maximum 3 weeks.

Agency: National Shipping Co., P.O.Box 8039, Mukalla, People's Democratic Republic of South Yemen. Cables: "Natship Mukalla" (via Aden Radio).

Importer: National Company for Home Trade, 5th Government Branch, Mukalla.

NOTES

Please also advise Shipping Guides Ltd.

Yugoslavia

BAR: 42.05 N. 19.03 E. (See Plan Book)

PORT LIMITS: Seaward limits of the port defines a line drawn between "Voluica" light and Ratac Point.

DOCUMENTS:

On Arrival:

2 copies Health Declaration.
1 copy General Declaration.
5 copies Crew List.
5 copies Passenger List.
5 copies Crew Personal Effects.
3 copies Stores List.
1 copy Animal Pets Aboard.
1 copy Certificate of Financial Insurance on Civil Liability for Oil Pollution – only foreign ships carrying more than 2,000 tons of oil.
1 copy List of Hazardous Cargoes loaded on board.

On departure:

5 copies Crew List, if any change.
1 copy Cargo Manifest for Loaded Goods.
List of Hazardous Cargoes, if loaded.

PILOTAGE: Advance notice 24 hours through ship's Agent. Pilot boat blue hull, white deck house, with letter "P" on each side. Pilot boards off West Breakwater. Use international signals to call Pilot. Pilot may also be contacted through Bar Radio on VHF.

ANCHORAGE: Safe anchorage West and N.W. off West Breakwater. Anchoring not allowed nearer then 0.5 mile off Breakwater.

RESTRICTIONS: Vessels enter/leave port by day and night. Tankers allowed only during daylight. Depth entrance 14 m..

No restriction on LOA and beam. Foreign nuclear ships enter only with special permission. Leaving or entering port for foreign tankers not allowed if not having said Certificate.

MAX. SIZE: Fully loaded vessels up to 14 m. draft.

RADIO: Bar-Radio, call sign YUW, 500 kHz and 447 kHz. Radio telephony on 2182 kHz on 2 meters band and on Channel 16.

Agents can be contacted through Bar-Radio on VHF.

TUGS: 2 tugs with twin 594 kW engine.

BERTHING: Berth assigned at Agent's request or Receiver's/Shipper's, both for liners or tramps, at the daily meeting of the Harbour Board.

2,500 m. of berthing space and able to accommodate up to 20 oceangoing vessels.

STEVEDORES: The Port Enterprise "Luka Bar" is the sole stevedoring company. Work is done in 2 shifts: first 0600 – 1400 hrs., second 1400 – 2200 hrs. Third shift can be ordered at daily meeting, paid as overtime.

MEDICAL: Medical care available at Medical Centre at Bar.

TANKERS: New oil berth can accommodate tankers up to 80,000 d.w.t., draft limit 14 m. Bunkers from local bunker station. Tank cleaning, pumping of slops and degassing not permitted in port.

Tankers must be ready to leave port at 30 minutes' notice, at any time and at request of Port Authorities.

CARGO HANDLING FACILITIES: Available for all kinds of general cargo, containers, pallets, Ro/Ro, bulk, fuel oil and chemical cargoes. Regular passenger service to Italy and from May – October to Greece.

Grain silos with 30,000 tons capacity with covered Vacuvator.

DENSITY: Sea water.

FRESH WATER: Available from hydrants on quay.

FUEL: Can be obtained from local bunker station. All grades available. A fuel barge may be available in the near future.

GANGWAY/DECK WATCHMEN: Available at Master's request.

OPENING/CLOSING HATCHES: Normally performed by crew, or as per Charter Party.

CARGO GEAR: *Mobile Shore Cranes:* 6×5/6 tons, 3×3 tons, 3×8 tons. Fork-lifts capable of handling containers, Vacuvators, 3 cranes for bulk cargoes. 1×40 ton container crane. If not agreed in C/P, loading and discharging is by shore cranes.

CUSTOMS ALLOWANCES: Yugoslav Customs Regulations apply.

IDENTIFICATION CARDS: Shore passes issued by local Police.

CONSULS: Same as "Rijeka".

REPAIRS/DRY DOCKS: Dry Docks at Shipyard "Veljko Vlahovic", Bijela, 36 miles from Port of Bar, capacity of about 130,000 d.w.t. and 35,000 d.w.t., available for all types of deck and engine repairs. Minor damage can be repaired while loading/discharging.

SURVEYORS: Representative of Yugoslav Register of Shipping at Tivat (80 km.). Bureau Veritas at Dubrovnik and Lloyd's Register at Split.

REPATRIATION: From Bar by bus, train (International Lines), and ship. From Airports Tivat, Titograd and Dubrovnik by plane.

TIME: Central European Time, GMT plus 1 hour. Summer time kept from March to October (date fixed annually).

SERVICES: Compass adjuster at Bijela (100 km.), RDF adjuster at Dubrovnik. Other electronics repairs via Split.

HOLIDAYS: January 1st and 2nd, May 1st and 2nd, July 4th and 13th, November 29th and 30th. Work can be arranged on Sundays and 2nd day of two-day holiday.

POLICE/AMBULANCE/FIRE: Police Tel. 92; Ambulance Tel. 94: Fire Tel. 93.

SHORE LEAVE: Allowed.

STORING: See "Prelims", page viii.

1. By truck.
2. Yugoslav Federal Regulations apply.
3. Yes.
4. Yes.
5. Yugoslav Customs Regulations apply.
6. Yes.

DEVELOPMENTS: See "Plan".

AUTHORITY: Lucka Kapetanija Bar, Obala 13, Jula 8, Src Gora, 85000 Bar, Yugoslavia. *Tel:* (085) 22-382 Harbour Master; (085) 22-733. *Telex:* 63188. *Contact:* Captain Vickovic Vukasin, Harbour Master.

AGENT: Jadroagent – Bar. Topolica b.b. P.O. Box 10, 81350 Bar. Cable: Jadroagent Bar. Tel: (085) 22194/5. Telex: 63141 Yu Jadrag.

DUBROVNIK (Gruz Harbour): 42.38 N. 18.07 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".

PILOTAGE: Compulsory. Pilot boards at a point situated approximately in centre of triangle formed by Kolocep Island, Daksa Island and Grebeni Rocks. Pilot boat may be contacted on VHF Channel 16.

ANCHORAGE: In about 22 fathoms in channel between Daksa Island and mainland. This anchorage is exposed to strong N.N.E. winds in Winter time.

RESTRICTIONS: Only port of Gruz is open to commercial traffic, the old port of Dubrovnik (within the city walls) can accommodate only yachts and small craft drawing under 9 ft.

MAX. SIZE: Max. length 230 m., max. draft 32 ft., no limits on beam.

RADIO: Dubrovnik Radio: *Telegraphy:* call sign YUX, working on 500 kHz and 447 kHz, (working 24 hours). Traffic list 0030, 0430, 0830, 1230, 1630, 2030 hrs.

Telephony: Working on 2182 kHz and 2615 kHz, (working 24 hours). Traffic list every odd hour + 20 minutes.

VHF: Listening Channel 16 throughout 24 hours and working on all Channels. Duplex Channel 23 with connection to national and international telephone network. All times are GMT.

TUGS: No permanently stationed tug boats, but can be ordered when necessary from other ports.

BERTHING: Berths for 5 ocean going vessels. 6 cranes from 1.5 to 25 tons lifting capacity.

CARGO HANDLING FACILITIES: The port handles some bulk cargoes (grain and bauxite) occasionally and in small quantities but is not specially equipped for handling these and other cargoes.

STEVEDORES: The port enterprise "Luka Dubrovnik" is the sole stevedoring company. Work is done in 2 shifts: first 0600 – 1300 hrs., second 1400 – 2100 hrs.

MEDICAL: General hospital and medical facilities available.

FRESH WATER: Available from hydrants on quay.

FUEL: Not available. Only oil for diesel engines in limited quantities. Heavy fuel can be delivered by coastal tankers from Split.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: If not performed by crew, stevedores.

CUSTOMS ALLOWANCES: About 40 cigarettes and limited amount wine/spirits per man per day.

CARGO GEAR: Although operations are performed usually with shore cranes ship must have efficient cargo gear and relative certificates.

IDENTIFICATION CARDS: Issued by local police.

CONSULS: Sweden: Konzulat Kraljevine Svedske, Zeljarica 7, Dubrovnik. Tel: 23144. Cables: Svensk.

Netherlands (Vice-Consul): Vicekonsulat Kraljevine Holandije, Gruska Obala 46, Dubrovnik. Tel: 24947.

REPAIRS: Small repairs only.

SURVEYORS: Bureau Veritas.

REPATRIATION: By bus, ship or plane from Dubrovnik International Airport.

TIME: Central European Time. GMT plus 1 hour. Summertime kept.

POLICE/AMBULANCE/FIRE: Police, tel. 92; Fire, 93; Ambulance, 94.

SHORE LEAVE: Allowed.

AUTHORITY: Lucka Kapetanija Dubrovnik, Gruska Obala 75, Dubrovnik. *Tel:* 23386. *Telex:* 27623 Yu Luckap. *Cables:* Luckap.

AGENT: Jadroagent – Dubrovnik. Gruska Obala 63, 50000 Dubrovnik. Cable: Jadroagent Dubrovnik. Tel. 23464 and 24464. Telex: 27514 Yu Jadrag.

KARDELJEVO (Formerly Ploce): 43.03 N. 17.26 E. (See Plan Book)

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".

PILOTAGE: Compulsory for vessels over 500 g.r.t. Pilot boards vessel at entrance of the channel within a circle of 3 miles radius from Point Visnjica. Pilot station on VHF Channel 16.

ANCHORAGES: Vessels are allowed to anchor West of the line which connects Kunova Cove on peninsula Peljesac with point Lat. 43° 03′ N., Long. 17° 24′ E. on land coast. Depth over 25 m.

RESTRICTIONS: Ship entering channel between Visnjica Point and embankment of right hand bank must keep in middle, leaving buoys to starboard. Recommended speed 5 – 8 knots. Also see "Tankers".

MAX. SIZE: Draft limited to max. 34 ft. 6 in. Length limited to 220 m.

RADIO: Nearest Radio Station Split Radio YUS – 2182 kHz and 2574 kHz. Radio station Dubrovnik Radio YUS – 2182 kHz and 2615 kHz.

VHF: Channels 14 and 16.

RADAR: No Port Radar service.

TUGS: One tug of 850 h.p., and one of 1,200 h.p.

BERTHING: Bosanska Obala (Berth Nos. 7 and 8): Length 227 m., drafts up to 31 ft. – no shore cranes.

Biokovska Obala No. 1 and 2 (Berth Nos. 4, 5 and 6): Length 368 m., drafts up to 32 ft., 7×5 ton cranes.

Gat Oslobodenja: North Side No. 3 (Berth Nos. 1, 2 and 3): Length 410 m., drafts up to 32 ft., 1×7 ton crane and 3×5 ton cranes. Head: Length 250 m. South Side No. 5 (Berth Nos. 20, 21 and 22): Length 507 m., drafts up to 34.5 ft., 5×10 ton cranes.

One floating crane up to 100 tons capacity.

BULK CARGO FACILITIES: Grain, ores and minerals by shore cranes equipped for grab discharge at Quay Nos. 3 and 5. Grain through feeders to railcars. Alumina silo (capacity 20,000 tons) at Quay No. 1 – length 140 m., draft 30 ft., with loading facilities. Coal handled by 5×10 ton travelling cranes, average discharge rate 250 tonnes/p.h.

SPECIALISED CARGO HANDLING FACILITIES: No berth specially equipped for handling containers, only by floating crane.

BRIDGES: No bridges to pass through.
STEVEDORES: Port Enterprise "Luka Ploce" Kardeljevo, is the sole stevedoring company. Work in 2 shifts: 0600 – 1400 hrs. and 1400 – 2100 hrs. Overtime possible.
MEDICAL: Medical service available. Nearest hospital at Mostar (64 km.), Dubrovnik (110 km.) and Split (110 km.).
TANKERS: Oil Terminal – Channel Vlaska: one berth: vessel's length – no restriction, max. vessel's beam – 27 m., max. draft – 9.20 m. No slop/deballast facilities. When wind blowing over 10 knots direction North-South, and over 14 knots East-West, vessels are not allowed to sail through Channel Vlaska to oil terminal. Navigation through Channel Vlaska is allowed only during daylight with assistance of 2 tug boats. It is not allowed to berth or anchor vessels less than 41 m. out of marked line, while other vessels sailing through the channel.

Storage:
6 tanks × 10,000 tons each for crude oil and heavy fuel oil,
3 tanks × 5,000 tons each for natrium hydroxide,
1 tank for special chemical products,
2 tanks × 2,500 tons each and 2 tanks × 1,300 tons each for petrol.

DENSITY: 1010 – 1030.
FRESH WATER: Available from quay. Rate 15 t.p.h. – 20 t.p.h.
FUEL: Fuel oil only. Delivery by tank trucks. Advance notice required.
GANGWAY/DECK WATCHMEN: Available but not compulsory.
OPENING/CLOSING HATCHES: May be done by crew, otherwise by stevedores with extra payment.
CUSTOMS ALLOWANCES: About 40 cigarettes and reasonable amount wine/spirits per man per day.
IDENTIFICATION CARDS: Shore pass issued by local Immigration Office.
REPAIRS: Only small repairs.
DRY DOCKS: None.
SURVEYORS: Lloyd's, A.B.S., B.V. and Yugoregister at Split (110 km. from Kardeljevo).
CARGO GEAR: Although the port is equipped with shore cranes and a floating crane of 100 tons capacity, ships must have efficient cargo gear and relative certificates.
REPATRIATION: Possible by train or bus. By plane from nearest airports, Split (110 km.), Dubrovnik (110 km.) and Mostar (64 km.).
TIME: GMT plus 1 hour. Summertime kept.
POLICE/AMBULANCE/FIRE: Police, Tel: 058/79006; Ambulance, 058/79115; Fire, 058/79029.
TELEPHONES: Not possible to place telephones onboard.
SHORE LEAVE: Allowed.
DELAYS: Only occasionally for bulk carriers.
DEVELOPMENTS: Draft is to be increased to 50 ft. by 1985. A new dock and equipment for bulk cargo is also to be constructed by the end of 1986. Ships of 150,000 tons are to be accepted at that time.
GENERAL: Lloyd's sub-Agents: Jadroagent Kardeljevo.
AUTHORITY: Lucka Kapetanija Kardeljevo, Lucka Kapetanija, 58340 Kardeljevo, Yugoslavia. *Tel:* 058/79008. *Cables:* Lucka Kapetanija Kardeljevo. *Contact:* Captain Busurelo Aleksandar, Harbour Master.
AGENT: Jadroagent – Kardeljevo, Trg Marsala Tita BB, P.O.Box 111, 58340 Kardeljevo. Cable: Jadroagent Kardeljevo. Telex: 26239 Yu Jadrag. Tel: 058/79046 or 058/79117.

KOPER: 45.31 N. 13.44 E. (See Plan Book)

PORT LIMITS: The seaward boundaries of the port are between "Debeli Rtic" (Punta Grossa) and Rt. Vilizan.
DOCUMENTS:
5 Crew Lists.
5 Passenger Lists.
8 Cargo Manifests.
2 Freighted Manifests.
2 Bills of Lading.
2 Store Lists.
1 Crew Effects List.
1 Cargo Gear Certificate.
1 Derat Declaration.
1 Health Certificate.

PILOTAGE: Pilot station may be contacted on VHF Channels 16 and 20 from 0600 hrs. until 2200 hrs. every day excluding holidays. Pilot boards 1 mile from entrance in roads or at anchorage. Definite notice to be sent by telex 24 hours before vessel's arrival in port area through its Agent in Koper. In case of bad weather, ship must wait for a Pilot at anchorage.
ANCHORAGES: Port area, depth 17 m., sandy bottom. Safe anchorages in case of S.E. wind near Rt. Vilizan and in case of N.E. wind near Debeli Rt. (Punta Grossa).
RESTRICTIONS: Vessels enter port by day and night, except tankers which enter during daylight hours and at nights in fair weather.
MAX. SIZE: General cargo and container vessels drawing up to 32 ft. and tankers with 40 ft. draft. No length restrictions.
HEALTH: Ship must have Health Declaration and in this case Pratique is automatic. In the event of any suspected disease or fever on board, Master must advise Harbour Master or Agent by VHF Channel 16 or by telegraph. Harbour Master's Office on VHF Channel 16 continuously.
RADIO: Communication on MW and SW through Rijeka Radio.
VHF: Communication on Koper Roads on Channel 16, 20 and 12. On Channel 20 it is possible to telephone outside the country.
RADAR: No service available.
TUGS: In area of old port, 2 available, 750 h.p. and 1,500 h.p. equipped for fire fighting.
BERTHING: 1,730 m. of operative quay with depths from 6 m. to 14 m. Berth Nos. 2, 8, 9 and 10 are equipped with shore cranes. On other berths handling is by ship's own gear.
CRANES: 5 shore cranes with capacity of 20 tons. 3 shore cranes are on Pier 8, 9, 10 and 2 on Pier 2. Mobile cranes: 4×20 tons.

Timber terminal is equipped with Portal crane of 8 tons. All harbour services are mechanised, i.e. performed by fork-lifts, trucks, transporters and other modern means.
BULK CARGO FACILITIES: Berths: 3 (1 berth for bulk cargo and 2 berths for liquid cargo).

Sea depth: 14 m.
Storage space: 25,000 sq.m.
Tanks: Wine 2,492 cu.m.
Edible oil and molasses 24,500 cu.m.
Chemicals 12,350 cu.m.
Phosphoric acid 450 cu.m.
Latex 1,320 cu.m.
Oil and oil derivates 114,900 cu.m.

The terminal can accommodate vessels up to 80,000 d.w.t. The goods can be handled both directly and indirectly in export and in import direction.

A new terminal for bulk cargoes on the port's pier No. 2 is under construction. The terminal will be primarily designed for unloading of ores and coal. The first stage (operative in June 1984) will enable the accommodation of larger vessels up to – 14 m., and the possibility of storage of up to 300,000 tons of cargo.

Terminal description: (1st stage) Quay length 200 m., depth 14 m., 2 elevators – capacity 2×400 t.p.h. Conveyor connection to the open store area for dispatching coal into wagons at the station with the corresponding equipment for warehousing and dispatching.
SPECIALISED CARGO HANDLING FACILITIES: 3 Ro/Ro berths for handling Ro/Ro traffic (up to 15,000 d.w.t.).

The container berth (No. 7, length 350 m., depth 36 ft.) is equipped with 1×40 ton container crane with annual capacity of 130,000 TEU. For handling containers the port has 5 straddle carriers for 20 ft. – 40 ft. containers. Containers stacking 2 high, 7 terminal tractors (Sisu) and various tractors, forklifts for handling empty containers, forklift truck for Ro/Ro handling (23 tons) and rubber tyred gantry for loading/discharging containers onto railway cars and 3 rubber tyred gantries for manipulation in warehouse.
BRIDGES: None.
STEVEDORES: Gangs ordered from "Luka Koper" who are stevedores, by Agents and forwarding Agents in Koper.
MEDICAL: Medical assistance and hospital available.
TANKERS: Tanker berth for crude oil with max. draft 40 ft., equipped with 3×8 in. arms.
FRESH WATER: Available from any pier. Rate of delivery about 15 t.p.h.
FUEL: None available.
FIRE PRECAUTIONS: Usual precautions.
CONSULS: Italy.
REPAIRS: Small repairs can be carried out at Koper. In Izola, 2 miles from Koper, is wharf "2nd October". The repair service for containers is in the Port.
DRY DOCKS: In Izola for vessels up to 16,000 d.w.t.
SURVEYORS: In Koper – Jugoregister. In Rijeka or Trieste all representatives.
GANGWAY/DECK WATCHMEN: Available at ship's request.
HATCHES: If not performed by crew, then by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes for each member of crew and 1 bottle of spirits per week and reasonable quantity of wine per man per day.
CARGO GEAR: 40 ton heavy lift shore crane and container crane without spreader (50 tons) available. Loading/discharging mostly effected with ship's gear.
REPATRIATION: By bus, by railway from Koper or by air from the airports.
AIRPORT: Ljubljana (Brnik) – 120 km. Rijeka – 100 km. Pula – 100 km. Roncki (Italy) – 80 km.
TIME: GMT plus 1 hour. Summertime kept.
HOLIDAYS: New Year's Days (1st, 2nd January), 27th April, May Days (1st and 2nd May), 4th July, 22nd July, 1st November, Republic Days (29th, 30th November).
POLICE/AMBULANCE/FIRE: Police No. 92, Ambulance No. 94, Fire No. 93.
TELEPHONES: From anchorage it is possible to telephone through VHF Channel 20. Telephones can be installed onboard at Berths Nos. 1a, 1, 2, 3, 4 and 5.
SHORE LEAVE: Allowed after clearing inwards (Free Pratique).
IDENTIFICATION CARDS: Shore pass issued by local police (without photograph).
REGULATIONS: None.
DEVELOPMENTS: In 1986 a grain silo with a capacity of 60,000 tons will be operative. Conveyor connection between silo and quay, capacity 1,000 t.p.h.

Bulk Terminal (2nd stage): Extension of the quay by additional 200 m., depth of the whole basin – 18 m. 2 loading bridges, capacity 2×100 t.p.h.

SHIPMASTER'S REPORT: October 1979.
Stevedores: Port works 5 days a week in 2 shifts; 1st shift 0600 hrs. to 1300 hrs.; 2nd shift 1400 hrs. to 2100 hrs.; a third shift may be worked from 2200 hrs. to 0530 hrs. Also possible to work 1st, 2nd and 3rd shifts on Saturdays and Sundays.
Pilotage: Pilot station contacted on VHF Channel 16 from 0600 hrs. to 2200 hrs. Vessels berthed alongside during these times. Pilots board about 1 mile from the entrance to the port or at the anchorage. Pilot vessel painted blue in colour and displaying large white 'P' on the bow. Pilots speak very good English. Vessels unberthed 0001 to 2400 hrs.
General: The use of cameras is prohibited within the port area.

SHIPMASTER'S REPORT: June 1981.

According to Pilot they do not have VHF in their office but use the set in the Harbour Master's Office. We found we could not contact the Pilots until after anchoring and when the Pilot boarded he said it was only because he happened to be in the Harbour Master's Office at the time.

Tankers always berth port side to and do not normally sail after dark as they have to move out of the channel stern first and then swing.

Moorings usually 4 head ropes and 1 backspring with similar aft. After ropes go to 2 buoys and require lashings. After backspring and forward moorings go to bollards ashore.

There is a telephone, for local calls, in the office on the jetty.

Use tug's lines berthing and ship's lines sailing.

Vessel is inspected by Harbour Master and they are very particular about ship's documents especially the Certificate of Insurance or other financial security in respect of civil liability for oil pollution damage.

If wishing to visit Consul it is apparently easy to cross the border to Trieste but best to allow boarding Immigration Officer to examine your passport. A long gangway is required (no shore gangway) as jetty is low.

AUTHORITY: Lucka Koper, Vojkovo nabrezje 38, Yu-66000 Koper. *Tel:* (3866) 25-361. *Telex:* 34-110 and 34-168 Yu Luka. *Contact:* Commercial Department.

AGENT: Jadroagent – Koper. Vojkovo nabrezje 30, P.O. Box 60, 66000 Koper. Cable: Jadroagent Koper. Telex: 34234 Yu Jadrag.

PULA: 44.52 N. 13.50 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as Rijeka.
PILOTAGE: 48 and 24 hours' notice of ETA must be given to Agent. Pilot boards vessel off the breakwater. Merchant vessels bound for Pula must signal their name and port of departure to the signal station at Muzil.
ANCHORAGES: Vessels waiting for berth or Free Pratique can anchor in the outer harbour at about 0.4 miles West of the island S. Andrija.
RADIO: Coastal station Rijeka-Radio (call sign "YUR").
VHF: Communications with Agents and Port Authority through VHF on Channel 16.
TUGS: Up to 600 h.p. available from shipyard "Uljanik", otherwise from Rijeka.
BERTHING:

Gat Rijeka: North side length: 138 m., depth 20 ft.
South side length: 150 m., depth 17 ft.
Obala Ugljen: length 140 m., depth 26 ft.
Gat Ugljen: East side length: 160 m., depth 31 ft.
West side length: 140 m., depth 28 ft.
Obala Tv.Cementa: length 146 m., depth 20 ft.
Obala Uljanik: length 160 m., depth 22 ft., used only for discharge of steel plates.

CRANES: No shore cranes except one of 5 tons at Obala Tv.Cementa and one of 75 tons at Obala Uljanik.

A floating crane of 45 tons at shipyard "Uljanik".

Two mobile cranes of 17 tons and 20 tons respectively.

STEVEDORES: Port Enterprise "Luka" is the sole stevedoring company. Working 2 shifts: from 0700 to 1500 hrs. and 1500 to 2300 hrs. Saturdays, Sundays and holidays may be worked on overtime.
MEDICAL: Hospital and all kinds of medical assistance available.
FRESH WATER: Available from quay.
FUEL: Available by barge from Rijeka – advance notice required.
REPAIRS: Available from local shipyard "Uljanik" and "Crvena Zvijezda".
SURVEYORS: Lloyd's Register, Jugoregister, Norske Veritas.
GANGWAY/DECK WATCHMAN: Service available.
OPENING/CLOSING HATCHES: May be carried out by crew otherwise by stevedores on extra payment.
CUSTOMS ALLOWANCES: About 40 cigarettes and reasonable amount of wine/spirits per man per day.
CARGO GEAR: Loading/discharging by ship's own gear.
REPATRIATION: Possible by train, bus and air.
AIRPORT: At Pula.
TIME: GMT plus 1 hour. Summertime kept.
POLICE/AMBULANCE/FIRE: Police tel. 92; Ambulance tel. 94; Fire tel. 93.
IDENTIFICATION CARDS: Shore passes issued.
REGULATIONS: Speed limit: within a line joining Prostina Point (Point Kristo) and Kumpar Point vessels must proceed at a speed not exceeding 8 knots and within a line joining Andrija Island and Sv. Petar Peninsula at a speed not exceeding 5 knots.
GENERAL: Lloyd's Agents: Jadroagent-Rijeka.
AUTHORITY: Lucka Kapetanija-Pula, Obala M. Tita 18, Pula. *Tel:* 220-37, 276-46. *Telex:* 25251. *Cables:* Luckap Pula. *Contact:* The Harbour Master.

AGENT: Jadroagent – Pula, Obala Marsala Tita 14, 52000 Pula. Cable: Jadroagent Pula. Telex: 25210 Yu Jadrag.

RIJEKA (including Bakar, Omisalj, Urinj, Sepen and Rasa): 45.19 N. 14.26 E. (See Plan Book)

PORT LIMITS: Outer line of Anchorage area.
DOCUMENTS:

5 Crew Lists
5 Passenger Lists
3 Manifest of Dangerous Cargo (send cable before arrival with description)
3 Store Lists
2 Private Declaration
9 Cargo Manifests
3 Freight Manifests
2 Transit Manifests
2 Cargo Plans
2 Copies of Bill of Lading

Cargo and Freight Manifests and Cargo Plan with Hatch List if possible should be mailed to Agent from loading port.

PILOTAGE: Compulsory for vessels over 500 g.r.t. Pilot boards in the roads within anchorage area limit. Pilot on VHF Channels 8, 12 and 16.

For oil terminal at Omisalj Pilot boards 5 miles south of Rijeka Main Light. On request, Pilot will board tankers over 200,000 d.w.t. in the northern part of Kvarner at Lat. 45° 02′ N., Long. 14° 14′ E. approx.

Pilot available 24 hours. ETA to be sent 72 hours, 48 hours and 24 hours prior to arrival

ANCHORAGES: All vessels with exception of those loaded with dangerous or hazardous cargoes, must anchor in the zone enclosed by the following points:

a) Lat. 45° 20.0′ N., Long. 14° 22.7′ E.
c) Lat. 45° 15.1′ N., Long. 14° 27.1′ E.
b) Lat. 45° 17.5′ N., Long. 14° 20.0′ E.
d) Lat. 45° 18.4′ N., Long. 14° 28.5′ E.

Tankers and vessels with dangerous cargoes must anchor in the following zone:

a) Lat. 45° 17.8′ N., Long. 14° 28.0′ E.
c) Lat. 45° 14.1′ N., Long. 14° 29.4′ E.
b) Lat. 45° 15.1′ N., Long. 14° 27.1′ E.
d) Lat. 45° 16.1′ N., Long. 14° 31.8′ E.

APPROACHES: The access entrance to the Rijeka Port Basin is 250 m. wide and that of the Susak Port Basin is 45 m. wide.
HEALTH: To obtain Free Pratique 24 hours before arrival advise following details: number of crew and passengers, health conditions and possible infectious diseases. No person allowed to leave vessel until Free Pratique obtained.

RADIO: Rijeka Radio, call sign YUR 500 kHz, Radio telephone on 2m. band covering area of North Adriatic or by VHF Channel 16.
VHF: Port Authority on Channels 16 and 20. Tugs on Channels 16 and 8. Pilot on Channels 16, 8 and 12.
TUGS: 600 h.p. to 2,200 h.p. available.

BERTHING: General Cargo Facilities:
Rijeka Basin:
Gat Otokar Kersovani (The Otokar Kersovani Pier):

East: Length 150 m.
Depth alongside 7.30 m.
Head: Length 80 m.
Depth alongside 6 m.
West: Length 135 m.
Depth alongside 6.30 m.

This pier is mainly used for the accommodation and direct or indirect loading/unloading operations of smaller lots of general cargo.

Equipment: 2 dockside cranes of 1.5 tons capacity.

Ljubljanska Obala (The Ljubljana Quay):

Length 246 m.
Depth alongside 9.60 m. (31 ft. 6 in.)

By fitting appropriate quay fendering, this quay can accommodate vessels with maximum length of 200 m. and maximum draft 32 ft. 10 in.

It is mainly used for direct or indirect loading/discharge operations of larger lots of general or bulk cargo.

Equipment: 7 × 3 ton dockside cranes.

Gat Vladimir Nazor (The Vladimir Nazor Pier):

East: Length 195 m.
Depth alongside 8.50 m.

This quay is mainly used for direct or indirect loading/discharge operations of larger lots of bulk or general cargo.

By fitting appropriate fendering vessels of max. length 195 m. and max. draft 31 ft. 6 in. can be accommodated.

Equipment: 3×5 ton dockside cranes.

Pier Head: Length 84 m.
Depth alongside 7.5 m.
West: Length 169 m.
Depth alongside 8 m.

This quay is mainly used for direct or indirect loading/discharge operations of general cargo or smaller lots of bulk cargo by means of ship's cargo gear.

Gat Vladimir Gortan (The Vladimir Gortan Pier):

East: Length 120 m.
Depth alongside 7.30 m.
Head: Length 79 m.
Depth alongside 7.20 m.
West: Length 120 m.
Depth alongside 7.30 m.

The Pier is mainly used for direct or indirect loading/discharge operations of smaller lots of general or bulk cargo.

Equipment: 6 × 1.5 ton dockside cranes (three cranes on the East quay and three on the West quay).

Zagrebacka Obala (The Zagreb Quay):
East: Length 161 m.
Depth alongside 7.30 m.

This quay is mainly used for direct or indirect operations of general or bulk cargo lots.

West: Length 200 m.
Depth alongside 7.50 m.

This quay is normally used for loading/discharge of larger lots of general or bulk cargo. By fitting appropriate fendering a ship with max. length 180 m. and max. draft 31 ft. 6 in. can be accommodated.

Equipment 7 × 1.5 ton dockside cranes.

Splitska Obala (The Split Quay):
Length 158 m.
Depth alongside 6.25 m.

This quay is mainly used for direct or indirect/discharge operations of smaller lots of general or bulk cargo.

Gat "1 Maj" and Gat "29 Novembar" (The "1 Maj" Pier and the "29 November" Pier): These two piers within the Rijeka Port Basin, with the total quay length 450 m. and max. depth about 6 m., are used for the accommodation of passenger ships, car-ferries, fishing vessels and other smaller craft.

Trscanska Obala (The Trieste Quay):
Length 189 m.
Depth alongside 6.50 m.

This quay is mainly used for loading/unloading smaller volumes of general cargo, and is used occasionally for berthing and handling smaller Roll-on/Roll-off vessels.

Lukobran Rijeka (The Rijeka Breakwater):
Length 1,768 m.
Depth alongside 5.50 m. – 7.20 m.

A 10,000 d.w.t. floating dock is berthed along the breakwater quay. On the quay there is a port control centre with pilot station. The operational part of the quay is 700 m. long and is used for loading/unloading smaller lots of general cargo and for direct operations with bulk cargo and timber. A part of the quay is used for ship derat and for occasional minor repairs on ships.

Equipment: 4 × 5 ton dockside cranes.

Note: Almost all the quays and breakwaters are rail and road connected.

Susak Basin:

Obala 10.Rujna (The 10 Rujan Quay):
Length 240 m.
Depth alongside 6.50 m.

This quay is mainly used for direct or indirect operations of general cargo and timber.

Equipment: 7 × 3 ton dockside cranes.

Supilova Obala (The Supilo Quay):
Length 132 m.
Depth alongside 7.50 m.

Mainly used for loading timber by means of the ship's own cargo gear.

Gat Barcic (The Barcic Pier):
North: Length 106 m.
Depth alongside 8 m.
South: Length 106 m.
Depth alongside 7.80 m.

This pier is mainly used for the loading/discharge of smaller lots of general cargo or timber and for unloading smaller volumes of liquid cargo (wine, latex, etc.).

CRANES: Shore cranes with lifting capacities from 1.5 to 5 tons available at respective berths except at Gat V. Nazor – West side, Splitska Obala, Trscanska Obala, Supilova Obala and Gat Barcic where vessel's own gear must be used. Floating cranes of 30 and 100 tons. At shipyard "3.Maj" berth (20 ft.) 1 bridge crane of 300 tons.

CONTAINER FACILITIES: *Kontejnerski Terminal "Brajdica" (The Brajdica Container Terminal):* The Brajdica Container Terminal is located in the Eastern part of the Susak Port Basin at the mouth of the river Rjecina. It includes a 165 m. long quay with depth alongside 12 m. and a 60 m. wide Ro-Ro ramp.

Equipment: 40 ton container crane, straddle carrier, side loader, trailers, tugmasters, fork lift trucks, etc.

The terminal has about 60,000 sq.m. stacking area and a special container repair workshop.

Total annual capacity of the terminal is 40,000–50,000 TEUs. The terminal area is being constantly extended.

Ro/Ro vessels handled at Bakar (see below).

BULK CARGO FACILITIES:

Rijeka Basin:

Beogradska Obala (The Beograd Quay):
East: Length 110 m.
Depth alongside 7.8 m.

The quay is mainly used for working smaller vessels carrying general or bulk cargo.

West: Length 257 m.
Depth alongside 7.30 m.

The silo located on this quay has a 32,000 tons single storage capacity for grain and oleiferous seeds and is equipped with 2 ship loaders/unloaders with a total capacity of 400 t.p.h.

Vessels of maximum length of 250 m. and max. draft up to 34 ft. can be accommodated, provided that the ship lies 8–10 m. distant from the quay, berthed by dropping port bow anchor, stern line being moored to the buoy.

Gat Lole Ribara (The Lola Ribar Pier):
Length 160 m.
Depth alongside 7.90 m.

This pier includes a covered storage for fertilisers, single storage capacity 15,000 tons, and is equipped with the handling and bagging facilities for all types of fertilisers.

By fitting appropriate fendering vessels with max. length 180 m. and max. draft 32 ft. can be accommodated.

Susak Basin:

Lukobran Susak (The Susak Breakwater):
Length 320 m.
Depth alongside 6.50 m.

The breakwater quay is mainly used for loading/discharge of dry bulk cargoes and ships with max. length 180 m. and max. draft 31 ft. 6 in. can be accommodated. The ship must be berthed at a distance of 5 – 6 m. from the quay by dropping the port anchor with stern line moored to the breakwater.

Equipment: 6 × 5 ton dockside cranes.

Bakar:

Obala Podbok (The Podbok Quay):
Length 400 m.
Depth alongside 18.50 m.

Vessels with max. length 300 m. and max. draft 17.50 m. can be accommodated (170,000 d.w.t.). The quay is used for loading/discharging bulk cargoes such as iron ore, bauxite, coal, etc., rate up to 3,000 t.p.h.

Equipment: 3 ship unloaders (1 × 45 ton and 2 × 16 ton capacity). The stockyard storage capacity is 300,000 tons. A special conveyor system connects the bulk cargo terminal with the nearby Coke Plant on the West coast of the Bay of Bakar for unloading and delivery of coal to the Coke Plant.

Obala Goranin (The Goranin Quay):
Length 84 m.
Depth alongside 9 m.

This quay is used for loading coke into smaller vessels and for loading/unloading operations with general cargo stored in the Back-up Storage Facility "Skrljevo".

Ships of 160 m. length and max. draft 29 ft. 9 in. can be accommodated. To the West of the quay a new Roll-on/Roll-off berth is being constructed.

Equipment: 2 × 5 ton dockside cranes.

Also see "Shipmaster's Report" dated November 1979.

SPECIALISED CARGO HANDLING FACILITIES:

Sepen:

New terminal for LPG and liquid chemicals carriers at Sepen-Krk Island (about 8 nautical miles S.S.E.'ly from Rijeka port) operated by Dina – Petrokemija. It consists of three berths: 2 "T" concrete jetties and one concrete multi-purpose berth. Jetty "A" is for liquid gas carriers up to 15,000 cbm, max. draft 11.5 m. Jetty "B" is for chemical tankers up to 60,000 d.w.t., max. draft 15 m. Length of multi-purpose quay is 90 m., max. draft 6 m., no shore cranes. Loading arms (8 in.) for ethylene liquid, ethylene vapour, VCM liquid and VCM vapour are on berth "A". Loading arms (8 in.) for fuel oil, caustic soda solution and EDC liquid (plus EDC vapour 3 in.) are on berth "B".

Rasa:

Bazen Rasa (The Rasa Port Basin): The Rasa Port Basin is located some 30 nautical miles S.W. of Rijeka port in the naturally protected bay of Rasa which is 5 km. long, with the navigable channel about 40 m. deep.

The port facilities in the Bay include:

165 m. long quay, with 11 m. depth alongside, used mainly for loading/unloading sawn timber. The quay area includes about 150,000 sq.m. of open space and 40,000 sq.m. of covered storage space for timber.

Equipment: 3 × 5 ton dockside cranes.

Separate pier with a berth, 25 m. long and 7 m. deep enabling the accommodation of ships up to 100 m. in length; it is exclusively used for loading livestock. The livestock terminal also includes a stable for the acceptance of about 700 head of cattle at a time.

STEVEDORES: Port Enterprise "Luka" Rijeka is the sole stevedoring company. Working 2 shifts: 1st from 0630 to 1430 hrs., 2nd shift from 1430 to 2230 hrs. Saturdays, Sundays and holidays may be worked on overtime. Unloading of bulk cargo at the basin of Bakar during the first shift on Saturday is considered to be an ordinary working shift. Timber operations normally performed during first shift only.

MEDICAL: Two hospitals and all kinds of medical assistance.

TANKERS: At Bakar Basin, berths for tankers up to 80,000 d.w.t. stern to shore and up to 40,000 d.w.t. alongside quay (draft 32 ft.) loading refined oil products.

At Urinj – 5 miles East of Rijeka – 1 berth for tankers up to 200,000 d.w.t. discharging crude oil. Also used for loading of virgin naphtha shipments. Tankers moor stern to quay using both anchors. Depths of 17 m. marked by 2 buoys. Cargo hoses: 1 flexible floating hose of 20 in. with 2 ends of 12 in. each. For connecting hoses on ship's manifold a derrick or crane of minimum 5 tons S.W.L. required. Also see "Shipmaster's Report" dated February 1980.

At Omisalj (Krk Island) (Lat. 45° 13.4′ N., Long. 14° 32.2′ E.) – 7 miles S.E. of Rijeka – new oil terminal for tankers up to 350,000 d.w.t. (minimum size 40,000 d.w.t.) and with draft up to 27 m. Two "T" shape piers (steel platforms) for alongside berthing. Each berth is equipped with four unloading arms of 16 in. for crude oil discharge and 2 arms of 12 in. for bunker delivery. Fresh water available, rate 25 t.p.h.

DENSITY: 1020 to 1025 depending on place, season and weather.

FRESH WATER: Available from quay in any quantity.

FUEL: All grades of bunker available by barge – advance notice required.

FIRE PRECAUTIONS: If 2 tankers moored side by side in Bakar, tug required to stand-by. Tankers moored stern to quay must have towing line ready.

CONSULS: Netherlands, Sweden. Others at Zagreb and Belgrade.

REPAIRS: All kinds available.

DRY DOCKS: 3 Floating Docks: 5,600 tons, 12,000 tons and 24,000 tons lifting capacities.

SURVEYORS: Lloyd's Register, Bureau Veritas, American Bureau, Jugoregister.

GANGWAY/DECK WATCHMEN: Service available.

OPENING/CLOSING HATCHES: May be carried out by crew, otherwise by stevedores for extra payment.

CUSTOMS ALLOWANCES: About 40 cigarettes and 0.5 litre wine and a reasonable amount of spirits daily per man.
CARGO GEAR: Although operations usually by shore cranes, ship must have efficient cargo gear and relative certificates.

REPATRIATION: Possible by train, bus and air.
AIRPORT: At Krk Island (28 km. from Rijeka).
TIME: GMT plus 1 hour. Summertime kept.
HOLIDAYS: January 1st and 2nd, May 1st and 2nd, July 4th and 27th, November 29th and 30th. Work can usually be arranged on Saturday, Sundays, January 2nd, May 2nd and November 30th from 0700 to 1400 hrs. on extra payment. If a holiday falls on Sunday the next working day becomes a holiday.

TELEPHONES: Connection possible upon special request.
SERVICES: Facilities for discharge of tank-washings at Bakar, compass adjusting.
IDENTIFICATION CARDS: Shore passes issued.
GENERAL: Lloyd's Agents, Jadroagent – Rijeka.
DELAYS: Waiting for some specialised berth occasionally experienced.
DEVELOPMENTS: The new "Dina – Petrokemija" terminal is under construction and upon completion of new plants will be able to handle other products (gases and chemicals). See "Plan Book".

SHIPMASTER'S REPORT: Urinj: February, 1980.
INA Petroleum Co. Berth: See "Plan".
Office: The Port of Urinj, telephone 41-022 ext. 250. Can be contacted via Rijeka Radio at any time.
Berth: The petroleum berth of Urinj (Lat. 45° 17′ N., Long. 14° 31.7′ E.) is situated 5 miles E.S.E. from the port of Rijeka. Its position is marked by a buoy whose characteristic is Fl.W. 3 sec. It is open 24 hours a day for commercial activities. The depth of water at this berth varies from 45 m. to 20 m. below the level of mean tides. The bottom is mud. Because of this it can accept tankers up to 200,000 d.w.t.
Documents on Arrival: The following documents are required on arrival:
5 Copies of a Crew List (full personal data, including birth place, date of birth, etc., are necessary).
5 Copies of Passenger List – if any
2 Copies of List of Ship's Stores
2 Copies of Manifest of Dangerous Goods – if any
2 Copies of Customs Declaration List
2 Copies of Transit Cargo Manifest
1 Cargo Manifest with extra copy for Customs.
Notice of Arrival: Vessels should give notice of arrival to their Agents via Rijeka Radio 48 hours and 24 hours in advance.
Approaching Directions: After passing Cape Jablanac a course of 060° leads safely to the tanker anchorage. The Pilot will board at anchorage area from a tug if the vessel is to proceed to the berth immediately.
VHF: Vessels equipped with VHF radio telephone should contact "Rijeka Pilot" on Channel 8 or "Rijeka Radio" on Channel 16 for berthing instructions.
Tugs: For berthing of a vessel the use of tugs is obligatory.
Gangway: Vessels should use their own port side gangway.
Manoeuvring: When the Pilot boards the vessel and forward tug is secured, both anchors (with one shackle in the water) should be ready for use. The stern mooring lines are carried toward the shore by a mooring boat. Usually 9 to 10 lines are used (6 from the vessel, and 4 from shore).
Connecting Hoses: After mooring operations have been completed, the connecting hoses will be brought alongside the starboard side of the vessel by a workboat. There are 2×12 in. hoses available, one for crude oil and one for products. Connecting and disconnecting of the hoses will be done by INA personnel, supervised by the Port Captain. The assistance of the ship's crew in operating windlasses, winches, etc. is required.
Note:
a) A minimum S.W.L. of 5 tons is required for the 12 in. hoses.
b) The vessel is responsible for good condition and effectiveness of the equipment.
c) Vessels are required to keep main engine on stand-by all the time during their stay in berth, therefore no repairs to the main engine of the vessel may be undertaken during berthing. Power must be kept on for possible adjustments of mooring lines, anchors, and derricks.
Discharging: When the connecting of the hoses is completed, and the ullage report completed, Chief Officer will report the readiness of the vessel for discharging operations. The vessel is required to discharge the cargo as quickly as possible. Max. discharging rate is about 6,000 t.p.h.
Sailing: After the discharging operation is completed, the vessel should leave the berth as soon as possible. The Master should keep in touch with the Port Captain who will despatch a Pilot and Authorities on time.
Deballasting: After arrival at anchorage or berth and Free Pratique has been granted, the Loading Master will take samples of the ballast water for quality checks. Permission to discharge ballast water overboard will be granted by the Port Captain only. If laboratory analysis is not accepted by the Port Captain, vessel must shift to the slop-discharging installation at Bakar. The "not accepted ballast water" must be discharged there through stern discharge line only. After tank cleaning and line-flushing, vessel will be returned to Urinj with or without ballast at Master's option.
Loading: INA Refinery produces several kinds of products.
Cargo Loaded: Clean unleaded virgin naphtha.
Density at 15° Centigrade −0.74.
Loading rate – average 1,500 cu.m.p.h.
Documents on Sailing: The following documents are required on sailing:
4 Copies of Crew List.
4 Copies of Passenger List.
2 Copies of List of Ship's Stores.
Free Pratique: To obtain Free Pratique by radio, vessels should send the following information to their Agent 48 hours in advance via Rijeka Radio:
The number of crew and passengers,
Health conditions and possible infectious diseases.
Note: No one is allowed to leave the vessel until Free Pratique is granted.
Medical: There are 3 well equipped hospitals in Rijeka whose medical staff is capable of giving full medical protection.
Fresh Water: There is an unlimited supply of fresh water available. It is supplied by a floating pipe-line attached to the Eastern signal buoy.
Fuel: All grades of bunker are available. Order must be placed 48 hours in advance.
Laundry: Laundry service has to be ordered immediately after arrival in order to ensure delivery of the clean laundry in time.
General: All kinds of repairs available by shipyard "Viktor Lenac".
There is a floating crane capacity up to 100 tons.
Dry docks accepting ships up to 60,000 d.w.t. also available.
Ship Supplies: In order to ensure timely supply of food and groceries vessel should place an order through the authorised stores (ship chandlers) immediately after or before arrival by radio.
Shore Passes: Shore passes are required for personal identification and serve as an entry permit to the terminal. Shore passes must be returned to the Immigration Office before sailing.
Transportation: During the time at the berth transportation of the crew and passengers from the vessel to the terminal is arranged by a shore launch from 0800 – 2400 hrs.
Lights: Manifold and poop mooring areas should be adequately lit to enable night mooring and discharging operations to be carried out with safety. Sea area around the ship also has to be properly illuminated.
Deck Watch: Deck watch must be maintained at all times while the vessel is in berth. In addition to its normal duties, the watch must inspect the hose connections and area around the ship against oil spillage, pollution, and to prevent unauthorised persons from boarding the vessel.
Action in Case of Emergency: In the event of a fire, oil spillage, or other emergency on the vessel, the emergency signal is 3 or more blasts of not less than 10 seconds duration each on whistle or siren supplemented by a continuous ringing of the general alarm bells.

SHIPMASTER'S REPORT: Bakar: November 1979.
Approaches: Entry to Rijeka Bay is made between mainland (Istra) and the island of Otok Cres. A small ferry runs between the two from a landing stage just North of Rt. Prestenice and another connects with Rijeka. A very conspicuous, red and white horizontal striped 700 ft. high chimney is situated about 1.5 miles West of Bakarski Zaliv and makes a good steering guide for the run across as the actual entrance is difficult to pick out being very narrow and blending in with the hills behind.
Anchorage: Initially we were ordered, by Port Authorities, to anchor 1 mile S.W. of the chimney but later requested to move closer to Rijeka for convenience in servicing vessel. Second anchorage 1.5 miles South of main breakwater. Depth of water both places 32 fathoms and we used 10 shackles cable on port anchor. Bottom is glutinous mud and despite Force 8, gusting 9 winds we held our position although many cargo ships dragged quite alarmingly. The normal winds for this time of the year (November) are the "bora", a cold strong N.E. wind which funnels down the mountains and can develop suddenly to gale force. We had unusually strong and prevalent S.E. winds during 10 days at anchor.
Communications: Pilot station listens on VHF Channel 16 and works Channel 8. Rijeka Radio was very easily contacted on VHF and proved of great help in connecting with Agents, Owners and Charterers. Rijeka Radio not quite as good for contact on W/T as does not seem to follow the times for listening as laid down. R/T proved difficult as well, due to his frequencies being same as other main radio stations.
Port Officials: Agent and boarding party boarded morning after arrival and cleared ship with very little difficulty, only normal representation required. Shore passes, made out by Agent, sent on board later same day. Permission to immobilise engines and lower lifeboats given by Harbour Master on arrival although this later cancelled due to approach of storm after 24 hours.
Shore Leave: It is possible to arrange for shore launches while at anchor to give shore leave but the service can be curtailed due to bad weather and in Winter could result in crew being stranded ashore. Last boat from the port being 2200 hrs. At the berth, no restriction on shore leave exists and there is an excellent bus service into Rijeka from the village of Bakar. Prices are comparable with UK and quality of goods similar. In Bakar itself is an excellent restaurant, family owned, which serves first class food in very nice surroundings. The Owner speaks perfect English.
Bunkers: Both intermediate and diesel oil is available by barge, price unknown but thought to be above average. Normally ships taking large quantities of bunkers would bunker at Augusta, Sicily.
Stores: Storing poses a problem due to several points. The access to the ship on the berth is difficult for large lorries as the extension to the wharf carried out over the past 3 years has wrecked the approach road to the face of the wharf and also the lorries if they make it to the wharf cannot get close alongside due to the conveyor belt and rails.

Storing at the anchorage also poses problems as there are no barges suitable for carrying large amounts and launches were used to bring the stores out to the ship but these can only carry a small quantity at a time. We had to load some large and heavy pieces of engine spares which had been sent from UK by lorry and these were transferred to a pontoon barge for delivery to the ship.
Crew Changes: Personnel were routed through Zagreb* mainly and this entailed a 4 hour drive from the airport to the ship, although it is possible to send people via Trieste which is a bit nearer. On arrival at Rijeka they have to see Immigration and are issued with shore passes. Wives and children should be entered on a passenger list and not included on the crew list as they get a special pass for 90 day entry.

*Whether this is normal routing or was Company's choice is not known.

Fresh Water: At anchor, limited water is available by tug but very expensive. On the berth, good quality water is readily available in any quantity required.

Cargo Handling: Berth has been extended and depth alongside increased to allow vessels drawing 17.5 m. to safely lie alongside although the 48 ft. 6 in. rock which was found previously at the Eastern end of the berth is still there according to the Pilot. (Approximate position of rock about 50 ft. off wharf and about 250 ft. from Eastern end). Berth is left in a very broken down looking state and lacks decent mooring posts at the Western end. Cargo is handled by 3 grabs (although only 2 were in use this call) 1 very large and the other 2 much smaller. Discharge rate on this call was averaging 30,000 t.p.d. with the major share being done by the larger grab which is at the Western end of the wharf. Cargo is either taken directly away by ore trains (if iron ore) or dumped onto back of wharf, or, if coke is taken direct to a coking factory on the other side of the bay by a covered conveyor belt. Storage or dumping facilities are very limited and this has a controlling effect on the discharge. When discharging iron ore, if insufficient trucks arrive and the stockpile is full, then discharge is on a stop/go basis and slow and also fully dependent on the trucks arriving regularly. This ship discharged 149,320 tonnes in 6 days as against a previous call experienced when 118,100 tonnes were discharged in 6.7 days. Maximum airdraft 16.5 m. on berth.

Stevedores were good and co-operation was good. Any damage caused was repaired before departure without causing any delay to the ship and the standard of repair was good.

Repairs: Besides the "3 MAJ" shipyard, there are quite a few smaller yards and workshops where repair work can be arranged.

Medical: There is a special clinic for seamen which opens at 1200 hrs. In attendance at that time is a general doctor who refers patients to the different specialists and usually entailed a visit next day to see those people.

Customs Allowances: On arrival, each man allowed 200 cigarettes and 0.5 litre wine/spirits during stay. Customs would allow an issue every 5 days of 200 cigarettes per man and 8 bottles of spirits for the ship.

SHIPMASTER'S REPORT: Rasa: October 1984.

Location: Lat. 45° 01.6′ N., Long. 14° 03.2′ E.

Documents: Same as Rijeka.

Pilotage: 48 and 24 hours' notice of ETA must be given to Agent. Pilot boards vessel off Traget Point (Lat. 45° 01′ N., Long. 14° 03.5′ E.). Sometimes Pilot boards off Ubas Point (Lat. 44° 56′ N., Long. 14° 04′ E.) by special arrangement. Pilot on VHF Channel 16.

Approaches: For obtaining Pilot off Traget Point, necessary to navigate through Zaliv Rasa Strait. This passage is easy during daytime, using the middle of the channel.

Anchorages: Off Traget Point with good sandy bottom and depths from 10 m. to 12 m.

Tugs: Not available.

Berthing: For berthing Pilot uses the starboard anchor for turning the vessel. There are 2 berths, 1 for loading livestock and 1 for loading general cargoes and special lumber from Austria. This berth is about 200 m. long with a depth of 10 m.

Cranes: 3 shore cranes of 5 tons and other equipment is available.

Stevedores: Port Enterprise "LUKA" is the sole stevedoring company. Working 2 shifts from 0730 – 1400 hrs. and 1500 – 1900 hrs. Saturdays, Sundays may be worked on overtime. Loading rate 2,500 CBM of lumber per day. (approx.)

Fresh Water: Available from quay.

Cargo Gear: Stevedores use shore cranes and ship's gear together.

Repatriation: Possible by bus to Rijeka or Pula and then by air or train.

Airport: Nearest airport at Pula.

Time: GMT plus 1 hour.

Identification Cards: Shore passes issued.

Telephones: Near to the berth through telephone centre.

AUTHORITY: Lucka Kapetanija.

Luka Rijeka (Port of Rijeka), Obala Jug. Mornarice 1, P.O.Box 146, 51000 Rijeka. *Tel:* (051) 33555 (Central), 23508 (Director General), 28886 (Commercial Director). *Telex:* 24165 Yu L R. *Cables:* Luka Rijeka. *Contact:* Zelimar Tomasic, Deputy Director General. Boris Pricard, Publicity Adviser.

AGENT: Jadroagent – Rijeka, Obala J.R. Mornarice 16, 51000 Rijeka, Cable: Jadroagent Rijeka, Telex: 24100Yu Jadrag, 24268Yu Jadrag.

SIBENIK: 43.44 N. 15.53 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".

PILOTAGE: Compulsory for vessels over 500 g.r.t. Pilot boards vessel at the entrance of St. Ante Channel, within a circle of 3 miles radius from Jadrija Lighthouse.

ANCHORAGE: Vessels waiting Pilot must anchor between Prvic Island and the shore if coming from the West, or between the South point of Zlarin and the shore if coming from the East, all in depths of 22 m.

In the Bay of Sibenik, vessels may anchor on the N.W. side of St. Ante Channel in depths of 30 m. – 40 m.

RESTRICTIONS: All vessels over 50 g.r.t. must apply for permission to enter St. Ante Channel by using International Code Signal "Z" by flag during daylight hours and a white light above a red light visible 2 miles all round or a sound signal (letter "Z" of morse code) during night hours. Vessels may enter channel only when authorised by a signal, 2 black balls vertically disposed by day or 2 green lights vertically displayed by night, made by the signalling station at Jadrija.

MAX. SIZE: Only draft limited. 33 ft. alongside in deepest berth.

VHF: Pilot has VHF available and maintains listening watch on Channel 14.

RADIO: None. Vessel may call Agent through Rijeka Radio and Split Radio.

TUGS: 1 of 750 h.p.

BERTHING:

Obala JRM: Length 274 m., draft up to 7 m. – no shore cranes.

Gat Vrulje: East side length 132 m., head 114 m., West side length 101 m., draft up to 9 m. – no shore crane.

Obala Dobrika: Length 225 m., depth 10 m.

Obala Rogac: Length 432 m., depth 10 m. Cranes: 2×7 tons, 3×5 tons.

Obala Sipad: Length 294 m., draft up to 7 m. – no shore cranes.

Obala Crnica: Length 90 m., draft 6.5 m. – no shore cranes.

Also see "Developments".

BULK CARGO FACILITIES: Ores and minerals (phosphate) at quays Rogac and Dobrika.

Obala Dobrika: Phosphate handling, capacity 400 t.p.h., storage capacity 1,000,000 tons.

STEVEDORES: Port Enterprise "Luka" – Sibenik and timber stevedoring company "Sipad".

Port works in two shifts: 0600 – 1300 hrs. and 1400 – 2100 hrs. Overtime possible 2200 – 0500 hrs.

Timber operations normally performed during first shift only.

MEDICAL: Medical service available including hospitalisation.

DENSITY: 1010 – 1025, depending on place, season and weather.

FRESH WATER: Available from quay.

FUEL: Diesel and Gas oil in small quantities.

GANGWAY/DECK WATCHMEN: Available.

OPENING/CLOSING HATCHES: If not performed by crew, can be done by stevedores at additional charge.

CUSTOMS ALLOWANCES: About 40 cigarettes and 0.5 litre of wine/spirits per man per day.

CARGO GEAR: General cargo and timber are handled using ship's gear. Ore and minerals by shore cranes fitted with grabs.

IDENTIFICATION CARDS: Shore passes given by local police.

REPAIRS: Small repairs only.

REPATRIATION: By train or bus and by air from Split Airport nearby, or from Zagreb or Zadar.

TIME: GMT plus 1 hour. Summertime – GMT plus 2 hours (March-September).

POLICE/AMBULANCE/FIRE: Police, 92; Ambulance, 94; Fire, 93.

TELEPHONES: No facilities for placing telephone on board.

GENERAL: Lloyd's Sub-Agents – Jadroagent Sibenik.

DEVELOPMENTS: Vrultje (East): Bulk fertiliser loading plant under construction, completion expected 1985.

AUTHORITY: Lucka Kapetanija Sibenik, Obala Oslobodjenja 8, 5900 Sibenik. *Tel:* 059-24261. *Cables:* Kapetanija Sibenik. *Contact:* Captain Janes Lakos, Harbour Master.

AGENT: Jadroagent – Sibenik, Obala Oslobodjenja 9, 59000 Sibenik. Cable: Jadroagent Sibenik. Telex: 27323 Yu Jadrag. Tel: 22-570, 22-571 (After hours) 25-544.

SPLIT: 43.31 N. 16.26 E.

DOCUMENTS:

5 Crew Lists.
5 Passenger Lists.
2 Store Lists.
3 Personal Effects Lists.
3 Cargo Manifests.
3 Bills of Lading.
1 Health Declaration.

PILOTAGE: Compulsory for vessels over 500 g.r.t. If vessel bound for Split, Dugi Rat or Trogir, Pilot will normally meet vessel 0.5 miles off the City Port Entrance, day or night, but on request Pilot will board a vessel S.W. of Razanj Lighthouse (Lat. 43° 19′ N., Long. 16° 25′ E.).

A vessel bound for Trogir may also take a Pilot 0.5 miles off Galera Light (Lat. 43° 28.4′ N., Long. 16° 11.5′ E.).

It is advisable to contact pilot station on VHF Channel 8, or via Split Radio on Channel 16, prior to arrival.

A vessel awaiting a Pilot can anchor South of City Port Breakwater.

ANCHORAGES: Vessels can anchor S.E. of City Port Entrance, 0.5 miles off the breakwater, in 40 m. depth, muddy bottom.

In case of very strong S.E. wind it is recommended to anchor in Southern part of Luka Milna (Lat. 43° 20′ N., Long. 16° 26′ E.) in 25 m. to 30 m. depth, sandy bottom.

RESTRICTIONS: Large tankers are handled in and out of the harbour during day time only. LPG carriers also enter port in day time only.

MAX. SIZE: No restrictions except draft. Maximum permitted draft for passenger ships in City Port (Southern Basin) 8.8 m.; in Northern Port for general/bulk cargoes 10.6 m. but for grain (Silo Quay) 11.3 m. and for oil tankers 11.9 m.

HEALTH: To obtain Pratique Health Declaration required. In event of any disease or fever contact Agents.

RADIO: All messages to Agent via Rijeka Radio (on HF), or via other Yugoslavian Coast Stations on MF radio telephony or MF radio telegraphy and VHF.

Answers to messages via Rijeka Radio only.

VHF: Split Radio Channel 16 (permanent watch). Pilot station Channel 8 (listening watch from 0700 hrs. to 2000 hrs. local time), tugboats on Channel 14.

TUGS: Normally ship's lines used. If tug's lines used 10% extra is charged.

BERTHING:
Northern Basin:
Northern Port: Continuous quay of total length 870 m. divided into 5 berths with the following permissible ship drafts: Berth No. 1, 8.5 m., Berth No. 2, 9.7 m., Berth No. 3, 7.3 m., Berth Nos. 4 and 5, 10.6 m., where general and bulk cargoes handled, mostly by shore equipment.

Cement factory "Partizan", Kastel Sucurac, length of quay 222 m., draft 8.2 m., cement in bulk mostly loaded.

Cement factory "Prvoborac" Sv. Kajo, quay length 274 m., draft 8.2 m., cement in bags only loaded.

"Jugovinil" factory Kastel Sucurac, quay length (dolphins) 80 m., draft 9.7 m., for LPG carriers only.

Silo Quay, Vranjic, length 110 m., draft 11.3 m., discharging/loading grain by multiport.

A. Vucicic factory, Vranjic, quay length 262 m., draft 7.3 m., where discharging asbestos and loading asbestos products. Shore crane and ship's gear used.

Southern Basin (City Port):
Breakwater Quay, length 230 m., draft up to 8.8 m.

Gat Spanjolskih Boraca (ex-Sv. Duje), total quay length 465 m., draft up to 7.9 m.

Gat Proleterskih Brigada, total quay length 350 m., drafts from 3.9 m. to 7.0 m.

City Port serves passenger ships and car ferries only.

CRANES: *Northern Port:* 2×7 tonne bridge cranes and 4×5 tonne gantry cranes. Floating crane of 60 tonne lifting capacity also available.
BULK CARGO FACILITIES: One quay (Silo Quay, Vranjic), length 110 m., draft 11.3 m. Max. height of discharging gear above sea level is 8.0 m. Max. loading/discharging rates 3,000 – 5,000 tonnes.
SPECIALISED CARGO HANDLING FACILITIES: One berth for LPG carriers (Jugovinil Factory Berth).
STEVEDORES: "Lucki prekrcaj i skladista" is the sole stevedoring company. Work in two shifts from 0600 – 1300 hrs. and from 1300 – 2000 hrs.
MEDICAL: No advance notice except in case of serious illness to be included in arrival cable. Hospital facilities available.
TANKERS: Two discharging berths alongside the quay. Discharge lines 6 in., 8 in. and 10 in.

Berth for small tankers, length 80 m., draft up to 7.0 m.

The other quay, length 150 m. (dolphins) and permitted draft 11.9 m.

Depending on type of cargo, average load/discharge rate is from 300 – 600 tonnes per hour.

DENSITY: Average density 1025.
FRESH WATER: Available at all berths. Order through Agent.
FUEL: Obtainable. Advance notice required.
CONSULS: Denmark, Italy, Netherlands and United Kingdom.
REPAIRS: All types of deck and engine repairs possible.
DRY DOCKS: One floating dock at Trogir, length 180 m. and one at Northern Basin, length 116 m.
SURVEYORS: Jugokontrola, Jugoinspekt, Jadroinspekt (Cargo Inspectors).

Lloyd's Register, American Bureau, Bureau Veritas and Jugoregister representing DNV, NKK and GL, Panama, etc.

GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Stevedores or ship's crew whichever to ship's advantage.
CUSTOMS ALLOWANCES: About 40 cigarettes and reasonable amount of wine/spirits for each crew member daily.
CARGO GEAR: Load/discharge mostly effected by shore gear.
REPATRIATION: All facilities available for crew changes.
AIRPORT: City centre to airport 23 km. 3 flights daily to Zagreb and Belgrade. From April 1st to October 31st direct flights to Rome, Paris, London and Zurich.
TIME: GMT plus 1 hour. Last Sunday in March clocks advanced 1 hour. Last Sunday in September clocks retarded 1 hour.
HOLIDAYS: January 1st, 2nd; May 1st, 2nd; July 4th and 27th; November 29th, 30th.
POLICE/AMBULANCE/FIRE: Police, 92; Ambulance, 94; Fire, 93.
SERVICES: Compass adjusting, radio/radar services and calibration of DF, divers for surveys/repairs, Lloyd's Sub-Agents (Jadroagent-Split), ship's laundries.
SHORE LEAVE: No restrictions.
IDENTIFICATION CARDS: Shore passes issued.
AUTHORITY: Lucka Kapetanija, Obala Lazareta 1, 58000 Split. *Tel:* Spilt 48-062. *Telex:* 26496 (Yu Kap St).

"Luka Split", Gat Spanjolskih Boraca, 58000 Split, Yugoslavia. *Tel:* Split 589-299.

ZADAR: 44.07 N. 15.14 E.

DOCUMENTS/HEALTH/HOLIDAYS: Same as "Rijeka".
PILOTAGE: 48 and 24 hours' notice of ETA must be given to Agent. According these notices Agent arranges for Pilot to board on arrival. Pilot boat blue motor launch with large "P" on bow and "H" flag. Pilot contacted on VHF Channel 12 or 16.
ANCHORAGE: About 0.5 mile, 245° from green port light, (Fl. G. 2 sec.) on the North part of Zadar Peninsular. Average depth about 40 m.
MAX. SIZE: Zadar, passenger port, permissible draft 6.25 m. (20.5 ft.) Zadar-Gazenica, port for dry cargo, max. draft forward 6.60 m. (21.7 ft.) Aft 13.5 m. (44.3 ft.). Length 160 m. Also see "Tankers" and "Berthing".
RADIO: Rijeka Radio, "YUR" or Split Radio "YUS".
VHF: Information/Operations Centre Zadar listens on VHF Channel 16. Pilot listens on Channel 16 or 12.
TUGS: 1 tug 1,200 h.p. Large vessels use 2 tugs, with the additional tug coming from Split. Tugs normally join 200 m. – 300 m. from breakwater, vessel's lines usually used.
BERTHING: *Soya Bean Berth:* 1 berth for soya bean or grain with discharging equipment 400 t.p.h. Max. draft 11 m. (36.1 ft.)
CRANES: Heavy lift shore crane, capacity 100 tons.
STEVEDORES: Number of gangs required to be stated in usual notice of ETA.
MEDICAL: Advance notice not necessary, hospital facilities available.
TANKERS: Gazenica Port: 1 tanker berth max. draft 10.35 m. (34.1 ft.) forward, 15.0 m. (49.2 ft.) aft. Length of the ship is not restricted.

Floating barriers/booms available for vessels loading/discharging mineral oils.

DENSITY: Average density in the port – 1026.
FRESH WATER: Connections on piers, rate of delivery 8 – 15 t.p.h.
FUEL: Fuel available for coasters only.
GANGWAY/DECK WATCHMEN: Not necessary.
OPENING/CLOSING HATCHES: Normally, but not compulsorily, carried out by stevedores.
CUSTOMS ALLOWANCES: 200 cigarettes per person. Tobacco and liquor sealed in bond.
IDENTIFICATION CARDS: Needed. Issued by police.
CONSULS: None.
REPAIRS: Deck and engine repairs possible.
REPATRIATION: Facilities exist for effecting crew changes and arranging necessary repatriations.
AIRPORT: Zadar airport served by regular daily flight for Zagreb with connection on all international flights.
DRY DOCK: 1 floating dock for ships up to about 2,000 b.r.t. in Zadar. 1 floating dock for ships up to about 20,000 b.r.t. on Ugljan Island.
TIME: GMT plus 1 hour. Summertime kept.
POLICE/AMBULANCE/FIRE: Police, 92; Ambulance, 94; Fire, 93.
TELEPHONES: No facilities for placing telephones on board.
DEVELOPMENTS: Gazenica Port: A second berth for dry cargo is under construction.
AUTHORITY: Lucka Kapetanija – Zadar. Radnicka Obala 8, 57000 Zadar, P.P.182. *Tel:* 337-58, 223-44, 337-78. *Telex:* 27163 Yu Kap Zd. *Cables:* Lucka Kapetanija Zadar.

AGENT: Jadranska Pomorska Agencija, Filijala Zadar, N. Nodila b.b., Zadar. Tel. 23210, 23215. Telex: 27129 Yu Jadrag. Telegrams: Jadroagent Zadar.

ZELENIKA: 42.27 N. 18.35 E.

DOCUMENTS/HEALTH: Same as "Rijeka".
PILOTAGE: Pilot boards at entrance of the Bay of Kotor, near point Punta Ostro. In bad weather Pilot boards at anchorage.
ANCHORAGE: Good ground for anchorage S.W. of Zelenika, about 0.25 miles off port light in about 27 fathoms.
MAX. SIZE: Port of Zelenika damaged by earthquake and temporarily closed. Vessels berthing at the passenger quay at Herceg-Novi.
HEALTH: Radio Agent requesting Free Pratique, 24 hours before arrival. For vessels over 500 g.r.t. Pratique is given at the anchorage. For small ships and yachts, Pratique is given at Herceg-Novi.
TUGS: None. In cases of necessity can be ordered from shipyard at Bijela.
BERTHING: The berth is assigned through the Agents giving notice 24 or 48 hours in advance. At present there is berthing for small ships only at the passenger port at Herceg-Novi.
STEVEDORES: State stevedoring company.
MEDICAL: Nearest hospital at nearby town of Herceg-Novi.
FRESH WATER: Available from hydrant on the passenger quay at Herceg-Novi.
FUEL: Nearest bunker station is at Bar.
OPENING/CLOSING HATCHES: If not performed by crew, can be done by stevedores.
CUSTOMS ALLOWANCES: About 40 cigarettes and 0.5 litres wine/spirits per man per day.
CARGO GEAR: Loading, unloading performed with ship's gear.
IDENTIFICATION CARDS: Shore passes issued by local police.
CONSULS: None.
REPAIRS: Any kind of repairs including dry docking at nearby shipyard at Bijela.
DRY DOCKS: Floating dock lifting capacity 10,000 tons, LOA 184 m., length over keel blocks 165.6 m., inside free breadth 25.5 m.

Floating dock lifting capacity 33,000 tons. LOA 252 m., length over keel blocks 235 m., inside free breadth 44 m.

The yard is about 4 miles East of Zelenika. The yard has 1,300 m. of fitting pier.

REPATRIATION: By bus to Dubrovnik, and from there bus, plane or ship to main cities in Yugoslavia.
TIME: Central European Time. GMT plus 1 hour. Summertime kept.
HOLIDAYS: January 1st and 2nd; May 1st and 2nd; July 4th and 13th; November 29th and 30th. Work can be arranged on Sundays and on 2nd day of two-day holidays.
POLICE/AMBULANCE/FIRE: No direct connection, in case of necessity call Agency, Tel. (082) 81-456 Jadroagent or (082) 81-261 Jugoagent.
SHORE LEAVE: Allowed.
AUTHORITY: Lucka Ispostava Zelenika.

AGENT: Jadroagent, Medunarodna pomorska i saobracajna agencija, Poslovna jedinica, Bijela. Tel: (082) 81-456. Telegraphic address: Jadroagent Bijela.

Zaire Republic

GENERAL:

ETA: It is essential that any change of vessel's ETA should be transmitted sufficiently in advance in order to avoid short shipments of cargo.

Matadi is only a transit port where cargo is not stored in order to avoid congestion.

Imported cargo is immediately re-forwarded to the interior while export cargo is only brought to Matadi a few days before the ETA of the vessel for which it has been booked.

Therefore, in order to make the cargo available at Matadi, shippers need a notice varying according to the cargo concerned, but which cannot be less than 2 weeks as is the case for coffee.

Agents at Matadi and Boma have been instructed to inform Port Authorities latest 4 days before berthing of inward cargo tonnages.

Non compliance with this provision may result in berthing delay.

PILOTAGE: Vessel should cable ETA 24 hours before arrival to the Harbour Master. Cable address: "Maritime Banana" via Banana Radio.

Pilotage compulsory for all vessels over 500 g.r.t. bound for Boma and Matadi.

Ships bound for Matadi and/or Boma must take a Pilot at the pilot station at Banana (at the mouth of the Zaire River). Pilot station at Banana can be contacted directly by radio (VHF).

In order to increase the safety and to facilitate the navigation on the river the Regie des Voies Maritimes have decided that in case a vessel is not equipped with a VHF installation the Pilot will bring one on board, for which a charge is made.

The following rules must be observed at the request of the Regie des Voies Maritimes for embarking and dis-embarking of Pilots.

If gangway is rigged astern on the port side it is compulsory to use the pilot ladder.

If gangway rigged amidships on port side it is recommended that the pilot ladder is used in combination with the gangway.

Pilots requesting only the gangway do so at their own risk.

Theoretically sailing from Matadi/Boma is only authorised so far as vessel can reach Banana latest at 1800 hrs. since navigation on the Zaire river is normally limited to daylight hours.

With regard to the trim the pilotage services ask Masters to comply with following rules:

Maximum trim 13 ft. aft; 4 ft. forward.

DOCUMENTS: *Ship's Documents required on arrival:*

Clearance from last port.
7 Crew Lists.
3 Lists of Arms and Ammunition.
7 Passenger Lists.
1 List of stowaways.
2 Crew Declarations.
3 Lists of Ports of Call.
2 Stores Lists.
1 International Tonnage Certificate.
1 International Load Line Certificate.
1 Derat Exemption Certificate.
1 Cargo Ship Safety Equipment Certificate.
1 Certificate of Registry.
1 Radiotelegraphy Certificate.
1 Construction Certificate.
1 Certificate Form on Board.
Free Pratique.

Documents required for disembarking passengers and discharging cargo:

A. To be received by mail at least 8 days before ship's arrival:
(1). Cargo:
  3 Freight Manifests
  8 Cargo Manifests
  5 Copies of Bills of Lading
  6 Copies of Stowage Plans.
(2). Passengers:
  1 Accountancy
  3 Passenger Lists, for passengers for the port/or in transit.
B. To be received by ship's bag at ship's arrival at quay:
(1). Cargo:
  1 Freight Manifest
  4 Cargo Manifests
  3 Copies of Bills of Lading.
(2). Passengers:
  1 Freight Manifest
  4 Passenger Lists for passengers for the port and/or in transit.

It is most important that stowage plans be available before vessel's arrival. Vessel's operations are indeed delayed to the next shift if same are only remitted upon arrival.

DRAFTS AND CURRENTS: Drafts on River Zaire are actually as follows (September 1984):

Inwards: High Water: 25 ft. 00 in.
Outwards: High Water: 26 ft. 00 in.

The authorised drafts are notified regularly by the Port Authorities.

The currents of the river and from berth to berth as well in Matadi as in Boma vary and depend upon the high and low levels of the water with sometimes adverse currents and still waters as stated before.

For proceeding to Matadi and according to the season vessels must have at least a speed of 10.5 to 11 knots, especially to pass the "Devil's Cauldron" about 3 miles before Matadi. 12-13 knots or greater sometimes requested for a 10-15 minute period.

BRIDGES: *Bridge on River Zaire:* The Port Authorities and Bridge Constructors request vessels to whistle 3 times:

(a) when proceeding to Matadi at about 300 m. before passing the bridge.
(b) when sailing from Matadi at about 200 m. before passing the bridge.

This will enable constructors to stop work to avoid the falling of any kind of object on vessels when passing the bridge.

HEALTH: Ship's crew must have an International Certificate of Vaccination against yellow fever and cholera.

RADIO: Banana Radio = 9PA =

Provisory working hours available from the beginning of 1984.

Telegraphy medium waves: 0700 – 1400 GMT.

500 kHz.
Working frequency: 489 kHz.
Listening frequency: 480 kHz, 500 kHz.

512 kHz.
Traffic list each hour + 00.

Telegraphy short waves: 0700 – 1400 GMT.

Traffic list:	HH + 00	6491.5 kHz
	HH + 20	8445 kHz
	HH + 40	12660 kHz
	H + 00	17184.8 kHz
	H + 20	22431 kHz

Reserve frequency: 8546 kHz.

Listening on Channel 6, 8, 12, 16 MHz Channels 5, 6, 15.

Listening on 22 MHz Channels 3, 4, 9.

Each Channel is monitored for 1 minute on scanning system and this during 15 minutes following traffic list, (same frequency band as traffic list.).

Telex on request

Paired frequencies:

Code 34646 (This is not definite since it must be allocated by UIT)

9PA:	8714 kHz	Ship:	8353 kHz
	13078.5 kHz		12498.5 kHz

Telephony: 0700 – 1400 GMT

Listening:	2182 kHz	Answering:	2182 kHz
	4125 kHz		4125 kHz
	6215.5 kHz		6521.9 kHz
	8257 kHz		8780.9 kHz
	12392 kHz		13162.8 kHz
17 MHz after QRX in RTG 16522			17294.9 kHz
22 MHz after QRX in RTG 22062			22658 kHz

Telephony VHF 0700 – 1400 GMT

Channel 16. Simplex Channels. Duplex Channels (Public Service).

Remark:

1. At this moment no telephone connection possible but we accept telegrams in telephony.

2. *Other available frequencies for telephony 9PA*

9PA:	4357.4 kHz	Ship:	4063 kHz
	4382.2 kHz		4087.8 kHz
	4419.4 kHz		4125 kHz
	4125 kHz		4125 kHz
	8753 kHz		8229.1 kHz
	8777.8 kHz		8253.9 kHz
	8762.3 kHz		8238.4 kHz
	13181.4 kHz		12410.6 kHz
	17350.7 kHz		16577.8 kHz

3. *Radiobeacon: 0700 – 1400 GMT*

Frequency	: 315 kHz
Call sign	: BAN
Position	: 05° 53′ 24″ S. 12° 17′ 48″ E.
Power	: 1 KW.
Antenna	: Omnidirectional
Range	: 500 miles estimated.

Please report the range.

FUEL: Must be ordered from Petrozaire at least 48 hours before required. Normally supply of gasoil, light and heavy fuel is effected at Banana between buoys 12 and 14 ex-barges with: minimum quantity – 250 tons; maximum quantity – 800 tons (total barge quantity).

Smaller quantities can also be supplied in Matadi or Ango Ango.

STEVEDORES: The ONATRA (Office National des Transports) – public institution, has the monopoly of the handling, stevedoring and transit operations at the ports of Matadi and Boma.

At each berth the responsible "Pier Master" remains in constant contact with the First Mate during the whole operation.

Working shifts are as follows: 1st. shift: 0630 – 1430 hrs.; 2nd shift: 1430 – 2230 hrs. overtime; 3rd shift: 2230 – 0630 hrs. overtime.

Work must be ordered the day before vessel's arrival. However, if gangs are available, work can still be ordered the day of vessel's arrival but latest at 0930 hrs. during week days.

In principle no work is done on Sundays, holidays and during the night. If required same has to be ordered by writing 1 working day in advance before 1000 hrs. Port Authorities will then decide according to the situation at that time.

According to the situation of the Port, the Authorities can also order labour 24 hours per day Sundays and holidays included.

At Boma there is no third shift – however on special request, work can eventually be granted until 2400 hrs.

At Matadi work during third shift will only be ordered upon special request from vessel.

GENERAL: *Quay Practices:*

The Zaire courtesy flag must be hoisted by foreign ships during daytime.

In view of the proximity of the town, the use of whistles, sirens and similar signals is forbidden.

Safety nets must be put between ship and quay at each of the working hatches and beneath the gangway.

No rubbish whatsoever may be thrown overboard.

Official Language:

The official language used by the Port Authorities and Administration is French.

Cargo plans:

According to ONATRA's instructions, stowage plans of ships calling at Matadi/Boma must be issued in such a way that they show clearly where all goods loaded for Matadi/Boma in several ports are located. This enables ONATRA to have, at once, a clear view of each vessel and to study, before ship's arrival, the discharging/loading possibilities.

Those stowage plans must reach Agent before ship's arrival.

Vessel's loading/discharging operations will only start during the next shift if stowage plans are remitted upon vessel's arrival. A request can be made to shift the vessel to a more convenient berth depending upon the cargo concerned.

With regard to cargo loaded, ONATRA does not issue stowage plans and Masters should consequently be instructed to draw up stowage plans themselves for transmission to corresponding discharging ports.

It is customary not to moor ships at Matadi/Boma between 2200 hrs. and 0600 hrs. They remain at anchor.

Important Notices:

In connection with manifests for Matadi/Boma cargo:

1. Liner Terms Cargo:

According to the General Rules and Tariffs stowing, unstowing, loading, discharging rates are applied on weight/measurement, whichever is the highest irrespective of the freight unit.

The Port Authority ONATRA instructs therefore that:

a) The freighted manifest remitted to them must show three columns detailing respectively weight and volume and freight unit (freight tons) of each cargo/bill of lading.

b) At the bottom of each page a summing up of tonnage/weight, tonnage/volume and freight units (freight tons) should be mentioned.

c) The last page of the manifest shall contain a separate recapitulation of weight tons, volumes and freight units (freight tons) showing thus the respective totals of each item.

Corrections or additionals added by the Agent at Matadi/Boma by hand or with typewriter are not accepted by ONATRA.

ONATRA is fully implementing the regulations and, for vessels whose manifests are incomplete or incorrect, a penalty, which may reach 1,000% of the stevedoring costs (or 10 times) is charged.

2. F.I.O. Cargo:

The same information is to be supplied as for Liner Cargo but, in addition, the manifest and B/L must clearly mention that cargo is carried on free out terms.

FUEL: Must be ordered 48 hours in advance from Petro-Zaire. Bunkering takes place between Buoys Nos. 12 and 14. Gasoil, light and heavy fuel oil available. Barge capacity 800 tons, minimum order 250 tons.

MEDICAL: Doctor available for emergency only. No dental or hospital facilities.

TANKERS: Tankers remain at anchor between Buoy Nos. 12 and 16 on the river, anchorage being agreed upon by the Master and the local suppliers' representative who will have received the advice of the Pilot. Since there is no mooring buoy and in view of the strong currents it is recommended to use both anchors while main engine to remain on standby.

Cargo Operations: Tankers discharge into/load from cargo barges moored alongside either side. These barges (three in total) have a capacity of 1,650 long tons or 2.050 cu.m. and can receive the cargo at a rate up to 400 t.p.h. Under normal conditions the refinery will handle these barges per shift of 12 hours. Cargo operations are effected continuously day and night during Sunday and holidays, in shifts from 0600 – 1800 hrs. and from 1800 – 0600 hrs.

Sailing: Tankers sail without Pilot and may leave any time.

Moanda Terminal: To notify his arrival, Master to call mv "Afran Zenith" by radio. Vessel will then proceed to single buoy mooring berth with following particulars:

Depth 57 ft.
Position: Lat. 5° 57′ 50″ S.
Long. 12° 08′ 19″ E.

where loading will take place.

The storage tanker is moored in position:

Lat: 05° 57′ 30″ S.
Long: 12° 06′ 00″ E.

No tank-cleaning facilities. Barge available for dirty ballast reception limited to 2,000 cu.m. per trip which occasionally and on special request can be put at disposal by the refinery.

REPAIRS: No facilities.

HOLIDAYS: See "Matadi".

GENERAL: During stay of tankers at anchorage the discharge and/or loading operations are constantly supervised by representatives of the refinery, who are to be accommodated on board and to be provided with meals.

SHORE LEAVE: Shore leave is presently not allowed due to lack of communications; only in urgent cases a crew member may join one of the refinery tugs. There is no entertainment whatsoever ashore.

AUTHORITY: Office National des Transports, ONATRA.

AGENT: See "Matadi".

BANANA: 06.01 S. 12.25 E.

DOCUMENTS: See "General" before first port.

APPROACHES: In view of the strong current, and in view of the fact that the lights of the navigation buoys on the river do not always work properly, night navigation is practically impossible. Tankers, therefore, arriving at night, or in times of congestion, are recommended to anchor approx. 5 miles West of Moita Seca Light in approx. 10 fathoms, about 12 miles from Stella Buoy.

PILOTAGE: River can be entered direct from sea in deep water. Pilot (Not compulsory) will board vessel from 0600 hrs. with Authorities off Stella Buoy (Outer navigation Buoy No. 2) located in position:

Lat. 6° 02′ 00″ S.
Long. 12° 22′ 30″ E.

The position of the flare of the SOCIR Refinery at Moanda is:

Lat. 5° 57′ 51″ S.
Long. 12° 25′ 07″ E.

The flare is visible during day and night and may be a good bearing for vessels approaching river.

Sailing from "Stella Buoy" at 0600 hrs. vessels with a speed of up to 14 knots must pass Bulabemba before 1400 hrs. and vessels with speed in excess of 14 knots by 1500 hrs.

MAX. SIZE: Tankers up to 35 ft. draft may discharge at buoy moorings. Also see "Berthing – Commercial Port".

HEALTH: Quarantine Officer boards at sea buoy. Free Pratique usually granted as soon as Maritime Health Declaration completed. Valid cholera and yellow fever inoculations required for all crew members.

RADIO: *Tankers:* At least 3 days' notice required to Agent (ETA and draft only) and to Harbour Master, "Maritime Banana" (ETA only). It is necessary to transmit these notices via another shore station (e.g. Capetown Radio, Libreville Radio, etc.), as the Banana Radio Station can only be reached 2 days prior arrival. Close advice on changes in ETA necessary to prevent delays in waiting for Pilot and lighters.

Radio Banana (9 PA) – see "General" before first port for details.

BERTHING:

Commercial Port:

The commercial port consists of a landing space of approximately 2,000 sq.m. in front of a warehouse with approximately 2,500 sq.m. storing room.

ONATRA, the Port Authority, has no cranes and the port equipment is extremely limited. Any discharging and/or loading must therefore be done by ships' gear.

With a draft of more than 17 ft. (indicative) cargo operations to be performed at anchor between Buoys No. 12 and No. 14. Barges and gangs are then supplied on request.

With a draft of less than 17 ft. (indicative) vessel can berth at ONATRA wharf inside Banana Bay.

Length of the wharf: 75 m.

DENSITY: Brackish to salt.

FRESH WATER: Not available.

BOMA: 05.51 S. 13.03 E.

DOCUMENTS: See "General" before first port.

PILOTAGE: Port is situated on the right bank of river, about 44 miles above pilot station at Banana.

Radio "Maritime Banana" 24 hours prior arrival giving ETA at Banana and requesting Pilot. Sailing for Banana from 0600 hrs. till 1500 hrs. Sailing for Matadi from 0500 hrs. till 1600 hrs.

RESTRICTIONS: Depth at bar 30 ft. Permissible draft for navigating river varies between 20 ft. to 27 ft. according to local conditions and should be checked with Port Authority in advance.

HEALTH: Quarantine Officer boards on arrival. All crew members require valid cholera vaccinations and yellow fever inoculation certificates.

TUGS: 2 tugs of 200 and 300 h.p. available to assist berthing.

BERTHING: Total quay length 450 m. with 3 berths alongside. Depth of water at the quay 8 m. at low water. Maximum current at the berths is 3 knots.

STEVEDORES: See "General" before first port.

Port Equipment:

6 electric cranes on rails, capacity 3 – 6 tons.
2 steam cranes on rails, capacity 7.5 ton at 6 m. (5.0 ton at 10 m.).
5 banana conveyors.
1 electric crane, capacity 6 tons.
8 forklifts.
5 tractors and 40 trailers and carts.
1 Palmkernel elevator.
1 Automatic grab.
2 Hyster carry cranes.
7 barges, capacity 100 tons.
1 pontoon, capacity 75 tons.

FRESH WATER: Available from quays, not suitable for drinking.

FUEL: See "General" before first port.

MEDICAL: Doctors and hospital facilities available.

REPAIRS: No facilities.

HOLIDAYS: See "Matadi".

GENERAL:

Exports: Logs and timber, plywood, veneerwood, coffee, cocoa, rubber, bananas, palmkernels, oils, cakes, about 8.8% of the total exports of the Zaire.

Imports: Various. About 2.5% of the total tonnage imported into Zaire.

Current at Quays: The currents of the river vary from berth to berth and depend upon the low and high level of the water with sometimes adverse currents and still waters.

Maximum speed at high level: 3 knots.
Minimum depth at the lowest level: 8 m.

AUTHORITY: Office National des Transport – ONATRA.

AGENT: Socomexas S.P.R.L. Aven. du Zaire, No. 119/F., B.P. No. 122, Boma, Republique du Zaire. Telephone: 267.

MATADI, (including Ango-Ango): 05.49 S. 13.27 E.

(See Plan Book)

DOCUMENTS: 7 days before arrival of vessel the following must be in the hands of the Agent:
4 Manifests (detailing explosives, general cargo, heavy lifts).
3 Stowage Plans.
6 Copies of Bills of Lading.
1 Freighted Manifest.
On arrival:
Maritime Declaration.
Ship's Register.
3 Crew Personal Effects Lists.
2 Stowage Plans.
1 Freighted Manifest.
3 Lists of Ports of Call.
7 Passengers Landed.
7 Passengers in Transit.
5 Crew Lists.
5 Crew Boys Lists.
2 Provisions Lists.
4 Individual Manifests.

PILOTAGE: Compulsory for vessels over 500 g.r.t. Radio "Maritime Banana" 24 hours prior arrival giving ETA at Banana and requesting Pilot. Pilot boards at Banana Pilot station. Distance from Banana to Matadi about 75 miles. Sailing for Banana from 0600 – 1200 hrs. Sailing for Boma from 0500 – 1600 hrs.

RESTRICTIONS: Depth at bar 30 ft. Permissible draft for navigating Zaire River varies between 20 ft. and 27 ft. according to local conditions and should be checked with the Port Authority 3 days in advance.

MAX. SIZE: Controlled by draft in river.

HEALTH: Quarantine Officer boards on arrival. All crew members require valid cholera and yellow fever inoculation certificates.

TUGS: "Inga" 850 h.p., "Boma" 250 h.p., "Banana" 600 h.p. and "Soyo" 220 h.p.

BERTHING: At Matadi.
Pier 1 – 149 m.
Pier 2 – 161 m.
Pier 3 – 155 m.
Pier 4 – 158 m.
Pier 5 – 156 m.
Pier 6 – 176 m.
Pier 7 – 188 m. For full container vessels
Pier 8 – 149 m.
Pier 9 – 167 m.
Pier 10 – 143 m.
Minimum depth at Piers 8 and 10 is 10 m.
In addition there is a berth length 400 m. for barges.

At Ango-Ango: As a rule for discharge of flammable goods and explosives.

UNLOADING RATE: 800 tons to 1,000 tons of general cargo per day of 3 shifts.

CRANES:

32 Cranes (Electric and hydraulic) on rails	3 – 6 tons
1 Derrick Fixed	*50 tons (Pier 4)
1 Bridge Crane	5 tons
14 Cranes Electric	3 – 6 tons
2 Cranes Electric	10 tons

*Actual capacity 34 tons.

BULK HANDLING FACILITIES: Palm oil is stocked by 4 companies in Matadi, 3 of which have pipe-lines to a main quay. The palm oil installations of CCP are at Ango-Ango where ships must berth at Sep Zaire pier. Vessels handling Sep Zaire cargoes are given priority at this pier and in case of unavailability of berth, palm oil would be loaded by barge of 260 tons capacity at Matadi.

Palm kernel oil is also loaded at Berth Nos. 2 – 9 and Palm Oil at Berth Nos. 2 – 8 in Matadi.

P.L.Z. (Plantations Lever au Zaire) capacity	13,450 tons
AMATO-Freres	3,700 tons
MADAIL	2,340 tons
C.C.P.	3,627 tons

Cereals discharged by suction at No. 9 Berth. Rate 1,000 t.p.h.

BARGES/EQUIPMENT:
Barges:
2 Pontoons N.T. 41 tons each
8 Pontoons N.T. 75 tons each
1 Lighter N.T. 91 tons
2 Lighters N.T. 99 tons each
1 Tankbarge N.T. 279 tons
19 Lighters N.T. 339 tons each
1 Lighter N.T. 438 tons
11 Lighters N.T. 487 tons each
1 Lighter N.T. 514 tons
1 Lighter N.T. 522 tons
10 Lighters N.T. 557 tons each
2 Landing craft 875 tons each
Equipment:
28 Tractors and 242 trailers and carts
75 Forklifts with a maximum capacity of 4,000 kilos
1 Roller bridge 30 tons
3 Fork conveyors
34 Platforms × 20 ft.
6 Platforms × 40 ft. (Unilock)
3 Pushwagon tractors
Grain Elevators (Midema)

DENSITY: Fresh water.

STEVEDORES: See "General" before first port.

TANKERS: Discharge at Sep Zaire pier at Ango-Ango or Matadi. If lightening necessary before berthing, this can be effected at Ramler Buoy, 17 miles above Banana. No tank-cleaning facilities. No fresh water.

FRESH WATER: Delivery aboard the ship through valves and at each pier. Maximum daily capacity 200 tons. Delivery takes place according to the quantity asked for and usually during night.

Delivery cannot be done at the loading berth of Sep Zaire at Ango Ango.

Suppliers need 48 hours' notice. It is therefore highly recommended that Masters cable their needs well in advance to Agent and/or through Owners.

FUEL: See "General" before first port.

MEDICAL: Doctors and hospital facilities available.

REPAIRS: Small repairs possible at railway workshop.

HOLIDAYS: *Legal Holidays in Zaire – 1985:*

1st January	New Year's Day
4th January	Memorial Day
1st May	Labour Day
20th May	Anniversary of the M.P.R.
24th June	Money Day
30th June	Independence Day
1st August	Relatives' Day
14th October	Zaire Youth Day
27th October	3Z Day
17th November	Army Day
24th November	Revolution Day
25th December	Christmas

GENERAL: *Currents at the quays:*
The currents of the river vary from berth to berth and depend upon the high and low levels of the water with sometimes adverse currents and still waters. Difference between high and low level of the river is approximately 5.50 m.

Maximum speed at high level: 6 knots.

Minimum depth at lowest level: Minimum 8 m. at low water and minimum 10 m. at low water at the new Kala Kala quays.

Exports: Logs and timber (plywood, veneerwood), coffee, cocoa, rubber, copal, bananas, manioc, groundnuts, palm kernels, oils, cakes, fibres, cotton and copper.

Port Equipment and Accommodation: Matadi is the only Zaire port handling the despatch of export products originating from the interior and the import of products destined to Zaire (excluding Boma which is of minor importance and only serves the Mayumbe area).

About 90% of the tonnage in – and outward goes through Matadi at the head of the S.N.C.Z. railroad from Matadi to Kinshasa. The latter locality being a handling and concentration centre of the goods directed to or coming from Matadi.

DEVELOPMENTS: Container berth to be rebuilt.

SHIPMASTER'S REPORT: January 1981.
Documents and papers required on arrival Matadi:
7 Crew Lists.
2 Maritime Declarations of Health.
4 Passenger Lists (even if nil).
4 Ports of Call Lists.
4 Arms and Ammunitions Lists (even if nil).
4 Narcotic Lists.
3 Stores Lists.
2 Crew Customs Declarations.
1 Vaccination List (Cholera/Smallpox/Yellow Fever).
1 Animal List. (even if nil).
Following documents have to be shown to the Port Authorities:
Classification Certificate.
Ship's Register.
Derat Certificate.
Certificate of Tonnage Measurement.
Cargo Ship Safety Construction Certificate.
Cargo Ship Safety Radio-telegraphy Certificate.
Cargo Ship Safety Equipment Certificate.
International Load Line Certificate.
The official Log Book of the vessel and the Articles.

The number of crew written in the crew lists will be checked with the entries in the Articles.

Shore Leave: Each crew member receives a shore pass without particulars, which has to be returned before departure of the vessel. Fines will be imposed if shore leave pass is lost.

SHIPMASTER'S REPORT: August 1982.
As far as I could ascertain the only point in the Congo River where one can expect currents of 12 knots is in the "Devil's Cauldron" between Matadi and Ango-Ango. The rainy season is Jan./Feb. and the dry season June/July. The average current in the rainy season is 4 knots and in the dry 3 knots.

Tankers and other vessels who clear at Banana generally must go through the same procedure again at Ango-Ango or Matadi. A complete set of papers is expected as though it is the first entry into the country.

AUTHORITY: Office National des Transports – ONATRA, Port of Matadi. *Contact:* Mr. Mbelolo Bituemi-di-Kebi, Port Director.

AGENT: Socomexas, S.P.R.L., B.P. 83, Matadi, Republic of Zaire. Tel: 22.33 and 22.35. Cables: Socomexas. Telex: 20.415.

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	Puerto Castilla
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	Haldia
	Kakinada
	Madras
	Visakhapatnam

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	Lavan Island
	Ras Bahregan
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ITALY	Porto Vesme
	Trieste
IVORY COAST	Abidjan
KUWAIT	Shuwaikh
LIBYA	General
NAMIBIA	Luderitz
NETHERLAND	Flushing
	Terneuzen
NIGERIA	General
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	Brass Terminal
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TURKEY	Hopa
U.S.S.R.	Ust Dunaysk
	Vostochny
U.A.E.	Ajman
U.S.A.	Huntington Beach
	Port Arthur
YEMEN P.D.R.	Aden

Australia

DARWIN: (Also see page 65). **(See Late Plans)**

BERTHING: No. 2 East (New Fort Hill Wharf) is now in use.
DENSITY: The usual water density of 1,025 kg./cu.m. may reduce to 1,022 kg./cu.m. during the wet season owing to river run-off.
FUEL: All grades of fuel up to 120cSt and a full range of lubricants available.

Darwin is the only port between Fremantle and Townsville which supplies HFO up to 120cSt. Longest possible notice required.
CONSULS: Honorary Consul-General for Japan: Mr. R. Morris, G.P.O. Box 1616, Darwin.

Honorary Consul for Germany (F.R.): Mr. R. W. Barth, G.P.O. Box 3329, Darwin.

EXMOUTH, W.A.: 22.20 S. 114.10 E. **(See Plan Book)**

SHIPMASTER'S REPORT: October 1984.

DOCUMENTS:

5 copies Crew List, 2 on Form M.S. 11.
2 copies Form 42A, Stores List (Ship's Bond).
1 copy Form 5. Personal Effects Declaration.
3 copies Form C & E 886. Dates and time of Departure from Overseas Ports of Loading.
*2 copies Form 0360. Health Report. 1 retained by Master.
Form 40. Application for Clearance.
Form QA3. Quarantine Notice and Declaration. If animals on board as cargo.
Form QA4. Quarantine Notice.
Form QA5. Shipmaster's Bond (Pink, Yellow). If ship's pets on board.
Forms in respect of Colonial Light Dues (if applicable).
*Forms obtained from Customs Boarding Officer on arrival.
Customs Officials, etc. board at berth.

PILOTAGE: Pilotage compulsory. Pilot boards 1 mile N.E. of jetty, from the line launch.
ANCHORAGES: 1.5 miles N.E. of jetty.
RESTRICTIONS: Berthing/sailing during daylight only. Berthing carried out at slack water.
HEALTH: See "General" before first port.
VHF: Port VHF system as such is non existent – consists of handheld portable set of very limited range, and generally during office hours only.
TUGS: None.
BERTHING: Straightforward approach from sea on recommended track to Learmouth. Reasonably deep water and no navigational hazards in vicinity of track.

Berth is a 'T' head jetty with a face 48.75 m. in length with mooring and breasting dolphins. Distance between outer dolphins is 320 m. Wharf decking is 6.1 m. above datum with depth alongside 12.0 m.
Berthing Operations: Berthing is usually starboard side to. Jetty is approached with bow slightly canted into berth and when approx. 100 m. off jetty, port anchor is let go to 1 shackle on deck and anchor dredged into berth. Forward slipline is sent away as soon as possible by mooring boat and when close enough, other lines sent by heaving line. It is essential to get either breastlines or springs ashore as soon as possible in order to hold vessel in position.

It may be necessary, once vessel is held alongside berth to change some of the moorings, as it was on this occasion. Final moorings as follows:
Forward:
1 Slipline (effectively 2 headlines).
1 Headline.
2 Breastlines (from starboard shoulder to bollard on inshore side of jetty).
2 Springs.
In addition port anchor on bottom, 1 shackle on deck.
Aft:
1 Sternline-slipline (effectively 2 stern lines).
1 Sternline.
2 Springs (from poop to North end of dolphin).
2 Breastlines (from aft maindeck to bollard on inshore side of dolphin).
A number of points arose from the mooring/unmooring operations:

Firstly, I am of the opinion that the anchor should be dropped further from the jetty, in order to assist the unmooring due to absence of tugs. This would be no problem if an offshore wind could be guaranteed, but the wind is invariably onshore. Secondly, mooring gangs are slow in getting ropes to their destination which proved to be the biggest hazard.

Care *must* be taken when mooring to ensure that the final ropes aft (in this case the springs) are on separate winches in order to clear the propeller as soon as possible – any delay when unmooring on an ebb tide could result in vessel drifting onto the aft isolated dolphin. The ideal time to unmoor would be on a flood tide and using the anchor to warp clear of the jetty. Unfortunately, things at sea are rarely done under ideal conditions, hence my comment regarding letting go the anchor sooner.

The mooring points on the jetty are themselves far from ideal, considering the strength of the ebb stream which can be compounded by a strong offshore breeze. Breast lines end up as very short, almost vertical leads, especially when light. In this case the vessel was partially ballasted prior to arrival, which somewhat alleviated this problem.

However, having made all the bad points about the berth, I must add that the shore staff were very co-operative and a fast discharge is normal.

Also see "Restrictions" and "Plan Book".

DISCHARGING: 1 line only. Permanent line on jetty connected to ship's manifold amidships with hoses. Shore line 300 mm.×1 km. Max. back pressure 150 p.s.i. High rate of discharge (up to 1,200 cu.m./hr. due empty shore tanks).

No water clearance required after discharge as line rests in Gas Oil.
Grades: As far as can be ascertained only Gas Oil delivered to Exmouth.
BALLAST: No tank cleaning or dirty ballast facilities.
DENSITY: 1025.
FRESH WATER: Very limited quantities available. Not available in dry season.
FUEL: Very limited quantities of Gas Oil.
REPAIRS: No facilities.
GENERAL: No contact with receivers (U.S. Navy). Liaison is with a Royal Australian Navy Officer on secondment to U.S. Navy.
Immobilisation of Engines: Not recommended due to strength of current and poor mooring facilities.
Stores, etc.: No laundry facilities. Very limited quantities of bread, milk, etc., available from local shops. Any large amounts of stores require to be ordered approx. 3 weeks in advance.

PORT BONYTHON, S.A.: (Also see page 91). **(See Late Plans)**

SHIPMASTER'S REPORT: November 1984.
Approaches: Recommended charts: BA 2389, 407; Aus. 136, 778, 777, 776. Passage up the Gulf is straightforward with fairly good radar echoes returned from the rather low lying coast. The lights of Whyalla and the flare at Bonython serve as useful guides.

The area is intensely fished and considerable interference may arise from concentrations of fishing vessels from Port Lincoln and Whyalla. All fishing vessels have been cautioned to keep clear of the Bonython Departure Channel but this instruction is largely ignored.
Documents: Normal port entry procedure and papers.
Pilotage: The Pilot boards from a yellow and blue hulled launch in a position 165°, distance 5 miles from Whyalla Entrance Beacon and the usual strict observance of IMO/SOLAS pilot ladder regulations is required. Ladder about 1.5 m. from water.

Pilots work Channels 16, 12 and 6 on VHF and the launch will approach from Whyalla itself. Once the Pilot is boarded, the vessel proceeds to the berth up the Western Channel, while loaded vessels depart from the newly marked departure channel with the Pilot disembarking at the Entrance Buoy.

Length of pilotage to first line ashore, about 1.5 hours.
Max. Size: See "Berthing".
VHF: See "Pilotage".

The name rhymes with "python" and the correct pronunciation will avoid embarrassment over the VHF.
Tugs: Two tugs are available (from Whyalla): "Taminga" 3,600 h.p. and "Turmoil" of 2,250 h.p. Despite my reservations, the Pilot assured me that they are perfectly adequate for pulling loaded vessels off the berth against the fresh onshore winds that predominate. Mooring boats are available for running lines to the dolphins.
Berthing: Consists of a new liquids handling terminal situated at the Northern end of the Spencer Gulf, about 9 miles from the port of Whyalla, in position Lat. 33° 01′ S., Long. 137° 47′ E., by the promontory noted on the charts as Stony Point.

The berth is designed to handle crude carriers up to 110,000 tonnes and LPG vessels up to 75,000 cu.m.

The oil handling facility has been in use for 2 years while the LPG facility has only come into operation within the last few months, this vessel being the second LPG ship to load there.

The berth consists of a "T" head jetty at the end of a 2.5 km. trestle.

Mooring arrangements are good and the berth is well fendered. See "Late Plans".

Within the next few months a 24 hour berthing operation will be put into effect although it is as well to obtain prior advice from the Agent since it occasionally suits their operation to berth vessels during daylight.

The Japanese company Idemitsu apparently invested a huge proportion of the cost of the project and it was at their insistence that the cargo lines are dedicated to their own product and with no cross-connection available.
Loading: Notice of Readiness is tendered and accepted at time of vessel being secured.

The maximum outreach of the loading arms is no more than 4.0 m. beyond the ship's side which necessitates the use of low extensions to the manifold. The arms also require a minimum distance of 2.0 m. between them and this precludes the simultaneous loading of 2 grades since they require a VRL to maintain an overpressure in their shore tanks.

At the moment LPG production is about 1,000 tonnes per day and they only envisage shipments every 6 weeks or so.

Quoted rates for the 2 products at the moment are 2,400 cu.m./hr. Our overall average was 890 tonnes/p.h. on each grade with occasional hourly rates up to 1,000 t.p.h.

It will be necessary to shift ship on changing grades to line up the chicksans/manifolds for the second grade.

Despite the length of pipe-line both products were cold. Butane at minus 4°C and Propane at minus 42°C.

Surveys are carried out on board but the final B/L figures are based on measurement of the shore tanks; on this occasion both sets of figures compared quite well.

Loading Arms: (Port Bonython)

LOADING ARMS						SHIP'S MANIFOLD REQUIREMENTS				
		Size		*Height above waterline*		*Height above deck or other obstruction*		*Set back to face of ship's manifold or reducer if requ'd*		
No.	*Service*	*Arm* (All 150 ANSI)	*Coupling*	*Max.*	*Min.*	*Max.*	*Min. below lower edge of manifold flange*	*From ship's side Max.*	*From ship's side Min.*	*Min. dist. between ship's manifolds*
1 2 3	Crude Condensate Ballast	12 in. 300 mm.	12 in. 300 mm.	20.24 m.	4.14 m.	Unrestricted, except for safe access.	0.56 m.	4 m.	1.65 m.	2 m.
4	Propane Liquid	6 in. 150 mm.	6 in. or 8 in. 150 mm. or 200 mm.	12.74 m.	3.14 m.		0.44 m.	3.2 m.	1.35 m.	2 m.
	Vapour hose connection	3 in. 75 mm.	3 in. 75 mm.							
5 6 7	Propane Liquid or Vapour	10 in. 250 mm.	10 in. or 12 in. 250 mm. or 300 mm.	18.24 m.	4.14 m.		0.53 m.	4 m.	1.5 m.	2 m.
8 9 10	Butane Liquid or Vapour	10 in. 250 mm.	10 in. or 12 in. 250 mm. or 300 mm.	18.24 m.	4.14 m.		0.53 m.	4 m.	1.5 m.	2 m.

Port Regulations do not allow the venting of tank vapours to atmosphere and in the event of a vessel arriving under inerts excess pressure will be vented to the shore flare. A charge for loss of product being made accordingly. Similarly, if they have doubts about contamination (ammonia) in the ship's tanks, this would also be led to the flare. Continuous sampling is done ashore.

It was not made clear whether a vessel would be asked to leave the berth to 'cool down' and it is thought that this would be a matter for discussion/decision on an individual basis. Tug hire, at 40,000 Aus. dollars per berthing operation is expensive.

The ship will be subjected to the normal D.O.T. inspection during her visit. They will not necessarily be carried out prior to loading. Very thorough, especially on safety gear, lifting gear and documentation.

We received excellent co-operation throughout at all levels and stages of the operation. Since this was only their second cargo they were, perhaps, taking particular care, but there is no reason to expect this co-operation to deteriorate in the future.

Also see "Fire Precautions".

Fresh Water: Available from the jetty or by barge; the local personnel do not advise taking any since it is most unpleasant (reportedly) to drink.

Fuel: Not available.

Fire Precautions: The terminal's safety regulations require the vessel to prepare a comprehensive loading plan which must include hull stresses for each stage of the operation.

Repairs: With the Whyalla Shipyard closed, these may be difficult to arrange.

Surveyors: Nearest Lloyd's Surveyor resides at Adelaide.

Gangway/Deck Watchmen: A substantial shore gangway is provided.

Strict security control is exercised throughout the complex and authorisation for visitors must be obtained. They are especially wary about intoxicated personnel boarding or leaving the vessel and may ask for a ship's Officer as escort.

Airport: There is a local airport which facilitates the delivery of spare gear, etc.

Storing: The local chandlers have a very good working relationship with the terminal personnel and there is little problem in loading foodstuffs and small stores/spares. The usual restrictions apply to the movement of metal objects.

There is a 1 tonne crane on the jetty (Eastern end) which may be used for storing.

Meat and fish prices are very good, together with most local produce. Beers other than the local South Australian brands may be difficult to obtain (coming from Adelaide) and are more expensive.

Shore Leave: Security will arrange for transport to and from the ship to the gate.

It is some 20 km. into town and the cost (one way) of a taxi is 30 Australian dollars. The Agent will be able to arrange a mini-bus service.

PORTLAND: (Also see page 101).

SHIPMASTER'S REPORT: November 1984.

Bulk Loading Facilities: Bulk grain at No. 1 and No. 2 Berths K.S. Anderson Wharf. As the shiploaders are fed by 1 conveyor belt, only 1 ship can be loaded at a time.

Bahamas

FREEPORT: (Also see page 117).

SHIPMASTER'S REPORT: December 1984.

Pilotage: Pilot boards from tug and requires pilot ladder about 10 ft. above water. There are no pilot boats.

Radio: With 5 day message Receivers require the following:

Name of vessel and call sign.
Deepest arrival draft.
Gross bbls. at observed temperature on arrival (estimated).
Average temperature in °F on arrival (estimated).
Expected discharge rate in bbls/hr. assuming unrestricted by shore facilities.
Maximum freeboard 55 ft.
No. and size of cargo manifolds.
No. of hours required to ballast.
Ship's loaded gross bbls. at 60°F less retained slops.
Ship's slop quantity on arrival load port indicating oil and water in bbls.
Indicate if Loading On Top (L.O.T.).
Which slop tank.
Indicate ship experience factor for last 5 cargoes excluding initial voyage after dry dock.
Was Letter of Protest noted, if so give brief details.

VHF: Channel 13 for working Pilots.

Tugs: Usually 2 tugs, 1 of which will put up 2 headlines and 2 quarter lines, the other just 2 headlines. Depends on weather conditions as to which tug is forward and which aft.

Belgium

ANTWERP: (Also see page 139).

REPORT: December 1984.

Bulk Handling Facilities:

1. Societe Generale des Minerais (S.G.M.)
Canaldock B.1 Berths:
LOA: No restriction (see remarks).
Draft: 54 ft. fresh water at berth (see remarks).
Beam: Discharge coal: No restriction.
Discharge ores: Crane Nos. 1 – 3 outreach 41.6 m. (see remarks).
Crane Nos. 4 – 5 outreach 49.0 m. (see remarks).
Clear height from waterline to top of hatch coaming:
Crane Nos. 1 – 3: 17 m.
Crane Nos. 4 – 5: 21 m.

2. Stocatra
(a) Hansadock Berths
LOA: No restriction (see remarks).
Draft: Alongside berth 43 ft. fresh water (see remarks).
Beam: No restriction (see remarks).
Clear height from waterline to top of hatch coaming: 16 m. for normal discharge.
(b) Delwaidedock Berths
LOA: No restriction (see remarks).
Draft: 55 ft. fresh water (see remarks).
Beam: No restriction (see remarks).
Clear height from waterline to top of hatch coaming: 24 m.

Remarks:

Drafts are based on fresh water.

For vessels over 270 m. (884 ft. 10 in.) LOA, drafts have to be reduced as follows:

LOA 270 m. (884 ft. 10 in.) up to 280 m. (917 ft. 8 in.): 6 in. per 10 ft. (3.05 m.) exceeding 270 m.

LOA over 280 m.: 6 in. per 10 ft. exceeding 270 m. and 3 in. per 10 ft. exceeding 280 m.

The maximum LOA allowed is 300 m.

The maximum beam in the Zandvlietlock is 45 m.

Sailing: Maximum draft allowed is 12.19 m. from Zandvlietlock.

Tankers: (Oil-gas-chemicals) – empty or loaded – not gasfree.

As from 1.11.1984 the regulations below and the tanker checklist are applicable.

Regulations:

14th August, 1984 – Royal Decree for the Assessment of the Minimum Requirements with which some Tankers, which intend to call at a Belgian port, have to comply. (Free translation) (*).

Article 1 § 1. The Owners and Operators, their employees, mandatories or representatives, of oil, gas and chemical tankers with a Belgian port as destination (loaded or in ballast but not yet free of vapours or dangerous residues) must notify the following information:

(a) Name and call sign of the vessel.
(b) Nationality of the vessel.
(c) The overall length and draft of the vessel.
(d) Port of destination.
(e) ETA in the port of destination or at the pilot station.
(f) General nature and quantity of the cargo.
(g) In case of carriage of chemicals in bulk, whether or not the vessel is in possession of a fitness certificate in accordance with the IMO Code for the construction and equipment of vessels carrying dangerous chemicals in bulk or in case the vessel carries liquefied gas in bulk, whether the vessel is in possession of a fitness certificate in accordance with the IMO Code for the construction and equipment of vessels carrying liquefied gases in bulk.
(h) Any defects or incidents which may affect the normal and safe manoeuvrability of the vessel, are detrimental to a safe and fluent navigation, or constitute a hazard to marine environment and surroundings.

§ 2. The Masters of such vessels can be put in charge of these notifications.

§ 3. When the destination of the vessels is a Belgian coastal port the data mentioned in §1 must be notified to the Maritime Control of Traffic of the Ostend Pilotage before Belgian territorial waters are entered. When the destination of these vessels is another Belgian port, this data must be notified to Flushing Radio before Belgian or Dutch territorial waters are entered.

Article 2 § 1. Before entering Belgian or Dutch territorial waters the Masters of the vessels referred to in Article 1 have to truthfully and accurately fill in the check-list to this decree and to hand a copy of it to the Pilot for his information.

§ 2. If additional copies of this list are requested by the competent Authorities they have to be transmitted to them without delay.

Article 3. During the navigation in territorial waters the Masters of the vessels referred to in Article 1 and which intend to call at a Belgian port or which have left this port have to:

(a) Notify the competent Authorities of all defects and incidents which are liable to reduce the manoeuvrability of the vessel under normal safe conditions, to detrimentally influence the safe and fluent navigation or constitute a hazard to the marine environment and surroundings.
(b) Establish as soon as possible a radio-telephonic communication with the appropriate coastal stations, preferably in VHF, more particularly with the nearest radar station – if it exists – and maintain this communication.
(c) Call upon the services of radar stations particularly in conditions of restricted visibility.

This decree will be effective on 1st November, 1984.

(*) This decree results from the directive 79/116/EEC of the Council of European Communities of 21st December, 1978, modified by the directive 79/1034/EEC of same council of 6th December, 1979.

Brazil

SANTOS: (Also see page 189).

BULK HANDLING FACILITIES:

Pellets: Length of quay 280 m., depth 13 m. with 3 warehouses, capacity 105,000 tonnes. Connected by belts and loaders, capacity 3,000 t.p.h., with automatic weighing machines. 2 hoppers with capacity of 500 t.p.h. and 800 t.p.h. each, permit simultaneous receival from wagons and trucks.

Pellets and Fertilisers: Stretch of quay from Warehouse 17 to Warehouse 20. 5 loaders of capacity 1,850 t.p.h. Stocks held in Warehouses 19 and 20, and Warehouses V, VI, X, XV and XXIII.

Salt: Stretch of quay in front of Warehouses 22 and 23. Electric cranes and belts provide capacity of 1,000 t.p.h. Stocks discharged to Warehouses XII and XVII, and a special wooden warehouse.

Grain: 3 terminals with unloaders and conveyor belts.

(i) 3 unloaders (270 t.p.h.) in front of Warehouse 9.
(ii) 2 unloaders (420 t.p.h.) between Warehouses 12-A and 13. Discharge to Paulista Mill.
(iii) 4 unloaders (540 t.p.h.) in front of Warehouse 26. Discharge to Codesp's silo.

Silo capacities: Codesp – 30,000 tonnes, Santista – 34,800 tonnes, Paulista – 20,000 tonnes.

Fertilisers: A quay, at Conceicaozinha, length 567 m. with 2 piers. Each pier is 283.5 m. long with a depth 13.5 m. minimum tide. Warehouse capacity 180,000 tonnes. 12 electric portico cranes, with grabs, and conveyor belts.

Coal: At Saboo, capacity 50,000 tonnes, serviced by electric cranes, grabs and conveyor belts. Rate 1,000 t.p.h.

Roll-on/Roll-off: 6 Ro/Ro berths in operation. For vessels with straight ramps – at Saboo Quay (Warehouse 29).

For vessels with angled or side ramps – at Saboo Quay (Warehouse 35).

CRANES:

Type	*No.*	*Capacity*
Cranes		
Electric portico	173	1.5 to 30.0 tonnes
On tyres	41	4.5 to 250.0 tonnes
On belts	5	6.5 to 11.0 tonnes
Conveyors/Piling up of containers	3	30.0 tonnes
Portainers	2	20 units/hr.
Transtainer	1	20 units/hr.
Transtainers on tyres	2	30.5 tonnes

EQUIPMENT:

Forklifts		
Common	271	2.0 to 23.6 tonnes
For rolls of paper	26	1.2 to 2.0 tonnes
For containers	3	37.0 tonnes
With buckets	7	1.8 tonnes
For inside containers	21	1.8 tonnes
Floating cranes	2	150 and 250 tonnes
Water barges	2	30 and 450 tonnes

DEVELOPMENTS: The following development goals for medium and long term:

Enlargement from the Valongo Quay to Paqueta 1.
Enlargement of the Container Terminal.
Construction of a Terminal destined for Roll-on/Roll-off operations.

Bulgaria

BOURGAS: (Also see page 213).

ANCHORAGE: Amend line 3 to read:

"Vessel ordered by Authorities to proceed to position Lat. 42° 39′ N.,"

SHIPMASTER'S REPORT:

Anchorage: Amend line 2 to read:

"Lat. 42° 39′ N., Long. 27° 56′ E. for clearance and Pilot. After clearance"

Canada

GENERAL: (Also see page 224).

REPORT: February 1985.

Herewith is an outline of requirements for chemical tankers which are scheduled to call Vancouver/British Columbia ports.

1. Vessel must have on board a valid non-Canadian Ship's Compliance Certificate.
2. Certificate of Fitness and date.
3. Provide Agents with 7, 4, 2 and 1 day's notice prior to arrival.
4. Advise Agents of the last 2 cargoes.
5. Advise of any cargo in transit (quantity and type).
6. Vessel is required, in Vancouver, to have a clear passage while transiting the First and Second Narrows Bridge – with a minimum of 1 mile visibility. Vancouver Traffic Centre will advise vessel accordingly upon arrival.
7. Canadian Coast Guard will attend on board upon arrival for safety inspection.

In the case that a vessel arrives in Vancouver with ammonia on board, the vessel is permitted to load propane as a second cargo, providing they are fully segregated.

PRINCE RUPERT: (Also see page 254).

SHIPMASTER'S REPORT: January 1985.

Berthing: Ridley Terminals Inc.: (Coal). Max. draft 22 m.

Chile

GENERAL: (Also see page 281).

SHIPMASTER'S REPORT: January 1985.
Painting: We called recently at Iquique – Antofagasta – Valparaiso – San Vicente. In *all* ports scraping and painting the hull only allowed after having received permission from Port Captain.
Containers: When more than 6 containers have been (re)loaded on deck the lashing of same are to be checked by Surveyor of Port Captain's Office. Surveyor at San Vicente insisted on chains, even when twistlocks were used and containers only single stacked.
Stability: Prior departure last Chilean port, stability particulars to be given to Surveyor from Port Captain's Office.
Time: Summertime is kept, GMT minus 3 hours.
Curfew: Only in Valparaiso.

PUNTA ARENAS: (Also see page 289).

SHIPMASTER'S REPORT: March 1985 (Research Ship).
Approaches and Pilotage: Report to Chilean Radio Station when 200 miles off.

The Pilot, a Chilean Naval Officer, boards/leaves via a warship. The Pilot brings his own charts. We did not have a suitable chart of Bahia Cook. On a future visit one should be obtained for a safe approach.
Berths: Either side of a 380 m. long pier. There is a Berthing Pilot, and because of the prevailing very strong winds in the afternoon and evening it is customary to use a tug aft.

Punta Arenas is a busy port.
Documentation:
10 Crew Lists (not all taken).
3 NIL Passenger Lists.
3 NIL Cargo Lists.
3 Lists of Personnel Disembarking.
2 Store Lists (Deck, Engine, catering).
2 Bonded Store Lists.
2 Crew Declarations.
1 Maritime Declaration of Health.
Officials: Extremely courteous. We were made to feel most welcome. The bond was not sealed. The Port Captain (Navy) visited the vessel on several occasions, and offered every assistance should any need arise.
Immigration: Shore passes are issued, and must be returned on sailing.
Fuel: Diesel was delivered by road wagon. This took most of the day, but saved having to shift the ship to the Oil Jetty – which would have taken all day.
Water: Laid on to the quay.
Provisions: Ship Chandler: Juan Carlos Carrasco Harris (Aguas Negras), Errazuri 455, Punta Arenas. Tel: 21549. Telex: 280056 Danep Cl.

Able to supply all our requirements, even to a medical oxygen bottle adaptor.

The quality of fresh fruit and vegetables was as good as U.K., in some cases better. Prices were similar. The chandler has a refrigerated store, thus items were delivered in prime condition. Even bananas lasted 2 weeks.
Prices: Unfortunately there is, at the moment, no Duty Free facility. In addition all items (and services) are subject to +20% VAT. This included fuel.
Laundry: Very good standard. Average price range (subject to the 20% VAT).
British Consul: Mr. Bill Matheson. Tel: 22325.
Repair Facilities: Not tried, but reported good.
Repatriation: No particular problems. There are flights daily. It is however a long haul back to the U.K., requiring a night stop over in Santiago.

The best hotel accommodation at Punta Arenas was very expensive. Alternative accommodation can be had at Mother Teresa's Home for Seamen at about £20 a night (but not usually single occupancy).

QUINTERO: (Also see page 290).

DOCUMENTS: 1 Certificate of Dues in respect of lighthouses and buoys.
MAX. SIZE: *Chilectra Andina Quay:* LOA 175 m., draft 32 ft.
Las Ventanas Chemical Terminal: Up to 40,000 g.r.t.
El Durazno Quay: LOA 96 m., draft 19 ft.
TANKERS: *S.B.M. Quintero Terminal:* Draft 25.5 m. (83 ft.)
Gas Berth: Max. draft 39 ft. Ship's head should lie on 285°.
R.P.C.: Max. draft 50 ft.
BULK HANDLING FACILITIES: *Chilectra Andina Quay, Las Ventanas:* Max. depth 19 m. at the head on the North side of the pier.

On the South side, max. LOA 160 m., draft 30 ft.
FRESH WATER: Available from Valparaiso, by barge.
SHORE LEAVE: Curfew in operation.
TIME: GMT minus 3 hours (October to March). GMT minus 4 hours (March to October).

Colombia

BUENAVENTURA: (Also see page 317)

The following amendments were received in December 1984.
PILOTAGE:

(a) Entry marked by channel having minimum depth of 3.25 fathoms low tide. Advisable enter channel or leave wharf 1 hour after low tide and 2 hours after high tide, restricting departure during any other periods, particularly when draft exceeding 20 ft. Entry to channel marked by Buoy No. 1 located at Lat. 03° 47′ 10″ N., Long. 77° 19′ 10″ W.

(b) 72, 48, 24 and 12 hours before reaching port, Master must cable separately to Agents and to Port Captain confirming hour of arrival Punta Basan (pilot station). Message to Agency must indicate, in addition to ETA, quantity of cargo destined for the port, number of disembarking or in-transit passengers, number of gangs required for operations, draft, mail for the port, if fresh or running water is required, fuel-oil, cash to Master or any other special requirements; whether special side of wharf is required for berthing, and whether dangerous cargo (explosive) or flammable cargo, and what quantity. Message to Port Captain must also indicate arrival time, quantity of cargo destined to the port, number of disembarking or in-transit passengers, mail, whether dangerous or flammable cargo is carried and in what quantity, and any other data that may be considered useful in accordance with International Regulations.

(d) Radio-telephone in pilot station of Punta Basan or La Bocana (opposite Punta Soldado). Characteristics: VHF Channels 11 and 16 every day from 0600 – 2400 hrs.

(f) Port has 8 Pilots.

(h) Pilotage compulsory.
ANCHORAGES: There are 3 additional anchorage zones and their use will be ordered from the Authorities.
MAX. SIZE: No restrictions on the length of vessel, depth alongside wharf approximately 12 ft. – 30 ft., under terms "not always afloat but safely aground", low tide.
HEALTH:

(c) Time-table for meeting vessel: Ordinary or regular time – ordinary time 0800/1200 hrs. – 1400/1800 hrs., overtime 0700/0800 hrs. – 1200/1400 hrs. – 1800/2000 hrs. Sundays and holidays, overtime.

(d) After 2000 hrs. and up to 0700 hrs. of following day it is not possible to make arrangements for meeting vessels, unless in emergency.
TUGS: Normally only required for berthing. Tug operation handled by Pilot. Generally tug service consists of pushing from stern or bow as required. When necessary to use ropes, they must be supplied by vessel. 2 tugs × 1,200 h.p. and 1 × 350 h.p.
BERTHING:

Berth	*Length*	*Depth at LW*
Shed No. 1	202 m.	12 ft.
Sheds No. 2 – No. 9	—	23 ft. – 25 ft.
New Pier	80 m.	30 ft.
	597 m.	17 ft. – 20 ft.

STEVEDORES: Port has at present time 80 gangs of 16 men each. The working hours during ordinary or regular time are from 0800/1130 hrs. and from 1400/1730 hrs. Overtime from 1200/1400 hrs. – 1800/2400 hrs. and from 0000/0200 hrs. 24 hours are worked with special request. No work from 2300 hrs. Saturday until 0700 hrs. Monday.
TANKERS: Independent oil pier with capacity to accommodate vessels of medium size. 4 × 8 in. hoses for discharge of petroleum products, and 2× 6 in. and 1× 4 in. hoses for unloading chemicals. Average rate of discharge of gasoline is 5,000 b.p.h. (approximately). Fuel oil and chemicals 1,500 b.p.h.
WATCHMEN: Service necessary both by Crew members' and Agents' personnel. There is an established body of watchmen named "Policia de Vigilancia Portuaria" (National Police); additionally, the steamship Agencies carry out this work with their own personnel on previous request by Master. The port has a port police body and Customs house guards which co-operate in vessels' watch.
CONSULS: Panama Tel. 2 22 50. Most countries have consuls in Cali – approximately 142 km. from Buenaventura.
AIRPORT: Located 18 km. from Buenaventura. Airport is small and is inactive. Agent in charge of the repatriation of a crew member must handle necessary connection in Cali or Bogota, where there are international airports.
POLICE/AMBULANCE/FIRE: A voluntary fireman corps in the city. Alarm, tel. 22222. Guard, tel. 23720. Fireman, tel. 15. Ambulance, tel. 22830, 22638/23708/24475. Police, tel. 22738.
GENERAL: Port is equipped with following shore cranes: 2 × 80,000 lb. capacity (mobile), 1 × 60,000 lb. capacity (mobile), 3 × 20,000 lb. capacity (mobile), 2 × 14,000 lb. capacity (mobile), and 1 × 10,000 lb. capacity (fixed).

Floating cranes: 1 × 45 tons capacity.

Lighters available: 3 with following characteristics:

Size Length/Width	*Capacity*	*Type*
24.40 × 9.45 m.	280 tons	Flat surface
34.40 × 7.60 m.	150 tons	Flat surface
38.80 × 10.60 m.	150 tons	Flat surface

CARTAGENA: (Also see page 319). (See Late Plans)

This information supersedes "Tankers" on page 319.

LOCATION: Cartagena is located on the Bay of Cartagena, North coast of Colombia, Lat. 10° 19′ N., Long. 75° 31′ W.

DOCUMENTS: Documents necessary for a petroleum tanker arriving at Cartagena are as follows:

1 copy Clearance (Despacho) from Last Port (if vessel was directed while en-route, Master's affidavit). Consular visa unnecessary.
1 copy Consular Dispatch.
4 copies Crew List.
4 copies Personal Effects Lists.
2 copies Ballast Manifest (Manifiesto de Lastre).
4 copies Stores List.

PILOTAGE: Pilotage is compulsory. If, on arrival outside the entrance to the channel leading to Cartagena harbour, a Pilot does not meet your vessel, you are to sound the whistle signal, 4 long blasts, and display International Code Flag "G" for a Pilot.

Vessels are not to pass each other in the channel leading into the harbour of Cartagena and inbound vessels are to give way to outbound vessels.

Vessels entering or leaving the port must have a Pilot on board, otherwise they might be subject to a fine for failure to comply with this regulation.

The vessel must sound 4 long whistle blasts so that it will be met by the Mooring Master inside the harbour and who will take it alongside immediately if berth is available. If the ship's Master sees that another ship is at the loading berth, he must anchor.

It will be necessary to deliver to the Mooring Master a report stating the exact time he arrived on board and left your vessel outside the channel. If, when inbound, the Pilot does not meet your vessel outside the channel, you are to note this fact on the Pilot's Report.

NAVIGATION AIDS: For information pertaining to Navigation Aids, you are invited to consult the latest edition of the Light List (H.O. III A) or equivalent British Light List; also the Sailing Directions covering the area.

RESTRICTIONS/MAX. SIZE:

		Refinery Terminal Max. – Min.	*Nestor Pineda Terminal* Max. – Min.
Size of vessel that can safely berth:	Length (ft.):	853 – 492	853 – 577
	Beam (ft.)	125 – 65	125 – 82
	Draft (ft.):	38	38
	d.w.t.:	85,000 – 12,000	85,000 – 25,000
Location of Terminals South of the City of Cartagena:		7 miles	5 miles
Latitude:		10° 19′ 09″ N.	10° 19′ 39″ N.
Longitude:		75° 30′ 42″ W.	75° 30′ 54″ W.
Distance from port entrance:		5.5 miles	6.5 miles
Least depth of water from Bocachica Channel to Terminal:		44 ft.	44 ft.
Depth of water at Terminal at Mean Low Tides:		40 ft.	40 ft.
Mean Tidal Range at Terminal:		1.5 ft.	1.5 ft.
Nature of bottom at Terminal:		Mud	Mud
Docking and unloading:		Night and day	Night and day

Also see "Berthing".

RADIO: Masters of vessels proceeding to the Cartagena Terminals are to send a radio notice at least 48 hours prior to arrival to the Agent at Cartagena; should be corrected promptly in the event of any change in the time of arrival.

The Agency, upon receipt of the arrival cable, will cable the vessel with pertaining instructions about the cargo, if not ready, or if the berth is occupied at the time of arrival by another vessel. In these instructions, the Agency will indicate the estimated docking time.

BERTHING: Ecopetrol owns 2 terminals on the Bay of Cartagena:
Refinery Terminal: The dock of the Refinery Terminal consists of a "T" loading platform with trestle connection to shore, 4 breasting dolphins and 2 mooring dolphins. These facilities are used for receiving crude oil, gas oil and white products and shipping refined products and spent caustic in tankers up to 85,000 d.w.t., either empty or partially loaded to a maximum draft of 36 ft.
Nestor Pineda Terminal: Consists of an isolated loading platform, connected to the shore by 7 submarine pipe-lines, 3 breasting dolphins, and 2 mooring dolphins. These facilities are used for receiving crude oil and shipping fuel oil and aromatics in tankers up to 85,000 d.w.t., either empty or partially loaded to a maximum draft of 36 ft.

The size of tankers entering Cartagena's bay is limited by the depth of the entrance channel (Boca Chica), which is limited to ships with a maximum draft of 38 ft.

Vessels are supposed to dock alongside the dock with bow and stern lines from both the port and starboard bow and stern.

To dock vessels over 2,000 d.w.t., Maritime and Port Authorities request the use of tugs. Tug costs are on the ship's account. It is recommended that 2 mooring lines be bent together on the starboard quarter. The Mooring Master boards the vessel about 0.5 mile from dock and remains aboard during the entire stay of the vessel at the dock. The Loading Master is to be supplied with room and meals on board.

LOADING/DISCHARGING:
Name of grades handled at Refinery Terminal:

	No. and Size of F.M.C. Tubular Arms	*Diameter of Pipe-line*	*Max. Pumping Rate – Barrels Per Hour*	*Max. Pump. Pressure psig.*
Crude Oil	3 – 12 in. × 60 ft.	20 in.	20,000	150
Fuel Oil	3 – 12 in. × 60 ft.	2 – 14 in.	5,000	150
Gasoline	3 – 12 in. × 60 ft.	18 in.	10,000	150
Kerosene-turbo	1 – 12 in. × 60 ft.	8 in. – 10 in.	2,100	150
Diesel	2 – 12 in. × 60 ft.	12 in.	7,000	150
Spent Caustic Soda	1 – 12 in. × 60 ft.	6 in.	2,000	150
Ballast Water	3 – 12 in. × 60 ft.	16 in.	20,000	150

Name of grades handled at Nestor Pineda Terminal:

	No. and Size of F.M.C. Tubular Arms	*Diameter of Pipe-line*	*Max. Pumping Rate – Barrels Per Hour*	*Max. Pump. Pressure psig.*
Fuel Oil	3 – 12 in. × 60 ft.	24 in.	10,000	150
Crude Oil	3 – 12 in. × 60 ft.	20 in.	20,000 (1)	150
White Products (2)	2 – 12 in. × 60 ft.	6 in.	1,500	150
Ballast Water	3 – 12 in. × 60 ft.	16 in	20,000 (1)	150

(1) From ship to shore facilities.
(2) Includes facilities for loading Aromatics (Benzenes and Xilenes).

BALLAST: Vessels must arrive with sufficient ballast to permit safe handling in port. Vessels in ballast shall not have greater than 4 ft. trim difference between the fore and after draft. Dock Master requirements in this connection under normal weather conditions are interpreted as drawing approximately 14 ft. forward and 18 ft. aft.

The deballasting facilities are as follows:

In the Refinery Terminal the pipe-line to the shore installations is 2,835 ft. long and 16 in. diameter, 3×12 in. loading arms are available to a maximum rate of deballasting of 20,000 bbls.p.h. In the Nestor Pineda Terminal the pipe-line to the shore is 3,600 ft. long, and 16 in. diameter, also there are 3×12 in. loading arms to a maximum rate of deballasting 20,000 bbls.p.h.

No dirty or clean ballast, nor engine room, or pump room material must be pumped overboard while inside the port.

The Ship's Master should be fully aware of the Colombian laws and regulations pertaining to pollution of the environment and the sanctions derived from their infringement.

Extreme care must be taken to avoid spillage of oil or any other contaminants. In the occurrence of any spillage attributable to the crew's responsibility, immediate action must be taken in order to clean the affected areas. The costs of this action are on the ship's account.

There are strict legal regulations concerning pollution problems. Those responsible for this type of situation will be heavily fined by the Port Authority.

FRESH WATER: Fresh water is available only at Nestor Pineda Marine Terminal. This water is not recommended for drinking.

FUEL: Bunker C Oil, Marine Diesel and Diesel Oil are available only in the tanker anchorage area, from local suppliers.

GANGWAY/DECK WATCHMEN: An accommodation ladder shall be lowered on the port side upon arrival at the port.

SHORE LEAVE: Shore leave is granted to members of the crews of vessels calling at Cartagena. Before granting shore leave, the Master must address a letter to the Port Authority requesting permission to grant shore leave and must assume all responsibility for his men.

Crew deserters will be arrested by the local police and the vessel in all probability will be fined. Every precaution, therefore, is to be taken to prevent members of the crew from going ashore without permission from the Master. The Port Authority restricts, under penalty of fine, the boarding of any tanker while at the loading terminal by all persons except those having official duties to perform on board. Masters are to make sure that no unauthorised persons are permitted to come on board their vessel while at the terminal.

REGULATIONS: Ecopetrol requires that all vessels loading or unloading at their terminals comply with the following regulations:

a. Tankers must arrive in port with hose derricks rigged and mooring lines on deck.
b. During the time the tanker is at the loading platform a sufficient number of the ship's crew must be on duty to properly attend the mooring and hose lines; so that necessary changes can be promptly made.
c. The tanker must furnish one member of the crew to operate the ship's winch, which operation, however, is to be under the direction of the Loading Master.
d. The tanker's crew must handle all ship's valves.
e. The ship's officers must follow the instructions, in all aspects, from the Loading Master as to all the signals to be given to the shore loading stations. When the tanker is about to be loaded, a "stand-by" signal is to be given. The "Slow-down" signal must be given at least 5 minutes before the "Shut-down" signal.
f. In order to facilitate the above, the crew should be on deck immediately following the "stand-by" signal and preparations must start to unberth the ship on completion.
g. No ship will be berthed except under the sole direction of the Mooring Master.
h. While the ship is berthed, the propellers must not be moved; engines shall be ready for immediate use and steam, or power must be available to work winches and windlasses to meet emergencies at all times.
i. All instructions from the Loading Master, whether contained in these regulations or not, must be followed by the ship's officers and if not, all operations will be discontinued, and, if necessary, the ship removed from the loading berth until such time as the ship's officers comply with orders of the Loading Master.
j. No maintenance, or repair to the ship, such as welding, or any other hot work will be undertaken, while at the berth and which will endanger the safety of the installations, or equipment, owned by Ecopetrol.
k. When loading/unloading operations are complete, the crew shall endeavour toward clearing the facilities in the shortest period of time possible.

AUTHORITY: *Operator:* Empresa Colombiana de Petroles, "Ecopetrol", Apartados: Aereo 5938-6813, Postal 808, Bogota, Colombia. *Telex:* 44464. *Cables:* Ecopetrol. *Contact:* Jorge Lozano, Depto. Coordinacion de Operaciones.

POZOS COLORADOS:

This information supersedes that given on page 321 and 322.

LOCATION: North coast of Colombia, approximately 6 miles S.W. of Santa Marta.

DOCUMENTS:

For the Port Captain:
1 Clearance for Last Port.
1 Voyage Report.
1 Crew List.
1 List of Passengers for Santa Marta.
1 List of Passengers in Transit.

Vessel Certificates: (These only need to be shown).
Registration Certificate.
Load Line Certificate.
Classification Certificate.
Safety Equipment Certificate.
Radiotelegraphy Safety Certificate.
Construction Certificate.
Cargo Handling Equipment Safety Certificate.
Oil Pollution Certificate (Insurance for US$1,000,000).

For Port Health Authority:
Derat Certificate.
Maritime Health Declaration.
Toxic Element Certificate.
Crew List with dates of vaccination.
List of Passengers for Santa Marta.
List of Passengers in Transit.

For Customs:
3 Cargo Manifests.
3 Crew Lists.
3 Lists of Passengers for Santa Marta.
3 Lists of Passengers in Transit.
3 Lists of Crew Personal Effects.
3 Lists of Provisions.
3 Mail Lists.

For Agencies:
1 Voyage Report (these only need to be shown).
2 Crew Lists.
2 Lists of Passengers for Santa Marta.
2 Lists of Passengers in Transit.
2 Crew Personal Effects Lists.
2 Lists of Mail for the Port.
4 Cargo Manifests.
4 Bills of Lading.
2 Cargo Stowage Plans.

PILOTAGE: Mooring Master will meet vessels approximately 1 mile seaward of terminal location. He will remain on board throughout the vessel's stay and should be provided with accommodation.

RESTRICTIONS: Docking only during daylight 0500 hrs. – 1600 hrs. Undocking 0430 hrs. – 1830 hrs.

MAX. SIZE: Berth in approximately 52 ft. of water and can accommodate vessels of up to 69,000 d.w.t. with max. draft 45 ft.

HEALTH: Port Authorities board with Mooring Master to enter ship and attend all formalities.

VHF: Permanent communications Vessel-Terminal with VHF Channels 16 and 6. National and International communications through "Empresa Nacional de Telecomunicaciones (Telecom)" 0800 hrs. – 2200 hrs.

BERTHING: The vessel will be berthed in the area surrounded by the 7 mooring buoys, in following order from for'd port side, passing round stern to for'd starboard side: No. 7, 1, 2, 3, 4, 5, 6. Vessels lie in berth on approximate due North heading; vessel's lines run by means of mooring launch to stern, quarter, and breast buoys. Vessels up to 20,000 d.w.t. require at least 5 good manila lines; vessels in excess of 20,000 d.w.t. require at least 12 good manila lines. These lines must be of not less than 120 fathoms in length each. Synthetic lines of equivalent strength may be used. Vessels equipped with wire mooring winches may use wires in lieu of fibre lines. The mooring requires use of both bower anchors, each having at least 150 fathoms of chain and be prepared to handle 5-ton lift on starboard side at ship's manifold. Because of rigidity of submarine hose, a small movement of vessel out of correct position could damage submarine equipment. Extreme caution must be exercised to ensure that vessel is correctly moored. During loading operation slack must be kept out of submarine hose by adjustment of vessel's anchor and lines.

TERMINAL REPRESENTATIVE: The Terminal has skilled personnel to represent its business on board and they will remain on board during all operations.

HOSES: Submarine hose 16 in. with 16 in. to 12 in. reducer for connection to vessel's 12 in. deck hose. For vessels not equipped with 12 in. deck hose, a 12 in. to 10 in. reducer is available. A 25 ft. length of 10 in. deck hose is also available for vessels not having a deck hose on board. Ship's crew perform all hose connecting, disconnecting, etc.

PUMPING: The Terminal is capable of receiving 15,000 bbls.p.h. if the vessel keeps pressure at an average of 100 lb./sq.in. (7 kg./sq.cm.).

CARGO HANDLING: Terminal is designed for loading and unloading Crude Oil or Products. Currently, it is used to unload white products (motor gasoline and virgin naphtha). The products must be transported and unloaded in segregated form. The total capacity of storage is 750,000 bbls.

BALLAST: The utmost care must be exercised by all tankers to avoid any contamination of the terminal bay waters, since the entire area is a developing tourist resort. This means that absolutely no deballasting or disposal of bilge water must take place in the bay. Shore deballasting facilities can handle up to 84,000 bbls. if ship provides advance warning.

FUEL: No bunkers available at terminal. Acquisition is possible at Cartagena (Colombia) located at Lat. 10° 19′ N., Long. 75° 31′ W. See "General" before first port.

MEDICAL: Doctor and hospital located at Santa Marta, throughout 24 hours.

CONSULS: No consular office in vicinity of terminal.

The following countries have consulates in Santa Marta:

		Phone
Costa Rica	Avda. Libertador No. 33-47	32199
Dominican Republic	Cra. 21 No. 15-99	32962
Ecuador	Las Villas 2a. etapa, Villa No. 15, El Rodadero	27590
Finland	Edificio de bs Bancos Oficina No. 605	35317
France	Calle 17 No. 2-56, Of. 212	32014
Guatemala	Calle 11 No. 1C-23 P. 8	34048
Netherlands and Sweden	Calle 15 No. 3-94	33403
Norway	Calle 11 No. 1C-23 Dpto. 306	33501
Panama	Calle 17 No. 2-56 Of. 416	34253
Peru	Calle 16 No. 1-92	33420

Other consuls located in Barranquilla, approximately 35 miles distant.

REPAIRS: Limited repair facilities available in Santa Marta, approximately 6 miles from terminal.

SURVEYORS: There are 3 petroleum inspection companies.

SHORE LEAVE: Through the ship's Agent, shore leave can be arranged, but sufficient crew must remain on board to handle emergencies. Most Maritime Agencies own 2 safety launches for vessel-shore-vessel routine.

GENERAL: No ships' stores.

AUTHORITY: *Operators:* Empresa Colombiana de Petreleos "Ecopetrol", Departamento de Coordinacion de Operaciones, Bogota, Colombia. Telex: 44 787. Tel: 85 67 97.

Estacion Pozos Colorados, Santa Marta, Colombia. Telex: 38 849. Tel: 7499, 7095.

Congo, Republic of

DJENO TERMINAL: (Also see page 326).

SHIPMASTER'S REPORT: September 1984.

Documents: Documents required: 3 each of Crew Lists, Vaccination Lists, Stores & Crew Declaration. 2 each of Passengers (or Nil) List, Birds and Animals, Narcotics, Arms and Ammunition. 1 Notice of Readiness. All paperwork carried out by Loading Master.

On departure, vessel steams slowly back to Pointe Noire while calculations and papers are completed on board.

Pilotage: Pilot and Loading Master boarded from pilot boat which has speed of about 20 knots.

On departure, the Pilot, Loading Master and Cargo Surveyor left using an inflatable dinghy. They prefer the ladder on the starboard side. The tug carries 2 inflatable dinghies.

Anchorages: For tankers waiting to berth at Djeno the indicated anchorage off Pointe Noire was found to be good with thick grey mud. Gear for mooring and hose connecting put on board from tug at anchorage. The tug then goes to Djeno to standby.

Tugs: There is a small buoy N.E. of the SBM and the tug moors there when not working.

Mooring: While mooring, tug is used to keep hoses clear.

Loading: Cargo Surveyor boarded while deballasting. Used combination accommodation ladder/pilot ladder on port side. Pilot, Surveyor and Loading Master stay on board.

Egypt, Arab Republic of

ZEIT BAY: 27.50 N. 33.02 E.

LOCATION: Zeit Bay Terminal is approximately 60 km. North of Hurgada.

ANCHORAGES: Waiting area centred on Lat. 27° 48.5′ N., Long. 33° 37.0′ E. Radius 1 mile. Depth ranges from 22 m. to 38 m., with 31 m. at centre.

Tanker should call "Marine Control" before approaching if necessary to drop anchor in the anchorage area.

Vessel is not permitted to anchor outside the anchorage area.

RESTRICTIONS: No night berthing; berthing should be completed before 1600 hrs.

MAX. SIZE: Max. 240,000 d.w.t. with 160,000 tons cargo. Minimum length of tanker approximately 550 ft. Maximum length decided by tonnage, but distance bow to manifold not longer than 650 ft.

RADIO: Tankers calling at Zeit Bay must send ETA message 72, 24, and 12 hours distant from the terminal to SUCO Head Office, telex 93455 or 92300 or 20477 Suco Un via any coastal radio station: Alexandria, Port Said, Suez and Kosseir.

ETA messages to SUCO should give the best estimates of ship's arrival time at the terminal. This ETA message should also include a definite statement of details of any equipment required from shore for connecting 16 in. floating hose, bearing in mind that such hose needs tanker to be equipped with crane, classed and certified to at least 10 tons capacity.

VHF: Master must call "Zeit Bay" 4 hours prior arrival on VHF Channel 16. If it is out of order, use Channel 12. Station is standing-by 24 hours/day.

BERTHING: SBM (Single buoy mooring). Cargo hose 16 in., ANSI type, with camlocks. Loading rate max. 6,000 tonnes/hr. Connection port side.

If cargo hose or connection is different, Master should contact SUCO Head Office 72 hours prior to his arrival at Zeit Bay stating the tanker hose and connection type.

Mooring facilities on tanker's bow should be ready prior to arrival.

Tanker must be on even keel and/or trimmed slightly by the stern, and have on board adequate ballast for manoeuvring.

BALLAST: Tankers calling at Zeit Bay should have permanent and/or clean ballast on board. Pumping ballast water overboard is completely prohibited by Governmental Authorities. If Master will require to deballast clean ballast during loading operations, letter should be submitted to the terminal that all bulkheads are fully tight and no leakages, to avoid any contamination. Master on behalf of Owners and/or Charterers will bear all costs and expenses for cleaning operations required to remove any pollution which might occur due to pumping ballast overboard, as well as a fine of US$15,000.

AUTHORITY: *Operator:* Suez Oil Company, 21 Orabi Street, Dokki, Cairo. Telex: 93455, 92300, 20477 Suco Un.

Ethiopia

ASSAB: (Also see page 440).

SHIPMASTER'S REPORT: February 1985.

Documents: No cargo documents whatsoever were received by Agent prior to ship's arrival. The day after arrival at the roads, the Agent came on board to collect a full set of cargo documents. This procedure seemed to be a fairly normal practice on ships other than regular liner ships and tankers arriving at Assab.

After having berthed, Authorities came on board to collect 5 Crew Lists, 3 Stores' Declarations and 3 Crew's Effect Declarations. Ship's Certificates were not examined. Ship's lockers with tobacco and spirits were sealed by Customs. Beer-store not sealed. No search of crew cabins.

Pilotage: Signal station working VHF Channels 16 and 14, giving berthing instructions and other information. Also signal station is most willing to pass any messages to Agents, etc.

Pilot boards ships on the roads approx. 0.5 miles off the breakwater. 2 Pilots are serving the port. This ship was handled by the Chief Pilot, who is very skilled in handling ships, making effective use of wind when berthing/unberthing/shifting ships in port.

Anchorages: Ship arrived on the roads 14th January, 1985 and was at anchor for 18 days. In that period the wind blew during the night with Force 4/5 from S.E., shifting E.S.E. Force 6/7 during daytime – often reaching Force 8. Holding ground good.

Restrictions: Draft restriction 33 ft., but Pilot advised me that 34 ft. has been handled. The problem is not the depth alongside the pier but a small patch of sand close to the breakwater, with a minimum depth over it of 35 ft. Ships with the deepest draft are berthed at Pier No.1 (The outer end of the Northern Pier).

Health: After arrival in roads, ships are called by a Quarantine Officer on VHF Channels 16/14, who asks relevant questions such as last port, crew members on board, if any sickness, gross/net tonnage. If satisfied with answers ship is granted Free Pratique.

Radio: Assab Radio (ETC) was impossible to use during voyage to Assab, and all messages were passed via Aden Radio (7OA). After having anchored at Assab Roads, Assab Radio did answer and arrival message and Notice of Readiness were sent via ETC.

Tugs: Tugs meet ships inside the breakwater. 1 tug built 1979 and 1 built 1981, respectively 1,200 and 1,400 h.p. Both of them are working very effectively. Large ships are normally berthed at Pier 1 or 2 – the outer ends of piers – bow heading out. An anchor is used to hold the ship's bow while tugs are pushing the ship into position. 1 larger tug and 1 smaller tug were seen in the port, but they were not in use during our visit.

Cranes: On the Northern pier there are 9 cranes, and on the Southern pier 7 cranes. All were electric cranes working well and well maintained. 2 of the cranes on each pier are 20 ton capacity and the others 6 ton. At least 3 mobile cranes were seen, one with capacity up to 60 tons.

Bulk Cargo Facilities: Bulk grain is discharged by grab to portable bag filling equipment on the pier . Capacity unknown. Simultaneously, dump trucks are used to carry bulk grain from ship to warehouse. 2 cranes are normally used and an outturn of 2,500 tons is said to obtainable.

Stevedores: Agents arrange gangs. Shifts worked: 0600 hrs. – 1400 hrs., 1400 hrs. – 2200 hrs., 2200 hrs. – 0600 hrs. It seems normal practice that all ships work around the clock with maximum possible gangs.

Density: 1023.5.

Fresh Water: Available but in very limited quantities, 10 to 30 tons per ship only. Quality said to be poor.

Watchmen: Gangway watchman compulsory. 1 watchman works from 0600 hrs. to 1800 hrs. The other from 1800 hrs. to 0600 hrs. Meals are to be supplied by ship.

Customs Allowances: Each crew member had 200 cigarettes and some had a bottle of spirits on arrival. No comments were made to this quantity.

Repatriation: Said to be possible. Local plane to Addis Ababa and from there international flight connections.

Shore Leave: Immigration Department issue a special shore pass, which is shown when passing the gate to and from the port.

Supplies: Ships should not rely on any supplies. At a local market, some supplies of fresh vegetables can be obtained, but most are of poor quality.

Delays: Depending on type of cargo. Army material seems to have priority over other cargo. Berth Nos. 1 and 2 are said to have been promised to ships with food aid.

Notice:

TO:
THE MASTER
M/V "...........................''
ASSAB

Assab Port Authorities: General Instructions to be followed:

1. The hours between 2400 and 0600 are curfew hours.
2. Any crew member going ashore should hold his passport or seaman's book together with a shore pass given by the Immigration Officer. Misuse or loss of a shore pass card will not only lead to payment of Birr 10.00 (Ten) per card but also strong measures will be taken upon the individual crew member who involves himself in such misuses.
3. Attempts to exchange foreign currency on black market leads to serious prosecution. Official bank exchanges are authorised. (Rate of exchange 1 US$=2.05 Birr.)
4. Ship's crew are not permitted beyond the following limits:
   - (A) The hospital to North East
   - (B) Starlite Hotel to the West, and
   - (C) The Agip Motel to the South West.
5. All crew's personal belongings should be shown in Crew Declaration. The Customs Authorities will inspect all individual cabins upon arrival and departure.
6. Rat guards should be fitted to all mooring ropes immediately after berthing. Contravention of this will incur a fine Birr 300.
7. Anchoring in Ethiopian Territorial Waters and generally from "T10" to "Ras Damera" is strictly prohibited. When entering territorial waters you must open your VHF Channel 16 and inform Naval Base of your identity.
8. Two hours before departure, "G" flag should be hoisted by day and vertical "Red White Red" should be lit by night, for Pilot.
9. Before sailing from our port you must institute a thorough search of your vessel to ensure that no unauthorised persons or stowaways are on board at the time of departure.
10. Any crew member found in illegal possession of harmful and toxic drugs or found circulating same directly or indirectly shall be seriously dealt with according to the penal code.
11. Diving, swimming and fishing within and or near by the premises of the harbour is strictly prohibited.
12. Photography within the port or around the town is strictly prohibited.
13. Smoking inside port area is strictly prohibited.

SIGNED:...........................
MASTER

Greece

AGIO THEODOROI: (Also see page 541).

(See Late Plans)

SHIPMASTER'S REPORT: December 1984.

Documents: Crew Lists must be IMO standard forms.

Pilotage: Oil Company has its own private Pilots. There are 4 Pilots stationed here, of which 2 are on call. Pilotage is compulsory. Pilot comes out by tug.

VHF: About 4 miles from the jetty, start calling "Pier Master Theodoroi", on Channel 14 VHF. He will give information about berthing and/or anchoring.

Anchorage: Reasonable safe anchorage Westward of jetty, about 3.5 cables from shore, in 20 – 25 fathoms of water.

Tugs: 4 tugs available.

Berthing: See "Plan". Ships always moor heading West, so only Berth "B" Inner is moored portside to. Each berth has 4 chicksans. Connections ranging from 8 in. to 12 in. Connecting and disconnecting is done by shore crew.

Fresh Water: Drinking water is also laid on to the jetty.

Provisions: Are available. Are brought alongside by tug for which a separate bill has to be signed.

Guatemala

PUERTO QUETZAL: 13.55 N. 90.47 W.

(See Late Plans)

SHIPMASTER'S REPORT: December 1984.

Limited operations commenced on 18th March, 1983.

Currently, services are provided with the following minimum organisation:

Port operations.

Maritime and Communication operations.

Financial and Administrative Services, and the additional personnel to provide other support services.

These offices operate in module buildings constructed for this purpose in the port area.

SERVICES TO VESSELS:

Right to berth.

Aids to navigation.

Service of pilot launch.

Pilotage.

Mooring, berthing, and vice versa.

Stay in port.

Anchorage.

PROTECTION WORKS: The sheltered area is formed by a major (West) breakwater 1,140 m. long, the minor (East) breakwater 307 m. long, and a secondary North Dock with a length of 367.54 m. These works ensure a minimum of rough water inside the port and maximum safety for vessels.

ACCESS CHANNEL: The access channel to the dock provides safety and facilitates entry and leaving of vessels to and from the sheltered area. It has a minimum width of 210 m. and a depth of 12 m. at the lowest tide.

MANOEUVRING BASIN: This offers safety and facilitates manoeuvring of vessels. It is circular with a diameter of 400 m., and a depth of 12 m. at the lowest tide.

BERTHING: The main quay, situated in the Eastern part, was planned as a multi-purpose terminal. It has a length of 800 m., and a free platform of 56 m. width. It includes a ramp 30 m. long and 25.5 m. wide, provided with two mooring devices at the sides with capacity of 100 tonnes, and with a predominant slope of one in ten for serving Ro/Ro vessels. It is located at the Northern extremity.

The whole quay is provided with rubber defences and bitts for mooring vessels. Its crown dimension is +4.5 m., and a depth of −11 m., giving a total of 15.5 m.

The South Quay has a length of 170 m., for berthing smaller ships. Its crown dimension is +4.5 m. and its depth is −5 m., giving a total of 9.5 m.

The Service Quay is 50 m. long and is for servicing small craft. Its crown dimension is +4.5 m. and its depth is −5 m.

Types of vessels handled:

General cargo.

Solid bulk cargo.

Containers.

Ro/Ro.

Barges.

Tourist passenger vessels.

STEVEDORES: Cargo handling services are provided by private concerns duly authorised by the UNECPA.

Ship's Agents and brokers arrange cargo handling with the stevedoring companies who in turn are authorised to provide such services.

The following services and direct cargo handling are available:

Receipt and clearance.

Loading and unloading.

Handling on quay.

Storage in the open.

STORAGE: It has been planned to place at the disposal of users a multiple use warehouse 90 m. long and 80 m. wide. This warehouse will have an area covered by metal structures and concrete walls, and fitted with fire-fighting equipment.

Attached to the warehouse will be a module housing the warehouse guard, Customs inspection, port checkers and wharfingers.

AIRPORT: There is an airport with capacity to receive any type of commercial aircraft 8 km. away.

There is also the runway of the Aeroclub de Guatemala and the installations of the Tourist Complex of Likin.

GENERAL: Puerto Quetzal is a terminal of the system of inter-ocean communication with the ports of the Atlantic, which are 406 km. distant by road and 443 km. by rail.

The new port is reached by land via the asphalted highway CA9 at a distance of 110 km. from the capital. There is also rail connection, and both means of communication connect with the country's network of roads and railways. The motorway from Escuinta to Puerto San Jose has yet to be built.

AUTHORITY: UNECPA, 7a Avenida y 4a. Calle, Zona 9, Building "74", Apartado Postal 206A, Guatemala City. *Tel:* 319133, 319101, 319152, 319082. *Telex:* 6134 Unecpa.

Port Offices, Direct Telephone: 717225.

SHIPMASTER'S REPORT: January 1985.

FRESH WATER: Said to be possible, ex road tankers. Very expensive.

PAINTING: No painting and/or scraping either on board or on hull can be done. Granting of permission takes at least 2 days.

Haiti

CAP HAITIEN: (Also see page 575). **(See Late Plans)**

REPORT: December 1984.

Documents: See "Port-au-Prince".

Approaches: New lighthouse on Pte. Pinolet seen at 30 miles.

Pilotage: Pilots boarded in Lat. 19° 48.8′ N., Long. 72° 10.9′ W. Pilots board from small launch, approx 5 m. long, with grey hull and yellow decking. The words "Pilote No. 1" painted in black on either side of white housing.

2 Pilots boarded – Senior Pilot/Port Captain: Eugene Magloire.

Restrictions: Channel very well marked – new beacons in positions as shown on "Plan". Least depth encountered in channel 10 m.

Radio: ETA telex sent via satellite to Agents. No radio station available.

VHF: Called pilot station on VHF Channel 16, 2 hours and 1 hour prior to arrival, but received no reply. Shortly before arrival at pilot boarding point, pilot station advised, on Channel 16, that pilot boat was coming out to our vessel.

Tugs: None. Small mooring boat takes heaving lines only ashore.

Berthing: Our vessel, 200 m. long, berthed at the Passenger Berth after swinging to starboard in the basin off the berth (depth 11 m.).

The berth is well fendered (Kleber fenders). Apart from main access to berth, there is also a footbridge for passengers.

Port has recently been reconstructed with modern berthing facilities, adequate mooring points, lighting, warehousing, open storage, etc.

Cargo Handling Equipment: Observed 1 conveyor, no cranes in evidence.

Regulations: Not permitted to take fruit ashore.

Authority: Autorite Portuaire National.

Honduras

LA CEIBA: (Also see page 578).

The following information should be read in conjunction with existing entry:

DOCUMENTS: In addition to those previously mentioned:

1 Copy of Derat Certificate.

Zarpe/Clearance from previous port.

14 Copies Cargo Manifest/Ballast Manifest.

3 Copies Bills of Lading.

All the original documents must be legalised by Honduran Consul at the port before calling at Honduras, and should be in Spanish language. If no Consul available, documents should be legalised by Consul of friendly nation or by Chamber of Commerce, stating the facts.

BERTHING: Berth available both sides of finger type pier, South side berth for side-door loading; North side for unrestricted operations.

CONSULS: None, however, American Consulate and those of other nations in Tegucigalpa, about 250 miles by road.

SURVEYORS: Lloyd's Agency in Puerto Cortes.

AIRPORT: International Airport "Goloson" with service daily to New Orleans and Miami, served by regular airlines.

GENERAL: *Labour:* Foreman US$3.50, workman US$1.50 per hour.

AGENT: Hondutours, Maritima y Transportes, Honduras, S.A., Edificio Comercial Maya, Tegucigalpa, Honduras. Tel: 32-16-57, 32-89-26, 32-89-30. Telex: 1251 Marhond Ho. Cables: Matra, Tegucigalpa.

Mailing Address: P.O.Box T-134, Tegucigalpa, Honduras.

PUERTO CASTILLA: 16.00 N. 85.58 W.

(See Late Plans)

DOCUMENTS:

2 copies Health Declaration.

Zarpe or Clearance from Last Port.

14 copies General Cargo Manifest of all cargo to be discharged in Puerto Castilla or Ballast Manifest.

10 copies Crew List.

10 copies Passenger/Negative Passenger List.

Derat Certificate, only if first call.

10 copies Stores List.

Mail Declaration (negative or positive).

3 complete sets Bills of Lading.

5 copies Hatch List.

15 copies Tally Books (prepared generally by Agent).

All original documents must be legalised by Honduras Consul at port before calling at Honduras, and must be in Spanish language.

If no Consul of Honduras available within 50 miles radius of port, documents can be legalised by statement from local Chamber of Commerce, stating the facts.

PILOTAGE: Not available, but vessel able to dock without such assistance.

ANCHORAGES: Once the vessel enters the bay, if no berth is available, she should anchor at a distance of between 0.5 mile – 1 mile from pier, and await boarding party in order to be granted Free Pratique.

RESTRICTIONS: Vessels may enter the port day or night, but are generally not visited by Authorities between 2000 hrs. and 0600 hrs., except in very special cases. Owing to remoteness of the port, Authorities have to be collected by Agent from villages within 30 miles radius of port.

MAX. SIZE: Vessels with draft up to 36 ft. can safely enter port and moor alongside pier.

HEALTH: Pratique granted after Port Authorities (including doctor) board vessel, between 0600 hrs. and 2000 hrs. Pratique granted if no contagious illnesses on board, otherwise quarantine restrictions imposed. No automatic Pratique when arriving from another Honduran port.

RADIO: Lantana Radio WOE, New Orleans Radio WNU, Limon Radio TIM, Balboa Radio NBA, Miami Radio WAX, messages routed via telegraph station Hondutel in nearby Trujillo, but not considered reliable.

Ship's radio not to be used in port except for communications with Port Authority. Vessel is fined if there is a violation.

VHF: Use Puerto Cortes Radio: Call Sign 'Cortes Radio', Channel 16, if Castilla Radio does not respond (Hours see "Puerto Cortes").

TUGS: None, not required.

BERTHING: The Agent and/or Port Authority to supply information as to berth, and time of docking. Departure should be effected when the despatch documents are on board and operations finished.

Pier: Made of concrete 150 m. long, width 38 m., depth 38 ft., used for all operations. Rubber/wooden fenders.

Directly adjacent to a paved area 300 m.×200 m.

Equipped with 2 open sided warehouses, each 3,000 sq.m.

Electric connections for 190 reefer containers.

CRANES: One each of 40, 50 and 70 tonnes capacity, mobile, on tyres.

TANKERS: Pipe-line for loading of African Palm Oil. A connection of 16 in. exterior diameter, 14 in. interior diameter, reducers available. Pumping rate 200 t.p.h. Storage capacity 20,000 bbls.

DENSITY: 1028/1030.

FRESH WATER: Water available at wharf, and of excellent quality, rate approximately 15 t.p.h.

FUEL: Only Diesel and Bunker "C" fuel available, 24 hours' notice required.

CONSULS: None in port. American Consulate and others in Tegucigalpa, 320 miles by road.

REPAIRS: No facilities.

SURVEYORS: Lloyd's Agency available locally.

GANGWAY/DECK WATCHMEN: Shore watchmen not usually required, and service left to the discretion of the Master.

HATCHES: On liners normally by crew with assistance of stevedores, otherwise according to C/P.

CUSTOMS ALLOWANCES: No restrictions, free use on board. Customs Officials check no sales to shore.

REPATRIATION: Facilities available for effecting repatriation in La Ceiba, by air.

AIRPORT: International airport "Goloson" in La Ceiba, 122 miles from port. Local airport connecting with La Ceiba daily, except Sundays and holidays, located in Trujillo, across the bay.

TIME: GMT minus 6 hours throughout year.

HOLIDAYS: 1st January; 14th April; 1st May; Maundy Thursday; Good Friday; Saturday at Easter; 15th September; 3rd, 12th, 21st October; 25th December. Cargo work can be arranged on those days, except Good Friday, and 1st May.

TELEPHONES: No telephones available in the area. Cable service available in Hondutel office.

SHORE LEAVE: Permitted without restrictions.

IDENTIFICATION CARDS: Must be shown to gate watchmen, when crew members come back on board, and are supplied by Agents.

CERTIFICATES: On first call, Registered Tonnage Certificate.

AUTHORITY: Empresa Nacional Portuaria (E.N.P.), Puerto Castilla.

AGENT: Maritima Y Transportes, S.A./Intermodal, S.A., Edificio Banco Atlantida, Suite No. 1101 – 1103, San Pedro Sula, Honduras. Tel: 51-17-73, 53-32-51, 52-25-11. Telex: 5634 Marhond Ho. Cables: Matra, San Pedro Sula.

Mailing Address: P.O.Box 991, San Pedro Sula, Honduras.

PUERTO CORTES: (Also see page 578).

(See Late Plans)

The following information should be read in conjunction with the existing entry.

BERTHING: Pier 1-A (molasses and bulk liquids), max. depth 32 ft. at rebuilt wooden T-Pier, in front of white and red painted tanks, between Texaco Pier and Banana Pier.

Pier 3: Under reconstruction, expected to be completed end 1985.

FRESH WATER: Water available at wharf face at 100 ft. intervals. Rate approximately 8 t.p.h. – 10 t.p.h.

FUEL: Only Diesel fuel and bunker "C" available, 24 hours' notice required for good service.

SURVEYORS: Lloyd's Agency available locally.

AIRPORT: Airport Ramon Villeda Morales at San Pedro Sula.

AGENT: Intermodal, S.A., 2a Calle, 1a. y 2a. Avenida, Puerto Cortes, Honduras. Tel: 55-03-90, 55-03-96. Telex: 8006 Inmodal Ho. Cables: Intermodal, Pto. Cortes.

Mailing address: P.O.Box 1535, San Pedro Sula, Honduras.

India

CALCUTTA: (Also see page 594).

SHIPMASTER'S REPORT: November 1984.

Pilotage: Accommodation is sometimes required for up to 3 Pilots transferring from Sandheads to Sagar or vice versa.

Radio Officer is required on standby during pilotage to send W/T messages as required by the Pilot.

Silting problems at Auckland Bar required a 0.4 m. reduction on published drafts November 1984. Situation not expected to improve.

Radio: Information on weather on 2000 m. not heard.

HALDIA: (Also see page 599).

SHIPMASTER'S REPORT: November 1984.

Pilotage: Ensure a boat rope is rigged; of good length and well down to the water and Pilot comes out in a small open boat, requiring a good lee and about 4 knots headway.

Also see "Calcutta – Late Reports".

Radio: See "Calcutta – Late Reports".

Tugs: Berthing at Haldia is critical in windy conditions. Tugs are under powered and have high freeboards. New tugs are ordered for 1986/7. Present set up requires clear understanding on Pilot's side controllable pitch ships where engines run continuously. Tugs slip wires unexpectedly on occasions.

Tankers: Tankers are sometimes berthed on the Iron Ore Berth inside the locked – in dock (11 m. alongside). Good pumping rates, up to 1,600 cu. m./p.h. Hose size 10 in., up to 4 connections. No night movements. If dealing with the India Oil Corporation, be ready for draft survey, independent quantity surveyor and a "standard" letter or protest. Also keep to hand all bunker/water information for arrival at previous port through to departure from present port, for end of passage and full away on passage plus port consumption/liftings.

KAKINADA: (Also see page 600).

AGENT: Gordon Woodroffe Limited, Cocanada Chamber of Commerce Building, Commercial Road, Kakinada – 533 007. Tel: Office hours 3042. After Office hours 3576. Telex: 491218 Wdrf In. Cables: "Woodroffe" Kakinada.

MADRAS: (Also see page 603)

AGENT: Gordon Woodroffe Limited, 36 Rajaji Salai, P.O.Box No. 42, Madras – 600 001. Tel: Office hours 510533 (8 extensions). After Office hours 427949. Telex: 416261 Gwmf In, 41420 Gwms In. Cables: "Woodroffe", Madras.

VISAKHAPATNAM: (Also see page 614).

SHIPMASTER'S REPORT: November 1984.

We presented Crew List (See Note 1), Passenger List, Stores List (Form 3), a Bonded Stores List (See Note 4), Drugs List (Morphine, etc.), Arms and Ammunitions List, comprehensive Customs List Form IV (See Notes 2, 3, and 5 below), Hidden Cavities Declaration List and Vaccination List.

Note 1: The Crew Lists must show passport or discharge book numbers. Not interested in dates of birth. The Immigration Officials issue passes for all on board who wish to go ashore (or just a few blanks, if only 4 or 5 people want to go ashore). These must be returned to Agent before sailing.

Note 2: Endeavour to obtain correct forms prior departing for first Indian port. A complete set of 4 is required for all subsequent Indian ports visited. Ensure that *all* paper money is declared, whatever the amount. (Undeclared currency, cigarettes, gifts, etc. confiscated). Rummage squads are thorough. Also ensure that the term "Dress materials and personal effects" is entered in Column 12 with other listed items.

Note 3: Currency – it is a fine-carrying offence to take high denomination notes ie. Rupees 20, 50, 100 and above, out of the country. Agents usually supply cash in 10 Rupee notes** or less.

Note 4: It is advisable to carry minimum sufficient bonded and slop chest items.

Note 5: Ensure that vessel sails with "travelling copy" handed to Master prior sailing first port for second port and so on for multi-Indian-port calls.

** Where foreign currency is changed ashore, a proper 'encashment certificate' with serial number must be obtained and details of passport given at time of exchange. The jetty duty Customs Official must be informed on return to ship and a supplementary currency declaration form C.B.R. CUS419 filled out showing amount exchanged and new balance of foreign currency in your possession. Both forms must be retained by exchanging person.

Also on arrival, the Health Officials carry out a "Marpol" inspection. (See overleaf.) There are many arrival and departure forms to be completed, including comprehensive pilot information forms. Have some detailed prior arrival to complete same as they are time consuming. Obtain blank sets if trading regularly.

Marpol Inspection:

Government of India
Port Health Organisation
Visakhapatnam
Sanitary Inspection of the Ship under Rule 83(i) of the
Indian Port Health Rules, 1955.

Date of inspection: Nationality:
Name of the ship: No. of crew: /Passengers:
1. Yellow Fever Vaccination Certificate Valid/Not Valid
2. Derat/Exemption Certificate Date: Place:
3. Medical Chest Inspection Date: Place:
4. Rat guards affixed Yes/No
5. Probable date of departure Date: Place:
6. Anybody sick/hospitalised Yes/No
7. Nature of sickness Fever/Skin Rash/Diarrhoea
8. Any Provisions taken or likely to be taken from this Port Yes/No
9. Date of last cleaning of Water Tank Date:
10. Last Ports of Call within 30 days
    1. Date: 4. Date:
    2. Date: 5. Date:
    3. Date: 6. Date:
11. General Sanitation:
    Pantry Stores
    Galley Crew Accommodation
    Linen Room Lavatories and bath
    Sick Bay
    Vermin: Mosquitoes/House Fly/Rodents/Cockroaches
    Garbage Disposal: On high seas:
    Shore Disposal:
    Sullage/Sewage and liquid waste disposal (S.W. system)
    Holding Tank: Size: Numbers:
    Treatment Plant (make and capacity):
    Final disposal of Sewage High seas/On shore disposal
    Liquid Wastes/Oily Bilge
    Dirty Ballast Water C.B.T./S.B.T. disposal
    Mode of disposal High seas/On shore
    Oil Water Separators (details):
    Potable Water (F.W. system) (Fresh Water) Date: Quantity:
    Chlorination on board done/not done
    Fresh Water Generator (Desalinisation Plant): Make: Capacity:
    End Point Chlorination: Results:
    Temperatures: Freeze room:
    Dish washing water:
    Remarks:

Signature of the Master:

Port Health Officer
Visakhapatnam.

Regulations: The taking of photographs in the harbour is not permitted. The placing of all cameras in the bond is advised, or a written notice posted.

AGENT: Gordon Woodroffe Limited, Diagonal Road, P.O.Box No. 8, Visakhapatnam – 530 035. Tel: Office hours 62629, 65932. After Office hours 62530. Telex: 495296 Gwvm In. Cables: "Woodroffe", Visakhapatnam.

Iran

BANDAR ABBAS: (Also see page 658).

RADIO OFFICER'S REPORT: December 1984.

Following schedule for opening and working hours has been brought to our attention by the operator of Bandar Abbas Radio.

Quote:

Notice to all ships' Masters in effect from 25th November 1984:

Abbas Radio/EQI will work on the following calling frequencies, GMT time and traffic lists.

From 0330 hrs. to 0830 hrs., Tx 8469 kHz, Rx 8 MHz (Channel 5/6). Traffic List at 0335 hrs – 0535 hrs. – 0735 hrs. GMT.

From 0730 hrs. to 1230 hrs., Tx 12700 kHz, Rx 12 MHz (Channel 5) and 16 MHz (Channel 5).

Traffic List at 0835 hrs – 1035 hrs. GMT.

From 1230 hrs. to 1430 hrs., Tx 6362 kHz, Rx 6 MHz (Channel 5) and 4 MHz (Channel 5).

Traffic List at 1235 hrs GMT.

From 1430 hrs. to 0330 hrs., Tx 4252 kHz, Rx 4 MHz (Channel 5) and 6 MHz (Channel 5).

Traffic List at 1435 hrs – 1635 hrs. – 1835 hrs. – 2035 hrs. – 2235 hrs. – 0035 hrs GMT.

Please observe the above table for your messages.

Unquote.

It has come to our attention, however, that contrary to the ITU "List of Coast Stations" the call sign instead of "EQI" is

EQI2 for 4 MHz.
EQI4 for 6 MHz.
EQI6 for 8 MHz.
EQI8 for 12 MHz.

Further deviation from the official published information is that the station works in the 8 MHz band on 3 frequencies. Its "CQ" tape runs on the indicated 8469 kHz, however, if a calling ship is heard the answer is given on a less powerful transmitter on 8469.5 kHz. Once contact is established on the ship's working frequency the station shifts to 8463 kHz. If long messages are held for the ship, this has been put on a tape and the ship will be instructed to listen on 8469 kHz again, to receive its traffic.

LAVAN ISLAND: (Also see page 672)

OPERATOR: Lavan Island is now operated by Iranian Offshore Oil Company (IOOC). References to LAPCO/IMINOCO on pages 672 – 674 are no longer valid as IOOC have taken over all operations.

LOCATION: Lavan Island is 13 miles long and about 2.5 miles wide. It is situated on the S.E. coastline of Iran in Lat. 26° 48′ N., Long. 53° 16′ E. (Island centre). The Island lies roughly East – West.

PORT LIMITS: Port area limits which are under the control of IOOC, extend between the following points:

Lat. 26° 47.5′ N., Long. 53° 22.0′ E.
Lat. 26° 46.4′ N., Long. 53° 22.0′ E.
Lat. 26° 47.5′ N., Long. 53° 19.4′ E.
Lat. 26° 46.8′ N., Long. 53° 19.4′ E.

Vessels must not enter this area without permission from the Port Control. Anchoring in this area is prohibited.

EARLY SAILING PROCEDURE:

Notice to Masters – Early Sailing Procedure: In order to minimise delays to tankers awaiting official documentation after loading at the port, an Early Sailing system is now in force.

The following documents are prepared in advance, *except for cargo figures,* and presented by the ship's Agent to the Master for his signature, upon the ship's arrival at the loading dock.

(A) Nos. . . . Originals & Nos. . . . Copies of IOOC Bill of Lading.
(B) Nos. . . . Originals & Nos. . . . Copies of IOOC Certificate of Origin and Cargo Manifest.
(C) Nos. . . . Originals & Nos. . . . Copies of IOOC Tanker Time and Loading Report.
(D) Nos. . . . Originals & Nos. . . . Copies of IOOC Report of Cargo and Ship's Ullages.
(E) Master's Receipt for Documents covering both pre-signed and onsite prepared forms.

Documents for Master's use, and for the Consignee care of the Master will be retained on board. All other pre-signed documents to be returned by the Agent to the IOOC Terminal Office.

Official cargo figures will be passed to the Master by radio *within 1 hour* of his departure. Advice of quantities loaded should be inserted by the Master on the "Bill of Lading" and "Certificate of Origin" forms as prior indicated.

Hand written copies of Items (C) and (D) will be passed to the Master for his reference.

In cases of disagreement on cargo figures, the Master may:

1. "Note Protest" by cable or telex.
2. Authorise the ship's Agent to "Note Protest" on his behalf.
3. Pass a written "Note of Protest" to the Berthing Master who will acknowledge receipt on behalf of the Terminal.

IOOC appreciates the co-operation of Masters, Owners, Shippers and Consignees in agreeing to implement this system.

APPROACHES: Charts covering the operational areas of IOOC are:

USHO 3647, 3648, 3650, 3660.
BA 2837, 2847, 2858, 2887, 2888, 3517, 3707.

PILOTAGE/NOTICE OF READINESS: Vessels must not enter the Port Limits without a Berthing Master on board.

Vessels should wait for the Berthing Master South of the Terminal Buoy, approximately 2 miles S.E. of the loading dock.

The Terminal operates a pilot launch and mooring launch for rope handling.

Pilot Room to be available and ready for the Loading Master and also trainee accommodation, should they decide to stay on board throughout the loading.

Immediately upon boarding the vessel, the Berthing Master will present the following documentation to the Master for his signature:

(a) A copy of the Port Rules and Regulations Book receipt and agreement form.
(b) IOOC "Notice of Readiness" form.
(c) Combined Tug, Pilot, Berthing/Unberthing charge form.
(d) Fire and Safety Regulations and No Smoking Notices for posting in approved spaces.

All the above documents must be processed prior to the vessel being berthed.

A vessel arriving in light condition must have sufficient ballast on board for safe handling. As the Terminal dock is located in the open sea, this amount has been set at 33% of the d.w.t. Trim must not be more than 10 ft. by the stern.

The Master's "Notice of Readiness" will be rejected if any of the ballast is oily, or if there is any leakage of oil from the vessel during loading, or any unsatisfactory condition on board ship which affects cargo-worthiness or seaworthiness while under the jurisdiction of the Terminal.

In all such situations of dispute, the decision of the IOOC Marine Superintendent will be final.

NAVIGATIONAL AIDS: *Warning:* The following information is for the guidance of ships. IOOC does not guarantee or warrant that the listed aids to navigation are in the stated positions or operating.

Lavan Island Terminal Beacon: Located in Lat. 26° 48.1′ N., Long. 53° 21.3′ E. Fitted on top of a steel lattice tower 182 ft. above MLWIS. Light exhibited is Gp.Fl. (3) ev. 12 sec. vis. 15 miles.

Terminal Sea Buoy: Located in Lat. 26° 46.5′ N., Long. 53° 22.1′ E. A white can buoy with lattice tower and radar reflector. Light exhibited is Fl. ev. 5 sec. vis. 3 miles.

Salman Pipe-line Marker Buoy: Located in Lat. 26° 46.8′ N., Long. 53° 20.5′ E. A red can buoy with lattice tower and radar reflector. Light exhibited is Fl.R. ev. sec. vis. 3 miles.

Salman Pipeline Rear Beacon (Onshore): Located in Lat. 26° 48.0′ N., Long. 53° 20.2′ E. Fitted on top of a steel lattice tower 192 ft. above MLWIS. Light exhibited is Fl.R. 10° vector, centred over the oil pipe-line, vis. 12 miles.

Salman Pipe-line Front Beacon (Onshore): Located in Lat. 26° 47.6′ N., Long. 53° 20.1′ E. Fitted on top of a steel lattice tower 115 ft. above MLWIS. Light exhibited is Fl.R. 10° vector, centred over the oil pipe-line, vis. 12 miles.

The Salman Pipe-line lights in transit signify a vessel is over the Salman pipe-line. Anchorage is prohibited within the area covered by the vector outline of the range lights, 10° apart.

Rostam Radio Mast: Located in Lat. 26° 48.2′ N., Long. 53° 19.2′ E. A steel lattice tower, painted red, 408 ft. above MLWIS. Light exhibited is Occ. R. ev. sec. visible 20 miles.

Decca Mast – Station "Green South": Located in Lat. 26° 47.5′ N., Long. 53° 22.4′ E. A steel lattice tower, painted red and white bands, 336 ft. above MLWIS. Light exhibited is Fl.R. vis. 20 miles.

Flares: The following flares are highly conspicuous and tend to obstruct the other navigational aids:

Salman – Located in Lat. 26° 47.6′ N., Long. 53° 20.6′ E.
Rostam – Located in Lat. 26° 48.4′ N., Long. 53° 20.0′ E.
LDC – Located in Lat. 26° 47.7′ N., Long. 53° 21.0′ E.

Radio Beacons: The following radio beacons belonging to IOOC are situated onshore and offshore at the Company's Salman Oil Field:

Signal LD transmitted on 310 kHz. Located in Lat. 26° 47.6′ N., Long. 53° 23.0′ E.

Signal LA transmitted on 397 kHz. Located in Lat. 25° 32.2′ N., Long. 53° 09.0′ E.

RESTRICTED AREAS: Salman's Production Facility (Offshore):

Located in Lat. 25° 32.2′ N., Long. 53° 09.0′ E.

The above platform complex, approximately 76 nautical miles South of Lavan Island, is situated in the centre of the Salman Oil Field.

This area, and 3 miles around it, is prohibited to navigation.

Crude oil is delivered to Lavan Island from offshore oil fields by submarine pipe-line.

From the Salman production complex in Lat. 25° 32.0′ N., Long. 53° 09.1′ E. A 22 in. pipe-line running approximately 008° T to a shore location on Lavan Island at Lat. 26° 47.5′ N., Long. 53° 20.1′ E. From the Rostam production complex in Lat. 25° 45.5′ N., Long. 52° 54.5′ E. An 18 in. pipe-line running approximately 023° T to a shore location on Lavan Island at Lat. 26° 47.5′ N., Long. 53° 20.0′ E.

In addition to the above, a 14 in. submarine pipe-line has been laid from the Balal Oil Field (undeveloped) to Lavan Island. The pipe-line runs approximately 056° T from an offshore location in Lat. 26° 18.8′ N., Long. 52° 32.8′ E., to a shore location on Lavan Island at Lat. 26° 47.6′ N., Long. 53° 19.6′ E.

Vessels are requested not to anchor or carry out any under sea/seabed operations in the vicinity of these pipe-lines.

MAX. SIZE: Water depths, adjacent to the dock, at LW are:

Berth No. 1: 68 ft. 4 in. (20.83 m.)
Berth No. 2: 65 ft. 0 in. (19.82 m.)

Keel clearance required by the Terminal is 3 ft. 0 in. at all times.

Tonnage capacity of the loading dock is:

Berth No. 1: 200,000 d.w.t.*
Berth No. 2: 75,000 d.w.t.**

*Vessels in the range 200,000 d.w.t. – 225,000 d.w.t. may be accepted subject to prior approval from IOOC Management which is based on answers to a 14 point questionnaire.

**Vessels are accepted for Berth No. 2 based on tonnage, overall length (maximum 850 ft. = 259 m.), position of the manifold in relation to the bow, and always subject to a maximum loaded draft of 43 ft. 6 in. (13.26 m.). Vessels over 65,000 d.w.t. should always be cleared by IOOC prior to firming up a nomination.

Following is a table of maximum loads that different size tankers can have on board on arrival, and remain acceptable for berthing:

(a) The maximum size vessel that is acceptable for berthing in a fully loaded condition is 100,000 d.w.t. This refers to vessels nominated for bunkers only.

(b) The maximum acceptable arrival load for tankers in the range 101,000 d.w.t. – 120,000 d.w.t. is 90,000 tons (675MB±).

(c) The maximum acceptable arrival load for tankers in the range 121,000 d.w.t. – 170,000 d.w.t. is 85,000 tons (638MB±).

(d) The maximum acceptable arrival load for tankers in the range 171,000 d.w.t. – 225,000 d.w.t. is 70,000 tons.

This schedule to be used in conjunction with the standard 14 point questionnaire for very large crude carriers.

RADIO: Vessels nominated to load at Lavan Island should transmit arrival information 96 hours and confirm 48 hours prior to arrival.

Arrival messages should be transmitted to the following address through either Abadan Radio (EQZ) or Bandar Abbas Radio (EQI) or Lavan Radio (EQV).

IOOC Tehran. Telex: 212598 – 212346 – 212707 "Attn. Marsupt. Lavan".

Arrival messages to be in the following format:

AA Name of ship.
BB ETA Lavan in GMT and last port.
CC Cargo(s) required and Bunker(s) required.
DD Deballast time.
EE Size and number of connections for cargo/bunker.

If bunker connection only one side of manifold, state location.

Lavan Radio Station, is operating on 500 kHz, call sign EQV, from 0530 hrs. – 1330 hrs. GMT.

IOOC tugs maintain a listening watch on 2182 kHz. Vessels should commence calling "Pourandokht I" when passing Quoin Island. When contact has been made, switch to working frequency 2638 kHz.

Radio Free Pratique: Vessels requesting Free Pratique by radio are required to transmit the following message through the same Channels as their ETA advice.

AA Name of vessel and ETA Lavan Island (in GMT).
BB Number of crew and state of health.
CC Number of vaccinations required for Smallpox and Cholera.
DD Number of deaths or cases of serious illness in the last 30 days.
EE Name of all ports called at during the last 30 days.
FF Master's Name.

Coastal Radio Station (EQZ) schedule and frequencies:

Schedule of Watch GMT (hrs.)	*Listening Watch Frequencies* (kHz)	*Transmitting Frequencies* (kHz)	*Receiving Frequencies* (kHz)	*Remarks*
Continuous	500	500	500	Distress Station is equipped with international Auto-Alarm receiver on 500 kHz.
Continuous	500	428	405-535	Traffic Lists every 2 hours from 0105 to 2305 GMT.
0400 – 0700	8356 – 8374	8471	8474 – 8460	**Traffic Lists every 2 hours from 0405 hrs. GMT.
0700 – 0900	12534 – 12561	13069.5	12561 – 12689	
1000 – 1300	12534 – 12561	13069.5	12561 – 12689	
1400 – 1700	8356 – 8374	8471	8374 – 8460	
1700 – 1830	3178 – 4187	4294	4187 – 4231	

**During scheduled watches on HF while station (EQZ) is not actually working with ships, traffic lists are transmitted automatically and continuously on frequencies 4294, 8471 and 13069.5 kHz according to their schedules of watch.

VHF: Lavan Terminal maintains a listening watch 24 hours on VHF Channels 16 and 12.

Vessels should commence calling "Lavan Island" 4 hours prior to arrival, on Channel 16. When contact has been made, switch to working frequency Channel 12.

BERTHING: Vessels should have the following equipment ready for use upon their arrival at the port:

a) Anchors, port and starboard, ready for letting go.

b) Ropes or wires, eight each end, not on automatic tension.

c) Derricks rigged if shore reducers or flexible hoses are required.

d) Manifold blanks removed and reducers fitted ready to connect 16 in. series 150 ASA loading arm flanges.

e) Accommodation ladder lowered together with the pilot hoist or pilot ladder.

Note: Berthing Masters will not board any vessel which does not present a clean safe means of access.

f) Ballast tank lids opened to allow the Berthing Master to inspect ballast water.

The tanker loading dock is constructed of a loading platform in the centre of 4 two-sided jacket piled breasting dolphins, and 4 outlying two-sided jacket piled mooring dolphins.

The dock is 1,240 ft. (378 m.) long, and is connected to the shore by a trestle 1,764 ft. (538 m.) long.

The platform deck is 31 ft. 4 in. (9.55 m.) above Chart Datum (MLWIS).

Maximum reach of the loading arms above Chart Datum is:

Distance Manifold to Ship's Side	*Elevation*
10 ft. (3.05 m.)	76 ft. 6 in. (23.32 m.)
12 ft. (3.66 m.)	75 ft. 9 in. (23.09 m.)
14 ft. (4.27 m.)	75 ft. 0 in. (22.85 m.)
16 ft. (4.88 m.)	74 ft. 0 in. (22.56 m.)
18 ft. (5.49 m.)	72 ft. 9 in. (22.18 m.)

Rigid "Chiksan" hydraulically operated loading arms are situated on both sides of the loading platform.

Berth No. 1	4×16 in. for crude oil loading.
Berth No. 1	1×12 in. for product loading – (fuel & gas oil).
Berth No. 2	2×16 in. for crude oil loading.
Berth No. 2	*1×16 in. for naphtha loading.
Berth No. 2	1× 8 in. for product loading (fuel & gas oil).

* Gas oil can also be loaded through this arm.

All loading arms are fitted with a series 150 ASA American Standard outer flange with quick connection coupler.

The Terminal carries a full range of aluminium reducing spool pieces and flexible hoses (15 ft.×8 in.) for crude and product/bunker connections.

Shore gangways are provided for both berths, with a safety net for each gangway.

Fire wires must be rigged forward and aft, of sufficient strength to tow the vessel away from the berth in an emergency. The "eye" of the fire wire must be lowered to within 6 ft. of the water and maintained at this level at all times. The IOOC tugs are equipped with their own towing wires which will be shackled onto the vessel's fire wire.

Rat Guards: All ships berthed alongside must provide rat guards for the ship's moorings.

TUGS: Two modern diesel tugs of 3120 b.h.p. fitted with controllable pitch propellers and a bollard pull of 42 tons are stationed at the loading dock and used for all manoeuvres.

The tugs are equipped with their own towing lines, fire fighting capability, foam, dispersant and fire wires.

Both tugs are on instant readiness throughout the entire time that a vessel is alongside the loading dock. The tugs will answer emergency signals, or can be called on VHF Channel 12, or by telephone (Tel. No. 222).

LOADING: Tankers are loaded at Lavan Island alongside an "L" shape 2 berth jetty, approximately 2,000 ft. offshore. The loading platform is fitted with rigid hydraulic loading arms which have quick connection/release couplers attached to the end flange.

There are 4×16 in. arms on the South Berth (No. 1) for crude loading, and 2×16 in. arms on the North Berth (No. 2) for crude loading.

Crude oil is delivered to the loading platform by gravity through 2×36 in. lines from a 4,000,000 barrel tank farm (Salman), and from a 1,500,000 barrel tank farm (Rostam).

Flow rates under normal conditions, with only 1 vessel loading, are approximately, Berth No. 1 (4 arms) 52,000 bbls./hr., Berth No. 2 (2 arms) 32,000 bbls./hr.

Flow rates with a vessel loading at each berth are approximately, Berth No. 1 (4 arms) 40,000 bbls./hr., Berth No. 2 (2 arms) 24,000 bbls./hr.

The minimum flow rate is 15,000 bbls./hr. All vessels accepting nominations to load at Lavan Island must be capable of loading crude at rates above this figure.

The API of Salman Crude Oil is 34 and the API of Rostam Crude Oil is 35.

The temperature of Salman Crude Oil varies between 91°F and 78°F (Summer/Winter), and the temperature of Rostam Crude Oil varies between 85°F and 66°F (Summer/Winter).

The Terminal will accept cargo requests 10% above or below the official nominated quantity unless specifically requested otherwise by the Consignor.

A shore stop to close off the flow of crude oil to the tanker will be executed by the Terminal provided the Master issues a written request to the Loading Master upon arrival at the loading dock. This request must include the statement that IOOC will not be held responsible for any error in the final quantity loaded.

Masters should note that in cases of overloading the excess cargo cannot be returned to the shore line.

Masters should also be aware that they will be held responsible for any overflows and pollution caused by their request for a shore stop.

An "Early Sailing System" of tanker documentation is operated by the Terminal as standard practice for all cargoes.

The Terminal will accept the "Load-on-Top" system of co-mingling tank cleaning oil residue from previous cargoes with the nominated quantity of Salman or Rostam crude oil, provided agreement has been obtained from the Consignor.

Slops should be segregated in a special "slop tank" or accumulated in one of the cargo tanks. A sample of the slop must be taken on arrival at the loading dock and kept for any future reference. Exact quantities must be calculated.

Vessels which arrive in ballast to load part cargo, should endeavour to place the ballast in such a manner as to allow loading to commence upon arrival at the loading dock.

The ballast may be retained for discharge en route to the next port, or discharged concurrent with loading. Provided the vessel can show adequate valve separation, this method is accepted by the Terminal, and will be finally confirmed by the Loading Master when satisfied that no pollution or contamination will occur.

Vessels arriving in ballast to load a full cargo, who carry most of their ballast in "permanent ballast" tanks, should also endeavour to arrange the remaining ballast in such cargo tanks as to allow loading to commence upon arrival at the loading dock, and discharge concurrent, using segregated lines and pumps. The Terminal will accept this system on the same basis as above paragraph.

GENERAL CARGO: In addition to existing information:

The cargo mooring for general cargo vessels is located adjacent to the small craft harbour at the East end of Lavan Island.

The stern mooring buoy is located in Lat. 26° 47.1′ N., Long. 53° 23.2′ E.

The port anchor drop marker buoy is located in Lat. 26° 46.9′ N., Long. 53° 23.6′ E.

BALLAST: The Terminal does not have any reception facility for disposal of dirty or contaminated ballast.

TIDE: The mean range of tide is 3 ft. 9 in. (1.14 m.)

The extreme range of tide is 5 ft. 6 in. (1.68 m.)

The highest tide recorded is 7 ft. 3 in. (2.21 m.) above MLWIS.

The lowest tide recorded is 0 ft. 5 in. (0.13 m.) above MLWIS.

A chart reading automatic tide gauge is fitted on the loading dock.

MEDICAL: IOOC operates small clinics on the Island with resident doctors. This facility will be made available for emergency cases only.

FUEL:

Bunker Requests: Requests for information on bunkering should not be directed to IOOC. All questions relating to the bunker facility at Lavan Island will be handled by NIOC Marketing & Exports Division.

The address is: Marketing & Exports, National Iranian Oil Company, Talaghani Avenue, P.O.Box 1863, Tehran, Iran. Tel: 6151, ask for Marketing. Telex: 21-2514, 21-2613 and 21-2182. Cable Address: Naftmelli Tehran.

All other information regarding tank sizes, bunkers, etc., is the same as in the existing entry.

CONSULS: No consular representation is available at Lavan but the Embassies of most nations are situated in Tehran.

MARINE SURVEYS: Surveyors of the American Bureau of Shipping and Lloyd's are stationed at Bandar Abbas and Abadan.

AUTHORITY: Iranian Offshore Oil Company, 339 Abbasabad Avenue, Tehran – Iran. *Tel:* 624102-5. *Telex:* 212598, 212346, 212707. *Cables:* Falatghareh, Tehran.

Mail Address: P.O.Box 1434.

RAS BAHREGAN: (Also see page 674).

PORT LIMITS: Port area limits which are under the control of IOOC extend between the following points:

Lat. 29° 43′ N., Long. 50° 00′ E.
Lat. 29° 43′ N., Long. 50° 12′ E.
Lat. 29° 40′ N., Long. 50° 10′ E.
Lat. 29° 40′ N., Long. 50° 24′ E.

Vessels must not enter this area without permission from the port control. Anchoring in this area is prohibited.

NAVIGATIONAL AIDS/PROHIBITED AREAS:

Two flares are located at:

Lat. 29° 50′ N., Long. 50° 15.8′ E.

Nowrouz production facility (Offshore) located in:

Lat. 29° 29′ 55″ N., Long. 49° 24′ 10″ E.

The above platform complex, approximately 50 nautical miles South West of Bahregan, is situated in the centre of the Nowrouz Oil Field.

This area, and 3 miles around it, is prohibited to navigation.

Bahregansar Production Facility (Offshore) located in:

Lat. 29° 56′ 23″ N., Long. 49° 50′ 58″ E.

The above platform complex, approximately 30 nautical miles West of Bahregan. This area, and 3 miles around it, is prohibited to navigation.

PILOTAGE: Vessels must not enter the Port Limits without a Mooring Master on board. Vessels should wait for the Mooring Masters approximately 2 miles off the SBM.

Prior Arrival: Vessels should have the following equipment ready for use upon their arrival at the port:

(a) Accommodation ladder lowered together with the pilot ladder if a VLCC, otherwise a pilot hoist or pilot ladder.

NOTE: Berthing Masters will not board any vessel which does not present a clean safe means of access.

(b) Ballast tank lids opened to allow the Berthing Master to inspect ballast water.

(c) Pilot room available and ready for the Berthing Master and also trainee accommodation, should they decide to stay on board throughout the loading.

(d) Under normal conditions vessels will be moored using 6 ship's lines. In rough weather the number of mooring lines will be increased. Therefore each ship to be moored at Bahregan SBM Terminal must be equipped with at least ten good quality mooring lines, each 120 fathoms or more in length with eyes and tail ropes spliced into each end. Two of these mooring lines should be laid out free for running adjacent to bitts and warping winches. Warping winches must be adequate to handle mooring lines under heavy strain, and efficient stoppers must be readily available to "hang off" mooring lines and transfer same from winch to bitts without loss of tension.

Ships must also have at least one good messenger line ready for immediate use; anchors, chains and anchor windlass must be in good condition. Vessels must be equipped to fit flanges of floating hoses, which are of ASA standards.

Ships must be adequately equipped with blocks, tackles and booms to hoist the floating hose, a 5.5 ton lift from the sea to the ship's rail, in a safe, efficient and expeditious manner. If, in the opinion of the Mooring Master, the vessel is not equipped with adequate mooring facilities, lines or gear, he will so inform the vessel's Master and in such event the vessel shall not be brought into the mooring until facilities, lines, or gear are deemed satisfactory. In this connection, lines cannot be provided by the company.

(e) Before a ship is moored at MBM Terminal, she must be equipped with at least 9 good quality mooring lines, each 120 fathoms or more in length with eyes and tail ropes spliced into each end. Mooring lines should be laid out free for running adjacent to bitts and warping winches. Warping winches must be adequate to handle mooring lines under heavy strain, and efficient stoppers must be readily available to "hang off" mooring lines and transfer same from winch to bitts without loss of tension.

Ships must have both bower anchors ready for immediate use, each with a minimum of 120 fathoms of chain. Anchors, chains and anchor windlass must be in good condition and capable of letting one chain go out on the run while heaving in on the other chain. Vessels must be equipped to fit flanges on submarine hoses, which are of ASA standards.

Ships must be adequately equipped with blocks, tackle and booms to hoist the submarine hoses, a 5 ton lift from the floor of the sea to the ship's rail, in a safe, efficient and expeditious manner.

If, in the opinion of the Mooring Master, the vessel is not equipped with adequate mooring facilities, lines or gear, he will so inform vessel's Master, and in such event the vessel shall not be brought into the mooring until facilities, lines or gear are deemed satisfactory.

On Arrival: Immediately upon boarding the vessel, the Berthing Master will present the following documentation to the Master for his signature:

(a) A copy of the Port Rules and Regulations Book receipt and agreement form.

(b) IOOC "Notice of Readiness" form.

(c) Combined Tug, Pilot, Berthing/Unberthing Charge form.

(d) Fire and Safety Regulations and No Smoking Notices for posting in approved spaces.

All the above documents must be processed prior to the vessel being berthed.

MAX. SIZE: Water depths at the Terminals at LW are:
SBM 79 ft. (24.0 m.)
MBM 52 ft. (15.5 m.)

Keel clearance required by the Terminal is 3.3 ft. (1 m.) at all times.

Tonnage capacity of the Terminals are:
SBM 250,000 d.w.t.
MBM 45,000 d.w.t.

RADIO: Vessels nominated to load at Bahregan should transmit arrival information 96 hours and confirm 48 hours prior to arrival.

Arrival messages should be transmitted to the following address through either Abadan Radio (EQZ) or Bandar Abbas (EQI).

IOOC, Tehran. Telex: 212598 – 212346 – 212707. "Attn. Marsupt. Bahregan".

Arrival messages to be in the following format:
AA Name of ship.
BB ETA Ras Bahregan in GMT and last port.
CC Cargo required/cargo to discharge.
DD Deballast time/Ballast time.
EE Size and number of cargo connections.

Ras Bahregan Radio Station, is operating on 500 kHz, call sign BOC, from 0530 hrs. – 1330 hrs. GMT.

Ras Bahregan Radio maintain a listening watch on 2638 kHz. Vessel should commence calling "Bahregan" when passing Kharg Island.

Free Pratique: Vessels requesting Free Pratique by radio are required to transmit the following message through the same Channels as their ETA advice.
AA Name of vessel and ETA Bahregan (in GMT).
BB Number of crew and state of health.
CC Number of vaccinations required for Smallpox and Cholera.
DD Number of deaths or cases of serious illness in the last 30 days.
EE Name all ports called at during the last 30 days.
FF Master's Name.

VHF: Ras Bahregan Terminal maintains a listening watch 24 hours a day on VHF Channels 16 and 13.

Vessels should commence calling "Bahregan" 4 hours prior to arrival, on Channel 16. When contact has been made, switch to working frequency Channel 13.

NOTICE OF READINESS: The ship's officer responsible for loading or discharging should give IOOC's Mooring Master at least 30 minutes Notice of Readiness to commence loading or discharging.

The Master's "Notice of Readiness" will be rejected if any of the ballast is oily, or if there is any leakage of oil from the vessel during loading, or any unsatisfactory condition on board ship which affects cargo worthiness or seaworthiness while under the jurisdiction of the Terminal. In all such situations of dispute, the decision of the IOOC Marine Superintendent will be final.

MBM: MBM Terminal is located 5 miles from coast at:
Lat. 29° 47′ 00″ N., Long. 50° 11′ 30″ E.

The MBM Terminal is connected by a 4.5 mile 18 in. diameter submarine pipe-line to Bahregan Terminal. Bahregan Terminal is located at:
Lat. 29° 49′ 30″ N., Long. 50° 15′ 47″ E.

TUGS: One modern diesel tug of 1,000 b.h.p. fitted with controllable pitch propellers is stationed at the Terminal and used for all manoeuvres.

The IOOC tug is equipped for fire fighting, using both water and foam through monitors situated on a fire fighting platform. IOOC tug is on instant readiness throughout the entire time that a vessel is moored at the Terminal. The tug will answer the emergency signal or by calling on Channel 13 VHF.

BERTHING: The Terminal operates a mooring launch and 3 small supply boats.

SBM: The SBM is designed to provide a safe mooring for tankers in most states of weather or sea. When moored to the SBM, tankers can load their cargo while weather-vaning about the Terminal. The moored vessel normally remains head into the wind and sea, riding at its most comfortable position. The SBM consists of a strongly constructed steel vessel securely moored in position by 6 sets of heavy mooring chains, each set is attached to a 3 pile template. The SBM is equipped with a Rotating Mooring Bollard, to which the tanker secures, a Rotating Cargo Manifold which carries the crude flow system from the SBM through the hoses, and a Rotating Balance Arm, which maintains the SBM on an even keel. These 3 components all rotate as one unit as the tanker swings with the sea or wind.

A submerged peripheral fender extending outward from the hull is provided to prevent damage to the floating hoses and SBM, should the tanker ride up against it.

MBM: Permanent mooring in the berth consists of 5 steel cylindrical buoys each fitted with a quick release hook to which the ship's mooring lines are attached by the company's mooring launches. The berth is laid out on a one heading basis, using both ship's bower anchors with 9 mooring ropes (4 beam, 4 quarter, and 1 stern).

The mooring buoys are numbered 1, 2, 3, 4 and 5 starting with No. 1 East of the mooring and numbers running consecutively in a clockwise direction.

HOSES: The Terminal carries a full range of reducing spool pieces and flexible hoses for connections.

SBM: 2×16 in. floating hoses.

After the vessel is securely moored to the SBM, the service launch will tow the end of the floating hoses to a point on the portside of the tanker immediately below the tanker's cargo manifold. The tanker's derrick runner should be ready to lift the hoses which will be secured by the attached chains in such a manner as to allow the ends of the hoses to reach the ship's manifold. The weight of the hose to be lifted is approximately 5.5 tons. The hoses are fitted with 16 in. flanges, and the company will provide reduction pieces to 14 in. or 12 in. or other sizes (as well as gaskets) as required to make connections to the ship's manifold. The hose connection is normally performed by IOOC's loading crew under the supervision of the Mooring Master. However, a ship's deck officer must be present, and must direct the ship's crew as required.

MBM: 2×10 in. submerged hoses.

After the vessel is securely moored, inside the MBM, the submarine loading hose must be lifted to the rail amidships. The 10 in. hose lift is 5 tons. Hoses are lifted by ship's gear on the starboard side. Ships should have manifold fittings aboard to allow connection of the flanges.

Tankers are loaded or discharged at this berth.

LOADING: Crude oil is delivered to the SBM through a 36 in. line and to the MBM through an 18 in. line from a 2,198,000 barrel tank farm.

Flow rate under normal conditions is approximately:
SBM (two hoses) 6,000 t.p.h.
MBM (two hoses) 5,000 t.p.h.

The minimum flow rate is 15,000 bbls./p.h. All vessels accepting nominations to load at Bahregan must be capable of loading crude at rates above this figure.

The initial loading rate is normally about 1,500 t.p.h. while the Loading Master and the ship's officer satisfy themselves that all is in order with the Terminal and the ship's facilities. As soon as this is done, the loading rate is increased to maximum or other rate as requested by the ship.

The API of Bahregan Crude oil is 26.0.

The temperature of Bahregan Crude oil varies between 62°F and 78°F (Winter/Summer).

The Terminal will accept cargo requests 10% above or below the official nominated quantity unless specifically requested otherwise by the consignor.

A shore stop to close off the flow of crude oil to the tanker will be executed by the Terminal; provided the Master issues a written request to the Loading Master upon arrival at the loading terminal. This request must include the statement that IOOC will not be held responsible for any error in the final quantity loaded.

Master should note that in cases of overloading, the excess cargo cannot be returned to the shore line. Masters should also be aware that they will be held responsible for any overflows and pollution caused by their request for a shore stop.

An "Early Sailing System" of tanker documentation is operated by the Terminal as standard practice for all cargoes.

The Terminal will accept the "Load-on-top" system of co-mingling tank cleaning oil residue from previous cargoes with the nominated quantity of Bahregan Crude oil, provided agreement has been obtained from the consignor.

Slops should be segregated in a special "Slop Tank" or accumulated in one of the cargo tanks. A sample of the slop must be taken on arrival at the Terminal and kept for any future reference. Exact quantities must be calculated.

Vessels which arrive in ballast to load part cargo, should endeavour to place the ballast in such a manner as to allow loading to commence upon arrival at the Terminal. The ballast may be retained for discharge en-route to the next port, or discharged concurrent with loading, provided the vessel can show adequate valve separation, this method is accepted by the Terminal, and will be finally confirmed by the Loading Master when satisfied that no pollution or contamination will occur. Vessels arriving in ballast to load a full cargo, who carry most of their ballast in "Permanent ballast" tanks, should also endeavour to arrange the remaining ballast in such cargo tanks as to allow loading to commence upon arrival at the Terminal, and discharge concurrent, using segregated lines and pumps. The Terminal will accept this system on the same basis as above paragraph.

SURVEYORS: Surveyors of the American Bureau of Shipping and Lloyd's are stationed at Bandar Abbas.

MEDICAL: Depending on the availability of the company Doctor, medical assistance can be provided. Although no hospital is available, in case of extreme emergency IOOC will arrange transport to nearby towns at the ship's expense and responsibility.

TIME: Standard zone time for Iran is GMT plus 3.5 hours. Daylight Saving Time advances clocks 1 hour from March through October.

AUTHORITY: Iranian Offshore Oil Company, 339 Abbassabad Avenue, Tehran – Iran.

Cables: Falatghareh, Tehran. *Telex:* 212598 – 212346 – 212707. *Tel:* 624102-7.

Mail address: P.O.Box 1434.

SIRRI ISLAND:

The following supersedes the information given on page 675.

FLAG: The Iranian flag, green side uppermost, must be flown while the vessel is within territorial waters. Iranian territorial waters extend 12 miles seaward from the mainland and offshore islands.

LOCATION: The loading station is located in the South Eastern part of the island of Sirri at:
Lat. 25° 54′ N., Long. 54° 33′ 30″ E.

Landfall on the island presents no difficulty, by day or night, for vessels coming from the Strait of Hormuz or from one of the Gulf Ports. The Island gives a good radar echo at 17 miles.

PORT LIMITS: Port area limits which are under the control of IOOC extend between the following points:
Lat. 25° 55.0′ N., Long. 54° 33.1′ E.
Lat. 25° 55.0′ N., Long. 54° 34.6′ E.
Lat. 25° 52.0′ N., Long. 54° 31.1′ E.
Lat. 25° 52.0′ N., Long. 54° 34.6′ E.

Vessels must not enter this area without permission from the Port Control. Anchoring in this area is prohibited.

NAVIGATIONAL AIDS:
Warning: The following information is for the guidance of ships. IOOC does not guarantee or warrant that the listed aids to navigation are in the stated positions or operating.

Sirri Island Terminal Light located in: Lat: 25° 54′ N., Long. 54° 33′ E. Light exhibited Fl. W. every 7 secs., visible 10 miles.

A lighted buoy, showing Fl. W.(3) every 12 secs. is visible 6 miles, and is located to the West of the South Eastern end of the island.

The flare located in: Lat. 25° 54.1′ N., Long. 54° 31.9′ E. is highly conspicuous and tends to obstruct the other navigational aids.

Masters may find it useful to refer to the following documents:

1. French Hydrographic and Oceanographic Department Charts No. 2172 and 6051.
2. French Nautical Instructions, Series L, Volume IV.
3. British Navy Hydrographic Office Charts No. 2837, 2887, 2832 and 3781.
4. Lights and Fog Signals Book, series L.

PROHIBITED AREAS: Papa Production Facility (Offshore) located in position: Lat. 25° 42′ N., Long. 54° 17′ E.

The above platform complex, approximately 18 nautical miles S.W. of Sirri Island, is situated in the centre of the Sirri "A" oil field.

This area, and 3 miles around it, is prohibited to navigation.

Crude oil from offshore oil fields is delivered to Sirri Island by submarine pipe-line, from Papa production complex.

3 pipe-lines running approximately 182°T to a shore location on Sirri Island at: Lat. 25° 53.4′ N., Long. 54° 32.6′ E.

Vessels are requested not to anchor or carry out any under sea/seabed operations in the vicinity of these pipe-lines.

PILOTAGE: Vessels must not enter the Port Limits without an IOOC Berthing Master on board.

Vessels should wait for the Berthing Master approximately 2 miles off the Loading Dock.

Vessels should have the following equipment ready for use upon their arrival at the Port:

(a) Anchors, port and starboard, ready for letting go.
(b) Ropes or wires, 8 each end, not on automatic tension winches.
(c) Derricks rigged if shore reducers or flexible hoses are required.
(d) Manifold blanks removed and reducers fitted ready to connect 20 in. series 150 ASA loading arm flanges.
(e) Accommodation ladder lowered together with the pilot ladder if a VLCC, otherwise a pilot hoist or pilot ladder.
Note: Berthing Masters will not board any vessel which does not present a clean safe means of access.
(f) Ballast tank lids opened to allow the Berthing Master to inspect ballast water.
(g) Pilot room available and ready for the Berthing Master and also trainee accommodation, should they decide to stay on board throughout the loading.

Immediately upon boarding the vessel, the Berthing Master will present the following documentation to the Master for his signature:

(a) A copy of the Port Rules and Regulations Book receipt and agreement form.
(b) IOOC "Notice of Readiness" form.
(c) Combined Tug, Pilot, Berthing/Unberthing charge form.
(d) Fire and Safety Regulations and No Smoking Notices for posting in approved locations.

All the above documents must be processed prior to the vessel being berthed.

A vessel arriving in light condition must have sufficient ballast on board for safe handling. As the Terminal Dock is located in the open sea, this amount has been set at 33% of the d.w.t. Trim must not be more than 10 ft. by the stern.

Also see "Tugs".

MAX. SIZE: The loading station is designed for docking and handling of vessels having a minimum length of 240 m. and a maximum length of 365 m. This normally restricts utilisation to vessels in the approximate size range of 80,000 d.w.t. to 330,000 d.w.t. The maximum authorized draft for these vessels is 24.00 m. (78 ft. 9 in.).

RADIO/VHF:
1. Vessels nominated to load at Sirri Island should transmit arrival information 96 hours and confirm 48 hours prior to arrival.

Arrival messages should be transmitted to the following address through either Bandar Abbas Radio (EOI) or Abadan Radio (EQZ).

IOOC Tehran, Telex: 212598 – 212346 – 212707.
Attn. Marsupt. Sirri.

Arrival messages to be in the following format:

AA Name of ship.
BB ETA Sirri in GMT and last port.
CC Cargo required.
DD Deballast time.
EE Size and number of connections for cargo.

Abadan Coastal Radio Station (EQZ) schedules and frequencies:

Schedule of Watch GMT (hrs.)	*Listening Watch Frequencies* (kHz)	*Transmitting Frequencies* (kHz)	*Receiving Frequencies* (kHz)	*Remarks*
Continuous	500	500	500	Distress Station is equipped with international Auto-Alarm receiver on 500 kHz.
Continuous	500	428	405-535	Traffic Lists every 2 hours from 0105 to 2305 GMT.
0400 – 0700	8356 – 8374	8471	8474 – 8460	**Traffic Lists every 2 hours from 0405 hrs. GMT.
0700 – 0900	12534 – 12561	13069.5	12561 – 12689	
1000 – 1300	12534 – 12561	13069.5	12561 – 12689	
1400 – 1700	8356 – 8374	8471	8374 – 8460	
1700 – 1830	3178 – 4187	4294	4187 – 4231	

**During scheduled watches on HF while station (EQZ) is not actually working with ships, traffic lists are transmitted automatically and continuously on frequencies 4294, 8471 and 13069.5 kHz according to their schedules of watch.

2. Sirri Island Station, is operating on 500 kHz, and 2182 kHz from 0400 – 0800 hrs. LT and from 1100 – 1400 hrs. LT.

3. Sirri Terminal maintains a listening watch 24 hours on VHF Channels 16 and 12.

Vessels should commence calling "Sirri Island" 4 hours prior to arrival, on Channel 16. When contact has been made, switch to working frequency Channel 12.

4. Sirri tugs maintain a listening watch on 2182 kHz. Vessels should commence calling "Sirri Tugs" when passing Quoin Island. When contact has been made, switch to working frequency 2638 kHz.

5. *Radio Free Pratique:* Vessels requesting Free Pratique by radio are required to transmit the following message through the same Channels as their ETA advice.

AA Name of vessel and ETA Sirri Island (in GMT).
BB Number of crew and state of health.
CC Number of vaccinations required for Smallpox and Cholera.
DD Number of deaths or cases of serious illness in the last 30 days.
EE Name all ports called at during the last 30 days.
FF Master's Name.

TUGS: 2 modern diesel tugs of 4,250 b.h.p. fitted with controllable pitch propellers and a bollard pull of 65 tons are stationed at the loading dock and used for all manoeuvres.

The tugs are equipped with their own towing lines, fire fighting capability, foam, dispersant and fire wires.

Launches: The Terminal operates a pilot launch and 2 mooring launches for rope handling.

NOTICE OF READINESS: The Master's "Notice of Readiness" will be rejected if any of the ballast is oily, or if there is any leakage of oil from the vessel during loading, or any unsatisfactory condition on board ship which affect cargoworthiness while under the jurisdiction of the Terminal.

In all such situations of dispute, the decision of the Sirri Marine Superintendent will be final.

The vessel's Owner may bring in a Classification Surveyor, at his own expense, to conduct a survey.

BERTHING: *Port Facility – Tanker Dock:*
1. Vessels are ordinarily docked port side to the dock on a heading of 017°, at mooring piling equipped with "Yokohama" type inflatable fenders. Mooring lines are attached to 6 mooring pilings, equipped with quick-release hooks. The dock comprises a loading platform linked to land by a catwalk. All ships berthed alongside must provide rat guards for the ship's moorings.

2. Water depth, adjacent to the dock, at LW is 28 m.

3. Keel clearance required by the Terminal is 3 ft. at all times.

4. Connection and disconnection of the loading arms is performed by IOOC personnel, with the assistance of the vessel's crew. The vessel's cranes are not used unless absolutely necessary, as in the event of failure of the platform hoisting equipment. The loading arms are of 20 in. size, with hydraulic couplers for 16 in., 14 in. and 12 in. flanges.

Vessels are advised to have their reducers attached to the loading manifold, ready for connection. Before connection is begun, the vessel will be connected to the arc system voltage equalising cable.

5. After the vessel is moored and Pratique issued, an IOOC representative responsible for loading and safety will reach agreement with the vessel as to loading conditions, possible flow rate, and quantities to be handled. The IOOC representative is on watch on the dock at all times. The Master of the vessel must provide him with all the information necessary to ensure proper completion of the loading process. The Master shall designate an officer to be responsible for loading and safety on board, in liaison with this representative, and a crew member who shall be permanently stationed near the manifold for direct communication with the dock. The Master shall be fully responsible for valve operations and safe loading on board. If necessary, the vessel may at any time request a reduction in the pumping rate.

When loading is completed, tank ullages shall be taken by an officer of the vessel, in the presence of the IOOC representative.

The Terminal shall furnish the vessel with samples of the crude loaded, taken by continuous sampling on the loading line. Such samples shall be numbered and sealed, and shall state the origin of the crude.

6. At the end of the loading process, the vessel shall notify the Terminal 0.5 hour, and again 10 minutes, before the planned stop loading.

LOADING: *Loading Facility:*
1. Tankers are loaded at Sirri Island alongside a 1 berth jetty, approximately 600 ft. offshore. The loading platform is fitted with rigid hydraulic loading arms which have quick connection/release couplers attached to the end flange.

Crude is loaded by 4×20 in. loading arms, 2 of which are also used for unloading dirty ballast water from the tanker.

2. The maximum loading rate is 15,000 cu.m./hr. The minimum flow rate is 15,000 bbls/hr. All vessels accepting nominations to load at Sirri Island must be capable of loading crude at rates above this figure.

3. The API of Sirri crude oil is 31.

4. The temperature of Sirri crude oil varies between 93°F and 86°F (Summer/Winter).

5. The Terminal will accept cargo requests 10% above or below the official nominated quantity unless specifically requested otherwise by the Consignor.

6. A shore stop to close off the flow of crude oil to the tanker will be executed by the Terminal provided the Master issues a written request to the Loading Master upon arrival at the loading dock. This request must include the statement that IOOC will not be held responsible for any error in the final quantity loaded.

Masters should note that in cases of overloading, the excess cargo cannot be returned to the shore line.

Masters should also be aware that they will be held responsible for any overflows and pollution caused by their request for a shore stop.

7. An "Early Sailing System" of tanker documentation is operated by the Terminal as standard practice for all cargoes (see "Early Sailing Procedure").

8. Most responsible ship owners have adopted a system of tank cleaning using circulatory methods of transfer of tank washing on board ship and treating these washings with chemicals. The result is that no oil is discharged into the sea and the oil separated is collected in a Slop Tank. With the written permission of Off-Taking Companies, the Terminal will "Load on Top" of such slops. To avoid pollution of the Gulf, this system is highly recommended.

9. Vessels which arrive in ballast to load part cargo, should endeavour to place the ballast in such a manner as to allow loading to commence upon arrival at the loading dock.

The ballast may be retained for discharge enroute to the next port, or discharged concurrent with loading. Provided the vessel can show adequate valve separation, this method is accepted by the Terminal, and will be finally confirmed by the Loading Master when satisfied that no pollution or contamination will occur.

Vessels arriving in ballast to load a full cargo, who carry most of their ballast in "permanent ballast" tanks, should also endeavour to arrange the remaining ballast in such cargo tanks as to allow loading to commence upon arrival at the loading dock, discharge concurrent, using segregated lines and pumps. The Terminal will accept this system on the same basis as above paragraph.

10. A 90,000 cu.m. storage reservoir enables vessels to discharge the dirty water ballast from their tanks into IOOC land installations, by means of two of the 20 in. handling arms in the dock installation.

EARLY SAILING PROCEDURE: Notice to Masters:

In order to minimise delays to tankers awaiting official documentation after loading at the port, an Early Sailing system is now in force.

The following documents are prepared in advance, *except for cargo figures,* and presented by the ship's Agent to the Master for his signature, upon the ship's arrival at the loading dock.

(A) Nos........ Originals & Nos........ Copies of IOOC Bill of Lading.

(B) Nos........ Originals & Nos........ Copies of IOOC Certificate of Origin and Cargo Manifest.

(C) Nos........ Originals & Nos........ Copies of IOOC Tanker Time and Loading Report.

(D) Nos........ Originals & Nos........ Copies of IOOC Report of Cargo and Ship's Ullages.

(E) Master's Receipt for Documents covering both pre-signed and onsite prepared forms.

Documents for Master's use, and for the Consignee care of the Master will be retained on board. All other pre-signed documents to be returned by the Agent to the IOOC Terminal Office.

Official cargo figures will be passed to the Master by radio *within 1 hour* of his departure. Advice of quantities loaded should be inserted by the Master on the "Bill of Lading" and "Certificate of Origin" forms as prior indicated.

Hand written copies of items (C) and (D) will be passed to the Master for his reference.

In case of disagreement on Cargo figures, the Master may:

1. "Note Protest" by cable or telex.
2. Authorise the ship's Agent to "Note Protest" on his behalf.
3. Pass a written "Note of Protest" to the Berthing Master who will acknowledge receipt on behalf of the Terminal.

IOOC appreciates the co-operation of Masters, Owners, Shippers and Consignees in agreeing to implement this system.

POLLUTION: It is the Master's responsibility to ensure that no garbage, refuse or liquid discharge is allowed to pollute harbour waters.

Adequate covers must be placed over all sanitary and galley discharges to prevent fouling the dock structure.

Ship's Masters are obliged to observe International Convention Laws concerning pollution of the sea.

Rules and Regulations establishing procedure for the Sea of Oman and the Gulf must be strictly observed by all Masters.

IOOC monitors the entire area within their field of operation, and will fully document and report back to NIOC any case of pollution for further action.

MEDICAL: IOOC operates a small clinic on the Island with resident doctors. This facility will be made available for emergency cases only.

TIME: Standard zone time for Iran is GMT plus 3.5 hours. Daylight saving time advances clocks 1 hour from March through to October.

SERVICES: The following facilities are NOT available:

Bunkers.
Laundry.
Fresh water.
Crew changes, shore leave.
Stores.
Repair facility.

GENERAL:

Surveyors: Surveyors of the American Bureau of Shipping and Lloyd's are stationed at Bandar Abbas and Abadan.

Consuls: No Consular representation is available at Sirri but the Embassies of most nations are situated in Tehran.

Officials: Customs, Ports and Shipping, and Gendarmerie Officials are stationed on Sirri Island.

Maintenance: Maintenance work such as scaling and painting on deck or from the loading dock, is prohibited at all times while the vessel is alongside the loading dock.

WEATHER: From May to September, very hot and humid conditions prevail with temperatures reaching 47°C (117°F) and relative humidity ranging from 10% to 100%.

The winter months, from November to March, are mild and pleasant with minimum temperatures of about 4°C (39°F).

Throughout the year, the dominant winds are from the W.N.W., with winds of a force greater than 20 knots from November to March. This orientation is approximately 290° at Sirri. This wind, known as the "Shamal", blows particularly in the Summer during a period of 40 days (beginning of June to mid-July; in the Winter, it comes on abruptly and can reach 30 to 40 knots. Days of flat calm can be estimated at 10% of the year.

Note: Violent winds from the N.E., reaching 60 knots, have been observed in the Winter season.

Sea temperature varies from 71°F. (22°C.) in January to 93°F. (34°C.) in August.

AUTHORITY: Iranian Offshore Oil Company, 339 Abbassabad Avenue, Tehran, Iran. *Tel:* 624102-5. *Telex:* 212598, 212346, 212707. *Cables:* Falatghareh, Tehran. *Contact:* Captain M. H. Salimzadeh, Head of Marine Operations.

Mailing Address: P.O.Box 1434, Tehran, Iran.

Italy

PORTO VESME: (Also see page 723).

SHIPMASTER'S REPORT: December 1984.

Porto Vesme is the name of the port and industrial complex. The local town is called Porto Scuso which may be better known to postal and telephone authorities.

Pilotage: Black pilot launch with VHF. Pilot carries portable VHF.

In strong N.W. winds Pilot requests vessels remain stationary, at pilot station, for boarding. Pilot disembarks West of Ghingetta Island, heading 340° using starboard side ladder.

Max. Size: Eurallumina Quay: Up to 12 m. draft permitted. (December 1984).

Tugs: One tug, nominal 1,400 h.p., is available at Porto Vesme. Other tugs available on order from Cagliari, etc.

Berthing: Very active rolling on Eurallumina Quay, fenders effective but strip all paint from hull. Local ships insert rubber tyres between ship and wooden faces of fenders. Long leads required on mooring lines to prevent breaking while rolling.

Fenders project at least 2 m. from wharf face, very difficult to swing gangway ashore causing delay. A brow may be more easily placed at first. Gangway or brow must have efficient rollers on ground.

TRIESTE: (Also see page 731).

SHIPMASTER'S REPORT: January 1985.

Dry Docks: There is a new dry dock, located at Arsenale San Marco. Our vessel was the first to use it, our dimensions being:

LOA: 255.0 m.
Moulded breadth: 35.3 m.
Moulded depth: 19.0 m.

Ivory Coast

ABIDJAN: (Also see page 735).

SHIPMASTER'S REPORT: February 1985.

Customs: It is advisable to declare all valuable goods such as television sets, video-recorders, video tapes, radios and binoculars, also soft drinks and beer, as it is common for Customs to impose fines of $1,000 – $2,000 if incorrect declaration is made.

The Ship's Stores List/Provisions List must also be correct otherwise fines will be imposed.

Kuwait

SHUWAIKH: (Also see page 862).

This information, received in January 1985, supersedes the entries for "Berthing" and "Cranes" on page 862.

BERTHING/CRANES:

Berth No.	*Overall Length* (m.)	*Depth Below ACD* (m.)	*Max. LOA of vessel allowed to berth* (m.)	*Max. Permitted draft* (m.)	*Cranage*
1	186.58	10.06	175	9.6	Grain elevator 250 t/hr. Grain elevator 150 t/hr.
2, 3, 4, 5	186.58	10.06	175	9.6	3 cranes×3 tons capacity (For each berth) 1 crane×6 tons capacity (For each berth)
6, 7	185.75	10.06	175	9.6	3 cranes×3 tons capacity (For each berth) 1 crane×6 tons capacity (For each berth)
8	211.51	10.06	200	9.6	Cement elevator 350 t/hr. 3 cranes×3 tons capacity 1 crane×6 tons capacity
9, 10	199.92	10.06	220	9.6	2 cranes×3 tons capacity (For each berth) 2 cranes×6 tons capacity (For each berth)
11	199.92	10.06	220	9.6	3 cranes×3 tons capacity 1 crane×6 tons capacity
12, 13	190.73	10.06	225	9.6	2 container gantry cranes 36 ton capacity under the spread. 1 jib crane, 30 tons capacity (For the 2 berths together)
14	199.92	10.06	220	9.6	3 cranes×3 tons capacity 1 crane×6 tons capacity
15	179.72	8.53	200	8.0	3 cranes×3 tons capacity
16, 17	199.92	8.53	220	8.0	2 cranes×3 tons capacity (For each berth)
18	199.92	8.53	220	8.0	3 cranes×3 tons capacity
F.H.1	181.08	6.7	180	6.0	3 cranes×3 tons capacity
F.H.2	155.69	6.7	110	6.0	2 cranes×3 tons capacity
F.H.3	199.77	6.7	220	6.0	3 cranes×3 tons capacity
F.H.3A	61.36	6.7	50	6.0	
14A	79.00	10.06		9.6	For Ro/Ro ships only

Note: There are 2 Dolphin Berths with depth alongside of 8.53 m. below ACD and capable of taking vessels up to 185 m. in length and 8.0 m. draft.

Entrance channel is 150 m. breadth and 8.53 m. depth (below ACD).

The Curvature of the channel has been recently widened, allowing vessels of 260 m. to pass through. Such vessels are allowed to berth provided that their draft is not greater than 9.6 m.

Closed Stores:

Store No.	*Area* (sq.m.)	*Store No.*	*Area* (sq.m.)
1	3,600	15	13,970
2	4,050	16	13,970
3	4,050	17	7,950
4	4,350	18	7,950
5	3,175	19	6,981
8	10,750	20	7,950
9	10,750	21	7,950
10	10,750	22	7,950
11	10,750	24	1,000
12	10,750	25	1,000
13	10,750	26	1,000
14	13,970	27	1,000

Total area of closed stores: 174,366 sq.m.

Covered Stores:

Store No.	*Area* (sq.m.)
7	10,000
23	5,250

Total area of covered stores: 15,250 sq.m.

Open Storage Areas:

Open Storage Area No.	*Area* (sq.m.)	
1	7,700	
2	7,000	
3	5,100	
4	8,800	
5	11,300	
6	6,700	
7	12,400	
8	16,600	
9	35,200	
10, 11	47,700	Container operation area for Berth Nos. 12 and 13
12	11,300	
13	56,300	
Areas North of Ghazali Street	262,500	

Total area of open storage: 488,600 sq.m.

Container Stacking Areas:

Container Terminal	120,000 sq.m.
New Extension	145,000 sq.m.
Total Container Stacking Area:	265,000 sq.m.

Libya

GENERAL: All ports: (Also see page 878).

DOCUMENTS: Not less than 7 copies of Crew and Passenger Lists. Other documents as required at each port.

Ship's certificates should be delivered to the Marine Inspection Office at the port.

PORT LIMITS/ANCHORAGES: As shown on Admiralty charts.

CONSULS: No Consuls at any port.

CUSTOMS ALLOWANCES: No spirits, wine or beer to be held out of bond.

TELEPHONES: All calls through Tripoli and Benghazi Coastal Stations – No calls allowed when the ship is alongside.

SHORE LEAVE: Crew members permitted ashore during daytime. Shore leave not permitted at oil terminals.

IDENTIFICATION CARDS: Shore passes issued and Seaman's Book to be kept at the gate at port entrance.

DELAYS: Delays in berthing and load/discharging can normally be expected.

Namibia

LUDERITZ: (Also see page 967).

The following information is in addition to that on page 967.

ANCHORAGE: Anchorage may take place inside the port limits between 0600 hrs. and 2200 hrs. or at any other time in an emergency.

MAX. SIZE:

Shearwater Bay Anchorage: No restriction.

Luderitz Harbour Anchorage: No length restriction. Draft 15 m.

Robert Harbour Anchorage: Length approximately 140 m. Draft approximately 7.5 m.

Alongside main jetty: Length normally approximately 95 m. Draft 6.0 m.

RADIO: ETA at least 72 hours in advance; unless in an emergency. Cables addressed to Harbour Master Luderitz.

VHF: Diaz Point Lighthouse, tel: 2249.

MEDICAL: Operating facilities are available. Air Ambulance Service is available. Port Health facilities exist.

CUSTOMS ALLOWANCES: Customs Regulations as per South African Customs and Excise.

POLICE/AMBULANCE/FIRE: Hospital, tel: 2266 or 2446.

SERVICES: No compressed air facilities are fitted on the jetty but portable compressors are available.

Low capacity salvage pumps are available.

SHIP SUPPLY SERVICE: An Off-Shore Ship Supply Service is operated by the South African Transport Services (Harbours) by means of a small tug and (occasionally) by means of a launch.

If the vessel does not have an Agent at the port, a deposit is required before the service will be rendered. The service is provided on a 24 hour basis, provided (except in an emergency) the necessary arrangements are made during normal office hours.

The tug has a capacity of approximately 3 tons and 24 passengers, but the capacity of the launch is severely limited.

The normal rendezvous position is approximately 3 miles N.E. of Diaz Point Lighthouse (Position of lighthouse: 26° 38.2′ S., 15° 05.6′ E.) but the tug, by special arrangement, will proceed further to seaward if required. The depth of water at the normal rendezvous position is 22 m.

GENERAL: *Basic weather conditions:* Winter: Variable winds; mainly Northerly; usually less than 20 knots. Occasionally Easterly wind in excess of 40 knots; but usually of very short duration (8 hours). Fog is prevalent; but only infrequently East of Angra Point.

FLUSHING: (Also see page 974). (See Late Plans)

LPG HANDLING FACILITIES:

Eurogas Terminal, Flushing East: The Eurogas Terminal is dedicated solely to storage and throughput of Liquefied Petroleum Gases and Chemical Gases.

Documents: Eurogas has been authorised by the Dutch Customs Authorities to prepare and complete all necessary Customs and transportation documents, which reduces waiting time to an absolute minimum.

Pilotage: In close co-operation with Eurogas, the shipping Agent and the Pilot, the harbour Authorities control the arrival and subsequent mooring in the Quarles Harbour.

Max. Size:

Vessel Size	*Length* (m.)	*Beam* (m.)	*Draft* (m.)	*Facilities* *Refr.*	*Press.*
Jetty 1	213	38	9.5	×	×
Jetty 2	295	44	13.5	×	×
Jetty 3	110	12	5.0	–	×
Jetty 4	110	12	5.0	–	×

The harbour has a depth of 16 m. and is therefore accessible to all existing fully loaded LPG-carriers. Maximum drafts may also be dependent on the prevailing least depth in 'Het Scheur' and the near approaches to the jetties and are conditional on the agreed procedures and Port Authority requirements for the safe movement of LPG-carriers. For safety reasons loading/unloading can be stopped due to high wind forces depending on wind direction.

Berthing:

Jetty 1: At which inland barges and oceangoing vessels with a draft of max. 9.5 m., overall length of max. 213 m., a max. bow to manifold distance of 115 m., a max. stern to manifold distance of 108 m. and a max. beam of 38 m. can safely reach and leave and at which such vessels can always lie safely afloat.

Loading and discharging shall normally be allowed to continue as long as the ship's manifold connection stays within the reach of the loading arm of Eurogas.

The reach of the loading arm can accommodate:

– max. height +14.0 m. NAP (Nieuw Amsterdams Peil) which is comparable with approx. 11.5 m. above water-level at HW.

– minimum height −1.5 m. NAP which is comparable with approx. 1 m. above water-level at LW.

– range out of centre loading arm parallel to berthing line approx. 5 m.

– range out of – and perpendicular on berthing line approx. 7 m.

Jetty 2: At which inland barges and oceangoing vessels with a draft of max. 13.5 m., overall length of max. 295 m., a max. bow to manifold distance of 150 m., and a max. stern to manifold distance of 150 m. and a max. beam of 44 m. can safely reach and leave and at which vessels can always lie safely afloat.

Loading and discharging shall normally be allowed to continue as long as the ship's manifold connection stays within the reach of the loading arm of Eurogas.

The reach of the loading arm shall be able to accommodate:

– max. height +28.0 m. NAP which is comparable with approx. 25.5 m. above water-level at HW.

– minimum height −1.5 m. NAP which is comparable with approx. 1 m. above water-level at LW.

– range out of centre loading arm parallel to berthing line approx. 7 m.

– range out of – and perpendicular on berthing line approx. 12 m.

Jetty 3/4: At which inland barges and coastal vessels with a draft of max. 5 m., overall length of max. 110 m., a max. bow to manifold distance of 40 m. (Jetty 3), and 55 m. (Jetty 4), a max. stern to manifold distance of 50 m. and a max. beam of 12 m. can safely reach and leave and at which vessels can always lie safely afloat.

Jetty 4 is also suitable for small coastal vessels (max. deadweight approx. 1,500 tonnes), ship size depending on manifold allocation.

Loading and discharging shall normally be allowed to continue as long as the ship's manifold connection stays within the reach of the loading arm of Eurogas.

The reach of the loading arm shall be able to accommodate:

– max. height +14.0 m. NAP.

– minimum height −1.5 m. NAP.

– range out of centre loading arm parallel to berthing line approx. 5 m.

– range out of – and perpendicular on berthing line approx. 6 m.

Discharging: The Eurogas Terminal operates 24 hours a day, 7 days a week.

Eurogas and the independent surveyor check the facilities of the vessel and the quantity of the cargo before discharge commences.

Receiving Capacities at Various Jetties (all in cu.m./hr.)

	Into refrigerated tanks	*Into pressure tanks or to other jetties*
Jetty 1	1,000 (per tank)	500
Jetty 2	3,200 (per tank)	500
Jetty 3	—	500
Jetty 4	—	500

In order to minimise laytime on jetties, refrigerated propane and butane can be discharged simultaneously at Jetty 1 and 2.

Additionally, all pipe-lines on shore can be cooled down before the arrival of a vessel by means of separate cool-down lines. All jetties are equipped with vapour return facilities including a blower-system at Jetty 2.

Board/board transfers between all the jetties can be realised with or without the use of 2 heaters. These heaters have a capacity of 500 cu.m./hr. each, with a temperature differential of up to 47°C under all weather conditions.

Loading: 4 vessels/barges, three railcars and 4 road trucks can be loaded simultaneously with capacities as described below.

Railcars and road trucks are each loaded on a weighbridge. The consecutive loading of 2 products into 1 railcar/road truck can take place without disconnecting and reconnecting of loading arms and necessary shunting/shifting to another loading point.

Loading Capacities in cu.m./hr.	*Product.* *Refrig.*	*Press.*
1. From the refrigerated tanks:		
To Jetty 1 or 2 (per tank)	600	–
To Jetty 3 or 4	–	–
Via heater to pressure tank	–	500
Via heater to Jetty 1, 2, 3 and 4	–	500
2. From the pressure tanks:		
To Jetty 1, 2, 3 or 4	–	350
To each railcar loading point	–	120
To each roadtruck loading point	–	80

Storage: The terminal consists of 6 pressure tanks with a gross capacity of 3,369 cu.m. each, and 2 refrigerated tanks of 55,000 cu.m. each. Total capacity is therefore 130,000 cu.m.

The refrigerated tanks are constructed with double integrity steel inner tanks and a concrete outer wall capable of holding refrigerated product.

In the pressure tanks, chemical gases can also be stored.

Product List:

1. Refrigerated tanks: propane, butane and/or mixtures.
2. Pressure tanks: butane, isobutane, butadiene, butylene, isobutylene, cyclopropane, propane, propylene-oxide, propylene.

Products for the pressurised storage are:

Spheres 1, 2, 3, 4, 5 and 6. Butane, isobutane, butadiene, butylene, isobutylene, cyclopropane, propane, propylene-oxide. Spheres 4 and 5 also propylene.

A. Pressure tanks: Product stored in tanks 1, 2, 3 and 6 shall have a vapour pressure of less than 13.5 bar gauge at 30°C.

B. Pressure tanks: Product stored in tanks 4 and 5 shall have a vapour pressure of less than 16.5 bar gauge at 30°C.

C. Refrigerated tanks: 2% mol. max. ethane content in propane was the design basis for the refrigerated system. The tolerances on the compressors and the cooling system are the technical limitations on storage of products with higher ethane contents.

Safety: E.S.D. systems (Emergency Shut Down systems)

Activated by:

(a) Gas detection system.
(b) Loading arms limit switches.
(c) Ship's E.S.D. system.
(d) Control-room.
(e) Local push buttons.
(f) General E.S.D. pressure storage fill system.
(g) Fill shut down (overflow).
(h) Shut down sendout system.

Gas Detection System.

Sensors located at:

(a) Annular space tanks.
(b) Fan intake.
(c) Roof tanks.
(d) Relief valves' exhaustline.
(e) Area general.
(f) Process area.
(g) Boiler house.
(h) Office heating air intake.
(i) Jetties.
(j) Existing pressure storage.
(k) Generators' area.
(l) Expansion-tank water/glycol system.

Firefighting: The terminal site has been equipped with all sorts of fire-fighting apparatus like:

– 45 waterguns, which can spray 1,600 litres per minute each over a distance of 70 m;

– sprinkler installations at all vital points;

– 2 separated pumping systems, to be sure of water supply under all circumstances; 1 at the harbour with 2 diesel-powered pumps with a total capacity of 2,000,000 litres water per hour, the other 65,000,000 litres at the pond which is constructed on the site.

– Eurogas has its own fire brigade, with a special fire-fighting truck which can also travel on rails. In this way every part of the terminal site and its perimeter can be reached with the greatest possible speed.

Operator: Eurogas Terminals C.V.

Head-Office: Van Vollenhovenstraat 3, 3016 BE Rotterdam. Tel: 010-366955. Telex: 25338.

Terminal: Frankrijkweg 4, 4455 TR Nieuwdorp. Tel: 01196-12820. Telex: 55684.

TERNEUZEN: (Also see page 984).

This information should be read in conjunction with entry on page 984.

BERTHING:

Dow Chemical:

Pilotage: Pilotage is compulsory for seagoing vessels, entering, leaving or manoeuvring in the harbour.

Dispensation may be granted by the Harbour Master.

Navigation Aids: The entrance of the harbour is marked by a fixed green and a fixed red light on top of piles on West and East side of the white leading-lights.

Night and day, the axis of the harbour entrance is marked by 2 synchronous interrupted white leading-lights (Iso. 2 sec.) located on the Southern harbour dyke. Bearing is 191°.

The green and red harbour-lights are located respectively 170 m. and 215 m. from the axis, indicated by the white leading-lights.

The minimum width of the harbour entrance on either side of the axis, measured at right angles, is 112 m.

Night and day the centre of the turning-basin, West of the Ocean Dock, is indicated by interrupted green leading-lights (3 sec. on, 1 sec. off). These lights are located on the Southern harbour dyke. Bearing is 211.5°.

The centre of the almost circular turning basin lies at the intersection of the green leading-lights and the Westward lengthened axis of the Ocean Dock. The radius of the turning basin is 200 m.

During fog, 2 sodium foglights are lighted underneath the green light of the harbour entrance.

One of these foglights is directed towards the Scheldt River, the other towards the harbour.

During the night and poor visibility, the piles, marking the harbour entrance are illuminated by flood-lights.

The shoal in the harbour, extending from the Southside of the Barge and Coaster Docks to further Southward is covered by 2 light-buoys, located on a water depth of NAP – 7.5 m. The line between the North Buoy (BRA 4 Qk., Fl., red) and the South Buoy (BRA 6, Iso. 8 sec., red) marks the Western boundary of the shoal.

Restrictions/Max. Size: The largest permissible length and/or beam are for:

Seagoing Vessels:	
In the harbour	Length overall 280 m.
Along the Ocean Dock	Length overall 280 m.
Along the B and C Docks	Length overall 140 m.
Inland craft	Length 140 m.
Push barges	Length 185 m. Beam 22.8 m. An additional length of 8 m. is permitted, provided that the max. length of the barge does not exceed 153 m. and the pushtug is lashed in the axis of the barge.
Lashed Barges	Length 110 m. Beam 22.8 m.

It is prohibited to enter the harbour with vessels or boats which:

(a) Do not have to load or unload in the harbour.

(b) Do not have to carry out any work.

(c) Are not equipped with a VHF radio, suitable for transmitting and receiving on Channel 3.

Dispensation from measurements and conditions as mentioned above can be granted by the Director of the Port Authority or his substitute. Dispensation can also be granted by the Harbour Master or his substitute except for the max. admittable length of 280 m. LOA.

The dredged bottom depths in the harbour are:

In the harbour entrance:	N.A.P. – 15 m.
In the turning basin:	N.A.P. – 16 m.
The Western Berths of the B and C Docks:	N.A.P. – 11 m.
B and C Dock Berth B-East:	N.A.P. – 9.5 m.
B and C Dock Berth A-East:	N.A.P. – 7.5 m.

The above mentioned bottom-depths are typical figures and certain deviations as a result of siltation can occur.

Information with regard to permitted draft can be obtained from the Harbour Master's Office or from the Traffic Control Station.

Ocean Dock:

For North and South the same depths and restrictions.

They are:

N.A.P. – 18 m.
Max. d.w.t. – 100,000 tonnes.
Max. Length – LOA 280 m.

In addition to the information given above, the following "General Directives" should be observed:

Time of berthing at, or departing from, the Ocean Dock depends on tidal conditions and max. d.w.t. or draft of each vessel and will be determined by the Pilot.

The maximum allowable draft of vessels is determined by the water depth at the Scheldt river entrance, at Scheur. At present maximum draft is about 43 ft. but new figures are published every month.

Berthing with ship's bow pointing to seaward is compulsory.

VHF: Dow Chemical Marine Department can be contacted by VHF-radio on Channels 6, 8, 13, and 34. Constant radio watch is kept on Channels 13 and 34.

Traffic controlled by Terneuzen Traffic Control Station, Tel: 01150-95651, Telex: 55482, VHF Channel 3, callsign: Radar Terneuzen.

The procedure of "Reporting in Writing" is also compulsory for inland craft, whereby the term of 3 hours also applies for the activities as mentioned below.

Masters of seagoing vessels and inland craft must report by VHF on Channel 3 to Terneuzen Traffic Control Station, call sign Terneuzen Radar, when:

(a) On the Western Scheldt River with destination Braakman Harbour and:

Ascending the river: Entering the radio area "Radar Terneuzen" and in the neighbourhood of buoy 22.

Sailing down the river: Entering the radio area "Radar Terneuzen" and in the neighbourhood of buoy 22.

(b) Entering or leaving the harbour.

(c) After berthing and before unberthing.

(d) Changing berth.

All traffic inside the harbour or harbour entrance is obliged to have the VHF radio tuned to Channel 13.

As necessitated by weather or other circumstances, the required number of tugs will be determined by the Harbour Master.

Seagoing vessels, having to carry signals in accordance with article 22 of the decree of the Ministry of Transport and Public Works, dated 12-31-1971 Nr. A-5/071054 (Regulations for Dangerous Goods) are not allowed to enter the harbour if the visibility is 500 m. or less.

Inland craft, having to carry the signals in accordance with article 10 of the decree of the Ministry of Transport and Public Works, dated 12-31-1971 (Regulations of Dangerous Goods) are not allowed to enter the Harbour if the visibility is 500 m. or less.

During approach under the above conditions vessels may be ordered by the Harbour Master, to berth or drop the anchor at a suitable place.

Dispensation from the paragraphs as provided above may be granted by the Harbour Master.

(a) Entering the harbour is prohibited if a red light is shown below the green and red harbour lights.

(b) Sailing out of the harbour is prohibited if a red light is shown below the green and red harbour lights.

Tugs: A seagoing vessel mooring, or leaving a berth has to be assisted by at least:

(a) 1 tug if the length overall is less than 100 m.

(b) 2 tugs with sufficient power if the overall length exceeds 100 m. unless the vessel is equipped with a functioning bow-thruster when only 1 tug is required.

(c) 1 tug only is necessary when leaving Berths B-West or B-East and when moored with the bow to the North.

Assisting tug must be attached to the towing lines on the seagoing vessel.

Berthing: A seagoing vessel calling at the Ocean Dock has to be:

(a) Moored with the bow in N.W. direction. Except as otherwise agreed by the Harbour Master.

(b) Turned away from the Ocean Dock.

A seagoing vessel calling at the Barge and Coaster Dock has to make its turn to starboard unless wind or other circumstances justify a different decision.

Masters must ensure that their vessels remain afloat under all circumstances.

Masters must moor their vessel in such a manner that the berth can be left without delay, unless decided otherwise by, or on behalf of the Harbour Master. At least 1 steel cable must be positioned on both the bow and the stern of the vessel. Each cable must be properly attached and adjusted for easy pick-up by a tug.

An intercom set and a telephone will be placed on board immediately after berthing. The intercom is for direct communication with the Loading Master.

Charges for the telephone will be made via the ship's Agency. The telephone number of the set placed on board depends on the berth where the vessel is moored.

The following numbers are in use:

A West:	01150 – 20819
A East:	None
B West:	01150 – 20820
B East:	01150 – 20821
C:	01150 – 20823
OD North:	01150 – 20825
OD South:	01150 – 20826
Scheldt Jetty:	01150 19637

Loading/Discharging:

Manifold Position:

The manifold position for ships bound for Terneuzen should be:

- about midships.
- 2 m. minimum from rail.
- 1 m. minimum above deck.
- Flange connection 6 in. minimum.

A well supported manifold is required and the space around and above the manifold should be free of obstructions.

Marine Loading Equipment:

LPG can be loaded and unloaded at the Barge, Coaster and Ocean Docks.

The following equipment is available:

(B and C-Barge and Coaster Dock: O.D.-Ocean Dock).

B and C A-West: 2 stainless steel loading arms for propane, nominal diameter 6 in. Minimum temperature –104°C.

1 carbon-steel loading arm for butane and propane, nominal diameter 6 in. With integrated vapour return line, nominal diameter 4 in. Minimum temperature –10°C.

B and C A-East: 1 carbon-steel loading arm for butane and propane, nominal diameter 6 in. With integrated vapour return line, nominal diameter 4 in. Minimum temperature –10°C.

B and C B-West: 1 carbon-steel loading arm for butane and propane, nominal diameter 8 in. With integrated vapour return line, nominal diameter 4 in. Minimum temperature –10°C.

B and C B-East: 1 carbon-steel loading arm for butane and propane, nominal diameter 8 in. With integrated vapour return line, nominal diameter 4 in. Minimum temperature –10°C.

B and C Dock C: 2 stainless steel loading arms for propane, nominal diameter 6 in. Minimum temperature –104°C.

O.D. South: 2 low temperature steel loading arms for butane and propane, nominal diameter 10 in. Minimum temperature –50°C.

O.D. North: 2 low temperature steel loading arms for butane and propane, nominal diameter 12 in. Minimum temperature −50°C.

Except for the carbon-steel loading arm on Berths A-West and A-East, all others are equipped with an emergency shut-off and disconnecting device and a firefighting nozzle, directed on the ship's cargolines' manifold.

On the Braakman Jetty a C-4 vapouriser and booster-pump are available for unloading C-4 from barges which do not have their own discharge facilities.

Propane can be unloaded with this booster-pump as well.

Nitrogen or methane supply from shore is necessary to produce enough over-pressure in the ship tanks, when unloading C3's.

Purging:

Purging of LPG vessels with nitrogen or methane can be carried out at the Barge and Coaster Docks. Maximum delivery rate of nitrogen is 2,000 N cu.m./hr., methane 1,800 N cu.m./hr.

Nitrogen can be heated to a temperature of +70°C to increase the drying effect of the vessel's cargo tanks which were waterwashed prior to the purge. Prior to loading LPG, vessels must meet the requirements as laid down in the "Guidelines for Cargotank Condition".

Conditions for Unloading Propane and Butane:

All refrigerated propane and butane vessels should arrive with tanks, over-pressure not exceeding 60 mb. to achieve maximum discharge rates.

Unloading of propane and butane is without vapour return.

Transfer Capabilities:

Discharge rates for refrigerated propane and butane are about 1,100 cu.m./hr.

Loading rates for refrigerated propane and butane are about 800 cu.m./hr.

Loading rates for pressurised propane and butane are about 250 cu.m./hr.

Storage:

Butane and propane are stored in refrigerated and pressurised tanks and loaded/unloaded at either ambient temperature or refrigerated. Refrigerated propane delivery is at −38°C and butane delivery is at −5°C.

LPG Storage Tanks:

2×50,000 cu.m. propane/butane fully refrigerated.

1×15,000 cu.m. butane fully refrigerated.

1×5,000 cu.m. butane pressurised.

2×3,000 cu.m. propane/butane pressurised.

Ventmasts must have clearly marked purge connections for either steam or nitrogen.

The vessel must have updated cargo-piping diagrams on board. Copies of drawings must be submitted to Dow on request.

Inspection – Visual Inspection:

Cargo tanks, pumps and refrigeration plants shall be easily accessible for inspection, and crew will upon request open the blinds, valves, drums, etc., as appropriate in accordance with vessel's safety practices.

Cargo Transfer Operations:

Loading or unloading will not start until the appropriate safety and operating procedures have been communicated by the Loading Master to the responsible ship's officer. The vessel must be securely moored alongside the jetty. If requested by the Loading Master additional mooring lines should be attached.

The Loading Master must be informed about the true set pressure of the cargo tank safety valves.

Non-used line ends must be blanked off. All bolt holes must be filled at all pipe connections.

Gas detection on board must be in good order. The Master must permit testing upon request. Master must allow the installation of additional shore gas detectors on deck during loading/unloading operations.

In case of inerted tanks and/or void-spaces, the Master is fully responsible for the necessary warning tags.

If a sprinkler test is requested by the Loading Master or Government Representatives, this must be permitted. If an ESD test is requested by the Loading Master or Government Representatives, this must also be permitted. Upon request the Master must state the valve closure time of his ESD system, to assure safe transfer at short ESD valve closing times. Dow reserves the right to the product transfer rates in order to keep the pressure, as a result of an activated ESD system, below the safety valve settings at no cost to Dow.

Pneumatic ESD connections for shore connections must be clearly marked.

(ESD = Emergency Shut Down.)

At the berth, the venting of gas through ventstacks is not permitted.

Upon request of the Loading Master, cargo pumps must be checked for proper functioning. Leakage of gas must not exceed a concentration of 30% LEL outside a circle of 25 cm. If the vessel's cargo compressors have to be used for loading or unloading operations, they will be tested as well. The Master must give full co-operation for these tests.

Fuel/Fresh Water/Stores: Dedicated bunkering facilities are not available.

Supplies of bunker oils, fresh water or large quantities of stores can be supplied with a barge alongside the vessel. In this case the cargo operations have to be interrupted for the time the barge is alongside. Depending on conditions in the port such operations will as a rule be limited to those vessels for which bunkering on the roads is legally not allowed. (LPG vessels with one or more cargotanks greater than 3,000 cu.m. in size and LPG vessels of over 15,000 cu.m. tank capacity in total.) Bunkering at the berth requires 24 hours' notice and will be co-ordinated by the Loading Master. Limited quantities of stores can be taken on board via the jetties.

If for bunkering or another reason a barge or boat has to moor alongside a ship already moored on one of our jetties, the Loading Master has to be informed 24 hours before the operation. Bunkering requests should be directed via the Agent.

With the permission of the Loading Master it is allowed to take cylinders with acetylene, nitrogen, helium, hydrogen, freon and oxygen from the jetty on board moored ships or to unload them. For hoisting the cylinders the specially made, blue hoisting-containers from Dow must be used. The cylinder valves must be protected by the screw-caps.

Operating of cranes is limited to those people who are authorised by Dow.

When hoisting general stores a net must be used.

Ballast: Slop oil or ballast water can in general not be received.

Tank cleaning of oil or chemical tankers is not permitted alongside the jetties. LPG vessels can be purged. Nitrogen and methane are available for purging purposes.

Vessels, moored at the Dow jetties, have to comply with international ship/shore safety checklist and the additional Dow Marine Safety Regulations.

Safety:

1. Fire/emergency: In case of Fire/emergency (including personal accidents).

(a.) Inform jetty operator.

(b.) Dial 94982, report name, position, emergency situation and required help.

2. Communication: Ship to jetty and Marine office by means of portable telephone or intercom on board. Telephone: dial 18920 ext. 2563 Marine office, ext. 3165 Loading Master.

3. Use of intercom: Push button and call operator or office. Release button and wait. Always mention your ship's name. (There are more ships alongside).

4. Emergency shutdown: Loading: To prevent overloading of ship's tanks and emergency shutdown can be carried out on deck by means of "the emergency shutdown switch" after which the shore-valve will immediately close.

5. Fire on board: Stop loading/unloading operations. Inform shore personnel.

6. Fire ashore or on other vessels: Stop loading/unloading operations. Make ship ready for departure. Wait for instructions.

7. Supervision: At all times during loading/unloading operations, adequate supervision must be carried out on deck and in the cargo-control room.

8. Tank cleaning: Tank cleaning or gas venting into the atmosphere alongside the jetty is strictly prohibited.

9. Deballasting: No deballasting of cargo tanks is allowed without permission of the Loading Master or his representative.

10. After loading: The loading arm will be blown with Nitrogen under pressure. You will receive approximately 3 cu.m. more.

Alarm signals: (Every Monday at 1200 hrs. there is an alarm test). Sounding of following signals:

Attention: 5 3 5 3 5 3 seconds: Stop cargo transfer, wait for instructions.

Evacuation: 1 1 1 1 1 1 seconds: Prepare ship for departure.

All clear: 20 seconds: Recommence operations (contact jetty operator). In case of loading: Loading will be stopped from: Ship/shore.

Nigeria

GENERAL: (Also see page 1026).

LOADING: *Oil Terminals:* A new regulation which took effect from 3rd December 1984, applies to all oil terminals in Nigeria. Vessels must load up to 90% of their deadweight. The remaining 10% being allowance for bunkers/water. Vessels are permitted to load part cargo at more than one terminal/port within Nigeria. This means that a vessel can load part cargo at one terminal and then complement loading at another terminal also within Nigeria. Vessels coming into Nigeria to load crude oil must arrive in ballast without part cargo from another country, otherwise such a vessel will not be allowed to load.

BONNY (Inshore Terminal): (Also see page 1026).

The following information was received in February 1985.

RESTRICTIONS: Berthing possible both day and night but this is dependent on the state of the channel lights.

The maximum draft to which a vessel can load at Bonny is governed by three factors *viz.*

1. Datum Depth in Bonny Channel.
2. Height of the tide.
3. The underkeel clearance allowed.

Datum depth of the Bonny Channel is dependent on the amount of dredging; at the present time Datum Depth is 10.2 m. (33 ft. 4 in.)

Tide is variable but the relevant factor is the height of the tide at the time the vessel will transit the Channel. The underkeel clearance allowed is dependent on the time of the year and is related to the height of the swell expected to be encountered in the Bonny Channel.

The present allowances are as follows:

			ft.	in.
(January 1st – February 15th)	1/1-15/2	=	2	6
	16/2-15/3	=	2	9
	16/3-31/3	=	3	0
	1/4-30/4	=	3	3
	1/5-15/5	=	3	6
	16/5-31/5	=	3	9
	1/6-31/8	=	4	0
	1/9-15/9	=	3	9
	16/9-30/9	=	3	6
	1/10-15/12	=	3	3
	16/10-31/10	=	3	0
	1/11-15/12	=	2	9
	16/12-31/12	=	2	6

Thus it can be seen that the max. draft at any particular time is equal to:

Datum Depth plus Height to Tide minus Underkeel Clearance Allowance.

A typical calculation would be as follows:

		ft.	in.
Datum Depth	=	33	4
Height of Tide	=	+ 7	0
		40	4
Underkeel Clearance Allowance		3	9
Max. Draft	=	36	7

DEADFREIGHT: Due to draft limitation at Bonny Inshore, Deadfreight applies (when necessary). This means that the Terminal will obtain approval from the Minister of Petroleum and Energy for the Deadfreight.

Also see "General – Late Reports".

BRASS TERMINAL: (Also see page 1028).

(See Late Plans)

Following corrections received from Port Authority in February 1985 and supersedes information on page 1028.

NOTICE OF READINESS: Notice of Readiness will be tendered on arrival provided that vessel is ready to load in all respects and after Free Pratique has been granted. Lay time will commence 6 hours after acceptance of Notice of Readiness for vessels arriving within agreed ETA range or when loading commences, whichever is earlier.

LOADING: The line boat will tow the end of the floating hoses to the point below the tanker's port cargo manifold. The safe working load of the tanker's port derrick should be at least 7 tons.

Loading Operations can commence only after the Loading Permit is issued by the Customs Authorities, NNPC – Inspectorate and Navy Commander.

Ships are requested to load cargo as rapidly as possible by day and night in accordance with the terms of their Charter Party.

Ships are expected and nominations of vessels are accepted by NAOC on the understanding that ships will be able to accept a bulk loading rate per hour of not less than 10 per cent of the Summer d.w.t. of the vessel or at the optimum terminal loading rate, whichever is lower.

It is extremely dangerous to close ship's valves against the oil stream as such operation may create excessive pressure in terminal pipings and hoses.

Should damage result from failure to observe this precaution the Master of the vessel will be held responsible.

During the loading operations the following signals shall be displayed:

International Code Flag "B" during day-light.

A red light, visible all round the horizon at a distance of at least 2 miles.

Brass Blend crude oil loading temperature is reasonably constant as well as API gravity at approximately:

Brass Blend 85°F 40.00 API R.V.P.=Approx. 10.0

The loading rate is approx. 5,000 t.p.h.

Also see "General – Late Reports".

FUEL: Not available.

FRESH WATER: Available.

AUTHORITY: *Operator:* Nigerian AGIP Oil Co. Ltd. Head Office, 9/11 MacCarthy Street, Lagos. P.O.Box 1268, Lagos. *Tel:* 600880/9 (10 lines). *Cables:* Agipoil – Lagos. *Telex:* 21268.

District, New Base Mile 4 – Port Harcourt, P.O.Box 923. *Tel.* 300400/20 (21 lines). *Telex:* Agipoil – Port Harcourt.

Togo Republic

KPEME: (Also see page 1347).

SHIPMASTER'S REPORT: February 1985.

Location: Kpeme is situated about 15 miles East of Lome, and about 115 miles West of Lagos, Nigeria. The position of Kpeme Jetty is approximately Lat. 06° 12′ N., Long. 01° 31′ E.

BA Chart 1861, Cape St. Paul to Lagos Harbour, with Plan, "Rade de Kpeme".

Approaches: The Coast Eastward of Cape St. Paul is practically featureless, but good navigational marks are Port de Lome Breakwater, and Kpeme Jetty, which show well on the radar at distances of up to 20 miles. No dangers in the immediate approach from any direction. The occulting light on Kpeme Jetty Head is difficult to identify, and should not be relied upon, especially in hazy weather.

Documents: The Pilot deals with all port formalities, acting for Customs and Immigration. Documents required are as follows:

2 Crew Lists.
2 Stores Lists, including Bonded Stores.
2 Crew's Effects Declarations.
2 Lists of Ports of Call.
(For the last voyage or last 4 weeks, whichever is longer.)
2 Passenger Lists.
(If Nil, list should be made out with a "Nil" declaration.)

Under normal circumstances the Agent does not visit the vessel until after loading is completed, when he brings all documents and clearance for the ship. (The vessel usually unberths, and drifts off the berth to await arrival of the Agent by boat).

Pilotage: Pilot, sometimes with Assistant Pilot, boards at the Anchorage together with 2 mooring gangs, each under the supervision of a Foreman, who is in constant contact with the Pilot. 2 mooring boats are available to assist with mooring. The Pilots remain on board at all times whilst the vessel is at the Jetty. They have to be accommodated and fed.

Anchorages: The anchorage area is from 1.5 to 2 miles S.E. of Kpeme Jetty Head. Good holding ground, sand and mud; in about 20 m. of water.

Restrictions: All berthing and unberthing operations performed on an East going current only. (Due to the configuration of the berth.) If a vessel happens to be at the berth when a West going current should start, she will remain at the berth until such time as the normal East going stream re-establishes itself. In extreme cases berthing and unberthing could be accomplished with the assistance of 2 tugs from Lome.

Max. Size: Our vessel, (Panamax) LOA 228 m., breadth 32.2 m., is about the largest vessel handled by Kpeme. Largest vessel normally handled is LOA 220 m., but this vessel was accepted on condition that no cargo was to be loaded into No. 1 hold.

Also see "Loading".

Radio: The usual ETAs and requests for berthing prospects were sent to the Agents, (Office Togolais des Phosphates. Telex: 5214. Cable Address: Phospat Lome) but no replies were received at any time from them.

VHF: We called Kpeme Port Control on VHF from 2 hours before arrival, but no response was gained from the shore until the vessel had actually arrived in the anchorage.

Port Control calls on Channel 16, and works Channel 11. Takes all details of the ship, and any requirements on arrival.

Notice of Readiness: Notice of Readiness Time is taken as the time the vessel actually anchors, and within the confines of the Charter Party.

Berthing: From the anchorage, the vessel approaches the berth in a wide sweep, to arrive about 1 cable off the berth, heading in a Westerly direction, when the port anchor is dropped. This is paid out to full scope, then the starboard anchor is let go. A headrope is then led to the buoy on the bow. Meanwhile, a shore after spring wire is hove up on the after mooring winch. Using this and also the main engine, the vessel is manoeuvred into position. This also involves heaving up the port anchor and slacking on the starboard anchor cable, to end up with about 7 shackles on the port anchor and about 4 shackles on the starboard anchor. Vessel then ends up in position for the shiploaders, which is on a heading of about 190° and about 4 m. off a set of small hydraulic fenders which front the islands on which the shiploaders are constructed. The mooring gangs then complete the mooring with shore wires.

Loading: Loading is by 2 shiploaders of 1,300 tonnes/p.h. each. Max. airdraft from Datum to loaders is 15 m. Berth is dredged to 14 m. at Chart Datum. Max. draft allowed at the berth is 38 ft. (11.58 m.) With these various restrictions, large vessels must berth with practically full ballast, and careful deballasting whilst loading is necessary to ensure that the vessel remains within the acceptable limits of draft and airdraft. It has to be remembered that the berth is an open roadstead, and a considerable swell can sometimes run (up to 2 m.). The berth is designed to berth vessel's head directly into the prevailing direction of the swell, to reduce rolling as much as possible, even so, there is still an appreciable movement of the vessel, even with little swell running. Also due to the swell, it is very difficult to read the draft with any accuracy. However, the shore weighing facilities for the phosphate are very accurate, and no real problems were encountered in this direction. (B/L is based on weight recorded by loaders during loading. No draft surveys.)

Liaison with the shore is carried out through the Pilot. No other contact with Agents, etc., available.

Terminal staff friendly and very co-operative.

Unberthing: As soon as, or just before the completion of loading, the shore mooring gangs start to single up the shore moorings. As soon as all shore wires are let go, the vessel's stern starts to move away from the berth with the current. The starboard anchor is weighed and then the Port anchor. Whilst swinging clear of the berth, and weighing anchor, an eye should be kept on the port breast line buoy aft, as it can pass quite close to the stern as the ship swings. After the port anchor is aweigh, the vessel is moved a little way from the berth, and drifts waiting for the Agent to bring out the documents; which usually takes about 1 hour.

Medical: Basic medical treatment is available at Kpeme. Hospitalisation can be effected but it is necessary to go to Lome, where there are adequate facilities.

Fresh Water: Not available.

Fuel: Not available.

Repairs: No repairs can be carried out. If these are required, vessel would have to go to Lome, 15 miles to the Westward.

Repatriation/Airport: There is an International Airport at Lome, and repatriation can be arranged if necessary.

Shore Leave: Although not actually prohibited, shore leave is not really feasible, due to the fact that there are no facilities at Kpeme. Also there are no proper arrangements for a liberty boat to be laid on.

Storing: Fresh provisions are available in limited quantities. Rather expensive and of poor to fair quality. Orders taken by Port Control on vessel's first arrival.

Tristan da Cunha

EDINBURGH (Tristan Island): 37.03 S. 12.18 W.

SHIPMASTER'S REPORT: July 1983.

DOCUMENTS: Usual documents required for entry.

APPROACHES: Chart BA1769 Pilot Book Africa Vol. 2 to be used, local knowledge should be sought regarding weather.

Island is good radar target and may be seen visually at 20 miles in good weather.

PILOTAGE: Local Radio Officer will indicate safe anchorage by handheld VHF (Channel 16).

ANCHORAGES: Edinburgh anchorage is on N.W. side of Island. Town is difficult to observe as houses are very low. Leading marks are white triangles in field to right of crayfish factory.

Area most likely for large vessels has depth of 18 fathoms. Vessel to be wary of large amounts of kelp blocking intakes, etc.

In rough weather vessel would shelter to South of Island.

HEALTH: Any person suffering a cold will not be allowed ashore; if colds are prevalent aboard then no one will be permitted ashore.

RADIO: Radio contact made via Capetown who will arrange schedule.

BERTHING: Calshott boat landing (used for all landings) is small (40 ft. – 50 ft. long). Local knowledge required. 1 motor launch and several whalers available.

Tunisia

GABES (Ghannouche): (Also see page 1359).

SHIPMASTER'S REPORT: February 1985.

Vessel discharged anhydrous ammonia.

Bow-thruster: It is advisable to inform the Agent well in advance whether vessel is equipped with a bow-thruster or not. When negative, a second tug is required for large vessels, as only 1 tug, small and low powered, is available at Ghannouche. The second tug has to be ordered from Sfax (distance approx. 60 miles). This might cause delay in berthing if Port Control is not aware that the vessel does not have a bow-thruster.

Hoses: The shore connection now consists of a 10 in. 150 ASA hose. Due to the height of our manifold above the water (41 ft.) at 24 ft. draft, extra lengths of hose had to be provided by shore.

Maximum allowable pressure for hoses: 8 bars.

Discharge: Maximum shore receiving capacity approx. 600 tonnes/p.h. Receivers urgently requested us not to go beyond the 8 bars back pressure.

We discharged approx. 550 tonnes/p.h. at 7.5 bars back pressure, however, a few hours after commencement of the discharge, the plant requested us to reduce the rate to 400 tonnes/p.h. as they experienced problems with their compressors.

Turkey

HOPA: 41.28 N. 41.27 E.

PILOTAGE: Compulsory, service 24 hours a day. 1 mooring boat available.

TUGS: 2 tugs available.

BERTHING: 815 m. of berthing space, depths from 4 m. – 10 m. One berth for passenger vessels, one for general cargo vessels and one for ore/tanker vessels.

Storage: Open – 3,000 sq.m., covered – 28,950 sq.m.

CRANES: 6 cranes available. Capacities 4 tonnes – 25 tonnes.

Forklifts: 1×3 tonnes, 1×4 tonnes.

GENERAL: The breakwater is still under construction and offers little protection to berthed vessels. In bad weather, vessels are advised to put to sea.

DEVELOPMENTS: 2 new berths and a Ro/Ro facility are under construction.

AUTHORITY: Denizcilik Bankasi TAO.

Union of Soviet Socialist Republics

UST DUNAYSK: (Also see page 1405).

LOCATION: The commercial port of Ust Dunaysk is situated on the left bank of the Kilia inlet of the Danube. The port is open for navigation all the year round.

DOCUMENTS: See "General" before first port in U.S.S.R.

PILOTAGE: Compulsory. It is carried out during daylight. Pilot's waiting area for large sea-going vessels is within a radius of 2.5 miles of centre of a circle, whose centre has co-ordinates 45° 28′ N., 30° 01′ E.

ANCHORAGES: There are 2 anchorages near the port. One is for LASH-carriers, the other for large bulk carriers. There is a floating berth for mooring lighters.

RESTRICTIONS: Daylight entry only.

MAX. SIZE: Max. draft 11.5 m.

RADIO: Notice of Arrival – see "General" before first U.S.S.R. port.

VHF: Radio communication can be effected through the port radio station, some details of which are given in the table below:

	Frequencies (MHz)		*Type of transmission*	*Time of work*
Call sign	*working*	*calling*		
"Cooperation-13" (Port)	156.8 (16)	156.8 (16)	F3E	H24
"Harbour Master"	156.45 (9)	156.45 (9)	F3E	H24

TUGS: Unloading of lighters and towing of convoys along the river is carried out with tug assistance.

CARGO HANDLING: A floating crane of 50 tonnes capacity is used for the handling of cargo on large sea-going vessels. Bulk cargoes, mainly iron ore, calcinated soda, and grain are unloaded from large bulk carriers into small size river tonnage. The loading is carried out the same way.

FRESH WATER/FUEL: May be delivered to the Inner Roads by barges.

CONSULS. None.

REPAIRS: No facilities.

TIME: GMT plus 3 hours in Winter, GMT plus 4 hours in Summer.

GENERAL: *Chart:* Soviet Chart No. 971.

AUTHORITY: The Port of Izmail Authority, Postal address: 7, Port Street, Izmail, 272630, U.S.S.R. *Tel:* 9-04-06. *Cable:* Morport Izmail.

VOSTOCHNY: (Also see page 1408).

The following information was received from the Port Authority in December 1984.

LOCATION: The commercial port of Vostochny is situated in the Vrangel Inlet, on the North-Western coast of the Nakhodka Bay, in the Sea of Japan. Navigation at the port continues all the year round.

DOCUMENTS: See "General" before first U.S.S.R. port.

PILOTAGE: Pilotage in the port of Vostochny is compulsory. The services rendered by Pilots are carried out round the clock. In case the Pilot is not able to board a vessel due to bad weather, Master should follow recommendation given by the Pilot from the Pilot boat.

The port is equipped with a shore automatic vessels' movement control system (radio call sign "Kamensky-17").

ANCHORAGES: Vessels are allowed to anchor in the port Inner Roads, the Vrangel Inlet, after having obtained the Harbour Master's permission only.

RESTRICTIONS: There are no entry restrictions in regard to vessel's length. Vessel's speed should not exceed 12 knots while proceeding through the main fairway and 6 knots when approaching the Vrangel Inlet. Under all circumstances Master shall choose the vessel's speed bearing in mind current navigational conditions.

The mooring of vessels having deadweight of 10,000 tonnes and over and length of more than 150 m. in ballast is not allowed during winds having velocity 10 m./sec. and over.

MAX. SIZE: The maximum draft of vessels mooring at the Coal Pier is 15 m. and 9.7 m. when mooring at other berths.

HEALTH: A vessel having arrived in the port Outer Roads and having no contact with the shore may not need to go through the clearance formalities. Vessels, having arrived in the port Inner Roads (the Vrangel Inlet) irrespective of the fact that they are to carry out cargo handling or not, shall go through all the necessary formalities for the clearance of the ship both on arrival and departure.

RADIO: Notice of Arrival – see "General" before first U.S.S.R. port.

VHF: Radio communication can be effected through the Port Radio Station "Vostochny-Radio", some details of which are given in the table below.

	Frequencies (MHz)		*Type of transmission*	*Time of work*
Call Sign	*working*	*calling*		
"Vostochny-2"	156.8(16)	156.8(16)	F3E	H24
(Port controller)	157.775(95)	157.775(95)	F3E	H24

TUGS: Masters of vessels are to use minimum of 2 tugs when mooring/unmooring and shifting berths at the port of Vostochny. The use of a third tug is compulsory during absence of a tug-pusher when mooring/unmooring bow-towed barges.

The number of tugs and their horse-power is determined by a Pilot with the Master's consent.

BERTHING/CRANES: Berths of the port with depths of up to 10 m. are equipped to handle bulk, liquid, general and timber cargoes as well as various kinds of vehicles. There are also specialised systems for the handling of coal and containers.

FRESH WATER: Can be taken at berths or from lighters.

FUEL: Can be taken at berths or from lighters.

REPAIRS: No facilities.

DRY DOCKS: None.

HATCHES: Opening and closing hatches is carried out by dockers.

TIME: GMT plus 10 hours in Winter; GMT plus 11 hours in Summer.

GENERAL: *Charts:* Soviet Chart No. 700.

Provisions: Can be supplied to order.

AUTHORITY: The Port of Vostochny Authority, Postal address: P.O.Box Vrangel-1, Port of Nakhodka Area, Primorsky Krai, 692907 U.S.S.R. *Tel:* 3-71, 2-71. *Cables:* Port of Vostochny.

United Arab Emirates

AJMAN, Ajman: 25.25 N. 55.28 E.

PILOTAGE: Not available.

RESTRICTIONS: Dredging is taking place between the breakwaters. Work will commence at the S.E. corner of the Eastern Breakwater and proceed to the outer end Roundheads. The dredger will then move to the Western side. The 100 m. cut will then be completed to a depth of 7.2 m. below Chart Datum.

The following restrictions are imposed during operations:

(a) The port will be closed to all navigation during the hours of darkness – sunset to 30 minutes before sunrise.

(b) Transit priority will be given to vessels sailing outward from the port up to 0630 hrs. local time.

(c) Between 0630 hrs. and 0730 hrs. local time, priority will be given to incoming vessels.

(d) At all other times during daylight hours, vessels may arrive or sail as required but all must exercise extreme caution while passing the dredger.

The dredger will carry lights and shapes as prescribed for vessels of this class.

MAX. SIZE: Max. draft available 5 m. Approach Channel width 100 m.

BERTHING: Minimum 48 hours' notice required.

Total quay space 5,000 m.

4 transit sheds of 60 m. × 120 m. available alongside.

Before sailing, all vessels must obtain a Port Clearance Certificate issued by the Department of Port and Customs.

REPAIRS: A "gas-free" and "hot-work" certificate is required from vessels undergoing repairs to oil-tanks within port limits.

A surcharge may be imposed on vessels undergoing repairs or modifications where welding equipment, compressors, etc., are operated from the wharf. Permission to commence this work must be obtained beforehand from the Port Authority.

GENERAL: *Charts:* BA 2887, 3711. USHO 62390.

AUTHORITY: Department of Port and Customs.

United States of America

HUNTINGTON BEACH, California: 33.38 N. 118.00 W.

LOCATION: Approximately 1.3 miles off Huntington Beach as shown on United States West Coast California San Pedro Channel Chart 18746, published by the U.S. Department of Commerce National Oceanic and Atmospheric Administration.

A lighted Bell Buoy "2HB" is located 2,242 ft. from the spare buoy at the Western approach to the Seaberth. It is a private aid to navigation and is shown on the above chart.

PILOTAGE: Mooring Master will board the vessel in the Los Angeles area for an inspection and acceptance of the ship's mooring facilities. He then accompanies this vessel, after agreement, to the Seaberth. On repeat visits, he may join vessel at Seaberth area.

RESTRICTIONS: In addition to max. size, wind force, wave height and direction in conjunction with mooring lines, sizes, place limits on conditions for remaining in the mooring. When these conditions are approached or predicted the vessel will return the submarine hose to the seabed after flushing, as necessary, to avoid damage to the crude unloading facilities. The determination of these limitation conditions is made by the Mooring Master in conjunction with the Terminal Supervisor.

MAX. SIZE: Length 1,000 ft., beam 150 ft., draft 43 ft.

TUGS: A mooring vessel will run the ship's lines to the buoys and serves also as a first response Pollution Control Vessel. It has aboard, for immediate deployment, 1,000 ft. of 14 in. Expandi Boom.

BERTHING: *Mooring Multi Point:* Consists of 8 buoys. Water depth 50 ft. Tidal range 5 ft. to 6 ft. Bottom sand. Current max. 1.7 knots, excluding storm conditions.

Normal Mooring: Bow anchors and 7 buoys are used.

Mooring Equipment: Require 14 lines, either 9 in. synthetic or 1.25 in. wire rope minimum. Minimum length for 9 in. synthetic rope 720 ft. Minimum length of 1.25 in. wire rope on drum 1,200 ft. Both bow anchors serviceable with an appropriate length of chain for vessel's size according to Lloyd's or ABS requirement. Usual mooring conditions require 8 to 10 shackles of chain in the water.

To allow flexibility in the charter market or vessel availability, the 1,200 ft. wire rope on drum requirement can be reduced to 900 ft. provided 720 ft. is usable at the rail and a 2,500 h.p. to 3,000 h.p. tug is utilised, charged to the vessel's account. The tug will normally only be needed during the mooring operation if the vessel cannot slip its wire mooring lines off the drums. A tug, again, may be necessary for the vessel's account in unmooring.

If mooring wires are used, the synthetic tail or eye, if so fitted, must be in good condition and of 125 per cent breaking strength of the wire. The tail or eye, if so fitted, shall be connected to the wire with a Mandell Shackle or equal. A minimum pennant length of 60 per cent, if possible, is requested for ease of handling by the mooring vessel.

Mooring Gear: If ship's gear and winches preclude fast deployment of mooring lines a tug may be required. This applies primarily to vessels with hydraulic winches and is dependent on the size of vessels, sea and wind conditions.

General: The moorings at seaberth have been modified to allow handling of vessels up to 150,000 d.w.t. under certain wind, wave and sea conditions. This modification includes the repositioning of all buoys, increasing the size of the dip and riser chain to 3.125 in. and the installing of additional 5 ton anchors to supplement the 10 ton existing anchors.

No. 4 or D buoy, which is at the stern of the vessel, has 2×3.125 in. dip and riser sections and 4 shackles of 3.125 in. chain. Mooring lines to this buoy are doubled during each mooring operation. Weight has been added to each buoy to decrease the buoyancy. An additional buoy, No. 8 or H, was added to allow the moorings to be used by barges.

DISCHARGING: *Lifting Equipment Requirements:* Derrick that can be utilised to lift the 12 in. hose from the seabed and swing the hose to the ship's manifold. Minimum lifting capacity, 5 tons.

Products Received: Crude, Naphtha and other refinery requirements.

Discharge Rate: Maximum 22,000 bbls./p.h. through 8 or 9 lengths (200 ft. – 225 ft.) of hose, 12 in. diameter into 22 in. I.D. sealine. Emergency flush possible from cross connected 10 in. line from shore. Pumping distance to shore tanks 9,479 ft. Height to shore tank 3 ft. – 4 ft. Tank height max. 39 ft. 6 in.

Temperature Limitation at Rail: Maximum product, Crude or Fuel Oil temperature of 150°F.

General: Refinery will furnish the Mooring Master with pertinent information on crude pours and vessel charter conditions, e.g. pump rates or lay time, in order that the Mooring Master can be fully appraised of the Charter Party Terms and conditions. Deviations from the Charter Party Terms furnished, if not correctable in discussions with the vessel's Master, will be discussed via radio with the Supervisor of Pipe-lines and Terminals to determine if a protest should be filed.

FRESH WATER: Not available.

FUEL: Not available.

BALLAST: No facilities.

PORT ARTHUR: (Also see page 1625).

PILOTAGE: *Add:*

Gulf of Mexico Pilots

American Master Mariners licensed by the United States Coast Guard. They are experienced in handling vessels of all types and sizes, and have many years of experience in navigating the Gulf of Mexico.

GULF OF MEXICO PILOTS cover the entire Gulf and the Florida Straits. They are on call to board vessels wherever requested within the service area, on 48 hours advance notice.

REQUEST for service may be directed to:
GULF OF MEXICO PILOTS, 3741 Memorial Blvd., Port Arthur, Texas 77640. Cables: Gompilots. Tel: (409) 982-2961.

The GULF OF MEXICO PILOT will provide assistance and advise in heavily congested areas. He will utilise up-dated local knowledge of conditions peculiar to navigation in the Gulf of Mexico. He will assist with VHF radio communications, expedite arrivals and departures between the Gulf Ports resulting in savings of time and fuel, while easing the human-fatigue factor caused by the demanding duties of Shipmasters operating in unfamiliar environment and the continuously changing conditions therein.

Yemen, People's Democratic Republic of

ADEN: (Also see page 1738).

SHIPMASTER'S REPORT: March 1985.

Documents: See "Fuel".

Pilotage: Harbour Control was called on VHF Channel 16 two hours before arrival and again 4 miles off the fairway buoy. Information given from the Harbour Control regarding Pilot and berthing gave the impression of a well organised port. Night signal for a ship requiring Pilot is following: vertical lights, red-white-red.

Radio: From one week before arrival, radio messages were sent via Aden Radio (7OA) to Aden and Ethiopia. Radio Officer told me that Aden Radio proved to be easy and efficient to work with.

Fuel: Bunkering commenced immediately on arrival even before ship cleared by the Authorities. Authorities came on board just before departure to collect Crew Lists and Stores Lists. Crew's cabins were not searched and stores not sealed.

2 men from the Agents were on board to handle ship's matters.

Repatriation: 7 crew members were repatriated to Denmark, and 7 new crew members joined. Tickets for those to be repatriated were brought from Denmark with the joining crew. Crew change went smoothly.

Notices: Yemen Ports Authority – Port of Aden:

Masters are requested to assist the Port Authorities in controlling bumboat traffic as follows:

Bumboatmen and fishermen selling fish *may not* board ships without the written permission of the Master. Disregard of this rule renders the men liable to police action *after* the ship has left when evidence cannot be obtained from the ship. Masters can greatly assist the Authorities if they will ensure that they give written approval to bumboatmen and fishermen whom they have allowed to board the ship.

Port Officer, Aden.

To: All Masters of Vessels in Aden Port – From National Shipping Agency.

The undermentioned information is for your kind attention and guidance:

Immobilisation of Ship's Engines:

Please note that it is an offence to immobilise ship's engines WITHOUT written permission being obtained from the Yemen Ports Authority. To avoid heavy penalty, Masters are advised to forward their requests to us in duplicate, as ship's Agents, and should NOT immobilise ship's engines unless they are in possession of the written permission of the Yemen Ports Authority for the period approved.

Garbage Collections:

Appended below are extracts from Circular No. G/3/128 dated 25th January, 1984, of the Port Officer and Director of Marine Affairs, Yemen Ports Authority, Aden:

(a) Collection and removal of garbage from vessels is entrusted to persons authorised and licensed by the Yemen Ports Authority, Aden, and who work on a rota system.

(b) It is compulsory for a vessel staying in the harbour for a period exceeding 24 hours to avail itself of this service and fees will be collected per day **whether garbage has been collected or NOT.**

(c) Similarly it is compulsory for garbage collectors to call on vessels allocated to them daily unless other arrangements have been agreed with the Master of a ship. Any garbage collector who does not call on vessel allocated to him daily without prior agreement of the Master will not receive his fee that day if reported.

Note: Masters requiring special service for collection of extra garbage, i.e., refuse/wastes, etc., emanating from the cargo holds/engine room, etc., must put their written request in duplicate to us, as Agents, to arrange for the garbage collector to call on their vessel. The Master should also notify us in writing the charges agreed upon for the extra garbage with the Collector. This does not apply to U.S.S.R. vessels who are required to comply with the procedures below.

For Masters of U.S.S.R. Ships: Before applying for the collection of extra garbage, please first submit your written request in *4 copies* through the Agent for *approval* of the Resident Representative for U.S.S.R. ships. Please *do NOT* employ collection of the extra garbage before receiving this approval.

Scraping, Chipping and Painting in the Port:

Please note that as per instructions from Yemen Ports Authority, scraping, chipping and/or painting are *NOT ALLOWED* during vessel's stay in the port, unless prior permission is obtained from the Port Officer through us, as Agents. Any requests for the above must be forwarded to us in duplicate.

Shore Leave – Immigration Regulations:

All shore leave expires at 2300 hrs. and, therefore, all Masters, Ship's Officers, crew and passengers should be on board by this time. Overnight stay ashore is *not permitted.* Infringement of the above will be subjected to penalty and also delay to the ship.

Cash Advance to Master in Yemeni Dinars:

Cash advances required by Masters for payment to their crew in order to enable the crew to avail themselves of purchases from *Tax Free Shop,* require the following procedures to be complied with:

(a) Masters are required to render their requisitions in duplicate to the Agents during working hours together with 2 copies of Crew List.

(b) Either the Master or Chief Officer or Purser in person should have the requisition attested, stamped and signed by the Customs Officer before handing them to National Shipping Co. (the Agents).

(c) Together with the cash to Master the Agents will issue Purchase Certificates on Tax Free Shop.

(d) After completion of the purchases and 24 hours before vessel is due to sail, the Master should obtain *Purchase Clearance Certificate* from Tax Free Shop and hand it over to the Agents. This is most essential as against these Certificates only and after reconciling with the actual cash advanced, the Agents can accept the balance cash refund from Master.

Under the Exchange Control Regulations, it is an offence *not* to return the *UNUSED* Yemeni Dinars prior to sailing. Masters of vessels who received Cash Advance in Yemeni Dinars are advised to return *ALL* Yemeni Dinars remaining in their possession, to our representative who boards to clear the vessel, and ensure to obtain from him *on the spot* an official receipt of the National Shipping Company for the amount refunded, prior to departure of the vessel.

Victualling Allowance:

Free meals to Stevedores' Personnel/Watchmen.

Free meals are normally given by vessels by mutual arrangements between Masters and the Stevedores, to save time of the following persons who otherwise would have to go ashore for their meals:

One Tally Clerk per hatch working.
One Foreman.
One Cargo Supervisor.

It is left entirely to your discretion to supply free meals to the above mentioned personnel and the watchman or not. Kindly, therefore, note that we do *NOT* countersign or vouch expenditures.

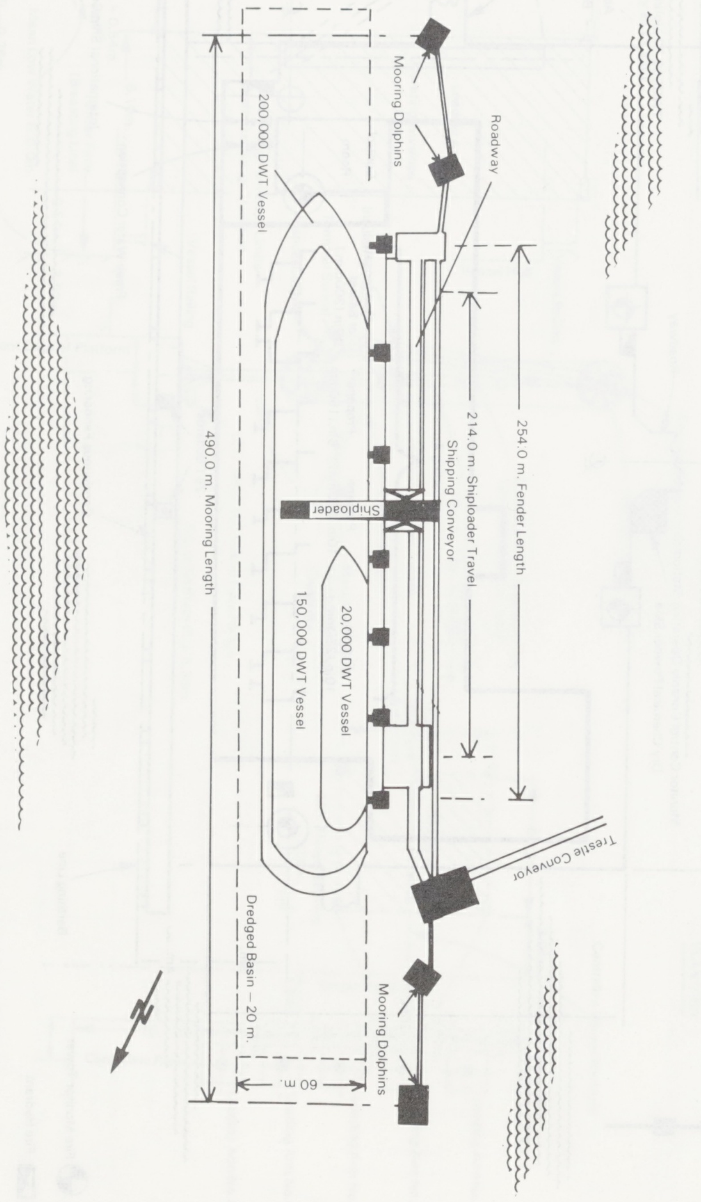
Contacts on VHF: Masters of vessels can contact Agents on VHF (Channel 16) at any time during the *DAY* or *NIGHT* for any inquiries or services required. The Harbour Control also can be contacted on the same Channel.

Authorities: All in all the Port Organisation, Pilots, tugs and the Authorities gave us a good impression of the port.

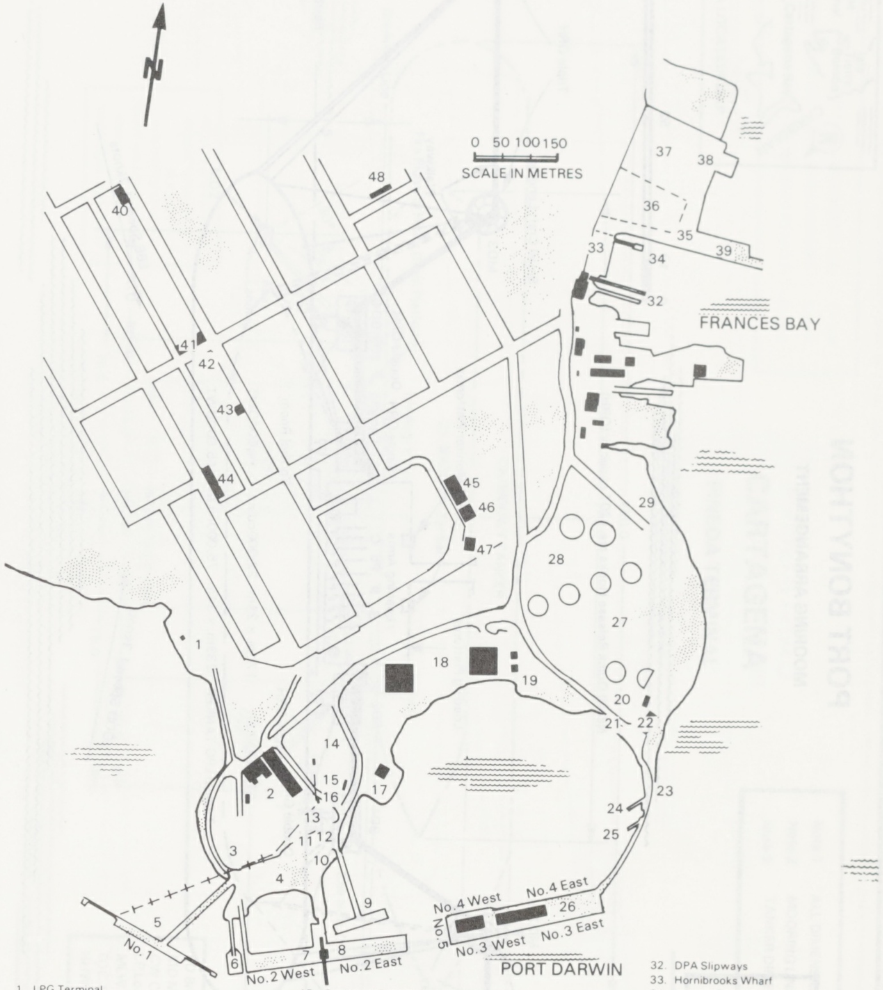
LATE PLANS

AUSTRALIA	Darwin Hay Point Port Bonython
COLOMBIA	Cartagena
CUBA	Manzanillo
GREECE	Agioi Theodoroi Isthmia
GUATEMALA	Puerto Quetzal
HAITI	Cap Haitien
HONDURAS	Puerto Castilla Puerto Cortes
INDONESIA	Tjilatjap
MEXICO	Manzanillo Puerto Madero
MOZAMBIQUE	Maputo
NETHERLANDS	Flushing
NIGERIA	Brass Terminal
SINGAPORE	Singapore
SPAIN	Marin
TAIWAN	Kaohsiung Suao
UK	Rye Scalloway
VENEZUELA	Puerto Cabello

HAY POINT
DALRYMPLE BAY
BERTH CONFIGURATION


Mooring Dolphins
Roadway
200,000 DWT Vessel
254.0 m. Fender Length
214.0 m. Shiploader Travel
Shipping Conveyor
Shiploader
20,000 DWT Vessel
150,000 DWT Vessel
490.0 m. Mooring Length
Trestle Conveyor
Dredged Basin – 20 m.
Mooring Dolphins
60 m.
N

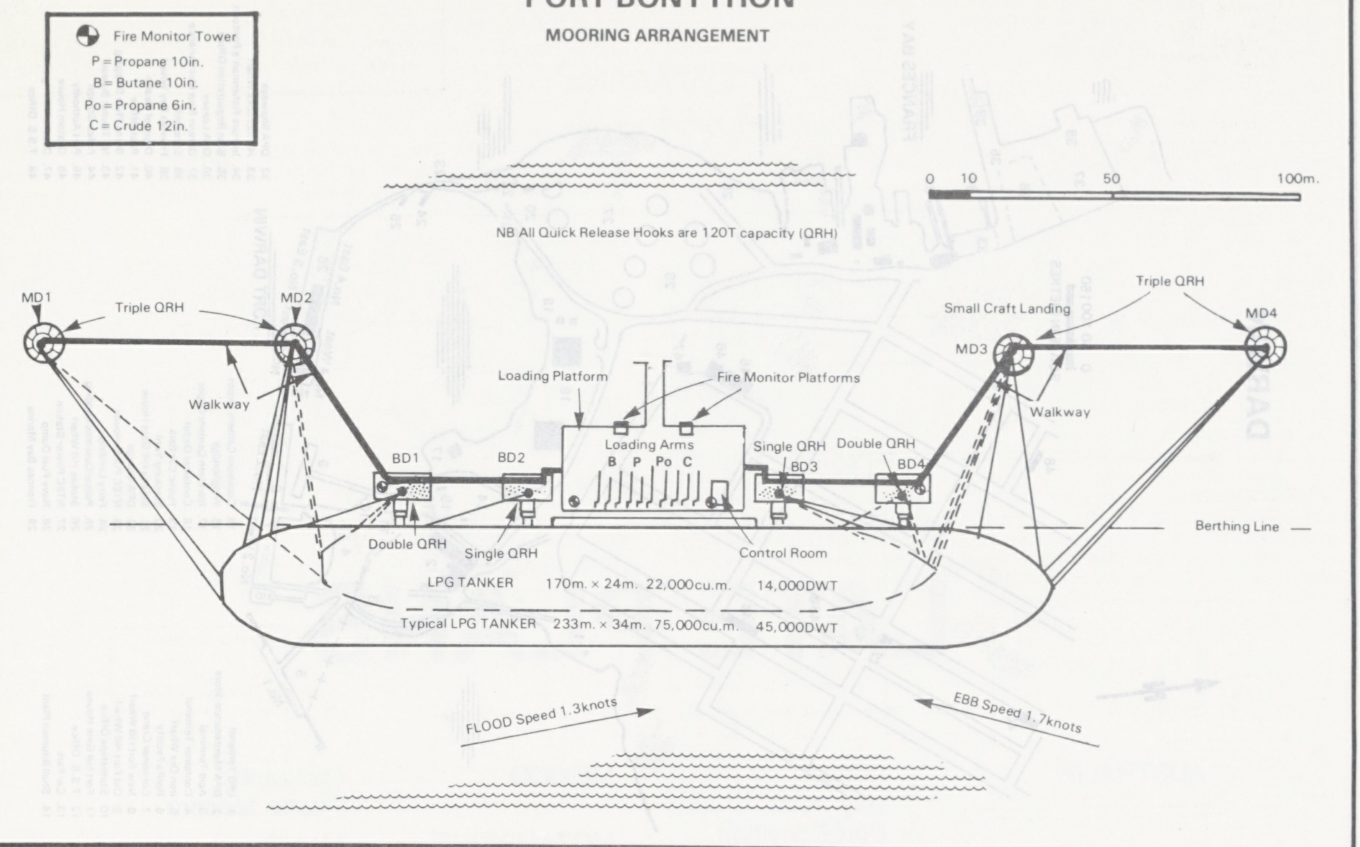
DARWIN


N
0 50 100 150
SCALE IN METRES
FRANCES BAY
PORT DARWIN
No. 1
No.2 West
No.2 East
No.3 West
No.3 East
No.4 West
No.4 East
No.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48

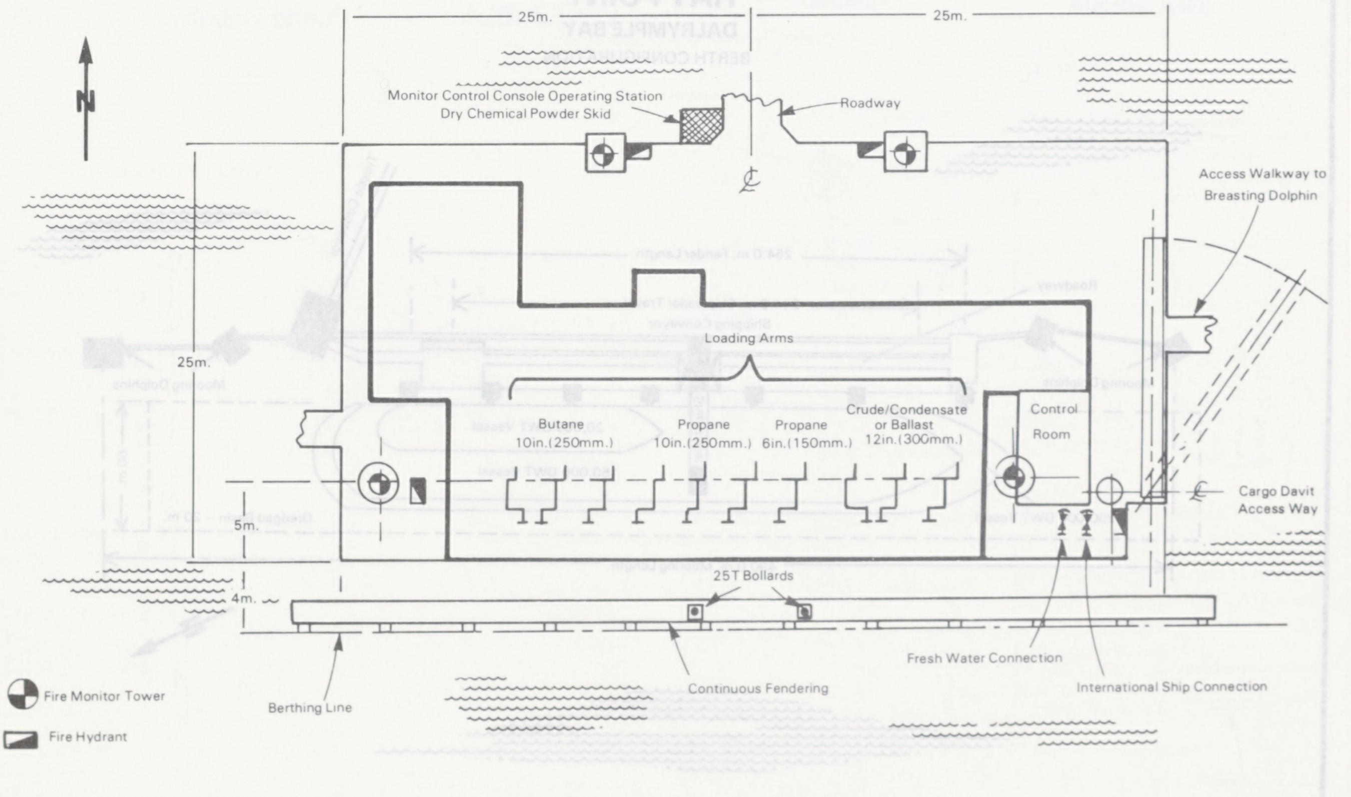
1. LPG Terminal
2. DPA Maintenance/Store
3. Acid Terminal
4. Container Terminal
5. Iron Ore Wharf
6. Ro/Ro Facility
7. Container Crane
8. New Fort Hill Wharf
9. Old Fort Hill Wharf
10. Stateships Office
11. Fort Hill Gate House
12. T.S.S. Office
13. Car Park
14. Shell Bitumen Plant
15. Cockburn Cement Depot
16. Weighbridge
17. Northern Cement Depot
18. Container Depot
19. Public Car Park
20. Stacking Yard
21. Stokes Hill Gate House
22. DPA Garage
23. NTEC Pump House
24. Ferry Landing
25. Police/Customs Landing
26. Stokes Hill Wharf
27. NTEC Power Station
28. Navy Fuel Dump
29. Frances Bay Marine
32. DPA Slipways
33. Hornibrooks Wharf
34. Inshore Fisherman's Pontoon
35. Boat Registration Office
36. DPA Leases
37. Darwin Ship Maintenance
38. Syncrolift
39. Frances Bay Wharf
40. Dept. of Health
41. Post Office
42. Burns Philp Shipping
43. NT Tourist Bureau
44. Police Station
45. Port Authority
46. Custom House
47. Dept. of Immigration
48. T.S.S. Office

PORT BONYTHON

MOORING ARRANGEMENT


Fire Monitor Tower
P = Propane 10in.
B = Butane 10in.
Po = Propane 6in.
C = Crude 12in.
0
10
50
100m.
NB All Quick Release Hooks are 120T capacity (QRH)
MD1
Triple QRH
MD2
Walkway
Small Craft Landing
Triple QRH
MD4
MD3
Walkway
Loading Platform
Fire Monitor Platforms
Loading Arms
B P Po C
Single QRH
Double QRH
BD1
BD2
BD3
BD4
Berthing Line
Double QRH
Single QRH
Control Room
LPG TANKER 170m. × 24m. 22,000cu.m. 14,000DWT
Typical LPG TANKER 233m. × 34m. 75,000cu.m. 45,000DWT
FLOOD Speed 1.3knots
EBB Speed 1.7knots

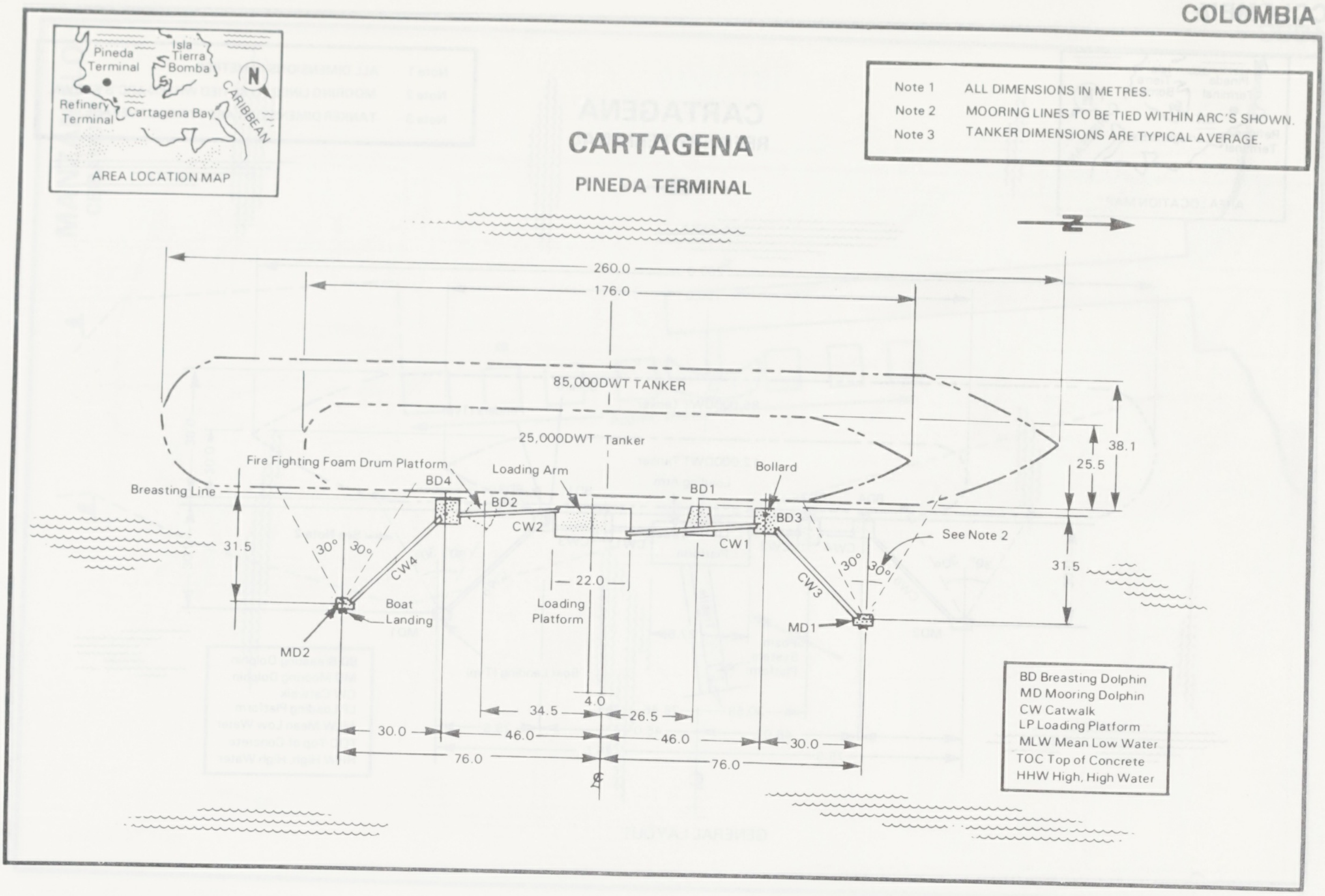
PORT BONYTHON


25m.
25m.
N
Monitor Control Console Operating Station
Dry Chemical Powder Skid
Roadway
Access Walkway to
Breasting Dolphin
25m.
Loading Arms
Butane
10in.(250mm.)
Propane
10in.(250mm.)
Propane
6in.(150mm.)
Crude/Condensate
or Ballast
12in.(300mm.)
Control
Room
Cargo Davit
Access Way
5m.
4m.
25T Bollards
Fresh Water Connection
International Ship Connection
Continuous Fendering
Berthing Line
Fire Monitor Tower
Fire Hydrant

JETTY HEAD — GENERAL ARRANGEMENT

CARTAGENA

PINEDA TERMINAL


Pineda Terminal
Isla Tierra Bomba
Refinery Terminal
Cartagena Bay
CARIBBEAN
N
AREA LOCATION MAP
N
260.0
176.0
85,000DWT TANKER
25,000DWT Tanker
38.1
25.5
Fire Fighting Foam Drum Platform
Loading Arm
Bollard
Breasting Line
BD4
BD2
BD1
BD3
CW2
CW1
CW4
CW3
31.5
30°
30°
30°
30°
See Note 2
31.5
Boat Landing
22.0
Loading Platform
MD2
MD1
4.0
34.5
26.5
30.0
46.0
46.0
30.0
76.0
76.0
℄

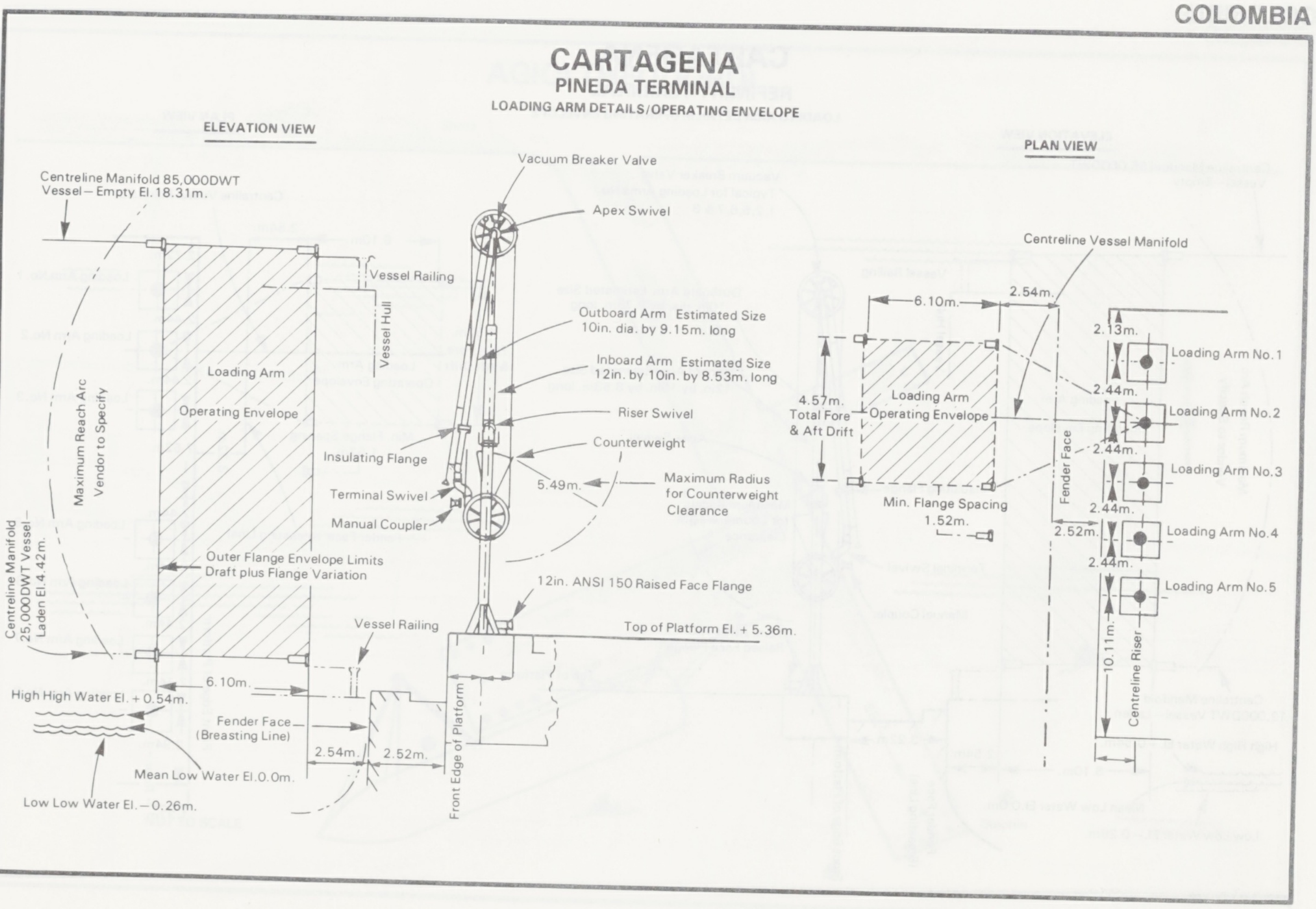
Note 1 ALL DIMENSIONS IN METRES.
Note 2 MOORING LINES TO BE TIED WITHIN ARC'S SHOWN.
Note 3 TANKER DIMENSIONS ARE TYPICAL AVERAGE.

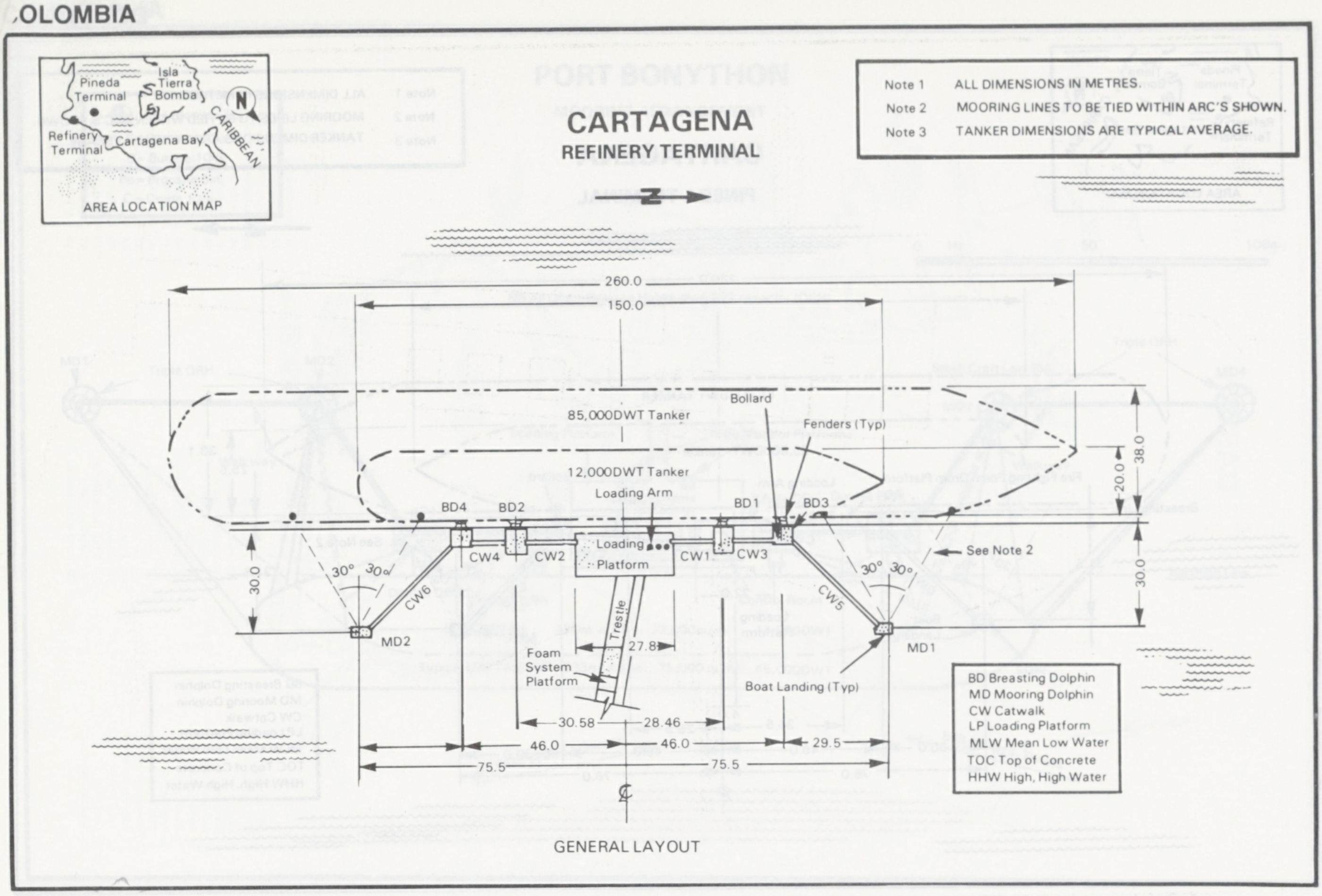
BD Breasting Dolphin
MD Mooring Dolphin
CW Catwalk
LP Loading Platform
MLW Mean Low Water
TOC Top of Concrete
HHW High, High Water

CARTAGENA

PINEDA TERMINAL

LOADING ARM DETAILS/OPERATING ENVELOPE


ELEVATION VIEW
Centreline Manifold 85,000DWT Vessel – Empty El. 18.31m.
Vessel Railing
Vessel Hull
Loading Arm
Operating Envelope
Maximum Reach Arc Vendor to Specify
Centreline Manifold 25,000DWT Vessel – Laden El. 4.42m.
Outer Flange Envelope Limits Draft plus Flange Variation
Vessel Railing
6.10m.
High High Water El. + 0.54m.
Fender Face (Breasting Line)
2.54m.
2.52m.
Mean Low Water El. 0.0m.
Low Low Water El. – 0.26m.
Front Edge of Platform
Vacuum Breaker Valve
Apex Swivel
Outboard Arm Estimated Size 10in. dia. by 9.15m. long
Inboard Arm Estimated Size 12in. by 10in. by 8.53m. long
Riser Swivel
Counterweight
Insulating Flange
5.49m.
Maximum Radius for Counterweight Clearance
Terminal Swivel
Manual Coupler
12in. ANSI 150 Raised Face Flange
Top of Platform El. + 5.36m.
PLAN VIEW
Centreline Vessel Manifold
6.10m.
2.54m.
4.57m. Total Fore & Aft Drift
Loading Arm Operating Envelope
Min. Flange Spacing 1.52m.
Fender Face
2.13m.
Loading Arm No. 1
2.44m.
Loading Arm No. 2
2.44m.
Loading Arm No. 3
2.44m.
Loading Arm No. 4
2.52m.
2.44m.
Loading Arm No. 5
10.11m.
Centreline Riser



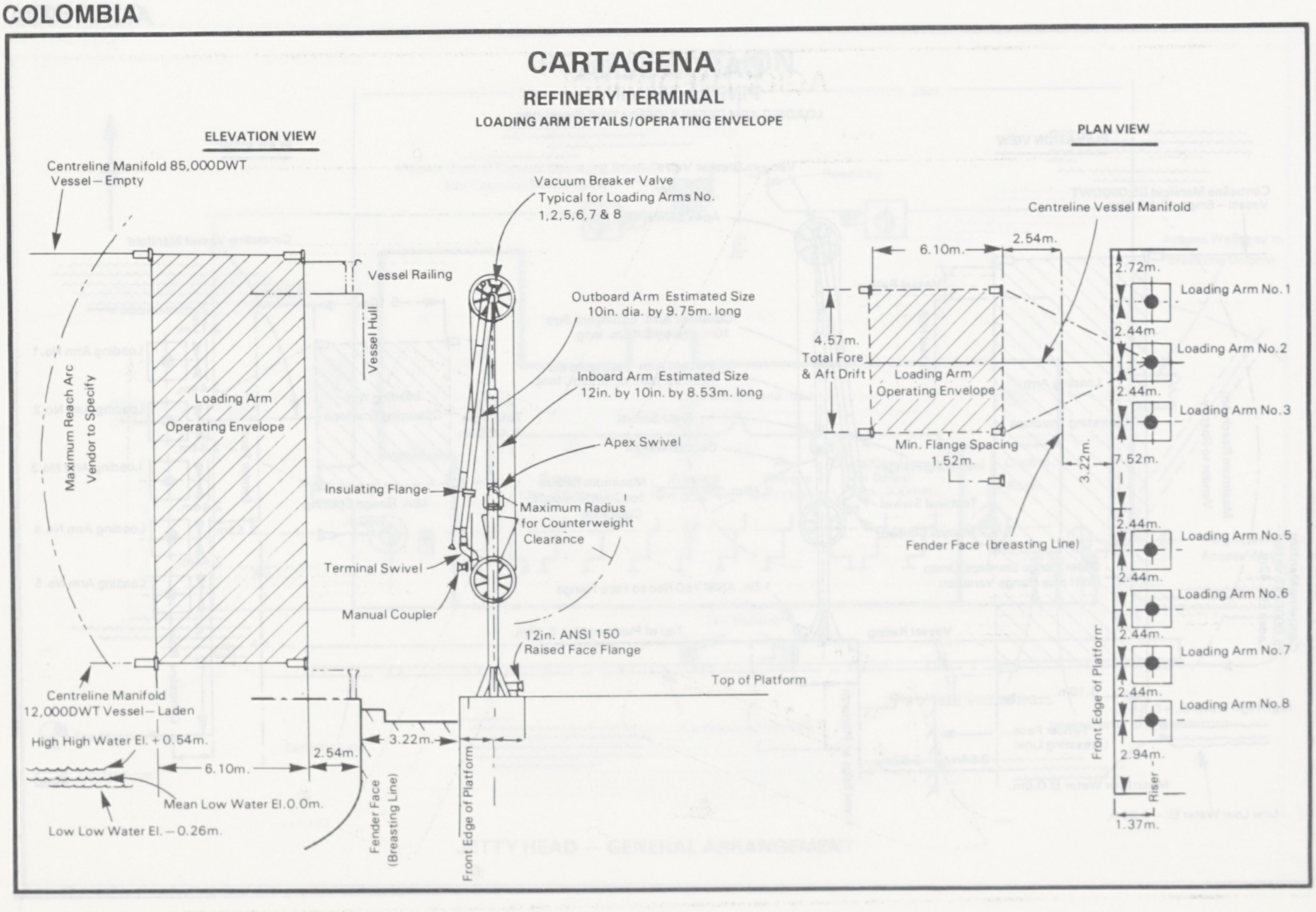
CARTAGENA
REFINERY TERMINAL

Note 1 ALL DIMENSIONS IN METRES.
Note 2 MOORING LINES TO BE TIED WITHIN ARC'S SHOWN.
Note 3 TANKER DIMENSIONS ARE TYPICAL AVERAGE.

BD Breasting Dolphin
MD Mooring Dolphin
CW Catwalk
LP Loading Platform
MLW Mean Low Water
TOC Top of Concrete
HHW High, High Water

GENERAL LAYOUT

Pineda Terminal
Isla Tierra Bomba
N
CARIBBEAN
Refinery Terminal
Cartagena Bay
AREA LOCATION MAP
N
260.0
150.0
Bollard
85,000DWT Tanker
Fenders (Typ)
12,000DWT Tanker
Loading Arm
38.0
20.0
BD4
BD2
BD1
BD3
Loading Platform
CW4
CW2
CW1
CW3
See Note 2
30.0
30°
30°
CW6
30°
30°
CW5
30.0
Trestle
MD2
MD1
27.8
Foam System Platform
Boat Landing (Typ)
30.58
28.46
46.0
46.0
29.5
75.5
75.5
℄

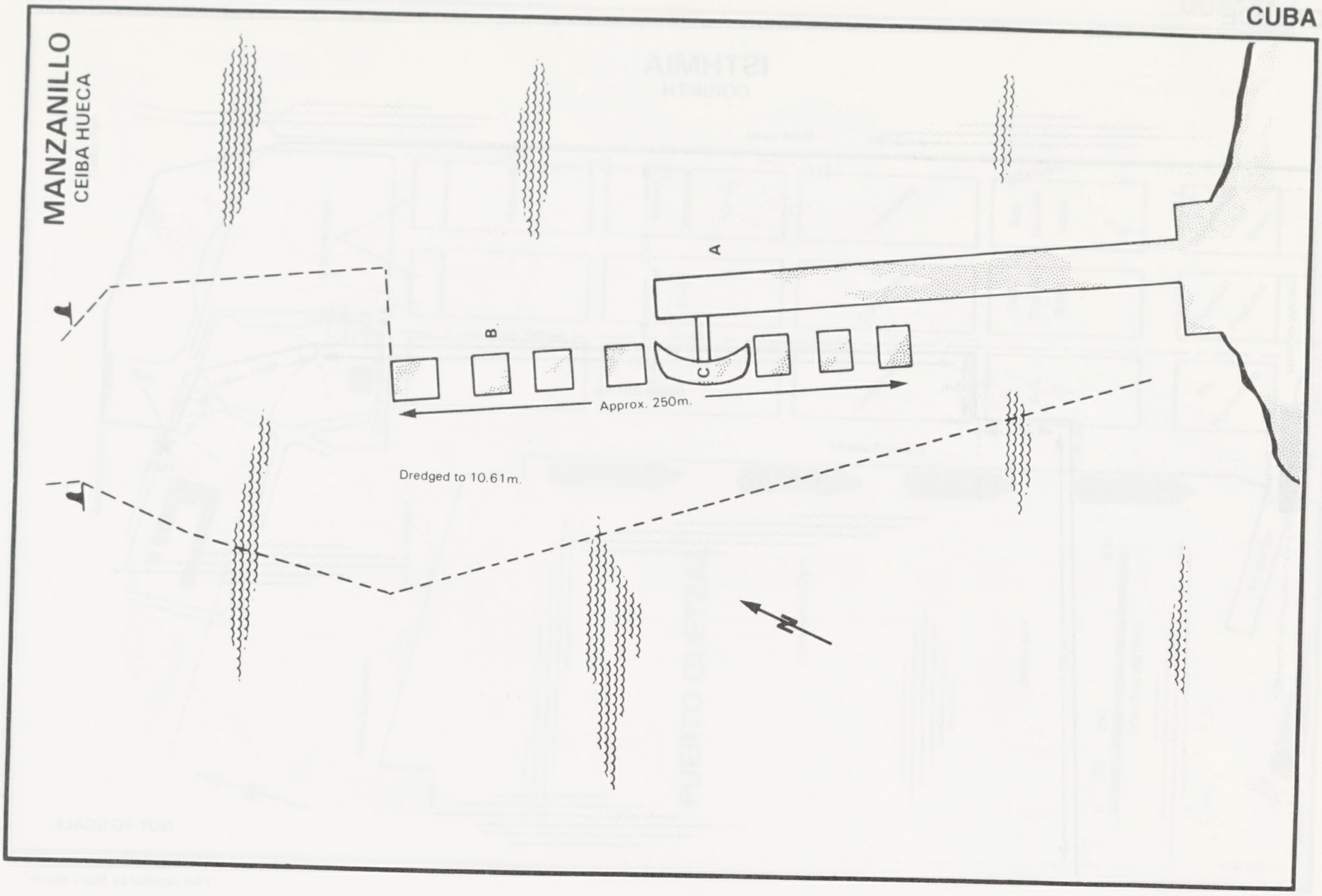


CARTAGENA
REFINERY TERMINAL
LOADING ARM DETAILS/OPERATING ENVELOPE

ELEVATION VIEW
Centreline Manifold 85,000DWT Vessel—Empty
Vacuum Breaker Valve Typical for Loading Arms No. 1,2,5,6,7 & 8
Vessel Railing
Vessel Hull
Outboard Arm Estimated Size 10in. dia. by 9.75m. long
Maximum Reach Arc Vendor to Specify
Loading Arm Operating Envelope
Inboard Arm Estimated Size 12in. by 10in. by 8.53m. long
Apex Swivel
Insulating Flange
Maximum Radius for Counterweight Clearance
Terminal Swivel
Manual Coupler
12in. ANSI 150 Raised Face Flange
Top of Platform
Centreline Manifold 12,000DWT Vessel—Laden
High High Water El. + 0.54m.
3.22m.
6.10m.
2.54m.
Mean Low Water El. 0.0m.
Low Low Water El. – 0.26m.
Fender Face (Breasting Line)
Front Edge of Platform
PLAN VIEW
Centreline Vessel Manifold
6.10m.
2.54m.
2.72m.
Loading Arm No.1
4.57m. Total Fore & Aft Drift
2.44m.
Loading Arm No.2
Loading Arm Operating Envelope
2.44m.
Loading Arm No.3
Min. Flange Spacing 1.52m.
3.22m.
7.52m.
Fender Face (breasting Line)
2.44m.
Loading Arm No.5
2.44m.
Loading Arm No.6
2.44m.
Loading Arm No.7
2.44m.
Loading Arm No.8
Front Edge of Platform
2.94m.
Riser
1.37m.

CUBA

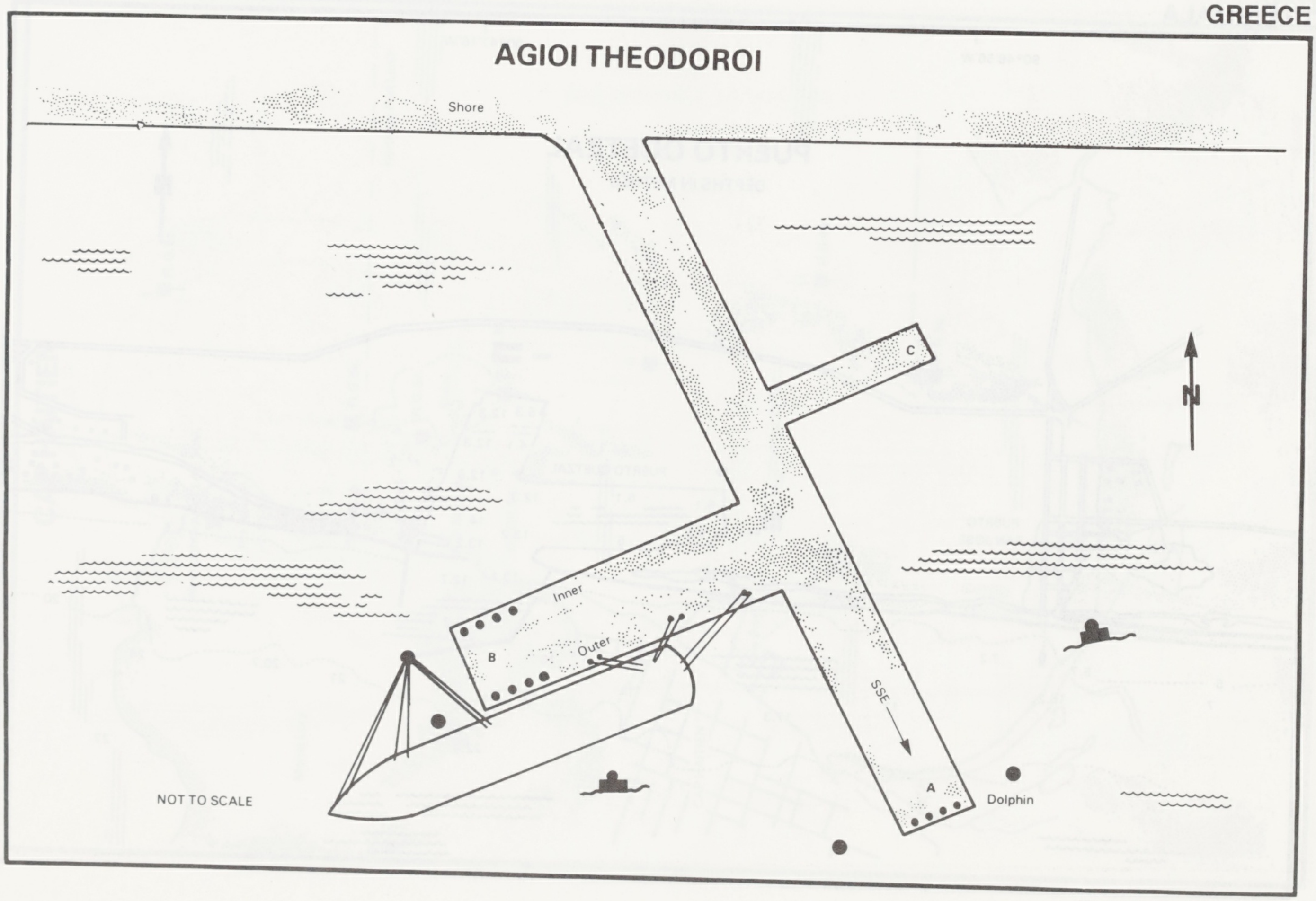
MANZANILLO
CEIBA HUECA


A
B
C
Approx. 250m.
Dredged to 10.61m.
N

"Plan supplied by Ship's Master"

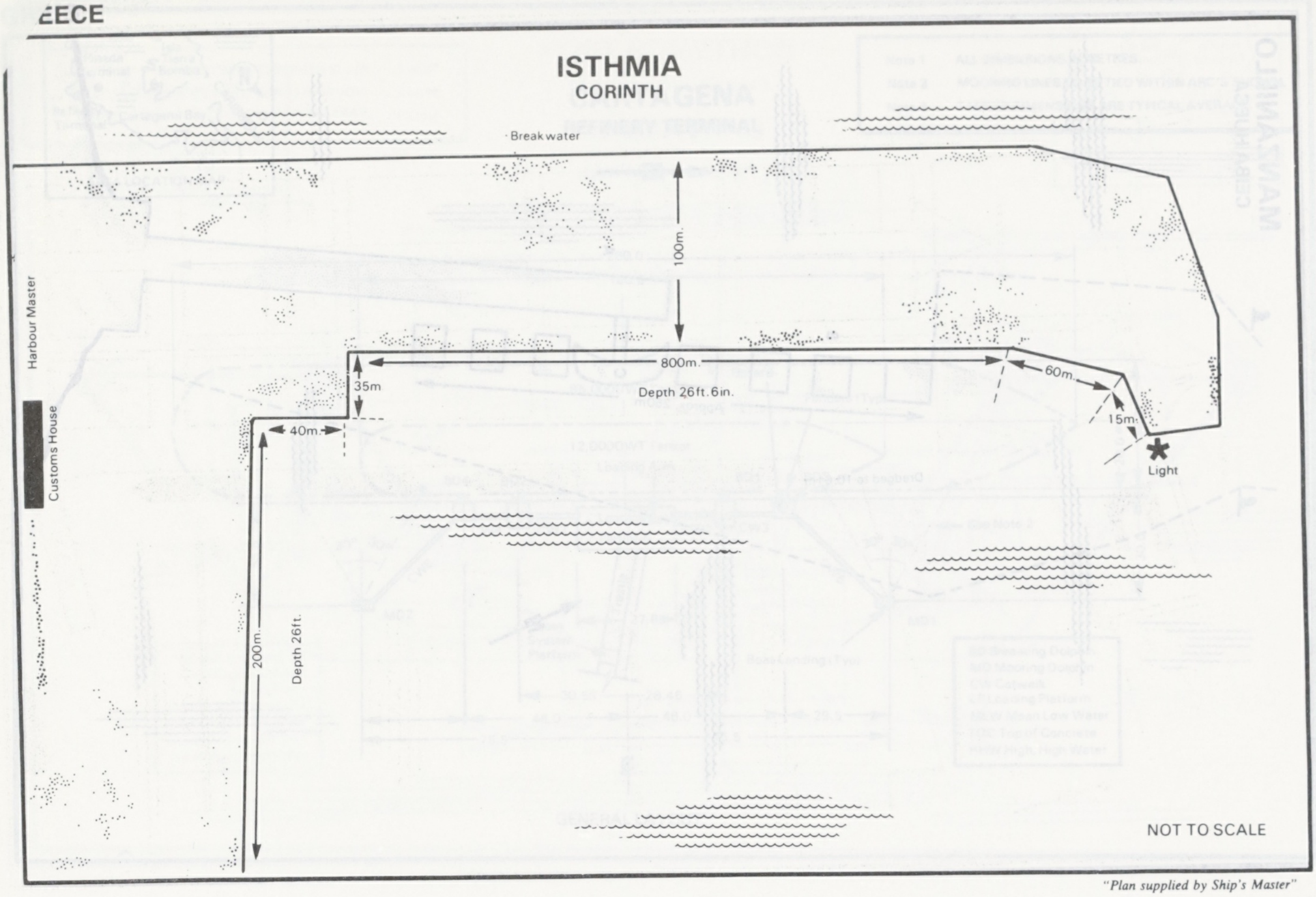
GREECE

AGIOI THEODOROI


Shore
C
N
Inner
B
Outer
SSE
A
Dolphin
NOT TO SCALE

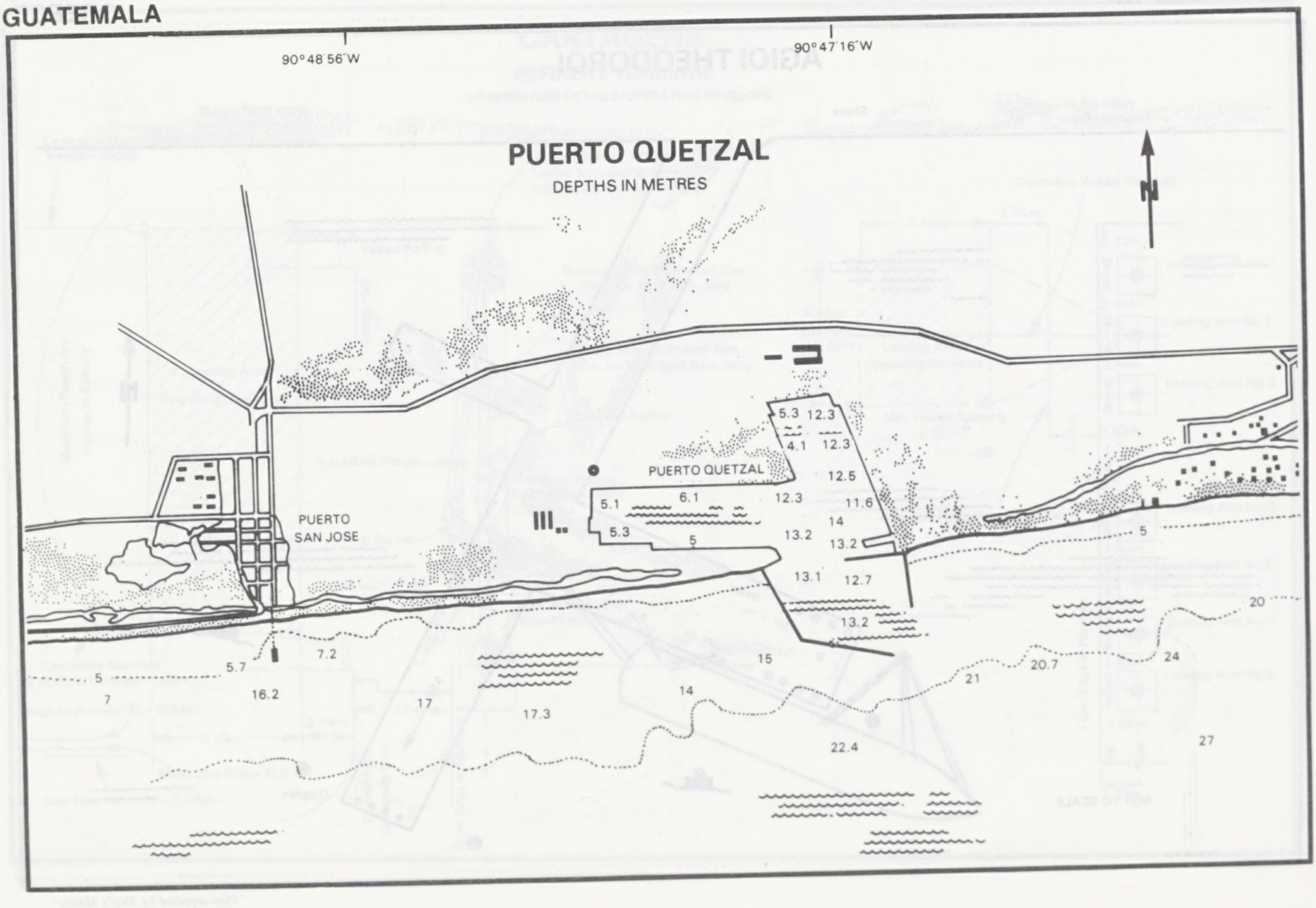
"Plan supplied by Ship's Master"

EECE

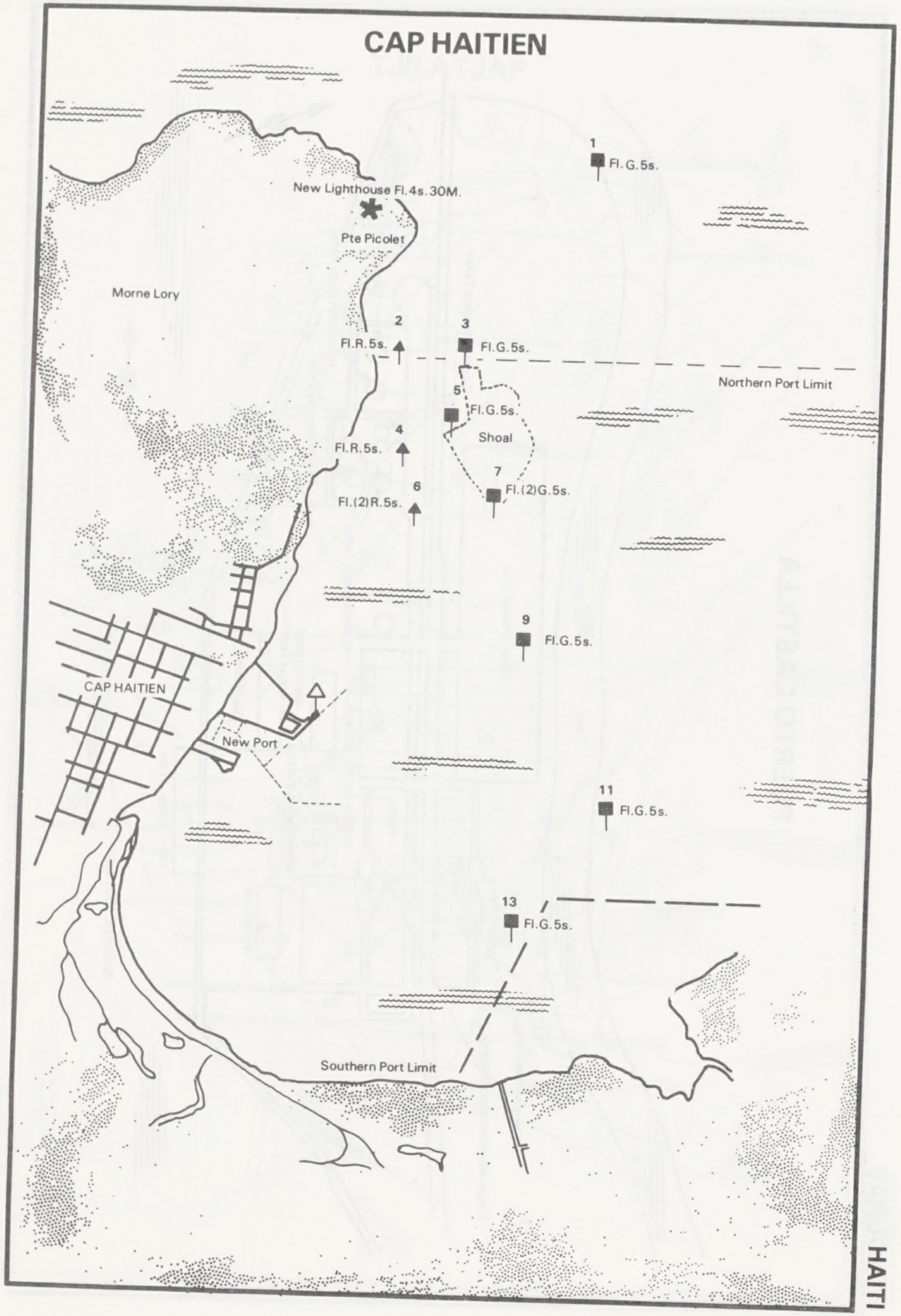

ISTHMIA
CORINTH
Breakwater
100m.
Harbour Master
Customs House
800m.
35m
Depth 26ft. 6in.
60m.
15m.
Light
40m
200m.
Depth 26ft.
NOT TO SCALE

"Plan supplied by Ship's Master"

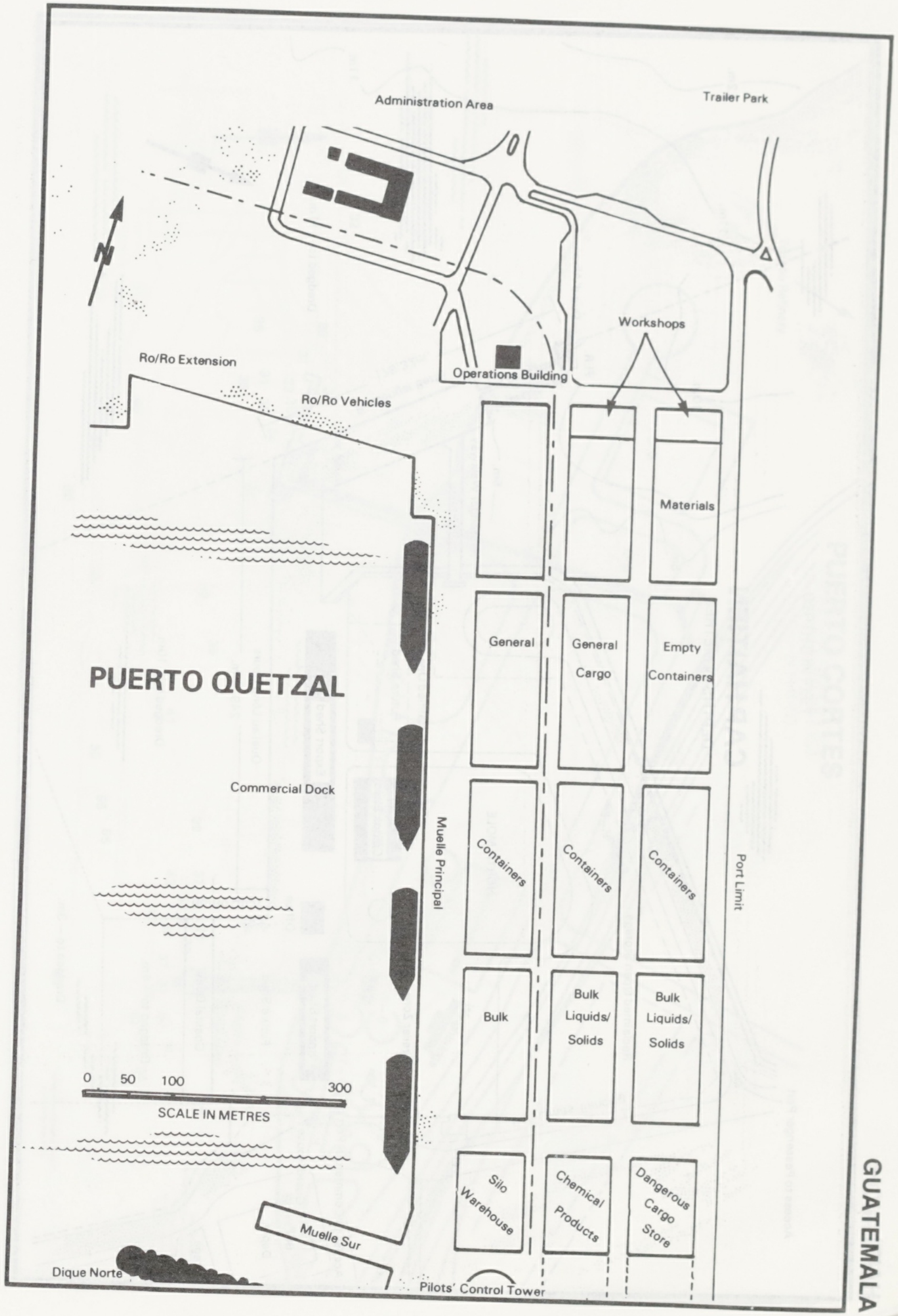
GUATEMALA


90° 48' 56" W
90° 47' 16" W
PUERTO QUETZAL
DEPTHS IN METRES
N
5.3
12.3
4.1
12.3
PUERTO QUETZAL
12.5
5.1
6.1
12.3
11.6
PUERTO SAN JOSE
5.3
5
13.2
14
13.2
5
13.1
12.7
13.2
20
5.7
7.2
15
20.7
24
5
21
7
16.2
17
14
17.3
27
22.4

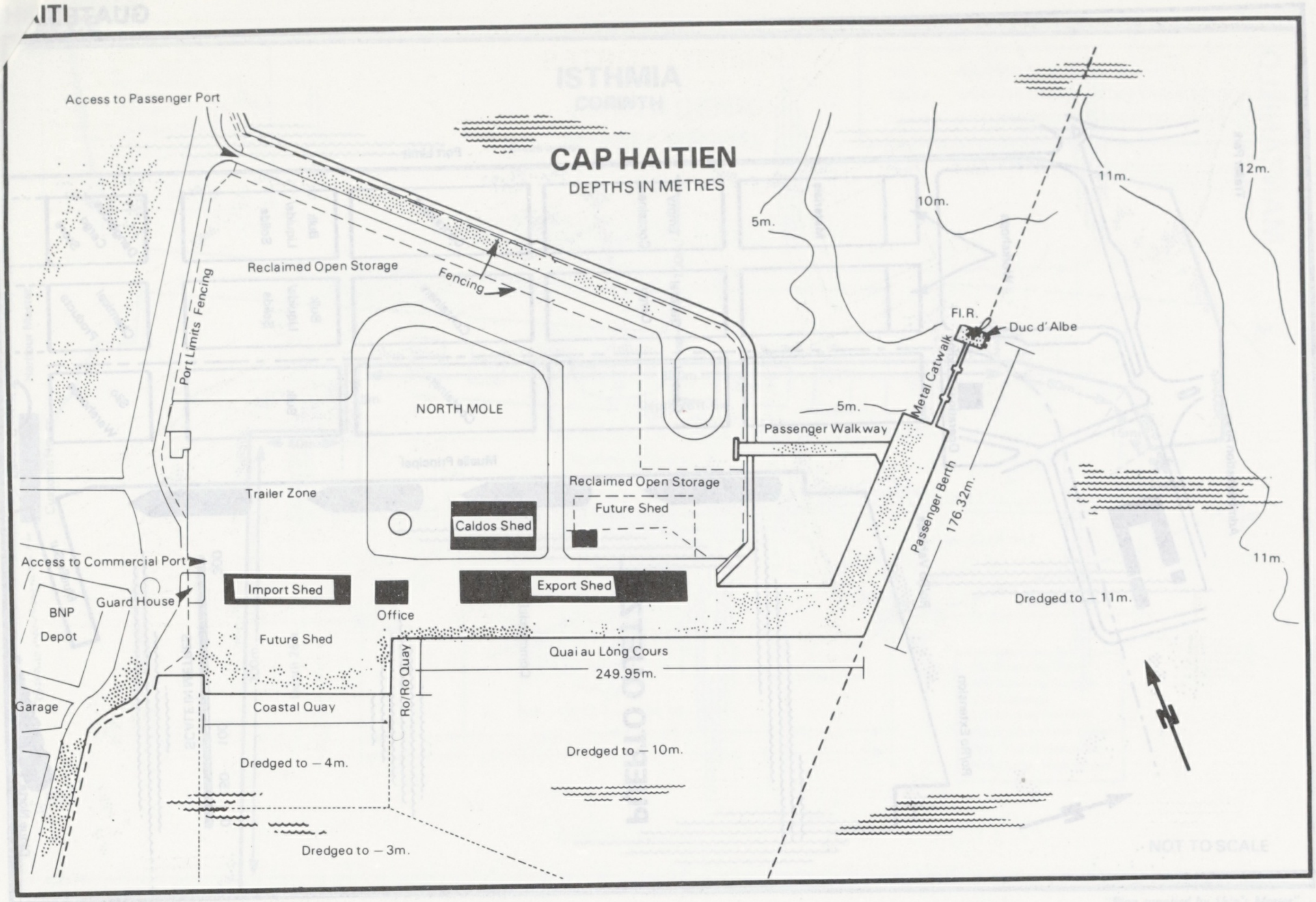
CAP HAITIEN


1
Fl.G.5s.
New Lighthouse Fl.4s.30M.
Pte Picolet
Morne Lory
2
Fl.R.5s.
3
Fl.G.5s.
Northern Port Limit
5
Fl.G.5s.
Shoal
4
Fl.R.5s.
6
Fl.(2)R.5s.
7
Fl.(2)G.5s.
9
Fl.G.5s.
CAP HAITIEN
New Port
11
Fl.G.5s.
13
Fl.G.5s.
Southern Port Limit

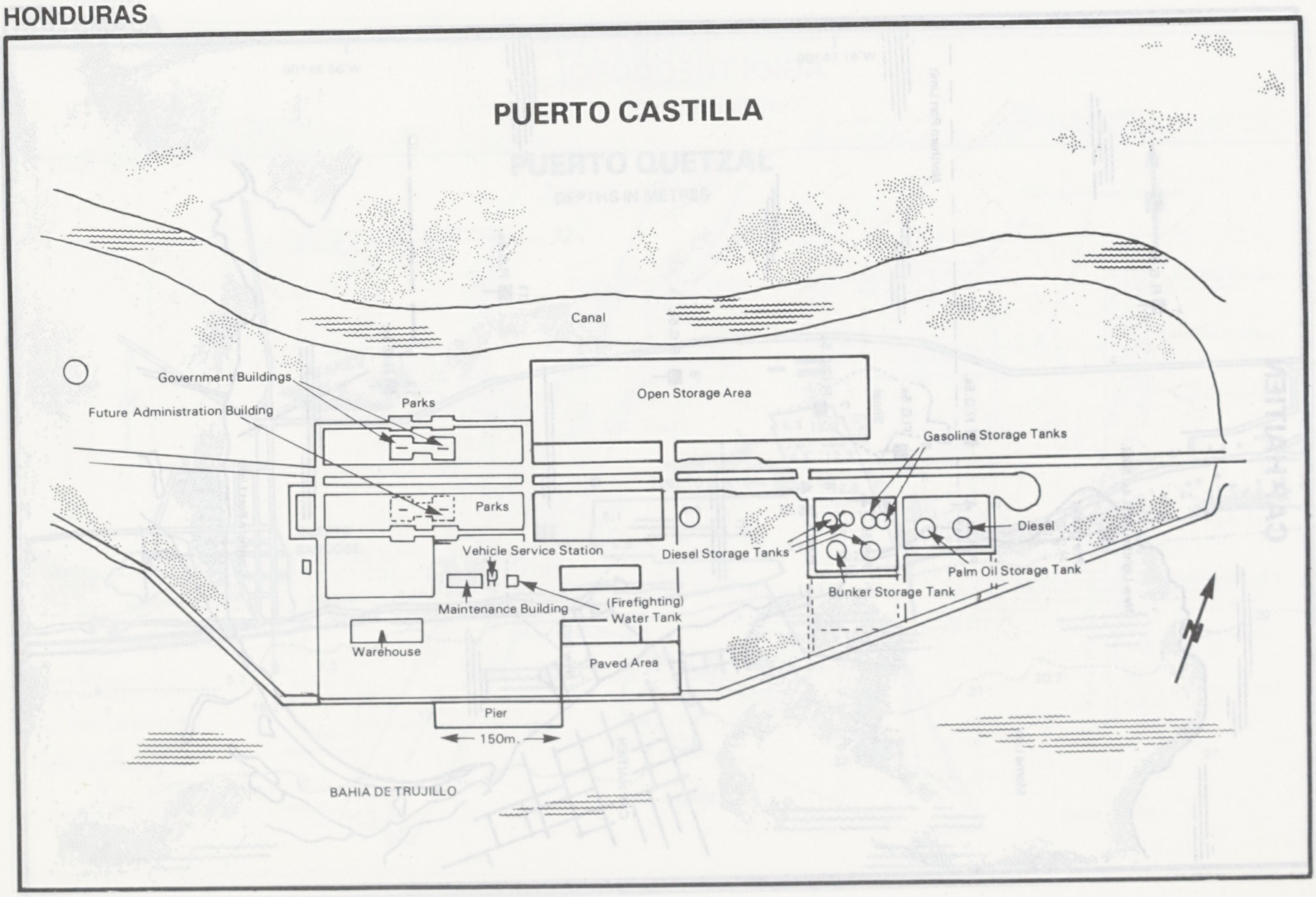
PUERTO QUETZAL

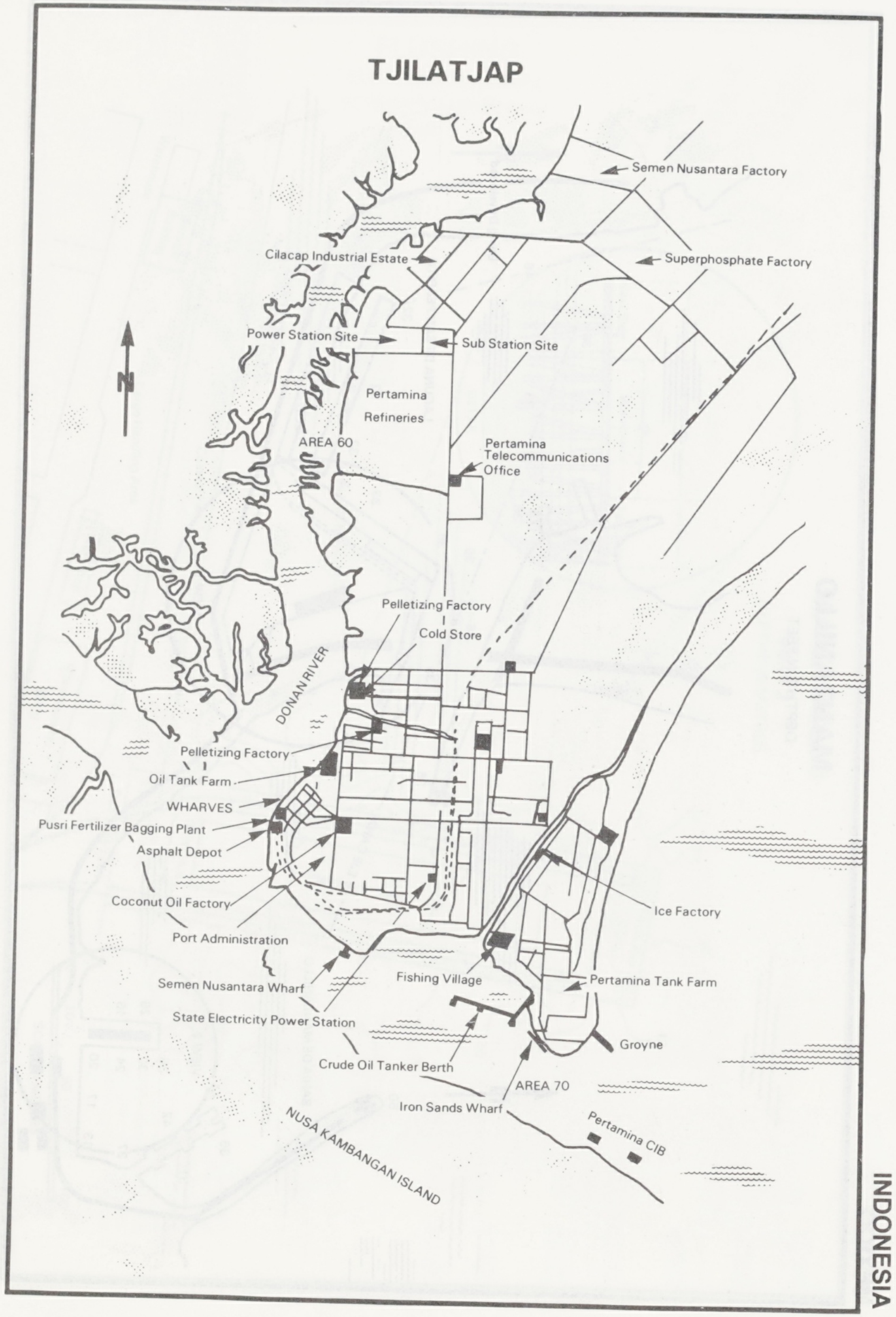

Administration Area
Trailer Park
Ro/Ro Extension
Operations Building
Workshops
Ro/Ro Vehicles
Materials
General
General Cargo
Empty Containers
Commercial Dock
Muelle Principal
Containers
Containers
Containers
Port Limit
Bulk
Bulk Liquids/ Solids
Bulk Liquids/ Solids
0
50
100
300
SCALE IN METRES
Silo Warehouse
Chemical Products
Dangerous Cargo Store
Muelle Sur
Dique Norte
Pilots' Control Tower

HAITI


CAP HAITIEN
DEPTHS IN METRES
Access to Passenger Port
Port Limits Fencing
Reclaimed Open Storage
Fencing
5m.
10m.
11m.
12m.
Fl.R.
Duc d'Albe
Metal Catwalk
5m.
Passenger Walkway
NORTH MOLE
Reclaimed Open Storage
Future Shed
Trailer Zone
Caldos Shed
Passenger Berth
176.32m.
11m.
Access to Commercial Port
Guard House
BNP
Depot
Import Shed
Office
Export Shed
Dredged to – 11m.
Future Shed
Ro/Ro Quay
Quai au Long Cours
249.95m.
Garage
Coastal Quay
Dredged to – 4m.
Dredged to – 10m.
Dredgea to – 3m.
N

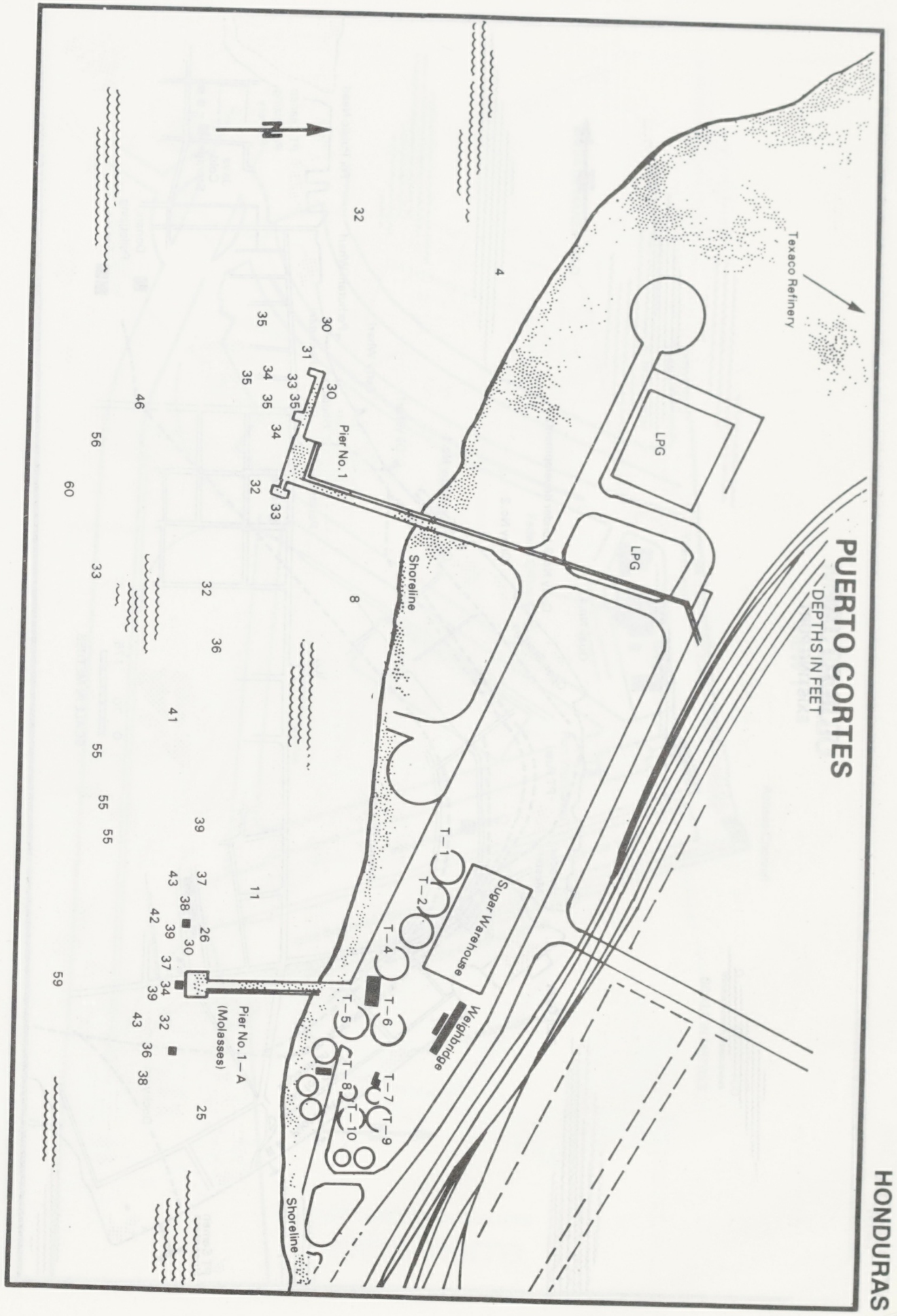
HONDURAS


PUERTO CASTILLA
Canal
Government Buildings
Open Storage Area
Future Administration Building
Parks
Gasoline Storage Tanks
Parks
Diesel
Vehicle Service Station
Diesel Storage Tanks
Palm Oil Storage Tank
Bunker Storage Tank
Maintenance Building
(Firefighting)
Water Tank
Warehouse
Paved Area
Pier
150m.
BAHIA DE TRUJILLO
N



TJILATJAP

N
Semen Nusantara Factory
Cilacap Industrial Estate
Superphosphate Factory
Power Station Site
Sub Station Site
Pertamina Refineries
AREA 60
Pertamina Telecommunications Office
Pelletizing Factory
Cold Store
DONAN RIVER
Pelletizing Factory
Oil Tank Farm
WHARVES
Pusri Fertilizer Bagging Plant
Asphalt Depot
Coconut Oil Factory
Port Administration
Semen Nusantara Wharf
State Electricity Power Station
Fishing Village
Ice Factory
Pertamina Tank Farm
Groyne
Crude Oil Tanker Berth
AREA 70
Iron Sands Wharf
Pertamina CIB
NUSA KAMBANGAN ISLAND

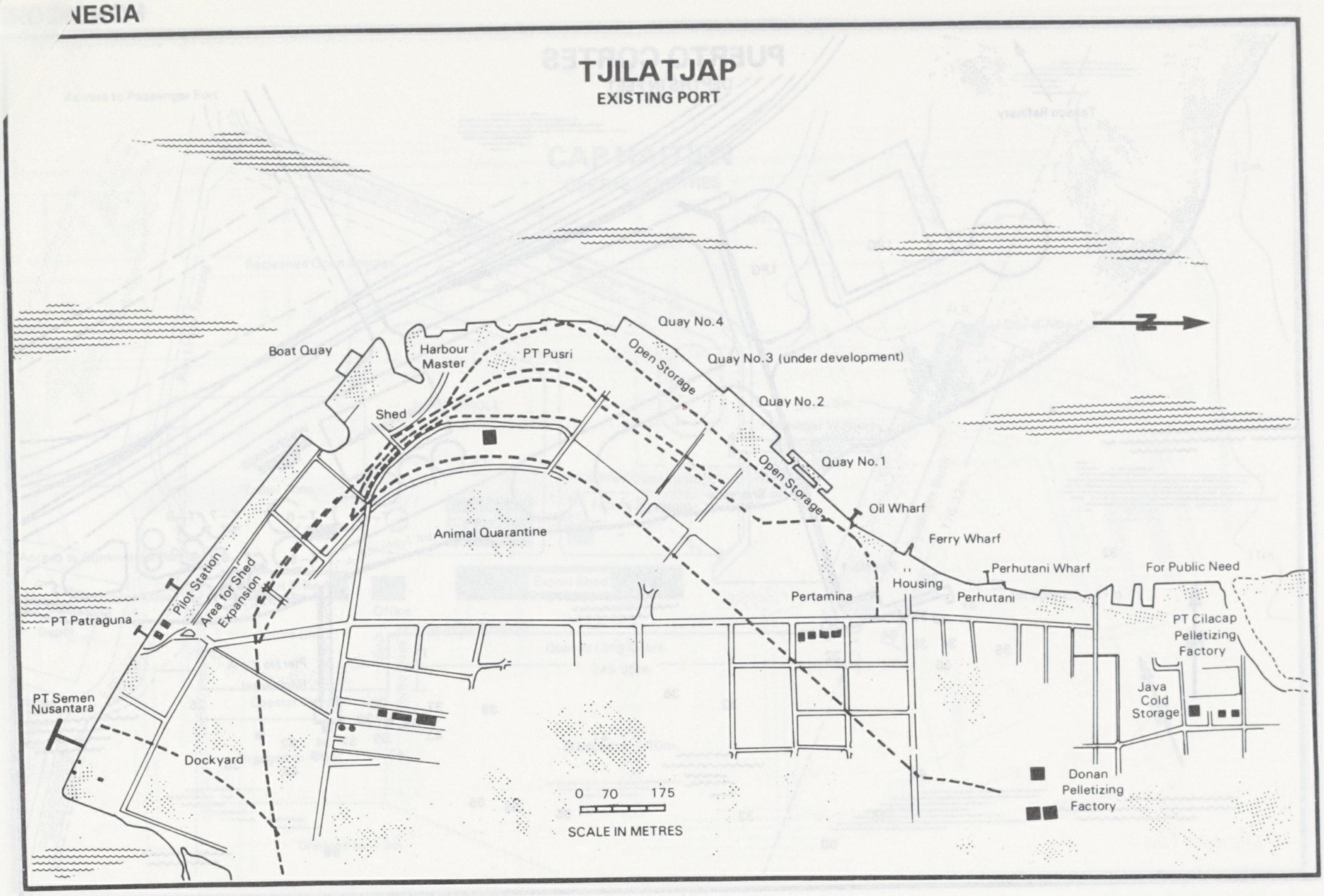


PUERTO CORTES

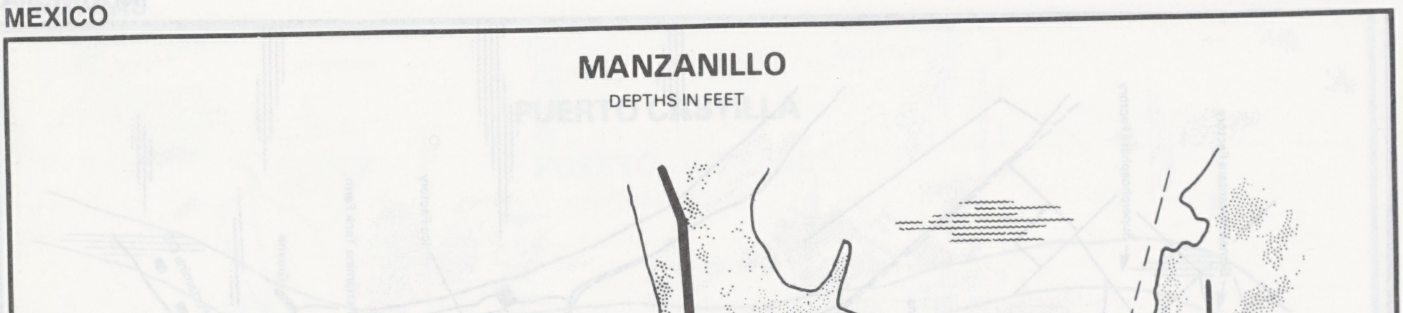
DEPTHS IN FEET

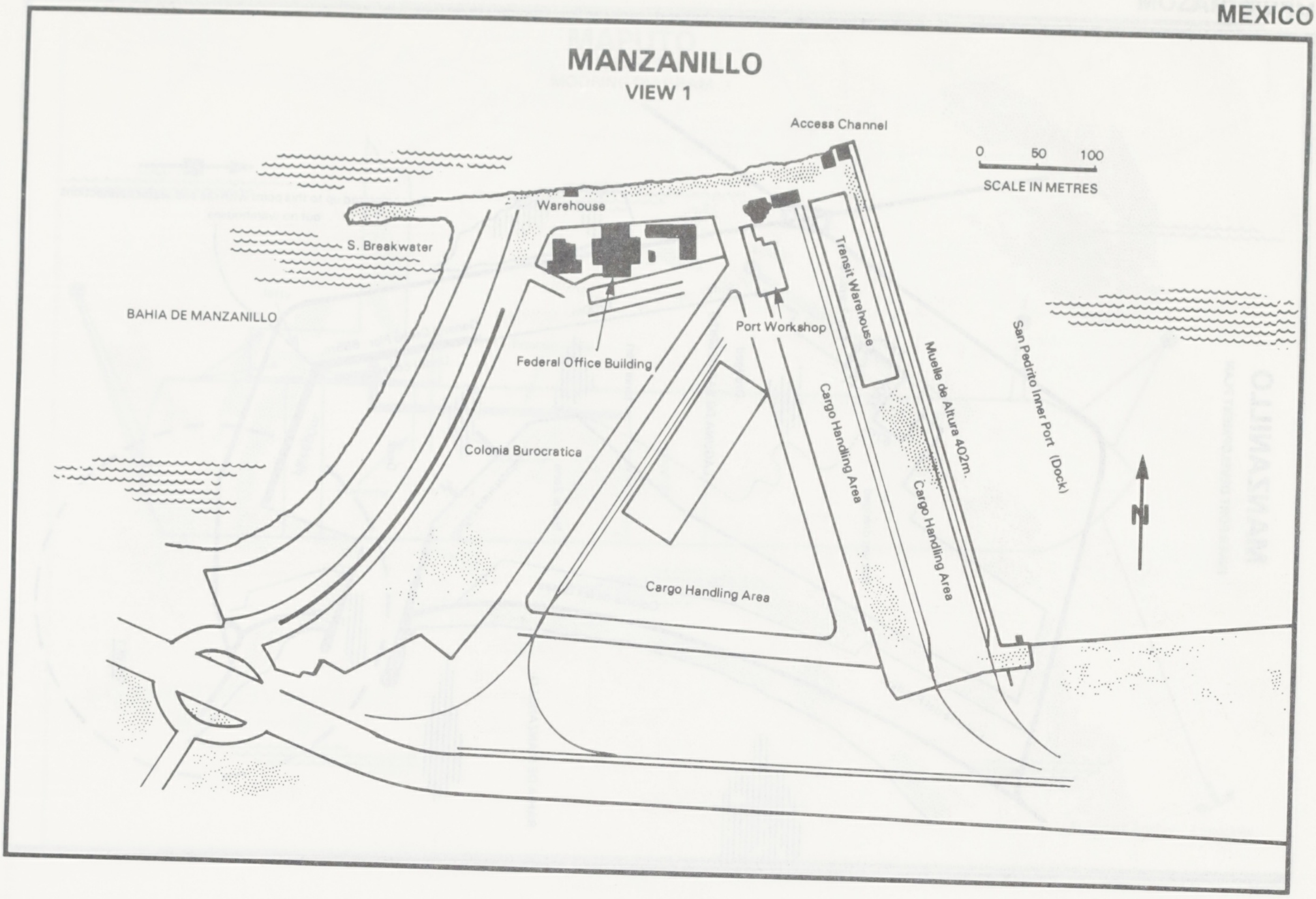
N
Texaco Refinery
LPG
LPG
Pier No. 1
Shoreline
Pier No. 1 – A (Molasses)
Shoreline
Sugar Warehouse
Weighbridge
T–1
T–2
T–4
T–5
T–6
T–7
T–8
T–9
T–10
32
4
30
35
31
34
33
35
30
35
34
46
56
60
32
33
8
33
32
36
41
55
55
55
39
11
37
43
38
26
42
39
30
37
34
39
32
43
36
38
25
59

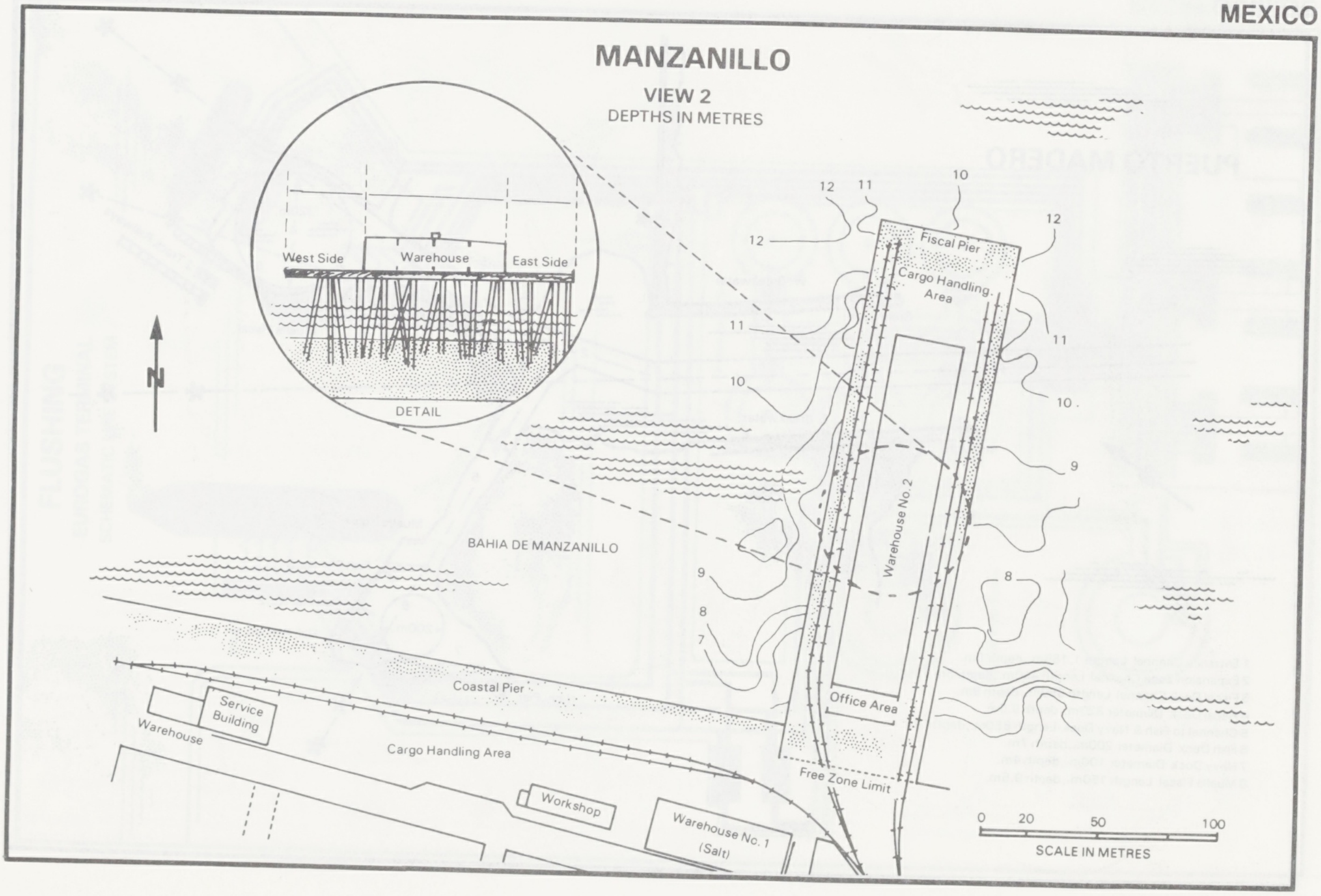
NESIA

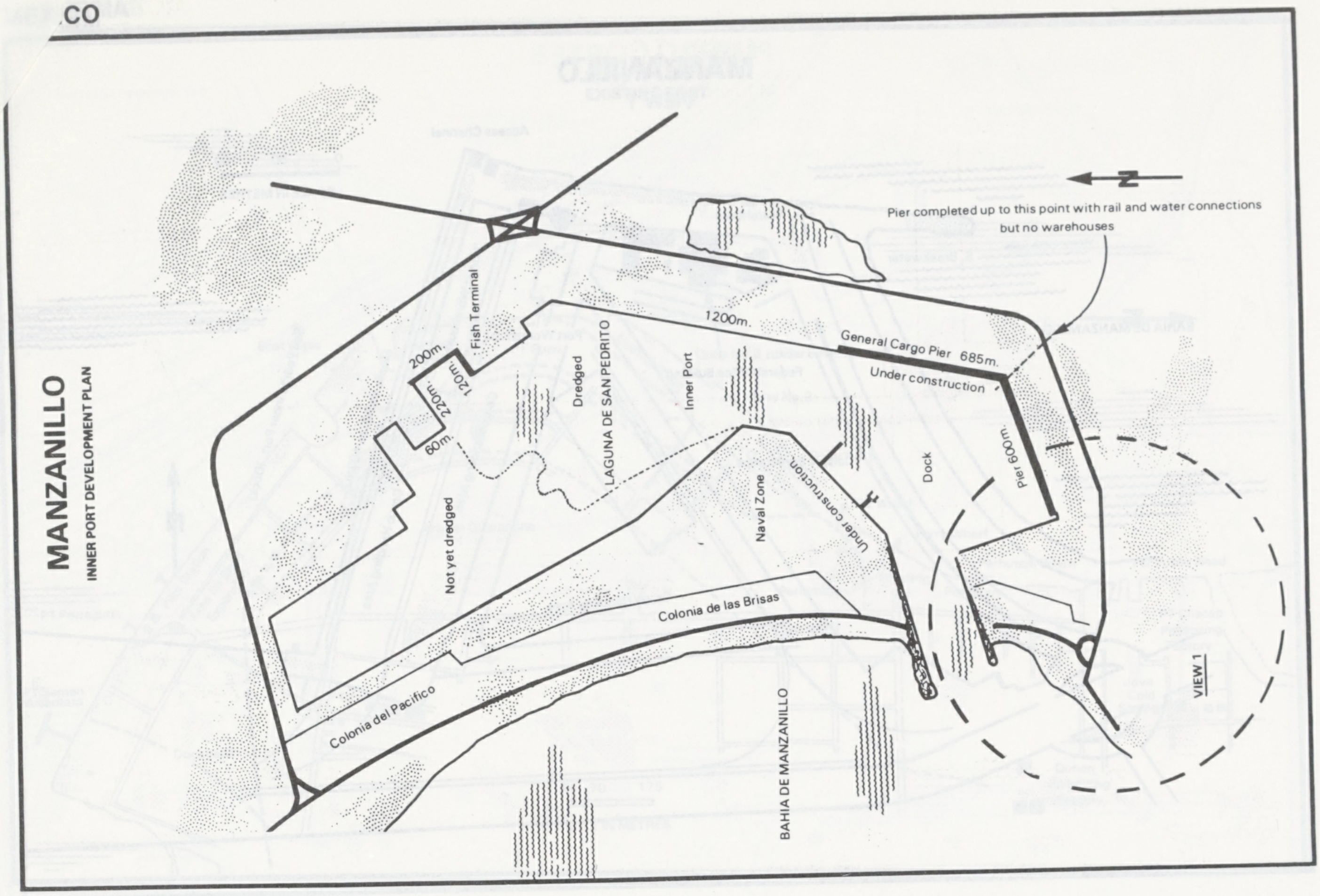

TJILATJAP
EXISTING PORT
N
Boat Quay
Harbour Master
PT Pusri
Quay No.4
Open Storage
Quay No.3 (under development)
Quay No.2
Shed
Quay No.1
Open Storage
Oil Wharf
Animal Quarantine
Ferry Wharf
Pilot Station
Area for Shed Expansion
Housing
Perhutani Wharf
For Public Need
Pertamina
Perhutani
PT Patraguna
PT Cilacap Pelletizing Factory
PT Semen Nusantara
Java Cold Storage
Dockyard
0 70 175
SCALE IN METRES
Donan Pelletizing Factory

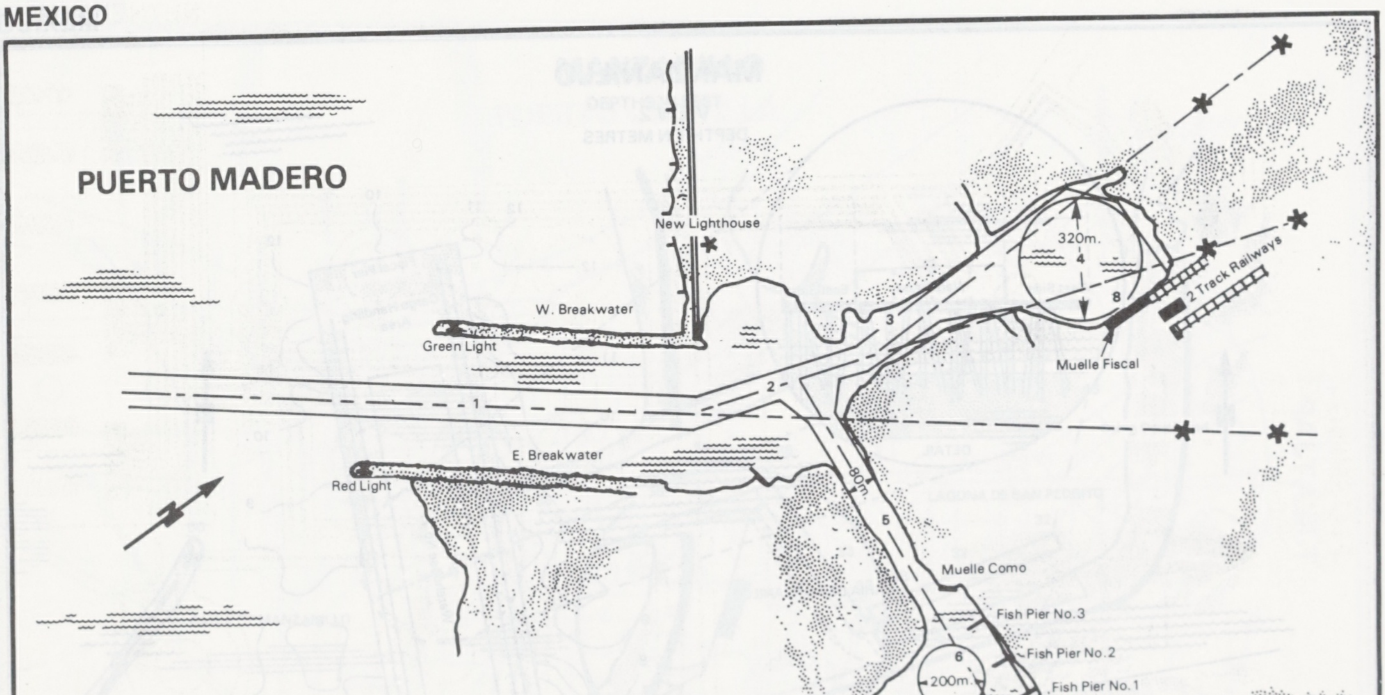
MEXICO


MANZANILLO
DEPTHS IN FEET
36
36
46
36
Being Developed
N
36
36
36
36
36
LAGUNA DE SAN PEDRITO
50
32
EJE CANAL
33
32
33
32
BAHIA DE MANZANILLO
36
44
VIEW 1
VIEW 2
31
42
36
26
30
24
16
37
13
17
20

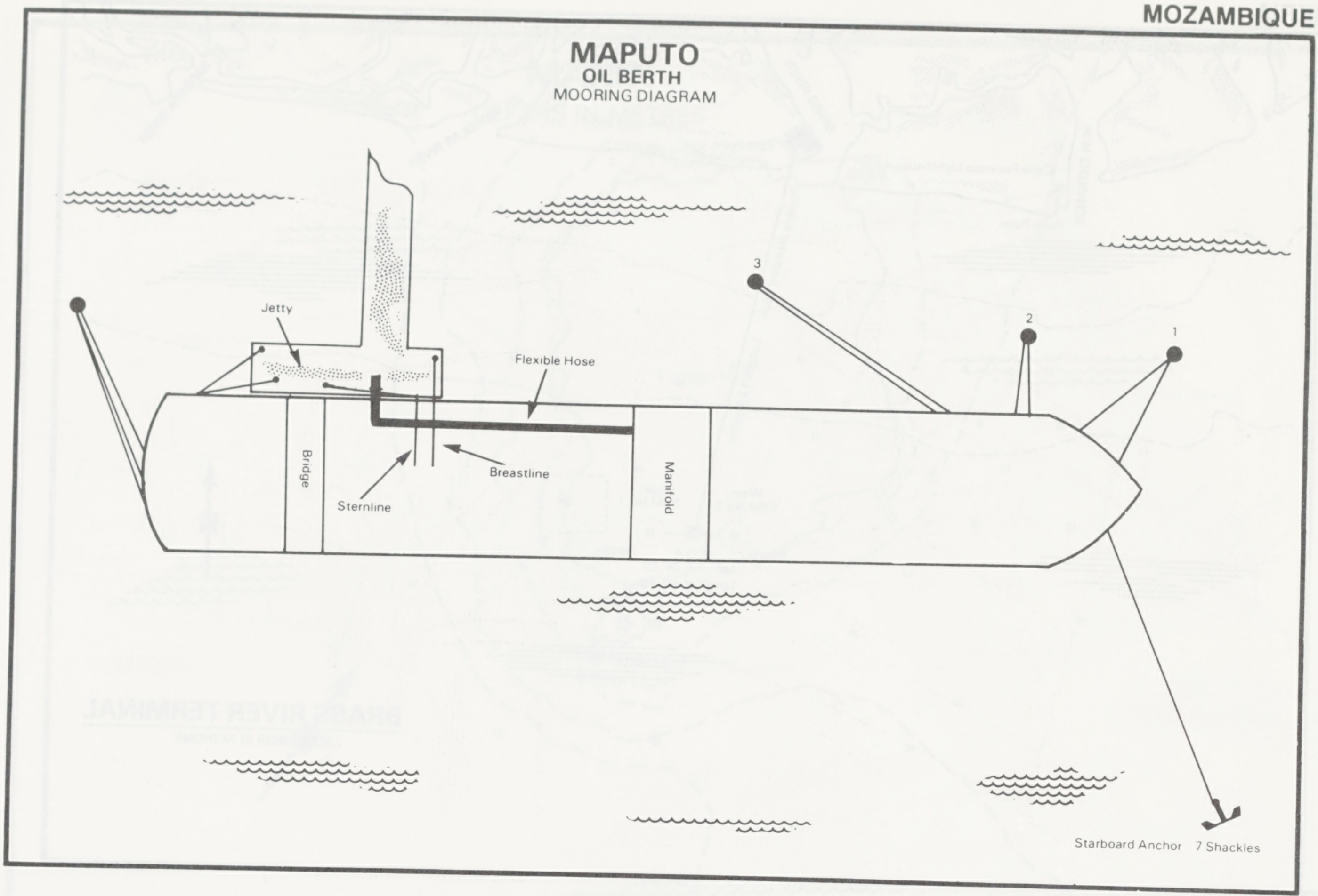

MANZANILLO
VIEW 1
Access Channel
0 50 100
SCALE IN METRES
Warehouse
S. Breakwater
BAHIA DE MANZANILLO
Federal Office Building
Port Workshop
Transit Warehouse
Muelle de Altura 402m.
San Pedrito Inner Port (Dock)
N
Colonia Burocratica
Cargo Handling Area
Cargo Handling Area
Cargo Handling Area


MANZANILLO
VIEW 2
DEPTHS IN METRES
West Side
Warehouse
East Side
DETAIL
N
12
11
10
12
12
Fiscal Pier
Cargo Handling Area
11
11
10
10
9
Warehouse No. 2
9
8
8
7
BAHIA DE MANZANILLO
Office Area
Free Zone Limit
Coastal Pier
Service Building
Warehouse
Cargo Handling Area
Workshop
Warehouse No. 1 (Salt)
0 20 50 100
SCALE IN METRES


MANZANILLO
INNER PORT DEVELOPMENT PLAN
Pier completed up to this point with rail and water connections but no warehouses
N
1200m.
General Cargo Pier 685m.
Under construction
Fish Terminal
200m.
120m.
220m.
60m.
Dredged
LAGUNA DE SAN PEDRITO
Inner Port
Not yet dredged
Naval Zone
Under construction
Dock
Pier 600m.
Colonia de las Brisas
Colonia del Pacifico
BAHIA DE MANZANILLO
VIEW 1


PUERTO MADERO
New Lighthouse
W. Breakwater
Green Light
E. Breakwater
Red Light
N
1
2
3
4
320m.
8
2 Track Railways
Muelle Fiscal
80m.
5
Muelle Como
Fish Pier No.3
Fish Pier No.2
Fish Pier No.1
6
200m.
7
Navy Pier

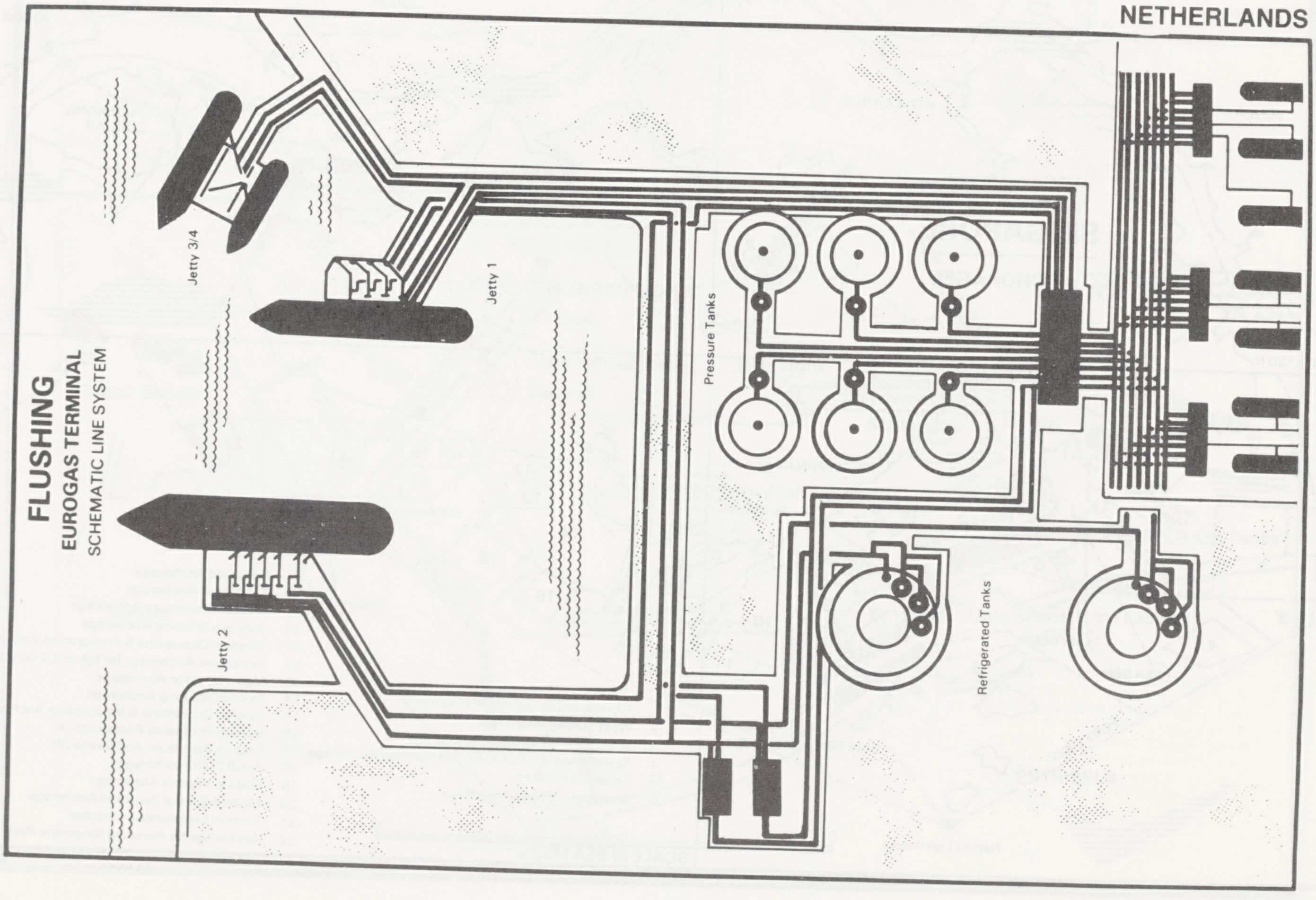
1 Entrance Channel Length 1,165m., depth 8m.
2 Expansion Zone Channel Length 450m., depth 8m.
3 Fiscal Dock Channel Length 350m., depth 9m.
4 Fiscal Dock Diameter 320m., depth 9.5m.
5 Channel to Fish & Navy Dock Length 850m., depth 7m.
6 Fish Dock Diameter 200m., depth 7m.
7 Navy Dock Diameter 100m., depth 4m.
8 Muelle Fiscal Length 150m., depth 9.5m.



MAPUTO
OIL BERTH
MOORING DIAGRAM

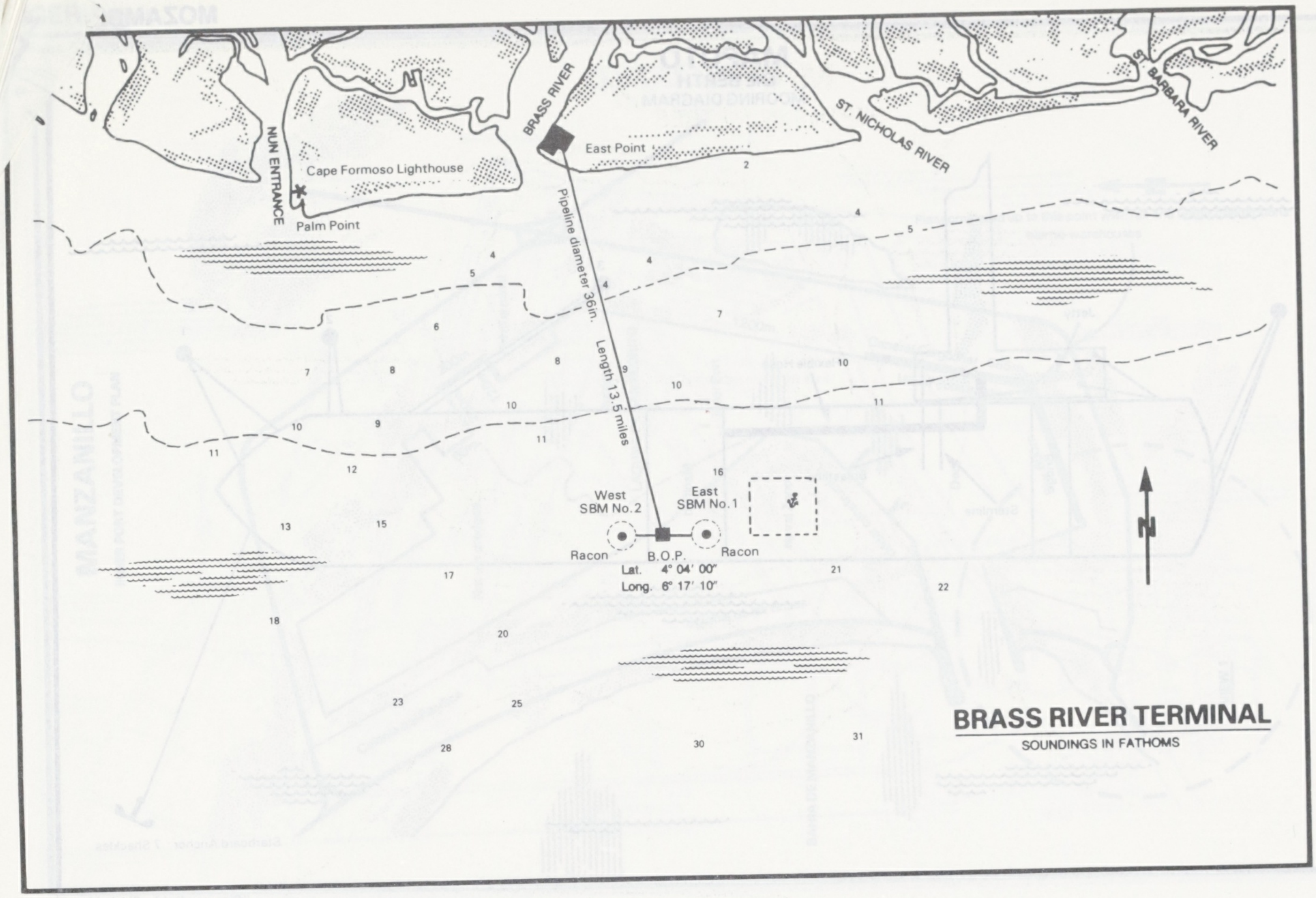
Jetty
Flexible Hose
Bridge
Sternline
Breastline
Manifold
3
2
1
Starboard Anchor 7 Shackles

"Plan supplied by Ship's Master"



FLUSHING
EUROGAS TERMINAL
SCHEMATIC LINE SYSTEM

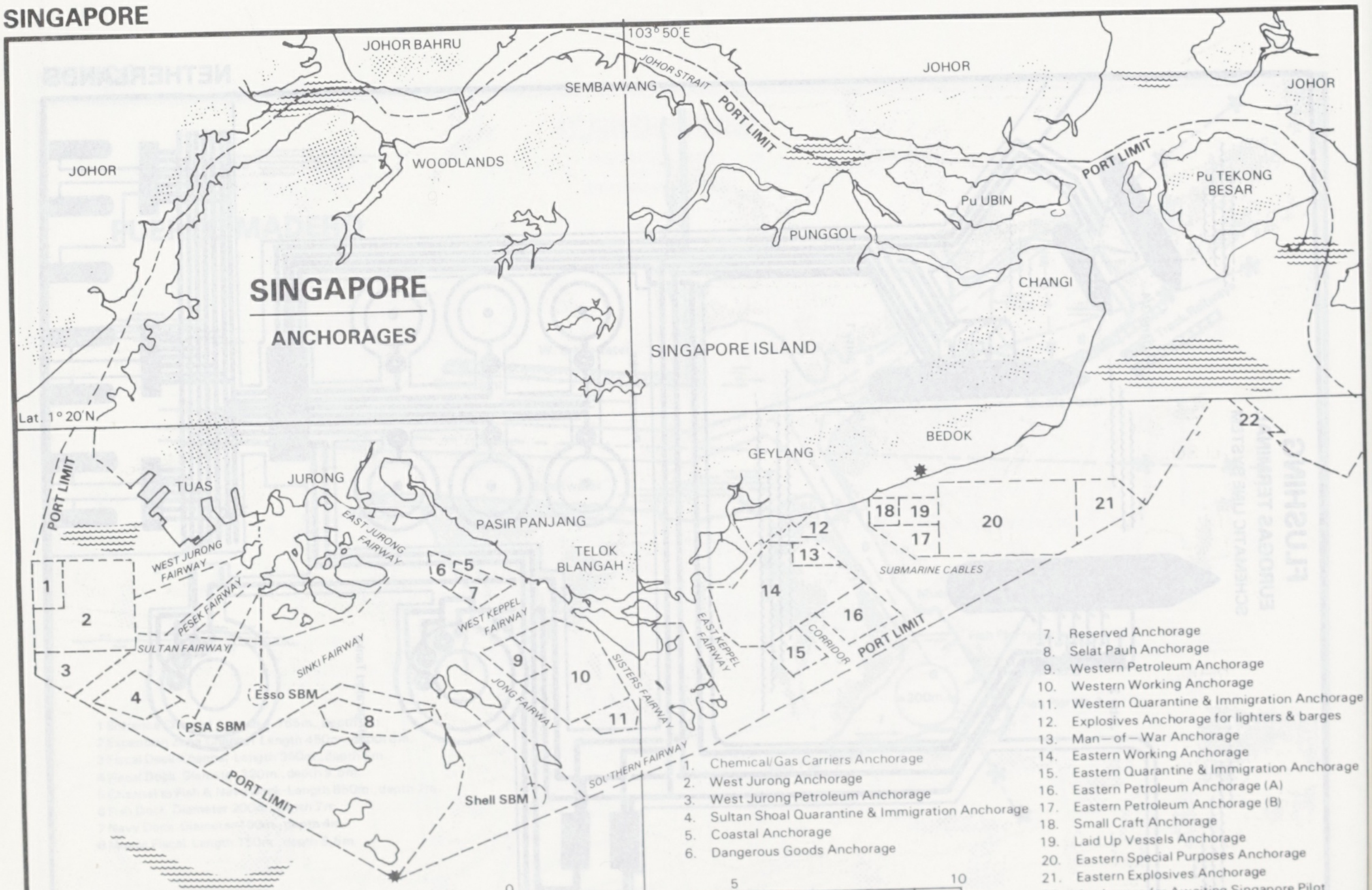
Jetty 3/4
Jetty 1
Jetty 2
Pressure Tanks
Refrigerated Tanks


BRASS RIVER
ST. NICHOLAS RIVER
ST. BARBARA RIVER
NUN ENTRANCE
Cape Formoso Lighthouse
Palm Point
East Point
Pipeline diameter 36in.
Length 13.5 miles
West SBM No. 2
East SBM No. 1
Racon
B.O.P.
Racon
Lat. 4° 04' 00"
Long. 6° 17' 10"
N

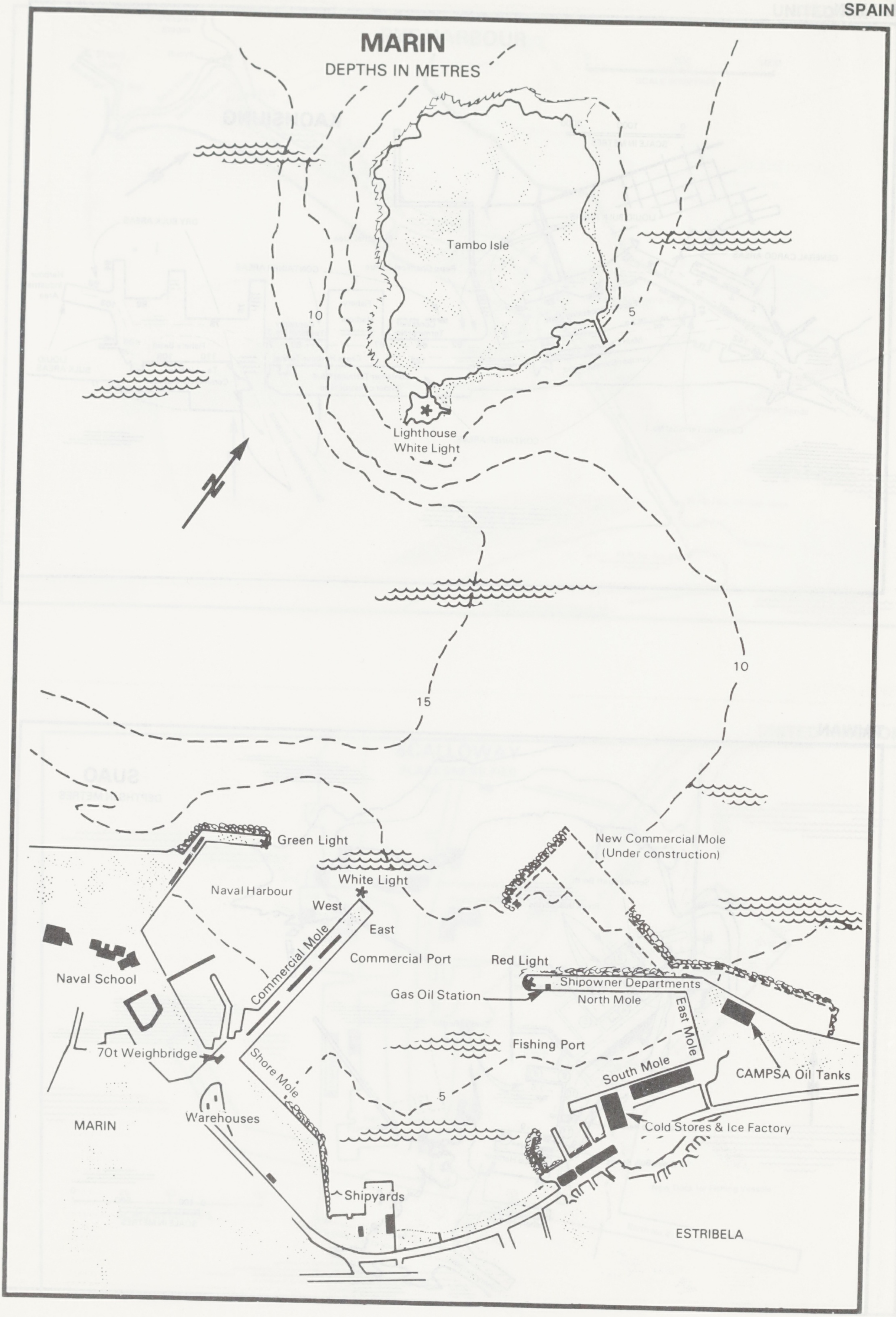
BRASS RIVER TERMINAL

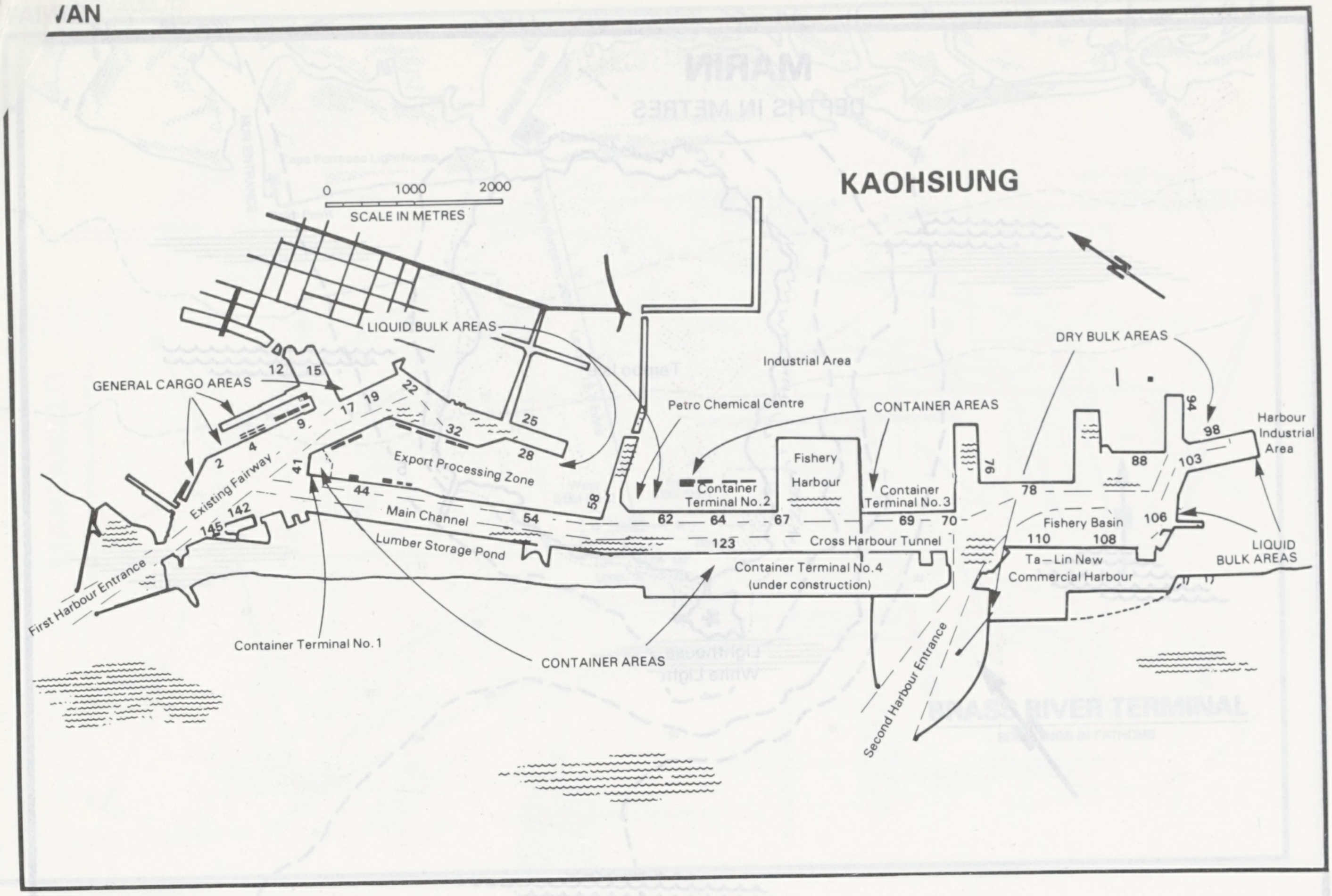
SOUNDINGS IN FATHOMS

SINGAPORE

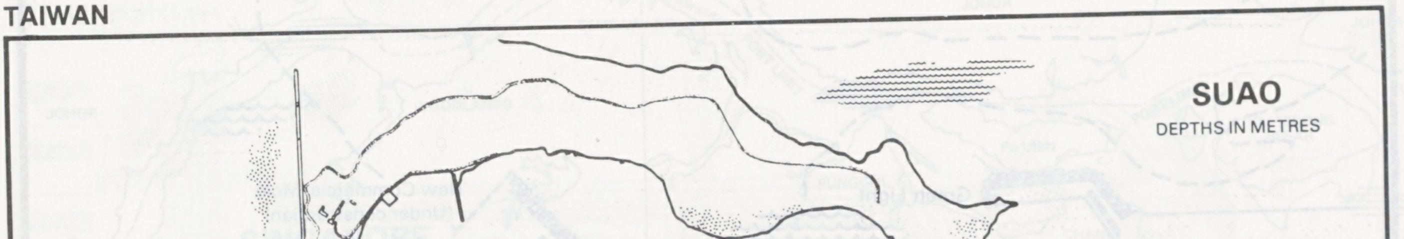

SINGAPORE
ANCHORAGES
103° 50' E
Lat. 1° 20' N.
JOHOR BAHRU
JOHOR
JOHOR
JOHOR
SEMBAWANG
JOHOR STRAIT
PORT LIMIT
WOODLANDS
PUNGGOL
Pu UBIN
Pu TEKONG BESAR
CHANGI
SINGAPORE ISLAND
GEYLANG
BEDOK
TUAS
JURONG
PASIR PANJANG
TELOK BLANGAH
WEST JURONG FAIRWAY
EAST JURONG FAIRWAY
PESEK FAIRWAY
SULTAN FAIRWAY
SINKI FAIRWAY
WEST KEPPEL FAIRWAY
EAST KEPPEL FAIRWAY
JONG FAIRWAY
SISTERS FAIRWAY
SOUTHERN FAIRWAY
SUBMARINE CABLES
CORRIDOR
PORT LIMIT
PORT LIMIT
Esso SBM
PSA SBM
Shell SBM
Raffles Lighthouse
SCALE IN SEA MILES
0
5
10

1. Chemical/Gas Carriers Anchorage
2. West Jurong Anchorage
3. West Jurong Petroleum Anchorage
4. Sultan Shoal Quarantine & Immigration Anchorage
5. Coastal Anchorage
6. Dangerous Goods Anchorage
7. Reserved Anchorage
8. Selat Pauh Anchorage
9. Western Petroleum Anchorage
10. Western Working Anchorage
11. Western Quarantine & Immigration Anchorage
12. Explosives Anchorage for lighters & barges
13. Man—of—War Anchorage
14. Eastern Working Anchorage
15. Eastern Quarantine & Immigration Anchorage
16. Eastern Petroleum Anchorage (A)
17. Eastern Petroleum Anchorage (B)
18. Small Craft Anchorage
19. Laid Up Vessels Anchorage
20. Eastern Special Purposes Anchorage
21. Eastern Explosives Anchorage
22. Anchorage for Awaiting Singapore Pilot

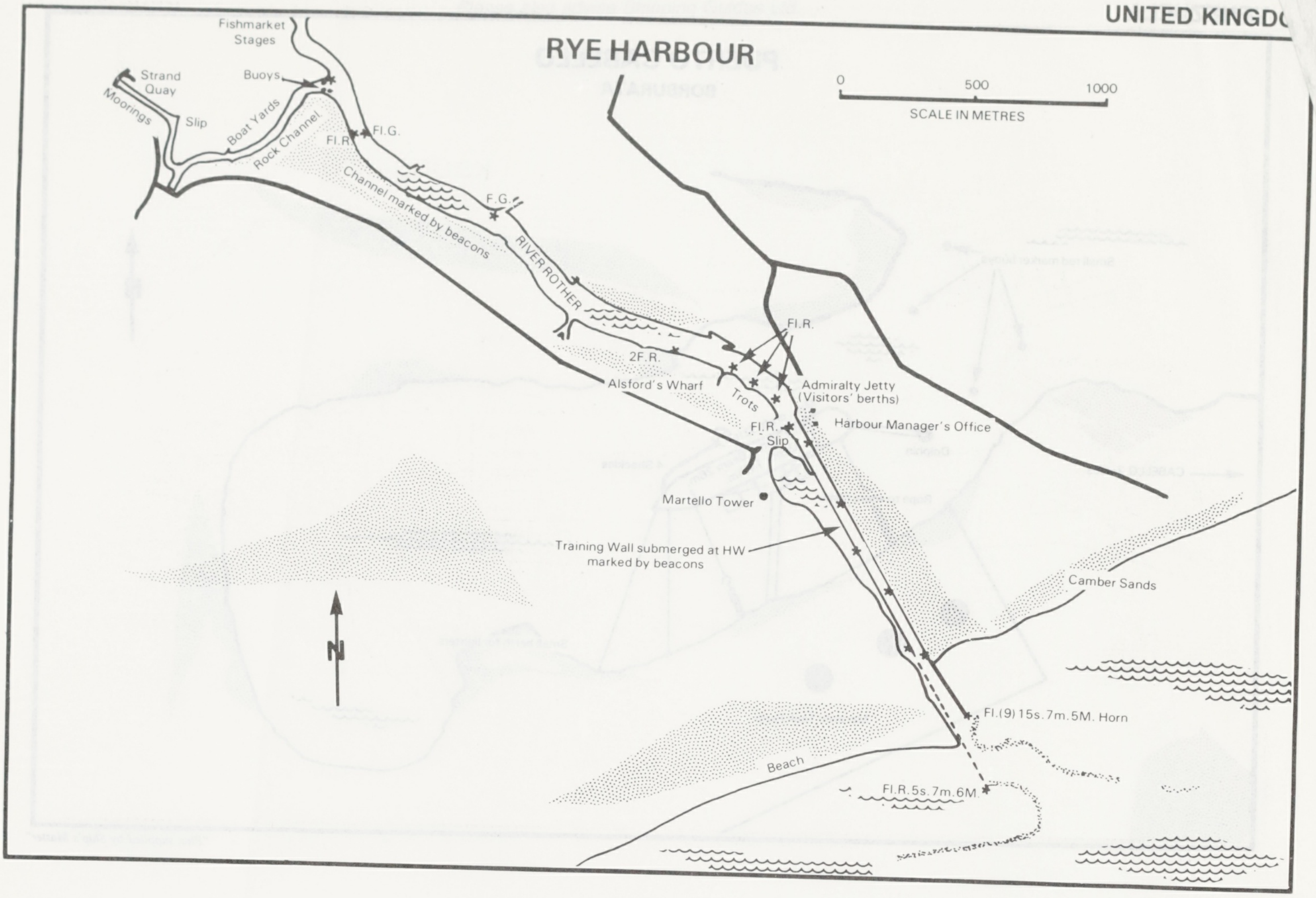

MARIN
DEPTHS IN METRES
Tambo Isle
Lighthouse
White Light
10
5
15
10
5
Green Light
White Light
Naval Harbour
West
East
New Commercial Mole
(Under construction)
Commercial Mole
Commercial Port
Red Light
Shipowner Departments
Gas Oil Station
North Mole
East Mole
Naval School
70t Weighbridge
Shore Mole
Fishing Port
South Mole
CAMPSA Oil Tanks
Warehouses
MARIN
Cold Stores & Ice Factory
Shipyards
ESTRIBELA


KAOHSIUNG
0 1000 2000
SCALE IN METRES
N
LIQUID BULK AREAS
GENERAL CARGO AREAS
Industrial Area
Petro Chemical Centre
CONTAINER AREAS
DRY BULK AREAS
Harbour Industrial Area
Fishery Harbour
Container Terminal No. 2
Container Terminal No. 3
Export Processing Zone
Existing Fairway
Main Channel
Lumber Storage Pond
First Harbour Entrance
Cross Harbour Tunnel
Container Terminal No. 4 (under construction)
Fishery Basin
Ta – Lin New Commercial Harbour
LIQUID BULK AREAS
Container Terminal No. 1
CONTAINER AREAS
Second Harbour Entrance
2
4
9
12
15
17
19
22
25
28
32
41
44
54
58
62
64
67
69
70
76
78
88
94
98
103
106
108
110
123
142
145

TAIWAN

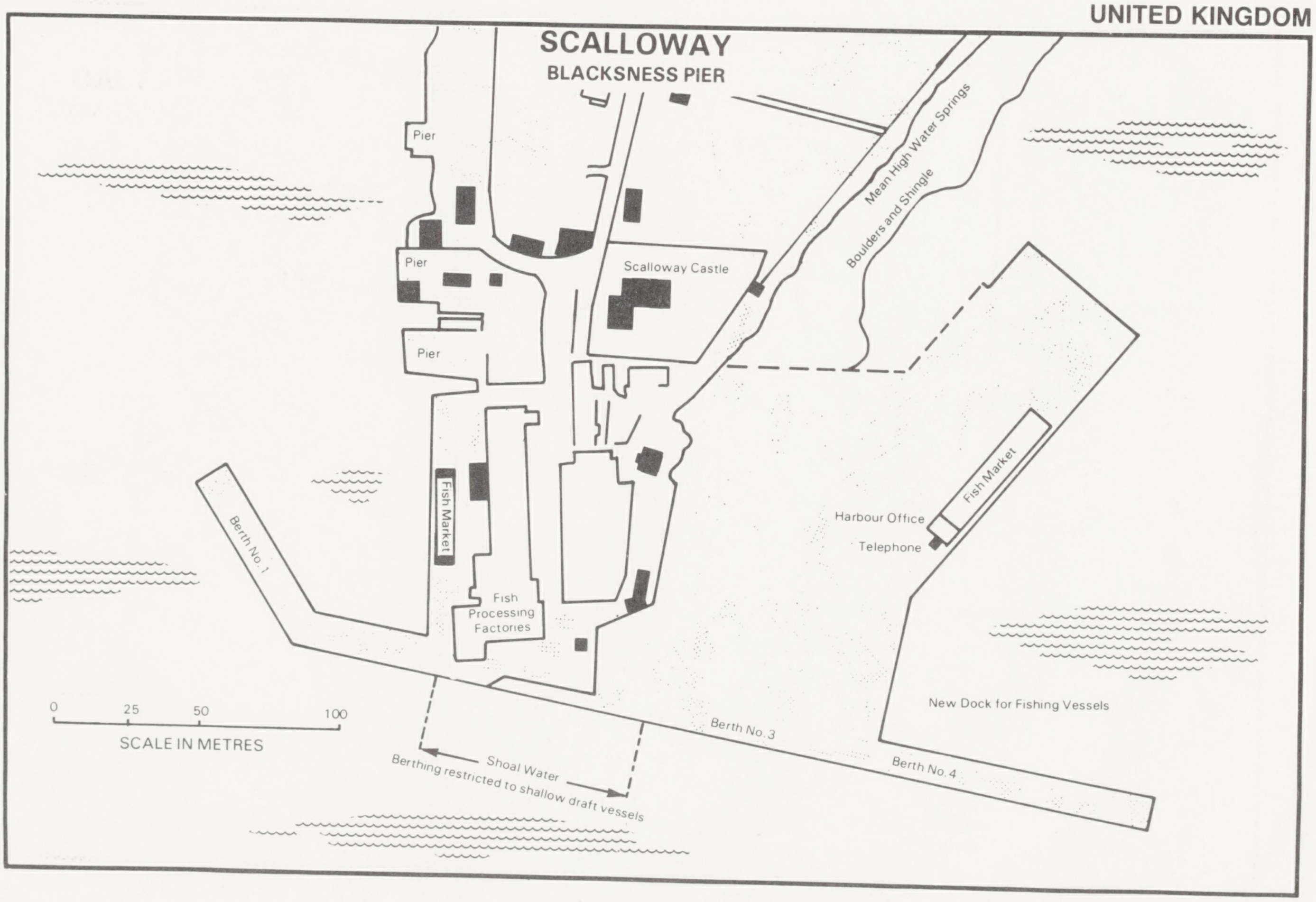

SUAO
DEPTHS IN METRES
N
Service Craft Berth
Break Bulk Berths
Container Terminal
Timber Berths
General Cargo Berths
Break Bulk Berths
Coastal Harbour
Fishery Harbour
Fishery Harbour
0 100 500
SCALE IN METRES
7.5
11
11
11
13
15
–7.5
6
–9
①
②
③
④
⑤
⑥
⑧
⑨
⑩
⑪
⑫
⑬

RYE HARBOUR


Fishmarket Stages
Strand Quay
Moorings
Slip
Buoys
Boat Yards
Rock Channel
Fl.R.
Fl.G.
Channel marked by beacons
F.G.
RIVER ROTHER
Fl.R.
2F.R.
Alsford's Wharf
Trots
Admiralty Jetty (Visitors' berths)
Harbour Manager's Office
Fl.R.
Slip
Martello Tower
Training Wall submerged at HW marked by beacons
Camber Sands
Fl.(9) 15s.7m.5M. Horn
Beach
Fl.R.5s.7m.6M.
N
0
500
1000
SCALE IN METRES

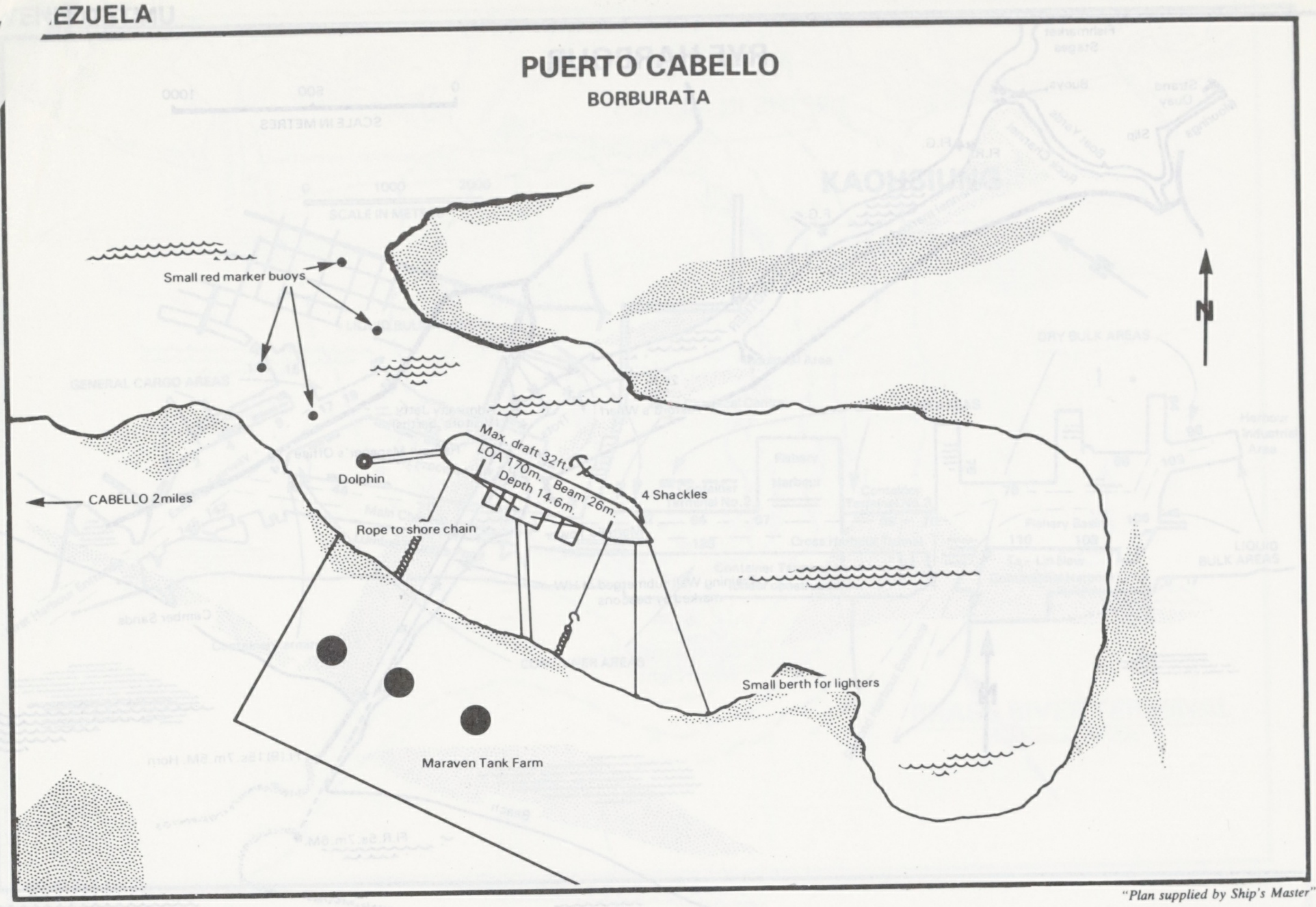
SCALLOWAY

BLACKSNESS PIER


Pier
Pier
Pier
Scalloway Castle
Mean High Water Springs
Boulders and Shingle
Fish Market
Fish Processing Factories
Berth No. 1
Harbour Office
Telephone
Fish Market
New Dock for Fishing Vessels
Berth No. 3
Berth No. 4
Shoal Water
Berthing restricted to shallow draft vessels
0
25
50
100
SCALE IN METRES

PUERTO CABELLO

BORBURATA


Small red marker buoys
Dolphin
CABELLO 2miles
Max. draft 32ft.
LOA 170m.
Beam 26m.
Depth 14.6m.
4 Shackles
Rope to shore chain
Small berth for lighters
Maraven Tank Farm
N

"Plan supplied by Ship's Master"

NOTES

Please also advise Shipping Guides Ltd.

NOTES

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